



CITY OF ALAMO HEIGHTS
COMMUNITY DEVELOPMENT SERVICES DEPARTMENT
6116 BROADWAY
SAN ANTONIO, TX 78209
210-826-0516

Architectural Review Board Meeting
March 18, 2025 – 5:30 P.M.

Take notice that a regular Architectural Review Board meeting of the City of Alamo Heights will be held on **Tuesday, March 18, 2025 at 5:30pm** in the City Council Chamber, located at 6116 Broadway St, San Antonio, Texas, 78209, to consider and act upon any lawful subjects with may come before it.

INSTRUCTIONS FOR TELECONFERENCE: Members of the public may also participate via audio by dialing 1-346-248-7799 Meeting ID 868 0184 5240. If you would like to speak on a particular item, when the item is considered, press *9 to “raise your hand”. Citizens will have three (3) minutes to share their comments. The meeting will be recorded.

Case No. 967F – 159 Burr Rd

Request of Joshua Ficarro of Pape-Dawson Engineers, applicant, representing Wendell Hall of the San Antonio Country Club, owner, for the final review in order to construct and expand an existing paved parking lot located at 159 Burr Rd under Chapter 2 Administration for Architectural Review.

Chapter 5 of Code of Ordinances (Buildings and Building Regulations) requires City Council to consider the ARB's recommendation for all demolition/final design review applications. Please check the ARB posted results on the City's website after the ARB meeting to confirm any future meeting dates.

Plans may be viewed online at <http://www.alamoheightstx.gov/departments/planning-and-development-services/public-notices/> and at the Community Development Services Department located at 6116 Broadway St. You may contact Dakotah Procell, Planner at 210-832-2239 (dprocell@alamoheightstx.gov) or Lety Hernandez, Director, at 210-832-2250 (lhernandez@alamoheightstx.gov), or our office at (210) 826-0516 for additional information regarding this case.



January 6, 2025

City of Alamo Heights
Planning and Zoning Commission
6116 Broadway
Alamo Heights, TX 78209

Re: San Antonio Country Club-Phase 2 Parking Expansion
Architectural Review Board Submittal

To Whom It May Concern:

The proposed parking lot expansion is a 0.69-acre commercial development located approximately 300 LF west from the intersection of Burr Rd and N New Braunfels Avenue. The planned development will consist of an expansion on the existing parking lot to serve the San Antonio Country Club.

The site is abutting a residential home to the west (Lot 29, Block 3), an existing parking lot to the east, Burr Rd to the South and an alley to the north. The site is currently partially developed with a single-family home, anticipated to be demolished in early 2025.

The proposed parking lot will include 23,865 SF of impervious cover with 67 parking spaces and landscaped curb islands. The site will be fenced off on the north, south and west sides. The entrance to the parking lot will be via the existing parking lot from N. New Braunfels Ave. The proposed landscape plans will be similar to the existing parking lot and will meet the requirements for the City of Alamo Heights.

Sincerely,
Pape-Dawson Engineers

A handwritten signature in blue ink, appearing to read 'JFicarro', is positioned above the printed name of the signatory.

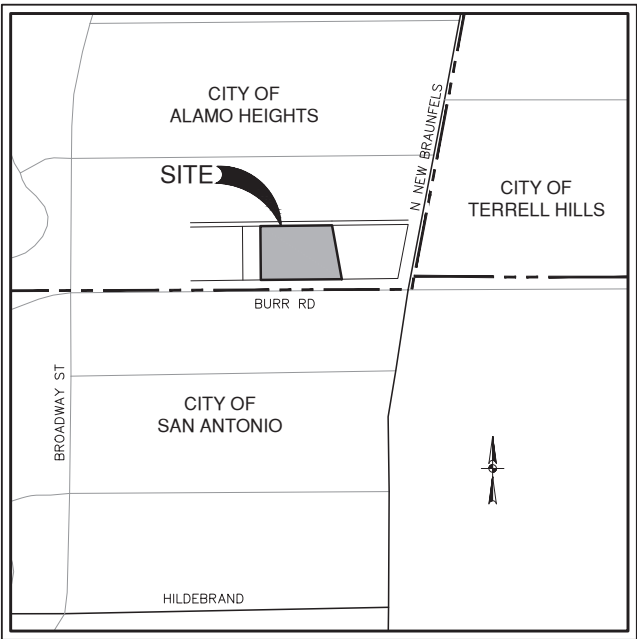
Josh Ficarro
Project Manager

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BURR ROAD PARKING LOT - PHASE 2

ALAMO HEIGHTS, TEXAS

CIVIL CONSTRUCTION PLANS



LOCATION MAP
NOT-TO-SCALE

PREPARED FOR:

SAN ANTONIO COUNTRY CLUB
4100 N. NEW BRAUNFELS
SAN ANTONIO, TEXAS 78209

JANUARY 2025



2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800



SHEET INDEX

Sheet Description	Sheet No.
COVER SHEET	C0.00
GENERAL CONSTRUCTION NOTES	C0.10
EXISTING CONDITIONS AND DEMOLITION PLAN	C0.20
STORM WATER POLLUTION PREVENTION PLAN	C1.00
STORM WATER POLLUTION PREVENTION DETAILS	C1.10
DIMENSIONAL CONTROL AND PAVING PLAN	C1.20
GRADING AND DRAINAGE PLAN	C2.00
SITE CIVIL DETAILS	C3.00

Landscape / Irrigation Plans	Sheet No.
TREE PRESERVATION PLAN	LTP 1.1
PLANTING PLAN	LP 1.1
PLANTING SCHEDULE, NOTES, AND DETAILS	LP 2.1
IRRIGATION NOTES AND LEGEND	LI 1.0
IRRIGATION PLAN	LI 1.1
IRRIGATION DETAILS - SHEET 1 OF 2	LI 2.1
IRRIGATION DETAILS - SHEET 2 OF 2	LI 2.2

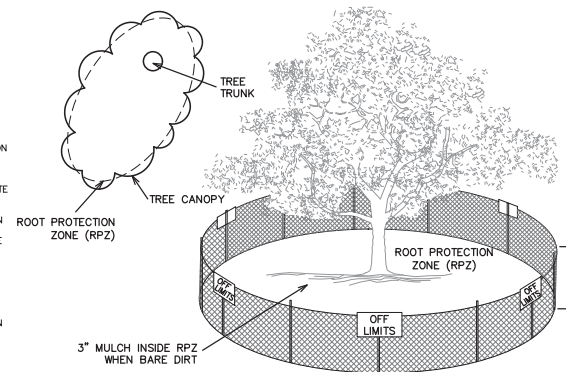
Electrical Plans	Sheet No.
ELECTRICAL GENERAL NOTES AND LEGEND	E1.0
ELECTRICAL NEW WORK PLAN	E1.1
ALTERNATIVE ELECTRICAL NEW WORK PLAN	E1.2
ELECTRICAL DETAILS	E2.1
ELECTRICAL SPECIFICATIONS	E3.1

LEGAL DESCRIPTION:
LOT 41, BLOCK 3, C.B. 5600, COUNTRY CLUB
HEIGHTS SUBDIVISION (1.370 ACRES)

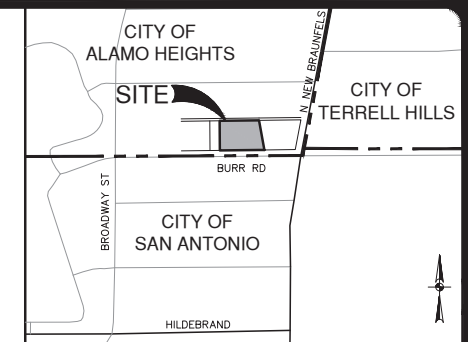
ADDRESS:
159 BURR RD.
ALAMO HEIGHTS, TEXAS 78209

SHEET C0.00

2. ALL TREES SHALL REMAIN UNLESS NOTED ON THE PLANS.
3. NO SITE PREPARATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED.
4. TREE PROTECTION FENCING SHALL BE REQUIRED. TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION.
5. THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN THREE INCHES IN DIAMETER EXCAVATING NEAR EXISTING TREES. EXCAVATION IN THE VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR
6. THE ROOT PROTECTION ZONE IS THAT AREA SURROUNDING A TREE, AS DETERMINED BY A RADIUS FROM THE TREE TRUNK, IN WHICH NO EQUIPMENT, VEHICLES OR MATERIALS MAY OPERATE OR BE STORED. THE REQUIRED RADIUS FOR A TREE WITH A 4" DBH IS 4 FEET. THE REQUIRED RADIUS FOR A TREE WITH A 6" DBH WOULD BE 6 FEET. A TREE WITH A 12" DBH WOULD HAVE A 5-FOOT RADIUS ROOT PROTECTION ZONE AROUND THE TREE. ROOTS OR BRANCHES THAT ARE IN CONFLICT WITH THE CONSTRUCTION SHALL BE REMOVED. THE CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE LIVE CAVY WOUNDS SHALL BE PAINTED OVER, WITHIN 20 MINUTES TO PREVENT ANK WILT.



TREE PROTECTION DETAIL
NOT TO SCALE



LOCATION MAP

LEGAL DESCRIPTION:
LOT 41, BLOCK 3, C.B. 5600, COUNTRY CLUB
HEIGHTS SUBDIVISION (1.370 ACRES)

ADDRESS:
159 BURR RD.
ALAMO HEIGHTS, TEXAS 78209




 — W — W — W — W —


 — GAS — GAS — GAS — GAS —


 — 715 —


 — 714 —




 POINT# 1008
 12" OAK
 SPECIES & SIZE


 POINT# 1001
 10" OAK
 SPECIES & SIZE

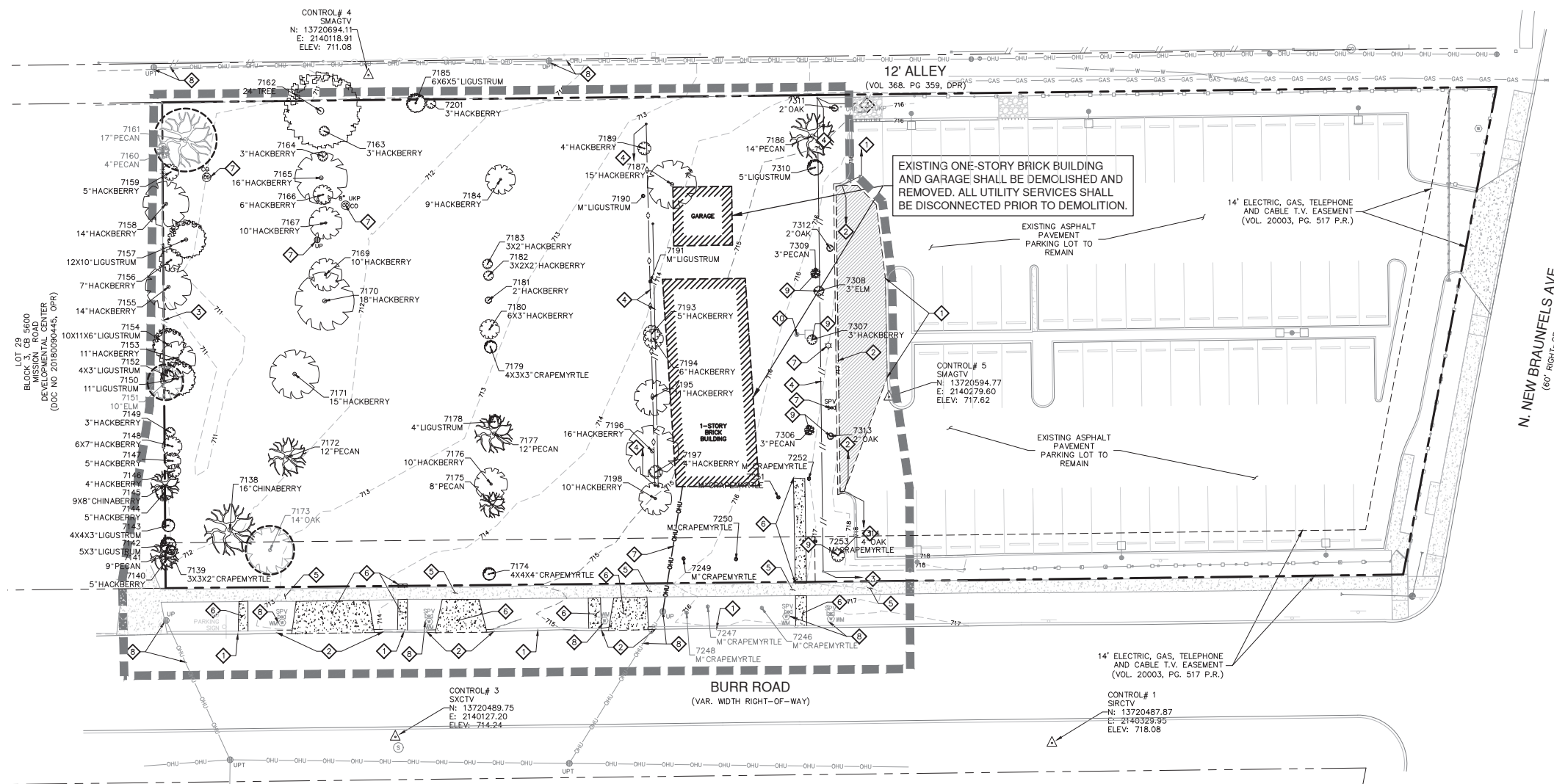


LIMITS OF CONSTRUCTION
 PROPERTY LINE
 EXISTING WATER LINE
 EXISTING OVERHEAD UTILITY LINE
 & POLE
 EXISTING GAS LINE
 EXISTING CONTOURS MAJOR
 EXISTING CONTOURS MINOR
 EXISTING HORIZONTAL AND
 VERTICAL CONTROL POINTS
 EXISTING TREE TO BE REMOVED
 (REFER TO TREE PRESERVATION AND
 LANDSCAPE PLAN)
 EXISTING TREE TO REMAIN AND TO BE
 PROTECTED (REFER TO TREE
 PRESERVATION AND LANDSCAPE PLAN)
 ASPHALT PAVEMENT AND BASE
 COURSE SHALL BE REMOVED. ALL
 EDGES MUST BE STRAIGHT LINE
 SAWCUTS.

1. EXISTING CURB TO REMAIN
2. EXISTING CURB TO BE REMOVED. (SAWCUT 12 INCHES INTO EXISTING AND WITH PAVEMENT. ALL EDGES MUST BE STRAIGHT LINE SAWCUTS)
3. EXISTING FENCE LINE TO REMAIN
4. EXISTING FENCE LINE TO BE REMOVED
5. EXISTING CONCRETE SIDEWALK TO REMAIN
6. EXISTING CONCRETE DRIVEWAY AND SIDEWALK TO BE REMOVED
7. EXISTING UTILITY POLES, UTILITY LINES, CLEANOUTS, AND SPRINKLER VALVES SHALL BE DISCONNECTED FROM SERVICE PRIOR TO REMOVAL
8. EXISTING WATER VALVES & METERS, UTILITY POLES, AND UTILITY LINES TO REMAIN
9. TREE TO BE RELOCATED
(REFER TO LANDSCAPE PLANS)
10. EXISTING LIGHT POLE TO REMAIN
(REFER TO ELECTRICAL PLANS)

SEE SHEET C0.10 FOR ADDITIONAL GENERAL NOTES.

CAUTION!!! THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS OF UTILITIES MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.



HORIZONTAL & VERTICAL CONTROL POINTS						
Point	Northing	Easting	Row Description	Elevation	Grid Northing	Grid Easting
1	13,720,487.810	2740329.950	SIRCTV	718.08'	13,718,155.784	2,139,966.156
3	13,720,489.750	2140127.195	SXCXV	714.24'	13,718,157.663	2,139,763.435
4	13,720,694.110	2140118.909	SMAGTV	711.08'	13,718,361.988	2,139,755.157
5	13,720,594.770	2140279.599	SMAGTV	717.62'	13,718,262.665	2,139,915.813

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NO.	REVISION	DATE



**PAPE-DAWSON
ENGINEERS**

2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028500

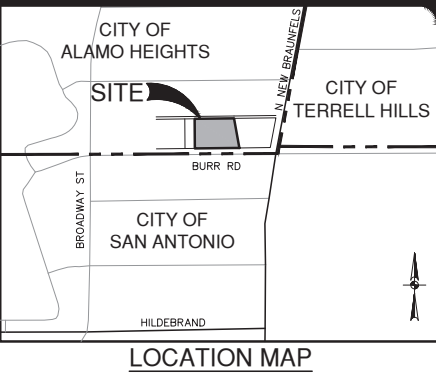
BURR ROAD PARKING LOT - PHASE 2
ALAMO HEIGHTS, TEXAS

EXISTING CONDITIONS AND DEMOLITION PLAN

LAT NO. N/A
 DB NO. 7531-10
 DATE JANUARY 2025
 DESIGNER JF
 CHECKED DM DRAWN LF
 SHEET **C0.20**

PERMIT SET

SWP3 MODIFICATIONS		
DATE	SIGNATURE	DESCRIPTION



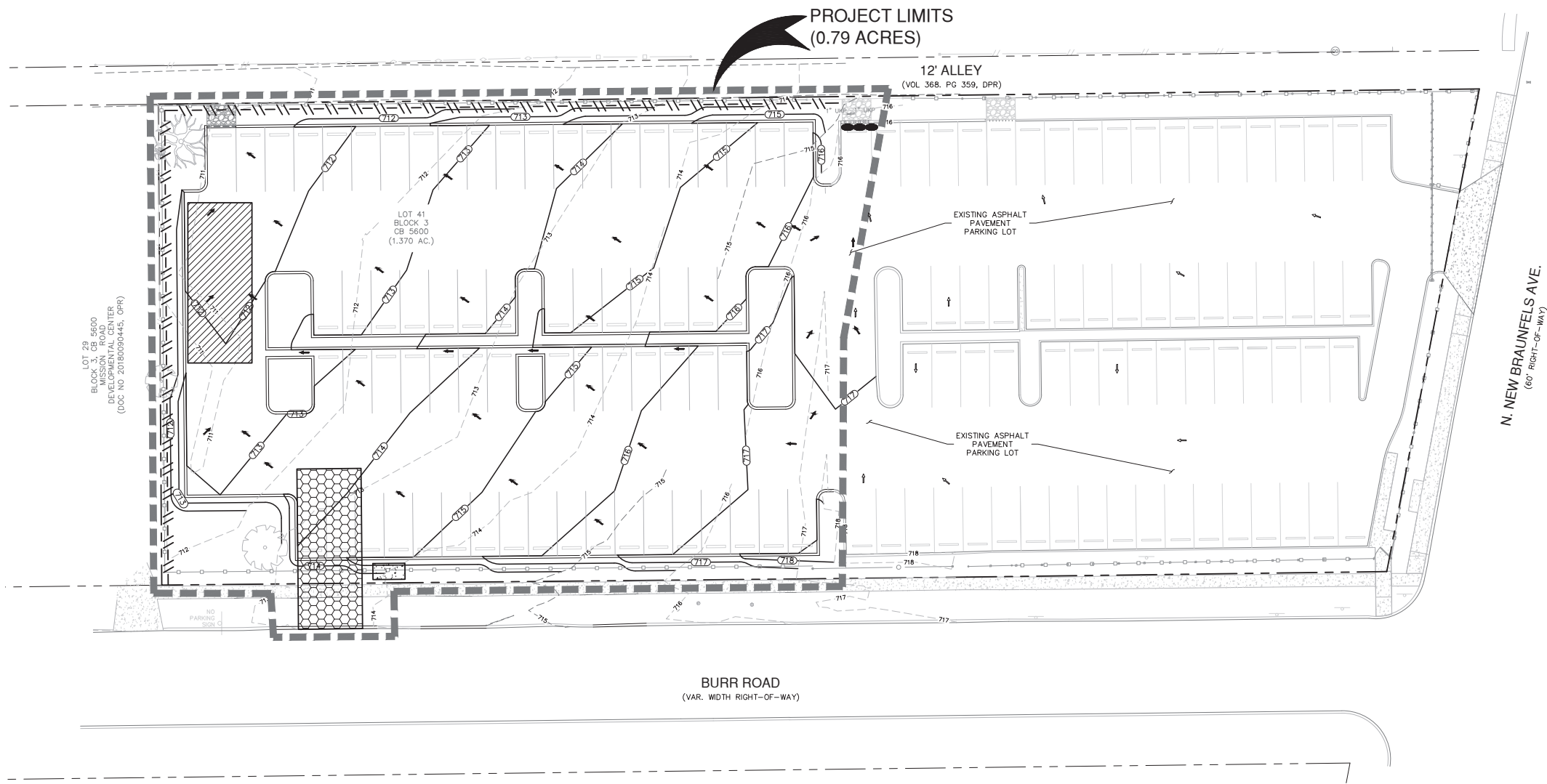
LEGAL DESCRIPTION: LOT 41, BLOCK 3, C.B. 5600, COUNTRY CLUB HEIGHTS SUBDIVISION (1.370 ACRES)
ADDRESS: 159 BURR RD, ALAMO HEIGHTS, TEXAS 78209



LEGEND	
	PROPERTY LINE
	PROJECT LIMITS
	EXISTING CONTOUR
	PROPOSED CONTOUR
	FLOW ARROW (EXISTING)
	FLOW ARROW (PROPOSED)
	SILT FENCE
	ROCK BERM
	GRAVEL FILTER BAGS
	STABILIZED CONSTRUCTION ENTRANCE/EXIT (FIELD LOCATE)
	CONSTRUCTION EQUIPMENT, VEHICLE & MATERIALS STORAGE AREA (FIELD LOCATE)
	CONCRETE TRUCK WASH-OUT PIT (FIELD LOCATE)

- GENERAL NOTES**
- DO NOT DISTURB VEGETATED AREAS (TREES, GRASS, WEEDS, BRUSH, ETC.) ANY MORE THAN NECESSARY FOR CONSTRUCTION.
 - CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASH-OUT PIT, AND CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD TO BE DETERMINED IN THE FIELD.
 - STORM WATER POLLUTION PREVENTION CONTROLS MAY NEED TO BE MODIFIED IN THE FIELD TO ACCOMPLISH THE DESIRED EFFECT. ALL MODIFICATIONS ARE TO BE NOTED ON THIS EXHIBIT AND SIGNED AND DATED BY THE RESPONSIBLE PARTY.
 - RESTRICT ENTRY/EXIT TO THE PROJECT SITE TO DESIGNATED LOCATIONS BY USE OF ADEQUATE FENCING, IF NECESSARY.
 - ALL STORM WATER POLLUTION PREVENTION CONTROLS ARE TO BE MAINTAINED AND IN WORKING CONDITIONS AT ALL TIMES.
 - FOR A COMPLETE LISTING OF TEMPORARY STORM WATER POLLUTION PREVENTION CONTROLS REFER TO THE TPDES STORM WATER POLLUTION PREVENTION PLAN.
 - STORM WATER POLLUTION PREVENTION STRUCTURES SHOULD BE CONSTRUCTED WITHIN THE SITE BOUNDARIES. SOME OF THESE FEATURES MAY BE SHOWN OUTSIDE THE SITE BOUNDARIES ON THIS PLAN FOR VISUAL CLARITY.
 - AS SOON AS PRACTICAL, ALL DISTURBED SOIL THAT WILL NOT BE COVERED BY IMPERVIOUS COVER SUCH AS PARKWAY AREAS, EASEMENT AREAS, EMBANKMENT SLOPES, ETC. WILL BE STABILIZED PER APPLICABLE PROJECT SPECIFICATIONS.
 - BEST MANAGEMENT PRACTICES MAY BE INSTALLED IN STAGES TO COINCIDE WITH THE DISTURBANCE OF UPGRADE AREAS.
 - BEST MANAGEMENT PRACTICES MAY BE REMOVED IN STAGES ONCE THE WATERSHED FOR THAT PORTION CONTROLLED BY THE BEST MANAGEMENT PRACTICES HAS BEEN STABILIZED IN ACCORDANCE WITH TPDES REQUIREMENTS.
 - UPON COMPLETION OF THE PROJECT, INCLUDING SITE STABILIZATION, AND BEFORE FINAL PAYMENT IS ISSUED, CONTRACTOR SHALL REMOVE ALL SEDIMENT AND EROSION CONTROL MEASURES, PAYING SPECIAL ATTENTION TO ROCK BERMS IN DRAINAGE FEATURES.
 - WHERE VEGETATED FILTER STRIPS ARE INDICATED, CONTRACTOR SHALL VERIFY THAT SUFFICIENT VEGETATION EXISTS, OTHERWISE CONTRACTOR SHALL PLACE SILT FENCING IN LIEU OF VEGETATED FILTER STRIP.
 - PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL COORDINATE PLACEMENT OF TEMPORARY BEST MANAGEMENT PRACTICES WITHIN TxDOT RIGHT-OF-WAY WITH TxDOT.
 - CPS ENERGY WILL FUNCTION AS A SECONDARY OPERATOR ON THIS PROJECT AND WILL BE INSTALLING ELECTRIC UTILITIES FOR ON-SITE CONSTRUCTION AND OFF-SITE FEED TO THE PROJECT.

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.	EXHIBIT 2
THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.	C1.00



DATE

NO.

REVISION

STATE OF TEXAS

DAVID E. MARTINEZ

94900

PROFESSIONAL ENGINEER

9/26/24

PAPE-DAWSON

ENGINEERS

2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000

TEXAS ENGINEERING FIRM #FC 1 TEXAS SURVEYING FIRM #1028800

BURR ROAD PARKING LOT - PHASE 2

ALAMO HEIGHTS, TEXAS

STORM WATER POLLUTION PREVENTION PLAN

PLAT NO.

N/A

JOB NO.

7531-10

DATE

JANUARY 2025

DESIGNER

JF

CHECKED

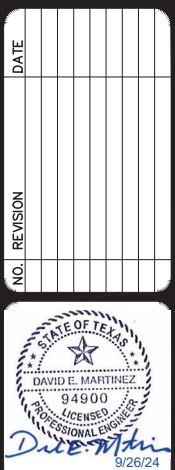
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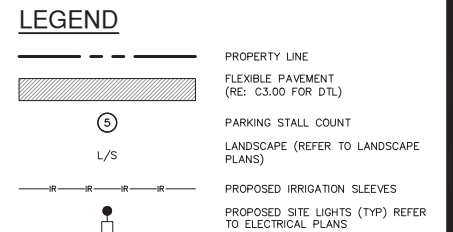
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SHEET

C1.00



<u>LEGAL DESCRIPTION:</u> LOT 41, BLOCK 3, C.B. 5600, COUNTRY CLUB HEIGHTS SUBDIVISION (1.370 ACRES)	<u>ADDRESS:</u> 159 BURR RD. ALAMO HEIGHTS, TEXAS 78209
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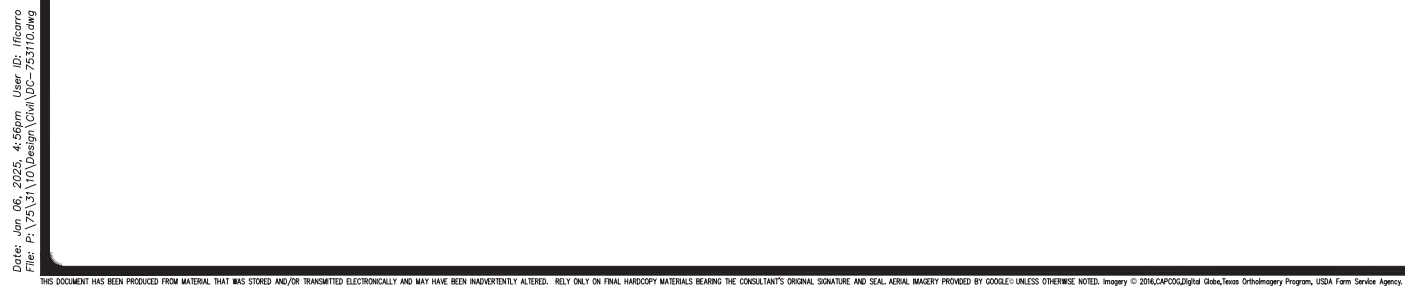
1	4" WIDE WHITE STRIPING (TYPICAL)
2	WHEEL STOP (TYPICAL) (REF: C3.00 FOR DTL)
3	6" STANDARD CURB (REF: C3.00 FOR DTL)
4	ASPHALT / ASPHALT PAVEMENT JUNCTURE (REF: C3.00 FOR DTL)
5	SAWTOOTH CURB (REF: C3.00 FOR DTL)
6	PROPOSED FENCE TO MATCH EXISTING FENCE
7	2' CONCRETE FLUME (REF: C3.00 FOR DTL)

**PAPE-DAWSON
ENGINEERS**

2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10228800

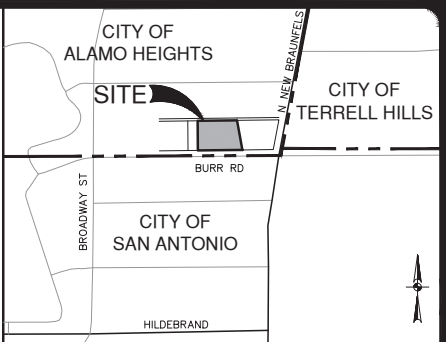
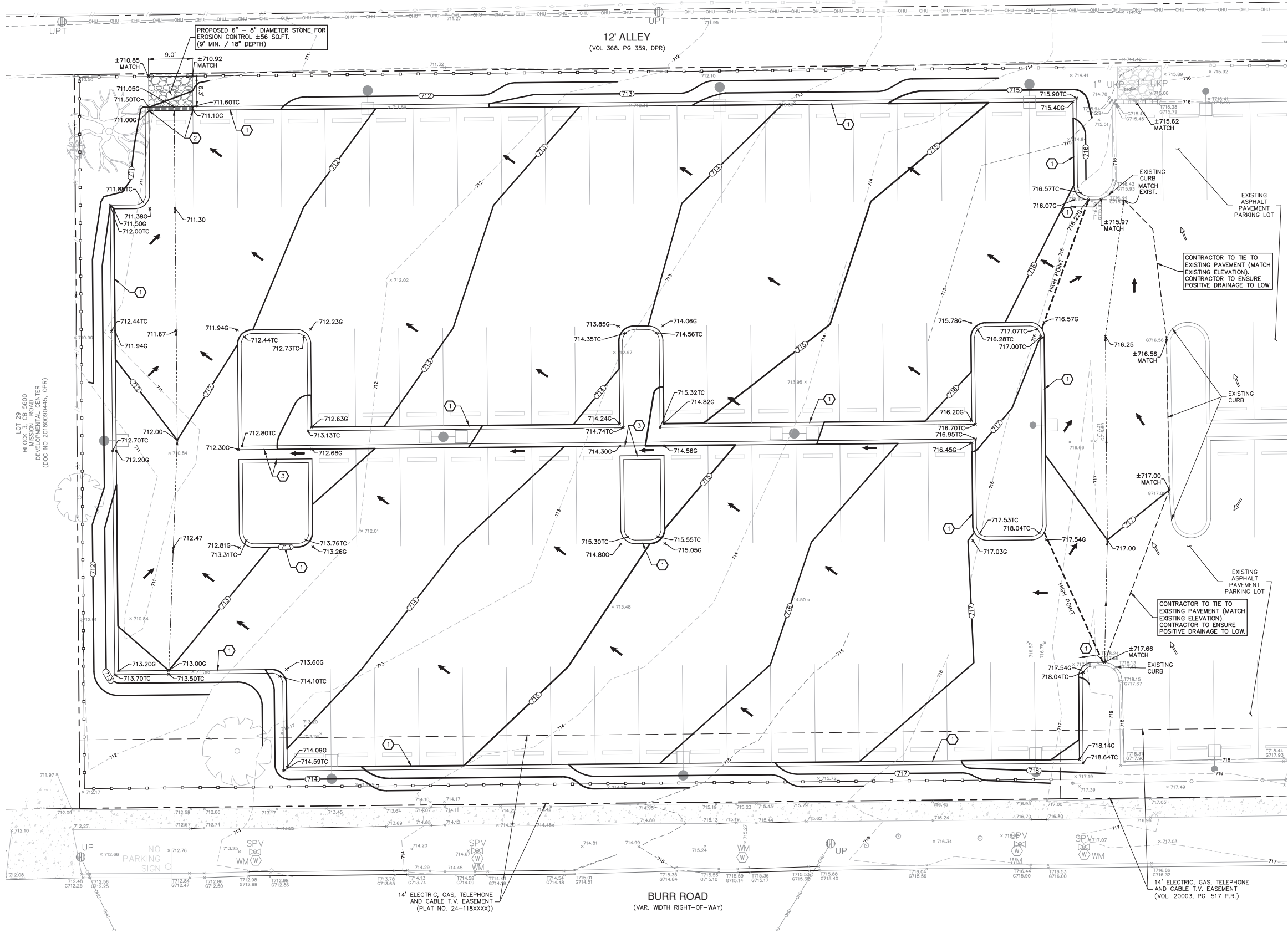
BURR ROAD PARKING LOT - PHASE 2
ALAMO HEIGHTS, TEXAS
DIMENSIONAL CONTROL AND PAVING PLAN

PERMIT SET



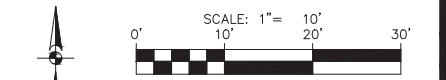
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ADDRESS:
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LEGEND	
—	PROPERTY LINE
- - - 715	EXISTING CONTOURS MAJOR
- - - 714	EXISTING CONTOURS MINOR
- - - 715	PROPOSED CONTOURS
+ 715.00	PROPOSED SPOT ELEVATION
+ 714.50TC	PROPOSED TOP OF CURB SPOT ELEVATION
+ 714.65G	PROPOSED GUTTER ELEVATION
- - - HIGH POINT	HIGH POINT (HP)
- - -	PROPOSED DRAINAGE SWALE
→	FLOW ARROW (EXISTING)
→	FLOW ARROW (PROPOSED)
— CHU — CHU — CHU — CHU —	EXISTING OVERHEAD ELECTRIC LINE AND UTILITY POLE
- - -	PROPOSED IRRIGATION SLEEVES (REFER TO LANDSCAPE PLANS)

KEYED NOTES	
①	6" STANDARD CURB (REF: C3.00 FOR DTL)
②	SAWTOOTH CURB (REF: C3.00 FOR DTL)
③	2' CONCRETE FLUME (REF: C3.00 FOR DTL)

NOTE
SEE SHEET C0.10 FOR ADDITIONAL GENERAL NOTES.

CAUTION!!
EXISTING UTILITIES ARE LOCATED WITHIN THE LIMITS OF THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL EXERCISE EXTRA CARE IN DIGGING ANY TRENCH FOR PROPOSED UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING, VERIFYING THE EXACT LOCATION AND IDENTIFYING ANY AREAS OF CONFLICTS WITH EXISTING UTILITIES AND WILL NOTIFY THE ENGINEER IMMEDIATELY IF CONFLICTS ARE FOUND.

CAUTION!!
CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

TRENCH EXCAVATION SAFETY PROTECTION
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

NO.	REVISION	DATE

PAPE-DAWSON ENGINEERS

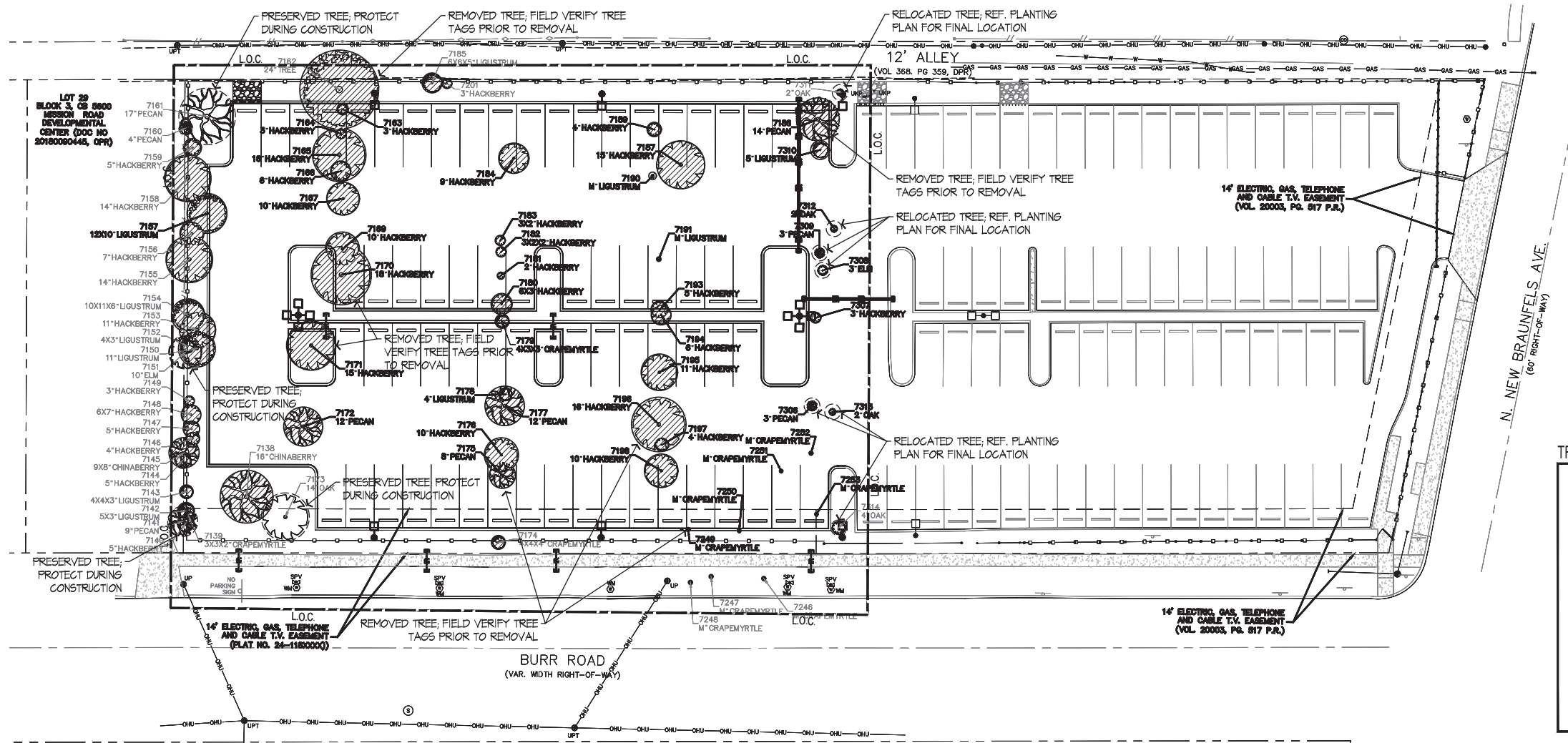
DAVID E. MARTINEZ
LICENSED PROFESSIONAL ENGINEER
94500
9/26/24

2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #FC 1 TEXAS SURVEYING FIRM #1028800

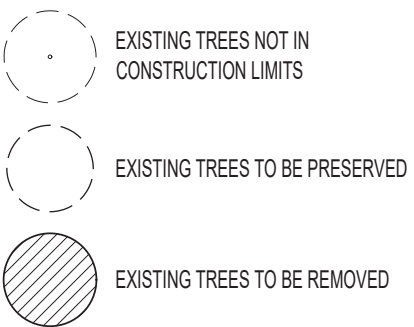
BURR ROAD PARKING LOT - PHASE 2
ALAMO HEIGHTS, TEXAS
GRADING AND DRAINAGE PLAN

PLAT NO.	N/A
JOB NO.	7531-10
DATE	JANUARY 2025
DESIGNER	JF
CHECKED	DM
DRAWN	LF
SHEET	C2.00

PERMIT SET



TREE PRESERVATION LEGEND



BURR ROAD PARKING
EXPANSION

REMOVED TREE LIST

NUMBER	SPECIES	NOTES
#1138	16" CHINABERRY	REMOVED
#1139	5.5" GRAPE MYRTLE	REMOVED
#1140	5" HACKBERRY	REMOVED
#1142	6.5" LIGUSTRUM	REMOVED
#1143	7.5" LIGUSTRUM	REMOVED
#1144	5" HACKBERRY	REMOVED
#1145	13" CHINABERRY	REMOVED
#1146	4" HACKBERRY	REMOVED
#1147	5" HACKBERRY	REMOVED
#1148	9.5" HACKBERRY	REMOVED
#1149	3" HACKBERRY	REMOVED
#1150	11" LIGUSTRUM	REMOVED
#1152	5.5" LIGUSTRUM	REMOVED
#1153	11" HACKBERRY	REMOVED
#1154	13.5" LIGUSTRUM	REMOVED
#1155	14" HACKBERRY	REMOVED
#1156	7" HACKBERRY	REMOVED
#1157	17" LIGUSTRUM	REMOVED
#1158	14" HACKBERRY	REMOVED
#1159	5" HACKBERRY	REMOVED
#1162	24" MULBERRY	REMOVED
#1163	3" HACKBERRY	REMOVED
#1164	3" HACKBERRY	REMOVED
#1165	16" HACKBERRY	REMOVED
#1166	6" HACKBERRY	REMOVED
#1167	10" HACKBERRY	REMOVED
#1169	10" HACKBERRY	REMOVED
#1170	18" HACKBERRY	REMOVED
#1171	15" HACKBERRY	REMOVED
#1172	12" PECAN	REMOVED
#1174	8" GRAPE MYRTLE	REMOVED
#1175	8" PECAN	REMOVED

* N/A REPRESENTS A TREE TOO SMALL TO MEASURE

PRESERVED TREE LIST

NUMBER	SPECIES	NOTES
#1116	10" HACKBERRY	REMOVED
#1117	12" PECAN	REMOVED
#1118	4" LIGUSTRUM	REMOVED
#1119	7" GRAPE MYRTLE	REMOVED
#1120	7.5" HACKBERRY	REMOVED
#1121	2" HACKBERRY	REMOVED
#1122	5" HACKBERRY	REMOVED
#1123	4" HACKBERRY	REMOVED
#1124	9" HACKBERRY	REMOVED
#1125	11.5" LIGUSTRUM	REMOVED
#1126	14" PECAN	REMOVED
#1127	15" HACKBERRY	REMOVED
#1129	4" HACKBERRY	REMOVED
#1130	*LIGUSTRUM - N/A	REMOVED
#1131	*LIGUSTRUM - N/A	REMOVED
#1133	5" HACKBERRY	REMOVED
#1134	6" HACKBERRY	REMOVED
#1135	11" HACKBERRY	REMOVED
#1136	16" HACKBERRY	REMOVED
#1137	4" HACKBERRY	REMOVED
#1138	10" HACKBERRY	REMOVED
#1139	3" HACKBERRY	REMOVED
#1140	*GRAPE MYRTLE - N/A	REMOVED
#1141	*GRAPE MYRTLE - N/A	REMOVED
#1142	*GRAPE MYRTLE - N/A	REMOVED
#1143	*GRAPE MYRTLE - N/A	REMOVED
#1144	*GRAPE MYRTLE - N/A	REMOVED
#1145	*GRAPE MYRTLE - N/A	REMOVED
#1146	*GRAPE MYRTLE - N/A	REMOVED
#1147	*GRAPE MYRTLE - N/A	REMOVED
#1148	*GRAPE MYRTLE - N/A	REMOVED
#1149	3" HACKBERRY	REMOVED
#1150	5" LIGUSTRUM	REMOVED

TREE PRESERVATION AND LANDSCAPE REQUIREMENTS:

TREE PRESERVATION:
EXISTING HERITAGE TREES: 1 HERITAGE TREE
TREE #1162 - 24" MULBERRY - TREE IN DECLINE
NO HERITAGE TREE MITIGATION REQUIRED

EXISTING SITE TREES:
SEE EXISTING TREE INVENTORY

PROPOSED TREES:
4" CEDAR ELM (10 TOTAL)
4" LIVE OAK (12 TOTAL)
2" MOUNTAIN LAUREL (16 TOTAL)

LANDSCAPE TABULATIONS:
PARKING LOT LANDSCAPING (LIMITS OF CONSTRUCTION):

A) SECTION 3-54 (1) (A) - LANDSCAPE AREA WIDTH
REQUIRED: 8' WIDE LANDSCAPE AREA ALONG PARKING AREA BOUNDARIES
PROVIDED: 8' WIDE LANDSCAPE AREA ON THREE SIDES (NORTH, SOUTH AND WEST)

B) SECTION 3-54 (1) (C) - LANDSCAPE PLAN AND PARKING LOT TREES
REQUIRED: 1. LANDSCAPE PLAN (SIZE, SPECIES, AND LOCATIONS OF PROPOSED LANDSCAPE)
2. ONE (1) 4" CALIPER TREE PER EIGHT (8) PARKING SPACES.
PROVIDED: 1. LANDSCAPE PLAN
2. 9 PARKING LOT TREES
61 STALLS / 8 STALLS PER TREE = 8.375 = 9 PARKING LOT TREES

C) SECTION 3-60 (4) - CANOPY TREES IN R.O.W.
REQUIRED: PROVIDE AT LEAST ONE (1) CANOPY TREE FOR EACH 25' OF FRONTAGE
PROVIDE: TOTAL FRONTAGE = 204 LF
204 LF / 25 LF = 8.36 TREES = 9 R.O.W. TREES PROVIDED

REFERENCE NOTE:
REFERENCE SHEET LP SHEETS FOR
PROPOSED PLANTING PLAN, PLANTING
SPECIFICATIONS, NOTES AND DETAILS.

BURR ROAD
ALAMO HEIGHTS, TEXAS

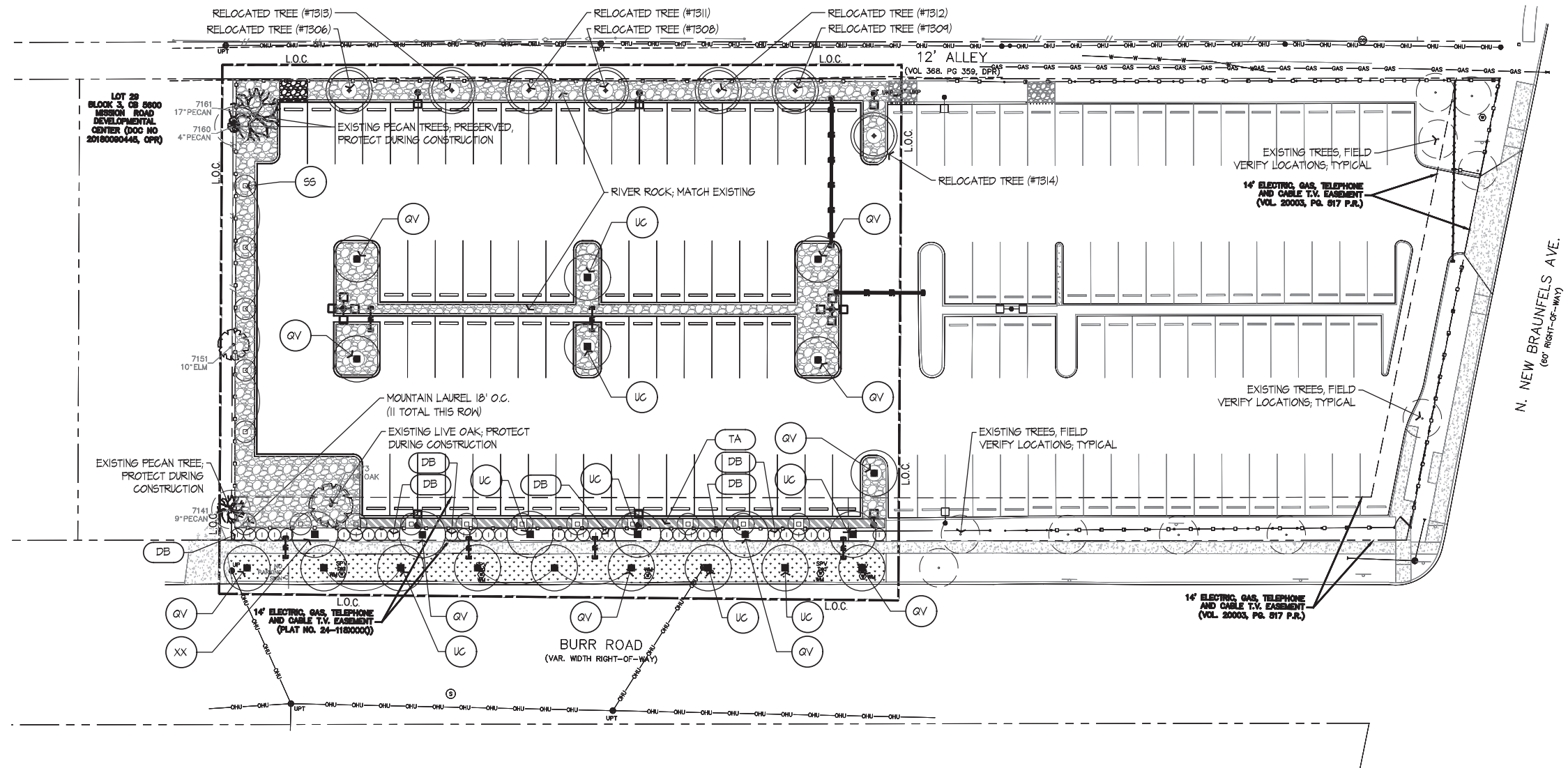
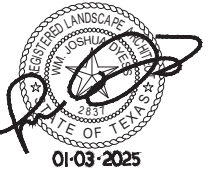


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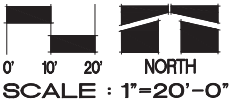
TREE PRESERVATION PLAN

LTP 1.1



BURR ROAD PARKING
EXPANSION

BURR ROAD
ALAMO HEIGHTS, TEXAS



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PLANTING PLAN

REFERENCE NOTE:
REFERENCE SHEET LP 2.1 FOR PLANT LIST,
PLANTING SPECIFICATIONS, NOTES AND
PLANTING DETAILS

LP 1.1

PRESSURE REQUIREMENT CALCULATIONS @ ZONE No. 7		
DESIGN STATISTICS FOR CALCULATIONS		
Total Zone Flow:		14.0 g.p.m.
Electric Valve Size:		1"
Static Pressure Less 10% (static @ 65 psi):		58.5 p.s.i.
ACCUMULATIVE LOSSES FROM CITY MAIN TO FURTHEST HEAD		
Sprinkler head requirement:		30 p.s.i.
Zone Pipe/Fitting Loss:		1.15 p.s.i.
1" Electric Valve Loss:		3.0 p.s.i.
Elevation Net Loss (+/- FT.):		N/A
System Mainline Loss (1.25" Sch-40 Mainline):		5.8 p.s.i.
Backflow Preventer Loss (EXISTING):		N/A
Water Meter Loss (EXISTING):		N/A
Master Electric Valve Loss (EXISTING):		N/A
Type K Copper Service Loss:		
Total Net Loss:		9.95 p.s.i.
Design Pressure:		39.95 p.s.i.
Notes: System requires a minimum of 40 psi static pressure (AT POINT OF CONNECTION TO EXISTING MAINLINE) for system to operate properly. Irrigation Contractor shall conduct on site pressure test to verify site pressure prior to starting work. Contractor shall notify Owner's Representative of pressure deficiencies or any other on site problems that may alter the effectiveness of the system. Pipe has been size to insure that velocity does not exceed 5 FPS. do not change pipe size in the field without consulting system designer.		

4 CRITICAL LOSS CHART

TYPICAL WEEKLY SCHEDULE BASED ON PRECIPITATION RATE					
Precipitation Rate (in/hr)	Water Desired (in/wk)	Time/Cycle (min)	No. of Zones	Total Time * Min. Hrs.	
Turf Rotor Zones .64	.80				
Turf Spray Zones 1.74	.80	28.0	3	84	1.4
Turf Drip Zones .85	.80				
Drip Zones .55	.80	88.0	1	88	1.5
Tree Bubblers 3.87	.80	12.0	6	72	1.2
Total System Hours of Operation Per Week				4.1	

* IT WILL BE NECESSARY TO WATER MULTIPLE ZONES AT ONE TIME TO MEET WATERING WINDOW . A TYPICAL SCHEDULE WOULD ALLOW WATERING TO OCCUR TWO TIMES PER WEEK. TOTAL WATERING TIME WOULD BE DIVIDED BY THE NUMBER OF WATERING DAYS. THIS SCHEDULE IS DESIGNED FOR SUMMER WATER USAGE AND ESTABLISHMENT OF NEW PLANTING.

3 VALVE SCHEDULE

- THIS PROJECT REQUIRES THE ALTERATION OF AN EXISTING IRRIGATION SYSTEM. THE SYSTEM SHALL BE OBSERVED IN REASONABLE WORKING CONDITION AND IS TO BE MAINTAINED IN PLACE FOR USE WITH NEW EQUIPMENT AS DESCRIBED IN THESE DOCUMENTS. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIMSELF FAMILIAR WITH THE EXISTING SYSTEM BEFORE BEGINNING WORK ON THE INSTALLATION OF THIS ADDITION. COORDINATE WITH THE SYSTEM DESIGNER, WADE RADLET AT 210-788-7015. THE IRRIGATION CONTRACTOR SHALL INVESTIGATE THE EXISTING SYSTEM AND COORDINATE WITH THE DESIGNER AND THE LANDSCAPE ARCHITECT.
- THE IRRIGATION CONTRACTOR SHALL CONDUCT STATIC PRESSURE MEASUREMENTS ON THE EXISTING IRRIGATION SYSTEM. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WITHOUT VERIFYING ACTUAL ON-SITE WATER PRESSURE FROM THE SOURCE .IF STATIC WATER PRESSURE IS LESS THAN 60P.S.I. DO NOT PROCEED UNTIL CONSULTING WITH SYSTEM DESIGNER AND LANDSCAPE ARCHITECT. IF ACTUAL SITE STATIC PRESSURE EXCEEDS DESIGN PRESSURE BY 15 P.S.I. IN ANY ZONE, A PRESSURE REDUCING VALVE SHALL BE INSTALLED.
- THE IRRIGATION CONTRACTOR SHALL VERIFY THE EXISTING IRRIGATION BACKFLOW DEVICE IS IN WORKING CONDITION. CONTRACTOR SHALL VERIFY LOCATION WITH LANDSCAPE ARCHITECT AND CONDUCT TEST TO CONFIRM PROPER FUNCTION. TEST TO CONDUCTED BY CERTIFIED BACKFLOW INSPECTOR AND A BACKFLOW INSPECTION CERTIFICATE TO BE SUPPLIED AS PART OF CLOSEOUT DOCUMENTS. IF THE EXISTING BACKFLOW IS NOT INSTALLED PER STATE AND LOCAL CODES, REPLACE THE DEVICE WITH A NEW BACKFLOW AS REQUIRED TO MEET THESE CODES.
- THE ABOVE DRAWING IS PROVIDED AS A REFERENCE FOR THE IRRIGATION CONTRACTOR. IT IN NO WAY IS AN ASSURANCE OF THE LOCATION OF ANY PART OF THE EXISTING SYSTEM. IT IS THE IRRIGATION CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING EQUIPMENT CONDITION AND LOCATIONS ONCE THE CONTRACT HAS BEEN AWARDED. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- IT IS THE IRRIGATION CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE GENERAL CONTRACTOR DURING THE SITE DEMOLITION PROCESS IN ORDER TO MAINTAIN IN PLACE THE MAINLINE, VALVES AND WIRES TO BE REUSED IN THE FINAL DESIGN. MAINLINE AND LATERAL PIPING WILL HAVE TO BE PROTECTED AND REUSED TO INSURE PROPER FUNCTION OF THE SYSTEM.
- IRRIGATION CONTRACTOR SHALL EITHER REPROGRAM THE EXISTING CONTROLLER OR ADD A NEW CONTROLLER AS SPECIFIED IN THESE DOCUMENTS TO MEET THE NUMBER OF ZONES REQUIRED FOR THE SYSTEM. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO VERIFY LOCATION AND CAPACITY OF EXISTING CONTROLLER PRIOR TO INSTALLING THE NEW IRRIGATION SYSTEM COMPONENTS.
- THE IRRIGATION CONTRACTOR SHALL VERIFY IN THE FIELD THE EXTENT OF THE EXISTING SYSTEM. ON EXISTING ZONES TO BE REUSED, ADD HEADS AS REQUIRED TO INSURE ADEQUATE HEAD TO HEAD COVERAGE. THE CONTRACTOR WILL REPLACE EXISTING HEADS WITH NEW HEADS WHEN NEEDED TO INSURE PROPER FUNCTION OF THE SYSTEM. THE IRRIGATION CONTRACTOR SHALL IDENTIFY ANY EQUIPMENT THAT HAS BEEN DAMAGED OR ABANDONED AS A RESULT OF NEW CONSTRUCTION AND REMOVE OR REPAIR ALL ZONES AFFECTED BY CONSTRUCTION DISTURBANCE.
- THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR ADJUSTING ALL HEADS AND NOZZLES ONCE THE SYSTEM IS INSTALLED TO INSURE HEAD TO HEAD COVERAGE AND TO INSURE THAT NO OVER SPRAY OCCURS ONTO WALKS AND PARKING AREAS. THESE FINAL ADJUSTMENTS ARE TO BE COMPLETE PRIOR TO FINAL INSPECTION AND ARE A CONDITION OF ACCEPTANCE AS COMPLETE.
- THE IRRIGATION SYSTEM WILL REQUIRE THE USE OF THE EXISTING HEADS. THE IRRIGATION CONTRACTOR SHALL ADD HEADS AND NOZZLES OR ADJUST HEAD LOCATIONS TO INSURE THAT EACH ZONE HAS PROPER COVERAGE AND HEAD TO HEAD COVERAGE WITHOUT OVER SPRAY ONTO HARDSCAPE OR PARKING AREAS.
- A WEATHER SENSOR COULD NOT BE LOCATED DURING FIELD INSPECTION. INSTALL A NEW WEATHER SENSOR WITH RAIN/FREEZE DETECTION.

3 EXISTING SYSTEM CONSTRUCTION NOTES

CONSTRUCTION NOTES:

- IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIMSELF FAMILIAR WITH THE SPECIFICATIONS AND ALL SUBMITTAL REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO NOTIFY THE OWNERS REPRESENTATIVE FOR SITE INSPECTIONS AS SPECIFIED IN THE SPECIFICATIONS. FAILURE TO NOTIFY THE OWNER'S REPRESENTATIVE DOES NOT RELIEVE THE CONTRACTOR FROM INSPECTION APPROVAL AND WILL REQUIRE THE CONTRACTOR TO UNCOVER WORK AS REQUIRED FOR APPROVAL AT THE COST OF THE CONTRACTOR. IRRIGATION CONTRACTOR IS TO INFORM OWNERS REPRESENTATIVE OF THE START DATE OF WORK.
- THE IRRIGATION CONTRACTOR IS REQUIRED BY LAW TO NOTIFY TEXAS ONE CALL (800-245-4545) 72 HOURS PRIOR TO ANY EXCAVATION. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIMSELF FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES. IRRIGATION CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF SAID UTILITIES WHETHER OR NOT TEXAS ONE CALL IS NOTIFIED.
- DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WITHOUT VERIFYING ACTUAL ON-SITE WATER PRESSURE FROM THE SOURCE. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE. THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH OTHER CONTRACTORS AS REQUIRED TO ACCOMPLISH IRRIGATION INSTALLATION.
- DUE TO SCALE OF DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS SLEEVES, ETC., WHICH MAY BE REQUIRED. IRRIGATION CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL OF HIS WORK AND PLAN HIS WORK ACCORDINGLY, FURNISHING SUCH FITTINGS, ETC., AS MAY BE REQUIRED TO MEET SUCH CONDITIONS. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. THE WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICTS BETWEEN IRRIGATION SYSTEM, PLANTING AND ARCHITECTURAL FEATURES. THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC., SHOWN WITHIN PAVED AREAS IS FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS AND WITHIN PROPERTY LINES.
- DURING INSTALLATION IT IS THE IRRIGATION CONTRACTOR'S RESPONSIBILITY TO COORDINATE PIPING WITH THE LANDSCAPE SUBCONTRACTOR TO AVOID CONFLICT WITH PROPOSED PLANTING. IT WILL BE THE RESPONSIBILITY OF THE IRRIGATION SUBCONTRACTOR TO MOVE PIPING TO ALLOW PROPER PLACEMENT OF PLANT MATERIAL. THE IRRIGATION CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO ENSURE PROPER COVERAGE AT NO ADDITIONAL COST TO THE OWNER.
- NO MACHINE TRENCHING IS TO BE DONE WITHIN THE DRIPLINE OF EXISTING TREES. TRENCHING IS TO BE DONE BY HAND, AIR-SPADE OR BY TUNNELING UNDER ROOT SYSTEM BY METHOD APPROVED BY LANDSCAPE ARCHITECT. PIPING LAYOUT IS DIAGRAMMATIC AND PIPING SHALL BE ROUTED AROUND EXISTING TREES AS POSSIBLE TO AVOID DAMAGE TO THE ROOT SYSTEMS. DO NOT CUT ANY ROOT OVER 3/4" DIAMETER UNLESS APPROVAL FROM THE LANDSCAPE ARCHITECT IS FIRST OBTAINED. ANY CUTS MADE SHALL BE CLEAN AND WITHOUT FRAIED ENDS.
- IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR SLEEVES AND CHASES WHEREVER PIPING OR CONDUIT PASSES, UNDER ALL PAVING, THROUGH WALLS, ETC. ALL SLEEVE LOCATIONS MAY NOT BE SHOWN ON PLAN. COORDINATE WITH ARCHITECTURAL AND CIVIL DRAWINGS. GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS AS REQUIRED. ALL SLEEVE AND CHASE LOCATIONS ARE NOT NOTED ON PLAN. ALL SLEEVES 4" OR LESS SHALL BE SCH-40 PVC, ALL SLEEVES 6" OR GREATER SHALL BE CLASS-200 PVC. ALL SLEEVES TO BE SIZED TWICE THE DIAMETER OF PIPE OR COMBINATION OF PIPES ENCLOSED WITHIN THE SLEEVE.
- CONFIRM STATIC WATER PRESSURE AT LEAST 7 DAYS BEFORE BEGINNING WORK. IF STATIC WATER PRESSURE IS LESS THAN STATED IN PRESSURE CALCULATIONS DO NOT PROCEED UNTIL DIRECTED SO BY THE LANDSCAPE ARCHITECT. IF ACTUAL SITE STATIC PRESSURE EXCEEDS DESIGN PRESSURE BY 15 P.S.I. IN ANY ZONE, A PRESSURE REDUCING VALVE SHALL BE INSTALLED. REFER TO DETAILS FOR MODEL.
- ADJUSTABLE FLOW CONTROLS SHALL BE REQUIRED ON CIRCUIT REMOTE CONTROL VALVE. PRESSURE AT ANY POINT WITHIN A ZONE SHALL NOT VARY BY MORE THAN 10% FROM THE DESIGN SPRINKLER OPERATING PRESSURE. SEE SPECIFICATIONS FOR TESTING.
- THE CONTRACTOR SHALL BE A REGISTERED LICENSED IRRIGATOR IN THE STATE OF TEXAS. CONTRACTOR MUST CONFORM TO ALL CODES AS STATED IN SECTION 344 OF THE TEXAS WATER CODE AS OUTLINED BY TCEQ.
- OBTAIN COVERAGE TEST APPROVAL FROM OWNER'S REPRESENTATIVE PRIOR TO PLANTING, SODDING OR SEEDING.
- ALL UNDESIGNATED END LATERAL PIPING SHALL BE ½" IN SPRAY ZONES AND ¾" IN ROTOR ZONES.
- SPRINKLER HEAD SPACING SHALL NOT EXCEED 50% OF SPRAY DIAMETER BASED ON MANUFACTURERS OPERATING SPECIFICATIONS. SPRINKLER HEAD SPACING SHALL BE DESIGNED FOR HEAD-TO-HEAD COVERAGE OR HEADS SHALL BE SPACED AS PER MANUFACTURERS RECOMMENDATIONS AND ADJUSTED FOR PREVAILING WINDS. THE SYSTEM SHALL BE DESIGNED SO THAT IRRIGATION IS NOT APPLIED TO VEHICULAR TRAFFIC LANES, OTHER PAVEMENT OR STRUCTURES.
- ALL ROTORS SHALL BE LOCATED 12" FROM PAVEMENT, CURBS OR EDGE OF STRUCTURE, ALL SPRAY HEADS SHALL BE LOCATED 6" FROM PAVEMENT, CURBS OR EDGE OF STRUCTURE.
- VALVE AND CIRCUITS SHALL BE SEPARATED BASED ON WATER USE, SO THAT TURF AREAS ARE WATERED SEPARATELY FROM SHRUB AND GROUND COVER AREAS. IRRIGATION HEADS IN THE TURF AREAS WILL BE VALVED SEPARATELY FROM SHRUB AND/OR GROUND COVER AREAS. IT IS RECOMMENDED THAT SEASONAL COLOR AREAS BE WATERED SEPARATELY. UNDER NO CIRCUMSTANCES ARE ZONE TYPES TO BE COMBINED I.E. ROTARY HEADS WITH SPRAYS, TURF AREAS WITH PLANTING BEDS.
- IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM STATIC PRESSURE ON SITE PRIOR TO STARTING WORK. REFER TO NOTES #9 AND #10.
- IT IS THE IRRIGATION CONTRACTOR'S RESPONSIBILITY TO SECURE ALL REQUIRED PERMITS AND PAY ALL ASSOCIATED FEES UNLESS OTHERWISE NOTED. ALL LOCAL CODES SHALL PREVAIL OVER ANY DISCREPANCIES CONTAINED IN THESE DOCUMENTS.
- UNSLEEVED PIPES MAY BE SHOWN UNDER PAVEMENT FOR GRAPHIC CLARITY. INSTALL PIPES IN ADJACENT SLEEVES WITHIN LANDSCAPE AREAS.
- 120 VAC ELECTRICAL POWER SOURCE AT CONTROLLER LOCATION SHALL BE PROVIDED BY OTHERS. THE IRRIGATION CONTRACTOR SHALL MAKE THE FINAL CONNECTION FROM THE ELECTRICAL SOURCE TO THE CONTROLLER WITH A HARDWIRE CONNECTION APPROVED AND INSTALLED BY A LICENSED ELECTRICIAN.
- SPRINKLER HEADS SHALL HAVE MATCHED PRECIPITATION RATES WITHIN EACH CONTROL VALVE CIRCUIT.
- SERVICEABLE CHECK VALVES SHALL BE REQUIRED ADJACENT TO PAVED AREAS WHERE ELEVATION DIFFERENCES MAY CAUSE LOW HEAD DRAINAGE.
- ALL AUTOMATIC IRRIGATION SYSTEMS SHALL BE EQUIPPED WITH A CONTROLLER CAPABLE OF DUAL OR MULTIPLE PROGRAMMING. CONTROLLERS SHALL HAVE MULTIPLE CYCLE START CAPACITY AND A FLEXIBLE CALENDAR PROGRAM. INCLUDING THE CAPABILITY OF BEING SET TO WATER EVERY FIVE DAYS. ALL AUTOMATIC IRRIGATION SYSTEMS SHALL BE EQUIPPED WITH A RAIN SENSOR SHUT-OFF DEVICE.
- ALL IRRIGATION WIRES SHALL BE UL LISTED FOR DIRECT UNDERGROUND BURIAL AND SHALL BE SIZED PER THE MANUFACTURER'S RECOMMENDATIONS. 3M-DBY WATERPROOF CONNECTORS TO BE USED ON ALL WIRE CONNECTIONS. SUBMIT SAMPLE TO LANDSCAPE ARCHITECT.
- ALL IRRIGATION HEADS SHALL BE ADJUSTED TO MINIMIZE OVER-SPRAY ONTO ALL IMPERVIOUS SURFACES.
- ALL PIPE CONNECTIONS SHALL BE PRIMED WITH AN APPROVED COLOR PRIMER BEFORE BEING CHEMICAL WELDED.
- AFTER AWARD OF CONTRACT AND BEFORE ANY IRRIGATION SYSTEM MATERIALS ARE ORDERED FROM SUPPLIERS OR DELIVERED TO THE JOB SITE, SUBMIT TO THE OWNER A COMPLETE LIST OF ALL IRRIGATION SYSTEM MATERIALS, OR PROCESSES PROPOSED TO BE FURNISHED AND INSTALLED AS PART OF THIS CONTRACT. THE LANDSCAPE ARCHITECT OR OWNERS AUTHORIZED REPRESENTATIVE WILL ALLOW NO SUBSTITUTIONS WITHOUT PRIOR WRITTEN ACCEPTANCE. MANUFACTURER'S WARRANTIES SHALL NOT RELIEVE THE CONTRACTOR OF HIS LIABILITY UNDER THE GUARANTEE. SUCH WARRANTIES SHALL ONLY SUPPLEMENT THE GUARANTEE.
- IRRIGATION CLOSEOUT DOCUMENTS SHALL INCLUDE A WATER BUDGET. A LAMINATED COPY OF THE WATER BUDGET SHALL BE PERMANENTLY INSTALLED INSIDE THE IRRIGATION CONTROLLER DOOR.
 - CHART CONTAINING ZONE NUMBER, PRECIPITATION RATE AND GPM.
 - LOCATION OF EMERGENCY IRRIGATION SYSTEM SHUT-OFF VALVE.

2 NOTES

EXISTING EQUIPMENT

- EXISTING IRRIGATION WATER METER
- EXISTING BACKFLOW DEVICE
- EXISTING MASTER VALVE
- EXISTING CONTROLLER
- EXISTING WEATHER SENSOR

THE CONTRACTOR SHALL FIELD LOCATE THE IRRIGATION METER, BACKFLOW, MASTER VALVE AND CONTROLLER / WEATHER SENSOR TO ENSURE PROPER FUNCTION AND CAPACITY FOR EXPANSION BEFORE PROCEEDING

NEW EQUIPMENT

- NEW CONTROLLER - HUNTER XC-HYBRID CONTROLLER WITH SOLAR KIT, POLE MOUNT, FINAL LOCATION IS TO BE DETERMINED AFTER CONSULTING WITH LANDSCAPE ARCHITECT.
- NEW WEATHER SENSOR - HUNTER RFC SENSOR. FINAL LOCATION IS TO BE DETERMINED AFTER CONSULTING WITH LANDSCAPE ARCHITECT.

- RAINBIRD SPRAYS 1806-SAM-PRS SPRAY BODY IN TURF AREAS WITH MPR NOZZLES.
- RAINBIRD SPRAYS 1806-SAM-PRS SPRAY BODY IN TURF AREAS WITH VAN NOZZLES.

INDICATES MANUFACTURER'S STANDARD CATALOGED SPACING WITHOUT WIND. ALLOWANCE THIS NUMBER IS FOR REFERENCE ONLY AND DOES NOT INDICATE ACCEPTANCE OF DEVIATION FROM DESIGN SPACING TO THIS STANDARD.

INDICATES ANGLE OF COVERAGE, FOR EXAMPLE: H=180 DEG SUB-LETTER 'g' INDICATES GROUND COVER. 's' INDICATES SHRUB APPLICATION.

- INSTALL TWO ROWS OF DRIP LINE EVENLY SPACED. IF BED AREA EXCEEDS 36", INSTALL THREE ROWS EVENLY SPACED. INSTALL STAPLES @ MAX. 3' O.C TO SECURE

- DRIP CONTROL ZONE VALVE WITH DC LATCHING SOLENOID - REFERENCE DETAILS

- REMOTE CONTROL VALVE, HUNTER ICV WITH DC LATCHING SOLENOID, SIZE AS INDICATED ON PLANS
- MANUAL VALVE- SIZE OF MAINLINE

- ZONE IDENTIFICATION
ZONE SIZE IN GALLONS PER MINUTE
VALVE SIZE THIS ZONE

- ZONE IDENTIFICATION
ZONE SIZE IN GALLONS PER MINUTE

- HATCH PATTERN INDICATES BED/TURF AREAS TO BE INCLUDED THIS ZONE
VALVE SIZE THIS ZONE

- DRIPLINE; RAINBIRD XFS-09-18 FOR SURFACE PLANTING BEDS, ROWS SPACED AT 18 INCHES
RAINBIRD XFS-06-12 FOR SUBSURFACE TURF, ROWS SPACED AT 12 INCHES
RAINBIRD XFCV-09-12 FOR SLOPES GREATER THAN 3:1

- DRIP SUPPLY LINE, SCH 40 PVC, SIZE PER PLAN.

- TREE BUBBLER ASSEMBLY ON 6" POP UP

- MAIN LINE - USE SCH-40 PVC PIPE, SIZE AS INDICATED ON PLANS

- LATERAL LINE - USE CLASS 315 ON 1/2" PIPE AND CLASS 200 IPS PVC ON 3/4" AND LARGER PIPE. DO NOT DEViate ON SIZING WITHOUT CONSULTING WITH PROJECT DESIGNER.

- SLEEVE - USE TWO (2) SIZES LARGER THAN SPRINKLER PIPE DESIGNATED FOR CROSSING PAVING ON ALL LATERAL LINES. USE SCH-40 PVC PIPE, VALVE WIRING MAY BE RUN IN THE SAME SLEEVES.

NOTE: REFER TO SHEET LI 2.1 to LI 2.2 FOR DETAILS

FIELD LOCATE BY STAKING. THE CONTROLLER, WATER METER, BACKFLOW DEVICE, MASTER VALVE AND FLOW SENSOR FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

1 LEGEND

STATEMENT OF IRRIGATION DESIGN STANDARDS CONFORMITY:

This plan is complete and conforms to the design and installation parameters of the irrigation design and equipment standards set out 35-510(j) and 35-511(c)(6) of the City of San Antonio Unified Development Code.

Wade O. Radlet TX LI # 22397

SPECIAL NOTES:

- THE IRRIGATION CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND STATE MANDATED IRRIGATION ORDINANCES AND CODES AND WILL SECURE ALL REQUIRED PERMITS.
- ALL WIRES, CONTROL VALVES, AND PRESSURIZED WATER SUPPLY LINES SHALL NOT BE LOCATED WITHIN THE EXISTING ROW OR OUTSIDE PROPERTY BOUNDARIES.

"Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ), MC-178, PO Box 13087, Austin, Texas 78711-3087 TCEQ's website is: www.tceq.state.tx.us"



UPLAND
STUDIO
LANDSCAPE ARCHITECTURE



BURR ROAD PARKING
EXPANSION

BURR ROAD
ALAMO HEIGHTS, TEXAS

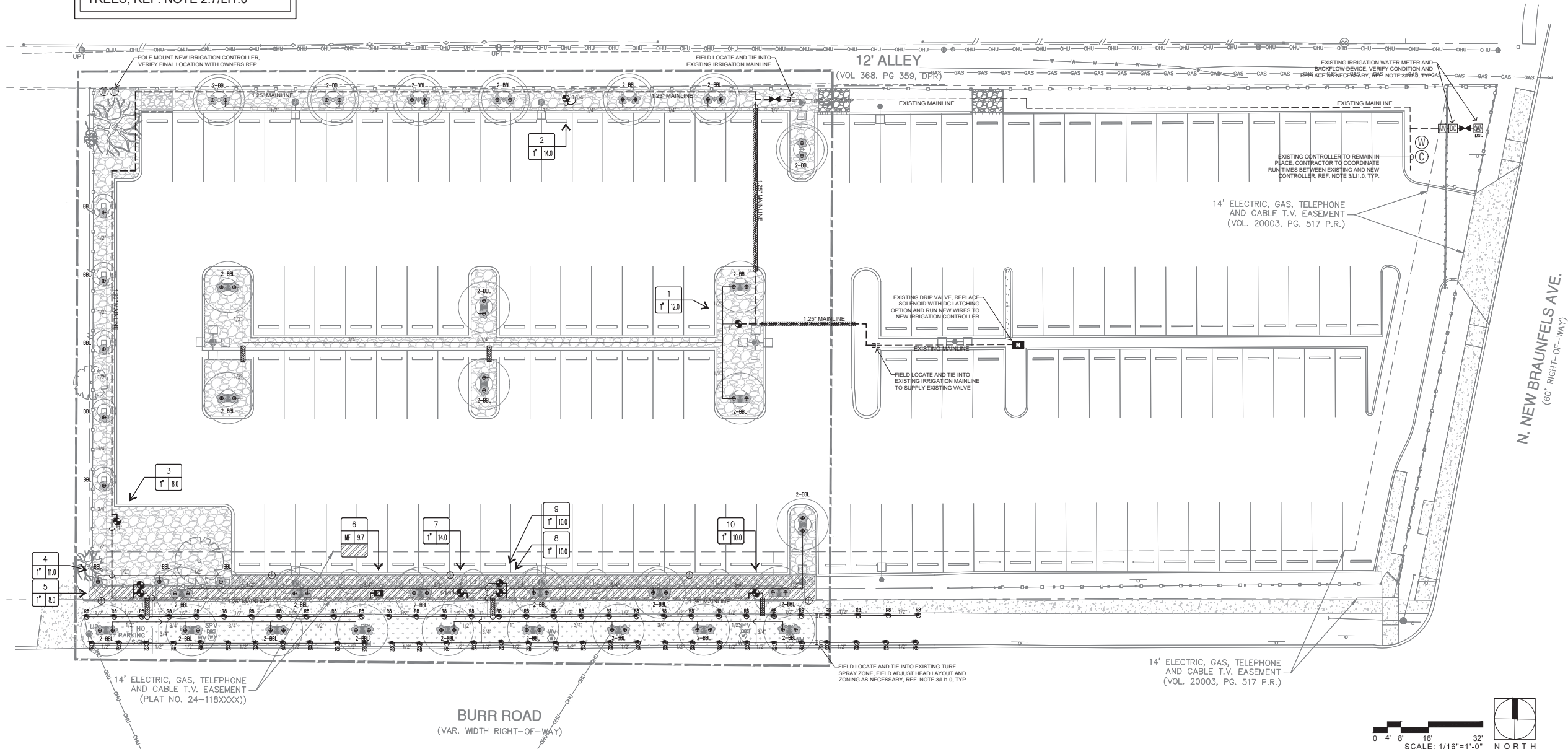
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IRRIGATION NOTES
AND LEGEND

LI1.0

NO MACHINE TRENCHING WITHIN
THE DRIPLINE OF EXSITING
TREES; REF. NOTE 2.7/LI1.0



BURR ROAD PARKING
EXPANSION

BURR ROAD
ALAMO HEIGHTS, TEXAS

REVISIONS: DATE

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IRRIGATION
PLAN

LI1.1





BURR ROAD PARKING
EXPANSION

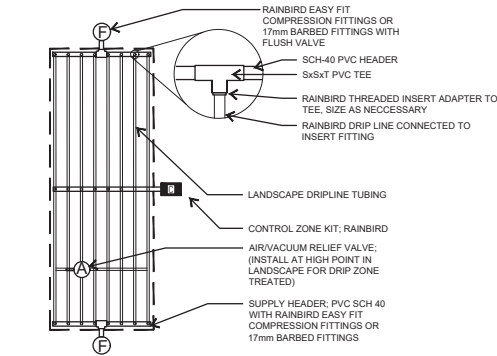
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ALAMO HEIGHTS, TEXAS

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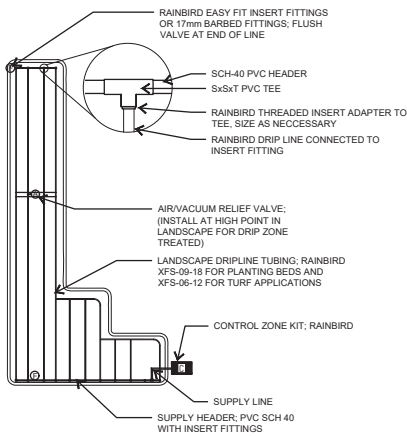
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IRRIGATION
DETAILS

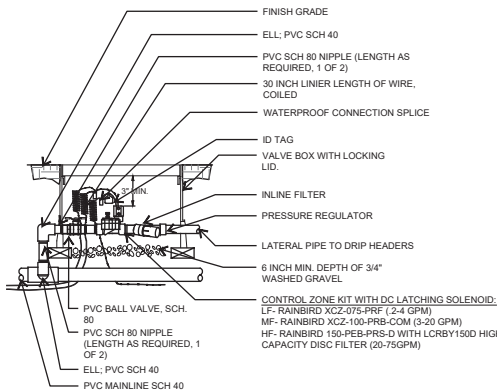
L12.2



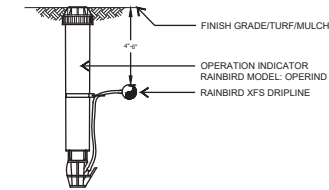
3 DRIPLINE INSTALLATION (CENTER FEED)



2 DRIPLINE INSTALLATION (END FEED)

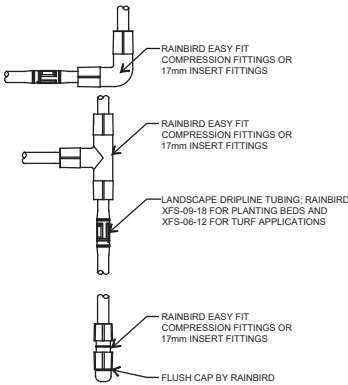


1 CONTROL ZONE KIT

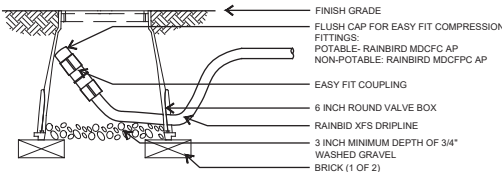


NOTE:
1. INSERT BARB TRANSFER FITTING DIRECTLY INTO DRIPLINE TUBING.
2. VAN NOZZLE MAY BE SET TO CLOSED, OR IF IT IS DESIRED TO SEE SPRAY FROM THE NOZZLE, SET THE ARC TO 0. PATTERN. THE FLOW FROM THE NOZZLE, 0.3 GPM, SHOULD BE ACCOUNTED FOR IN THE SYSTEM DESIGN.

7 DRIPLINE OPERATION INDICATOR

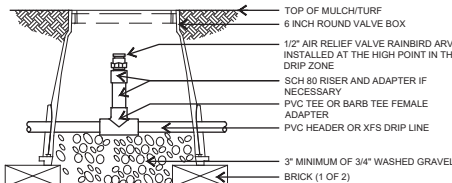


6 DRIPLINE FITTINGS



NOTE:
1. ALLOW A MINIMUM OF 8-INCHES OF DRIPLINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

5 DRIPLINE FLUSH VALVE



4 AIR RELIEF VALVE

- 1.) DRIPLINE SHALL BE BURIED 3" TO 9" BELOW FINISHED SOIL GRADE IN PLANTING BEDS AFTER PLANTING AND BEFORE MULCH AND 4" TO 8" BELOW FINISHED GRADE IN TURF AREAS.
- 2.) STAGGER EMITTER SPACING IN PARALLEL ROWS TO CREATE TRIANGULAR WETTING PATTERN.
- 3.) ALL DRIPLINE SHALL BE SECURED USING SOIL STAPLES AS SUPPLIED BY THE MANUFACTURER SPACED A MAX. OF 3' ON CENTER.
- 4.) DRIPLINE LATERALS SHOWN ON THE PLANS ARE USED TO INDICATE ZONING SIZES AND RELATIONSHIPS. INSTALLATION OF DRIP ZONES SHALL FOLLOW ONE OF THE TWO METHODS DESCRIBED IN DTLS. 203-L1 2.2. AND RAIN BIRD'S RECOMMENDED INSTALLATION SPECIFICATIONS.
- 5.) RAIN BIRD XFS SERIES DRIPLINE SHALL BE USED AS FOLLOWS:
TURF AREAS: XFS-06-12, ROWS SPACED AT 12 INCHES
BED AREAS: XFS-09-18, ROWS SPACED AT 18 INCHES
BED AREAS WITH SLOPE 3:1 OR MORE: XFCV-06-12
- 6.) WHEN CONFLICTS OCCUR BETWEEN THESE DRAWINGS AND THE MANUFACTURER'S SPECIFICATIONS DEFER TO THE MANUFACTURER'S RECOMMENDED SPECIFICATIONS.
- 7.) EACH DRIP ZONE SHALL HAVE A DRIP SYSTEM OPERATION INDICATOR, RAIN BIRD MODEL OPERIND. INSTALL PER RAIN BIRD RECOMMENDATIONS.

CONTRACTOR TO USE EASY FIT COMPRESSION OR 17MM INSERT FITTINGS WITH DRIPLINE BY RAIN BIRD. REFER TO MANUFACTURER'S SPECIFICATIONS FOR ALL PARTS TO INSURE COMPATIBILITY.

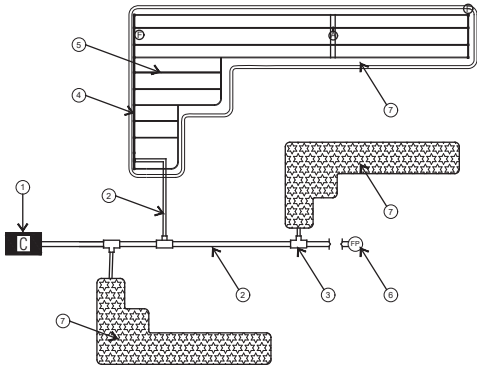
PROPER SIZING OF SUPPLY AND EXHAUST HEADERS
(17MM XFS SERIES DRIPLINE)

TOTAL ZONE FLOW	PIPE SIZE
UP TO 5 GPM	1/2" SCH 40 PVC or 1/2" CLASS 315 PVC
5.1 TO 8 GPM	3/4" CLASS 200 PVC
8.1 TO 13 GPM	1" CLASS 200 PVC
13.1 TO 22 GPM	1-1/4" CLASS 200 PVC
22.1 TO 31 GPM	1-1/2" CLASS 200 PVC

NOTE: A 45 PSI PRESSURE REGULATOR IS RECOMMENDED TO OBTAIN MAXIMUM RUN LENGTHS AND MAXIMIZE ZONE SIZE WHEN INSTALLING XFS SERIES DRIPLINE.

9 DRIPLINE DESIGN NOTES

- 1 CONTROL ZONE KIT; NETAFIM
- 2 PVC SUPPLY LINE; SIZE PER CHART BELOW
- 3 PVC SCH 40 TEE OR EL (TYPICAL)
- 4 SUPPLY HEADER; PVC SCH 40 WITH INSERT FITTINGS
- 5 LANDSCAPE DRIPLINE TUBING; XFS-09-18 FOR PLANTING BEDS XFS-06-12 FOR TURF APPLICATIONS
- 6 DRIPLINE FLUSH POINT (SEE NETAFIM DETAIL: FLUSH VALVE)
- 7 DRIP AREA; DEFINED BY HATCH ASSOCIATED TO ZONE TAG ON PLANS



8 DRIPLINE HATCH LAYOUT
























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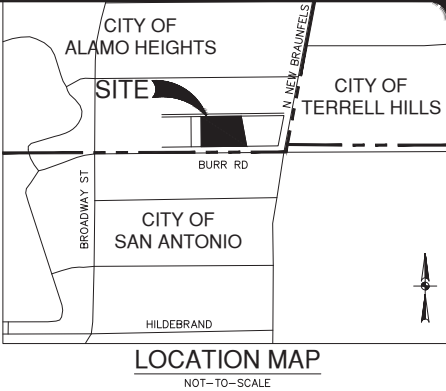
1. PRIOR TO BIDDING, THE CONTRACTOR SHALL VISIT THE SITE TO CRITICALLY EXAMINE AND FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS, AND TO VERIFY EXACT LOCATIONS, SIZES AND QUANTITY AF ITEMS WHICH ARE TO BE REMOVED, RELOCATED, AND ADDED. SUBMITTAL OF HIS BID SHALL SIGNIFY HIS WILLINGNESS TO COMPLY WITH THE OWNER'S REQUIREMENTS; DESIGN AND SPECIFICATION; AND HIS ACCEPTANCE OF ON-SITE CONDITIONS AS THEY EXIST.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOSS OR DAMAGE TO THE EXISTING FACILITIES AND SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING SUCH LOSS OR DAMAGE. THE CONTRACTOR SHALL SEND PROPER NOTICES AND RECEIVE WRITTEN PERMISSION FROM THE OWNER TO ENTER EXISTING AREAS. BEFORE BEGINNING WORK IN EXISTING AREAS, THE CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS AND PERFORM OTHER SERVICES REQUIRED FOR THE CARE, PROTECTION, AND SERVICE MAINTENANCE OF ALL ELECTRICAL, COMMUNICATION, FIRE ALARM, PLUMBING, HEATING, AIR CONDITIONING, AND VENTILATING SERVICES FOR NEW AND EXISTING FACILITIES. THE CONTRACTOR SHALL ERECT TEMPORARY BARRICADES WITH NECESSARY SAFETY DEVICES, TO PROTECT PERSONNEL FROM INJURY, REMOVING ALL SUCH TEMPORARY PROTECTION UPON COMPLETION OF THE WORK.
3. THE CONTRACTOR SHALL MODIFY, REMOVE, AND RELOCATE ALL MATERIALS AND ITEMS SO INDICATED ON THE DRAWINGS OR REQUIRED BY THE INSTALLATION OF NEW FACILITIES. ALL REMOVALS AND/OR DISMANTLING SHALL BE CONDUCTED IN SUCH A MANNER AS TO PRODUCE MAXIMUM SALVAGE. MATERIALS AND ITEMS SCHEDULED FOR RELOCATION AND WHICH ARE DAMAGED DURING DISMANTLING OR REASSEMBLY OPERATIONS SHALL BE REPAIRED AND RESTORED TO THE APPROVAL OF THE OWNER, NATIONAL & LOCAL AGENCIES. THE CONTRACTOR MAY SUBSTITUTE NEW MATERIALS AND ITEMS OF EQUAL DESIGN AND QUALITY IN LIEU OF MATERIALS AND ITEMS TO BE RELOCATED, IF APPROVED BY THE OWNER.
4. ALL ITEMS WHICH ARE TO BE RELOCATED SHALL BE CAREFULLY REMOVED IN REVERSE TO ORIGINAL ASSEMBLY OR PLACEMENT AND PROTECTED UNTIL RELOCATED. THE CONTRACTOR SHALL CLEAN, REPAIR AND PROVIDE ALL NEW MATERIALS, FITTINGS, AND APPURTENANCES REQUIRED TO COMPLETE THE RELOCATION AND TO RESTORE THE ITEMS TO GOOD OPERATIVE ORDER. ALL RELOCATIONS SHALL BE PERFORMED BY WORKMEN SKILLED IN THE WORK AND IN ACCORDANCE WITH STANDARD PRACTICE OF THE TRADES INVOLVED.
5. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL TO ALL ITEMS AND MATERIALS REMOVED UNDER THIS CONTRACT. SALVAGE ITEMS AND MATERIALS SHALL REMAIN THE PROPERTY OF THE OWNER AND AS PART OF THIS CONTRACT, THE CONTRACTOR SHALL DELIVER THE ITEMS THE OWNER WISHES TO KEEP TO A DESTINATION AS DIRECTED BY THE OWNER. ALL OTHER ITEMS NOT REQUESTED BY THE OWNER SHALL BE DISPOSED OF WITH PRIOR VERIFICATION OF THE OWNER.
6. NO MORE THAN 360° BENDS PERMITTED FOR ANY SINGLE CONDUIT RUN. PROVIDE ADDITIONAL HANDHOLES, AS REQUIRED. SUBMIT HANDHOLE MATERIAL DATA AND LOCATIONS TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION.

ABBREVIATIONS

A	- AMPERE(S)
AIC	- AMPERAGE INTERRUPTING CAPACITY
A/V	- AUDIO VISUAL
AFF	- ABOVE FINISH FLOOR
AFG	- ABOVE FINISH GRADE
AHU	- AIR HANDLING UNIT
ATS	- AUTOMATIC TRANSFER SWITCH
BLDG	- BUILDING
C	- CONDUIT
CB	- ENCLOSED CIRCUIT BREAKER
CKT	- CIRCUIT
EDF	- ELECTRIC DRINKING FOUNTAIN
EPO	- EMERGENCY POWER OFF
FLA	- FULL LOAD AMPS
FSD	- FIRE SMOKE DAMPER
GFCI	- GROUND-FAULT CIRCUIT INTERRUPTER
GND	- GROUND
HOA	- HAND-OFF-AUTOMATIC
HP	- HORSEPOWER
IG	- ISOLATED GROUND
J-BOX	- JUNCTION BOX
KVA	- KILOVOLT AMPERE
KW	- KILOWATT
MCB	- MAIN CIRCUIT BREAKER
MCC	- MOTOR CONTROL CENTER
MLO	- MAIN LUGS ONLY
MTD	- MOUNTED
N/A	- NOT APPLICABLE
NC	- NORMALLY CLOSED
NO	- NORMALLY OPEN
NF	- NON FUSED
N.I.C.	- NOT IN CONTRACT
NL	- NIGHT LIGHT (UNSWITCHED)
NTS	- NOT TO SCALE
OFCI	- OWNER FURNISHED CONTRACTOR INSTALLED
OH	- OVERHEAD
PB	- PUSHBUTTON
PH,Ø	- PHASE
RCPT	- RECEPTACLE
SPD	- SURGE PROTECTION DEVICE
SWBD	- SWITCHBOARD
TC	- TIMECLOCK
TV	- TELEVISION
TYP.	- TYPICAL
UG	- UNDERGROUND
V	- VOLTAGE
W.G.	- WIREGUARD
W.P.	- WEATHERPROOF
XFMR	- TRANSFORMER
1P	- ONE POLE
2P	- TWO POLE
3P	- THREE POLE

ELECTRICAL SYMBOLS LEGEND

MARK	ITEM
 A	LIGHT FIXTURE. UPPER CASE LETTER(S) IDENTIFIES FIXTURE IN SCHEDULE.
 B	LIGHTING FIXTURE. BRACKET "f" INDICATES WALL MOUNTED. UPPER CASE LETTER(S) IDENTIFIES FIXTURE IN SCHEDULE
 B	LIGHT FIXTURE CONNECTED TO EMERGENCY CIRCUIT
 B	LIGHT FIXTURE CONNECTED TO UNSWITCHED PORTION OF CIRCUIT FOR NIGHT LIGHTING
	LIGHT FIXTURE CONNECTED TO EMERGENCY CIRCUIT
	LIGHT FIXTURE CONNECTED TO UNSWITCHED PORTION OF CIRCUIT FOR NIGHT LIGHTING
P1 	POLE LIGHT FIXTURE. UPPER CASE LETTER(S) IDENTIFIES FIXTURE IN SCHEDULE.
S	SINGLE-POLE DECORA ROCKER LIGHT SWITCH, RED IN COLOR WITH RED FACEPLATE, AND CIRCUIT LABEL IN WHITE ON CLEAR LETTERING
S _K	SWITCH, KEYED OPERATED
S ₃	SWITCH, THREE-WAY (K=KEYED OPERATED)
S ₄	SWITCH, FOUR-WAY (K=KEYED OPERATED)
S _P	SWITCH, WITH PILOT LIGHT
S _L	SWITCH, WITH LIGHTED HANDLE
S _{3L}	SWITCH, THREE WAY, WITH LIGHTED HANDLE
S _T	TIMER SWITCH
S _D	DIGITAL DIMMER SWITCH
 A	RECEPTACLE, DUPLEX (A=ABOVE COUNTER)
 T	RECEPTACLE, TAMPER RESISTANT DUPLEX
	RECEPTACLE, G.F.C.I. DUPLEX
 W.P.	RECEPTACLE, WEATHERPROOF
 R	EMERGENCY RECEPTACLE (RED DEVICE WITH RED FACEPLATE)
 A	RECEPTACLE, QUADRUPLEX (A=ABOVE COUNTER)
	SIMPLEX RECEPTACLE
	SPECIAL PURPOSE OUTLET
 G	GROUND BAR AS NOTED ON DRAWING AND SPECIFICATIONS
 PB	PANELBOARD, 120/208 VOLT (LETTERS IDENTIFY PANEL)
 HB	PANELBOARD, 277/480 VOLT (LETTERS IDENTIFY PANEL)
 T-LA	DRY TYPE TRANSFORMER. REFER TO TRANSFORMER SCHEDULE.
	DISCONNECT SWITCH
 J	JUNCTION BOX
 M	MOTOR CONNECTION. REFER TO ELECTRICAL CONNECTION SCHEDULE
 SPD	SURGE PROTECTIVE DEVICE. REFER TO SPECIFICATIONS.
W.P.	WEATHERPROOF
C.	CONDUIT



LEGAL DESCRIPTION:
LOT 41, BLOCK 3, C.B. 5600, COUNTRY CLUB
HEIGHTS SUBDIVISION (1.370 ACRES)
PLAT NO. 24-118XXXXX

ADDRESS:
159 BURR RD.
ALAMO HEIGHTS, TEXAS 78209



PAPE-DAWSON
ENGINEERS

2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10228600

BURR ROAD PARKING LOT - PHASE 2

SAN ANTONIO, TEXAS

ELECTRICAL GENERAL NOTES AND LEGENDS

ENGINEERING &
SKYE MEP
COMMISSIONING
8610 Broadway, Suite 415
San Antonio, Texas 78217
State of Texas Firm Registration No. F-19468
Job No.: 2024.223

PLAT NO. N/A
JOB NO. 7531-10
DATE JANUARY 06, 2025
DESIGNER JF/DM
CHECKED DRAWN LF
SHEET E1.0

GENERAL NOTES:

- ALL LIGHT FIXTURES SHALL BE CIRCUITED THROUGH THE LIGHTING CONTRACTOR.
- ALL CONDUITS SHALL BE SCHEDULE 80 PVC FOR UNDERGROUND INSTALLATION AND TRANSITION TO RIGID METAL CONDUIT (RMC) ABOVE GROUND.
- INSTALL CONDUITS AT A MINIMUM BURIAL DEPTH OF 24 INCHES.
- ALL WIRING SHALL USE COPPER CONDUCTORS WITH A MINIMUM SIZE OF #10 AWG UNLESS OTHERWISE SPECIFIED.
- EXISTING POLE HEIGHTS AND LOCATIONS SHALL REMAIN UNCHANGED UNLESS DIRECTED OTHERWISE.
- ENSURE ALL LIGHT FIXTURES ARE DARK-SKY COMPLIANT TO MINIMIZE LIGHT POLLUTION AND COMPLY WITH SAN ANTONIO LOCAL ORDINANCES.
- VERIFY PHOTOCELLS AND TIME CLOCK CONTROLS FUNCTIONALITY FOR AUTOMATIC OPERATION OF PARKING LOT LIGHTING, ENSURING ENERGY EFFICIENCY.
- CONTRACTOR SHALL PERFORM ALL NECESSARY TRENCHING AND BACKFILLING, ENSURING COMPLIANCE WITH NEC AND LOCAL SAN ANTONIO REGULATIONS.
- PROVIDE WARNING TAPE 12 INCHES ABOVE ALL CONDUITS IN TRENCHES FOR PROPER IDENTIFICATION.
- ALL BOXES, ENCLOSURES, AND CONNECTIONS SHALL BE WATERPROOF AND SUITABLE FOR OUTDOOR USE.
- USE RIGID AND CORROSION-RESISTANT MATERIALS FOR ALL BOXES TO WITHSTAND ENVIRONMENTAL CONDITIONS.
- ALL METALLIC PARTS OF THE SYSTEM, INCLUDING POLES AND ENCLOSURES, SHALL BE PROPERLY GROUNDED AND BONDED IN COMPLIANCE WITH NEC ARTICLE 250.
- ALL WORK SHALL ADHERE TO THE NATIONAL ELECTRICAL CODE (NEC), SAN ANTONIO BUILDING CODES AND STANDARDS.

LIGHTING CONTROL SEQUENCE OF OPERATION:

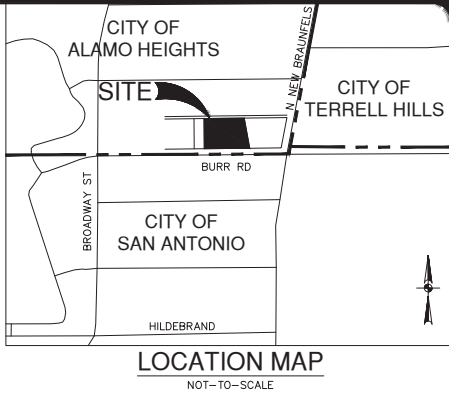
- CONTRACTOR SHALL VERIFY AND ENSURE THE PARKING LOT OPERATION AS FOLLOW:
- TURN "ON" AT DUSK BY PHOTOCELL.
 - DIM TO 70% RATED OUTPUT AT 1 HOUR AFTER OWNER-DESIGNATED CLOSE OF BUSINESS TIME.
 - INCREASE TO 100% RATED OUTPUT AT 1 HOUR PRIOR TO OWNER-DESIGNATED BUSINESS OPENING TIME.
 - TURN "OFF" AT SUNRISE BY PHOTOCELL-CONTROLLED CONTACTOR.

2021 IECC LIGHTING COMMISSIONING NOTES:

- COMMISSIONING FOR LIGHTING SYSTEMS SHALL COMPLY WITH SECTION C408.3 OF 2021 IECC.
- COMMISSIONING SHALL BE PERFORMED BY AN CERTIFIED COMMISSIONING AGENT.
- THE PROPER FUNCTIONS AND OPERATIONS OF LIGHTING CONTROLS SHALL BE TESTED AND VERIFIED AGAINST EQUIPMENT MANUFACTURER SPECIFICATIONS.
- LIGHTING CONTROLS INSTALLATION SHALL BE VERIFIED FOR COMPLIANCE WITH EQUIPMENT MANUFACTURER RECOMMENDATIONS AND ACCEPTED MINIMUM STANDARDS.
- AT A MINIMUM, LIGHTING CONTROLS THAT SHALL BE TESTED INCLUDE TIME SWITCH CONTROLS, DIMMERS, AND OCCUPANCY SENSORS.
- PROPER PERFORMANCE AND OPERATION OF LIGHTING CONTROLS EQUIPMENT SHALL BE DOCUMENTED.
- COMMISSIONING PLAN SHALL BE PROVIDED BY COMMISSIONING AGENT.

ELECTRICAL NEW WORK NOTES, PLAN 101:

- EXISTING POLE TO REMAIN.
- EXTEND EXISTING CIRCUIT USING 2#10, 1#10 GND IN 1" C.
- ALTERNATIVE: PROVIDE A 1" EMPTY CONDUIT WITH A PULL STRING TO THE CONTROLLER. THE CONDUIT SHALL STUB OUT FROM THE POLE AT 12 FEET ABOVE FINISHED FLOOR (A.F.F.). ENSURE THE CONDUIT IS BURIED AT A MINIMUM DEPTH OF 24 INCHES OR PER LOCAL CODE REQUIREMENTS. INSTALL A WEATHERPROOF JUNCTION BOX (J-BOX) RATED FOR OUTDOOR USE ADJACENT TO THE BASE OF THE POLE, EVERY 100 FEET ALONG THE CONDUIT RUN, AND AT EVERY 180-DEGREE TURN. USE SCHEDULE 80 PVC OR RIGID METAL CONDUIT (RMC) IN AREAS SUBJECT TO POTENTIAL PHYSICAL DAMAGE, AS REQUIRED BY CODE.
- ALTERNATIVE: REPLACE EXISTING FIXTURE WITH SINGLE HEAD TYPE S1.
- ALTERNATIVE: REPLACE REPLACE EXISTING FIXTURE WITH SINGLE HEAD TYPE S2.



LEGAL DESCRIPTION: LOT 41, BLOCK 3, C.B. 5603, COUNTRY CLUB HEIGHTS SUBDIVISION (1.370 ACRES) PLAT NO. 24-118XXXXX

ADDRESS: 159 BURR RD. ALAMO HEIGHTS, TEXAS 78209



PAPE-DAWSON ENGINEERS

2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10228600

BURR ROAD PARKING LOT - PHASE 2
SAN ANTONIO, TEXAS
ELECTRICAL NEW WORK PLAN

PLAT NO. N/A
JOB NO. 7531-10
DATE JANUARY 06, 2025
DESIGNER JF/DM
CHECKED DRAWN LF
SHEET E1.1

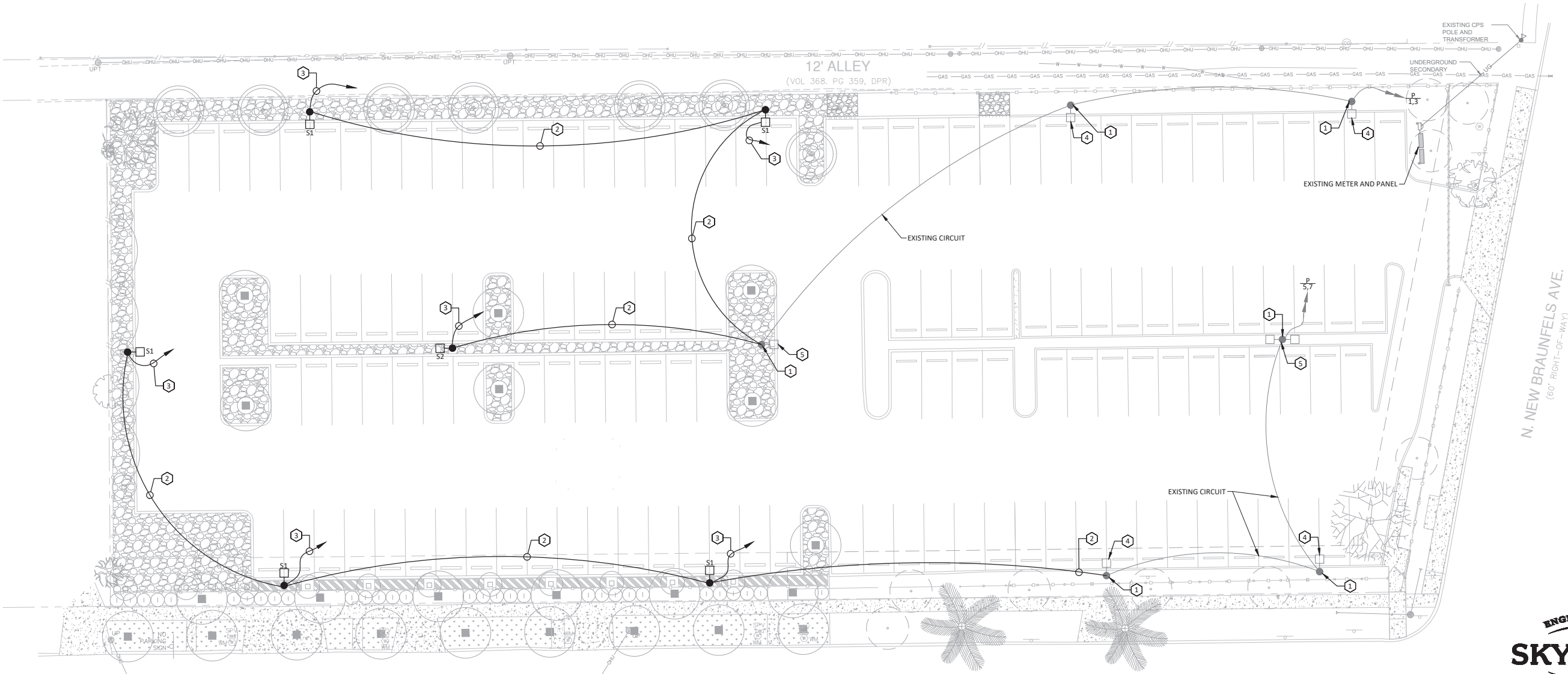
LIGHT FIXTURE SCHEDULE

MARK	FIXTURE DESCRIPTION	LIGHT SOURCE	LAMP MODEL	BUG RATINGS	WATTS	VOLTS	MOUNTING	MANUFACTURER	MODEL	NOTES
S1	AREA LIGHT SINGLE-HEAD	LED LM79 & LM80 TESTED	-	B1-U0-G3	160	240	15' POLE ON 6" CONC. BASE	COOPER LTG. (HEAD)	GALN-SA3C-740-U-T4FT-HSS	1, 2
S2	AREA LIGHT SINGLE-HEAD	LED LM79 & LM80 TESTED	-	B5-U0-G3	160	240	15' POLE ON 6" CONC. BASE	VALMONT (POLE)	DS330-400Q160-D1-XX-XX	1,2
								COOPER LTG. (HEAD)	GALN-SA3C-740-U-5WQ	
								VALMONT (POLE)	DS330-400Q160-D1-XX-XX	

GENERAL LIGHT FIXTURE SCHEDULE NOTES:

- PROVIDE 16-FOOT POLE AND CUT TO 15-FOOT LENGTH.
 - MEASURE EXISTING POLE HEIGHT AND REPORT FINDINGS TO ENGINEER PRIOR TO RELEASING ORDER.
- NOTE: THE PROJECT SITE IS LOCATED OUTSIDE OF MLOD ZONING.

LOAD ANALYSIS				
PROJECT: SACC BURR RD PARKING LOT EXPANSION				
AREA (SF): 59,677		VOLTS: 240	SIGLE PHASE	
LOAD DESCRIPTION		CONNECTED KVA	DIVERSITY	DEMAND KVA
EXISTING PARKING LOT LIGHTING:		0.606	1.25	0.758
NEW PARKING LOT LIGHTING		0.996	1.25	1.245
LIGHTING CONTACTOR		0.200	1.25	0.250
EXISTING IRRIGATION CONTROLLER		1.920	1.000	1.920
TOTAL KVA:				4
TOTAL AMPS:				17
SERVICE ENTRANCE SIZE, AMPS: (EXISTING SERVICE SIZE IS ADEQUATE)				60



1 ELECTRICAL NEW WORK PLAN
Scale: 1/16" = 1'-0"

0 8' 16' 32' 48'
SCALE: 1/16" = 1'-0"

ENGINEERING & SKYE MEP
COMMISSIONING
8610 Broadway, Suite 415
San Antonio, Texas 78217
State of Texas Firm Registration No. F-19468
Job No.: 2024.223

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- VERIFY PHOTOCELLS AND TIME CLOCK CONTROLS FUNCTIONALITY FOR AUTOMATIC OPERATION OF PARKING LOT LIGHTING, ENSURING ENERGY EFFICIENCY.
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CONTRACTOR SHALL VERIFY AND ENSURE THE PARKING LOT OPERATION AS FOLLOW:

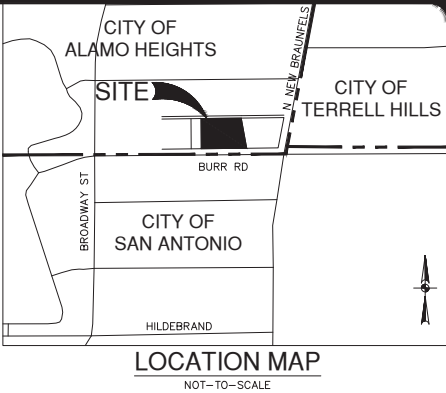
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- INCREASE TO 100% RATED OUTPUT AT 1 HOUR PRIOR TO OWNER-DESIGNATED BUSINESS OPENING TIME.
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- PROPER PERFORMANCE AND OPERATION OF LIGHTING CONTROLS EQUIPMENT SHALL BE DOCUMENTED.
- COMMISSIONING PLAN SHALL BE PROVIDED BY COMMISSIONING AGENT.

ELECTRICAL NEW WORK NOTES, PLAN 101:

- EXISTING LIGHT POLE TO REMAIN
- EXTEND EXISTING CIRCUIT USING 2#10, 1#10 GND IN 1".
- ALTERNATIVE: PROVIDE POLE AND FIXTURE TYPE S2 AND USE EXISTING CIRCUIT AS INDICATED ON THE PLANS. PROVIDE CONDUCTORS AND CONDUIT TO EXTEND CIRCUIT AS NEEDED.
- ALTERNATIVE: PROVIDE A 1" EMPTY CONDUIT WITH A PULL STRING TO THE CONTROLLER. THE CONDUIT SHALL STUB OUT FROM THE POLE AT 12 FEET ABOVE FINISHED FLOOR (A.F.F.). ENSURE THE CONDUIT IS BURIED AT A MINIMUM DEPTH OF 24 INCHES OR PER LOCAL CODE REQUIREMENTS. INSTALL A WEATHERPROOF JUNCTION BOX (J-BOX) RATED FOR OUTDOOR USE ADJACENT TO THE BASE OF THE POLE, EVERY 100 FEET ALONG THE CONDUIT RUN, AND AT EVERY 180-DEGREE TURN. USE SCHEDULE 80 PVC OR RIGID METAL CONDUIT (RMC) IN AREAS SUBJECT TO POTENTIAL PHYSICAL DAMAGE, AS REQUIRED BY CODE.



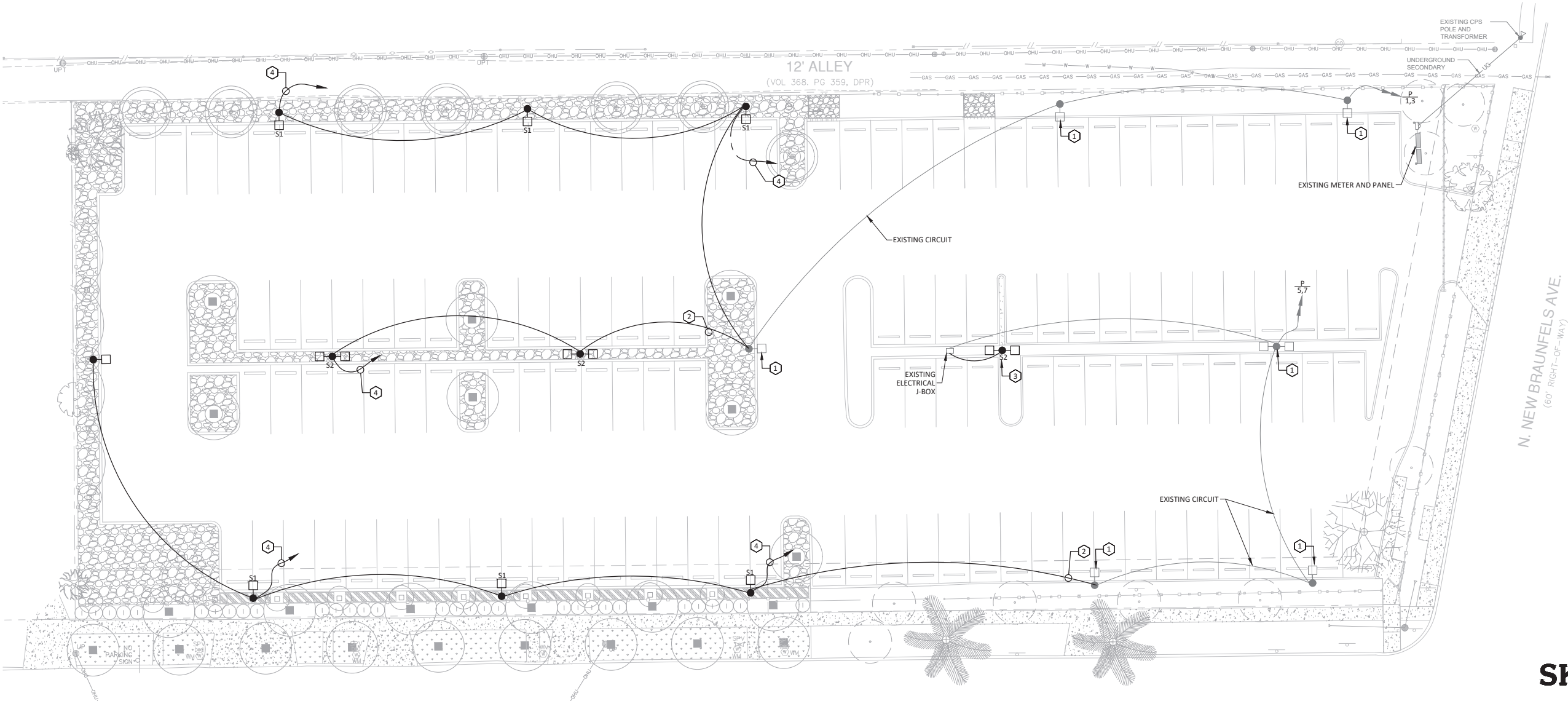
LIGHT FIXTURE SCHEDULE										
MARK	FIXTURE DESCRIPTION	LIGHT SOURCE	LAMP MODEL	BUG RATING	WATTS	VOLTS	MOUNTING	MANUFACTURER	MODEL	NOTES
S1	AREA LIGHT SINGLE-HEAD	LED LM79 & LM80 TESTED	13,400LM 50K 70CRI	B3-U2-G3	101	240	15' POLE ON 6" CONC. BASE	ASD LTG. (HEAD)	ASD-LSB2HV-100D50B-PRM	1, 2
S2	AREA LIGHT FOUR HEAD	LED LM79 & LM80 TESTED	13,400LM 50K 70CRI	B3-U2-G3	202	240	15' POLE ON 6" CONC. BASE	VALMONT (POLE)	DS330-400Q160-D1-XX-XX	1, 2
								ASD LTG. (HEAD)	ASD-LSB2HV-100D50B-PRM-2@180°	
								VALMONT (POLE)		

GENERAL LIGHT FIXTURE SCHEDULE NOTES:

- PROVIDE 16-FOOT POLE AND CUT TO 15-FOOT LENGTH. MATCH EXISTING POLE HIGHT.
- MEASURE EXISTING POLE HEIGHT AND REPORT FINDINGS TO ENGINEER PRIOR TO RELEASING ORDER.

NOTE: THE PROJECT SITE IS LOCATED OUTSIDE OF MLOD ZONING.

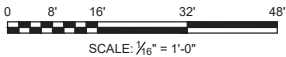
LOAD ANALYSIS					
PROJECT: SACC BURR RD PARKING LOT EXPANSION					
AREA (SF): 72,000 VOLTS: 240 SIGLE PHASE					
LOAD DESCRIPTION			CONNECTED KVA	DIVERSITY	DEMAND KVA
EXISTING PARKING LOT LIGHTING:			0.606	1.25	0.758
NEW PARKING LOT LIGHTING			1.212	1.25	1.515
LIGHTING CONTACTOR			0.200	1.25	0.250
EXISTING IRRIGATION CONTROLLER			1.920	1.000	1.920
TOTAL KVA:					4
TOTAL AMPS:					19
SERVICE ENTRANCE SIZE, AMPS: (EXISTING SERVICE SIZE IS ADEQUATE)					60



1

ELECTRICAL NEW WORK PLAN - ALTERNATE

Scale: 1/16" = 1'-0"



ENGINEERING & SKYE MEP COMMISSIONING

8610 Broadway, Suite 415
San Antonio, Texas 78217
State of Texas Firm Registration No. F-19468
Job No.: 2024.223

BURR ROAD PARKING LOT - PHASE 2

SAN ANTONIO, TEXAS

ALTERNATE ELECTRICAL NEW WORK PLAN

PLAT NO.	N/A
JOB NO.	7531-10
DATE	JANUARY 06, 2025
DESIGNER	JF/DM
CHECKED	DRAWN LF
SHEET	E1.2

PAPE-DAWSON ENGINEERS

2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1028600

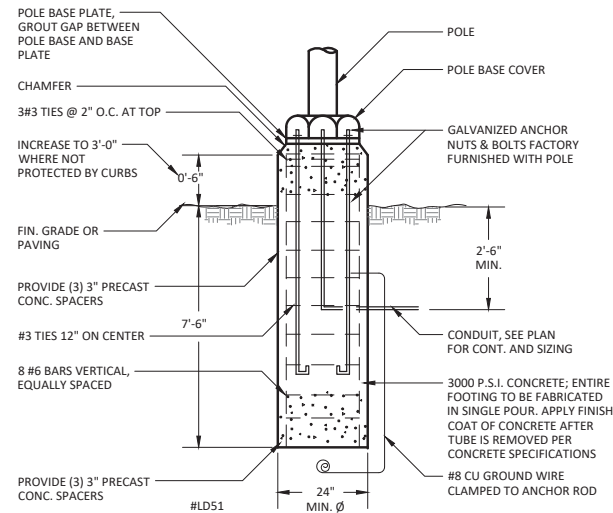
STATE OF TEXAS

STEPHEN MITCHELL

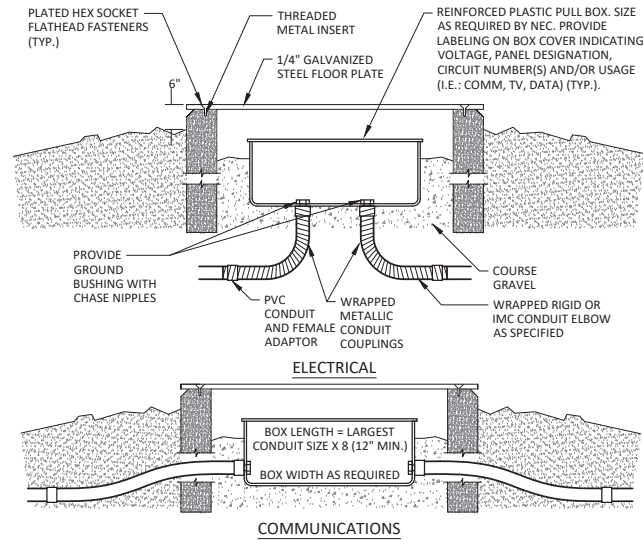
99313

LICENSED PROFESSIONAL ENGINEER

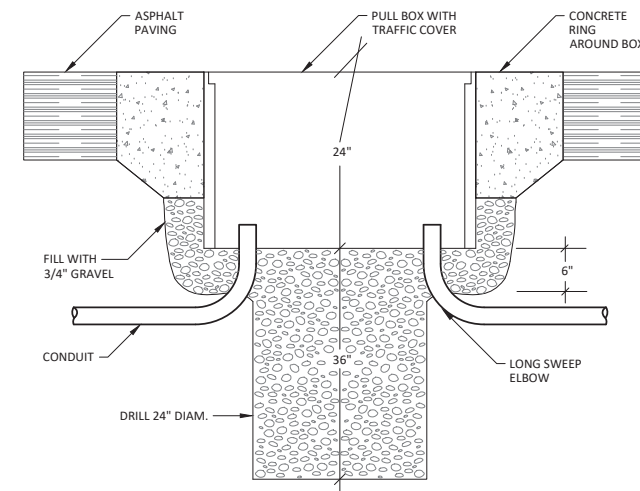
01/04/25



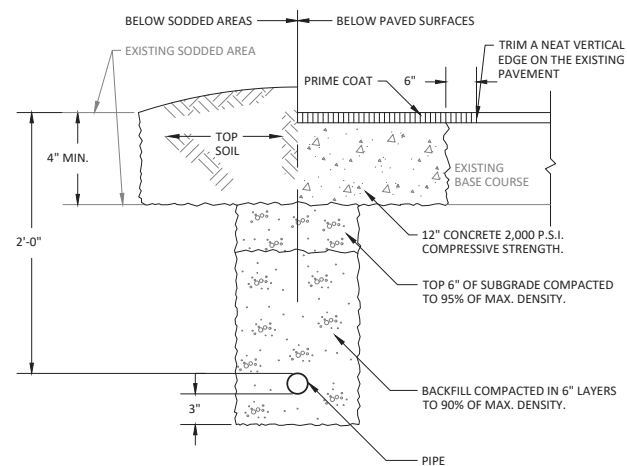
1 POLE BASE DETAIL-PARKING LIGHTING
Scale: NOT TO SCALE



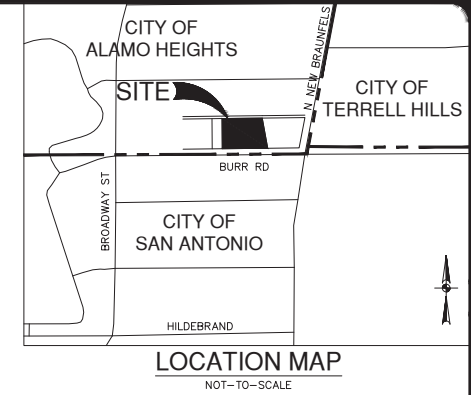
2 UNDERGROUND PULL BOX DETAIL
Scale: NOT TO SCALE



3 PULL BOX DETAIL
Scale: NOT TO SCALE



4 SECTION THROUGH TRENCH
Scale: NOT TO SCALE



LEGAL DESCRIPTION:
LOT 41, BLOCK 3, C.B. 5600, COUNTRY CLUB HEIGHTS SUBDIVISION (1.370 ACRES)
PLAT NO. 24-118XXXXX

ADDRESS:
159 BURR RD.
ALAMO HEIGHTS, TEXAS 78209



PAPE-DAWSON ENGINEERS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10228600

BURR ROAD PARKING LOT - PHASE 2
SAN ANTONIO, TEXAS
ELECTRICAL DETAILS

ENGINEERING & SKYE MEP COMMISSIONING
8610 Broadway, Suite 415
San Antonio, Texas 78217
State of Texas Firm Registration No. F-19468
Job No.: 2024.223

0 8' 16' 32' 48'
SCALE: 1/4" = 1'-0"

PLAT NO. N/A
JOB NO. 7531-10
DATE JANUARY 06, 2025
DESIGNER JF/DM
CHECKED DRAWN LF
SHEET E2.1

SECTION 26000 - GENERAL ELECTRICAL PROVISIONS

PART 1 - GENERAL

1.01 WORK INCLUDED IN THIS SECTION

- A. Referenced Documents: Division 01 - General Requirements are hereby made a part of this section.
- B. Work included in Division 26 includes the furnishing of all labor, materials, tools, equipment, drayage, rigging, fees, permits, inspections, etc., necessary for the complete installation and operation of all electrical equipment and work as shown on the Plans and specified herein. Work includes the following general listings, in addition to which furnish all fittings, hangers, supports, conduits, sleeves, inserts and other such items and accessories required or necessary for the operation of a complete electrical system as shown on the Plans and/or specified herein:

1. Wiring, and feeders.

1.02 REQUIREMENTS OF REGULATORY AGENCIES

Work shall conform to the latest editions of the following:

- A. Power company electrical standard requirements.
- B. International Energy Conservation Code (IECC).
- C. National Electrical Code (NEC) with local amendments.
- D. National Electrical Manufacturers Association (NEMA).
- E. Occupational Safety and Health Administration (OSHA).
- F. Underwriters' Laboratories, Inc. (UL), and shall be so labeled.
- G. International Building Code (IBC).

1.03 QUALIFICATIONS

Electrical Contractor of work specified herein to have been engaged in electrical contracting business for a minimum of five (5) years prior to bid date and be prepared to show evidence and references if requested by the Owner.

1.04 SUBSTITUTIONS AND DEVIATIONS

- A. The intent of these specifications is to establish minimum quality standards for material and equipment installed. All materials, equipment, and apparatus shall be new and of the quality indicated in the following specifications.
- B. It is not the Architect/Engineer's intention to discriminate against any manufacturer or product. Any manufacturer desiring to submit his product for approval as an equal to that specified may do so by providing a sample specification to the Engineer's office for approval a minimum of 10 working days prior to bid date.
- C. All material shall be new and of domestic origin and shall bear underwriter's label where applicable.

1.05 SPECIAL CONDITIONS OF THE WORK

- A. Drawings are necessarily diagrammatic and do not show every connection in detail or every line conduit in its exact location.
- B. Investigate structural and finish conditions and arrange Work accordingly; furnish all fittings and accessories required to meet conditions and give satisfactory operation. Coordinate with other contractors to avoid interference with the Work.
1. Work shall be laid out to be concealed in furred chases and suspended ceilings, etc., in finished portions of building, unless specifically noted to be exposed. Work shall be installed to avoid crippling of structural members. Thimbling of beams shall be done only with the specific approval of the Owner.
2. Electrical Contractor, by submitting a sub-bid, sets forth that he has the necessary technical training and ability and that he will install his Work in a satisfactory and workmanlike manner up to the best standard of the trade, complete and in good working order.
3. If any of the requirements of the plans and specifications are impossible of performance, or if the installation will not perform satisfactorily, he shall report same to the Owner for correction during the bidding period.
4. No extra will be allowed for extra work or changes caused by failure to comply with above requirements.
5. The right to make any reasonable change in the location of outlets, apparatus, and equipment up to time of roughing-in is reserved by the Owner without involving any additional expense to the Owner.

1.06 SITE INVESTIGATION

- A. Locations and elevations of utilities shown on Plans have been obtained from site utility plans, existing plans, site inspection and utility companies serving the site. The Electrical Contractor shall examine the site verifying to his own satisfaction the location and elevation of all utilities and shall adequately inform himself as to their relationship to the Work before entering into a contract.
- B. Specifications and the Drawings in no way imply as to the condition of the soil to be encountered. No representations as to soil conditions are made or implied in any portion of the Contract documents.
- C. All Work in connection with this Contract will be under the supervision and to the entire satisfaction of the Owner or his authorized representative who shall determine all questions as to the satisfactory completion of the Work, or any part thereof, and defects necessary to be remedied.
- D. The Electrical Contractor shall give his personal attention to all parts of the Work and shall employ only skilled and reliable workmen in the performance thereof. They shall also accord to the Owner the right to decide upon and discontinue the services of any workman who does not possess satisfactory skill and qualifications, or is otherwise objectionable.

1.07 SAFETY STANDARDS

It shall be the responsibility of the Electrical Contractor to initiate, maintain and supervise all safety precautions required by local, state and federal laws, including OSHA (Occupational Safety and Health Administration).

PART 2 - PRODUCTS

2.01 MATERIALS

All materials described in Division 26000 shall be new; no used materials shall be used. Brands and models listed are for quality assurance only; other brands equal in quality and approved for use are acceptable. Any material damaged during installation shall be replaced at Electrical Contractor's expense.

2.02 CONDUCTORS

All conductors shall be copper, 600V rating, type THHN, THHW unless shown otherwise.

2.03 CONDUIT

- A. Thin wall EMT acceptable for general application.
- B. PVC acceptable in slabs or underground. Provide factory wrapped steel ells for rising exposed out of ground or slab.

2.04 WIRING DEVICES

- A. Wall switches shall be specification grade, UL listed, 20 Amp, 120/277 Volt. Duplex receptacles shall be specification grade, UL listed, 20 Amp, 125 Volt, NEMA 5-20R. Color for all interior and exterior devices shall be selected by Architect. Provide wall plates of color and material of construction as selected by Architect.
- B. Provide gray metal locking while-in-use covers for all exterior receptacles. Box depth shall accommodate receptacle covered.

2.05 JUNCTION AND PULL BOXES

- A. Use galvanized pull and junction boxes that comply with NEC as to size and construction. Use boxes not less than 4" square and 1-1/2" deep with removable covers. In wet areas or outdoors, use cast aluminum or cast iron boxes with threaded hubs and gasketed covers. Install junction and pull boxes in accessible location. Position boxes so that covers flush with finished walls

2.06 CIRCUIT BREAKERS

- A. Only UL-listed circuit breaker panels are permitted for use.
- B. a dedicated UL-listed switched neutral breaker is required for each circuit leading to a pump/dispenser. It must be able to disconnect hot and neutral conductors simultaneously.
- C. One cicuit breaker is required for each pump/dispenser to allow isolation of the pump/dispenser.
- D. Circuit breakers must be installed away from pump/dispenser, readily accessible, and clearly marked.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Work shall be done in accordance with Plans and Specifications and shall meet rules and regulations of all governing agencies having jurisdiction.
- B. If Plans and Specifications differ from required minimum standards set forth in ordinances, ordinances shall govern unless the Plans and Specifications exceed requirements, in which case Plans and Specifications shall govern.
- C. If any disagreement between the Plans and Specifications and the ordinances occurs, attention must be called to same before signing of the Contract. After the contract has been signed, the Electrical Contractor is responsible for having all Work meet with the requirements of the governing ordinances. No extra to the contract will be granted to correct any discrepancy existing between the Work and the ordinances.

3.02 GUARANTEE

- A. All electrical Work shall be guaranteed for a period of one (1) year from date of acceptance by Owner.
- B. Upon notice of any electrical malfunction, the Electrical Contractor shall remedy the malfunction including all materials, equipment and labor at no extra cost to the Owner.

3.03 LOCATIONS OF FIXTURES AND EQUIPMENT

Fixtures and equipment shall be as shown on Plans and Elevations. Locations of fixtures or equipment not shown on Plans shall be established or verified in writing or by shop drawings.

3.04 PARTS LISTS AND MAINTENANCE MANUALS

- A. The Electrical Contractor shall submit to the Owner 30 days prior to final acceptance of the building, complete and detailed electronic parts lists, maintenance manuals, etc., covering electrical equipment furnished under this Contract. Electronic brochures shall include all as-built equipment shop drawings, all cuts and capacity information, names and addresses of manufacturers, stocking distributors, manufacturer's agents and/or factory representatives and shall cover all items of equipment on which submittal data is made and shall also include manuals and lists herein called for.
- B. Brochures shall be sent electronically and shall be indexed and tabbed referencing all items to the Plans and Specifications regarding locations of equipment and materials.

3.05 AS-BUILT DRAWINGS

At the completion of this project, the Electrical Contractor shall provide the Owner with a set of electronic marked-up drawings showing all conduit, outlets, etc., installed by the Electrical Contractor. These drawings shall be complete in every detail and shall incorporate all changes made during the course of the conduct of the project. These drawings shall be prepared in such a manner as to enable the Owner to properly maintain, operate, and repair both concealed and exposed Work. Actual routing of all underground conduit shall be shown.

3.06 PAINTING AND FINISHING

- A. Paint all equipment, metal work, conduit, hangers and rods, etc., exposed to view and installed under this Division, with two coats of oil base metal protective paint in colors as directed by the Owner.

3.07 LOCAL BOARDS

Before submitting a bid, Electrical Contractor shall familiarize himself with the rules of all governing boards having jurisdiction, and he shall notify the Owner before submitting his bid, if in his opinion, any work or material specified is contrary to such rules.

3.08 SEPARATE CONTRACTS WITH OWNER

- A. The Owner reserves the right to let other contracts to perform tenant work. The Electrical Contractor shall afford other contractors reasonable opportunity for the storage and introduction of materials for execution of their Work and shall properly connect and coordinate his own Work with theirs. Cooperation shall be absolute to insure harmonious relations with these other contractors that all Work may be completed efficiently.
- B. If any part of the Work depends upon work of other contractors for operation or results, Electrical Contractor shall inspect the other work, and shall promptly report to the Owner any condition that conflicts with his Work. Failure to do so shall constitute an acceptance as being suitable and proper as far as his own Work is concerned.

3.09 EXCAVATION AND BACKFILL

- A. Electrical Contractor to provide all excavation required in execution of his Work.
- B. Excavations shall be to depths indicated or required, protected and kept dry at all times, and properly backfilled, moistened and mechanically tamped to maximum compaction at completion.
- C. Remove any surplus excavated earth from site.
- D. Arrange for and pay all costs of paving patching if excavation required in city streets.

3.10 CONTRACTOR'S COORDINATION AND CLEANING UP

- A. Electrical Contractor shall cooperate with the other contractors on the job to the end that as a whole, the job shall be completely finished, and shall carry on this Work in such a manner that none of the other contractors shall be handicapped, hindered, or delayed. When work is finished, remove from the premises all tools, machinery, debris, etc., occasioned by his Work, and leave the premises free of all obstructions and hindrances.
- B. Where electrical work occurs in masonry walls, the installation shall be done sufficiently in advance of construction; fittings, appurtenances, etc., shall be installed in such a manner and at such locations as to avoid unnecessary cutting of masonry units. Work erected in advance of masonry shall be securely supported and held in position to prevent displacement. Cutting and fitting of masonry around properly located equipment will be done by masons. Place Work located in partitions or ceilings ahead of the construction, with equipment securely wired in place. The Contractor shall have a representative on the job during all concrete pours to insure all of his equipment is adequately supported and protected and will not be adversely affected by such operations.
- C. Cooperate with the local utility companies in such a manner that the installation of all services proceeds in an orderly manner, and meets all requirements of the specified companies involved.

3.11 ELECTRICAL EQUIPMENT BY OTHERS

Except for such items as are normally wired up at their point of manufacture and unless specifically noted to the contrary in the documents, execute all electric wiring of every character both for power supply and for pilot and control for equipment. Others will erect all motors in place ready for connection. Mount all starters and control equipment, furnishing supporting structures where necessary.

3.12 TESTING AND ADJUSTING

- A. All systems shall be tested in the presence of the Owner.
- B. All testing equipment necessary to satisfactorily conduct the required tests shall be provided, and the tests shall be made by the Electrical Contractor at his expense under the direction of the Owner.
- C. All equipment furnished and installed and/or connected under the provisions of these Specifications shall be demonstrated to function electrically in the manner required.
- D. The entire electrical installation shall be free from short circuits and improper grounds. Tests shall be made at each power panel and lighting panel with all switches closed. Each power circuit shall be tested at its switch. In testing for insulation values to ground, the power equipment shall be connected for normal operation. The instruments required for these tests shall be furnished by the Electrical Contractor.
- E. Insulation values shall not be less than those required by the National Electric Code. Other specific tests shall be made in accordance with requirements stated in these Specifications.
- F. All loads shall be properly balanced on each phase of the system, within five percent (5%).
- G. If the tests indicate unsatisfactory materials, workmanship, or performance, the Electrical Contractor shall remove such defective materials and replace with new material at his own expense, shall correct defective workmanship, and shall then conduct same tests again until the satisfactory character of the work installed by him has been fully demonstrated to the satisfaction of the Owner.

3.13 PROTECTION OF UNDERGROUND CONDUIT

- A. All steel conduit run underground shall be protected by a factory applied coating or wrapping consisting of one of the following:

1. Minnesota Mining and Manufacturing Company "Scotch Kote" Resin #202, factory applied coating with two-ply "Scotchwrap" #50 tape on field joints.
2. PVC plastic primer, followed by poly-vinyl plastic coating as supplied by Lone Star Steel Company "Extra Coat" or approved equal. Field joints shall be wrapped in strict accordance with manufacturer's directions.

- B. Electrical Contractor shall submit samples and detailed Specifications for final approval.

3.14 GROUNDING

- A. Grounding of electrical conduit system and neutral of wiring system for building shall be effectively made by connection to earth, using standard ground clamps and cables.
- B. Provide continuous grounding wire through all PVC conduits.

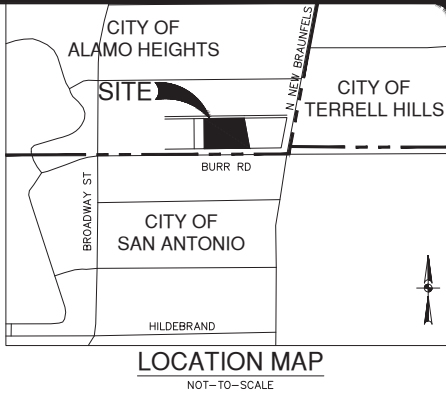
3.15 WORKMANSHIP

- A. Labor shall be performed in a thorough and workmanlike manner and with all reasonable rapidity to the satisfaction of the Owner.
- B. Material or equipment shall be delivered to the project in the manufacturer's original, unopened, labeled containers and be adequately protected against moisture, tampering, or damage from improper handling or storage. Materials shall not be delivered to the job before they are ready for installation.
- C. The Owner will require the removal from the premises of such material or work as in his opinion is not in accordance with the Specifications or Drawings. The Owner has authority to stop the work whenever such stoppage may be necessary to insure the proper execution of the Contract.
- D. Any item of equipment shall be the product, modified as required by the requirements of the project, of a manufacturer experienced in the design, construction, and operation of equipment for the purpose required and who shall have furnished such equipment long enough to be able to show a record of successful operation.

3.16 CLEANING UP

It is the Electrical Contractor's responsibility to clean up all trash and debris caused by the work of this Division, keeping premises, street, sidewalks, and adjacent property clean and neat at all times and to dispose of such materials outside the legal limits of the project or as directed by the Owner.

END OF SECTION 26000



LEGAL DESCRIPTION:
LOT 41, BLOCK 3, C.B. 5603, COUNTRY CLUB
HEIGHTS SUBDIVISION (1.370 ACRES)
PLAT NO. 24-118XXXXX

ADDRESS:
159 BURR RD.
ALAMO HEIGHTS, TEXAS 78209

NO.	REVISION	DATE



BURR ROAD PARKING LOT - PHASE 2

SAN ANTONIO, TEXAS

LIGHTING SPECIFICATIONS



PLAT NO.	N/A
JOB NO.	7531-10
DATE	JANUARY 06, 2025
DESIGNER	JF/DM
CHECKED	DRAWN LF
SHEET	E3.1