

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

Fort Bend County Engineering Department 301 Jackson Suite 401

301 Jackson Suite 401 Richmond, Texas 77469 281.633.7500 Permits@fortbendcountytx.gov

	Right of Way Permit
X	Commercial Driveway Permit

Permit No: 2017-15583

The following "Notice of Proposed Cable, Conduit, and/or Pole Line activity in Fort Bend County" and accompanying attachments have been reviewed and the notice conforms to appropriate regulations set by Commissioner's Court of Fort Bend County, Texas.					
(1) COMPLETE APPLICATION FORM:					
X b. Vicinity map showing course	•				
X c. Plans and specifications	o. a coc.				
A c. Flans and specifications					
(2) BOND:					
County Attorney, approval whe applicable.		Amount			
Perpetual bond currently posted.	Bond No:	Amount:			
X Performance bond submitted.	Bond No:	Amount: \$5,000.00			
Cashier's Check	Check No:	Amount:			
(3) DRAINAGE DISTRICT APPROVAL (WHE	IN APPLICABLE):				
	_				
Drainage District Approval		Date			
We have reviewed this project and agree it meets minimum requirements.					
Charly O. Af					
Permit Administrator Date					



REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT

Fort Bend County Engineering Department 301 Jackson Suite 401

301 Jackson Suite 401 Richmond, Texas 77469 281.633.7500

Permits@fortbendcountytx.gov

AMA	BEND COCKE				, ,		
	Right of W	ay Permi	t				
	X Commerci	ial Drivew	av Permit				
	Permit No: 2017		ay i cillin				
	- Terrini No. 2017	10000					
Appl	licant: Noma Engineering & Construction						
Job	Location Site: 15330 W. Bellfort Boulevard,	Sugarland	i, TX 77498				
Bone	d No. Date of Bond:	3/2/2017	_Amount: _	\$5,000.00			
Layir Road Com Texa	above applicant came to make use of certain Forng, Construction, Maintenance, and Repair of Burds, Streets, Highways, and Drainage Ditches in Fomissioners Court of Fort Bend County, Texas," as s, of the Minutes of the Commissioners Court of nsistant with Chapter 181, Vernon's Texas Statut	ried Cables rt Bend Co passed by Fort Bend	s, Conduits, and ounty, Texas, Ur the Commissio County, Texas,	I Pole Lines, In, Under, Acro nder the Jurisdiction of the oners Court of Fort Bend Co	ss or Along		
Note 1. 2.	Evidence of review by the Commissioners Courgrounds for job shutdown.	rt must be	kept on the job	o site and failure to do so co	onstitutes		
	a. 48 hours in advance of construct b. When construction is completed Administrator thru MyGovernme This permit expires one (1) year from date of permiters.	and ready entOnline.c	for final inspec org portal.		Permit		
Com notic	his <u>26th</u> day of <u>September</u> , <u>2017</u> , Upon Motion o missioner, duly pu ce of said above purpose is hereby acknowledged said notice be placed on record according to the	t and carri I by the Co	ed, it is ORDERI ommissioners C	ED, ADJUDGED AND DECRE ourt of Fort Bend County, T	ED that said		
Signa	ature	Pres	ented to Comm	nissioners Court and approv	ed.		
Ву:	Charles O. Al	Date	Recorded	Comm. Court No			
	County Engineer						
	N/A		c of Commission	ners Court			
Ву:		By:					
	Drainage District Engineer/Manager		Deputy				

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

BOND NO

ГΗЕ	STATE	OF	TEXAS	

COUNTY OF FORT BEND

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KNOW ALL MEN BY THESE PRESENTS:

THAT WE, NOMA ENGINEERING AND CONSTRUCTION
whose (address, phone) is 2500 WEST LOOP SOUTH SUITE 330, HOUSTON, TX 77027
(832) 878-2016 Texas ,
hereinafter called the Principal, and WESTERN SURETY COMPANY, a Corporation existing under and
by virtue of the laws of the state of South Dakota and authorized to do an indemnifying business in the state of
Texas, and whose principal office is located at (name/address/phone) P.O. Box 5077, Sioux Falls,
SD 57117-5077, (605) 336-0850, whose officer residing in the State of Texas, authorized to accept service in all
suits and actions brought whining said state is Insurance Leader Services
and whose address is attn: Laudy Yazbek 7210 Lawndale St., Ste. D, Houston, TX 77012
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 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

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44441100000

August

WESTERN SURETY

TY COMPANY

Western Surety Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That WESTERN SURETY COMPANY, a corporation organized and existing under the laws of the State of South Dakota, and authorized and licensed to do business in the States of Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and the United States of America, does hereby make, constitute and appoint

	Paul T. Bruflat	of	Sioux Falls
State of	South Dakota	, its regularly elected	Sioux Falls Vice President
as Attorney-in-F	act, with full power and authority ety and as its act and deed, the fo	hereby conferred upon him t	to sign, execute, acknowledge and deliver for and on
Cable One of Fo	e, Conduit and/or Pole li	ne Activity in, under,	, across or along County Roads County
0110 99 29	20 20114		
bond with bond r	number		
for NOMA ENGI	INEERING AND CONSTRUCTION	<u> </u>	
as Principal in th	e penalty amount not to exceed:	\$ 5,000.00	
Section 7. A name of the Comp Board of Directors	now in force, to-wit: ill bonds, policies, undertakings, Pow pany by the President, Secretary, an s may authorize. The President, an	vers of Attorney, or other obligat y Assistant Secretary, Treasurer ny Vice President, Secretary, a	py of Section 7 of the by-laws of Western Surety Company tions of the corporation shall be executed in the corporate r, or any Vice President, or by such other officers as the iny Assistant Secretary, or the Treasurer may appoint
not necessary for	the validity of any bonds, policies, un- e corporate seal may be printed by fa	dertakings, Powers of Attorney o	akings in the name of the Company. The corporate seal is or other obligations of the corporation. The signature of any
In Witness	Whereof, the said WESTERN	SURETY COMPANY has	caused these presents to be executed by its
NeA 30 - 10 - 10 Decree			
ATTEST	-2 0	W	ESTERN SURETY COMPANY
	J. nelson	By	TelT Bullet
	L. Nelson, Assistant	Secretary Dy	Paul T Bruflat, Vice President
			THE SURET CO.
STATE OF SOU	TH DAKOTA		SEAL SEAL
COUNTY OF MI	NNEHAHA ss		A STORY DATOLY
On this	2nd day of Aug Paul T. Bruflat	ust , 2017	, before me, a Notary Public, personally appeared Nelson
			r of Attorney as Vice President
and Assistant Se	ecretary, respectively, of the said	WESTERN SURETY COM	PANY, and acknowledged said instrument to be the
	d deed of said Corporation.		5
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	J. MOHR		0500
(SEAL)	NOTARY PUBLIC SEAL !		4 Wohr
+ co so so so so so	ာက္ကေရးရေးရေးရေးရေးရေးရေးရေးရေးရေးရေးရ	mmission Expires June	Notary Public

FORT BEND COUNTY CONSTRUCTION PLANS OF PRIVATE UTILITIES AND PAVING DESIGN TO SERVE

WEST BELLFORT STREET STORAGE

NW CORNER OF W. BELFORT STREET AND 2ND STREET SUGARLAND, TX 77498

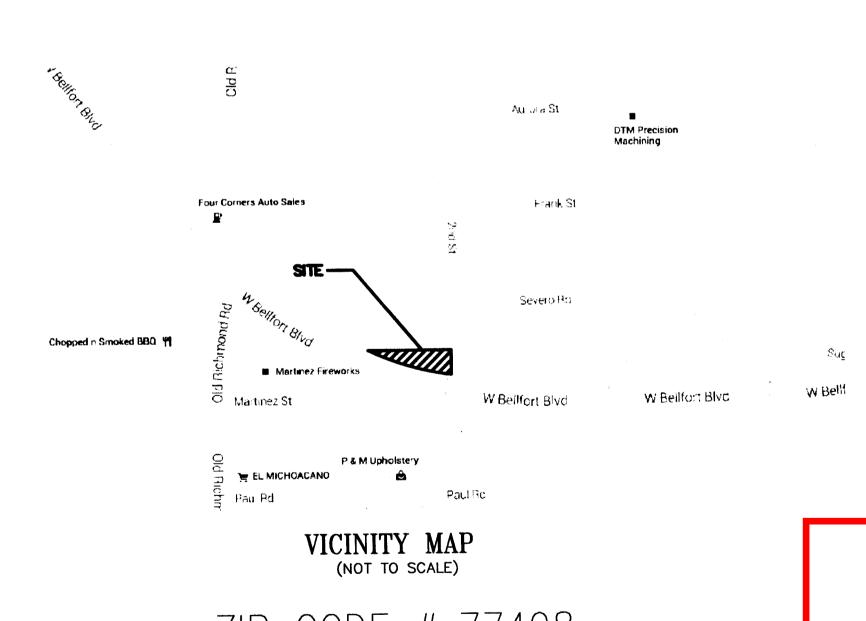
- C1 COVERSHEET
- C2 NOTES SHEET & DETAILS
- C3 DIMENSION CONTROL PLAN
- C4 GRADING & UTILITY PLAN
- C5 FIRE LANE LAYOUT
- C6 STORM WATER PPP
- C7 DETAIL SHEET

FIRM MAP INFORMATION

INSURANCE RATE MAP (FIRM) FOR FORT BEND COUNTY, TEXAS, MAP NO. 48157C0145L REVISED/DATED APRIL 2, 2014, THE SUBJECT TRACT APPEARS TO LIE WITHIN UNSHADED ZONE "X". THIS DETERMINATION WAS DONE BY GRAPHIC PLOTTING AND IS APPROXIMATE ONLY, AND HAS NOT BEEN FIELD VERIFIED. THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF WINDROSE LAND SERVICES, INC.

BENCHMARK INFORMATION

PUBLISHED ELEVATION = 77.07'
ALL ELEVATIONS SHOWN HEREON ARE BASED ON CITY OF SUGAR LAND GEODETIC CONTROL STATION, SGR-RM017 BEING A BRASS DISK STAMPED "A-805 1948", HAVING AN ELEVATION OF 77.07 FEET, NAVD 88, 2001 ADJUSTMENT.



ZIP CODE # 77498

Note: Building is not included in this set of plans. A separate submittal will be sent for building.

FORT BEND COUNTY SIGNATURE BLOCK

Rich Stargle, PE, PTOE

ENGINEER

7/5/17

DATE

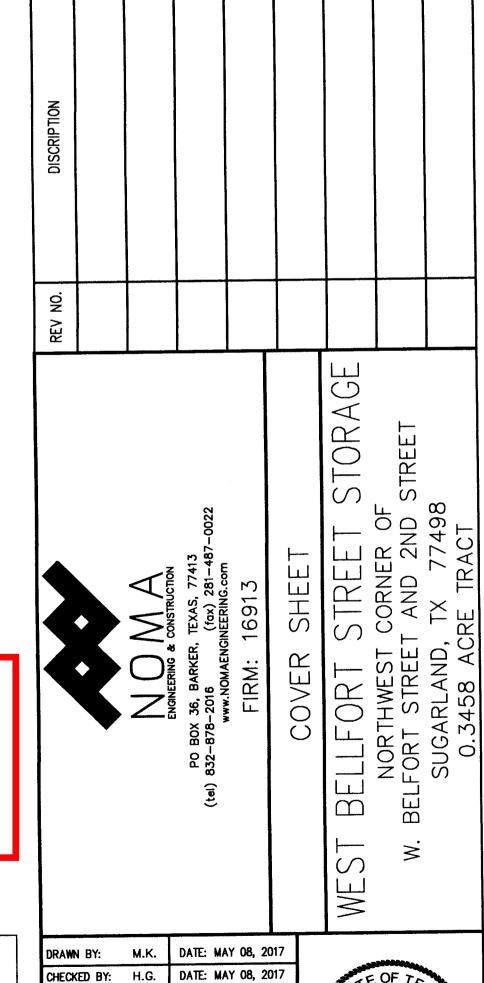
LASAN OLD

LO-30-17

DATE

LO-30-17

DATE



APPROVED BY: H.G. DATE: MAY 31, 2017

DATE: 05-31-2017

SHEET NO.

GENERAL CONSTRUCTION NOTES - OUTSIDE CITY LIMITS (FORT BEND COUNTY)

- CONSTRUCT WASTEWATER COLLECTION SYSTEMS, WATER LINES, AND STORM DRAINAGE IN ACCORDANCE WITH THE LATEST EDITION OF THE PUBLICATIONS STANDARD CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING AND STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING PUBLISHED BY THE CITY OF HOUSTON, DEPARTMENT OF PUBLIC WORKS
- UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATIN. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS IN THE FIELD PRIOR TO COMMENCING CONSTRUCTIN. CONTRACTOR SHALL NOTIFY "TEXAS ONE CALL" AT 713-223-4567/800-245-4545 AND "LONE STAR ONE CALL" AT 800-669-8344 AT LEAST 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING WATER, WASTEWATER, AND STORM DRAINAGE LINES. DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH THE CITY OF HOUSTON, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING'S STANDARD CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING AND STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING, REFERENCED ABOVE, AT NO ADDITIONAL COST.
- CONTRACTOR SHALL NOTIFY THE OFFICE OF THE CITY ENGINEER, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING IN WRITING PRIOR TO COMMENCING CONSTRUCTION.
- ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS.
- CONTRACTOR SHALL COMPLY WITH THE LATEST EDITION OF OSHA REGULATIONS AND THE STATE OF TEXAS LAWS CONCERNING EXCAVATION.
- CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS AND TREES ALONG THE AREA OF EXCAVATION.
- 8. IF THE CONSTRUCTION DOES NOT BEGIN WITHIN A YEAR AFTER THE PLANS HAVE BEEN SIGNED, NEW SIGNATURES MUST BE OBTAINED AND LETTERS OF AVAILABILITY MUST BE UPDATED.
- 9. CONTRACTOR SHALL MAINTAIN A SET OF REDLINE DRAWINGS RECORDING AS-BUILT CONDITIONS DURING CONSTRUCTION. THESE REDLINE MARKED UP DRAWINGS WILL BE SUBMITTED TO THE DESIGN CONSULTANT, WHO WILL MAKE THE CHANGES ON THE ORIGINAL TRACINGS.
- 10. THE OWNER SHALL OBTAIN THE NECESSARY PERMITS FOR INSTALLATION OF UTILITY PIPELINES WITHIN THE
- 11. OWNER TO OBTAIN ALL CONSTRUCTIN PERMITS REQUIRED BY THE "REGULATINS OF HARRIS COUNTY, TEXAS FOR FLOOD PLAIN MANAGEMENT".
- 12. THE CONTRACTOR SHALL NOTIFY HARRIS COUNTY ENGINEERING DEPARTMENT AT LEAST 24 HOURS IN ADVANCE OF COMMENCING CONSTRUCTION, PHONE: (713)316-3565 AND WRITTEN NOTICE 48 HOURS IN
- 13. PAVING SHALL BE IN ACCORDANCE WITH "REGULATIONS OF HARRIS COUNTY, TEXAS FOR THE APPROVAL AND ACCEPTANCE OF INFRASTRUCTURE" AND THE LATEST REVISIONS AND/OR AMENDMENTS OF SAME.
- 14. ALL INTERSECTIONS SHALL BE PROVIDED WITH STOP SIGNS AND STREET SIGNS AS INDICATED ON THE
- 15. ALL CONCRETE USED IN THIS PROJECT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28
- 16. GUIDELINES SET FORTH IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" SHALL BE OBSERVED.
- 17. ALL ROADWAY FILL SHALL BE PLACED IN 8" LIFTS AND COMPACTED TO 95% OF STANDARD PROCTOR DENSITY PRIOR TO CONSTRUCTION OF UNDERGROUND UTILITIES.
- 18. ALL CURB RETURN RADII ARE 25' UNLESS SHOWN OTHERWISE. ALL TURNOUT RADII AT INTERSECTIONS SHALL HAVE A MINIMUM OF 1.00% FALL. WHERE % OF GRADE IS NOT SHOWN, TOP OF CURB SHALL BE BUILT ON GRADE BETWEEN TOP OF CURB ELEVATIONS SHOWN.
- 19. ALIGNMENT, CENTER LINE CURVE DATA AND STATIONING FOR ALL CONSTRUCTION TO BE DETERMINED FROM SUBDIVISION PLAT.
- 20. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCH LINES (I.E. STORM SEWER, SANITARY SEWER AND
- WATER LINES) TO INDUCE MAXIMUM SETTLEMENT OF BACKFILL MATERIAL 21. EXISTING PAVEMENTS, CURBS, SIDEWALKS, AND DRIVEWAYS DAMAGED OR REMOVED DURING
- CONSTRUCTION SHALL BE REPLACED TO HARRIS COUNTY STANDARDS. 22. CONDITION OF THE ROAD AND/OR RIGHT-OF-WAY, THROUGHOUT CONSTRUCTION, SHALL BE AS GOOD AS OR

ENGINEERING DEVISION - PERMIT OFFICE - REQUIRED PRIOR TO CONSTRUCTION OF UTILITIES OR LEFT TURN

- BETTER THAN THE CONDITION PRIOR TO STARTING WORK. 23. CONTRACTOR SHALL LOCATE WHEELCHAIR RAMPS OUT OF MANHOLE RIM LOCATIONS. RACK MANHOLE
- TOPS OR RELOCATE WHEELCHAIR RAMPS TO AVOID BICYCLE ACCIDENTS AND LAWSUITS. 24. AUTHORIZATION NOTICE ISSUED BY HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT -

LANES WITHIN HARRIS COUNTY RIGHTS-OF-WAY. CONTACT PERMIT OFFICE (713) 956-3000.

STORM SEWER CONSTRUCTION NOTES:

- 1. STORM SEWERS AND LEADS SHALL BE REINFORCED CONCRETE PIPE WITH RUBBER GASKET JOINTS, C-76 CLASS III, AND SHALL BE INSTALLED, BEDDED AND BACKFILLED IN ACCORDANCE WITH CITY OF HOUSTON DWG. 02317-02, 02317-03, 02317-05, 02317-06, AND 02317-07. HDPE OR EQUIVELENT PIPE APPROVED FOR INSTALLATION AS OPTION TO OWNER OR CONTRACTOR.
- 2. ALL STORM SEWER CONSTRUCTED IN SIDE LOT EASEMENTS SHALL BE R.C.P., 20' MIN., C-76, CLASS III, AND SHALL BE BEDDED IN ACCORDANCE WITH CITY OF HOUSTON DWG. 02317-02, 02317-03, 02317-05, 02317-06, AND 02317-07.
- 3. ALL SEWER UNDER PROPOSED OR FUTURE PAVEMENT AND TO A POINT ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE BACKFILLED WITH 1-1/2 SACK CEMENT/C.Y. STABILIZED SAND TO WITHIN ONE (1) FOOT OF SUBGRADE THE REMAINING DEPTH OF TRENCH SHALL BE BACKFILLED WITH SUITABLE EARTH MATERIAL.
- 4. ALL TRENCH BACKFILLS SHALL BE IN 8" LIFTS, WITH TESTS TAKEN AT 100 FOOT INTERVALS ON EACH LIFT, AND MECHANICALLY COMPACTED TO A DENSITY OF NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D-698/AASHTO T99).
- 5. CIRCULAR AND ELLIPTICAL REINFORCED CONCRETE PIPE SHALL BE INSTALLED USING RUBBER GASKET JOINTS CONFORMING TO ASTM C443 AND ASTM C877 RESPECTIVELY.
- 6. ALL STORM SEWER PIPES AND INLET LEADS SHALL BE 24" AND LARGER R.C.P. (C-76, CLASS III), OR HDPE OR
- EQUIVELENT PIPE APPROVED FOR INSTALLATION AS OPTION TO OWNER OR CONTRACTOR. 7. ALL PROPOSED PIPE STUB-OUTS FROM MANHOLES AND INLETS ARE TO BE PLUGGED WITH 8" BRICK WALLS UNLESS OTHERWISE NOTED.
- 8. CONTRACTOR SHALL PROVIDE 12" MINIMUM CLEARANCE AT STORM SEWER AND WATERLINE CROSSINGS.
- 9. ADJUST MANHOLE COVERS TO GRADE CONFORMING TO REQUIREMENTS OF SECTION 02086-ADJUSTING MANHOLES, INLETS AND VALVE BOXES TO GRADE.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, MAINTAINING, AND RESTORING ANY BACK SLOPE DRAINAGE SYSTEM DISTURBED AS A RESULT OF HIS WORK.
- 11. ALL DITCHES SHALL BE REGRADED TO PROPOSED ELEVATIONS TO INSURE PROPER DRAINAGE. ALL OUTFALLS SHALL BE PROPERLY BACKFILLED AND COMPACTED. ALL DISTURBED AREAS SHALL BE REGRADED, SEEDED, AND
- 12. ALL DRIVEWAYS WILL BE LOCATED TO AVOID EXISTING CURB INLET STRUCTURES.

WATERLINE CONSTRUCTION NOTES

- 1. UNLESS OTHERWISE NOTED, ALL WATER LINES 12-INCHES AND SMALLER SHALL HAVE A MINIMUM OF 4-FEET OF COVER AND WATER LINES 16-INCHES AND LARGER SHALL HAVE A MINIMUM OF 5-FEET OF COVER.
- 2. SANITARY PRECAUTIONS MUST BE TAKEN DURING WATER LINE CONSTRUCTION, AS CALLED FOR BY AWWA STANDARDS. PRECAUTIONS INCLUDE, BUT ARE NOT LIMITED TO, KEEPING PIPE CLEAN AND CAPPED OR OTHERWISE EFFECTIVELY COVERING OPEN PIPE ENDS TO EXCLUDE INSECTS, ANIMALS OR OTHER SOURCES OF CONTAMINATION FROM UNFINISHED PIPE LINES AT TIMES WHEN CONSTRUCTION IS NOT IN PROGRESS.
- 3. ALL WATER LINES, AFTER INSTALLATION, SHALL BE THOROUGHLY DISINFECTED ACCORDING TO TCEQ, CHAPTER 290 AND AWWA SPECIFICATION C-651 AND THEN FLUSHED BEFORE BEING PLACED INTO SERVICE. WATER SAMPLES WILL BE COLLECTED FOR BACTERIOLOGIC ANALYSIS AND MUST MEET THE TEXAS STATE DEPARTMENT OF HEALTH AND CITY OF HOUSTON REQUIREMTNS PRIOR TO PLACING THE LINES INTO SERVICE.
- 4. PIPE MATERIAL (IF NOT A STEEL SECTION) SHALL BE POLY-VINYL CHLORIDE (P.V.C.) CONFORMING TO AWWA
- SPECIVIDATION C-900, WITH BELL AND SPIGOT PUSH ON JOINTS. 5. THE CONTRACTOR SHALL NOT OPERATE ANY EXISTING GATE VALVES. THE CONTRACTOR SHALL CONTACT THE MUNICIPAL UTILITY DISTRICT'S OPERATOR A MINIMUM OF 48 HOURS PRIOR TO MAKING ANY CONNECTIONS TO THE
- EXISTING WATER LINE AND TO OPERATE ANY EXISTING GATE VALVES. 6. ALL WATER VALVES SHALL OPEN CLOCKWISE, SHALL BE SUPPLIED AND INSTALLED INACCORDANCE WITH THE
- LATEST EDITION OF AWWA SPECIFICATION C-500 AND SHALL BE OF THE RESILIENT SEAT TYPE. 7. WATER LINES PARALLEL TO SANITARY SEWER LINES SHALL BE INSTALLED WITH AT LEAST 9-FEET OF CLEARANCE FROM OUTSIDE TO OUTSIDE OF PIPE AND SHALL BE INSTALLED IN SEPARATE TRENCHES. CONTRACTOR MUST MAINTAIN A MINIMUM OF 9-FEET OF CLEARANCE BETWEEN OUTSIDE OF SANITARY SEWER MANHOLES AND WATER LINES AS SPECIFIED BY TCEQ, CHAPTER 317 (LATEST PRINTING).
- 8. WATER LINES SHALL BE CONSTRUCTED SO THAT ALL FITTINGS WILL NOT BE LOCATED UNDER PROPOSED OR FUTURE
- 9. THE UTILITY CONTRACTOR SHALL TURN FIRE HYDRANTS AND MAKE ALL FINAL ADJUSTMENTS AFTER COMPLETION OF PAVING. NO SEPARATE PAY.
- 10. THIS PROJECT SHALL BE BUILT BY MEANS OF OPEN CUT EXCEPT AS NOTED ON THE DRAWINGS. CONTRACTOR TO DETERMINE THE LOCATIONS OF BORE PITS IN FIELD SUBJECT TO THE CITY ENGINEER'S APPROVAL.

SANITARY SEWER CONSTRUCTION NOTES

- 1. ALL PROPOSED SANITARY SEWER SHALL BE SDR 26 PVC PIPE AS SHOWN ON THE PLAN OR OTHER APPROVED ALTERNATE PRESSURE ASTM D 3034 SDR 26 PIPE.
- 2. ALL SDR/DR P.V.C. PIPES ARE TO HAVE RUBBER GASKETED PUSH-ON BELL-AND-SPIGOT TYPE JOINT ENDS. CHEMICALLY WELDED SANITARY SEWER JOINTS ARE NOT ACCEPTABLE. ALL DR P.V.C. PIPE USED IS TO HAVE C.I.P. SIZE O.D.'S REGARDLESS OF ANY OTHER WASTEWATER CONSTRUCTION NOTE TO THE CONTRARY, ALL P.V.C. PIPE AND FITTINGS TO PIPE (JOINTS) MUST BE SO MARKED (STAMPED).
- 3. ALL SANITARY SEWER SERVICE LEADS SHALL BE ASTM D 3034 SDR 26 P.V.C. PIPE.
- 4. SANITARY SEWER AND SERVICE LEADS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING STANDARD CONSTRUCTION SPECIFICATIONS AND STANDARD
- 5. UNLESS OTHERWISE NOTED, ALL SANITARY SEWER SERVICE LEADS SHALL BE CONNECTED DIRECTLY TO THE MAIN LINE OR SANITARY SEWER STACKS ONLY. NO LEADS SHALL BE CONNECTED DIRECTLY TO MANHOLES UNLESS APPROVED BY WASTEWATER DESIGN SECTION OF CITY OF HOUSTON DEPERTMENT OF PUBLIC WORKS AND
- 6. SANITARY SEWER, INCLUDING ALL LEADS, SHALL HAVE CEMENT STABILIZED SAND BEDDING AND BACKFILL AS PER
- C.O.H. DRAWING NO. 02317-03 IN THE CITY OF HOUSTON STANDARD CONSTRUCTION DETAILS. 7. SANITARY SEWERS CONSTRUCTED IN WET STABLE TRENCH SHALL BE BEDDED & BACKFILLED AS PER CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING DWG. NO. 02317-02 OF STANDARD CONSTRUCTION
- 8. ALL CEMENT STABILIZED SAND (USED FOR SEWER BEDDING AND/OR PAVING BACKFILL) MUST MEET OR EXCEED CURRENT CITY OF HOUSTON PERFORMANCE SPECIFICATION (100 PSI COMPRESSION TEST) REGARDLESS OF ANY OTHER MINIMUM CEMENT CONTENT RATIO REQUIREMENTS STATED IN OTHER APPLICABLE NOTES.
- 9. SANITARY SEWER MANHOLE RIMS, AS A RULE SHALL BE SET 2" MINIMUM ABOVE THE SURROUNDING LEVEL FINISHED GRADE AFTER PAVING, WITH SLOPED BACKFILL ADDED FOR STORMWATER DRAINAGE AWAY FROM THE MANHOLE RIM. MANHOLES IN THE 100-YEAR FLOOD PLAIN SHALL EIHER HAVE TOPS RAISED 6" MINIMUM ABOVE 100 YEAR
- WATER LEVEL OR BE SEALED AND VENTED PER APPROVED DETAIL ON THESE PLANS. 10. SANITARY SEWER MANHOLES ARE TO BE PRECAST IN ACCORDANCE WITH THE CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING STANDARD CONSTRUCTION SPECIFICATIONS AND STANDARD CONSTRUCTIO DETAILS. CAST-IN-PLACE MANHOLES ARE NOT ALLOWED.
- 11. UNLESS OTHERWISE NOTED ALL SANITARY SEWER MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING DWG. NO. 02082-02 WITH NOTES FROM DWG.
- 12. WHERE P.V.C. (OR OTHER SMOOTH PLASTIC) PIPE IS TO BE USED, WATER-STOP GASKET AND CLAMP ASSEMBLY ARE TO BE FURNISHED AND INSTALLED AT ALL CONNECTIONS TO MANHOLES. NO SEPARATE PAY.
- 13. WHEN MAKING A CONNECTION TO AN EXISTING SANITARY SEWER MANHOLE, CONTRACTOR SHALL PLUG DOWNSTREAM END OF PROPOSED SANITARY SEWER. THE SEWER SHALL REMAIN PLUGGED UNTIL FINAL ACCEPTANCE BY THE CITY.
- 14. THE TOTAL FOOTAGE OFALL SANITARY SEWERS SHALL BE AIR TESTED OR WATER TESTED BY THE CONTRACTOR. THE CURRENT CITY OF HOUSTON TESTING PROCEDURE SHALL BE FOLLOWED. IF THE WATER TESTING METHOD IS EMPLOYED, THE TOTAL INFILTRATION/EXFILTRATION SHALL NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER. PER MILE OF PIPE, PER 24 HOURS. IF THE AIR TESTING METHOD IS EMPLOYED, THE CONSTRUCTIN, SEQUENCING AND SCHEDULING OF ALL TEST WILL BE AGREED UPON BY THE CONTRACTOR AND THE ENGINEER.
- 15. DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE AND SEMI-RIGID PIPE, WITH THE EXCEPETIN OF SERVICE LEADS. THE TESTS SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. THE TEST IS TO BE RUN USING A MANDREL HAVING AN OUTSIDE DIAMETER OF 95% OF THE AVERAGE INSIDE DIAMETER OF THE PIPE. THE MANDREL SHALL HAVE A MINIMUM OF 9 RUNNERS (ODD NUMBER ONLY), WITH THE CONTACT LENGTH OF EACH RUNNER BEING BOTH 6" MINIMUM AND NOT LESS THAN 75% OF THE NOMINAL INSIDE DIAMTER OF THE PIPE BEING TESTED. THE CONTRACTOR SHALL PROVIDE AN APPROVED TRUEING RING FOR THE MANDREL DEVICE. THERE WILL BE NO SEPARATE PAY FOR MANDREL TESTS. ANY PIPE NOT MEETING TEST REQUIREMENTS WILL BE REMOVED, REPLACED AND RETESTED AT THE CONTRACTOR'S EXPENSE.
- 16. SANITARY SEWER TESTING WILL BE IN ACCORDANCE WITH CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING STANDARD CONSTRUCTION SPECIFICATION AND STANDARD CONSTRUCTION DETAILS. CONTRACTOR IS TO FURNISH ALL NECESSARY TEST PLUGS AND RISERS. IF SEWER (INCLUDING M.H.'S) IS TO BE AIR TESTED, OBTAIN APPROVAL LETTER FROM CITY'S WASTEWATER DESIGN SECTION.
- 17. MANDREL TESTING WILL BE REQUIRED FOR SEWERS CONSTRUCTED OF: P.V.C. (WITH WALLS THINNER THAN SDR/DR 21); A.B.S./P.V.C. "TRUSS". TESTING IS NOT REQUIRED FOR RIGID (NON-PLASTIC) PIPES; AND PRESSURE PIPES, AS DESIGNATED IN THESE NOTES BY THE CITY.
- 18. MAINTAIN 12-INCH MINIMUM VERTICAL CLEARANCE AT CROSSINGS BETWEEN SANITARY SEWERS AND CULVERTS, UNLESS OTHERWISE NOTED.
- 19. WHENEVER A SANITARY SEWER CROSSES OVER A WATER MAIN OR UNDER A WATER MAIN CLOSER THAN 2 FEET VERTICALLY, THE SEWER PIPE SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (CLASS NO. 350, MIN. THICKNESS CLASS 52), OR C900 P.V.C. AND ONE JOINT OF THE SEWER PIPE WILL BE CENTERED ON THE WATER MAIN.
- 20. CONTRACTOR SHALL KEEP RECORD OF LOCATION OF ALL STACKS, STUBS, SLEEVES, ETC. 21. PRIOR TO SANITARY SEWER CONSTRUCTION, CONTRACTOR SHALL CONTACT THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING AT 713-535-7675 OR 713-535-7880 AND COMPLY WITH REQUIREMENTS FOR ISSUANCE OF NECESSARY PERMITS/WORK ORDERS.

FORT BEND COUNTY CONSTRUCTION GENERAL NOTES:

- FORT BEND COUNTY MUST BE INVITED TOT HE PRE-CONSTRUCTION MEETING.
- CONTRACTOR SHALL NOTIFY FORT BEND COUNT ENGINEERING DEPARTMENT 48 HOURS PRIOR TO COMMENCING CONSTRUCTION AND 48 HOURS NOTICE TO ANY CONSTRUCTION ACTIVITY WITHIN THE LIMITS OF THE PAVING AT CONSTRUCTION@FORTBENDCOUNTYTX.GOV.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FROM FORT BEND COUNTY PRIOR TO COMMENCING CONSTRUCTION OF
- ANY IMPROVEMENTS WITHIN COUNTY ROAD RIGHT OF WAYS. 4. ALL PAVING IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FORT BEND COUNTY "RULES, REGULATIONS AND REQUIREMENTS"
- RELATING TO THE APPROVAL AND ACCEPTANCE OF IMPROVEMENTS IN SUBDIVISIONS AS CURRENTLY AMENDED.
- ALL ROAD WIDTHS, CURB RADII AND CURB ALIGNMENT SHOWN INDICATES BACK OF CURB.
- 6. A CONTINUOUS LONGITUDINAL REINFORCING BAR SHALL BE USED IN THE CURBS.
- 7. ALL CONCRETE PAVEMENT SHALL BE 5 SACK CEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS. TRANSVERSE
- EXPANSION JOINTS SHALL BE INSTALLED AT EACH CURB RETURN AND AT A MAXIMUM SPACING OF 60 FEET. ALL WEATHER ACCESS TO ALL EXISTING STREETS AND DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES.
- 9. 4" x 12" REINFORCED CONCRETE CURB SHALL BE PLACED IN FRONT OF SINGLE FAMILY LOTS ONLY. ALL OTHER AREAS SHALL BE 6" REINFORCED
- 10. AT ALL INTERSECTION LOCATIONS, TYPE 7 RAMPS SHALL BE PLACED IN ACCORDANCE WITH TXDOT PED-12A STANDARD DETAIL SHEET
- A.D.A.-HANDICAP RAMPS SHALL BE INSTALLED WITH STREET PAVING AT ALL INTERSECTIONS AND COMPLY WITH CURRENT A.D.A. REGULATIONS. 11. CURB HEADERS ARE REQUIRED AT CURB CONNECTIONS TO HANDICAP RAMPS, WITH NO CONSTRUCTION JOINT WITHIN 5' OF RAMPS.
- 12. ALL INTERSECTIONS UTILIZING TRAFFIC CONTROL MEASURES SHALL HAVE A.D.A. WHEEL CHAIR RAMPS INSTALLED.
- 13. GUIDELINES ARE SET FORTH IN THE TEXAS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", AS CURRENTLY AMENDED, SHALL BE OBSERVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE FLAGMEN, SIGNING, STRIPING, AND WARNING DEVICES, ETC., DURING CONSTRUCTION - BOTH DAY AND NIGHT.
- 14. ALL R1-1 STOP SIGNS SHALL BE 30"X30" WITH DIAMOND GRADE SHEETING PER TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- 15. STREET NAME SIGNAGE SHALL BE ON A 9" HIGH SIGN FLAT BLADE W/REFLECTIVE GREEN BACKGROUND. STREET NAMES SHALL BE UPPER AND LOWERCASE LETTERING WITH UPPERCASE LETTERS OF 6" MINIMUM AND LOWERCASE LETTERS OF 4.5" MINIMUM. THE LETTERS SHALL BE REFLECTIVE WHITE. STREET NAME SIGNS SHALL BE MOUNTED ON STOP SIGN POST.
- 16. A BLUE DOUBLE REFLECTORIZED BUTTON SHALL BE PLACED AT ALL FIRE HYDRANT LOCATIONS. THE BUTTON SHALL BE PLACED 12 INCHES OFF OF THE CENTERLINE OF THE STREET ON THE SAME SIDE AS THE HYDRANT.
- 17. THE PROJECT AND ALL PARTS THEREOF SHALL BE SUBJECT TO INSPECTION FROM TIME TO TIME BY INSPECTORS DESIGNATED BY FORT BEND COUNTY. NO SUCH INSPECTIONS SHALL RELIEVE THE CONTRACTOR OF ANY OF IS OBLIGATIONS HEREUNDER. NEITHER FAILURE TO INSPECT NOR FAILURE TO DISCOVER OR REJECT ANY OF HE WORK AS NOT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, REQUIREMENT, AND SPECIFICATIONS OF FORT BEND COUNTY OR ANY PROVISION OF THIS PROJECT SHALL BE CONSTRUED TO IMPLY AN ACCEPTANCE OF SUCH WORK OR TO RELIEVE THE CONTRACTOR OF ANY OF ITS OBLIGATIONS HEREUNDER.

INSURANCE RATE MAP (FIRM) FOR FORT BEND COUNTY, TEXAS, MAP NO. 48157C0145L REVISED/DATED APRIL 2, 2014, THE SUBJECT TRACT APPEARS TO LIE WITHIN UNSHADED ZONE "X". THIS DETERMINATION WAS DONE BY GRAPHIC PLOTTING AND IS APPROXIMATE ONLY, AND HAS NOT BEEN FIELD VERIFIED. THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF WINDROSE LAND SERVICES, INC.

ALL ELEVATIONS SHOWN HEREON ARE BASED ON CITY OF SUGAR LAND GEODETIC CONTROL STATION, SGR-RM017 BEING A BRASS DISK STAMPED "A-805" 1948", HAVING AN ELEVATION OF 77.07 FEET, NAVD 88, 2001 ADJUSTMENT.

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FORT BEND COUNTY SIGNATURE BLOCK

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APPROVED BY: H.G. DATE: MAY 08, 201 HUSSAM S. GHUNEIM 115671 DATE: MAY 31, 2017

DRAWN BY: M.K. DATE: MAY 08, 2017 CHECKED BY: H.G. DATE: MAY 08, 2017

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