



**REVIEW BY FORT BEND COUNTY  
COMMISSIONERS COURT**

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

☐

Right of Way Permit

☒

Commercial Driveway Permit

Permit No: 2018-18974

**Applicant:** Lischka Utilities, LP

**Job Location Site:** 20000 Beechnut Street, Richmond, TX 77407

**Bond No.**                      **Date of Bond:** 4/3/2018 **Amount:** \$5,000.00

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 3rd day of April, 2018, Upon Motion of Commissioner Meyers, seconded by Commissioner Morales, 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: Rick J. Staigle, PE, PTOE  
County Engineer

Date Recorded 4-6-2018 Comm. Court No. 12c

By: N/A  
Drainage District Engineer/Manager

Clerk of Commissioners Court  
By: Ronita Willis  
Deputy



**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@fortbendcountytexas.gov

- ☐ Right of Way Permit  
☒ Commercial Driveway Permit

Permit No: 2018-18974

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:**

- |                                     |  |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | a. Name of road, street, and/or drainage ditch affected. |
| <input checked="" type="checkbox"/> | b. Vicinity map showing course of directions             |
| <input checked="" type="checkbox"/> | c. Plans and specifications                              |

**(2) BOND:**

- |                                     |  |                     |                    |
|-------------------------------------|--|---------------------|--------------------|
| <input type="checkbox"/>            | County Attorney, approval when applicable. |                     |                    |
| <input type="checkbox"/>            | Perpetual bond currently posted.           | Bond No: _____      | Amount: _____      |
| <input checked="" type="checkbox"/> | Performance bond submitted.                | Bond No: [REDACTED] | Amount: \$5,000.00 |
| <input type="checkbox"/>            | 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.**

*Rich J. Staigle, PE, PTOE*  
Permit Administrator

3/23/2018

Date



**PERFORMANCE BOND COVERING ALL CABLE CONDUIT AND/OR POLE LINE  
ACTIVITY IN UNDER ACROSS OR ALONG FORT BEND COUNTY ROAD  
COMMERCIAL DRIVEWAY AND MEDIAN OPENINGS OR MODIFICATIONS  
(AUTHORIZED)**

Grand Vista Section 21  
(PO 27060) obo FBCMUD No. 30

**BOND** [REDACTED]

THE STATE OF TEXAS  
COUNTY OF FORT BEND

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, Lischka Utilities, LP whose (address, phone) is P.O. Box 853  
Bellville, TX 77418, 979-865-5941 Texas, hereinafter called the Principal, and Fidelity and Deposit Company of Maryland,  
a Corporation existing under and by virtue of the laws of the state of MD and authorized to do an indemnifying business  
in the state of Texas, and whose principal office is located at (name/address/phone) Fidelity and Deposit Company of Maryland  
1299 Zurich Way, 5th Floor, Schaumburg, IL 60196-1056 (847) 605-6000 whose officer  
residing in the State of Texas, authorized to accept service in all suits and actions brought whining said state is  
Tracey Lee Haley and whose address is 15303 Dallas Parkway, Suite 800, Addison, TX 75001  
hereinafter called the Surety, and held and firmly bound unto, Robert E.  
Hebert, County Judge of Fort Bend County, Texas, or his successors in office, in the full sum of  
Five Thousand Dollars and 00/100 Dollars (\$5,000.00) current, lawful money of the  
United States of America, to be paid to said Robert E. Hebert, County Judge of Fort Bend County, Texas, or his successors in  
office, to which payment well and truly to be made and done, we, the undersigned, bind ourselves and each of us, our heirs,  
executors, administrators, successors, assigns, and legal representatives, jointly and severally, by these presents.

THE CONDITION OF THIS BOND IS SUCH THAT, WHEREAS, the above bounden principal contemplates laying,  
constructing maintaining and/or repairing one or more cables, conduits, and/or pole lines in, under, across and/or along  
roads, streets and highways, commercial driveway and median openings or modifications in the County of Fort Bend, and  
the State of Texas, under the jurisdiction of the Commissioners' Court of Fort Bend County, Texas, pursuant to the  
Commissioners' Court order adopted on the 1st day of December, A.D. 1980, recorded in Volume 13, of the Commissioners'  
Court Minutes of Fort Bend County, Texas, regulating same, which Commissioners' Court order is hereby referred to and  
made a part hereof for all purposes as though fully set out herein;

AND WHEREAS, the principal desires to provide Fort Bend County with a performance bond covering all such cable,  
conduit and/or pole line activity, commercial driveway and median Openings or modifications;

NOW, THEREFORE, if the above bounden principal shall faithfully perform all its cable, conduit and/or pole line  
activity (including, but not limited to the laying, construction, maintenance and/or repair of cables, conduits and/or pole  
lines) in, under, across and/or along roads, streets and highways, commercial driveway and median openings or  
modifications in the County of Fort Bend and State of Texas, under the jurisdiction of the Commissioners Court of Fort Bend  
County, Texas, pursuant to and in accordance with minimum requirements and conditions of the above mentioned  
Commissioners' Court order set forth and specified to be by said principal done and performed, at the time and in the manner  
therein specified, and shaft pay over and make good and reimburse Fort Bend County, all loss and damages which Fort Bend  
County may sustain by reason of any failure or default on the part of said principal, then this obligation shall be null and  
void, otherwise to remain in full force and effect.

This bond is payable at the County Courthouse in the County of Fort Bend and State of Texas.

It is understood that at any time Fort Bend County deems itself insecure under this bond, it may require further  
and/or additional bonds of the principal.

EXECUTED this 26th day of February, 2018

Lischka Utilities, LP

PRINCIPAL

BY

Fidelity and Deposit Company of Maryland

SURETY

BY Danielle D Johnson, Attorney-in-Fact



CCM 4-3-2018 # 12C  
Fort Bend County Clerk  
Return Admin Serv Coord  
Permit # 201818974 RAC

## EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

### CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies,  
this 26th day of February, 2018.



*Gerald F. Haley*

Gerald F. Haley, Vice President

**TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT ALL REQUIRED INFORMATION TO:**

Zurich American Insurance Co.  
Attn: Surety Claims  
1299 Zurich Way  
Schaumburg, IL 60196-1056



Bond

Obligee: Fort Bend County, Robert E. Hebert, County Judge

**ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND  
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **Michael P. Bond, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Danielle D Johnson**, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 22<sup>nd</sup> day of July, A.D. 2015.

ATTEST:  
ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND

*Michael P. Bond*

By: **Michael P. Bond**  
Vice President



*Eric D. Barnes*

By: **Eric D. Barnes**  
Secretary

State of Maryland  
County of Baltimore

On this 22nd day of July, A.D. 2015, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **Michael P. Bond, Vice President and Eric D. Barnes, Secretary** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

*Constance A. Dunn*

Constance A. Dunn, Notary Public  
My Commission Expires: July 9, 2019



## Disclosure Statement



### NOTICE OF DISCLOSURE FOR AGENT & BROKER COMPENSATION

If you want to learn more about the compensation Zurich pays agents and brokers visit:

<http://www.zurichnaproducercompensation.com>

or call the following toll-free number: (866) 903-1192.

This Notice is provided on behalf of Zurich American Insurance Company  
and its underwriting subsidiaries.



## Texas Important Notice

### IMPORTANT NOTICE

To obtain information or make a complaint:

You may call Zurich North America's toll-free telephone number for information or to make a complaint at:

**1-800-382-2150**

You may contact the Texas Department of Insurance to obtain information on companies, coverages, rights, or complaints at:

**1-800-252-3439**

You may write the Texas Department of Insurance:

P.O. Box 149104

Austin, TX 78714-9104

Fax: (512) 490-1007

Web: [www.tdi.texas.gov](http://www.tdi.texas.gov)

E-mail: [ConsumerProtection@tdi.texas.gov](mailto:ConsumerProtection@tdi.texas.gov)

### PREMIUM OR CLAIM DISPUTES:

Should you have a dispute concerning your premium or about a claim, you should contact the company first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

### ATTACH THIS NOTICE TO YOUR POLICY:

This notice is for information only and does not become a part or condition of the attached document.

### AVISO IMPORTANTE

Para obtener información o para presentar una queja:

Usted puede llamar al número de teléfono gratuito de Zurich North America's para obtener información o para presentar una queja al:

**1-800-382-2150**

Usted puede comunicarse con el Departamento de Seguros de Texas para obtener información sobre compañías, coberturas, derechos, o quejas al:

**1-800-252-3439**

Usted puede escribir al Departamento de Seguros de Texas a:

P.O. Box 149104

Austin, TX 78714-9104

Fax: (512) 490-1007

Sitio web: [www.tdi.texas.gov](http://www.tdi.texas.gov)

E-mail: [ConsumerProtection@tdi.texas.gov](mailto:ConsumerProtection@tdi.texas.gov)

### DISPUTAS POR PRIMAS DE SEGUROS O RECLAMACIONES:

Si tiene una disputa relacionada con su prima de seguro o con una reclamación, usted debe comunicarse con la compañía primero. Si la disputa no es resuelta, usted puede comunicarse con el Departamento de Seguros de Texas.

**ADJUNTE ESTE AVISO A SU PÓLIZA:** Este aviso es solamente para propósitos informativos y no se convierte en parte o en condición del documento adjunto.

FILED AND RECORDED  
OFFICIAL PUBLIC RECORDS

*Laura Richard*

Laura Richard, County Clerk

Fort Bend County Texas

April 05, 2018 02:33:26 PM

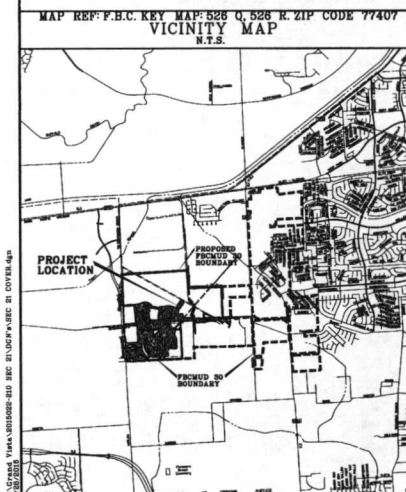
FEE: \$0.00

DP2

**2018035764**



# CONSTRUCTION PLANS FOR WATER, SEWER, DRAINAGE AND PAVING IMPROVEMENTS FOR GRAND VISTA SECTION 21 WITHIN FORT BEND COUNTY M.U.D. No. 30 FORT BEND COUNTY, TEXAS



## INDEX OF DRAWINGS

| SHEET NO. | DESCRIPTION  |
|-----------|--|
| 1         | COVER SHEET  |
| 2         | CONSTRUCTION NOTES   |
| 3         | WATER AND SANITARY LAYOUT  |
| 4         | PAVING AND DRAINAGE LAYOUT   |
| 5         | DRAINAGE CALCULATIONS  |
| 6         | PAVEMENT MARKING AND SIGNAGE LAYOUT  |
| 7         | TRAFFIC CONTROL PLAN FOR BEECHNUT STREET   |
| 8         | PLAN AND PROFILE   |
| 9         | ASPEN DOWNS LANE AND BELFAST MANOR LANE  |
| 10        | BELFAST MANOR LANE AND TRENTON RIDGE TRACE   |
| 11        | VISTA LANDING TRAIL, PROVIDENCE LANDING LANE<br>AND GREEN WOOD MEADOW TRAIL<br>48" STORM SEWER AND 12" STORM SEWER |
| 12        | MISCELLANEOUS  |
| 13        | DRAINAGE DETAILS   |
| 14        | PAVING DETAILS   |
| 15        | WATER MAIN DETAILS   |
| 16        | BUILDING DETAILS, FORT BEND COUNTY RESIDENTIAL   |
| 17        | DRIVEWAYS DETAILS  |
| 18        | SANITARY SEWER DETAILS   |
| 19        | *TYPICAL STANDARD FACILITIES CURB RAMP (PED 12A)   |
| 20        | *TYPICAL STANDARD PAVEMENT MARKINGS  |
| 21        | *PRECAST SAFETY END TREATMENT  |
| 22        | POLLUTION PREVENTION PLAN  |
| 23        | POLLUTION PREVENTION DETAILS<br>LOT GRADING LAYOUT<br>PLAN   |

JOB NO.: 2015022-201-211 JANUARY 2016



- NOTES:
- ALL BEARINGS ARE BASED ON THE TEXAS STATE PLANE COORDINATE GRID SYSTEM, SOUTH CENTRAL ZONE.
  - PRIOR TO THE CONSTRUCTION OF THESE FACILITIES WITHIN OR BY THE DISTRICT, THE DISTRICT OR ITS ENGINEER WILL GIVE WRITTEN NOTICE BY REGISTERED OR CERTIFIED MAIL TO THE DIRECTOR OF PUBLIC WORKS AND ENGINEERING, CITY OF HOUSTON, STATING THE DATE SUCH CONSTRUCTION WILL COMMENCE.
  - CONTRACTOR SHALL NOTIFY THE CITY OF HOUSTON, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING, OFFICE OF THE CITY ENGINEER, 48 HOURS BEFORE STARTING WORK ON THIS PROJECT. PHONE NO. 832-394-9066.
  - CONTRACTOR SHALL NOTIFY FORT BEND COUNTY 48 HOURS BEFORE STARTING WORK AT CONSTRUCTION@FORTBENDCOUNTYTX.GOV

THE STANDARD SHEET SPECIFICALLY IDENTIFIED BY A (U) HAS BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.  
(U) STATEWIDE TxDOT STANDARD  
JASON M. ROBERTS P.E. 97274 4/12/16  
DATE

FIRM:  
FLOOD INSURANCE RATE MAP: FORT BEND COUNTY, TEXAS AND INCORPORATED AREAS.  
PANEL: 130 & 140 OF 575  
MAP NO. 48157C0303L, 48157C0404L  
MAP REVISED APRIL 2, 2014  
THIS PROJECT IS LOCATED IN UNSHADED ZONE X, OUTSIDE THE 500-YEAR FLOOD PLAN.

LOG NO. 15-1673  
ELMS NO. 15130569

TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT ENERGY AT 713-287-2222.

## NOTICE:

For your safety, you are required by Texas Law to call 811 at least 48 hours before you dig so that underground lines can be marked. This verification does not fulfill your obligation to call 811.

## VERIFICATION OF PRIVATE UTILITY LINES

Signature: *Jason M. Roberts* Date: 4/19/16  
CenterPoint Energy/ Natural Gas Facilities Verification ONLY  
(This Signature verifies that you have shown CPE Natural Gas Lines correctly-not to be used for conflict verification.) (Use service lines are not shown.)  
Signature valid for six months.

Signature: *Jason M. Roberts* Date: 4/19/16  
CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY  
(This Signature verifies existing underground facilities-not to be used for conflict verification.)  
Signature valid for six months.

NAT APPLICABLE  
Approved for AT&T Texas/SWBT Underground Conduit Facilities ONLY.  
Signature valid for one year

## FORT BEND COUNTY ENGINEER

ENGINEER: *Jason M. Roberts, P.E.*  
FOR: RICHARD W. VOLLEIS, P.E.

DATE: 3/30/17

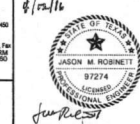
THESE SIGNATURES ARE VOID IF CONSTRUCTION HAS NOT COMMENCED IN THE (1) YEAR FROM DATE OF APPROVAL.

APPROVED: *Jason M. Roberts*  
DEVELOPER/COORDINATOR  
DATE: 3/29/17

NOTE: CITY SIGNATURES VALID FOR ONE YEAR ONLY AFTER DATE OF SIGNATURES



SURVEYED BY: COSTELLO, INC.



## CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

WATER: *Jason M. Roberts* 4-18-16  
STORM: *Jason M. Roberts* 4-18-16  
STREET & BRIDGE: *Jason M. Roberts* 4-18-16

CITY ENGINEER

DIRECTOR OF PUBLIC WORKS AND ENGINEERING

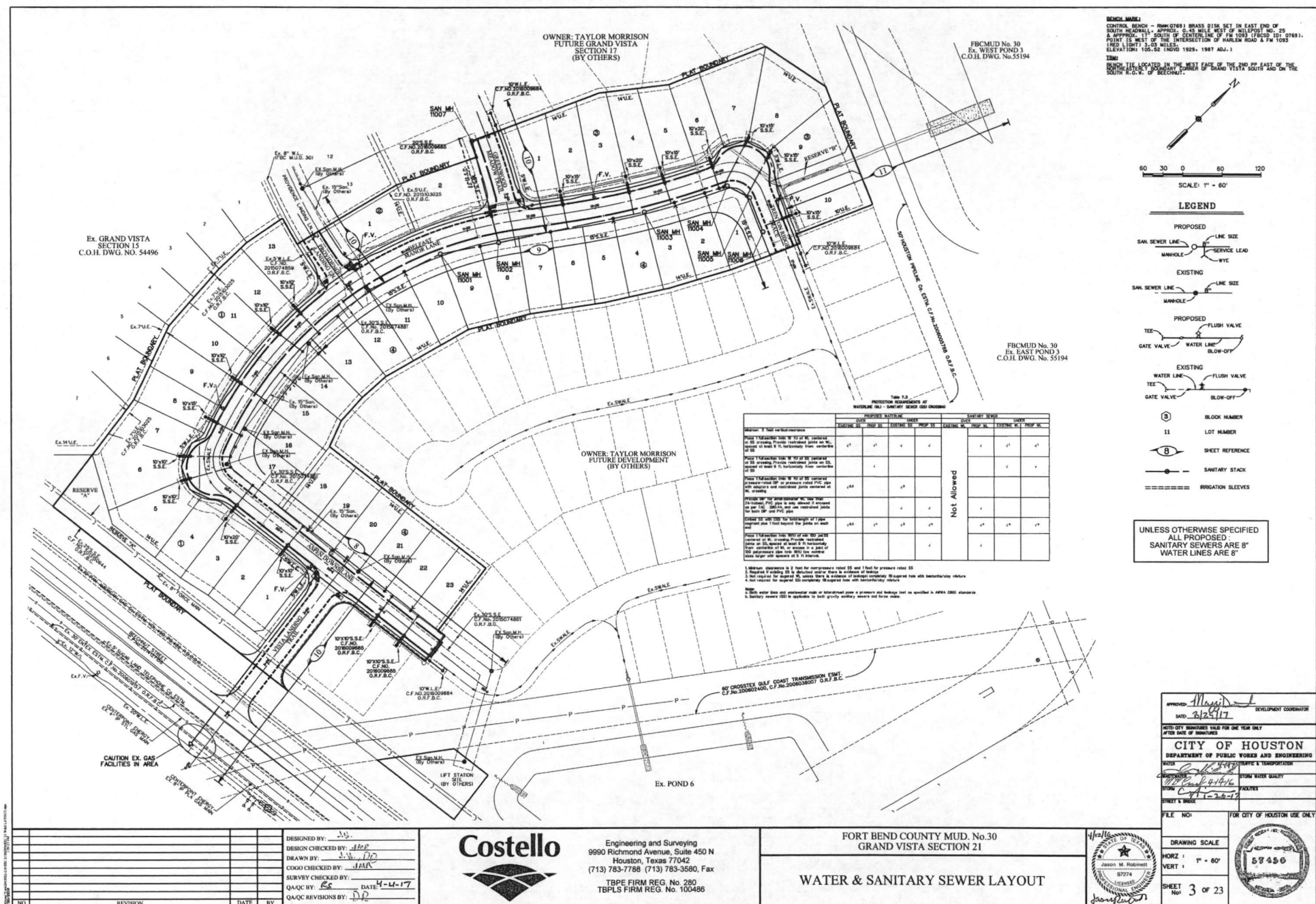
SHEET No: 1 OF 23



GRAND VISTA SECTION 21 - JOB NO. 2015022-201-211





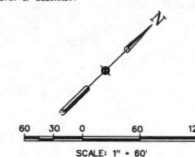


- 1) STORM WATER DETENTION PLANS IS PROVIDED IN GRANDVISTA PHASE 4 DETENTION IMPROVEMENTS ENGINEERING FIRM CELLULO
- 2) SITE SIGNED AND APPROVED BY FORT BEND COUNTY ENGINEERING, 3/31/2019  
STORM WATER DRAINAGE DESIGN REPORT  
 REPORT TITLE: GRANDVISTA PHASE 4 DETENTION ANALYSIS UPDATE 120 ACRES PHASE 4  
 DATE: 4/15/2019 ENGINEERING FIRM: CELLULO  
 DATE OF APPROVEMENT: BY CEDD, 4/15/2019  
 115 ACRES ULTIMATE
- 3) INCREASED IMPERVIOUS COVER = 454 ACRES  
 DETENTION RATE REQUIRED = 0.714 ACRES-FEET PER ACRE  
 DETENTION RATE PROVIDED = 1.114 ACRES-FEET PER ACRE

FBCMUD No. 30  
Ex. WEST POND 3  
C.O.H. DWG. No. 55194

**BENCH MARK:**  
CONTROL BENCH - RWM(G769) BRASS DISK SET IN EAST END OF  
SOUTH HEADWALL, APPROX. 0.45 MILE WEST OF MILEPOST NO. 25  
ON USX, 1.5 MILES SOUTHWEST OF CENTERLINE OF FW 1093 (PARCSD 10768).  
POINT IS WEST OF THE INTERSECTION OF HARLEM ROAD & FW 1093  
(RED LIGHT) 3.03 MILES.  
ELEVATION: 105.52 (NVDY 1929, 1987 ADJ.)

**TIME:**  
BENCH TIME LOCATED IN THE WEST FACE OF THE 2ND RP EAST OF THE  
INTERSECTION OF THE SOUTHWEST CORNER OF GRAND VISTA SOUTH AND ON THE  
SOUTH S.O.N. OF BUCKINGHAM.



APPROVED M. J. S. DEVELOPMENT COORDINATOR

DATE 5/24/17

NOTE: CITY REQUIREMENTS VALID FOR ONE YEAR ONLY  
AFTER DATE OF SIGNATURES

**CITY OF HOUSTON**  
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

WATER 57476 SEWER'S REGISTRATION

MATERIAL 2" 150# STORM WATER DUCTS

QUANTITY 11 FEET

STREET & BLOCK 1 - 26-17

FILE NO: \_\_\_\_\_ FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE \_\_\_\_\_

HORIZ : 1" = 60'

VERT : \_\_\_\_\_

SHEET NO. 4 OF 23

CITY OF HOUSTON  
SEWERAGE DEPARTMENT  
**57456**  
1" = 100' HORIZ. SCALE

10

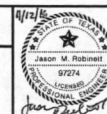


Engineering and Surveying  
9990 Richmond Avenue, Suite 450 N  
Houston, Texas 77042  
(713) 783-7788 (713) 783-3580, Fax  
TBPE FIRM REG. No. 280  
TBPLS FIRM REG. No. 100486

FORT BEND COUNTY MUD. No.30  
GRAND VISTA SECTION 21

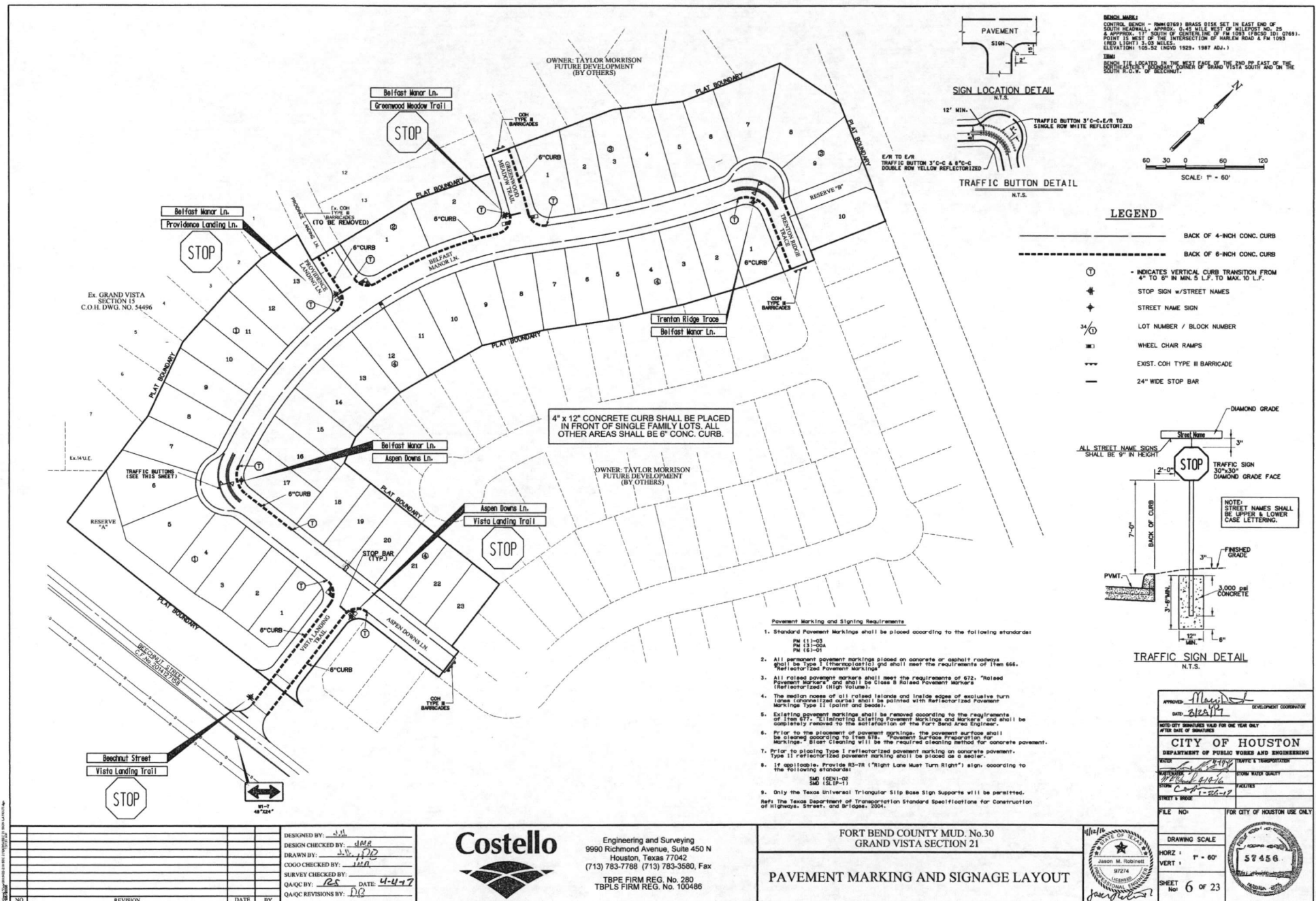
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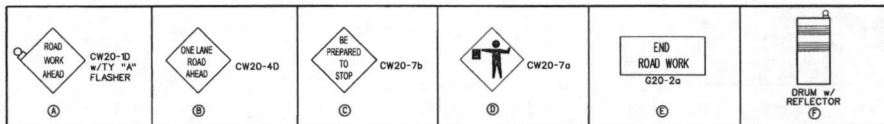
PAVING & DRAINAGE LAYOUT

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| STORM SEWER CALCULATIONS |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | DESIGN DATA |  |  |  |  |  |  |  |  |  | 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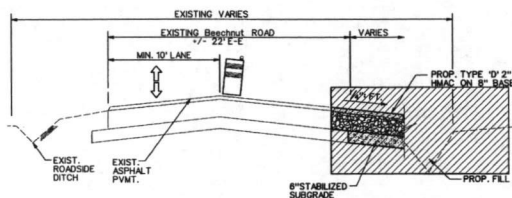




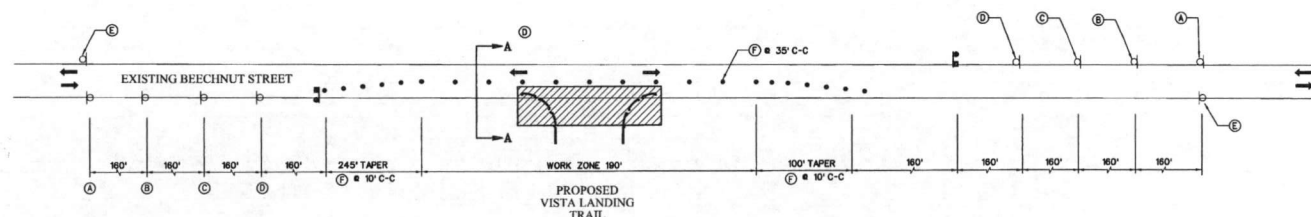
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# LEGEND

- CONSTRUCTION WARNING SIGN
- CHANNELIZING DEVICE
- CONSTRUCTION ZONE
- DIRECTION OF TRAFFIC FLOW
- FLAGGER



SECTION "A"-A"  
N.T.S.



## TRAFFIC CONTROL NOTES

- 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 7 A.M. to 9 A.M. and 4 P.M. to 6:30 P.M. Monday thru Friday.
- Off duty police officers/flaggers are required to direct traffic when lanes are blocked.
- Contractor shall cover the excavation with steel plates anchored properly during non-working hours and allow normal traffic flow. If covering is not feasible, use Trantex FR 336 EPX 36" delineator or approved equal with sheeting and base exposed to pavement next to excavation during non-working hours.
- Approved copies of "Traffic Control Plans" shall be available for inspection at all times.
- If the contractor chooses to use a different method of traffic control plan during the construction than what is outlined in the contract drawings, (s)he shall be responsible to prepare and submit alternate plans to Traffic Section of FBCE for approval ten (10) working days prior to implementation. These plans shall be drawn to scale on reproducible mylar and sealed by a licensed engineer in the state of Texas. Plans will become a part of the contract drawings.
- If the project is within 400 feet from a signalized intersection, the contractor shall contact FORT BEND COUNTY ENGINEERING DEPARTMENT at CONSTRUCTION@FORTBENDCOUNTYTX.GOV five (5) working days prior to the start of construction.

## MISCELLANEOUS TRAFFIC CONTROL NOTES

- All advanced warning signs to be set prior to start of construction activities and to remain in place until all construction activities are complete and accepted by Fort Bend County. The contractor will coordinate with the Fort Bend County Engineering Department in establishing traffic routes and location of signs.
- All flaggers shall be in radio contact with each other at all times, as required.
- All pavement markings covered by overlay shall be replaced before opening to traffic.
- Advance signing shall be placed a minimum of two weeks in advance to inform of possible delay. Contractor shall notify the Harris County Engineering Department at least two weeks prior to any construction.
- All portable signing, drums and cones shall be removed at the end of each day.
- If work zone is needed overnight all cones or tubular markers shall be replaced with drums w/ VP's and temporary pavement markings shall be in place for nighttime operation as directed by the engineer.
- Access to existing businesses or residences shall be maintained at all times.
- Traffic control signs may be adjusted to fit field conditions, with approval of the engineer.
- Contractor shall treat overnight drop-off conditions with a 3:1 or flatter slope wedge capable of supporting vehicle loads.

|   |          |
|---|----------|
| DESIGNED BY: <i>AMR</i>                   |          |
| DESIGN CHECKED BY: <i>AMR</i>             |          |
| DRAWN BY: <i>AMR</i>                      |          |
| CADD CHECKED BY: <i>AMR</i>               |          |
| SURVEY CHECKED BY: <i>AMR</i>             |          |
| QA/QC BY: <i>AMR</i> DATE: <i>4-19-17</i> |          |
| QA/QC REVISIONS BY: <i>AMR</i>            |          |
| NO  | REVISION |
|   | DATE BY  |



Engineering and Surveying  
9990 Richmond Avenue, Suite 450 N  
Houston, Texas 77042  
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FORT BEND COUNTY MUD. No.30  
GRAND VISTA SECTION 21

TRAFFIC CONTROL PLAN  
FOR BEECHNUT STREET



|   |                              |
|---|------------------------------|
| APPROVED: <i>[Signature]</i><br>DATE: <i>4/25/17</i>          |                              |
| CITY OF HOUSTON<br>DEPARTMENT OF PUBLIC WORKS AND ENGINEERING |                              |
| FILE NO: <i>2017-0017</i>                                     | FOR CITY OF HOUSTON USE ONLY |
| DRAWING SCALE: <i>AS SHOWN</i>                                |                              |
| HORIZ: <i>N/A</i>   | VERT: <i>N/A</i>             |
| SHEET NO: <i>7</i> OF <i>23</i>                               |                              |

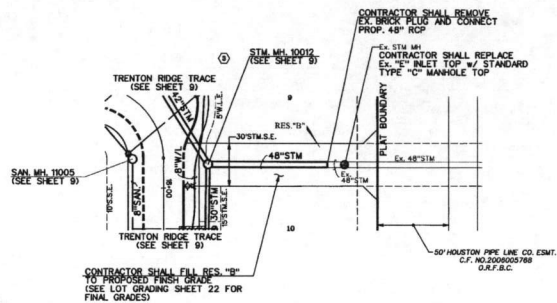




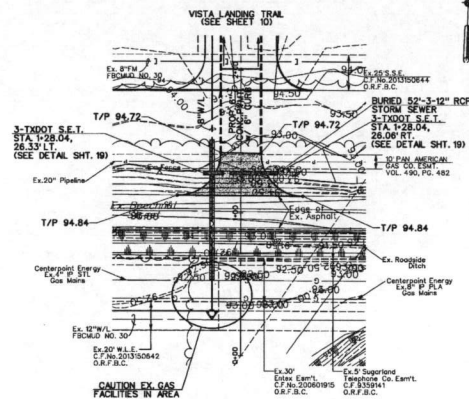






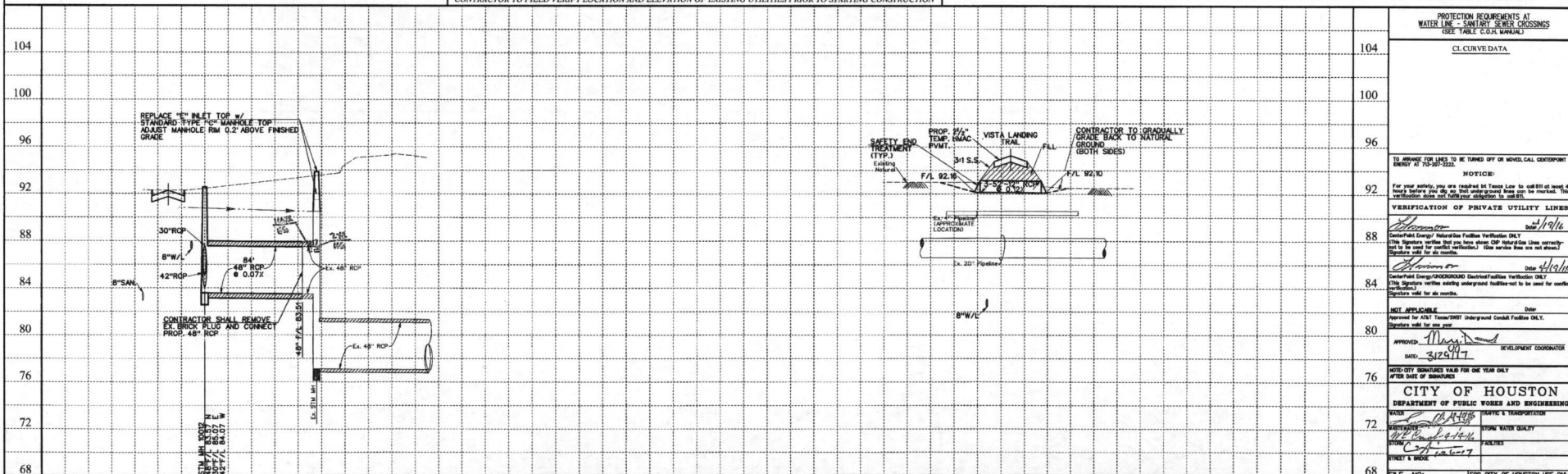


48" STORM SEWER



3 - 12" STORM SEWER

CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO STARTING CONSTRUCTION



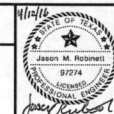
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|     |          |      |    |

DESIGNED BY: J.H.  
 DESIGN CHECKED BY: M.A.  
 DRAWN BY: J.H.  
 CHECKED BY: M.A.  
 SURVEY CHECKED BY: PS DATE: 4-4-17  
 QA/QC BY: PS DATE: 4-4-17  
 QA/QC REVISIONS BY: PS



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 9990 Richmond Avenue, Suite 450 N  
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 TBPLS FIRM REG. NO. 100486

FORT BEND COUNTY MUD, No.30  
 GRAND VISTA SECTION 21  
 PLAN AND PROFILE  
 48" STORM SEWER AND  
 3 - 12" STORM SEWER



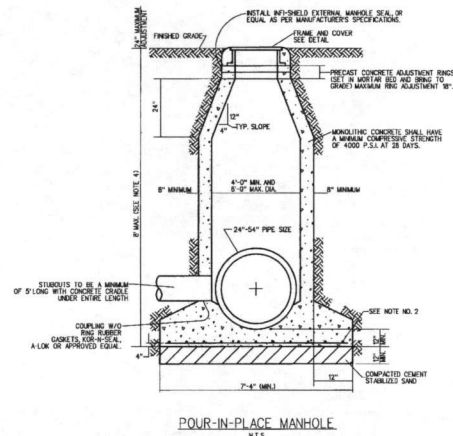
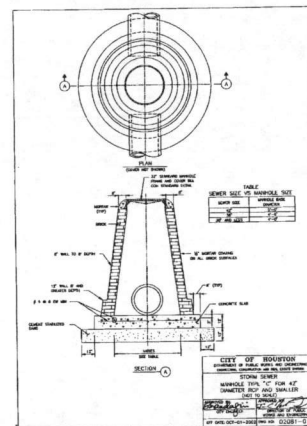
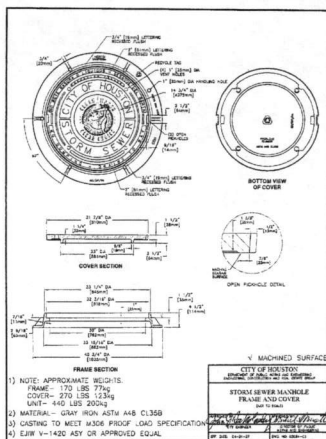
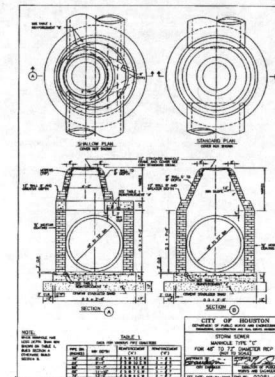
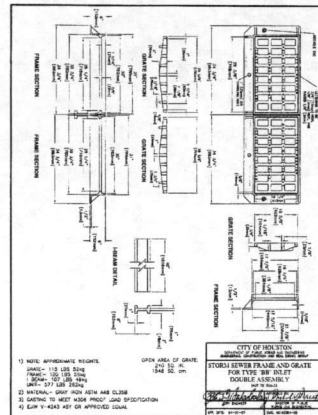
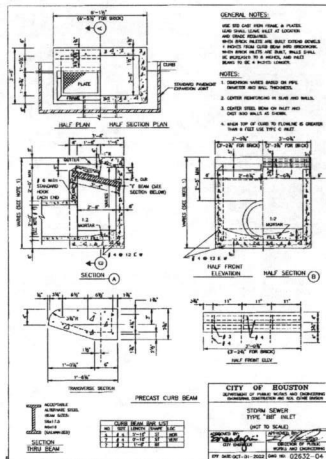
DRAWING SCALE  
 HORIZ: 1" = 40'  
 VERT: 1" = 4'  
 SHEET 11 OF 23

**BENCH MARK**  
 CONTROL BENCH - RAINCREEK BRASS DISK SET IN EAST END OF SOUTH SIDEWALK, APPROX. 0.45 MILE WEST OF MILEPOST NO. 25 & APPROX. 17' SOUTH OF CENTERLINE OF FM 1093 (PCEC 101 0789). POINT IS WEST OF THE INTERSECTION OF HARLEM ROAD & FM 1093 (ELEV. 105.52) & 0.45 MILES.  
 ELEVATION: 105.52 (NOV 1929, 1987 ADJ.)  
**TIME**  
 BENCH TIE LOCATED IN THE WEST FACE OF THE DRAIN PP EAST OF THE INTERSECTION OF HARLEM ROAD & FM 1093 (ELEV. 105.52) & 0.45 MILES. BENCH TIE LOCATED IN THE SOUTH R.O.W. OF BEECHMONT.

- NOTES**
1. UNLESS OTHERWISE NOTED, ALL STORM SEWERS AND INLET LEADS WILL BE PROPOSED REINFORCED CONCRETE PIPE (C-76, C-8, & W/PROPOSED TYPE "C" MANHOLES).
  2. 1- 18" PVC SANITARY JOINT CENTERED OVER/UNDER ONE 18" PVC WATERING JOINT REFER TO PROTECTION REQUIREMENTS CHART FOR WATERLINE AND SANITARY CROSSINGS ON SHEET 3.
  3. ALL CURB RACK SHALL BE 22" UNLESS OTHERWISE NOTED. MINIMUM SLOPE AROUND CURB RETURN 1.0%.
  4. 48" CONCRETE CURB SHALL BE PLACED IN FRONT OF SINGLE FAMILY LOTS. ALL OTHER AREAS SHALL BE 6" CONC. CURB. (SEE SHEET 6).
  5. EXIST. TEMP. SWALES WITHIN R.O.W. TO BE MAINTAINED, PROOF ROLLED & FILLED. (NO SEPARATE PART)
- LEGEND**
- PROPOSED STACK
  - EXISTING STACK
  - ☒ - INDICATES 1.0% OFFSET & 45" FROM 8" SAN. TRUNKLINE & 0.75% VERTICAL FEET ADDED TO 8" SAN. FLOORLINE. (SEE SANITARY SEWER DETAIL SHEET 16)
  - ☑ - INDICATES MIN. VERTICAL CLEARANCE
  - ⊕ - INDICATES VERTICAL CURB TRANSITION FROM 4" TO 8" IN MAX. 10' L.F. TO MAX. 10' L.F.

2025/04/04 10:00 AM

2025/04/04 10:00 AM



|                     |       |
|---------------------|-------|
| DESIGNED BY:        | DATE: |
| DESIGN CHECKED BY:  | DATE: |
| DRAWN BY:           | DATE: |
| CHECKED BY:         | DATE: |
| SURVEY CHECKED BY:  | DATE: |
| QA/QC BY:           | DATE: |
| QA/QC REVISIONS BY: | DATE: |



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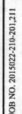
FORT BEND COUNTY MUD. No.30  
 GRAND VISTA SECTION 21

DRAINAGE DETAILS



|   |                              |
|---|------------------------------|
| APPROVED: <i>Jason M. Robinson</i>                            | DEVELOPMENT COORDINATOR      |
| DATE: 3/25/17   |                              |
| CITY OF HOUSTON<br>DEPARTMENT OF PUBLIC WORKS AND ENGINEERING |                              |
| NAME: <i>Jason M. Robinson</i>                                | STATE'S TRANSPORTATION       |
| ADDRESS: <i>11111 West 28th St.</i>                           | STORM WATER DIVISION         |
| PHONE: <i>281-417-1111</i>                                    | FACILITIES                   |
| FILE NO:  | FOR CITY OF HOUSTON USE ONLY |
| DRAWING SCALE   |                              |
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| VERT: N.T.S.  |                              |
| SHEET No. 12 of 23  |                              |

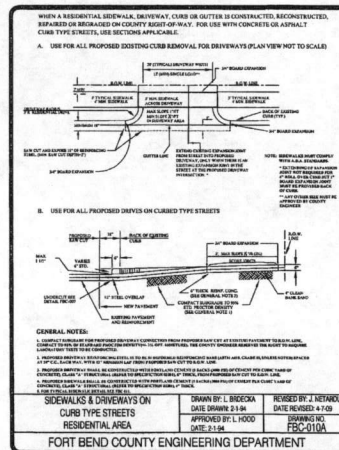
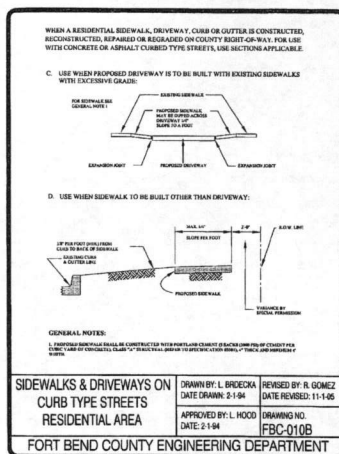
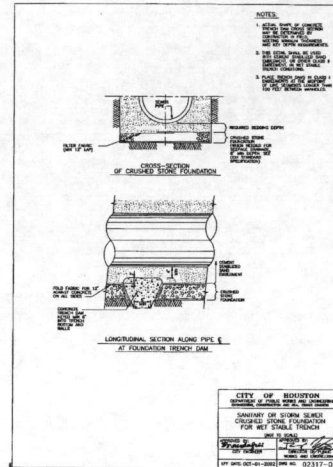
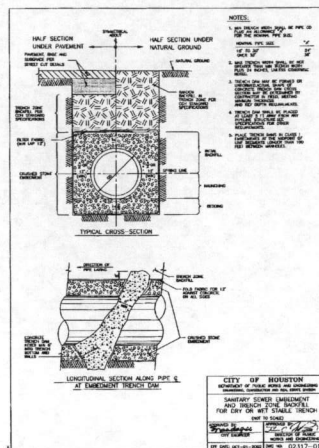
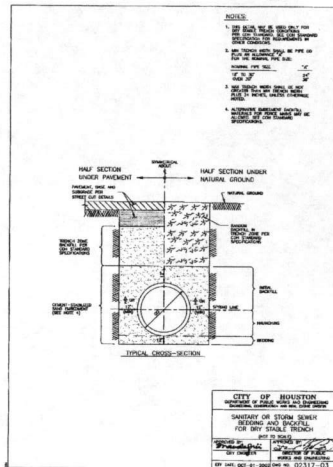












APPROVED: *[Signature]* DEVELOPMENT COORDINATOR

DATE: 2/29/17

NOTED: CITY ENGINEER WALK FOR ONE YEAR ONLY AFTER DATE OF MODIFICATION

**CITY OF HOUSTON**  
**DEPARTMENT OF PUBLIC WORKS AND ENGINEERING**  
**STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION**  
**SECTION 100.01 CURB AND GUTTER**  
**FOR DRY STABLE TRENCH**  
**REVISED 11-1-06**  
**BY: J. B. GOMEZ, P.E. (100.01-01) HMM NO. 02317-03**

FILE NO: *[Blank]*

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE: *[Blank]*

HORIZ: *[Blank]* N.T.S.

VERT: *[Blank]*

SHEET No: 15 of 23

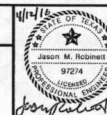
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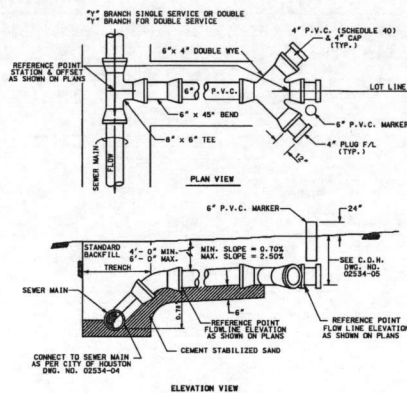
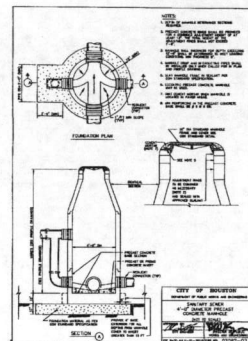
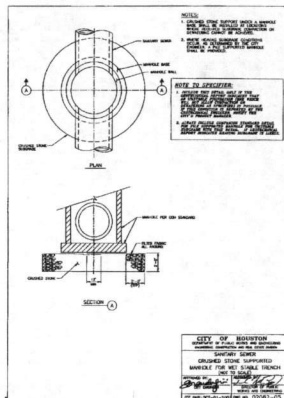
Engineering and Surveying  
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 Houston, Texas 77042  
 (713) 763-7788 (713) 783-3580, Fax  
 TBPE FIRM REG. No. 280  
 TBPLS FIRM REG. No. 100486

FORT BEND COUNTY MUD. No.30  
 GRAND VISTA SECTION 21

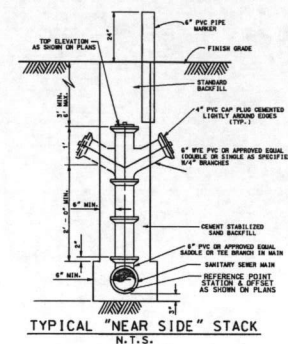
**BEDDING DETAILS, FORT BEND COUNTY RESIDENTIAL DRIVEWAYS DETAILS**



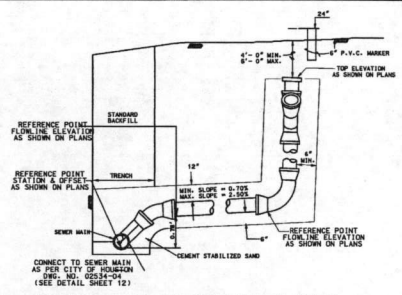
FOR CITY OF HOUSTON USE ONLY



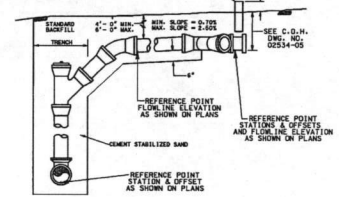
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N.T.S.



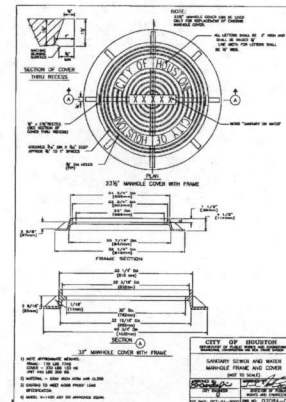
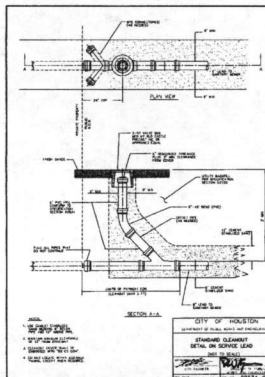
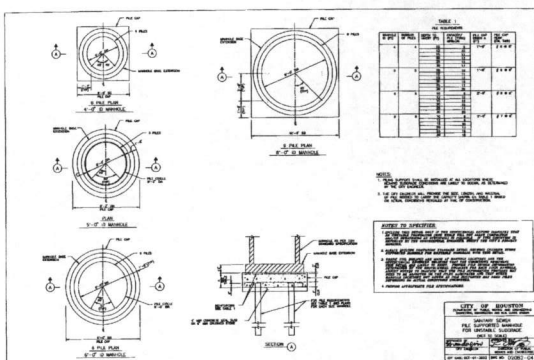
**TYPICAL "NEAR SIDE" STACK**  
N.T.S.



**TYPICAL LEAD TO "FAR SIDE" STACK**  
N.T.S.



**TYPICAL "NEAR SIDE" STACK W/LEAD TO FAR SIDE**  
N.T.S.



APPROVED: *[Signature]*  
DATE: 11/21/17  
DEVELOPMENT COORDINATOR

CITY OF HOUSTON  
DEPARTMENT OF PUBLIC WORKS & ENGINEERING

STREET & BLOCK: 15147  
STREET & BLOCK: 15147  
STREET & BLOCK: 15147

FILE NO: 15147  
FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE  
HORIZ: N.T.S.  
VERT: N.T.S.

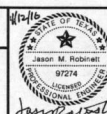
SHEET No. 16 of 23

57450



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TBPLS FIRM REG. No. 100486

FORT BEND COUNTY MUD. No.30  
GRAND VISTA SECTION 21  
**SANITARY SEWER DETAILS**

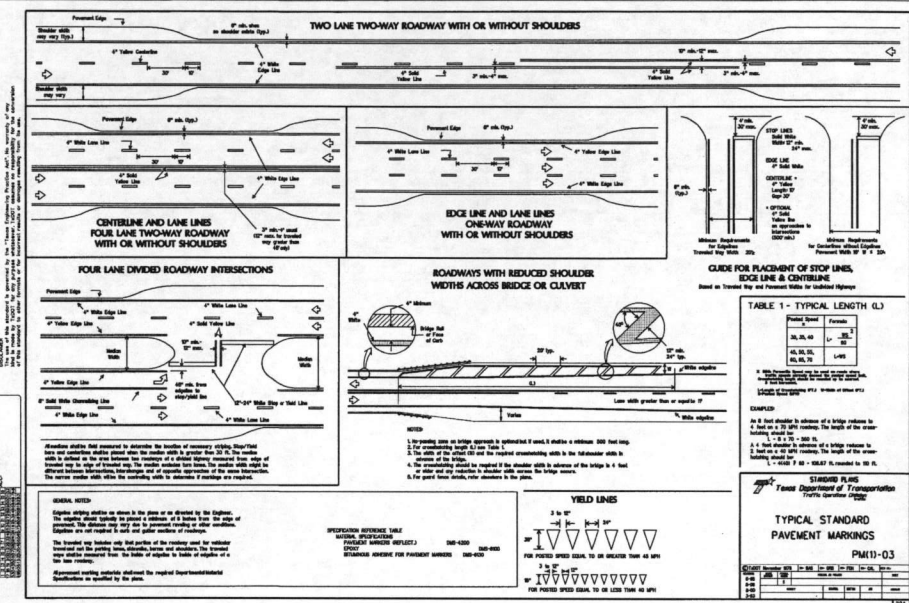
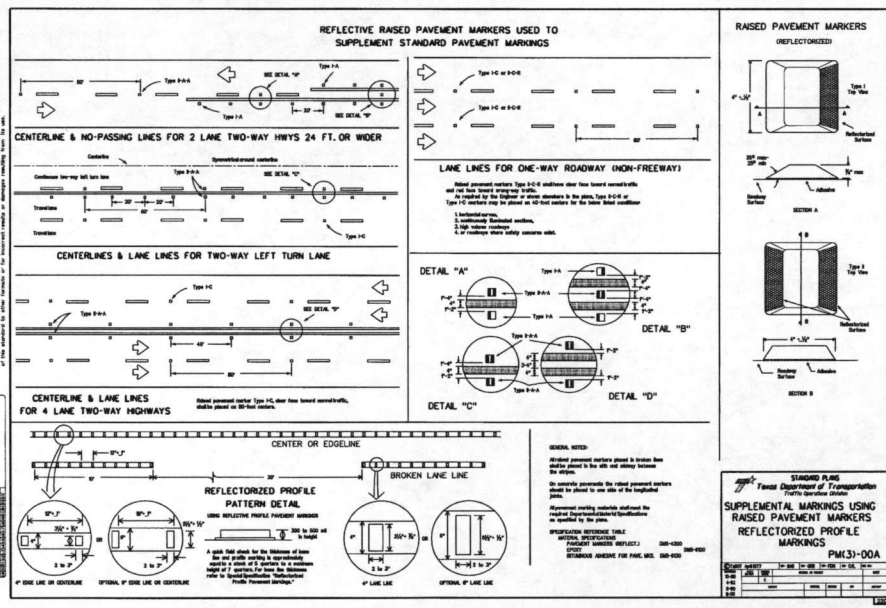


| NO. | REVISION | DATE | BY |
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DESIGNED BY: *[Signature]*  
DESIGN CHECKED BY: *[Signature]*  
DRAWN BY: *[Signature]*  
COORD CHECKED BY: *[Signature]*  
QA/QC BY: *[Signature]* DATE: 4-21-17  
QA/QC REVISIONS BY: *[Signature]*





[illegible]

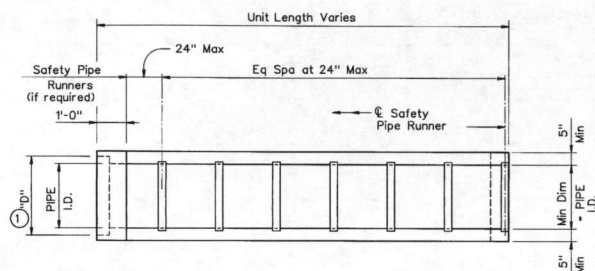

**STANDARD PLANS**  
 Texas Department of Transportation  
 Traffic Operations Division

## TYPICAL STANDARD PAVEMENT MARKINGS

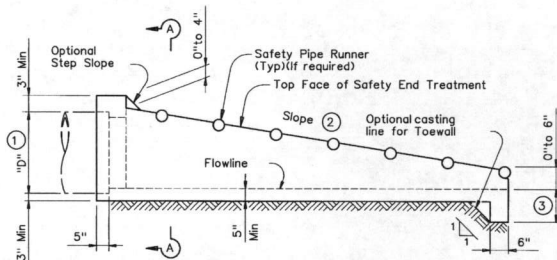
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| © TxDOT March 2001 |                | DP#            | CD# GRB            | DP# FDN | CD# CAL |
| REVISIONS          | STATE DISTRICT | FEDERAL REGION | FEDERAL HD PROJECT |         | SHEET   |
|                    |                | 6              |                    |         |         |
|                    | COUNTY         |                | CONTROL            | SECTION | JOB     |
|                    |                |                |                    |         | HIGHWAY |

Maxine 3/29/17

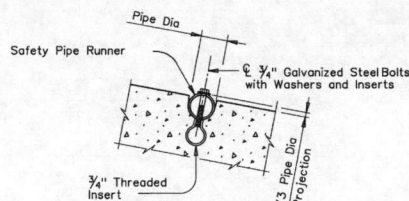
DISCLAIMER: The use of this standard is governed by the Texas Engineering Practice Act. No liability is assumed for the use of this standard for purposes other than those intended. The user assumes all responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.



PLAN

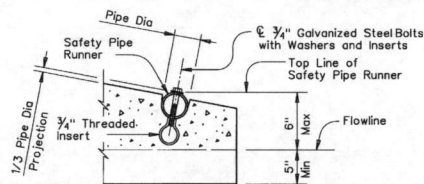


LONGITUDINAL ELEVATION

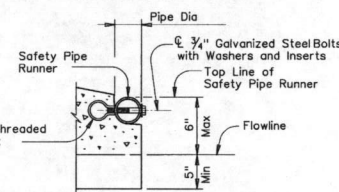


INSTALLATION DETAIL FOR SAFETY PIPE RUNNERS

(If required)



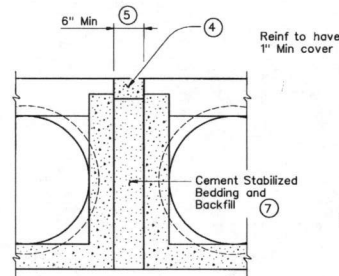
OPTION A



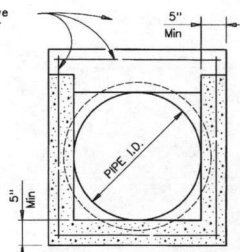
OPTION B

END DETAILS FOR INSTALLATION OF SAFETY PIPE RUNNERS

(If required)

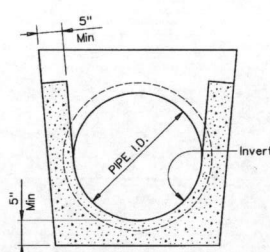


MULTIPLE PIPE INSTALLATION

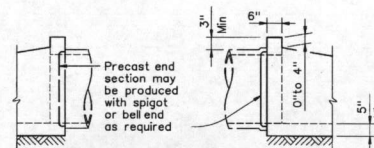


OPTION WITH SQUARE BOTTOM

SECTION A-A



OPTION WITH INVERT BOTTOM



OPTIONAL JOINT

(Showing joint between RCP and Precast Safety End Treatment)

| PIPE I.D. | PIPE WALL THICKNESS | "D"     | MAXIMUM SLOPE | MINIMUM LENGTH OF UNIT | PIPE RUNNERS REQUIRED |                   | REQUIRED PIPE RUNNER SIZES |        |        |
|-----------|---------------------|---------|---------------|------------------------|-----------------------|-------------------|----------------------------|--------|--------|
|           |                     |         |               |                        | SINGLE PIPE           | MULTIPLE PIPE     | NOMINAL DIA.               | O.D.   | I.D.   |
| 12"       | 2"                  | 17"     | 6:1           | 4'-9"                  | No                    | Yes, for >2 pipes | 3" STD                     | 3.500" | 3.068" |
| 15"       | 2 1/4"              | 20 1/2" | 6:1           | 6'-5"                  | No                    | Yes, for >2 pipes | 3" STD                     | 3.500" | 3.068" |
| 18"       | 2 1/2"              | 24"     | 6:1           | 8'-0"                  | No                    | Yes, for >2 pipes | 3" STD                     | 3.500" | 3.068" |
| 24"       | 3"                  | 31"     | 6:1           | 11'-3"                 | No                    | Yes, for >2 pipes | 3" STD                     | 3.500" | 3.068" |
| 30"       | 3 1/2"              | 38 1/2" | 6:1           | 14'-8"                 | No                    | Yes               | 4" STD                     | 4.500" | 4.026" |
| 36"       | 4"                  | 45 1/2" | 6:1           | 17'-11"                | Yes                   | Yes               | 4" STD                     | 4.500" | 4.026" |
| 42"       | 4 1/2"              | 52 1/2" | 6:1           | 21'-2"                 | Yes                   | Yes               | 4" STD                     | 4.500" | 4.026" |

- Dimension "D" is based on ASTM C-76, Class III, Wall "B" thickness. If any other wall thickness is used, dimension "D" must be adjusted accordingly.
- Slope as shown elsewhere in the plans. Slope of 6:1 or flatter is required for vehicle safety.
- Toewall to be used only when dimension is shown elsewhere in the plans.
- The top 4" of void between Precast End Treatments shall be filled with concrete Riprap and shall be considered subsidiary to Safety End Treatment.
- Clear distance between pipes shall be adjusted to provide for the minimum distance between safety end treatments.
- Cement stabilized bedding and backfill shall be in accordance with the item, "Excavation and Backfill for Structures". Bedding and backfill shall be considered subsidiary to the item "Safety End Treatment". When concrete riprap is specified around the safety end treatment, backfill shall be as directed by Engineer.

#### GENERAL NOTES:

Precast safety end treatment for reinforced concrete pipe may be used for TYPE II end treatment as specified in item "Safety End Treatment". When Precast Safety End Treatment is used as a Contractor's alternate to mitered RCP, Riprap will not be required unless noted otherwise on the plans.

Manufacture of this product shall conform to requirements of item "Safety End Treatment" except as noted below:

A. Minimum reinforcing shall be #4 at 6" (Grade 40) or #4 at 9" (Grade 60) each way or 5 x 5 - W12 x W12 or 5 x 5 - W10 x W10 welded wire fabric.

B. Concrete for precast (steel formed) sections shall be Class "C" with a minimum compressive strength of 3600 psi.

At the option and expense of the Contractor the next larger size of Safety End Treatment may be furnished: as long as the "D" dimension cast is that of the required size of pipe.

Pipe Runners are designed for a traversing load of 10,000 Lbs at yield as recommended by Research Report 280-2F, "Safety Treatment of Roadside Parallel-Drainage Structures", Texas Transportation Institute, March 1981.

Pipe Runners shall conform to the requirements of ASTM A53 (Type E or S, Grade B), ASTM A500 (Grade B), or API 5LX52.

All steel components except reinforcing, shall be galvanized after fabrication. Galvanizing damaged during transport or construction shall be repaired in accordance with the specifications.



Texas Department of Transportation  
Bridge Division

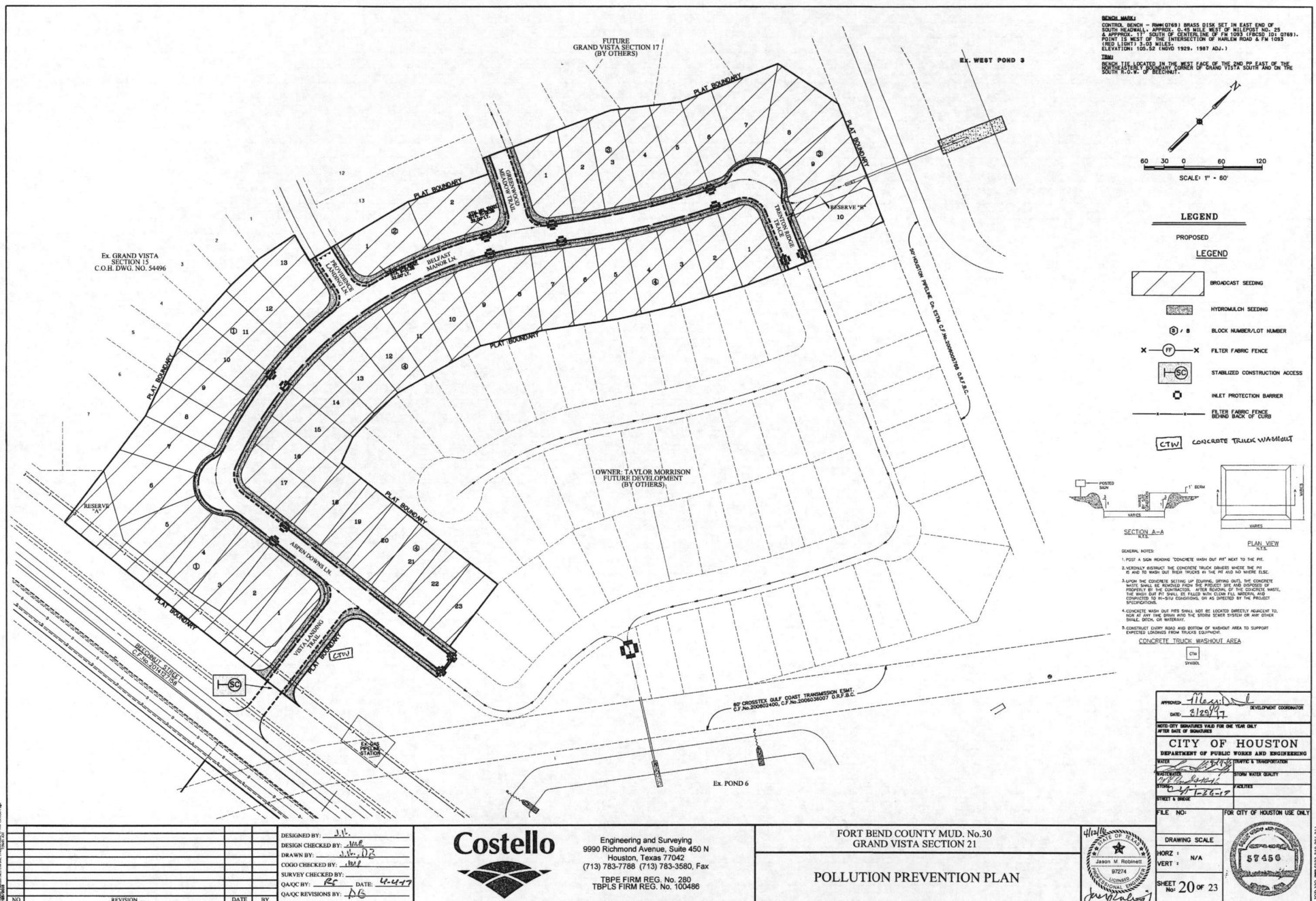
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PSET-SP

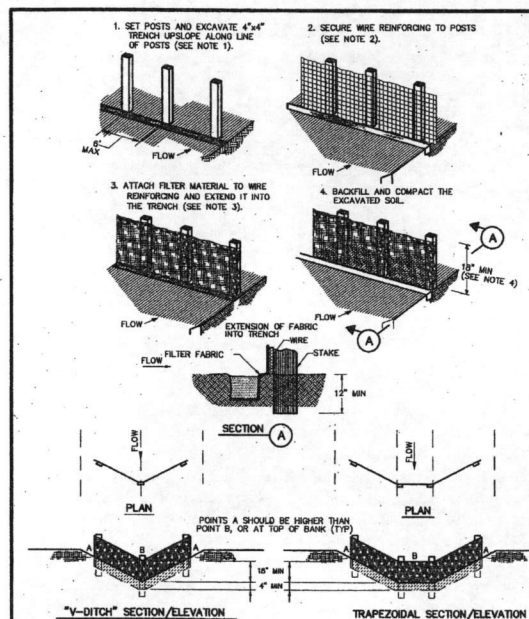
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| ©14001 December 2003 | DISTRICT | FEDERAL NO PROJECT | NO/22   |         |
| REVISIONS            | COUNTY   | CONTROL            | SECT    | JOB     |
|                      |          |                    |         | HIGHWAY |

Massi 3/25/17

SHEET 19 OF 23





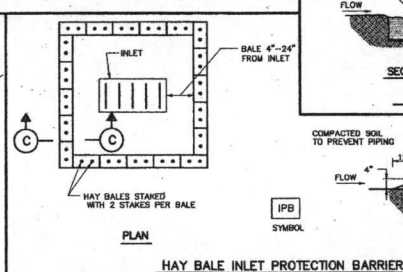
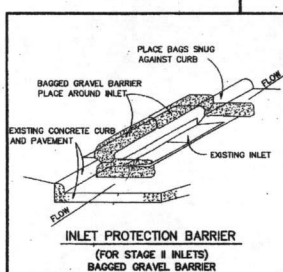


#### CONSTRUCTION NOTES:

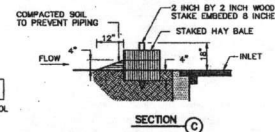
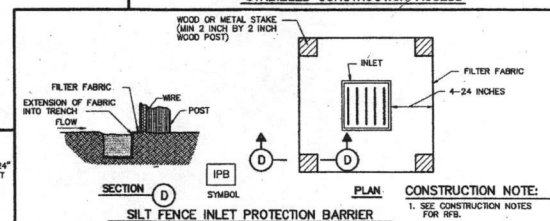
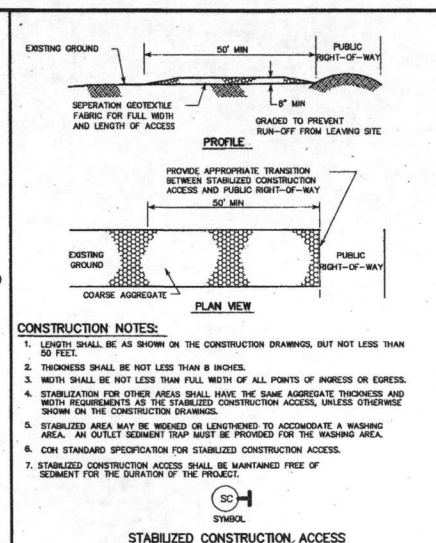
1. SET 2 INCH BY 2 INCH WOODEN STAKES SPACED A MAX OF 6 FEET APART AND EMBEDDED A MIN OF 12 INCHES.
2. WOVEN WIRE REINFORCING TO BE FASTENED SECURELY TO BARRIER POSTS WITH STAPLES.
3. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE REINFORCING, WITH TIES SPACED EVERY 24 INCHES AT TOP AND MIDSECTION.
4. MINIMUM HEIGHT OF FILTER SHOULD BE 18 INCHES AND A MAXIMUM OF 36 INCHES ABOVE NATURAL GROUND.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED 8 INCHES AT THE POSTS, AND FOLDED.
6. SEE COH STANDARD SPECIFICATION FOR FILTER FABRIC BARRIER.



**REINFORCED FILTER FABRIC BARRIER**



Engineering and Surveying  
9990 Richmond Avenue, Suite 450 N  
Houston, Texas 77042  
(713) 783-7788 (713) 783-3580, Fax  
TBPE FIRM REG. No. 280  
TBPLS FIRM REG. No. 100486



**CITY OF HOUSTON**  
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

**STORM WATER POLLUTION PREVENTION PLAN DETAILS**  
(NOT TO SCALE)

APPROVED: *[Signature]*  
CITY ENGINEER

DIRECTOR OF PUBLIC WORKS AND ENGINEERING

OFF DATE: JULY-01-2010 DWG NO: 01571-01

APPROVED: *[Signature]*  
DEVELOPMENT COORDINATOR

DATE: *5/14/10*

**CITY OF HOUSTON**  
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

SEAL: *[Signature]*

STATION: *1+26.17*

STREET & MARK: *1+26.17*

FILE NO: *57456*

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE: *1"=20'*

HORIZ: *N.T.S.*

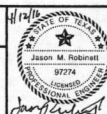
VERT: *N.T.S.*

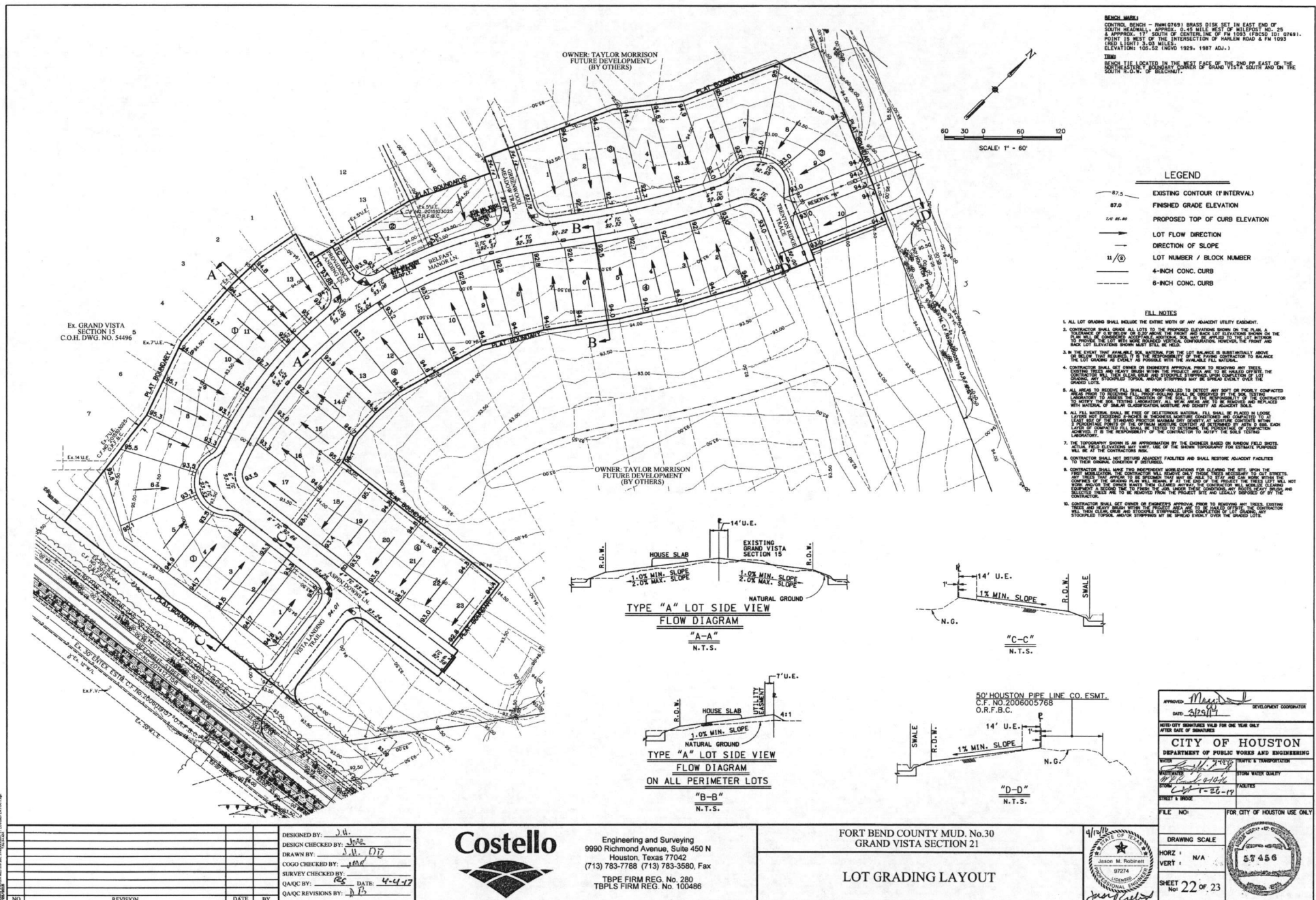
SHEET 21 of 23

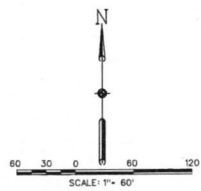
|                               |                     |
|-------------------------------|---------------------|
| DESIGNED BY: <i>APC</i>       | DATE: <i>4-6-10</i> |
| DRAWN BY: <i>DB</i>           | DATE: <i>4-6-10</i> |
| CHECKED BY: <i>MAC</i>        | DATE: <i>4-6-10</i> |
| SURVEY CHECKED BY: <i>RS</i>  | DATE: <i>4-6-10</i> |
| QA/QC BY: <i>RS</i>           | DATE: <i>4-6-10</i> |
| QA/QC REVISIONS BY: <i>DB</i> | DATE: <i>4-6-10</i> |

FORT BEND COUNTY MUD. No.30  
GRAND VISTA SECTION 21

**POLLUTION PREVENTION DETAILS**







- LEGEND**
- SET 5/8" - 1/2" IRON ROD WITH PLASTIC CAP STAMPED "COSTELLO INC UNLESS OTHERWISE NOTED"
  - FOUND 5/8" - 1/2" IRON ROD UNLESS OTHERWISE NOTED
  - 1 - INDICATES LOT NUMBER
  - ① - INDICATES BLOCK NUMBER
  - A - INDICATES RESERVE
  - ✂ - INDICATES STREET NAME BREAK

| RESERVE TABLE |                        |                               |
|---------------|------------------------|-------------------------------|
| RESERVE "A"   | LANDSCAPE / OPEN SPACE | 0.4261 ACRES / 18,559 SQ. FT. |
| RESERVE "B"   | LANDSCAPE / OPEN SPACE | 0.0884 ACRES / 3,850 SQ. FT.  |
|               | <b>TOTAL</b>           | <b>0.5145 ACRES</b>           |

**LINE DATA TABLE**

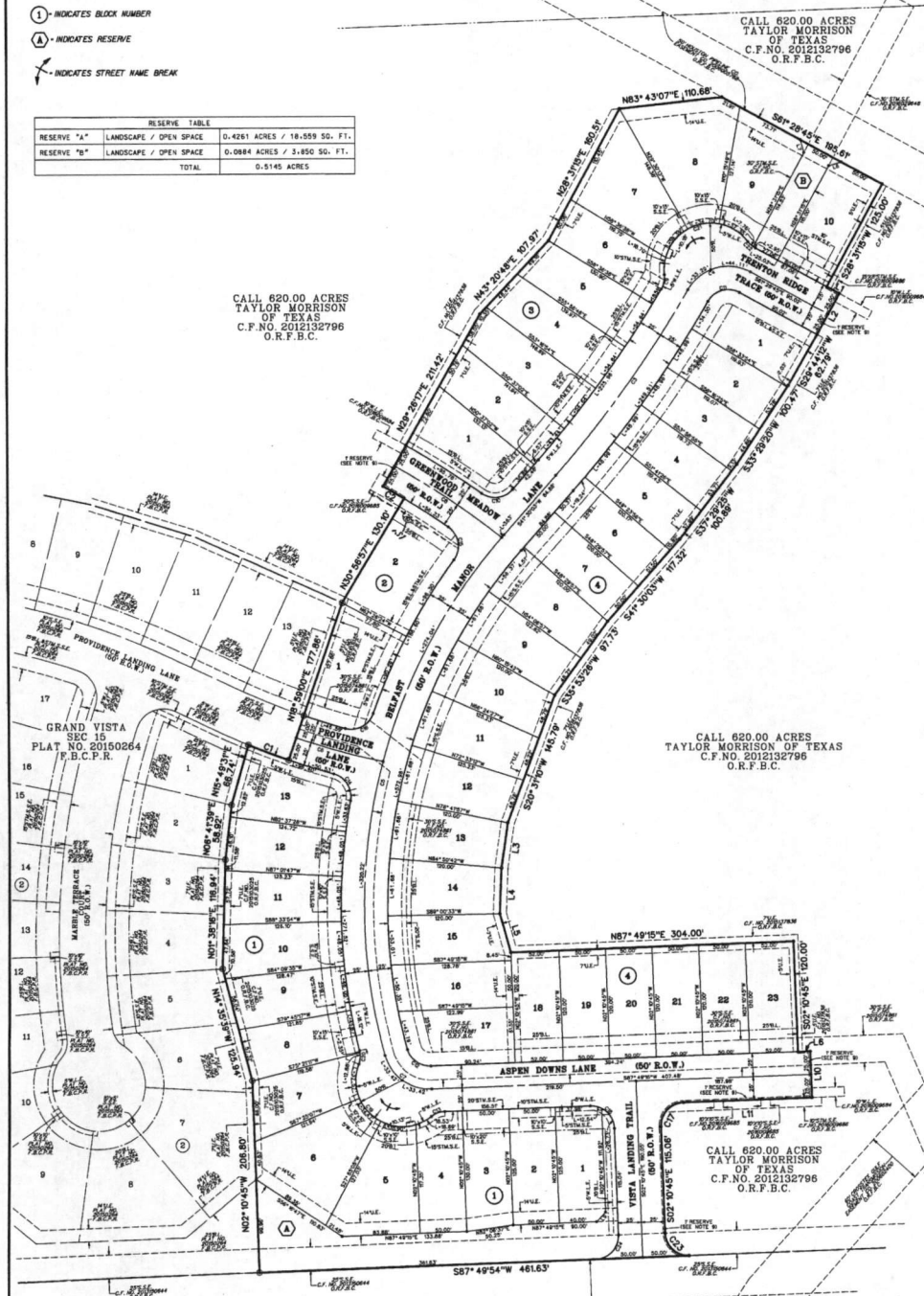
| LINE NO. | DIRECTION        | DISTANCE (FEET) |
|----------|------------------|-----------------|
| 1        | N 89° 38' 43" E  | 15.31           |
| 2        | N 128° 37' 59" E | 50.00           |
| 3        | N 128° 37' 59" E | 48.78           |
| 4        | S 82° 04' 55" W  | 48.78           |
| 5        | N 77° 43' 01" E  | 13.24           |
| 6        | N 67° 45' 01" E  | 13.24           |
| 7        | N 88° 28' 45" W  | 14.34           |
| 8        | N 12° 32' 52" E  | 14.34           |
| 9        | N 44° 49' 07" E  | 14.34           |
| 10       | N 44° 49' 07" E  | 14.34           |
| 11       | S 87° 49' 07" W  | 137.88          |

**CURVE DATA TABLE**

| STATION | CHORD BEARING    | CHORD LENGTH | DELTA ANGLE | RADIUS | ARC LENGTH |
|---------|------------------|--------------|-------------|--------|------------|
| 1       | N 89° 38' 43" E  | 15.31        | 13° 33' 38" | 50.00  | 15.31      |
| 2       | N 128° 37' 59" E | 50.00        | 12° 42' 00" | 50.00  | 50.00      |
| 3       | N 128° 37' 59" E | 48.78        | 12° 42' 00" | 50.00  | 48.78      |
| 4       | S 82° 04' 55" W  | 48.78        | 88° 43' 55" | 50.00  | 48.78      |
| 5       | N 77° 43' 01" E  | 13.24        | 12° 42' 00" | 50.00  | 13.24      |
| 6       | N 67° 45' 01" E  | 13.24        | 12° 42' 00" | 50.00  | 13.24      |
| 7       | N 88° 28' 45" W  | 14.34        | 12° 42' 00" | 50.00  | 14.34      |
| 8       | N 12° 32' 52" E  | 14.34        | 12° 42' 00" | 50.00  | 14.34      |
| 9       | N 44° 49' 07" E  | 14.34        | 12° 42' 00" | 50.00  | 14.34      |
| 10      | N 44° 49' 07" E  | 14.34        | 12° 42' 00" | 50.00  | 14.34      |
| 11      | S 87° 49' 07" W  | 137.88       | 12° 42' 00" | 50.00  | 137.88     |



- NOTES:**
- THIS PLAN IS BASED ON A CITY PLANNING LETTER PREPARED BY CHARTER TITLE COMPANY, DATED 2015 AND IS SUBJECT TO ALL TERMS, CONDITIONS, LEASES AND ENCUMBRANCES STIPULATED THEREIN.
  - B.L. INDICATES BUILDING LINE, U.E. INDICATES UTILITY EASEMENT, A.E. INDICATES AERIAL EASEMENT, S.E. INDICATES SANITARY SEWER EASEMENT, S.T.A.S.E. INDICATES STORM SEWER EASEMENT, D.E. INDICATES DRAINAGE EASEMENT, F.M.E. INDICATES FORCE MAIN EASEMENT, W.L.E. INDICATES WATER EASEMENT, S.E. INDICATES SEWER EASEMENT, L.W.E. INDICATES LIGHTNING EASEMENT, G.F.B.C. INDICATES OFFICIAL RECORDS OF FORT BEND COUNTY, F.B.C.D. INDICATES FORT BEND COUNTY PLAT RECORDS, F.B.C.D. INDICATES FORT BEND COUNTY DEED RECORDS, S.W.T. INDICATES SOUTHWESTERN BELL TELEPHONE, S.C. INDICATES SANITARY CONTROL EASEMENT.
  - THE COORDINATES SHOWN HEREON ARE TEXAS SOUTH CENTRAL ZONE NUMBER 408 PLATE PLANE GRID COORDINATES (NAD 83) AND MAY BE BROUGHT TO SURFACE BY APPLYING THE FOLLOWING COMBINED SCALE 1.0001871.
  - THIS PROPERTY LIES WITHIN ZONE "2" AS PER FLOOD INSURANCE RATE MAPS, MAP NUMBER 48157C0140 L DATED APRIL 02, 2014.
  - THIS PROPERTY LIES WITHIN FORT BEND COUNTY, AND FORT BEND INDEPENDENT SCHOOL DISTRICT, FORT BEND COUNTY MUD NO. 80 (ANNEX 2015), FORT BEND COUNTY ESD NO. 100 AND THE CITY OF HOUSTON, TEXAS.
  - CONTROL BENCHMARK: RM 0769: BRASS DISK SET IN EAST END OF SOUTH ROADWAY, APPROX. 0.45 MILE WEST OF MILEPOST NO. 25 & APPROX. 17 SOUTH OF CENTERLINE OF FM 1963. ELEVATION: 103.32 (NGVD 1929, 1981 ADJ.).
  - THE DRAINAGE SYSTEM FOR THIS SUBDIVISION IS DESIGNED IN ACCORDANCE WITH THE FORT BEND COUNTY DRAINAGE CATEGORICAL MANUAL WHICH ALLOWS STREET PONDING DURING INTENSE RAINFALL EVENTS.
  - THE TOP OF ALL FLOOR SLABS SHALL BE A MINIMUM OF 1.5 FEET ABOVE MEAN SEA LEVEL. THE TOP OF SLAB ELEVATION AT ANY POINT ON THE PERIMETER OF THE SLAB SHALL NOT BE LESS THAN EIGHTEEN (18) INCHES ABOVE NATURAL GROUNDING.
  - A ONE-FOOT RESERVE DEDICATED TO THE PUBLIC IN FEE AS A BUFFER SEPARATION BETWEEN THE SIDE OR END OF STREETS AND ADJACENT ACRES TRACTS, THE CONDITIONS OF SUCH DEDICATION BEING THAT WHEN THE ADJACENT PROPERTY IS SUBDIVIDED BY A RECORDED PLAT, THE ONE-FOOT RESERVE SHALL THEREUPON BECOME VESTED IN THE PUBLIC FOR STREET RIGHT-OF-WAY PURPOSES AND THE FEE TITLE THEREON SHALL REVERT AND REVEST IN THE DEDICATOR, HIS HEIRS, ASSONS, OR SUCCESSORS.
  - SIDEWALKS SHALL BE BUILT OR CAUSED TO BE BUILT NOT LESS THAN 5 FEET IN WIDTH ON BOTH SIDES OF ALL DEDICATED RIGHT-OF-WAY WITHIN SAID PLAT AND ON THE CONTIGUOUS RIGHT-OF-WAY OF ALL PERIMETER ROADS SURROUNDING SAID PLAT, IN ACCORDANCE WITH THE A.D.A.
  - UNLESS OTHERWISE INDICATED, THE BUILDING LINE (B.L.) WHATEVER OR MORE, SHOWN ON THIS SUBDIVISION PLAT ARE ESTABLISHED TO EVIDENCE COMPLIANCE WITH THE APPLICABLE PROVISIONS OF CHAPTER 42 OF CODE OF ORDINANCES, CITY OF HOUSTON, TEXAS, IN EFFECT AT THE TIME THIS PLAT WAS APPROVED, WHICH MAY BE AMENDED FROM TIME TO TIME.
  - SINGLE FAMILY RESIDENTIAL SHALL MEAN THE USE OF A LOT WITH ONE BUILDING DESIGNED FOR AND CONTAINING NOT MORE THAN TWO SEPARATE UNITS WITH FACILITIES FOR LIVING, SLEEPING, COOKING, AND EATING THEREIN. A LOT UPON WHICH IS LOCATED A PRE-EXISTING BUILDING CONTAINING ONE DWELLING UNIT AND DETACHED SECONDARY DWELLING UNIT OF NOT MORE THAN 900 SQUARE FEET ALSO SHALL BE CONSIDERED SINGLE FAMILY RESIDENTIAL. A BUILDING THAT CONTAINS ONE DWELLING UNIT ON ONE LOT THAT IS CONNECTED BY A PARTY WALL TO ANOTHER BUILDING CONTAINING ONE DWELLING UNIT ON AN ADJACENT LOT SHALL BE SINGLE FAMILY RESIDENTIAL.
  - EACH LOT SHALL PROVIDE A MINIMUM OF TWO OFF-STREET PARKING SPACES PER DWELLING UNIT ON EACH LOT. IN THOSE INSTANCES WHERE A SECONDARY UNIT IS PROVIDED ONLY ONE ADDITIONAL SPACE SHALL BE PROVIDED.
  - ALL DRAINAGE EASEMENTS TO BE KEPT CLEAR OF FENCES, BUILDINGS, VEGETATION AND OTHER OBSTRUCTIONS TO THE OPERATION AND MAINTENANCE OF THE DRAINAGE FACILITY.
  - ALL PROPERTY TO DRAIN INTO THE DRAINAGE EASEMENT ONLY THROUGH AN APPROVED DRAINAGE STRUCTURE.
  - ALL EASEMENTS SHOWN ON LOT LINES ARE CENTERED UNLESS OTHERWISE NOTED.
  - THIS PLAT LIES WITHIN ZONE "123" OF THE FORT BEND COUNTY LIGHTING ORDINANCE ZONE, DATED JUNE, 2004.
  - THIS PLAT IS SUBJECT TO AGREEMENTS RECORDED IN CLERK'S FILE NUMBERS 201112300 AND 201112301 OF THE O.R.F.B.C.
  - ABSENT WRITTEN AUTHORIZATION BY THE AFFECTED UTILITIES, ALL UTILITY AND AERIAL EASEMENTS MUST BE KEPT UNOBSTRUCTED FROM ANY NON-UTILITY IMPROVEMENTS OR OBSTRUCTIONS BY THE PROPERTY OWNER. ANY UNAUTHORIZED IMPROVEMENTS OR OBSTRUCTIONS MAY BE REMOVED BY ANY PUBLIC UTILITY AT THE PROPERTY OWNER'S EXPENSE. WHILE WOODEN POSTS AND PANELED WOODEN FENCES ALONG THE PERIMETER AND BACK TO BACK EASEMENTS AND ALONGSIDE REAR LOT LINES ARE PERMITTED, THEY TOO MAY BE REMOVED BY PUBLIC UTILITIES AT THE PROPERTY OWNER'S EXPENSE. SHOULD THEY BE AN OBSTRUCTION, PUBLIC UTILITIES MAY PUT SAID WOODEN POSTS AND PANELED WOODEN FENCES BACK UP, BUT GENERALLY WILL NOT REPLACE WITH NEW FENCING.



**GRAND VISTA SEC 21**

A SUBDIVISION OF 10.5437 ACRES LOCATED IN THE HUGH ROGERS SURVEY, A-309 FORT BEND COUNTY, TEXAS

48 LOTS 4 BLOCKS 2 RESERVES

SCALE: 1"=100' DATE: FEBRUARY, 2016

**OWNER:**  
TAYLOR MORRISON OF TEXAS INC.  
RUSSELL W. PACE, VICE PRESIDENT  
5333 W. SAM HOUSTON PARKWAY N. STE. 190  
HOUSTON, TEXAS 77057  
PHONE: 281-596-3035

**PLANNER:**  
KERRY R. GILBERT & ASSOCIATES, INC.  
Land Planning Consultants  
23801 CINCO RANCHO BLVD., SUITE A-250  
KATY, TEXAS 77450  
(281) 675-0240

**Costello**  
ENGINEERING AND SURVEYING  
9909 RICHMOND AVENUE, SUITE 400  
NORTH BUILDING  
HOUSTON, TEXAS 77042  
(713) 762-7788 (713) 763-3585 FAX  
TEXAS PROFESSIONAL ENGINEER NO. 230  
TELEPHONE RECORD NO. 100488

MRB-145-15  
S:\MFW\TERRAVISTA LAKES\20150221\_207 Set 21\Plan02207.dgn

**SHEET 2 OF 2**