PSJA ISD

PSJA ISD NEW SWIMMING FACILITIES BID # 18-19-039

04.11.19

SUPERINTENDENT	PRESIDENT	VICE - PRESIDENT	SECRETARY - TREASURER	ASST. SECRETARY-TREASURER	MEMBER	MEMBER	MEMBER
Dr. Daniel King	Mr. Jesus Zambrano	Mr. Jorge Palacios	Mr. Jorge Zambrano	Mr. Ricardo Pedraza	Mr. Victor Perez	Mr. Jesus Vela, Jr.	Mr. Carlos G. Villegas, Jr.

OWNER	ARCHITECT	SPORTS	CIVIL	LANDSCAPE	STRUCTURAL	MEPT	AQUATICS
PSJA ISD 601 E. KELLY AVE. PHARR, TX, 78577 956-354-2000 P	PBK ARCHITECTS 3900 NORTH 10TH STREET, SUITE 810 MCALLEN, TX 78501 956-687-1330 P	PBK SPORTS 11 GREENWAY PLAZA BLVD, 15TH FLOOR HOUSTON, TX 77046 713-965-0608 P	MELDEN & HUNT, INC. 115 W. MCINTRYE EDINBURG, TX 78541 956-381-1839 P	HEFFNER DESIGN TEAM 4814 N. 11TH STREET, SUITE E MCALLEN, TX 78504 956-540-7850 P	CHANIN ENGINEERING 400 NOLANA AVE, STE H2 MCALLEN, TX 78504 956-687-9421 P	LEAF ENGINEERS 601 N.W. LOOP 410 SUITE 400 SAN ANTONIO, TX 78216 210-638-7200 P 210-829-0578 F	COUNSILMAN-HUNSAKER 10733 SUNSET DR. STE. 400 ST. LOUIS, MO 63127 314-894-1245 P

ABBREVIATIONS

A.D.	AREA DRAIN
A.D.A.	AMERICANS WITH DISABILITIES ACT
A.D.A.	2010 ADA STANDARDS FOR ACCESSIBLE DESIGN
A.D.A.A.G.	AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES
A.F.F.	ABOVE FINISH FLOOR
A.F.G.	ABOVE FINISH GRADE
A.H.J.	ATHORITY HAVING JURISDICTION
A/C	AIR CONDITIONING
ACC.	ACCESSIBLE, ACCESSIBILITY
ACP.	ACOUSTICAL PANEL
ACT.	ACOUSTICAL TILE
ADJ.	ABADJUSTABLE
ALT.	ALTERNATE
ALUM.	ALUMINUM
ASPH.	ASPHALT
∠	ANGLE
B.O.D.	BOTTOM OF DECK
B.U.R.	BUILT-UP ROOF
BD.	BOARD
BLDG.	BUILDING
BLK.	BLOCK
BM.	BEAM
C	CHANNEL
C.J.	CONTROL JOINT
C.M.U.	CONCRETE MASONRY UNIT
C.W.	COLD WATER
CAB, CABT	CABINET
CFMF	COLD-FORMED METAL FRAMING
CFSF	COLD-FORMED STEEL FRAMING
CL	CENTERLINE
CLG.	CEILING
CLR	CLEAR
COL.	COLUMN
COMP.	COMPRESSIBLE
CONC.	CONCRETE
COND.	CONDITION
CONT.	CONTINUOUS
CORR.	CORRIDOR
CPT.	CARPET (ED)
CT.	CERAMIC TILE
CTSK.	COUNTER SINK
D	DRYER
D.F.	DRINKING FOUNTAIN
D.P.	DAMPPROOFING
D.S.	DOWN SPOUT
DIA.	DIAMETER
DIM.	DIMENSION
DTL.	DETAIL
DWG.	DRAWING
E.J.	EXPANSION JOINT
E.Q.	EQUAL
EA.	EACH
EDF	ELECTRIC DRINKING FOUNTAIN
EL.	ELEVATION (HEIGHT)
ELEC.	ELECTRICAL
ELECT.	ELECTRICAL
ELEV	ELEVATION (DRAWING)
EQUIP	EQUIPMENT
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET
F.H.C.	FIRE HOSE CABINET
FB.	FACE BRICK
FD.	FLOOR DRAIN
FIN.	FINISH (ED)
FIXT.	FIXTURE
FLR.	FLOOR (ING)
FLSHG.	FLASHING
FLUOR	FLUORESCENT
FRP	FIBER REINFORCED PLASTIC
G.B.	GRAB BAR
G.I.	GALVANIZED IRON
GA.	GAUGE
GALV.	GALVANIZED
GCMU	GLAZED CONCRETE MASONRY UNIT
GEN.	GENERAL
GEN.	GENERAL
GL.	GLASS / GLAZING
GL.	GLASS
GR.	GRADE
GTP.	GLAZED TILE PAVER
GWB	GYPSUM WALL BOARD
GYP.	GYPSUM
H.W.	HOT WATER
HM	HOLLOW METAL FRAME
HORIZ.	HORIZONTAL
HT.	HEIGHT
I.D.	INSIDE DIAMETER
I.P.S.	IRON PIPE SIZE
INSUL	INSULATE (ED), (ION)
INT.	INTERIOR
JT.	JOINT
L.P.	LIGHT POLE
LAM.	LAMINATE (D)
LAV.	LAVATORY
LT.	LIGHT
LT. WT.	LIGHTWEIGHT
M.O.	MASONRY OPENING
MAS.	MASONRY
MATL.	MATERIAL (S)
MAX.	MAXIMUM
MB.	MARKER BOARD
MECH.	MECHANICAL
MEM	MEMBRANE
MEM. WP.	MEMBRANE WATERPROOFING
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MEPT	MECHANICAL, ELECTRICAL, PLUMBING, TECHNOLOGY
MEZZ.	MEZZANINE
MFR. / MANUF.	MANUFACTURE (R)
MH.	MANHOLE
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MOD	MODULAR
MTL	METAL
MTP.	METAL TOILET PARTITION
N.D.	NAPKIN DISPOSAL
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
N.V.	NAPKIN VENDOR
NO.	NUMBER
NOM.	NOMINAL
O.C.	ON CENTER (S)
O.C.E.W.	ON CENTER EACH WAY
O.D.	OUTSIDE DIAMETER
O.F.C.I.	OWNER FURNISHED, CONTRACTOR INSTALLED
O.H.	OPPOSITE HAND
OPNG.	OPENING
OPP.	OPPOSITE
P. LAM. / PLAM	PLASTIC LAMINATE
P.C.	PRECAST
P.H.	PAPER HOLDER
P.L.	PROPERTY LINE
P.P.	POWER POLE
P.W.B.	PREFINISHED WALL BOARD
PL.	PLATE
PLUMB.	PLUMBING
PLYWD.	PLYWOOD
POL.	POLISHED
PR.	PAIR
PREFIN.	PRE-FINISHED
PT	PRESSURE-TREATED
PT.	POINT
PTD.	PAINTED
Q.T.	QUARRY TILE
R / RAD	RADIUS
R.O.	ROUGH OPENING
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
RE. , REF.	REFER TO / REFERENCE / SEE
RECP.	RECEPTACLE
REINF.	REINFORCE (D), (ING)
REQ'D.	REQUIRED
RES.	RESILIENT
REV.	REVISION (S), REVISED
RF	RECREATIONAL RESILIENT FLOORING
RPG.	RELOCATABLE PAINTED GYPSUM BOARD
RSS.	ROD STOCK AND SEALANT
S.C.	SEALED CONCRETE
S.D.	SOAP DISPENSER
S.N.D.	SANITARY NAPKIN DISPOSAL
SCHED	SCHEDULE
SCPL	SOLID CORE PLASTIC LAMINATE
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SPC	SPECIAL COATING SYSTEM
SPEC	SPECIFICATION (S)
SQ.	SQUARE
SS / SS. STL.	STAINLESS STEEL
STL.	STEEL
STRUC / STRUCT	STRUCTURAL
SUSP	SUSPENDED
SVDF	SHEET VINYL DANCE FLOORING
SVF	SHEET VINYL FLOORING
T.A.S.	TEXAS ACCESSIBILITY STANDARDS (2012)
T.B.	TACK BOARD
T.D.R.	TOWEL DISPENSER AND RECEPTACL
T.O.	TOP OF
T.O.B.	TOP OF (WOOD) BLOCKING
T.O.M.	TOP OF MASONRY
T.O.P.	TOP OF PARAPET
T.O.S.	TOP OF STEEL
T.T.D.	TOILET TISSUE DISPENSER
TEL	TELEPHONE
TERR	TERRAZZO
THK	THICK (NESS)
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
UR.	URINAL
V	VENT
V.C.T.	VINYL COMPOSITION TILE
V.I.F.	VERIFY IN FIELD
VENT.	VENTILATING, VENTILATED
VER.	VERIFY
VERT.	VERTICAL
VGB	(PREFINISHED) VINYL CLAD GYPSUM BOARD
VWC	VINYL WALL COVERING
W	WASHING MACHINE
W.P.	WATER PROOFING
W.S.	WEATHERSTRIP
W.W.	WATER WELL
W.W.F.	WELDED WIRE FABRIC
W.W.M.	WOVEN WIRE MESH
W/	WITH
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WT	WEIGHT

SHEET NUMBERING

A2.01A

- **SHEET NUMBER**
- **BUILDING AREA**
- **SEQUENCE (.01 - .99.....etc.)**
- **SHEET DISCIPLINE TYPE**

DISCIPLINE

G	GENERAL
C	CIVIL
L	LANDSCAPE
CA	SPORTS
S	STRUCTURAL
D	DEMOLITION
A	ARCHITECTURAL
M	MECHANICAL
E	ELECTRICAL
P	PLUMBING
T	TECHNOLOGY
FS	FOOD SERVICE
AV	ACOUSTICAL
TH	THEATRICAL

0	GENERAL
1	SITE
2	FLOOR PLANS (Note: Flip Sheets are Schedules)
3	ROOF
4	ENLARGED PLANS
5	PLAN DETAILS
6	ELEVATIONS (Exterior and Interior)
7	PARTITION TYPES, WALL SECTIONS
8	CASEWORK, MILLWORK
9	DOORS, WINDOWS, FRAMES
10	CEILINGS

CODES & STANDARDS

GENERAL INFORMATION

LOCATION:	Burl McKinney Stadium, Avenue J, Van Vleck, TX 77482	**AGENCY INFORMATION:**	Van Vleck ISD 133 S 4th St, Van Vleck, TX 77482 (979) 323-5006
ARCHITECT:	PBK Sports 11 Greenway Plaza, 15th Floor Houston, TX 77046	**RESPONDING FIRE DEPARTMENT:**	Van Vleck Volunteer Fire Department
REASON FOR SUBMITTAL:	Renovation / Demolition / New Construction	**WATER SERVICE:**	Matagorda County Water Control
		TDLR REGISTRATION NO.:	B8811728

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF A RENOVATION AND EXPANSION OF THE EXISITING FOOTBALL COMPLEX ON A TRACT OF LAND WHERE THE FOOTBALL STADIUM IS CURRENTLY LOCATED. THE SCOPE INCLUDES THE RENOVATION OF THE EXISTING CONCESSION / RESTROOMS BUILDING TO SERVE THE EXISITING AND NEW FOOTBALL FACILITIES, CONSTRUCTING NEW HOME FOOTBALL BLEACHERS, RESURFACING THE EXISTING TRACK, AND ADDING 2 ADDITIONAL PRACTICE FIELDS AND TENNIS COURTS. SEATING IS PROVIDED FOR **1242 SPECTATORS AT THE FOOTBALL FIELD.**

APPLICABLE CODES

2012 - INTERNATIONAL BUILDING CODE	2014 - NATIONAL ELECTRIC CODE
2012 - INTERNATION MECHANICAL CODE	2012 - INTERNATIONAL FIRE CODE
2012 - INTERNATIONAL PLUMBING CODE	2012 - INTERNATIONAL ENERGY CONSERVATION CODE
2012 - NATIONAL PLUMBING CODE	2012 - TEXAS ACCESSIBILITY STANDARDS

USE & OCCUPANCY CLASSIFICATIONS - (CHAPTER 3)

Concession / RR - B (ref. sec. 304.1) Press Box - A5 (re. sec. 303.1)

BUILDING HEIGHT AND AREAS - (CHAPTER 5)

Concession / RR (Football Complex) = 1,219 sq. ft.
Number of Stories = 1

Press Box (Football Complex) = 450 sq. ft.
Number of Stories = 1

ACTIVE FIRE SAFETY FEATURES

	Req.	Prov.
Fire Alarm System:	✓	✓
Manual Pull Station:	✓	✓
Exit Signs:	✓	✓
Minimum Egress Lighting:	✓	✓
Fire Extinguishers:	✓	✓
Fire Sprinklers:	✓	✓
Smoke Detection:	✓	✓
Emergency Lighting:	✓	✓
Duct Detection:	✓	✓
Fire Pump:	✓	✓

TYPE OF CONSTRUCTION (CHAPTER 6)

Concessions / RR - **V-B**
Max. allowable area = 9,000 sq. ft. (ref. sec. table 503)
Max. allowable height = 40' - 0"
Max. story allowed = 2
***Area, Stories, & Height complied with construction type V-B**

Press Box - **II-B**
Max. allowable area = Unlimited
Max. allowable height = 55' - 0"
Max. story allowed = Unlimited
***Area, Stories, & Height complied with construction type II-B**

Building Elements Fire Resistance Rating Requirements
(ref. sec. table 601)

	Concession / RR type V-B	**Press Box type II-B**
Structural frame	0	0
Non bearing wall & interior partition	0	0
Floor construction	0	0
Roof construction	0	0
Exterior wall (ref. table 602)	0	0

FIRE PROTECTION SYSTEM (CHAPTER 9)

Automatic sprinkler system required for A-5 occupancies in excess of 1000 SF. (ref. 903.2.1.5), and for E occupancies over 12,000 SF. (ref 903.2.3).
-Press Box is under 1000 SF, no fire sprinkler required.
-No fire sprinkler requirement for Type B buildings.

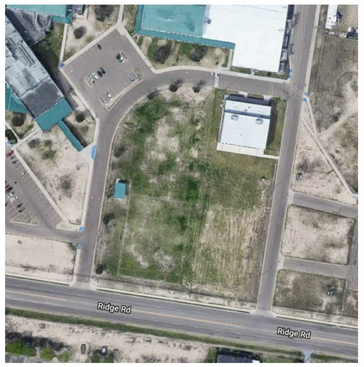
A manual fire alarm system shall be installed in accordance with NFPA 72 in Group A occupancies having an occupant load of 300 or more (ref. 907.2.1)
-Press Box is under 300 occupants, no FA system required (ref. 907.2.1)
-Concessions / RR building is under 500 occupants, no FA system required (ref. 907.2.2)

FIRE PROTECTION SYSTEM (CHAPTER 10)

Concessions / RR Building:
Occupant Load (ref. sec. table 1004.1.1)
1,219 sq. ft. / 50 sq. ft. net/occupant = **43**
Egress width req.
50 x .2 = 10" (ref. sec. 1005.3.2)
***Egress width provided = (5) @ 36"**

Press Box:
Occupant Load (ref. sec. table 1004.1.1)
450 sq. ft. / 7 sq. ft. net/occupant = **64**
Egress width req.
64 x .3 = 19" (ref. sec. 1005.3.2)
***Egress width provided = (2) @ 36"**

SITE LOCATION MAP - MEMORIAL EARLY COLLEGE HS ALAMO, TX



SITE LOCATION MAP - EARLY COLLEGE HS SAN JUAN, TX

PLAN NORTH NORTH

DRAWING INDEX

COVER SHEET
G0.00 COVER SHEET

GENERAL
G0.01 INDEX & CONVENTIONS
G0.09 SIGNAGE
G0.10 CODE INFO & LIFE SAFETY

CIVIL
C1.0 EXISTING CONDITIONS - MEMORIAL EARLY COLLEGE HS
C1.01 EXISTING SITE
C2.0 SITE PLAN LAYOUT - MEMORIAL EARLY COLLEGE HS
C2.01 CIVIL SITE PLAN - EARLY COLLEGE HS
C3.0 PROPOSED UTILITIES - MEMORIAL EARLY COLLEGE HS
C3.01 WATER AND SEWER OUTLET - EARLY COLLEG HS
C4.0 PAVING & GRADING PLAN - MEMORIAL EARLY COLLEGE HS
C4.01 PAVING & GRADING PLAN - EARLY COLLEGE HS
C5.0 CONSTRUCTION DETAILS
C5.01 CONSTRUCTION DETAILS
C6.0 EROSION CONTROL PLAN - MEMORIAL EARLY COLLEGE HS
C6.01 EROSION CONTROL PLAN - EARLY COLLEGE HS
C7.0 EXISTING SOUTH PARKING AREA
C8.0 SOUTH PARKING AREA DRAINAGE PLAN
C9.0 PARKING AREA DRAINAGE PLAN

LANDSCAPE
L1 MEMORIAL LANDSCAPE PLAN
L2 BEARS LANDSCAPE PLAN
L3 LANDSCAPE DETAILS

IRRIGATION
IR1 MEMORIAL IRRIGATION PLAN
IR2 BEARS IRRIGATION PLAN
IR3 IRRIGATION SCHEDULE & NOTES
IR4 IRRIGATION DETAILS

STRUCTURAL
S1.01 GENERAL NOTES
S1.02 GENERAL NOTES
S1.03A EXCAVATION PLAN (PSJA EARLY COLLEGE HS)
S1.03B EXCAVATION PLAN (PSJA MEMORIAL ECHS)
S1.04 COMPONENTS AND CLADDING ROOF UPLIFT PLAN
S1.05 ROOF PONDING PLAN
S2.01 FOUNDATION PLAN - BASE BID
S2.02 FOUNDATION PLAN - ALTERNATE NO. 1
S3.01 CMU WALL LAYOUT PLAN
S4.01 ROOF FRAMING PLAN - BASE BID
S4.02 ROOF FRAMING PLAN - ALTERNATE NO. 1
S5.01 TYPICAL DETAILS
S5.02 TYPICAL DETAILS
S6.01 DETAILS
S6.02 DETAILS
S6.03 DETAILS

DEMOLITION
AD0.01A SITE DEMOLITION PLAN - EARLY COLLEGE HS
AD0.01B SITE DEMOLITION PLAN - MEMORIAL EARLY COLLEGE HS

ARCHITECTURAL
A0.01A ARCHITECTURAL SITE PLAN - EARLY COLLEGE HS
A0.01B ARCHITECTURAL SITE PLAN - MEMORIAL EARLY COLLEGE HS
A0.02A ENLARGED SITE PLAN & DETAILS - EARLY COLLEGE HS
A0.02B ENLARGED SITE PLAN & DETAILS - MEMORIAL EARLY COLLEGE HS
A1.01 SERVICE YARD PLAN & SITE DETAILS
A2.01 OVERALL FLOOR PLAN - BASE BID
A2.02 OVERALL FLOOR PLAN ALTERNATE NO. 1
A2.04 INTERIOR FINISH SCHEDULE
A2.06 PARTITION TYPES
A3.01 ROOF PLAN - BASE BID
A3.02 ROOF PLAN - ALTERNATE
A3.03 ROOF DETAILS
A3.04 BUILDING ENVELOPE
A3.05 BUILDING ENVELOPE
A4.01 ENLARGED PLANS, & INTERIOR ELEVATIONS
A4.02 INTERIOR ELEVATIONS
A4.03 EXTERIOR ELEVATIONS - BASE BID
A4.04 EXTERIOR ELEVATIONS - BASE BID
A4.05 EXTERIOR ELEVATIONS - BASE BID
A4.06 EXTERIOR ELEVATIONS - ALTERNATE NO. 1 & 2
A5.01 EXTERIOR PLAN DETAILS
A5.05 STAIRS
A6.01 SCHEDULES & DOOR, WINDOW, & FRAME ELEVATIONS
A6.02 INTERIOR & EXTERIOR DOOR, WINDOW & FRAME DETAILS
A7.01 BUILDING SECTIONS
A7.02 BUILDING SECTIONS ALTERNATE NO. 1
A7.03 WALL SECTIONS
A7.04 WALL SECTIONS
A7.05 WALL SECTIONS
A7.06 ALTERNATE 1 SECTIONS
A7.10 WALL SECTIONS DETAILS
A8.01 CASEWORK / SECTIONS & MISC. DETAILS
A9.01 BLEACHER PLANS
A10.01 FIRST FLOOR REFLECTED CEILING PLAN
A10.02 REFLECTED CEILING PLAN - ALTERNATE NO. 1

MECHANICAL
M0.01 MECHANICAL SYMBOLS AND ABBREVIATIONS
M2.01 FIRST FLOOR - MECHANICAL PLAN
M2.03 ROOF - MECHANICAL PLAN
M3.01 MECHANICAL SECTIONS
M6.01 MECHANICAL SCHEDULES
M7.01 MECHANICAL DETAILS

ELECTRICAL
E0.01 ELECTRICAL SYMBOLS AND ABBREVIATIONS
E1.01 EARLY COLLEGE HS ELECTRICAL SITE PLAN
E1.02 MEMORIAL HS ELECTRICAL SITE PLAN
E2.01 POWER PLAN
E2.02 LIGHTING PLAN
E2.03 LIGHTING PLAN - ALTERNATE #1
E2.04 ELECTRICAL ROOF PLAN
E5.01 ELECTRICAL ONE LINE DIAGRAMS
E6.01 ELECTRICAL SCHEDULES
E7.01 ELECTRICAL DETAILS
E7.02 ELECTRICAL DETAILS

PLUMBING
P0.01 PLUMBING SYMBOLS AND ABBREVIATIONS
P1.01 EARLY COLLEGE HS PLUMBING SITE PLAN
P1.02 MEMORIAL HS PLUMBING SITE PLAN
P2.01 UNDERFLOOR - PLUMBING PLAN
P2.02 PLUMBING PLAN
P2.03 PLUMBING PLAN - ALTERNATE #2
P2.04 ROOF - PLUMBING PLAN - BASE BID
P2.05 PLUMBING ROOF PLAN - ALTERNATE 1
P3.01 PLUMBING ENLARGED PLANS
P5.01 PLUMBING RISER DIAGRAMS
P5.02 PLUMBING RISER DIAGRAMS
P5.03 PLUMBING RISER DIAGRAM
P5.04 PLUMBING RISER DIAGRAM
P6.01 PLUMBING SCHEDULES
P7.01 PLUMBING DETAILS

TECHNOLOGY
T0.01 TECHNOLOGY SYMBOLS AND ABBREVIATIONS
T2.01 FIRE SAFETY PLAN
T2.02 SECURITY PLAN
T2.03 TECHNOLOGY PLAN
T3.01 TECHNOLOGY IDF ENLARGED AND RISER

POOL CONSULTANT
SP0.00 POOL REFERENCE PLAN
SP0.01 COMPETITION POOL TIMING SYSTEM LAYOUT
SP1.00 COMPETITION POOL PLAN
SP1.01 COMPETITION POOL SECTIONS
SP1.02 COMPETITION POOL WATER POLO LAYOUT
SP1.03 COMPETITION POOL DETAILS
SP2.00 TRAINING POOL PLAN & SECTIONS
SP2.01 TRAINING POOL DETAILS
SP3.00 DIVE POOL PLAN & SECTIONS (ALTERNATE #2)
SP3.01 DIVE POOL DETAILS (ALTERNATE #2)
SP4.00 POOL LOCATION POINT PLAN
SP5.00 POOL SUCTION PIPING PLAN
SP5.01 POOL RETURN PIPING PLAN
SP6.00 POOL MECHANICAL ROOM PLAN
SP6.01 POOL MECHANICAL ROOM SECTIONS
SP6.02 COMPETITION & TRAINING POOL SURGE TANK PLANS & SECTIONS
SP6.03 DIVE POOL SURGE TANK PLAN & SECTIONS (ALTERNATE #2)
SP6.04 POOL MECHANICAL DETAILS
SP6.05 POOL MECHANICAL DETAILS
SP6.06 POOL MECHANICAL DETAILS
SP7.00 COMPETITION & TRAINING POOL SYSTEMS SCHEMATICS
SP7.01 DIVE POOL SYSTEMS SCHEMATIC
SP8.00 COMPETITION POOL STRUCTURAL PLAN
SP8.01 TRAINING POOL STRUCTURAL PLAN
SP8.02 DIVE POOL STRUCTURAL PLAN
SP8.03 POOL STRUCTURAL DETAILS
SP8.04 POOL STRUCTURAL SECTIONS
SP8.05 POOL STRUCTURAL SECTIONS

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH / TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

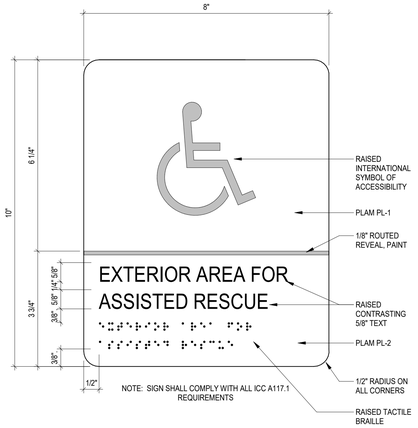
REVISIONS

No.	Description	Date

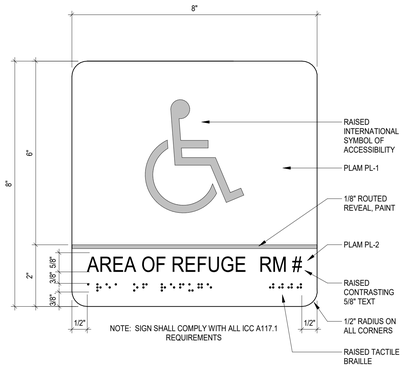
ISSUED FOR BIDS

INDEX & CONVENTIONS

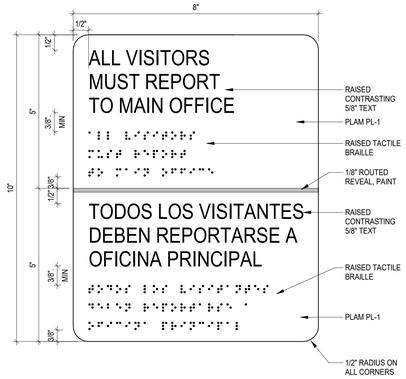
G0.01



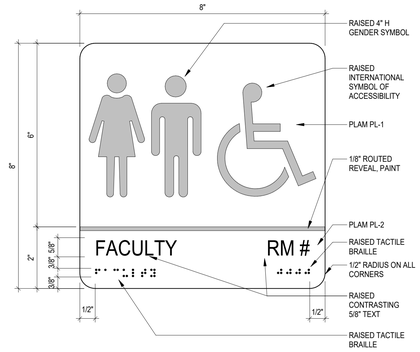
H EGRESS



G EGRESS



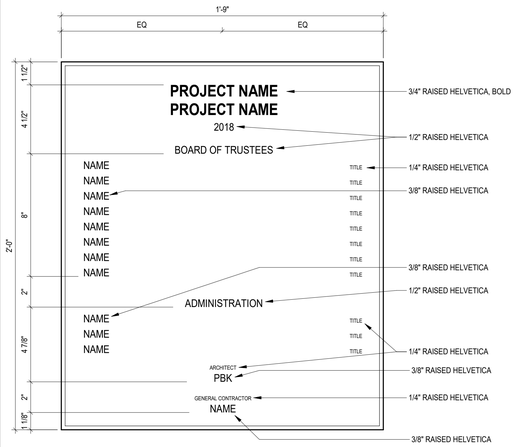
F ADMINISTRATIVE



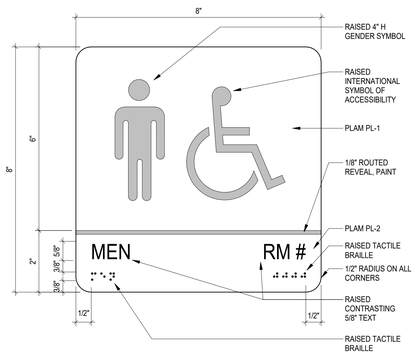
E FACULTY / ASSISTED USE / UNISEX

GENERAL GRAPHICS NOTES

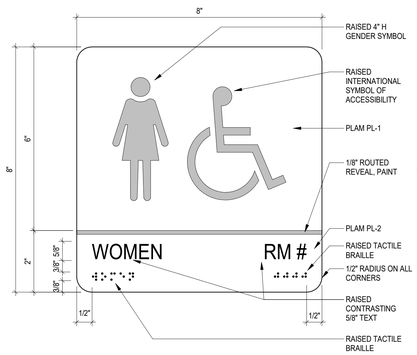
1. ALL GRAPHIC SIGNAGE SHALL BE COMPLIANT WITH ALL APPLICABLE ACCESSIBILITY REQUIREMENTS, VERIFY REQUIREMENTS AND COMPLIANCE PRIOR TO FABRICATION.
2. PROVIDE AND INSTALL ONE SIGN FOR EVERY DOOR IN DOOR SCHEDULE, PLUS ONE SIGN FOR EVERY PERMANENT ROOM AND OR SPACE WITHOUT A DOOR.
3. SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO DOOR OR AT DOUBLE LEAF DOOR LOCATIONS, INSTALL SIGN ON THE NEAREST ADJACENT WALL.
4. TACTILE CHARACTERS ON SIGNS SHALL BE LOCATED 48 INCHES MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE AND 60 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE.
5. CHARACTER FONTS SHALL BE UPPERCASE, SANS SERIF, HELVITICA MEDIUM, NON-ITALIC, NON-OBLIQUE, NON-SCRIPT, NON-DECORATIVE, RAISED 1/32 INCH, PAINTED WHITE.
6. CHARACTER FONT PROPORTIONS SHALL BE HAVE A WIDTH OF THE UPPERCASE LETTER "O" 55 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I".
7. CHARACTER FONT HEIGHT SHALL BE 5/8 INCH HIGH MINIMUM AND 2 INCH HIGH MAXIMUM.
8. CHARACTER FONT STROKE THICKNESS OF THE UPPER CASE LETTER "I" SHALL BE 15 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER.
9. CHARACTER FONT SPACING OF CHARACTERS WITH RECTANGULAR CROSS SECTIONS SHALL BE 1/8 INCH MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM.
10. CHARACTER FONT SPACING OF CHARACTERS WITH NON-RECTANGULAR CROSS SECTIONS SHALL BE 1/16 INCH MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE BASE OF THE CROSS SECTIONS, AND 1/8 INCH MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE TOP OF THE CROSS SETCIONS.
11. CHACTER FONTS SHALL BE SEPARATED FROM RAISED BORDERS AND DECORATIVE ELEMENTS 3/8 INCH MINIMUM.
12. GRADE 2 BRAILLE SHALL ACCOMPANY ALL RAISED TEXT. BRAILLE DOTS SHALL HAVE DOMED OR ROUNDED SHAPE, AND BE POSITIONED BELOW THE CORRESPONDING TEXT. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT.
13. BRAILLE SHALL BE SEPARATED 3/8 INCH MINIMUM FROM RAISED BORDERS AND DECORATIVE ELEMENTS.
14. PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE 6 INCHES MINIMUM IN HEIGHT.
15. SIGN MATERIAL SHALL BE 1/4 INCH THICK WITH MATTE, NON-GLARE PLASTIC LAMINATE FRONT FACE AND MATTE, NON-GLARE PLASTIC LAMINATE BACK FACE. CHARACTER AND SYMBOL COLOR SHALL CONTRAST WITH BACKGROUND COLOR. COLORS SHALL BE SELECTED BY ARCHITECT AND OR OWNER.
16. SIGN EDGE SHALL BE PAINTED ALL AROUND TO MATCH SIGN FACE.



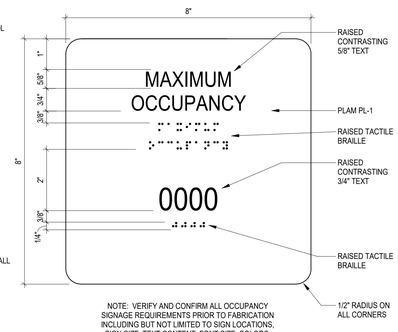
18 DEDICATION PLAQUE
3" = 1'-0"



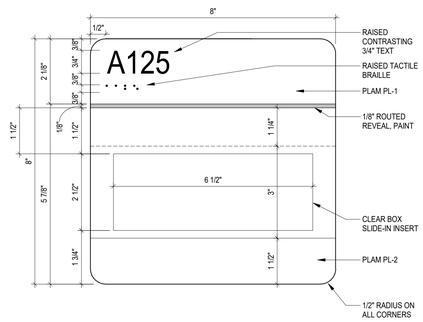
D MEN / BOYS



C WOMEN / GIRLS

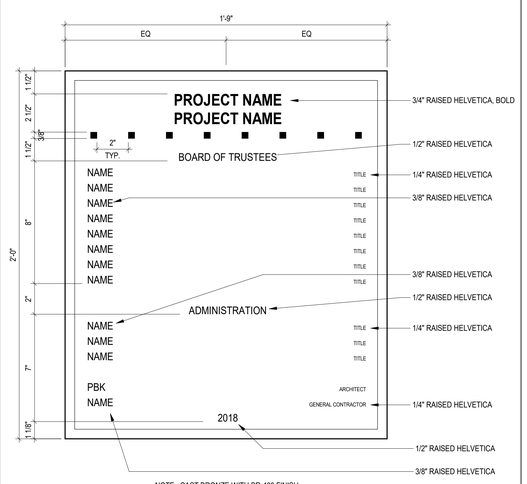


B ADMINISTRATIVE

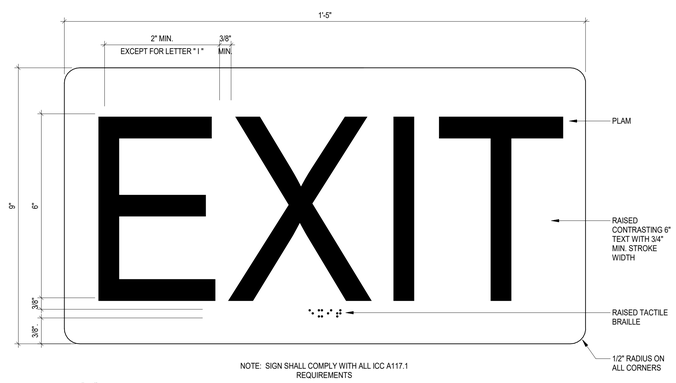


A ADMINISTRATIVE

17 GRAPHICS
6" = 1'-0"

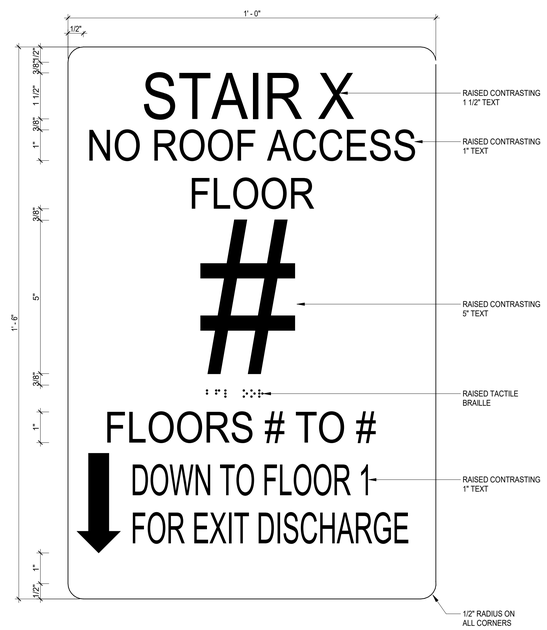


3 DEDICATION PLAQUE
3" = 1'-0"



K EGRESS

5 GRAPHICS - EXIT SIGN
6" = 1'-0"



G EGRESS

2 EGRESS GRAPHICS
6" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

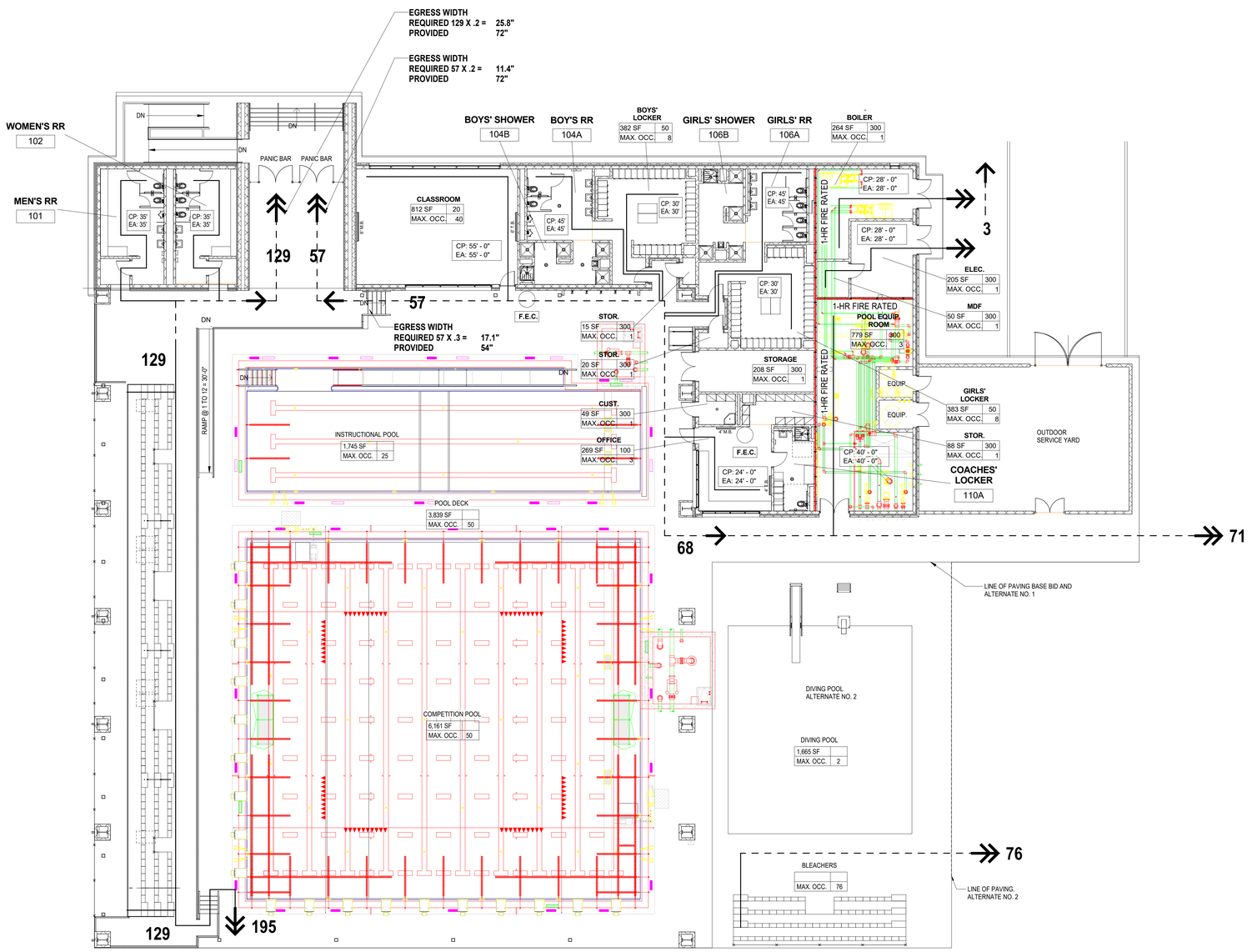
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

SIGNAGE

G0.09



12 LIFE SAFETY PLAN

3/32" = 1'-0"

LIFE SAFETY SYMBOLS LEGEND

- MEANS OF EGRESS - PATH OF TRAVEL
- MEANS OF EGRESS - COMMON PATH OF TRAVEL
- POINT OF EXIT
- EXIT DISCHARGE
- DIRECTION OF TRAVEL
- 1-HR FIRE RATED
- 2-HR FIRE RATED
- 3-HR FIRE RATED
- F.E. — FIRE EXTINGUISHER
- F.E.C. — FIRE EXTINGUISHER CABINET
- CP: 0" EA: 0" — COMMON PATH OF TRAVEL/ EXIT ACCESS TRAVEL DISTANCE

PROJECT GENERAL INFORMATION

NAME OF PROJECT:	PSJA ISD SWIMMING FACILITIES
BUILDING / FACILITY NAME:	PSJA ISD SWIMMING FACILITIES
LOCATION (ADDRESS):	SAN JUAN: 805 WEST RIDGE ROAD, SAN JUAN, TX 78589 ALAMO: 800 SOUTH ALAMO RD., ALAMO, TX 78516
STATE, ZIP CODE:	SEE ABOVE,
DESCRIPTION OF PROJECT:	SWIMMING FACILITIES WITH 25 METER X 25 METER COMPETITION POOL, INSTRUCTIONAL POOL, AND DIVING POOL (ALT# 2).
APPLICABLE BUILDING CODE:	2012 IBC
APPLICABLE ENERGY CODE:	2012 IECC
ACCESSIBILITY:	2012 TEXAS ACCESSIBILITY STANDARDS
CONSTRUCTION TYPE:	II-B
CONSTRUCTION TYPE MIX:	List Construction Type if Mixed (second type)
OCCUPANCY CLASSIFICATION:	A-5
OVERALL USE OF BUILDING:	Provide a summary of building use
HIGH RISE BUILDING:	NO
AUTOMATIC FIRE SPRINKLER SYSTEM:	Yes or No (select)
STANDPIPE SYSTEM:	Yes or No (select)
# OF PARKING SPACES BY ZONING:	0 REQUIRED / 0 PROVIDED
# OF ACCESSIBLE SPACES REQUIRED:	0 REQUIRED / 0 PROVIDED
MINIMUM CORRIDOR WIDTH (REF. IBC):	0"
GROSS BUILDING SQ FT:	6,989 SQ FT.
NET BUILDING SQ FT:	6,146 SQ FT.
TOTAL OCCUPANT LOAD:	531 OCCUPANTS
ASSIGNABLE SQ FT:	1 SQ FT.
BUILDING EFFICIENCY:	0.014308%

OCCUPANCY AND EGRESS

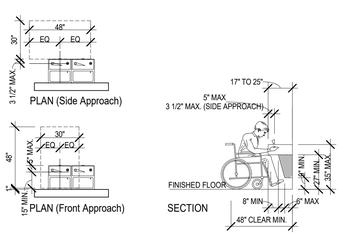
	Number of Occupants	Exits: Single Exit Maximum Occupant Load: 49		Egress Door Width (in.): Means of Egress Capacity Factor: 0.2 in.		Egress Stair Width (in.): Stairway Means of Egress Capacity Factor: 0.3in.	
		Required	Provided	Required	Provided	Required	Provided
First Floor	531	3	3	107"	216"	160"	270"

ALLOWABLE HEIGHTS AND AREAS - MIXED OCCUPANCY

	1st Occupancy Info	2nd Occupancy Info	3rd Occupancy Info	Most Stringent Req.	Provided
Occupancy Classification	A-5	E	B	-	-
Allowable Height Stories	2	2	3	0	1
Allowable Height in Feet	55'	55'	55'	0'	0'
Non-Sprinklered Allowable Area (SF)	0	14,500	23,500	-	-
Tabular Allowable Area (SF)	0	0	0	-	-
Frontage Increase (XX)	0	0	0	-	-
Total Allowable Area per Story (SF)	0	0	0	0	0
Maximum Common Path (With or Without Sprinkler)	75' - 0"	75' - 0"	75' - 0"	75' - 0"	0"
Maximum Exit Access Travel Distance (With or Without Sprinkler)	200' - 0"	200' - 0"	200' - 0"	200' - 0"	0"
Corridor Fire Resistance Rating	0hr.	0hr.	0hr.	0hr.	0hr.

PLUMBING / FIXTURE COUNTS

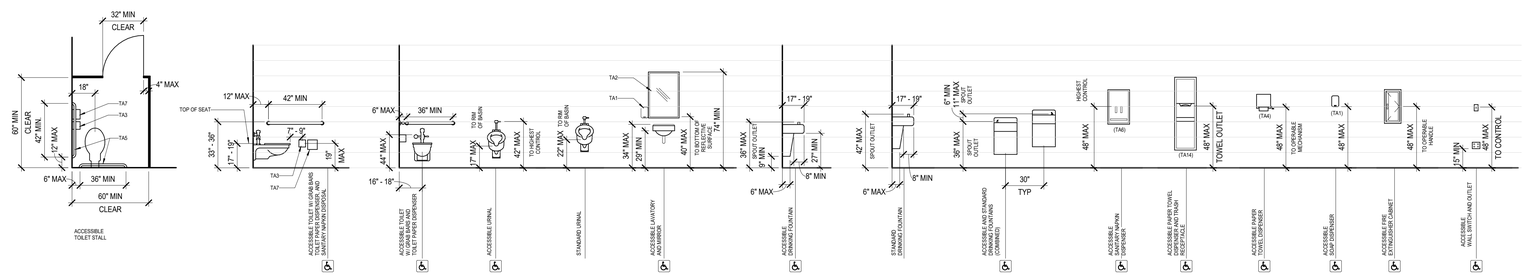
		Water Closets + Urinals		Lavatories		Drinking Fountains		Bathtubs/Showers		Service Sinks	
Occupancy Type: B	Occupants	Required	Provided	Required	Provided	Required	Provided	Required	Provided	Required	Provided
Total Occupants:	531	-	-	-	-	2	2	-	11	1	1
Total Female Occupants:	266	7	7	5	5	-	-	-	-	-	-
Total Male Occupants:	266	7	7	5	5	-	-	-	-	-	-
Unisex Assisted Use:	-	0	1	0	1	-	-	-	-	-	-



6 DRINKING FOUNTAIN GUIDELINE

1/4" = 1'-0"

NOTE: ALL FIXTURE SIZES, MOUNTING HEIGHTS, AND CLEARANCES MUST ABIDE BY THE TEXAS ACCESSIBILTY STANDARDS.



5 MOUNTING HEIGHTS GRADES 9-12 AND STANDARD HEIGHT

1/4" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT EDMUND X. RAMIREZ 14374 STATE OF TEXAS

4.11.2019

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: Author
CHECKED BY: Checker

REVISIONS

No.	Description	Date

ISSUED FOR BIDS

CODE INFO & LIFE SAFETY

G0.10

CALL BEFORE YOU DIG!

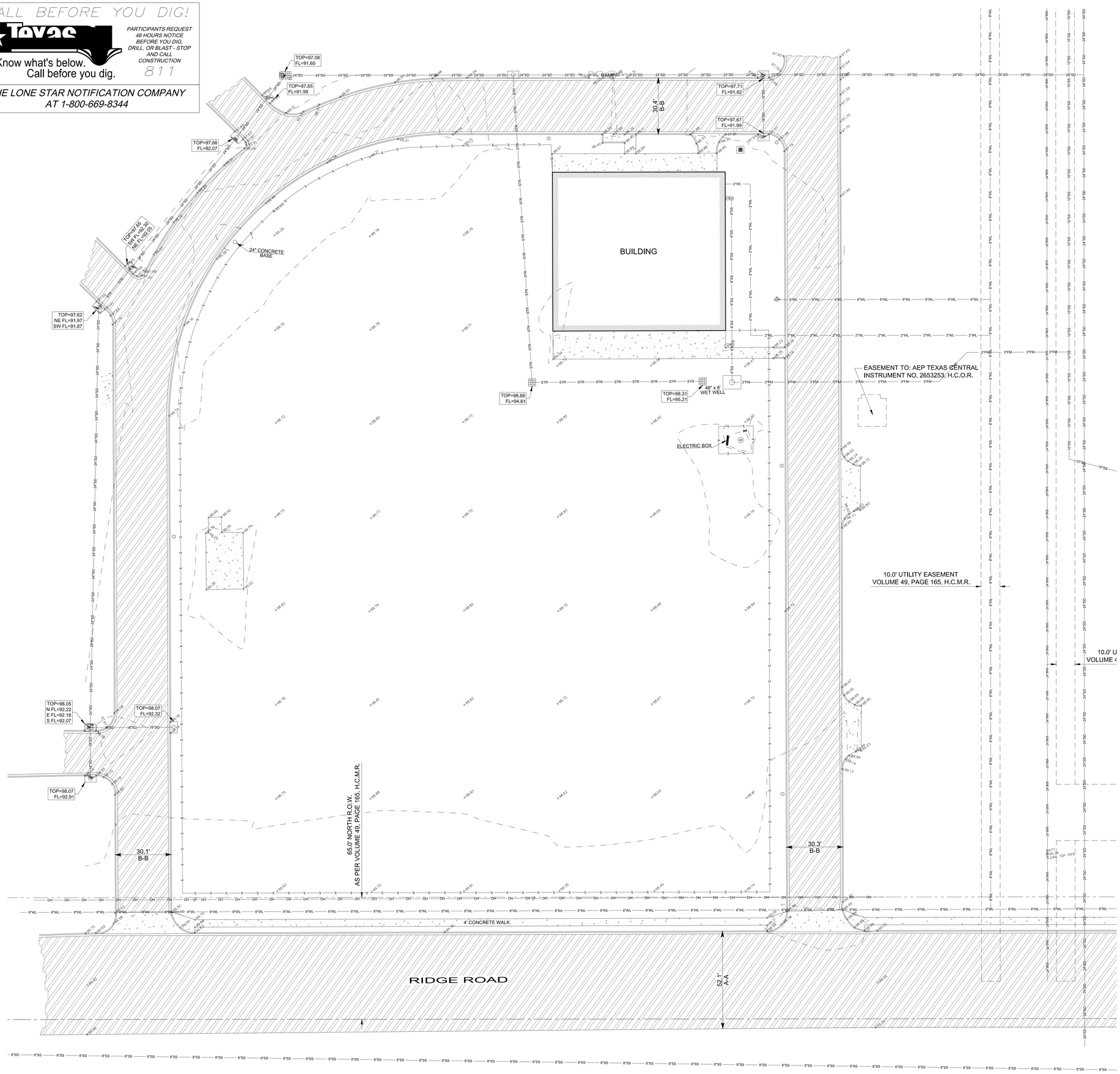
Texas

Know what's below.
Call before you dig.

PARTICIPANTS REQUEST 48 HOURS NOTICE BEFORE YOU DIG, DRILL, OR BLAST - STOP AND CALL CONSTRUCTION

811

THE LONE STAR NOTIFICATION COMPANY AT 1-800-669-8344



SCALE:1"=20'

CIVIL GENERAL NOTES:

1. THE INFORMATION SHOWN ON THESE DRAWINGS INDICATING TYPE AND LOCATION OF UNDERGROUND UTILITIES AND ELECTRICAL UTILITIES IS NOT GUARANTEED TO BE EXACT OR COMPLETE. THE LOCATIONS AND SIZES HAVE BEEN TAKEN FROM EXISTING RECORDS AND THE BEST AS-BUILT INFORMATION AVAILABLE; HOWEVER, IT IS EXPECTED THAT THERE MAY BE SOME DISCREPANCIES AND OMISSIONS IN THE LOCATIONS, QUALITIES AND SIZES SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT TYPE, SIZE AND LOCATION OF ALL UTILITIES AFFECTED BY THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL ARRANGE FOR THE REPAIR AND RESTORATION OF CONTRACTOR DAMAGED UTILITIES. THE COST OF ANY REPAIR OR REPLACEMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE CURRENT LINE SPOTTING TOLL FREE NUMBER AND COORDINATE WITH ALL THE UTILITY COMPANIES FOR ACTUAL LOCATING AND UNCOVERING OF EXISTING LINES PRIOR TO EXCAVATION OPERATIONS.

2. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY UNREPORTED OBSTACLES THAT MAY IMPEDE OR PREVENT THE PROPER CONSTRUCTION OF THIS PROJECT.

3. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE APPLICABLE STATE STATUES AND THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS (OSHA). COPIES OF THE O.S.H.A. STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE. INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM O.S.H.A. AT 611 EAST 6TH STREET, ROOM 303, AUSTIN, TEXAS.

4. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A SAFE, NEAT AND WORKMAN LIKE MANNER AT ALL TIMES. JOB SAFETY SHALL NOT BE COMPROMISED. ANY UNSAFE OR UNATTRACTIVE NUISANCE SHALL BE REMOVED OR OTHERWISE TAKEN CARE OF BY THE CONTRACTOR WHEN DIRECTED BY THE OWNER OR PROJECT ENGINEER.

5. EXCAVATIONS, TRENCHES AND OTHER HAZARDOUS AREAS SHALL BE ADEQUATELY PROTECTED BY BARRICADES, FENCING, LIGHTS AND/OR OTHER PROTECTIVE DEVICES AT ALL TIMES.

6. CONSTRUCTION OF THIS PROJECT WILL BE SUBJECT TO INSPECTIONS AND TESTING AS DEEMED NECESSARY OR APPROPRIATE BY THE ENGINEER AND/OR BY THE CITY OF ALAMO. THE CONTRACTOR SHALL FURNISH INCIDENTAL LABOR AND EQUIPMENT TO ALLOW FOR THE TESTING, PERSONAL ACCESS TO THE WORK, AND WILL COOPERATE FULLY WITH THE PERSONS CONDUCTING THE TESTING AND INSPECTION PROGRAM.

7. A PART OF THE WORK THAT IS NECESSARY OR REQUIRED TO MAKE EACH SYSTEM OR INSTALLATION SATISFACTORY AND OPERABLE FOR ITS INTENDED PURPOSE, EVEN THOUGH IT IS NOT SPECIFICALLY INCLUDED IN THE SPECIFICATIONS OR DRAWINGS, SHALL BE PERFORMED AS INCIDENTAL WORK AS IF IT WERE DESCRIBED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS.

8. THE DRAWINGS DO NOT ALWAYS INDICATE ALL VERTICAL BENDS AND TRANSITIONS. WHEN NECESSARY, MAKE VERTICAL TRANSITIONS BY A DEFLECTION AT THE JOINTS OR THE INSTALLATION OF FITTINGS. DO NOT DEFLECT PIPE JOINTS MORE THAN 80% OF THE MANUFACTURERS RECOMMENDATION.

9. ALL PIPING MUST BE INSTALLED WITH A MINIMUM OF 36-INCHES OF COVER UNLESS OTHERWISE NOTED ON THE PLANS.

10. ALL EXCAVATION FOR THIS PROJECT SHALL BE UNCLASSIFIED.

11. ALL UTILITIES WHICH ARE TO REMAIN AND WHICH ARE DAMAGED OR REMOVED WILL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

12. PIPE SHALL BE BACKFILLED WITH JOINTS EXPOSED FOR TESTING, BEFORE NEW JOINTS ARE COVERED. PRESSURE LINES ARE TO BE HYDROSTATICALLY TESTED AT NOT LESS THAN 150 PSIG FOR A PERIOD OF TWO HOURS. THE OWNER SHALL OBSERVE AND APPROVE OR REJECT THE TEST. REPAIRS, IF REQUIRED, SHALL BE MADE AND THE LINE SHALL BE RETESTED UNTIL APPROVED. TEST SHALL NOT BEGIN UNTIL THRUST BLOCKS HAVE AGED A MINIMUM OF 24 HOURS.

13. AS SOON AS PRACTICAL, ALL PORTIONS OF EXCAVATIONS NOT OCCUPIED BY THE PERMANENT STRUCTURE SHALL BE BACKFILLED.

14. WHERE WATER LINE INTERSECTS SANITARY SEWER SYSTEM MAINS AT LESS THAN 9.0 FEET SEPARATION, THE CONTRACTOR SHALL INSTALL A 20 FOOT SECTION OF C-900 PVC PRESSURE PIPE CENTERED ON THE POINT OF INTERSECTION, PER TCEQ REQUIREMENTS.

15. CONTRACTOR SHALL REMOVE AND REINSTALL ALL SIGNS, MAILBOXES, FENCES, CULVERTS AND OTHER ITEMS IN WAY OF THE WORK.

16. CONTRACTOR SHALL REPAIR ALL OPEN CUTS OF PAVED AREAS BACK TO BETTER THAN ``AS-IS" CONDITION WITH LIKE MATERIALS.

17. PROVIDE INTERIM DRAINAGE DURING CONSTRUCTION AS REQUIRED. USE PUMPS, TEMPORARY DITCHES, ETC. TO MAINTAIN A WELL DRAINED SITE FREE OF STANDING WATER AND WATER SOFTENED SOILS.

18. ANCHOR ALL UNDERGROUND PRESSURE PIPING AS NECESSARY TO PREVENT MOVEMENT UNDER PRESSURE TEST AND SERVICES.

19. ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A-165, GRADE 60. ALL BARS SHALL CONFORM TO ASTM SPECIFICATION A-305.

20. ALL CONCRETE AND FORM WORK SHALL CONFORM TO CURRENT ACI CODE REQUIREMENTS.

21. THE CONTRACTOR SHALL EXERCISE EXTRA CARE TO PREVENT DAMAGE TO ALL OTHER STRUCTURES IN THE AREA INCLUDING BUILDINGS, FENCES, ROADS, PIPELINES, UTILITIES, ETC., WHETHER PUBLICLY OR PRIVATELY OWNED.

21. UNTIL ACCEPTANCE BY THE ENGINEER OF ANY OR ALL OF THE CONSTRUCTION, AS PROVIDED FOR IN THE PLANS AND SPECIFICATIONS, AND ACCEPTANCE BY THE PROPER UTILITY PROVIDER, IT SHALL BE UNDER THE CHARGE AND CARE OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE EVERY NECESSARY PRECAUTION AGAINST TO ANY PART OF THE WORK. THE CONTRACTOR SHALL REBUILD, REPAIR, RESTORE AND MAKE GOOD, AT HIS OWN EXPENSE, OF ALL THE DAMAGE TO ANY PORTION OF THE WORK BEFORE ITS ACCEPTANCE.

22. NO OPEN TRENCHES OR EXCAVATION SHALL BE LEFT OPEN OVERNIGHT.

23. ALL WATERLINE TAPS AND WATER METERS SHALL BE INSTALLED BY CONTRACTOR, IN THE CASE THE CONTRACTOR WILL NOT BE INSTALLING SUCH IMPROVEMENTS, THE CONTRACTOR IS TO COORDINATE WITH THE CITY OF ALAMO BEFORE COMMENCING ANY UTILITY WORK. ALL WATER SERVICE CONNECTIONS TO CITY MAIN LINES WILL REQUIRE BACKFLOW PREVENTERS. CONTRACTOR TO COORDINATE INSTALLATION AND TESTING WITH CITY.

24. COORDINATE ALL UTILITY WORK WITH THE PLUMBING PLANS BEFORE COMMENCING ANY UTILITY WORK. REFER TO PLUMBING PLANS FOR CONTINUATION.

25. COORDINATE WITH GRADING PLANS FOR WATER LINE, STORM AND SANITARY SEWER LINES INSTALLATION.

26. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INCLUDING THOSE FROM THE CITY OF ALAMO PRIOR TO THE START OF CONSTRUCTION.

27. THE TOP ELEVATIONS OF MANHOLES AND CLEANOUTS CONSTRUCTED IN PAVED AREAS SHALL MATCH FINISHED PAVEMENT GRADE. THE TOP ELEVATIONS OF MANHOLES AND CLEANOUTS CONSTRUCTED IN GRASSED AREAS SHALL BE SIX INCHES ABOVE FINISHED GRADE (UNLESS OTHERWISE NOTED ON PLANS).

28. CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING TO VERIFY EXISTING CONDITIONS.

29. CONTRACTOR TO LEAVE OPENINGS IN CURB AT SIDEWALK RAMPS LOCATIONS.

30. REFER TO GEOTECH REPORT BEFORE INSTALLATION OF DRIVES AND PARKING AREAS.

31. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS (LOCATIONS & ELEVATIONS) PRIOR TO START OF CONSTRUCTION.

32. PERMIT NEEDED FROM THE CITY OF ALAMO BUILDING DEPARTMENT AND PRE-CONSTRUCTION CONFERENCE NEEDED BEFORE CONSTRUCTION CAN BEGIN.

33. CONSULT WITH PROPERTY OWNER BEFORE RELOCATING EXISTING FENCES THAT MIGHT BE IN THE WAY OF THE CONSTRUCTION AREA AND/OR CONSTRUCTION PLANS.

34. BOTH SITE AND BUILDING CONTRACTORS TO VERIFY EXISTING SITE ELEVATIONS PRIOR TO POURING CONCRETE TO VERIFY ACCESIBILITY.

35. ALL PROPOSED STORM R.C.P. TO BE INSTALLED AT PLACES OTHER THAN EXISTING OR PROPOSED STRUCTURES SHALL INCLUDE SAFETY ENDS TREATMENT.

36. CONTRACTOR TO INSTALL METALLIC TAPE THE LENGTH OF WATER AND SANITARY SEWER LINES FOR EASE OF FUTURE LOCATION.

37. SIDEWALK SLOPE IS NOT TO EXCEED 1:20 WITH A CROSS SLOPE OF 1:50 AT ANY INSTANCE.

38. AT ALL OF ENTRIES TO BUILDING, WARP CONCRETE SIDEWALKS SO AS TO PROVIDE A FLAT SURFACE WITH FINISHED FLOOR.

LEGEND

- POWER POLE
- LIGHT POLE
- FIRE HYDRANT
- SPRINKLER VALVE
- 54" WELL
- CLEANOUT
- TYPE "A" INLET
- GRATED INLET
- ELECTRIC BOX
- STR — STORM SEWER LINE
- 18"SD — 18" STORM SEWER LINE
- 24"SD — 24" STORM SEWER LINE
- 3"FM — 3" FORCE MAIN LINE
- 6"SS — 6" SANITARY SEWER LINE
- 8"SS — 8" SANITARY SEWER LINE
- 10"SS — 10" SANITARY SEWER LINE
- 2"WL — 2" WATER LINE
- 6"WL — 6" WATER LINE
- 8"WL — 8" WATER LINE
- 6"IRR — 6" IRRIGATION LINE
- OH — OH — OVERHEAD POWER LINE
- ASPHALT AREA
- CONCRETE AREA

A-A - EDGE OF ASPHALT TO BACK OF CURB
B-B - BACK OF CURB TO BACK OF CURB

MELDEN & HUNT, INC.
CONSULTANTS · ENGINEERS · SURVEYORS
115 W. McINTYRE · EDINBURG, TX 78541
PH: (956) 381-0981 · FAX: (956) 381-1839
ESTABLISHED 1947 · www.meldenandhunt.com
TBPLS No. 10096900

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
MARIO A. REYNA
117368
LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIO A. REYNA, P.E. 117368

04-12-2019

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

KEY PLAN — PLAN NORTH — TRUE NORTH

CLIENT	PSJA ISD
PROJECT NUMBER	19057.04
DATE	02.11.19
DRAWN BY	EM
CHECKED BY	M.A.R.

REVISIONS

No.	Description	Date

Project Status

EXISTING CONDITIONS

C1.0

CALL BEFORE YOU DIG!

Texas811

Know what's below.
Call before you dig.

PARTICIPANTS REQUEST 48 HOURS NOTICE BEFORE YOU DIG, DRILL, OR BLAST - STOP AND CALL CONSTRUCTION 811

THE LONE STAR NOTIFICATION COMPANY AT 1-800-669-8344

GENERAL CONSTRUCTION NOTES

1. THE INFORMATION SHOWN ON THESE DRAWINGS INDICATING TYPE AND LOCATION OF UNDERGROUND UTILITIES AND ELECTRICAL UTILITIES IS NOT GUARANTEED TO BE EXACT OR COMPLETE. THE LOCATIONS AND SIZES HAVE BEEN TAKEN FROM FIELD WORK AND EXISTING RECORDS AND THE BEST AS-BUILT INFORMATION AVAILABLE; HOWEVER, IT IS EXPECTED THAT THERE MAY BE SOME DISCREPANCIES IN THE LOCATIONS, QUALITIES AND SIZES SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT TYPE, SIZE AND LOCATION OF ALL UTILITIES AFFECTED BY THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL ARRANGE FOR THE REPAIR AND RESTORATION OF CONTRACTOR DAMAGED UTILITIES. THE COST OF ANY REPAIR OR REPLACEMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE CURRENT LINE SPOTTING TOLL FREE NUMBER AND COORDINATE WITH ALL THE UTILITY COMPANIES FOR ACTUAL LOCATING AND UNCOVERING OF EXISTING LINES PRIOR TO EXCAVATION OPERATIONS.

2. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY UNREPORTED OBSTACLES THAT MAY IMPEDE OR PREVENT THE PROPER CONSTRUCTION OF THIS PROJECT.

3. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE APPLICABLE STATE STATUTES AND THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS (OSHA). COPIES OF THE O.S.H.A. STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE. INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM O.S.H.A. AT 611 EAST 6TH STREET, ROOM 303, AUSTIN, TEXAS.

4. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A SAFE, NEAT AND WORKMAN LIKE MANNER AT ALL TIMES. JOB SAFETY SHALL NOT BE COMPROMISED. ANY UNSAFE OR NUISANCE SHALL BE REMOVED OR OTHERWISE TAKEN CARE OF BY THE CONTRACTOR WHEN DIRECTED BY THE OWNER OR PROJECT ENGINEER.

5. EXCAVATIONS, TRENCHES AND OTHER HAZARDOUS AREAS SHALL BE ADEQUATELY PROTECTED BY BARRICADES, FENCING, LIGHTS AND/OR OTHER PROTECTIVE DEVICES AT ALL TIMES.

6. CONSTRUCTION OF THIS PROJECT WILL BE SUBJECT TO INSPECTIONS AND TESTING AS DEEMED NECESSARY OR APPROPRIATE BY THE ENGINEER AND/OR THE CITY OF SAN JUAN. THE CONTRACTOR SHALL FURNISH INCIDENTAL LABOR AND EQUIPMENT TO ALLOW THE TESTING PERSONAL ACCESS TO THE WORK AND WILL COOPERATE FULLY WITH THE PERSONS CONDUCTING THE TESTING AND INSPECTION PROGRAM.

7. A PART OF THE WORK THAT IS NECESSARY OR REQUIRED TO MAKE EACH SYSTEM OR INSTALLATION SATISFACTORY AND OPERABLE FOR ITS INTENDED PURPOSE, EVEN THOUGH IT IS NOT SPECIFICALLY INCLUDED IN THE SPECIFICATIONS OR DRAWINGS, SHALL BE PERFORMED AS INCIDENTAL WORK AS IF IT WERE DESCRIBED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS.

8. THE DRAWINGS DO NOT ALWAYS INDICATE ALL VERTICAL BENDS AND TRANSITIONS. WHEN NECESSARY, MAKE VERTICAL TRANSITIONS BY A DEFLECTION AT THE JOINTS OR THE INSTALLATION OF FITTINGS. DO NOT DEFLECT PIPE JOINTS MORE THAN 80% OF THE MANUFACTURERS RECOMMENDATION.

9. ALL PIPING MUST BE INSTALLED WITH A MINIMUM OF 36-INCHES OF COVER UNLESS OTHERWISE NOTED ON THE PLANS.

10. ALL EXCAVATION FOR THIS PROJECT SHALL BE UNCLASSIFIED.

11. ALL UTILITIES WHICH ARE TO REMAIN AND THAT ARE DAMAGED OR REMOVED WILL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

12. PIPE SHALL BE BACKFILLED WITH JOINTS EXPOSED FOR TESTING, BEFORE NEW JOINTS ARE COVERED. PRESSURE LINES ARE TO BE HYDROSTATICALLY TESTED AT NOT LESS THAN 150 PSIG FOR A PERIOD OF TWO HOURS. THE OWNER SHALL OBSERVE AND APPROVE OR REJECT THE TEST. REPAIRS, IF REQUIRED, SHALL BE MADE AND THE LINE SHALL BE RETESTED UNTIL APPROVED. TEST SHALL NOT BEGIN UNTIL THRUST BLOCKS HAVE AGED A MINIMUM OF 24 HOURS.

13. AS SOON AS PRACTICAL, ALL PORTIONS OF EXCAVATIONS NOT OCCUPIED BY THE PERMANENT STRUCTURE SHALL BE BACKFILLED.

14. WHERE WATER LINE INTERSECTS SANITARY SEWER SYSTEM MAINS AT LESS THAN 9.0 FEET SEPARATION, THE CONTRACTOR SHALL INSTALL A 20 FOOT SECTION OF C-900 PVC PRESSURE PIPE CENTERED ON THE POINT OF INTERSECTION.

15. CONTRACTOR SHALL REMOVE AND REINSTALL ALL SIGNS, MAILBOXES, FENCES, CULVERTS AND OTHER ITEMS IN WAY OF THE WORK.

16. CONTRACTOR SHALL REPAIR ALL OPEN CUTS OF PAVED AREAS BACK TO BETTER THAN "AS-IS" CONDITION WITH LIKE MATERIALS.

17. PROVIDE INTERIM DRAINAGE DURING CONSTRUCTION AS REQUIRED. USE PUMPS, TEMPORARY DITCHES, ETC. TO MAINTAIN A WELL DRAINED SITE FREE OF STANDING WATER AND WATER SOFTENED SOILS.

18. ANCHOR ALL UNDERGROUND PRESSURE PIPING AS NECESSARY TO PREVENT MOVEMENT UNDER PRESSURE TEST AND SERVICES.

19. ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A-165, GRADE 60 ALL BARS SHALL CONFORM TO ASTM SPECIFICATION A-305.

20. ALL CONCRETE AND FORM WORK SHALL CONFORM TO CURRENT ACI CODE REQUIREMENTS.

21. THE CONTRACTOR SHALL EXERCISE EXTRA CARE TO PREVENT DAMAGE TO ALL OTHER STRUCTURES IN THE AREA INCLUDING BUILDINGS, FENCES, ROADS, PIPELINES, UTILITIES, ETC., WHETHER PUBLICLY OR PRIVATELY OWNED.

22. UNTIL ACCEPTANCE BY THE ENGINEER OF ANY OR ALL OF THE CONSTRUCTION, AS PROVIDED FOR IN THE PLANS AND SPECIFICATIONS, AND ACCEPTANCE BY THE PROPER UTILITY PROVIDER, IT SHALL BE UNDER THE CHARGE AND CARE OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE EVERY NECESSARY PRECAUTION AGAINST TO ANY PART OF THE WORK. THE CONTRACTOR SHALL REBUILD, REPAIR, RESTORE AND MAKE GOOD, AT HIS OWN EXPENSE, OF ALL THE DAMAGE TO ANY PORTION OF THE WORK BEFORE ITS ACCEPTANCE.

23. NO OPEN TRENCHES OR EXCAVATION SHALL BE LEFT OPEN OVERNIGHT.

24. ALL WATERLINE TAPS AND WATER METERS SHALL BE INSTALLED BY CONTRACTOR. COORDINATE WITH THE CITY OF SAN JUAN BEFORE COMMENCING ANY UTILITY WORK.

25. COORDINATE ALL UTILITY WORK WITH THE PLUMBING PLANS BEFORE COMMENCING ANY UTILITY WORK. REFER TO PLUMBING PLANS FOR CONTINUATION.

26. COORDINATE WITH GRADING PLANS FOR WATER LINE, STORM AND SANITARY SEWER LINES INSTALLATION.

27. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INCLUDING THOSE FROM THE CITY OF SAN JUAN, PRIOR TO START OF CONSTRUCTION.

28. THE TOP ELEVATIONS OF MANHOLES AND CLEANOUTS CONSTRUCTED IN PAVED AREAS SHALL MATCH FINISHED PAVEMENT GRADE. THE TOP ELEVATIONS OF MANHOLES AND CLEANOUTS CONSTRUCTED IN GRASSED AREAS SHALL BE SIX INCHES ABOVE FINISHED GRADE (UNLESS OTHERWISE NOTED ON PLANS).

29. CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING TO VERIFY EXISTING CONDITIONS.

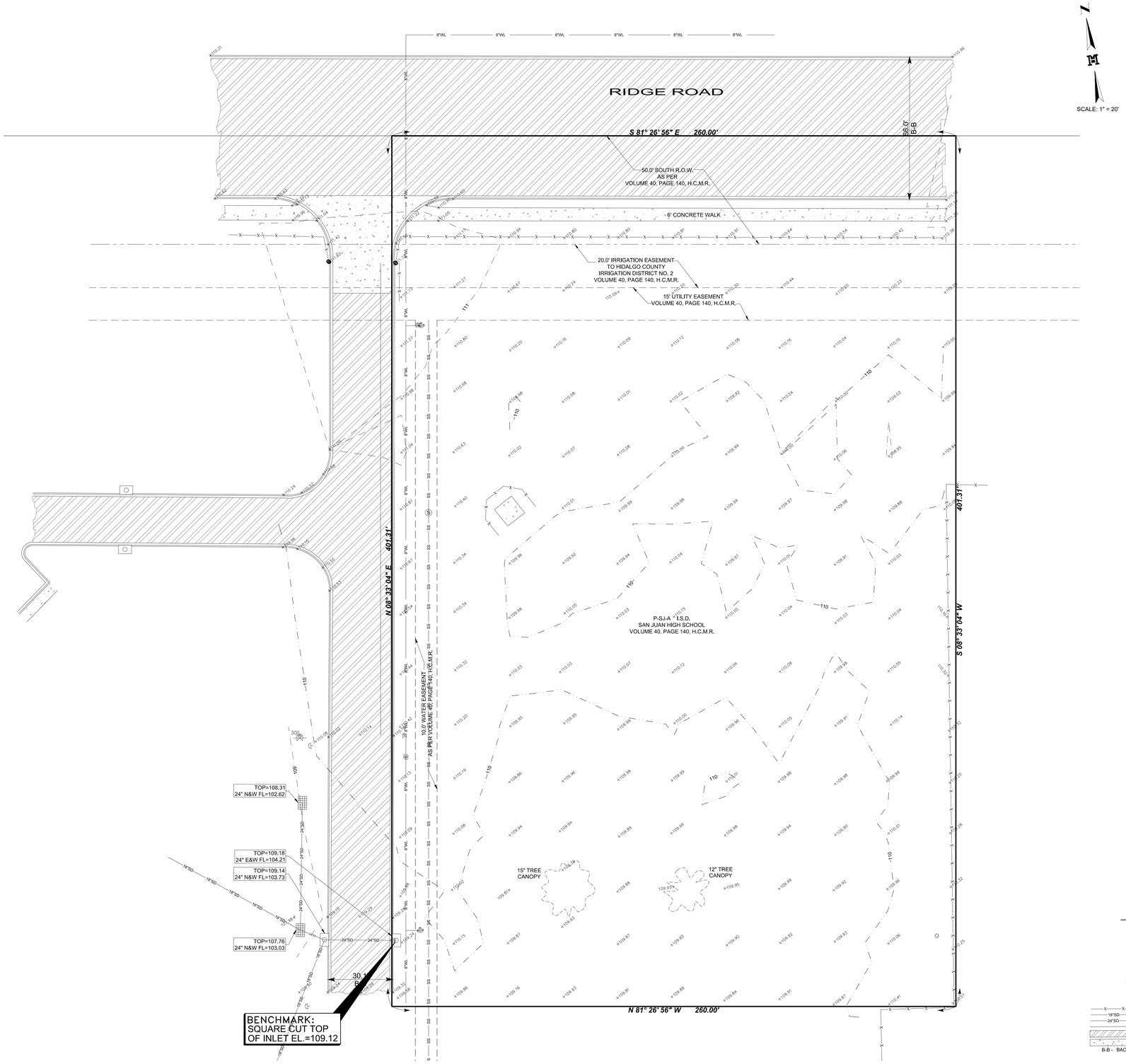
30. REFER TO GEOTECH REPORT BEFORE INSTALLATION OF DRIVES AND PARKING AREAS.

31. BOTH SITE AND BUILDING CONTRACTORS TO VERIFY EXISTING SITE ELEVATIONS PRIOR TO POURING CONCRETE TO VERIFY ACCESIBILITY.

32. PERMIT NEEDED FROM CITY OF SAN JUAN BUILDING DEPARTMENT AND PRE-CONSTRUCTION CONFERENCE NEEDED WITH CITY OF SAN JUAN.

33. CONTRACTOR TO LEAVE OPENINGS IN CURB AT SIDEWALK RAMP LOCATIONS.

34. CONSULT WITH PROPERTY OWNER BEFORE RELOCATING EXISTING FENCES THAT MIGHT BE IN THE WAY OF THE CONSTRUCTION AREA AND/OR CONSTRUCTION PLANS.



SCALE: 1" = 20'

LEGEND

- FOUND No.4 REBAR
- FOUND PIPE
- SET SQUARE CUT
- LIGHT POLE
- FIRE HYDRANT
- WATER METER
- FIRE DEPARTMENT CONNECTION
- WATER VALVE
- SANITARY SEWER MANHOLE
- TYPE "A" INLET
- TYPE "C" INLET
- IRRIGATION VALVE
- GATE POST
- CHAIN LINK FENCE
- 18" STORM SEWER LINE
- 24" STORM SEWER LINE
- 8" WATER LINE
- ASPHALT AREA
- CONCRETE AREA

B-B - BACK OF CURB TO BACK OF CURB

MELDEN & HUNT INC.
CONSULTANTS • ENGINEERS • SURVEYORS
115 W. McINTYRE - EDINBURG, TX 78541
PH: (956) 381-0981 - FAX: (956) 381-1839
ESTABLISHED 1947 - www.meldenandhunt.com
TBPLS No. 10096900

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
MARIO A. REYNA
117368
LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIO A. REYNA, P.E. 117368

04-12-2019

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

KEY PLAN

PLAN NORTH — TRUE NORTH

CLIENT: PSJA ISD

PROJECT NUMBER: 19057.04

DATE: 02.11.19

DRAWN BY: EM

CHECKED BY: M.A.R.

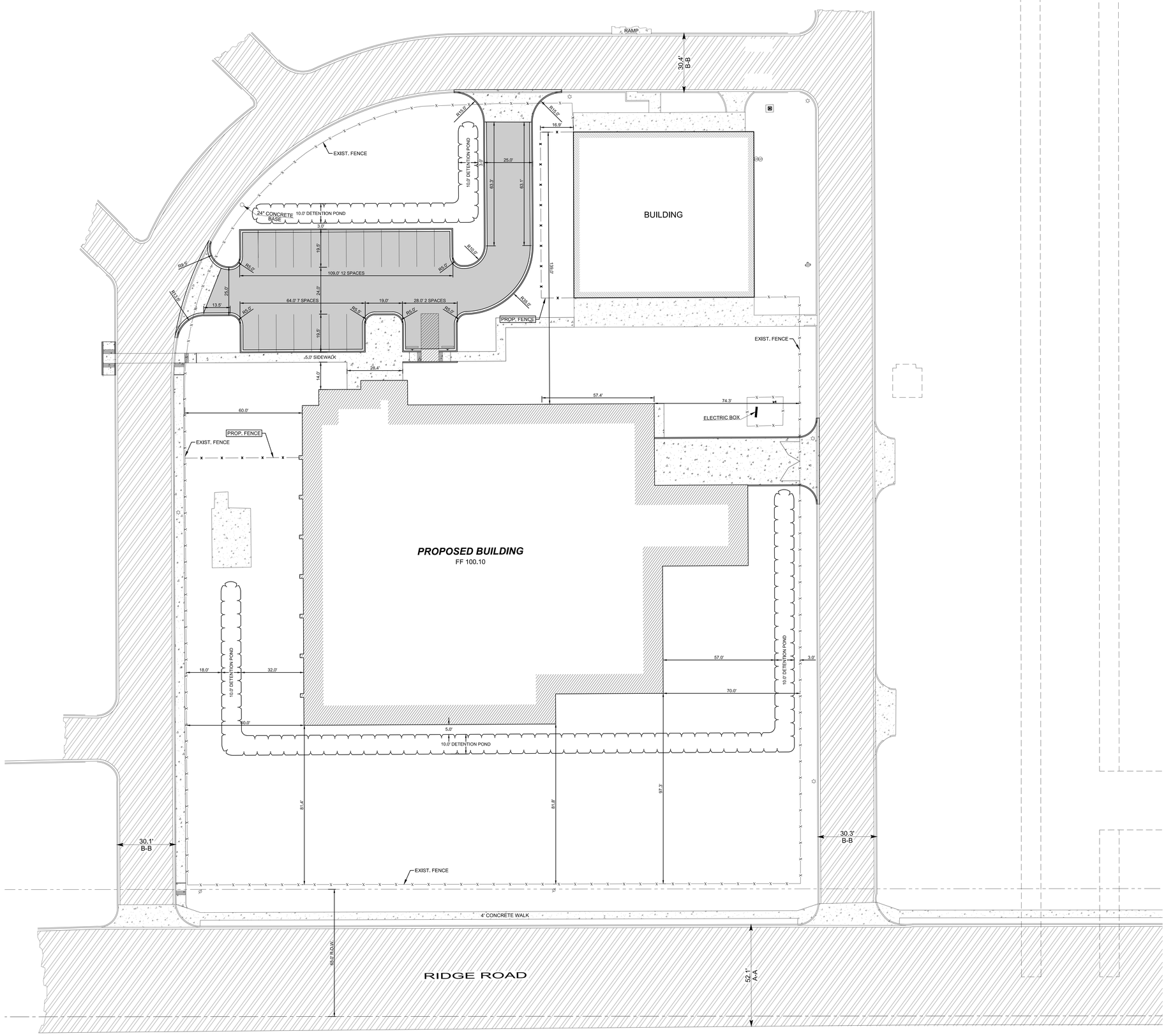
REVISIONS

No.	Description	Date

Project Status

EXISTING SITE

C1.01



SCALE:1"=20'

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
MARIO A. REYNA
117368
LICENSED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIO A. REYNA, P.E. 117368

04-12-2019

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

KEY PLAN

PLAN NORTH TRUE NORTH

CLIENT	PSJA ISD
PROJECT NUMBER	19057.04
DATE	02.11.19
DRAWN BY	EM
CHECKED BY	M.A.R.

REVISIONS

No.	Description	Date

Project Status

SITE PLAN LAYOUT

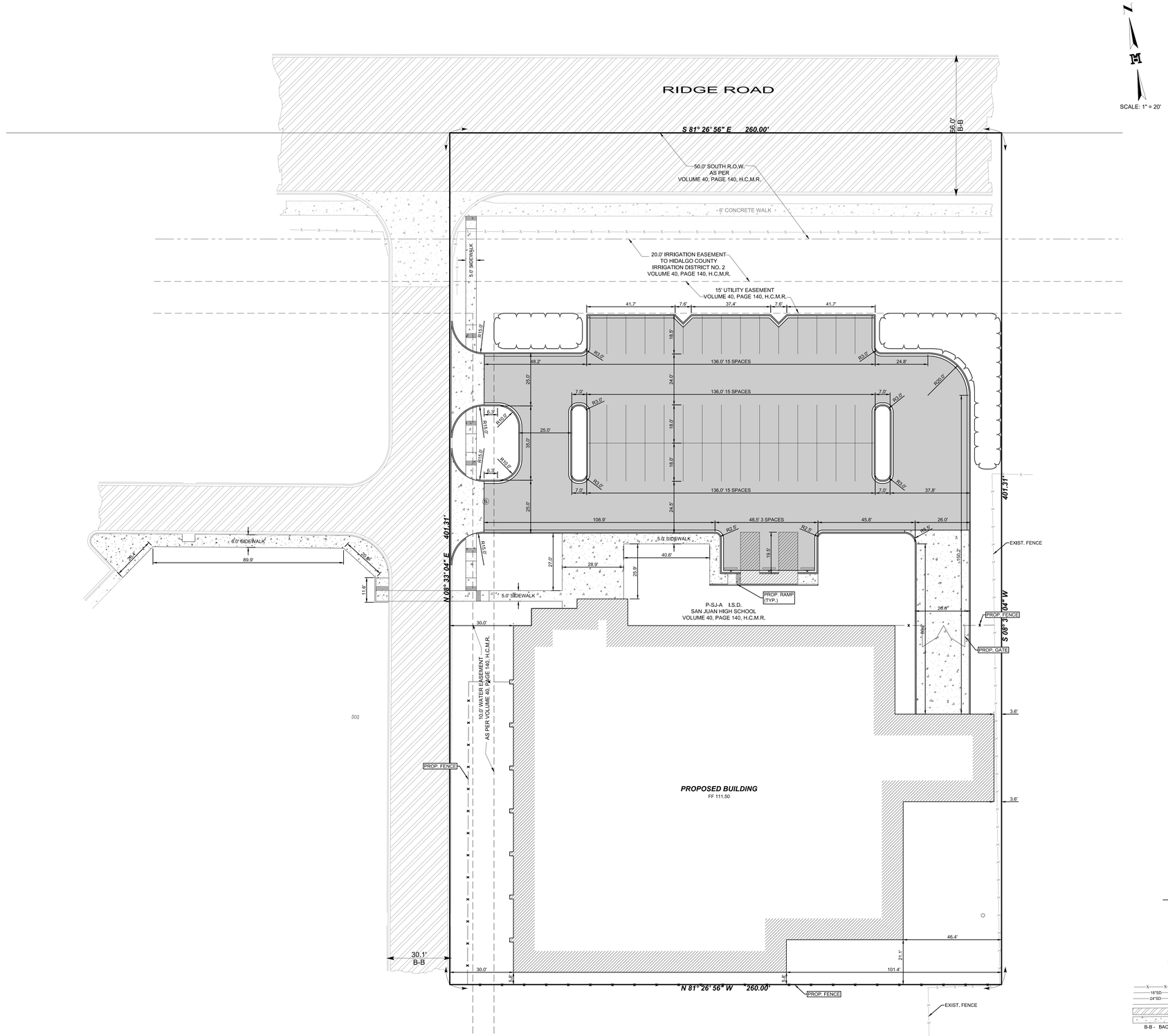
LEGEND

- POWER POLE
- LIGHT POLE
- FIRE HYDRANT
- SPRINKLER VALVE
- 54" WELL
- CLEANOUT
- TYPE "A" INLET
- GRATED INLET
- ELECTRIC BOX
- STR — STR — STORM SEWER LINE
- 18"SD — 18" STORM SEWER LINE
- 24"SD — 24" STORM SEWER LINE
- 3"FM — 3" FORCE MAIN LINE
- 6"SS — 6" SANITARY SEWER LINE
- 8"SS — 8" SANITARY SEWER LINE
- 10"SS — 10" SANITARY SEWER LINE
- 2"WL — 2" WATER LINE
- 6"WL — 6" WATER LINE
- 8"WL — 8" WATER LINE
- 6"IRR — 6" IRRIGATION LINE
- OH — OH — OVERHEAD POWER LINE
- ASPHALT AREA
- CONCRETE AREA

A-A - EDGE OF ASPHALT TO BACK OF CURB
B-B - BACK OF CURB TO BACK OF CURB

MELDEN & HUNT inc.
CONSULTANTS · ENGINEERS · SURVEYORS
115 W. McINTYRE · EDINBURG, TX 78541
PH: (956) 381-0981 · FAX: (956) 381-1839
ESTABLISHED 1947 · www.meldenandhunt.com
TBPLS No. 10096900

C2.0



LEGEND

- FOUND No.4 REBAR
- FOUND PIPE
- SET SQUARE CUT
- LIGHT POLE
- FIRE HYDRANT
- WATER METER
- FIRE DEPARTMENT CONNECTION
- WATER VALVE
- SANITARY SEWER MANHOLE
- TYPE "A" INLET
- TYPE "C" INLET
- IRRIGATION VALVE
- GATE POST
- CHAIN LINK FENCE
- 18"SD — 18" STORM SEWER LINE
- 24"SD — 24" STORM SEWER LINE
- 8" WATER LINE
- ASPHALT AREA
- CONCRETE AREA

B-B - BACK OF CURB TO BACK OF CURB

MELDEN & HUNT INC.
CONSULTANTS • ENGINEERS • SURVEYORS
115 W. McINTYRE - EDINBURG, TX 78541
PH: (956) 381-0981 - FAX: (956) 381-1839
ESTABLISHED 1947 - www.meldenandhunt.com
TBPLS No. 10096000

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
MARIO A. REYNA
117368
LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIO A. REYNA, P.E. 117368

04-12-2019

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

KEY PLAN

PLAN NORTH — TRUE NORTH

CLIENT	PSJA ISD
PROJECT NUMBER	19057.04
DATE	02.11.19
DRAWN BY	EM
CHECKED BY	M.A.R.

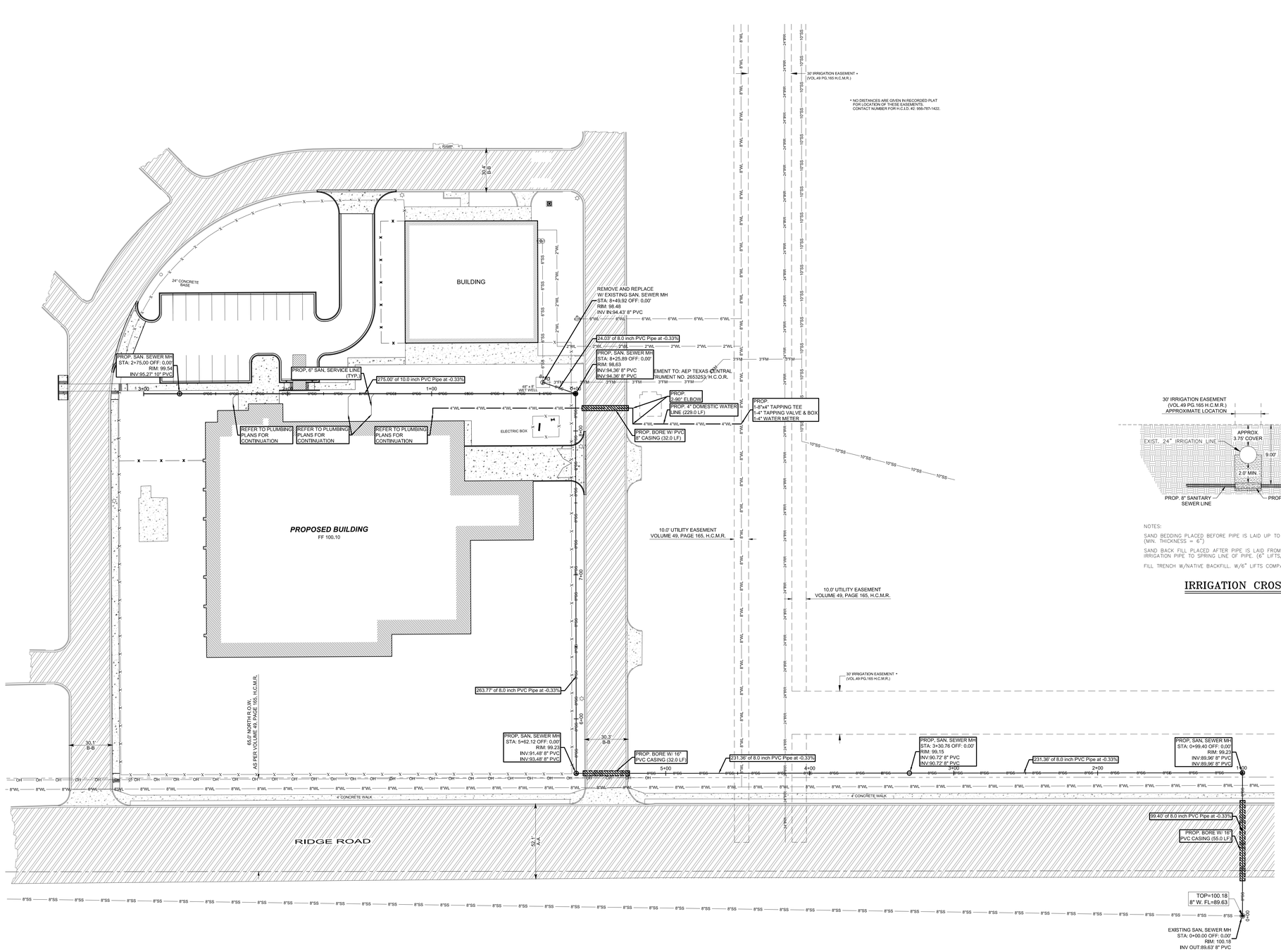
REVISIONS

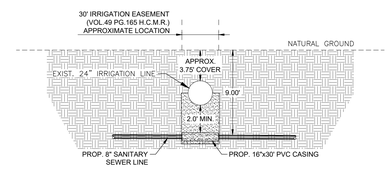
No.	Description	Date

Project Status

CIVIL SITE PLAN

C2.01





NOTES:

SAND BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW LINE OF PIPE. (MIN. THICKNESS = 6")

SAND BACK FILL PLACED AFTER PIPE IS LAID FROM BOTTOM OF EXISTING IRRIGATION PIPE TO SPRING LINE OF PIPE. (6" LIFTS, MECH. TAMPED).

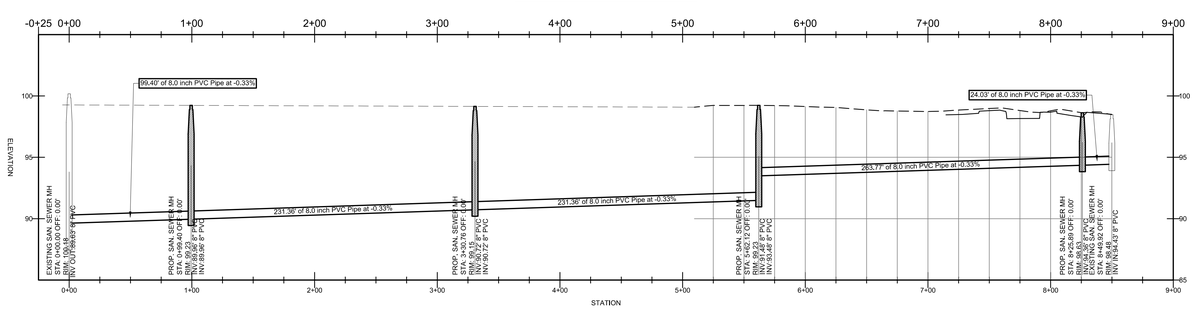
FILL TRENCH W/NATIVE BACKFILL. W/6" LIFTS COMPACT

IRRIGATION CROSSING

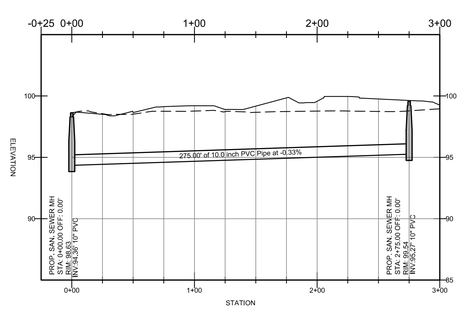
NOTE:

CONTRACTOR IS TO REMOVE ANY STRUCTURE TO BE ABLE TO INSTALL UTILITIES. VERIFY W/ ENGINEER AND REPLACE ANY STRUCTURE TO ITS ORIGINAL CONDITION.

SANITARY SEWER LINE A PROFILE



SANITARY SEWER LINE B PROFILE



LEGEND

- POWER POLE
- LIGHT POLE
- FIRE HYDRANT
- SPRINKLER VALVE
- 54" WELL
- CLEANOUT
- TYPE "A" INLET
- GRATED INLET
- ELECTRIC BOX
- STR — STR — STORM SEWER LINE
- 18"SD — 18" STORM SEWER LINE
- 24"SD — 24" STORM SEWER LINE
- 3"FM — 3" FORCE MAIN LINE
- 8"SS — 8" SANITARY SEWER LINE
- 8"SS — 8" SANITARY SEWER LINE
- 10"SS — 10" SANITARY SEWER LINE
- 2"WL — 2" WATER LINE
- 6"WL — 6" WATER LINE
- 8"WL — 8" WATER LINE
- 6"IRR — 6" IRRIGATION LINE
- OH — OH — OVERHEAD POWER LINE
- ASPHALT AREA
- CONCRETE AREA

A-A - EDGE OF ASPHALT TO BACK OF CURB
B-B - BACK OF CURB TO BACK OF CURB

MELDEN & HUNT INC.
CONSULTANTS · ENGINEERS · SURVEYORS
115 W. McINTYRE - EDINBURG, TX 78541
PH: (956) 381-0981 - FAX: (956) 381-1839
ESTABLISHED 1947 - www.meldenandhunt.com
TBPLS No. 10096900

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435
STATE OF TEXAS
MARIO A. REYNA
117368
LICENSED
PROFESSIONAL ENGINEER
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIO A. REYNA, P.E. 117368
04-12-2019

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

KEY PLAN — PLAN NORTH — TRUE NORTH

CLIENT	PSJA ISD
PROJECT NUMBER	19057.04
DATE	02.11.19
DRAWN BY	EM
CHECKED BY	M.A.R.

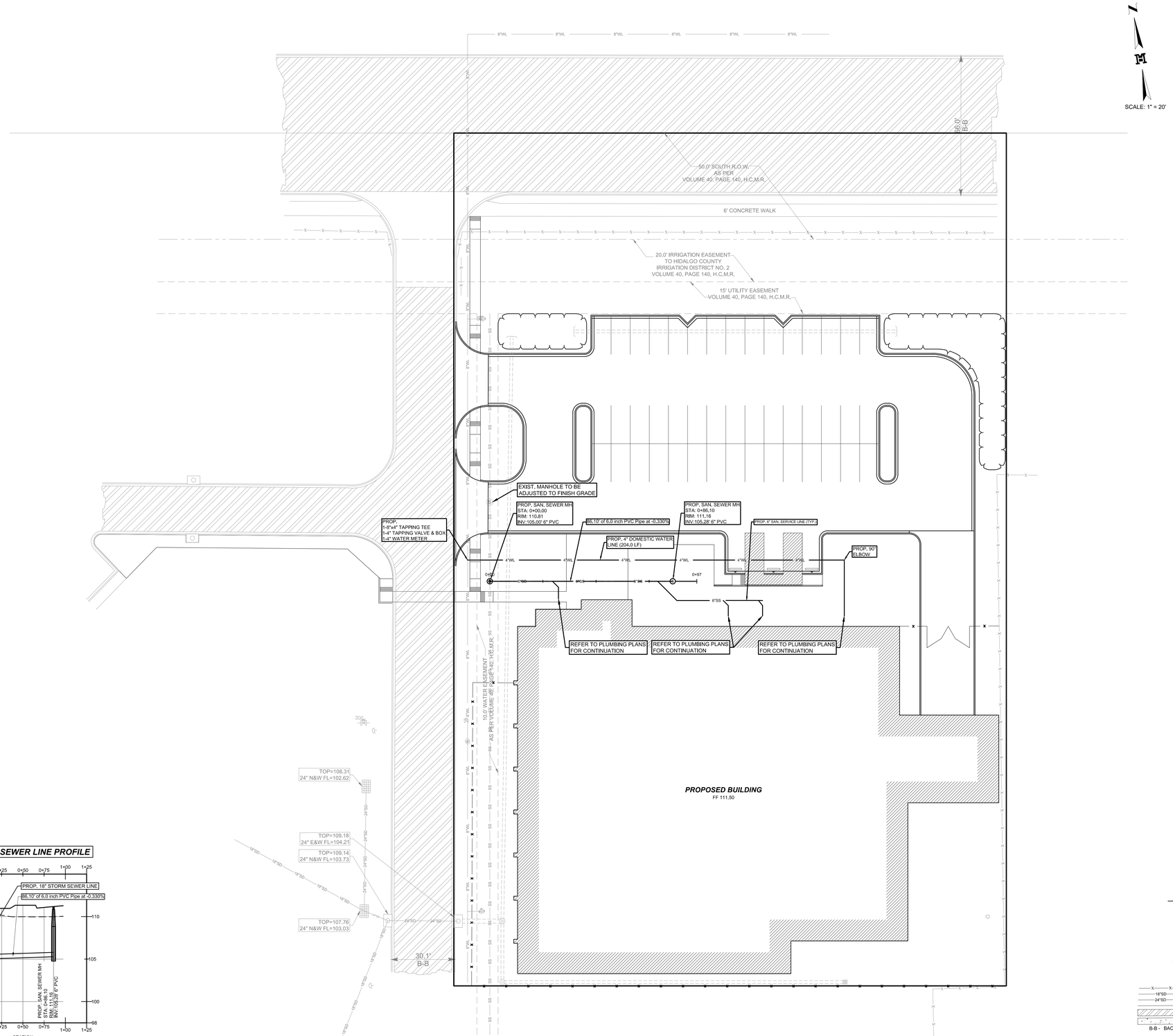
REVISIONS

No.	Description	Date

Project Status

PROPOSED UTILITIES

C3.0



LEGEND

- FOUND No.4 REBAR
- FOUND PIPE
- SET SQUARE CUT
- LIGHT POLE
- FIRE HYDRANT
- WATER METER
- FIRE DEPARTMENT CONNECTION
- WATER VALVE
- SANITARY SEWER MANHOLE
- TYPE "A" INLET
- TYPE "C" INLET
- IRRIGATION VALVE
- GATE POST
- CHAIN LINK FENCE
- 18" STORM SEWER LINE
- 24" STORM SEWER LINE
- 8" WATER LINE
- ASPHALT AREA
- CONCRETE AREA

B-B - BACK OF CURB TO BACK OF CURB

MELDEN & HUNT, INC.
CONSULTANTS • ENGINEERS • SURVEYORS
115 W. McINTYRE - EDINBURG, TX 78541
PH: (956) 381-0981 - FAX: (956) 381-1839
ESTABLISHED 1947 - www.meldenandhunt.com
TBPLS No. 10096000

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
MARIO A. REYNA
117368
LICENSED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON
THIS DOCUMENT WAS
AUTHORIZED BY
MARIO A. REYNA, P.E. 117368

04-12-2019

ALTERATION OF A SEALED DOCUMENT
WITHOUT PROPER NOTIFICATION
TO THE RESPONSIBLE ENGINEER
IS AN OFFENSE UNDER THE
TEXAS ENGINEERING PRACTICE LAW

KEY PLAN

PLAN NORTH — TRUE NORTH

CLIENT	PSJA ISD
PROJECT NUMBER	19057.04
DATE	02.11.19
DRAWN BY	EM
CHECKED BY	M.A.R.

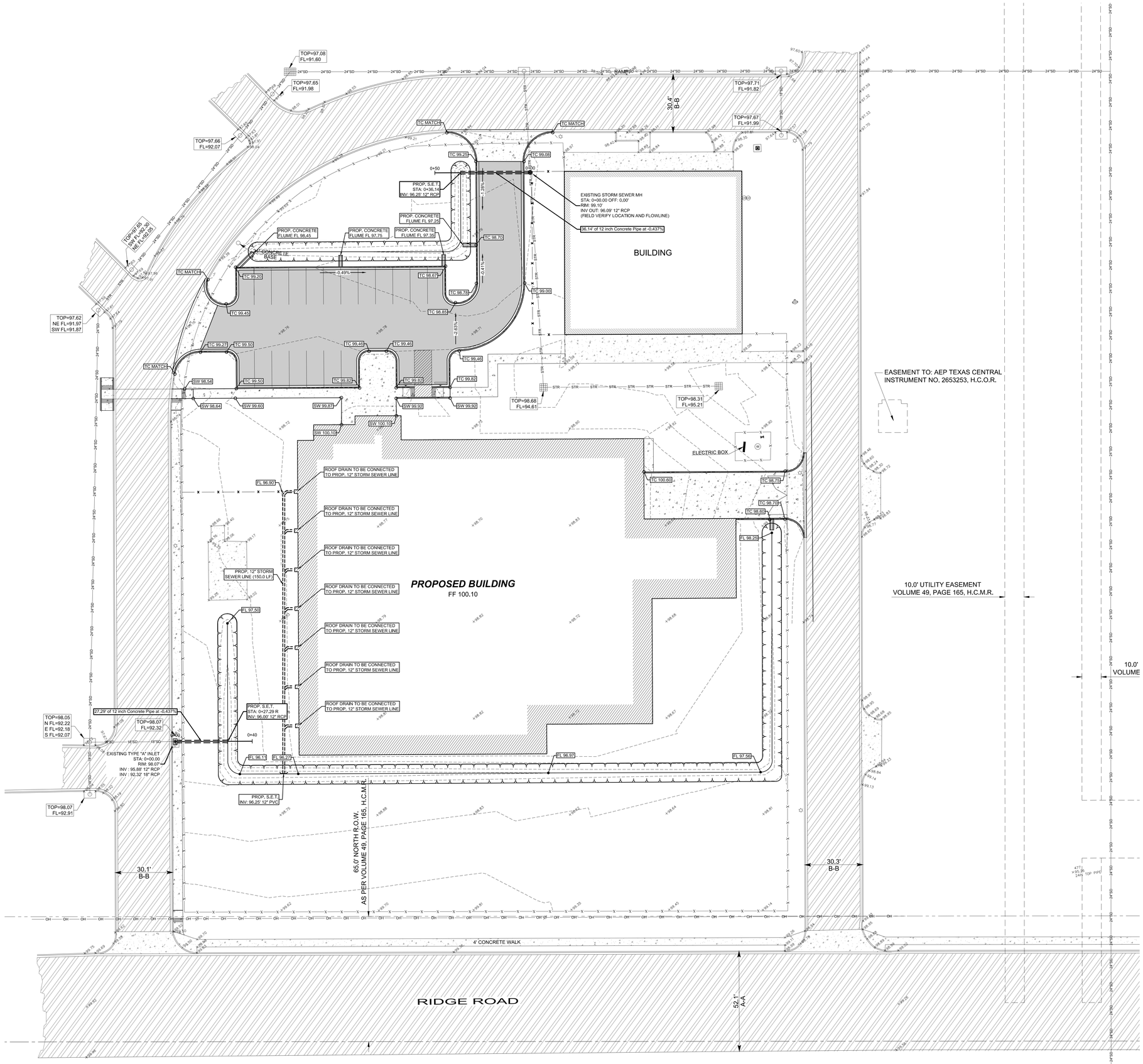
REVISIONS

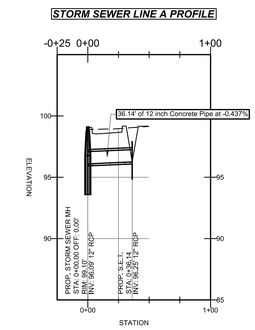
No.	Description	Date

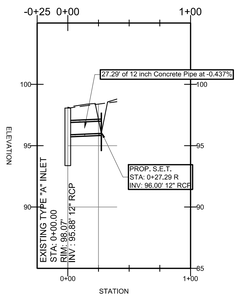
Project Status

WATER AND SEWER LAYOUT

C3.01







LEGEND

- POWER POLE
- LIGHT POLE
- FIRE HYDRANT
- SPRINKLER VALVE
- 54" WELL
- CLEANOUT
- TYPE "A" INLET
- GRATED INLET
- ELECTRIC BOX
- STR — STORM SEWER LINE
- 18"SD — 18" STORM SEWER LINE
- 24"SD — 24" STORM SEWER LINE
- 3"FM — 3" FORCE MAIN LINE
- 6"SS — 6" SANITARY SEWER LINE
- 8"SS — 8" SANITARY SEWER LINE
- 10"SS — 10" SANITARY SEWER LINE
- 2"WL — 2" WATER LINE
- 6"WL — 6" WATER LINE
- 8"WL — 8" WATER LINE
- 6"IRR — 6" IRRIGATION LINE
- OH — OVERHEAD POWER LINE
- ASPHALT AREA
- CONCRETE AREA

A-A - EDGE OF ASPHALT TO BACK OF CURB
B-B - BACK OF CURB TO BACK OF CURB

MELDEN & HUNT INC.
CONSULTANTS · ENGINEERS · SURVEYORS
115 W. McINTYRE - EDINBURG, TX 78541
PH: (956) 381-0981 - FAX: (956) 381-1839
ESTABLISHED 1947 - www.meldenandhunt.com
TBPLS No. 10096900

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
MARIO A. REYNA
117368
LICENSED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIO A. REYNA, P.E. 117368

04-12-2019

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

KEY PLAN — PLAN NORTH — TRUE NORTH

CLIENT	PSJA ISD
PROJECT NUMBER	19057.04
DATE	02.11.19
DRAWN BY	EM
CHECKED BY	M.A.R.

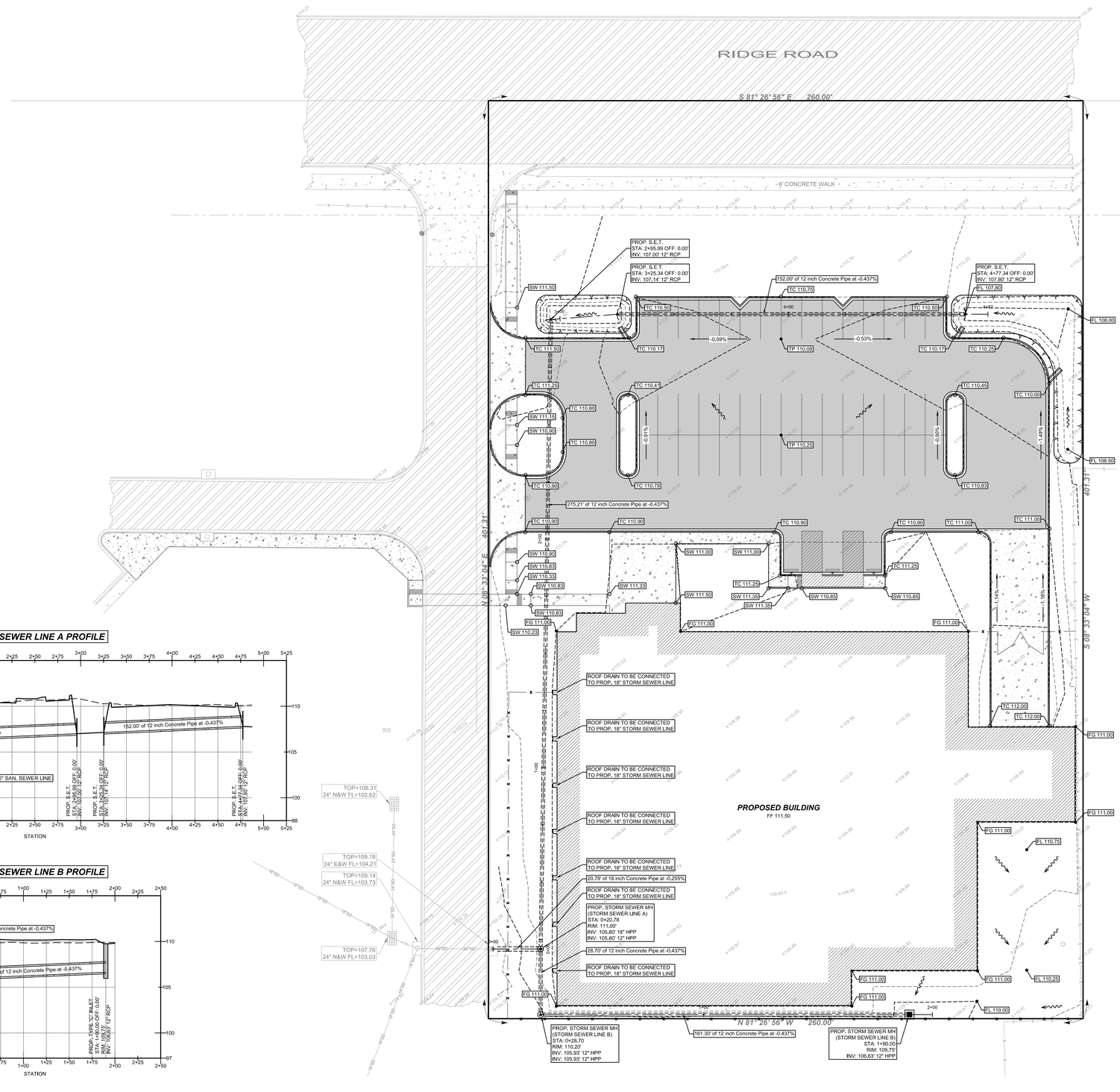
REVISIONS

No.	Description	Date

Project Status

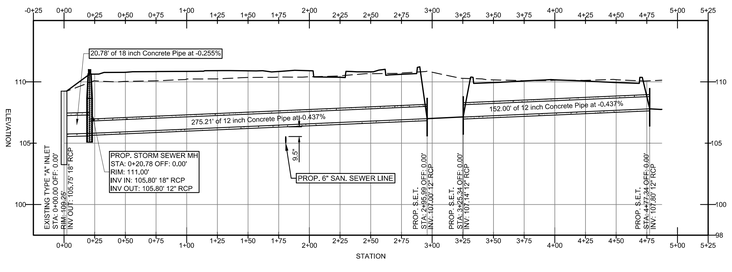
PAVING & GRADING PLAN

C4.0

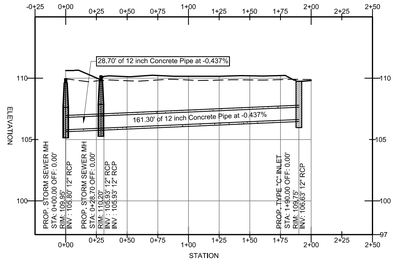


SCALE: 1" = 20'

STORM SEWER LINE A PROFILE



STORM SEWER LINE B PROFILE



NOTE:

CONTRACTOR TO NOTIFY ENGINEER IF ANY CONFLICTS OR ADJUSTMENTS NEEDED FOR ALL UTILITY CROSSINGS.

LEGEND

- FOUND No.4 REBAR
- FOUND PIPE
- SET SQUARE CUT
- LIGHT POLE
- FIRE HYDRANT
- WATER METER
- FIRE DEPARTMENT CONNECTION
- WATER VALVE
- SANITARY SEWER MANHOLE
- TYPE "A" INLET
- TYPE "C" INLET
- IRRIGATION VALVE
- GATE POST
- X — X — CHAIN LINK FENCE
- 18"SD — 18" STORM SEWER LINE
- 24"SD — 24" STORM SEWER LINE
- 8" WATER LINE
- ASPHALT AREA
- CONCRETE AREA
- B-B - BACK OF CURB TO BACK OF CURB

MELDEN & HUNT, INC.
CONSULTANTS • ENGINEERS • SURVEYORS
115 W. McINTYRE - EDINBURG, TX 78541
PH: (956) 381-0981 - FAX: (956) 381-1839
ESTABLISHED 1947 - www.meldenandhunt.com
TBPLS No. 10096900

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
MARIO A. REYNA
117368
LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIO A. REYNA, P.E. 117368

04-12-2019

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

KEY PLAN — PLAN NORTH — TRUE NORTH

CLIENT	PSJA ISD
PROJECT NUMBER	19057.04
DATE	02.11.19
DRAWN BY	EM
CHECKED BY	M.A.R.

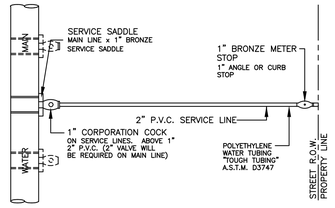
REVISIONS

No.	Description	Date

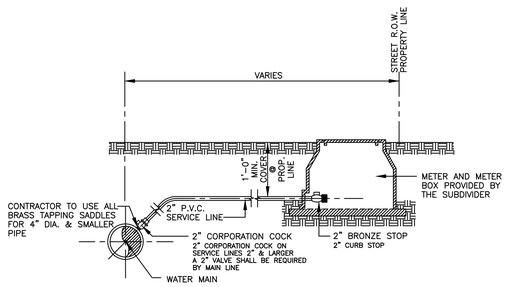
Project Status

PAVING AND DRAINAGE PLAN

C4.01



SINGLE WATER SERVICE CONNECTION

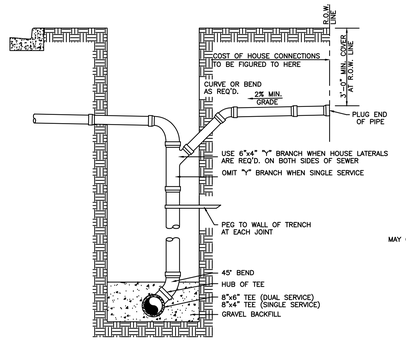


TYPICAL SERVICE CONNECTION

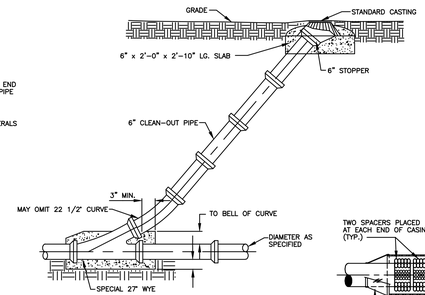
GENERAL NOTES :

1. DRAWINGS INDICATE COPPER SERVICE LINES.
2. FOR P.V.C. SERVICE LINES REFER TO SMALLER TYPE NOTES.
3. ALL COMPRESSION OR PACK TYPE FITTINGS & JOINTS REQUIRE STAINLESS STEEL INSERTS OF REQUIRED SIZE.
4. WATER SERVICE CONNECTIONS CROSSING A STREET SHALL BE ENCASED IN A 2" P.V.C. SHC40 CASING. LENGTH OF CASING SHALL BE WIDTH OF STREET PLUS 10.0 FEET.

TYPICAL WATER SERVICE CONNECTIONS

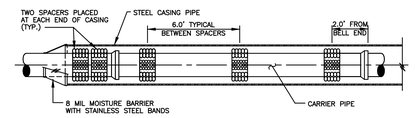


SANITARY SEWER SERVICE CONNECTION



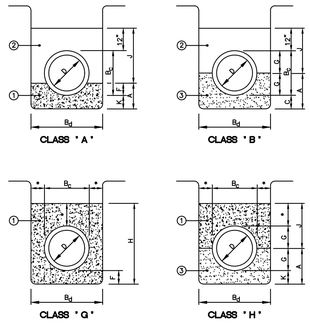
STANDARD CLEANOUT

BORING INSTALLATION	
PIPE CASING SIZE	CARRIER PIPE SIZE
12" 0.375 WALL	4"-6"
18" 0.375 WALL	8"
18" 0.375 WALL	10"
20" 0.375 WALL	12"
24" 0.375 WALL	14"
26" 0.375 WALL	16"
32" 0.375 WALL	18"
36" 0.375 WALL	20"
40" 0.375 WALL	24"



BORING and CASING DETAIL

CLASS	D	B_c	B_d	A In Earth	A In Rock	C	E	F	G	H	J	K In Earth	K In Rock	①	②	③ In Earth	③ In Rock
												DIMENSIONS (INCHES)				QUAN. (C.Y. per 100 L.F.)	
A	6	7.75	24	5.94	—	—	—	1.94	—	—	17.82	—	4.00	3.4	10.0	—	—
	8	10.25	26	6.56	—	—	—	2.56	—	—	19.69	—	4.00	4.0	11.5	—	—
	10	13.00	29	7.25	—	—	—	3.25	—	—	21.75	—	4.00	4.7	13.5	—	—
	12	16.00	32	8.00	—	—	—	4.00	—	—	24.00	—	4.00	5.6	15.6	—	—
	15	19.50	36	9.76	—	—	—	4.88	—	—	26.63	—	4.88	7.5	18.5	—	—
	18	23.00	39	11.50	—	—	—	5.75	—	—	29.25	—	5.75	9.4	20.7	—	—
	21	26.50	43	13.26	—	—	—	6.63	—	—	31.88	—	6.63	11.9	23.8	—	—
B	6	7.75	24	7.88	9.88	4	6	—	—	3.88	—	15.88	—	—	9.2	4.3	5.5
	8	10.25	26	9.13	11.13	4	6	—	—	5.13	—	17.13	—	—	10.4	5.0	6.4
	10	13.00	29	10.50	12.50	4	6	—	—	6.50	—	18.50	—	—	12.1	6.1	7.6
	12	16.00	32	12.00	14.00	4	6	—	—	8.00	—	20.00	—	—	13.9	7.3	8.9
	15	19.50	36	13.75	15.75	4	6	—	—	9.75	—	21.75	—	—	16.3	8.9	10.7
	18	23.00	39	15.50	17.50	4	6	—	—	11.50	—	23.50	—	—	18.2	10.2	12.2
	21	26.50	43	17.25	19.25	4	6	—	—	13.25	—	25.25	—	—	20.8	12.0	14.2
C	6	7.75	24	5.29	7.29	4	6	1.29	—	—	—	18.46	—	—	10.3	3.1	4.4
	8	10.25	26	5.71	7.71	4	6	1.71	—	—	—	20.55	—	—	11.8	3.6	4.9
	10	13.00	29	6.17	8.17	4	6	2.17	—	—	—	22.83	—	—	14.0	4.2	5.7
	12	16.00	32	6.67	8.67	4	6	2.67	—	—	—	25.33	—	—	16.2	4.9	6.6
	15	19.50	36	7.25	9.25	4	6	3.25	—	—	—	28.25	—	—	19.3	5.9	7.7
	18	23.00	39	7.83	9.83	4	6	3.83	—	—	—	31.17	—	—	21.8	6.7	8.7
	21	26.50	43	8.42	10.42	4	6	4.42	—	—	—	34.08	—	—	25.1	7.8	10.0
G	6	7.75	24	—	—	—	—	—	4.00	—	16.0	—	—	—	8.7	—	—
	8	10.25	24	—	—	—	—	—	4.00	—	18.0	—	—	—	9.0	—	—
	10	13.00	24	—	—	—	—	—	4.00	—	21.0	—	—	—	9.5	—	—
	12	16.00	24	—	—	—	—	—	4.00	—	24.0	—	—	—	9.6	—	—
	15	19.50	28	—	—	—	—	—	4.88	—	28.5	—	—	—	12.8	—	—
	18	23.00	32	—	—	—	—	—	5.75	—	33.0	—	—	—	16.5	—	—
	21	26.50	36	—	—	—	—	—	6.63	—	37.0	—	—	—	20.1	—	—
H	6	7.75	24	7.88	9.88	—	—	—	—	3.88	—	8.12	4.00	6.00	4.4	—	4.3	5.5
	8	10.25	24	9.13	11.13	—	—	—	—	5.13	—	8.87	4.00	6.00	4.4	—	4.6	5.8
	10	13.00	24	10.50	12.50	—	—	—	—	6.50	—	10.50	4.00	6.00	4.8	—	4.8	6.0
	12	16.00	24	12.00	14.00	—	—	—	—	8.00	—	12.00	4.00	6.00	4.8	—	4.8	6.1
	15	19.50	28	14.63	15.75	—	—	—	—	9.75	—	13.87	4.88	6.00	6.1	—	6.7	7.5
	18	23.00	32	17.25	17.50	—	—	—	—	11.50	—	15.75	5.75	6.00	7.6	—	8.9	9.1
	21	26.50	36	19.88	19.88	—	—	—	—	13.25	—	17.12	6.63	6.63	8.8	—	11.3	11.3



LEGEND (ALL CLASSES)

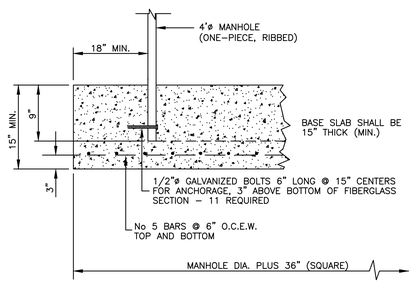
1	2500 PSI CONCRETE
2	INITIAL BACKFILL
3	GRAVEL OR CRUSHED STONE
D	NOMINAL PIPE SIZE (I.D.)
B_c	PIPE O.D. AT BELLS
B_d	TRENCH WIDTH
A	SEE TABLE
C	1/8 B_c (EXCEPT AS NOTED)
E	1/6 B_c
F	1/4 B_c (EXCEPT AS NOTED)
G	1/2 B_c
H	DEPTH OF CONCRETE
J	SEE TABLE
K	1/4 B_c (EXCEPT AS NOTED)
*	4" MINIMUM

GENERAL NOTES:
DIMENSIONS AND QUANTITIES SHALL BE USED FOR MEASUREMENT AND PAYMENT UNLESS OTHERWISE PERMITTED BY THE ENGINEER.

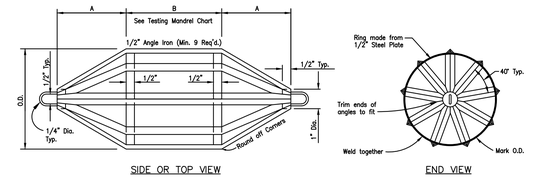
FREEFALL OF CONCRETE SHALL NOT EXCEED FIVE (5) FEET.

INITIAL BACKFILL SHALL CONSIST OF SELECT MATERIAL OR FINE GRANULAR MATERIAL AS PER SPECIFICATIONS.

PIPE BEDDING REQUIREMENTS



TYPICAL FIBERGLASS MANHOLE BASE



SIDE OR TOP VIEW

END VIEW

SIZE	A	B*	MANDREL O.D. PVC (SDR-35)	MANDREL O.D. PVC (SDR-26)	RING O.D. PVC (SDR-35)	RING O.D. PVC (SDR-26)
6"	4.0"	4.5"	5.62	5.50	4.91	4.79
8"	5.5"	6.0"	7.52	7.37	6.81	6.66
10"	7.0"	7.5"	9.41	9.21	8.70	8.50
12"	8.0"	9.0"	11.19	10.96	10.48	10.25
15"	10.0"	11.0"	13.70	13.42	12.99	12.71
18"	12.0"	13.5"	16.75	—	16.04	—
21"	14.0"	16.0"	19.74	—	19.03	—
24"	16.0"	18.0"	22.21	—	21.50	—
27"	18.0"	20.0"	25.03	—	24.32	—

* Minimum Length

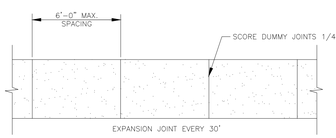
TESTING MANDREL CHART

Notes:

PVC pipes and fittings six inches (6") to fifteen inches (15") in diameter shall conform to ASTM D-3034. PVC pipes and fittings eighteen inches (18") to twenty-seven inches (27") in diameter shall conform to ASTM F-679.

This information is provided as a reference. All deflection testing shall be done in accordance with TNRCC Chapter 317.

GO, NO-GO DEFLECTION TESTING MANDREL



PLAN

SIDEWALK NOTES:

MINIMUM 4'-0" WIDE SIDEWALK.

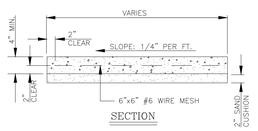
SIDEWALK GRADIENT SHALL NOT EXCEED 1:20.

SIDEWALK CONCRETE SHALL BE 5 SACK CEMENT MIX AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 psi.

CONTRACTOR SHALL VERIFY EXISTENCE AND LOCATION OF EXISTING UTILITY LINES WITH APPROPRIATE COMPANIES TO AVOID PLACING SIDEWALKS ON TOP OF LINES.

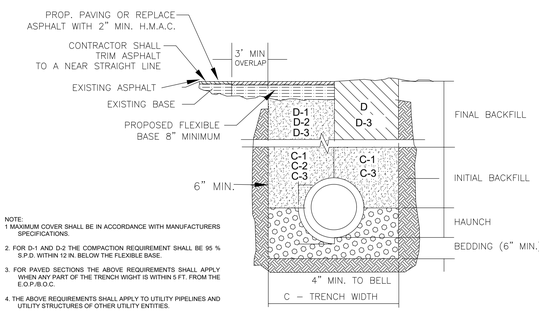
PROVIDE DROP CURBS AT INTERSECTIONS.

CONTRACTOR SHALL COMPLY WITH LATEST REGULATIONS AS SET FORTH IN AMERICANS WITH DISABILITES ACT (ADA).



SECTION

SIDEWALK DETAILS



NOTE:
1 MAXIMUM COVER SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

2. FOR D-1 AND D-2 THE COMPACTION REQUIREMENT SHALL BE 95 % S.P.D. WITHIN 12 IN. BELOW THE FLEXIBLE BASE.

3. FOR PAVED SECTIONS THE ABOVE REQUIREMENTS SHALL APPLY WHEN ANY PART OF THE TRENCH WIGHT IS WITHIN 5 FT. FROM THE E.O.P./B.O.C.

4. THE ABOVE REQUIREMENTS SHALL APPLY TO UTILITY PIPELINES AND UTILITY STRUCTURES OF OTHER UTILITY ENTITIES.

A. BEDDING FOR RCP CLASS III HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SAND AND/OR GRAVEL MIX BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW OF PIPE (MIN. COMPACTED THICKNESS = 6") - PIT RUN GRAVEL 2" MIX SIZE.

B. HAUNCH FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS 1 OR CLASS II (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

C. TRENCH WIDTH - SHALL BE BELL O.D. X 1.5 + 12". MINIMUM TRENCH WIDTH SHALL EQUAL STRUCTURE WIDTH + 4FT. THROUGHOUT THE HEIGHT OF THE STRUCTURE.

C-1 INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON CITY STREET, PARKING AREAS, DRIVEWAYS, COUNTY ROADS & UNPAVED AREAS - SHALL BE SOIL TYPE A1, A2, A3 WITH A MAXIMUM P.I. OF 19 (AASHTO M145) COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

C-2 INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON STATE MAINTAINED ROADWAY - COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D., AS PER ASTM D4253 AND ASTM D698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.

C-3 INITIAL BACKFILL FOR HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS I OR CLASS II WITH A MAXIMUM P.I. OF 19 (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

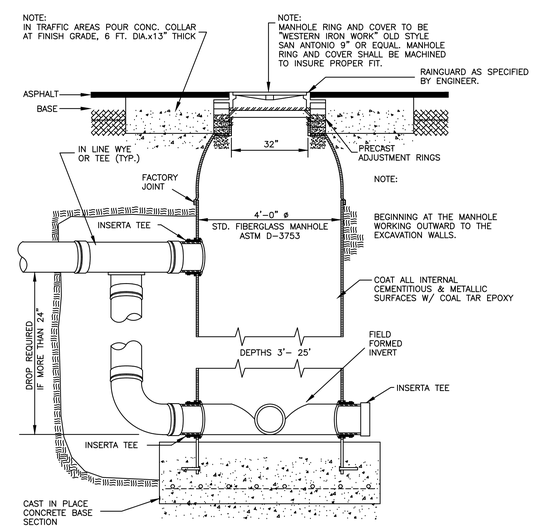
D. FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE UNDER UNPAVED SECTIONS - SHALL BE CLASS I, II, III, OR IV, COMPACTED TO 92% S.P.D., (12" LOOSE LIFTS, MECHANICAL COMPACTION).

D-1 FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON CITY STREETS, PARKING AREAS, DRIVEWAYS AND COUNTY ROADS - SHALL BE SOIL TYPE A1, A2, A3 WITH A MAXIMUM P.I. OF 19 (AASHTO M145) COMPACTED TO 92% S.P.D., AS PER ASTM D4253 AND ASTM D698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.

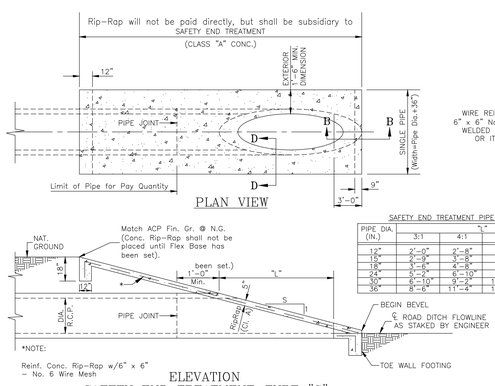
D-2 FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON STATE MAINTAINED ROADWAY - COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D., AS PER ASTM D4253 AND ASTM D698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.

D-3 FINAL BACKFILL OR STRUCTURES (INLETS, MANHOLES, ETC.) - STRUCTURES UNDER THE ROADWAY AND UP TO 5 FT BEYOND THE EDGE OF PAVEMNTT/BACK OF CURB SHALL HAVE CLASS 1 OR CLASS II (ASTM D2321 OR SOIL TYPE 1A, A2, OR A3 (AASHTO M145) WITH A MAXIMUM P.I. OF 19 BACKFILL MATERIAL. STRUCTURES BEYOND 5 FT FROM THE E.O.P/B.O.C. SHALL HAVE CLASS I, II, III OR IV (ASTM D2321) BACKFILL MATERIAL. FOUNDATION PREPARATION (WILLPOINTS, MINIMUM 4" GRAVEL OR CEMENTS STABILIZATION, OR APPROVED SUBSTITUTE) SHALL BE REQUIRED WHEN TRENCH BOTTOM IS UNSTABLE. BACKFILLING AT STRUCTURES SHALL BE PLACED IN UNIFORM LAYERS, MOISTENED AS REQUIRED TO APPROXIMATE OPTIMUM MOISTURE CONTENT AND COMPACTED TO 95% S.P.D (USE RELATIVE DENSITY TEST PER ASTM D4253 & ASTM D698). THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 8".

STORM TRENCH BEDDING AND BACKFILL DETAILS

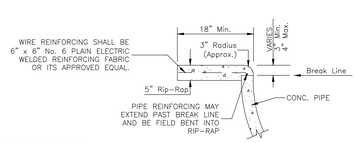


TYPICAL FIBERGLASS MANHOLE

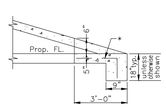


SAFETY END TREATMENT LENGTHS

PIPE DIA. (IN.)	"L" 3:1	4:1	5:1	6:1
12"	2'-0"	3'-8"	3'-4"	4'-0"
15"	2'-3"	3'-8"	4'-0"	5'-0"
18"	3'-6"	4'-8"	5'-10"	7'-0"
24"	4'-6"	6'-10"	8'-6"	10'-3"
30"	6'-10"	9'-2"	11'-4"	13'-9"
36"	8'-6"	11'-4"	14'-2"	17'-0"



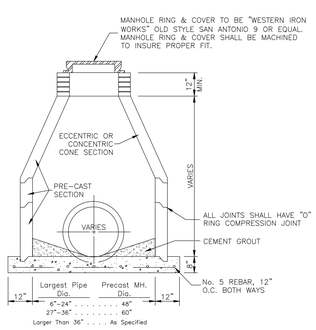
SEC. "DD"



SEC. "BB"

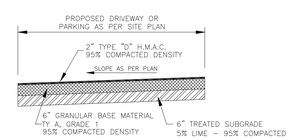
SAFETY END TREATMENT – (Type "C") DETAILS

N.T.S.

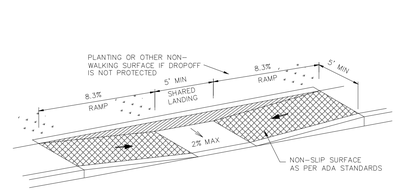


STANDARD STORM SEWER PRE-CAST CONCRETE MANHOLE

N.T.S.

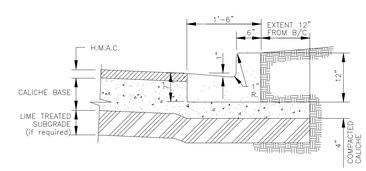


PAVEMENT SECTION



PARALLEL CURB RAMP BUILT ON SIDEWALK

N.T.S.



SECTION "AA" – CONCRETE CURB & GUTTER

MELDEN & HUNT, INC.
CONSULTANTS · ENGINEERS · SURVEYORS
115 W. McINTYRE · EDINBURG, TX 78541
PH: (956) 381-0981 · FAX: (956) 381-1839
ESTABLISHED 1947 · www.meldenandhunt.com
TBPLS No. 10096900

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS · MARIO A. REYNA · 117368 · LICENSED · PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIO A. REYNA, P.E. 117368

04-12-2019

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

KEY PLAN | PLAN NORTH | TRUE NORTH

CLIENT	PSJA ISD
PROJECT NUMBER	19057.04
DATE	02.11.19
DRAWN BY	EM
CHECKED BY	M.A.R.

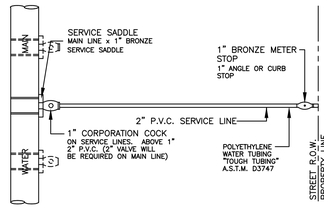
REVISIONS

No.	Description	Date

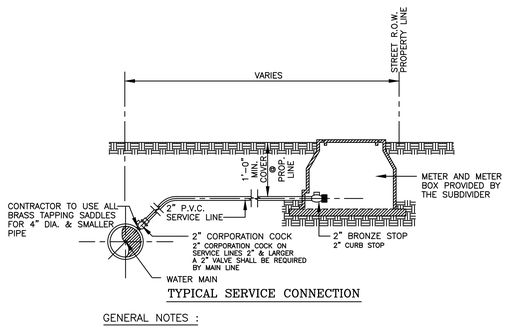
Project Status

CONSTRUCTION DETAILS

C5.0



SINGLE WATER SERVICE CONNECTION

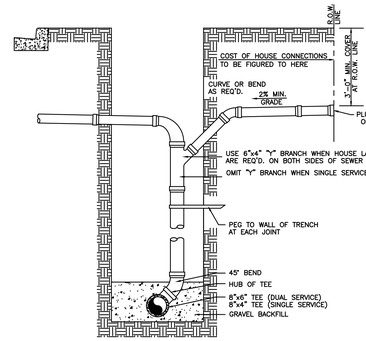


TYPICAL SERVICE CONNECTION

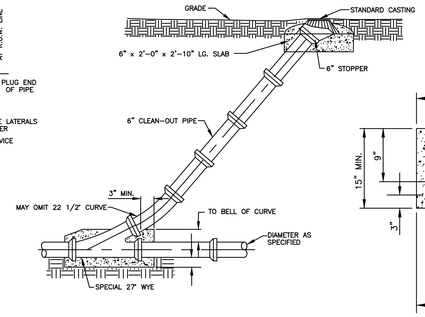
GENERAL NOTES :

1. DRAWINGS INDICATE COPPER SERVICE LINES.
2. FOR P.V.C. SERVICE LINES REFER TO SMALLER TYPE NOTES.
3. ALL COMPRESSION OR PACK TYPE FITTINGS & JOINTS REQUIRE STAINLESS STEEL INSERTS OF REQUIRED SIZE.
4. WATER SERVICE CONNECTIONS CROSSING A STREET SHALL BE ENCASED IN A 2" P.V.C. SHC40 CASING. LENGTH OF CASING SHALL BE WIDTH OF STREET PLUS 10.0 FEET.

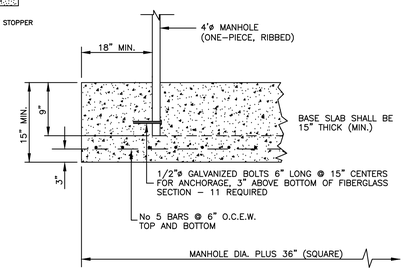
TYPICAL WATER SERVICE CONNECTIONS



SANITARY SEWER SERVICE CONNECTION

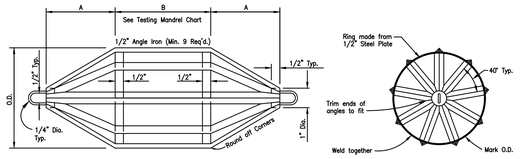


STANDARD CLEANOUT



TYPICAL FIBERGLASS MANHOLE BASE

CLASS	D	B_c	B_d	A In Earth	A In Rock	C ø	C r	E	F	G	H	J	K In Earth	K In Rock	①	②	③ In Earth	③ In Rock
				DIMENSIONS (INCHES)											QUAN. (C.Y. per 100 L.F.)			
A	6	7.75	24	5.94	—	—	—	1.94	—	—	17.82	—	4.00	—	3.4	10.0	—	—
	8	10.25	26	6.56	—	—	—	2.56	—	—	19.69	—	4.00	—	4.0	11.5	—	—
	10	13.00	29	7.25	—	—	—	3.25	—	—	21.75	—	4.00	—	4.7	13.5	—	—
	12	16.00	32	8.00	—	—	—	4.00	—	—	24.00	—	4.00	—	5.6	15.6	—	—
	15	19.50	36	9.76	—	—	—	4.88	—	—	26.63	—	4.88	—	7.5	18.5	—	—
	18	23.00	39	11.50	—	—	—	5.75	—	—	29.25	—	5.75	—	9.4	20.7	—	—
	21	26.50	43	13.26	—	—	—	6.63	—	—	31.88	—	6.63	—	11.9	23.8	—	—
B	6	7.75	24	7.88	9.88	4	6	—	—	—	3.88	—	15.88	—	—	9.2	4.3	5.5
	8	10.25	26	9.13	11.13	4	6	—	—	—	5.13	—	17.13	—	—	10.4	5.0	6.4
	10	13.00	29	10.50	12.50	4	6	—	—	—	6.50	—	18.50	—	—	12.1	6.1	7.6
	12	16.00	32	12.00	14.00	4	6	—	—	—	8.00	—	20.00	—	—	13.9	7.3	8.9
	15	19.50	36	13.75	15.75	4	6	—	—	—	9.75	—	21.75	—	—	16.3	8.9	10.7
	18	23.00	39	15.50	17.50	4	6	—	—	—	11.50	—	23.50	—	—	18.2	10.2	12.2
	21	26.50	43	17.25	19.25	4	6	—	—	—	13.25	—	25.25	—	—	20.8	12.0	14.2
C	6	7.75	24	5.29	7.29	4	6	1.29	—	—	—	—	10.3	—	—	10.3	3.1	4.4
	8	10.25	26	5.71	7.71	4	6	1.71	—	—	—	—	20.55	—	—	11.8	3.6	4.9
	10	13.00	29	6.17	8.17	4	6	2.17	—	—	—	—	22.83	—	—	14.0	4.2	5.7
	12	16.00	32	6.67	8.67	4	6	2.67	—	—	—	—	25.33	—	—	16.2	4.9	6.6
	15	19.50	36	7.25	9.25	4	6	3.25	—	—	—	—	28.25	—	—	19.3	5.9	7.7
	18	23.00	39	7.83	9.83	4	6	3.83	—	—	—	—	31.17	—	—	21.8	6.7	8.7
	21	26.50	43	8.42	10.42	4	6	4.42	—	—	—	—	34.08	—	—	25.1	7.8	10.0
G	6	7.75	24	—	—	—	—	—	4.00	—	16.0	—	—	—	8.7	—	—	—
	8	10.25	24	—	—	—	—	—	4.00	—	18.0	—	—	—	9.0	—	—	—
	10	13.00	24	—	—	—	—	—	4.00	—	21.0	—	—	—	9.5	—	—	—
	12	16.00	24	—	—	—	—	—	4.00	—	24.0	—	—	—	9.6	—	—	—
	15	19.50	28	—	—	—	—	—	4.88	—	28.5	—	—	—	12.8	—	—	—
	18	23.00	32	—	—	—	—	—	5.75	—	33.0	—	—	—	16.5	—	—	—
	21	26.50	36	—	—	—	—	—	6.63	—	37.0	—	—	—	20.1	—	—	—
H	6	7.75	24	7.88	9.88	—	—	—	—	—	3.88	—	8.12	4.00	6.00	4.4	—	4.3	5.5
	8	10.25	24	9.13	11.13	—	—	—	—	—	5.13	—	8.87	4.00	6.00	4.4	—	4.6	5.8
	10	13.00	24	10.50	12.50	—	—	—	—	—	6.50	—	10.50	4.00	6.00	4.8	—	4.8	6.0
	12	16.00	24	12.00	14.00	—	—	—	—	—	8.00	—	12.00	4.00	6.00	4.8	—	4.8	6.1
	15	19.50	28	14.63	15.75	—	—	—	—	—	9.75	—	13.87	4.88	6.00	6.1	—	6.7	7.5
	18	23.00	32	17.25	17.50	—	—	—	—	—	11.50	—	15.75	5.75	6.00	7.6	—	8.9	9.1
	21	26.50	36	19.88	19.88	—	—	—	—	—	13.25	—	17.12	6.63	6.63	8.8	—	11.3	11.3



SIDE OR TOP VIEW

END VIEW

SIZE	A	B*	MANDREL O.D. PVC (SDR-35)	MANDREL O.D. PVC (SDR-26)	RING O.D. PVC (SDR-35)	RING O.D. PVC (SDR-26)
6"	4.0"	4.5"	5.62	5.50	4.91	4.79
8"	5.5"	6.0"	7.52	7.37	6.81	6.66
10"	7.0"	7.5"	9.41	9.21	8.70	8.50
12"	8.0"	9.0"	11.19	10.96	10.48	10.25
15"	10.0"	11.0"	13.70	13.42	12.99	12.71
18"	12.0"	13.5"	16.75	—	16.04	—
21"	14.0"	16.0"	19.74	—	19.03	—
24"	16.0"	18.0"	22.21	—	21.50	—
27"	18.0"	20.0"	25.03	—	24.32	—

* Minimum Length

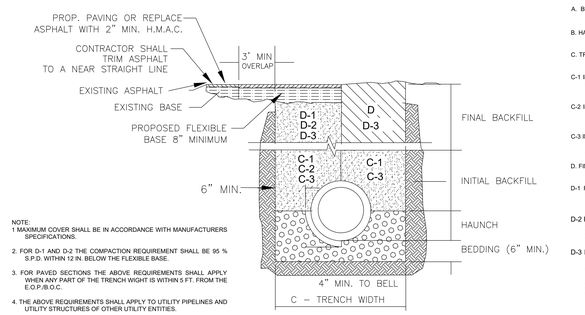
TESTING MANDREL CHART

Notes:

PVC pipes and fittings six inches (6") to fifteen inches (15") in diameter shall conform to ASTM D-3034. PVC pipes and fittings eighteen inches (18") to twenty-seven inches (27") in diameter shall conform to ASTM F-679.

This information is provided as a reference. All deflection testing shall be done in accordance with TNRCC Chapter 317.

GO, NO-GO DEFLECTION TESTING MANDREL



NOTE:
1 MAXIMUM COVER SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. FOR D-1 AND D-2 THE COMPACTION REQUIREMENT SHALL BE 95 % S.P.D. WITHIN 12 IN. BELOW THE FLEXIBLE BASE.
3. FOR PAVED SECTIONS THE ABOVE REQUIREMENTS SHALL APPLY WHEN ANY PART OF THE TRENCH WIGHT IS WITHIN 5 FT. FROM THE E.O.P./B.O.C.
4. THE ABOVE REQUIREMENTS SHALL APPLY TO UTILITY PIPELINES AND UTILITY STRUCTURES OF OTHER UTILITY ENTITIES.

A. BEDDING FOR RCP CLASS III HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SAND AND/OR GRAVEL MIX BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW OF PIPE (MIN. COMPACTED THICKNESS = 6") - PIT RUN GRAVEL 2" MIX SIZE.

B. HAUNCH FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS 1 OR CLASS II (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

C. TRENCH WIDTH - SHALL BE BELL O.D. X 1.5 + 12". MINIMUM TRENCH WIDTH SHALL EQUAL STRUCTURE WIDTH + 4FT. THROUGHOUT THE HEIGHT OF THE STRUCTURE.

C-1 INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON CITY STREET, PARKING AREAS, DRIVEWAYS, COUNTY ROADS & UNPAVED AREAS - SHALL BE SOIL TYPE A1, A2, A3 WITH A MAXIMUM P.I. OF 19 (AASHTO M145) COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

C-2 INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON STATE MAINTAINED ROADWAY - COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D., A5 PER ASTM D4253 AND ASTM D698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.

C-3 INITIAL BACKFILL FOR HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS I OR CLASS II WITH A MAXIMUM P.I. OF 19 (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

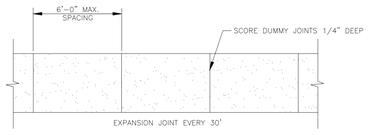
D. FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE UNDER UNPAVED SECTIONS - SHALL BE CLASS I, II, III, OR IV, COMPACTED TO 92% S.P.D., (12" LOOSE LIFTS, MECHANICAL COMPACTION).

D-1 FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON CITY STREETS, PARKING AREAS, DRIVEWAYS AND COUNTY ROADS - SHALL BE SOIL TYPE A1, A2, A3 WITH A MAXIMUM P.I. OF 19 (AASHTO M145) COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

D-2 FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON STATE MAINTAINED ROADWAY - COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D., AS PER ASTM D4253 AND ASTM D698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.

D-3 FINAL BACKFILL OR STRUCTURES (INLETS, MANHOLES, ETC.) - STRUCTURES UNDER THE ROADWAY AND UP TO 5 FT BEYOND THE EDGE OF PAVEMNTT/BACK OF CURB SHALL HAVE CLASS 1 OR CLASS II (ASTM D2321 OR SOIL TYPE 1A, A2, OR A3 (AASHTO M145) WITH A MAXIMUM P.I. OF 19 BACKFILL MATERIAL STRUCTURES BEYOND 5 FT FROM THE E.O.P/B.O.C. SHALL HAVE CLASS I, II, III OR IV (ASTM D2321) BACKFILL MATERIAL. FOUNDATION PREPARATION (WILLPOINTS, MINIMUM 4" GRAVEL OR CEMENTS STABILIZATION, OR APPROVED SUBSTITUTE) SHALL BE REQUIRED WHEN TRENCH BOTTOM IS UNSTABLE. BACKFILLING AT STRUCTURES SHALL BE PLACED IN UNIFORM LAYERS, MOISTENED AS REQUIRED TO APPROXIMATE OPTIMUM MOISTURE CONTENT AND COMPACTED TO 95% S.P.D (USE RELATIVE DENSITY TEST PER ASTM D4253 & ASTM D698). THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 8".

STORM TRENCH BEDDING AND BACKFILL DETAILS



PLAN

SIDEWALK NOTES:

MINIMUM 4'-0" WIDE SIDEWALK.

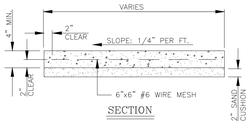
SIDEWALK GRADIENT SHALL NOT EXCEED 1:20.

SIDEWALK CONCRETE SHALL BE 5 SACK CEMENT MIX AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 psi.

CONTRACTOR SHALL VERIFY EXISTENCE AND LOCATION OF EXISTING UTILITY LINES WITH APPROPRIATE COMPANIES TO AVOID PLACING SIDEWALKS ON TOP OF LINES.

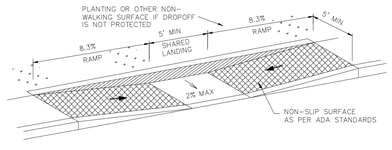
PROVIDE DROP CURBS AT INTERSECTIONS.

CONTRACTOR SHALL COMPLY WITH LATEST REGULATIONS AS SET FORTH IN AMERICANS WITH DISABILITIES ACT (ADA).



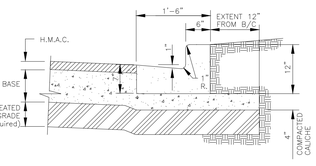
SECTION

SIDEWALK DETAILS

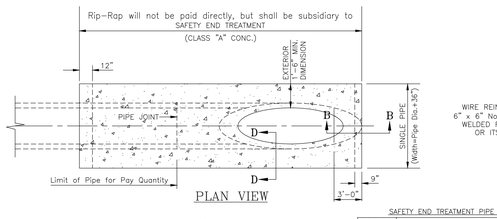


PARALLEL CURB RAMP BUILT ON SIDEWALK

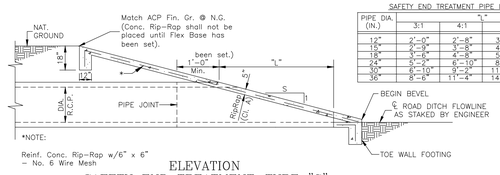
N.T.S.



SECTION "AA" – CONCRETE CURB & GUTTER



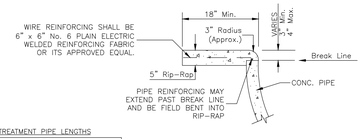
PLAN VIEW



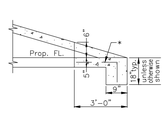
ELEVATION
SAFETY END TREATMENT–TYPE "C"

SAFETY END TREATMENT PIPE LENGTHS

PIPE DIA. (IN.)	"L" 3:1	"L" 4:1	"L" 5:1	"L" 6:1
12"	2'-0"	2'-8"	3'-4"	4'-0"
18"	3'-0"	4'-0"	5'-0"	6'-0"
24"	4'-0"	5'-4"	6'-10"	7'-0"
30"	5'-0"	6'-10"	8'-6"	10'-0"
36"	6'-0"	8'-0"	11'-4"	13'-0"
48"	8'-0"	11'-4"	14'-0"	17'-0"



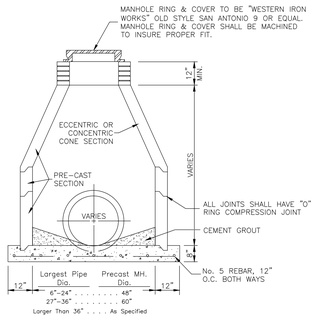
SEC. "DD"



SEC. "BB"

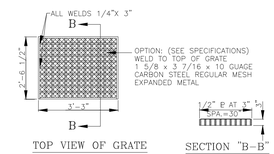
SAFETY END TREATMENT – (Type "C") DETAILS

N.T.S.



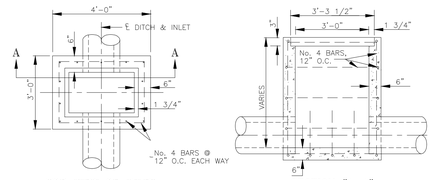
STANDARD STORM SEWER PRE-CAST CONCRETE MANHOLE

N.T.S.



TOP VIEW OF GRATE

SECTION "B–B"



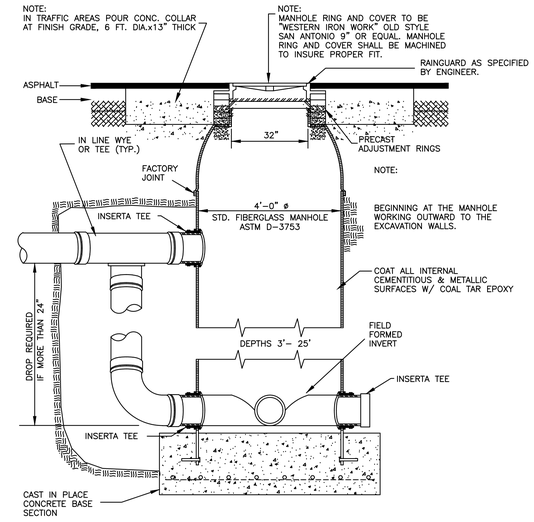
TOP VIEW OF INLET

SECTION "A–A"

TYPE "C" GRATED INLET

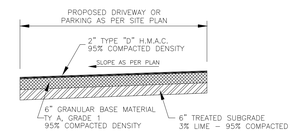
NOTE:
IN TRAFFIC AREAS POUR CONC. COLLAR AT FINISH GRADE, 6 FT. DIA.x13" THICK

NOTE:
MANHOLE RING AND COVER TO BE "WESTERN IRON WORK" OLD STYLE SAN ANTONIO 9" OR EQUAL. MANHOLE RING AND COVER SHALL BE MACHINED TO INSURE PROPER FIT.



NOTE:
BEGINNING AT THE MANHOLE WORKING OUTWARD TO THE EXCAVATION WALLS.

TYPICAL FIBERGLASS MANHOLE



PAVEMENT SECTION

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435
STATE OF TEXAS
MARIO A. REYNA
117368
LICENSED PROFESSIONAL ENGINEER
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIO A. REYNA, P.E. 117368
04-12-2019

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

KEY PLAN

PLAN NORTH

TRUE NORTH

CLIENT	PSJA ISD
PROJECT NUMBER	19057.04
DATE	02.11.19
DRAWN BY	EM
CHECKED BY	M.A.R.

REVISIONS

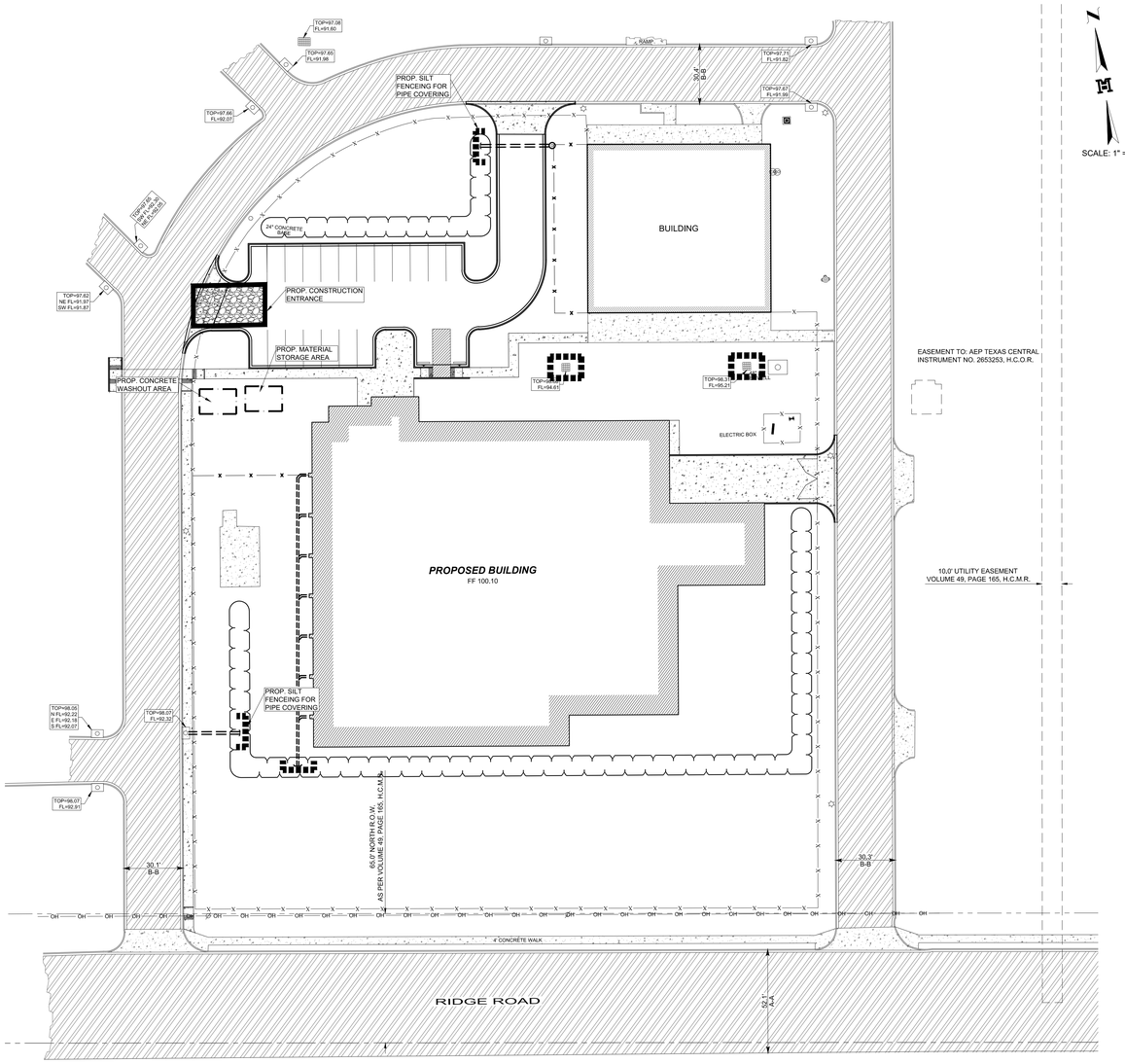
No.	Description	Date

Project Status

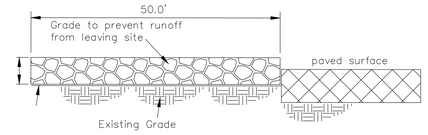
DETAILS

C5.01

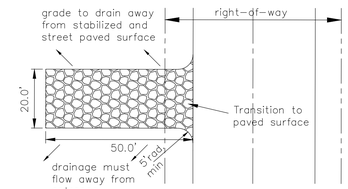
MELDEN & HUNT INC.
CONSULTANTS • ENGINEERS • SURVEYORS
TBPLS No. 10096900
115 W. McINTYRE - EDINBURG, TX 78541
PH: (956) 381-0981 - FAX: (956) 381-1839
ESTABLISHED 1947 - www.meldenandhunt.com



SCALE: 1" = 30'



Profile View



Plan View

2/C5 STABILIZED CONSTRUCTION ENTRANCE

SCALE: NOT TO SCALE

Notes :

1. Contruction entrance(s) shall be locted at the time of pre-contruction meeting.
2. Stone shall be 4 to 8 inch diameter crushed rock or acceptable crushed Portland Cement Concrete.
3. When necessary, vehicles shall be cleaned to remove sediment prior to entrance onto a public roadway. When washing is required, it shall be done on a area stabilized with crushed stone with drainage flowing away form both the street and the stabilized entrance. All sediment shall be prevented from entering any storm drain, ditch or watercourse using approved methods.
4. The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto paved surfaces. This may require periodic top dressing with additional stone as conditions demand. All sediment spilled, dropped, washed or tracked onto paved surfaces, must be removed immediately.
5. The entrance must be properly graded or incorporate a drainage swale to prevent runoff from leaving the construction site.

LEGEND

- SEDIMENT CONTROL FENCE
- CONSTRUCTION ENTRANCE
- SOCK FOR INLET

GENERAL NOTES :

1. The guidelines shown hereon are suggestions only and may be modified by the engineer.
2. Hay bales shall be a minimum of 30" in length and weigh a minimum of 50 lbs.
3. Hay bales shall be bound by either wire or nylon or polypropylene string. The bales shall be composed enitrely of vegetable matter.
4. Hay bales shall be embedded in the soil a minimum of 4" and where possible 1/2 the height of the bale.
5. Hay bales shall be place in a row with ends tightly abutting the adjacent bales. The bales shall be placed with bindings parallel to the ground.
6. Hay bales shall be securely anchored in place with 3/8" dia. rebar or 2"x2" wood stakes driven through the bales. The first stake shall be angled towards the previously laid bale to force the bales together.

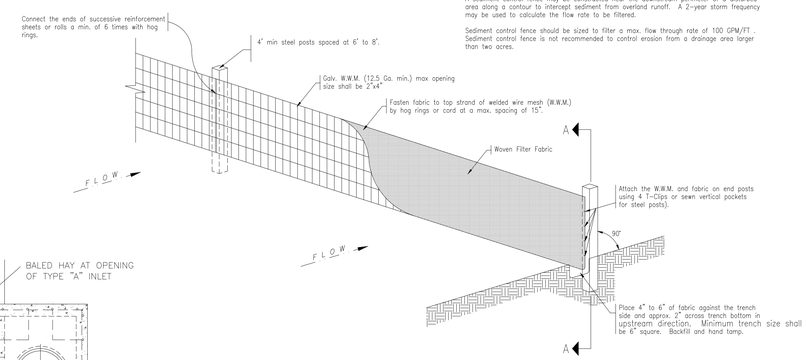
GENERAL NOTES :

1. The guidelines shown hereon are suggestions only and may be modified by the engineer.

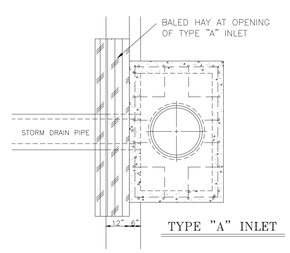
SEDIMENT CONTROL FENCE USAGE GUIDELINES

A sediment control fence may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A 2-year storm frequency may be used to calculate the flow rate to be filtered.

Sediment control fence should be sized to filter a max. flow through rate of 100 GPM/FT . Sediment control fence is not recommended to control erosion from a drainage area larger than two acres.



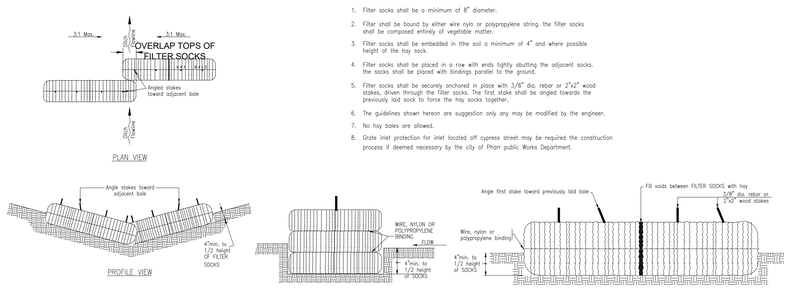
TEMPORARY SEDIMENT CONTROL FENCE



TYPE "A" INLET

NOTE:

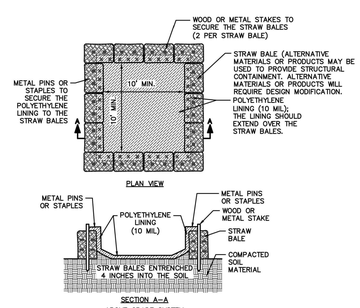
1. **NO OFFICE TRAILER ON SITE.**

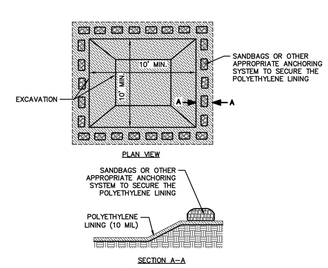


GENERAL NOTES :

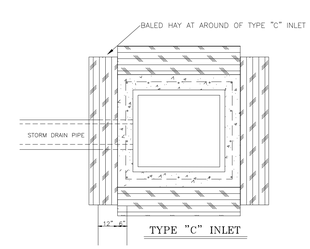
1. Filter socks shall be a minimum of 8" diameter.
2. Filter shall be bound by either wire nylo or polypropylene string, the filter socks shall be composed entirely of vegetable matter.
3. Filter socks shall be embedded in the soil a minimum of 4" and where possible height of the hay sock.
4. Filter socks shall be placed in a row with ends tightly abutting the adjacent socks. the socks shall be placed with bindings parallel to the ground.
5. Filter socks shall be securely anchored in place with 3/8" dia. rebar or 2"x2" wood stakes, driven through the filter socks. The first stake shall be angled towards the previously laid sock to force the hay socks together.
6. The guidelines shown hereon are suggestion only any may be modified by the engineer.
7. No hay bales are allowed.
8. Grate inlet protection for inlet located off cypress street may be required the construction process if deemed necessary by the city of Pharr public Works Department.

BALED HAY FOR EROSION CONTROL





CONCRETE WASH OUT



TYPE "C" INLET

MELDEN & HUNT, INC.
CONSULTANTS · ENGINEERS · SURVEYORS
115 W. McINTYRE - EDINBURG, TX 78541
PH: (956) 381-0981 - FAX: (956) 381-1839
ESTABLISHED 1947 - www.meldenandhunt.com
TBPLS No. 10064900

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
MARIO A. REYNA
117368
LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIO A. REYNA, P.E. 117368

04-12-2019

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

KEY PLAN — PLAN NORTH — TRUE NORTH

CLIENT	PSJA ISD
PROJECT NUMBER	19057.04
DATE	02.11.19
DRAWN BY	EM
CHECKED BY	M.A.R.

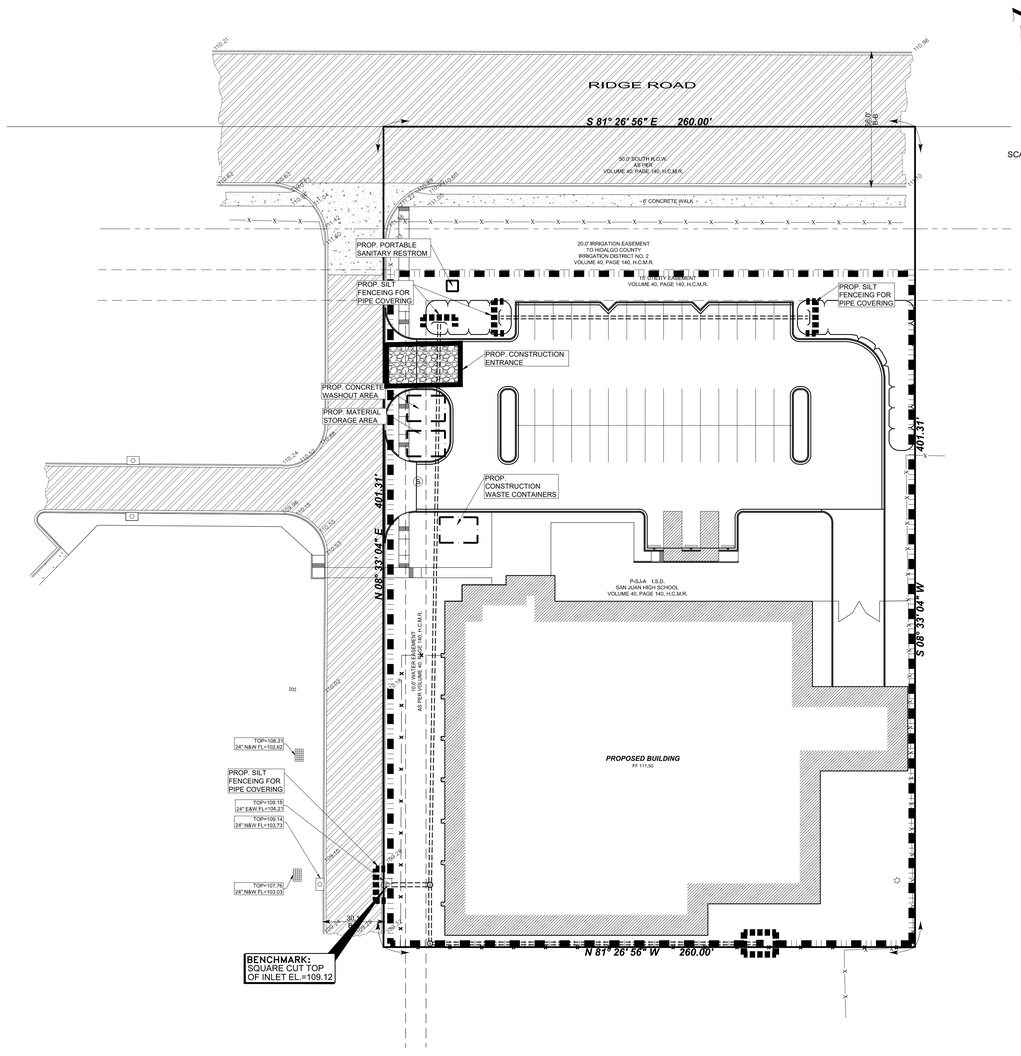
REVISIONS

No.	Description	Date

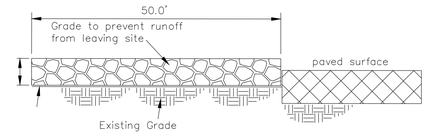
Project Status

EROSION CONTROL PLAN

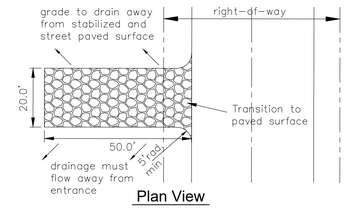
C6.0



SCALE: 1" = 30'



Profile View



Plan View

2 / C5 STABILIZED CONSTRUCTION ENTRANCE

SCALE: NOT TO SCALE

Notes :

1. Contruction entrance(s) shall be locted at the time of pre-contruction meeting.
2. Stone shall be 4 to 8 inch diameter crushed rock or acceptable crushed Portland Cement Concrete.
3. When necessary, vehicles shall be cleaned to remove sediment prior to entrance onto a public roadway. When washing is required, it shall be done on a area stabilized with crushed stone with drainage flowing away form both the street and the stabilized entrance. All sediment shall be prevented from entering any storm drain, ditch or watercourse using approved methods.
4. The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto paved surfaces. This may require periodic top dressing with additional stone as conditions demand. All sediment spilled, dropped, washed or tracked onto paved surfaces, must be removed immediately.
5. The entrance must be properly graded or incorporate a drainage swale to prevent runoff from leaving the construction site.

LEGEND

- SEDIMENT CONTROL FENCE
- CONSTRUCTION ENTRANCE
- SOCK FOR INLET

GENERAL NOTES :

1. The guidelines shown hereon are suggestions only and may be modified by the engineer.
2. Hay bales shall be a minimum of 30" in length and weigh a minimum of 50 lbs.
3. Hay bales shall be bound by either wire or nylon or polypropylene string. The bales shall be composed entirely of vegetable matter.
4. Hay bales shall be embedded in the soil a minimum of 4" and where possible 1/2 the height of the bale.
5. Hay bales shall be place in a row with ends tightly abutting the adjacent bales. The bales shall be placed with bindings parallel to the ground.
6. Hay bales shall be securely anchored in place with 3/8" dia. rebar or 2"x2" wood stakes driven through the bales. The first stake shall be angled towards the previously laid bale to force the bales together.

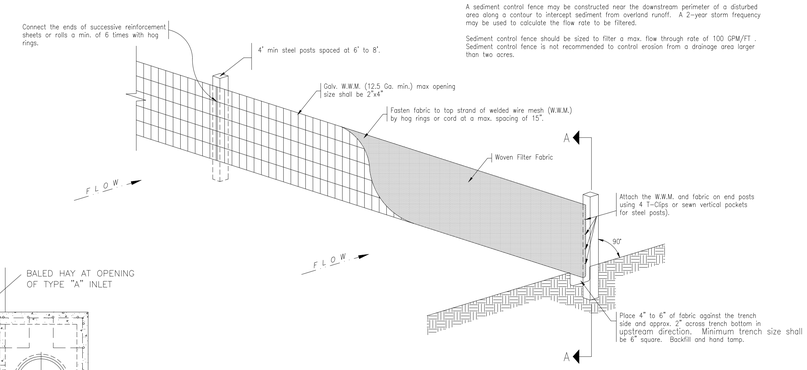
GENERAL NOTES :

1. The guidelines shown hereon are suggestions only and may be modified by the engineer.

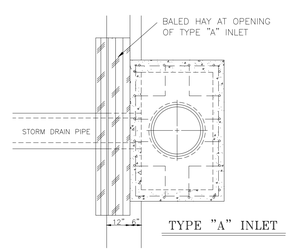
SEDIMENT CONTROL FENCE USAGE GUIDELINES

A sediment control fence may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A 2-year storm frequency may be used to calculate the flow rate to be filtered.

Sediment control fence should be sized to filter a max. flow through rate of 100 GPM/FT . Sediment control fence is not recommended to control erosion from a drainage area larger than two acres.



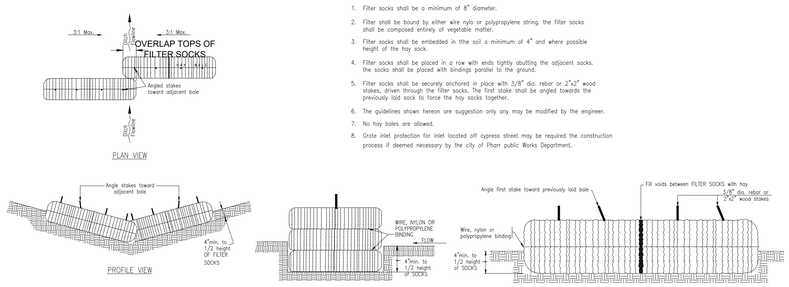
TEMPORARY SEDIMENT CONTROL FENCE



TYPE "A" INLET

NOTE:

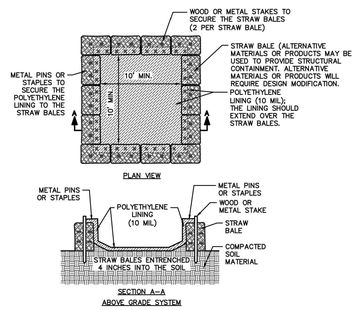
1. **NO OFFICE TRAILER ON SITE.**

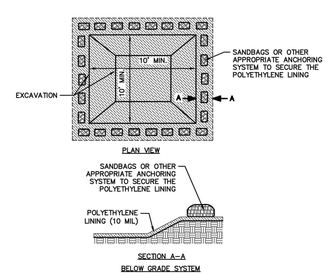


GENERAL NOTES :

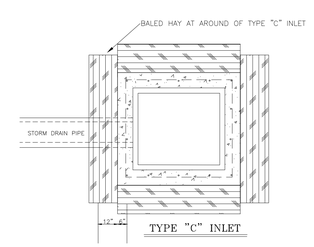
1. Filter socks shall be a minimum of 8" diameter.
2. Filter shall be bound by either wire nylo or polypropylene string. the filter socks shall be composed entirely of vegetable matter.
3. Filter socks shall be embedded in the soil a minimum of 4" and where possible height of the hay sock.
4. Filter socks shall be placed in a row with ends tightly abutting the adjacent socks. the socks shall be placed with bindings parallel to the ground.
5. Filter socks shall be securely anchored in place with 3/8" dia. rebar or 2"x2" wood stakes, driven through the filter socks. The first stake shall be angled towards the previously laid sock to force the hay socks together.
6. The guidelines shown hereon are suggestion only any may be modified by the engineer.
7. No hay bales are allowed.
8. Grate inlet protection for inlet located off cypress street may be required the construction process if deemed necessary by the city of Pharr public Works Department.

BALED HAY FOR EROSION CONTROL





CONCRETE WASH OUT



TYPE "C" INLET

MELDEN & HUNT, INC.
CONSULTANTS • ENGINEERS • SURVEYORS
115 W. McINTYRE - EDINBURG, TX 78541
PH: (956) 381-0981 - FAX: (956) 381-1839
ESTABLISHED 1947 - www.meldenandhunt.com
TBPLS No. 10096900

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
MARIO A. REYNA
117368
LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIO A. REYNA, P.E. 117368

04-12-2019

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

KEY PLAN

PLAN NORTH | TRUE NORTH

CLIENT	PSJA ISD
PROJECT NUMBER	19057.04
DATE	02.11.19
DRAWN BY	EM
CHECKED BY	M.A.R.

REVISIONS

No.	Description	Date

Project Status

EROSION AND SEDIMENT CONTROL PLAN

C6.01

LEGEND

- FOUND No.4 REBAR
- LIGHT POLE WITH 2Ø CONCRETE BASE
- HANDICAP SIGN
- GRATE INLET
- IRRIGATION CONTROL VALVE
- 30"SD — 30" STORM SEWER LINE
- ASPHALT AREA
- CONCRETE AREA
- B-B - BACK OF CURB TO BACK OF CURB
- LAUREL BUSH (SIZE AS NOTED)
- OAK TREE (SIZE AS NOTED)
- PALM TREE (SIZE AS NOTED)

MELDEN & HUNT INC.
CONSULTANTS · ENGINEERS · SURVEYORS
TBPLS No. 10096900

115 W. McINTYRE - EDINBURG, TX 78541
PH: (956) 381-0981 - FAX: (956) 381-1839
ESTABLISHED 1947 - www.meldenandhunt.com

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
MARIO A. REYNA
117368
LICENSED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIO A. REYNA, P.E. 117368

04-12-2019

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

KEY PLAN

PLAN NORTH — TRUE NORTH

CLIENT	PSJA ISD
PROJECT NUMBER	19057.04
DATE	02.11.19
DRAWN BY	EM
CHECKED BY	M.A.R.

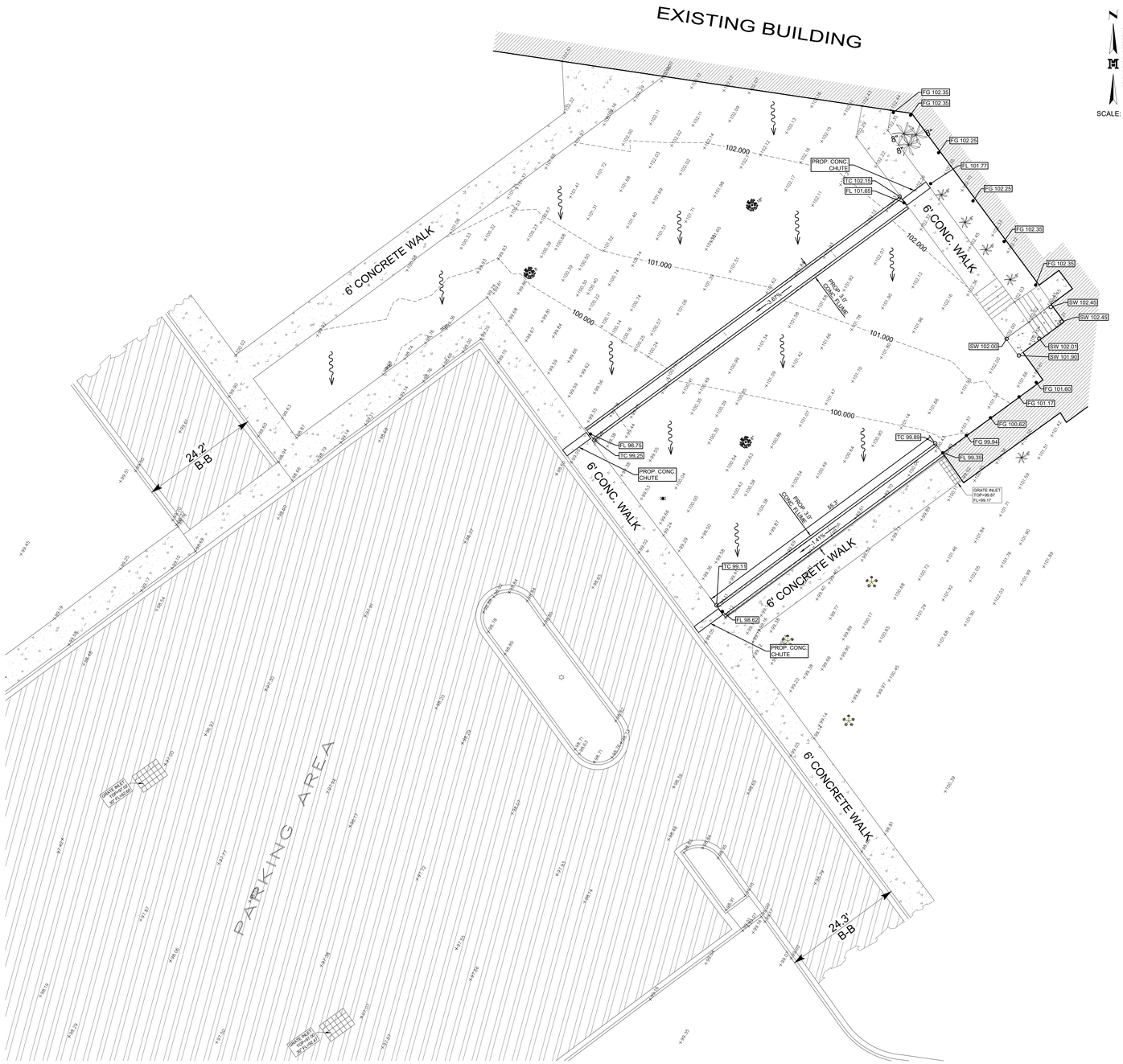
REVISIONS

No.	Description	Date

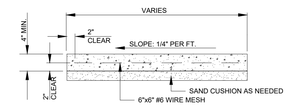
Project Status

EXISTING SOUTH PARKING AREA

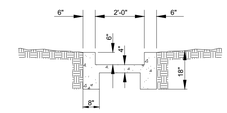
C7.0



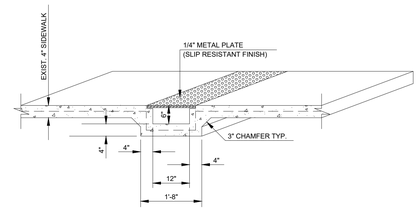
SCALE: 1" = 10'



CONCRETE SECTION
N.T.S.



CONCRETE FLUME DETAIL
N.T.S.



SIDEWALK CHUTE DETAIL
N.T.S.

LEGEND

- FOUND No.4 REBAR
- LIGHT POLE WITH 2'Ø CONCRETE BASE
- HANDICAP SIGN
- GRATE INLET
- IRRIGATION CONTROL VALVE
- 30"SD — 30" STORM SEWER LINE
- ASPHALT AREA
- CONCRETE AREA
- B-B - BACK OF CURB TO BACK OF CURB
- LAUREL BUSH (SIZE AS NOTED)
- OAK TREE (SIZE AS NOTED)
- PALM TREE (SIZE AS NOTED)
- SURFACE FLOW DIRECTION
- TC XX.XX — TOP OF CURB ELEV.
- SW XX.XX — TOP OF SIDEWALK ELEV.
- FL XX.XX — FLOW OF GRADE OR SWALE
- FG XX.XX — FINISH GROUND ELEV.

GRADING PLAN NOTES

1. NO MECHANICAL COMPACTION ADJACENT TO BUILDING.
2. CONTRACTOR TO APPLY SEEDING TO ANY DISTURBED AREAS.

MELDEN & HUNT INC.
CONSULTANTS · ENGINEERS · SURVEYORS
115 W. McINTYRE - EDINBURG, TX 78541
PH: (956) 381-0981 - FAX: (956) 381-1839
ESTABLISHED 1947 - www.meldenandhunt.com
TBPLS No. 10096900

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD AQUATIC CENTERS
SAN JUAN, TEXAS
ALAMO, TEXAS

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435
STATE OF TEXAS
MARIO A. REYNA
117368
LICENSED
PROFESSIONAL ENGINEER
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIO A. REYNA, P.E. 117368
04-12-2019

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

KEY PLAN — PLAN NORTH — TRUE NORTH

CLIENT	PSJA ISD
PROJECT NUMBER	19057.04
DATE	02.11.19
DRAWN BY	EM
CHECKED BY	M.A.R.

REVISIONS

No.	Description	Date

Project Status

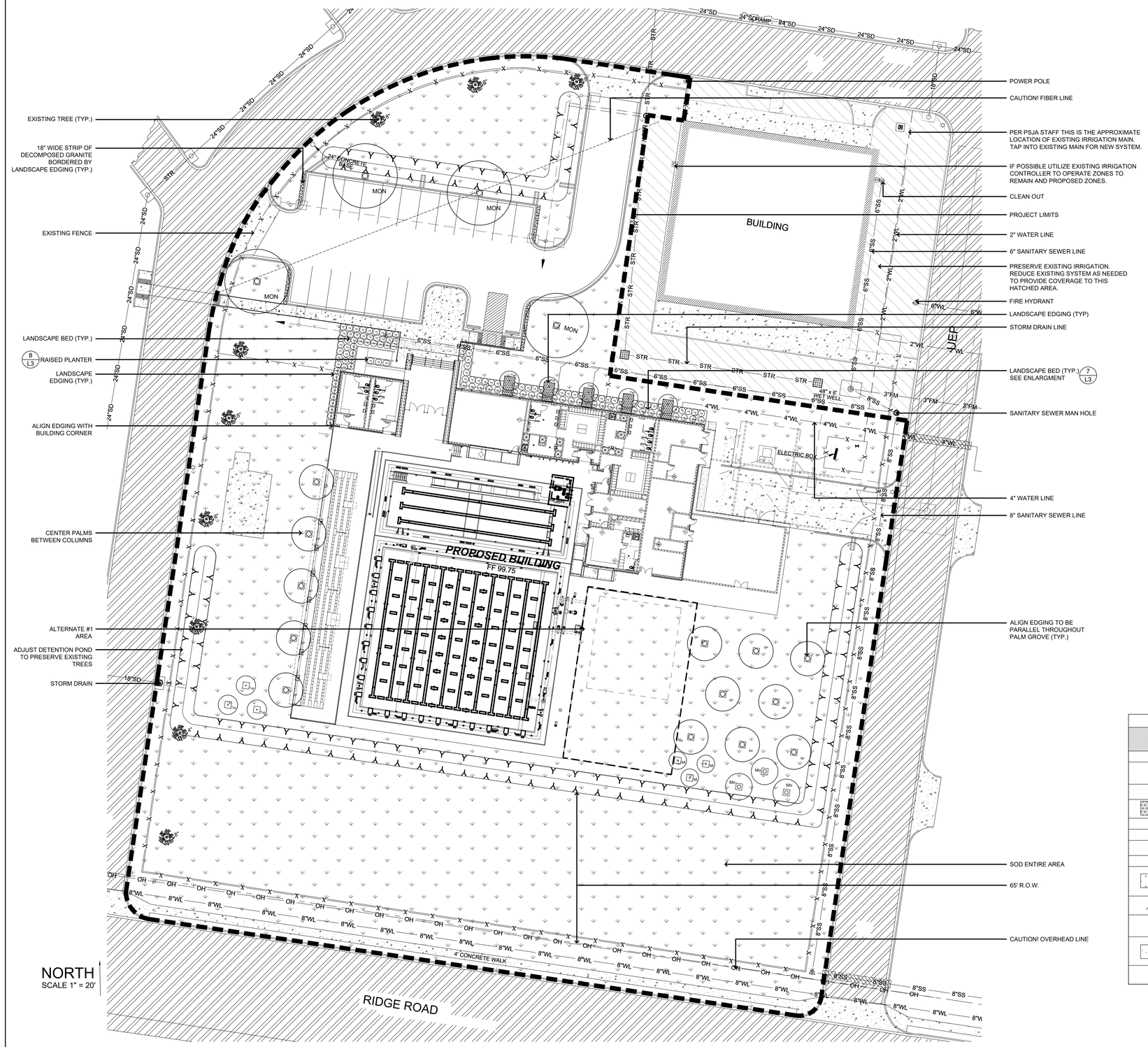
SOUTH PARKING AREA DRAINAGE PLAN

C8.0

PSJA ISD NEW SWIMMING FACILITIES

PSJA MEMORIAL ECHS
800 S ALAMO RD
ALAMO, TX 78516

PSJA BEARS ECHS
805 W RIDGE RD
SAN JUAN, TX 78589



LANDSCAPE & IRRIGATION DRAWING INDEX

L1	MEMORIAL LANDSCAPE PLAN
L2	BEARS LANDSCAPE PLAN
L3	LANDSCAPE DETAILS
IR1	MEMORIAL IRRIGATION PLAN
IR2	BEARS IRRIGATION PLAN
IR3	IRRIGATION SCHEDULE AND NOTES
IR4	IRRIGATION DETAILS

GENERAL NOTES:

1. SEE CIVIL, MEP AND ARCHITECTURAL SHEETS FOR ALL CIVIL, MEP AND ARCHITECTURAL IMPROVEMENTS.
2. THE LOCATION OF ALL TREES, BOULDERS, SHRUBS AND EDGING SHALL BE STAKED OR MARKED IN THE FIELD BY THE CONTRACTOR FOR LANDSCAPE ARCHITECT APPROVAL PRIOR TO INSTALLATION.
3. SOD ENTIRE PROJECT LIMITS AND ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES. DO NOT SOD LANDSCAPE BEDS OR IMPERVIOUS SURFACES.
4. THE CONTRACTOR SHALL INSTALL A ONE INCH LAYER OF COMPOST TO ALL LANDSCAPE BEDS AND INCORPORATE INTO EXISTING SOIL TO A MIN. THREE INCH DEPTH. THE CONTRACTOR SHALL INSTALL A 3" LAYER OF WOOD MULCH TO ALL LANDSCAPE BEDS, UNLESS ANOTHER MATERIAL IS SPECIFIED.
5. ALL DIRECTIONAL SIGNAGE TO BE PLACED INSIDE LANDSCAPE BEDS. SEE ARCHITECTURAL SHEETS FOR SIGNAGE.
6. ALL EXISTING AND PROPOSED UTILITIES ARE SHOWN SCHEMATICALLY AND ARE FOR THE CONTRACTORS REFERENCE. THE CONTRACTOR SHALL VERIFY THE LOCATION, SIZE AND DEPTH OF ALL UTILITIES PRIOR TO COMMENCING WORK.
7. IF ANY FIELD CONDITIONS VARY FROM THE CONTRACT DOCUMENTS THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING UPON DISCOVERY.
8. MAINTAIN A POSITIVE SLOPE AWAY FROM THE BUILDING FOUNDATION.
9. CONTRACTOR SHALL VERIFY ALL QUANTITIES AND NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.
10. ALL IMPROVEMENTS SHALL BE CONSTRUCTED TO COMPLY WITH THE TEXAS ARCHITECTURAL BARRIERS ACTS AND THE ARCHITECTURAL BARRIERS ACT OF 1968.

LANDSCAPE ORDINANCE COMPLIANCE SCHEDULE

BUILDING SITE:	108,897 SF
REQUIRED LANDSCAPE AREA (5%)	5,445 SF
PROPOSED LANDSCAPE AREA (58%)	63,602 SF

FRONT LOT REQUIRED TREES

REQUIRED TREES - 328 LF /30' = 10.93 = 11 TREES

PROPOSED TREES =9 TREES + 2 EXISTING TREES = 11 TREES

51 LF OF REQUIRED SCREENING/50' = 1..02 = 2 TREES REQUIRED. 2 TREES PROPOSED

PARKING LOT LANDSCAPE-

22 PARKING SPACES/20 = 1.1 = 2 X 162 SF = 324 SF REQUIRED PARKING LOT LANDSCAPING

PROPOSED PARKING LOT LANDSCAPING = 1,050 SF

LANDSCAPE MATERIAL SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	APPROXIMATE QTY.	COMMENTS
Mo	CORDIA BOISSIERI	MEXICAN OLIVE TREE	3	3" CALIPER, B&B
Txp	DIOSPYROS TEXANA	TEXAS PERSIMMON	8	3" CALIPER, B & B, 7' TALL, UNIFORM SIZE & SHAPE
ry	HESPERALOE PARVIFLORA	RED YUCCA	66	3 GALLON, 36" O.C. SPACING
	MUHLENBERGIA CAPILLARIS	GULF MUHLY GRASS	61	3 GALLON, 30" O.C. SPACING
pp	OPTUNIA ELLISIANA	SPINELESS PRICKLY PEAR	25	5 GALLON, 48" O.C. SPACING
MON	QUERCUS POLYMORPHA	MONTERREY OAK	4	3" CALIPER, B & B, 7' TALL
PS	SABAL TEXANA	TEXAS SABAL PALM	13	6' CLR. TRUNK, FULLY BOOTED
MI	SOPHORA SECUNDIFLORA	TEXAS MOUNTAIN LAUREL	3	7' HEIGHT GRO-BAG
		SOD	BASE BID - 67,104 SF ALTERNATE 1 - 4,112 SF	BERMUDA SOD
		LANDSCAPE EDGING	745 - LF	4" ALUMINUM MILL FINISH EDGING
		STONE MULCH/ WASHED GRAVEL	210 - SF	1" - 2" NO CALICHE, 3" LAYER INSTALLED ON A LAYER OF LANDSCAPE FABRIC
		DECOMPOSED GRANITE	106 - SF	2" LAYER INSTALLED ON A LAYER OF LANDSCAPE FABRIC. APPLY PRE EMERGENT ONCE MATERIAL IS PLACED.
		CYPRESS MULCH	1386 - SF	3" LAYER INSTALLED WITHOUT A LAYER OF LANDSCAPE FABRIC

HEFFNER DESIGN TEAM, PLLC
aheffner@heffnerdesignteam.com
4814 N. 11th St. Suite E
McALLEN, TX. 78504
(956) 540-7850

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED LANDSCAPE ARCHITECT — ANDREW T. HEFFNER — 2626 — STATE OF TEXAS

DATE: 04-11-19

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: AH
CHECKED BY: ER

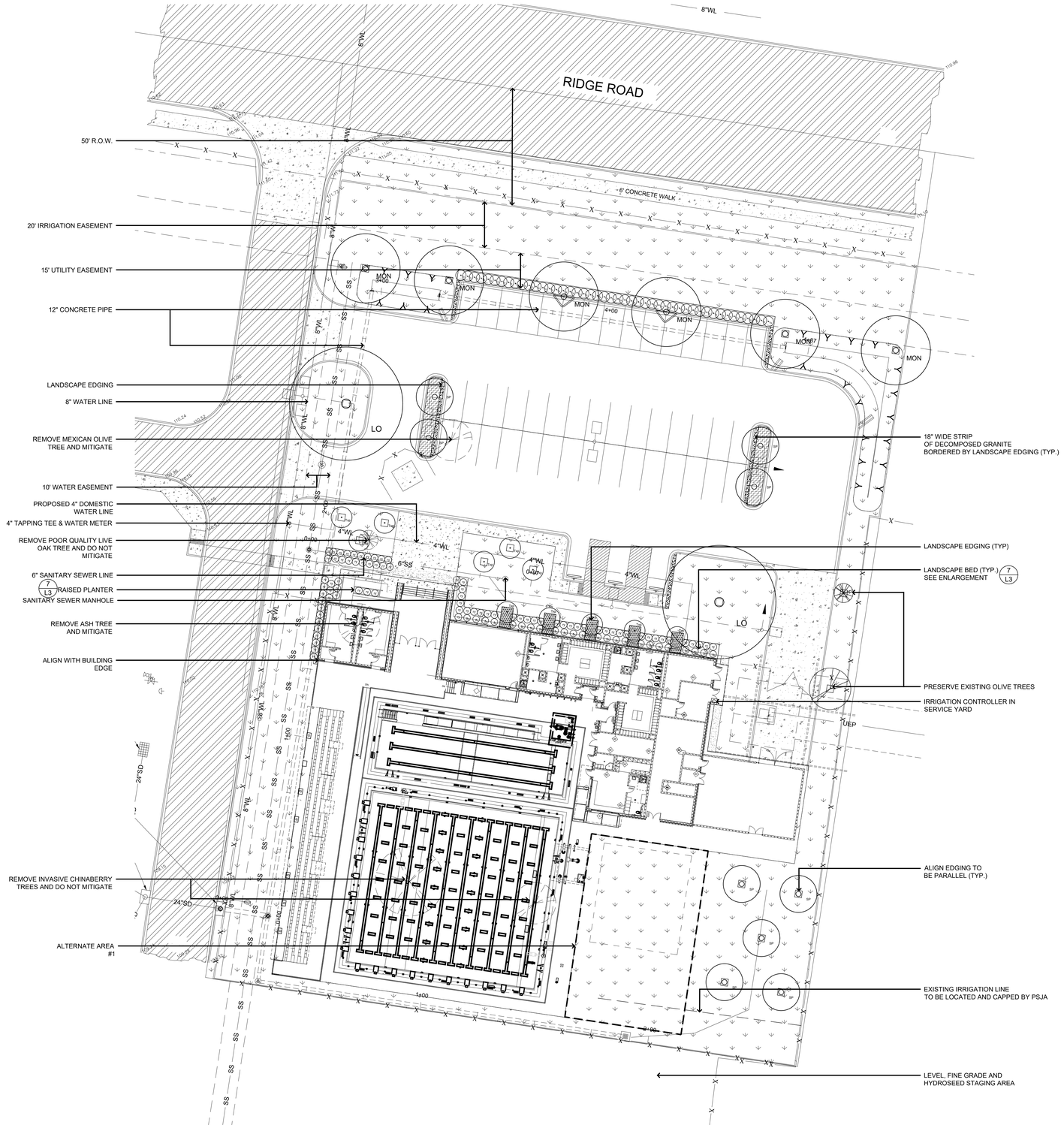
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

MEMORIAL LANDSCAPE PLAN

L1



NORTH
SCALE 1" = 20'

LANDSCAPE ORDINANCE COMPLIANCE SCHEDULE

THE FRONT PARKING LOT AND VEHICLE USE AREA IS BEING SCREENED WITH A 3' TALL HEDGE.

STREET TREE REQUIREMENT-

REQUIRED STREET TREES = 260 / 50' = 5.2 = 6 TREES
PROPOSED STREET TREES = 6 TREES

INTERIOR PARKING LOT LANDSCAPING -

REQUIRED - 48 PARKING SPACES/20 = 2.4 = 3 X 162 SF = 486 SF
PROPOSED AREA - 1,458 SF

TREE REMOVAL AND MITIGATION

GOOD QUALITY TREES REMOVED = 2
REQUIRED MITIGATION = 4 TREES
CREDIT FOR PRESERVING EXISTING TREES = 2
TOTAL TREE MITIGATION REQUIRED = 2 TREES
TOTAL TREE MITIGATION PROPOSED = 2 TREES

LANDSCAPE MATERIAL SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	APPROXIMATE QTY.	COMMENTS
Txp	DIOSPYROS TEXANA	TEXAS PERSIMMON	11	3" CALIPER, B & B, 7' TALL, UNIFORM SIZE & SHAPE
	DYSCHORISTE CRENULATA	SNAKE HERB	108	3 GALLON, 24" O.C. SPACING
ry	HESPERALOE PARVIFLORA	RED YUCCA	79	3 GALLON, 36" O.C. SPACING
Ts	LEUCOPHYLLUM FRUTESCENS	TEXAS SAGE	46	3 GALLON, 36" O.C. SPACING
	MUHLENBERGIA CAPILLARIS	GULF MUHLY GRASS	61	3 GALLON, 30" O.C. SPACING
pp	OPTUNIA ELLISIANA	SPINELESS PRICKLY PEAR	24	5 GALLON, 48" O.C. SPACING
MON	QUERCUS POLYMORPHA	MONTERREY OAK	6	3"CALIPER, B & B, 7' TALL
LO	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	1	3" CAL., B&B, 7' TALL
SP	SABAL TEXANA	TEXAS SABAL PALM	9	6' CLR. TRUNK, FULLY BOOTED
		SOD	BASE BID - 33,721 SF ALTERNATE 1 - 4,112 SF	BERMUDA SOD
		LANDSCAPE EDGING	896 - LF	4" ALUMINUM MILL FINISH EDGING
		STONE MULCH/ WASHED GRAVEL	210 - SF	1" - 2" NO CALICHE, 3" LAYER INSTALLED ON A LAYER OF LANDSCAPE FABRIC
		DECOMPOSED GRANITE	186 - SF	2" LAYER INSTALLED ON A LAYER OF LANDSCAPE FABRIC. APPLY PRE EMERGENT ONCE MATERIAL IS PLACED.
		CYPRESS MULCH	1,911 - SF	3" LAYER INSTALLED WITHOUT A LAYER OF LANDSCAPE FABRIC

HEFFNER DESIGN TEAM, PLLC
aheffner@heffnerdesignteam.com
4814 N. 11th St. Suite E
McALLEN, TX. 78504
(956) 540-7850

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

REGISTERED LANDSCAPE ARCHITECT
ANDREW T. HEFFNER
2535
STATE OF TEXAS

DATE: 04-11-19

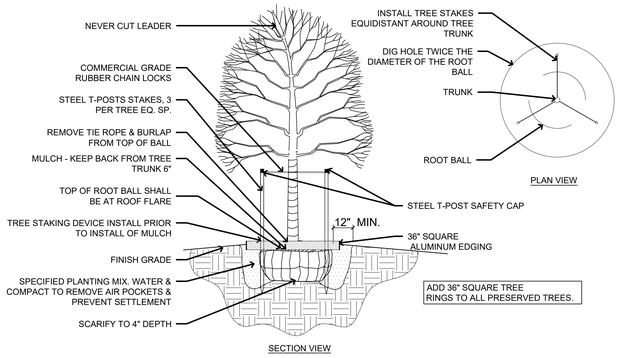
CLIENT
PSJA ISD
PROJECT NUMBER
18309SP
DATE
04.11.19
DRAWN BY
AH
CHECKED BY
ER
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

BEARS LANDSCAPE PLAN

L2



NOTES:
1. FOR EACH ONE (1) INCH CALIPER OF TREE TRUNK DIAMETER INSTALL ONE 21 GRAM AGRIFORM PLANTING TABLET. INSTALL HALF-WAY UP THE ROOTBALL 1" FROM ROOT TIPS.
2. SET TOP OF ROOT CROWN 1" ABOVE FINISHED GRADE WHERE APPLICABLE. TRIM FABRIC AROUND TRUNK OF TREE.
3. REMOVE ALL PLASTIC OR POLYETHYLENE MESH FROM ROOT BALLS.
4. REMOVE ALL NYLON TYING STRING.
5. STEEL CAGING TO BE REMOVED BY 2/3rds.
6. USE MULCH TREE RING IF TREE IS IN MULCHED LANDSCAPE BED ONLY OR LAWN.

1 / L3 TREE & PALM PLANTING

N.T.S.

SIZE:

1/8" X 4" (3.2MM X 102MM), 0.050" (1.27 MM) THICK
W/ 0.125" (3.18MM) EXPOSED TOP LIP

FINISH LEGEND:

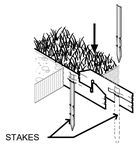
ARCHITECT NOTE: CHECK OFF APPLICABLE FINISH DESIRED

☒ (MF) MILL FINISH-NATURAL ALUMINUM

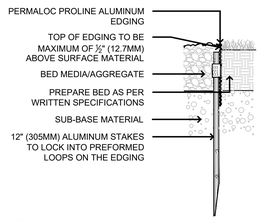
☐ (BL) BLACK DUROFLEX-ELECTROSTATICALLY APPLIED BAKED ON PAINT, MEETS AAMA 2603

☐ (GR) GREEN-ELECTROSTATICALLY APPLIED BAKED ON PAINT, MEETS AAMA 2603

☐ (BR) BRONZE-ELECTROSTATICALLY APPLIED BAKED ON PAINT, MEETS AAMA 2603



ISOMETRIC VIEW
SCALE: NTS

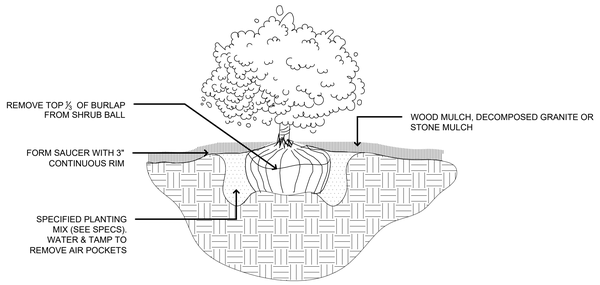


NOTES:

1. INSTALL PER MANUFACTURER'S "INSTALLATION GUIDELINES".
2. 8'-0" (2.44 M) SECTIONS TO INCLUDE (3) 12" (305 MM) ALUMINUM STAKES.
3. 16'-0" (4.88 M) SECTIONS TO INCLUDE (5) 12" (305 MM) ALUMINUM STAKES.
4. CORNERS - CUT BASE EDGING UP HALFWAY AND FORM A CONTINUOUS CORNER.
5. PERMALOC PROLINE AS MANUFACTURED BY PERMALOC CORPORATION, HOLLAND MI. (800) 356-9660, (616) 399-9600 OR APPROVED EQUAL.
6. CONTRACTOR'S NOTE: FOR PRODUCT AND PURCHASING INFORMATION VISIT:WWW.PERMALOC.COM

2 / L3 PERMALOC ALUMINUM EDGING

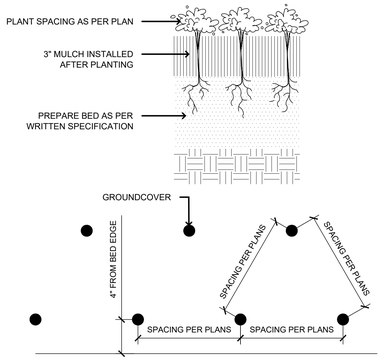
N.T.S.



NOTE:
1. SET TOP OF ROOT CROWN 1" ABOVE FINISHED GRADE WHERE APPLICABLE. TRIM FABRIC AROUND TRUNK OF TREE.
2. REMOVE ALL PLASTIC OR POLYETHYLENE MESH FROM ROOT BALLS.
3. REMOVE ALL NYLON TYING STRING.
4. STEEL CAGING TO BE REMOVED BY 2/3rds.

3 / L3 5 GALLON SHRUB PLANTING

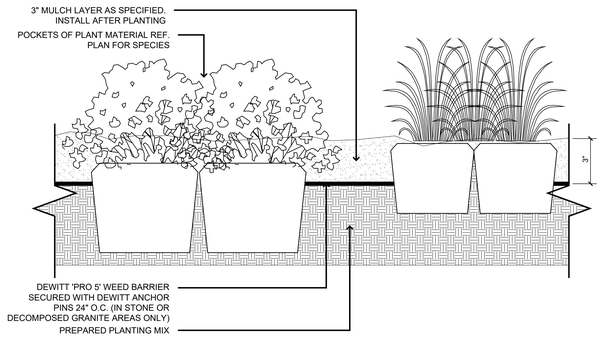
N.T.S.



4 / L3 GROUNDCOVER PLANTING

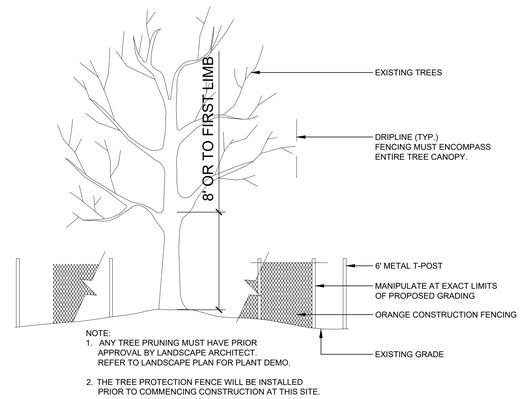
N.T.S.

PLANT MATERIAL SPACING AND GROUP VARY



5 / L3 1 & 3 GALLON SHRUB PLANTING

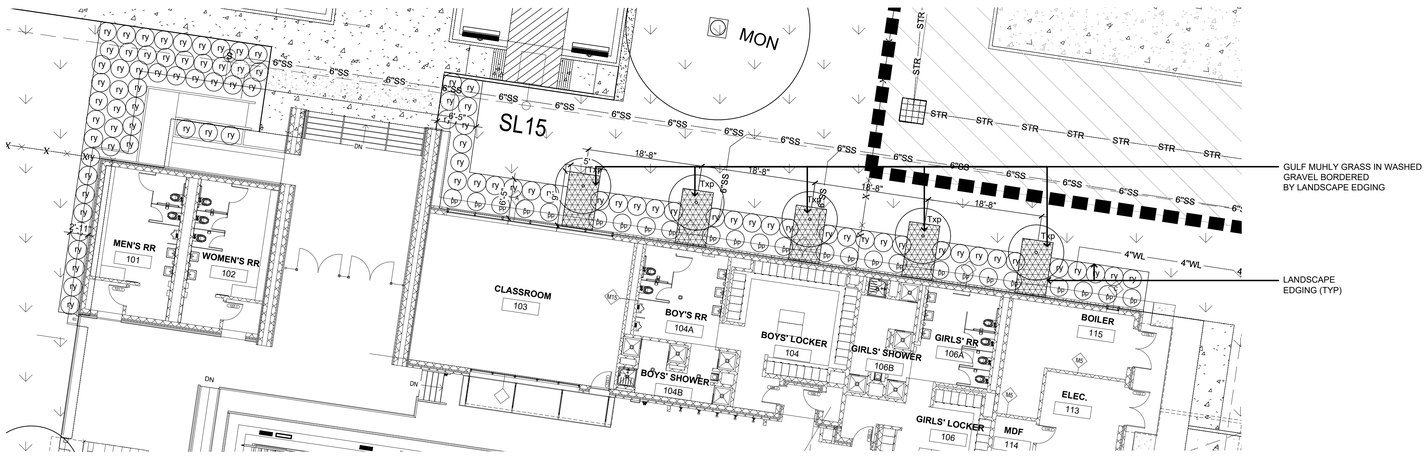
N.T.S.



NOTE:
1. ANY TREE PRUNING MUST HAVE PRIOR APPROVAL BY LANDSCAPE ARCHITECT. REFER TO LANDSCAPE PLAN FOR PLANT DEMO.
2. THE TREE PROTECTION FENCE WILL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION AT THIS SITE.

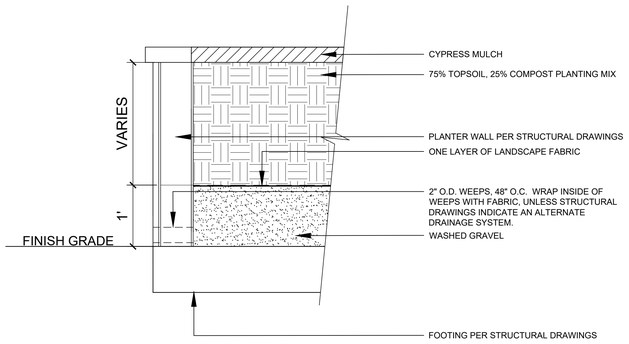
6 / L3 LANDSCAPE TREE PROTECTION FENCING

N.T.S.



7 / L3 LANDSCAPE BED ENLARGEMENT

SCALE: 1"=10'



8 / L3 RAISED PLANTER PROFILE

N.T.S.

HEFFNER DESIGN TEAM, PLLC
aheffner@heffnerdesignteam.com
4814 N. 11th St. Suite E
McALLEN, TX. 78504
(956) 540-7850

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED LANDSCAPE ARCHITECT — ANDREW S. HEFFNER — 2526 — STATE OF TEXAS

DATE: 04-11-19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	AH
CHECKED BY	ER

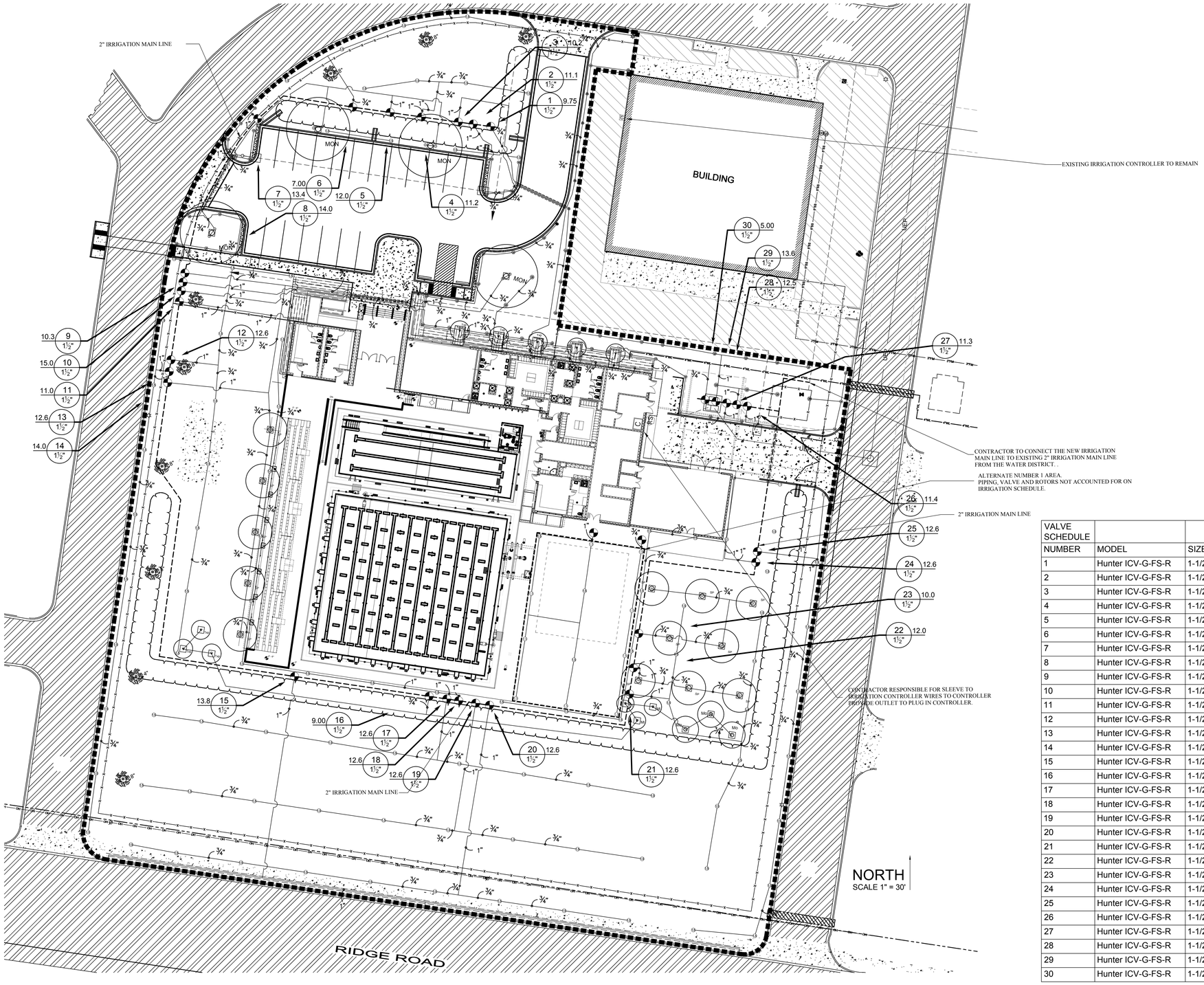
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

LANDSCAPE DETAILS

L3



VALVE SCHEDULE					
NUMBER	MODEL	SIZE	TYPE	GPM	PRECIP
1	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	9.75	1.25 in/h
2	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.13	0.88 in/h
3	Hunter ICV-G-FS-R	1-1/2"	Area for Dripline	8.94	1.44 in/h
4	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	5.60	0.22 in/h
5	Hunter ICV-G-FS-R	1-1/2"	Bubbler	12.00	7.35 in/h
6	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	7.00	0.37 in/h
7	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	13.36	1.41 in/h
8	Hunter ICV-G-FS-R	1-1/2"	Bubbler	14.00	7.01 in/h
9	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	10.33	0.84 in/h
10	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	15.02	0.80 in/h
11	Hunter ICV-G-FS-R	1-1/2"	Area for Dripline	10.55	1.44 in/h
12	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	0.25 in/h
13	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	0.32 in/h
14	Hunter ICV-G-FS-R	1-1/2"	Bubbler	14.00	7.01 in/h
15	Hunter ICV-G-FS-R	1-1/2"	Area for Dripline	13.79	1.44 in/h
16	Hunter ICV-G-FS-R	1-1/2"	Bubbler	9.00	3.40 in/h
17	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	0.15 in/h
18	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	0.27 in/h
19	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	0.15 in/h
20	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	0.32 in/h
21	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	0.22 in/h
22	Hunter ICV-G-FS-R	1-1/2"	Bubbler	6.00	6.81 in/h
23	Hunter ICV-G-FS-R	1-1/2"	Bubbler	10.00	6.81 in/h
24	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	0.56 in/h
25	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	0.35 in/h
26	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.41	0.99 in/h
27	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.25	0.70 in/h
28	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	12.46	0.78 in/h
29	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	13.60	0.78 in/h
30	Hunter ICV-G-FS-R	1-1/2"	Bubbler	5.00	3.40 in/h

HEFFNER DESIGN TEAM, PLLC
aheffner@heffnerdesignteam.com
4814 N. 11th St. Suite E
McALLEN, TX. 78504
(956) 540-7850

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
ROBERT DURAN
18376
LICENSED IRRIGATOR

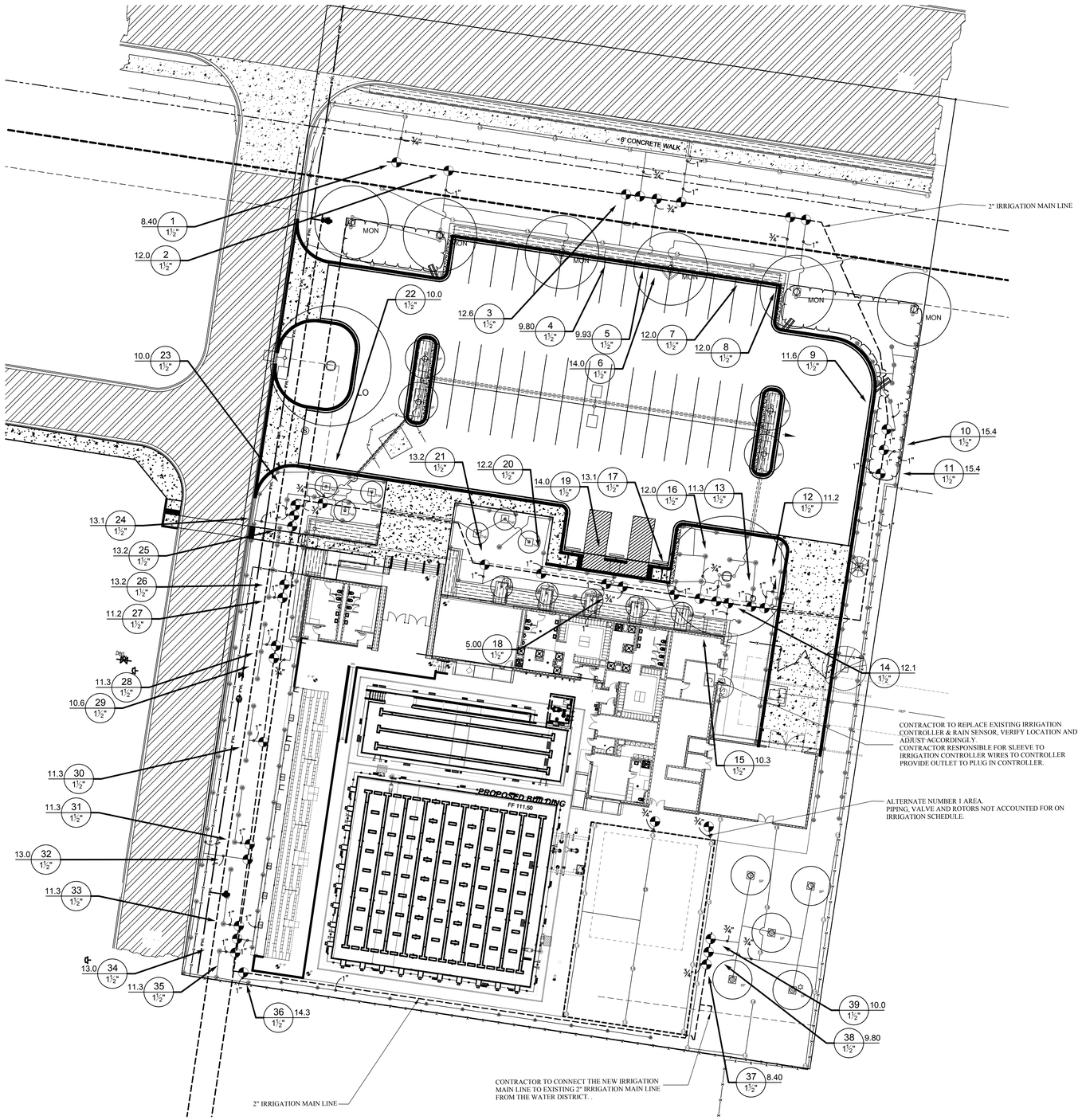
DATE: 04-11-19

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: RD
CHECKED BY: ER
REVISIONS

No.	Description	Date

MEMORIAL IRRIGATION PLAN

IR1



NORTH
SCALE 1" = 20'

VALVE SCHEDULE						
NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PRECIP
1	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	8.40	436.3	0.41 in/h
1	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	9.75	436.3	1.25 in/h
2	Hunter ICV-G-FS-R	1-1/2"	Bubbler	12.00	414.7	7.37 in/h
2	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.13	414.7	0.88 in/h
3	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	341.4	0.31 in/h
3	Hunter ICV-G-FS-R	1-1/2"	Area for Dripline	10.17	341.4	1.44 in/h
4	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	9.80	335.8	0.31 in/h
4	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	11.20	335.8	0.28 in/h
5	Hunter ICV-G-FS-R	1-1/2"	Area for Dripline	9.93	328.8	1.44 in/h
5	Hunter ICV-G-FS-R	1-1/2"	Bubbler	12.00	328.8	7.35 in/h
6	Hunter ICV-G-FS-R	1-1/2"	Area for Dripline	13.96	318.7	1.44 in/h
6	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	7.00	318.7	0.37 in/h
7	Hunter ICV-G-FS-R	1-1/2"	Bubbler	12.00	273.6	7.39 in/h
7	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	13.36	273.6	1.41 in/h
8	Hunter ICV-G-FS-R	1-1/2"	Bubbler	12.00	267.1	7.39 in/h
8	Hunter ICV-G-FS-R	1-1/2"	Bubbler	14.00	267.1	7.05 in/h
9	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.64	170.5	1.43 in/h
9	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	10.33	170.5	0.84 in/h
10	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	15.38	162.1	0.84 in/h
10	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	15.02	162.1	0.80 in/h
11	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	15.38	152.2	0.83 in/h
11	Hunter ICV-G-FS-R	1-1/2"	Area for Dripline	10.97	152.2	1.44 in/h
12	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.24	52.1	0.90 in/h
12	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	52.1	0.25 in/h
13	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.25	46.7	1.28 in/h
13	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	46.7	0.32 in/h
14	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	12.13	37.2	0.77 in/h
14	Hunter ICV-G-FS-R	1-1/2"	Bubbler	14.00	37.2	7.05 in/h
15	Hunter ICV-G-FS-R	1-1/2"	Area for Dripline	13.79	44.1	1.44 in/h
15	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	10.30	44.1	1.57 in/h
16	Hunter ICV-G-FS-R	1-1/2"	Bubbler	12.00	37.2	7.20 in/h
16	Hunter ICV-G-FS-R	1-1/2"	Bubbler	9.00	37.2	3.40 in/h
17	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	13.08	54.6	1.36 in/h
17	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	54.6	0.15 in/h
18	Hunter ICV-G-FS-R	1-1/2"	Bubbler	5.00	75.9	3.40 in/h
18	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	75.9	0.27 in/h
19	Hunter ICV-G-FS-R	1-1/2"	Area for Dripline	14.00	82.8	1.44 in/h
19	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	82.8	0.15 in/h
20	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	12.16	109.8	0.88 in/h
20	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	109.8	0.32 in/h
21	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	13.18	133.2	1.00 in/h
21	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	133.2	0.22 in/h
22	Hunter ICV-G-FS-R	1-1/2"	Bubbler	10.00	211.5	7.17 in/h
22	Hunter ICV-G-FS-R	1-1/2"	Bubbler	12.00	211.5	6.81 in/h
23	Hunter ICV-G-FS-R	1-1/2"	Bubbler	10.00	224.8	6.81 in/h
23	Hunter ICV-G-FS-R	1-1/2"	Bubbler	10.00	224.8	6.81 in/h
24	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	13.11	142.5	1.24 in/h
24	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	142.5	0.60 in/h
25	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	13.18	137.3	0.84 in/h
25	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	12.60	137.3	0.35 in/h
26	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.41	54.7	0.99 in/h
26	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	13.18	54.7	0.83 in/h
27	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.25	49.7	0.70 in/h
27	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.22	49.7	1.23 in/h
28	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	12.46	44.8	0.78 in/h
28	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.25	44.8	1.23 in/h
29	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	13.60	39.7	0.78 in/h
29	Hunter ICV-G-FS-R	1-1/2"	Area for Dripline	4.95	39.7	1.44 in/h
30	Hunter ICV-G-FS-R	1-1/2"	Bubbler	5.00	34.5	3.40 in/h
30	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.25	34.5	1.23 in/h
31	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.25	364.9	1.23 in/h
32	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	13.02	371.1	0.76 in/h
33	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.25	398.6	1.23 in/h
34	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	13.02	403.9	0.76 in/h
35	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	11.27	409.7	1.25 in/h
36	Hunter ICV-G-FS-R	1-1/2"	Turf Spray	14.30	421.5	1.48 in/h
37	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	8.40	639.3	0.49 in/h
38	Hunter ICV-G-FS-R	1-1/2"	Turf Rotor	9.80	644.4	0.49 in/h
39	Hunter ICV-G-FS-R	1-1/2"	Bubbler	10.00	649.8	6.81 in/h

HEFFNER DESIGN TEAM, PLLC
aheffner@heffnerdesignteam.com
4814 N. 11th St. Suite E
McALLEN, TX. 78504
(956) 540-7850

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

DATE: 04-11-19

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: RD
CHECKED BY: ER
REVISIONS

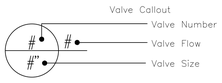
No.	Description	Date

BEARS IRRIGATION PLAN

IR2

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI			DETAIL
CS	Hunter PROS-04-PRS30-CV 5` strip spray Turf Spray, 30 psi regulated 4.0" Pop-Up. With factory installed Drain Check Valve. Co-molded wiper seal with UV Resistant Material.	16	30			
10 10 10 Q H F	Hunter PROS-04-PRS30-CV 10` radius Turf Spray, 30 psi regulated 4.0" Pop-Up. With factory installed Drain Check Valve. Co-molded wiper seal with UV Resistant Material.	57	30			
15 15 15 Q H F	Hunter PROS-04-PRS30-CV 15` radius Turf Spray, 30 psi regulated 4.0" Pop-Up. With factory installed Drain Check Valve. Co-molded wiper seal with UV Resistant Material.	130	30			
10 15	Hunter PROS-04-PRS30-CV adjustable arc Turf Spray, 30 psi regulated 4.0" Pop-Up. With factory installed Drain Check Valve. Co-molded wiper seal with UV Resistant Material.	25	30			
10F 20F	Hunter PROS-PRS30-04-CV-MSBN Multi-Stream Bubbler, 4" pop-up, factory installed drain check valve, 25=.25gpm, 50=0.5gpm, 10=1.0gpm, 20=2.0gpm.	73	30			
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS	DETAIL
1.5	Hunter PGP-ADJ-B Turf Rotor, 4.0" Pop-Up. Adjustable and Full Circle. Standard Angle Blue Nozzle.	156	35	1.40	31'	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY				DETAIL
	Area to Receive Dripline Rain Bird XFS-CV-09-12 XFS-CV On-Surface Landscape Dripline with a Heavy-Duty 4.3 psi Check Valve. 0.9 GPH emitters at 12" O.C. Dripline laterals spaced at 12" apart, with emitters offset for triangular pattern. Specify XF insert fittings. Available Only in California	5,484 l.f.				
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY				DETAIL
	Hunter ICV-G-FS-R 1-1/2" 1", 1-1/2", 2", and 3" Plastic Electric Remote Control Valves, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use. With Filter Sentry Factory Installed Option, and Reclaimed Water ID, Purple Handle.	73				
C	Hunter ACC-3000-SS 30 Station Outdoor Modular Controller. With three ACM-600 module. High-End Commercial Use. Stainless Steel Cabinet.	1				
C	Hunter ACC-99D 2-Wire Decoder Controller with 99 station capacity, metal cabinet.	2				
RS	Hunter Solar-Sync Solar, rain freeze sensor with outdoor interface, connects to Hunter PCC, Pro-C, and I-Core Controllers, install as noted. Includes 10 year lithium battery and rubber module cover, and gutter mount bracket. Wired.	2				
	Irrigation Lateral Line: PVC Class 200 SDR 21	42.4 l.f.				
	Irrigation Lateral Line: PVC Class 200 SDR 21 3/4"	10,065 l.f.				
	Irrigation Lateral Line: PVC Class 200 SDR 21 1"	1,608 l.f.				
	Irrigation Mainline: PVC Schedule 40	1,916 l.f.				
	Pipe Sleeve: PVC Schedule 40	440.2 l.f.				



NOTE:
ALL NON-POTABLE IRRIGATION MATERIAL SHALL BE SO LABELLED.

NOTES

1.- ALL IRRIGATION WORK TO BE PERFORMED BY A TEXAS LICENSED IRRIGATOR.
2.- INSTALL ALL VALVES IN AN ARMOR VALVE BOX WITH COVER OR EQUAL. VALVE SHOULD BE CENTERED IN BOX TO FACILITATE ACCESS TO SOLENOID ASSEMBLY AND MANUAL OPERATORS.
3.- PIPE AS SHOWN IS DIAGRAMMATIC BUT SHOULD BE REASONABLY FOLLOWED. LOCATION OF SPRINKLER HEADS SHALL BE ESTABLISHED BY THE CONTRACTOR BUT DESIGN SPACING MAY NOT BE EXCEEDED WITHOUT AUTHORIZATION FROM THE OWNER.
4.- ALLOW A MINIMUM OF 6" CLEARANCE FROM ANY STRUCTURE, INCLUDING SIDEWALKS, CURBS, BUILDINGS, ETC. WHEN INSTALLING SPRINKLER HEADS
5.- ALL SLEEVES SHALL BE SCH. 40 PVC, SHALL EXTEND 12" BEYOND EDGE OF PAVEMENT OR STRUCTURE, SHALL BE PLACED 24" BELOW TOP OF PAVEMENT AND SHALL BE CAPPED WITH PVC CAPS. DO NOT PENETRATE STRUCTURES WITHOUT PRIOR APPROVAL. LOCATION OF SLEEVES TO BE MARKED IN PAVEMENT WITH AN "S" CONCRETE STAMP.
6.- AFTER INSTALLATION, SYSTEM MUST BE BALANCED BY ADJUSTING PRESSURE REGULATOR CONTROLS ON VALVES.
7.- SYSTEM SHALL REQUIRE A MINIMUM OF 50 LBS. STATIC PRESSURE FOR SYSTEM TO OPERATE PROPERLY. IRRIGATION CONTRACTOR SHALL NOTIFY THE OWNER OF PRESSURE DEFICIENCIES OR IF THE PRIMARY WATER SUPPLY LINES ARE SMALLER THAN 4" AND/OR LONGER THAN 120' FROM THE SOURCE. NOTIFY THE OWNER OF ANY OTHER SITE PROBLEMS THAT MAY ALTER THE EFFECTIVENESS OF THE SYSTEM.
8.- THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SPECIFICATIONS FOR THE LANDSCAPE IRRIGATION SYSTEM.
9.- THE CONTRACTOR SHALL PREPARE "AS-BUILT" DRAWINGS IN AN AUTOCAD FORMAT WHICH SHALL SHOW LOCATIONS OF MAIN LINES, VALVES, CONTROLLERS AND SLEEVES. THE AUTOCAD DRAWINGS SHALL BE DELIVERED ON DISC TO THE OWNERS REPRESENTATIVE FOR REVIEW AND APPROVAL.
10.- ALL SPLICES ARE TO BE CAPPED WITH TAN KING LOW VOLTAGE CONNECTORS. NO FIELD SPLICES WILL BE PERMITTED. WHERE SPLICES ARE NECESSARY ALL MUST BE IN VALVE BOXES.
11.- NO PIPE CROSSES ARE PERMITTED
12.- HAND DIG TRENCHES WITHIN THE DRIP LINE OF EXISTING TREES.
13.- ALL MAIN & LATERAL LINES SHALL BE SET AT A MINIMUM DEPTH OF 18" TO THE TOP OF THE PIPE. ALL LATERAL LINES SHALL BE SET AT A MINIMUM DEPTH OF 18" TO THE TOP OF THE PIPE. ALL ELECTRIC VALVES SHALL BE SET TO A DEPTH OF 18" TO THE TOP OF ADJACENT PIPE.
14.- ALL PIPING TO BE LAID WITH LETTERING UP.
15.- ALL 3/4" - 2" LATERAL PIPING SHALL BE CLASS 200 SOLVENT WELD PVC.
16.- PROVIDE THRUST BLOCKS AS PER DETAILS . ALL THRUST BLOCKING SHALL BE INSPECTED AND APPROVED BY THE OWNER PRIOR TO BACKFILL.
17.- ALL VALVE WIRING SHALL BE #14 UF.
18.- PROVIDE PRESSURE GAUGE ON INLET AND OUTLET.
19.- PROVIDE QUICK COUPLERS AS INDICATED.
20.- DO NOT LOCATE VALVE BOXES IN MULTI-USE ATHLETIC FIELD AREAS. ALL PIPES GOING TO AND FROM RP AND PUMP SHALL BE SCH. 80 PVC PIPE. WRAP PIPE WITH 1/8"x2" INSULATION TAPE #4217-W3 BY NU-CALGON WHOLESALE INC. ST. LOUIS, MO. 63146.
21.- ALL SPRINKLER HEADS SHALL BE SET LEVEL TO FINISH GRADES, PLACED VERTICAL IN THE GROUND, ADJUSTED TO COVER HEAD TO HEAD WITH MINIMAL SPRAY IN AREAS NOT IRRIGATED.
22.- TEN (10) DAYS PRIOR TO START OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE WATER STATIC PRESSURE. CONFIRM WITH OWNER THE WATER STATIC PRESSURE BEFORE COMMENCING WORK.
23.- THE CONTRACTOR SHALL PROVIDE TWO QUICK COUPLER KEYS TO MATCH QUICK COUPLER SPECIFIED.
24.- THE CONTRACTOR SHALL OBTAIN THE PROPER PERMIT FOR IRRIGATION WORK PRIOR TO COMMENCING WORK.
25.- ALL MATERIAL SHOULD BE CONSIDERED OR APPROVED EQUAL.

HEFFNER DESIGN TEAM, PLLC
aheffner@heffnerdesignteam.com
4814 N. 11th St. Suite E
McALLEN, TX. 78504
(956) 540-7850

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
REGISTERED
RICHARD DUNAN
18076
PROFESSIONAL ENGINEER

DATE: 04-11-19

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: RD
CHECKED BY: ER

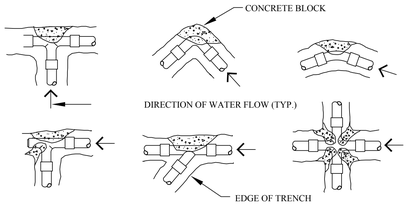
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

IRRIGATION SCHEDULE & NOTES

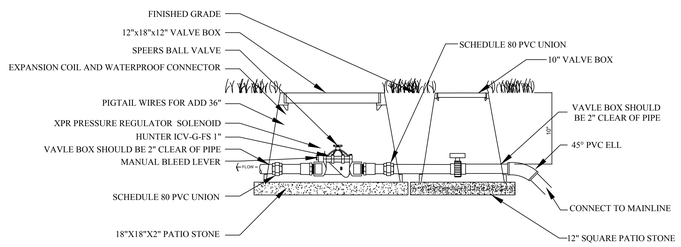
IR3



THRUST BLOCK REQUIREMENTS VS. FITTING TYPE				
	1 1/4" – 2 1/2"	3"	4"	6"
TEES/ELLS	1.00	1.00	1.40	3.2
90° BEND	1.00	1.25	2.00	4.5
45° BEND	1.00	1.00	1.00	2.4

NOTES:
1. THRUST BLOCKING TO BE PLACED AT ALL DEAD ENDS, TEES, BENDS, WYES AND REDUCERS AND ANY OTHER AREA AS DETERMINED BY THE ENGINEER/ARCHITECT.
2. MINIMUM AREAS SHOWN ARE IN SQUARE FEET.
3. BEARING MUST BE ON UNDISTURBED EARTH.
4. THRUST BLOCK SHALL BEAR ON FULL 180° OF PIPE CIRCUMFERENCE.
5. USE A MINIMUM OF ONE (1) CU. FT OF 3000 PSI CONCRETE.

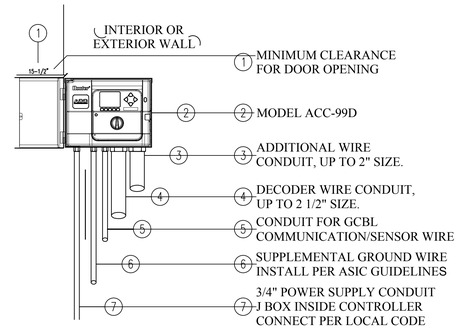
A THRUST BLOCKS
N.T.S.



NOTES:

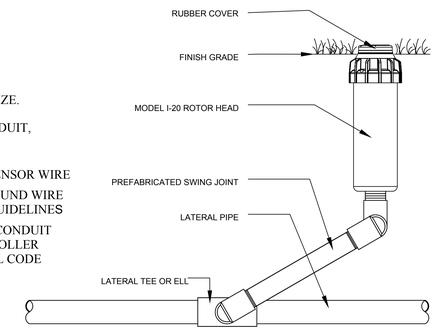
1. MAINTAIN A 2"-3" GAP BETWEEN THE BOTTOM OF THE VALVE AND THE TOP OF THE PATIO STONE.
2. PROVIDE 36" OF SLACK FOR CONTROL WIRES AND NEATLY COIL.
3. PROVIDE ONE EXTRA 14 GA. RED WIRE AT EACH VALVE FOR FUTURE USE.

B HUNTER ICV-G-SF
N.T.S.

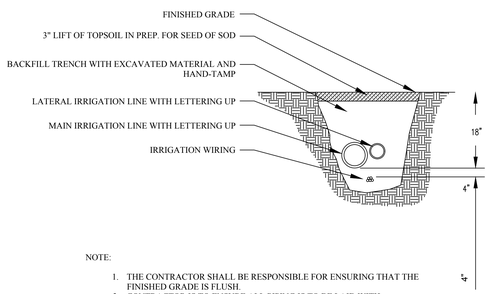


ACC–99C–IMMS CONTROLLER
WALL MOUNT

C HUNTER ACC-99D
N.T.S.



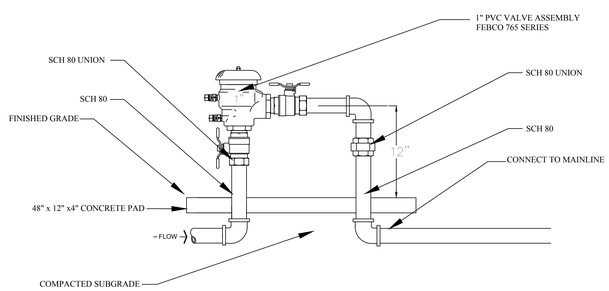
D HUNTER PGP
N.T.S.



NOTE:

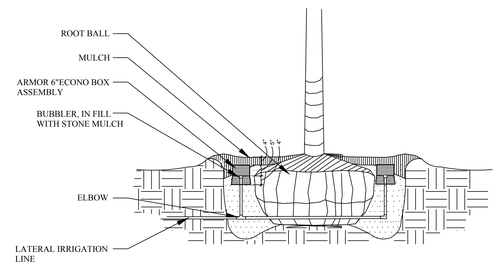
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE FINISHED GRADE IS FLUSH.
2. CONTRACTOR IS TO ENSURE ALL PIPING IS TO BE LAID WITH LETTERING UP.

E IRRIGATION MAINLINE, LATERAL LINE, AND WIRES
N.T.S.

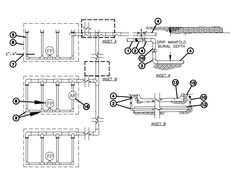


NOTES:
1. INSTALL PVB 12" ABOVE THE HIGHEST DOWNSTREAM OUTLET AND THE HIGHEST POINT IN THE DOWNSTREAM PIPING.
2. CENTER PVB ON 4" CONCRETE PAD. VERIFY CONCRETE FORMS WITH OWNER PRIOR TO POUR.

F FEBCO PVB
N.T.S.



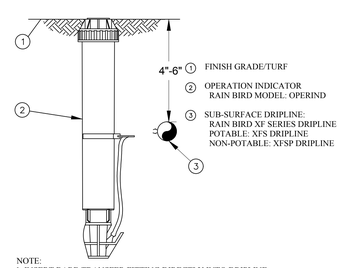
G HUNTER MSBN BUBBLERS
N.T.S.



NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE INSTALLATION SPECIFICATIONS ON RAIN BIRD WEB SITE (WWW.RAINBIRD.COM) FOR SUGGESTED SPACING.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.
3. INSTALL AIR RELIEF VALVE AT HIGH POINTS IN DRIP LATERAL.
4. WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENMDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.
5. DRIP SHALL BE PLACED UNDER LANDSCAPE FABRIC IN LANDSCAPE BEDS WITH DECOMPOSED GRANITE.

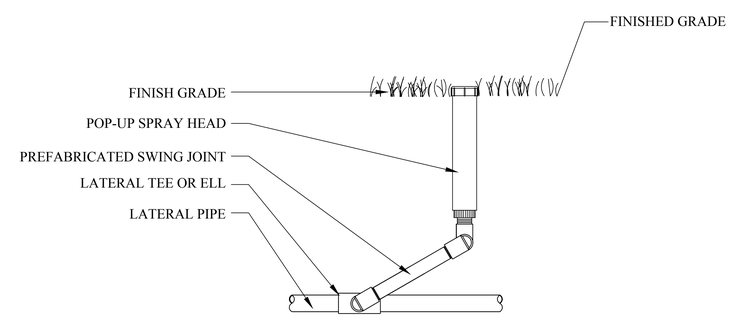
- PVC SUPPLY HEADER
- PVC SCH 40 TEE OR EL (TYPICAL)
- BARB X MALE FITTING: RAIN BIRD XFF-MA FITTING (TYPICAL)
- PVC DRIP MANIFOLD FROM RAIN BIRD CONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- SUB-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE (TYPICAL) POTABLE: XFS DRIPLINE NON-POTABLE: XFSP DRIPLINE
- PERIMETER OF AREA
- PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
- FLUSH POINT (TYPICAL) - SEE RAIN BIRD XFS DETAILS FOR FLUSH POINT INSTALLATION
- BARB X BARB INSERT TEE OR EL: RAIN BIRD XFF-TEE OR RAIN BIRD XFF-ELBOW (TYPICAL)
- PVC RISER PIPE
- PVC SUPPLY MANIFOLD
- PVC SCH 40 SLEEVE PIPE SIZED TWICE THE SIZE OF MANIFOLD PIPE SIZE
- PAVEMENT AND CURB
- TURF OR MULCH
- FINISH GRADE
- ½" AIR RELIEF VALVE: RAIN BIRD MODEL: ARV050 SEE RAIN BIRD XFS DETAILS FOR AIR RELIEF INSTALLATION

H RAINBIRD XFS-CV DRIP LINE
N.T.S.



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 ¼ PATTERN. THE FLOW FROM THE NOZZLE, 0.3 GPM, SHOULD BE ACCOUNTED FOR IN THE SYSTEM DESIGN.

I RAINBIRD XFS DRIP INDICATOR
N.T.S.



J HUNTER PRO SPRAYS
N.T.S.

HEFFNER DESIGN TEAM, PLLC
aheffner@heffnerdesignteam.com
4814 N. 11th St. Suite E
McALLEN, TX. 78504
(956) 540-7850

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS — ROBERT DURAN — 14875 — REGISTERED PROFESSIONAL ENGINEER

DATE: 04-11-19

CLIENT	
PROJECT NUMBER	PSJA ISD
DATE	18309SP
DRAWN BY	04.11.19
CHECKED BY	RD
REVISIONS	ER

No.	Description	Date

ISSUED FOR BIDS

IRRIGATION DETAILS

IR4

GENERAL NOTES

CHANIN
ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369

GENERAL

1. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, SHORING FOR THE EARTH BANKS, FORMS, SCAFFOLDING, PLANNING, SAFETY NETS, SUPPORT AND BRACING FOR CRANES, GIN POLES, ETC. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
2. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
3. EQUIPMENT FRAMING LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO HVAC, PLUMBING, OR ELECTRICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. EXACT WEIGHTS AND LOCATIONS OF MECHANICAL EQUIPMENT SHALL BE COORDINATED BY CONTRACTOR. IF THE FINAL LOCATION VARIES FROM THAT SHOWN ON THE PLANS, CONTRACTOR TO NOTIFY ARCHITECT AND ENGINEER FOR APPROVAL BEFORE INSTALLATION.
4. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THESE STRUCTURAL NOTES, THE SPECIFICATIONS, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.
5. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE AND SHALL BE RESPONSIBLE FOR CONDITIONS OF ALL WORK AND MATERIALS.
6. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS AND ELEVATIONS. CONTRACTOR SHALL REPORT ANY DISCREPANCIES IN WRITING TO THE ARCHITECT. ANY CONFLICT BETWEEN THE DRAWING AND SPECIFICATIONS OF THE VARIOUS TRADES INVOLVED SHALL BE REPORTED TO THE ARCHITECT AND ENGINEER.
7. DETAILS SHOWN ON DRAWINGS APPLY AT SIMILAR CONDITIONS.
8. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL STANDARDS AND TO ALL APPLICABLE PROVISIONS OF THE GOVERNING BUILDING CODE.
9. THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED IN WRITING WHEN WORK COMMENCES.
10. CONTRACTOR SUBSTITUTIONS: ANY MATERIALS OR PRODUCTS THAT ARE SUBMITTED FOR APPROVAL THAT ARE DIFFERENT FROM THE MATERIALS OR PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS WILL ONLY BE CONSIDERED IF THE FOLLOWING CRITERIA ARE SATISFIED.
    A) A COST SAVING TO THE OWNER IS DOCUMENTED AND SUBMITTED WITH THE REQUEST
    B) THE MATERIAL OR PRODUCT HAS BEEN APPROVED BY THE INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS (ICBO) AND THE ICBO REPORT IS SUBMITTED WITH THE REQUEST.

STRUCTURAL OBSERVATION

1. THE PROFESSIONAL ENGINEER OR HIS/HER AUTHORIZED REPRESENTATIVE SHALL CONDUCT ALL STRUCTURAL OBSERVATIONS. STRUCTURAL OBSERVATIONS SHALL BE FOR THE PURPOSE OF ASCERTAINING GENERAL COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. HOWEVER, SUCH OBSERVATION VISITS SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATIONS AND RESPONSIBILITIES TO THE CONSTRUCTION DOCUMENTS.
2. ITEMS THAT REQUIRE A STRUCTURAL OBSERVATION ARE AS FOLLOWS:
   A. STEEL REINFORCEMENT IN SLAB OR FOUNDATION
   B. FRAMING OF ROOF STRUCTURE BEFORE METAL DECKING IS INSTALLED
   C. EXTERIOR METAL DECKING INSTALLATION
   D. CMU WALL REINFORCING BEFORE FILLING WITH GROUT
3. NOTIFY ENGINEER 24 HOURS IN ADVANCE WHEN A STRUCTURAL OBSERVATION IS REQUIRED.
4. WORK SHALL NOT CONTINUE AT THESE AREAS UNTIL OBSERVATION AND APPROVAL BY ENGINEER. FAILURE BY THE CONTRACTOR TO PROVIDE PROPER NOTICE FOR AN OBSERVATION VISIT AT THE REQUIRED TIME OR ADDITIONAL WORK PERFORMED WITHOUT AN OBSERVATION VISIT WILL BE DONE AT CONTRACTOR'S RISK AND MAY BE SUBJECT TO COMPLETE OR PARTIAL REMOVAL TO VERIFY COMPLIANCE OF PREVIOUS WORK.

SHOP DRAWINGS & SUBMITTALS

1. SUBMITTAL THAT WILL BE REQUIRED FOR APPROVAL INCLUDE:
   A. CONCRETE MIX DESIGN
   B. CURING COMPOUND FOR CONCRETE
   C. REINFORCING STEEL (INCLUDING CMU WALL)
   D. STRUCTURAL STEEL
   E. STEEL JOIST
   F. METAL DECKING
   G. CMU WALL COMPONENTS
2. DEFERRED SUBMITTALS THAT WILL REQUIRE APPROVAL INCLUDE:
   A. PRE-ENGINEERED BUILDING CALCULATIONS (INCLUDING REACTIONS)
3. DEFERRED SUBMITTALS SHALL BE DESIGNED BY A TEXAS REGISTERED PROFESSIONAL ENGINEER ACCORDING TO THE DESIGN CRITERIA STATED IN THE PLANS AND SPECIFICATIONS THE SUBMITTAL SHALL INCLUDE SIGNED AND SEALED CALCULATIONS.
2. ALLOW (2) WEEKS MINIMUM FOR REVIEW OF SHOP DRAWINGS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DELAYS CAUSED BY REJECTION OF INADEQUATE OR COMPLETE SHOP DRAWINGS.
3. PRIOR TO ISSUING THE SUBMITTALS TO THE ENGINEER, THE CONTRACTOR SHALL REVIEW THE SHOP DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSION WITH ARCHITECTURAL PLANS.
4. REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS FOR GENERAL CONFORMANCE TO THE STRUCTURAL DRAWINGS. APPROVAL OF THE SHOP DRAWINGS BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR FOR ANY ERRORS OR OMISSIONS IN DIMENSIONS OR MATERIALS INDICATED ON THE SHOP DRAWINGS.

CONTRACTOR NOTE

THE STRUCTURAL SYSTEM FOR THIS PROJECT SHALL NOT BE CONSTRUCTED BY USING THE STRUCTURAL DRAWINGS ALONE. THESE DRAWINGS WERE DEVELOPED FROM DATA DERIVED PRIMARILY FROM THE ARCHITECTURAL DRAWINGS AND SECONDARILY FROM MEP, CIVIL AND OTHER DISCIPLINES' DOCUMENTS. IT IS INTENDED THAT CONSTRUCTION PROCEED BY UTILIZING ALL OF THE INFORMATION CONTAINED IN THE ENTIRE SET OF CONSTRUCTION DOCUMENTS TAKEN AS A WHOLE; FAILURE TO DO SO WILL RESULT IN ERRORS WHICH SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

© COPYRIGHT 2019 - ALL RIGHTS RESERVED

These drawings, as instruments of professional service, are the property of Chanin Engineering LLC for use solely with respect to this Project and shall not be reproduced for other purposes.

The Professional Engineer whose seal appears on the structural construction documents is the project Structural Engineer-of-Record (SER) who bears legal responsibility for the performance of the structural framing relating to the public health, safety and welfare. No other party, whether or not a Professional Engineer, may complete, correct, revise, delete or add to these construction documents or perform inspections of the work without the written permission of the SER.

DESIGN CRITERIA

1. DESIGN LOADS, STRUCTURAL ANALYSIS AND PREPARATION OF STRUCTURAL MEMBERS ARE BASED ON THE FOLLOWING CRITERIA:
2. CODE: .... IBC 2012
3. VERTICAL LOADS
   A. ROOF DEAD LOAD (BUILT-UP ROOF): .... 25 PSF
   B. ROOF LIVE LOAD(REDUCIBLE) : .... 20 PSF
   C. PONDING LOAD: .... SEE ROOF PONDING PLAN
   D. UPLIFT LOAD .... SEE ROOF UPLIFT PLAN

   E. MECHANICAL LOAD:
   THE GENERAL CONTRACTOR SHALL SUBMIT ACTUAL WEIGHTS AND LOCATIONS OF EQUIPMENT TO BE USED IN THE PROJECT TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOADS USED IN THE DESIGN AT LEAST TWO WEEKS PRIOR TO FABRICATION AND CONSTRUCTION OF THE SUPPORTING STRUCTURE.
4. LATERAL LOADS
   A. WIND SPEED (V-ULT): .... 141 MPH
   WIND SPEED (V-ASD) .... 109 MPH
   B. EXPOSURE CATEGORY: C
   C. IMPORTANCE FACTOR: 1.00
   D. BUILDING CATEGORY: III
   E. SEISMIC DESIGN CATEGORY: .... A
   F. SITE CLASS: .... D
5. GEOTECHNICAL ENGINEERING REPORT (PSJA EARLY COLLEGE HS):
   PROVIDED BY: TERRACON CONSULTANTS, INC.
   PROJECT NUMBER: 88185143
   DATED: 01/03/19
   FOUNDATION DESIGN BASED ON THE FOLLOWING PARAMETERS
   A. EFFECTIVE PI: 20
   B. CLIMATIC RATING (Cw): 15
   C. MINIMUM BEAM DEPTH: .... 18 IN
   D. MINIMUM FOOTING WIDTH: .... 30 IN
   E. ALLOWABLE BEARING CAPACITY (BEAMS) 2000PSF
   F. ALLOWABLE BEARING CAPACITY (FOOTING) 2000PSF
   G. EXISTING PVR: .... 1.00 IN
   H. PVR (CUT 24 IN FILL 18 IN) .... 1 INCH
   I. MINIMUM DEPTH (PIER): .... 10 FT
   J. MAXIMUM DEPTH (PIER): .... 18 FT
   K. ALLOWABLE SIDE SHEAR (PIER): 600PSF
   L. ALLOWABLE END BEARING (PIER): 9000PSF
6. GEOTECHNICAL ENGINEERING REPORT (PSJA MEMORIAL COLLEGE HS):
   PROVIDED BY: TERRACON CONSULTANTS, INC.
   PROJECT NUMBER: 88185144
   DATED: 01/10/19
   FOUNDATION DESIGN BASED ON THE FOLLOWING PARAMETERS
   A. EFFECTIVE PI: 29
   B. CLIMATIC RATING (Cw): 15
   C. MINIMUM BEAM DEPTH: .... 18 IN
   D. ALLOWABLE BEARING CAPACITY (BEAMS) 3000PSF
   E. EXISTING PVR: .... 2.5 IN
   F. PVR (CUT 24 IN FILL 42 IN) .... 1 INCH
   G. MINIMUM DEPTH (PIER): .... 15 FT
   H. MAXIMUM DEPTH (PIER): .... 18 FT
   I. ALLOWABLE SIDE SHEAR (PIER): 600PSF
   J. ALLOWABLE END BEARING (PIER): 9000PSF

CONCRETE

1. ALL CONCRETE WORK SHALL BE EXECUTED IN ACCORDANCE WITH ACI 318 AND ACI 301 LATEST EDITION.
2. CEMENT SHALL CONFORM TO ASTM CI50 TYPE I AGGREGATE SHALL CONFORM TO ASTM C33.
3. CONCRETE SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH AS FOLLOWS:

MEMBER TYPE	STRENGTH	SLUMP	MAX AGG.
FOUNDATION AND SLAB	3000 PSI	4"-6"	1.5 IN.
C.I.P CONC. BEAMS	4000 PSI	4"-7"	.75 IN.
PIERS	4000 PSI	4"-7"	1.5 IN.

4. INSTALL 15 MIL VAPOR RETARDER UNDER SLABS ON GRADE AND ALONG SIDE OF TRENCHES IN ACCORDANCE WITH ASTM E1643. LAP JOINTS MINIMUM OF 12 INCHES.
5. PLACE CONCRETE CONTINUOUSLY BETWEEN PRE-DETERMINED EXPANSION AND CONSTRUCTION JOINTS.
6. ALL CONSTRUCTION JOINT LOCATIONS TO BE APPROVED BY ARCHITECT AND STRUCTURAL ENGINEER.
7. HORIZONTAL CONSTRUCTION JOINTS SHALL NOT BE PERMITTED.
8. CURE CONCRETE IN ACCORDANCE WITH ACI 308.1
9. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR LOCATIONS OF ALL DEPRESSIONS, OPENINGS, ACCESSORIES, ETC.
10. CONDUIT AND PLUMBING LINES SHALL BE PLACED BELOW SLAB REINFORCING AND SHALL BE NO BIGGER THAN 1 INCH.
11. FLYASH MAY BE USED TO REPLACE A PORTION OF THE PORTLAND CEMENT. THE RATIO OF FLYASH TO THE TOTAL OF THE FLYASH AND CEMENT IN A MIX SHALL NOT EXCEED 20%. FLYASH SHALL CONFORM TO ASTM C618, TYPE C OR F.
12. ALL FLOORS SHALL BE CONSTRUCTED WITH A MINIMUM FLATNESS FF = 35 AND A MINIMUM LEVELNESS OF FL = 25
13. CONTRACTION JOINTS TO BE INSTALLED WITHIN 12 HOURS OF POURING FOUNDATION.
14. TESTING OF CONCRETE SHALL BE DONE AS FOLLOWS:
    1) SETS SHALL CONSIST OF 3 CYLINDERS
       ONE TESTED AT 7 DAYS
       TWO TESTED AT 28 DAYS
    2) ONE SET SHALL BE TAKEN FOR EACH 150 CY AND FOR EVERY 5000 SF OF SURFACE AREA AND AT LEAST ONCE PER DAY OF POURING
    3) A MINIMUM OF 3 SETS SHALL BE TAKEN FOR EACH CLASS OF CONCRETE
15. NO WATER SHALL BE ADDED TO THE CONCRETE AT THE JOBSITE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE CONCRETE SUPPLIER TO ENSURE A PUMPABLE AND WORKABLE MIX WITHOUT THE ADDITION OF WATER AT THE JOBSITE. THE USE OF PLASTICIZERS, RETARDANTS AND OTHER ADDITIVES SHALL BE AT THE OPTION OF THE CONTRACTOR SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER. FOLLOW THE RECOMMENDATIONS OF THE MANUFACTURER FOR THE PROPER USE OF ADDITIVES. THE USE OF CALCIUM CHLORIDE OR OTHER CHLORIDE BEARING SALTS SHALL NOT BE PERMITTED.
16. PLACE CONCRETE IN A MANNER SO AS TO PREVENT SEGREGATION OF THE MIX. DELAY FLOATING AND TROWELING OPERATIONS UNTIL CONCRETE HAS LOST SURFACE WATER SHEEN OR ALL FREE WATER. DO NOT SPRINKLE FREE CEMENT ON THE SLAB SURFACE. FINISHING OF SLAB SURFACES SHALL COMPLY WITH THE RECOMMENDATIONS OF AC1 302.1 AND 304.
17. UNLESS SPECIFIED, CONCRETE MUST REACH THE FOLLOWING PERCENTAGES OF ITS 28-DAY COMPRESSIVE STRENGTH (F'c), BEFORE FORMS MAY BE REMOVED.

    WALL, COLUMNS, & BEAM SIDES..........40%
    JOIST PANS & BEAM BOTTOMS (IF RESHORED)..........70%
    SHORING FOR FLOOR SYSTEMS (IF NOT RESHORED)..........85%
18. NO CONCRETE SHALL BE PLACED OUTSIDE OF THESE SPECIFICATIONS WITHOUT THE OWNER'S PRIOR APPROVAL. ANY ITEMS NOT IN COMPLIANCE WITH THE OUTLINED SPECIFICATION SHALL BE REPORTED TO THE OWNER AND STRUCTURAL ENGINEER WITHIN 24 HOURS.
19. CONSTRUCTION VEHICLE LOADS SHALL NOT BE PERMITTED ON ELEVATED SLABS AT ANY TIME.
20. ALL RETAINING WALLS TO BE SHORED UNTIL UPPER SLAB IS IN PLACE AND HAS REACHED 70% OF ITS DESIGN STRENGTH OR THE RETAINING WALL HAS REACHED 100% OF ITS DESIGN STRENGTH. PROVIDE GRANULAR BACKFILL AND PERFORATED DRAIN PIPE CONNECTED TO SITE DRAINAGE, RE: CIVIL PLAN.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE TO AISC SPECIFICATIONS.
2. MATERIALS USED SHALL BE AS FOLLOWS=
   A. STRUCTURAL W-SHAPES - ASTM A992 GRADE 50
   B. STRUCTURAL M-SHAPES AND S-SHAPES - ASTM A36
   C. STRUCTURAL T-SHAPES - CUT FROM W-SHAPES
   D. CHANNELS AND ANGLES - ASTM A36
   E. ROUND HOLLOW STRUCTURAL SECTIONS - ASTM A500 GRADE B
   F. SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SECTIONS - ASTM A500 GRADE B
   G. STRUCTURAL PLATES - ASTM A36
   H. STRUCTURAL BARS - ASTM A36
   I. HIGH STRENGTH BOLTS - ASTM A325
   J. ELECTRODES - SERIES E70
3. ALL WELDING SHALL BE DONE BY CERTIFIED WELDERS IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY SPECIFICATIONS.
4. CONNECTIONS NOT DETAILED AND/OR SCHEDULED ON STRUCTURAL DRAWINGS SHALL BE DETAILED BY FABRICATOR AND MARKED FOR ENGINEERS APPROVAL. CONNECTIONS TO BE DESIGNED TO AISC SPECIFICATIONS AND SHALL BE CAPABLE OF SUPPORTING 55% OF THE MAXIMUM UNIFORM LOAD CAPACITY FOR THE SPAN SPECIFIED, SHOWN IN THE TABLES OF UNIFORM CONSTANTS OF THE AISC MANUAL OF STEEL CONSTRUCTION.
5. REFER TO ARCHITECTURAL PLANS FOR ANY MISCELLANEOUS STEEL. MISCELLANEOUS STEEL AND CONNECTIONS SHALL BE DESIGNED BY STEEL FABRICATOR.
6. HOT DIP GALVANIZE, IN ACCORDANCE WITH ASTM A123 AND ASTM A153, STRUCTURAL STEEL AND FASTENERS PERMANENTLY EXPOSED TO THE WEATHER.
7. STEEL SUPPORTING OR CONNECTED TO HVAC AND OTHER EQUIPMENT AS SHOWN ON THE DRAWINGS IS SHOWN FOR BIDDING PURPOSES ONLY CONTRACTOR SHALL COORDINATE EXACT LOCATION AND SIZE BEFORE COMMENCING WORK.
8. STRUCTURAL STEEL SHALL BE PAINTED WITH ONE COAT OF RUST INHIBITIVE PAINT.
9. STRUCTURAL DRAWINGS SHALL NOT BE REPRODUCED IN WHOLE OR IN PART FOR SHOP DRAWING SUBMITTALS.
10. PROVIDE 10 TONS OF RED IRON ALLOWANCE TO BE USED AS DIRECTED BY STRUCTURAL ENGINEER. INCLUDE LABOR COSTS IN THE ALLOWANCE. ANY UNUSED ALLOWANCE SHALL BE CREDITED BACK TO OWNER AT A COST OF $3500 PER TON.
11. ALL WELDED CONNECTION SHALL BE MADE WITH A 1/4" FILLET WELD U.N.O.
12. PROVIDE 1/2" GAP AT ALL PENETRATIONS THROUGH CMU WALL AND INFILL WITH ELASTOMERIC MATERIAL.
13. STEEL FABRICATOR SHALL BE CERTIFIED BY ONE OF THE FOLLOWING: AISC/ IBC/ IAS-ICC

STEEL JOISTS

1. ALL STEEL JOISTS AND JOIST GIRDERS SHALL BE DETAILED, FABRICATED AND ERECTED PER AISC AND SJI SPECIFICATIONS FOR OPEN-WEB STEEL JOISTS.
2. STEEL JOISTS SHALL BE WELDED TO SUPPORTING MEMBERS UNLESS NOTED OTHERWISE.
3. JOIST BEARING SHALL BE A MINIMUM OF 2 1/2 INCHES WITH A MINIMUM 2 INCH LONG FILLET WELD EACH SIDE OF BEARING.
4. JOISTS AT COLUMN LOCATIONS OR CLOSEST JOIST TO COLUMN SHALL BE BOLTED.
5. PROVIDE BRIDGING IN ACCORDANCE WITH SJI SPECIFICATIONS. BRIDGING SHALL BE CONTINUOUS THROUGH STRUCTURAL STEEL MEMBERS, AND SHALL BE ANCHORED TO SPANDREL MEMBERS OR WALLS. PROVIDE ADDITIONAL BRIDGING WHERE REQUIRED FOR UPLIFT.
6. BOTTOM CHORD EXTENSIONS TO BE PROVIDED AS REQUIRED BY ARCHITECTURAL PLANS.
7. JOISTS SUPPORTING MECHANICAL UNITS TO BE DESIGNED FOR UNIT WEIGHT IN ADDITION TO GRAVITY LOADS SHOWN IN DESIGN CRITERIA.
8. REFER TO MECHANICAL ENGINEERING PLANS FOR EXACT UNIT WEIGHT AND LOCATIONS.
9. MECHANICAL EQUIPMENT SHALL BE SUPPORTED BY TOP CHORD OF JOIST ONLY.
10. PROVIDE SUPPORT ANGLES AROUND ANY OPENINGS IN ROOF DECK.
11. JOISTS AND ACCESSORIES SHALL BE PAINTED WITH ONE COAT OF RUST INHIBITIVE PAINT.
12. JOISTS TO BE DESIGNED PER LOADS SHOWN IN DESIGN CRITERIA.
13. DESIGN JOISTS FOR A 500 LB CONCENTRATED LOAD AT MIDSPAN TO ACT CONCURRENTLY WITH OTHER LOADS IN DESIGN CRITERIA.
14. JOIST MANUFACTURER SHALL DESIGN BOTTOM CHORDS OF ALL OPEN WEB JOISTS AND JOIST GIRDERS TO SUPPORT A 50 lb LOAD LOCATED ANYWHERE ALONG THE LENGTH OF THE CHORD.
15. HANGERS FOR MECHANICAL EQUIPMENT WITH REACTIONS IN EXCESS OF 50 lbs MUST BE LOCATED AT THE PANEL POINTS OF THE JOISTS. PROVIDE JOIST REINFORCING IN ACCORDANCE WITH THE TYPICAL DETAILS WHERE HANGERS ARE REQUIRED TO BE LOCATED MORE THAN 4 INCHES FROM THE JOIST PANEL POINTS.
16. PROVIDE FLAT BEARING FOR ALL JOISTS AND JOIST GIRDERS. BEAR JOISTS AND JOIST GIRDERS ON SUPPORTS IN ACCORDANCE WITH SJI SPECIFICATIONS.
17. PROVIDE 1/2" GAP AT ANY PENETRATIONS THROUGH CMU WALL AND INFILL WITH ELASTOMERIC MATERIAL.
18. STEEL JOISTS TO BE DESIGNED BY TEXAS REGISTERED PROFESSIONAL ENGINEER.
19. STEEL JOIST SHOP DRAWINGS SHALL BE SEALED BY A TEXAS REGISTERED PROFESSIONAL ENGINEER.

STEEL REINFORCING

1. ALL REINFORCEMENT SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A-615 GRADE 60.
2. REINFORCING STEEL SHALL BE DESIGNED, DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH THE LATEST ACI DETAILING MANUAL (SP-66) AND CSRI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE, (ACI #315) LATEST EDITIONS.
3. BARS SCHEDULED OR DETAILED "CONT" SHALL BE SPLICED ONLY WHEN UNAVOIDABLE AT POINTS OF MINIMUM STRESS AND WITH A MINIMUM LAP AS FOLLOWS:
   A. HORIZONTAL BARS w/ MORE THAN 12" OF FRESH CONCRETE CAST BELOW LAPS.
      #6 BARS AND SMALLER - 57 BAR DIAMETERS
      #7 BARS AND BIGGER - 72 BAR DIAMETERS
   B. OTHER BARS
      #6 BARS AND SMALLER - 44 BAR DIAMETERS
      #7 BARS AND BIGGER - 55 BAR DIAMETERS
   C. ALL SPLICES TO BE STAGGERED A MINIMUM OF 4'-0". TOP BAR AND BOTTOM BAR SPLICES TO BE LOCATED AT MID-SPAN AND WITHIN 1/3 SPAN RESPECTIVELY.
4. CORNER REINFORCING BARS SHALL BE USED AT ALL CORNERS AND INTERSECTIONS.
5. EXTEND THE SLAB REINFORCING STEEL PERPENDICULAR TO EXTERIOR GRADE BEAM TO THE TOP OUT SIDE REINFORCING BAR OF BEAM.
6. SPACE REINFORCING BARS WITH MINIMUM CLEAR SPACING IN ACCORDANCE WITH ACI 318 OF ONE BAR DIAMETER, BUT NOT LESS THAN 1 INCH. FOR COMPRESSION MEMBERS, SPACE AT A MINIMUM OF 1.5 INCHES OR 1.5 BAR DIAMETERS, WHICHEVER IS GREATER.
7. WHERE REINFORCING BARS ARE PLACED IN MULTIPLE LAYERS, PLACE UPPER BARS DIRECTLY ABOVE LOWER BARS.
8. MAINTAIN CONCRETE COVER AROUND REINFORCEMENT IN ACCORDANCE WITH ACI 318 AND AS FOLLOWS:
   A. FOOTING AND CONCRETE CAST AGAINST EARTH - 3 INCHES
   B. EXPOSED TO EARTH OR WEATHER
      #6 BARS AND BIGGER - 2 INCHES
      #5 BARS AND SMALLER - 1.5 INCHES
   C. BEAMS AND COLUMNS - 1.5 INCHES
   D. SLABS AND WALLS - 1 INCH
9. REPAIR ANY DAMAGE TO VAPOR RETARDER PER MANUFACTURER SPECIFICATIONS.
10. ADDITIONAL REINFORCING TO BE PROVIDED ON SITE FOR USE AS DIRECTED BY STRUCTURAL ENGINEER.
    #4 BARS - 100 FT.
    #5 BARS - 100 FT.
    #6 BARS - 100 FT.

MASONRY

1. MATERIALS:
   A. CONCRETE BLOCK: MEDIUM WEIGHT ASTM C90 (HOLLOW) ASTM C145 (SOLID) MINIMUM COMPRESSIVE STRENGTH: 1900 PSI
   B. MORTAR: ASTM C270 TYPE S.
   C. GROUT: MINIMUM COMPRESSIVE STRENGTH: 2000 PSI
   D. NET AREA COMPRESSIVE STRENGTH: 1500 PSI TO BE TESTED IN ACCORDANCE TO ATSM 1314 STANDARDS.
   E. JOINT REINFORCING: MILL GALVANIZED FINISH, 9 GAGE MINIMUM SIDE WIRES AND CROSS WIRES (DUR-O-WALL). A HOHMANN + BARNARD COMPANY.
   F. BAR REINFORCING: ASTM A615, GRADE 60 (UNLESS NOTED OTHERWISE).
   G. TYPICAL CMU WALL REINFORCING SHALL BE #5 (V) AT 48" O.C. AND #5 (H) AT 8'-0" O.C. U.N.O. ON DRAWINGS.
2. REINFORCED MASONRY, WHERE VERTICAL BARS ARE TO BE GROUTED INTO CORES, THE FOLLOWING REQUIREMENTS APPLY:
   A. PROVIDE DOWELS FROM WALL, SAME SIZE AND SPACING AS WALL BARS. LAP 48 BAR DIAMETERS MINIMUM WITH WALL BAR.
   B. PROVIDE A CONTINUOUS VERTICAL CAVITY, AT LEAST 2" x 3" IN SIZE, FREE OF MORTAR DROPPINGS.
   C. PROVIDE REBAR ALIGNMENT DEVICES AT A MAXIMUM SPACING OF 96 BAR DIAMETERS (MINIMUM OF 2 PER BAR).
   D. AT SPLICES IN VERTICAL BARS, PROVIDE MECHANICAL COUPLERS OR 48 BAR DIAMETER LAP.
   E. ALL REINFORCEMENT MUST BE INSTALLED AND SECURELY ANCHORED IN PLACE PRIOR TO PLACEMENT OF GROUT.
   F. MAXIMUM HEIGHT OF GROUT LIFT = 4'-0'. UNLESS HIGH LIFT GROUTING PROCEDURES ARE EMPLOYED IN ACCORDANCE WITH ASI 530-99
3. MISCELLANEOUS:
   A. FILL CORE SOLID AROUND ANCHOR BOLTS.
   B. PROVIDE SOLIDLY FILLED HOLLOW BLOCKS AT ALL EMBED ANCHOR LOCATIONS.
   C. SET WELD PLATES IN BOND BEAMS AFTER THE GROUT IS PLACED, BUT WHILE IT IS STILL PLASTIC.
   D. HOLLOW MASONRY UNITS TO BE LAID WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. WEBS SHALL ALSO BE BEDDED IN ALL COURSES OF PIERS, COLUMNS, AND PILASTERS, AND IN THE STARTING COURSE ON FOOTING, AND WHEN ADJACENT TO CELLS OR CAVITIES TO BE REINFORCED OR FILLED WITH CONCRETE OR GROUT. SOLID UNITS TO BE LAID WITH FULL HEAD AND BED JOINTS.
   E. PROVIDE JOINT REINFORCING AT 16 INCHES, EXCEPT AS NOTED.
   F. LAP JOINT REINFORCING 6 INCHES FOR STANDARD, 15 INCHES FOR HEAVY WEIGHT.
   G. VERTICAL CONTROL JOINTS SHALL BE PROVIDED FULL HEIGHT OF MASONRY WALLS AS LOCATED ON THE DRAWINGS. THE JOINT SHALL BE PROVIDED AS A CONTINUOUS HEAD JOINT WITH MORTAR RAKED BACK 3/4" AT BOTH FACES AND 50% OF THE HORIZONTAL JOINT REINFORCING CUT AT THE JOINT. AFTER THE MORTAR IS SET, THE JOINT SHALL BE CAULKED.
   H. FILL ALL VOIDS AND CELLS WITHIN 12" EITHER SIDE OF CENTERLINE OF BEAM AND/OR COLUMN BEARING LOCATIONS WITH A #4 REINFORCING BAR AND GROUT U.N.O.
   I. ALL CMU WALLS MUST HAVE SPECIAL INSPECTION PER IBC CODE 2012 SECTION 1705.4 "MASONRY CONSTRUCTION" ON CHAPTER 17-"STRUCTURAL TEST & SPECIAL INSPECTION". THE CONTRACTOR MUST PROVIDE REPORTS OF THESE "SPECIAL INSPECTIONS".
   J. BARS SCHEDULED "CONTINUOUS" SHALL BE SPLICED AS FOLLOWS:

REINFORCING BAR SIZE	MIN. LAP SPLICE LENGTH
#5	30"
#6	36"
#7	42"
#8	48"
#9	54"
#10	MECHANICAL CONNECTOR
#11	MECHANICAL CONNECTOR

4. STABILITY AND BRACING:
   ALL MASONRY WALLS SHOWN ON THE CONTRACT DRAWINGS HAVE BEEN DESIGNED TO RESIST THE REQUIRED CODE VERTICAL AND LATERAL FORCES APPLIED TO THEM IN THEIR FINAL CONSTRUCTED POSITION ONLY ASSUMING FULL BRACING AT TOP, BOTTOM, AND/OR SIDES AS INDICATED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT CONSTRUCTION RESIST ANY ERECTION VERTICAL OR LATERAL LOADS THAT COULD BE IMPOSED ON THE WALLS PRIOR TO CONSTRUCTION COMPLETION.
5. TESTING:
   A. TESTING FREQUENCY: ONE SET OF SPECIFIED TESTS FOR EVERY 5,000 SF OF COMPLETED WALL AREA.
   B. TESTING OF MORTAR MIX: IN ACCORDANCE WITH ASTM C780 FOR AGGREGATE RATIO AND WATER CONTENT, AIR CONTENT, CONSISTENCY, AND COMPREHENSIVE STRENGTH.
   C. TESTING OF GROUT MIX: IN ACCORDANCE WITH ASTM C1019 FOR COMPREHENSIVE STRENGTH, AND IN ACCORDANCE WITH ASTM C143/C143M FOR SLUMP.
   D. TEST COMPREHENSIVE STRENGTH OF MORTAR AND MASONRY TO ASTM C1314: TEST IN ACCORDANCE WITH MASONRY UNIT SECTIONS SPECIFIED.
6. GENERAL CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING WITH STRUCTURAL ENGINEER AND MASONRY CONTRACTOR BEFORE MASONRY WORK COMMENCES.

METAL ROOF DECK

1. SHEET STEEL: ASTM A653 GRADE 33 STRUCTURAL QUALITY WITH G90 GALVANIZED COATING CONFORMING TO ASTM A525
2. DECK PROFILE - B
   PROFILE DEPTH - 1.5 IN.
   GAGE - 22
3. METAL DECK ATTACHMENT SHALL BE:
   AT SUPPORTS: #12 TEK SCREWS AT A 36/9 PATTERN
   AT SIDELAPS: #10 TEK SCREWS, 6 PER SPAN
4. WELDING OF METAL DECKING SHALL NOT BE ALLOWED
5. ALL METAL DECK PANELS SHALL SPAN ACROSS A MINIMUM OF FOUR JOISTS OR BEAMS
6. DECK ENDS SHALL BE LAPPED OVER SUPPORTS

DRILLED CONCRETE PIERS

1. CONSTRUCTION PROCEDURES TO FOLLOW ACI 336.1 AND ACI 336.3R
2. PIERS NOT SPECIFICALLY DIMENSIONED ON THE PLAN SHALL BE CENTERED UNDERNEATH COLUMN OR GRADE BEAM, AS OCCURS.
3. PIERS SHALL BE DRILLED PLUMB ALONG ENTIRE LENGTH. MAXIMUM ALLOWED DEVIATION FROM POSITION AT TOP OF SHAFT IS 1" PER 10' OF DEPTH.
4. CLEAN SHAFT AND BOTTOM OF LOOSE MATERIAL. MAINTAIN SHAFTS FREE OF WATER PRIOR TO PLACING CONCRETE.
5. ELEVATION OF TOP OF PIERS IS A THE BOTTOM OF THE DEEPEST INTERSECTING BEAM, COLUMN, OR WALL SUPPORTED AT THE PIER, UNLESS NOTED OTHERWISE.
6. REINFORCING STEEL CAGE SHALL BE HELD IN PLACE BY A MINIMUM OF 3 SETS OF SPACERS AT A MAXIMUM SPACING OF 8 FT. ALONG THE ENTIRE DEPTH OF THE PIER AND AT 3" FROM THE BOTTOM.
7. CONTRACTOR TO VERIFY DEPTH OF PIER BEFORE REINFORCING STEEL IS CUT. PIER STEEL SHALL BE DELIVERED TO SITE IN STANDARD LENGTHS AND CUT AS REQUIRED. PROVIDE 75 BAR DIAMETER LAPS WHEN NEEDED.
8. PIER REINFORCING AND CONCRETE SHALL BE PLACED IMMEDIATELY AFTER DRILLING OPERATIONS ARE COMPLETE.
9. UNDER NO CONDITIONS SHALL A PIER BE DRILLED THAT CANNOT BE POURED THE SAME DAY.
10. CONTRACTOR TO COORDINATE WITH GEOTECHNICAL ENGINEER FOR INSPECTION AND VERIFICATION OF PIERS IN ORDER TO ENSURE BEARING IN CORRECT SOIL STRATUM AS RECOMMENDED IN PROJECT GEOTECHNICAL REPORT.
11. TEMPORARY STEEL CASING MAY BE REQUIRED DURING DRILLING OPERATIONS. ANY SEEPAGE WATER SHALL BE REMOVED FROM PIER HOLES PRIOR TO POURING CONCRETE.
12. STEEL CASING SHALL BE CONTINUOUSLY JOINED AND SHALL BE OF SUFFICIENT STRENGTH AND RIGIDITY TO WITHSTAND HANDLING STRESS, DRILLING STRESSES, CONCRETE PRESSURES, AND SURROUNDING EARTH AND WATER PRESSURES AND TO PERMIT ADVANCEMENT OF THE PIER THROUGH CAVING GROUND.
13. SIZE AND LENGTH OF CASING SHALL BE SUBMITTED TO THE GEOTECHNICAL ENGINEER FOR ACCEPTANCE.
14. PLACE CONCRETE IN PIER IN ONE CONTINUOUS OPERATION WITHOUT CESSATION FROM BOTTOM OF PIER TO TOP.
15. TESTING OF CONCRETE SHALL BE AT THE RATE OF ONE SET OF FOUR (4) CYLINDERS PER PIER BUT NOT MORE THAN ONE SET PER TRUCKLOAD.
16. CONTRACTOR SHALL MAKE ACCURATE RECORDS OF THE DRILLED PIER LOCATIONS, DEPTHS, BEARING STRATUM, DEPTH OF PENETRATION INTO BEARING STRATUM AND DIAMETER AND SHALL SUBMIT THIS INFORMATION TO ENGINEER.
17. MINIMUM VERTICAL REINFORCING TO BE 1% OF CROSS-SECTIONAL AREA OF PIER, WITH MINIMUM OF SIX (6) BARS, AND #3 SPIRAL, UNLESS NOTED OTHERWISE.

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED PROFESSIONAL ENGINEER
4-12-19

CLIENT
PSJA ISD
PROJECT NUMBER
18330
DATE
04-04-19
DRAWN BY
JP
CHECKED BY
MC
REVISIONS

No.	Description	Date

50% REVIEW SET

GENERAL NOTES

S1.01

GENERAL NOTES

CHANIN
ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369

PRE-ENGINEERED METAL BUILDING AND COMPONENTS

1. REFER TO SCHEMATIC ROOF FRAMING PLAN AND DESIGN CRITERIA FOR DESIGN LOAD REQUIREMENTS AND SPECIFICATIONS FOR THE PRE-ENGINEERED METAL BUILDING.
2. PRE-ENGINEERED METAL BUILDING MANUFACTURER SHALL SUBMIT DESIGN CERTIFICATION SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS FOR THE STRUCTURAL FRAMING AND COVERING PANELS OF THE BUILDING SYSTEM. CERTIFICATION AND DESIGN SHALL MEET REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC) AND ASCE 7.
3. PRE-ENGINEERED METAL BUILDING MANUFACTURER CERTIFICATION SHALL BE SUBMITTED WITH SEALED SHOP DRAWINGS WHEN SUBMITTED FOR REVIEW.
4. SHOP DRAWINGS AND CALCULATIONS INCLUDING BUILDING REACTIONS, SHALL BE PREPARED AND REVIEWED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS. SEALED SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED FOR REVIEW BY THE DESIGN TEAM.
5. ALL COMPONENTS SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS AND STANDARDS OF THE AISC. THIS WORK SHALL INCLUDE ALL MEMBERS AND BRACES NECESSARY TO BRACE MASONRY WALLS. LIGHT GAGE STEEL MEMBERS SHALL COMPLY WITH THE LATEST ADDITION OF THE AISI.
6. PURLINS AND EAVE STRUTS SHALL HAVE A MINIMUM YIELD STRESS OF 55 KSI AND SHALL BE PAINTED WITH ONE COAT OF RED OXIDE OR APPROVED SHOP COAT.
7. PURLIN SPACING SHOWN IN STRUCTURAL DRAWINGS ARE FOR SCHEMATIC PURPOSES ONLY. PURLIN SPACING TO BE DETERMINED BY METAL BUILDING MANUFACTURER. PURLINS SHALL HAVE A MAXIMUM TOTAL LOAD DEFLECTION OF L/180.
8. SAG STRAPS SHALL BE LOCATED AS SHOWN ON PLANS AND SHALL BE FABRICATED WITH A MINIMUM YIELD STRENGTH OF 50 KSI.
9. STANDING SEAM METAL ROOF SHALL NOT BE CONSIDERED TO PROVIDE LATERAL BRACING FOR PURLINS. BRIDGING SHALL BE DESIGNED AND SUPPLIED BY THE METAL BUILDING MANUFACTURER TO RESIST BOTH GRAVITY AND UPLIFT LOADS.
10. CROSS BRACING SHALL BE DESIGNED AND SUPPLIED BY THE METAL BUILDING MANUFACTURER TO PROVIDE AN ADEQUATE HORIZONTAL ROOF DIAPHRAGM FOR THE STRUCTURE.
11. PROVIDE PINNED BASE CONNECTION FROM COLUMN TO FOUNDATION.
12. ALL ANCHOR BOLTS SIZES, LENGTH, AND EMBEDMENT SHALL BE DESIGNED BY THE METAL BUILDING MANUFACTURER AND SUPPLIED BY THE CONTRACTOR. ANCHOR BOLT EMBEDMENT DEPTHS SHALL BE DESIGNED TO RESIST CONCRETE CONICAL SHEAR FAILURE.
13. THIS FOUNDATION HAS BEEN DESIGNED USING ASSUMED REACTIONS FROM THE PRE ENGINEERED METAL BUILDING COMPONENTS AND IS FOR BID PURPOSES ONLY. THE CONTRACTOR SHALL SUBMIT BASE CONNECTION DETAILS (SIZE AND THICKNESS OF BASE PLATE AND DIAMETER AND LENGTH OF ANCHOR BOLTS) AND REACTIONS SO THE DESIGN ASSUMPTIONS CAN BE VERIFIED.
14. ANY ADDITIONAL COST OF FOUNDATION WORK REQUIRED BY REVISIONS OF THE FOUNDATION DESIGN AFTER PRE-ENGINEERED METAL BUILDING REACTIONS ARE SUBMITTED SHALL NOT BE INCURRED BY STRUCTURAL ENGINEER.
15. DRIFT CRITERIA FOR RIGID FRAMES AND METAL GIRTS SHALL HAVE A MAXIMUM DEFLECTION OF H/240 FOR MASONRY FINISHES AND A H/120 FOR METAL SIDING.

STRUCTURAL TESTS AND SPECIAL INSPECTION

1. THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THIS SECTION.
2. THE FOLLOWING TERMS AND PHRASES SHALL HAVE THE MEANINGS SHOWN BELOW AS IT PERTAINS TO THIS SECTION,
   A. APPROVED AGENCY - AN ESTABLISHED AND RECOGNIZED AGENCY REGULARLY ENGAGED IN CONDUCTING AND FURNISHING SPECIAL INSPECTION SERVICES.
   B. APPROVED FABRICATOR - AN ESTABLISHED AND QUALIFIED FIRM APPROVED BY BUILDING OFFICIAL. SPECIAL INSPECTIONS ARE NOT REQUIRED WHEN WORK IS PERFORMED ON THE PREMISES OF AN APPROVED FABRICATOR.
   C. SPECIAL INSPECTION, CONTINUOUS - THE FULL TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION.
   D. SPECIAL INSPECTION, PERIODIC - THE PART TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION.
3. SPECIAL INSPECTORS SHALL KEEP RECORDS OF ALL INSPECTIONS AND SHALL FURNISH REPORTS TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED THEY SHALL BE BROUGHT TO THE ATTENTION OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.
4. SPECIAL INSPECTION FOR STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF AISC 360.
5. SPECIAL INSPECTION FOR MASONRY CONSTRUCTION SHALL BE INSPECTED AND VERIFIED IN ACCORDANCE WITH TMS 402/ACI 530/ASCE 5 AND TMS 602/ACI 530.1/ASCE 6 QUALITY ASSURANCE PROGRAM REQUIREMENTS.
6. THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION.

TABLE 1705.2.2
REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD[a]
1. MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK.			
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	—	:	APPLICABLE ASTM MATERIAL STANDARDS
b. MANUFACTURER'S CERTIFICATE TEST REPORTS.	—	:	—
2. INSPECTION OF WELDING:			
a. COLD-FORMED STEEL DECK:			
1) FLOOR AND ROOF DECK WELDS	—	:	AWS D1.3
b. REINFORCING STEEL:			
1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706.	—	:	
1) REINFORCING STEEL RESISTING FLEXUAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL STRUCTURAL WALLS OF CONCRETE AND SHEAR REINFORCEMENT.	:	—	AWS D1.4 ACI 318: SECTION 3.5.2
3) SHEAR REINFORCEMENT.	:	—	
4) OTHER REINFORCING STEEL.		:	

TABLE 1705.3
REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD[a]	IBC REFERENCE
1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT.	—	:	ACI 318: 3.5, 7.1-7.7	1910.4
2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1705.2.2, ITEM 2b.	—	—	AWS D1.4 ACI 318: 3.5.2	—
3. INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED.	—	:	ACI 318: 8.1.3, 21.2.8	1908.5 1909.1
4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.	—	:	ACI 318: 3.86, 8.1.3, 21.2.8	1909.1
4. VERIFYING USE OF REQUIRED DESIGN MIX.	—	:	ACI 318: Ch. 4, 5.2-5.4	1904.2, 1910.2, 1910.3
6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	:	—	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	1910.10
7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	:	—	ACI 318: 5.9, 5.10	1910.6, 1910.7, 1910.8
8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	—	:	ACI 318: 5.11-5.13	1910.9
9. INSPECTION OF PRESTRESSED CONCRETE: a. APPLICATION OF PRESTRESSING FORCES. b. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC-FORCE-RESISTING SYSTEM.	: :	—	ACI 318: 18.20 ACI 318: 18.18.4	—
10. ERECTION OF PRECAST CONCRETE MEMBERS.	—	:	ACI 318: Ch.16	—
11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	—	:	ACI 318: 6.2	—
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	—	:	ACI 318: 6.1.1	—

TABLE 1705.6
REQUIRED VERIFICATION AND INSPECTION OF SOILS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	—	:
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	—	:
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	—	:
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.	:	—
5. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	—	:

TABLE 1705.8
REQUIRED VERIFICATION OF CAST-IN-PLACE DEEP FOUNDATION ELEMENTS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1. OBSERVE DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	:	—
2. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES.	:	—
3. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	—	—

LEVEL 1 REQUIRED VERIFICATION AND INSPECTION OF MASONRY CONSTRUCTION

INSPECTION TASK	FREQUENCY OF INSPECTION: CONTINUOUS DURING TASK LISTED	FREQUENCY OF INSPECTION: PERIODICALLY DURING TASK LISTED	REFERENCE FOR CRITERIA: IBC SECTION	REFERENCE FOR CRITERIA: ACI 530/ASCE 5/TMS 402[a]	REFERENCE FOR CRITERIA: ACI 530.1/ASCE 6/TMS 602[a]
1. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:					
a. PROPORTIONS OF SITE-PREPARED MORTAR.	—	:	—	—	Art. 2.6A
b. CONSTRUCTION OF MORTAR JOINTS.	—	:	—	—	Art. 3.3B
c. LOCATION OF REINFORCEMENT , CONNECTORS, PRE-STRESSING TENDONS AND ANCHORAGES.	—	:	—	—	Art. 3.4, 3.6A
d. PRE-STRESSING TECHNIQUE.	—	:	—	—	Art. 3.6B
e. GRADE AND SIZE OF PRE-STRESSING TENDONS AND ANCHORAGES.	—	:	—	—	Art. 2.4B, 2.4H
2. THE INSPECTION PROGRAM SHALL VERIFY:					
a. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.	—	:	—	—	Art. 3.3G
b. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION.	—	:	—	Sec. 1.2.2(e), 2.1.4, 3.1.6	—
c. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT	—	:	—	Sec. 1.13	Art. 2.4,3.4
d. WELDING OF REINFORCING BARS.	:	—	—	Sec. 2.1.10.7.2, 3.3.3.4(D)	—
e. PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F).	—	:	—	—	Art. 1.8C, 1.8D
f. APPLICATION AND MEASUREMENT OF PRE-STRESSING FORCE.	—	:	—	—	Art. 3.6B
3. PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:					
a. GROUT SPACE IS CLEAN.	—	:	—	—	Art. 3.2D
b. PLACEMENT OF REINFORCEMENT AND CONNECTORS AND PRE-STRESSING TENDONS AND ANCHORAGES.	—	:	—	Sec. 1.13	Art. 3.4
c. PROPORTIONS OF SITE-PREPARED GROUT AND PRE-STRESSING GROUT FOR BONDED TENDONS.	—	:	—	—	Art. 2.6B
d. CONSTRUCTION OF MORTAR JOINTS.	—	:	—	—	Art. 3.3B
4. GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENT PROVISIONS.	:	—	—	—	Art. 3.5
a. GROUTING OF PRE-STRESSING BONDED TENDONS.	:	—	—	—	Art. 3.6C
5. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED.	:	—	—	—	Art. 1.4
6. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.	—	:	—	—	Art. 1.5

REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD[a]	IBC REFERENCE
1. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS:				
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	—	:	APPLICABLE ASTM MATERIAL SPECIFICATIONS; AISC 360, SECTION A3.3	—
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	—	:	—	—
2. INSPECTION OF HIGH-STRENGTH BOLTING:				
a. BEARING-TYPE CONNECTIONS.	—	:	AISC 360, SECTION M2.5	—
b. SLIP-CRITICAL CONNECTIONS.	:	:		
3. MATERIAL VERIFICATION OF STRUCTURAL STEEL:				
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	—	—	ASTM A 6 OR ASTM A568	—
b. MANUFACTURERS' CERTIFIED MILL TEST REPORTS.	—	—	ASTM A 6 OR ASTM A568	
4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:				
a. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.	—	—	AISC 360, SECTION A3.5	—
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	—	—	—	—
5. INSPECTION OF WELDING:	—	—		
a. STRUCTURAL STEEL:				
1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS.	:	—	AWS D1.1	—
2) MULTIPASS FILLET WELDS.	:	—		
3) SINGLE-PASS FILLET WELDS > 5/16"	:	—		
4) SINGLE-PASS FILLET WELDS ≤ 5/16"	—	:		
5) FLOOR AND ROOF DECK WELDS.	—	:	AWS D1.3	—
a. REINFORCING STEEL:	—	—	AWS D1.4 ACI 318: 3.5.2	—
1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706.	—	:		
2) REINFORCING STEEL-RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS AND SHEAR REINFORCEMENT.	:	—		
3) SHEAR REINFORCEMENT.	:	—		
4) OTHER REINFORCING STEEL.	—	:		
6. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS: a. DETAILS SUCH AS BRACING AND STIFFENING. b. MEMBER LOCATIONS. c. APPLICATION OF JOINT DETAILS AT EACH CONNECTION.	— — —	: — —	—	—

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED PROFESSIONAL ENGINEER
4-12-19

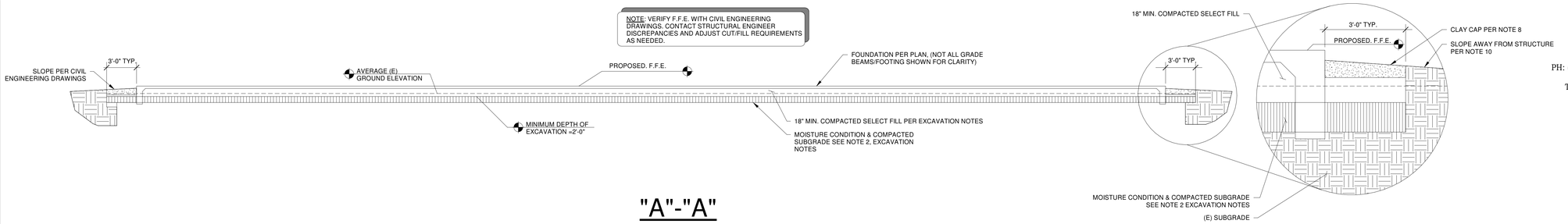
CLIENT: PSJA ISD
PROJECT NUMBER: 18330
DATE: 04-04-19
DRAWN BY: JP
CHECKED BY: MC
REVISIONS

No.	Description	Date

50% REVIEW SET

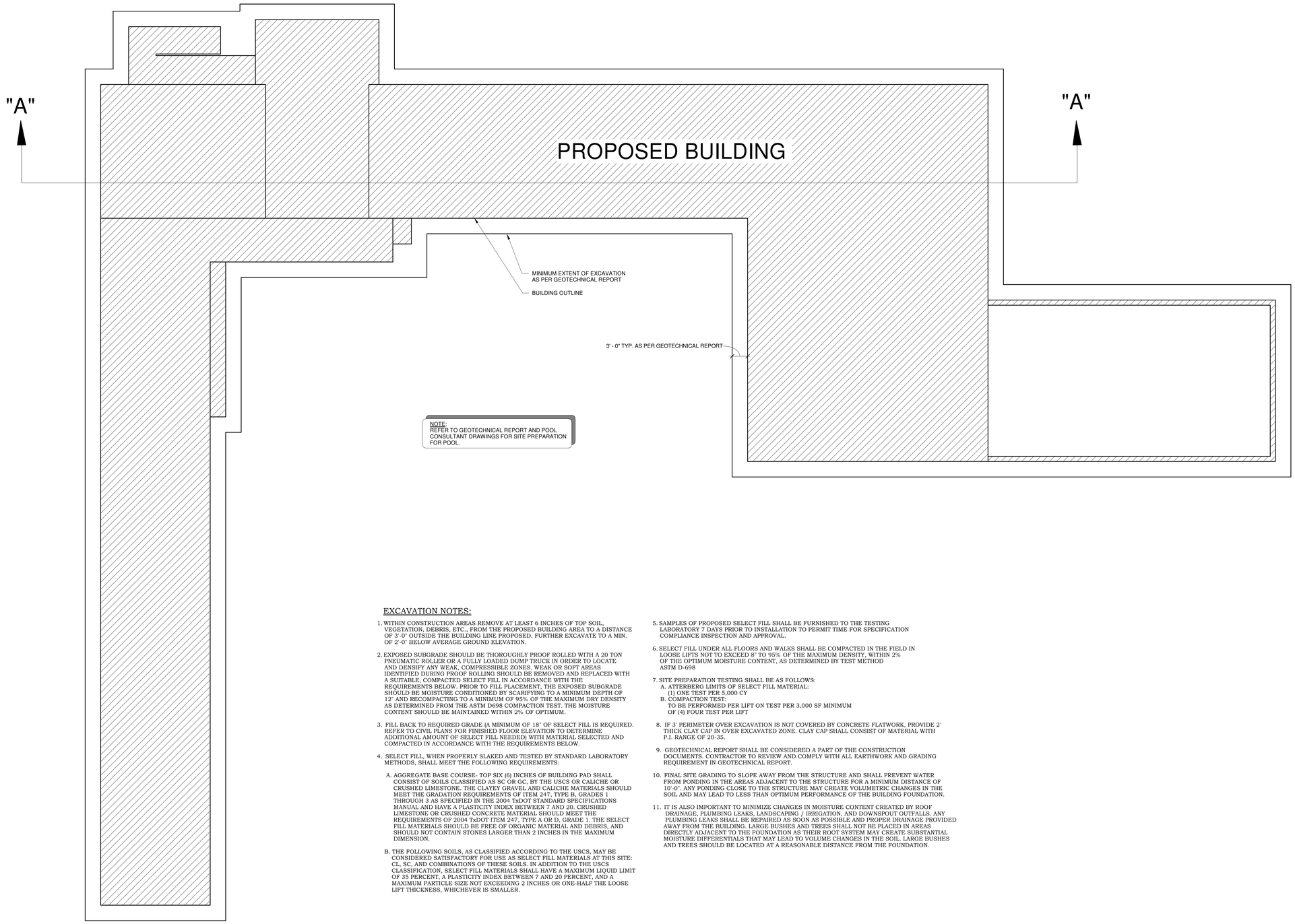
GENERAL NOTES

S1.02



"A"-"A"

1 PROFILE-PSJA EARLY COLLEGE HS
NOT TO SCALE



NOTE:
REFER TO GEOTECHNICAL REPORT AND POOL CONSULTANT DRAWINGS FOR SITE PREPARATION FOR POOL.

EXCAVATION NOTES:

1. WITHIN CONSTRUCTION AREAS REMOVE AT LEAST 6 INCHES OF TOP SOIL, VEGETATION, DEBRIS, ETC., FROM THE PROPOSED BUILDING AREA TO A DISTANCE OF 3'-0" OUTSIDE THE BUILDING LINE PROPOSED. FURTHER EXCAVATE TO A MIN. OF 2'-0" BELOW AVERAGE GROUND ELEVATION.

2. EXPOSED SUBGRADE SHOULD BE THOROUGHLY PROOF ROLLED WITH A 20 TON PNEUMATIC ROLLER OR A FULLY LOADED DUMP TRUCK IN ORDER TO LOCATE AND DENSIFY ANY WEAK, COMPRESSIBLE ZONES. WEAK OR SOFT AREAS IDENTIFIED DURING PROOF ROLLING SHOULD BE REMOVED AND REPLACED WITH A SUITABLE, COMPACTED SELECT FILL IN ACCORDANCE WITH THE REQUIREMENTS BELOW. PRIOR TO FILL PLACEMENT, THE EXPOSED SUBGRADE SHOULD BE MOISTURE CONDITIONED BY SCARIFYING TO A MINIMUM DEPTH OF 12" AND RECOMPACTING TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED FROM THE ASTM D698 COMPACTION TEST. THE MOISTURE CONTENT SHOULD BE MAINTAINED WITHIN 2% OF OPTIMUM.

3. FILL BACK TO REQUIRED GRADE (A MINIMUM OF 18" OF SELECT FILL IS REQUIRED. REFER TO CIVIL PLANS FOR FINISHED FLOOR ELEVATION TO DETERMINE ADDITIONAL AMOUNT OF SELECT FILL NEEDED) WITH MATERIAL SELECTED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS BELOW.

4. SELECT FILL, WHEN PROPERLY SLAKED AND TESTED BY STANDARD LABORATORY METHODS, SHALL MEET THE FOLLOWING REQUIREMENTS:

   A. AGGREGATE BASE COURSE- TOP SIX (6) INCHES OF BUILDING PAD SHALL CONSIST OF SOILS CLASSIFIED AS SC OR GC, BY THE USCS OR CALICHE OR CRUSHED LIMESTONE. THE CLAYEY GRAVEL AND CALICHE MATERIALS SHOULD MEET THE GRADATION REQUIREMENTS OF ITEM 247, TYPE B, GRADES 1 THROUGH 3 AS SPECIFIED IN THE 2004 TxDOT STANDARD SPECIFICATIONS MANUAL AND HAVE A PLASTICITY INDEX BETWEEN 7 AND 20. CRUSHED LIMESTONE OR CRUSHED CONCRETE MATERIAL SHOULD MEET THE REQUIREMENTS OF 2004 TxDOT ITEM 247, TYPE A OR D, GRADE 1. THE SELECT FILL MATERIALS SHOULD BE FREE OF ORGANIC MATERIAL AND DEBRIS, AND SHOULD NOT CONTAIN STONES LARGER THAN 2 INCHES IN THE MAXIMUM DIMENSION.

   B. THE FOLLOWING SOILS, AS CLASSIFIED ACCORDING TO THE USCS, MAY BE CONSIDERED SATISFACTORY FOR USE AS SELECT FILL MATERIALS AT THIS SITE: CL, SC, AND COMBINATIONS OF THESE SOILS. IN ADDITION TO THE USCS CLASSIFICATION, SELECT FILL MATERIALS SHALL HAVE A MAXIMUM LIQUID LIMIT OF 35 PERCENT, A PLASTICITY INDEX BETWEEN 7 AND 20 PERCENT, AND A MAXIMUM PARTICLE SIZE NOT EXCEEDING 2 INCHES OR ONE-HALF THE LOOSE LIFT THICKNESS, WHICHEVER IS SMALLER.

5. SAMPLES OF PROPOSED SELECT FILL SHALL BE FURNISHED TO THE TESTING LABORATORY 7 DAYS PRIOR TO INSTALLATION TO PERMIT TIME FOR SPECIFICATION COMPLIANCE INSPECTION AND APPROVAL.

6. SELECT FILL UNDER ALL FLOORS AND WALKS SHALL BE COMPACTED IN THE FIELD IN LOOSE LIFTS NOT TO EXCEED 8" TO 95% OF THE MAXIMUM DENSITY, WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT, AS DETERMINED BY TEST METHOD ASTM D-698

7. SITE PREPARATION TESTING SHALL BE AS FOLLOWS:
   A. ATTERBERG LIMITS OF SELECT FILL MATERIAL:
      (1) ONE TEST PER 5,000 CY
   B. COMPACTION TEST:
      TO BE PERFORMED PER LIFT ON TEST PER 3,000 SF MINIMUM OF (4) FOUR TEST PER LIFT

8. IF 3' PERIMETER OVER EXCAVATION IS NOT COVERED BY CONCRETE FLATWORK, PROVIDE 2' THICK CLAY CAP IN OVER EXCAVATED ZONE. CLAY CAP SHALL CONSIST OF MATERIAL WITH P.I. RANGE OF 20-35.

9. GEOTECHNICAL REPORT SHALL BE CONSIDERED A PART OF THE CONSTRUCTION DOCUMENTS. CONTRACTOR TO REVIEW AND COMPLY WITH ALL EARTHWORK AND GRADING REQUIREMENT IN GEOTECHNICAL REPORT.

10. FINAL SITE GRADING TO SLOPE AWAY FROM THE STRUCTURE AND SHALL PREVENT WATER FROM PONDING IN THE AREAS ADJACENT TO THE STRUCTURE FOR A MINIMUM DISTANCE OF 10'-0". ANY PONDING CLOSE TO THE STRUCTURE MAY CREATE VOLUMETRIC CHANGES IN THE SOIL AND MAY LEAD TO LESS THAN OPTIMUM PERFORMANCE OF THE BUILDING FOUNDATION.

11. IT IS ALSO IMPORTANT TO MINIMIZE CHANGES IN MOISTURE CONTENT CREATED BY ROOF DRAINAGE, PLUMBING LEAKS, LANDSCAPING / IRRIGATION, AND DOWNSPOUT OUTFALLS. ANY PLUMBING LEAKS SHALL BE REPAIRED AS SOON AS POSSIBLE AND PROPER DRAINAGE PROVIDED AWAY FROM THE BUILDING. LARGE BUSHES AND TREES SHALL NOT BE PLACED IN AREAS DIRECTLY ADJACENT TO THE FOUNDATION AS THEIR ROOT SYSTEM MAY CREATE SUBSTANTIAL MOISTURE DIFFERENTIALS THAT MAY LEAD TO VOLUME CHANGES IN THE SOIL. LARGE BUSHES AND TREES SHOULD BE LOCATED AT A REASONABLE DISTANCE FROM THE FOUNDATION.

2 EXCAVATION PLAN-PSJA EARLY COLLEGE HS
NOT TO SCALE

CHANIN ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED PROFESSIONAL ENGINEER
4-12-19

CLIENT: PSJA ISD
PROJECT NUMBER: 18330
DATE: 04-04-19
DRAWN BY: JP
CHECKED BY: MC

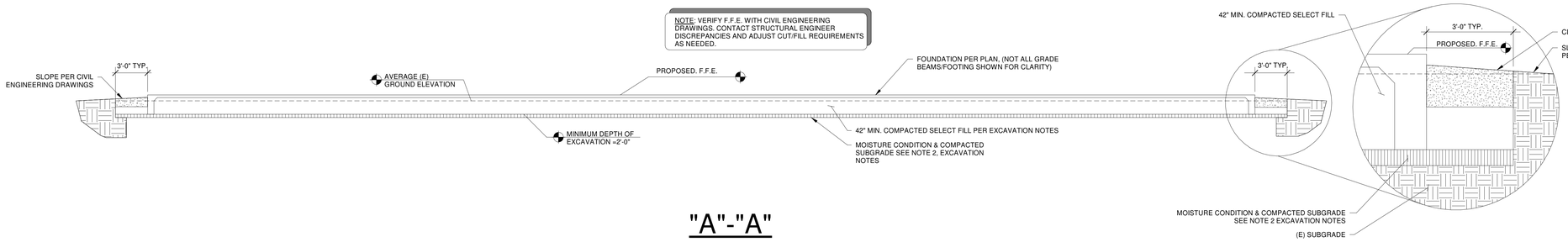
REVISIONS

No.	Description	Date

50% REVIEW SET

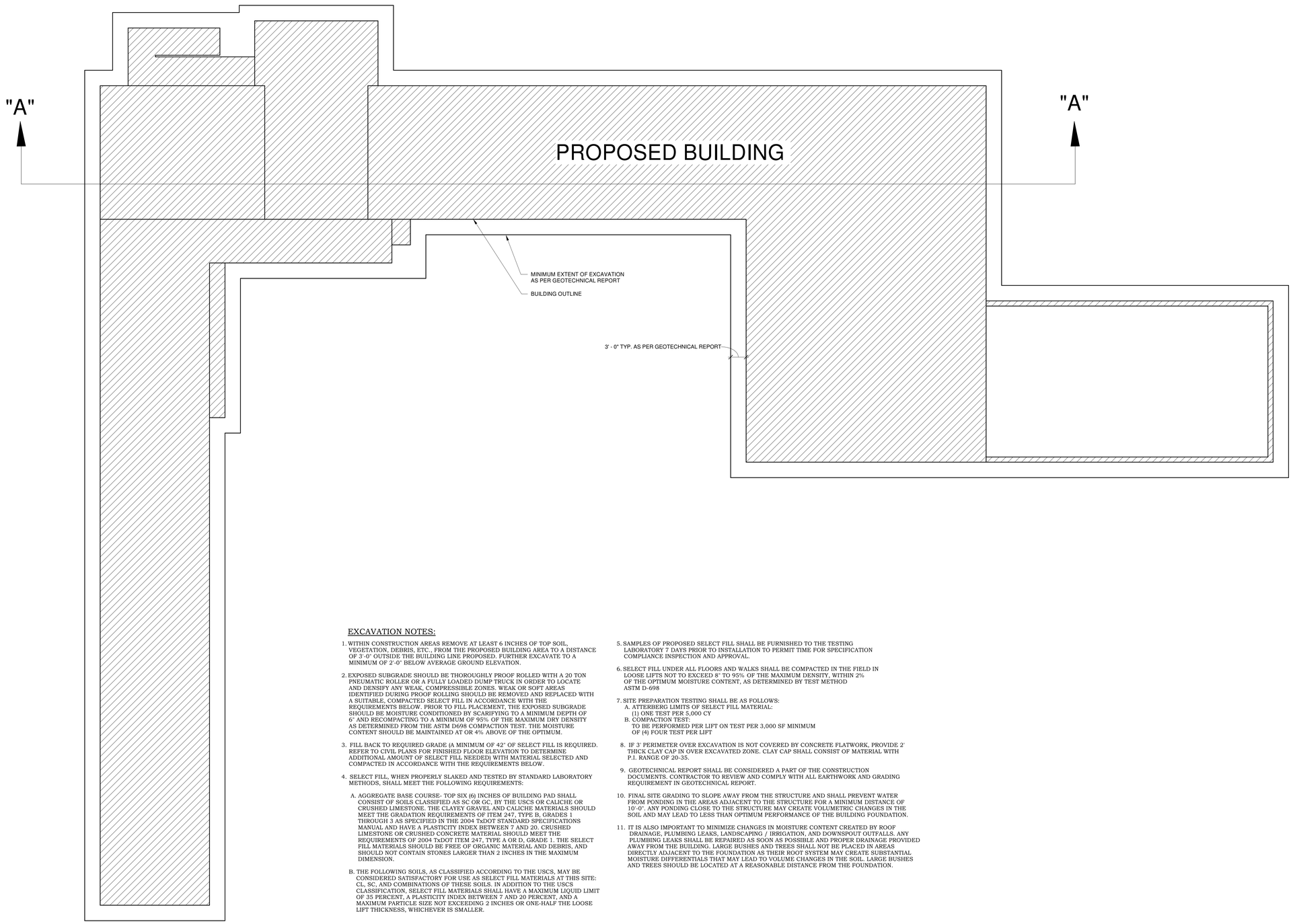
EXCAVATION PLAN (PSJA EARLY COLLEGE HS)

S1.03A



"A"-"A"

1 PROFILE-PSJA MEMORIAL ECHS
NOT TO SCALE



EXCAVATION NOTES:

1. WITHIN CONSTRUCTION AREAS REMOVE AT LEAST 6 INCHES OF TOP SOIL, VEGETATION, DEBRIS, ETC., FROM THE PROPOSED BUILDING AREA TO A DISTANCE OF 3'-0" OUTSIDE THE BUILDING LINE PROPOSED. FURTHER EXCAVATE TO A MINIMUM OF 2'-0" BELOW AVERAGE GROUND ELEVATION.

2. EXPOSED SUBGRADE SHOULD BE THOROUGHLY PROOF ROLLED WITH A 20 TON PNEUMATIC ROLLER OR A FULLY LOADED DUMP TRUCK IN ORDER TO LOCATE AND DENSIFY ANY WEAK, COMPRESSIBLE ZONES. WEAK OR SOFT AREAS IDENTIFIED DURING PROOF ROLLING SHOULD BE REMOVED AND REPLACED WITH A SUITABLE, COMPACTED SELECT FILL IN ACCORDANCE WITH THE REQUIREMENTS BELOW. PRIOR TO FILL PLACEMENT, THE EXPOSED SUBGRADE SHOULD BE MOISTURE CONDITIONED BY SCARIFYING TO A MINIMUM DEPTH OF 6" AND RECOMPACTING TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED FROM THE ASTM D698 COMPACTION TEST. THE MOISTURE CONTENT SHOULD BE MAINTAINED AT OR 4% ABOVE OF THE OPTIMUM.

3. FILL BACK TO REQUIRED GRADE (A MINIMUM OF 42" OF SELECT FILL IS REQUIRED. REFER TO CIVIL PLANS FOR FINISHED FLOOR ELEVATION TO DETERMINE ADDITIONAL AMOUNT OF SELECT FILL NEEDED) WITH MATERIAL SELECTED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS BELOW.

4. SELECT FILL, WHEN PROPERLY SLAKED AND TESTED BY STANDARD LABORATORY METHODS, SHALL MEET THE FOLLOWING REQUIREMENTS:

   A. AGGREGATE BASE COURSE- TOP SIX (6) INCHES OF BUILDING PAD SHALL CONSIST OF SOILS CLASSIFIED AS SC OR GC, BY THE USCS OR CALICHE OR CRUSHED LIMESTONE. THE CLAYEY GRAVEL AND CALICHE MATERIALS SHOULD MEET THE GRADATION REQUIREMENTS OF ITEM 247, TYPE B, GRADES 1 THROUGH 3 AS SPECIFIED IN THE 2004 TxDOT STANDARD SPECIFICATIONS MANUAL AND HAVE A PLASTICITY INDEX BETWEEN 7 AND 20. CRUSHED LIMESTONE OR CRUSHED CONCRETE MATERIAL SHOULD MEET THE REQUIREMENTS OF 2004 TxDOT ITEM 247, TYPE A OR D, GRADE 1. THE SELECT FILL MATERIALS SHOULD BE FREE OF ORGANIC MATERIAL AND DEBRIS, AND SHOULD NOT CONTAIN STONES LARGER THAN 2 INCHES IN THE MAXIMUM DIMENSION.

   B. THE FOLLOWING SOILS, AS CLASSIFIED ACCORDING TO THE USCS, MAY BE CONSIDERED SATISFACTORY FOR USE AS SELECT FILL MATERIALS AT THIS SITE: CL, SC, AND COMBINATIONS OF THESE SOILS. IN ADDITION TO THE USCS CLASSIFICATION, SELECT FILL MATERIALS SHALL HAVE A MAXIMUM LIQUID LIMIT OF 35 PERCENT, A PLASTICITY INDEX BETWEEN 7 AND 20 PERCENT, AND A MAXIMUM PARTICLE SIZE NOT EXCEEDING 2 INCHES OR ONE-HALF THE LOOSE LIFT THICKNESS, WHICHEVER IS SMALLER.

5. SAMPLES OF PROPOSED SELECT FILL SHALL BE FURNISHED TO THE TESTING LABORATORY 7 DAYS PRIOR TO INSTALLATION TO PERMIT TIME FOR SPECIFICATION COMPLIANCE INSPECTION AND APPROVAL.

6. SELECT FILL UNDER ALL FLOORS AND WALKS SHALL BE COMPACTED IN THE FIELD IN LOOSE LIFTS NOT TO EXCEED 8" TO 95% OF THE MAXIMUM DENSITY, WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT, AS DETERMINED BY TEST METHOD ASTM D-698

7. SITE PREPARATION TESTING SHALL BE AS FOLLOWS:
   A. ATTERBERG LIMITS OF SELECT FILL MATERIAL:
      (1) ONE TEST PER 5,000 CY
   B. COMPACTION TEST:
      TO BE PERFORMED PER LIFT ON TEST PER 3,000 SF MINIMUM OF (4) FOUR TEST PER LIFT

8. IF 3' PERIMETER OVER EXCAVATION IS NOT COVERED BY CONCRETE FLATWORK, PROVIDE 2' THICK CLAY CAP IN OVER EXCAVATED ZONE. CLAY CAP SHALL CONSIST OF MATERIAL WITH P.I. RANGE OF 20-35.

9. GEOTECHNICAL REPORT SHALL BE CONSIDERED A PART OF THE CONSTRUCTION DOCUMENTS. CONTRACTOR TO REVIEW AND COMPLY WITH ALL EARTHWORK AND GRADING REQUIREMENT IN GEOTECHNICAL REPORT.

10. FINAL SITE GRADING TO SLOPE AWAY FROM THE STRUCTURE AND SHALL PREVENT WATER FROM PONDING IN THE AREAS ADJACENT TO THE STRUCTURE FOR A MINIMUM DISTANCE OF 10'-0". ANY PONDING CLOSE TO THE STRUCTURE MAY CREATE VOLUMETRIC CHANGES IN THE SOIL AND MAY LEAD TO LESS THAN OPTIMUM PERFORMANCE OF THE BUILDING FOUNDATION.

11. IT IS ALSO IMPORTANT TO MINIMIZE CHANGES IN MOISTURE CONTENT CREATED BY ROOF DRAINAGE, PLUMBING LEAKS, LANDSCAPING / IRRIGATION, AND DOWNSPOUT OUTFALLS. ANY PLUMBING LEAKS SHALL BE REPAIRED AS SOON AS POSSIBLE AND PROPER DRAINAGE PROVIDED AWAY FROM THE BUILDING. LARGE BUSHES AND TREES SHALL NOT BE PLACED IN AREAS DIRECTLY ADJACENT TO THE FOUNDATION AS THEIR ROOT SYSTEM MAY CREATE SUBSTANTIAL MOISTURE DIFFERENTIALS THAT MAY LEAD TO VOLUME CHANGES IN THE SOIL. LARGE BUSHES AND TREES SHOULD BE LOCATED AT A REASONABLE DISTANCE FROM THE FOUNDATION.

2 EXCAVATION PLAN-PSJA MEMORIAL ECHS
NOT TO SCALE

CHANIN ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED PROFESSIONAL ENGINEER
4-12-19

CLIENT	PSJA ISD
PROJECT NUMBER	18330
DATE	04-04-19
DRAWN BY	JP
CHECKED BY	MC

REVISIONS

No.	Description	Date

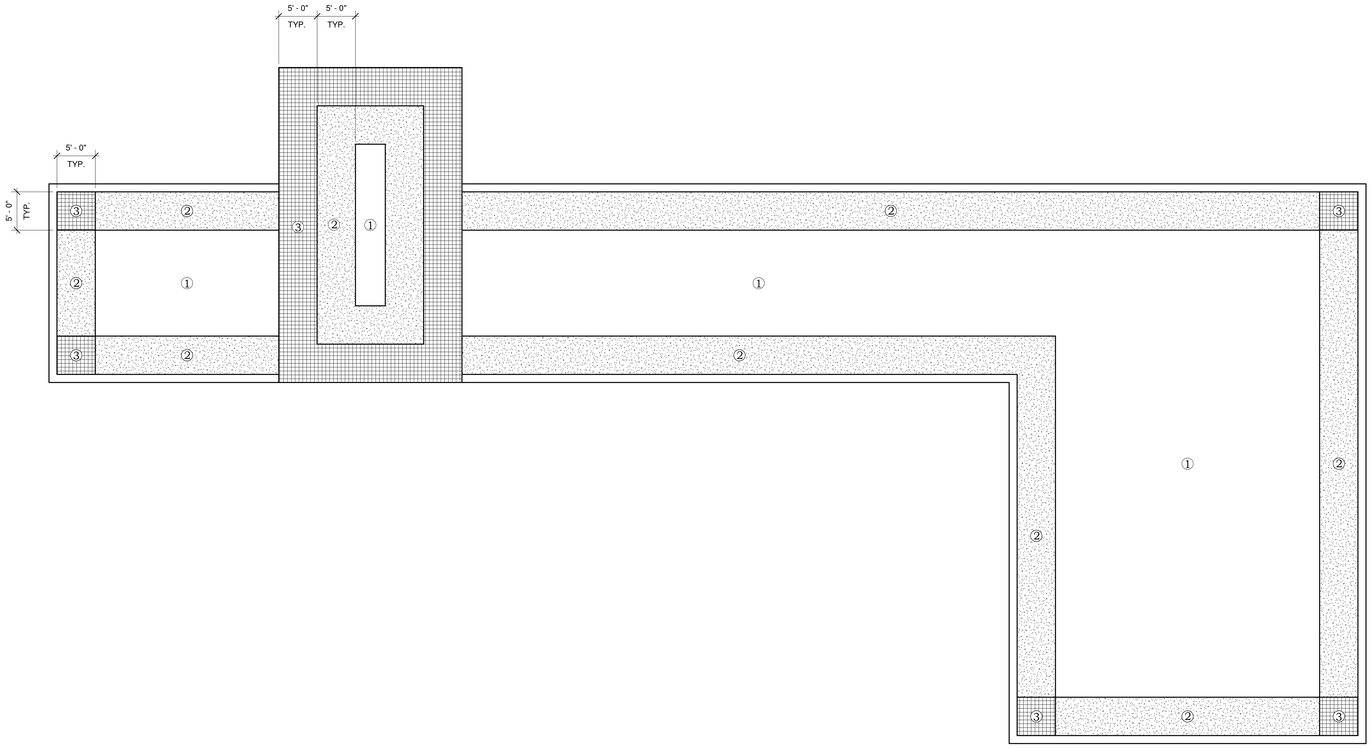
50% REVIEW SET

EXCAVATION PLAN (PSJA MEMORIAL ECHS)

S1.03B

CHANIN
ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

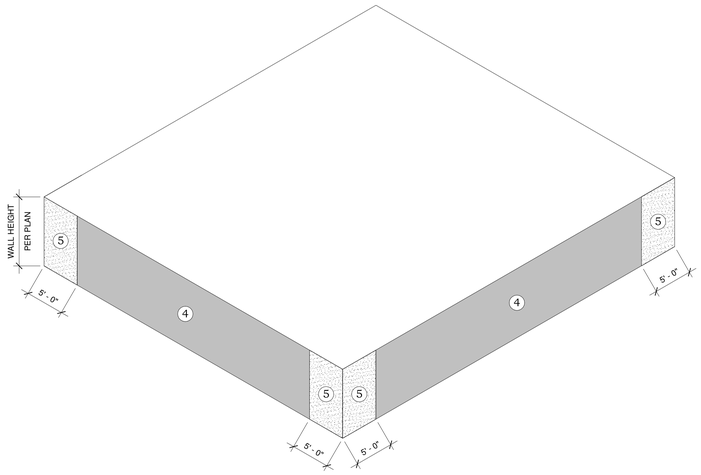


ALLOWABLE STRESS DESIGN

EFFECTIVE WIND AREA	ZONE	GROSS	NET
10	1	-25.6psf	-19.6psf
20	1	-25.0psf	-19.0psf
50	1	-24.1psf	-18.1psf
10	2	-43.0psf	-37.0psf
20	2	-38.4psf	-32.4psf
50	2	-32.3psf	-26.3psf
10	3	-64.6psf	-58.6psf
20	3	-53.6psf	-47.6psf
50	3	-38.8psf	-32.8psf

WIND LOAD PLAN NOTES:
1. NEGATIVE PRESSURES DENOTE FORCE ACTING AWAY FROM BUILDING SURFACE (SUCTION).
2. PRESSURES FOR TRIBUTARY AREAS IN BETWEEN THE LISTED VALUES MAY BE LINEARLY INTERPOLATED

1 ROOF UPLIFT PLAN
NOT TO SCALE



ALLOWABLE STRESS DESIGN

EFFECTIVE WIND AREA	ZONE	MAX PRESSURE
10	4	±27.7psf
20	4	±26.7psf
50	4	±25.1psf
10	5	±34.3psf
20	5	±31.9psf
50	5	±28.9psf

WIND LOAD PLAN NOTES:
1. NEGATIVE PRESSURES DENOTE FORCE ACTING AWAY FROM BUILDING SURFACE (SUCTION).
2. PRESSURES FOR TRIBUTARY AREAS IN BETWEEN THE LISTED VALUES MAY BE LINEARLY INTERPOLATED

2 COMPONENTS AND CLADDING
NOT TO SCALE

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED
PROFESSIONAL ENGINEER
4-12-19

CLIENT: PSJA ISD
PROJECT NUMBER: 18330
DATE: 04-04-19
DRAWN BY: JP
CHECKED BY: MC

REVISIONS

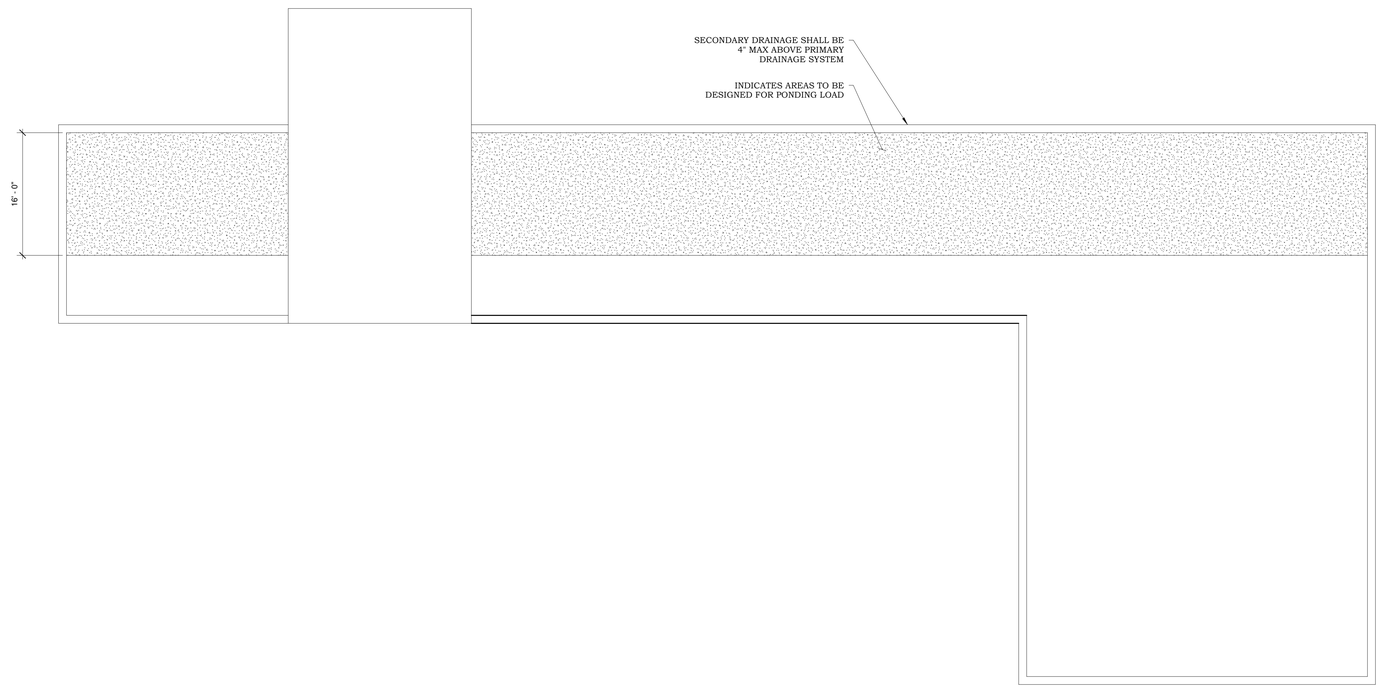
No.	Description	Date

50% REVIEW SET

COMPONENTS AND CLADDING/ROOF UPLIFT PLAN

S1.04

CHANIN
ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369



	PONDING LOAD	20.8PSF

1 ROOF PONDING PLAN
NOT TO SCALE

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED
PROFESSIONAL ENGINEER
4-12-19

CLIENT
PSJA ISD
PROJECT NUMBER
18330
DATE
04-04-19
DRAWN BY
JP
CHECKED BY
MC
REVISIONS

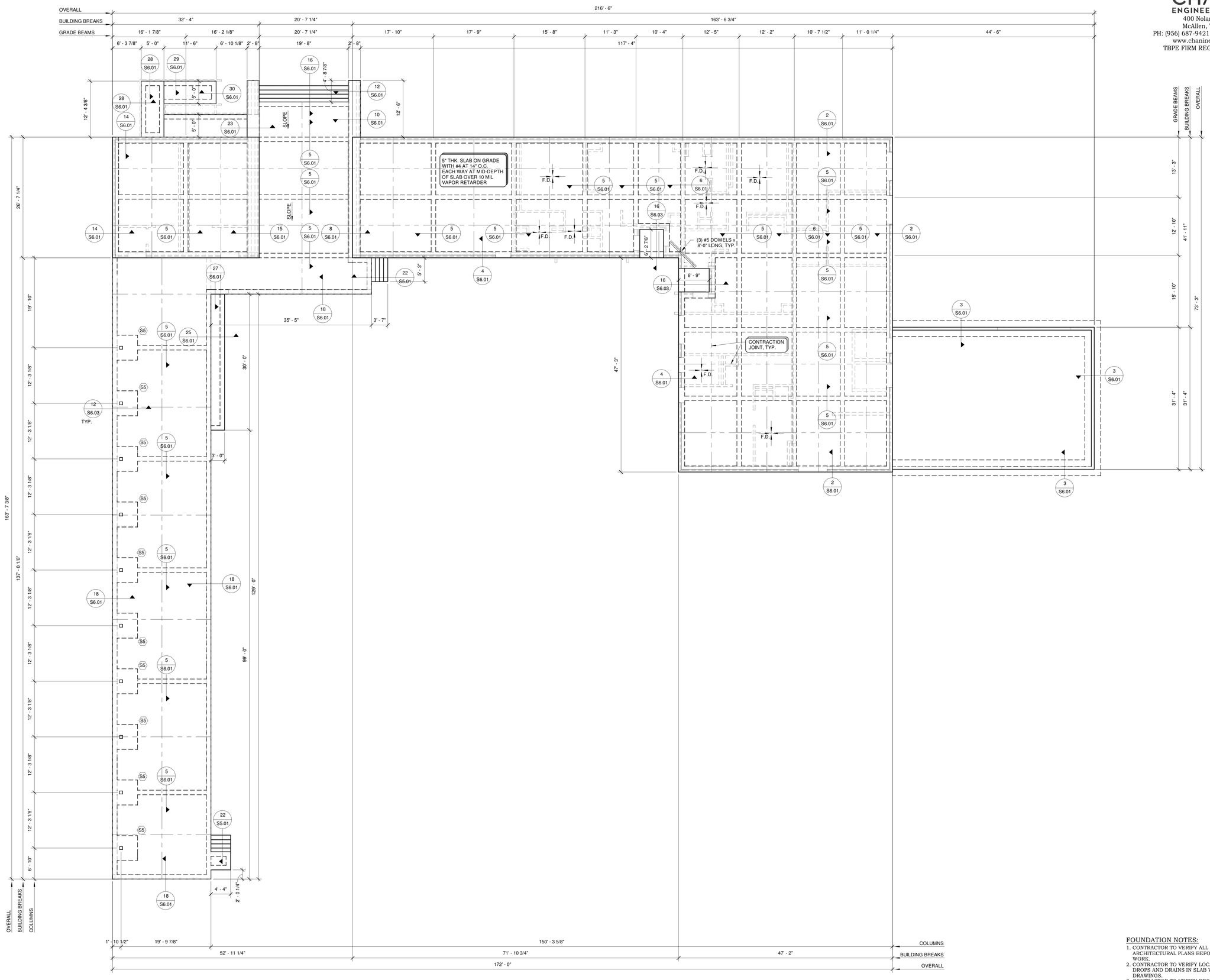
No.	Description	Date

50% REVIEW SET

ROOF PONDING PLAN

S1.05

CHANIN
ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369



FOUNDATION NOTES:

1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS BEFORE COMMENCING WORK.
2. CONTRACTOR TO VERIFY LOCATION OF ANY/ALL DROPS AND DRAINS IN SLAB WITH ARCHITECTURAL DRAWINGS.
3. CONTRACTOR TO VERIFY REQUIRED F.F.E. WITH CIVIL ENGINEERING DRAWINGS.
4. ▭ INDICATES 1 1/2" SLAB DEPRESSION, VERIFY EXACT LOCATION AND DEPTH WITH ARCHITECTURAL PLANS.

1 FOUNDATION PLAN - BASE BID
1/8" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED
PROFESSIONAL ENGINEER
4-12-19

CLIENT	PSJA ISD
PROJECT NUMBER	18330
DATE	04-04-19
DRAWN BY	JP
CHECKED BY	MC

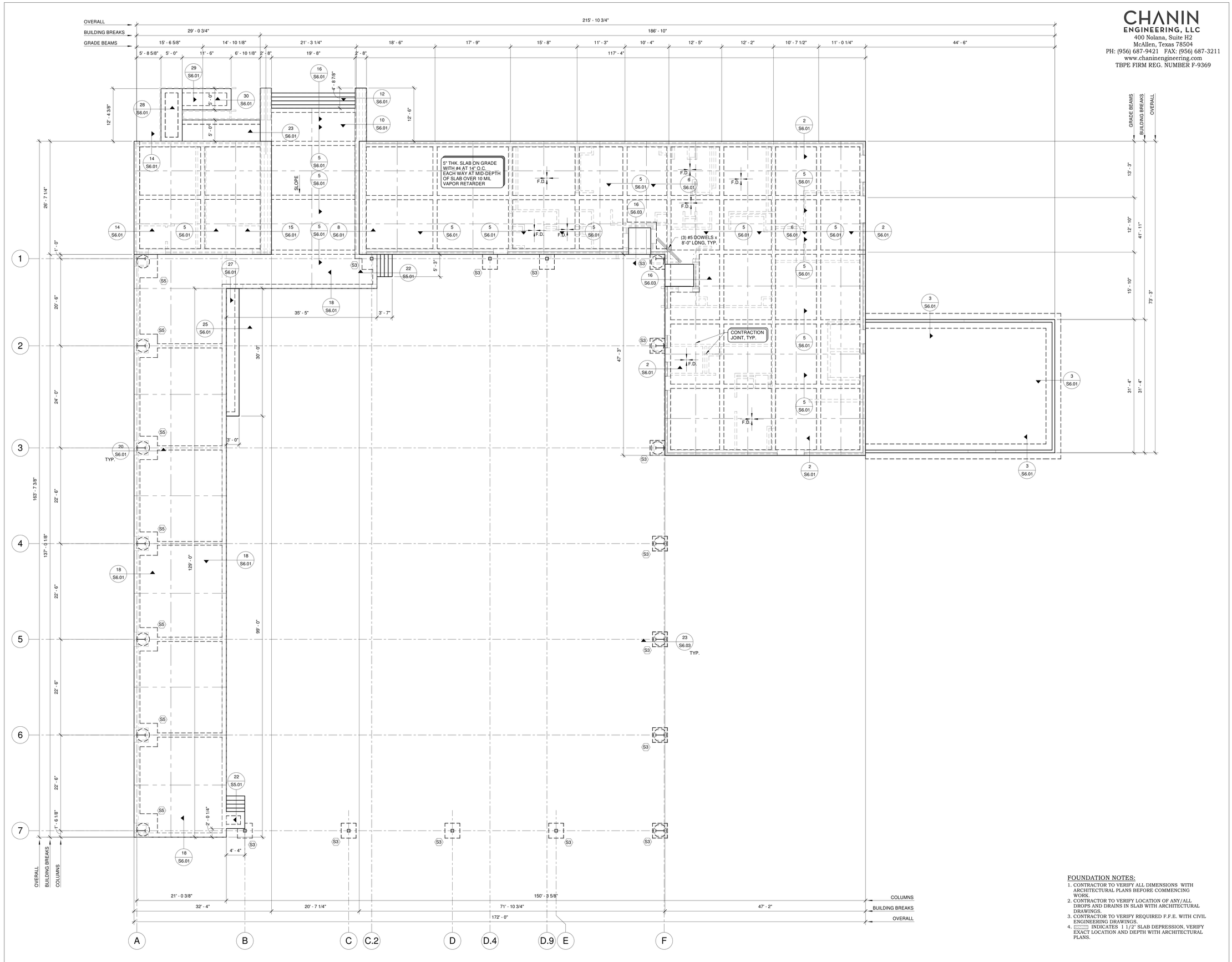
REVISIONS

No.	Description	Date

50% REVIEW SET

FOUNDATION PLAN-BASE BID

S2.01



FOUNDATION NOTES:

1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS BEFORE COMMENCING WORK.
2. CONTRACTOR TO VERIFY LOCATION OF ANY/ALL DROPS AND DRAINS IN SLAB WITH ARCHITECTURAL DRAWINGS.
3. CONTRACTOR TO VERIFY REQUIRED F.F.E. WITH CIVIL ENGINEERING DRAWINGS.
4. ▭ INDICATES 1 1/2" SLAB DEPRESSION, VERIFY EXACT LOCATION AND DEPTH WITH ARCHITECTURAL PLANS.

1 FOUNDATION PLAN-ALTERNATE NO. 1
1/8" = 1'-0"

CHANIN ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED
PROFESSIONAL ENGINEER
4-12-19

CLIENT	PSJA ISD
PROJECT NUMBER	18330
DATE	04-04-19
DRAWN BY	JP
CHECKED BY	MC

REVISIONS

No.	Description	Date

50% REVIEW SET

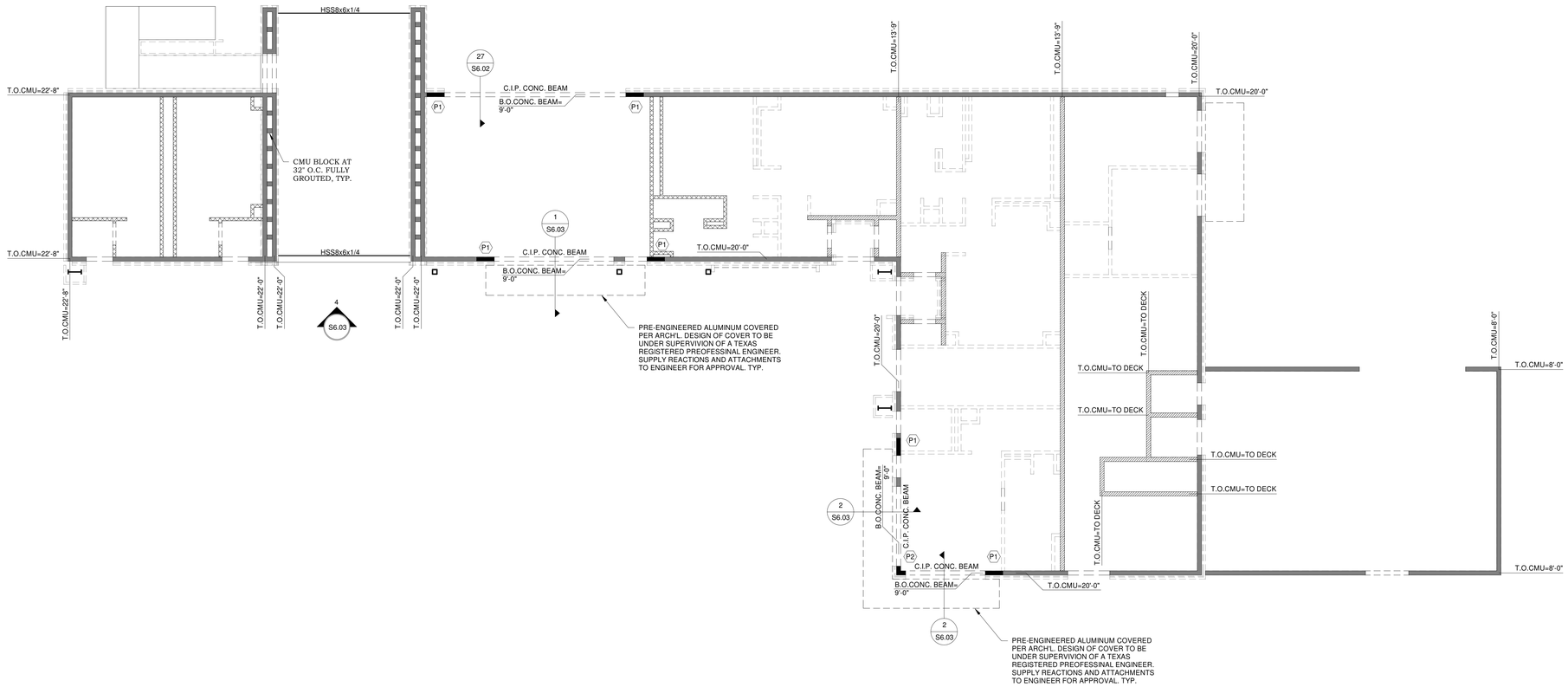
FOUNDATION PLAN-ALTERNATE NO. 1

S2.02

CHANIN
ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS



KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED PROFESSIONAL ENGINEER
4-12-19

CLIENT	PSJA ISD
PROJECT NUMBER	18330
DATE	04-04-19
DRAWN BY	JP
CHECKED BY	MC

REVISIONS

No.	Description	Date

50% REVIEW SET

CMU WALL LAYOUT PLAN

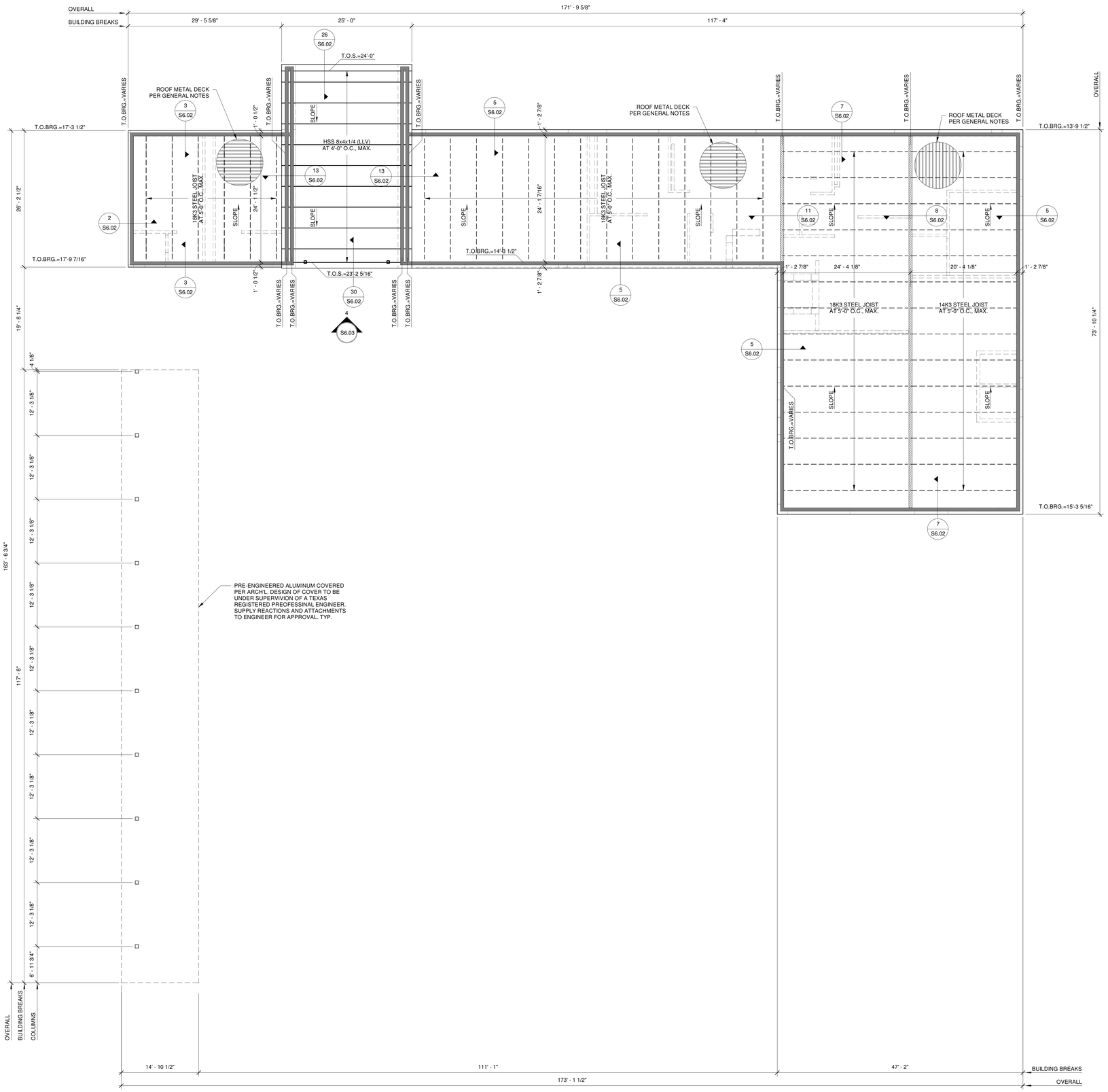
S3.01

CMU WALL LAYOUT NOTES:

1. IF ANY DISCREPANCIES ARE FOUND BETWEEN THESE DRAWINGS AND THE ARCHITECTURAL DRAWINGS THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER BEFORE COMMENCING CONSTRUCTION.
2. FOR TYPICAL CMU WALL CONSTRUCTION SEE SHEET S5.02
3. FOR TYPICAL ATTACHMENT AT THE TOP OF ALL INTERIOR CMU WALLS (INCLUDING THOSE NOT SHOWN ON THIS PLAN) SEE DETAILS 13,14/S5.02
4. INDICATES EXTERIOR 8" CMU WALL WITH #5 (V) AT 32" O.C. AND #5 (H) AT 8'-0" O.C., U.N.O.
5. INDICATES INTERIOR 8" CMU WALL WITH #5 (V) AT 48" O.C. AND #5 (H) AT 8'-0" O.C., U.N.O.
6. INDICATES INTERIOR 6" CMU WALL TO DECK WITH #5 (V) AT 48" O.C. AND #5 (H) AT 8'-0" O.C. U.N.O.
7. INDICATES CMU LINTEL, SEE DETAIL 23/S5.01.
8. FOR SPECIAL INSPECTION REQUIREMENTS SEE GENERAL NOTES.
9. ALL TOP OF WALLS FROM FINISH FLOOR ELEVATION 0'-0".
10. SEE ARCHITECTURAL PLANS FOR EXACT LOCATION, LENGTH, AND HEIGHT OF ALL OPENINGS IN CMU WALLS.
11. FOR CONTROL JOINT LOCATIONS, SEE ARCHITECTURAL DRAWINGS.
12. PROVIDE CMU LINTEL OVER ALL MECHANICAL SYSTEM PENETRATIONS IN CMU WALL. COORDINATE WITH MEP DRAWINGS FOR ALL LOCATIONS.
13. 8" CMU WALL IS A NOMINAL DIMENSION, ACTUAL WIDTH IS 7 5/8"
14. 6" CMU WALL IS A NOMINAL DIMENSION, ACTUAL WIDTH IS 5 5/8"
15. (P1) INDICATES 8" PILASTER "P1", SEE DETAIL 24/S5.02.
16. (P2) INDICATES 8" PILASTER "P2", SEE DETAIL 28/S5.02.

1 CMU WALL LAYOUT PLAN-BASE BID
1/8" = 1'-0"

CHANIN
ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369



NOTE:
EACT NUMBER OF PURLINS MAY NOT BE ACCURATELY REPRESENTED ON PLANS. ADDITIONAL PURLINS MAY BE REQUIRED TO MEET UPLIFT REQUIREMENTS.

NOTE:
P.E&M. TO DESIGN ALL COLUMNS WITH A STRAIGHT PROFILE AND A DEPTH OF 10" MAX.

NOTE:
UPLIFT PER PRE-ENGINEERED BUILDING MANUFACTURER.

NOTE:
ALL STEEL MEMBERS AND CONNECTIONS TO BE PAINTED WITH RUST INHIBITIVE PAINT.

FRAMING NOTES:

1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS BEFORE COMMENCING WORK.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ANY ADDITIONAL DIMENSIONS.
3. JOIST MANUFACTURER TO PROVIDE ADEQUATE BRIDGING FOR JOISTS AS REQUIRED BY S.J.I.
4. CONTRACTOR TO COORDINATE ALL MECHANICAL,ELECTRICAL AND PLUMBING COMPONENTS SUPPORTED BY THE STRUCTURE WITH THE STRUCTURE MANUFACTUREREK. THIS INCLUDES COORDINATING EXACT WEIGHT AND LOCATION, AND ALL NECESSARY ATTACHMENTS.
5. CONTRACTOR TO COORDINATE EXACT LOCATION AND SIZE OF ANY AND ALL ROOF HATCHES WITH ARCH'L DRAWINGS.
6. REFER TO M.E.P. DRAWINGS FOR ANY HOUSEKEEPING PADS AT MECHANICAL ROOMS.
7. FOR CMU WALL REINFORCEMENT, REFER TO CMU WALL LAYOUT PLAN ON SHEET S3.01.
8. STEEL FABRICATOR TO COORDINATE EXACT JOIST SPACING. STEEL JOIST LOCATIONS SHOWN ON STRUCTURAL DRAWINGS MAY BE ADJUSTED IN ORDER TO AVOID CONFLICTING STRUCTURAL MEMBERS AND CONDITIONS (SUCH AS STUB COLUMNS OR CONNECTIONS) AND IN ORDER TO ACHIEVE PROPER BEARING. ADD JOISTS AS NEEDED TO NOT EXCEED MAXIMUM SPACING SHOWN ON DRAWINGS.

1 ROOF FRAMING PLAN-BASE BID
1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED PROFESSIONAL ENGINEER
4-12-19

CLIENT	PSJA ISD
PROJECT NUMBER	18330
DATE	04-04-19
DRAWN BY	JP
CHECKED BY	MC

REVISIONS

No.	Description	Date

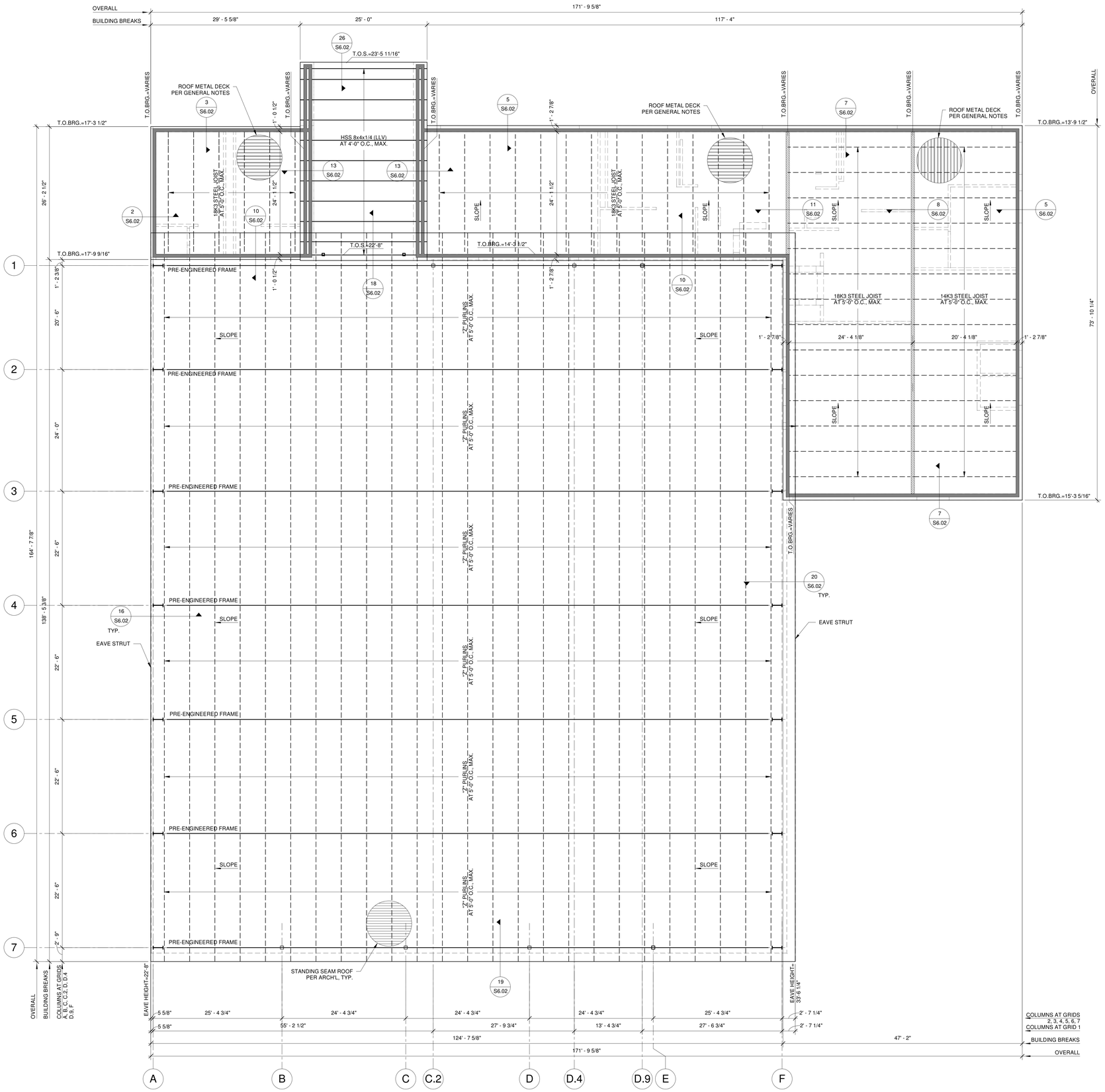
50% REVIEW SET

ROOF FRAMING PLAN-BASE BID

S4.01

CHANIN
ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com



NOTE:
EACT NUMBER OF PURLINS MAY NOT BE ACCURATELY REPRESENTED ON PLANS. ADDITIONAL PURLINS MAY BE REQUIRED TO MEET UPLIFT REQUIREMENTS.

NOTE:
P.EB.M. TO DESIGN ALL COLUMNS WITH A STRAIGHT PROFILE AND A DEPTH OF 10" MAX.

NOTE:
UPLIFT PER PRE-ENGINEERED BUILDING MANUFACTURER.

NOTE:
ALL STEEL MEMBERS AND CONNECTIONS TO BE PAINTED WITH RUST INHIBITIVE PAINT.

FRAMING NOTES:

1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS BEFORE COMMENCING WORK.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ANY ADDITIONAL DIMENSIONS.
3. JOIST MANUFACTURER TO PROVIDE ADEQUATE BRIDGING FOR JOISTS AS REQUIRED BY S.J.I.
4. CONTRACTOR TO COORDINATE ALL MECHANICAL,ELECTRICAL AND PLUMBING COMPONENTS SUPPORTED BY THE STRUCTURE WITH THE STRUCTURE MANUFACTUREIR. THIS INCLUDES COORDINATING EXACT WEIGHT AND LOCATION, AND ALL NECESSARY ATTACHMENTS.
5. CONTRACTOR TO COORDINATE EXACT LOCATION AND SIZE OF ANY AND ALL ROOF HATCHES WITH ARCH'L DRAWINGS.
6. REFER TO M.E.P. DRAWINGS FOR ANY HOUSEKEEPING PADS AT MECHANICAL ROOMS.
7. FOR CMU WALL REINFORCEMENT, REFER TO CMU WALL LAYOUT PLAN ON SHEET S3.01.
8. STEEL FABRICATOR TO COORDINATE EXACT JOIST SPACING. STEEL JOIST LOCATIONS SHOWN ON STRUCTURAL DRAWINGS MAY BE ADJUSTED IN ORDER TO AVOID CONFLICTING STRUCTURAL MEMBERS AND CONDITIONS (SUCH AS STUB COLUMNS OR CONNECTIONS) AND IN ORDER TO ACHIEVE PROPER BEARING. ADD JOISTS AS NEEDED TO NOT EXCEED MAXIMUM SPACING SHOWN ON DRAWINGS.

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED PROFESSIONAL ENGINEER
4-12-19

CLIENT	PSJA ISD
PROJECT NUMBER	18330
DATE	04-04-19
DRAWN BY	JP
CHECKED BY	MC

REVISIONS

No.	Description	Date

50% REVIEW SET

ROOF FRAMING PLAN-ALTERNATE NO. 1

S4.02

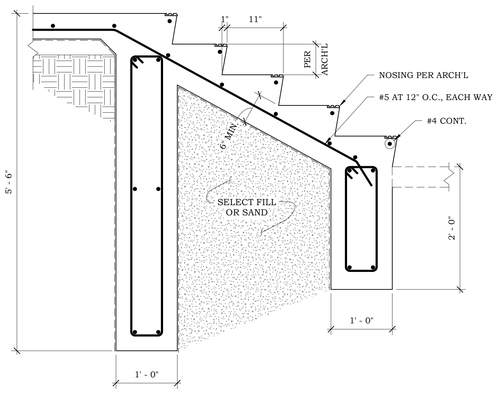
1 ROOF FRAMING PLAN-ALTERNATE NO. 1
1/8" = 1'-0"

CHANIN
ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369

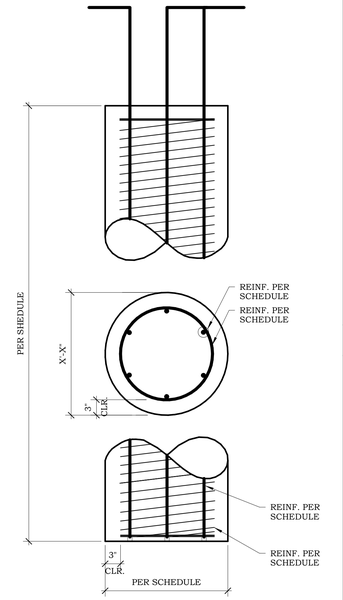
PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS



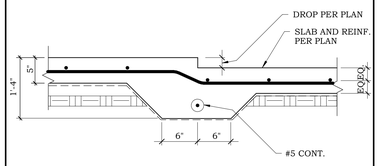
CONCRETE STAIRS DETAIL | 22



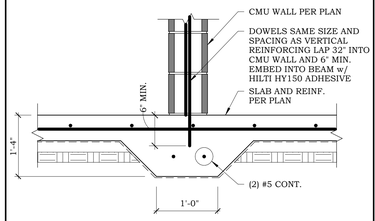
NOTE:
CONTRACTOR TO SUBMIT FINAL LIGHT POLE SPECIFICATIONS FOR REVIEW. DEPTH OF PIER MAY NEED TO BE ADJUSTED UPON REVIEW.

NOTE:
IF ANY GROUND WATER IS ENCOUTERED DURING DRILLING OPERATIONS, STEEL CASING MAY BE REQUIRED.

PIER DETAIL | 17

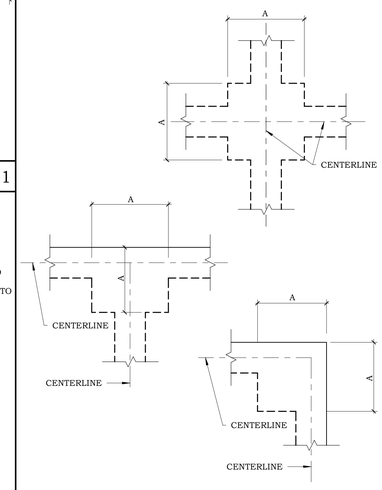


DROP AT SLAB ON GRADE | 11



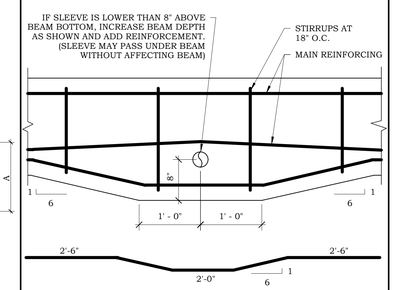
THICKENED SLAB AT NON-BEARING CMU WALL | 12

FOOTING SCHEDULE AT STEEL COLUMNS			
TYPE	A	DEPTH	REBAR REINFORCEMENT
S2	2'-6"	3'-0"	#5'S AT 12" O.C. E.W. TOP & BOTTOM
S3	3'-6"	3'-0"	#5'S AT 12" O.C. E.W. TOP & BOTTOM
S4	4'-6"	3'-0"	#5'S AT 12" O.C. E.W. TOP & BOTTOM
S5	5'-6"	3'-0"	#5'S AT 12" O.C. E.W. TOP & BOTTOM
S6	6'-6"	3'-0"	#5'S AT 8" O.C. E.W. TOP & BOTTOM
S7	7'-6"	3'-0"	#5'S AT 8" O.C. E.W. TOP & BOTTOM



FOOTING SCHEDULE | 7

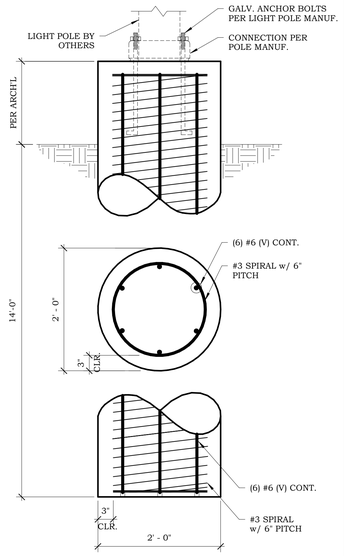
NOT USED | 1



TYPICAL SLEEVE IN GRADE BEAM | 2

NOT USED | 28

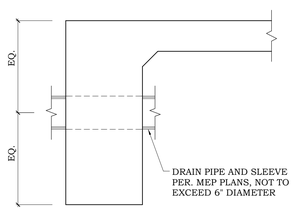
NOT USED | 23



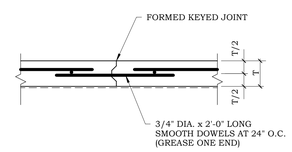
NOTE:
CONTRACTOR TO SUBMIT FINAL LIGHT POLE SPECIFICATIONS FOR REVIEW. DEPTH OF PIER MAY NEED TO BE ADJUSTED UPON REVIEW.

NOTE:
IF ANY GROUND WATER IS ENCOUTERED DURING DRILLING OPERATIONS, STEEL CASING MAY BE REQUIRED.

LIGHT POLE DETAIL | 19

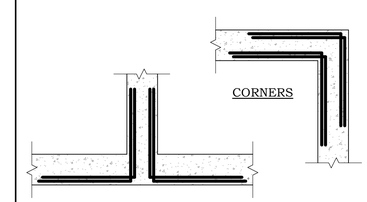


PIPE EXTERIOR FOOTING | 13



1. CONTRACTOR TO SUBMIT ANY PROPOSED LOCATIONS OF CONSTRUCTION JOINTS TO STRUCTURAL ENGINEER BEFORE COMMENCING WORK.
2. GRADE BEAM REINFORCING SHALL BE CONTINUOUS THRU JOINT

CONSTRUCTION JOINT DETAIL | 8



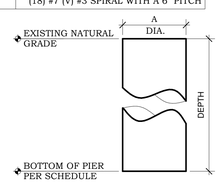
NOTE:
PROVIDE (4) #6 x 6'-0" CORNER BARS (2-TOP & 2-BOTTOM) AS SHOWN IN DETAILS ABOVE

TYPICAL CORNER BARS | 3

NOT USED | 29

NOT USED | 24

PIER SCHEDULE AT STEEL COLUMNS			
TYPE	A	BOTTOM OF PIER	REBAR REINFORCEMENT
P18	18"	20'-0"	(8) #7 (V) #3 SPIRAL WITH A 6" PITCH
P24	24"	20'-0"	(8) #7 (V) #3 SPIRAL WITH A 6" PITCH
P30	30"	25'-0"	(12) #7 (V) #3 SPIRAL WITH A 6" PITCH
P36	36"	25'-0"	(18) #7 (V) #3 SPIRAL WITH A 6" PITCH



NOTE: BOTTOM OF PIER ELEVATION TAKEN FROM EXISTING NATURAL GRADE

NOTE: FOR MORE INFORMATION SEE DETAIL 17/S5.01

TYPE "P" FOOTING

PIER SCHEDULE | 14

1. JOINT PATTERN SHALL BE NEARLY SQUARE
2. JOINT SPACING SHALL NOT EXCEED 15'-0"

CONTRATION JOINT DETAIL | 9

DIAMETER OF BENDS	
STIRRUPS AND TIES	4 db FOR #3 THRU #5 BARS
	6 db FOR #6 THRU #8 BARS
ALL OTHERS	6 db FOR #3 THRU #8 BARS
	8 db FOR #9 THRU #11 BARS
	10 db FOR #14 THRU #18 BARS

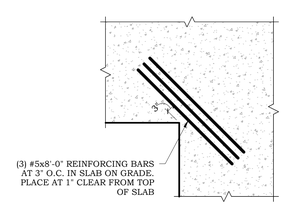
STANDARD HOOKS | 4

NOT USED | 30

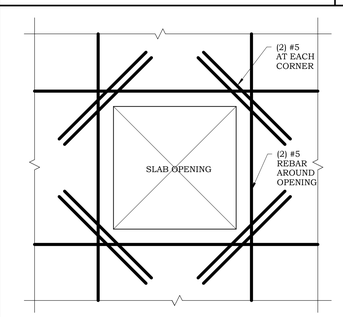
NOT USED | 25

NOT USED | 20

NOT USED | 15



TYPICAL SLAB REINFORCING | 10



OPENINGS IN SLAB | 5

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED PROFESSIONAL ENGINEER
4-12-19

CLIENT: PSJA ISD
PROJECT NUMBER: 18330
DATE: 04-04-19
DRAWN BY: JP
CHECKED BY: MC

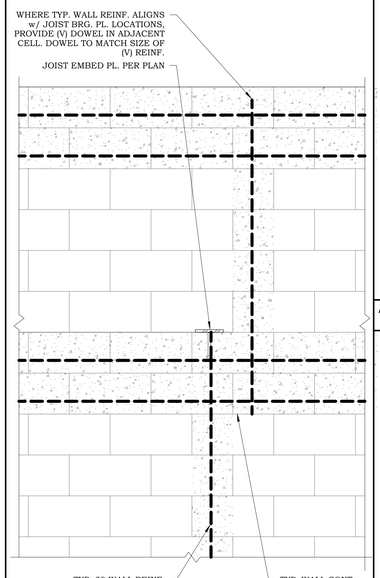
REVISIONS

No.	Description	Date

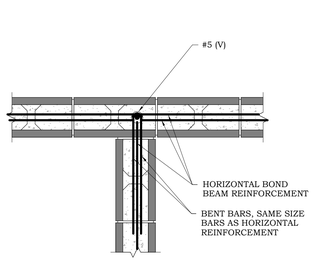
50% REVIEW SET

TYPICAL DETAILS

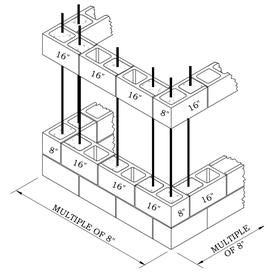
S5.01



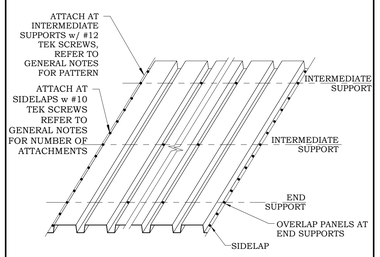
TYPICAL CMU WALL ELEVATION | 27



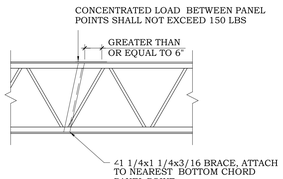
TYPICAL BOND BEAM INTERSECTION | 21



TYPICAL CMU CORNER DETAIL | 16



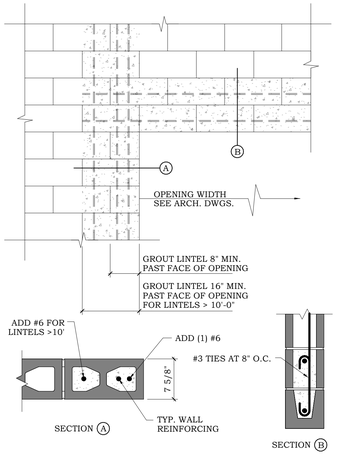
TYPICAL METAL DECK ATTACHMENT | 11



JOIST BRACING AT CONCENTRATED LOAD | 6

NOT USED | 1

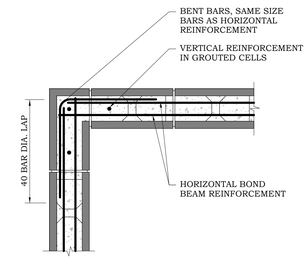
CHANIN ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369



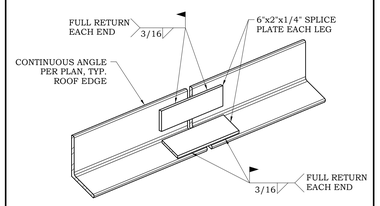
LINTEL SCHEDULE

CLEAR SPAN	WIDTH	DEPTH	REINFORCING	#3 TIES AT:	REMARKS
<3'-4"	8"	8"	(1)#5		
<4'-8"	8"	16"	(1)#5 (T) & (B)	8"	
<6'-8"	8"	16"	(1)#6 (T) & (B)	8"	
<10'-0"	8"	24"	(1)#6 (T) & (B)	8"	
<12'-0"	8"	24"	(1)#7 (T) & (B)	8"	

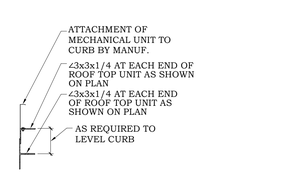
CMU LINTEL SCHEDULE | 23



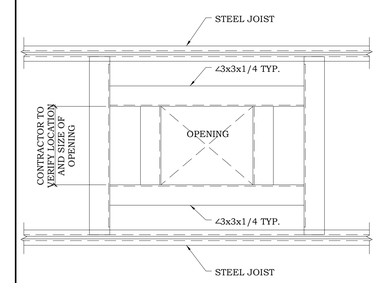
TYPICAL BOND BEAM CORNER | 17



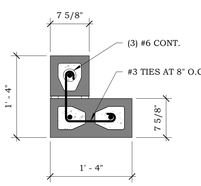
TYPICAL ROOF EDGE ANGLE SPLICE DETAIL | 12



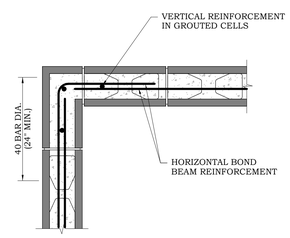
MECHANICAL CURB TO STEEL ANGLE | 7



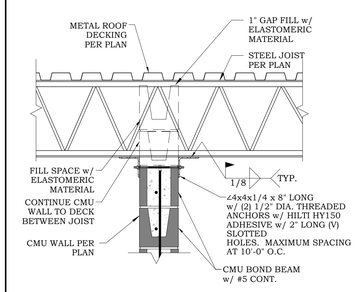
SUPPORT FOR HATCH OPENING | 2



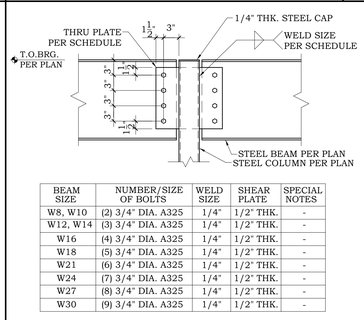
8" PILASTER "P2" | 28



TYPICAL BOND BEAM CORNER | 18

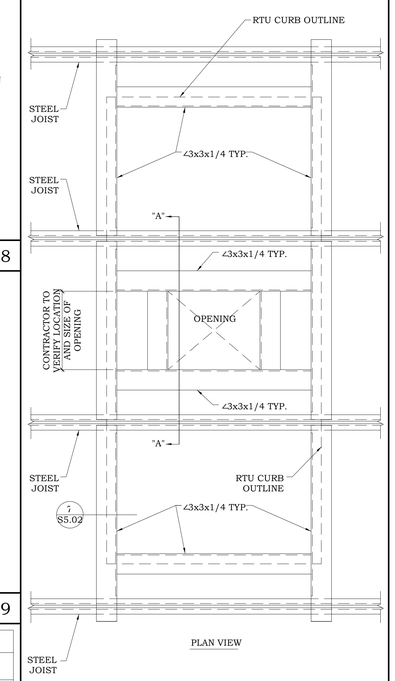


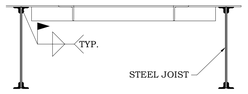
CMU WALL TO DECK LATERAL BRACE | 13



BEAM SIZE	NUMBER/SIZE OF BOLTS	WELD SIZE	SHEAR PLATE	SPECIAL NOTES
W8, W10	(2) 3/4" DIA. A325	1/4"	1/2" THK.	-
W12, W14	(3) 3/4" DIA. A325	1/4"	1/2" THK.	-
W16	(4) 3/4" DIA. A325	1/4"	1/2" THK.	-
W18	(5) 3/4" DIA. A325	1/4"	1/2" THK.	-
W21	(6) 3/4" DIA. A325	1/4"	1/2" THK.	-
W24	(7) 3/4" DIA. A325	1/4"	1/2" THK.	-
W27	(8) 3/4" DIA. A325	1/4"	1/2" THK.	-
W30	(9) 3/4" DIA. A325	1/4"	1/2" THK.	-

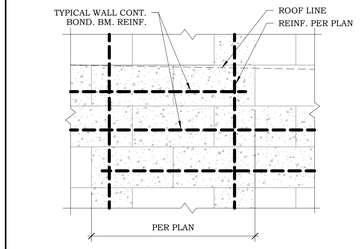
STEEL BEAM TO STEEL COLUMN | 8



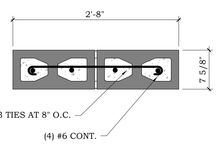


SECTION "A"-"A"

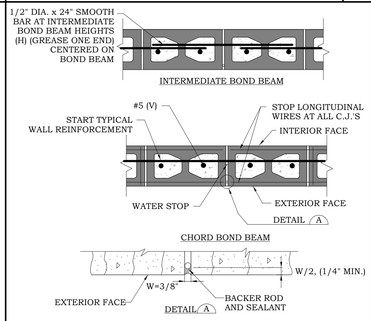
SUPPORT FOR MECHANICAL UNIT | 5



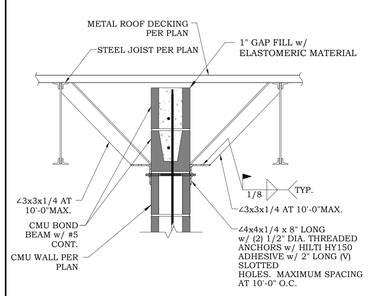
TYP. STEP IN BOND BEAM DETAIL | 29



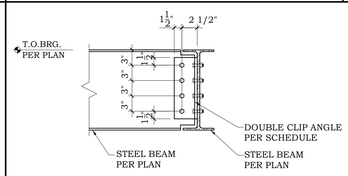
8" PILASTER "P1" | 24



CMU CONTROL JOINT "C.J." | 19



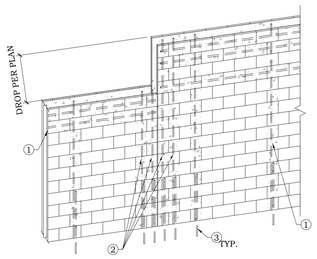
CMU WALL TO DECK LATERAL BRACE | 14

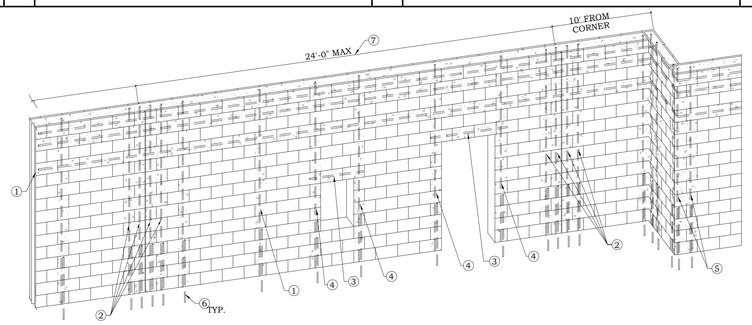


BEAM SIZE	NUMBER OF ROWS/ SIZE OF BOLTS	CLIP ANGLE
W8, W10	(2) 3/4" DIA. A325	∠4x3 1/2 x1/4
W12, W14	(3) 3/4" DIA. A325	∠4x3 1/2 x1/4
W16	(4) 3/4" DIA. A325	∠4x3 1/2 x1/4
W18	(5) 3/4" DIA. A325	∠4x3 1/2 x1/4
W21	(6) 3/4" DIA. A325	∠4x3 1/2 x1/4
W24	(7) 3/4" DIA. A325	∠4x3 1/2 x1/4
W27	(8) 3/4" DIA. A325	∠4x3 1/2 x1/4
W30	(9) 3/4" DIA. A325	∠4x3 1/2 x1/4

STEEL BEAM TO STEEL BEAM CONNECTION | 9

1. TYPICAL WALL REINFORCING AS CALLED OUT IN PLANS AND GENERAL NOTES.
2. VERTICAL REINFORCING AT CONTROL JOINTS, REFER TO DETAIL 19/S5.01
3. LINTELS PER LINTEL SCHEDULE, REFER TO DETAIL 23/S5.01
4. ADDITIONAL VERTICAL REINFORCING AT JAMBS OF ALL OPENINGS
5. WALL CORNER REINFORCING, REFER TO DETAIL 15, 17, 18/S5.01
6. DOWELS TO MATCH VERTICAL REINFORCEMENT PER PLAN, TYPICAL
7. CONTROL JOINT SPACING AS NOTED IS MAXIMUM ALLOWED, COORDINATE CONTROL JOINT LOCATIONS w/ARCHITECTURAL PLANS.





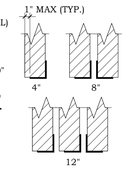
TYPICAL CMU WALL CONSTRUCTION | 15

STEEL LINTEL SCHEDULE

SIZE (MIN.-NOTE 4)	CLEAR OPNG. GREATER THAN	CLEAR OPNG. UP TO	REMARKS
∠4x4x3/8	----	8'-0"	MIN. OF 8" BEARING AT EACH END
∠6x4x3/8	8'-0"	11'-0"	MIN. OF 8" BEARING AT EACH END
∠7x4x3/8	11'-0"	12'-0"	MIN. OF 8" BEARING AT EACH END
∠8x4x1/2	12'-0"	14'-0"	MIN. OF 8" BEARING AT EACH END

NOTES:

1. PROVIDE ONE MEMBER FOR EACH 4" (NORMAL)
2. INSTALL ALL LOOSE LINTELS WITH LONG LEG VERT.
3. PROVIDE SHORING UNDER LINTELS OVER 8'-0" LONG UNTIL GROUT HAS SET 72 HOURS.
4. **ANGLE SIZE IS MIN. COORDINATE REQUIRED HORIZ. LEG DIMENSION w/ ARCH. DRAWING.**



TYPICAL LINTEL DETAILS

- FOR SUPPORT OF MASONRY WEIGHT ONLY.
- DEFLECTION AT ℄ ∠/600.
- LINTELS SHALL BE GALVANIZED STEEL.

STEEL LINTEL SCHEDULE | 10

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED PROFESSIONAL ENGINEER
4-12-19

CLIENT	PSJA ISD
PROJECT NUMBER	18330
DATE	04-04-19
DRAWN BY	JP
CHECKED BY	MC

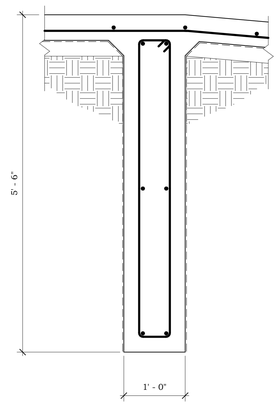
REVISIONS

No.	Description	Date

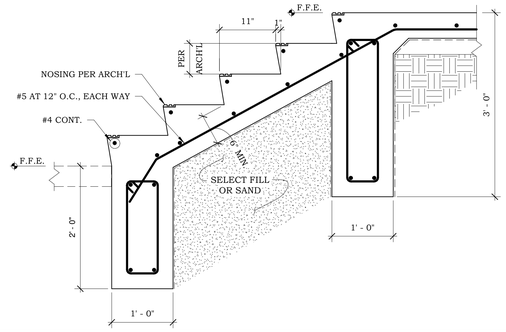
50% REVIEW SET

TYPICAL DETAILS

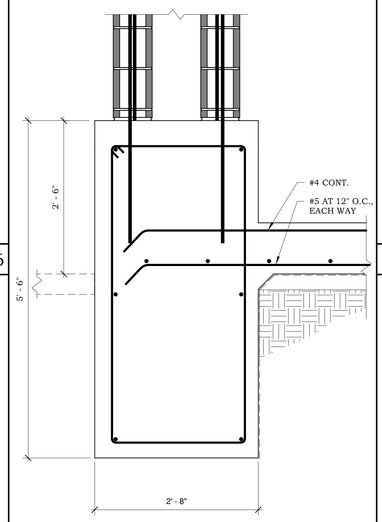
S5.02



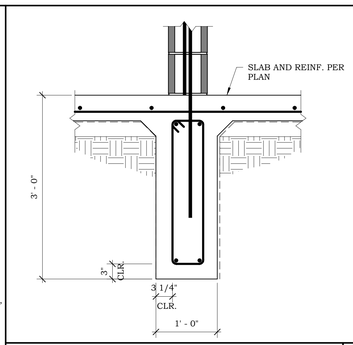
EXTERIOR GRADE BEAM | 27



EXTERIOR GRADE BEAM | 16

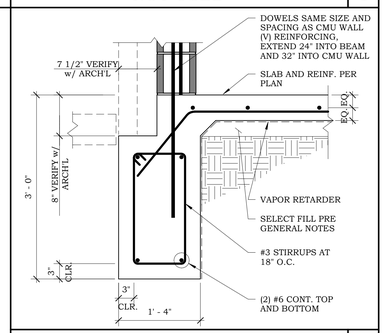


EXTERIOR GRADE BEAM | 12

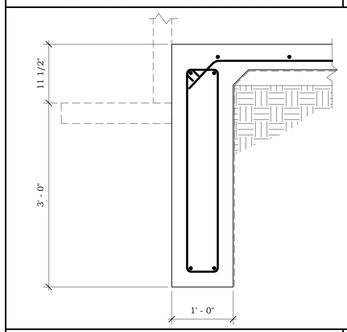


INTERIOR GRADE BEAM | 6

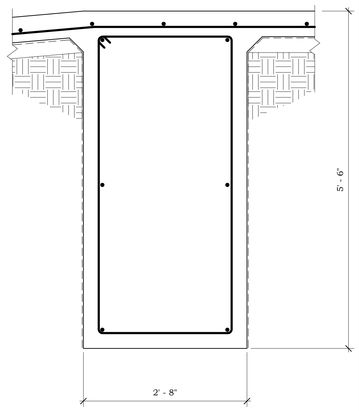
NOT USED | 1



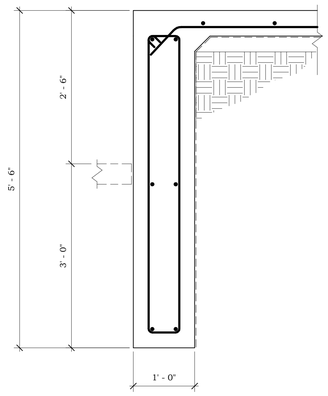
EXTERIOR GRADE BEAM | 2



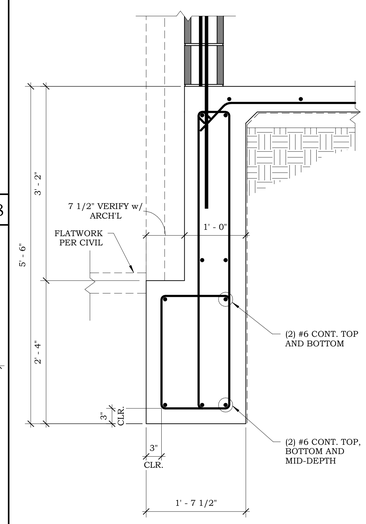
EXTERIOR GRADE BEAM | 28



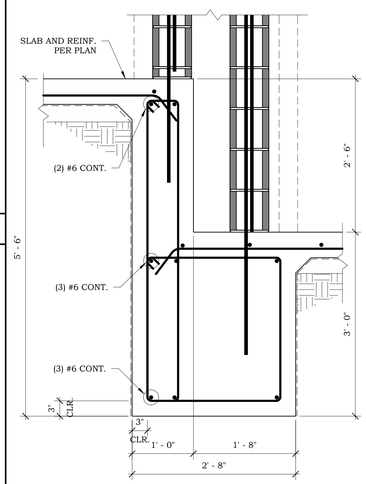
EXTERIOR GRADE BEAM | 23



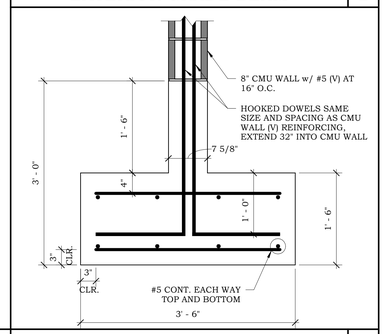
EXTERIOR GRADE BEAM | 18



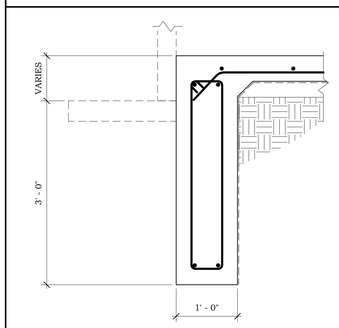
EXTERIOR GRADE BEAM | 14



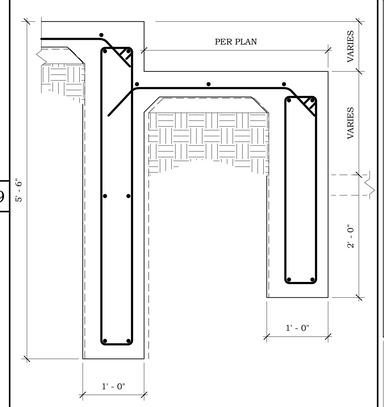
EXTERIOR GRADE BEAM | 8



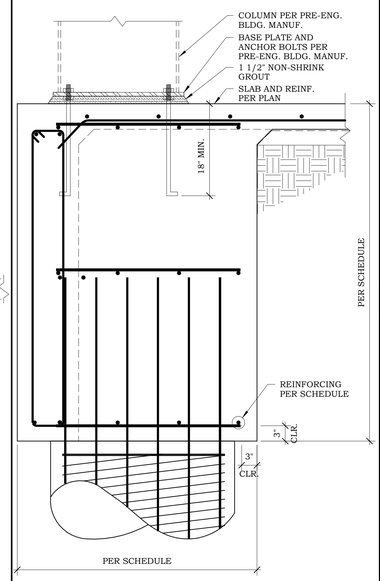
EXTERIOR GRADE BEAM | 3



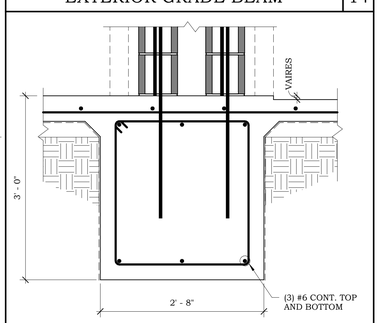
EXTERIOR GRADE BEAM | 29



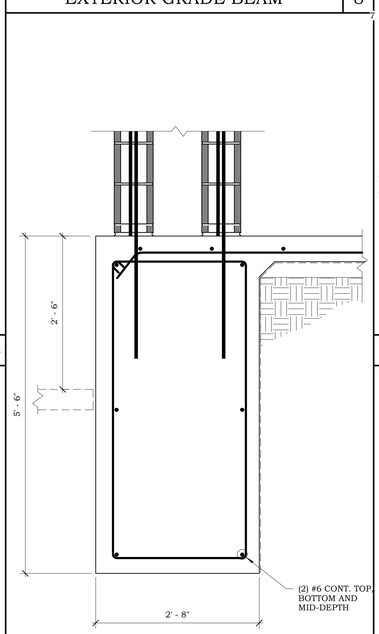
EXTERIOR GRADE BEAM | 25



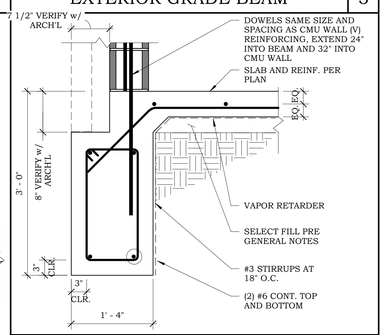
FOOTING AT STEEL COLUMN | 20



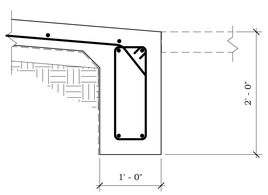
INTERIOR GRADE BEAM | 15



EXTERIOR GRADE BEAM | 10

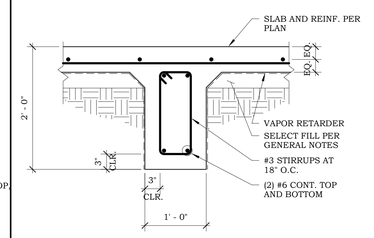


EXTERIOR GRADE BEAM | 4



EXTERIOR GRADE BEAM | 30

INTERIOR GRADE BEAM | 5



CHANIN
ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS — MIGUEL CHANIN — 93127 — LICENSED PROFESSIONAL ENGINEER
4-12-19

CLIENT	PSJA ISD
PROJECT NUMBER	18330
DATE	04-04-19
DRAWN BY	JP
CHECKED BY	MC

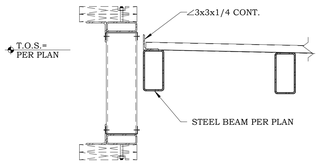
REVISIONS

No.	Description	Date

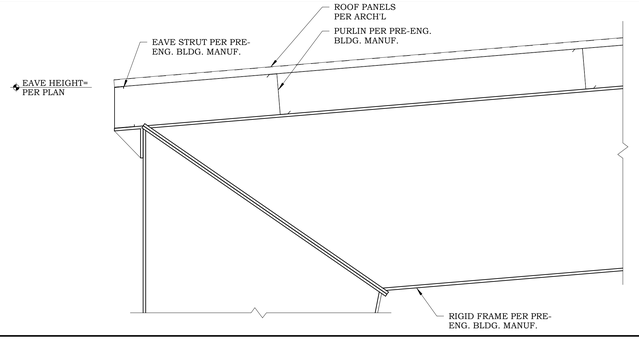
50% REVIEW SET

DETAILS

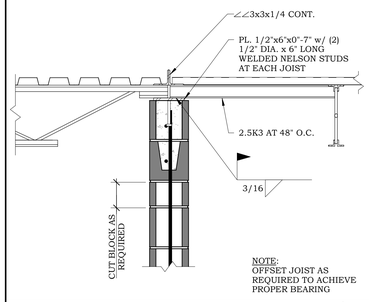
S6.01



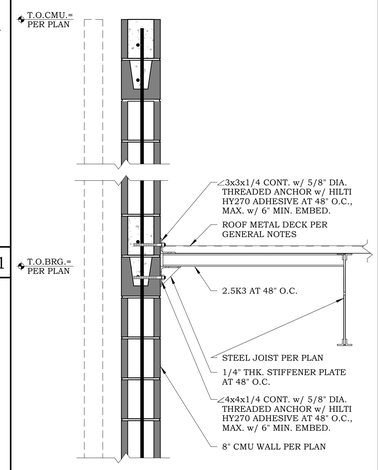
STEEL BEAM TO ROOF DECK | 26



RIGID FRAME DETAIL | 16

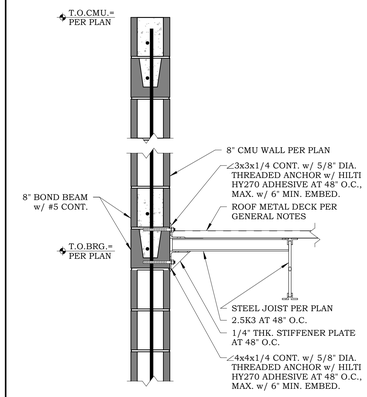


STEEL JOIST TO CMU WALL | 11

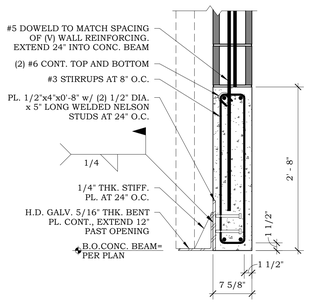


STEEL JOIST TO CMU WALL | 7

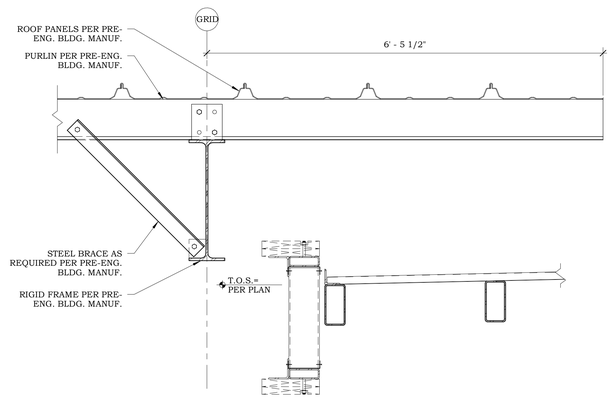
CHANIN
ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369



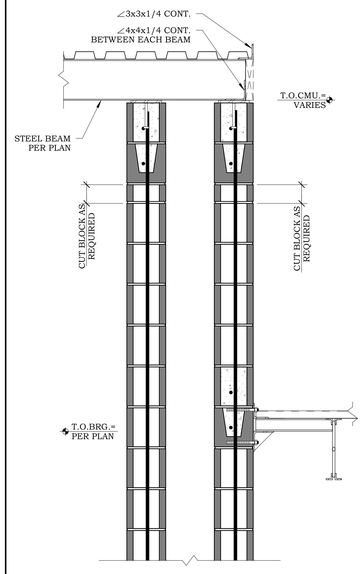
STEEL JOIST TO CMU WALL | 2



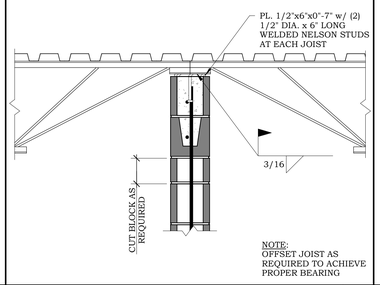
CONCRETE BEAM DETAIL | 27



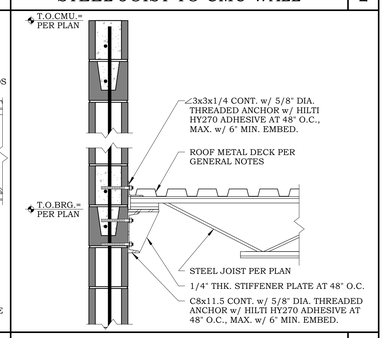
RIGID FRAME DETAIL (ALTERNATE NO. 1) | 18



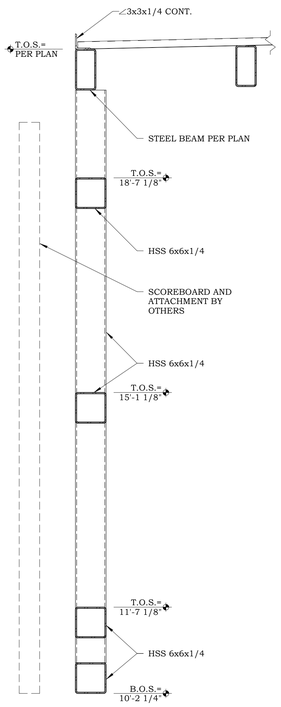
STEEL JOIST TO CMU WALL | 13



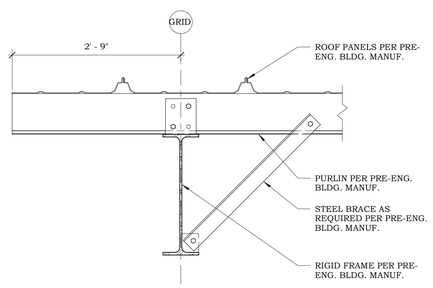
STEEL JOIST TO CMU WALL | 8



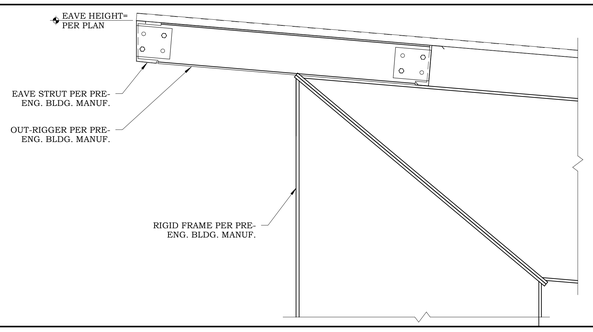
STEEL JOIST TO CMU WALL | 3



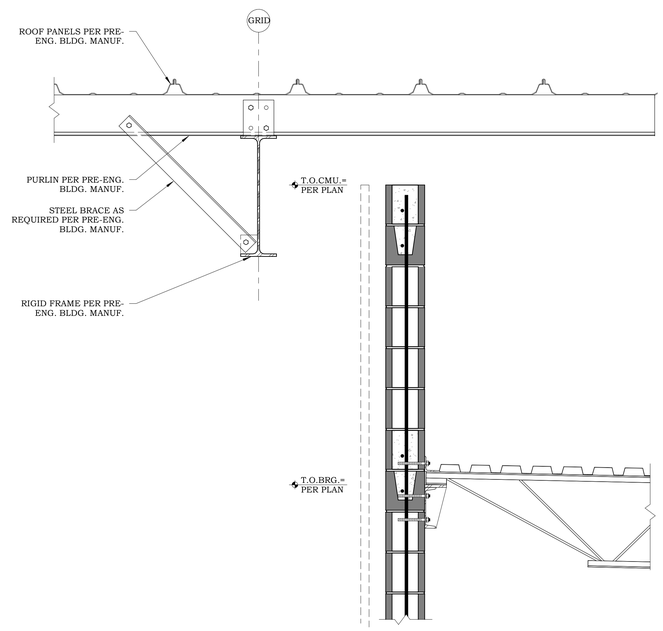
SECTION AT SCOREBOARD | 30



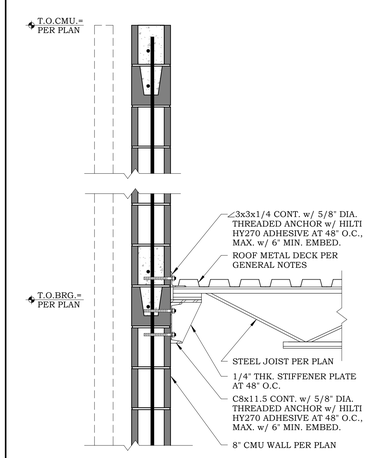
RIGID FRAME DETAIL | 19



RIGID FRAME DETAIL | 20



RIGID FRAME DETAIL (ALTERNATE NO. 1) | 10



STEEL JOIST TO CMU WALL | 5

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED
PROFESSIONAL ENGINEER
4-12-19

CLIENT	PSJA ISD
PROJECT NUMBER	18330
DATE	04-04-19
DRAWN BY	JP
CHECKED BY	MC

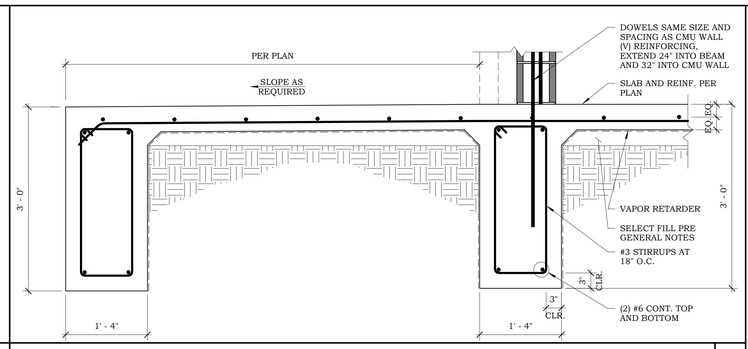
REVISIONS

No.	Description	Date

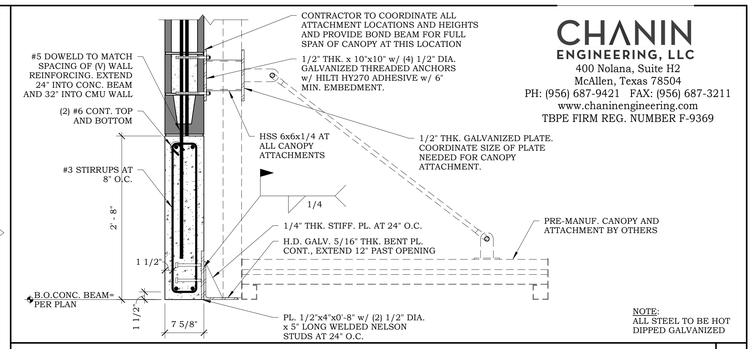
50% REVIEW SET

DETAILS

S6.02

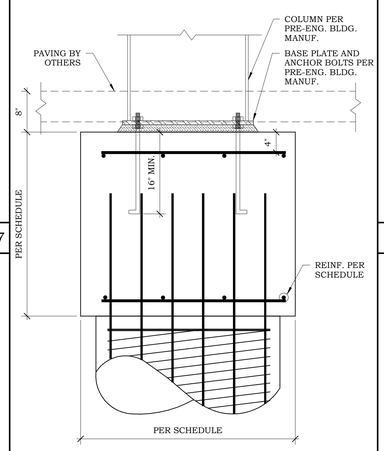


NOT USED | 26 | EXTERIOR GRADE BEAM | 16

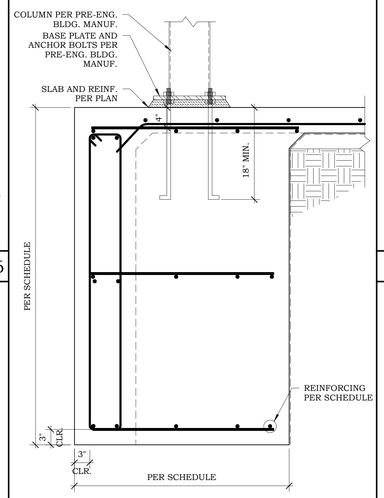


CHANIN ENGINEERING, LLC
400 Nolana, Suite H2
McAllen, Texas 78504
PH: (956) 687-9421 FAX: (956) 687-3211
www.chaninengineering.com
TBPE FIRM REG. NUMBER F-9369

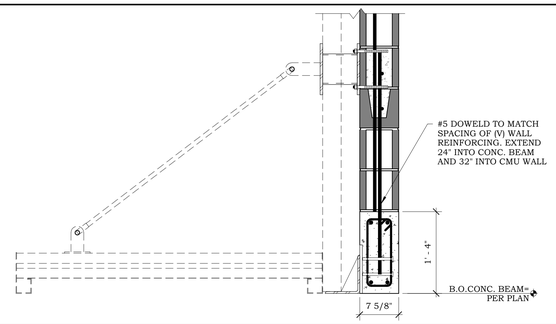
CONCRETE BEAM DETAIL | 1



NOT USED | 27 | FOOTING AT STEEL COLUMN | 23



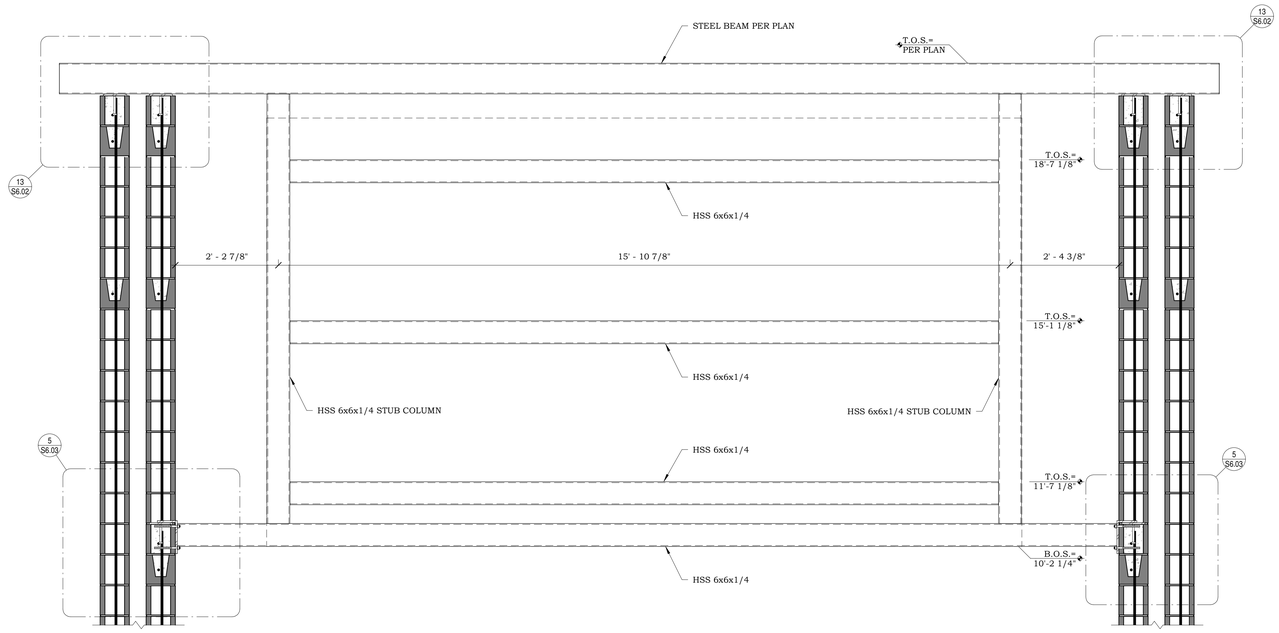
FOOTING AT STEEL COLUMN | 12



CONCRETE BEAM DETAIL | 2

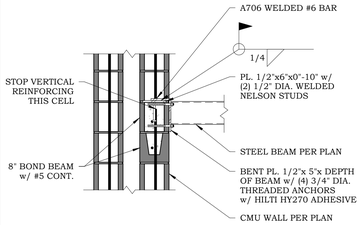
NOT USED | 28 | NOT USED | 24

NOT USED | 17



SCOREBOARD ELEVATION | 4

NOT USED | 29 | NOT USED | 25 | NOT USED | 20 | NOT USED | 15 | NOT USED | 10



STEEL BEAM TO CMU WALL | 5

NOT USED | 30 | NOT USED | 25 | NOT USED | 20 | NOT USED | 15 | NOT USED | 10 | STEEL BEAM TO CMU WALL | 5

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
MIGUEL CHANIN
93127
LICENSED PROFESSIONAL ENGINEER
4-12-19

CLIENT	PSJA ISD
PROJECT NUMBER	18330
DATE	04-04-19
DRAWN BY	JP
CHECKED BY	MC

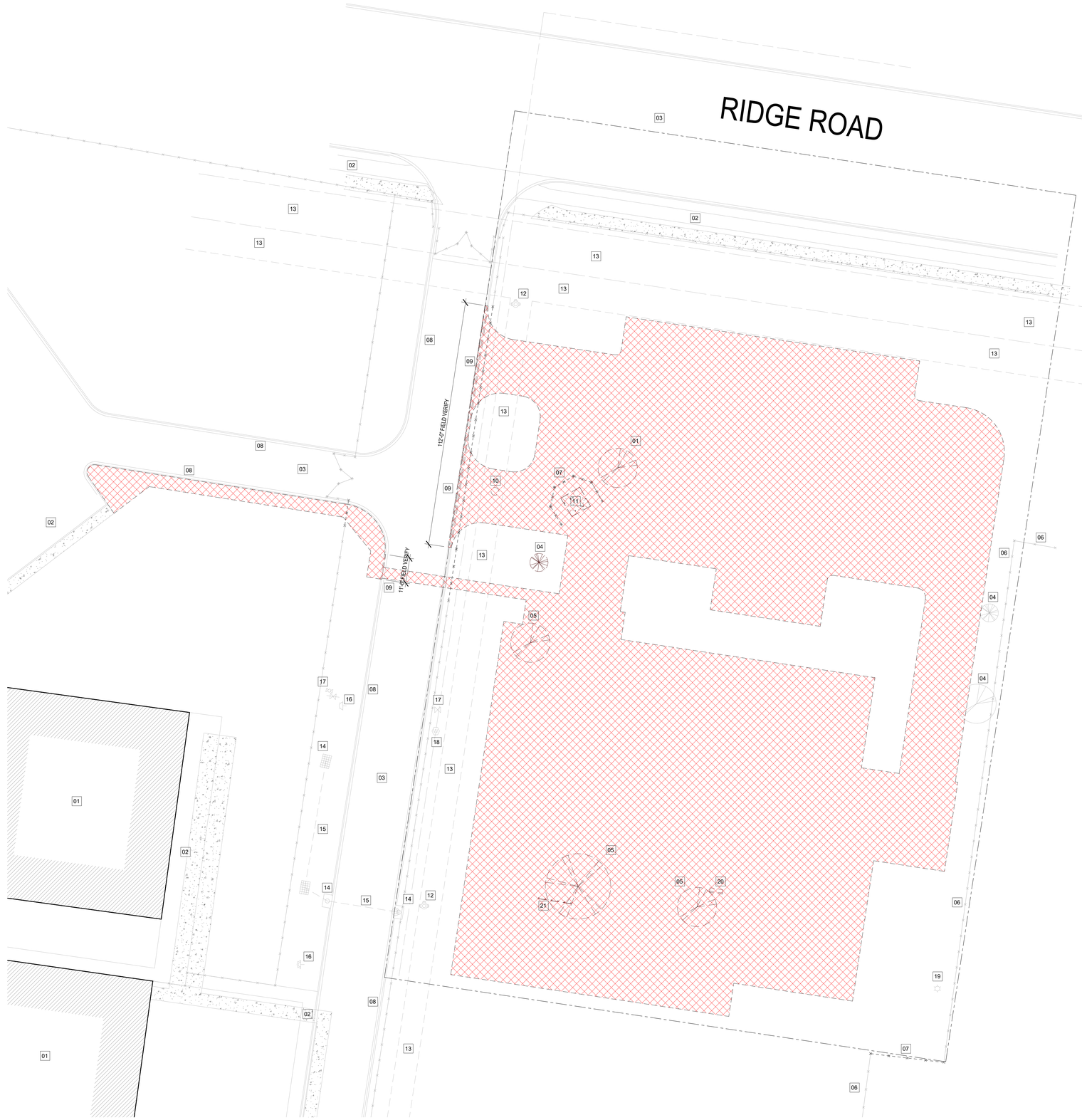
REVISIONS

No.	Description	Date

50% REVIEW SET

DETAILS

S6.03



6 DEMOLITION SITE PLAN
1" = 20'-0"

GENERAL DEMOLITION NOTES

1. DEMOLITION PLANS INDICATE SOME OF THE SCOPE-OF-WORK INVOLVED FOR THE DEMOLITION PHASE OF THIS PROJECT. CONTRACTOR SHALL REVIEW ALL SHEETS FOR ADDITIONAL DEMOLITION SCOPE.
2. CONTRACTOR SHALL VERIFY EXISTING SITE AND BUILDING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO DEMOLITION ACTIVITIES AND WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES IN WRITING.
4. CONTRACTOR SHALL NOTIFY ARCHITECT AND OWNER OF ANY POSSIBLE ASBESTOS CONTAINING MATERIALS DISCOVERED BEFORE PROCEEDING WITH WORK, PROTECT INTERIOR CONSTRUCTION TO REMAIN DURING DEMOLITION AND CONSTRUCTION.
5. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE COMMENCING WORK.
6. AFTER AWARD OF THE CONTRACT, CHANGE ORDER REQUESTS FOR ADDITIONAL MONEY WILL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR.
7. CONTRACTOR SHALL NOT SCALE DRAWINGS.
8. CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SHORING, TEMPORARY BRACING, AND OR TEMPORARY SUPPORTS AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF EXISTING STRUCTURE TO REMAIN AND OR EXISTING BUILDING ELEMENTS TO REMAIN.
9. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO DEMOLITION ACTIVITIES AND WORK.
10. CONTRACTOR SHALL REMOVE TRASH AND DEBRIS REGULARLY AS NECESSARY TO ELIMINATED INTERFERENCE WITH ROADS, STREET, WALKS, AND ALL OTHER ADJACENT FACILITIES.
11. CONTRACTOR SHALL REMOVE TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
12. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF TEMPORARY DUST AND OR SOUND PARTITION BETWEEN CONSTRUCTION AREA AND AREAS NOT IN SCOPE AS NECESSARY. DEMOLITION ACTIVITIES SHALL BE PERFORMED SO AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY AND OCCUPANTS (I.E. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST).
13. CONTRACTOR SHALL REPAIR, REPLACE, OR PATCH EXISTING BUILDINGS, DRIVEWAYS, SIDEWALKS, CANOPIES, AND OR PARKING AREAS DAMAGED, MODIFIED, AND OR DISTURBED BY DEMOLITION WORK AT NO COST TO THE OWNER.
14. ALL EXISTING EQUIPMENT THAT REMAINS SHALL BE PROTECTED DURING DEMOLITION AND OR CONSTRUCITON TO PREVENT DAMAGE. ANY DAMAGE TO REMAINING EXISTING EQUIPMENT SUSTAINED DURING DEMOLITION AND OR CONSTRUCITON SHALL BE EQUIVALENTLY REPLACED OR EQUIVALENTLY REPAIRED AT NO COST TO THE OWNER.
15. CONTRACTOR SHALL PROVIDE TRAFFIC HANDLING MEASURES TO PROTECT THE GENERAL PUBLIC AT ALL TIMES, AS NECESSARY AND AS REQURED BY AUTHORITIES HAVING JURISDICTION.
16. DO NOT INTERRUPT EXISTING UTILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
17. WHEN UTILITY SERVICES ARE REQUIRED TO BE REMOVED, RELOCATED, OR ABANDONED, PROVIDE BYPASS CONNECTIONS TO MAINTAIN CONTINUITY OF SERVICE BEFORE PROCEEDING WITH DEMOLITION.
18. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING: ELECTRIC, GAS, WATER, TELEPHONE, STORM SEWER, AND SANITARY SEWER FOR FIELD LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITY LINES. PRIOR TO COMMENCEMENT OF ANY DEMOLITION WORK, CONTRACTOR SHALL IDENTIFY ALL ELECTRICAL CIRCUITS SERVICING THE AREA INVOLVED WITH THIS DEMOLITION. THOSE CIRCUITS SHALL THEN BE LOCKED OUT AND TAGGED OUT IF THEY DO NOT SERVICE ANY OF THE REMAINING BUILDING. THOSE CIRCUITS WHICH ARE IDENTIFIED TO SERVICE BOTH THE AREA TO BE DEMOLISHED AND THE REMAINING BUILDING SHALL BE SPLIT SO AS TO KILL ALL ELECTRICAL POWER TO THE AREA TO BE DEMOLISHED WHILE MAINTAINING POWER TO THE REMAINDER OF THE BUILDING.
19. CONTRACTOR SHALL RELOCATE UTILITIES AND EQUIPMENT AS REQUIRED TO ACCOMMODATE NEW HVAC, ELECTRICAL, PLUMBING, AND TECHNOLOGY REQUIREMENTS FOR NEW WORK.
20. PROTECT EXISTING SITE ELEMENTS AND EXISTING LANDSCAPING TO REMAIN. PROTECTION SHALL INCLUDE BUT NOT BE LIMITED TO EXISTING TREES AND OTHER EXISTING VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING, OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIAL OR EXCAVATED MATERIAL WITHIN DRIP LINES.
21. CONTRACTOR SHALL REGRADE AND HYDROMULCH AREAS AFFECTED BY DEMOLITION.
22. OWNER HAS RIGHT OF FIRST REFUSAL OF ALL ITEMS REMOVED AS PART OF THE SOCPE OF WORK, WHETHER IDENTIFIED AS SALVAGE OR NOT.
23. NOTIFY THE BUILDING OWNER OF ANY MATERIALS, FIXTURES, ETC. TO BE REMOVED THAT ARE DEEMED SALVAGEABLE. TURN OVER ANY REQUESTED ITEMS TO THE BUILDING OWNER IN GOOD AND CLEAN CONDITION.
24. ALL FURNITURE WILL BE REMOVED OR RELOCATED BY THE OWNER AS NECESSARY PRIOR TO THE DEMOLITION WORK OF THIS PROJECT. CONTRACTOR SHALL COORDINATE WITH OWNER AS REQUIRED.
25. REMOVE EXISTING CONSTRUCTION TO THE EXTENT INDICATED ON THE DRAWINGS. SHOULD ANY DAMAGE OCCUR TO ANY EXISTING CONSTRUCTION TO REMAIN, THE CONTRACTOR SHALL REPAIR THE DAMAGE TO MATCH EXISTING AND OR ADJACENT CONSTRUCTION AT NO COST TO THE OWNER.
26. MAINTAIN ANY AND ALL EXISTING FIRE-RATED ASSEMBLIES THAT ARE TO REMAIN, AND THEIR ASSOCIATED FIRE-RATINGS, INCLUDING BUT NOT LIMITED TO ALL ASSOCIATED EXISTING FIRE-RATED OPENINGS, ALL ASSOCIATED EXISTING FIRE-RATED PENETRATIONS, AND ALL ASSOCIATED EXISTING FIRE-RATED FIRESTOPPING CONDITIONS.
27. WHEN UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH THE INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, DETERMINE THE NATURE AND EXTENT OF THE CONFLICT AND NOTIFY THE ARCHITECT IMMEDIATELY FOR RESOLUTION.
28. REMOVE, PATCH, AND REPAIR ALL ABANDONED ROOF PENETRATIONS RESULTING FROM WORK.
29. SAW-CUT AND REMOVE EXISTING FLOOR FINISHES AND FLOOR SLAB AS REQUIRED TO INSTALL NEW FIXTURES, ITEMS, AND OR DEVISES FOR ALL SCOPE-OF-WORK PERTAINING TO NEW MECHANICAL WORK, NEW PLUMBING UTILITIES, NEW PLUMBING WORK, NEW ELECTRICAL WORK, AND NEW TECHNOLOGY WORK. SPLICE NEW REINFORCING BARS DOWELLED INTO EXITISTING CONCRETE AND PROVIDE NEW VAPOR RETARDER AND NEW CONTINUOUS WATERSTOPS AT JOINT BETWEEN NEW CONCRETE FLOOR SLAB AND EXISTING CONCRETE FLOOR SLAB. PATCH WITH NEW 3,500 PSI MINIMUM CONCRETE AND PREPARE FLOOR, INCLUDING NEW CONCRETE, TO RECEIVE NEW FLOOR FINISHES. COORDINATE WITH STRUCTURAL.
30. EXISTING WALLS (OR PORTIONS OF WALLS) TO BE REMOVED SHALL BE CUT FLUSH WHERE INTERSECTING WITH WALLS TO REMAIN. REMAINING WALLS TO BE PATCHED AND FINISHED SMOOTH.
31. NEW OPENING TO BE CUT IN EXISTING WALLS SHALL BE SAW-CUT AT LOCATIONS INDICATED TO THE HEIGHT AND WIDTH INDICATED. NEW LINTELS SHALL BE INSTALLED TO SUPPORT EXISTING WALL CONSTRUCTION ABOVE AS INDICATED ON THE DRAWINGS, OR IF NOT INDICATED, AS REQUIRED FOR NEW WALL CONSTRUCTION PER STRUCTURAL DRAWINGS. COORDINATE LOCATIONS OF ALL NEW OPENINGS IN EXISTING WALLS AND PARTITIONS WITH ARCHITECTURAL PLANS.
32. WHERE EXISTING WALL OPENINGS ARE TO BE NEWLY CLOSED-OFF, REMOVE ANY EXISTING OPENING FRAME AND PATCH AND REPAIR EXISTING WALL TO MATCH EXISTING ADJACENT MATERIALS AND FINISHES, UNLESS NOTED OTHERWISE.
33. WHERE EXISTING INTERIOR WALLS ARE REPLACED OR REMOVED, REMOVE MEPT SYSTEMS BACK TO PANEL, OR MECHANICAL ROOM, OR FARTHEST POSSIBLE POINT WITHOUT DISTURBING EXISTING CONSTRUCTION. REMOVE EXISTING MECHANICAL EQUIPMENT, RELOCATE POWER PER MEPT DRAWINGS
34. REFER TO MEPT DRAWINGS FOR DEMOLITION OF MEPT SYSTEMS. IDENTIFY WORK REQUIRED BY THIS CONTRACTOR WHICH MAY AFFECT DEMOLITION AND OR REPAIRS OF ARCHITECTURAL ELEMENTS. COORDINATE WITH RELATED SUBCONTRACTORS THE EXTENT OF ALL DEMOLITION WORK.
35. PATCH FLOORS, WALLS CEILINGS WHICH REMAIN AT LOCATIONS WHERE PIPES, CONDUITS, ETC. ARE REMOVED AS REQURIED TO MATCH EXISTING CONDITIONS OR TO RECEIVE NEW FINISHES.
36. WHERE EXISTING FINISH FLOOR IS REMOVED, PREPARE FLOOR SURFACE TO RECEIVE NEW FLOORING.
37. ALL DASHED LINES ARE DEMOLITION LINES U.N.O.

DEMOLITION - KEY NOTES

01	EXISTING BUILDING TO REMAIN, NIC.
02	EXISTING SIDEWALK TO REMAIN AND PROTECTED THROUGHOUT CONSTRUCTION.
03	EXISTING ASPHALT DRIVE TO REMAIN.
04	EXISTING TREE TO REMAIN AND PROTECTED THROUGOUT CONSTRUCITON.
05	TREE/SHRUB TO BE REMOVED AND RELOCATED, COORDINATE WITH LANDSCAPING DWGS..
06	EXISTING CHAIN LINK FENCE TO REMAIN.
07	PORTION OF CHAINLINK FENCE TO BE REMOVED WITH ASSOCIATED FOOTINGS.
08	EXISTING CURB AND GUTTER
09	PORTION OF CURB AND GUTTER TO BE REMOVED, COORDINATE WITH CIVIL DWGS.
10	EXISTING MANHOLE COVER TO BE REMOVED, COORDINATE WITH CIVIL DWGS.
11	EXISTING CONC. PAD TO BE DEMOLISHED.
12	EXISTING FIRE HYDRANT TO REMAIN AND PROTRECTED THROUGHOUT CONSTRUCTION.
13	EXISTING UTILITY EASEMENT, REF. TO CIVIL DWGS.
14	EXISTING INLET, REF. TO CIVIL DWGS.
15	EXISTING STORM DRAINAGE, REF. TO CIVIL DWGS.
16	EXISTING FIRE DEPARTMENT CONNECTION, REF. TO CIVIL DWGS.
17	EXISTING WATER/IRRIGATION VALVE, REF. TO CIVIL DWGS.
18	EXISTING WATER METER, REF. TO CIVIL DWGS.
19	EXISTING LIGHT POLE TO REMAIN, REF. TO CIVIL DWGS.

DEMO LEGEND

- EXISTING BUILDING, NIC
- DEMOLISHED ITEM
- DEMOLISH

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	JC
CHECKED BY	ER

REVISIONS

No.	Description	Date

ISSUED FOR BIDS

SITE DEMOLITION PLAN

AD0.01A

6 DEMOLITION SITE PLAN
1" = 20'-0"

GENERAL DEMOLITION NOTES

1. DEMOLITION PLANS INDICATE SOME OF THE SCOPE-OF-WORK INVOLVED FOR THE DEMOLITION PHASE OF THIS PROJECT. CONTRACTOR SHALL REVIEW ALL SHEETS FOR ADDITIONAL DEMOLITION SCOPE.
2. CONTRACTOR SHALL VERIFY EXISTING SITE AND BUILDING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO DEMOLITION ACTIVITIES AND WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES IN WRITING.
4. CONTRACTOR SHALL NOTIFY ARCHITECT AND OWNER OF ANY POSSIBLE ASBESTOS CONTAINING MATERIALS DISCOVERED BEFORE PROCEEDING WITH WORK, PROTECT INTERIOR CONSTRUCTION TO REMAIN DURING DEMOLITION AND CONSTRUCTION.
5. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE COMMENCING WORK.
6. AFTER AWARD OF THE CONTRACT, CHANGE ORDER REQUESTS FOR ADDITIONAL MONEY WILL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR.
7. CONTRACTOR SHALL NOT SCALE DRAWINGS.
8. CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SHORING, TEMPORARY BRACING, AND OR TEMPORARY SUPPORTS AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF EXISTING STRUCTURE TO REMAIN AND OR EXISTING BUILDING ELEMENTS TO REMAIN.
9. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO DEMOLITION ACTIVITIES AND WORK.
10. CONTRACTOR SHALL REMOVE TRASH AND DEBRIS REGULARLY AS NECESSARY TO ELIMINATED INTERFERENCE WITH ROADS, STREET, WALKS, AND ALL OTHER ADJACENT FACILITIES.
11. CONTRACTOR SHALL REMOVE TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
12. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF TEMPORARY DUST AND OR SOUND PARTITION BETWEEN CONSTRUCTION AREA AND AREAS NOT IN SCOPE AS NECESSARY. DEMOLITION ACTIVITIES SHALL BE PERFORMED SO AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY AND OCCUPANTS (I.E. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST).
13. CONTRACTOR SHALL REPAIR, REPLACE, OR PATCH EXISTING BUILDINGS, DRIVEWAYS, SIDEWALKS, CANOPIES, AND OR PARKING AREAS DAMAGED, MODIFIED, AND OR DISTURBED BY DEMOLITION WORK AT NO COST TO THE OWNER.
14. ALL EXISTING EQUIPMENT THAT REMAINS SHALL BE PROTECTED DURING DEMOLITION AND OR CONSTRUCITON TO PREVENT DAMAGE. ANY DAMAGE TO REMAINING EXISTING EQUIPMENT SUSTAINED DURING DEMOLITION AND OR CONSTRUCITON SHALL BE EQUIVALENTLY REPLACED OR EQUIVALENTLY REPAIRED AT NO COST TO THE OWNER.
15. CONTRACTOR SHALL PROVIDE TRAFFIC HANDLING MEASURES TO PROTECT THE GENERAL PUBLIC AT ALL TIMES, AS NECESSARY AND AS REQURED BY AUTHORITIES HAVING JURISDICTION.
16. DO NOT INTERRUPT EXISTING UTILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
17. WHEN UTILITY SERVICES ARE REQUIRED TO BE REMOVED, RELOCATED, OR ABANDONED, PROVIDE BYPASS CONNECTIONS TO MAINTAIN CONTINUITY OF SERVICE BEFORE PROCEEDING WITH DEMOLITION.
18. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING: ELECTRIC, GAS, WATER, TELEPHONE, STORM SEWER, AND SANITARY SEWER FOR FIELD LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITY LINES. PRIOR TO COMMENCEMENT OF ANY DEMOLITION WORK, CONTRACTOR SHALL IDENTIFY ALL ELECTRICAL CIRCUITS SERVICING THE AREA INVOLVED WITH THIS DEMOLITION. THOSE CIRCUITS SHALL THEN BE LOCKED OUT AND TAGGED OUT IF THEY DO NOT SERVICE ANY OF THE REMAINING BUILDING. THOSE CIRCUITS WHICH ARE IDENTIFIED TO SERVICE BOTH THE AREA TO BE DEMOLISHED AND THE REMAINING BUILDING SHALL BE SPLIT SO AS TO KILL ALL ELECTRICAL POWER TO THE AREA TO BE DEMOLISHED WHILE MAINTAINING POWER TO THE REMAINDER OF THE BUILDING.
19. CONTRACTOR SHALL RELOCATE UTILITIES AND EQUIPMENT AS REQUIRED TO ACCOMMODATE NEW HVAC, ELECTRICAL, PLUMBING, AND TECHNOLOGY REQUIREMENTS FOR NEW WORK.
20. PROTECT EXISTING SITE ELEMENTS AND EXISTING LANDSCAPING TO REMAIN. PROTECTION SHALL INCLUDE BUT NOT BE LIMITED TO EXISTING TREES AND OTHER EXISTING VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING, OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIAL OR EXCAVATED MATERIAL WITHIN DRIP LINES.
21. CONTRACTOR SHALL REGRADE AND HYDROMULCH AREAS AFFECTED BY DEMOLITION.
22. OWNER HAS RIGHT OF FIRST REFUSAL OF ALL ITEMS REMOVED AS PART OF THE SOCPE OF WORK, WHETHER IDENTIFIED AS SALVAGE OR NOT.
23. NOTIFY THE BUILDING OWNER OF ANY MATERIALS, FIXTURES, ETC. TO BE REMOVED THAT ARE DEEMED SALVAGEABLE. TURN OVER ANY REQUESTED ITEMS TO THE BUILDING OWNER IN GOOD AND CLEAN CONDITION.
24. ALL FURNITURE WILL BE REMOVED OR RELOCATED BY THE OWNER AS NECESSARY PRIOR TO THE DEMOLITION WORK OF THIS PROJECT. CONTRACTOR SHALL COORDINATE WITH OWNER AS REQUIRED.
25. REMOVE EXISTING CONSTRUCTION TO THE EXTENT INDICATED ON THE DRAWINGS. SHOULD ANY DAMAGE OCCUR TO ANY EXISTING CONSTRUCTION TO REMAIN, THE CONTRACTOR SHALL REPAIR THE DAMAGE TO MATCH EXISTING AND OR ADJACENT CONSTRUCTION AT NO COST TO THE OWNER.
26. MAINTAIN ANY AND ALL EXISTING FIRE-RATED ASSEMBLIES THAT ARE TO REMAIN, AND THEIR ASSOCIATED FIRE-RATINGS, INCLUDING BUT NOT LIMITED TO ALL ASSOCIATED EXISTING FIRE-RATED OPENINGS, ALL ASSOCIATED EXISTING FIRE-RATED PENETRATIONS, AND ALL ASSOCIATED EXISTING FIRE-RATED FIRESTOPPING CONDITIONS.
27. WHEN UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH THE INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, DETERMINE THE NATURE AND EXTENT OF THE CONFLICT AND NOTIFY THE ARCHITECT IMMEDIATELY FOR RESOLUTION.
28. REMOVE, PATCH, AND REPAIR ALL ABANDONED ROOF PENETRATIONS RESULTING FROM WORK.
29. SAW-CUT AND REMOVE EXISTING FLOOR FINISHES AND FLOOR SLAB AS REQUIRED TO INSTALL NEW FIXTURES, ITEMS, AND OR DEVISES FOR ALL SCOPE-OF-WORK PERTAINING TO NEW MECHANICAL WORK, NEW PLUMBING UTILITIES, NEW PLUMBING WORK, NEW ELECTRICAL WORK, AND NEW TECHNOLOGY WORK. SPLICE NEW REINFORCING BARS DOWELLED INTO EXITISTING CONCRETE AND PROVIDE NEW VAPOR RETARDER AND NEW CONTINUOUS WATERSTOPS AT JOINT BETWEEN NEW CONCRETE FLOOR SLAB AND EXISTING CONCRETE FLOOR SLAB. PATCH WITH NEW 3,500 PSI MINIMUM CONCRETE AND PREPARE FLOOR, INCLUDING NEW CONCRETE, TO RECEIVE NEW FLOOR FINISHES. COORDINATE WITH STRUCTURAL.
30. EXISTING WALLS (OR PORTIONS OF WALLS) TO BE REMOVED SHALL BE CUT FLUSH WHERE INTERSECTING WITH WALLS TO REMAIN. REMAINING WALLS TO BE PATCHED AND FINISHED SMOOTH.
31. NEW OPENING TO BE CUT IN EXISTING WALLS SHALL BE SAW-CUT AT LOCATIONS INDICATED TO THE HEIGHT AND WIDTH INDICATED. NEW LINTELS SHALL BE INSTALLED TO SUPPORT EXISTING WALL CONSTRUCTION ABOVE AS INDICATED ON THE DRAWINGS, OR IF NOT INDICATED, AS REQUIRED FOR NEW WALL CONSTRUCTION PER STRUCTURAL DRAWINGS. COORDINATE LOCATIONS OF ALL NEW OPENINGS IN EXISTING WALLS AND PARTITIONS WITH ARCHITECTURAL PLANS.
32. WHERE EXISTING WALL OPENINGS ARE TO BE NEWLY CLOSED-OFF, REMOVE ANY EXISTING OPENING FRAME AND PATCH AND REPAIR EXISTING WALL TO MATCH EXISTING ADJACENT MATERIALS AND FINISHES, UNLESS NOTED OTHERWISE.
33. WHERE EXISTING INTERIOR WALLS ARE REPLACED OR REMOVED, REMOVE MEPT SYSTEMS BACK TO PANEL, OR MECHANICAL ROOM, OR FARTHEST POSSIBLE POINT WITHOUT DISTURBING EXISTING CONSTRUCTION. REMOVE EXISTING MECHANICAL EQUIPMENT, RELOCATE POWER PER MEPT DRAWINGS
34. REFER TO MEPT DRAWINGS FOR DEMOLITION OF MEPT SYSTEMS. IDENTIFY WORK REQUIRED BY THIS CONTRACTOR WHICH MAY AFFECT DEMOLITION AND OR REPAIRS OF ARCHITECTURAL ELEMENTS. COORDINATE WITH RELATED SUBCONTRACTORS THE EXTENT OF ALL DEMOLITION WORK.
35. PATCH FLOORS, WALLS CEILINGS WHICH REMAIN AT LOCATIONS WHERE PIPES, CONDUITS, ETC. ARE REMOVED AS REQUIRED TO MATCH EXISTING CONDITIONS OR TO RECEIVE NEW FINISHES.
36. WHERE EXISTING FINISH FLOOR IS REMOVED, PREPARE FLOOR SURFACE TO RECEIVE NEW FLOORING.
37. ALL DASHED LINES ARE DEMOLITION LINES U.N.O.

DEMOLITION - KEY NOTES

01	EXISTING BUILDING TO REMAIN, NIC.
02	EXISTING SIDEWALK TO REMAIN AND PROTECTED THROUGHOUT CONSTRUCTION.
03	EXISTING ASPHALT DRIVE TO REMAIN.
04	EXISTING TREE TO REMAIN AND PROTECTED THROUGOUT CONSTRUCITON.
05	TREE/SHRUB TO BE REMOVED AND RELOCATED, COORDINATE WITH LANDSCAPING DWGS.
06	EXISTING CHAIN LINK FENCE TO REMAIN.
07	PORTION OF CHAINLINK FENCE TO BE REMOVED WITH ASSOCIATED FOOTINGS.
08	EXISTING CURB AND GUTTER
09	PORTION OF CURB AND GUTTER TO BE REMOVED, COORDINATE WITH CIVIL DWGS.
10	PORTION OF CONC. SIDEWALK TO BE REMOVED.
11	EXISTING CONC. PAD TO BE DEMOLISHED.
12	EXISTING FIRE HYDRANT TO REMAIN AND PROTRECTED THROUGHOUT CONSTRUCTION.
13	EXISTING UTILITY EASEMENT, REF. TO CIVIL DWGS.
14	EXISTING INLET, REF. TO CIVIL DWGS.
15	EXISTING STORM DRAINAGE, REF. TO CIVIL DWGS.
16	EXISTING FIRE DEPARTMENT CONNECTION, REF. TO CIVIL DWGS.
17	EXISTING WATER/IRRIGATION VALVE, REF. TO CIVIL DWGS.
18	EXISTING LIGHT POLE TO BE RELOCATED, REF. MEP
19	EXISTING LIGHT POLE TO REMAIN, REF. TO CIVIL DWGS.

DEMO LEGEND

EXISTING BUILDING, NIC

DEMOLISHED ITEM

DEMOLISH

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT
EDMUND X. RAMIREZ
14374
STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	JC
CHECKED BY	ER

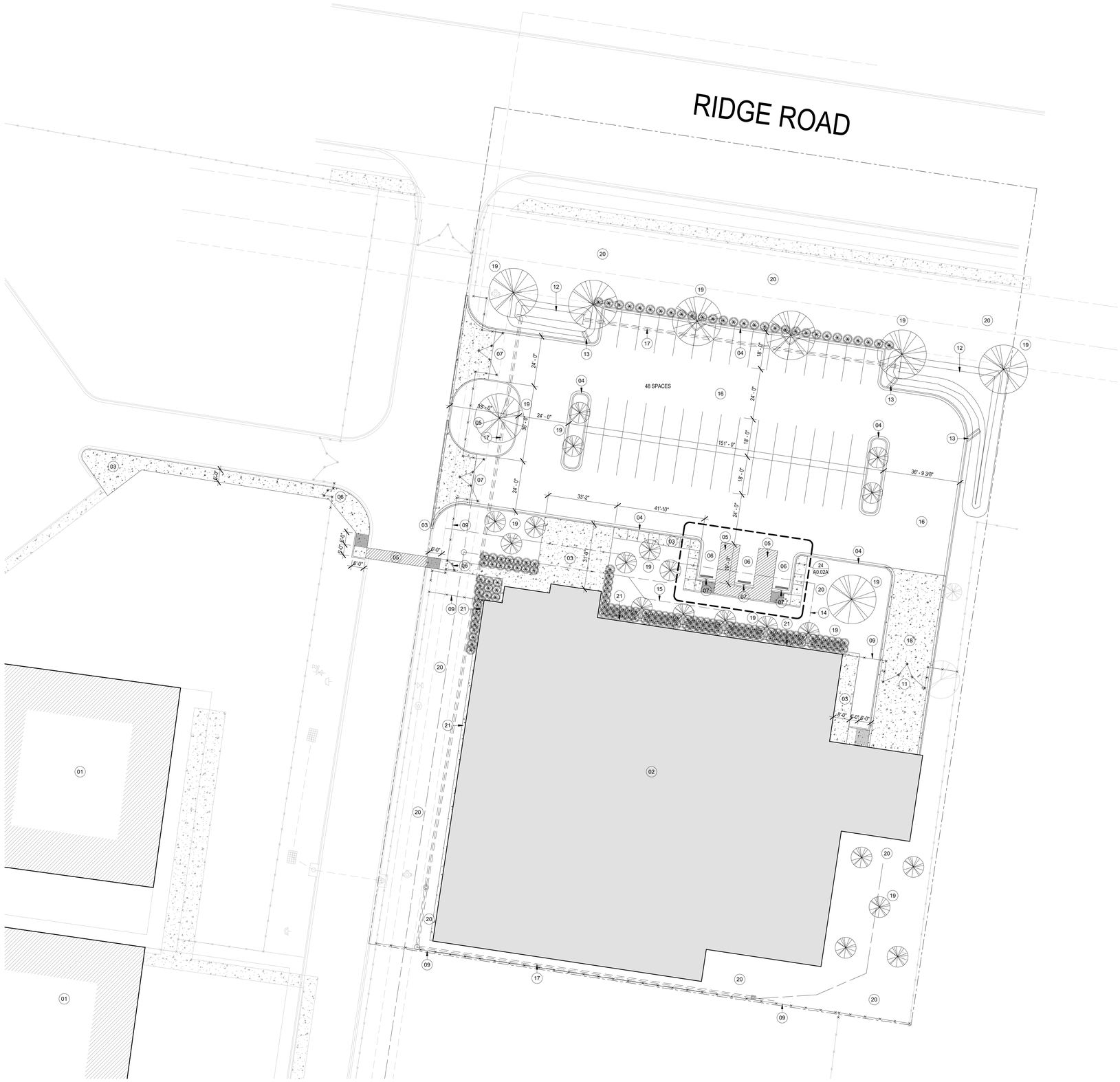
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

DEMOLITION SITE PLAN

AD0.01B



6 ARCHITECTURAL SITE PLAN
1" = 20'-0"

GENERAL ARCH SITE PLAN NOTES

1. REFER TO CIVIL DOCUMENTS
2. COORD. ALL SPOT ELEVATIONS AND DIMENSIONS WITH CIVIL, LANDSCAPE, AND OR STRUCTURAL DOCUMENTS
3. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 1 % MINIMUM, 2 % MAXIMUM AT ALL EXTERIOR PAVED PEDESTRIAN AREAS, INCLUDING BUT NOT LIMITED TO, SIDEWALKS, PATIOS, STAIRS, PAVING, U.N.O.
4. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5 % FOR A HORIZ. DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O
5. REFER TO CIVIL DOCUMENTS FOR CONCRETE SIDEWALK EXPANSION JOINTS AND CONCRETE SIDEWALK CONTROL JOINTS
6. VERIFY AND CONFIRM ALL JOINT LAYOUTS AT ALL CONCRETE SIDEWALKS WITH ARCH. PRIOR TO POURING OF CONCRETE
7. PROVIDE AND INSTALL CONCRETE SIDEWALK EXPANSION JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT 50 FEET ON-CENTER MAX. U.N.O.
8. PROVIDE AND INSTALL CONCRETE SIDEWALK CONTROL JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT DISTANCES EQUIVALENT TO SIDEWALK WIDTH, BUT NOT TO EXCEED 10 FEET ON-CENTER MAX.
9. VERIFY ALL SITE SIGNAGE LOCATIONS WITH ARCH. PRIOR TO INSTALLATION OF SITE SIGNAGE

CONSTRUCTION - KEY NOTES

01	EXISTING BUILDINGS, N.I.C.
02	PROPOSED AQUATIC CENTER BUILDING ADDITION
03	CONCRETE SIDWALK, REF. CIVIL
04	CONCRETE CURB AND GUTTER, REF. CIVIL
05	4" WIDE PAINTING STRIPING
06	ACCESSIBLE PARKING STALL
07	ACCESSIBLE PARKING SIGNAGE: RER. CIVIL
08	CONCRETE WHEEL STOP, REF. CIVIL
09	6' HIGH CHAIN LINK FENCE TO MATCH EXISTING
10	GATE - 4' WIDE SINGLE LEAF
11	GATE - 10' WIDE DOUBLE LEAF
12	PROPOSED SWALE, REF. CIVIL
13	CONCRETE FLUME, REF. CIVIL
14	PROPOSED WATER LINE, REF. CIVIL
15	PROPOSED SEWER LINE, REF. CIVIL
16	PROPOSED ASPHALT PARKING/DRIVE, REF. CIVIL
17	PROPOSED STORM DRAINAGE, REF. CIVIL
18	CONCRETE DRIVE, REF. CIVIL
19	PROPOSED TREE/SHRUB, REF. LANDSCAPING
20	PROPOSED SOLID SOD AREA, REF. LANDSCAPING
21	18" CONC. MOW STRIP

SITE PLAN LEGEND

EXISTING BUILDING, NIC

PROPOSED BUILDING

PROPOSED CONCRETE SIDEWALK/RAMP, REF. CIVIL

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT
EDMUND X. RAMIREZ
14374
STATE OF TEXAS

4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	JC
CHECKED BY	ER

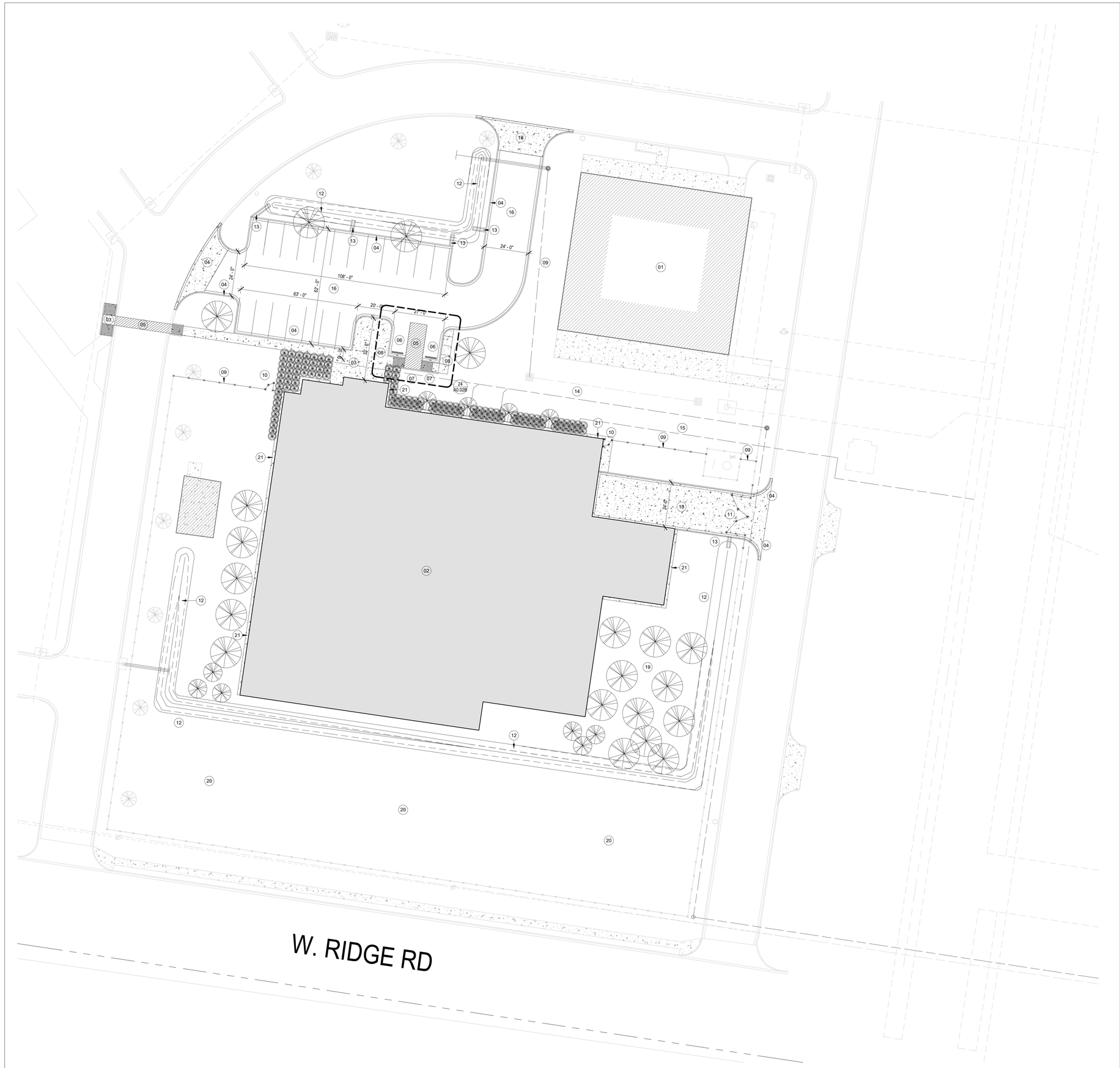
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

ARCHITECTURAL SITE PLAN

A0.01A



6 ARCHITECTURAL SITE PLAN
1" = 20'-0"

GENERAL ARCH SITE PLAN NOTES

1. REFER TO CIVIL DOCUMENTS
2. COORD. ALL SPOT ELEVATIONS AND DIMENSIONS WITH CIVIL, LANDSCAPE, AND OR STRUCTURAL DOCUMENTS
3. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 1 % MINIMUM, 2 % MAXIMUM AT ALL EXTERIOR PAVED PEDESTRIAN AREAS, INCLUDING BUT NOT LIMITED TO, SIDEWALKS, PATIOS, STAIRS, PAVING, U.N.O.
4. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5 % FOR A HORIZ. DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O
5. REFER TO CIVIL DOCUMENTS FOR CONCRETE SIDEWALK EXPANSION JOINTS AND CONCRETE SIDEWALK CONTROL JOINTS
6. VERIFY AND CONFIRM ALL JOINT LAYOUTS AT ALL CONCRETE SIDEWALKS WITH ARCH. PRIOR TO POURING OF CONCRETE
7. PROVIDE AND INSTALL CONCRETE SIDEWALK EXPANSION JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT 50 FEET ON-CENTER MAX. U.N.O.
8. PROVIDE AND INSTALL CONCRETE SIDEWALK CONTROL JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT DISTANCES EQUIVALENT TO SIDEWALK WIDTH, BUT NOT TO EXCEED 10 FEET ON-CENTER MAX.
9. VERIFY ALL SITE SIGNAGE LOCATIONS WITH ARCH. PRIOR TO INSTALLATION OF SITE SIGNAGE

CONSTRUCTION - KEY NOTES

01	EXISTING BUILDINGS, N.I.C.
02	PROPOSED AQUATIC CENTER BUILDING ADDITION
03	CONCRETE SIDWALK, REF. CIVIL
04	CONCRETE CURB AND GUTTER, REF. CIVIL
05	4" WIDE PAINTING STRIPING
06	ACCESSIBLE PARKING STALL
07	ACCESSIBLE PARKING SIGNAGE: RER. CIVIL
08	CONCRETE WHEEL STOP, REF. CIVIL
09	6' HIGH CHAIN LINK FENCE TO MATCH EXISTING
10	GATE - 4' WIDE SINGLE LEAF
11	GATE - 10' WIDE DOUBLE LEAF
12	PROPOSED SWALE, REF. CIVIL
13	CONCRETE FLUME, REF. CIVIL
14	PROPOSED WATER LINE, REF. CIVIL
15	PROPOSED SEWER LINE, REF. CIVIL
16	PROPOSED ASPHALT PARKING/DRIVE, REF. CIVIL
17	PROPOSED STORM DRAINAGE, REF. CIVIL
18	CONCRETE DRIVE, REF. CIVIL
19	PROPOSED TREE/SHRUB, REF. LANDSCAPING
20	PROPOSED SOLID SOD AREA, REF. LANDSCAPING
21	18" CONC. MOW STRIP

SITE PLAN LEGEND

EXISTING BUILDING, NIC

PROPOSED BUILDING

PROPOSED CONCRETE SIDEWALK/RAMP, REF. CIVIL

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT
EDMUND X. RAMIREZ
14374
STATE OF TEXAS

4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	JC
CHECKED BY	ER

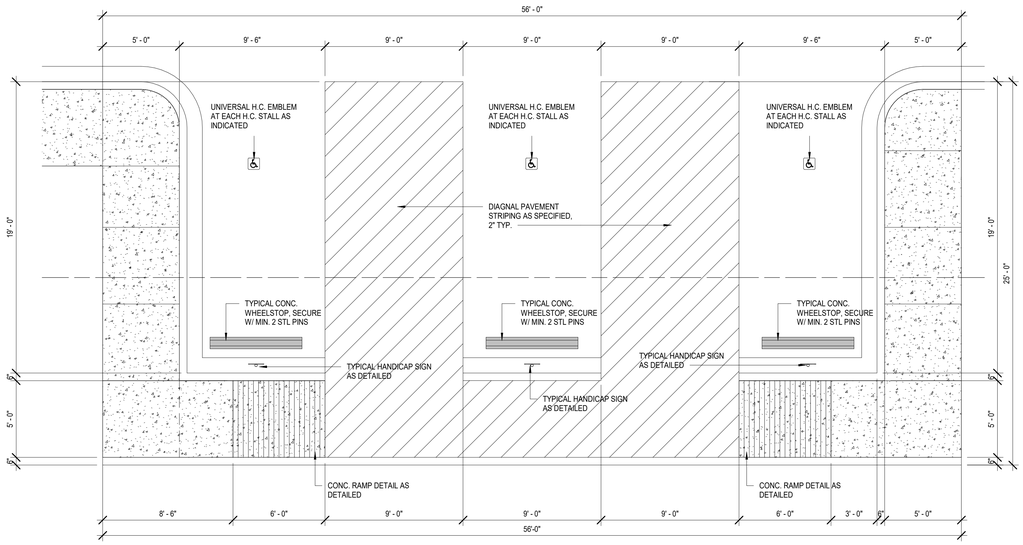
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

ARCHITECTURAL SITE PLAN

A0.01B



24 ENLARGED SITE PLAN
1/4" = 1'-0"

GENERAL ARCH SITE PLAN NOTES

1. REFER TO CIVIL DOCUMENTS
2. COORD. ALL SPOT ELEVATIONS AND DIMENSIONS WITH CIVIL, LANDSCAPE, AND OR STRUCTURAL DOCUMENTS
3. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 1 % MINIMUM, 2 % MAXIMUM AT ALL EXTERIOR PAVED PEDESTRIAN AREAS, INCLUDING BUT NOT LIMITED TO, SIDEWALKS, PATIOS, STAIRS, PAVING, U.N.O.
4. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5 % FOR A HORIZ. DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O
5. REFER TO CIVIL DOCUMENTS FOR CONCRETE SIDEWALK EXPANSION JOINTS AND CONCRETE SIDEWALK CONTROL JOINTS
6. VERIFY AND CONFIRM ALL JOINT LAYOUTS AT ALL CONCRETE SIDEWALKS WITH ARCH. PRIOR TO POURING OF CONCRETE
7. PROVIDE AND INSTALL CONCRETE SIDEWALK EXPANSION JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT 50 FEET ON-CENTER MAX. U.N.O.
8. PROVIDE AND INSTALL CONCRETE SIDEWALK CONTROL JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT DISTANCES EQUIVALENT TO SIDEWALK WIDTH, BUT NOT TO EXCEED 10 FEET ON-CENTER MAX.
9. VERIFY ALL SITE SIGNAGE LOCATIONS WITH ARCH. PRIOR TO INSTALLATION OF SITE SIGNAGE

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

REGISTERED ARCHITECT
EDMUND K. RAMIREZ
14374
STATE OF TEXAS
4.11.2019

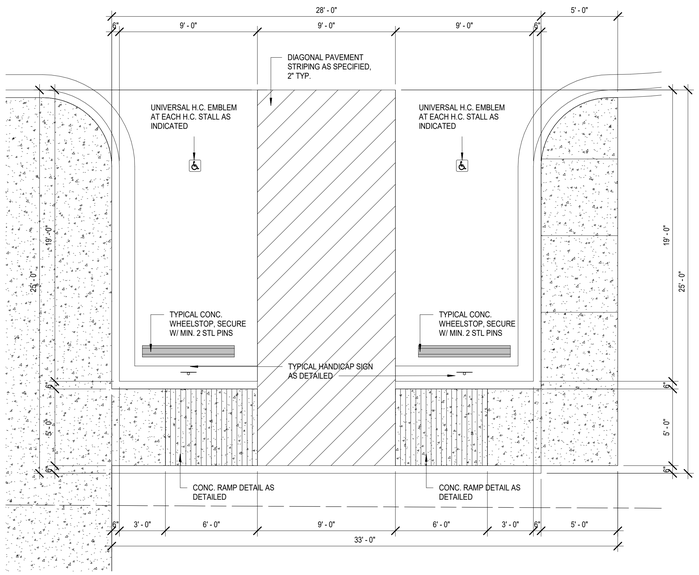
CLIENT
PSJA ISD
PROJECT NUMBER
18309SP
DATE
04.11.19
DRAWN BY
JC
CHECKED BY
ER
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

ENLARGED SITE PLAN AND DETAILS

A0.02A



24 ENLARGED SITE PLAN
1/4" = 1'-0"

GENERAL ARCH SITE PLAN NOTES

1. REFER TO CIVIL DOCUMENTS
2. COORD. ALL SPOT ELEVATIONS AND DIMENSIONS WITH CIVIL, LANDSCAPE, AND OR STRUCTURAL DOCUMENTS
3. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 1 % MINIMUM, 2 % MAXIMUM AT ALL EXTERIOR PAVED PEDESTRIAN AREAS, INCLUDING BUT NOT LIMITED TO, SIDEWALKS, PATIOS, STAIRS, PAVING, U.N.O.
4. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5 % FOR A HORIZ. DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O
5. REFER TO CIVIL DOCUMENTS FOR CONCRETE SIDEWALK EXPANSION JOINTS AND CONCRETE SIDEWALK CONTROL JOINTS
6. VERIFY AND CONFIRM ALL JOINT LAYOUTS AT ALL CONCRETE SIDEWALKS WITH ARCH. PRIOR TO POURING OF CONCRETE
7. PROVIDE AND INSTALL CONCRETE SIDEWALK EXPANSION JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT 50 FEET ON-CENTER MAX. U.N.O.
8. PROVIDE AND INSTALL CONCRETE SIDEWALK CONTROL JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT DISTANCES EQUIVALENT TO SIDEWALK WIDTH, BUT NOT TO EXCEED 10 FEET ON-CENTER MAX.
9. VERIFY ALL SITE SIGNAGE LOCATIONS WITH ARCH. PRIOR TO INSTALLATION OF SITE SIGNAGE

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

REGISTERED ARCHITECT
EDMUND X. RAMIREZ
14374
STATE OF TEXAS
4.11.2019

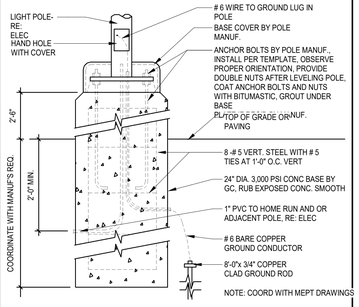
CLIENT
PSJA ISD
PROJECT NUMBER
18309SP
DATE
04.11.19
DRAWN BY
JC
CHECKED BY
ER
REVISIONS

No.	Description	Date

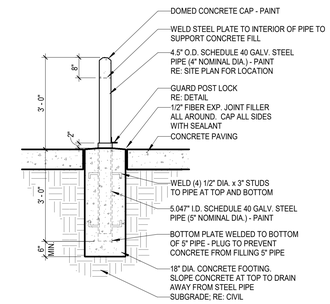
ISSUED FOR BIDS

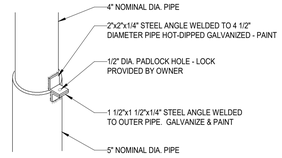
ENLARGED SITE PLAN & DETAILS

A0.02B



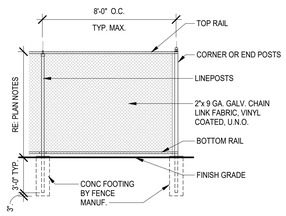
30 LIGHT POLE BASE
3/4" = 1'-0"



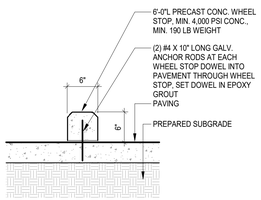


LOCK DETAIL (N.T.S.)

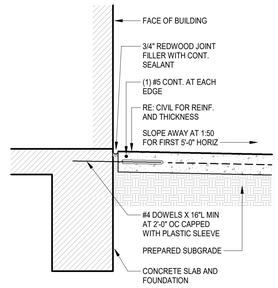
29 REMOVABLE BOLLARD
1/2" = 1'-0"



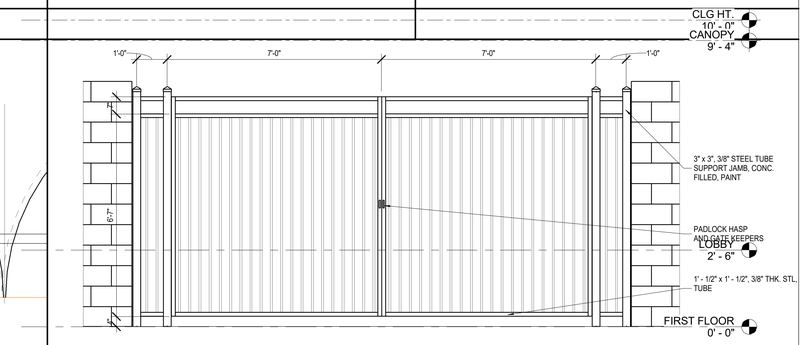
24 CHAIN LINK FENCE DETAIL @ CORNER
1" = 1'-0"



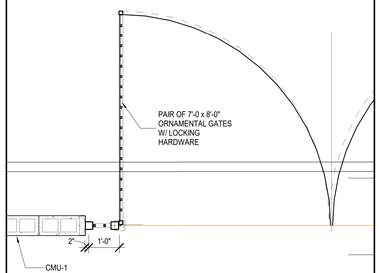
23 PARKING BUMPER
1" = 1'-0"



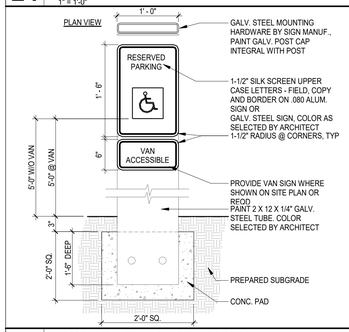
22 WALK AT EDGE OF BUILDING
1" = 1'-0"



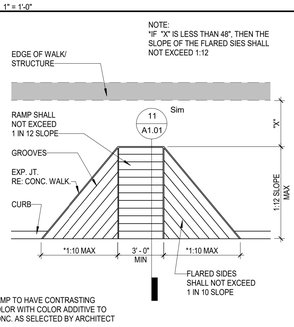
14 SERVICE YARD NORTH ELEVATION
1/2" = 1'-0"



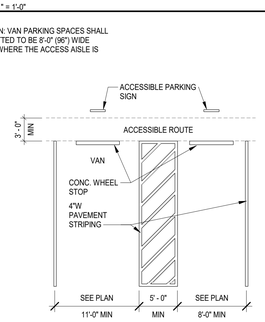
15 DUMPSTER ENCLOSURE CALLOUT 2
1/2" = 1'-0"



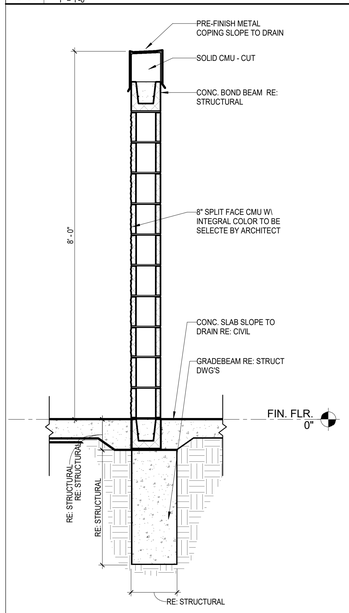
18 ACCESSIBLE PARKING SIGN
1" = 1'-0"



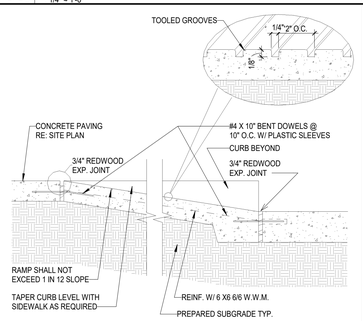
17 ACCESSIBLE RAMP
1/4" = 1'-0"



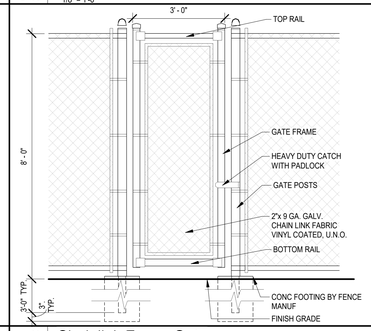
16 ACCESSIBLE PARKING
1/8" = 1'-0"



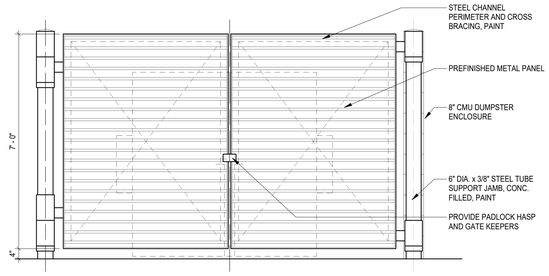
6 SERVICE YARD WALL SECTION
3/4" = 1'-0"



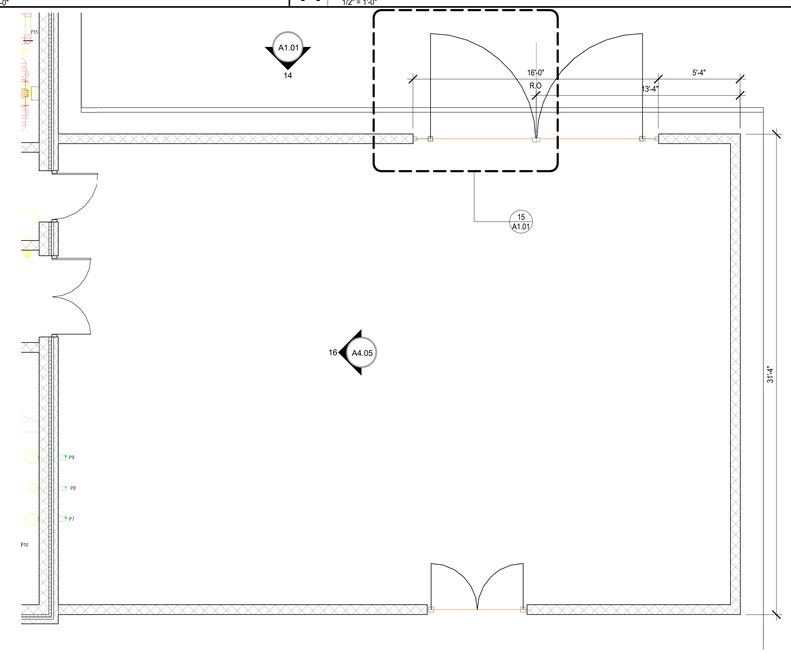
11 ACCESSIBLE RAMP SEC.
1" = 1'-0"



10 Chainlink Fence Gate
1/2" = 1'-0"



5 DUMPSTER ENCLOSURE FRONT ELEVATION
1/2" = 1'-0"



3 OVERALL FLOOR PLAN - CALLOUT 1
1/4" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	TT
CHECKED BY	EXR

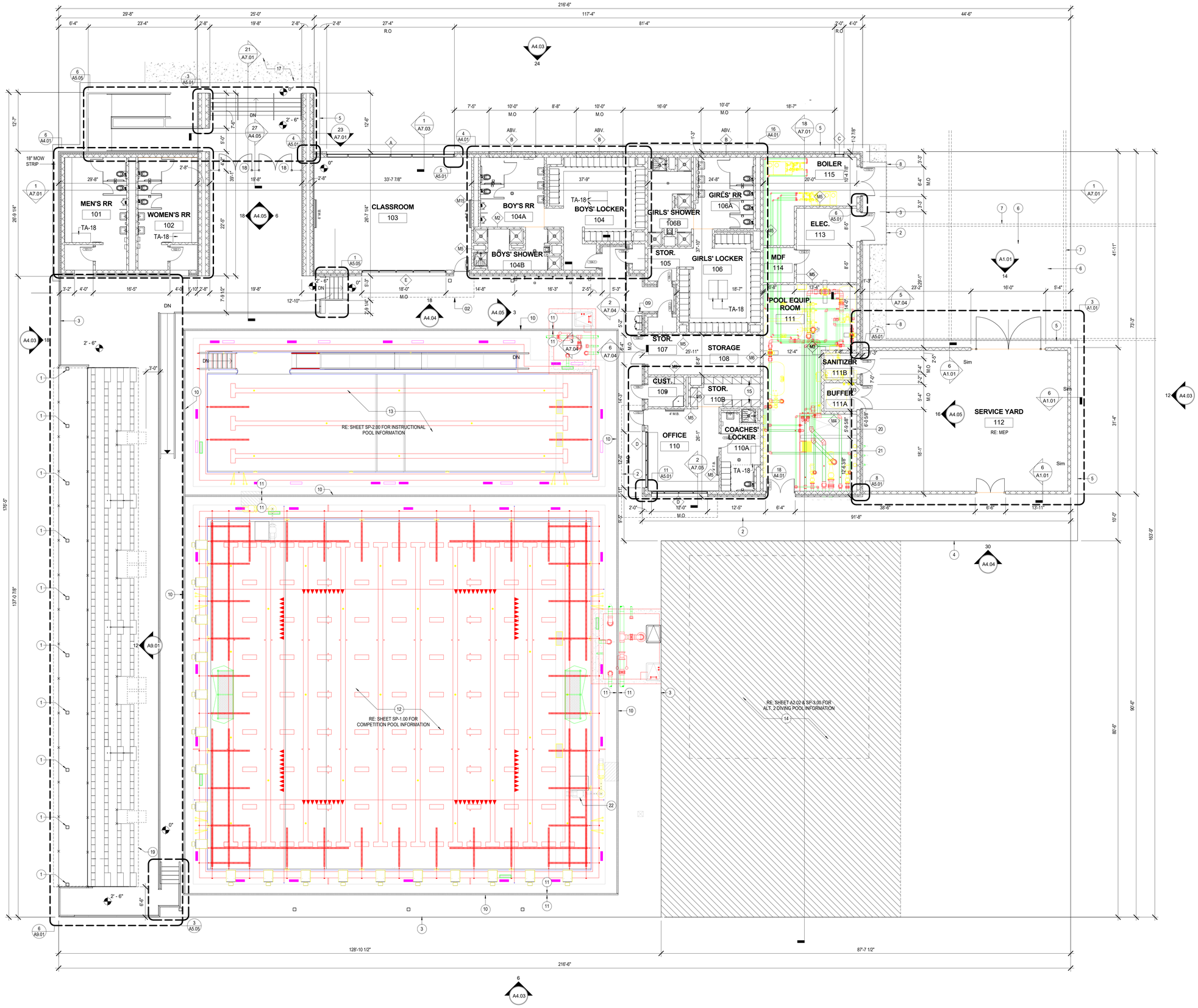
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

SERVICE YARD PLAN & SITE DETAILS

A1.01



6 OVERALL FLOOR PLAN
1/8" = 1'-0"

KEY NOTES

1. 8'x8' ALUM. TUBES, BY CANOPY MANUF.
2. ALUM. CANOPY, ABV SHOWN DASHED
3. EDGE OF CONC. SLAB, RE: STRUCT.
4. EDGE OF CONC. PAVING RE: CIVIL.
5. 18" MOW STRIP, RE: CIVIL
6. CONC. DRIVE RE: CIVIL
7. CONC. CURB RE: CIVIL
8. SIDEWALK PAVING RE: CIVIL
9. ELECTRIC HI/LO DRINKING FOUNTAIN, ADA COMPLIANT
10. 4" TRENCH DRAN RE: DTL 29/A7.10
11. SLOPE TOWARDS DRAIN, TYP.
12. COMPETITION POOL. REFER TO SHEET SP-SERIES SHEETS FOR POOL INFORMATION
13. INSTRUCTIONAL POOL.
14. DIVING POOL, ALTERNATE NO. 2
15. PLASTIC SHELVING 24x18
16. MOP SINK RE: PLUMB.
17. ENTRY WALKWAY RE: SITE PLAN
18. 3' - 0" x 8' - 0" ORNAMENTAL STEEL GATES
19. LINE OF CANOPY ABOVE
20. BACK WASH CATCH BASIN @ 5'-0" B.F.F.
21. PUMP PIT, 5'-0" B.F.F.
22. POOL LIFT RE: SP-SERIES SHEETS

GENERAL ARCHITECTURAL DRAWING NOTES

1. BUILDING FLOOR PLAN DIMENSIONS ARE REFERENCED FROM STRUCTURAL GRID, FACE OF CONCRETE, FACE OF MASONRY, OR FACE OF FINISHED SURFACE, UNLESS NOTED OTHERWISE.
2. CASEWORK, PLUMBING FIXTURES, TOILET PARTITIONS, AND OTHER FIXTURES AND EQUIPMENT ARE DIMENSIONED FROM FINISHED SURFACES UNLESS NOTED OTHERWISE.
3. DIMENSIONS NOTED AS "FIELD VERIFY" SHALL BE CHECKED AT THE SITE BY THE CONTRACTOR AND REVIEWED WITH THE ARCHITECT BEFORE INCORPORATING INTO THE WORK.
4. DIMENSIONS NOTED AS "CLEAR" REQUIRE SPECIFIC COORDINATION BETWEEN DISCIPLINES AND/OR MANUFACTURERS.
5. DO NOT SCALE DRAWING. WRITTEN DIMENSIONS TAKE PRECEDENCE. IF CLARIFICATION IS REQUIRED IN ORDER TO DETERMINE THE INTENT OF THE CONTRACT DOCUMENTS, CONTACT THE ARCHITECT.
6. NOTES OR DIMENSIONS LABELED "TYPICAL" SHALL APPLY TO SITUATIONS THAT ARE THE SAME OR SIMILAR.
7. REFER TO DETAIL 30/A7.10 FOR DOWNSPOUT DETAIL. DOWNSPOUTS ALL LABELLED 'DS'
8. PROVIDE THREE (3) 6'-0" X 6'-0" CONCRETE FLOOR MOCK UPS FOR ARCHITECT REIVEW. EACH MOCK UP SHALL BE A LIGHT BROOM CONCRETE FINISH WITH ONE (1) LIGHT TEXTURE FINISH, ONE (1) MEDIUM TEXTURE FINISH AND ONE (1) HEAVY TEXTURE FINISH.
9. ALL EXPOSED STEEL IN AQUATIC CENTER SHALL BE EPOXY PAINTED
10. ALL EXPOSED, INTERIOR CMU IN THE AQUATIC CENTER SHALL BE PAINTED WITH EPOXY PAINT, U.N.O.

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	TT
CHECKED BY	ER

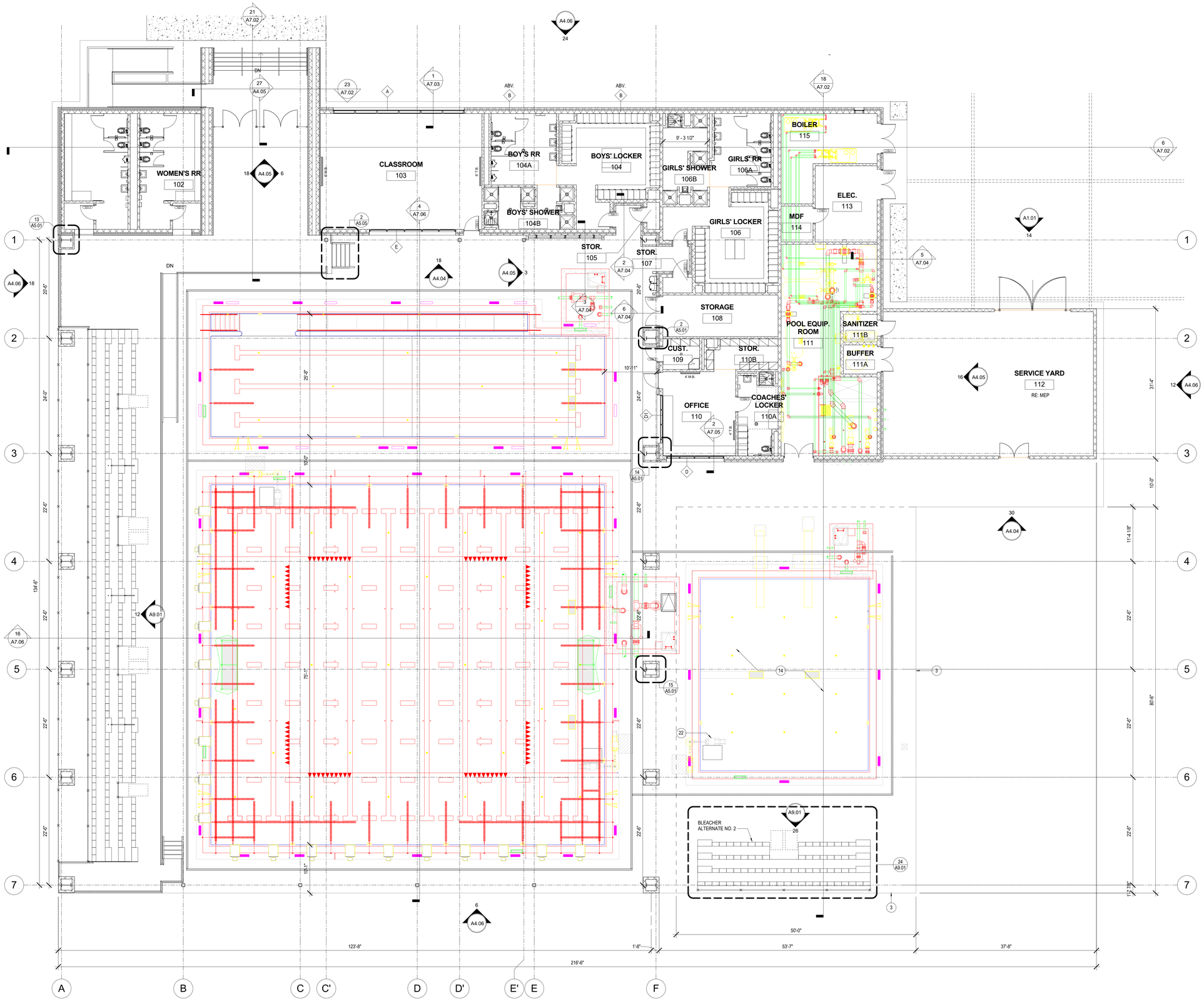
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

OVERALL FLOOR PLAN - BASE BID

A2.01



6 OVERALL FLOOR PLAN DIM.
1/8" = 1'-0"

KEY NOTES

1. 8'x8' ALUM. TUBES, BY CANOPY MANUF.
2. ALUM. CANOPY, BY CANOPY MANUF.
3. EDGE OF CONC. SLAB, RE: STRUCT.
4. EDGE OF CONC. PAVING RE: STRUCT.
5. 18" MOW STRIP
6. CONC. DRIVE RE: CIVIL
7. CONC. CURB RE: CIVIL
8. SIDEWALK PAVING RE: CIVIL
9. ELECTRIC DRINKING FOUNTAIN
10. 4" TRENCH DRAN RE: DTL 19/A7.10
11. SLOPE TOWARDS DRAIN, TYP.
12. COMPETITION POOL. NOTE: REFER TO SP-SERIES SHEETS FOR POOL INFORMATION
13. INSTRUCTIONAL POOL.
14. DIVING POOL, ALTERNATE NO. 2
15. PLASTIC SHELVING 24x18
16. MOP SINK RE: PLUMB.
17. ENTRY WALKWAY RE: SITE PLAN
18. 3' - 0" x 8' - 0" ORNAMENTAL STEEL GATES
19. LINE OF CANOPY ABOVE
20. BACK WASH CATCH BASIN @ 5'-0" B.F.F.
21. PUMP PIT, 5'-0" B.F.F.

GENERAL ARCHITECTURAL DRAWING NOTES

1. VERIFY DIMENSIONS AND EXISTING CONDITIONS BEFORE COMMENCING WORK. REPORT DISCREPANCIES TO THE ARCHITECT PRIOR TO PROCEEDING WITH AFFECTED WORK.
2. BUILDING FLOOR PLAN DIMENSIONS ARE REFERENCED FROM STRUCTURAL GRID, FACE OF CONCRETE, FACE OF MASONRY, OR FACE OF FINISHED SURFACE, UNLESS NOTED OTHERWISE.
3. REFLECTED CEILING PLAN DIMENSIONS ARE REFERENCED FROM FINISHED SURFACES UNLESS NOTED OTHERWISE. CEILING HEIGHTS ARE DIMENSIONED FROM FLOOR TO FINISHED CEILING HEIGHT.
4. CASEWORK, PLUMBING FIXTURES, TOILET PARTITIONS, AND OTHER FIXTURES AND EQUIPMENT ARE DIMENSIONED FROM FINISHED SURFACES UNLESS NOTED OTHERWISE.
5. DIMENSIONS NOTED AS "FIELD VERIFY" SHALL BE CHECKED AT THE SITE BY THE CONTRACTOR AND REVIEWED WITH THE ARCHITECT BEFORE INCORPORATING INTO THE WORK.
6. DIMENSIONS NOTED AS "CLEAR" REQUIRE SPECIFIC COORDINATION BETWEEN DISCIPLINES AND/OR MANUFACTURERS.
7. DRAWINGS NOTED AT "N.T.S." ARE NOT TO SCALE.
8. DO NOT SCALE DRAWING. WRITTEN DIMENSIONS TAKE PRECEDENCE. IF CLARIFICATION IS REQUIRED IN ORDER TO DETERMINE THE INTENT OF THE CONTRACT DOCUMENTS, CONTACT THE ARCHITECT.
9. NOTES OR DIMENSIONS LABELED "TYPICAL" SHALL APPLY TO SITUATIONS THAT ARE THE SAME OR SIMILAR.
10. REFER TO DETAIL 25/A7.10 FOR DOWNSPOUT DETAIL. DOWNSPOUTS ALL LABELLED 'DS'
11. PROVIDE THREE (3) 6'-0" X 6'-0" CONCRETE FLOOR MOCK UPS FOR ARCHITECT REIVEW. EACH MOCK UP SHALL BE A LIGHT BROOM CONCRETE FINISH WITH ONE (1) LIGHT TEXTURE FINISH, ONE (1) MEDIUM TEXTURE FINISH AND ONE (1) HEAVY TEXTURE FINISH.
12. ALL EXPOSED STEEL IN AQUATIC CENTER SHALL BE EPOXY PAINTED
13. ALL EXPOSED, SMOOTH-FACED CMU IN THE AQUATIC CENTER SHALL BE PAINTED WITH EPOXY PAINT, U.N.O.

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

REVISIONS

No.	Description	Date

ISSUED FOR BIDS

OVERALL FLOOR PLAN ALTERNATE NO. 1

A2.02

FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR	BASE	WALL FINISH A	WALL FINISH B	WALL FINISH C	WALL FINISH D	CEILING FINISH	COMMENTS
101	MEN'S RR	EPX-1	EPX-1	EPNT-2	PT-3	EPNT-2	EPNT-2		
102	WOMEN'S RR	SC-1	RB-1	EPNT-2	EPNT-2	EPNT-2	PT-3		
103	CLASSROOM	SF-1	RB-1	EPNT-2	EPNT-2	EPNT-2	EPNT-2		
104	BOYS' LOCKER	EPX-1	EPX-1	EPNT-2, EPNT-3	EPNT-2, EPNT-3	EPNT-2, EPNT-3, EPNT-4	EPNT-2, EPNT-3, EPNT-4		
104A	BOY'S RR	EPX-1	EPX-1	EPNT-2	EPNT-2, PT-3	EPNT-4	EPNT-2		
104B	BOYS' SHOWER	EPX-1	EPX-1	PT-2	PT-2	PT-2	PT-2	GWB	GWB CEILING TO BE PAINTED EPNT-1
105	STOR.	SC-1	RB-1	EPNT-2	EPNT-2	EPNT-2	EPNT-2		
106	GIRLS' LOCKER	EPX-1	EPX-1	EPNT-2, EPNT-3, EPNT-4	EPNT-2, EPNT-3	EPNT-2, EPNT-3	EPNT-2, EPNT-3, EPNT-4		
106A	GIRLS' RR	EPX-1	EPX-1	EPNT-2	EPNT-2	EPNT-2	EPNT-2, EPNT-4, PT-3		
106B	GIRLS' SHOWER	EPX-1	EPX-1	PT-2	PT-2	PT-2	PT-2	GWB	GWB CEILING TO BE PAINTED EPNT-1
107	STOR.	SC-1	RB-1	EPNT-2	EPNT-2	EPNT-2	EPNT-2		
108	STORAGE	SC-1	RB-1	EPNT-2	EPNT-2	EPNT-2	EPNT-2		
109	CUST.	SC-1	RB-1	EPNT-2	EPNT-2	EPNT-2	EPNT-2		
110	OFFICE	SC-1	RB-1	EPNT-2	EPNT-4	EPNT-2, GLASS	EPNT-2, GLASS		
110A	COACHES' LOCKER	EPX-1	EPX-1	EPNT-2, PT-2, PT-3	EPNT-2, EPNT-3, PT-2	EPNT-3	EPNT-2		
110B	STOR.	SC-1	RB-1	EPNT-2	EPNT-2	EPNT-2	EPNT-2		
111	POOL EQUIP. ROOM	SC-1	RB-1	EPNT-2	EPNT-2	EPNT-2	EPNT-2	EXPOSED	
111A	BUFFER	SC-1	RB-1	EPNT-2	EPNT-2	EPNT-2	EPNT-2	EXPOSED	
111B	SANITIZER	SC-1	RB-1	EPNT-2	EPNT-2	EPNT-2	EPNT-2	EXPOSED	
112	SERVICE YARD								
113	ELEC.	SC-1	RB-1	EPNT-2	EPNT-2	EPNT-2	EPNT-2	EXPOSED	
114	MDF	SC-1	RB-1	EPNT-2	EPNT-2	EPNT-2	EPNT-2	EXPOSED	
115	BOILER	SC-1	RB-1	EPNT-2	EPNT-2	EPNT-2	EPNT-2	EXPOSED	

FINISH SCHEDULE REMARKS

ALL SCHEDULED DIRECTIONS (NORTH, EAST, SOUTH, WEST) ARE PER PLAN DIRECTIONS, NOT TRUE COMPASS DIRECTIONS.

ALL SCHEDULED CEILING HEIGHTS ARE FROM THE PRIMARY FLOOR LEVEL WITHIN THE ROOM AND OR SPACE, AND ARE NOT FROM AN ELEVATED FLOOR LEVEL, AND ARE NOT FROM A RECESSED FLOOR LEVEL.

ALL FINISH MATERIALS SHALL MEET FLAME SPREAD RATINGS PER THE BUILDING CODE.

PROTECT ALL FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.

CARPET PATTERNS SHALL RUN PARALLEL TO CORRIDOR U.N.O.

PROVIDE AND INSTALL BULLNOSE TRIM AT ALL TRANSITIONS FROM CERAMIC WALL TILE TO OTHER MATERIALS U.N.O.

PAINT ALL NON-FACTORY FINISHED EXPOSED METAL.

PAINT ALL H.M. DOORS U.N.O.

PAINT ALL H.M. DOOR FRAMES TO MATCH ADJACENT WALL COLOR U.N.O.

LAY-IN CEILING TYPES
- TYPE A: STANDARD MINERAL FIBER, ANTIMICROBIAL, 24"X24"
- TYPE B: GLASS FIBER, HIGH NRC, ANTIMICROBIAL, 24"X24"
- TYPE C: VINYL-FACED MINERAL FIBER, ANTIMICROBIAL, 24"X24"
- TYPE D: IMPACT RESISTANT, MINERAL FIBER, ANTIMICROBIAL, 24"X24"
- TYPE E: WOOD FIBER, 24"X24"
- TYPE F: MINERAL FIBER, ANTIMICROBIAL, 24"X24"

1. REFER TO FLOOR PATTERN PLANS
2. REFER TO INTERIOR ELEVATIONS
3. REFER TO CEILING PLANS
4. 48"H FRP WAINSCOT AT MOP SINK, EXTEND 24" EACH SIDE BEYOND SINK EDGES.
5. 48"H STAINLESS STEEL WAINSCOT AT MOP SINK, EXTEND 24" EACH SIDE BEYOND SINK EDGES
6. 3/4" TREATED PLYWOOD WAINSCOT FULL HEIGHT ALL AROUND, PAINT
7. PAINT ALL EXPOSED CEILING-RELATED ITEMS, INCLUDING BUT NOT LIMITED TO, STRUCT. MEMBERS, STRUCT. DECK, DUCTWORK, DIFFUSERS, PIPING, CONDUIT, EQUIP. HOUSINGS, LIGHT FIXTURE HOUSINGS, CABLE SUPPORTS, CABLE TRAYS, EQUIP. SUPPORTS, HANGERS
8. PAINT ALL EXPOSED CEILING-RELATED ITEMS FLAT BLACK, INCLUDING BUT NOT LIMITED TO, STRUCT. MEMBERS, STRUCT. DECK, DUCTWORK, DIFFUSERS, PIPING, CONDUIT, EQUIP. HOUSINGS, LIGHT FIXTURE HOUSINGS, CABLE SUPPORTS, CABLE TRAYS, EQUIP. SUPPORTS, HANGERS
9. PAINT ALL EXPOSED CEILING-RELATED ITEMS WHITE, INCLUDING BUT NOT LIMITED TO, STRUCT. MEMBERS, STRUCT. DECK, DUCTWORK, DIFFUSERS, PIPING, CONDUIT, EQUIP. HOUSINGS, LIGHT FIXTURE HOUSINGS, CABLE SUPPORTS, CABLE TRAYS, EQUIP. SUPPORTS, HANGERS
10. DO NOT PAINT ACOUSTICAL STRUCT. DECK
11. 1-HR FIRE RATED CEILING ASSEMBLY
12. 2-HR FIRE RATED CEILING ASSEMBLY
13. DOUBLE CEILING ASSEMBLY, REFER TO _____
14. HOLD-DOWN CLIPS AT SUSP. LAY-IN CEILING SYSTEM WITHIN 8'-0" MIN. ANY DIRECTION FROM AN EXTERIOR DOOR LOCATION

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS

4.11.2019

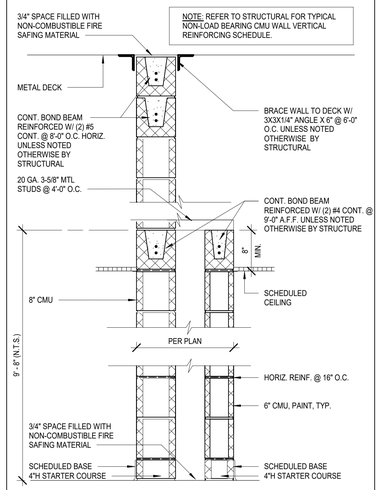
CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

REVISIONS

No.	Description	Date

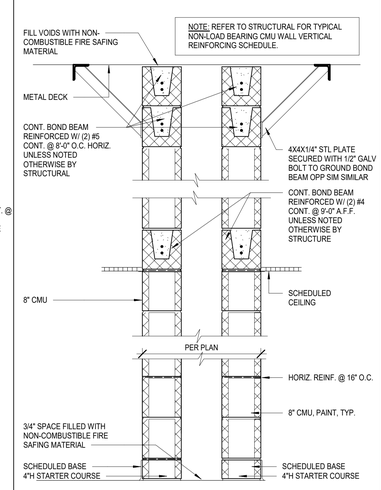
INTERIOR FINISH SCHEDULE

A2.04



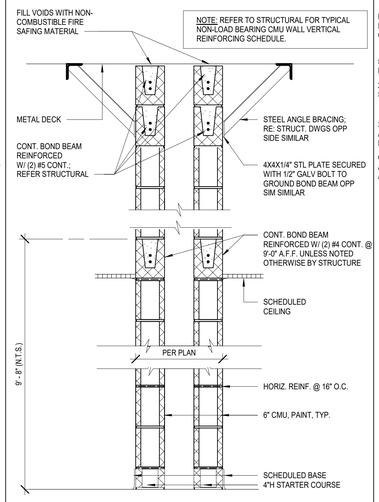
TYPE	FIRE RAT'G	DESCRIPTION
M17	TWO HOUR	DOUBLE WYTHE 8" CMU AND 6" CMU WITH FIRE-RATED CEILING

17 PARTITION TYPE M17
1" = 1'-0"



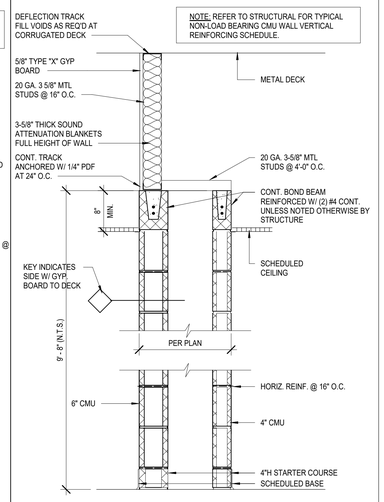
TYPE	FIRE RAT'G	DESCRIPTION
M16	TWO HOUR	DOUBLE WYTHE 8" CMU AND 8" CMU WITH AIR SPACE IN BETWEEN

16 PARTITION TYPE M16
1" = 1'-0"



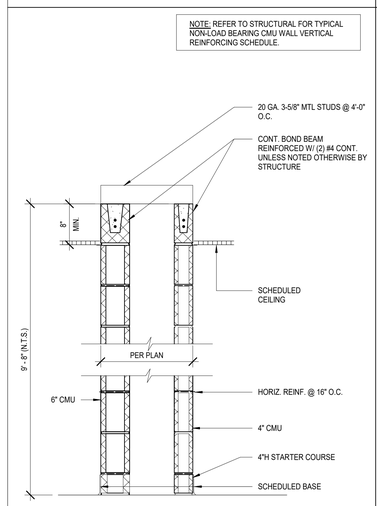
TYPE	FIRE RAT'G	DESCRIPTION
M15	NONE	DOUBLE WYTHE 6" CMU W/ FOAM FILL, SEALED TO DECK
M15A	ONE HOUR	DOUBLE WYTHE 6" CMU W/ FOAM FILL, SEALED TO DECK
M15B	TWO HOUR	DOUBLE WYTHE 6" CMU W/ FOAM FILL, SEALED TO DECK

14 PARTITION TYPE M15
1" = 1'-0"



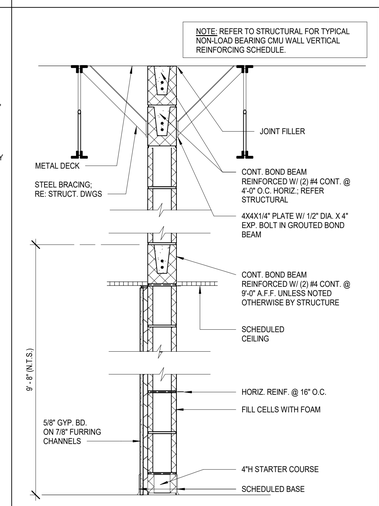
TYPE	FIRE RAT'G	DESCRIPTION
M14	NONE	DOUBLE WYTHE 6" AND 4" CMU
M14A	ONE HOUR	DOUBLE WYTHE 6" AND 4" CMU WITH FIRE-RATED CEILING

13 PARTITION TYPE M14
1" = 1'-0"



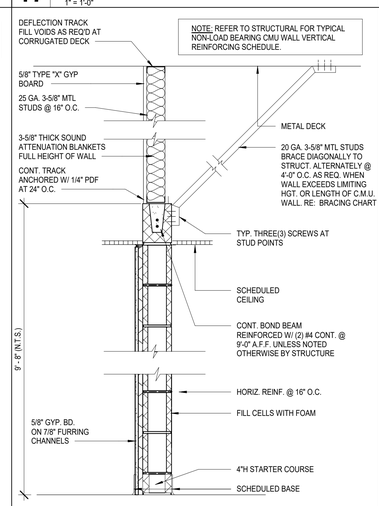
TYPE	FIRE RAT'G	DESCRIPTION
M13	NONE	DOUBLE WYTHE 6" AND 4" CMU
M13A	ONE HOUR	DOUBLE WYTHE 6" AND 4" CMU WITH FIRE-RATED CEILING

12 PARTITION TYPE M13
1" = 1'-0"



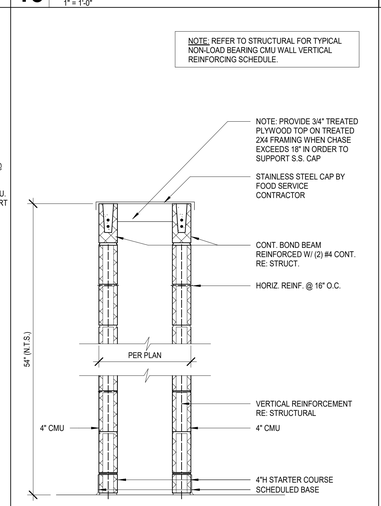
TYPE	FIRE RAT'G	DESCRIPTION
M12	ONE HOUR	6" CMU TO DECK WITH 5/8" GYP ONE SIDE

11 PARTITION TYPE M12
1" = 1'-0"



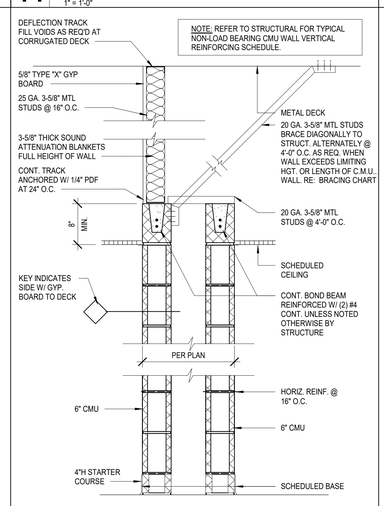
TYPE	FIRE RAT'G	DESCRIPTION
M11	ONE HOUR	6" CMU TO DECK WITH 5/8" GYP ONE SIDE WITH FIRE-RATED CEILING

10 PARTITION TYPE M11
1" = 1'-0"



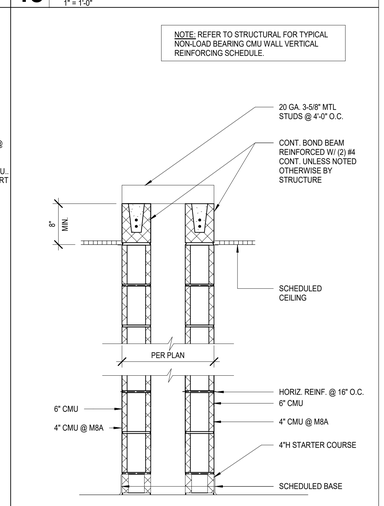
TYPE	FIRE RAT'G	DESCRIPTION
M10	NONE	DOUBLE WYTHE 4" CMU PARTIAL HEIGHT

9 PARTITION TYPE M10
1" = 1'-0"



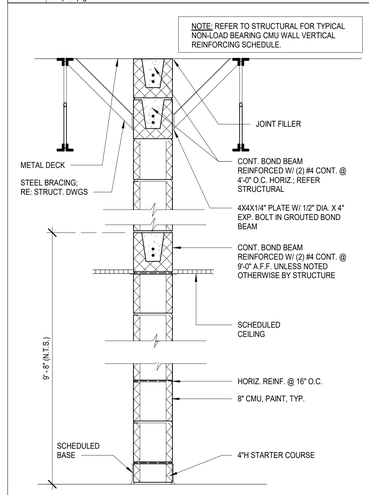
TYPE	FIRE RAT'G	DESCRIPTION
M9	NONE	DOUBLE WYTHE 6" CMU

8 PARTITION TYPE M9
1" = 1'-0"



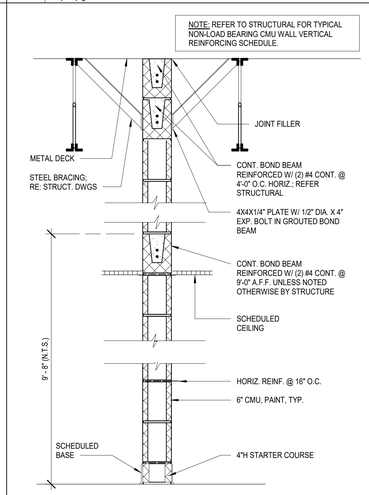
TYPE	FIRE RAT'G	DESCRIPTION
M8	NONE	DOUBLE WYTHE 6" CMU
M8A	NONE	DOUBLE WYTHE 4" CMU

7 PARTITION TYPE M8
1" = 1'-0"



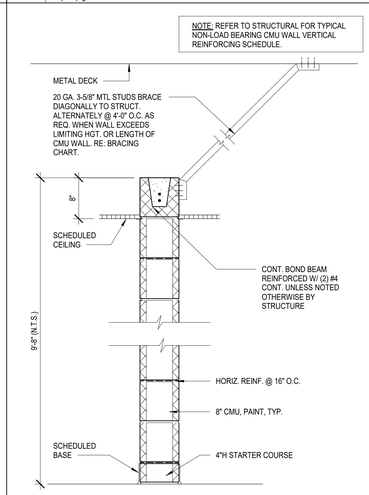
TYPE	FIRE RAT'G	DESCRIPTION
M6	NONE	8" CMU TO DECK
M6A	ONE HOUR	8" CMU TO DECK
M6B	TWO HOUR	8" CMU TO DECK

6 PARTITION TYPE M6
1" = 1'-0"



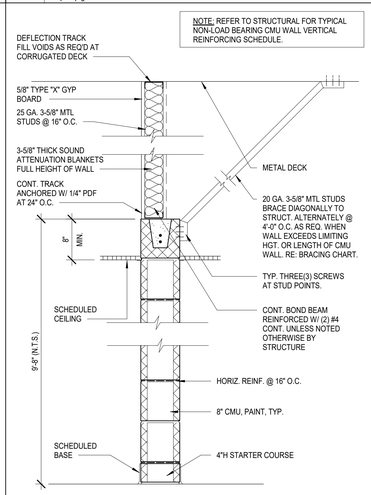
TYPE	FIRE RAT'G	DESCRIPTION
M5	NONE	6" CMU TO DECK
M5A	ONE HOUR	6" CMU TO DECK
M5B	TWO HOUR	6" CMU TO DECK

5 PARTITION TYPE M5
1" = 1'-0"



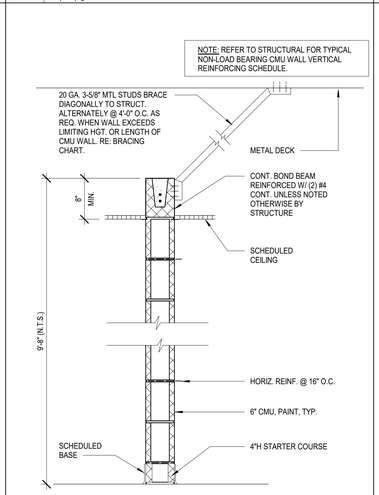
TYPE	FIRE RAT'G	DESCRIPTION
M4	NONE	8" CMU
M4A	ONE HOUR	8" CMU WITH FIRE-RATED CEILING

4 PARTITION TYPE M4
1" = 1'-0"



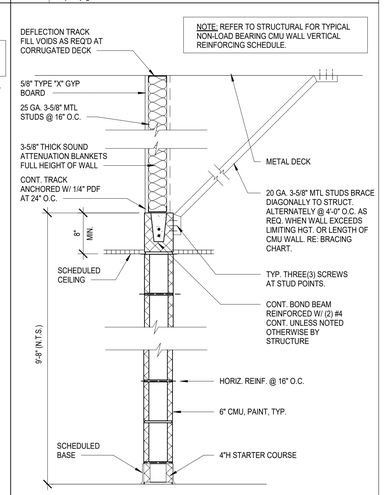
TYPE	FIRE RAT'G	DESCRIPTION
M3	NONE	8" CMU
M3A	ONE HOUR	8" CMU WITH FIRE-RATED CEILING

3 PARTITION TYPE M3
1" = 1'-0"



TYPE	FIRE RAT'G	DESCRIPTION
M2	NONE	6" CMU
M2A	ONE HOUR	6" CMU WITH FIRE-RATED CEILING

2 PARTITION TYPE M2
1" = 1'-0"



TYPE	FIRE RAT'G	DESCRIPTION
M1	NONE	6" CMU
M1A	ONE HOUR	6" CMU WITH FIRE-RATED CEILING

1 PARTITION TYPE M1
1" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

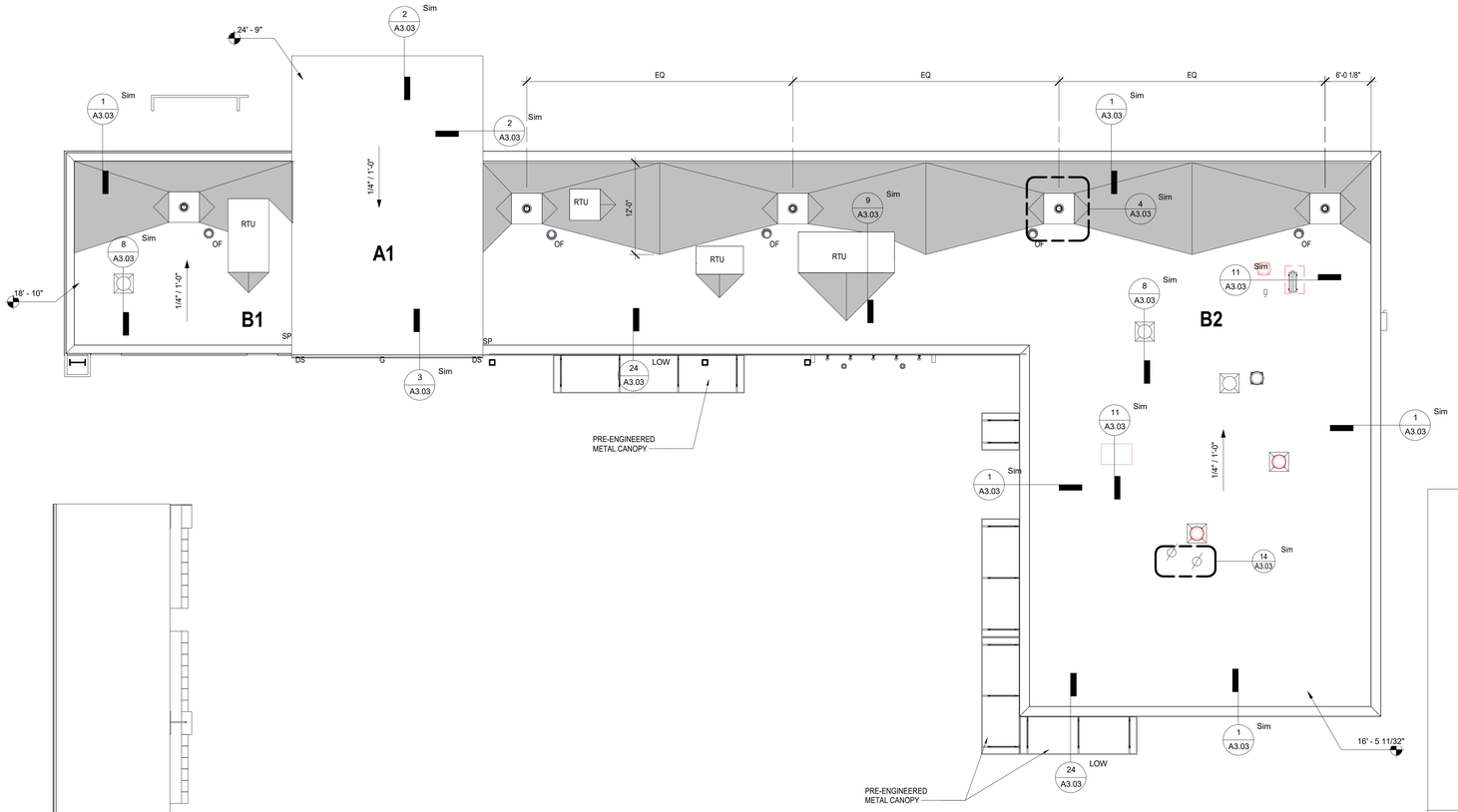
REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: Author
CHECKED BY: Checker
REVISIONS

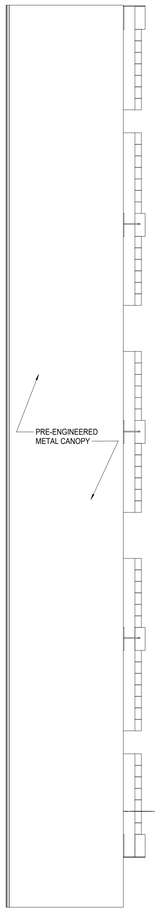
No.	Description	Date

PARTITION TYPES

A2.06



6 ROOF PLAN BASE BID
1/8" = 1'-0"

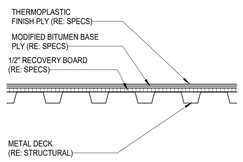


AREA	APPROX. SQ. FT.	NOMENCLATURE
A1	950	A
B1	690	B
B2	4,890	B
BASE BID TOTAL	8,190	

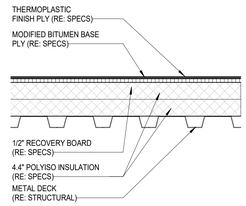
19 ROOFING - AREAS
NOT TO SCALE

- PLUMBING VENT
- FLANGE VENT
- PITCH PAN
- NEW ROOF DRAIN
- OVERFLOW DRAINS
- WALL DRAIN
- CURB MOUNTED VENT
- CURB MOUNTED INTAKE
- GUY WIRE
- POWER VENT
- HEATER VENT
- BOILER VENT
- TURBINE VENT
- PB PIPE BOX
- GOOSE NECK VENT
- AC CURB MOUNTED AC
- SPLASH BLOCK
- SPLASH PAN
- A/C ON SUPPORT CURBS
- ROOF HATCH
- SL SKYLIGHTS
- ANTENNA
- SATELLITE DISH
- SCUPPER
- G GUTTER
- DS DOWNSPOUT
- WALL LADDER
- SWING LADDER
- EXHAUST AND SUPPLY FAN ON SINGLE CURB
- RIDGE LINE
- WALK PAD
- NEW TAPERED INSULATION/ CRICKET
- A1 ROOF AREA DESIGNATION
- TAPERED LIGHT WEIGHT CONCRETE
- AD AREA DIVIDER
- EJ EXPANSION JOINT
- C CONDENSATE LINE
- W WATER LINE
- E ELEC. LINE
- G GAS LINE

13 ROOFING - LEGEND (NEW)
NOT TO SCALE



8 ROOFING (HYB) - NOMENCLATURE A
NOT TO SCALE



2 ROOFING (HYB) - NOMENCLATURE B
NOT TO SCALE

1. CONTRACTOR SHALL REVIEW AND COORDINATE WITH ARCHITECTURAL, MEP, AND STRUCTURAL DOCUMENTS TO ASCERTAIN EXACT CONDITIONS AND COMPONENTS RELATED TO THE WORK DESCRIBED BY THESE DOCUMENTS. ALL WORK SHALL BE IN ACCORDANCE WITH ACCEPTED MANUFACTURER'S PRINTED INSTRUCTIONS AND NRCA STANDARDS.
2. DIMENSIONS, DETAILS, EQUIPMENT SIZE AND LOCATION SHOWN IN THESE CONSTRUCTION DOCUMENTS ARE FOR CONVEYANCE OF DESIGN INTENT ONLY. EXACT SIZE, LOCATION, TYPE OF MATERIAL AND TYPE OF CONSTRUCTION OF EXISTING CONDITIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN AND CONFIRM.
3. INDICATED ROOF HEIGHTS ARE GENERAL IN NATURE. RE: STRUCTURAL FOR FRAMING HEIGHTS.
4. REFER TO NOMENCLATURE FOR TYPE OF ROOF SYSTEM. AREAS ARE MARKED WITH DESIGNATED LETTER ON ROOF PLAN.
5. NOTE THAT THE DETAILS DRAWN ARE GENERIC IN NATURE AND ARE NOT NECESSARILY LOCATED AND KEYED TO THE ROOF PLANS.
6. ALL NEW CRICKETS AND TAPERED INSULATION SHALL BE INSTALLED WITH A FINISHED 1/4" PER FOOT MIN. SLOPE. CRICKET THE UP SLOPE SIDE OF ALL SQUARE CURBS AND PROJECTIONS OVER 20" IN WIDTH.
7. ALL CURB MOUNTED HVAC UNITS, EQUIPMENT, ETC. SHALL HAVE A MINIMUM 10" CURB HEIGHT.
8. WORK TO ANY UTILITY CONDUIT OR PIPE SHALL BE PERFORMED BY SPECIFIC LICENSED SUBCONTRACTORS SPECIALIZING IN HVAC, PLUMBING AND ELECTRICAL WORK. PERMITS AND INSPECTIONS ARE REQUIRED.
9. UNLESS INDICATED OTHERWISE ON THE CONSTRUCTION DOCUMENTS, ALL EXISTING JOINTS / AREA DIVIDERS / CURB MOUNTED EQUIPMENT / SKYLIGHTS SHALL BE MIN. 10" ABOVE ROOF DECK.
10. ALL SOIL STACK FLASHING SHALL BE A MIN. 10" ABOVE FINISHED ROOF SURFACE. COUPLE PVC PIPE ABOVE DECK AND COUPLE CAST IRON PIPE BELOW DECK. PROPERLY SUPPORT PIPE BELOW ROOF DECK FROM LATERAL MOVEMENT.
11. ALL PIPING/ CONDUITS/ ETC. SHALL BE A MIN. 10" ABOVE ROOF SURFACE. PROVIDE PORTABLE PIPE HANGERS WITH PROTECTION PADS AS SPECIFIED. MEP CONTRACTORS SHALL PROVIDE SUPPORTS FOR UTILITY LINES.
12. PROVIDE "MERCURY" GAS LINE TEST (COORDINATE WITH OWNER AND ARCHITECT FOR WITNESS OF THE TEST). REPAIR ANY FOUND LEAKS AND RETEST AS REQUIRED.
13. PROVIDE SHEET METAL HOODED (WITH METAL FACE CLOSURE) CAPS, WOOD CURB, BOX COVER AT ALL GAS AND WATER PIPE ROOF PENETRATIONS AS DETAILED AND SPECIFIED. PROVIDE POSITIVE SLOPE AWAY FROM FACE COVER.
14. PROVIDE WALKWAY PROTECTION PADS AS SPECIFIED AROUND ALL ROOF HATCHES, HVAC ROOFTOP UNITS, DOORS THAT OPEN ONTO ROOF AND AT TOP AND BOTTOM OF ALL ROOF TOP ACCESS LOCATIONS.
15. ISOLATE ALL HEAT PIPES / FLUES AS DETAILED AND RECOMMENDED AND OUTLINED IN THE NRCA MANUAL FOR HOT STACK FLASHING AND AS DETAILED.
16. ALL OUTSIDE AIR INTAKES SHALL BE COVERED TO ELIMINATE ODORS AND FUMES FROM ENTERING INTO THE BUILDING DURING CONSTRUCTION WORK.
17. AFTER SUBSTANTIAL COMPLETION, THE GENERAL CONTRACTOR SHALL EXAMINE AND CLEAN NEW DRAIN LINES AND NEW AND EXISTING (AS APPLICABLE) GUTTERS OF DEBRIS AND BLOCKAGE, FLUSH WITH WATER TO ENSURE THAT DRAINS AND GUTTERS FLOW FREELY.
18. PRIOR TO COMMENCEMENT OF WORK, COORDINATE WALK OF ENTIRE ROOF WITH ROOFING MANUFACTURER'S TECHNICAL REPRESENTATIVE TO IDENTIFY AND LOCATE ALL AREAS OF HIGH SLOPE OR OTHER CONDITIONS WHICH MIGHT REQUIRE SPECIAL PROCEDURES FOR SYSTEM ATTACHMENT.
19. REFER TO MEP DRAWINGS FOR SIZE AND LOCATION OF NEW ROOF DECK PENETRATIONS AND ROOF TOP EQUIPMENT.
20. INSTALL NEW SPLASH PAN AT ALL LOCATIONS WHERE ROOF DRAINAGE DISCHARGES ONTO ROOF AREA. INSTALL NEW SPLASH BLOCKS WHERE ROOF DRAINAGE DICHARGES ON GROUND.
21. REFER TO GENERAL DETAILS FOR TYPICAL SPLASH PAN, ROOF DRAIN AND OVERFLOW DRAIN DETAILS.
22. GENERAL CONTRACTOR TO ENSURE ALL ROOFTOP PENETRATIONS (SOIL STACKS, VENTS, ETC.) ARE INSTALLED MIN. 4'-0" FROM OTHER DECK PENETRATIONS, RISE WALLS, AND ROOF EDGE. MECHANICAL EQUIPMENT TO BE LOCATED MIN. 10'-0" FROM PERIMETER EDGE AND NO CLOSER THAN 4'-0" FROM RISE WALLS, OR ANY OTHER ROOF PENETRATION.
23. LOCATE PERIMETER DRAINS MAX. 6'-0" FROM EDGE TYPICAL UNLESS SHOWN OTHERWISE. (GENERAL CONTRACTOR TO COORDINATE WITH ROOFING AND PLUMBING CONTRACTOR.)
24. THROUGH WALL BASE FLASHING MIN. HEIGHT 10" AND MAX. HEIGHT 20" FROM FINISH DECK. DO NOT STEP THROUGH WALL FLASHING CLOSER THAN 5'-0" FROM CORNERS.
25. GENERAL CONTRACTOR SHALL COORDINATE LOCATION AND ORIENTATION OF ROOF HATCH AND ACCESS LADDER.
26. GENERAL CONTRACTOR SHALL COORDINATE ALL TOP OF STEEL TO TOP OF BLOCKING AND SUBSTRATE BOARD DIMENSIONS IN FIELD PRIOR TO ORDERING MATERIALS. NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR FAILURE TO COORDINATE THESE DIMENSIONS.
27. GENERAL CONTRACTOR SHALL VERIFY ROOF SLOPES WILL PROPERLY DRAIN AS SHOWN. TAPERED INSULATION HATCHING SHOWN IS NOT INTENDED TO ILLUSTRATE THE ENTIRE LIMITS OF TAPERED INSULATION. ROOF AREAS NOT SLOPED BY STRUCTURE SHALL BE SLOPED WITH TAPERED INSULATION TO ACHIEVE PROPER DRAINAGE.
28. PAINT ALL EXPOSED GAS PIPE.

1 GENERAL NOTES (NEW)
NOT TO SCALE

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

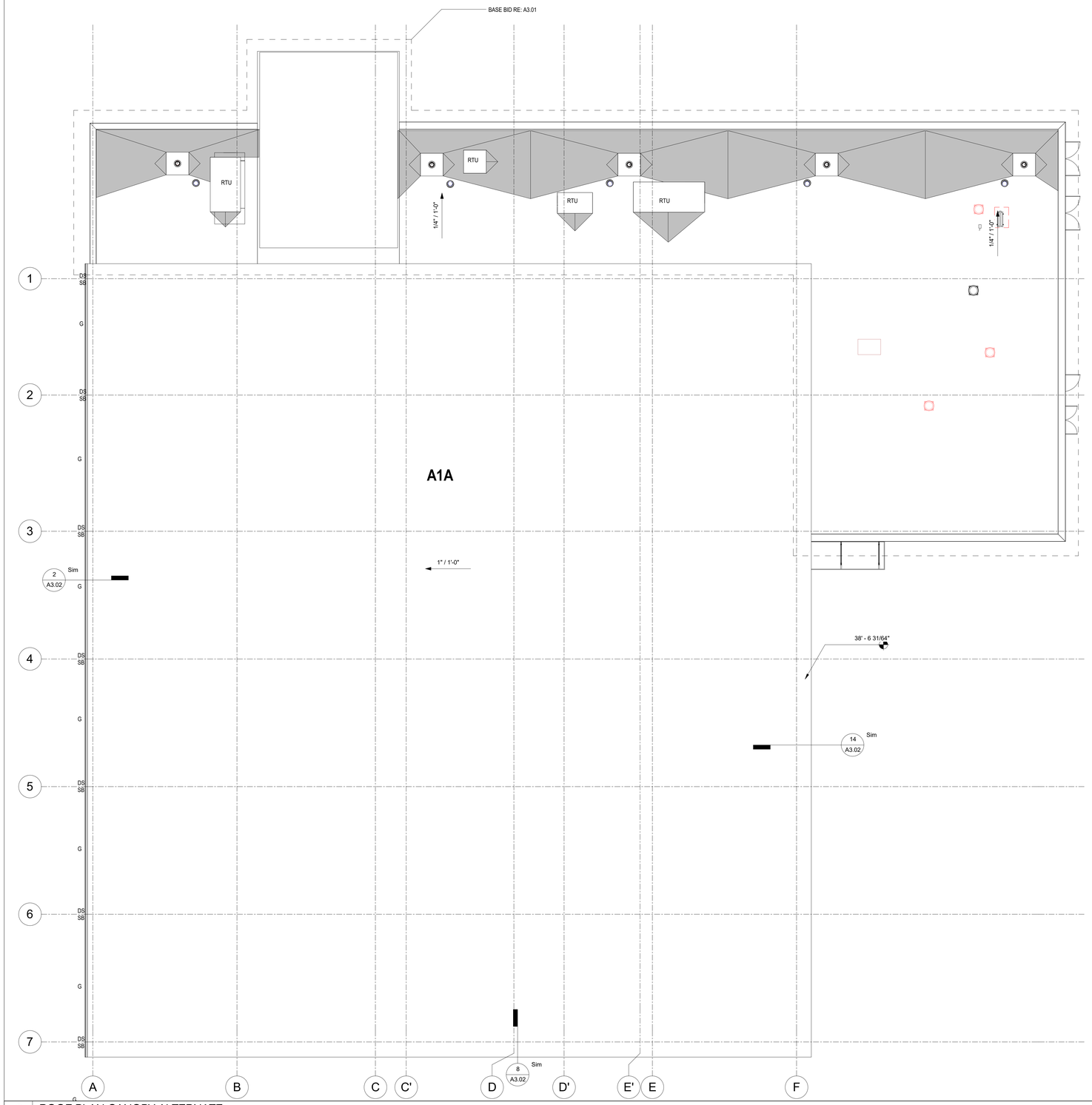
CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

REVISIONS

No.	Description	Date

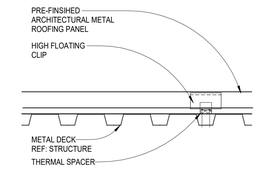
ROOF PLAN - BASE BID

A3.01

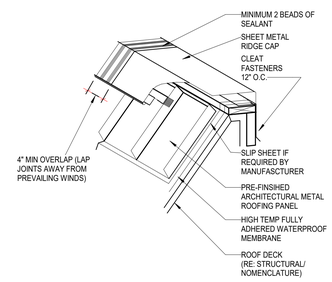


6 ROOF PLAN CANOPY ALTERNATE
1/8" = 1'-0"

AREA	APPROX. SQ. FT.	NOMENCLATURE
A1A	19,920	C



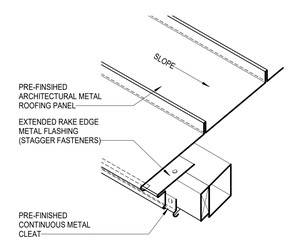
19 ROOFING (METAL) - NOMENCLATURE C
NOT TO SCALE



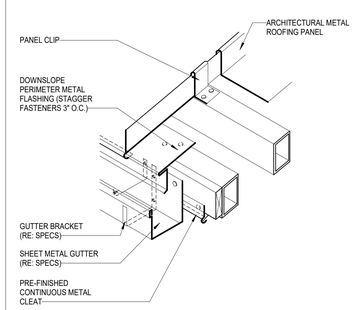
14 ROOFING (METAL) - HIGH EAVE
NOT TO SCALE

- PLUMBING VENT
- FLANGE VENT
- PITCH PAN
- NEW ROOF DRAIN
- OVERFLOW DRAINS
- WALL DRAIN
- CURB MOUNTED VENT
- CURB MOUNTED INTAKE
- GUY WIRE
- POWER VENT
- HEATER VENT
- BOILER VENT
- TURBINE VENT
- PB PIPE BOX
- GOOSE NECK VENT
- AC CURB MOUNTED AC
- SPLASH BLOCK
- SPLASH PAN
- A/C ON SUPPORT CURBS
- ROOF HATCH
- SL SKYLIGHTS
- ANTENNA
- SATELLITE DISH
- SCUPPER
- G GUTTER
- DS SB DOWNSPOUT
- WALL LADDER
- SWING LADDER
- EXHAUST AND SUPPLY FAN ON SINGLE CURB
- RIDGE LINE
- WALK PAD
- NEW TAPERED INSULATION/ CRICKET
- A1 ROOF AREA DESIGNATION
- TAPERED LIGHT WEIGHT CONCRETE
- AD AREA DIVIDER
- EJ EXPANSION JOINT
- C CONDENSATE LINE
- W WATER LINE
- E ELEC. LINE
- G GAS LINE

13 ROOFING - LEGEND (NEW)
NOT TO SCALE



8 ROOFING (METAL) - EDGE w/ RAKE
NOT TO SCALE



2 ROOFING (METAL) - EDGE w/ GUTTER
NOT TO SCALE

1. CONTRACTOR SHALL REVIEW AND COORDINATE WITH ARCHITECTURAL, MEP, AND STRUCTURAL DOCUMENTS TO ASCERTAIN EXACT CONDITIONS AND COMPONENTS RELATED TO THE WORK DESCRIBED BY THESE DOCUMENTS. ALL WORK SHALL BE IN ACCORDANCE WITH ACCEPTED MANUFACTURER'S PRINTED INSTRUCTIONS AND NRCA STANDARDS.
2. DIMENSIONS, DETAILS, EQUIPMENT SIZE AND LOCATION SHOWN IN THESE CONSTRUCTION DOCUMENTS ARE FOR CONVEYANCE OF DESIGN INTENT ONLY. EXACT SIZE, LOCATION, TYPE OF MATERIAL AND TYPE OF CONSTRUCTION OF EXISTING CONDITIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN AND CONFIRM.
3. INDICATED ROOF HEIGHTS ARE GENERAL IN NATURE. RE: STRUCTURAL FOR FRAMING HEIGHTS.
4. REFER TO NOMENCLATURE FOR TYPE OF ROOF SYSTEM. AREAS ARE MARKED WITH DESIGNATED LETTER ON ROOF PLAN.
5. NOTE THAT THE DETAILS DRAWN ARE GENERIC IN NATURE AND ARE NOT NECESSARILY LOCATED AND KEYED TO THE ROOF PLANS.
6. ALL NEW CRICKETS AND TAPERED INSULATION SHALL BE INSTALLED WITH A FINISHED 1/4" PER FOOT MIN. SLOPE. CRICKET THE UP SLOPE SIDE OF ALL SQUARE CURBS AND PROJECTIONS OVER 20" IN WIDTH.
7. ALL CURB MOUNTED HVAC UNITS, EQUIPMENT, ETC. SHALL HAVE A MINIMUM 10" CURB HEIGHT.
8. WORK TO ANY UTILITY CONDUIT OR PIPE SHALL BE PERFORMED BY SPECIFIC LICENSED SUBCONTRACTORS SPECIALIZING IN HVAC, PLUMBING AND ELECTRICAL WORK. PERMITS AND INSPECTIONS ARE REQUIRED.
9. UNLESS INDICATED OTHERWISE ON THE CONSTRUCTION DOCUMENTS, ALL EXISTING JOINTS / AREA DIVIDERS / CURB MOUNTED EQUIPMENT / SKYLIGHTS SHALL BE MIN. 10" ABOVE ROOF DECK.
10. ALL SOIL STACK FLASHING SHALL BE A MIN. 10" ABOVE FINISHED ROOF SURFACE. COUPLE PVC PIPE ABOVE DECK AND COUPLE CAST IRON PIPE BELOW DECK. PROPERLY SUPPORT PIPE BELOW ROOF DECK FROM LATERAL MOVEMENT.
11. ALL PIPING/ CONDUITS/ ETC. SHALL BE A MIN. 10" ABOVE ROOF SURFACE. PROVIDE PORTABLE PIPE HANGERS WITH PROTECTION PADS AS SPECIFIED. MEP CONTRACTORS SHALL PROVIDE SUPPORTS FOR UTILITY LINES.
12. PROVIDE "MERCURY" GAS LINE TEST (COORDINATE WITH OWNER AND ARCHITECT FOR WITNESS OF THE TEST), REPAIR ANY FOUND LEAKS AND RETEST AS REQUIRED.
13. PROVIDE SHEET METAL HOODED (WITH METAL FACE CLOSURE) CAPS, WOOD CURB, BOX COVER AT ALL GAS AND WATER PIPE ROOF PENETRATIONS AS DETAILED AND SPECIFIED. PROVIDE POSITIVE SLOPE AWAY FROM FACE COVER.
14. PROVIDE WALKWAY PROTECTION PADS AS SPECIFIED AROUND ALL ROOF HATCHES, HVAC ROOFTOP UNITS, DOORS THAT OPEN ONTO ROOF AND AT TOP AND BOTTOM OF ALL ROOF TOP ACCESS LOCATIONS.
15. ISOLATE ALL HEAT PIPES / FLUES AS DETAILED AND RECOMMENDED AND OUTLINED IN THE NRCA MANUAL FOR HOT STACK FLASHING AND AS DETAILED.
16. ALL OUTSIDE AIR INTAKES SHALL BE COVERED TO ELIMINATE ODORS AND FUMES FROM ENTERING INTO THE BUILDING DURING CONSTRUCTION WORK.
17. AFTER SUBSTANTIAL COMPLETION, THE GENERAL CONTRACTOR SHALL EXAMINE AND CLEAN NEW DRAIN LINES AND NEW AND EXISTING (AS APPLICABLE) GUTTERS OF DEBRIS AND BLOCKAGE, FLUSH WITH WATER TO ENSURE THAT DRAINS AND GUTTERS FLOW FREELY.
18. PRIOR TO COMMENCEMENT OF WORK, COORDINATE WALK OF ENTIRE ROOF WITH ROOFING MANUFACTURER'S TECHNICAL REPRESENTATIVE TO IDENTIFY AND LOCATE ALL AREAS OF HIGH SLOPE OR OTHER CONDITIONS WHICH MIGHT REQUIRE SPECIAL PROCEDURES FOR SYSTEM ATTACHMENT.
19. REFER TO MEP DRAWINGS FOR SIZE AND LOCATION OF NEW ROOF DECK PENETRATIONS AND ROOF TOP EQUIPMENT.
20. INSTALL NEW SPLASH PAN AT ALL LOCATIONS WHERE ROOF DRAINAGE DISCHARGES ONTO ROOF AREA. INSTALL NEW SPLASH BLOCKS WHERE ROOF DRAINAGE DICHARGES ON GROUND.
21. REFER TO GENERAL DETAILS FOR TYPICAL SPLASH PAN, ROOF DRAIN AND OVERFLOW DRAIN DETAILS.
22. GENERAL CONTRACTOR TO ENSURE ALL ROOFTOP PENETRATIONS (SOIL STACKS, VENTS, ETC.) ARE INSTALLED MIN. 4'-0" FROM OTHER DECK PENETRATIONS, RISE WALLS, AND ROOF EDGE. MECHANICAL EQUIPMENT TO BE LOCATED MIN. 10'-0" FROM PERIMETER EDGE AND NO CLOSER THAN 4'-0" FROM RISE WALLS, OR ANY OTHER ROOF PENETRATION.
23. LOCATE PERIMETER DRAINS MAX. 6'-0" FROM EDGE TYPICAL UNLESS SHOWN OTHERWISE. (GENERAL CONTRACTOR TO COORDINATE WITH ROOFING AND PLUMBING CONTRACTOR.)
24. THROUGH WALL BASE FLASHING MIN. HEIGHT 10" AND MAX. HEIGHT 20" FROM FINISH DECK. DO NOT STEP THROUGH WALL FLASHING CLOSER THAN 5'-0" FROM CORNERS.
25. GENERAL CONTRACTOR SHALL COORDINATE LOCATION AND ORIENTATION OF ROOF HATCH AND ACCESS LADDER.
26. GENERAL CONTRACTOR SHALL COORDINATE ALL TOP OF STEEL TO TOP OF BLOCKING AND SUBSTRATE BOARD DIMENSIONS IN FIELD PRIOR TO ORDERING MATERIALS. NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR FAILURE TO COORDINATE THESE DIMENSIONS.
27. GENERAL CONTRACTOR SHALL VERIFY ROOF SLOPES WILL PROPERLY DRAIN AS SHOWN. TAPERED INSULATION HATCHING SHOWN IS NOT INTENDED TO ILLUSTRATE THE ENTIRE LIMITS OF TAPERED INSULATION. ROOF AREAS NOT SLOPED BY STRUCTURE SHALL BE SLOPED WITH TAPERED INSULATION TO ACHIEVE PROPER DRAINAGE.
28. PAINT ALL EXPOSED GAS PIPE.

1 GENERAL NOTES (NEW)
NOT TO SCALE

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

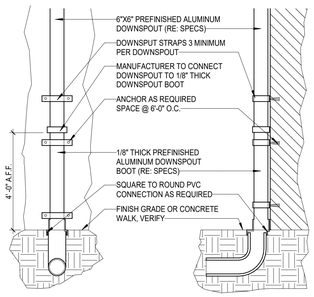
CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

REVISIONS

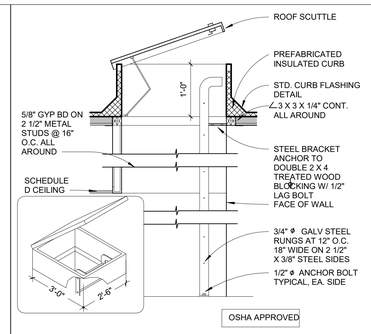
No.	Description	Date

ROOF PLAN - ALTERNATE

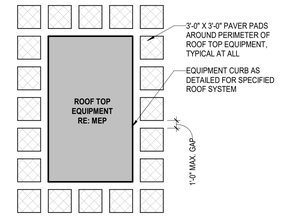
A3.02



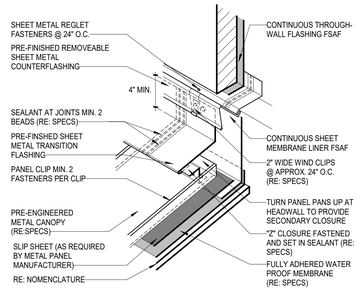
27 DOWNSPOUT TO BOOT
NOT TO SCALE



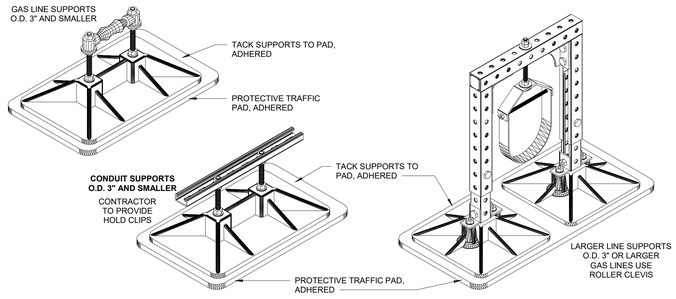
26 ROOFING - ROOF HATCH
NOT TO SCALE



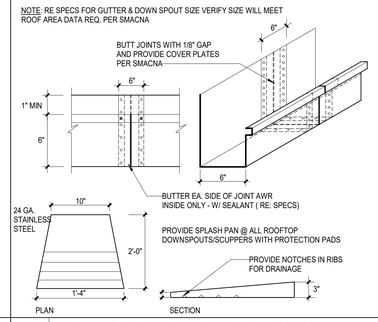
25 ROOFING - WALK PADS
NOT TO SCALE



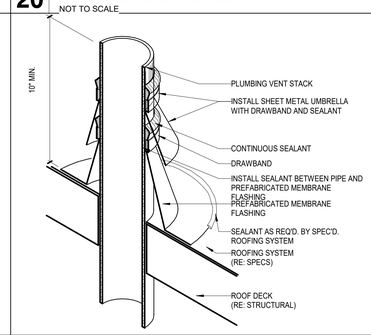
24 ROOFING - FLASHING AT CANOPY
NOT TO SCALE



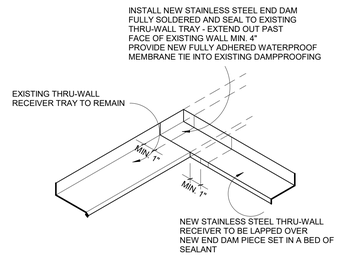
23 ROOFING - PIPE SUPPORTS
NOT TO SCALE



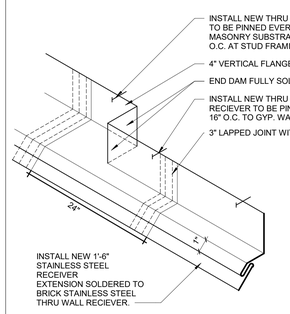
21 GUTTER JOINT AND SPLASH PANS
NOT TO SCALE



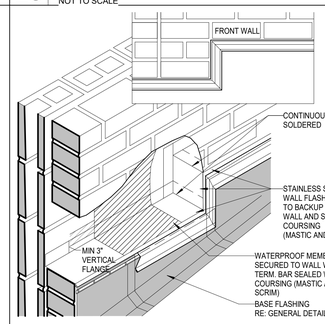
20 ROOFING - DOWNSPOUT
NOT TO SCALE



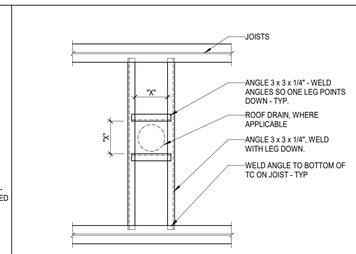
19 ROOFING - THRU-WALL TRAY
NOT TO SCALE



18 ROOFING - BRICK-PLASTER THRU-WALL
NOT TO SCALE

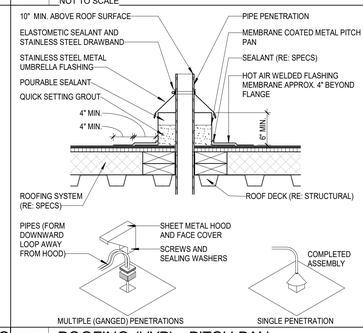


17 ROOFING - THRU-WALL FLASHING
NOT TO SCALE



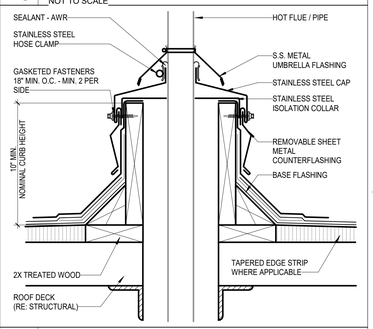
NOTE: INSTALL BRACING PRIOR TO INSTALLATION OF NEW EQUIPMENT CURBS. CONTRACTOR TO VERIFY DIMENSION "X". PROVIDE ANGLE SUPPORTS AT ALL EQUIPMENT CURBS.

16 EQUIP. CURB / SUPPORT / DRAIN FRAMING
NOT TO SCALE

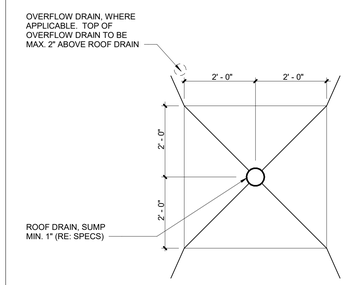


15 ROOFING (HYB) - PITCH PAN
NOT TO SCALE

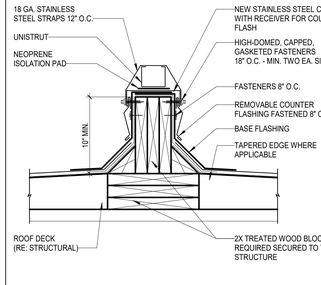
14 ROOFING (HYB) - PLUMBING VENT STACK
NOT TO SCALE



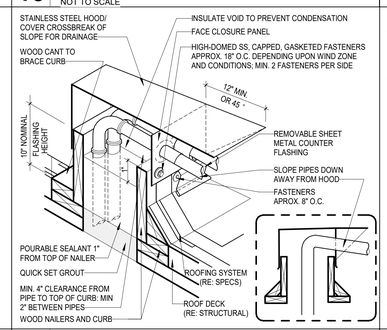
13 ROOFING (HYB) - HOT STACK
NOT TO SCALE



12 ROOFING (HYB) - ROOF DRAIN SUMP PLAN
NOT TO SCALE



11 ROOFING (HYB) - EQUIP. SUPPORT CURB
NOT TO SCALE

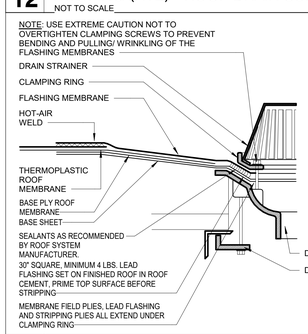


10 ROOFING (HYB) - HOODED CURB
NOT TO SCALE

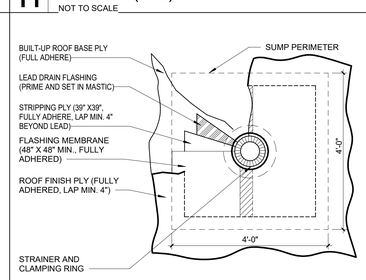
9 ROOFING (HYB) - CURBED PLATFORM
NOT TO SCALE

8 ROOFING (HYB) - EQUIPMENT CURB
NOT TO SCALE

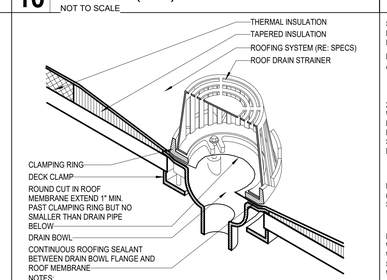
7 ROOFING (HYB) - MEMBRANE LAP
NOT TO SCALE



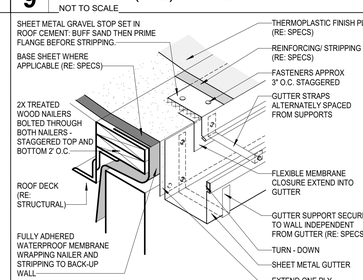
6 ROOFING (HYB) - ROOF DRAIN SECTION
NOT TO SCALE



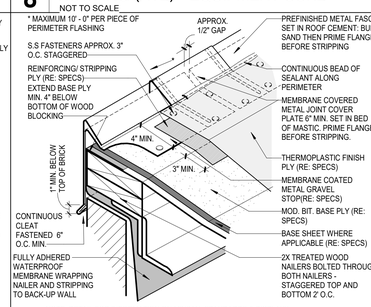
5 ROOFING (HYB) - ROOF DRAIN PLAN
NOT TO SCALE



4 ROOFING (HYB) - ROOF DRAIN
NOT TO SCALE

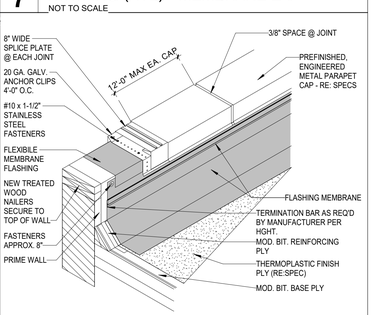


3 ROOFING (HYB) - ROOF EDGE WITH GUTTER
NOT TO SCALE



NOTE: DETAIL FOR INFORMATION ON MINIMAL STANDARDS & DISPLAYS GENERIC CONDITIONS IN RESPECT TO DECK, WALL AND STRUCTURE. REFER TO PLAN REFERENCED DETAILS FOR JOB SPECIFIC DETAILS.

2 ROOFING (HYB) - ROOF EDGE
NOT TO SCALE



1 ROOFING (HYB) - PARAPET METAL COPING
NOT TO SCALE

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

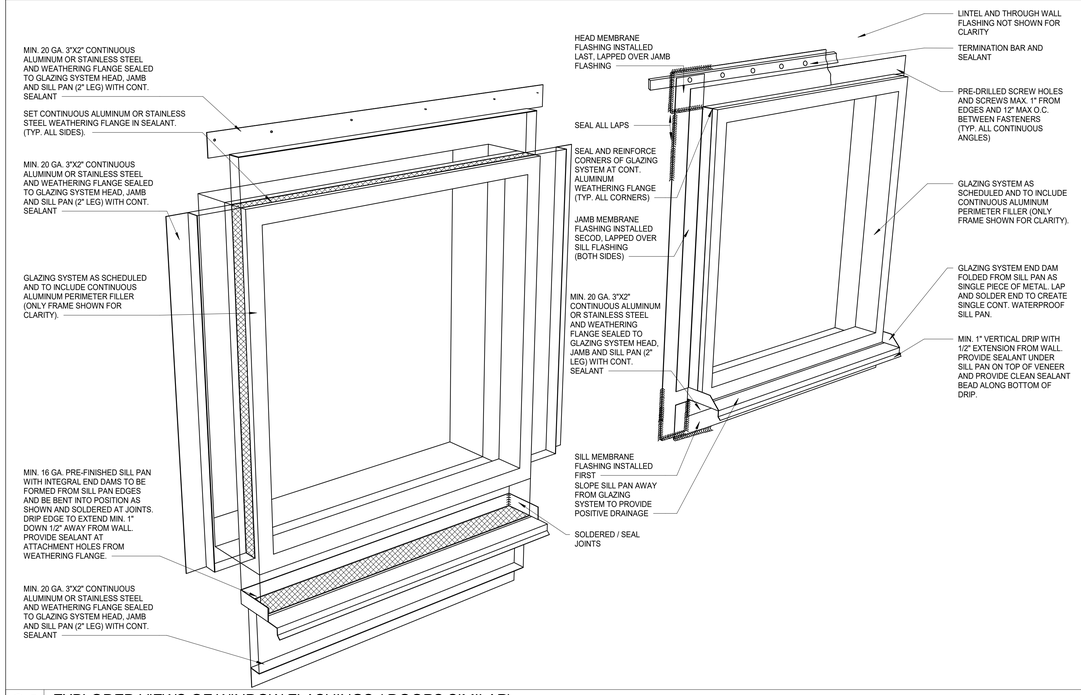
CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	AH
CHECKED BY	PS

REVISIONS

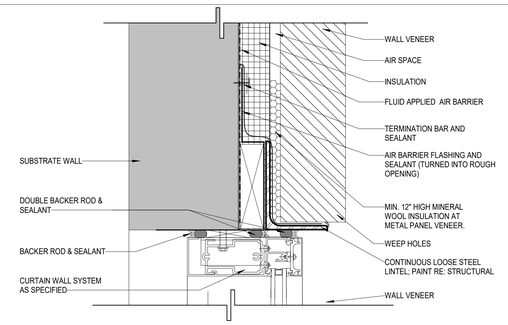
No.	Description	Date

ROOF DETAILS

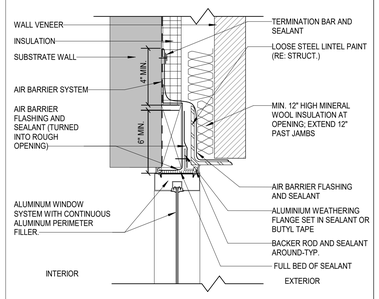
A3.03



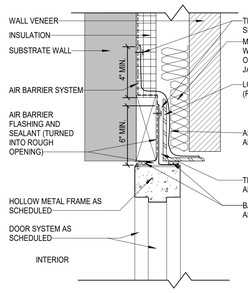
24 EXPLODED VIEWS OF WINDOW FLASHINGS (DOORS SIMILAR)
NOT TO SCALE



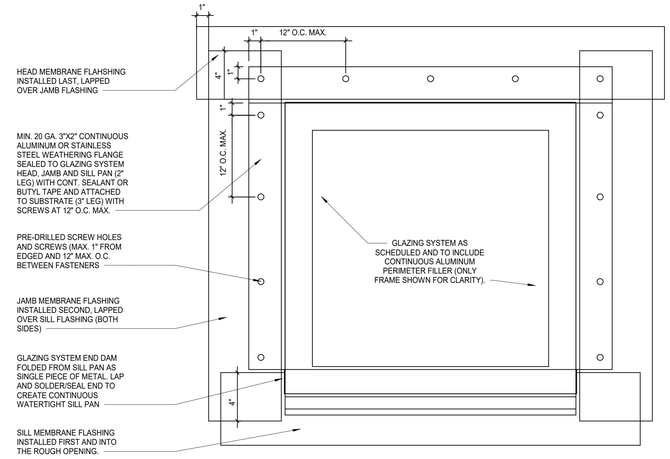
21 CURTAIN WALL HEAD AT LOOSE LINTEL1
NOT TO SCALE



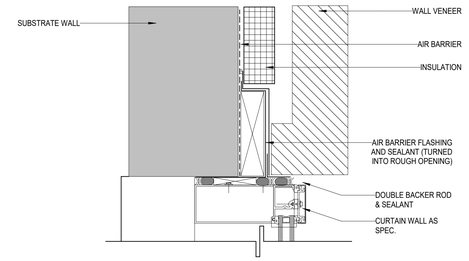
19 STOREFRONT HEAD AT LOOSE LINTEL
NOT TO SCALE



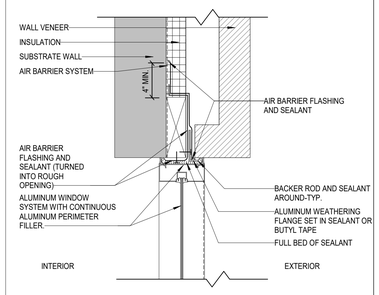
18 HOLLOW METAL HEAD
NOT TO SCALE



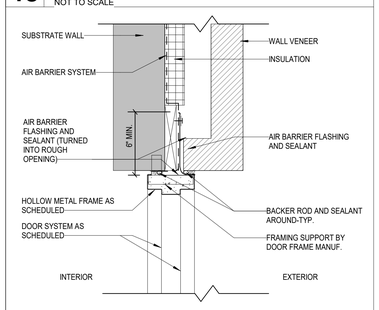
11 STOREFRONT ELEVATION - EDGE CONDITION
NOT TO SCALE



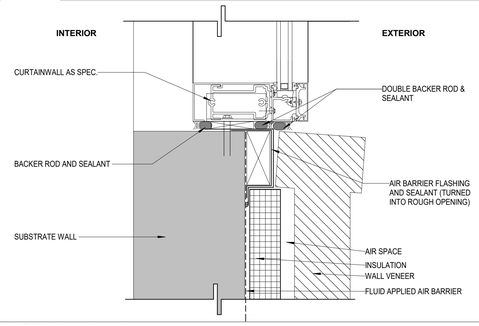
15 CURTAIN WALL JAMB1
NOT TO SCALE



13 STOREFRONT JAMB
NOT TO SCALE

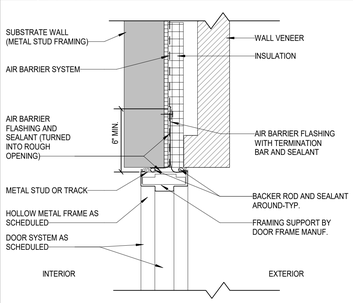


12 HOLLOW METAL JAMB
NOT TO SCALE



9 CURTAIN WALL SILL1
NOT TO SCALE

7 STOREFRONT SILL
NOT TO SCALE



6 HOLLOW METAL JAMB
NOT TO SCALE

1. ALL DETAILS ARE INTENDED TO INDICATE GENERIC SUBSTRATE AND FLASHING/SEALING OF EXTERIOR BUILDING ENVELOPE CONDITIONS. EXACT PROJECT CONDITIONS AND DETAILS WILL VARY. REFER ALSO TO ARCHITECTURAL WINDOW, DOOR AND OTHER WALL PENETRATION OPENINGS FOR ADDITIONAL NOTES AND FINISHES.
2. ALL DETAILS ARE INTENDED TO CONVEY THE BUILDING CODE REQUIREMENTS OF A SEALED BUILDING ENVELOPE. OTHER PROJECT CONDITIONS MAY DICTATE DIFFERING DETAILS, HOWEVER A SEALED BUILDING ENVELOPE IS TO BE MAINTAINED.
3. ALL LAPS AND EXPOSED EDGES OF FLEXIBLE SELF ADHERED FLASHING ARE TO BE SEALED ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
4. EXPOSED EDGES OF FLEXIBLE SELF-ADEHERED FLASHING ARE NOT TO BE INSTALLED IN CONTACT WITH POLYURETHANE SEALANTS EXPOSED TO VIEW.
5. AIR BARRIER SYSTEM IS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. ALL AIR BARRIER, FLASHING AND TRANSITION MATERIALS SHALL BE COMPATIBLE WITH ONE ANOTHER AND CONSTITUTE THE AIR BARRIER SYSTEM.

5 GENERAL NOTES
NOT TO SCALE

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14378 — STATE OF TEXAS
4.11.2019

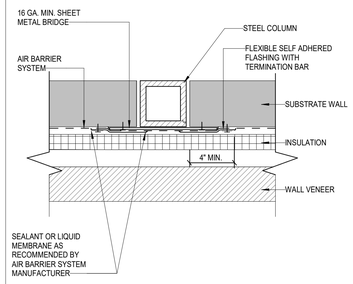
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: Author
CHECKED BY: Checker

REVISIONS

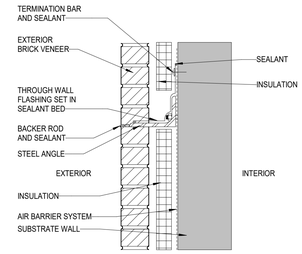
No.	Description	Date

BUILDING ENVELOPE

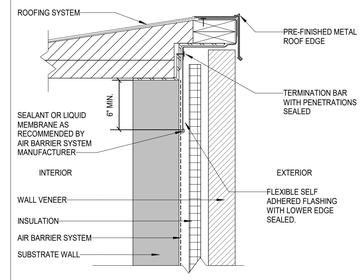
A3.04



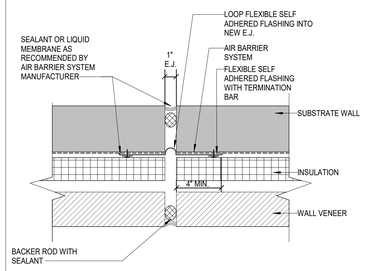
27 STEEL COLUMN CONNECTION
NOT TO SCALE



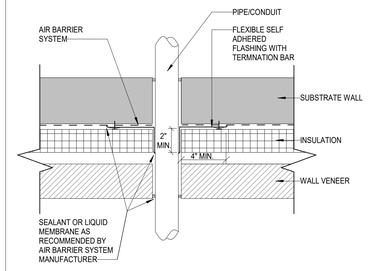
26 BRICK RELIEF FLASHING1
NOT TO SCALE



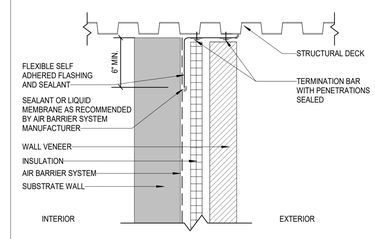
25 TOP OF WALL AT ROOF EDGE
NOT TO SCALE



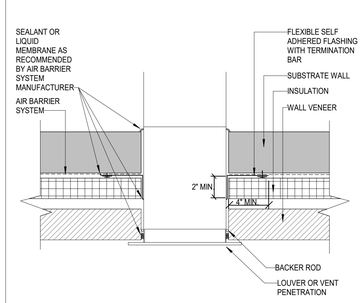
21 EXPANSION JOINT CONNECTION
NOT TO SCALE



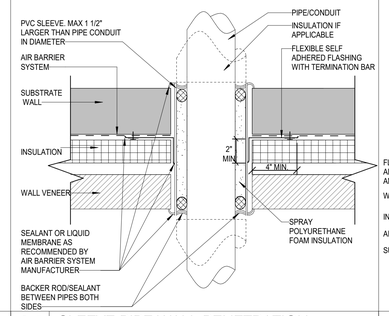
20 PIPE/CONDUIT WALL PENETRATION
NOT TO SCALE



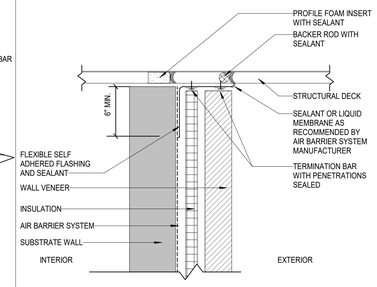
19 TOP OF WALL AT MTL. DECK
NOT TO SCALE



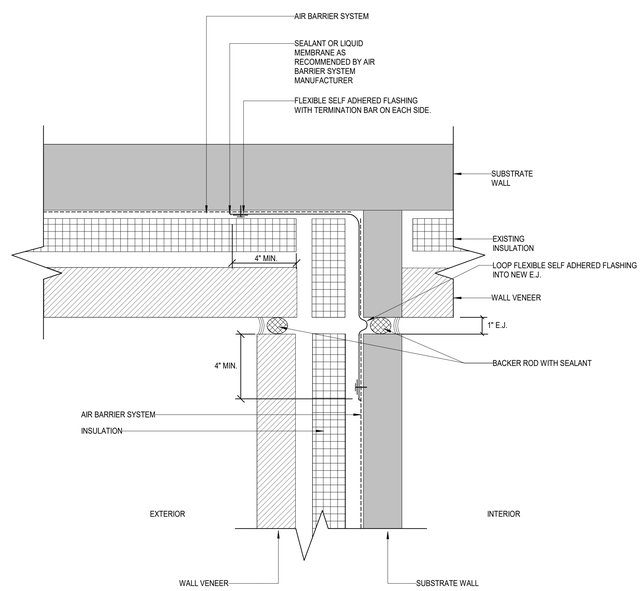
15 DUCT WALL PENETRATION
NOT TO SCALE



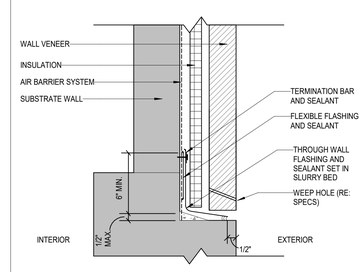
14 SLEEVE PIPE WALL PENETRATION
NOT TO SCALE



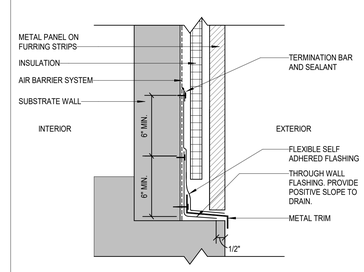
13 TOP OF WALL AT MTL. DECK
NOT TO SCALE



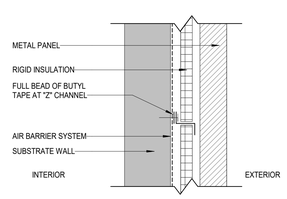
3 "T" CONNECTION EXPANSION JOINT
NOT TO SCALE



7 BASE OF MASONRY WALL
NOT TO SCALE



1 BASE OF METAL WALL PANEL
NOT TO SCALE



4 METAL PANEL WALL ATTACHMENT
NOT TO SCALE

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

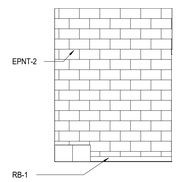
CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

REVISIONS

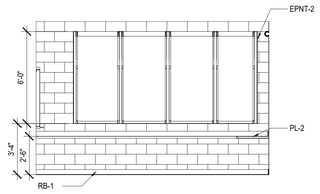
No.	Description	Date

BUILDING ENVELOPE

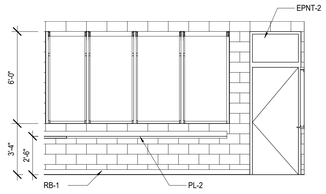
A3.05



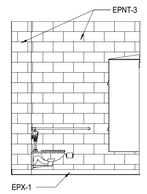
30 INT. ELEV. - CUSTODIAL CLOSET 109
1/4" = 1'-0"



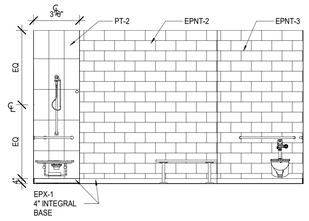
29 INT. ELEV. - COACHES' OFFICE 110
1/4" = 1'-0"



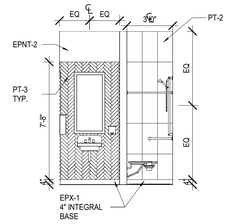
28 INT. ELEV. - COACHES' OFFICE 110
1/4" = 1'-0"



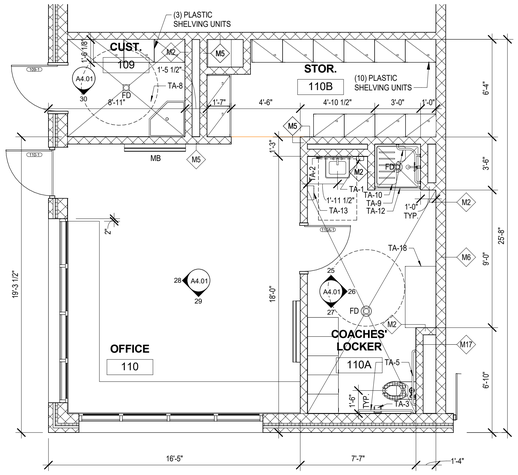
27 INT. ELEV. - COACHES' LOCKER 110A
1/4" = 1'-0"



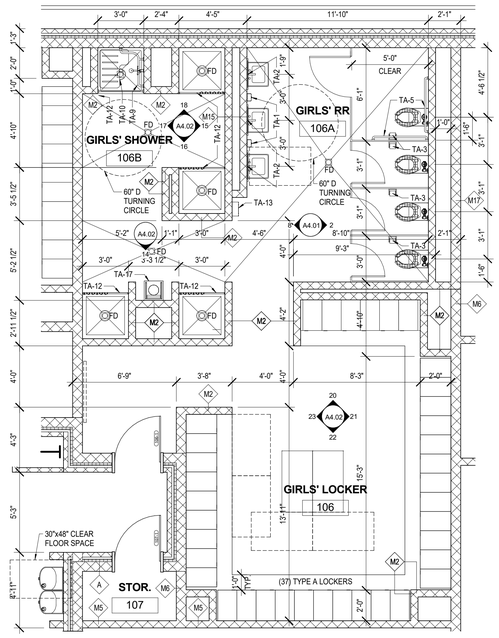
26 INT. ELEV. - COACHES' LOCKER 110A
1/4" = 1'-0"



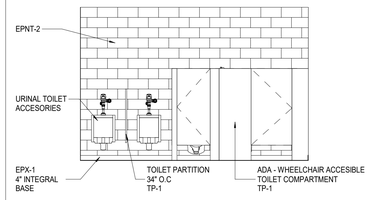
25 INT. ELEV. - COACHES' LOCKER 110A
1/4" = 1'-0"



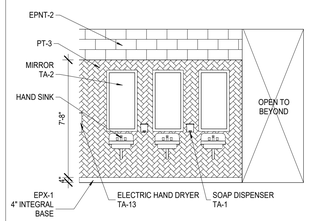
18 ENLARGED PLAN - COACHES' OFFICE
1/4" = 1'-0"



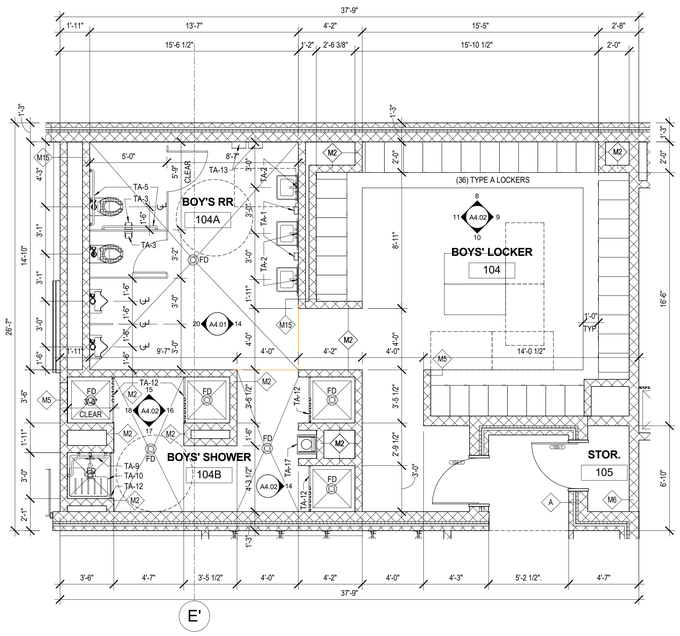
16 ENLARGED PLAN - GIRL'S LOCKER ROOM
1/4" = 1'-0"



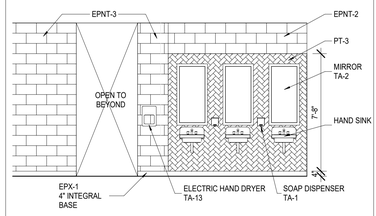
20 INT. ELEV. - BOY'S RR 104A
1/4" = 1'-0"



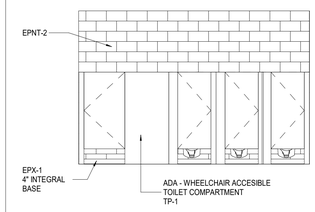
14 INT. ELEV. - BOY'S RR 104A
1/4" = 1'-0"



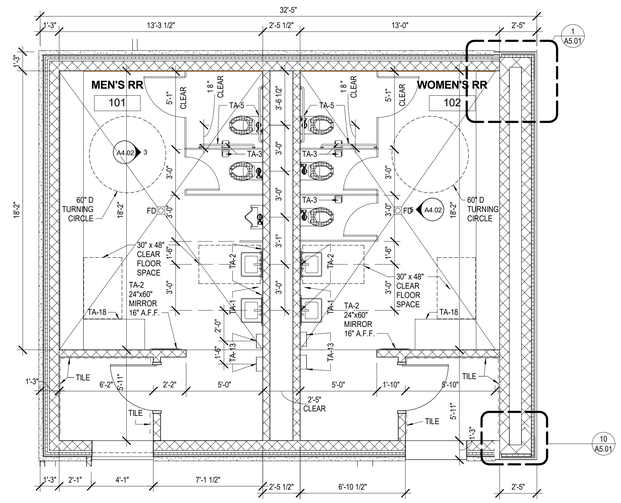
4 ENLARGED PLAN - BOY'S LOCKER ROOM
1/4" = 1'-0"



8 INT. ELEV. - GIRL'S RR 106A
1/4" = 1'-0"



2 INT. ELEV. - GIRL'S RR 106A
1/4" = 1'-0"



6 ENLARGED PLAN - PUBLIC RESTROOMS
1/4" = 1'-0"

TOILET ACCESSORIES
1/4" = 1'-0"

TOILET ACCESSORIES

LABEL	DESCRIPTION	REMARKS
TA-1	SOAP DISPENSER	
TA-2	MIRROR	
TA-3	TOILET PAPER DISPENSER	
TA-4	PAPER TOWEL DISPENSER	
TA-5	GRAB BARS (AT TYPICAL ACCESSIBLE TOILETS)	
TA-6	SANITARY NAPKIN DISPENSER	
TA-7	SANITARY NAPKIN DISPOSAL	
TA-8	MOP AND BROOM HOLDER	
TA-9	GRAB BARS (AT ACCESSIBLE SHOWERS)	
TA-10	FOLDING SHOWER BENCH	
TA-11	CLOTHES HOOK MOUNTED @ 40" A.F.F.	NOTE 5
TA-12	SHOWER CURTAIN, ROD AND HOOKS	
TA-13	ELECTRIC HAND DRYER	
TA-14	PAPER TOWEL DISPENSER AND TRASH RECEPTACLE	
TA-15	GRAB BARS (AT AMBULATORY ACCESSIBLE TOILETS)	
TA-16	DIAPER CHANGING STATION	
TA-17	ELECTRIC SWIMSUIT SPINNER	
TA-18	ADA BENCH	
TA-19	ELECTRIC HAIR DRYER	

NOTE: ALL TOILET ACCESSORIES SHALL BE CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED U.N.O.

1. COORDINATE FINAL LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION
2. CONTRACTOR IS TO VERIFY ALL HEIGHTS OF ACCESSORIES TO COMPLY WITH ALL APPLICABLE ACCESSIBILITY REQUIREMENTS
3. REFER TO ALL FINISHES AND COLORS IN FINISH SCHEDULE, VERIFY ALL PATTERNS WITH ARCHITECT
4. ALIGN MIRROR ON CENTER OF LAVATORY
5. ONE (1) HOOK SHALL BE INSTALLED INSIDE DOOR AT EACH TOILET PARTITION. ONE HOOK INSIDE DOOR AT SINGLE TOILET ROOMS AND ONE HOOK AT EACH SHOWER
6. CASEWORK, PLUMBING FIXTURES, TOILET PARTITIONS, AND OTHER FIXTURES AND EQUIPMENT ARE DIMENSIONED FROM FINISHED SURFACES UNLESS NOTED OTHERWISE.

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

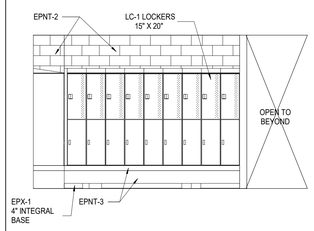
CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	TT
CHECKED BY	ER

REVISIONS

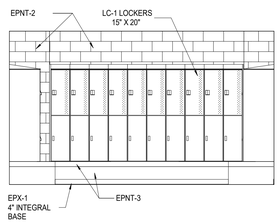
No.	Description	Date

ENLARGED PLANS, & INTERIOR ELEVATIONS

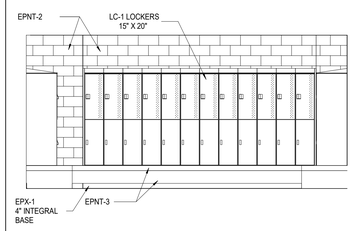
A4.01



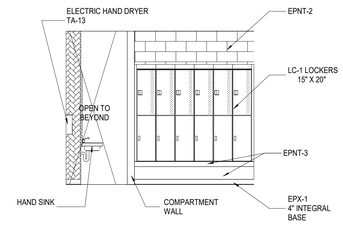
23 INT. ELEV. - GIRL'S LOCKER 106
1/4" = 1'-0"



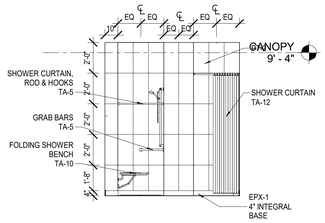
22 INT. ELEV. - GIRL'S LOCKER 106
1/4" = 1'-0"



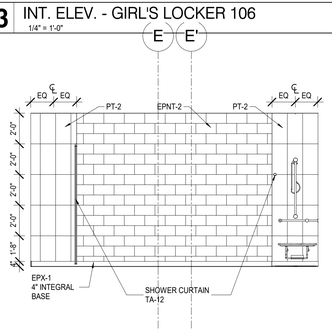
21 INT. ELEV. - GIRL'S LOCKER 106
1/4" = 1'-0"



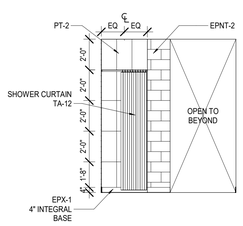
20 INT. ELEV. - GIRL'S LOCKER 106
1/4" = 1'-0"



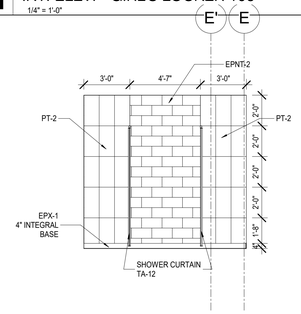
18 INT. ELEV. BOY'S SHOWER 104B
1/4" = 1'-0"



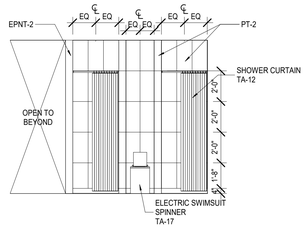
17 INT. ELEV. BOY'S SHOWER 104B
1/4" = 1'-0"



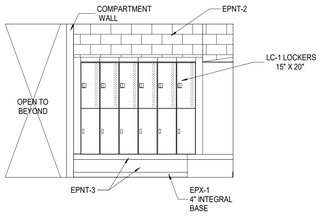
16 INT. ELEV. BOY'S SHOWER 104B
1/4" = 1'-0"



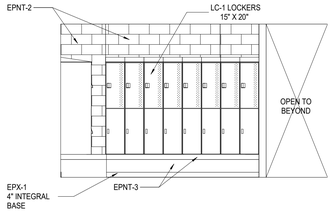
15 INT. ELEV. BOY'S SHOWER 104B
1/4" = 1'-0"



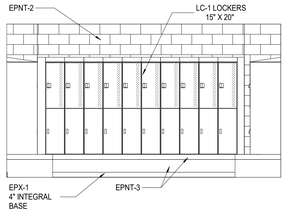
14 INT. ELEV. BOY'S SHOWER 104B
1/4" = 1'-0"



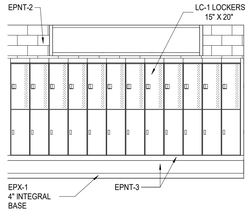
11 INT. ELEV. - BOYS LOCKER 104
1/4" = 1'-0"



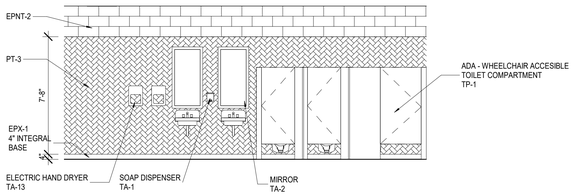
10 INT. ELEV. - BOYS LOCKER 104
1/4" = 1'-0"



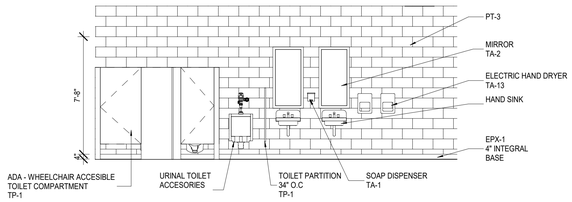
9 INT. ELEV. - BOY'S LOCKER 104
1/4" = 1'-0"



8 INT. ELEV. - BOY'S LOCKER 104
1/4" = 1'-0"



5 INT. ELEV. - WOMEN'S RESTROOM 102
1/4" = 1'-0"



3 INT. ELEV. - MEN'S RESTROOM 101
1/4" = 1'-0"

TOILET ACCESSORIES

LABEL	DESCRIPTION	REMARKS
TA-1	SOAP DISPENSER	
TA-2	MIRROR	
TA-3	TOILET PAPER DISPENSER	
TA-4	PAPER TOWEL DISPENSER	
TA-5	GRAB BARS (AT TYPICAL ACCESSIBLE TOILETS)	
TA-6	SANITARY NAPKIN DISPENSER	
TA-7	SANITARY NAPKIN DISPOSAL	
TA-8	MOP AND BROOM HOLDER	
TA-9	GRAB BARS (AT ACCESSIBLE SHOWERS)	
TA-10	FOLDING SHOWER BENCH	
TA-11	CLOTHES HOOK, MOUNTED @ 40" A.F.F.	NOTE 5
TA-12	SHOWER CURTAIN, ROD AND HOOKS	
TA-13	ELECTRIC HAND DRYER	
TA-14	PAPER TOWEL DISPENSER AND TRASH RECEPTACLE	
TA-15	GRAB BARS (AT AMBULATORY ACCESSIBLE TOILETS)	
TA-16	DIAPER CHANGING STATION	
TA-17	ELECTRIC SWIMSUIT SPINNER	
TA-18	ADA BENCH	
TA-19	ELECTRIC HAIR DRYER	

NOTE: ALL TOILET ACCESSORIES SHALL BE CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED U.N.O.

1. COORDINATE FINAL LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION
2. CONTRACTOR IS TO VERIFY ALL HEIGHTS OF ACCESSORIES TO COMPLY WITH ALL APPLICABLE ACCESSIBILITY REQUIREMENTS
3. REFER TO ALL FINISHES AND COLORS IN FINISH SCHEDULE, VERIFY ALL PATTERNS WITH ARCHITECT
4. ALIGN MIRROR ON CENTER OF LAVATORY
5. ONE (1) HOOK SHALL BE INSTALLED INSIDE DOOR AT EACH TOILET PARTITION. ONE HOOK INSIDE DOOR AT SINGLE TOILET ROOMS AND ONE HOOK AT EACH SHOWER.
6. CASEWORK, PLUMBING FIXTURES, TOILET PARTITIONS, AND OTHER FIXTURES AND EQUIPMENT ARE DIMENSIONED FROM FINISHED SURFACES UNLESS NOTED OTHERWISE.

TOILET ACCESSORIES LEGEND
1/4" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

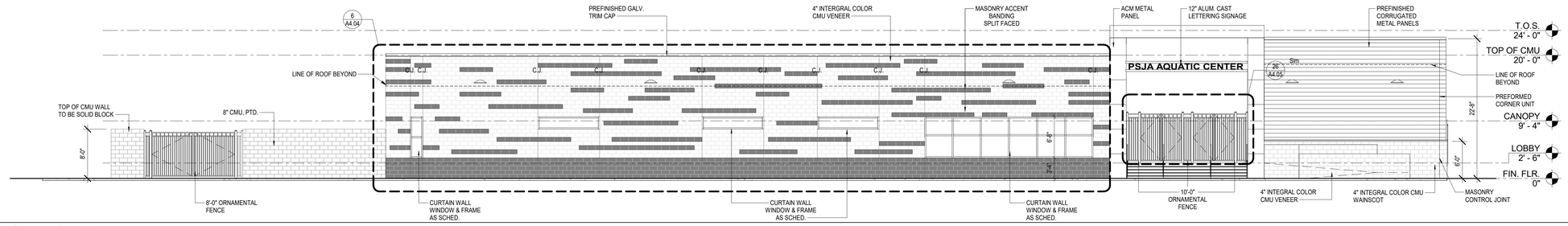
REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: Author
CHECKED BY: Checker
REVISIONS

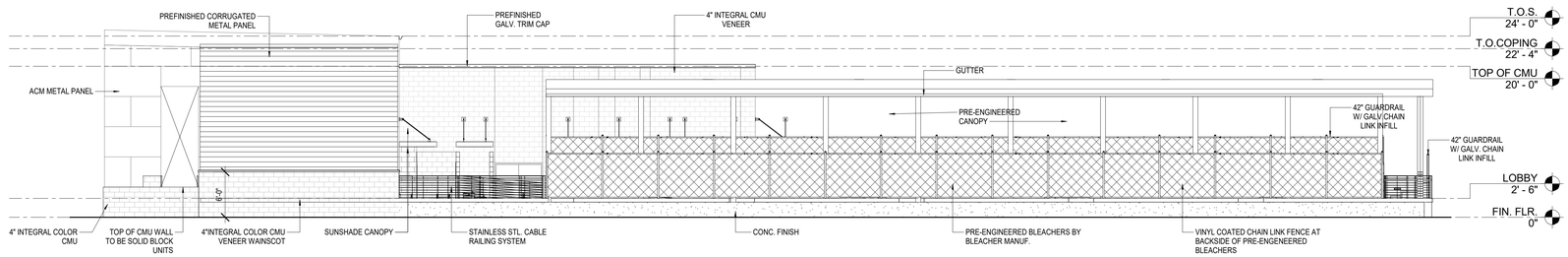
No.	Description	Date

INTERIOR ELEVATIONS

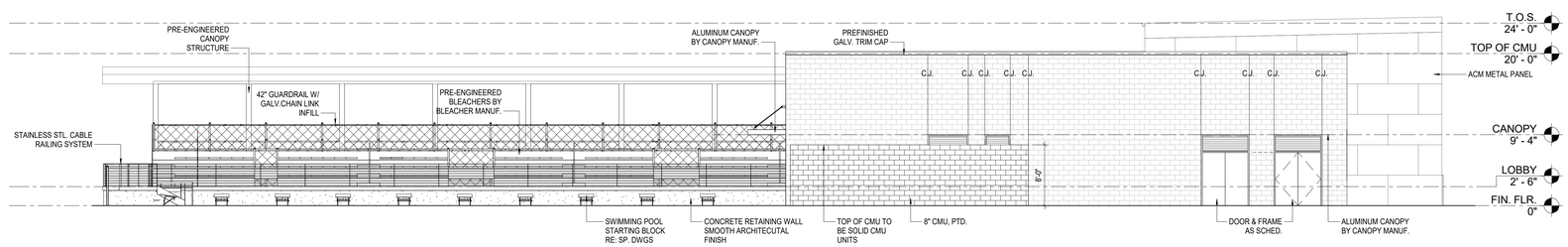
A4.02



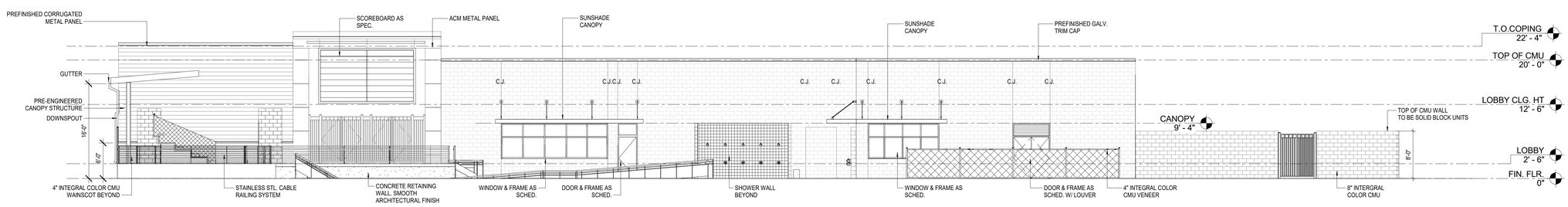
24 NORTH ELEVATION - BASE BID
1/8" = 1'-0"



18 WEST ELEVATION - BASE BID
1/8" = 1'-0"



12 EAST ELEVATION - BASE BID
1/8" = 1'-0"



6 SOUTH ELEVATION - BASE BID
1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

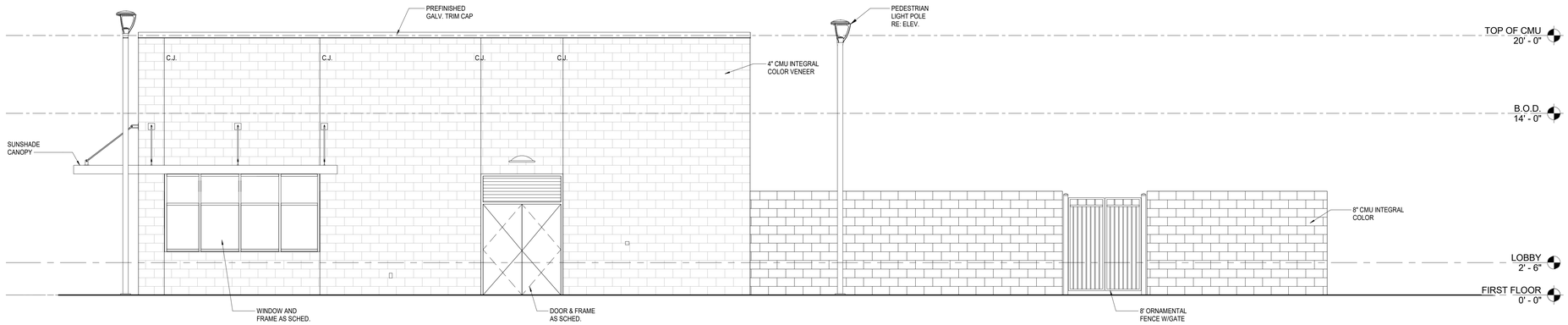
REVISIONS

No.	Description	Date

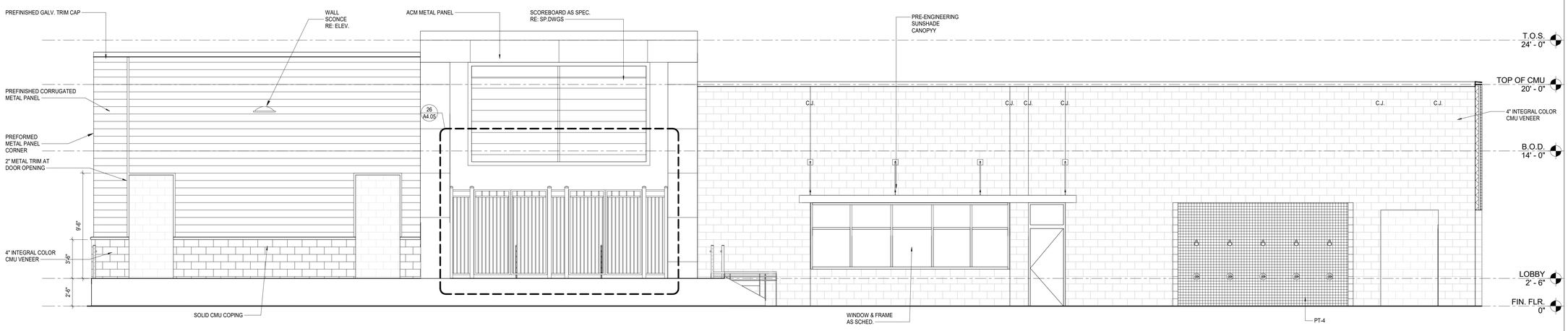
ISSUED FOR BIDS

EXTERIOR ELEVATIONS - BASE BID

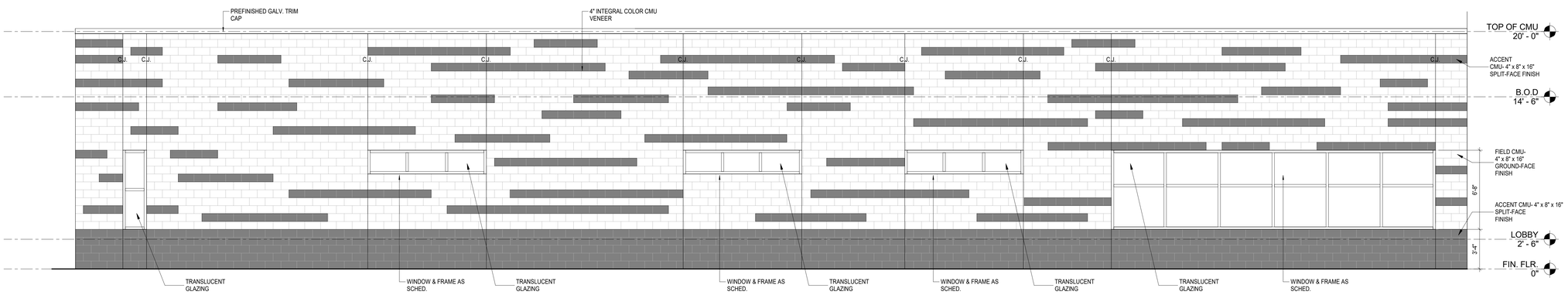
A4.03



30 SOUTH POOL ELEVATION
1/4" = 1'-0"



18 NORTH POOL ELEVATION
1/4" = 1'-0"



6 NORTH ELEVATION - BASE BID - ENLARGED
1/4" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

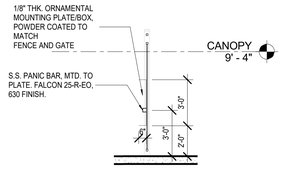
REVISIONS

No.	Description	Date

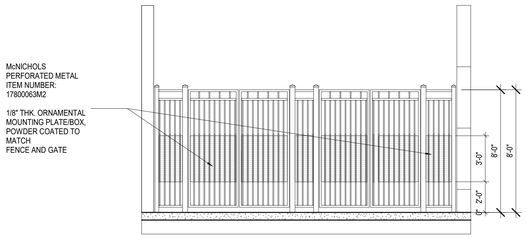
ISSUED FOR BIDS

EXTERIOR ELEVATIONS - BASE BID

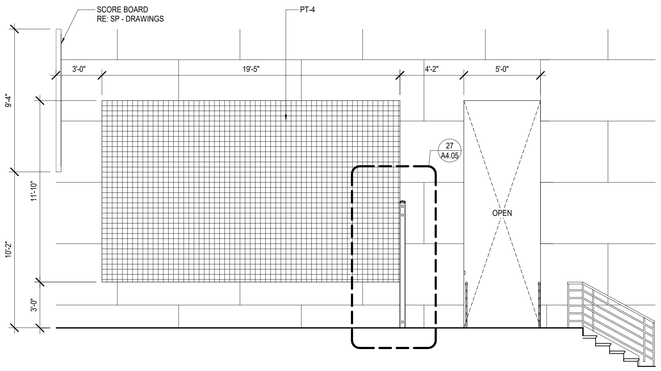
A4.04



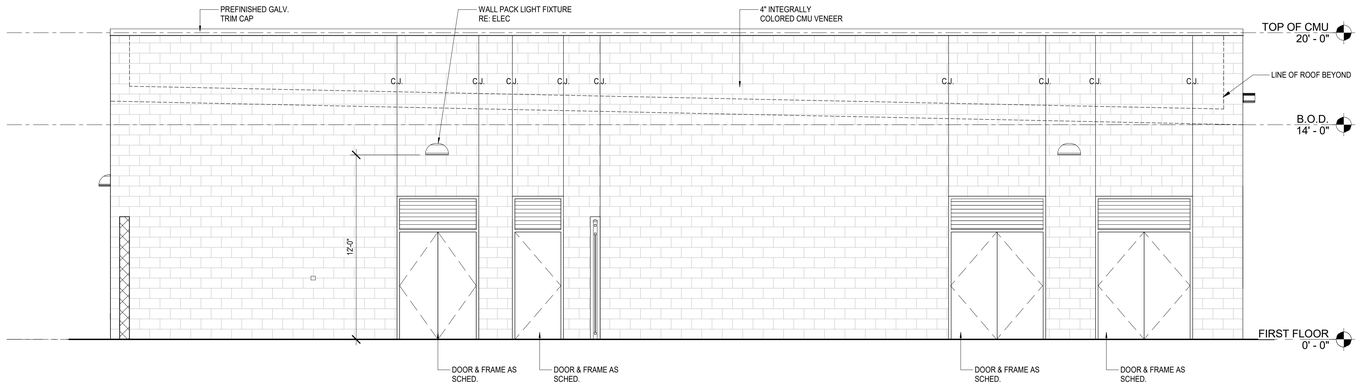
27 ENTRY GATE SECTION
1/4" = 1'-0"



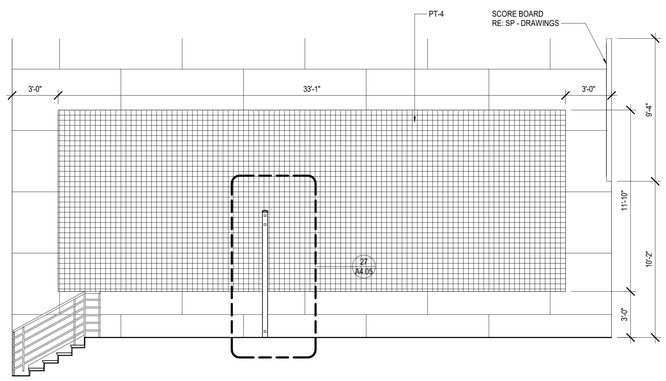
26 ENTRY GATE ELEVATION
1/4" = 1'-0"



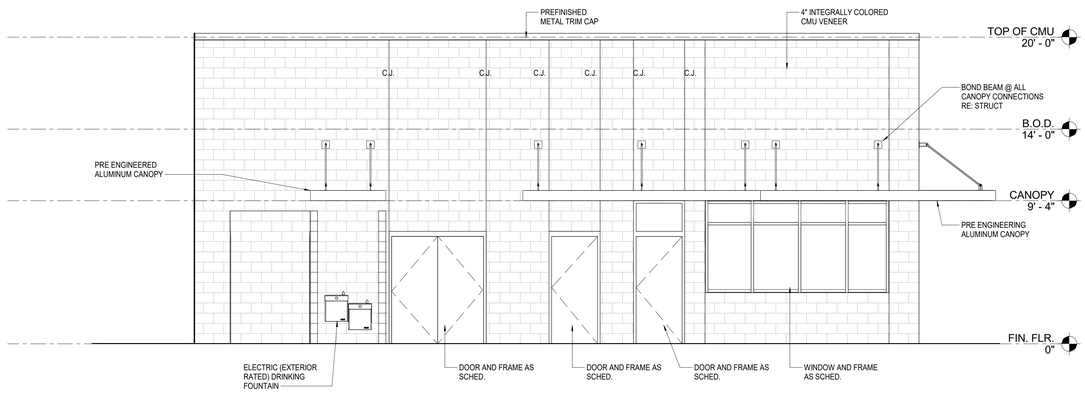
18 WEST ENTRY WALL ELEVATION
1/4" = 1'-0"



16 SERVICE YARD ELEVATION
1/4" = 1'-0"



6 EAST ENTRY WALL ELEVATION
1/4" = 1'-0"



3 EAST POOL ELEVATION1
1/4" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

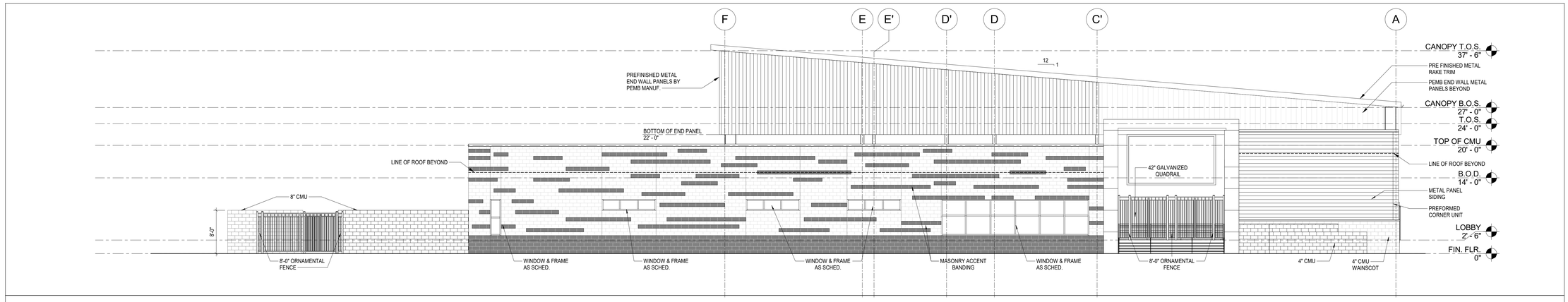
REVISIONS

No.	Description	Date

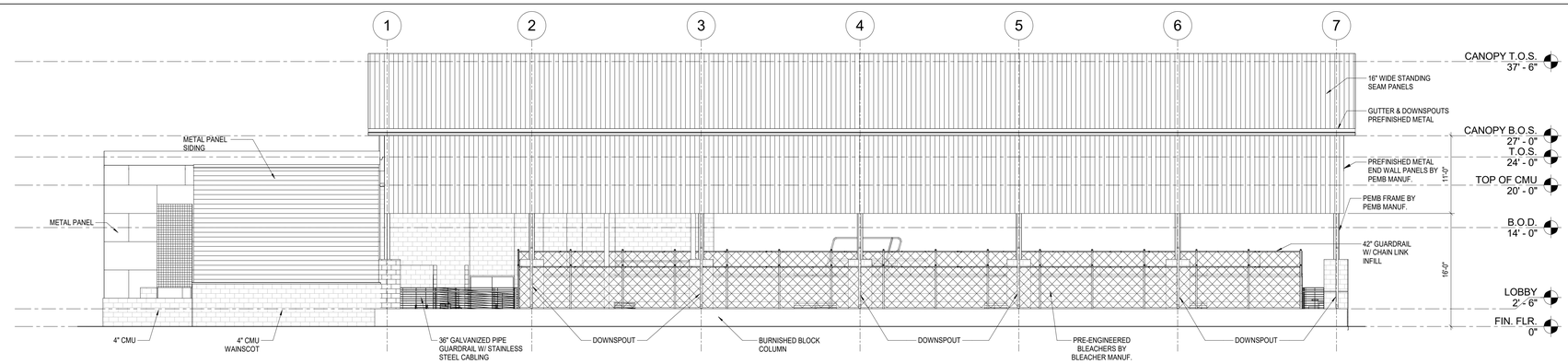
ISSUED FOR BIDS

EXTERIOR ELEVATIONS - BASE BID

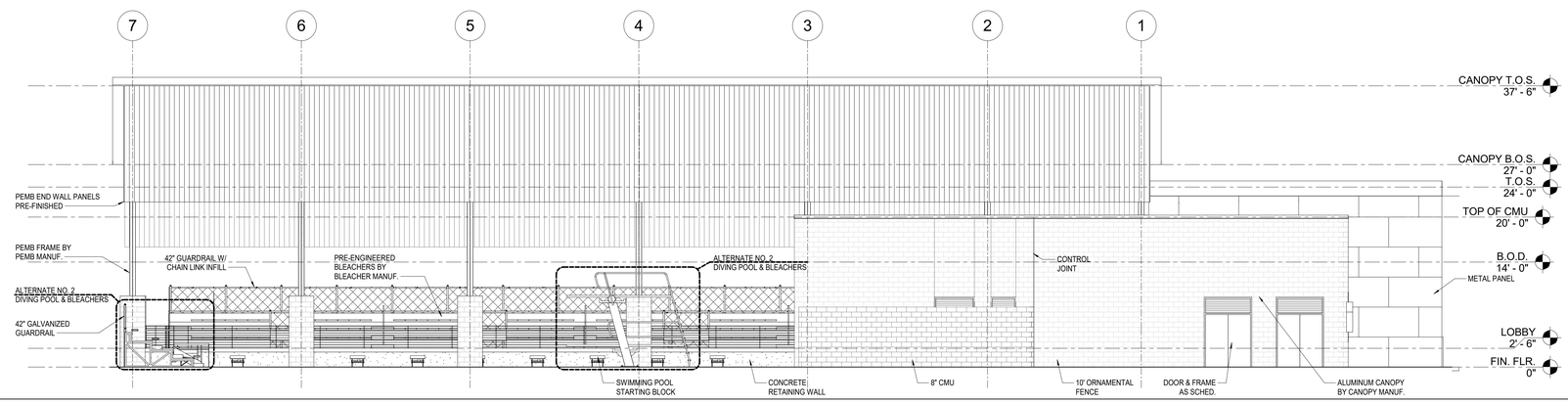
A4.05



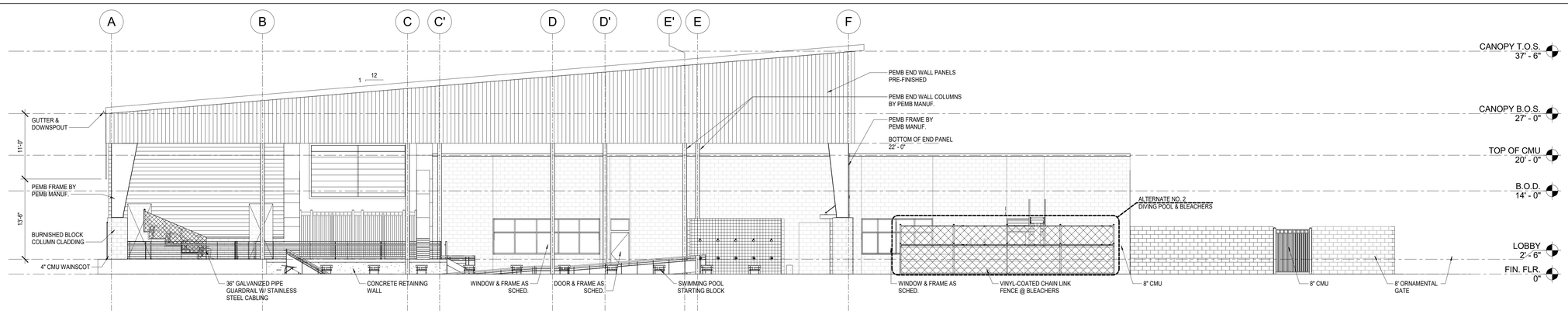
24 NORTH ELEVATION - CANOPY ALT.
1/8" = 1'-0"



18 WEST ELEVATION - CANOPY ALT.
1/8" = 1'-0"



12 EAST ELEVATION - CANOPY ALT.
1/8" = 1'-0"



6 SOUTH ELEVATION - CANOPY ALT.
1/8" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14378 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	TT
CHECKED BY	ER

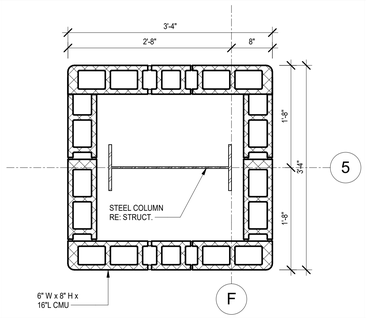
REVISIONS

No.	Description	Date

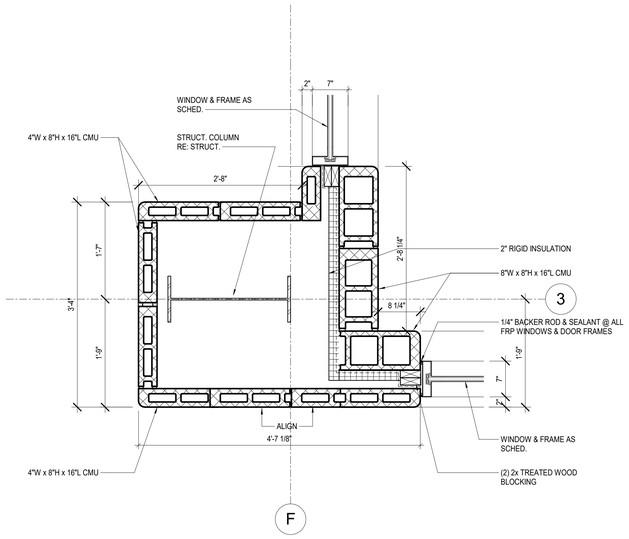
ISSUED FOR BIDS

EXTERIOR ELEVATIONS - ALTERNATE NO. 1 & 2

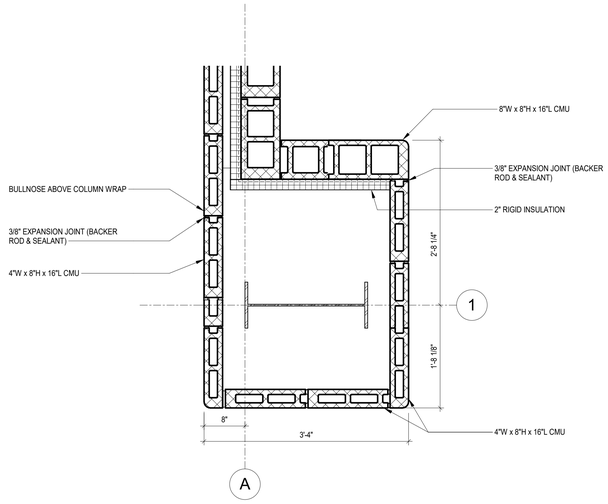
A4.06



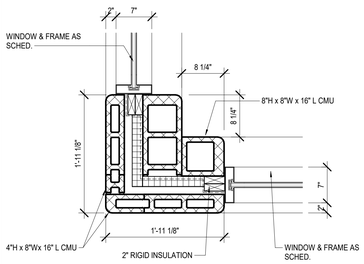
15 CANOPY COLUMN - ALTERNATE 1
1" = 1'-0"



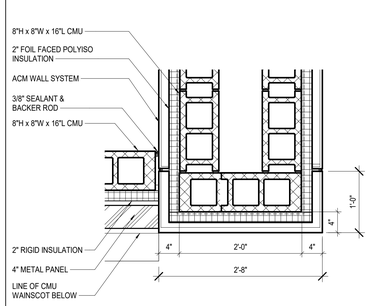
14 OFFICE COLUMN - ALTERNATE 1
1" = 1'-0"



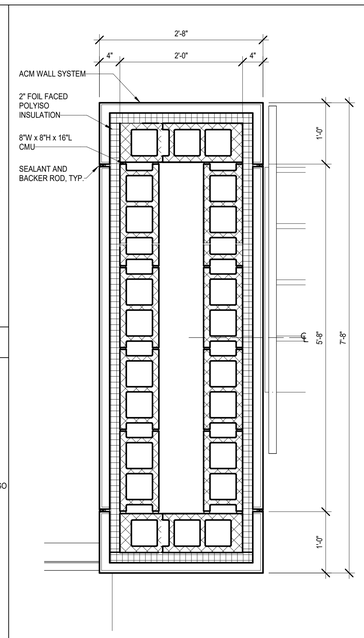
13 PUBLIC RESTROOM COLUMN - DETAIL
1" = 1'-0"



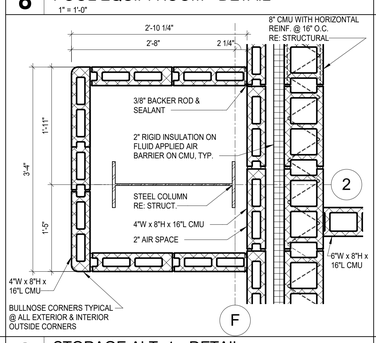
11 OFFICE 110 - DETAIL
1" = 1'-0"



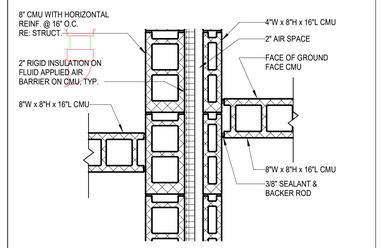
10 PUBLIC RESTROOMS - DETAIL
1" = 1'-0"



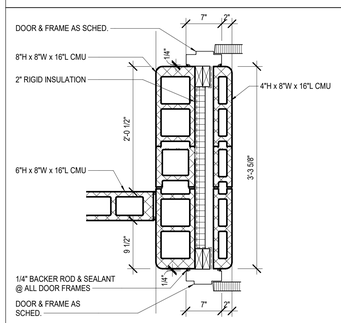
3 ENTRY CORRIDOR DETAIL
1" = 1'-0"



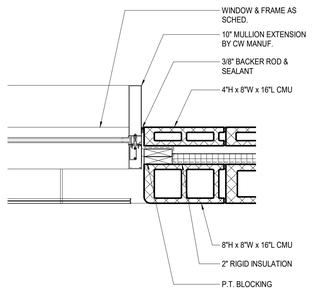
8 POOL EQUIP. ROOM - DETAIL
1" = 1'-0"



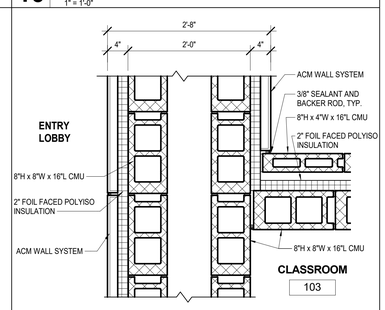
7 SERVICE YARD - DETAIL
1" = 1'-0"



6 ELEC. ROOM - DETAIL
1" = 1'-0"

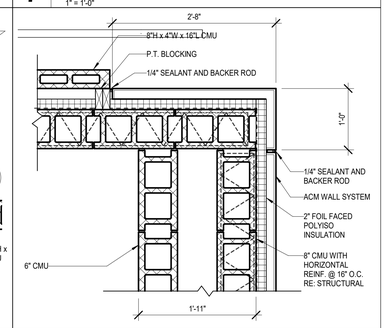


5 CLASSROOM WINDOW JAMB - DETAIL
1" = 1'-0"



4 CLASSROOM - 103 DETAIL
1" = 1'-0"

2 STORAGE ALT. 1 - DETAIL
1" = 1'-0"



1 PUBLIC RESTROOMS - DETAIL
1" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS

4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

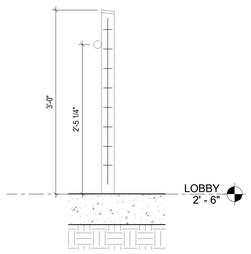
REVISIONS

No.	Description	Date

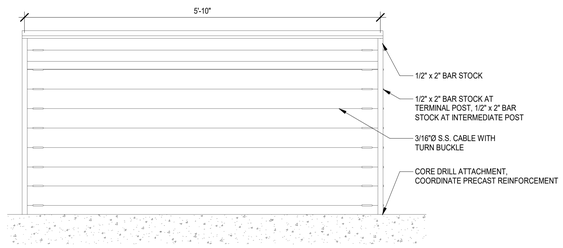
ISSUED FOR BIDS

EXTERIOR PLAN DETAILS

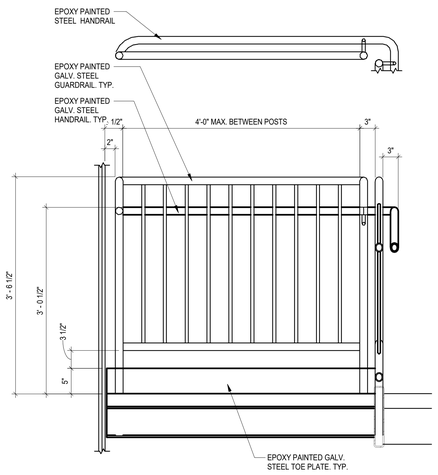
A5.01



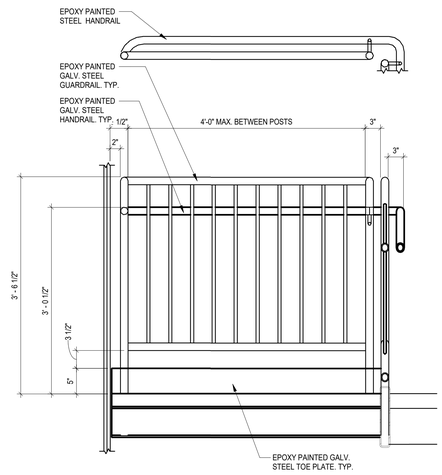
24 RAIL SECTION
1" = 1'-0"



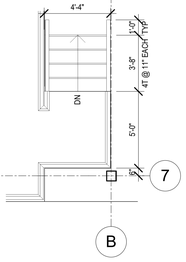
23 RAIL ELEVATION
1" = 1'-0"



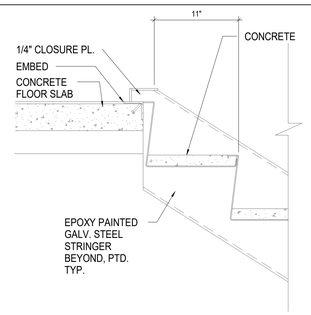
12 STAIR HANDRAIL DETAIL.
1" = 1'-0"



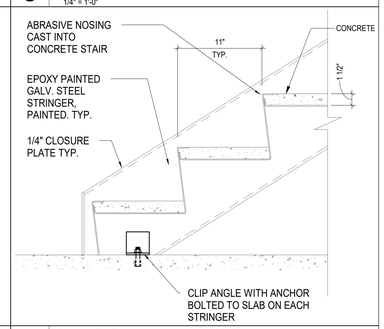
10 STAIR HANDRAIL DETAIL..
1" = 1'-0"



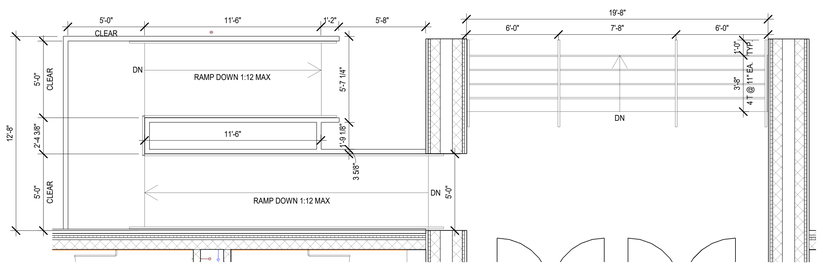
3 OVERALL FLOOR PLAN- BLEACHERS STAIR
1/4" = 1'-0"



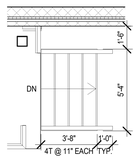
8 STAIR DETAIL AT UPPER FLOOR LANDING
1 1/2" = 1'-0"



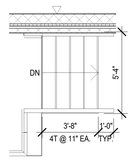
7 STAIR DETAIL AT FLOOR
1 1/2" = 1'-0"



6 ENLARGED RAMP AND STAIR PLAN
1/4" = 1'-0"



2 ENLARGED STAIR PLAN - ALTERNATE 1
1/4" = 1'-0"



1 ENLARGED STAIR PLAN
1/4" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

REVISIONS

No.	Description	Date

ISSUED FOR BIDS

STAIRS

A5.05

DOOR SCHEDULE - FIRST FLOOR AREA A

MARK	DOOR PANEL ELEV.	PAIR/ SING	SIZE W x H W	SIZE W x H H	MATL.	DOOR FRAME ELEV.	SIZE W x H W	SIZE W x H H	MATL.	DETAILS SILL	DETAILS JAMB	DETAILS HEAD	H.W.	CTRL ACCESS	FIRE RATING LABEL	REMARKS
101-1	F	SING	3' - 0"	7' - 0"	FRP	1M	3' - 4"	7' - 4"	FRP		9/A6.02	15/A6.02				
102-1	F	SING	3' - 0"	7' - 0"	FRP	1M	3' - 4"	7' - 4"	FRP		9/A6.02	15/A6.02				
103-1	F	PAIR	3' - 0"	7' - 0"	FRP	1T	5' - 0"	9' - 4"	FRP		9/A6.02	15/A6.02				
104-1	F	SING	3' - 0"	7' - 0"	FRP	1M	3' - 4"	7' - 4"	FRP		9/A6.02	15/A6.02				
105-1	F	SING	3' - 0"	7' - 0"	FRP	1M	3' - 4"	7' - 4"	FRP		9/A6.02	15/A6.02				
106-1	F	SING	3' - 0"	7' - 0"	FRP	1M	3' - 4"	7' - 4"	FRP		9/A6.02	15/A6.02				
107-1	F	SING	3' - 0"	7' - 0"	FRP	1M	3' - 4"	7' - 4"	FRP		9/A6.02	15/A6.02				
108-1	F	PAIR	6' - 0"	7' - 0"	HM	1	6' - 4"	7' - 2"	HM		9/A6.02	15/A6.02				
109-1	F	SING	3' - 0"	7' - 0"	FRP	1M	3' - 4"	7' - 4"	FRP		9/A6.02	15/A6.02				
110-1	F	PAIR	3' - 0"	7' - 0"	FRP	1T	5' - 0"	9' - 4"	FRP		9/A6.02	15/A6.02				
110A-1	F	SING	3' - 0"	7' - 0"	FRP	1M	3' - 4"	7' - 4"	FRP		9/A6.02	15/A6.02				
111-1	F	PAIR	3' - 0"	7' - 0"	FRP	2L	5' - 0"	9' - 4"	FRP		9/A6.02	15/A6.02				
111A-1	F	PAIR	2' -6"	7' - 0"	FRP	2L	5' - 0"	9' - 4"	FRP		9/A6.02	15/A6.02				
111B-1	F	SING	3' - 0"	7' - 0"	FRP	1L	5' - 0"	9' - 4"	FRP		9/A6.02	15/A6.02				
113-1	F	PAIR	3' - 0"	7' - 0"	FRP	2L	5' - 0"	9' - 4"	FRP		9/A6.02	15/A6.02				
114-1	F	SING	3' - 0"	7' - 0"	FRP	1M	3' - 4"	7' - 4"	FRP		9/A6.02	15/A6.02				
115-1	F	PAIR	3' - 0"	7' - 0"	FRP	2L	5' - 0"	9' - 4"	FRP		9/A6.02	15/A6.02				

WINDOW SCHEDULE - ALL

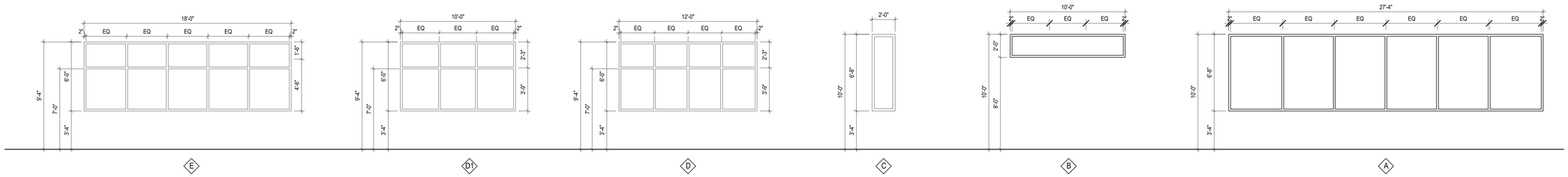
MARK	FRAME SIZE W X H WIDTH	FRAME SIZE W X H HEIGHT	WINDOW ELEV	FRAME MATERIAL	DETAILS SILL	DETAILS JAMB	DETAILS HEAD	COMMENTS
A	27' - 4"	6' - 8"	A					
B	10' - 0"	2' - 0"	B					
C	2' - 0"	6' - 8"	C					
D	12' - 0"	6' - 0"	D					
E	18' - 0"	6' - 0"	E					
D1	10' - 0"	6' - 0"	D1	ALUM				ONLY INCLUDED IF ALTERNATE 1 IS ACCEPTED

FINISH SCHEDULE - FIRST FLOOR AREA A

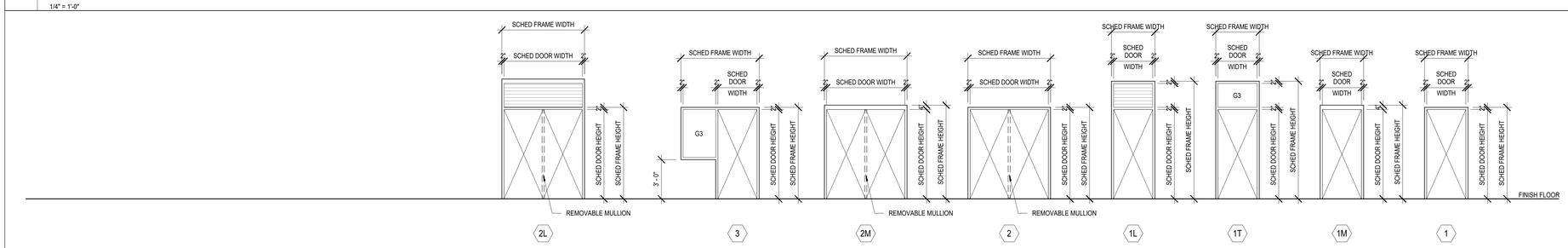
ROOM NUMBER	ROOM NAME	FLOOR	BASE	WALL FINISH NORTH WALL	WALL FINISH EAST WALL	WALL FINISH SOUTH WALL	WALL FINISH WEST WALL	CEILING FINISH	CEILING HEIGHT	REMARKS

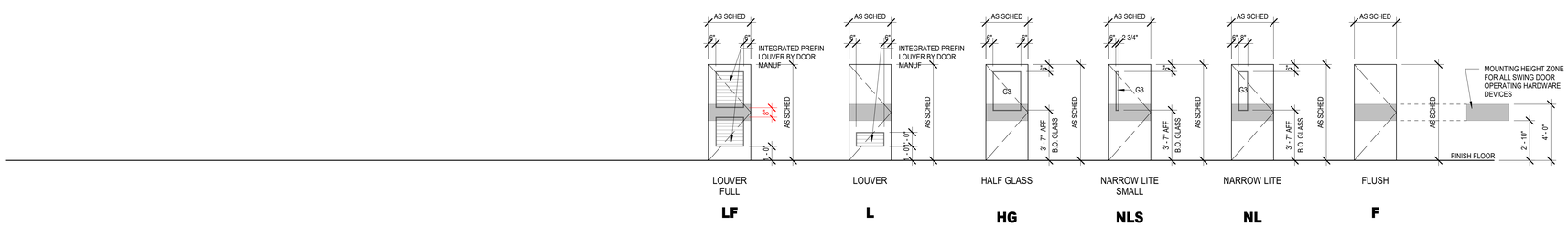
GLAZING PANEL SCHEDULE

Type Mark	Type	Keynote
	1" Glass	
	1" Insulated Clear - 1 1/4" Offset	08 44 13



WINDOW ELEVATION TYPES
1/4" = 1'-0"





DOOR PANEL ELEVATION TYPES
1/4" = 1'-0"

DOOR SCHEDULE REMARKS

1. PANIC EXIT HARDWARE
2. NOT AN ENTRY DOOR, EXIT ONLY DOOR WITH LOCKING OPERABLE HARDWARE ON SWING-OUT SIDE OF DOOR
3. NO LOCKING HARDWARE
4. ELEC. DOOR OPENER
5. ELEC. CONTROLLED ACCESS HARDWARE WITH CARD READER
6. ELEC. CONTROLLED ACCESS HARDWARE WITH PUSH-BUTTON
7. ELEC. CONTROLLED ACCESS HARDWARE, ROUGH-IN ONLY
8. KEYED REMOVABLE CENTER MULLION
9. CENTER ASTRAGAL
10. 180 DEGREE SWING
11. CONT. HINGE
12. WEATHER-STRIP SEAL
13. FIRE SMOKE SEAL
14. SOUND SEAL
15. PEEP HOLE
16. DOOR BUZZER
17. DOOR CHIME ON OPEN
18. MANUAL HOLD-OPEN
19. MAGNETIC HOLD-OPEN, CONNECT TO FIRE ALARM
20. MAGNETIC HOLD-OPEN, CONNECT TO SECURITY SYSTEM
21. INSULATED DOOR
22. SOUND RATED DOOR ASSEMBLY, STC AS SPECIFIED
23. WINDSTORM DOOR HARDWARE SHALL BE TESTED AS PART OF A COMPLETE DOOR OPENING ASSEMLBY. THE TESTED DOOR OPENING ASSEMBLY SHALL INCLUDE DOOR HARDWARE. THE ENTIRE DOOR OPENING, INCLUDING DOOR HARDWARE, SHALL BE BY DOOR MANUF.
24. ACOUSTICAL GLASS TO MEET FIRE DOOR ASSEMBLY REQUIREMENTS FOR FIRE RATING INDICATED
25. MANUAL PUSH-UP OPERATION
26. ELEC. MOTOR OPERATION WITH KEY SWITCH CONTROL, KEY SWITCH ON ONE SIDE OF DOOR ONLY
27. ELEC. MOTOR OPERATION WITH KEY SWITCH CONTROL, KEY SWITCH ON BOTH SIDES OF DOOR
28. ELEC. MOTOR OPERATION WITH PUSH-BUTTON CONTROL ON ONE SIDE OF DOOR ONLY
29. PANIC EXIT PUSH-BUTTON ON ONE SIDE OF DOOR ONLY
30. AUTOMATIC OPEN ON FIRE ALARM ACTIVATION
31. AUTOMATIC CLOSE ON FIRE ALARM ACTIVATION
32. FAIL SAFE IN OPEN POSITION
33. FAIL SAFE IN CLOSED POSITION
34. MAXIMUM OCCUPANCY SIGNAGE NEAR DOOR
35. SIGNAGE ON DOOR TO READ "NOT AN EXIT"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: TT
CHECKED BY: ER

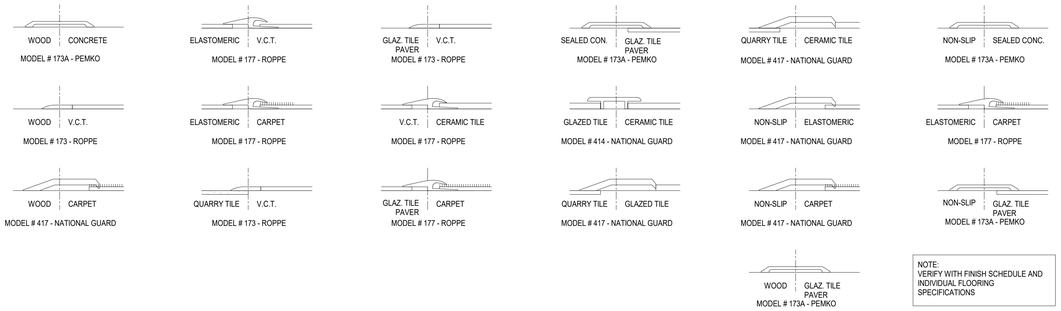
REVISIONS

No.	Description	Date

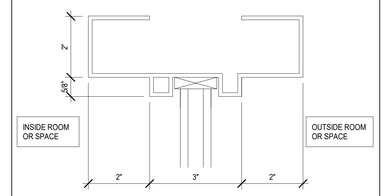
ISSUED FOR BIDS

SCHEDULES & DOOR, WINDOW, & FRAME ELEVATIONS

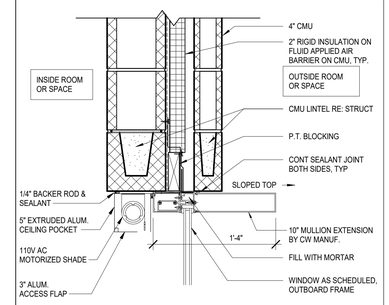
A6.01



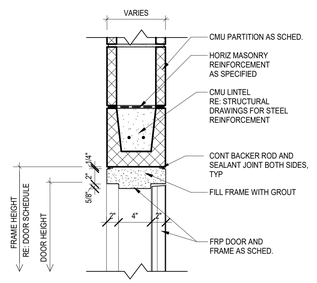
30 TYP. INT. FLOOR TRANSITIONS
6" = 1'-0"



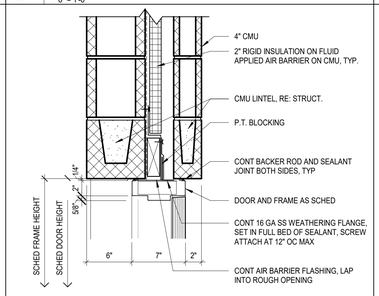
21 EXTERIOR FRP DOOR HEAD FRAME
6" = 1'-0"



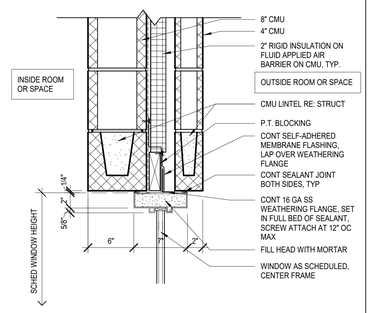
19 ALUM. SHADE POCKET
1 1/2" = 1'-0"



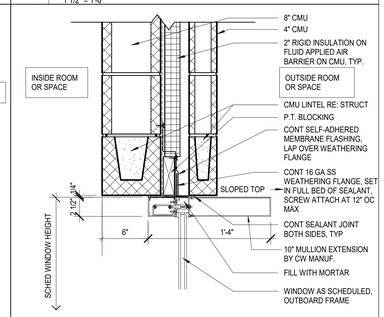
18 INTERIOR FRP DOOR HEAD - CMU
1 1/2" = 1'-0"



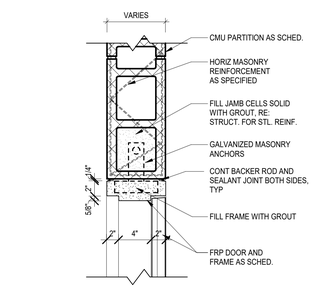
15 EXTERIOR FRP DOOR HEAD - CMU
1 1/2" = 1'-0"



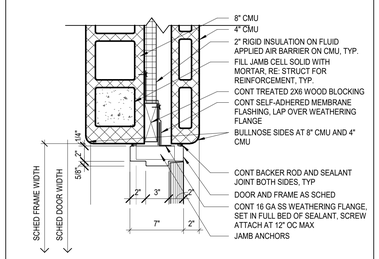
14 EXTERIOR FRP WINDOW HEAD - CMU
1 1/2" = 1'-0"



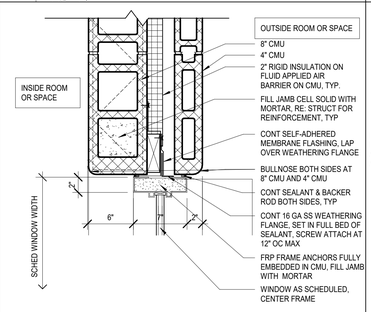
13 EXTERIOR CURTAIN WALL HEAD - CMU
1 1/2" = 1'-0"



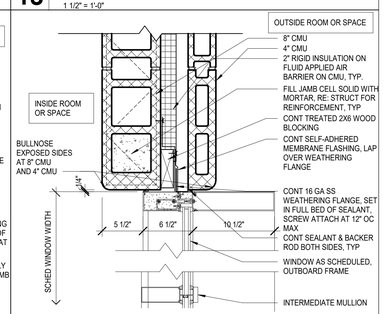
12 INTERIOR FRP DOOR JAMB - CMU
1 1/2" = 1'-0"



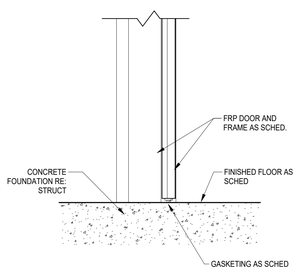
9 EXTERIOR FRP DOOR JAMB - CMU
1 1/2" = 1'-0"



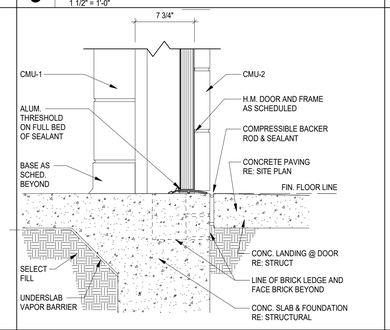
8 EXTERIOR FRP WINDOW JAMB - CMU
1 1/2" = 1'-0"



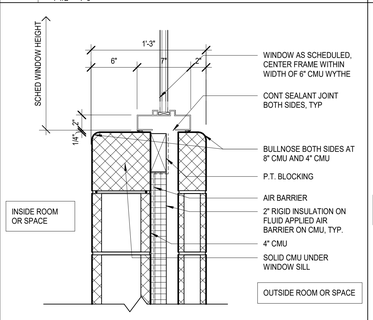
7 EXTERIOR CURTAIN WALL JAMB - CMU
1 1/2" = 1'-0"



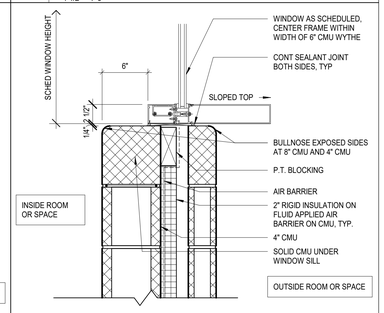
6 INTERIOR FRP DOOR SILL - CMU
1 1/2" = 1'-0"



3 HM DOOR THR @ BRICK ON CMU1
1 1/2" = 1'-0"



2 EXTERIOR FRP WINDOW SILL - CMU
1 1/2" = 1'-0"



1 EXTERIOR CURTAIN WALL SILL - CMU
1 1/2" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

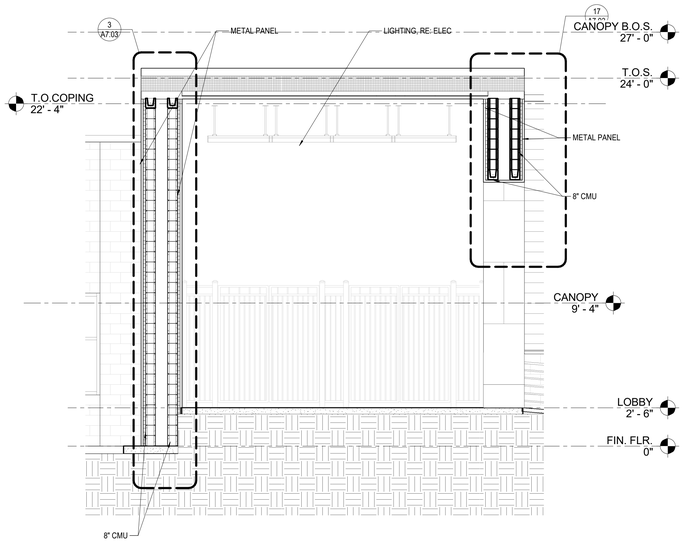
REVISIONS

No.	Description	Date

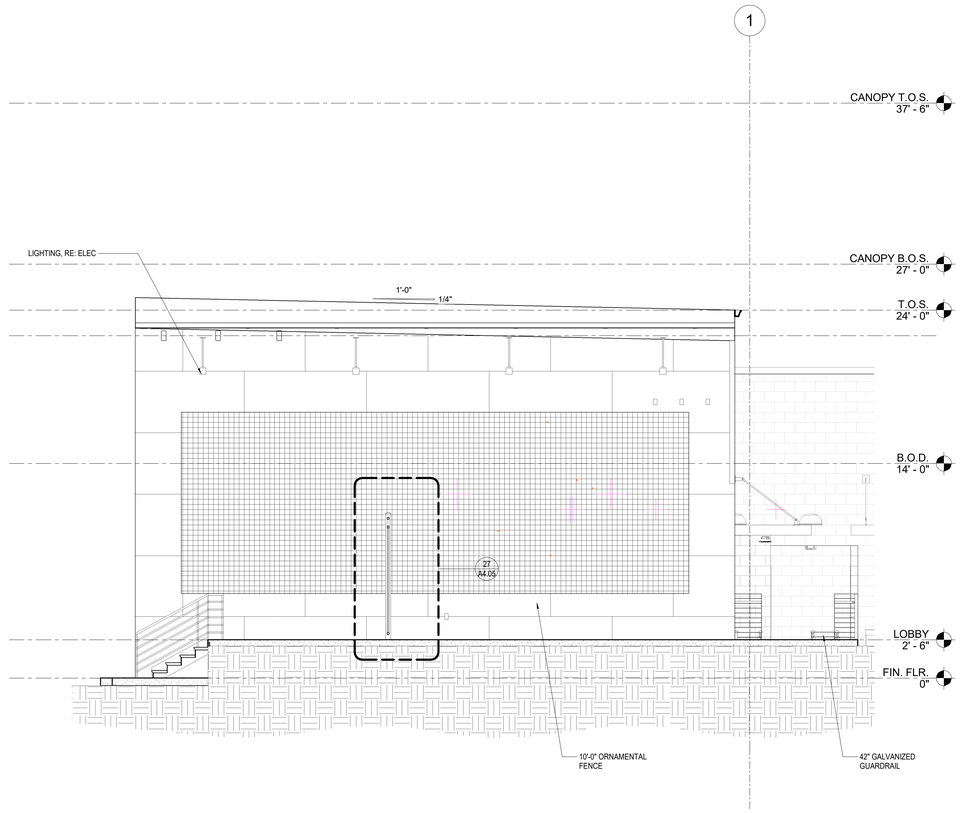
ISSUED FOR BIDS

INTERIOR & EXTERIOR DOOR, WINDOW & FRAME DETAILS

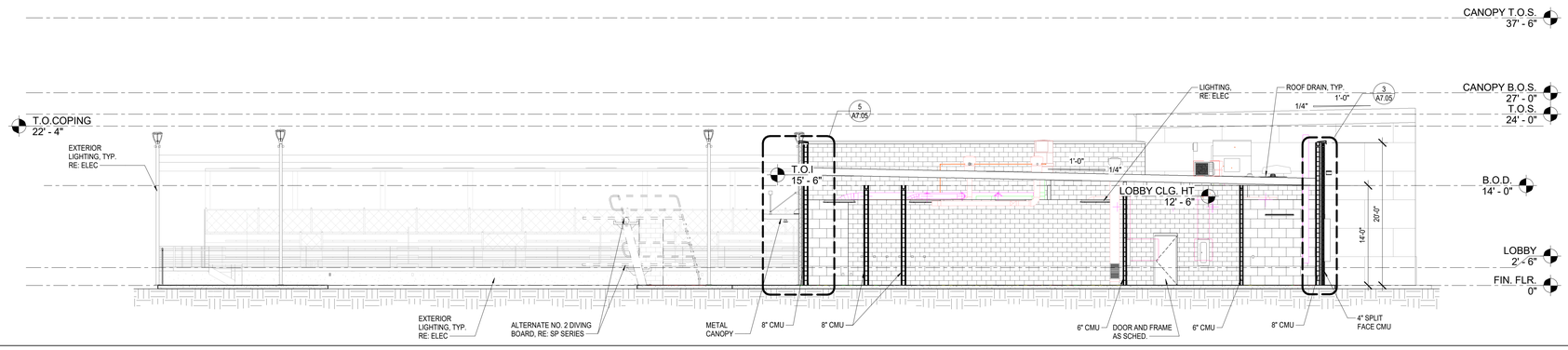
A6.02



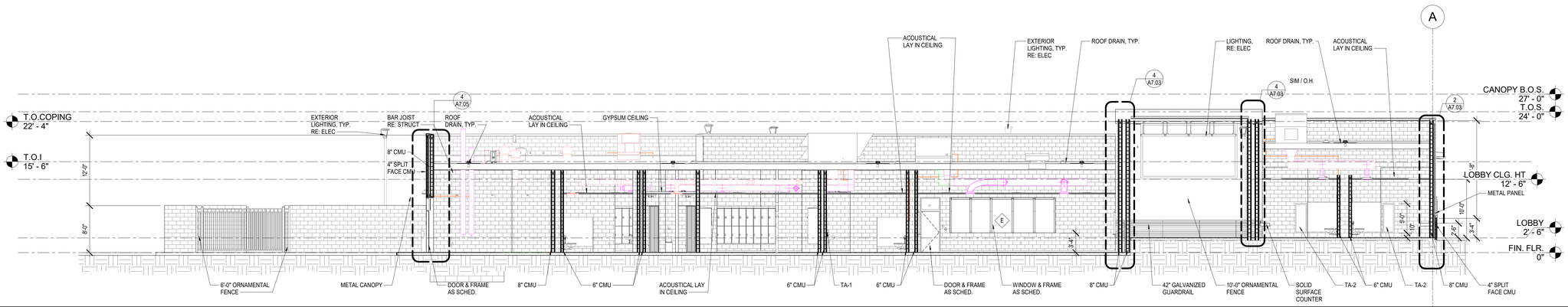
23 BUILDING SECTIONS
1/4" = 1'-0"



21 BUILDING SECTION
1/4" = 1'-0"



18 BUILDING SECTION
1/8" = 1'-0"



1 BUILDING SECTION
1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

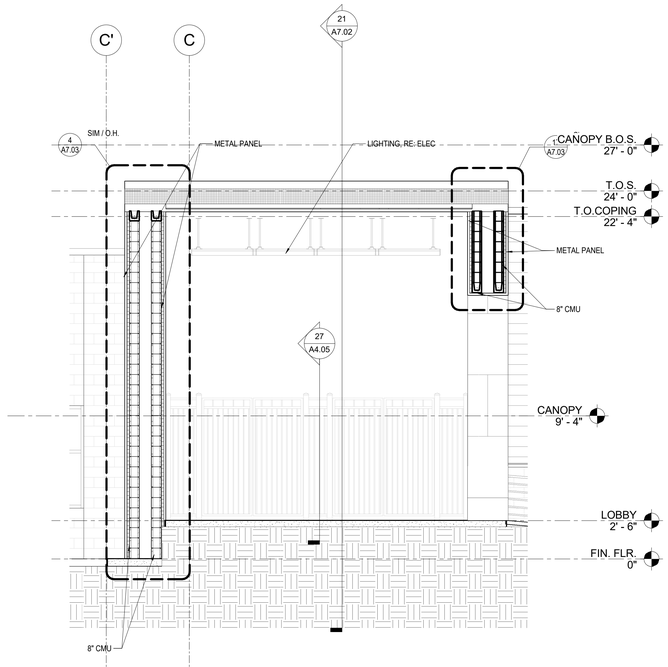
REVISIONS

No.	Description	Date

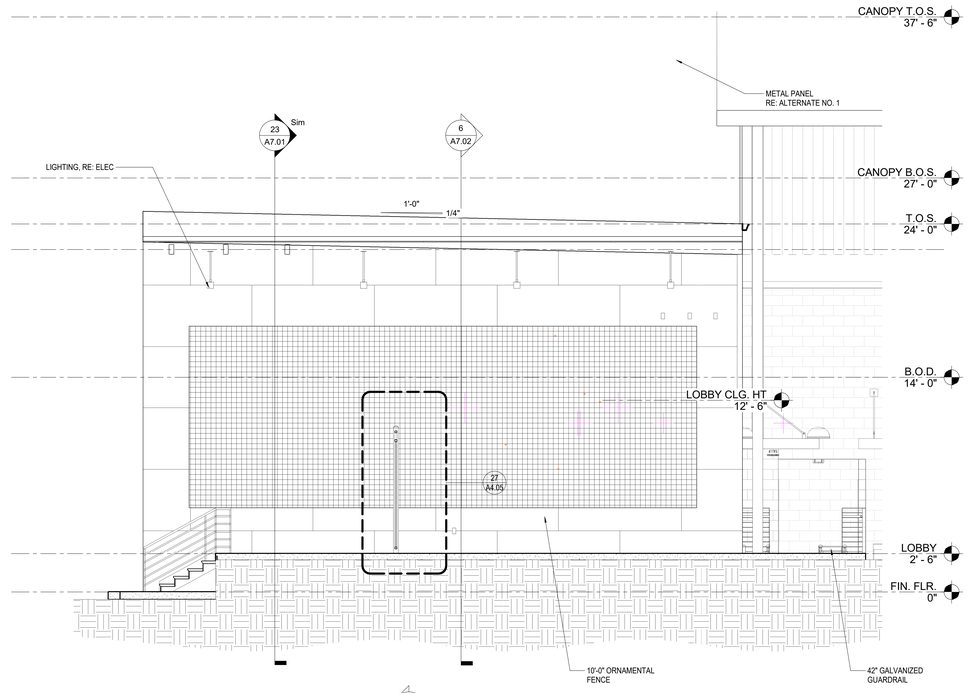
ISSUED FOR BIDS

BUILDING SECTIONS

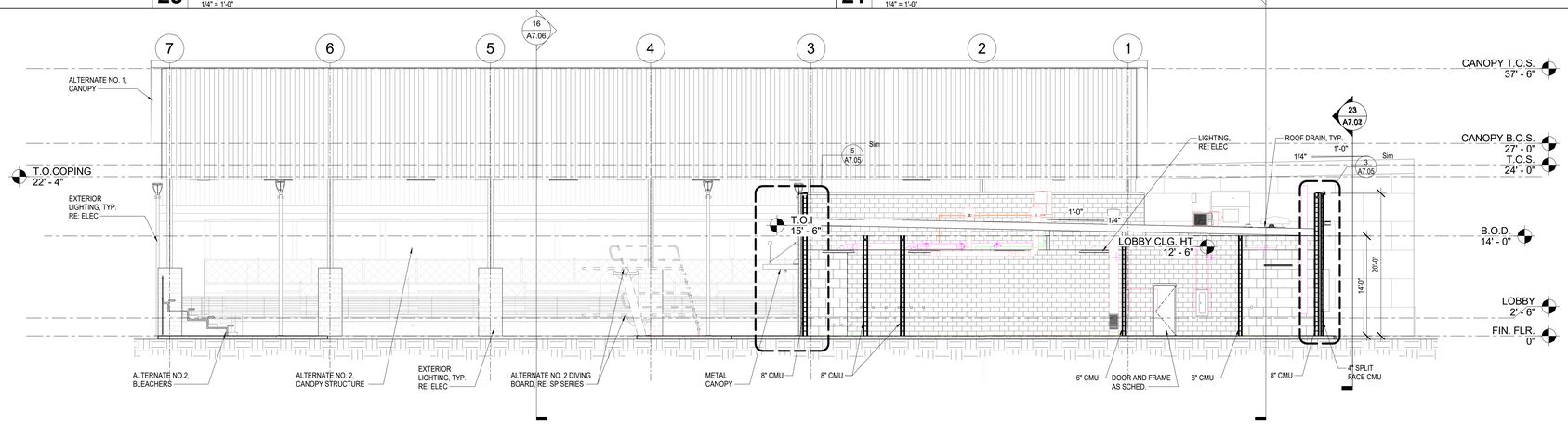
A7.01



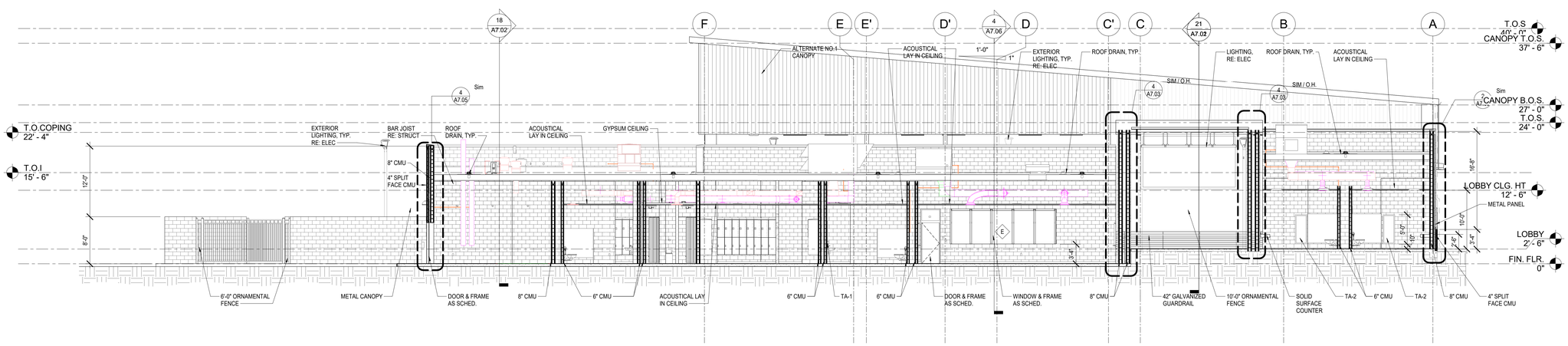
23 BUILDING SECTIONS
1/4" = 1'-0"



21 BUILDING SECTION
1/4" = 1'-0"



18 BUILDING SECTION
1/8" = 1'-0"



6 BUILDING SECTION
1/8" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT
EDMUND X. RAMIREZ
14374
STATE OF TEXAS

4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

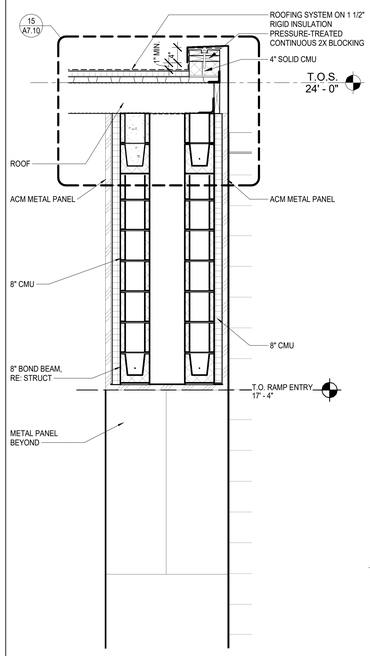
REVISIONS

No.	Description	Date

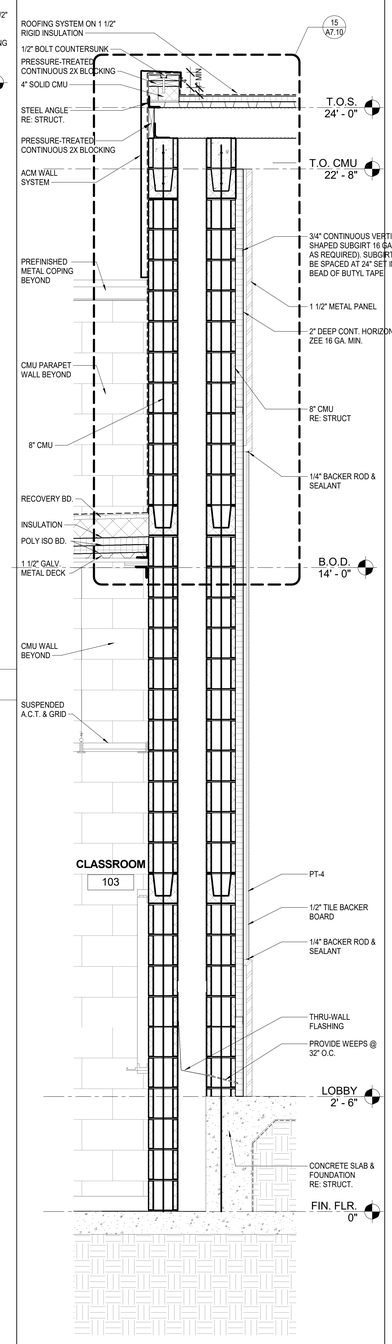
ISSUED FOR BIDS

BUILDING SECTIONS ALTERNATE NO. 1

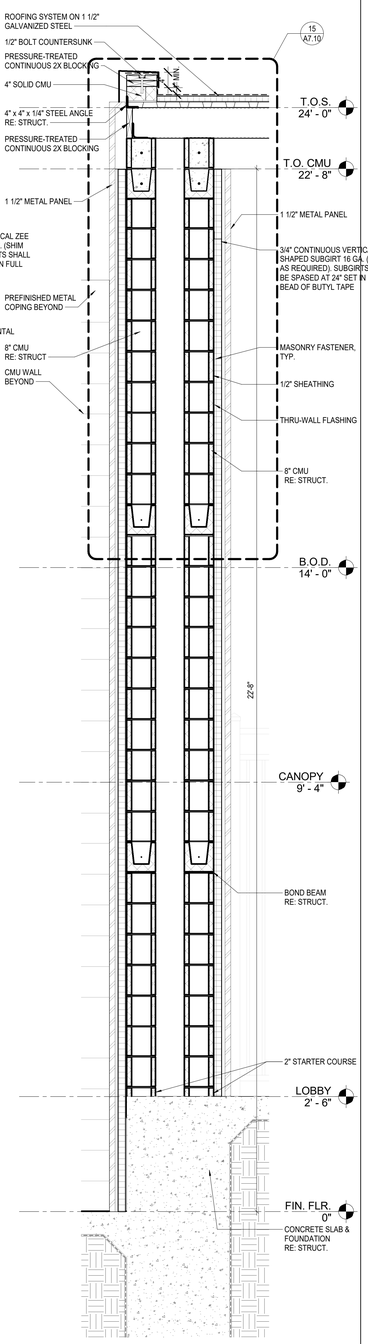
A7.02



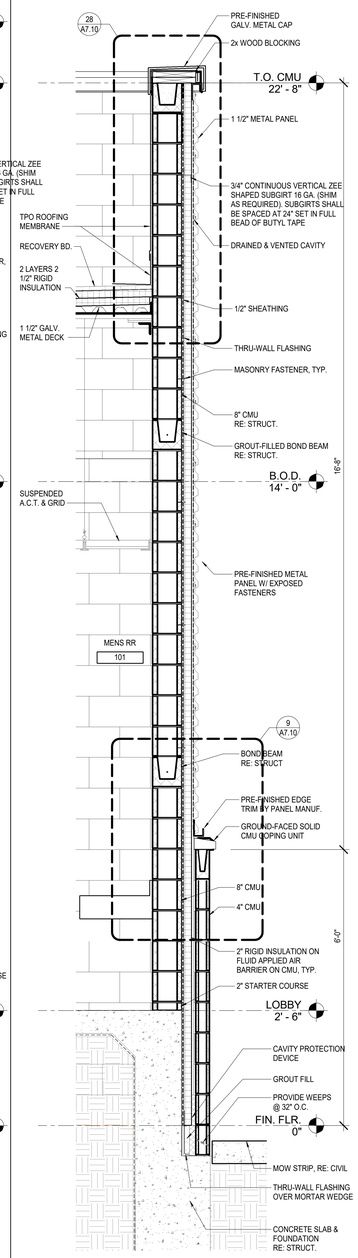
17 ENTRANCE SECTION DETAIL
3/4" = 1'-0"



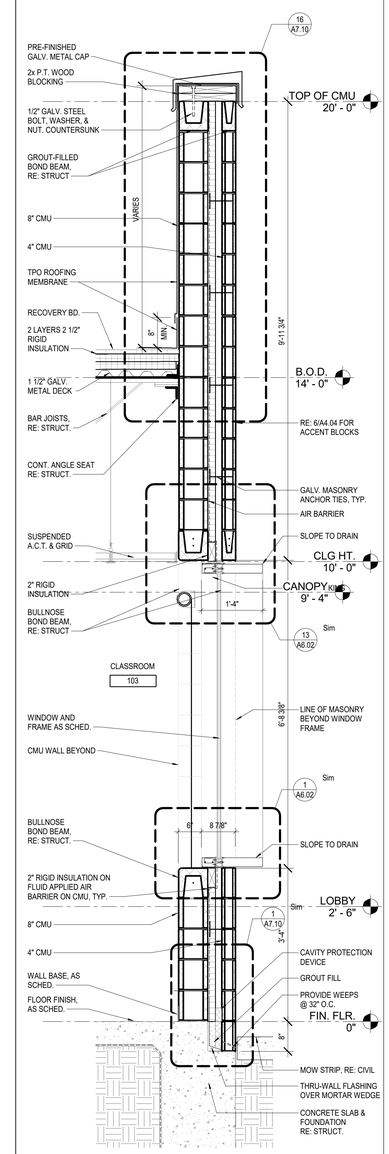
4 ENTRANCE SECTION THROUGH BUILDING
3/4" = 1'-0"



3 ENTRANCE SECTION
3/4" = 1'-0"



2 RESTROOM WALL SECTION
3/4" = 1'-0"



1 CLASSROOM WALL SECTION
3/4" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT
EDMUND X. RAMIREZ
14374
STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

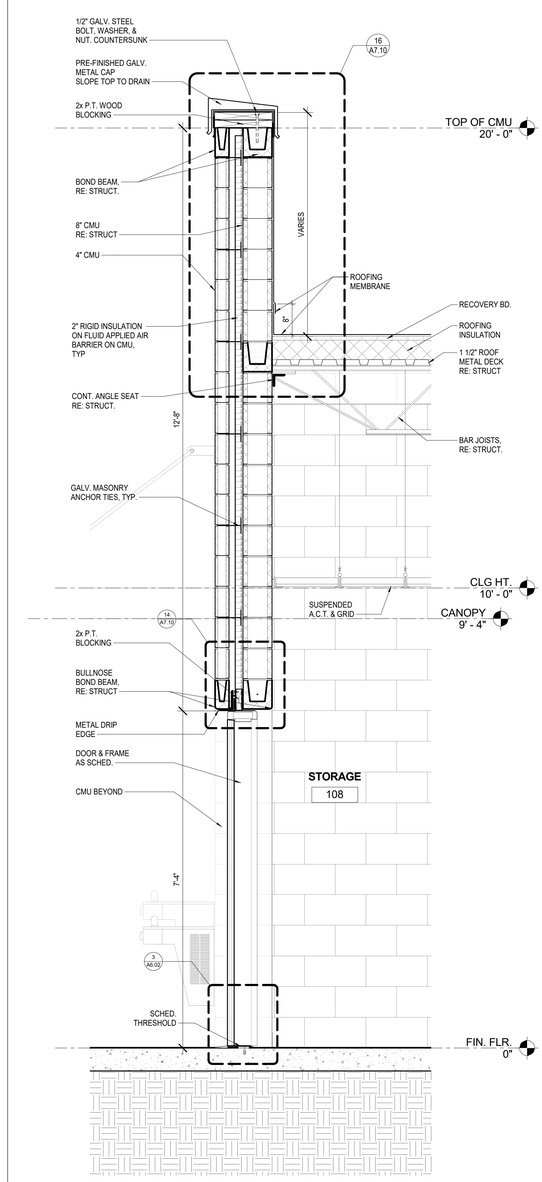
REVISIONS

No.	Description	Date

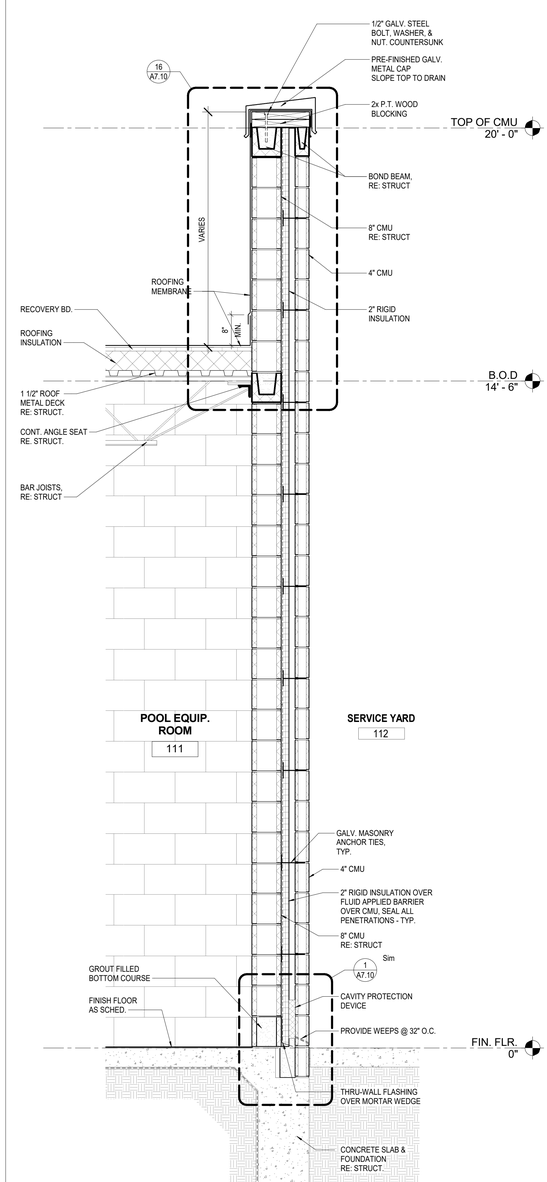
ISSUED FOR BIDS

WALL SECTIONS

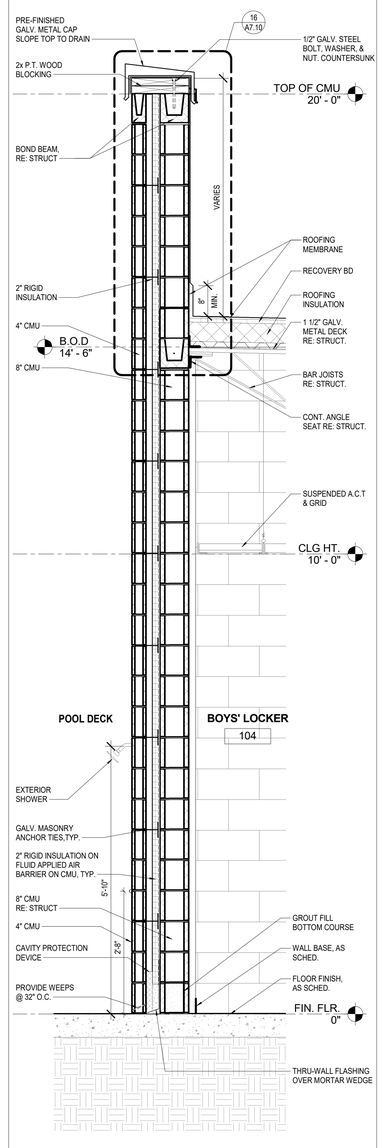
A7.03



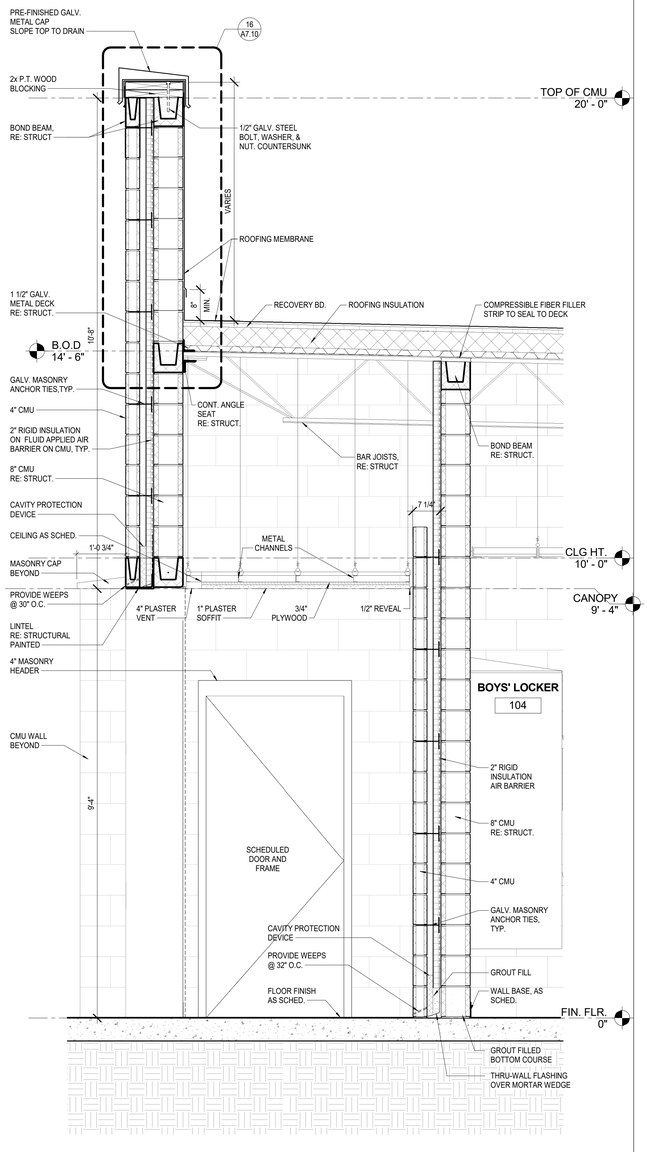
6 WALL SECTION
3/4" = 1'-0"



5 WALL SECTION
3/4" = 1'-0"



3 EXTERIOR SHOWER SECTION
3/4" = 1'-0"



2 WALL SECTION
3/4" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

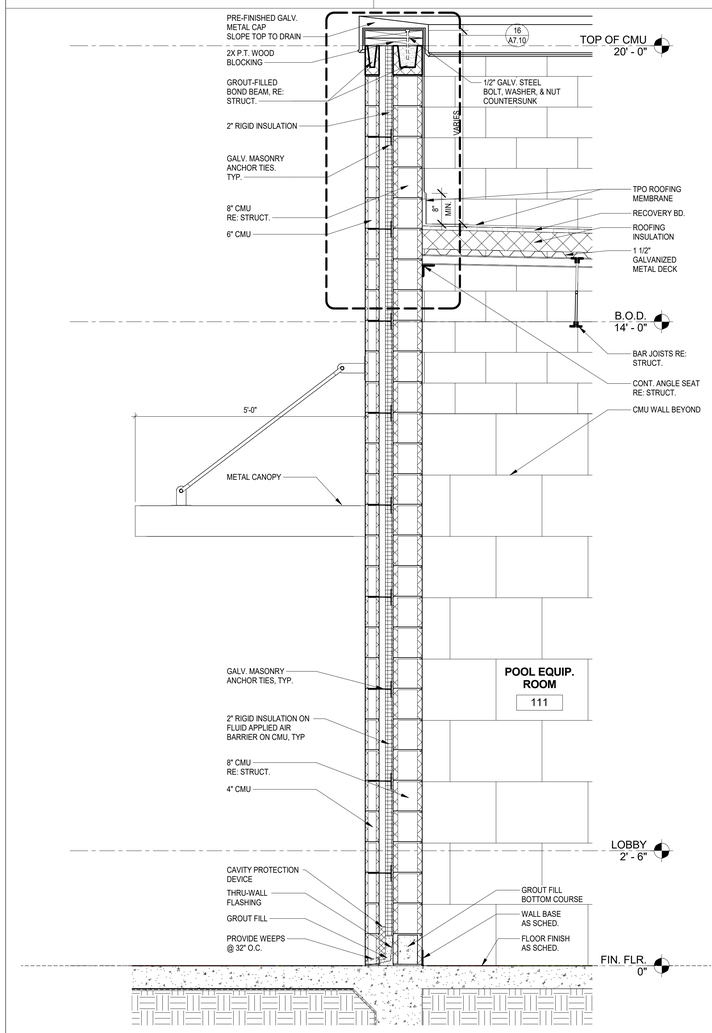
REVISIONS

No.	Description	Date

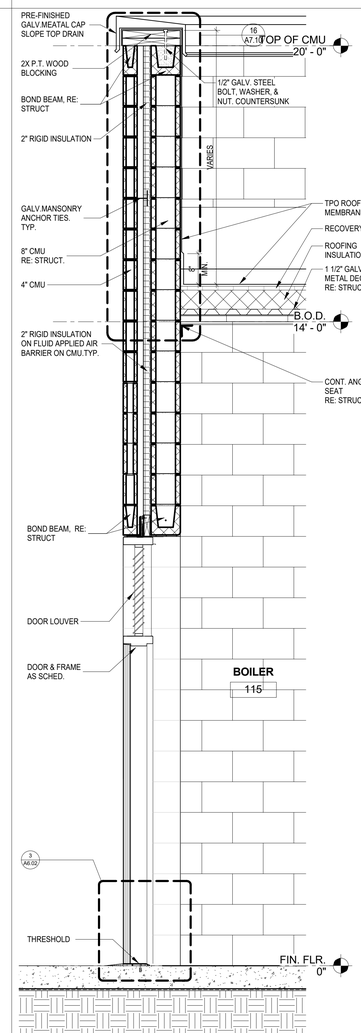
ISSUED FOR BIDS

WALL SECTIONS

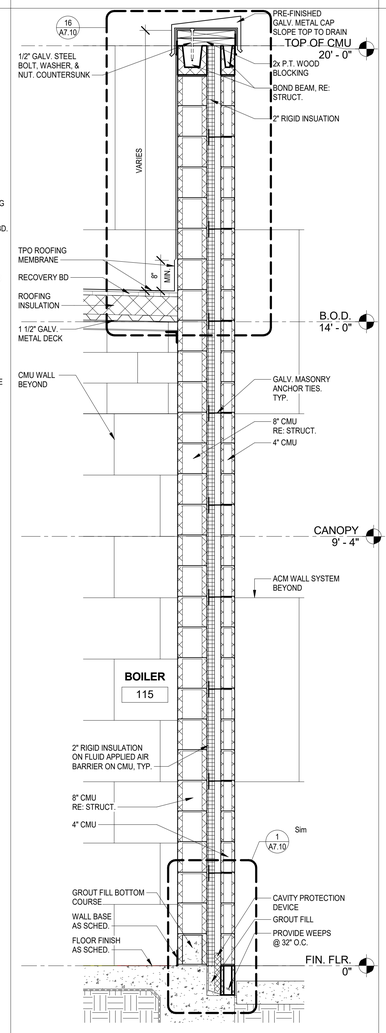
A7.04



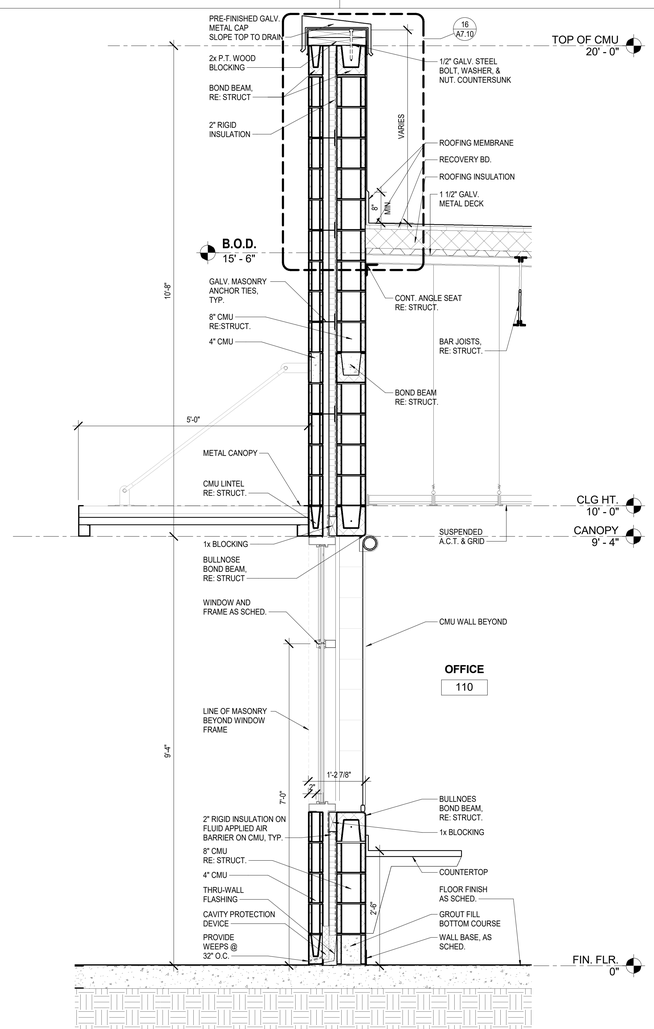
5 POOL EQUIPEMENT ROOM WALL SECTION
3/4" = 1'-0"



4 BOILER ROOM ADJACENT WALL SECTION
3/4" = 1'-0"



3 BOILER ROOM WALL SECTION
3/4" = 1'-0"



2 COACHES' OFFICE WALL SECTION
3/4" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS

4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

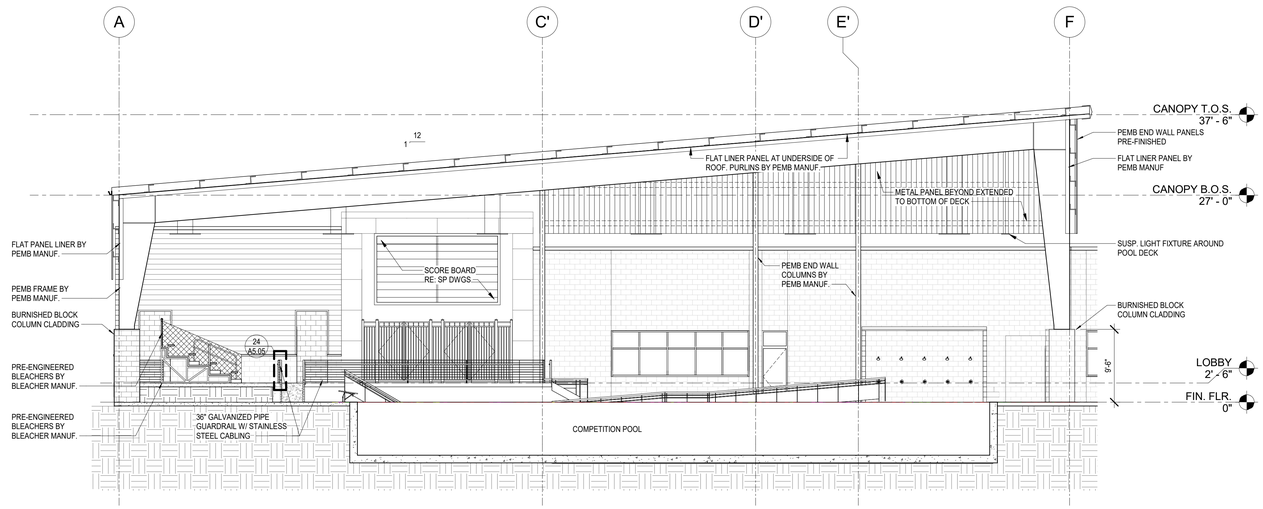
REVISIONS

No.	Description	Date

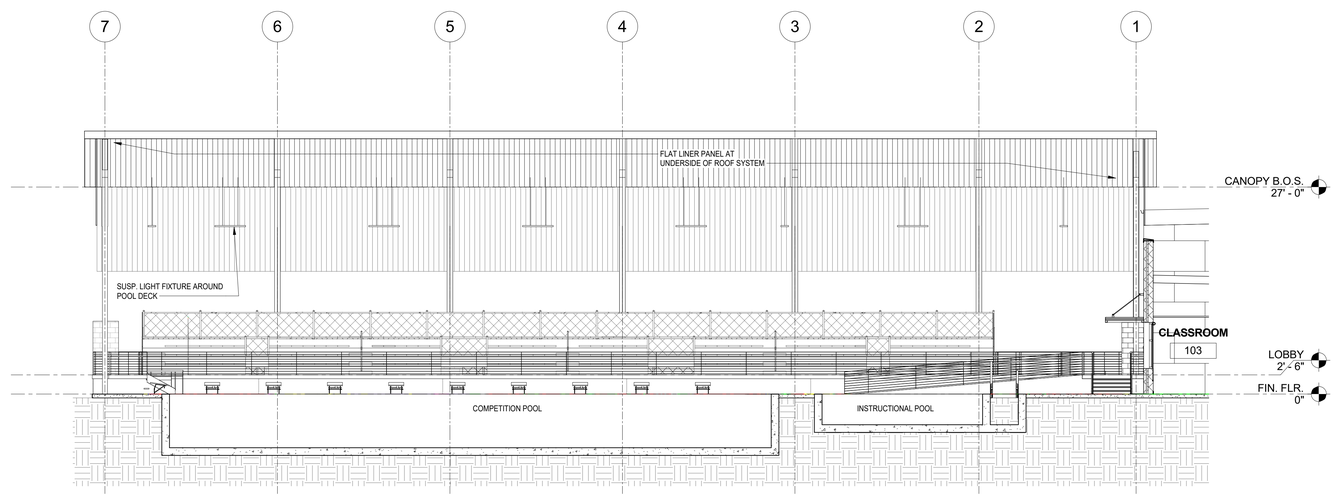
ISSUED FOR BIDS

WALL SECTIONS

A7.05



16 CANOPY ALT. 1 SECTION
1/8" = 1'-0"



4 CANOPY ALT. 1 SECTION
1/8" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT
EDMUND X. RAMIREZ
14374
STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

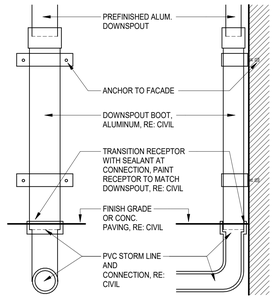
REVISIONS

No.	Description	Date

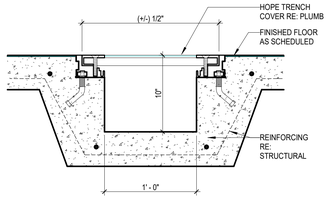
ISSUED FOR BIDS

ALTERNATE 1 SECTIONS

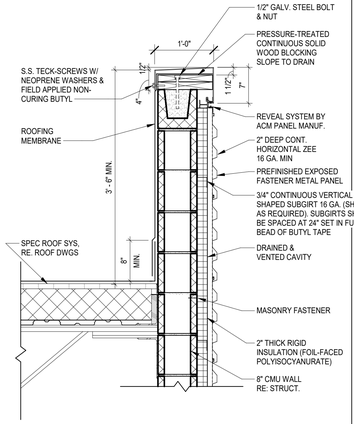
A7.06



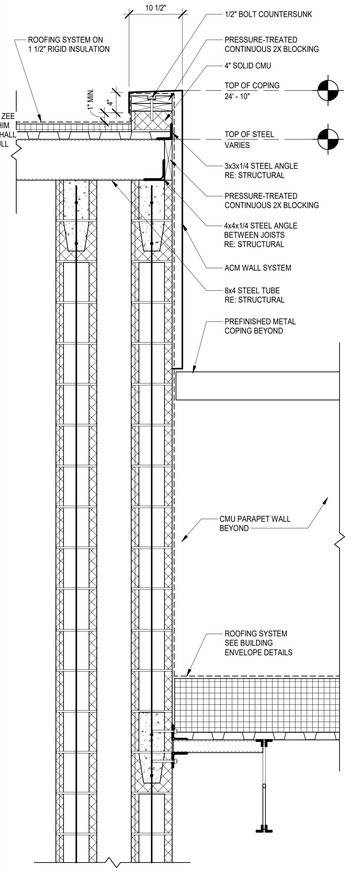
30 DOWNSPOUT BOOT
1" = 1'-0"

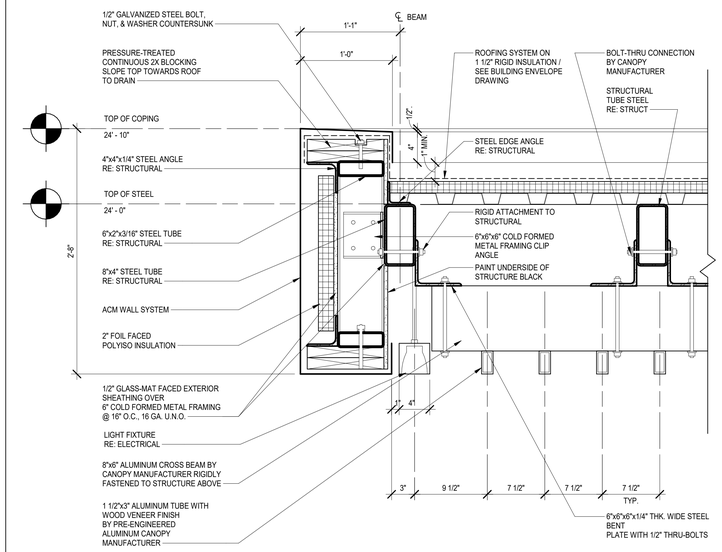


29 TRENCH DRAIN DETAIL
1 1/2" = 1'-0"

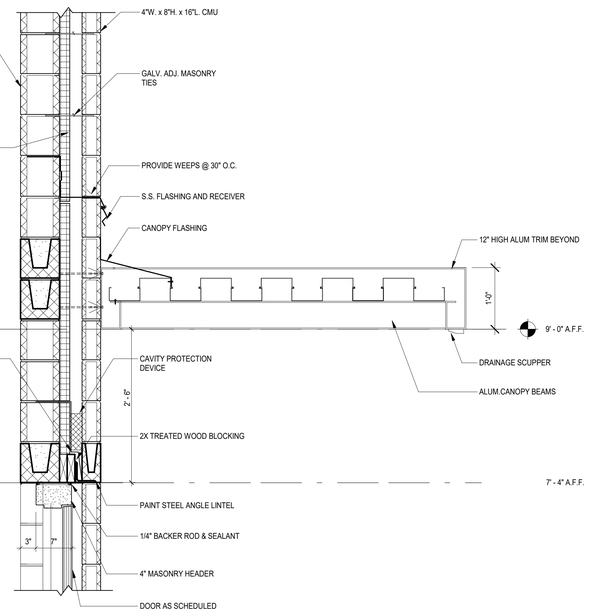


28 PARAPET COPING @ RESTROOMS
1" = 1'-0"

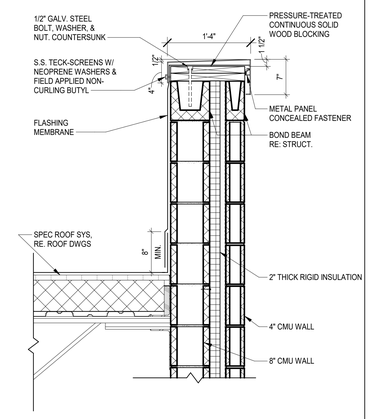




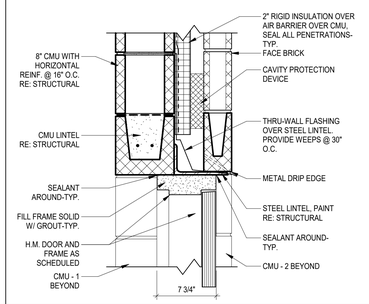
20 ENTRY DETAIL FRONT WALL
1 1/2" = 1'-0"



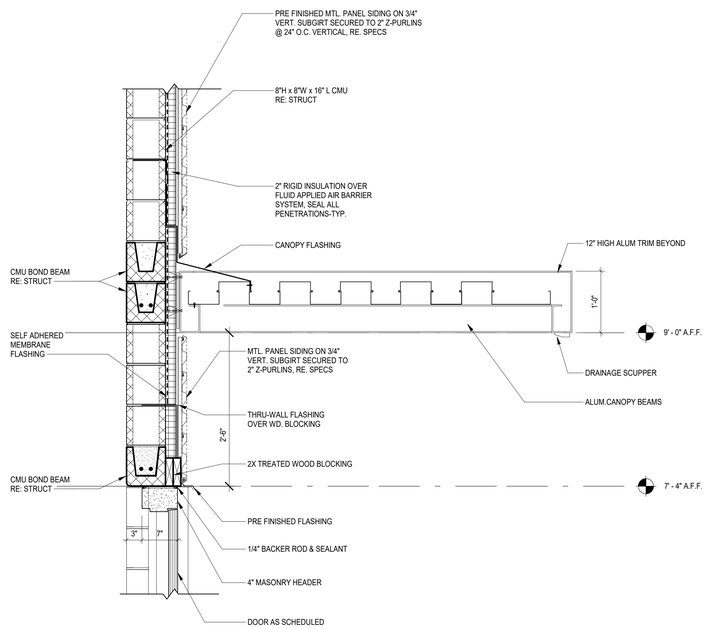
18 CANOPY DETAIL (BASE BID)
1" = 1'-0"



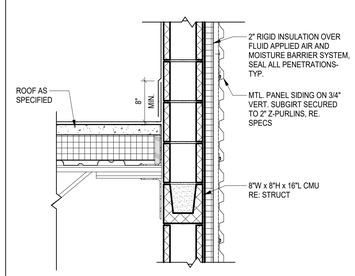
16 PARAPET COPING @ CLASSROOM
1" = 1'-0"



14 HM DOOR HEAD @ BRICK ON CMU1
1 1/2" = 1'-0"

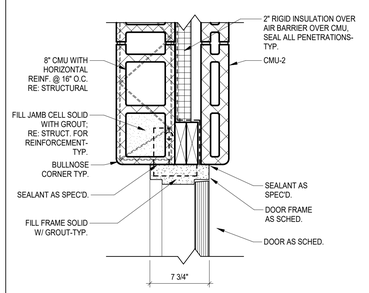


6 CANOPY DETAIL (BASE BID)
1" = 1'-0"

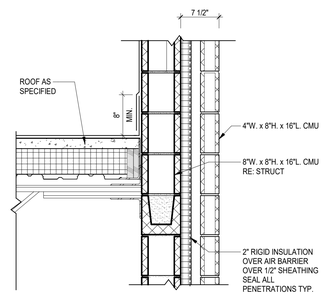


10 ROOF DETAIL @ MTL PNL/CMU
1" = 1'-0"

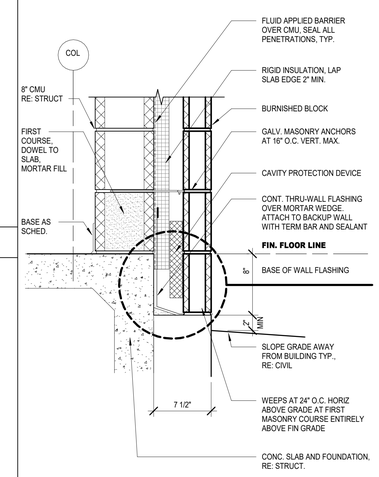
9 RESTROOM WALL WAINSCOT DETAIL
1" = 1'-0"



8 HM DOOR JAMB @ BRICK ON CMU1
1 1/2" = 1'-0"



4 ROOF DETAIL @ EXT WALL
1" = 1'-0"



1 BRICK LEDGE - CMU + CMU
1 1/2" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14378 — STATE OF TEXAS
4.11.2019

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

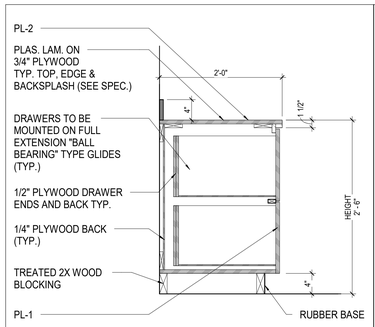
REVISIONS

No.	Description	Date

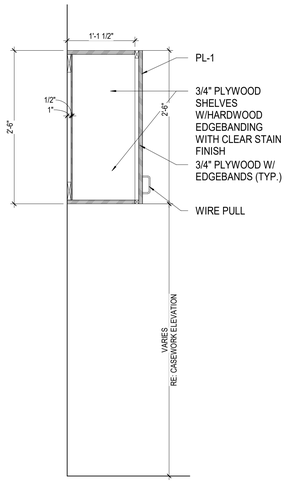
ISSUED FOR BIDS

WALL SECTIONS DETAILS

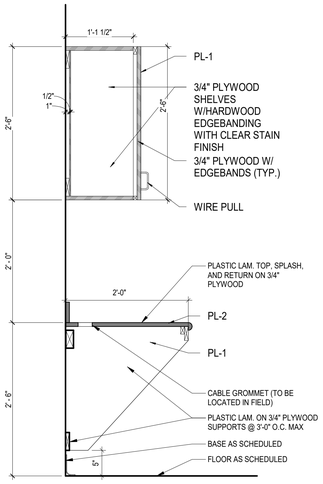
A7.10



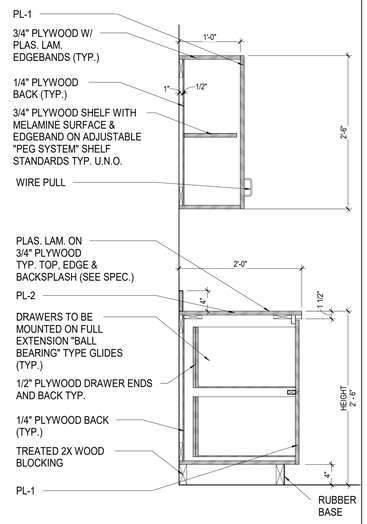
30 BASE CABINET - 2 FILE DRAWERS
1" = 1'-0"



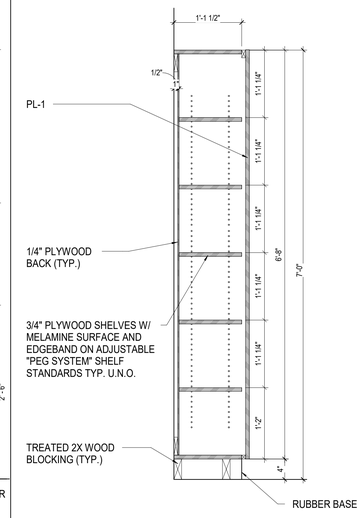
23 DESK / WALL MOUNTED UPPER CABINET
1" = 1'-0"



22 WALL MOUNTED UPPER CABINET
1" = 1'-0"



21 2 FILE DRAWERS / UPPER CABINET
1" = 1'-0"



20 TYP. TEACHER UNIT
1" = 1'-0"

GENERAL CASEWORK NOTES

1. BASIS-OF-DESIGN FOR ALL NON-SCIENCE CASEWORK SHALL BE _____, U.N.O.
2. BASIS-OF-DESIGN FOR ALL SCIENCE CASEWORK SHALL BE _____, U.N.O.
3. FIELD VERIFY ALL CASEWORK-RELATED DIMENSIONS PRIOR TO FABRICATION AND INSTALLATION
4. VERIFY ALL COLUMN LOCATIONS PRIOR TO FABRICATION AND INSTALLATION
5. REFER TO MEPT DOCUMENTS FOR ALL DATA OUTLETS AND DEVICES, ELECTRICAL OUTLETS AND DEVICES, AND PLUMBING FIXTURES. NOTIFY ARCHITECT OF ANY CONFLICTS PRIOR TO FABRICATION AND INSTALLATION
6. ALL CASEWORK BASE CABINETS SHALL BE 24 INCHES IN DEPTH, U.N.O.
7. ALL CASEWORK UPPER WALL CABINETS SHALL BE 14 INCHES IN DEPTH, U.N.O.
8. ALL COUNTER TOPS, VERTICAL SURFACES, NOSINGS, AND BACK SPLASHES SHALL BE PLASTIC LAMINATE FINISH, U.N.O.
9. PROVIDE AND INSTALL SIDE SPLASHES WHERE COUNTER TOP ENDS ABUT WALL SURFACES
10. PROVIDE AND INSTALL 4 INCH HIGH TOE SPACE WITH WALL BASE AT ALL CASEWORK, WALL BASE TO MATCH ROOM WALL BASE
11. PROVIDE AND INSTALL WALL ANCHORED VERTICAL SUPPORTS AT ALL KNEE SPACES GREATER THAN 48 INCHES WIDE
12. PROVIDE AND INSTALL GROMMETS WITH SLEEVES AT ALL KNEE SPACES
13. ALL CASEWORK UNITS 36 INCHES WIDE AND GREATER WITH SHELVING SHALL HAVE A CENTER FIXED SHELF
14. ALL SHELVING 36 INCHES WIDE AND GREATER SHALL BE SHALL BE 1 INCH THICK MINIMUM
15. ALL ADJUSTABLE SHELVING SHALL HAVE RECESSED STANDARDS HARDWARE
16. PROVIDE AND INSTALL FILLER PANELS WITH TOP RETURNS AT ALL SIDES, CORNERS, AND COLUMNS TO PREVENT THE CONTACT OF DOORS WITH ADJACENT SURFACES
17. PROVIDE AND INSTALL LOCKS AT ALL BASE CABINETS AND ALL UPPER WALL CABINETS

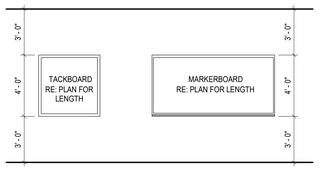
LOCKER TYPE "A"

TYPE:	SOLID PLASTIC LOCKERS - DOUBLE TIER
SIZE:	18 INCHES WIDE X 18 INCHES DEEP X 36 INCHES HIGH (72 INCHES TOTAL HEIGHT)
DOORS:	SOLID WITH VENTS
LOCKS:	COMBINATION LOCK
BACKS & DIVIDERS:	SOLID
ENDS:	SOLID
BASE:	AS SCHEDULED AND DETAILED
TOP:	SLOPED
LOCATION:	BOYS' & GIRLS' LOCKER ROOMS

LOCKER TYPE "B"

TYPE:	SOLID PLASTIC LOCKERS - SINGLE TIER
SIZE:	18 INCHES WIDE X 18 INCHES DEEP X 72 INCHES HIGH
DOORS:	SOLID WITH VENTS
LOCKS:	COMBINATION LOCK
BACKS & DIVIDERS:	SOLID
ENDS:	SOLID
BASE:	AS SCHEDULED AND DETAILED
TOP:	SLOPED
LOCATION:	COACHES' LOCKER ROOM

18 LOCKER TYPES
1" = 1'-0"



17 TACKBOARD / MARKERBOARD HEIGHTS
1/4" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

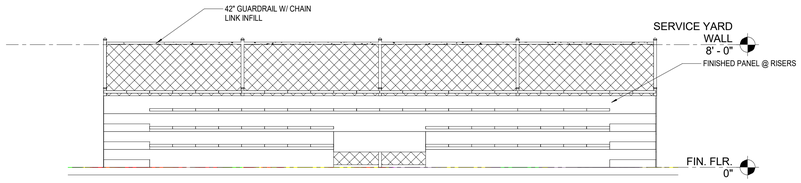
CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	Author
CHECKED BY	Checker

REVISIONS

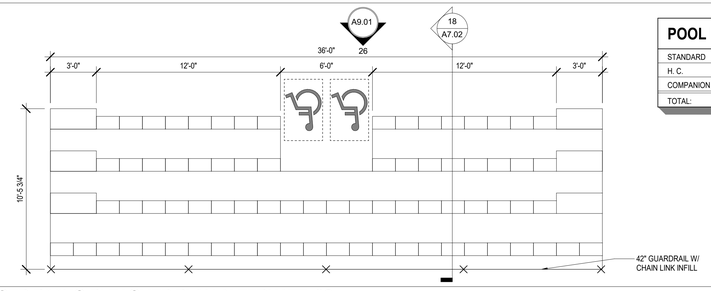
No.	Description	Date

CASEWORK / SECTIONS & MISC. DETAILS

A8.01

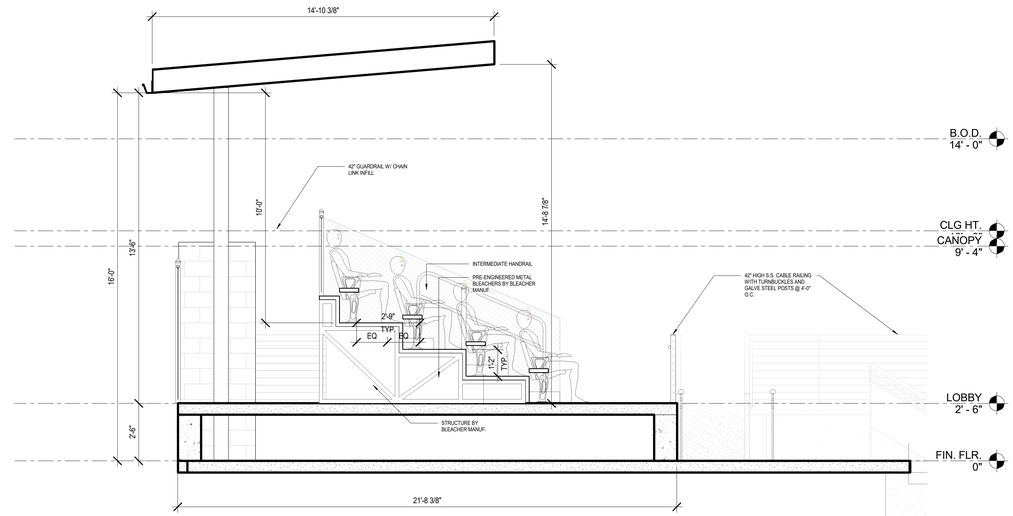


26 DIVING BLEACHER FRONT ELEVATION ALTERNATE #2
1/4" = 1'-0"

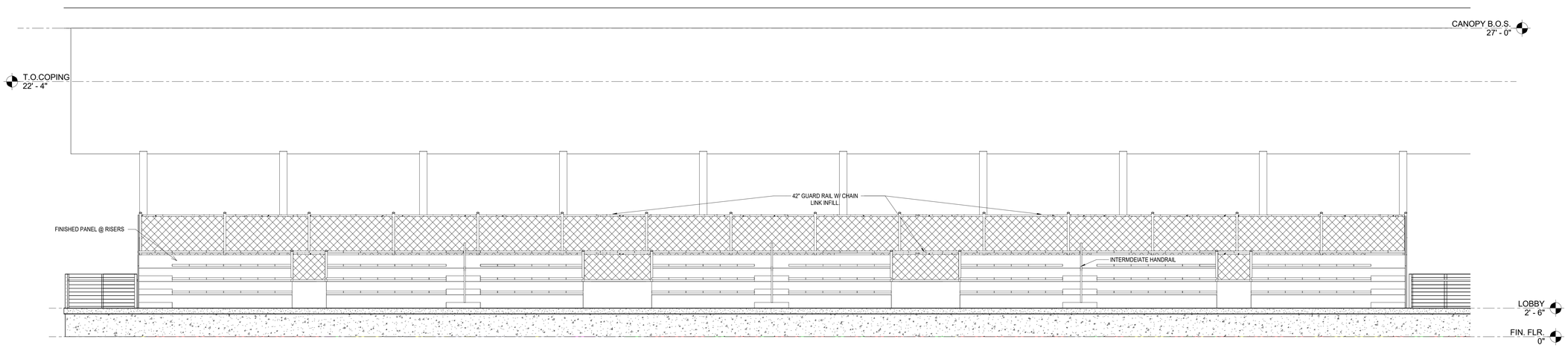


POOL BLEACHERS	
STANDARD	72
H. C.	2
COMPANION	2
TOTAL:	76

24 ENLARGED DIVING BLEACHER PLAN ALTERNATE #2
1/4" = 1'-0"

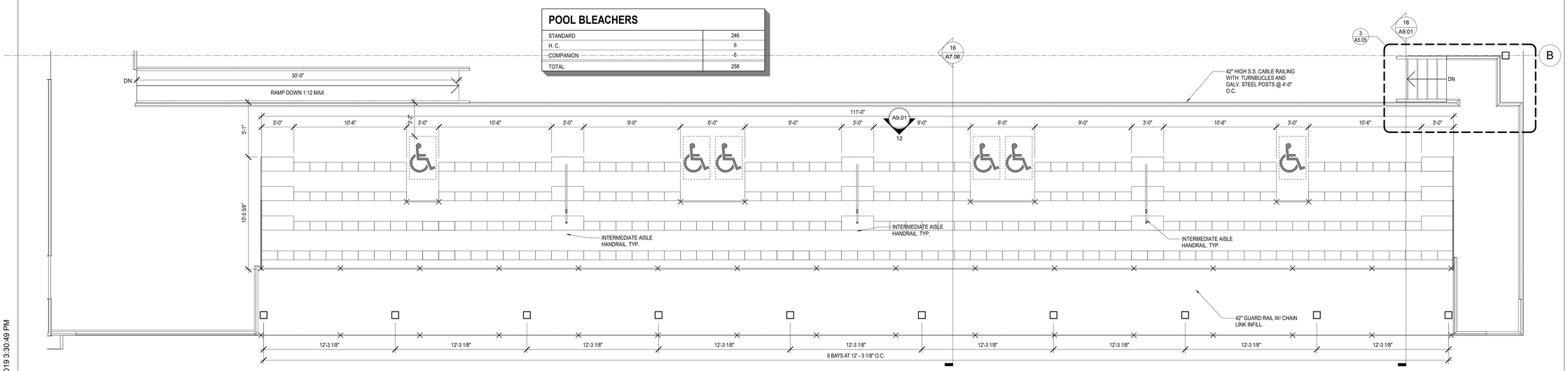


18 BLEACHER SECTION
3/8" = 1'-0"



12 BLEACHER FRONT ELEVATION
1/4" = 1'-0"

POOL BLEACHERS	
STANDARD	246
H. C.	6
COMPANION	6
TOTAL:	258



6 ENLARGED PLAN - BLEACHERS
1/4" = 1'-0"

C:\Users\ttownsend\Documents\18309SP-PSJA_POOLS_CENTRAL_ttownsend.rvt
4/12/2019 3:30:49 PM

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
ALAMO, TEXAS

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: Author
CHECKED BY: Checker
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

BLEACHER PLANS

A9.01

RCP LEGEND:

- 2' X 4' LT FIXT
- 2' X 4' LT FIXT
- CAN LIGHTS
- 1' X 4' STRIP FIXTURE
- STUCCO FINCH
- GYPSUM CEILING
- 2' X 2' SUSPENDED LAY-IN CEILING
- ALUMINUM CEILING PIPES
- 2' X 2' DIFFUSER
- 2' X 2' RETURN
- 4" WIDE SLOT LIGHTS
- WS — WINDOW SHADES

5 REFLECTED CEILING PLAN - BASE BID
1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT — EDMUND X. RAMIREZ — 14374 — STATE OF TEXAS
4.11.2019

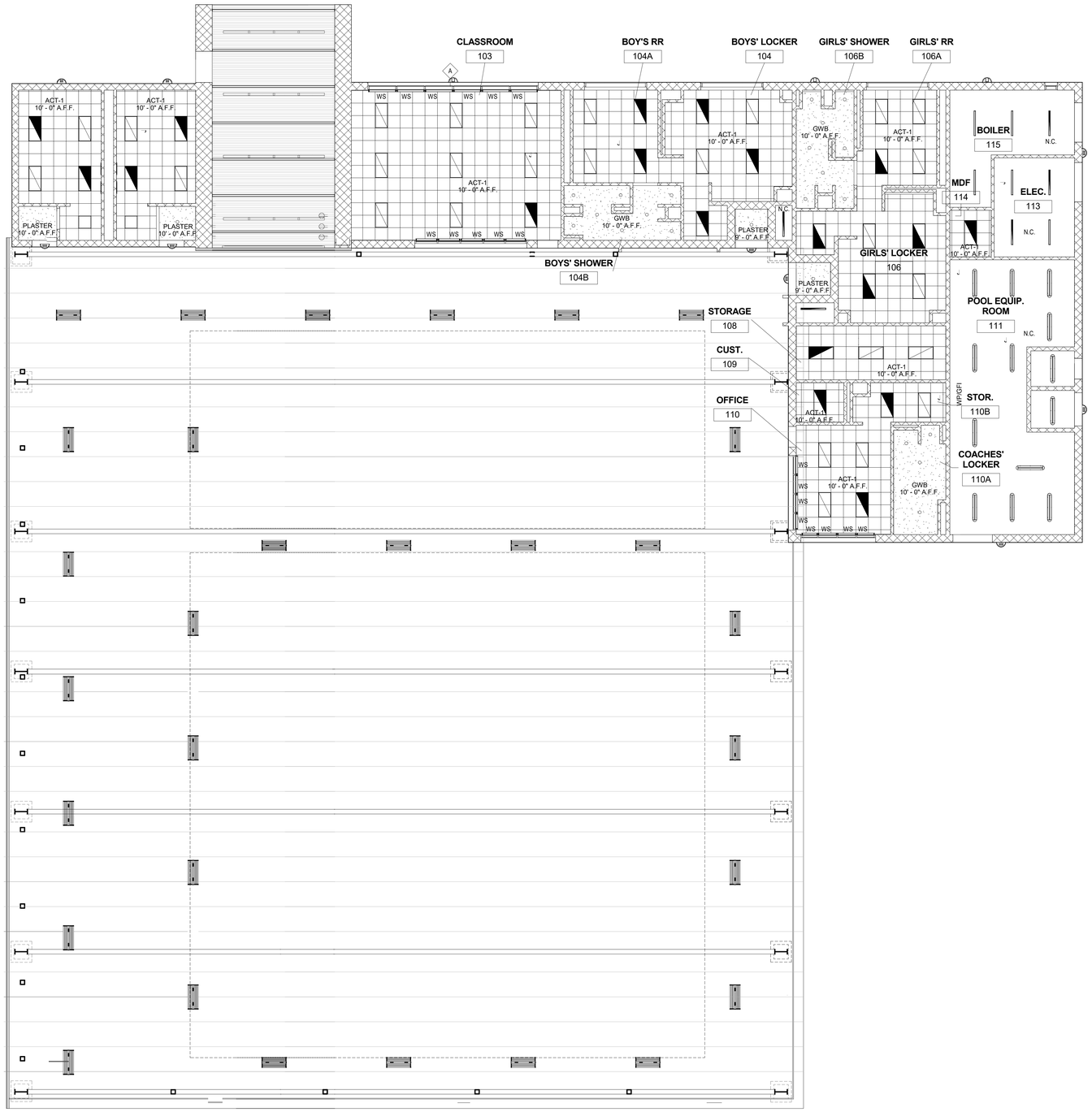
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: Author
CHECKED BY: Checker

REVISIONS

No.	Description	Date

FIRST FLOOR REFLECTED CEILING PLAN

A10.01



RCP LEGEND:

- 2' X 4' LT FIXT
- 2' X 4' LT FIXT
- CAN LIGHTS
- 1' X 4' STRIP FIXTURE
- STUCCO FINCH
- GYPSUM CEILING
- 2' X 2' SUSPENDED LAY-IN CEILING
- ALUMINUM CEILING PIPES
- 2' X 2' DIFFUSER
- 2' X 2' RETURN
- 4" WIDE SLOT LIGHTING
- WS — WINDOW SHADES

5 REFLECTED CEILING PLAN - ALTERNATE NO. 1
1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

REGISTERED ARCHITECT
EDMUND X. RAMIREZ
14374
STATE OF TEXAS
4.11.2019

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: Author
CHECKED BY: Checker

REVISIONS

No.	Description	Date

REFLECTED CEILING PLAN - ALTERNATE NO. 1

A10.02

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
CO2	CARBON DIOXIDE SENSOR		GATE VALVE
CO	CARBON MONOXIDE SENSOR		CHECK VALVE
SD	SMOKE DAMPER		GLOBE VALVE
FS	COMBINATION FIRE / SMOKE DAMPER		PLUG VALVE
FD	FIRE DAMPER		BUTTERFLY VALVE
F	FIRESTAT		STRAINER
H	HUMIDISTAT		GATE VALVE WITH HOSE CONNECTION
T	THERMOSTAT		3-WAY CONTROL VALVE
F	FREEZESTAT		STRAIGHT THROUGH CONTROL VALVE
VD	VOLUME DAMPER		BALL VALVE
S	SMOKE DETECTOR		TEST PLUG
M	MOTORIZED DAMPER		GAUGE STATION WITH COCK
OBD	OPPOSED BLADE DAMPER		THERMOMETER
BDD	BACKDRAFT DAMPER		THERMOMETER WELL
BD	BAROMETRIC DAMPER		PRESSURE RELIEF VALVE
07/M-3	INDICATES REFERENCE TO VIEW 07, SHEET M-3		PRESSURE REDUCING VALVE
	FILTER SECTION	FS	FLOW SWITCH
	FLEXIBLE CONNECTION	AV	AIR VENT
	MECHANICAL EQUIPMENT		FLOW METER
	SUPPLY AIR TERMINAL		UNION
	RETURN AIR TERMINAL	FCV	FLOW CONTROL VALVE
	EXHAUST AIR TERMINAL	CHS	CHILLED WATER SUPPLY
	NEW DUCTWORK	CHR	CHILLED WATER RETURN
	EXISTING DUCTWORK TO REMAIN	HWS	HOT WATER SUPPLY
	EXISTING DUCTWORK TO BE REMOVED	HWR	HOT WATER RETURN
01 M-3	INDICATES REFERENCE TO SECTION VIEW 01, SHEET M-3	CWS	CONDENSER WATER SUPPLY
		CWR	CONDENSER WATER RETURN
		CD	CONDENSATE DRAIN
		RS	REFRIGERANT SUCTION
		RG	REFRIGERANT GAS
		RL	REFRIGERANT LIQUID
		CR	STEAM CONDENSATE RETURN
		HP	HIGH PRESSURE STEAM
		LP	LOW PRESSURE STEAM

A	AMPERES	DFA	DOWN FROM ABOVE	HOA	HAND OFF AUTOMATIC SWITCH	SPF	STAIRWELL PRESSURIZATION FAN
ACC	AIR COOLED CHILLER	DR	RETURN DUCT SMOKE DETECTOR	HP	HORSEPOWER	TEF	TOILET EXHAUST FAN
ACCU	AIR COOLED CONDENSING UNIT	DS	SUPPLY DUCT SMOKE DETECTOR	HWP	HEATING WATER PUMP	UG	UNDERGROUND
ACU	AIR CONDITIONING UNIT	DY	DRYER	IV	ISOLATION VALVE	UL	UNDERWRITERS LABORATORIES
AFF	ABOVE FINISHED FLOOR	E.C.	ELECTRICAL CONTRACTOR	KEF	KITCHEN EXHAUST FAN	U.N.O.	UNLESS NOTED OTHERWISE
AFR	ABOVE FINISHED ROOF	EDH	ELECTRIC DUCT HEATER	KSU	KITCHEN SUPPLY UNIT	VAV	VARIABLE AIR VOLUME
AHAP	AS HIGH AS POSSIBLE	EF	EXHAUST FAN	KW	KILOWATTS	WP	WEATHERPROOF
AHU	AIR HANDLING UNIT	EX	EXISTING	MCC	MOTOR CONTROL CENTER	XT	EXPANSION TANK
AP	ACCESS PANEL	FIXT	FIXTURE	MD	MANUAL BALANCING DAMPER		
AS	AIR SEPARATOR	FA	FIRE ALARM	MTD	MOUNTED		
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS	FAAP	FIRE ALARM ANNUNCIATOR PANEL	NIC	NOT IN CONTRACT		
B	BOILER	FACP	FIRE ALARM CONTROL PANEL	OFOI	OWNER FURNISHED / OWNER INSTALLED		
BCP	BUILDING CONTROL POWER	FCU	FAN COIL UNIT	OA	OUTSIDE AIR		
BFF	BELOW FINISHED FLOOR	FD	FIRE DAMPER	PCHP	PRIMARY CHILLED WATER PUMP		
BFG	BELOW FINISHED GRADE	FPB	FAN POWERED TERMINAL BOX	PRV	PRESSURE REDUCING VALVE		
C	CHILLER	FSD	COMBINATION FIRE / SMOKE DAMPER	PVC	POLYVINYL CHLORIDE		
CHP	CHILLED WATER PUMP	G	PROTECTIVE GUARD	RA	RETURN AIR		
CP	CONDENSER WATER PUMP	GBD	GRAVITY BACKDRAFT DAMPER	RF	RELIEF FAN		
CT	COOLING TOWER	GC	GENERAL CONTRACTOR	SCHP	SECONDARY CHILLED WATER PUMP		
CU	CONDENSING UNIT	GHP	GEOTHERMAL HEAT PUMP	SD	SMOKE DAMPER		
CV	CONTROL VALVE	GSHP	GROUND SOURCE HEAT PUMP	SEF	SMOKE EXHAUST FAN		
DEF	DISHWASHER EXHAUST FAN	GV	GRAVITY VENTILATOR	SPEC	SPECIFICATION		

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

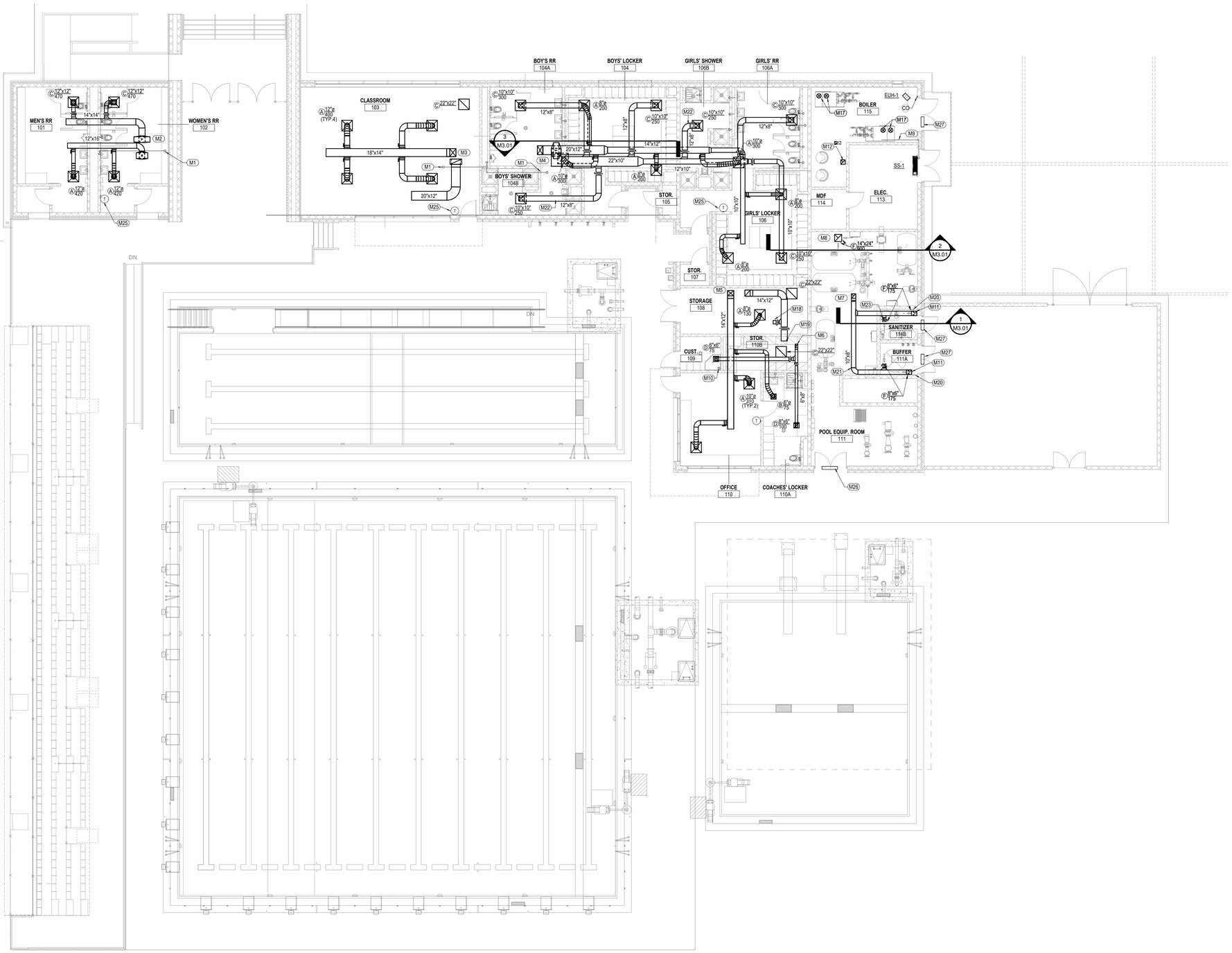
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: TAE HWANG
CHECKED BY: DON RICHARDS
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

MECHANICAL SYMBOLS AND ABBREVIATIONS

M0.01



GENERAL NOTES - MECHANICAL PLAN

1. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL LOCATION OF EQUIPMENT, DUCTS, AND GRILLES ETC. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS THAT COMPLETE MECHANICAL SYSTEMS BE FURNISHED, INSTALLED, TESTED AND READY FOR OPERATION WHETHER OR NOT EVERY ITEM OF EQUIPMENT, ACCESSORY, DEVICE, ETC. IS SHOWN. REFERENCE SHALL BE MADE TO THE FULL DRAWING PACKAGE INCLUDING ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR COORDINATION AND POTENTIAL CONFLICTS. THE MECHANICAL SUBCONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN THE LAYOUT AS NEEDED TO PREVENT CONFLICTS WITH OTHER TRADES, OR FOR PROPER EXECUTION OF THE WORK. FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATING DUCTWORK.
2. DUCT DIMENSIONS INDICATED ON DRAWINGS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
3. ALL NEW A/C EQUIPMENT SHALL BE CLEANED AFTER THE FINISHING OF DRYWALL AND PRIOR TO THE RELEASE OF BUILDING TO OWNER. MECHANICAL CONTRACTOR TO PROVIDE DOCUMENTATION WITH DATE AND TIME OF UNIT CLEANING.
4. FLEX DUCT SHALL NOT EXCEED 6 FEET, NO EXCEPTIONS.
5. ALL WALL MOUNTED TEMPERATURE AND HUMIDITY SENSORS SHALL BE MOUNTED 48 INCHES AFF.
6. CONTRACTOR TO FIRE WRAP TOP OF KITCHEN HOODS.

KEYED NOTES - MECHANICAL PLAN

M1 3/4" CONDENSATE DOWN FROM ROOF. ROUTE TO NEAREST TAILPICE.

M2 12X16 SUPPLY AND 14X14 RETURN DUCT DOWN FROM RTU-01.

M3 18X14 SUPPLY AND 20X12 RETURN DUCT DOWN FROM RTU-02.

M4 20X12 SUPPLY AND 22X10 RETURN DUCT DOWN FROM RTU-03.

M5 14X12 SUPPLY AND 14X12 RETURN DUCT DOWN FROM RTU-04.

M6 6x8 EXHAUST DUCT UP TO EF-1.

M7 10X0 EXHAST DUCT UP TO EF-3.

M8 16X16 EXHAUST UP TO EF-2. EXHAUST DUCT SHALL TERMINATE 6" AFF. INSTALL TWO EXHAUST GRILLES SIZED AS INDICATED ON PLAN. LOCATE ONE GRILLE 18" BELOW STRUCTURE. LOCATE SECOND GRILLE SUCH THAT BOTTOM OF GRILL IS NO HIGHER THAN 12" AFF.

M9 3/4" CONDENSATE. ROUTE TO NEAREST FLOOR DRAIN IN BOILER 115. REFER TO PLUMBING DRAWINGS FOR LOCATION OF FLOOR DRAIN.

M10 3/4" CONDESNATE DOWN FROM ROOF. ROUTE TO MOP SINK.

M11 10X8 DUCT DOWN, TERMINATE DUCT 6" AFF. PROVIDE GRILLE AS INDICATED ON PLANS. LOCATE GRILLE SUCH THAT BOTTOM OF GRILL IS NO HIGHER THAN 12" AFF.

M12 10X10 EXHAUST UP TO EF-4. PROVIDE WITH MOTORIZED DAMPER.

M17 10" FLUE AND 10" COMBUSTION AIR VENT. FLUE SHALL BE CONSTRUCTED OF METAL-FAB INC., CORR/GUARD VENT WITH AL29-4C STAINLESS STEEL OR MANUFACTURER APPROVED EQUAL. AIR INLET PIPING SHALL BE CONSTRUCTED OF GALVANIZED STEEL. REFER TO MANUFACTUER FOR INSTALLATION INSTRUCTION AND CONSTRUCTION OF FLUE AND INLET PIPING.

M18 RETURN AIR OPENING. BALANCE FOR 100 CFM.

M19 RETURN AIR OPENING. BALANCE FOR 545 CFM.

M20 PROVIDE WALL MOUNTED SENSOR FOR MURIATIC ACID AND CHLOORINE. PROVIDE BOTH AN AUDIO AND VISUAL ALARM OUTSIDE THE DOOR AND ALARM TO BMS.

M21 DUCTWORK SHALL BE CONSTRUCTED OF STAINLESS STEEL.

M22 DUCTWORK FROM AIR DEVICE TO DUCT MAIN SHALL BE CONSTRUCTED OF STAINLESS.

M23 GRILLE SHALL BE CONSTRUCTED OF STAINLESS STEEL.

M25 PROVIDE A LOCKABLE, TAMPER PROOF HOUSING FOR T-STAT.

M26 PROVIDE LOUVER WITH MINIMUM FREE AREA OF 3.5 SQFT. COORDINATE EXACT LOCATION, SIZE AND FINISH WITH ARCHITECT.

M27 PROVIDE LOUVER WITH MINIMUM FREE AREA OF 1 SQFT. COORDINATE EXACT LOCATION, SIZE AND FINISH WITH ARCHITECT.

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

1 **MECHANICAL PLAN**
SCALE: 1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	APRIL 11, 2019
DRAWN BY	TAE HWANG
CHECKED BY	DON RICHARDS

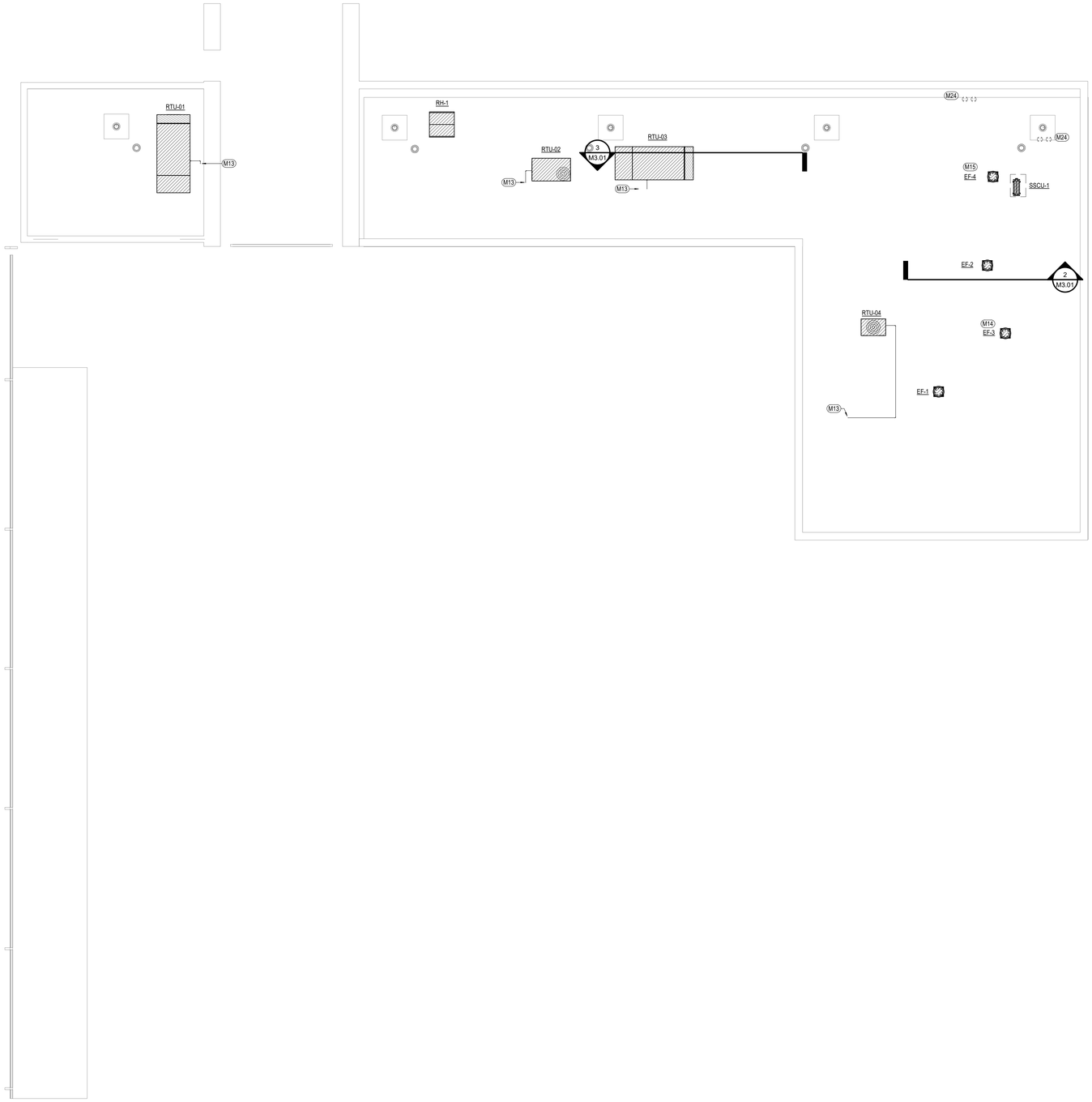
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

FIRST FLOOR - MECHANICAL PLAN

M2.01



GENERAL NOTES - MECHANICAL PLAN

1. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL LOCATION OF EQUIPMENT, DUCTS, AND GRILLES ETC. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS THAT COMPLETE MECHANICAL SYSTEMS BE FURNISHED, INSTALLED, TESTED AND READY FOR OPERATION WHETHER OR NOT EVERY ITEM OF EQUIPMENT, ACCESSORY, DEVICE, ETC. IS SHOWN. REFERENCE SHALL BE MADE TO THE FULL DRAWING PACKAGE INCLUDING ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR COORDINATION AND POTENTIAL CONFLICTS. THE MECHANICAL SUBCONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN THE LAYOUT AS NEEDED TO PREVENT CONFLICTS WITH OTHER TRADES, OR FOR PROPER EXECUTION OF THE WORK. FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATING DUCTWORK.
2. DUCT DIMENSIONS INDICATED ON DRAWINGS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
3. ALL NEW A/C EQUIPMENT SHALL BE CLEANED AFTER THE FINISHING OF DRYWALL AND PRIOR TO THE RELEASE OF BUILDING TO OWNER. MECHANICAL CONTRACTOR TO PROVIDE DOCUMENTATION WITH DATE AND TIME OF UNIT CLEANING.
4. FLEX DUCT SHALL NOT EXCEED 6 FEET, NO EXCEPTIONS.
5. ALL WALL MOUNTED TEMPERATURE AND HUMIDITY SENSORS SHALL BE MOUNTED 48 INCHES AFF.
6. CONTRACTOR TO FIRE WRAP TOP OF KITCHEN HOODS.

KEYED NOTES - MECHANICAL PLAN

M13 3/4" CONDENSATE DOWN TO BELOW. REFER TO FIRST FLOOR PLAN FOR CONTINUATION.

M14 POOL CHEMICAL ROOM FAN. FAN SHALL CONTINUOUSLY OPERATE AT MINIMUM CFM AS IN INDICATED ON SCHEDULE. IN THE EVENT OF ALARM FROM CHEMICAL MONITORING SYSTEM, FAN SHALL RUN AT HIGHER AIRFLOW. FAN SHALL MAINTAIN AIRFLOW FOR MINIMUM OF 15 MINUTES (ADJ) AFTER ALARM STOPS.

M15 BOILER ROOM FAN. MOTORIZED DAMPER SHALL OPEN AND FAN ENERGIZED UPON ALARM FROM CARBON MONOXIDE SENSOR. FAN SHALL CONTINUE TO OPERATE FOR MINIMUM OF 15 MINUTES (ADJ) AFTER ALARM STOPS.

M24 FLUE AND COMBUSTION AIR INTAKE FOR POOL HEATERS. REFER TO MANUFACTURER FOR SPECIFIC INSTALLATION REQUIREMENTS.

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

1 **MECHANICAL ROOF PLAN**
SCALE: 1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61522
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

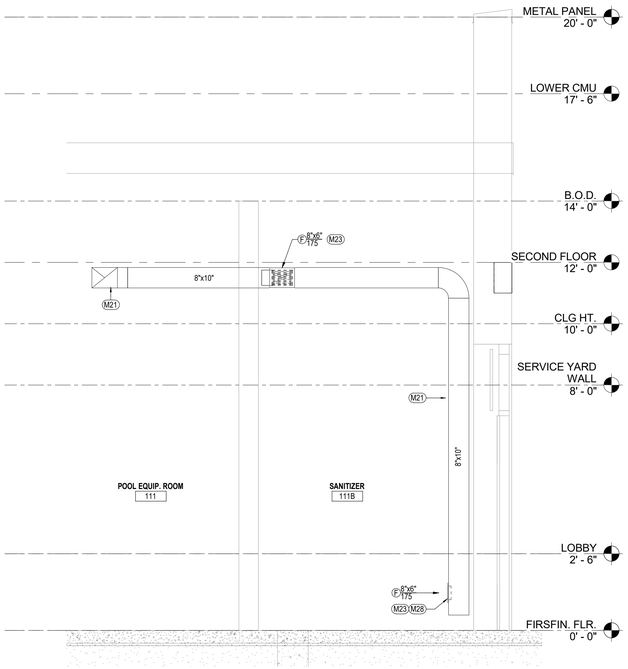
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: TAE HWANG
CHECKED BY: DON RICHARDS
REVISIONS

No.	Description	Date

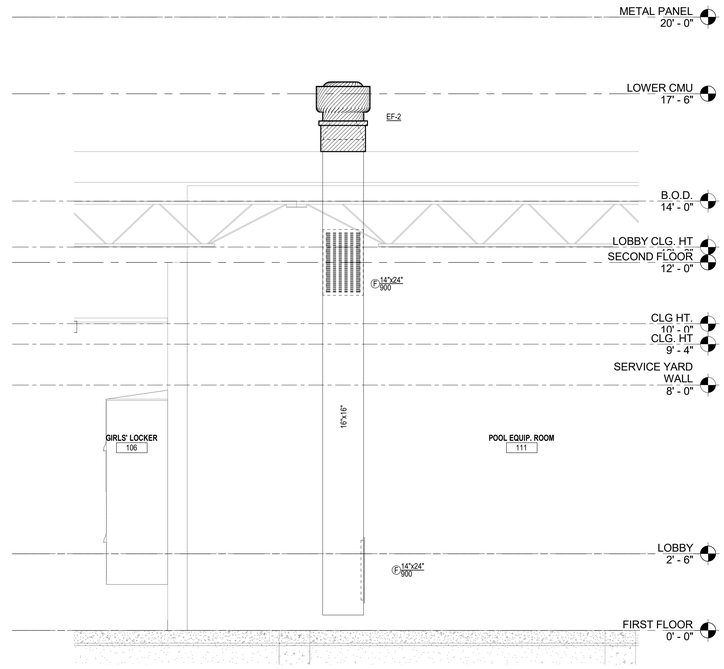
ISSUE FOR PROPOSAL

ROOF - MECHANICAL PLAN

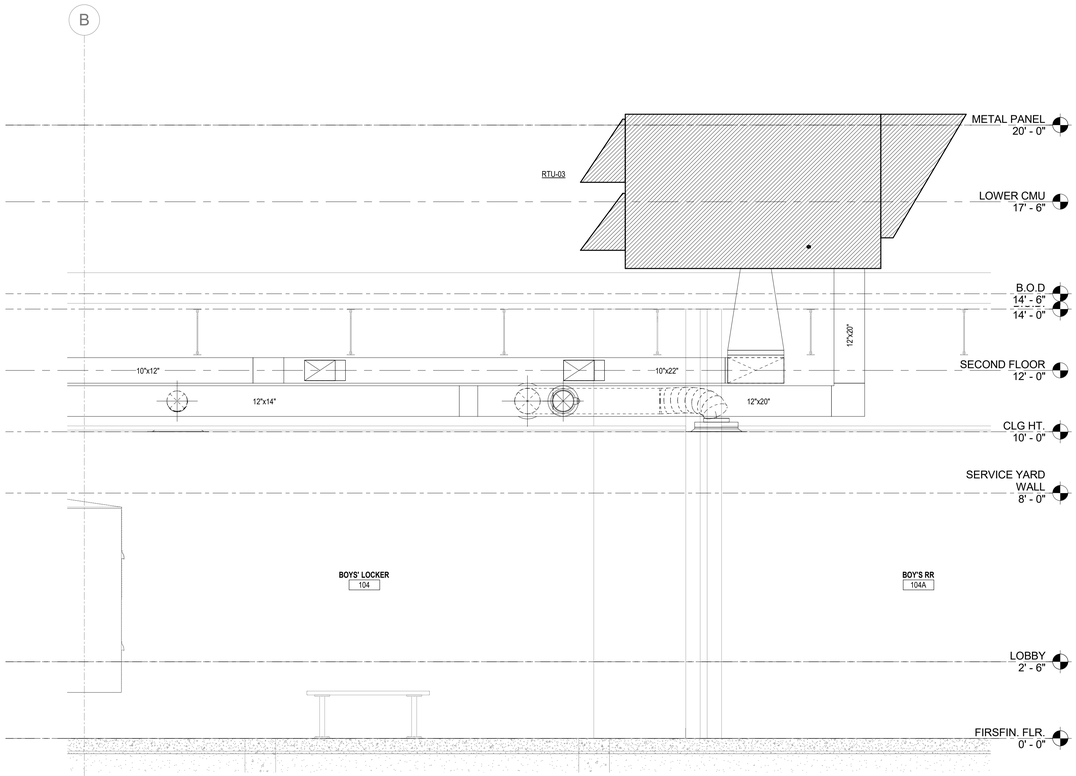
M2.03



1 CHECMICAL TREATMENT ROOM
SCALE: 1/2" = 1'-0"



2 POOL EQUIPMENT ROOM EXHAUST DUCT
SCALE: 1/2" = 1'-0"



3 RTU-3 SECTION
SCALE: 1/2" = 1'-0"

GENERAL NOTES - MECHANICAL PLAN

1. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL LOCATION OF EQUIPMENT, DUCTS, AND GRILLES ETC. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS THAT COMPLETE MECHANICAL SYSTEMS BE FURNISHED, INSTALLED, TESTED AND READY FOR OPERATION WHETHER OR NOT EVERY ITEM OF EQUIPMENT, ACCESSORY, DEVICE, ETC. IS SHOWN. REFERENCE SHALL BE MADE TO THE FULL DRAWING PACKAGE INCLUDING ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR COORDINATION AND POTENTIAL CONFLICTS. THE MECHANICAL SUBCONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN THE LAYOUT AS NEEDED TO PREVENT CONFLICTS WITH OTHER TRADES, OR FOR PROPER EXECUTION OF THE WORK. FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATING DUCTWORK.
2. DUCT DIMENSIONS INDICATED ON DRAWINGS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
3. ALL NEW A/C EQUIPMENT SHALL BE CLEANED AFTER THE FINISHING OF DRYWALL AND PRIOR TO THE RELEASE OF BUILDING TO OWNER. MECHANICAL CONTRACTOR TO PROVIDE DOCUMENTATION WITH DATE AND TIME OF UNIT CLEANING.
4. FLEX DUCT SHALL NOT EXCEED 6 FEET, NO EXCEPTIONS.
5. ALL WALL MOUNTED TEMPERATURE AND HUMIDITY SENSORS SHALL BE MOUNTED 48 INCHES AFF.
6. CONTRACTOR TO FIRE WRAP TOP OF KITCHEN HOODS.

KEYED NOTES - MECHANICAL PLAN

M21 DUCTWORK SHALL BE CONSTRUCTED OF STAINLESS STEEL.

M23 GRILLE SHALL BE CONSTRUCTED OF STAINLESS STEEL.

M28 LOCATE AIR DEVICE SUCH THAT BOTTOM OF GRILL NO HIGHER THAN 12" AFF.

LEAF ENGINEERS
A PGAL COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	APRIL 11, 2019
DRAWN BY	Author
CHECKED BY	Checker

REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

MECHANICAL SECTIONS

M3.01

FAN SCHEDULE

TAG	SERVICE	FAN DATA						ELECTRICAL		WEIGHT (LBS)	MANUF.	MODEL NUMBER	NOTES
		TYPE	DRIVE	CFM	ESP (IN W.G.)	MOTOR HP	RPM (MAX.)	VOLT/PH	FLA (A)				
EF-1	JANITOR	UPBLAST	DIRECT	175	0.25	0.02	1354	115/1	1.3	45	GREENHECK	CUE-70-VG	1,2,3,4,5
EF-2	POOL EQUIP	UPBLAST	DIRECT	1,800	0.15	0.69	1550	115/1	11.3	100	GREENHECK	CUE-141HP-VG	1,2,3,4,5
EF-3	POOL EQUIP	UPBLAST	DIRECT	250/700	0.25	0.08	1374	115/1	2.6	60	GREENHECK	CUE-95-VG	1,2,3,4,5,6,7
EF-4	BOILER	UPBLAST	DIRECT	600	0.25	0.06	1432	115/1	1.5	54	GREENHECK	CUE-90-VG	1,2,5

NOTES
1. REFERENCE SPECIFICATIONS FOR SEQUENCE OF OPERATIONS.
2. REFERENCE ARCHITECTURAL DRAWINGS FOR ROOF CURB DETAIL.
3. PROVIDE WITH BACKDRAFT DAMPER.
4. FAN TO RUN CONTINOUSLY.
5. FAN SHALL BE HIGH WIND RATED.
6. PROVIDE EC MOTOR WITH TWO SPEED OPERATION.
7. PROVIDE WITH HI-PRO POLYESTER COATING OR EQUIVALENT SUITABLE FOR CHLORINE AND MURIATIC ACID.

AIR DEVICE SCHEDULE

DESIGNATION	MANUFACTURER	MODEL	COLOR	NOISE CRITERIA (NC)	DESCRIPTION
A	TITUS	TMS-AA	WHITE	25	24x24 MODULE SIZE, LAY-IN BORDER TYPE, NECK SIZE AS INDICATED ON PLANS. NO OPPOSED BLADE DAMPER, ALL ALUMINUM CONSTRUCTION.
B	TITUS	TMS-AA	WHITE	25	12x12 MODULE SIZE, LAY-IN BORDER TYPE, NECK SIZE AS INDICATED ON PLANS. NO OPPOSED BLADE DAMPER, ALL ALUMINUM CONSTRUCTION.
C	TITUS	50F	WHITE	25	24x24 MODULE SIZE, LAY-IN BORDER TYPE, 22X22 NECK SIZE. NO OPPOSED BLADE DAMPER, ALL ALUMINUM CONSTRUCTION.
D	TITUS	50F	WHITE	25	12x12 MODULE SIZE, LAY-IN BORDER TYPE, NECK SIZE AS INDICATED PLANS. PROVIDE OPPOSED BLADE DAMPER, ALL STEEL CONSTRUCTION.
E	TITUS	50F	WHITE	25	24x24 MODULE SIZE, LAY-IN BORDER TYPE, NECK SIZE AS INDICATED PLANS. PROVIDE OPPOSED BLADE DAMPER, ALL STEEL CONSTRUCTION.
F	TITUS	350FL	WHITE	25	ALUMINUM CONSTRUCTION. 35 DEGREE DEFLECTION. OPPOSED BLADE DAMPER. HORIZONTAL BLADES. NECK SIZE AS INDICATED ON PLAN.
J	TITUS	TMR-AA	WHITE	25	ROUND CEILING DIFFUSER, ALL ALUMINUM CONSTRUCTION. NECK SIZE AS INDICATED ON PLANS.
K	TITUS	350FS	WHITE	25	ALUMINUM CONSTRUCTION. VERTICAL BLADES. NECK SIZE AS INDICATED ON PLAN.

NOTES
1. ALL DIFFUSER DESIGNATIONS MAY NOT BE USED ON PROJECT.
2. PROVIDE ROTO-TWIST CABLE OPERATED DAMPERS IN GYPBOARD CEILINGS.
3. PROVIDE FRAME FOR MOUNTING AIR DEVICE IN LAY-IN GRID CEILING UNLESS REFELECTED CEILING PLAN INDICATES HARD CEILING. IN AREAS WITH HARD CIELINGS, PROVIDE FRAMES FOR SURFACE MOUNTING
4. UNLESS OTHERWISE NOTED, BRANCH DUCTS SERVING AIR DEVICES SHALL BE SAME SIZE AS AIR DEVICE.

AIR COOLED DUCTLESS MINI-SPLIT AIR CONDITIONING UNIT SCHEDULE

TAG	SERVICE	MIN. SEER RATING	COOLING CAPACITY (MBH)	EVAPORATOR UNIT					CONDENSING UNIT					MANUF.	NOTES
				AIR FLOW (CFM)	FAN (MCA)	VOLTS/ PHASE	UNIT WT. (LBS)	INDOOR UNIT MODEL	MCA (A)	MOCP (A)	VOLTS/ PHASE	UNIT WT. (LBS)	OUTDOOR UNIT MODEL		
SS-1/SSCU-1	ELECTRICAL RM	14.0	36.0	920	1.0	208/1	46	PKA-A36KA6	25	40.0	208/1	163	PUY-A36NHA6	MITSUBISHI	1,2,3

NOTES:
1. EXTEND REFRIGERATION PIPING BETWEEN EVAPORATOR AND CONDENSER AS RECOMMENDED BY MANUFACTURER.
2. PROVIDE INTEGRAL CONDENSATE PUMP AND 3/4" PIPING. ROUTE CONDENSATE TO NEAREST CONDENSATE DRAIN TAILPIECE OR FLOOR DRAIN.
3. PROVIDE WITH UNIT MOUNTED THERMOSTAT.
4. PROVIDE COOLING DOWN TO 0 DEG.F.

RELIEF HOOD SCHEDULE

MARK	RH-1
SERVES	CLASSROOM
CFM	300
MAX. P.D. (IN. W.G.)	0.001
THROAT SIZE (IN.)	24x30
MANUFACTURER	GREENHECK
MODEL NO.	FGR
NOTES	1,2

NOTES:
1. PROVIDE ROOF CURB.
2. PROVIDE WITH BUG SCREEN AND BACKDRAFT DAMPER.

ELECTRIC UNIT HEATER SCHEDULE

MARK	EUH-1
SERVICE	BOILER
AIRLFLOW (CFM)	310
KW	3
VOLTS/PHASE/HERTZ	277/1/60
WEIGHT (LBS)	40
MANUFACTURER	REZNOR
MODEL NO.	EGEB
NOTES	1,2

NOTES:
1. SHALL INCLUDE FACTORY MOUNTED DISCONNECT, THERMOSTAT, AND FACTORY MOUNTING BRACKET.
2. REFER TO MANUFACTURER FOR MOUNTING REQUIREMENTS.

ROOFTOP UNIT SCHEDULE

TAG	SERVICE	MANUFACTURER	MODEL NUMBER	NOMINAL TONS	MIN. SEER	OPTIONS	SEE NOTE	MAX. OPERATING WEIGHT (LBS)	INDOOR BLOWER DATA					COOLING COIL DATA					HEATING COIL DATA							ELECTRICAL INFORMATION		
									TOTAL CFM	OUTSIDE AIR CFM	EST. EXT. SP. (IN. WG.)	MOTOR BHP	DRIVE / TYPE	MAX. FACE VELOCITY (FPM)	SENSIBLE CAPACITY (MBH)	TOTAL CAPACITY (MBH)	EAT (°F DB/WB)	LAT (°F DB/WB)	FUEL	HEATTING (CFM)	HEATING INPUT CAPACITY (MBH)	HEATING OUTPUT CAPACITY (MBH)	MIN. STAGES OF HEAT	EAT (°F DB)	LAT (°F DB)	VOLTS / PH / HZ	MCA	MOCP
RTU-02	CLASSROOM	CARRIER	48GCDN05A2P5-6B0A0	4	16	HG, ECON	ALL	757	1,600	300	0.60	0.74	DIRECT	500	33.8	48.1	77.6/66.1	58.0/56.5	GAS	1,600	67	54	2	65.0°	96.3°	208/3/60	26.0	30.0
RTU-04	COACH OFFICE	CARRIER	48VG-B240403	4	15	HG	ALL	344	830	100	0.75	0.4	DIRECT	500	15.3	22.0	96.0/65.3	58.9/56.8	GAS	830	40	33	2	65.0°	96.3°	208/3/60	26.0	30.0

NOTES
1. REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL DATA.
2. ESTIMATED EXTERNAL STATIC PRESSURE INCLUDES LOSSES THROUGH DUCTWORK, AIR DEVICES, SOUND ATTENUATORS, ETC. ROOF TOP UNIT INTERNAL STATIC PRESSURE SHALL INCLUDE LOSSES THROUGH COILS, CASING, INTERNAL DAMPERS, AND 0.75" W.G. FOR DIRTY FILTERS.
3. PROVIDE UNIT WITH STAINLESS STEEL DRAIN PAN AND THROUGH THE BASE CONDENSATE DRAIN.
4. AMBIENT AIR TEMPERATURE TO BE 105°F.
5. PROVIDE NEW 14" ROOF CURB. ROOF CURB MUST EXTEND MIN. 10" ABOVE FINISHED ROOF PLANE. FOR ROOF CURB TYPE AND CONSTRUCTION DETAIL, REFER TO ARCHITECTURAL CONSTRUCTION SET.
7. EQUIPMENT SHALL COMPLY WITH LATEST EDITION OF 2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC). ROOFTOP UNIT MINIMUM EFFICIENCIES: (<5 tons: 14.0 SEER), (5-11 TONS: 11.2 EER & 12.8 IEER), (12-20 TONS: 11.0 EER & 12.4 IEER), (20-63 TONS: 10.0 EER & 11.6 IEER).
8. PROVIDE SINGLE POINT POWER CONNECTION WITH FACTORY MOUNTED AND WIRED DISCONNECT AND UNPOWERED 120V/15A GFCI CONVENIENCE OUTLET. CONVENIENCE OUTLET CONNECTION SHALL BE A SEPARATE ELECTRICAL FEED AND NOT FROM THE MAIN.
9. PROVIDE LOW AMBIENT CONTROL DOWN TO 35°F.
10. REFRIGERANT SHALL BE R-410a.
11. PROVIDE FACTORY MOUNTED AND WIRED FLOAT SWITCH IN DRAIN PAN.
12. PROVIDE HAIL GUARDS.
13. PROVIDE MINIMUM 2 STAGES OF COOLING FOR UNITS 3-5 TONS.
14. EVAPORATOR COIL SHALL HAVE A MINIMUM OF 6 ROWS.
15. ROOF TOP UNITS SHALL HAVE DOUBLE WALL, FOAM INSULATION CONSTRUCTION. MINIMUM R-13.
16. PROVIDE WITH MODULATING HOT GAS REHEAT.

OPTIONS LEGEND:
ECON=PROVIDE COMPARATIVE ENTHALPY AIRSIDE ECONOMIZER.
DCV=PROVIDE O2 SENSOR FOR DEMAND CONTROL VENTILATION. INSTALL SENSOR IN RETURN DUCT.
DW= 2" DOUBLE WALL CONSTRUCTION WITH FOAM INSULATION. MINIMUM R-13
IC= PROVIDE A FULLY MODULATING INVERTER COMPRESSOR FOR ENHANCED DEHUMIDIFICATION DURING PART LOAD CONDITIONS. DIGITAL SCROLL NOT ACCEPTABLE
HG= HOT GAS REHEAT FOR HUMIDITY CONTROL

ROOFTOP UNIT WITH ENERGY RECOVERY

TAG	SERVICE	TYPE	MANUF.	MODEL	WEIGHT (LBS)	OPTIONS	SEE NOTE	SUPPLY BLOWER DATA						EXHAUST BLOWER DATA				
								TOTAL CFM	OUTSIDE AIR CFM	EST. EXT. SP. (IN. WG.)	MOTOR QUANTITY	BRAKE H.P.	TYPE	TOTAL CFM	EST. EXT. SP. (IN. WG.)	MOTOR QUANTITY	BRAKE H.P.	TYPE
RTU-01	RESTROOM	SZ CV	CARRIER	62XJ03NAJT-AFATAFL	2,410	HG	ALL	840	840	0.8	1	0.49	ECM	940	0.3	1	0.39	ECM
RTU-03	LOCKERS	SZ CV	CARRIER	62XJ05QAMT-AFATAFL	2,600	HG	ALL	1,400	1400	0.6	1	1.12	RCM	1,600	0.5	1	0.93	ECM

TAG	ENERGY RECOVERY WHEEL DATA								COOLING COIL DATA							GAS HEATING COIL DATA						ELECTRICAL DATA			
	OUTSIDE AIR DETAIL					EXHAUST AIR DETAIL																			
	OUTDOOR AIR (CFM)	WINTER EAT (°F)	SUMMER EAT (db/wb) (°F)	WINTER LAT (db/wb) (°F)	SUMMER LAT (db/wb) (°F)	EXHAUST AIR (CFM)	WINTER EAT (db) (°F)	SUMMER EAT (db/wb) (°F)	CFM OVER COIL	MAX. FACE VELOCITY (FPM)	SENSIBLE MBH	TOTAL MBH	TONAGE	EAT (°F DB/WB)	LAT (°F DB/WB)	CFM	SOURCE	INPUT (BTUH)	MIN. STAGES / TURNDOWN	EAT (°F DB)	LAT (°F DB)	MCA	FLA	MOCP	VOLTAGE
RTU-01	840	32°F	98.0/76.0	59.1/44.1	80.4/66.1	940	70.0/50.0	75.0/62.0	840	500	26.2	35.8	3	80.4/66.1	52.1/51.8	840	GAS	75,000	2/5:1	59.1°	125.2°	34.2	20.5	50	208/3/60
RTU-03	1,400	32°F	98.0/76.0	62.0/45.9	79.3/65.2	1,400	70.0/50.0	75.0/62.0	1,400	500	46.3	64.6	5	79.3/65.2	56.4/52.2	1,400	GAS	75,000	2/5:1	62.0°	101.7°	22.5	30.2	30	208/3/60

NOTES
1. REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL DATA.
2. ESTIMATED EXTERNAL STATIC PRESSURE INCLUDES LOSSES THROUGH DUCTWORK, AIR DEVICES, SOUND ATTENUATORS, ETC. ROOF TOP UNIT INTERNAL STATIC PRESSURE SHALL INCLUDE LOSSES THROUGH COILS, CASING, INTERNAL DAMPERS, AND 0.75" W.G. FOR DIRTY FILTERS.
3. PROVIDE UNIT WITH STAINLESS STEEL DRAIN PAN AND THROUGH THE BASE CONDENSATE DRAIN.
4. AMBIENT AIR TEMPERATURE TO BE 105°F.
5. PROVIDE NEW 14" ROOF CURB. ROOF CURB MUST EXTEND MIN. 10" ABOVE FINISHED ROOF PLANE. FOR ROOF CURB TYPE AND CONSTRUCTION DETAIL, REFER TO ARCHITECTURAL CONSTRUCTION SET.
7. EQUIPMENT SHALL COMPLY WITH LATEST EDITION OF 2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC). ROOFTOP UNIT MINIMUM EFFICIENCIES: (<5 tons: 14.0 SEER), (5-11 TONS: 11.2 EER & 12.8 IEER), (12-20 TONS: 11.0 EER & 12.4 IEER), (20-63 TONS: 10.0 EER & 11.6 IEER).
8. PROVIDE SINGLE POINT POWER CONNECTION WITH FACTORY MOUNTED AND WIRED DISCONNECT AND UNPOWERED 120V/15A GFCI CONVENIENCE OUTLET. CONVENIENCE OUTLET CONNECTION SHALL BE A SEPARATE ELECTRICAL FEED AND NOT FROM THE MAIN.
9. PROVIDE LOW AMBIENT CONTROL DOWN TO 35°F.
10. REFRIGERANT SHALL BE R-410a.
11. PROVIDE FACTORY MOUNTED AND WIRED FLOAT SWITCH IN DRAIN PAN.
12. PROVIDE HAIL GUARDS.
13. PROVIDE MINIMUM 2 STAGES OF COOLING FOR UNITS 3-5 TONS.
14. EVAPORATOR COIL SHALL HAVE A MINIMUM OF 6 ROWS.
15. ROOF TOP UNITS SHALL HAVE DOUBLE WALL, FOAM INSULATION CONSTRUCTION. MINIMUM R-13.
16. PROVIDE WITH MODULATING HOT GAS REHEAT.

OPTIONS LEGEND:
ECON=PROVIDE COMPARATIVE ENTHALPY AIRSIDE ECONOMIZER.
DCV=PROVIDE O2 SENSOR FOR DEMAND CONTROL VENTILATION. INSTALL SENSOR IN RETURN DUCT.
DW= 2" DOUBLE WALL CONSTRUCTION WITH FOAM INSULATION. MINIMUM R-13
IC= PROVIDE A FULLY MODULATING INVERTER COMPRESSOR FOR ENHANCED DEHUMIDIFICATION DURING PART LOAD CONDITIONS. DIGITAL SCROLL NOT ACCEPTABLE
HG= HOT GAS REHEAT FOR HUMIDITY CONTROL

601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61522
LICENSED PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

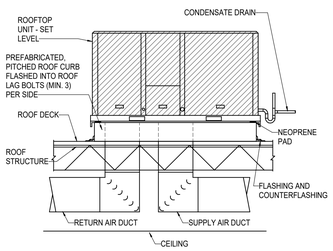
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: TAE HWANG
CHECKED BY: DON RICHARDS
REVISIONS

No.	Description	Date

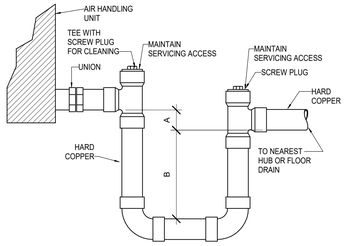
ISSUE FOR PROPOSAL

MECHANICAL SCHEDULES

M6.01



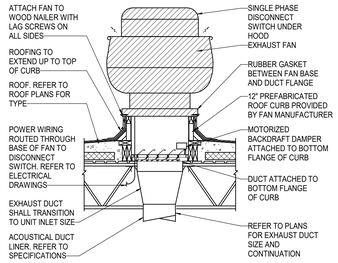
1 ROOFTOP AIR CONDITIONING UNIT DETAIL
SCALE: NOT TO SCALE



NOTES:

1. FOR DRAW THROUGH UNIT CONFIGURATION, DIMENSION A TO BE 1" GREATER THAN SUCTION PRESSURE OF UNIT (IN. W.G.) DIMENSION B TO BE 1/2 TOTAL PRESSURE OF UNIT (IN. W.G.).
2. FOR BLOW THROUGH UNIT CONFIGURATION, DIMENSION A TO BE 1" DIMENSION B TO BE EQUAL TO TOTAL PRESSURE OF UNIT (IN. W.G.).
3. REFER TO PLANS FOR DRAIN PIPE SIZES.

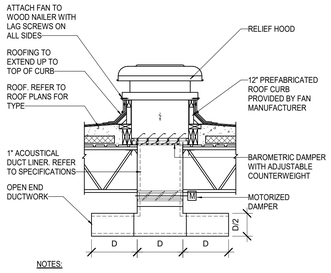
2 CONDENSATE TRAP PIPING DETAIL
SCALE: NOT TO SCALE



NOTES:

1. FOR THREE PHASE FANS, REFER TO THREE PHASE DISCONNECT SWITCH DETAIL.
2. PROVIDE DUCT LINER IN THE FIRST 10 FEET OF DUCT FROM FAN INLET.

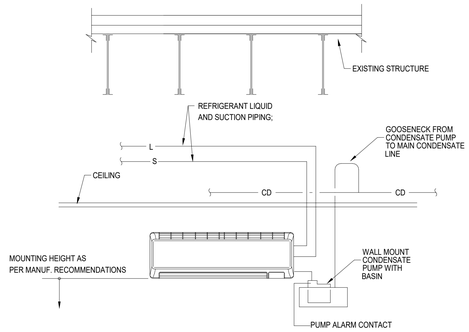
3 UPBLAST ROOF MOUNTED EXHAUST FAN DETAIL
SCALE: NOT TO SCALE



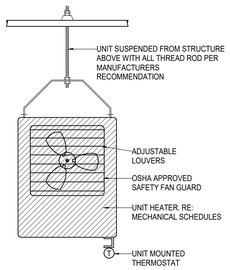
NOTES:

1. UNDER NO CIRCUMSTANCES SHOULD EQUIPMENT OF ANY KIND BE MOUNTED TO THE SIDE OF THE ROOF CURB.
2. FAN MANUFACTURER TO PROVIDE BAROMETRIC DAMPER AND ROOF CURB.
3. CONTROLS CONTRACTOR TO PROVIDE AND INSTALL CONTROL DAMPER WITH MOTORIZED OPERATOR MOUNTED TO THE EXTERIOR OF DUCT.
4. MINIMUM DIMENSION OF CURB TO BE 12".

4 ROOF MOUNTED RELIEF HOOD DETAIL
SCALE: NOT TO SCALE



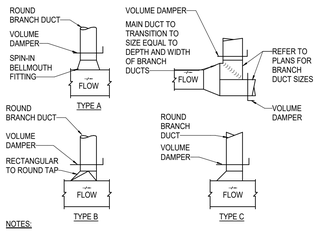
5 WALL MOUNTED DUCTLESS SPLIT
SCALE: NOT TO SCALE



NOTES:

1. UNIT TO BE INSTALLED A MINIMUM OF 7'-0 ABOVE FINISHED FLOOR.
2. DO NOT ROUTE CONDUIT OR WIRING ABOVE UNIT HEATER.
3. REFER TO SPECIFICATION SECTION 15060 FOR HANGERS AND SUPPORTS.
4. REFER TO SPECIFICATON SECTION 15070 FOR VIBRATION CONTROL.

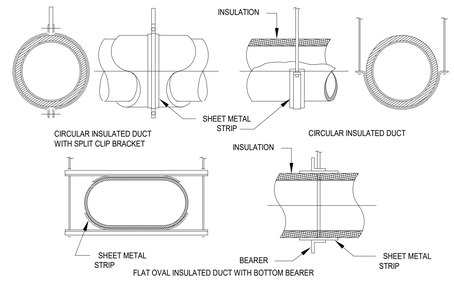
6 ELECTRIC UNIT HEATER DETAIL
SCALE: NOT TO SCALE



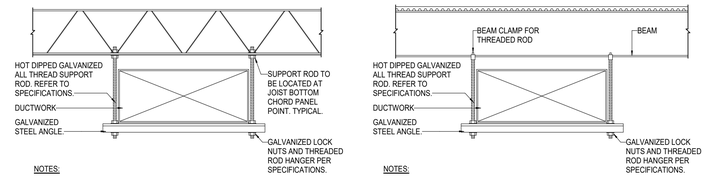
NOTES:

1. USE TYPE "A" CONNECTIONS ONLY FOR BRANCHES TO SINGLE DIFFUSERS, TERMINAL BOXES OR GRILLES FROM THE MAIN.
2. USE TYPE "B" OR "C" BRANCH WHERE BRANCH FLOW IS 20% OR LESS OF MAIN.
3. NO DAMPERS ARE REQUIRED ON VAV SYSTEMS BETWEEN AIR HANDLING UNIT AND VAV TERMINAL BOXES.
4. USE TEE SPLIT WHERE BRANCH FLOW IS MORE THAN 20% OF MAIN.
5. FOR TYPE " A" CONNECTIONTO DIFFUSERS, THE ROUND DUCT RUNOUT SIZE SHALL BE THE SAME SIZE AS THE INLET OF THE DIFFUSER, UNLESS OTHERWISE INDICATED.
6. PROVIDE VOLUME DAMPERS ON SUPPLY, RETURN AND EXHAUST DUCT SYSTEMS AS SHOWN.

7 BRANCH DUCT DETAILS
SCALE: NOT TO SCALE



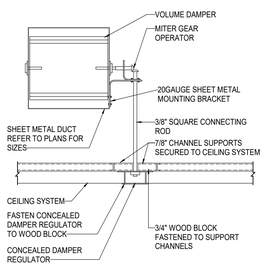
8 TYPICAL ROUND DUCT SUPPORTS
SCALE: NOT TO SCALE



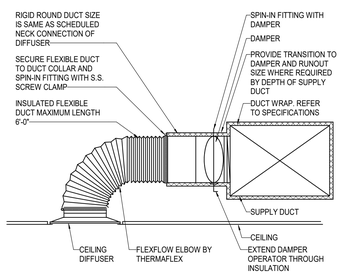
NOTES:

1. FOLLOW SMACNA GUIDELINES FOR SPACING REQUIREMENTS.
2. CONTRACTOR SHALL OBTAIN STRUCTURAL ENGINEER APPROVAL FOR ANY AND ALL DUCTWORK MOUNTING DETAILS AT CONCRETE.
3. CONTRACTOR SHALL INSTALL DUCT HANGER ROD WITHIN 3" AT JOIST BOTTOM CHORD PANEL POINT. IF HANGER ROD DOES NOT OCCUR WITHIN 3" AT BOTTOM CHORD PANEL POINT THAN LOAD SHALL NOT EXCEED 100# CONCENTRATED LOAD AT EACH THREADED ROD HANGER LOCATION.
4. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL JOIST REINFORCEMENTS REQUIREMENTS IF DUCT HANGER RODS ARE MORE THAN 3" FROM JOIST BOTTOM CHORD PANEL POINT AND EXCEED 100# CONCENTRATED LOAD.
5. IF DUCT RUNS PARALLEL WITH STRUCTURE, PROVIDE SECURED UNISTRUT HEADER LAID ACROSSMULTIPLE JOISTS MOUNTED TO JOIST BOTTOM CHORD.
6. BEAM CLAMPS AND FLANGE CLIPS ARE NOT ACCEPTABLE FOR JOISTS.

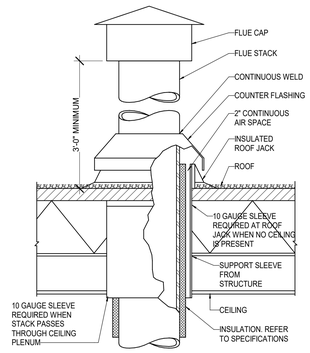
9 DUCT HANGER TRAPEZE DETAIL
SCALE: NOT TO SCALE



10 DAMPER OPERATOR IN NON-ACCESSIBLE CEILINGS DETAIL
SCALE: NOT TO SCALE



11 CEILING DIFFUSER CONNECTION DETAIL
SCALE: NOT TO SCALE



12 FLUE THROUGH ROOF DETAIL
SCALE: NOT TO SCALE

LEAF ENGINEERS
A PEGE COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: TAE HWANG
CHECKED BY: DON RICHARDS
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

MECHANICAL DETAILS

M7.01

A	AMPERE	FCU	FAN COIL UNIT	NTS	NOT TO SCALE
AFF	ABOVE FINISHED FLOOR	GEN	GENERATOR	PNL	PANELBOARD
AFG	ABOVE FINISHED GRADE	GFI	GROUND FAULT INTERRUPTER	REC'P	RECEPTACLE
AHU	AIR HANDLING UNIT	GND	GROUND	REQ'D	REQUIRED
ATS	AUTOMATIC TRANSFER SWITCH	GRS	GALVANIZED RIGID STEEL	RTU	ROOFTOP UNIT
C	CONDUIT	HID	HIGH INTENSITY DISCHARGE	TEL	TELEPHONE
CB	CIRCUIT BREAKER	HP	HORSEPOWER OR HEAT PUMP	TR	TAMPER RESISTANT
CCTV	CLOSED CIRCUIT TELEVISION	HPS	HIGH PRESSURE SODIUM	TRT	TRIPLE TUBE CF LAMP
CKT	CIRCUIT	IF	INSIDE FROSTED	TT	TWIN TUBE CF LAMP
CLK	CLOCK	KAIC	THOUSAND AMPERE INTERRUPTING CAPACITY	TV	TELEVISION
CT'S	CIRCUIT TRANSFORMERS	KCMIL	THOUSAND CIRCULAR MILIMETER	UH	UNIT HEATER
CU	CONDENSING UNIT	KVA	THOUSAND VOLT AMPERE	UON	UNLESS OTHERWISE NOTED
DISC. SW	DISCONNECT SWITCH	MCB	MAIN CIRCUIT BREAKER	V	VOLT
EDF	ELECTRIC DRINKING FOUNTAIN	MH	METAL HALIDE	VA	VOLT AMPERE
EF	EXHAUST FAN	MLO	MAIN LUGS ONLY	WG	WIRE GUARD
ELEC	ELECTRICAL	MCC	MOTOR CONTROL CENTER	WP	WEATHER PROOF
EPO	EMERGENCY POWER OFF	NC	NORMALLY CLOSED	XFMR	TRANSFORMER
EQUIP	EQUIPMENT	NEC	NATIONAL ELECTRICAL CODE		
EWH	ELECTRIC WATER HEATER	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASS'N		
EXIST	EXISTING	NIC	NOT IN CONTRACT		
FACP	FIRE ALARM CONTROL PANEL	NL	NIGHT LIGHT		
FAA	FIRE ALARM ANNUNCIATOR PANEL	NO	NUMBER OR NORMALLY OPEN		

NOTES:

1. EVERY SYMBOL SHOWN MAY NOT APPEAR ON DRAWINGS.
2. DASHED ELECTRICAL EQUIPMENT GENERALLY INDICATES EXISTING EQUIPMENT.
3. LONG-SHORT-SHORT-LONG DASHING GENERALLY INDICATES MATCHLINE OR DEFINES AREA FOR SPECIAL NOTE.

CIRCUIT RELATED:

LIGHTING OR POWER CIRCUIT(S). ARROW INDICATES HOME RUN, LONGER TICK(S) INDICATE NEUTRAL WIRE(S). SHORTER STRAIGHT TICK(S) INDICATE PHASE WIRE(S), SLANTED SHORTER TICK(S) INDICATE SWITCH LEG(S). DOT(S) INDICATE GROUNDING CONDUCTOR(S), DASHED WIRING (LONG-SHORT-LONG DASHES) INDICATES WIRING BELOW SLAB OR GRADE. DASHED WIRING (SERIES OF SHORT DASHES) INDICATES EXISTING WIRING. SLASH THROUGH ARROW INDICATES PARTIAL CIRCUIT. "D" ON HOMERUN ARROW INDICATES DEDICATED CIRCUIT: PROVIDE A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR FOR ENTIRE LENGTH OF CIRCUIT FROM PANEL TO OUTLET. COUNT EACH NEUTRAL AS CURRENT-CARRYING AND GROUP A MAXIMUM OF SIX THHN/THWN CONDUCTORS IN A SINGLE RACEWAY; GROUNDING CONDUCTOR IS NOT COUNTED.

J — JUNCTION BOX.

POINT OF BRANCH CIRCUIT TAP FOR SEPARATELY SWITCHED FIXTURE GROUP. REFERENCE CATEGORY "B" LIGHTING SYMBOLS FOR FURTHER INFORMATION.

GROUNDING ELECTRODE

LIGHTING:

LIGHTING FIXTURE. LETTER INDICATES TYPE.

STRIP TYPE LIGHTING FIXTURE. LETTER INDICATES TYPE.

LED DOWNLIGHT FIXTURE. LETTER INDICATES TYPE.

WALL OR BRACKET MOUNTED FIXTURE OR DEVICE.

WALL / CLG. — EXIT LIGHT FIXTURE. LETTER INDICATES TYPE. PROVIDE CHEVRON DIRECTIONAL INDICATORS AS SHOWN ON DRAWINGS.

CONTROL:

$ — SWITCH. SMALL LETTER INDICATES FIXTURES CONTROLLED, "TR" INDICATES TAMPER RESISTANT, "P" INDICATES PILOT LIGHT, "WP" INDICATES WEATHERPROOF, "K" INDICATES KEY OPERATED, "MO" INDICATES SPDT MOMENTARY CONTACT, "VS" INDICATES VACANCY SENSOR, "OS" INDICATES OCCUPANCY SENSOR, "LO" INDICATES DIGITAL LOW VOLTAGE "ON" ONLY SWITCH, "2" INDICATES DPDT, "3" INDICATES 3-WAY, "4" INDICATES 4-WAY, "M" INDICATES MANUAL MOTOR STARTER. CIRCUIT DESIGNATION NEXT TO SWITCH INDICATES BRANCH CIRCUIT NUMBER

$D — WALL BOX DIMMER SWITCH. "3D" INDICATES 3-WAY DIMMER.

$T — DIGITAL TIME SWITCH

PC — PHOTOELECTRIC CONTROL.

EMERGENCY POWER OFF (EPO) PUSHBUTTON.

PUSH BUTTON.

$OC — WALL MOUNT OCCUPANCY SENSOR.

DS — DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR.

DL — DUAL TECHNOLOGY CEILING MOUNTED DAYLIGHT SENSOR.

HS — CEILING MOUNTED HIGH CEILING OCCUPANCY SENSOR.

LC — DIGITAL LIGHTING ROOM CONTROLLER.

NB — DIGITAL LIGHTING NETWORK BRIDGE.

POWER OUTLETS:

20A-125V DUPLEX RECEPTACLE. "GF" INDICATES GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE.

20A-125V FOURPLEX RECEPTACLE.

SPECIAL PURPOSE SINGLE POWER RECEPTACLE. RATED AS INDICATED (IF NO RATING INDICATED, RECEPTACLE RATING SHALL MATCH BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE SIZE AND SHALL MEET REQUIREMENTS OF EQUIPMENT BEING CONNECTED). "C" INDICATES CLOCK OUTLET.

SPECIAL PURPOSE RECEPTACLE.

SAME AS DUPLEX RECEPTACLE EXCEPT ISOLATED GROUND TYPE RECEPTACLE.

SAME AS FOURPLEX RECEPTACLE EXCEPT ISOLATED GROUND TYPE RECEPTACLE.

AC — INDICATES RECEPTACLE SHALL BE MOUNTED ABOVE COUNTER TOP. REFER TO ARCHITECT FOR EXACT HEIGHT ABOVE COUNTER.

LC1-X — CIRCUIT DESIGNATION NEXT TO RECEPTACLE DEVICES INDICATES BRANCH CIRCUIT NUMBER. RE: PANEL SCHEDULES FOR INFORMATION.

WP — "WP" INDICATES WEATHER PROOF DEVICE.

EQUIPMENT:

+42" — A NOTATION INDICATING THE MOUNTING HEIGHT OF A DEVICE AS MEASURED FROM FINISHED FLOOR OR GRADE TO CENTER LINE OF DEVICE.

MOTOR.

DISCONNECT SWITCH. FRAME SIZE/FUSE SIZE/POLES AS INDICATED. "NF" INDICATES NON-FUSIBLE. NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED. PROVIDE FUSED BUSWAY PLUG WHEN SWITCH IS INDICATED ON BUSWAY. ALL DISCONNECT SWITCHES SHALL BE 30/NF/3 UNLESS OTHERWISE NOTED.

SINGLE CIRCUIT BREAKER IN INDIVIDUAL ENCLOSURE.

MAGNETIC MOTOR CONTROLLER. NUMBER INDICATES NEMA SIZE. STARTER NEMA SIZE SHALL BE "NEMA 1" UNLESS OTHERWISE NOTED.

COMBINATION DISCONNECT SWITCH/MOTOR CONTROLLER.

CONTACTOR

PANELBOARD SWITCHBOARD/DP

TRANSFORMER

GROUNDING CONNECTION TO GROUNDING ELECTRODE AS DEFINED IN NEC ARTICLE 250.

BELL. "WP" INDICATES OUTDOOR RATED.

LINE TYPES:

SITE PLAN:

OHE — OVERHEAD ELECTRICAL LINES.

UGP — UNDERGROUND ELECTRICAL PRIMARY.

UNDERGROUND ELECTRICAL SECONDARY.

FLOOR PLANS:

LIGHTING SWITCH LEG.

LOW VOLTAGE WIRING.

DAYLIGHT LIGHTING ZONE INDICATION.

POWER SUPPLY LINES.

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH / TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61527
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: LARRY A. SCHAFFER
CHECKED BY: DON RICHARDS

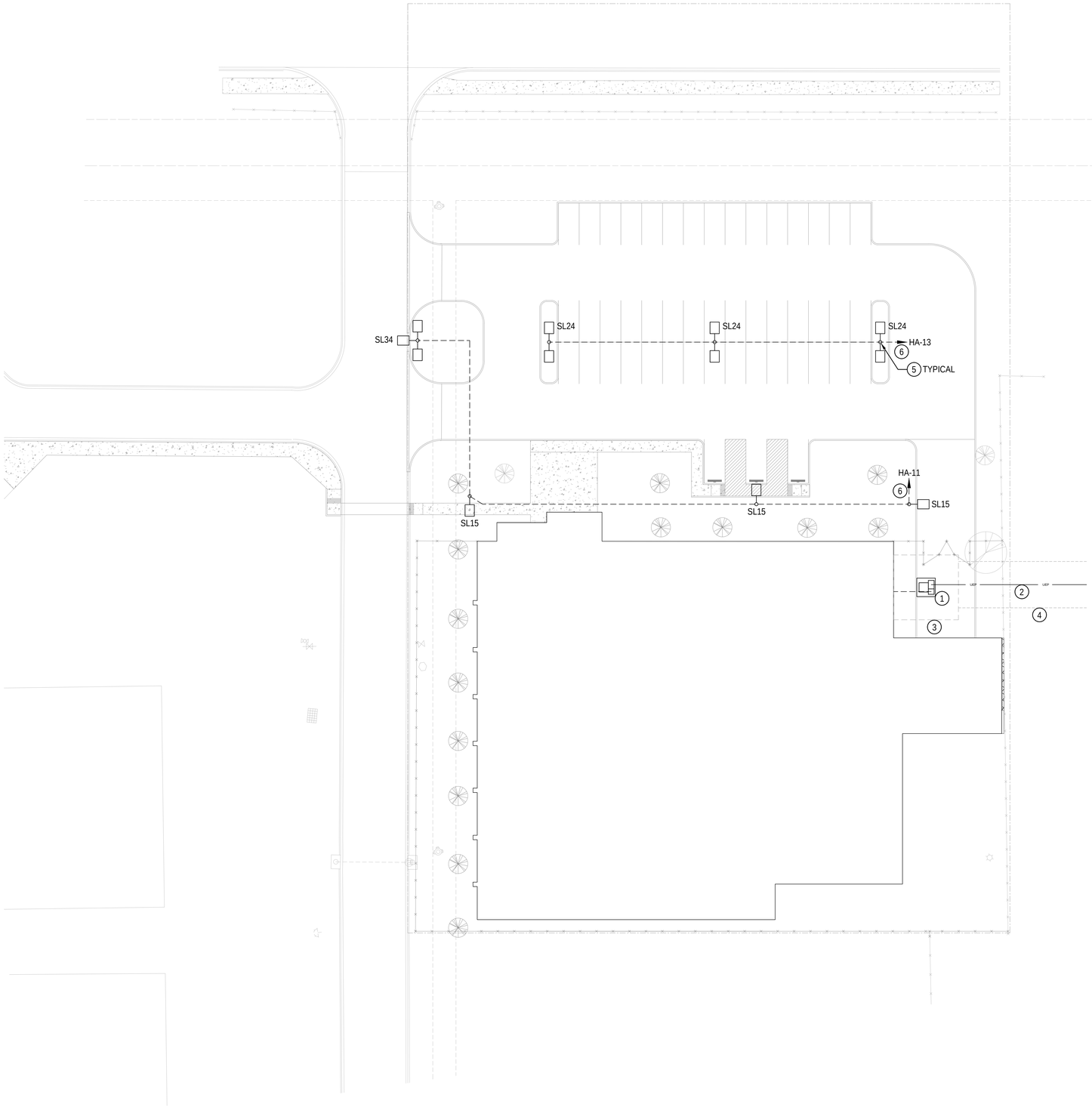
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

ELECTRICAL SYMBOLS AND ABBREVIATIONS

E0.01



ELECTRICAL GENERAL NOTES:

1. COORDINATE ALL NEW SITE WORK WITH ALL OTHER DISCIPLINES AND EXISTING SITE UTILITIES PRIOR TO THE START OF CONSTRUCTION.
2. COORDINATE WITH TECHNOLOGY DRAWING FOR ADDITIONAL ELECTRICAL ROUGH-IN REQUIREMENTS PRIOR TO THE START OF CONSTRUCTION.
3. COORDINATE ANY AND POWER OUTAGES WITH OWNER MIN. 72 HOURS PRIOR TO OUTAGE.

ELECTRICAL KEYED NOTES:

1. NEW UTILITY COMPANY SERVICE PAD MOUNTED TRANSFORMER. COORDINATE EXACT LOCATION ON SITE WITH CIVIL DRAWINGS AND UTILITY COMPANY. CONCRETE HOUSEKEEPING PAD TO BE INSTALLED IN ACCORDANCE WITH UTILITY COMPANY STANDARDS.
2. NEW UNDERGROUND ELECTRICAL PRIMARY. TRENCH AND CONDUITS TO BE INSTALLED BY DIV. 26 CONTRACTOR IN ACCORDANCE WITH UTILITY COMPANY INSTALLATION STANDARDS. UTILITY COMPANY SHALL PULL CONDUCTORS FROM NEW LOOP FEED TRANSFORMER INSTALLED NEAR EXISTING BUILDING NEXT TO TRACK ON SITE AND TERMINATE AT NEW SERVICE TRANSFORMER LOCATED AT POOL BUILDING. SEE DETAIL ?/E7.01. UTILITY COMPANY SHALL REPLACE EXISTING 500KVA RADIAL FEED PRIMARY TRANSFORMER LOCATED NEAR TRACK WITH NEW LOOP FEED TRANSFORMER AT SAME LOCATION.
3. NEW 20'-0" x20'-0" UTILITY COMPANY EASEMENT AROUND SERVICE TRANSFORMER.
4. NEW 20'-0" UNDERGROUND PRIMARY EASEMENT.
5. NEW SITE LIGHTING POLE BASE. SEE DETAIL ?/E7.01.
6. INSTALL 2#10, #10GND, 3/4"C. SITE LIGHTING CIRCUIT TO CIRCUITED THROUGH LIGHTING CONTROLLER. LIGHTING SHALL BE CONTROLLED VIA ROOF MOUNTED PHOTOCELL AND CONTROLLER. SEE DETAIL ?/E7.??.

1 ELECTRICAL SITE PLAN - EARLY COLLEGE HS
SCALE: 1' = 30' 0"

Z:\Projects\San\18\18309SP\MEPT\2_ELECTRICAL\E-1.01.dwg
4/5/2019 8:31:59 AM

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED PROFESSIONAL ENGINEER
04 / 11 / 19
LEAF ENGINEERS
F-18672

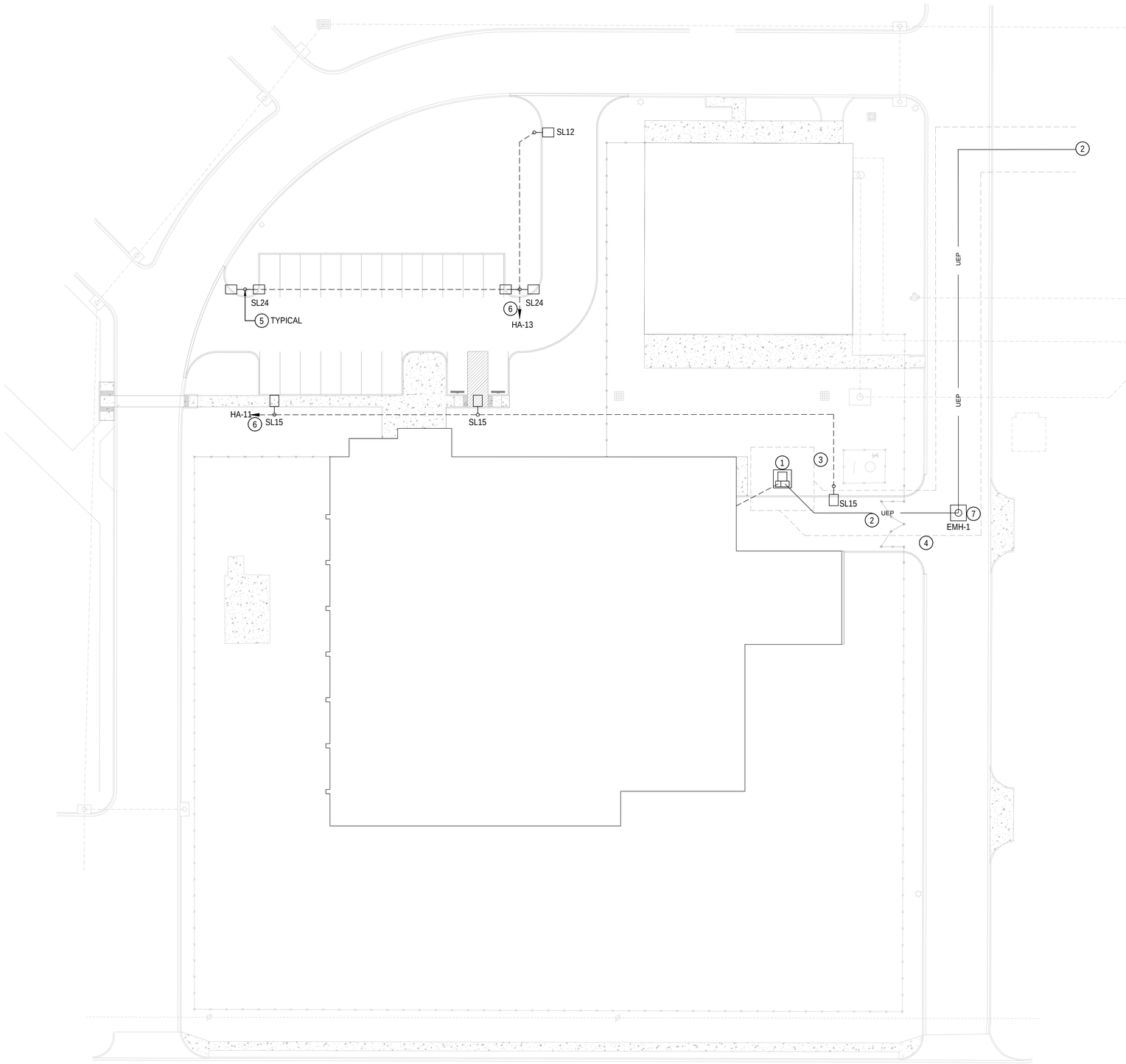
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: LARRY A. SCHAFFER
CHECKED BY: DON RICHARDS
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

EARLY COLLEGE HS ELECTRICAL SITE PLAN

E1.01



ELECTRICAL GENERAL NOTES:

1. COORDINATE ALL NEW SITE WORK WITH ALL OTHER DISCIPLINES AND EXISTING SITE UTILITIES PRIOR TO THE START OF CONSTRUCTION.
2. COORDINATE WITH TECHNOLOGY DRAWING FOR ADDITIONAL ELECTRICAL ROUGH-IN REQUIREMENTS PRIOR TO THE START OF CONSTRUCTION.
3. COORDINATE ANY AND POWER OUTAGES WITH OWNER MIN. 72 HOURS PRIOR TO OUTAGE.

ELECTRICAL KEYED NOTES:

1. NEW UTILITY COMPANY SERVICE PAD MOUNTED TRANSFORMER. COORDINATE EXACT LOCATION ON SITE WITH CIVIL DRAWINGS AND UTILITY COMPANY. CONCRETE HOUSEKEEPING PAD TO BE INSTALLED IN ACCORDANCE WITH UTILITY COMPANY STANDARDS.
2. NEW UNDERGROUND ELECTRICAL PRIMARY. TRENCH AND CONDUITS TO BE INSTALLED BY DIV. 26 CONTRACTOR IN ACCORDANCE WITH UTILITY COMPANY INSTALLATION STANDARDS. UTILITY COMPANY SHALL PULL CONDUCTORS FROM NEW LOOP FEED TRANSFORMER INSTALLED NEAR EXISTING BUILDING NEXT TO TRACK ON SITE AND TERMINATE AT NEW SERVICE TRANSFORMER LOCATED AT POOL BUILDING. SEE DETAIL ?/E7.01. UTILITY COMPANY SHALL REPLACE EXISTING 500KVA RADIAL FEED PRIMARY TRANSFORMER LOCATED NEAR TRACK WITH NEW LOOP FEED TRANSFORMER AT SAME LOCATION.
3. NEW 20'-0" x20'-0" UTILITY COMPANY EASEMENT AROUND SERVICE TRANSFORMER.
4. NEW 20'-0" UNDERGROUND PRIMARY EASEMENT.
5. NEW SITE LIGHTING POLE BASE. SEE DETAIL ?/E7.01.
6. INSTALL 2#10, #10GND, 3/4"C, SITE LIGHTING CIRCUIT TO CIRCUITED THROUGH LIGHTING CONTROLLER. LIGHTING SHALL BE CONTROLLED VIA ROOF MOUNTED PHOTOCELL AND CONTROLLER. SEE DETAIL ?/E7.??.
7. INSTALL NEW UTILITY COMPANY ELECTRICAL PRIMARY MANHOLE IN ACCORDANCE WITH UTILITY COMPANY INSTALLATION STANDARDS.

1 **ELECTRICAL SITE PLAN - MEMORIAL HS**
SCALE: 1' = 20' 0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61522
LICENSED
PROFESSIONAL ENGINEER
04 / 11 / 19
LEAF ENGINEERS
F-18672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: LARRY A. SCHAFFER
CHECKED BY: DON RICHARDS
REVISIONS

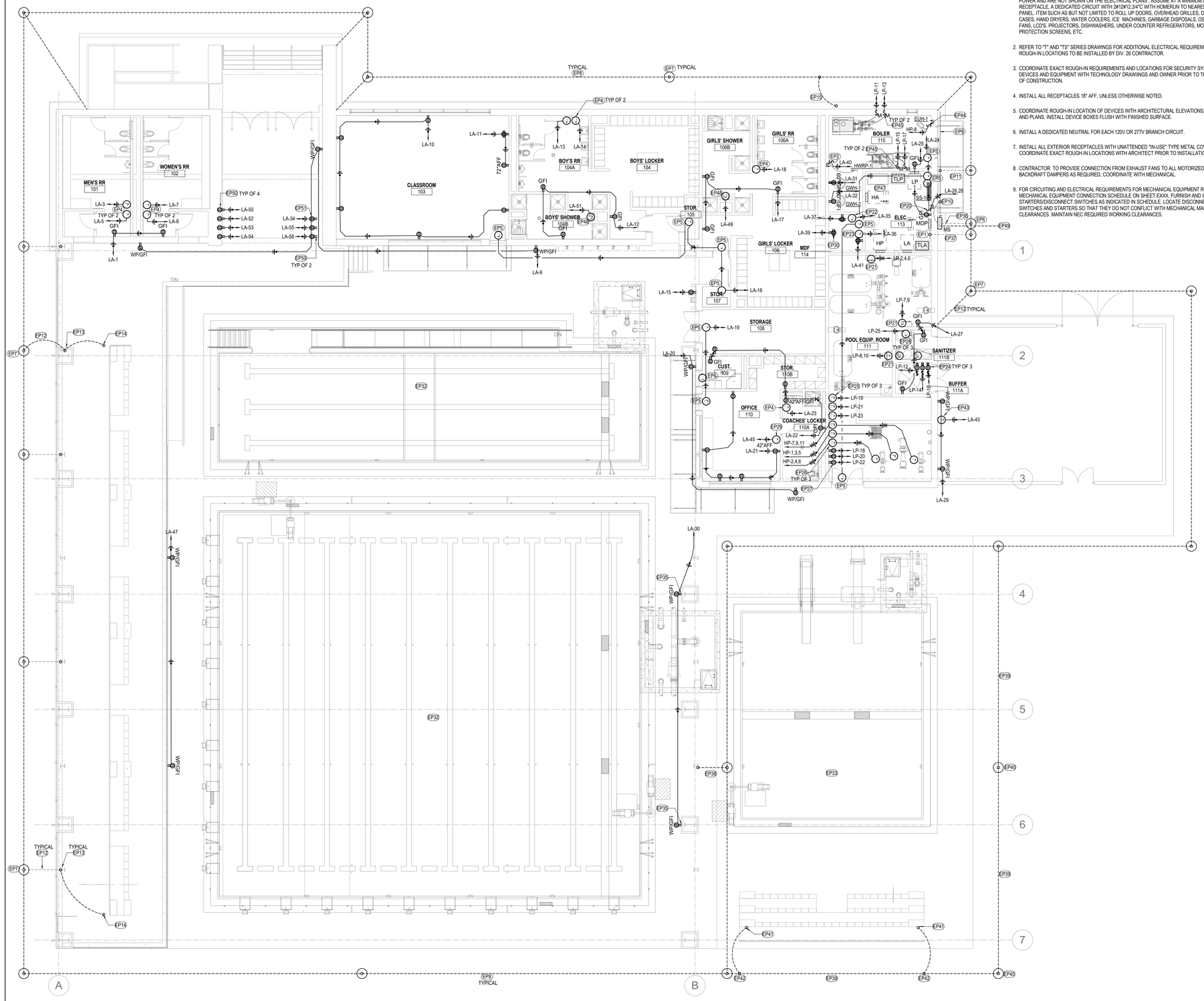
No.	Description	Date

: **ISSUE FOR PROPOSAL**

MEMORIAL HS ELECTRICAL SITE PLAN

E1.02

Z:\Projects\San\18\18309SP\MEPT\2_ELECTRICAL\E-1.01.dwg
4/5/2019 8:31:59 AM



GENERAL NOTES - POWER PLAN

1. FOR EQUIPMENT OR DEVICES SHOWN ON THE ARCHITECTURAL DRAWINGS THAT REQUIRE POWER AND ARE NOT SHOWN ON THE ELECTRICAL PLANS , ASSUME AT A MINIMUM A DUPLEX RECEPTACLE, A DEDICATED CIRCUIT WITH 2#12#12,3/4"C WITH HOMERUN TO NEAREST 120/208V PANEL. ITEM SUCH AS BUT NOT LIMITED TO ROLL UP DOORS, OVERHEAD GRILLES, DISPLAY CASES, HAND DRYERS, WATER COOLERS, ICE MACHINES, GARBAGE DISPOSALS, OSCILLATING FANS, LCD'S, PROJECTORS, DISHWASHERS, UNDER COUNTER REFRIGERATORS, MOTORIZED PROTECTION SCREENS, ETC.
2. REFER TO "T" AND "TS" SERIES DRAWINGS FOR ADDITIONAL ELECTRICAL REQUIREMENTS AND ROUGH-IN LOCATIONS TO BE INSTALLED BY DIV. 26 CONTRACTOR.
3. COORDINATE EXACT ROUGH-IN REQUIREMENTS AND LOCATIONS FOR SECURITY SYSTEM DEVICES AND EQUIPMENT WITH TECHNOLOGY DRAWINGS AND OWNER PRIOR TO THE START OF CONSTRUCTION.
4. INSTALL ALL RECEPTACLES 18" AFF, UNLESS OTHERWISE NOTED.
5. COORDINATE ROUGH-IN LOCATION OF DEVICES WITH ARCHITECTURAL ELEVATIONS, DETAILS AND PLANS. INSTALL DEVICE BOXES FLUSH WITH FINISHED SURFACE.
6. INSTALL A DEDICATED NEUTRAL FOR EACH 120V OR 277V BRANCH CIRCUIT.
7. INSTALL ALL EXTERIOR RECEPTACLES WITH UNATTENDED "IN-USE" TYPE METAL COVERS. COORDINATE EXACT ROUGH-IN LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
8. CONTRACTOR TO PROVIDE CONNECTION FROM EXHAUST FANS TO ALL MOTORIZED BACKDRAFT DAMPERS AS REQUIRED, COORDINATE WITH MECHANICAL.
9. FOR CIRCUITING AND ELECTRICAL REQUIREMENTS FOR MECHANICAL EQUIPMENT REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE ON SHEET EXXX. FURNISH AND INSTALL STARTERS/DISCONNECT SWITCHES AS INDICATED IN SCHEDULE. LOCATE DISCONNECT SWITCHES AND STARTERS SO THAT THEY DO NOT CONFLICT WITH MECHANICAL MAINTENANCE CLEARANCES. MAINTAIN NEC REQUIRED WORKING CLEARANCES.

KEYED NOTES - POWER PLAN

EP2 INSTALL 120V, 20A, HEAVYDUTY, TOGGLE DISCONNECT SWITCH FOR DOMESTIC WATER RECIRC PUMP WITH 2#12,#12GND,3/4"C ON WALL 48"AFF TO CENTER OF SWITCH IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION WIRING DIAGRAMS.

EP4 CONNECTION FOR ELECTRIC HAND DRYER ON WALL 48"AFF. COORDINATE EXACT LOCATION AND ROUGH-IN REQUIREMENTS WITH ARCHITECTURAL DRAWINGS AND INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WIRING DIAGRAMS.

EP5 CONNECTION FOR DOOR POWER SUPPLY. INSTALL ABOVE ACCESSIBLE CEILING AND COORDINATE EXACT LCT LOCATION WITH SECURITY DRAWINGS AND OWNER PRIOR TO INSTALLATION.

EP7 10'-0" LONG X 3/4" DIA. COPPER GROUND ROD DRIVEN INTO GROUND AT THIS APPROXIMATE LOCATION 5'-0" OUTSIDE OF BUILDING AS PART OF THE GROUNDING ELECTRODE SYSTEM AND GROUNDING SYSTEM LOOP.

EP8 #3/0 BARE COPPER GROUNDING ELECTRODE CONDUCTOR FOR GROUNDING LOOP.

EP9 20'-0" LONG GROUND ELECTRODE ENCASED IN CONCRETE.

EP11 INSTALL #3 BARE COPPER GROUNDING ELECTRODE CONDUCTOR FROM ENCASED GROUNDING ELECTRODE TO DRIVEN GROUND ROD ON GROUND LOOP.

EP12 #6 BARE COPPER GROUNDING ELECTRODE CONDUCTOR CONNECTED TO BUILDING STEEL AND BONDED TO GROUNDING ELECTRODE SYSTEM IN ACCORDANCE WITH NEC ARTICLE 250.

EP13 BONDED GROUND CONNECTION TO BUILDING STEEL IN ACCORDANCE WITH NEC ARTICLE 250.

EP14 #6 BARE COPPER GROUNDING ELECTRODE CONDUCTOR CONNECTED TO BLEACHERS AND BONDED TO BUILDING STEEL IN ACCORDANCE WITH NEC ARTICLE 250.

EP15 #6 BARE COPPER GROUNDING ELECTRODE CONDUCTOR CONNECTED TO DOMESTIC WATER LINE AND BONDED TO GROUNDING ELECTRODE IN ACCORDANCE WITH NEC ARTICLE 250.

EP20 INSTALL 250V, 20A, HEAVYDUTY, TOGGLE DISCONNECT SWITCH FOR SS-1 UNIT ON WALL 48"AFF TO CENTER OF SWITCH. UNIT SERVED FROM SSCU LOCATED ON ROOF. MAKE FINAL TERMINATIONS AT UNIT IN ACCORDNACE WITH MANUFACTURER'S INSTALLATION WIRING DIAGRAMS.

EP21 CONNECTION FOR ULTRAVIOLET SYSTEM. COORDINATE FINAL LOCATION WITH POOL CONSULTANT PRIOR TO ROUGH-IN.

EP22 CONNECTION FOR FIRE ALARM NAC PANEL. SERVE FROM DEDICATED 20A1P CIRCUIT BREAKER AND LABEL "FIRE ALARM EQUIPMENT". CIRCUIT BREAKER SHALL LOCKABLE TYPE AND LOCKED IN THE CLOSED (ON) POSITION.

EP23 CONNECTION FOR SECURITY PANEL. COORDINATE EXACT LOCATION AND ROUGH-IN REQUIREMENTS WITH TECHNOLOGY DRAWINGS PRIOR TO INSTALLATION.

EP24 CONNECTION FOR STENNER PUMP. MOUNT RECEPTACLE 18" AFF; MOUNT MOTOR RATED SWITCH 48"AFF. COORDINATE FINAL LOCATION WITH POOL CONSULTANT PRIOR TO ROUGH-IN.

EP25 CONNECTION FOR CHEMICAL CONTROL PANEL. COORDINATE FINAL LOCATION WITH POOL CONSULTANT PRIOR TO ROUGH-IN.

EP26 VFD FURNISHED BY POOL EQUIPMENT CONTRACTOR INSTALLED BY ELECTRICAL. VFD TO CONTROL PUMPS, CIRCUIT POOL PUMPS THROUGH VFD.

EP27 CONNECTION FOR WATER LEVEL CONTROL PANEL. COORDINATE FINAL LOCATION WITH POOL CONSULTANT PRIOR TO ROUGH-IN.

EP28 CONNECTION FOR CHLORINATION PUMP. COORDINATE FINAL LOCATION WITH POOL CONSULTANT PRIOR TO ROUGH-IN.

EP29 CONNECTION FOR TIME CLOCK. COORDINATE FINAL ELECTRICAL CONNECTION REQUIREMENT WITH TIME CLOCK INSTALLER PRIOR TO ROUGH-IN.

EP30 QUADRUPLEX RECEPTACLE FOR MDF RACK. LOCATE JUST ABOVE THE LADDER TRAY. COORDINATE FINAL LOCATION WITH MDF EQUIPMENT INSTALLER PRIOR TO ROUGH-IN.

EP32 CONTRACTOR SHALL INSTALL EQUIPOTENTIAL PLANE GROUNDING SYSTEM AT POOL IN ACCORDANCE WITH NEC ARTICLE 680. CONTRACTOR SHALL INSTALL 12"X12" WIRE MESH MIN. 36" AROUND POOL ENCLOSURE PER NEC ARTICLE 680. POOL EQUIPOTENTIAL PLANE GROUNDING SYSTEM SHALL BE BONDED TO THE GROUND RING IN ACCORDANCE WITH NEC ARTICLES 250 AND 680.

EP33 UNDER ALTERNATE #2 DIVE POOL - CONTRACTOR SHALL INSTALL EQUIPOTENTIAL PLANE GROUNDING SYSTEM AT POOL IN ACCORDANCE WITH NEC ARTICLE 680. CONTRACTOR SHALL INSTALL 12"X12" WIRE MESH MIN. 36" AROUND POOL ENCLOSURE PER NEC ARTICLE 680. POOL EQUIPOTENTIAL PLANE GROUNDING SYSTEM SHALL BE BONDED TO THE GROUND RING IN ACCORDANCE WITH NEC ARTICLES 250 AND 680.

EP35 UNDER ALTERNATE #1 - INSTALL OUTLETS ON COLUMN AS INDICATED.

EP36 #6 BARE COPPER GROUNDING ELECTRODE CONDUCTOR FROM BUILDING DISCONNECT AND BONDED TO GROUNDING ELECTRODE AT GROUND RING IN ACCORDANCE WITH NEC ARTICLE 250.

EP37 #6 BARE COPPER GROUNDING ELECTRODE CONDUCTOR FROM GROUND BUS AND BONDED TO GROUNDING ELECTRODE AT GROUND RING IN ACCORDANCE WITH NEC ARTICLE 250.

EP38 UNDER ALTERNATE #1 - #6 BARE COPPER GROUNDING ELECTRODE CONDUCTOR FROM BUILDING STEEL AND BONDED TO GROUNDING ELECTRODE AT GROUND RING IN ACCORDANCE WITH NEC ARTICLE 250.

EP39 UNDER ALTERNATE #2 - INSTALL #3/0 BARE COPPER GROUNDING ELECTRODE CONDUCTOR FOR GROUNDING LOOP.

EP40 UNDER ALTERNATE #2 - INSTALL 10'-0" LONG X 3/4" DIA. COPPER GROUND ROD DRIVEN INTO GROUND AT THIS APPROXIMATE LOCATION 5'-0" OUTSIDE OF CONCRETE PAD AS PART OF THE GROUNDING ELECTRODE SYSTEM AND GROUNDING SYSTEM LOOP.

EP41 UNDER ALTERNATE #2 - INSTALL #6 BARE COPPER GROUNDING ELECTRODE CONDUCTOR CONNECTED TO BLEACHERS AND BONDED TO GROUNDING SYSTEM LOOP IN ACCORDANCE WITH NEC ARTICLE 250.

EP42 UNDER ALTERNATE #2 - BONDED CONNECTION TO GROUNDING SYSTEM LOOP IN ACCORDANCE WITH NEC ARTICLE 250.

EP43 CONNECTION FOR IRRIGATION CONTROLLER AT 48"AFF. COORDINATE EXACT LOCATION WITH LANDSCAPE DRAWINGS PRIOR TO THE START OF CONSTRUCTION.

EP44 INSTALL 250V, 20A, HEAVYDUTY, TOGGLE DISCONNECT SWITCH FOR ELECTRIC UNIT HEATER WITH 2#12,#12GND,3/4"C ON WALL 48"AFF TO CENTER OF SWITCH IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION WIRING DIAGRAMS.

EP45 INSTALL 120V, 20A, HEAVYDUTY, TOGGLE DISCONNECT SWITCH FOR POOL BOILER WITH 2#12,#12GND,3/4"C ON WALL 48"AFF TO CENTER OF SWITCH IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION WIRING DIAGRAMS.

EP47 LOCATION OF BATTERY INVERTER.

EP48 CONNECTION FOR SWIM SUIT SPINNER MACHINE WITH 2#12,#12GND,3/4"C. COORDINATE EACT LOCATION AND ROUGH-IN REQUIREMENTS WITH MANUFACTURER PRIOR TO THE START OF CONSTRUCTION.

EP49 UNDERGROUND ELECTRICAL DUCTBANK TO BUILDING FROM SERVICE TRANSFORMER. REFER TO SITE PLAN FOR CONTINUATION.

EP50 INSTALL 120V, 20A, WEATHER RESISTANT GFI RECEPTACLE ON STRUCTURAL FRAME OF SCOREBOARD FOR POWER TO SCOREBOARD MODULES. INSTALL 2#12, #12GND,3/4"C TO EACH DEVICE. COORDINATE EXACT ELECTRICAL ROUGH-IN LOCATION WITH SCOREBOARD MANUFACTURER PRIOR TO INSTALLATION. REFER TO POOL CONSULTANT DRAWINGS FOR ADDITIONAL INFORMATION.

EP51 INSTALL 120V, 20A, WEATHER RESISTANT GFI RECEPTACLE ON STRUCTURAL FRAME OF SCOREBOARD FOR SCOREBOARD CONTROLS. INSTALL 2#12, #12GND,3/4"C. COORDINATE EXACT ELECTRICAL ROUGH-IN LOCATION WITH SCOREBOARD MANUFACTURER PRIOR TO INSTALLATION. REFER TO POOL CONSULTANT DRAWINGS FOR ADDITIONAL INFORMATION.

LEAF ENGINEERS
A PGAL COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

1 **ELECTRICAL POWER PLAN**
SCALE: 1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61522
LICENSED PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	APRIL 11, 2019
DRAWN BY	LARRY A. SCHAFFER
CHECKED BY	DON RICHARDS

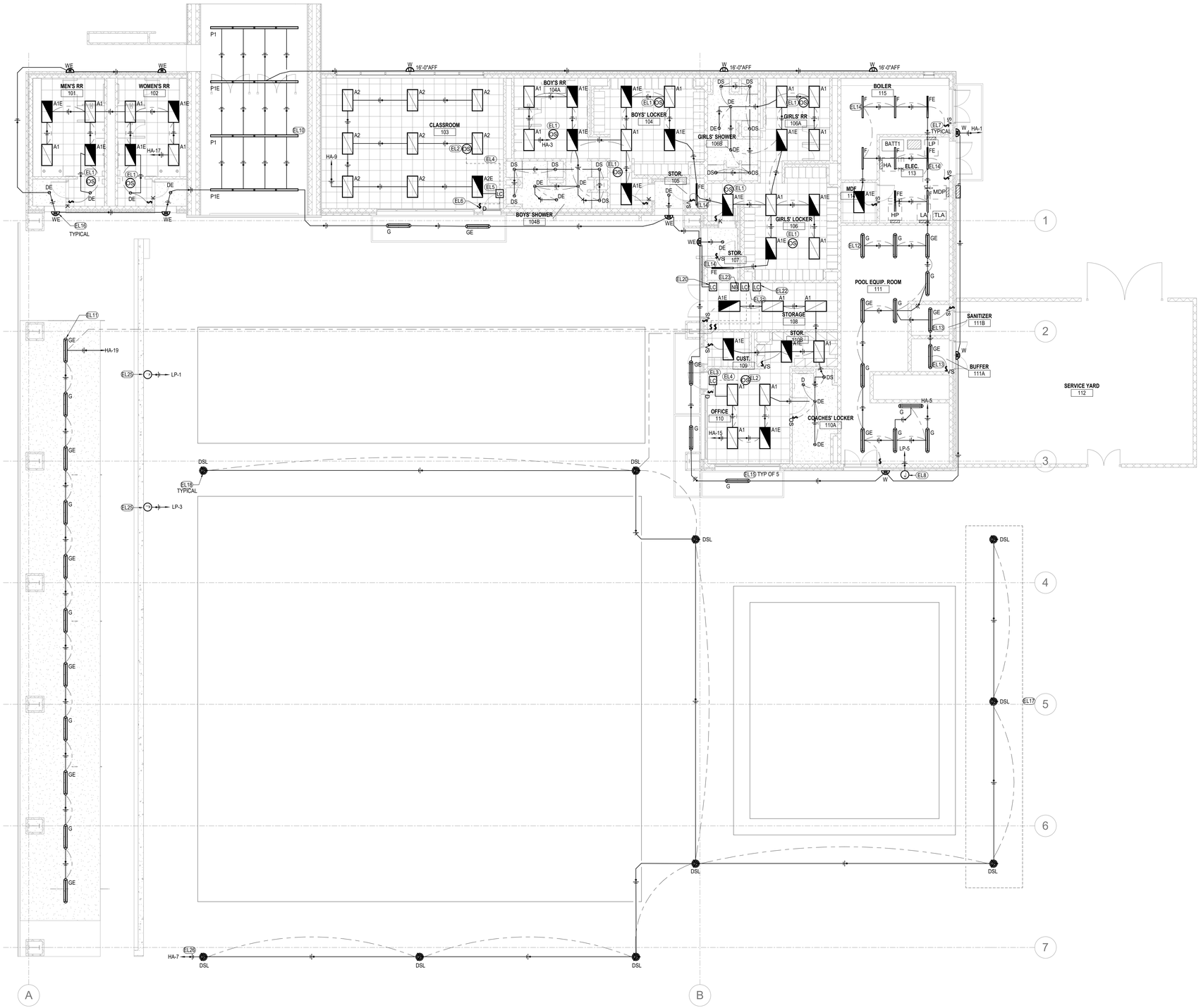
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

POWER PLAN

E2.01



GENERAL NOTES - LIGHTING PLAN

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN (RCP) FOR EXACT LOCATION OF LIGHT FIXTURES. WHERE DISCREPANCIES EXIST THE LIGHTING SHOWN ON THIS PLAN SHALL GOVERN. FURNISH FIXTURES WITH TRIM COMPATIBLE WITH THE TYPE OF CEILING AS INDICATED ON THE RCP.
2. COORDINATE PLACEMENT OF FIXTURES WITH ACTUAL INSTALLATION OF MECHANICAL EQUIPMENT AND DUCTWORK.
3. INSTALL A DEDICATED NEUTRAL FOR EACH 120V OR 277V BRANCH CIRCUIT.
4. ALL EXIT LIGHTS SHALL BE CONNECTED TO THE UN-SWITCHED PHASE CONDUCTOR (CONSTANT HOT) OF THE CIRCUIT SERVING THE LIGHTING FIXTURES WITHIN THE SPACE. TAP UNSWITCHED HOTLEG AHEAD OF LIGHTING CONTROL PANEL OR CONTROLLER.
5. CONNECT EMERGENCY BATTERY UNITS IN LIGHTING FIXTURES TO THE UN-SWITCHED PHASE CONDUCTOR (CONSTANT HOT) OF THE CIRCUIT SERVING THE FIXTURES. TAP UNSWITCHED HOTLEG AHEAD OF LIGHTING CONTROL PANEL OR CONTROLLER.
6. WHERE TWO LIGHT SWITCHES ARE SHOWN ADJACENT TO EACH OTHER, THE SWITCH NEAREST THE DOOR CONTROLS THE ROW OF FIXTURES AT THE FRONT OF THE ROOM AND THE OTHER SWITCH CONTROLS THE REMAINING FIXTURES IN THE SPACE. UNLESS OTHERWISE NOTED.
7. ALL LIGHT SWITCHES AND WALL SWITCH OCCUPANCY SENSORS SHALL BE INSTALLED ON THE STRIKE SIDE OF DOOR. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION AND FINAL DOOR LOCATIONS IN FIELD.
8. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS, MOUNTING HEIGHTS OF THE EXIT SIGNS AND THE DIRECTIONAL CHEVRONS WITH THE ARCHITECTS EGRESS PLAN PRIOR TO INSTALLATION.
9. IN EXPOSED STRUCTURE AREAS. ROUTE FEEDER AND BRANCH CIRCUIT RACEWAYS PARALLEL AND PERPENDICULAR TO STRUCTURE.

KEYED NOTES - LIGHTING PLAN

EL1 LINE VOLTAGE CEILING MOUNTED OCCUPANCY SENSOR. SEE DETAIL 5/E7.02.

EL2 LOW VOLTAGE CEILING MOUNTED OCCUPANCY SENSOR. SEE ELECTRICAL DETAILS AND SPECIFICATIONS 26 09 43.

EL3 COACHES OFFICE LIGHTING CONTROLLER MOUNTED ABOVE ACCESSIBLE CEILING NEAR ENTRY DOOR. SEE DETAIL 1/E7.02 AND SPECIFICATION SECTION 26 09 43.

EL4 CLASS 2, CAT 5E CABLING FROM AREA LIGHTING CONTROLLER TO ROOM OCCUPANCY SENSOR AND WALL CONTROLLER. SEE DETAILS AND SPECIFICATIONS 26 09 43

EL5 CLASSROOM LIGHTING CONTROLLER MOUNTED ABOVE ACCESSIBLE CEILING NEAR ENTRY DOOR. SEE DETAIL 2/E7.02 AND SPECIFICATION SECTION 26 09 43.

EL6 LOW VOLTAGE WALL CONTROLLER WITH DIMMER AND TWO SCENE BUTTONS. "GENERAL", "AV". SEE DETAIL 2/E7.02 AND SPECIFICATIONS 26 09 43.

EL7 LINE VOLTAGE WALL MOUNTED VACANCY SENSOR. SEE ELECTRICAL DETAIL 4/E7.02 AND SPECIFICATIONS 26 09 43.

EL8 UNDER ALTERNATE #2 - INSTALL JUNCTION BOX WITH REMOVABLE GASKETED COVER FOR DIVE POOL LIGHTS. CAP OFF CONDUCTORS AND MAKE SAFE. CONTRACTOR TO INSTALL MIN. 3/4" CONDUIT TO POOL LIGHTING IN ACCORANCE WITH NEC ARTICLE 680 AND POOL CONSULTANT DRAWINGS.

EL10 INSTALL TYPE "P1" AND "P1E" LIGHT FIXTURES SUSPENDED FROM ENTRY CANOPY 2'-0" BELOW CANOPY OR HEIGHT AS SPECIFIED BY ARCHITECT AND SUPPORT FROM STRUCTURE IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

EL11 INSTALL TYPE "G" AND "GE" LIGHT FIXTURES ON UNDERSIDE OF BLEACHER CANOPY AS HIGH AS POSSIBLE AND SUPPORT FROM STRUCTURE USING HDG STEEL "C" CHANNEL SUPPORTS AND ALLTHREAD RODS.

EL12 INSTALL TYPE "G" AND "GE" LIGHT FIXTURES IN SPACE 12'-0" AFF TO BOTTOM OF FIXTURE AND SUPPORT FROM STRUCTURE USING HDG STEEL "C" CHANNEL SUPPORTS AND ALLTHREAD RODS.

EL13 INSTALL TYPE "G" AND "GE" LIGHT FIXTURES IN SPACE 10'-0" AFF TO BOTTOM OF FIXTURE AND SUPPORT FROM STRUCTURE USING HDG STEEL "C" CHANNEL SUPPORTS AND ALLTHREAD RODS.

EL14 INSTALL TYPE "F" AND "FE" LIGHT FIXTURES IN SPACE 10'-0" AFF TO BOTTOM OF FIXTURE AND SUPPORT FROM STRUCTURE USING HDG STEEL "C" CHANNEL SUPPORTS AND ALLTHREAD RODS.

EL16 INSTALL TYPE "W" AND "WE" FIXTURE ON WALL 10'-0" AFF TO BOTTOM OF FIXTURE. COORDINATE EXACT LOCATION AND HEIGHT WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

EL17 UNDER ALTERNATE #2 - INSTALL LIGHTING AT DIVING POOL AS INDICATED.

EL18 NEW DECORATIVE POOL DECK LIGHTING POLE BASE. SEE DETAIL 3/E7.01.

EL20 NON-DIMMING LIGHTING CONTROLLER MOUNTED ABOVE ACCESSIBLE CEILING NEAR ENTRY DOOR FOR EXTERIOR BUILDING LIGHTING. SEE DETAIL 3/E7.02 AND SPECIFICATION SECTION 26 09 43.

EL21 NON-DIMMING LIGHTING CONTROLLER MOUNTED ABOVE ACCESSIBLE CEILING NEAR ENTRY DOOR FOR BLEACHER LIGHTING. CONTROLLER NOT REQUIRED IF ALTERNATE #1 IS ACCEPTED. SEE DETAIL 6/E7.02 AND SPECIFICATION SECTION 26 09 43.

EL22 NON-DIMMING LIGHTING CONTROLLER MOUNTED ABOVE ACCESSIBLE CEILING NEAR ENTRY DOOR FOR EXTERIOR POOL DECK LIGHTING. CONTROLLER NOT REQUIRED IF ALTERNATE #1 IS ACCEPTED. SEE DETAIL 6/E7.02 AND SPECIFICATION SECTION 26 09 43.

EL23 INSTALL NETWORK BRIDGE FOR EXTERIOR LIGHTING ABOVE ACCESSIBLE CEILING. SEE DETAIL 3/E7.02 AND SPECIFICATION SECTION 26 09 43.

EL25 BASE BID - JUNCTION BOX WITH REMOVABLE GASKETED COVER FOR POOL LIGHTS. CAP OFF CONDUCTORS AND MAKE SAFE. CONTRACTOR TO INSTALL MIN. 3/4" CONDUIT TO POOL LIGHTING IN ACCORANCE WITH NEC ARTICLE 680 AND POOL CONSULTANT DRAWINGS.

EL26 BASE BID - POOL DECK LIGHTING TO BE CIRCUITED THROUGH THE LIGHTING BATTERY INVERTER LOCATED IN THE ELECTRICAL ROOM.

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

1 **LIGHTING PLAN**
SCALE: 1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	APRIL 11, 2019
DRAWN BY	LARRY A. SCHAFFER
CHECKED BY	DON RICHARDS

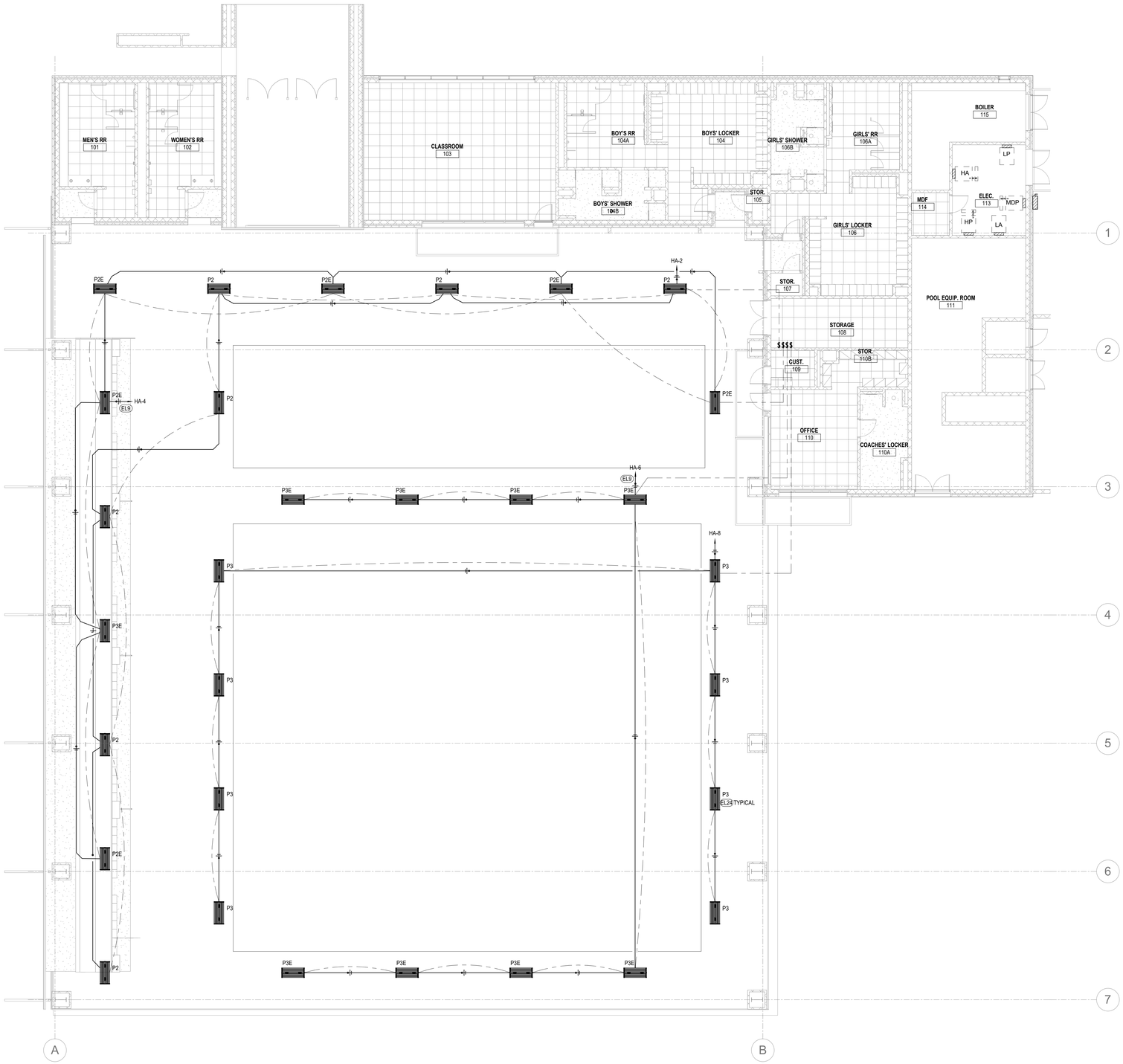
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

LIGHTING PLAN

E2.02



GENERAL NOTES - LIGHTING PLAN

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN (RCP) FOR EXACT LOCATION OF LIGHT FIXTURES. WHERE DISCREPANCIES EXIST THE LIGHTING SHOWN ON THIS PLAN SHALL GOVERN. FURNISH FIXTURES WITH TRIM COMPATIBLE WITH THE TYPE OF CEILING AS INDICATED ON THE RCP.
2. COORDINATE PLACEMENT OF FIXTURES WITH ACTUAL INSTALLATION OF MECHANICAL EQUIPMENT AND DUCTWORK.
3. INSTALL A DEDICATED NEUTRAL FOR EACH 120V OR 277V BRANCH CIRCUIT.
4. ALL EXIT LIGHTS SHALL BE CONNECTED TO THE UN-SWITCHED PHASE CONDUCTOR (CONSTANT HOT) OF THE CIRCUIT SERVING THE LIGHTING FIXTURES WITHIN THE SPACE. TAP UNSWITCHED HOTLEG AHEAD OF LIGHTING CONTROL PANEL OR CONTROLLER.
5. CONNECT EMERGENCY BATTERY UNITS IN LIGHTING FIXTURES TO THE UN-SWITCHED PHASE CONDUCTOR (CONSTANT HOT) OF THE CIRCUIT SERVING THE FIXTURES. TAP UNSWITCHED HOTLEG AHEAD OF LIGHTING CONTROL PANEL OR CONTROLLER.
6. WHERE TWO LIGHT SWITCHES ARE SHOWN ADJACENT TO EACH OTHER, THE SWITCH NEAREST THE DOOR CONTROLS THE ROW OF FIXTURES AT THE FRONT OF THE ROOM AND THE OTHER SWITCH CONTROLS THE REMAINING FIXTURES IN THE SPACE. UNLESS OTHERWISE NOTED.
7. ALL LIGHT SWITCHES AND WALL SWITCH OCCUPANCY SENSORS SHALL BE INSTALLED ON THE STRIKE SIDE OF DOOR. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION AND FINAL DOOR LOCATIONS IN FIELD.
8. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS, MOUNTING HEIGHTS OF THE EXIT SIGNS AND THE DIRECTIONAL CHEVRONS WITH THE ARCHITECTS EGRESS PLAN PRIOR TO INSTALLATION.
9. IN EXPOSED STRUCTURE AREAS. ROUTE FEEDER AND BRANCH CIRCUIT RACEWAYS PARALLEL AND PERPENDICULAR TO STRUCTURE.

KEYED NOTES - LIGHTING PLAN

EL9 UNDER ALTERNATE #1 - LIGHTING TO BE CIRCUITED THROUGH THE LIGHTING BATTERY INVERTER LOCATED IN THE ELECTRICAL ROOM.

EL24 UNDER ALTERNATE #1 - INSTALL TYPE "P2", "P2E", "P3" AND "P3E" LIGHT FIXTURES SUSPENDED FROM CANOPY 20'-0" ABOVE POOL DECK OR HEIGHT AS SPECIFIED BY ARCHITECT AND SUPPORT FROM STRUCTURE IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

1 **LIGHTING PLAN - ALTERNATE #1 CANOPY**
SCALE: 1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61521
LICENSED PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	APRIL 11, 2019
DRAWN BY	LARRY A. SCHAFFER
CHECKED BY	DON RICHARDS

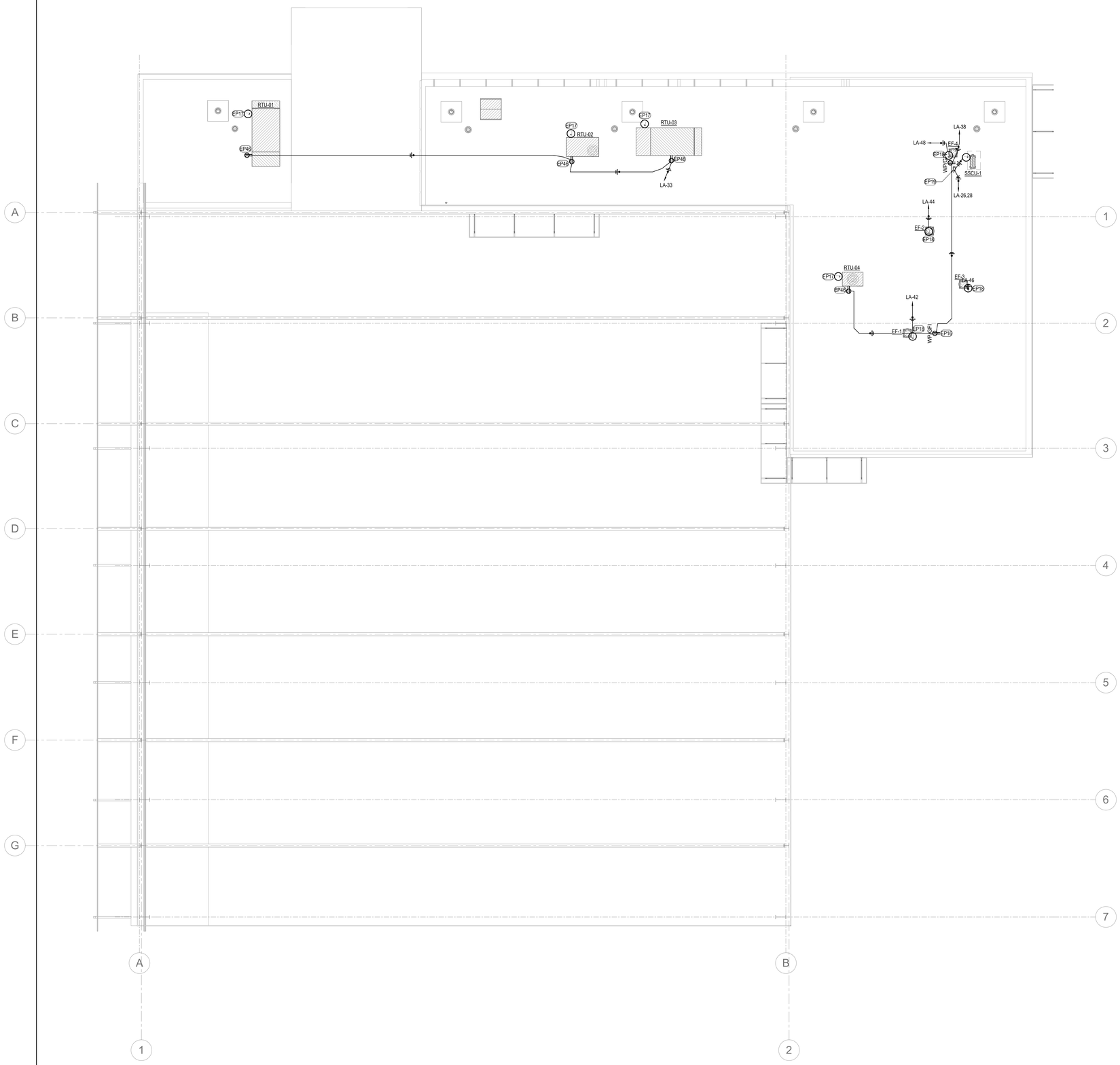
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

LIGHTING PLAN - ALTERNATE #1

E2.03



GENERAL NOTES - POWER PLAN

1. FOR EQUIPMENT OR DEVICES SHOWN ON THE ARCHITECTURAL DRAWINGS THAT REQUIRE POWER AND ARE NOT SHOWN ON THE ELECTRICAL PLANS , ASSUME AT A MINIMUM A DUPLEX RECEPTACLE, A DEDICATED CIRCUIT WITH 2#12#12,3/4"C WITH HOMERUN TO NEAREST 120/208V PANEL. ITEM SUCH AS BUT NOT LIMITED TO ROLL UP DOORS, OVERHEAD GRILLES, DISPLAY CASES, HAND DRYERS, WATER COOLERS, ICE MACHINES, GARBAGE DISPOSALS, OSCILLATING FANS, LCD'S, PROJECTORS, DISHWASHERS, UNDER COUNTER REFRIGERATORS, MOTORIZED PROTECTION SCREENS, ETC.
2. REFER TO "T" AND "TS" SERIES DRAWINGS FOR ADDITIONAL ELECTRICAL REQUIREMENTS AND ROUGH-IN LOCATIONS TO BE INSTALLED BY DIV. 26 CONTRACTOR.
3. COORDINATE EXACT ROUGH-IN REQUIREMENTS AND LOCATIONS FOR SECURITY SYSTEM DEVICES AND EQUIPMENT WITH TECHNOLOGY DRAWINGS AND OWNER PRIOR TO THE START OF CONSTRUCTION.
4. INSTALL ALL RECEPTACLES 18" AFF, UNLESS OTHERWISE NOTED.
5. COORDINATE ROUGH-IN LOCATION OF DEVICES WITH ARCHITECTURAL ELEVATIONS, DETAILS AND PLANS. INSTALL DEVICE BOXES FLUSH WITH FINISHED SURFACE.
6. INSTALL A DEDICATED NEUTRAL FOR EACH 120V OR 277V BRANCH CIRCUIT.
7. INSTALL ALL EXTERIOR RECEPTACLES WITH UNATTENDED "IN-USE" TYPE METAL COVERS. COORDINATE EXACT ROUGH-IN LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
8. CONTRACTOR TO PROVIDE CONNECTION FROM EXHAUST FANS TO ALL MOTORIZED BACKDRAFT DAMPERS AS REQUIRED, COORDINATE WITH MECHANICAL.
9. FOR CIRCUITING AND ELECTRICAL REQUIREMENTS FOR MECHANICAL EQUIPMENT REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE ON SHEET EXXX. FURNISH AND INSTALL STARTERS/DISCONNECT SWITCHES AS INDICATED IN SCHEDULE. LOCATE DISCONNECT SWITCHES AND STARTERS SO THAT THEY DO NOT CONFLICT WITH MECHANICAL MAINTENANCE CLEARANCES. MAINTAIN NEC REQUIRED WORKING CLEARANCES.

KEYED NOTES - ELECTRICAL PLAN

EP16 INSTALL 120V, 20A, WEATHER RESISTANT GFI RECEPTACLE ON ROOF WITH UN-ATTENDED IN-USE COVER. INSTALL DEVICE IN ROOF MOUNTED MAPA PEDISTAL. INSTALL 2#12, #12GND,3/4"C TO EACH DEVICE. REFER TO ARCHITECTURAL ROOFING DETAILS FOR ADDITIONAL INFORMATION.

EP17 CONNECTION TO RTU. SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE ON DRAWING E6.01 FOR CIRCUIT AND FEEDER SIZE.

EP18 ROOF MOUNTED EXHAUST FAN. SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE ON DRAWING E6.01 FOR FEEDER SIZE.

EP19 30A2P, NEMA-3R, NON-FUSED DISCONNECT SWITCH FOR ROOF MOUNTED CONDENSING UNIT. EXTEND CIRCUIT DOWN TO SWITCH FOR INDOOR UNIT IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND DIAGRAMS. REFER TO ARCHITECTURAL DRAWINGS FOR ROOFING DETAILS.

EP46 FACTORY MOUNTED, 120V, 20A, DUPLEX RECEPTACLE ON RTU.

1 **ELECTRICAL ROOF PLAN**
SCALE: 1/8" = 1'-0"

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61527
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	APRIL 11, 2019
DRAWN BY	LARRY A. SCHAFFER
CHECKED BY	DON RICHARDS

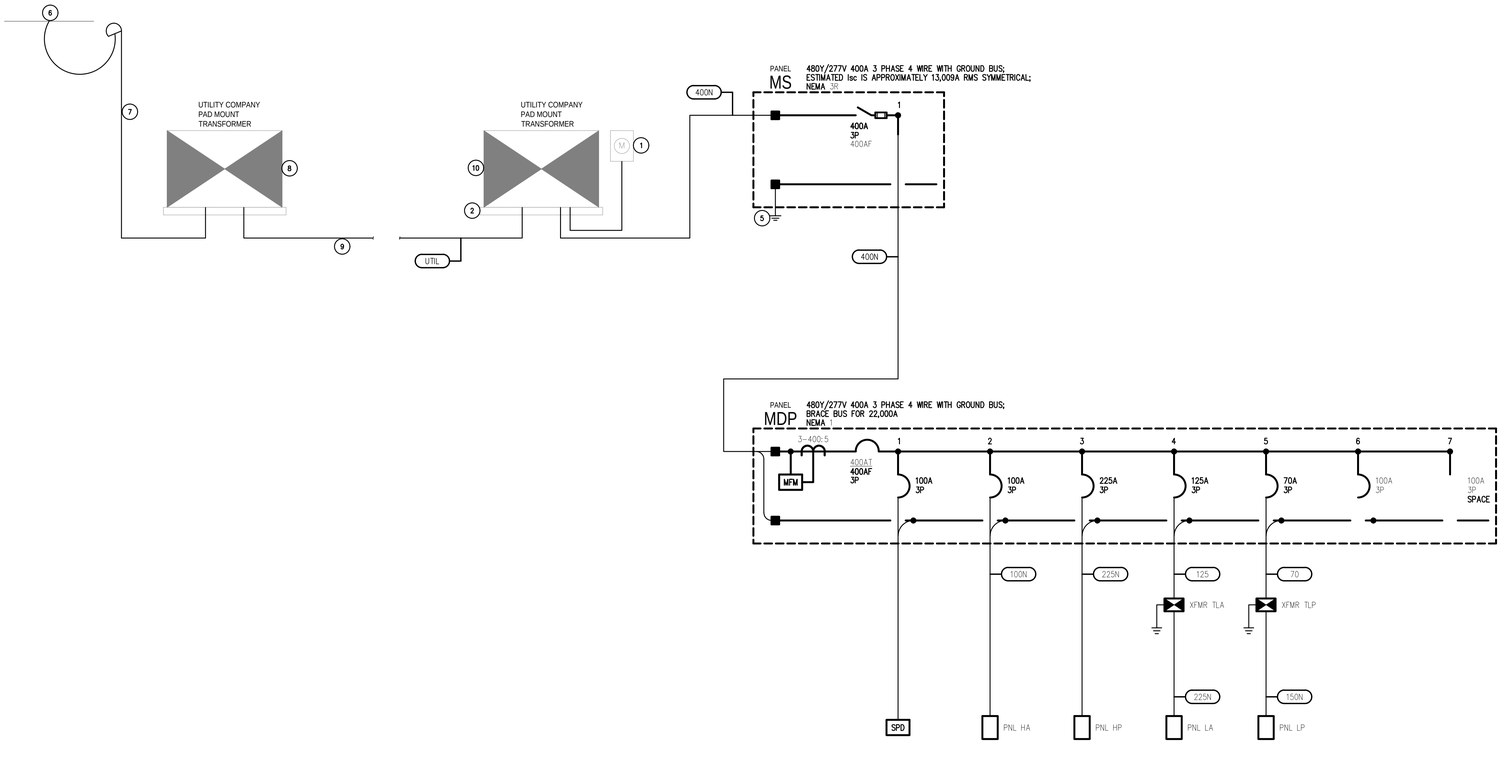
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

ELECTRICAL ROOF PLAN

E2.04



KEYED NOTES - ONE LINE DIAGRAM

1. UTILITY COMPANY METER. COORDINATE INSTALLATION OF METER WITH UTILITY COMPANY STANDARDS.
2. REINFORCED CONCRETE PAD PER UTILITY COMPANY SPECIFICATIONS.
3. INSTALL THIS OVERCURRENT DEVICE IN THE TOP LEFT POSITION OF THE SWITCHGEAR.
4. SURGE PROTECTIVE DEVICE (SPD); SEE SPECIFICATION SECTION 26 43 13.00.
5. SYSTEM GROUNDING ELECTRODE. SEE SPECIFICATIONS 26 05 26.
6. EXISTING OVERHEAD ELECTRICAL PRIMARY.
7. EXISTING UTILITY COMPANY RISER POLE.
8. EXISTING UTILITY COMPANY PAD MOUNTED TRANSFORMER NEAR TRACK TO BE REPLACED WITH NEW LOOP FEED TRANSFORMER U UTILITY COMPANY. CONTRACTOR TO EXTEND CONDUIT(S) FOR PRIMARY FROM NEW LOOP FEED TRANSFORMER TO NEW UTILITY COMPANY RADIAL FEED TRANSFORMER LOCATED AT NEW POOL FACILITY. REFER TO SITE PLAN FOR ADDITIONAL INFORMATION.
9. NEW UNDERGROUND ELECTRICAL PRIMARY FROM NEW UTILITY COMPANY LOOP FEED TRANSFORMER NEAR TRACK TO NEW UTILITY COMPANY TRANSFORMER AT POOL FACILITY. TRENCHING AND CONDUIT TO BE INSTALLED BY DIV. 26 CONTRACTOR IN ACCORDANCE WITH UTILITY COMPANY STANDARDS. PRIMARY CONDUCTORS SHALL BE INSTALLED AND TERMINATED BY UTILITY COMPANY.
10. NEW UTILITY COMPANY RADIAL FEED SERVICE TRANSFORMER AT POOL FACILITY INSTALLED BY UTILITY COMPANY.

LOAD ANALYSIS

LIGHTING -			29577 VA	X	1.25 =	36971 VA
RECEPTACLES -	53 EA X	180 VA/EA =	9540 VA			
<10,000 VA			9540 VA	X	1.00 =	9540 VA
>10,000 VA			0 VA	X	0.50 =	0 VA
AIR CONDITIONING -			33516 VA	X	1.00 =	33516 VA
POOL EQUIPMENT -			86810 VA	X	1.00 =	86810 VA
HEATING -			3000 VA	X	1.00 =	3000 VA
OTHER -			39094 VA	X	1.00 =	39094 VA
			NET CALCULATED DEMAND =			208931 VA
			@ 480Y/277V 3 PH =			251 A

THE SERVICE CONSISTING OF TWO SETS OF #4/0 (230A) PER PHASE AND NEUTRAL IS ADEQUATE FOR THE NEW 400A SERVICE

TRANSFORMER SCHEDULE

MARK	KVA	PRIMARY VOLTAGE	SECONDARY VOLTAGE	GROUNDING ELECTRODE	REMARKS
TLA	112-1/2	480V DELTA	208Y/120 GND WYE	#1/0	K-13 RATED
TLP	45	480V DELTA	208Y/120 GND WYE	#6	----
	x	x	x	x	x

FEEDER / BRANCH CIRCUIT SCHEDULE

MARK	RACEWAY	PHASE CONDUCTORS	NEUTRAL CONDUCTORS	GROUND CONDUCTORS	REMARKS
UTIL	4"	-	-	-	INSTALL TWO CONDUITS OR QUANTATY REQUIRED BY UTILITY COMPANY
400N	2"	3 #3/0	1 #3/0	1 #3	TWO PARALLEL FEEDERS REQUIRED
225N	2 1/2"	3 #4/0	1 #4/0	1 #4	----
150N	1 1/2"	3 #1/0	1 #1/0	1 #6	----
125	1 1/4"	3 #1	-- --	1 #6	----
100N	1 1/4"	3 #3	1 #3	1 #6	----
70	1"	3 #4	-- --	1 #8	----

1 ELECTRICAL ONE-LINE DIAGRAM - MEMORIAL HS & ECHS
SCALE: NONE

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
PROFESSIONAL ENGINEER
04 / 11 / 19
LEAF ENGINEERS
F-10672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: LARRY A. SCHAFFER
CHECKED BY: DON RICHARDS

REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

ELECTRICAL ONE-LINE DIAGRAM

E5.01

Z:\Projects\San\18183309SP\MEP\T2_ELECTRICAL\E-5.01.dwg
4/3/2019 10:29:34 AM

PANELBOARD HA

VOLTAGE: 480Y/277 VOLT 3 PHASE 4 WIRE — LOCATION: ROOM
100A MAIN LUGS ONLY — MOUNTING: SURFACE
BUSES: MAIN - 225 A NEUTRAL - 100%; EQUIPMENT GROUND — Isc = 22,000 A RMS SYM AVAILABLE

VA:L	VA:M	VA:O	LOAD	BKR	CKT			CKT	BKR	LOAD	VA:L	VA:M	VA:O
2481			EXTERIOR BUILDING LIGHTING	20/1	1	A		2	20/1	GENERAL POOL DECK LTG (ALT #1)	2534		
1434			LOCKER ROOM LIGHTING	20/1	3		B	4	20/1	GENERAL POOL DECK LTG (ALT #1)	2534		
1137			LIGHTING RM 111,113,114,115	20/1	5		C	6	25/1	COMPETITION POOL LTG (ALT #1)	4984		
763			POOL DECK LIGHTING (base bid)	20/1	7	A		8	25/1	COMPETITION POOL LTG (ALT #1)	4984		
441			LIGHTING RM 103	20/1	9		B	10	25/1	SPARE	0		
2688			SITE LIGHTING	20/1	11		C	12	25/1	SPARE	0		
2688			SITE LIGHTING	20/1	13	A		14	25/1	SPARE	0		
524			LIGHTING RM 108,109,110	20/1	15		B	16	20/1	SPARE	0		
376			LIGHTING RM 101,102	20/1	17		C	18	20/1	SPARE	0		
539			BLEACHER LIGHTING (BASE BID)	20/1	19	A		20	20/1	SPARE	0		
0			SPARE	20/1	21		B	22	20/1	SPARE	0		
0			SPARE	20/1	23		C	24	20/1	SPARE	0		
0			SPACE	20/1	25	A		26	20/1	SPACE	0		
0			SPACE	20/1	27		B	28	20/1	SPACE	0		
0			SPACE	20/1	29		C	30	20/1	SPACE	0		
0			SPACE	20/1	31	A		32	20/1	SPACE	0		
0			SPACE	20/1	33		B	34	20/1	SPACE	0		
0			SPACE	20/1	35		C	36	20/1	SPACE	0		
0			SPACE	20/1	37	A		38	20/1	SPACE	0		
0			SPACE	20/1	39		B	40	20/1	SPACE	0		
0			SPACE	20/1	41		C	42	20/1	SPACE	0		

VA:L (LIGHTING)	28107	CONNECTED VA	35134	DEMAND VA	
VA:M (HVAC)	0	CONNECTED VA	0	DEMAND VA	
VA:O (OTHER)	0	CONNECTED VA	0	DEMAND VA	
VA: TOTAL	28107	CONNECTED VA	35134	DEMAND VA	
AMPS: TOTAL	34	CONNECTED AMPS	42	DEMAND AMPS	

L	M	O	TOTAL				
13989	0	0	VA CONNECTED TO A PHASE	13989	VA=	51	AMPS CONNECTED TO A PHASE @ 277 VOLTS
4933	0	0	VA CONNECTED TO B PHASE	4933	VA=	18	AMPS CONNECTED TO B PHASE @ 277 VOLTS
9185	0	0	VA CONNECTED TO C PHASE	9185	VA=	33	AMPS CONNECTED TO C PHASE @ 277 VOLTS
28107	0	0	TOTAL	28107	VA		

PANELBOARD HP

VOLTAGE: 480Y/277 VOLT 3 PHASE 4 WIRE — LOCATION: ROOM
225 A MAIN LUGS ONLY — MOUNTING: SURFACE
BUSES: MAIN - 225 A NEUTRAL - 100%; EQUIPMENT GROUND — Isc = 22,000 A RMS SYM AVAILABLE

VA:L	VA:M	VA:O	LOAD	BKR	CKT			CKT	BKR	LOAD	VA:L	VA:M	VA:O
0		11085	COMP POOL PUMP (30HP)	80/3	1	A		2	25/3	TRAINING POOL PUMP (10HP)	0		3880
0		11085	-	-	3		B	4	-	-	0		3880
0		11085	-	-	5			6	-	-	0		3880
0		5820	DIVE POOL PUMP (15HP) ALT #2	40/3	7	A		8	20/1	EUH-1	0		3000
0		5820	-	-	9		B	10	20/1	SPARE	0		
0		5820	-	-	11		C	12	20/1	SPARE	0		
0			SPARE	40/3	13	A		14	25/3	SPARE	0		
0			-	-	15		B	16	-	-	0		
0			-	-	17		C	18	-	-	0		
0			SPARE	20/1	19	A		20	20/1	SPARE	0		
0			SPARE	20/1	21		B	22	20/1	SPARE	0		
0			SPARE	20/1	23		C	24	20/1	SPARE	0		
0			SPARE	20/1	25	A		26	20/1	SPARE	0		
0			SPARE	20/1	27		B	28	20/1	SPARE	0		
0			SPARE	20/1	29		C	30	20/1	SPARE	0		
0			SPACE	20/1	31	A		32	20/1	SPACE	0		
0			SPACE	20/1	33		B	34	20/1	SPACE	0		
0			SPACE	20/1	35		C	36	20/1	SPACE	0		
0			SPACE	20/1	37	A		38	20/1	SPACE	0		
0			SPACE	20/1	39		B	40	20/1	SPACE	0		
0			SPACE	20/1	41		C	42	20/1	SPACE	0		

VA:L (LIGHTING)	0	CONNECTED VA	0	DEMAND VA	
VA:M (HVAC)	0	CONNECTED VA	0	DEMAND VA	
VA:O (OTHER)	65354	CONNECTED VA	65354	DEMAND VA	
VA: TOTAL	65354	CONNECTED VA	65354	DEMAND VA	
AMPS: TOTAL	79	CONNECTED AMPS	79	DEMAND AMPS	

L	M	O	TOTAL				
0	0	23785	VA CONNECTED TO A PHASE	23785	VA=	86	AMPS CONNECTED TO A PHASE @ 277 VOLTS
0	0	20785	VA CONNECTED TO B PHASE	20785	VA=	75	AMPS CONNECTED TO B PHASE @ 277 VOLTS
0	0	20785	VA CONNECTED TO C PHASE	20785	VA=	75	AMPS CONNECTED TO C PHASE @ 277 VOLTS
0	0	65354	TOTAL	65354	VA		

PANELBOARD LA

VOLTAGE: 208Y/120 VOLT 3 PHASE 4 WIRE — LOCATION: ROOM
400A MAIN BREAKER — MOUNTING: SURFACE
BUSES: MAIN - 400 A NEUTRAL - 100%; EQUIPMENT GROUND — Isc = 10,000 A RMS SYM AVAILABLE

VA:L	VA:R	VA:O	LOAD	BKR	CKT			CKT	BKR	LOAD	VA:L	VA:R	VA:O
0	360		RECEPTACLES RM 101, 102	20/1	1	A		2	30/3	SPD	0	0	
0	0	1800	HAND DRYER	20/1	3		B	4	-	-	0	0	
0	0	1800	HAND DRYER	20/1	5		C	6	-	-	0	0	
0	0	1800	HAND DRYER	20/1	7	A		8	20/1	HAND DRYER	0	0	1800
0	540		EXTERIOR RECEPTACLES	20/1	9		B	10	20/1	RECEPTACLES RM 103	0	900	
0	540		RECEPTACLES RM 103	20/1	11		C	12	20/1	RECEPTACLES RM 104	0	540	
0	0		HAND DRYER	20/1	13	A		14	20/1	HAND DRYER	0	0	
0	0	600	DRINKING FOUNTAIN	20/1 GFI	15		B	16	20/1	ELECTROMAGNETIC DOOR LOCKS	0	0	400
0	540		RECEPTACLES RM 106	20/1	17		C	18	20/1	HAND DRYER	0	0	1800
0	0	300	ELECTROMAGNETIC DOOR LOCKS	20/1	19	A		20	20/1	EXTERIOR RECEPTACLES	0	360	
0	900		RECEPTACLES RM 110	20/1	21		B	22	20/1	RECEPTACLES	0	900	
0	0	1800	HAND DRYER	20/1	23		C	24	20/1	ELECTROMAGNETIC DOOR LOCKS	0	0	400
0	360		RECEPTACLES RM 113,115	20/1	25	A		26	40/2	SSCU/SS-1	0	0	3120
0	360		RECEPTACLES RM 111	20/1	27		B	28	-	-	0	0	3120
0	360		EXTERIOR RECEPTACLES	20/1	29		C	30	20/1	EXTERIOR RECEPTACLES (ALT #1)	0	360	
0	0	300	GWH-1	20/1	31	A		32	20/1	GWH-2	0	0	300
0	540		ROOF RECEPTACLES	20/1	33		B	34	20/1	SCOREBOARD CONTROLS	0	0	600
0	0	1200	FIRE ALARM NAC PANEL	20/1	35		C	36	20/1	SECURITY PANEL	0	0	1200
0	360		RECEPTACLES RM 114	20/1	37	A		38	20/1	ROOF RECEPTACLES	0	540	
0	360		RECEPTACLES RM 114	20/1	39		B	40	15/1	HWRP-1	0	0	528
0	360		RECEPTACLES RM 114	20/1	41		C	42	15/1	EF-1	0	0	156
0	0	300	IRRIGATION CONTROLLER (ECHS)	20/1	43	A		44	15/1	EF-2	0	0	1356
0	0	50	TIME CLOCK RM 110	20/1	45		B	46	15/1	EF-3	0	0	312
0	360		EXTERIOR RECEPTACLES	20/1	47		C	48	15/1	EF-4	0	0	180
0	0	1176	SUIT SPINNER	20/1	49	A		50	20/1	SCOREBOARD POWER	0	0	1920
0	0	1176	SUIT SPINNER	20/1	51		B	52	20/1	SCOREBOARD POWER	0	0	1920
0	0	1920	SCOREBOARD POWER	20/1	53		C	54	20/1	SCOREBOARD POWER	0	0	1920
0	0	1920	SCOREBOARD POWER	20/1	55	A		56	20/1	SCOREBOARD POWER	0	0	1920
0	0		SPARE	20/1	57		B	58	20/1	SPARE	0	0	
0	0		SPARE	20/1	59		C	60	20/1	SPARE	0	0	
0	0		SPARE	20/1	61	A		62	20/1	SPARE	0	0	
0	0		SPARE	20/1	63		B	64	20/1	SPARE	0	0	
0	0		SPARE	20/1	65		C	66	20/1	SPARE	0	0	
0	0	2834	RTU-2	30/3	67	A		68	30/3	RTU-1	0	0	2462
0	0	2834	-	-	69		B	70	-	-	0	0	2462
0	0	2834	-	-	71		C	72	-	-	0	0	2462
0	0	2249	RTU-4	30/3	73	A		74	50/3	RTU-3	0	0	3627
0	0	2249	-	-	75		B	76	-	-	0	0	3627
0	0	2249	-	-	77		C	78	-	-	0	0	3627
0	0		SPACE	20/1	79	A		80	20/1	SPACE	0	0	
0	0		SPACE	20/1	81		B	82	20/1	SPACE	0	0	
0	0		SPACE	20/1	83		C	84	20/1	SPACE	0	0	

VA:L (LIGHTING)	0	CONNECTED VA	0	DEMAND VA	
VA:R (RECEPTACLES)	9540	CONNECTED VA	9540	DEMAND VA	
VA:O (OTHER)	72610	CONNECTED VA	72610	DEMAND VA	
VA: TOTAL	82150	CONNECTED VA	82150	DEMAND VA	
AMPS: TOTAL	228	CONNECTED AMPS	228	DEMAND AMPS	

L	R	O	TOTAL				
0	1980	27384	VA CONNECTED TO A PHASE	29364	VA=	245	AMPS CONNECTED TO A PHASE @ 120 VOLTS
0	4500	21678	VA CONNECTED TO B PHASE	26178	VA=	218	AMPS CONNECTED TO B PHASE @ 120 VOLTS
0	3060	23548	VA CONNECTED TO C PHASE	26608	VA=	222	AMPS CONNECTED TO C PHASE @ 120 VOLTS
0	9540	72610	TOTAL	82150	VA		

PANELBOARD LP

VOLTAGE: 208Y/120 VOLT 3 PHASE 4 WIRE — LOCATION: ROOM
150A MAIN BREAKER — MOUNTING: SURFACE
BUSES: MAIN - 225 A NEUTRAL - 100%; EQUIPMENT GROUND — Isc = 10,000 A RMS SYM AVAILABLE

VA:L	VA:R	VA:O	LOAD	BKR	CKT			CKT	BKR	LOAD	VA:L	VA:R	VA:O
350	0		TRAINING POOL LIGHTS	20/1	1	A		2	15/3	COMP. POOL UV SYSTEM 5KW	0	0	1667
840	0		COMPETITION POOL LIGHTS	20/1	3		B	4	-	-	0	0	1667
280	0		DIVE POOL LIGHTS (ALT #2)	20/1	5		C	6	-	-	0	0	1667
0	0	1000	POOL UV SYSTEM 2KW	15/2	7	A		8	15/2	POOL UV SYSTEM 2KW	0	0	1000
0	0	1000	-	-	9		B	10	-	-	0	0	1000
0	0	1200	BOILER	20/1	11		C	12	20/1	STENNER PUMP	0	0	1176
0	0	1200	BOILER	20/1	13	A		14	20/1	STENNER PUMP	0	0	1176
0	0	1200	BOILER	20/1	15		B	16	20/1	STENNER PUMP	0	0	1176
0	0	1200	BOILER (ALT #2)	20/1	17		C	18	20/1	WATER LEVEL CONTROLLER	0	0	600
0	0	600	UV SYSTEM CONTROLLER	20/1	19	A		20	20/1	WATER LEVEL CONTROLLER	0	0	600
0	0	600	UV SYSTEM CONTROLLER	20/1	21		B	22	20/1	WATER LEVEL CONTROLLER	0	0	600
0	0	600	UV SYSTEM CONTROLLER	20/1	23		C	24	20/1	SPARE	0	0	
0	0	1176	CHLORINATOR PUMP	20/1	25	A		26	20/1	SPARE	0	0	
0	0	1176	CHLORINATOR PUMP	20/1	27		B	28	20/1	SPARE	0	0	
0	0	1176	CHLORINATOR PUMP	20/1	29		C	30	20/1	SPARE	0	0	
0	0		SPARE	20/1	31	A		32	20/1	SPARE	0	0	
0	0		SPARE	20/1	33		B	34	20/1	SPARE	0	0	
0	0		SPARE	20/1	35		C	36	20/1	SPARE	0	0	
0	0		SPARE	20/1	37	A		38	20/1	SPACE	0	0	
0	0		SPARE	20/1	39		B	40	20/1	SPACE	0	0	
0	0		SPACE	20/1	41		C	42	20/1	SPACE	0	0	

VA:L (LIGHTING)	1470	CONNECTED VA	1838	DEMAND VA	
VA:R (RECEPTACLES)	0	CONNECTED VA	0	DEMAND VA	
VA:O (OTHER)	24456	CONNECTED VA	24456	DEMAND VA	
VA: TOTAL	25926	CONNECTED VA	26294	DEMAND VA	
AMPS: TOTAL	72	CONNECTED AMPS	73	DEMAND AMPS	

L	R	O	TOTAL				
350	0	8419	VA CONNECTED TO A PHASE	8769	VA=	73	AMPS CONNECTED TO A PHASE @ 120 VOLTS
840	0	8419	VA CONNECTED TO B PHASE	9259	VA=	77	AMPS CONNECTED TO B PHASE @ 120 VOLTS
280	0	7619	VA CONNECTED TO C PHASE	7899	VA=	66	AMPS CONNECTED TO C PHASE @ 120 VOLTS
1470	0	24456	TOTAL	25926	VA		

MECHANICAL EQUIPMENT CONNECTION SCHEDULE

UNIT MARK	LOCATION	CIRCUIT	FEEDER SIZE	FLA	MCA	MOCP	REMARKS
FAN COIL UNITS							
SS-1	ELEC. 113	LA-26,28	2 #8, 1 #10GND IN 3/4"C		NA	NA	2
CONDENSING UNITS							
SSCU-1	ROOF TOP	LA-26,28	2 #8, 1 #10GND IN 3/4"C		25.0	40.0	3
FANS							
EF-1	ROOF TOP	LA-42	3 #12, 1 #12GND IN 3/4"C	1.3	1.6	15.0	1
EF-2	ROOF TOP	LA-44	3 #12, 1 #12GND IN 3/4"C	11.3	14.1	20.0	1
EF-3	ROOF TOP	LA-46	3 #12, 1 #12GND IN 3/4"C	2.6	3.3	15.0	1
EF-4	ROOF TOP	LA-48	3 #12, 1 #12GND IN 3/4"C	1.5	1.9	15.0	1
PACKAGED AIR CONDITIONING (ROOF-TOP) UNITS							
RTU-01	ROOF TOP	LA-68,70,72	3 #8, 1 #10GND IN 3/4"C		34.2	50.0	1
RTU-02	ROOF TOP	LA-67,69,71	3 #10, 1 #10GND IN 3/4"C		26.0	30.0	1
RTU-03	ROOF TOP	LA-74,76,78	3 #10, 1 #10GND IN 3/4"C		22.5	30.0	1
RTU-04	ROOF TOP	LA-73,75,77	3 #10, 1 #10GND IN 3/4"C		26.0	30.0	1

NOTES:

1. CONNECT TO FACTORY INSTALLED INTERGAL DISCONNECT SWITCH.
2. FURNISH AND INSTALL --A250V HORSEPOWER RATED TOGGLE SWITCH ON WALL NEXT TO EQUIPMENT WHERE INDICATED ON PLANS.
3. FURNISH AND INSTALL --A2P NEMA-3R NON-FUSED DISCONNECT SWITCH ON ROOF MOUNTED EQUIPMENT RACK WHERE INDICATED ON PLANS. REFER TO ROOFING CONSULTANT DRAWINGS FOR RACK DETAIL.

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER & MODEL NUMBER	LAMPS	VA	VOLTAGE	DESCRIPTION	NOTES
A1	METALUX #24GR-LD4-48-UNV-L840-CD1-U DAY-BRITE # 2TG45L8404FS02FUNVDIM LITHONIA #2GTL4G48LMVOLTEZ1LP840	LED	4000K 38	120/277	2' X 4' LAY-IN RECESSED LED TROFFER WITH STANDARD DIMMING.	
A1E	METALUX #24GR-LD4-48-UNV-EL14-L840-CD1-U DAY-BRITE # 2TG45L8404FS02FUNVDIMEMLED LITHONIA #2GTL4G48LMVOLTEZ1LP840EL14L	LED	4000K 38	120/277	2' X 4' LAY-IN RECESSED LED TROFFER WITH STANDARD DIMMING. PROVIDE WITH EMERGENCY BATTERY PACK	
A2	METALUX #24GR-LD4-60-UNV-L840-CD1-U DAY-BRITE # 2TG45L8404FS02FUNVDIM LITHONIA #2GTL4G60LMVOLTEZ1LP840	LED	4000K 48	120/277	2' X 4' LAY-IN RECESSED LED TROFFER WITH STANDARD DIMMING.	
A2E	METALUX #24GR-LD4-60-UNV-EL14-L840-CD1-U DAY-BRITE # 2TG45L8404FS02FUNVDIMEMLED LITHONIA #2GTL4G60LMVOLTEZ1LP840EL14L	LED	4000K 48	120/277	2' X 4' LAY-IN RECESSED LED TROFFER WITH STANDARD DIMMING. PROVIDE WITH EMERGENCY BATTERY PACK	
BF	METALUX #24GR-LD4-48-UNV-L840-CD1-U DF-24-W DAY-BRITE # 2TG45L8404FS02FUNVDIMFMA24 LITHONIA #2GTL4F48LMVOLTEZ1LP840DGA24	LED	4000K 38	120/277	2' X 4' LAY-IN RECESSED LED TROFFER WITH STANDARD DIMMING AND DRYWALL GRID ADAPTER.	
BFE	METALUX #24GR-LD4-48-UNV-EL14-L840-CD1-U DF-24-W DAY-BRITE # 2TG45L8404FS02FUNVDIMEMLEDFMA24 LITHONIA #2GTL4F48LMVOLTEZ1LP840EL14LDGA24	LED	4000K 38	120/277	2' X 4' LAY-IN RECESSED LED TROFFER WITH STANDARD DIMMING AND DRYWALL GRID ADAPTER. PROVIDE WITH EMERGENCY BATTERY PACK	
D	PORTFOLIO# LD6A20D010TE-ERM6A10840-6LM0LIWF-HB26 PATHWAY #6VLFLX30004KE1D8EM6VLEDMDSCLPF GOTHAM #EVO40/306ARMMDLSSVOLTEZ1TRW	LED	4000K 36	120/277	6" NOMINAL APERTURE RECESSED LED DOWNLIGHT	
DE	PORTFOLIO# LD6A20D010TEEMBOD-ERM6A10840-6LM0LIWF-HB26 PATHWAY #6VLFLX30004KE1D8EM6VLEDMDSCLPF GOTHAM #EVO40/306ARMMDLSSVOLTEZ1ELTRW	LED	4000K 36	120/277	6" NOMINAL APERTURE RECESSED LED DOWNLIGHT, INTEGRAL EMERGENCY BATTERY PACK AND INTEGRAL TEST SWITCH	
DS	PORTFOLIO #LD4A18D010TE-ERM6A10840-4LM0LIWF-HB26 PATHWAY # 6VLBWL304KM6VLBWLSCLPF GOTHAM #EVO40/306DFRMVOLTEZ1	LED	4000K 32	120/277	RECESSED LENSED LED DOWNLIGHT LISTED FOR WET LOCATION APPLICATION	
F	LITHONIA #ZL2NL485000LMMDDMVOLT40K80CRIWH	LED	4000K 70	120/277	4' LONG LED LENSED STRIP	
FE	LITHONIA #ZL2NL485000LMMDDMVOLT40K80CRIBSL722WH	LED	4000K 70	120/277	4' LONG LED LENSED STRIP WITH EMERGENCY BATTERY PACK	
G	HORIZON #LCVTM401 LITHONIA #VAP6000LMFSTMDMVOLTGZ140K80CRIWLFEND2STSL	LED	4000K 49	120/277	4' LONG ENCLOSED AND GASKETED LED FIXTURE LISTED FOR WET LOCATION APPLICATION	
GE	HORIZON #LCVTM401LEB13 LITHONIA #VAP6000LMFSTMDMVOLTGZ140K80CRIBSL722WLFEND2STSL	LED	4000K 49	120/277	4' LONG ENCLOSED AND GASKETED LED FIXTURE WITH EMERGENCY BATTERY PACK, LISTED FOR WET LOCATION APPLICATION	
P1	SELUX #L1252B4540SDRS16WHUNVDIMNF	LED	4000K 376	120/277	16' LONG EXTRUDED ALUMINUM, LED, RIGID STEM MOUNTED FIXTURE WITH POWDER COAT FINISH AND WET LOCATION RATED. FIXTURE TO BE RATED FOR NATATORIUM USE.	
P1E	SELUX #L1252B4540SDRS16WHUNVDIMNFEM	LED	4000K 376	120/277	16' LONG EXTRUDED ALUMINUM, LED, RIGID STEM MOUNTED FIXTURE WITH POWDER COAT FINISH AND WET LOCATION RATED. FIXTURE TO BE RATED FOR NATATORIUM USE. PROVIDE FIXTURE WITH INTEGRAL EMERGENCY BATTERY PACK.	
P2	LUX DYNAMICS #WAVE8DH028404U10C4NATDIRH4P10SSNAT	LED	4000K 362	120/277	4' LONG EXTRUDED ALUMINUM HIGH BAY LED PENDANT FIXTURE WITH 360 DEGREE ROTATABLE LED BARS, NOMINAL 45,000 LUMENS, WET RATING SUITABLE FOR USE IN A NATATORIUM.	2
P2E	LUX DYNAMICS #WAVE8DH028404U10C4NATDIRH4P10SSNAT	LED	4000K 362	120/277	4' LONG EXTRUDED ALUMINUM HIGH BAY LED PENDANT FIXTURE WITH 360 DEGREE ROTATABLE LED BARS, NOMINAL 45,000 LUMENS, WET RATING SUITABLE FOR USE IN A NATATORIUM.	1,2
P3	LUX DYNAMICS #WAVE8DH038404U10C4NATDIRH4P10SSNAT	LED	4000K 623	120/277	4' LONG EXTRUDED ALUMINUM HIGH BAY LED PENDANT FIXTURE WITH 360 DEGREE ROTATABLE LED BARS, NOMINAL 86,000 LUMENS, WET RATING SUITABLE FOR USE IN A NATATORIUM.	2
P3E	LUX DYNAMICS #WAVE8DH038404U10C4NATDIRH4P10SSNAT	LED	4000K 623	120/277	4' LONG EXTRUDED ALUMINUM HIGH BAY LED PENDANT FIXTURE WITH 360 DEGREE ROTATABLE LED BARS, NOMINAL 86,000 LUMENS, WET RATING SUITABLE FOR USE IN A NATATORIUM.	1,2
BATT1	CRUCIAL POWER PRODUCTS #WR010R2500N1 MYERS POWER PRODUCTS #6IE8SBD25022YW			277/277	NOMINAL 10 KW CENTRAL BATTERY INVERTER SYSTEM WITH INPUT AND OUTPUT CIRCUIT BREAKERS AND INTERNAL MAINTENANCE BYPASS SWITCH.	3
DSL	MCGRAW EDISON #MSA-B03-LED-E1-5WQ-BZ Lumec #MPTC-110W54LED4K-T-LE5-UNIV-BRTX LITHONIA #MRPLED163B530/40KSR5MVOLTDDBXD	LED	4000K 109	120/277	SINGLE POST TOP LED AREA LIGHT WITH TYPE 5 DISTRIBUTION ON A 20' TALL POLE. POLE LITHONIA #RSS204B4/.120PTFBCDDB	1
SL12	LITHONIA #DSX2LEDP840KT2MMVOLTSPAPIRHHSDDBXDDM19AS	LED	4000K 448	120/277	ONE AREA LIGHT WITH TYPE 2 MEDIUM DISTRUBUTION WITH HOUSESIDE SHIELD ON A 25' TALL POLE. HIGH WIND RATED POLE LITHONIA #RTSFLA2570FDM19ASDDB	4
SL15	LITHONIA #DSX2LEDP840KT5MMVOLTSPAPIRHDDBXDDM19AS	LED	4000K 448	120/277	ONE AREA LIGHT WITH TYPE 5 WIDE DISTRUBUTION ON A 25' TALL POLE. HIGH WIND RATED POLE LITHONIA #RTSFLA2570FDM19ASDDB	4
SL24	LITHONIA #DSX2LEDP840KT4MMVOLTSPAPIRHHSDDBXDDM28AS	LED	4000K 896	120/277	TWO AREA LIGHTS WITH TYPE 4 MEDIUM DISTRIBUTION 180° APART ON A 25' TALL POLE. HIGH WIND RATED POLE LITHONIA #RTSFLA2570FDM28ASDDB	4
SL34	LITHONIA #DSX2LEDP840KT4MMVOLTSPAPIRHHSDDBXDDM39AS	LED	4000K 1344	120/277	THREE AREA LIGHTS WITH TYPE 4 MEDIUM DISTRIBUTION 90° APART ON A 25' TALL POLE. HIGH WIND RATED POLE LITHONIA #RTSFLA2570FDM39ASDDB	4
W	EELP LITHONIA #WSRLEDP3240KSR4MVOLTDSSTXD	LED	4000K 47	120/277	LED DARK SKY COMPLIANT WALL PACK	
WE	EELP LITHONIA #WSRLEDP3240KSR4MVOLTE20WCDSSTXD	LED	4000K 47	120/277	LED DARK SKY COMPLIANT WALL PACK WITH EMERGENCY BATTERY PACK	

GENERAL NOTES
1. COLOR TEMPERATURE SHALL BE 4000K UNLESS NOTED OTHERWISE.

NOTES
1. CONNECT FIXTURE TO EMERGENCY BATTERY INVERTER SYTSEM.
2. FIXTURES INSTALLED IF ALTERNATE #1 IS EXCEPTED
3. BATTERY INVERTER FOR POOL DECK LIGHTING AND CANOPY LIGHTS. CANOPY LIGHTS INSTALLED UNDER ALTERNATE #1 WITH "E" DESIGNATION SHALL BE CONNECTED TO THE BATTERY INVERTER.
4. THE FINISH FOR BOTH THE FIXTURE HEAD AND POLE SHALL BE TEXURED NATURAL ALUMINUM. FINAL COLOR SELECTION TO BE BY ARCITECT BASED ON THE MANUFACTURER'S FULL COLOR CHART.

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS — DONALD C. RICHARDS — 61525 — LICENSED — PROFESSIONAL ENGINEER
04 / 11 / 19
LEAF ENGINEERS
F-18672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: LARRY A. SCHAFFER
CHECKED BY: DON RICHARDS
REVISIONS

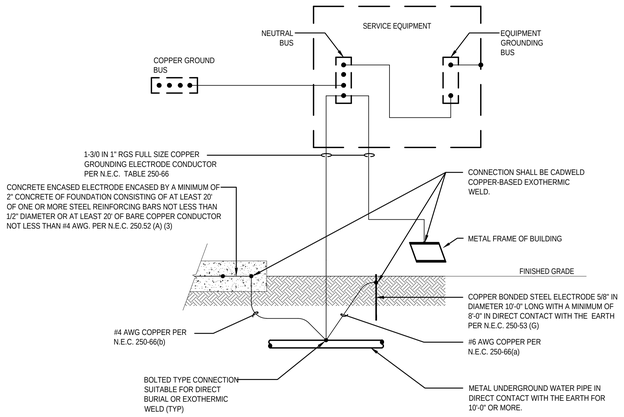
No.	Description	Date

: ISSUE FOR PROPOSAL

ELECTRICAL SCHEDULES

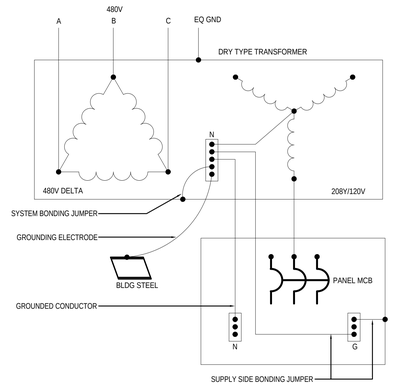
E6.01

Z:\Projects\San\18\18309SP\MEPT12_ELECTRICAL\E-6.01.dwg
2/24/2019 7:44:13 AM

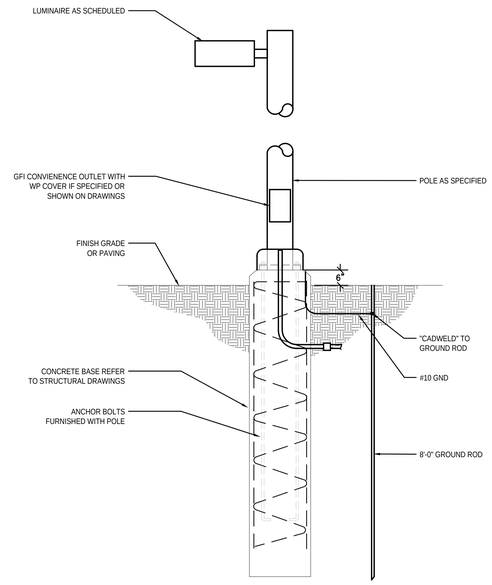


NOTE: PROVIDE GROUNDING BUSHING ON CONDUIT ENDS. CONNECT BUSHING TO GROUNDING CONDUCTOR.

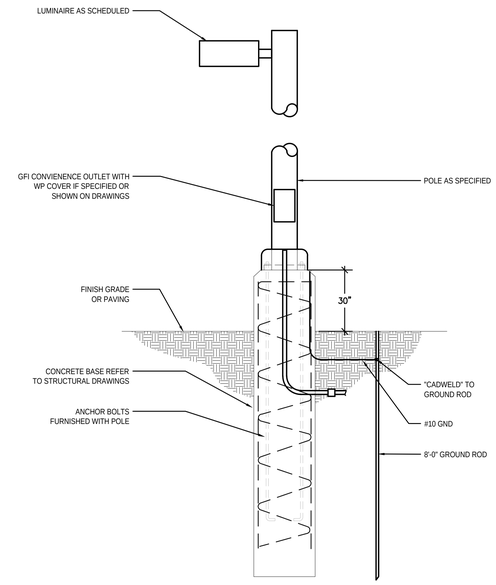
1 GROUNDING ELECTRODE SYSTEM DETAIL
SCALE: NONE



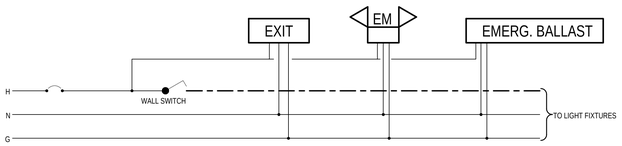
2 SEPARATELY DERIVED SYSTEM GROUNDING DETAIL
SCALE: NONE



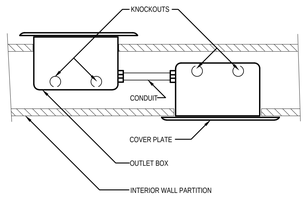
3 NON-TRAFFIC AREA LIGHT POLE BASE DETAIL
SCALE: NONE



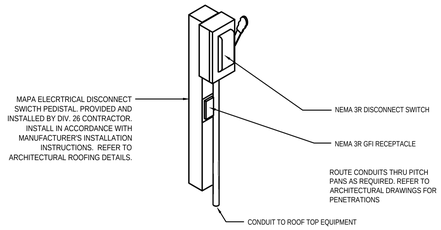
4 TRAFFIC AREA LIGHT POLE BASE DETAIL
SCALE: NONE



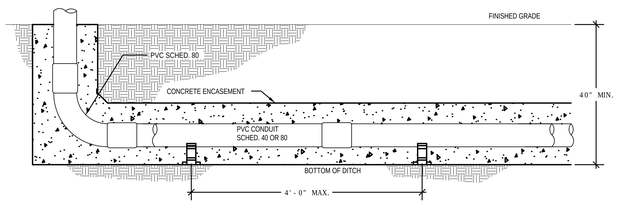
5 EMERGENCY FIXTURE WIRING DIAGRAM
SCALE: NONE

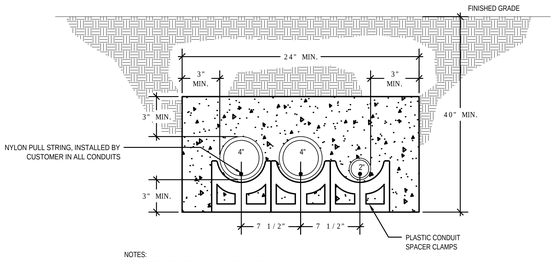


6 TYPICAL BACK TO BACK BOX ROUGH-IN DETAIL
SCALE: NONE



7 ROOF MOUNTED SWITCH RACK DETAIL
SCALE: NONE





NOTES:
1. CONDUIT TO BE SCHEDULE 40 PVC OR SCHEDULE 80 PVC.
2. PROVIDE NYLON PULL STRINGS.
3. SPACERS SHOULD BE INSTALLED NOT MORE THAN 4 FEET APART.
4. ALL EXTERIOR CONCRETE COVER DIMENSIONS ARE MINIMUM.
5. CONCRETE SHALL BE 2000 PSI. PEA GRAVEL IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS.
6. ALL WORK SHALL COMPLY WITH OSHA SAFETY STANDARDS.

8 ELECTRICAL UNDERGROUND PRIMARY DUCTBANK DETAIL
SCALE: NONE

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
PROFESSIONAL ENGINEER
04 / 11 / 19
LEAF ENGINEERS
F-18672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: LARRY A. SCHAFFER
CHECKED BY: DON RICHARDS

REVISIONS

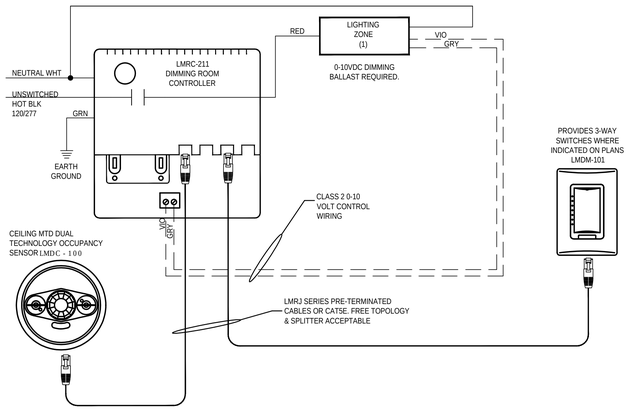
No.	Description	Date

: ISSUE FOR PROPOSAL

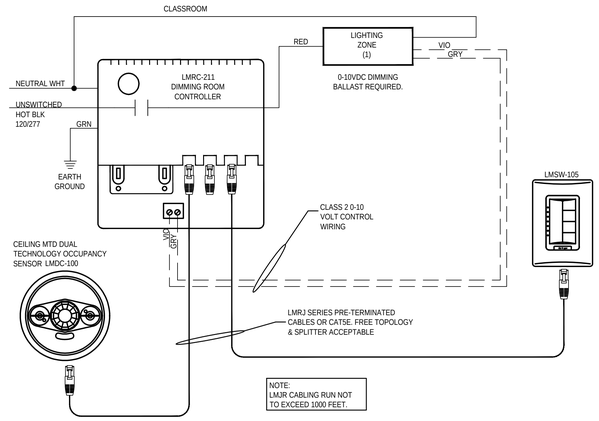
ELECTRICAL DETAILS

E7.01

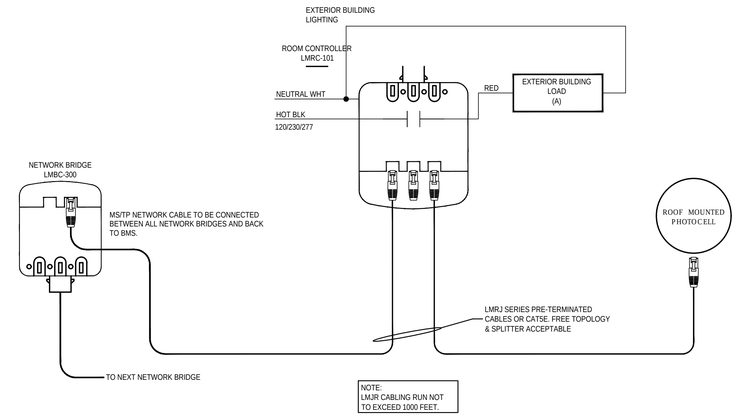
Z:\Projects\San\18\18309SP\MEPT\2_ELECTRICAL\E-7.01.dwg
4/5/2019 8:31:43 AM



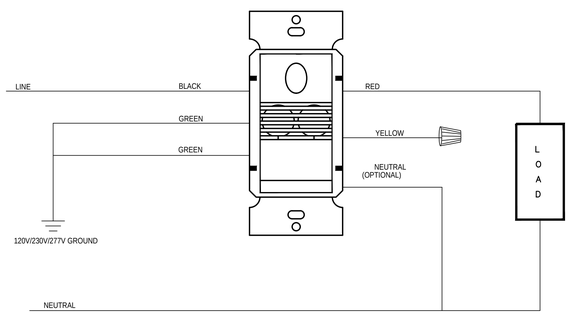
1 SINGLE OFFICE DIGITAL LIGHTING CONTROL DIAGRAM
SCALE: NONE



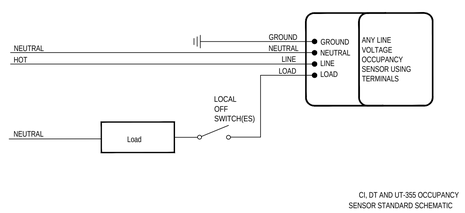
2 TYPICAL CLASSROOM DIGITAL LIGHTING CONTROL DIAGRAM
SCALE: NONE



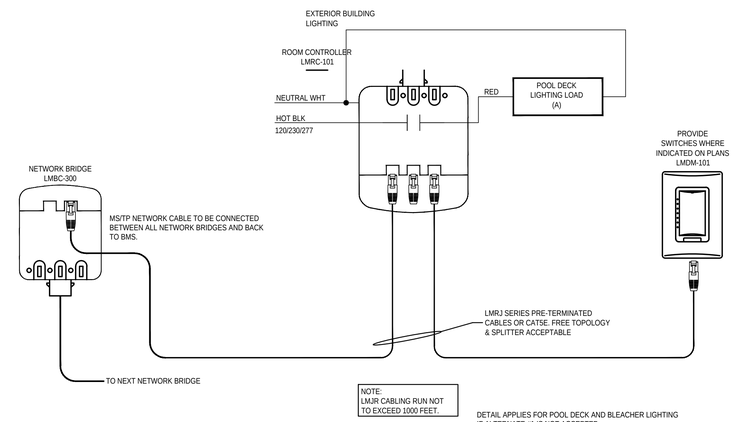
3 EXTERIOR BUILDING LIGHTS DIGITAL NETWORK LIGHTING CONTROL DIAGRAM
SCALE: NONE



4 DUAL TECH. WALL SENSOR WITH OPTIONAL NEUTRAL DIAGRAM
SCALE: NONE



5 LINE VOLTAGE CEILING MOUNTED OCCUPANCY SENSOR DIAGRAM
SCALE: NONE



6 EXTERIOR BUILDING LIGHTS DIGITAL NETWORK LIGHTING CONTROL DIAGRAM
SCALE: NONE

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
PROFESSIONAL ENGINEER
04 / 11 / 19
LEAF ENGINEERS
F-18672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: LARRY A. SCHAFFER
CHECKED BY: DON RICHARDS
REVISIONS

No.	Description	Date

: ISSUE FOR PROPOSAL

ELECTRICAL DETAILS

E7.02

Z:\Projects\San\18\18309SP\MEPT\2_ELECTRICAL\E-7.01.dwg
4/5/2019 8:31:43 AM

NOTE: NOT ALL ABBREVIATIONS MAY BE USED ON THESE DRAWINGS							
(A)	ITEM NOTED TO BE ABANDONED	DF	DRINKING FOUNTAIN	MAP	MASTER ALARM PANEL	SIA.	SIAMESE
(D)	ITEM NOTED TO BE DEMOLISHED	DPV	DRY PIPE VALVE	MECH	MECHANICAL	SK	SINK
(E)	EXISTING ITEM	DWG.	DRAWING	MH	MANHOLE	T.O.P.	TOP OF PIPE
(N)	NEW ITEM	EA	EACH	MS	MOP SINK	TP	TRAP PRIMER
(R)	ITEM NOTED TO BE RELOCATED	EDF	ELECTRIC DRINKING FOUNTAIN	N.C.	NORMALLY CLOSED	TYP	TYPICAL
A.F.F.	ABOVE FINISHED FLOOR	FCO	FLOOR CLEANOUT	N.O.	NORMALLY OPEN	U	URINAL
AAP	AREA ALARM PANEL	FD	FLOOR DRAIN	NIC	NOT IN CONTRACT	UF	UNDERFLOOR
AAV	AUTOMATIC AIR VENT	FDV	FIRE DEPARTMENT VALVE	O.F.C.I	OWNER FURNISHED CONTRACTOR INSTALLED	US	UNDERSLAB
AP	ACCESS PANEL	F.F.	FINISHED FLOOR	O.F.O.I	OWNER FURNISHED OWNER INSTALLED	VB	VACUUM BREAKER
B.F.F.	BELOW FINISHED FLOOR	FHC	FIRE HOSE CABINET	OFD	OVERFLOW DRAIN	VCT	VITRIFIED CLAY TILE
BFP	BACKFLOW PREVENTER	F.L.	FLOW LINE	PH	PHASE	VTR	VENT THROUGH ROOF
BOB	BOTTOM OF BEAM	FS	FLOOR SINK	PIV	POST INDICATOR VALVE	WC	WATER CLOSET
BOP	BOTTOM OF PIPE	FT	FEET	PRV	PRESSURE REDUCING VALVE	WCO	WALL CLEANOUT
BTUH	BRITISH THERMAL UNITS PER HOUR	FU	FIXTURE UNITS	RD	ROOF DRAIN	WH	WALL HYDRANT
C/C	CUT AND CAP	GC	GENERAL CONTRACTOR	RE:	REFER TO	WMB	WASHING MACHINE BOX
CFH	CUBIC FEET PER HOUR	GPH	GALLONS PER HOUR	R.I.C.	ROUGH IN AND CONNECT	YD	YARD HYDRANT
CFS	CUBIC FEET PER SECOND	GPM	GALLONS PER MINUTE	RO	REVERSE OSMOSIS	ZV	ZONE VALVE
CI	CAST IRON	HB	HOSE BIBB	RPBP	REDUCED PRESSURE BACKFLOW PREVENTER		
CLG	CEILING	HP	HORSE POWER	RPM	REVOLUTIONS PER MINUTE		
CO	CLEANOUT	I.E.	INVERT ELEVATION	RVB	REFRIGERATOR VALVE BOX		
CONN	CONNECTION	KW	KILOWATTS	SD	STORM DRAIN		
CONT.	CONTINUATION	LAV	LAVATORY	S.F.	SQUARE FEET		

SYMBOL	ABV.	DESCRIPTION						
—AW—	AW	ACID WASTE	- - -SS- - -	SS	SANITARY SEWER BELOW SLAB			THERMOMETER
—AV—	AV	ACID VENT	- - - - - - -					ROOF DRAIN / OVERFLOW DRAIN
—B—	B	BUTANE	- - -SV- - -	SV	SANITARY VENT			FLOOR DRAIN
—CDWR—		CHILLED DRINKING WATER RETURN	— · —	CW	COLD WATER			FLOOR SINK
—CDWS—		CHILLED DRINKING WATER SUPPLY	— · · —	HW	HOT WATER			T & P RELIEF VALVE
—D—		DRAIN PIPING	— · · · —	HWR	HOT WATER RETURN			STRAINER
—DSP—		DRY SPRINKLER PIPE	—D		DROP IN PIPE	CO	CO	END OF LINE CLEANOUT
—F—	F	FIRE LINE	—O		RISE IN PIPE	FCO	FCO	FLOOR CLEANOUT
—FOR—	FOR	FUEL OIL RETURN			GATE VALVE	WCO	WCO	WALL CLEANOUT
—FOS—	FOS	FUEL OIL SUPPLY			BALL VALVE			PIPE CAP
—FOV—	FOV	FUEL OIL VENT			CHECK VALVE			
—G—	G	NATURAL GAS PIPING			VALVE WITH FLOW SWITCH			
—GW—	GW	GREASE WASTE ABOVE SLAB			VALVE IN VERTICAL			
- - -GW- - -	GW	GREASE WASTE BELOW SLAB			GAS COCK			
—OSD—	OSD	STORM OVERFLOW DRAIN			BUTTERFLY VALVE			
—P—	P	PROPANE GAS PIPING			BALANCING VALVE			
—PSS—	PSS	PUMPED SANITARY SEWER			PIPE UNION			
—PSD—	PSD	PUMPED STORM SEWER			PRESSURE CONTROL VALVE			
—SD—	SD	STORM DRAIN ABOVE SLAB			3 WAY VALVE			
- - -SD- - -	SD	STORM DRAIN BELOW SLAB			SOLENOID VALVE			
—SP—	SP	SPRINKLER LINE			FLOW SWITCH			
—SS—	SS	SANITARY SEWER ABOVE SLAB			PRESSURE GAUGE WITH COCK			

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61523
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

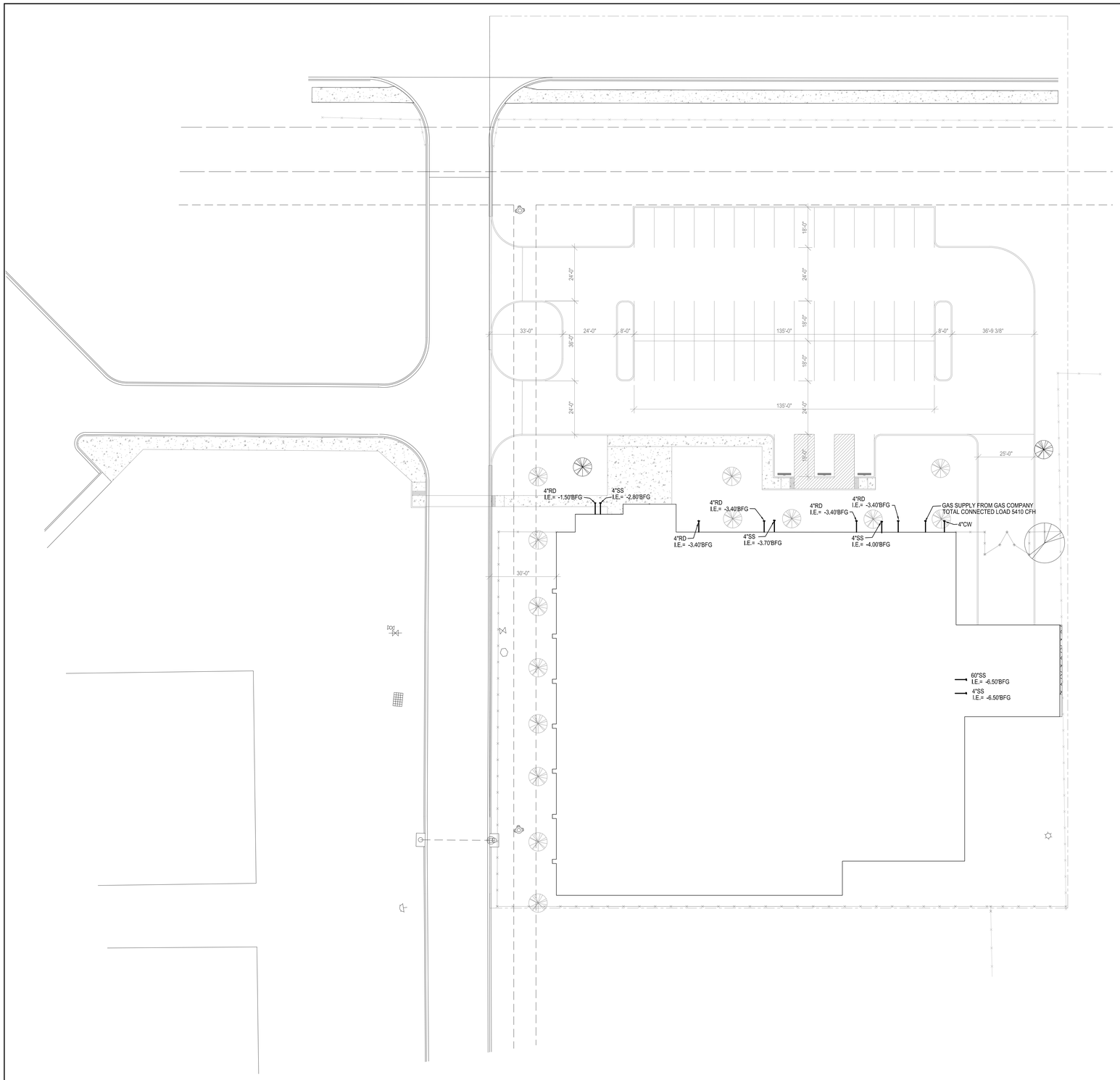
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: MATTHEW TREVINO
CHECKED BY: DON RICHARDS
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

PLUMBING SYMBOLS AND ABBREVIATIONS

P0.01



1 **PLUMBING SITE PLAN**
SCALE: 1" = 20' 0"

Z:\Projects\San\18\18309SP\MEP\T3_PLUMBING\P-1.01.dwg
4/11/2019 9:07:24 AM

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61522
04 / 04 / 19
LEAF ENGINEERS
F-18672

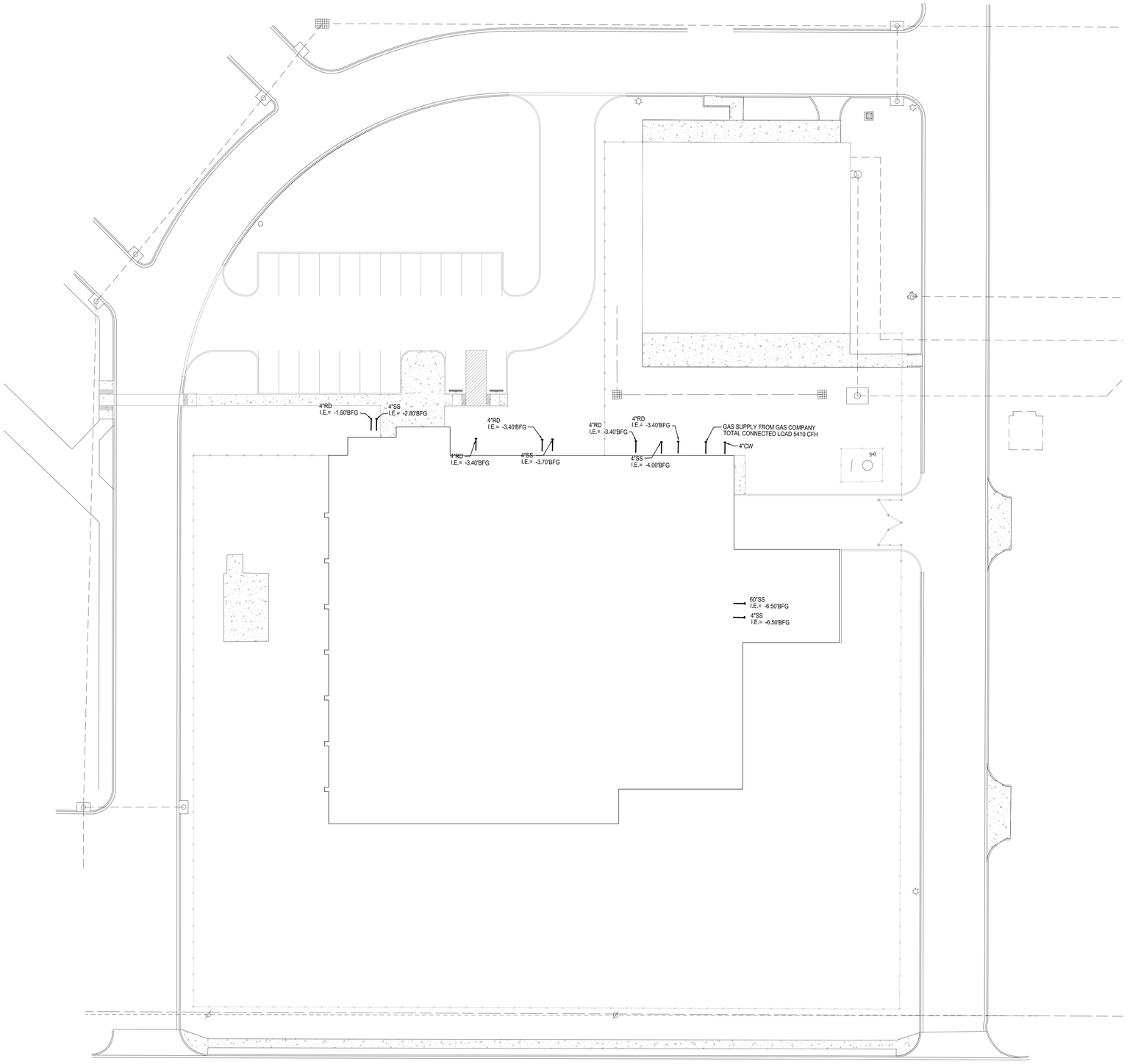
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: MATTHEW TREVINO
CHECKED BY: DON RICHARDS
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

EARLY COLLEGE HS PLUMBING SITE PLAN

P1.01



1 **PLUMBING SITE PLAN**
SCALE: 1" = 20' 0"

Z:\Projects\San\18\18309SP\MEP\T3_PLUMBING\P-1.01.dwg
4/11/2019 9:07:24 AM

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61528
LICENSED
PROFESSIONAL ENGINEER
04 / 04 / 19
LEAF ENGINEERS
F-18672

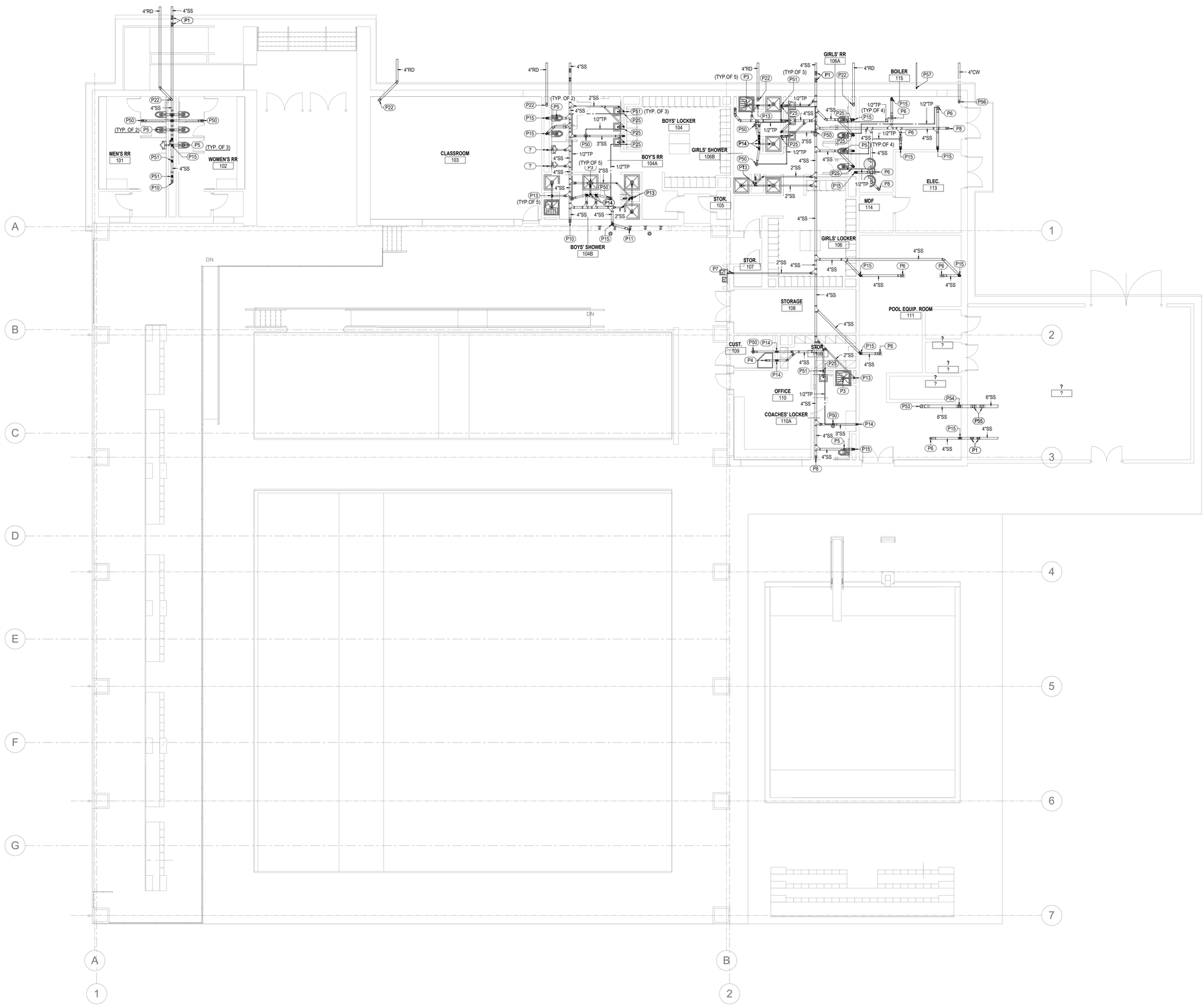
CLIENT
PSJA ISD
PROJECT NUMBER
18309SP
DATE
APRIL 11, 2019
DRAWN BY
MATTHEW TREVINO
CHECKED BY
DON RICHARDS
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

MEMORIAL HS PLUMBING SITE PLAN

P1.02



GENERAL NOTES - PLUMBING PLAN

1. THE CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION.
2. ALL FINAL CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE MADE BY THE PLUMBING CONTRACTOR.
3. ALL PLUMBING PIPING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO ANY INSTALLATION OF ALL PLUMBING FIXTURES AND EQUIPMENT BY THE PLUMBING CONTRACTOR.
4. ALL FLOOR DRAINS AND FLOOR SINKS SHOWN ON THIS DRAWING SHALLB E COODINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
5. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.
6. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.
7. PROVIDE A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.
8. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER.
9. FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADDA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.
10. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.
11. FLOOR DRAINS AND FLOOR SINKS IN MECHANICAL ROOMS SHALL BE SET NOT LESS THAN 6" FROM HOUSEKEEPING PADS. RE: MECHANICAL DRAWINGS. DO NOT PLACE ON, OR IN, HOUSEKEEPING PAD, OR UNDERNEATH EQUIPMENT.
12. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.
13. CONTRACTOR SHALL PLACE A TRAP PRIMER, TP-1, AND A HOSE BIBB, HB-2, IN ALL MECHANICAL ROOMS.
14. PROVIDE A HOSE-BIBB WITH WHEEL HANDLE IN ALL MECHANICAL ROOMS, HB-2.
15. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED AND HEAT TRACED TO PREVENT FREEZING.
16. ALL SANITARY 3" OR ABOVE SHALL BE INSPECTED BY A CAMERA PRIOR TO SUBSTANTIAL COMPLETION.

KEYED NOTES - PLUMBING PLAN

P1 4"WASTE DOWN FROM 2-WAY YARD CLEAN-OUT IN CONCRETE PAD.

P3 2" WAST DOWN FROM 2" FLOOR DRAIN.

P4 3" WASTE DOWN FROM MOP SINK.

P5 4"WASTE DOWN FROM WATER CLOSET.

P6 4"WASTE DOWN FROM 4" FLOOR SINK.

P7 2" WASTE DOWN FROM DRINKING FOUNTAIN.

P8 4" WASTE DOWN FROM FLOOR CLEAN-OUT.

P10 4" WASTE DOWN FROM WALL CLEAN-OUT

P11 4" WASTE DOWN FROM TRENCH DRAIN.

P13 2" VENT PIPING UP AND 2" WASTE DOWN.

P14 2" VENT PIPING UP AND 3" WASTE DOWN.

P15 2" VENT PIPING UP AND 4" WASTE DOWN.

P22 ROOF DRAIN PIPING DOWN. PROVIDE WALL CLEAN OUT 12" ABOVE FINISHED FLOOR.

P25 3/4" TRAP PRIMER SUPPLY DOWN TO FLOOR DRAIN/SINK. ROUTE AS INDICATED ON PLAN.

P50 3"WASTE DOWN FROM 3" FLOOR DRAIN.

P51 2"WASTE DOWN FROM LAVATORY OR SINK.

P53 6" WASTE DOWN FROM BACKWASH PIT.

P54 3" VENT UP AND 6" WASTE DOWN.

P55 6" WASTE DOWN FROM 2-WAY YARD CLEAN-OUT.

P56 DOMESTIC COLD WATER UP FROM BELOW.

P57 GAS PIPING UP FROM BELOW GRADE. GAS PIPING FROM GAS COMPANY.

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

1 **UNDERFLOOR - PLUMBING PLAN**
SCALE: 1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61527
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

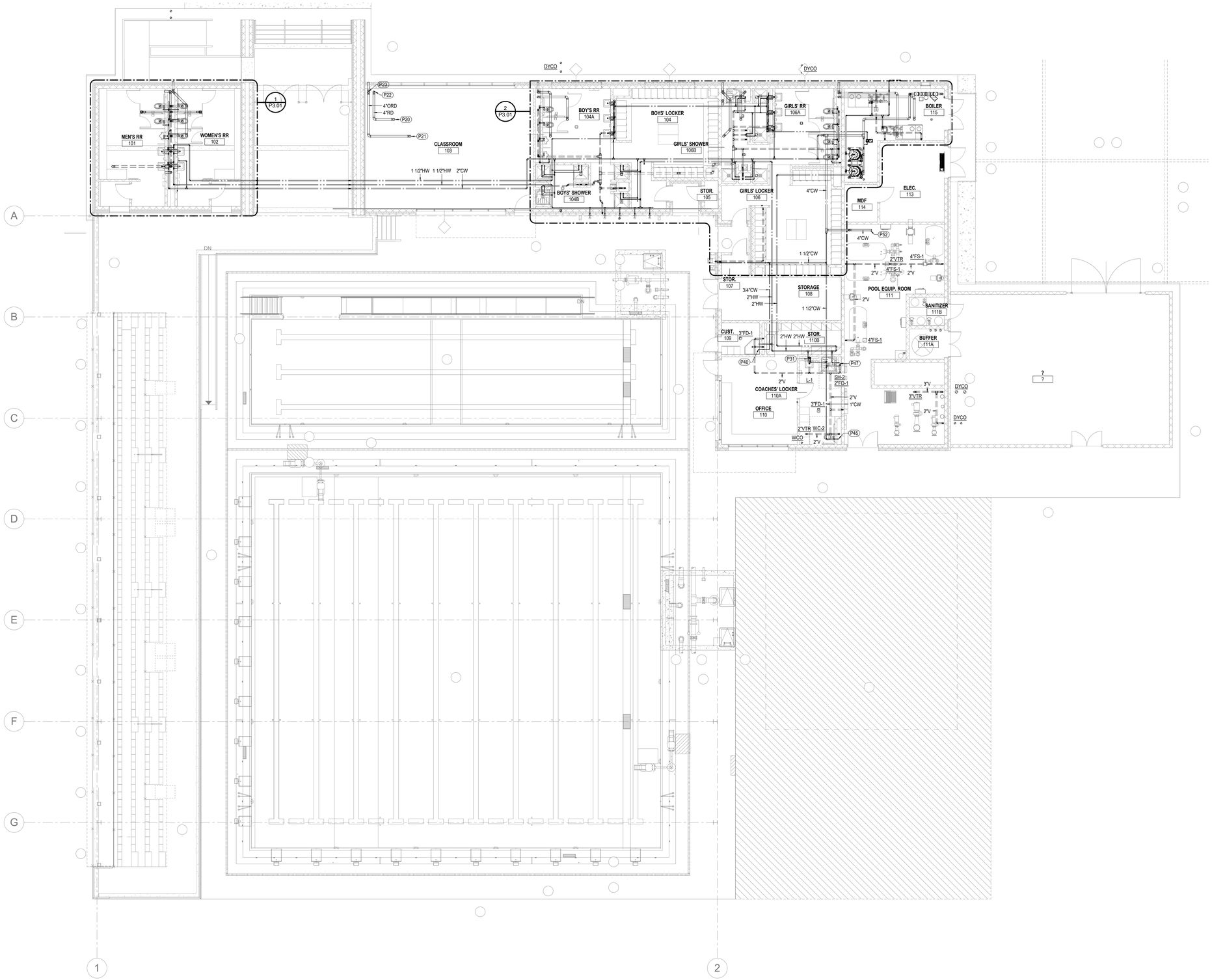
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: MATTHEW TREVINO
CHECKED BY: DON RICHARDS
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

UNDERFLOOR - PLUMBING PLAN

P2.01



GENERAL NOTES - PLUMBING PLAN

1. THE CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION.
2. ALL FINAL CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE MADE BY THE PLUMBING CONTRACTOR.
3. ALL PLUMBING PIPING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO ANY INSTALLATION OF ALL PLUMBING FIXTURES AND EQUIPMENT BY THE PLUMBING CONTRACTOR.
4. ALL FLOOR DRAINS AND FLOOR SINKS SHOWN ON THIS DRAWING SHALLB E COODINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
5. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.
6. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.
7. PROVIDE A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.
8. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER.
9. FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADDA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.
10. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.
11. FLOOR DRAINS AND FLOOR SINKS IN MECHANICAL ROOMS SHALL BE SET NOT LESS THAN 6" FROM HOUSEKEEPING PADS. RE: MECHANICAL DRAWINGS. DO NOT PLACE ON, OR IN, HOUSEKEEPING PAD, OR UNDERNEATH EQUIPMENT.
12. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.
13. CONTRACTOR SHALL PLACE A TRAP PRIMER, TP-1, AND A HOSE BIBB, HB-2, IN ALL MECHANICAL ROOMS.
14. PROVIDE A HOSE-BIBB WITH WHEEL HANDLE IN ALL MECHANICAL ROOMS, HB-2.
15. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED AND HEAT TRACED TO PREVENT FREEZING.
16. ALL SANITARY 3" OR ABOVE SHALL BE INSPECTED BY A CAMERA PRIOR TO SUBSTANTIAL COMPLETION.

KEYED NOTES - PLUMBING PLAN

P20	ROOF DRAIN PIPING DOWN FROM ROOF DRAIN. SIZE AS NOTED.
P21	OVER FLOW ROOF DRAIN PIPING DOWN FROM ROOF DRAIN. SIZE AS NOTED.
P22	ROOF DRAIN PIPING DOWN. PROVIDE WALL CLEAN OUT 12" ABOVE FINISHED FLOOR.
P23	OVER FLOW ROOF DRAIN PIPING DOWN TO DOWN SPOUT NOZZLE.
P31	2"VENT, 3/4"CW AND 3/4"HW DOWN TO LAVATORY OR SINK.
P40	3/4"CW AND 3/4"HW DOWN TO MOP SINK.
P45	1"CW AND 2" VENT UP.
P47	3/4"CW AND 3/4"HW DOWN TO SHOWER VALVE.
P52	REFER TO POOL CONSULATANT DRAWING FOR FINAL WATER CONNECTIONS IN POOL EQUIPMENT ROOM.

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61535
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: MATTHEW TREVINO
CHECKED BY: DON RICHARDS
REVISIONS

No.	Description	Date

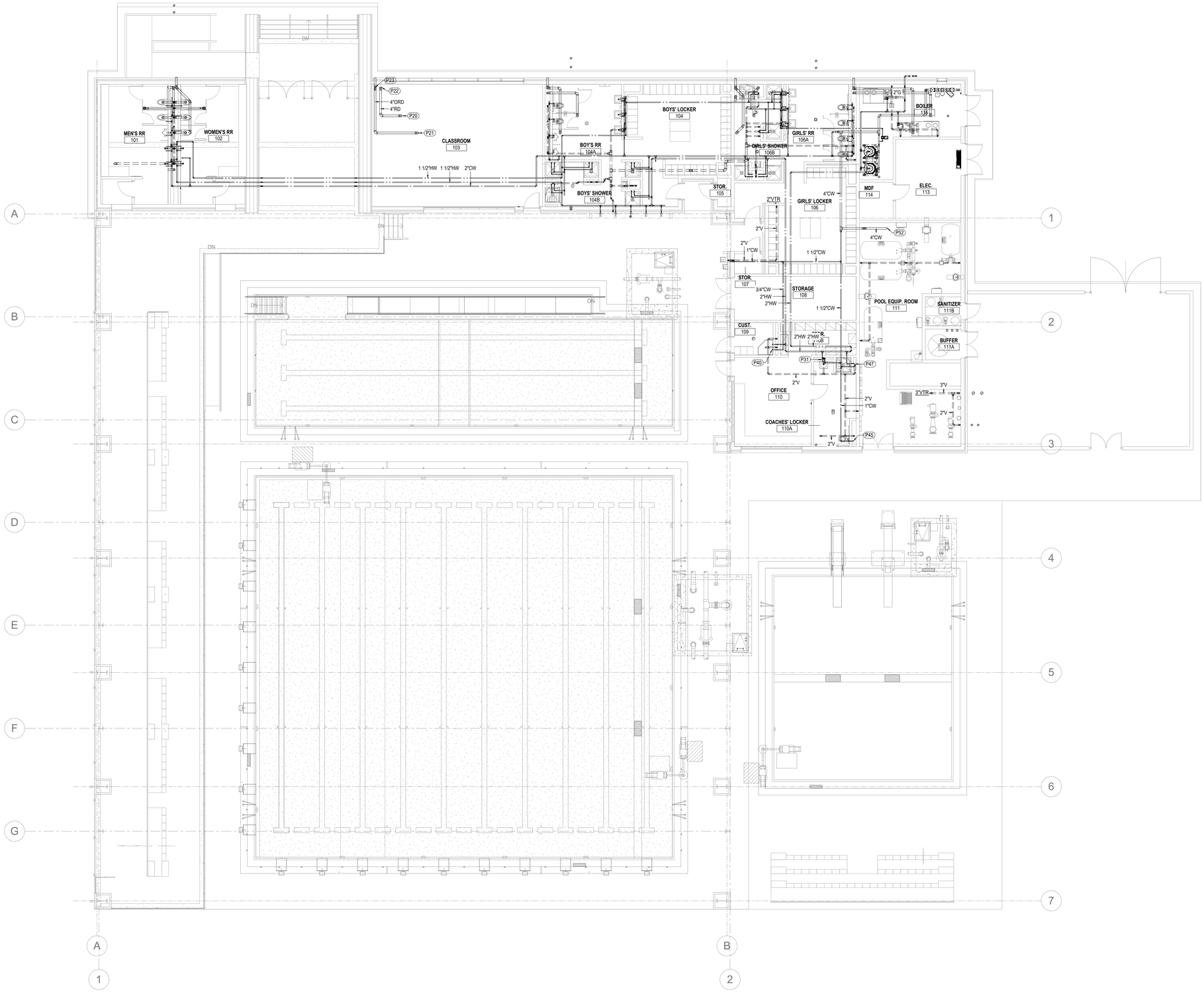
ISSUE FOR PROPOSAL

PLUMBING PLAN

P2.02

LEAF ENGINEERS
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

1 **PLUMBING PLAN**
SCALE: 1/8" = 1'-0"



GENERAL NOTES - PLUMBING PLAN

1. THE CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION.
2. ALL FINAL CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE MADE BY THE PLUMBING CONTRACTOR.
3. ALL PLUMBING PIPING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO ANY INSTALLATION OF ALL PLUMBING FIXTURES AND EQUIPMENT BY THE PLUMBING CONTRACTOR.
4. ALL FLOOR DRAINS AND FLOOR SINKS SHOWN ON THIS DRAWING SHALLB E COODINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
5. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.
6. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.
7. PROVIDE A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.
8. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER.
9. FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADDA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.
10. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.
11. FLOOR DRAINS AND FLOOR SINKS IN MECHANICAL ROOMS SHALL BE SET NOT LESS THAN 6" FROM HOUSEKEEPING PADS. RE: MECHANICAL DRAWINGS. DO NOT PLACE ON, OR IN, HOUSEKEEPING PAD, OR UNDERNEATH EQUIPMENT.
12. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.
13. CONTRACTOR SHALL PLACE A TRAP PRIMER, TP-1, AND A HOSE BIBB, HB-2, IN ALL MECHANICAL ROOMS.
14. PROVIDE A HOSE-BIBB WITH WHEEL HANDLE IN ALL MECHANICAL ROOMS, HB-2.
15. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED AND HEAT TRACED TO PREVENT FREEZING.
16. ALL SANITARY 3" OR ABOVE SHALL BE INSPECTED BY A CAMERA PRIOR TO SUBSTANTIAL COMPLETION.

KEYED NOTES - PLUMBING PLAN

P20	ROOF DRAIN PIPING DOWN FROM ROOF DRAIN. SIZE AS NOTED.
P21	OVER FLOW ROOF DRAIN PIPING DOWN FROM ROOF DRAIN. SIZE AS NOTED.
P22	ROOF DRAIN PIPING DOWN. PROVIDE WALL CLEAN OUT 12" ABOVE FINISHED FLOOR.
P23	OVER FLOW ROOF DRAIN PIPING DOWN TO DOWN SPOUT NOZZLE.
P31	2"VENT, 3/4"CW AND 3/4"HW DOWN TO LAVATORY OR SINK.
P40	3/4"CW AND 3/4"HW DOWN TO MOP SINK.
P45	1"CW AND 2" VENT UP.
P47	3/4"CW AND 3/4"HW DOWN TO SHOWER VALVE.
P52	REFER TO POOL CONSULATANT DRAWING FOR FINAL WATER CONNECTIONS IN POOL EQUIPMENT ROOM.

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

1 **PLUMBING PLAN - ALTERNATE #2**
SCALE: 1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61527
LICENSED PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	APRIL 11, 2019
DRAWN BY	MATTHEW TREVINO
CHECKED BY	DON RICHARDS

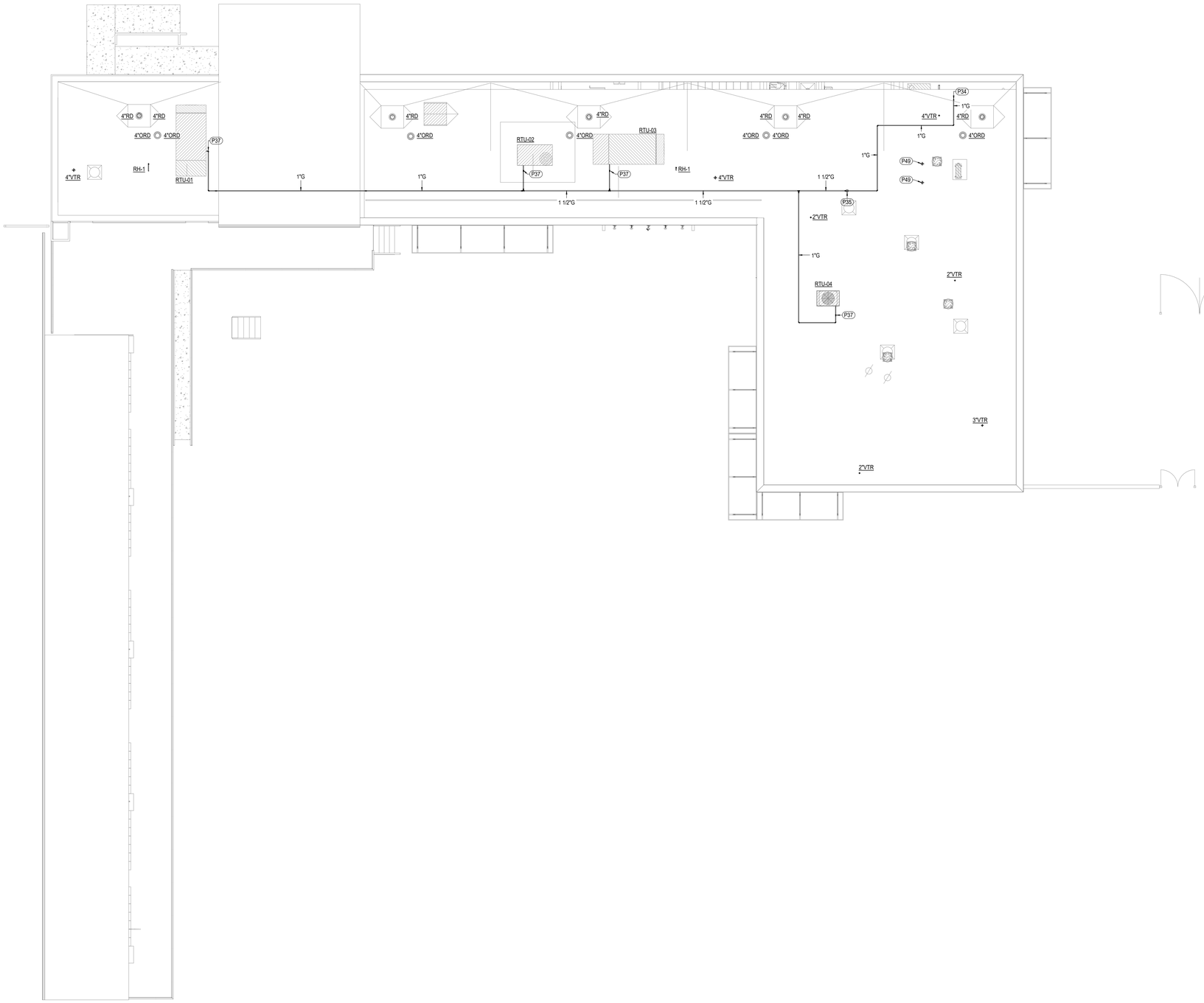
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

PLUMBING PLAN - ALTERNATE #2

P2.03



GENERAL NOTES - PLUMBING PLAN

1. THE CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION.
2. ALL FINAL CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE MADE BY THE PLUMBING CONTRACTOR.
3. ALL PLUMBING PIPING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO ANY INSTALLATION OF ALL PLUMBING FIXTURES AND EQUIPMENT BY THE PLUMBING CONTRACTOR.
4. ALL FLOOR DRAINS AND FLOOR SINKS SHOWN ON THIS DRAWING SHALLB E COODINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
5. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.
6. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.
7. PROVIDE A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.
8. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER.
9. FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADDA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.
10. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.
11. FLOOR DRAINS AND FLOOR SINKS IN MECHANICAL ROOMS SHALL BE SET NOT LESS THAN 6" FROM HOUSEKEEPING PADS. RE: MECHANICAL DRAWINGS. DO NOT PLACE ON, OR IN, HOUSEKEEPING PAD, OR UNDERNEATH EQUIPMENT.
12. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.
13. CONTRACTOR SHALL PLACE A TRAP PRIMER, TP-1, AND A HOSE BIBB, HB-2, IN ALL MECHANICAL ROOMS.
14. PROVIDE A HOSE-BIBB WITH WHEEL HANDLE IN ALL MECHANICAL ROOMS, HB-2.
15. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED AND HEAT TRACED TO PREVENT FREEZING.
16. ALL SANITARY 3" OR ABOVE SHALL BE INSPECTED BY A CAMERA PRIOR TO SUBSTANTIAL COMPLETION.

KEYED NOTES - PLUMBING PLAN

P49 PROVIDE CONCENTRIC VENT. REFER TO GAS WATER HEATER SCHEDULE FOR MODEL NUMBERS.

1 **PLUMBING ROOF PLAN - BASE BID**
SCALE: 1/8" = 1'-0"

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61522
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

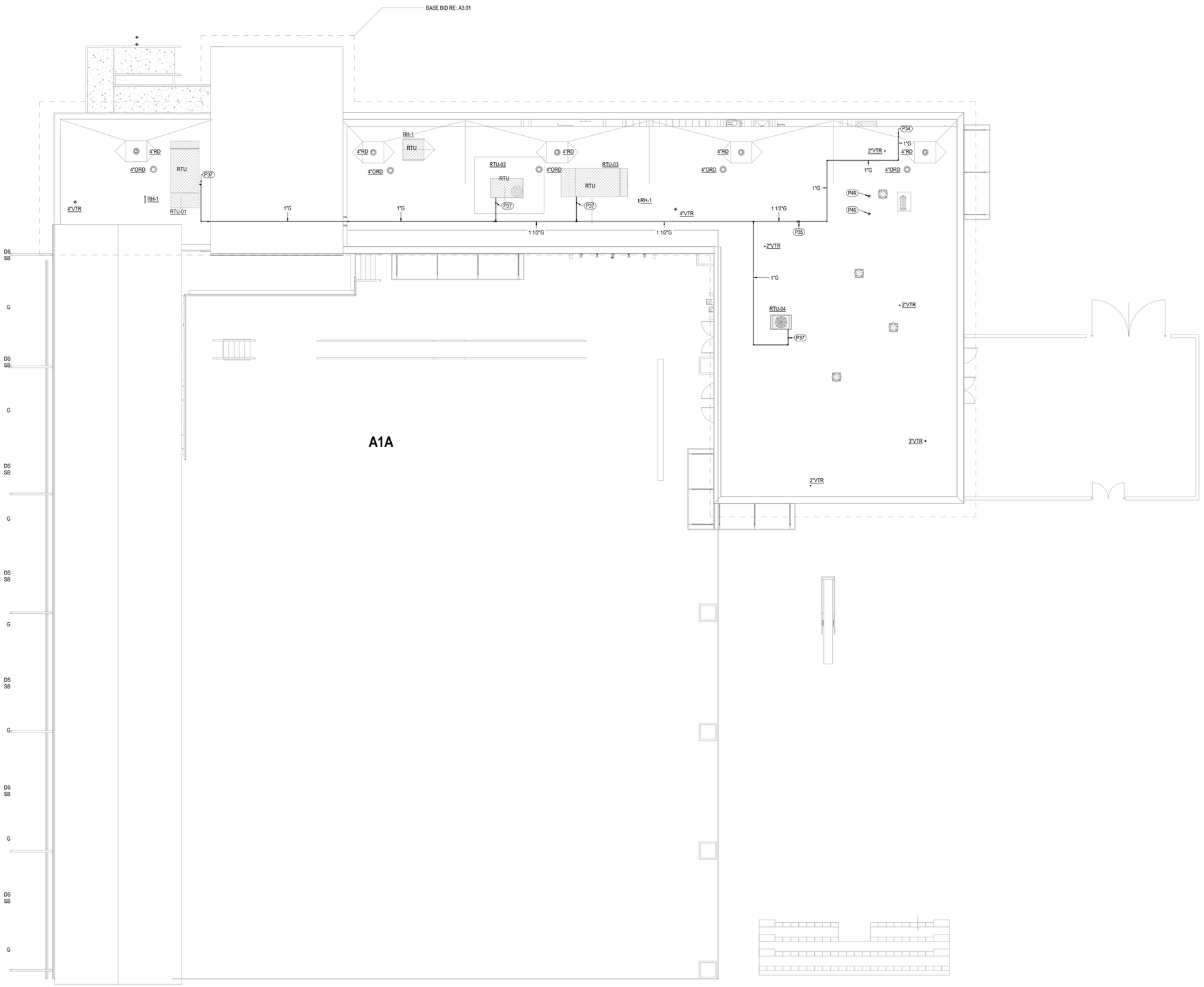
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: MATTHEW TREVINO
CHECKED BY: DON RICHARDS
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

ROOF - PLUMBING PLAN - BASE BID

P2.04



GENERAL NOTES - PLUMBING PLAN

1. THE CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION.
2. ALL FINAL CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE MADE BY THE PLUMBING CONTRACTOR.
3. ALL PLUMBING PIPING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO ANY INSTALLATION OF ALL PLUMBING FIXTURES AND EQUIPMENT BY THE PLUMBING CONTRACTOR.
4. ALL FLOOR DRAINS AND FLOOR SINKS SHOWN ON THIS DRAWING SHALLB E COODINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
5. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.
6. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.
7. PROVIDE A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.
8. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER.
9. FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADDA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.
10. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.
11. FLOOR DRAINS AND FLOOR SINKS IN MECHANICAL ROOMS SHALL BE SET NOT LESS THAN 6" FROM HOUSEKEEPING PADS. RE: MECHANICAL DRAWINGS. DO NOT PLACE ON, OR IN, HOUSEKEEPING PAD, OR UNDERNEATH EQUIPMENT.
12. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.
13. CONTRACTOR SHALL PLACE A TRAP PRIMER, TP-1, AND A HOSE BIBB, HB-2, IN ALL MECHANICAL ROOMS.
14. PROVIDE A HOSE-BIBB WITH WHEEL HANDLE IN ALL MECHANICAL ROOMS, HB-2.
15. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED AND HEAT TRACED TO PREVENT FREEZING.
16. ALL SANITARY 3" OR ABOVE SHALL BE INSPECTED BY A CAMERA PRIOR TO SUBSTANTIAL COMPLETION.

KEYED NOTES - PLUMBING PLAN

P49 PROVIDE CONCENTRIC VENT. REFER TO GAS WATER HEATER SCHEDULE FOR MODEL NUMBERS.

LEAF ENGINEERS
A PGAL COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

1 **PLUMBING ROOF PLAN - ALTERNATE #1**
SCALE: 1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

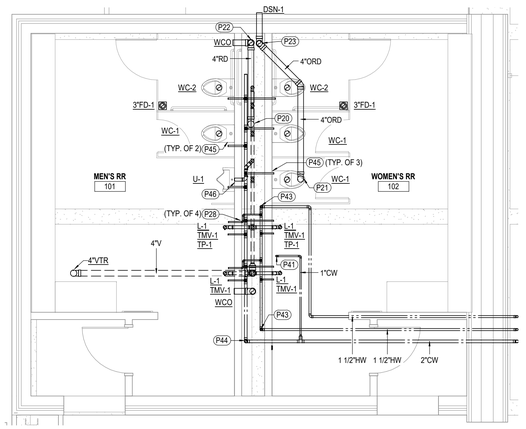
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: MATTHEW TREVINO
CHECKED BY: DON RICHARDS
REVISIONS

No.	Description	Date

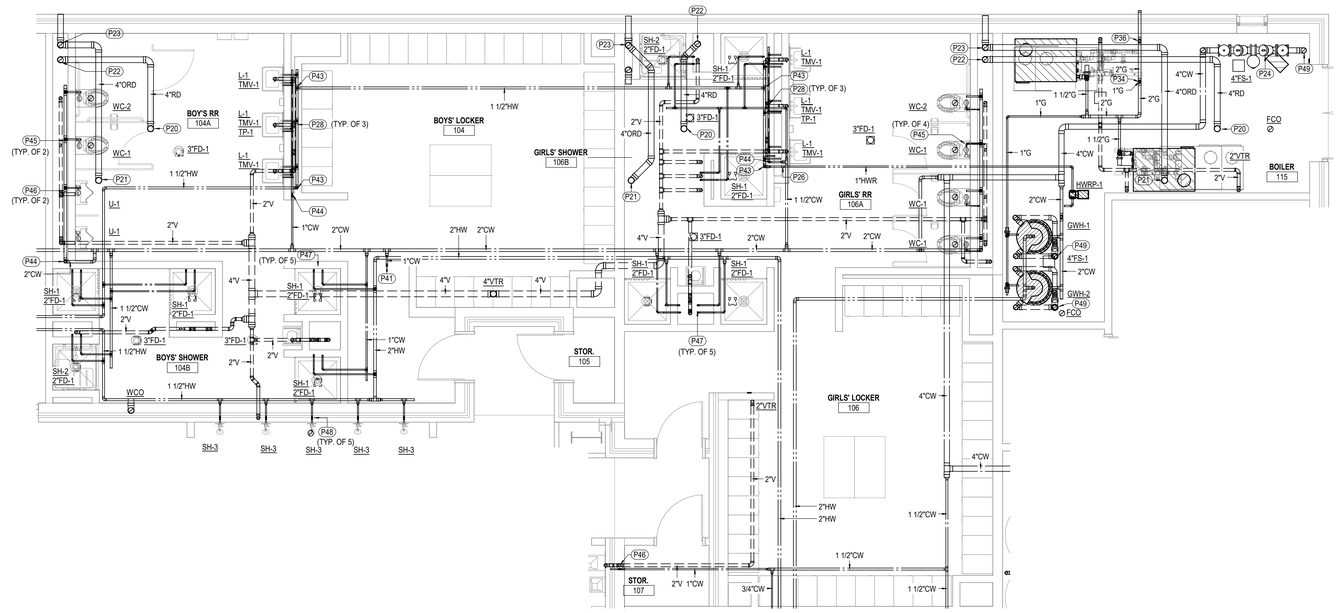
ISSUE FOR PROPOSAL

PLUMBING ROOF PLAN - ALTERNATE 1

P2.05



1 ENLARGED PLUMBING PLAN - MEN'S 101 & WOMEN'S 102
SCALE: 1/4" = 1'-0"



2 ENLARGED PLUMBING PLAN - BOY'S 104 & GIRL'S 106
SCALE: 1/4" = 1'-0"

KEYED NOTES - PLUMBING PLAN

P20	ROOF DRAIN PIPING DOWN FROM ROOF DRAIN. SIZE AS NOTED.
P21	OVER FLOW ROOF DRAIN PIPING DOWN FROM ROOF DRAIN. SIZE AS NOTED.
P22	ROOF DRAIN PIPING DOWN. PROVIDE WALL CLEAN OUT 12" ABOVE FINISHED FLOOR.
P23	OVER FLOW ROOF DRAIN PIPING DOWN TO DOWN SPOUT NOZZLE.
P24	PROVIDE LINE SIZED REDUCED PRESSURE ZONE ASSEMBLY EQUAL TO WATTS LF909. PROVIDE AIR GAP FITTING EQUALL TO WATTS 909AG-K. ROUTE DRAIN LINE FULL SIZE FROM AIR GAP FITTING TO NEAREST FLOOR SINK.
P26	PROVIDE BALANCING VALVE.
P28	3/4"CW AND 3/4"HW DOWN TO LAVATORY OR SINK.
P34	GAS PIPING DOWN THRU ROOF. SIZE AS NOTED.
P36	GAS PIPING UP. SUPPORT PIPING TO WALL. SIZE AS NOTED.
P41	1"CW UP TO ROOF HYDRANT REFER TO ROOF ACCESSORIES SPEC SECTION 07 72 00.
P43	HOT WATER PIPING DOWN IN CHASE. SIZE AS NOTED.
P44	COLD WATER PIPING DOWN IN CHASE. SIZE AS NOTED.
P45	1"CW AND 2" VENT UP.
P46	3/4"CW AND 2" VENT UP.
P47	3/4"CW AND 3/4"HW DOWN TO SHOWER VALVE.
P48	3/4"HW DOWN TO METER SHOWER VALVE.
P49	PROVIDE CONCENTRIC VENT. REFER TO GAS WATER HEATER SCHEDULE FOR MODEL NUMBERS.

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61523
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: MATTHEW TREVINO
CHECKED BY: DON RICHARDS

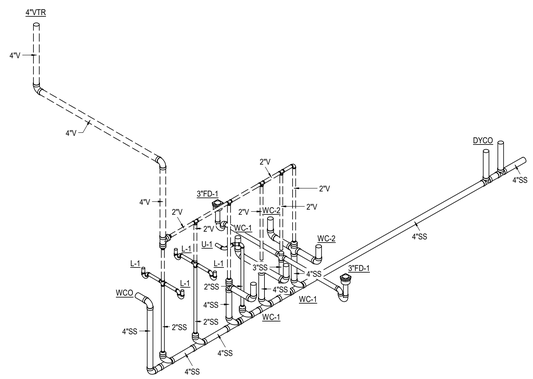
REVISIONS

No.	Description	Date

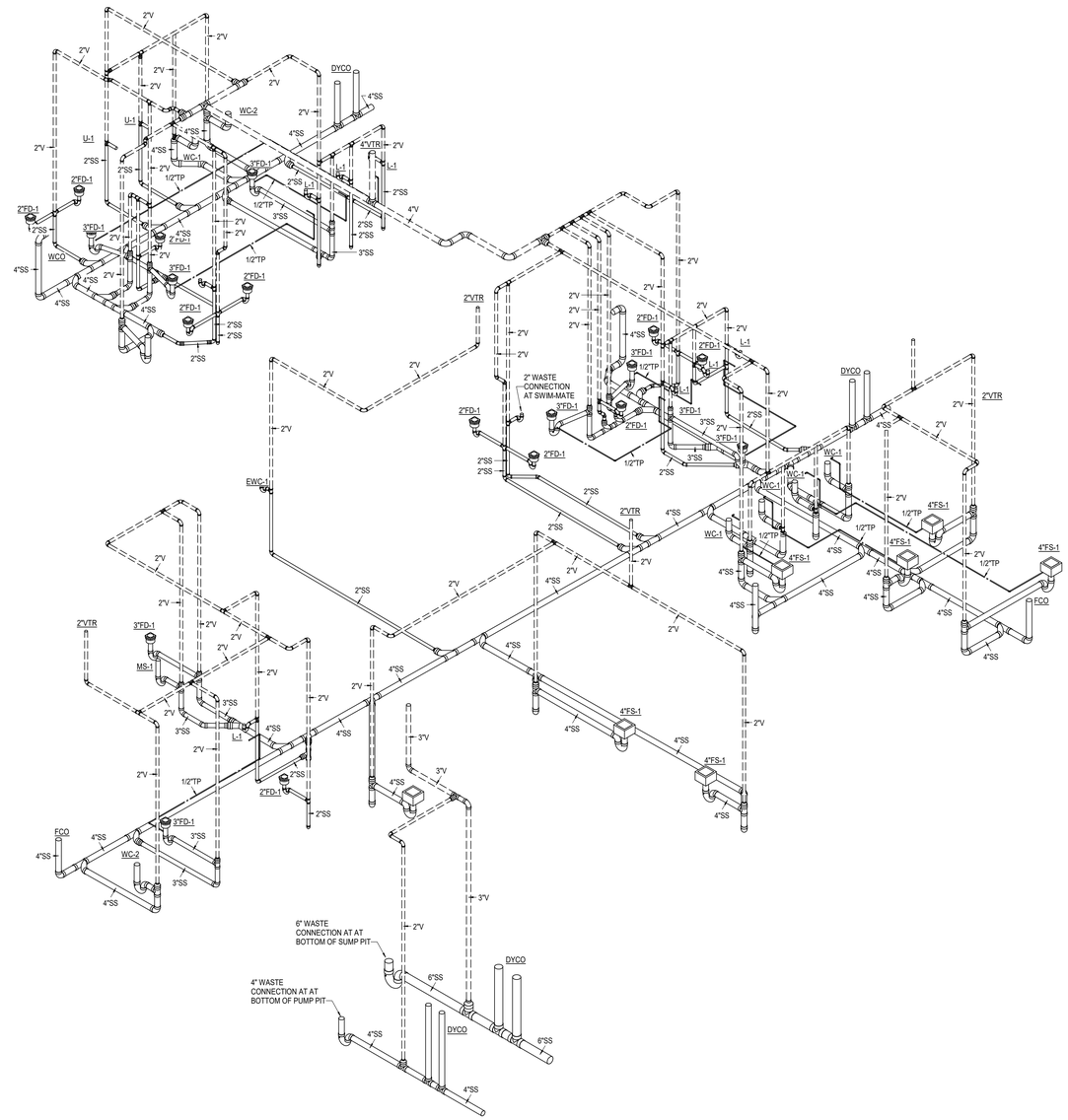
ISSUE FOR PROPOSAL

PLUMBING ENLARGED PLANS

P3.01



1 PLUMBING RISER DIAGRAM - WASTE AND VENT REST ROOM
SCALE:



2 PLUMBING RISER DIAGRAM - WASTE AND VENT LOCKER ROOM
SCALE:

LEAF ENGINEERS
A pgc COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

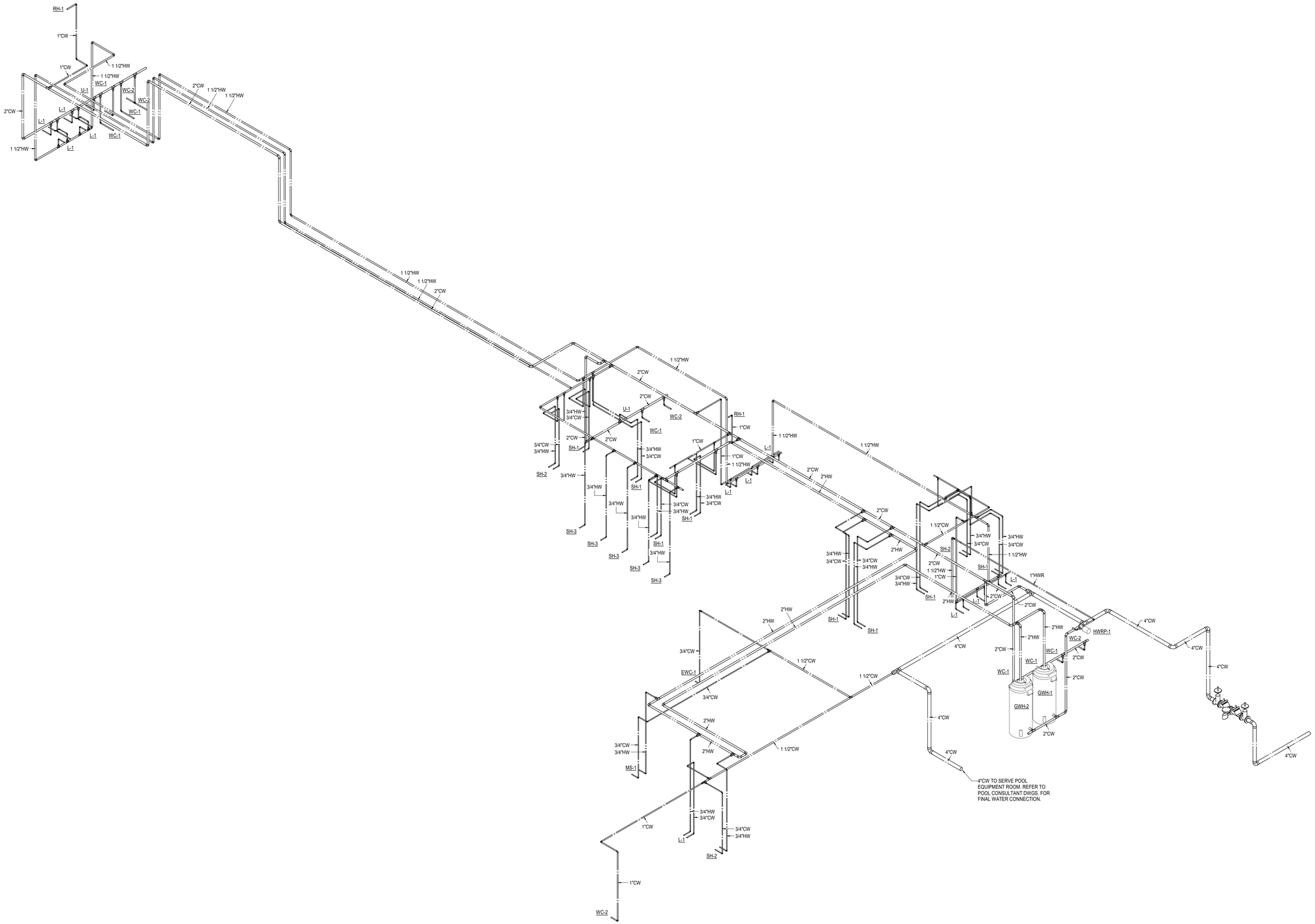
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: MATTHEW TREVINO
CHECKED BY: DON RICHARDS
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

PLUMBING RISER DIAGRAMS

P5.01



1 **PLUMBING RISER DIAGRAM - DOMESTIC WATER**
SCALE:

601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	APRIL 11, 2019
DRAWN BY	MATTHEW TREVINO
CHECKED BY	DON RICHARDS

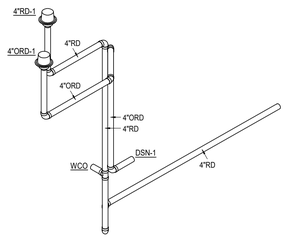
REVISIONS

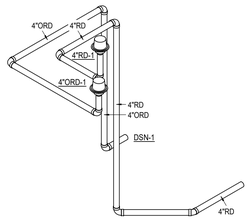
No.	Description	Date

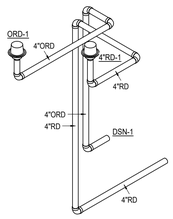
ISSUE FOR PROPOSAL

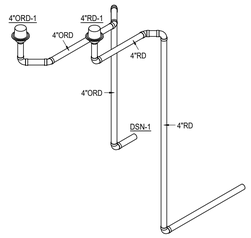
PLUMBING RISER DIAGRAMS

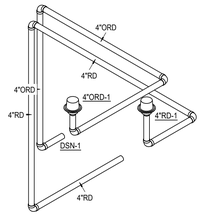
P5.02











1 **PLUMBING RISER DIAGRAM - STORM**
SCALE:

LEAF ENGINEERS
A pbk COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

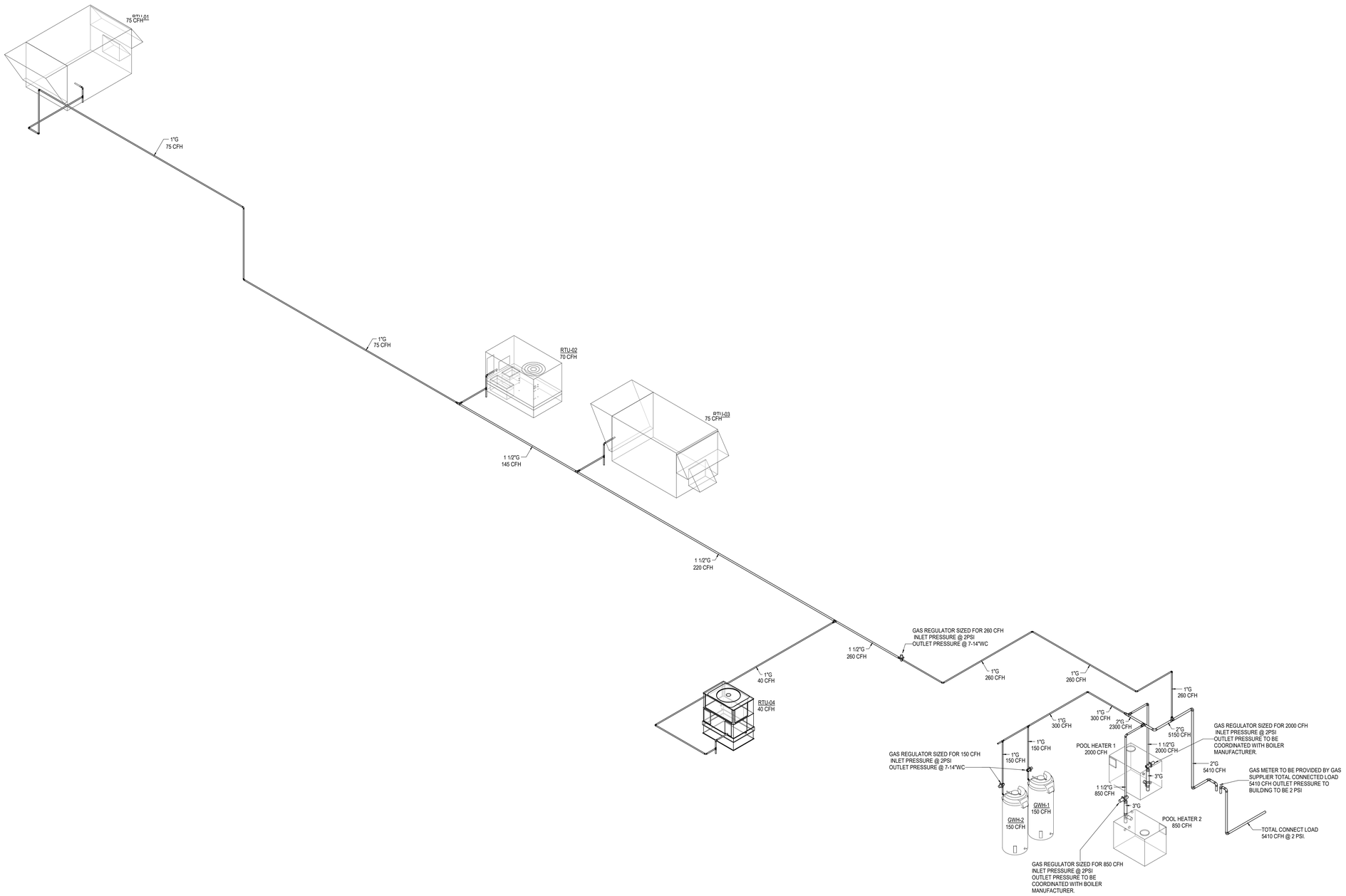
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: Author
CHECKED BY: Checker
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

PLUMBING RISER DIAGRAM

P5.03



1 **PLUMBING RISER DIAGRAM - NATURAL GAS**
SCALE:

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: Author
CHECKED BY: Checker

REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

PLUMBING RISER DIAGRAM

P5.04

PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	CONNECTION SIZE WASTE	VENT	C.W.	H.W.	REMARKS
WC-1	WATER CLOSET FLOOR-MOUNTED BOWL WITH 1-1/2" TOP SPUD; 1.28 GPF; ELONGATED RIM; PROVIDE ADJUSTABLE CARRIER.	4	2	1-1/2"	--	
WC-2	SAME AS WC-1 EXCEPT FLUSH VALVE SHALL BE ROUGHED-IN NO MORE THAN 44" A.F.F. WITH CENTER LINE OF FIXTURE 18" FROM FINISHED WALL OR PARTITION.	4	2	1-1/2"	--	
U-1	WALL HUNG HIGH EFFICIENCY URINAL WITH 3/4" TOP SPUD AND 0.125 GPF MANUAL FLUSH VALVE. MOUNT URINAL RIM AT 24" ABOVE FINISHED FLOOR. PROVIDE FLOOR SUPPORTED URINAL CARRIER.	2	2	3/4"	--	
U-2	SAME AS U-1 EXCEPT MOUNT RIM MAXIMUM 17" ABOVE FINISHED FLOOR.	2	2	3/4"	--	
L-1	WALL MOUNTED LAVATORY; FAUCET WITH 0.5 GPM AERATOR; ZURN Z-8746-CP OFFSET GRID DRAIN, ZURN Z-8802LR-CP ANGLE STOPS WITH 3/8" OD TUBING, DEARBORN 701-1 17 GA. PROTRAP AND TRUBRO 105W OFFSET INSULATION KIT. INSULATION KIT NOT REQUIRED IF CABINET APRON IS INSTALLED, ADA, LEAD-FREE.	2	2	3/4"	3/4"	PROVIDE TEMPERING VALVE SIMILAR TO POWERS HYDROGUARD T/P SERIES E480.
SS-1	32"X32"X12" CORNER MOP SERVICE BASIN, WITH HOSE AND BRACKET, PROVIDE SERVICE SINK FAUCET W/ WALL BRACE, PAIL HOOK AND 3/4" HOSE THREAD ON SPOUT.	3	2	3/4"	3/4"	PROVIDE WITH WALL GUARDS.
SH-1	SINGLE SHOWER, CONCEALED SUPPLY W/ INTEGRATED THERMOSTATIC MIXING VALVES, INTEGRAL SERVICE STOPS, VANDAL-PROOF HEAD W/ WALL BRACKET, 1.5 GPM AERATOR; LEAD-FREE.	2	2	3/4"	3/4"	
SH-2	ADA SHOWER, CONCEALED SUPPLY W/ INTEGRATED THERMOSTATIC MIXING VALVES, INTEGRAL SERVICE STOPS, VANDAL-PROOF HEAD W/ WALL BRACKET, HAND HELD SHOWER W/ METAL CLAD HOSE AND SLIDE BAR, 1.5GPM AERATOR; ADA, LEAD-FREE.	2	2	3/4"	3/4"	
SH-3	SINGLE SHOWER, SURFACE MOUNTED PANEL W/ INTEGRATED THERMOSTATIC MIXING VALVES, INTEGRAL SERVICE STOPS, VANDAL-PROOF HEAD W/ WALL BRACKET, 1.5 GPM AERATOR; LEAD-FREE.	2	2	3/4"	3/4"	
EWC-1	WALL HUNG BI-LEVEL ELECTRIC DRINKING FOUNTAIN WITH BOTTLE FILLER, STAINLESS STEEL FINISH; DEARBORN 704-1 1-1/2" 17 GA. P-TRAP; BRASS CRAFT G2CR19 C ANGLE STOP, AQUAFLO SFC-120 PP STAINLESS STEEL FLEX CONNECTORS.	2	2	3/4"	--	
ES-1	COMBINATION DRENCH SHOWER AND HALO EYE/FACE WASH WITH BARRIER FREE PULL ROD.			1-1/4"		
FD-1	6" SQUARE NICKEL BRONZE STRAINER, TRAP PRIMER CONNECTION WITH CAST IRON BODY FLOOR DRAIN; PUSH ON GASKET OUTLET OR NO HUB OUTLET.	SEE PLANS			--	PROVIDE TRAP PRIMER
FS-1	8-1/2" SQUARE NICKEL BRONZE STRAINER W/ HALF GRATE, POLISHED ALUMINUM DOME BOTTOM STRAINER; PUSH ON GASKET OUTLET OR NO HUB OUTLET.	SEE PLANS			--	
HB-1	EXPOSED, ANTI-SIPHON WALL HYDRANT WITH INTEGRAL BACKFLOW PREVENTER.	--	--	3/4"	--	
WH-1	NON-FREEZE, ANTI-SIPHON WALL HYDRANT ENCASED IN STAINLESS STEEL BOX WITH OPERATING KEY LOCK.			3/4"	--	
TMV-1	SYMMONS 7-225 MIXING VALVE FOR POINT OF USE, VOLUME CONTROL SHUT-OFF VALVE ON OUTLET, CHECK VALVE ON INLETS, LEAD FREE.			3/4"	3/4"	
TMV-2	LAWLER MODEL 803 HIGH-LOW THERMOSTATIC MIXING VALVE, VOLUME CONTROL SHUT-OFF VALVE ON OUTLET, CHECK VALVE ON INLETS, LEAD FREE.			1-1/4"	1-1/4"	
RVB-1	GUY GRAY MODEL BIM875 REFRIGERATOR/ICE MACHINE BOX, STAINLESS STEEL PREFORMED ROUGH-IN BOX WITH BRASS VALVES WITH WHEEL HANDLE SLIP IN FINISHING COVER.			3/4"	--	
RVB-2	GUY GRAY MODEL B-200 WASHING MACHINE BOX, STAINLESS STEEL PREFORMED ROUGH-IN BOX WITH BRASS VALVES WITH WHEEL HANDLE SLIP IN FINISHING COVER.			3/4"	--	
RD-1	J.R.SMITH FIG. 1010Y-C-R-U ROOF DRAIN WITH LOW PROFILE DOME AND SUMP RECEIVER, UNDERDECK CLAMP.	--	--	--	--	
ORD-1	J.R.SMITH FIG. 1070Y-C-R-U OVERFLOW ROOF DRAIN WITH INTERNAL STANDPIPE AND SUMP RECEIVER, UNDERDECK CLAMP.	--	--	--	--	
DSN-1	REFER TO PLUMBING SPEC SECTION 22 40 00.					

NOTES:

1. ROUGH-IN SUPPLY WASTE AND VENT PIPE SIZES INDICATED ARE MINIMUM SIZES SHOWN FOR ROUGH-IN ONLY.
2. COORDINATE WITH PLUMBING FIXTURE MANUFACTURER'S INSTALLATION DRAWINGS FOR PROPER INSTALLATION OF ALL FIXTURES.
3. ALL PLUMBING FIXTURES SHALL BE COMPLETELY ROUGH IN BY THE PLUMBING CONTRACTOR AND SHALL MEET ALL CODES HAVING JURISDICTION.
4. ALL FIXTURES TO BE COMMERCIAL GRADE UNLESS OTHERWISE NOTED.
5. PROVIDE A WATER HAMMER ARRESTOR IN PIPING TO ALL FIXTURES AND/OR FIXTURE BANKS.

GAS WATER HEATER SCHEDULE

UNIT	MANUFACTURER & MODEL No.	LOCATION	CAPACITY (GAL)	RECOVERY (GPH)	TEMPERATURE RISE (°F)	INPUT (BTU)	REMARKS
GWH-1	A.O.SMITH BTH-150(A)	BOILER 115	100	173	100	150,000	PROVIDE WITH THERM-X-TROL ST-30V-C EXPANSION TANK. PROVIDE CONCENTRIC VENT KIT PART No. 100111100 PROVIDE CONDENSATE NEUTRALIZATION KIT PART No. 100112380 FOR EACH GAS WATER HEATER.
GWH-2	A.O.SMITH BTH-150(A)	BOILER 115	100	173	100	150,000	

PUMP SCHEDULE

UNIT	MANUFACTURER & MODEL No.	LOCATION	TYPE	INLET PRESSURE (PSI.)	OUTLET PRESSURE (PSI.)	RPM	CAPACITY GPM	CAPACITY HEAD(FT.)	ELECTRICAL HP	ELECTRICAL VOLTS	ELECTRICAL PH	ELECTRICAL Hz	REMARKS
HWRP-1	BELL & GOSSETT ecocirc XL B 20-35	BOILER 115	INLINE CIRCULATOR	-	-	-	5	5	1/12	120	1	60	*

PLUMBING PIPING MATERIAL SCHEDULE

SYSTEM	BELOW GRADE	ABOVE GRADE
STORM WATER PIPING	SCH 40 PVC	CAST IRON
SANITARY WATER PIPING	SCH 40 PVC	CAST IRON
DOMESTIC WATER PIPING	TYPE K COPPER	TYPE L COPPER
NATURAL GAS PIPING	SCH 40 BLACK STEEL WITH P.E. TAPE OR POLYETHYLENE	SCH 40 BLACK STEEL

LEAF ENGINEERS
A pgc COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: MATTHEW TREVINO
CHECKED BY: DON RICHARDS

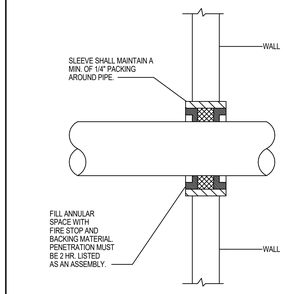
REVISIONS

No.	Description	Date

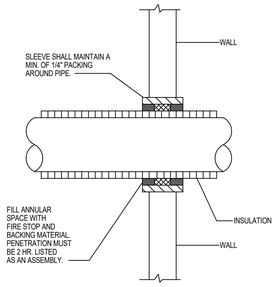
ISSUE FOR PROPOSAL

PLUMBING SCHEDULES

P6.01

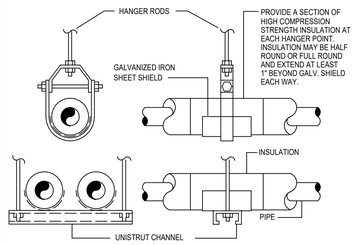


UNINSULATED PIPE PENETRATION THROUGH WALL N.T.S 01

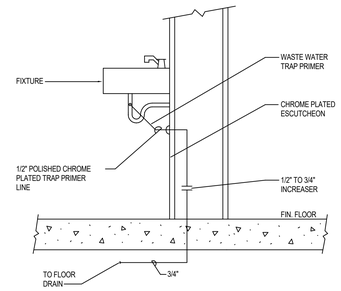


INSULATED PIPE PENETRATION THROUGH WALL N.T.S 02

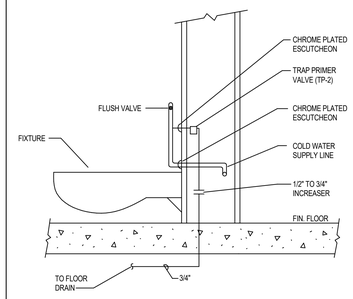
MINIMUM DIMENSIONS OF GALVANIZED SHEETMETAL PROTECTION SHIELDS AT PIPE HANGERS		
NOMINAL SIZE PIPE	SHIELD LENGTH (IN.)	GAUGE THICKNESS
1/2" & 3/4"	12	18
1" - 2-1/2"	12	18
3" - 4"	16	18
6"	18	16



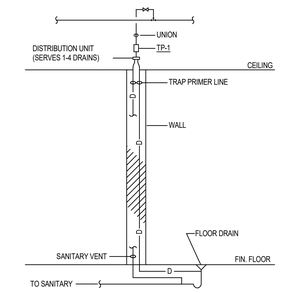
INSULATED PIPE HANGER N.T.S 02



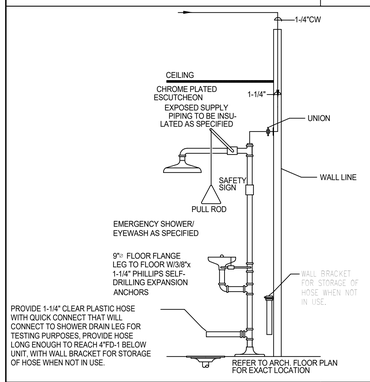
TRAP PRIMER (TP-3) DETAIL N.T.S 04



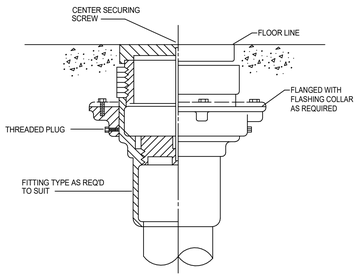
TRAP PRIMER (TP-2) DETAIL N.T.S 05



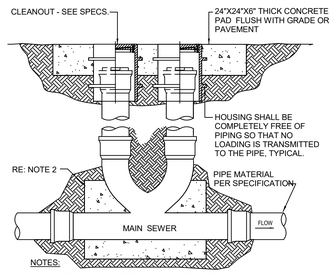
TRAP PRIMER (TP-1) WITH DISTRIBUTION UNIT DETAIL N.T.S 06



EMERGENCY EYE WASH/ SAFETY SHOWER DETAIL N.T.S 07



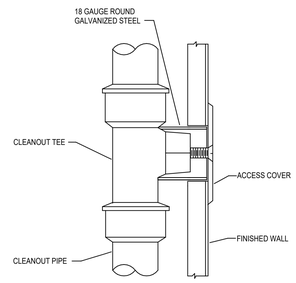
FLOOR CLEANOUT DETAIL N.T.S 08



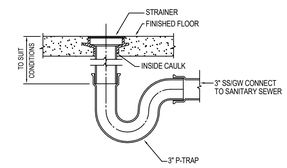
NOTES:

1. COVER TO HAVE LETTERS "CO" CAST ON TOP.
2. CONCRETE REST BLOCK SHALL BE 2'-0" LONG x DIA. OF BARREL +6" ON EACH SIDE.
3. SINGLE OR DOUBLE CLEANOUT REQUIRED AS SHOWN ON PLANS.

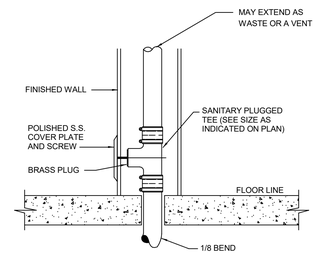
DOUBLE EXTERIOR CLEANOUT DETAIL N.T.S 09



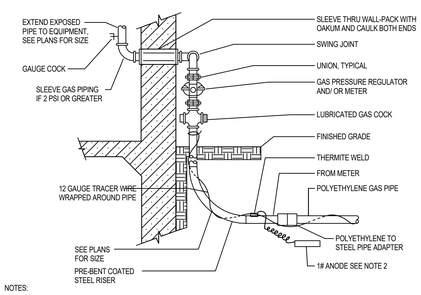
WALL CLEANOUT DETAIL N.T.S 10



FLOOR DRAIN DETAIL N.T.S 11



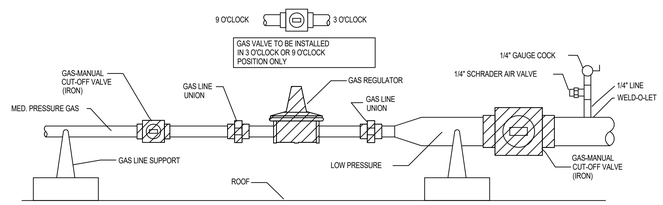
WALL CLEANOUT DETAIL N.T.S 12



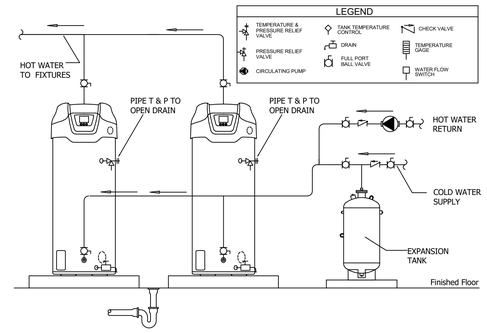
NOTES:

1. ADEQUATE SLACK SHALL BE LEFT IN LEAD WIRE TO PREVENT DAMAGE TO LEAD WIRE DURING BACKFILLING.
2. ANODE SHALL BE AT LEAST 6" BELOW SERVICE LINE UNLESS OTHERWISE SPECIFIED.

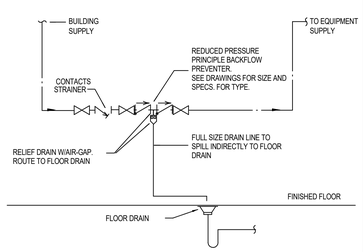
GAS ENTRY WITH REGULATOR DETAIL N.T.S 13



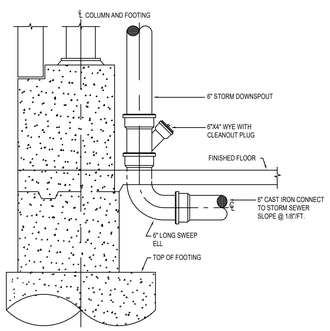
TYPICAL GAS REGULATOR INSTALLATION DETAIL N.T.S 14



GAS WATER HEATER DETAIL N.T.S 15



TYPICAL REDUCED PRESSURE BACKFLOW ASSEMBLY DETAIL N.T.S 16



STORM DOWNSPOUT DETAIL N.T.S 17

LEAF ENGINEERS
A pegc COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	APRIL 11, 2019
DRAWN BY	MATTHEW TREVINO
CHECKED BY	DON RICHARDS

REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

PLUMBING DETAILS

P7.01

FIRE ALARM LEGEND

GROUP	SYMBOL	DESCRIPTION
DEVICES	⊢□	FOOT ADDED TO ANY SYMBOL INDICATES WALL MOUNTED.
	⊢F	MANUAL FIRE ALARM PULL STATION.
	F◁	FIRE ALARM SPEAKER OR HORN. SUBSCRIPT "WP" INDICATES WEATHER PROOF DEVICE. REFERENCE DIV. 28 SPECIFICATIONS FOR SPEAKER AND/OR HORN APPLICATIONS. A SUBSCRIPT "S" INDICATES THAT A SPEAKER STROBE TIED TO VOICE EVAC PANEL SHALL BE PROVIDED FOR ALL LOCATIONS INDICATED.
		COMBINATION SPEAKER OR HORN AND STROBE IN SINGLE COVER. SUBSCRIPT "W" INDICATES WHITE FINISH; OTHERWISE STANDARD RED COLOR. "V" INDICATES LOCAL VOICE EVACUATION SPEAKER FUNCTIONS, "H" INDICATES HIGH VOLUME SPEAKER FUNCTIONS, REFERENCE DIV. 28 SPECIFICATIONS FOR SPEAKER AND/OR HORN APPLICATIONS.
		VISUAL ALARM STROBE. SUBSCRIPT "W" INDICATES WHITE FINISH; OTHERWISE STANDARD RED COLOR.
	S	SMOKE DETECTOR. NO SUBSCRIPT INDICATES IONIZATION TYPE; "P" INDICATES PHOTOELECTRIC TYPE; "D" INDICATES DUCT TYPE AND PHOTOELECTRIC.
	!	HEAT DETECTOR; COMBINATION RATE OF RISE AND FIXED TEMPERATURE. "F" INDICATES FIXED TEMPERATURE ONLY; "R" INDICATES RATE OF RISE ONLY. "C" INDICATES RATE COMPENSATION TYPE.
	CO	CARBON MONOXIDE DETECTOR.
	B	BEAM SMOKE DETECTOR. "T" INDICATES TRANSMITTER. "R" INDICATES RECEIVER.
	⊢T	FIRE FIGHTER'S TELEPHONE JACK. "H" INDICATES PERMANENT EMERGENCY TELEPHONE HANDSET.
	R	AUXILIARY CONTROL RELAY. "2" INDICATES TWO RELAYS REQUIRED FOR FIRE FIGHTER OVERRIDE CONTROL.
	D	FIRE/SMOKE DUCT DAMPER WITH MOTOR ACTUATOR (BY DIV. 15). PROVIDE FIRE ALARM CONTROL RELAYS AND ADDRESSABLE MODULE.
	FTC	TERMINAL CABINET FOR FIRE ALARM SYSTEM WIRING.
	FACP	FIRE ALARM CONTROL PANEL.
	FAA	FIRE ALARM ANNUNCIATOR PANEL.
	FAXP	FIRE ALARM EXTENDER PANEL.
	GV	SPRINKLER SYSTEM GATE VALVE MONITOR SWITCH.
	FS	SPRINKLER SYSTEM WATER FLOW SWITCH.
	TS	TAMPER SWITCH.
	CV	SPRINKLER SYSTEM ALARM CHECK VALVE.
	B	SPRINKLER SYSTEM ELECTRIC ALARM BELL.
	PA	SPRINKLER SYSTEM PRE-ACTION CONTROL PANEL.
	DH	DOOR HOLDER.
	MM	MONITOR MODULE

NOTE:
1. EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS. REFER TO GENERAL ELECTRICAL NOTES FOR WALL-MOUNTED DEVICE MOUNTING HEIGHTS.
2. REFERENCE SPECIFICATIONS FOR MATERIALS AND METHODS.
3. COMPLETE INSTALLATION OF ALL PRODUCTS SHALL BE IN COMPLIANCE WITH ALL CODES, INDUSTRY STANDARDS, COMMON PRACTICES AND MANUFACTURER'S INSTRUCTIONS.

SEQUENCE OF OPERATIONS

1. WHEN A FIRE ALARM CONDITION IS DETECTED BY ANY OF THE SYSTEM ALARM INITIATING DEVICES THE CONTROL PANEL MUST RESPOND WITHIN 3 SECONDS, THE FOLLOWING FUNCTIONS OCCUR:
   A. THE SYSTEM COMMON ALARM LED ON THE CPU MODULE SHALL FLASH. THE INTERNAL AUDIBLE TROUBLE DEVICE SHALL SOUND. ACKNOWLEDGEMENT OR SILENCING THE ALARM CONDITION SHALL SILENCE THE ALARM SIGNALS AND CAUSE FLASHING ALARM LED's TO ILLUMINATE STEADY.
   B. AN BACK-LIT LCD DISPLAY SHALL INDICATE ALL APPLICABLE INFORMATION ASSOCIATED WITH THE ALARM CONDITION INCLUDING: ZONE, DEVICE TYPE, DIVIDE LOCATION AND TIME OF ALARM. LOCATION AND ZONING MESSAGES SHALL BE CUSTOM FIELD PROGRAMMED TO RESPECTIVE PREMISES. THE ALARM INFORMATION MUST BE STORED IN EVENT MEMORY FOR LATER REVIEW. EVENT MEMORY MUST BE AVAILABLE AT THE MAIN AND ALL REMOTE ANNUNCIATORS.
   C. ANY REMOTE OR LOCAL ANNUNCIATOR LED's ASSOCIATED WITH THE ALARM ZONE SHALL BE ILLUMINATED AS HEREIN SPECIFIED.
   D. A THREE CHANNEL DIGITAL ALARM COMMUNICATOR SHALL BE INTEGRALLY PROVIDED AND TRANSMIT TROUBLE AND ALARM SIGNALS TO AN APPROVED REMOTE STATION, (REMOTE STATION CONNECTION AND SERVICE PROVIDED BY OWNER).
   E. WHEN THE ALARMED DEVICE IS RESTORED TO NORMAL, THE CONTROL PANEL SHALL BE REQUIRED TO BE MANUALLY RESET TO CLEAR THE ALARM CONDITION, EXCEPT THAT THE ALARMS MAY BE SILENCED AS PROGRAMMED.
   F. AN ALARM SHALL BE SILENCED BY A CODE OR FIREFIGHTER KEY AT THE MAIN OR REMOTE ANNUNCIATORS. WHEN SILENCED, THIS SHALL NOT PREVENT THE RESOUNDING OF SUBSEQUENT EVENTS IF ANY OTHER EVENT SHOULD OCCUR, (SUBSEQUENT ALARM FEATURE). WHEN ALARMS ARE SILENCED THE SILENCED LED ON THE CONTROL PANEL AND ON ANY REMOTE ANNUNCIATORS SHALL REMAIN LIT UNTIL THE ALARMED DEVICE IS RETURNED TO NORMAL.
   G. ALL AUTOMATIC EVENTS PROGRAMMED TO THE ALARM POINT SHALL BE EXECUTED AND THE ASSOCIATED INDICATING DEVICE AND/OR OUTPUTS ACTIVATED. AS EACH INDICATING CIRCUIT OR CONTROL RELAY IS ACTIVATED, ITS ASSOCIATED "ON" LED SHALL BE ILLUMINATED.
   H. ACTIVATE ALL AUDIBLE/VISUAL ALARM DEVICES.
   I. DE-ACTIVATE HVAC SYSTEMS OVER 2000 CFM.
   J. DISPLAY SYSTEM STATUS CHANGES ON THE REMOTE ANNUNCIATOR(S).
   K. RELEASE ALL SMOKE DOOR, FIRE DOORS, FIRE COILING DOORS, FIRE SMOKE DAMPERS AND FIRE SHUTTERS.

GENERAL FIRE ALARM NOTES

1. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF THE FIRE ALARM SYSTEMS SHALL BE A DEDICATED CIRCUIT AND 0N EMERGENCY POWER WHEN AVAILABLE. THE INSTALLING CONTRACTOR OF EACH SYSTEM SHALL BE RESPONSIBLE FOR PROVIDING THEIR OWN 120V POWER REQUIREMENTS FOR ALL REMOTE POWER SUPPLIES. THE INSTALLING CONTRACTORS LICENSED ELECTRICAL SUBCONTRACTOR SHALL COORDINATE ELECTRICAL PANEL LOCATIONS AND AVAILABLE SPACE DEDICATED FOR THE CONTRACTOR'S SYSTEM REQUIREMENTS. (TYPICAL). PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER TOMAIN CONTROL PANELS AND ALL HEAD END EQUIPMENT. SYSTEM INSTALLERS SHALL COORDINATE LOCATION AND CONNECTION OF CONTROL PANEL AND HEAD END POWER WITH THE PROJECTS ELECTRICAL CONTRACTOR.
2. UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS OR OTHERWISE INSTRUCTED BY THE ARCHITECT, FIRE ALARM DEVICES SHALL HAVE THE FOLLOWING MOUNTING HEIGHTS. VERIFY EXACT HEIGHT WITH ARCHITECT. DIMENSIONS ARE TO CENTER OF BOX UNLESS OTHERWISE NOTED:
   A. MANUAL FIRE PULL STATIONS - MOUNT AT 42" AFF TO THE TOP OF BOX FOR FRONTAL WHEELCHAIR APPROACH; AND 48" AFF FOR SIDE WHEELCHAIR APPROACH. PULL STATIONS SHALL BE LOCATED THROUGHOUT THE PROTECTED AREA SO THAT THEY ARE UNOBSTRUCTED AND ACCESSIBLE; MOUNT WITHIN 5 FT. OF THE EXIT DOORWAY OPENING AT EACH EXIT ON EACH FLOOR; MOUNT ON BOTH SIDES OF GROUP OPENINGS OVER 40 FT. IN WIDTH. ADDITIONAL
   B. FIRE ALARM AUDIBLE DEVICES - IF CEILING HEIGHTS ALLOW, WALL-MOUNTED APPLIANCES SHALL HAVE THEIR TOPS ABOVE THE FINISHED FLOORS AT HEIGHTS OF NOT LESS THAN 90 IN. AND BELOW THE FINISHED CEILINGS AT HEIGHTS OF NOT LESS THAN 6 IN. THIS REQUIREMENT SHALL NOT PRECLUDE CEILING-MOUNTED OR RECESSED APPLIANCES. COMPLY WITH NFPA 72, CHAPTER 4.
   C. SOUND PRESSURE LEVEL SHALL EXCEED THE PREVAILING EQUIVALENT SOUND IN THE ROOM BY AT LEAST 15 dbA OR EXCEED ANY MAX SOUND LEVEL WITH A DURATION OF 60 SECONDS BY 5 dbA, WHICHEVER IS LOUDER. SOUND LEVELS FOR ALARM SIGNALS SHALL NOT EXCEED 120 dbA.
3. FIRE ALARM VISUAL DEVICES SHALL COMPLY WITH NFPA 72, CHAPTER 4.
   A. VISUAL APPLIANCES CANDELA SHALL BE THE HIGHEST VALUE ALLOWED BY NFPA TABLE IN ORDER TO INSTALL THE FEWEST NUMBER OF STROBES.
   B. THE LAMP SHALL BE XENON STROBE TYPE OR EQUIVALENT.
   C. THE COLOR SHALL BE CLEAR OR NOMINAL WHITE.
   D. THE MAX. PULSE DURATION SHALL BE TWO TENTHS OF ONE SECOND (0.2 SEC) WITH A MAX. DUTY CYCLE OF 40%. THE PULSE DURATION IS DEFINED AS THE TIME INTERVAL BETWEEN INITIAL AND FINAL POINTS OF 10% MAX. SIGNAL.
   E. THE INTENSITY SHALL BE A MINIMUM 0F 75 CANDELA.
   F. THE FLASH RATE SHALL BE A MIN. OF 1Hz AND MAX. OF 3Hz.
4. VISUAL APPLIANCES SHALL BE PLACED 80" ABOVE THE HIGHEST FLOOR LEVEL WITHIN THE SPACE OR 6" BELOW THE CEILING, WHICHEVER IS LOWER. CEILING MOUNTED WERE INDICATED.
5. AT A MIN. VISUAL SIGNALS APPLIANCES SHALL BE PROVIDED IN BUILDING AND FACILITIES IN EACH OF THE FOLLOWING AREAS: HALLWAYS, LOBBIES, AND ANY OTHER GENERAL USAGE AREAS.
6. ALL EQUIPMENT AND WORK PERFORMED SHALL COMPLY WITH ALL OF THE CURRENT AND APPLICABLE CODES, RULES, ORDINANCES, REGULATIONS, AND STANDARDS AS INTERPRETED AND ENFORCED BY THE AUTHORITIES HAVING JURISDICTION.
7. PROVIDE POWER FOR REMOTE BATTERY SUPPLIES AND BOOSTER PANELS AS NEEDED. FIRE ALARM CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR CIRCUIT.
8. ALL FIRE ALARM WIRING SHALL ROUTE DOWN CORRIDORS AND WALKWAYS PARALLEL AND PERPENDICULAR TO BUILDING WALLS.
9. ALL FIRE ALARM CABLING SHALL BE SUPPORTED IN DEDICATED CABLE SUPPORTS. DO NOT ROUTE IN OR TIE-WRAP DIRECTOR TO THE BUILDING'S STRUCTURE.
10. ALL NOTIFICATION APPLIANCE CIRCUIT CABLES SHALL HAVE A YELLOW OUTER JACKET. ALL OTHER FIRE ALARM SYSTEM CABLE SHALL HAVE A RED OUTER JACKET.
11. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ANY CONDUITS AND/OR BOXES REQUIRED FOR THE INSTALLATION FIRE ALARM DEVICES.
12. PROVIDE AND INSTALL PROTECTIVE BUSHINGS ON ALL STUB-OUTS AND SLEEVES TO PREVENT CABLE DAMAGE. BUSHINGS TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE ACCEPTED.
13. PROVIDE AND INSTALL STOPPER II PROTECTIVE COVERS WITH A LOCAL ALARM FOR ALL MANUAL PULL STATIONS ON THE ENTIRE PROJECT.
14. CONTRACTOR TO PROVIDE AND INSTALL DUCT DETECTORS ON ALL AHU AND OAHU AS REQUIRED BY CODE. REFERENCE MECHANICAL DRAWINGS FOR EXACT LOCATIONS AND QUANTITIES.
15. CONTRACTOR TO PROVIDE CEILING MOUNTED LED NOTIFICATION DEVICESWITH TEST BUTTON FOR ALL DUCT DETECTORS THAT ARE MOUNTED ABOVE CEILING AND/OR IN LOCATIONS NOT VISIBLE FROM THE FLOOR.
16. ALL FIRE ALARM DEVICES ARE NEW UNLESS NOTED OTHERWISE. CONTRACTOR TO CONNECT NEW DEVICES TO NEW FIRE ALARM PANEL AND CONFIGURE PANEL FOR NEW DEVICES AND LAYOUT.
17. TESTING OF THE FIRE ALARM SYSTEM SHALL BE PERFORMED PRIOR TO THE COMMENCEMENT OF ANY PHASE OF WORK ON THIS PROJECT. UPON COMPLETION OF THE SYSTEM'S TESTING, THE CONTRACTOR SHALL ISSUE A FORMAL DOCUMENT THAT STATES NO ISSUES WERE FOUND. IF ANY PORTION OF ANY SYSTEM WERE FOUND TO BE NON-FUNCTIONAL OR FUNCTIONING IMPROPERLY, THE CONTRACTOR SHALL NOTE EACH ITEM, ITS LOCATION, AND A DETAILED DESCRIPTION OF THE ISSUE. IF ANY WORK IS CONDUCTED PRIOR TO THE SYSTEMS' TESTING, THE CONTRACTOR WILL ASSUME ALL RESPONSIBILITY FOR ANY SYSTEM REPAIRS, WHERE ISSUES ARE DISCOVERED UPON COMPLETION OF THE PROJECT, REPLACEMENT AND OR REPAIRS TO WILL BE AT NO ADDITIONAL COST TO THE PROJECT OR THE OWNER.
18. ANY DEVICE WITH A SUBSCRIP (E) INDICATES AND EXISTING DEVICE. DEVICE TO REMAIN UNLESS OTHERWISE NOTED ON PLANS.
19. CONTRACTOR SHALL PROVIDE ALL MATERIALS REQUIRED TO CONNECT EXISTING FIRE ALARM SYSTEM TO NEW FIRE ALARM SYSTEM TO BE INSTALLED.

INTERCOM/CLOCK SYSTEMS' LEGEND

GROUP	SYMBOL	DESCRIPTION
DEVICES	S	SPEAKER, FLUSH MOUNTED IN CEILING. "12" INDICATES HIGH VOLUME SPEAKER. SUBSCRIPT "L" INDICATES CONNECTION TO LOCAL SOUND SYSTEM.
	⊢S	WALL MOUNTED SPEAKER
		FLUSH MOUNTED EXTERIOR SPEAKER, WEATHER PROOF WALL MOUNTED
	$VC	SPEAKER VOLUME CONTROL, FLUSH MOUNTED IN WALL
	*M	MICROPHONE OUTLET. '*' WHEN REPLACED WITH AN 'W' SHALL INDICATE THAT THE OUTLET IS TO BE WALL MOUNTED AT +18" A.F.F. UNLESS NOTED OTHERWISE. '*' WHEN REPLACED WITH AN 'F' SHALL INDICATE THAT THE OUTLET IS TO BE FLOOR MOUNT. '*' WHEN REPLACED WITH AN 'H' SHALL INDICATE THAT THE OUTLET IS TO BE A HANGING MICROPHONE SUSPENDED FROM ABOVE.
	⊢CB	CALL BUTTON FOR COMMUNICATIONS MOUNTED AT 42" A.F.F.
	*A	AUXILIARY INPUT OUTLET. '*' WHEN REPLACED WITH AN 'W' SHALL INDICATE THAT THE OUTLET IS TO BE WALL MOUNTED AT +18" A.F.F. UNLESS NOTED OTHERWISE. '*' WHEN REPLACED WITH AN 'F' SHALL INDICATE THAT THE OUTLET IS TO BE FLOOR MOUNT.
	* ▽	INTERCOM COMMUNICATIONS CONTROL SYSTEM HANDSET. "ACS" INDICATES ADMINISTRATOR CONTROL SYSTEM HANDSET. "MCS" INDICATES MASTER CONTROL SYSTEM HANDSET. "RCS" INDICATES RESCUE AREA CONTROL SYSTEM HANDSET.
	⊢C	SINGLE SIDED WALL MOUNTED CLOCK
	C/C	DOUBLE SIDED WALL MOUNTED CLOCK

NOTE:
1. EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS. REFER TO GENERAL ELECTRICAL NOTES FOR WALL-MOUNTED DEVICE MOUNTING HEIGHTS.
2. REFERENCE SPECIFICATIONS FOR MATERIALS AND METHODS.
3. COMPLETE INSTALLATION OF ALL PRODUCTS SHALL BE IN COMPLIANCE WITH ALL CODES, INDUSTRY STANDARDS, COMMON PRACTICES AND MANUFACTURER'S INSTRUCTIONS.

INTERCOM SYSTEM'S GENERAL NOTES

1. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF EACH SYSTEM SHALL BE A DEDICATED CIRCUIT AND 0N EMERGENCY POWER WHEN AVAILABLE. THE INSTALLING CONTRACTOR OF EACH SYSTEM SHALL BE RESPONSIBLE FOR PROVIDING THEIR OWN 120V POWER REQUIREMENTS FOR ALL REMOTE POWER SUPPLIES. THE INSTALLING CONTRACTORS LICENSED ELECTRICAL SUBCONTRACTOR SHALL COORDINATE ELECTRICAL PANEL LOCATIONS AND AVAILABLE SPACE DEDICATED FOR THE CONTRACTOR'S SYSTEM REQUIREMENTS. (TYPICAL). PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER TO MAIN CONTROL PANELS AND ALL HEAD END EQUIPMENT. SYSTEM INSTALLERS SHALL COORDINATE LOCATION AND CONNECTION OF CONTROL PANEL AND HEAD END POWER WITH THE PROJECTS ELECTRICAL CONTRACTOR.
2. THE PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL IN WALL CONDUITS, BELOW GRADE CONDUITS, BELOW SLAB CONDUITS, CONDUITS ACROSS OPEN AREAS BACK BOXES, SLEEVES, AND OTHER RACEWAY REQUIRED FOR DEVICES AND PATHWAYS SHOWN ON THE FLOOR PLANS AND DETAIL SHEETS. ANY ADDITIONAL CONDUITS, SLEEVES, AND RACEWAY REQUIREMENTS FOR EACH SYSTEM SHALL BE THE RESPONSIBILITY OF EACH SYSTEM INSTALLER.
3. ALL EXPOSED SYSTEM'S WIRING OR WIRING ROUTING ACROSS NON ACCESSIBLE CEILINGS SHALL BE ROUTED IN CONDUIT. SIZE CONDUIT AS REQUIRED TO ROUTE SYSTEMS WITH 40% CABLE FILL RATIO. MINIMUM CONDUIT SIZE SHALL BE 3/4".
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL EXTERIOR WALL PENETRATIONS ARE PROPERLY SEALED TO PREVENT ANY MOISTURE FROM ENTERING BUILDING.
5. NO CONDUITS SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING. IF EXTERIOR CONDUITS ARE REQUIRED FOR A COMPLETE INSTALLATION, EACH SYSTEM CONTRACTOR SHALL COORDINATE WITH THE PROJECTS CONSULTANT PRIOR TO ANY ROUGH-IN.
6. EACH SYSTEM CONTRACTOR SHALL PROVIDE AND INSTALL PROTECTIVE BUSHINGS ON ALL CONDUIT STUB OUTS AND SLEEVES TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR O CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE EXCEPTED.
7. ALL CABLE SHALL BE ROUTED DOWN CORRIDORS, PARALLEL AND PERPENDICULAR TO THE BUILDING WALLS AND STRUCTURE. CABLE TO EACH DEVICE SHALL BRANCH OFF OF A MAIN CORRIDOR TRUNK. ROUTING CABLES THROUGH CLASSROOMS, OFFICES, STORAGE ROOMS, RESTROOMS OR ANY TYPE OF ROOM OTHER THAN A CORRIDOR WILL NOT BE ACCEPTED. ENTER ALL ROOMS ABOVE THE ASSOCIATED ROOM DOORWAY.
8. THE SYSTEM INSTALLER SHALL PROPERLY SUPPORT ALL INSTALLED SYSTEM CABLING FROM AN APPROVED CABLE SUPPORT SYSTEM AS DETAILED IN SPECIFICATIONS. NO CABLING SHALL BE ROUTED AND TIED DIRECTLY TO BUILDING STEEL, CEILING GRID SUPPORT, CONDUIT, PIPING, OR DUCTWORK. THE CABLE SUPPORT SYSTEM SHALL BE DIRECTLY CONNECTED TO THE BUILDING'S STEEL JOIST. AT LOCATIONS WHERE THE BOTTOM OF THE JOIST IS MORE THAN 5' ABOVE THE CEILING, THE SYSTEM INSTALLER SHALL PROVIDE AND INSTALL THREADED ROD AND ALL REQUIRED MATERIALS TO CONNECT THE THREADED ROD TO THE BUILDING STEEL AND THE CABLE SUPPORT SYSTEM TO THE THREADED ROD. CABLE PATHWAY SHALL NOT BE HIGHER THAN 5' ABOVE THE CEILING AT ANY LOCATIONS.
9. ALL INTERCOM CABLING FOR CLASSROOMS, OFFICES, CONFERENCE ROOMS, WORK ROOMS, AND LOUNGES SHALL BE HOME RUNS TO HEAD END EQUIPMENT TO ALLOW ZONING TO BE ACCOMPLISHED.
10. ALL EXTERIOR AND WALL MOUNTED SPEAKERS SHALL BE MOUNTED AT 10'-0" UNLESS OTHERWISE NOTED.
11. EXTERIOR SPEAKERS SHALL NOT BE GROUPED WITH INTERIOR SPEAKERS.
12. ALL SPEAKERS SHALL BE CONNECTED TO A STANDARD PUNCH DOWN BLOCK LOCATED NEAR HEAD END EQUIPMENT AND THEN CONNECTED TO HEAD END EQUIPMENT.
13. ALL CEILING MOUNTED SPEAKERS SHALL BE INSTALLED UTILIZING A TILE BRIDGE SUPPORT SYSTEM. AT NO POINT SHOULD THE WEIGHT OF A CEILING MOUNTED SPEAKER BE SUPPORTED BY A CEILING TILE ONLY.
14. ALL WALL MOUNTED CALL INITIATING DEVICES SHALL BE INSTALLED AT +42" ABOVE THE FINISHED FLOOR.

TECHNOLOGY PLAN GENERAL NOTES

1. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF THE TELECOMMUNICATION, NETWORK, AND VIDEO EQUIPMENT SHALL BE A DEDICATED CIRCUIT AND 0N EMERGENCY POWER WHEN AVAILABLE. CONTRACTOR SHALL COORDINATE AND INSTALL ALL 120V POWER REQUIREMENTS AND LOCATIONS AS REQUIRED FOR ALL EQUIPMENT (TYPICAL)
2. CONTRACTOR SHALL COORDINATING WITH PBK TECHNOLOGY DEPARTMENT PRIOR TO THE INSTALLATION OF RACKS AND RACK EQUIPMENT. NO RACKS SHALL BE PERMANENTLY INSTALLED WITHOUT WRITTEN APPROVAL OF THE PROPOSED LOCATIONS.
3. THE PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONDUITS, BACK BOXES, AND OTHER RACEWAY REQUIRED FOR DEVICES AND PATHWAYS SHOWN ON THE FLOOR PLANS AND DETAIL SHEETS. ANY ADDITIONAL CONDUITS, SLEEVES, AND RACEWAY REQUIREMENTS FOR THE SCS SHALL BE THE RESPONSIBILITY OF THE SCS INSTALLER.
4. THE SELECTED, INSTALLING CONTRACTOR MUST BE A CERTIFIED INTEGRATOR/INSTALLER AUTHORIZED BY THE SPECIFIED SYSTEM MANUFACTURER TO INSTALL THE CABLE PLANT AND CONNECTIVITY PRODUCTS. REFER TO SPECIFICATIONS FOR PRODUCT TYPE AND DESCRIPTION.
5. SYSTEM WIRING AND EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH GOOD ENGINEERING PRACTICES AS ESTABLISHED BY ANSI/EIA/TIA, BICSI, AND THE NEC.
6. ALL WIRING SHALL MEET ALL STATE AND LOCAL ELECTRICAL CODES.
7. ALL TELECOMMUNICATIONS SYSTEMS EQUIPMENT AND MOUNTING LOCATIONS SHALL BE IN COMPLIANCE WITH ADA ACCESSIBILITY STANDARDS.
8. ALL INDUSTRY STANDARD CATEGORY 6A CABLING PRACTICES MUST BE FOLLOWED FOR ALL DATA CABLING.
9. ALL DATA CABLES ARE TO BE INSTALLED WITH A MINIMUM OF 12 INCHES OF SEPARATION FROM AC POWER CABLES, INTERCOM, FIRE ALARM, SECURITY CABLES IN ANY PARALLEL OPEN WIRE RUN.
10. ALWAYS CROSS OTHER SYSTEM CABLES AT A 90 DEGREE ANGLE.
11. ALL CABLES AND TERMINATION COMPONENTS SHALL BE MACHINE LABELED AT BOTH ENDS. LABEL ALL CABLES PER TS DRAWINGS AND/OR SPECIFICATIONS. FINAL CABLE/OUTLET IDENTIFICATION LABELS SHALL BE COORDINATED WITH THE OWNER AND PBK.
12. CONTRACTOR TO PROVIDE LIGHTNING PROTECTION ON ALL COMMUNICATION CABLE BETWEEN BUILDINGS.
13. ALL EXPOSED CABLING ROUTED IN PLENUM SHALL BE PLENUM-RATED. ALL NON PLENUM-RATED CABLING INSTALLED IN PLENUM SPACES SHALL BE INSTALLED IN CONDUIT.
14. NO TERMINATION OR SPLICES SHALL BE INSTALLED IN OR ABOVE CEILINGS UNLESS NOTED NOTED OTHERWISE.
15. TECHNOLOGY CONTRACTOR SHALL PROVIDE AND INSTALL ALL SLEEVES REQUIRED TO INSTALL COMMUNICATION CABLING THROUGH ALL CMU AND RATED WALLS. ALL TECHNOLOGY SYSTEM CONDUIT SLEEVES SHALL HAVE PROTECTIVE BUSHING ON BOTH ENDS, BE DEDICATED FOR TECHNOLOGY SYSTEMS ONLY AND SHALL NOT SHARE WITH OTHER BUILDING TRADES.
16. CONTRACTOR SHALL MAINTAIN WALL RATING WITH PROPER FIRE BLOCKING METHODS.
17. CONTRACTOR SHALL ROUTE ALL FIBER/VOICE/DATA AND CATV CABLING DOWN CORRIDORS AND PERPENDICULAR OR PARALLEL TO BUILDING WALLS ENTER INTO ALL ROOMS ABOVE THE MAIN DOORWAY.
18. ALL COMMUNICATION CABLE INSTALLED SHALL ROUTE TO THE CENTER OF THE ROOM IN WHICH IT SERVES AND THEN TO THE OUTLET LOCATION IT IS INTENDED FOR. EACH CABLE SHALL HAVE A 10' SERVICE LOOP AT THE CENTER OF EACH ROOM AND A 3' SERVICE LOOP ABOVE EACH OUTLET LOCATION.
19. THE SYSTEM INSTALLER SHALL PROPERLY SUPPORT ALL INSTALLED SYSTEM CABLING FROM A PANDUIT J-MOD CABLE SUPPORT SYSTEMS AS DETAILED IN SPECIFICATIONS. NO CABLING SHALL BE ROUTED AND TIED DIRECTLY TO BUILDING STEEL, CEILING GRID SUPPORT, CONDUIT, PIPING, OR DUCTWORK. PANDUIT J-MOD SUPPORT SYSTEM SHALL BE DIRECTLY CONNECTED TO THE BUILDING'S STEEL JOIST. IN LOCATION WHERE THE BOTTOM OF THE JOIST IS MORE THAN 5' ABOVE THE CEILING, THE SYSTEM INSTALLER SHALL PROVIDE AND INSTALL THREADED ROD AND ALL REQUIRED MATERIALS TO CONNECT THE THREADED ROD TO THE BUILDING STEEL AND THE CABLE SUPPORT SYSTEM TO THE THREADED ROD. CABLE PATHWAY SHALL NOT BE HIGHER THAN 5' ABOVE THE CEILING AT ANY LOCATIONS.
20. CONTRACTOR TO PROVIDE AND INSTALL ALL REQUIRED CABLING AND COMPONENTS TO FURNISH TWO (2) ANALOG TELEPHONE CABLES TO THE FIRE ALARM SYSTEM. CONTRACTOR TO COORDINATE WITH THE SYSTEM INSTALLER FOR EXACT LOCATIONS AND TERMINATION INSTRUCTIONS PRIOR TO INSTALLATION.
21. ALL EXPOSED CABLING OR CABLING ROUTING ACROSS NON ACCESSIBLE CEILINGS SHALL BE INSTALLED IN CONDUIT. CONDUIT SHALL BE PROPERLY SIZED TO MAINTAIN THE 40% FILL RATIO.
22. ALL CONDUIT STUB OUTS AND SLEEVES SHALL HAVE PROTECTIVE BUSHINGS TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE EXCEPTED. CONTRACTOR TO MAINTAIN A 40% MAXIMUM FILL RATION ON ALL SLEEVES INSTALLED.
23. CONTRACTOR TO PROVIDE AND INSTALL ALL REQUIRED CABLING AND COMPONENTS TO FURNISH ONE (1) ANALOG TELEPHONE CABLES TO EACH ELEVATOR MACHINE ROOM ON THE PROJECT. CONTRACTOR TO COORDINATE WITH SYSTEM INSTALLERS FOR EXACT LOCATIONS AND TERMINATION INSTRUCTIONS PRIOR TO INSTALLATION.
24. CONTRACTOR TO PROVIDE AND INSTALL ALL REQUIRED CABLING AND COMPONENTS TO FURNISH TWO (2) CATEGORY 6A CABLES TO BUILDING AUTOMATION SYSTEM. (1) CABLE SHALL BE INSTALLED AT +18" AFF FOR TECHNICIAN NETWORK CONNECTIVITY AND THE OTHER SHALL PROVIDE CONNECTIVITY TO THE SYSTEM. CONTRACTOR TO COORDINATE WITH SYSTEM INSTALLERS FOR EXACT LOCATIONS AND TERMINATION INSTRUCTIONS PRIOR TO INSTALLATION.
25. CONTRACTOR TO PROVIDE AND INSTALL (2) CATEGORY 6A CABLES TO THE BUILDING'S SECURITY CONTROL PANEL AND (1) CATEGORY 6A CABLE TO THE BUILDING'S ACCESS CONTROL HEAD END PANEL. TERMINATION OF THESE CABLES SHALL BE COORDINATED WITH THE SYSTEM INSTALLER. CONTRACTOR TO VERIFY HOW MANY CABLES ARE REQUIRED TO ROUTE TO THE NEAREST MDF/IDF AND HOW MANY TO THE BUILDING'S DEMARCATION.

AUDIO & VIDEO GENERAL NOTES

1. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF EACH SYSTEM SHALL BE A DEDICATED CIRCUIT AND 0N EMERGENCY POWER WHEN AVAILABLE. THE INSTALLING CONTRACTOR OF EACH SYSTEM SHALL BE RESPONSIBLE FOR PROVIDING THEIR OWN 120V POWER REQUIREMENTS FOR ALL REMOTE POWER SUPPLIES. THE INSTALLING CONTRACTORS LICENSED ELECTRICAL SUBCONTRACTOR SHALL COORDINATE ELECTRICAL PANEL LOCATIONS AND AVAILABLE SPACE DEDICATED FOR THE CONTRACTOR'S SYSTEM REQUIREMENTS. (TYPICAL). PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER TO MAIN CONTROL PANELS AND ALL HEAD END EQUIPMENT. SYSTEM INSTALLERS SHALL COORDINATE LOCATION AND CONNECTION OF CONTROL PANEL AND HEAD END POWER WITH THE PROJECTS ELECTRICAL CONTRACTOR.
2. THE PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL IN WALL CONDUITS, BELOW GRADE CONDUITS, BELOW SLAB CONDUITS, CONDUITS ACROSS OPEN AREAS BACK BOXES, SLEEVES, AND OTHER RACEWAY REQUIRED FOR DEVICES AND PATHWAYS SHOWN ON THE FLOOR PLANS AND DETAIL SHEETS. ANY ADDITIONAL CONDUITS, SLEEVES, AND RACEWAY REQUIREMENTS FOR EACH SYSTEM SHALL BE THE RESPONSIBILITY OF EACH SYSTEM INSTALLER.
3. ALL EXPOSED SYSTEM'S WIRING OR WIRING ROUTING ACROSS NON ACCESSIBLE CEILINGS SHALL BE ROUTED IN CONDUIT. SIZE CONDUIT AS REQUIRED TO ROUTE SYSTEMS WITH 40% CABLE FILL RATIO. MINIMUM CONDUIT SIZE SHALL BE 3/4".
4. A/V CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL EXTERIOR WALL PENETRATIONS ARE PROPERLY SEALED TO PREVENT ANY MOISTURE FROM ENTERING BUILDING.
5. NO CONDUITS SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING. IF EXTERIOR CONDUITS ARE REQUIRED FOR A COMPLETE INSTALLATION, EACH SYSTEM CONTRACTOR SHALL COORDINATE WITH THE PROJECTS CONSULTANT PRIOR TO ANY ROUGH-IN.
6. EACH SYSTEM CONTRACTOR SHALL PROVIDE AND INSTALL PROTECTIVE BUSHINGS ON ALL CONDUIT STUB OUTS AND SLEEVES TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR O CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE EXCEPTED.
7. ALL CABLE SHALL BE ROUTED DOWN CORRIDORS, PARALLEL AND PERPENDICULAR TO THE BUILDING WALLS AND STRUCTURE. CABLE TO EACH DEVICE SHALL BRANCH OFF OF A MAIN CORRIDOR TRUNK. ROUTING CABLES THROUGH CLASSROOMS, OFFICES, STORAGE ROOMS, RESTROOMS OR ANY TYPE OF ROOM OTHER THAN A CORRIDOR WILL NOT BE ACCEPTED. ENTER ALL ROOMS ABOVE THE ASSOCIATED ROOM DOORWAY.
8. THE SYSTEM INSTALLER SHALL PROPERLY SUPPORT ALL INSTALLED SYSTEM CABLING FROM AN APPROVED CABLE SUPPORT SYSTEM AS DETAILED IN SPECIFICATIONS. NO CABLING SHALL BE ROUTED AND TIED DIRECTLY TO BUILDING STEEL, CEILING GRID SUPPORT, CONDUIT, PIPING, OR DUCTWORK. THE CABLE SUPPORT SYSTEM SHALL BE DIRECTLY CONNECTED TO THE BUILDING'S STEEL JOIST. AT LOCATIONS WHERE THE BOTTOM OF THE JOIST IS MORE THAN 5' ABOVE THE CEILING, THE SYSTEM INSTALLER SHALL PROVIDE AND INSTALL THREADED ROD AND ALL REQUIRED MATERIALS TO CONNECT THE THREADED ROD TO THE BUILDING STEEL AND THE CABLE SUPPORT SYSTEM TO THE THREADED ROD. CABLE PATHWAY SHALL NOT BE HIGHER THAN 5' ABOVE THE CEILING AT ANY LOCATIONS.
9. ALL EXTERIOR AND WALL MOUNTED SPEAKERS SHALL BE MOUNTED AT 10'-0" UNLESS OTHERWISE NOTED.
10. EXTERIOR SPEAKERS SHALL BE ON A SEPARATE LOW VOLTAGE CIRCUIT FROM INTERIOR SPEAKERS.
11. A/V CONTRACTOR SHALL COORDINATE ALL MOUNTING LOCATIONS OF ALL A/V DEVICES TO PROVIDE EVEN AND BALANCED AUDIO COVERAGE OF INTENDED LISTENING AREAS AND UNOBSTRUCTED, SQUARE AND PLUMB VIDEO IMAGE DISPLAYS.
12. ALL LAY-IN CEILING MOUNTED SPEAKERS SHALL BE INSTALLED UTILIZING A TILE BRIDGE SUPPORT SYSTEM. AT NO POINT SHOULD THE WEIGHT OF A CEILING MOUNTED SPEAKER BE SUPPORTED BY A CEILING TILE ONLY.
13. A/V CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL CONDUIT AND BACK BOX REQUIREMENTS.
14. A/V CONTRACTOR TO COORDINATE WITH ALL OTHER TRADES WITH REGARD TO BLOCKING AND PROPER SUPPORT OF ALL A/V DEVICES.

TECHNOLOGY LEGEND

GROUP	SYMBOL	DESCRIPTION
DEVICES	'PS'	INDICATES THE LOCATION OF A PRESENTATION STATION. 'PS' SHALL PROVIDE CONNECTIVITY TO 'WMP'. 4 GANG FLUSH MOUNT AT 18" A.F.F. CONNECT 1" CONDUIT STUBBED INTO CEILING. REFER TO SPECIFICATIONS FOR PART NUMBERS AND FURTHER DETAILS.
	'LCD'	INDICATES THE LOCATION OF A LCD TELEVISION. THE CONTRACTOR SHALL ALSO PROVIDE AND INSTALL LCD MOUNT.
	▽	INDICATES THE LOCATION OF A NEW TECHNOLOGY OUTLET. CONTRACTOR TO PROVIDE FACEPLATE WITH A MINIMUM OF 4-PORTS AT EACH LOCATION UNLESS OTHERWISE NOTED. ELECTRICAL CONTRACTOR TO PROVIDE A DOUBLE GANG BACK BOX WITH A SINGLE GANG REDUCER RING AND A 1" EMT CONDUIT FROM THE BOX TO THE NEAREST ACCESSIBLE CEILING. SOME EXISTING BUILDINGS MAY REQUIRE SURFACE MOUNTED RACEWAY. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL RACEWAY AS SPECIFIED AND DESIGNATE IN THE ELECTRICAL CONTRACT DOCUMENTS. SYSTEM INSTALLER TO PROVIDE AND INSTALL A PLASTIC PROTECTIVE BUSHING, ON EACH CONDUIT STUB-OUT, TO PREVENT CABLE DAMAGE.
	▼	INDICATES THE LOCATION OF A CEILING MOUNTED OUTLET. CONTRACTOR SHALL MOUNT THIS OUTLET AT +12" ABOVE THE CEILING AND COORDINATE ALL FINAL LOCATIONS WITH OTHER TRADES ON THE PROJECT TO VERIFY THAT THE LOCATION OF THE OUTLET MAINTAINS 12" OF CLEARANCE FROM THE FRONT OF THE FACEPLATE FOR OWNER ACCESS. ELECTRICAL CONTRACTOR SHALL ROUTE (1) 1" CONDUIT FROM THE BUILDING STRUCTURE TO A SINGLE GANG BACK BOX MOUNTED AT 5' OR LESS ABOVE THE FINISHED CEILING. SECURE CONDUIT AND BACK BOX TO INSURE MINIMAL SWAY MOVEMENT.
	⊙	INDICATES THE LOCATION OF A FLOOR MOUNTED OUTLET. CONTRACTOR TO PROVIDE AND INSTALL (1) 1" CONDUIT FROM BOX TO NEAREST ACCESSIBLE CEILING.
	AP	DESIGNATES THAT THE ASSOCIATED TECHNOLOGY OUTLET IS INTENDED FOR THE USE OF A WIRELESS ACCESS POINT CONNECTION. CONTRACTOR TO PROVIDE AND INSTALL (2) CATEGORY 6A, NETWORK CABLE, (1) WITH CATEGORY 6, CONNECTORS, STAINLESS STEEL FACEPLATE WITH IDENTIFICATION WINDOWS, LABELS, AND ANY OTHER MATERIALS REQUIRED TO FURNISH A COMPLETELY FUNCTIONAL AND TESTED CIRCUIT AT EACH LOCATION SHOWN. PROVIDE (2) 15' PLENUM PATCH CABLE FOR EACH LOCATION INSTALLED. PROVIDE 10' SERVICE LOOP UPSTREAM OF TERMINATION POINT. 'WM' DESIGNATION INDICATES THAT THE ACCESS POINT IS TO BE WALL MOUNTED AT 12' AFF. 'WM-E' DESIGNATION INDICATES THAT THE ACCESS POINT IS TO BE WALL MOUNTED IN AN ENCLOSURE AT 12' AFF. REFER TO SPECIFICATIONS FOR MATERIALS AND METHODS.
	'H'	HANDSET OUTLET TO BE MOUNTED FOR IP TELEPHONE AT 42" AFF. CONTRACTOR SHALL ONLY INSTALL NEW HANDSET FACEPLATE WHERE THERE IS ATLEAT 15" FREE CLEAR WALL SPACE. ROUTE (1) CATEGORY 6 UTP CABLE FROM DESIGNATED MDF OR IDF, TERMINATE ON PROPER FACEPLATE HARDWARE.
	'USB'	INDICATES THE LOCATION OF USB EXTENDER. REFERENCE SPECIFICATIONS FOR ALL MATERIALS AND METHODS.
	'K'	INDICATES THE LOCATION OF A KRONOS CLOCK.
	'CP'	INDICATES THE LOCATION OF THE A/V SYSTEM CONTROL PANEL. 2 GANG FLUSH MOUNT AT 48" A.F.F. CONNECT 1" CONDUIT STUBBED INTO CEILING. REFERENCE SPECIFICATIONS FOR PART NUMBERS AND FURTHER DETAILS.
	'CMP'	INDICATES THE LOCATION OF CEILING MOUNTED PROJECTOR. CONTRACTOR SHALL PROVIDE AND INSTALL ALL CABLES FROM THE 'PS' OUTLET. VERIFY PROPER FOCAL DISTANCE PRIOR TO INSTALLATION. IMAGE SHALL BE SQUARE AND PLUMB ON VIEWING SURFACE.
	'WMP'	INDICATES THE LOCATION OF WALL MOUNTED PROJECTOR AT APPROXIMATELY 12" BELOW FINISHED CEILING. COORDINATE FINAL LOCATION WITH ARCHITECT PRIOR TO ROUGH IN. 1 GANG BOX FLUSH MOUNT. CONNECT 1-1/4" CONDUIT STUBBED INTO CEILING. ELECTRICAL CONTRACTOR TO PROVIDE 15A CIRCUIT AT THIS LOCATION.

NOTE:
1. EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS. REFER TO GENERAL ELECTRICAL NOTES FOR WALL-MOUNTED DEVICE MOUNTING HEIGHTS.
2. REFERENCE SPECIFICATIONS FOR MATERIALS AND METHODS.
3. COMPLETE INSTALLATION OF ALL PRODUCTS SHALL BE IN COMPLIANCE WITH ALL CODES, INDUSTRY STANDARDS, COMMON PRACTICES AND MANUFACTURER'S INSTRUCTIONS.

SECURITY SYSTEMS' LEGEND

GROUP	SYMBOL	DESCRIPTION
DEVICES		STATIONARY INTERIOR SECURITY CAMERA NO SUBSCRIPT INDICATES CEILING MOUNTED, "W" INDICATES WALL MOUNTED, "PTZ" INDICATED A MOTORIZED PAN/TILT/ZOOM CAMERA. ALL CAMERAS SHALL BE IP BASED CAMERAS UNLESS NOTED OTHERWISE. 360° INDICATES THAT THE CAMERA IS TO BE A 360° CAMERA.
		WEATHER PROOF, EXTERIOR SECURITY CAMERA IN DOMED HOUSING. NO SUBSCRIPT INDICATES STANDARD, FIXED POSITION WALL MOUNTED AND "PTZ" INDICATES A MOTORIZED PAN/TILT/ZOOM CAMERA.
	⊢M	WALL MOUNTED MOTION DETECTOR. MOUNT AT 9'-0" A.F.F.
	M	360 DEGREE CEILING MOUNTED MOTION DETECTOR.
	⊢KP	INTRUSION DETECTION SYSTEM ARM/DISARM KEYPAD WITH LOCKING VANDAL RESISTANT COVER.
	GB	GLASS BREAK SENSOR
	CONT	INTRUSION DETECTION CONTROL PANELS MOUNTED ON WALL. ELECTRICAL CONTRACTOR TO PROVIDE 120V. POWER TO PANEL. PROVIDE (1) TELEPHONE LINE AND (1) NETWORK CABLE TO PANEL. COORDINATE WITH DISTRICT TECHNOLOGY DEPARTMENT ON ACTIVATING VOICE LINE AND ACQUIRING AN IP ADDRESS.
	CR	ACCESS CONTROL PROXIMITY CARD READER. MOUNT AT 42" A.F.F.
	DR	DOOR RELEASE BUTTON (TO BE CONNECTED TO DOOR INDICATED).
	DC	DOOR CONTACT

NOTE:
1. EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS. REFER TO GENERAL ELECTRICAL NOTES FOR WALL-MOUNTED DEVICE MOUNTING HEIGHTS.
2. REFERENCE SPECIFICATIONS FOR MATERIALS AND METHODS.
3. COMPLETE INSTALLATION OF ALL PRODUCTS SHALL BE IN COMPLIANCE WITH ALL CODES, INDUSTRY STANDARDS, COMMON PRACTICES AND MANUFACTURER'S INSTRUCTIONS.

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TX
ALAMO, TX

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: ANTHONY CRUZ
CHECKED BY: GREG GRIFFIN

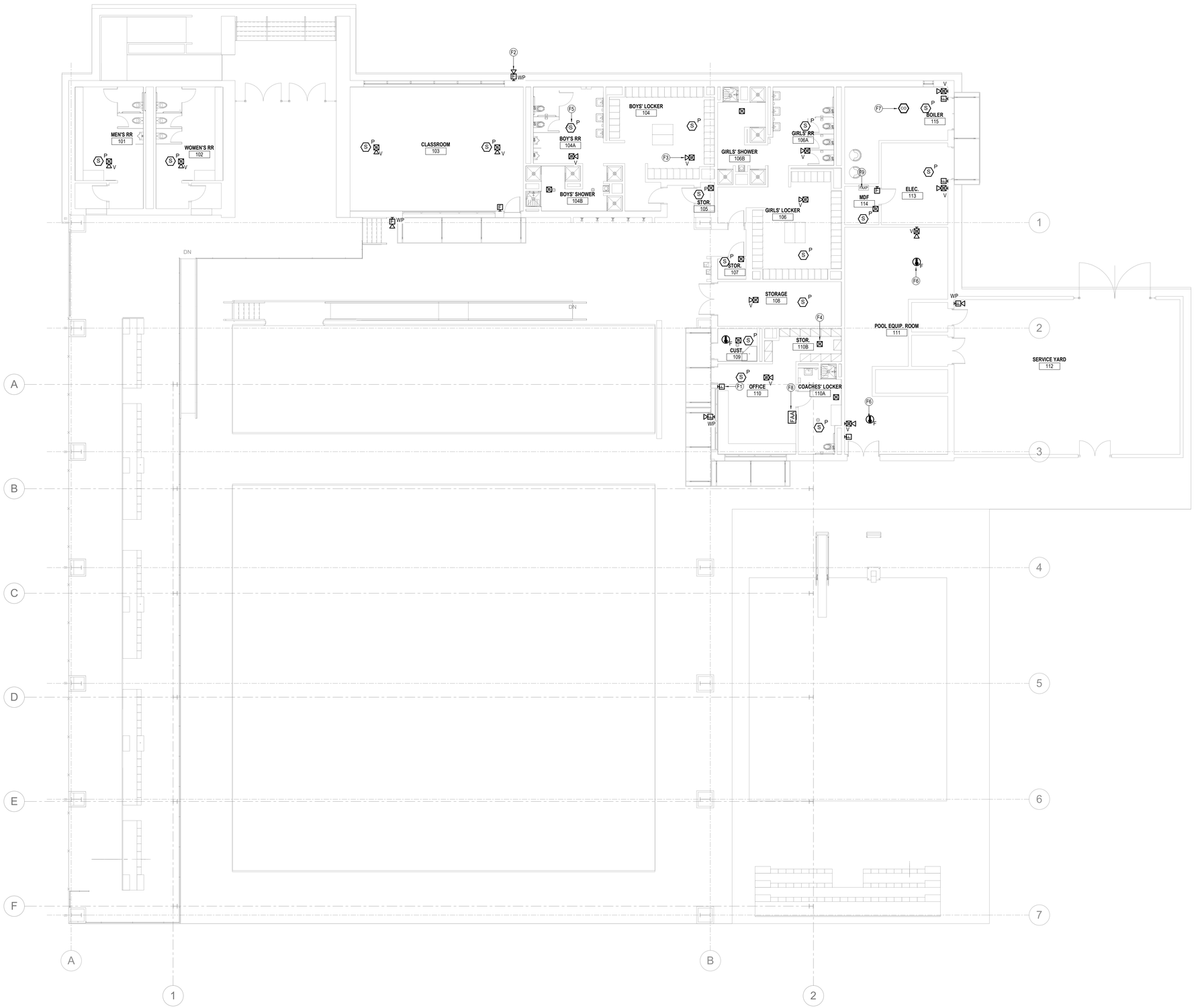
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

TECHNOLOGY SYMBOLS AND ABBREVIATIONS

T0.01



GENERAL NOTES - FIRE SAFETY PLAN

1. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF THE FIRE ALARM SYSTEMS SHALL BE A DEDICATED CIRCUIT AND ON EMERGENCY POWER WHEN AVAILABLE. THE INSTALLING CONTRACTOR OF EACH SYSTEM SHALL BE RESPONSIBLE FOR PROVIDING THEIR OWN 120V POWER REQUIREMENTS FOR ALL REMOTE POWER SUPPLIES. THE INSTALLING CONTRACTORS LICENSED ELECTRICAL SUBCONTRACTOR SHALL COORDINATE ELECTRICAL PANEL LOCATIONS AND AVAILABLE SPACE DEDICATED FOR THE CONTRACTOR'S SYSTEM REQUIREMENTS. (TYPICAL). PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER TOMAIN CONTROL PANELS AND ALL HEAD END EQUIPMENT. SYSTEM INSTALLERS SHALL COORDINATE LOCATION AND CONNECTION OF CONTROL PANEL AND HEAD END POWER WITH THE PROJECTS ELECTRICAL CONTRACTOR.

2. UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS OR OTHERWISE INSTRUCTED BY THE ARCHITECT, FIRE ALARM DEVICES SHALL HAVE THE FOLLOWING MOUNTING HEIGHTS. VERIFY EXACT HEIGHT WITH ARCHITECT. DIMENSIONS ARE TO CENTER OF BOX UNLESS OTHERWISE NOTED.

2A. MANUAL FIRE PULL STATIONS - MOUNT AT 42" AFF TO THE TOP OF BOX FOR FRONTAL WHEELCHAIR APPROACH; AND 48" AFF FOR SIDE WHEELCHAIR APPROACH. PULL STATIONS SHALL BE LOCATED THROUGHOUT THE PROTECTED AREA SO THAT THEY ARE UNOBSTRUCTED AND ACCESSIBLE; MOUNT WITHIN 5 FT. OF THE EXIT DOORWAY OPENING AT EACH EXIT ON EACH FLOOR; MOUNT ON BOTH SIDES OF GROUP OPENINGS OVER 40 FT. IN WIDTH ADDITIONAL.

2B. FIRE ALARM AUDIBLE DEVICES - IF CEILING HEIGHTS ALLOW, WALL-MOUNTED APPLIANCES SHALL HAVE THEIR TOPS ABOVE THE FINISHED FLOORS AT HEIGHTS OF NOT LESS THAN 90 IN. AND BELOW THE FINISHED CEILINGS AT HEIGHTS OF NOT LESS THAN 6 IN. THIS REQUIREMENT SHALL NOT PRECLUDE CEILING-MOUNTED OR RECESSED APPLIANCES. COMPLY WITH NFPA 72, CHAPTER 4.

2C. SOUND PRESSURE LEVEL SHALL EXCEED THE PREVAILING EQUIVALENT SOUND IN THE ROOM BY AT LEAST 15 dbA OR EXCEED ANY MAX SOUND LEVEL WITH A DURATION OF 60 SECONDS BY 5 dbA, WHICHEVER IS LOUDER. SOUND LEVELS FOR ALARM SIGNALS SHALL NOT EXCEED 120 dbA.

3. FIRE ALARM VISUAL DEVICES SHALL COMPLY WITH NFPA 72, CHAPTER 4.

3A. VISUAL APPLIANCES CANDELA SHALL BE THE HIGHEST VALUE ALLOWED BY NFPA TABLE IN ORDER TO INSTALL THE FEWEST NUMBER OF STROBES.

3B. THE LAMP SHALL BE XENON STROBE TYPE OR EQUIVALENT.

3C. THE COLOR SHALL BE CLEAR OR NOMINAL WHITE.

3D. THE MAXIMUM PULSE DURATION SHALL BE TWO TENTHS OF ONE SECOND (0.2 SEC) WITH A MAXIMUM DUTY CYCLE OF 40%.

3E. THE PULSE DURATION IS DEFINED AS THE TIME INTERVAL BETWEEN INITIAL AND FINAL POINTS OF 10% MAXIMUM SIGNAL.

3F. THE INTENSITY SHALL BE A MINIMUM 0F 75 CANDELA. THE FLASH RATE SHALL BE A MIN. OF 1Hz AND MAXIMUM OF 3Hz.

4. VISUAL APPLIANCES SHALL BE PLACED 80" ABOVE THE HIGHEST FLOOR LEVEL WITHIN THE SPACE OR 6" BELOW THE CEILING, WHICHEVER IS LOWER. CEILING MOUNTED WERE INDICATED.

5. AT A MIN. VISUAL SIGNALS APPLIANCES SHALL BE PROVIDED IN BUILDING AND FACILITIES IN EACH OF THE FOLLOWING AREAS: HALLWAYS, LOBBIES, AND ANY OTHER GENERAL USAGE AREAS.

6. ALL EQUIPMENT AND WORK PERFORMED SHALL COMPLY WITH ALL OF THE CURRENT AND APPLICABLE CODES, RULES, ORDINANCES, REGULATIONS, AND STANDARDS AS INTERPRETED AND ENFORCED BY THE AUTHORITIES HAVING JURISDICTION.

7. PROVIDE POWER FOR REMOTE BATTERY SUPPLIES AND BOOSTER PANELS AS NEEDED. FIRE ALARM CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR CIRCUIT.

8. ALL FIRE ALARM WIRING SHALL ROUTE DOWN CORRIDORS AND WALKWAYS PARALLEL AND PERPENDICULAR TO BUILDING WALLS.

9. ALL FIRE ALARM CABLING SHALL BE SUPPORTED IN DEDICATED CABLE SUPPORTS. DO NOT ROUTE IN OR TIE-WRAP DIRECTOR TO THE BUILDING'S STRUCTURE.

10. ALL NOTIFICATION APPLIANCE CIRCUIT CABLES SHALL HAVE A YELLOW OUTER JACKET. ALL OTHER FIRE ALARM SYSTEM CABLE SHALL HAVE A RED OUTER JACKET.

11. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ANY CONDUITS AND/OR BOXES REQUIRED FOR THE INSTALLATION FIRE ALARM DEVICES.

12. PROVIDE AND INSTALL PROTECTIVE BUSHINGS ON ALL STUB-OUTS AND SLEEVES TO PREVENT CABLE DAMAGE. BUSHINGS TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE ACCEPTED.

13. PROVIDE AND INSTALL STOPPER II PROTECTIVE COVERS WITH A LOCAL ALARM FOR ALL MANUAL PULL STATIONS ON THE ENTIRE PROJECT.

14. CONTRACTOR TO PROVIDE AND INSTALL DUCT DETECTORS ON ALL AHU AND OAHU AS REQUIRED BY CODE. REFERENCE MECHANICAL DRAWINGS FOR EXACT LOCATIONS AND QUANTITIES.

15. CONTRACTOR TO PROVIDE CEILING MOUNTED LED NOTIFICATION DEVICES FOR ALL DUCT DETECTORS THAT ARE MOUNTED ABOVE CEILING AND/OR IN LOCATIONS NOT VISIBLE FROM THE FLOOR.

16. ALL FIRE ALARM DEVICES ARE NEW UNLESS NOTED OTHERWISE. CONTRACTOR TO CONNECT NEW DEVICES TO NEW FIRE ALARM PANEL AND CONFIGURE PANEL FOR NEW DEVICES AND LAYOUT.

17. TESTING OF THE FIRE ALARM SYSTEM SHALL BE PERFORMED PRIOR TO THE COMMENCEMENT OF ANY PHASE OF WORK ON THIS PROJECT. UPON COMPLETION OF THE SYSTEM'S TESTING, THE CONTRACTOR SHALL ISSUE A FORMAL DOCUMENT THAT STATES NO ISSUES WERE FOUND. IF ANY PORTION OF ANY SYSTEM WERE FOUND TO BE NON-FUNCTIONAL OR FUNCTIONING IMPROPERLY, THE CONTRACTOR SHALL NOTE EACH ITEM, ITS LOCATION, AND A DETAILED DESCRIPTION OF THE ISSUE. IF ANY WORK IS CONDUCTED PRIOR TO THE SYSTEMS' TESTING, THE CONTRACTOR WILL ASSUME ALL RESPONSIBILITY FOR ANY SYSTEM REPAIRS, WHERE ISSUES ARE DISCOVERED UPON COMPLETION OF THE PROJECT, REPLACEMENT AND OR REPAIRS TO WILL BE AT NO ADDITIONAL COST TO THE PROJECT OR THE OWNER.

18. ANY DEVICE WITH A SUBSCRIP (E) INDICATES AND EXISTING DEVICE. DEVICE TO REMAIN UNLESS OTHERWISE NOTED ON PLANS.

19. CONTRACTOR SHALL PROVIDE ALL MATERIALS REQUIRED TO CONNECT EXISTING FIRE ALARM SYSTEM TO NEW FIRE ALARM SYSTEM TO BE INSTALLED.

KEYED NOTES - FIRE SAFETY PLAN

F1 MANUAL FIRE ALARM PULL STATION. ALL MANUAL FIRE ALARM PULL STATIONS MUST BE INSTALLED WITH AN STI STOPPER II PULL STATION COVER (PN-STI-1100)

F2 FIRE ALARM SPEAKER OR HORN. SUBSCRIPT "WP" INDICATES WEATHER PROOF DEVICE. REFERENCE DIV. 28 SPECIFICATIONS FOR SPEAKER AND/OR HORN APPLICATIONS. A SUBSCRIPT "S" INDICATES THAT A SPEAKER STROBE TIED TO VOICE EVAC PANEL SHALL BE PROVIDED FOR ALL LOCATIONS INDICATED.

F3 COMBINATION SPEAKER OR HORN AND STROBE IN SINGLE COVER. SUBSCRIPT "W" INDICATES WHITE FINISH; OTHERWISE STANDARD RED COLOR. "V" INDICATES LOCAL VOICE EVACUATION SPEAKER FUNCTIONS, "H" INDICATES HIGH VOLUME SPEAKER FUNCTIONS, REFERENCE DIV. 28 SPECIFICATIONS FOR SPEAKER AND/OR HORN APPLICATIONS.

F4 VISUAL ALARM STROBE. SUBSCRIPT "W" INDICATES WHITE FINISH; OTHERWISE STANDARD RED COLOR.

F5 SMOKE DETECTOR. NO SUBSCRIPT INDICATES IONIZATION TYPE; "P" INDICATES PHOTOELECTRIC TYPE; "D" INDICATES DUCT TYPE AND PHOTOELECTRIC.

F6 HEAT DETECTOR; COMBINATION RATE OF RISE AND FIXED TEMPERATURE. "F" INDICATES FIXED TEMPERATURE ONLY; "R" INDICATES RATE OF RISE ONLY. "C" INDICATES RATE COMPENSATION TYPE.

F7 CARBON MONOXIDE DETECTOR.

F8 FIRE ALARM ANNUNCIATOR PANEL.

F9 FIRE ALARM EXTENDER PANEL.

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

1 **FIRE SAFETY PLAN**
SCALE: 1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TX
ALAMO, TX

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
APRIL 11, 2019
LEAF ENGINEERS
F-18672

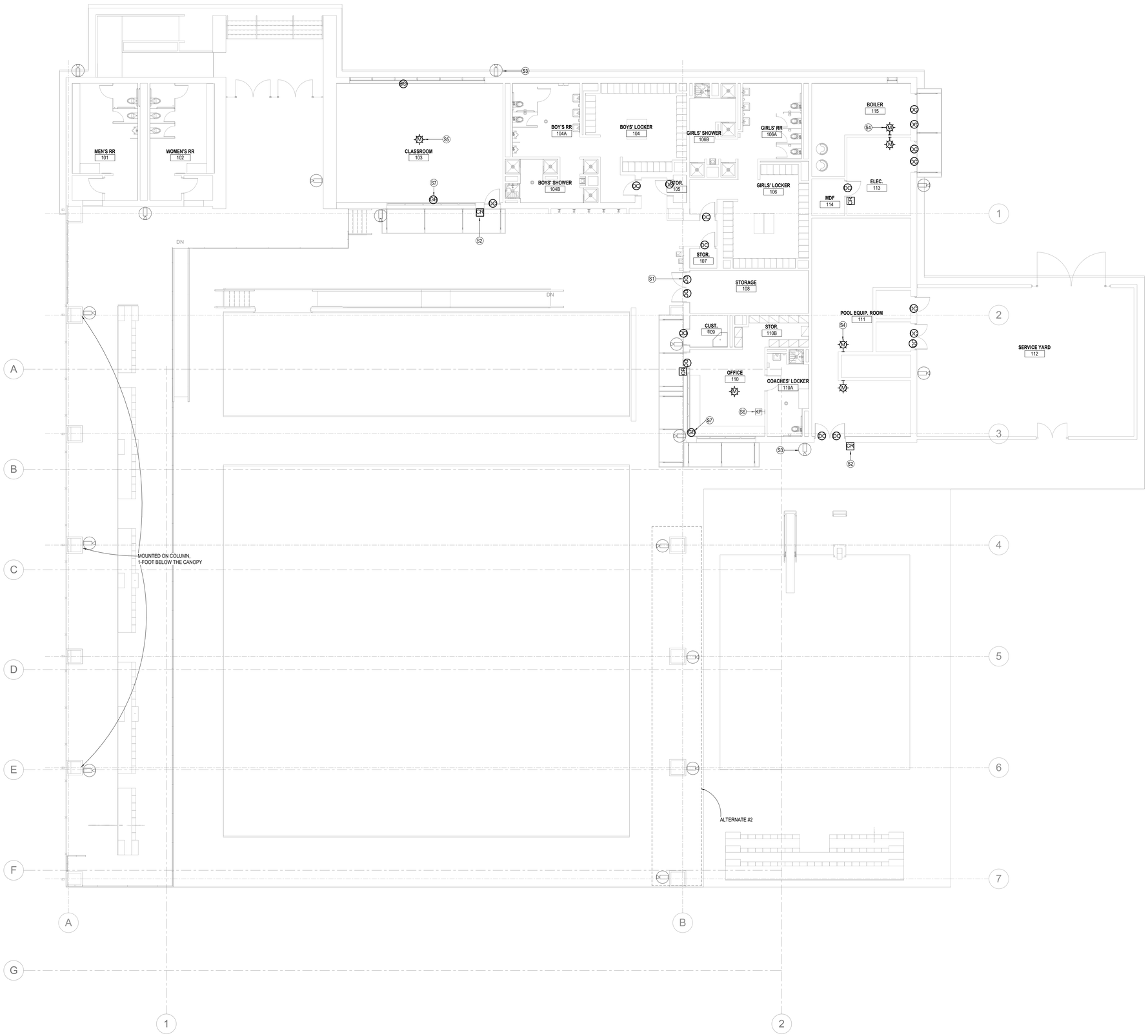
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: ANTHONY CRUZ
CHECKED BY: GREG GRIFFIN
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

FIRE SAFETY PLAN

T2.01



GENERAL NOTES - SECURITY PLAN

1. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF THE ACCESS CONTROL, BURGLAR ALARM, AND SECURITY CAMERA SYSTEMS SHALL BE A DEDICATED CIRCUIT AND ON EMERGENCY POWER WHEN AVAILABLE. SECURITY CONTRACTOR SHALL COORDINATE ALL 120V POWER REQUIREMENTS AND LOCATIONS WITH ELECTRICAL CONTRACTOR FOR ALL EQUIPMENT AND REMOTE POWER SUPPLIES (TYPICAL).
2. A DOOR CONTACT POSITION SENSOR IS REQUIRED AT ALL ROOF HATCHES (TYPICAL).
3. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY CONDUIT, SLEEVES, AND PROTECTIVE BUSHINGS REQUIRED TO INSTALL COMPLETE INTRUSION DETECTION SYSTEM. PROVIDE ALL CONDUITS REQUIRED AT ALL EXTERIOR DOORS TO ALLOW FOR INSTALLATION OF DOOR CONTACT POSITION SENSORS.
4. SECURITY CONTRACTOR IS RESPONSIBLE FOR CONNECTING SYSTEM TO DISTRICT'S REMOTE MONITORING SERVICE.
5. ALL EXPOSED SECURITY SYSTEMS WIRING OR WIRING ROUTING ACROSS NON ACCESSIBLE CEILINGS SHALL BE ROUTED IN CONDUIT. SIZE CONDUIT AS REQUIRED TO ROUTE SYSTEMS WITH 40% CABLE FILL RATIO. MINIMUM CONDUIT SIZE SHALL BE 3/4"
6. SECURITY CONTRACTOR SHALL PROVIDE A 20'-0" SERVICE LOOP AT EACH CAMERA TO PROVIDE FLEXIBILITY OF CAMERA POSITION AND LOCATION.
7. SECURITY CONTRACTOR TO ENSURE ALL EXTERIOR WALL PENETRATIONS ARE PROPERLY SEALED TO PREVENT ANY MOISTURE FROM ENTERING BUILDING.
8. NO CONDUITS SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING. CONTRACTOR TO COORDINATE WITH TECHNOLOGY CONSULTANT PRIOR TO INSTALLATION IF ANY EXTERIOR CONDUITS ARE REQUIRED.
9. ALL CONDUIT STUB OUTS AND SLEEVES SHALL HAVE PROTECTIVE BUSHINGS TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE ACCEPTED.

KEYED NOTES - SECURITY PLAN

S1 DOOR CONTACT

S2 ACCESS CONTROL PROXIMITY CARD READER. MOUNT AT 48" A.F.F.

S3 WEATHER PROOF, EXTERIOR SECURITY CAMERA IN DOMED HOUSING. NO SUBSCRIPT INDICATES STANDARD, FIXED POSITION WALL MOUNTED AND "PTZ" INDICATES A MOTORIZED PAN/TILT/ZOOM CAMERA. MOUNTED AT 10'-0" A.F.G. UNLESS OTHERWISE NOTED.

S4 WALL MOUNTED MOTION DETECTOR. MOUNTED AT 8'-0" A.F.F.

S5 360 DEGREE CEILING MOUNTED MOTION DETECTOR.

S6 INTRUSION DETECTION SYSTEM ARM/DISARM KEYPAD WITH LOCKING VANDAL RESISTANT COVER. MOUNTED AT 42-INCHES A.F.F.

S7 GLASS BREAK SENSOR

LEAF ENGINEERS
A PGAL COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

1 **SPECIAL SYSTEMS PLAN**
SCALE: 1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TX
ALAMO, TX

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61522
LICENSED
PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: ANTHONY CRUZ
CHECKED BY: GREG GRIFFIN

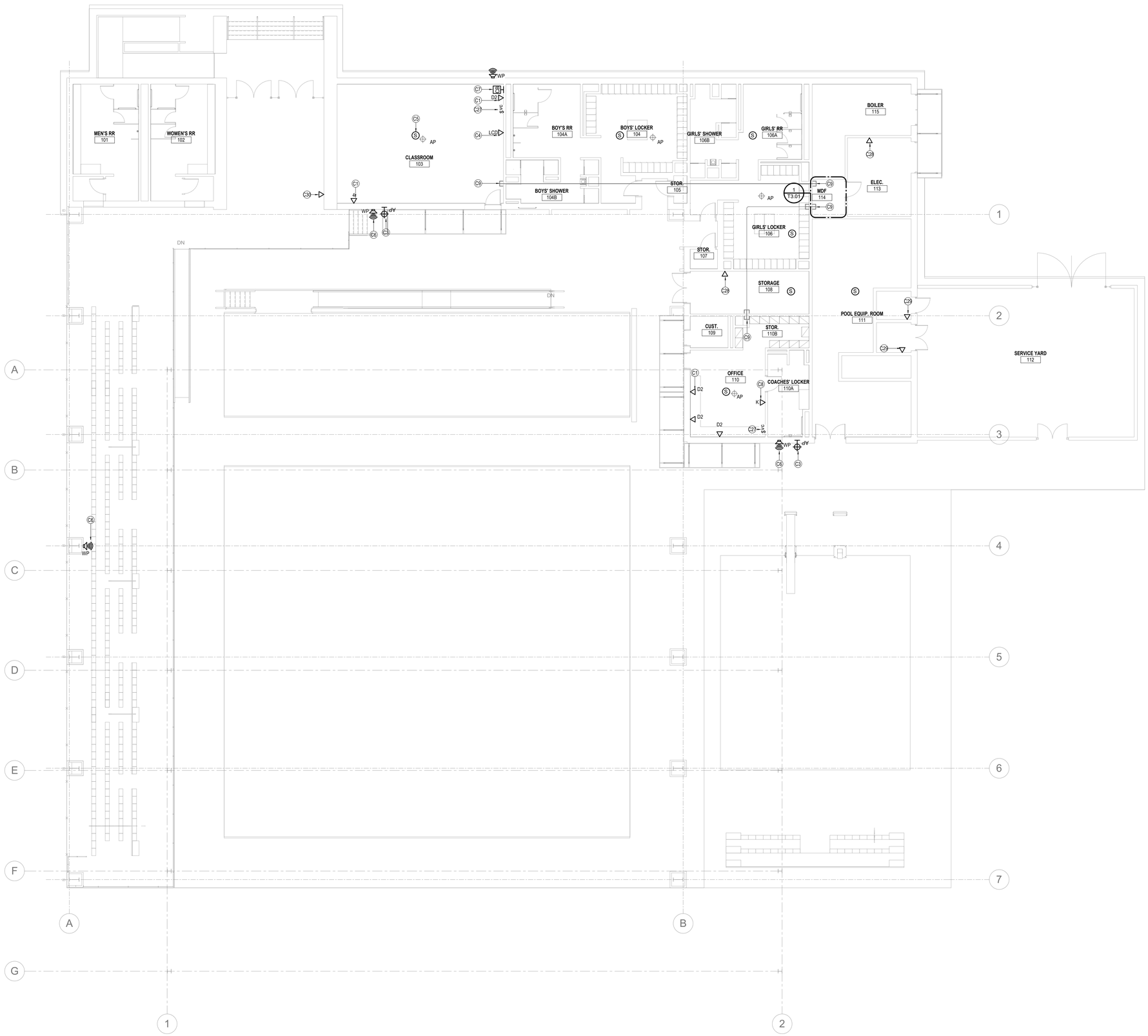
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

SECURITY PLAN

T2.02



GENERAL NOTES - TECHNOLOGY PLAN

1. NETWORK, AND VIDEO EQUIPMENT SHALL BE A DEDICATED CIRCUIT AND ON EMERGENCY POWER WHEN AVAILABLE. CONTRACTOR SHALL COORDINATE AND INSTALL ALL 120V POWER REQUIREMENTS AND LOCATIONS AS REQUIRED FOR ALL EQUIPMENT (TYPICAL)
2. CONTRACTOR SHALL COORDINATING WITH PBK TECHNOLOGY DEPARTMENT PRIOR TO THE INSTALLATION OF RACKS AND RACK EQUIPMENT. NO RACKS SHALL BE PERMANENTLY INSTALLED WITHOUT WRITTEN APPROVAL OF THE PROPOSED LOCATIONS.
3. THE PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONDUITS, BACK BOXES, AND OTHER RACEWAY REQUIRED FOR DEVICES AND PATHWAYS SHOWN ON THE FLOOR PLANS AND DETAIL SHEETS. ANY ADDITIONAL CONDUITS, SLEEVES, AND RACEWAY REQUIREMENTS FOR THE SCS SHALL BE THE RESPONSIBILITY OF THE SCS INSTALLER.
4. THE SELECTED, INSTALLING CONTRACTOR MUST BE A CERTIFIED INTEGRATOR/INSTALLER AUTHORIZED BY THE SPECIFIED SYSTEM MANUFACTURER TO INSTALL THE CABLE PLANT AND CONNECTIVITY PRODUCTS. REFER TO SPECIFICATIONS FOR PRODUCT TYPE AND DESCRIPTION.
5. SYSTEM WIRING AND EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH GOOD ENGINEERING PRACTICES AS ESTABLISHED BY ANSI/EIA/TIA, BICSI, AND THE NEC.
6. ALL WIRING SHALL MEET ALL STATE AND LOCAL ELECTRICAL CODES.
7. ALL TELECOMMUNICATIONS SYSTEMS EQUIPMENT AND MOUNTING LOCATIONS SHALL BE IN COMPLIANCE WITH ADA ACCESSIBILITY STANDARDS.
8. ALL INDUSTRY STANDARD CATEGORY 6 CABLING PRACTICES MUST BE FOLLOWED FOR ALL DATA CABLING.
9. ALL DATA CABLES ARE TO BE INSTALLED WITH A MINIMUM OF 12 INCHES OF SEPARATION FROM AC POWER CABLES, INTERCOM, FIRE ALARM, SECURITY CABLES IN ANY PARALLEL OPEN WIRE RUN.
10. ALWAYS CROSS OTHER SYSTEM CABLES AT A 90 DEGREE ANGLE.
11. ALL CABLES AND TERMINATION COMPONENTS SHALL BE MACHINE LABELED AT BOTH ENDS. LABEL ALL CABLES PER TS DRAWINGS AND/OR SPECIFICATIONS. FINAL CABLE/OUTLET IDENTIFICATION LABELS SHALL BE COORDINATED WITH THE OWNER AND PBK.
12. CONTRACTOR TO PROVIDE LIGHTNING PROTECTION ON ALL COMMUNICATION CABLE BETWEEN BUILDINGS.
13. ALL EXPOSED CABLING ROUTED IN PLENUM SHALL BE PLENUM-RATED. ALL NON PLENUM-RATED CABLING INSTALLED IN PLENUM SPACES SHALL BE INSTALLED IN CONDUIT.
14. NO TERMINATION OR SPLICES SHALL BE INSTALLED IN OR ABOVE CEILINGS UNLESS NOTED NOTED OTHERWISE.
15. TECHNOLOGY CONTRACTOR SHALL PROVIDE AND INSTALL ALL SLEEVES REQUIRED TO INSTALL COMMUNICATION CABLING THROUGH ALL CMU AND RATED WALLS. ALL TECHNOLOGY SYSTEM CONDUIT SLEEVES SHALL HAVE PROTECTIVE BUSHING ON BOTH ENDS. BE DEDICATED FOR TECHNOLOGY SYSTEMS ONLY AND SHALL NOT SHARE WITH OTHER BUILDING TRADES.
16. CONTRACTOR SHALL MAINTAIN WALL RATING WITH PROPER FIRE BLOCKING METHODS.
17. CONTRACTOR SHALL ROUTE ALL FIBER/VOICE/DATA AND CATV CABLING DOWN CORRIDORS AND PERPENDICULAR OR PARALLEL TO BUILDING WALLS ENTER INTO ALL ROOMS ABOVE THE MAIN DOORWAY.
18. ALL COMMUNICATION CABLE INSTALLED SHALL ROUTE TO THE CENTER OF THE ROOM IN WHICH IT SERVES AND THEN TO THE OUTLET LOCATION IT IS INTENDED FOR. EACH CABLE SHALL HAVE A 10' SERVICE LOOP AT THE CENTER OF EACH ROOM AND A 3' SERVICE LOOP ABOVE EACH OUTLET LOCATION.
19. THE SYSTEM INSTALLER SHALL PROPERLY SUPPORT ALL INSTALLED SYSTEM CABLING FROM A PANDUIT J-MOD CABLE SUPPORT SYSTEMS AS DETAILED IN SPECIFICATIONS. NO CABLING SHALL BE ROUTED AND TIED DIRECTLY TO BUILDING STEEL, CEILING GRID SUPPORT, CONDUIT, PIPING, OR DUCTWORK. PANDUIT J-MOD SUPPORT SYSTEM SHALL BE DIRECTLY CONNECTED TO THE BUILDING'S STEEL JOIST. IN LOCATION WHERE THE BOTTOM OF THE JOIST IS MORE THAN 5' ABOVE THE CEILING, THE SYSTEM INSTALLER SHALL PROVIDE AND INSTALL THREADED ROD AND ALL REQUIRED MATERIALS TO CONNECT THE THREADED ROD TO THE BUILDING STEEL AND THE CABLE SUPPORT SYSTEM TO THE THREADED ROD. CABLE PATHWAY SHALL NOT BE HIGHER THAN 5' ABOVE THE CEILING AT ANY LOCATIONS.
20. CONTRACTOR TO PROVIDE AND INSTALL ALL REQUIRED CABLING AND COMPONENTS TO FURNISH TWO (2) ANALOG TELEPHONE CABLES TO THE FIRE ALARM SYSTEM. CONTRACTOR TO COORDINATE WITH THE SYSTEM INSTALLER FOR EXACT LOCATIONS AND TERMINATION INSTRUCTIONS PRIOR TO INSTALLATION.
21. ALL EXPOSED CABLING OR CABLING ROUTING ACROSS NON ACCESSIBLE CEILINGS SHALL BE INSTALLED IN CONDUIT. CONDUIT SHALL BE PROPERLY SIZED TO MAINTAIN THE 40% FILL RATIO.
22. ALL CONDUIT STUB OUTS AND SLEEVES SHALL HAVE PROTECTIVE BUSHINGS TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE EXCEPTED. CONTRACTOR TO MAINTAIN A 40% MAXIMUM FILL RATION ON ALL SLEEVES INSTALLED.
23. CONTRACTOR TO PROVIDE AND INSTALL ALL REQUIRED CABLING AND COMPONENTS TO FURNISH ONE (1) ANALOG TELEPHONE CABLES TO EACH ELEVATOR MACHINE ROOM ON THE PROJECT. CONTRACTOR TO COORDINATE WITH SYSTEM INSTALLERS FOR EXACT LOCATIONS AND TERMINATION INSTRUCTIONS PRIOR TO INSTALLATION.
24. CONTRACTOR TO PROVIDE AND INSTALL ALL REQUIRED CABLING AND COMPONENTS TO FURNISH TWO (2) CATEGORY 6 CABLES TO BUILDING AUTOMATION SYSTEM. (1) CABLE SHALL BE INSTALLED AT +18" AFF FOR TECHNICIAN NETWORK CONNECTIVITY AND THE OTHER SHALL PROVIDE CONNECTIVITY TO THE SYSTEM. CONTRACTOR TO COORDINATE WITH SYSTEM INSTALLERS FOR EXACT LOCATIONS AND TERMINATION INSTRUCTIONS PRIOR TO INSTALLATION.
25. CONTRACTOR TO PROVIDE AND INSTALL (2) CATEGORY 6 CABLES TO THE BUILDING'S SECURITY CONTROL PANEL AND (1) CATEGORY 6 CABLE TO THE BUILDING'S ACCESS CONTROL HEAD END PANEL. TERMINATION OF THESE CABLES SHALL BE COORDINATED WITH THE SYSTEM INSTALLER. CONTRACTOR TO VERIFY HOW MANY CABLES ARE REQUIRED TO ROUTE TO THE NEAREST MDF/IDF AND HOW MANY TO THE BUILDING'S DEMARCATION.

KEYED NOTES - COMMUNICATIONS PLAN

C1 INDICATES THE LOCATION OF A NEW TECHNOLOGY OUTLET. CONTRACTOR TO PROVIDE FACEPLATE WITH A MINIMUM OF 4-PORTS AT EACH LOCATION UNLESS OTHERWISE NOTED. ELECTRICAL CONTRACTOR TO PROVIDE A DOUBLE GANG BACK BOX WITH A SINGLE GANG REDUCER RING AND A 1" EMT CONDUIT FROM THE BOX TO THE NEAREST ACCESSIBLE CEILING. SOME EXISTING BUILDINGS MAY REQUIRE SURFACE MOUNTED RACEWAY. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL RACEWAY AS SPECIFIED AND DESIGNATE IN THE ELECTRICAL CONTRACT DOCUMENTS. SYSTEM INSTALLER TO PROVIDE AND INSTALL A PLASTIC PROTECTIVE BUSHING, ON EACH CONDUIT STUB-OUT, TO PREVENT CABLE DAMAGE.

C3 INDICATES THE LOCATION OF A TECHNOLOGY OUTLET INTENDED FOR THE USE OF A WALL MOUNTED WIRELESS ACCESS POINT CONNECTION MOUNTED AT 8-FEET A.F.F.

C4 INDICATES THE LOCATION OF A DATA OUTLET FOR A NEW LINE 75-INCH INTERACTIVE SMART BOARD ROUGHED IN AT 72-INCHES A.F.F. UNLESS OTHERWISE NOTED.

C5 INDICATES THE LOCATION OF A RAULAND ACC1400 INTERIOR INTERCOM SPEAKER, MOUNTED ON CEILING WITH A RAULAND ACC100 FACEPLATE.

C6 INDICATES THE LOCATION OF AN ATLAS VT-152UCN EXTERIOR HORN / SPEAKER, WEATHER PROOF WALL MOUNTED AT 9-FEET A.F.G.

C7 INDICATES THE LOCATION OF A DATA OUTLET FOR AN INTERCOM CALL BUTTON MOUNTED AT 42-INCHES A.F.F.

C8 INDICATES THE LOCATION OF A DATA OUTLET FOR A KRONOS TIME CLOCK MOUNTED AT 42-INCHES A.F.F.

C9 INDICATES THE APPROXIMATE ROUTING OF TECHNOLOGY FEEDER CONDUITS INSTALLED ABOVE CEILING FROM THE MDF TO AREAS WITH TECHNOLOGY DROPS.

C27 SPEAKER VOLUME CONTROL, FLUSH MOUNTED IN WALL

C28 INDICATES THE LOCATION OF A DATA OUTLET FOR ELECTRICAL OR LIGHTING CONTROLS. CONTRACTOR MUST COORDINATE EXACT LOCATION AND TERMINATION REQUIREMENTS WITH ELECTRICAL CONTRACTOR.

C29 INDICATES THE LOCATION OF A DATA OUTLET FOR POOL EQUIPENT. CONTRACTOR MUST COORDINATE EXACT LOCATION AND TERMINATION REQUIREMENTS WITH POOL EQUIPMENT CONTRACTOR.

C30 INDICATES THE LOCATION OF A DATA OUTLET FOR SCORE BOARD. CONTRACTOR MUST COORDINATE EXACT LOCATION AND TERMINATION REQUIREMENTS WITH SCORE BOARD CONTRACTOR.

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

1 **TECHNOLOGY PLAN**
SCALE: 1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TX
ALAMO, TX

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED PROFESSIONAL ENGINEER
APRIL 11, 2019
LEAF ENGINEERS
F-18672

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: ANTHONY CRUZ
CHECKED BY: GREG GRIFFIN

REVISIONS

No.	Description	Date

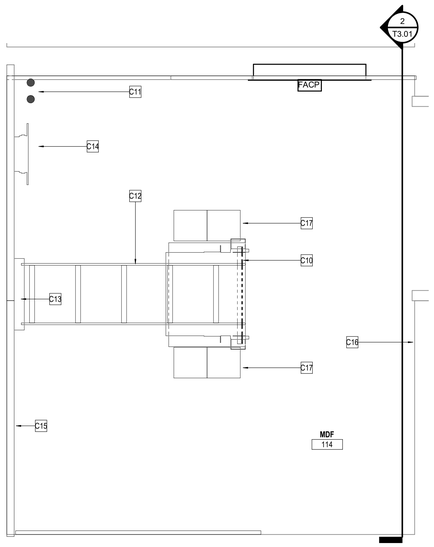
ISSUE FOR PROPOSAL

TECHNOLOGY PLAN

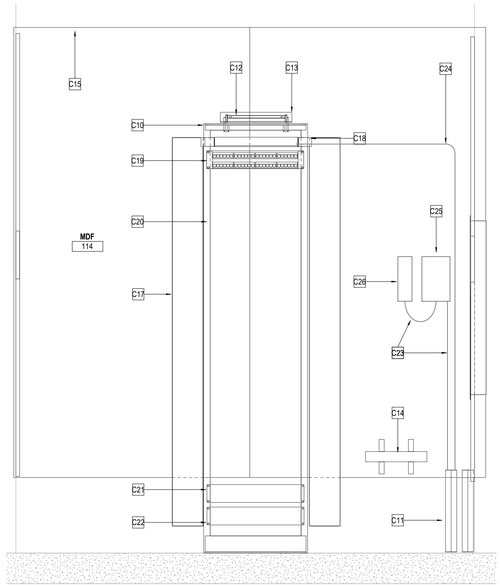
T2.03

KEYED NOTES - COMMUNICATIONS PLAN

C10	INDICATES THE LOCATION OF A 2-POST RACK COMMSCOPE PN - RK3-45A.
C11	INDICATES THE LOCATION OF TWO 4-INCH CONDUITS ROUTED UNDERGROUND FROM THE WEIGHT ROOM IDF OR THE NEAREST MAIN BUILDING IDF TO THE NATATORIUM IDF FOR FIBER AND COPPER BACKBONE CONNECTIVITY. EACH CONDUIT MUST HAVE FOUR 1-INCH INNER DUCT SLEEVES TO SEPARATE THE CABLING TRADES BEING INSTALLED IN THE CONDUIT. EACH INNER DUCT SLEEVE MUST HAVE A PULL STRING.
C12	INDICATES THE LOCATION OF LADDER RACK TRAY MOUNTED AT 7-FEET A.F.F.
C13	INDIACTES THE LOCATION OF A 12-INCH WALL ANGLE BRACKET MOUNTED AT 7-FEET A.F.F. TO SUPPORT LADDER RACK.
C14	INDICATES THE LOCATION OF A 12-INCH GROUNDING BUS BAR FOR TELECOMMUNICATIONS MOUNTED ON PLYWOOD AT 18-INCHES A.F.F.
C15	INDICATES THE LOCATION OF 3/4-INCH FIRE RATED PLYWOOD MOUNTED AT 12-INCHES A.F.F.
C16	INDICATES THE LOCATION OF A LAMINATED 24X36-INCH AS-BUILT DRAWING SHOWING ALL STRUCTURED CABLE PLANT INFORMATION.
C17	VERTICALE CABLE MANAGEMENT KIT COMMSCOPE PN - VCM-DS-84-6
C18	1RU FIBER SLIDING LIU SHELF COMMSCOPE PN - 360G2-1U-MOD-SD
C19	48-PORT PATCH PANEL COMMSCOPE PN - 360-PM-GS3-2U-48P
C20	INDICATES THE LOCATION OF AN OWNER PROVIDED NETWORK SWITCH CISCO WS-C2960X-48FPD-L
C21	INDICATES THE LOCATION OF AN OWNER PROVIDED EXTENDED RUN TIME FRAME UPS APC PN - SURTA48RMXLBP2U
C22	INDICATES THE LOCATION OF AN OWNER PROVIDED TYPICAL UPS APC PN - SURTA1500RMXL2U
C23	OUTDOOR MULTI-PAIR COPPER DATA CABLE, 25 PAIR COMMSCOPE PN - 760026518
C24	COMMSCOPE 10G OM3 INDOOR/OUTDOOR ARMORED 12 STRAND FIBER OPTIC CABLE PN - 760171470
C25	CIRCA 25 PAIR LIGHTNING PROTECTION BUILDING ENTRANCE TERMINAL WITH FUSES PN - 2625QC/QC FUSE PART NUMBER 3B1E (1 FOR EACH PAIR)
C26	WALL MOUNTED 66 TYPE TERMINATION BLOCK



1 TECHNOLOGY PLAN - MDF 114
SCALE: 1" = 1'-0"



2 IDF 114 RISER
SCALE: 1" = 1'-0"

LEAF ENGINEERS
A PBK COMPANY
601 N.W. LOOP 410, SUITE 400
SAN ANTONIO, TX 78216
210-638-7200
TX Firm: F-18672

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TX
ALAMO, TX

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
APRIL 11, 2019
LEAF ENGINEERS
F-18672

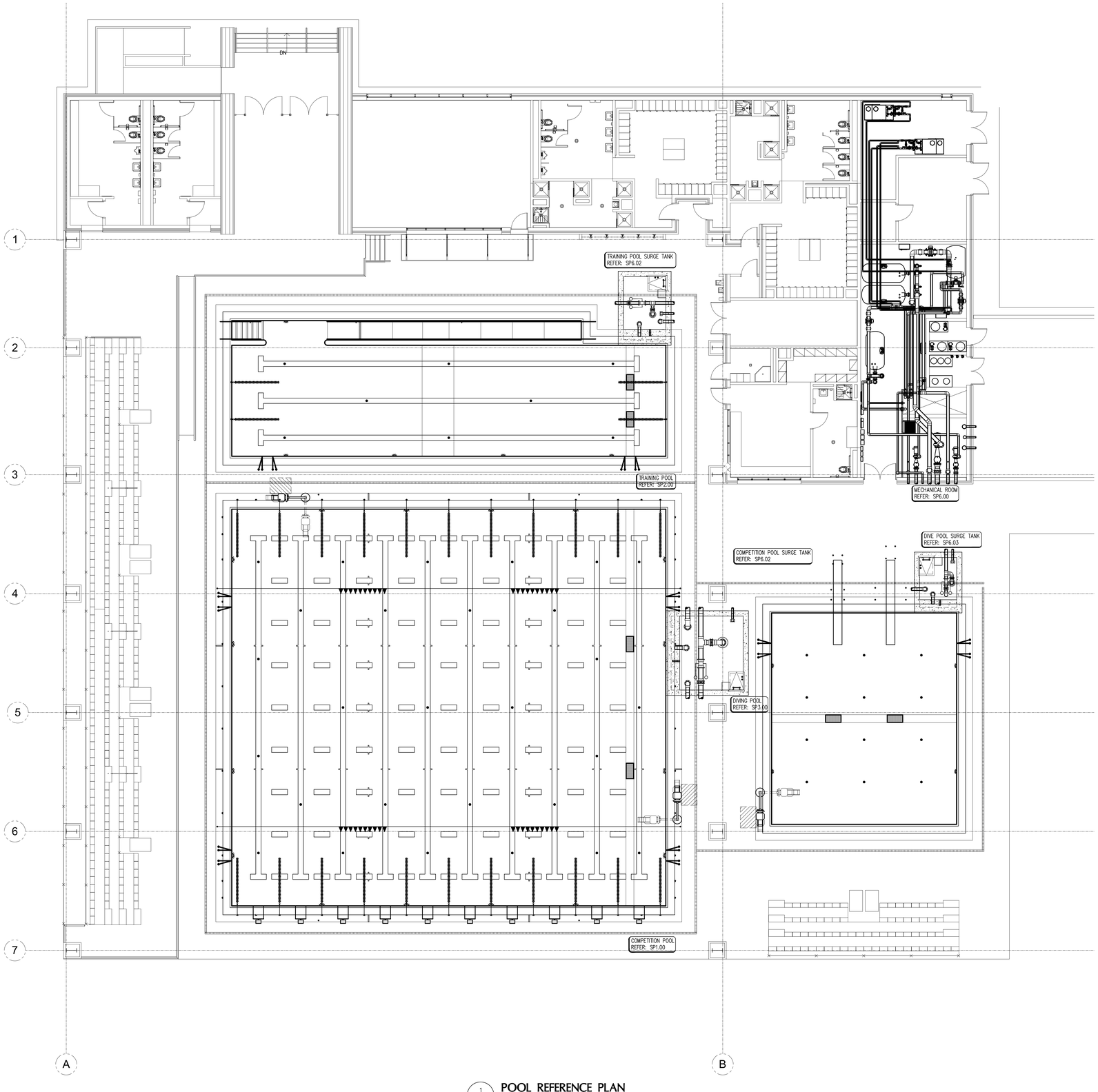
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: APRIL 11, 2019
DRAWN BY: ANTHONY CRUZ
CHECKED BY: GREG GRIFFIN
REVISIONS

No.	Description	Date

ISSUE FOR PROPOSAL

TECHNOLOGY IDF ENLARGED AND RISER

T3.01



1 SP0.00 POOL REFERENCE PLAN
1/8" = 1'-0"

DESIGN DATA

	UNITS	COMPETITION POOL	TRAINING POOL	DIVE POOL (ALTERNATE #2)
LENGTH	FT.	82	VARIES	40
WIDTH	FT.	75	VARIES	35
WATER SURFACE AREA	SQ. FT.	6,162	1,978	1,400
PERIMETER	FT.	314	215	150
VOLUME	GALLON	328,511	53,388	137,502
CIRCULATION SYSTEM & FILTERS				
POOL TURNOVER RATE	HOUR	4.98	2.97	4.82
RECIRCULATION RATE	GPM	1,100	300	475
FILTRATION RATE (MAX. DESIGN)	GPM/SQ. FT.	12.5	13.0	12.5
FILTER AREA REQUIRED	SQ. FT.	88	23.1	38.0
FILTRATION RATE (ACTUAL)	GPM/SQ. FT.	11.5	12.6	11.6
FILTRATION AREA (ACTUAL)	SQ. FT.	95.6	23.9	40.8
FILTER BACKWASH RATE	GPM/SQ. FT.	15	15.0	15.0
BACKWASH FLOW RATE (PER FILTER)	GPM	359	359	306
SURGE CAPACITY	GALLON	6,283	2,394	3,979
SEWER CAPACITY	GPM	420	420	420
DESIGN FILL RATE	GPM	91	37	95
DESIGN FILL TIME	HOUR	60	24	24
BATHER LOAD	PERSON	246	131	56

GENERAL POOL NOTES

1. ⊕ DENOTES WATER DEPTH FROM WATER LEVEL.
2. POOL FINISH SHALL BE A PROPRIETARY AGGREGATE PLASTER WITH A 6" CERAMIC TILE BAND AND A 1'-5" PERIMETER TILE BAND WITH TILE DECK MARKINGS.
3. ALL POOL FLOOR AREAS 18" AND SHALLOWER AND ALL STAIR TREADS SHALL HAVE A SLIP RESISTANT FINISH.
4. TYPICAL POOL DIMENSIONS SHOWN ARE FROM INSIDE FINISHED POOL WALL.
5. REFER TO POOL STRUCTURAL DRAWINGS FOR ALL DIMENSIONS RELATING TO THE THICKNESS OF THE POOL SHELL.
6. THE JUNCTION BETWEEN THE SWIMMING POOL WALL AND THE FLOOR SHALL BE COVED WITH A MAXIMUM 6" RADIUS.
7. DEPTH MARKERS AND WARNING SIGNS ARE SHOWN IN APPROXIMATE LOCATIONS. DEPTH MARKERS AND WARNING SIGNS SHALL NOT EXCEED 25'-0" APART FROM EACH OTHER, AND SHALL BE PLACED AT EVEN FOOT INTERVALS PER LOCAL CODE.
8. ALL PROPRIETARY NAMES MENTIONED ARE TO DESIGNATE PERFORMANCE STANDARDS. EQUIVALENT PRODUCTS SHALL BE SUBMITTED FOR APPROVAL.
9. SLIP RESISTANT DECK FINISH REQUIRED. REFER TO ARCHITECT.
10. REFER TO PLUMBING FOR DECK DRAINS AND HOSE BIBBS.
11. ALL SURFACE WATER SHALL DRAIN AWAY FROM THE POOL.
12. REFER TO ELECTRICAL FOR GFI OUTLETS ON POOL DECK.
13. ELECTRICAL INSPECTOR SHALL APPROVE INSTALLATION OF BONDING GRID FOR POOL REINFORCING AND ALL POOL EMBEDS PRIOR TO PLACEMENT OF CONCRETE.
14. NO GROUND WATER SHALL BE ALLOWED TO RISE ABOVE ANY PORTION OF THE POOL BOTTOM DURING CONSTRUCTION.
15. COMPETITION POOL HAS BEEN DESIGNED TO BE IN COMPLIANCE WITH THE RULES AND REGULATIONS OF USA SWIMMING (USA) NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS (NFSHSA)
16. REFER TO SWIMMING POOL SPECIFICATIONS FOR COMPETITION RACE COURSE TOLERANCES.
17. TIMING SYSTEM SHOWN FOR REFERENCE ONLY. REFER ARCHITECTURAL AND ELECTRICAL DRAWINGS.
18. ALL POOL REINFORCING STEEL, METAL FITTINGS, EQUIPMENT WITHIN 5'-0" OF POOL EDGE AND ANY METAL PARTS OF POOL EQUIPMENT IN CONTACT WITH POOL RECIRCULATION SYSTEM SHALL BE BONDED PER NEC 680. REFER: 13/SP6.05

DRAWING INDEX

SHEET	DESCRIPTION
SP0.00	POOL REFERENCE PLAN
SP0.01	COMPETITION POOL TIMING SYSTEM LAYOUT
SP1.00	COMPETITION POOL PLAN
SP1.01	COMPETITION POOL SECTIONS
SP1.02	COMPETITION WATER POLO LAYOUT
SP1.03	COMPETITION POOL DETAILS
SP2.00	TRAINING POOL PLAN & SECTIONS
SP2.01	TRAINING POOL DETAILS
SP3.00	DIVE POOL PLAN & SECTIONS (ALTERNATE #2)
SP3.01	DIVE POOL PLAN DETAILS (ALTERNATE #2)
SP4.00	POOL LOCATION POINT PLAN
SP5.00	POOL SUCTION PIPING PLAN
SP5.01	POOL RETURN PIPING PLAN
SP6.00	POOL MECHANICAL ROOM PLAN
SP6.01	POOL MECHANICAL ROOM SECTIONS
SP6.02	COMPETITION & TRAINING POOL SURGE TANKS PLANS & SECTIONS
SP6.03	DIVE POOL SURGE TANK PLANS & SECTIONS (ALTERNATE #2)
SP6.04	POOL MECHANICAL DETAILS
SP6.05	POOL MECHANICAL DETAILS
SP6.06	POOL MECHANICAL DETAILS
SP7.00	COMPETITION & TRAINING POOL SYSTEMS SCHEMATICS
SP7.01	DIVE POOL SYSTEMS SCHEMATIC (ALTERNATE #2)
SP8.00	COMPETITION POOL STRUCTURAL PLAN
SP8.01	TRAINING POOL STRUCTURAL PLAN
SP8.02	DIVE POOL STRUCTURAL PLAN
SP8.03	POOL STRUCTURAL DETAILS
SP8.04	POOL STRUCTURAL DETAILS
SP8.05	POOL STRUCTURAL DETAILS

POOL ALTERNATES

BID ALTERNATE #2 – BID ALTERNATE #2 SHALL INCLUDE THE COMPLETE DIVING POOL AND ALL ASSOCIATED DIVING POOL SYSTEMS, COMPLETE AND OPERATIONAL AS A LUMP SUM ADDITIVE ALTERNATE FOR THE AQUATICS SCOPE OF WORK. REFER TO ARCHITECTURE FOR ASSOCIATED POOL DECK, SPECTATOR SEATING, AND SITE CONSTRUCTION TO BE INCLUDED IN THE GENERAL CONTRACTOR'S ALTERNATE BID SCOPE.

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: DRO
CHECKED BY: SAP

REVISIONS

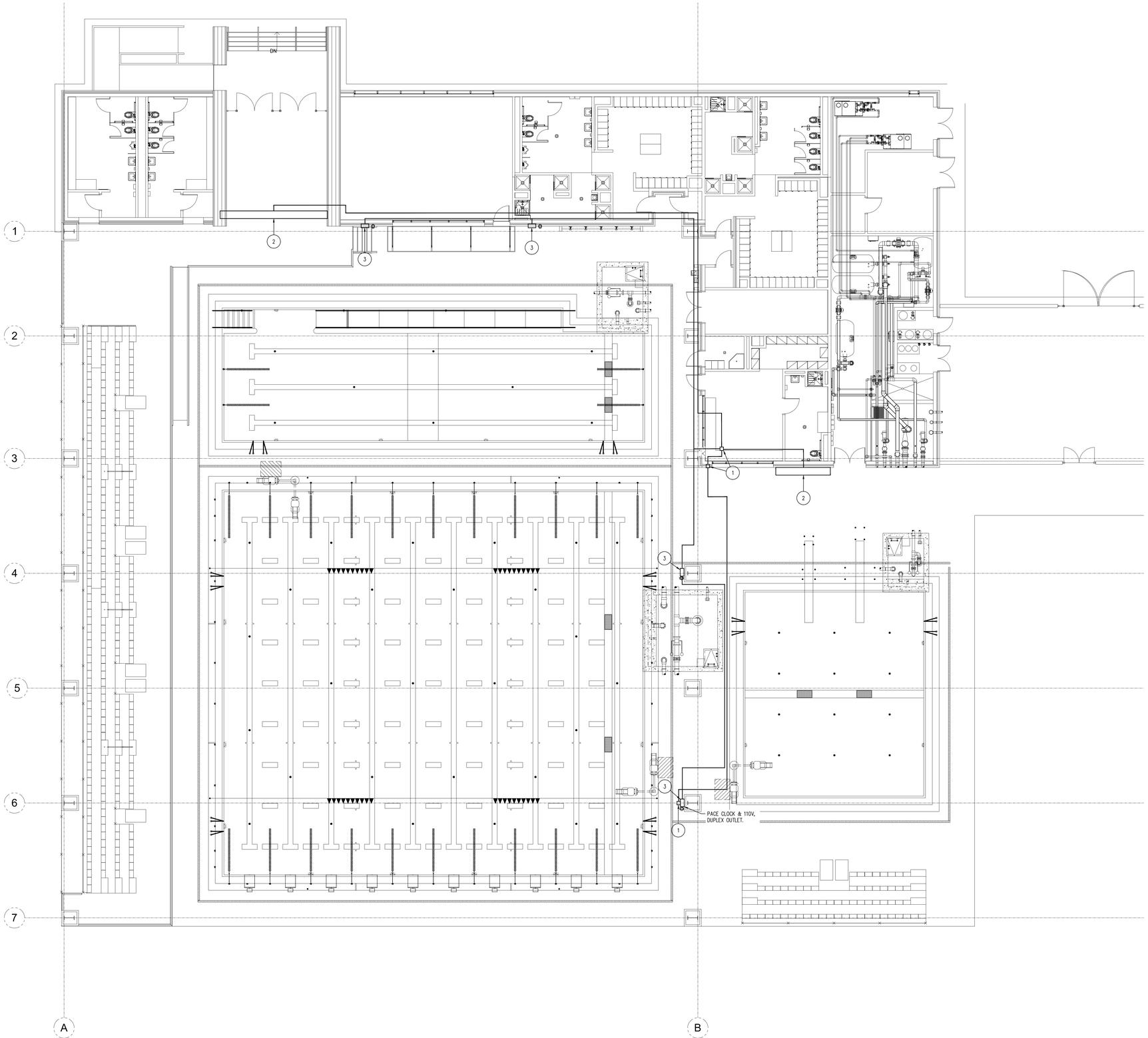
No.	Description	Date

ISSUED FOR BIDS

POOL REFERENCE PLAN

SP0.00

TIMING SYSTEM SCHEDULE			
ID	QTY.	ITEM	DESCRIPTION
1	3	WALL PLATE	12X12X6 PVC JUNCTION BOX 1/8" ATT WITH 120 VAC QUAD OUTLET AND ETHERNET DROP BY OTHERS.
2	2	SCOREBOARD	4X4X6 PVC JUNCTION BOX
3	4	PACE CLOCK	PACE CLOCK & 110V, DUPLEX OUTLET



1 SP0.01 COMPETITION POOL TIMING SYSTEM LAYOUT
1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	DRO
CHECKED BY	SAP

REVISIONS

No.	Description	Date

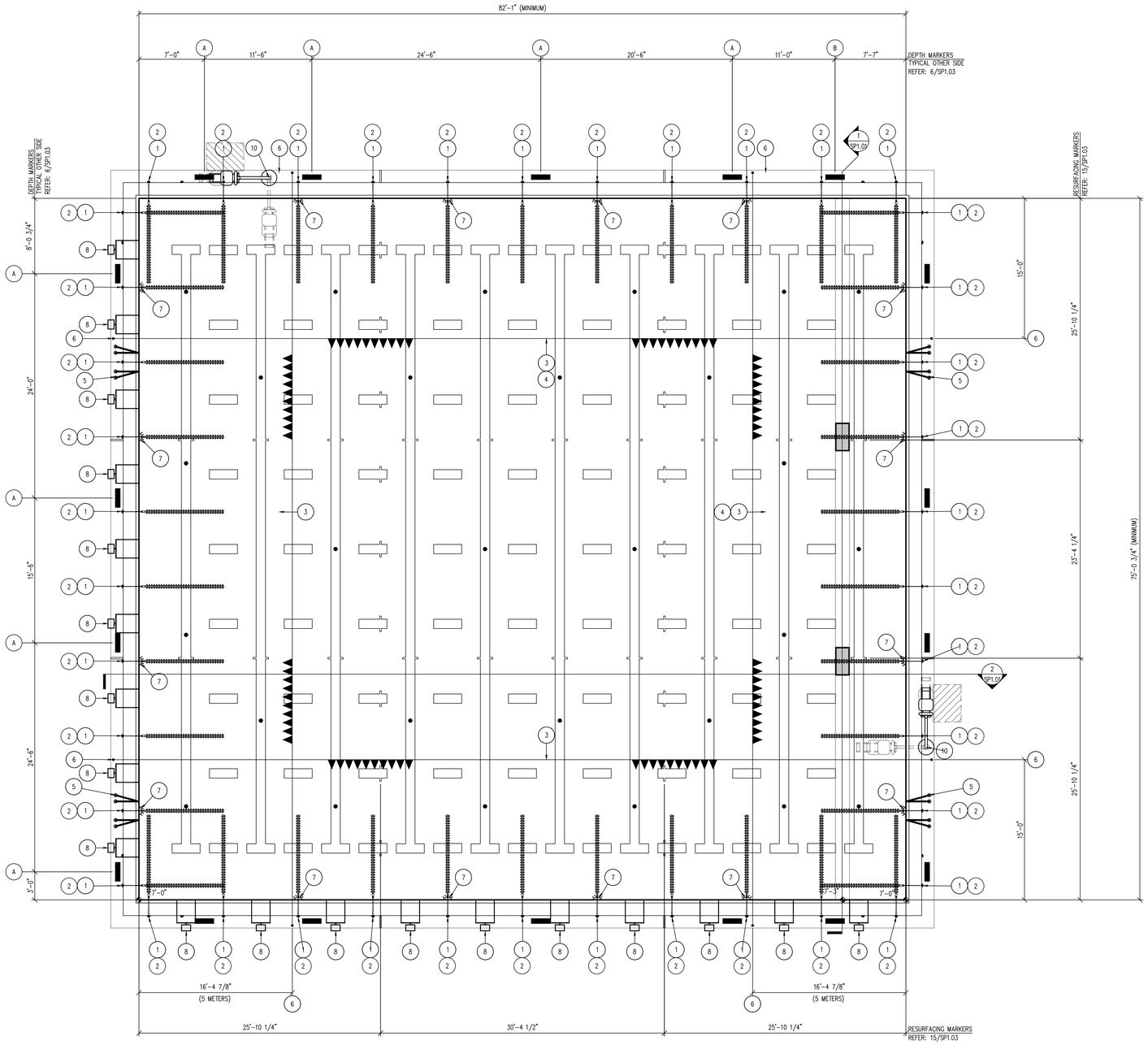
ISSUED FOR BIDS

COMPETITION POOL TIMING SYSTEM LAYOUT

SP0.01

DEPTH & WARNING SIGNAGE SCHEDULE	
ID	SIGNAGE
A	7 FT 0 IN
B	7 FT 3 IN

POOL EQUIPMENT LEGEND		
LEGEND	ID	ITEM
	1	LANE CUP ANCHOR REFER: 1/SP1.03
	2	LANE ROPE EXTENSION REFER: 12/SP1.03
	3	BACKSTROKE PENNANT
	4	FALSE START ROPE ASSEMBLY
	5	GRAB RAILS AND RECESSED STEPS REFER: 14/SP1.03
	6	STANCHION POST AND ANCHOR REFER: 9/SP1.03
	7	UNDERWATER LIGHT REFER: 7/SP1.03
	8	DECK MOUNTED STARTING PLATFORM AND ANCHOR REFER: 10/SP1.03
	9	FLOATING WATER POLO GOAL REFER: 13/SP1.03
	10	POOL LIFT REFER: 11/SP1.03



1 SP1.00 COMPETITION POOL PLAN
3/16" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: DRO
CHECKED BY: SAP

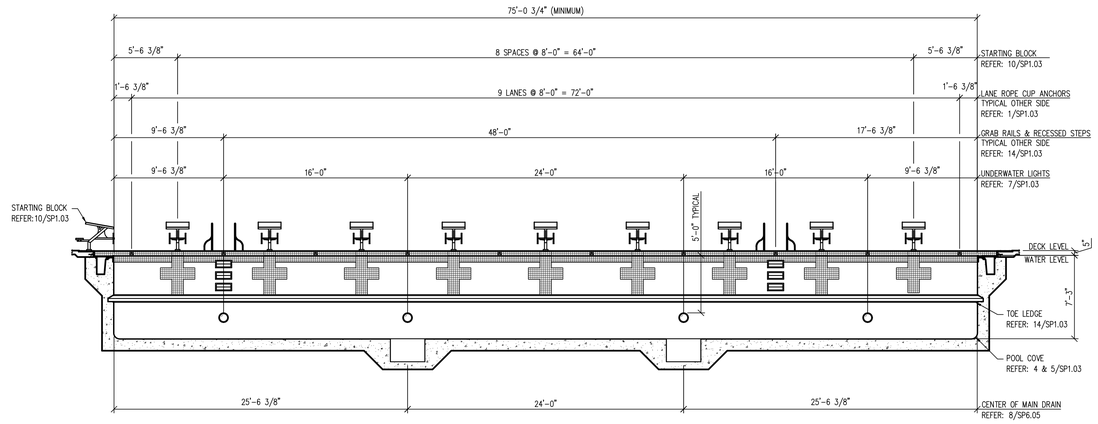
REVISIONS

No.	Description	Date

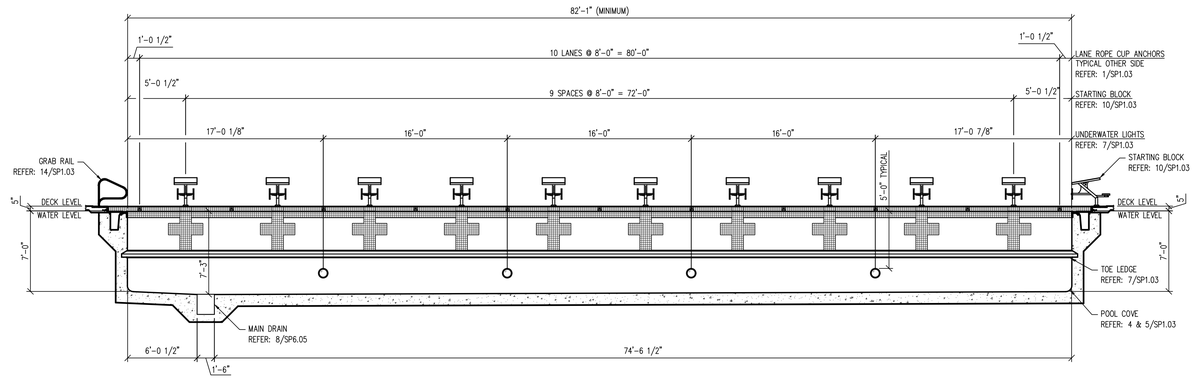
ISSUED FOR BIDS

COMPETITION POOL PLAN

SP1.00



1 SP1.01 COMPETITION POOL SECTION
3/16" = 1'-0"



2 SP1.01 COMPETITION POOL SECTION
3/16" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	DRO
CHECKED BY	SAP

REVISIONS

No.	Description	Date

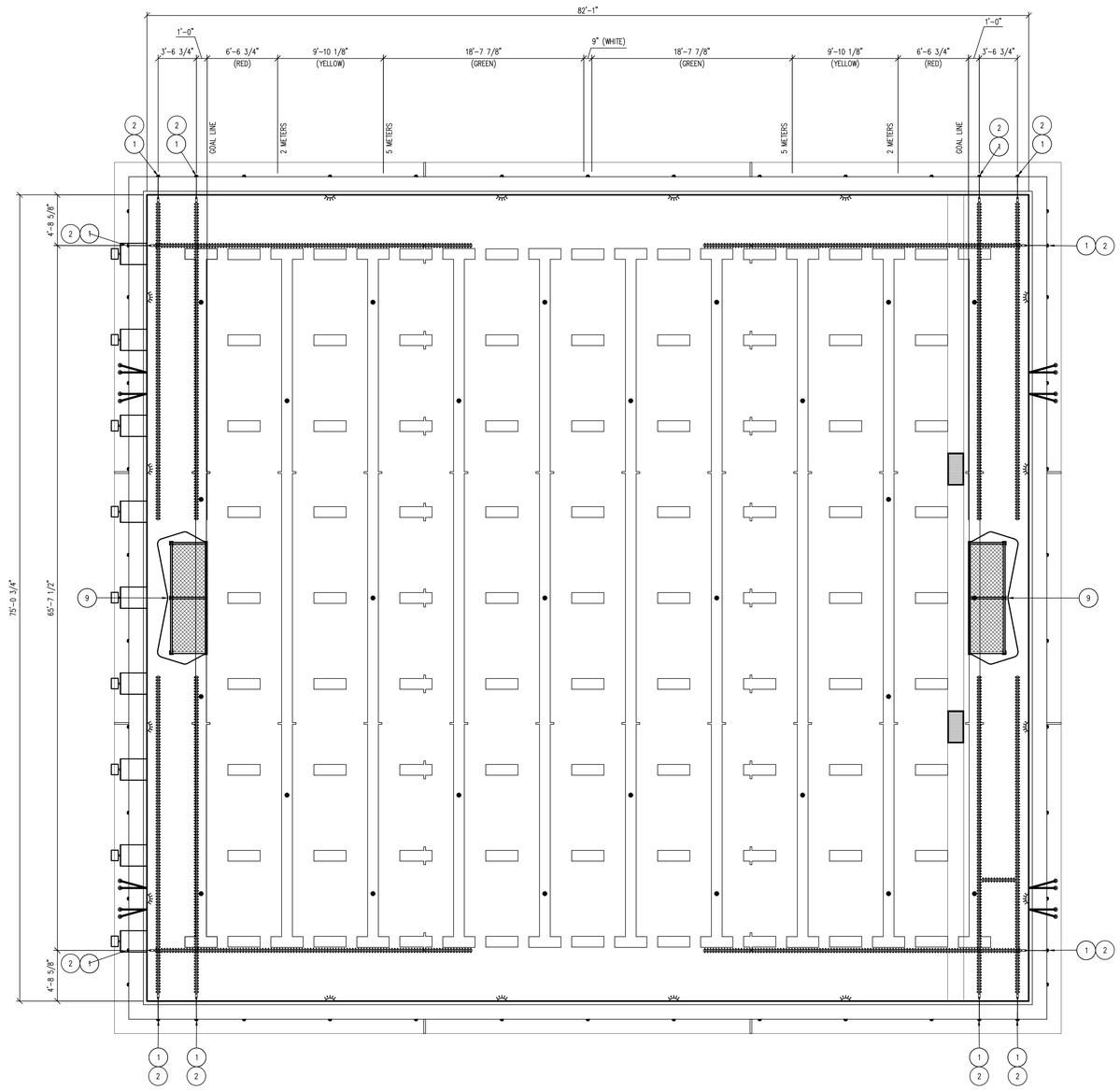
ISSUED FOR BIDS

COMPETITION POOL SECTIONS

SP1.01

POOL EQUIPMENT LEGEND

LEGEND	ID	ITEM
	1	LANE CUP ANCHOR REFER: 1/SP1.03
	2	LANE ROPE EXTENSION REFER: 12/SP1.03
	3	BACKSTROKE PENNANT
	4	FALSE START ROPE ASSEMBLY
	5	GRAB RAILS AND RECESSED STEPS REFER: 14/SP1.03
	6	STANCHION POST AND ANCHOR REFER: 9/SP1.03
	7	UNDERWATER LIGHT REFER: 7/SP1.03
	8	DECK MOUNTED STARTING PLATFORM AND ANCHOR REFER: 10/SP1.03
	9	FLOATING WATER POLO GOAL REFER: 13/SP1.03
	10	POOL LIFT REFER: 11/SP1.03



1 SP1.02 COMPETITION WATER POLO LAYOUT
3/16" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	DRO
CHECKED BY	SAP

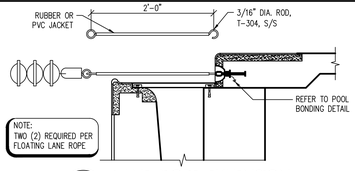
REVISIONS

No.	Description	Date

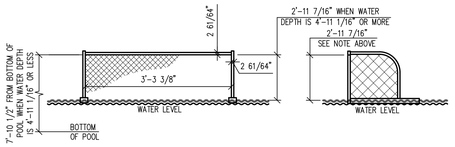
ISSUED FOR BIDS

COMPETITION POOL WATER POLO LAYOUT

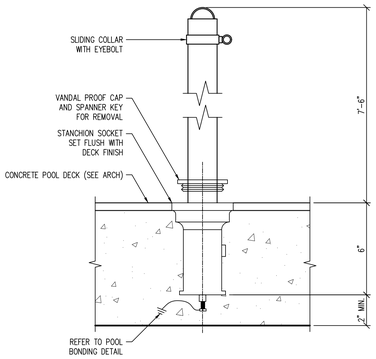
SP1.02



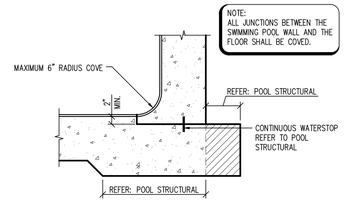
12 SP1.03 **LANE ROPE EXTENSION**
1" = 1'-0"



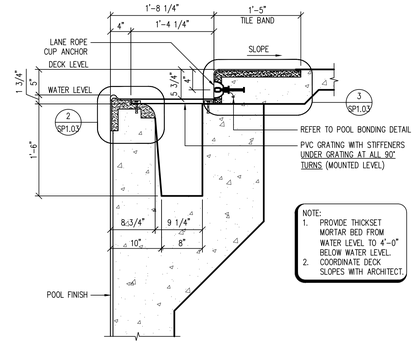
13 SP1.03 **FLOATING WATER POLO GOAL**
1/4" = 1'-0"



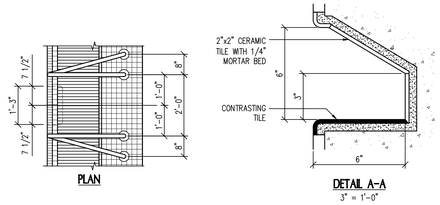
9 SP1.03 **STANCHION POST AND ANCHOR**
3" = 1'-0"

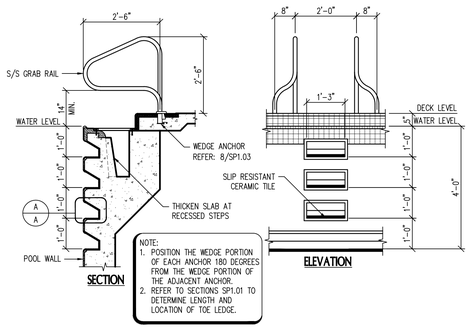


5 SP1.03 **SHOTCRETE COVE**
3/4" = 1'-0"

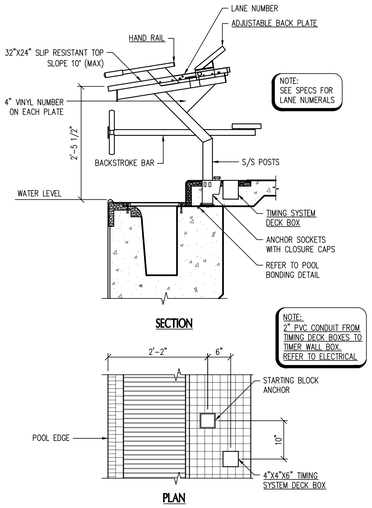


1 SP1.03 **CONCRETE ROLLOUT GUTTER**
1" = 1'-0"

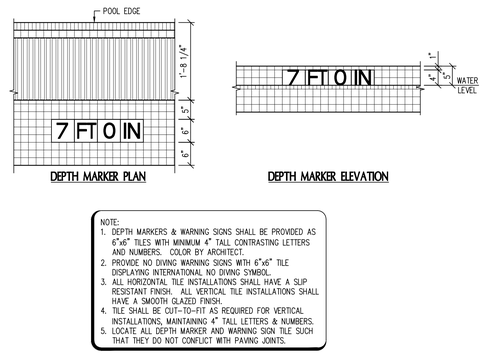




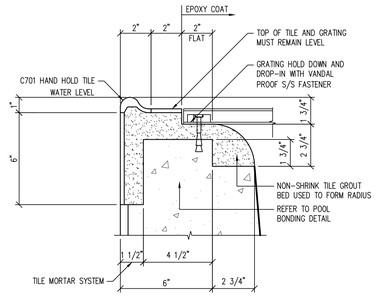
14 SP1.03 **GRAB RAILS & RECESSED STEPS**
1/2" = 1'-0"



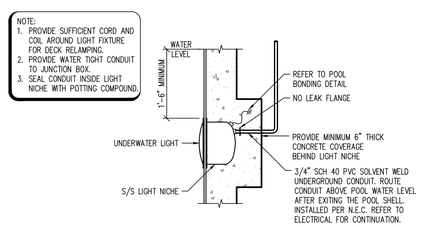
10 SP1.03 **STARTING BLOCK**
3/4" = 1'-0"



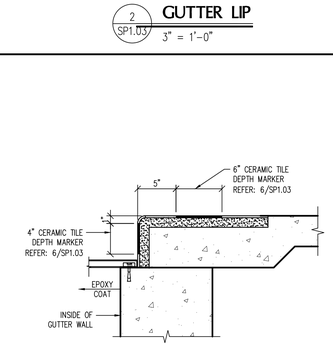
6 SP1.03 **DEPTH MARKERS AND WARNING SIGNS**
3/4" = 1'-0"



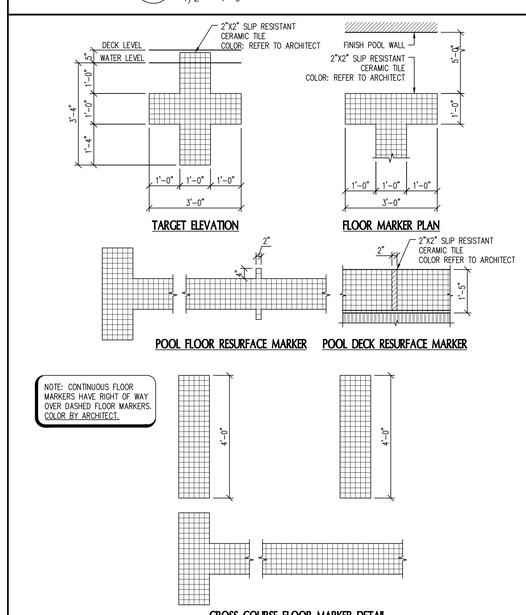
2 SP1.03 **GUTTER LIP**
3" = 1'-0"



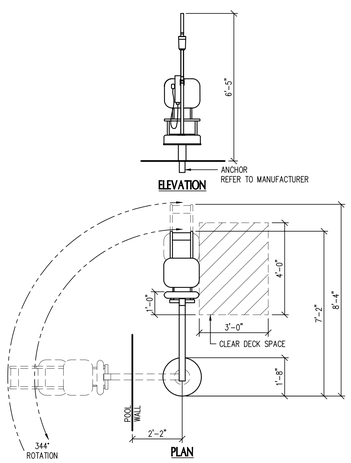
7 SP1.03 **UNDERWATER LIGHT**
3/4" = 1'-0"



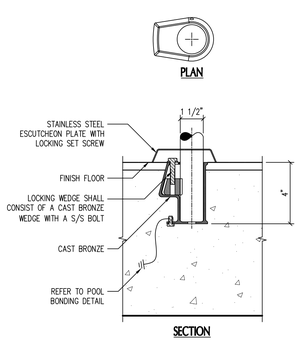
3 SP1.03 **GUTTER CURB**
1 1/2" = 1'-0"



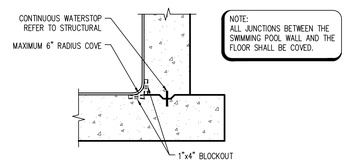
15 SP1.03 **WALL TARGETS & FLOOR MARKERS**
1/2" = 1'-0"



11 SP1.03 **POOL LIFT**
3/8" = 1'-0"



8 SP1.03 **WEDGE ANCHOR**
3" = 1'-0"



4 SP1.03 **CAST IN PLACE CONCRETE COVE**
3/4" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS — DARREN BEVARD — 104309 — LICENSED — PROFESSIONAL ENGINEER
4.11.19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	DRO
CHECKED BY	SAP

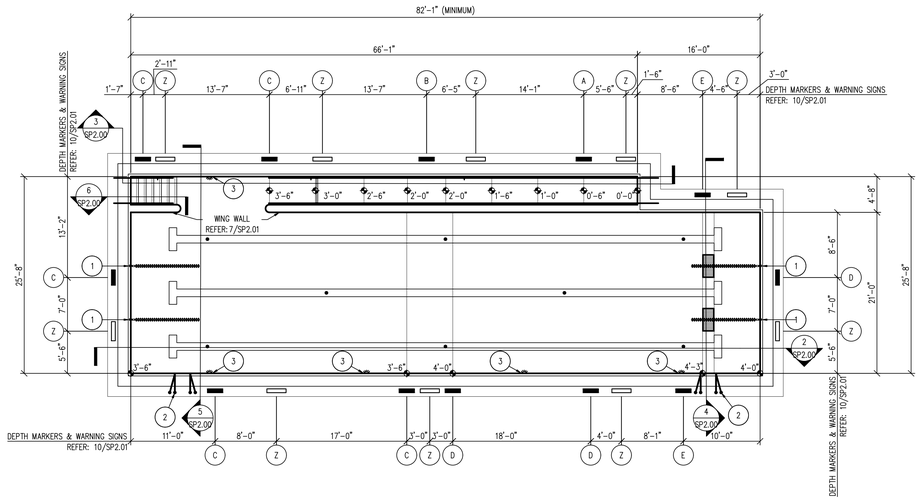
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

COMPETITION POOL DETAILS

SP1.03



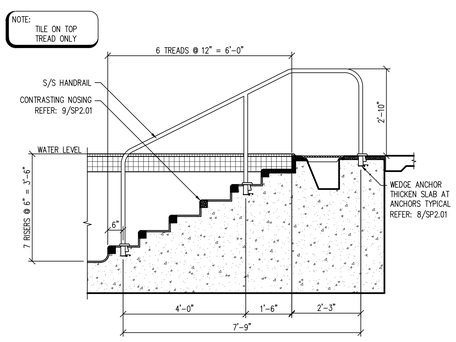
1 SP2.00 TRAINING POOL PLAN
1/8" = 1'-0"

DEPTH & WARNING SIGNAGE SCHEDULE

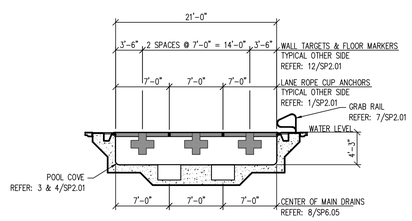
ID	SIGNAGE
A	0 FT 6 IN
B	2 FT 0 IN
C	3 FT 6 IN
D	4 FT 0 IN
E	4 FT 3 IN
Z	NO DIVING

POOL EQUIPMENT LEGEND

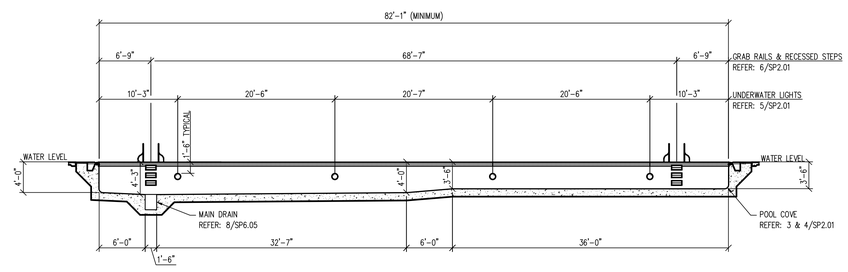
LEGEND	ID	ITEM
	1	LANE ROPE CUP ANCHOR REFER: 1/SP2.01
	2	GRAB RAILS AND RECESSED STEPS REFER: 6/SP2.01
	3	UNDERWATER LIGHT REFER: 5/SP2.01



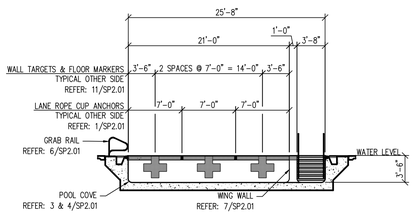
6 SP2.00 STAIR SECTION
1/2" = 1'-0"



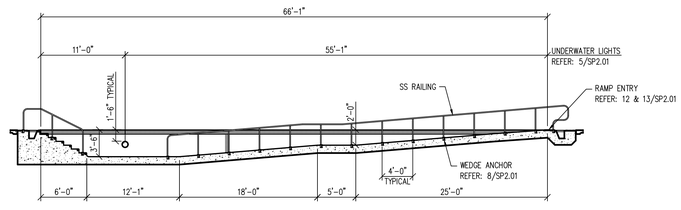
4 SP2.00 TRAINING POOL SECTION
1/8" = 1'-0"



2 SP2.00 TRAINING POOL SECTION
1/8" = 1'-0"



5 SP2.00 TRAINING POOL SECTION
1/8" = 1'-0"



3 SP2.00 TRAINING POOL SECTION
1/8" = 1'-0"

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	DRO
CHECKED BY	SAP

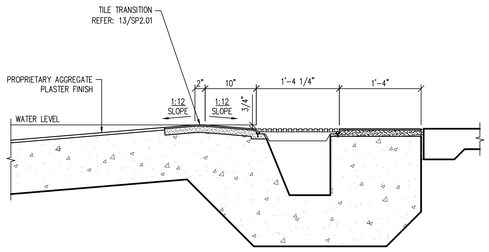
REVISIONS

No.	Description	Date

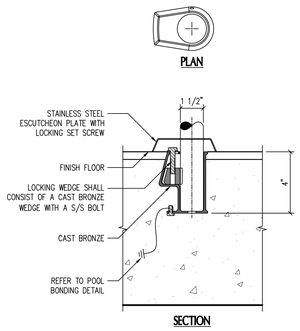
ISSUED FOR BIDS

TRAINING POOL PLAN & SECTIONS

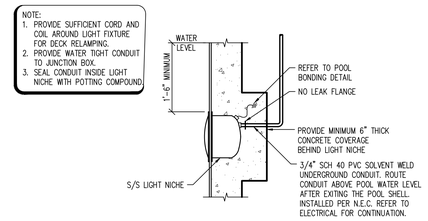
SP2.00



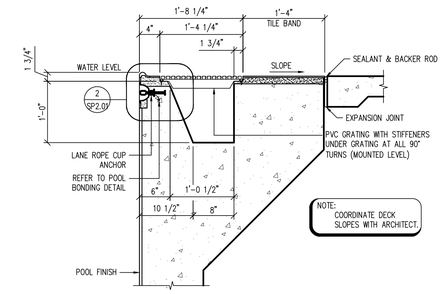
12 SP2.01 RAMP ENTRY SECTION
1" = 1'-0"



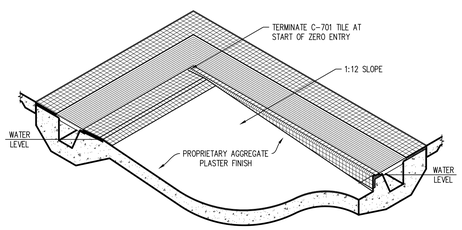
8 SP2.01 WEDGE ANCHOR
3" = 1'-0"



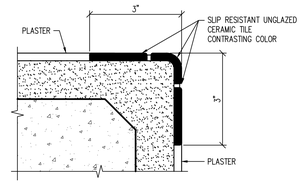
5 SP2.01 UNDERWATER LIGHT
3/4" = 1'-0"



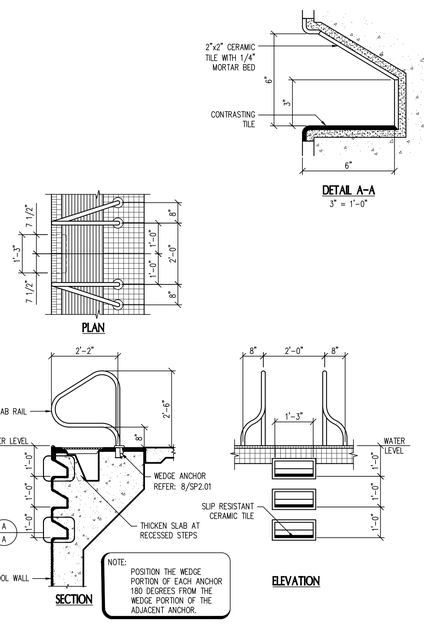
1 SP2.01 CONCRETE DECK LEVEL GUTTER
1" = 1'-0"



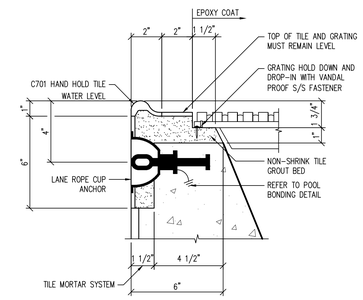
13 SP2.01 RAMP ENTRY ISOMETRIC
3/8" = 1'-0"



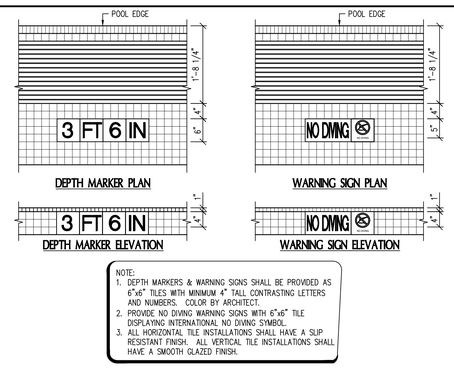
9 SP2.01 CONTRASTING NOSING
6" = 1'-0"



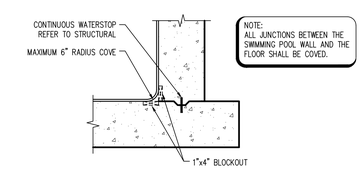
6 SP2.01 GRAB RAILS & RECESSED STEPS
1/2" = 1'-0"



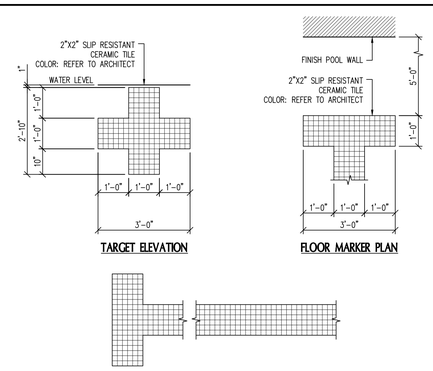
2 SP2.01 GUTTER LIP
3" = 1'-0"



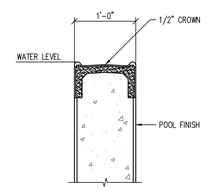
10 SP2.01 DEPTH MARKERS AND WARNING SIGNS
3/4" = 1'-0"



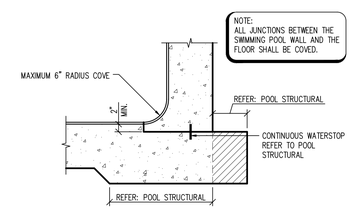
3 SP2.01 CAST IN PLACE CONCRETE COVE
3/4" = 1'-0"



11 SP2.01 WALL TARGETS & FLOOR MARKERS
1/2" = 1'-0"



7 SP2.01 WING WALL SECTION
1" = 1'-0"



4 SP2.01 SHOTCRETE COVE
3/4" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	DRO
CHECKED BY	SAP

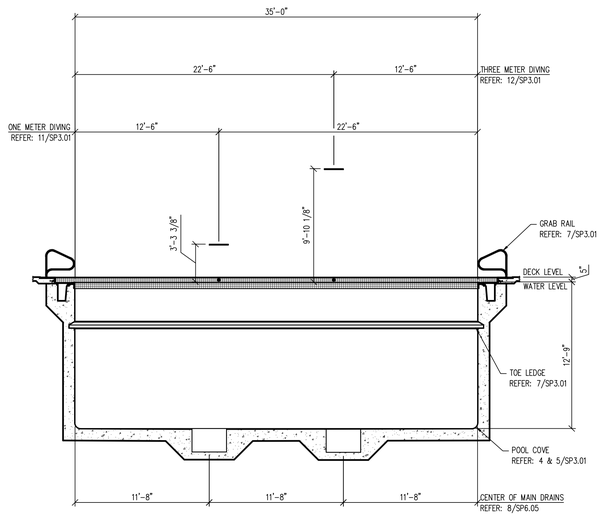
REVISIONS

No.	Description	Date

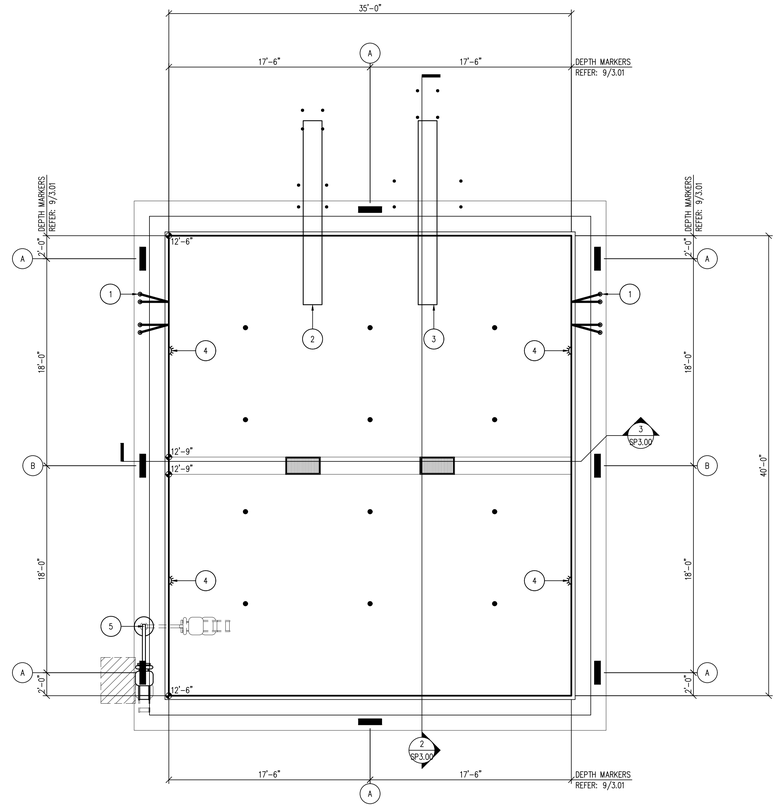
ISSUED FOR BIDS

TRAINING POOL DETAILS

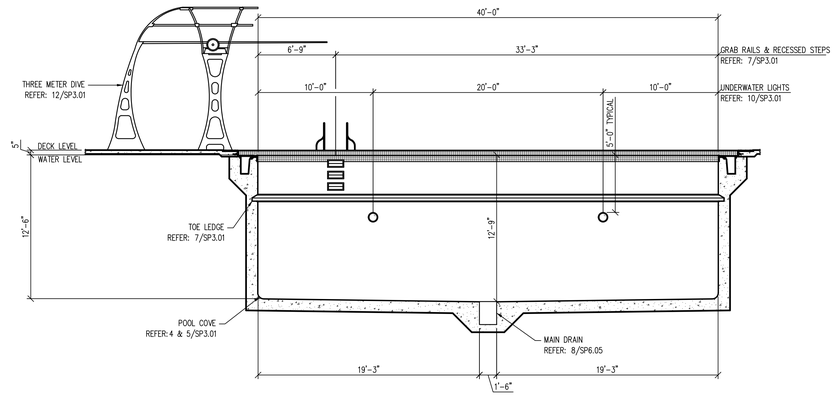
SP2.01



3 SP3.00 DIVE POOL SECTION
3/16" = 1'-0"



1 SP3.00 DIVE POOL PLAN
3/16" = 1'-0"



2 SP3.00 DIVE POOL SECTION
3/16" = 1'-0"

DEPTH & WARNING SIGNAGE SCHEDULE

ID	SIGNAGE
A	12 FT 6 IN
B	12 FT 9 IN

POOL EQUIPMENT LEGEND

LEGEND	ID	ITEM
	1	GRAB RAILS AND RECESSED STEPS REFER: 7/SP3.01
	2	ONE METER DIVING STAND REFER: 11/SP3.01
	3	THREE METER DIVING STAND REFER: 12/SP3.01
	4	UNDERWATER LIGHT REFER: 10/SP3.01
	5	POOL LIFT AND ANCHOR REFER: 6/SP3.01

ALTERNATE BID ITEMS:
BID ALTERNATE #2 SHALL INCLUDE THE COMPLETE DIVING POOL AND ALL ASSOCIATED DIVING POOL SYSTEMS, COMPLETE AND OPERATIONAL AS A LUMP SUM ADDITIVE ALTERNATE FOR THE AQUATICS SCOPE OF WORK. REFER TO ARCHITECTURE FOR ASSOCIATED POOL DECK, SPECTATOR SEATING, AND SITE CONSTRUCTION TO BE INCLUDED IN THE GENERAL CONTRACTOR'S ALTERNATE BID SCOPE.

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: DRO
CHECKED BY: SAP

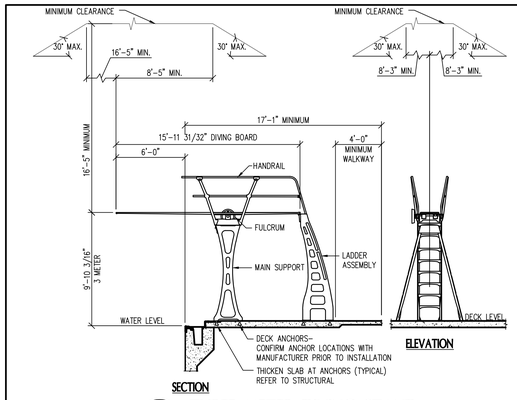
REVISIONS

No.	Description	Date

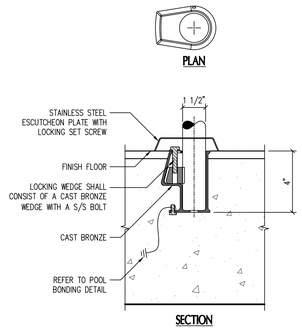
ISSUED FOR BIDS

DIVE POOL PLAN & SECTIONS (ALTERNATE #2)

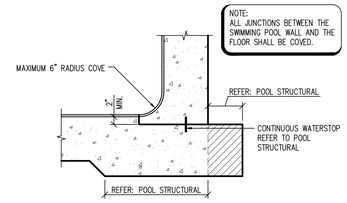
SP3.00



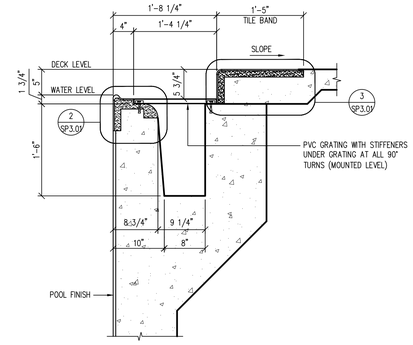
12 SP3.01 THREE METER DIVING STAND
3/16" = 1'-0"



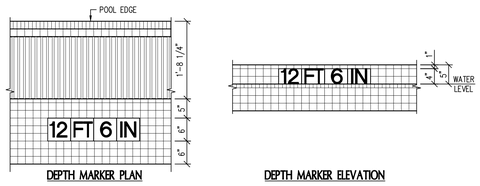
8 SP3.01 WEDGE ANCHOR
3" = 1'-0"



5 SP3.01 SHOTCRETE COVE
3/4" = 1'-0"

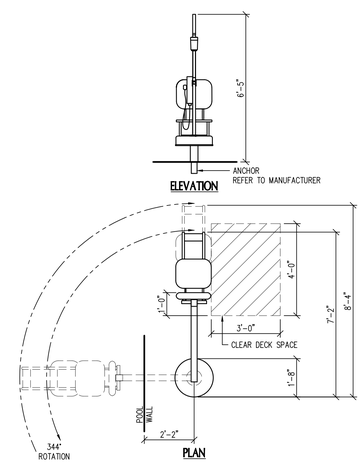


1 SP3.01 CONCRETE ROLLOUT GUTTER
1" = 1'-0"

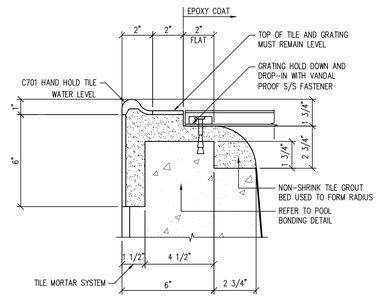


NOTE:
1. DEPTH MARKERS & WARNING SIGNS SHALL BE PROVIDED AS 6"x6" TILES WITH MINIMUM 4" TALL CONTRASTING LETTERS AND NUMBERS. COLOR BY ARCHITECT.
2. PROVIDE NO DIVING WARNING SIGNS WITH 6"x6" TILE DISPLAYING INTERNATIONAL NO DIVING SYMBOL.
3. ALL HORIZONTAL TILE INSTALLATIONS SHALL HAVE A SLIP RESISTANT FINISH. ALL VERTICAL TILE INSTALLATIONS SHALL HAVE A SMOOTH GLAZED FINISH.
4. TILE SHALL BE CUT-TO-FIT AS REQUIRED FOR VERTICAL INSTALLATIONS, MAINTAINING 4" TALL LETTERS & NUMBERS.
5. LOCATE ALL DEPTH MARKER AND WARNING SIGN TILE SUCH THAT THEY DO NOT CONFLICT WITH PAVING JOINTS.

9 SP3.01 DEPTH MARKERS & WARNING SIGNS
3/4" = 1'-0"

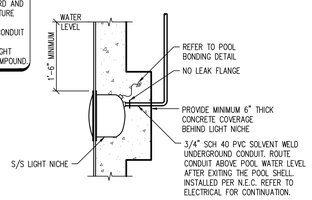


6 SP3.01 POOL LIFT
3/8" = 1'-0"

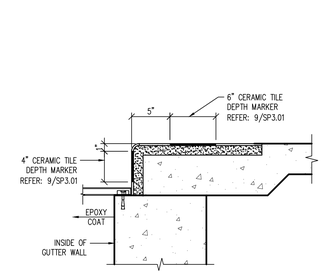


2 SP3.01 GUTTER LIP
3" = 1'-0"

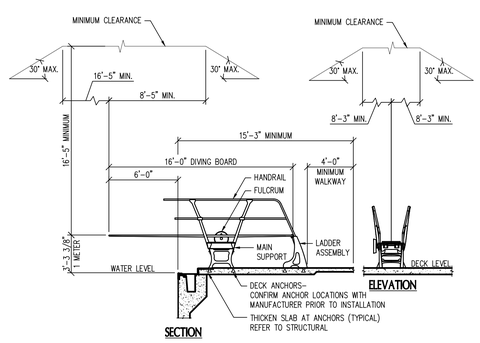
NOTE:
1. PROVIDE SUFFICIENT CORD AND COIL AROUND LIGHT FIXTURE FOR DECK RELAMPING.
2. PROVIDE WATER TIGHT CONDUIT TO JUNCTION BOX.
3. SEAL CONDUIT INSIDE LIGHT NICHE WITH POTTING COMPOUND.



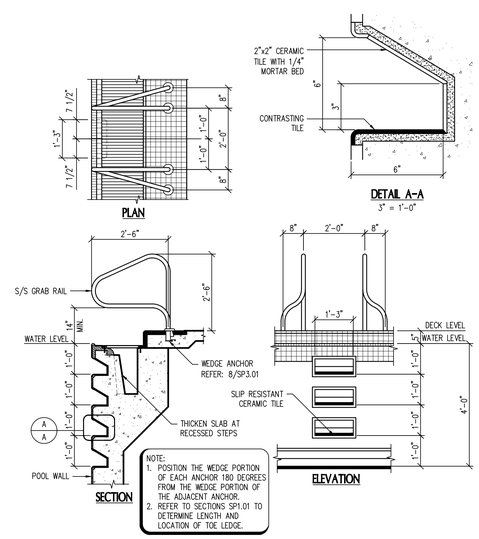
10 SP3.01 UNDERWATER LIGHT
3/4" = 1'-0"



3 SP3.01 GUTTER CURB
1 1/2" = 1'-0"

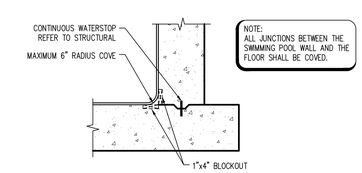


11 SP3.01 ONE METER DIVING STAND
3/16" = 1'-0"



NOTE:
1. POSITION THE WEDGE PORTION OF EACH ANCHOR 180 DEGREES FROM THE WEDGE PORTION OF THE ADJACENT ANCHOR.
2. REFER TO SECTIONS SP1.01 TO DETERMINE LENGTH AND LOCATION OF TOE LEDGE.

7 SP3.01 GRAB RAILS & RECESSED STEPS
1/2" = 1'-0"



NOTE:
ALL JUNCTIONS BETWEEN THE SWIMMING POOL WALL AND THE FLOOR SHALL BE COVED.

4 SP3.01 CAST IN PLACE CONCRETE COVE
3/4" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS — DARREN BEVARD — 104309 — LICENSED — PROFESSIONAL ENGINEER
4.11.19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	DRO
CHECKED BY	SAP

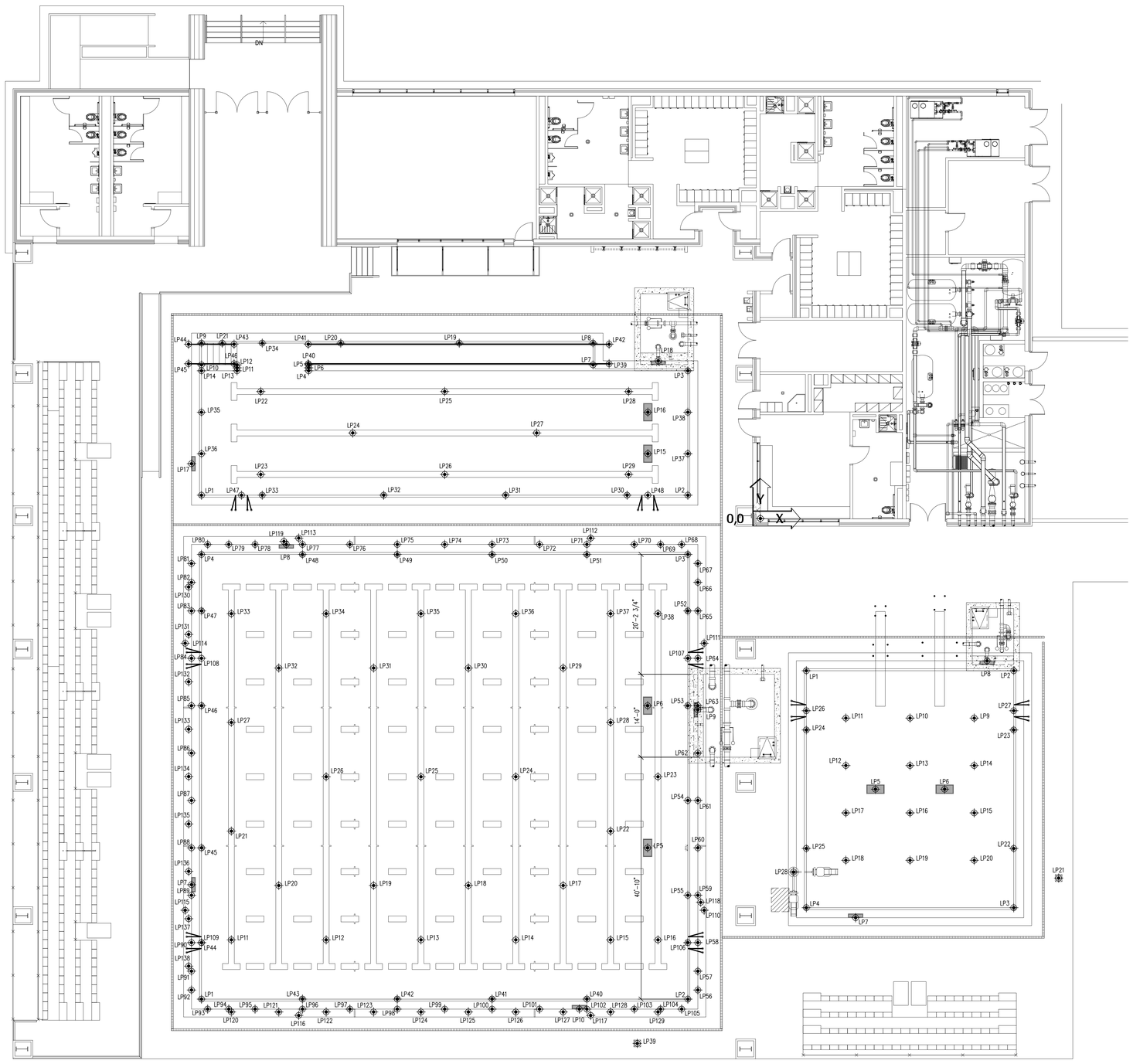
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

DIVE POOL DETAILS (ALTERNATE #2)

SP3.01



1 SP4.00 POOL LOCATION POINT PLAN

1/8" = 1'-0"

TRAINING POOL LOCATION POINT SCHEDULE

LP#	X	Y	DESCRIPTION
1	-94'-4"	3'-11 1/4"	CONSTRUCTION POINT
2	-12'-3"	3'-11 1/4"	CONSTRUCTION POINT
3	-12'-3"	24'-11 1/4"	CONSTRUCTION POINT
4	-76'-3"	24'-11 1/4"	ARC END POINT
5	-76'-3"	25'-11 1/4"	ARC END POINT
6	-76'-3"	25'-5 1/4"	ARC CENTER POINT
7	-28'-3"	25'-11 1/4"	CONSTRUCTION POINT
8	-28'-3"	29'-7 1/4"	CONSTRUCTION POINT
9	-94'-4"	29'-7 1/4"	CONSTRUCTION POINT
10	-94'-4"	25'-11 1/4"	CONSTRUCTION POINT
11	-88'-4"	25'-5 1/4"	ARC CENTER POINT
12	-88'-4"	25'-11 1/4"	ARC END POINT
13	-88'-4"	24'-11 1/4"	ARC END POINT
14	-94'-4"	24'-11 1/4"	CONSTRUCTION POINT
15	-19'-0"	10'-11 1/4"	CENTER OF MAIN DRAIN
16	-19'-0"	17'-11 1/4"	CENTER OF MAIN DRAIN
17	-96'-0 1/4"	9'-3"	GUTTER DROPOUT BOX
18	-17'-3"	26'-7 1/2"	GUTTER DROPOUT BOX
19	-50'-10"	29'-7 1/4"	WALL INLET
20	-70'-10"	29'-7 1/4"	WALL INLET
21	-90'-10"	29'-7 1/4"	WALL INLET
22	-84'-4"	21'-5 1/4"	FLOOR INLET
23	-84'-4"	7'-5 1/4"	FLOOR INLET
24	-68'-9 3/4"	14'-5 1/4"	FLOOR INLET
25	-53'-3 1/2"	21'-5 1/4"	FLOOR INLET
26	-53'-3 1/2"	7'-5 1/4"	FLOOR INLET
27	-37'-9 1/4"	14'-5 1/4"	FLOOR INLET
28	-22'-3"	21'-5 1/4"	FLOOR INLET
29	-22'-3"	7'-5 1/4"	FLOOR INLET
30	-22'-6"	3'-11 1/4"	UNDERWATER LIGHT
31	-43'-0"	3'-11 1/4"	UNDERWATER LIGHT
32	-63'-7"	3'-11 1/4"	UNDERWATER LIGHT
33	-84'-1"	3'-11 1/4"	UNDERWATER LIGHT
34	-84'-1"	29'-7 1/4"	UNDERWATER LIGHT
35	-94'-4"	17'-11 1/4"	LANE ROPE ANCHOR
36	-94'-4"	10'-11 1/4"	LANE ROPE ANCHOR
37	-12'-3"	10'-11 1/4"	LANE ROPE ANCHOR
38	-12'-3"	17'-11 1/4"	LANE ROPE ANCHOR
39	-25'-6 1/2"	26'-1 1/2"	HANDRAIL END POINT
40	-76'-3 3/4"	26'-1 1/2"	HANDRAIL END POINT
41	-76'-3 3/4"	29'-5"	HANDRAIL END POINT
42	-25'-6 1/2"	29'-5"	HANDRAIL END POINT
43	-88'-10"	29'-5"	HANDRAIL END POINT
44	-96'-6 1/4"	29'-5"	HANDRAIL END POINT
45	-96'-6 1/4"	26'-1 1/2"	HANDRAIL END POINT
46	-88'-10"	26'-1 1/2"	HANDRAIL END POINT
47	-87'-7"	3'-11 1/4"	GRAB RAIL
48	-19'-0"	3'-11 1/4"	GRAB RAIL

COMPETITION POOL LOCATION POINT SCHEDULE

LP#	X	Y	DESCRIPTION
1	-94'-4"	-81'-1 1/2"	CONSTRUCTION POINT
2	-12'-3"	-81'-1 1/2"	CONSTRUCTION POINT
3	-12'-3"	-6'-0 3/4"	CONSTRUCTION POINT
4	-94'-4"	-6'-0 3/4"	CONSTRUCTION POINT
5	-19'-0 1/2"	-55'-7"	CENTER OF MAIN DRAIN
6	-19'-0 1/2"	-31'-7"	CENTER OF MAIN DRAIN
7	-96'-0 1/4"	-61'-9 3/4"	GUTTER DROPOUT BOX
8	-80'-0 1/4"	-4'-4 1/2"	GUTTER DROPOUT BOX
9	-10'-6 3/4"	-32'-3 1/2"	GUTTER DROPOUT BOX
10	-30'-6 3/4"	-82'-9 3/4"	GUTTER DROPOUT BOX
11	-89'-3 1/2"	-71'-1 1/2"	FLOOR INLET
12	-73'-3 1/2"	-71'-1 1/2"	FLOOR INLET
13	-57'-3 1/2"	-71'-1 1/2"	FLOOR INLET
14	-41'-3 1/2"	-71'-1 1/2"	FLOOR INLET
15	-25'-3 1/2"	-71'-1 1/2"	FLOOR INLET
16	-17'-3 1/2"	-71'-1 1/2"	FLOOR INLET
17	-33'-3 1/2"	-61'-11 1/4"	FLOOR INLET
18	-49'-3 1/2"	-61'-11 1/4"	FLOOR INLET
19	-65'-3 1/2"	-61'-11 1/4"	FLOOR INLET
20	-81'-3 1/2"	-61'-11 1/4"	FLOOR INLET
21	-89'-3 1/2"	-52'-9 1/4"	FLOOR INLET
22	-25'-3 1/2"	-52'-9 1/4"	FLOOR INLET
23	-17'-3 1/2"	-43'-7"	FLOOR INLET
24	-41'-3 1/2"	-43'-7"	FLOOR INLET
25	-57'-3 1/2"	-43'-7"	FLOOR INLET
26	-73'-3 1/2"	-43'-7"	FLOOR INLET
27	-89'-3 1/2"	-34'-5"	FLOOR INLET
28	-25'-3 1/2"	-34'-5"	FLOOR INLET
29	-33'-3 1/2"	-25'-2 3/4"	FLOOR INLET
30	-49'-3 1/2"	-25'-2 3/4"	FLOOR INLET
31	-65'-3 1/2"	-25'-2 3/4"	FLOOR INLET
32	-81'-3 1/2"	-25'-2 3/4"	FLOOR INLET
33	-89'-3 1/2"	-16'-0 3/4"	FLOOR INLET
34	-73'-3 1/2"	-16'-0 3/4"	FLOOR INLET
35	-57'-3 1/2"	-16'-0 3/4"	FLOOR INLET
36	-41'-3 1/2"	-16'-0 3/4"	FLOOR INLET
37	-25'-3 1/2"	-16'-0 3/4"	FLOOR INLET
38	-17'-3 1/2"	-16'-0 3/4"	FLOOR INLET
39	-20'-9 1/2"	-88'-7 1/4"	SIGHT SUMP
40	-29'-3 1/2"	-81'-1 1/2"	UNDERWATER LIGHT
41	-45'-3 1/2"	-81'-1 1/2"	UNDERWATER LIGHT
42	-61'-3 1/2"	-81'-1 1/2"	UNDERWATER LIGHT
43	-77'-3 1/2"	-81'-1 1/2"	UNDERWATER LIGHT
44	-94'-4"	-71'-7"	UNDERWATER LIGHT
45	-94'-4"	-55'-7"	UNDERWATER LIGHT
46	-94'-4"	-31'-7"	UNDERWATER LIGHT
47	-94'-4"	-15'-7"	UNDERWATER LIGHT
48	-77'-3 1/2"	-6'-0 3/4"	UNDERWATER LIGHT
49	-61'-3 1/2"	-6'-0 3/4"	UNDERWATER LIGHT
50	-45'-3 1/2"	-6'-0 3/4"	UNDERWATER LIGHT
51	-29'-3 1/2"	-6'-0 3/4"	UNDERWATER LIGHT
52	-12'-3"	-15'-7"	UNDERWATER LIGHT
53	-12'-3"	-31'-7"	UNDERWATER LIGHT
54	-12'-3"	-47'-7"	UNDERWATER LIGHT
55	-12'-3"	-63'-7"	UNDERWATER LIGHT
56	-10'-6 3/4"	-79'-7"	LANE ROPE CUP ANCHOR
57	-10'-6 3/4"	-76'-5"	LANE ROPE CUP ANCHOR
58	-10'-6 3/4"	-71'-7"	LANE ROPE CUP ANCHOR
59	-10'-6 3/4"	-63'-7"	LANE ROPE CUP ANCHOR
60	-10'-6 3/4"	-55'-7"	LANE ROPE CUP ANCHOR
61	-10'-6 3/4"	-47'-7"	LANE ROPE CUP ANCHOR
62	-10'-6 3/4"	-39'-7"	LANE ROPE CUP ANCHOR
63	-10'-6 3/4"	-31'-7"	LANE ROPE CUP ANCHOR
64	-10'-6 3/4"	-23'-7"	LANE ROPE CUP ANCHOR
65	-10'-6 3/4"	-15'-7"	LANE ROPE CUP ANCHOR
66	-10'-6 3/4"	-10'-9 1/4"	LANE ROPE CUP ANCHOR
67	-10'-6 3/4"	-7'-7"	LANE ROPE CUP ANCHOR
68	-13'-3 1/2"	-4'-4 1/2"	LANE ROPE CUP ANCHOR
69	-16'-10 1/4"	-4'-4 1/2"	LANE ROPE CUP ANCHOR
70	-21'-3 1/2"	-4'-4 1/2"	LANE ROPE CUP ANCHOR
71	-29'-3 1/2"	-4'-4 1/2"	LANE ROPE CUP ANCHOR
72	-37'-3 1/2"	-4'-4 1/2"	LANE ROPE CUP ANCHOR
73	-45'-3 1/2"	-4'-4 1/2"	LANE ROPE CUP ANCHOR
74	-53'-3 1/2"	-4'-4 1/2"	LANE ROPE CUP ANCHOR
75	-61'-3 1/2"	-4'-4 1/2"	LANE ROPE CUP ANCHOR
76	-69'-3 1/2"	-4'-4 1/2"	LANE ROPE CUP ANCHOR
77	-77'-3 1/2"	-4'-4 1/2"	LANE ROPE CUP ANCHOR
78	-85'-3 1/2"	-4'-4 1/2"	LANE ROPE CUP ANCHOR
79	-89'-8 3/4"	-4'-4 1/2"	LANE ROPE CUP ANCHOR
80	-93'-3 1/2"	-4'-4 1/2"	LANE ROPE CUP ANCHOR
81	-96'-0 1/4"	-7'-7"	LANE ROPE CUP ANCHOR
82	-96'-0 1/4"	-10'-9 1/4"	LANE ROPE CUP ANCHOR
83	-96'-0 1/4"	-15'-7"	LANE ROPE CUP ANCHOR
84	-96'-0 1/4"	-23'-7"	LANE ROPE CUP ANCHOR
85	-96'-0 1/4"	-31'-7"	LANE ROPE CUP ANCHOR
86	-96'-0 1/4"	-39'-7"	LANE ROPE CUP ANCHOR
87	-96'-0 1/4"	-47'-7"	LANE ROPE CUP ANCHOR
88	-96'-0 1/4"	-55'-7"	LANE ROPE CUP ANCHOR
89	-96'-0 1/4"	-63'-7"	LANE ROPE CUP ANCHOR
90	-96'-0 1/4"	-71'-7"	LANE ROPE CUP ANCHOR
91	-96'-0 1/4"	-76'-4 3/4"	LANE ROPE CUP ANCHOR
92	-96'-0 1/4"	-79'-7"	LANE ROPE CUP ANCHOR
93	-93'-3 1/2"	-82'-9 3/4"	LANE ROPE CUP ANCHOR
94	-89'-8 3/4"	-82'-9 3/4"	LANE ROPE CUP ANCHOR
95	-85'-3 1/2"	-82'-9 3/4"	LANE ROPE CUP ANCHOR
96	-77'-3 1/2"	-82'-9 3/4"	LANE ROPE CUP ANCHOR
97	-69'-3 1/2"	-82'-9 3/4"	LANE ROPE CUP ANCHOR
98	-61'-3 1/2"	-82'-9 3/4"	LANE ROPE CUP ANCHOR
99	-53'-3 1/2"	-82'-9 3/4"	LANE ROPE CUP ANCHOR
100	-45'-3 1/2"	-82'-9 3/4"	LANE ROPE CUP ANCHOR
101	-37'-3 1/2"	-82'-9 3/4"	LANE ROPE CUP ANCHOR
102	-29'-3 1/2"	-82'-9 3/4"	LANE ROPE CUP ANCHOR
103	-21'-3 1/2"	-82'-9 3/4"	LANE ROPE CUP ANCHOR
104	-16'-10 1/4"	-82'-9 3/4"	LANE ROPE CUP ANCHOR
105	-13'-3 1/2"	-82'-9 3/4"	LANE ROPE CUP ANCHOR
106	-12'-3"	-71'-7"	GRAB RAIL
107	-12'-3"	-23'-7"	GRAB RAIL
108	-94'-4"	-23'-7"	GRAB RAIL
109	-94'-4"	-71'-7"	GRAB RAIL
110	-9'-6"	-66'-1 1/2"	STANCHION POST ANCHOR
111	-9'-6"	-21'-0 3/4"	STANCHION POST ANCHOR
112	-28'-7 3/4"	-3'-3 3/4"	STANCHION POST ANCHOR
113	-77'-11"	-3'-3 3/4"	STANCHION POST ANCHOR
114	-97'-1"	-21'-0 3/4"	STANCHION POST ANCHOR
115	-97'-1"	-66'-1 1/2"	STANCHION POST ANCHOR
116	-77'-11"	-83'-10 1/2"	STANCHION POST ANCHOR
117	-28'-7 3/4"	-83'-10 1/2"	STANCHION POST ANCHOR
118	-10'-1"	-64'-9 1/2"	POOL LIFT ANCHOR
119	-80'-5"	-3'-10 1/2"	POOL LIFT ANCHOR
120	-89'-3 1/2"	-83'-3 1/2"	STARTING BLOCK ANCHOR
121	-81'-3 1/2"	-83'-3 1/2"	STARTING BLOCK ANCHOR
122	-73'-3 1/2"	-83'-3 1/2"	STARTING BLOCK ANCHOR
123	-65'-3 1/2"	-83'-3 1/2"	STARTING BLOCK ANCHOR
124	-57'-3 1/2"	-83'-3 1/2"	STARTING BLOCK ANCHOR
125	-49'-3 1/2"	-83'-3 1/2"	STARTING BLOCK ANCHOR
126	-41'-3 1/2"	-83'-3 1/2"	STARTING BLOCK ANCHOR
127	-33'-3 1/2"	-83'-3 1/2"	STARTING BLOCK ANCHOR
128	-25'-3 1/2"	-83'-3 1/2"	STARTING BLOCK ANCHOR
129	-17'-3 1/2"	-83'-3 1/2"	STARTING BLOCK ANCHOR
130	-96'-6"	-11'-6 3/4"	STARTING BLOCK ANCHOR
131	-96'-6"	-19'-6 3/4"	STARTING BLOCK ANCHOR
132	-96'-6"	-27'-6 3/4"	STARTING BLOCK ANCHOR
133	-96'-6"	-35'-6 3/4"	STARTING BLOCK ANCHOR
134	-96'-6"	-43'-6 3/4"	STARTING BLOCK ANCHOR
135	-96'-6"	-51'-6 3/4"	STARTING BLOCK ANCHOR
136	-96'-6"	-59'-6 3/4"	STARTING BLOCK ANCHOR
137	-96'-6"	-67'-6 3/4"	STARTING BLOCK ANCHOR
138	-96'-6"	-75'-6 3/4"	STARTING BLOCK ANCHOR

DIVE POOL LOCATION POINT SCHEDULE (ALTERNATE #2)

LP#	X	Y	DESCRIPTION
1	7'-9"	-25'-8 1/4"	CONSTRUCTION POINT
2	42'-9"	-25'-8 1/4"	CONSTRUCTION POINT
3	42'-9"	-65'-8 1/4"	CONSTRUCTION POINT
4	7'-9"	-65'-8 1/4"	CONSTRUCTION POINT
5	19'-5"	-45'-8 1/4"	CENTER OF MAIN DRAIN
6	31'-1"	-45'-8 1/4"	CENTER OF MAIN DRAIN
7	16'-0 3/4"	-67'-4 1/2"	GUTTER DROPOUT BOX
8	38'-3"	-24'-0"	GUTTER DROPOUT BOX
9	36'-1"	-33'-8 1/4"	FLOOR INLET
10	25'-3"	-33'-8 1/4"	FLOOR INLET
11	14'-5"	-33'-8 1/4"	FLOOR INLET
12	14'-5"	-41'-8 1/4"	FLOOR INLET
13	25'-3"	-41'-8 1/4"	FLOOR INLET
14	36'-1"	-41'-8 1/4"	FLOOR INLET
15	36'-1"	-49'-8 1/4"	FLOOR INLET
16	25'-3"	-49'-8 1/4"	FLOOR INLET
17	14'-5"	-49'-8 1/4"	FLOOR INLET
18	14'-5"	-57'-8 1/4"	FLOOR INLET
19	25'-3"	-57'-8 1/4"	FLOOR INLET
20	36'-1"	-57'-8 1/4"	FLOOR INLET
21	50'-4"	-60'-8 1/4"	SIGHT SUMP
22	42'-9"	-55'-8 1/4"	UNDERWATER LUGHT
23	42'-9"	-35'-8 1/4"	UNDERWATER LUGHT
24	7'-9"	-35'-8 1/4"	UNDERWATER LUGHT
25	7'-9"	-55'-8 1/4"	UNDERWATER LUGHT
26	7'-9"	-32'-5 1/4"	GRAB RAIL
27	42'-9"	-32'-5 1/4"	GRAB RAIL
28	5'-7"	-59'-8"	POOL LIFT

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN

PLAN NORTH

TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	DRO
CHECKED BY	SAP

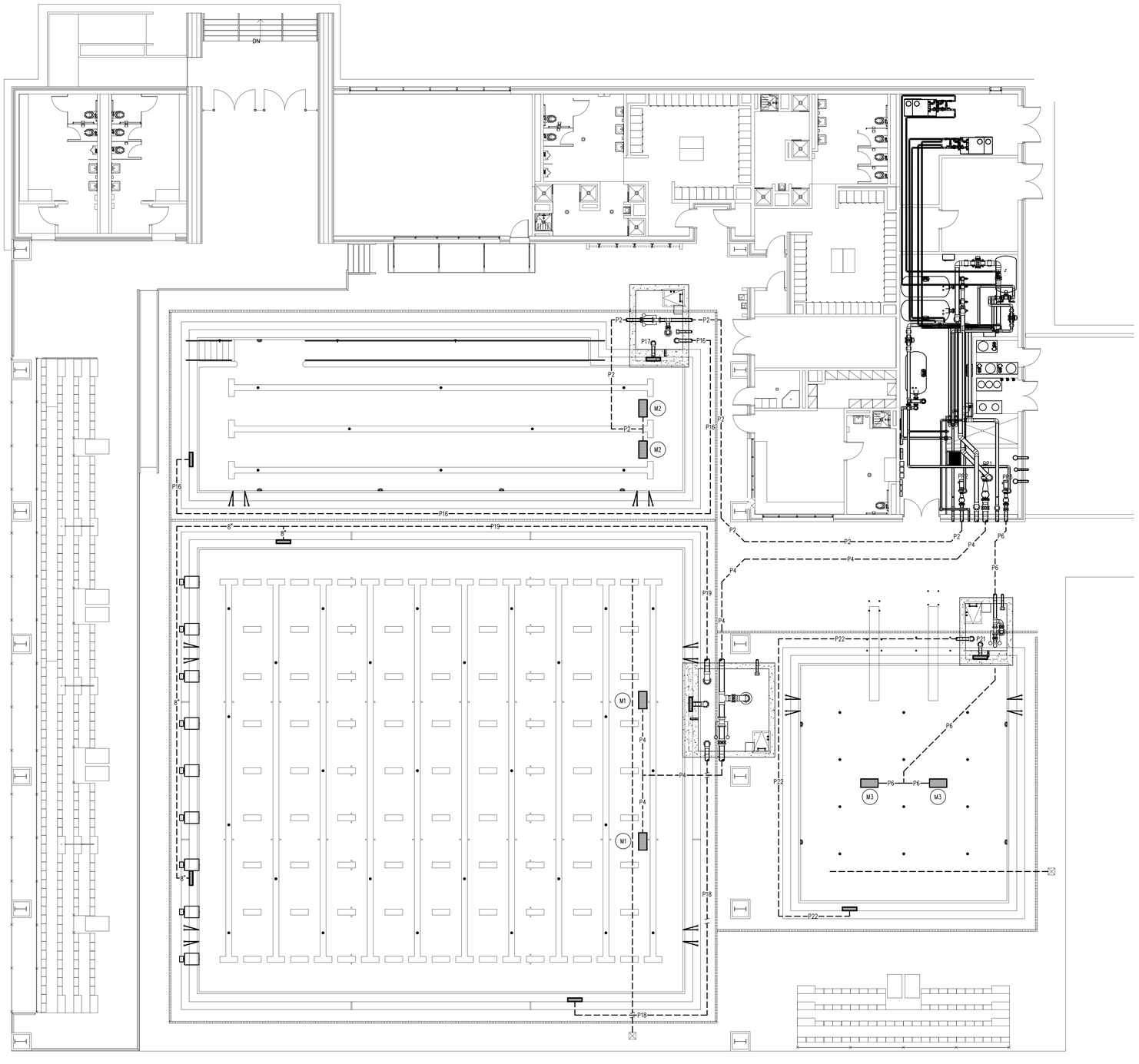
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

POOL LOCATION POINT PLAN

SP4.00



1 SP5.00 POOL SUCTION PIPING PLAN
1/8" = 1'-0"

GENERAL PIPING NOTES

1. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERATIONAL PIPING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
2. PIPE SIZES INDICATED ARE NOMINAL, I.P.S.
3. UNLESS OTHERWISE NOTED, ALL OVERHEAD PIPING SHALL BE TIGHT TO UNDERSIDE OF STRUCTURE OR SLAB.
4. ALL BALANCING VALVES AND BUTTERFLY VALVES SHALL BE PROVIDED WITH POSITION INDICATORS AND MAXIMUM ADJUSTABLE STOPS (MEMORY STOPS).
5. ALL VALVES SHALL BE INSTALLED SO THAT THE VALVE REMAINS IN SERVICE WHEN THE EQUIPMENT OR PIPING ON THE EQUIPMENT SIDE OF THE VALVE IS REMOVED.
6. PROVIDE CHAIN WHEEL OPERATORS FOR ALL VALVES IN EQUIPMENT ROOMS MOUNTED GREATER THAN 7'-0" ABOVE FINISHED FLOOR; CHAIN SHALL EXTEND TO 7'-0" ABOVE FINISHED FLOOR LEVEL.
7. INSTALL ALL PIPING WITHOUT FORCING OR SPRINGING.
8. ALL PIPING WORK SHALL BE COORDINATED WITH ALL TRADES AND SITE CONDITIONS. OFFSETS, EXPANSION LOOPS, OR TRANSITIONS IN PIPING AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
9. ALL PIPING INDICATED SHALL BE CONSIDERED DIAGRAMMATIC.
10. ALL SWIMMING POOL PIPING ROUTED BELOW THE POOL SHELL SHALL BE CONCRETE ENCASED SCHEDULE 40 PVC. REFER: 10 & 11/SP6.05
11. ALL UNDERGROUND OR EXPOSED SWIMMING POOL PIPING SHALL BE SCHEDULE 80 PVC, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL REFER TO PLANS AND SPECIFICATIONS FOR ANY SPECIFIC REQUIREMENTS REGARDING PLACEMENT AND BACKFILLING OF BELOW GRADE POOL PIPE.
12. ALL DIMENSIONS INDICATED FROM THE FINISH WALL SURFACE AND DO NOT ACCOUNT FOR ANY VARIATIONS IN EITHER GRADE OR SLOPE DISTANCES.
13. THE CHEMICAL SENSOR LINE SHALL BE A 3/4" TO 1" DIAMETER, SCHEDULE 80 PVC PIPE EXTENDED FROM THE WET CELL SENSOR TO ITS RESPECTIVE FILL FUNNEL AND THE BACKWASH CATCH BASIN OR PUMP SUCTION.
14. ALL FLOOR INLETS SHALL BE ADJUSTED TO ACHIEVE AN EVEN FLOW DISTRIBUTION THROUGHOUT SYSTEMS.
15. ALL PIPE TEES SHALL BE SIZED FOR LARGEST PIPE CONNECTION.
16. ALL GUTTER DROPOUT LINES SHALL SLOPE 1/8" PER FOOT MINIMUM

PUMP SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	SIZE	GPM	TDH	HP	NPSHR	HAIR/LINT		NOTES
									MAKE	SIZE	
PP1	COMPETITION POOL RECIRCULATION PUMP REFER: 1/SP6.04	PACO	50123 LC	6X5	1,100	72	30	9.39	MERMADE	10X6	1,2,3
PP2	TRAINING POOL RECIRCULATION PUMP REFER: 1/SP6.04	PACO	25957 LC	3X2.5	300	77	10	9.01	MERMADE	6X3	1,2,3
PP3	DIVING POOL RECIRCULATION PUMP REFER: 1/SP6.04 (ALTERNATE #2)	PACO	30957 LC	4X3	475	71	15	8.68	MERMADE	6X4	1,2,3

NOTE:
1. THE MANUFACTURER INDICATED IS BASIS OF DESIGN. PUMP MANUFACTURERS: ITT MARLOW, GRISWOLD, PACO OR AURORA SHALL BE CONSIDERED EQUAL PROVIDED THEY MEET SPECIFICATIONS AS INDICATED IN BID DOCUMENTS.
2. PROVIDE WITH 460 VOLT, 3 PHASE, 60HZ, 1750 RPM MOTOR.
3. PROVIDE VARIABLE FREQUENCY DRIVE.

PIPING LEGEND

LEGEND	QTY.	ITEM
COMPETITION POOL		
◉	28	FLOOR INLET REFER: 15/SP6.04
☒	1	SIGHT SUMP REFER: 12/SP6.05
▭	4	GUTTER DROPOUT BOX REFER: 6/SP6.05
▬	2	MAIN DRAIN REFER: 8/SP6.05
TRAINING POOL		
▲	3	WALL INLET REFER: 14/SP6.04
◉	8	FLOOR INLET REFER: 15/SP6.04
▭	2	GUTTER DROPOUT BOX REFER: 7/SP6.05
▬	2	MAIN DRAIN REFER: 8/SP6.05
DIVE POOL (ALTERNATE #2)		
◉	12	FLOOR INLET REFER: 15/SP6.04
☒	1	SIGHT SUMP REFER: 12/SP6.05
▭	2	GUTTER DROPOUT BOX REFER: 6/SP6.05
▬	2	MAIN DRAIN REFER: 8/SP6.05
⊠	2	AGITATOR REFER: 9/SP6.06
COMBINED		
- - - - -	N/A	BELOW GRADE PIPING

PIPE SCHEDULE

ID	DESCRIPTION
P1	4" FROM TRAINING POOL FILTER TO POOL INLETS
P2	6" FROM TRAINING POOL MAIN DRAINS TO PP2
P3	8" FROM COMPETITION POOL FILTERS TO POOL INLETS
P4	10" FROM COMPETITION POOL MAIN DRAINS TO PP1
P5	6" FROM DIVE POOL FILTERS TO POOL INLETS (ALTERNATE #2)
P6	6" FROM DIVE POOL MAIN DRAINS TO PP3 (ALTERNATE #2)
P7	4" FROM FILL FUNNEL TO COMPETITION POOL SURGE TANK
P8	3" FROM FILL FUNNEL TO TRAINING POOL SURGE TANK
P9	4" FROM FILL FUNNEL TO DIVE POOL SURGE TANK (ALTERNATE #2)
P10	6" FROM PP3 TO DIVE POOL FILTERS (ALTERNATE #2)
P11	8" FROM PP1 TO COMPETITION POOL FILTERS
P12	4" FROM PP2 TO TRAINING POOL FILTER
P13	4" FROM DIVE POOL FILTERS TO BACKWASH CATCH BASIN (ALTERNATE #2)
P14	4" FROM COMPETITON POOL FILTERS TO BACKWASH CATCH BASIN
P15	4" FROM TRAINING POOL FILTER TO BACKWASH CATCH BASIN
P16	6" FROM GUTTER DROPOUT BOX TO TRAINING POOL SURGE TANK
P17	6" FROM GUTTER DROPOUT BOX TO TRAINING POOL SURGE TANK
P18	8" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P19	10" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P20	8" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P21	6" FROM GUTTER DROPOUT BOX TO DIVE POOL SURGE TANK (ALTERNATE #2)
P22	6" FROM GUTTER DROPOUT BOX TO DIVE POOL SURGE TANK (ALTERNATE #2)
P23	2" FROM P3 TO COMPETITION POOL HEATERS
P24	2" FROM COMPETITION POOL HEATERS TO P3
P25	2" FROM P1 TO TRAINING POOL HEATER
P26	2" FROM TRAINING POOL HEATER TO P1
P27	2" FROM P5 TO DIVE POOL HEATER (ALTERNATE #2)
P28	2" FROM DIVE POOL HEATER TO P5 (ALTERNATE #2)
P29	3" FROM P5 TO WATER SURFACE AGITATOR NOZZLES (ALTERNATE #2)
P30	3" FROM P11 TO BACKWASH CATCH BASIN
P31	2" FROM P12 TO BACKWASH CATCH BASIN
P32	2" FROM P10 TO BACKWASH CATCH BASIN (ALTERNATE #2)
P33	3" SURGE TANK VENT
P34	3" SURGE TANK VENT
P35	3" SURGE TANK VENT (ALTERNATE #2)

MAIN DRAIN SCHEDULE

ID	DESCRIPTION	SIZE	QTY	DESIGN FLOW (GPM)	DESIGN VELOCITY (FPS)	MODEL	MANUFACTURER	NOTES
M1	COMPETITION POOL	18X36	2	1,100	0.51	MLD-FG	NEPTUNE BENSON	1,2,3,4
M2	TRAINING POOL	18X36	2	300	0.14	MLD-FG	NEPTUNE BENSON	1,2,3,4
M3	DIVE POOL (ALTERNATE #2)	18X36	2	475	0.22	MLD-FG	NEPTUNE BENSON	1,2,3,4

NOTE:
1. MAIN DRAIN GRATING SHALL BE MANUFACTURED BY NEPTUNE BENSON/LAWSON.
2. MAXIMUM FACE VELOCITY SHALL NOT EXCEED 1.5 FEET PER SECOND.
3. OPEN AREA IS BASED ON MANUFACTURER'S DATA.
4. ALL MAIN DRAINS SHALL BE INSTALLED IN THE POOL FLOOR. WALL SUMPS WILL NOT BE PERMITTED.

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: DRO
CHECKED BY: SAP

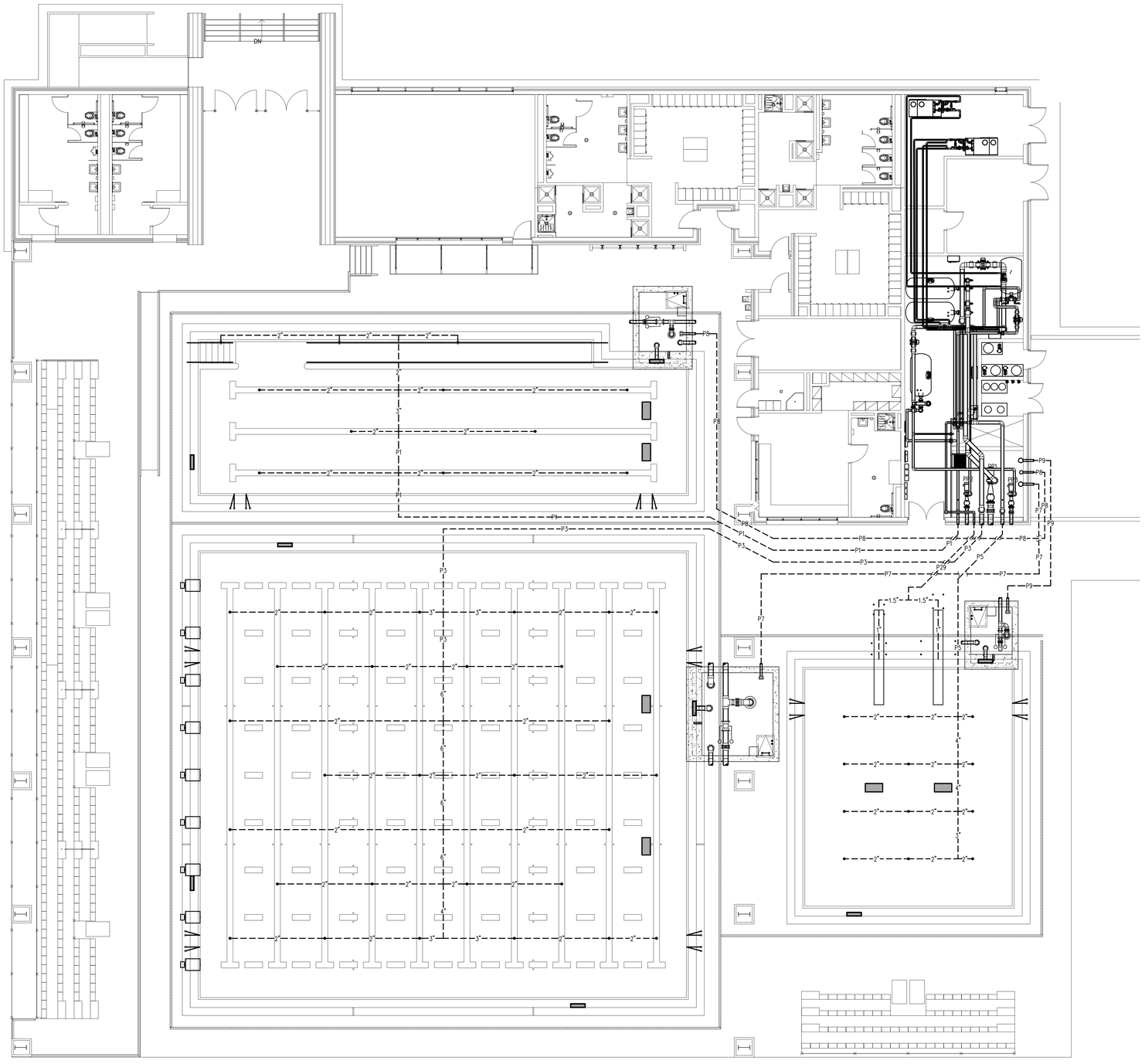
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

POOL SUCTION PIPING PLAN

SP5.00



1 SP5.01 POOL RETURN PIPING PLAN
1/8" = 1'-0"

GENERAL PIPING NOTES

1. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERATIONAL PIPING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
2. PIPE SIZES INDICATED ARE NOMINAL, I.P.S.
3. UNLESS OTHERWISE NOTED, ALL OVERHEAD PIPING SHALL BE TIGHT TO UNDERSIDE OF STRUCTURE OR SLAB.
4. ALL BALANCING VALVES AND BUTTERFLY VALVES SHALL BE PROVIDED WITH POSITION INDICATORS AND MAXIMUM ADJUSTABLE STOPS (MEMORY STOPS).
5. ALL VALVES SHALL BE INSTALLED SO THAT THE VALVE REMAINS IN SERVICE WHEN THE EQUIPMENT OR PIPING ON THE EQUIPMENT SIDE OF THE VALVE IS REMOVED.
6. PROVIDE CHAIN WHEEL OPERATORS FOR ALL VALVES IN EQUIPMENT ROOMS MOUNTED GREATER THAN 7'-0" ABOVE FINISHED FLOOR; CHAIN SHALL EXTEND TO 7'-0" ABOVE FINISHED FLOOR LEVEL.
7. INSTALL ALL PIPING WITHOUT FORCING OR SPRINGING.
8. ALL PIPING WORK SHALL BE COORDINATED WITH ALL TRADES AND SITE CONDITIONS. OFFSETS, EXPANSION LOOPS, OR TRANSITIONS IN PIPING AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
9. ALL PIPING INDICATED SHALL BE CONSIDERED DIAGRAMMATIC.
10. ALL SWIMMING POOL PIPING ROUTED BELOW THE POOL SHELL SHALL BE CONCRETE ENCASED SCHEDULE 40 PVC. REFER: 10 & 11/SP6.05
11. ALL UNDERGROUND OR EXPOSED SWIMMING POOL PIPING SHALL BE SCHEDULE 80 PVC, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL REFER TO PLANS AND SPECIFICATIONS FOR ANY SPECIFIC REQUIREMENTS REGARDING PLACEMENT AND BACKFILLING OF BELOW GRADE POOL PIPE.
12. ALL DIMENSIONS INDICATED FROM THE FINISH WALL SURFACE AND DO NOT ACCOUNT FOR ANY VARIATIONS IN EITHER GRADE OR SLOPE DISTANCES.
13. THE CHEMICAL SENSOR LINE SHALL BE A 3/4" TO 1" DIAMETER, SCHEDULE 80 PVC PIPE EXTENDED FROM THE WET CELL SENSOR TO ITS RESPECTIVE FILL FUNNEL AND THE BACKWASH CATCH BASIN OR PUMP SUCTION.
14. ALL FLOOR INLETS SHALL BE ADJUSTED TO ACHIEVE AN EVEN FLOW DISTRIBUTION THROUGHOUT SYSTEMS.
15. ALL PIPE TEES SHALL BE SIZED FOR LARGEST PIPE CONNECTION.
16. ALL GUTTER DROPOUT LINES SHALL SLOPE 1/8" PER FOOT MINIMUM

PUMP SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	SIZE	GPM	TDH	HP	NPSHR	HAIR/LINT		NOTES
									MAKE	SIZE	
PP1	COMPETITION POOL RECIRCULATION PUMP REFER: 1/SP6.04	PACO	50123 LC	6X5	1,100	72	30	9.39	MERMADE	10X6	1,2,3
PP2	TRAINING POOL RECIRCULATION PUMP REFER: 1/SP6.04	PACO	25957 LC	3X2.5	300	77	10	9.01	MERMADE	6X3	1,2,3
PP3	DIVING POOL RECIRCULATION PUMP REFER: 1/SP6.04 (ALTERNATE #2)	PACO	30957 LC	4X3	475	71	15	8.68	MERMADE	6X4	1,2,3

NOTE:
1. THE MANUFACTURER INDICATED IS BASIS OF DESIGN. PUMP MANUFACTURERS: ITT MARLOW, GRISWOLD, PACO OR AURORA SHALL BE CONSIDERED EQUAL PROVIDED THEY MEET SPECIFICATIONS AS INDICATED IN BID DOCUMENTS.
2. PROVIDE WITH 460 VOLT, 3 PHASE, 60HZ, 1750 RPM MOTOR.
3. PROVIDE VARIABLE FREQUENCY DRIVE.

PIPING LEGEND

LEGEND	QTY.	ITEM
COMPETITION POOL		
	28	FLOOR INLET REFER: 15/SP6.04
	1	SIGHT SUMP REFER: 12/SP6.05
	4	GUTTER DROPOUT BOX REFER: 6/SP6.05
	2	MAIN DRAIN REFER: 8/SP6.05
TRAINING POOL		
	3	WALL INLET REFER: 14/SP6.04
	8	FLOOR INLET REFER: 15/SP6.04
	2	GUTTER DROPOUT BOX REFER: 7/SP6.05
	2	MAIN DRAIN REFER: 8/SP6.05
DIVE POOL (ALTERNATE #2)		
	12	FLOOR INLET REFER: 15/SP6.04
	1	SIGHT SUMP REFER: 12/SP6.05
	2	GUTTER DROPOUT BOX REFER: 6/SP6.05
	2	MAIN DRAIN REFER: 8/SP6.05
	2	AGITATOR REFER: 9/SP6.06
COMBINED		
	N/A	BELOW GRADE PIPING

PIPE SCHEDULE

ID	DESCRIPTION
P1	4" FROM TRAINING POOL FILTER TO POOL INLETS
P2	6" FROM TRAINING POOL MAIN DRAINS TO PP2
P3	8" FROM COMPETITION POOL FILTERS TO POOL INLETS
P4	10" FROM COMPETITION POOL MAIN DRAINS TO PP1
P5	6" FROM DIVE POOL FILTERS TO POOL INLETS (ALTERNATE #2)
P6	6" FROM DIVE POOL MAIN DRAINS TO PP3 (ALTERNATE #2)
P7	4" FROM FILL FUNNEL TO COMPETITION POOL SURGE TANK
P8	3" FROM FILL FUNNEL TO TRAINING POOL SURGE TANK
P9	4" FROM FILL FUNNEL TO DIVE POOL SURGE TANK (ALTERNATE #2)
P10	6" FROM PP3 TO DIVE POOL FILTERS (ALTERNATE #2)
P11	8" FROM PP1 TO COMPETITION POOL FILTERS
P12	4" FROM PP2 TO TRAINING POOL FILTER
P13	4" FROM DIVE POOL FILTERS TO BACKWASH CATCH BASIN (ALTERNATE #2)
P14	4" FROM COMPETITON POOL FILTERS TO BACKWASH CATCH BASIN
P15	4" FROM TRAINING POOL FILTER TO BACKWASH CATCH BASIN
P16	6" FROM GUTTER DROPOUT BOX TO TRAINING POOL SURGE TANK
P17	6" FROM GUTTER DROPOUT BOX TO TRAINING POOL SURGE TANK
P18	8" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P19	10" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P20	8" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P21	6" FROM GUTTER DROPOUT BOX TO DIVE POOL SURGE TANK (ALTERNATE #2)
P22	6" FROM GUTTER DROPOUT BOX TO DIVE POOL SURGE TANK (ALTERNATE #2)
P23	2" FROM P3 TO COMPETITION POOL HEATERS
P24	2" FROM COMPETITION POOL HEATERS TO P3
P25	2" FROM P1 TO TRAINING POOL HEATER
P26	2" FROM TRAINING POOL HEATER TO P1
P27	2" FROM P5 TO DIVE POOL HEATER (ALTERNATE #2)
P28	2" FROM DIVE POOL HEATER TO P5 (ALTERNATE #2)
P29	3" FROM P5 TO WATER SURFACE AGITATOR NOZZLES (ALTERNATE #2)
P30	3" FROM P11 TO BACKWASH CATCH BASIN
P31	2" FROM P12 TO BACKWASH CATCH BASIN
P32	2" FROM P10 TO BACKWASH CATCH BASIN (ALTERNATE #2)
P33	3" SURGE TANK VENT
P34	3" SURGE TANK VENT
P35	3" SURGE TANK VENT (ALTERNATE #2)

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

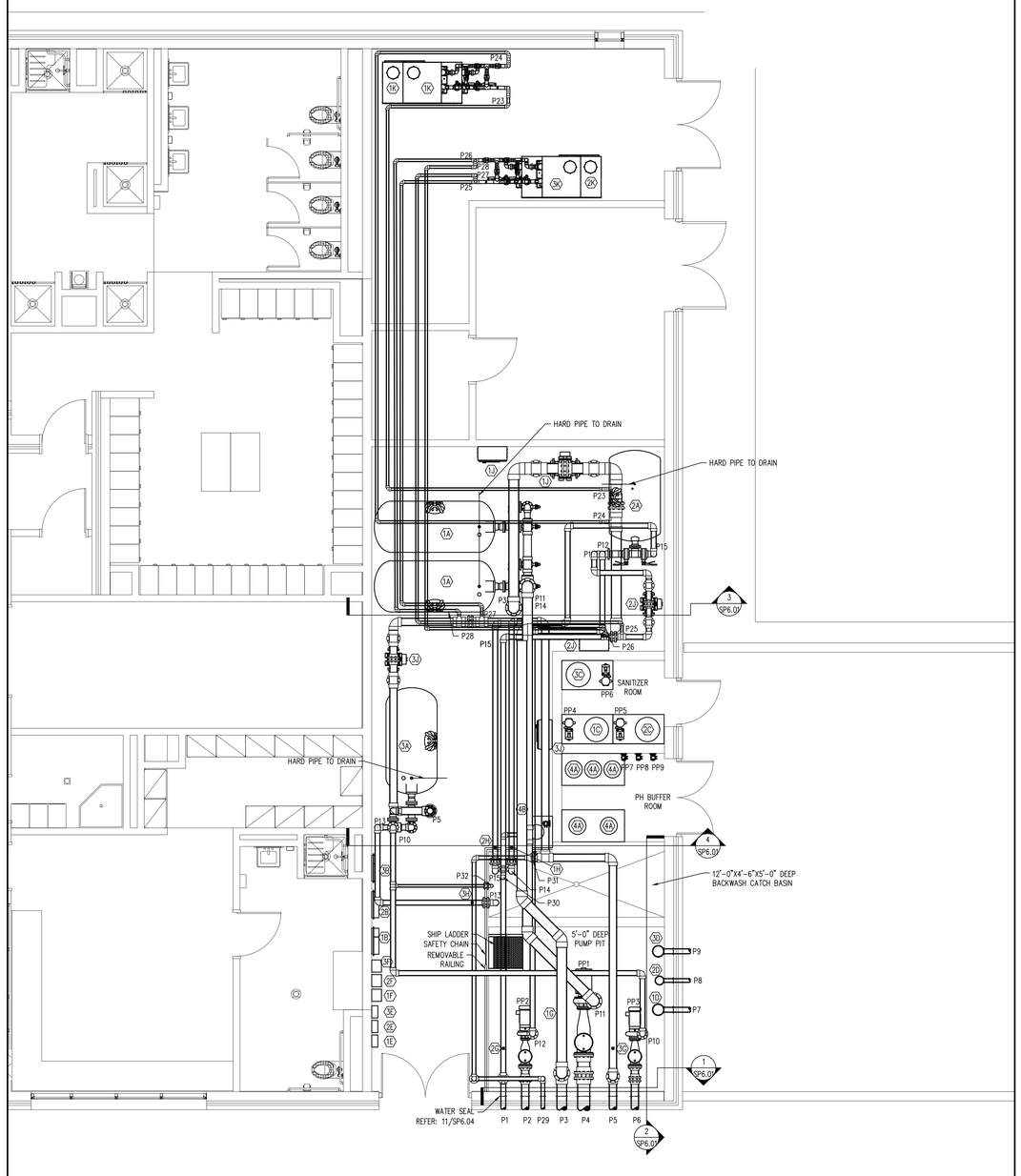
CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: DRO
CHECKED BY: SAP
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

POOL RETURN PIPING PLAN

SP5.01



1 SP6.00 POOL MECHANICAL ROOM PLAN

1/4" = 1'-0"

PIPE SCHEDULE

ID	DESCRIPTION
P1	4" FROM TRAINING POOL FILTER TO POOL INLETS
P2	6" FROM TRAINING POOL MAIN DRAINS TO PIP2
P3	8" FROM COMPETITION POOL FILTERS TO POOL INLETS
P4	10" FROM COMPETITION POOL MAIN DRAINS TO PP1
P5	6" FROM DIVE POOL FILTERS TO POOL INLETS (ALTERNATE #2)
P6	6" FROM DIVE POOL MAIN DRAINS TO PP3 (ALTERNATE #2)
P7	4" FROM FILL FUNNEL TO COMPETITION POOL SURGE TANK
P8	3" FROM FILL FUNNEL TO TRAINING POOL SURGE TANK
P9	4" FROM FILL FUNNEL TO DIVE POOL SURGE TANK (ALTERNATE #2)
P10	6" FROM PP3 TO DIVE POOL FILTERS (ALTERNATE #2)
P11	8" FROM PP1 TO COMPETITION POOL FILTERS
P12	4" FROM PP2 TO TRAINING POOL FILTER
P13	4" FROM DIVE POOL FILTERS TO BACKWASH CATCH BASIN (ALTERNATE #2)
P14	4" FROM COMPETITON POOL FILTERS TO BACKWASH CATCH BASIN
P15	4" FROM TRAINING POOL FILTER TO BACKWASH CATCH BASIN
P16	6" FROM GUTTER DROPOUT BOX TO TRAINING POOL SURGE TANK
P17	6" FROM GUTTER DROPOUT BOX TO TRAINING POOL SURGE TANK
P18	8" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P19	10" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P20	8" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P21	6" FROM GUTTER DROPOUT BOX TO DIVE POOL SURGE TANK (ALTERNATE #2)
P22	6" FROM GUTTER DROPOUT BOX TO DIVE POOL SURGE TANK (ALTERNATE #2)
P23	2" FROM P3 TO COMPETITION POOL HEATERS
P24	2" FROM COMPETITION POOL HEATERS TO P3
P25	2" FROM P1 TO TRAINING POOL HEATER
P26	2" FROM TRAINING POOL HEATER TO P1
P27	2" FROM P5 TO DIVE POOL HEATER (ALTERNATE #2)
P28	2" FROM DIVE POOL HEATER TO P5 (ALTERNATE #2)
P29	3" FROM P5 TO WATER SURFACE AGITATOR NOZZLES (ALTERNATE #2)
P30	3" FROM P11 TO BACKWASH CATCH BASIN
P31	2" FROM P12 TO BACKWASH CATCH BASIN
P32	2" FROM P10 TO BACKWASH CATCH BASIN (ALTERNATE #2)
P33	3" SURGE TANK VENT
P34	3" SURGE TANK VENT
P35	3" SURGE TANK VENT (ALTERNATE #2)

EQUIPMENT SCHEDULE

ID	ITEM
	COMPETITION POOL
1A	FILTER SYSTEM
1B	CHEMICAL CONTROLLER REFER: 2/SP6.04
1C	CHLORINATION SYSTEM REFER: 9/SP6.04
1D	FILL FUNNEL REFER: 10/SP6.04
1E	WATER LEVEL CONTROLLER REFER: 9/SP6.05
1F	VARIABLE FREQUENCY DRIVE
1G	FLOW METER SENSOR REFER: 12/SP6.04
1H	IMPACT FLOW METER REFER: 13/SP6.04
1J	UV TREATMENT SYSTEM & CONTROLLER REFER: 6/SP6.04
1K	HEATER REFER: 2/SP6.06
	TRAINING POOL
2A	FILTER SYSTEM
2B	CHEMICAL CONTROLLER REFER: 2/SP6.04
2C	CHLORINATION SYSTEM REFER: 9/SP6.04
2D	FILL FUNNEL REFER: 10/SP6.04
2E	WATER LEVEL CONTROLLER REFER: 9/SP6.05
2F	VARIABLE FREQUENCY DRIVE
2G	FLOW METER SENSOR REFER: 12/SP6.04
2H	IMPACT FLOW METER REFER: 13/SP6.04
2J	UV TREATMENT SYSTEM & CONTROLLER REFER: 6/SP6.04
2K	HEATER REFER: 3/SP6.06
	DIVE POOL (ALTERNATE #2)
3A	FILTER SYSTEM
3B	CHEMICAL CONTROLLER REFER: 2/SP6.04
3C	CHLORINATION SYSTEM REFER: 9/SP6.04
3D	FILL FUNNEL REFER: 10/SP6.04
3E	WATER LEVEL CONTROLLER REFER: 9/SP6.05
3F	VARIABLE FREQUENCY DRIVE
3G	FLOW METER SENSOR REFER: 12/SP6.04
3H	IMPACT FLOW METER REFER: 13/SP6.04
3J	UV TREATMENT SYSTEM & CONTROLLER REFER: 6/SP6.04
3K	HEATER REFER: 3/SP6.06
	COMBINED
4A	ACID CARBOY REFER: 3/SP6.04
4B	DECHLORINATION SYSTEM REFER: 1/SP6.06

GENERAL POOL MECHANICAL ROOM NOTES

1. POOL PUMPS, STRAINERS, AND HEATERS SHALL BE INSTALLED ON HOUSEKEEPING PADS UNLESS NOTED OTHERWISE.
2. EQUIPMENT ROOM FLOOR AND PUMP PIT FLOOR SHALL SLOPE 1/4" TO 1/2" PER FOOT TO FLOOR DRAINS OR SUMP PIT. REFER TO PLUMBING.
3. PROVIDE HOSE BIBBS FOR HOUSE CLEANING PURPOSES. REFER PLUMBING DRAWINGS.
4. THE INSIDE SURFACES OF THE BACKWASH CATCH BASIN SHALL BE WATERPROOFED. REFER TO SPECIFICATION.
5. VENTILATION OF POOL MECHANICAL ROOM AND CHEMICAL STORAGE AREAS PER LOCAL, STATE AND INTERNATIONAL MECHANICAL CODE MINIMUM. REFER TO MECHANICAL.
6. THE FOLLOWING INFORMATION SHALL BE LAMINATED AND POSTED IN THE POOL MECHANICAL ROOM: BACKWASH PROCEDURE, POOL FILLING & DRAINING, VALVE REFERENCE CHART, POOL MECHANICAL ROOM PLAN, POOL PIPING SCHEMATICS & POOL SYSTEMS SCHEMATICS.
7. REFER TO MECHANICAL FOR HVAC SYSTEMS DESIGN.
8. REFER TO ARCHITECTURAL DRAWINGS FOR LADDER RUNGS, SAFETY CHAIN, & REMOVABLE RAILING AT PUMP PIT.

PIPING

1. MINIMUM 7'-0" CLEARANCE BENEATH ALL OVERHEAD PIPING.
2. PROVIDE AND SUPPORT OVERHEAD AND VERTICAL PIPING PER SPECIFICATION REQUIREMENTS.
3. LABEL AND IDENTIFY ALL PIPING IN COMPLIANCE WITH THE SPECIFICATIONS.
4. ALL FLOW METERS SHALL BE SIZED TO MATCH THE PIPE ON WHICH IT IS INSTALLED. PROVIDE PRESSURE GAUGES ON INFLUENT AND EFFLUENT SIDE OF EACH FILTRATION SYSTEM AND A FULL LINE SIZE FLOW METER ON FILTER RETURN.
5. THE BACKWASH PIPING SHALL TERMINATE NO CLOSER THAN 6" ABOVE THE FLOOD RIM OF THE BACKWASH CATCH BASIN OR TWICE THE PIPE DIAMETER, WHICHEVER IS GREATER.
6. HYDROSTATICALLY TEST ALL PIPING AT 50 PSI FOR TWO HOURS AND MAINTAIN A PRESSURE OF 20 PSI IN ALL PIPING THROUGHOUT CONSTRUCTION. SECURE ALL FIXTURES PER SPECIFICATION REQUIREMENTS BEFORE HYDROSTATIC TEST.
7. REFER TO DETAILS 1-5 ON DRAWING SP6.05 FOR INSTALLATION OF PIPE SUPPORTS.

FILTERS

1. ALL FILTER SUPPORTS SHALL BE SEISMICALLY RATED FOR THE SEISMIC ZONE IN WHICH IT IS INSTALLED IN ACCORDANCE WITH LOCAL AND/ OR STATE REQUIREMENTS.
2. FILTER MANUFACTURER SHALL CERTIFY FILTER MEDIA.
3. VALVES SHALL BE PROVIDED TO BACKWASH EACH FILTER VESSEL INDEPENDENTLY.
4. FILTER TANK ASSEMBLIES SHALL BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL FOR A MAXIMUM FLOW RATE OF 20 GPM PER SQUARE FOOT OF FILTER MEDIA.
5. THE BACKWASH THROTTLING VALVE(S) HANDLE SHALL BE REMOVED AND TURNED OVER TO THE OWNER ONCE THE BACKWASH FLOW RATE(S) HAVE BEEN TESTED, ADJUSTED AND BALANCED.
6. PROVIDE 1" DIAMETER, SCHEDULE 80 PIPE FROM THE AUTOMATIC AIR VENT ON EACH FILTER VESSEL TO THE NEAREST FLOOR DRAIN OR BACKWASH CATCH BASIN. THE VENT PIPE SHALL BE SLOPED TO THE DRAIN.
7. VESSEL SHALL BE BACKWASHED AT NO LESS THAN 15.0 GPM/SF.

CHEMICAL TREATMENT

1. CHEMICAL FEED REQUIREMENTS – REFER TO THE POOL SYSTEMS SCHEMATIC(S) ON SP7.00 & SP7.01
2. INTERLOCK POOL CIRCULATION PUMP(S) WITH ITS CORRESPONDING WATER CHEMISTRY CONTROLLER, CHEMICAL FEED PUMP(S), AND HEATER(S).
3. PROVIDE SIGNAGE ON CHEMICAL ROOM DOORS IN COMPLIANCE WITH THE STATE FIRE CODE. REFER 8/SP6.04
4. SECURE CHEMICAL METERING PUMP FEED LINES TO WALL AND/OR OVERHEAD WITH CLIPS OR DEVICES THAT DO NOT CRIMP, DISTORT OR ALLOW HIGH AND LOW AREAS IN TUBING RUNS. PROVIDE CHECK VALVE AND SHUT-OFF VALVE BEFORE LINES ENTER POOL RETURN PIPING.
5. WATER CHEMISTRY CONTROLLERS SHALL CONTROL THE SANITIZING SYSTEM AND PH CONTROL SYSTEM AND SHUT THEM DOWN UPON LOSS OF SAMPLE STREAM FLOW.
6. THE CHEMICAL CONTROL SYSTEM BYPASS LINE SHALL SAMPLE WATER AFTER THE FILTERS AND BEFORE THE HEATER BYPASS LINE.
7. VERIFY REMOTE ACCESS CAPABILITY TO ALL CHEMICAL CONTROLLERS. REFER TO ELECTRICAL.
8. LOCATE CHEMICAL INJECTION POINT AFTER THE FLOW METER SENSOR AND AT MAXIMUM HEIGHT OF 7'-0" ABOVE FINISHED FLOOR. REFER: 7/SP6.04.

PUMPS

1. PROVIDE INFLUENT AND EFFLUENT GAUGES FOR EACH PUMP. PRESSURE GAUGES HAVE A RANGE OF 0-30 HG / 0-60 PSI. COMPOUND GAUGES HAVE A RANGE OF 0-30 HG / 0-60 PSI.

ELECTRICAL

1. GFCI'S PROVIDED AT OUTLETS. REFER TO ELECTRICAL.
2. POOL EQUIPMENT ROOM AND CHEMICAL STORAGE AREAS SHALL BE PROVIDED WITH ARTIFICIAL LIGHTING SUFFICIENT TO ILLUMINATE ALL EQUIPMENT AND SUPPLIES. REFER TO ELECTRICAL.
3. CONDUIT SHALL BE ROUTED OVERHEAD OR BELOW GRADE.
4. PROVIDE ELECTRICAL CONNECTION TO POOL HEATERS. REFER TO ELECTRICAL.

PUMP SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	SIZE	GPM	TDH	HP	NPSHR	HAIR/LINT		NOTES
									MAKE	SIZE	
PP1	COMPETITION POOL RECIRCULATION PUMP REFER: 1/SP6.04	PACO	50123 LC	6X5	1,100	72	30	9.39	MERMADE	10X6	1,2,3
PP2	TRAINING POOL RECIRCULATION PUMP REFER: 1/SP6.04	PACO	25957 LC	3X2.5	300	77	10	9.01	MERMADE	6X3	1,2,3
PP3	DIVING POOL RECIRCULATION PUMP REFER: 1/SP6.04 (ALTERNATE #2)	PACO	30957 LC	4X3	475	71	15	8.68	MERMADE	6X4	1,2,3

NOTE:
1. THE MANUFACTURER INDICATED IS BASIS OF DESIGN. PUMP MANUFACTURERS: ITT MARLOW, GRISWOLD, PACO OR AURORA SHALL BE CONSIDERED EQUAL PROVIDED THEY MEET SPECIFICATIONS AS INDICATED IN BID DOCUMENTS.
2. PROVIDE WITH 460 VOLT, 3 PHASE, 60HZ, 1750 RPM MOTOR.
3. PROVIDE VARIABLE FREQUENCY DRIVE.

CHEMICAL FEED PUMP SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	TUBE #	HP	FLOW	NOTES
PP4	COMPETITION POOL CHLORINATION PUMP REFER: 9/SP6.04	ACCUTAB	3140	N/A	1.5	528 LBS/DAY	1,2,3
PP5	TRAINING POOL CHLORINATION PUMP REFER: 9/SP6.04	ACCUTAB	1030	N/A	1	67 LBS/DAY	1,2,3
PP6	DIVE POOL (ALTERNATE #2) CHLORINATION PUMP REFER: 9/SP6.04	ACCUTAB	3070	N/A	1.5	244 LBS/DAY	1,2,3
PP7	COMPETITION POOL ACID FEED PUMP REFER: 3/SP6.04	STENNER	45M	3	FRAC.	22 GAL/DAY	1,2,3
PP8	TRAINING POOL ACID FEED PUMP REFER: 3/SP6.04	STENNER	45M	3	FRAC.	22 GAL/DAY	1,2,3
PP9	DIVE POOL (ALTERNATE #2) ACID FEED PUMP REFER: 3/SP6.04	STENNER	45M	3	FRAC.	22 GAL/DAY	1,2,3

NOTE:
1. THE MANUFACTURER INDICATED IS BASIS OF DESIGN. ALTERNATE MANUFACTURER SHALL BE SUBMITTED FOR APPROVAL.
2. PROVIDE WITH 120 VOLT, SINGLE PHASE, ADJUSTABLE FEED.
3. INTERLOCK WITH POOL RECIRCULATION PUMP.

POOL HEATER SCHEDULE

POOL	MODEL NUMBER	BOILER EFF (%)	INPUT (MBH)	AIR INLET SIZE (INCHES)	PIPE SIZE (IN/OUT)	VENT SIZE (INCH)	ELECTRICAL DATA (2 REQUIRED CONNECTIONS PER HEATER)			
							V 120	PH 1	HZ 60	AMP 15
COMPETITION	(2) CPN 0992	89	990,000	10"	2 1/2"	10"	120	1	60	15
TRAINING	CPN 0992	89	990,000	10"	2 1/2"	10"	120	1	60	15
DIVE (ALTERNATE #2)	CPN 0992	89	990,000	10"	2 1/2"	10"	120	1	60	15

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: DRO
CHECKED BY: SAP

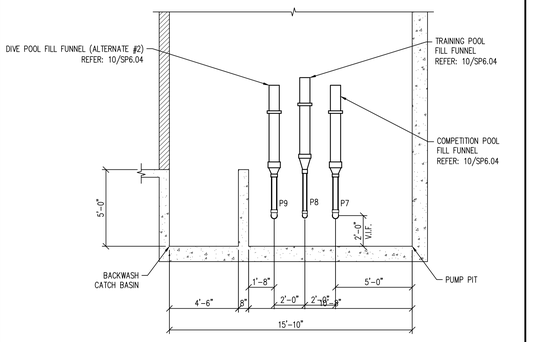
REVISIONS

No.	Description	Date

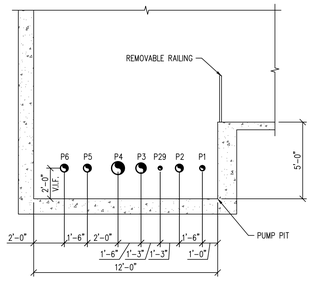
ISSUED FOR BIDS

POOL MECHANICAL ROOM PLAN

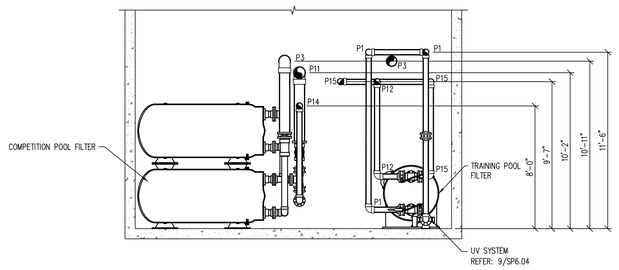
SP6.00



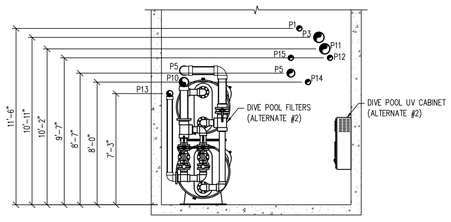
2 SP6.01 POOL MECHANICAL ROOM SECTION
1/4" = 1'-0"



1 SP6.01 POOL MECHANICAL ROOM SECTION
1/4" = 1'-0"



3 SP6.01 POOL MECHANICAL ROOM SECTION
1/4" = 1'-0"



4 SP6.01 POOL MECHANICAL ROOM SECTION
1/4" = 1'-0"

PUMP SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	SIZE	GPM	TDH	HP	NPSHR	HAIR/LINT		NOTES
									MAKE	SIZE	
PP1	COMPETITION POOL RECIRCULATION PUMP REFER: 1/SP6.04	PACO	50123 LC	6X5	1,100	72	30	9.39	MERMADE	10X6	1,2,3
PP2	TRAINING POOL RECIRCULATION PUMP REFER: 1/SP6.04	PACO	25957 LC	3X2.5	300	77	10	9.01	MERMADE	6X3	1,2,3
PP3	DIVING POOL RECIRCULATION PUMP REFER: 1/SP6.04 (ALTERNATE #2)	PACO	30957 LC	4X3	475	71	15	8.68	MERMADE	6X4	1,2,3

NOTE:
1. THE MANUFACTURER INDICATED IS BASIS OF DESIGN. PUMP MANUFACTURERS: ITT MARLOW, GRISWOLD, PACO OR AURORA SHALL BE CONSIDERED EQUAL PROVIDED THEY MEET SPECIFICATIONS AS INDICATED IN BID DOCUMENTS.
2. PROVIDE WITH 460 VOLT, 3 PHASE, 60HZ, 1750 RPM MOTOR.
3. PROVIDE VARIABLE FREQUENCY DRIVE.

PIPE SCHEDULE

ID	DESCRIPTION
P1	4" FROM TRAINING POOL FILTER TO POOL INLETS
P2	6" FROM TRAINING POOL MAIN DRAINS TO PP2
P3	8" FROM COMPETITION POOL FILTERS TO POOL INLETS
P4	10" FROM COMPETITION POOL MAIN DRAINS TO PP1
P5	6" FROM DIVE POOL FILTERS TO POOL INLETS (ALTERNATE #2)
P6	6" FROM DIVE POOL MAIN DRAINS TO PP3 (ALTERNATE #2)
P7	4" FROM FILL FUNNEL TO COMPETITION POOL SURGE TANK
P8	3" FROM FILL FUNNEL TO TRAINING POOL SURGE TANK
P9	4" FROM FILL FUNNEL TO DIVE POOL SURGE TANK (ALTERNATE #2)
P10	6" FROM PP3 TO DIVE POOL FILTERS (ALTERNATE #2)
P11	8" FROM PP1 TO COMPETITION POOL FILTERS
P12	4" FROM PP2 TO TRAINING POOL FILTER
P13	4" FROM DIVE POOL FILTERS TO BACKWASH CATCH BASIN (ALTERNATE #2)
P14	4" FROM COMPETITON POOL FILTERS TO BACKWASH CATCH BASIN
P15	4" FROM TRAINING POOL FILTER TO BACKWASH CATCH BASIN
P16	6" FROM GUTTER DROPOUT BOX TO TRAINING POOL SURGE TANK
P17	6" FROM GUTTER DROPOUT BOX TO TRAINING POOL SURGE TANK
P18	8" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P19	10" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P20	8" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P21	6" FROM GUTTER DROPOUT BOX TO DIVE POOL SURGE TANK (ALTERNATE #2)
P22	6" FROM GUTTER DROPOUT BOX TO DIVE POOL SURGE TANK (ALTERNATE #2)
P23	2" FROM P3 TO COMPETITION POOL HEATERS
P24	2" FROM COMPETITION POOL HEATERS TO P3
P25	2" FROM P1 TO TRAINING POOL HEATER
P26	2" FROM TRAINING POOL HEATER TO P1
P27	2" FROM P5 TO DIVE POOL HEATER (ALTERNATE #2)
P28	2" FROM DIVE POOL HEATER TO P5 (ALTERNATE #2)
P29	3" FROM P5 TO WATER SURFACE AGITATOR NOZZLES (ALTERNATE #2)
P30	3" FROM P11 TO BACKWASH CATCH BASIN
P31	2" FROM P12 TO BACKWASH CATCH BASIN
P32	2" FROM P10 TO BACKWASH CATCH BASIN (ALTERNATE #2)
P33	3" SURGE TANK VENT
P34	3" SURGE TANK VENT
P35	3" SURGE TANK VENT (ALTERNATE #2)

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: DRO
CHECKED BY: SAP

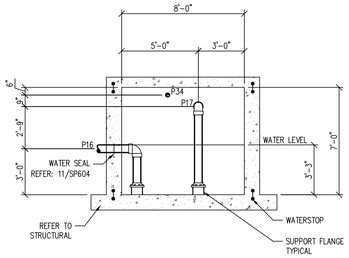
REVISIONS

No.	Description	Date

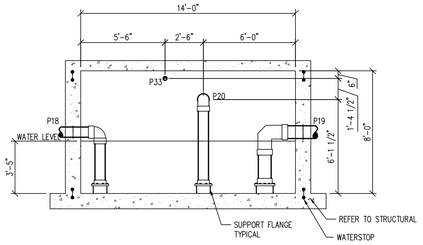
ISSUED FOR BIDS

POOL MECHANICAL ROOM SECTIONS

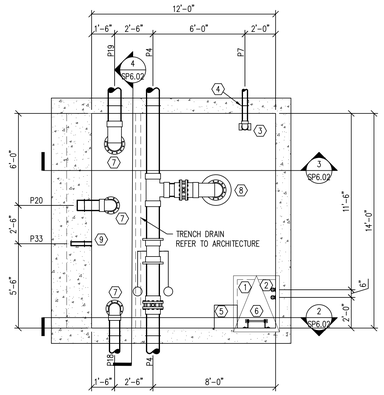
SP6.01



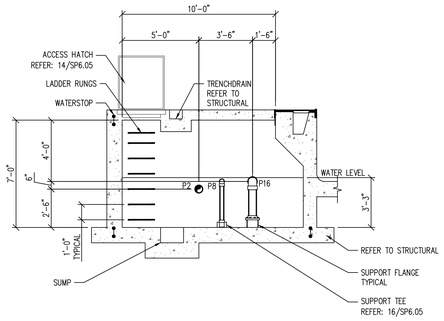
7 SP6.02 TRAINING POOL SURGE TANK SECTION
1/4" = 1'-0"



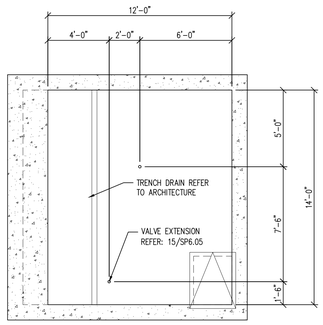
4 SP6.02 COMPETITION POOL SURGE TANK SECTION
1/4" = 1'-0"



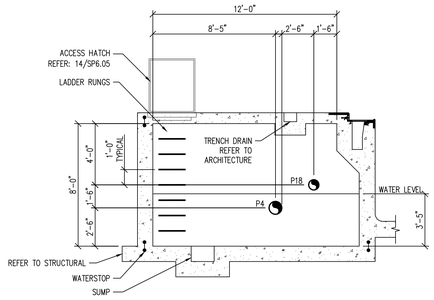
1 SP6.02 COMPETITION POOL SURGE TANK PLAN
1/4" = 1'-0"



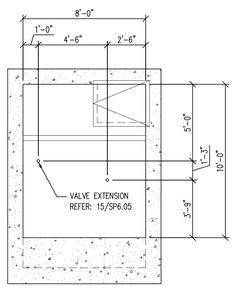
8 SP6.02 TRAINING POOL SURGE TANK SECTION
1/4" = 1'-0"



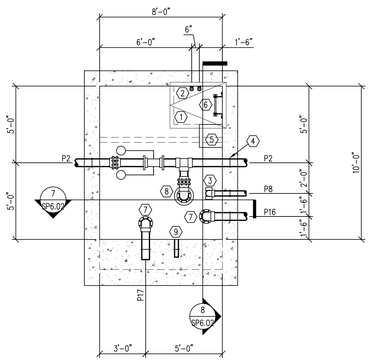
5 SP6.02 COMPETITION POOL VALVE EXTENSION PENETRATION PLAN
1/4" = 1'-0"



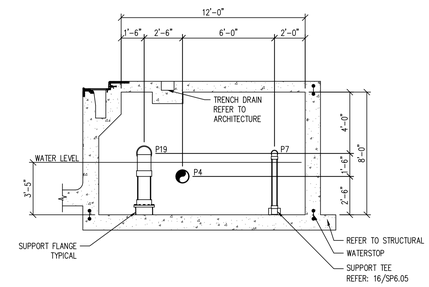
2 SP6.02 COMPETITION POOL SURGE TANK SECTION
1/4" = 1'-0"



9 SP6.02 TRAINING POOL VALVE EXTENSION PENETRATION PLAN
1/4" = 1'-0"



6 SP6.02 TRAINING POOL SURGE TANK PLAN
1/4" = 1'-0"



3 SP6.02 COMPETITION POOL SURGE TANK SECTION
1/4" = 1'-0"

SURGE TANK NOTES

1. A WATERPROOFING COATING SHALL BE PROVIDED TO ALL INTERIOR SURFACES OF SURGE TANK INCLUDING LID.
2. PROVIDE WATER TIGHT PIPE PENETRATIONS AND INTERFACES WITHIN THE SURGE TANK.
3. REFER TO POOL OR BUILDING STRUCTURAL DRAWINGS FOR SURGE TANK STRUCTURAL SHELL DESIGN.
4. SLEEVES IN SLAB OVER SURGE TANK FOR VALVE EXTENSIONS POSITIONED DIRECTLY ABOVE SURGE TANK VALVES BELOW SHALL BE COORDINATED.
5. DRILL 1" DIAMETER HOLE ON TOP OF ELBOW. TYPICAL ALL GUTTER DROPOUT LINES.
6. LADDER RUNGS SHALL BE PROVIDED.
7. REFER TO POOL OR BUILDING STRUCTURAL DRAWINGS FOR WATER STOPS.
8. PVC ANTI-VORTEX PLATE SHALL BE MINIMUM 2.5 TIMES CONNECTING PIPE DIAMETER UP TO 24" AND 4" A.F.F.
9. SUPPORT FLANGE WITH FOUR (4) LEGS EQUAL TO NOMINAL PIPE DIAMETER, BUT NOT LESS THAN 6" A.F.F.
10. PROVIDE 18"x18"x12" DEEP SUMP LOCATED NEAR ACCESS HATCH.

PUMP SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	SIZE	GPM	TDH	HP	NPSHR	HAIR/LINT		NOTES
									MAKE	SIZE	
PP1	COMPETITION POOL RECIRCULATION PUMP REFER: 1/SP6.04	PACO	50123 LC	6X5	1,100	72	30	9.39	MERMADE	10X6	1,2,3
PP2	TRAINING POOL RECIRCULATION PUMP REFER: 1/SP6.04	PACO	25957 LC	3X2.5	300	77	10	9.01	MERMADE	6X3	1,2,3
PP3	DIVING POOL RECIRCULATION PUMP REFER: 1/SP6.04 (ALTERNATE #2)	PACO	30957 LC	4X3	475	71	15	8.68	MERMADE	6X4	1,2,3

NOTE:
1. THE MANUFACTURER INDICATED IS BASIS OF DESIGN. PUMP MANUFACTURERS: ITT MARLOW, GRISWOLD, PACO OR AURORA SHALL BE CONSIDERED EQUAL PROVIDED THEY MEET SPECIFICATIONS AS INDICATED IN BID DOCUMENTS.
2. PROVIDE WITH 460 VOLT, 3 PHASE, 60HZ, 1750 RPM MOTOR.
3. PROVIDE VARIABLE FREQUENCY DRIVE.

EQUIPMENT SCHEDULE

ID	ITEM
1	ACCESS HATCH REFER: 14/SP6.05
2	WATER LEVEL CONTROLLER(S) REFER: 9/SP6.05
3	SUPPORT TEE REFER: 16/SP6.05
4	WATER SEAL REFER: 11/SP6.04
5	SUMP
6	LADDER RUNGS
7	SUPPORT FLANGE
8	ANTI-VORTEX PLATE
9	SURGE TANK VENT REFER: 10/SP6.06

PIPE SCHEDULE

ID	DESCRIPTION
P1	4" FROM TRAINING POOL FILTER TO POOL INLETS
P2	6" FROM TRAINING POOL MAIN DRAINS TO PP2
P3	8" FROM COMPETITION POOL FILTERS TO POOL INLETS
P4	10" FROM COMPETITION POOL MAIN DRAINS TO PP1
P5	6" FROM DIVE POOL FILTERS TO POOL INLETS (ALTERNATE #2)
P6	6" FROM DIVE POOL MAIN DRAINS TO PP3 (ALTERNATE #2)
P7	4" FROM FILL FUNNEL TO COMPETITION POOL SURGE TANK
P8	3" FROM FILL FUNNEL TO TRAINING POOL SURGE TANK
P9	4" FROM FILL FUNNEL TO DIVE POOL SURGE TANK (ALTERNATE #2)
P10	6" FROM PP3 TO DIVE POOL FILTERS (ALTERNATE #2)
P11	8" FROM PP1 TO COMPETITION POOL FILTERS
P12	4" FROM PP2 TO TRAINING POOL FILTER
P13	4" FROM DIVE POOL FILTERS TO BACKWASH CATCH BASIN (ALTERNATE #2)
P14	4" FROM COMPETITON POOL FILTERS TO BACKWASH CATCH BASIN
P15	4" FROM TRAINING POOL FILTER TO BACKWASH CATCH BASIN
P16	6" FROM GUTTER DROPOUT BOX TO TRAINING POOL SURGE TANK
P17	6" FROM GUTTER DROPOUT BOX TO TRAINING POOL SURGE TANK
P18	8" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P19	10" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P20	8" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P21	6" FROM GUTTER DROPOUT BOX TO DIVE POOL SURGE TANK (ALTERNATE #2)
P22	6" FROM GUTTER DROPOUT BOX TO DIVE POOL SURGE TANK (ALTERNATE #2)
P23	2" FROM P3 TO COMPETITION POOL HEATERS
P24	2" FROM COMPETITION POOL HEATERS TO P3
P25	2" FROM P1 TO TRAINING POOL HEATER
P26	2" FROM TRAINING POOL HEATER TO P1
P27	2" FROM P5 TO DIVE POOL HEATER (ALTERNATE #2)
P28	2" FROM DIVE POOL HEATER TO P5 (ALTERNATE #2)
P29	3" FROM P5 TO WATER SURFACE AGITATOR NOZZLES (ALTERNATE #2)
P30	3" FROM P11 TO BACKWASH CATCH BASIN
P31	2" FROM P12 TO BACKWASH CATCH BASIN
P32	2" FROM P10 TO BACKWASH CATCH BASIN (ALTERNATE #2)
P33	3" SURGE TANK VENT
P34	3" SURGE TANK VENT
P35	3" SURGE TANK VENT (ALTERNATE #2)

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	DRO
CHECKED BY	SAP

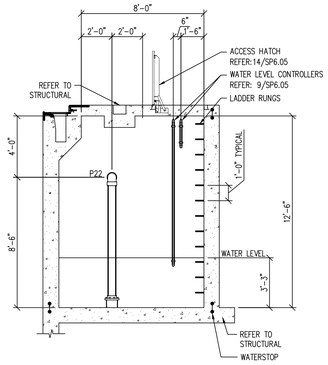
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

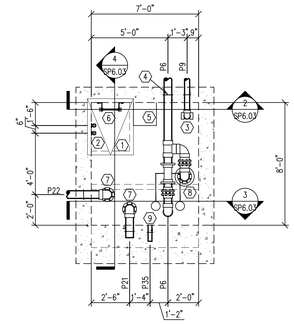
COMPETITION & TRAINING POOL SURGE TANK PLANS & SECTIONS

SP6.02



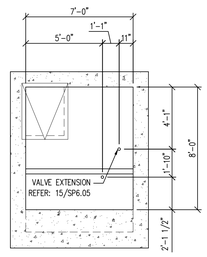
4 / SP6.03 DIVE POOL SURGE TANK SECTION

1/4" = 1'-0"



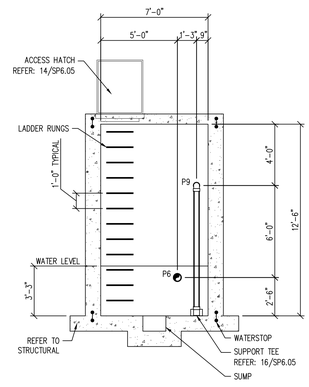
1 / SP6.03 DIVE POOL SURGE TANK PLAN

1/4" = 1'-0"



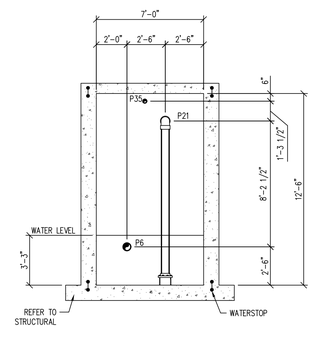
5 / SP6.03 DIVE POOL VALVE EXTENSION PENETRATION PLAN

1/4" = 1'-0"



2 / SP6.03 DIVE POOL SURGE TANK SECTION

1/4" = 1'-0"



3 / SP6.03 DIVE POOL SURGE TANK SECTION

1/4" = 1'-0"

SURGE TANK NOTES

1. A WATERPROOFING COATING SHALL BE PROVIDED TO ALL INTERIOR SURFACES OF SURGE TANK INCLUDING LID.
2. PROVIDE WATER TIGHT PIPE PENETRATIONS AND INTERFACES WITHIN THE SURGE TANK.
3. REFER TO POOL OR BUILDING STRUCTURAL DRAWINGS FOR SURGE TANK STRUCTURAL SHELL DESIGN.
4. SLEEVES IN SLAB OVER SURGE TANK FOR VALVE EXTENSIONS POSITIONED DIRECTLY ABOVE SURGE TANK VALVES BELOW SHALL BE COORDINATED.
5. DRILL 1" DIAMETER HOLE ON TOP OF ELBOW. TYPICAL ALL GUTTER DROPOUT LINES.
6. LADDER RUNGS SHALL BE PROVIDED.
7. REFER TO POOL OR BUILDING STRUCTURAL DRAWINGS FOR WATER STOPS.
8. PVC ANTI-VORTEX PLATE SHALL BE MINIMUM 2.5 TIMES CONNECTING PIPE DIAMETER UP TO 24" AND 4" A.F.F.
9. SUPPORT FLANGE WITH FOUR (4) LEGS EQUAL TO NOMINAL PIPE DIAMETER, BUT NOT LESS THAN 6" A.F.F.
10. PROVIDE 18"x18"x12" DEEP SUMP LOCATED NEAR ACCESS HATCH.

PUMP SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	SIZE	GPM	TDH	HP	NPSHR	HAIR/LINT		NOTES
									MAKE	SIZE	
PP1	COMPETITION POOL RECIRCULATION PUMP REFER: 1/SP6.04	PACO	50123 LC	6X5	1,100	72	30	9.39	MERMADE	10X6	1,2,3
PP2	TRAINING POOL RECIRCULATION PUMP REFER: 1/SP6.04	PACO	25957 LC	3X2.5	300	77	10	9.01	MERMADE	6X3	1,2,3
PP3	DIVING POOL RECIRCULATION PUMP REFER: 1/SP6.04 (ALTERNATE #2)	PACO	30957 LC	4X3	475	71	15	8.68	MERMADE	6X4	1,2,3

NOTE:
1. THE MANUFACTURER INDICATED IS BASIS OF DESIGN. PUMP MANUFACTURERS: ITT MARLOW, GRISWOLD, PACO OR AURORA SHALL BE CONSIDERED EQUAL PROVIDED THEY MEET SPECIFICATIONS AS INDICATED IN BID DOCUMENTS.
2. PROVIDE WITH 460 VOLT, 3 PHASE, 60HZ, 1750 RPM MOTOR.
3. PROVIDE VARIABLE FREQUENCY DRIVE.

EQUIPMENT SCHEDULE

ID	ITEM
1	ACCESS HATCH REFER: 14/SP6.05
2	WATER LEVEL CONTROLLER(S) REFER: 9/SP6.05
3	SUPPORT TEE REFER: 16/SP6.05
4	WATER SEAL REFER: 11/SP6.04
5	SUMP
6	LADDER RUNGS
7	SUPPORT FLANGE
8	ANTI-VORTEX PLATE
9	SURGE TANK VENT REFER: 10/SP6.06

PIPE SCHEDULE

ID	DESCRIPTION
P1	4" FROM TRAINING POOL FILTER TO POOL INLETS
P2	6" FROM TRAINING POOL MAIN DRAINS TO PP2
P3	8" FROM COMPETITION POOL FILTERS TO POOL INLETS
P4	10" FROM COMPETITION POOL MAIN DRAINS TO PP1
P5	6" FROM DIVE POOL FILTERS TO POOL INLETS (ALTERNATE #2)
P6	6" FROM DIVE POOL MAIN DRAINS TO PP3 (ALTERNATE #2)
P7	4" FROM FILL FUNNEL TO COMPETITION POOL SURGE TANK
P8	3" FROM FILL FUNNEL TO TRAINING POOL SURGE TANK
P9	4" FROM FILL FUNNEL TO DIVE POOL SURGE TANK (ALTERNATE #2)
P10	6" FROM PP3 TO DIVE POOL FILTERS (ALTERNATE #2)
P11	8" FROM PP1 TO COMPETITION POOL FILTERS
P12	4" FROM PP2 TO TRAINING POOL FILTER
P13	4" FROM DIVE POOL FILTERS TO BACKWASH CATCH BASIN (ALTERNATE #2)
P14	4" FROM COMPETITON POOL FILTERS TO BACKWASH CATCH BASIN
P15	4" FROM TRAINING POOL FILTER TO BACKWASH CATCH BASIN
P16	6" FROM GUTTER DROPOUT BOX TO TRAINING POOL SURGE TANK
P17	6" FROM GUTTER DROPOUT BOX TO TRAINING POOL SURGE TANK
P18	8" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P19	10" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P20	8" FROM GUTTER DROPOUT BOX TO COMPETITION POOL SURGE TANK
P21	6" FROM GUTTER DROPOUT BOX TO DIVE POOL SURGE TANK (ALTERNATE #2)
P22	6" FROM GUTTER DROPOUT BOX TO DIVE POOL SURGE TANK (ALTERNATE #2)
P23	2" FROM P3 TO COMPETITION POOL HEATERS
P24	2" FROM COMPETITION POOL HEATERS TO P3
P25	2" FROM P1 TO TRAINING POOL HEATER
P26	2" FROM TRAINING POOL HEATER TO P1
P27	2" FROM P5 TO DIVE POOL HEATER (ALTERNATE #2)
P28	2" FROM DIVE POOL HEATER TO P5 (ALTERNATE #2)
P29	3" FROM P5 TO WATER SURFACE AGITATOR NOZZLES (ALTERNATE #2)
P30	3" FROM P11 TO BACKWASH CATCH BASIN
P31	2" FROM P12 TO BACKWASH CATCH BASIN
P32	2" FROM P10 TO BACKWASH CATCH BASIN (ALTERNATE #2)
P33	3" SURGE TANK VENT
P34	3" SURGE TANK VENT
P35	3" SURGE TANK VENT (ALTERNATE #2)

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	DRO
CHECKED BY	SAP

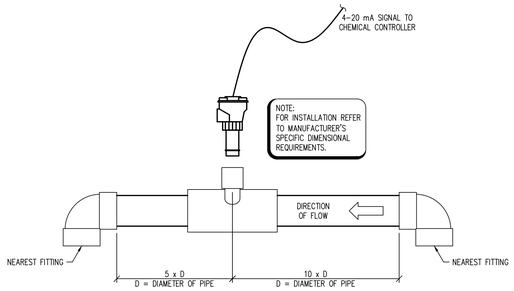
REVISIONS

No.	Description	Date

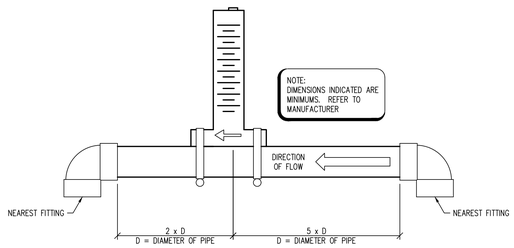
ISSUED FOR BIDS

DIVE POOL SURGE TANK PLAN & SECTIONS (ALTERNATE #2)

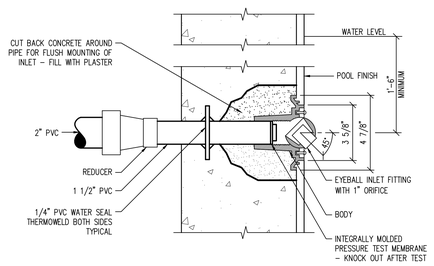
SP6.03



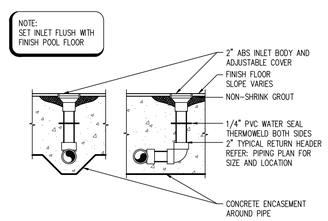
12 SP6.04 **FLOW METER SENSOR**
3/4" = 1'-0"



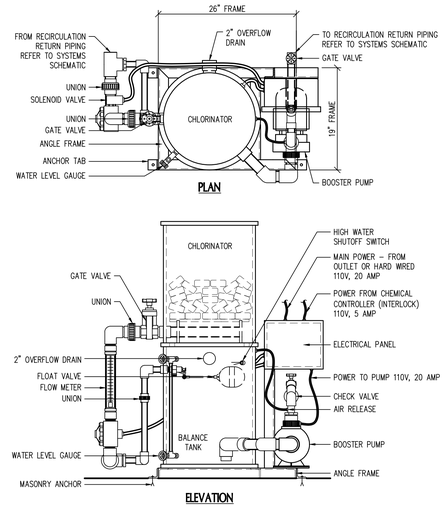
13 SP6.04 **IMPACT FLOW METER**
3/4" = 1'-0"



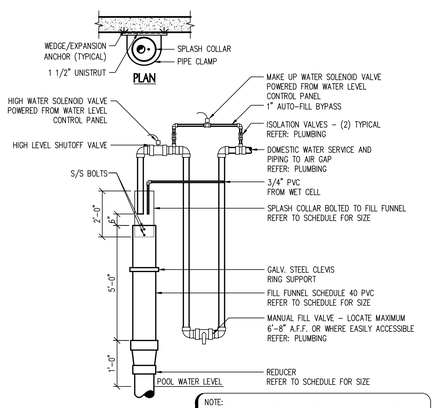
14 SP6.04 **WALL INLET**
3" = 1'-0"



15 SP6.04 **FLOOR INLET**
1" = 1'-0"



9 SP6.04 **CHLORINATION SYSTEM**
1" = 1'-0"

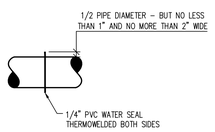


NOTE:
PLUMBING CONTRACTOR SHALL PROVIDE MAKE-UP WATER PIPING TO AIR GAP, INCLUDING SOLENOID VALVE INSTALLATION AND BACKFLOW PREVENTER IF REQUIRED. CONTRACTOR TO FURNISH SOLENOID, PROVIDE FILL FUNNEL, AND PIPING TO SURGE TANK.

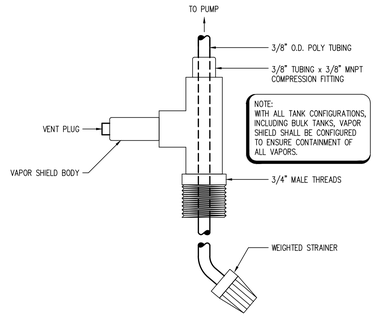
FILL FUNNEL SCHEDULE

POOL	FRESH WATER SUPPLY GPM (MIN.)	FILL FUNNEL SIZE	REDUCER SIZE	SPLASH COLLAR SIZE	FILL LINE SIZE TO POOL
COMPETITION	91	8"	8"X4"	6"	4"
TRAINING	37	6"	6"X3"	4"	3"
DIVE (ALTERNATE #2)	95	8"	8"X4"	6"	4"

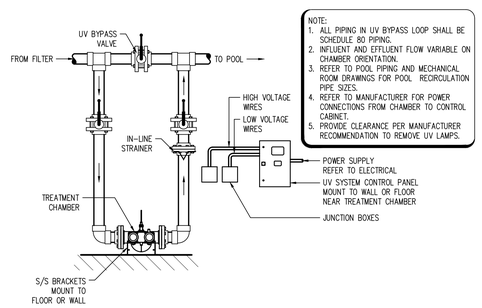
10 SP6.04 **FILL FUNNEL**
3/8" = 1'-0"



11 SP6.04 **WATER SEAL**
1" = 1'-0"

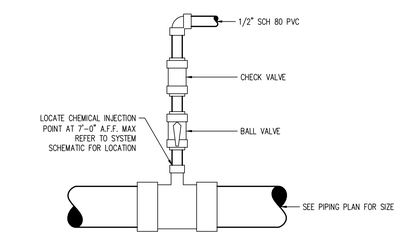


5 SP6.04 **ACID VENT PIPING**
6" = 1'-0"

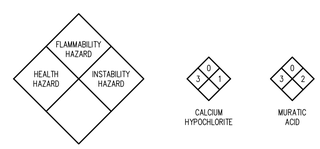


NOTE:
1. ALL PIPING IN UV BYPASS LOOP SHALL BE SCHEDULE 80 PIPING.
2. INFLUENT AND EFFLUENT FLOW VARIABLE ON CHAMBER ORIENTATION.
3. REFER TO POOL PIPING AND MECHANICAL ROOM DRAWINGS FOR POOL RECIRCULATION PIPE SIZES.
4. REFER TO MANUFACTURER FOR POWER CONNECTIONS FROM CHAMBER TO CONTROL CABINET.
5. PROVIDE CLEARANCE PER MANUFACTURER RECOMMENDATION TO REMOVE UV LAMPS.

6 SP6.04 **UV TREATMENT SYSTEM**
1/2" = 1'-0"



7 SP6.04 **CHEMICAL TAP AND VALVE**
1" = 1'-0"

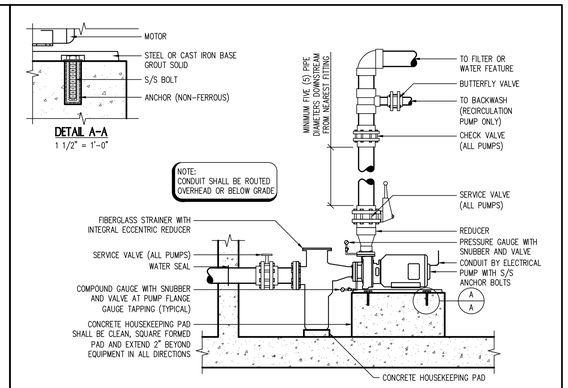


RATING EXPLANATION GUIDE

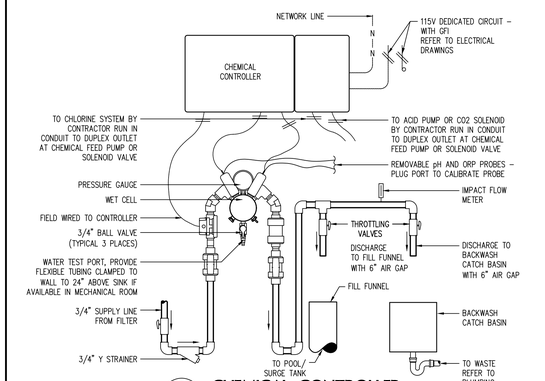
RATING	HEALTH HAZARD	FLAMMABILITY HAZARD	INSTABILITY HAZARD
4	CAN BE LETHAL	BELOW 73 DEGREES F	MAY EXPLODE AT NORMAL TEMPERATURES AND PRESSURES
3	CAN CAUSE SERIOUS OR PERMANENT INJURY	ABOVE 73 DEGREES, BELOW 100 DEGREES F	MAY EXPLODE AT HIGH TEMPERATURE OR SHOCK
2	CAN CAUSE TEMPORARY INCAPACITATION OR RESIDUAL INJURY	ABOVE 100 DEGREES F, BELOW 200 DEGREES F	VOLENT CHEMICAL CHANGE AT HIGH TEMPERATURES OR PRESSURES
1	CAN CAUSE SIGNIFICANT IRRITATION	ABOVE 200 DEGREES F	NORMALLY STABLE, HIGH TEMPERATURES MAKE UNSTABLE
0	NO HAZARD	WILL NOT BURN	STABLE

CONFIRM SIGNAGE WITH LOCAL FIRE MARSHAL AND/OR BUILDING CODES PRIOR TO INSTALLATION.

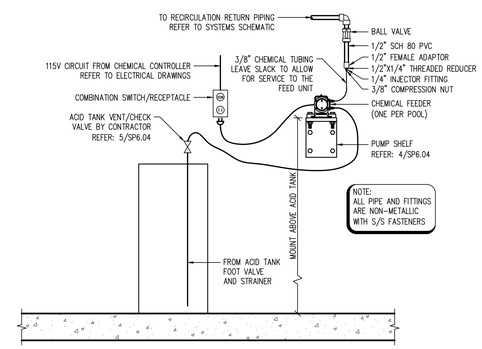
8 SP6.04 **HAZARD SIGNAGE**
NTS



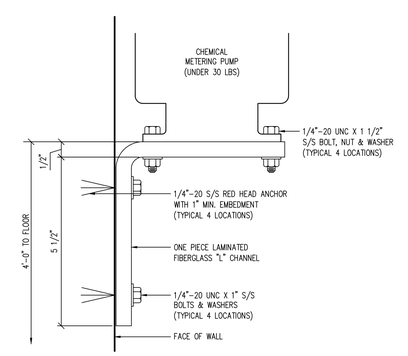
1 SP6.04 **TYPICAL PUMP DETAIL**
1/2" = 1'-0"



2 SP6.04 **CHEMICAL CONTROLLER**
NTS



3 SP6.04 **ACID SYSTEM**
3/4" = 1'-0"



4 SP6.04 **CHEMICAL PUMP SHELF**
6" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: DRO
CHECKED BY: SAP

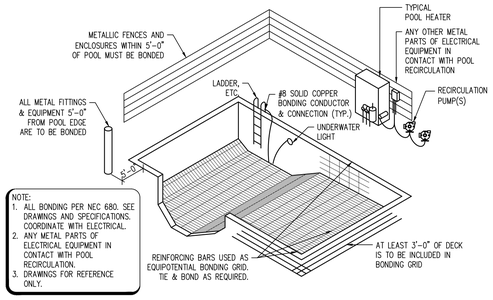
REVISIONS

No.	Description	Date

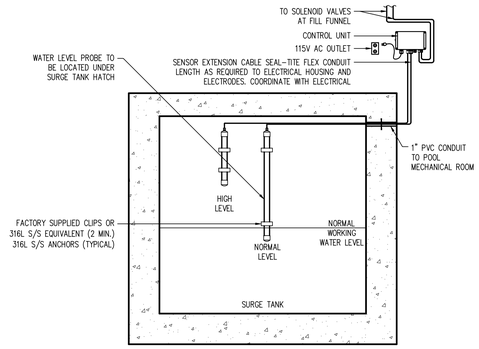
ISSUED FOR BIDS

POOL MECHANICAL DETAILS

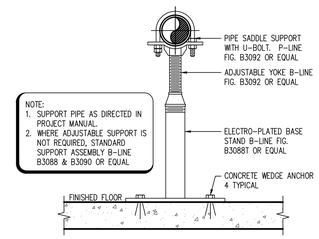
SP6.04



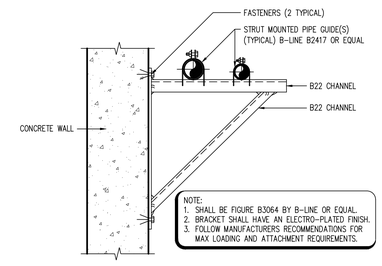
13 / SP6.05 **TYPICAL POOL BONDING DETAIL**
NTS



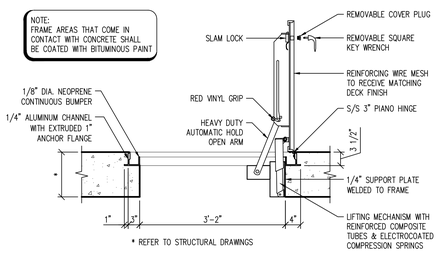
9 / SP6.05 **WATER LEVEL CONTROLLER**
3/4" = 1'-0"



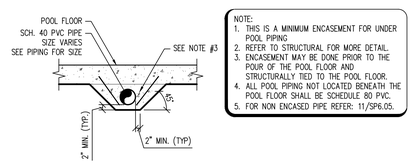
5 / SP6.05 **FLOOR MOUNTED PIPE SUPPORT**
3" = 1'-0"



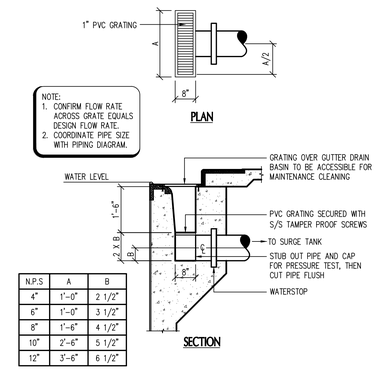
1 / SP6.05 **ADJUSTABLE STRUT BRACKET**
3" = 1'-0"



14 / SP6.05 **SURGE TANK ACCESS HATCH**
3/4" = 1'-0"

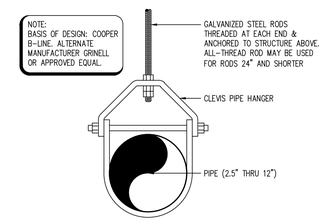


10 / SP6.05 **CONCRETE ENCASED PIPE**
1/2" = 1'-0"

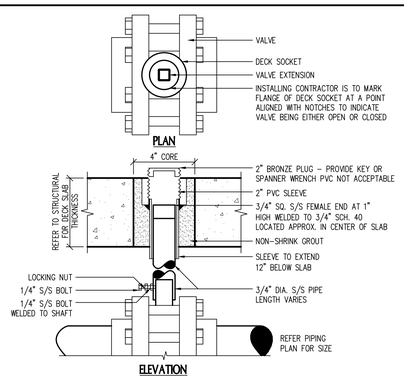


N.P.S	A	B
4"	1'-0"	2 1/2"
6"	1'-0"	3 1/2"
8"	1'-6"	4 1/2"
10"	2'-6"	5 1/2"
12"	3'-6"	6 1/2"

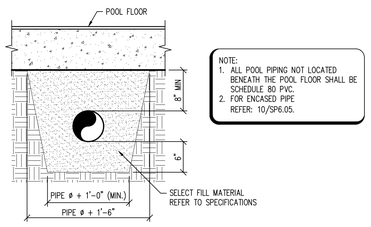
6 / SP6.05 **COMPETITION & DIVE POOL GUTTER DROPOUT BOX**
1/2" = 1'-0"



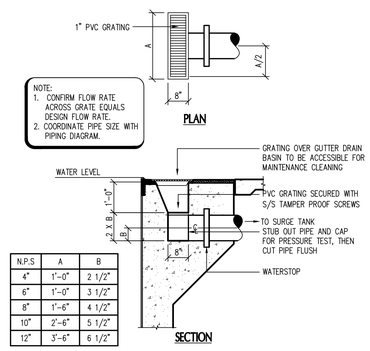
2 / SP6.05 **CLEVIS PIPE HANGER**
1 1/2" = 1'-0"



15 / SP6.05 **VALVE EXTENSION**
3" = 1'-0"

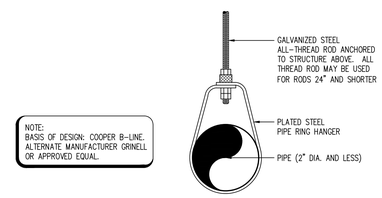


11 / SP6.05 **BELOW GRADE PIPING**
1" = 1'-0"

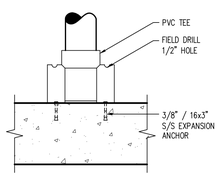


N.P.S	A	B
4"	1'-0"	2 1/2"
6"	1'-0"	3 1/2"
8"	1'-6"	4 1/2"
10"	2'-6"	5 1/2"
12"	3'-6"	6 1/2"

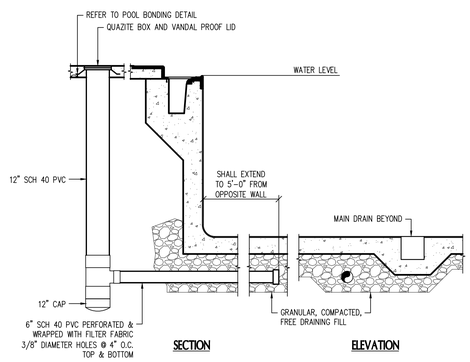
7 / SP6.05 **TRAINING POOL GUTTER DROPOUT BOX**
1/2" = 1'-0"



3 / SP6.05 **SWIVEL RING PIPE HANGER**
1 1/2" = 1'-0"



16 / SP6.05 **SUPPORT TEE**
1" = 1'-0"

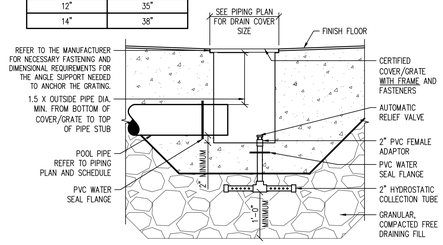


12 / SP6.05 **COMPETITION & DIVE POOL SIGHT SUMP**
3/8" = 1'-0"

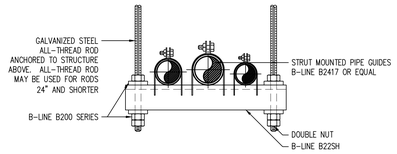
DRAIN DEPTH SCHEDULE

STUB SIZE (NPS)	MINIMUM DEPTH
3" AND UNDER	12"
4"	14.25"
6"	19.5"
8"	24.5"
10"	30"
12"	35"
14"	38"

NOTE:
1. ALL MAIN DRAINS SHALL BE CONSTRUCTED TO COMPLY WITH THE VIRGINIA GRAEME BAKER ACT AND ASME ANSI/APSP-16-2011.
2. MAIN DRAINS MAY USE MULTIPLE VGB COMPLIANT GRATES SECURELY FASTENED PER MANUFACTURER RECOMMENDATIONS.



8 / SP6.05 **MAIN DRAIN**
3/4" = 1'-0"



NOTE:
1. COOPER B-LINE (BASIS OF DESIGN) ALTERNATE MANUFACTURERS UNISTRUT OR PRE APPROVED EQUAL.
2. REFER TO THE PROJECT MANUAL FOR FINISH REQUIREMENT.
3. CONTRACTOR SHALL FOLLOW ALL RECOMMENDATIONS FROM MANUFACTURER.

4 / SP6.05 **TRAPEZE HANGER**
3" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT: PSJA ISD
PROJECT NUMBER: 18309SP
DATE: 04.11.19
DRAWN BY: DRO
CHECKED BY: SAP

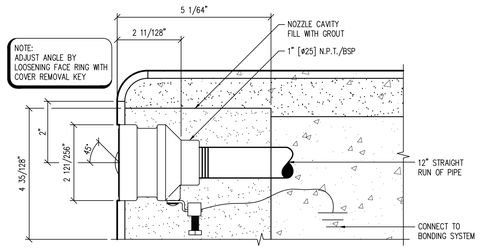
REVISIONS

No.	Description	Date

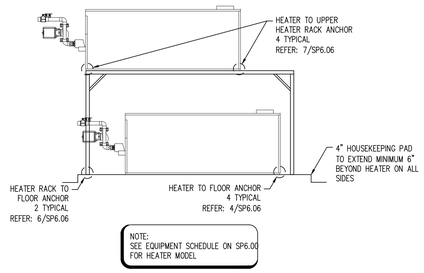
ISSUED FOR BIDS

POOL MECHANICAL DETAILS

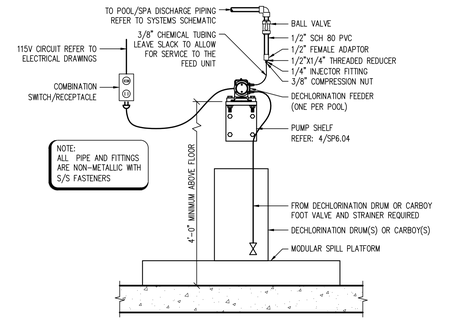
SP6.05



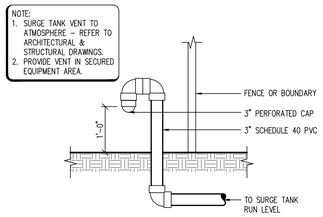
9 SP6.06 **WATER SURFACE AGITATOR**
6" = 1'-0"



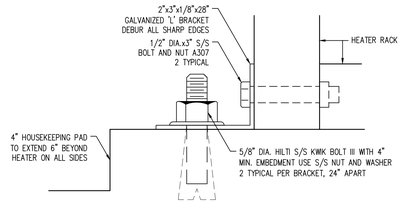
5 SP6.06 **POOL HEATER ANCHOR – SEISMIC ZONE 4**
NTS



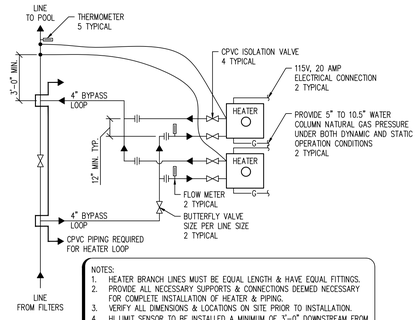
1 SP6.06 **DECHLORINATION SYSTEM**
3/4" = 1'-0"



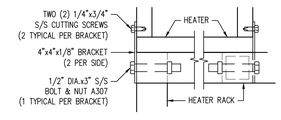
10 SP6.06 **SURGE TANK VENT**
3/4" = 1'-0"



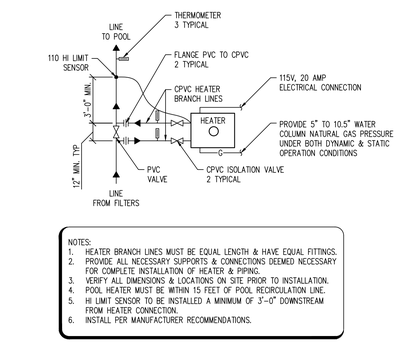
6 SP6.06 **HEATER RACK TO FLOOR ANCHOR**
6" = 1'-0"



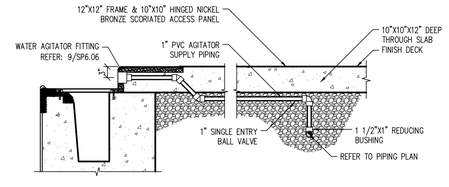
2 SP6.06 **COMPETITION POOL HEATER PIPING SCHEMATIC**
NTS



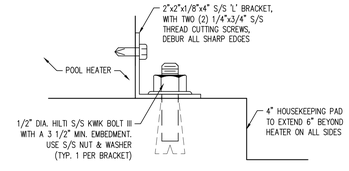
7 SP6.06 **HEATER TO UPPER HEATER RACK ANCHOR**
3" = 1'-0"



3 SP6.06 **TRAINING & DIVE POOL HEATER PIPING SCHEMATIC**
NTS



8 SP6.06 **AGITATOR PIPING**
3/4" = 1'-0"



4 SO6.05 **HEATER TO FLOOR ANCHOR**
6" = 1'-0"

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS — DARREN BEVARD — 104309 — LICENSED — PROFESSIONAL ENGINEER
4.11.19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	DRO
CHECKED BY	SAP

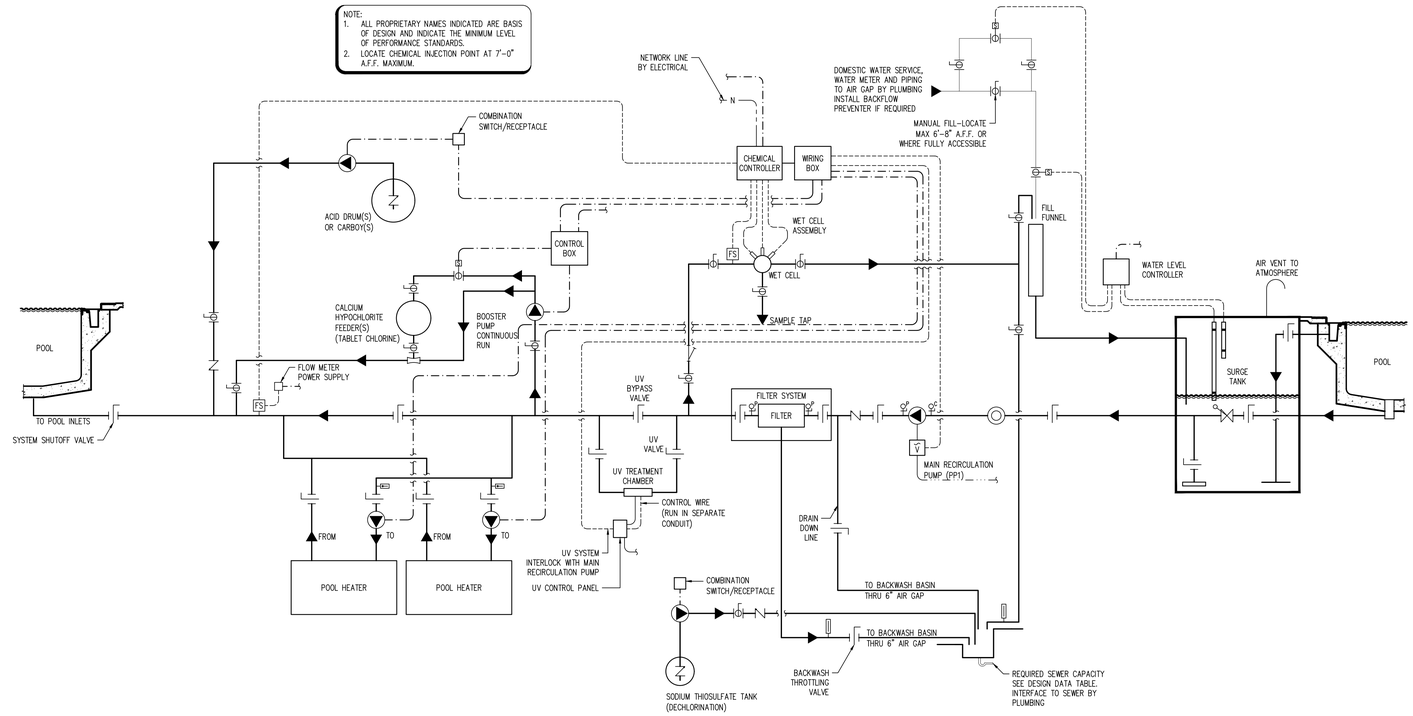
REVISIONS

No.	Description	Date

ISSUED FOR BIDS

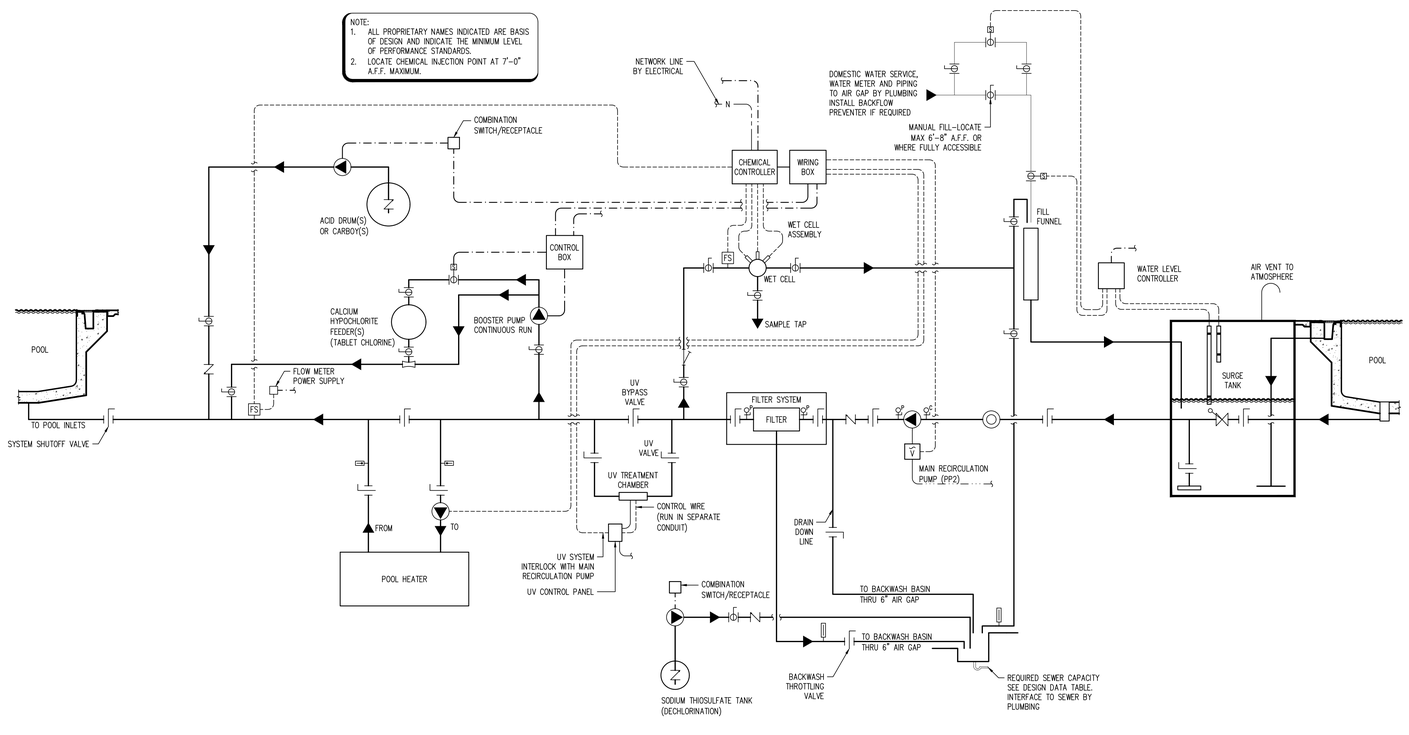
POOL MECHANICAL DETAILS

SP6.06



1 SP7.00 COMPETITION POOL SYSTEMS SCHEMATIC

NTS



2 SP7.00 TRAINING POOL SYSTEMS SCHEMATIC

NTS

SCHEMATIC LEGEND

LEGEND	ITEM
	FLOW DIRECTION
	BUTTERFLY VALVE
	BALL VALVE
	GATE VALVE
	MODULATING FLOAT VALVE
PRV	PRESSURE REDUCING VALVE
S	SOLENOID VALVE
	SWING GATE CHECK VALVE
	THREE WAY VALVE
	DUCK BILLED VALVE
	PUMP
	HAIR AND LINT STRAINER
	"Y" STRAINER
F	FLOW METER
FI	FLOW INTERLOCK
FS	FLOW SENSOR
	IMPACT FLOW METER
	VENTURI FLOW METER
W	WATER METER
AV	AUTOMATIC AIR VENT
MV	MANUAL AIR VENT
P	PRESSURE GAUGE AND COCK
C	COMPOUND GAUGE AND COCK
	DIGITAL TEMP SENSOR
	THERMOMETER
G	GEAR
A	PNEUMATIC ACTUATOR
S	SOLENOID
	POWER CORD
	FLOW CONTROL VALVE
V	VARIABLE FREQUENCY DRIVE
R	REMOTE START/STOP
E	EMERGENCY STOP
	LOW VOLTAGE CONTROL
	WATER LINE
	1 PHASE POWER
	3 PHASE POWER
	VENT LINE
	CO_2 LINE
N	NETWORK LINE

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	DRO
CHECKED BY	SAP

REVISIONS

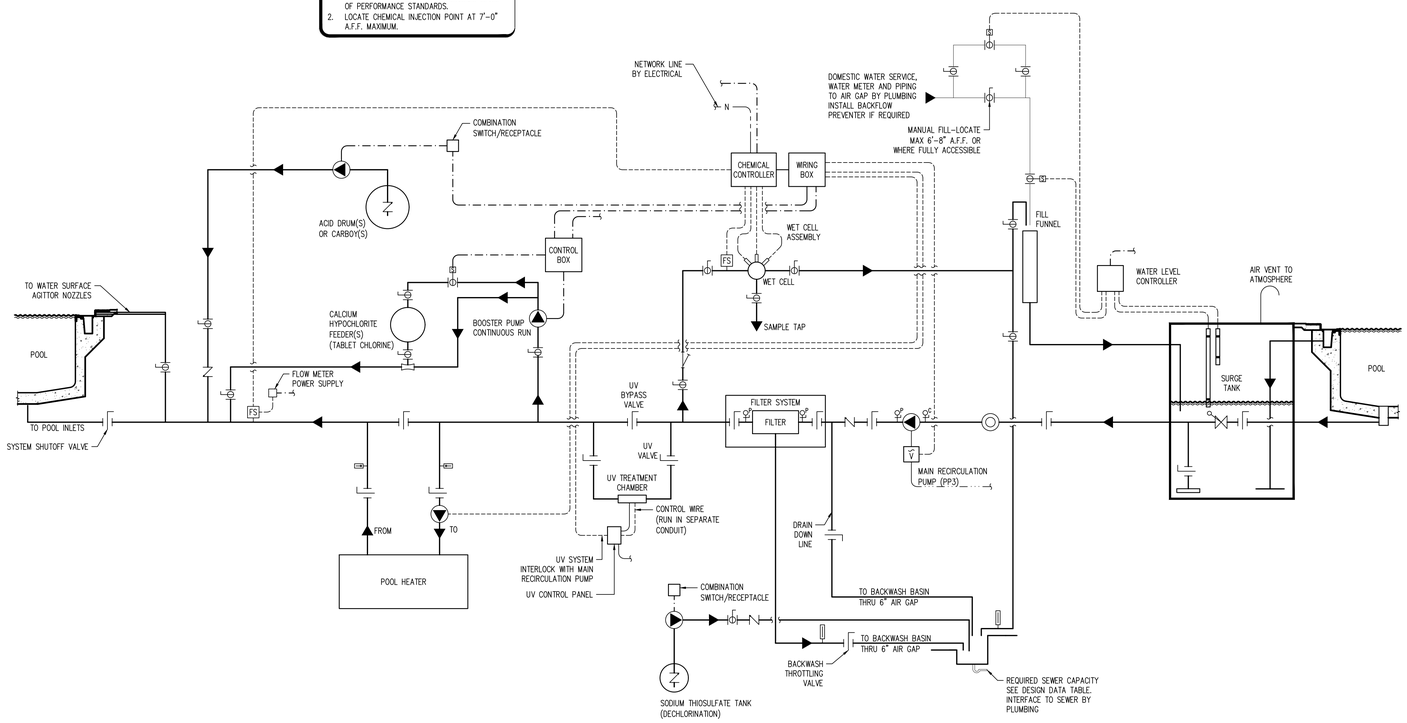
No.	Description	Date

ISSUED FOR BIDS

COMPETITION & TRAINING POOL SYSTEMS SCHEMATICS

SP7.00

NOTE:
1. ALL PROPRIETARY NAMES INDICATED ARE BASIS OF DESIGN AND INDICATE THE MINIMUM LEVEL OF PERFORMANCE STANDARDS.
2. LOCATE CHEMICAL INJECTION POINT AT 7'-0" A.F.F. MAXIMUM.



SCHEMATIC LEGEND

LEGEND	ITEM
	FLOW DIRECTION
	BUTTERFLY VALVE
	BALL VALVE
	GATE VALVE
	MODULATING FLOAT VALVE
PRV	PRESSURE REDUCING VALVE
S	SOLENOID VALVE
	SWING GATE CHECK VALVE
	THREE WAY VALVE
	DUCK BILLED VALVE
	PUMP
	HAIR AND LINT STRAINER
	"Y" STRAINER
F	FLOW METER
FI	FLOW INTERLOCK
FS	FLOW SENSOR
	IMPACT FLOW METER
	VENTURI FLOW METER
W	WATER METER
AV	AUTOMATIC AIR VENT
MV	MANUAL AIR VENT
P	PRESSURE GAUGE AND COCK
C	COMPOUND GAUGE AND COCK
	DIGITAL TEMP SENSOR
	THERMOMETER
G	GEAR
A	PNEUMATIC ACTUATOR
S	SOLENOID
	POWER CORD
	FLOW CONTROL VALVE
V	VARIABLE FREQUENCY DRIVE
R	REMOTE START/STOP
E	EMERGENCY STOP
	LOW VOLTAGE CONTROL
	WATER LINE
	1 PHASE POWER
	3 PHASE POWER
	VENT LINE
	CO_2 LINE
N	NETWORK LINE

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS
DARREN BEVARD
104309
LICENSED
PROFESSIONAL ENGINEER
4.11.19

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	DRO
CHECKED BY	SAP

REVISIONS

No.	Description	Date

ISSUED FOR BIDS

DIVE POOL SYSTEMS SCHEMATIC

SP7.01

1 / SP7.00 DIVE POOL SYSTEMS SCHEMATIC
NTS

1717 East 116th Street, Suite 200
Carmel, Indiana 46032

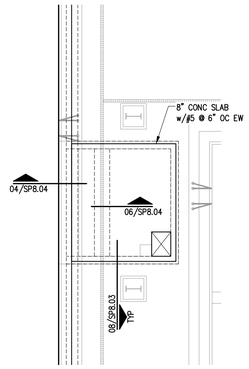
317-580-0402
www.mccomaseng.com
Project No: MEI 19060
Firm No: F-11404

McCOMAS ENGINEERING
Structural Engineers

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

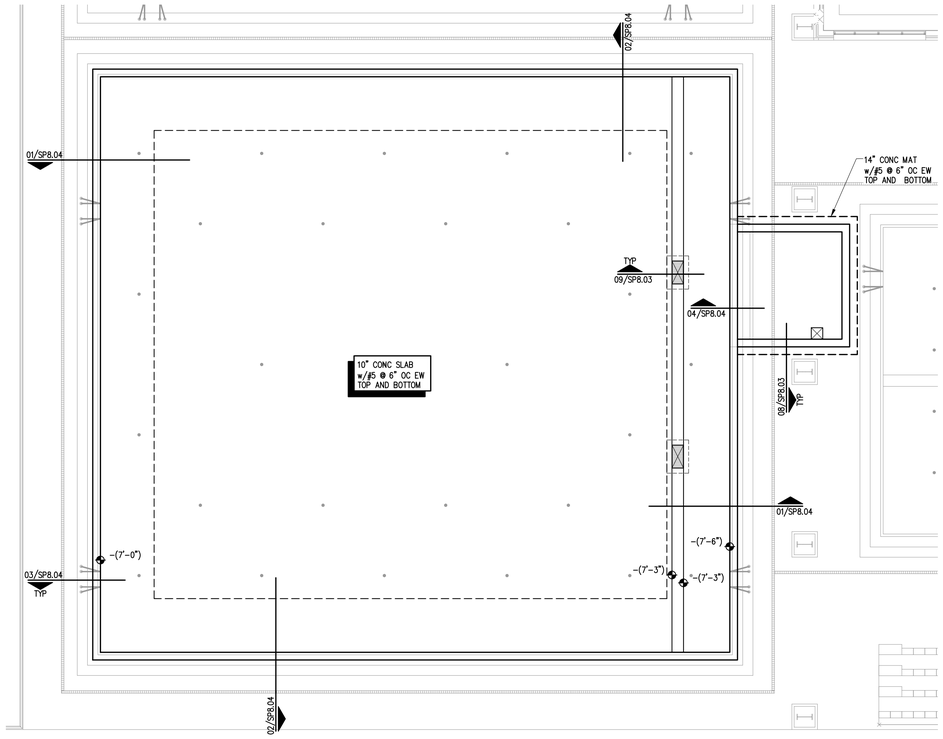
PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS



TOP SLAB PLAN

SCALE: 1/8" = 1'-0" 0 1 2 4 8 16'

PLAN NORTH



COMPETITION POOL STRUCTURAL PLAN

SCALE: 1/8" = 1'-0" 0 1 2 4 8 16'

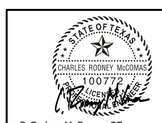
PLAN NORTH

PLAN NOTES:

1. WATER ELEVATION OF POOLS = +(0'-0"). SEE CIVIL DRAWINGS FOR CORRELATION TO ACTUAL SITE ELEVATION.
2. PROVIDE COMPACTED, FREE DRAINING FILL UNDER ALL POOL BOTTOM SLABS. SEE NOTE PF1 ON SHEET SP8.03.
3. PROVIDE ELECTRICAL GROUNDING FOR ALL REINFORCING AND EMBEDDED ITEMS, SEE ELECTRICAL DRAWINGS.
4. SEE SWIMMING POOL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN.
5. WALLS ARE TYPICALLY SHOWN ON PLAN AT FOUNDATION LEVEL. SEE DETAILS & COORDINATE WITH SWIMMING POOL DRAWINGS FOR ALL WALL DETAIL ABOVE BASE SLAB.
6. ELEVATIONS ARE GIVEN RELATIVE TO POOL WATER SURFACE, UNO. COORDINATE WITH SWIMMING POOL DRAWINGS.
7. ALL ELEVATIONS ARE TO POOL FINISH.

KEY PLAN

PLAN NORTH TRUE NORTH



C. Rodney McComas, PE
Registration No. 100772.
These documents are incomplete and for interim review only. They are not to be used for regulatory approval, permitting or construction.

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	LKM
CHECKED BY	CRM

REVISIONS

No.	Description	Date

ISSUED FOR BIDS

COMPETITION POOL STRUCTURAL PLAN

SP8.00

© 2019 COUNSILMAN • HUNSAKER

1717 East 116th Street, Suite 200
Carmel, Indiana 46032

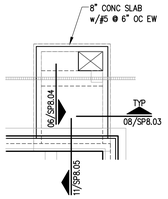
317-580-0402
www.mccomaseng.com
Project No: MEI 19060
Firm No: F-11404

McCOMAS ENGINEERING
Structural Engineers

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

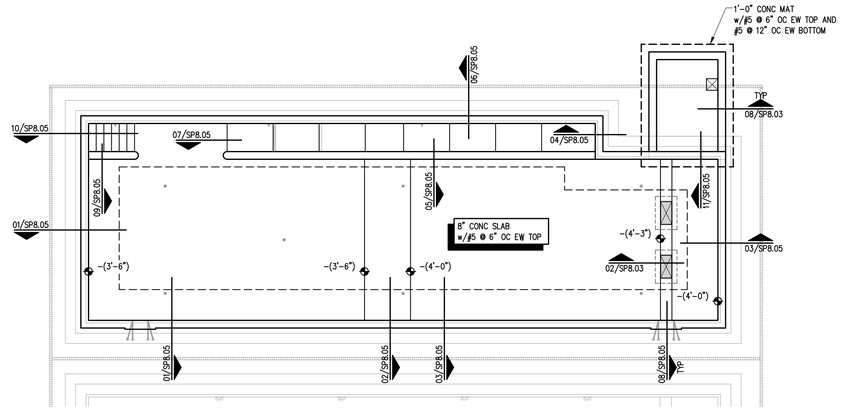
PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS



TOP SLAB PLAN

SCALE: 1/8" = 1'-0"

PLAN NORTH



TRAINING POOL STRUCTURAL PLAN

SCALE: 1/8" = 1'-0"

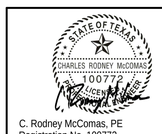
PLAN NORTH

PLAN NOTES:

1. WATER ELEVATION OF POOLS = +(0'-0"). SEE CIVIL DRAWINGS FOR CORRELATION TO ACTUAL SITE ELEVATION.
2. PROVIDE COMPACTED, FREE DRAINING FILL UNDER ALL POOL BOTTOM SLABS. SEE NOTE PF1 ON SHEET SP8.03.
3. PROVIDE ELECTRICAL GROUNDING FOR ALL REINFORCING AND EMBEDDED ITEMS, SEE ELECTRICAL DRAWINGS.
4. SEE SWIMMING POOL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN.
5. WALLS ARE TYPICALLY SHOWN ON PLAN AT FOUNDATION LEVEL. SEE DETAILS & COORDINATE WITH SWIMMING POOL DRAWINGS FOR ALL WALL DETAIL ABOVE BASE SLAB.
6. ELEVATIONS ARE GIVEN RELATIVE TO POOL WATER SURFACE, UNO. COORDINATE WITH SWIMMING POOL DRAWINGS.
7. ALL ELEVATIONS ARE TO POOL FINISH.

KEY PLAN

PLAN NORTH TRUE NORTH



C. Rodney McComas, PE
Registration No. 100772.
These documents are incomplete and for interim review only. They are not to be used for regulatory approval, permitting or construction.

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	LKM
CHECKED BY	CRM

REVISIONS

No.	Description	Date

ISSUED FOR BIDS

TRAINING POOL STRUCTURAL PLAN

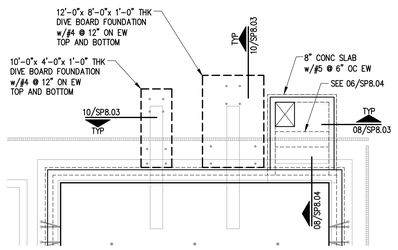
SP8.01

© 2019 COUNSILMAN • HUNSAKER

1717 East 116th Street, Suite 200
Carmel, Indiana 46032

317-580-0402
www.mccomaseng.com
Project No: MEI 19060
Firm No: F-11404

McCOMAS ENGINEERING
Structural Engineers

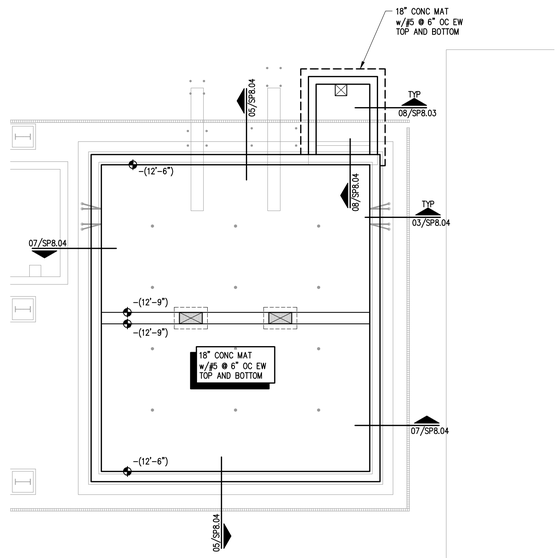


TOP SLAB PLAN

SCALE: 1/8" = 1'-0"

0' 1' 2' 4' 8' 16'

PLAN NORTH



DIVE POOL STRUCTURAL PLAN

SCALE: 1/8" = 1'-0"

0' 1' 2' 4' 8' 16'

PLAN NORTH

PLAN NOTES:

1. WATER ELEVATION OF POOLS = +(0'-0"). SEE CIVIL DRAWINGS FOR CORRELATION TO ACTUAL SITE ELEVATION.
2. PROVIDE COMPACTED, FREE DRAINING FILL UNDER ALL POOL BOTTOM SLABS. SEE NOTE PF1 ON SHEET SP8.03.
3. PROVIDE ELECTRICAL GROUNDING FOR ALL REINFORCING AND EMBEDDED ITEMS, SEE ELECTRICAL DRAWINGS.
4. SEE SWMMING POOL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN.
5. WALLS ARE TYPICALLY SHOWN ON PLAN AT FOUNDATION LEVEL. SEE DETAILS & COORDINATE WITH SWMMING POOL DRAWINGS FOR ALL WALL DETAIL ABOVE BASE SLAB.
6. ELEVATIONS ARE GIVEN RELATIVE TO POOL WATER SURFACE, UNO. COORDINATE WITH SWMMING POOL DRAWINGS.
7. ALL ELEVATIONS ARE TO POOL FINISH.

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN

PLAN NORTH TRUE NORTH

STATE OF TEXAS
CHARLES RODNEY McCOMAS
100772
LICENSED

C. Rodney McComas, PE
Registration No. 100772.
These documents are incomplete and for interim review only. They are not to be used for regulatory approval, permitting or construction.

CLIENT
PSJA ISD

PROJECT NUMBER
18309SP

DATE
04.11.19

DRAWN BY
LKM

CHECKED BY
CRM

REVISIONS

No.	Description	Date

ISSUED FOR BIDS

DIVE POOL STRUCTURAL PLAN

SP8.02

© 2019 Counsilman•Hunsaker

1717 East 116th Street, Suite 200
Carmel, Indiana 46032

317-580-0402
www.mccomaseng.com
Project No: MEI 19060
Firm No: F-11404

McCOMAS ENGINEERING
Structural Engineers

PBK Sports

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

ABBREVIATIONS LIST

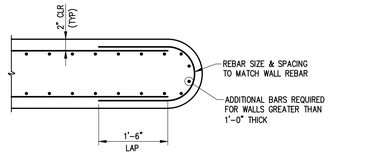
AR	ANCHOR RODS
ACI	AMERICAN CONCRETE INSTITUTE
ADD'L	ADDITIONAL
ADH	ADHESIVE
ADJ	ADJACENT
AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL
AFF	ABOVE FINISHED FLOOR
AGGR	AGGREGATE
AHU	AIR HANDLING UNIT
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ALUM	ALUMINUM
ALT	ALTERNATE
APA	AMERICAN PLYWOOD ASSOCIATION
APPROX	APPROXIMATE
ARCH	ARCHITECT
ASTM	AMERICAN SOCIETY OF TESTING MATERIALS
AWS	AMERICAN WELDING SOCIETY
L	ANGLE
BB	BOND BEAM
B/B	BACK TO BACK
BC	BOTTOM CHORD
BD	BOARD
BLDG	BUILDING
BLK	BLOCK
BM	BEAM
BOTT	BOTTOM
BP	BEARING PLATE
BRDG	BRIDGING
BRG	BEARING
BRK	BRICK
BS	BOTH SIDES
BSMT	BASEMENT
BTWN	BETWEEN
BUC	BUILT UP COLUMN
c	CAMBER
C/C	CENTER TO CENTER
CANT	CANTILEVER
CFS	COLD FORMED STEEL
CJ	CONTROL AND OR CONSTRUCTION JOINT
CL	CENTERLINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
COORD	COORDINATE
COMP	COMPACTED
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CTR	CENTER
CTRD	CENTERED
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DL	DEAD LOAD
DLT	DEEP LEG TRACK
DO	DITTO
DN	DOWN
DTL	DETAIL
DWG	DRAWING
DWL	DOWEL
EA	EACH
EE	EACH END
EF	EACH FACE
ENG	ENGINEER
ELEV	ELEVATION
ELECT	ELECTRICAL
EOD	EDGE OF DECK
EOS	EDGE OF SLAB
EQ	EQUAL
EQUIV	EQUIVALENT
ES	EACH SIDE
EW	EACH WAY
EX	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F/	FACE OF
FD	FLOOR DRAIN
FDN	FOUNDATION
FIN	FINISH
FLR	FLOOR
FLG	FLANGE
FS	FAR SIDE
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GC	GENERAL CONTRACTOR
GL	GLULAM
GR	GRADE
HC	HOLLOW CORE
HD	HOLD DOWN
HGT	HEIGHT
HORIZ	HORIZONTAL
HP	HIGH POINT
HS	HEADED STUD
HSS	HOLLOW STRUCTURAL SECTION
ID	INSIDE DIAMETER
IF	INSIDE FACE
INFO	INFORMATION
INT	INTERIOR
INV	INVERT
JST	JOIST
JT	JOINT
K	KIP
KO	KNOCK OUT
LB	POUND
LDG	LEDGE
LG	LONG
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LNTL	LINTEL
LSL	LONG SLOTTED HOLES
LONG	LONGITUDINAL
LP	LOW POINT
LVL	LAMINATED VENEER LUMBER
MAS	MASONRY
MAT'L	MATERIAL
MAX	MAXIMUM
MBM	METAL BUILDING MFR
MCJ	MASONRY CONTROL JT
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MOM	MOMENT
MSW	MASONRY SHEAR WALL
MSL	MEAN SEA LEVEL
MTL	METAL
MW	MASONRY WALL
NIC	NOT IN CONTRACT
NO	NUMBER
NS	NEAR SIDE
NTS	NOT TO SCALE
O/O	OUT TO OUT
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OH	OVER HEAD
OPNG	OPENING
OPP	OPPOSITE
OPP HD	OPPOSITE HAND
OSB	ORIENTED STRAND BOARD
OSL	OUTSTANDING LEG
OVS	OVERSIZE HOLE
PAF	POWDER ACTUATED FASTENER
PC	PRECAST
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PLYWD	PLYWOOD
PNL	PANEL
PROJ	PROJECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED
PTN	PARTITION
PVMT	PAVEMENT
QTY	QUANTITY
R	RADIUS
RD	ROOF DRAIN
REF	REFERENCE
REINF	REINFORCE(D)(ING)(MENT)
REQ'D	REQUIRED
REV	REVISION/REVISED
RO	ROUGH OPENING
RRD	ROOF RELIEF DRAIN
RTN	RETURN
RTU	ROOF TOP UNIT
RW	RETAINING WALL
SCHED	SCHEDULE
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SJ	SAWCUT JOINT
SJI	STEEL JOIST INSTITUTE
SL	SLOPED
SLRS	SEISMIC LOAD RESISTING SYSTEM
SPA	SPACE(S)
SPECS	SPECIFICATIONS
SQ	SQUARE
SS	STAINLESS STEEL
SSL	SHORT SLOTTED HOLES
STD	STANDARD
STIFF	STIFFENERS
STL	STEEL
STRUCT	STRUCTURAL
SW	SHEAR WALL
SYMM	SYMMETRICAL
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TB	TIE BEAM
TC	TOP CHORD
TEMP	TEMPERATURE
TF	TRENCH FOOTING
THK	THICK
THKS	THICKENED SLAB
THR'D	THREADED
TL	TOTAL LOAD
TOP'G	TOPPING
TRANS	TRANSVERSE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VIF	VERIFY IN FIELD
w/	WITH
WD	WOOD
WO	WINDOW OPENING
WP	WORKING POINT
WT	WEIGHT
WWF	WELDED WIRE FABRIC

ELEVATION TOP AND BOTTOM OF LIST

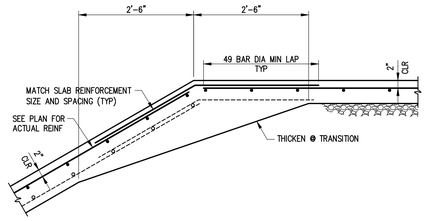
T/	ELEVATION, TOP OF
B/	ELEVATION, BOTTOM OF
T/BB	TOP OF BOND BEAM
T/BM	TOP OF BEAM
T/CONC	TOP OF CONCRETE
T/F	TOP OF FOOTING
T/LDG	TOP OF LEDGE
T/MAS	TOP OF MASONRY
T/P	TOP OF PIER
T/SLAB	TOP OF SLAB
T/STL	TOP OF STEEL
T/W	TOP OF WALL
T/GB	TOP OF GRADE BEAM
T/CAIS	TOP OF CAISSON
B/PL	BOTTOM OF PLATE
B/F	BOTTOM OF FOOTING

SYMBOLS

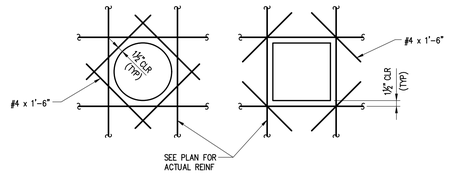
ø	DIAMETER
°	DEGREE
◆	ELEVATION
±	PLUS OR MINUS



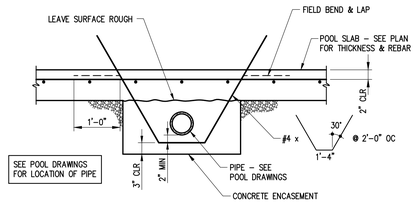
TYP WALL TERMINATION DETAIL
SCALE: ¾" = 1'-0" POOL-014 11 SP8.03



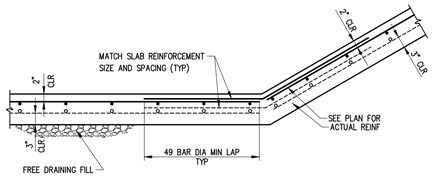
TYPICAL BOTTOM SLAB TRANSITION DETAIL
SCALE: ¾" = 1'-0" POOL-008 06 SP8.03



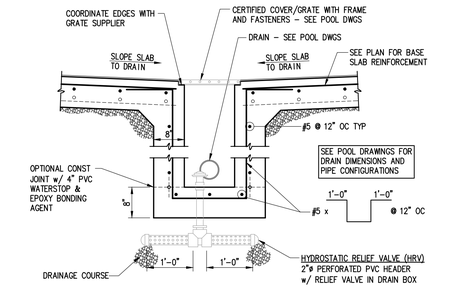
TYP REINFORCING AT EMBEDDED ITEMS
SCALE: NTS POOL-001 01 SP8.03



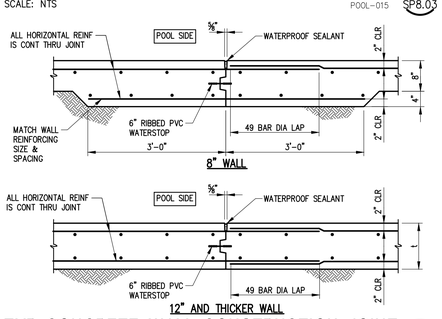
TYP PIPE ENCASEMENT DETAIL
SCALE: NTS POOL-015 12 SP8.03



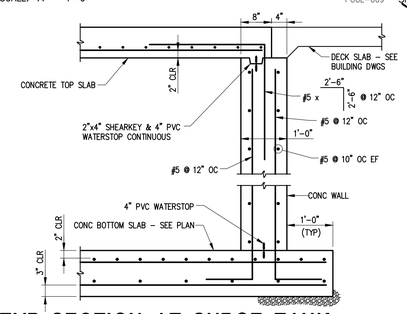
TYP BOTTOM SLAB TRANSITION DETAIL
SCALE: ¾" = 1'-0" POOL-009 07 SP8.03



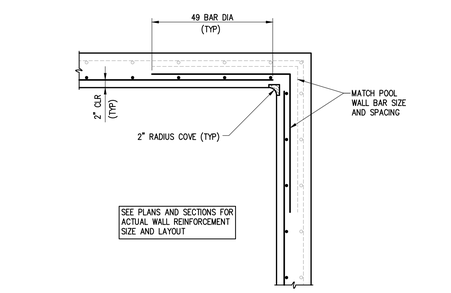
TYPICAL DRAIN BOX DETAIL
SCALE: ¾" = 1'-0" POOL-002 02 SP8.03



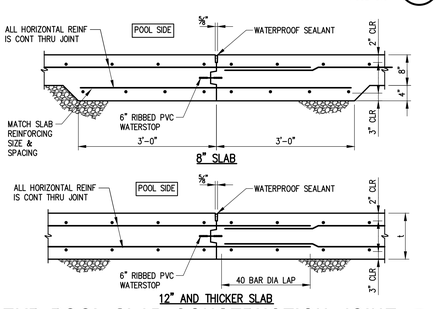
TYP CONCRETE WALL CONSTRUCTION JOINT
SCALE: ¾" = 1'-0" POOL-016 13 SP8.03



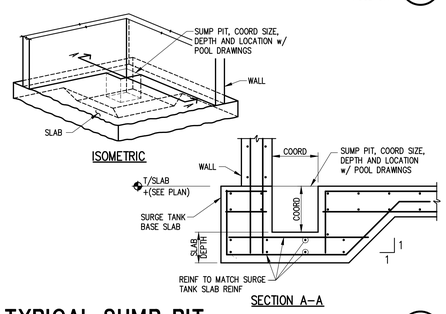
TYP SECTION AT SURGE TANK
SCALE: ¾" = 1'-0" POOL-011 08 SP8.03



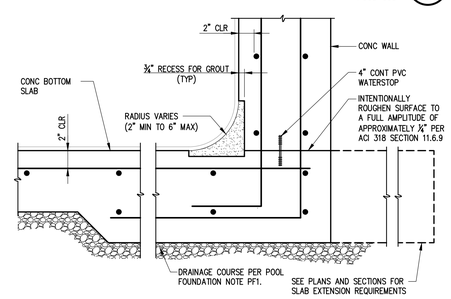
TYPICAL POOL WALL CORNER DETAIL
SCALE: ¾" = 1'-0" POOL-003 03 SP8.03



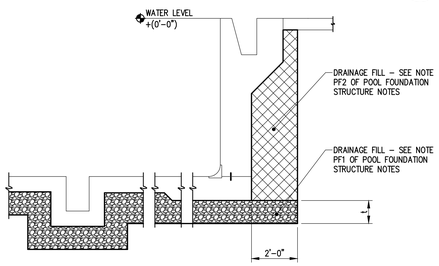
TYP POOL SLAB CONSTRUCTION JOINT
SCALE: NTS POOL-017 14 SP8.03



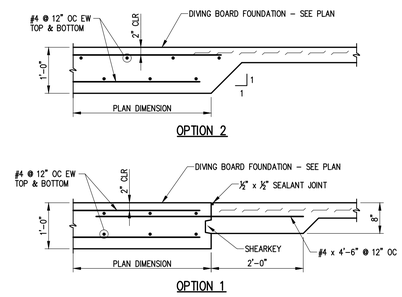
TYPICAL SUMP PIT
SCALE: NTS POOL-012 09 SP8.03



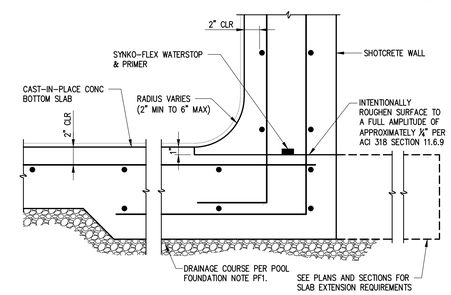
TYP CAST-IN-PLACE WALL BASE
SCALE: 1½" = 1'-0" POOL-004 04 SP8.03



TYPICAL POOL FILL
SCALE: NTS POOL-025_POOL FILL 15 SP8.03



SECTION
SCALE: ¾" = 1'-0" POOL-013 10 SP8.03



TYP SHOTCRETE WALL BASE
SCALE: 1½" = 1'-0" POOL-006 05 SP8.03

SWIMMING POOL STRUCTURE NOTES

PG1. Building Codes:
Model: International Building Code 2012
Concrete: American Concrete Institute ACI 318-11
American Concrete Institute ACI 350-06

PG2. The construction documents indicate design of a completed reinforced concrete structure. The structural details have been prepared based on cast-in-place concrete methods. If alternate means and methods of concrete placement are employed that may alter the completed project, the contractor must submit proposed revisions and signed/sealed calculations to the Architect/Engineer for approval prior to fabrication or construction.

PG3. The pool structure has been designed to withstand all anticipated loadings under both full and empty conditions in accordance with the criteria of ACI 350 for a non-jointed structure.

PG4. During construction the pool structure should not be completely filled with water with no backfill present. If the pool is to be filled with water with no backfill, all walls greater than 6'-0" in height must be laterally braced at maximum intervals of 2'-0" on center. Lateral bracing shall be placed within 2'-0" of the top of the wall.

PG5. The pool shell has not been designed to withstand any surcharge loading from adjacent structures. Inform engineer immediately if adjacent structures are close to the pool structure.

HYRDOSTATIC RELIEF VALVES

HV1. HRV = Hydrostatic Relief Valve.

HV2. The hydrostatic relief valves are part of the pool shell design, and are intended to balance buoyant forces caused by groundwater that is higher than the pool bottom when the pool is empty. The hydrostatic relief valves must remain open and in operation whenever the pool is empty. If the hydrostatic relief valves are not operational, significant deflection of and damage to the pool shell structure is possible. Contractor is responsible for control of groundwater levels during construction. Refer to the project geotechnical report for additional information.

POOL SHELL AND RELATED ELEMENTS REINFORCED CONCRETE AND SHOTCRETE NOTES

PC1. Pool base slab shall be cast-in-place concrete. Pool walls shall be either cast-in-place concrete or shotcrete (wet-mix or dry-mix).

PC2. All concrete and shotcrete shall be 4000 psi minimum 28 day compressive strength with 6% air entrainment. Limit water to cementitious material ratio (w/c) to 0.42.

PC3. All reinforcing steel shall be detailed, supplied and placed in accordance with these construction documents and with ACI 318-05, ACI 315-05, and CRSI MSP-1-01.

PC4. All reinforcing steel shall be shop fabricated to conform to ASTM A615, Grade 60.

PC5. All pool concrete shall be wet-cured using hoses and polyethylene covering.

PC6. Reinforcing clearance: 2" Pool walls, surge tank walls
2" Pool bottom slabs, surge tank slabs
3" All surfaces cast or shot against earth

PC7. When placing shotcrete against existing soil, overlay soil in contact with shotcrete with minimum 10 mil thick plastic sheeting prior to shooting.

PC8. Formwork may be required for shotcrete based on base of wall configurations and wall backfill requirements. Coordinate requirements with pool structural sections and project geotechnical report.

PC9. Fully encase all underslab piping in concrete unless noted otherwise.

CONSTRUCTION LOAD NOTES

CL1. All pool structural elements have not been designed for any construction loading, including, but not limited to scaffolding, shoring, lifts, etc. It is the responsibility of the contractor to verify the pool structural elements are capable of withstanding construction loads without damage to the pool structural elements, or, performance of the in-service pool.

WATER-TIGHTNESS TESTING

WT1. Water-tightness testing per American Concrete Institute is required. See specifications.

POOL FOUNDATION STRUCTURE

PF1. All Slabs shall be placed on compacted, free-draining, frost-free drainage course:
Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and 0 to 5 percent passing a No. 8 sieve. All fill shall be compacted to a minimum dry density of 95% of the Modified Proctor maximum dry density (ASTM-D1557), placed in 6" to 8" lifts. Place Mirafi 140N or equivalent between drainage fill and subgrade. See project geotechnical report for further recommendations.

Drainage Course Thickness (t): 24" For water depths of 0'-0" to 3'-0"
24" For water depths greater than 3'-0"
24" For Surge Tank

PF2. All pool walls shall be backfilled with compacted, free-draining, frost-free drainage fill:
Drainage Fill: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and 0 to 5 percent passing a No. 8 sieve. All fill shall be compacted to a minimum dry density of 95% of the Modified Proctor maximum dry density (ASTM-D1557), placed in 6" to 8" lifts. Place Mirafi 140N or equivalent between drainage fill and subgrade. See project geotechnical report for further recommendations.

PF3. See project geotechnical for soil and groundwater conditions. Soil parameters listed below have been used for design of the pool structure. During construction, report any discrepancies in soil conditions to the Engineer of Record immediately.

Geotechincal report by:	Terracon, Project No. 88185143 and Project No. 88185144
Support Type:	Soil-supported
Density:	120 pcf
Equivalent Fluid Pressure:	50 psf/ft depth (active)
Passive Pressure:	300 psf/ft depth
Groundwater:	None
Differential Settlement:	1/2"
Total Settlement:	1"
Allowable Bearing Pressure:	2500 psf

BAR DEVELOPMENT & SPLICE LENGTHS

BAR	TENSION DEVELOPMENT		SPLICES	
	TOP BAR *	OTHER	TOP BAR *	OTHER
#3	19"	15"	25"	19"
#4	25"	19"	33"	25"
#5	31"	24"	41"	31"
#6	37"	29"	49"	37"
#7	54"	42"	71"	54"
#8	62"	48"	81"	62"
#9	70"	54"	91"	70"
#10	79"	61"	102"	79"
#11	87"	67"	114"	87"

* USE TOP BAR LENGTHS WHEN BARS ARE PLACED SUCH THAT THERE IS MORE THAN 1'-0" OF CONCRETE BELOW BAR

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS — CHARLES RODNEY McCOMAS — 100772 — LICENSED

C. Rodney McComas, PE
Registration No. 100772.
These documents are incomplete and for interim review only. They are not to be used for regulatory approval, permitting or construction.

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	LKM
CHECKED BY	CRM

REVISIONS

No.	Description	Date

ISSUED FOR BIDS

POOL STRUCTURAL DETIALS

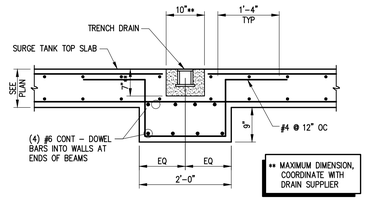
SP8.03

© 2019 COUNSILMAN • HUNSAKER

1717 East 116th Street, Suite 200
Carmel, Indiana 46032

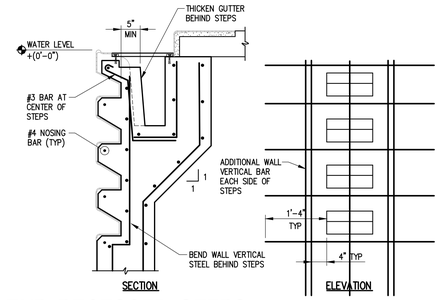
317-580-0402
www.mccomaseng.com
Project No: MEI 19060
Firm No: F-11404

McCOMAS ENGINEERING
Structural Engineers



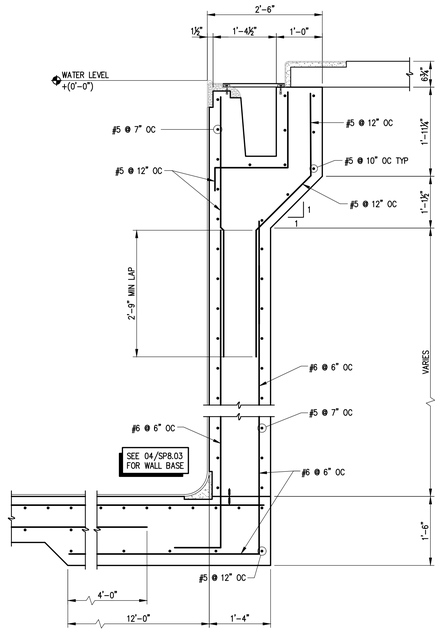
TRENCH DRAIN AT SURGE TANK LID

SCALE: ¾" = 1'-0" DET015_19060 06 SP8.04



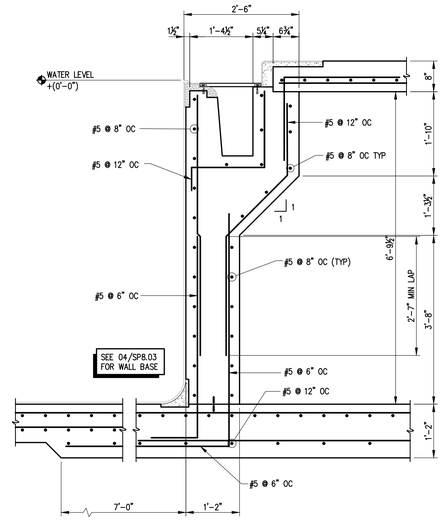
TYP RECESSED STEPS

SCALE: ¾" = 1'-0" DET001_19060 03 SP8.04



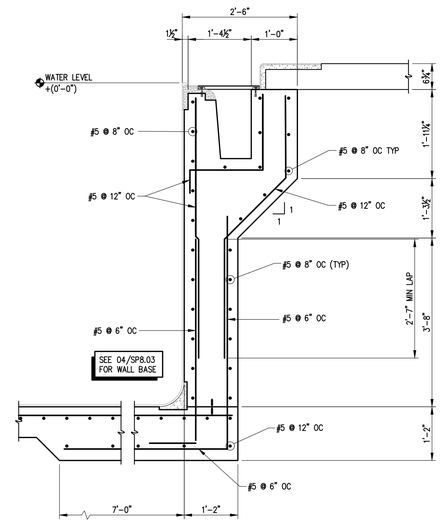
SECTION

SCALE: ¾" = 1'-0" DET050_19060 07 SP8.04



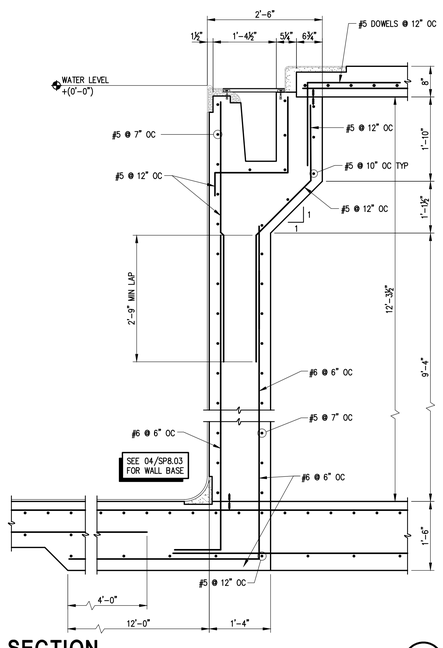
SECTION

SCALE: ¾" = 1'-0" DET007_19060 04 SP8.04



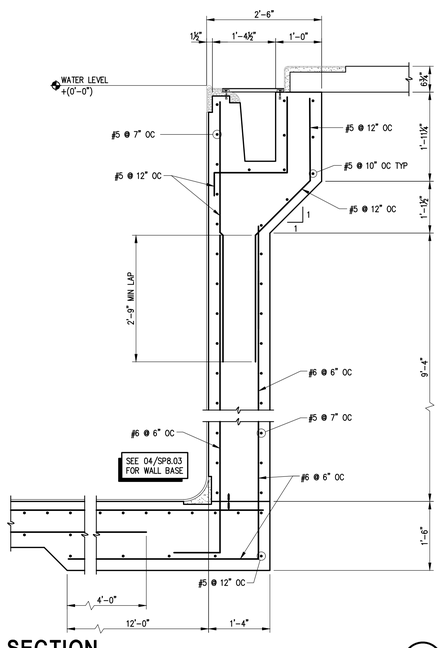
SECTION

SCALE: ¾" = 1'-0" DET009_19060 01 SP8.04



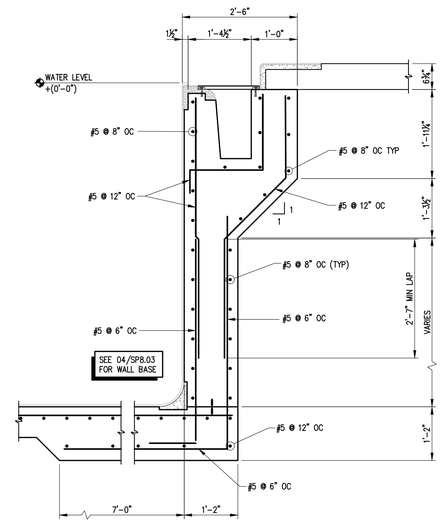
SECTION

SCALE: ¾" = 1'-0" DET052_19060 08 SP8.04



SECTION

SCALE: ¾" = 1'-0" DET051_19060 05 SP8.04



SECTION

SCALE: ¾" = 1'-0" DET013_19060 02 SP8.04

© 2019 COUNSILMAN•HUNSAKER

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN — PLAN NORTH — TRUE NORTH

STATE OF TEXAS — CHARLES RODNEY McCOMAS — 100772 — LICENSED

C. Rodney McComas, PE
Registration No. 100772.
These documents are incomplete and for interim review only. They are not to be used for regulatory approval, permitting or construction.

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	LKM
CHECKED BY	CRM

REVISIONS

No.	Description	Date

ISSUED FOR BIDS

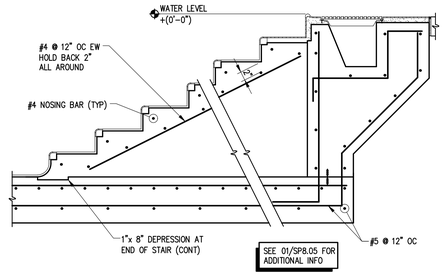
POOL STRUCTURAL SECTIONS

SP8.04

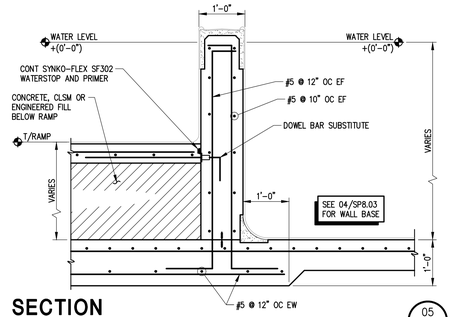
1717 East 116th Street, Suite 200
Carmel, Indiana 46032

317-580-0402
www.mccomaseng.com
Project No: MEI 19060
Firm No: F-11404

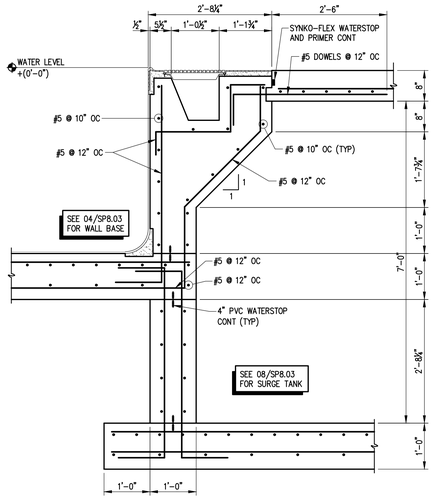
McCOMAS ENGINEERING
Structural Engineers



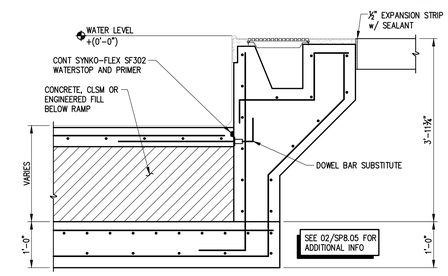
SECTION 10/SP8.05
SCALE: ¾" = 1'-0"
DET011_19060



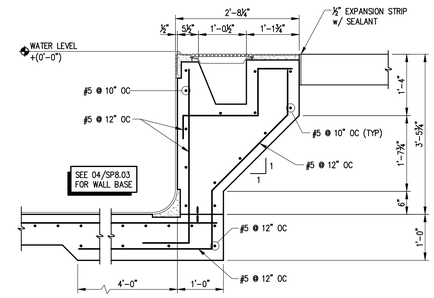
SECTION 05/SP8.05
SCALE: ¾" = 1'-0"
DET006_19060



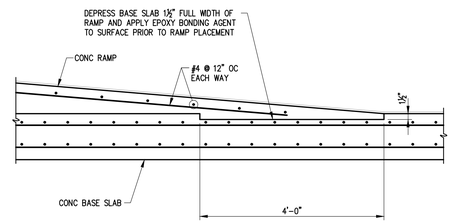
SECTION 11/SP8.05
SCALE: ¾" = 1'-0"
DET004_19060



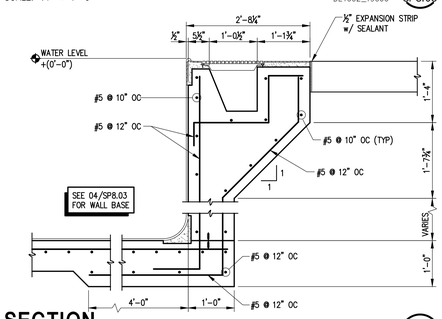
SECTION 06/SP8.05
SCALE: ¾" = 1'-0"
DET012_19060



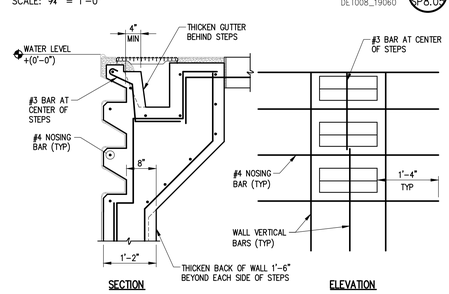
SECTION 01/SP8.05
SCALE: ¾" = 1'-0"
DET002_19060



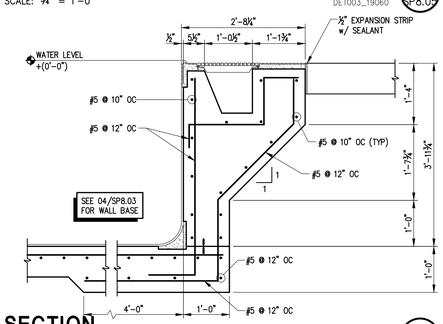
SECTION 07/SP8.05
SCALE: ¾" = 1'-0"
DET008_19060



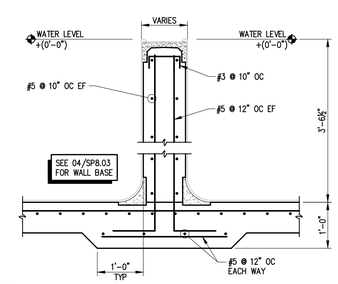
SECTION 02/SP8.05
SCALE: ¾" = 1'-0"
DET003_19060



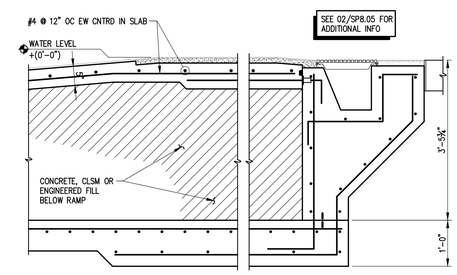
SECTION AT RECESSED STEPS 08/SP8.05
SCALE: ¾" = 1'-0"
DET020_19060



SECTION 03/SP8.05
SCALE: ¾" = 1'-0"
DET030_19060



SECTION 09/SP8.05
SCALE: ¾" = 1'-0"
DET010_17195



SECTION 04/SP8.05
SCALE: ¾" = 1'-0"
DET005_19060

PBK Sports
11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608 P
713-961-4571 F
TX Firm: F-3709
PBK.com

PSJA ISD NEW SWIMMING FACILITIES
SAN JUAN, TEXAS
ALAMO, TEXAS

KEY PLAN
PLAN NORTH
TRUE NORTH

STATE OF TEXAS
CHARLES RODNEY McCOMAS
100772
LICENSED

C. Rodney McComas, PE
Registration No. 100772.
These documents are incomplete and for interim review only. They are not to be used for regulatory approval, permitting or construction.

CLIENT	PSJA ISD
PROJECT NUMBER	18309SP
DATE	04.11.19
DRAWN BY	LKM
CHECKED BY	CRM

REVISIONS

No.	Description	Date

ISSUED FOR BIDS

POOL STRUCTURAL SECTIONS

SP8.05

© 2019 Counsilman•Hunsaker