



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: 11-30-2021

PROPOSED AEP PROGRESO SUBSTATION SUBDIVISION PRECINCT No. 1.

ENGINEER: CDS MUERY DEVELOPER: AMERICAN POWER ELECTRIC (AEP)

PRELIMINARY APPROVAL FINAL APPROVAL FINAL APPROVAL WITH FINANCIAL GUARANTEE WITH VARIANCE

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

NUMBER OF STREETLIGHTS: N/A

FILLING STATIONS: N/A

LOCATION DESCRIPTION: NORTH OF U.S. HIGHWAY 281 APPROXIMATELY ½ MILE WEST OF FM 88.

SUBDIVISION LIES WITHIN THE: ETJ OF WESLACO AND WAS APPROVED ADMINISTRATIVELY BY SAID CITY.

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 10-8-21 PROPERTY LIES WITHIN FLOOD ZONE: "C" AS PER FEMA.

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

ROAD R.O.W. DEDICATION: 5.00 FT ONTO U.S. HIGHWAY 281

H.C.R.O.W. FINAL APPROVAL DATE: 11-16-21 BY, DANNY GUZMAN, PCT 1 R.O.W. AGENT

H.C.H.D. FINAL APPROVAL DATE: 11-16-21 BY, ENVIRONMENTAL HEALTH DIVISION

SEWER SYSTEM: OSSF WILL BE INSTALLED AT BUILDING PERMIT STAGE.

WATER SERVICE PROVIDER: MHWSC EXISTING LINE SIZE: 8" LOCATION: U.S. HIGHWAY 281

H.C.E.O.C. FINAL APPROVAL DATE: 11-16-21: BY 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: N/A

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

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.*

STATE OF OHIO
COUNTY OF FRANKLIN

I, P. TODD IRELAND AS OWNER(S) OF THE 5.00 ACRE TRACT OF LAND ENCOMPASSED WITHIN THE PROPOSED AEP PROGRESO SUBSTATION SUBDIVISION LOT 1, BLOCK 1, HEREBY SUBDIVIDE THE LAND AS DEPICTED IN THIS SUBDIVISION PLAT 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 PLAT ARE TRUE AND COMPLETE.

DATE _____
P. TODD IRELAND
REAL ESTATE MANAGEMENT MANAGER
AEP TEXAS CENTRAL COMPANY
1 RIVERSIDE PLAZA, 16TH FLOOR
COLUMBUS, OHIO 43215

STATE OF OHIO
COUNTY OF FRANKLIN

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY P. TODD IRELAND PERSONALLY APPEARED KNOWN TO ME BY THE PERSON(S) WHOSE NAME(S) IS (ARE) SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR PURPOSED AND CONSIDERATION THEREIN STATED, GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS _____ DAY OF _____, 2021.

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

CERTIFICATION OF 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 ADOPTED UNDER TEXAS WATER CODE 49.211(C). 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 THESE DETERMINATIONS.

HIDALGO COUNTY DRAINAGE DISTRICT NO. 1

RAUL E. SESIN, PE, CFM - GENERAL MANAGER

I, JOHN T. KUBALA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECT AND WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE UNDER MY SUPERVISION ON THE GROUND.

JOHN T. KUBALA, R.P.L.S.
REGISTERED PROFESSIONAL LAND SURVEYOR
No. 4503 - STATE OF TEXAS

I, JUAN A. LUDWIG, A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, HEREBY CERTIFY THAT PROPER ENGINEERING CONSIDERATION HAS BEEN GIVEN TO THIS PLAT.

JUAN A. LUDWIG, P.E.
LICENSED PROFESSIONAL ENGINEER
No. 99289 - STATE OF TEXAS

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

WE THE UNDERSIGNED CERTIFY THAT THIS PLAT OF AEP PROGRESO SUBSTATION WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY COMMISSIONERS COURT ON _____

HIDALGO COUNTY JUDGE

ATTEST: HIDALGO COUNTY CLERK

STATE OF TEXAS
COUNTY OF HIDALGO

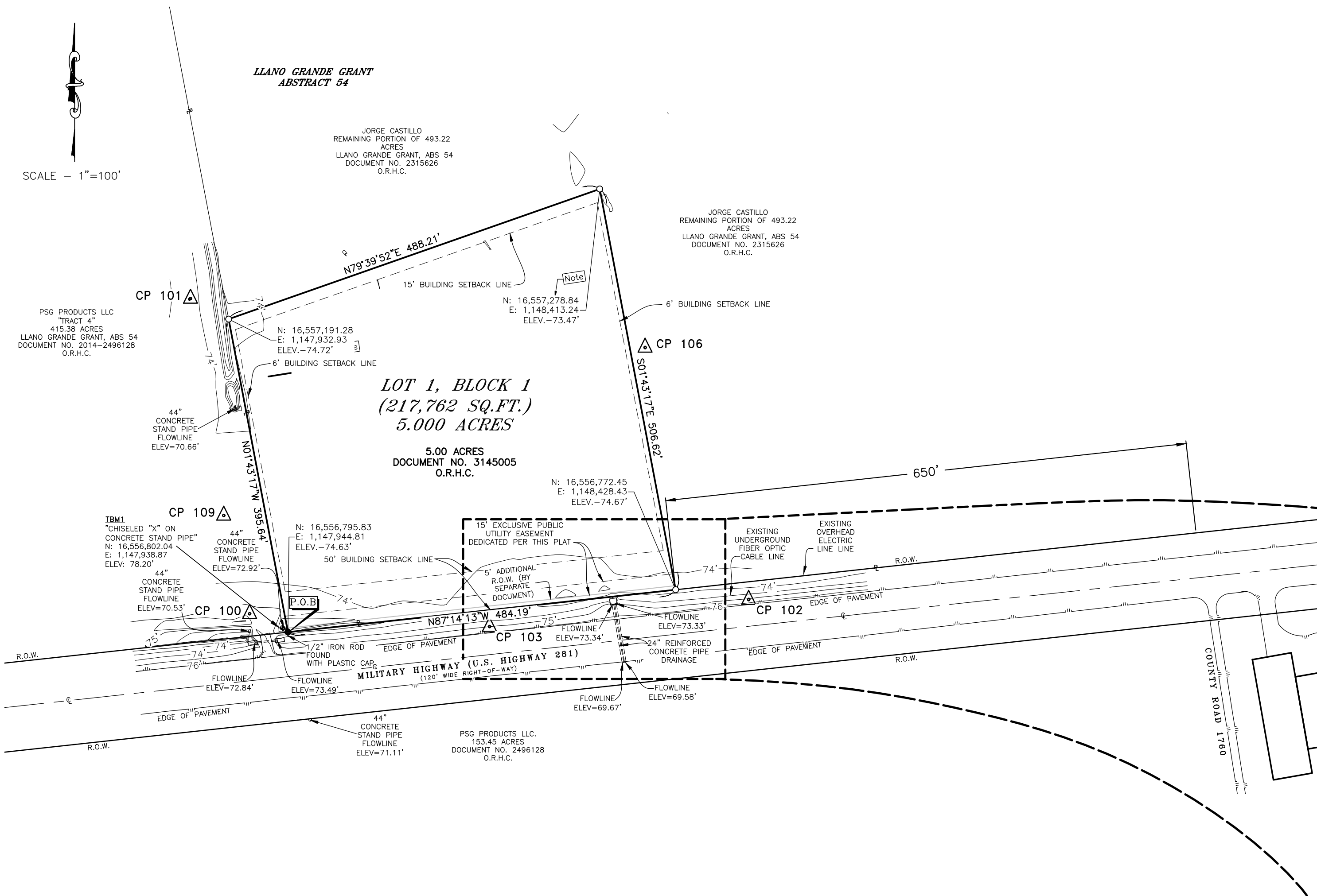
I, MIKE R. PEREZ, ADMINISTRATOR/DIRECTOR OF PLANNING AND ZONING DEPARTMENT OF THE CITY OF WESLACO, TEXAS DO HEREBY CERTIFY THIS MINOR PLAT KNOWN AS AEP PROGRESO SUBSTATION LOT 1, BLOCK 1 CONFORMS TO ALL SUBDIVISION REQUIREMENTS OF THIS CITY WHEREIN MY APPROVAL IS REQUIRED AND HAS BEEN APPROVED FOR RECORDING ON THIS _____ DAY OF _____, 2021 WITH THE COUNTY CLERK OF HIDALGO COUNTY, TEXAS.

I, THE UNDERSIGNED, MAYOR TO THE CITY OF STUART, HEREBY CERTIFY THAT THIS SUBDIVISION PLAT CONFORMS TO ALL REQUIREMENTS OF THE SUBDIVISION REGULATIONS OF THIS CITY WHEREIN MY APPROVAL IS REQUIRED.

CITY MANAGER-MIKE R. PEREZ

AEP PROGRESO SUBSTATION SUBDIVISION

A 5.000 ACRE TRACT OF LAND LYING IN THE LLANO GRANDE GRANT, ABSTRACT 54, HIDALGO COUNTY, TEXAS, SAME BEING ALL OF A 5.00 ACRE TRACT OF LAND AS DESCRIBED AND RECORDED IN DOCUMENT NUMBER 3145005 OF THE OFFICIAL RECORDS OF HIDALGO COUNTY, TEXAS,

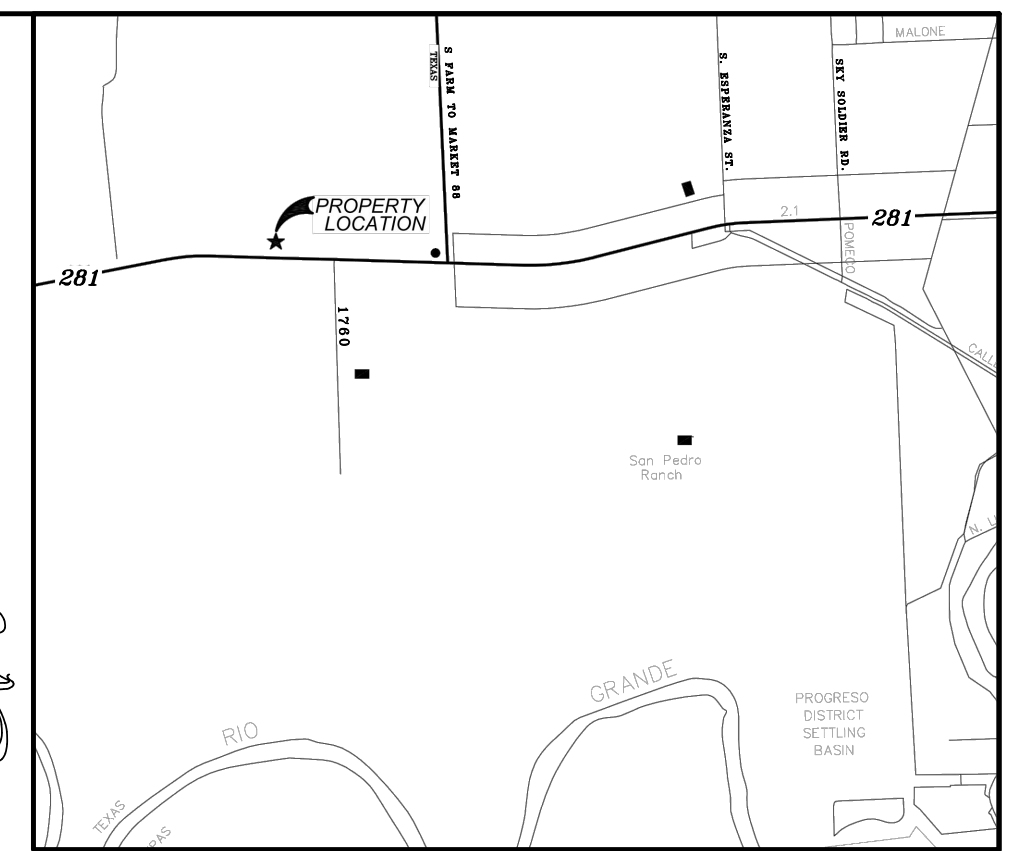


CONTROL POINT TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
100	16556825.7000	1147901.4200	75.34	SET 1/2\"/>

DATUM INFORMATION:
VERTICAL DATUM:
NORTH AMERICAN VERTICAL DATUM 1988.

HORIZONTAL DATUM:
GRID NORTH, TEXAS STATE PLANE
COORDINATE SYSTEM, NAD 1983(2011),
SOUTH ZONE.

SCALE - 1\"/>



SUBDIVISION PLAT OF AEP PROGRESO SUBSTATION SUBDIVISION LOT 1, BLOCK 1
BEING A 5.000 ACRE TRACT OF LAND LYING IN THE LLANO GRANDE GRANT, ABSTRACT 54, HIDALGO COUNTY, TEXAS, SAME BEING ALL OF A 5.00 ACRE TRACT OF LAND AS DESCRIBED AND RECORDED IN DOCUMENT NUMBER 3145005 OF THE OFFICIAL RECORDS OF HIDALGO COUNTY, TEXAS.

AEP PROGRESO SUBSTATION SUBDIVISION IS LOCATED WITHIN HIDALGO COUNTY FEL. NO. 1 ON THE NORTH SIDE OF MILITARY HIGHWAY, APPROXIMATELY 1/5 MILE WEST FROM THE INTERSECTION OF MILITARY HIGHWAY AND COUNTY ROAD 1760 NEARBY MUNICIPALITY IS THE CITY OF PROGRESO, ACCORDING TO THE OFFICIAL MAP IN THE OFFICE OF THE SECRETARY OF THE CITY OF WESLACO (POPULATION 40,000) AEP PROGRESO SUBSTATION SUBDIVISION LIES APPROXIMATELY TWO MILES FROM THE CITY LIMITS AND IS WITHIN THE CITY'S 3-1/2 MILE EXTRATERRITORIAL JURISDICTION (ETJ) UNDER LOCAL GOVERNMENT CODE 842.021 AND WITHIN THE CITY'S 5-MILE ETJ UNDER LOCAL GOVERNMENT CODE 821.001.

- LEGEND**
- 1/2" IRON ROD SET WITH PLASTIC CAP STAMPED "CDS/MUERY S.A. TX."
 - FOUND MONUMENTATION
 - 74' - 1 FOOT CONTOUR LINE
 - - - 75' - 5 FOOT CONTOUR LINE
 - P.O.B. - PLACE OF BEGINNING
 - CENTERLINE
 - PROPERTY LINES
 - R.O.W. - RIGHT-OF-WAY
 - O.R.H.C. - OFFICIAL RECORDS HIDALGO COUNTY, TEXAS
 - △ CP - CONTROL POINT

METES AND BOUNDS DESCRIPTION LOT 1, BLOCK 1 5.000 ACRES

BEING A 5.000 ACRE TRACT OF LAND LYING IN THE LLANO GRANDE GRANT, ABSTRACT 54, HIDALGO COUNTY, TEXAS, SAME BEING ALL OF A 5.00 ACRE TRACT OF LAND AS DESCRIBED AND RECORDED IN DOCUMENT NUMBER 3145005 OF THE OFFICIAL RECORDS OF HIDALGO COUNTY, TEXAS, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 1/2 INCH IRON ROD FOUND WITH PLASTIC CAP IN THE NORTH RIGHT-OF-WAY LINE OF MILITARY HIGHWAY (U.S. HIGHWAY 281), A 110 FOOT WIDE RIGHT-OF-WAY, FOR THE SOUTHEAST CORNER OF A 415.38 ACRE TRACT OF LAND DESCRIBED AS "TRACT 4" AND RECORDED IN DOCUMENT NUMBER 2014-2496129 OF THE OFFICIAL RECORDS OF HIDALGO COUNTY, TEXAS, THE SOUTHWEST CORNER OF THE AFOREMENTIONED 5.00 ACRE TRACT AND THE SOUTHWEST CORNER OF THE HEREIN DESCRIBED 5.000 ACRE TRACT:

THENCE WITH THE COMMON LINE OF THE AFOREMENTIONED 415.38 ACRE TRACT AND THE AFOREMENTIONED 5.00 ACRE TRACT, N01°43'17"W A DISTANCE OF 395.64 FEET TO A 1/2 INCH IRON ROD SET WITH PLASTIC CAP STAMPED "CDS/MUERY S.A. TX." FOR THE NORTHWEST CORNER OF SAID 5.00 ACRE TRACT AND THE NORTHWEST CORNER OF THE HEREIN DESCRIBED 5.000 ACRE TRACT;

THENCE ALONG THE NORTH LINE OF THE AFOREMENTIONED 5.000 ACRE TRACT, N79°39'52"E A DISTANCE OF 488.21 FEET TO A 1/2 INCH IRON ROD SET WITH PLASTIC CAP STAMPED "CDS/MUERY S.A. TX." FOR THE NORTHEAST CORNER OF SAID 5.00 ACRE TRACT AND THE NORTHEAST CORNER OF THE HEREIN DESCRIBED 5.000 ACRE TRACT;

THENCE ALONG THE EAST LINE OF THE AFOREMENTIONED 5.000 ACRE TRACT, S01°43'17"E A DISTANCE OF 506.62 FEET TO A 1/2 INCH IRON ROD SET WITH PLASTIC CAP STAMPED "CDS/MUERY S.A. TX." FOR THE SOUTHEAST CORNER OF SAID 5.00 ACRE TRACT AND THE SOUTHWEST CORNER OF THE HEREIN DESCRIBED 5.000 ACRE TRACT;

THENCE ALONG THE NORTH RIGHT-OF-WAY LINE OF THE AFOREMENTIONED MILITARY HIGHWAY (U.S. HIGHWAY 281) AND THE SOUTH LINE OF THE AFOREMENTIONED 5.00 ACRE TRACT, N87°14'13"W A DISTANCE OF 484.19 FEET TO THE POINT OF BEGINNING AND CONTAINING 5.000 ACRES, MORE OR LESS.

CITY OF WESLACO GENERAL SUBDIVISION PLAT NOTES:

- THIS PROPERTY IS LOCATED IN ZONE "C" AS PER FLOOD INSURANCE RATE MAP - COMMUNITY PANEL No.480334-0525 B, REVISED JANUARY 2, 1981, ZONE "C" IS DEFINED AS AREAS OF MINIMAL FLOODING (NO SHADING).
- MINIMUM FINISH FLOOR ELEVATION SHALL BE AT 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 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 A DEVELOPMENT PERMIT APPLICATION.
- SETBACKS:**
FRONT 50.0 FEET
REAR 15.0 FEET OR EASEMENT WHICHEVER IS GREATER
SIDES 6.0 FEET OR EASEMENT WHICHEVER IS GREATER
- STORM DRAIN IN ACCORDANCE WITH THE HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 AND HIDALGO COUNTY REQUIREMENTS, THIS DEVELOPMENT WILL BE REQUIRED TO DETAIN A TOTAL OF 14,927 CUBIC FT (0.34 AC-FT) OF STORM WATER RUNOFF. DRAINAGE DETENTION IN ACCORDANCE WITH THE LOCAL REQUIREMENTS WILL BE ACCOMPLISHED AS FOLLOWS: THE DEVELOPER SHALL BE RESPONSIBLE TO DETAIN AND ACCOMMODATE MORE THAN THE DETAINED VOLUME SHOWN ABOVE IF IT DETERMINES AT THE DEVELOPMENT PERMIT STAGE THAT THE DETENTION REQUIREMENTS ARE GREATER THAN STATED ABOVE DUE TO THE IMPERVIOUS AREA BEING GREATER THAN THE ENGINEER CONSIDERED FOR HIS CALCULATION OF THIS SUBDIVISION.
- OWNER TO MAINTAIN DETENTION/RETENTION AREAS WITHIN SUBDIVISION.
- NO PERMANENT STRUCTURES ARE PERMITTED OVER AN EASEMENTS. EASEMENTS SHALL BE KEPT CLEAR OF BUILDINGS, SHEDS, SHRUBS, TREES AND OTHER PLANTINGS (EXCEPT LOW, LESS THAN 18" MATURE HEIGHTS, GROUND COVER, GRASS OR FLOWERS (AND OTHER OBSTRUCTIONS THAT WOULD INTERFERE WITH OPERATIONS AND MAINTENANCE OF EASEMENTS).
- TEMPORARY BENCHMARK ONE (1): N: 16556802, E: 1147939, ELEV: 78.2 COORDINATES BASED ON TEXAS STATE PLANE COORDINATES SOUTH ZONE, VERTICAL DATUM IS NAVD 1988 USING GEOID MODEL 1999. (ALL VALUES ARE TO GRID).
- CDS MUERY BEARING BASIS FOR THIS PLAT: GRID NORTH, COORDINATE SYSTEM: TEXAS STATE PLANE, NAD83(2011), SOUTH ZONE. (ALL DISTANCES SHOWN ARE SURFACE) COMBINED SCALE FACTOR = (GRID X 0.99998 = SURFACE)
- EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM (TPDES).
- ADDITIONAL FIRE PROTECTION MAY BE REQUIRED DURING THE PLAN REVIEW PHASE IN ORDER TO PROVIDE ANY ADDITIONAL FIRE PROTECTION REQUIREMENT.
- A 5.0' SIDEWALK IS REQUIRED ALONG EXTERIOR PERIMETER UPON ISSUANCE OF A NOTICE TO PROCEED, AS PER CITY OF WESLACO.

PRINCIPAL CONTACTS			
OWNER(S):	NAME	ADDRESS	PHONE NUMBER
	AEP TEXAS INC	1 RIVERSIDE PLAZA COLUMBUS, OHIO 43215	614-716-6835
ENGINEER	JUAN A. LUDWIG	100 NE LOOP 410, STE 300 SAN ANTONIO, TX. 78216	210-581-1111
SURVEYOR	JOHN T. KUBALA	100 NE LOOP 410, STE 300 SAN ANTONIO, TX. 78216	210-581-1111

ON: _____ AT _____ A.M./P.M.
INSTRUMENT NUMBER _____
OF THE MAP RECORDS OF HIDALGO COUNTY, TEXAS
BY: _____ DEPUTY CLERK

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

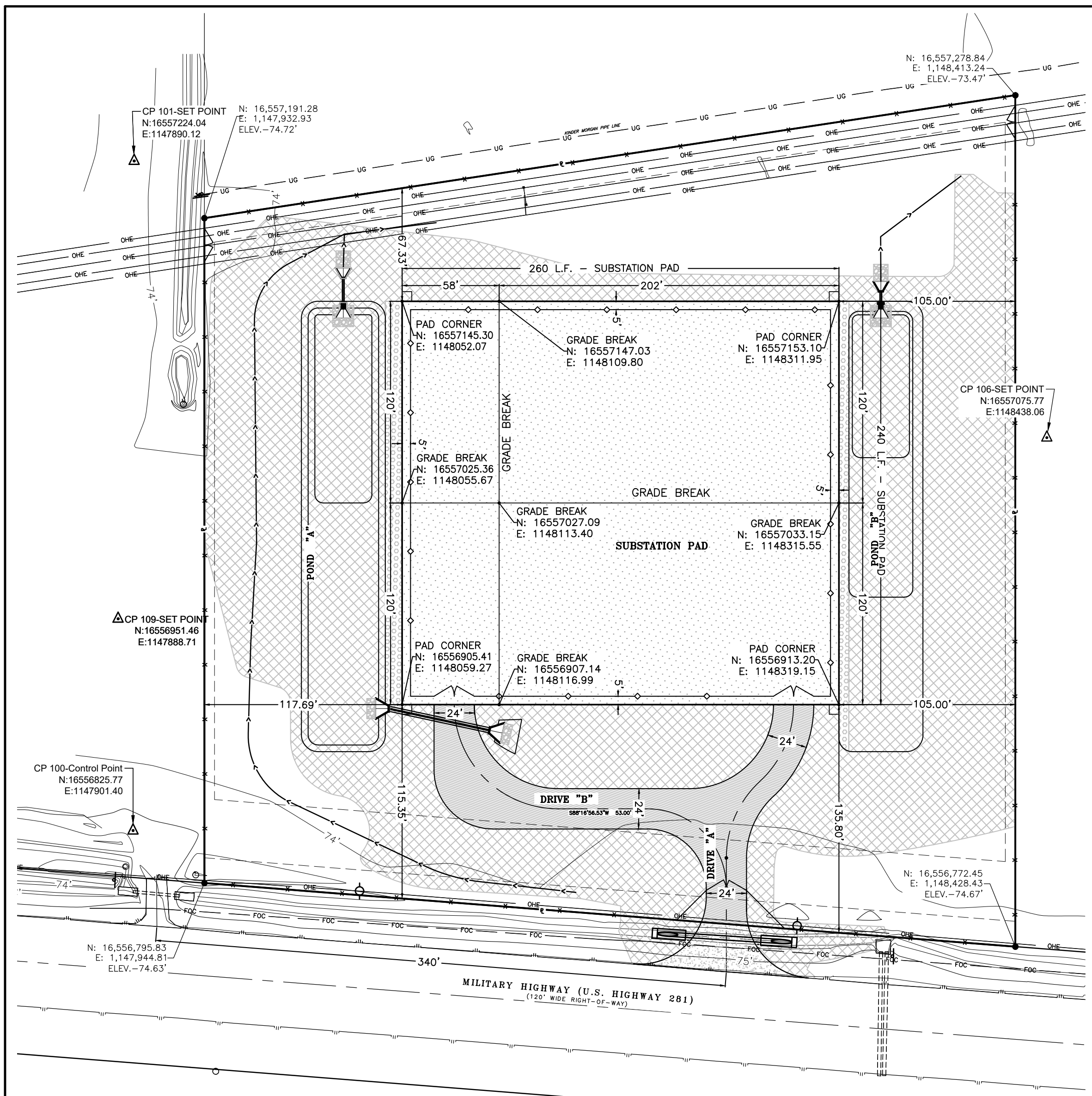
NO	DATE	REVISION	BY

DESIGNED BY _____
DRAWN BY E. HERNANDEZ/J. RODRIGUEZ
CHECKED BY T. KUBALA
REVIEWED BY J. LUDWIG
DATE 11/08/2021



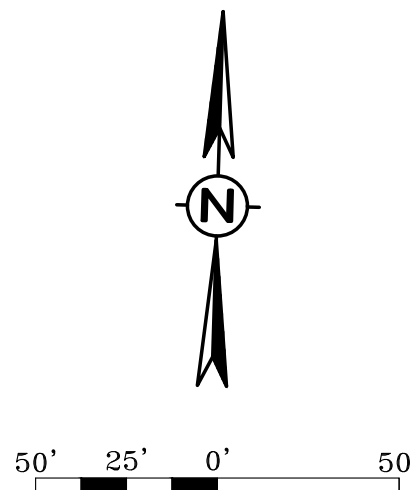
AEP PROGRESO SUBSTATION SUBDIVISION LOT 1, BLOCK 1
AEP TEXAS INC.
HIDALGO COUNTY, TEXAS

SHEET NO. 1
OF 2 SHEETS
FILE NO. 121088_PLAT.dwg



LEGEND

- AEP PROPERTY LINE
- EXISTING EDGE OF ASPHALT
- EXISTING EDGE OF GRAVEL
- EXISTING UNDERGROUND CABLE
- EXISTING UNDERGROUND GAS LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING TRANSMISSION STRUCTURE
- EXISTING POWER POLE
- EXISTING GUY WIRE
- EXISTING SIGN
- PROPOSED PROPERTY FENCE (5 STRAND)
- PROPOSED STATION FENCE (CHAIN LINK)
- PROPOSED DRIVE CENTERLINE
- PROPOSED CHANNEL CENTERLINE
- DRIVEWAY W/ 9" FLEXIBLE BASE & GEOGRID
- SUBSTATION PAD W/ 6" FLEXIBLE BASE
- 8" ROCK RUBBLE RIP-RAP
- 7" CONCRETE PAVEMENT
- 5" CONCRETE RIP-RAP
- FLEXIBLE GROWTH MEDIUM



AEP PROGRESO SUBSTATION SUBDIVISION
LOT 1, BLOCK 1
DRAINAGE SUMMARY

AEP Progreso Substation is located in Hidalgo County about 2.08 miles west of Progreso city limits, north of Military Hwy (281) and east of Texas Avenue. The 5.0 AC site is currently owned by American Electric Power (AEP) Texas Central Company and partially located within the City of Weslaco ETJ.

Proposed substation construction will consist of an approximately 240'x260' substation pad and entry driveway accessed from Military Hwy. The site design will also include two site detention ponds for the purpose of mitigating post construction runoff. Ponds will be intentionally oversized to store 100-YR runoff volumes.

According to the Soil Survey Report prepared for Hidalgo County by the USDA, site soils have been classified as (19) Harlingen clay, 0 to 1 percent slopes, which carries a hydrologic soil classification of D.

The existing site is currently undeveloped and is currently utilized as an agricultural parcel. The total lot (5.00 ac) is single tract located north of Military Hwy and West of Texas Avenue. Existing Project site slopes to the north/north east at approximately 0.2%. The earthen channel along the southside of the property collects insignificant conveyes area drainage to the south, via 2-24" RCP pipes.

Proposed substation improvements will include the construction of an approximately 260' x 240' (1.43 ac) substation pad. The pad will be elevated with select fill and covered with six inches of flexible base material and five inches of station rock, respectively. The pad will be mildly sloped (0.5% - 1.0%); the pad is divided into two parts (East and West). Approximately 1/3 of the pad will drain west towards detention pond "A" and the remaining will drain east towards pond "B".

Access to the substation pad will be accomplished via a proposed 24-ft wide flexible base driveway and will connect to TxDOT Military Hwy. Runoff from the driveway has been designed to be conveyed north/northwest, where the runoff will be captured in between the two drives and discharged via two - 12" pipes into pond "A".

Substation improvements will include 1.54 acres of flexible base material and 0.11 acres of concrete to the site, which result in a net increase of 1.65 acres of impervious cover for the 5.0-acre site. Site runoff for this development will include oversized detention ponds large enough to store the 100-YR, versus HCDD#1 required 50-YR, proposed runoff volumes.

To reduce the 100-YR proposed flow to 10-YR existing levels, ponds will contain composite outfall structures, which will result in mitigated flows from the site. Ultimate discharge from the site flows NE towards HCDD#1 Ranchitos de Progreso Drain.

Detention pond "A" will be installed west of the proposed substation pad. Detention Pond A dimensions are approximately 50'x 275', with an average depth of 2.6 (73.4' - 76.0'). Side slopes of the basin are to be sloped 4:1. The pond will be accessible via a 6:1 earthen ramp on the south. The composite outfall structure will consist of a 6-inch orifice (73.4') and a 3.0' x 3.0' grate inlet set at 75.15' as emergency overflow. Flow from the pond will be conveyed from the pond via a 12" RCP culvert pipe.

Detention Pond "B" dimensions are approximately 50'x 265', with an average depth of 2.5' (73.5' - 76.0'). Side slopes of the basin are to be primarily sloped 4:1. The composite outfall structure will consist of a 6-inch orifice (73.5') and a 3.0' x 3.0' grate inlet set at 75.25' to act as emergency overflow. Flow from the pond will be conveyed from the pond via a 12" RCP culvert pipe.

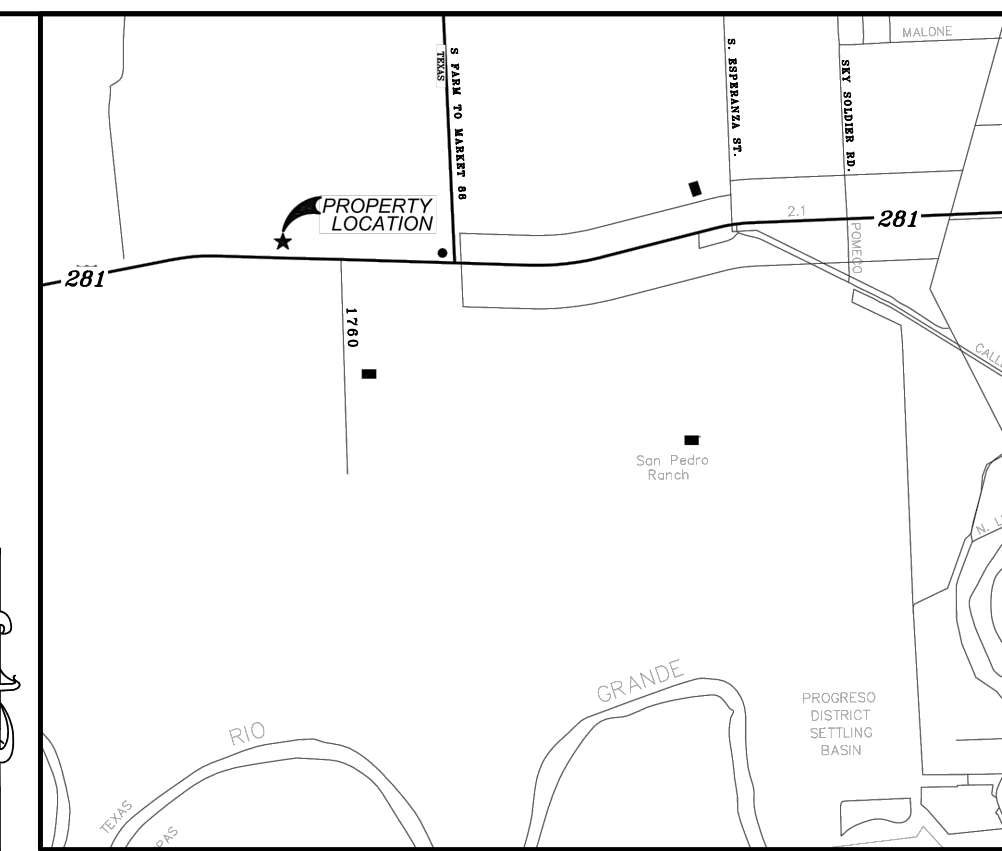
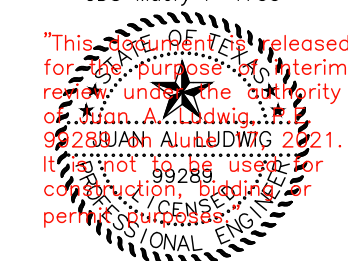
After development, proposed runoff flows without detention will increase overall discharge (Q₁₀₀) from 3.61 cfs, to 19.94 cfs, or a net increase of 16.33 cfs. Minimal detention capacity required for Pond "A" (4,028 cf) and Pond "B" (9,019), per HCDD#1 detention criteria, is 13,047 cf (0.30 ac-ft). Designed site detention for Ponds "A" (8,494 cf) and Pond "B" (11,195 cf) will have a total storage capacity 19,689 cf (0.45 ac-ft). Total pond area designed (0.45 ac-ft) will far exceed total pond area (0.30 ac-ft) required.

In summary, site detention is over designed to mitigate increased flows. Q₁₀₀ flows of 2.37 cfs released from ponds will be less than Q₁₀ flows of 2.71 cfs and therefore no adverse impacts downstream of the development will result as part of this development.

CERTIFICATION

By my signature below, I certify that this subdivision lies in a Flood Zone "C" - Areas of minimal flooding (no shading). The site can be found on Community-Panel No. 480334-0525 B. Effective Date of January 2, 1981.

CDS Muery F-1733



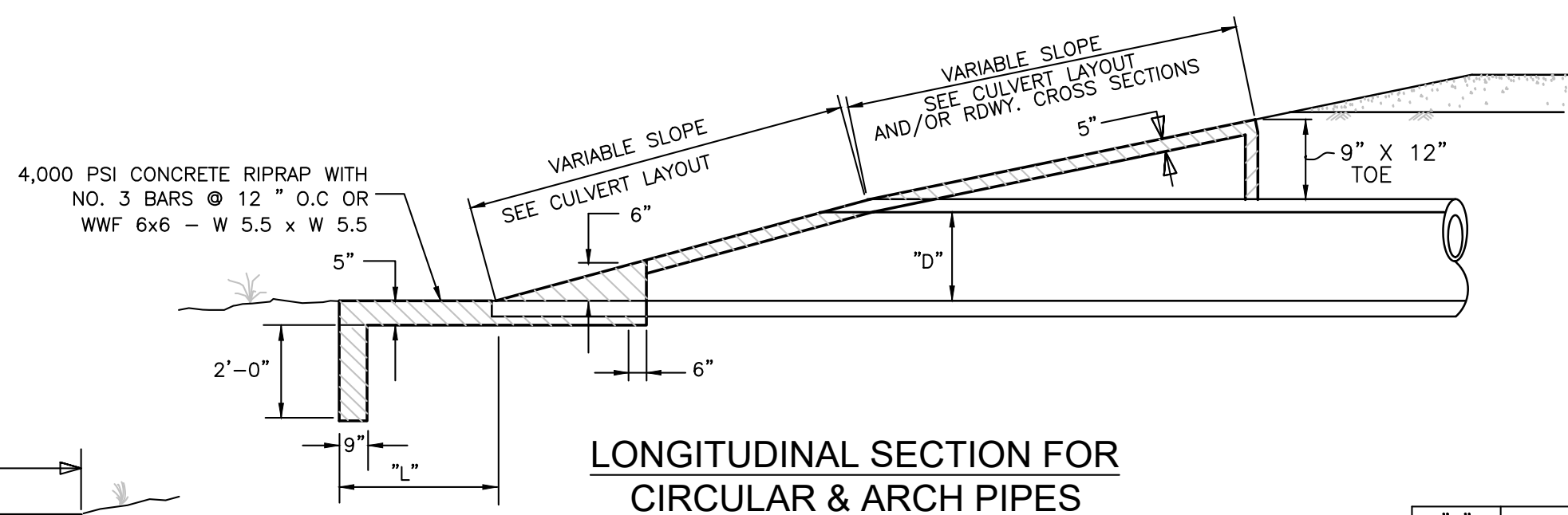
SCALE - 1"=2000'

LOCATION MAP

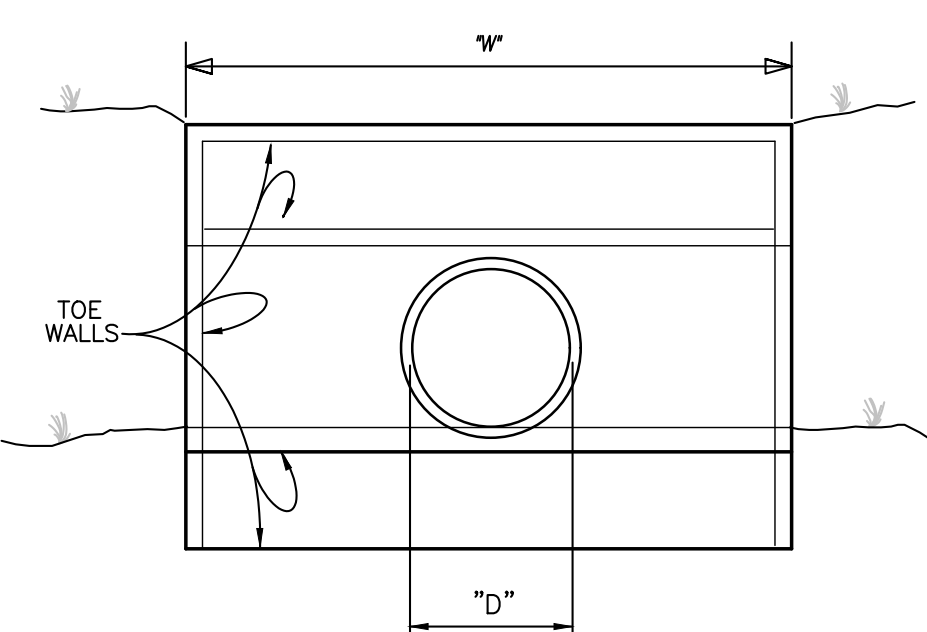
SUBDIVISION PLAT OF AEP PROGRESO SUBSTATION SUBDIVISION LOT 1, BLOCK 1
BEING A 5.000 ACRE TRACT OF LAND LYING IN THE LLANO GRANDE GRANT, ABSTRACT 54, HIDALGO COUNTY, TEXAS, SAME BEING ALL OF A 5.00 ACRE TRACT OF LAND AS DESCRIBED AND RECORDED IN DOCUMENT NUMBER 3145005 OF THE OFFICIAL RECORDS OF HIDALGO COUNTY, TEXAS.

MAP OF TOPOGRAPHY AND DRAINAGE

THE MAP BELOW ILLUSTRATES THE FLOW PATTERNS FOR THE RUNOFF. 1/2 FOOT INTERVALS



LONGITUDINAL SECTION FOR CIRCULAR & ARCH PIPES
CONCRETE RIPRAP HEADWALLS



SINGLE CIRCULAR PIPE CULVERT (CMP or RCP)
N.T.S.

"D" INSIDE DIA. OF PIPE	"L"	"G"		SINGLE	DOUBLE	TRIPLE	QUADRUPLE
		CMP	RCP				
12"	1'-6"	1'-0"	0'-6"	4'-0"	6'-0"	8'-0"	10'-0"
18"	2'-0"	1'-2"	0'-9"	4'-6"	7'-2"	9'-10"	12'-6"
21"	2'-6"	1'-3"	0'-10"	5'-3"	8'-4"	11'-4"	13'-4"
24"	3'-0"	1'-5"	0'-11"	6'-0"	9'-5"	12'-10"	16'-3"
30"	4'-0"	1'-8"	1'-1"	7'-6"	11'-8"	15'-10"	20'-0"
36"	5'-0"	1'-11"	1'-3"	9'-0"	13'-11"	18'-10"	23'-9"
42"	6'-0"	2'-2"	1'-5"	10'-6"	16'-2"	21'-10"	27'-6"
48"	7'-0"	2'-5"	1'-7"	12'-0"	18'-5"	24'-10"	31'-3"
54"	8'-0"	2'-10"	1'-11"	13'-6"	20'-10"	28'-2"	35'-6"
60"	9'-0"	3'-2"	2'-0"	15'-0"	23'-1"	31'-4"	39'-6"

"G" IS MEASURED BETWEEN THE OUTER SURFACES OF THE PIPES.
DIMENSIONS FOR CIRCULAR (CMP and RCP) PIPE CULVERTS

PRINCIPAL CONTACTS			
OWNER(S):	NAME	ADDRESS	PHONE NUMBER
AEP TEXAS INC		1 RIVERSIDE PLAZA COLUMBUS, OHIO 43215	614-716-6835
ENGINEER	JUAN A. LUDWIG	100 NE LOOP 410, STE 300 SAN ANTONIO, TX. 78216	210-581-1111
SURVEYOR	JOHN T. KUBALA	100 NE LOOP 410, STE 300 SAN ANTONIO, TX. 78216	210-581-1111

ON: _____ AT _____ A.M./P.M.
INSTRUMENT NUMBER _____
OF THE MAP RECORDS OF HIDALGO COUNTY, TEXAS
BY: _____ DEPUTY CLERK

NO	DATE	REVISION	BY

DESIGNED BY _____
DRAWN BY E. HERNANDEZ/J. RODRIGUEZ
CHECKED BY T. KUBALA
REVIEWED BY J. LUDWIG
DATE 11/08/2021



AEP PROGRESO SUBSTATION SUBDIVISION
LOT 1, BLOCK 1
AEP TEXAS INC.
HIDALGO COUNTY, TEXAS

SHEET NO. **2**
OF **2** SHEETS
FILE NO. **121088_PLAT.dwg**