



T.J. Arredondo
Director of Planning

HIDALGO COUNTY PLANNING DEPARTMENT

2818 S. BUSINESS HWY 281
EDINBURG TEXAS 78539
Tel. 956-318-2840 Fax. 956-318-2844

HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 5-30-2023

PROPOSED DOBLE RUEDA RANCH SUBDIVISION, PRECINCT No. 4.

ENGINEER: SAM ENGINEERING & SURVEYING DEVELOPER: MIGUEL AVITIA

PRELIMINARY APPROVAL FINAL APPROVAL FINAL APPROVAL WITH FINANCIAL GUARANTEE WITH VARIANCE

NUMBER OF LOTS: *SINGLE FAMILY 1 *MULTI-FAMILY COMMERCIAL INSTITUTIONAL

NUMBER OF STREETLIGHTS: N/A

FILLING STATIONS: 1

LOCATION DESCRIPTION: WEST OF TOWER ROAD APPROXIMATELY 500 FEET SOUTH OF RICHARDSON ROAD.

SUBDIVISION LIES WITHIN THE: ETJ OF EDINBURG.

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 1-27-2022 PROPERTY LIES WITHIN FLOOD ZONE: "X" AS PER FEMA.

DRAINAGE DESIGN: DRAINAGE WILL BE PROVIDED BY ONSITE DETENTION AT BUILDING PERMIT STAGE.

ROAD R.O.W. DEDICATION: 10.0 FEET ONTO TOWER ROAD.

H.C.R.O.W. FINAL APPROVAL DATE: 8-16-2022 BY, PRECINCT 4 R.O.W. AGENT

H.C.H.D. FINAL APPROVAL DATE: 5-16-2023 BY, ENVIRONMENTAL HEALTH DIVISION MANAGER

SEWER SYSTEM: OSSF'S HAVE BEEN INSTALLED.

WATER SERVICE PROVIDER: N.A.W.S.C. LINE SIZE: 12" LOCATION: TOWER ROAD.

H.C.E.O.C. FINAL APPROVAL DATE: 8-25-2022 : BY MARTIN RAMIREZ ENVIRONMENTAL COMPLIANCE COORDINATOR

SMALL CONSTRUCTION

The applicant has submitted the required small construction site notice 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: MARCH 22, 2022

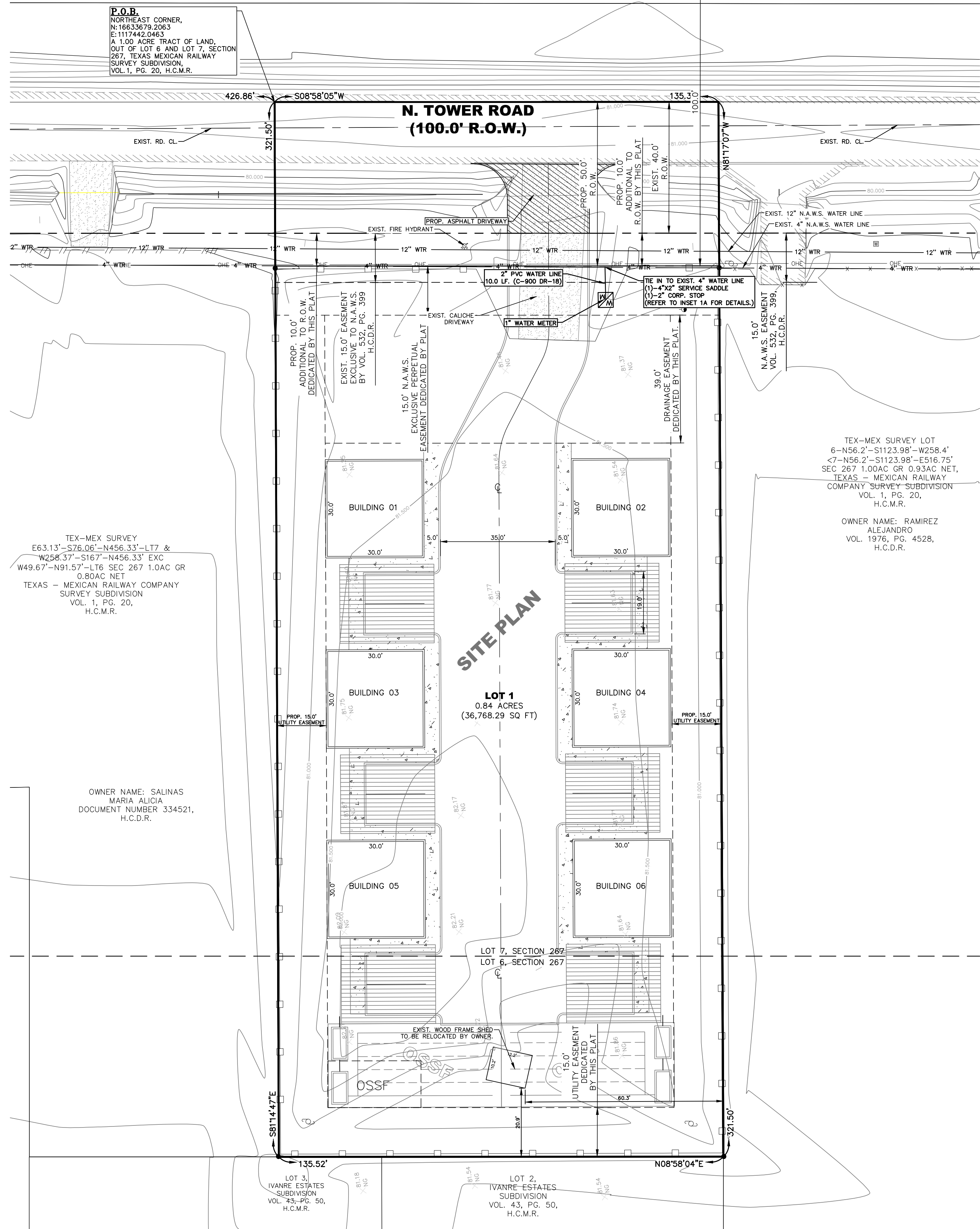
STAFF RECOMMENDS: **Preliminary Approval** subject to comments and future recommendations by planning,
other departments and the approval of the City of EDINBURG.

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.

DOBLE RUEDA RANCH SUBDIVISION UTILITY LAYOUT



P.O.B.
NORTHEAST CORNER,
N:16633679.2063
E:1117442.0463
A 1.00 ACRE TRACT OF LAND,
OUT OF LOT 6 AND LOT 7, SECTION
267, TEXAS MEXICAN RAILWAY
SURVEY SUBDIVISION
VOL. 1, PG. 20, H.C.M.R.

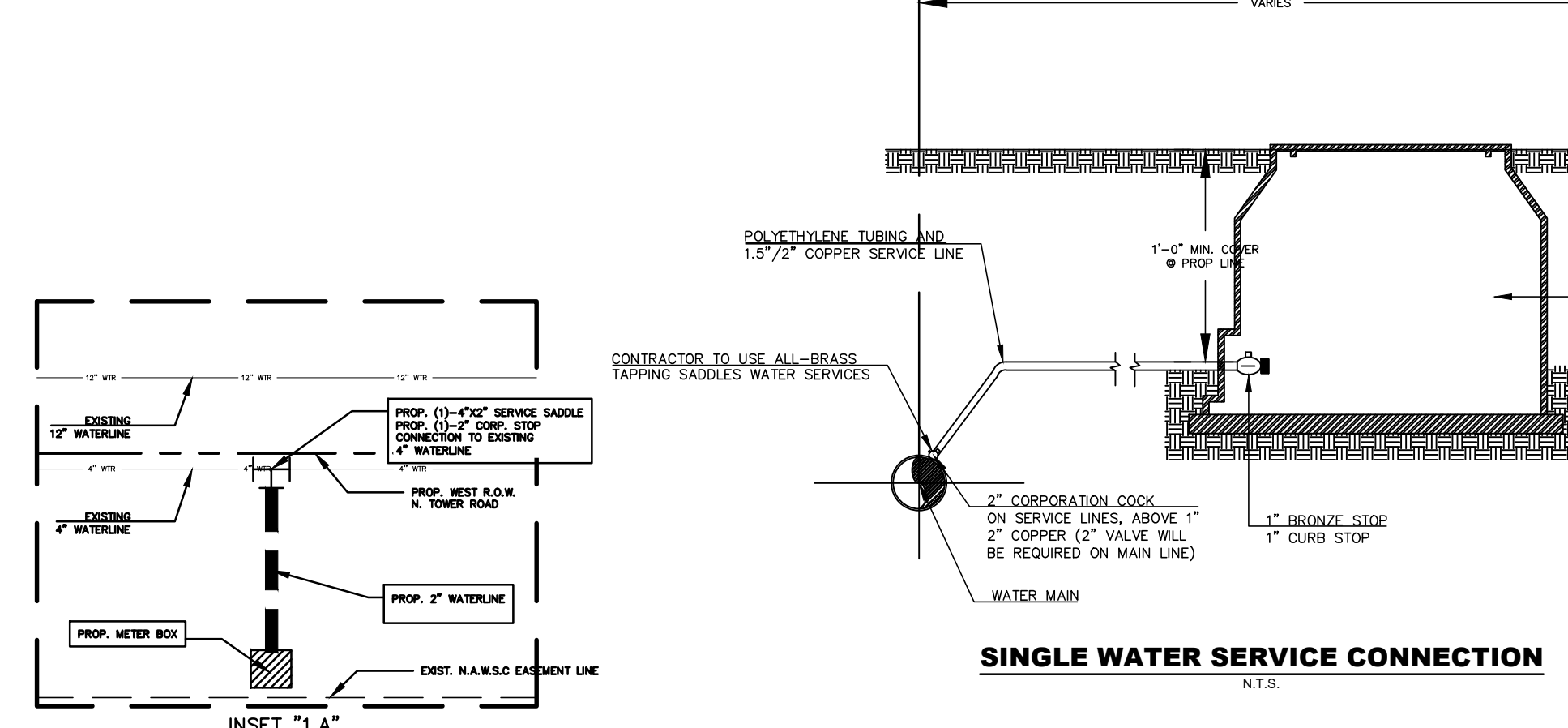
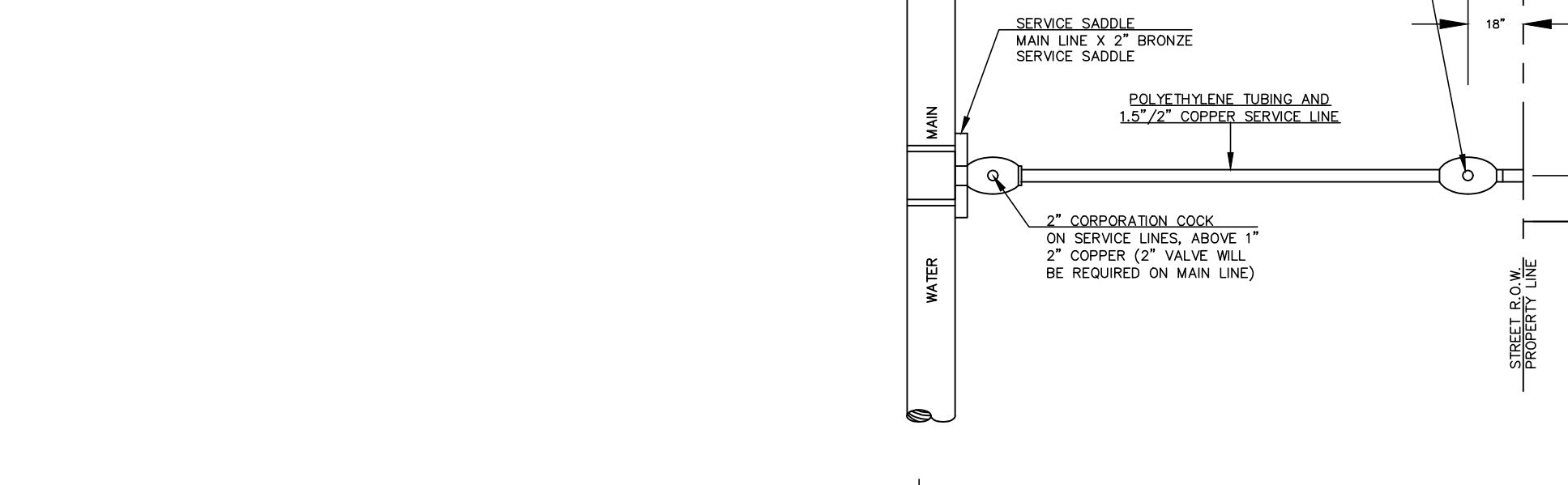
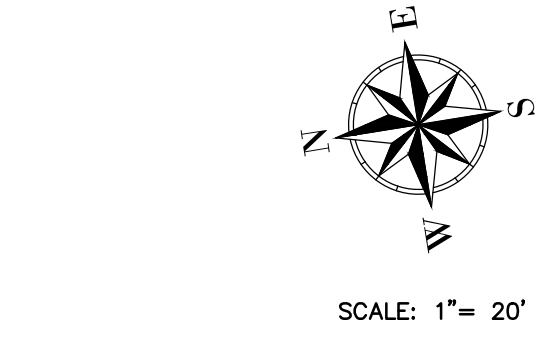
TEX-MEX SURVEY
E63.13'-S76.06'-N456.33'-L17 &
W256.37'-S167'-N456.33' EXC
W49.67'-N91.57'-L16 SEC 267 1.0AC GR
0.80AC NET
TEXAS - MEXICAN RAILWAY COMPANY
SURVEY SUBDIVISION
VOL. 1, PG. 20,
H.C.M.R.

OWNER NAME: SALINAS
MARIA ALICIA
DOCUMENT NUMBER 334521,
H.C.D.R.

LOT 3,
IVANRE-ESTATES
SUBDIVISION
VOL. 43, PG. 50,
H.C.M.R.

SITE PLAN

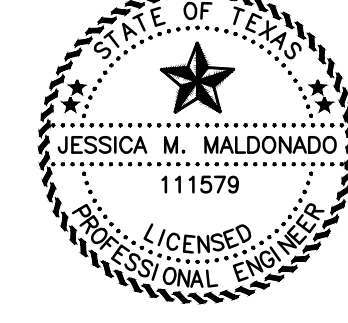
LOT 1
0.84 ACRES
(36,768.29 SQ FT)



SINGLE WATER SERVICE CONNECTION
N.T.S.

FINAL ENGINEERING REPORT:
WATER SUPPLY, DESCRIPTION, COST, AND OPERABILITY DATE:
DOBLE RUEDA RANCH SUBDIVISION HAS BEEN PROVIDED WITH POTABLE WATER BY NORTH ALAMO WATER SUPPLY CORPORATION (N.A.W.S.C.). THE SUBDIVIDER AND N.A.W.S.C. HAVE ENTERED INTO A CONTRACT IN WHICH N.A.W.S.C. HAS PROMISED TO PROVIDE SUFFICIENT WATER TO THE SUBDIVISION FOR AT LEAST 30 YEARS AND N.A.W.S.C. 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.
THE DEVELOPMENT WILL REQUIRE AT FULL BUILD OUT, THE DEVELOPER HAS TO PROVIDE N.A.W.S.C. WITH THE MUNICIPAL WATER RIGHTS NECESSARY TO PROVIDE WATER SERVICE TO THE SUBDIVISION. N.A.W.S.C. HAS A 4" WATER LINE RUNNING ALONG THE WEST RIGHT-OF-WAY LINE OF N. TOWER ROAD. THE DEVELOPER WILL CONNECT TO THE EXISTING WATERLINE LOCATED ALONG THE WEST RIGHT-OF-WAY OF N. TOWER ROAD AND EXTEND A NEW 2" WATERLINE APPROXIMATELY 100' TO THE WEST OF THE PROPERTY LINE OF LOT 1. A NEW SERVICE WATER LINE FOR DOBLE RUEDA RANCH SUBDIVISION WILL CONSIST OF CONNECTING A SINGLE WATER SERVICE 1" DIAMETER POLYETHYLENE WATER TUBING GOING INTO THE METER BOX AND TO BE WITHIN N.A.W.S.C. EXISTING EASEMENT. THE SUBDIVIDER HAS PAID N.A.W.S.C. THE SUM OF \$850.00 FOR LOT 1 AS STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH COVERS WATER METER, METER BOXES, WATER SUPPLY FEE AND ALL OTHER FEES ASSOCIATED WITH WATER SUPPLY. UPON REQUEST BY THE LOT OWNER, N.A.W.S.C. WILL PROMPTLY INSTALL AT NO CHARGE, THE WATER METER FOR THAT LOT. THE SUBDIVIDER WILL INSTALL NO FIRE HYDRANT. THE ENTIRE WATER FACILITIES HAVE BEEN APPROVED AND ACCEPTED BY N.A.W.S.C. AND WATER DISTRIBUTION SYSTEM IS OPERABLE AS OF THE DATE OF THE RECORDING OF THIS PLAN.
SEWAGE FACILITIES DESCRIPTION, COST AND OPERABILITY DATES
SEWAGE FROM DOBLE RUEDA RANCH SUBDIVISION WILL BE TREATED BY AN INDIVIDUAL ON-SITE SEWAGE FACILITIES ("OSSF") CONSISTING OF A STANDARD DESIGN DUAL COMPARTMENTS SEPTIC TANK AND A DRAIN FIELD ON EACH LOT. THE UNDERSIGNED PROFESSIONAL ENGINEER 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 HEALTH DEPARTMENT. EACH LOT HAS ADEQUATE AREA FOR A REPLACEMENT DRAIN FIELD.
EACH LOT IN THE PROPOSED SUBDIVISION IS AT LEAST 0.84 ACRE IN SIZE. THE NATURAL RESOURCE CONSERVATION SERVICE SOIL SURVEY BOOK INDICATED THAT 100.0% OF SITE COMPOSED OF HIDALGO SANDY CLAY LOAM (S8) WITH 0 TO 1 PERCENT SLOPES MODERATELY WELL DRAINED, AND HIGH PERMEABILITY. HIDALGO SANDY CLAY LOAM EXTEND UP TO 28 INCHES BELOW NATURAL GROUND WITH CLAY LOAM EXTENDING DEPTHS OF 28 - 80 INCHES. THE NATURAL DRAINAGE CLASS SPECIFIED FOR THIS PROPERTY IS MODERATELY WELL DRAINED WITH A NOTED RESTRICTIVE DEPTH TO BE MORE THAN 80 INCHES BELOW NATURAL GROUND. THERE IS NO INDICATION OF GROUNDWATER OR A RESTRICTIVE LAYER WITHIN 24" OF BOTTOM OF THE PROPOSED EXCAVATIONS. THE COST OF THE INSTALLATION OF THE SEPTIC SYSTEM, ON AN INDIVIDUAL LOT IS \$4,000.00, INCLUDING THE COST FOR THE REQUIRED PERMIT AND LICENSE. ALL OSSF'S HAVE BEEN INSTALLED AND FINALIZED AT THIS TIME AT A TOTAL COST OF \$4,000.00. THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ALL OSSF.

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 DISTRIBUTION SYSTEM AND 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 \$2,820.00 WHICH EQUALS TO \$2,820.00 FOR THE ENTIRE SUBDIVISION.
SEWAGE FACILITIES - SEPTIC SYSTEM HAS BEEN INSTALLED AT A TOTAL COST OF \$3,500.00 PER LOT (ALL INCLUSIVE), FOR A TOTAL OF \$7,000.00 FOR THE ENTIRE SUBDIVISION.

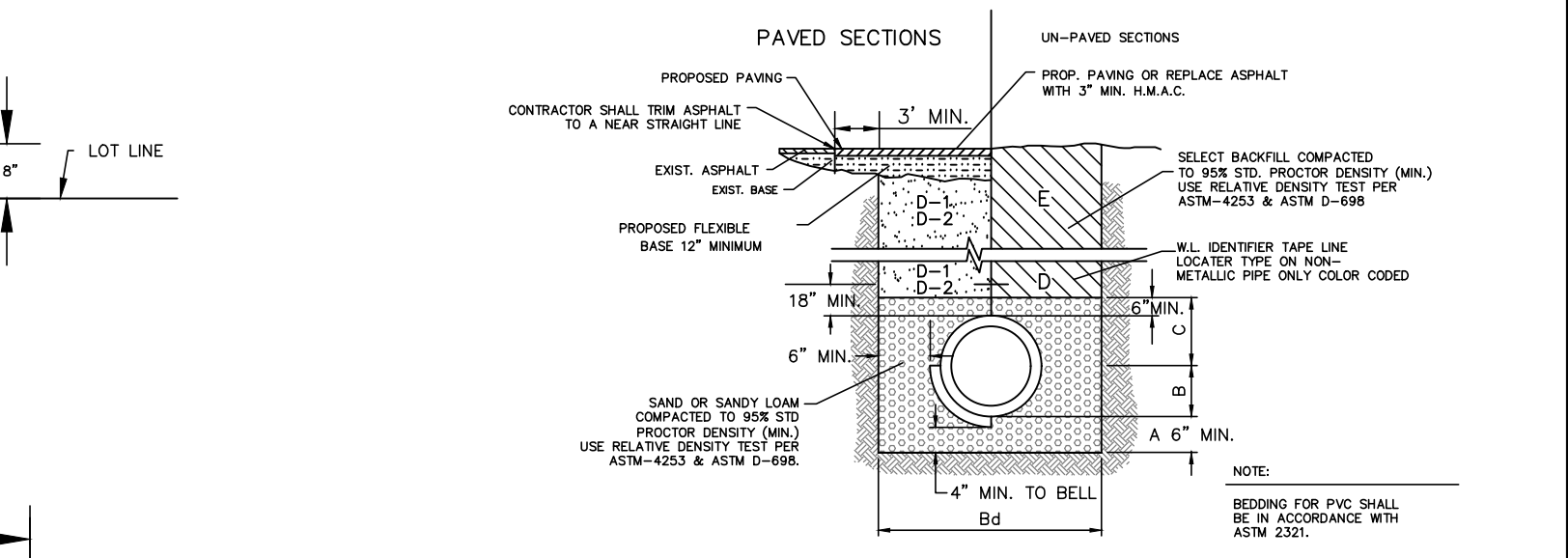
JESSICA M. MALDONADO, P.E. _____ DATE _____


NOTE:
1. EXISTING STRUCTURE TO BE RELOCATED TO CLEAR NEW RIGHT OF WAY AND EASEMENT.
2. CASING REQUIRED ON ALL SERVICES EXTENDING ACROSS ROAD WAY.
3. METER BOX TO BE PROVIDED BY DEVELOPER/OWNER.
4. WATER METER TO BE PROVIDED BY THE NORTH ALAMO WATER SUPPLY CORPORATION.
5. N.A.W.S.C. WILL DETERMINE THE SIZE OF WATER METER.
6. ALL WATER SERVICES SHALL BE INSTALLED INSIDE UTILITY EASEMENTS.
7. SITE PLAN SHOWN ONLY FOR REFERENCE OF FUTURE DEVELOPMENT OF LOT 1. OWNER OF LOT 1 SHALL APPLY FOR BUILDING PERMIT BEFORE ANY CONSTRUCTION ON SITE. THIS PLAN DOES NOT GRANT ANY APPROVAL OF SITE PLAN FROM COUNTY/ CITY OR ANY OTHER ENTITIES.

COST ESTIMATE
DRAINAGE IMPROVEMENTS: \$7,500.00
WATER DISTRIBUTION: \$2,820.00
OSSF: \$3,500.00

SUBDIVIDER CERTIFICATION:
BY COMPLETING THE IMPROVEMENTS DESCRIBED ON THIS PLAN, SUBDIVIDER WILL COMPLY WITH MINIMUM STATE STANDARDS AND THAT (a) WATER QUALITY AND CONNECTIONS INCLUDING WATER METERS TO THE LOTS MEET SUCH STANDARDS AND (b) SEWER CONNECTIONS TO THE LOTS OR SEPTIC TANKS MEET OR WILL MEET SUCH STANDARDS AND WILL BE CONSTRUCTED IN ACCORDANCE WITH STATE AND COUNTY REGULATIONS.
SUBDIVIDER STATEMENT:
I (WE) MIGUEL AVTIA AND MONICA AVTIA SUBDIVIDER OF DOBLE RUEDA RANCH SUBDIVISION, HEREBY CERTIFY SEWER PERMITS HAVE BEEN PAID AND ARE ON FILE WITH HIDALGO COUNTY HEALTH DEPARTMENT AND THAT AN ADEQUATE DRINKING WATER SERVICE IS IMMEDIATELY AVAILABLE TO EACH LOT OF THE TYPE, QUALITY AND QUANTITY TO ENABLE EACH PERSON PURCHASING A LOT TO HAVE ADEQUATE WATER TO COMPLY WITH THE REGULATIONS AND THE LAWS OF THE STATE REQUIRED BY STATE AND COUNTY REGULATIONS.

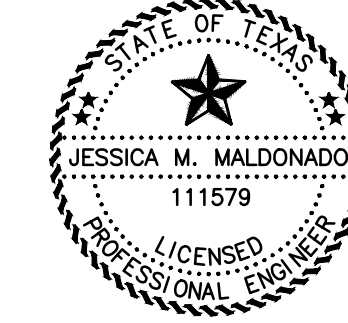
OWNER: MIGUEL AVTIA _____
OWNER: MONICA AVTIA _____



TRENCH BEDDING (WATER) DETAIL
N.T.S.

FINAL ENGINEERING REPORT:
SUMINISTRO DE AGUA, DESCRIPCION, COSTO, Y FECHA DE OPERABILIDAD:
DOBLE RUEDA RANCH SUBDIVISION, FINCAS SE PRESTARÁ CON AGUA POTABLE POR SUMINISTRO DE AGUA DE NORTH ALAMO WATER SUPPLY CORPORATION (N.A.W.S.C.). EL SUBDIVIDOR Y EL SUMINISTRO DE AGUA DE N.A.W.S.C. HAN ENTRADO EN UN CONTRATO DE ABASTECIMIENTO DE AGUA. N.A.W.S.C. HA PROMETIDO PROPORCIONAR SUFICIENTE AGUA A LA SUBDIVISION EN AL MENOS 30 AÑOS. ABASTECIMIENTO DE AGUA DE N.A.W.S.C. HA PROPORCIONADO SUFICIENTE DOCUMENTACION PARA ESTABLECER LA CANTIDAD LARGO PLAZO Y LA CALIDAD DE LOS SUMINISTROS DE AGUA DISPONIBLE PARA SERVIR EL PLENO DESARROLLO DE ESTA SUBDIVISION.
N.A.W.S.C. TIENE UNA LINEA DE AGUA DE 4" QUE CORRE A LO LARGO DE LA VÍA DEL OESTE DE N. TOWER ROAD UBICADA AL ESTE DEL DESARROLLO. EL DESARROLLADOR SE CONECTARÁ A ESTA LINEA E INSTALARÁ 100 PIES LINEALES DE 2" DE LINEA DE AGUA HASTA UN PUNTO AL ESTE DEL DESARROLLO. EL SERVICIO DE LA LINEA PRINCIPAL DE AGUA DE FINCAS DE DOBLE RUEDA RANCH SUBDIVISION CONSISTIRÁ DE 1 CONEXION DE AGUA DE 2" PULGADAS DE DIAMETRO PROPUESTA PARA EL SERVICIO QUE MIDE 1" DE DIAMETRO TIPO POLIETILENO INCLUYENDO 1 LINEA DE SERVICIO A LA CAJA DEL MEDIDOR. EL SUBDIVIDOR HA PAGADO UN TOTAL DE \$850.00 DOLÁRES PARA LAS MEJORAS DE AGUA MENCIONADAS PARA LOTE 2 COMO DECLARO EN EL ACUERDO DE SERVICIO DE AGUA DE 30 AÑOS QUE CUBRE EL CONTADOR DE AGUAMETROS CUADROS. PAGO DE ABASTECIMIENTO DE AGUA Y TODOS LOS OTROS GASTOS RELACIONADOS CON EL ABASTECIMIENTO DE AGUA A PETICION DEL PROPIETARIO DEL LOTE. N.A.W.S.C. INSTALARÁ RAPIDAMENTE SIN COSTO ALGUNO EL CONTADOR DE AGUA PARA ESE LOTE.
EL NUEVO SISTEMA DE DISTRIBUCION DE AGUA PARA LA SUBDIVISION DOBLE RUEDA RANCH NO INCLUYE SISTEMA DE DISTRIBUCION DE AGUA ADICIONAL. EL DUEÑO NO INSTALARÁ NINGUN HIRRIANTE.
DRENAJE, DESCRIPCION, COSTO, Y FECHA DE OPERABILIDAD
EL DRENAJE SANITARIO DE LA SUBDIVISION DOBLE RUEDA RANCH, SERÁ TRATADO CON SERVICIOS LOCALES ("OSSF") CONSISTIENDO EN UN DISEÑO ESTANDAR DE FOSA SEPTICA DE COMPARTIMIENTO DOBLE Y AREA DE DRENAJO INDIVIDUAL EN EL LOTE. 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 ESTE TIPO DE FOSAS SEPTICAS (OSSF). EL REPORTE FUE APROBADO POR EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO (HIDALGO COUNTY HEALTH DEPARTMENT). CADA LOTE TIENE EL AREA ADECUADA PARA REEMPLAZAR EL CAMPO DE DRENAJO.
EL LOTE EN LA SUBDIVISION PROPUESTA ES POR LO MENOS DE 0.84 ACRE. EL LIBRO DE LA CONSERVACION DE LOS RECURSOS NATURALES INDICA QUE 100.0% DEL SITIO COMPUESTO DE HIDALGO ARENA MARGA ARCILLOSA (S8) CON 0 A 1 PORCIENTO DE PENDIENTES MODERATEMENTE DRENAJABLES Y UNA ALTA PERMEABILIDAD. EL SUELO HIDALGO ARENA MARGA ARCILLOSA SE EXTIENDE HASTA 28 PULGADAS DEBAJO DEL TERRENO NATURAL, CON MARGA ARCILLOSA EXTENDIENDOSE ENTRE LA PROFUNDIDAD DE 28 - 80 PULGADAS. LA CLASE NATURAL DEL DRENAJE ESPECIFICADA PARA ESTA PROPIEDAD SERA "BENA DRENAJE" CON UNA NOTA RESTRICTIVA DE PROFUNDIDAD QUE SEA MAS DE 80 PULGADAS POR DEBAJO DEL SUELO NATURAL. NO HAY NINGUNA INDICACION DE AGUA SUBTERRANEA O UN CAPA RESTRICTIVA DENTRO DE 24" POR DEBAJO DELA PROPUESTA EXCAVACIONES. EL COSTO ESTIMADO PARA INSTALAR UNA SISTEMA DE FOSA SEPTICA EN UN TERRENO INDIVIDUAL ES DE \$2,000.00, INCLUYENDO EL COSTO PARA EL PERMISO Y LA LICENCIA REQUERIDOS. OSSF FUE INSTALADO AL TIEMPO DE LA APLICACION PARA LA APROBACION FINAL DE LA SUBDIVISION CON UN COSTO TOTAL DE SISTEMA DE FOSA SEPTICA DE \$2,000.00 EL CONDADO DE DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO (HIDALGO HEALTH DEPARTMENT) AH INSPECCIONADO Y APROBADO LA INSTALACION DE TODOS LOS SISTEMAS SEPTICOS.

ENGINEER CERTIFICATION:
BAJO MI FIRMA, CERTIFICO QUE LOS SERVICIOS Y SISTEMAS DE AGUA Y DE DRENAJE, DESCRITOS EN ESTE DOCUMENTO, CUMPLAN CON LAS NORMAS DEL PROCESO DE SUBDIVISION, 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 DE DRENAJE SON:
SERVICIOS DE AGUA- LOS SERVICIOS DE AGUA SERAN COMPLETAMENTE CONSTRUIDOS, Y INSTALADOS CON MEDIDORES DE AGUA, CON UN COSTO TOTAL DE \$2,820.00, CUAL ES IGUAL A \$2,820.00 PARA TODA LA SUBDIVISION.
SERVICIOS DE DRENAJE SANITARIO- SISTEMA SEPTICO A SIDO INSTALADO CON UN COSTO TOTAL DE \$3,500.00 POR LOTE (TODOS INCLUSIVE), CON UN TOTAL DE \$3,500.00 PARA TODA LA SUBDIVISION.

JESSICA M. MALDONADO, P.E. _____ DATE _____


STATE OF TEXAS
COUNTY OF HIDALGO:
BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED MIGUEL AVTIA AND MONICA AVTIA KNOWN TO ME BY THE PERSON (S) WHOSE NAME (S) IS (ARE) DESCRIBED TO SUCH STANDARDS AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR PURPOSE AND CONSIDERATION THEREIN STATED, GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS THE _____ DAY OF _____ 20____.

NOTARY PUBLIC _____
MY COMMISSION EXPIRES _____

INDEX TO SHEETS OF DOBLE RUEDA RANCH SUBDIVISION	
SHEET 1	HEADING; INDEX; LOCATION MAP; AND ETC.; PRINCIPAL CONTACTS; PLAT WITH LOT AND EASEMENT DESIGNATIONS; LEGAL DESCRIPTION (METES AND BOUNDS); SURVEYOR'S AND ENGINEER'S CERTIFICATION; PLAT NOTES AND RESTRICTIONS; OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION; CITY OF APPROVAL CERTIFICATE; COUNTY CLERK'S RECORDING CERTIFICATE; HIDALGO COUNTY JUDGE CERTIFICATE OF PLAT APPROVAL; DESCRIPTION OF LOCATION OF SUBDIVISION WITH RESPECT OF A MUNICIPALITY AND DESIGNATE THE PRECINCT THE PROJECT IS SITUATED; H.C.D. No. 1 CERTIFICATION; H.C.IRRIGATION DISTRICT E.C. AND H.C.H.D. REVISION NOTES.
SHEET 2	WATER DISTRIBUTION AND SANITARY SEWER MAP; TYPICAL WATER SERVICE CONNECTION; REVISION NOTES; ENGINEERING REPORT (ENGLISH AND SPANISH VERSION), INCLUDING DESCRIPTION OF WATER AND WASTE WATER AND ENGINEER'S CERTIFICATION (ENGLISH AND SPANISH VERSION); OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION; WATER DISTRIBUTION AND SANITARY SEWER MAP; TYPICAL WATER SERVICE CONNECTION.
SHEET 3	DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE AND HOW IT WILL SERVE THIS DEVELOPMENT; MAP OF TOPOGRAPHY AND DRAINAGE, AND ENGINEER'S CERTIFICATION; REVISION NOTES; & CONSTRUCTION DETAILS.

NO.	SHEET	REVISION	DATE	APPROVED

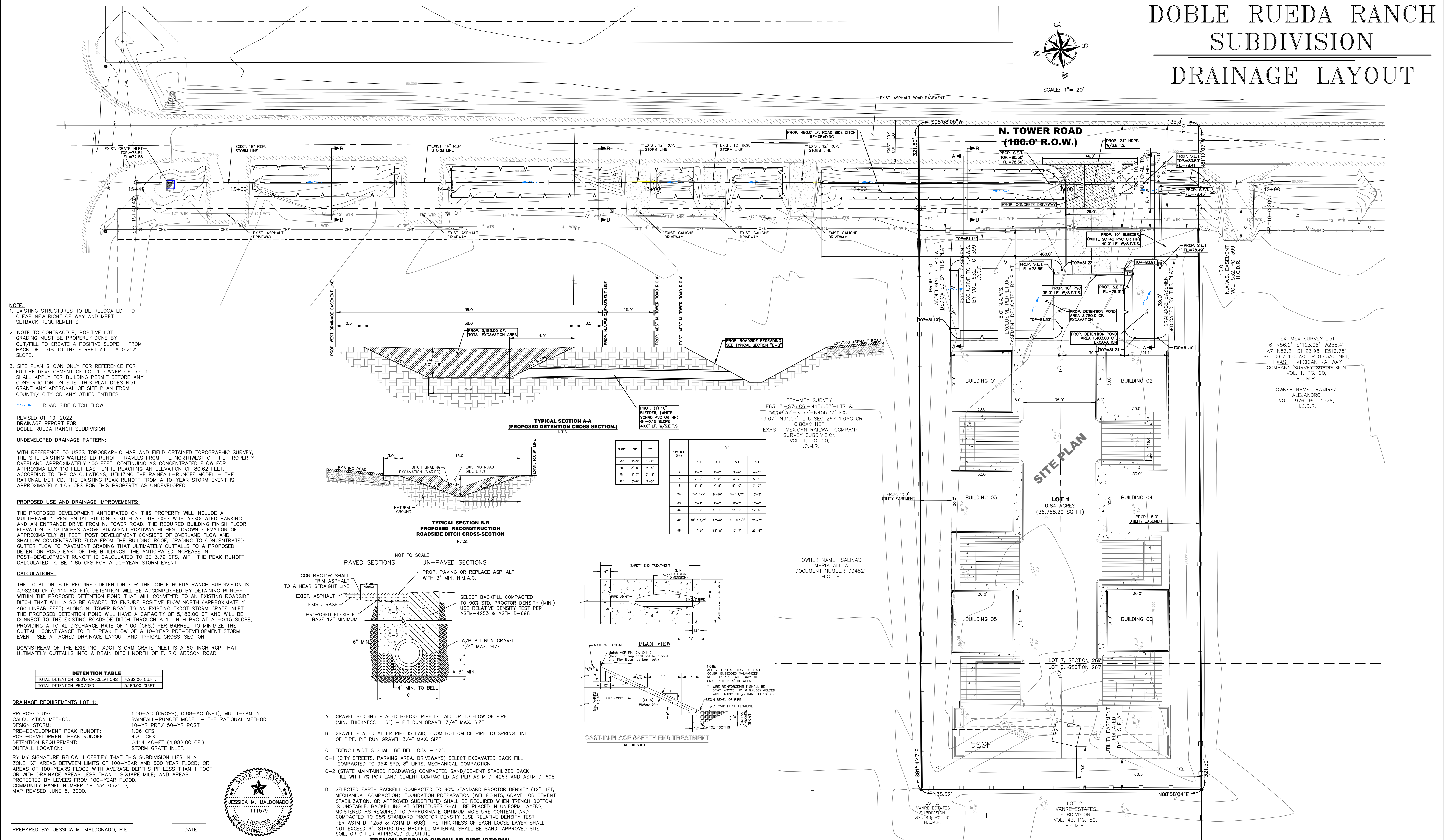
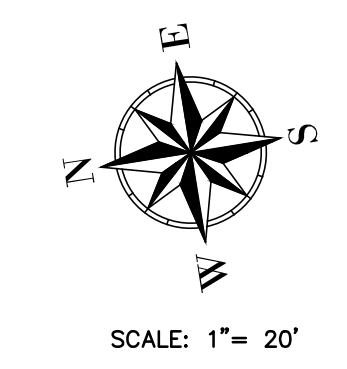
PRINCIPAL CONTACTS:

OWNER:	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	MIGUEL AVTIA	515 N. TOWER ROAD	EDINBURG, TX, 78542	(956) 703-1420	(000) 000-0000
OWNER:	MONICA AVTIA	515 N. TOWER ROAD	EDINBURG, TX, 78542	(956) 703-1420	(000) 000-0000
ENGINEER:	JESSICA M. MALDONADO	200 S. 10TH ST., SUITE 1500	McALLEN, TX 78501	(956) 702-8880	(956) 702-8883
SURVEYOR:	SAMUEL D. MALDONADO, RPLS	200 S. 10TH ST., SUITE 1500	McALLEN, TX 78501	(956) 702-8880	(956) 702-8883

DATE OF PREPARATION: September 2022
REGISTRATION No. F-10602

SAMES SAM Engineering & Surveying, Inc.
200 S. 10TH ST. SUITE 1500. TEL: (956) 702-8880
McALLEN, TEXAS 78501 FAX: (956) 702-8883

DOBLE RUEDA RANCH SUBDIVISION DRAINAGE LAYOUT



NOTE:
 1. EXISTING STRUCTURES TO BE RELOCATED TO CLEAR NEW RIGHT OF WAY AND MEET SETBACK REQUIREMENTS.
 2. NOTE TO CONTRACTOR, POSITIVE LOT GRADING MUST BE PROPERLY DONE BY CUT/FILL TO CREATE A POSITIVE SLOPE FROM BACK OF LOTS TO THE STREET AT A 0.25% SLOPE.
 3. SITE PLAN SHOWN ONLY FOR REFERENCE FOR FUTURE DEVELOPMENT OF LOT 1, OWNER OF LOT 1 SHALL APPLY FOR BUILDING PERMIT BEFORE ANY CONSTRUCTION ON SITE. THIS PLAN DOES NOT GRANT ANY APPROVAL OF SITE PLAN FROM COUNTY/ CITY OR ANY OTHER ENTITIES.

REVISED 01-19-2022
DRAINAGE REPORT FOR:
 DOBLE RUEDA RANCH SUBDIVISION
UNDEVELOPED DRAINAGE PATTERN:

WITH REFERENCE TO USGS TOPOGRAPHIC MAP AND FIELD OBTAINED TOPOGRAPHIC SURVEY, THE SITE EXISTING WATERSHED RUNOFF TRAVELS FROM THE NORTHWEST OF THE PROPERTY OVERLAND APPROXIMATELY 100 FEET, CONTINUING AS CONCENTRATED FLOW FOR APPROXIMATELY 110 FEET EAST UNTIL REACHING AN ELEVATION OF 80.62 FEET. ACCORDING TO THE CALCULATIONS, UTILIZING THE RAINFALL-RUNOFF MODEL - THE RATIONAL METHOD, THE EXISTING PEAK RUNOFF FROM A 10-YEAR STORM EVENT IS APPROXIMATELY 1.06 CFS FOR THIS PROPERTY AS UNDEVELOPED.

PROPOSED USE AND DRAINAGE IMPROVEMENTS:
 THE PROPOSED DEVELOPMENT ANTICIPATED ON THIS PROPERTY WILL INCLUDE A MULTI-FAMILY, RESIDENTIAL BUILDINGS SUCH AS DUPLEXES WITH ASSOCIATED PARKING AND AN ENTRANCE DRIVE FROM N. TOWER ROAD. THE REQUIRED BUILDING FINISH FLOOR ELEVATION IS 18 INCHES ABOVE ADJACENT ROADWAY HIGHEST CROWN ELEVATION OF APPROXIMATELY 81 FEET. POST DEVELOPMENT CONSISTS OF OVERLAND FLOW AND SHALLOW CONCENTRATED FLOW FROM THE BUILDING ROOF, GRADING TO CONCENTRATED GUTTER FLOW TO PAVEMENT GRADING THAT ULTIMATELY OUTFALLS TO A PROPOSED DETENTION POND EAST OF THE BUILDINGS. THE ANTICIPATED INCREASE IN POST-DEVELOPMENT RUNOFF IS CALCULATED TO BE 3.79 CFS, WITH THE PEAK RUNOFF CALCULATED TO BE 4.85 CFS FOR A 50-YEAR STORM EVENT.

CALCULATIONS:
 THE TOTAL ON-SITE REQUIRED DETENTION FOR THE DOBLE RUEDA RANCH SUBDIVISION IS 4,982.00 CF (0.114 AC-FT). DETENTION WILL BE ACCOMPLISHED BY DETAINING RUNOFF WITHIN THE PROPOSED DETENTION POND THAT WILL CONVEYED TO AN EXISTING ROADSIDE DITCH THAT WILL ALSO BE GRADED TO ENSURE POSITIVE FLOW NORTH (APPROXIMATELY 460 LINEAR FEET) ALONG N. TOWER ROAD TO AN EXISTING TxDOT STORM GATE INLET. THE PROPOSED DETENTION POND WILL HAVE A CAPACITY OF 5,183.00 CF AND WILL BE CONNECT TO THE EXISTING ROADSIDE DITCH THROUGH A 10 INCH PVC AT A -0.15 SLOPE, PROVIDING A TOTAL DISCHARGE RATE OF 1.00 (CFS.) PER BARREL. TO MINIMIZE THE OUTFALL CONVEYANCE TO THE PEAK FLOW OF A 10-YEAR PRE-DEVELOPMENT STORM EVENT, SEE ATTACHED DRAINAGE LAYOUT AND TYPICAL CROSS-SECTION.

DOWNSSTREAM OF THE EXISTING TxDOT STORM GATE INLET IS A 60-INCH RCP THAT ULTIMATELY OUTFALLS INTO A DRAIN DITCH NORTH OF E. RICHARDSON ROAD.

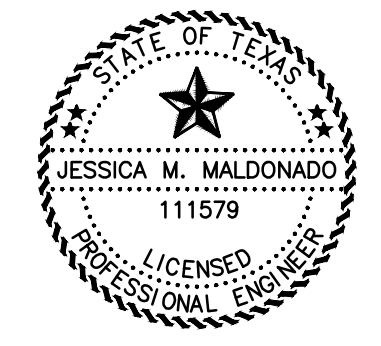
DETENTION TABLE	
TOTAL DETENTION REQ'D CALCULATIONS	4,982.00 CU.FT.
TOTAL DETENTION PROVIDED	5,183.00 CU.FT.

DRAINAGE REQUIREMENTS LOT 1:

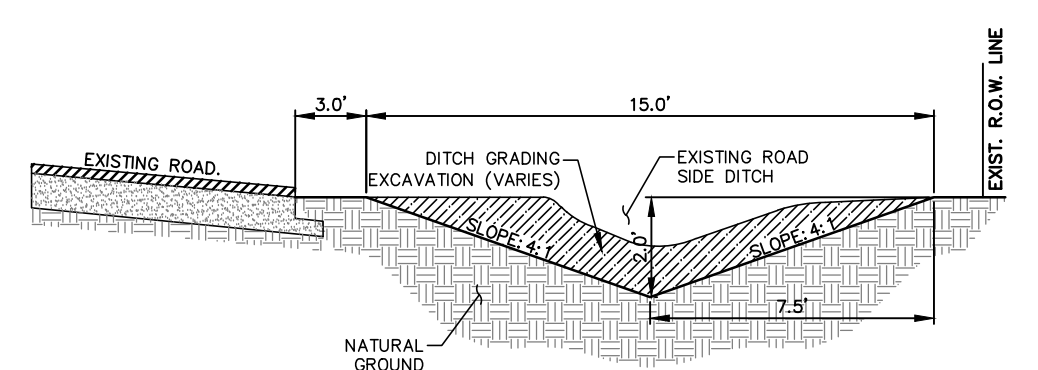
PROPOSED USE: 1.00-AC (GROSS), 0.86-AC (NET), MULTI-FAMILY.
 CALCULATION METHOD: RAINFALL-RUNOFF MODEL - THE RATIONAL METHOD
 DESIGN STORM: 10-YR PRE/ 50-YR POST
 PRE-DEVELOPMENT PEAK RUNOFF: 1.06 CFS
 POST-DEVELOPMENT PEAK RUNOFF: 4.85 CFS
 DETENTION REQUIREMENT: 0.114 AC-FT (4,982.00 CF.)
 OUTFALL LOCATION: STORM GATE INLET.

BY MY SIGNATURE BELOW, I CERTIFY THAT THIS SUBDIVISION LIES IN A ZONE "X" AREAS BETWEEN LIMITS OF 100-YEAR AND 500 YEAR FLOOD; OR AREAS OF 100-YEARS FLOOD WITH AVERAGE DEPTHS PF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 100-YEAR FLOOD.
 COMMUNITY PANEL NUMBER 480334 0325 D.
 MAP REVISED JUNE 6, 2000.

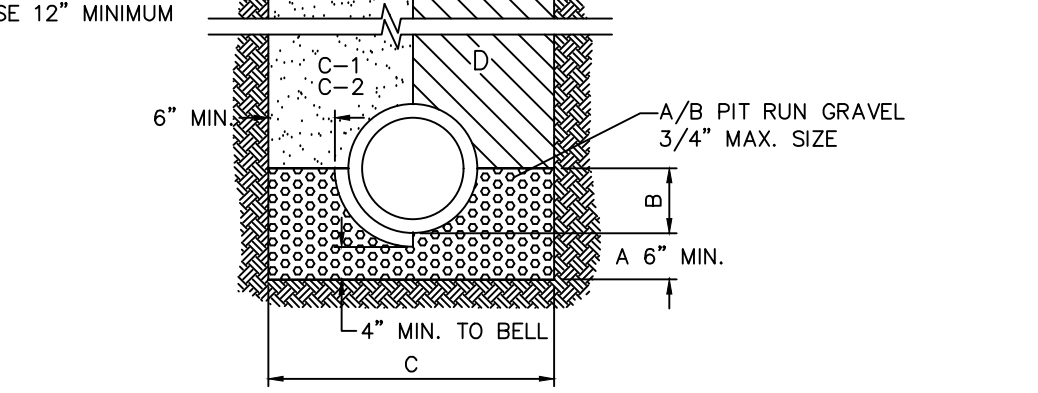
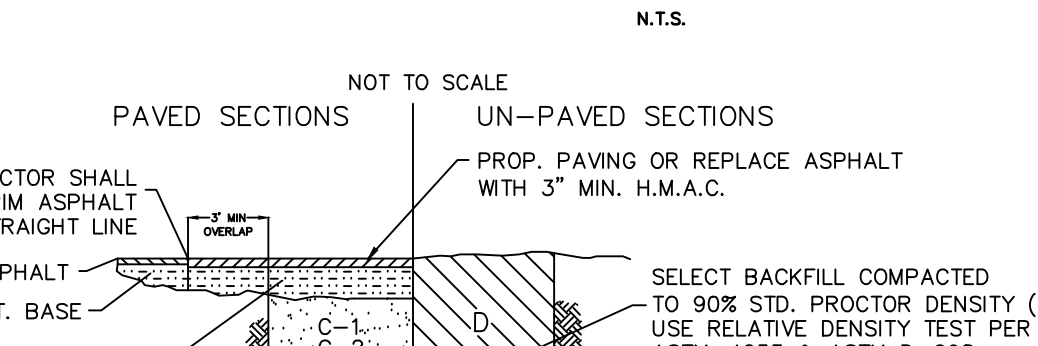
PREPARED BY: JESSICA M. MALDONADO, P.E. DATE



TYPICAL SECTION A-A (PROPOSED DETENTION CROSS-SECTION)
 N.T.S.



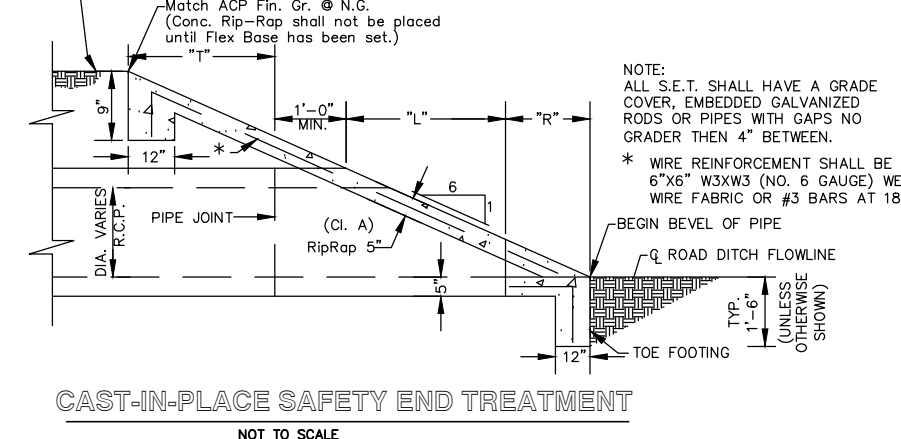
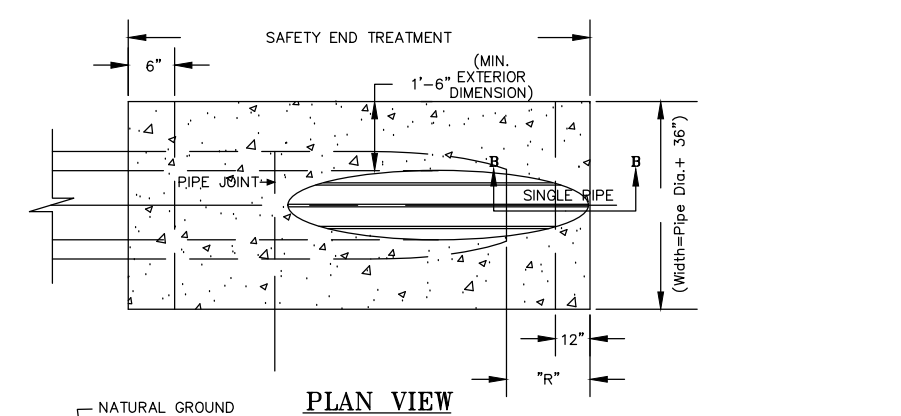
TYPICAL SECTION B-B (PROPOSED RECONSTRUCTION ROADSIDE DITCH CROSS-SECTION)
 N.T.S.



- GRAVEL BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW OF PIPE (MIN. THICKNESS = 6") - PIT RUN GRAVEL 3/4" MAX. SIZE.
- GRAVEL PLACED AFTER PIPE IS LAID, FROM BOTTOM OF PIPE TO SPRING LINE OF PIPE. PIT RUN GRAVEL 3/4" MAX. SIZE
- TRENCH WIDTHS SHALL BE BELL O.D. + 12"
- (CITY STREETS, PARKING AREA, DRIVEWAYS) SELECT EXCAVATED BACK FILL COMPACTED TO 95% SPD, 8" LIFTS, MECHANICAL COMPACTION.
- (STATE MAINTAINED ROADWAYS) COMPACTED SAND/CEMENT STABILIZED BACK FILL WITH 7% PORTLAND CEMENT COMPACTED AS PER ASTM D-4253 AND ASTM D-698.
- SELECTED EARTH BACKFILL COMPACTED TO 90% STANDARD PROCTOR DENSITY (12" LIFT, MECHANICAL COMPACTION), FOUNDATION PREPARATION (WELLPOINTS, GRAVEL OR CEMENT STABILIZATION, OR APPROVED SUBSTITUTE) SHALL BE REQUIRED WHEN TRENCH BOTTOM IS UNSTABLE. BACKFILLING AT STRUCTURES SHALL BE PLACED IN UNIFORM LAYERS, MOISTENED AS REQUIRED TO APPROXIMATE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO 95% STANDARD PROCTOR DENSITY (USE RELATIVE DENSITY TEST PER ASTM D-4253 & ASTM D-698). THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 6". STRUCTURE BACKFILL MATERIAL SHALL BE SAND, APPROVED SITE SOIL, OR OTHER APPROVED SUBSTITUTE.

TRENCH BEDDING CIRCULAR PIPE (STORM)
 NOT TO SCALE

SLOPE	PIPE DIA.			
	3.1	4.1	5.1	6.1
3:1	2'-0"	1'-0"	1'-0"	1'-0"
4:1	3'-0"	2'-0"	2'-0"	2'-0"
5:1	4'-0"	3'-0"	3'-0"	3'-0"
6:1	5'-0"	4'-0"	4'-0"	4'-0"
8:1	5'-1 1/2"	6'-0"	6'-0"	6'-0"
10:1	6'-0"	7'-0"	7'-0"	7'-0"
12:1	6'-0"	7'-0"	7'-0"	7'-0"
14:1	10'-1 1/2"	12'-0"	14'-0"	17'-0"
16:1	11'-0"	13'-0"	15'-0"	22'-0"



PLAN VIEW
 NOTE:
 ALL S.E.T. SHALL HAVE A GRADE OVER THE EXISTING GRAVELLED ROADS OR PAVEMENT WITH GAPS NO GREATER THAN 4" BETWEEN.
 WIRE REINFORCEMENT SHALL BE #7" W/MX (NO. 6 GAUGE) WELDED WIRE FABRIC OR #3 BARS AT 18" CC.
 BEGIN LEVEL OF PIPE
 1/4" ROAD DITCH FLOWLINE
 1/4" TOE FOOTING
 1/4" TOE FOOTING
 1/4" TOE FOOTING

CAST-IN-PLACE SAFETY END TREATMENT
 NOT TO SCALE

TEX-MEX SURVEY
 E63.13'-S76.06'-N456.33'-L17 &
 W258.37'-S167'-N456.33' EXC
 '49.67'-N91.57'-L16 SEC 267 1.0AC GR
 0.80AC NET
 TEXAS - MEXICAN RAILWAY COMPANY
 SURVEY SUBDIVISION
 VOL. 1, PG. 20,
 H.C.M.R.

OWNER NAME: SALINAS
 MARIA ALICIA
 DOCUMENT NUMBER 334521,
 H.C.D.R.

PRINCIPAL CONTACTS:

NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER: MIGUEL AVITA	515 N. TOWER ROAD	EDINBURG, TX, 78542	(956) 703-1420	(000) 000-0000
OWNER: MONICA AVITA	515 N. TOWER ROAD	EDINBURG, TX, 78542	(956) 703-1420	(000) 000-0000
ENGINEER: JESSICA M. MALDONADO	200 S. 10TH ST., SUITE 1500	McALLEN, TX 78501	(956) 702-8880	(956) 702-8883
SURVEYOR: OSCAR HERNANDEZ, R.P.L.S.	200 S. 10TH ST., SUITE 1500	McALLEN, TX 78501	(956) 702-8880	(956) 702-8883

DATE OF PREPARATION: September 2022

REGISTRATION No. F-10602

SAMES SAM Engineering & Surveying, Inc.
 200 S. 10TH ST. SUITE 1500. TEL. (956) 702-8880
 McALLEN, TEXAS 78501 FAX: (956) 702-8883

INDEX TO SHEETS OF DOBLE RUEDA RANCH SUBDIVISION					
SHEET	NO.	SHEET	REVISION	DATE	APPROVED
SHEET 1					
SHEET 2					
SHEET 3					