



HIDALGO COUNTY PLANNING DEPARTMENT

T.J. Arredondo, CFM
Director of Planning

1304 SOUTH 25TH STREET
EDINBURG TEXAS 78539
Tel. 956-318-2840 Fax. 956-318-2844

HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 8-28-2018

PROPOSED CAMINO DE ABRAM SUBDIVISION, PRECINCT No. 3.

ENGINEER: SOUTH TEXAS INFRASTRUCTURE GROUP DEVELOPER: EVERMAN DEVELOPMENT LLC.

PRELIMINARY APPROVAL FINAL APPROVAL FINAL APPROVAL WITH FINANCIAL GUARANTEE WITH VARIANCE

NUMBER OF LOTS: 81 *SINGLE FAMILY *MULTI-FAMILY COMMERCIAL INSTITUTIONAL

LOCATION DESCRIPTION: EAST OF ABRAM ROAD APPROXIMATELY 1/2 MILE NORTH OF MILE 3 NORTH ROAD.

SUBDIVISION LIES WITHIN THE: ETJ of MISSION and was approved by the P & Z and City Commission of said City

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 6-20-2017 PROPERTY LIES WITHIN FLOOD ZONE: "X" AS PER FEMA.

DRAINAGE DESIGN: DRAINAGE CONSISTS OF STORM SEWER SYSTEM DISCHARGING TO AN EXISTING DRAINAGE BASIN OWNED BY THE HCDD#1.

ROAD R.O.W. DEDICATION: 42.00 ADDITIONAL FEET ONTO ABRAM ROAD.

H.C.R.O.W. FINAL APPROVAL DATE: 8-15-2018 BY, VICTOR GALLARDO, PCT. 3 R.O.W. AGENT

H.C.H.D. FINAL APPROVAL DATE: 6-28-2018 BY, ENVIRONMENTAL HEALTH DIVISION MANAGER

SEWER SYSTEM: OSSF HAVE BEEN INSTALLED

WATER SERVICE PROVIDER: AGUA SUD LINE SIZE: 8" LOCATION: MILE 3 NORTH ROAD.

H.C.E.O.C. FINAL APPROVAL DATE: 8-13-2018 : BY MARTIN RAMIREZ ENVIRONMENTAL COMPLIANCE COORDINATOR

LARGE CONSTRUCTION

The applicant has submitted the required NOI as per Part II, Section E of the TPDES General Permit for Construction Activities (TXR150000) along with a copy of the Erosion Control Plan for the proposed project.

PRELIMINARY APPROVAL FROM THE
HIDALGO COUNTY COMMISSIONERS COURT ON: JUNE 27, 2017

STAFF RECOMMENDS: **Preliminary Approval** subject to comments and future recommendations by planning, other departments and the approval of the City of MISSION.

Final Approval subject to recommendations other departments

This subdivision plat has been reviewed and complies with the Hidalgo County Subdivision Rules, Texas

* *Water Development Board Model Subdivision Rules and The Texas Local Government Code.*

CAMINO DE ABRAM SUBDIVISION

BEING A 62.28 ACRE TRACT OF LAND SITUATED IN NICHOLAS ZAMORA SURVEY, A-76, PORCION 48, HIDALGO COUNTY, TEXAS, OUT OF A 243.51 ACRE TRACT OF LAND AS DESCRIBED IN VOLUME 1178, PAGE 208, OF THE DEED RECORDS, HIDALGO COUNTY, TEXAS

LOT AREA TABLE			LOT AREA TABLE		
LOT	SQUARE FT.	ACRES	LOT	SQUARE FT.	ACRES
1	21781	0.50	41	21781	0.50
2	21783	0.50	42	21781	0.50
3	21785	0.50	43	21781	0.50
4	21780	0.50	44	21783	0.50
5	21779	0.50	45	21783	0.50
6	21781	0.50	46	21783	0.50
7	21782	0.50	47	21783	0.50
8	21784	0.50	48	21783	0.50
9	21786	0.50	49	21783	0.50
10	21788	0.50	50	21783	0.50
11	21790	0.50	51	21783	0.50
12	21792	0.50	52	21783	0.50
13	21794	0.50	53	21783	0.50
14	21795	0.50	54	21781	0.50
15	21790	0.50	55	21781	0.50
16	21799	0.50	56	21778	0.50
17	21793	0.50	57	21780	0.50
18	21789	0.50	58	21780	0.50
19	21789	0.50	59	21780	0.50
20	21789	0.50	60	21780	0.50
21	21789	0.50	61	21780	0.50
22	21789	0.50	62	22132	0.51
23	21789	0.50	63	22128	0.51
24	21789	0.50	64	22128	0.51
25	21789	0.50	65	22128	0.51
26	21789	0.50	66	22128	0.51
27	21789	0.50	67	22081	0.51
28	21782	0.50	68	24052	0.55
29	21787	0.50	69	21932	0.50
30	21781	0.50	70	21781	0.50
31	21783	0.50	71	21781	0.50
32	21783	0.50	72	21781	0.50
33	21783	0.50	73	21781	0.50
34	21783	0.50	74	21781	0.50
35	21783	0.50	75	21781	0.50
36	21783	0.50	76	21781	0.50
37	21783	0.50	77	21781	0.50
38	21783	0.50	78	21781	0.50
39	21783	0.50	79	21781	0.50
40	21783	0.50	80	21781	0.50
			81	639440	14.68

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	CHORD BEARING
C1	7.09'	50.00'	08°07'27"	7.08'	S42°53'44"W
C2	90.33'	50.00'	103°30'38"	78.64'	S81°17'13"E
C3	119.15'	50.00'	136°31'58"	92.89'	S38°44'05"W
C4	45.23'	50.00'	51°49'56"	43.71'	N47°04'58"W
C5	92.01'	600.50'	08°46'48"	91.93'	N46°15'49"E

LINE TABLE		
LINE	LENGTH	BEARING
L1	35.35'	N36°09'30"W
L2	35.36'	N53°50'30"E
L3	35.36'	S36°10'00"E
L4	35.36'	S53°50'30"W

STATE OF TEXAS
COUNTY OF HIDALGO
KNOW ALL MEN BY THESE PRESENTS:
I, JULIO C. CERDA, A REGISTERED PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF TEXAS, LICENSE NUMBER 95524, DO HEREBY CERTIFY THAT THIS PLAT HAS BEEN GIVEN PROPER AND ADEQUATE ENGINEERING CONSIDERATION.

JULIO C. CERDA, P.E.
LICENSED PROFESSIONAL ENGINEER, TEXAS LIC. NO. 95524

STATE OF TEXAS
COUNTY OF HIDALGO
KNOW ALL MEN BY THESE PRESENTS:
I, KURT SCHUMACHER, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECTLY MADE AND PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE UNDER MY SUPERVISION ON THE GROUND ON _____ UNDER MY DIRECTION.

KURT SCHUMACHER, R.P.L.S.
REG. PROFESSIONAL LAND SURVEYOR # 6333
FIRM # 0103396
900 S. STEWART, SUITE 13
MISSION, TEXAS 78752

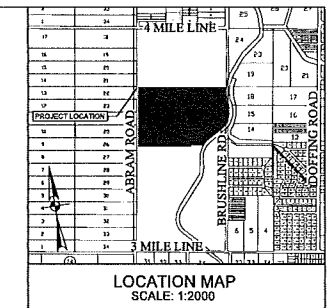
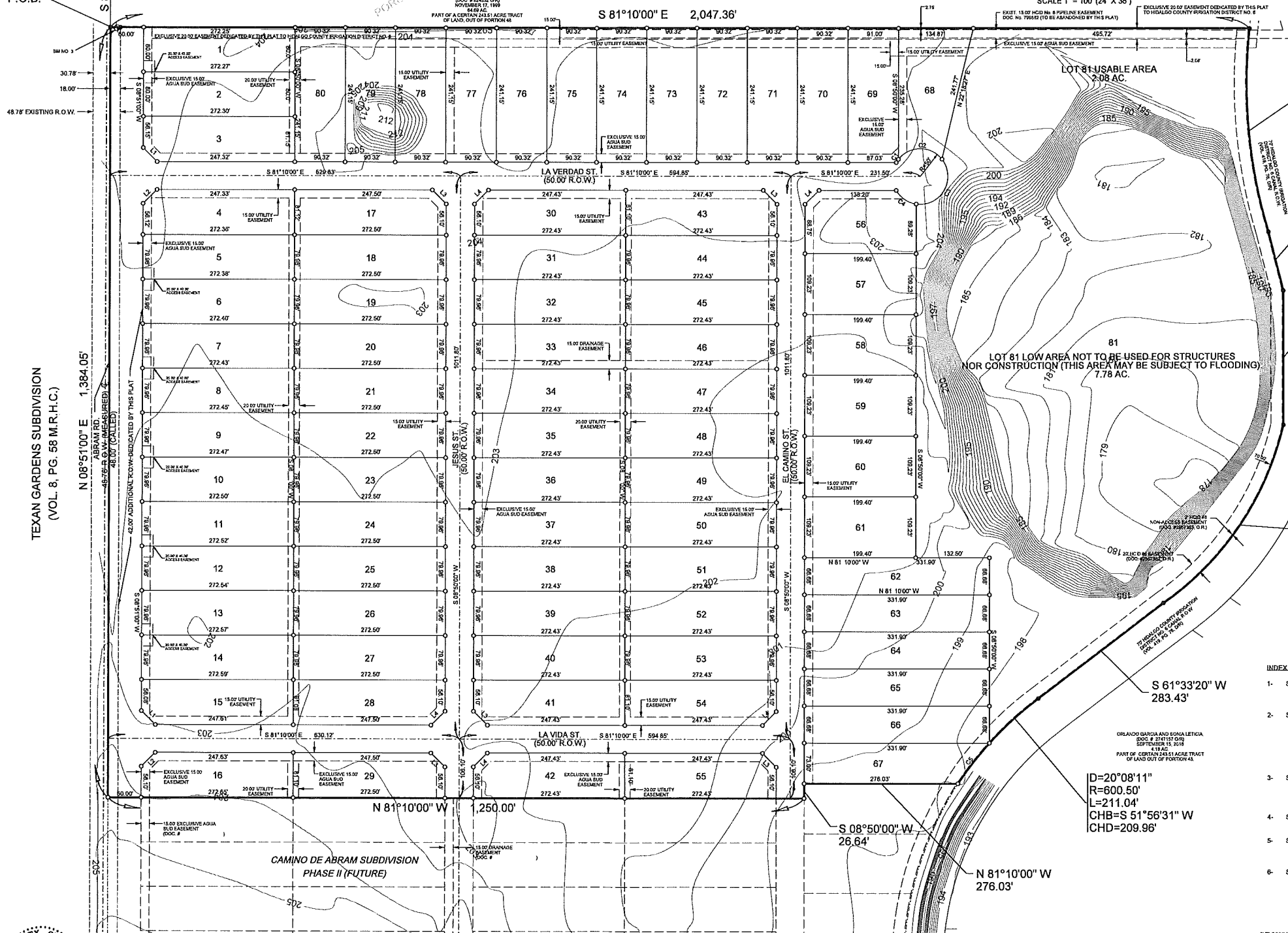


FILED FOR RECORD IN
HIDALGO COUNTY
ARTURO GUJARDO, JR.
HIDALGO COUNTY CLERK

ON _____ AT _____ AM/PM
INSTRUMENT NUMBER _____
OF THE MAP RECORDS OF HIDALGO COUNTY, TEXAS
BY _____ DEPUTY

TEXAN GARDENS SUBDIVISION
(VOL. 8, PG. 58 M.R.H.C.)

P.O.B.
S 8°51'00" W
1341.95'



LEGEND:
○ SET # 6/8" IRON ROD WITH PLASTIC CAP STAMPED "ROWSS PROP. COR."
● FOUND IRON ROD

SCALE 1" = 100' (24" X 36")

LOCATION DESCRIPTION
CAMINO DE ABRAM IS LOCATED WITHIN HIDALGO COUNTY PRECINCT NO. 3 IN THE WEST SIDE OF HIDALGO COUNTY, APPROXIMATE 2,600 FT NORTH OF THE INTERSECTION OF MILE 3 (FM 1924) AND ABRAM RD. THE ONLY NEARBY MUNICIPALITY IS THE CITY OF MISSION, ACCORDING TO THE OFFICIAL MAP IN THE CITY OFFICE OF PLANNING AND ZONING (POPULATION 83,394, 2015 CENSUS). CAMINO DE ABRAM PH I SUBDIVISION LIES APPROXIMATELY 2 1/2 MILE FROM THE CITY LIMITS OF MISSION AND IS WITHIN THE CITY'S 0 TO 3/4 MILE EXTRATERRITORIAL JURISDICTION (ETJ) UNDER LOCAL GOVERNMENT CODE 42.021 AND 212.001.

HIGH DOPPING SUBDIVISION
(VOL. 5 PAGE 34 M.R.H.C.)

RICARDO ORTIZ JR. ET AL.
REG. PROFESSIONAL ENGINEER
MAY 02, 2015
LIC. # 17,848
OUT OF NICK DOPPING SUBDIVISION
(VOL. 5 PG. 14 8/7)

D=22°58'18"
R=920.87'
L=369.21'
CHB=S 03°26'34" W
CHD=366.74'

S 05°22'21" E
108.71'

S 08°43'24" W
241.67'

D=41°53'18"
R=539.06'
L=394.10'
CHB=S 42°37'15" W
CHD=385.38'

D=20°08'11"
R=600.50'
L=211.04'
CHB=S 51°56'31" W
CHD=209.96'

- INDEX OF SHEETS
- SHEET 1- HEADING INDEX, LOCATION MAP AND ETJ, PRINCIPAL CONTACTS, LOT, STREETS AND EASEMENT LAYOUT, ENGINEERS AND SURVEYORS CERTIFICATION, HIDALGO COUNTY CLERK'S RECORDING CERTIFICATE.
 - SHEET 2- PLAT NOTES AND RESTRICTIONS, DESCRIPTION (METES & BOUNDS), OWNERS ACKNOWLEDGMENT, HIDALGO COUNTY HEALTH DEPT. CERTIFICATE, H.C.D.D. NO. 1 CERTIFICATION, COUNTY CLERK RECORDING CERTIFICATE, H.C.D. NO. 6 CERTIFICATE, ENGINEERS AND SURVEYORS CERTIFICATION, CITY OF MISSION CERTIFICATE OF APPROVAL, HIDALGO COUNTY ENVIRONMENTAL HEALTH DEPARTMENT CERTIFICATE.
 - SHEET 3- WATER DISTRIBUTION AND SANITARY SEWER (OSSF) MAP, ENGINEERING REPORT, INCLUDING DESCRIPTION OF WATER AND WASTE WATER/OSSF AND ENGINEERS CERTIFICATION (ENGLISH AND SPANISH) SUBDIVIDER CERTIFICATE & STATEMENT.
 - SHEET 4- WATER DISTRIBUTION AND SANITARY SEWER (OSSF) MAP CONTINUATION.
 - SHEET 5- DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE, MAP OF TOPOGRAPHY, DRAINAGE AND PAVING MAP, ENGINEERING CERTIFICATION, REVISION NOTES.
 - SHEET 6- DRAINAGE AND PAVING MAP CONTINUATION.

REVISION NOTES

No.	SHEET	REVISION	DATE	APPROVED

LOT LAYOUT
SHEET 1 OF 7

PRINCIPAL CONTACTS:

	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	MANUEL CHAPA	1601 MOZZELLE ST.	PHARR, TEXAS 78577	(361) 778-3404	
ENGINEER:	JULIO C. CERDA, P.E.	600 S. STEWART RD., STE. 13	MISSION, TEXAS 78752	(361) 424-3335	(361) 424-3132
SURVEYOR:	KURT SCHUMACHER, R.P.L.S.	600 S. STEWART RD., STE. 13	MISSION, TEXAS 78752	(361) 424-3335	(361) 424-3132

SOUTH TEXAS INFRASTRUCTURE GROUP
900 S. STEWART, SUITE 13
MISSION, TEXAS 78752
PH: (361) 424-3335
FAX: (361) 424-3132
TBP# REG. # 1500



STATE OF TEXAS
COUNTY OF HIDALGO

OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION

I, MANUEL CHAPA, AS OWNER OF THE 62.28 ACRE TRACT OF LAND ENCOMPASSED WITHIN THE PROPOSED CAMINO DE ABRAM SUBDIVISION PH I, HEREBY SUBDIVIDE THE LAND AS DEPICTED IN THIS SUBDIVISION PLAN AND DEDICATED TO PUBLIC USE THE STREET, PARK, AND EASEMENTS SHOWN HEREIN

I CERTIFY THAT I HAVE COMPLIED WITH THE REQUIREMENTS OF TEXAS LOCAL GOVERNMENT CODE 232.032 AND THAT:

- (A) THE WATER QUALITY AND CONNECTIONS TO THE LOTS MEET, OR WILL MEET, THE MINIMUM STATE STANDARDS.
(B) SEWER CONNECTIONS TO THE LOTS OR SEPTIC TANKS MEET, OR WILL MEET, THE MINIMUM REQUIREMENTS OF THE STATE STANDARDS
(C) ELECTRICAL CONNECTIONS PROVIDED TO THE LOTS MEET, OR WILL MEET, THE MINIMUM STATE STANDARDS
(D) GAS CONNECTIONS, IF AVAILABLE, PROVIDED TO THE LOTS MEET, OR WILL MEET, THE MINIMUM STATE STANDARDS

I ATTEST THAT THE MATTERS ASSERTED IN THIS PLAN ARE TRUE AND COMPLETE

MANUEL CHAPA DATE
1801 MOZELLE ST. PHARR, TEXAS 78577

STATE OF TEXAS
COUNTY OF HIDALGO

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED MANUEL CHAPA KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS DAY OF

NOTARY PUBLIC

THIS PLAN OF CAMINO DE ABRAM SUBDIVISION PH I HAS BEEN SUBMITTED TO AND CONSIDERED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF MISSION, TEXAS AND IS HEREBY APPROVED BY SUCH COMMISSION

DATED THIS DAY OF 20

CHAIRMAN

CITY OF MISSION CERTIFICATE OF APPROVAL

UNDER LOCAL GOVERNMENT CODE 212.0115(B) WE THE UNDERSIGNED CERTIFY THAT THIS PLAN OF CAMINO DE ABRAM SUBDIVISION PH I WAS REVIEWED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MISSION.

MAYOR CITY OF MISSION DATE

ATTEST: CITY SECRETARY DATE

STATE OF TEXAS
COUNTY OF HIDALGO

KNOW ALL MEN BY THESE PRESENTS:

I, JULIO C. CERDA, A REGISTERED PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF TEXAS, LICENSE NUMBER 9524, DO HEREBY CERTIFY THAT THIS PLAN HAS BEEN GIVEN PROPER AND ADEQUATE ENGINEERING CONSIDERATION

JULIO C. CERDA, P.E. LICENSED PROFESSIONAL ENGINEER, TEXAS U.C. NO. 10524

STATE OF TEXAS
COUNTY OF HIDALGO

KNOW ALL MEN BY THESE PRESENTS:

I, KURT SCHUMACHER, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, HEREBY CERTIFY THAT THIS PLAN IS TRUE AND CORRECTLY MADE AND PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE UNDER MY SUPERVISION ON THE GROUND ON UNDER MY DIRECTION.

KURT SCHUMACHER, R.P.L.S. REG. PROFESSIONAL LAND SURVEYOR # 6333 FIRM # 10193586 900 S. STEWART, SUITE 13 MISSION, TEXAS 78572

APPROVED BY DRAINAGE DISTRICT:

HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 HEREBY CERTIFIES THAT THE DRAINAGE PLANS FOR THIS SUBDIVISION COMPLY WITH THE MINIMUM STANDARDS OF THE DISTRICT ADOPTED UNDER TEXAS WATER CODE 49.211(5). THE DISTRICT HAS NOT REVIEWED AND DOES NOT CERTIFY THAT THE DRAINAGE STRUCTURES DESCRIBED ARE APPROPRIATE FOR THE SPECIFIC SUBDIVISION BASED ON GENERALLY ACCEPTED ENGINEERING CRITERIA. IT IS THE RESPONSIBILITY OF THE DEVELOPER AND HIS ENGINEER TO MAKE THEIR DETERMINATIONS

HIDALGO COUNTY DRAINAGE DISTRICT NO. 1

RAUL E. SESIN, P.E., C.F.M. DATE

THIS PLAN IS HEREBY APPROVED BY THE HIDALGO COUNTY IRRIGATION DISTRICT NO. 6 ON THIS DAY OF 20

NO IMPROVEMENTS OF ANY KIND (INCLUDING WITHOUT LIMITATION TREES, FENCES AND BUILDINGS) SHALL BE PLACED UPON IRRIGATION DISTRICT NO. 6 RIGHT OF WAYS OR EASEMENTS. APPROVAL OF THIS PLAN DOES NOT RELEASE ANY RIGHTS THAT THE DISTRICT MAY HAVE WHETHER SHOWN OR NOT.

ATTEST: PRESIDENT

SECRETARY

CAMINO DE ABRAM SUBDIVISION

BEING A 62.28 ACRE TRACT OF LAND SITUATED IN NICHOLAS ZAMORA SURVEY, A-76, PORCION 48, HIDALGO COUNTY, TEXAS, OUT OF A 243.51 ACRE TRACT OF LAND AS DESCRIBED IN VOLUME 1178, PAGE 208, OF THE DEED RECORDS, HIDALGO COUNTY, TEXAS

HIDALGO COUNTY
CERTIFICATE OF PLAN APPROVAL

I, THE UNDERSIGNED CERTIFY THAT THIS PLAN OF CAMINO DE ABRAM SUBDIVISION PH I WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY HEALTH DEPARTMENT ON

ENVIRONMENTAL HEALTH DIVISION MANAGER DATE

STATE OF TEXAS
COUNTY OF HIDALGO

WE, THE UNDERSIGNED CERTIFY THAT THIS PLAN OF CAMINO DE ABRAM SUBDIVISION PH I WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY COMMISSIONERS COURT ON

HIDALGO COUNTY JUDGE DATE

I, JOSE E. SAENZ, HEREBY CERTIFY THAT THE AGUA SPECIAL UTILITY DISTRICT HAS APPROVED THE POTABLE WATER SUPPLY FOR THE CAMINO DE ABRAM PH I SUBDIVISION, HIDALGO COUNTY, TEXAS. THE AGUA SPECIAL UTILITY DISTRICT IS THE HOLDER OF THE CERTIFICATE OF CONVENIENCE AND NECESSITY (CCN) ISSUED BY THE STATE OF TEXAS TO FURNISH POTABLE WATER TO AN AREA IN HIDALGO COUNTY, TEXAS THAT INCLUDES THIS SUBDIVISION AND IS THEREFORE OBLIGATED TO SERVE THIS SUBDIVISION WITH POTABLE WATER TO THE EXTENT REQUIRED BY THE LAWS OF THE STATE OF TEXAS. THE AGUA SPECIAL UTILITY DISTRICT AGREES THAT IT WILL PROVIDE WATER TO THIS SUBDIVISION AT THE TIME WHEN ALL OF THE INFRASTRUCTURE REQUIREMENTS FOR THE SUBDIVISION ARE MET. WATER METERS ARE IMMEDIATELY AVAILABLE FOR THIS PURPOSE UPON COMPLETION OF THE WATER FACILITIES SHOWN ON THE PLAN OF THE SUBDIVISION.

JOSE E. SAENZ
GENERAL MANAGER
AGUA SPECIAL UTILITY DISTRICT

GENERAL NOTES:

1. THIS PROPERTY IS LOCATED IN FLOOD ZONE X, AREAS DETERMINED TO BE OUTSIDE 500-YEAR-FLOOD-PLAIN AS PER COMMUNITY PANEL NO. 490334 0250 D, REVISED JUNE 6, 2000

2. MINIMUM BUILDING SETBACK LINES:

FRONT SETBACK: 25 FEET OR EASEMENT WHICHEVER IS GREATER 50 FEET FOR LOTS FRONTING ABRAM ROAD

SIDE SETBACK:

INTERNAL LOT: 8.00 FEET OR EASEMENT WHICHEVER IS GREATER EXTERNAL LOT: 10.00 FEET OR EASEMENT WHICHEVER IS GREATER REAR SETBACK: 10.00 FEET OR EASEMENT WHICHEVER IS GREATER

3. NO MORE THAN ONE SINGLE FAMILY DETACHED DWELLING SHALL BE LOCATED ON THE LOT. THIS MUST BE STIPULATED ON ALL DEEDS AND CONTRACTS FOR DEEDS.

4. MINIMUM FINISHED FLOOR ELEVATION SHALL BE 2" ABOVE TOP OF CURB OR 24" ABOVE NATURAL GROUND, WHICHEVER IS GREATER. ELEVATION CERTIFICATE MAY BE REQUIRED FOR LOTS LOCATED OUTSIDE A DESIGNATED FLOOD ZONE AT THE TIME OF APPLICATION FOR CONSTRUCTION TO VERIFY PRE AND POST CONSTRUCTION FINISHED FLOOR ELEVATIONS. AN ELEVATION CERTIFICATE SHALL BE REQUIRED FOR ALL LOTS WITHIN A DESIGNATED FLOOD ZONE AT THE TIME FOR DEVELOPMENT PERMIT APPLICATION

5. THE FOLLOWING BENCHMARKS ARE IDENTIFIED ON THE FACE OF THE PLAN AND ON THE ATTACHED ENGINEERING PLANS.

BM-1 IS A SET 5/8" IRON PIN WITH PLASTIC CAP "ROVSS CONTROL" ALONG THE ABRAM RD N= 16923705.1321 E= 1019340.7681 ELEV. = 199.40

BM-2 IS A SET 5/8" IRON PIN WITH PLASTIC CAP "ROVSS CONTROL" ALONG THE ABRAM RD N= 16924543.4883 E= 1019473.1760 ELEV. = 204.53

BM-3 IS A SET 5/8" IRON PIN WITH PLASTIC CAP "ROVSS CONTROL" ALONG THE EAST SIDE OF ABRAM RD N= 16926989.3959 E= 1019891.0050 ELEV. = 203.85

6. IN ACCORDANCE WITH THE HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 A TOTAL OF 263,711 CUBIC FEET, 6.054 ACRE-FEET OF DETENTION IS REQUIRED FOR THIS SUBDIVISION.

7. NO STRUCTURE SHALL BE PERMITTED OVER ANY EASEMENT. EASEMENTS SHALL BE KEPT CLEAR OF BUILDINGS, SHEDS, SHRUBS TREES, AND OTHER PLANTINGS (EXCEPT LOW, LESS THAN 18 INCHES MATURE HEIGHT, GROUND COVER, GRASS, OR FLOWERS) AND OTHER OBSTRUCTIONS THAT WOULD INTERFERE WITH THE OPERATIONS AND MAINTENANCE OF THE EASEMENT.

8. EACH PURCHASE CONTRACT MADE BETWEEN A SUBDIVIDER AND PURCHASER OF A LOT IN THIS SUBDIVISION SHALL CONTAIN A STATEMENT DESCRIBING HOW AND WHEN WATER, SEWER, ELECTRICITY, AND GAS SERVICES WILL BE MADE AVAILABLE TO THE SUBDIVISION.

9. ALL PUBLIC UTILITIES EASEMENTS DEDICATED BY THIS PLAN SHALL BE A MINIMUM WIDTH OF 15.00 FEET AS PER THE HIDALGO COUNTY MODEL SUBDIVISION RULES. BY SIGNING THIS PLAN, DEVELOPER AND ENGINEER CERTIFY THAT ALL OTHER EASEMENTS SHOWN COMPLY WITH THE SIZE REQUIRED BY EACH UTILITY PROVIDER OCCUPYING AN EASEMENT.

10. ON-SITE SEWAGE FACILITIES (OSSF) NOTE: THIS SUBDIVISION SHALL USE ON-SITE SEWAGE FACILITIES IN ACCORDANCE WITH TCEQ AND HIDALGO COUNTY REGULATIONS FOR SEWAGE DISPOSAL. THE SUBDIVIDER IS RESPONSIBLE FOR PROVIDING AN OSSF ON LOT.

A. OSSF SYSTEM IS BEING DESIGNED FOR DISPOSAL OF DOMESTIC SEWERAGE ONLY.

B. EACH LOT ON THIS PLAN COMPLIES WITH THE MINIMUM 21,780 SQUARE FEET LOT AREA WITH POTABLE WATER SUPPLY.

C. OSSF SYSTEM SHALL REQUIRE INSPECTION AND APPROVAL BY HIDALGO COUNTY AUTHORIZED DEPARTMENT

D. SOIL ANALYSIS HAVE BEEN SUBMITTED TO THE AUTHORIZED HIDALGO COUNTY DEPARTMENT AND EXCERPTS MAY BE ALSO SEEN ON THE UTILITY LAYOUT FOR THIS SUBDIVISION AS SUBMITTED TO THE HIDALGO COUNTY PLANNING DEPARTMENT. THE ENGINEER HAS DETERMINED THAT THE SOIL IS SUITABLE FOR A STANDARD SEPTIC TANK AND ABSORPTIVE DRAINFIELD SYSTEM.

E. APPROVED "OSSF" PERMIT APPLICATION IS REQUIRED INCLUDING INDIVIDUAL LOT PLANNING MATERIALS PRIOR TO OCCUPYING A LOT.

METES AND BOUNDS

BEING A 62.28 ACRE TRACT OF LAND SITUATED IN NICHOLAS ZAMORA SURVEY, A-76, PORCION 48, HIDALGO COUNTY, TEXAS, OUT OF A 243.51 ACRE TRACT OF LAND AS DESCRIBED IN VOLUME 1178, PAGE 208, OF THE DEED RECORDS, HIDALGO COUNTY, TEXAS, AND LYING WEST OF THE HIDALGO COUNTY IRRIGATION NO. 6 MAIN CANAL, CONVEYED BY SPECIAL WARRANTY DEED TO EVERARDO VILLARREAL DBA EAR CONSTRUCTION AND LIMAN VENTURES, LTD., AS DESCRIBED IN DOCUMENT NUMBER 2775191, OF THE OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS, SAID 62.28 ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A MAG NAIL SET IN 4 MILE ROAD, IN THE EAST LINE OF A CALLED 30.00 FOOT ROAD, AS SHOWN BY MAP OF TEXAN GARDENS SUBDIVISION, RECORDED IN VOLUME 8, PAGE 58, OF THE MAP RECORDS, OF HIDALGO COUNTY, TEXAS, FOR THE NORTHWEST CORNER OF A HIGHWAY RIGHT OF WAY EASEMENT TO HIDALGO COUNTY, TEXAS, AS DESCRIBED IN DOCUMENT NUMBER 716558, OF THE OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS;

THENCE WITH THE EAST LINE OF SAID 30.00 FOOT ROADWAY, THE WEST LINE OF SAID HIDALGO COUNTY RIGHT OF WAY EASEMENT S 08°51'00"W, A DISTANCE OF 1341.95 FEET TO A MAG NAIL SET, FOR THE NORTHWEST CORNER AND POINT OF BEGINNING OF THIS HEREIN DESCRIBED TRACT OF LAND;

THENCE WITH THE SOUTH LINE OF A 64.69 TRACT, CONVEYED BY WARRANTY DEED TO VALLEY CALICHE PRODUCTS, AS DESCRIBED IN DOCUMENT NUMBER 624552, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS, S 81°10'00"E, A DISTANCE OF 2047.36 TO A 5/8" IRON PIN WITH PLASTIC CAP STAMPED "R.O.W. PROP. COR." FOUND ON THE WEST LINE OF SAID HIDALGO COUNTY IRRIGATION DISTRICT NO. 6 CANAL RIGHT OF WAY, FOR THE NORTHEAST CORNER OF THIS HEREIN DESCRIBED TRACT OF LAND;

THENCE WITH THE WEST LINE OF SAID HIDALGO COUNTY IRRIGATION DISTRICT NO. 6 CANAL RIGHT OF WAY AND WITH A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 920.87 FEET, AN ARC LENGTH OF 389.21 FEET, A DELTA ANGLE OF 22°58'18", A CHORD BEARING OF S 03°28'34"W AND A CHORD DISTANCE OF 366.74 FEET TO A FOUND 5/8" IRON PIN WITH PLASTIC CAP STAMPED "R.O.W. PROP. COR.", FOR A CORNER OF THIS HEREIN DESCRIBED TRACT OF LAND;

THENCE CONTINUING WITH THE WEST LINE OF SAID HIDALGO COUNTY IRRIGATION DISTRICT NO. 6 CANAL RIGHT OF WAY, S 05°22'21"E A DISTANCE OF 108.71 FEET TO A FOUND 5/8" IRON PIN WITH PLASTIC CAP STAMPED "R.O.W. PROP. COR.", FOR A CORNER OF THIS HEREIN DESCRIBED TRACT OF LAND;

THENCE DEPARTING THE HIDALGO COUNTY IRRIGATION DISTRICT NO. 6 WEST RIGHT OF WAY LINE, WITH THE EAST LINE OF SAID 243.51 ACRE TRACT OF LAND, S 08°43'24"W A DISTANCE OF 241.67 FEET TO A 5/8" IRON PIN WITH PLASTIC CAP STAMPED "R.O.W. PROP. COR." FOUND IN THE WEST LINE OF SAID HIDALGO COUNTY IRRIGATION DISTRICT NO. 6 CANAL RIGHT OF WAY, FOR A CORNER OF THIS HEREIN DESCRIBED TRACT OF LAND;

THENCE CONTINUING WITH THE HIDALGO COUNTY IRRIGATION DISTRICT NO. 6 WEST RIGHT OF WAY LINE, AND WITH A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 339.96 FEET, AN ARC LENGTH OF 394.10 FEET, A DELTA ANGLE OF 41°53'18", A CHORD BEARING OF S 42°37'15"W AND A CHORD DISTANCE OF 385.38 FEET TO A 5/8" IRON PIN WITH PLASTIC CAP STAMPED "R.O.W. PROP. COR." FOUND IN THE EAST LINE OF SAID 130.468 ACRE TRACT OF LAND;

THENCE CONTINUING WITH THE HIDALGO COUNTY IRRIGATION DISTRICT NO. 6 WEST RIGHT OF WAY LINE, S 61°33'20" W A DISTANCE OF 283.43 FEET TO A 5/8" IRON PIN WITH PLASTIC CAP STAMPED "R.O.W. PROP. COR." FOUND IN THE BEGINNING OF A CURVE CONCAVE TO THE SOUTHWEST, AND FOR A CORNER OF THIS HEREIN DESCRIBED TRACT OF LAND;

THENCE WITH THE WEST LINE OF SAID HIDALGO COUNTY IRRIGATION DISTRICT NO. 6 CANAL RIGHT OF WAY AND WITH SAID CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 600.50 FEET, AN ARC LENGTH OF 211.04 FEET, A DELTA ANGLE OF 20°08'11", A CHORD BEARING OF S 51°56'31"W AND A CHORD DISTANCE OF 209.86 FEET TO A 5/8" IRON PIN WITH PLASTIC CAP STAMPED "R.O.W. PROP. COR." SET FOR THE SOUTHWEST CORNER OF THIS HEREIN DESCRIBED TRACT OF LAND;

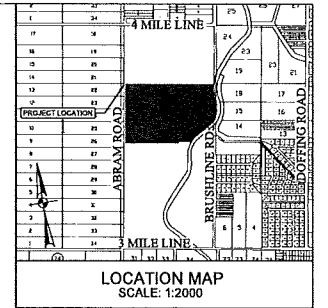
THENCE DEPARTING THE WEST LINE OF SAID HIDALGO COUNTY IRRIGATION DISTRICT NO. 6 CANAL RIGHT OF WAY, N81°10'00"W A DISTANCE OF 276.03 FEET TO A 5/8" IRON PIN WITH PLASTIC CAP STAMPED "R.O.W. PROP. COR." SET FOR AN INTERIOR CORNER OF THIS HEREIN DESCRIBED TRACT OF LAND;

THENCE S 08°50'00"W A DISTANCE OF 26.64 FEET TO A 5/8" IRON PIN WITH PLASTIC CAP STAMPED "R.O.W. PROP. COR." SET FOR AN EXTERIOR CORNER OF THIS HEREIN DESCRIBED TRACT OF LAND;

THENCE N 81°10'00" W A DISTANCE OF 1,250.00 FEET TO A MAG NAIL SET FOR THE SOUTHWEST CORNER OF THIS HEREIN DESCRIBED TRACT OF LAND;

THENCE WITH THE EAST LINE OF SAID 30.00 FOOT ROADWAY, THE WEST LINE OF SAID HIDALGO COUNTY RIGHT OF WAY EASEMENT, N 08°51'00"E A DISTANCE OF 1384.05 FEET TO THE POINT OF BEGINNING AND BEING A 2,713.084 SQUARE FOOT OR 62.28 OF AN ACRE TRACT OF LAND.

BEARING BASIS, TEXAS COORDINATE SYSTEM, SOUTH ZONE, NORTH AMERICAN DATUM OF 1983.



LOCATION DESCRIPTION

CAMINO DE ABRAM PH I IS LOCATED WITHIN HIDALGO COUNTY PRECINCT NO. 3 IN THE WEST SIDE OF HIDALGO COUNTY, APPROXIMATE 2,600 FT NORTH OF THE INTERSECTION OF MILE 3 (FM 1924) AND ABRAM RD. THE ONLY NEARBY MUNICIPALITY IS THE CITY OF MISSION, ACCORDING TO THE OFFICIAL MAP IN THE CITY OFFICE OF PLANNING AND ZONING (POPULATION 83,394, 2015 CENSUS). CAMINO DE ABRAM PH I SUBDIVISION LIES APPROXIMATELY 2 1/2 MILE FROM THE CITY LIMITS OF MISSION AND IS WITHIN THE CITY'S 0 TO 3 1/2 MILE EXTRATERRITORIAL JURISDICTION (ETJ) UNDER LOCAL GOVERNMENT CODE 42.021 AND 212.001.



FILED FOR RECORD IN HIDALGO COUNTY ARTURO GUJARDO, JR. HIDALGO COUNTY CLERK ON AT AM/PM INSTRUMENT NUMBER OF THE MAP RECORDS OF HIDALGO COUNTY, TEXAS BY DEPUTY

INDEX OF SHEETS

- 1. SHEET 1 - HEADING INDEX, LOCATION MAP AND ETJ, PRINCIPAL CONTACTS, LOT, STREETS AND EASEMENT LAYOUT, ENGINEERS AND SURVEYORS CERTIFICATION, HIDALGO COUNTY CLERK'S RECORDING CERTIFICATE.
2. SHEET 2 - PLAN NOTES AND RESTRICTIONS, DESCRIPTION (METES & BOUNDS), OWNER'S ACKNOWLEDGMENT, HIDALGO COUNTY HEALTH DEPT. CERTIFICATE, H.C.D.D. NO. 1 CERTIFICATION, COUNTY CLERK RECORDING CERTIFICATE, H.C.I.D. NO. 8 CERTIFICATE, ENGINEERS AND SURVEYORS CERTIFICATION, CITY OF MISSION CERTIFICATE OF APPROVAL, HIDALGO COUNTY ENVIRONMENTAL HEALTH DEPARTMENT CERTIFICATE.
3. SHEET 3 - WATER DISTRIBUTION AND SANITARY SEWER (OSSF) MAP, ENGINEERING REPORT, INCLUDING DESCRIPTION OF WATER AND WASTE WATER/OSSF AND ENGINEER'S CERTIFICATION (ENGLISH AND SPANISH) SUBDIVIDER CERTIFICATE & STATEMENT.
4. SHEET 4 - WATER DISTRIBUTION AND SANITARY SEWER (OSSF) MAP CONTINUATION.
5. SHEET 5 - DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE, MAP OF TOPOGRAPHY, DRAINAGE AND PAVING MAP, ENGINEERING CERTIFICATION, REVISION NOTES.
6. SHEET 6 - DRAINAGE AND PAVING MAP CONTINUATION

NOTES PAGE

SHEET 2 OF 7

PRINCIPAL CONTACTS:

Table with columns: NAME, ADDRESS, CITY & ZIP, PHONE, FAX. Rows include OWNER (MANUEL CHAPA), ENGINEER (JULIO C. CERDA, P.E.), and SURVEYOR (KURT SCHUMACHER, R.P.L.S.).

SOUTH TEXAS INFRASTRUCTURE GROUP 800 S STEWART, SUITE 13 MISSION, TEXAS 78572 PH: (956) 424-3355 FAX: (956) 58424-3132 10/06 REC. # 1500



WATER AND SEWER ENGINEERING REPORT

WATER SUPPLY (DESCRIPTION, COST, AND OPERABILITY DATE):

CAMINO DE ABRAM SUBDIVISION PH I WILL BE PROVIDED WITH POTABLE WATER BY AGUA SPECIAL UTILITY DISTRICT (AGUA SUD). THE SUBDIVIDER AND AGUA SUD HAVE ENTERED INTO A CONTRACT IN WHICH AGUA SUD HAS PROMISED TO PROVIDE SUFFICIENT WATER TO THE SUBDIVISION FOR AT LEAST 30 YEARS AND AGUA SUD HAS PROVIDED DOCUMENTATION TO SUFFICIENTLY ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THIS SUBDIVISION.

CAMINO DE ABRAM SUBDIVISION PH I ONLY HAS 81 LOTS. AGUA SUD HAS AN EXISTING 8" DIAMETER WATER LINE RUNNING ALONG THE NORTH SIDE OF THE RIGHT-OF-WAY OF AILE 3 RD AND AN EXISTING 8" DIAMETER WATER LINE RUNNING ALONG THE NORTHEAST LINE OF THE SUBDIVISION, BEING ALSO THE WEST LINE OF AN IRRIGATION DISTRICT NO. 6 CANAL. THE WATER SYSTEM FOR CAMINO DE ABRAM CONSISTS OF AN 8" DIAMETER WATER LINE THAT TAPS INTO THE MENTIONED 8" DIAMETER LINE LOCATED ON 3 AILE RD. IT THEN RUNS NORTH ALONG THE EAST SIDE OF ABRAM RD, THEN EAST INTO THE SUBDIVISION AND FINALLY TAPS INTO THE PREVIOUSLY MENTIONED 8" DIAMETER LINE LOCATED ON THE WEST SIDE OF THE IRRIGATION NO. 6 CANAL.

WATER DISTRIBUTION FOR CAMINO DE ABRAM SUBDIVISION PH I CONSISTS OF EIGHTY ONE (81) 1" DIAMETER SINGLE SERVICE LINES THAT RUN INTO THE LOTS. THE 1" SINGLE SERVICE LINES AND THE METER BOXES HAVE ALREADY BEEN INSTALLED, AT A TOTAL OF \$281,918.55 OR \$3,480.48 PER LOT. IN ADDITION THE SUBDIVIDER HAS PAID AGUA SUD THE SUM OF \$206,145.00, WHICH COVERS THE \$2,545.00 COST PER LOT AS STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH SUM REPRESENTS THE TOTAL COST OF WATER METER, RIGHTS ACQUISITION FEES, AND ALL MEMBERSHIP OR OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOTS IN THE SUBDIVISION TO AGUA SUD UPON REQUEST BY THE LOT OWNER, AGUA SUD WILL PROMPTLY INSTALL AT NO CHARGE THE WATER METER FOR THAT LOT. THE SUBDIVIDER HAS INSTALLED NINE (9) FIRE HYDRANTS AT A UNIT COST OF \$4,500.00 FOR A TOTAL COST OF \$40,500.00. THE ENTIRE WATER FACILITIES HAVE BEEN APPROVED AND ACCEPTED BY AGUA SUD AND SAID DISTRIBUTION SYSTEM OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

SEWAGE FACILITIES-DESCRIPTION, COSTS, AND OPERABILITY DATE

SEWAGE FROM CAMINO DE ABRAM SUBDIVISION PH I WILL BE TREATED BY INDIVIDUAL ON-SITE SEWAGE FACILITIES ("OSSF") CONSISTING OF A STANDARD DESIGN DUAL COMPARTMENT SEPTIC TANK AND DRAIN FIELD ON LOTS 1 TO 81. THE UNDERSIGNED PROFESSIONAL ENGINEER HAS EVALUATED THE SUITABILITY OF THE SUBDIVISION SITE FOR OSSF AND SUBMITTED A REPORT CONCLUDING THE SITE IS SUITABLE FOR OSSF. THE REPORT WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY HEALTH DEPARTMENT. EACH LOT HAS AN ADEQUATE AREA FOR A REPLACEMENT DRAIN FIELD.

SOIL EVALUATION REPORT:

EACH LOT IN THE PROPOSED SUBDIVISION IS AT LEAST 1/4 ACRE IN SIZE. THE NATURAL RESOURCE CONSERVATION SERVICE SOIL SURVEY BOOK INDICATED A SANDY LOAM SOIL FOR THE AREA. AT LEAST TWO SOIL EXCAVATIONS WERE PERFORMED ON THE SITE, AT OPPOSITE AREAS OF THE SUBDIVISION, A TOTAL OF 14 SOIL BORING EXCAVATION WERE PERFORMED. (ADDITIONAL BORINGS WERE UNNECESSARY BECAUSE THE SOILS ARE VERY UNIFORM WITHIN THIS UNIT AREA). THE SOIL IS A UNIFORM SANDY LOAM EXTENDING UP TO 35" BELOW THE BOTTOM OF ANY PROPOSED EXCAVATIONS. THERE IS NO INDICATION OF GROUNDWATER OR A RESTRICTIVE LAYER WITHIN 24" OF BOTTOM OF THE PROPOSED EXCAVATIONS. THE SUBDIVISION DRAINS WELL.

THE COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS \$1,500.00, INCLUDING THE COST FOR THE REQUIRED PERMIT AND LICENSE. ALL OSSF HAVE BEEN INSTALLED AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL AT A TOTAL COST \$121,500.00. THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ONE OSSF ON 06/28/18.

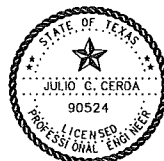
ENGINEER CERTIFICATION:

BY MY SIGNATURE BELOW, I CERTIFY THAT THE WATER AND SEWAGE SERVICE FACILITIES DESCRIBED ABOVE ARE IN COMPLIANCE WITH THE MODEL RULES ADOPTED UNDER SECTION 16.343, WATER CODE. I CERTIFY THAT THE COSTS TO INSTALL THE WATER AND THE UNCONSTRUCTED ON-SITE SEWAGE FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:

WATER FACILITIES- THESE FACILITIES FULLY CONSTRUCTED, WITH THE INSTALLATION OF WATER METERS, WILL COST A GRAND TOTAL OF \$281,918.55.
SEWAGE FACILITIES- SEPTIC SYSTEM IS ESTIMATED TO COST \$121,500.00

JULIO C. CERDA, P.E.
LICENSED PROFESSIONAL
ENGINEER, TEXAS LIC. NO. 90524

06/13/2018



REPORT DE INGENIERIA DE AGUA Y DRENAJE

WATER SUPPLY (DESCRIPCIÓN, GASTOS Y FECHAS DE INICIO):

LA SUBDIVISION CAMINO DE ABRAM PH I RECIBIRÁ SU PROVISION DE AGUA DE AGUA SPECIAL UTILITY DISTRICT (AGUA SUD). EL DUEÑO DE LA SUBDIVISION Y AGUA SUD HAN FIRMADO UN CONTRATO POR EL CUAL LA SUBDIVISION RECIBIRÁ SU PROVISION DE AGUA POR LOS PROXIMOS 30 AÑOS. AGUA SUD HA PRESENTADO DOCUMENTACION PARA DEMOSTRAR A LARGO PLAZO LA CANTIDAD Y CALIDAD DE AGUA ACCESIBLE PARA SERVIR EL FUTURO DESARROLLO DE LA SUBDIVISION.

LA SUBDIVISION CAMINO DE ABRAM PH I TIENE 81 LOTES. AGUA SUD TIENE UN EXISTENTE CONDUCTO DE AGUA DE 8" DE DIAMETRO CORRIENDO SOBRE EL LADO NOROCCIDENTE DEL DERECHO DE VÍA (RIGHT OF WAY) DE LA CARRETERA MILE 3 Y UN EXISTENTE CONDUCTO DE AGUA DE 8" DE DIAMETRO CORRIENDO SOBRE LA LINEA NOROCCIDENTE DE LA SUBDIVISION, SIENDO TAMBIEN LA LINEA OCCIDENTE DE UN CANAL QUE PERTENECE AL DISTRITO DE RIEGO NO. 6.

LA DISTRIBUCION DE AGUA PARA LA SUBDIVISION CAMINO DE ABRAM PH I CONSISTE EN OCHENTA Y UN (81) SERVICIOS SENCILLOS DE 1" DE DIAMETRO QUE CORREN HACIA LOS LOTES. SE HAN INSTALADO YA LA LINEA DE 8" LOS SERVICIOS DE 1" A LAS CASAS DE LOS MEDIDORES A UN COSTO TOTAL DE \$281,918.55 O \$3,480.48 POR LOTE. EL DUEÑO/REPRESENTANTE DE LA SUBDIVISION LE HA PAGADO A AGUA SUD LA CANTIDAD DE \$206,145.00 QUE CUBRE EL COSTO DE LOS MEDIDORES (\$2,545.00 POR CADA LOTE). ESTE PRECIO INCLUYE TAMBIEN EL COSTO DE LA INSTALACION DE CADA MEDIDOR Y LOS GASTOS DE CONEXION CUANDO EL DUEÑO DE ALGUNO DE LOS LOTES SOLICITE UN MEDIDOR DE AGUA. AGUA SUD LO INSTALARA SIN COSTO ALGUNO. EL DUEÑO/REPRESENTANTE DE LA SUBDIVISION HA INSTALADO 9 HIDRANTES CONTRA INCENDIO (FIRE HYDRANTS) A UN COSTO DE \$4,500.00 POR CADA UNO, LO CUAL REPRESENTA UNA CANTIDAD TOTAL DE \$40,500.00. EL SISTEMA DE AGUA ESTARA EN FUNCIONAMIENTO COMPLETO ANTES O EN LA FECHA EN LA CUAL LA SUBDIVISION SEA REGISTRADA EN EL CONDADO DE HIDALGO.

DRENAJE: DESCRIPCIÓN, GASTOS Y FECHA DE INICIO PARA FACILITAR EL DRENAJE PARA LA SUBDIVISION

SE INSTALARA UNA FOSA SEPTICA EN CADA SOLAR. ESTA FOSA SEPTICA CONSISTE DE UN TANQUE SEPTICO DE MODELO DUAL Y DE UN CAMPO DE DRENAJE PARA EL SOLAR. EL INGENIERO AUTOR DE ESTE DOCUMENTO HA EVALUADO EL AREA DONDE SE ENCUENTRA LA SUBDIVISION Y HA PREPARADO UN REPORTE QUE CONCLUYE QUE ESTE TERRENO ES ADECUADO PARA ESAS FOSAS SEPTICAS (OSSF). EL REPORTE FUE APROBADO POR EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO (HIDALGO COUNTY HEALTH DEPARTMENT) SEGUN EL REPORTE.

REPORT DE EVALUACION DE SUELO:

CADA LOTE EN LA SUBDIVISION PROPUESTA MIDE MÁS DE MEDIO ACRE. SE HICIERON DOS EXCAVACIONES DE EVALUACION EN LUGARES OPUESTOS DE LA SUBDIVISION, UN TOTAL DE 14 EXCAVACIONES DE EVALUACION FUERON REALIZADAS. (EXCAVACIONES ADICIONALES NO FUERON NECESARIAS PORQUE EL TERRENO EN ESTA AREA ES SIGNIFICATIVAMENTE UNIFORME). EL TERRENO ES UNIFORME (TERRENO ARCILLOSO Y SUELO FRANCO) Y SE EXTIENDE A 36 PULGADAS BAJO TODAS LAS EXCAVACIONES PROPUESTAS. NO EXISTE EVIDENCIA DE AGUA 24 PULGADAS MÁS ARRIBA DE LO MÁS BAJO DE LAS EXCAVACIONES PROPUESTAS. EL AGUA EN ESTA AREA FLUYE BIEN.

EL COSTO TOTAL PARA LA INSTALACION DE UN SISTEMA INDIVIDUAL DE FOSA SEPTICA ES DE \$1,500.00 DOLARES, INCLUYENDO EL COSTO DEL PERMISO REQUERIDO Y LICENCIA. EN ESTOS MOMENTOS TODAS LAS FOSAS SEPTICAS HAN SIDO INSTALADAS EN EL PROCESO DE LA APROBACION FINAL A UN COSTO TOTAL DE \$121,500.00. EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO HA INSPECCIONADO Y HA APROBADO LA INSTALACION DE LA FOSA SEPTICA DESDE 06/28/2018.

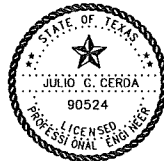
CERTIFICACION:

CON MI FIRMA, CERTIFICO QUE LOS SERVICIOS Y SISTEMAS DE AGUA Y DRENAJE, DESCRITOS EN ESTE DOCUMENTO CUMPLEN CON LAS REGLAS GOBERNANDO LAS SUBDIVISIONES, ADOPTADAS EN LA SECCION 16.343 DEL TEXAS WATER CODE (CÓDIGO DE AGUA DE TEXAS). CERTIFICO QUE LOS GASTOS PARA INSTALAR LOS SISTEMAS DE AGUA Y DRENAJE SON:

AGUA- EL SISTEMA/SERVICIO DE AGUA SERÁ INSTALADO Y COMPLETAMENTE CONSTRUÍDO MENOS EL MEDIDOR MECÁNICO DE AGUA QUE COSTARÁ UN TOTAL DE \$281,918.55
DRENAJE- SE ESTIMA QUE LA FOSA SEPTICA COSTARÁ \$121,500.

JULIO C. CERDA, P.E.
LICENSED PROFESSIONAL
ENGINEER, TEXAS LIC. NO. 90524

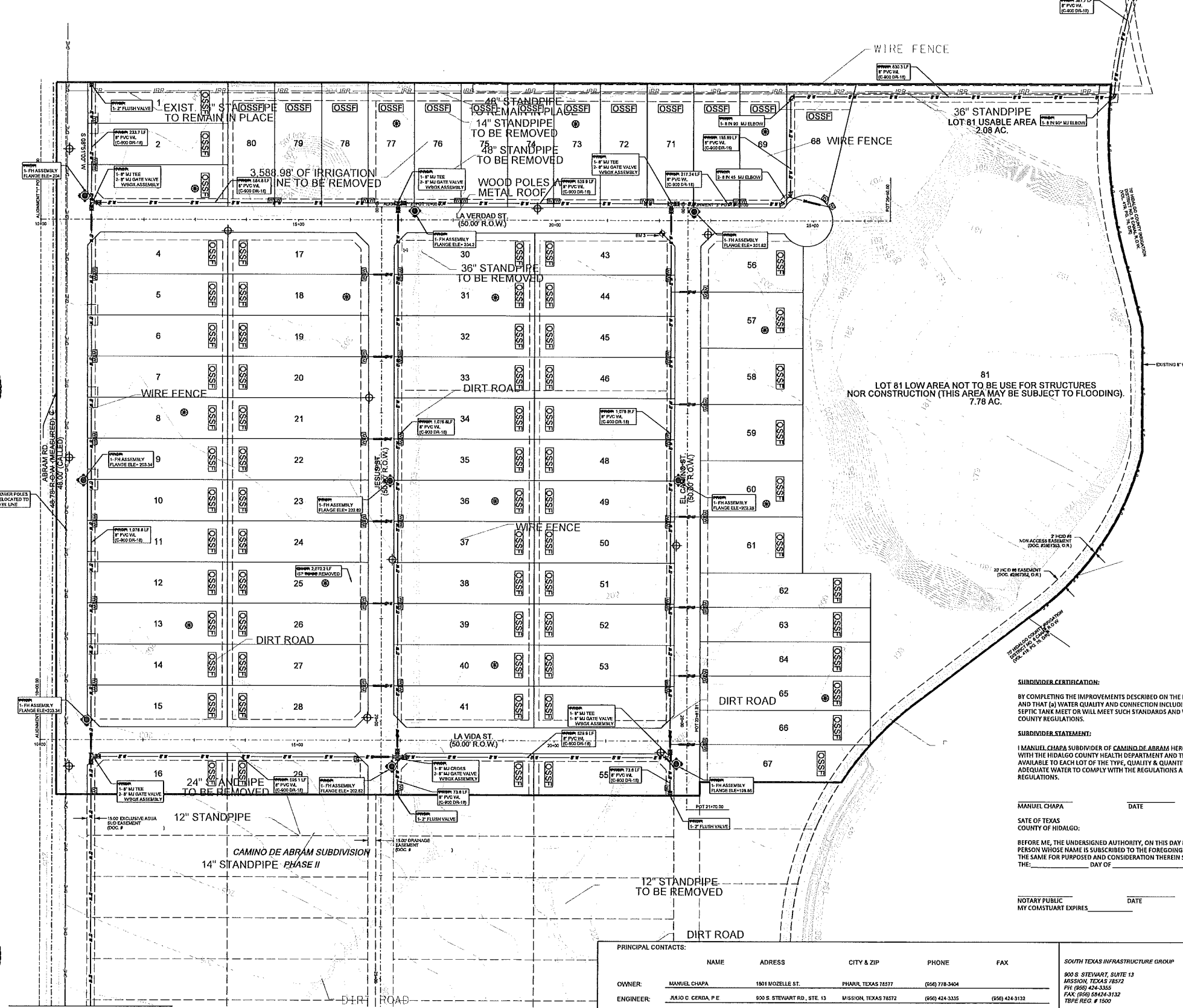
06/13/2018



CAMINO DE ABRAM SUBDIVISION

BEING A 62.28 ACRE TRACT OF LAND SITUATED IN NICHOLAS ZAMORA SURVEY, A-76, PORCION 48, HIDALGO COUNTY, TEXAS, OUT OF A 243.51 ACRE TRACT OF LAND AS DESCRIBED IN VOLUME 1178, PAGE 208, OF THE DEED RECORDS, HIDALGO COUNTY, TEXAS

SCALE 1" = 100' (24" X 36")



- LEGEND:**
- CHAIN LINK FENCE
 - SET # 5/8" IRON ROD WITH PLASTIC CAP STAMPED 'ROWS PROP. CORL'
 - FOUND IRON ROD
 - WOOD FENCE
 - PROPOSED PAVEMENT
 - PROPOSED WATER METER
 - OVERHEAD ELECTRIC
 - PROPOSED CASING
 - FOR 6" WATERLINE= 16" STEEL CASING
FOR 2" WATERLINE= 3" PVC CASING
FOR 1" WATERLINE= 2" PVC CASING
 - PROPOSED STREET LIGHT
 - SOIL BORING LOCATION

SUBDIVIDER CERTIFICATION:
BY COMPLETING THE IMPROVEMENTS DESCRIBED ON THE PLAT, SUBDIVIDER WILL COMPLY WITH MINIMUM STANDARDS AND THAT (a) WATER QUALITY AND CONNECTION INCLUDING WATER METER TO THE LOT MEET SUCH STANDARDS AND (b) SEPTIC TANK MEET OR WILL MEET SUCH STANDARDS AND WILL BE CONSTRUCTED IN ACCORDANCE WITH STATE AND COUNTY REGULATIONS.

SUBDIVIDER STATEMENT:
I, MANUEL CHAPA, SUBDIVIDER OF CAMINO DE ABRAM HEREBY CERTIFY SEWER PERMITS HAVE BEEN PAID AND ARE ON FILE WITH THE HIDALGO COUNTY HEALTH DEPARTMENT AND THAT AN ADEQUATE DRINKING WATER SOURCE IS IMMEDIATELY AVAILABLE TO EACH LOT OF THE TYPE, QUALITY & QUANTITY TO ENABLE EACH PERSON PURCHASING A LOT TO HAVE ADEQUATE WATER TO COMPLY WITH THE REGULATIONS AND THE LAWS OF THE STATE AS REQUIRED BY STATE AND COUNTY REGULATIONS.

MANUEL CHAPA _____ DATE _____
STATE OF TEXAS
COUNTY OF HIDALGO:
BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED MANUEL CHAPA KNOWN TO ME BY THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE OBTAINED THE SAME FOR PURPOSED AND CONSIDERATION THEREIN STATED, GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS THE _____ DAY OF _____ 20____

NOTARY PUBLIC _____ DATE _____
MY COMSTUARY EXPIRES _____

UTILITY LAYOUT AND
ENGINEERING REPORT PART 1
SHEET 3 OF 7

PRINCIPAL CONTACTS:

OWNER:	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
	MANUEL CHAPA	1801 MOZELLE ST.	PHARR, TEXAS 78877	(361) 778-3464	
ENGINEER:	JULIO C. CERDA, P.E.	600 S. STEVART RD., STE. 13	MISSION, TEXAS 78572	(361) 424-3335	(361) 424-3132
SURVEYOR:	KURT SCHMACHNER, R.P.L.S.	600 S. STEVART RD., STE. 13	MISSION, TEXAS 78572	(361) 424-3335	(361) 424-3132

SOUTH TEXAS INFRASTRUCTURE GROUP
300 S. STEVART, SUITE 13
MISSION, TEXAS 78572
PH: (361) 424-3335
FAX: (361) 424-3132
TDEE REG. # 1500

DRAINAGE REPORT CAMINO DE ABRAM

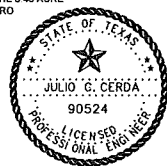
PROJECT LOCATION
CAMINO DE ABRAM SUBDIVISION IS A PROPOSED 81 LOT SINGLE FAMILY RESIDENTIAL SUBDIVISION LOCATED WITHIN THE CITY OF MISSION 3 1/4 MILE EXTRATERRITORIAL JURISDICTION (ETJ), BEING A 62.28 ACRE TRACT OF LAND SITUATED IN NICHOLAS ZAMORA SURVEY, A-76, PORCION 48, HIDALGO COUNTY, TEXAS, OUT OF PORTION A 130.465 ACRE TRACT OF LAND AS DESCRIBED IN VOLUME 1178, PAGE 208, OF THE DEED RECORDS, HIDALGO COUNTY, TEXAS, AND LYING WEST OF THE HIDALGO COUNTY IRRIGATION NO. 8 MAIN CANAL, CONVEYED BY SPECIAL WARRANTY DEED TO EVERARDO VILLARREAL DBA EAR CONSTRUCTION AND LINDA VENTURES, LTD., AS DESCRIBED IN DOCUMENT NUMBER 2775191, OF THE OFFICIAL RECORDS OF HIDALGO COUNTY, TEXAS.

FLOOD PLAIN
THE PROPERTY IS IN ZONE X. AREAS DETERMINED TO BE OUTSIDE 500-YEAR-FLOOD-PLAIN; COMMUNITY PANEL NO. 460334 0280 D, REVISED JUNE 8, 2000.

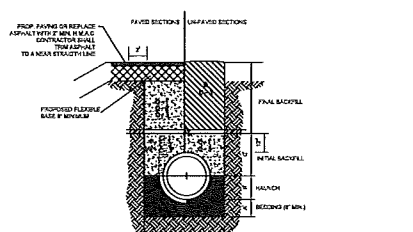
SOIL CONDITIONS
ACCORDING TO THE SOIL SURVEY REPORT PREPARED FOR HIDALGO COUNTY BY THE U.S.D.A. SOIL CONSERVATION SERVICE, THE SITE CONSISTS OF 0.2% OF BRENDA FINE SAND LOAM (3), WITH 0 TO 1 PERCENT SLOPES, 50.6% OF HIDALGO FINE SANDY LOAM (2), WITH 0 TO 1 PERCENT SLOPES, 18.8% OF HIDALGO FINE SANDY LOAM (2), 1 TO 3 PERCENT SLOPES, 14.3% OF HIDALGO SANDY CLAY LOAM (2) WITH 0 TO 1 PERCENT SLOPES, AND 1.1% OF CUEVITAS-RANIDO COMPLEX (5), WITH 0 TO 3 PERCENT SLOPES. THESE SOILS ARE WELL DRAINED, SURFACE RUNOFF IS NEGLECTIBLE, PERMEABILITY IS MODERATELY HIGH TO HIGH, AND THE WATER CAPACITY IS HIGH. THIS SOIL IS LISTED IN HYDROLOGIC GROUP B. SEE APPENDIX C.

EXISTING CONDITIONS
THE SUBJECT PROPERTY IS CURRENTLY UNDEVELOPED. TOPOGRAPHIC ELEVATIONS OBTAINED FROM THE SITE INDICATE THAT THE EXISTING TERRAIN HAS A VERY SLIGHT GRADE APPROXIMATELY 0.8%, IN ACCORDANCE WITH THE DRAINAGE POLICIES OF THE CITY OF MISSION AND COUNTY OF HIDALGO, THE RATIONALE METHOD, 10-YEAR FREQUENCY STORM EVENT WAS UTILIZED TO DETERMINE THE EXISTING STORM WATER RUNOFF FOR THIS SITE. THE TOTAL CONTRIBUTING 10-YEAR EXISTING STORM WATER RUNOFF FROM THIS SITE IS APPROXIMATELY 47.65 CFS.

PROPOSED CONDITIONS
THE PROPOSED DRAINAGE SYSTEM SHALL CONSIST OF THE INSTALLATION OF AN INTERNAL STORM SEWER SYSTEM WITH INLETS IN THE STREET TO COLLECT SURFACE RUNOFF FROM LOTS AND STREET. THIS SYSTEM WILL HAVE PIPE SIZES RANGING FROM 24" TO 36", AND WILL ONLY HAVE ONE OUTFALL LOCATED IN LOTS 30, 31, 32, 33, AND 34, OF BLOCK 1, TEXAN GARDENS SUBDIVISION IN ACCORDANCE WITH THE CITY OF MISSION AND COUNTY OF HIDALGO DRAINAGE POLICY. THE PEAK RATE FOR RUNOFF FOR THIS DEVELOPMENT WILL BE MITIGATED TO THE EXISTING 10-YEAR STORM WATER RUNOFF. THE PEAK RATE WILL BE 108.28 CFS WHICH WILL GIVE US A NET INCREASE OF 60.61 CFS. A TOTAL OF 323.711 CUBIC FEET, OR 8.054 ACRE-FEET OF STORM WATER RUNOFF WILL BE REQUIRED TO BE DETAINED, AS PER RANCHO EL POTRERO SUBDIVISION DRAINAGE REPORT, THESE 8.054 ACRE-FEET WILL BE DETAINED ON THE 6.43 ACRE DRAINAGE BASIN LOCATED ON THE EAST SIDE OF RANCHO EL POTRERO SUBDIVISION WITH A CAPACITY OF 80 ACRE-FEET.



JULIO C. CERDA, P.E.
LICENSED PROFESSIONAL ENGINEER, TEXAS LIC. NO. 90524



D-3 STORM TRENCH BEDDING AND BACKFILL DETAILS
N.T.S.

A. BEDDING FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

B. MANHOLE FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE MANHOLE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE MANHOLE.

C. TRENCH WALLS SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED AGAINST THE TRENCH WALLS AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE TRENCH WALLS.

D. FINAL BACKFILL FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE ON STATE MAINTAINED ROADWAYS SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

E. FINAL BACKFILL FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE ON PRIVATE ROADWAYS SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

F. FINAL BACKFILL FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE ON UNPAVED AREAS SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

G. FINAL BACKFILL FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE ON GRADE SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

H. FINAL BACKFILL FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE ON SLOPE SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

I. FINAL BACKFILL FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE ON CURB SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

J. FINAL BACKFILL FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE ON DITCH SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

K. FINAL BACKFILL FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE ON DRAINAGE LINE SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

L. FINAL BACKFILL FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE ON STREET SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

M. FINAL BACKFILL FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE ON SIDEWALK SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

N. FINAL BACKFILL FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE ON DRIVEWAY SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

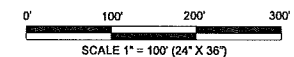
O. FINAL BACKFILL FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE ON PORCH SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

P. FINAL BACKFILL FOR RCP CLASS B, HIGH PERFORMANCE POLYPROPYLENE OR COMPOSITE PVC STORM TRENCH PIPE ON PATIO SHALL BE 4" OF 1/2" SAND COMPACTED TO 95% MDD. THE SAND SHALL BE PLACED ABOVE THE PIPE AND SHALL BE COMPACTED TO A MINIMUM OF 4" BELOW THE TOP OF THE PIPE.

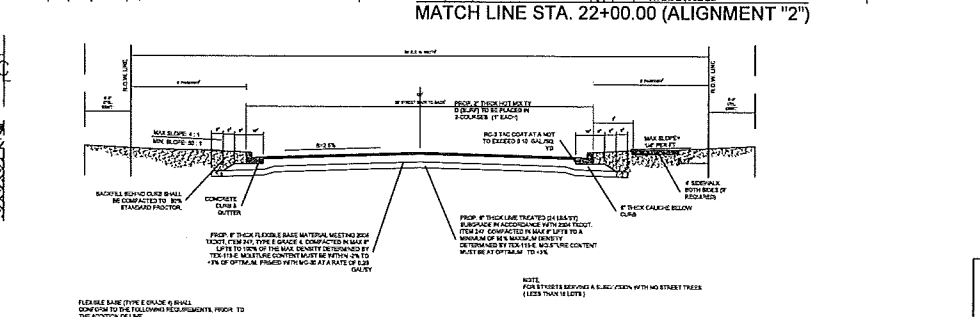
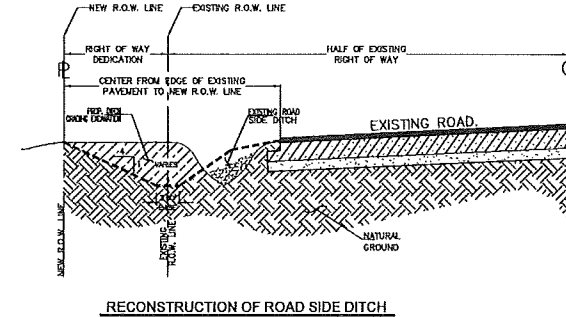
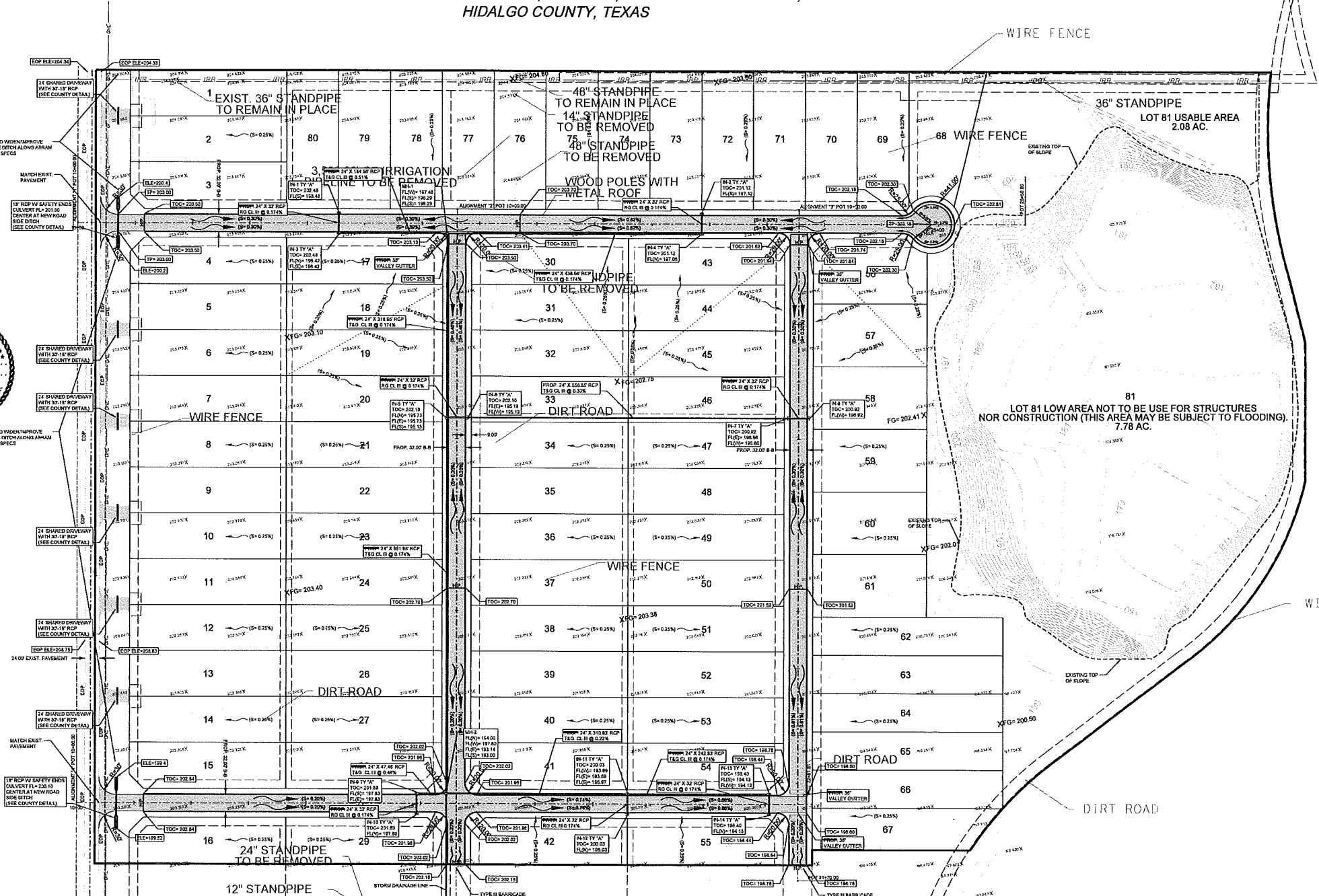
NOTE: 1. MANHOLE COVER SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF MISSION DRAINAGE POLICY.
3. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE COUNTY OF HIDALGO DRAINAGE POLICY.
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STATE OF TEXAS DRAINAGE POLICY.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FEDERAL GOVERNMENT DRAINAGE POLICY.

CAMINO DE ABRAM SUBDIVISION

BEING A 62.28 ACRE TRACT OF LAND SITUATED IN NICHOLAS ZAMORA SURVEY, A-76, PORCION 48, HIDALGO COUNTY, TEXAS, OUT OF A 243.51 ACRE TRACT OF LAND AS DESCRIBED IN VOLUME 1178, PAGE 208, OF THE DEED RECORDS, HIDALGO COUNTY, TEXAS



- LEGEND:**
- CHAIN LINK FENCE
 - SET # 5/8" IRON ROD WITH PLASTIC CAP STAMPED "ROSS PROP. COR."
 - FOUND IRON ROD
 - WOOD FENCE
 - PROPOSED PAVEMENT
 - PROPOSED WATER METER
 - OVERHEAD ELECTRIC
 - TOP OF PAVEMENT
 - TOP OF CURVE
 - EXISTING EDGE OF PAVEMENT ELEVATION



PRINCIPAL CONTACTS:

	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	MANUEL CHIAPA	1401 MOELLE ST.	PHARR, TEXAS 78877	(956) 778-3404	
ENGINEER:	JULIO C. CERDA, P.E.	600 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132
SURVEYOR:	KURT SCHUMACHER, R.P.L.S.	500 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132

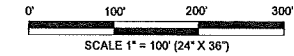
SOUTH TEXAS INFRASTRUCTURE GROUP
500 S. STEWART, SUITE 13
MISSION, TEXAS 78572
PH: (956) 424-3335
FAX: (956) 424-3132
TBP# REG. # 1500



PAVING LAYOUT AND DRAINAGE DESIGN PART 1
SHEET 5 OF 7

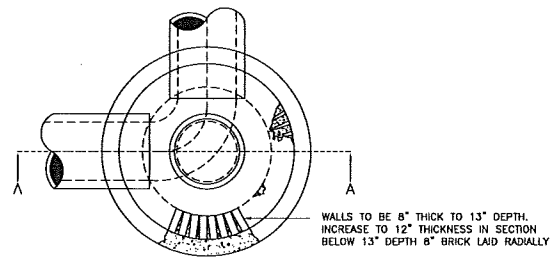
CAMINO DE ABRAM SUBDIVISION

BEING A 62.28 ACRE TRACT OF LAND SITUATED IN NICHOLAS ZAMORA SURVEY, A-76, PORCION 48, HIDALGO COUNTY, TEXAS, OUT OF A 243.51 ACRE TRACT OF LAND AS DESCRIBED IN VOLUME 1178, PAGE 208, OF THE DEED RECORDS, HIDALGO COUNTY, TEXAS

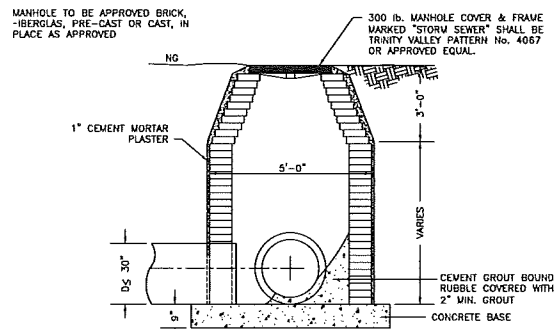


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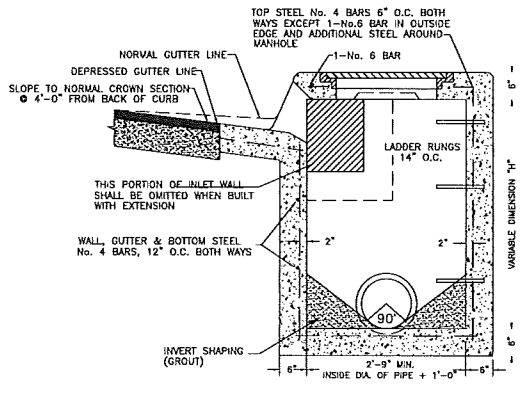
- CHAIN LINK FENCE
- SET # 5/8" IRON ROD WITH PLASTIC CAP STAMPED "TOWNS PROP. COR."
- FOUND IRON ROD
- WOOD FENCE
- PROPOSED PAVEMENT
- PROPOSED WATER METER
- OVERHEAD ELECTRIC
- TOP OF PAVEMENT
- TOP OF CURVE
- EXISTING EDGE OF PAVEMENT ELEVATION



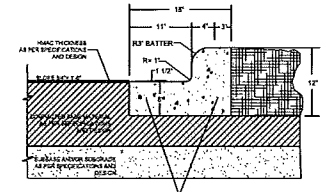
WALLS TO BE 8" THICK TO 13" DEPTH. INCREASE TO 12" THICKNESS IN SECTION BELOW 13" DEPTH 8" BRICK LAID RADially



D-10 DRAINAGE MANHOLE DETAILS



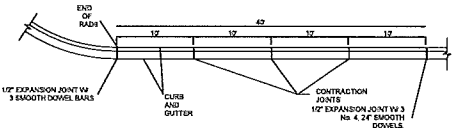
D-1 STANDARD CURB INLET SECTION



TYPICAL CURB AND GUTTER DETAIL

NOT TO SCALE

- ALL INTERSECTIONS SHALL BE DETAIL TO MATCH A UTILITY PLAN
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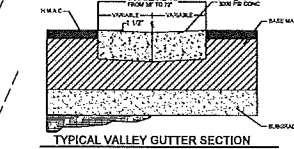


P-2 TYPICAL JOINTS

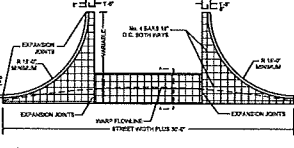
NOT TO SCALE

GENERAL NOTES

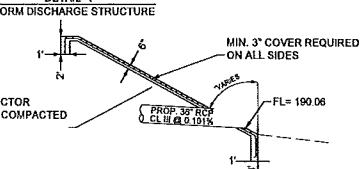
- THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.



TYPICAL VALLEY GUTTER SECTION



P-9 CONCRETE VALLEY GUTTER DETAIL



DETAIL "1" STORM DISCHARGE STRUCTURE

MIN. PROCTOR DENSITY COMPACTED TO 95%

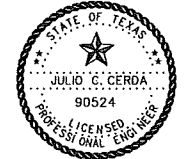
MIN. 3" COVER REQUIRED ON ALL SIDES

FL= 190.06

PROF. 3/8" RCP 12" O.D. @ 10.11%

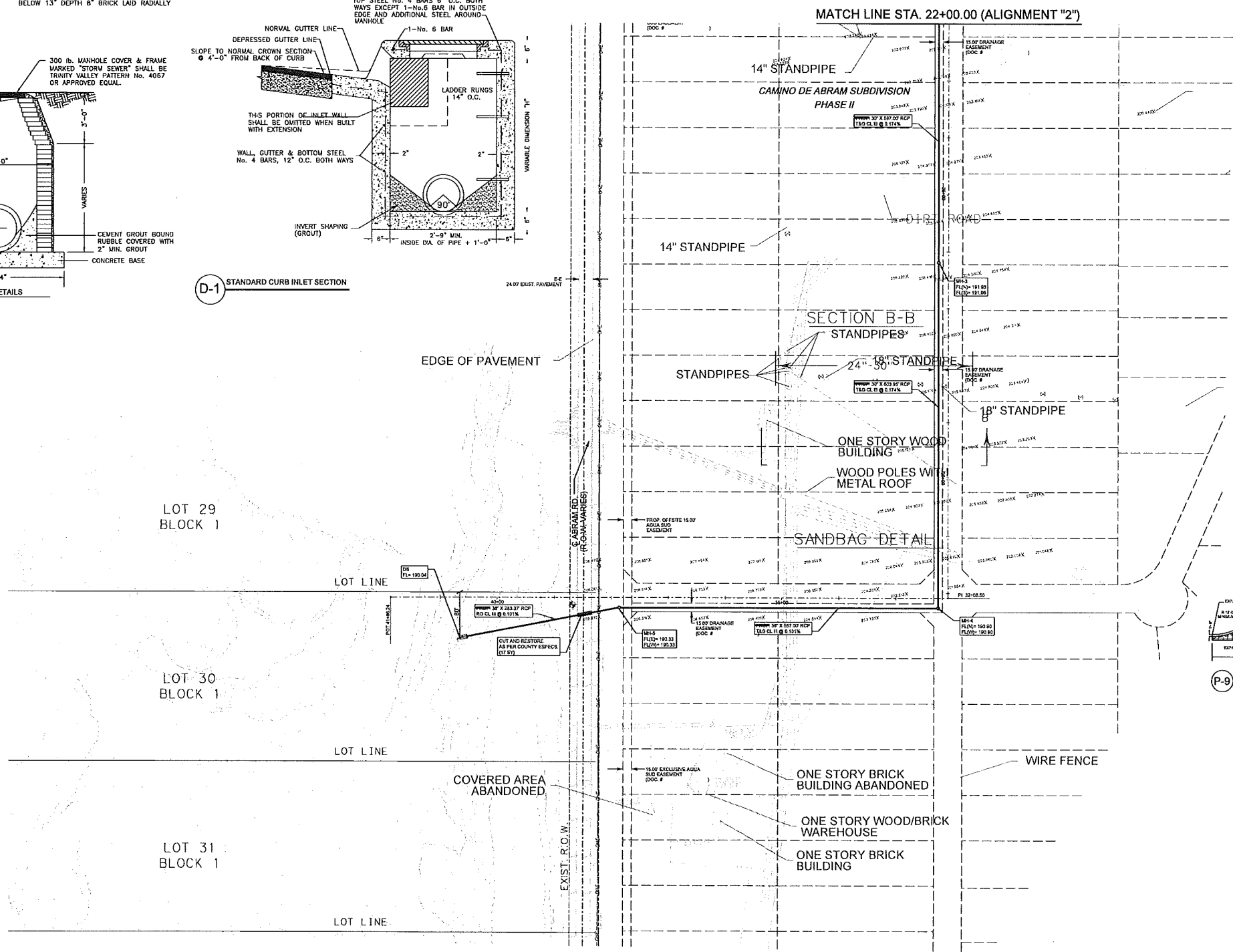
NOTES:

- CONCRETE TO HAVE 3000 PSI MIN 28 DAYS COMPRESSION STRENGTH.
- ALL REINFORCED STEEL SHALL BE GRADE 60.



JULIO C. CERDA, P.E.
LICENSED PROFESSIONAL ENGINEER,
TEXAS LIC. NO. 90524

PAVING LAYOUT AND DRAINAGE DESIGN PART 2
SHEET 6 OF 7



PRINCIPAL CONTACTS:					
	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	MANUEL CHAPA	1501 MOZELLE ST.	PHARR, TEXAS 78577	(361) 778-3404	
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