

REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT

On this 9th day of August, 2016, Commissioners Court came on to be heard and reviewed the accompanying notice

of Lischka Utilities LLC

Job Location 8600 Grand Mission Blvd, Richmond, TX 77407

Date 7/29/2016 Bond No. LPM9210953, Permit No. 2016-8626 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 the 3rd 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
 301 Jackson Street
 Richmond, Texas 77469
 281-633-7500
3. This permit expires one (1) year from date of permit if construction has not commenced.

By: Charles O. Ad
 for County Engineer

Presented to Commissioners Court and approved.

Recorded in Volume 8-09-16 10H
 Minutes of Commissioners Court

By: N/A
 Drainage District Engineer/Manager

Clerk of Commissioners Court

By: Arinda Willis
 Deputy

County of Fort Bend

Engineering Department

301 Jackson Street
Richmond, Texas 77469

Johnny Ortega
Permit Administrator

Phone: (281) 633-7500

Permit Application Review Form For Cable, Conduit, and Pole Line Activity In Fort Bend County

Permit No. 2016-8626

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 directions

 X c. Plans and specifications

 X (2) Bond:

 District Attorney, approval when applicable.

 Perpetual bond currently posted.

 No: _____

 Amount: _____

 X Performance bond submitted.

 No: LPM9210953

 Amount: \$5,000.00

 Cashier's Check

 No: _____

 Amount: _____

 (3) Verbal permission given for emergencies, to start construction before approved in Commissioner's Court.

Precinct Engineer Acknowledgment

Date

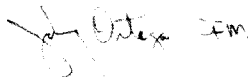
Precinct Commissioner Acknowledgment

Date

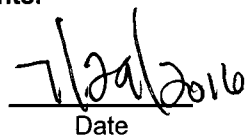
(4)

Drainage District Approval when applicable

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



Johnny Ortega CFM/Permit Administrator



Date

**PERFORMANCE BOND COVERING ALL CABLE, CONDUIT AND/OR POLE LINE
ACTIVITY IN, UNDER, ACROSS OR ALONG FORT BEND COUNTY ROAD**

AUTHORIZED

BOND NO LPM9210953

THE STATE OF TEXAS

§

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF FORT BEND

§

THAT WE, Lischka Utilities, LLC whose address is P.O Box 853, Bellville 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 1400 American Lane, Tower I, 18th Floor, Schaumburg, IL 60196-1056, 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 shall 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 25th day of July, 2016.



Lischka Utilities, LLC
PRINCIPAL

BY

Fidelity and Deposit Company of Maryland
SURETY

BY Denise Raker, Attorney-in-Fact

**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 **GERALD F. HALEY, 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 **Larry H. SENKEL, Laura E. SUDDUTH, Jo Ann PARKER, Denise RAKER and David S.J. WIGHTMAN, all of Houston, Texas, EACH** 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, EXCEPT bonds on behalf of Independent Executors, Community Survivors and Community Guardians.** 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.

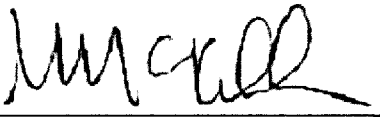
The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

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 24th day of March, A.D. 2016.

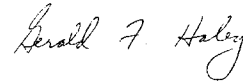
ATTEST:

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



By: 

*Secretary
Michael McKibben*



*Vice President
Gerald F. Haley*

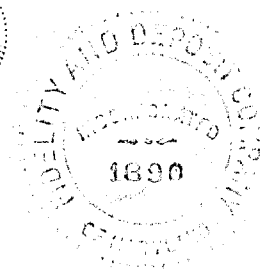
State of Maryland
County of Baltimore

On this 24th day of March, A.D. 2016, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **GERALD F. HALEY, Vice President, and MICHAEL MCKIBBEN, 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, Notary Public
My Commission Expires: July 9, 2019



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 25th day of July, 2016.



A handwritten signature in black ink, appearing to read "Michael Bond".

Michael Bond, Vice President



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

E-mail: 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

E-mail: 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.



Disclosure Statement

NOTICE OF DISCLOSURE FOR AGENT & BROKER COMPENSATION

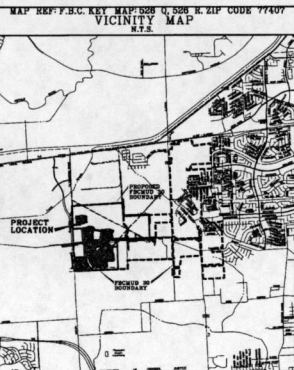
If you want to learn more about the compensation Zurich pays agents and brokers visit:

<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.

CONSTRUCTION PLANS FOR WATER, SEWER, FORCE MAIN, DRAINAGE AND PAVING IMPROVEMENTS FOR GRAND VISTA SECTION 16 WITHIN FORT BEND COUNTY M.U.D. No. 30 FORT BEND COUNTY, TEXAS



FIRM FLOOD INSURANCE RATE MAP FORT BEND COUNTY, TEXAS AND INCORPORATED AREAS. PANEL NO. OF 375. MAP NO. 4810201A.P. NEW EDITION APRIL 2, 2014. THIS PROJECT IS LOCATED IN ZONE X, OUTSIDE THE 500-YEAR FLOOD PLAN.

- NOTES:
1. ALL BEARINGS ARE BASED ON THE TEXAS STATE PLANE COORDINATE GRID SYSTEM, SOUTH CENTRAL ZONE.
 2. 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.
 3. 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. 832-384-9086.
 4. CONTRACTOR SHALL NOTIFY FORT BEND COUNTY 48 HOURS BEFORE STARTING WORK AT CONSTRUCTION@FBEND.TX.GOV.

INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	CONSTRUCTION NOTES
3.	PAVING AND DRAINAGE LAYOUT
4.	PAVING AND DRAINAGE LAYOUT
5A.	PAVING AND DRAINAGE LAYOUT
6.	P.C. STORM CALCULATIONS
7.	TREATMENT BASINS AND DRAINAGE LAYOUT
8.	TRAFFIC CONTROL PLAN PHASE I
9.	TRAFFIC CONTROL PLAN PHASE II
10.	OVERALL SANITARY SEWER LAYOUT
11.	PLAN AND PROFILE
12.	SUMNER CEDAR CROSSING AND
13.	WHEATLAWER ROAD LANE STA. 0+00 TO STA. 0+00
14.	WHEATLAWER ROAD LANE STA. 0+00 TO STA. 0+04.18 AND
15.	PERDITA VICTORY COURT STA. 0+04.18 TO STA. 0+04.18
16.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
17.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
18.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
19.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
20.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
21.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
22.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
23.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
24.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
25.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
26.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
27.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
28.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
29.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
30.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
31.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
32.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
33.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
34.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
35.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
36.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
37.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
38.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
39.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
40.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
41.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
42.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
43.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
44.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
45.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
46.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
47.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
48.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
49.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
50.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
51.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
52.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
53.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
54.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
55.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
56.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
57.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
58.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
59.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
60.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
61.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
62.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
63.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
64.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
65.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
66.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
67.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
68.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
69.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
70.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
71.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
72.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
73.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
74.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
75.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
76.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
77.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
78.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
79.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
80.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
81.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
82.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
83.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
84.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
85.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
86.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
87.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
88.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
89.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
90.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
91.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
92.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
93.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
94.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
95.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
96.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
97.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
98.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
99.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18
100.	ANDERWOOD DRIVE STA. 0+04.18 TO STA. 0+04.18

THE STANDARD SHEET SPECIFICALLY IDENTIFIED BY A 100 HAS BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.

DATE: 5/21/16

DESIGNED BY: [Signature]

CHECKED BY: [Signature]

DATE: 5/21/16

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

FORT BEND COUNTY ENGINEER

ENGINEER: [Signature]

DATE: 5/21/16

THESE SIGNATURES ARE VALID IF CONSTRUCTION USE HAS COMMENCED IN ONE (1) YEAR FROM DATE OF APPROVAL.

APPROVED: [Signature]

DATE: 5/21/16

CITY OF HOUSTON

DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

SURVEYED BY: COSTELLO, INC.

FB NO.:

WATER	PAVING & RECONSTRUCTION
SEWER	STORM WATER SEWER
FORCE MAIN	TRAFFIC CONTROL
DRAINAGE	LANDSCAPE
UTILITY & EROSION	UTILITY & EROSION

CITY ENGINEER

FOR CITY OF HOUSTON USE ONLY

CITY DWG NO.:

DIRECTOR OF PUBLIC WORKS AND ENGINEERING

[Signature]

58895

SHEET NO. 1 OF 29

811
Call before you dig

ISSN NO. 15128289
LOG NO. 15-1756

GRAND VISTA SECTION 16 - JOB NO. 15040002-000-0001

GENERAL CONSTRUCTION NOTES

- 1 WATER LINES, WASTEWATER COLLECTION SYSTEM AND DRAINAGE SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF HOUSTON, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING'S LATEST EDITION OF STANDARD SPECIFICATIONS FOR CONSTRUCTION AND STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEM, WATER MAINS, STORM DRAINAGE AND STREET PAVING WITH ALL SUBSEQUENT AMENDMENTS AND REVISIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE LATEST EDITION OF "STANDARD SPECIFICATIONS MANUAL." NOTE THAT PLAN SIGNATURES EXPIRE AFTER 1 YEAR AND THE LATEST EDITIONS OF DESIGN PRACTICES, SPECIFICATIONS & HANDBOOKS SHALL GOVERN AS OF THE DATE OF RESUBMISSION.

GENERAL CONSTRUCTION NOTES (CONT.)

- 2 THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE TO THE EXISTING PUBLIC OR PRIVATE UTILITY LINES, INCLUDING BUT NOT LIMITED TO PAVING, WATER LINES, WASTEWATER COLLECTION SYSTEMS AND STORM DRAINAGE SYSTEMS. ALL DAMAGE SHALL BE REPAIRED IN ACCORDANCE WITH THE CITY OF HOUSTON, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING'S "STANDARD SPECIFICATIONS MANUAL." NOTE THAT PLAN SIGNATURES EXPIRE AFTER 1 YEAR AND THE LATEST EDITIONS OF DESIGN PRACTICES, SPECIFICATIONS & HANDBOOKS SHALL GOVERN AS OF THE DATE OF RESUBMISSION.

STORM SEWER CONSTRUCTION NOTES

- 1 STORM SEWER SHALL BE REINFORCED CONCRETE PIPE (10-16 CLASS III) WITH 10% FIBER REINFORCEMENT. MANHOLE AND INLET SHALL BE IN ACCORDANCE WITH CITY OF HOUSTON STANDARD SPECIFICATIONS AND STANDARD CONSTRUCTION DETAILS FOR STORM SEWER CONSTRUCTION. ALL MANHOLES SHALL BE REINFORCED CONCRETE PIPE (10-16 CLASS III) WITH 10% FIBER REINFORCEMENT. ALL MANHOLES SHALL BE REINFORCED CONCRETE PIPE (10-16 CLASS III) WITH 10% FIBER REINFORCEMENT. ALL MANHOLES SHALL BE REINFORCED CONCRETE PIPE (10-16 CLASS III) WITH 10% FIBER REINFORCEMENT.

PAVING CONSTRUCTION NOTES

- 1 PAVING SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL CITY OF HOUSTON STANDARD SPECIFICATIONS AND STANDARD CONSTRUCTION DETAILS FOR PAVING CONSTRUCTION. ALL PAVING SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL CITY OF HOUSTON STANDARD SPECIFICATIONS AND STANDARD CONSTRUCTION DETAILS FOR PAVING CONSTRUCTION. ALL PAVING SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL CITY OF HOUSTON STANDARD SPECIFICATIONS AND STANDARD CONSTRUCTION DETAILS FOR PAVING CONSTRUCTION.

STANDARD SPECIFICATIONS

- 1. FORT BEND COUNTY MUST BE IN THE PRE-CONSTRUCTION PHASE OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE LATEST EDITION OF "STANDARD SPECIFICATIONS MANUAL." NOTE THAT PLAN SIGNATURES EXPIRE AFTER 1 YEAR AND THE LATEST EDITIONS OF DESIGN PRACTICES, SPECIFICATIONS & HANDBOOKS SHALL GOVERN AS OF THE DATE OF RESUBMISSION.

Table with 3 columns: REVISION, DATE, BY. Contains revision details for the drawing.

DESIGNED BY: [Signature]
CHECKED BY: [Signature]
DATE: 04/16/16
BY: [Signature]

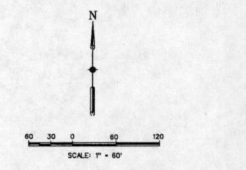
Costello Engineering and Surveying
9900 Richmond Avenue, Suite 450
Houston, Texas 77042
(713) 733-7788
TEXAS PEBOARD FIRM REGISTRATION NO. 280

FORT BEND COUNTY MUD No.30
GRAND VISTA SECTION 16
CONSTRUCTION NOTES

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
Drawing Scale: N.T.S.
Sheet 2 of 20

BRASS MARK
 CONTROL BEACH - (FROM 1978) BRASS DISK SET IN EAST END OF CONTROL BEACH, APPROX. 2.00 FEET WEST OF INTERSECTION OF A. SHERMAN ST. CENTERLINE OF F.W. 1978 (1978) POINT IS WEST OF THE INTERSECTION OF HANSEN ROAD & F.W. 1978 ELEVATION 105.12 MSL. 1929, 1987 ADJ. 1.

1978-88
 BRASS DISK SET IN EAST FACE OF 80' END OF NORTH FROM INTERSECTION OF GRAND VISTA DR. AND HANSEN LANDING, ON THE EAST SIDE OF GRAND VISION.

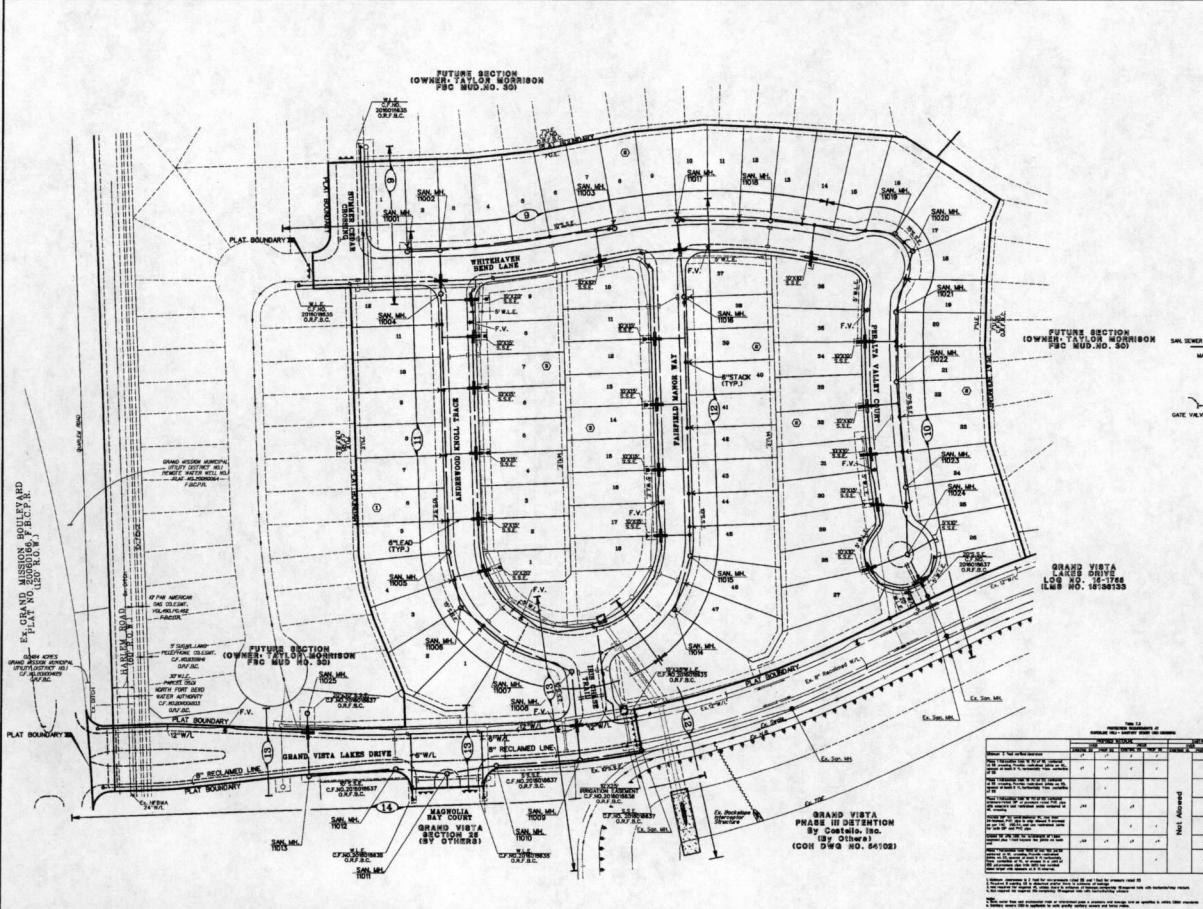


LEGEND

PROPOSED SAN SEWER LINE LINE SIZE
 EXISTING SAN SEWER LINE LINE SIZE
 PROPOSED WATER LINE LINE SIZE
 EXISTING WATER LINE LINE SIZE
 PROPOSED GATE VALVE
 EXISTING GATE VALVE
 PROPOSED FLUSH VALVE
 EXISTING FLUSH VALVE
 PROPOSED BLOW-OFF
 EXISTING BLOW-OFF

⊙ BLOCK NUMBER
 11 LOT NUMBER
 ⊙ SHEET REFERENCE
 — SANITARY STACK
 — INVERT SLEEVES

UNLESS OTHERWISE SPECIFIED
 ALL PROPOSED
 SANITARY SEWERS ARE 8"
 WATER LINES ARE 6"



NO.	REVISION	DATE	BY

DESIGNED BY: *K.M.*
 CHECKED BY: *A.P.S.*
 DRAWN BY: *J.D.*
 SURVEY CHECKED BY:
 DATE: *1-1-14*
 QA/QC REVISIONS BY: *J.R. D.B.*

Costello
 Engineering and Surveying
 9990 Richmond Avenue, Suite 450
 North Building
 Houston, Texas 77042
 (713) 783-7708 (713) 783-5980, Fax
 TEXAS PE BOARD FIRM
 REGISTRATION No. 380

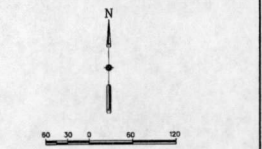
FORT BEND COUNTY MUD No.30
 GRAND VISTA SECTION 16
 WATER AND SANITARY LAYOUT

APPROVED: *Maggie D...*
 CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
 SHEET NO. 3 OF 29
 DRAWING SCALE: 1" = 60'
 SHEET NUMBER: 38895

FUTURE SECTION
 (OWNERS: FUTURE SECTION
 SEC. MUD NO. 23)

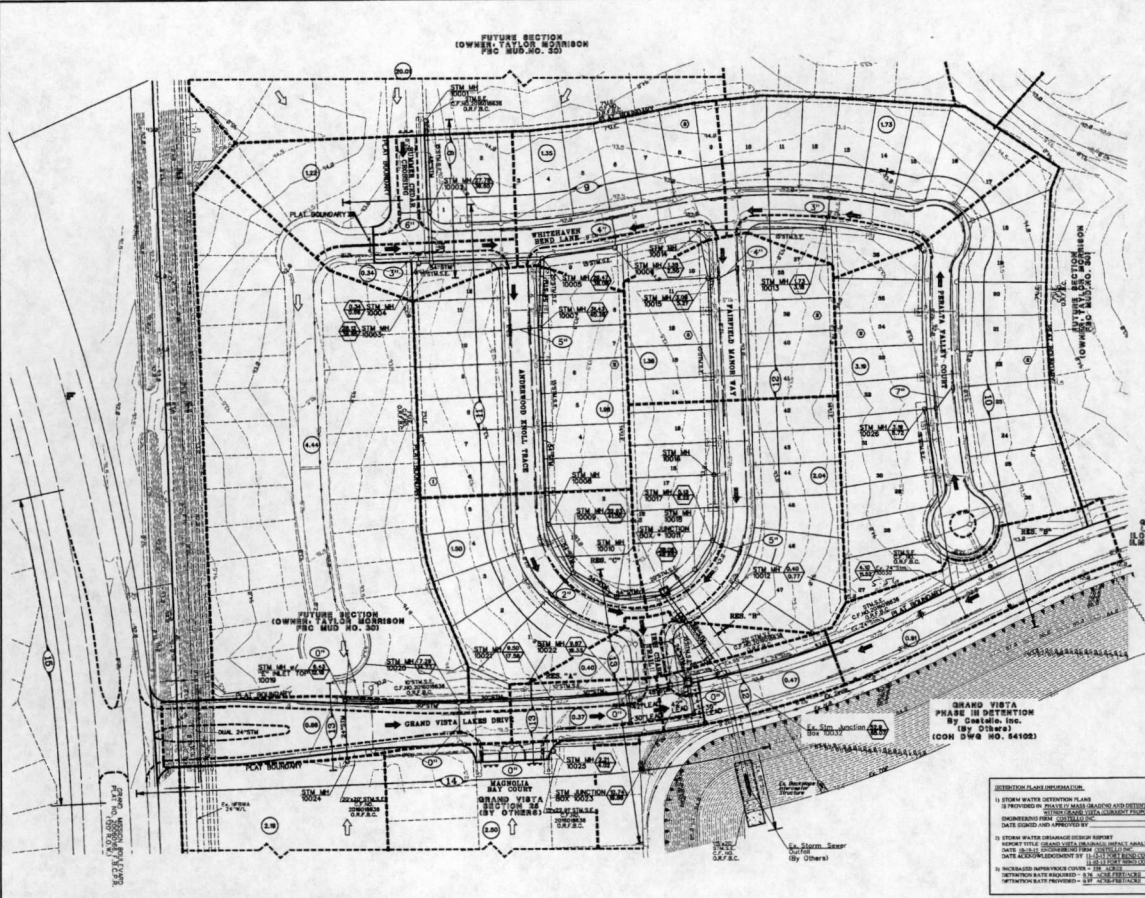
RECORD BOOK:
 RECORD BOOK - (MATERIAL) SHALL BE SET IN EAST END OF
 (OWNER'S) RECORD BOOK AS AT ALL TIMES OF REVISIONS. IN
 A RECORD BOOK - (MATERIAL) SHALL BE SET IN EAST END OF
 (OWNER'S) RECORD BOOK AS AT ALL TIMES OF REVISIONS. IN
 RECORD BOOK - (MATERIAL) SHALL BE SET IN EAST END OF
 (OWNER'S) RECORD BOOK AS AT ALL TIMES OF REVISIONS. IN

DATE:
 DATE - 11-11-11
 DATE - 11-11-11
 DATE - 11-11-11



- LEGEND**
- PROPOSED**
- STORM SEWER LINE - 18" S.C.P.
 - MANHOLE
 - INLET
 - PROP. 4" CURB
 - PROP. 6" CURB
 - DRAINAGE BOUNDARY
 - 100 YEAR OVERLAND FLOW
 - OFFSITE OVERLAND FLOW
 - DIRECTION OF FLOW
 - SHEET REFERENCE
 - ACS - CUMULATIVE DRAINAGE AREA (ACRES)
 - QFS - 2 YR. FREQUENCY STORM RUNOFF
 - EXISTING CONTOUR
 - ACREAGE
 - MAX. FLOWING LEVEL
 - SHOULDER CLOSURE FOR EXTREME
 - EXIST. DRIVEWAY

NOTE:
 ALL STORM SEWER LINES ARE 18" S.C.P. UNLESS OTHERWISE INDICATED ON THE PLANS.
 EXISTING CONTOURS INDICATED ON THIS SHEET ARE FROM PHASE 4 MASS GRADING / DETENTION EXCAVATION.



GRAND VISTA
 PHASE III DETENTION
 By CHENIERE, INC.
 (CIVIL ENGINEER)
 (CEN. NO. 165415)

- DESIGN PLAN SUBMITTALS:**
- 1) STORM WATER DETENTION PLANS
 - 2) PROPOSED DETENTION BASIN DESIGN AND DETENTION IMPROVEMENTS
 - 3) DRAINAGE PLAN SUBMITTALS
 - 4) DRAINAGE PLAN SUBMITTALS
 - 5) STORM WATER CHARGES DESIGN REPORT
 - 6) STORM WATER CHARGES DESIGN REPORT
 - 7) STORM WATER CHARGES DESIGN REPORT
 - 8) STORM WATER CHARGES DESIGN REPORT
 - 9) STORM WATER CHARGES DESIGN REPORT
 - 10) STORM WATER CHARGES DESIGN REPORT

APPROVED: *Maged J. ...*
 CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
 DATE: 11/11/11
 SHEET NO. 4 OF 29

DESIGNED BY: <i>ADP</i>	DATE BY:
DESIGN CHECKED BY: <i>ADP</i>	DATE BY:
DRAWN BY: <i>JL</i>	DATE BY:
CADD CHECKED BY:	DATE BY:
SURVEY CHECKED BY:	DATE BY:
QA/QC BY: <i>ES</i>	DATE BY: <i>11-11-11</i>
QA/QC REVIEWED BY: <i>ADP</i>	DATE BY: <i>11-11-11</i>

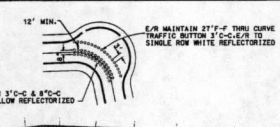
Costello
 Engineering and Surveying
 9990 Richmond Avenue, Suite 450
 North Building
 Houston, Texas 77042
 (713) 783-7788 (713) 783-3580, Fax
 TEXAS PE BOARD FIRM
 REGISTRATION No. 280

FORT BEND COUNTY MUD No.30
 GRAND VISTA SECTION 16
 PAVING AND DRAINAGE LAYOUT

401316

 DRAWING SCALE: 1" = 60'
 SHEET NO. 4 OF 29

- Pavement Marking and Signage Requirements**
- Standard pavement markings shall be placed according to the following standards:
 - 11-102
 - 11-103
 - All pavement markings shall be placed on concrete or asphalt pavements. Pavement markings shall be placed on the Pavement of the subgrade. Pavement markings shall be placed on the Pavement of the subgrade. Pavement markings shall be placed on the Pavement of the subgrade.
 - The minimum width of all painted lines and markings shall be 4 inches. The minimum width of all painted lines and markings shall be 4 inches. The minimum width of all painted lines and markings shall be 4 inches.
 - Before the placement of concrete, the pavement markings shall be clearly visible to the construction of the pavement. The pavement markings shall be clearly visible to the construction of the pavement. The pavement markings shall be clearly visible to the construction of the pavement.
 - After the placement of concrete, the pavement markings shall be clearly visible to the construction of the pavement. The pavement markings shall be clearly visible to the construction of the pavement. The pavement markings shall be clearly visible to the construction of the pavement.
 - Only the Texas Standard Triangular Sign Board Sign Boards will be permitted. All other signs shall be removed. All other signs shall be removed. All other signs shall be removed.



REMARKS

CONCRETE CURB - (Pavement) BRASS DISK SET IN EAST END OF CURB. BRASS DISK - (Pavement) BRASS DISK SET IN EAST END OF CURB. BRASS DISK - (Pavement) BRASS DISK SET IN EAST END OF CURB.

SCALE: 1" = 60'



DESIGNED BY: <i>AS, P.S.</i>	DATE: <i>12-14-00</i>
DESIGN CHECKED BY: <i>AS, P.S.</i>	DATE: <i>12-14-00</i>
DATE: <i>12-14-00</i>	DATE: <i>12-14-00</i>
DATE: <i>12-14-00</i>	DATE: <i>12-14-00</i>
DATE: <i>12-14-00</i>	DATE: <i>12-14-00</i>
DATE: <i>12-14-00</i>	DATE: <i>12-14-00</i>

Costello

Engineering and Surveying
 9990 Richmond Avenue, Suite 450
 North Building
 Houston, Texas 77042
 (713) 783-7798 (713) 783-3080 Fax
 TEXAS PE BOARD FIRM REGISTRATION No. 280

FORT BEND COUNTY MUD No.30
 GRAND VISTA SECTION 16

PAVEMENT MARKING AND SIGNAGE LAYOUT

THE TURN LANE USE ARROW MARKING WILL BE ACCORDING TO THE ROAD TYPE. CONDITIONS OF THE ROAD TYPE AND CONDITIONS OF THE ROAD TYPE AND CONDITIONS OF THE ROAD TYPE.

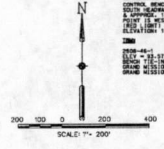
THERMOPLASTIC PAVEMENT MARKINGS

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

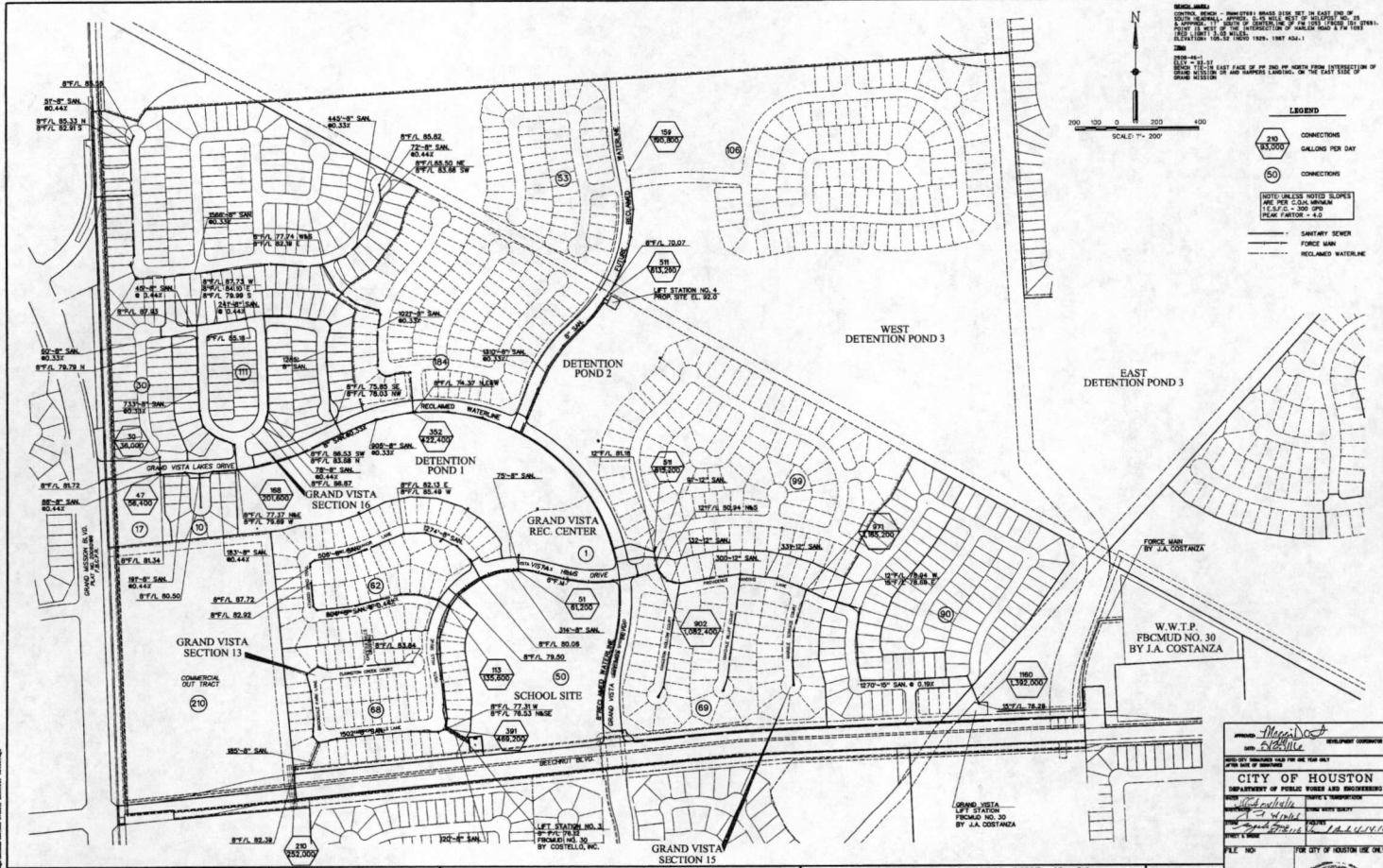
DRAWING SCALE: 1" = 60'

SHEET NO. 6 OF 29

REVISIONS:
 1. CORRECTED SLOPES TO 0.5% TO 1.0% TO MEET CITY OF HOUSTON REQUIREMENTS.
 2. CORRECTED SLOPES TO 0.5% TO 1.0% TO MEET CITY OF HOUSTON REQUIREMENTS.
 3. CORRECTED SLOPES TO 0.5% TO 1.0% TO MEET CITY OF HOUSTON REQUIREMENTS.
 4. CORRECTED SLOPES TO 0.5% TO 1.0% TO MEET CITY OF HOUSTON REQUIREMENTS.
 5. CORRECTED SLOPES TO 0.5% TO 1.0% TO MEET CITY OF HOUSTON REQUIREMENTS.
 6. CORRECTED SLOPES TO 0.5% TO 1.0% TO MEET CITY OF HOUSTON REQUIREMENTS.
 7. CORRECTED SLOPES TO 0.5% TO 1.0% TO MEET CITY OF HOUSTON REQUIREMENTS.
 8. CORRECTED SLOPES TO 0.5% TO 1.0% TO MEET CITY OF HOUSTON REQUIREMENTS.
 9. CORRECTED SLOPES TO 0.5% TO 1.0% TO MEET CITY OF HOUSTON REQUIREMENTS.
 10. CORRECTED SLOPES TO 0.5% TO 1.0% TO MEET CITY OF HOUSTON REQUIREMENTS.



- LEGEND**
- CONNECTIONS
CALLINGS PER DAY
 - CONNECTIONS
 - SLOPE (UNLESS NOTED SLOPES ARE 0.5% TO 1.0%)
PEAK FLOW = 4.0
 - SANITARY SEWER
 - FORCE MAIN
 - RECLAIMED WATERLINE



NO.	REVISION	DATE	BY
1	DESIGNED BY: J.D. [Signature]		
2	DESIGN CHECKED BY: J.D. [Signature]		
3	DRAWN BY: J.D. [Signature]		
4	CADD CHECKED BY: J.D. [Signature]		
5	SURVEY CHECKED BY: J.D. [Signature]		
6	DATE: 6-1-14		
7	DATE: 6-1-14		
8	DATE: 6-1-14		

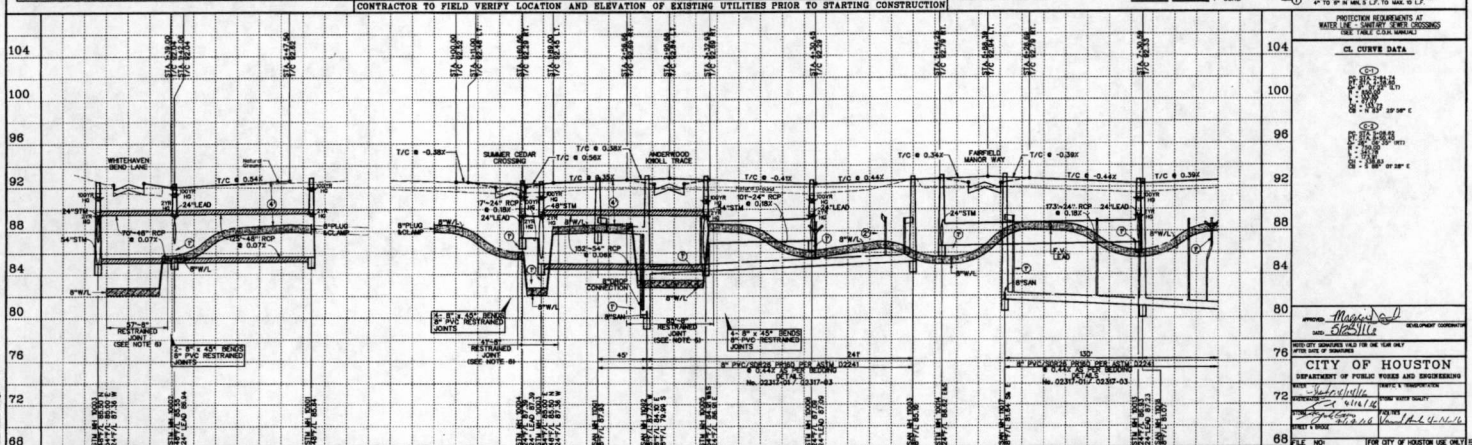
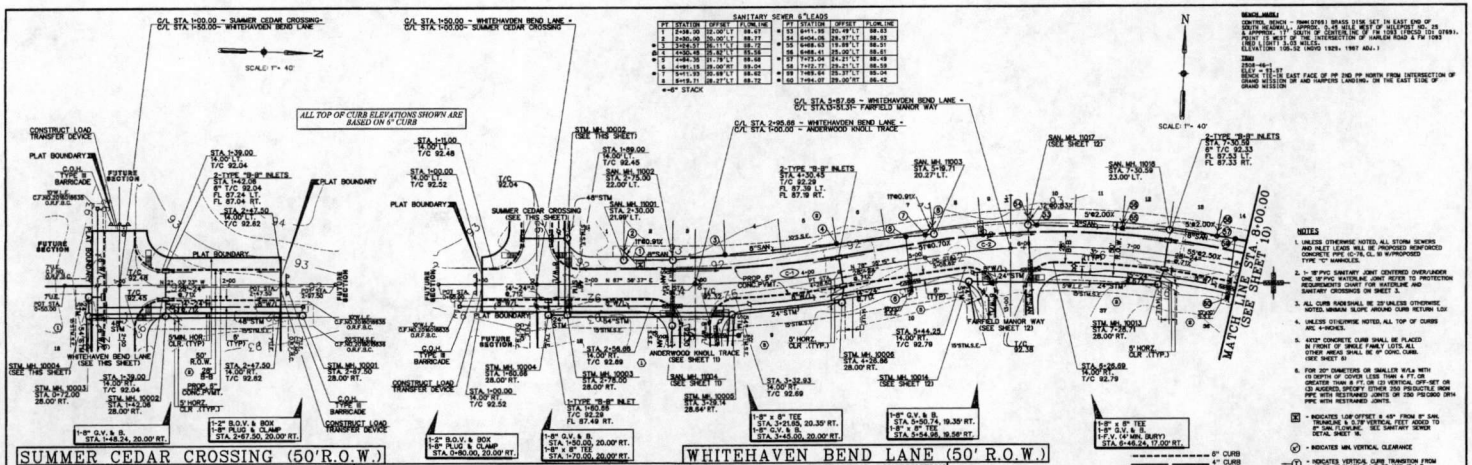
Costello
 Engineering and Surveying
 9990 Richmond Avenue, Suite 450
 North Building
 Houston, Texas 77042
 (713) 783-7788, (713) 783-3080, Fax
 TEXAS PE BOARD FIRM
 REGISTRATION No. 280

FORT BEND COUNTY MUD No.30
 GRAND VISTA SECTION 16
 OVERALL SANITARY SEWER LAYOUT

DESIGNED BY: J.D. [Signature]
 DRAWN BY: J.D. [Signature]
 DATE: 6-1-14

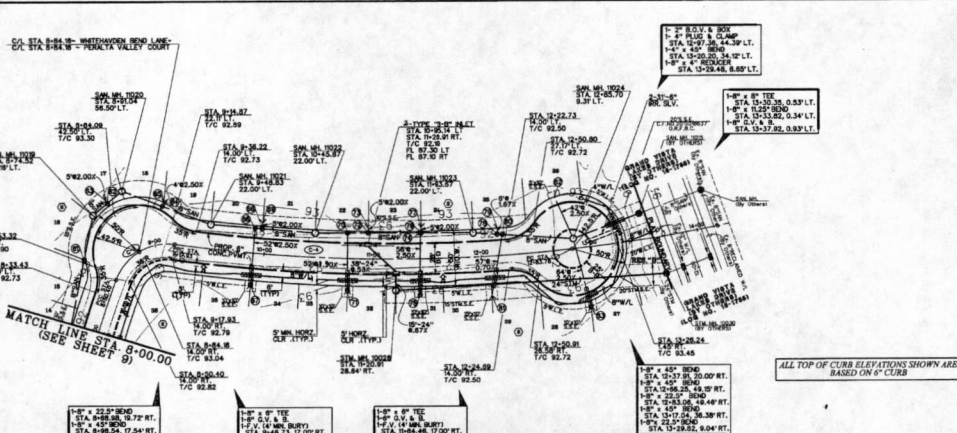
FILE NO. FOR CITY OF HOUSTON USE ONLY
 DRAWING SCALE: 1"=200'
 SHEET NO. 8 OF 20

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
 DIVISION OF SANITARY ENGINEERING
 PROJECT NO. 14-14-14-14
 SHEET NO. 8 OF 20



DESIGNED BY: <i>AD</i> DESIGN CHECKED BY: <i>AD</i> DRAWN BY: <i>JD</i> CADD CHECKED BY: SURVEY CHECKED BY: QA/QC BY: <i>ES</i> DATE: <i>8-1-14</i> QA/QC REVISIONS BY: <i>LS</i> <i>10-1-14</i>		Costello Engineering and Surveying 9990 Richmond Avenue, Suite 450 North Building Houston, Texas 77042 (713) 763-7788 (713) 763-3580, Fax TEXAS PE BOARD FIRM REGISTRATION No. 280	PORT BEND COUNTY MUD No.30 GRAND VISTA SECTION 16 PLAN AND PROFILE SUMMER CEDAR CROSSING AND WHITEHAVEN BEND LANE STA. 0+00 TO STA. 8+00 SHEET 9 OF 29	CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING PROJECT: <i>88095</i> SHEET NO. <i>9</i> OF 29
--	--	--	--	--

SANITARY SEWER SLEADS		SANITARY SEWER SLEADS	
STATION	DEPTH	STATION	DEPTH
11	885.17	11	885.17
12	885.17	12	885.17
13	885.17	13	885.17
14	885.17	14	885.17
15	885.17	15	885.17
16	885.17	16	885.17
17	885.17	17	885.17
18	885.17	18	885.17
19	885.17	19	885.17
20	885.17	20	885.17
21	885.17	21	885.17
22	885.17	22	885.17
23	885.17	23	885.17
24	885.17	24	885.17
25	885.17	25	885.17
26	885.17	26	885.17
27	885.17	27	885.17
28	885.17	28	885.17
29	885.17	29	885.17
30	885.17	30	885.17
31	885.17	31	885.17
32	885.17	32	885.17
33	885.17	33	885.17
34	885.17	34	885.17
35	885.17	35	885.17
36	885.17	36	885.17
37	885.17	37	885.17
38	885.17	38	885.17
39	885.17	39	885.17
40	885.17	40	885.17
41	885.17	41	885.17
42	885.17	42	885.17
43	885.17	43	885.17
44	885.17	44	885.17
45	885.17	45	885.17
46	885.17	46	885.17
47	885.17	47	885.17
48	885.17	48	885.17
49	885.17	49	885.17
50	885.17	50	885.17
51	885.17	51	885.17
52	885.17	52	885.17
53	885.17	53	885.17
54	885.17	54	885.17
55	885.17	55	885.17
56	885.17	56	885.17
57	885.17	57	885.17
58	885.17	58	885.17
59	885.17	59	885.17
60	885.17	60	885.17
61	885.17	61	885.17
62	885.17	62	885.17
63	885.17	63	885.17
64	885.17	64	885.17
65	885.17	65	885.17
66	885.17	66	885.17
67	885.17	67	885.17
68	885.17	68	885.17
69	885.17	69	885.17
70	885.17	70	885.17
71	885.17	71	885.17
72	885.17	72	885.17
73	885.17	73	885.17
74	885.17	74	885.17
75	885.17	75	885.17
76	885.17	76	885.17
77	885.17	77	885.17
78	885.17	78	885.17
79	885.17	79	885.17
80	885.17	80	885.17
81	885.17	81	885.17
82	885.17	82	885.17
83	885.17	83	885.17
84	885.17	84	885.17
85	885.17	85	885.17
86	885.17	86	885.17
87	885.17	87	885.17
88	885.17	88	885.17
89	885.17	89	885.17
90	885.17	90	885.17
91	885.17	91	885.17
92	885.17	92	885.17
93	885.17	93	885.17
94	885.17	94	885.17
95	885.17	95	885.17
96	885.17	96	885.17
97	885.17	97	885.17
98	885.17	98	885.17
99	885.17	99	885.17
100	885.17	100	885.17

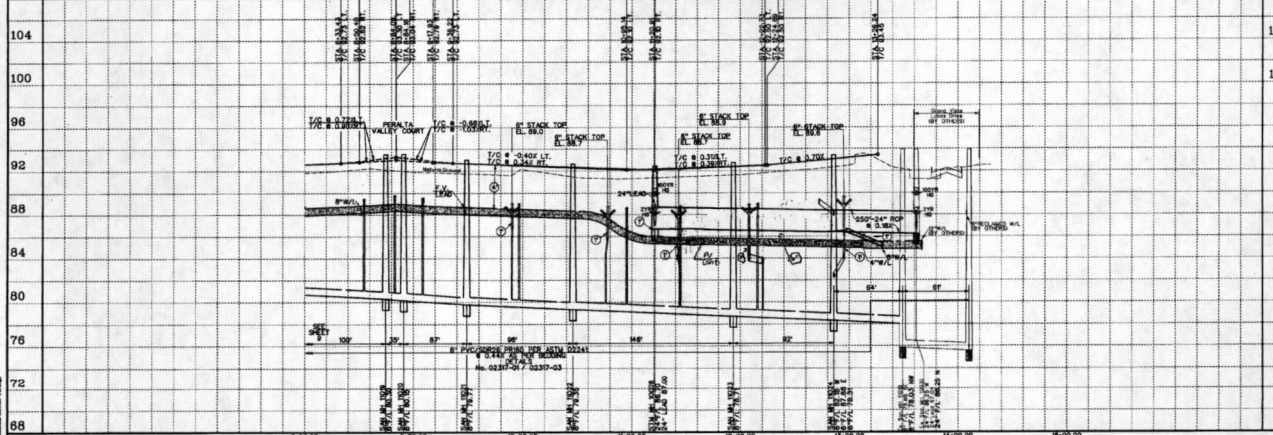


NOTES

1. ALL ELEVATIONS SHOWN ARE BASED ON 6' CURB.
2. ALL TOP OF CURB ELEVATIONS SHOWN ARE BASED ON 6' CURB.
3. ALL OTHER ELEVATIONS ARE BASED ON 6' CURB.
4. ALL OTHER ELEVATIONS ARE BASED ON 6' CURB.
5. ALL OTHER ELEVATIONS ARE BASED ON 6' CURB.
6. ALL OTHER ELEVATIONS ARE BASED ON 6' CURB.
7. ALL OTHER ELEVATIONS ARE BASED ON 6' CURB.
8. ALL OTHER ELEVATIONS ARE BASED ON 6' CURB.
9. ALL OTHER ELEVATIONS ARE BASED ON 6' CURB.
10. ALL OTHER ELEVATIONS ARE BASED ON 6' CURB.

WHITEHAVEN BEND LANE AND PERALTA VALLEY COURT (50' R.O.W.)

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



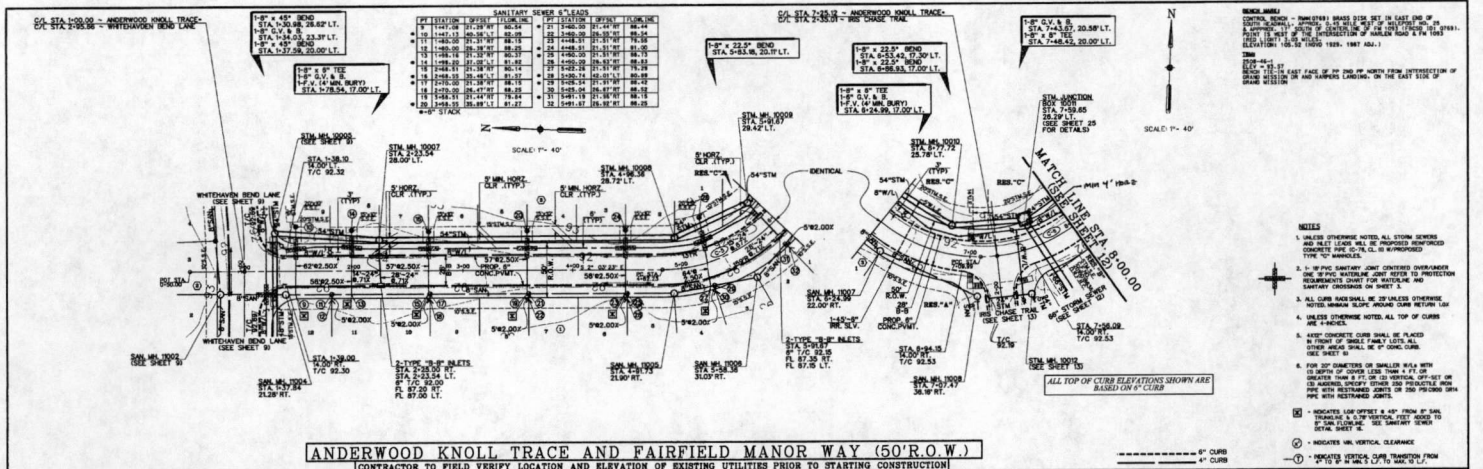
PROJECTION INFORMATION	
DATE	10/10/10
BY	J. L. ...
CHECKED BY	J. L. ...
APPROVED BY	J. L. ...
CITY OF HOUSTON	DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
PROJECT NO.	...
FILE NO.	...

NO.	REVISION	DATE	BY

Costello
 Engineering and Surveying
 9950 Richmond Avenue, Suite 450
 North Building
 Houston, Texas 77042
 (713) 783-7788 (713) 783-3980, Fax
 TEXAS PE BOARD FIRM
 REGISTRATION NO. 280

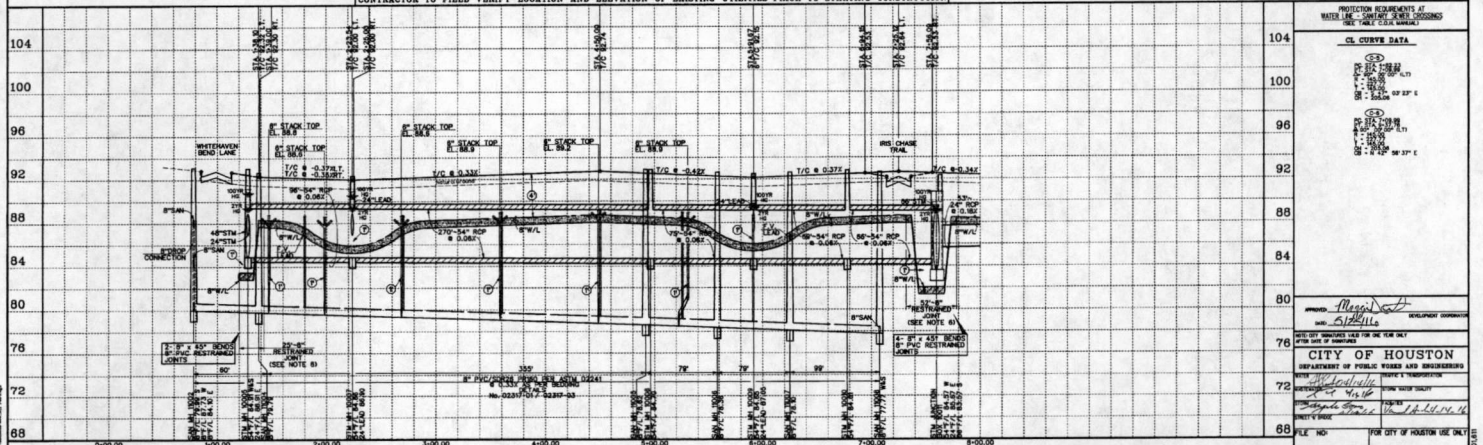
FORT BEND COUNTY MUD No.30
 GRAND VISTA SECTION 16
 PLAN AND PROFILE
 WHITEHAVEN BEND LANE STA. 8+00.00 TO STA. 8+84.16
 PERALTA VALLEY COURT STA. 8+64.16 TO 13+28.24

DRAWING SCALE
 HORIZ. 1" = 40'
 VERT. 1" = 4'
 SHEET 10 OF 29

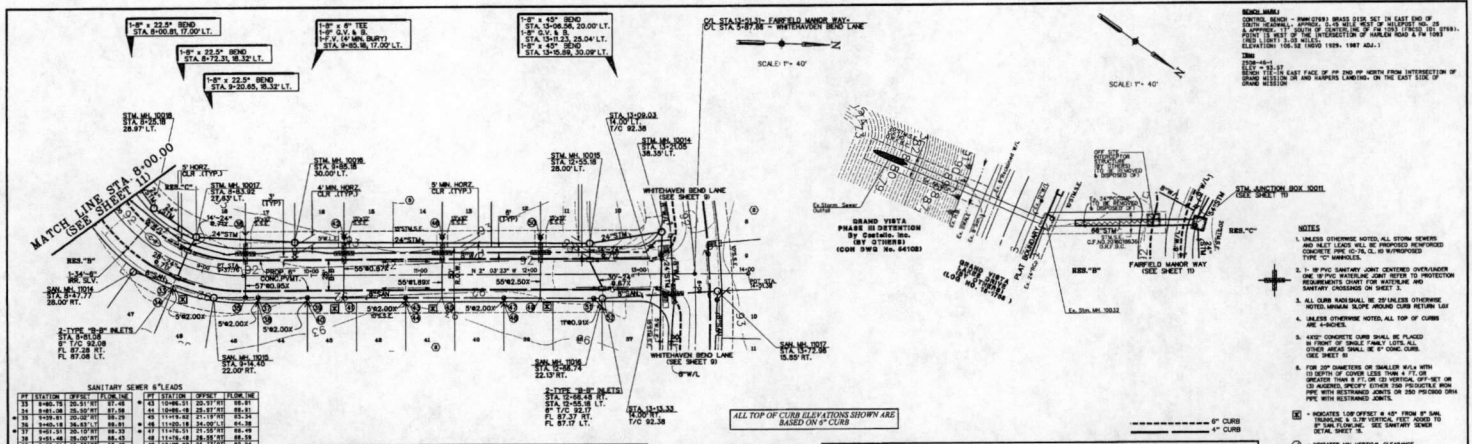


ANDERWOOD KNOLL TRACE AND FAIRFIELD MANOR WAY (50'R.O.W.)

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



<p>DESIGNED BY: <i>AD</i></p> <p>DESIGN CHECKED BY: <i>TC</i></p> <p>DRAWN BY: <i>TC</i></p> <p>CONG. CHECKED BY:</p> <p>SURVEY CHECKED BY:</p> <p>QA/QC BY: <i>TC</i> DATE: 12-1-16</p> <p>QA/QC REVISIONS BY: <i>TC</i></p>	<p>Costello</p> <p>Engineering and Surveying</p> <p>9000 Richmond Avenue, Suite 450</p> <p>North Building</p> <p>Houston, Texas 77042</p> <p>(713) 783-7788 (713) 783-3580, Fax</p> <p>TEXAS PE BOARD FIRM</p> <p>REGISTRATION NO. 280</p>	<p>FORT BEND COUNTY MUD No.30</p> <p>GRAND VISTA SECTION 16</p> <p>PLAN AND PROFILE</p> <p>ANDERWOOD KNOLL TRACE STA. 0+36.00 TO STA. 7+25.12</p> <p>AND FAIRFIELD MANOR WAY STA. 7+25.12 TO STA. 8+00.00</p>	<p>DRAWING SCALE:</p> <p>HORIZ. 1" = 40'</p> <p>VERT. 1" = 4'</p> <p>DATE: 12-1-16</p> <p>SHEET 11 OF 29</p>
---	---	---	--

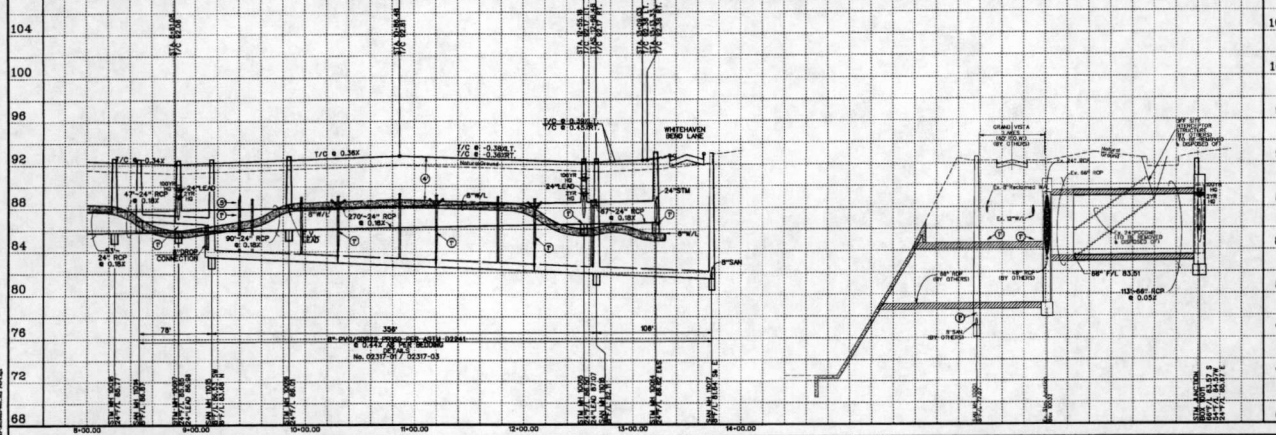


SANITARY SEWER 8" LEADS

STATION	DEPTH	INVERT	DIAMETER	LENGTH
8+00.00	10.00	88.00	8"	10.00
8+10.00	10.00	88.00	8"	10.00
8+20.00	10.00	88.00	8"	10.00
8+30.00	10.00	88.00	8"	10.00
8+40.00	10.00	88.00	8"	10.00
8+50.00	10.00	88.00	8"	10.00
8+60.00	10.00	88.00	8"	10.00
8+70.00	10.00	88.00	8"	10.00
8+80.00	10.00	88.00	8"	10.00
8+90.00	10.00	88.00	8"	10.00
9+00.00	10.00	88.00	8"	10.00
9+10.00	10.00	88.00	8"	10.00
9+20.00	10.00	88.00	8"	10.00
9+30.00	10.00	88.00	8"	10.00
9+40.00	10.00	88.00	8"	10.00
9+50.00	10.00	88.00	8"	10.00
9+60.00	10.00	88.00	8"	10.00
9+70.00	10.00	88.00	8"	10.00
9+80.00	10.00	88.00	8"	10.00
9+90.00	10.00	88.00	8"	10.00
10+00.00	10.00	88.00	8"	10.00
10+10.00	10.00	88.00	8"	10.00
10+20.00	10.00	88.00	8"	10.00
10+30.00	10.00	88.00	8"	10.00
10+40.00	10.00	88.00	8"	10.00
10+50.00	10.00	88.00	8"	10.00
10+60.00	10.00	88.00	8"	10.00
10+70.00	10.00	88.00	8"	10.00
10+80.00	10.00	88.00	8"	10.00
10+90.00	10.00	88.00	8"	10.00
11+00.00	10.00	88.00	8"	10.00
11+10.00	10.00	88.00	8"	10.00
11+20.00	10.00	88.00	8"	10.00
11+30.00	10.00	88.00	8"	10.00
11+40.00	10.00	88.00	8"	10.00
11+50.00	10.00	88.00	8"	10.00
11+60.00	10.00	88.00	8"	10.00
11+70.00	10.00	88.00	8"	10.00
11+80.00	10.00	88.00	8"	10.00
11+90.00	10.00	88.00	8"	10.00
12+00.00	10.00	88.00	8"	10.00
12+10.00	10.00	88.00	8"	10.00
12+20.00	10.00	88.00	8"	10.00
12+30.00	10.00	88.00	8"	10.00
12+40.00	10.00	88.00	8"	10.00
12+50.00	10.00	88.00	8"	10.00
12+60.00	10.00	88.00	8"	10.00
12+70.00	10.00	88.00	8"	10.00
12+80.00	10.00	88.00	8"	10.00
12+90.00	10.00	88.00	8"	10.00
13+00.00	10.00	88.00	8"	10.00
13+10.00	10.00	88.00	8"	10.00
13+20.00	10.00	88.00	8"	10.00
13+30.00	10.00	88.00	8"	10.00
13+40.00	10.00	88.00	8"	10.00
13+50.00	10.00	88.00	8"	10.00
13+65.33	10.00	88.00	8"	10.00

FAIRFIELD MANOR WAY (50' R.O.W.) **66" STM TO GRAND VISTA LAKES OUTFALL**

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



NOTES

- UNLESS OTHERWISE NOTED, ALL STORM SEWERS AND 8" SANITARY SEWERS SHALL BE CONCRETE PIPE 12'-0" O.D. IN WADSWORTH TYPE "C" MANHOLES.
- IF 8" SANITARY SEWER EXISTING OUTFALL IS NOT PROTECTED, CONTRACTOR SHALL PROVIDE PROTECTION REQUIREMENTS (SEE SHEET 12) FOR MANHOLE AND SANITARY CHIMNEY OF SHEET 12.
- ALL CURB SHALL BE 24" UNLESS OTHERWISE NOTED. MANHOLE SLOPE SHALL BE RETURN TO 4% UNLESS OTHERWISE NOTED. ALL TOP OF CURBS USE SHEET 12.
- 4" CONC. CURB SHALL BE PLACED ON 4" SAND. ALL OTHER CURB SHALL BE 8" CONC. CURB. USE SHEET 12.
- FOR 24" DIAMETERS OR SMALLER RISES WITH 12" DEPTH OF CURB, LESS THAN 4" TO 12" DEPTH, 4" CONC. CURB SHALL BE USED. ALL OTHER CURB SHALL BE 8" CONC. CURB. USE SHEET 12.
- INDICATES TOP OF CURB ± 4" FROM 8" MANHOLE. ALL 4" VERTICAL FEET ADDED TO 8" MANHOLE. ALL 8" VERTICAL FEET ADDED TO 4" MANHOLE. ALL 12" VERTICAL FEET ADDED TO 12" MANHOLE. ALL 16" VERTICAL FEET ADDED TO 16" MANHOLE. ALL 20" VERTICAL FEET ADDED TO 20" MANHOLE. ALL 24" VERTICAL FEET ADDED TO 24" MANHOLE. ALL 28" VERTICAL FEET ADDED TO 28" MANHOLE. ALL 32" VERTICAL FEET ADDED TO 32" MANHOLE. ALL 36" VERTICAL FEET ADDED TO 36" MANHOLE. ALL 40" VERTICAL FEET ADDED TO 40" MANHOLE. ALL 44" VERTICAL FEET ADDED TO 44" MANHOLE. ALL 48" VERTICAL FEET ADDED TO 48" MANHOLE. ALL 52" VERTICAL FEET ADDED TO 52" MANHOLE. ALL 56" VERTICAL FEET ADDED TO 56" MANHOLE. ALL 60" VERTICAL FEET ADDED TO 60" MANHOLE. ALL 64" VERTICAL FEET ADDED TO 64" MANHOLE. ALL 68" VERTICAL FEET ADDED TO 68" MANHOLE. ALL 72" VERTICAL FEET ADDED TO 72" MANHOLE. ALL 76" VERTICAL FEET ADDED TO 76" MANHOLE. ALL 80" VERTICAL FEET ADDED TO 80" MANHOLE. ALL 84" VERTICAL FEET ADDED TO 84" MANHOLE. ALL 88" VERTICAL FEET ADDED TO 88" MANHOLE. ALL 92" VERTICAL FEET ADDED TO 92" MANHOLE. ALL 96" VERTICAL FEET ADDED TO 96" MANHOLE. ALL 100" VERTICAL FEET ADDED TO 100" MANHOLE. ALL 104" VERTICAL FEET ADDED TO 104" MANHOLE.
- INDICATES MIN. VERTICAL CLEARANCE.
- INDICATES VERTICAL CLEARANCE FROM TOP OF CURB TO TOP OF MANHOLE.

NO.	REVISION	DATE	BY
1	DESIGNED BY: <i>A.S.</i>		
2	DESIGN CHECKED BY: <i>A.S.</i>		
3	DRAWN BY: <i>A.S.</i>		
4	CHECKED BY: <i>A.S.</i>		
5	DATE: <i>11-11-11</i>		
6	QA/QC BY: <i>A.S.</i>		
7	QA/QC REVISIONS BY: <i>A.S.</i>		

Costello
 Engineers and Surveying
 9990 Richmond Avenue, Suite 450
 North Building
 Houston, Texas 77042
 (713) 783-7788 (713) 783-3580, Fax
 TEXAS PE BOARD FIRM
 REGISTRATION No. 280

FORT BEND COUNTY MUD No.30
 GRAND VISTA SECTION 18
 PLAN AND PROFILE
 FAIRFIELD MANOR WAY-
 STA. 8+00.00 TO STA. 13+65.33 AND
 66" STM TO GRAND VISTA LAKES OUTFALL

DATE: *11-11-11*

DRAWING SCALE
 HORIZ: 1" = 40'
 VERT: 1" = 4'

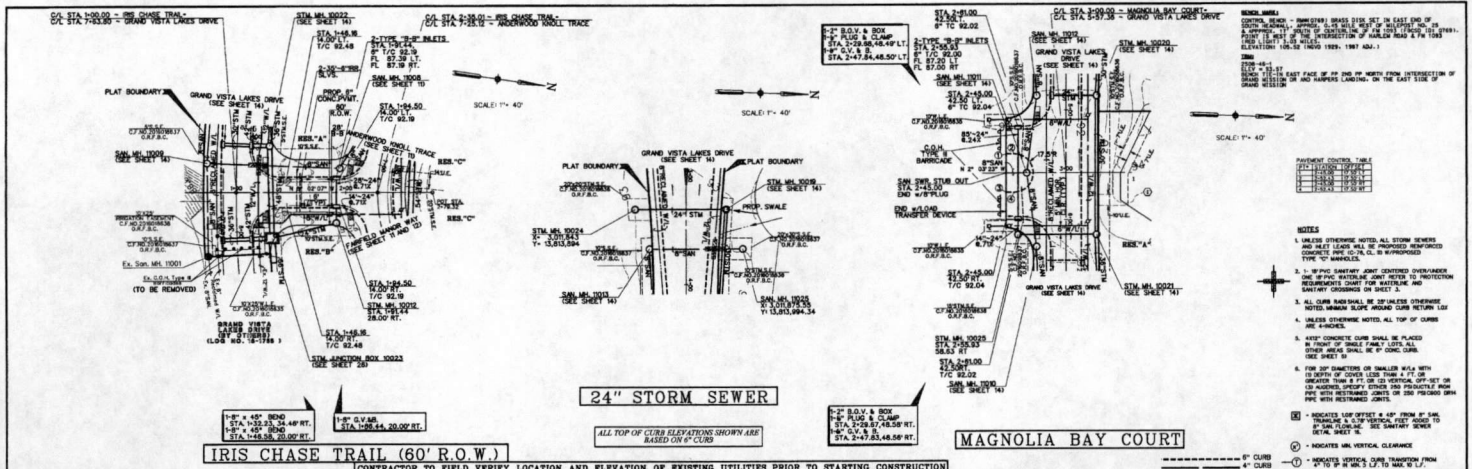
NO. 12 OF 29

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

APPROVED: *[Signature]*
 DATE: *11-11-11*

DESIGNED BY: *A.S.*
 DRAWN BY: *A.S.*
 CHECKED BY: *A.S.*
 DATE: *11-11-11*

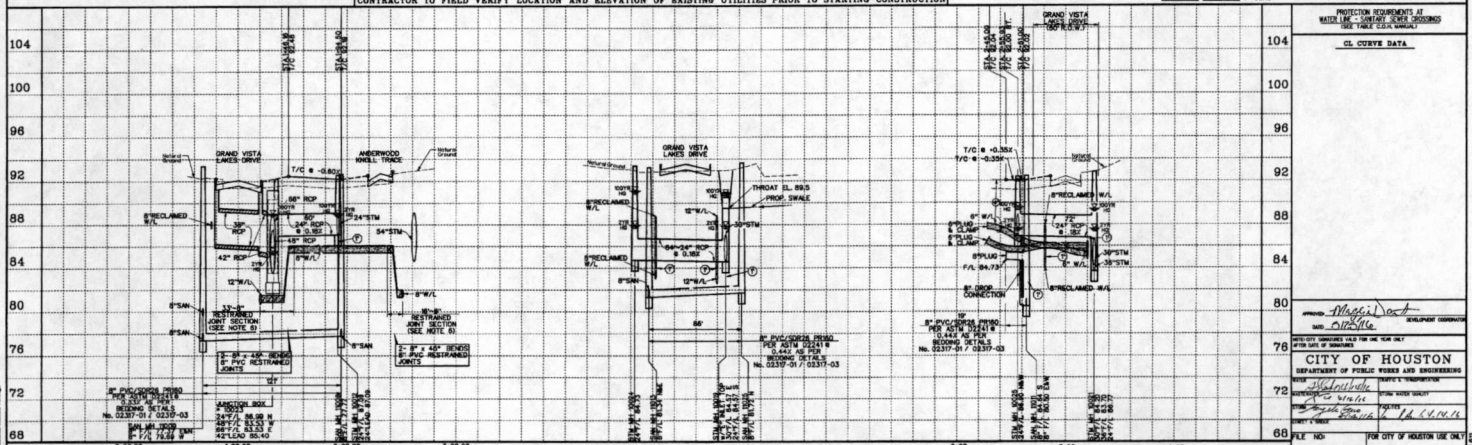
FILE NO: _____



PAVEMENT CONTROL TABLE

STATION	CONTROL
0+79.50	1
1+00.00	2
1+20.00	3
1+40.00	4
1+60.00	5
1+80.00	6
2+00.00	7
2+20.00	8
2+43.32	9

- NOTES
1. UNLESS OTHERWISE NOTED, ALL STORM SEWERS SHALL BE 24" DIA. AND SHALL BE CONCRETE PIPE WITH 12" MIN. COVER. ALL STORM SEWERS SHALL BE 12" DIA. UNLESS OTHERWISE NOTED.
 2. ALL CURB SHALL BE 24" HIGH AND SHALL BE CONCRETE. ALL CURB SHALL BE 6" CONC. CURB UNLESS OTHERWISE NOTED.
 3. ALL CURB SHALL BE 24" HIGH UNLESS OTHERWISE NOTED. ALL CURB SHALL BE 6" CONC. CURB UNLESS OTHERWISE NOTED.
 4. ALL CURB SHALL BE 24" HIGH UNLESS OTHERWISE NOTED. ALL CURB SHALL BE 6" CONC. CURB UNLESS OTHERWISE NOTED.
 5. ALL CURB SHALL BE 24" HIGH UNLESS OTHERWISE NOTED. ALL CURB SHALL BE 6" CONC. CURB UNLESS OTHERWISE NOTED.
 6. ALL CURB SHALL BE 24" HIGH UNLESS OTHERWISE NOTED. ALL CURB SHALL BE 6" CONC. CURB UNLESS OTHERWISE NOTED.



PROTECTION REQUIREMENTS AT MATERIAL - JUNCTIONS

CL. CURVE DATA

STATION	CL. CURVE DATA
0+79.50	1
1+00.00	2
1+20.00	3
1+40.00	4
1+60.00	5
1+80.00	6
2+00.00	7
2+20.00	8
2+43.32	9

DESIGNED BY: AC	DATE: 1/14
DESIGN CHECKED BY: AC	DATE: 1/14
DRAWN BY: JL	DATE: 1/14
CDDG CHECKED BY:	DATE:
REVIEW CHECKED BY:	DATE:
QA/QC BY: JS	DATE: 1/14
QA/QC REVISIONS BY: JS	DATE: 1/14

Costello

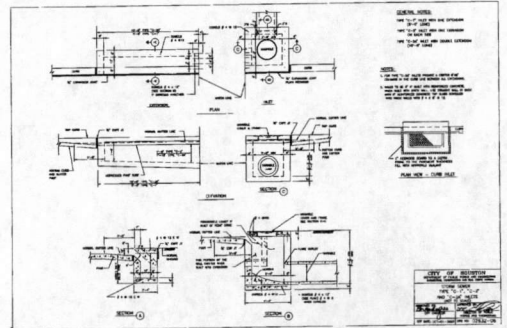
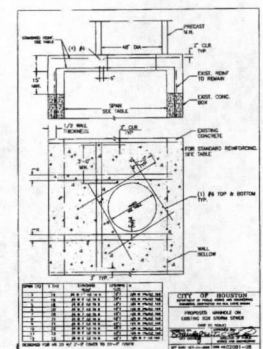
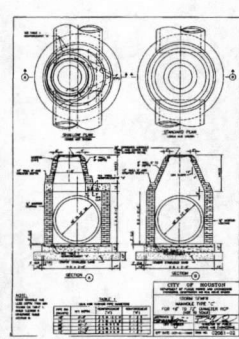
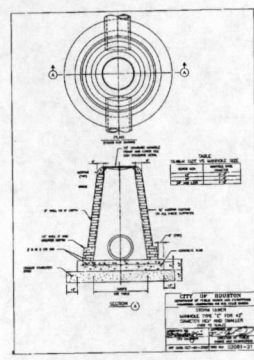
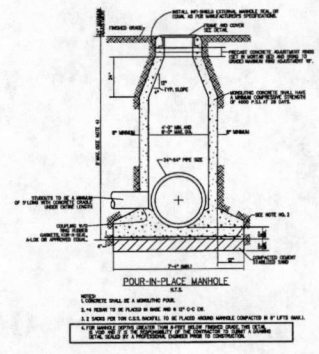
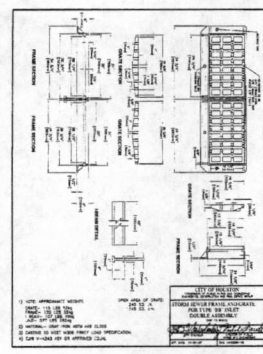
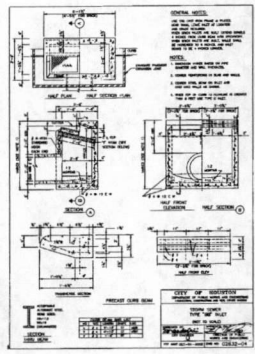
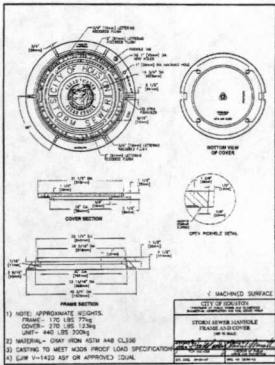
Engineering and Surveying
 9900 Richmond Avenue, Suite 450
 North Building
 Houston, Texas 77042
 (713) 783-7788 (713) 783-3560, Fax
 TEXAS PE BOARD FIRM
 REGISTRATION No. 280

PORT BEND COUNTY MUD No.30
 GRAND VISTA SECTION 16
 PLAN AND PROFILE
 IRIS CHASE TRAIL STA. 0+79.50 TO STA. 2+43.32
 24" STORM SEWER, AND MAGNOLIA BAY COURT

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

DRAWING SCALE
 HORIZ. 1" = 40'
 VERT. 1" = 4'

SHEET 13 OF 29



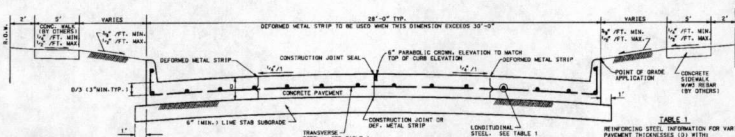
NO.	REVISION	DATE	BY

DESIGNED BY: AC
 DESIGN CHECKED BY: DB
 CDDG CHECKED BY:
 SURVEY CHECKED BY:
 QA/QC BY: DATE:
 QA/QC REVISIONS BY: DATE:

Costello
 Engineering and Surveying
 9900 Richmond Avenue, Suite 450
 North Building
 Houston, Texas 77042
 (713) 783-7788 (713) 783-3360, Fax
 TEXAS PE BOARD FIRM
 REGISTRATION No. 280

FORT BEND COUNTY MUD No.30
 GRAND VISTA SECTION 16
 DRAINAGE DETAILS

FILE NO. FOR CITY OF HOUSTON USE ONLY
 DRAWING SCALE: N.T.S.
 SHEET NO. 16 OF 20
 CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
 PLANS DIVISION
 OFFICE



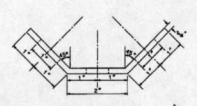
TYPICAL SINGLE ROADWAY SECTION

TABLE 1
REINFORCING STEEL INFORMATION FOR VARIOUS PAVEMENT THICKNESSES (2" MIN.)

PAVEMENT THICKNESS (IN)	NUMBER OF BARS	SPACING (IN)	CONCRETE STRENGTH (PSI)
2	2	18	4000
3	3	18	4000
4	4	18	4000
5	5	18	4000
6	6	18	4000
7	7	18	4000
8	8	18	4000
9	9	18	4000
10	10	18	4000
11	11	18	4000
12	12	18	4000

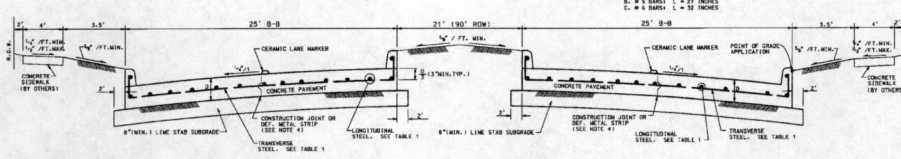
TABLE 2
DOWEL STEEL AND SPACINGS

PAVEMENT THICKNESS (IN)	DOWEL DIA. (IN)	SPACING (IN)
2	1/2	18
3	3/4	18
4	1	18
5	1 1/4	18
6	1 1/2	18
7	1 3/4	18
8	2	18
9	2 1/4	18
10	2 1/2	18
11	2 3/4	18
12	3	18



DOWEL TYPE EXPANSION JOINT

- NOTES:
1. ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A615, GRADE 60.
 2. THE LOCATION OF CONSTRUCTION JOINTS AND DEFORMED METAL STRIPS MAY BE VARIED, WITH THE APPROVAL OF THE ENGINEER, TO MEET THE PROPOSED CONSTRUCTION METHODS OF THE CONTRACTOR. THE MAXIMUM WIDTH BETWEEN LONGITUDINAL JOINTS SHALL NOT EXCEED 15'.
 3. ALL EARTHEN AREAS ARE TO BE HYDROLOCKED.
 4. CONTRACTOR MAY SAW OUT IN LIEU OF DEFORMED METAL STRIP.



TYPICAL DOUBLE ROADWAY SECTION

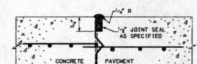
NOTES:

1. STEEL TO MEET WITH STANDARD SPECIFICATIONS FOR CONCRETE REINFORCING BARS. UNITS TO BE PLACED ON 1" CENTER.
2. CENTER DOWEL VERTICALLY IN CONCRETE BASE. EXTERIOR THICKNESS CONCRETE AS NEEDED TO MAINTAIN 3" MIN. COVER.

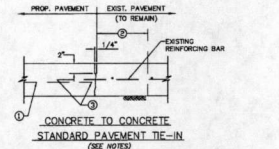
EXPANSION JOINT TO BE PLACED AT THE END OF EACH CURB RADIUS AND SPACED APPROX. 60'-6" APART.



DEFORMED METAL STRIP



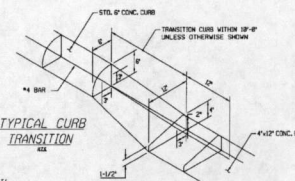
CONSTRUCTION JOINT SEAL



CONCRETE TO CONCRETE STANDARD PAVEMENT TIE-IN

PAVING HEADS AND TRANSITION CURB NOTES

1. Paving heads shall be cast halleable iron load transmission unit star logo model 3-21 or equal on 22" C-C acceptable as alternate.
2. Paving heads shall be cast halleable iron load transmission unit star logo model 3-21 or equal on 22" C-C acceptable as alternate.



TYPICAL CURB TRANSITION

STRIPING SHOULD COVER THE FULL WIDTH OF THE ROAD. STRIPING OF RAILS, PANELS, ETC. SHOULD SLOPE DOWNWARD AT AN ANGLE OF 45 DEGREES IN DIRECTIONS TRAFFIC IS TO PASS.



STRIPING FOR BARRICADE

WHERE A BARRICADE EXTENDS ENTIRELY ACROSS A ROADWAY, IT IS DESIRABLE THAT THE STRIPES SLOPE DOWNWARD IN THE DIRECTION TOWARD WHICH TRAFFIC MUST TURN IN DETOURING. WHEN BOTH RIGHT AND LEFT TURNS ARE PROVIDED FOR, THE CHEVRON STRIPING MAY SLOPE DOWNWARD IN BOTH DIRECTIONS FROM THE CENTER OF THE BARRICADE.

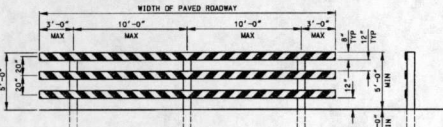
FOR ALL TYPES OF BARRICADES WITH RAILS LESS THAN 3'-0" LONG, STRIPES 4" WIDE SHALL BE USED. IDENTIFICATION MARKINGS MAY BE SHOWN ONLY ON BACK SIDE OF BARRICADE RAILS.

NOTES FOR TIE-IN:

1. REINFORCING CENTERED IN PROPOSED PAVEMENT, 3" CLEAR AT EDGES.
2. SAW-CUT 2" DEEP AND REMOVE 2" EXISTING PAVEMENT OR PAVEMENT WITH CURB, EXPOSE AND CLEAN EXISTING REINFORCING.
3. 2#4 BAR DIAMETER .AP OR WELD IF ORCUTTED.
4. IF NO EXPOSED REINFORCING STEEL EXISTS, HORIZONTAL DOWELS SHALL BE 4# BARS, GRADE 60, 30" LONG (DRIED) AND EMBEDDED 12" INTO THE CENTER OF THE EXIST CONCRETE SLAB WITH DROPPY OR APPROVED EQUAL. DOWELS SHALL BE PLACED 14" CENTER TO CENTER.

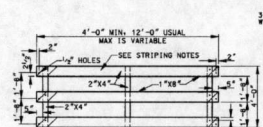
NOTES FOR PAVING HEADS

1. ADDITIONAL CONCRETE FOR PAVING HEADS SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAVING BID ITEMS.
2. DISTURBED MATERIAL IN THE FLEXIBLE PAVEMENT WILL BE BACKFILLED WITH ASPHALT CONCRETE PAVEMENT (ACP). THE ACP WILL BE CONSIDERED INCIDENTAL TO VARIOUS PAVING BID ITEMS.

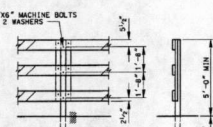


TYPE III BARRICADE FOR END OF ROAD

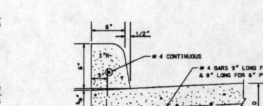
FOR TYPE III BARRICADES FOR END OF ROAD, THE THREE (3) RAILS SHALL BE REFLECTIVE RED AND RELFLECTIVE WHITE STRIPES ON SIDE FACING TRAFFIC (HIGH INTENSITY SHEETING ON BARRICADE OR NICKOLITE)



PANEL FOR TYPE III BARRICADE



POST FOR TYPE III BARRICADE



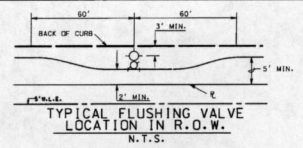
CONCRETE CURB

NO.	REVISION	DATE	BY

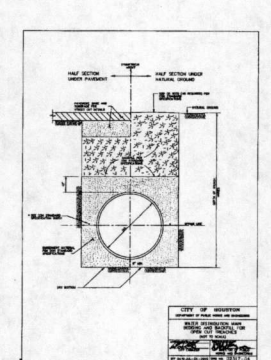
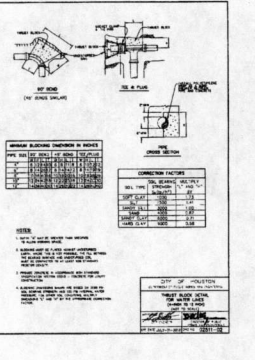
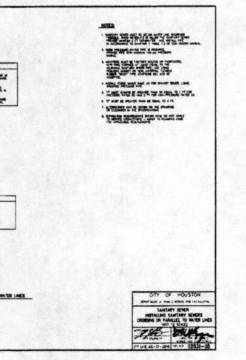
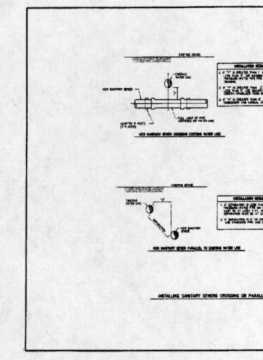
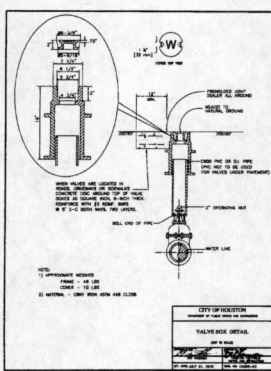
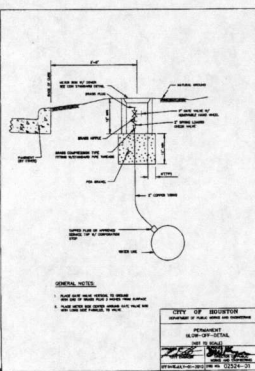
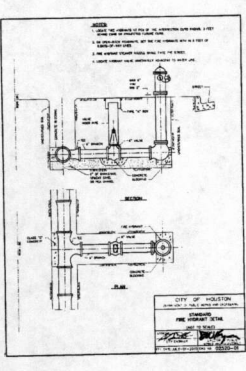
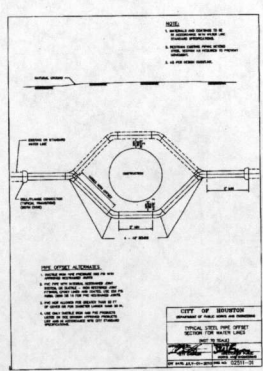
Costello
Engineering and Surveying
9900 Richmond Avenue, Suite 450
North Building
Houston, Texas 77042
(713) 783-7788 (713) 783-3580, Fax
TEXAS PE BOARD FIRM
REGISTRATION No. 230

FORT BEND COUNTY MUD No.30
GRAND VISTA SECTION 18
PAVING DETAILS

APPROVED: *Maggie*
DESIGNER/ENGINEER
DATE: *12/11/10*
CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
PROJECT: *Fort Bend County MUD No. 30 Grand Vista Section 18*
DRAWN BY: *J. D. Smith*
CHECKED BY: *J. D. Smith*
DATE: *12/11/10*
FILE NO.: *17-019*
FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE: N.T.S.
SHEET NO. 17 OF 29



- NORTH FORT BEND WATER AUTHORITY**
GENERAL NOTES FOR EXISTING UNDERGROUNDS
- UTILITY WILL CONTACT NORTH FORT BEND WATER AUTHORITY'S ("AUTHORITY") OPERATOR (EVENING TREAT SERVICES 281-646-2323) TO LOCATE AND MARK AUTHORITY'S WATER LINE PRIOR TO ANY CONSTRUCTION. AUTHORITY ACCEPTS NO RESPONSIBILITY REGARDING THE LOCATION OF ANY OTHER FACILITIES WITHIN THE AUTHORITY'S EASEMENT.
 - UTILITY WILL COORDINATE WITH AUTHORITY REGARDING USE OF HEAVY EQUIPMENT OR ON-CROSS WATERLINE WITHIN THE EASEMENT TO PREVENT POTENTIAL DAMAGE TO AUTHORITY FACILITIES. THIS MAY INCLUDE USE OF MATS, PLATS, OR SPECIAL EQUIPMENT.
 - ANY OPEN CUT CONSTRUCTION FOR A UTILITY CROSSING ABOVE AN AUTHORITY WATERLINE WILL NOT DISTURB THE WATERLINE. THE USE OF AUTHORITY'S LINE UTILITY LOCATOR SHALL BE REQUIRED. A PLAT WILL BE OBTAINED FROM THE UTILITY LOCATOR. THE USE OF THE UTILITY LOCATOR SHALL BE REQUIRED TO PREVENT POTENTIAL DAMAGE TO AUTHORITY FACILITIES. ANY EXCAVATION TO PLACE WITHIN 24 INCHES OF THE OUTSIDE OF THE WATERLINE SHALL BE DONE BY HAND EXCAVATION ONLY. AIR CUTTING AND VACUUM PRECAUTION SHALL BE USED WITH THE APPROVAL OF THE AUTHORITY OFFICE. REFER TO SPECIFIC.
 - CONSTRUCTION ACTIVITIES THAT GENERATE GROUND VIBRATIONS, INCLUDING PILE DRIVING, SHEET PILING, SOIL COMPACTION WORK, JACK HAMMERING, BURNING, BORING AND JACKING SHALL BE COORDINATED WITH AND APPROVED BY THE AUTHORITY'S ENGINEER.
 - LETTER OF NO OBJECTION MUST BE OBTAINED PRIOR TO ANY WORK ACTIVITY WITHIN AUTHORITY'S EASEMENT. AUTHORITY MUST REVIEW AND APPROVE PROPOSED EASEMENT AND CONSTRUCTION DRAWINGS BEFORE ISSUING A LETTER OF NO OBJECTION. A COPY OF THIS LETTER MUST BE IN THE POSSESSION OF UTILITY AND ITS CONTRACTOR'S WORK CREW WHILE CONDUCTING CONSTRUCTION ACTIVITY WITHIN THE AUTHORITY'S EASEMENT. A LETTER OF NO OBJECTION IS NOT NECESSARY FOR SURVEY WORK OR ASSESSMENT OF THE SURFACE OF THE EASEMENT.
 - UTILITY MUST NOTIFY AUTHORITY 48 HRS IN ADVANCE OF UTILITY CONDUCTING ACTIVE CONSTRUCTION WITHIN THE AUTHORITY'S EASEMENT. AUTHORITY REPRESENTATIVE MAY BE PRESENT TO OBSERVE ACTIVE CONSTRUCTION WITHIN AUTHORITY EASEMENT. UTILITY WILL REIMBURSE AUTHORITY FOR THE COST OF ITS REPRESENTATIVE TO BE PRESENT DURING ACTIVE CONSTRUCTION WITHIN AUTHORITY'S EASEMENT.
 - UTILITY MAY NOT STORE CONSTRUCTION MATERIALS INCLUDING SOIL, SPILLS, AND EQUIPMENT ON AUTHORITY EASEMENT.
 - ALL PROPOSED CROSSINGS SHALL BE REASONABLY PERPENDICULAR TO AUTHORITY'S EASEMENT.
 - PROPOSED SURFACE GRADE OR ELEVATION WITHIN AUTHORITY EASEMENT MUST BE APPROVED BY THE AUTHORITY. NO CONSTRUCTION WILL BE ALLOWED THAT RESULTS IN THE EROSION OF SOILS OR EARTHILL CREATION THERE-INSIDE WITHIN THE AUTHORITY'S EASEMENT. RESTORE AUTHORITY'S EASEMENT TO EXISTING CONDITION OR BETTER TO ENSURE POSITIVE DRAINAGE WITHOUT ADVERSE EFFECTS TO ADJACENT PROPERTIES.
 - NO TEMPORARY OR PERMANENT CROSSING (RAILROADS, ROADWAYS, DRIVEWAYS, SIDEWALKS, PARKING LOTS, ETC.) SHALL BE CONSTRUCTED ACROSS AUTHORITY'S EASEMENT WITHOUT WRITTEN APPROVAL. ALL CROSSINGS SHALL BE DESIGNED TO BE REASONABLY PERPENDICULAR TO THE WATERLINE AND MAINTAIN A MINIMUM OF 2' COMPACTED COVER OVER THE WATERLINE.
 - REQUEST FOR VARIANCE FROM THESE CROSSING GUIDELINES MAY BE SUBMITTED TO THE AUTHORITY'S BOARD OF DIRECTORS FOR CONSIDERATION ON A CASE-BY-CASE BASIS AND MUST BE PROVIDED AN EXPLANATION OF THE NEED FOR THE VARIANCE. THIS IS IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN THE HOUSTON REGION. THE CITY OF HOUSTON SHALL BE RESPONSIBLE FOR THE GENERAL PUBLIC OR THE AUTHORITY'S FACILITIES, AND IS NOT UNREASONABLY EXPECTED OR INTENDED BY THE AUTHORITY'S EASEMENT OR FACILITIES, OR THE OPERATION AND MAINTENANCE OF THE AUTHORITY'S FACILITIES.



NO.	REVISION	DATE	BY

DESIGNED BY: *AS*
 DESIGN CHECKED BY: *AS*
 DRAWN BY: *AS*
 CADD CHECKED BY: *AS*
 SURVEY CHECKED BY: *AS*
 QA/QC BY: *AS* DATE: *11/11/11*
 QA/QC REVISIONS BY: *AS* DD

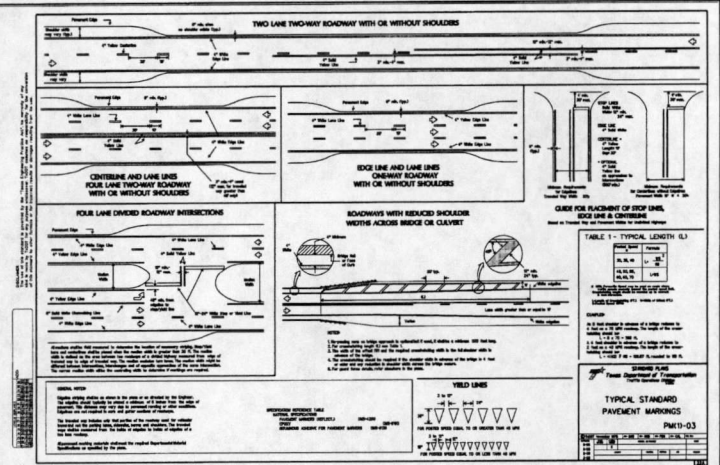
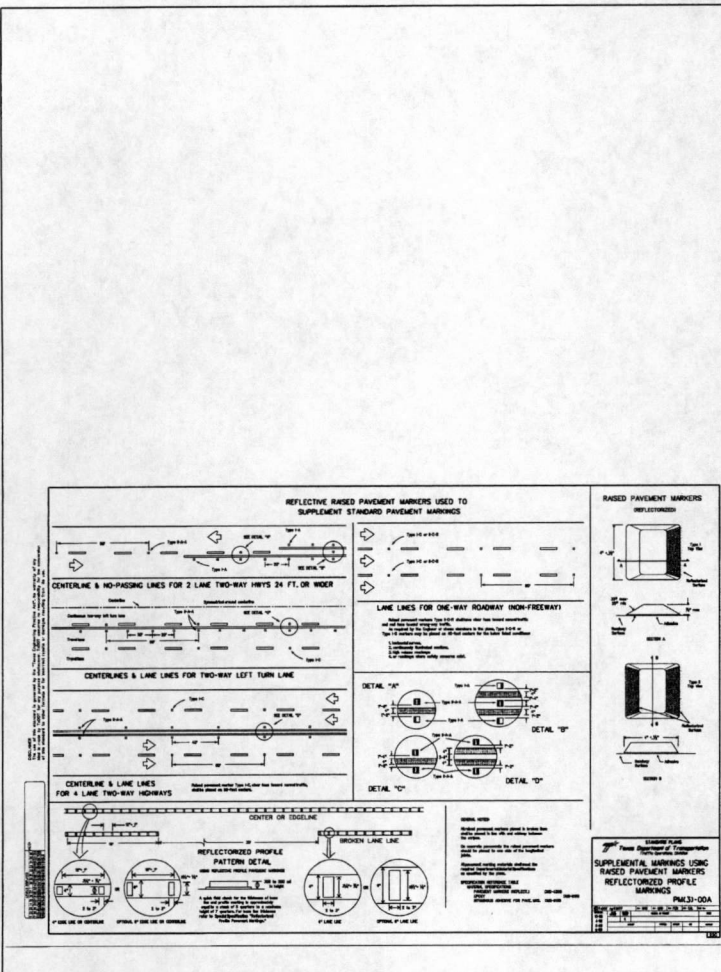
Costello
 Engineering and Surveying
 9960 Richmond Avenue, Suite 450
 North Building
 Houston, Texas 77042
 (713) 783-7788 (713) 783-2980 Fax
 TEXAS PE BOARD FIRM
 REGISTRATION NO. 280

FORT BEND COUNTY MUD No.30
 GRAND VISTA SECTION 16
 WATER MAIN DETAILS

APPROVED: *Magdalena*
 CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
 DRAWING SCALE: N.T.S.
 SHEET NO. 18 OF 29

DISCUSSION: This standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for subsequent results or damages resulting therefrom.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----



STANDARD PLANS
 Texas Department of Transportation
 Traffic Operations Division

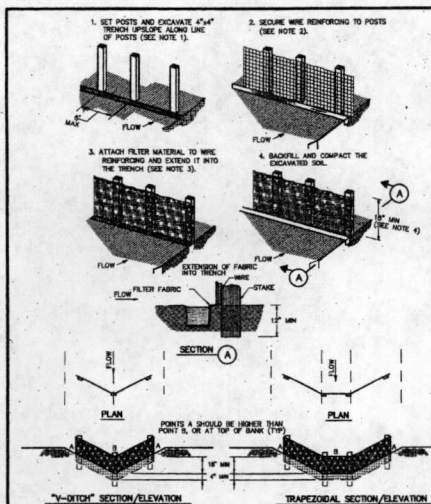
TYPICAL STANDARD PAVEMENT MARKINGS

PAV-3-00A

© TxDOT March 2001	REV. 003	REV. 004	REV. 005	REV. 006
DATE	ISSUE	REVISION	BY	DATE



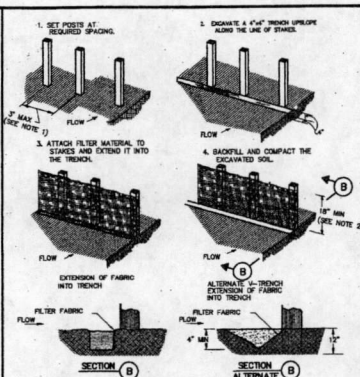
SHEET 22 OF 29
 01/25/16



CONSTRUCTION NOTES:

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

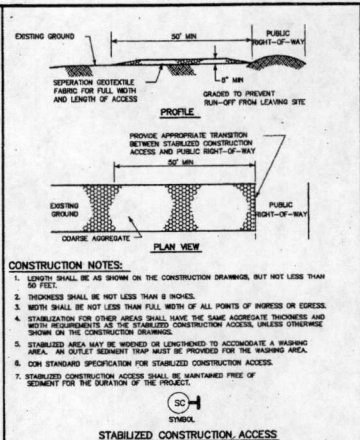
REINFORCED FILTER FABRIC BARRIER



CONSTRUCTION NOTES:

- 2 INCH THICK BY 2 INCH WOODEN STAKES TO BE SET AT MAX SPACING OF 3 FEET AND EMBEDDED A MIN OF 8 INCHES. IF PREASSEMBLED BARRIER WITH SUPPORT NETTING IS USED, SPACING OF POST MAY BE INCREASED TO 8 FEET MAX.
- ATTACH FILTER FABRIC TO WOODEN STAKES. FILTER FABRIC BARRIER SHALL HAVE A MIN HEIGHT OF 18 INCHES AND MAX HEIGHT OF 36 INCHES ABOVE NATURAL GROUND.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHOULD BE OVERLAPPED 8 INCHES AT THE POSTS AND FOLDED.
- SEE CON STANDARD SPECIFICATION FOR FILTER FABRIC BARRIER.

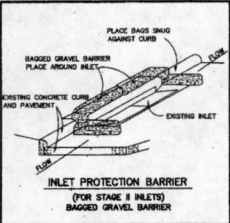
FILTER FABRIC BARRIER



CONSTRUCTION NOTES:

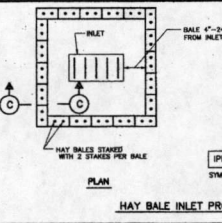
- LENGTH SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS, BUT NOT LESS THAN 50 FEET.
- THICKNESS SHALL BE NOT LESS THAN 8 INCHES.
- WIDTH SHALL BE NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
- STABILIZATION FOR OTHER AREAS SHALL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION ACCESS, UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DRAWINGS.
- STABILIZED AREA MAY BE WORKED OR LIMPWORKED TO ACCOMMODATE A WASHING AREA. AN OUTLET SEDIMENT TRAP MUST BE PROVIDED FOR THE WASHING AREA.
- CON STANDARD SPECIFICATION FOR STABILIZED CONSTRUCTION ACCESS.
- STABILIZED CONSTRUCTION ACCESS SHALL BE MAINTAINED FREE OF SEDIMENT FOR THE DURATION OF THE PROJECT.

STABILIZED CONSTRUCTION ACCESS

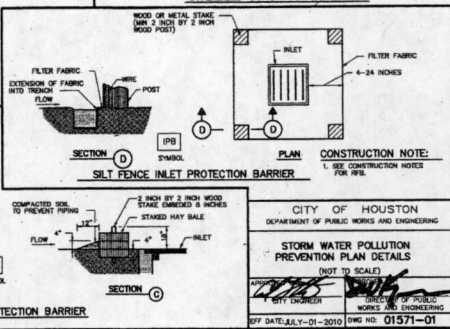


INLET PROTECTION BARRIER (FOR STAKE & INLETS)

BAGGED GRAVEL BARRIER



HAY BALE INLET PROTECTION BARRIER



CONSTRUCTION NOTE:

- SEE CONSTRUCTION NOTES FOR SILE.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
STORM WATER POLLUTION PREVENTION PLAN DETAILS
(NOT TO SCALE)
DATE: 06/11/10
BY: [Signature]
CITY ENGINEER
DATE: 06/11/10
BY: [Signature]
CITY ENGINEER

APPROVED: [Signature]
CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
FILE NO: _____
DRAWING SCALE: N.T.S.
SHEET 24 OF 29
DATE: 06/11/10

DESIGNED BY: AD	DATE: 06/11/10
DESIGN CHECKED BY: AD	DATE: 06/11/10
DRAWN BY: J.D.	DATE: 06/11/10
CHECKED BY: J.D.	DATE: 06/11/10
SURVEY CHECKED BY:	DATE:
QA/QC BY: J.S.	DATE: 06/11/10
QA/QC REVISIONS BY: J.S.	DATE: 06/11/10

Costello
Engineering and Surveying
9900 Richmond Avenue, Suite 450
North Building
Houston, Texas 77042
(713) 783-7788 (713) 783-3580, Fax
TEXAS PE BOARD FIRM
REGISTRATION NO. 290

FORT BEND COUNTY MUD No.30
GRAND VISTA SECTION 16
POLLUTION PREVENTION DETAILS

