

TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT ENERGY AT 713-207-2222	
NOTICE: FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS VERIFICATION DOES NOT FULFILL YOUR OBLIGATION TO CALL 811.	
VERIFICATION OF PRIVATE UTILITY LINES AND	
AGREEMENT TO RESOLVE CONFLICTS IN CITY RIGHT OF WAY AT NO COST TO THE CITY PRIOR TO CONSTRUCTION IN THREE (3) MONTHS.	
CENTERPOINT ENERGY/ UNDERGROUND ELECTRIC FACILITIES VERIFICATION ONLY.	
DATE:	
TEXAS GAS	
DATE:	
AT&T TEXAS/ SWBT	
DATE:	
COMCAST	

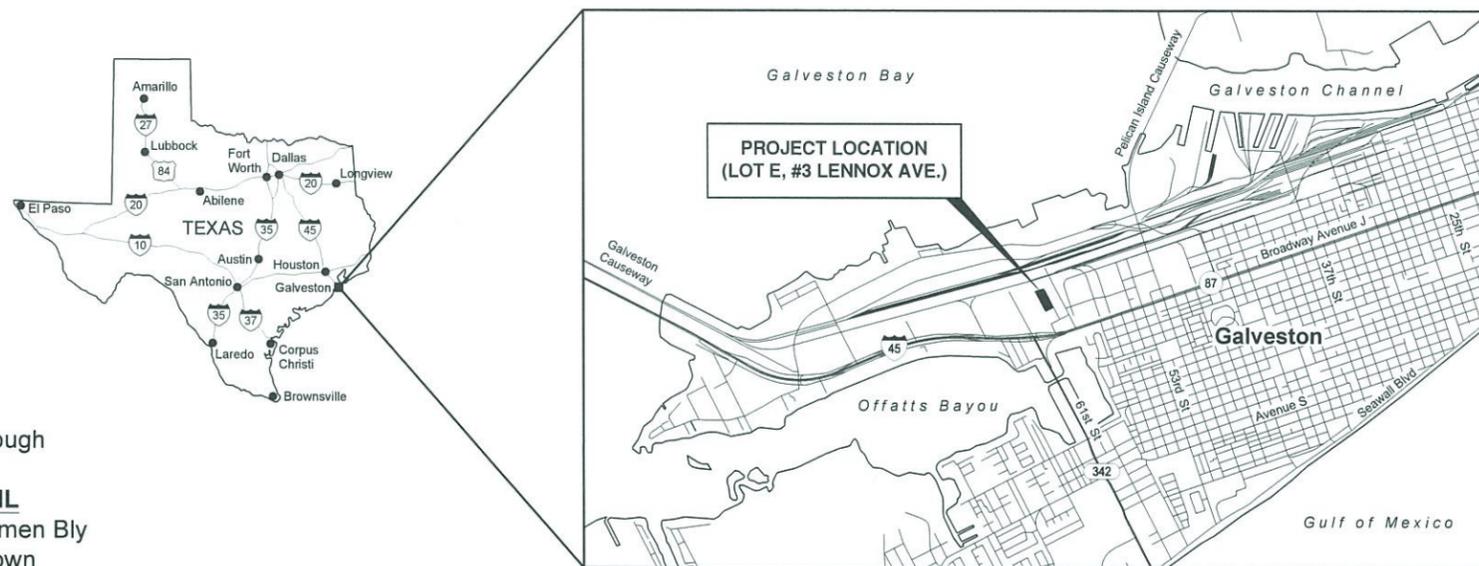
City of Galveston

Old Municipal Incinerator Site Remediation (Lot E, #3 Lennox Ave.)



- Plans may not illustrate all work necessary to obtain complete remediation of the site.
- Contractor shall be responsible for completing all work not itemized or quantified at no additional cost to the City.
- Contractor shall be responsible for the Health and Safety of all workers and personnel involved in the project. This shall include all necessary training, certifications, and personnel protective equipment (PPE).
- Environmental impacts shall be controlled before, during and after construction.
- City Engineer signature is contingent on offsite property buyout program.
- All documents including the Design Summary Report (DSR), Hydraulic Modeling, Specifications, Geotechnical Report, etc., are part of this Contract.
- Contractor shall verify all private and public utilities and obtain written approvals prior to construction.
- AECOM shall comply with TCEQ's conditional approval terms for the interim remedial action plan (RAP) prior to capping, as per DSR.
- The entire structure and site shall be considered asbestos containing material (ACM) and shall be treated as such, as per DSR.

**ISSUED FOR BID
JUNE 2018**



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MAYOR
James D. Yarbrough

CITY COUNCIL

- District 1 Amy Carmen Bly
- District 2 Craig Brown
- District 3 David Collins
- District 4 Jason Hardcastle
- District 5 Terrilyn Tarlton-Shannon
- District 6 Jackie Cole

CITY MANAGER
Brian Maxwell

DEPUTY CITY MANAGER
Dan Buckley

DIRECTOR OF PUBLIC WORKS
Kyle Hockersmith



AECOM Technical Services, Inc.
9400 Amberglen Blvd
Austin, Texas 78729
www.aecom.com
TBPE Reg. No. F-3580



Ananth T. Bukkapatnam
June 06, 2018

SUBMITTED BY:

Ananth T. Bukkapatnam

June 06, 2018

ENGINEER: ANANTH T. BUKKAPATNAM
TEXAS P.E. #122809
AECOM TECHNICAL SERVICES, INC.

SUBMITTAL DATE

REVIEWED BY:

TEXAS GENERAL LAND OFFICE
Daniel Chupala
CITY OF GALVESTON: CITY ENGINEER
June 20, 2018

DATE

DATE

ABBREVIATIONS

AC	ACRES	MAX	MAXIMUM
ACP	ASPHALTIC CONCRETE PAVING	MH	MANHOLE
AGGR	AGGREGATE	MIN	MINIMUM
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	MISC	MISCELLANEOUS
APPROX	APPROXIMATE	MSE	MECHANICAL STABILIZED EARTH
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MTZ	METZGER
AZ	AZIMUTH		
B/B	BACK TO BACK	N	NORTHING
BC	BACK OF CURB	NAD83	NORTH AMERICAN DATUM (1983)
BL	BASE LINE	NAVD88	NORTH AMERICAN VERTICAL DATUM (1988)
BM	BENCHMARK	No	NUMBER
BMP5	BEST MANAGEMENT PRACTICES SYSTEM	NOM	NOMINAL
BOT F	BOTTOM FACE	NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
C&G	CURB AND GUTTER	NTS	NOT TO SCALE
CB	CATCH BASIN	OC	ON CENTER
CFS	CUBIC FEET PER SECOND	OD	OUTSIDE DIAMETER
CI	CAST IRON	OF	OUTSIDE FACE
CIP	CAST-IN-PLACE	OS	OFFSET
CJ	CONSTRUCTION JOINT		
CL	CENTER LINE		
CMP	CORRUGATED METAL PIPE		
CONC	CONCRETE	PC	POINT OF CURVE
CONST	CONSTRUCTION	PCC	POINT OF COMPOUND CURVE
COR	CONTRACTING OFFICER REPRESENTATIVE	PCLC	PROTECTIVE CONCENTRATION LEVEL EXCEEDANCE
CP	CONTROL POINT	PGL	PROFILE GRADE
CPT	CONE PENETRATION TEST	PI	POINT OF INTERSECTION
CR	COUNTY ROAD	PL	PROPERTY LINE
CULV	CULVERT	PP	POWER POLE
CU FT	CUBIC FEET	PRC	POINT OF REVERSE CURVE
CU YD/CY	CUBIC YARD	PROP	PROPOSED
D	DEPTH	PT	POINT OF TANGENCY
DA	DRAINAGE AREA	PSI	POUNDS PER SQUARE INCH
DEG	DEGREE	PVMT	PAVEMENT
DEMO	DEMOLITION	PVC	POLY VINYL CHLORIDE
DIA	DIAMETER		
DIST	DISTANCE	Q	DISCHARGE
DMS	DEGREES, MINUTES, SECONDS		
E	EASTING	R	RADIUS
EA	EACH	RCB	REINFORCED CONCRETE BOX
EC	EDGE OF CURB	RCP	REINFORCED CONCRETE PIPE
EL	ELEVATION	RD	ROAD
ELEC	ELECTRIC	REL	RELOCATE
EMD	ENVIRONMENTAL MANAGEMENT DIVISION	REM	REMOVE
ENV	ENVIRONMENTAL	ROW	RIGHT OF WAY
EOC	EDGE OF CAP	RR	RAILROAD
EOP	EDGE OF PAVEMENT	RT	RIGHT
ESMT	EASEMENT		
EW	EACH WAY	S	SOUTH
EX	EXTERNAL LENGTH	SCP	SECONDARY CONTROL POINT
EXIST	EXISTING	SD	STORM DRAIN
EXIST GR	EXISTING GRADE	SEC	SECOND
FH	FIRE HYDRANT	SF	SQUARE FEET
FHWA	FEDERAL HIGHWAY ADMINISTRATION	SHLDR	SHOULDER
FIN	FINISH	SHPO	STATE HISTORIC PRESERVATION OFFICER
FIN GR	FINISH GRADE	SQ YD/SY	SQUARE YARD
FLL	FLOW LINE	SS	SANITARY SEWER
FND	FOUND	ST	STREET
FOC	FACE OF CURB	SWPPP	STORM WATER POLLUTION PREVENTION PLAN
FT	FOOT	SW	SIDEWALK
G LN	GAS LINE	STA	STATION
GALV	GALVANIZED	TAN	TANGENT
GCA	GRADED CRUSHED AGGREGATE	TCP	TRAFFIC CONTROL PLAN
GR	GROUND	TEMP	TEMPORARY
GR LN	GRADE LINE	TOB	TOP OF BANK
H	HORIZONTAL	TOC	TOP OF CURB
HDWL	HEADWALL	TOC FTG	TOP OF CONCRETE FOOTING
HGL	HYDRAULIC GRADE LINE	TOC WALL	TOP OF CONCRETE WALL
HNDRL	HANDRAIL	TOLE	TOP OF LEVEE ELEVATION
HR	HOUR	TYP	TYPICAL
HS	HIGH STRENGTH		
HV	HIGH VOLTAGE	UNO	UNLESS NOTED OTHERWISE
HWY	HIGHWAY	UNPV RD	UNPAVED ROAD
ID	INSIDE DIAMETER	V	VERTICAL
IN	INCHES	VC	VERTICAL CURVE
		VEL	VELOCITY
K	K-VALUE	VFZ	VEGETATION FREE ZONE
kVA	KILOVOLT AMPERE	VPC	VERTICAL POINT OF CURVATURE
L	LENGTH	VPI	VERTICAL POINT OF INTERSECTION
LAT	LATERAL	VPT	VERTICAL POINT OF TANGENCY
LBS	POUNDS		
LF	LINEAR FEET (FOOT)	W	WEST
LR	LEVEE RAISE	W/	WITH
LS	LUMP SUM	W/O	WITHOUT
LT	LEFT	WL	WATER LINE
		WPNT	WATER PAINT MARK ON GROUND ACCORDING TO THE SURVEYOR
		X SECT	CROSS SECTION

LEGEND

	ALIGNMENT
	AREA TO BE SEEDED
	BENCH MARK
	BORE
	BUILDING
	CHAIN LINK FENCE
	CONCRETE
	CONTOURS
	CONSTRUCTION ZONE
	DEMOLITION
	DIRT ROAD
	DITCH
	EMBANKMENT FILL
	EXCAVATION
	FIRE HYDRANT
	FH
	FLEX BASE
	FLOW
	GAS LINE
	GATE POST
	GUY WIRE
	HORIZONTAL CONTROL POINT
	HORIZONTAL VERTICAL CONTROL POINT
	INDICATES SECTION OR DETAIL TAKEN FROM AND SHOWN ON THE SAME SHEET, LETTER INDICATES SECTION & NUMBER INDICATES DETAIL

LEGEND

	LIMITS OF CONSTRUCTION
	MAILBOX
	MONITOR WELL FLUSH
	OVERHEAD POWER
	POWER POLE
	PAVED ROAD
	PHONE LINE
	PROPERTY LINES
	RIPRAP
	ROW
	SAN. SEWER LINE
	SAN. MANHOLE
	SECTION "LETTER" OR DETAIL "#"
	SHEET NUMBER
	SIGN
	STATE PLANE COORDINATES
	S.W.B.T. PED.
	TOPSOIL
	TOWER
	TREE
	WM
	WATER METER
	WATER VALVE
	WATER LINE
	COORDINATE POINT
	FLOW

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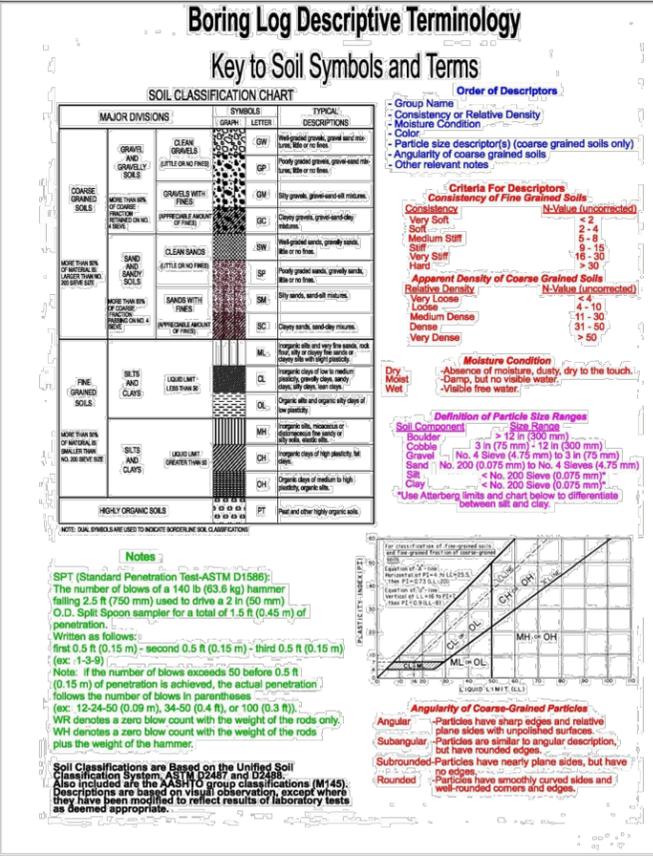
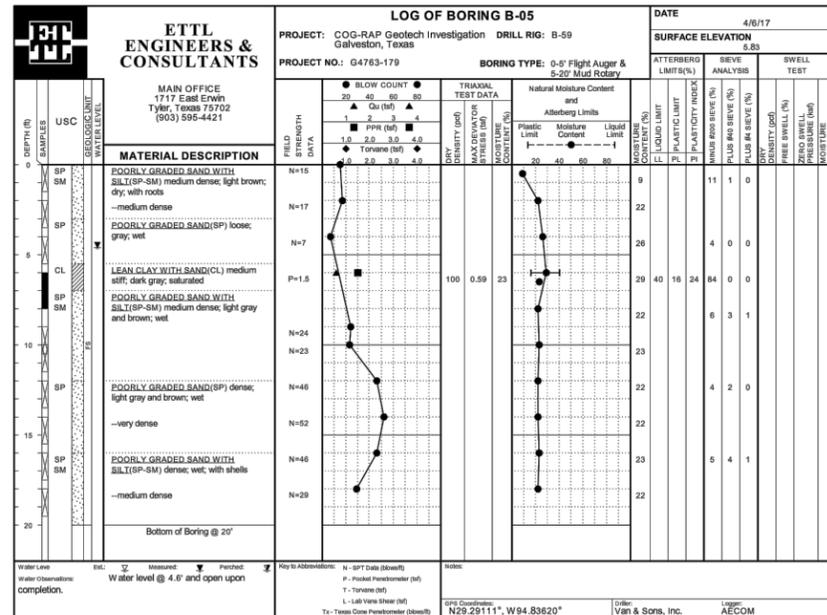
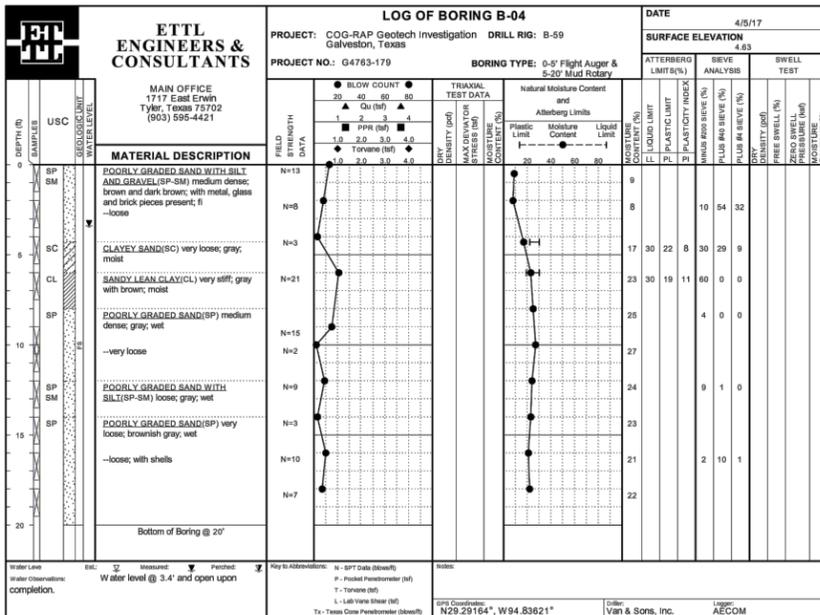
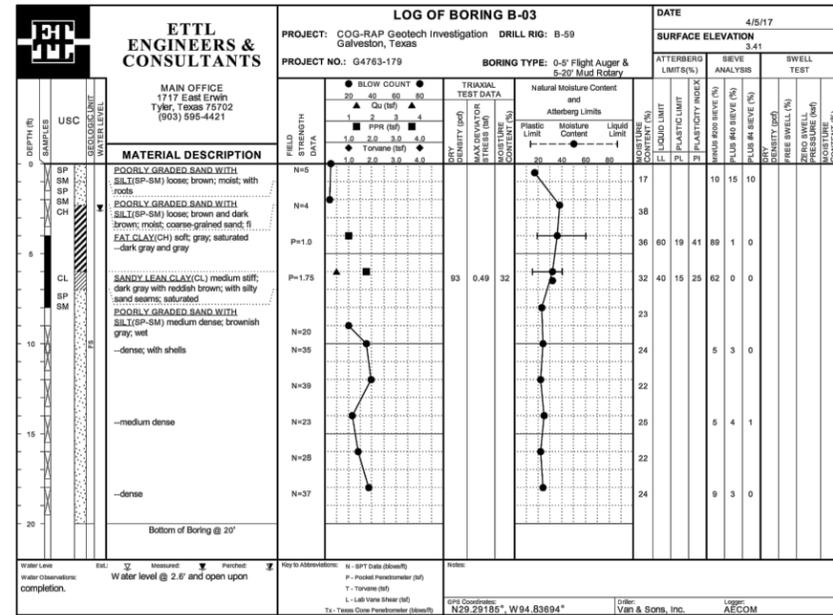
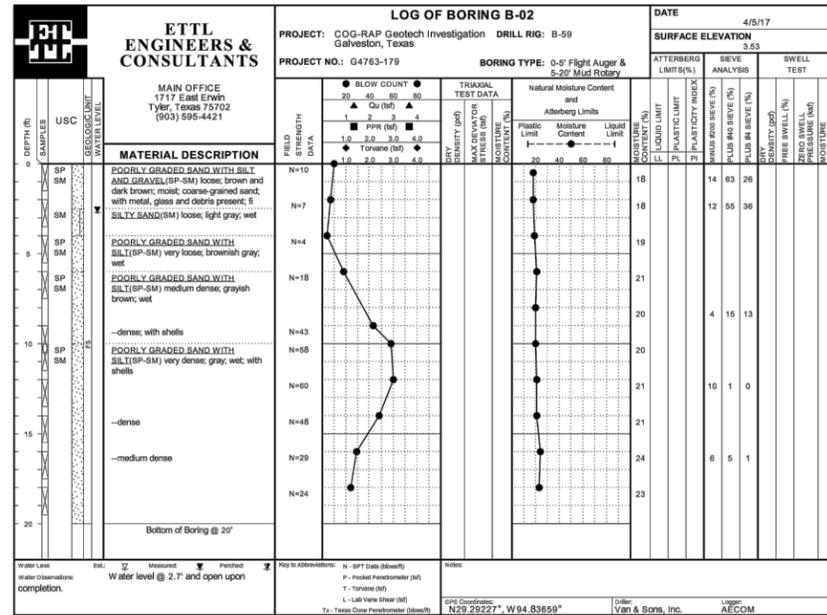
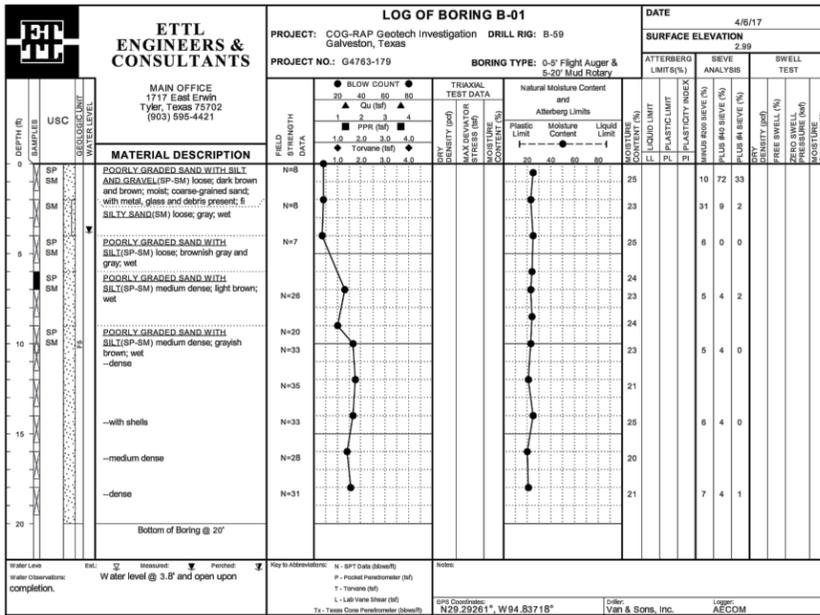
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City of Galveston, Texas
 Old Municipal Incinerator Site
 Remediation (Lot E, #3 Lennox Ave.)

LEGEND AND ABBREVIATIONS

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.	2 OF 24



NO.	DR	CK	DATE	DESCRIPTION

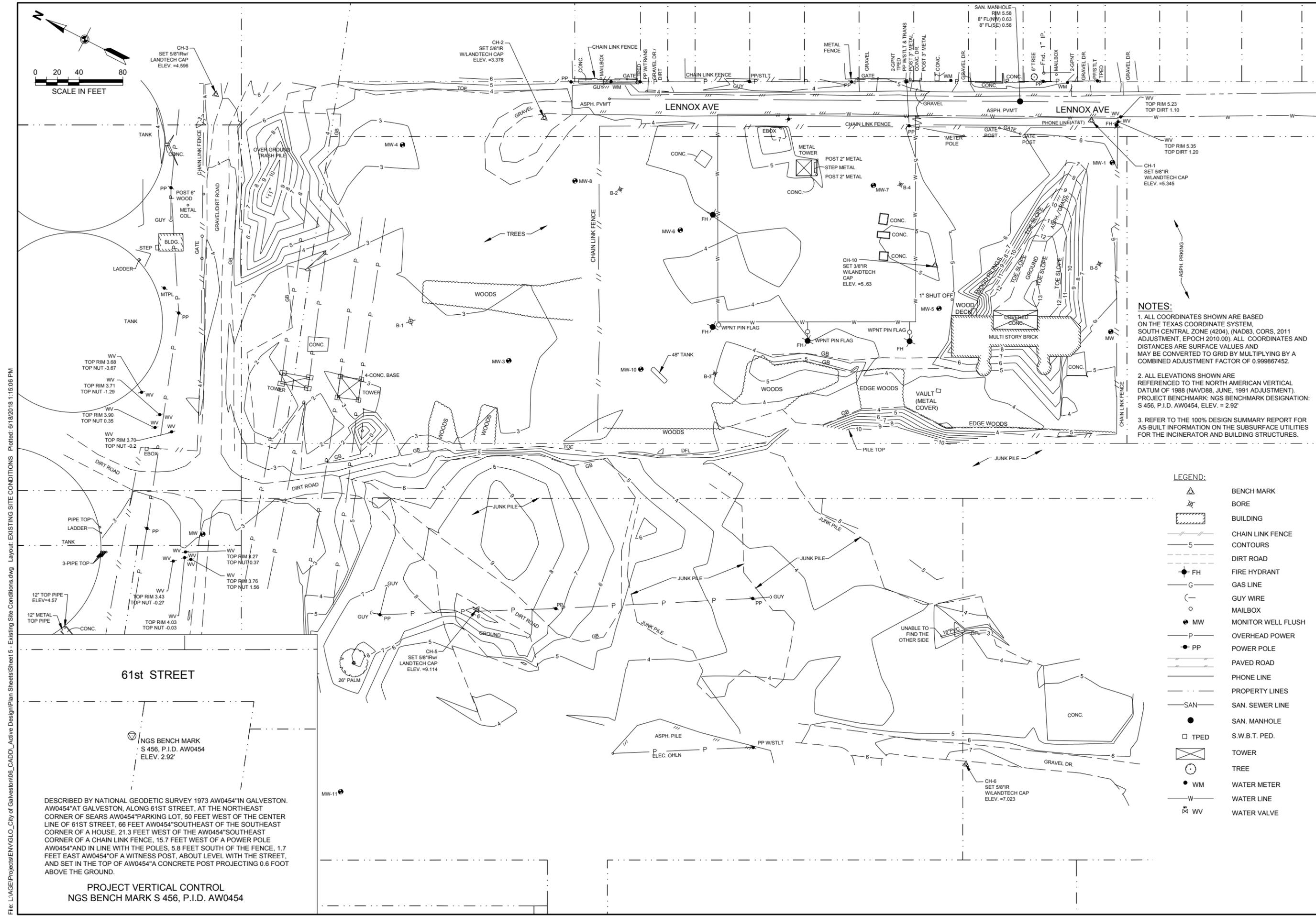
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ANANTH BUKKAPATNAM TRIMULA
 122809
 LICENSED ENGINEER
 June 06, 2018

City of Galveston, Texas
 Old Municipal Incinerator Site
 Remediation (Lot E, #3 Lennox Ave.)

BORING LOGS

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
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REVISION:	
SHEET NO.	4 OF 24



NOTES:

1. ALL COORDINATES SHOWN ARE BASED ON THE TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (4204), (NAD83, CORS, 2011 ADJUSTMENT, EPOCH 2010.00). ALL COORDINATES AND DISTANCES ARE SURFACE VALUES AND MAY BE CONVERTED TO GRID BY MULTIPLYING BY A COMBINED ADJUSTMENT FACTOR OF 0.999867452.
2. ALL ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88, JUNE, 1991 ADJUSTMENT). PROJECT BENCHMARK: NGS BENCHMARK DESIGNATION: S 456, P.I.D. AW0454, ELEV. = 2.92'
3. REFER TO THE 100% DESIGN SUMMARY REPORT FOR AS-BUILT INFORMATION ON THE SUBSURFACE UTILITIES FOR THE INCINERATOR AND BUILDING STRUCTURES.

- LEGEND:**
- BENCH MARK
 - BORE
 - BUILDING
 - CHAIN LINK FENCE
 - CONTOURS
 - DIRT ROAD
 - FIRE HYDRANT
 - GAS LINE
 - GUY WIRE
 - MAILBOX
 - MONITOR WELL FLUSH
 - OVERHEAD POWER
 - POWER POLE
 - PAVED ROAD
 - PHONE LINE
 - PROPERTY LINES
 - SAN. SEWER LINE
 - SAN. MANHOLE
 - S.W.B.T. PED.
 - TOWER
 - TREE
 - WATER METER
 - WATER LINE
 - WATER VALVE

DESCRIBED BY NATIONAL GEODETIC SURVEY 1973 AW0454"IN GALVESTON. AW0454"AT GALVESTON, ALONG 61ST STREET, AT THE NORTHEAST CORNER OF SEARS AW0454"PARKING LOT, 50 FEET WEST OF THE CENTER LINE OF 61ST STREET, 66 FEET AW0454"Southeast OF THE Southeast CORNER OF A HOUSE, 21.3 FEET WEST OF THE AW0454"Southeast CORNER OF A CHAIN LINK FENCE, 15.7 FEET WEST OF A POWER POLE AW0454"AND IN LINE WITH THE POLES, 5.8 FEET SOUTH OF THE FENCE, 1.7 FEET EAST AW0454"OF A WITNESS POST, ABOUT LEVEL WITH THE STREET, AND SET IN THE TOP OF AW0454" A CONCRETE POST PROJECTING 0.6 FOOT ABOVE THE GROUND.

PROJECT VERTICAL CONTROL
NGS BENCH MARK S 456, P.I.D. AW0454

NO.	DATE	CK	DR	DESCRIPTION

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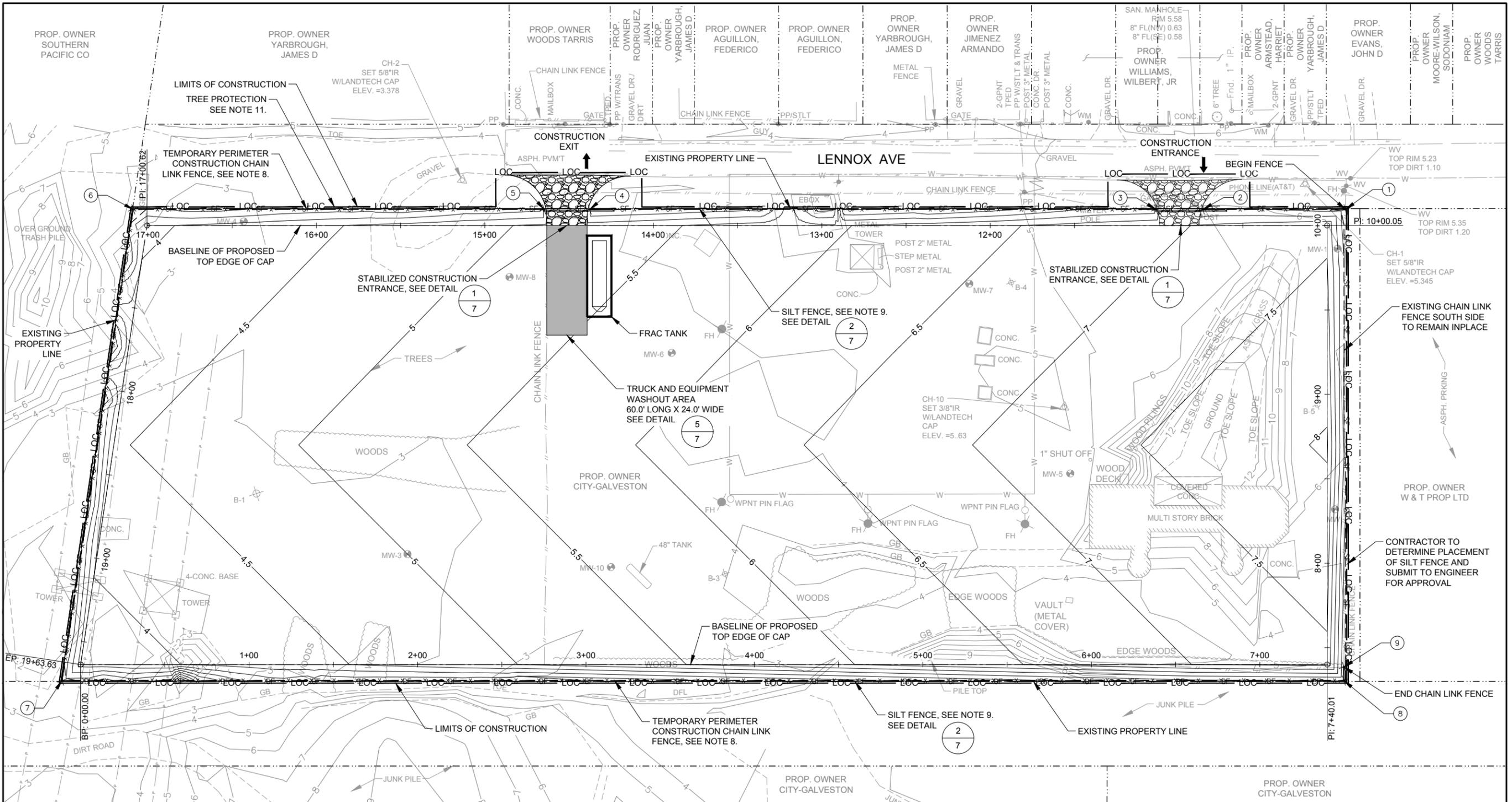
City of Galveston, Texas
Old Municipal Incinerator Site
Remediation (Lot E, #3 Lennox Ave.)

EXISTING SITE CONDITIONS

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.	5 OF 24

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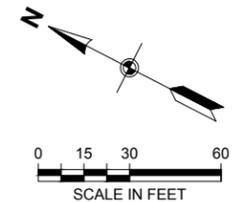
POINT #	STATION	NORTHING	EASTING
1	10+00.05	13678856.71	3295929.47
2	10+73.82	13678932.10	3295890.88
3	11+01.54	13678956.77	3295878.25
4	14+37.81	13679256.12	3295725.05
5	14+64.81	13679280.15	3295712.75
6	17+00.62	13679497.34	3295601.59
7	0+00.00	13679407.85	3295333.93
8	7+40.01	13678730.45	3295680.63
9	7+40.01	13678734.09	3295687.75

NOTES:

- CONTRACTOR IS RESPONSIBLE FOR PREVENTING SEDIMENT-LADEN STORM-WATER FROM LEAVING THE SITE, USING NECESSARY DEWATERING EQUIPMENT.
- ALL STORM-WATER SHALL BE TREATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS REFER TO SPECIFICATION SECTIONS 01563, 01565 AND 01566 FOR ADDITIONAL DETAILS.
- ANY STOCKPILE MATERIALS, INCLUDING MULCH, SAND, DIRT, DEMOLITION MATERIALS, SPOIL PILES ETC. MUST BE COVERED WITH A WATER RESISTANT MATERIAL DURING ANY RAIN EVENT AND AT ALL TIMES WHEN NOT BEING USED. SILT FENCING SHALL BE INSTALLED AROUND PERIMETER IF THESE MATERIALS ARE TO BE STORED ON SITE.
- CONSTRUCTION VEHICLES SHALL BE FREE OF MUD AND DIRT PRIOR TO LEAVING THE CONSTRUCTION SITE. VEHICLES SHALL BE CLEANED ONLY IN CONCRETE WASHOUT AREAS (SEE SHEET 7 FOR DETAILS) WITH APPROVED METHODS PRIOR TO LEAVING THE SITE.
- SEE SHEET 2 FOR LEGEND AND ABBREVIATIONS.
- SEE SHEET 3 FOR GENERAL NOTES.
- SEE SHEET 5 FOR HORIZONTAL AND VERTICAL CONTROL.
- THE CONTRACTOR SHALL PROVIDE A TEMPORARY CONSTRUCTION CHAIN LINK FENCE AS REQUIRED WITH TWO 24 FOOT SWING GATES DURING THE PROJECT CONSTRUCTION ACTIVITIES. AFTER THE COMPLETION OF ALL WORK, THE CONTRACTOR SHALL INSTALL A PERMANENT CHAIN LINK FENCE WITH TWO SLIDING GATES AS SHOWN ON SHEETS 21 AND 22.
- SILT FENCE PLACED 1.0 FEET OFFSET FROM PROPERTY LINE TO ALLOW FOR PLACING OF PROPOSED CAP TO PROPERTY LINE ACTUAL LIMITS OF CONSTRUCTION ARE TO PROPERTY LINE.
- TEMPORARY CHAINLINK FENCE COORDINATE POINT STATIONING IS BASED ON BASELINE OF PROPOSED TOP EDGE OF CAP.
- CONTRACTOR SHALL PROVIDE OFFSITE TREE PROTECTION ALONG LENNOX AVENUE AS REQUIRED DURING CONSTRUCTION. SEE DETAILS 3 AND 4 ON SHEET 7. REFER TO SPECIFICATION SECTION 01535FOR ADDITIONAL DETAILS.

LEGEND:

- LOC LIMITS OF CONSTRUCTION
- SF SILT FENCE
- TEMPORARY CONSTRUCTION CHAIN FENCE FENCE
- LIMITS OF FINAL GRADING
- STABILIZED CONSTRUCTION ENTRANCE
- PROPERTY LINE
- PROPOSED GRADE CONTOUR
- EXISTING GRADE CONTOUR
- COORDINATE POINT



NO.	DATE	CK	DR	DESCRIPTION

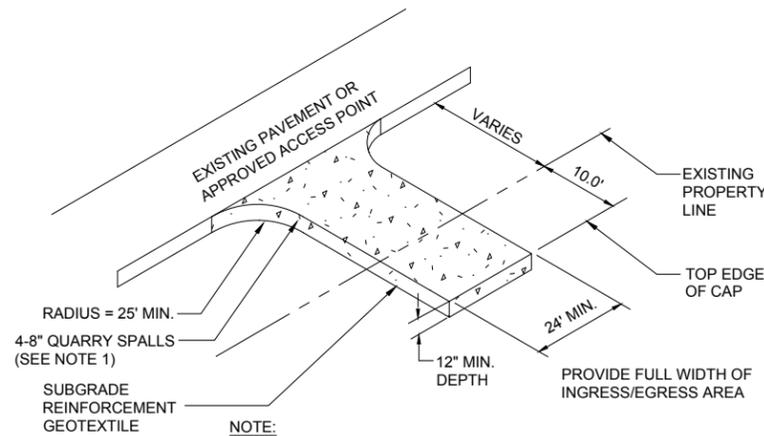
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City of Galveston, Texas
Old Municipal Incinerator Site
Remediation (Lot E, #3 Lennox Ave.)

EROSION AND SEDIMENT CONTROL PLAN

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
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SCALE:	AS NOTED
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SHEET NO.:	6 OF 24

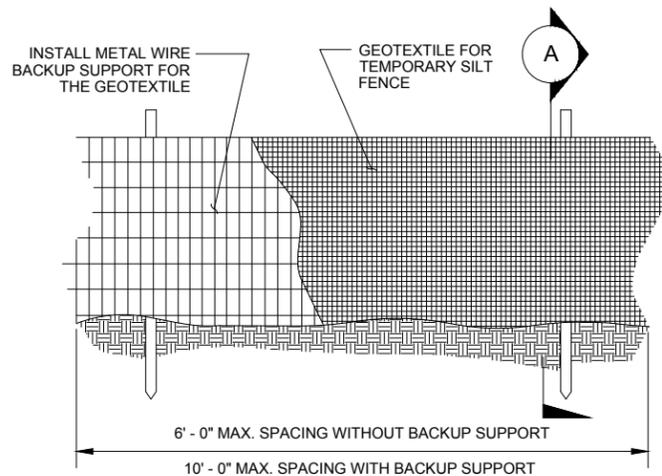
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NOTE:

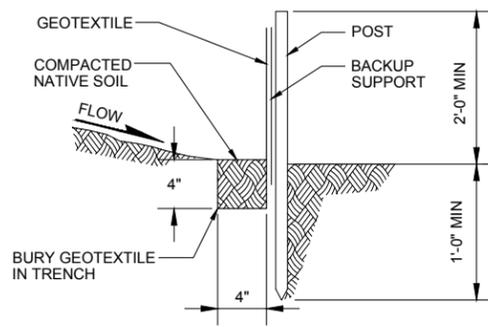
- QUARRY ROCK MUST BE PLACED TO A DEPTH OF 1 FOOT, AND MUST MEET THE FOLLOWING SPECIFICATIONS:
 4"-8" / 40%-70% PASSING
 2"-4" / 30%-40% PASSING
 2" / 10%-20% PASSING.

1 TEMPORARY CONSTRUCTION ENTRANCE
7 NOT TO SCALE



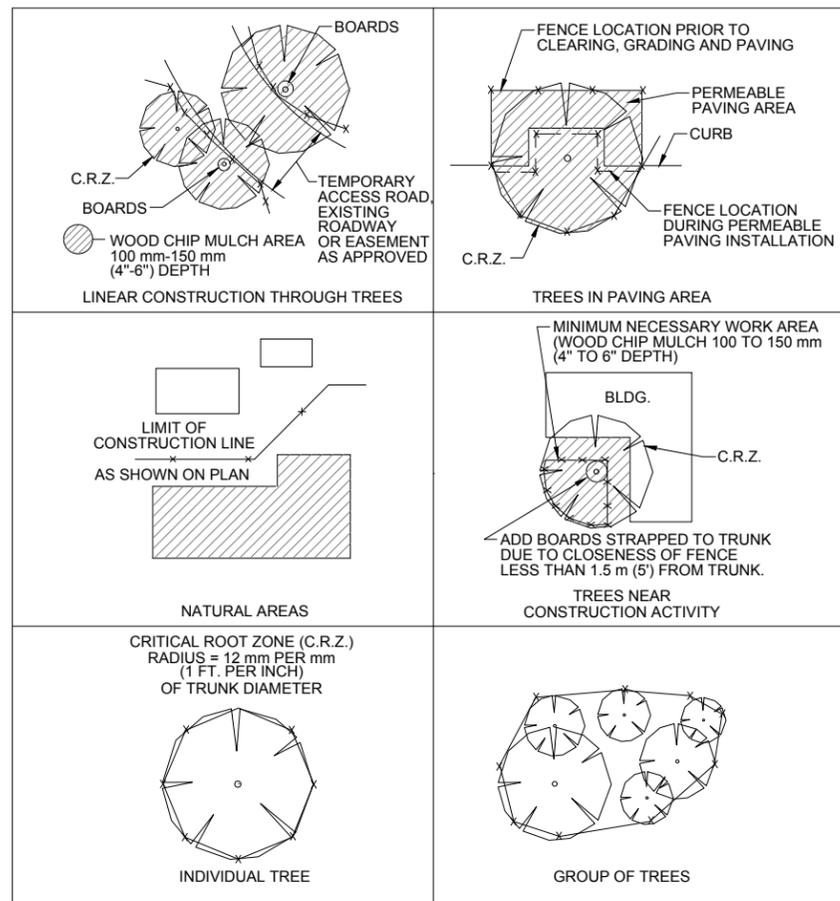
NOTES:

- MAXIMIZE DETENTION OF STORMWATER BY PLACING FENCE AS FAR AWAY FROM TOE OF CAP SLOPE OR OUTSIDE OF THE CLEARING BOUNDARIES.
- INSTALL SILT FENCING ALONG CONTOURS WHENEVER POSSIBLE.
- INSTALL THE ENDS OF THE SILT FENCE TO POINT SLIGHTLY UP-SLOPE TO PREVENT SEDIMENT FROM FLOWING AROUND THE ENDS OF THE FENCE.

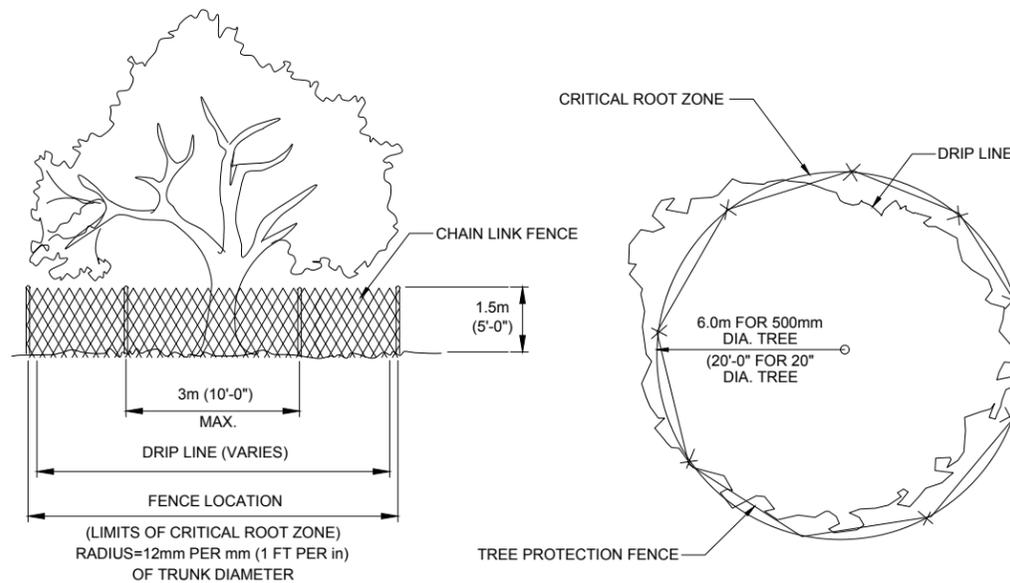


SECTION A

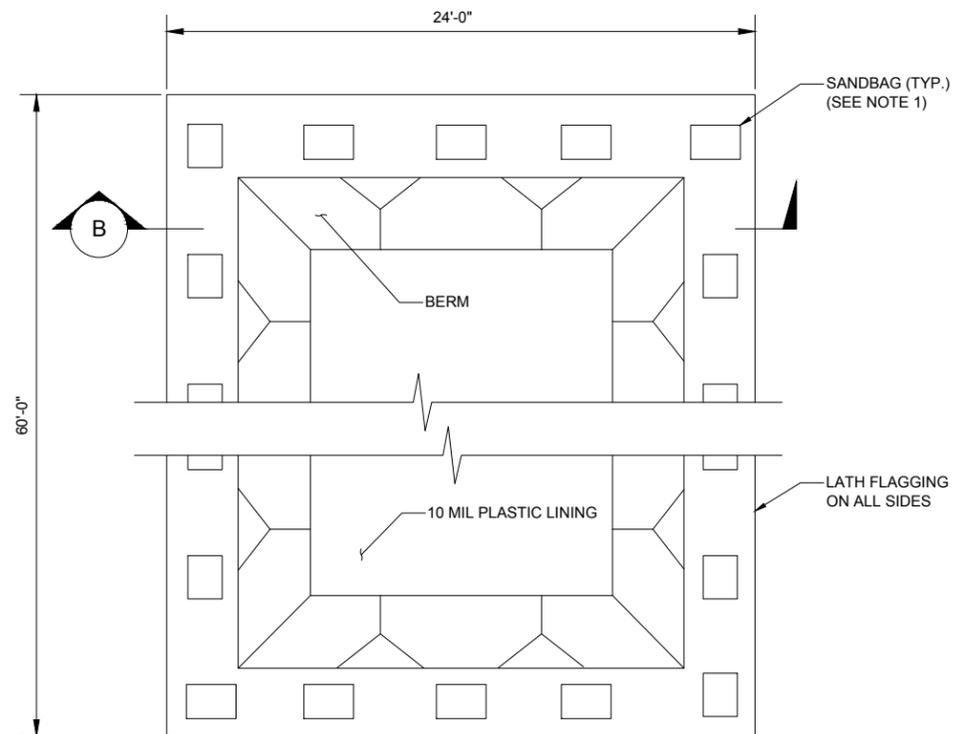
2 SILT FENCE DETAIL
7 NOT TO SCALE



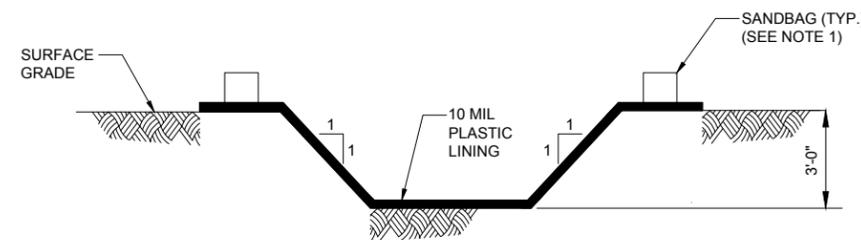
3 TREE PROTECTION FENCE LOCATION DETAIL
7 NOT TO SCALE



4 TREE PROTECTION DETAIL CHAIN LINK FENCE
7 NOT TO SCALE



DEPRESSED WASHOUT



SECTION B

NOTE:

- SECURE WASHOUT STRUCTURES AND LININGS WITH SANDBAGS OR TWO SECURELY FASTENED STAKES AROUND ENTIRE WASHOUT PERIMETER.
- MATERIAL AND CONSTRUCTION METHODS TO CONFORM TO CITY OF GALVESTON STANDARDS AND SPECIFICATIONS.
- CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER DISPOSAL OF WASHOUT MATERIAL AND WATER BY USE OF FRAC TANK OR APPROVED METHOD BY THE CITY OF GALVESTON.

5 CONCRETE WASHOUT DETAIL
7 NOT TO SCALE

NO.	DATE	DESCRIPTION

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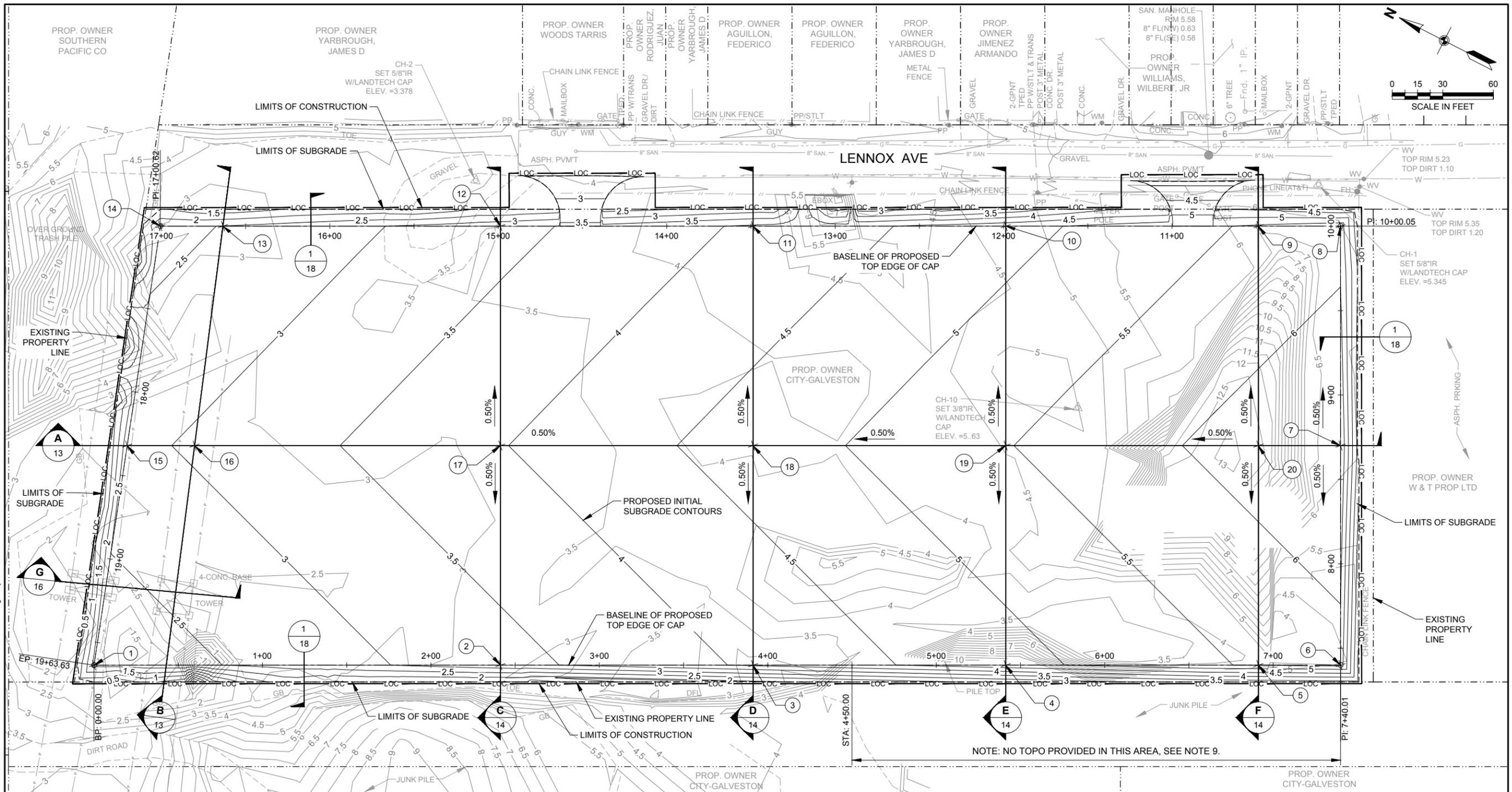
STATE OF TEXAS
 ANANTH BUKKAPATNAM TRIMULA
 122809
 LICENSED PROFESSIONAL ENGINEER
 Ananth B.T.
 JUNE 06, 2018

City of Galveston, Texas
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EROSION AND SEDIMENT CONTROL DETAILS

DESIGNED BY:	A.T.B.
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APPROVED BY:	D.Z.
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File: L:\AGE\Projects\ENV\GLO_City of Galveston\06_CADD_Active Design\Plan_Sheets\Sheet 9 - CAP SUBGRADE PREPARATION PLAN.dwg Layout: CAP SUBGRADE PREPARATION PLAN Plotted: 6/18/2018 1:15:54 PM



POINT #	STATION	NORTHING	EASTING	ELEV.
1	0+00.00	13679402.34	3295347.42	2.12
2	2+41.25	13679187.58	3295457.34	3.33
3	3+91.25	13679054.06	3295525.68	4.08
4	5+41.25	13678920.53	3295594.02	4.83
5	6+91.25	13678787.00	3295662.35	5.58
6	7+40.01	13678743.60	3295684.57	5.82
7	8+70.03	13678802.85	3295800.30	6.47
8	10+00.05	13678862.10	3295916.04	5.82
9	10+48.76	13678905.47	3295893.84	5.58
10	11+98.77	13679039.00	3295825.50	4.83

POINT #	STATION	NORTHING	EASTING	ELEV.
11	13+48.77	13679172.52	3295757.16	4.09
12	14+98.77	13679306.05	3295688.82	3.34
13	16+63.44	13679452.65	3295613.79	2.52
14	17+00.62	13679485.74	3295596.85	2.33
15	18+32.12	13679444.04	3295472.14	2.87
16	18+26.13	13679408.41	3295490.37	3.07
17	14+98.77	13679246.82	3295573.08	3.98
18	13+48.77	13679113.29	3295641.42	4.73
19	11+98.77	13678979.76	3295709.76	5.48
20	8+70.03	13678846.24	3295778.10	6.23

NOTES:

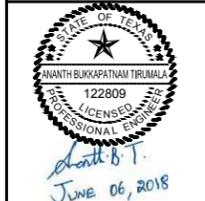
- GRADING SHOWN ON THIS PLAN IS APPROXIMATE AND BASED ON THE SURVEY PERFORMED BY LANDTECH ENGINEERING AND SURVEYING IN MAY 2017.
- ALL SOIL OUTSIDE OF PROPOSED TOE OF SLOPE SHOWN HEREON SHALL BE EXCAVATED AND PLACED INSIDE PROPOSED TOE OF SLOPE. EXCAVATE TO 12-INCHES BELOW NATURAL GRADE FROM PROPOSED TOE OF SLOPE ON ALL SIDES OF THE CAP.
- PROPOSED GRADES ABOVE TOE OF SLOPE INDICATE GRADING PATTERN FOR STORMWATER DRAINAGE PURPOSES. FIELD MODIFICATIONS TO GRADING IN THESE AREAS IS ACCEPTABLE PROVIDED THE GENERAL DRAINAGE CONCEPT IS IMPLEMENTED AND APPROVED BY THE ENGINEER OF RECORD.
- USE NORTHING AND EASTING TO LAYOUT POINTS IN THE FIELD DURING CONSTRUCTION.
- SEE SHEET 2 FOR LEGEND AND ABBREVIATIONS.
- SEE SHEET 3 FOR GENERAL NOTES.
- SEE SHEET 5 FOR HORIZONTAL AND VERTICAL CONTROL.
- COORDINATE POINT STATIONING IS BASED ON BASELINE OF PROPOSED TOP EDGE OF CAP.
- NO EXISTING GRADING WAS PROVIDED IN THIS AREA DUE TO EXISTING JUNK PILE ON-SITE. THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION SURVEY OF THE SITE PRIOR TO CONSTRUCTION AND GRADE AS NECESSARY TO MEET RECOMMENDED GRADES AS SHOWN ON THIS SHEET.

LEGEND:

- LOC — LIMITS OF CONSTRUCTION
- - - - - LIMITS OF SUBGRADE
- - - - - PROPERTY LINE
- 5 — PROPOSED GRADE CONTOUR
- 5 — EXISTING GRADE CONTOUR
- FLOW
- ① COORDINATE POINT AT EDGE OF CAP

NO.	DATE	CK	DR	DESCRIPTION

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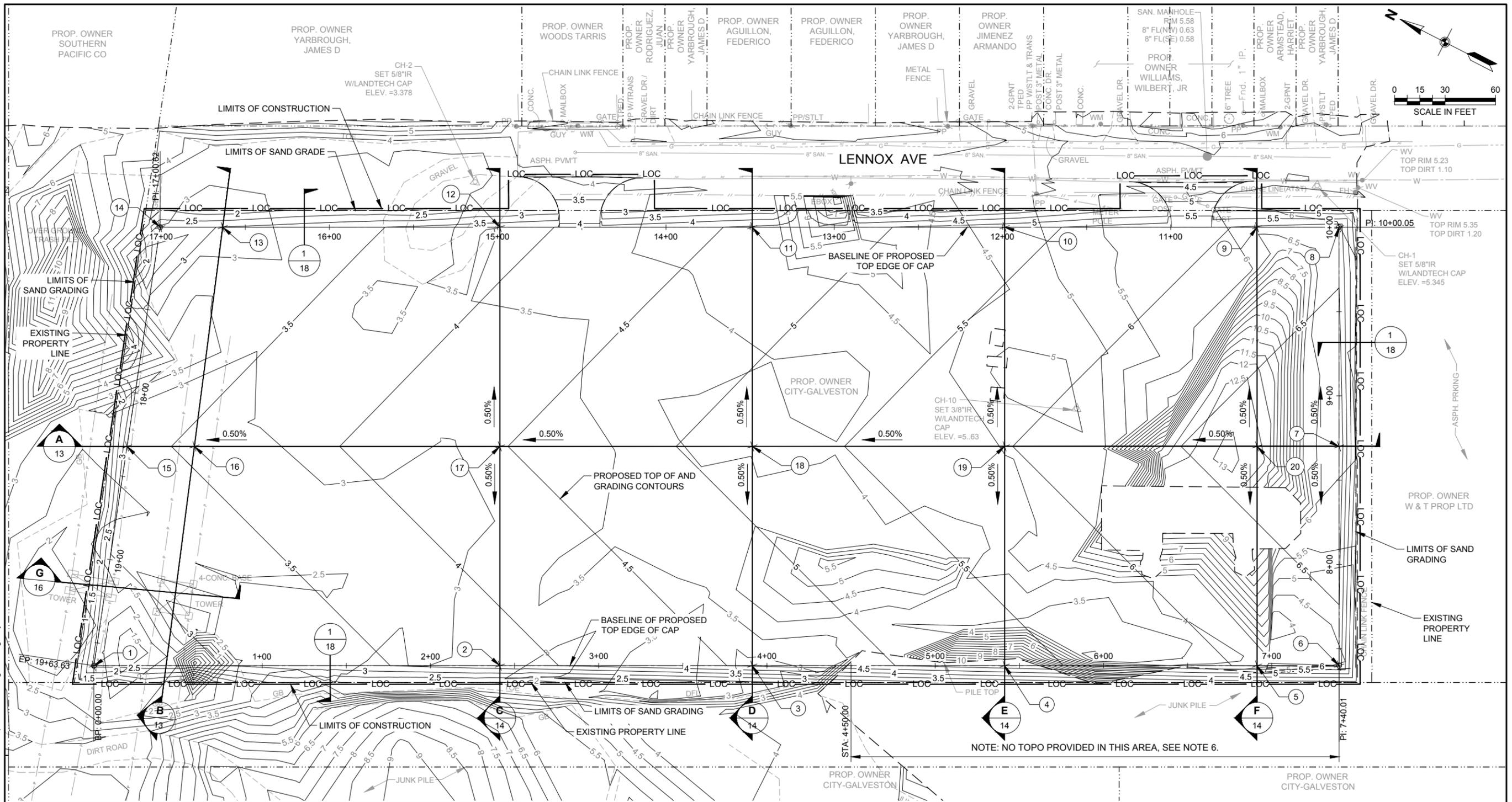


City of Galveston, Texas
Old Municipal Incinerator Site
Remediation (Lot E, #3 Lennox Ave.)

CAP SUBGRADE PREPARATION PLAN

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	

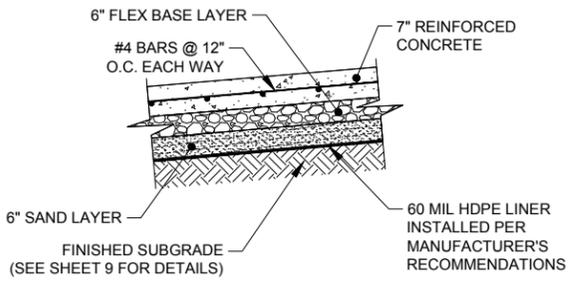
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PROPOSED TOP OF SAND GRADING POINTS TABLE				
POINT #	STATION	NORTHING	EASTING	ELEV.
1	0+00.00	13679402.34	3295347.42	2.62
2	2+41.25	13679187.58	3295457.34	3.83
3	3+91.25	13679054.06	3295525.68	4.58
4	5+41.25	13678920.53	3295594.02	5.33
5	6+91.25	13678787.00	3295662.35	6.08
6	7+40.01	13678743.60	3295684.57	6.32
7	8+70.03	13678802.85	3295800.30	6.97
8	10+00.05	13678862.10	3295916.04	6.32
9	10+48.76	13678905.47	3295893.84	6.08
10	11+98.77	13679039.00	3295825.50	5.33

PROPOSED TOP OF SAND GRADING POINTS TABLE				
POINT #	STATION	NORTHING	EASTING	ELEV.
11	13+48.77	13679172.52	3295757.16	4.59
12	14+98.77	13679306.05	3295688.82	3.84
13	16+63.44	13679452.65	3295613.79	3.02
14	17+00.62	13679485.74	3295596.85	2.83
15	18+32.12	13679444.04	3295472.14	3.37
16	18+26.13	13679408.41	3295490.37	3.57
17	14+98.77	13679246.82	3295573.08	4.48
18	13+48.77	13679113.29	3295641.42	5.23
19	11+98.77	13678979.76	3295709.76	5.98
20	8+70.03	13678846.24	3295778.10	6.73

- NOTES:**
1. USE NORTHING AND EASTING TO LAYOUT POINTS IN THE FIELD DURING CONSTRUCTION.
 2. SEE SHEET 2 FOR LEGEND AND ABBREVIATIONS.
 3. SEE SHEET 3 FOR GENERAL NOTES.
 4. SEE SHEET 5 FOR HORIZONTAL AND VERTICAL CONTROL.
 5. COORDINATE POINT STATIONING IS BASED ON BASELINE OF PROPOSED TOP EDGE OF CAP.
 6. NO EXISTING GRADING WAS PROVIDED IN THIS AREA DUE TO EXISTING JUNK PILE ON-SITE. THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION SURVEY OF THE SITE PRIOR TO CONSTRUCTION AND GRADE AS NECESSARY TO MEET RECOMMENDED GRADES AS SHOWN ON THIS SHEET.



1 TYPICAL CAP DETAIL
10 NOT TO SCALE

LEGEND:

— LOC — LOC —	LIMITS OF CONSTRUCTION
- - - - -	LIMITS OF SAND GRADING
- - - - -	PROPERTY LINE
— 5 —	PROPOSED GRADE CONTOUR
— 5 —	EXISTING GRADE CONTOUR
←	FLOW
①	COORDINATE POINT AT EDGE OF CAP

NO.	DATE	CK	DR	DESCRIPTION

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 9400 Amberglenn Blvd
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 www.aecom.com
 TBPE Reg. No. F-3580

City of Galveston, Texas
Old Municipal Incinerator Site
Remediation (Lot E, #3 Lennox Ave.)

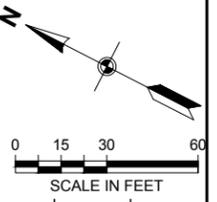
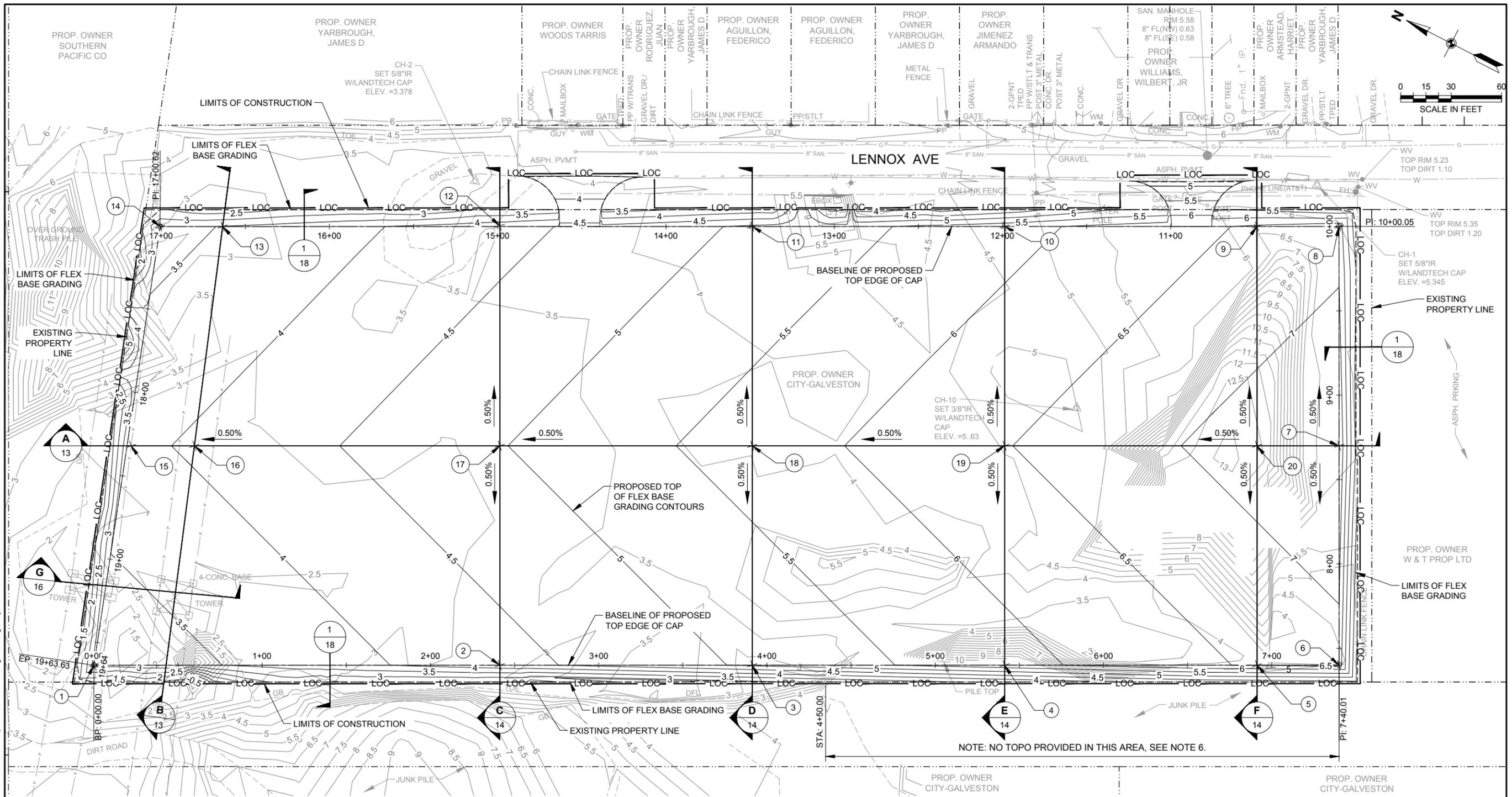
TOP OF SAND GRADING PLAN

DESIGNED BY: **A.T.B.**
 DRAWN BY: **S.L.S.**
 REVIEWED BY: **S.P.C. & C.B.N.**
 APPROVED BY: **D.Z.**
 PROJECT NO.: 60420789
 DATE: JUNE 6, 2018
 SCALE: **AS NOTED**

REVISION:

SHEET NO.
10 OF 24

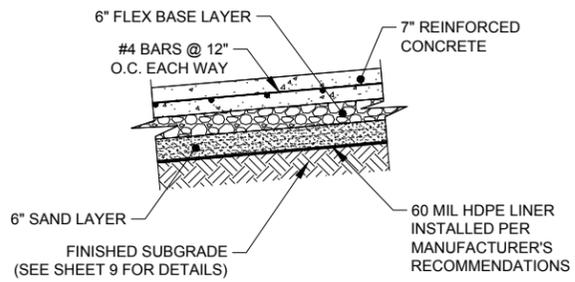
File: L:\AGE\Projects\ENV\GLO_City of Galveston\06_CADD_Active Design\Plan_Sheets\Sheet 11 - Top of Flex Base Grading Plan.dwg Layout: TOP OF FLEX BASE GRADING PLAN Plotted: 6/18/2018 1:16:25 PM



PROPOSED TOP OF FLEX BASE GRADING POINTS TABLE				
POINT #	STATION	NORTHING	EASTING	ELEV.
1	0+00.00	13679402.34	3295347.42	3.12
2	2+41.25	13679187.58	3295457.34	4.33
3	3+91.25	13679054.06	3295525.68	5.08
4	5+41.25	13678920.53	3295594.02	5.83
5	6+91.25	13678787.00	3295662.35	6.58
6	7+40.01	13678743.60	3295684.57	6.82
7	8+70.03	13678802.85	3295800.30	7.47
8	10+00.05	13678862.10	3295916.04	6.82
9	10+48.76	13678905.47	3295893.84	6.58
10	11+98.77	13679039.00	3295825.50	5.83

PROPOSED TOP OF FLEX BASE GRADING POINTS TABLE				
POINT #	STATION	NORTHING	EASTING	ELEV.
11	13+48.77	13679172.52	3295757.16	5.09
12	14+98.77	13679306.24	3295689.18	4.29
13	16+63.44	13679452.65	3295613.79	3.52
14	17+00.62	13679485.74	3295596.85	3.33
15	18+32.12	13679441.82	3295473.28	3.88
16	18+26.13	13679408.41	3295490.37	4.07
17	14+98.77	13679246.82	3295573.08	4.98
18	13+48.77	13679113.29	3295641.42	5.73
19	11+98.77	13678979.76	3295709.76	6.48
20	8+70.03	13678846.24	3295778.10	7.23

- NOTES:**
- USE NORTHING AND EASTING TO LAYOUT POINTS IN THE FIELD DURING CONSTRUCTION.
 - SEE SHEET 2 FOR LEGEND AND ABBREVIATIONS.
 - SEE SHEET 3 FOR GENERAL NOTES.
 - SEE SHEET 5 FOR HORIZONTAL AND VERTICAL CONTROL.
 - COORDINATE POINT STATIONING IS BASED ON BASELINE OF PROPOSED TOP EDGE OF CAP.
 - NO EXISTING GRADING WAS PROVIDED IN THIS AREA DUE TO EXISTING JUNK PILE ON-SITE. THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION SURVEY OF THE SITE PRIOR TO CONSTRUCTION AND GRADE AS NECESSARY TO MEET RECOMMENDED GRADES AS SHOWN ON THIS SHEET.



1 TYPICAL CAP DETAIL
11 NOT TO SCALE

- LEGEND:**
- LOC — LOC — LIMITS OF CONSTRUCTION
 - - - - - LIMITS OF FLEX BASE GRADING
 - — — — — PROPERTY LINE
 - 5 — — — — PROPOSED GRADE CONTOUR
 - 5 — — — — EXISTING GRADE CONTOUR
 - (1) — — — — FLOW
 - (1) — — — — COORDINATE POINT AT EDGE OF CAP

NO.	DATE	CK	DR	DESCRIPTION

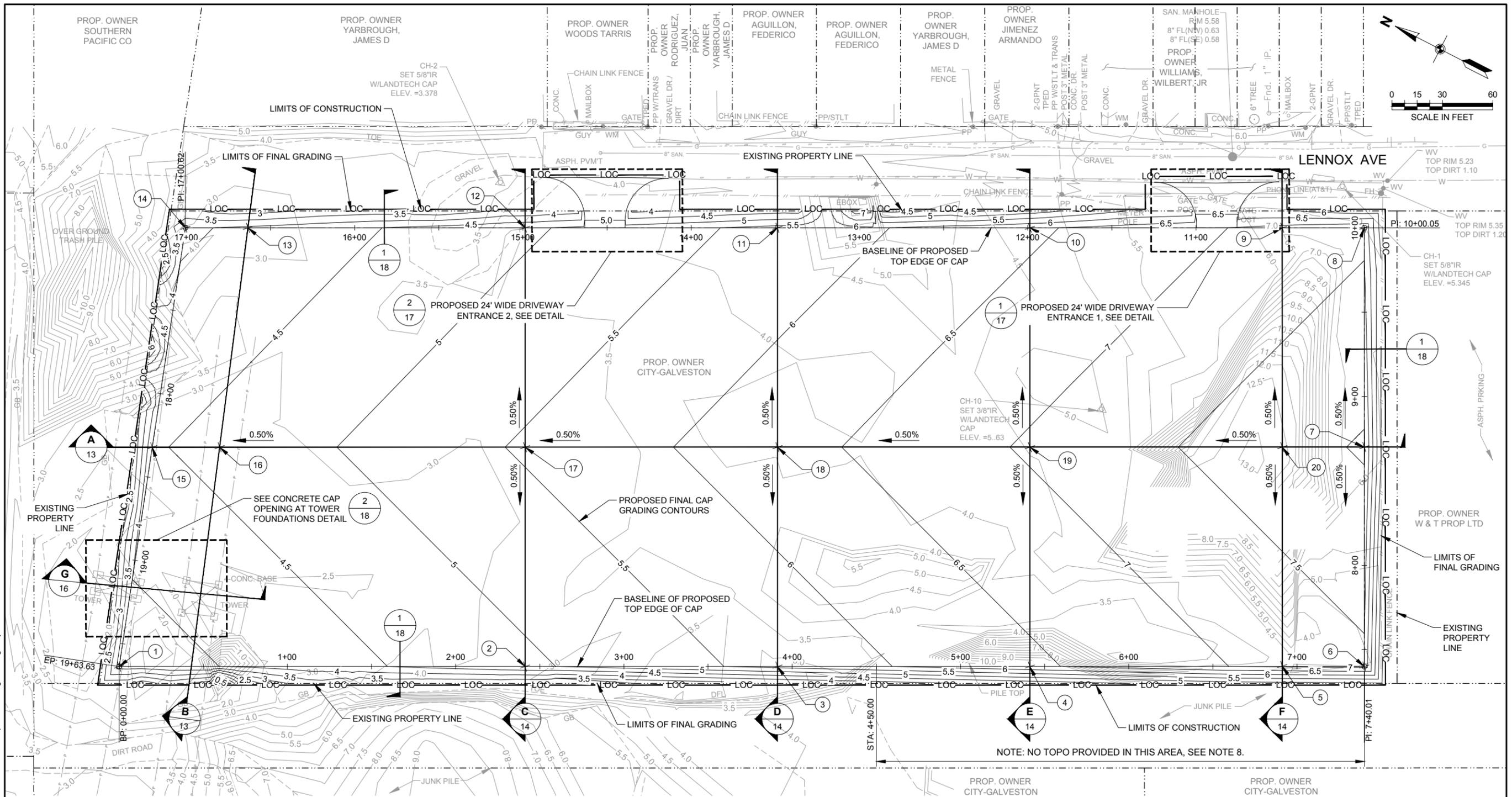
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 TBPE Reg. No. F-3580

City of Galveston, Texas
Old Municipal Incinerator Site
Remediation (Lot E, #3 Lennox Ave.)

TOP OF FLEX BASE GRADING PLAN

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.:	11 OF 24

File: L:\AGE\Projects\ENV\GLO_City of Galveston\06_CADD_Active Design\Plan_Sheets\Sheet 12 - Cap Final Grading Plan.dwg Layout: CAP FINAL GRADING PLAN Plotted: 6/18/2018 1:16:39 PM

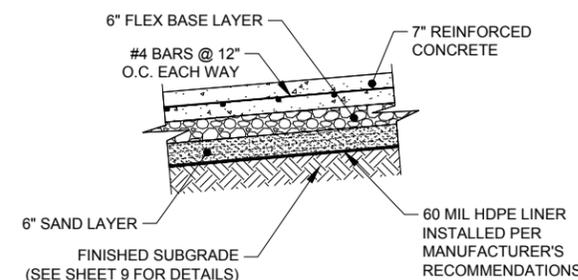


POINT #	STATION	NORTHING	EASTING	ELEV.
1	0+00.00	13679402.34	3295347.42	3.70
2	2+41.25	13679187.58	3295457.34	4.91
3	3+91.25	13679054.06	3295525.68	5.66
4	5+41.25	13678920.53	3295594.02	6.41
5	6+91.25	13678787.17	3295662.60	7.16
6	7+40.01	13678743.60	3295684.57	7.40
7	8+70.03	13678802.85	3295800.30	8.05
8	10+00.05	13678862.10	3295916.04	7.40
9	10+48.76	13678905.47	3295893.84	7.16
10	11+98.77	13679039.00	3295825.50	6.41

POINT #	STATION	NORTHING	EASTING	ELEV.
11	13+48.77	13679172.52	3295757.16	5.67
12	14+98.77	13679306.05	3295688.82	4.92
13	16+63.44	13679452.65	3295613.79	4.10
14	17+00.62	13679485.74	3295596.85	3.92
15	18+32.12	13679444.04	3295472.14	4.45
16	18+26.13	13679408.41	3295490.37	4.65
17	14+98.77	13679246.82	3295573.08	5.56
18	13+48.77	13679113.29	3295641.42	6.31
19	11+98.77	13678979.76	3295709.76	7.06
20	8+70.03	13678846.24	3295778.10	7.81

NOTES:

1. USE NORTHING AND EASTING TO LAYOUT POINTS IN THE FIELD DURING CONSTRUCTION.
2. SEE SHEET 2 FOR LEGEND AND ABBREVIATIONS.
3. SEE SHEET 3 FOR GENERAL NOTES.
4. SEE SHEET 5 FOR HORIZONTAL AND VERTICAL CONTROL.
5. SEE SHEET 18 FOR MISCELLANEOUS CAP DETAILS.
6. SEE SHEET 19 FOR CONCRETE CAP DETAILS - STRUCTURAL.
7. COORDINATE POINT STATIONING IS BASED ON BASELINE OF PROPOSED TOP EDGE OF CAP.
8. NO EXISTING GRADING WAS PROVIDED IN THIS AREA DUE TO EXISTING JUNK PILE ON-SITE. THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION SURVEY OF THE SITE PRIOR TO CONSTRUCTION AND GRADE AS NECESSARY TO MEET RECOMMENDED GRADES AS SHOWN ON THIS SHEET.



1 TYPICAL CAP DETAIL
12 NOT TO SCALE

LEGEND:

- LOC — LOC — LIMITS OF CONSTRUCTION
- - - - - LIMITS OF FINAL GRADING
- - - - - PROPERTY LINE
- 5 — PROPOSED GRADE CONTOUR
- 5 — EXISTING GRADE CONTOUR
- ① FLOW
- ① COORDINATE POINT AT EDGE OF CAP

NO.	DATE	CK	DR	DESCRIPTION

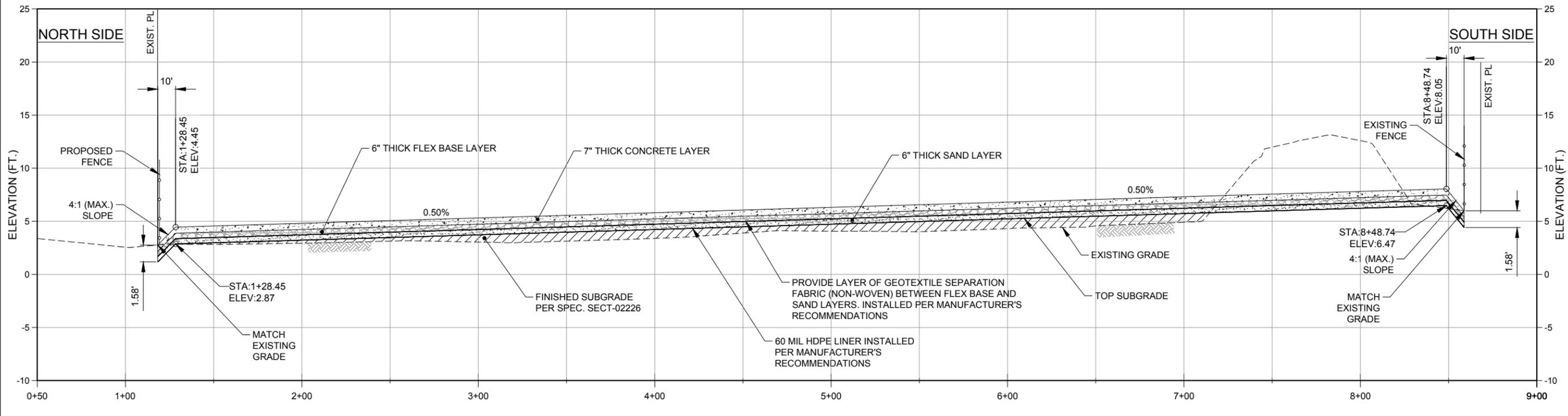
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City of Galveston, Texas
Old Municipal Incinerator Site
Remediation (Lot E, #3 Lennox Ave.)

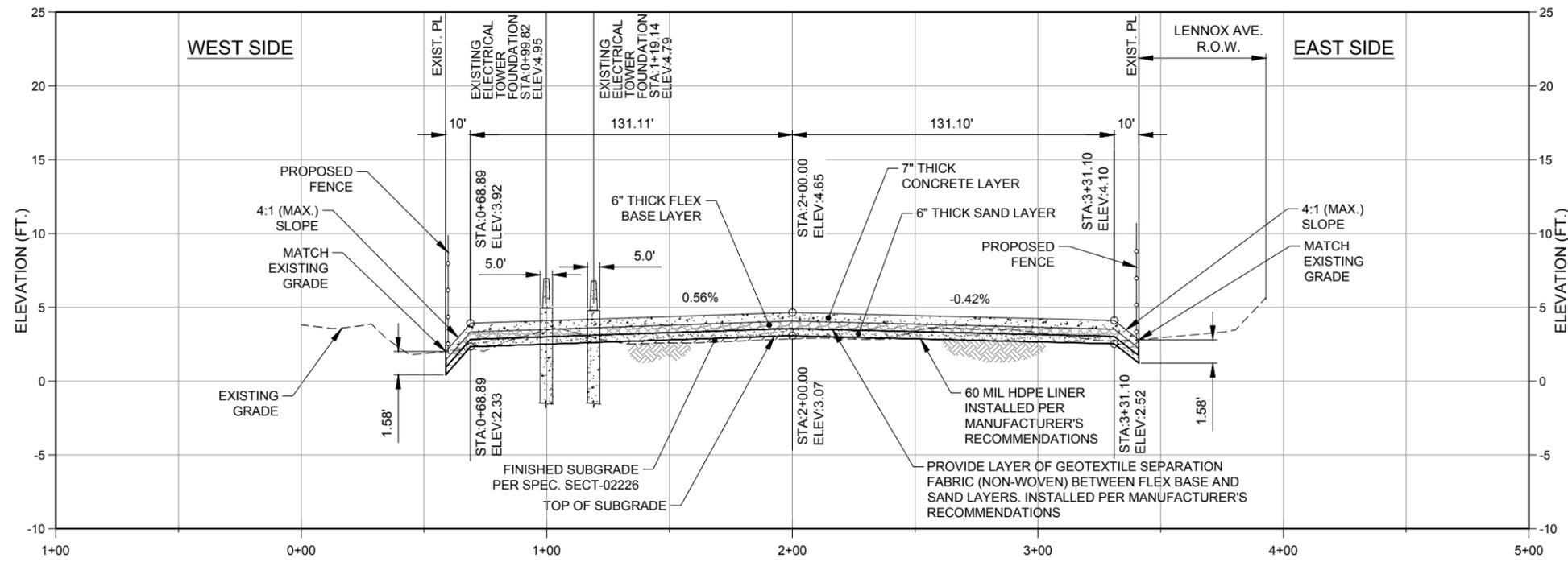
CAP FINAL GRADING PLAN

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.:	12 OF 24

File: L:\AGE\Projects\ENV\GLO_City of Galveston\05_CADD_Active Design\Plan Sheets\Sheet 13 - Cap Grading Section A and B.dwg Layout: CAP GRADING SECTION A AND B Plotted: 6/19/2018 1:16:53 PM



A TYPICAL CAP GRADING SECTION
 9 THRU 12
 0 15 30 60 0 5 10
 HORIZ. SCALE IN FEET VERT. SCALE IN FEET



B TYPICAL CAP GRADING SECTION
 9 THRU 12
 0 15 30 60 0 5 10
 HORIZ. SCALE IN FEET VERT. SCALE IN FEET

NO.	DR	CK	DATE	DESCRIPTION

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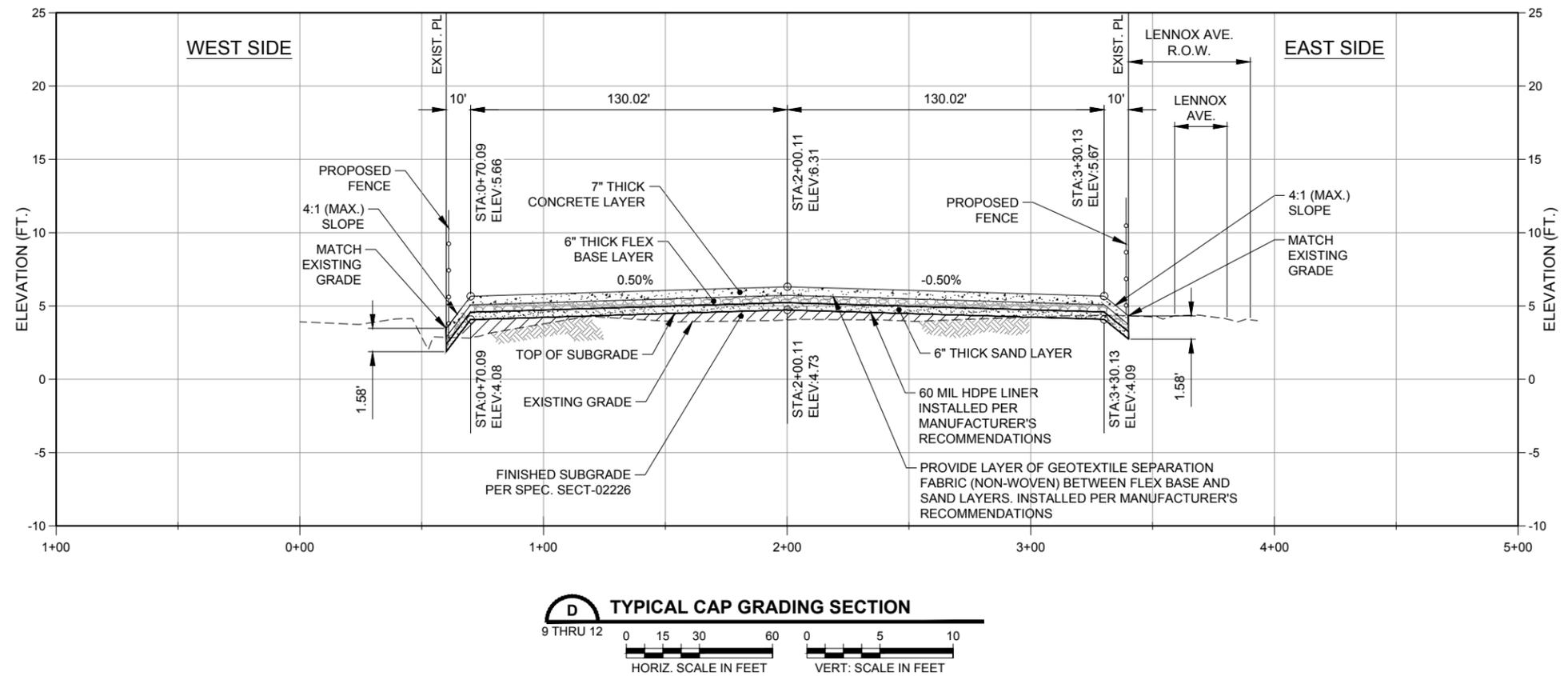
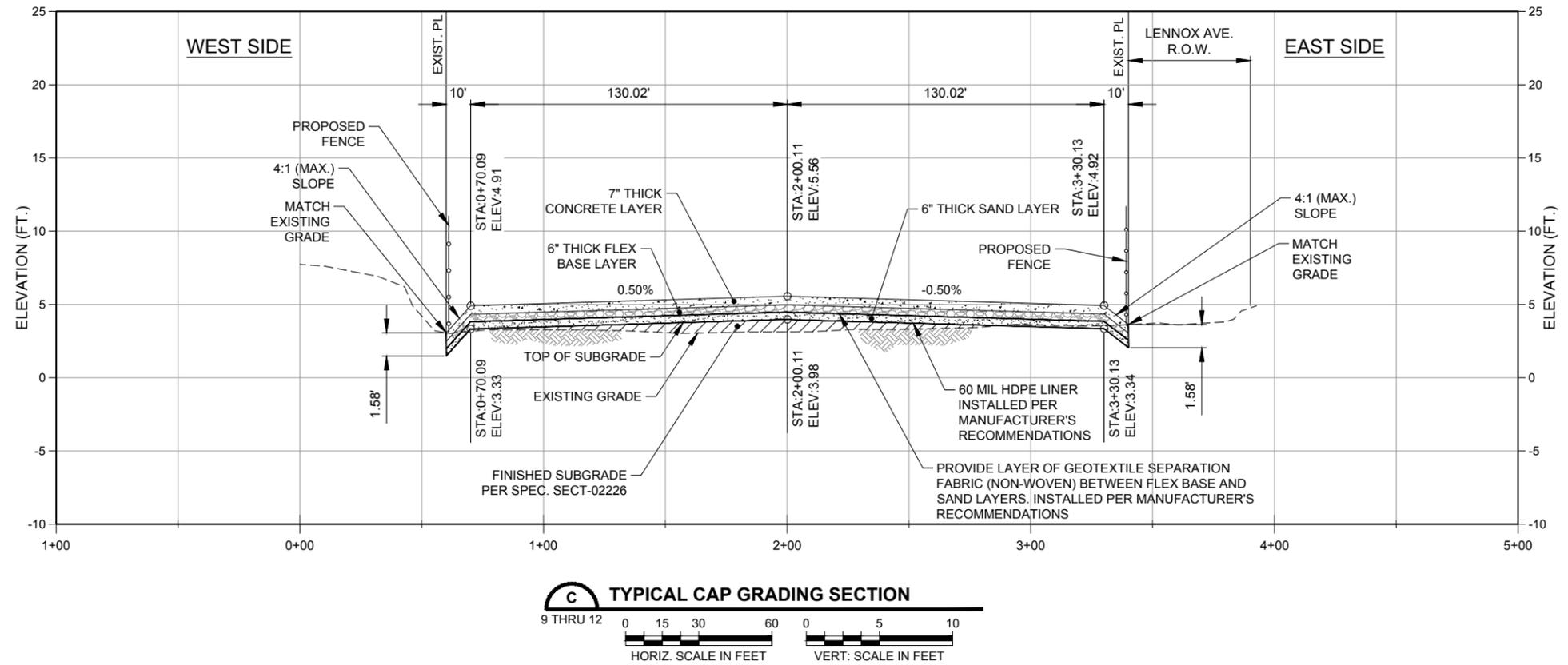


City of Galveston, Texas
 Old Municipal Incinerator Site
 Remediation (Lot E, #3 Lennox Ave.)

CAP GRADING SECTION A AND B

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.:	13 OF 24

File: L:\AGE\Projects\ENV\GLO_City of Galveston\05_CADD_Active Design\Plan Sheets\Sheet 14 - Cap Grading Section C AND D.dwg Layout: CAP GRADING SECTION C AND D Plotted: 01/19/2018 1:17:09 PM



NO.	DATE	CK	DR	DESCRIPTION

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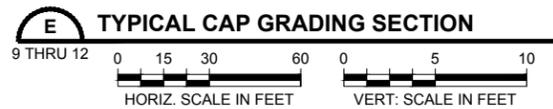
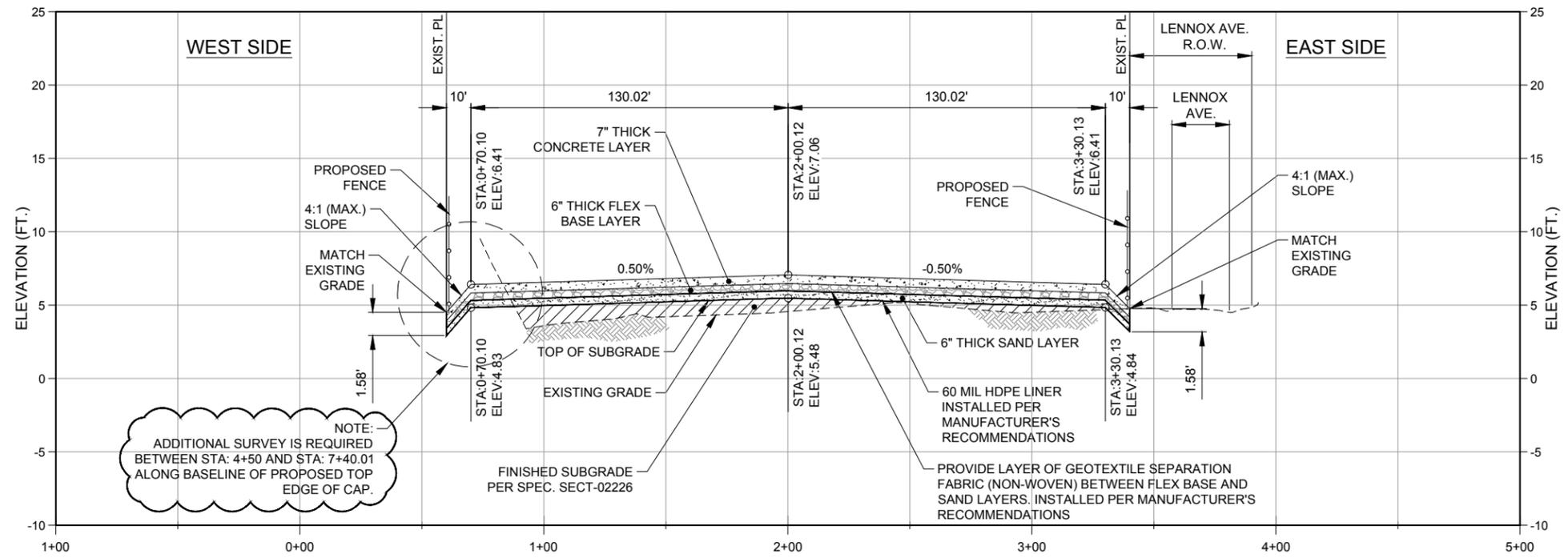
City of Galveston, Texas
**Old Municipal Incinerator Site
Remediation (Lot E, #3 Lennox Ave.)**

CAP GRADING SECTION C AND D

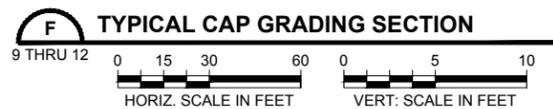
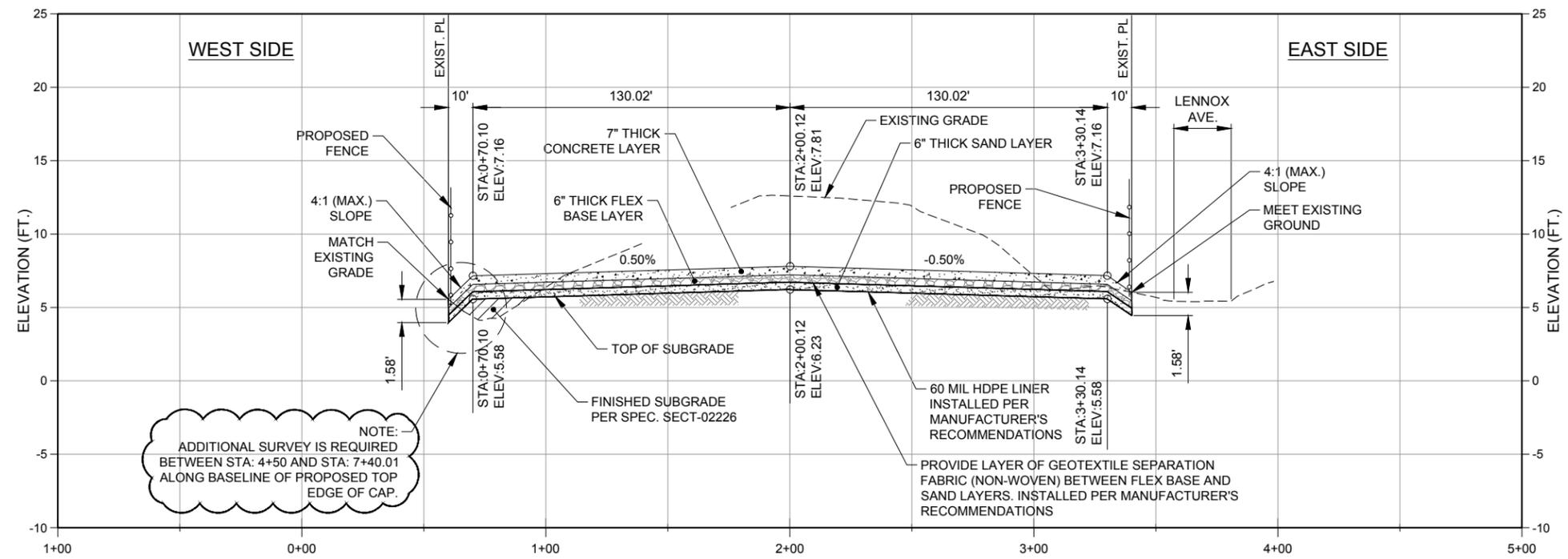


DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.	14 OF 24

File: L:\MGE\Projects\ENV\GLO_City of Galveston\05_CADD\Active Design\Plan Sheets\Sheet 15 - Cap Grading Section E AND F.dwg Layout: CAP GRADING SECTION E AND F Plotted: 6/18/2018 1:17:24 PM



NOTE:
ADDITIONAL TOPOGRAPHICAL SURVEY DATA IS REQUIRED ON THE SOUTH WEST CORNER OF THE SITE BETWEEN STA: 4+50 AND STA: 7+40.01 ALONG BASELINE OF PROPOSED TOP EDGE OF CAP.



NO.	DR	CK	DATE	DESCRIPTION

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 TBPE Reg. No. F-3580

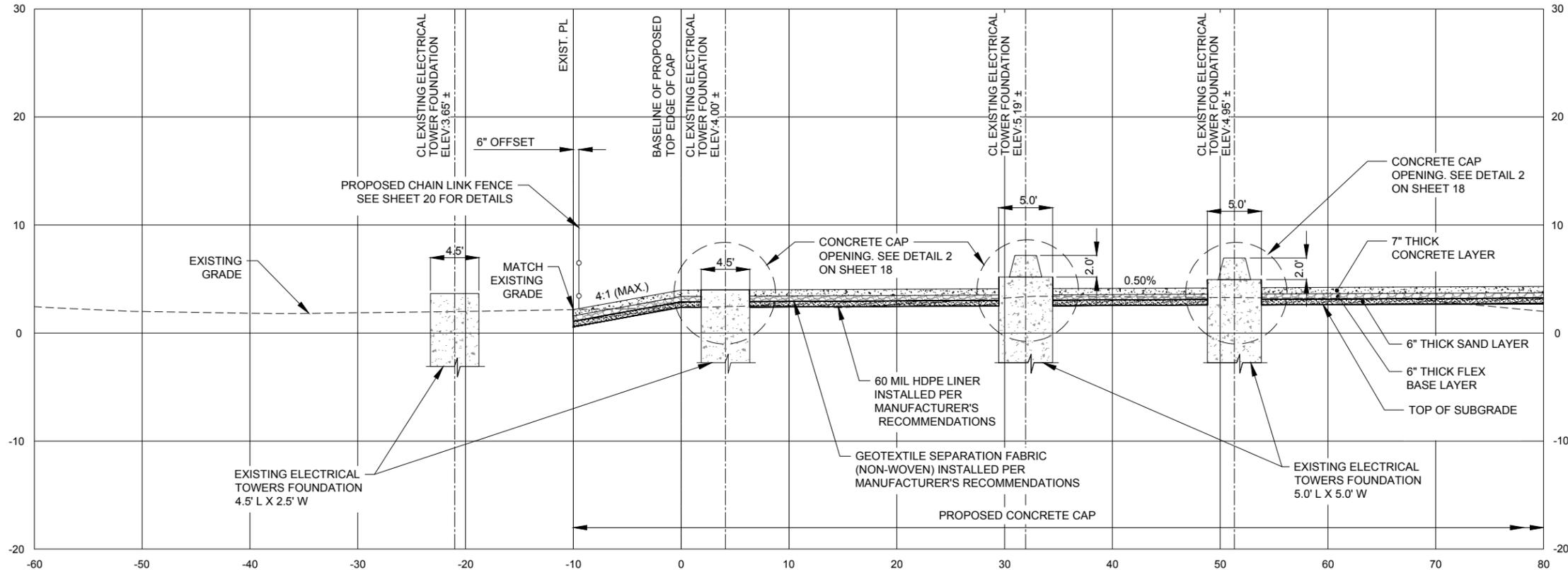


City of Galveston, Texas
Old Municipal Incinerator Site
Remediation (Lot E, #3 Lennox Ave.)

CAP GRADING SECTION E AND F

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.:	15 OF 24

File: L:\AGE\Projects\ENV\GLO_City of Galveston\05_CADD_Active Design\Plan Sheets\Sheet 16 - Cap Grading Section G.dwg Layout: CAP GRADING SECTION G Plotted: 6/18/2018 1:17:38 PM



G TYPICAL CAP GRADING SECTION
9 THRU 12 NOT TO SCALE

NOTES:

1. SEE SHEET 2 FOR LEGEND AND ABBREVIATIONS.
2. SEE SHEET 3 FOR GENERAL NOTES.
3. SEE SHEET 5 FOR HORIZONTAL AND VERTICAL CONTROL.
4. SEE SHEETS 9 THRU 12 FOR CAP GRADING PLANS.

NO.	DR	CK	DATE	DESCRIPTION

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 Austin, Texas 78729
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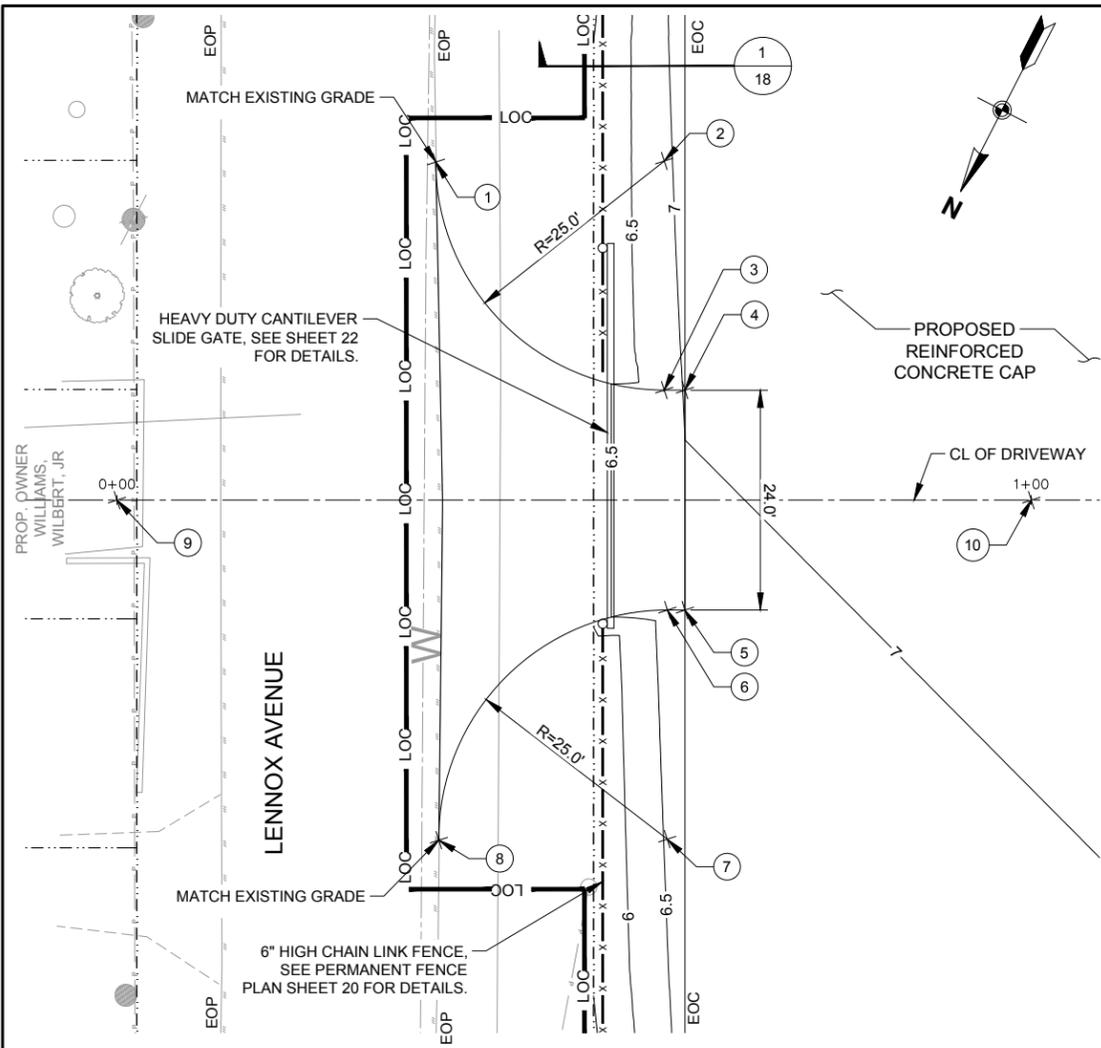


City of Galveston, Texas
 Old Municipal Incinerator Site
 Remediation (Lot E, #3 Lennox Ave.)

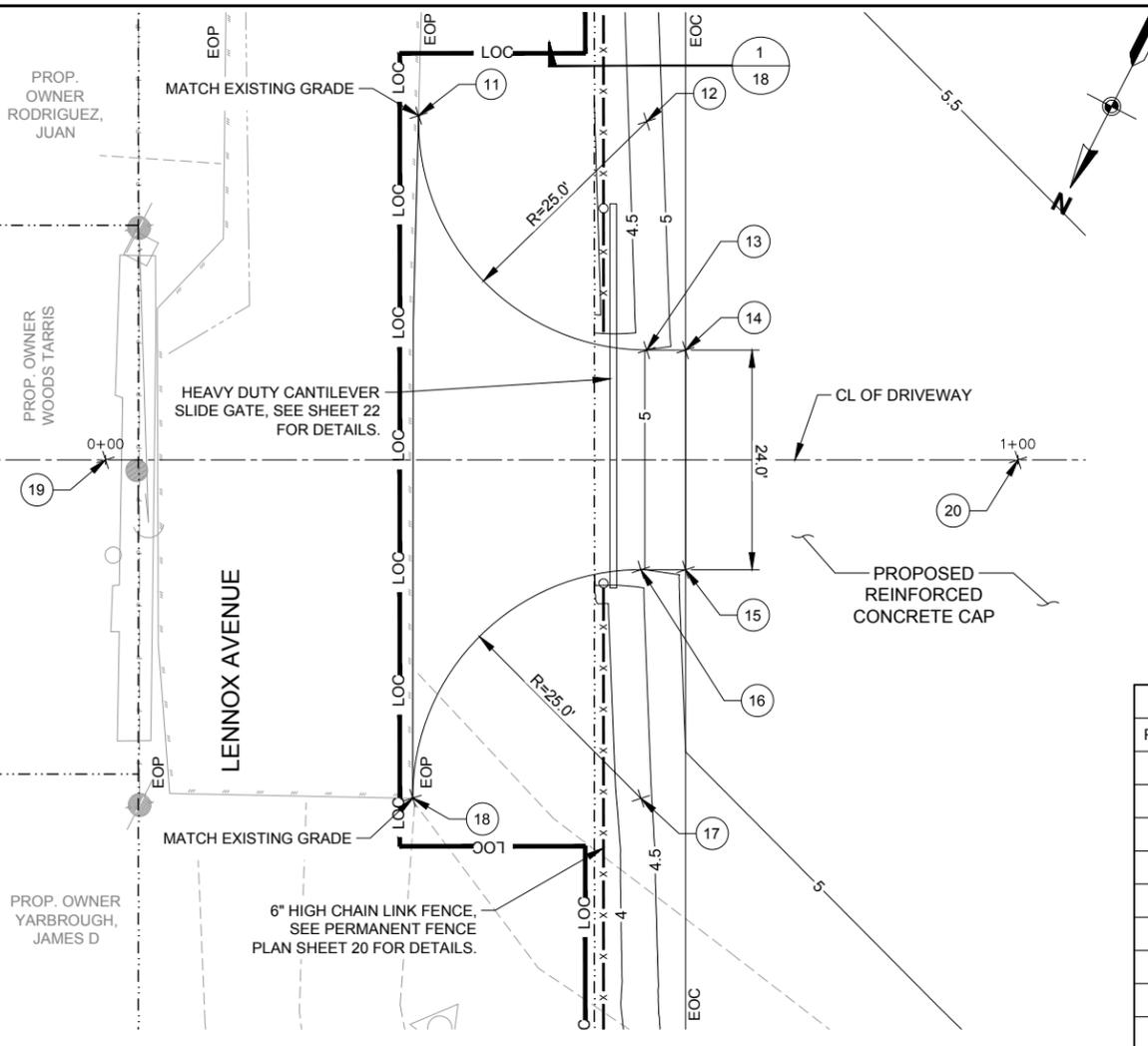
CAP GRADING SECTION G

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.	16 OF 24

File: L:\AGE\Projects\ENV\GLO_City of Galveston\05_CADD_Active Design\Plan Sheets\Sheet 17 - Driveways\Plan.dwg Layout: DRIVEWAY ENTRANCE 1 AND 2 PLAN AND PROFILES Plotted: 6/18/2018 1:18:02 PM



1 DRIVEWAY ENTRANCE 1 PLAN
 SCALE IN FEET



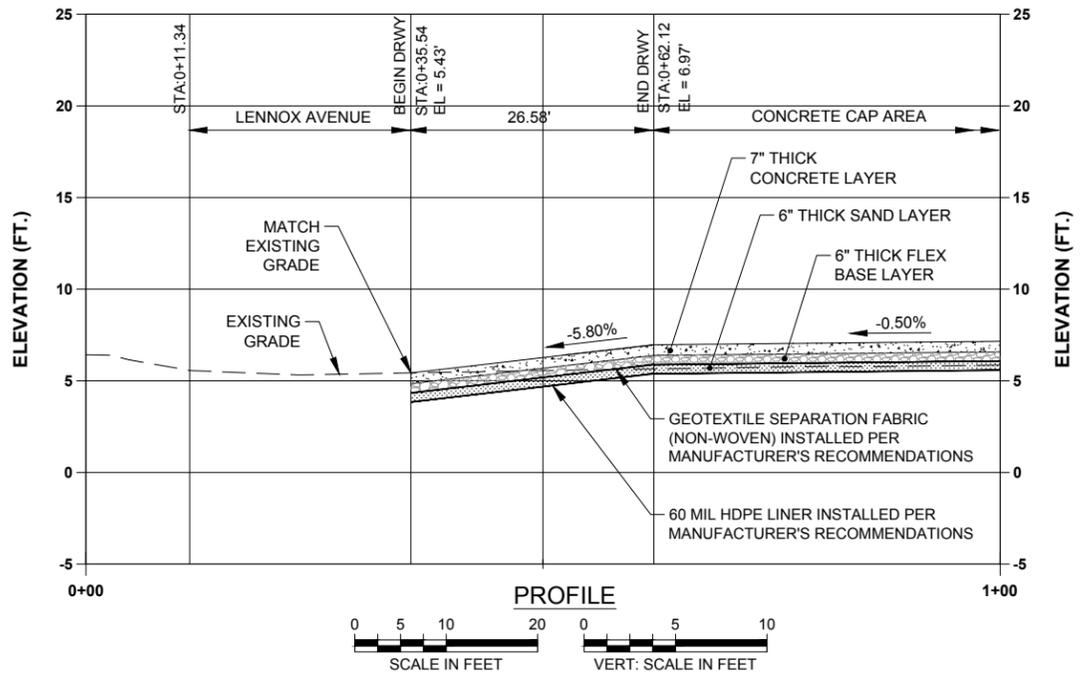
2 DRIVEWAY ENTRANCE 2 PLAN
 SCALE IN FEET

- NOTES:**
1. USE NORTHING AND EASTING TO LAYOUT POINTS IN THE FIELD DURING CONSTRUCTION.
 2. SEE SHEET 2 FOR LEGEND AND ABBREVIATIONS.
 3. SEE SHEET 3 FOR GENERAL NOTES.
 4. SEE SHEET 5 FOR HORIZONTAL AND VERTICAL CONTROL.

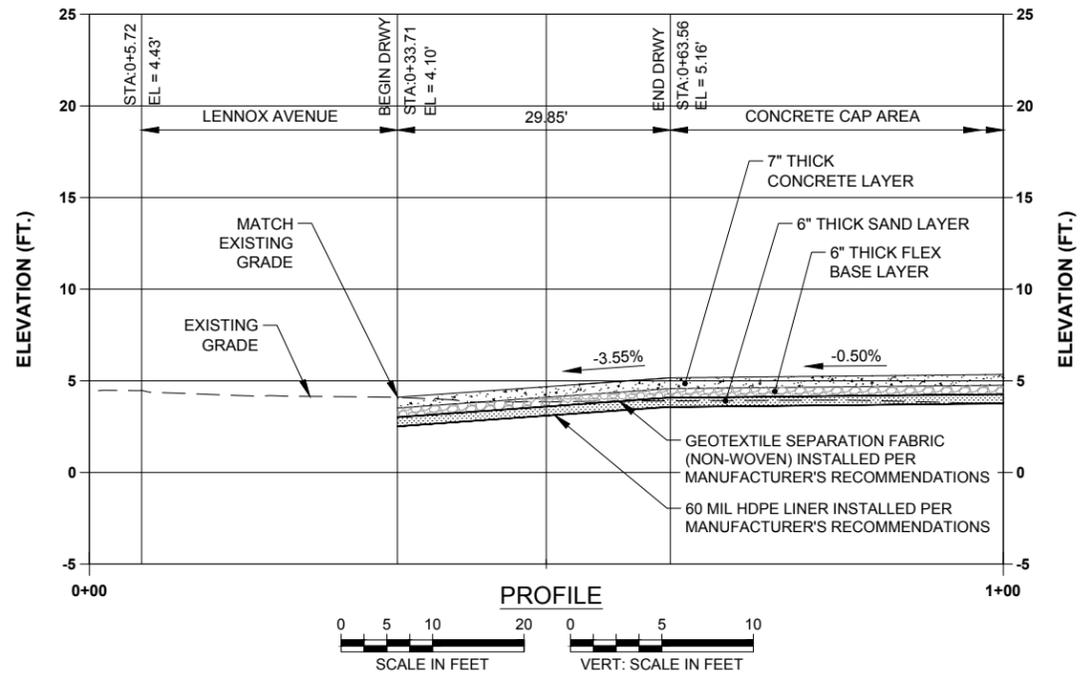
- LEGEND:**
- LOC LIMITS OF CONSTRUCTION
 - PROPERTY LINE
 - 5 PROPOSED GRADE CONTOUR
 - 5 EXISTING GRADE CONTOUR
 - 1 COORDINATE POINT

PROPOSED POINTS TABLE				
POINT #	STATION	NORTHING	EASTING	ELEV.
1	0+34.85	13678919.68	3295917.17	5.44
2	0+59.85	13678908.20	3295894.99	0.00
3	0+59.85	13678930.46	3295883.60	6.77
4	0+76.63	13678929.43	3295881.58	0.00
5	0+76.63	13678950.79	3295870.64	0.00
6	0+60.20	13678951.66	3295872.35	6.78
7	0+60.20	13678973.93	3295860.98	0.00
8	0+35.18	13678985.40	3295883.17	5.43
9	0+00.00	13678968.41	3295931.41	0.00
10	0+00.00	13678922.85	3295842.39	0.00
11	0+34.22	13679243.62	3295753.62	4.27
12	0+59.31	13679232.81	3295731.08	0.00
13	0+59.31	13679255.06	3295719.69	4.99
14	0+63.56	13679253.13	3295715.91	0.00
15	0+63.56	13679274.49	3295704.97	0.00
16	0+58.67	13679276.72	3295709.33	4.98
17	0+58.67	13679298.98	3295697.94	0.00
18	0+33.67	13679310.34	3295720.21	3.87
19	0+00.00	13679292.77	3295767.02	0.00
20	0+00.00	13679247.21	3295678.00	0.00

NOTE:
 ELEVATION 0.00' IS NOT APPLICABLE FOR CONSTRUCTION.



PROFILE
 SCALE IN FEET
 VERT: SCALE IN FEET



PROFILE
 SCALE IN FEET
 VERT: SCALE IN FEET

NO.	DR	CK	DATE	DESCRIPTION

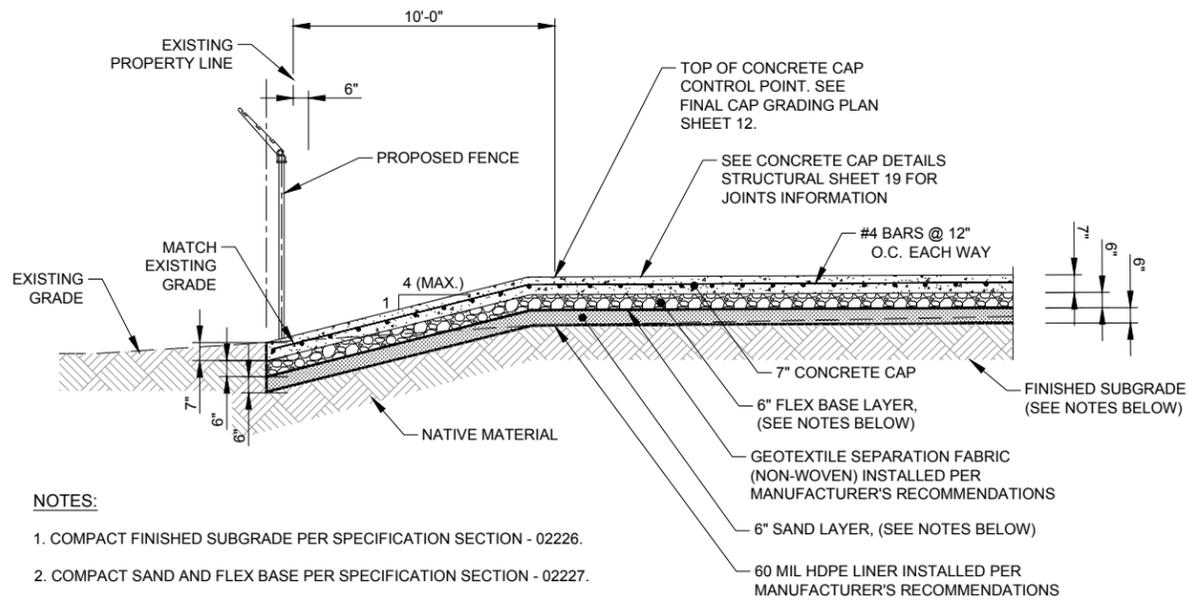
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City of Galveston, Texas
Old Municipal Incinerator Site
Remediation (Lot E, #3 Lennox Ave.)

DRIVEWAY ENTRANCE 1 AND 2
 PLAN AND PROFILES

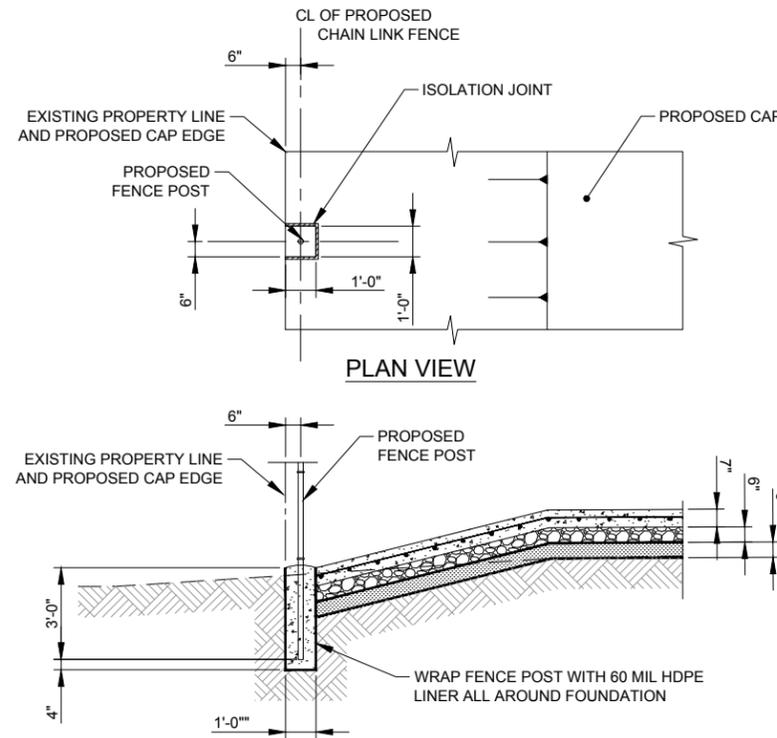
DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.:	17 OF 24

File: L:\ACE\Projects\ENV\GLO_City of Galveston\05_CADD_Active Design\Plan_Sheets\Sheet 18 - MISCELLANEOUS CAP DETAILS.dwg Layout: MISCELLANEOUS CAP DETAILS Plotted: 6/18/2018 1:18:11 PM

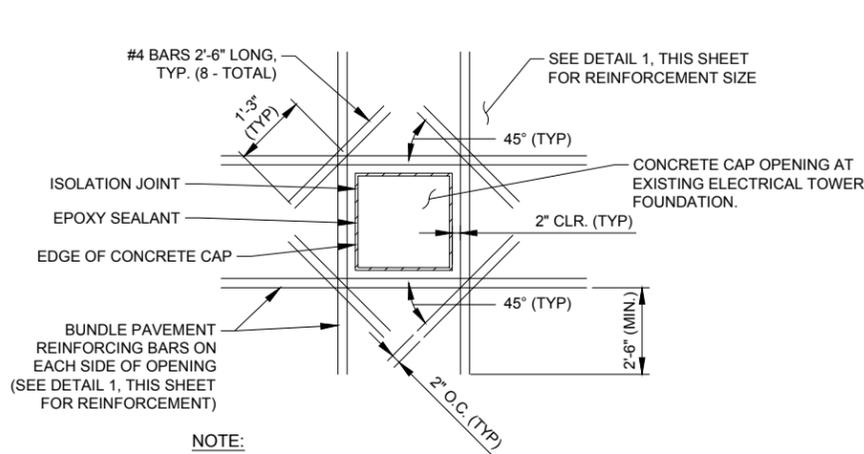


- NOTES:**
1. COMPACT FINISHED SUBGRADE PER SPECIFICATION SECTION - 02226.
 2. COMPACT SAND AND FLEX BASE PER SPECIFICATION SECTION - 02227.

1 CONCRETE CAP DETAIL
9 THRU 12 NOT TO SCALE

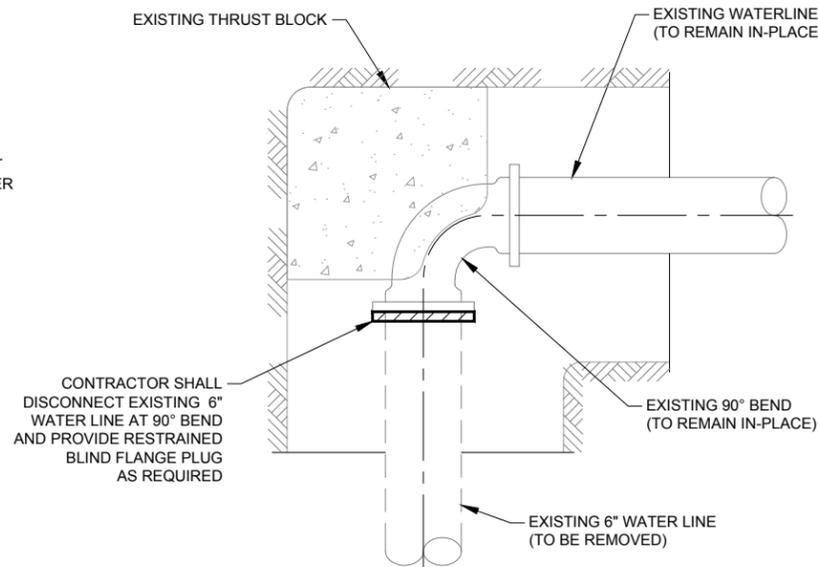


3 TYPICAL FENCE POST FOUNDATION INSTALLATION
12 NOT TO SCALE

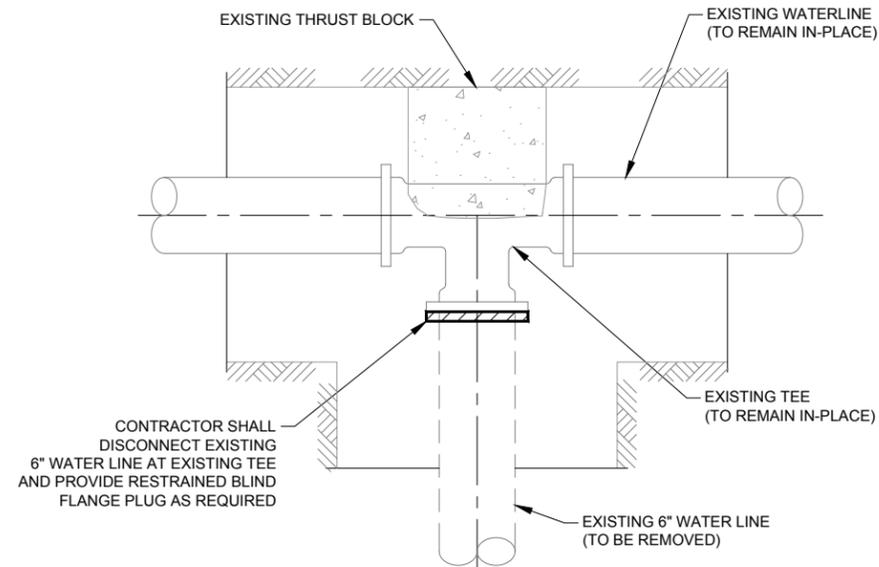


- NOTE:**
1. CUT TYPICAL CONCRETE CAP REINFORCING BARS AS NEEDED AROUND OPENING MAINTAINING MINIMUM CLEAR.
 2. BUNDLE LENGTHS VARIES FOR DIFFERENT FOUNDATION SIZES.

2 CONCRETE CAP OPENING AT TOWER FOUNDATIONS DETAIL
12 NOT TO SCALE



4 TYPICAL PLUG DETAIL AT 90 DEGREE BEND
8 NOT TO SCALE



5 TYPICAL PLUG DETAIL AT EXISTING TEE
8 NOT TO SCALE

- NOTES:**
1. SEE SHEET 2 FOR LEGEND AND ABBREVIATIONS.
 2. SEE SHEET 3 FOR GENERAL NOTES.
 3. SEE SHEET 5 FOR HORIZONTAL AND VERTICAL CONTROL.
 4. SEE SHEETS 9 THRU 12 FOR CAP GRADING PLAN.

NO.	DATE	DESCRIPTION

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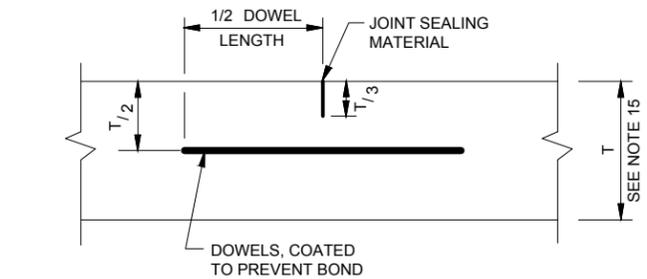


City of Galveston, Texas
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Remediation (Lot E, #3 Lennox Ave.)

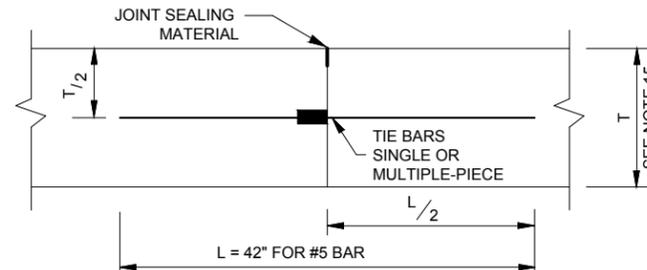
MISCELLANEOUS CAP DETAILS

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.:	18 OF 24

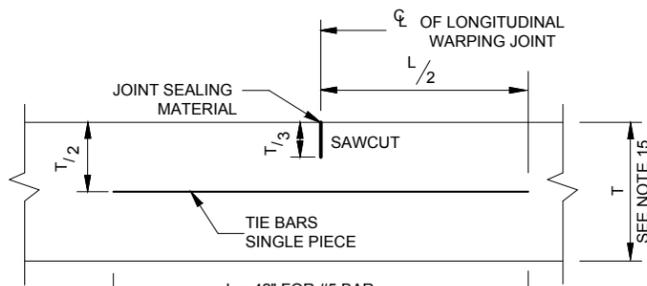
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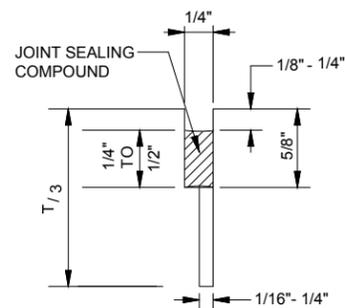
**TRANSVERSE CONTRACTION JOINT
SECTION X-X**



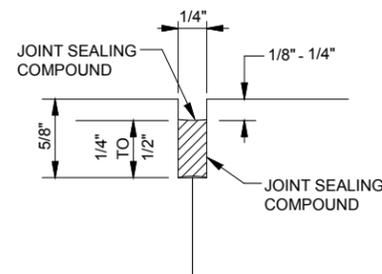
**LONGITUDINAL CONSTRUCTION JOINT
SECTION Y-Y**



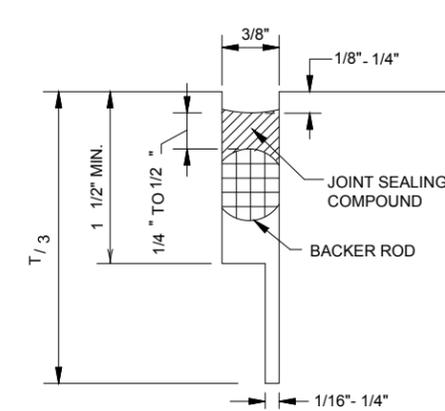
**LONGITUDINAL CONTRACTION JOINT
SECTION Z-Z**



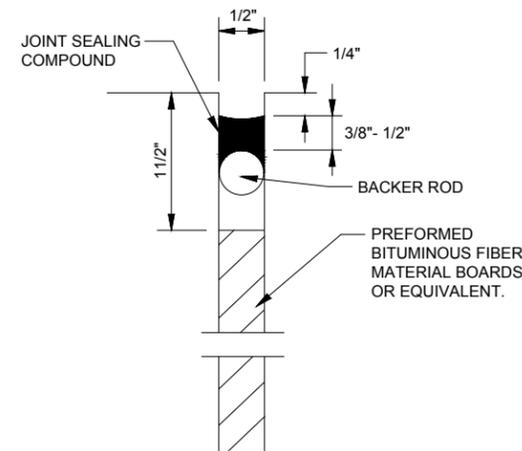
**LONGITUDINAL SAWED
CONSTRUCTION JOINT**



**LONGITUDINAL OR TRANSVERSE
CONSTRUCTION JOINT**

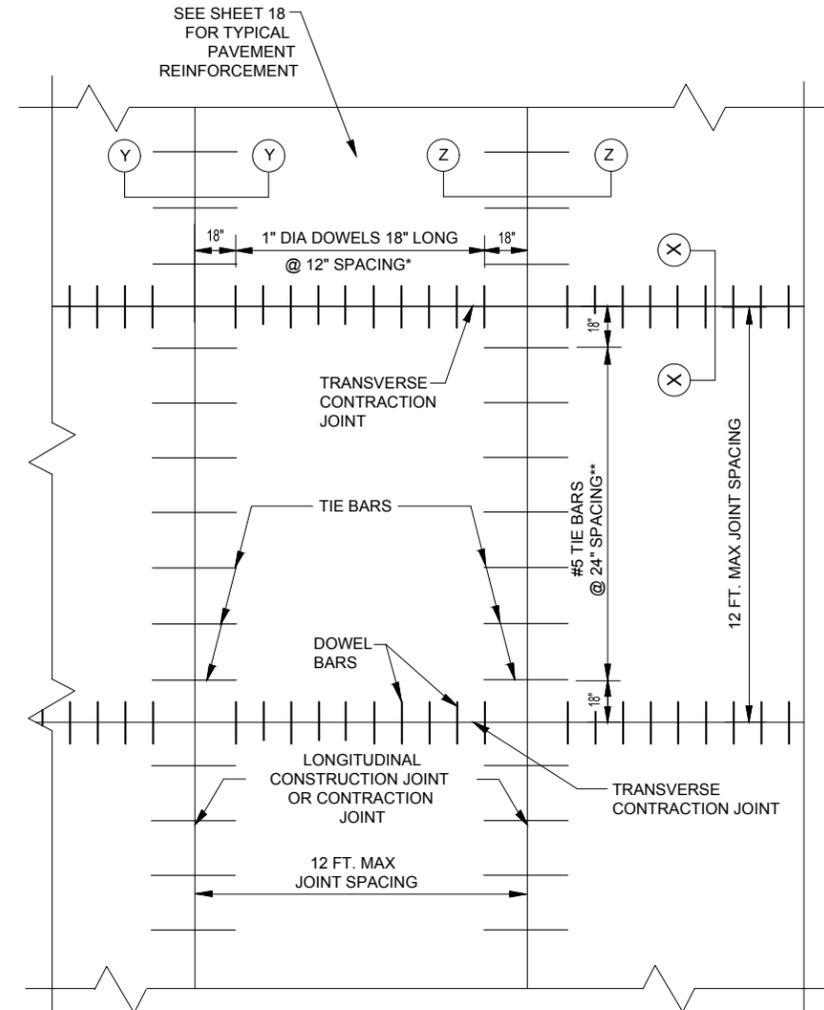


**TRANSVERSE SAWED
CONTRACTION JOINT**



FORMED ISOLATION JOINT

(SEE NOTE 7)



TYPICAL PAVEMENT LAYOUT

PLAN VIEW (NOT TO SCALE)

* DOWELS ARE SMOOTH BARS
** TIE BARS ARE DEFORMED BARS

GENERAL NOTES

1. CONCRETE SHALL BE CLASS "P" WITH A STRENGTH F'C = 4,000 PSI AT 28 DAYS. MINIMUM SEVEN (7) DAYS COMPRESSIVE STRENGTH = 0.70 F'C.
2. REINFORCING STEEL SHALL BE GRADE 60.
3. TRANSVERSE CONSTRUCTION JOINTS SHALL BE FORMED BY USE OF METAL FORMS EQUAL IN DEPTH TO THE DEPTH OF PAVEMENT, OR BY METHODS APPROVED BY THE ENGINEER.
4. USE HAND-OPERATED IMMERSION VIBRATORS TO CONSOLIDATE THE CONCRETE ADJACENT TO ALL THE FORMED JOINTS.
5. THE SAW CUT DEPTH FOR THE LONGITUDINAL CONTRACTION JOINT (SECTION Z-Z) SHALL BE ONE THIRD OF THE SLAB THICKNESS (T/3).
6. NO FULL DEPTH EXPANSION JOINTS WILL BE ALLOWED IN THE CONCRETE CAP IN ORDER TO ELIMINATE ANY POSSIBILITY OF WATER INFILTRATION INTO THE CAP.
7. FORMED ISOLATION JOINTS SHALL BE USED AROUND EXISTING ELECTRICAL TOWER FOUNDATIONS AND PROPOSED CHAIN LINK FENCE POST FOUNDATION.
8. DOWEL BAR PLACEMENT TOLERANCE SHALL BE +/- 1/4IN. HORIZONTALLY AND VERTICALLY UNLESS OTHERWISE SPECIFIED. WHERE DOWEL BAR BASKETS ARE USED, REMOVE THE SHIPPING WIRES.
9. THE JOINT RESERVOIR FOR SEALANT OR PCS SHALL BE SAWED UNLESS OTHERWISE SHOWN ON THE PLANS FOR THE LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS AND THE SAWED JOINTS.
10. REFER TO DMS-6310 "JOINT SEALANTS AND FILLERS" FOR THE CLASSIFICATIONS.
11. FOR SAWED LONGITUDINAL JOINT, LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINT, USE JOINT SEALANT CLASS 5 OR 8 UNLESS OTHERWISE SHOWN ON THE PLAN OR APPROVED.
12. FOR TRANSVERSE SAWED CONTRACTION, TRANSVERSE FORMED EXPANSION JOINT, AND ISOLATION JOINT USE JOINT SEALANT CLASS 5 OR 8 AT NEW JOINTS. USE JOINT SEALANT CLASS 4, 5, 7, OR 8 FOR MAINTAINING EXISTING JOINTS.
13. THE JOINTS SHALL BE CLEANED IN ACCORDANCE WITH THE ITEM 438 "CLEANING AND SEALING JOINTS" OR ITEM 713 "CLEANING AND SEALING JOINTS AND CRACKS (CONCRETE PAVEMENT)" (TXDOT STANDARD SPECIFICATIONS).
14. FOR INFORMATION REGARDING CONCRETE PLACEMENT SEE ITEM 360 (TXDOT STANDARD SPECIFICATIONS).
15. SLAB THICKNESS = T.

NO.	DATE	DR	CK	DESCRIPTION

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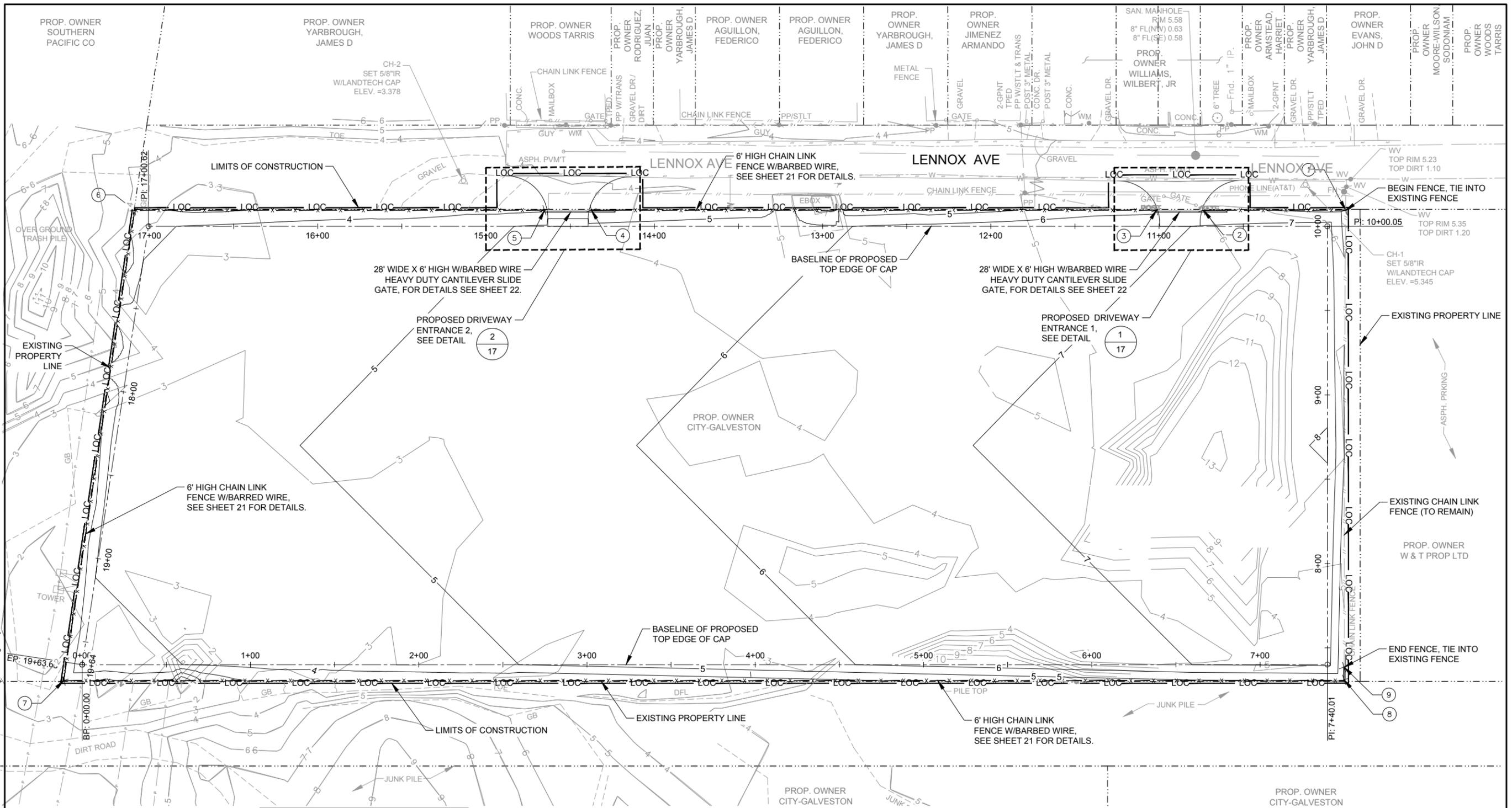


City of Galveston, Texas
 Old Municipal Incinerator Site
 Remediation (Lot E, #3 Lennox Ave.)

CONCRETE CAP DETAILS - STRUCTURAL

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.	19 OF 24

File: L:\AGE\Projects\ENV\GLO_City of Galveston\05_CADD_Active Design\Plan Sheets\Sheet 20 - Permanent Fencing Plan_Sheet 20 - Permanent Fencing Plan.dwg Layout: PERMANENT FENCE PLAN Plotted: 6/18/2018 1:18:34 PM



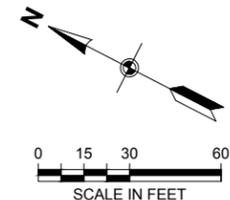
PROPOSED POINTS TABLE			
POINT #	STATION	NORTHING	EASTING
1	10+00.05	13678856.71	3295929.47
2	10+73.68	13678931.97	3295890.95
3	11+01.68	13678956.90	3295878.19
4	14+37.37	13679255.67	3295725.27
5	14+65.31	13679280.60	3295712.52
6	17+00.62	13679497.34	3295601.59
7	0+00.00	13679407.85	3295333.93
8	7+40.01	13678730.68	3295681.07
9	7+40.01	13678734.09	3295687.75

NOTES:

1. USE NORTHING AND EASTING TO LAYOUT POINTS IN THE FIELD DURING CONSTRUCTION.
2. SEE CITY OF GALVESTON TECHNICAL SPECIFICATIONS - SECTION 02831 FOR INFORMATION ON CHAIN LINK FENCE AND GATES.
3. SEE SHEET 2 FOR LEGEND AND ABBREVIATIONS.
4. SEE SHEET 3 FOR GENERAL NOTES.
5. SEE SHEET 5 FOR HORIZONTAL AND VERTICAL CONTROL.
6. COORDINATE POINT STATIONING IS BASED ON BASELINE AT PROPOSED TOP EDGE OF CAP.

LEGEND:

- LOC — LIMITS OF CONSTRUCTION
- X - X - X - X - PROPOSED CHAIN LINK FENCE
- - - - - LIMITS OF FINAL GRADING
- PROPERTY LINE
- 5 — PROPOSED GRADE CONTOUR
- 5 — EXISTING GRADE CONTOUR
- ① — COORDINATE POINT



NO.	DATE	CK	DR	DESCRIPTION

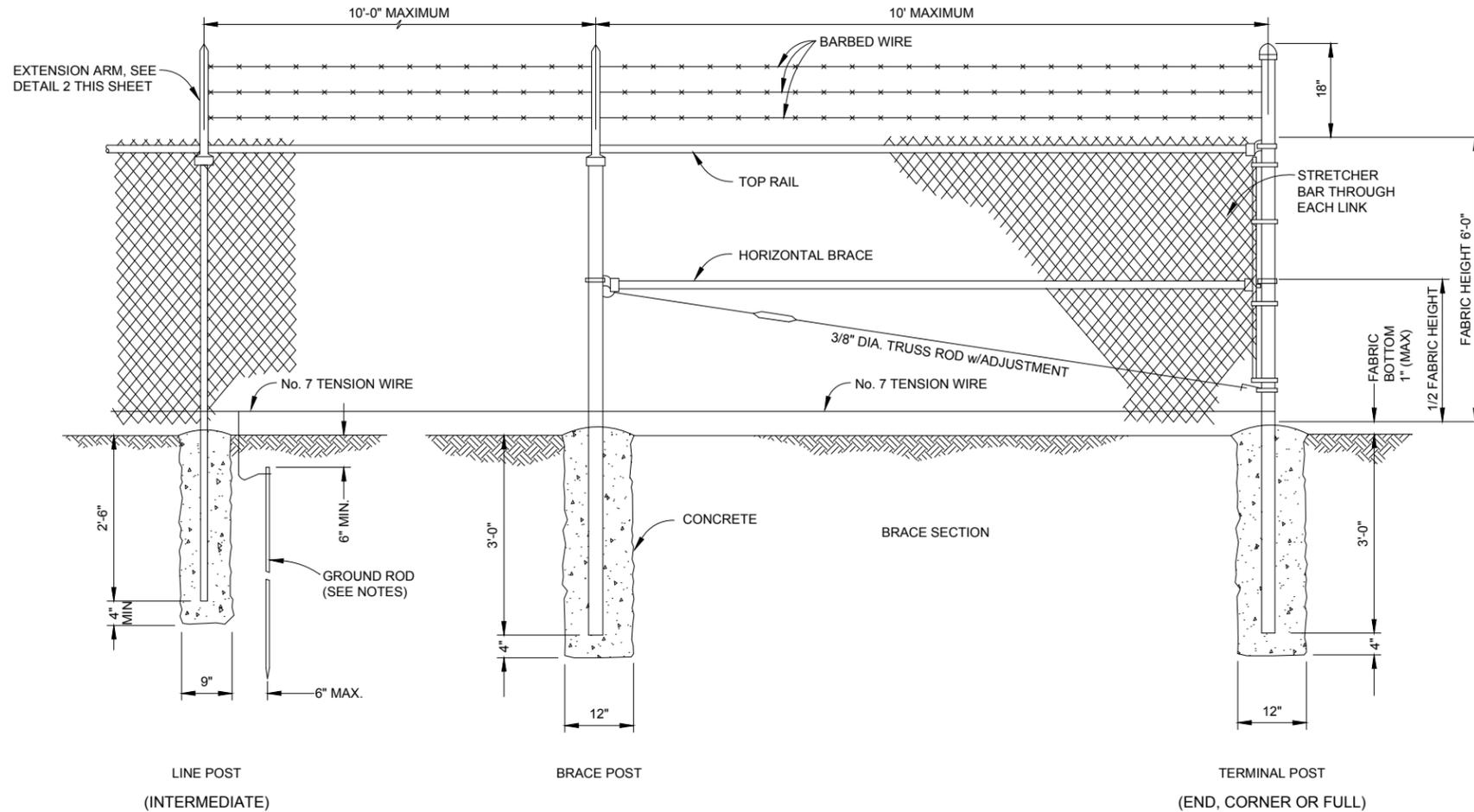
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City of Galveston, Texas
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Remediation (Lot E, #3 Lennox Ave.)

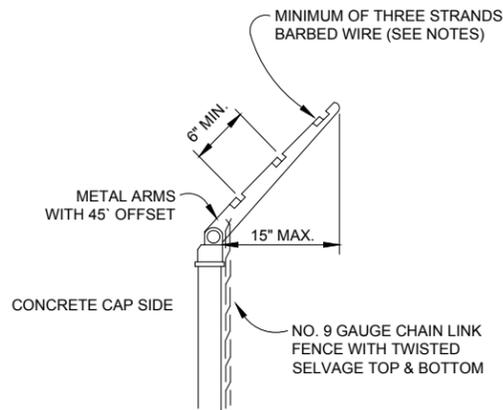
PERMANENT FENCE PLAN

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.	20 OF 24

File: L:\AGE\Projects\ENV\GLO_City of Galveston\02_CADD_Active Design\Plan Sheets\Sheet 21 - Fence Details.dwg Layout: 6' HIGH CHAIN LINK FENCE DETAILS Plotted: 6/19/2018 1:18:44 PM



1 CHAIN FENCE DETAILS
21 NOT TO SCALE



2 BARBED WIRE EXTENSION ARM DETAIL
21 NOT TO SCALE

CHAIN LINK FENCE MEMBER DIMENSIONS AND WEIGHTS		
DESCRIPTION	OUTSIDE DIMENSION (INCHES)	WEIGHT (LB./FT.)
CORNER, BRACE, END & PULL POSTS	2.875	5.79
LINE POSTS	2.375	3.65
RAILS & BRACES	1.675	2.27

FENCING NOTES

SEE CITY OF GALVESTON TECHNICAL SPECIFICATION - SECTION 02831

FABRIC MATERIAL:

ALL FENCE MATERIAL SHALL BE ZINC COATED, WOVEN WITH 9 GAUGE WIRE IN A 2 INCH MESH.

SELVAGE, RAILS & TENSION WIRE:

FENCING SHALL HAVE KNUCKLE SELVAGE ON TOP AND BOTTOM. FENCING SHALL BE SUPPORTED BY TOP RAIL AND 7 GAUGE TENSION WIRE AT BOTTOM OF THE FABRIC. KNUCKLE SELVAGE SHALL EXTEND 1 INCH ABOVE THE TOP RAIL.

POST RAILS AND BRACES:

SEE TABLE FOR CHAIN LINK FENCE MEMBER DIMENSIONS AND WEIGHTS.

FABRIC FASTENERS:

MINIMUM 3/8 INCH X 3/4 STRETCHER BAR, Banded to terminal post or integral to fabric fittings on terminal post minimum no. 9 wire clips for braces and rails and tension wire. All fasteners shall have a maximum spacing of 14 inches vertical and 24" horizontal.

COATINGS:

ZINC COATINGS ON POSTS RAILS, GATE FRAMES AND STEEL FITTINGS SHALL BE HOT DIP ZINC-COATED AFTER FABRICATION WITH AVERAGE WEIGHT OF 2.0 OUNCES OF ZINC PER SQUARE FOOT OF COATED SURFACE AREA.

ZINC COATING ON STEEL FABRIC SHALL BE CLASS 2 NOT LESS THAN 2 OUNCES OF ZINC PER SQUARE FOOT OF UNCOATED WIRE SURFACE AS DETERMINED FROM THE AVERAGE OF 2 OR MORE SPECIMENS.

FENCE HEIGHT:

THE NOMINAL HEIGHT OF THE FENCE FABRIC SHALL BE 6 FEET.

BARBED WIRE:

BARBED WIRE SHALL BE 2 STRAND TWISTED STEEL NO. 12 1/2 GAUGE WIRE WITH 4 POINT BARBS OF 14 GAUGE WIRE. COATING SHALL BE CLASS 3. THE FENCE SHALL INCLUDE 3 STRANDS OF BARBED WIRE SPACED AT 6 INCHES ON 45 DEGREE METAL SUPPORT ARMS, AND ORIENTED AWAY FROM PROPERTY.

CONCRETE:

CONCRETE SHALL BE 2,400 PSI. THE TOP OF FOOTINGS SHALL BE 1 INCH MINIMUM ABOVE GROUND AT THE POST, AND TROWEL FINISHED TO SLOPE AWAY FROM THE POST.

OPENINGS UNDER FENCE:

ANY OPENING UNDER THE FENCE, WHERE THE BOTTOM OF THE FENCE WIRE IS MORE THAN 1 INCH ABOVE GROUND, SHALL BE CLOSED BY GRADING SURROUNDING MATERIAL.

OPENINGS LESS THAN 18 INCHES HIGH SHALL BE CLOSED BY INSTALLING ONE OR MORE ADDITIONAL LINE POSTS NEAR THE OPENING CENTER AND STRETCHING STRANDS OF BARBED WIRE BETWEEN THE EXTRA POSTS AT 6 INCH MAXIMUM VERTICAL SPACING. VERTICAL STRANDS OF BARBED WIRE SHALL BE INSTALLED AT 12 INCH MAXIMUM HORIZONTAL SPACING AND TIE TO ALL HORIZONTAL STRANDS AND THE FABRIC BOTTOM WIRE. THIS WORK SHALL BE INCIDENTAL TO THE FENCE INSTALLATION.

FENCE LINE AND ALIGNMENT:

FENCE LINES SHALL BE CLEARED AND GRUBBED OF ALL OBSTRUCTIONS. THE FENCE SHALL BE CONSTRUCTED VERTICAL, STRAIGHT AND TRUE TO LINE. THE LONGITUDINAL GRADIENT SHALL BE PARALLEL TO THE GENERAL SLOPE OF THE GROUND.

GROUND RODS:

GROUND RODS SHALL BE INSTALLED AT 500' MAXIMUM INTERVALS AND WHERE POWER LINES PASS OVER THE FENCE. EACH SECTION OF FENCE SEPARATED BY GRASS, BUILDINGS OR OTHER OPENINGS SHALL HAVE A MINIMUM OF ONE GROUND ROD.

ADDITIONAL GROUND RODS SHALL BE INSTALLED, AS DIRECTED BY THE ENGINEER, SO THE RESISTANCE TO GROUND OF ANY FENCE SECTION WILL NOT EXCEED 25 OHMS. MEASUREMENT OF RESISTANCE SHALL BE MADE BY THE CONTRACTOR UNDER THE SUPERVISION OF THE ENGINEER.

GROUND RODS SHALL BE 3/8 INCH X 8 FOOT MINIMUM SIZE, COPPER OR COPPER CLAD. GROUND CABLE SHALL BE NO. 6 AWG MINIMUM BARE STRAND COPPER WIRE. CONNECTIONS TO FENCE AND RODS SHALL BE MADE WITH SUITABLE NON-CORROSIVE METAL CLAMPS, LUGS OR CONNECTORS.

NO.	DATE	DR	CK	DESCRIPTION

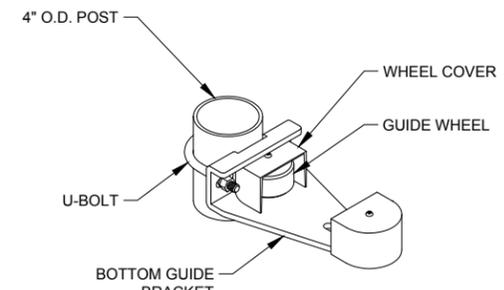
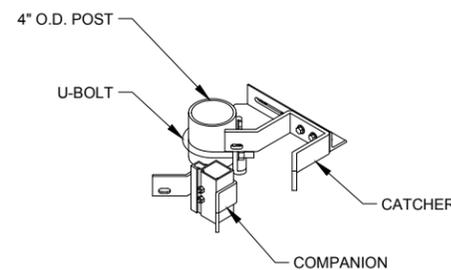
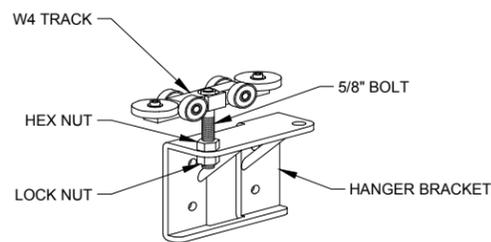
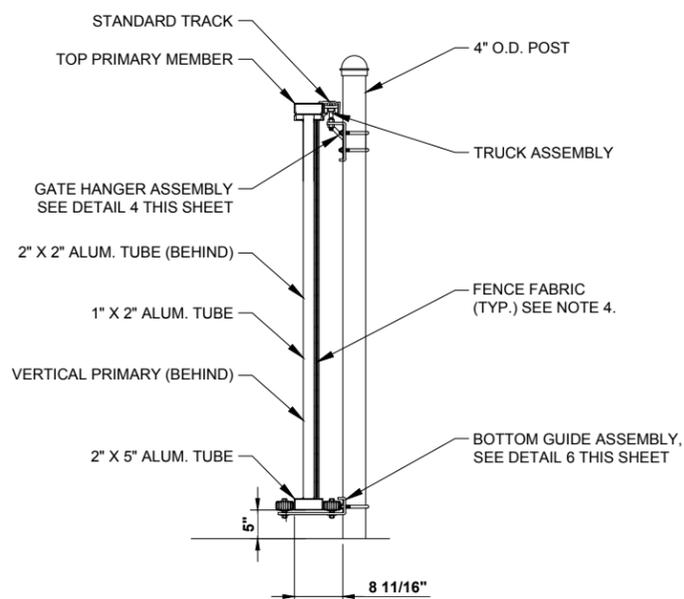
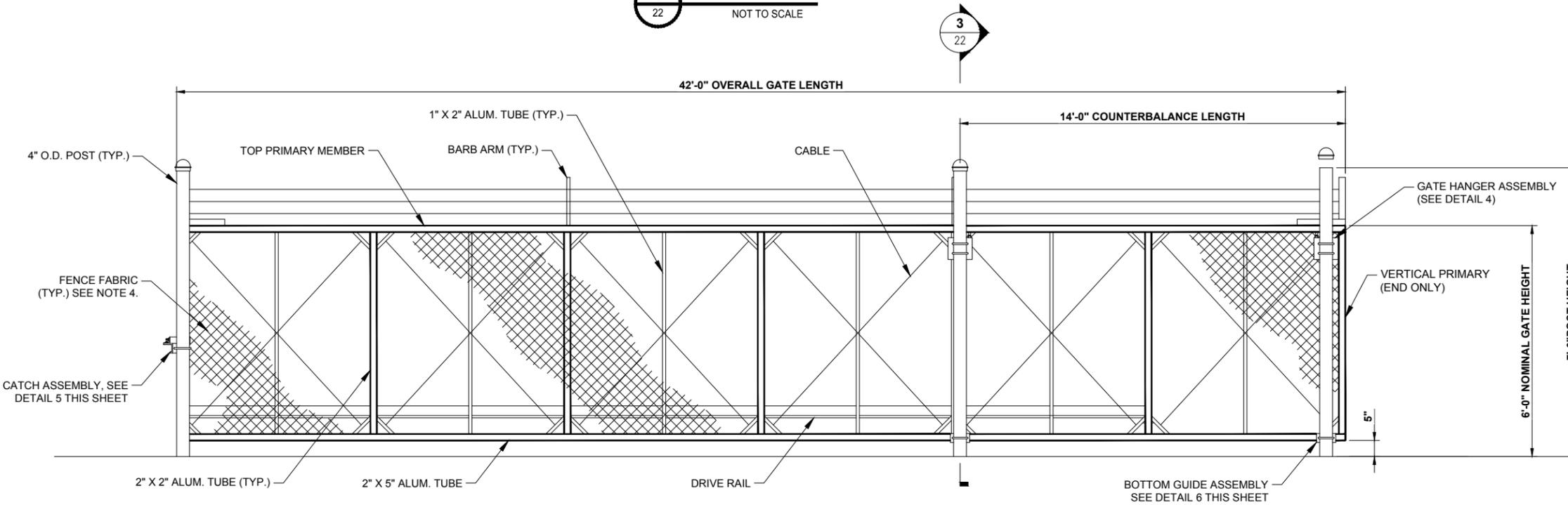
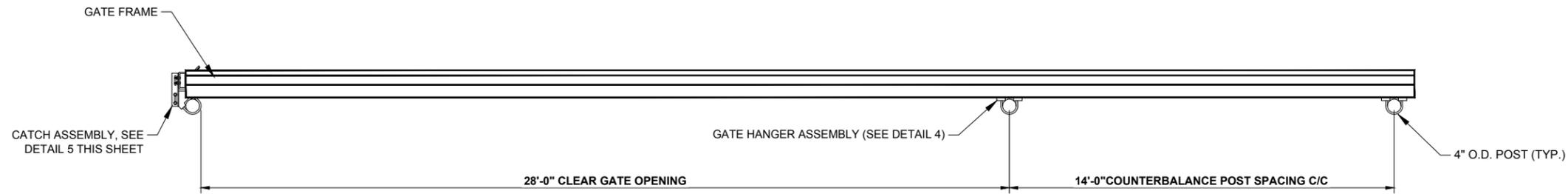
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City of Galveston, Texas
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 Remediation (Lot E, #3 Lennox Ave.)

6' HIGH CHAIN LINK FENCE DETAILS

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.	21 OF 24

File: L:\ACE\Projects\ENV\GLO_City of Galveston\05_CADD_Active Design\Plan_Sheets\Sheet 22 - SLIDE GATE DETAILS.dwg Layout: HEAVY DUTY CANTILEVER SLIDE GATE DETAILS Plotted: 6/18/2018 11:18:54 PM



- NOTES:**
1. ALL FITTINGS STANDARD PROVIDED FOR 4" O.D. POSTS.
 2. GATE ELEVATION IS VIEWED FROM THE OUTSIDE OF THE SECURE AREA LOOKING IN.
 3. THIS GENERIC DRAWING SHOWS TYPICAL GATE. GATE MANUFACTURED MAY NOT BE EXACTLY AS SHOWN.
 4. SEE FENCING NOTES ON SHEET 21.

NO.	DR	CK	DATE	DESCRIPTION

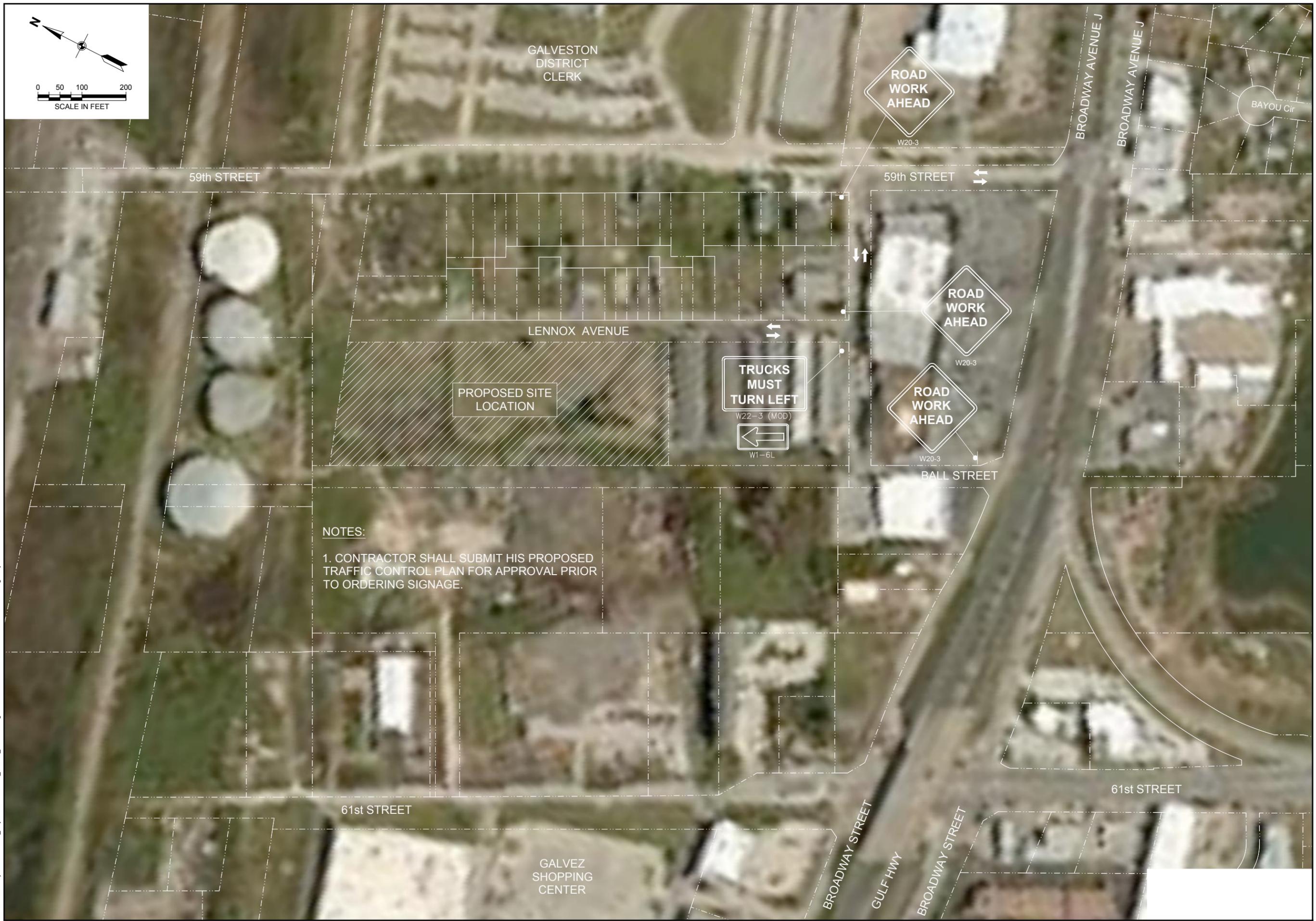
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STATE OF TEXAS
ANANTH BUKKAPATNAM TRIMALA
122809
LICENSED PROFESSIONAL ENGINEER
June 06, 2018

City of Galveston, Texas
Old Municipal Incinerator Site
Remediation (Lot E, #3 Lennox Ave.)
HEAVY DUTY CANTILEVER SLIDE GATE DETAILS

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
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File: L:\AGE\Projects\ENV\GLO_City of Galveston\05_CADD_Active Design\Plan Sheets\Sheet 23 - Traffic Control Plan.dwg Layout: TRAFFIC CONTROL PLAN Plotted: 6/18/2018 1:19:06 PM



NOTES:

1. CONTRACTOR SHALL SUBMIT HIS PROPOSED TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO ORDERING SIGNAGE.

NO.	DR	CK	DATE	DESCRIPTION

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City of Galveston, Texas
Old Municipal Incinerator Site
Remediation (Lot E, #3 Lennox Ave.)

TRAFFIC CONTROL PLAN

DESIGNED BY:	A.T.B.
DRAWN BY:	S.L.S.
REVIEWED BY:	S.P.C. & C.B.N.
APPROVED BY:	D.Z.
PROJECT NO.:	60420789
DATE:	JUNE 6, 2018
SCALE:	AS NOTED
REVISION:	
SHEET NO.	23 OF 24

