

# REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT

10K

On this 04 day of DECEMBER, 2012, Commissioners Court came on to be heard and reviewed the accompanying notice of CENTERPOINT ENERGY

Job Location GRAND PARKWAY [ STATE HIGHWAY 99 ]

Dated 11/15/12 Bond No. 22001420, Permit No. 84244 to make use of certain Fort Bend County property subject to, "A Revised 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, date the 3<sup>rd</sup> day of August, 1987, recorded in Volume \_\_\_\_\_ of the Minutes of the Commissioners Court of Fort Bend County, Texas, to the extent that such order is not inconsistent with Article 1436a, Vernon's Texas Civil Statutes. Upon Motion of Commissioner Meyers, seconded by Commissioner Patterson, 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.

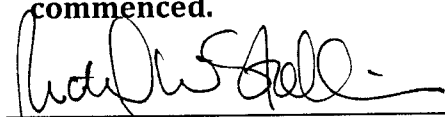
## Notes:

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

Mail notices to: Permit Administrator  
Fort Bend County Engineering  
P.O. Box 1449  
Rosenberg, Texas 77471  
281-633-7500

3. This permit expires one (1) year from date of permit if construction has not commenced.

By

  
County Engineer

By

Drainage District Engineer/Manager

Presented to Commissioners Court and approved.

Recorded in Volume 12-4-12  
Minutes of Commissioners Court.

Clerk of Commissioners Court

By Sherry Fournier  
Deputy

# COUNTY OF FORT BEND

## Engineering Department

P.O. BOX 1449  
Rosenberg, Texas 77471-1449

Johnny Ortega  
Permit Administrator

1124 Blume Road  
Phone: (281) 341-7500

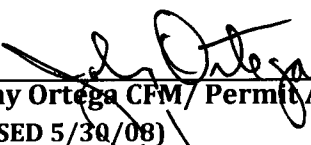
### PERMIT APPLICATION REVIEW FORM FOR CABLE, CONDUIT, AND POLE LINE ACTIVITY IN FORT BEND COUNTY

PERMIT NO. 084244

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.

- X (1) Complete Application Form.
- X a. Name of road, street, and/or drainage ditch affected.
- X b. Vicinity map showing course of direction.
- X c. Plans and specifications.
- X (2) Bond:
- X District Attorney, approval when applicable.
- X Perpetual bond currently posted.
- No. 22001420
- Amount \$50,000.00
- Performance bond submitted.
- No. \_\_\_\_\_
- Amount \_\_\_\_\_
- Cashier's Check.
- No. \_\_\_\_\_
- Amount \_\_\_\_\_
- \_\_\_\_\_ (3) Verbal permission given for emergencies, to start construction before approved in Commissioner's Court.
- \_\_\_\_\_ Precinct Engineer Acknowledgment \_\_\_\_\_ Date \_\_\_\_\_
- \_\_\_\_\_ Precinct Commissioner Acknowledgment \_\_\_\_\_ Date \_\_\_\_\_
- \_\_\_\_\_ (4) \_\_\_\_\_
- \_\_\_\_\_ Drainage District Approval when applicable \_\_\_\_\_

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

  
Johnny Ortega CFM/ Permit Administrator  
(REVISED 5/30/08)

11/15/2012  
Date

NOTICE OF PROPOSED CABLE, CONDUIT AND/OR POLE LINE ACTIVITY  
IN, UNDER, ACROSS OR ALONG ROADS, STREETS, HIGHWAYS AND DRAINAGE DITCHES  
IN FORT BEND COUNTY

APPLICANT'S JOB NO. \_\_\_\_\_  
PERMIT No. 84244 PCT. No. 4  
BOND No. 22001420

Formal notice is hereby given that CenterPoint Energy  
proposes to lay, construct, maintain and/or repair cable, conduit and/or pole line, in, under,  
across, or along roads, streets, highways and drainage ditches in Fort Bend County, as follows:

In, Under, or Across Roads and/or Drainage Ditches

| Road or<br>Ditch Name | Distance & Direction From<br>Nearest Intersection | Length of<br>Crossing | Type of Construction   |        |        |       |
|-----------------------|---|-----------------------|------------------------|--------|--------|-------|
|                       |   |                       | Bored                  | Jacked | Driven | Cased |
| SH 99                 | Farmer Road                                       | 800'                  | Bored under<br>roadway |        |        |       |
|                       |   |                       |                        |        |        |       |
|                       |   |                       |                        |        |        |       |

Along Roads and/or Drainage Ditches

| Road or<br>Ditch Name | Distance & Direction From<br>Nearest Intersection | To | Distance |
|-----------------------|---|----|----------|
|                       |   |    |          |
|                       |   |    |          |
|                       |   |    |          |
|                       |   |    |          |

General Description

CenterPoint Energy proposes to install an electrical duct bank under existing and proposed SH 99 at West Belfort. The construction will bore under existing frontage roads and trench across the future mainlanes. The crossing will replace an existing overhead crossing.

The Location and description of the proposed installation and appurtenances is more fully shown on the attached detail drawings. The laying, construction, maintenance and/or repair of the proposed installation shall be subject to "A Revised Order Regulating the Laying, Construction, Maintenance and/or Repair of Cables, Conduits, and/or 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 Commissioners Court of Fort Bend County, Texas, dated the 3rd. day of August, 1987, recorded in Volume 639 of the Minutes of the Commissioners Court of Fort Bend County, Texas.

Written notices are required: 1) 48 hours in advance of start of construction and  
2) when construction is complete and ready for final inspection.

Mail to: Permit Administrator/Fort Bend County Engineering  
P.O. Box 1449, Rosenberg, TX 77471.

Violation of requirements shall constitute grounds for job shut down.

Does project  
comply with Fort  
Bend County  
Outdoor Lighting  
Ordinance?

Yes ( )  
No ( )

N/A

COMPANY NAME: Midtown Engineers, LLC agent for CenterPoint Energy  
AGENT and/or OWNER

Joel R. Colwell

(Signature)

NAME & TITLE Joel R. Colwell, P.E. agent for CenterPoint Energy  
(Please Print)

DATE November 7, 2012

ADDRESS 5225 Katy Freeway, Suite 400  
(Street/P.O. Box)

HoustonTX77007

CityStateZip

TELEPHONE NO: 713-862-8848  
(accessible 24 hrs/day, 7 days/week)

# CenterPoint Energy

## MAJOR UNDERGROUND ENGINEERING UNDERGROUND DUCT BANK STATE HIGHWAY 99 AT FARMER ROAD WEST OF MASON ROAD

LOREL R. COLWELL, P.E. HEREBY ACKNOWLEDGE THAT I RECEIVED THE NEUTRAL FLOOD HAZARD RECOVERY DATA AND USED THE SAME TO PREPARE THE DESIGN OF THIS PROJECT.

### NOTES:

1. THE INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM BROWN & GAY ENGINEERS. ALL INFORMATION CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE HERE TO. THE CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITIES, CONDUITS AND STRUCTURES BY CONTACTING OWNERS OF UNDERGROUND UTILITIES OR BY EXCAVATING IN ADVANCE OF CONSTRUCTION.
2. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES WHEN AND WHERE THEY FALL IN THE PATH OF CONSTRUCTION.
3. THE CONTRACTOR IS ALSO RESPONSIBLE FOR CONTACTING THE UTILITY COORDINATING COMMITTEE @ 713-223-4567 AND TEXAS ONE CALL @ 1-800-245-4545, FORTY- EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION.
4. ALL PROPOSED FACILITIES SHALL MAINTAIN 12" CLEAR FROM ALL PUBLIC AND PRIVATE UTILITIES.

### AT&T TEXAS/SBC FACILITIES

1. THE LOCATIONS OF AT&T TEXAS/SBC FACILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.
2. THE CONTRACTOR SHALL CALL 1-800-344-8377 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.
3. WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF AT&T TEXAS/SBC FACILITIES, ALL EXCAVATIONS MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES. WHEN BORING, THE CONTRACTOR SHALL EXPOSE THE AT&T TEXAS/SBC FACILITIES.
4. WHEN AT&T TEXAS/SBC FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES, THE CONTRACTOR SHALL BRACE THE POLE FOR SUPPORT.
5. THE PRESENCE OR ABSENCE OF AT&T TEXAS/SBC UNDERGROUND CONDUIT FACILITIES DOES NOT IMPLY THAT THERE ARE NO OTHER CABLES IN THE AREA. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATION COMMITTEE AT (713) 223-4567 OR 1-800-869-8344 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

### CAUTION: UNDERGROUND GAS FACILITIES

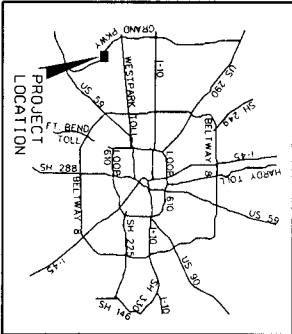
LOCATIONS OF CENTERPOINT ENERGY MAIN LINES (TO INCLUDE UNIT GAS TRANSMISSION AND FOR INDUSTRIAL GAS SUPPLY CORPORATION WHERE APPLICABLE) ARE SHOWN IN AN APPROXIMATE LOCATION ONLY. SERVICE LINES ARE USUALLY NOT SHOWN. OUR SIGNATURE ON THESE PLANS ONLY INDICATES THAT OUR FACILITIES ARE SHOWN IN APPROXIMATE LOCATION. IT DOES NOT IMPLY THAT A CONFLICT ANALYSIS HAS BEEN MADE. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATION COMMITTEE AT (713) 223-4567 OR 1-800-869-8344 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED

- WHEN CENTERPOINT ENERGY PIPE LINE MARKINGS ARE NOT VISIBLE, CALL (713) 967-8037 (7:00 A.M. TO 4:30 P.M.) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS
- WHEN EXCAVATING WITHIN (18") OF THE INDICATED LOCATION OF CENTERPOINT ENERGY FACILITIES, ALL EXCAVATION MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES.
- WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPING.

THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATED AND PRESERVE THESE UNDERGROUND FACILITIES.

### WARNING: OVERHEAD ELECTRICAL FACILITIES

OVERHEAD LINES MAY EXIST ON THE PROPERTY WE HAVE NOT ATTEMPTED TO MARK THOSE LINES SINCE THEY ARE CLEARLY VISIBLE. BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING ANY CONSTRUCTION. TEXAS LAW SECTION 752 HEALTH & SAFETY CODE FORBIDS ALL ACTIVITIES IN WHICH PERSONS OR THINGS MAY COME WITHIN SIX (6) FEET OF LIVE OVERHEAD HIGH-VOLTAGE LINES. PARTIES RESPONSIBLE FOR THE WORK INCLUDING CONTRACTORS ARE LEGALLY RESPONSIBLE FOR THE SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR REMOVED CALL CENTERPOINT-ENERGY AT (713) 207-7777



ONE CALL NOTIFICATION SYSTEM  
CALL BEFORE YOU DIG!!!  
(713) 223-4567 (IN HOUSTON)  
NEW STATEWIDE NUMBER OUTSIDE HOUSTON:  
1-800-515-8805

### VICINITY MAP

Not To Scale

KEY MAP No. 526-W  
ZIP CODE 77406, 77407

FIRM PANEL No.: 4857C0140L  
DATE: APRIL 20, 2000  
ZONE: X  
CNP DRAWING NO. 12700000

### GENERAL CONSTRUCTION NOTES:

1. ALL UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY IN THE FIELD THE EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL NOTIFY TEXAS ONE CALL AT (713) 223-4567 AT LEAST 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION.
2. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY DAMAGES TO EXISTING WATER, WASTEWATER, STORM WATER LINES AND TRAFFIC CONTROL DEVICES. ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH THE CITY OF HOUSTON, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING'S "STANDARD CONSTRUCTION SPECIFICATIONS" REFERENCED ABOVE, AT NO COST TO THE FACILITY OWNER.
3. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THE SATISFACTION OF THE OWNING AUTHORITY.
4. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS AND TREES ALONG THE AREA OF EXCAVATION.
5. THE CONTRACTOR SHALL COMPLY WITH THE LATEST EDITION OF OSHA REGULATIONS AND THE STATE OF TEXAS LAWS CONCERNING EXCAVATION.
6. IF THE CONSTRUCTION DOES NOT BEGIN WITHIN A YEAR AFTER THE PLANS HAVE BEEN SIGNED, NEW SIGNATURES MUST BE OBTAINED AND LETTERS OF AVAILABILITY MUST BE UPDATED.

CONTACT FT. BEND COUNTY MUD 118 AT LEAST 72 HOURS PRIOR TO CONSTRUCTION.  
VERNON WEBB, P.E. (281) 985-2357

CONTACT FT. BEND WATER AUTHORITY AT LEAST 72 HOURS PRIOR TO CONSTRUCTION



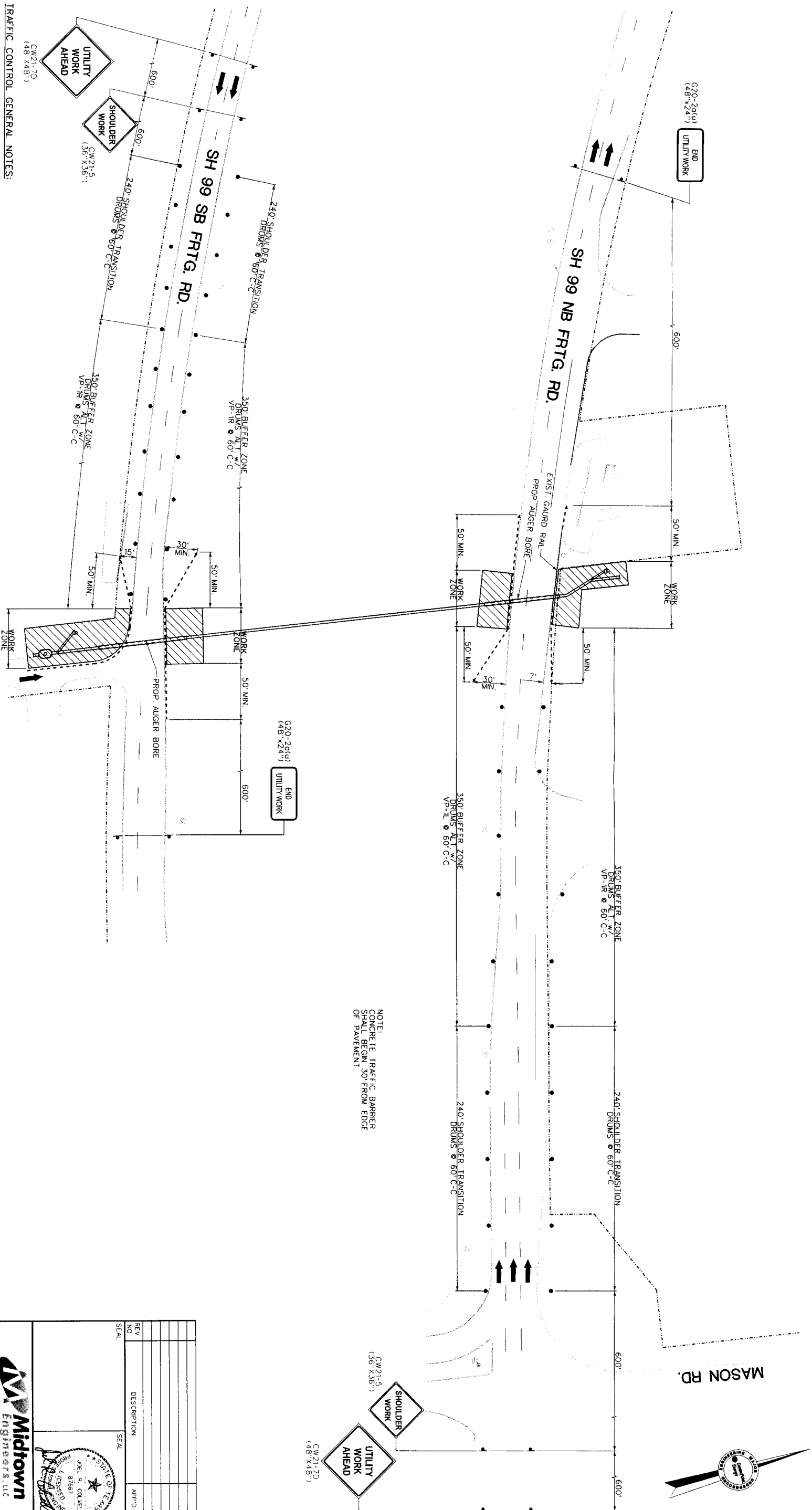
### INDEX OF DRAWINGS

| SHEET NO. | DESCRIPTION           |
|-----------|-----------------------|
| 1         | TITLE SHEET           |
| 2         | PLAN & PROFILE        |
| 3         | TRAFFIC CONTROL PLANS |
| 4         | CONSTRUCTION DETAILS  |



5225 KATY FREEWAY, SUITE 400 HOUSTON, TX 77007  
(713) 862-8848 TBPE No. F-8934











TRAFFIC CONTROL GENERAL NOTES:

1. CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (TEXAS MUTCD, MOST RECENT EDITION AS REVISED) DURING CONSTRUCTION.
2. WORKING HOURS SHALL BE COORDINATED WITH THE FT. BEND TOLL ROAD AUTHORITY.
3. CONTRACTOR TO NOTIFY THE FT. BEND TOLL ROAD AUTHORITY 48 HOURS BEFORE STARTING WORK IN STREET RIGHT-OF-WAY OR EASEMENTS.
4. IF THE CONTRACTOR CHOOSES TO USE A DIFFERENT METHOD OF "TRAFFIC CONTROL PLANS" DURING THE CONSTRUCTION THAN WHAT IS OUTLINED IN CONTRACT DRAWINGS, (S)HE SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT AN ALTERNATE SET OF PLANS TO THE TEXAS DEPARTMENT OF TRANSPORTATION FOR APPROVAL TEN WORKING DAYS PRIOR TO IMPLEMENTATION.
5. THE TRAFFIC CONTROL, SIGNS, DEVICES, AND BARRICADES SHOWN ON THESE DRAWINGS CONSTITUTE MINIMUM REQUIREMENTS AND ARE NOT INTENDED TO COVER SPECIAL CIRCUMSTANCES OR OTHER CONDITIONS THAT MAY ARISE DUE TO UNFORESEEN FIELD CONDITIONS. THE CONTRACTOR SHALL PROVIDE ADDITIONAL SIGNS, BARRICADES, AND WARNING DEVICES TO WARN THE PUBLIC PROVIDE FOR THE SAFE MOVEMENT OF TRAFFIC, AND PROVIDE FOR THE SAFETY OF THE CONSTRUCTION AREA WHERE FIELD REQUIREMENTS ARE NOT FULLY SATISFIED AS SHOWN HEREON.
6. THE CONTRACTOR SHALL MAINTAIN SAFE ACCESS (INGRESS AND EGRESS) TO ADJOINING PROPERTIES AT ALL TIMES.
7. CONTRACTOR SHALL INSURE THAT ALL BARRICADES, SIGNS, CHANNELIZING DEVICES, WARNING LIGHTS, AND TRAFFIC HANDING DEVICES ARE MAINTAINED IN A CLEAN FUNCTIONAL CONDITION AT ALL TIMES.
8. APPROVED COPIES OF TRAFFIC CONTROL PLANS SHALL BE AVAILABLE FOR INSPECTION AT JOB SITE AT ALL TIMES.

LEGEND

- |   |                          |
|---|--------------------------|
|  | CONSTRUCTION AREA        |
|  | DRUMS OR CHEVRONS        |
|  | OPEN TRAFFIC LANE        |
|  | TYPE III BARRICADE       |
|  | FLASHING ARROW PANEL     |
|  | CONCRETE TRAFFIC BARRIER |

## CONCRETE TRAFFIC BARRIER

SH 99 AT FARMER ROAD  
WEST OF MASON RD

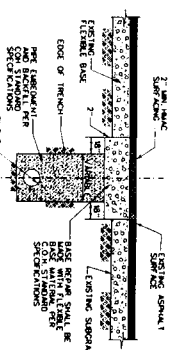
*CenterPoint Energy*  
MAJOR UNDERGROUND ENGINEERING

**M Midtown**  
Engineers, LLC  
5225 KATY FREEMAN, SUITE 400 HOUSTON TX 77005  
(713) 862-8848 T/BPE NO. F-5834

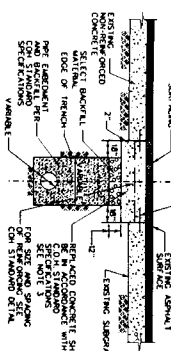
[illegible]

NOTE:  
CONCRETE TRAFFIC BARRIER  
SHALL BEGIN 30' FROM EDGE  
OF PAVEMENT.

# CONSTRUCTION DETAILS

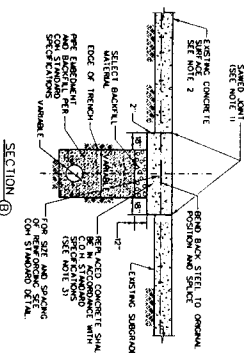


## REPAIR OF FLEXIBLE BASE PAVEMENT

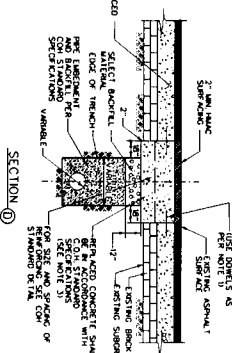


REPAIR OF NON-REINFORCED CONCRETE PAVEMENT

1. EXPOSE 15' OF REINFORCING STEEL AT PROPOSED SAILED JOINT.
2. REMOVE REINFORCING STEEL EXPOSED, USE HAND-DRIVEN TOOL TO REMOVE REINFORCING STEEL EXPOSED, DRILLED AND CEMENTED IN TO THE CENTER OF THE EXISTING SLAB WITH "PO-COC" OR EQUIV.
3. IF REINFORCED CONCRETE IS OPERATED REPLACED WITH SAME THICKNESS OF "MAC" SURFACING (2" MIN FOR TENSILE BASE PAYMENT).
3. CENTER REINFORCING IN SLAB THICKNESS.



## REPAIR OF REINFORCED CONCRETE PAVEMENT



# REPAIR OF NON-REINFORCED CONCRETE PAVEMENT WITH BRICK

|   |                         |
|---|-------------------------|
| DEPARTMENT OF PUBLIC WORKS AND ENGINEERING<br>ENGINEERING, CONSTRUCTION AND REPAIRS PLATE GROUP |                         |
| CITY OF HOUSTON   |                         |
| PAYMENT REPAIR DETAILS  |                         |
| (SEE 15 SHEET)  |                         |
| PROJECT NO.<br>2721-1000000   | PROJECT<br>2721-1000000 |
| DATE<br>OCTOBER 2002  | DATE<br>10/01/02        |

## CITY OF HOUSTON

DEPARTMENT OF PUBLIC WORKS AND ENGINEERING  
ENGINEERING, CONSTRUCTION AND REAL ESTATE GROUP  
TRAFFIC AND SIGNAL ENGINEERING SECTION

1. CONTRACTOR SHALL PROVIDE AND INSTALL RAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART TWO OF THE TEXAS MANUAL ON TRAFFIC CONTROL DEVICES, LATEST EDITION, AND THE MOST RECENT EDITION WITH REVISIONS DURING CONSTRUCTION.
  2. WORKDAY HOURS SHALL BE 7:00 A.M. TO 5:00 P.M. ON SUNDAY. THE HOURS OF 7:00 A.M. TO 9:00 A.M. AND 4:00 P.M. TO 6:00 P.M. ANCHORED PROPERTY DURING NON-WORKING HOURS.
  3. AT LEAST ONE UNARMED OFF-DUTY POLICE OFFICER IS REQUIRED DURING CONSTRUCTION HOURS.
  4. IN THE EVENT WHEN NO RAFFIC CONTROL PLANS EXIST AS A PART OF CONTRACT DRAWINGS, CONTRACTOR MAY PREPARE A PLAN FOR APPROVAL. TEN WORKING DAYS PRIOR TO IMPLEMENTATION.
  5. CONTRACTOR SHALL NOTIFY THE CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND TRAFFIC LIGHT ENGINEERING BEFORE DIVISION TELEPHONE AND TRAFFIC LIGHTS 7:00-00 HOURS BEFORE STARTING WORK ON THIS PROJECT.
  6. CONTRACTOR TO MAINTAIN A MINIMUM CLEARANCE WITH ALL EXISTING CITY OF HOUSTON WATER LINES.
  7. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE TO THE EXISTING PUBLIC OR PRIVATE UTILITY LINES DURING CONSTRUCTION. ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH THE CITY OF HOUSTON SPECIFICATIONS FOR PUBLIC WORKS AND ENGINEERING STANDARDS.
  8. LATEST ADDENDA AND AMENDMENT THERE TO, WITH NO COST TO THE CITY OF HOUSTON.
- THESE PLANS SHALL BE OBTAIN TO SCALE ON REPRODUCIBLE PAPER AND SEALED BY REGISTERED PROFESSIONAL ENGINEER CONTRACT DRAWINGS. PLANS WILL BE OBTAIN A PART OF THE CONTRACT DRAWINGS.

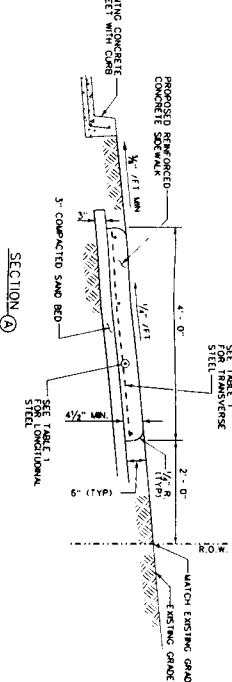
## CITY OF HOUSTON

STREET, BRIDGE &amp; R.O.W.

1. ALL AIDS AND SIGNS ON PLANS SHALL BE FILED IN LAYERS NOT DEEPER THAN 4" IN DEPTH AND EACH COMPLETED SIGN SHALL BE REMOVED IMMEDIATELY UPON COMPLETION OF THE PROJECT.
2. UTILITY CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF WATER LINE AND FILL AREA. ALL UTILITIES SHALL BE RELOCATED TO THE SIDE OF THE ROAD PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL PROVIDE SIGHT BARRIER FENCE ON ALL NON-CURB ALLEYS WHICH WILL BE CLOSED DURING CONSTRUCTION.
4. EXISTING PAVEMENT, CURES, SIDEWALKS, AND DRIVEWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPAIRED TO ORIGINAL CONDITION PRIOR TO STARTING WORK.
5. RELOCATION OF THE ROAD AND RICH OF WAY UPON COMPLETION OF JOB SHALL BE AS GOOD AS OR BETTER THAN THE ORIGINAL CONDITION PRIOR TO STARTING WORK.
6. STRUCTURAL PROTECTIVE SHALL BE MAINTAINED ON ALL EXISTING BUILDINGS, CONSTRUCTION AND NON-DAMAGED DRIVE OR SIDEWALKS DURING CONSTRUCTION.
7. EXPOSED 9" OF REINFORCING STEEL AT BARS 24" SPACING DOWN JOINT "X" OF REINFORCING STEEL EXISTS. USE HORIZONTAL DOWELS HORIZONTAL DOWELS SHALL BE 6" DIAMETER, 24" LONG, 4" C/C, UNPAINTED AND EMBEDDED 8" INTO THE CENTER OF THE EXISTING SLAB WITH POLYMER OR COAL OIL PAINT.
8. CONSTRUCTION OF SLAB NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF TREES, PLANTS AND TREES ALONG SIDE OF ROAD SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
9. THE CONTRACTOR SHALL COMPLY WITH CITY REGULATIONS AND STATE OF TEXAS LAW CONCERNING EXCAVATION, TRENCHING AND SHORING AS SPECIFIED IN CITY OF HOUSTON ORDINANCE 487-1457.
10. **WHEELCLOAK RAILS** SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF HOUSTON STANDARDS AT ALL INTERSECTIONS PRIOR TO STREET CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING PRIOR TO WORKING ON ANY INTERSECTION. THE CONTRACTOR SHALL MAINTAIN ALL REQUIREMENTS FOR THE ISSUANCE OF THE PERMIT TO CONSTRUCT.

## NOTES

1. THE LOCATION AND DEPTH OF ALL UTILITIES SHOWN HAVE NOT BEEN VERIFIED. SMC VERIFICATION WOULD REQUIRE RECOVERY OF PAYING AND 50%.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE EXACT LOCATION OF ALL UTILITIES WHEN AND WHERE THEY FALL IN THE PROJECT CONSTRUCTION.
3. THE CONTRACTOR IS ALSO RESPONSIBLE FOR NOTIFYING THE UTILITY COMPANIES. COASTAL PHONE: 713-323-1957, FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION.
4. CONTRACTOR MUST PROVIDE SHORING FOR TRENCH IN ACCORDANCE WITH THE CITY OF HOUSTON SPECIFICATIONS (481.5) STATE OF TEXAS LAWS AS SPECIFIED IN CITY OF HOUSTON SPECIFICATIONS (481.5).
5. CONTRACTOR MUST COMPLY WITH ALL THE LAWS OF THE STATE OF TEXAS AND THE CITY OF HOUSTON. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL THE NECESSARY PERMITS AND REGULATIONS NOW IN EFFECT FOR THE PROJECT.

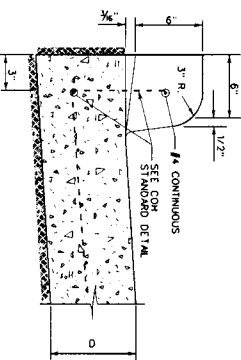


SECTION A

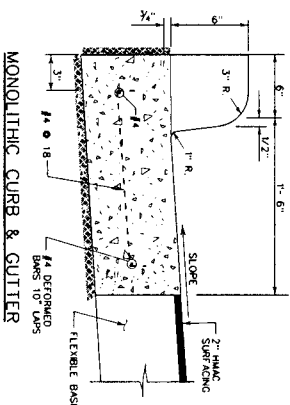
Technical drawing of a wheel chair castor assembly. The drawing shows a cross-section of the castor with a central hub and a flange. Dimensions are indicated: 1.5" for the hub diameter, 1.5" for the flange diameter, and 1.5" for the flange thickness. Callouts include: "EXPANSION JOINT REQUIRED (TYPE 1)" pointing to the hub, "EXPANSION JOINT REQUIRED (TYPE 1)" pointing to the flange, "ROW LINE" pointing to the center of the castor, "EXPANSION JOINT REQUIRED (TYPE 1)" pointing to the bottom of the castor, and "EXPANSION JOINT REQUIRED (TYPE 1)" pointing to the bottom of the castor. A note on the right side reads: "WHEELCHAIR CASTOR SEE NOTE ON DRAWING WHEEL CHAIR PART OF M.S. EXPANSION JOINT REQUIRED (TYPE 1)".

| REINFORCING STEEL INFORMATION<br>FOR 4 1/2" THICK SOEWALKS<br>EXPANSION JOINT SPACING - 36 FT.<br>FC - 3,000 PSI AND FY - 60,000 PSI |                          |                          |                          |                             |
|--|--------------------------|--------------------------|--------------------------|-----------------------------|
| SOEWALK<br>THICKNESS<br>(in)   | SOEWALK<br>WIDTH<br>(in) | LONGITUDINAL STEEL       |                          | TRANSVERSE<br>STEEL<br>(in) |
|  |                          | 2 BARS<br>TOP AND<br>BOT | 2 BARS<br>TOP AND<br>BOT |                             |
| 4.5  | 4                        | 3                        | 2 1/2                    | 1 1/8                       |
| 4.5  | 5                        | 3                        | 3 1/2                    | 1 1/8                       |
| 4.5  | 6                        | 4                        | 3 1/2                    | 1 1/8                       |

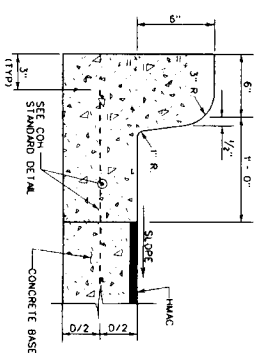
|  |  |
|--|--|
| <p><b>CITY OF HOUSTON</b><br/> DEPARTMENT OF PUBLIC WORKS AND ENGINEERING<br/> ENGINEERING, CONSTRUCTION AND REAL ESTATE GROUP</p> |  |
| <p align="center"><b>CONCRETE SIDEWALK DUALS<br/> FOR STREETS WITH CURBS</b></p> <p align="center">(NOT TO SCALE)</p>              |  |
| <p>DESIGNED BY<br/> <b>SCHWENKMEYER &amp; P.C.</b><br/> 10000 N. FARMERS<br/> HOUSTON, TEXAS 77036</p>                             | <p>DESIGNED BY<br/> <b>JOHN C. HANCOCK ARCHITECT, P.C.</b><br/> 10000 N. FARMERS<br/> HOUSTON, TEXAS 77036</p> |
| <p>DATE: <b>OCTOBER 2003</b></p>   | <p>DATE: <b>02/24/05</b></p>   |



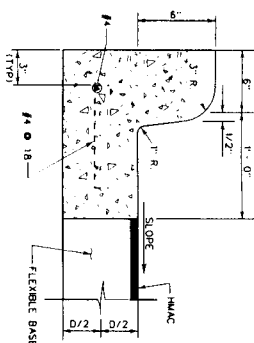
## CONCRETE CURE



## MONOLITHIC CURB & GUTTER



ESPLANADE CURB CONNECTED  
TO CONCRETE BASE



ESPLANADE CURB CONNECTED  
TO FLEXIBLE BASE

[illegible]

**Midtown**  
Engineers, LLC  
5225 KATY FREEWAY, SUITE 400 HOUSTON, TX 77005  
(713) 862-8948 TBE NO. F-8534

*CenterPoint Energy*  
OR UNDERGROUND ENGINEERING

## CONSTRUCTION DETAILS

SH 99 AT FARMER ROAD  
WEST OF MASON RD

MIDCON ENGINEERS, LLC  
 DRAWN BY: KERIA GARNER  
 CHECKED BY: JOEL R. COLWELL  
 APPROVED:

SCALE: HOR. VERT.  
 SHEET NO. 4 OF 4 SHEETS

DATE: 11/6/2012 DWG. NO. 12700000