INDEX OF SHEETS SEE SHEET 2

STATE OF TEXAS DEPARTMENT OF TRANSPORTATION

DESIGN SPEED = 18 MPH ADT: N/A

6 STP 1702 (405) MM STATE TEXAS HOU BRAZORIA СОМ1 SEC1 "ОВ МЕСНЯХУ НО О912 31 291 VA

PLANS OF PROPOSED

STATE HIGHWAY IMPROVEMENT

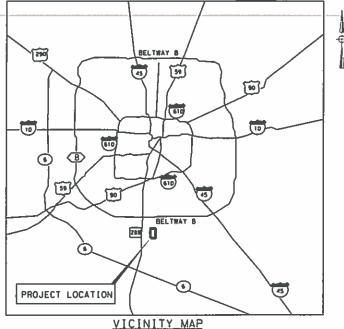
PROJECT NO: STP 1702 (405) MM

NET LENGTH OF PROJECT= ROADWAY 7, 488.14 FT = 1.418 MI BRIDGE 200.00 FT = 0.038 MI TOTAL 7,688,14 FT = 1,456 MI

GREEN TEE TERRACE BIKE AND PEDESTRIAN TRAIL BRAZORIA COUNTY

LIMITS: ON GREEN TEE TERRACE

FOR THE CONSTRUCTION OF A NON FREEWAY FACILITY CONSISTING OF GREEN TEE TERRACE BIKE AND PEDESTRIAN TRAIL



NTS

DUN # 020796397 ZIP CODE 77581-5416

END PROJECT STA 84+91.20 CSJ 0912-31-291 X: 3,158,599.14 Y: 13,775,560.97

REGISTERED ACCESSIBILITY SPECIALIST (RAS) INSPECTION REQUIRED TDLR NO. EABPRJB 9800984.

CITY OF PEARLAND CONCURRENCE

DIRECTOR OF ENGINEERING

4/18/18

ect OP/13 PEARLAND COUNTY McLast Road Ms T

BEGIN PROJECT STA 10+00 CSJ 0912-31-291 X: 3,157,590.09 Y: 13,770,056.42

- 1. SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, NOVEMBER 1, 2014 AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT: REQUIRED CONTRACT PROVISIONS FOR ALL FEDERAL-AID CONSTRUCTION CONTRACTS (FORM FHWA 1273, MAY, 2012).
- 2. ALL ELEVATIONS ARE BASED ON NAVD 88.
- 3. ALL BEARINGS AND COORDINATES ARE BASED ON THE TEXAS

PROJECT LOCATION N. T. S.

EXCEPTIONS: NONE EQUATIONS: NONE RAILROAD CROSSING: NONE

Texas Department of Transportation all rights reserved

9-18-18 LETTING PROJECT MANAGER

Texas Department of Transportation

9)18/18 DISTRICT ENGINEER

STP 1702 (405) MM COUNTY: BRAZORIA/HARRIS PROJ NO: HWY NO: VA LETTING DATE: DATE ACCEPTED:

USInfrastructure@rpsgroup.com Formerly Klotz Associates, Inc. Texas PE Firm Reg. 87-929

Houston, Texas 77079 T 281 589 7257

1160 Dairy Ashford, Suite 500

INDEX OF SHEETS

GENERAL

1			TITLE SHEET
2			INDEX OF SHEETS
3	-	7	PROJECT LAYOUTS
88	-	8J	CONTROL MONUMENT LAYOUT
9	-	10	TYPICAL SECTIONS
11	-	21	GENERAL NOTES
22	-	23	QUANTITY SUMMARY
24			SUMMARY OF SMALL SIGNS

TRAFFIC CONTROL PLAN

25		TRAFFIC CONTROL PLAN PHASES NARRATIVE AND LAYOUTS
26		* TRAFFIC CONTROL PLAN ONE-WAY TWO-LANE ROADS TCP(1-2)-18
27		* TRAFFIC CONTROL PLAN LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS TCP(1-4)-18
28		* BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS BC(1)-14
29		* BARRICADE AND CONSTRUCTION PROJECT LIMIT BC(2)-14
30		* BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT BC(3)-14
31		* BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES BC(4)-14
32		* BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT BC(5)-14
33		* BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) BC(6)-14
34		* BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS,
		ATTENUATOR BC(7)-14
35	- 37	* BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES BC(8)-14 THROUGH BC(10)-14
38		* BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS BC(11)-14
39		* BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS BC(12)-14

ROADWAY DETAILS

40	-	45	HORIZONTAL ALIGNMENT DATA
46	-	62	PLAN AND PROFILES
63	-	65	* DRIVEWAY DETAILS DD (HOU DIST)
66	-	69	* PEDESTRIAN FACILITIES CURB RAMPS PED-18
70	-	71	* JOINTED REINFORCED CONCRETE PAVEMENT DETAILS JRCP (HOU DIST)

DRAINAGE DETAILS

72			HARRIS COUNTY ENGINEERING DEPARTMENT REVIEW SHEET
73	-	74	CULVERT LAYOUT
75			INTERCEPTOR STRUCTURE DETAILS
76			* BOX CULVERT SUPPLEMENT- WINGS AND END TREATMENTS BCS
77			* EXTENDED CURB DETAILS FOR BOX CULVERTS WITH CURBS OVER 1'-O" TO 5'-O" TALL ECD
78			* CONCRETE WINGWALLS WITH FLARED WINGS FOR O°SKEW BOX CULVERTS FW-O
79			* CONCRETE WINGWALLS WITH PARALLEL WINGS FOR BOX CULVERTS TYPES PW-1 AND PW-2 PW
80			* SINGLE BOX CULVERTS PRECAST 6'-O" SPAN SCP-6
81			* BOX CULVERTS PRECAST MISCELLANEOUS DETAILS SCP-MD
82	_	83	* EXCAVATION AND BACKFILL DIAGRAMS E&BD (HOU DIST)

UTILITIES

84 - 85 EXISTING UTILITIES

BRIDGES

86	-	90	BORE LOGS
91			HYDRAULIC DATA SHEET
91A			HYDRAULIC DATA SHEET SECTIONS
92	-	93	BRIDGE LAYOUT PEDESTRIAN BRIDGE
94			BRIDGE QUANTITIES
95			BENT 2
96			ABUTMENT 1
97			ABUTMENT 3
98			ABUTMENT DETAILS
99			** CONCRETE RIPRAP AND SHOULDER DRAINS EMBANKMENTS AT BRIDGE ENDS
			(TYPES RR8 & RR9) CRR
100		101	** COMMON FOUNDATION DETAILS ED

TRAFFIC ITEMS

102	* SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS GENERAL NOTES & DETAILS SMD(GEN)-08
103	* SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-1)-08
104	* SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-2)-08
105	* SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-3)-08
106	* SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS WEDGE & UNIVERSAL ANCHOR WITH THIN WALL
	TUBING POST SMD(TWT)-08

ENVIRONMENTAL ISSUES

107 - 11	1 STORMWATER POLLUTION PREVENTION PLAN
112	* TXDOT STORM WATER POLLUTION PREVENTION PLAN SWP3 (HOU DIST)
113	* ECL EROSION CONTROL LOG ECL-12 (HOU DIST)
114	* TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES FENCE AND VERTICAL TRACKING EC(1)-16
115	* TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES ROCK FILTER DAMS EC(2)-16
116	* TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES CONSTRUCTION EXITS EC(3)-16
117	* FERTILIZER, SEED, SOD, STRAW, COMPOST, AND WATER (HOU DIST)
118	* ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS EPIC

MISCELLANEOUS

119	CURB RAMP LAYOUT PROVINCE VILLAGE DRIVE
120	SITE DIMENSION LAYOUT PEARLAND PARKWAY
121	GRADING AND DRAINAGE LAYOUT PEARLAND PARKWAY

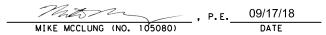
LANDSCAPE

122			OVERALL LANDSCAPE PLAN
123	-	124	LANDSCAPE LAYOUT
125	-	126	LANDSCAPE DETAILS
127			PLANTING DETAILS
128			IRRIGATION PLAN
129	-	130	IRRIGATION DETAILS
131	-	135	SIGNAGE DETAILS



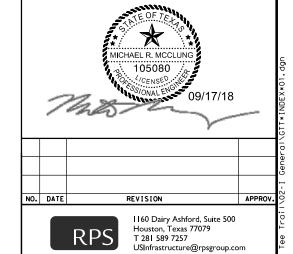
JONATHAN GRIFFIN 116876

(*) THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE HAVE BEEN SELECTED BY ME OR MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.



(**) THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE HAVE BEEN SELECTED BY ME OR MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.







GREEN TEE TERRACE BIKE & PEDESTRIAN TRAIL

INDEX OF SHEETS

HEEI	1 OF 1				
ED.RD.	PROJECT NO. SHEET NO.				
6	2				
STATE	DIST.	COUNTY			
EXAS	HOU	BRAZORIA / HARRIS			
CONT.	SECT.	JOB HIGHWAY NO.			
0012	3.1	201 VA			

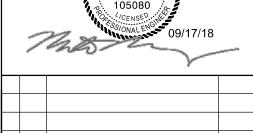
PROP CONC RIP RAP

BORING

TYPICAL SECTION

- 1. SEE SHEETS 40-45 FOR HORIZONTAL ALIGNMENT DATA.
- DETAILS OF BORINGS.
- 3. SEE LANDSCAPE PLANS ON SHEETS 122-135 FOR LANDSCAPE FEATURES.
- 4. SEE SHEETS 70-71 FOR PAVEMENT DETAILS.
- 5. SEE SHEET 66-69 FOR PEDESTRIAN RAMP DETAILS.
- 6. SEE SHEET 99 FOR RIPRAP

100 SCALE: 1"=100'



1160 Dairy Ashford, Suite 500 Houston, Texas 77079 T 281 589 7257 USInfrastructure@rpsgroup.com Formerly Klotz Associates, Inc. Texas PE Firm Reg. #F-929

Texas Department of Transportation

GREEN TEE TERRACE BIKE & PEDESTRIAN TRAIL

PROJECT LAYOUT

ı	SHEET	1 OF 5							
	FED.RD. DIV.NO.	PROJECT NO.			SHEET NO.				
	6				3				
	STATE	DIST.		COUNTY					
1	TEXAS	HOU	BR	AZORIA / H	HARRIS				
	CONT.	SECT. JOB			HWAY NO.				
	0010								

PROP CONC RIP RAP

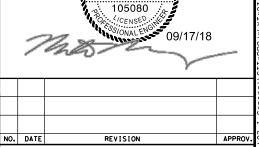
BORING

TYPICAL SECTION

<u>NOTES</u>

- 1. SEE SHEETS 40-45 FOR HORIZONTAL ALIGNMENT DATA.
- 2. SEE SHEETS 86-90 FOR DETAILS OF BORINGS.
- 3. SEE LANDSCAPE PLANS ON SHEETS 122-135 FOR LANDSACPE FEATURES.
- 4. SEE SHEETS 70-71 FOR PAVEMENT DETAILS.
- 5. SEE SHEETS 92-101 FOR BRIDGE LAYOUT AND DETAILS.

0 50 100 SCALE: 1"=100'



MICHAEL R. MCCLUNG



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Texas Department of Transportation

GREEN TEE TERRACE
BIKE & PEDESTRIAN TRAIL

PROJECT LAYOUT

SHEET 3 OF

SHEET 3 OF 5					
FED.RD. DIV.NO.		PROJECT NO.	SHEET NO.		
6				5	
STATE	DIST.		COUNTY		
TEXAS	HOU	BR	AZORIA / H	HARRIS	
CONT.	SECT.	JOB	GHWAY NO.		
0912	31	291		VA	

CONT.

SECT.

HIGHWAY NO.

N 36° 47′ 31.69" W

STA: 84+91.20 END TRAIL NORTH 2 -N: 13, 775, 560. 9682 E: 3, 158, 599, 1411 MATCH EXISTING TRAIL

BORING

TYPICAL SECTION

<u>NOTES</u>

SHADED ZONE AE

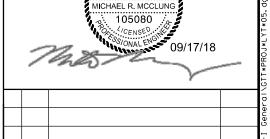
REJERVE "B"
FINAL PLAT OF
ENCLAVE AT HIGHLAND GLEN
ECTION 4
(20140648691 H.C.O.R.)

1. SEE SHEETS 40-45 FOR HORIZONTAL ALIGNMENT DATA.

2. SEE SHEETS 86-90 FOR DETAILS OF BORINGS.

3. SEE LANDSCAPE PLANS ON SHEETS 122-135 FOR LANDSCAPE FEATURES.

4. SEE SHEETS 70-71 FOR PAVEMENT DETAILS.





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APPROV.

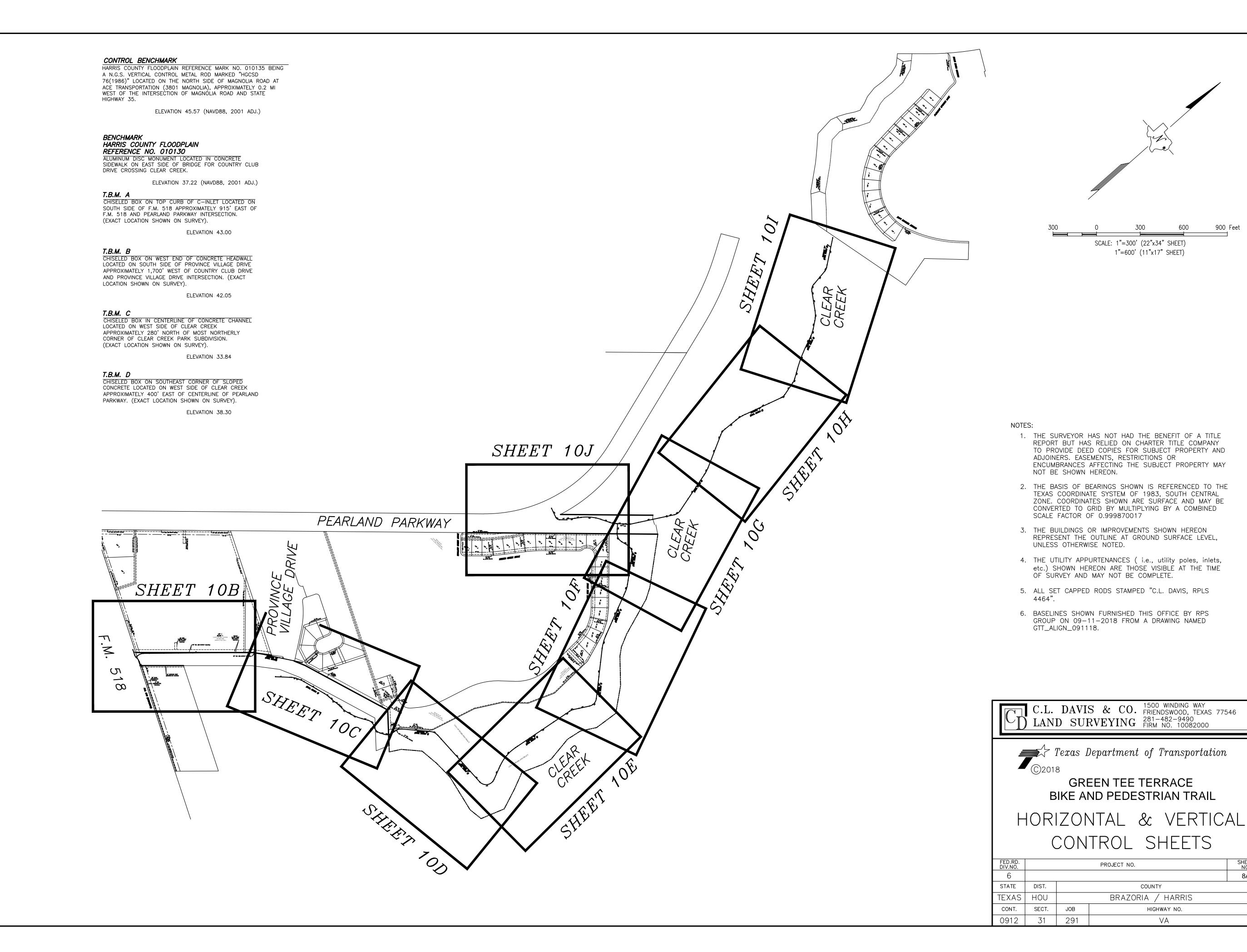
Texas Department of Transportation

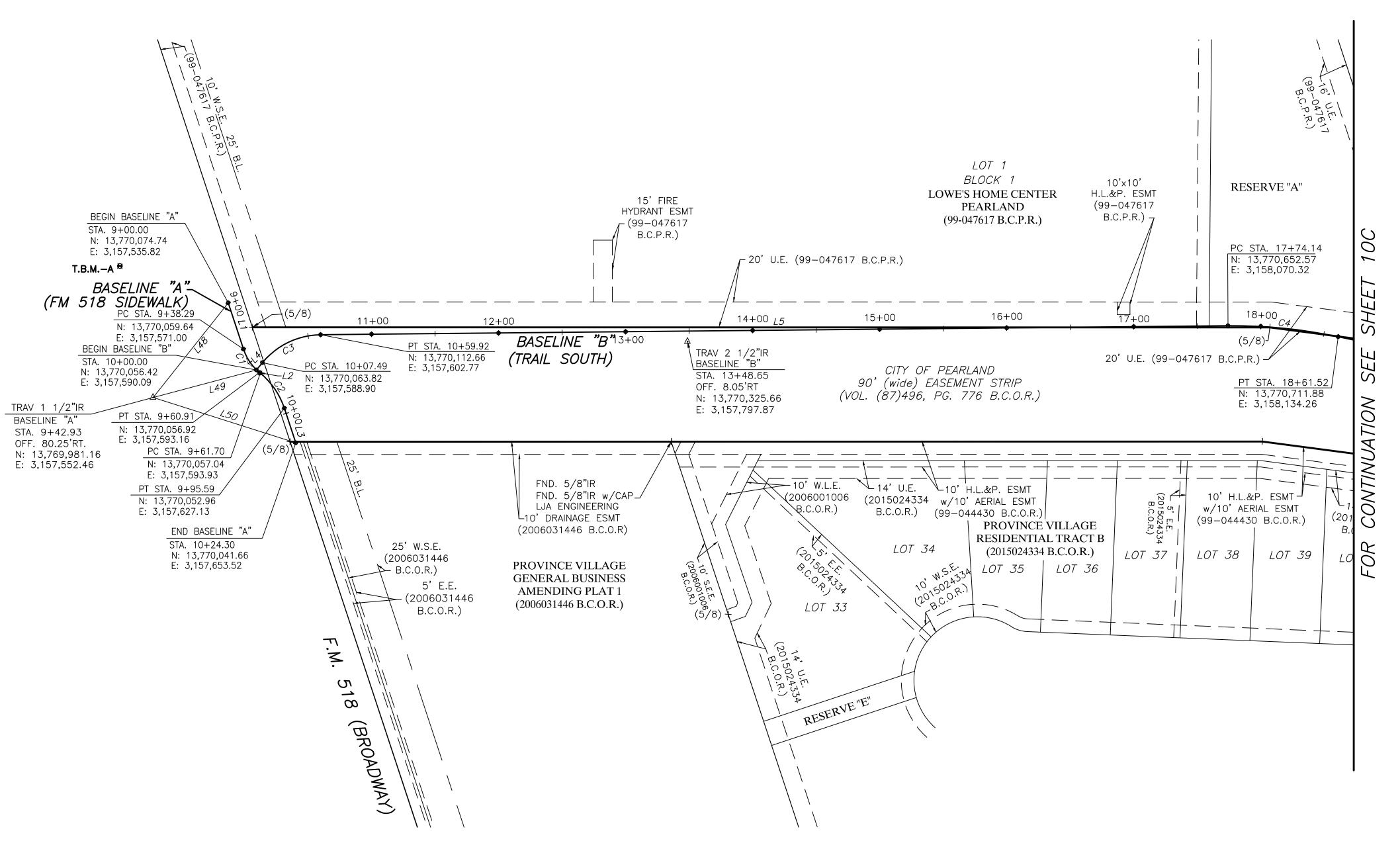
Formerly Klotz Associates, Inc. Texas PE Firm Reg. #F-929

GREEN TEE TERRACE BIKE & PEDESTRIAN TRAIL

PROJECT LAYOUT

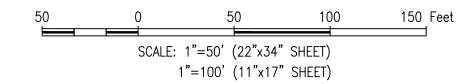
SHEET !	5 OF 5						
FED.RD. DIV.NO.		PROJECT NO. SHEE					
6				7			
STATE	DIST.		COUNTY				
TEXAS	HOU	BR	BRAZORIA / HARRIS				
CONT.	SECT.	JOB	HIGHWAY NO.				
0912	31	291		VA			





LINE	BEARING	DISTANCE
L1	S 66°46′30" E	38.29
L2	N 80°49'28" E	0.79
L3	S 66°48'41" E	28.71
L4	N 09°10'32" W	7.49
L5	N 40°53'29" E	714.22
L48	N 10°05'07" W	95.06
L49	N 26°33'44" E	84.15
L50	S 59°05'30" W	117.78

	CURVE	RADIUS	DELTA ANGLE	ARC LENGTH	CHORD BEARING	CHORD LENGTH
	C1	40.00'	<i>32°24'02"</i>	22.62'	S 82°58'31" E	22.32'
	C2	60.00'	32°21'52"	33.89'	S 82°59'36" E	33.44'
Ī	C3	60.00'	50°04'02"	52.43'	N 15°51'29" E	50.78'
ſ	C4	400.00'	12°31'02"	87.39'	N 47°09'00" E	87.21'
	C5	100.00'	17°30'58"	30.57'	N 52°23'37" E	30.45'



	C.L.	DAVIS	&	CO.	1500 WINDING WAY FRIENDSWOOD, TEXAS 77546 281-482-9490 FIRM NO. 10082000
	LANI	D SURV	EY	ING	281-482-9490 FIRM NO. 10082000

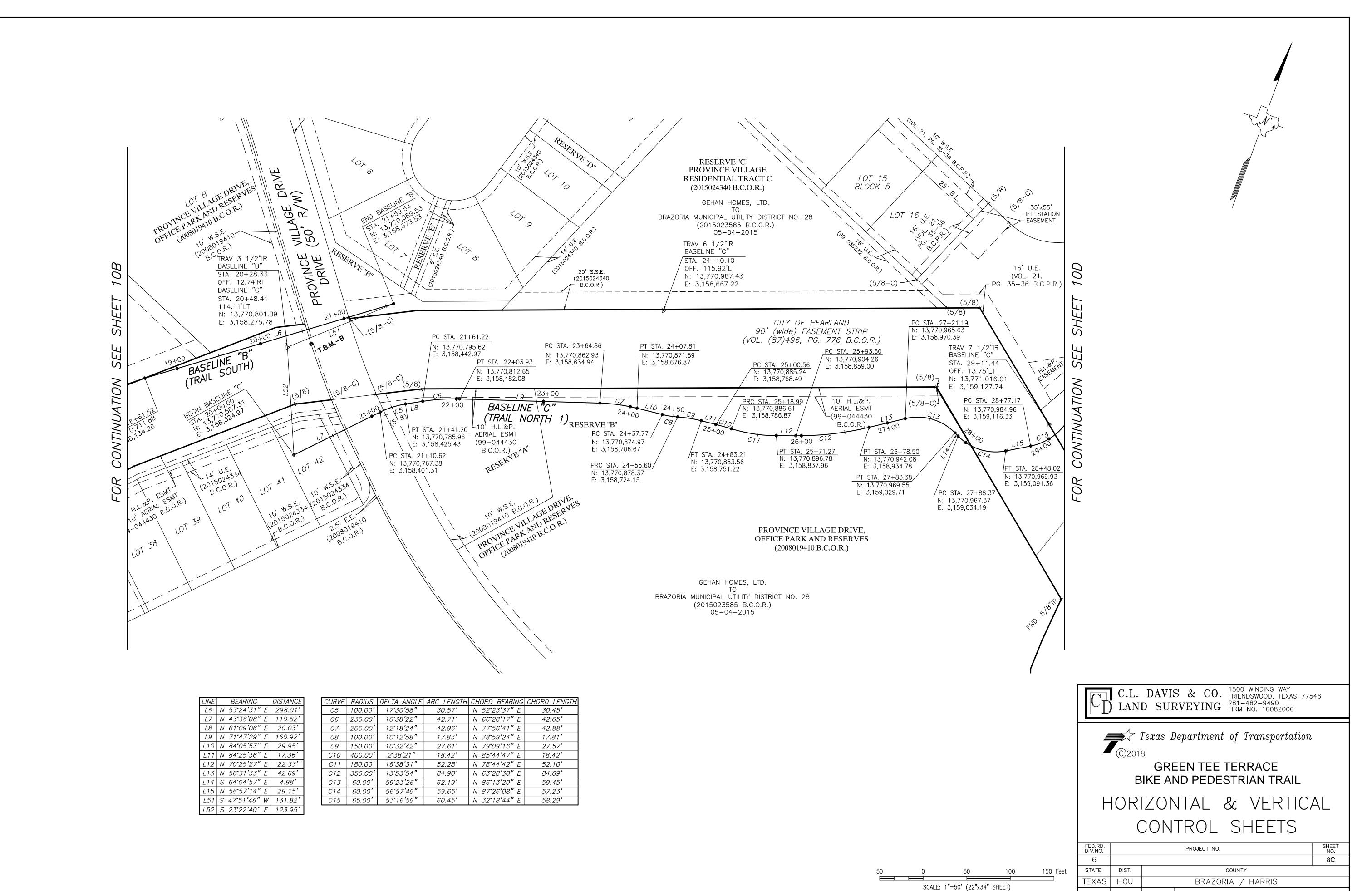
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GREEN TEE TERRACE

BIKE AND PEDESTRIAN TRAIL
HORIZONTAL & VERTICAL

CONTROL SHEETS

FED.RD. DIV.NO.			PROJECT NO.					
6				8B				
STATE	DIST.		COUNTY					
TEXAS	HOU		BRAZORIA / HARRIS					
CONT.	SECT.	JOB	HIGHWAY NO.					
0912	31	291	VA					



CONT.

1"=100' (11"x17" SHEET)

SECT.

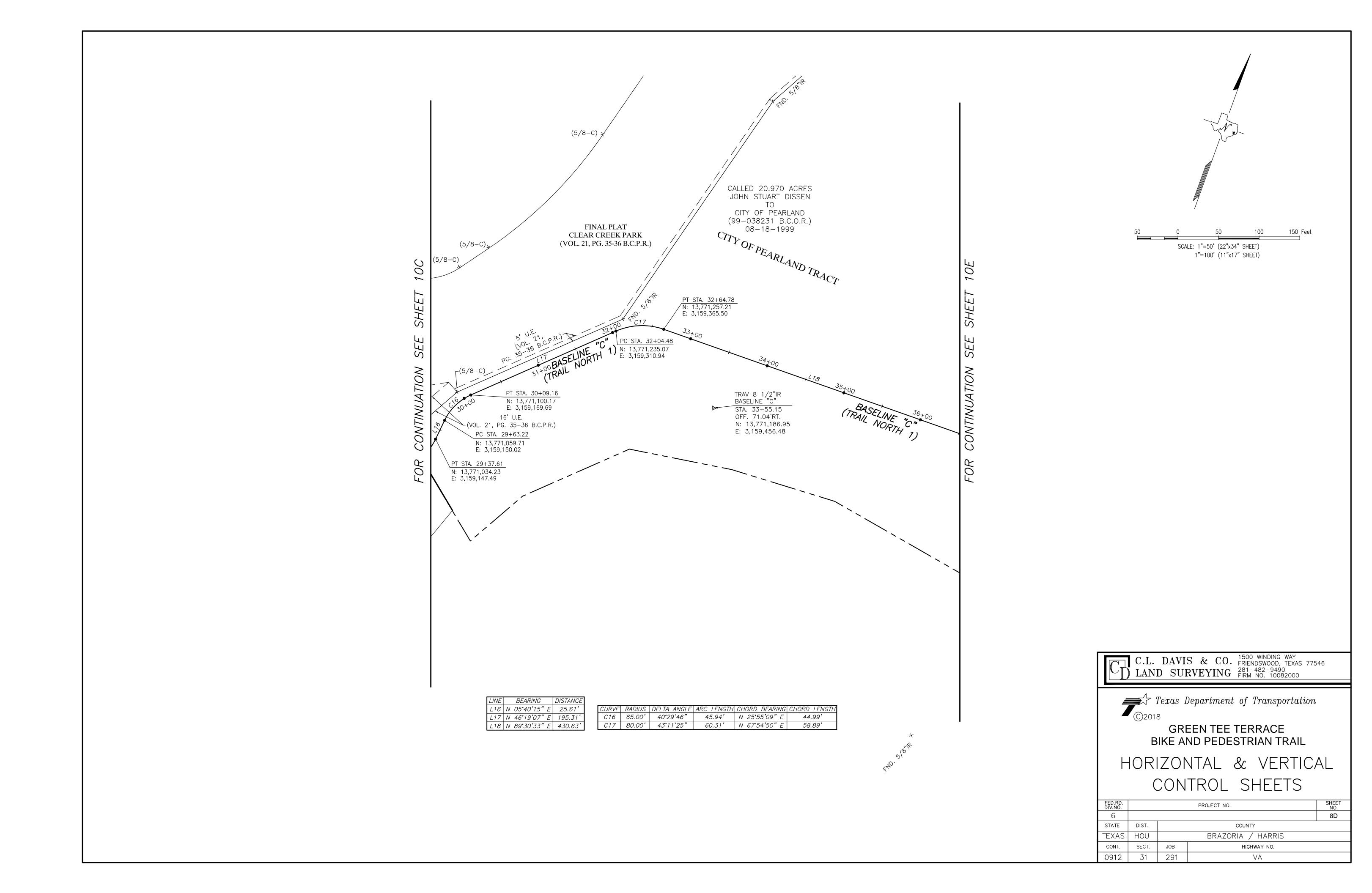
0912 31

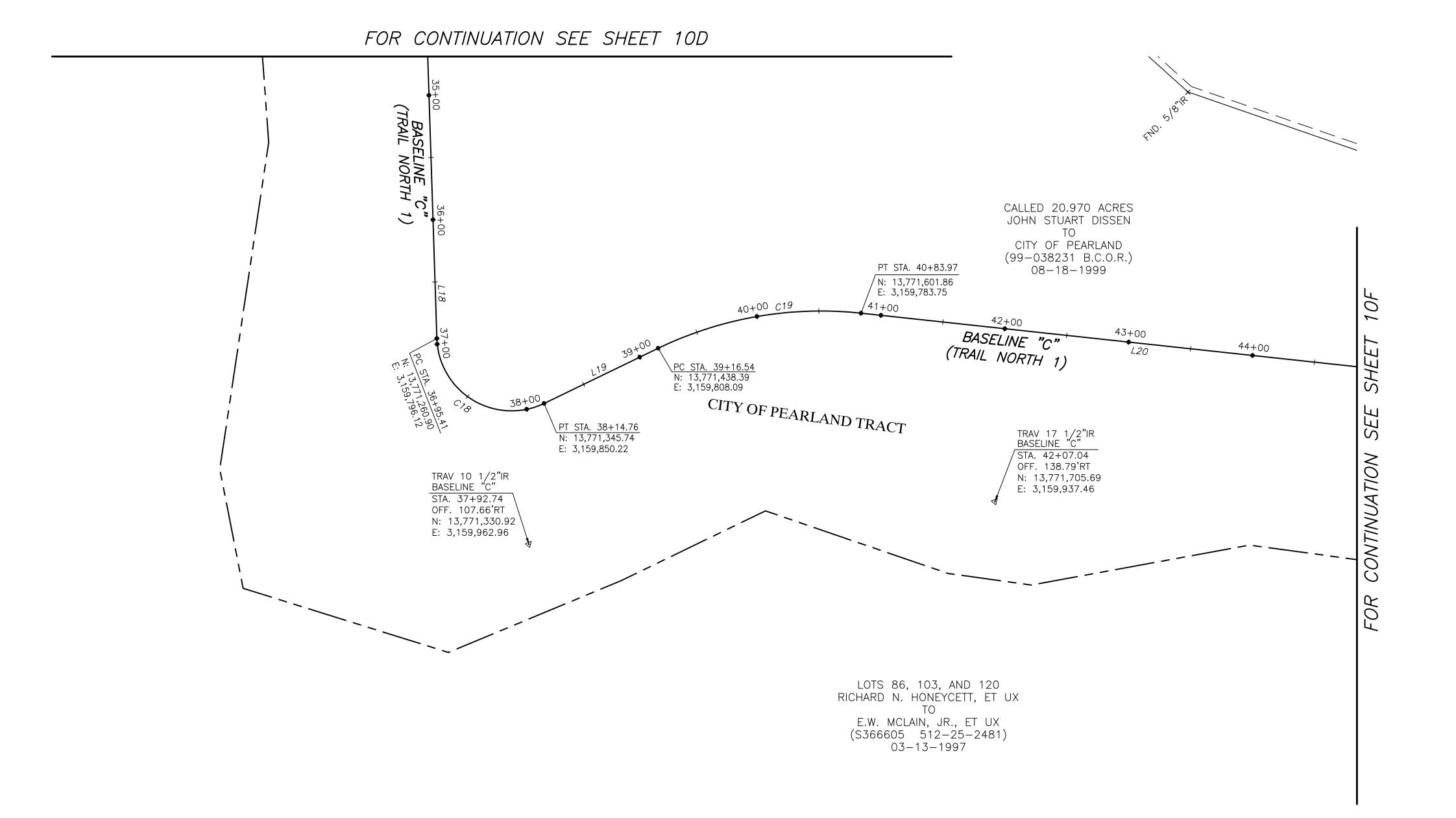
JOB

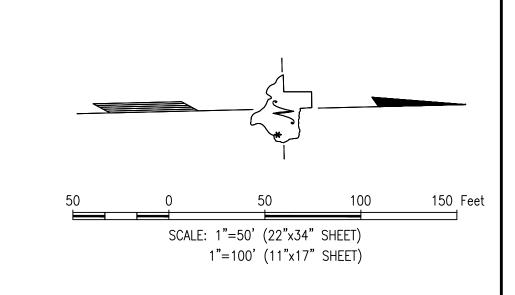
291

HIGHWAY NO.

VA







 LINE
 BEARING
 DISTANCE

 L18
 N 89°30'33" E 430.63'

 L19
 N 24°27'19" W 101.78'

 L20
 N 07°31'20" E 448.77'

CURVE				CHORD BEARING	CHORD LENGTH
C18	60.00'	113°57'51"	119.34'	N 32°31'37" E	100.62'
C19	300.00'	<i>31°58'39"</i>	167.43'	N 08°27′59″ W	165.27'

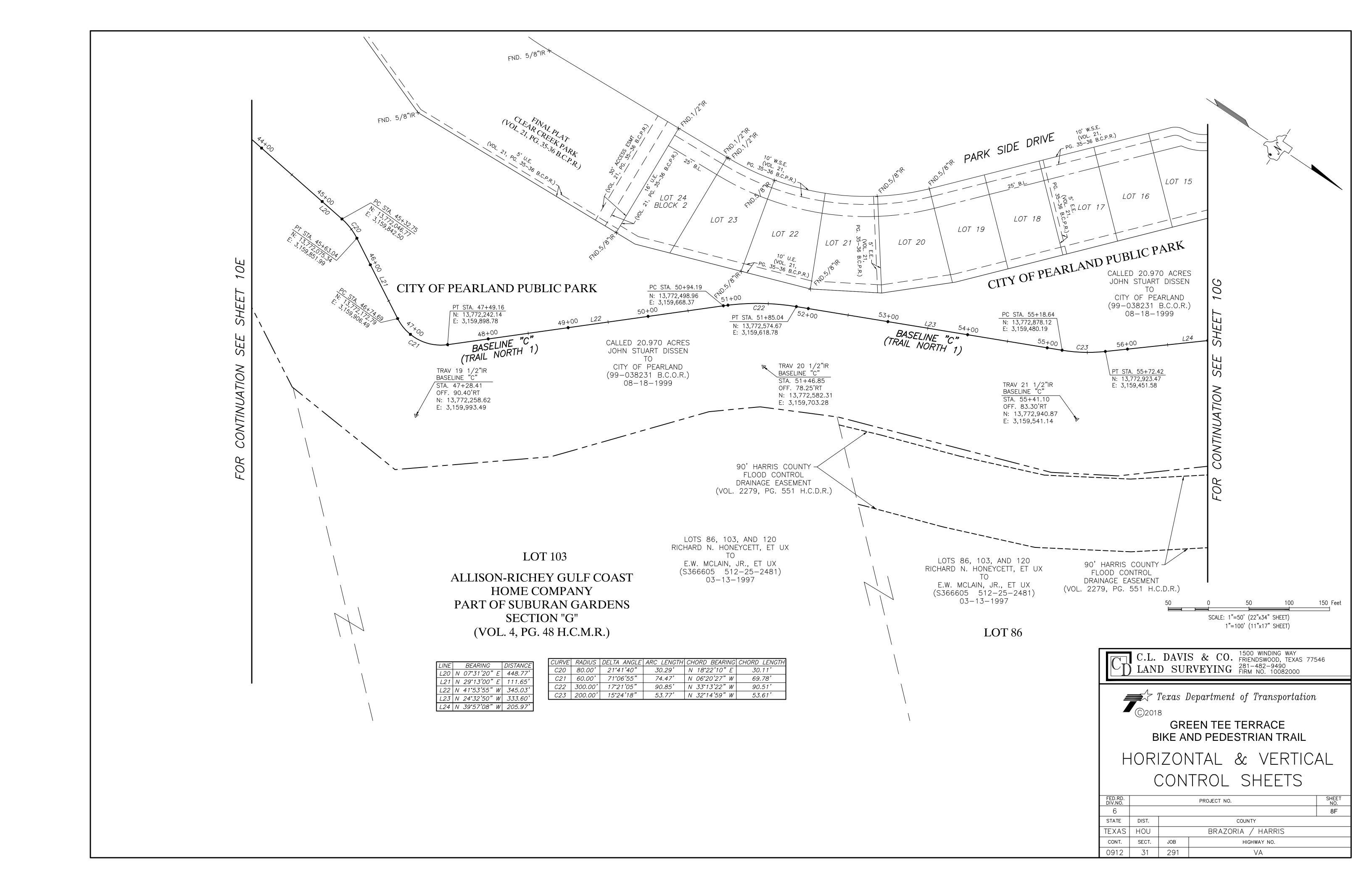
C.L. DAVIS & CO. 1500 WINDING WAY FRIENDSWOOD, TEXAS 77546 LAND SURVEYING 281-482-9490 FIRM NO. 10082000

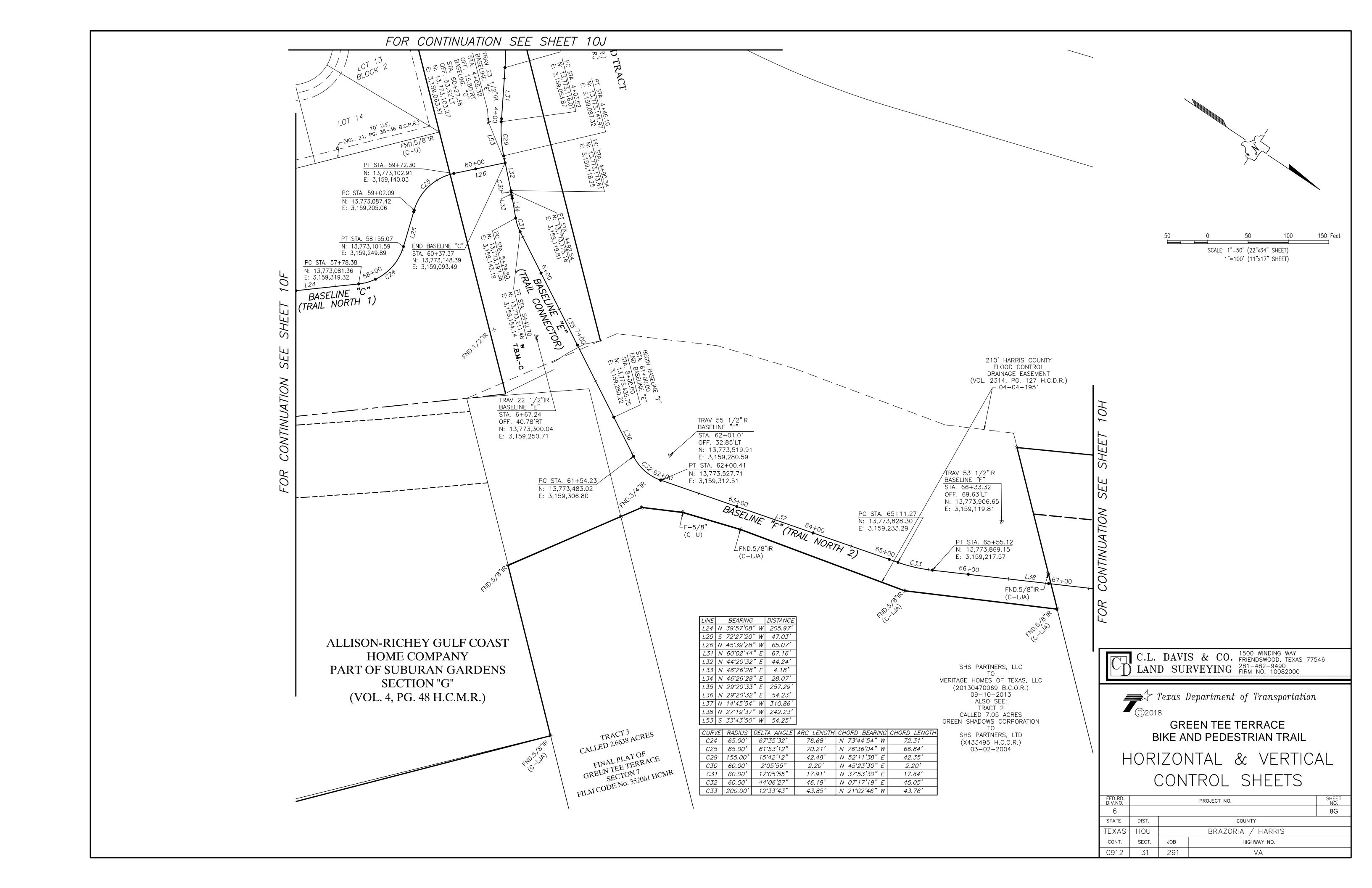
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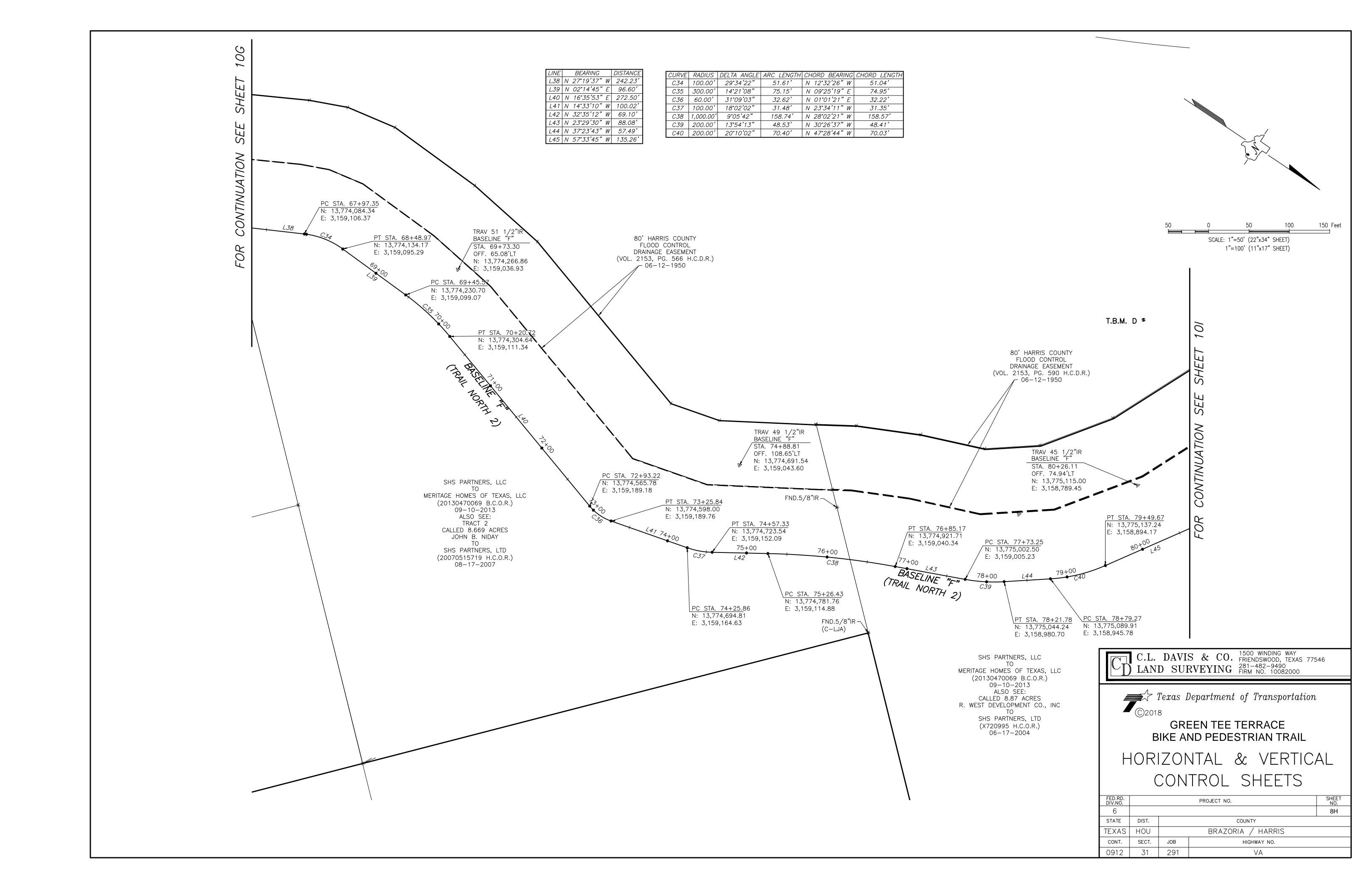
GREEN TEE TERRACE BIKE AND PEDESTRIAN TRAIL

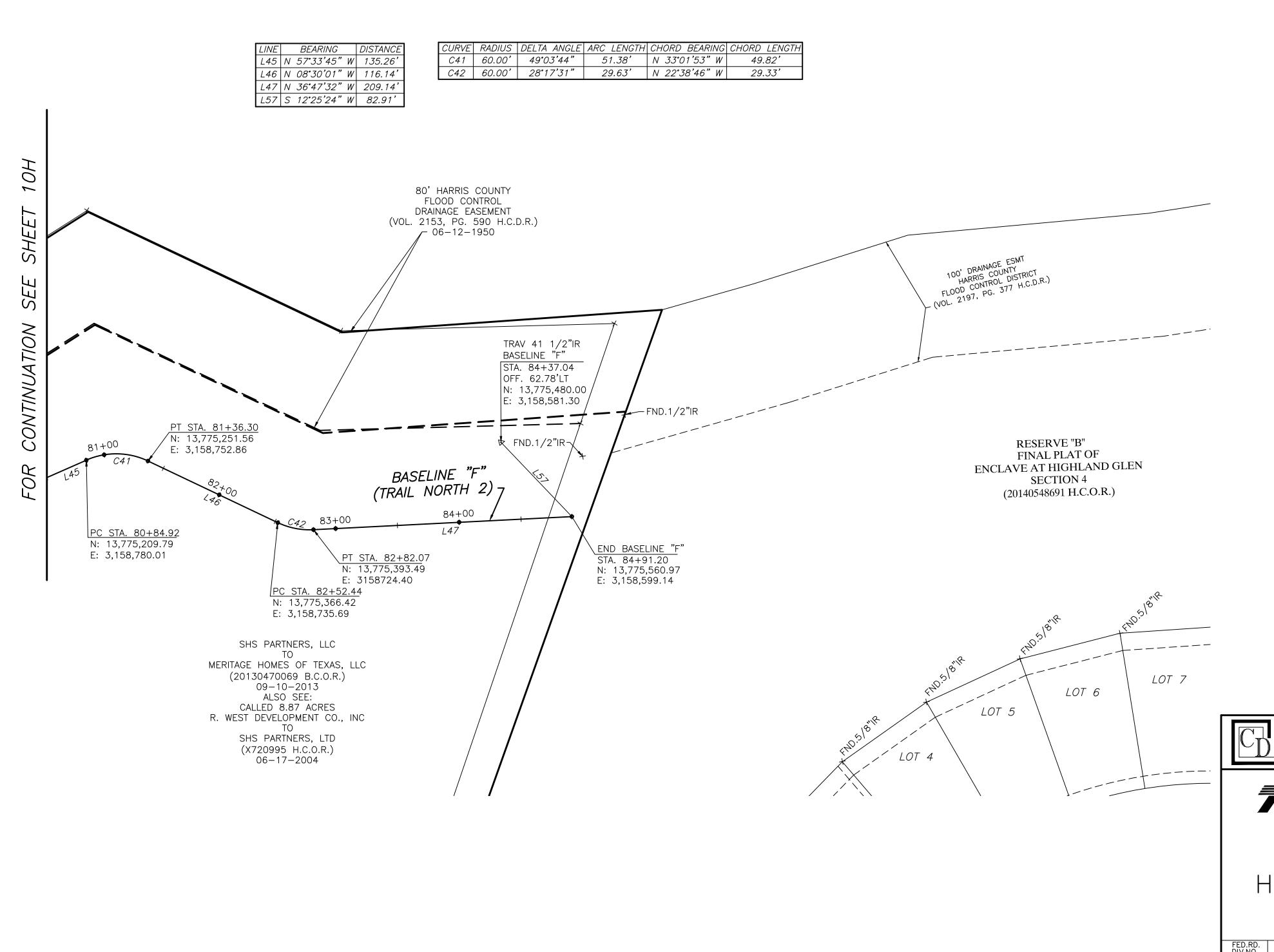
HORIZONTAL & VERTICAL CONTROL SHEETS

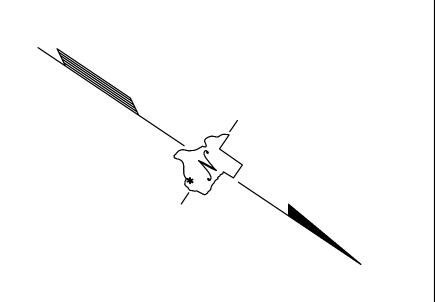
FED.RD. DIV.NO.	PROJECT NO. SHEET NO.							
6				8E				
STATE	DIST.		COUNTY					
TEXAS	HOU		BRAZORIA / HARRIS					
CONT.	SECT.	JOB	JOB HIGHWAY NO.					
0912	31	291	VA					











150 Feet

SCALE: 1"=50' (22"x34" SHEET) 1"=100' (11"x17" SHEET)

C.L. DAVIS & CO. 1500 WINDING WAY FRIENDSWOOD, TEXAS 77546 LAND SURVEYING FIRM NO. 10082000

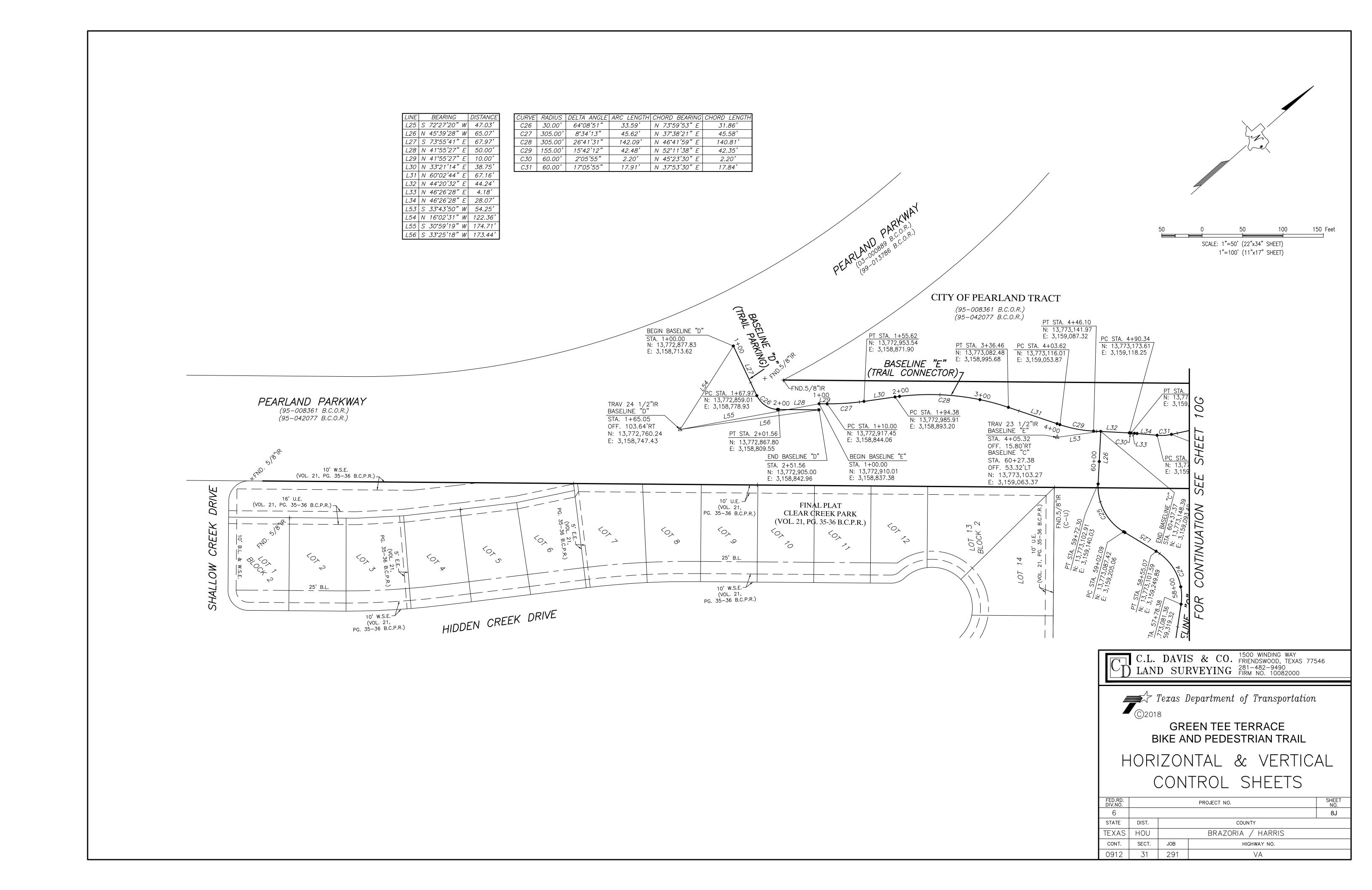
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BIKE AND PEDESTRIAN TRAIL

GREEN TEE TERRACE

HORIZONTAL & VERTICAL CONTROL SHEETS

FED.RD. DIV.NO.	PROJECT NO. SHEET NO.							
6		81						
STATE	DIST.		COUNTY					
TEXAS	HOU		BRAZORIA / HARRIS					
CONT.	SECT.	JOB	JOB HIGHWAY NO.					
0912	31	291	VA					



- (1) 6" CONC PAV (JOINT REINF)
- 2 6" LIME TREATED SUBGRADE
- 3 BLOCK SODDING
- 4 PERMANENT SEEDING
- # TYPICAL SECTION REFERENCE NO.

NOTES:

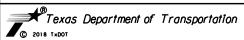
- 1. SOD SHALL BE LAID 2 FT BEYOND THE EDGE OF PROPOSED TRAIL.
- 2. ALL OTHER AREAS DISTURBED OUTSIDE 2' SOD BUFFER WILL BE SEEDED PER SPECIFICATIONS.



NO. DATE REVISION APPROV



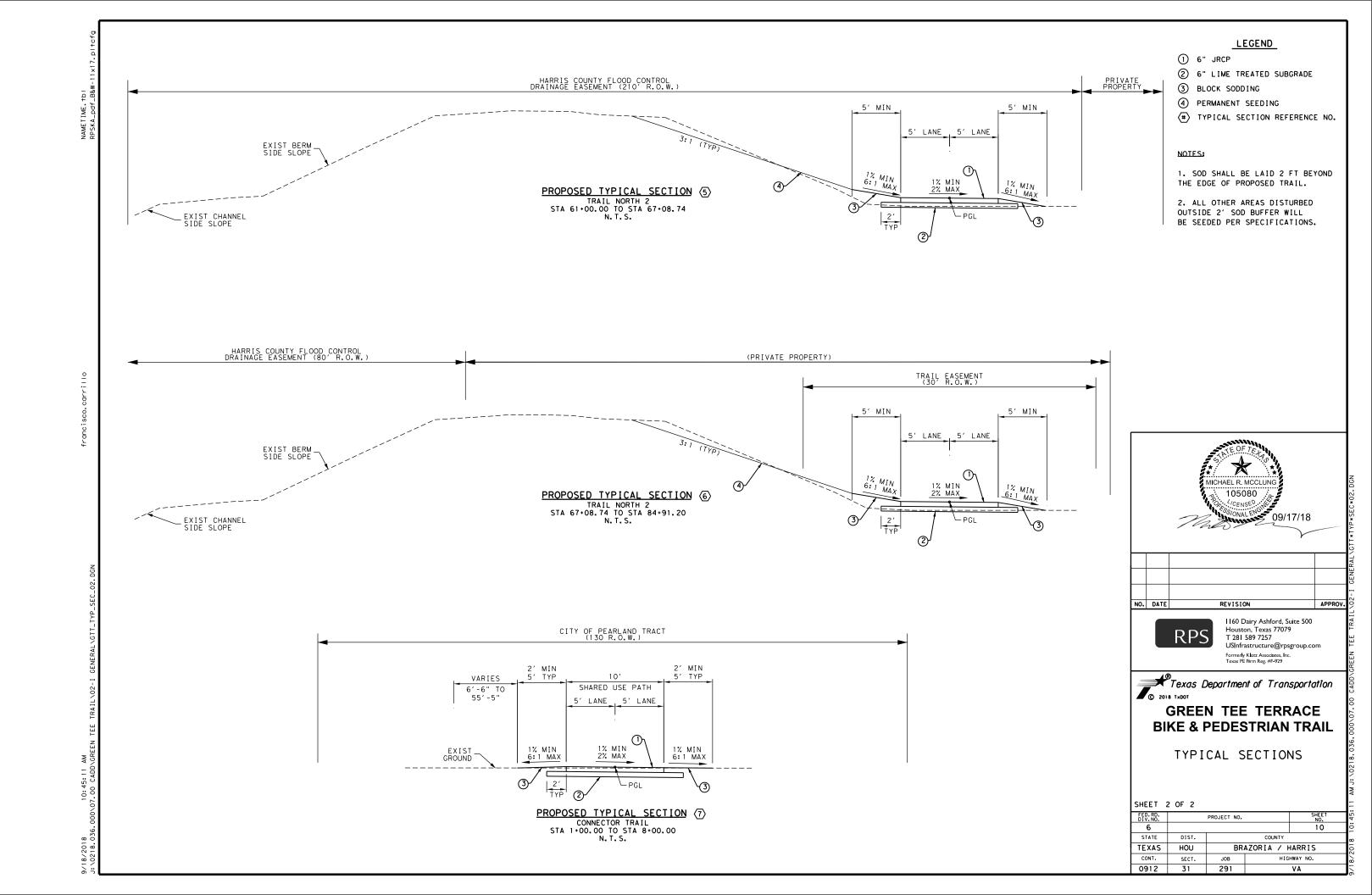
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GREEN TEE TERRACE BIKE & PEDESTRIAN TRAIL

TYPICAL SECTIONS

SHEET	1 OF 2						
FED.RD. DIV.NO.		SHEET NO.					
6				9			
STATE	DIST.		COUNTY				
TEXAS	HOU	BR.	BRAZORIA / HARRIS				
CONT.	SECT.	JOB	HIGHWAY NO.				
0912	31	291	VA				



CITY OF PEARLAND GENERAL NOTES

- 1. THE CONTRACTOR SHALL NOT DUMP ANY DIRT OR OTHER MATERIALS ONTO A PROPERTY BEING OUTSIDE OF THE BOUNDARY OF THE PERMITTED PROJECT AND WITHIN THE CITY OF PEARLAND CITY LIMITS WITHOUT A VALID DEVELOPMENT/GRADING PERMIT ISSUED TO THE OFFSITE PROPERTY OWNER BY THE CITY OF PEARLAND ENGINEERING DEPARTMENT. IF SUCH DUMPING IS TO OCCUR WITHOUT A VALID PERMIT, THE CONTRACTOR SHALL BE SOLEY RESPONSIBLE FOR THE REMOVAL OF ANY DISCARDED DIRT OR OTHER MATERIALS TO AN APPROVED LOCATION AT THE CONTRACTORS EXPENSE.
- 2. ON SITE MECHANICAL SWEEPERS (ROAD BROOM) IS REQUIRED FOR THE PROJECTS HAULING DIRT TO AND FROM THE SITE IN EXCESS OF 120 CUBIC YARDS PER DAY.
- 3. CONTRACTOR SHALL ADEQUATELY PROTECT EXISTING STRUCTURES, UTILITIES, TREES, SHRUBS, AND PERMANENT OBJECTS WHICH ARE NOT SCHEDULED TO BE REMOVD AS PART OF THIS PROJECT. PRIOR TO THE REMOVAL OF ANY TREES A CLEAR AND GRUB PERMIT MUST BE OBTAINED FROM THE URBAN FORESTER 281.652.1983.
- 4. CONTRACTOR SHALL MAINTAIN ACCESS TO RESIDENTAIL AND COMMERCIAL PROPERTIES ADJACENT TO THE WORK AREA AT ALL TIMES.
- 5. ON ALL PAVEMENT TO BE REMOVED, INCLUDING CONCRETE DRIVEWAYS AND SIDEWALKS, THE PAVEMENT SHALL BE SAWCUT TO FULL DEPTH PRIOR TO
- 6. ALL WORK WITHIN THE CITY OF PEARLAND RIGHTS-OF-WAY OR PUBLIC EASEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF PEARLAND SPECIFICATIONS, ACCEPTED STANDARDS, AND APPROVED DETAILS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND UNDERSTANDING ALL RELEVANT INFORMATION PRIOR TO CONSTRUCTION.
- 7. CONTRACTOR SHALL CONTACT THE CITY OF PEARLAND CHEIF ENGINEERING INSPECTOR (JAMES NESTER) AT 281.851.2314 TO EITHER SCHEDULE OR NOTIFY HIM OF A PREVIOUSLY SCHEDULED PRE-CONSTRUCTION MEETING. THE PRE-CONSTRUCTION METING SHALL BE HELD A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- 8. THE CONTRACTOR IS NOT AUTHORIZED TO OPERATE WATER/SANITAY INFRASTRUCTURE UTILITIES, OWENED OR OPERATED BY THE CITY OF PEARLAND. CONTRACTOR SHALL CONTACT THE CITY OF PEARLAND PUBLIC WORKS DEPARTMENT TO REQUEST CITY OF PUBLIC PUBLIC WORKS AUTHORIZED PERSONNEL TO PERFORM ALL UTILITY OPERATIONS.

GENERAL NOTES

- 1.FIELD SURVEY INFORMATION WAS PROVIDED BY:
- C.L. DAVIS & Co. LAND SURVEYING 1500 WINDING WAY, FRIENDSWOOD, TEXAS 77546
- 2. GEOTECHNICAL INVESTIGATIONS WERE COMPLETED BY:
- GEOTEST ENGINEERING, INC 5600 BINTLIFF, HOUSTON, TEXAS 77036 REFER TO APPROVED MAY 31, 2018 REPORT (1140225001)
- 3. THE PLANS WERE DEVELOPED FROM "AS-BUILT" INFORMATION SUPPLEMENTED BY ON-THE-GROUND SURVEYS. THE INFORMATION PRESENTED IS BASED ON THE ENGINEER'S BEST KNOWLEDGE OF THE EXISTING CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THESE DRAWINGS WITH THE ENGINEER PRIOR TO BEGINNING ANY WORK. SHOULD THE CONTRACTOR DISCOVER CONDITIONS DIFFERING FROM OR NOT REFLECTED ON THE PLANS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
- 4. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN AS APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR OWNER'S REPRESENTATIVE. ALL UTILITIES AND FACILITIES ARE NOT NECESSARILY SHOWN.
- O. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL CONTACT ALL UTILITY AND FACILITY AGENCIES FOR FIELD MARKING PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL ADVISE THE ENGINEER, IN WRITING, OF ANY EXISTING DAMAGED UTILITIES PRIOR TO BEGINNING CONSTRUCTION.

b. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES AND FACILITIES, ABOVE OR BELOW GROUND, FROM DAMAGE BY EQUIPMENT OR PERSONNEL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. ANY UTILITIES OR FACILITIES DAMAGED DURING THE PROJECT BY THE CONTRACTOR'S CREWS OR EQUIPMENT SHALL BE PROMPTLY REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR SHALL HAND DIG WHEN WITHIN THREE (3) FEET OF ANY KNOWN OR SUSPECTED UNDERGROUND

GENERAL NOTES CONT.

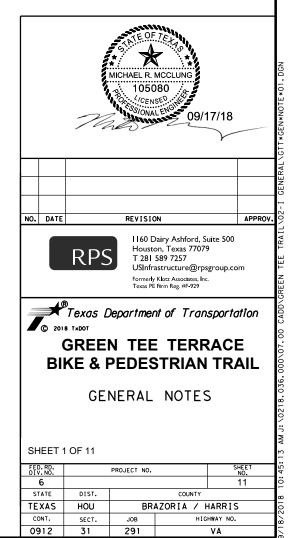
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, LICENSES, ETC. REQUIRED BY LOCAL, STATE, AND FEDERAL AGENCIES. NO SEPARATE PAY.
- 6. THE PROJECT PAY ITEMS PROVIDED SHALL BE INCLUSIVE OF ALL WORK TO BE PERFORMED AS SHOWN ON THE PLANS. WORK SHOWN ON THE PLANS BUT NOT ASSOCIATED WITH A SPECIFIC PAY ITEM SHALL BE CONSIDERED AS INCIDENTAL TO OTHER PAY ITEMS OF WORK.
- 7. THE OWNER RESERVES THE RIGHT TO CONTRACT AND PERFORM OTHER OR ADDITIONAL WORK ADJACENT TO AND WITHIN THE WORK AREA COVERED BY THIS CONTRACT. WHEN SEPARATE CONTRACTS ARE LET WITHIN THE LIMITS OF ANY ONE PROJECT, EACH CONTRACTOR SHALL CONDUCT HIS WORK SO AS NOT TO INTERFERE WITH OR HINDER THE PROGRESS OR THE COMPLETION OF THE WORK BY OTHER CONTRACTORS. THE CONTRACTORS WORKING ON THE SAME PROJECT SHALL COOPERATE WITH EACH OTHER AS ORDERED BY THE OWNER. ANY ADDITIONAL EFFORT OR WORK REQUIRED FOR SUCH COORDINATION WITH OTHER CONTRACTORS SHALL BE INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE. IT IS NOT CURRENTLY ANTICIPATED THAT OTHER WORK MAY BE COMPLETED BY AN INDEPENDENT CONTRACTOR(S) DURING THE COURSE OF THIS PROJECT.
- 8. PRIOR TO CONSTRUCTION MOBILIZATION, THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION CONFERENCE BETWEEN THE CONSULTING ENGINEER, CONTRACTOR, OTHER STAKEHOLDERS AND AGENCIES,
- 9. FOLLOWING THE PRE-CONSTRUCTION CONFERENCE AND PRIOR TO ANY MOBILIZATION OR COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VIDEO AND PHOTOGRAPH (AS REQUIRED FOR DETAIL) THE ENTIRE CONSTRUCTION WORK AREA. NO SEPARATE PAY ITEM. TWO DIGITAL FILES OF THE CONSTRUCTION SITE VIDEO AND PHOTOGRAPHS WILL BE PROVIDED TO THE ENGINEER. SPECIAL ATTENTION TO PAVEMENTS WHICH ARE PART OF THE CONTRACTOR'S HAUL ROUTE OR WHICH MUST BE CROSSED TO ACCESS PROPOSED WORK AREAS SHALL BE TAKEN. THE VIDEO AND PHOTOGRAPHS WILL BE USED TO ASSESS DAMAGE, IF ANY, CAUSED BY THE CONTRACTOR'S CREWS AND EQUIPMENT TO EXISTING FACILITIES. UTILITIES AND PAYEMENTS AND DETERMINE THE QUANTITY AND QUALITY OF REQUIRED REPAIR AND RESTORATION.
- 10.ALL BROKEN CONCRETE, ASPHALT, ETC. SHALL BE DISPOSED OF OFFSITE BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL GUIDELINES, UNLESS OTHERWISE NOTED IN THE PLANS AND
- 11. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE ON THE PROJECT, FOR THE COMPLETE DURATION, THAT IS OF A CAPACITY EQUAL TO OR IN EXCESS OF THE EXISTING DRAINAGE CONVEYANCES. THIS MAY REQUIRE TEMPORARY DITCHES, STRUCTURES OR PIPES, WHICH SHALL BE INCIDENTAL TO THE PROJECT.
- 12. THE CONTRACTOR SHALL ENSURE PROPOSED PATHS DO NOT BLOCK SURROUNDING SURFACE DRAINAGE TO SWALES. PERFORM SHAPING AS REQUIRED, INCIDENTAL TO EARTHWORK OPERATIONS, TO ACHIEVE POSITIVE SURFACE DRAINAGE AND ELIMINATE PONDING.
- 13.ALL SAW-CUTTING REQUIRED FOR COMPLETION OF THE WORK AS PROPOSED SHALL BE CONSIDERED INCIDENTAL TO PROVIDED BID ITEMS. NO SEPARATE PAY.
- 14. THE CONTRACTOR SHALL MINIMIZE USE OF NEWLY CONSTRUCTED PAVEMENTS TO PREVENT DAMAGE. DAMAGE TO NEW PAVEMENTS SHALL BE REPAIRED AT THE DIRECTION OF THE OWNER. NO SEPARATE PAY.
- 15. FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS.

BRAZORIA DRAINAGE DISTRICT #4 GENERAL NOTES

- 1. ANY GOVERNMENTAL BODY FOR PURPOSES OF DRAINGE WORK MAY USE THE DRAINAGE EASEMENT AND FEE STRIPS PROVIDED THE DISTRICT IS PROPERTLY
- 2. PERMANENT STRUCTURES, INCLUDING FENCES AND PERMANENT STRUCTURES, INCLUDING FENCES AND PERMANENT LANDSCAPING SHALL NOT BE ERECTED IN A DRAINAGE EASEMENT OR FEE STRIPS.
- 3. MAINTENANCE OF THE DETENTION FACILITIES IS THE SOLE RESPONSIBILITY OF THE OWNER OF THE PROPERTY. THE DISTRICT WILL
 PROVIDE MAINTENANCE OF REGIONAL FACILITIES OWNED AND CONSTRUCTED BY THE DISTRICT, OR SUBREGIONAL FACILITIES CONSTRUCTED BY DEVELOPER(S) FOR WHICH OWNERSHIP HAS BEEN TRANSFERRED TO THE DISTRICT WITH THE DISTRICT TO APPROVAL. THE DISTRICT IS RESPONSIBLE ONLY FOR MAINTENANCE OF FACILITIES OWNED BY THE DISTRICT UNLESS THE DISTRICT SPECIFICALLY CONTRACTS OR AGREES TO MAINTAIN OTHER FACILITIES.

BRAZORIA DRAINAGE DISTRICT #4 GENERAL NOTES CONT.

- 4. CONTRACTOR SHALL NOTIFY THE DISTRICT IN WRITING AT LEAST THIRTY-SIZ (36) HOURS BEFORE PLACING ANY CONCRETE FOR DRAINAGE STRUCTURES.
- MAY BE WARRANTED TO ENSURE THE DETENTION FACILITY IS OPERATING PROPERIY.
- 6. APPROPRIATE COVER FOR THE SIDE SLOPES, BOTTON, AND MAINTENANCE BERM SHALL BE ESTABLISHED PRIOR TO ACCEPTANCE OF CONSTRUCTION BY THE DISTRICT. AT LEAST 95% GERMINATION OF THE GRASS MUST BE ESTABLISHED PRIOR TO ACCEPTANCE OF CONSTRUCTION BY THE DISTRICT.
- 7. NO BUILDING PERMIT SHALL BE ISSUED FOR ANY LOT WITHIN THIS DEVELOPMENT UNTIL THE DETENTION FACILITY HAS BEEN CONSTRUCTED AND APPROVED BY THE DISTRICT.
- 8. THE DISTRICT № S APPROVAL OF THE FINAL DRAINAGE PLAN AND FINAL PLAT (IF REQUIRED) DOES NOT AFFECT THE PROPERTY RIGHTS OF THIRD PARTIES. THE DEVELOPER IS RESPONSIBLE FOR OBTAINING AND
 MAINTAINING ANY AND ALL EASEMENTS, FEE STRIPS, AND/OR ANY OTHER
 RIGHTS-OF-WAY ACROSS THIRD PARTIES PROPERTIES FOR PURPOSES OF
 MOVING EXCESS RUNOFF TO THE DISTRICT S DRAINAGE FACILITIES AS CONTEMPLAYED BY THE FINAL DRAINAGE PLAN AND FINAL PLAT.



UTILITY NOTES

1. THE LOCATIONS OF AT&T TEXAS/SWBT FACILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.

2. THE CONTRACTOR SHALL CALL 1-800-344-8377 (TEXAS 811) A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.

3. WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18) OF THE INDICATED LOCATION OF AT&T TEXAS/SWBT FACILITIES, ALL EXCAVATIONS MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES. WHEN BORING, THE CONTRACTOR SHALL EXPOSE THE AT&T TEXAS/SWBT FACILITIES.

4. WHEN AT&T TEXAS/SWBT FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES THE CONTRACTOR SHALL BRACE THE POLE FOR SUPPORT.

5. THE PRESENCE OR ABSENCE OF AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES OR BURIED CABLE FACILITIES SHOWN ON THESE PLANS DOES NOT MEAN THAT THERE ARE NO DIRECT BURIED CABLES OR OTHER CABLES IN CONDUIT IN THE AREA.

6. PLEASE CONTACT THE AT&T TEXAS DAMAGE PREVENTION MANAGER ROOSEVELT LEE JR. AT (713)567-4552 OR E-MAIL HIM AT RIZ259@ATT.COM, IF THERE ARE QUESTIONS ABOUT BORING OR EXCAVATING NEAR OUR AT&T TEXAS/SWBT FACILITIES.

CENTER POINT ENERGY

CAUTION: UNDERGROUND GAS FACILITIES

1. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-6005 OR 811 A MINIUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

- WHEN CENTERPOINT ENERGY PIPE LINE MARKINGS ARE NOT VISIBLE, CALL (713) 945-8036 OR (713) 945-8037 (7:00 AM TO 4:30 PM) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.
 WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18%) OF THE INDICATED LOCATION OF CENTERPOINT ENERGY FACILITIES, ALL EXCAVATION MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES.
 WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPING.
 FOR EMERGENCIES REGARDING GAS LINES CALL (713) 659-3552 OR (713) 207-4200.
- 2. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

WARNING: OVERHEAD ELECTRICAL LINES

- 3. OVERHEAD LINES MAY EXIST ON THE PROPERTY. THE LOCATION OF OVERHEAD LINES HAS NOT BEEN SHOWN ON THESE DRAWINGS AS THE LINES ARE CLEARLY VISIBLE, BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING ANY CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH & SAFETY CODE FORBIDS ACTIVITIES THAT OCCUR IN CLOSE PROXIMITY TO HIGH VOLTAGE LINES, SPECIFICALLY:
 - ANY ACTIVITY WHERE PERSON OR THINGS MAY COME WITHING SIX (6) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES; AND
 - OPERATING A CRANE, DERRICK, POWER SHOVEL, DRILLING RIG, PILE DRIVER, HOISTING EQUIPMENT, OR SIMILAR APPARATUS WITHIN 10 FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES.

4. PARTIES RESPONSIBLE FOR THE WORK, INCLUDING CONTRACTORS ARE LEGALLY RESPONSIBLE FOR THE SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR REMOVED CALL CENTERPOINT ENERGY AT (713) 207-2222.

5. ACTIVITIES ON/OR ACROSS CENTERPOINT ENERGY FEE OR EASEMENT PROPERTY:
NO APPROVAL TO USE, CROSS OR OCCUPY CENTERPOINT FEE OR EASEMENT PROPERTY IS GIVEN. IF YOU NEED TO USE CENTERPOINT PROPERTY, PLEASE OCNTACT OUR SURVEYING & RIGHT OF WAY DIVISION AT (713) 207-6348 OR (713) 207-5769.

HARRIS COUNTY FLOOD CONTROL DISTRICT GENERAL CONSTRUCTION NOTES:

- OBTAIN AND COMPLY WITH ALL APPLICABLE CITY, COUNTY, STATE, AND FEDERAL PERMITS AND APPROVALS, WITH ASSISTANCE FROM ENGINEER, IF NECESSARY. OBTAIN PERMIT (CERTIFICATION) FROM HARRIS COUNTY ENGINEER TO ENTER HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT-OF-WAY.
- 2. NOTIFY THE HARRIS COUNTY FLOOD CONTROL DISTRICT'S PROPERTY MANAGEMENT DEPARTMENT IN WRITING AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. SUBMIT THE HCFCD 48 HOUR PRE-CONSTRUCTION NOTIFICATION FORM, A COPY OF THE APPROVED CONSTRUCTION DRAWINGS, AND A COPY OF THE CORPS OF ENGINEERS INDIVIDUAL SECTION 404 PERMIT, IF APPLICABLE, TO HCFCD, 9900 NORTHWEST FREEWAY, HOUSTON, TEXAS 77092, ATTN: PROPERTY MANAGEMENT DEPT. BY HAND DELIVERY, OR FAX TO 713-684-4129 (FAX NUMBER).
- 3. ENGINEER SHALL SUBMIT CERTIFICATION LETTER AND RECORD DRAWINGS TO THE HARRIS COUNTY FLOOD CONTROL DISTRICT'S PROPERTY MANAGEMENT DEPARTMENT REQUESTING INSPECTION OF ITEMS CONSTRUCTED IN HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT-OF-WAY. PRIOR TO REQUESTING INSPECTION, THE DRAINAGE RIGHT-OF-WAY AND/OR EASEMENTS SHALL BE STAKED AND FLAGGED.
- 4. PROTECT, MAINTAIN, AND RESTORE EXISTING BACKSLOPE DRAINAGE SYSTEMS.
- 5. BACKSLOPE SWALE AND INTERCEPTOR STRUCTURE ELEVATIONS AND LOCATIONS SHOWN ON PLANS ARE APPROXIMATE. FINAL ELEVATIONS AND LOCATIONS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO INSTALLATION.
- 6. ESTABLISH TURF GRASS ON ALL DISTURBED AREAS WITHIN THE PROPOSED TRAILS, CHANNEL OR DETENTION RIGHT-OF-WAY, EXCEPT THE CHANNEL BOTTOM AND WHERE STRUCTURAL EROSION MEASURES ARE USED. SEE LANDSCAPE SHEETS FOR TURF ESTABLISHMENT SPECIFICATIONS.
- BACKFILL IN ACCORDANCE WITH THE HARRIS COUNTY FLOOD CONTROL DISTRICT STANDARD SPECIFICATION, SECTION 02315 - EXCAVATING AND BACKFILLING, OR EQUIVALENT.
- 8. EXCAVATE CHANNEL FLOWLINE TO DESIGN ELEVATION AS SHOWN ON PLANS AND DOWNSTREAM, AS NECESSARY, TO ENSURE NO WATER REMAINS IN THE FACILITY (STORM SEWER, LATERAL CHANNEL, OR DRY BOTTOM DETENTION BASIN) DURING NORMAL WATER SURFACE CONDITIONS IN THE CHANNEL, SO THE FACILITY WILL FUNCTION AS INTENDED. FOR WET BOTTOM DETENTION BASINS, ENSURE NO WATER IS ABOVE THE DESIGN LEVEL IN THE WET BOTTOM DURING NORMAL WATER SURFACE CONDITIONS IN THE CHANNEL.
- 9. MAINTAIN FLOW IN CHANNEL DURING CONSTRUCTION AND RESTORE CHANNEL TO ORIGINAL CONDITION.
- 10. REMOVE ALL EXCAVATED MATERIAL FROM THE HARRIS COUNTY FLOOD CONTROL DISTRICT OR DRAINAGE RIGHT-OF-WAY. NO FILL IS TO BE PLACED WITHIN A DESIGNATED FLOOD PLAIN AREA WITHOUT FIRST OBTAINING A FILL PERMIT FROM THE APPROPRIATE JURISDICTIONAL AUTHORITY.
- 11. A 20 FOOT CLEAR MAINTENANCE ACCESS CORRIDOR MUST BE PROVIDED IN ALL LOCATIONS THROUGHOUT THE PROJECT. THIS MAY REQUIRE FIELD ADJUSTMENTS DURING CONSTRUCTION TO ACCOMPLISH. FOR AREAS WHERE EXISTING ACCESS IS LESS THAN 20 FEET, NOTHING SHALL BE INSTALLED TO REDUCE THE EXISTING ACCESS.

PEDESTRIAN BRIDGE NOTES

1. THE PEDESTRIAN BRIDGE WILL BE FABRICATED BY CONTECH ENGINEERED SOLUTIONS, LLC, OR APPROVED EQUAL.

2. DESIGN STRESSES ARE IN ACCORDANCE WITH "STANDARD SPECIFICATION FOR HIGHWAY BRIDGES" & "GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES" BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) 2015.

3. BRIDGE MEMBERS ARE FABRICATED FROM HIGH STRENGTH, LOW ALLOY, ENHANCED ATMOSPHERIC CORROSION RESISTANT ASTM A847 COLD-FORMED WELDED SQUARE AND RECTANGULAR TUBING, AND ASTM A588, ASTM A606, OR ASTM A242 PLATE AND STRUCTURAL SHAPES (FY=50,000 PSI).

4. GALVANIZED FORM DECK TO BE SUPPLIED BY CONTECH, OR APPROVED EQUAL. 6" CONCRETE DECK WILL BE CAST AFTER THE BRIDGE IS ERECTED.

5. THE GAS METAL ARC WELDING PROCESS OR FLUX CORED ARC WELDING PROCESS WILL BE USED. WELDING TO BE IN ACCORDANCE WITH AWS

6. ALL TOP AND BOTTOM CHORD SHOP SPLICES TO BE COMPLETE PENETRATION TYPE WELDS. WELD BETWEEN TOP CHORD AND END VERTICAL SHALL BE IN ACCORDANCE TO MANUFACTURER SPECIFICATIONS.

PEDESTRIAN BRIDGE NOTES CONT.

7. UNLESS OTHERWISE NOTED, WELDED CONNECTIONS SHALL BE FILLET WELDS (OR HAVE THE EFFECTIVE THROAT OF A FILLET WELD) OF A SIZE EQUAL TO THE THICKNESS OF THE LIGHTEST GAGE MEMBER IN THE CONNECTION. WELDS SHALL BE APPLIED AS FOLLOWS:

- A. BOTH ENDS OF VERTICALS, DIAGONALS, AND FLOOR BEAMS SHALL BE WELDED ALL AROUND.
 B. BRACE DIAGONALS WILL BE WELDED ALL AROUND.
 C. MISCELLANEOUS NON-STRUCTURAL MEMBERS WILL BE STITCH

8. BRIDGE DESIGN WAS BASED ON THE COMBINATIONS OF THE FOLLOWING LOADS WHICH WILL PRODUCE MAXIMUM CRITICAL MEMBER STRESSES.

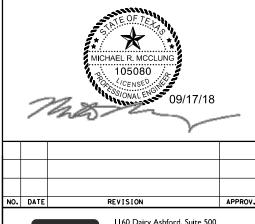
- A. 90 PSF UNIFORM LIVE LOADING ON THE FULL DECK AREA OR ONE 20,000 LB VEHICLE LOAD. THE LOAD SHALL BE DISTRIBUTED AS A FOUR-WHEEL VEHICLE WITH 80% OF THE LOAD ON THE REAR WHEELS. THE WHEEL TRACK WIDTH OF THE VEHICLE SHALL BE 6'-0" AND THE WHEEL BASE SHALL BE 14'-0". THE VEHICLE SHALL BE POSITIONED SO AS TO PRODUCE THE MAXIMUM STRESSES IN EACH MEMBER, INCLUDING DECKING.

 B. 35 PSF WIND LOAD ON THE FULL HEIGHT OF THE BRIDGE, AS IF ENCLOSED.

 C. 20 PSF UPWARD FORCE APPLIED AT THE WINDWARD QUARTER POINT OF THE TRANSVERSE BRIDGE WIDTH (AASHTO 3.15.3).

9. CLEANING: ALL EXPOSED SURFACES OF STEEL SHALL BE CLEANED IN ACCORDANCE WITH STEEL STRUCTURES PAINTING COUNCIL SURFACES PREPARATION SPECIFICATIONS NO. 7 BRUSH-OFF BLAST CLEANING SSPC-SP7-LATEST EDITION.

10. MINIMUM MATERIA THICKNESS OF 1/4" ON ALL STRUCTURAL MEMBERS.





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Formerly Klotz Associates, Inc. Texas PE Firm Reg. #F-929



GREEN TEE TERRACE BIKE & PEDESTRIAN TRAIL

GENERAL NOTES

SHEET 2 OF 11

SHEET NO.	PROJECT NO.			FED.RD. DIV.NO.
12				6
	COUNTY	DIST.	STATE	
HARRIS	AZORIA / H	BR	HOU	TEXAS
HWAY NO.	HIG	JOB	SECT.	CONT.
VA		291	31	0912

County: Brazoria Control: 0912-31-291

Highway: VA

TxDOT General Notes

General:

If fixed features require, the governing slopes shown may vary between the limits shown and to the extent determined by the Engineer.

Superelevate the curves to match the existing surface.

Notify the Engineer immediately if discrepancies are discovered in the horizontal control or the benchmark data.

References to manufacturer's trade name or catalog numbers are for the purpose of identification only. Similar materials from other manufacturers are permitted if they are of equal quality, comply with the specifications for this project, and are approved, except for roadway illumination, electrical, and traffic signal items.

The cost for materials, labor, and incidentals to provide for traffic across the roadway and for ingress and egress to private property in accordance with Section 7.2.4 of the standard specifications is subsidiary to the various bid items. Restore access roadways to their original condition upon completing construction.

Grade street intersections and median openings for surface drainage.

If a foundation is to be placed where a riprap surface or an asphalt concrete surface presently exists, use caution in breaking out the existing surface for placement. Break out no greater area than is required to place the foundation. After placing the foundation, wrap the periphery with 0.5 in. pre-molded mastic expansion joint. Then replace the remaining portion of the broken out surface with Class A or Class C concrete or cold mix asphalt concrete to the exact slope, pattern, and thickness of the existing riprap or asphalt. Payment for breaking out the existing surface, wrapping the foundation, and replacing the surface is subsidiary to the various bid items.

The lengths of the posts for ground mounted signs and the tower legs for the overhead sign supports are approximate. Verify the lengths before ordering these materials to meet the existing field conditions and to conform to the minimum sign mounting heights shown in the plans.

Furnish aluminum Type A signs instead of plywood signs for signs shown on the Summary of Small Signs sheet.

Stencil the National Bridge Inventory (NBI) number on each existing bridge shown on these plans. The NBI number is shown above the title block for each bridge layout.

Clearly mark or highlight on the shop drawings, the items being furnished for this project. Submit required shop drawings in accordance with the shop drawing distribution list shown in the note for Item 5 for review and distribution.

General Notes Sheet A

County: Brazoria Control: 0912-31-291

Highway: VA

Right of way parcels or utility adjustments shown to be unclear on the plans but not listed on the special provisions will have no effect on construction.

Unless otherwise shown on the plans or otherwise directed, commence work after sunrise and ensure construction equipment is off the road by sunset.

Procure permits and licenses, which are to be issued by the City, County, or Municipal Utility District.

Any groundwater elevation information provided is representative of conditions existing on the day when and for the specific location where this information was collected. The actual groundwater elevation may fluctuate with time, climatic conditions, and construction activity.

General: Site Management

Mow the grass and weeds within the project limits a maximum of 3 times a year as directed. This work is subsidiary to the various bid items.

Mark stations every 100 ft. and maintain the markings for the project duration. Remove the station markings at the completion of the project. This work is subsidiary to the various bid items.

Do not mix or store materials, or store or repair equipment, on top of concrete pavement or bridge decks unless authorized by the Engineer. Permission will be granted to store materials on surfaces if no damage or discoloration will result.

Assume ownership of debris and dispose of at an approved location. Do not dispose of debris on private property unless approved in writing by the District Engineer.

Control the dust caused by construction operations. For sweeping the base material in preparation for laying asphalt and for sweeping the finished concrete pavement, use one of the following types of sweepers or approved equal:

Tricycle Type

Wayne Series 900 Elgin White Wing Elgin Pelican Truck Type - 4 Wheel

M-B Cruiser II Wayne Model 945 Mobile TE-3 Mobile TE-4 Murphy 4042

General Notes SHEET 3 OF 11 Sheet B County: Brazoria Control: 0912-31-291

Highway: VA

General: Traffic Control and Construction

Schedule construction operations such that preparing individual items of work follows in close sequence to constructing storm drains in order to provide as little inconvenience as practical to the businesses and residents along the project.

Schedule work so that the base placement operations follow the subgrade work as closely as practical to reduce the hazard to the traveling public and to prevent undue delay caused by wet weather.

This project requires extensive grading operations in an environmentally sensitive area.

If relocating mailboxes, place them with the post firmly in the ground at nearby locations. Upon completing the project, the Engineer will locate the final mailbox placement. Perform this work in accordance with the requirements of the Item, "Mailbox Assemblies," except for measurement and payment. This work is subsidiary to the various bid items.

If fences cross construction easements shown on the plans and work is required beyond the fences, remove and replace the fences as directed. This work and the materials are subsidiary to the various bid items.

When design details are not shown on the plans, provide signs and arrows conforming to the latest "Standard Highway Sign Designs for Texas" manual.

General: Utilities

Consider the locations of underground utilities depicted in the plans as approximate and employ responsible care to avoid damaging utility facilities. Depending upon scope and magnitude of planned construction activities, advanced field confirmation by the utility owner or operator may be prudent. Where possible, protect and preserve permanent signs, markers, and designations of underground facilities.

If the Contractor damages or causes damage (breaks, leaks, nicks, dents, gouges, etc.) to the utility, contact the utility facility owner or operator immediately.

At least 48 hours before starting work, make arrangements for locating existing Department-owned above ground and underground fiber optic, communications, power, illumination, and traffic signal cabling and conduit. Do this by calling the Department's Houston District Traffic Signal Operations Office at 713-802-5663 to schedule marking of underground lines on the ground. Use caution if working in these areas to avoid damaging or interfering with existing facilities.

Notify the Engineer at least 48 hours before constructing junction boxes at storm drain and utility intersections.

General Notes Sheet C

County: Brazoria Control: 0912-31-291

Highway: VA

Install or remove poles and luminaires located near overhead or underground electrical lines using established industry and utility safety practices. Consult the appropriate utility company before beginning such work.

If overhead or underground power lines need to be de-energized, contact the electrical service provider to perform this work. Costs associated with de-energizing the power lines or other protective measures required are at no expense to the Department.

If working near power lines, comply with the appropriate sections of Texas State Law and Federal Regulations relating to the type of work involved.

Perform electrical work in conformance with the National Electrical Code (NEC) and Department's standard sheets.

Before beginning any underground work, notify the City of Houston's Chief Inspector, Public Works and Engineering, to establish the locations of any existing electrical systems for lighting facilities within the limits of this project.

Item 5: Control of Work

Before contract letting, electronically generated earthwork cross-section data will be furnished free of charge to the prospective bidders on a compact high-density disk, in an ASCII print format. This will be available through the Association of General Contractors bulletin board service or through the Area Engineer's office. If the earthwork data is not available electronically, reproducible earthwork cross sections are available at the Area Engineer's office for borrowing by copying service companies for the purpose of making copies for the prospective bidders, at the prospective bidder's expense. The earthwork cross-section data provided above is for non-construction purposes only and it is the responsibility of the prospective bidder to validate the enclosed data with the appropriate plans, specifications, and estimates for the projects.

Submit shop drawings electronically for the fabrication of items as documented in Table 1 or Table 2 below. Information and requirements for electronic submittals can be viewed in the "Guide to Electronic Shop Drawing Submittal" which can be accessed through the following web link, the following web link, the following web link, the following web link, <a href="mailto:tp.dot.state.tx.us/pub/tx

SHEET 4 OF 11 Sheet D

General Notes

14

County: Brazoria

Control: 0912-31-291

Highway: VA

Table 2
2014 Construction Specification Required Shop/Working Drawing Submittals Consultant Generated Plans

Spec Item No.'s	Product	Submittal Required	Approval Required (Y/N)	Contractor/ Fabricator P.E. Seal Required	Reviewing Party	Shop or Working Drawing (Note 1)
7.16.1&.2	Construction Load Analyses	Υ	Y	Y	D	WD
400	Excavation and Backfill for Structures (cofferdams)	Υ	N	Y	D	WD
403	Temporary Special Shoring	Y	N	Υ	D	WD
420	Formwork/Falsework	Υ	N	Υ	D	WD
423	Retaining Walls, (calcs reg'd.)	Y	Υ	Y	D	SD
425	Optional Design Calculations (Prstrs Bms)	Y	Y	Υ	D	SD
425	Prestr Concr Sheet Piling	Y	Υ	N	D	SD
425	Prestr Concr Beams	Υ	Ŷ	Ň	D	SD
425	Prestr Concr Bent	Y	Υ	N	D	SD
426	Post Tension Details	Υ	Y	N .	D	SD
434	Elastomeric Bearing Pads (All)	Y	Y	N	D	SD
441	Bridge Protective Assembly	Υ	Υ	N	D	SD
441	Misc Steel (various steel assemblies)	Υ	Υ	N	D	SD
441	Steel Pedestals (bridge raising)	Y	Y	N	D	SD
441	Steel Bearings	Υ	Υ	N	D	SD
441	Steel Bent	Y	Υ	N	D	SD
441	Steel Diaphragms	Y	Y	N	D	SD
441	Steel Finger Joint	Υ	Υ	N	D	SD
441	Steel Plate Girder	Y	Υ	N	D	SD
441	Steel Tub-Girders	Y	Y	N	D	SD
441	Erection Plans, including Falsework	Υ	N	Y	D	WD

General Notes Sheet E

County: Brazoria Control: 0912-31-291

Highway: VA

	Sign Structure				_ =	
449	Anchor Bolts	Υ	Υ	N	D	SD
450	Railing	Υ	Υ	N	D	SD
462	Concrete Box Culvert	Υ	Y	N	D	SD
462	Concrete Box Culvert (Alternate Designs Only,calcs reqd.)	Y	Y	Y	D	SD
464	Reinforced Concrete Pipe (Jack and Bore only; ONLY when requested)	Υ	Y	Y	D	SD
465	Pre-cast Junction Boxes, Grates, and Inlets	Υ	Y	N	D	SD
465	Pre-cast Junction Boxes, Grates, and Inlets (Alternate Designs Only, calcs req'd.)	Y	Y	Y	D	SD
466	Pre-cast Headwalls and Wingwalls	Y	Y	N	D	SD
467	Pre-cast Safety End Treatments	Υ	Y	N	D	SD
495	Raising Existing Structure (calcs reqd.)	Y	Y	Υ	D	SD
610	Roadway Illumination Supports (Non- Standard only, calcs reqd.)	Y	Y	Y	D	SD
613	High Mast Illumination Poles (Non-standard only, calcs reqd.)	Y	Y	Y	D	SD
627	Treated Timber Poles	Υ	Y	N	D	SD
644	Special Non- Standard Supports (Bridge Mounts, Barrier Mounts, Etc.)	Y	Y	Y	D	SD
647	Large Roadside Sign	Υ	Υ	Y	D	SD

General Notes SHEET 5 OF 11
Sheet F
15

County: Brazoria

Highway: VA

	Supports					
650	Cantilever Sign Structure Supports - Alternate Design Calcs.	Υ	Υ	Y	D	SD
650	Sign Structures	Υ	Υ	N	D	SD_
680	Installation of Highway Traffic Signals	Y	Y	N	D	SD
682	Vehicle and Pedestrian Signal Heads	Υ	Y	N	D	SD
684	Traffic Signal Cables	Y	Y	N	D	\$D_
685	Roadside Flashing Beacon Assemblies	Y	Υ	N	D	SD
686	Traffic Signal Pole Assemblies (Steel) (Non-Standard only)	Υ	Y	Υ	D	SD
687	Pedestal Pole Assemblies	Υ - 5	Y	N	D	SD
688	Detectors	Y	Y	N	D	SD
784	Repairing Steel Bridge Members	Y	Υ	Υ	D	WD
SS	Prestr Concr Crown Span	Υ	Υ	N	D	SD
SS	Sound Barrier Walls	Υ	Υ	Υ	D	SD
SS	Camera Poles	Υ	Υ	Υ	TMS	SD
ss	Pedestrian Bridge (Calcs req'd.)	Υ	Y	Y	D	SD
SS	Screw-in Type Anchor Foundations	Υ	Y	N	D	SD
SS	Fiber Optic/Communication Cable	Y	Y	N	TMS	SD
SS	Spread Spectrum Radios for Signals	Υ	Υ	N	D	SD
SS	VIVDS System for Signals	Υ	Y	N	D	SD
SS	CTMS Equipment	Υ	Y	N	TMS	SD

Notes:

General Notes Sheet G

Control: 0912-31-291

County: Brazoria Control: 0912-31-291

Highway: VA

Document flow for Working Drawings differs from Shop Drawings in that Working
Drawings must be submitted to the Engineer rather than the Engineer of Record
and they are for the information of the Engineer only; an approval stamp and
distribution to all project offices is not required.

Key to Reviewing Party

TMS – Traffic Management System Computerized Traffic Management Systems					
D - Consultant: Submit to Engineer of Record at mike.mcclung@rpsgroup.com					
TMS - Traffic Management S	ystem				
Computerized Traffic					
Management Systems					
(CTMS)	HOU-CTMSShpDrwgs@txdot.gov	ļ			

Item 7: Legal Relations and Responsibilities

The Contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

Do not initiate activities in a Project Specific Location (PSL), associated with a U.S. Army Corps of Engineers (USACE) permit area, that have not been previously evaluated by the USACE as part of the permit review of this project. Such activities include those pertaining to, but are not limited to, haul roads, equipment staging areas, borrow and disposal sites. Associated defined here means materials are delivered to or from the PSL. The permit area includes the waters of the U.S. or associated wetlands affected by activities associated with this project. Special restrictions may be required for such work. Assume responsibility for consultations with the USACE regarding activities, including PSLs that have not been previously evaluated by the USACE. Provide the Department with a copy of consultations or approvals from the USACE before initiating activities.

The Contractor may proceed with activities in PSLs that do not affect a USACE permit area if a self-determination has been made that the PSL is non-jurisdictional or if proper USACE clearances have been obtained in jurisdictional areas or have been previously evaluated by the USACE as part of the permit review of this project. The Contractor is solely responsible for documenting any determinations that their activities do not affect a USACE permit area. Maintain copies of their determinations for review by the Department or any regulatory agency.

Document and coordinate with the USACE, if required, before hauling any excavation from or hauling any embankment to a USACE permit area by either 1 or 2 below:

1. Restricted Use of Materials for the Previously Evaluated Permit Areas.

Document both the Project Specific Locations (PSL) and their authorization.

General Notes SHEET 6 OF 11 Sheet H County: Brazoria Control: 0912-31-291

Highway: VA

Maintain copies for review by the Department or any regulatory agency. When an area within the project limits has been evaluated by the USACE as part of the permit process for this project:

- a. Suitable excavation of required material in the areas shown on the plans and cross sections as specified in the Item, "Excavation" is used for permanent or temporary fill (under the Item, "Embankment") within a USACE permit area.
- b. Suitable embankment (under the Item, "Embankment") from within the USACE permit area is used as fill within a USACE evaluated area.
- c. Unsuitable excavation or excess excavation, "Waste" (under the Item, "Excavation"), that is disposed of at a location approved within a USACE evaluated area.
- 2. Contractor Materials from Areas Other than Previously Evaluated Areas.

 Provide the Department with a copy of USACE coordination or approvals before initiating any activities for an area within the project limits that has not been evaluated by the USACE or for any off right of way locations used for the following, but not limited to, haul roads, equipment staging areas, borrow and disposal sites:
 - a. The Item, "Embankment" used for temporary or permanent fill within a USACE permit area.
 - b. Unsuitable excavation or excess excavation, "Waste" (under the Item, "Excavation"), that is disposed of outside a USACE evaluated area.

The total area disturbed for this project is 5.21 acres. The disturbed area in this project, the project locations in the Contract, and Contractor project specific locations (PSLs) within 1 mile of the project limits for the Contract, will further establish the authorization requirements for storm water discharges. The Department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. The Contractor is to obtain required authorization from the TCEQ for Contractor PSLs for construction support activities on or off the ROW. When the total area disturbed in the Contract and PSLs within 1 mile of the project limits exceeds 5 acres, provide a copy of the Contractor NOI for PSLs on the ROW to the Engineer (to the appropriate MS4 operator when on an off-state system route) and to the local government that operates a separate storm drain system.

This project does not require a U.S. Army Corps of Engineers (USACE) Section 404 Permit before letting, but if a permit is needed during construction, assume responsibility for preparing the permit application. Submit the permit application to the Department's District Environmental Section for approval. Once the permit application is approved, the Department will submit it to the USACE. Assume responsibility for the requested revisions, in coordination with the Department's District Environmental Section.

Maintain the roadway slope stability. Maintaining slope stability is subsidiary to the various bid items

General Notes Sheet I

County: Brazoria Control: 0912-31-291

Highway: VA

The nesting / breeding season for migratory birds is February 15 through September 30.

Conduct any tree removal outside of the migratory bird nesting season. If this is not possible due to scheduling, then exercise caution to remove only those trees with no active nests. Do not destroy nests on structures or in trees within the project limits during the nesting / breeding season.

Take measures to prevent the building of nests on any structures or trees within the project limits throughout the duration of the construction if work / removal will be performed during the nesting / breeding season. This can be accomplished by application of bird repellent gel, netting by hand every 3 to 4 days, or any other non-threatening method approved by the Houston District Environmental Section. Obtain this approval well in advance of the planned use. Contact the Houston District Environmental Section at 713-802-5244. The cost of this work is subsidiary to the various bid items.

No significant traffic generator events have been identified.

Item 8: Prosecution and Progress

The road-user cost liquidated damages are \$ 1,000.00 per day. After the project is substantially complete, the liquidated damages become those based on contract administration costs.

Working days will be computed and charged based on a 5-day work week.

Item 100: Preparing Right of Way

Obtain a City of Houston plumbing permit and a demolishing permit or removing permit before demolishing or removing existing houses or commercial buildings.

Clean existing ditches under fill sections of undesirable materials including grass, muck, and trash. Perform this work in accordance with the Construction section of the Item, "Preparing Right of Way." This work is subsidiary to this bid Item.

The Item, "Preparing Right of Way" will be measured for payment only in those designated areas shown on the plans. Preparing right of way necessary to perform construction that is outside designated areas is subsidiary to this bid Item.

Remove abandoned utilities that are in conflict with the new utilities, at no expense to the Department.

Reestablish and maintain right of way stakes after completing the right of way preparation activities and until the new utilities are in place.

Remove and assume ownership of the existing ground mounted signs within the limits of roadway construction unless otherwise noted or directed. This work is subsidiary to the Item, "Preparing Right of Way."

SHEET 7 OF 11 Sheet J

General Notes

17

County: Brazoria Control: 0912-31-291

Highway: VA

Item 104: Removing Concrete

Removing concrete curb is paid as a separate bid item if the existing pavement on which it rests is not removed at the same time.

Item 110: Excavation

If manipulating the excavated material requires moving the same material more than once to accomplish the desired results, the excavation is measured and paid for only once regardless of the manipulation required.

Transition the ditch grades and channel bottom widths at structure locations. Use only approved channel excavation in the embankment.

Item 132: Embankment

If salvaged base is used for the embankment material, break it into small pieces to achieve the required density and to facilitate placing in the embankment. Obtain approval of the material before placing in the embankment.

Furnish Type C material with a maximum Liquid Limit (LL) of 65, a minimum Plasticity Index (PI) of 5, and composed of suitable earth material such as loam, clay, or other materials that form a suitable embankment.

The embankment material used on the project which has a Liquid Limit exceeding 45 will be tested for Liquid Limits at the rate of one test per 20,000 cu. yd. or per total quantity less than 20,000 cu. yd., unless otherwise directed. Only use material that passes the above tests.

For unpaved areas, provide a finished grade with the top 4 in. capable of sustaining vegetation. Use fertile soil that is easily cultivated, free from objectionable material and highly resistant to erosion

Item 162: Sodding for Erosion Control Item 164: Seeding for Erosion Control

Item 166: Fertilizer

Item 168: Vegetative Watering

Refer to the "Fertilizer, Seed, Sod, Straw, Compost, and Water" plan sheet for material specifications, application rates, and for watering requirements.

Item 360: Concrete Pavement

Where the pavement curb is left off for a later tie, provide the dowels or the tie bars as indicated on the paving detail sheets. The dowel bars and tie bars are subsidiary to the various bid items.

General Notes Sheet K

County: Brazoria Control: 0912-31-291

Highway: VA

Repair portions of the concrete pavement surfaces that are damaged while in a plastic state before that area receives permanent pavement markings and opens to traffic. Perform repairs that are structurally equivalent to and cosmetically uniform with the adjacent undamaged areas. Do not repair by grouting onto the surface.

On pavement widening, hand finishing in place of the longitudinal float will be permitted.

Where existing pavement is widened with new pavement, place the new pavement a minimum of 2 ft. wide.

Equip the batching plants to proportion by weight, aggregates and bulk cement, using approved proportioning devices and approved automatic scales.

For mono curb, the curb height transitions will be paid at the contract unit price of the larger curb height in the transition. The 2.5-in. laydown curbs for driveways will be paid at the unit price bid for the Item. "Conc Curb (Mono) (Ty II)."

High-early strength cement may be used for frontage road and city street intersection construction.

Do not use limestone dust of fracture as fine aggregate.

If the concrete design requires greater than 5.5 sacks of cementitious material per cubic yard, obtain written approval. If placing concrete pavement mixes from April 1 to October 31, inclusive, use Mix Design Option 1 as specified in Section 421.4.2.6.1.

Perform saw cutting as shown on the plans in accordance with Section 360.4.10, "Sawing Joints." This saw cutting is subsidiary to this bid Item.

Items 360, 420, and 421: All Concrete Items

For the Department's concrete cylinder split samples, transport the test cylinders to the Houston District Laboratory located at 7600 Washington Avenue in Houston, or to the appropriate Area Laboratory, when applicable. Transporting the test cylinders is subsidiary to the various bid items.

The approach pavement is paid for under the Item, "Concrete Pavement."

Item 361: Repair of Concrete Pavement

For full depth repair, remove only the quantity of pavement replaceable during the daily allowable work schedule.

General Notes SHEET 8 OF 11 Sheet L

Go

INDEX OF SHEETS SEE SHEET 2

STATE OF TEXAS DEPARTMENT OF TRANSPORTATION

DESIGN SPEED = 18 MPH ADT: N/A

6 STP 1702 (405) MM STATE TEXAS HOU BRAZORIA СОМ1 SEC1 "ОВ МЕСНЯХУ НО О912 31 291 VA

PLANS OF PROPOSED

STATE HIGHWAY IMPROVEMENT

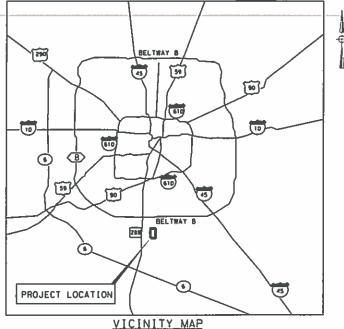
PROJECT NO: STP 1702 (405) MM

NET LENGTH OF PROJECT= ROADWAY 7, 488.14 FT = 1.418 MI BRIDGE 200.00 FT = 0.038 MI TOTAL 7,688,14 FT = 1,456 MI

GREEN TEE TERRACE BIKE AND PEDESTRIAN TRAIL BRAZORIA COUNTY

LIMITS: ON GREEN TEE TERRACE

FOR THE CONSTRUCTION OF A NON FREEWAY FACILITY CONSISTING OF GREEN TEE TERRACE BIKE AND PEDESTRIAN TRAIL



NTS

DUN # 020796397 ZIP CODE 77581-5416

END PROJECT STA 84+91.20 CSJ 0912-31-291 X: 3,158,599.14 Y: 13,775,560.97

REGISTERED ACCESSIBILITY SPECIALIST (RAS) INSPECTION REQUIRED TDLR NO. EABPRJB 9800984.

CITY OF PEARLAND CONCURRENCE

DIRECTOR OF ENGINEERING

4/18/18

ect OP/13 PEARLAND COUNTY McLast Road Ms T

BEGIN PROJECT STA 10+00 CSJ 0912-31-291 X: 3,157,590.09 Y: 13,770,056.42

- 1. SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, NOVEMBER 1, 2014 AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT: REQUIRED CONTRACT PROVISIONS FOR ALL FEDERAL-AID CONSTRUCTION CONTRACTS (FORM FHWA 1273, MAY, 2012).
- 2. ALL ELEVATIONS ARE BASED ON NAVD 88.
- 3. ALL BEARINGS AND COORDINATES ARE BASED ON THE TEXAS

PROJECT LOCATION N. T. S.

EXCEPTIONS: NONE EQUATIONS: NONE RAILROAD CROSSING: NONE

Texas Department of Transportation all rights reserved

9-18-18 LETTING PROJECT MANAGER

Texas Department of Transportation

9)18/18 DISTRICT ENGINEER

STP 1702 (405) MM COUNTY: BRAZORIA/HARRIS PROJ NO: HWY NO: VA LETTING DATE: DATE ACCEPTED:

USInfrastructure@rpsgroup.com Formerly Klotz Associates, Inc. Texas PE Firm Reg. 87-929

Houston, Texas 77079 T 281 589 7257

1160 Dairy Ashford, Suite 500

INDEX OF SHEETS

GENERAL

1			TITLE SHEET
2			INDEX OF SHEETS
3	-	7	PROJECT LAYOUTS
88	-	8J	CONTROL MONUMENT LAYOUT
9	-	10	TYPICAL SECTIONS
11	-	21	GENERAL NOTES
22	-	23	QUANTITY SUMMARY
24			SUMMARY OF SMALL SIGNS

TRAFFIC CONTROL PLAN

25		TRAFFIC CONTROL PLAN PHASES NARRATIVE AND LAYOUTS
26		* TRAFFIC CONTROL PLAN ONE-WAY TWO-LANE ROADS TCP(1-2)-18
27		* TRAFFIC CONTROL PLAN LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS TCP(1-4)-18
28		* BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS BC(1)-14
29		* BARRICADE AND CONSTRUCTION PROJECT LIMIT BC(2)-14
30		* BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT BC(3)-14
31		* BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES BC(4)-14
32		* BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT BC(5)-14
33		* BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) BC(6)-14
34		* BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS,
		ATTENUATOR BC(7)-14
35	- 37	* BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES BC(8)-14 THROUGH BC(10)-14
38		* BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS BC(11)-14
39		* BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS BC(12)-14

ROADWAY DETAILS

40	-	45	HORIZONTAL ALIGNMENT DATA
46	-	62	PLAN AND PROFILES
63	-	65	* DRIVEWAY DETAILS DD (HOU DIST)
66	-	69	* PEDESTRIAN FACILITIES CURB RAMPS PED-18
70	-	71	* JOINTED REINFORCED CONCRETE PAVEMENT DETAILS JRCP (HOU DIST)

DRAINAGE DETAILS

72			HARRIS COUNTY ENGINEERING DEPARTMENT REVIEW SHEET
73	-	74	CULVERT LAYOUT
75			INTERCEPTOR STRUCTURE DETAILS
76			* BOX CULVERT SUPPLEMENT- WINGS AND END TREATMENTS BCS
77			* EXTENDED CURB DETAILS FOR BOX CULVERTS WITH CURBS OVER 1'-O" TO 5'-O" TALL ECD
78			* CONCRETE WINGWALLS WITH FLARED WINGS FOR O°SKEW BOX CULVERTS FW-O
79			* CONCRETE WINGWALLS WITH PARALLEL WINGS FOR BOX CULVERTS TYPES PW-1 AND PW-2 PW
80			* SINGLE BOX CULVERTS PRECAST 6'-O" SPAN SCP-6
81			* BOX CULVERTS PRECAST MISCELLANEOUS DETAILS SCP-MD
82	_	83	* EXCAVATION AND BACKFILL DIAGRAMS E&BD (HOU DIST)

UTILITIES

84 - 85 EXISTING UTILITIES

BRIDGES

86	-	90	BORE LOGS
91			HYDRAULIC DATA SHEET
91A			HYDRAULIC DATA SHEET SECTIONS
92	-	93	BRIDGE LAYOUT PEDESTRIAN BRIDGE
94			BRIDGE QUANTITIES
95			BENT 2
96			ABUTMENT 1
97			ABUTMENT 3
98			ABUTMENT DETAILS
99			** CONCRETE RIPRAP AND SHOULDER DRAINS EMBANKMENTS AT BRIDGE ENDS
			(TYPES RR8 & RR9) CRR
100		101	** COMMON FOUNDATION DETAILS ED

TRAFFIC ITEMS

102	* SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS GENERAL NOTES & DETAILS SMD(GEN)-08
103	* SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-1)-08
104	* SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-2)-08
105	* SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-3)-08
106	* SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS WEDGE & UNIVERSAL ANCHOR WITH THIN WALL
	TUBING POST SMD(TWT)-08

ENVIRONMENTAL ISSUES

107 - 11	1 STORMWATER POLLUTION PREVENTION PLAN
112	* TXDOT STORM WATER POLLUTION PREVENTION PLAN SWP3 (HOU DIST)
113	* ECL EROSION CONTROL LOG ECL-12 (HOU DIST)
114	* TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES FENCE AND VERTICAL TRACKING EC(1)-16
115	* TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES ROCK FILTER DAMS EC(2)-16
116	* TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES CONSTRUCTION EXITS EC(3)-16
117	* FERTILIZER, SEED, SOD, STRAW, COMPOST, AND WATER (HOU DIST)
118	* ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS EPIC

MISCELLANEOUS

119	CURB RAMP LAYOUT PROVINCE VILLAGE DRIVE
120	SITE DIMENSION LAYOUT PEARLAND PARKWAY
121	GRADING AND DRAINAGE LAYOUT PEARLAND PARKWAY

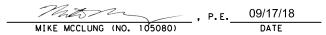
LANDSCAPE

122			OVERALL LANDSCAPE PLAN
123	-	124	LANDSCAPE LAYOUT
125	-	126	LANDSCAPE DETAILS
127			PLANTING DETAILS
128			IRRIGATION PLAN
129	-	130	IRRIGATION DETAILS
131	-	135	SIGNAGE DETAILS



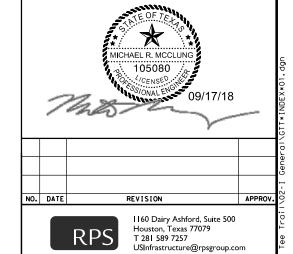
JONATHAN GRIFFIN 116876

(*) THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE HAVE BEEN SELECTED BY ME OR MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.



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GREEN TEE TERRACE BIKE & PEDESTRIAN TRAIL

INDEX OF SHEETS

HEEI	1 OF 1					
ED.RD.		PROJECT NO. SHEET NO.				
6				2	7	
STATE	DIST. COUNTY			7		
EXAS	HOU	BRAZORIA / HARRIS				
CONT.	SECT.	JOB HIGHWAY NO.			Į.	
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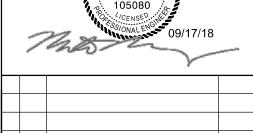
PROP CONC RIP RAP

BORING

TYPICAL SECTION

- 1. SEE SHEETS 40-45 FOR HORIZONTAL ALIGNMENT DATA.
- DETAILS OF BORINGS.
- 3. SEE LANDSCAPE PLANS ON SHEETS 122-135 FOR LANDSCAPE FEATURES.
- 4. SEE SHEETS 70-71 FOR PAVEMENT DETAILS.
- 5. SEE SHEET 66-69 FOR PEDESTRIAN RAMP DETAILS.
- 6. SEE SHEET 99 FOR RIPRAP

100 SCALE: 1"=100'



1160 Dairy Ashford, Suite 500 Houston, Texas 77079 T 281 589 7257 USInfrastructure@rpsgroup.com Formerly Klotz Associates, Inc. Texas PE Firm Reg. #F-929

Texas Department of Transportation

GREEN TEE TERRACE BIKE & PEDESTRIAN TRAIL

PROJECT LAYOUT

ı	SHEET TOF 5						
	FED.RD. DIV.NO.	PROJECT NO.			SHEET NO.		
	6				3		
	STATE	DIST.		COUNTY			
1	TEXAS	HOU	BRAZORIA / HARRIS				
	CONT.	SECT.	JOB	HIG	HWAY NO.		
	0010						

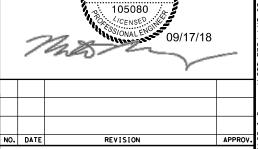
PROP CONC RIP RAP

BORING TYPICAL SECTION

NOTES

- 1. SEE SHEETS 40-45 FOR HORIZONTAL ALIGNMENT DATA.
- 2. SEE SHEETS 86-90 FOR DETAILS OF BORINGS.
- 3. SEE LANDSCAPE PLANS ON SHEETS 122-135 FOR LANDSACPE FEATURES.
- 4. SEE SHEETS 70-71 FOR PAVEMENT DETAILS.
- 5. SEE SHEETS 92-101 FOR BRIDGE LAYOUT AND DETAILS.

100 SCALE: 1"=100'



MICHAEL R. MCCLUNG



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₹*Texas Department of Transportation

GREEN TEE TERRACE BIKE & PEDESTRIAN TRAIL

PROJECT LAYOUT

SHEET 3 OF 5						
FED.RD. DIV.NO.		PROJECT NO.	SHEET NO.			
6				5		
STATE	DIST.		COUNTY			
TEXAS	HOU	BR	AZORIA / H	HARRIS		
CONT.	SECT.	JOB HIG		HWAY NO.		
0912	31	291		VA		