



Anthony Uresti,
Director of Planning

HIDALGO COUNTY PLANNING DEPARTMENT

2818 S. BUSINESS HWY 281
EDINBURG TEXAS 78539
Tel. 956-318-2840

HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 9-29-2026

PROPOSE IOWA GROVES SUBDIVISION, PRECINCT No. 3.

ENGINEER IZAGUIRRE ENGINEERING. DEVELOPER: F & T LLC.

☐ PRELIMINARY APPROVAL ☒ FINAL APPROVAL ☐ FINAL APPROVAL WITH FINANCIAL GUARANTEE ☐ WITH VARIANCE

NUMBER OF LOTS: 42 ☒ *SINGLE FAMILY ☐ *MULTI-FAMILY ☐ COMMERCIAL ☐ INSTITUTIONAL

NUMBER OF STREETLIGHTS: 6

FILLING STATIONS: 4

LOCATION DESCRIPTION: WEST OF IOWA ROAD APPROXIMATELY ¼ MILE SOUTH OF MILE 8 NORTH ROAD.

SUBDIVISION LIES WITHIN THE: ☒ RUAL AREA

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 03-03-2026 PROPERTY LIES WITHIN FLOOD ZONE: "X" AS PER FEMA.

DRAINAGE DESIGN: DRAINAGE WILL BE PROVIDED BY STORM SEWER SYSTEM AND DETENTION WILL BE PROVIDED BY WIDENING THE EXISTING DRAIN DITCH.

SEWER SYSTEM: ☒ OSSF'S HAVE BEEN INSTALLED.

WATER SERVICE PROVIDER: AGUA SUD. LINE SIZE: 12" LOCATION: IOWA ROAD

STAFF RECOMMENDS: ☐ Preliminary Approval subject to comments and future recommendations by planning, Other departments.

☒ 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.

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SUBDIVISION PLAT OF: IOWA GROVES SUBDIVISION

BEING A 24.30-ACRE TRACT SITUATED IN HIDALGO COUNTY, TEXAS AND OUT OF LOT 12 AND LOT 13, BLOCK 20, OF TEXAN GARDENS SUBDIVISION AS PER MAP PLAT THEREOF RECORDED IN VOLUME 8, PAGE 57-58 HIDALGO COUNTY MAP RECORDS, HIDALGO COUNTY, TEXAS, CONVEYED TO GERALD WENSMANN AND WIFE ANGELINE WENSMANN AS DESCRIBED IN A WARRANTY DEED WITH VENDOR'S LIEN, DATED APRIL 29, 2003, RECORDED IN DOCUMENT NUMBER 1193050 AND IN ANOTHER WARRANTY DEED, DATED SEPTEMBER 15, 2004, RECORDED IN DOCUMENT NUMBER 1381741, HIDALGO COUNTY OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

METES AND BOUNDS

BEING A 24.30-ACRE TRACT SITUATED IN HIDALGO COUNTY, TEXAS AND OUT OF LOT 12 AND LOT 13, BLOCK 20, OF TEXAN GARDENS SUBDIVISION AS PER MAP PLAT THEREOF RECORDED IN VOLUME 8, PAGE 57-58 HIDALGO COUNTY MAP RECORDS, HIDALGO COUNTY, TEXAS, CONVEYED TO GERALD WENSMANN AND WIFE ANGELINE WENSMANN AS DESCRIBED IN A WARRANTY DEED WITH VENDOR'S LIEN, DATED APRIL 29, 2003, RECORDED IN DOCUMENT NUMBER 1193050 AND IN ANOTHER WARRANTY DEED, DATED SEPTEMBER 15, 2004, RECORDED IN DOCUMENT NUMBER 1381741, HIDALGO COUNTY OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS. SAID 24.30-ACRE TRACT BEING PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING, AT A FOUND COTTON PICKER SPINDLE AT THE NORTHEAST CORNER OF LOT 14 OF SAID SUBDIVISION SAME BEING THE CENTERLINE OF IOWA ROAD (60.00' R.O.W.) THENCE, SOUTH 08° 55' 34" WEST, ALONG THE CENTERLINE OF SAID IOWA ROAD, A DISTANCE OF 300.00 FEET TO A FOUND COTTON PICKER SPINDLE ON THE SOUTHEAST CORNER OF LOT 14, SAME BEING THE NORTHEAST CORNER OF LOT 13 OF SAID SUBDIVISION FOR THE NORTHEAST CORNER AND THE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED;

THENCE, SOUTH 08° 55' 34" WEST, CONTINUING ALONG THE CENTERLINE OF SAID IOWA ROAD, AT 300.00 FEET PASS A FOUND COTTON PICKER SPINDLE, AND CONTINUING A TOTAL DISTANCE OF 600.00 FEET TO A FOUND COTTON PICKER SPINDLE ON THE SOUTHEAST CORNER OF LOT 12, BLOCK 20 OF SAID SUBDIVISION, FOR THE SOUTHEAST CORNER OF THE TRACT HEREIN DESCRIBED;

THENCE, NORTH 81° 06' 06" WEST, ALONG THE NORTH LINE OF COHIBA SUBDIVISION AS RECORDED IN DOCUMENT NUMBER 2569961, HIDALGO COUNTY MAP RECORDS, HIDALGO COUNTY, TEXAS, SAME BEING THE SOUTH LINE OF SAID SUBDIVISION, AT 30.00 FEET PASS A 1/2 INCH IRON ROD FOUND WITH CAP STAMPED "PENA", AND CONTINUING A TOTAL DISTANCE OF 1,764.40 FEET TO A 1/2 INCH IRON ROD FOUND WITH PLASTIC CAP STAMPED "PENA" FOR THE SOUTHWEST CORNER OF THE TRACT HEREIN DESCRIBED;

THENCE, NORTH 08° 55' 18" EAST, ALONG THE WEST LINE OF LOT 12 AND LOT 13 OF SAID SUBDIVISION, AT 300.00 FEET PASS A 1/2 INCH IRON ROD FOUND ON THE NORTH LINE OF LOT 12, SAME BEING THE SOUTH LINE OF LOT 13 AND CONTINUING A TOTAL DISTANCE OF 600.00 FEET TO A 1/2 INCH IRON ROD FOUND ON THE NORTHWEST CORNER OF SAID LOT 13, FOR THE NORTHWEST CORNER OF THE TRACT HEREIN DESCRIBED;

THENCE, SOUTH 81° 06' 06" EAST, ALONG THE NORTH LINE OF LOT 13, BLOCK 20 OF SAID SUBDIVISION, AT 1,734.46 FEET A 1/2 INCH IRON ROD FOUND WITH PLASTIC CAP STAMPED "SEA" ON THE WEST RIGHT-OF-WAY LINE OF SAID IOWA ROAD AND CONTINUING A TOTAL DISTANCE OF 1,764.45 FEET TO THE POINT OF BEGINNING, AND CONTAINING 24.30-ACRE TRACT OF LAND, MORE OR LESS;

STATE OF TEXAS COUNTY OF HIDALGO OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION

I, **FORD SASSER**, OWNER OF THE 24.30 ACRE TRACT OF LAND ENCOMPASSED WITHIN THE PROPOSED **IOWA GROVES SUBDIVISION**, HEREBY SUBDIVIDE THE LAND AS DEPICTED IN THIS SUBDIVISION PLAT AND DEDICATE 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:

- THE WATER QUALITY AND CONNECTIONS TO THE LOTS MEET, OR WILL MEET, THE MINIMUM STATE STANDARDS;
- SEWER CONNECTIONS TO THE LOTS OR SEPTIC TANKS MEET, OR WILL MEET, THE MINIMUM REQUIREMENTS OF STATE STANDARDS;
- ELECTRICAL CONNECTIONS PROVIDED TO THE LOTS MEET, OR WILL MEET, THE MINIMUM STATE STANDARDS;
- GAS CONNECTIONS, IF AVAILABLE, PROVIDED TO THE LOTS MEET, OR WILL MEET, THE MINIMUM STATE STANDARDS.

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

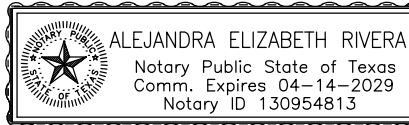
F & T, LLC, A TEXAS LIMITED LIABILITY COMPANY
FORD SASSER - PRESIDENT
316 EAST DALLAS AVENUE
MCALLEN, TEXAS 78501

DATE

STATE OF TEXAS COUNTY OF HIDALGO

BEFORE ME, the undersigned notary public, on this day personally appeared **FORD SASSER** proved to me through her Texas Department of Public Safety Driver License to be the person whose name is subscribed to the foregoing instrument, who, being by me first duly sworn, declared that the statements therein are true and correct and acknowledged that she executed the same for the purposes and consideration thereby expressed.

Given under my hand and seal of office this _____ day of _____, 2026.



NOTARY PUBLIC- STATE OF TEXAS

HIDALGO COUNTY IRRIGATION DISTRICT No.16

THIS PLAT IS HEREBY APPROVED BY THE HIDALGO COUNTY IRRIGATION DISTRICT No.16 ON THIS THE _____ DAY OF _____, 20____.

NO IMPROVEMENTS OF ANY KIND (INCLUDING WITHOUT LIMITATION TREES, FENCES AND BUILDINGS) SHALL BE PLACED UPON HIDALGO COUNTY IRRIGATION DISTRICT No.16 RIGHT OF WAY OR EASEMENTS. APPROVAL OF THIS PLAT DOES NOT RELEASE ANY RIGHTS THAT THE DISTRICT MAY HAVE WHETHER SHOWN OR NOT.

RESIDENT _____ ATTEST: _____ SECRETARY

HIDALGO COUNTY CERTIFICATE OF PLAT APPROVAL UNDER LOCAL GOVERNMENT CODE § 232.028(c)

WE THE UNDERSIGNED CERTIFY that this plat of the **IOWA GROVES SUBDIVISION** was reviewed and approved by the Hidalgo County Commissioners Court on _____, _____.

Hidalgo County Judge _____ date _____

ATTEST: _____
Hidalgo County Clerk _____ date _____

PRINCIPAL CONTACTS:

Name	Address	City & Zip	Phone/Fax
OWNER: FORD SASSER	2121 E. GRIFFIN PARKWAY SUITE 2	MISSION, TEXAS 78574	(956)240-3246
ENGINEER: GILBERTO A. GRACIA	2121 E. GRIFFIN PARKWAY SUITE 2	MISSION, TEXAS 78574	(956)584-0554
SURVEYOR: OSCAR HERNANDEZ, R.P.L.S.	2020 E GRIFFIN PKWY	MISSION, TEXAS 78574	(956)403-9787

PLAT NOTES AND RESTRICTIONS:

1.- FLOOD PLAIN
THE SUBJECT TRACT IS LOCATED WITHIN FLOOD ZONE "X" (NO SHADING) INDICATES: AREAS OF MINIMAL FLOODING; FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 480334 0290 D, MAP REVISED JUNE 6, 2000.

2.- GENERAL NOTE FOR SINGLE FAMILY RESIDENCES: NO MORE THAN ONE-SINGLE FAMILY DETACHED DWELLING SHALL BE LOCATED ON EACH LOT. THIS MUST BE STIPULATED ON ALL DEEDS AND CONTRACTS FOR DEEDS (ANY OTHER USE SHALL REQUIRE PLANNING DEPARTMENT, OFFICE OF ENVIRONMENTAL COMPLIANCE, HEALTH DEPARTMENT AND FIRE MARSHALL APPROVAL). APPLICATIONS FOR CONSTRUCTION ARE REQUIRED PRIOR TO OCCUPANCY OF THE LOTS 1-16 (RESIDENTIAL ONLY).

3.- MINIMUM FINISH FLOOR NOTE: MINIMUM FINISH FLOOR ELEVATION SHALL BE 18" ABOVE CENTERLINE OF STREET OR 18" ABOVE NATURAL GROUND, WHICHEVER IS GREATER. ELEVATION CERTIFICATE MAY BE REQUIRED FOR LOTS LOCATED OUTSIDE A DESIGNATED FLOOD ZONE AT THE TIME FOR APPLICATION FOR CONSTRUCTION TO VERIFY PRE AND POST CONSTRUCTION FINISH FLOOR ELEVATIONS. AN ELEVATION CERTIFICATE SHALL BE REQUIRED FOR ALL LOTS WITHIN A DESIGNATED FLOOD ZONE AT THE TIME FOR A DEVELOPMENT PERMIT APPLICATION.

4.- MINIMUM BUILDING SETBACK LINES:
FRONT.....25.00' OR GREATER FOR EASEMENTS
FRONT CUL-DE-SAC.....15.00' OR GREATER FOR EASEMENTS
GARAGE.....18.00' OR GREATER FOR EASEMENTS
REAR.....15.00' OR GREATER FOR EASEMENTS
INTERIOR SIDES.....6.00' OR GREATER FOR EASEMENTS
SIDE CORNER.....10.00' OR GREATER FOR EASEMENTS.
OR TO EASEMENT LINE WHICHEVER IS GREATER ON ALL CASES

5.- DRAINAGE: IN ACCORDANCE WITH THE HIDALGO COUNTY DRAINAGE DISTRICT No. 1 AND HIDALGO COUNTY REQUIREMENTS, THIS DEVELOPMENT WILL BE REQUIRED TO DETAIN A TOTAL OF **51,791 CUBIC FEET (1.19 ACRE-FEET)** OF STORM WATER RUNOFF; DRAINAGE RETENTION IN ACCORDANCE WITH THE LOCAL REQUIREMENTS WILL BE ACCOMPLISHED AS FOLLOWS: SEE DRAINAGE REPORT ON SHEET No. 4.

6.- NO STRUCTURE SHALL BE PERMITTED OVER ANY EASEMENT. EASEMENTS SHALL BE KEPT CLEAR OF FENCES, 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.

7.- BENCHMARK NOTE:
THE FOLLOWING BENCHMARK IS IDENTIFIED ON THE FACE OF THE PLAT AND ON THE ATTACHED ENGINEERING PLANS.

B.M. 1: ELEV. 226.24 AT AN IRON ROD FOUND AT THE SOUTHWEST CORNER OF THIS DEVELOPMENT. N.A.V.D. 88 DATUM.

B.M. 2: ELEV. _____ AT AN IRON ROD SET AT THE S.W. COR. OF LOT 2 OF THIS SUBDIVISION. X=1014287.96, Y=16648902.51 N.A.V.D. 88 DATUM.

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.

STATE OF TEXAS COUNTY OF HIDALGO

I, OSCAR HERNANDEZ, A REGISTERED PROFESSIONAL LAND SURVEYOR IN TEXAS, HEREBY CERTIFY THAT THE ABOVE PLAT AND DESCRIPTION OF THE **IOWA GROVES SUBDIVISION**, WAS PREPARED FROM A SURVEY OF THE PROPERTY MADE ON THE GROUND BY ME OR UNDER MY SUPERVISION ON **NOVEMBER 07, 2025**.

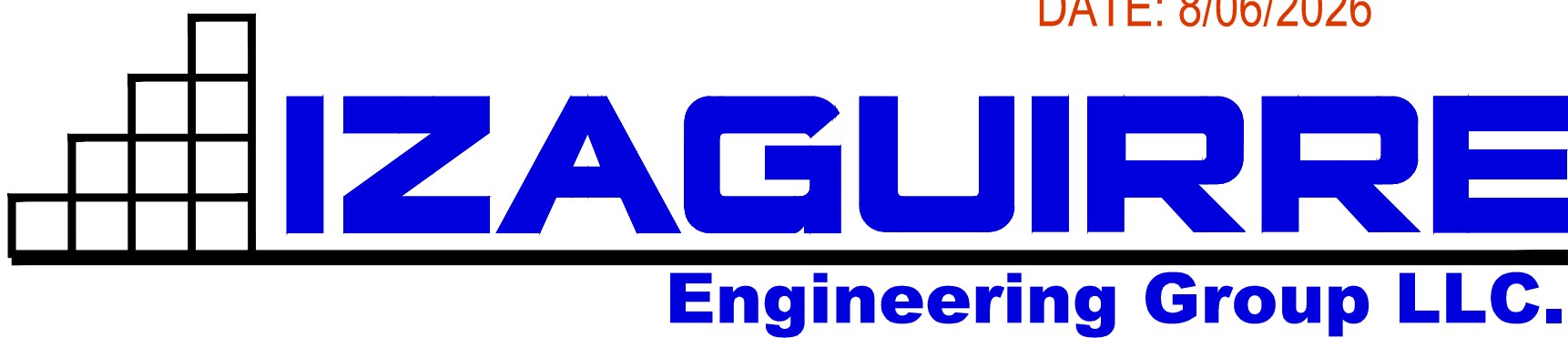


OSCAR HERNANDEZ
R.P.L.S. No. 5005
S2 ENGINEERING, PLLC,
2020 E GRIFFIN PKWY
MISSION, TEXAS 78574

DATE

AS-BUILT PLAN

DATE: 8/06/2026



2121 E GRIFFIN PKWY SUITE 2 F-10214 PHONE (956) 584-0554
MISSION TEXAS, 78574 FAX (956) 584-0049

THE STATE OF TEXAS COUNTY OF HIDALGO CERTIFICATE OF PLAT APPROVAL

I, THE UNDERSIGNED CERTIFY THAT THIS PLAT OF **IOWA GROVES SUBDIVISION** WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY HEALTH DEPARTMENT ON _____, 20____.

ENVIRONMENTAL HEALTH DIVISION MANAGER _____ DATE _____

STATE OF TEXAS COUNTY OF HIDALGO

I, THE UNDERSIGNED, A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THE PROPER ENGINEERING CONSIDERATIONS HAVE BEEN GIVEN TO THIS PLAT.



08/07/26

GILBERTO A. GRACIA
REGISTERED PROFESSIONAL ENGINEER No. 62477
IZAGUIRRE ENGINEERING GROUP, LLC.
2121 E GRIFFIN PKWY SUITE 2
MISSION, TEXAS 78574

HIDALGO COUNTY DRAINAGE DISTRICT No. 1

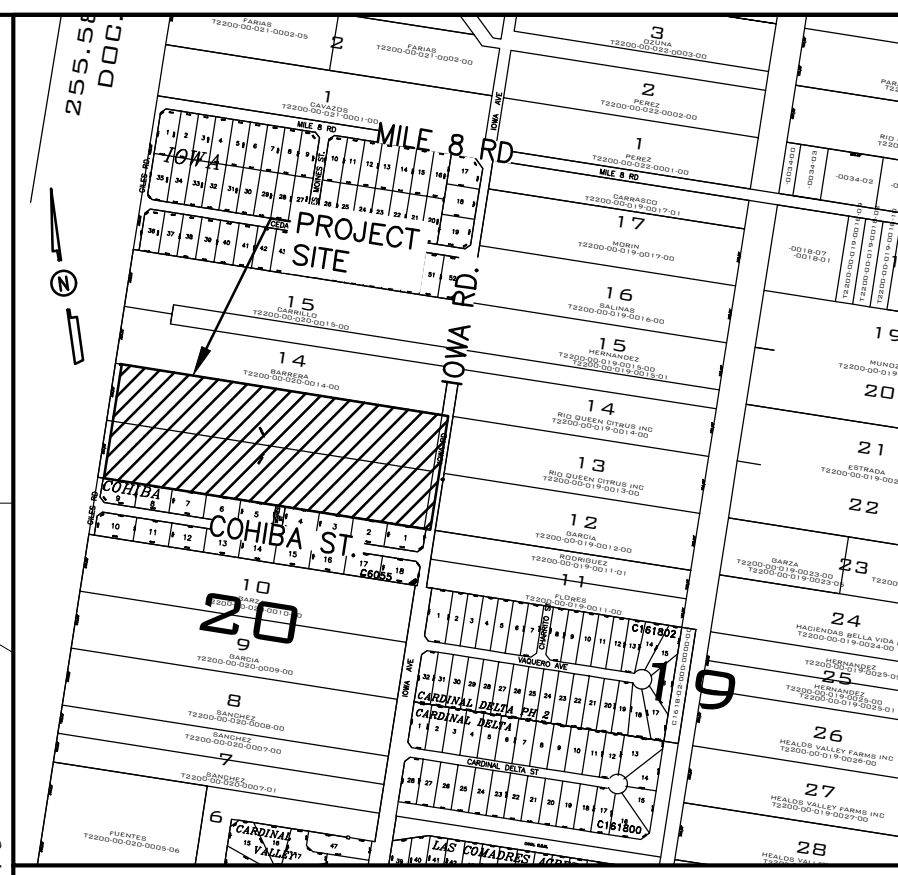
HIDALGO COUNTY DRAINAGE DISTRICT No. 1 HEREBY CERTIFIES THAT THE DRAINAGE PLANS FOR THIS SUBDIVISION COMPLY WITH THE MINIMUM STANDARDS OF THE DISTRICT. THE PROJECT IS SITUATED: H.C.D.D. CERTIFICATION, IRRIGATION DISTRICT CERTIFICATE OF APPROVAL, SWG CERTIFICATION, P&Z CITY CERTIFICATION; REVISION NOTES.

RAUL SESIN, P.E. C.F.M.
GENERAL MANAGER
HIDALGO COUNTY DRAINAGE DISTRICT NO. 1
902 N. DOOLITTLE RD,
EDINBURG, TEXAS 78542

DATE

CURVE DATA TABLE				
CURVE	DELTA	RADIUS	ARC LENGTH	CHORD LENGTH
C-1	116°03'27"	50.00'	101.28'	84.83'
C-2	03°56'35"	50.00'	3.44'	3.44'
C-3	04°00'21"	50.00'	3.50'	3.49'
C-4	116°01'40"	50.00'	101.25'	84.82'

DATE OF PREPARATION:
08/07/26



LOCATION OF SUBDIVISION WITH RESPECT TO THE EXTRATERRITORIAL JURISDICTION OF A MUNICIPALITY:
IOWA GROVES SUBDIVISION IS LOCATED IN WEST HIDALGO COUNTY, ON THE WEST SIDE OF IOWA ROAD AND APPROXIMATELY 1,380 FEET SOUTH OF MILE 8 NORTH ROAD. THIS SUBDIVISION DOES NOT LIE WITHIN ANY CITY LIMITS OR WITHIN ANY CITY'S EXTRATERRITORIAL JURISDICTION (ETJ) UNDER LOCAL GOVERNMENT CODE § 212.001 AND LIES IN PCT. NO. 3.

LEGEND	
○ SET 1/2" IRON ROD WITH PLASTIC CAP STAMPED	LOT LINE
○ SET MAG NAIL	EXIST. EXISTING
△ CALCULATED POINT	N.E.C. NORTHEAST CORNER
● FOUND 1/2" IRON ROD	S.E.C. SOUTHEAST CORNER
● FOUND 1/2" IRON PIPE	S.W.C. SOUTHWEST CORNER
● FOUND COTTON PICKER SPINDLE	N.W.C. NORTHWEST CORNER
P.B. POINT OF BEGINNING	M.R.C. MAP RECORDS OF HIDALGO COUNTY
P.O.C. POINT OF COMMENCING	O.R.C. OFFICIAL RECORDS OF HIDALGO COUNTY
CL CENTER LINE	D.R.C. DEED RECORDS OF HIDALGO COUNTY
	R.O.W. RIGHT OF WAY
	(N°/W°/E°) RECORD BEARING
	R.D. RECORD DISTANCE



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

ON: _____ AT _____ AM/PM

INSTRUMENT NUMBER OF THE MAP RECORDS OF HIDALGO COUNTY, TEXAS

BY: _____ DEPUTY

AQUA SPECIAL UTILITY DISTRICT

I, ROBERTO SALINAS, P.E., HEREBY CERTIFY THAT THE AQUA SPECIAL UTILITY DISTRICT HAS APPROVED THE PORTABLE WATER SUPPLY FOR THE **IOWA GROVES SUBDIVISION**, HIDALGO COUNTY, TEXAS. THE AQUA SPECIAL UTILITY DISTRICT IS THE HOLDER OF THE CERTIFICATE OF CONVENIENCE AND NECESSITY (CON) ISSUED BY THE STATE OF TEXAS TO FURNISH PORTABLE WATER TO AN AREA IN HIDALGO COUNTY, TEXAS THAT INCLUDES THIS SUBDIVISION AND IS THEREFORE OBLIGATED TO SERVE THIS SUBDIVISION WITH PORTABLE WATER TO THE EXTENT REQUIRED BY THE LAWS OF THE STATE OF TEXAS. THE AQUA SPECIAL UTILITY DISTRICT AGREES THAT IT WILL PROVIDE WATER TO THIS SUBDIVISION AT THE TIME WHEN THE INFRASTRUCTURE REQUIREMENTS FOR THE SUBDIVISION ARE MET. WATER METER ARE IMMEDIATELY AVAILABLE FOR THIS PURPOSE UPON COMPLETION OF THE WATER FACILITIES SHOWN ON THE PLAT OF THE SUBDIVISION.

ROBERTO SALINAS, P.E.
GENERAL MANAGER
AQUA SPECIAL UTILITY DISTRICT
3120 N. ABRAM RD.
PALMVIEW TEXAS, 78572

DATE

INDEX OF SHEETS

SHEET 1.- HEADING; INDEX: LOCATION MAP AND ETJ; PRINCIPAL CONTACTS; PLAT WITH LOTS, STREETS, AND EASEMENT DESIGNATIONS; LEGAL DESCRIPTION (METES AND BOUNDS); SURVEYOR'S AND ENGINEER'S CERTIFICATION; PLAT NOTES AND RESTRICTIONS; OWNERS DEDICATION, CERTIFICATION, AND ATTESTATION; COUNTY CLERK'S RECORDING CERTIFICATE; HIDALGO COUNTY CERTIFICATE OF PLAT APPROVAL; DESCRIPTION OF LOCATION OF SUBDIVISION WITH RESPECT TO THE ETJ OF A MUNICIPALITY AND DESIGNATE THE PRECINCT THE PROJECT IS SITUATED; H.C.D.D. CERTIFICATION; IRRIGATION DISTRICT CERTIFICATE OF APPROVAL; SWG CERTIFICATION, P&Z CITY CERTIFICATION; REVISION NOTES.

SHEET 2.- WATER DISTRIBUTION MAP, ON-SITE SEWAGE FACILITIES DISTRIBUTION MAP, ENGINEERING REPORT (ENGLISH AND SPANISH VERSION), INCLUDING DESCRIPTION OF WATER AND ENGINEER'S CERTIFICATION (ENGLISH AND SPANISH VERSION); TYPICAL WATER SERVICE CONNECTION; SUBDIVIDER CERTIFICATE AND STATEMENT.

SHEET 2.1- AQUA SUD DETAIL SHEET

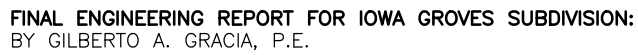
SHEET 3.- PAVING DISTRIBUTION AND DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE AND HOW IT WILL SERVE THIS DEVELOPMENT; MAP OF TOPOGRAPHY AND DRAINAGE, AND ENGINEER'S CERTIFICATION; REVISION NOTES; TYPICAL ROADWAY SECTION; CURB AND GUTTER SECTION; VALLEY GUTTER SECTION; DETAILS.

SHEET NO. 1 OF 3 SHEETS			
FILENAME : S:\1 Izaguirre Engineering\Subdivision Projects\Iowa Groves			
DATE PREPARED	PREPARED BY	CHECKED BY	APPROVED BY
NOV 04 2025			
DATE REVISED	REVISED BY	CHECKED BY	APPROVED BY

NO.	SHEET	REVISION	DATE	APPROVED

IOWA GROVES SUBDIVISION

MAP OF UTILITIES DISTRIBUTION



WATER SUPPLY: Description and Costs.

WATER SUPPLY:

OWA GROVES SUBDIVISION HAS BEEN PROVIDED WITH POTABLE WATER BY THE WATER COMPANY OF AGUA SPECIAL UTILITY DISTRICT (AGUA SUD). THE SUBDIVIDER AND COMPANY AGUA SUD SIGNED A CONTRACT BY WHICH, THE SUBDIVISION HAS RECEIVE SUFFICIENT WATER PROVISION FOR AT LEAST 30 YEARS AND AGUA SUD HAS PROVIDED SUFFICIENT DOCUMENTATION TO ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THIS SUBDIVISION.

AGUA SUD HAS AN **EXISTING 12"** WATERLINE RUNNING ALONG THE EAST SIDE OF IOWA RD.
AGUA SUD HAS ANOTHER **EXISTING 8"** WATERLINE LOCATED ON THE SOUTHWEST CORNER OF THIS PROPERTY FROM COHIBA SUBDIVISION.

THE WATER SYSTEM FOR IOWA GROVES SUBDIVISION CONSISTS OF AN 8" WATERLINE THAT TAPS INTO THE EXISTING 12" DIAMETER WATER LINE. THEN THE EXISTING 8" WATERLINE TAPS AND RUNS 1768.0 LF WEST ALONG A 15.0 FT AGUA EASEMENT ON THE SOUTH SIDE OF VALERO DRIVE. FROM THERE ANOTHER EXISTING 8" WATERLINE RUNS NORTH AND SOUTH; APPROXIMATELY 300.00 NORTH ALONG A 15.0 FT AGUA EASEMENT ENDING WITH A EXISTING FLUSH VALVE; AND APPROXIMATELY 300.00 SOUTH ALONG A 15.0 FT AGUA EASEMENT AND MAKING LOOP WITH THE EXISTING 8" WATERLINE FROM COHIBA SUBDIVISION.

FROM THE EXISTING 8" DIAMETER WATERLINE, TWENTY (20) DUAL SERVICES OF 2" DIAMETER AND TWO (2) SINGLE SERVICES OF 1" OF DIAMETER ARE COMING OUT OF THIS LINE. SAID SERVICES TERMINATE AT THE WATER METERS OF EACH LOT. THE 8" DIAMETER LINE, THE WATER SERVICE LINES, AND THE WATER METER BOXES HAVE BEEN INSTALLED AT THE TOTAL COST OF \$_____ PER FOOT OF 8" DIAMETER LINE, AND \$_____ PER FOOT OF 1" DIAMETER LINE, WHICH COVERS THE _____ COST PER LOT STATED IN THE 30 YEAR WATER SERVICE AGREEMENT, WHICH SUM REPRESENTS THE TOTAL COST OF WATER, WATER RIGHTS ACQUISITION FEES, AND ALL MEMBERSHIP OR OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOTS IN THE SUBDIVISION TO THE AQUA SUB WATER SUPPLY SYSTEM. UPON REQUEST BY THE LOT OWNER, AQUA SUB WILL PROMPTLY INSTALL AT NO CHARGE THE WATER METER BOXES AND WATER METER FOR EACH LOT. THESE ACTIONS HAVE BEEN APPROVED AND ACCEPTED BY AQUA SUB AND THE DISTRIBUTION SYSTEM HAS BEEN OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

SEWAGE FACILITIES: Description and Costs.

SEWAGE FROM THE **IOWA GROVES SUBDIVISION** IS TREATED BY INDIVIDUAL ON-SITE SEWAGE FACILITIES ("OSSF") CONSISTING OF A STANDARD DESIGN DUAL COMPARTMENT SEPTIC TANK AND A DRAINFIELD ON EACH LOT. THE SITE EVALUATOR (LICENSE NUMBER QS 12258) HAS EVALUATED THE SUITABILITY OF THE SUBDIVISION SITE FOR OSSF AND SUBMITTED A REPORT CONCLUDING THAT THE SITE IS SUITABLE FOR OSSF. THE REPORT WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY PLANNING DEPARTMENT. EACH LOT HAS ADEQUATE AREA FOR A REPLACEMENT DRAIN FIELD.

EACH LOT IN THE EXISTING SUBDIVISION IS AT LEAST 1/2 ACRE IN SIZE. THE NATURAL RESOURCE CONSERVATION SERVICE SOIL SURVEY BOOK INDICATED A FINE SANDY LOAM, SANDY CLAY LOAM AND CLAY LOAM SOIL FOR THE AREA. THE SITE EVALUATOR (LICENSE NUMBER 05 12258) HAD FOUR (4) TEST BORINGS MADE AT OPPOSITE AREAS OF THE SUBDIVISION AT THE CENTERS OF LOTS _____. (ADDITIONAL BORINGS WERE UNNECESSARY BECAUSE THE SOILS ARE VERY UNIFORM WITHIN THIS LIMITED AREA.) THE SOIL IS A UNIFORM SANDY LOAM (CLASS I) EXTENDING UP TO 36" BELOW THE BOTTOM OF ANY EXISTING EXCAVATIONS. THERE IS NO INDICATION OF GROUNDWATER OR A RESTRICTIVE LAYER WITHIN 24" OF BOTTOM OF THE EXISTING EXCAVATIONS. THE SUBDIVISION DRAINS WELL.

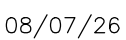
THE COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS \$ 3,500.00, INCLUDING THE COST FOR THE REQUIRED PERMIT AND LICENSE. ALL OSSFS HAVE BEEN INSTALLED AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL AT A TOTAL COST OF \$ 147,000.00. THE HIDALGO COUNTY PLANNING DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ALL OSSF AS OF THE DATE OF THE RECORDING OF THE PLAT.

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 CONSTRUCTED WATER AND ON-SITE SEWAGE FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:

WATER FACILITIES- THESE FACILITIES HAS BEEN CONSTRUCTED, WITH THE INSTALLATION OF WATER METER BOXES, HAVE COST A GRAND TOTAL OF \$ _____ WHICH EQUALS TO \$ _____ PER LOT.

SEWAGE FACILITIES— SEPTIC SYSTEM IS ESTIMATED TO COST \$ 3,500.00 PER LOT (ALL INCLUSIVE), FOR A TOTAL OF \$ 147,000.00 FOR THE ENTIRE SUBDIVISION.



GILBERTO A. GRACIA—P.E. No. 62477

This seal appearing on this document was authorized by Gilberto A. Gracia, P.E. No. 62477 on the above designated date.

IOWA GROVES SUBDIVISION.
FOR: GILBERTO A. GRACIA, P.E.

PROVISIÓN DE AGUA: DESCRIPCIÓN, Y COSTOS.

OWA GROVES SUBSIDIARIO SERA PROVEISTA DE AGUA POTABLE POR LA COMPAÑIA DE AGUA SPECIAL UTILITY DISTRICT (AGUA SUD). EL SUBDIVIDOR Y LA COMPAÑIA DE AGUA, AGUA SUD FIRMARON UN CONTRATO POR EL CUAL LA SUBDIVISION RECIBIRA PROVISION DE AGUA SUFICIENTE POR LOS PROXIMOS 30 AÑOS Y LA COMPAÑIA DE AGUA SUD PRESENTE SUFICIENTE DOCUMENTACION PARA ESTABLECER A LARGO PLAZO LA CANTIDAD Y CALIDAD DE AGUA ABASTECIDA PARA SERVIR EL FUTURO DESARROLLO DE LA SUBDIVISION.

LA RANCHA SUD TIENE UNA LINEA DE **12"** DE DIAMETRO EXISTENTE, CORRIENDO POR EL LADO ESTE DE LA CALLE IOWA ROAD; TAMBIEN TIENE OTRA LINEA EXISTENTE DE 8" DE DIAMETRO LOCALIZADA EN LA ESQUINA SUROESTE DE ESTA PROPIEDAD.

EL SISTEMA DE AGUA PARA IOWA GROVES SUBDIVISION CONSISTE EN UNA LINEA DE AGUA DE 8" DE DIÁMETRO QUE SE CONECTA CON LA LINEA DE AGUA EXISTENTE DE 12" DE DIÁMETRO, DE AHI LA LINEA EXISTENTE CORRE 1,768.0 PIES POR UN EASEMENT DE AGUA SUD DE 15.0 PIES, POR EL LADO SUR DE VALERO DRIVE. DESPUES DE LA LINEA EXISTENTE SE ABRE AL NORTE Y AL SUR CORRIENDO EN AMBAS DIRECCIONES POR UN EASEMENT DE AGUA SUD DE 15.0 PIES, Y POR 300.00 PIES HACIA AMBOS LADOS Y AL NORTE TERMINA CON UNA VALVULA DE PURGA DE 8"; AL SUR SE CONECTA Y HACE CIRCUITO CON LA LINEA EXISTENTE QUE PROVIENE DE LA SUBDIVISION COHIBA AL SUR DE ESTA PROPIEDAD.

HA LA LINEA DE 8" DE DIÁMETRO SE DESPIENDEN DUELO (10) SERVICIOS DOBLES DE 2" DE DIÁMETRO Y DOS (2) SERVICIOS SENCILLOS DE 1" DE DIÁMETRO QUE VAN HACIA LOS MEDIDORES DE CADA LOTE. LAS LINEAS DE 8" DE DIÁMETRO, LAS LINEAS DE SERVICIOS DE AGUA, Y LAS CAJAS DE LOS MEDIDORES SE INSTALARON A UN COSTO TOTAL DE US\$ O US\$ POR LOTE. EL DUEÑO DE LA SUBDIVISIÓN PAGARÁ ADICIONALMENTE A AGUA SU CANTIDAD DE US\$ O US\$ POR LOTE DE ACUERDO AL CONTRATO Y DOCUMENTO DE 30 AÑOS DE SERVICIO DE AGUA POTABLE QUE CUBRE EL MEDIDOR DE AGUA, INCLUYENDO LOS COSTOS DE LA INSTALACIÓN DEL MEDIDOR, LOS COSTOS DE CONEXIÓN Y MEMBRANAS). EL DUEÑO DEL SOLAR SEGURO UN MEDIDOR DE AGUA, LA COMPAÑÍA DE AGUA SUO INSTALO EL MEDIDOR SIN COSTO ALGUNO AL LOTE. EL SISTEMA DE AGUA ESTARÁ EN FUNCIONAMIENTO COMPLETO ANTES O EN LA FECHA, EN LA CUAL LA SUBDIVISIÓN SEA REGISTRADA EN EL CONDAO DE HIDALGO.

PROVISION DE DRENAJE SANITARIO: DESCRIPCION Y COSTOS

SE INSTALO UNA FOSA SEPTICA EN CADA SOLAR DE LA SUBDIVISION **IOWA GROVES SUBDIVISION**. ESTA FOSA SEPTICA CONSISTE DE UN TANQUE SEPTICO DE MODELO **QUAL** Y DE UN CAMPO DE DRENAJE PARA EL SOLAR. EL EVALUADOR (LIC# 05 12258) 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 PLANEACION DEL CONDADO DE HIDALGO (HIDALGO COUNTY PLANNING DEPARTMENT) SEGUN EL REPORTE.

_____. (EXCAVACIONES ADICIONALES NO FUERON NECESARIAS PORQUE EL TERRENO EN ESTA ÁREA ES SIGNIFICANTEMENTE UNIFORME). EL TERRENO ES UNIFORME Y EL SUELO ES UN TIPO DE TIERRA DE ARANCO ARENOSO (CLASS II) Y SE EXTIENDE A 36 PULGADAS BAJO TODAS LAS EXCAVACIONES EXISTENTES. NO EXISTE EVIDENCIA DE AGUA 24 PULGADAS MAS ABAJO DE LO MAS BAJO DE LAS EXCAVACIONES EXISTENTES. EL AGUA EN ESTA ÁREA FLUYE BIEN

EL COSTO TOTAL PARA LA INSTALACIÓN DE UN SISTEMA INDIVIDUAL DE FOSAS SÉPTICAS POR SOLAR SON **US\$ 3,500.00**, INCLUYENDO EL COSTO DEL PERMISO DE CONSTRUCCIÓN Y LICENCIA, EN ESTOS MOMENTOS TODAS LAS FOSAS SÉPTICAS HAN SIDO INSTALADAS EN EL PROCESO DE LA APROBACIÓN FINAL, A UN COSTO TOTAL DE **US\$ 147,000.00** EL DEPARTAMENTO DE PLANEACIÓN DEL CONDADO DE HIDALGO HA INSPECCIONADO TODAS LAS FOSAS SÉPTICAS Y HA APROBADO LA INSTALACIÓN DE LAS FOSAS SÉPTICAS ANTES O EN LA FECHA, EN LA CUAL LA SUBDIVISIÓN SEA REGISTRADA EN EL CONDADO DE HIDALGO.

CERTIFICACION

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

AGUA: EL SISTEMA/SERVICIO DE AGUA ESTA TOTALMENTE CONSTRUIDO, CON LA INSTALACION DE LOS MEDIDORES DE AGUA, EL GRAN COSTO TOTAL ES DE US\$ _____ LO CUAL EQUIVALE A US\$ _____ POR LOTE.

DRENAJE: SE ESTIMA QUE LA FOSA SÉPTICA COSTARÁ \$ 3,500.00 A UN COSTO TOTAL DE \$ 147,000.00 TODA LA SUBDIVISIÓN.



GILBERTO A. GRACIA—P.E. No. 6247

This seal appearing on this document was authorized by Gilberto A. Gracia, P.E. No. 62477 on the above designated date.

AS-BUILT PLAN

DATE: 8/06/2026

COST ESTIMATE	
WATER DISTRIBUTION:	\$
PAVING IMPROVEMENTS:	\$
DRAINAGE IMPROVEMENTS:	\$
OSSF IMPROVEMENTS:	\$
TOTAL:	\$

OSSF ON-SITE SEWAGE FACILITIES

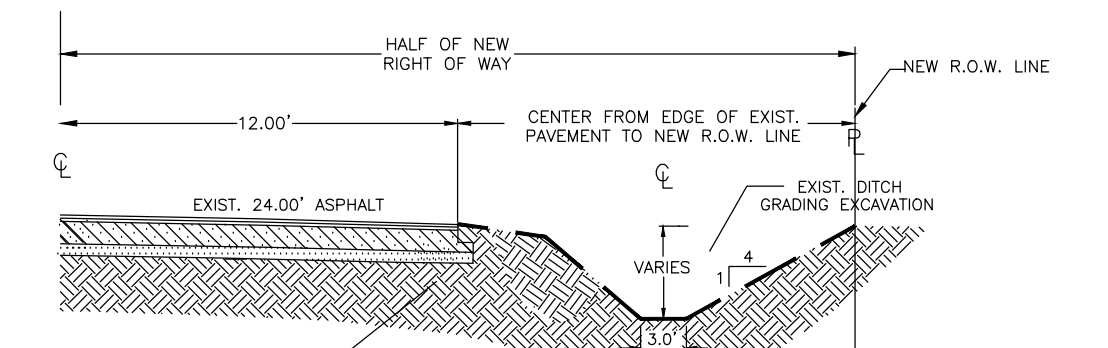
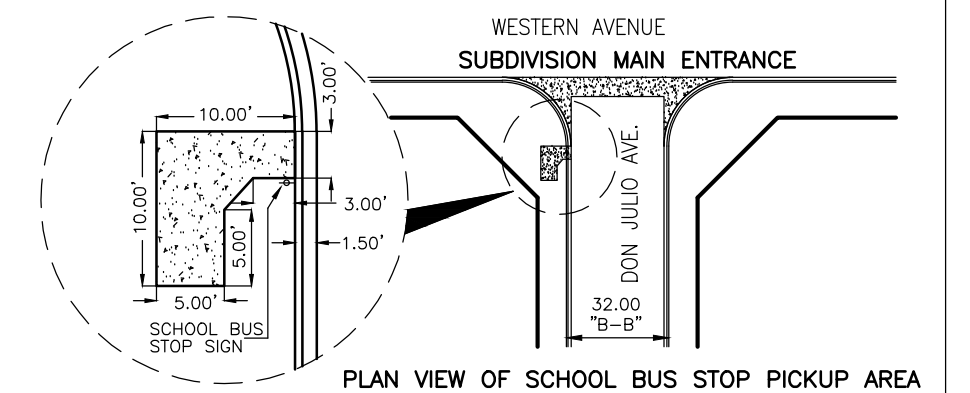
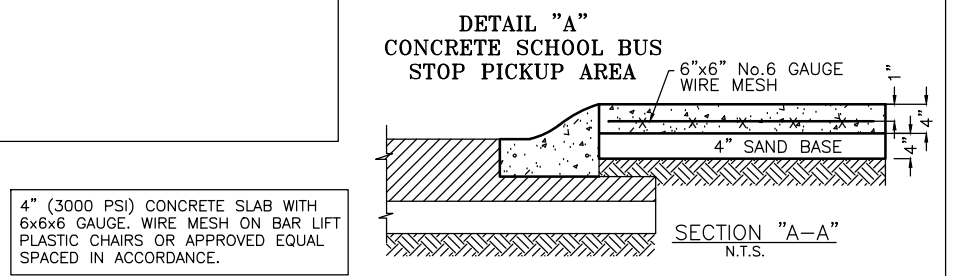
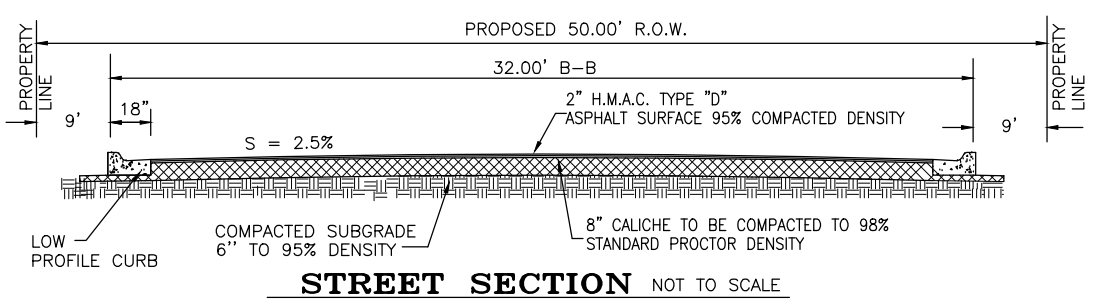
DATE OF PREPARATION:
08/07/26

IOWA GROVES SUBDIVISION
UTILITIES LAYOUT

IZAGUIRRE
Engineering Group LLC

2121 E GRIFFIN PKWY SUITE 2 F-10214 PHONE (956) 584-0554
MISSION TEXAS, 78574 FAX (956) 584-0049

SHEET NO. 2
OF 3 SHEETS



RECONSTRUCTION OF ROAD SIDE DITCH

I. PROJECT LOCATION
THIS SUBDIVISION CONSISTS OF 42 SINGLE FAMILY RESIDENTIAL LOTS LOCATED ON THE WEST SIDE OF IOWA RD & APPROXIMATELY 1.4500' SOUTH OF W MILE 8 RD. SAID SUBDIVISION, LIES WITHIN THE RURAL AREA OF HIDALGO COUNTY. A 24.30-ACRE TRACT SITUATED IN HIDALGO COUNTY, TEXAS AND OUT OF LOT 12 AND LOT 13, BLOCK 20, OF TEXAN GARDENS SUBDIVISION AS PER MAP OR PLAT THEREOF RECORDED IN VOLUME 8, PAGE 57-58 HIDALGO COUNTY MAP RECORDS, HIDALGO COUNTY.

II. FLOOD PLAN
THE SUBJECT TRACT IS LOCATED WITHIN FLOOD ZONE "X" (NO SHADING) INDICATES AREAS OF MINIMAL FLOODING. FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 480334 0290 D, MAP REVISED JUNE 6, 2000.

III. SOIL CONDITIONS
A REVIEW OF THE U.S. SOIL CONSERVATION SURVEY OF HIDALGO COUNTY INDICATES THAT THE PREDOMINANT SOIL OF THE SUBJECT SITE IS CLASSIFIED AS BRENNAH 3 (FINE SANDY LOAM) AND RAMADERO 50 (SANDY CLAY LOAM).

3- BRENNAH FINE SANDY LOAM (HYDROLOGIC GROUP B, UNIFIED CLASS SO), TYPICALLY FOUND WITH 0-1% SLOPES, CONSISTS OF A SURFACE LAYER OF DARK BROWN FINE SANDY LOAM ABOUT 12 INCHES THICK. THE NEXT SOIL LAYER DOWN, FROM 12 TO 26 INCHES, IS BROWN SANDY SOIL LAYER DOWN, FROM 26 TO 40 INCHES, IS PALE BROWN SANDY CLAY LOAM. THE SOIL DOWN THEREAFTER TO APPROXIMATELY 80 INCHES IS A VERY PALE BROWN SANDY CLAY LOAM. THIS SOIL (A) IS NONCALCAREOUS DOWN TO 28 INCHES, (B) IS WELL DRAINED, (C) HAS MEDIUM AVAILABLE WATER CAPACITY, (D) HAS MEDIUM SURFACE RUNOFF, (E) HAS MODERATE PERMEABILITY, (F) HAS AN OVERALL LOW SHRINK-SWELL POTENTIAL, (G) HAS A MODERATE HAZARD OF SOIL BLOWING, AND (H) HAS A SLIGHT HAZARD OF WATER EROSION.

50-RAMADERO SANDY CLAY LOAM, (SOIL GROUP C, UNIFIED CLASSIFICATION CL-CH) TYPICALLY, SLOPES RANGE FROM 0% TO 1% AND CONSIST OF A SURFACE LAYER OF DARK GRAYISH BROWN CLAY LOAM ABOUT 16 INCHES THICK. THE NEXT SOIL LAYER DOWN, FROM 16 TO 42 INCHES, IS LIGHT BROWNISH GRAY CLAY LOAM, AND BELOW THAT, FROM 42 TO 72 INCHES, IS PALE BROWN SILTY CLAY LOAM. THIS SOIL (A) IS CALCAREOUS THROUGHOUT, (B) IS MODERATELY WELL DRAINED, (C) HAS MODERATE TO HIGH AVAILABLE WATER CAPACITY, (D) HAS SLOW SURFACE RUNOFF, (E) HAS SLOW PERMEABILITY, (F) HAS A HIGH SHRINK-SWELL POTENTIAL, (G) HAS A SLIGHT HAZARD OF SOIL BLOWING, AND (H) HAS A SLIGHT TO MODERATE HAZARD OF WATER EROSION. SEE ATTACHED SOIL SURVEY OF HIDALGO COUNTY, TEXAS.

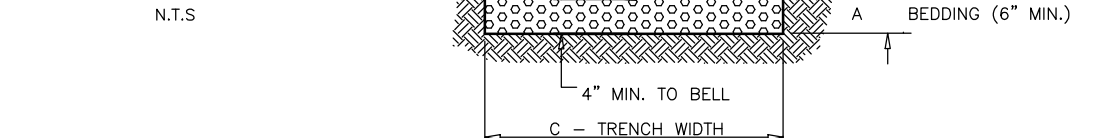
IV. EXISTING CONDITIONS
THE SUBJECT TRACT IS CURRENTLY UNDEVELOPED HEAVY BRUSH-LAND, EXISTING RUNOFF FROM THE SUBJECT SITE IS BY FORM OF SHEET OVERLAND FLOW TOWARDS THE WEST TOPOGRAPHIC ELEVATIONS OBTAINED FROM THE SITE INDICATE THAT THE EXISTING TERRAIN HAS A GRADE TO THE WEST APPROXIMATELY (0.46%).

THE RATIONALE METHOD WAS UTILIZED TO DETERMINE THE EXISTING 10-YEAR FREQUENCY EVENT STORM WATER RUNOFF (Q_{EXIST} = 26.38 CFS) FOR THIS SITE.

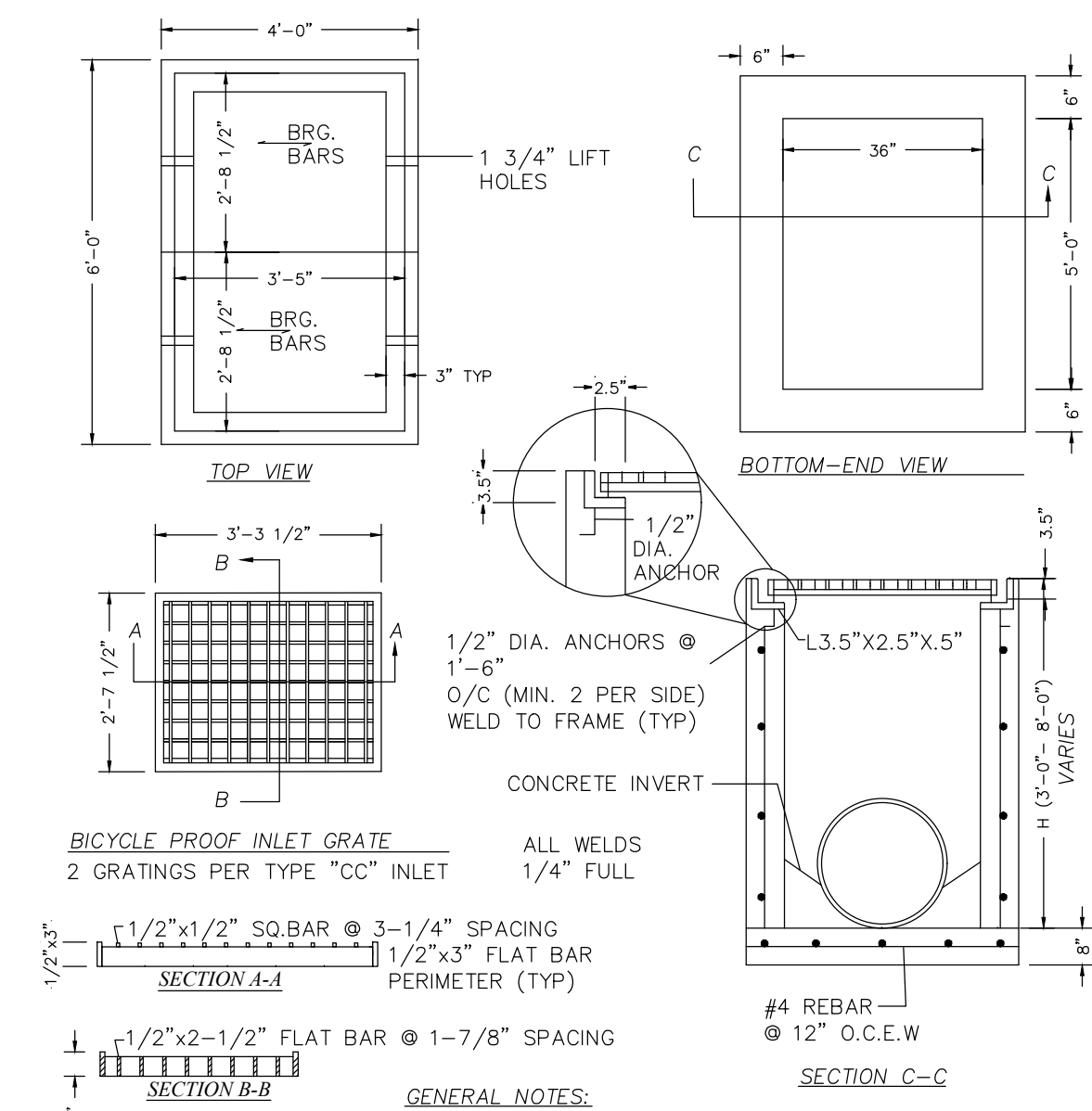
V. PROPOSED CONDITIONS
UTILIZING THE 50-YEAR FREQUENCY STORM EVENT, AFTER DEVELOPMENT OF THIS SUBDIVISION STORM WATER RUNOFF WILL BE 73.89 CFS WITH AN INCREASED 47.51 CFS. THE TOTAL PROPOSED DETENTION VOLUME, IN 1/2" OF DETENTION, IS 102,728.51 CFS. THE 50-YEAR FREQUENCY STORM EVENT, IS 51,791 CUBIC FEET (1.20 ACRES-FEET) (REFER TO ATTACHED DRAINAGE CALCULATIONS).

THE PROPOSED DEVELOPMENT SITE'S SURFACE STORMWATER RUNOFF WILL BE COLLECTED BY PROPOSED TYPE "A" INLETS. THE INLETS WILL CONVEY FLOW INTO PROPOSED STORM SEWER LINES, WHICH WILL CONNECT TO THE PROPOSED STORM SYSTEM FOR THE IOWA ACRES SUBDIVISION LOCATED WEST OF IOWA ROAD. THE PROPOSED STORM SEWER WITHIN IOWA ACRES WILL BE UNDESIGNED AS NECESSARY TO ACCOMMODATE THE ADDITIONAL FLOW FROM THIS DEVELOPMENT. THE COMBINED SYSTEM WILL ULTIMATELY DISCHARGE INTO A FUTURE LATERAL EXTENSION, WHICH IS CURRENTLY OWNED AND MAINTAINED BY IRRIGATION DISTRICT #16. AN ADDITIONAL HCCOI EAST ROW WILL BE DEDICATED BY IOWA ACRES PLAT, REQUIRED DETENTION VOLUME FOR BOTH IOWA ACRES AND IOWA GROVES WILL BE PROVIDED BY EXCAVATING THE ADDITIONAL ROW. A TOTAL OF 102,728.51 CF OF DETENTION VOLUME WILL BE PROVIDED.

STORM TRENCH BEDDING AND BACKFILL DETAILS



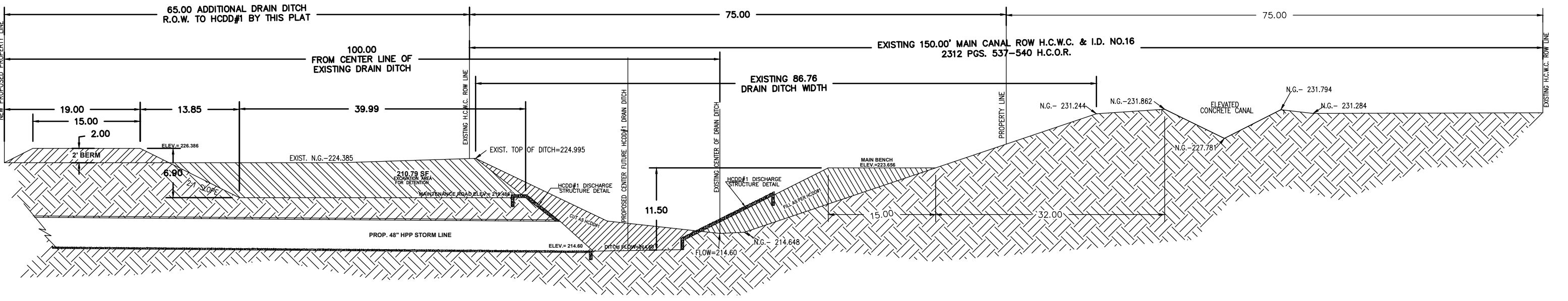
- A. BEDDING FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SAND AND/OR GRAVEL MAX BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW OF PIPE (MIN. COMPACTED THICKNESS = 6") - FIT RUN GRAVEL 2" MAX SIZE.
- B. HAUNCH FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS I OR CLASS II WITH A MAXIMUM P.I. OF 19 (ASTM D3321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.
- C. TRENCH WIDTH - SHALL BE BELL O.D. X 1.5 + 12" MINIMUM TRENCH WIDTH SHALL EQUAL STRUCTURE WIDTH + 4 FT. THROUGHOUT THE HEIGHT OF THE STRUCTURE.
- C-1 INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON CITY STREETS, PARKING AREAS, DRIVEWAYS, COUNTY ROADS & UNPAVED AREAS - SHALL BE SOIL TYPE A1, A2, A3 WITH A MAXIMUM P.I. OF 19 (ASTM D3321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.
- C-2 INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON STATE MAINTAINED ROADWAYS - COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D. AS PER ASTM D4253 AND ASTM D698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
- C-3 INITIAL BACKFILL FOR HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS I OR CLASS II WITH A MAXIMUM P.I. OF 19 (ASTM D3321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.
- D. FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE UNDER URBAN SECTIONS - SHALL BE CLASS I, II, III OR IV, COMPACTED TO 92% S.P.D. (12" LOOSE LIFT, MECHANICAL COMPACTION).
- D-1 FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON CITY STREETS, PARKING AREAS, DRIVEWAYS AND COUNTY ROADS - SHALL BE SOIL TYPE A1, A2, A3 WITH A MAXIMUM P.I. OF 19 (ASTM D3321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.
- D-2 FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON STATE MAINTAINED ROADWAYS - COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D. AS PER ASTM D4253 AND ASTM D698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
- D-3 FINAL BACKFILL FOR STRUCTURES (INLETS, MANHOLES, ETC.) - STRUCTURES UNDER THE ROADWAY AND UP TO 5 FT BEYOND THE EDGE OF PAVEMENT/BACK OF CURB SHALL HAVE CLASS I OR CLASS II (ASTM D3321) OR SOIL TYPE A1, A2, OR A3 (MSHTO M145) WITH A MAXIMUM P.I. OF 19 BACKFILL MATERIAL. STRUCTURES BEYOND 5 FT FROM THE E.O.P./B.O.C. SHALL HAVE CLASS I, II, III OR IV (ASTM D3321) BACKFILL MATERIAL. FOUNDATION PREPARATION (WELLPONTS, MINIMUM 4" GRAVEL OR CEMENTS STABILIZATION, OR APPROVED SUBSTITUTE) SHALL BE REQUIRED WHEN TRENCH BOTTOM IS UNSTABLE. BACKFILLING AT STRUCTURES SHALL BE PLACED IN UNIFORM LAYERS, MOTTLED AS REQUIRED TO APPROXIMATE OPTIMUM MOISTURE CONTENT AND COMPACTED TO 95% S.P.D. (USE RELATIVE DENSITY TEST PER ASTM D4253 & ASTM D698). THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 8".
- NOTES:
1. MAXIMUM COVER SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. FOR D-1 AND D-2 THE COMPACTION REQUIREMENT SHALL BE 92% S.P.D. WITHIN 12 IN. BELOW THE FLEXIBLE BASE.
3. FOR PAVED SECTIONS THE ABOVE REQUIREMENTS SHALL APPLY WHEN ANY PART OF THE TRENCH WIDTH IS WITHIN 5 FT. FROM THE E.O.P./B.O.C.
4. THE ABOVE REQUIREMENTS SHALL APPLY TO UTILITY PIPELINES AND UTILITY STRUCTURES OF OTHER UTILITY ENTITIES.



TYPE "C-C" INLET

NOT TO SCALE

COST ESTIMATE	
WATER DISTRIBUTION:	\$
PAVING IMPROVEMENTS:	\$
DRAINAGE IMPROVEMENTS:	\$
OSFS IMPROVEMENTS:	\$
TOTAL:	\$



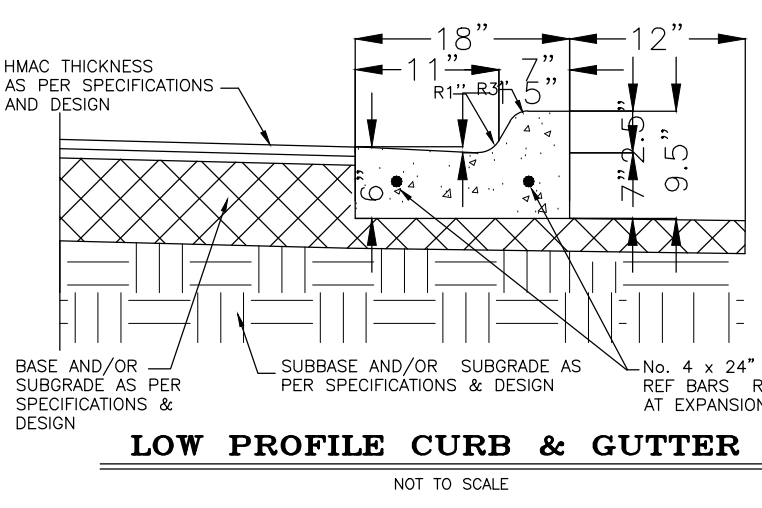
CROSS SECTION A-A

DRAIN DITCH LINEAR DETENTION EXCAVATION:
210.79 SF x 487.35 LF Drainage Ditch= 102,728.51 CF

IOWA ACRES DETENTION REQUIRED = 47,533 CF
IOWA GROVES DETENTION REQUIRED = 51,791 CF
TOTAL REQUIRED = 99,324 CF
DETENTION PROVIDED = 102,728.51 CF

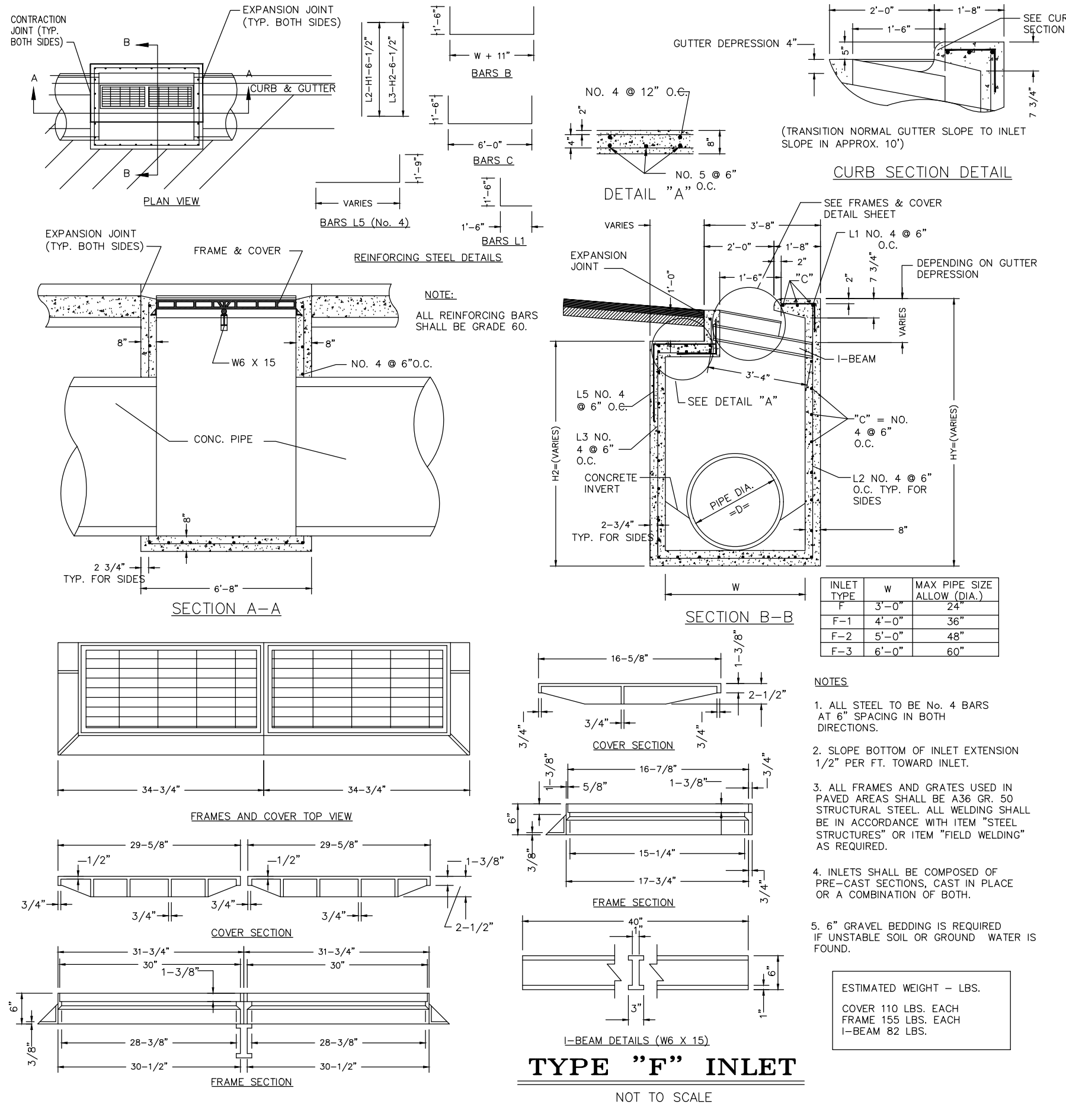
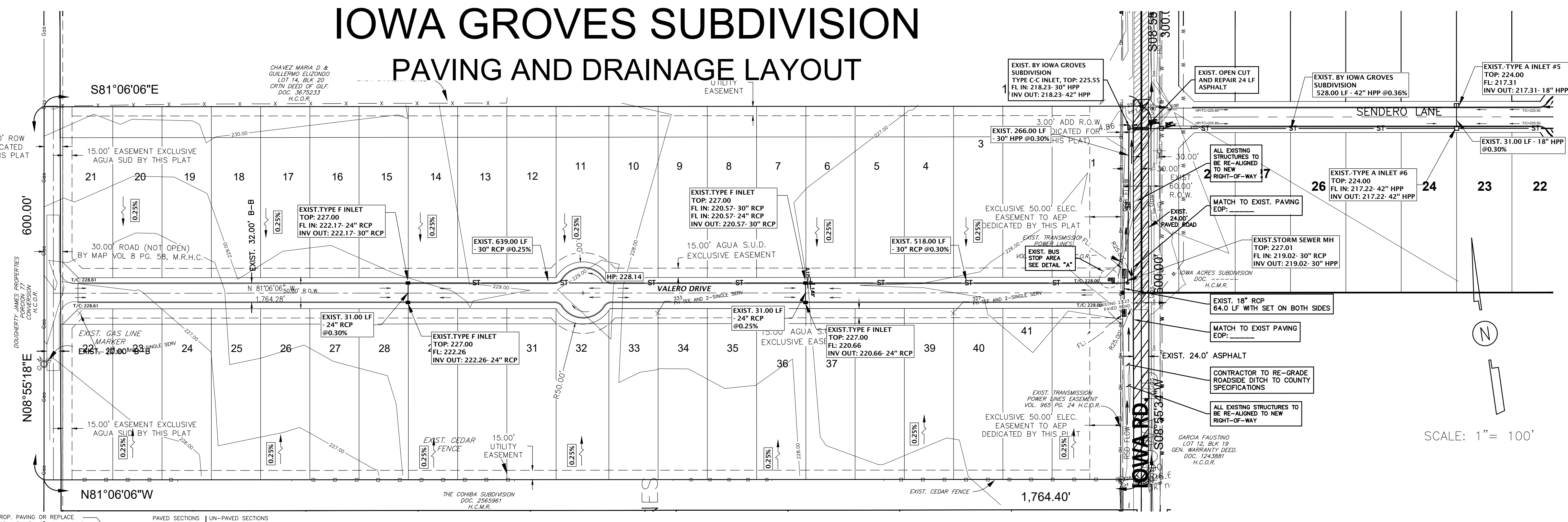


GILBERTO A. GRACIA-P.E. No. 62477
This seal appearing on this document was authorized by Gilberto A. Gracia, P.E., No. 62477 on the above designated date.



1. ALL HONEYCOMBING SHALL BE GROUTED TO PROVIDE A UNIFORM SURFACE.
2. WHEN HONEYCOMBING IS EXCESSIVE AS DETERMINED BY THE COUNTY OF HIDALGO COUNTY DESIGNATED REPRESENTATIVE, CURB AND GUTTER SHALL BE REPLACED.
3. BACKFILL BEHIND CURBS SHALL BE RECOMPACTED WITHIN 24 HOURS AFTER BACK FORM IS REMOVED OR 48 HOURS AFTER SLIP FORMING.
4. CURB AND GUTTER CONCRETE SHALL BE CLASS "A" (3000 PSI).
5. REINFORCED STEEL AS SHOWN.
6. MAX. LENGTH OF CURB AND GUTTER SECTION IS 8' BETWEEN 2" EXPANSION JOINT.

IOWA GROVES SUBDIVISION PAVING AND DRAINAGE LAYOUT



TYPE "F" INLET

NOT TO SCALE

INDEX OF SHEETS

- SHEET 1.- HEADING; INDEX; LOCATION MAP AND ETJ; PRINCIPAL CONTACTS; PLAT WITH LOTS, STREETS, AND EASEMENT DESIGNATIONS; LEGAL DESCRIPTION (METES AND BOUNDS); SURVEYOR'S AND ENGINEER'S CERTIFICATION; PLAT NOTES AND RESTRICTIONS; OWNERS DEDICATION, CERTIFICATION, AND ATTESTATION; COUNTY CLERK'S RECORDING CERTIFICATE; HIDALGO COUNTY CERTIFICATE OF PLAT APPROVAL; DESCRIPTION OF LOCATION OF SUBDIVISION WITH RESPECT TO THE ETJ OF A MUNICIPALITY AND DESIGNATE THE PRECINCT THE PROJECT IS SITUATED; H.C.D.D. CERTIFICATION; IRRIGATION DISTRICT CERTIFICATE OF APPROVAL; SWSC CERTIFICATION, P&Z CITY CERTIFICATION; REVISION NOTES.
- SHEET 2.- WATER DISTRIBUTION MAP, ON-SITE SEWAGE FACILITIES DISTRIBUTION MAP, ENGINEERING REPORT (ENGLISH AND SPANISH VERSION), INCLUDING DESCRIPTION OF WATER AND ENGINEER'S CERTIFICATION (ENGLISH AND SPANISH VERSION); TYPICAL WATER SERVICE CONNECTION; SUBDIVIDER CERTIFICATE AND STATEMENT.
- SHEET 2.1- AGUA SUD DETAIL SHEET
- SHEET 3.- PAVING DISTRIBUTION AND DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE AND HOW IT WILL SERVE THIS DEVELOPMENT; MAP OF TOPOGRAPHY AND DRAINAGE, AND ENGINEER'S CERTIFICATION; REVISION NOTES; TYPICAL ROADWAY SECTION; CURB AND GUTTER SECTION; VALLEY GUTTER SECTION; DETAILS.

AS-BUILT PLAN

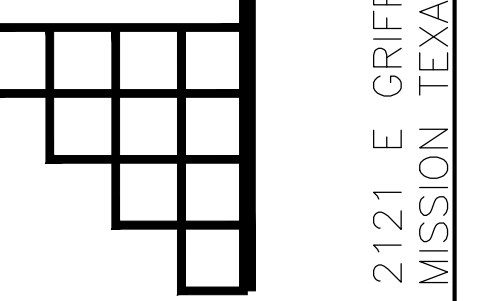
DATE: 8/06/2026

DATE OF PREPARATION:
08/07/26



IOWA GROVES SUBDIVISION
PAVING AND DRAINAGE LAYOUT
& STANDARD DETAILS

IZAGUIRRE
Engineering Group LLC.
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SHEET NO. 3
OF 3 SHEETS