

REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT

On this 6th day of October, 2015, Commissioners Court came on to be heard and reviewed the accompanying notice of Cruz Tec Inc on behalf of Cinco Southwest MUD No 2 Job Location 9423 Spring Green Blvd., Katy, TX 77494 Date 9/22/2015 Bond No. 95008664, Permit No. 2015-3120 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 Mejers, seconded by Commissioner Morrison, 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: Phil J Stangle, PE, PTOE
For County Engineer

By: N/A
Drainage District Engineer/Manager

Presented to Commissioners Court and approved.
Recorded in Volume 1016115
Minutes of Commissioners Court

Clerk of Commissioners Court
By: [Signature]
Deputy **RENEE MICHULKA**

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

AUTHORIZED

BOND NO 95008664
THE STATE OF TEXAS §
COUNTY OF FORT BEND §

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, Cruz Tec, Inc. whose address is Houston, TX 77064, Texas, hereinafter called the Principal, and The Guarantee Co. Of North America USA, a Corporation existing under and by virtue of the laws of the State of Michigan and authorized to do an indemnifying business in the State of Texas, and whose principal office is located at One Towne Square Ste 1470, Southfield, MI 48076, whose officer residing in the State of Texas, authorized to accept service in all suits and actions brought within said State is TX and whose address is 1999 Bryan St, Ste 900 Dallas, TX 75201 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 Ten Thousand Dollars Dollars (\$ 10,000) 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 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;

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 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 14th day of September, 2015

CCM 10/16/15 # 16F
Fort Bend County Clerk
Return Admin Serv Coord

Cruz Tec, Inc.
PRINCIPAL
BY [Signature]
The Guarantee Co. Of North America USA
SURETY
BY Misty Witt
Misty Witt, Attorney-in-Fact



The Guarantee Company of North America USA
Southfield, Michigan

POWER OF ATTORNEY

POWER OF ATTORNEY NUMBER (must match bond number on bond): 95008664

Fort Bend County Cable Line Performance Bond
Ten Thousand Dollars (\$10,000.00)

KNOW ALL BY THESE PRESENTS: That THE GUARANTEE COMPANY OF NORTH AMERICA USA, a corporation organized and existing under the laws of the State of Michigan, having its principal office in Southfield, Michigan, does hereby constitute and appoint

Misty Witt, The Woodlands, TX

its true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise.

The execution of such instrument(s) in pursuance of these presents, shall be as binding upon THE GUARANTEE COMPANY OF NORTH AMERICA USA as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at the principal office.

The Power of Attorney is executed and may be certified so, and may be revoked, pursuant to and by authority of Article IX, Section 9.03 of the By-Laws adopted by the Board of Directors of THE GUARANTEE COMPANY OF NORTH AMERICA USA at a meeting held on the 31st day of December, 2003. The President, or any Vice President, acting with any Secretary or Assistant Secretary, shall have power and authority:

1. To appoint Attorney(s)-in-fact, and to authorize them to execute on behalf of the Company, and attach the Seal of the Company thereto, bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, and
2. To revoke, at any time, any such Attorney-in-fact and revoke the authority given, except as provided below
3. In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.
4. In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

Further, this Power of Attorney is signed and sealed by facsimile pursuant to resolution of the Board of Directors of the Company adopted at a meeting duly called and held on the 6th day of December 2011, of which the following is a true excerpt:

RESOLVED that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, contracts of indemnity and other writings obligatory in the nature thereof, and such signature and seal when so used shall have the same force and effect as though manually affixed.



IN WITNESS WHEREOF, THE GUARANTEE COMPANY OF NORTH AMERICA USA has caused this instrument to be signed and its corporate seal to be affixed by its authorized officer, this 23rd day of February, 2012.

THE GUARANTEE COMPANY OF NORTH AMERICA USA

STATE OF MICHIGAN
County of Oakland

Stephen C. Ruschak, Vice President

Randall Musselman, Secretary

On this 23rd day of February, 2012 before me came the individuals who executed the preceding instrument, to me personally known, and being by me duly sworn, said that each is the herein described and authorized officer of The Guarantee Company of North America USA; that the seal affixed to said instrument is the Corporate Seal of said Company; that the Corporate Seal and each signature were duly affixed by order of the Board of Directors of



Cynthia A. Takai
Notary Public, State of Michigan
County of Oakland
My Commission Expires February 27, 2018
Acting in Oakland County

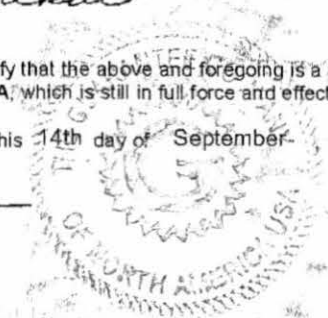
IN WITNESS WHEREOF, I have hereunto set my hand at The Guarantee Company of North America USA offices the day and year above written.

I, Randall Musselman, Secretary of THE GUARANTEE COMPANY OF NORTH AMERICA USA, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by THE GUARANTEE COMPANY OF NORTH AMERICA USA, which is still in full force and effect.



IN WITNESS WHEREOF, I have thereunto set my hand and attached the seal of said Company this 14th day of September, 2015

Randall Musselman, Secretary





Texas Consumer Notice

1. IMPORTANT NOTICE

To obtain information or make a complaint:

2. You may contact your **agent** at:
3. You may call The Guarantee Company of North America USA's toll-free telephone number for information or to make a complaint at: 1-866-328-0567
4. You may also write to The Guarantee Company of North America USA at:

One Towne Square, Suite 1470
Southfield, Michigan 48076
Web: www.gcna.com
E-mail: Info@gcna.com
Fax: 248-750-0431
5. You may contact the Texas Department of Insurance to obtain information on companies, coverages, rights or complaints at: 1-800-252-3439
6. You may write the Texas Department of Insurance:
P.O. Box 149104
Austin, TX 78714-9104
Fax: (512) 475-1771
Web: <http://www.tdi.state.tx.us>
E-mail: ConsumerProtection@tdi.state.tx.us
7. **PREMIUM OR CLAIM DISPUTES:**
Should you have a dispute concerning your premium or about a claim you should contact the (agent) (company) (agent or the company) first. If the dispute is not resolved, you may contact the Texas Department of Insurance.
8. **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 informacion o para someter una queja:

Puede comunicarse con su **agente** al

Usted puede llamar al numero de telefono gratis de The Guarantee Company of North America USA's para informacion o para someter una queja al: 1-866-328-0567

Usted tambien puede escribir a to The Guarantee Company of north America USA;
One Towne Square, Suite 1470
Southfield, Michigan 48076
Web: www.gcna.com
E-mail: Info@gcna.com
Fax: 248-750-0431

Puede comunicarse con el Departamento de Seguros de Texas para obtener informacion acerca de companias, coberturas, derechos o quejas al: 1-800-252-3439

Puede escribir al Departamento de Seguros de Texas:
P.O. Box 149104
Austin, TX 78714-9104
Fax: (512) 475-1771
Web: <http://www.tdi.state.tx.us>
E-mail: ConsumerProtection@tdi.state.tx.us

DISPUTAS SOBRE PRIMAS O RECLAMOS:

Si tiene una disputa concierne a su prima o a un reclamo, debe comunicarse con el (agente) (la compania) agente o la compania) primero. Si no se resuelve la disputa, puede entonces comunicarse con el departamento (TDI).

UNA ESTE AVISO A SU POLIZA: Este aviso es solo para proposito de informacion y no se convierte en parte o condicion del document adjunto.

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

AUTHORIZED

BOND NO 95008664
THE STATE OF TEXAS §
COUNTY OF FORT BEND §

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, Cruz Tec, Inc. whose address is Houston, TX 77064, Texas, hereinafter called the Principal, and The Guarantee Co. Of North America USA, a Corporation existing under and by virtue of the laws of the State of Michigan and authorized to do an indemnifying business in the State of Texas, and whose principal office is located at One Towne Square Ste 1470, Southfield, MI 48076, whose officer residing in the State of Texas, authorized to accept service in all suits and actions brought within said State is TX and whose address is 1999 Bryan St, Ste 900 Dallas, TX 75201 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 Ten Thousand Dollars Dollars (\$ 10,000) 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 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;

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 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 14th day of September, 2015

Cruz Tec, Inc.

PRINCIPAL
BY _____
The Guaranteed Co. Of North America USA

SURETY
BY Mitch Witt

BY Mitch Witt, Attorney in-Fact



The Guarantee Company of North America USA
Southfield, Michigan

POWER OF ATTORNEY

POWER OF ATTORNEY NUMBER (must match bond number on bond): 95008664

Fort Bend County Cable Line Performance Bond
Ten Thousand Dollars (\$10,000.00)

KNOW ALL BY THESE PRESENTS: That THE GUARANTEE COMPANY OF NORTH AMERICA USA, a corporation organized and existing under the laws of the State of Michigan, having its principal office in Southfield, Michigan, does hereby constitute and appoint

Misty Witt, The Woodlands, TX

its true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise.

The execution of such instrument(s) in pursuance of these presents, shall be as binding upon THE GUARANTEE COMPANY OF NORTH AMERICA USA as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at the principal office.

The Power of Attorney is executed and may be certified so, and may be revoked, pursuant to and by authority of Article IX, Section 9.03 of the By-Laws adopted by the Board of Directors of THE GUARANTEE COMPANY OF NORTH AMERICA USA at a meeting held on the 31st day of December, 2003. The President, or any Vice President, acting with any Secretary or Assistant Secretary, shall have power and authority:

1. To appoint Attorney(s)-in-fact, and to authorize them to execute on behalf of the Company, and attach the Seal of the Company thereto, bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, and
2. To revoke, at any time, any such Attorney-in-fact and revoke the authority given, except as provided below
3. In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.
4. In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

Further, this Power of Attorney is signed and sealed by facsimile pursuant to resolution of the Board of Directors of the Company adopted at a meeting duly called and held on the 6th day of December 2011, of which the following is a true excerpt:

RESOLVED that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, contracts of indemnity and other writings obligatory in the nature thereof, and such signature and seal when so used shall have the same force and effect as though manually affixed.



IN WITNESS WHEREOF, THE GUARANTEE COMPANY OF NORTH AMERICA USA has caused this instrument to be signed and its corporate seal to be affixed by its authorized officer, this 23rd day of February, 2012.

THE GUARANTEE COMPANY OF NORTH AMERICA USA

Stephen C. Ruschak, Vice President

Randall Musselman, Secretary

STATE OF MICHIGAN
County of Oakland

On this 23rd day of February, 2012 before me came the individuals who executed the preceding instrument, to me personally known, and being by me duly sworn, said that each is the herein described and authorized officer of The Guarantee Company of North America USA; that the seal affixed to said instrument is the Corporate Seal of said Company; that the Corporate Seal and each signature were duly affixed by order of the Board of Directors of



Cynthia A. Takai
Notary Public, State of Michigan
County of Oakland
My Commission Expires February 27, 2018
Acting in Oakland County

IN WITNESS WHEREOF, I have hereunto set my hand at The Guarantee Company of North America USA offices the day and year above written.

I, Randall Musselman, Secretary of THE GUARANTEE COMPANY OF NORTH AMERICA USA, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by THE GUARANTEE COMPANY OF NORTH AMERICA USA, which is still in full force and effect.



IN WITNESS WHEREOF, I have thereunto set my hand and attached the seal of said Company this 14th day of September, 2015

Randall Musselman, Secretary



Texas Consumer Notice

1. IMPORTANT NOTICE

To obtain information or make a complaint:

2. You may contact your **agent** at:
3. You may call The Guarantee Company of North America USA's toll-free telephone number for information or to make a complaint at: 1-866-328-0567
4. You may also write to The Guarantee Company of North America USA at:

One Towne Square, Suite 1470
Southfield, Michigan 48076
Web: www.gcna.com
E-mail: info@gcna.com
Fax: 248-750-0431

5. You may contact the Texas Department of Insurance to obtain information on companies, coverages, rights or complaints at: 1-800-252-3439
6. You may write the Texas Department of Insurance:
P.O. Box 149104
Austin, TX 78714-9104
Fax: (512) 475-1771
Web: <http://www.tdi.state.tx.us>
E-mail: ConsumerProtection@tdi.state.tx.us
7. **PREMIUM OR CLAIM DISPUTES:**
Should you have a dispute concerning your premium or about a claim you should contact the (agent) (company) (agent or the company) first. If the dispute is not resolved, you may contact the Texas Department of Insurance.
8. **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 informacion o para someter una queja:

Puede comunicarse con su **agent** al

Usted puede llamar al numero de telefono gratis de The Guarantee Company of North America USA's para informacion o para someter una queja al: 1-866-328-0567

Usted tambien puede escribir a to The Guarantee Company of north America USA;
One Towne Square, Suite 1470
Southfield, Michigan 48076
Web: www.gcna.com
E-mail: info@gcna.com
Fax: 248-750-0431

Puede comunicarse con el Departamento de Seguros de Texas para obtener informacion acerca de companias, coberturas, derechos o quejas al: 1-800-252-3439

Puede escribir al Departamento de Seguros de Texas:
P.O. Box 149104
Austin, TX 78714-9104
Fax: (512) 475-1771
Web: <http://www.tdi.state.tx.us>
E-mail: ConsumerProtection@tdi.state.tx.us

DISPUTAS SOBRE PRIMAS O RECLAMOS:

Si tiene una disputa concerniente a su prima o a un reclamo, debe comunicarse con el (agente) (la compania) agente o la compania) primero. Si no se resuelve la disputa, puede entonces comunicarse con el departamento (TDI).

UNA ESTE AVISO A SU POLIZA: Este aviso es solo para proposito de informacion y no se convierte en parte o condicion del document adj unto.

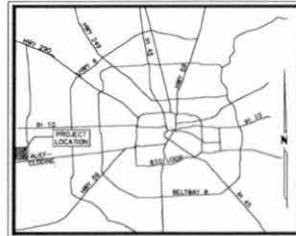
CIVIL PLANS

FOR

WATER, SANITARY SEWER, AND STORM SEWER CONNECTION EXTENSIONS SERVING CROSSING AT CINCO RANCH ON BEHALF OF: CINCO SOUTHWEST MUD NO. 2

LOCATED IN
CITY OF HOUSTON ETJ, FORT BEND COUNTY, TEXAS

KEYMAP NO.: 524G
ZIP CODE: 77494



VICINITY MAP
N.T.S.



LOCATION MAP
N.T.S.

ACCORDING TO MAP NO. (48157CD1054) OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR FORT BEND COUNTY AND INCORPORATED AREAS, DATED APRIL 2, 2014, THE SUBJECT TRACT IS SITUATED WITHIN: UNSHADED ZONE X

CONTRACTOR SHALL NOTIFY THE CITY OF HOUSTON,
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING,
ENGINEERING OFFICE OF THE CITY ENGINEER, 48
HOURS BEFORE STARTING WORK ON THIS PROJECT.
PHONE NO. 832.394.9098

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1 OF 20	COVER SHEET
2 OF 20	GENERAL NOTES
3 OF 20	PLAN
4 OF 20	UTILITY PLAN (1 OF 2)
5 OF 20	UTILITY PLAN (2 OF 2)
6 OF 20	DRAINAGE AREA MAP
7 OF 20	STORM SEWER CALCULATIONS
8 OF 20	SANITARY & STORM SEWER PLAN & PROFILE
9 OF 20	STORM SEWER PLAN & PROFILE
10 OF 20	WATER PLAN & PROFILE (1 OF 3)
11 OF 20	WATER PLAN & PROFILE (2 OF 3)
12 OF 20	WATER PLAN & PROFILE (3 OF 3)
13 OF 20	SANITARY SEWER P&P FOR COMM RES AT F.M. 1093 & SPRING GREEN BLVD
14 OF 20	WATER P&P FOR COMM RES AT F.M. 1093 & SPRING GREEN BLVD
15 OF 20	WATER P&P FOR COMM RES AT F.M. 1093 & SPRING GREEN BLVD
16 OF 20	GRADING PLAN
17 OF 20	EROSION CONTROL PLAN
18 OF 20	CONSTRUCTION DETAILS (1 OF 3)
19 OF 20	CONSTRUCTION DETAILS (2 OF 3)
20 OF 20	CONSTRUCTION DETAILS (3 OF 3)



FORT BEND COUNTY ENGINEER

ENGINEER: _____ RICHARD W. STOLLES, P.E. _____

DATE: _____

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

AUTHORIZATION IS VALID FOR 1 YEAR.

APPROVED: _____ DEVELOPMENT COORDINATOR _____

DATE: _____

ILMS NO: 14126815
LOG NO: 14-1861

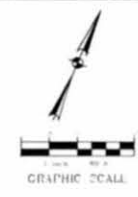
 6111 FM 1900 W., Suite 210 Houston, TX 77064 Tel: 281.248.1100 Fax: 281.248.1108	
SURETY BY: _____ FB NO: _____ NOTE: CITY SIGNATURES VALID FOR ONE YEAR ONLY AT THE DATE OF SIGNATURES.	
CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
WITH _____ (DATE)	SATELITE & TRANSPORTATION
INSPECTOR _____ (DATE)	STORM WATER QUALITY
DRAWN _____ (DATE)	FACILITIES
STREET & BRIDGE _____ (DATE)	CITY ENGINEER _____ CITY DWG NO: _____
DIRECTOR OF PUBLIC WORKS AND ENGINEERING _____ (DATE)	SHEET NO: 1 OF 20

CALL BEFORE YOU DIG
TEXAS ONE CALL PARTICIPANTS REQUEST
72 HOURS NOTICE BEFORE YOU DIG, DRILL
OR BLAST - STOP CALL
TEXAS ONE CALL SYSTEM
1-800-245-4545

WATER, SANITARY SEWER, AND STORM SEWER CONNECTION EXTENSIONS SERVING CROSSING AT CINCO RANCH ON BEHALF OF CINCO SOUTHWEST MUD NO. 2

BENCHMARK: T.S.A.R.P. MONUMENT #100055
 STAINLESS STEEL ROD STAMPED "100055-68-1988" LOCATED ON EAST SIDE OF P.M. 1463 APPROX 0.1 MILE SOUTH OF CORBITT ROAD.
 ELEVATION = 136.32 FEET NAD 88 (2001 ADJUSTMENT)

T.S.A.R.P. MONUMENT #100045
 BRASS DISK STAMPED "100045" LOCATED ON DOWNSTREAM SIDE OF BRIDGE CROSSING UPPER BUFFALO AT CINCO RANCH BOULEVARD.
 ELEVATION = 115.26 FEET NAD 88 (2001 ADJUSTMENT)



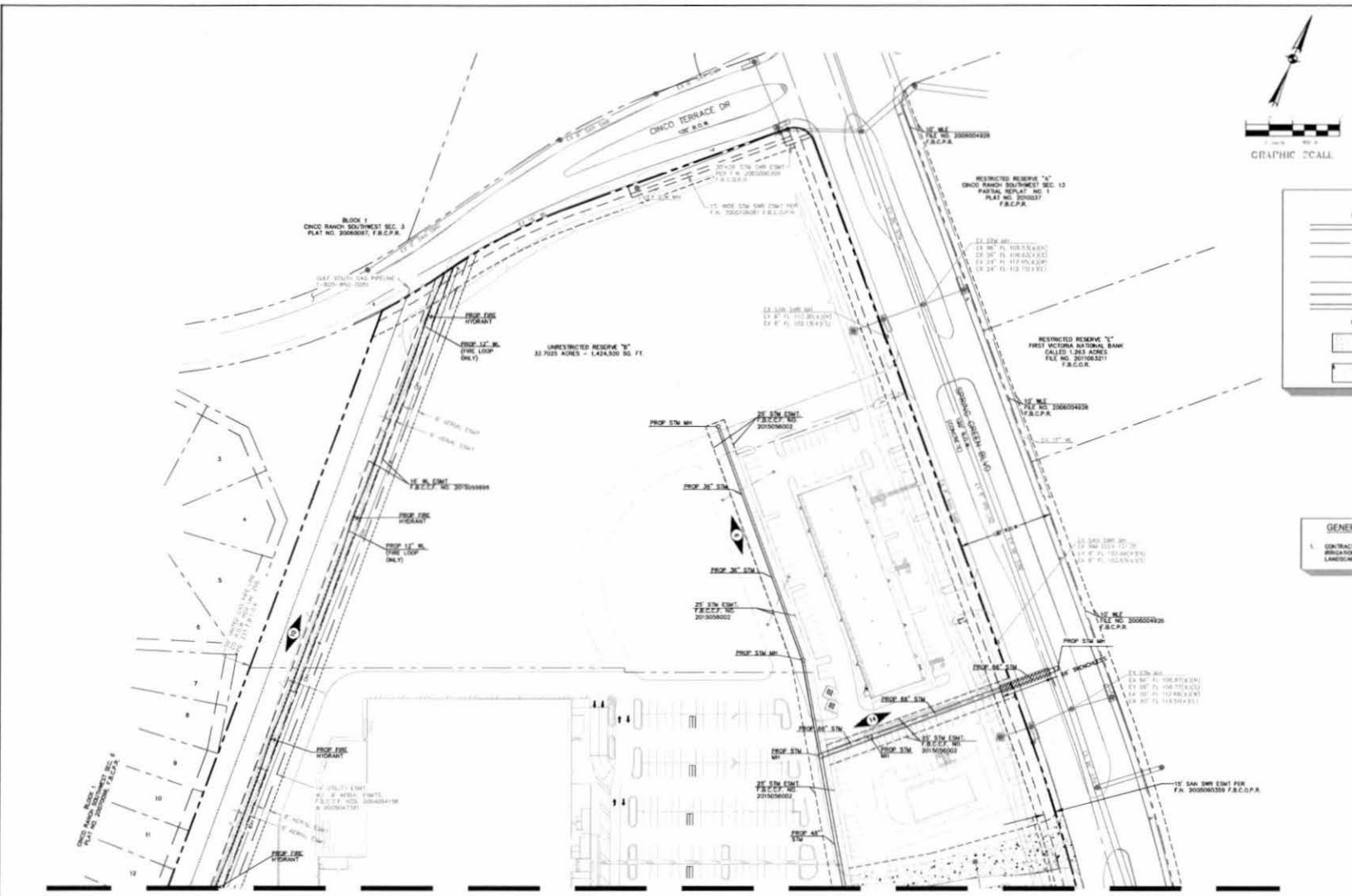
LEGEND	
●	EX. MANHOLE
—	EX. STORM SEWER
—	EX. WATER LINE
—	EX. SANITARY SEWER LINE
—	EX. OVERHEAD POWER LINE
—	PROP. WATER LINE
—	PROP. SANITARY SEWER LINE
—	PROP. STORM SEWER
○	PROP. MANHOLE
□	PROP. 12" ALL WEATHER ACCESS ROAD (SEE DETAIL, SHEET 18)
▨	EX. CONCRETE PAVEMENT

GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR REMOVAL/REPLACEMENT OF ALL UTILITIES OR OTHER IMPROVEMENTS IN R.C.P. AND WITHIN ANY LANDSCAPED AREA.

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

CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
DATE	DATE OF SIGNATURE
DESIGNED	DATE WHEN DRAFT
DRAWN	DATE
CHECKED & MARK	
FILE NO.	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
HORIZ. 1" = 40'	
VERT. N/A	
SHEET No.	4 OF 20

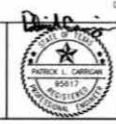


MATCH LINE A-A
(SHEET 5)

CALL BEFORE YOU DIG
 TEXAS ONE CALL PARTICIPANTS REDUCED
 72 HOURS NOTICE BEFORE YOU DIG ORN
 OR BLAST - STOP CALL
 TEXAS ONE CALL SYSTEM
 1-800-245-4545

NO.	REVISIONS	DATE

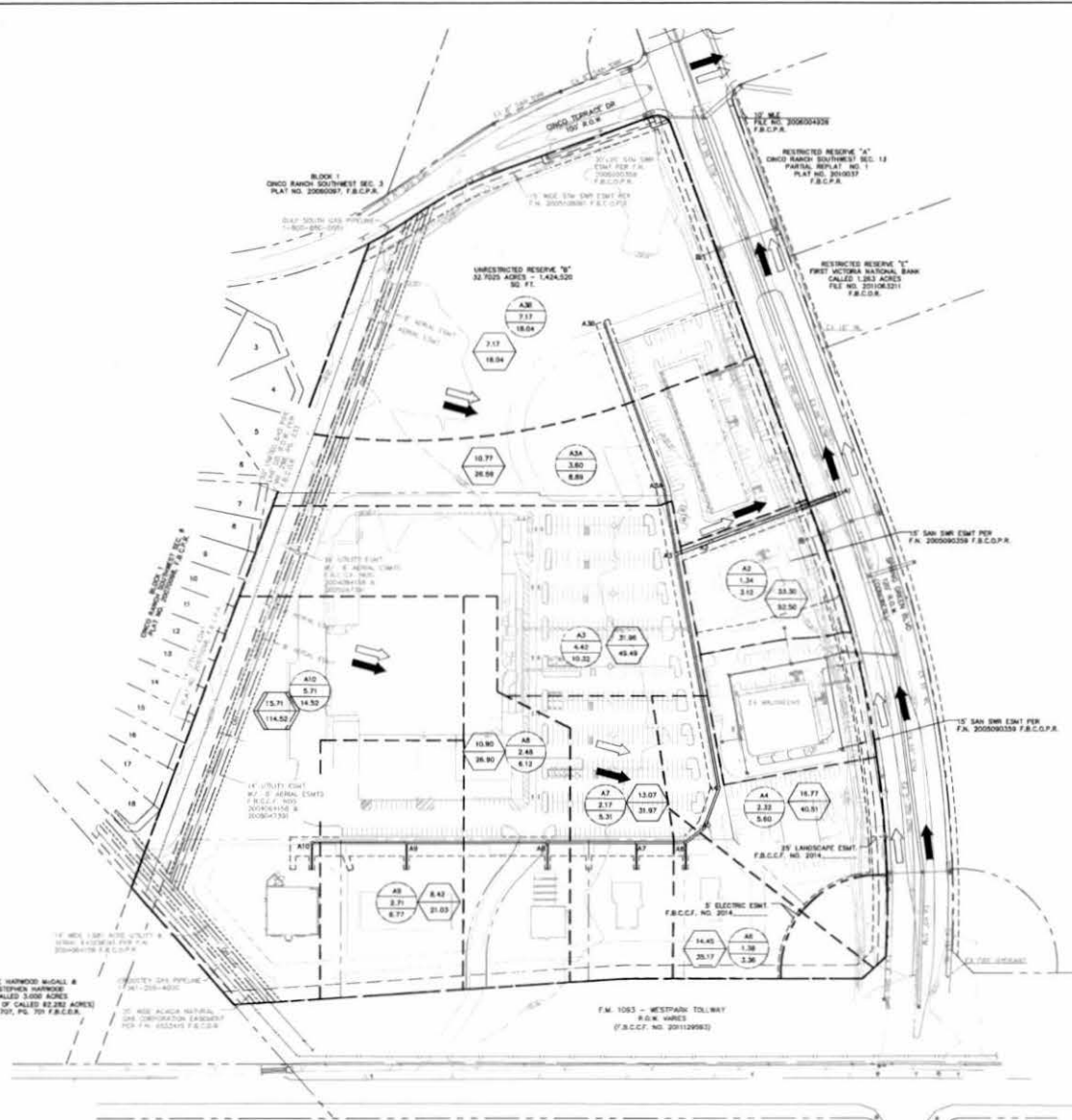
UTILITY PLAN (1 OF 2)



APPROVED: _____
 DATE: _____
 DEPARTMENT CHIEF/ENGINEER

WATER, SANITARY SEWER, AND STORM
 SEWER CONNECTION EXTENSIONS
 SERVING CROSSING AT CINCO RANCH ON
 BEHALF OF
 CINCO SOUTHWEST MUD NO. 2
 Houston, Texas





BENCHMARK: T.S.A.P. MONUMENT #88005 STAINLESS STEEL ROD STAMPED "HSCD-86 1981" LOCATED ON EAST SIDE OF F.M. 1463 APPROX 0.1 MILE SOUTH OF CORBITT ROAD.
ELEVATION = 136.32 FEET NAD 88 (2001 ADJUSTMENT)

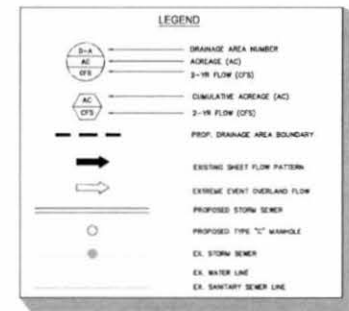
T.S.A.P. MONUMENT #28045 BRASS DISK STAMPED "190045" LOCATED ON DOWNSTREAM SIDE OF BRIDGE CROSSING UPPER BUFFALO AT CINCO RANCHO BOULEVARD.
ELEVATION = 115.39 FEET NAD 88 (2001 ADJUSTMENT)

GENERAL NOTES

1. REFERENCE STORM SEWER NOTES SHEET 2 FOR PIPE MATERIAL REQUIREMENTS
2. FOR PIPE "C" MANHOLE AND BACKFILL DETAILS, SEE SHEETS 19

DETENTION NOTE

PROPOSED PROJECT DOES NOT ADD IMPERVIOUS COVER. NO DETENTION REQUIRED.



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

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

DATE	DATE
DESIGNED	DATE WITH SCALE
DRAWN	DATE
CHECKED	DATE
FILE NO.	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
HORIZ : 1" = 100'	
VERT : N/A	
SHEET No.	6 OF 20

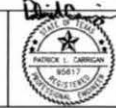
NOTE:
NO DEVELOPED FLOW TO TIDOT.

APPROVED: _____
DATE: _____

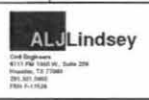
CALL BEFORE YOU DIG
TEXAS ONE CALL PARTICIPANTS REQUEST
10 HOURS AHEAD BEFORE YOU DIG, DRILL
OR BURN - STOP CALL
TEXAS ONE CALL SYSTEM
1-800-245-4545

No.	REVISIONS	DATE

DRAINAGE AREA MAP



WATER, SANITARY SEWER, AND STORM SEWER CONNECTION EXTENSIONS SERVING CROSSING AT CINCO RANCHO ON BEHALF OF: CINCO SOUTHWEST MUD NO. 2 Houston, Texas



CUMULATIVE STORM SEWER CALCULATIONS (CITY OF HOUSTON 2 YEAR ANALYSIS)

Storm Sewer Design Analysis

City of Houston
Spring Green Blvd & FM 1302
Houston, Texas

Design Frequency: 2 years
100 Year Rainfall: 7.25"
Downstream 25 Year W5 Elev: 116.55' sea

Manhole No. From	Manhole No. To	Drainage Area (acres)	Runoff Coefficient	DA C*-A	Total C*-A	Time of Conc. (min)	Intensity I (in/hr)	Drainage Area Flow (cfs)	Total Flow (cfs)	Reach Length (ft)	Slope %	Manning's Roughness Coefficient 'n'	Design Capacity (cfs)	Design Velocity (ft/sec)	Full Pipe Flow		Drop from Downstream Manhole (ft)	Flowline Elevation (ft)	Flowline Elevation (ft)	Minimum Depth (ft)	Minimum W.S. Elev. (ft)	Actual Depth (ft)	Actual Velocity (ft/sec)	Actual Flow per Barrel		Change in Head (ft)	Elevation of Hydr. Grad. Upstream (ft)	Elevation of Hydr. Grad. Downstream (ft)	Top of Pipe Elevation (ft)	Top of Pipe Elevation (ft)	Point 1 Grade Elevation (ft)			
															Area (sq ft)	Velocity (ft/sec)								Area (sq ft)	Velocity (ft/sec)									
A10	A9	2.7	0.80	4.37	4.37	28.59	3.18	14.52	14.52	171	30	0.130	0.213	14.8	3.0	4.9	7.9	0.22	0.30	113.40	113.18	1.00	116.16	1.00	3.96	4.94	7.86	0.128	0.21	116.04	117.80	115.92	116.98	123.90
A9	A8	2.7	0.80	2.17	4.74	28.59	3.12	6.77	21.03	250	36	0.110	0.243	22.1	3.1	7.1	8.4	0.28	0.30	110.80	112.42	1.00	114.71	1.00	3.98	7.07	9.42	0.088	0.24	117.80	117.56	116.88	118.40	123.75
A8	A7	2.48	0.80	1.98	6.72	30.23	3.08	6.12	28.93	360	42	0.088	0.212	20.2	3.1	9.6	11.0	0.34	0.30	111.90	111.06	1.00	114.20	1.00	3.90	3.92	11.20	0.011	0.11	117.56	111.43	119.40	119.28	123.43
A7	A6	2.17	0.80	1.71	12.46	30.72	3.04	5.21	31.27	85	42	0.110	0.213	22.4	3.0	9.6	11.0	0.30	0.30	111.70	111.80	1.00	114.30	1.00	3.92	9.52	11.20	0.001	0.08	117.43	117.30	115.18	115.13	123.13
A6	A4	1.38	0.80	1.18	13.64	31.20	3.04	3.26	35.17	41	48	0.075	0.213	26.0	3.0	12.6	12.6	0.02	0.02	111.13	111.13	1.00	114.13	1.00	3.86	13.07	13.57	0.000	0.05	117.30	117.27	115.12	116.08	123.12
A4	A3	2.32	0.80	1.88	13.40	31.42	3.02	3.80	40.51	433	48	0.075	0.213	26.0	3.0	12.6	12.6	0.05	0.05	111.28	111.28	1.00	114.28	1.00	3.92	13.57	13.57	0.000	0.34	117.27	116.93	115.08	114.78	122.85
A3	A2	4.47	0.80	3.57	6.86	30.41	2.87	10.37	49.85	67	66	0.060	0.213	24.0	3.4	23.9	17.3	0.03	0.03	109.28	109.35	1.00	110.51	1.00	7.00	29.76	17.25	0.037	0.71	116.83	116.81	114.79	114.75	123.05
A2	A1	1.34	0.80	1.07	8.02	33.54	2.91	3.12	42.50	281	66	0.060	0.213	24.0	3.5	23.9	17.3	0.15	0.15	109.25	109.10	1.00	110.25	1.00	3.21	23.76	17.28	0.024	0.08	116.81	116.85	114.73	114.50	122.80
A10	A1	7.17	0.80	5.74	5.74	28.15	3.15	18.04	18.04	393	36	0.110	0.213	22.1	3.1	7.1	8.4	0.35	0.30	112.28	111.64	1.00	113.58	1.00	3.86	7.07	9.42	0.073	0.23	117.30	117.12	115.26	114.94	123.90
A1	A3	3.40	0.80	2.88	8.62	30.23	3.09	8.89	35.58	124	36	0.130	0.213	24.0	3.4	7.1	8.4	0.18	0.18	111.84	111.78	1.00	114.78	1.00	3.78	7.07	9.42	0.158	0.20	117.12	116.93	114.94	114.78	122.85

*THE DRAINAGE CALCULATIONS LISTED ABOVE ARE BASED ON THE 2-YEAR EVENT PER THE CITY OF HOUSTON INFRASTRUCTURE DESIGN MANUAL.

CUMULATIVE STORM SEWER CALCULATIONS (CITY OF HOUSTON 100 YEAR ANALYSIS)

Storm Sewer Design Analysis

City of Houston
Spring Green Blvd & FM 1302
Houston, Texas

Design Frequency: 100 years
100 Year Rainfall: 7.25"
Downstream 25 Year W5 Elev: 116.55' sea

Manhole No. From	Manhole No. To	Drainage Area (acres)	Runoff Coefficient	DA C*-A	Total C*-A	Time of Conc. (min)	Intensity I (in/hr)	Drainage Area Flow (cfs)	Total Flow (cfs)	Reach Length (ft)	Slope %	Manning's Roughness Coefficient 'n'	Design Capacity (cfs)	Design Velocity (ft/sec)	Full Pipe Flow		Drop from Downstream Manhole (ft)	Flowline Elevation (ft)	Flowline Elevation (ft)	Minimum Depth (ft)	Minimum W.S. Elev. (ft)	Actual Depth (ft)	Actual Velocity (ft/sec)	Actual Flow per Barrel		Change in Head (ft)	Elevation of Hydr. Grad. Upstream (ft)	Elevation of Hydr. Grad. Downstream (ft)	Top of Pipe Elevation (ft)	Top of Pipe Elevation (ft)	Point 1 Grade Elevation (ft)			
															Area (sq ft)	Velocity (ft/sec)								Area (sq ft)	Velocity (ft/sec)									
A10	A9	2.71	0.80	4.37	4.37	28.59	3.13	30.29	30.29	171	30	0.130	0.213	14.8	3.0	4.9	7.9	0.22	0.30	113.40	113.18	1.00	116.16	1.00	3.96	4.94	7.86	0.128	0.21	116.04	117.80	115.92	116.98	123.90
A9	A8	2.71	0.80	2.17	4.74	28.59	3.12	6.77	21.03	250	36	0.110	0.243	22.1	3.1	7.1	8.4	0.28	0.30	110.80	112.42	1.00	114.71	1.00	3.98	7.07	9.42	0.088	0.24	117.80	117.56	116.88	118.40	123.75
A8	A7	2.48	0.80	1.98	6.72	30.23	3.08	6.12	28.93	360	42	0.088	0.212	20.2	3.1	9.6	11.0	0.34	0.30	111.90	111.06	1.00	114.20	1.00	3.90	3.92	11.20	0.011	0.11	117.56	111.43	119.40	119.28	123.43
A7	A6	2.17	0.80	1.71	12.46	30.72	3.04	5.21	31.27	85	42	0.110	0.213	22.4	3.0	9.6	11.0	0.30	0.30	111.70	111.80	1.00	114.30	1.00	3.92	9.52	11.20	0.001	0.08	117.43	117.30	115.18	115.13	123.13
A6	A4	1.38	0.80	1.18	13.64	31.20	3.04	3.26	35.17	41	48	0.075	0.213	26.0	3.0	12.6	12.6	0.02	0.02	111.13	111.13	1.00	114.13	1.00	3.86	13.07	13.57	0.000	0.05	117.30	117.27	115.12	116.08	123.12
A4	A3	2.32	0.80	1.88	13.40	31.42	3.02	3.80	40.51	433	48	0.075	0.213	26.0	3.0	12.6	12.6	0.05	0.05	111.28	111.28	1.00	114.28	1.00	3.92	13.57	13.57	0.000	0.34	117.27	116.93	115.08	114.78	122.85
A3	A2	4.47	0.80	3.57	6.86	30.41	2.87	10.37	49.85	67	66	0.060	0.213	24.0	3.4	23.9	17.3	0.03	0.03	109.28	109.35	1.00	110.51	1.00	7.00	29.76	17.25	0.037	0.71	116.83	116.81	114.79	114.75	123.05
A2	A1	1.34	0.80	1.07	8.02	33.54	2.91	3.12	42.50	281	66	0.060	0.213	24.0	3.5	23.9	17.3	0.15	0.15	109.25	109.10	1.00	110.25	1.00	3.21	23.76	17.28	0.024	0.08	116.81	116.85	114.73	114.50	122.80
A10	A1	7.17	0.80	5.74	5.74	28.15	3.15	18.04	18.04	393	36	0.110	0.213	22.1	3.1	7.1	8.4	0.35	0.30	112.28	111.64	1.00	113.58	1.00	3.86	7.07	9.42	0.073	0.23	117.30	117.12	115.26	114.94	123.90
A1	A3	3.40	0.80	2.88	8.62	30.23	3.09	8.89	35.58	124	36	0.130	0.213	24.0	3.4	7.1	8.4	0.18	0.18	111.84	111.78	1.00	114.78	1.00	3.78	7.07	9.42	0.158	0.20	117.12	116.93	114.94	114.78	122.85

*THE DRAINAGE CALCULATIONS LISTED ABOVE ARE BASED ON THE 100-YEAR EVENT PER THE CITY OF HOUSTON INFRASTRUCTURE DESIGN MANUAL.

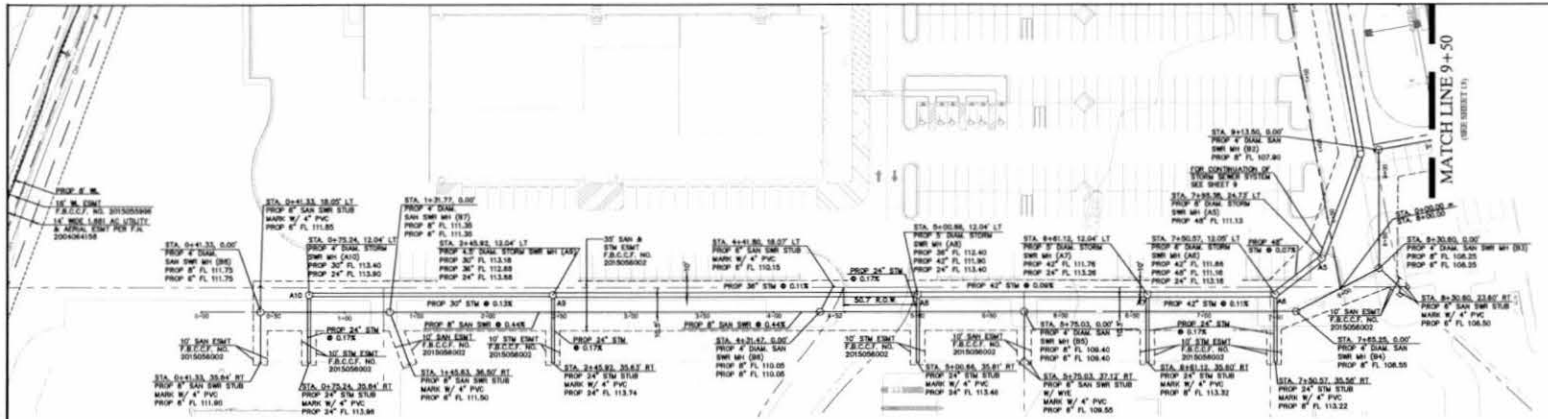
CUMULATIVE STORM SEWER CALCULATIONS (FORT BEND COUNTY ANALYSIS)

Storm Sewer Design Analysis

City of Houston
Spring Green Blvd & FM 1302
Houston, Texas

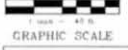
Design Frequency: 100 years
100 Year Rainfall: 7.25"
Downstream 25 Year W5 Elev: 116.55' sea

Manhole No. From	Manhole No. To	Drainage Area (acres)	Runoff Coefficient	DA C*-A	Total C*-A	Time of Conc. (min)	Intensity I (in/hr)	Drainage Area Flow (cfs)	Total Flow (cfs)	Reach Length (ft)	Slope %	Manning's Roughness Coefficient 'n'	Design Capacity (cfs)	Design Velocity (ft/sec)	Full Pipe Flow		Drop from Downstream Manhole (ft)	Flowline Elevation (ft)	Flowline Elevation (ft)	Minimum Depth (ft)	Minimum W.S. Elev. (ft)	Actual Depth (ft)	Actual Velocity (ft/sec)	Actual Flow per Barrel		Change in Head (ft)	Elevation of Hydr. Grad. Upstream (ft)	Elevation of Hydr. Grad. Downstream (ft)	Top of Pipe Elevation (ft)	Top of Pipe Elevation (ft)	Point 1 Grade Elevation (ft)			
															Area (sq ft)	Velocity (ft/sec)								Area (sq ft)	Velocity (ft/sec)									
A10	A9	2.71	0.80	4.37	4.37	28.59	3.13	30.29	30.29	171	30	0.130	0.213	14.8	3.0	4.9	7.9	0.22	0.30	113.40	113.18	1.00	116.16	1.00	3.96	4.94	7.86	0.128	0.21	116.04	117.80	115.92	116.98	123.90
A9	A8	2.71	0.80	2.17	4.74	28.59	3.12	6.77	21.03	250	36	0.110	0.243	22.1	3.1	7.1	8.4	0.28	0.30	110.80	112.42	1.00	114.71	1.00	3.98	7.07	9.42	0.088	0.24	117.80	117.56	116.88	118.40	123.75
A8	A7	2.48	0.80	1.98	6.72	30.23	3.08	6.12	28.93	360	42	0.088	0.212	20.2	3.1	9.6	11.0	0.34	0.30	111.90	111.06	1.00	114.20	1.00	3.90	3.92	11.20	0.011	0.11	117.56	111.43	119.40	119.28	123.43
A7	A6	2.17	0.80	1.71	12.46	30.72	3.04	5.21	31.27	85	42	0.110	0.213	22.4	3.0	9.6	11.0	0.30	0.30	111.70	111.80	1.00	114.30	1.00	3.92	9.52	11.20	0.001	0.08	117.43	117.30	115.18	115.13	123.13
A6	A4	1.38	0.80	1.18	13.64	31.20	3.04	3.26	35.17	41	48	0.075	0.213	26.0	3.0	12.6	12.6	0.02	0.02	111.13	111.13	1.00	114.13	1.00	3.86	13.07	13.57	0.000	0.05	117.30	117.27	115.12	116.08	123.12
A4	A3	2.32	0.80	1.88	13.40	31.42	3.02	3.80	40.51	433	48	0.075	0.213	26.0	3.0	12.6	12.6	0.05	0.05	111.28	111.28	1.00	114.28	1.00	3.92	13.57	13.57	0.000	0.34	117.27	116.93	115.08	114.78	122.85
A3	A2	4.47	0.80	3.57	6.86	30.41	2.87	10.37	49.85	67	66	0.060	0.213	24.0	3.4	23.9	17.3	0.03	0.03	109.28	109.35	1.00	110.51	1.00	7.00	29.76								



BENCHMARK: T.S.A.R.P. MONUMENT #80005
 STAINLESS STEEL ROD STAMPED "80005 48 1584" LOCATED ON EAST SIDE OF F.M. 1483 APPROX 0.1 MILE SOUTH OF COBBETT ROAD.
 ELEVATION = 136.32 FEET NAD 88 (2001 ADJUSTMENT)

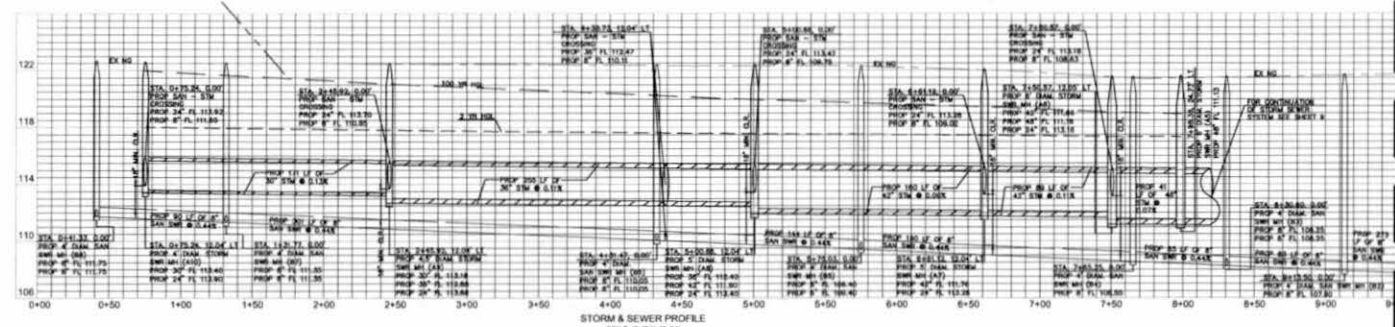
T.S.A.R.P. MONUMENT #80045
 BRASS DISK STAMPED "158045" LOCATED ON DOWNSTREAM SIDE OF BRIDGE CROSSING UPPER BUFFALO AT CINCO RANCH BOULEVARD.
 ELEVATION = 115.26 FEET NAD 88 (2001 ADJUSTMENT)



LEGEND

- EX. NATURAL GROUND
- EX. STORM SEWER
- EX. WATER LINE
- EX. SANITARY SEWER LINE
- PROP. STORM SEWER LINE
- PROP. SANITARY SEWER LINE
- PROP. SANITARY SEWER/STORM MH
- EX. SANITARY SEWER/STORM MH
- PROP. 12" ALL WEATHER ACCESS ROAD (SEE DETAIL SHEET 18)

- GENERAL NOTES**
1. REFERENCE SANITARY SEWER LINE NOTES SHEET 8 FOR PIPE MATERIAL AND CONSTRUCTION REQUIREMENTS.
 2. FOR CITY OF HOUSTON TYPE "C" MANHOLE, SANITARY SEWER MANHOLE, AND BACKSILL DETAILS, SEE SHEET 18.
 3. CONTRACTOR RESPONSIBLE FOR MANUAL REPLACEMENT OF ALL SIGNATURES OF OTHER IMPROVEMENTS IN A.U.M. AND WITHIN ANY LANDSCAPED AREA.



DETENTION NOTE
 PROPOSED PROJECT DOES NOT ADD IMPERVIOUS COVER
 NO DETENTION REQUIRED

NOTE: CITY SIGNATURES VALID FOR ONE YEAR ONLY
 AT 50% SCALE OF SIGNATURES

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

DESIGN	NAME & ORGANIZATION
REVISIONS	DATE
DRAWN	DATE
CHECKED	DATE
FILE NO.	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
HORIZ. 1" = 40'	
VERT. 1" = 4'	
APPROVED:	DATE:
SHEET No. 8 OF 20	

CALL BEFORE YOU DIG
 TEXAS ONE CALL PARTICIPANTS REQUEST
 72 HOURS NOTICE BEFORE YOU DIG OR BLAST - STOP CALL
 TEXAS ONE CALL SYSTEM
 1-800-245-4545

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

No.	REVISIONS	DATE

SANITARY & STORM SEWER PLAN & PROFILE



WATER, SANITARY SEWER, AND STORM SEWER CONNECTION EXTENSIONS SERVING CROSSING AT CINCO RANCH ON BEHALF OF: CINCO SOUTHWEST MUD NO. 2 Houston, Texas





BENCHMARK: T.S.A.R.P. MONUMENT #830055
 STAINLESS STEEL ROD STAMPED "500246 1986" LOCATED ON EAST SIDE OF F.M. 1463 APPROX 0.1 MILE SOUTH OF CORBITT ROAD.
 ELEVATION = 136.32 FEET NAD 88 (2001 ADJUSTMENT)

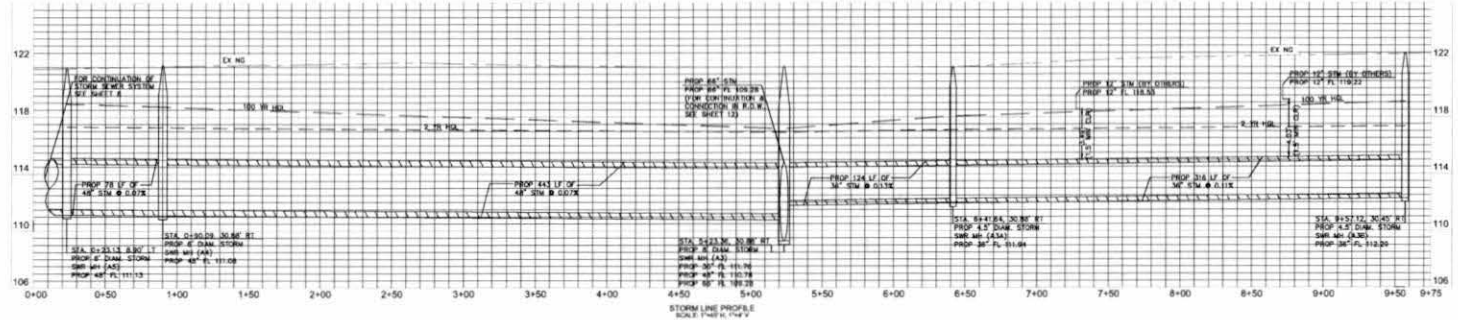
T.S.A.R.P. MONUMENT #830045
 BRASS DISK STAMPED "130045" LOCATED ON DOWNSTREAM SIDE OF BRIDGE CROSSING UPPER BUFFALO AT CINCO RANCHO BOULEVARD.
 ELEVATION = 115.26 FEET NAD 88 (2001 ADJUSTMENT)



LEGEND

- EX. NATURAL GROUND
- EX. STORM SEWER
- EX. WATER LINE
- EX. SANITARY SEWER LINE
- PROP. STORM SEWER LINE
- PROP. SANITARY SEWER LINE
- PROP. SANITARY SEWER/STORM MH
- EX. SANITARY SEWER/STORM MH
- ▭ PROP. 12" ALL WEATHER ACCESS ROAD (SEE DETAIL, SHEET 10)

- GENERAL NOTES**
1. REFERENCE SANITARY SEWER LINE NOTES SHEET 2 FOR PIPE MATERIAL AND CONSTRUCTION REQUIREMENTS.
 2. FOR CITY OF HOUSTON TYPE "C" MANHOLE, SANITARY SEWER MANHOLE, AND RAFTERS, DETAILS, SEE SHEET 10.
 3. CONTRACTOR RESPONSIBLE FOR REMOVAL/REPLACEMENT OF ALL IMPOSITION OF OTHER IMPROVEMENTS IN R.O.W. AND WITHIN ANY LANDSCAPED AREA.
 4. CONTRACTOR TO COORDINATE CONSTRUCTION OF NORTHERN MOST MOST MANHOLE (L&M) AND 36" DIAM. STORM SEWER WITH ARCH-CON (CONTRACTOR FOR COMMERCIAL PAD J). CONTRACTOR TO INSTALL THIS PORTION OF LINE PROP. TO ARCH-CON'S PAYMENT OVER THE EASEMENT. CONTACT ARCH-CON'S PROJECT MANAGER DAVID KING AT 832-888-8778.
 5. CONTRACTOR MAY FIND ADDITIONAL FILL PLACE ON PORTIONS OF THE STORM AND SANITARY SEWER EASEMENT AS COMPARED TO THE NATURAL GROUND PROVIDED IN THE PLANS. CONTRACTOR TO VERIFY FILL PLACED IN THIS AREA PRIOR TO BID. CONTRACTOR TO RELOCATE ADDITIONAL FILL FOR OWNER REPRESENTATION.



DETENTION NOTE
 PROPOSED PROJECT DOES NOT ADD IMPERVIOUS COVER, NO DETENTION REQUIRED.

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

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC ENGINEERING

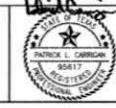
DESIGNER	TRAVIS S. BRADSHAW
DATE	2016.08.04
FILE NO.	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
HORIZ : 1" = 40'	
VERT : 1" = 4'	
SHEET	9 OF 20

CALL BEFORE YOU DIG
 TEXAS ONE CALL SYSTEM
 1-800-245-4545

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

NO.	REVISIONS	DATE

STORM SEWER PLAN & PROFILE



WATER, SANITARY SEWER, AND STORM SEWER CONNECTION EXTENSIONS SERVING CROSSING AT CINCO RANCHO ON BEHALF OF: CINCO SOUTHWEST MUD NO. 2 Houston, Texas



BENCHMARK: T.S.A.R.P. MONUMENT #180955
 STAINLESS STEEL ROD STAMPED "180955 66 1986" LOCATED ON
 EAST SIDE OF F.M. 1463 APPROX 0.1 MILE SOUTH OF CORBITT
 ROAD.
 ELEVATION = 136.32 FEET NAD 88 (2001 ADJUSTMENT)

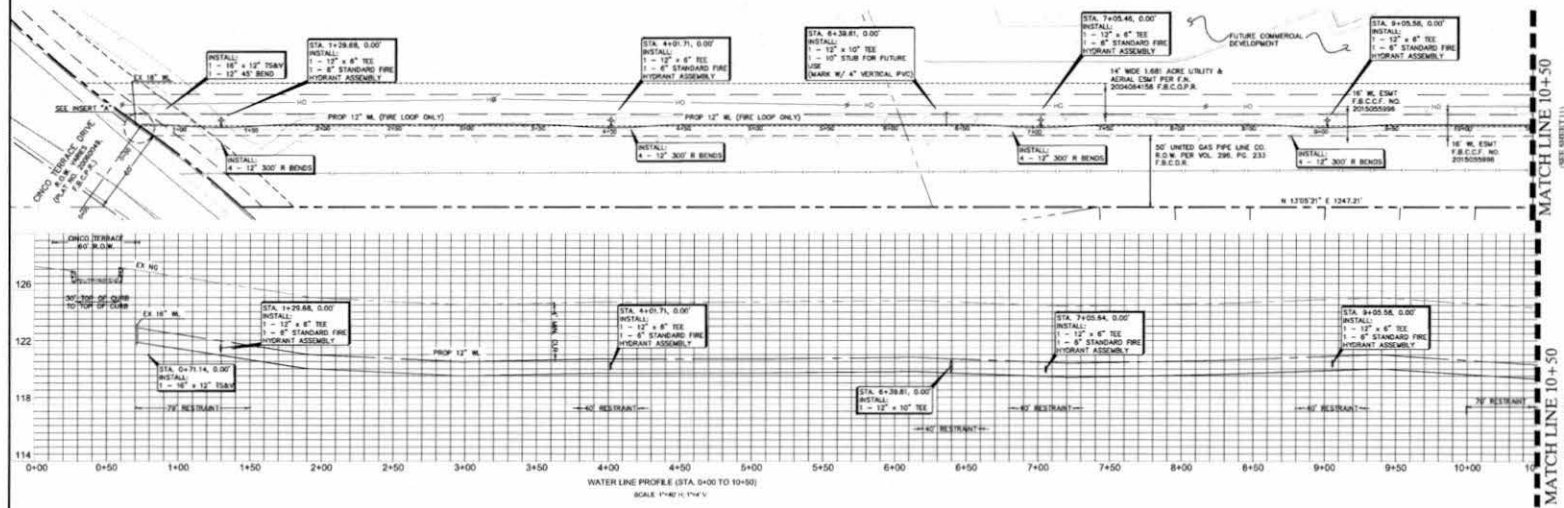
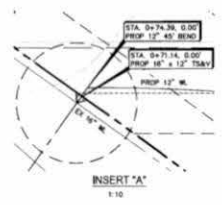
T.S.A.R.P. MONUMENT #180945
 BRASS DISK STAMPED "180945" LOCATED ON DOWNSTREAM
 SIDE OF BRIDGE CROSSING UPPER BUFFALO AT CINCO RANCH
 BOULEVARD.
 ELEVATION = 115.26 FEET NAD 88 (2001 ADJUSTMENT)



LEGEND

---	EX. NATURAL GROUND
---	EX. STORM SEWER
---	EX. WATER LINE
---	EX. SANITARY SEWER LINE
---	PROP. STORM SEWER LINE
---	PROP. SANITARY SEWER LINE
---	PROP. WATER LINE
---	PROP. 12" ALL WEATHER ACCESS ROAD (SEE DETAIL, SHEET 14)

- GENERAL NOTES**
- REFERENCE WATER LINE NOTES SHEET 2 FOR PIPE MATERIAL AND CONSTRUCTION REQUIREMENTS.
 - CONTRACTOR RESPONSIBLE FOR REMOVAL/REPLACEMENT OF ALL IRRIGATION OR OTHER IMPROVEMENTS IN & W/IN ANY LANDSCAPE AREA.

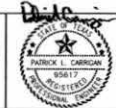


CALL BEFORE YOU DIG
 TEXAS ONE CALL PARTICIPANTS REQUEST
 72 HOURS NOTICE BEFORE 903.963.2888
 OR BLAST - STOP CALL
 TEXAS ONE CALL SYSTEM
 1-800-245-4545

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

No.	REVISIONS	DATE

WATER PLAN & PROFILE
(1 OF 3)



APPROVED: _____
 DATE: _____
 DEVELOPMENT COORDINATOR

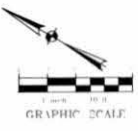
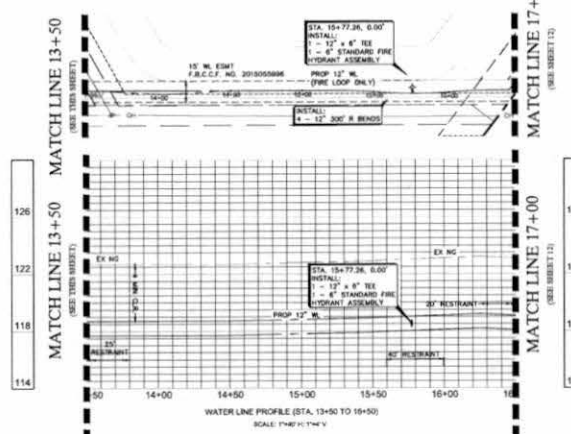
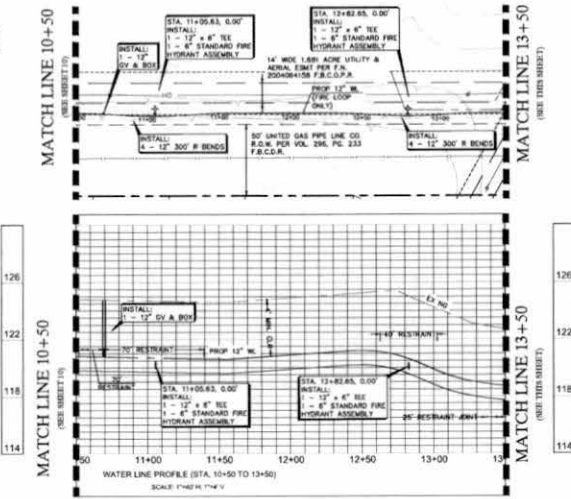
WATER, SANITARY SEWER, AND STORM
 SEWER CONNECTION EXTENSIONS
 SERVING CROSSING AT CINCO RANCH ON
 BEHALF OF
 CINCO SOUTHWEST MUD NO. 2
 Houston, Texas



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

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

WATER	STORM WATER QUALITY
SEWER	RESURF
PROJECT & WORK	
FILE NO.	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
HORIZ : 1" = 40'	
VERT : 1" = 4'	
SHEET No.	10 OF 20



BENCHMARK T.S.A.R.P. MONUMENT #190055
 STAINLESS STEEL ROD STAMPED "HCSD 86 1986" LOCATED ON
 EAST SIDE OF F.M. 1463 APPROX 0.1 MILE SOUTH OF CORBITT
 ROAD.
 ELEVATION = 136.32 FEET NAD 88 (2001 ADJUSTMENT)

T.S.A.R.P. MONUMENT #190045
 BRASS DISK STAMPED "190045" LOCATED ON DOWNSTREAM
 SIDE OF BRIDGE CROSSING UPPER BUFFALO AT CINCO RANCH
 BOULEVARD.
 ELEVATION = 115.26 FEET NAD 88 (2001 ADJUSTMENT)

LEGEND

	EX. NATURAL GROUND
	EX. STORM SEWER
	EX. WATER LINE
	EX. SANITARY SEWER LINE
	PROP. STORM SEWER LINE
	PROP. SANITARY SEWER LINE
	PROP. WATER LINE
	PROP. 12" ALL WEATHER ACCESS ROAD (SEE DETAIL SHEET 18)

- GENERAL NOTES**
- REFERENCE WATER LINE NOTES SHEET 2 FOR PIPE MATERIAL AND CONSTRUCTION REQUIREMENTS.
 - CONTRACTOR RESPONSIBLE FOR REMOVAL/REPLACEMENT OF ALL BRIDGES OR OTHER IMPROVEMENTS IN R.O.W. AND WITHIN ANY LANDSCAPED AREA.

CALL BEFORE YOU DIG
 TEXAS ONE CALL PARTNERS REQUEST
 72 HOURS NOTICE BEFORE YOU DIG, DRILL
 OR BLAST - STOP CALL
 TEXAS ONE CALL SYSTEM
 1-800-245-4545

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON
 THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS
 REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND
 MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE
 EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS
 SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

No.	REVISIONS	DATE

WATER PLAN & PROFILE
 (2 OF 3)



APPROVED: _____
 DATE: _____
 DEVELOPMENT COORDINATOR

WATER, SANITARY SEWER, AND STORM
 SEWER CONNECTION EXTENSIONS
 SERVING CROSSING AT CINCO RANCH ON
 BEHALF OF:
 CINCO SOUTHWEST MUD NO. 2
 Houston, Texas



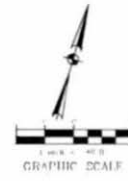
NOTE: CITY SIGNATURES VALID FOR ONE YEAR ONLY
 AFTER DATE OF SUBMITTAL

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

DATE	TITLE & ORGANIZATION
REVISIONS	DATE
DATE	TITLE
DATE	TITLE
DATE	TITLE
FILE NO.	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
HORIZ :	
VERT :	
SHEET No.	11 OF 20

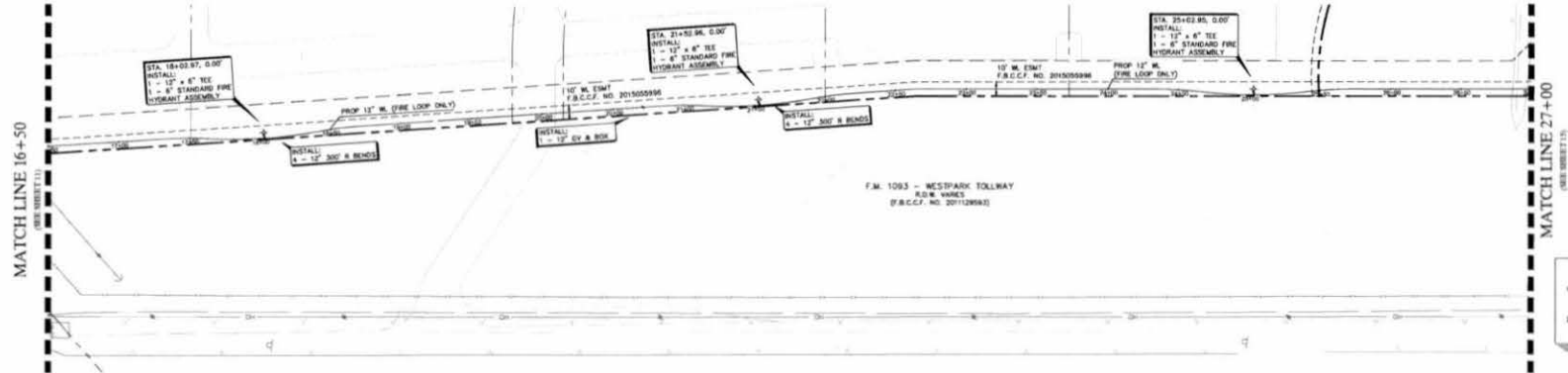
LEGEND

- EX. NATURAL GROUND
- EX. STORM SEWER
- EX. WATER LINE
- EX. SANITARY SEWER LINE
- PROP. STORM SEWER LINE
- PROP. SANITARY SEWER LINE
- PROP. WATER LINE
- PROP. 12" ALL WEATHER ACCESS ROAD (SEE DETAIL, SHEET 16)



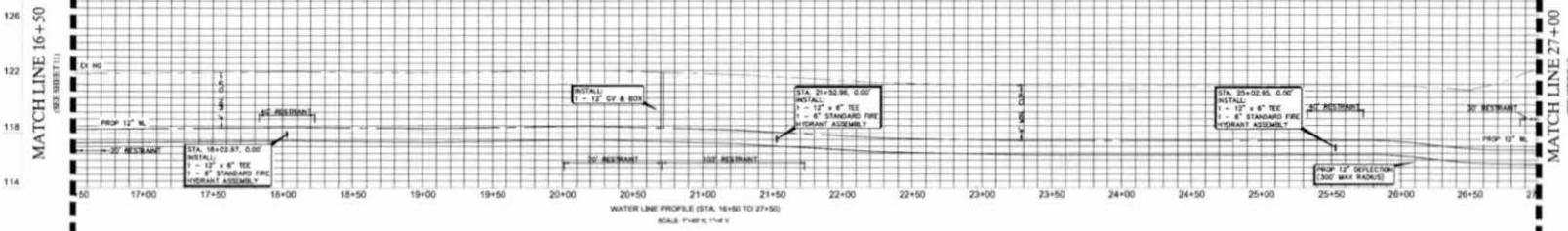
BENCHMARK: T.S.A.R.P. MONUMENT #130055
 STAINLESS STEEL DISK STAMPED "180045" LOCATED ON EAST SIDE OF F.M. 1469 APPROX 0.1 MILE SOUTH OF CORBITT ROAD
 ELEVATION = 136.32 FEET NAD 88 (2001 ADJUSTMENT)

T.S.A.R.P. MONUMENT #130045
 BRASS DISK STAMPED "180045" LOCATED ON DOWNSTREAM SIDE OF BRIDGE CROSSING UPPER BUFFALO AT CINCO RANCH BOULEVARD
 ELEVATION = 115.26 FEET NAD 88 (2001 ADJUSTMENT)



GENERAL NOTES

- REFERENCE WATER LINE NOTES SHEET 2 FOR PIPE MATERIAL AND CONSTRUCTION REQUIREMENTS.
- CONTRACTOR RESPONSIBLE FOR PROTECT, REPLACEMENT OF ALL IRRIGATION OR OTHER IMPROVEMENTS IN E.O.M. AND WITHIN ANY LANDSCAPED AREA.



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

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

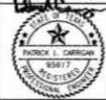
DATE	DATE
DESIGNED	DATE
DRAWN	DATE
CHECKED & REVISION	DATE
FILE NO.	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
HORIZ : 1" = 40'	
VERT : 1" = 4'	
SHEET No.	12 OF 20

CALL BEFORE YOU DIG
 SEND ONE CALL PARTICIPANTS REQUEST
 12 HOURS NOTICE BEFORE YOU DIG, DRILL
 OR BLAST - STOP CALL
 TEXAS ONE CALL SYSTEM
 1-800-245-4545

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT REFLECT ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

NO.	REVISIONS	DATE

WATER PLAN & PROFILE
 (3 OF 3)



APPROVED: _____
 DATE: _____
 DEVELOPMENT CONSULTANT

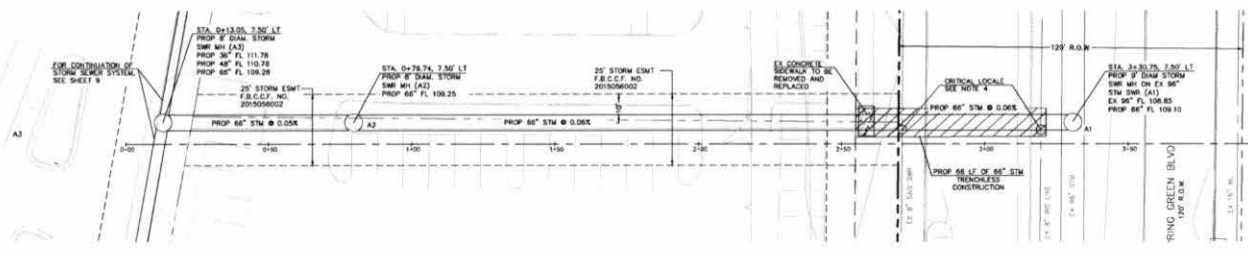
WATER, SANITARY SEWER, AND STORM SEWER CONNECTION EXTENSIONS SERVING CROSSING AT CINCO RANCH ON BEHALF OF: CINCO SOUTHWEST MUD NO. 2
 Houston, Texas

ALJ Lindsey
 Civil Engineer
 4111 Fair Street, Suite 200
 Houston, TX 77005
 281-567-6865
 P.E. 011158



BENCHMARK: T.S.A.R.P. MONUMENT #190055
 STAINLESS STEEL ROD STAMPED "HCO-66 1986" LOCATED ON
 EAST SIDE OF F.M. 1463 APPROX 0.1 MILE SOUTH OF CORBITT
 ROAD
 ELEVATION = 136.32 FEET NAD 88 (2001 ADJUSTMENT)

T.S.A.R.P. MONUMENT #190045
 BRASS DISK STAMPED "190045" LOCATED ON DOWNSTREAM
 SIDE OF BRIDGE CROSSING UPPER BUFFALO AT CINCO RANCH
 BOULEVARD
 ELEVATION = 115.28 FEET NAD 88 (2001 ADJUSTMENT)



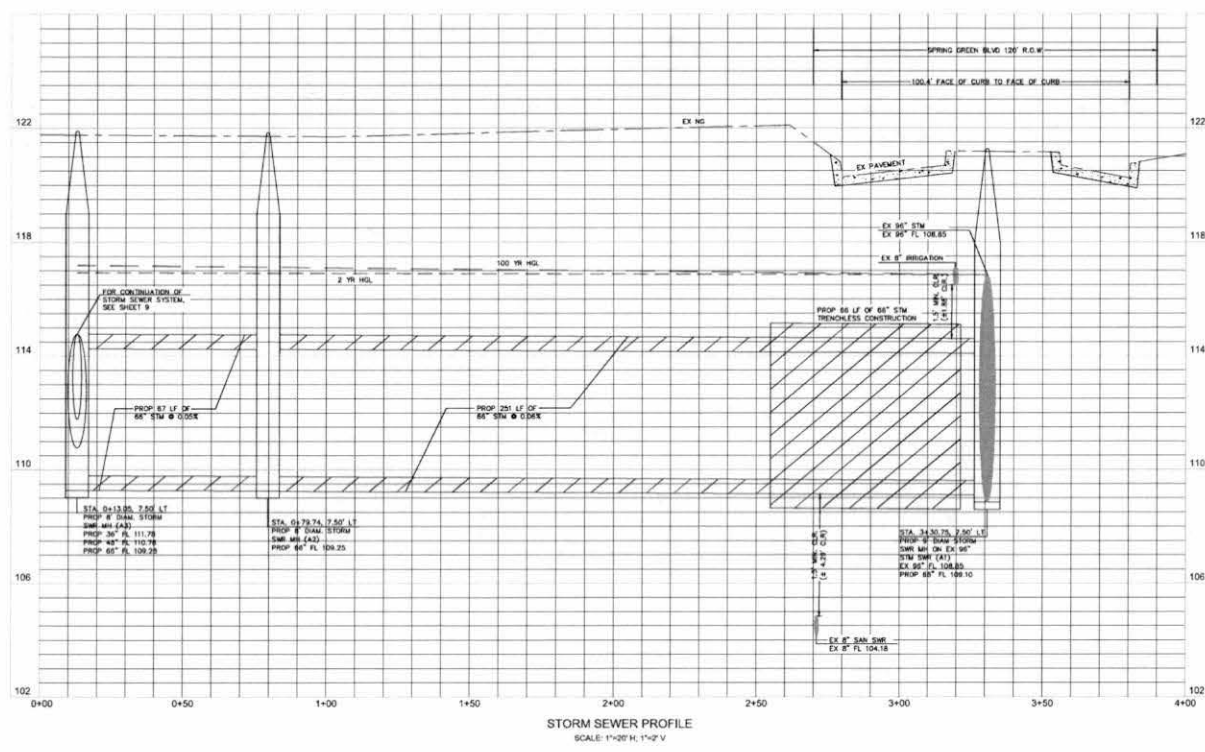
LEGEND

---	EX. NATURAL GROUND
---	EX. STORM SEWER
---	EX. WATER LINE
---	EX. SANITARY SEWER LINE
---	PROP. STORM SEWER LINE
---	PROP. SANITARY SEWER LINE
○	PROP. SANITARY SEWER/STORM MH

DETENTION NOTE

PROPOSED PROJECT DOES NOT AFFECT IMPERVIOUS COVER.
 NO DETENTION REQUIRED.

- GENERAL NOTES**
1. REFERENCE SANITARY SEWER LINE NOTES SHEET 2 FOR PIPE MATERIAL AND CONSTRUCTION REQUIREMENTS.
 2. FOR CITY OF HOUSTON TYPE "C" MANHOLE, SANITARY SEWER MANHOLE AND BRIGGANS DETAILS, SEE SHEET 19.
 3. CONTRACTOR RESPONSIBLE FOR REMOVAL/REPLACEMENT OF ALL BRIGGANS ON OTHER IMPROVEMENTS IN R.O.W. AND WITHIN ANY UNDEVELOPED AREA.
 4. CONTRACTOR TO FIELD KEYWAY DEPTHS OF EXISTING "B" SANITARY SEWER AND "B" BRIGGANS LINES TO ENSURE 18" OF MINIMUM COVER AND NO CONFLICT WITH PROPOSED "B" STORM SEWER. IF CONFLICT ARISES, CONTRACTOR TO CONTACT THE ENGINEER IMMEDIATELY.



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

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

DATE:	DATE: 7/1/2017
DESIGNER:	STON, BIRD & GALT
SCALE:	INCHES
PROJECT NAME:	FOR CITY OF HOUSTON USE ONLY
FILE NO.:	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE:	
HORIZ. : 1" = 20'	
VERT. : 1" = 2'	
SHEET No.:	14 OF 20

CALL BEFORE YOU DIG
 TEXAS ONE CALL PARTICIPANTS REQUEST
 72 HOURS NOTICE BEFORE 10:00 AM (M-F)
 OR 8:00 AM - 5:00 PM (S-S)
 TEXAS ONE CALL SYSTEM
 1-800-245-4545

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

No.	REVISIONS	DATE

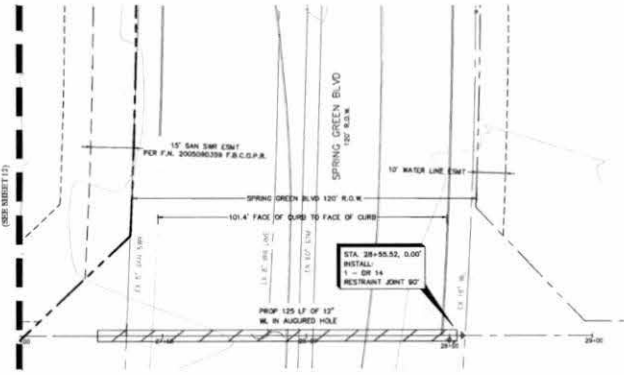
**STORM SEWER P&P FOR
 COMM RES AT F.M. 1093 &
 SPRING GREEN BLVD**



WATER, SANITARY SEWER, AND STORM
 SEWER CONNECTION EXTENSIONS
 SERVING CROSSING AT CINCO RANCH ON
 BEHALF OF:
 CINCO SOUTHWEST MUD NO. 2
 Houston, Texas



MATCH LINE 27+00
(SEE SHEET 13)

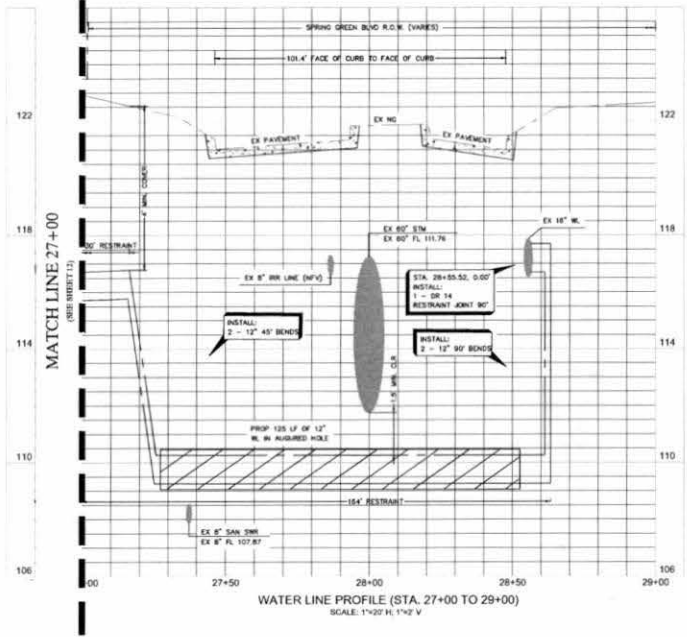


BENCHMARK: T.S.A.R.P. MONUMENT #180955
STAINLESS STEEL ROD STAMPED "MCCO 66 1986" LOCATED ON EAST SIDE OF F.M. 1463 APPROX 0.1 MILE SOUTH OF CORBITT ROAD.
ELEVATION = 136.32 FEET NAD 88 (2001 ADJUSTMENT)

T.S.A.R.P. MONUMENT #180045
BRASS DISK STAMPED "180045" LOCATED ON DOWNSTREAM SIDE OF BRIDGE CROSSING UPPER BUFFALO AT CINCO RANCH BOULEVARD.
ELEVATION = 115.26 FEET NAD 88 (2001 ADJUSTMENT)

LEGEND	
	EX. NATURAL GROUND
	EX. STORM SEWER
	EX. WATER LINE
	EX. SANITARY SEWER LINE
	EX. MANHOLE
	PROP. WATER LINE

MATCH LINE 27+00
(SEE SHEET 13)



GENERAL NOTES

- REFERENCE SANITARY WATER LINE NOTES SHEET 2 FOR PIPE MATERIAL AND CONSTRUCTION REQUIREMENTS.
- CONTRACTOR RESPONSIBLE FOR REMOVAL, REPLACEMENT OF ALL OBSTACLES OR OTHER IMPROVEMENTS IN R.O.M. AND WITHIN ANY LANDSCAPED AREA.

NOTE: CITY SIGNATURES VALID FOR ONE YEAR ONLY AFTER DATE OF SIGNATURES	
CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
DATE	DATE & SIGNATURE
DESIGNER	STAMP WITH QUALTY
STATION	INCHES
STREET & BLOCK	
FILE NO.	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
HORZ :	
VERT :	
SHEET No.	15 OF 20

APPROVED: _____
DATE: _____
DEPARTMENT CHIEF

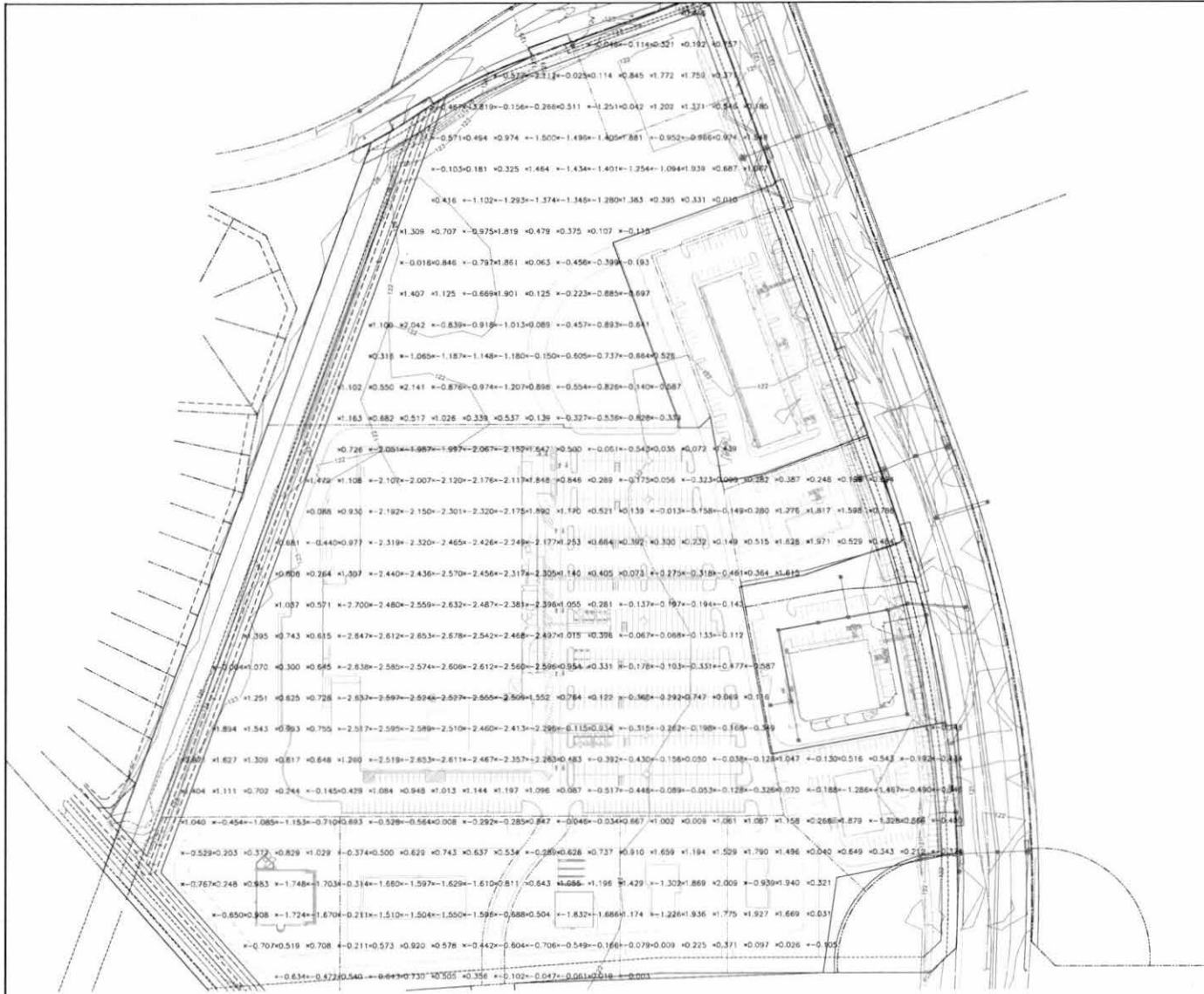
No.	REVISIONS	DATE

WATER P&P FOR COMM RES AT F.M. 1093 & SPRING GREEN BLVD



WATER, SANITARY SEWER, AND STORM SEWER CONNECTION EXTENSIONS SERVING CROSSING AT CINCO RANCH ON BEHALF OF: CINCO SOUTHWEST MUD NO. 2
Houston, Texas





BENCHMARK: T.S.A.R.P. MONUMENT #18055
 STAINLESS STEEL ROD STAMPED "MCCO 66 1986" LOCATED ON EAST SIDE OF F.M. 1463 APPROX 0.1 MILE SOUTH OF CORBITT ROAD.
 ELEVATION = 136.32 FEET NAD 88 (2001 ADJUSTMENT)

T.S.A.R.P. MONUMENT #28045
 BRASS DISK STAMPED "180045" LOCATED ON DOWNSTREAM SIDE OF BRIDGE CROSSING UPPER BUFFALO AT CINCO RANCH BOULEVARD.
 ELEVATION = 113.26 FEET NAD 88 (2001 ADJUSTMENT)



NOTE:
 CONTRACTOR TO SPOIL EXCESS UTILITY EXCAVATION PER THIS PLAN. GRID REPRESENTS CUT AND FILL NUMBERS AS COMPARED TO NATURAL GROUND TO ACHIEVE FINISHED GRADE. CONTRACTOR TO COMPACT SPOIL TO 95% STANDARD PROCTOR PER ASTM D698. PLACEMENT OF FILL SHALL NOT BLOCK NATURAL DRAINAGE & ENTIRE SITE SHALL HAVE POSITIVE DRAINAGE.

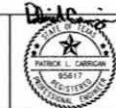
NOTE: CITY SIGNATURES VALID FOR ONE YEAR ONLY AFTER DATE OF SIGNATURES	
CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
DATE:	DATE OF SIGNATURES:
DESIGNER:	DATE WHEN DRAFT:
DRAWN:	FILED:
SHEET #:	OF SHEETS:
FILE NO.:	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE:	
HORIZ.:	
VERT.:	
SHEET No.:	16 OF 20

APPROVED: _____
 DATE: _____



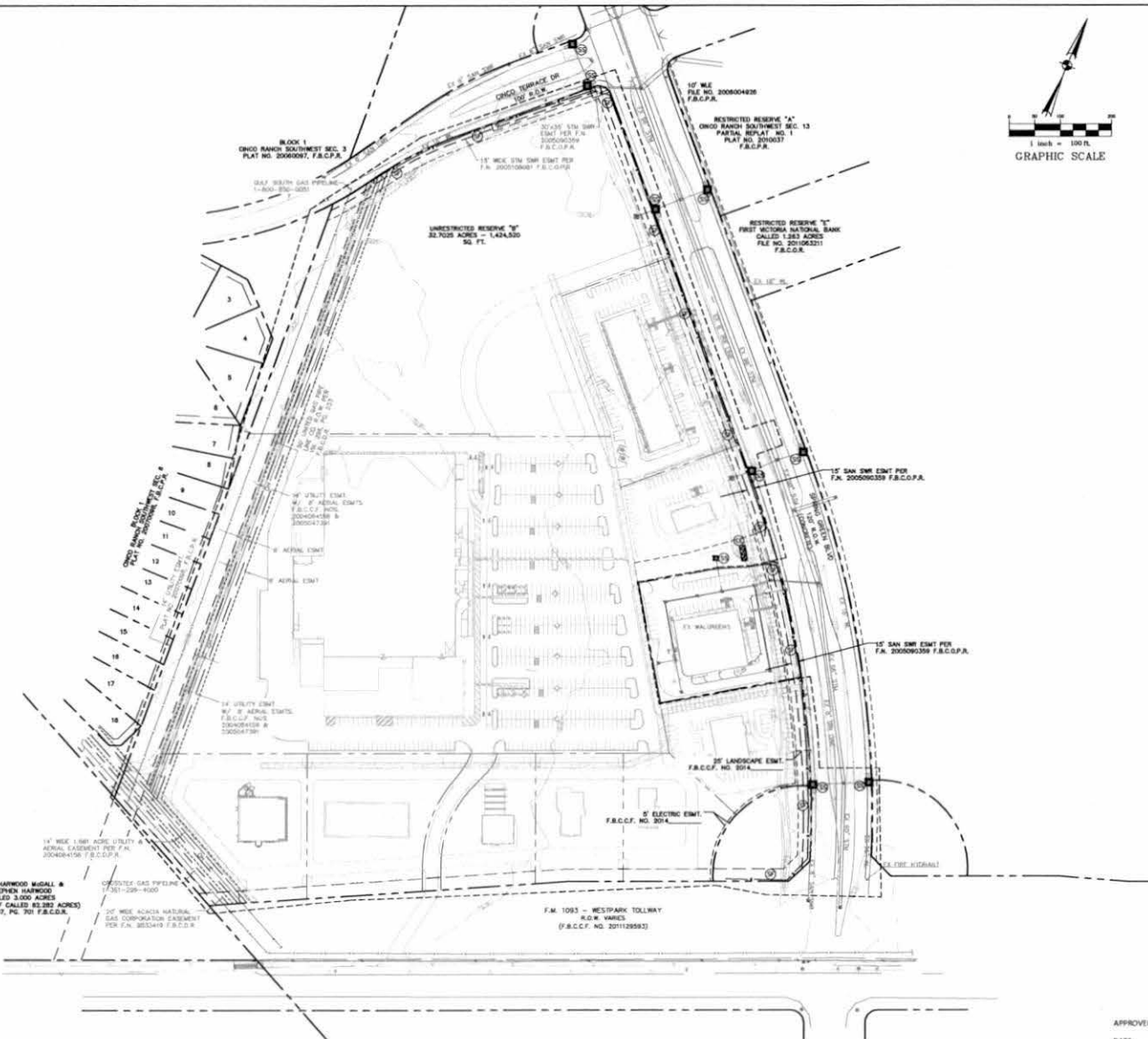
No.	REVISIONS	DATE

GRADING PLAN



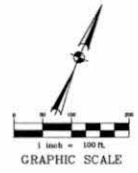
WATER, SANITARY SEWER, AND STORM SEWER CONNECTION EXTENSIONS SERVING CROSSING AT CINCO RANCH ON BEHALF OF:
 CINCO SOUTHWEST MUD NO. 2
 Houston, Texas





BENCHMARK, T.S.A.R.P. MONUMENT #100055
 STAINLESS STEEL ROD STAMPED "10050-66 1986" LOCATED ON
 EAST SIDE OF F.M. 1463 APPROX 0.1 MILE SOUTH OF CORBITT
 ROAD.
 ELEVATION = 136.32 FEET NAD 88 (2001 ADJUSTMENT)

T.S.A.R.P. MONUMENT #100045
 BRASS DISK STAMPED "190045" LOCATED ON DOWNSTREAM
 SIDE OF BRIDGE CROSSING UPPER BUFFALO AT CINCO RANCH
 BOULEVARD.
 ELEVATION = 115.26 FEET NAD 88 (2001 ADJUSTMENT)



LEGEND

	CONSTRUCTION ENTRANCE (SEE DETAIL SHEET 18)
	SILT STACK INLET PROTECTION BARRIER (SEE DETAIL SHEET 19)
	SILT FENCE (SEE DETAIL SHEET 18)
	LIMITS OF DISTURBED AREA

SITE DATA

TOTAL AREA DISTURBED	36.02 AC
TOTAL LOT AREA	32.7025 AC

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

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

WORK	STORM & SEWER
MAINTENANCE	STORM WATER GROUP
DESIGN	DESIGN
DRAW & BRIDGE	
FILE NO:	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
HORIZ : 1"=100'	
VERT : N/A	
SHEET No:	17 OF 20

JANE HARMON MOGALL &
 STEPHEN HARMON
 CALLED 3,000 ACRES
 (RESIDUE OF CALLED 80,382 ACRES)
 VOL. 707, PG. 701 F&C.D.R.

CONVEYER GAS PIPELINE
 17 50' COR - 9000

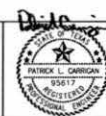
12" WIDE ACROSS NATIONAL
 GAS CORPORATION EXHIBENT
 PER F.A. 200409 F&C.D.R.

F.M. 1093 - WESTPARK TOLLWAY
 S.O.M. VARIES
 (F&C.C.F. NO. 201129593)

CALL BEFORE YOU DIG
 TEXAS ONE CALL PARTICIPANTS REQUEST
 72 HOURS NOTICE BEFORE "ON" ONE DRILL
 OR BLAST - STOP CALL
 TEXAS ONE CALL SYSTEM
 1-800-245-4545

No.	REVISIONS	DATE

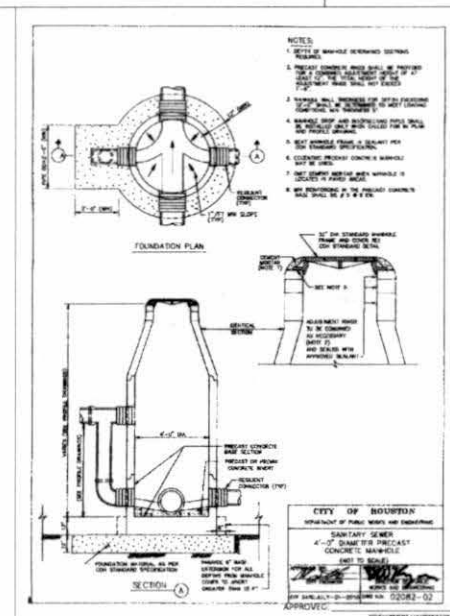
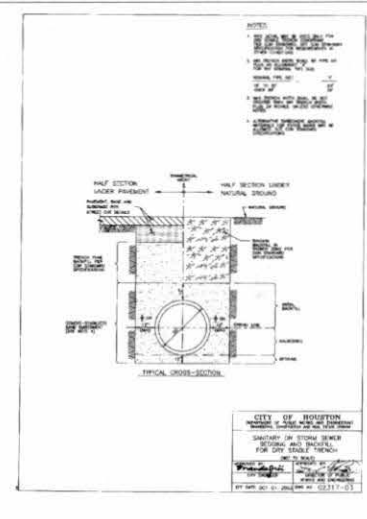
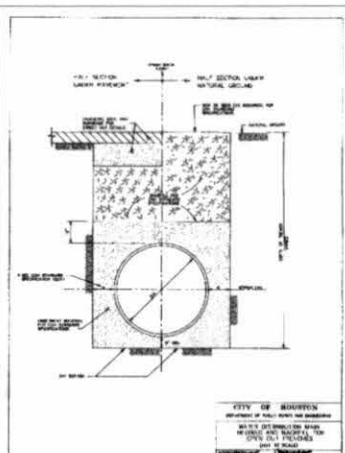
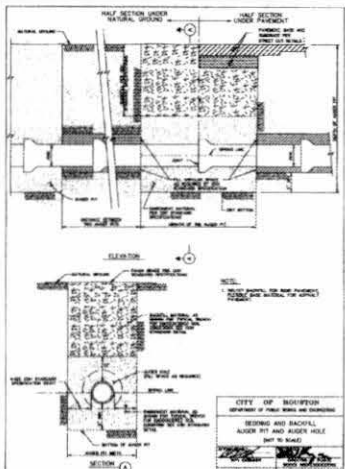
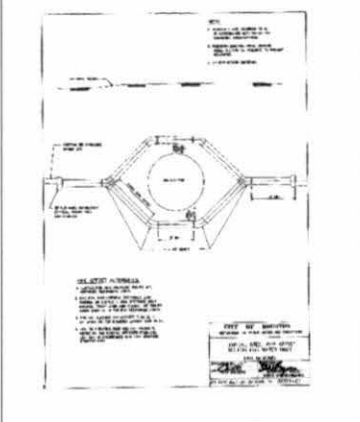
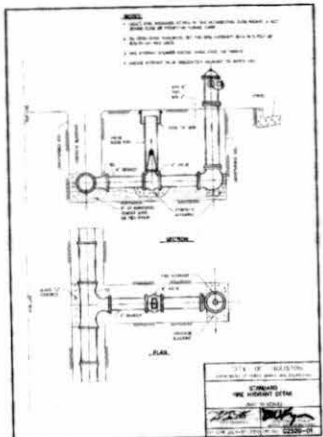
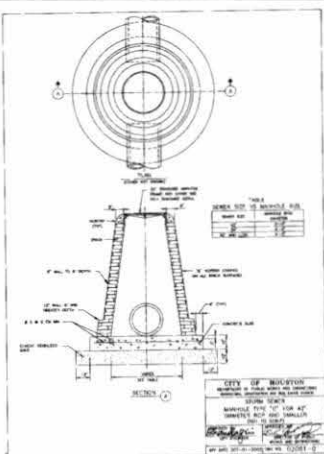
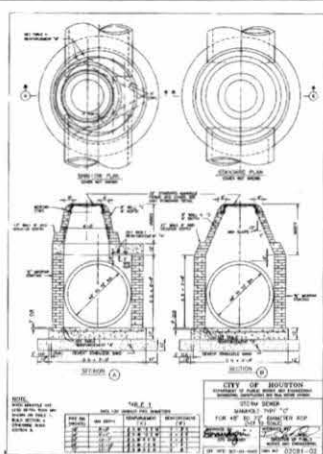
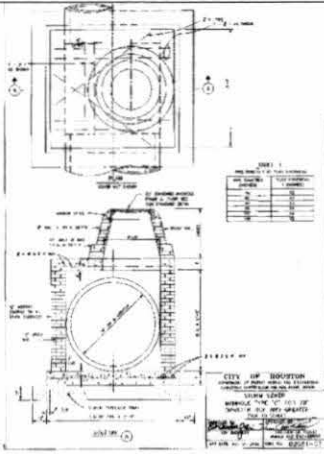
EROSION CONTROL PLAN



APPROVED: _____
 DATE: _____
 DEVELOPMENT COORDINATOR

WATER, SANITARY SEWER, AND STORM
 SEWER CONNECTION EXTENSIONS
 SERVING CROSSING AT CINCO RANCH ON
 BEHALF OF:
 CINCO SOUTHWEST MUD NO. 2
 Houston, Texas





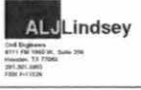
NOTE: CITY SIGNATURES VALID FOR ONE YEAR ONLY AFTER DATE OF SIGNATURES	
CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
DESIGNED BY	TRACY W. THOMPSON
DRAWN BY	DAVID W. DAVIS
CHECKED BY	DAVID W. DAVIS
IN CHARGE	DAVID W. DAVIS
FILE NO.	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
HORIZ. SCALE	1" = 10'
VERT. SCALE	1" = 10'
SHEET No.	18 OF 20

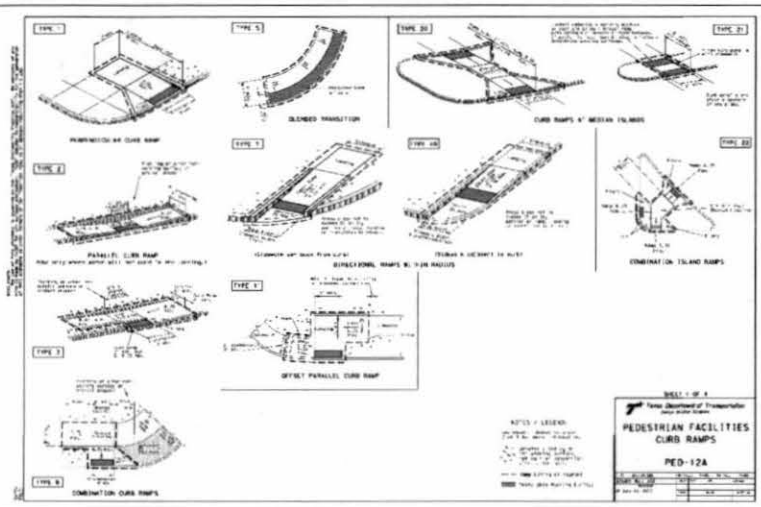
No.	REVISIONS	DATE

CONSTRUCTION DETAILS
(1 OF 3)



WATER, SANITARY SEWER, AND STORM SEWER CONNECTION EXTENSIONS SERVING CROSSING AT CINCO RANCH ON BEHALF OF: CINCO SOUTHWEST MUD NO. 2 Houston, Texas





GENERAL NOTES

1. Curb ramps shall be 6' wide, except at curb extensions at street corners.
2. A 4' wide ramp shall be provided for wheelchair access to all public buildings and facilities.
3. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
4. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
5. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
6. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
7. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
8. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
9. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
10. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
11. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
12. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
13. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
14. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
15. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
16. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
17. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
18. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
19. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).
20. All curb ramps shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).

DETECTABLE WARNING

1. Detectable warnings shall be provided at all curb ramps.
2. Detectable warnings shall be provided at all curb ramps.
3. Detectable warnings shall be provided at all curb ramps.
4. Detectable warnings shall be provided at all curb ramps.
5. Detectable warnings shall be provided at all curb ramps.
6. Detectable warnings shall be provided at all curb ramps.
7. Detectable warnings shall be provided at all curb ramps.
8. Detectable warnings shall be provided at all curb ramps.
9. Detectable warnings shall be provided at all curb ramps.
10. Detectable warnings shall be provided at all curb ramps.
11. Detectable warnings shall be provided at all curb ramps.
12. Detectable warnings shall be provided at all curb ramps.
13. Detectable warnings shall be provided at all curb ramps.
14. Detectable warnings shall be provided at all curb ramps.
15. Detectable warnings shall be provided at all curb ramps.
16. Detectable warnings shall be provided at all curb ramps.
17. Detectable warnings shall be provided at all curb ramps.
18. Detectable warnings shall be provided at all curb ramps.
19. Detectable warnings shall be provided at all curb ramps.
20. Detectable warnings shall be provided at all curb ramps.

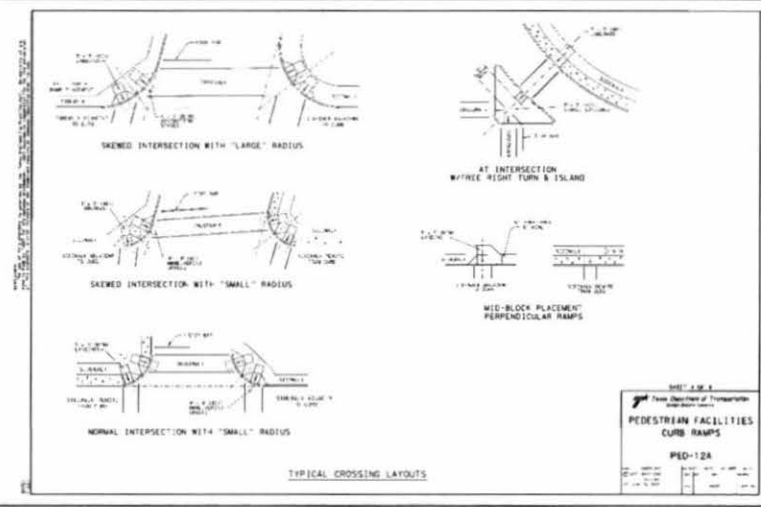
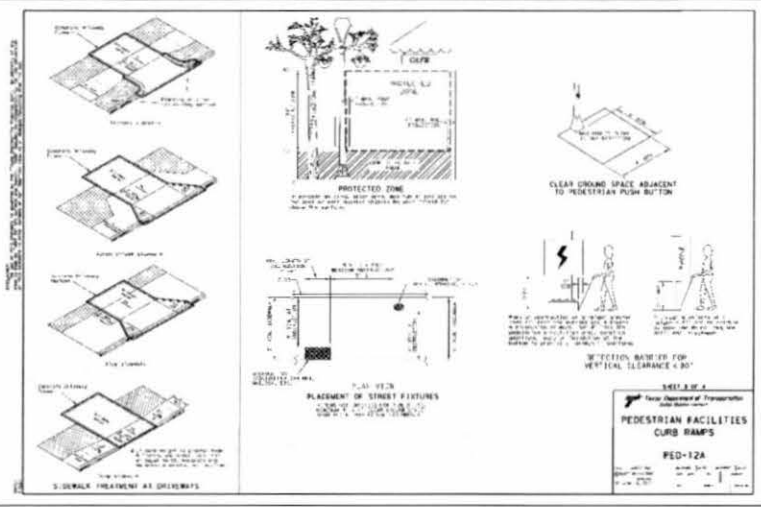
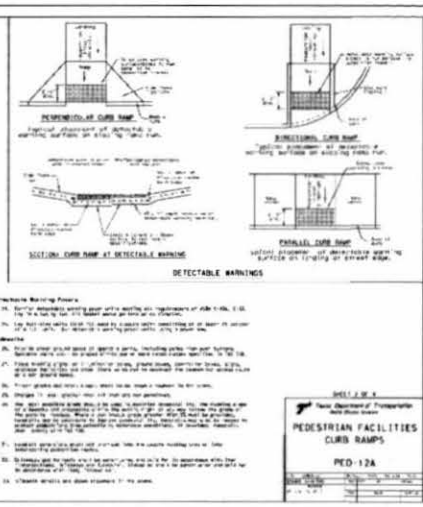
DETECTABLE WARNING PLACEMENT

1. Detectable warnings shall be provided at all curb ramps.
2. Detectable warnings shall be provided at all curb ramps.
3. Detectable warnings shall be provided at all curb ramps.
4. Detectable warnings shall be provided at all curb ramps.
5. Detectable warnings shall be provided at all curb ramps.
6. Detectable warnings shall be provided at all curb ramps.
7. Detectable warnings shall be provided at all curb ramps.
8. Detectable warnings shall be provided at all curb ramps.
9. Detectable warnings shall be provided at all curb ramps.
10. Detectable warnings shall be provided at all curb ramps.
11. Detectable warnings shall be provided at all curb ramps.
12. Detectable warnings shall be provided at all curb ramps.
13. Detectable warnings shall be provided at all curb ramps.
14. Detectable warnings shall be provided at all curb ramps.
15. Detectable warnings shall be provided at all curb ramps.
16. Detectable warnings shall be provided at all curb ramps.
17. Detectable warnings shall be provided at all curb ramps.
18. Detectable warnings shall be provided at all curb ramps.
19. Detectable warnings shall be provided at all curb ramps.
20. Detectable warnings shall be provided at all curb ramps.

DETECTABLE WARNING PLACEMENT

1. Detectable warnings shall be provided at all curb ramps.
2. Detectable warnings shall be provided at all curb ramps.
3. Detectable warnings shall be provided at all curb ramps.
4. Detectable warnings shall be provided at all curb ramps.
5. Detectable warnings shall be provided at all curb ramps.
6. Detectable warnings shall be provided at all curb ramps.
7. Detectable warnings shall be provided at all curb ramps.
8. Detectable warnings shall be provided at all curb ramps.
9. Detectable warnings shall be provided at all curb ramps.
10. Detectable warnings shall be provided at all curb ramps.
11. Detectable warnings shall be provided at all curb ramps.
12. Detectable warnings shall be provided at all curb ramps.
13. Detectable warnings shall be provided at all curb ramps.
14. Detectable warnings shall be provided at all curb ramps.
15. Detectable warnings shall be provided at all curb ramps.
16. Detectable warnings shall be provided at all curb ramps.
17. Detectable warnings shall be provided at all curb ramps.
18. Detectable warnings shall be provided at all curb ramps.
19. Detectable warnings shall be provided at all curb ramps.
20. Detectable warnings shall be provided at all curb ramps.

PEDESTRIAN FACILITIES CURB RAMP PED-12A

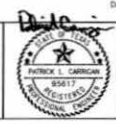


NO.	REVISIONS	DATE

CONSTRUCTION DETAILS (3 OF 3)

APPROVED _____
DATE _____

WATER, SANITARY SEWER, AND STORM SEWER CONNECTION EXTENSIONS SERVING CROSSING AT CINCO RANCH ON BEHALF OF CINCO SOUTHWEST MUD NO. 2 Houston, Texas



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

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

DATE	DATE OF SIGNATURES
DESIGNER	DATE WHEN DRAFT
DRAWN	DATE
CHECKED	DATE
FILE NO.	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
HORIZ. 1/4" = 1'	
VERT. 1/4" = 1'	
SHEET NO.	20 OF 20

ALJ Lindsey
City Engineer
4777 FM 2611, Suite 200
Houston, TX 77056
281.971.0800
Fax: 281.971.0800