

REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT

On this 23rd day of February, 2016, Commissioners Court came on to be heard and reviewed the accompanying notice of Millis Equipment Rental Job Location 6126 1/2 McCallister Falls Dr., Sugar Land, TX 77479 Date 2/12/2016 Bond No. 106404925, Permit No. 2015-4649 to make use of certain Fort Bend County property subject to, "A Revised Order Regulating the Laying, Construction, Maintenance, and Repair of Buried Cables, Conduits, and Pole Lines, In, Under, Across or Along Roads, Streets, Highways, and Drainage Ditches in Fort Bend County, Texas, Under the Jurisdiction of the Commissioners Court of Fort Bend County, Texas," as passed by the Commissioners Court of Fort Bend County, Texas the 3rd day of August, 1987, recorded in Volume _____ of the Minutes of the Commissioners Court of Fort Bend County, Texas, to the extent that such order is not inconsistent with Article 1436a, Vernon's Texas Civil Statutes. Upon Motion of Commissioner Meyers, seconded by Commissioner Mourson, duly put and carried, it is ORDERED, ADJUDGED AND DECREED that said notice of said above purpose is hereby acknowledged by the Commissioners Court of Fort Bend County, Texas, and that said notice be placed on record according to the regulation order thereof.

Notes:

1. Evidence of review by the Commissioners Court must be kept on the job site and failure to do so constitutes grounds for job shutdown.
2. Written notices are required:
 - a. 48 hours in advance of construction start up, and
 - b. when construction is completed and ready for final inspection
 Mail notices to: Permit Administrator
 Fort Bend County Engineering
 301 Jackson Street
 Richmond, Texas 77469
 281-633-7500
3. This permit expires one (1) year from date of permit if construction has not commenced.

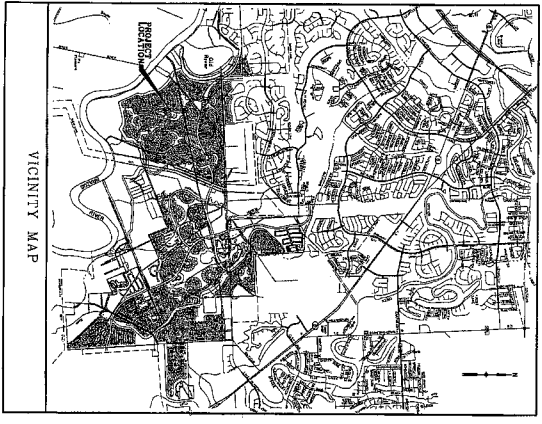
By: Charles O. [Signature]
 County Engineer

Presented to Commissioners Court and approved.
 Recorded in Volume 223-16-135
 Minutes of Commissioners Court

By: N/A
 Drainage District Engineer/Manager

Clerk of Commissioners Court

By: [Signature]
 Deputy



SITE PLAN FOR WATER, SEWER, DRAINAGE & PAVING IMPROVEMENTS FOR RIVERSTONE AV ALON SOUTH CENTRAL PARK FORT BEND COUNTY MUD NO. 128 FORT BEND COUNTY, TEXAS



APPROVE FOR THE CITY OF SUGAR LAND TO BE DESIGNATED FOR IF CONSTRUCTION HAS NOT BEGUN WITH THE SIGNATURE OF APPROVAL.

CONTRACTOR SHALL NOTIFY THE CITY OF SUGAR LAND AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF WORK. NO CONSTRUCTION SHALL BEGIN UNTIL COVER SHEET IS SIGNED.

CITY OF SUGAR LAND

APPROVED: _____ DATE: _____

FORT BEND COUNTY

ENGINEER: *M. H. H. H.*

DATE: 11/21/13

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

APPROVED: *[Signature]*

DATE: 11/21/13

FOR CITY OF SUGAR LAND

Costello
Engineering and Surveying
8990 Richmond Avenue, Suite 450
North Building
Houston, Texas 77042
(713) 783-7788 (713) 783-3590, Fax

JOB NO. 2014-214-002

DATE: MAY 2016
TEXAS PE BOARD #184
REGISTRATION NO. 280

CONTACT NUMBERS

CITY OF SUGAR LAND - ENGINEERING DEPT. 281-275-2788

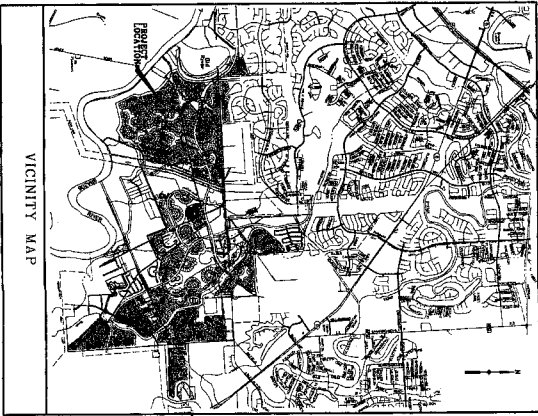
FORT BEND COUNTY MUD NO. 128 - OPERATOR - ST. ENVIRONMENTAL 632-496-1588

FORT BEND COUNTY MUD NO. 128 - ENGINEER - COSTELLO, INC. 713-783-7788

FORT BEND COUNTY DRAINAGE DISTRICT 281-342-2883

INDEX OF DRAWINGS SHEET NO. DESCRIPTION

1. COVER SHEET
 2. CONSTRUCTION NOTES
 3. CONSTRUCTION NOTES
 4. WATER LINE EXISTING SHERM AND CONCRETE WATER LAYOUT
 5. WATER LINE EXISTING SHERM AND CONCRETE WATER LAYOUT
 6. DRAINAGE AND CALCULATIONS
 7. SHERM & SIGNAGE LAYOUT
 8. CONSTRUCTION JOINT LAYOUT
 9. POLLUTION PREVENTION PLAN
 10. PER-SITE ASSESSMENT & REMEDIATION PLAN
 11. REMEDIATION PLAN
 12. FERTILIZER FACILITIES
- SUGAR LAND DETAILS**
- SI-01 GENERAL CONSTRUCTION NOTES I
 - SI-02 GENERAL CONSTRUCTION NOTES II
 - SI-03 STORM SEWER CONSTRUCTION DETAILS
 - SI-04 STORM SEWER CONSTRUCTION DETAILS I
 - SI-05 STORM SEWER CONSTRUCTION DETAILS II
 - SI-06 WATER LINE CONSTRUCTION DETAILS
 - SI-07 WATER LINE CONSTRUCTION DETAILS I
 - SI-08 WATER LINE CONSTRUCTION DETAILS II
 - SI-09 WATER LINE WATER VALVE DETAILS
 - SI-10 WATER LINE WATER VALVE DETAILS I
 - SI-11 WATER LINE WATER VALVE DETAILS II
 - SI-12 CONCRETE PAVEMENT CONSTRUCTION DETAILS
 - SI-13 CONCRETE PAVEMENT CONSTRUCTION DETAILS I
 - SI-14 CONCRETE PAVEMENT CONSTRUCTION DETAILS II
 - SI-15 DRIVEWAY CONSTRUCTION DETAILS
 - SI-16 DRIVEWAY CONSTRUCTION DETAILS I
 - SI-17 DRIVEWAY CONSTRUCTION DETAILS II
 - SI-18 SIGN CONSTRUCTION DETAILS
 - SI-19 SIGN CONSTRUCTION DETAILS I
 - SI-20 SIGN CONSTRUCTION DETAILS II
 - SI-21 EROSION CONTROL DETAILS I
 - SI-22 EROSION CONTROL DETAILS II
 - SI-23 EROSION CONTROL DETAILS III
 - SI-24 EROSION CONTROL DETAILS IV
 - SI-25 EROSION CONTROL DETAILS V
 - SI-26 EROSION CONTROL DETAILS VI
 - SI-27 EROSION CONTROL DETAILS VII
 - SI-28 EROSION CONTROL DETAILS VIII
 - SI-29 EROSION CONTROL DETAILS IX
 - SI-30 EROSION CONTROL DETAILS X
 - SI-31 EROSION CONTROL DETAILS XI
 - SI-32 EROSION CONTROL DETAILS XII
 - SI-33 EROSION CONTROL DETAILS XIII
 - SI-34 EROSION CONTROL DETAILS XIV
 - SI-35 EROSION CONTROL DETAILS XV



VICINITY MAP

SITE PLAN FOR WATER, SEWER, DRAINAGE & PAVING IMPROVEMENTS FOR RIVERSTONE CENTRAL PARK AVALON SOUTH CENTRAL PARK FORT BEND COUNTY MUD NO. 128 FORT BEND COUNTY, TEXAS



JOB NO. 2014-214-002

Costello
Engineering and Surveying
9990 Richmond Avenue, Suite 450
North Building
Houston, Texas 77042
(713) 783-7180 (713) 783-5800, FAX

DATE: MAY 2015
TEXAS P.E. NO. 60407 PIRM
REGISTRATION No. 745,389

APPROVAL BY THE CITY OF SUGAR LAND WILL BE OBTAINED UPON IF CONSTRUCTION HAS NOT BEGUN WITHIN ONE YEAR OF APPROVAL. CONTRACTOR SHALL NOTIFY THE CITY OF SUGAR LAND AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF WORK. NO CONSTRUCTION SHALL BEGIN UNTIL COVER SHEET IS SIGNED.
CITY OF SUGAR LAND
APPROVED: _____
DATE: _____

FORT BEND COUNTY
APPROVED: _____ DEVELOPMENT COMMISSION
DATE: _____
ENGINEER: _____
DATE: _____
THESE SIGNATURES ARE VOID IF CONSTRUCTION HAS NOT COMMENCED WITHIN ONE YEAR FROM DATE OF APPROVAL.
APPROVED: _____
DATE: _____


FORT BEND COUNTY FIRE MARSHAL'S OFFICE
 APPROVED
 RESUBMIT
DATE: 11-20-15
SIGNATURE: _____

CONTACT NUMBERS:
CITY OF SUGAR LAND - ENGINEERING DEPT. 281-279-2188
FORT BEND COUNTY MUD NO. 128 - OPERATOR - ST. ENVIRONMENTAL 632-479-1589
FORT BEND COUNTY MUD NO. 128 - ENGINEER - COSTELLO, Inc. 713-783-7180
FORT BEND COUNTY DRAINAGE DISTRICT 281-342-2653

INDEX OF DRAWINGS
SHEET NO. DESCRIPTION

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	CONSTRUCTION NOTES
3	PROPOSED WATER LAYOUT
4	WATER LINE ASSAYMENT SEWERS AND STORM SEWERS
5	DRAINAGE AND CALCULATIONS
6	PRELIMINARY CONSTRUCTION LAYOUT
7	CONSTRUCTION JOINT LAYOUT
8	POLLUTION PREVENTION PLAN
9	PROPOSED WATER LAYOUT
10	PROPOSED SEWER LAYOUT
11	PROPOSED STORM SEWER LAYOUT
12	PROPOSED PAVING LAYOUT
13	PROPOSED DRAINAGE LAYOUT
14	PROPOSED CONSTRUCTION DETAILS
15	PROPOSED CONSTRUCTION DETAILS
16	PROPOSED CONSTRUCTION DETAILS
17	PROPOSED CONSTRUCTION DETAILS
18	PROPOSED CONSTRUCTION DETAILS
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98	PROPOSED CONSTRUCTION DETAILS
99	PROPOSED CONSTRUCTION DETAILS
100	PROPOSED CONSTRUCTION DETAILS

NO.	REVISION	DATE	BY	DESIGNED BY:
				DESIGN CHECKED BY:
				DRAWN BY:
				SOFT CHECKED BY:
				SCALE: REVISIONS BY:



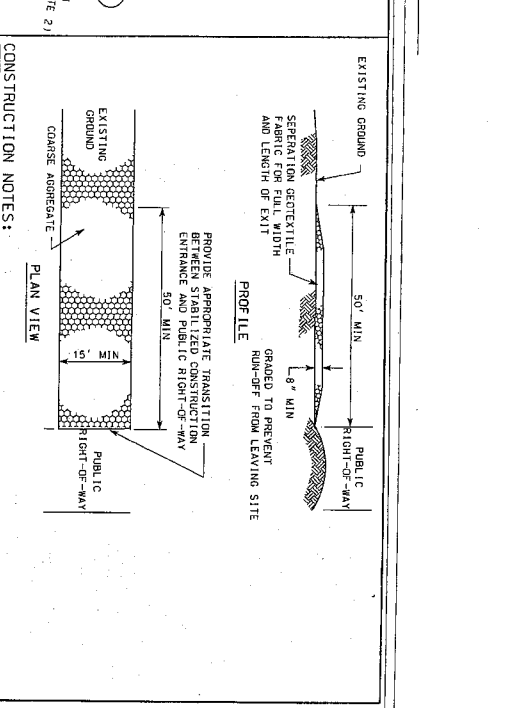
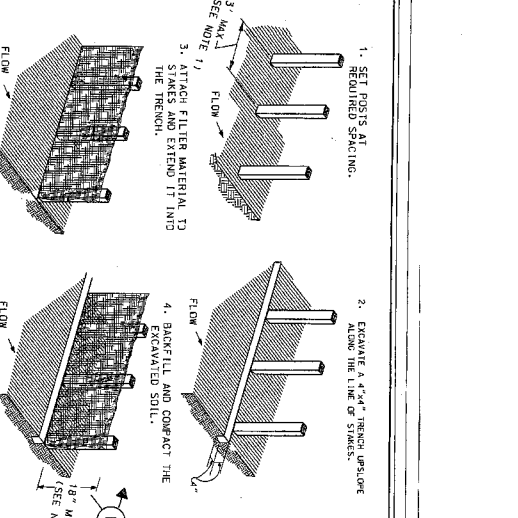
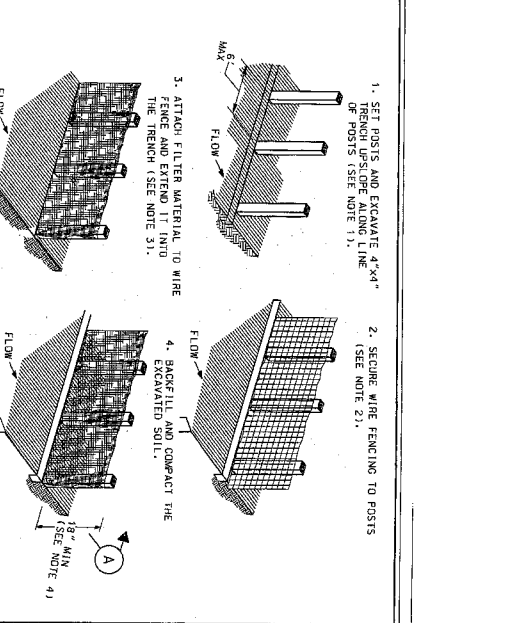
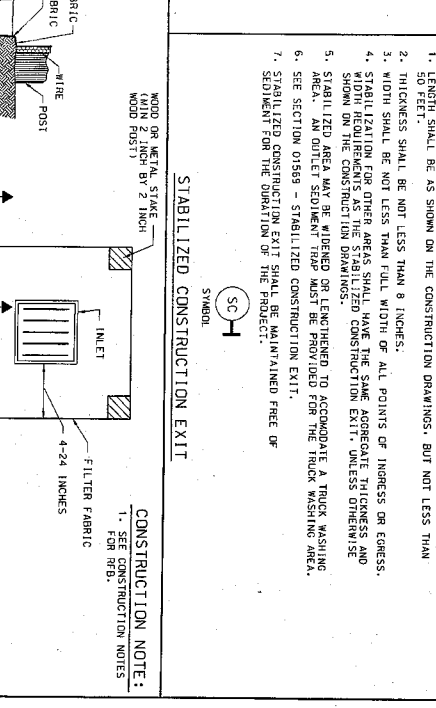
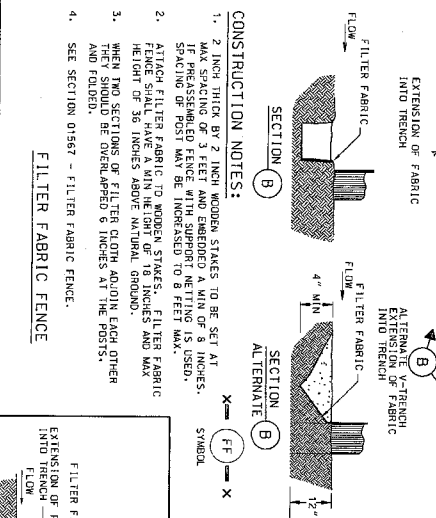
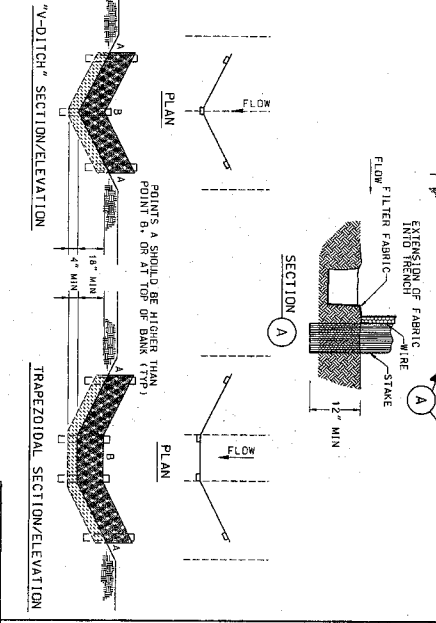
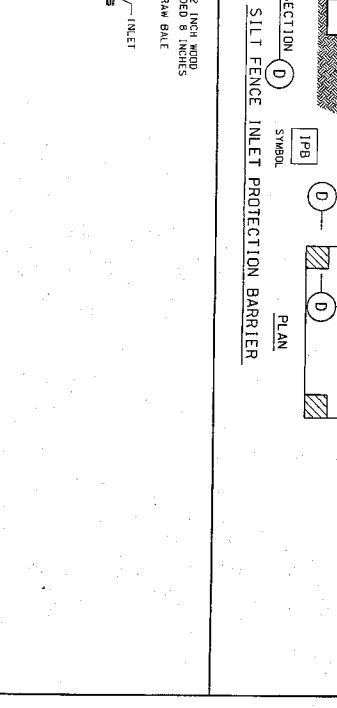
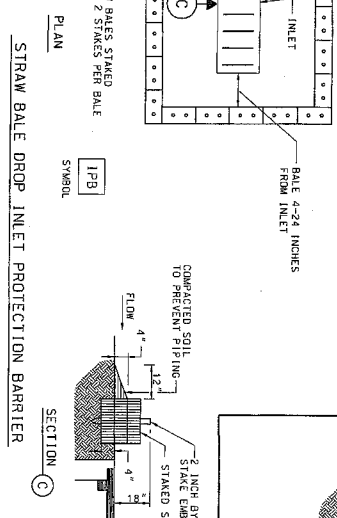
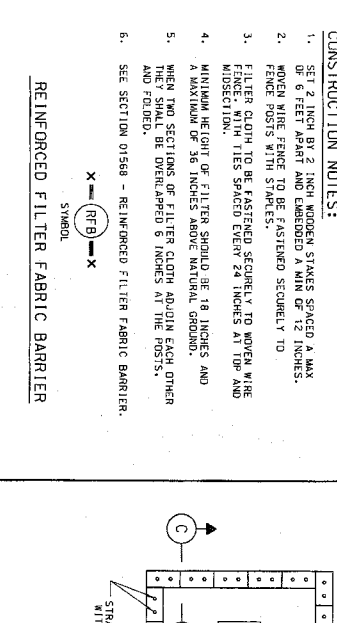
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9980 Industrial Avenue, Suite 450 N
Tucson, AZ 85710
(719) 785-7788 (719) 785-9500 Fax
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T89E-S-TRM-REG. No. 100288

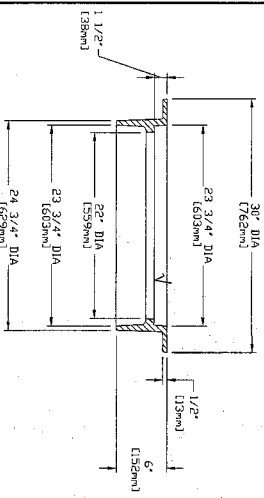
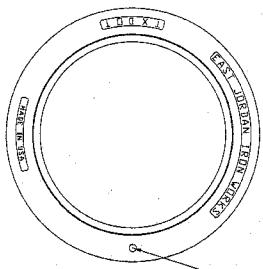
AVALON SOUTH CENTRAL PARK
POLLUTION PREVENTION DETAILS

10 SHEETS

9

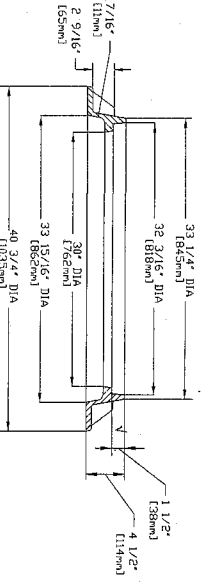
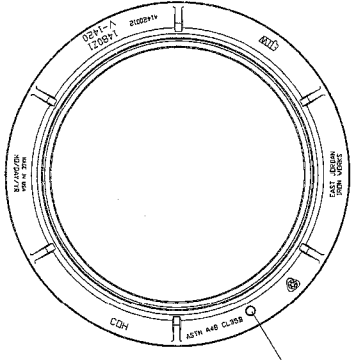
10 SHEETS





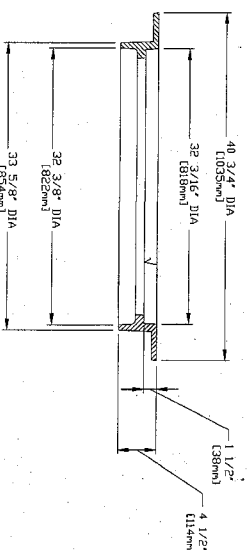
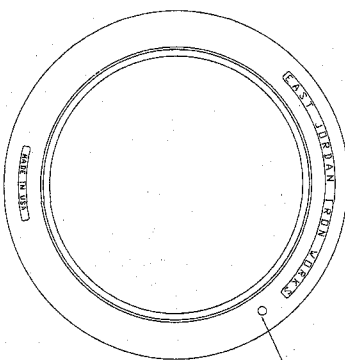
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N.T.S.

SL-DR-09



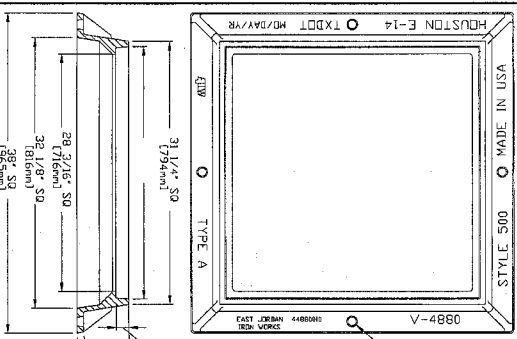
32" MANHOLE FRAME W/O MUD RING
N.T.S.

SL-DR-10



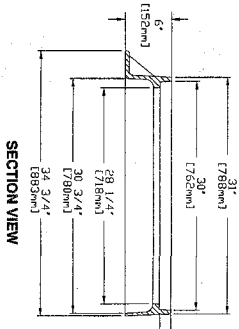
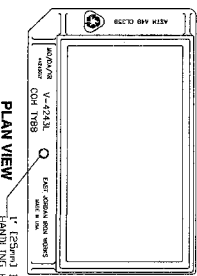
32" MANHOLE FRAME
N.T.S.

SL-DR-11



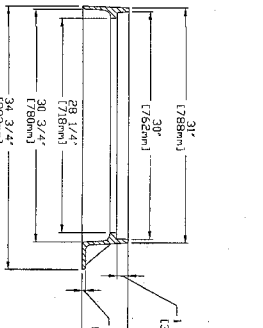
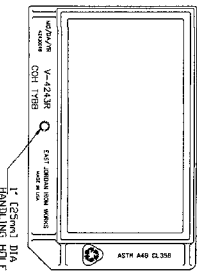
FRAME SECTION TYPE A INLET FRAME
N.T.S.

SL-DR-12



LEFT FRAME
N.T.S.

SL-DR-13

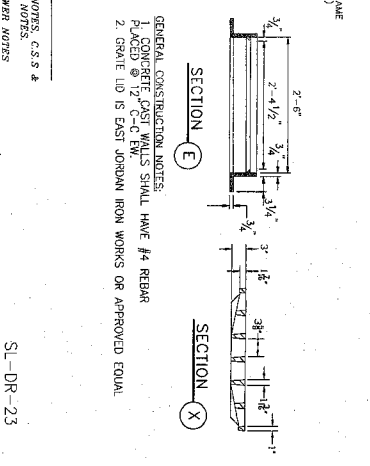
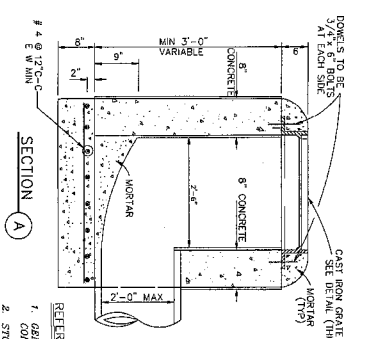
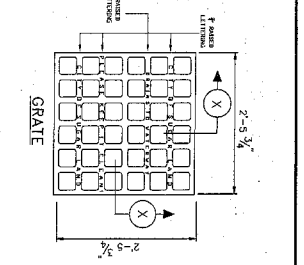
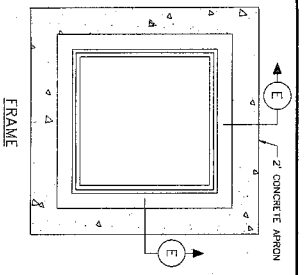
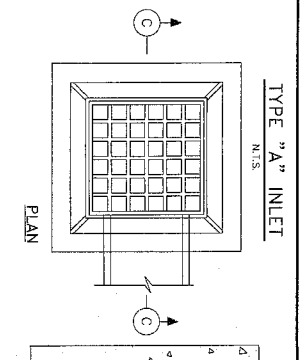
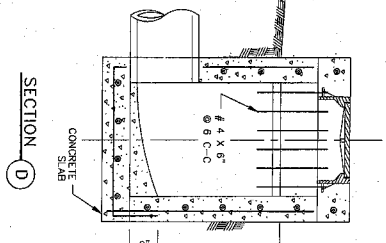
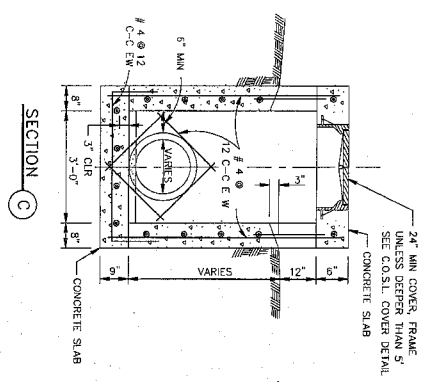
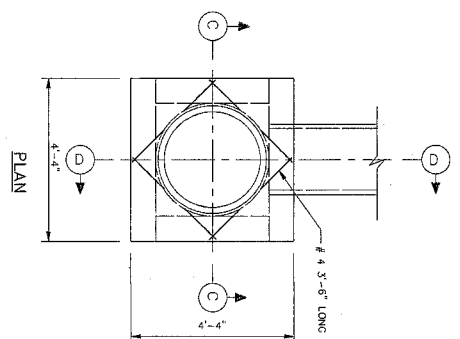
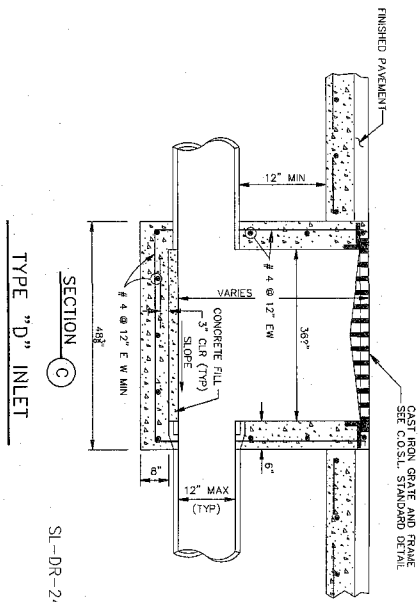
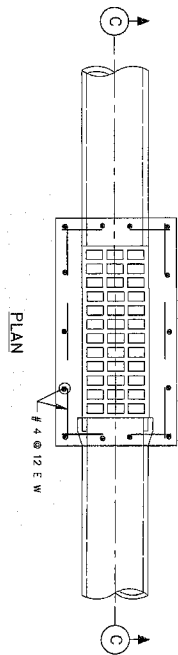


RIGHT FRAME
N.T.S.

SL-DR-14

plastic resin

<p>CITY OF SUGAR LAND, TEXAS ENGINEERING DEPARTMENT CONSTRUCTION PERMS JOB AVILON SOUTH CENTRAL PARK</p>	<p>STORIN SEWER CONSTRUCTION DETAILS</p>	<p>SL-05</p>
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GENERAL CONSTRUCTION NOTES:

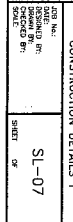
1. CONCRETE JOIST WALLS SHALL HAVE #4 REBAR
2. GRATE LID IS EAST JORDAN IRON WORKS OR APPROVED EQUAL.

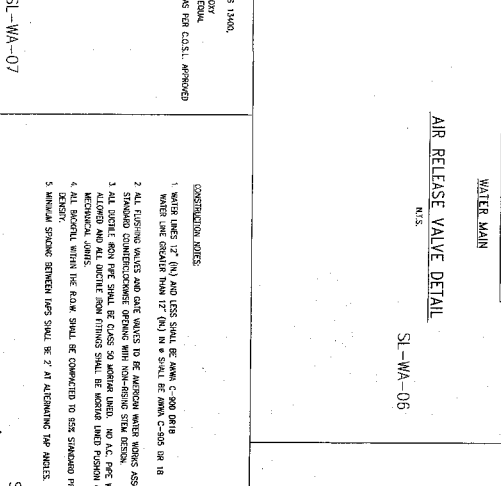
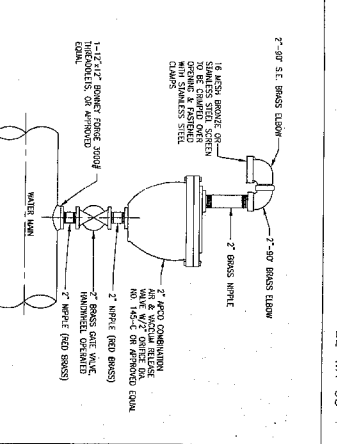
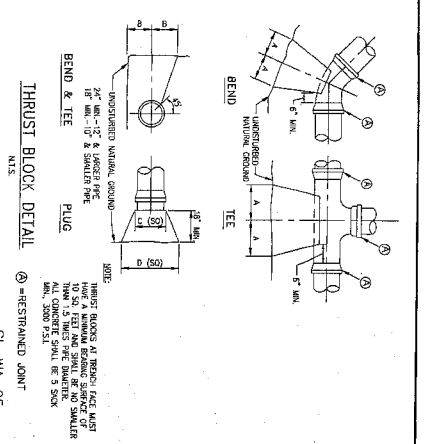
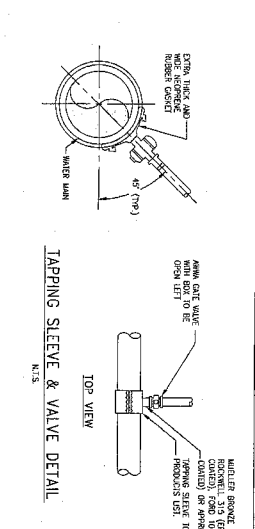
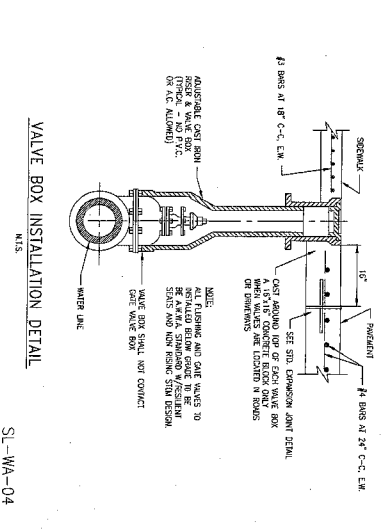
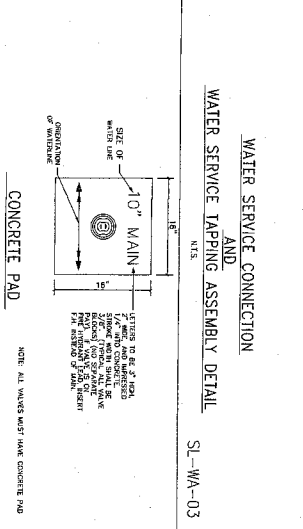
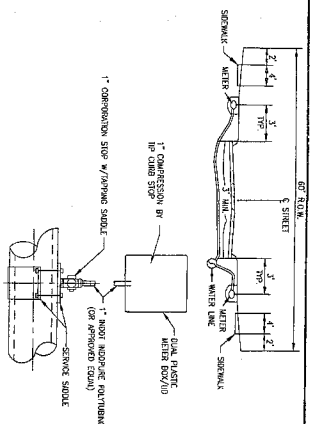
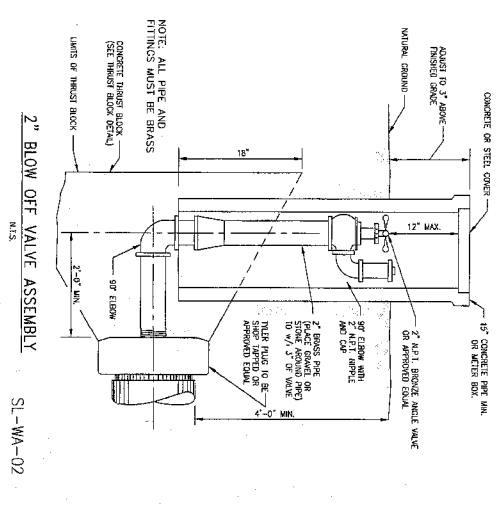
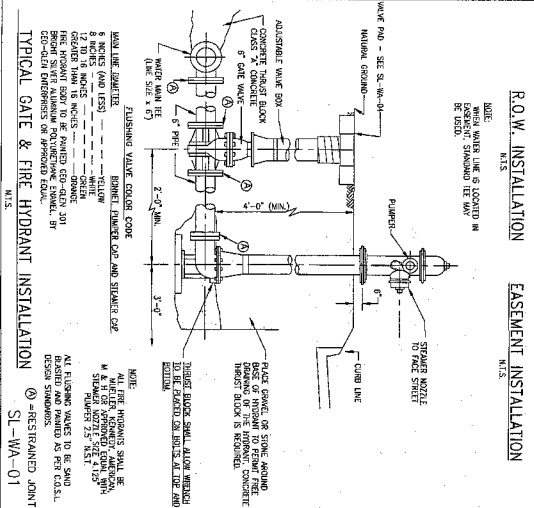
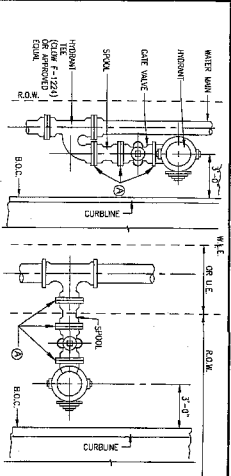
REFER TO:

1. GENERAL NOTES, C.S.S. &
2. STORM SEWER NOTES

SL-DR-23

plans and





NOTES:

1. POLYETHYLENE PIPE SHALL BE USED AS A MEANS TO PROTECT SOFT SOILS AND OTHER AREAS IN A CONDUIT SIZE EQUIVALENT.
2. ALL POLYETHYLENE PIPE SHALL BE REINFORCED WITH STEEL WIRE MESH (W.M.W.)
3. FROM POINT TO POINT THE PIPE IN TRENCH OR IN SHEET PILE.
4. POLYETHYLENE PIPE SHALL BE REINFORCED WITH STEEL WIRE MESH (W.M.W.)
5. ALL FITTINGS AND PIPE JOINTS SHALL BE 10" OF A FITTING SHALL HAVE REINFORCED JOINTS.

BENDS, TEES & PLUGS FOR PIPE OF VARIOUS SIZES

SIZE	90° BEND	45° BEND	27 1/2° BEND	TEES	PLUGS
1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
1"	1"	1"	1"	1"	1"
1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"
1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
2"	2"	2"	2"	2"	2"
2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
3"	3"	3"	3"	3"	3"
3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
4"	4"	4"	4"	4"	4"
4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"
5"	5"	5"	5"	5"	5"
5 1/2"	5 1/2"	5 1/2"	5 1/2"	5 1/2"	5 1/2"
6"	6"	6"	6"	6"	6"
6 1/2"	6 1/2"	6 1/2"	6 1/2"	6 1/2"	6 1/2"
7"	7"	7"	7"	7"	7"
7 1/2"	7 1/2"	7 1/2"	7 1/2"	7 1/2"	7 1/2"
8"	8"	8"	8"	8"	8"
8 1/2"	8 1/2"	8 1/2"	8 1/2"	8 1/2"	8 1/2"
9"	9"	9"	9"	9"	9"
9 1/2"	9 1/2"	9 1/2"	9 1/2"	9 1/2"	9 1/2"
10"	10"	10"	10"	10"	10"
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11"	11"	11"	11"	11"	11"
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12"	12"	12"	12"	12"	12"
12 1/2"	12 1/2"	12 1/2"	12 1/2"	12 1/2"	12 1/2"
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14"	14"	14"	14"	14"	14"
14 1/2"	14 1/2"	14 1/2"	14 1/2"	14 1/2"	14 1/2"
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16"	16"	16"	16"	16"	16"
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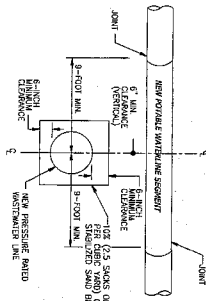
CITY OF SUGAR LAND, TEXAS
ENGINEERING DEPARTMENT

CONSTRUCTION PLANS FOR
AVALON SOUTH CENTRAL PARK

WATER LINE CONSTRUCTION DETAILS

SL-15

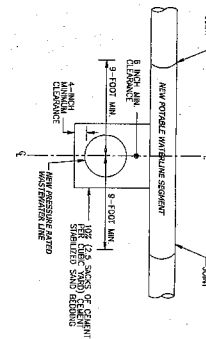
NEW PORTABLE WATERLINE CROSSING NEW PRESSURE RATED WATERLINE LINE WITH SEGMENT LENGTHS OF FOURTEEN (14) FEET OR GREATER, HAVING 6 INCHES OF VERTICAL CLEARANCE AND 4 FEET OF HORIZONTAL CLEARANCE



- WHETHER POSSIBLE, THE CROSSING SHALL BE CENTERED BETWEEN JOINTS OF THE WATERLINE LINE.
- BETWEEN JOINTS OF THE WATERLINE LINE.
- EMBEDDED WATERLINE LINE IN CLEANLY STABILIZED SAND TO AT LEAST 12" INCHES BEYOND EACH JOINT OF CROSSING SECTION OF PIPE.

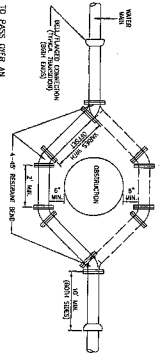
SL-WA-09

NEW PORTABLE WATERLINE CROSSING NEW PRESSURE RATED WATERLINE LINE



- WHETHER POSSIBLE, THE CROSSING SHALL BE CENTERED BETWEEN JOINTS OF THE WATERLINE LINE.
- BETWEEN JOINTS OF THE WATERLINE LINE.
- EMBEDDED WATERLINE LINE IN CLEANLY STABILIZED SAND TO AT LEAST 12" INCHES BEYOND EACH JOINT OF CROSSING SECTION OF PIPE.

SL-WA-10

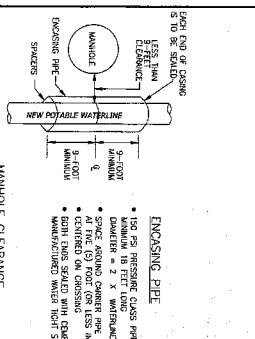


- FOR A LINE TO PASS OVER AN EXISTING WATERLINE, THE EXISTING WATERLINE SHALL BE PROTECTED BY A MINIMUM OF 18" INCHES OF CLEANLY STABILIZED SAND TO BE MAINTAINED AT ALL TIMES.
- | PIPE WALL THICKNESS | MINIMUM SAND COVER |
|---------------------|--------------------|
| 1/2" | 18" |
| 3/4" | 18" |
| 1" | 18" |
| 1 1/4" | 18" |
| 1 1/2" | 18" |
1. PIPE WALL THICKNESS SHALL BE AS FOLLOWS:

PIPE WALL THICKNESS	MINIMUM SAND COVER
1/2"	18"
3/4"	18"
1"	18"
1 1/4"	18"
1 1/2"	18"
 2. THE MINIMUM SAND COVER SHALL BE MAINTAINED AT ALL TIMES.
 3. THE MINIMUM SAND COVER SHALL BE MAINTAINED AT ALL TIMES.
 4. THE MINIMUM SAND COVER SHALL BE MAINTAINED AT ALL TIMES.
 5. ALL PIPE JOINTS SHALL BE PROTECTED BY A MINIMUM OF 18" INCHES OF CLEANLY STABILIZED SAND TO BE MAINTAINED AT ALL TIMES.

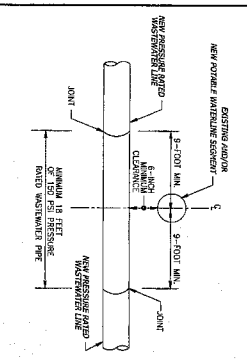
PVC WATER PIPE OFFSET ASSEMBLY SL-WA-11

DETAIL OF WATER LINE CROSSING WASTEWATER FACILITIES WHERE SEPARATION IS LESS THAN 9" (NINE FEET)



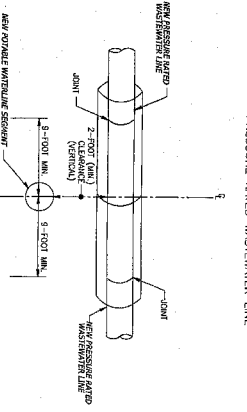
SL-WA-12

ALTERNATIVE A: PRESSURE RATED WASTEWATER PIPE



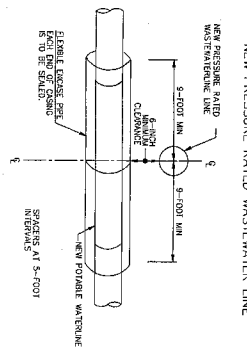
SL-WA-14

ALTERNATIVE B: EXISTING PORTABLE WATERLINE CROSSING EXISTING PRESSURE RATED WASTEWATER LINE



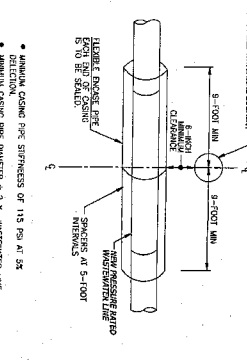
SL-WA-15

ALTERNATIVE C: ENCASE NEW PORTABLE WATERLINE UNDER A NEW PRESSURE RATED WASTEWATER LINE



SL-WA-16

ALTERNATIVE D: ENCASED WASTEWATER LINE



SL-WA-17

1/2" PIPE STIFFNESS STEEL STRIP TO CASE (4 REQUIRED)

CHANGER	MINIMUM	MAX. WALL
6"	12"	0.11
8"	12"	0.15
10"	12"	0.15
12"	12"	0.20

1. CROSSING SIZE AND THICKNESS SHALL CONFORM TO SCHEDULE ORDER PERMITS AS REQUIRED.
2. MAINTAIN 4" MINIMUM CLEARANCE BETWEEN THE CROSSING AND ALL UTILITIES.
3. DIMENSIONS ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY ALL DIMENSIONS TO ACCORDANCE WITH SCHEDULE ORDER PERMITS.

- GENERAL NOTES:
1. CONTRACTOR SHALL VERIFY CITY OF SUGAR LAND PROVISIONS REGARDING ALL CITY PERMITS IF NOT SHOWN OR OTHER APPLICABLE PERMITS, WITH WATER MAIN FIELD AND/OR UNDERGROUND UTILITIES AND RECORDS INCLUDED.
 2. IN PROJECT SPECIFICATIONS, CITY OF SUGAR LAND DESIGN STANDARDS SHALL APPLY.
 3. ALL NEW PORTABLE WATER LINES AND SANITARY SEWER FORCE MAINS SHALL BE BORED IN COMPACTED BANK SAND A MINIMUM OF 6 INCHES BELOW GRADE AND TO EITHER SIDE OF SUCH PIPE.
 4. ALL NEW PORTABLE WATER LINES SHALL BE BORED IN CLEANLY STABILIZED SAND CONFORMING TO THE REQUIREMENTS FOR SANITARY SEWER INSTALLATIONS WHERE NOT SHOWN OTHERWISE AND TO BE MAINTAINED AT ALL TIMES.
 5. CENTER STRIKED BORE SHALL BE A MINIMUM 1 1/2 INCH PER DIA. AND C.S. INSTALLED IN MAXIMUM LITS OF 8 INCHES AND 6 INCHES RESPECTIVELY.
 6. ALL NEW PORTABLE WATER LINES SHALL BE BORED IN CLEANLY STABILIZED SAND CONFORMING TO THE REQUIREMENTS FOR SANITARY SEWER INSTALLATIONS WHERE NOT SHOWN OTHERWISE AND TO BE MAINTAINED AT ALL TIMES.
 7. ALL NEW PORTABLE WATER LINES SHALL BE BORED (ENCASED) WHERE A MINIMUM OF 9 FEET SEPARATION DISTANCE OF PORTING OR CROSSING, STEERING (ENCASEMENT) IS REQUIRED FOR ALL NEW PORTABLE WATER LINES AND SANITARY SEWER FORCE MAINS.
 8. ALL NEW PORTABLE WATER LINES SHALL BE BORED (ENCASED) WHERE LESS THAN 9 FEET SEPARATION DISTANCE OF PORTING OR CROSSING, STEERING (ENCASEMENT) IS REQUIRED FOR ALL NEW PORTABLE WATER LINES AND SANITARY SEWER FORCE MAINS.
 9. ALL NEW PORTABLE WATER LINES SHALL BE BORED (ENCASED) WHERE LESS THAN 9 FEET SEPARATION DISTANCE OF PORTING OR CROSSING, STEERING (ENCASEMENT) IS REQUIRED FOR ALL NEW PORTABLE WATER LINES AND SANITARY SEWER FORCE MAINS.
 10. ALL NEW PORTABLE WATER LINES AND/OR FORCE MAINS CONSTRUCTED OF PVC SHALL BE BORED (ENCASED) WHERE LESS THAN 2 FEET VERTICAL OR 4 FEET HORIZONTAL CLEARANCE OF 10 FEET MINIMUM SHALL BE MAINTAINED AT ALL TIMES.
 11. ALL NEW PORTABLE WATER LINES AND/OR FORCE MAINS SHALL BE BORED (ENCASED) WHERE LESS THAN 2 FEET VERTICAL OR 4 FEET HORIZONTAL CLEARANCE OF 10 FEET MINIMUM SHALL BE MAINTAINED AT ALL TIMES.
 12. BORE NEW PORTABLE WATER LINES (24" DIA. AND GREATER) THROUGH THE USE OF PVC PIPE METHODS AND STEERING SHALL BE USED TO PROVIDE THE REQUIRED MINIMUM CLEARANCES OR SEPARATION DISTANCES OF 10 FEET FROM THE POINT OF CROSSING.
 13. ALL NEW PORTABLE WATER LINES SHALL BE BORED (ENCASED) WHERE LESS THAN 9 FEET SEPARATION DISTANCE OF PORTING OR CROSSING, STEERING (ENCASEMENT) IS REQUIRED FOR ALL NEW PORTABLE WATER LINES AND SANITARY SEWER FORCE MAINS.
 14. ALL NEW PORTABLE WATER LINES SHALL BE BORED (ENCASED) WHERE LESS THAN 9 FEET SEPARATION DISTANCE OF PORTING OR CROSSING, STEERING (ENCASEMENT) IS REQUIRED FOR ALL NEW PORTABLE WATER LINES AND SANITARY SEWER FORCE MAINS.
 15. REFER TO GENERAL SPECIFICATIONS, WATER AND C.S. NOTES.

SL-WA-18

CITY OF SUGAR LAND, TEXAS
 CONSOLIDATION PLANS FOR
 AMALON SOUTH CENTRAL PARK
 ENGINEERING DEPARTMENT

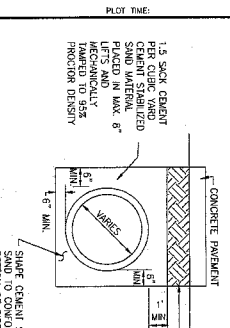
WATER LINE CROSSING DETAILS

SL-16

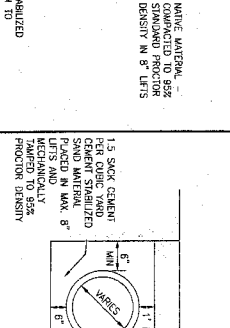
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 SHEET: 16 OF 16

APPROVED: [Signature]
 DATE: 11/11/2011

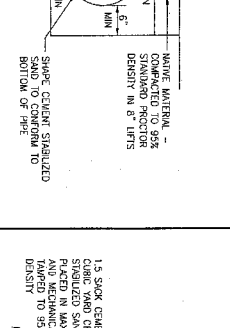
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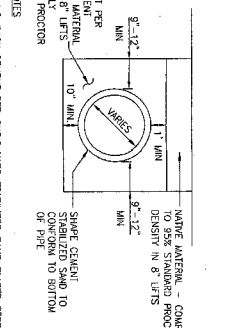
SL-BB-06
 BEDDING DETAIL FOR REINFORCED CONCRETE PIPE UNDER ROADWAY PAVEMENT
 CLASS "A-A"
 N.T.S.



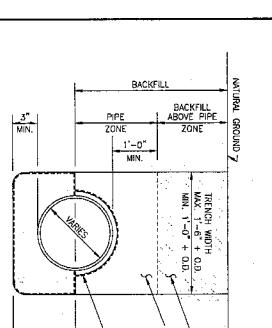
SL-BB-07
 BEDDING DETAIL FOR REINFORCED CONCRETE PIPE 36" DIAMETER & SMALLER
 N.T.S.



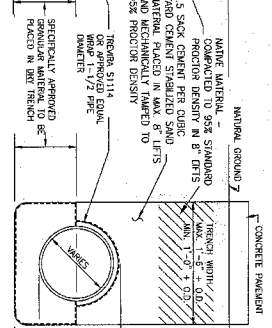
SL-BB-08
 BEDDING DETAIL FOR REINFORCED CONCRETE PIPE 42" TO 108" DIAMETER
 N.T.S.



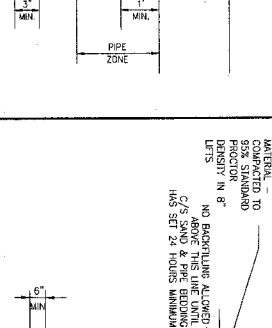
SL-BB-09
 BEDDING DETAIL FOR REINFORCED CONCRETE PIPE 42" TO 108" DIAMETER
 N.T.S.



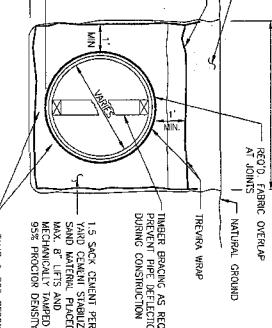
SL-BB-10
 MODIFIED "A-A"
 N.T.S.



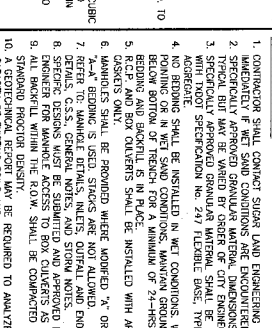
SL-BB-11
 BEDDING DETAIL FOR STORM SEWER-CORRUGATED METAL PIPE
 N.T.S.



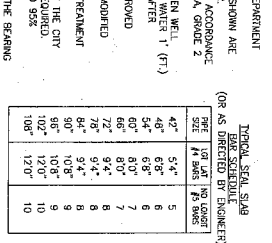
SL-BB-12
 BEDDING DETAIL FOR REINFORCED CONCRETE BOX CULVERT UNDER ROADWAY PAVEMENT
 N.T.S.



SL-BB-13
 BEDDING DETAIL FOR REINFORCED CONCRETE BOX CULVERT IN CAST-IN-PLACE
 N.T.S.



SL-BB-14
 BEDDING DETAIL FOR REINFORCED CONCRETE BOX CULVERT W/MODIFIED BEDDING
 N.T.S.



SL-BB-15
 BEDDING DETAIL FOR REINFORCED CONCRETE BOX CULVERT UNDER ROADWAY PAVEMENT W/MODIFIED BEDDING
 N.T.S.

NOTES:
 1. 1.5-SACK CEMENT PER CUBIC YARD STABILIZED SAND PLACED BEFORE PIPE IS PLACED (8" MINIMUM FOR 42" TO 60", 12" MINIMUM FOR 66" TO 108").

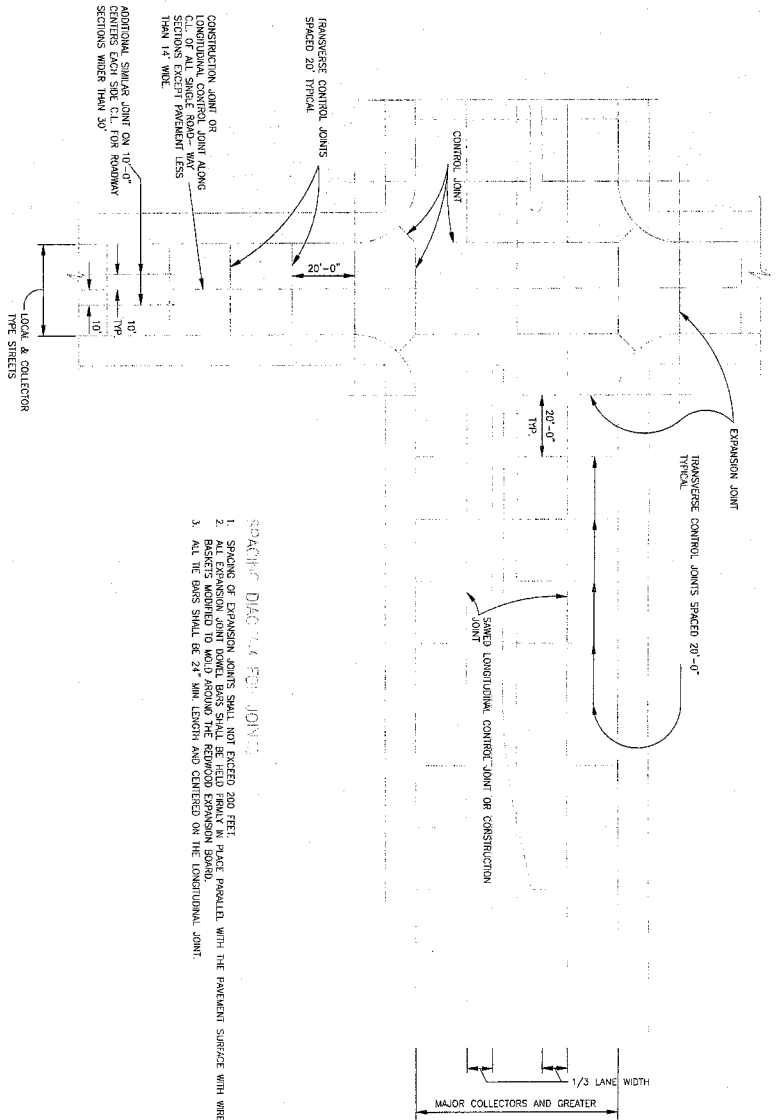
NOTES:
 1. 1.5-SACK CEMENT PER CUBIC YARD STABILIZED SAND PLACED BEFORE PIPE IS PLACED (8" MINIMUM FOR 42" TO 60", 12" MINIMUM FOR 66" TO 108").

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NOTES:
 1. 1.5-SACK CEMENT PER CUBIC YARD STABILIZED SAND PLACED BEFORE PIPE IS PLACED (8" MINIMUM FOR 42" TO 60", 12" MINIMUM FOR 66" TO 108").



- NOTES:**
1. SPACING OF EXPANSION JOINTS SHALL NOT EXCEED 200 FEET.
 2. ALL EXPANSION JOINT TYPED BRASS SHALL BE FIELD PROTECTIVE PAINT PROTECTED WITH THE PAVEMENT SURFACE WITH WHITE PAINT.
 3. ALL THE BRASS SHALL BE 24" MIN. LENGTH AND CENTERED ON THE LONGITUDINAL JOINT.

TRANSVERSE CONTROL JOINTS
SPACED 20' TYPICAL

EXPANSION JOINT

TRANSVERSE CONTROL JOINTS SPACED 20'-0" TYPICAL

SPACED LONGITUDINAL CONTROL JOINT OR CONSTRUCTION JOINT

CONTROL JOINT

20'-0"

20'-0"

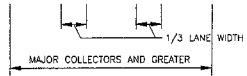
10'



10'

10'

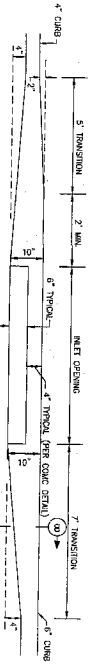
LOCAL & COLLECTOR TYPE SHEETS

ADDITIONAL SPACER JOINT ON 10'-0" SPACING SECTION ON HIGHWAY SECTIONS WIDER THAN 30' THAN 14" WIDE.



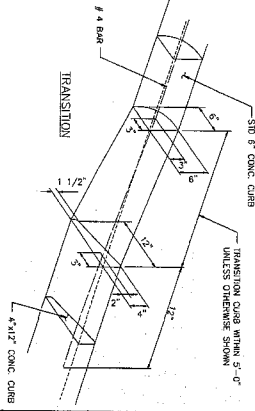
 <p>CITY OF SUGAR LAND, TEXAS ENGINEERING DEPARTMENT</p>		 <p>JEFF STRICK Professional Engineer</p>
<p>CONSTRUCTION PLANS FOR AYALON SOUTH CENTRAL PARK</p>		
<p>CONCRETE PAVEMENT CONSTRUCTION DETAILS</p>		
<p>DATE: 12/15/22</p> <p>SCALE: AS SHOWN</p>	<p>SHEET NO. SL-22</p> <p>TOTAL SHEETS: 22</p>	<p>12/15/22</p>

TYPICAL CURB TRANSITION FOR INLET INSTALLATION



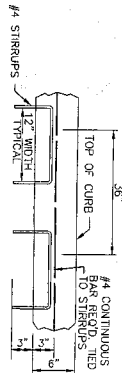
SL-ST-13

TYPICAL CURB TRANSITION



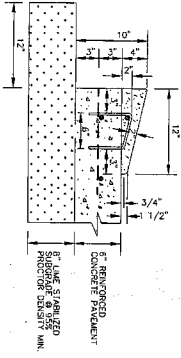
SL-ST-15

TYPICAL CONCRETE CURB REINFORCING



SL-ST-16

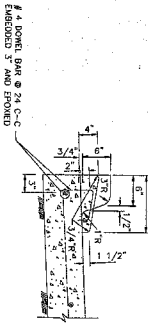
4"x12" MOUNTABLE CONCRETE CURB



SL-ST-17

- NOTES:
- 1) 10 LBS. OF APPROVED NON-METALLIC FIBER MESH PER C/Y IN 4"x12" CURBS.
 - 2) #4 RE-BAR STRIPS TO BE PLACED AT INTERVALS OF 2' (7) C-C.
 - 3) APPROVED CURB MUST ALLOW FOR THE 10' DECK SPACING.
 - 4) APPROVED CURB MUST ALLOW FOR THE 10' DECK SPACING.

4-INCH X 12-INCH TRANSITION CURB

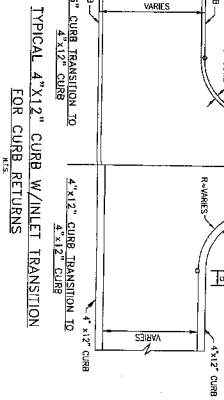


SL-ST-18

4"x12" MOUNTABLE CONCRETE CURB AND TRANSITION CURB DETAILS

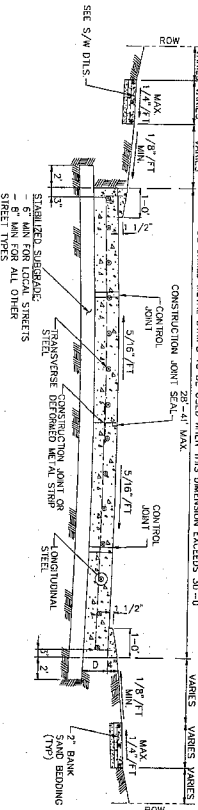
1. 4-INCH CONCRETE CURB TO BE CONSTRUCTED ON ALL EAST-WAYWAYS, ISLANDS AND TRANSVERSE JOINTS OF CONSTRUCTION JOINTS OF 4-INCH X 12-INCH CONCRETE CURB ON 4-INCH X 12-INCH CONCRETE CURB.
2. ALL 4-INCH X 12-INCH CONCRETE CURBS TO BE POURED SEPARATE FROM PROPOSED CONCRETE PAVEMENT.
3. TRANSVERSE JOINTS OF 4-INCH X 12-INCH CONCRETE CURB TO BE REINFORCED WITH #4 REBAR STRIPS AND REINFORCING STEEL AS SHOWN IN 4-INCH X 12-INCH TRANSITION CURB DETAIL.

SL-ST-20



TYPICAL 4"x12" CURB W/INLET TRANSITION FOR CURB RETURNS

SL-ST-14



TYPICAL SINGLE ROADWAY SECTION FOR CONCRETE PAVEMENT WITH 4"x12" CURB



SEE 4" X 12" MOUNTABLE CURB DETAIL (THIS SHEET)

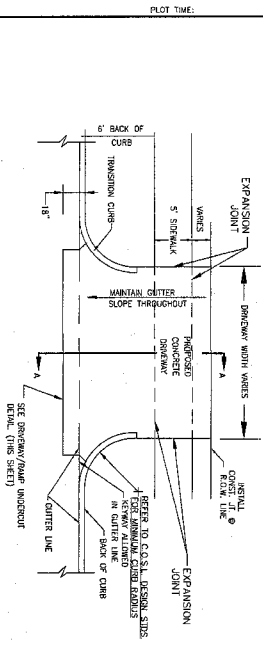
SL-ST-19

CONSTRUCTION NOTES:

1. 5 INCH, 5.5 SACK CEMENT PER CURB YARD CONCRETE 3000 PSI REINFORCED CONCRETE WITH #4 BARS 24 INCHES C-C, E.K. IS THE MINIMUM ACCEPTABLE PAVEMENT CONSTRUCTION FOR RESIDENTIAL STREETS.
2. 7 INCH, 5.5 SACK CEMENT PER CURB YARD CONCRETE, 3000 PSI REINFORCED CONCRETE WITH #4 BARS 24 INCHES C-C, IS THE MINIMUM ACCEPTABLE PAVEMENT CONSTRUCTION FOR COLLECTOR STREETS.
3. EIGHT (8) INCH, 5.5 SACK CEMENT PER CURB YARD CONCRETE WITH #4 BARS 24 INCHES C-C, IS THE MINIMUM ACCEPTABLE PAVEMENT CONSTRUCTION FOR ARTERIAL STREETS.
4. TRANSVERSE EXPANSION JOINTS SHALL BE PLACED AT ALL POINTS OF CURVATURE, POINTS OF TANGENCY AND ALL INTERSECTION CLAVING TO TYPICAL SPACING SHALL BE 200' AND BE SEALED CONFORMING TO TYPICAL.
5. TRANSVERSE CONTROL JOINTS ARE REQUIRED AT MAXIMUM SPACING OF 20' TO 25' FOR LOCAL CURB JOINTS TO BE SEALED WITH SPECIAL JOINT SEALANT ASTIM-D-1500.
6. TRANSVERSE CONTROL JOINTS TO BE SEALED WITH SPECIAL JOINT SEALANT (ELASTOMERIC TYPE NOT FORCED).
7. STORM WATER POLLUTION PROTECTION SHALL BE DESIGNED, CONSTRUCTED, MAINTAINED AND SHALL BE IN TOTAL COMPLIANCE WITH THE STORM WATER QUALITY MANUAL OF THE CITY OF SUGAR LAND.
8. UNSURABLE SUBGRADE SHALL BE EXCAVATED AND REPLACED WITH CEMENT STABILIZED SAND.
9. USE 1 1/2" REMOVED STRIKES FOR HEADERS.
10. EDGE ALL SIDES WITH EDGING TOOL.
11. DOWNS SHALL BE 3/4" DIAMETER WITH MINIMUM 8" PENETRATION (BOTH SIDES).
12. IF IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF SUGAR LAND OF ANY SITUATION PREVIOUS FROM TO CONSTRUCTION OF DRIVEWAY.
13. REFER TO GENERAL C.S.S. AND PAVEMENT NOTES.
14. 10 LBS. OF APPROVED POLYPROPYLENE FIBER MESH PER C/Y IN 4"x12" CURBS REQUIRED.

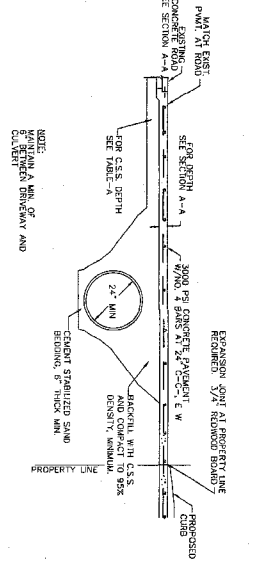
SL-ST-20

DATE:	BY:	CHKD:	APP'D:
 			
CITY OF SUGAR LAND, TEXAS ENGINEERING DEPARTMENT CONSULTING ENGINEER AMALON SOUTH CENTRAL PARK CONSTRUCTION DETAILS			
DATE:	BY:	CHKD:	APP'D:
RESIDENTIAL CURB CONSTRUCTION DETAILS			
DATE:	BY:	CHKD:	APP'D:
SL-23 SHEET OF			



6" CONCRETE CURB
DRIVEWAY PLAN
N.T.S.

SI-ST-41

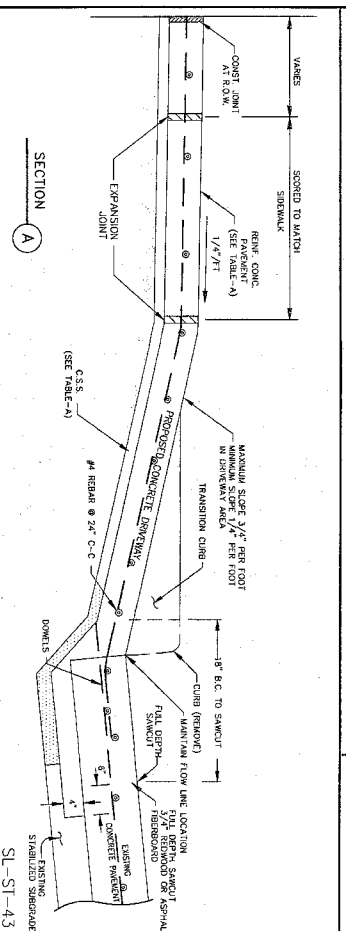


CONCRETE APRON DETAIL - DRIVEWAY PROFILE
FOR CULVERT DRAINAGE
N.T.S.

SI-ST-42

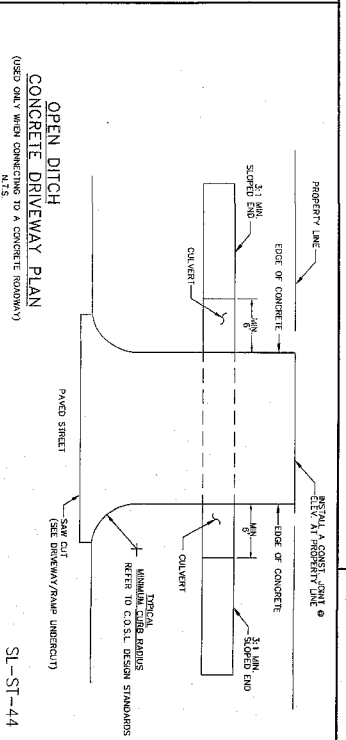
- NOTES:
- 1) SAW CUT & BRUSHED NO MORE THAN 12 HOURS PRIOR TO PROCEEDING CONCRETE PLACEMENT.
 - 2) PROPERTY LINE SHALL BE OVER EXCAVATED & REPAIRED WITH CONCRETE.
 - 3) IT IS CONTRACTOR'S RESPONSIBILITY TO NOTIFY SLOPE LAND OF ANY EROSION PROBLEMS PRIOR TO CONSTRUCTION OF DRIVEWAY.
 - 4) USE 1"x2" HEATED REINFORCING FOR HEADER.
 - 5) BORE ALL HOLES WITH EXISTING TOOL AND BRUSH FINISH.
 - 6) FOR AGGREGATE DRIVES, PAVEMENT SHALL HAVE A DEPTH OF 6" (MIN).
 - 7) EXPANSION JOINT AT PROPERTY LINE REQUIRED 3/4" REINFORCED BOARD WITH NO. 4 DOWELS MINIMUM.
 - 8) MAXIMUM ALLOWABLE DRIVEWAY GRADE IN FIELD ROW IS SEE.
 - 9) DRIVEWAY GRADE MUST MEET D.A.A. AND T.A.S. SPURK SLOPE. SPURK SLOPE MUST BE SCORED TO MATCH ADJACENT DRIVEWAY. IF A 3/4" REMOVED EXPANSION JOINT WITH DOWELS AT R.O.W. LINE, REFER TO GENERAL, C.S.S., ASPHALT, AND CONCRETE PAVEMENT NOTES.

SI-ST-49



SECTION A
4" x 12" CONCRETE CURB
DRIVEWAY PLAN
N.T.S.

SI-ST-43



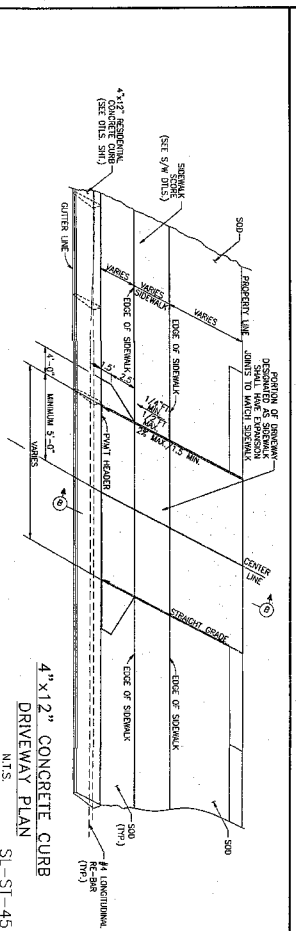
OPEN DITCH
CONCRETE DRIVEWAY PLAN
(USED ONLY WHEN CONNECTING TO AN ASPHALT ROADWAY)
N.T.S.

SI-ST-44

TABLE-A

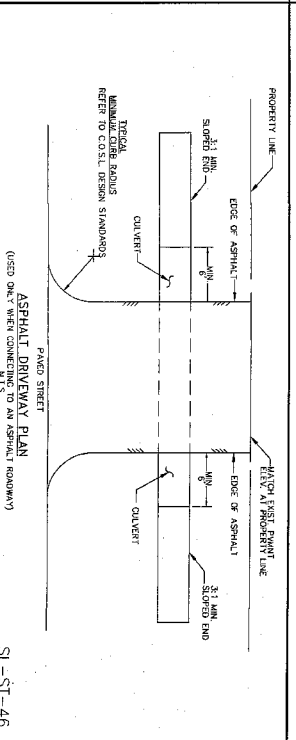
ITEM	DESCRIPTION	QUANTITY	UNIT
1	CEMENT STABILIZED SAND	2.5	SQ. YD.
2	REBAR	4	LINEAL FEET
3	CONCRETE	8	CY
4	REINFORCED CONCRETE	8	CY
5	CONCRETE	4	MANHOLE
6	CONCRETE	4	MANHOLE
7	CONCRETE	8	MANHOLE

DRIVEWAY
PAVEMENT
CONSTRUCTION TABLE



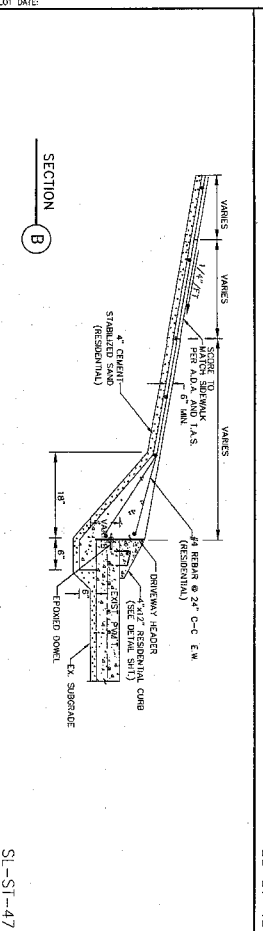
SECTION B
4" x 12" CONCRETE CURB
DRIVEWAY PLAN
N.T.S.

SI-ST-45



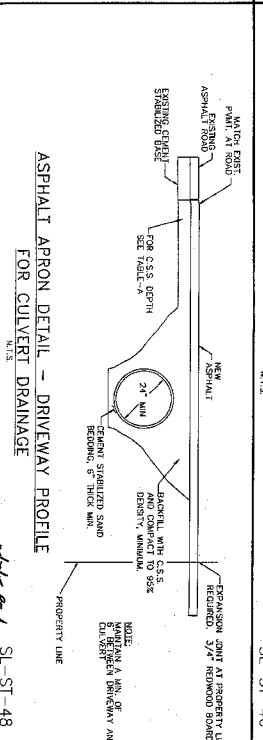
ASPHALT DRIVEWAY PLAN
(USED ONLY WHEN CONNECTING TO AN ASPHALT ROADWAY)
N.T.S.

SI-ST-46



SECTION B
ASPHALT APRON DETAIL - DRIVEWAY PROFILE
FOR CULVERT DRAINAGE
N.T.S.

SI-ST-47



ASPHALT APRON DETAIL - DRIVEWAY PROFILE
FOR CULVERT DRAINAGE
N.T.S.

SI-ST-48

DRIVEWAY
CONSTRUCTION DETAILS

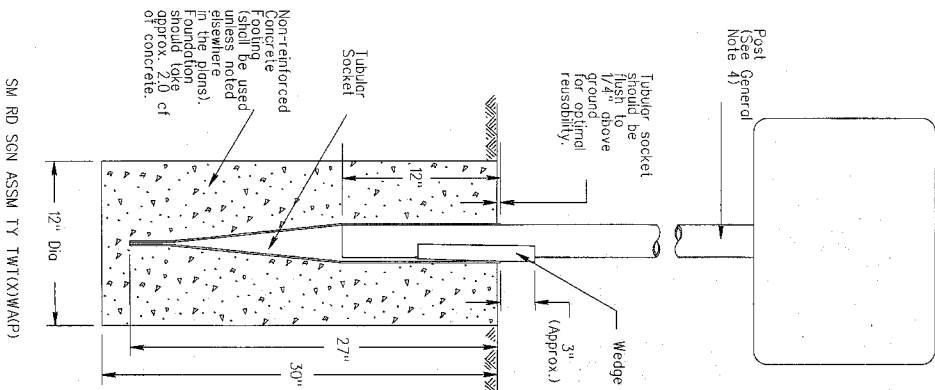
SI-ST-27

CITY OF SUGAR LAND, TEXAS
ENGINEERING DEPARTMENT

CONSTRUCTION PLANS FOR:
AYALON SOUTH CENTRAL PARK

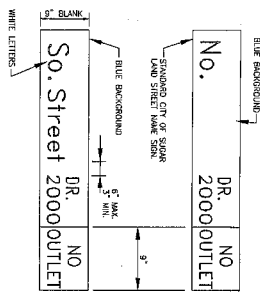
DATE: 11/11/2011
DRAWN BY: [Signature]
CHECKED BY: [Signature]
SCALE: AS SHOWN

Wedge Anchor System



SI-ST-62

DETAIL OF STANDARD STREET NAME SIGN

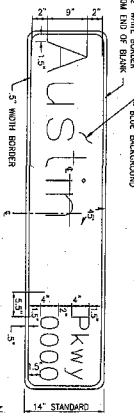


NOTES:

1. HORIZONTAL SIGN, UPPER CASE LETTERS, 9" UPPER CASE LETTERS
2. REFER TO COSTL DESIGN STANDARDS FOR MORE INFO.

SI-ST-66

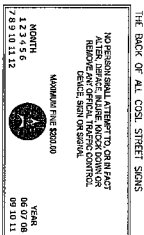
DETAIL OF SIGN FOR MAST ARM TRAFFIC SIGNAL POLES



NOTES:

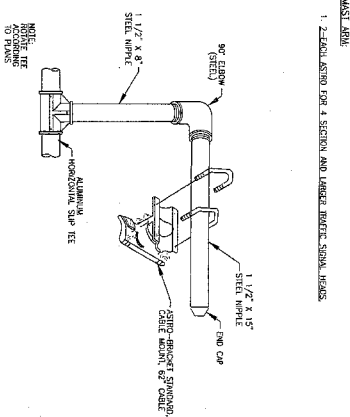
1. HORIZONTAL SIGN, UPPER CASE LETTERS, 9" UPPER CASE LETTERS
2. REFER TO COSTL DESIGN STANDARDS FOR MORE INFO.

SI-ST-68



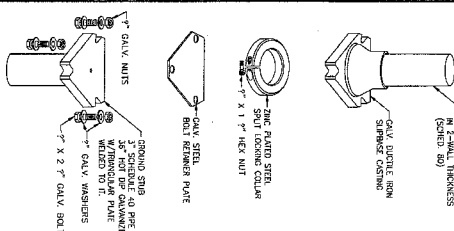
SIGN I.D. TAG DETAIL

SI-ST-68



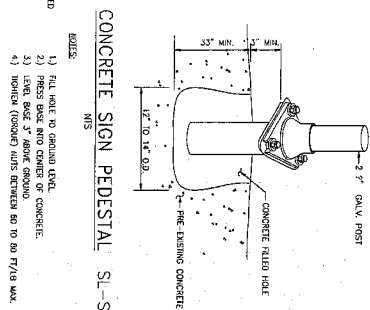
ASTRO BRACKET CABLE MOUNT DETAIL

SI-ST-63



POZ-LOCK SLIPBASE SYSTEM

SI-ST-64



CONCRETE SIGN PEDESTAL

SI-ST-65

- GENERAL CONSTRUCTION NOTES:**
1. SIGNPOST WITHIN STREET NAME SIGN TO BE TOP OF SIGN. SIGNPOST WITHIN MAST ARM TRAFFIC SIGNAL.
 2. SIGNPOST WITHIN STREET NAME SIGN TO BE APPROXIMATE 2 FEET FROM POLE ABOVE ON-COMMAND TRAFFIC ON EACH TRAFFIC SIGNAL.
 3. SIGNPOST WITHIN STREET NAME SIGN APPROXIMATE 2 FEET FROM POLE ABOVE ON-COMMAND TRAFFIC ON EACH TRAFFIC SIGNAL.
 4. THE FIRST LETTER OF EACH WORD SHALL BE UPPER CASE. SIGNPOST WITHIN STREET NAME SIGN SHALL BE UPPER CASE. ALL INDIVIDUAL LETTERS SHALL BE UPPER CASE. SIGNPOST WITHIN STREET NAME SIGN SHALL BE UPPER CASE.
 5. LETTERS FOR CORNER TRAFFIC SIGNAL SHALL BE UPPER CASE. SIGNPOST WITHIN STREET NAME SIGN SHALL BE UPPER CASE.
 6. USE ANCHORED BOLTS ONLY. THE DESIGN ON APPROVED COUL.
 7. USE ANCHORED BOLTS ONLY. THE DESIGN ON APPROVED COUL.
 8. MINIMUM SIGN THICKNESS OF SIGN: 1/2" SIGN: 1/2" SIGN: 1/2"

CITY OF SUGAR LAND, TEXAS ENGINEERING DEPARTMENT	CITY OF SUGAR LAND, TEXAS ENGINEERING DEPARTMENT
CONSTRUCTION PLANS JOB:	CONSTRUCTION PLANS JOB:
AVALON SOUTH CENTRAL PARK	AVALON SOUTH CENTRAL PARK
SIGN CONSTRUCTION DETAILS	SIGN CONSTRUCTION DETAILS
SI-ST-32	SI-ST-32

HYPER-CHLORINATED WATER NOTES

1. HYPER-CHLORINATED WATER SHALL NOT BE DISCHARGED TO THE STORM DRAINAGE SYSTEM UNLESS THE WATER IS FIRST TREATED TO A pH OF 6.5 OR LESS BY CHEMICALLY TREATING THE HYPERCHLORINATED WATER WITH SODIUM BICARBONATE OR SODIUM CARBONATE.
2. VELOCITY DISPERSION DEVICES SHOULD BE INSTALLED TO PREVENT VELOCITY DISPERSION DEVICES SO IT SHOULD NOT BE USED TO WATER VELOCITY DISPERSION DEVICES.
3. VEGETATION THAT IS BEING USED FOR STABILIZATION, VEGETATED FILTERS OR OTHER VEGETATION SHOULD BE PROTECTED.
4. HYPER-CHLORINATED WATER SHOULD NOT BE APPLIED TO ANY VEGETATION AREA UNTIL VEGETATION ATTENUATION OCCURS. THE AREA MAY BE A DRY AREA UNTIL VEGETATION ATTENUATION OCCURS. THE AREA MAY BE A DRY AREA UNTIL VEGETATION ATTENUATION OCCURS.
5. VEGETATION ATTENUATION OF THE CULVERT MAY BE AIDED BY REMOVING VEGETATION FROM THE CULVERT AREA.
6. VEGETATION ATTENUATION OF THE CULVERT MAY BE AIDED BY REMOVING VEGETATION FROM THE CULVERT AREA.
7. VEGETATION ATTENUATION OF THE CULVERT MAY BE AIDED BY REMOVING VEGETATION FROM THE CULVERT AREA.

SPILL AND LEAK RESPONSE NOTES

1. RECORDS OF RELEASES THAT EXCEED THE REPORTABLE QUANTITY (RQ) FOR OIL AND HAZARDOUS SUBSTANCES SHOULD BE MAINTAINED IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
2. EMERGENCY CONTACT INFORMATION AND SPILL RESPONSE PROCEDURES SHOULD BE POSTED IN AN AVAILABLE AREA FOR ACCESS BY ALL EMPLOYEES AND SUBCONTRACTORS.
3. SPILL CONTAINMENT APTS SHOULD BE MAINTAINED FOR REGULATORY PRODUCTS AND MATERIALS.
4. SPILL CONTAINMENT APTS SHOULD BE MAINTAINED FOR REGULATORY PRODUCTS AND MATERIALS.
5. SPILL CONTAINMENT APTS SHOULD BE MAINTAINED FOR REGULATORY PRODUCTS AND MATERIALS.
6. SPILL CONTAINMENT APTS SHOULD BE MAINTAINED FOR REGULATORY PRODUCTS AND MATERIALS.
7. SPILL CONTAINMENT APTS SHOULD BE MAINTAINED FOR REGULATORY PRODUCTS AND MATERIALS.

SANITARY WASTE NOTES

1. THE CONTRACTOR SHALL PROVIDE AN APPROPRIATE NUMBER OF PORTABLE TOILETS BASED ON THE NUMBER OF EMPLOYEES USING THE TOILETS AND THE DURATION OF THE PROJECT.
2. SANITARY FACILITIES SHALL BE PLACED ON A MINIMUM OF 50 FEET AWAY FROM ANY EXISTING OR PROPOSED WATER BODIES OR STORM DRAINAGE SYSTEMS.
3. PORTABLE TOILETS SHALL BE MAINTAINED AND REPLENISHED WITH TOILET PAPER AND TOILET BOWL FLUSHING FLUID AS NECESSARY.
4. PORTABLE TOILETS SHALL BE MAINTAINED AND REPLENISHED WITH TOILET PAPER AND TOILET BOWL FLUSHING FLUID AS NECESSARY.
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8. PORTABLE TOILETS SHALL BE MAINTAINED AND REPLENISHED WITH TOILET PAPER AND TOILET BOWL FLUSHING FLUID AS NECESSARY.


SUBGRADE STABILIZATION NOTES

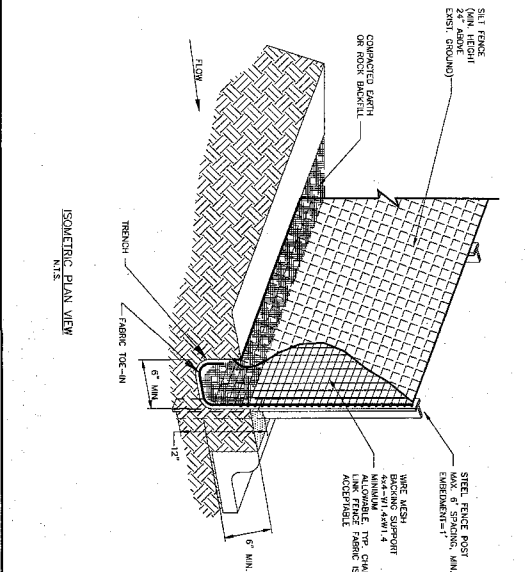
1. MINIMIZE THE DISRUPTION OF THE SUBGRADE STABILIZATION BY THE CONSTRUCTION OF THE STABILIZATION SYSTEM.
2. STABILIZATION SHALL BE APPLIED AT RATES THAT RESULT IN NO SOIL OFF SITE.
3. STABILIZATION SHALL NOT OCCUR IMMEDIATELY BEFORE AND DURING RAINFALL.
4. NO TRAFFIC OTHER THAN WATER TRUCKS AND MINING EQUIPMENT SHALL BE ALLOWED TO PASS OVER THE AREA BEING STABILIZED UNTIL AFTER STABILIZATION IS COMPLETE.
5. AREA ADJACENT AND DOWNSTREAM OF STABILIZED AREAS SHALL BE PROTECTED FROM EROSION.
6. EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE STABILIZATION PROCESS.
7. IF SOIL STABILIZERS ARE STORED ON SITE, THEY SHALL BE CONSIDERED HAZARDOUS WASTE AND STORED ACCORDING TO ALL APPLICABLE REGULATIONS.
8. THE CONTRACTOR SHALL MAINTAIN BARRIERS TO ALL LIMITS AND PERMITS CONNECTED TO THE STORM SEWER SYSTEMS TO PREVENT LEAK FROM ENTERING THE SOIL SYSTEM.

DEBRIS AND TRASH NOTES

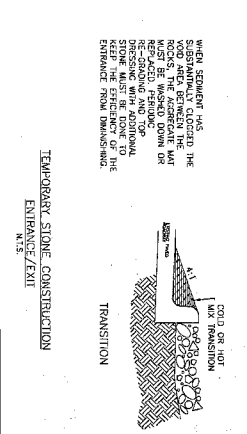
1. ALL WASTE, SPURS AND STUMP AREAS SHALL BE LOCATED A MINIMUM OF 20 FEET AWAY FROM ALLEYS, STREETS, PARKS, BARRIERS, WAYS, CHANNELS AND DRAINAGE SYSTEMS.
2. WASTE, SPURS AND STUMP AREAS SHALL BE MAINTAINED AND REPLENISHED WITH TOILET PAPER AND TOILET BOWL FLUSHING FLUID AS NECESSARY.
3. WASTE, SPURS AND STUMP AREAS SHALL BE MAINTAINED AND REPLENISHED WITH TOILET PAPER AND TOILET BOWL FLUSHING FLUID AS NECESSARY.
4. WASTE, SPURS AND STUMP AREAS SHALL BE MAINTAINED AND REPLENISHED WITH TOILET PAPER AND TOILET BOWL FLUSHING FLUID AS NECESSARY.
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15. WASTE, SPURS AND STUMP AREAS SHALL BE MAINTAINED AND REPLENISHED WITH TOILET PAPER AND TOILET BOWL FLUSHING FLUID AS NECESSARY.

1/2/01/01

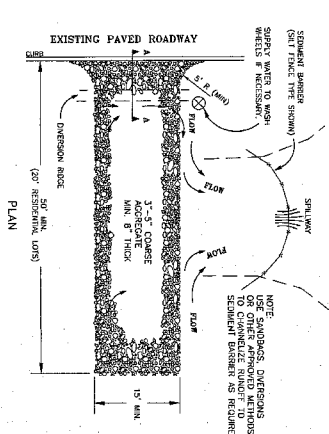
 <p>CITY OF SUGAR LAND, TEXAS ENGINEERING DEPARTMENT</p>	
<p>CONSTRUCTION PLANS FOR: AYALON SOUTH CENTRAL PARK</p>	
<p>GENERAL EROSION CONTROL NOTES</p>	
<p>DATE: 1/2/01 DRAWN BY: [Signature] CHECKED BY: [Signature]</p>	<p>SL-33</p>



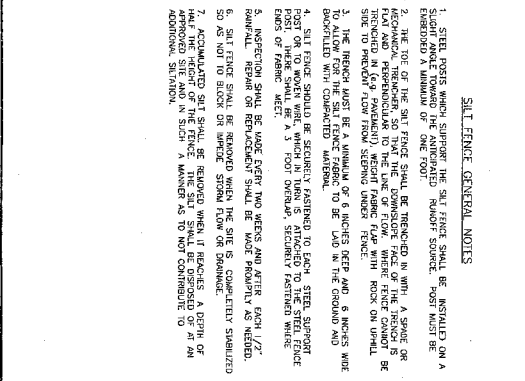
ISOMETRIC PLAN VIEW
N.T.S.



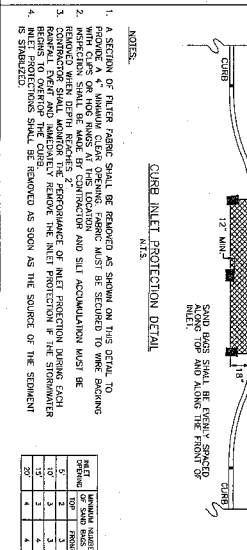
TEMPORARY STONE CONSTRUCTION
ENTRANCE/EXIT
N.T.S.



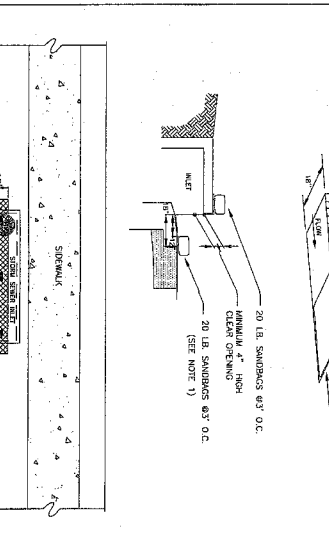
SECTION A - A



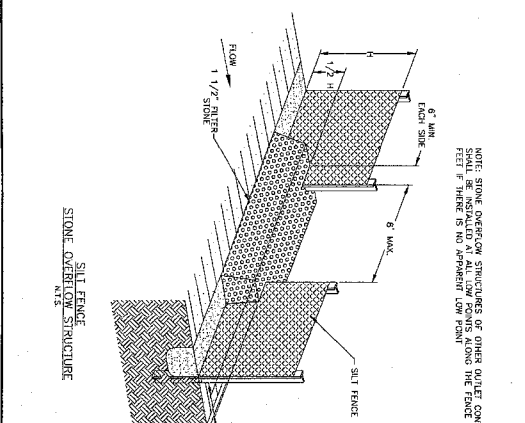
ISOMETRIC PLAN VIEW
N.T.S.



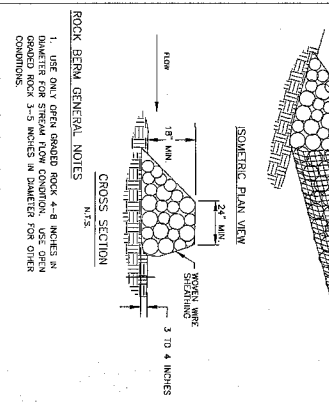
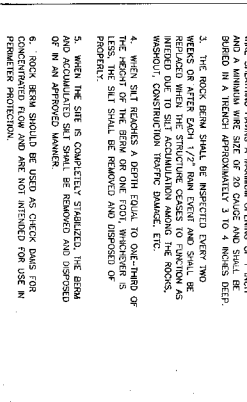
CURB INLET PROTECTION DETAIL
N.T.S.



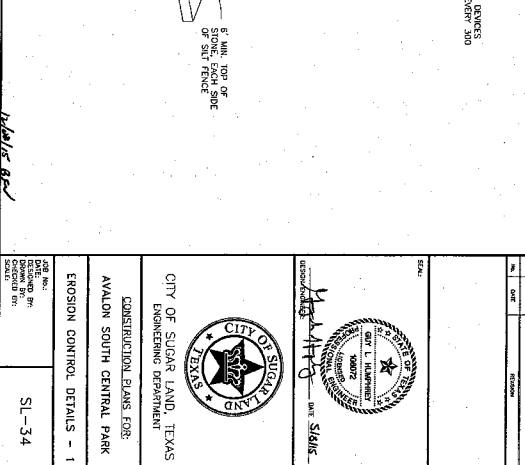
ISOMETRIC PLAN VIEW



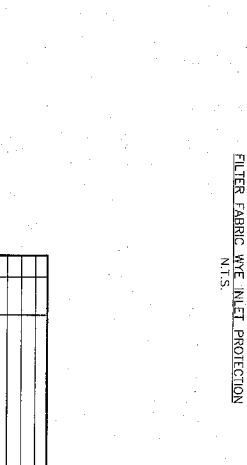
ISOMETRIC PLAN VIEW
N.T.S.



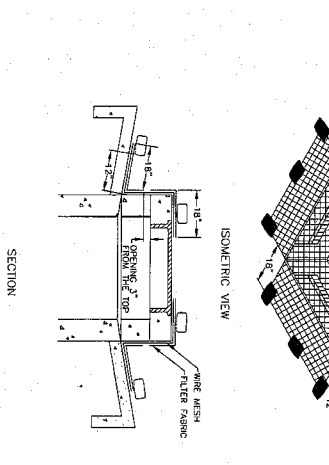
ROCK BERM DETAIL
N.T.S.



ISOMETRIC PLAN VIEW
N.T.S.



SECTION
FILTER FABRIC WIRE INLET PROTECTION
N.T.S.



ISOMETRIC VIEW

1/2/16/16/16

<p>CITY OF SUGAR LAND, TEXAS ENGINEERING DEPARTMENT</p>	<p>DAVE SLATIS</p>	<p>CONSTRUCTION PLANS FOR: AYALON SOUTH CENTRAL PARK</p>	<p>EROSION CONTROL DETAILS - 1</p>
<p>SL-34</p>	<p>DATE: 11/16/16</p>	<p>SCALE: AS SHOWN</p>	<p>PROJECT NO: 16-000000-000</p>

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

AUTHORIZED

BOND NO. 106404925

THE STATE OF TEXAS

§

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF FORT BEND

§

THAT WE, Millis Equipment Rental, LLC whose address is 931 Pheasant Valley Dr., Suite 200, Missouri City, Texas 77489 Texas, hereinafter called the Principal, And Travelers Casualty and Surety Company of America, a Corporation existing under and by virtue of the laws of the state of Connecticut and authorized to do an indemnifying business in the state of Texas, and whose principal office is located at One Tower Square, Hartford, Connecticut 06183, whose officer residing in the State of Texas, authorized to accept service in all suits and actions brought whining said state is Texas and Whose address is 1301 E. Collins Blvd., Suite 111C, Richardson, Tx 75081, hereinafter called the Surety, and held and firmly bound unto, Robert e. Hebert, County Judge of Fort Bend County, Texas, or his successors in office, in the full sum of Five Thousand Dollars & No/100's 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.

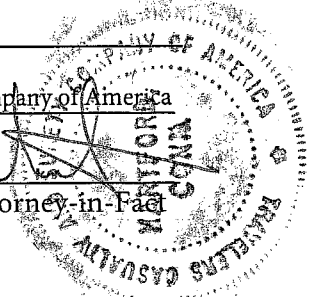
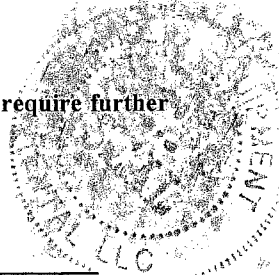
It is understood that at any time Fort Bend County deems itself insecure under this bond, it may require further and/or additional bonds of the principal.

EXECUTED this 8th day of December, 20 15.

Millis Equipment Rental, LLC
PRINCIPAL

BY [Signature]
Travelers Casualty and Surety Company of America
SURETY

BY Roxanne G. Hebert, Attorney-in-Fact





POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

Attorney-In Fact No. 230155

Certificate No. 006596712

KNOW ALL MEN BY THESE PRESENTS: That Farmington Casualty Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company are corporations duly organized under the laws of the State of Connecticut, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

Kurt A. Risk, Sue Kohler, Sharon Cavanaugh, Misty D. Amaya, Francine Hay, David R. Groppell, Sharen R. Groppell, Roxanne G. Hebert, and Beverly A. Ireland

of the City of Houston, State of Texas, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 12th day of November, 2015.

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company



State of Connecticut
City of Hartford ss.

By: Robert L. Raney, Senior Vice President

On this the 12th day of November, 2015, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal. My Commission expires the 30th day of June, 2016.



Marie C. Tetreault
Marie C. Tetreault, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 8th day of December, 20 15.

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER

Kevin E. Hughes
Kevin E. Hughes, Assistant Secretary



To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.



IMPORTANT NOTICE

TO OBTAIN INFORMATION OR MAKE A COMPLAINT:

You may contact Travelers Casualty & Surety Company of America, Travelers Casualty & Surety Company, Travelers Indemnity Company, Standard Fire Insurance Company and/or Farmington Casualty Company for information or to make a complaint at:

Travelers Bond
Attn: Claims
1500 Market Street
West Tower, Suite 2900
Philadelphia, PA 19102

(267) 675-3130
(267) 675-3102 Fax

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

Texas Department of Insurance
P.O. Box 149104
Austin, TX 78714-9104

(800) 252-3439

ATTACH THIS NOTICE TO YOUR BOND. This notice is for information only and does not become a part or a condition of the attached document and is given to comply with Section 2253-021, Government Code, and Section 53.202, Property Code, effective September 1, 2001.