HISTORIC AND DESIGN REVIEW COMMISSION

March 20, 2019

HDRC CASE NO:	**2019-105**
COMMON NAME:	Father Albert Benavides Park
ADDRESS:	1502 SALTILLO ST
LEGAL DESCRIPTION:	NCB 3689 BLK 26 LOT 108 FATHER ALBERT BENAVIDES PARK
ZONING:	MF-33
CITY COUNCIL DIST.:	5
APPLICANT:	Mark Padilla/MP Studio
OWNER:	City of San Antonio
TYPE OF WORK:	Park improvements
APPLICATION RECEIVED:	March 01, 2019
60-DAY REVIEW:	April 30, 2019
CASE MANAGER:	Adam Rajper

REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to carry out various park improvements, including the construction of a splash pad water feature in an open space along the existing park walk.

APPLICABLE CITATIONS:

UDC Sec. 35-641. - Design Considerations for Historic and Design Review Commission Recommendations.
In reviewing an application, the historic and design review commission shall be aware of the importance of attempting to find a way to meet the current needs of the City of San Antonio, lessee or licensee of public property. The historic and design review commission shall also recognize the importance of recommending approval of plans that will be reasonable to implement. The best urban design standards possible can and should be employed with public property including buildings and facilities, parks and open spaces, and the public right-of-way. Design and construction on public property should employ such standards because the use of public monies for design and construction is a public trust. Public commitment to quality design should encourage better design by the private sector. Finally, using such design standards for public property improves the identity and the quality of life of the surrounding neighborhoods.

UDC Sec 35-642. – New Construction of Buildings and Facilities:
In considering whether to recommend approval or disapproval of a certificate, the historic and design review commission shall be guided by the following design considerations. These are not intended to restrict imagination, innovation or variety, but rather to assist in focusing on design principles, which can result in creative solutions that will enhance the city and its neighborhoods. Good and original design solutions that meet the individual requirements of a specific site or neighborhood are encouraged and welcomed.
(a) Site and Setting.
(1) Building sites should be planned to take into consideration existing natural climatic and topographical features. The intrusive leveling of the site should be avoided. Climatic factors such as sun, wind, and temperature should become an integral part of the design to encourage design of site-specific facilities which reinforces the individual identity of a neighborhood and promotes energy efficient facilities.
(2) Special consideration should be given to maintain existing urban design characteristics, such as setbacks, building heights, streetscapes, pedestrian movement, and traffic flow. Building placement should enhance or create focal points and views. Continuity of scale and orientation shall be emphasized.
(3) Accessibility from streets should be designed to accommodate safe pedestrian movement as well as vehicular traffic. Where possible, parking areas should be screened from view from the public right-of-way by attractive fences, berms, plantings or other means.
(4) Historically significant aspects of the site shall be identified and if possible incorporated into the site design. Historic relationships between buildings, such as plazas or open spaces, boulevards or axial relationships should be maintained.
(b) Building Design.
(1) Buildings for the public should maintain the highest quality standards of design integrity. They should elicit a pride of ownership for all citizens. Public buildings should reflect the unique and diverse character of San Antonio and should be responsive to the time and place in which they were constructed.

(2) Buildings shall be in scale with their adjoining surroundings and shall be in harmonious conformance to the identifying quality and characteristics of the neighborhood. They shall be compatible in design, style and materials. Reproductions of styles and designs from a different time period are not encouraged, consistent with the secretary of the interior's standards. Major horizontal and vertical elements in adjoining sites should be respected.
(3) Materials shall be suitable to the type of building and design in which they are used. They shall be durable and easily maintained. Materials and designs at pedestrian level shall be at human scale, that is they shall be designed to be understood and appreciated by someone on foot. Materials should be selected that respect the historic character of the surrounding area in texture, size and color.
(4) Building components such as doors, windows, overhangs, awnings, roof shapes and decorative elements shall all be designed to contribute to the proportions and scale of their surrounding context. Established mass/void relationships shall be maintained. Patterns and rhythms in the streetscape shall be continued.
(5) Colors shall be harmonious with the surrounding environment, but should not be dull. Choice of color should reflect the local and regional character. Nearby historic colors shall be respected.
(6) Mechanical equipment or other utility hardware should be screened from public view with materials compatible with the building design. Where possible, rooftop mechanical equipment should be screened, even from above. Where feasible, overhead utilities should also be underground or attractively screened. Exterior lighting shall be an integral part of the design. Interior lighting shall be controlled so that the spillover lighting onto public walkways is not annoying to pedestrians.
(7) Signs which are out of keeping with the character of the environment in question should not be used. Excessive size and inappropriate placement on buildings results in visual clutter. Signs should be designed to relate harmoniously to exterior building materials and colors. Signs should express a simple clear message with wording kept to a minimum.
(8) Auxiliary design. The site should take into account the compatibility of landscaping, parking facilities, utility and service areas, walkways and appurtenances. These should be designed with the overall environment in mind and should be in visual keeping with related buildings, structures and places.

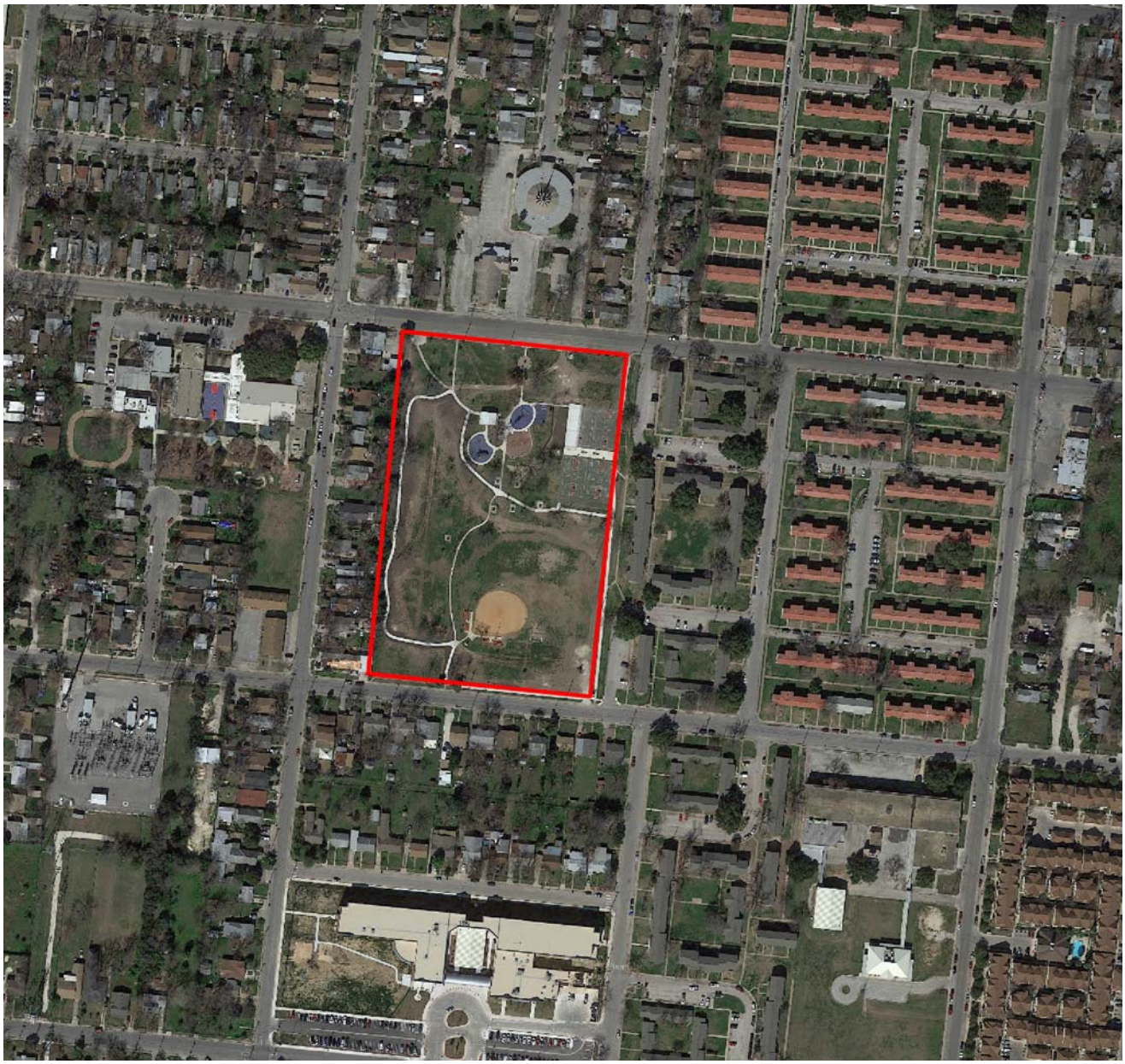
FINDINGS:

a. The property located at 1502 Saltillo is a public park with the common name of Father Albert Benavides Park and is situated to the southwest of Downtown. The applicant is requesting approval for various park improvements.
b. PARK IMPROVEMENTS – The applicant has proposed various park improvements, including the construction of a splash pad water feature in an open space along the existing park walk. Staff finds the proposal consistent with the UDC.
c. ARCHAEOLOGY – The project shall comply with all federal, state, and local laws, rules, and regulations regarding archaeology.

RECOMMENDATION:

Staff recommends approval based on findings a through c with the following stipulation:

i. ARCHAEOLOGY – The project shall comply with all federal, state, and local laws, rules, and regulations regarding archaeology.



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Flex Viewer

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Printed:Mar 12, 2019


St Timothy Catholic Church
Caty's togo tacos Mexican Restraunt
Good Samaritan Center
Templo Monte De Cion
Father Albert Benavides Park
Saltillo St
Merida St
Hazel St
Wacker Way
Noonan Way
Goolsby Way
San Nicolas St
San Lino St
Brewer Academy
HyAt
Cinderella B
SW 19th St
SW 18th St
Spruce
Arizona
Click Ln

BENAVIDES PARK

New splash pad to be installed in the open area along the pathway

2017-2022 BOND PROGRAM
COSA DISTRICT 5 PARKS
FATHER ALBERT BENAVIDES PARK
San Antonio, Texas
Sitework / Electrical

INDEX OF SHEETS

A PROJECT BY

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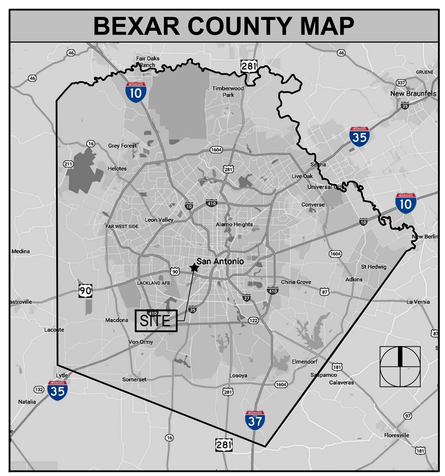
SUBCONSULTANT

City of San Antonio, Texas
Parks & Recreation Department
DISTRICT 5 PARKS
Father Albert Benavides Park
1502 SALTILLO ST,
SAN ANTONIO, TX 78207

BEXAR COUNTY MAP



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STATUS

REGISTERED LANDSCAPE ARCHITECT · MARK PADILLA · 2533 · STATE OF TEXAS

02/11/2019

PROJECT

BENAVIDES PARK
COSA DISTRICT 5 PARK

PROJECT ADDRESS
1502 SALTILLO STREET
SAN ANTONIO, TX 78207

OWNER | CLIENT
TCI - CITY OF SAN ANTONIO
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REVISIONS

NO.	DATE	DESCRIPTION

ISSUE SETS

NO.	DATE	DESCRIPTION
1	12.12.18	100% CD SET

SHEET INFORMATION

PROJECT NO.
18001

DATE ISSUED
FEBRUARY 11, 2019

SHEET NAME
LANDSCAPE COVER SHEET

SHEET NUMBER
LC 1.0

GENERAL LEGEND

ABBREVIATIONS

SYMBOL	DESCRIPTION
AD	AREA DRAIN
BC	BOTTOM OF CURB
BOC	BACK OF CURB
BW	BOTTOM OF WALL
CL	CENTER LINE
ESMT	EASEMENT
EOP	EDGE OF PAVEMENT
EJ	EXPANSION JOINT
FOC	FACE OF CURB
FFE	FINISH FLOOR ELEVATION
FH	FIRE HYDRANT
HP	HIGH POINT
INV	INVERT OF PIPE
L.O.C.	LIMITS OF CONSTRUCTION
N.I.C.	NOT IN CONTRACT
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OHE	OVERHEAD ELECTRIC
PD	PLANTER DRAIN
PA	PLANTING AREA
PP	POWER POLE
POB	POINT OF BEGINNING
R.O.W.	RIGHT OF WAY
TAN	POINT OF TANGENCY
SD	STORM DRAIN
SS	SANITARY SEWER
TD	TOP OF DRAIN
TPC	TOP OF POOL COPING
TC	TOP OF CURB
TF	TOP OF FOOTING
TW	TOP OF WALL
UGE	UNDERGROUND ELECTRIC
U.N.O.	UNLESS NOTED OTHERWISE
WD	WATER DEPTH
WL	WATER LEVEL

SYMBOLS & LINE TYPES

SYMBOL	DESCRIPTION
REF:	ENLARGEMENT AREA W/ CALLOUT
X / LS.X.X	DETAIL CALLOUT
X.X | XXX	MATERIALS & FINISHES CALLOUT
1 / LS2.X	SECTION CALLOUT
1 / LS2.X	ELEVATION CALLOUT
XXXXX	SITEWORK LABEL
QTY-XXX	PLANTING LABEL
XXX	EXISTING TOPOGRAPHY - MINOR
XXX	EXISTING TOPOGRAPHY - MAJOR
XXX	PROPOSED TOPOGRAPHY - MINOR
XXX	PROPOSED TOPOGRAPHY - MAJOR
XXX.XX	PROPOSED SPOT ELEVATION
T.O. XXXX / XXXX.XX	PROPOSED DATUM ELEVATION
X"	PIPE SIZE
	WATER FLOW / SWALE DIRECTION
M	ELECTRICAL METER
J	JUNCTION BOX
	CONDUIT
	HOME RUN
	SIGN LIGHT
	TREE OR SIGN BULLET UPLIGHT
	POLE LIGHT
	GFI ELECTRICAL OUTLET

MATERIALS SCHEDULE

SITE MATERIALS

KEY	DESCRIPTION / MODEL NUMBER	COLOR	FINISH	SOURCE	REMARKS
S.1	SAFETY SIGN	AQUA BLUE	STANDARD	LOCAL SOURCE	• CONTRACTOR TO REFERENCE SIGN DETAIL 1/ LS 2.1 AND PROVIDE SAMPLE FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION
S.2	SPLASH PAD BY KRAFTSMAN COMMERCIAL PLAYGROUNDS & WATER PARKS	REF. KRAFTSMAN SPECIFICATIONS	REF. KRAFTSMAN SPECIFICATIONS	CONTACT: RAMON GARZA COMPANY: KRAFTSMAN PHONE: 281.353.9599 EMAIL:RamonG@kraftsmanplay.com	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • KRAFTSMAN TO PROVIDE ALL NECESSARY DRAWGINS & CUTSHEETS FOR SPLASH PAD & MECHANICAL EQUIPMENT
S.3	BERMUDA HYDROSEED CYNODON DACTYLON	STANDARD	STANDARD	LOCAL SOURCE	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • SEEDS 2 LBS./ 1,000 SQ.FT. CONTRACTOR TO FIELD VERIFY QUALITY OF LAWN REQUIRED

GENERAL NOTES:

1.) LOCATE AND VERIFY THE CONDITION OF EXISTING UTILITIES PRIOR TO EXCAVATION. TAKE RESPONSIBILITY OF CONTACTING LINE LOCATION SERVICES AND ANY COST INCURRED FOR BODILY INJURY AND / OR DAMAGE OF OWNER'S PROPERTY OR SAID UTILITIES.

2.) THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED BY THE CONTRACTOR OF ANY DISCREPANCIES DISCOVERED BETWEEN THE PLANS AND ACTUAL SITE CONDITIONS BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE LIABLE FOR ALL MODIFICATIONS AND DAMAGES IF WORK PROCEEDS WITHOUT THIS NOTIFICATION.

3.) THE CONTRACTOR IS RESPONSIBLE FOR ALL ASPECTS OF MAINTAINING A SAFE WORK SITE INCLUDING, BUT NOT LIMITED TO PROVIDING FOR TRAFFIC CONTROL, INSTALLATION AND PLACEMENT OF FENCING AND BARRICADES, EXCAVATION AND TRENCH PROTECTION, AND COMPLIANCE WITH ALL FEDERAL AND LOCAL REGULATIONS AND CODES. ALL SAFETY EXPOSURES OR VIOLATIONS SHALL BE RECTIFIED IMMEDIATELY.

4.) THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL EXISTING IMPROVEMENTS BOTH ON SITE AND ADJACENT TO THE WORK SITE AND SHALL REPAIR ANY DAMAGE TO THESE IMPROVEMENTS TO THE SATISFACTION OF THE OWNER.

5.) THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT 48 HOURS PRIOR TO COMMENCEMENT OF WORK TO COORDINATE PROJECT INSPECTION SCHEDULES.

6.) ANY ALTERNATES AND OR SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL. CHANGES TO THE SCOPE OF WORK AND / OR CONTRACT DOCUMENTS RESULTING FROM THE ACCEPTANCE OF THE CONTRACTOR'S ALTERNATES AND / OR SUBSTITUTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

7.) THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF TRASH ON A DAILY BASIS.

8.) THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. PRIOR TO CONSTRUCTION, ALL PERMITS AND APPROVALS REQUIRED FOR CONSTRUCTION OF THE PROJECT SHALL BE PAID FOR AND OBTAINED BY THE CONTRACTOR (PLAN REVIEW FEES ARE PAID BY OWNER) COSTS FOR PERMITS SHALL BE INCLUDED IN THE BID. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME AWARE OF REQUIRED INSPECTIONS THAT ARE ASSOCIATED WITH PERMITS ISSUED FOR THE WORK AND TO SCHEDULE THESE INSPECTIONS AT THE APPROPRIATE STAGE OF CONSTRUCTION. EXAMPLES INCLUDE BUT ARE NOT LIMITED TO ROUGH-IN ELECTRICAL, ROUGH-IN PLUMBING,IRRIGATION PIPING, FOUNDATION STEEL FOR STRUCTURES (INCLUDING WALLS), FIRE INSPECTIONS RELATED TO ENTRY GATES AND ASSOCIATED STRUCTURES AND OTHERS AS MAY APPLY.

9.) COORDINATE WORK WITH SUBCONTRACTORS TO ACCOMPLISH THE SCOPE OF WORK AS SHOWN AND NOTED IN THE CONTRACT DOCUMENTS AS WELL AS, COORDINATE CONSTRUCTION WITH OTHER CONTRACTORS WORKING ON THE SITE.

10.) THE CONTRACTOR SHALL COORDINATE THE STORING OF MATERIALS, PARKING OF VEHICLES, AND RESTRICTIONS OF WORK AND ACCESS WITH THE OWNER. UNDER NO CIRCUMSTANCES SHALL ANY CONTRACTOR STORE MATERIALS, PARK VEHICLES OR EQUIPMENT UNDER THE CANOPY OF EXISTING TREES.

11.) UNLESS SPECIFIED OTHERWISE, THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND PAYING ALL TEMPORARY UTILITIES AND SERVICES NECESSARY TO COMPLETELY INSTALL ALL WORK AS SHOWN AND NOTED IN THE CONTRACT DOCUMENTS.

12.) THE CONTRACTOR IS RESPONSIBLE FOR THE LEGAL OFF-SITE DISPOSAL OF SURPLUS MATERIAL AND DEBRIS.

13.) UPON COMPLETION OF CONSTRUCTION AND PRIOR TO FINAL APPROVAL, THE CONTRACTOR SHALL THOROUGHLY CLEAN THE PROJECT SITE OF ALL TRASH, REPAIR ALL DAMAGE TO FINISH GRADE, INCLUDING TAILINGS FROM EXCAVATIONS, WHEEL RUTS AND ANY SETTLING OR EROSION THAT HAS OCCURRED PRIOR TO COMPLETION. ALL AREAS OF THE PROJECT SITE SHALL BE LEFT IN A NEAT AND PRESENTABLE CONDITION SATISFACTORY TO THE OWNER PRIOR TO SUBMITTAL OF THE FINAL PAYMENT.

14.) THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND SERVICING TEMPORARY TOILET FACILITIES.

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STATUS

REGISTERED LANDSCAPE ARCHITECT · PERRY T. PANITZ · 2533 · STATE OF TEXAS

02/11/2019

PROJECT

BENAVIDES PARK

COSA DISTRICT 5 PARK

PROJECT ADDRESS

1502 SALTILLO STREET
SAN ANTONIO, TX 78207

OWNER | CLIENT

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114 WEST COMMERCE ST.
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SUBCONSULTANT

REVISIONS

ISSUE SETS

NO.	DATE	DESCRIPTION
1	12.12.18	100% CD SET

SHEET INFORMATION

PROJECT NO.
18001

DATE ISSUED
FEBRUARY 11, 2019

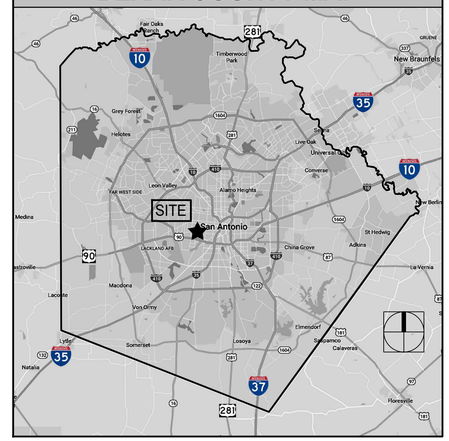
SHEET NAME
GENERAL NOTES

SHEET NUMBER
LC 1.1

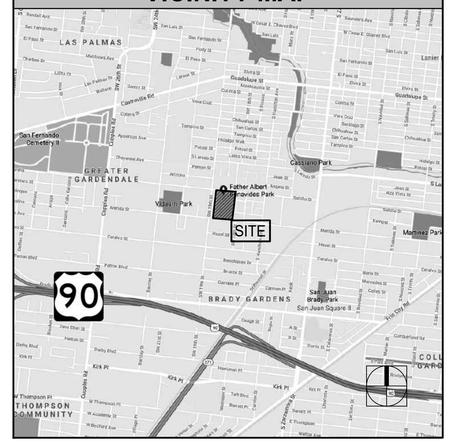
1 TREE PRESERVATION
PLAN

0 5' 10' 20' 40'
SCALE: 1"=20'

BEXAR COUNTY MAP



VICINITY MAP



TREE PRESERVATION

TREE PRESERVATION: (Tree Survey Method)

MITIGATION CALCULATIONS

SIGNIFICANT TREE:	25.5 TOTAL INCHES
25.5 INCH. X 40% REQUIRED TO BE PRESERVED :	10 INCH. (40%)
SIGNIFICANT TREE INCH. PRESERVED:	25.5 INCH. (100%)
REQUIRED SIGNIFICANT MITIGATION:	**0" REQ. MITIGATION**
HERITAGE TREE:	0 TOTAL INCHES
0 INCH. X 100% REQUIRED TO BE PRESERVED :	0 INCH. (100%)
HERITAGE TREE INCH. PRESERVED:	0 INCH. (100%)
REQUIRED MITIGATION: 0 INCH. X 1:1 =	**0" REQUIRED MITIGATION**

PRESERVED TREES | TRANSPLANTED TREE | REMOVED TREES

MP STUDIO
201 GROVETON | SATX 78210
210.314.5582 | MPSTUD.IO

STATUS

REGISTERED LANDSCAPE ARCHITECT GARY PATTILLO 2533 STATE OF TEXAS
02/11/2019

PROJECT

BENAVIDES PARK
COSA DISTRICT 5 PARK

PROJECT ADDRESS
1502 SALTILLO STREET
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REVISIONS

ISSUE SETS

NO.	DATE	DESCRIPTION
1	12.12.18	100% CD SET

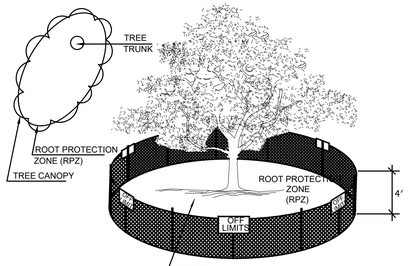
SHEET INFORMATION

PROJECT NO.
18001

DATE ISSUED
FEBRUARY 11, 2019

SHEET NAME
TREE PRESERVATION PLAN

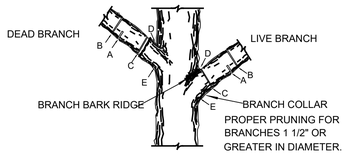
SHEET NUMBER
TP 1.1



NOTE:
1. THE FENCING SHOWN ABOVE IS DIAGRAMATIC ONLY AND WILL CONFORM TO THE DRIP LINE AND LIMITED TO PROJECT BOUNDARY.
2. FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

1 EXISTING TREE PROTECTION

ELEVATION - PLAN - 3D VIEW NOT TO SCALE



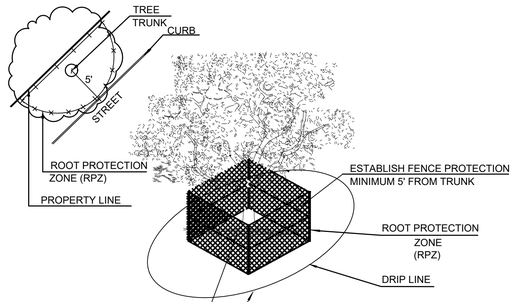
NOTE: DO NOT CUT FROM D to E.

A. FIRST CUT - TO PREVENT THE BARK FROM BEING PEELED WHEN THE BRANCH FALLS.
B. SECOND CUT - TO REDUCE THE WEIGHT OF BRANCH.
C. FINAL CUT - ALLOW FOR HEALING COLLAR BUT NO STUBS
D. BRANCH RIDGES - INDENT PROPERLY BRANCH RIDGES WHICH ARE SITE FOR DECAY.

FOR OAKS ONLY: PAINT ALL WOUNDS OR CUTS WITH PRUNING PAINT WITHIN 20 MIN TO PREVENT THE SPREAD OF OAK WILT.

2 TREE BRANCH PRUNING

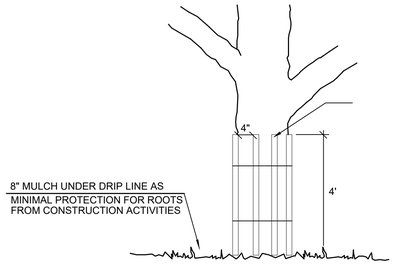
ELEVATION NOT TO SCALE



NOTE
1. OPTION USED FOR TIGHT CONSTRUCTION AREAS OR WHEN CONSTRUCTION OCCURS IN ROOT PROTECTION ZONE.
2. FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

3 LEVEL II A TREE PROTECTION

ELEVATION NOT TO SCALE



NOTE
WRAP TREE TRUNK WITH 2"X4" STUDS AND ROPE OR BAND IN PLACE AS NEEDED TO PROTECT TREES IN WORK AREAS.

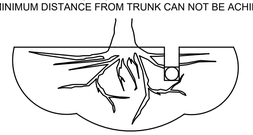
4 LEVEL II B TREE PROTECTION

ELEVATION NOT TO SCALE

TREES THAT ARE MARKED TO BE PRESERVED ON A SITE PLAN AND FOR WHICH UTILITIES MUST PASS TROUGH THEIR ROOT PROTECTION ZONES MAY REQUIRE TUNNELING AS OPPOSED TO OPEN TRENCHES. THE DECISION TO TUNNEL WILL BE DETERMINED ON A CASE BY CASE BASIS BY THE ENGINEER.

TUNNELS SHALL BE DUG THROUGH THE ROOT PROTECTION ZONE IN ORDER TO MINIMIZE ROOT DAMAGE.

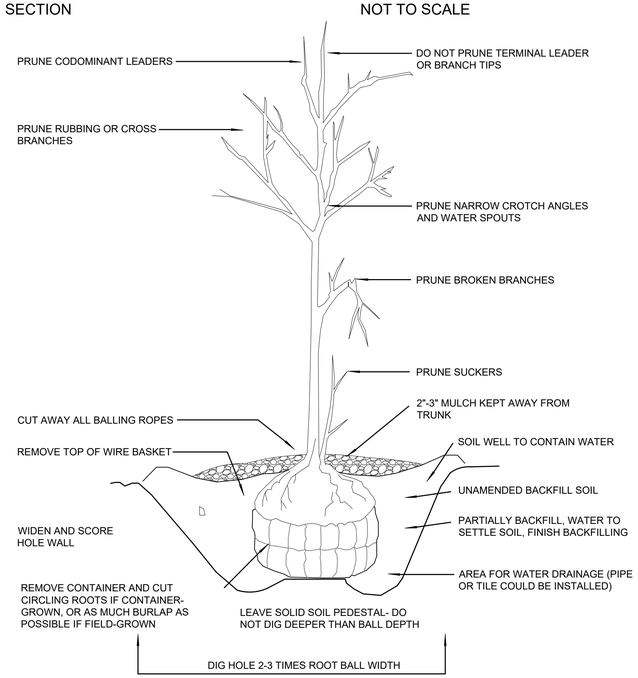
TUNNEL TO MINIMIZE ROOT DAMAGE (TOP) AS OPPOSED TO SURFACE-DUG TRENCHES IN ROOT PROTECTION ZONE WHEN THE 5' MINIMUM DISTANCE FROM TRUNK CAN NOT BE ACHIEVED.



OPEN TRENCHING MAY BE USED IF EXPOSED TREE ROOTS DO NOT EXCEED 3" OR ROOTS CAN BE BENT BACK.

5 BORING THROUGH TREE ROOT (RPZ)

SECTION NOT TO SCALE



6 TRANSPLANT TREE DETAIL

SECTION NOT TO SCALE

BENAVIDES PARK TREE INVENTORY

Tag #	Species	Tree Caliper	Understory Species* 5.0" - 11.5" Removed	Understory Species* 5.0" - 11.5" Preserved	Significant Tree 6" - 23.5" Removed	Significant Tree 6" - 23.5" Preserved	Significant Tree** 10.0" - 23.5" Removed	Significant Tree** 10.0" - 23.5" Preserved	Heritage 3:1 Removed	Heritage 3:1 Preserved	Heritage 1:1 Removed	Heritage 1:1 Preserved	Additional Inches Preserved for Preserved
1001	Monterey Oak	3				3							
1002	Monterey Oak	4.5				4.5							
1003	Hackberry	18						18					
Sub. Tot. Inches=			0	0	0	7.5	0	18	0	0	0	0	0
Total inches by category=				0		7.5		18		0		0	
Preservation percentage=			#DIV/0!		Significant		100%		Heritage Preservation		#DIV/0!		0
Mitigation required (Commercial) =			0		Commercial (inches)		-15.3						
Mitigation required (Residentia			0		Residential (inches)		-16.575		Heritage Mitigation (inches)			0	

EXISTING TREE NOTES

1. ALL THE TREES WITH A DIAMETER GREATER THAN 3 INCHES AFFECTED BY CONSTRUCTION SHALL HAVE THE LIMBS AND ROOTS TRIMMED AND PRUNED ACCORDING TO TREE PRUNING, SOIL AMENDING AND FERTILIZATION, UNLESS SPECIFIED TREES SHALL RECEIVE PROTECTION AS SHOWN ON TREE PROTECTION DETAIL ON THIS SHEET.

2. ALL TREES SHALL REMAIN UNLESS NOTED ON THE PLANS.

3. NO SITE PREPARATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED BY CITY INSPECTOR.

4. TREE PROTECTION FENCING SHALL BE REQUIRED. TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION.

5. THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN THREE INCHES IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN THE VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR.

6. THE ROOT PROTECTION ZONE IS THAT AREA SURROUNDING A TREE, AS MEASURED BY A RADIUS FROM THE TREE TRUNK, IN WHICH NO EQUIPMENT, VEHICLES OR MATERIALS MAY OPERATE OR BE STORED. THE REQUIRED RADIUS LENGTH IS 1 FOOT PER DIAMETER INCH OF THE TREE. FOR EXAMPLE, A 10-INCH DIAMETER TREE WOULD HAVE A 5-FOOT RADIUS ROOT PROTECTION ZONE AROUND THE TREE. ROOTS OR BRANCHES THAT ARE IN CONFLICT WITH THE CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. LIVE OAK WOUNDS SHALL BE PAINTED OVER, WITHIN 20 MINUTES TO PREVENT OAK WILT.

7. ACCESS TO FENCED AREAS WILL BE PERMITTED ONLY WITH THE APPROVAL OF THE ENGINEER OR CITY INSPECTOR.

8. GRADING, IF REQUIRED, SHALL BE LIMITED TO A 3 INCH CUT OR FILL WITHIN THE FENCED ROOT ZONE AREAS.

9. TREES, SHRUBS OR BUSHES TO BE CLEARED FROM PROTECTED ROOT ZONE AREAS SHALL BE REMOVED BY HAND AS DIRECTED BY THE PROJECT MANAGER OR CITY INSPECTOR.

10. TREES DAMAGED OR LOST DUE TO CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED TO THE ENGINEER'S SATISFACTION.

11. EXPOSED ROOTS SHALL BE COVERED AT THE END OF EACH DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH OR WET BURLAP.

12. ANY TREE REMOVAL SHALL BE APPROVED BY THE CITY ARBORIST PRIOR TO ITS REMOVAL.

MP STUDIO
201 GROVETON | SATX 78210
210.314.5582 | MPSTUD.IO

STATUS

REGISTERED LANDSCAPE ARCHITECT
TERRY PATTON
2533
STATE OF TEXAS

02/11/2019

PROJECT

BENAVIDES PARK

COSA DISTRICT 5 PARK

PROJECT ADDRESS
1502 SALTILLO STREET
SAN ANTONIO, TX 78207

OWNER | CLIENT
TCI - CITY OF SAN ANTONIO
114 WEST COMMERCE ST.
SAN ANTONIO, TX 78283

OWNER'S REPRESENTATIVE
PAT SCHNEIDER
210.207.8466
Patrick.Schneider@sanantonio.gov

SUBCONSULTANT

REVISIONS

ISSUE SETS

NO.	DATE	DESCRIPTION
1	12.12.18	100% CD SET

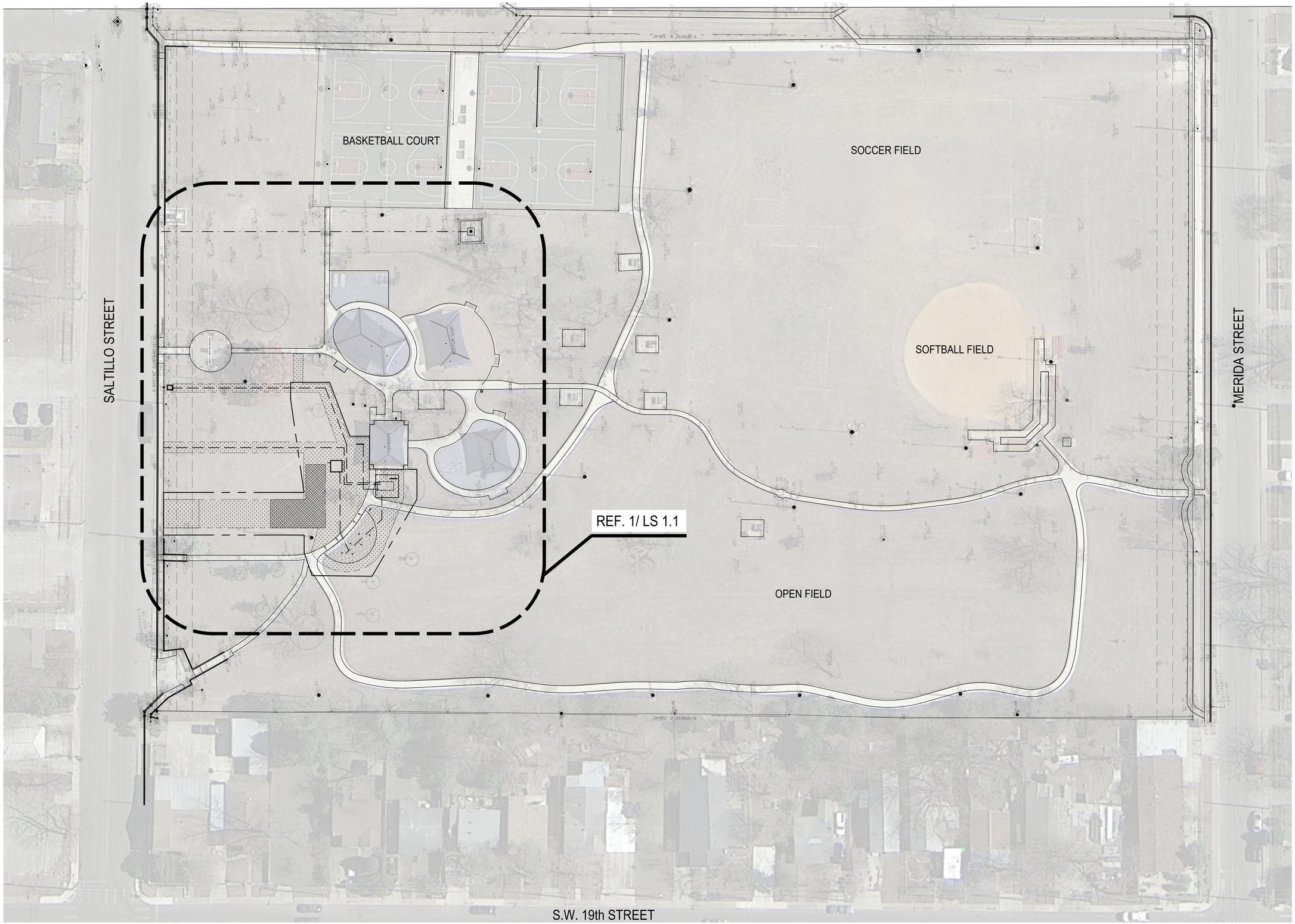
SHEET INFORMATION

PROJECT NO.
18001

DATE ISSUED
FEBRUARY 11, 2019

SHEET NAME
TREE PRESERVATION PLAN

SHEET NUMBER
TP 2.1



1 SITE WORK REFERENCE PLAN

0 5' 15' 30' 60'

SCALE: 1"=30'

MP STUDIO

201 GROVETON | SATX 78210
210.314.5582 | MPSTUD.IO

STATUS

COMPLETE SET

FOR REVIEW ONLY
Not for regulatory approval, permitting or construction

02/11/2019

PROJECT

BENAVIDES PARK

COSA DISTRICT 5 PARK

PROJECT ADDRESS

1502 SALTILLO STREET
SAN ANTONIO, TX 78207

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SUBCONSULTANT

REVISIONS

NO.	DATE	DESCRIPTION

ISSUE SETS

NO.	DATE	DESCRIPTION
1	12.12.18	100% CD SET

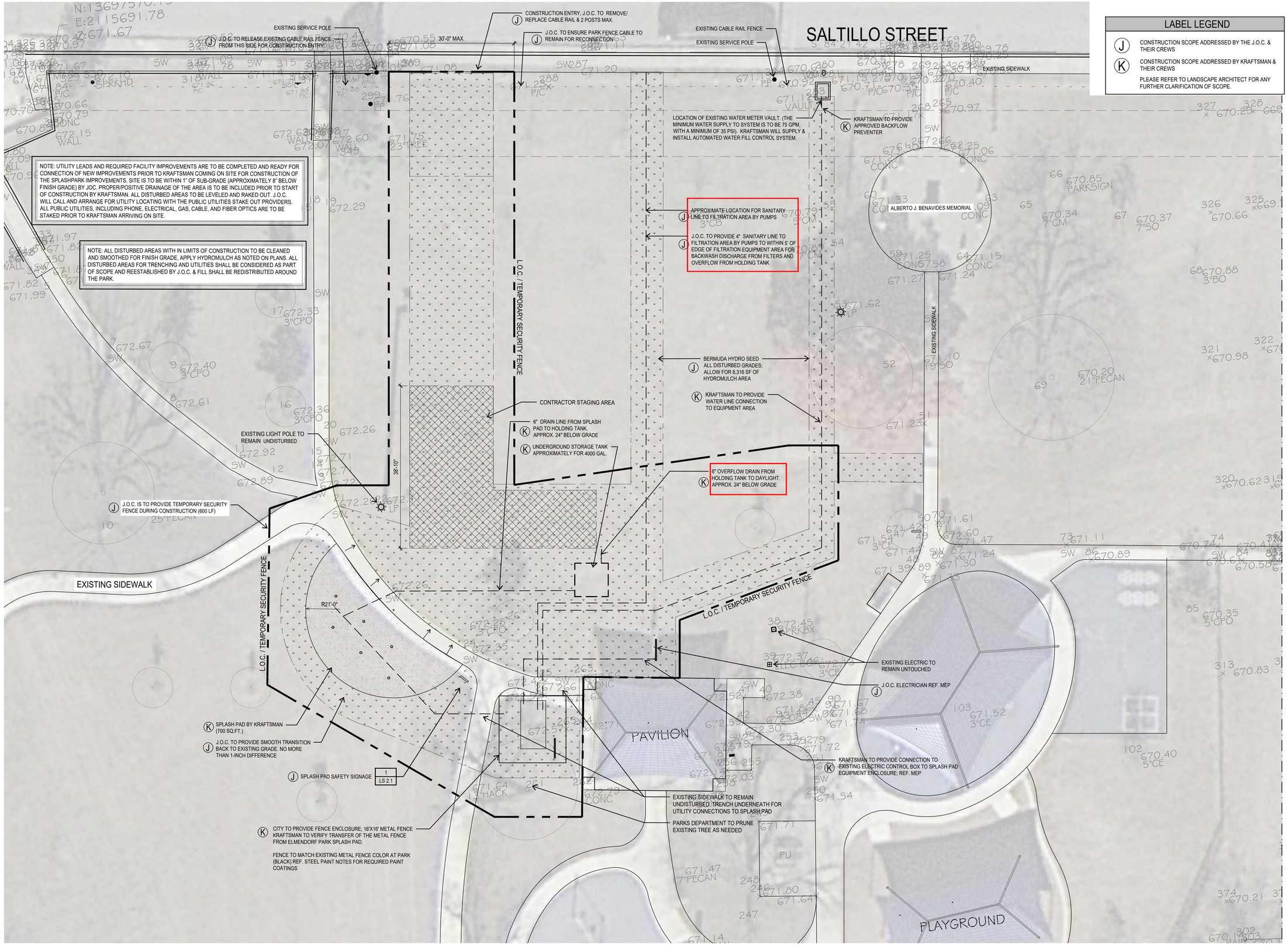
SHEET INFORMATION

PROJECT NO.
18001

DATE ISSUED
FEBRUARY 11, 2019

SHEET NAME
OVERALL REFERENCE PLAN

SHEET NUMBER
LS 1.0



LABEL LEGEND

- (J) CONSTRUCTION SCOPE ADDRESSED BY THE J.O.C. & THEIR CREWS
- (K) CONSTRUCTION SCOPE ADDRESSED BY KRAFTSMAN & THEIR CREWS

PLEASE REFER TO LANDSCAPE ARCHITECT FOR ANY FURTHER CLARIFICATION OF SCOPE.

1 SITE WORK PLAN

0 5' 10' 20' 40'

SCALE: 1"=20'

MP STUDIO

201 GROVETON | SATX 78210
210.314.5582 | MPSTUD.IO

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PROJECT NO.
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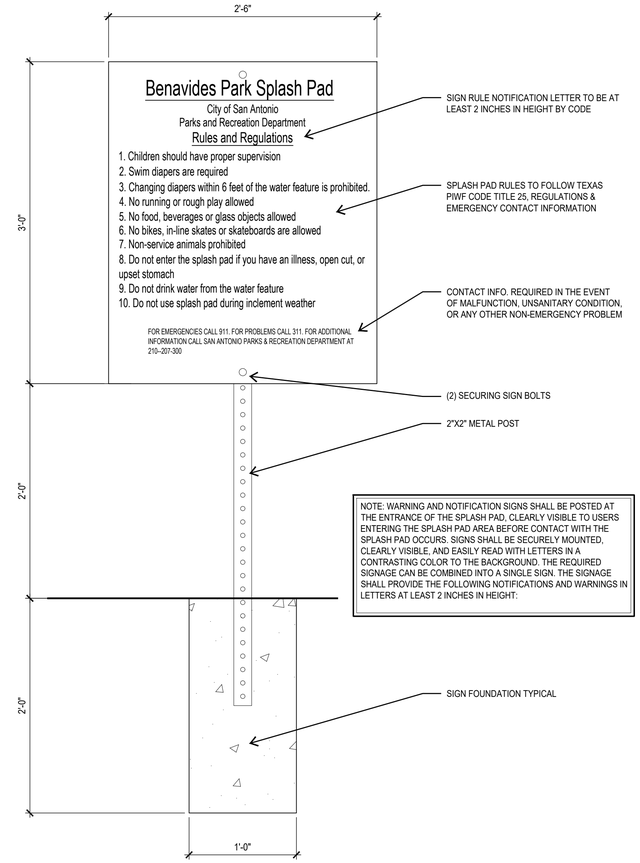
FEBRUARY 11, 2019

SHEET NAME
SITE WORK PLAN

SHEET NUMBER
LS 1.1



1 SPLASH PAD SAFETY SIGN

ELEVATION SCALE: 1-1/2"=1'-0"

PROJECT EXAMPLE

MP STUDIO
201 GROVETON | SATX 78210
210.314.5582 | MPSTUD.IO

STATUS

REGISTERED LANDSCAPE ARCHITECT
PERRY PATTILLO
2533
STATE OF TEXAS

02/11/2019

PROJECT

BENAVIDES PARK

COSA DISTRICT 5 PARK

PROJECT ADDRESS
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SAN ANTONIO, TX 78207

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SHEET INFORMATION

PROJECT NO.
18001

DATE ISSUED
FEBRUARY 11, 2019

SHEET NAME
SITE DETAILS

SHEET NUMBER
LS 2.1

ELECTRICAL SYMBOLS & ABBREVIATIONS

[SOME SYMBOLS MAY NOT BE USED ON THIS PROJECT]

CNG engineering
1917 N. New Braunfels Avenue
Suite 201
San Antonio, TX 78208
(210)224-8841, (210)224-8824 FAX
TBPE REGISTRATION No.
:F-7964

SYMBOL — DESCRIPTION

GENERAL

- MOTOR, HP AS INDICATED
- DISCONNECT SWITCH
- MOTOR CONTROLLER
- COMBINATION MOTOR CONTROLLER/DISCONNECT UNIT
- VARIABLE FREQUENCY DRIVE
- C — CONTACTOR
- J — JUNCTION BOX, CEILING MOUNTED
- J — JUNCTION BOX, WALL MOUNTED
- PUSHBUTTON
- EQUIPMENT CONNECTION, HARD WIRED
- TB — PLYWOOD TELEPHONE BACKBOARD

LIGHTING CONTROL PANELBOARDS (26 09 26)

- FEEDTHROUGH LIGHTING CONTROL PANELBOARD, SURFACE MOUNTED (SEE E7 SERIES FOR PANEL SCHEDULES)

PANELBOARDS (26 24 16)

- 120/2407V PANELBOARD, SURFACE MOUNTED

RACEWAYS (26 05 33)

- OHE — OVERHEAD UTILITY LINE
- UGE — UNDERGROUND UTILITY LINE
- OHE — EXISTING OVERHEAD UTILITY LINE
- UGE — EXISTING UNDERGROUND UTILITY LINE
- CONDUIT CONCEALED IN WALL OR CEILING WITH ONE PHASE, NEUTRAL AND GROUND CONDUCTOR U.N.O.
- UNDERGROUND CIRCUIT POWER LINES

SYMBOL — DESCRIPTION

RACEWAYS (cont.) (26 05 33)

- PANEL-2,4,6 — BRANCH CIRCUIT HOMERUN, WITH PANEL AND BREAKER POSITION INDICATED. SMALL TICK(S) = PHASE CONDUCTORS, LARGE TICK = NEUTRAL CONDUCTOR AND LARGE TICK WITH CIRCLE = GROUND CONDUCTOR. (IG N)

WIRING DEVICES (26 27 26)

- GFCI, SIMPLEX RECEPTACLE – 15A, 125V, 3W, NEMA 5-15R, WITHNEMA 3R WHILE IN USE COVER

REFERENCE SYMBOLS

- CIRCUIT END EXTENSION
- X — KEYED NOTE TAG, HEXAGON
- X — DEMOLITION KEYED NOTE TAG, ROUND
- A — ADDENDUM, ASI, ASR, PR TAG
- XXX-XX — EQUIPMENT TAG
- 1 / E1.0 — ENLARGED PLAN, DETAIL TAG
- 5 / E303 — ELEVATION TAG
- 5 / E303 — SECTION TAG

ABBREVIATION — DESCRIPTION

A	AMPERE(S)
ABV	ABOVE
AC	ABOVE COUNTER
A/C	AIR CONDITIONING
AIC	AMPERE INTERRUPTING CAPACITY
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
ATS	AUTOMATIC TRANSFER SWITCH
BC	BELOW COUNTER
BFF	BELOW FINISHED FLOOR
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
COND	CONDUCTOR
DIA	DIAMETER
DIST	DISTRIBUTION
DN	DOWN
DWGS	DRAWINGS
EC	EMPTY CONDUIT
EMT	ELEC. METALLIC TUBING
EQMT	EQUIPMENT
EXH	EXHAUST
EXTG	EXISTING
FC	FOOT CANDLES
FLEX	FLEXIBLE METAL CONDUIT
FN	FULL NEUTRAL
FT	FEET, FOOT
GALV	GALVANIZED
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
HOA	HAND OFF AUTOMATIC
HZ	HERTZ
ID	INSIDE DIAMETER
IMC	INTERMEDIATE STEEL CONDUIT
IN	INCHES
JB	JUNCTION BOX
KV	KILOVOLT
KVA	KILOVOLT AMPERE
KVAC	KILOVOLT AMPERE CAPACITIVE
KVAR	KILOVOLT AMPERE REACTIVE
KW	KILOWATT
KWH	KILOWATT HOUR
LB	POUND
M	MANHOLE
MAX.	MAXIMUM
MEP	MECHANICAL, ELECTRICAL & PLUMBING
MH	MOUNTING HEIGHT
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MTG	MOUNTING
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NF	NON FUSED
NO	NORMALLY OPEN
N.T.S.	NOT-TO-SCALE
OC	ON CENTER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OH	OVERHEAD

ABBREVIATION — DESCRIPTION

P	POLE
PA	PUBLIC ADDRESS
PB	PUSH BUTTON
PBX	PRIVATE BUILDING EXCHANGE
PC	PULL CHAIN
PEC	PHOTO CELL
PNL	PANELBOARD
PSI	POUNDS PER SQUARE INCH
PVC	POLY VINYL CHLORIDE CONDUIT
PWR	POWER
RGS	RIGID GALVANIZED STEEL CONDUIT
RMC	RIGID METAL CONDUIT
SC	SPLIT CIRCUIT
SN	SOLID NEUTRAL
SQFT	SQUARE FEET,FOOT
SW	SWITCH
SWBD	SWITCHBOARD
TELE	TELEPHONE
TSTAT	THERMOSTAT
TV	TELEVISION
TYP.	TYPICAL
UEP	UNDERGROUND ELECTRIC PRIMARY
UES	UNDERGROUND ELECTRIC SECONDARY
UEB	UNDERGROUND ELECTRIC BRANCH CIRCUIT
U.N.O.	UNLESS NOTED OTHERWISE
V	VOLT(S)
VP	VAPOR PROOF
W	WIRE
WP	WEATHERPROOF
XFMR	TRANSFORMER
Z	IMPEDENCE
1P	ONE POLE
2P	TWO POLE
3P	THREE POLE
Ø	PHASE

GENERAL NOTES

1. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS AND REVIEW ALL RELATED DRAWINGS AND SPECIFICATIONS PRIOR TO BID.
2. THE DRAWINGS ARE DIAGRAMMATICAL. CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND DETERMINE CONDUIT ROUTING AND EXACT LOCATIONS OF EQUIPMENT AND DEVICES. NOTIFY THE ARCHITECT/ENGINEER IF THE APPROXIMATE CONDUIT ROUTING SHOWN ON PLANS IS NOT FEASIBLE. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO ROUGH-IN.
3. LOCATIONS OF DEVICES ARE DIAGRAMMATICAL. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO ROUGH-IN.
4. REFERENCE EQUIPMENT CONNECTION SCHEDULE FOR REQUIREMENTS AND ADDITIONAL INFORMATION OF TAGGED EQUIPMENT SHOWN ON PLAN.
5. LOCATIONS OF MECHANICAL EQUIPMENT TO BE COORDINATED WITH EQUIPMENT VENDOR DRAWINGS FOR EXACT LOCATIONS AND QUANTITY.
6. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT ISSUE OF THE NATIONAL ELECTRIC CODE AND ALL APPLICABLE LOCAL CODES. ALL WORK SHALL MATCH THE EXISTING BUILDING'S ELECTRICAL INSTALLATION. ALL SYSTEMS SHALL BE INSTALLED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH APPLICABLE STANDARDS AND SPECIFICATIONS APPROVED BY ALL AUTHORITIES HAVING JURISDICTION.
7. PROVIDE A TYPED PANEL DIRECTORY FOR EACH NEW OR MODIFIED ELECTRICAL PANEL. DIRECTORY SHALL IDENTIFY THE CIRCUIT NUMBER, DEVICES SERVED, AND LOCATION OF DEVICES BY ROOM NUMBER. FILE COPY OF DIRECTORIES WITH THE OWNER'S REPRESENTATIVE WHEM WORK IS COMPLETED, AND PROVIDE COPIES WITH THE OWNER'S MANUALS.
8. INDICATED SPARE AND/OR SPACES IN ALL EQUIPMENT ON THE ELECTRICAL ONE-LINE DIAGRAM AND IN THE PANEL SCHEDULES ARE THE MINIMUM NUMBER REQUIRED FOR THIS PROJECT.
9. ALL CONNECTIONS TO MOTORS, OR OTHER DEVICES SUBJECT TO VIBRATION SHALL BE MADE USING A MINIMUM OF 12" LENGTH OF LIQUID TIGHT FLEXIBLE METALLIC CONDUIT. PROVIDE CONTINUOUS SEPARATE GROUND WIRE THROUGH ALL FLEXIBLE METALLIC CONDUIT CONNECTIONS.
10. PROVIDE UL, CLASS A GROUND FAULT INTERRUPTER CIRCUIT PROTECTIVE DEVICES ON ALL CONSTRUCTION RECEPTACLE CIRCUITS, OUTSIDE RECEPTACLE CIRCUITS, AND ON ALL OTHER CIRCUITS REQUIRED OR RECOMMENDED IN THE NATIONAL ELECTRIC CODE.
11. IDENTIFY PANEL AND CIRCUIT NUMBER FOR ALL INSTALLED ELECTRICAL DEVICES ON THE OUTSIDE OF THE JUNCTION BOX.
12. ALL FUSES/CIRCUIT BREAKERS IN PANELS, DISCONNECT SWITCHES, MOTOR STARTERS, ETC., SERVING MOTORS AND EQUIPMENT SHALL BE SIZED AS RECOMMENDED BY THE MANUFACTURER OF THE PARTICULAR LOAD DEVICE SERVED. COORDINATE WITH OTHER TRACES AS REQUIRED.

DEMOLITION GENERAL NOTES

1. CONDUCT ALL DEMOLITION WORK IN SUCH MANNER TO MAINTAIN A SAFE WORK ENVIRONMENT AND IN ACCORDANCE WITH APPLICABLE SAFETY RULES AND PROCEDURES WITHIN NEC, NESC, NECA, AND OSHA REQUIREMENTS.
2. CONTRACTOR SHALL REQUEST AND REVIEW ANY HAZARDOUS MATERIALS SURVEYS FROM THE OWNER'S REPRESENTATIVE. OBSERVE RECOMMENDED PRECAUTIONS AND VERIFY THE STATUS OF ANY REMEDIAL WORK RECOMMENDED OR NOTED WITHIN THE HAZARDOUS MATERIAL SURVEY. NOTIFY THE OWNER'S REPRESENTATIVE IF ANY HAZARDOUS MATERIALS ARE SUSPECTED OR OBSERVED DURING THE COURSE OF EXECUTING THIS CONTRACT.
3. SURVEY AREAS OF THE FACILITY SCHEDULED FOR RENOVATION OR PARTIAL DEMOLITION PRIOR TO ANY WORK BEING PROFORMED. SUBMIT A REPORT OF THIS PRE-WORK SURVEY DETAILING ANY UTILIZATION EQUIPMENT OR SYSTEMS THAT ARE NOT IN GOOD WORKING ORDER IN ADVANCE OF ANY DEMOLITION WORK AND REVIEW WITH THE OWNER'S REPRESENTATIVE.
4. RESTORE CIRCUITS, UTILIZATION EQUIPMENT, AND SYSTEMS AFFECTED BY SELECTIVE DEMOLITION TO THE CONDITION NOTED IN THE PRE-WORK SURVEY REPORT. ELECTRICAL CIRCUITS WITH A PORTION OF THE LOAD REMOVED SHALL HAVE THE REMOVED LOADS ASSOCIATED CIRCUITRY TERMINATED IN SUCH A MANNER THAT THE REMAINING LOAD REMAINS FULLY OPERATIONAL.
5. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL FOR SALVAGED MATERIAL. REQUEST THAT THE OWNER PROVIDE DIRECTION ON DISPOSITION OF SALVAGED MATERIAL FIVE (5) WORKING DAYS PRIOR TO REMOVAL. IF SO DIRECTED BY THE OWNER, SALVAGED MATERIAL SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE DELIVERED BY THE CONTRACTOR TO A LOCATION AS DIRECTED. REMOVE AND DISPOSE ANY SALVAGED MATERIAL NOT RETAINED BY THE OWNER.
6. VERIFY LOCATION AND QUANTITY OF ITEMS TO BE REMOVED. NO ALLOWANCE WILL BE MADE BECAUSE OF CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS.
7. PROVIDE BLANK COVERS AND PLATES AT UNUSED OPENINGS IN BOXES, RACEWAYS, AUXILIARY GUTTERS, CABINETS, EQUIPMENT CASES AND HOUSINGS SHALL BE CLOSED TO AFFORD PROTECTION SUBSTANTIALLY EQUIVALENT TO THE EQUIPMENT ENCLOSURE.
8. IF A CONDUIT RUN IS EXPOSED OR A SURFACE RACEWAY LEFT WITHOUT A MOUNTING SURFACE DUE TO REMOVAL OF A PARTITION, THE RACEWAY SHALL BE REROUTED AS ACCEPTABLE TO THE OWNER/ARCHITECT.
9. PROTECT ELECTRICAL EQUIPMENT, OUTLETS, AND DEVICES THAT ARE SCHEDULED TO BE RELOCATED. REPAIR, RESTORE, OR REPLACE ITEMS DAMAGED WHEN REMOVED TO THE APPROVAL OF THE OWNER. NOTIFY THE OWNER/ARCHITECT/ENGINEER OF ANY ELECTRICAL EQUIPMENT, OUTLETS AND/OR DEVICES WHICH ARE SCHEDULED TO BE RE-USED THAT ARE FOUND TO BE UNUSABLE.
10. CONTRACTOR SHALL UPDATE PANELBOARD DIRECTORIES AT EACH PANEL WHERE CIRCUIT MODIFICATIONS ARE MADE.

POWER GENERAL NOTES

1. REFERENCE ELECTRICAL PLANS AND SPECIFICATIONS FOR REQUIREMENTS AND ADDITIONAL INFORMATION OF TAGGED EQUIPMENT SHOWN ON PLAN.
2. COORDINATE EXACT LOCATIONS OF MECHANICAL/PLUMBING EQUIPMENT WITH OTHER DISCIPLINES AND EQUIPMENT INSTALLERS.
3. ALL RECEPTACLES SHALL BE COMMERCIAL SPECIFICATION GRADE UNLESS NOTED OTHERWISE.

MP STUDIO
201 GROVETON | SATX 78210
210.314.5582 | MPSTUD.IO

STATUS

COMPLETE SET

FOR REVIEW ONLY
Not for regulatory approval, permitting or construction

PROJECT

BENAVIDES PARK
COSA DISTRICT 5 PARK

PROJECT ADDRESS
1502 SALTILLO STREET
SAN ANTONIO, TX 78207

OWNER | CLIENT
TCI - CITY OF SAN ANTONIO
114 WEST COMMERCE ST.
SAN ANTONIO, TX 78283

OWNER'S REPRESENTATIVE
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210.207.8466
Patrick.Schneider@sanantonio.gov

SUBCONSULTANT

INTERIM REVIEW ONLY
Document Incomplete: Not Intended for permit, bidding or construction.
Engineer: DOUGLAS W. SCHULZE
P.E. Reg. No.: 80707
Company Name: CNG ENGINEERING, PLLC.
Texas Registered Engineering Firm: F-7964
Date: 02/12/2019

REVISIONS

ISSUE SETS

NO.	DATE	DESCRIPTION
1		

SHEET INFORMATION

PROJECT NO.
18001

DATE ISSUED
FEBRUARY 12 2019

SHEET NAME
ELECTRICAL ABBREVIATIONS & SYMBOLS

SHEET NUMBER
E0.0

GENERAL NOTES: (THIS SHEET ONLY)

A. FOR SYMBOLS AND ABBREVIATIONS, REFER TO SHEET E0.0.

B. BURY CONDUITS A MINIMUM OF 24" BELOW FINISHED GRADE OR PAVEMENT. PROVIDE CONCRETE CAP NOT LESS THAN 2" THICK ABOVE DIRECT BURIED LOW VOLTAGE CONDUITS WHERE SUBJECT TO VEHICULAR OR EXCAVATION DAMAGE OR WHERE MINIMUM BURIAL DEPTH CANNOT BE ACHIEVED.

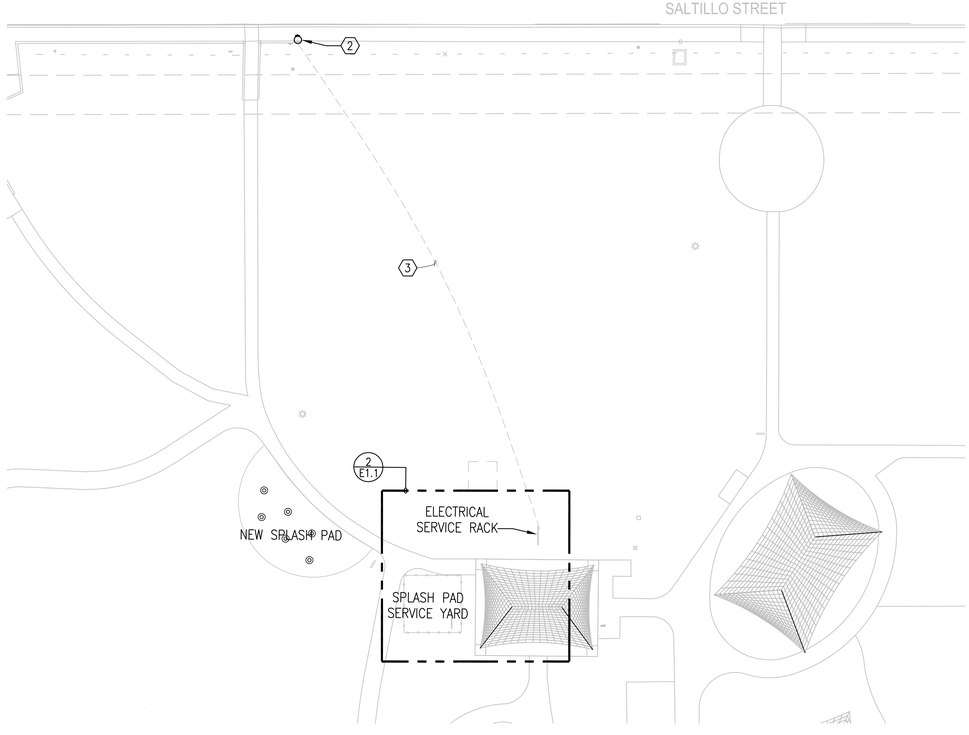
C. FOR ELECTRICAL PARTIAL RISER DIAGRAM, REFER TO SHEET E 2.1.

D. COORDINATE INSTALLATION OF SPLASH PAD EQUIPMENT WITH SPLASH PAD INSTALLER. REFER TO SPLASH PAD INSTALLATION DRAWINGS FOR ADDITIONAL INFORMATION.

E. PROVIDE IN-GRADE JUNCTION BOXES WHERE REQUIRED, REFER TO SHEET E2.1, DETAIL NO. 3 FOR ADDITIONAL INFORMATION.

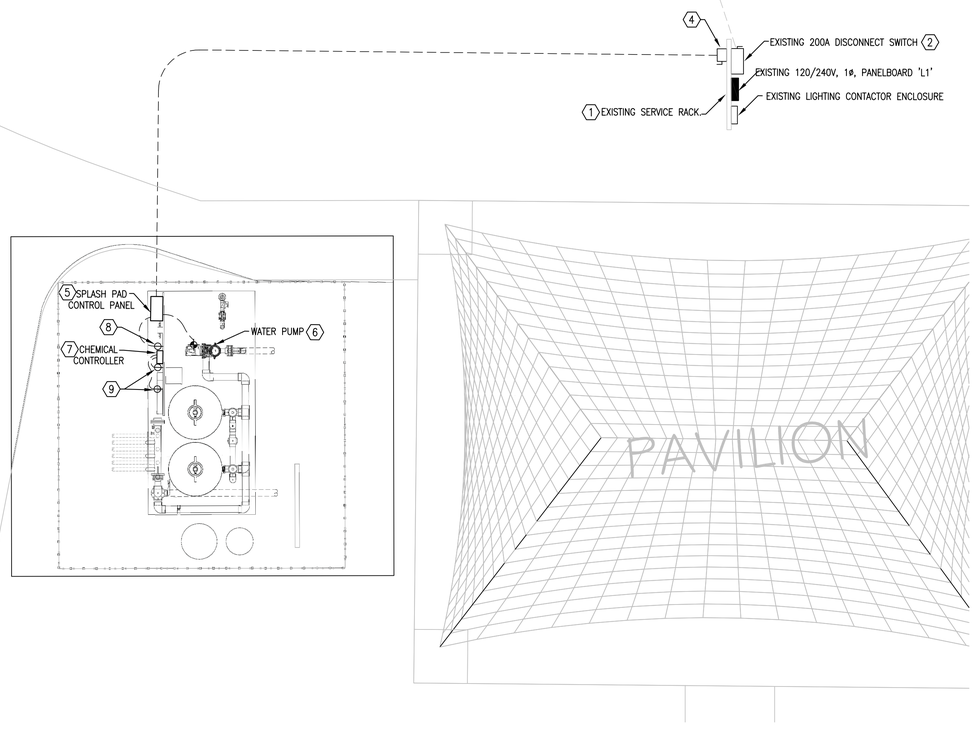
(#) KEYED NOTES: (THIS SHEET ONLY)

1. EXISTING RACK TO BE REPLACED BY OWNER. REFER TO 2/E1.2.
2. EXISTING SERVICE DISCONNECT SWITCH TO BE REPLACED BY OWNER.
3. APPROXIMATE LOCATION OF EXISTING UNDERGROUND ELECTRICAL SERVICE FEEDER TO REMAIN. FIELD VERIFY LOCATION AND PROTECT DURING INSTALLATION OF SPLASH PAD EQUIPMENT.
4. SPLASH PAD CONTROLLER DISCONNECT SWITCH, PROVIDE N3R, 100A, 1ø, FUSED DISCONNECT SWITCH WITH WITH NEUTRAL KIT AND 70A RK5 FUSES. CONNECT TO SPLASH PAD CONTROLLER PANEL WITH 3#4, #8GND, IN 2"C. IN SCH 80 PVC. PROVIDE RMC FOR 90° ELBOWS AND EXPOSED CONDUITS ABOVE GROUND. SPLASH PAD CONTROLLER PANEL PROVIDED BY OTHERS. CONNECT TO PANEL AS DIRECTED BY SPLASH PAD INSTALLER.
5. SPLASH PAD CONTROL PANEL PROVIDED BY SPLASH PAD INSTALLER. CONDUIT, WIRING CONDUCTORS AND ELECTRICAL CONNECTIONS FROM EQUIPMENT DISCONNECT SWITCH PROVIDED BY CONTRACTOR.
6. SPLASH PAD PUMP PROVIDED AND INSTALLED BY OTHERS. ELECTRICAL CONDUIT, WIRING CONDUCTORS AND ELECTRICAL CONNECTIONS PROVIDED BY CONTRACTOR. PROVIDE 2#10,#10G,1"C. FEEDER CONNECTION FROM SPLASH PAD CONTROLLER TO WATER PUMP. TERMINATE CONDUCTORS AT CONTROL PANEL 30A, TWO POLE OUTPUT BREAKER AND CONNECT PUMP AS DIRECTED BY SPLASH PAD INSTALLER.
7. SPLASH PAD CHEMICAL CONTROLLER PROVIDED AND INSTALLED BY OTHERS.
8. DEDICATED EQUIPMENT SIMPLEX RECEPTACLE FOR CHEMICAL CONTROLLER. RECEPTACLE, CONDUIT, WIRING CONDUCTORS AND ELECTRICAL CONNECTIONS PROVIDED BY CONTRACTOR. PROVIDE NEMA 5-15R SIMPLEX, HEAVY DUTY GFCI RECEPTACLE IN NEMA 3R JUNCTION BOX WITH WHILE-IN-USE COVER EQUAL TO HUBBELL WP26E PROVIDE 2#12,#12G, 3/4"C. FEEDER CONNECTION FROM SPLASH PAD CONTROLLER TO CHEMICAL CONTROLLER. TERMINATE CONDUCTORS AT CONTROL PANEL 3A, SINGLE POLE OUTPUT BREAKER AND CONNECT CHEMICAL CONTROLLER AS DIRECTED BY SPLASH PAD INSTALLER. PROVIDE RECEPTACLE LABEL AS DIRECTED BY SPLASH PAD VENDOR.
9. DEDICATED EQUIPMENT SIMPLEX RECEPTACLES FOR PERISTALTIC PUMPS. RECEPTACLES, CONDUIT, WIRING CONDUCTORS AND ELECTRICAL CONNECTIONS PROVIDED BY CONTRACTOR. PROVIDE NEMA 5-15R SIMPLEX, HEAVY DUTY GFCI RECEPTACLE IN NEMA 3R JUNCTION BOX WITH WHILE-IN-USE COVER EQUAL TO HUBBELL WP26E PROVIDE 2#12,#12G, 3/4"C. FEEDER CONNECTION FROM SPLASH PAD CONTROLLER TO CHEMICAL CONTROLLER. TERMINATE CONDUCTORS AT CONTROL PANEL 3A, SINGLE POLE OUTPUT BREAKER AND CONNECT CHEMICAL CONTROLLER AS DIRECTED BY SPLASH PAD INSTALLER. PROVIDE RECEPTACLE LABEL AS DIRECTED BY SPLASH PAD VENDOR.



1 ELECTRICAL SITE PLAN
SCALE: 1" = 20'

GRAPHIC SCALE
(IN FEET)
10 5 0 10 20 30
1" = 20'



2 SPLASH PAD SERVICE YARD
SCALE: 1/4" = 1-0""

CNG engineering
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Texas Registered Engineering Firm: F-7964
Date: 02/12/2019

REVISIONS

ISSUE SETS

NO.	DATE	DESCRIPTION
1		

SHEET INFORMATION

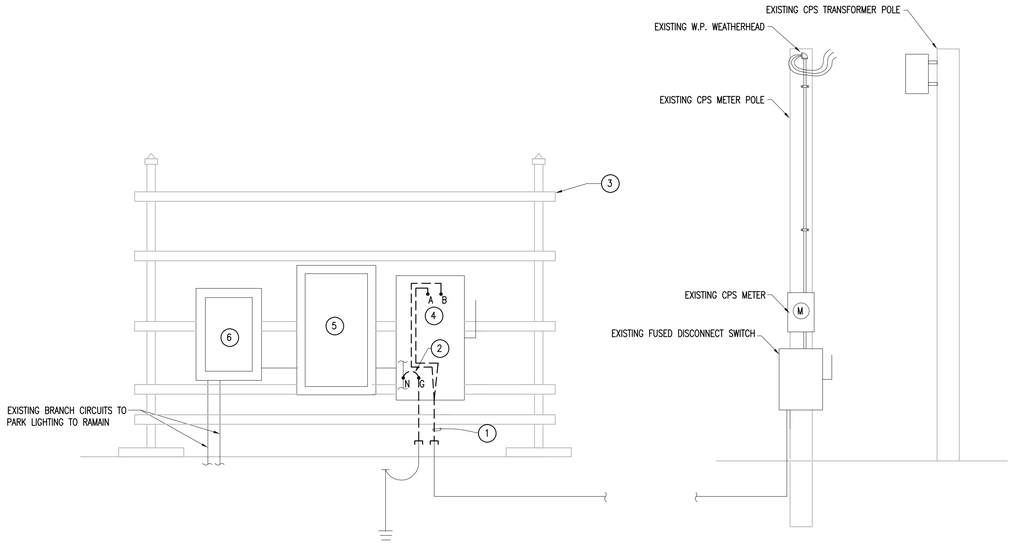
PROJECT NO.
18001

DATE ISSUED
FEBRUARY 12 2019

SHEET NAME
ELECTRICAL SITE PLAN

SHEET NUMBER
E1.1

CNG engineering
1917 N. New Braunfels Avenue
Suite 201
San Antonio, TX 78208
(210)224-8841, (210)224-8824 FAX
TBPE REGISTRATION No. :F-7964



1 ELECTRICAL ONE LINE DIAGRAM - DEMOLITION
NOT TO SCALE

ⓕ DEMOLITION KEYED NOTES: (THIS SHEET ONLY)

1. INTERCEPT EXISTING CONDUIT CONTAINING 3#3/0, #6GND CONDUCTORS. REMOVE PORTION OF CONDUIT AND LEAVE READY FOR INSTALLATION OF NEW WIRE GUTTER. DISCONNECT SERVICE CONDUCTORS AND LEAVE READY FOR RELOCATION TO NEW WIRE GUTTER.
2. REMOVE NEUTRAL AND GROUND BOND AT EXISTING DISCONNECT SWITCH. LEAVE GROUNDING CONDUCTOR READY FOR RELOCATION TO WIRE GUTTER.
3. EXISTING SERVICE RACK REPLACED BY OWNER. REFURBISHMENT OF CORRODED SERVICE RACK COMPONENTS ARE NOT IN SCOPE OF WORK.
4. EXISTING DISCONNECT SWITCH REPLACED BY OWNER. REPLACEMENT OF DAMAGED DISCONNECT IS NOT IN SCOPE OF WORK.
5. EXISTING ELECTRICAL PANEL 'L1' TO REMAIN.
6. EXISTING LIGHTING CONTACTORS AND CONTACTOR ENCLOSURE TO REMAIN.

GENERAL DEMOLITION NOTES: (THIS SHEET ONLY)

A. CONDUCT ALL DEMOLITION WORK IN SUCH A MANNER AS TO MAINTAIN A SAFE WORK ENVIRONMENT AND IN ACCORDANCE WITH APPLICABLE SAFETY RULES AND PROCEDURES WITHIN NEC, NECA AND OSHA REQUIREMENTS.

B. CONTRACTOR SHALL REQUEST AND REVIEW ANY HAZARDOUS MATERIALS SURVEYS FROM THE OWNER'S REPRESENTATIVE. OBSERVE RECOMMENDED PRECAUTIONS AND VERIFY THE STATUS OF ANY REMEDIAL WORK RECOMMENDED OR NOTED WITHIN THE HAZARDOUS MATERIAL SURVEY. NOTIFY THE OWNER'S REPRESENTATIVE IF ANY HAZARDOUS MATERIALS ARE SUSPECTED OR OBSERVED DURING THE COURSE OF EXECUTING THIS CONTRACT.

C. SURVEY AREAS OF THE FACILITY SCHEDULED FOR RENOVATION OR PARTIAL DEMOLITION PRIOR TO ANY WORK BEING PERFORMED. SUBMIT REPORT OF THE PRE-WORK SURVEY DETAILING ANY UTILIZATION EQUIPMENT OR SYSTEMS THAT ARE NOT IN GOOD WORKING ORDER IN ADVANCE OF ANY DEMOLITION WORK AND REVIEW WITH THE OWNER'S REPRESENTATIVE.

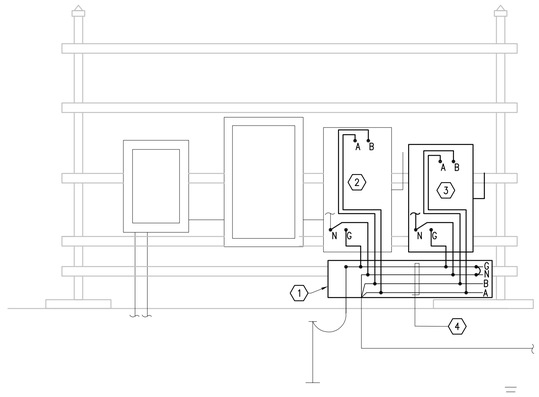
D. RESTORE CIRCUITS, UTILIZATION EQUIPMENT AND SYSTEMS AFFECTED BY SELECTIVE DEMOLITION TO THE CONDITION NOTED IN THE PRE-WORK SURVEY REPORT. ELECTRICAL CIRCUITS WITH A PORTION OF THE LOAD REMOVED SHALL HAVE THE REMOVED LOADS ASSOCIATED CIRCUITRY TERMINATED IN SUCH A MANNER THAT THE REMAINING LOAD REMAINS FULLY OPERATIONAL.

E. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL FOR SALVAGED MATERIAL. REQUEST THAT THE OWNER PROVIDE DIRECTION ON DISPOSITION OF SALVAGED MATERIAL FIVE(5) WORKING DAYS PRIOR TO REMOVAL. IF SO DIRECTED BY THE OWNER, SALVAGED MATERIAL SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE DELIVERED BY THE CONTRACTOR TO A LOCATION AS DIRECTED. REMOVE AND DISPOSE ANY SALVAGED MATERIAL NO RETAINED BY THE OWNER.

F. REMOVE ABANDONED CONDUIT TO POINT OF CONCEALMENT BEHIND INACCESSIBLE SURFACES. ENTIRELY REMOVE ABANDONED WIRING.

G. PROVIDE BLANK COVERS AND PLATES AT UNUSED OPENINGS IN BOXES, RACEWAYS, AUXILIARY GUTTERS, CABINETS, EQUIPMENT CASES AND HOUSINGS SHALL BE CLOSED TO AFFORD PROTECTION SUBSTANTIALLY EQUIVALENT TO THE EQUIPMENT ENCLOSURE.

H. CONTRACTOR SHALL UPDATE PANELBOARD DIRECTORIES AT EACH PANEL WHERE CIRCUIT MODIFICATIONS ARE MADE.



2 ELECTRICAL ONE LINE DIAGRAM - NEW WORK
NOT TO SCALE

ⓕ KEYED NOTES: (THIS SHEET ONLY)

1. PROVIDE 8" X 8" X 24", N3R SERVICE WIREWAY TO MEET CPS STANDARDS. BOND NEUTRAL AND GROUND AT THIS LOCATION.
2. RECONNECT EXISTING DISCONNECT SWITCH WITH 3#3/0, #6GND, 2"C.
3. NEW SPLASH PAD DISCONNECT SWITCH INSTALLED BEHIND EXISTING RACK. (SHOWN ON FRONT FOR CLARITY) PROVIDE LB CONDUIT FROM WIREWAY. PROVIDE ADDITIONAL HORIZONTAL RACK SUPPORTS FOR A COMPLETE INSTALLATION. REFER TO SHEET E1.1 FOR CONDUIT AND CONDUCTOR SIZES.
4. EXISTING CONDUCTORS PREVIOUSLY CONNECTED TO EXISTING SERVICE DISCONNECT SWITCH. INSTALL CONDUCTORS INSIDE NEW WIREWAY. PROVIDE SPLICES, CONDUIT, AND WIRING AS REQUIRED FOR CONNECTION TO EXISTING AND NEW DISCONNECT SWITCHES.

ANALYSIS OF PROJECTED ELECTRICAL LOAD
Benavides Park

2/12/2019

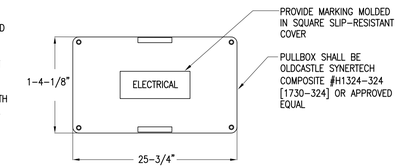
SERVICE VOLTAGE: 240/120V, 1Ph., 3W

LOAD DESCRIPTION			CONNECTED LOAD, VA	NEC LOAD kVA	NEC LOAD AMPERES
EXISTING LOADS (FROM UTILITY DEMAND):		NOTES			
PRIOR 12 MONTH PEAK DEMAND (JANUARY, 2018)	6 kW @ 0.88 PF	1	6,818	6.8	28
NEW OR ADDED LOADS					
LOAD DESCRIPTION	DEMAND FACTOR	NOTES	CONNECTED LOAD, kVA	NEC LOAD kVA	NEC LOAD AMPERES
EQUIPMENT	1.00	2	12.0	12.0	50
CONNECTED NEW LOADS SUBTOTAL			**12**	**12**	**50**
NET SUBTOTAL OF EXISTING, DEMO, AND NEW LOADS				19	78
LOAD GROWTH ALLOWANCE	15%			3	12
TOTAL				**22**	**90**
SERVICE ENTRANCE DESIGN (200A FUSED DISCONNECT SWITCH)				75	**200**

NOTES: 1 EXISTING DEMAND LOAD DETERMINED IN ACCORDANCE WITH NEC 220.87
2 EQUIPMENT LOAD PROVIDED BY SPLASH PAD VENDOR.

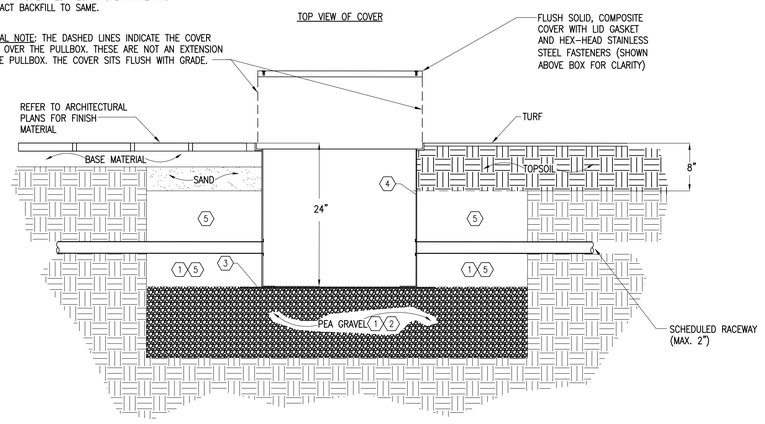
ⓕ KEYED NOTES (DETAIL NO.1 ONLY):

1. OVER EXCAVATE 18" ALL AROUND ENCLOSURE AND 12" ADDITIONAL DEPTH.
2. PLACE 1/2" CRUSHED STONE OR PEA GRAVEL AT BASE OF EXCAVATED HOLE.
3. PLACE 1/2" SQUARE GALVANIZED HARDWARE CLOTH BELOW PULLBOX, 6" LARGER IN EACH DIMENSION.
4. INSTALL PULLBOX PER MANUFACTURER'S WRITTEN DIRECTIONS.
5. USE HAND OPERATED MECHANICAL TAMPER TO COMPACT BACKFILL TO SAME.



TOP VIEW OF COVER

GENERAL NOTE: THE DASHED LINES INDICATE THE COVER LIFTED OVER THE PULLBOX. THESE ARE NOT AN EXTENSION OF THE PULLBOX. THE COVER SITS FLUSH WITH GRADE.



3 MEDIUM DUTY PULLBOX
SCALE: NOT-TO-SCALE

MP STUDIO
201 GROVETON | SATX 78210
210.314.5582 | MPSTUD.IO

STATUS

COMPLETE SET

FOR REVIEW ONLY
Not for regulatory approval, permitting or construction

PROJECT

BENAVIDES PARK
COSA DISTRICT 5 PARK

PROJECT ADDRESS
1502 SALTILLO STREET
SAN ANTONIO, TX 78207

OWNER | CLIENT
TCI - CITY OF SAN ANTONIO
114 WEST COMMERCE ST.
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OWNER'S REPRESENTATIVE
PAT SCHNEIDER
210.207.8466
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SUBCONSULTANT

INTERIM REVIEW ONLY
Document Incomplete: Not Intended for permit, bidding or construction.
Engineer: **DOUGLAS W. SCHULZE**
P.E. Reg. No.: **80707**
Company Name: **CNG ENGINEERING, PLLC.**
Texas Registered Engineering Firm: **F-7964**
Date: **02/12/2019**

REVISIONS

ISSUE SETS

NO.	DATE	DESCRIPTION
1		

SHEET INFORMATION

PROJECT NO.
18001

DATE ISSUED
FEBRUARY 12 2019

SHEET NAME
ELECTRICAL RISER DIAGRAM AND DETAILS

SHEET NUMBER
E2.1

DIVISION 26 – ELECTRICAL SPECIFICATIONS

SECTION 260510 – BASIC REQUIREMENTS FOR ELECTRICAL

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

B. Drawings and Specifications

1. Division 26 specifications are written in imperative and streamlined format. This imperative language is directed to the Contractor. The word 'shall be' shall be included by inference where a colon (:) is used within sentences and phrases.

C. Codes and Standards

1. Work shall comply with the local city codes and ordinances, the regulations of state authorities having lawful jurisdiction and the codes, statues and reference standards identified within these Specifications. These Specifications shall not be construed as negating the regulations or requirements of lawful jurisdictions.

2. Where Specifications require materials or equipment exceeding the minimum requirements of applicable codes and ordinances, the requirements of these Specifications shall take precedence.

1.2 DEFINITIONS & ABBREVIATIONS

Retain abbreviations and definitions that remain after this Section has been edited.

A. DEFINITIONS

1. Contract Documents – Drawings and the project manual, including Specifications.
2. Install: to set in place in position for service.
3. Furnish: to supply.
4. Provide: to install and furnish.
5. City – When used in an otherwise non–specific reference anywhere in the Contract documents, City is defined to refer to the local municipal authority governing the project address or the City whose ETJ includes the project address.

B. Utilities: The Contract Documents reflect the general location and routing of existing utilities Visit the site, and coordinate and confirm the exact conditions. Maintain existing services during construction.

1. Temporary Services:
   a. Provide temporary electrical service and electric power distribution and temporary lighting throughout the construction site. Install and maintain in accordance with National Electrical Code and OSHA requirements. Make arrangements with the serving utility for point of service for temporary electric service and pay costs for delivery to and use at the site.

1.3 Submittal Requirements

A. Provide all electrical submittals at the same time. Submittals are required for new electrical distribution equipment and lighting. Submittal requirements are waived for other sections if specified materials are used.

B. Submittals shall be provided in binders and arranged in sequence by Specification section number. Provide submittals only for specification sections that list this requirement.

C. Submittals shall be provided in PDF form.

PART 2 – PRODUCTS

2.1 GENERAL MATERIALS AND EQUIPMENT REQUIREMENTS

A. Materials and equipment shall conform to National Electrical Code requirements and shall be listed by Underwriters Laboratories, Inc. (UL). UL listing will be accepted as evidence that the material or equipment conform to the standards of that agency. In lieu of this listing, submit a statement from a nationally recognized testing agency, indicating that products have been tested in accordance with UL criteria and that the materials and equipment comply with Contract requirements.

PART 3 – EXECUTION

3.1 COMMON REQUIREMENTS FOR ELECTRICAL INSTALLATION

A. Coordinate location of access panels and doors for electrical items that are behind finished surfaces or otherwise concealed. Coordinate location of access panels and doors with Architect prior to the associated equipment rough–in.

B. Apply firestopping to penetrations of fire–rated floor and wall assemblies for electrical installations to restore original fire–resistance rating of assembly.

3.2 VIBRATION ISOLATION

A. Provide vibration isolation means for equipment and materials to prevent the transmission of perceptible vibration, structure borne or air borne noise.

SECTION 260519 – LOW–VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

1.1 CONDUCTOR MATERIAL APPLICATIONS

A. Feeders: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.

B. Branch Circuits: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.

C. Unless otherwise noted use #10 AWG and larger for homerun wiring.

1.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS

A. Service Entrance: Type THHN–THWN, single conductors in raceway or Type XHHW, single conductors in raceway.

B. All other applications: Type THHN–THWN, single conductors in raceway.

1.3 INSTALLATION OF CONDUCTORS AND CABLES

A. Conceal cables in finished walls, ceilings, and floors, unless otherwise indicated.

B. Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.

C. Provide support for conductors in vertical raceways in accordance with NEC 300.19. Refer to Table 300.19(A) for support spacing distance requirements of specific cable sizes.

1.4 CONNECTIONS

A. Tighten electrical connectors and terminals according to manufacturer's published torque–tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

B. Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings.

C. Wiring at Outlets: Install conductor at each outlet, with at least 12 inches of slack.

1.5 SLEEVE AND SLEEVE–SEAL INSTALLATION FOR ELECTRICAL PENETRATIONS

A. Install sleeves and sleeve seals at penetrations of exterior floor and wall assemblies. Comply with requirements in Section 260544 "Sleeves and Sleeve Seals for Electrical Raceways and Cabling."

SECTION 260526

GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 – PRODUCTS

1.1 CONDUCTORS

A. Insulated Conductors: Copper or tinned–copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.

1.2 CONNECTORS

A. Bolted Connectors for Conductors and Pipes: Copper or copper alloy, pressure type with at least two bolts.

B. Bus–bar Connectors: Mechanical type, cast silicon bronze, solderless, compression type wire terminals, and long–barrel, two–bolt connection to ground bus bar.

1.3 GROUNDING ELECTRODES

A. Ground Rods: Copper–clad steel 3/4 inch by 10 feet (19 mm by 3 m) in diameter.

PART 2 – EXECUTION

2.1 EQUIPMENT GROUNDING

A. Install insulated equipment grounding conductors with all feeders and branch circuits.

SECTION 260533 – RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 – GENERAL

1.1 DEFINITIONS

A. EMT: Electrical Metallic Tubing.

B. GRC, RGS: Galvanized rigid steel conduit.

C. IMC: Intermediate metal conduit.

D. LFMC: Flexible steel conduit with PVC jacket.

PART 2 – PRODUCTS

2.1 METAL CONDUITS, TUBING, AND FITTINGS

A. Fittings for Metal Conduit: Comply with NEMA FB 1 and UL 514B.

1. Fittings for EMT:
   a. Material: Steel.
   b. Type: Compression.

PART 3 – EXECUTION

3.1 RACEWAY APPLICATION

A. Outdoors: Apply raceway products as specified below unless otherwise indicated:

1. Exposed Conduit: GRC (GRS) or IMC or RNC, Type EPC–80–PVC. RNC conduit is not allowed on or above roofs.
2. Concealed Conduit, Aboveground: EMT.
3. Underground Conduit (Service entrance and feeders): concrete encased RNC, Type EPC–40–PVC or Type EPC–80–PVC. .
4. Underground Conduit (Branch Circuits): Type EPC–80–PVC, direct buried.
5. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor–Driven Equipment): LFMC.
6. Boxes and Enclosures, Aboveground: NEMA 250, Type 3R.

B. Minimum Raceway Size: 3/4–inch trade size.

C. Raceway Fittings: Compatible with raceways and suitable for use and location.

1. Rigid and Intermediate Steel Conduit: Use threaded rigid steel conduit fittings unless otherwise indicated.
2. EMT: Use compression, steel fittings. Comply with NEMA FB 2.10.
3. Flexible Conduit: Use only fittings listed for use with flexible conduit.

E. Install surface raceways only where indicated on Drawings.

3.2 INSTALLATION

A. Install no more than the equivalent of three 90–degree bends in any conduit run except for control wiring conduits, for which fewer bends are allowed. Support within 12 inches of changes in direction.

B. Conceal raceways within finished walls, ceilings, and floors unless otherwise indicated.

C. Install above grade conduits parallel or perpendicular to building lines.

D. Support conduit within 12 inches of enclosures to which attached.

E. Use EMT for raceways for stub–ups to above recessed ceilings. Provide insulated conduit bushing terminate stub–ups.

F. Terminate threaded conduits into threaded hubs or with locknuts on inside and outside of boxes or cabinets. Install bushings on conduits up to 1–1/4–inch trade size and insulated throat metal bushings on 1–1/2–inch trade size and larger conduits terminated with locknuts. Install insulated throat, metal grounding bushings on service conduits.

G. Install pull wires in empty raceways. Cap underground raceways designated as spare above grade alongside raceways in use.

SECTION 260553 – IDENTIFICATION FOR ELECTRICAL SYSTEMS

1.1 IDENTIFICATION SCHEDULE

A. Power–Circuit Conductor Identification, 600 V or Less: For conductors in vaults, pull and junction boxes, manholes, and handholes, use color–coding conductor tape to identify the phase.

1. Color–Coding for Phase and Voltage Level Identification, 600 V or Less: Use colors listed below for ungrounded service, feeder, and branch–circuit conductors.
   a. Color shall be factory applied or field applied for sizes larger than No. 8 AWG, if authorities having jurisdiction permit.
   b. Colors for 208/120–V Circuits:
      1) Phase A: Black.
      2) Phase B: Red.
      3) Phase C: Blue.
   c. Colors for 120/240–V Single Phase Circuits:
      1) Phase A: Black .
      2) Phase B: Red.
   d. Field–Applied, Color–Coding Conductor Tape: Apply in half–lapped turns for a minimum distance of 6 inches from terminal points and in boxes where splices or taps are made. Locate bands to avoid obscuring factory cable markings.

B. Locations of Underground Lines: Identify with underground–line warning tape for power, lighting, communication, control wiring, and optical fiber cable.

END OF SECTION 260553

SECTION 262816 – ENCLOSED SWITCHES

PART 16 – PRODUCTS

16.1 FUSIBLE AND NON–FUSIBLE SWITCHES

A. Manufacturers: Subject to compliance with requirements, provide one of the following::

1. Eaton Electrical Inc.; Cutler–Hammer Business Unit.
2. General Electric Company; GE Consumer & Industrial – Electrical Distribution.
3. Siemens Energy & Automation, Inc.
4. Square D; a brand of Schneider Electric.

B. Type HD, Heavy Duty, Single Throw, 240 or 600–V ac, 1200 A and Smaller: UL 98 and NEMA KS 1, horsepower rated, with clips or bolt pads to accommodate indicated fuses where noted, lockable handle with capability to accept three padlocks, and interlocked with cover in closed position.

C. Accessories:

1. Equipment Ground Kit: Internally mounted and labeled for copper and aluminum ground conductors.
2. Neutral Kit: Internally mounted; insulated, capable of being grounded and bonded; labeled for copper and aluminum neutral conductors.
3. Class R Fuse Kit: Provides rejection of other fuse types when Class R fuses are specified.

16.2 ENCLOSURES

A. Enclosed Switches and Circuit Breakers: NEMA AB 1, NEMA KS 1, NEMA 250, and UL 50, to comply with environmental conditions at installed location.

1. Indoor, Dry and Clean Locations: NEMA 250, Type 1 .
2. Outdoor Locations: NEMA 250, Type 3R .

SECTION 262813 – FUSES

PART 1 – PRODUCTS

1.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide one of the following:

1. Cooper Bussmann, Inc.
2. Edison Fuse, Inc.
3. Ferraz Shawmut, Inc.
4. Littelfuse, Inc.

1.2 FUSE APPLICATIONS

A. Cartridge Fuses:

1. Feeders: Class RK5, time delay

END OF SECTION

CNG engineering
1917 N. New Braunfels Avenue
Suite 201
San Antonio, TX 78208
(210)224-8841, (210)224-8824 FAX
TBPE REGISTRATION No. :F-7964

MP STUDIO
201 GROVETON | SATX 78210
210.314.5582 | MPSTUD.IO

STATUS

COMPLETE SET

FOR REVIEW ONLY
Not for regulatory approval, permitting or construction

PROJECT

BENAVIDES PARK
COSA DISTRICT 5 PARK

PROJECT ADDRESS
1502 SALTILLO STREET
SAN ANTONIO, TX 78207

OWNER | CLIENT
TCI - CITY OF SAN ANTONIO
114 WEST COMMERCE ST.
SAN ANTONIO, TX 78283

OWNER'S REPRESENTATIVE
PAT SCHNEIDER
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SUBCONSULTANT

INTERIM REVIEW ONLY
Document Incomplete; Not Intended for permit, bidding or construction.
Engineer: DOUGLAS W. SCHULZE
P.E. Reg. No.: 80707
Company Name: CNG ENGINEERING, PLLC.
Texas Registered Engineering Firm: F-7964
Date: 02/12/2019

REVISIONS

ISSUE SETS

NO.	DATE	DESCRIPTION
1		

SHEET INFORMATION

PROJECT NO.
18001

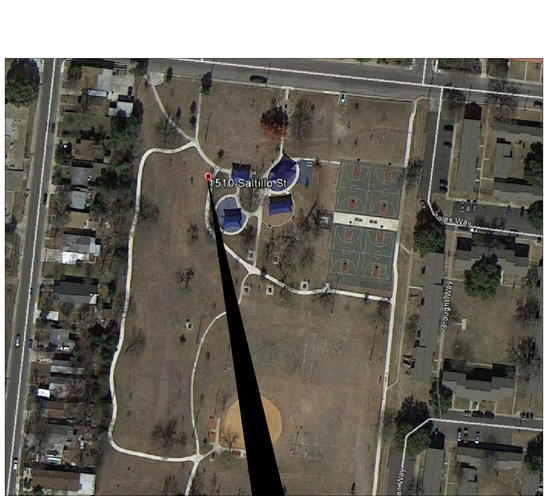
DATE ISSUED
FEBRUARY 12 2019

SHEET NAME
ELECTRICAL SPECIFICATIONS

SHEET NUMBER
E3.1

Benavides Park
SplashPark

San Antonio, Texas
Construction Documents
February 2019



PROJECT LOCATION - AERIAL VIEW

1502 SALTILLO ST.
SAN ANTONIO, TEXAS 78207

DOCUMENTS PREPARED BY:

KRAFTSMAN LP

Kraftsman LP
19535 Haude Road
Spring, Texas 77388

ph: 800-451-4869
www.KraftsmanPlay.com

SHEET INDEX	
SHEET NO.	**DESCRIPTION**
K100	Cover Sheet
SP101	Site Layout
SP102	SplashPark Drain Layout
SP103	Feature Layout
PP104	Piping Plan
CL105	Concrete Layout
GP106	Grading Plan
CD106	Concrete Details
BD107	Bonding Details
ED200	Feature Details
FL300	Holding Tank Details
FL300.1	Honlding Tank Piping
FL301	Filtration System Layout
FL302	Filtration System Penetrations
FL303	Filtration System Piping

75% KOMPLETE - DESIGN REVIEW

BENAVIDES PARK SPLASHPARK - SAN ANTONIO, TEXAS

PROJECT INFORMATION:

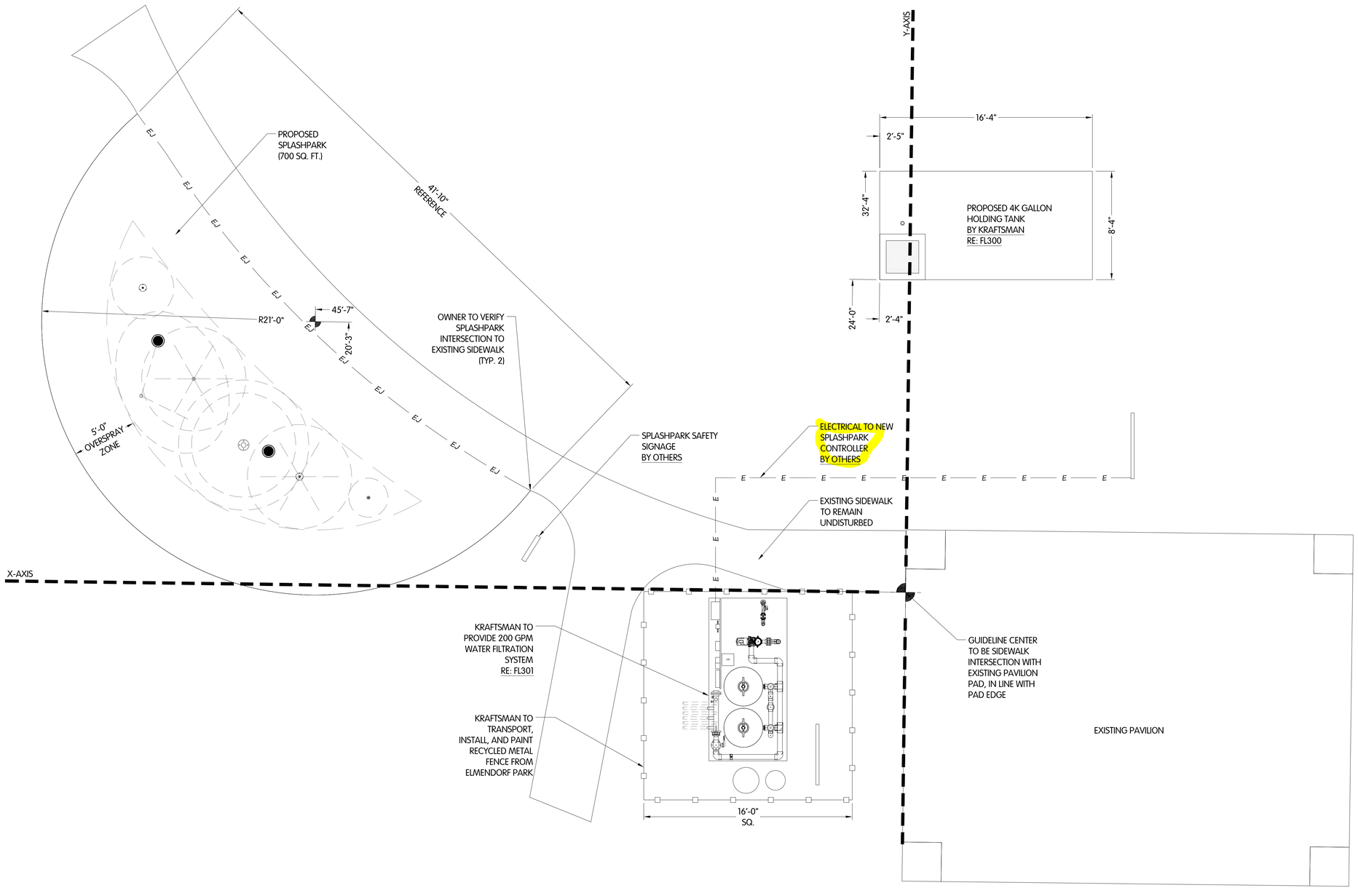
PROJECT # 21588

SHEET NO.

K100

NOTE:

1. ALL LOCATIONS ARE APPROXIMATE. FIELD VERIFY FINAL LOCATIONS TO ENSURE INFORMATION SHOWN DOES NOT CONFLICT WITH EXISTING SITE CONDITIONS. IF EXISTING SITE CONDITIONS DIFFER FROM INFORMATION SHOWN IN THESE DOCUMENTS, PLEASE CONTACT KRAFTSMAN AT (281) 353-9599 PRIOR TO EXECUTION OF WORK IN QUESTION.
2. DIMENSIONS SHOWN THUS ARE FROM X-AXIS OR Y-AXIS (TYP.)



1 SITE LAYOUT

SCALE: 1/4" = 1'

NORTH

75% KOMPLETE - DESIGN REVIEW

Note: Drawing should not be scaled unless in its original 24" x 36" printed format

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800.451.4869

SCALE: 1/4" = 1'

SALES REP: Ramon Garza

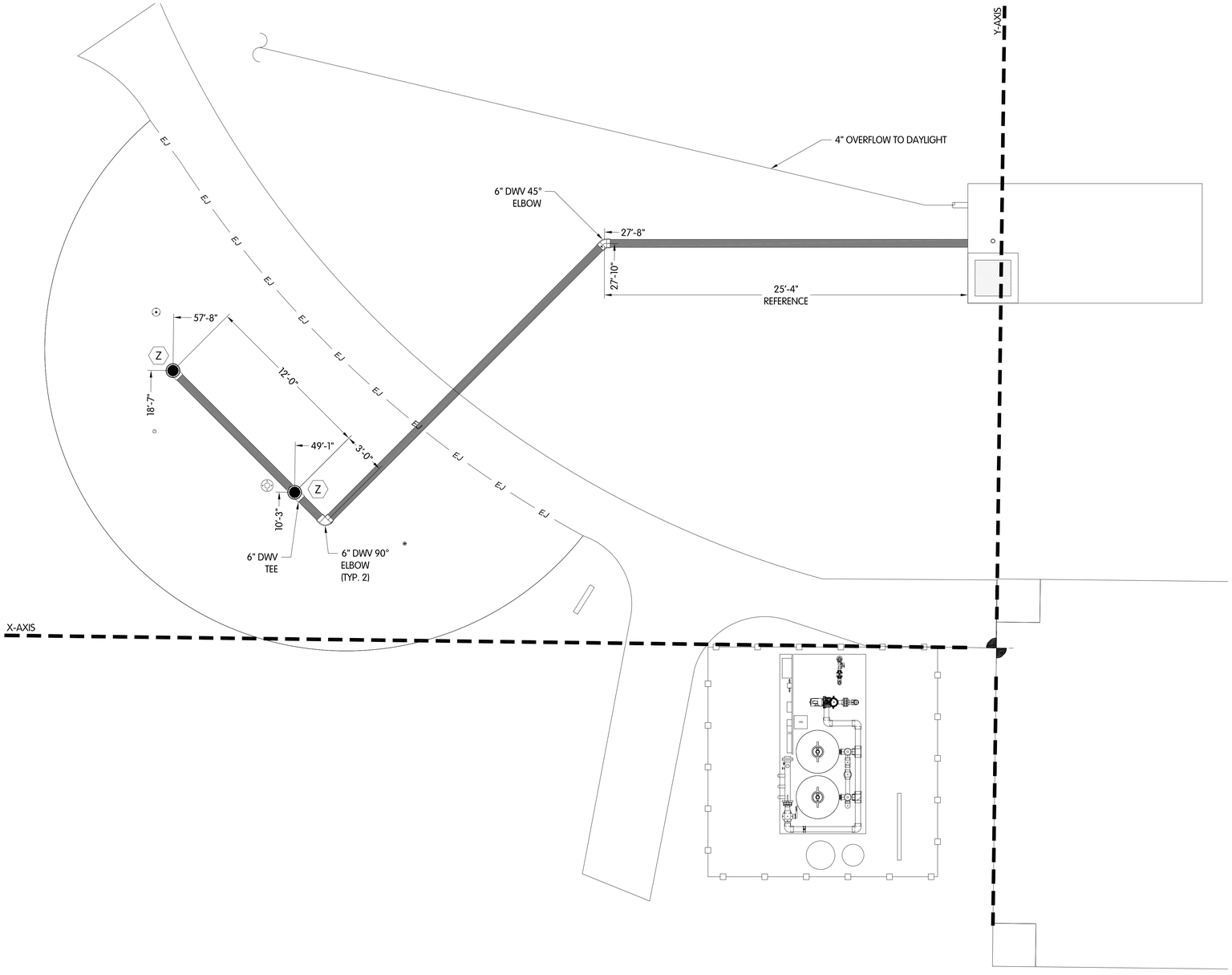
Benavides Park SplashPark
San Antonio, Texas

SHEET #:	OPTION #:	REVISION #:	DATE:	DRAWN BY	PAGE VIEW:	PROJECT #:
SP101	2	0	02-08-19	NIF	Site Layout	21588

NOTE:

1. ALL LOCATIONS ARE APPROXIMATE. FIELD VERIFY FINAL LOCATIONS TO ENSURE INFORMATION SHOWN DOES NOT CONFLICT WITH EXISTING SITE CONDITIONS. IF EXISTING SITE CONDITIONS DIFFER FROM INFORMATION SHOWN IN THESE DOCUMENTS, PLEASE CONTACT KRAFTSMAN AT (281) 353-9599 PRIOR TO EXECUTION OF WORK IN QUESTION.
2. DIMENSIONS SHOWN THUS ARE FROM X-AXIS OR Y-AXIS (TYP.)
3. DRAIN PIPING SHOWN SHALL BE SCHEDULE 40 PVC (MIN.)

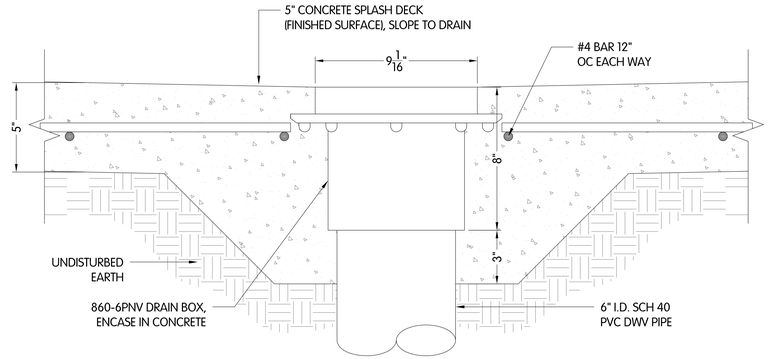
	DESCRIPTION	QTY	GPM
Z	**860-6PNV DRAIN** BY SIOUX CHIEF (LOCATIONS BY INSTALLER)	2	N/A



1 SPLASHPARK DRAIN LAYOUT

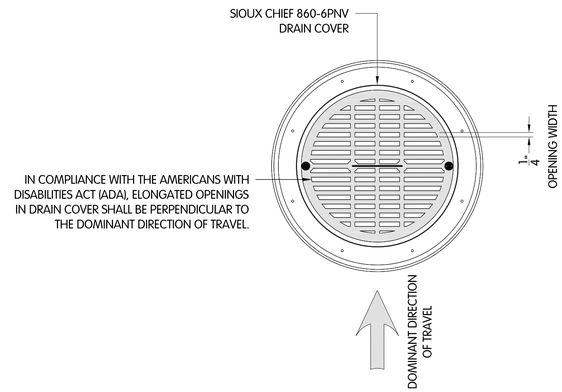
SCALE: 1/4" = 1'

NORTH



2 DRAIN BOX CONNECTION DETAIL

SCALE: 3" = 1'



3 DRAIN COVER ORIENTATION

SCALE: 3" = 1'

75% KOMPLETE - DESIGN REVIEW

Note: Drawing should not be scaled unless in its original 24" x 36" printed format

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SCALE: VARIES

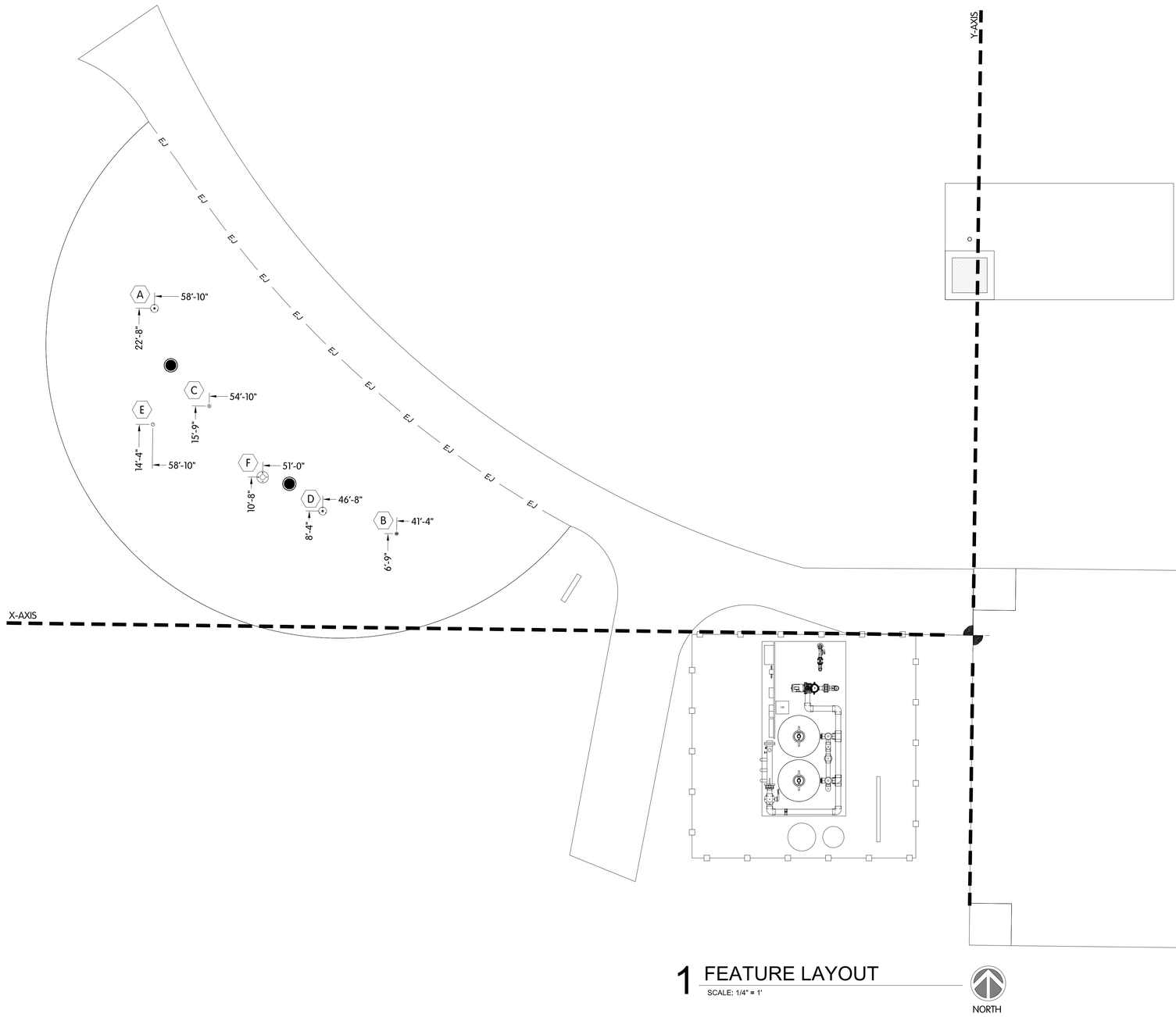
SALES REP: Ramon Garza

Benavides Park SplashPark
San Antonio, Texas

SHEET #:	OPTION #:	REVISION #:	DATE:	DRAWN BY	PAGE VIEW:	PROJECT #:
SP102	2	0	02 - 08 - 19	NIF	SplashPark Drain Layout	21588

NOTE:

1. ALL LOCATIONS ARE APPROXIMATE. FIELD VERIFY FINAL LOCATIONS TO ENSURE INFORMATION SHOWN DOES NOT CONFLICT WITH EXISTING SITE CONDITIONS. IF EXISTING SITE CONDITIONS DIFFER FROM INFORMATION SHOWN IN THESE DOCUMENTS, PLEASE CONTACT KRAFTSMAN AT (281) 353-9599 PRIOR TO EXECUTION OF WORK IN QUESTION.
2. DIMENSIONS SHOWN THUS ARE FROM X-AXIS OR Y-AXIS (TYP.)



1 FEATURE LAYOUT
SCALE: 1/4" = 1'

NORTH

FEATURE SCHEDULE			
	DESCRIPTION	QTY	GPM
A	**W011** **JET WAY** 4' HIGH 9 GPM @ 4 PSI	1	9
B	**W126** **SIMPLE SPRAY II** 2' to 15' HIGH 2-40 GPM @ 2-10 PSI	1	15
C	**W125** **SIMPLE SPRAY** 4' HIGH 18 GPM @ 3 PSI	1	18
D	**W036** **BABY LONG LEGS** 4' HIGH 18 GPM @ 3 PSI	1	18
E	**W344** **DUET JET MINI** 4' HIGH 6 GPM @ 3 PSI	1	6
F	**W010-ST** **MUSHROOM MAZE** **W/WIRED ACTIVATOR** 3' HIGH - 6' SPREAD 35 GPM @ 3 PSI	1	35
Z	**860-6PV DRAIN** BY SIOUX CHIEF (LOCATIONS BY INSTALLER)	2	N/A
MAXIMUM TOTAL FLOW RATE **126 GPM**			
TOTAL SPLASHPARK AREA **700 SQ. FT.**			
MAXIMUM TOTAL OF USERS **28**			

75% KOMPLETE - DESIGN REVIEW

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SCALE: 1/4" = 1'

SALES REP: Ramon Garza

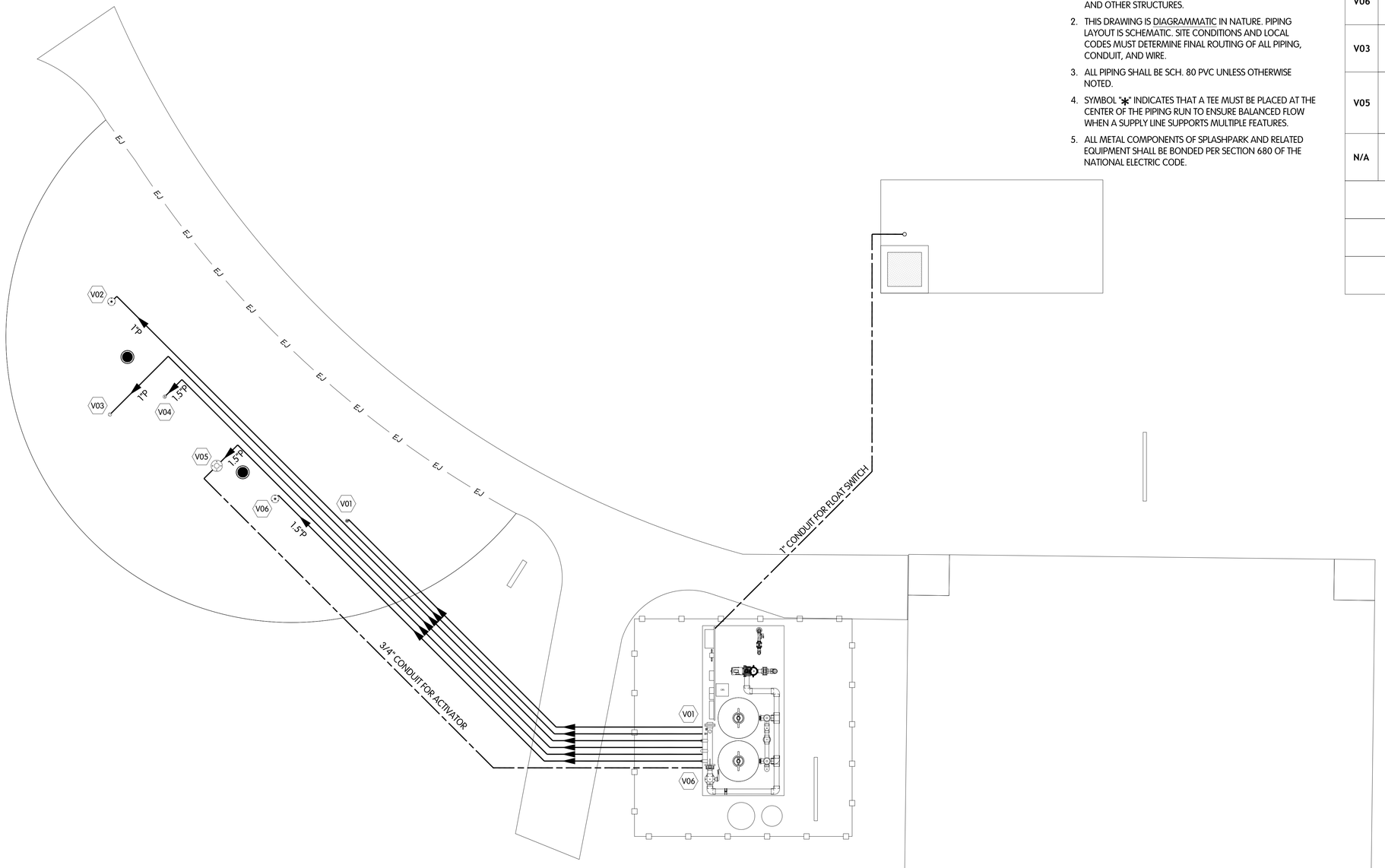
Benavides Park SplashPark
San Antonio, Texas

SHEET #:	OPTION #:	REVISION #:	DATE:	DRAWN BY	PAGE VIEW:	PROJECT #:
SP103	2	0	02 - 08 - 19	NIF	Feature Layout	21588

Note: Drawing should not be scaled unless in its original 24" x 36" printed format

NOTE:

1. ALL LOCATIONS ARE APPROXIMATE. FIELD VERIFY FINAL LOCATIONS TO ENSURE INFORMATION SHOWN DOES NOT CONFLICT WITH EXISTING SITE CONDITIONS. IF EXISTING SITE CONDITIONS DIFFER FROM INFORMATION SHOWN IN THESE DOCUMENTS, PLEASE CONTACT KRAFTSMAN AT (281) 353-9599 PRIOR TO EXECUTION OF WORK IN QUESTION.
2. FOUNTAIN SUPPLY PIPING SHOWN SHALL BE SCHEDULE 40 PVC (MIN.)



1 FEATURE LAYOUT
SCALE: 1/4" = 1'

NORTH

PLUMBING SCHEDULE

VALVE	FEATURE(S)	MAIN LINE PIPE SIZE	FLOW PER LINE (GPM)
V01	SIMPLE SPRAY II	1.5"	15
V02	JET WAY	1"	9
V03	DUET JET MINI	1"	6
V04	SIMPLE SPRAY	1.5"	18
V05	MUSHROOM MAZE	1.5"	35
V06	BABY LONG LEGS	1.5"	18

GENERAL NOTES:

1. FIELD VERIFY LOCATIONS OF ALL EXISTING UTILITIES, INLETS AND OTHER STRUCTURES.
2. THIS DRAWING IS DIAGRAMMATIC IN NATURE. PIPING LAYOUT IS SCHEMATIC. SITE CONDITIONS AND LOCAL CODES MUST DETERMINE FINAL ROUTING OF ALL PIPING, CONDUIT, AND WIRE.
3. ALL PIPING SHALL BE SCH. 80 PVC UNLESS OTHERWISE NOTED.
4. SYMBOL "✱" INDICATES THAT A TEE MUST BE PLACED AT THE CENTER OF THE PIPING RUN TO ENSURE BALANCED FLOW WHEN A SUPPLY LINE SUPPORTS MULTIPLE FEATURES.
5. ALL METAL COMPONENTS OF SPLASHPARK AND RELATED EQUIPMENT SHALL BE BONDED PER SECTION 680 OF THE NATIONAL ELECTRIC CODE.

FEATURE SCHEDULE

VALVE	⬡	DESCRIPTION	QTY	GPM
V02	A	**W011** **JET WAY** 4' HIGH 9 GPM @ 4 PSI	1	9
V01	B	**W126** **SIMPLE SPRAY II** 2' to 15' HIGH 2-40 GPM @ 2-10 PSI	1	15
V04	C	**W125** **SIMPLE SPRAY** 4' HIGH 18 GPM @ 3 PSI	1	18
V06	D	**W036** **BABY LONG LEGS** 4' HIGH 18 GPM @ 3 PSI	1	18
V03	E	**W344** **DUET JET MINI** 4' HIGH 6 GPM @ 3 PSI	1	6
V05	F	**W010-ST** **MUSHROOM MAZE** **W/WIRED ACTIVATOR** 3' HIGH - 6' SPREAD 35 GPM @ 3 PSI	1	35
N/A	Z	**860-6PV DRAIN** BY SIOUX CHIEF (LOCATIONS BY INSTALLER)	2	N/A
MAXIMUM TOTAL FLOW RATE **126 GPM**				
TOTAL SPLASHPARK AREA **700 SQ. FT.**				
MAXIMUM TOTAL OF USERS **28**				

75% KOMPLETE - DESIGN REVIEW

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SCALE:
1/4" = 1'

SALES REP:
Ramon Garza

Benavides Park Splashpark
San Antonio, Texas

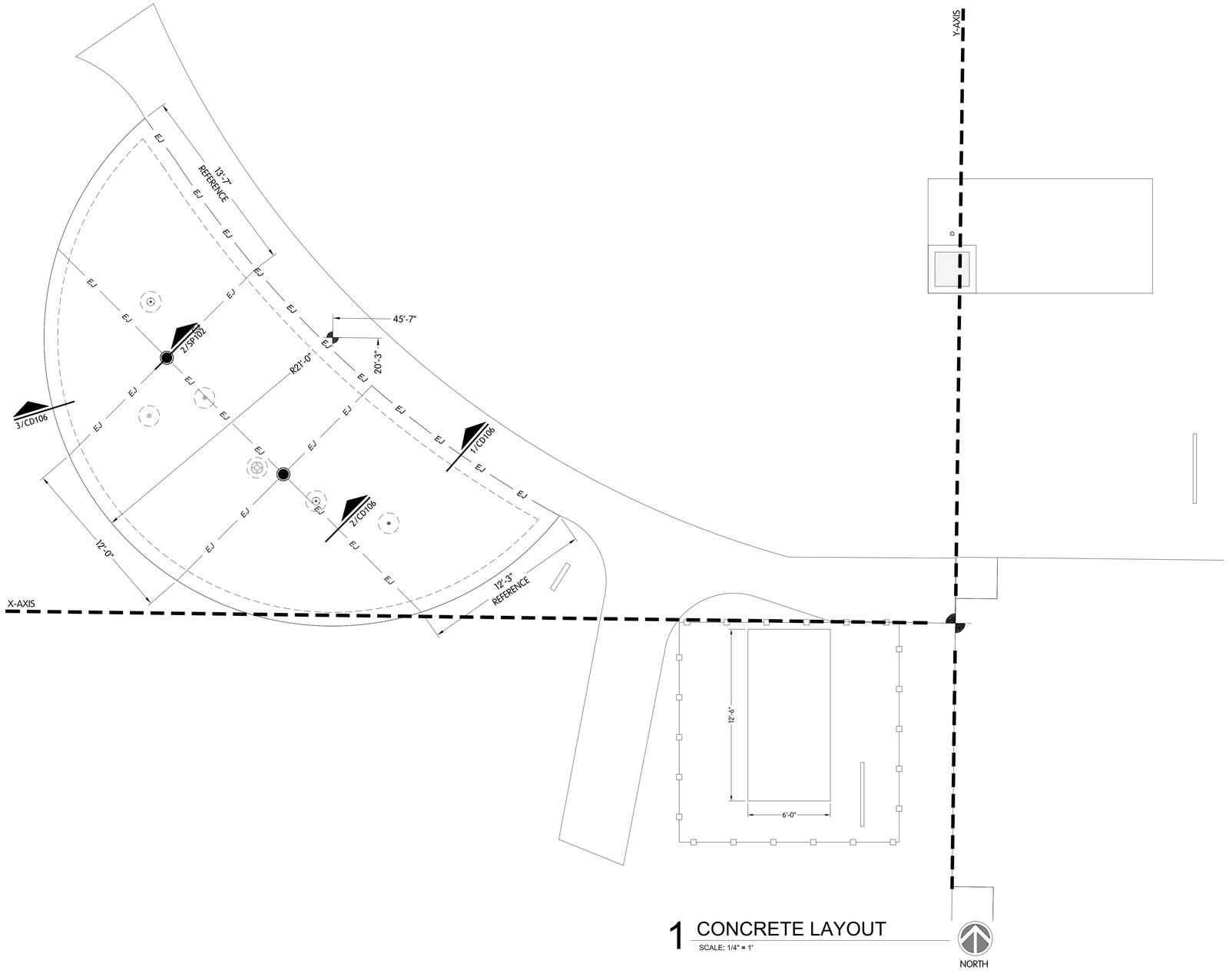
SHEET #:	OPTION #:	REVISION #:	DATE:	DRAWN BY	PROJECT #:
PP104	2	0	02-08-19	NIF	21588

PAGE VIEW: Piping Plan

Note: Drawing should not be scaled unless in its original 24" x 36" printed format

NOTE:

1. ALL LOCATIONS ARE APPROXIMATE. FIELD VERIFY FINAL LOCATIONS TO ENSURE INFORMATION SHOWN DOES NOT CONFLICT WITH EXISTING SITE CONDITIONS. IF EXISTING SITE CONDITIONS DIFFER FROM INFORMATION SHOWN IN THESE DOCUMENTS, PLEASE CONTACT KRAFTSMAN AT (281) 353-9599 PRIOR TO EXECUTION OF WORK IN QUESTION.
2. DIMENSIONS SHOWN THUS ARE FROM X-AXIS OR Y-AXIS (TYP.)



1 CONCRETE LAYOUT
SCALE: 1/4" = 1'

GENERAL CONCRETE NOTES:

1. REFER TO ED200; WATER ODYSSEY FEATURE CUT SHEET, FOR REQUIRED FEATURE FOUNDATION SIZES.
2. IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA), SPLASH DECK SLOPES NOT TO EXCEED 2% IN ANY DIRECTION.
3. PERIMETER PAD ELEVATION TO BE 2"-4" ABOVE HIGHEST POINT OF SURROUNDING EXISTING GRADE.
4. CONTINUOUS REBAR THROUGH EXPANSION JOINTS IS ACCEPTABLE IN LIEU OF DOWEL RODS.
5. ALL METAL COMPONENTS OF SPLASHPARK AND RELATED EQUIPMENT SHALL BE BONDED PER SECTION 680 OF THE NATIONAL ELECTRIC CODE.
6. DIMENSIONS FROM DESIGNATED GUIDELINES UNLESS OTHERWISE INDICATED.
7. SOIL PREPARATION BENEATH SPLASHPARK SHALL BE BY OTHERS. SOIL BENEATH SPLASHPARK SHALL BE DENSITY CONTROLLED, COMPACTED SELECT FILL MATERIAL INSTALLED SO THAT POTENTIAL VERTICAL RISE (PVR) IS LIMITED TO 1-INCH OR LESS. IT IS RECOMMENDED A LICENSED GEOTECHNICAL ENGINEER REVIEW THE SOIL PREPARATION AND CONFIRM IT HAS BEEN PERFORMED PROPERLY. SOIL INSTALLER SHALL COMPACT SELECT FILL MATERIAL TO 95% STANDARD PROCTOR DENSITY AT ±3.0% OPTIMUM MOISTURE CONTENT.

LEGEND

EJ ——— EJ ———	EXPANSION JOINT
- - - - - - - - - - - - - - - -	FOUNDATION / BEAM
T.D.	TOP OF DRAIN
T.C.	TOP OF CONCRETE

75% KOMPLETE - DESIGN REVIEW

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SCALE: 1/4" = 1'

SALES REP: Ramon Garza

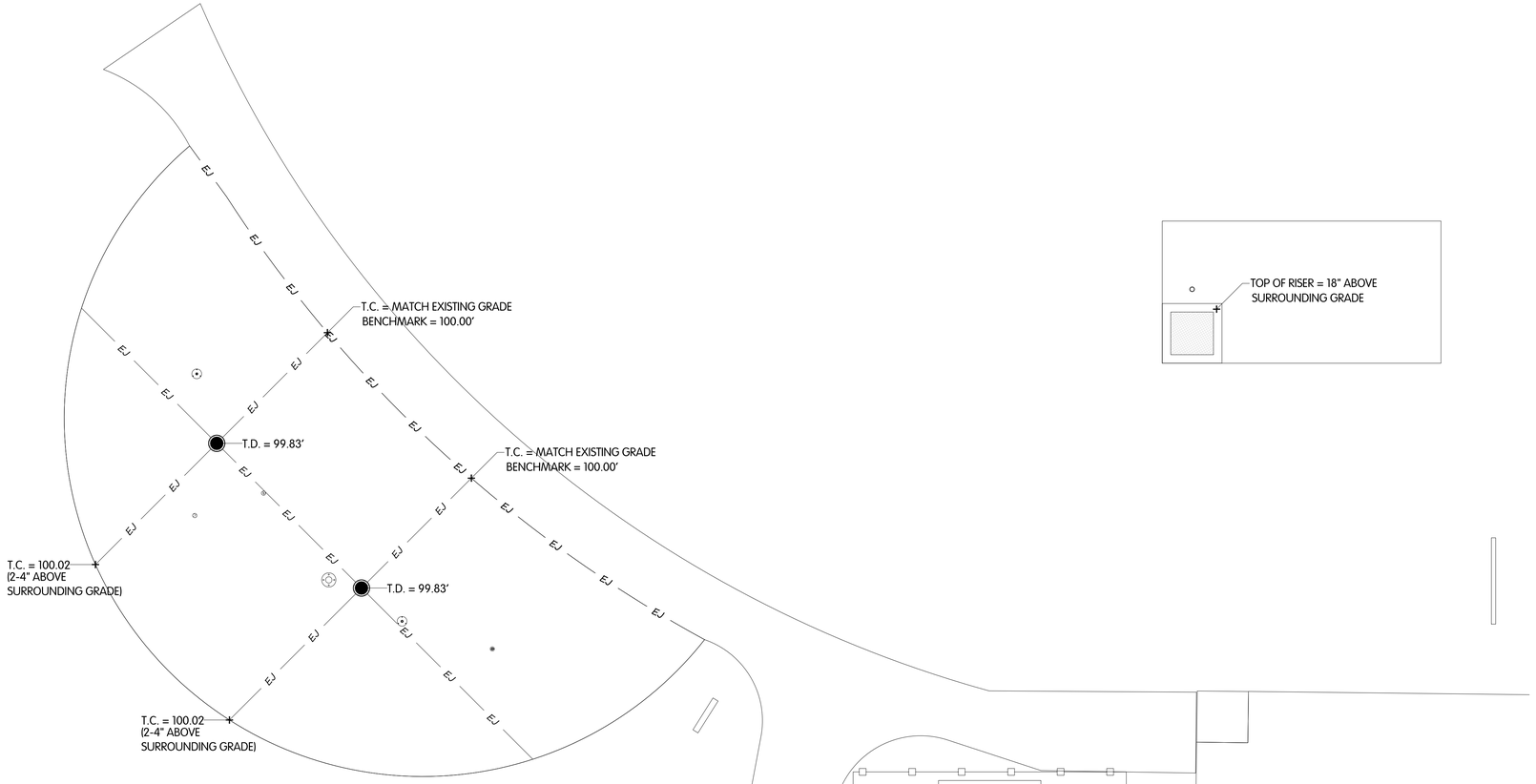
Benavides Park SplashPark
San Antonio, Texas

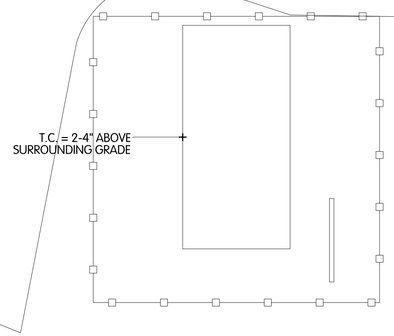
SHEET #:	OPTION #:	REVISION #:	DATE:	DRAWN BY	PAGE VIEW:	PROJECT #:
CL105	2	0	02-08-19	NIF	Concrete Layout	21588

Note: Drawing should not be scaled unless in its original 24" x 36" printed format

NOTE:

1. ALL LOCATIONS ARE APPROXIMATE. FIELD VERIFY FINAL LOCATIONS TO ENSURE INFORMATION SHOWN DOES NOT CONFLICT WITH EXISTING SITE CONDITIONS. IF EXISTING SITE CONDITIONS DIFFER FROM INFORMATION SHOWN IN THESE DOCUMENTS, PLEASE CONTACT KRAFTSMAN AT (281) 353-9599 PRIOR TO EXECUTION OF WORK IN QUESTION.
2. DIMENSIONS SHOWN THUS ARE FROM X-AXIS OR Y-AXIS (TYP.)





1 GRADING PLAN

SCALE: 1/4" = 1'

NORTH

GENERAL CONCRETE NOTES:

1. REFER TO ED200; WATER ODYSSEY FEATURE CUT SHEET, FOR REQUIRED FEATURE FOUNDATION SIZES.
2. IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA), SPLASH DECK SLOPES NOT TO EXCEED 2% IN ANY DIRECTION.
3. PERIMETER PAD ELEVATION TO BE 2"-4" ABOVE HIGHEST POINT OF SURROUNDING EXISTING GRADE.
4. CONTINUOUS REBAR THROUGH EXPANSION JOINTS IS ACCEPTABLE IN LIEU OF DOWEL RODS.
5. ALL METAL COMPONENTS OF SPLASHPARK AND RELATED EQUIPMENT SHALL BE BONDED PER SECTION 680 OF THE NATIONAL ELECTRIC CODE.
6. DIMENSIONS FROM DESIGNATED GUIDELINES UNLESS OTHERWISE INDICATED.
7. SOIL PREPARATION BENEATH SPLASHPARK SHALL BE BY OTHERS. SOIL BENEATH SPLASHPARK SHALL BE DENSITY CONTROLLED, COMPACTED SELECT FILL MATERIAL INSTALLED SO THAT POTENTIAL VERTICAL RISE (PVR) IS LIMITED TO 1-INCH OR LESS. IT IS RECOMMENDED A LICENSED GEOTECHNICAL ENGINEER REVIEW THE SOIL PREPARATION AND CONFIRM IT HAS BEEN PERFORMED PROPERLY. SOIL INSTALLER SHALL COMPACT SELECT FILL MATERIAL TO 95% STANDARD PROCTOR DENSITY AT ±3.0% OPTIMUM MOISTURE CONTENT.

LEGEND

EJ ——— EJ ———	EXPANSION JOINT
- - - - - - - - - - - - - - -	FOUNDATION / BEAM
T.D.	TOP OF DRAIN
T.C.	TOP OF CONCRETE

75% KOMPLETE - DESIGN REVIEW

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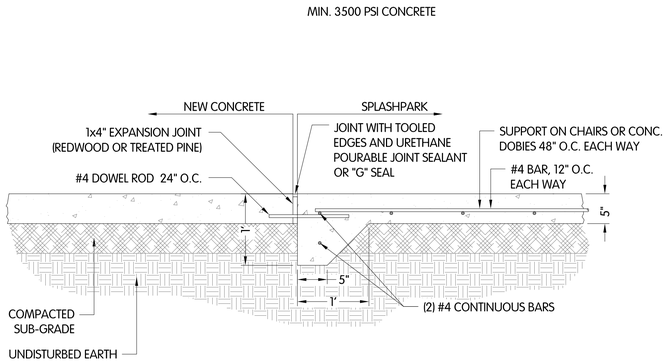
SCALE: 1/4" = 1'

SALES REP: Ramon Garza

Benavides Park SplashPark
San Antonio, Texas

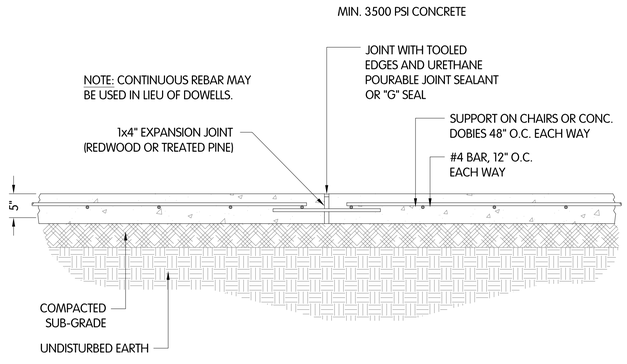
SHEET #:	OPTION #:	REVISION #:	DATE:	DRAWN BY	PAGE VIEW:	PROJECT #:
GP106	2	0	02 - 08 - 19	NIF	Grading Plan	21588

Note: Drawing should not be scaled unless in its original 24" x 36" printed format



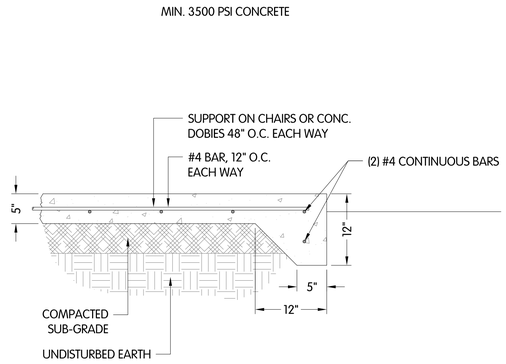
1 EXPANSION JOINT @ EDGE DETAIL

SCALE: 1" = 1'-0"



2 CONCRETE - EXPANSION JOINT DETAIL

SCALE: 1" = 1'-0"



3 CONCRETE - EDGE DETAIL

SCALE: 1" = 1'-0"

75% KOMPLETE - DESIGN REVIEW

Note: Drawing should not be scaled unless in its original 24" x 36" printed format

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SCALE:

1" = 1'

SALES REP:

Ramon Garza

Benavides Park SplashPark
San Antonio, Texas

SHEET #:	OPTION #:	REVISION #:	DATE:	DRAWN BY	PROJECT #:
CD106	2	0	02 - 08 - 19	NIF	21588

PAGE VIEW: Concrete Details

BONDING NOTES:

BOND ALL METAL COMPONENTS OF SPLASHPARK IN COMPLIANCE OF SECTION 680 OF THE NATIONAL ELECTRICAL CODE

REINFORCING STEEL-NON ENCAPSULATED ONLY
UN-ENCAPSULATED STRUCTURAL REINFORCING SHALL BE BONDED TOGETHER BY STEEL TIE WIRES OR THE EQUIVALENT TO FORM THE BONDING GRID. THE STRUCTURAL REINFORCING STEEL SHALL BE BONDED WITH A FASTENER ADHERING TO NEC 250.8 IN NO LESS THAN FOUR LOCATIONS UNIFORMLY SPACED AROUND THE SPLASH PAD PERIMETER.

THE FOLLOWING EQUIPMENT IF SHOWN MUST BE CONNECTED TO THE BONDING GRID PER NEC 250.8

METALLIC COMPONENETS
ALL METALLIC PARTS OF THE SPLASH PAD STRUCTURE OR EMBEDDED THEREIN AND HAVING AN EXPOSED SURFACE GREATER THAN FOUR SQUARE INCHES SHALL BE BONDED.

METAL FITTINGS
ALL METAL FITTINGS WITHIN OR ATTACHED TO THE SPLASH PAD STRUCTURE SHALL BE BONDED.

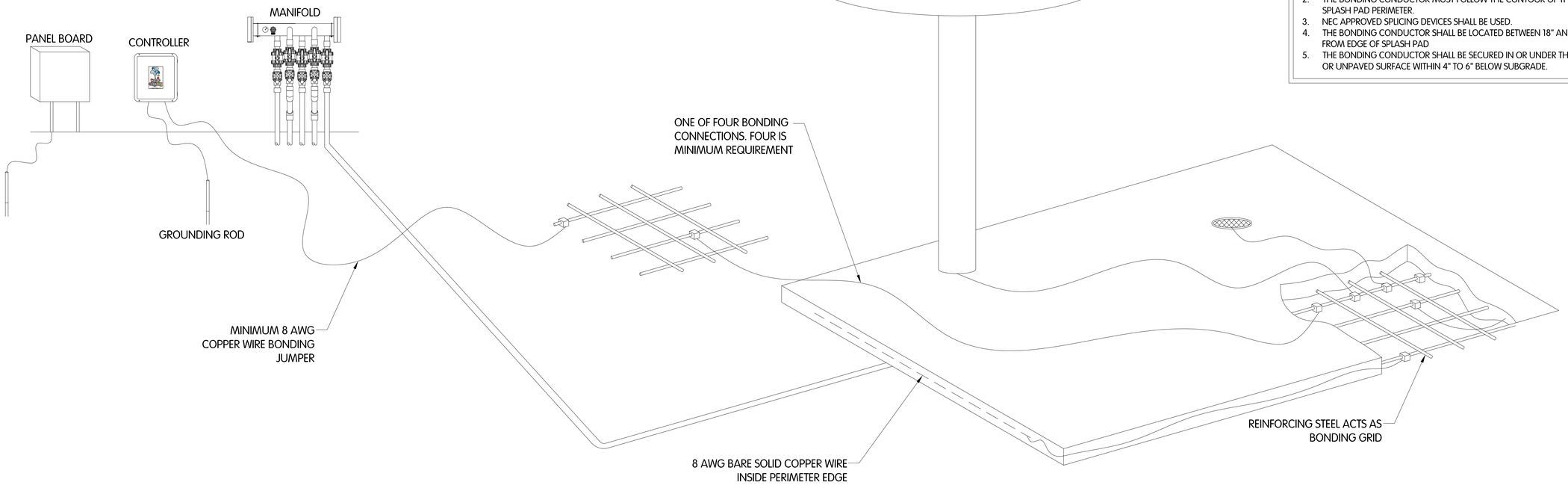
ELECTRICAL EQUIPMENT
METAL PARTS OF ELECTRICAL EQUIPMENT ASSOCIATED WITH THE SPLASH PAD WATER. FOR EXAMPLE SPLASH PAD PUMPS WITH MOTORS SHALL BE BONDED.

FIXED METAL PARTS
ALL FIXED METAL PARTS WITHIN 5 FEET OF THE EDGE OF THE SPLASH PAD SHALL BE BONDED INCLUDING, BUT NOT LIMITED TO, METAL SHEATHED CABLES AND RACEWAYS, METAL PIPING, METAL AWNINGS, METAL FENCES, AND METAL DOOR AND WINDOW FRAMES. REFER TO NEC 680 FOR EXCEPTIONS.

PERIMETER SURFACES
BONDING GRID SHALL BE EXTENDED 3 FEET HORIZONTALLY BEYOND THE EDGE OF THE SPLASH PAD INTO THE ADJACENT SURFACES. BONDING GRID SHALL BE INSTALLED IN ADJACENT DECK, GRAVEL, NOT REINFORCED DECK, EARTH, LANDSCAPING, BUILDING OR OTHER STRUCTURES PER NEC 680 "BURIED" DEFINITIONS.

WHERE STRUCTURAL REINFORCING STEEL IS NOT AVAILABLE IN ADJACENT SURFACES, EQUIPOTENTIAL BONDING MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED:

1. THE BONDING CONDUCTOR MUST BE 8 AWG BARE SOLID COPPER.
2. THE BONDING CONDUCTOR MUST FOLLOW THE CONTOUR OF THE SPLASH PAD PERIMETER.
3. NEC APPROVED SPLICING DEVICES SHALL BE USED.
4. THE BONDING CONDUCTOR SHALL BE LOCATED BETWEEN 18" AND 24" FROM EDGE OF SPLASH PAD
5. THE BONDING CONDUCTOR SHALL BE SECURED IN OR UNDER THE DECK OR UNPAVED SURFACE WITHIN 4" TO 6" BELOW SUBGRADE.



1 BONDING DETAIL
SCALE: N.T.S.

75% KOMPLETE - DESIGN REVIEW

Note: Drawing should not be scaled unless in its original 24" x 36" printed format

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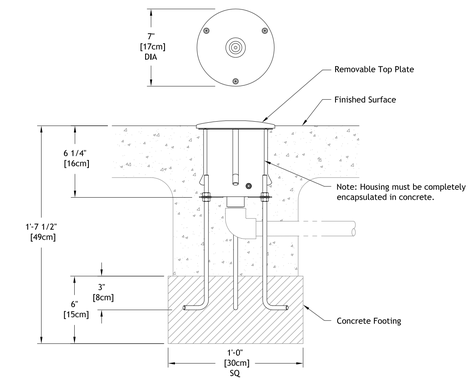
SCALE: N.T.S.

SALES REP: Ramon Garza

Benavides Park SplashPark
San Antonio, Texas

SHEET #:	OPTION #:	REVISION #:	DATE:	DRAWN BY	PROJECT #:
BD107	2	0	02 - 08 - 19	NIF	21588

PAGE VIEW: Bonding Details



Specifications

Model Number: W011
Interactive Water Effect: Shall be a vertical aerated stream of water.
Housing: 20 gauge deep-drawn type 304 stainless steel with grounding connection and 1" FPT inlet. Supplied with 4, 3/8" x 12" x 2" anchor bolts with two leveling nuts and washers per bolt and wood pour template.
Gaskets: 70 durometer EPDM o-ring.
Construction Cover: Reusable 7" diameter HDPE (high density polyethylene).
Top Plate: 7" diameter slightly domed cast bronze with interchangeable nozzle assembly and UV stabilized, textured elastomeric urethane coating with a UV and chlorine resistant sealer coat.
Top Plate Anchors: Three ½" x 5" machined brass with 30° hook bend.
Fasteners: Tamper-resistant 18/8 stainless steel.
Nozzle: Precision machined brass.

Hydraulic Requirements

☐ W011

Height	GPM	psi
2'	6	2
4'	9	4
6'	12	6

☐ *W011C-Water Conserving Version

Height	*CGPM	*Cpsi
2'	2	1
4'	3	2
6'	4	4
10'	5	8

WATER ODYSSEY™ BY FOUNTAIN PEOPLE A PLAYCORE Company

Jet Way™

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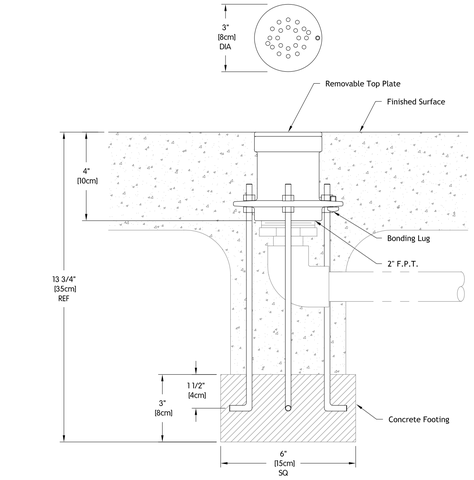
Phone (512) 392-1155 - Fax (512) 392-1154 - www.waterodyssey.com

W011 03-07-18

A FEATURE DETAIL: W011

SCALE: N.T.S.



Specifications

Model No: W126
Housing: Machined cast bronze with natural finish, 2" inlet and grounding lug.
Top Plate: Polished brass
Leveling Bolts: (3) 1/4"-20 x 10" x 1", bolts with two leveling nuts and washers per bolt.
Nozzle: Precision machined orifice.

Hydraulic Requirements

☐ W126

Height	GPM	psi
2'-15'	2-40	2-10
3'-4'	15-20	3-4.5

WATER ODYSSEY™ BY FOUNTAIN PEOPLE A PLAYCORE Company

Simple Spray II™ Mini Series

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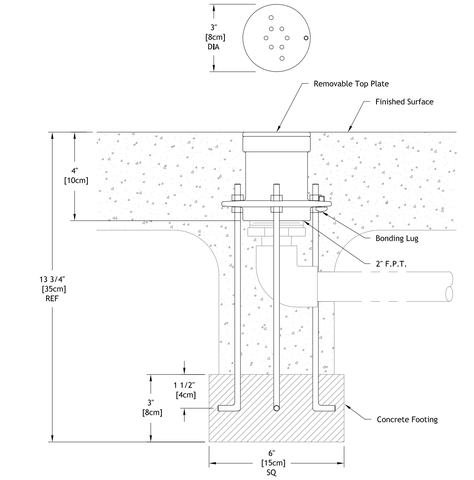
W126 03-07-18

B FEATURE DETAIL: W126

SCALE: N.T.S.



Specifications

Model No: W125
Housing: Machined cast bronze with natural finish, 2" inlet and grounding lug.
Top Plate: Polished brass
Leveling Bolts: (3) 1/4"-20 x 10" x 1", bolts with two leveling nuts and washers per bolt.
Nozzle: Precision machined orifice.

Hydraulic Requirements

☐ W125

Height	GPM	psi
2'	12	2
4'	18	3
6'	27	4
10'	36	6

WATER ODYSSEY™ BY FOUNTAIN PEOPLE A PLAYCORE Company

Simple Spray™ Mini Series

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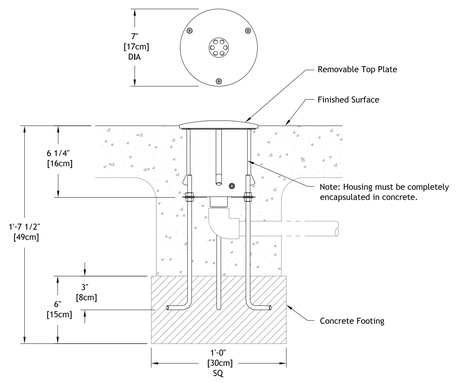
W125 03-07-18

C FEATURE DETAIL: W125

SCALE: N.T.S.



Specifications

Model Number: W036
Interactive Water Effect: Shall be an array of outward arching streams of water.
Housing: 20 gauge deep-drawn type 304 stainless steel with grounding connection and 1" FPT inlet. Supplied with 4, 3/8" x 12" x 2" anchor bolts with two leveling nuts and washers per bolt and wood pour template.
Gaskets: 70 durometer EPDM o-ring.
Construction Cover: Reusable 7" diameter HDPE (high density polyethylene).
Top Plate: 7" diameter slightly domed cast bronze with interchangeable nozzle assembly and UV stabilized, textured elastomeric urethane coating with a UV and chlorine resistant sealer coat.
Top Plate Anchors: Three ½" x 5" machined brass with 30° hook bend.
Fasteners: Tamper-resistant 18/8 stainless steel.
Nozzles: Six precision machined brass.

Hydraulic Requirements

☐ W036

Height	GPM	psi
2'	12	2
4'	18	3
6'	24	4
10'	36	6

☐ *W036C - Water Conserving Version

Height	*CGPM	*Cpsi
2'	2.5	2
4'	3	3
6'	4	4
10'	6	6

WATER ODYSSEY™ BY FOUNTAIN PEOPLE A PLAYCORE Company

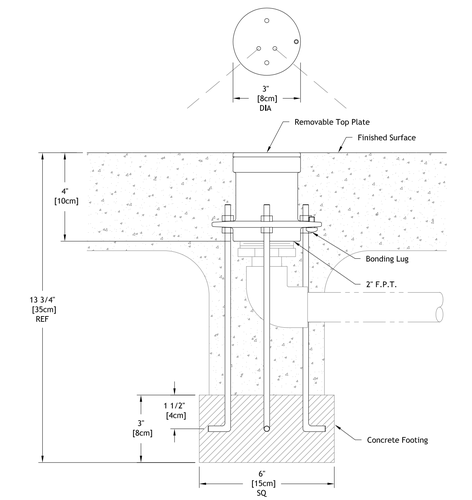
Baby Long Legs™

Fountain People, Inc. - PO Box 807 - 4600 Highway 123 - San Marcos, Texas 78667-0807
Phone (512) 392-1155 - Fax (512) 392-1154 - www.waterodyssey.com

W036 03-07-18

D FEATURE DETAIL: W036

SCALE: N.T.S.



Specifications

Model No: W344
Housing: Machined cast bronze with natural finish, 2" inlet and grounding lug.
Top Plate: Polished brass
Leveling Bolts: (3) 1/4"-20 x 10" x 1", bolts with two leveling nuts and washers per bolt.
Nozzle: Precision machined orifice.

Hydraulic Requirements

☐ W344

Throw	GPM	psi
2'	4	2
4'	6	3
6'	9	4
10'	12	6

WATER ODYSSEY™ BY FOUNTAIN PEOPLE A PLAYCORE Company

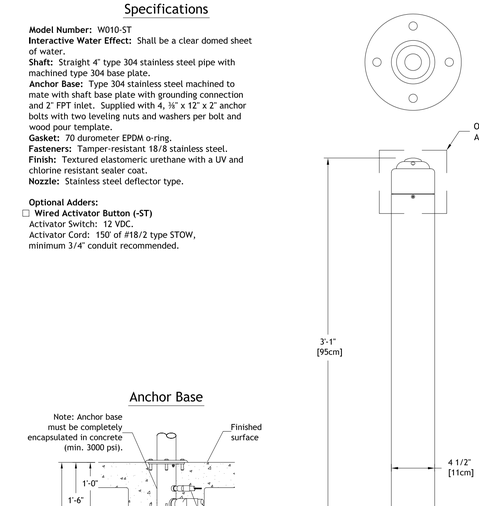
Duet Jet™ Mini Series

Fountain People, Inc. - PO Box 807 - 4600 Highway 123 - San Marcos, Texas 78667-0807
Phone (512) 392-1155 - Fax (512) 392-1154 - www.waterodyssey.com

W344 03-08-18

E FEATURE DETAIL: W344

SCALE: N.T.S.



Specifications

Model Number: W010-ST
Interactive Water Effect: Shall be a clear domed sheet of water.
Shaft: Straight 4" type 304 stainless steel pipe with machined type 304 base plate.
Anchor Base: Type 304 stainless steel machined to mate with shaft base plate with grounding connection and 2" FPT inlet. Supplied with 4, ⅜" x 12" x 2" anchor bolts with two leveling nuts and washers per bolt and wood pour template.
Gasket: 70 durometer EPDM o-ring.
Fasteners: Tamper-resistant 18/8 stainless steel.
Finish: Textured elastomeric urethane with a UV and chlorine resistant sealer coat.
Nozzle: Stainless steel deflector type.

Optional Adders:
☐ **Wired Activator Button (-ST)**
Activator Switch: 12 VDC.
Activator Cord: 150' of #18/2 type STOW, minimum 3/4" conduit recommended.

Hydraulic Requirements

☐ W010-ST

Spread	GPM	psi
4'	30	2
8'	40	3

WATER ODYSSEY™ BY FOUNTAIN PEOPLE A PLAYCORE Company

Mushroom Maze™
with Tactile Hard-Wired Activator Button

Fountain People, Inc. - PO Box 807 - 4600 Highway 123 - San Marcos, Texas 78667-0807
Phone (512) 392-1155 - Fax (512) 392-1154 - www.waterodyssey.com

W010-ST 09-17-18

F FEATURE DETAIL: W010-ST

SCALE: N.T.S.

75% KOMPLETE - DESIGN REVIEW

Note: Drawing should not be scaled unless in its original 24" x 36" printed format

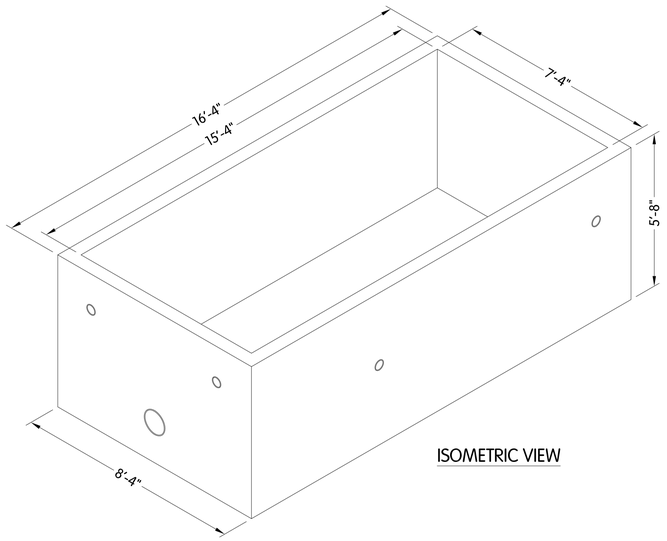
THE FUN BUILDERS KRAFTSMAN KRAFTSMANPLAY.COM
kraftsmanplay.com
800.451.4869

SCALE: N.T.S.

SALES REP: Ramon Garza

Benavides Park SplashPark
San Antonio, Texas

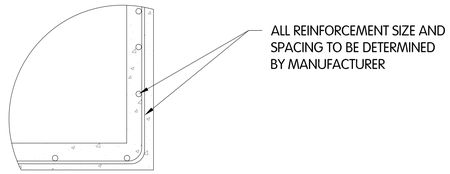
PROJECT #: 21588
PAGE VIEW: Feature Details
DRAWN BY: NIF
DATE: 02 - 08 - 19
REVISION #: 0
OPTION #: 2
SHEET #: ED200



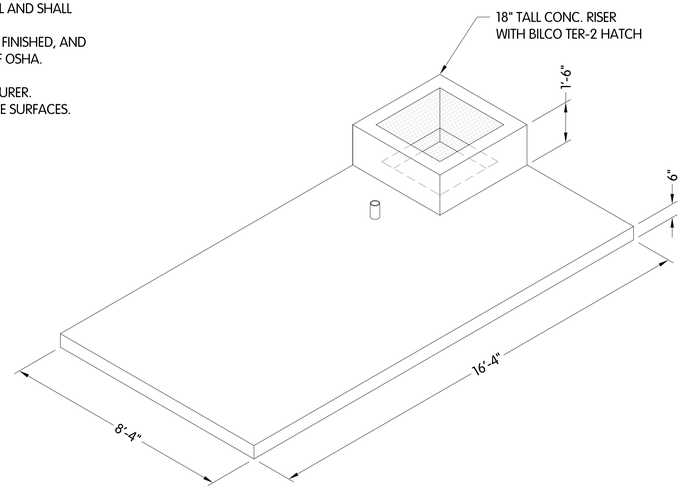
ISOMETRIC VIEW

GENERAL NOTES:

1. ALL CONCRETE SHALL HAVE A MIX DESIGN OF 5000PSI WITH A MININUM OF 5 SACKS OF STANDARD TYPE 1 CEMENT.
2. ALL REINFORCING REBARS SHALL BE CLEAN, NEW AND FREE OF DIRT, RUST, OR OIL AND SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM A-615 GRADE 60.
3. WELDED WIRE FABRIC SHALL BE CLEAN, NEW AND FREE OF DIRT, RUST, OR OIL AND SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM A-185.
4. ALL REINFORCING SHALL BE SET AND TIED, ALL CONCRETE SHALL BE PLACED, FINISHED, AND CURED PER ACI 318-83 SPECIFICATIONS AND PER ALL SAFETY PROVISIONS OF OSHA.
5. LAP REBARS AT ALL SPLICES A MINIMUM OF 36 BAR DIAMETERS.
6. ALL REINFORCEMENT SIZE AND SPACING TO BE DETERMINED BY MANUFACTURER.
7. ALL REBAR SHALL BE A MINIMUM OF 2" FROM EITHER THE INSIDE OR OUTSIDE SURFACES.
8. EPOXY INTERIOR COATING OF HOLDING TANK AND BOTTOM OF LID.

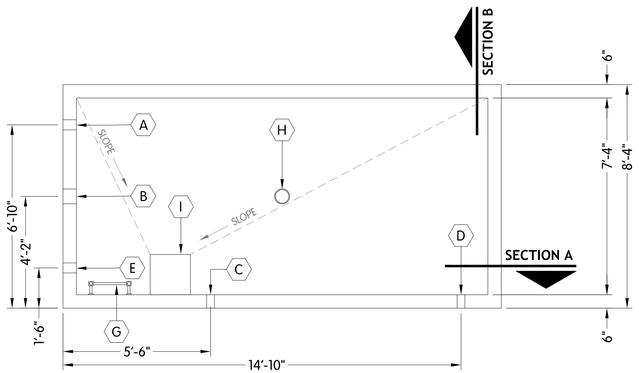


WALL AND FLOOR REINFORCING DETAIL

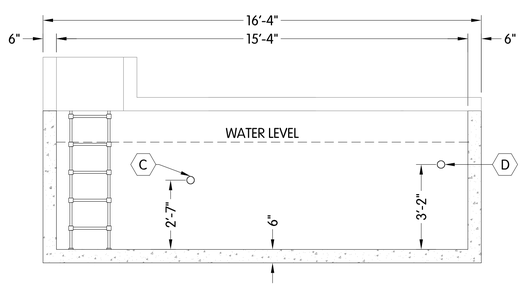


ISOMETRIC VIEW

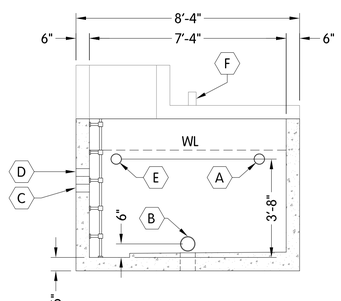
-	DESCRIPTION
A	4" CAST-A-SEAL, ℄ 3'-8" ABOVE FLOOR (OVERFLOW CONNECTION)
B	6" CAST-A-SEAL, ℄ 12" ABOVE FLOOR (DRAIN LINE CONNECTION)
C	3" CAST-A-SEAL, ℄ 2'-7" ABOVE FLOOR (SUCTION CONNECTION)
D	3" CAST-A-SEAL, ℄ 3'-2" ABOVE FLOOR (FILTERED RETURN CONNECTION)
E	4" CAST-A-SEAL, ℄ 3'-8" ABOVE FLOOR (MAKE-UP WATER / FILL CONNECTION)
F	2" CAST-A-SEAL FOR FLOAT ASSEMBLY
G	POP UP LADDER; BY WALLIS CONCRETE, LLC. RUNGS TO EXTEND TO TOP OF RISER @ LID
H	6" PVC CLEANOUT
I	18" X 18" X 3" RECESS FOR SUMP PUMP



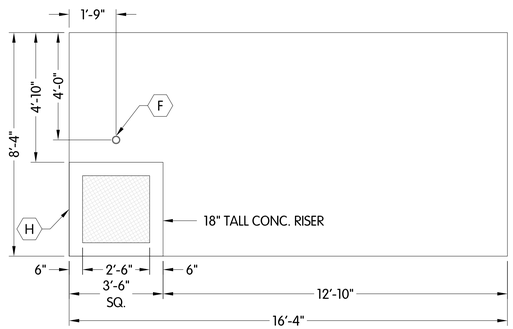
PLAN VIEW



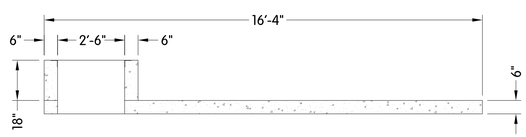
SECTION A



SECTION B



PLAN VIEW



SECTION VIEW

1 CONC. COLLECTION TANK DETAILS

SCALE: 3/8" = 1'-0"

2 COLLECTION TANK LID DETAILS

SCALE: 3/8" = 1'-0"

75% KOMPLETE - DESIGN REVIEW

Note: Drawing should not be scaled unless in its original 24" x 36" printed format

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800.451.4869

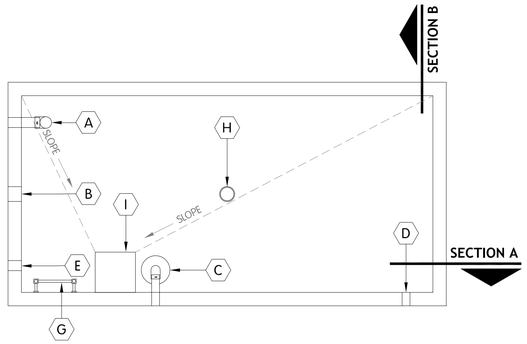
SCALE: 3/8" = 1'

SALES REP: Ramon Garza

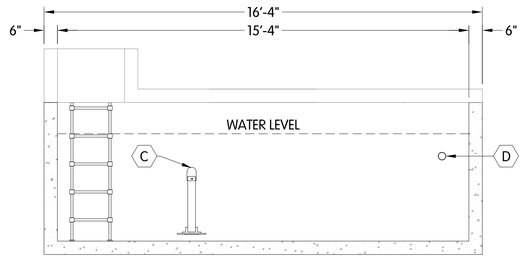
Benavides Park SplashPark
San Antonio, Texas

SHEET #:	OPTION #:	REVISION #:	DATE:	DRAWN BY	PROJECT #:
FL300	2	0	02-08-19	NIF	21588

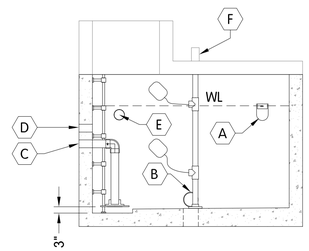
PAGE VIEW: Holding Tank Details



PLAN VIEW



SECTION A



SECTION B

-	DESCRIPTION
A	4" CAST-A-SEAL, ℄ 3'-8" ABOVE FLOOR (OVERFLOW CONNECTION)
B	6" CAST-A-SEAL, ℄ 12" ABOVE FLOOR (DRAIN LINE CONNECTION)
C	3" CAST-A-SEAL, ℄ 2'-7" ABOVE FLOOR (SUCTION CONNECTION)
D	3" CAST-A-SEAL, ℄ 3'-2" ABOVE FLOOR (FILTERED RETURN CONNECTION)
E	4" CAST-A-SEAL, ℄ 3'-8" ABOVE FLOOR (MAKE-UP WATER / FILL CONNECTION)
F	2" CAST-A-SEAL FOR FLOAT ASSEMBLY
G	POP UP LADDER; BY WALLIS CONCRETE, LLC. RUNGS TO EXTEND TO TOP OF RISER @ LID
H	6" PVC CLEANOUT
I	18" X 18" X 3" RECESS FOR SUMP PUMP

1 CONC. COLLECTION TANK DETAILS

SCALE: 3/8" = 1'-0"

75% KOMPLETE - DESIGN REVIEW

Note: Drawing should not be scaled unless in its original 24" x 36" printed format

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SCALE: 3/8" = 1'

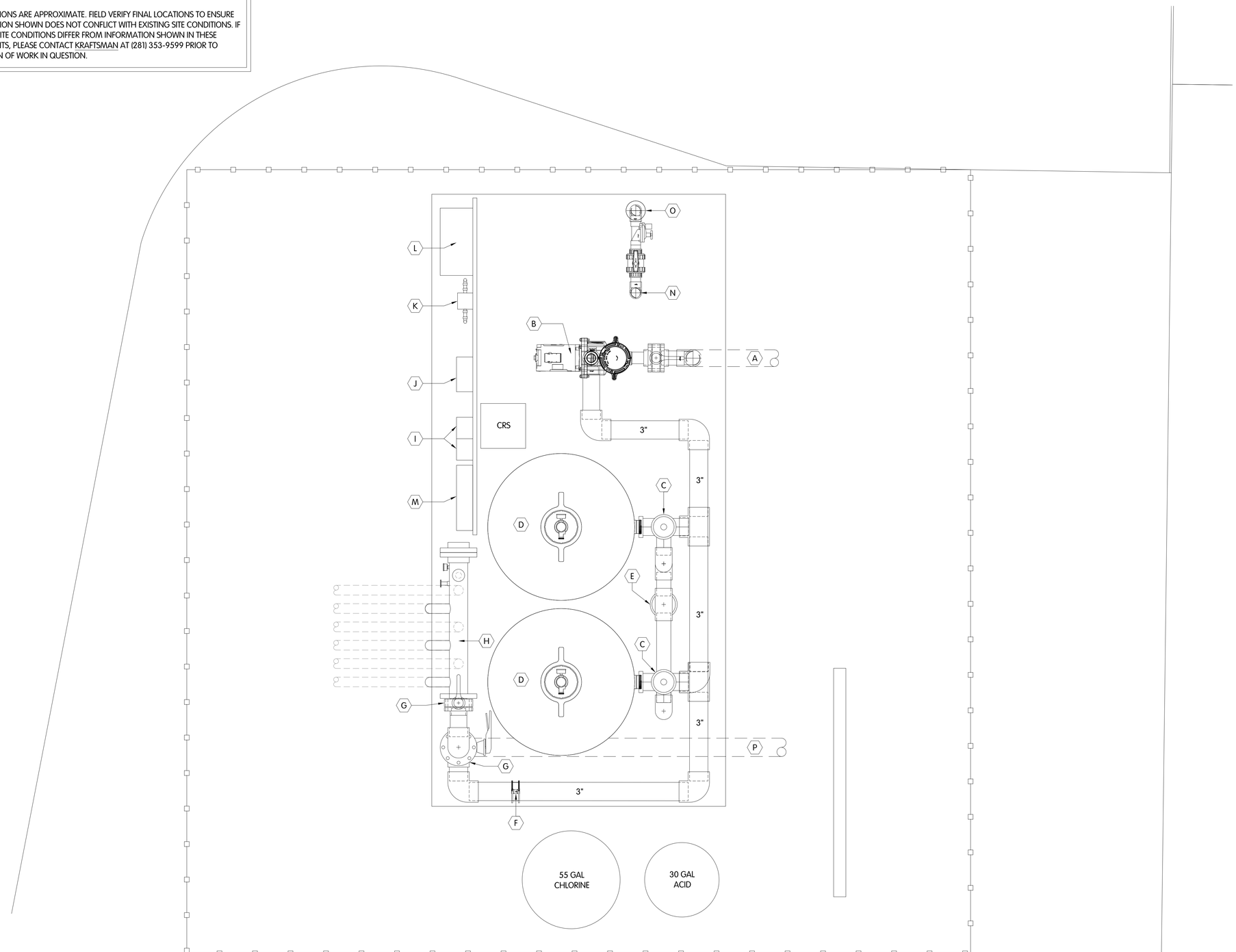
SALES REP: Ramon Garza

Benavides Park SplashPark
San Antonio, Texas

SHEET #:	OPTION #:	REVISION #:	DATE:	DRAWN BY	PAGE VIEW:	PROJECT #:
FL300.1	2	0	02-08-19	NIF	Holding Tank Piping	21588

NOTE:

ALL LOCATIONS ARE APPROXIMATE. FIELD VERIFY FINAL LOCATIONS TO ENSURE INFORMATION SHOWN DOES NOT CONFLICT WITH EXISTING SITE CONDITIONS. IF EXISTING SITE CONDITIONS DIFFER FROM INFORMATION SHOWN IN THESE DOCUMENTS, PLEASE CONTACT KRAFTSMAN AT (281) 353-9599 PRIOR TO EXECUTION OF WORK IN QUESTION.



SPLASHPARK EQUIPMENT SCHEDULE	
A	3" PUMP SUCTION
B	PENTAIR WHISPERFLOW XFE-20, 5HP, SINGLE PHASE PUMP WITH STRAINER
C	PENTAIR FULLFLoXF BACKWASH VALVE; QTY. 2
D	FIBERGLASS SAND FILTER BY PENTAIR; 7.06 S.F. FILTER AREA; MODEL: TR140C; QTY. 2
E	6" REDUCED UNDERGROUND BACKWASH WITH AIR GAP, 6" RISER 4.75" ABOVE FINISH FLOOR
F	BLUE WHITE FLOWMETER; MIN. 10X BEFORE AND 4X PIPE DIA. AFTER INTERRUPTED PIPE RUN
G	3" BUTTERFLY VALVE QTY. 2
H	WATER SUPPLY MANIFOLD BY KRAFTSMAN; MODEL:KM-06, 3" DIAMETER HEADER, 6 VALVES
I	STENNER PERISTALTIC PUMP; 0.5-10 GPD FEED RATE; 120V (REQUIRES ELEC RECEPTICLE); FURNISH WITH NO 5 TUBE ASSEMBLY AND BALL TYPE EJECTOR CHECK VALVE; MODEL: A45M5138 QTY. 2
J	CHEMTROL MODEL 250 CHEMICAL CONTROLLER FOR LSI, pH, AND ORP MONITORING; FURNISH WITH SAMPLING CELL AND PROBES; 120V REQUIRED (REQUIRES DUPLEX RECEPTACLE), MODEL:CH250
K	FLOW CELL FOR CHEMICAL INJECTION, MODEL: FCA
L	CUSTOM CONTROLLER; MODEL:KDSC-8-16
M	PULSAR CRY SYSTEM, WITH 5 GALLON CONTAINER
N	1" MAKEUP WATER SYSTEM / FILL LINE, 1" WATER IN WITH AUTO AND MANUAL VALVES
O	4" MAKEUP WATER SYSTEM / FILL LINE, 4" GRAVITY LINE TO HOLDING TANK
P	3" FILTERED RETURN TO HOLDING TANK (MANIFOLD BYPASS)

1 FILTRATION SYSTEM LAYOUT
SCALE: 1" = 1'

NORTH

75% KOMPLETE - DESIGN REVIEW

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SCALE: 1" = 1'

SALES REP: Ramon Garza

Benavides Park SplashPark
San Antonio, Texas

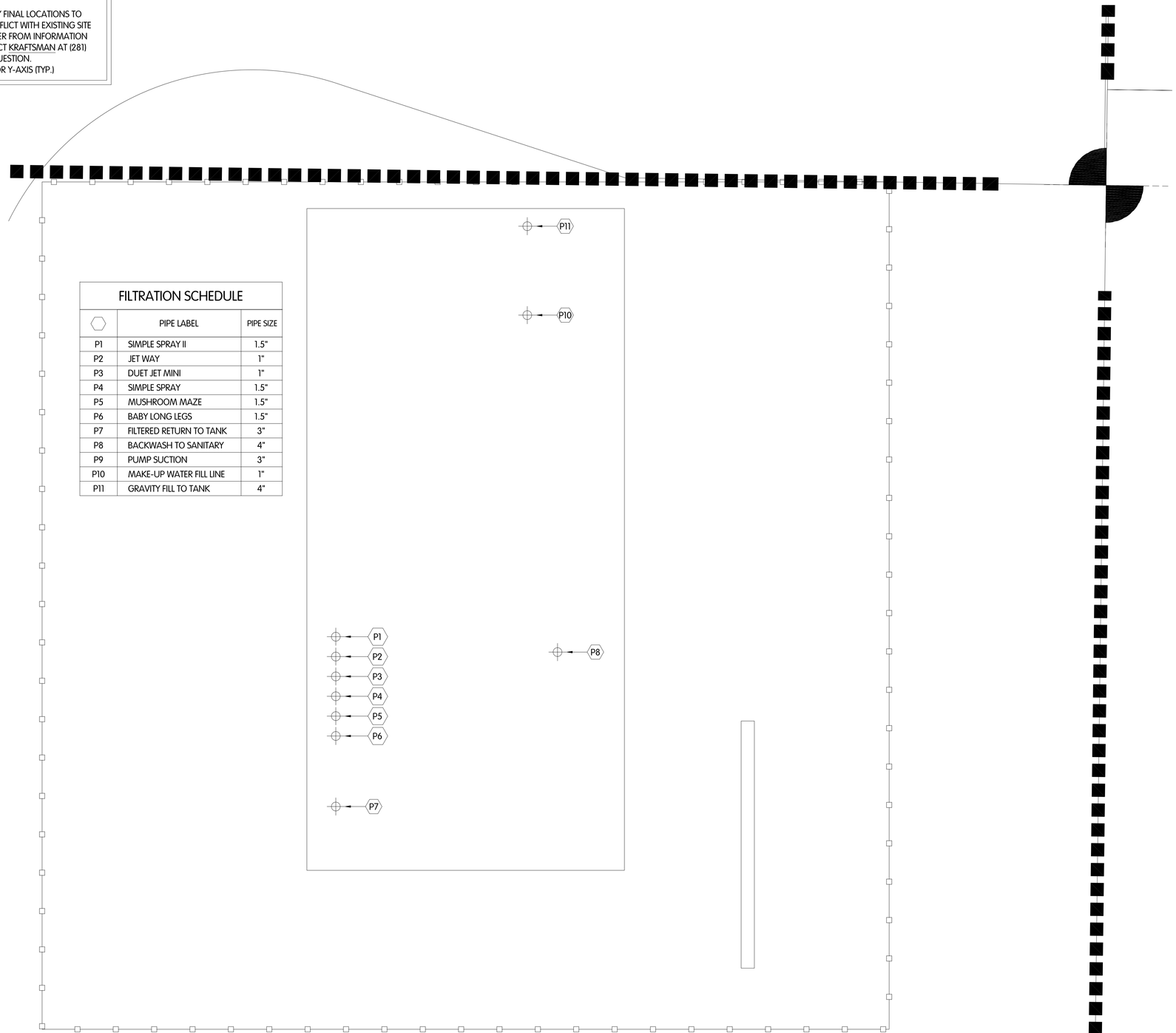
SHEET #:	OPTION #:	REVISION #:	DATE:	DRAWN BY	PROJECT #:
FL301	2	0	02-08-19	NIF	21588

PAGE VIEW: Filtration System Layout

Note: Drawing should not be scaled unless in its original 24" x 36" printed format

NOTE:

1. ALL LOCATIONS ARE APPROXIMATE. FIELD VERIFY FINAL LOCATIONS TO ENSURE INFORMATION SHOWN DOES NOT CONFLICT WITH EXISTING SITE CONDITIONS. IF EXISTING SITE CONDITIONS DIFFER FROM INFORMATION SHOWN IN THESE DOCUMENTS, PLEASE CONTACT KRAFTSMAN AT (281) 353-9599 PRIOR TO EXECUTION OF WORK IN QUESTION.
2. DIMENSIONS SHOWN THUS ARE FROM X-AXIS OR Y-AXIS (TYP.)



FILTRATION SCHEDULE

	PIPE LABEL	PIPE SIZE
P1	SIMPLE SPRAY II	1.5"
P2	JET WAY	1"
P3	DUET JET MINI	1"
P4	SIMPLE SPRAY	1.5"
P5	MUSHROOM MAZE	1.5"
P6	BABY LONG LEGS	1.5"
P7	FILTERED RETURN TO TANK	3"
P8	BACKWASH TO SANITARY	4"
P9	PUMP SUCTION	3"
P10	MAKE-UP WATER FILL LINE	1"
P11	GRAVITY FILL TO TANK	4"

1 FILTRATION SYSTEM PENETRATIONS
SCALE: 1" = 1'

SPLASHPARK EQUIPMENT SCHEDULE	
A	3" PUMP SUCTION
B	PENTAIR WHISPERFLOW XFE-20, 5HP, SINGLE PHASE PUMP WITH STRAINER
C	PENTAIR FULLFLoXF BACKWASH VALVE; QTY. 2
D	FIBERGLASS SAND FILTER BY PENTAIR; 7.06 S.F. FILTER AREA; MODEL: TR140C; QTY. 2
E	6" REDUCED UNDERGROUND BACKWASH WITH AIR GAP, 6" RISER 4.75" ABOVE FINISH FLOOR
F	BLUE WHITE FLOWMETER; MIN. 10X BEFORE AND 4X PIPE DIA. AFTER INTERRUPTED PIPE RUN
G	3" BUTTERFLY VALVE QTY. 2
H	WATER SUPPLY MANIFOLD BY KRAFTSMAN; MODEL:KM-06, 3" DIAMETER HEADER, 6 VALVES
I	STENNER PERISTALTIC PUMP; 0.5-10 GPD FEED RATE; 120V (REQUIRES ELEC RECEPTICLE); FURNISH WITH NO 5 TUBE ASSEMBLY AND BALL TYPE EJECTOR CHECK VALVE; MODEL: A45M5138 QTY. 2
J	CHEMTROL MODEL 250 CHEMICAL CONTROLLER FOR LSI, pH, AND ORP MONITORING; FURNISH WITH SAMPLING CELL AND PROBES; 120V REQUIRED (REQUIRES DUPLEX RECEPTACLE), MODEL:CH250
K	FLOW CELL FOR CHEMICAL INJECTION, MODEL: FCA
L	CUSTOM CONTROLLER; MODEL:KDSC-8-16
M	PULSAR CRY SYSTEM, WITH 5 GALLON CONTAINER
N	1" MAKEUP WATER SYSTEM / FILL LINE, 1" WATER IN WITH AUTO AND MANUAL VALVES
O	4" MAKEUP WATER SYSTEM / FILL LINE, 4" GRAVITY LINE TO HOLDING TANK
P	3" FILTERED RETURN TO HOLDING TANK (MANIFOLD BYPASS)

75% KOMPLETE - DESIGN REVIEW

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SCALE: 1" = 1'

SALES REP: Ramon Garza

Benavides Park SplashPark
San Antonio, Texas

SHEET #:	OPTION #:	REVISION #:	DATE:	DRAWN BY	PAGE VIEW:	PROJECT #:
FL302	2	0	02 - 08 - 19	NIF	Filtration System Penetrations	21588

Note: Drawing should not be scaled unless in its original 24" x 36" printed format

NOTE:

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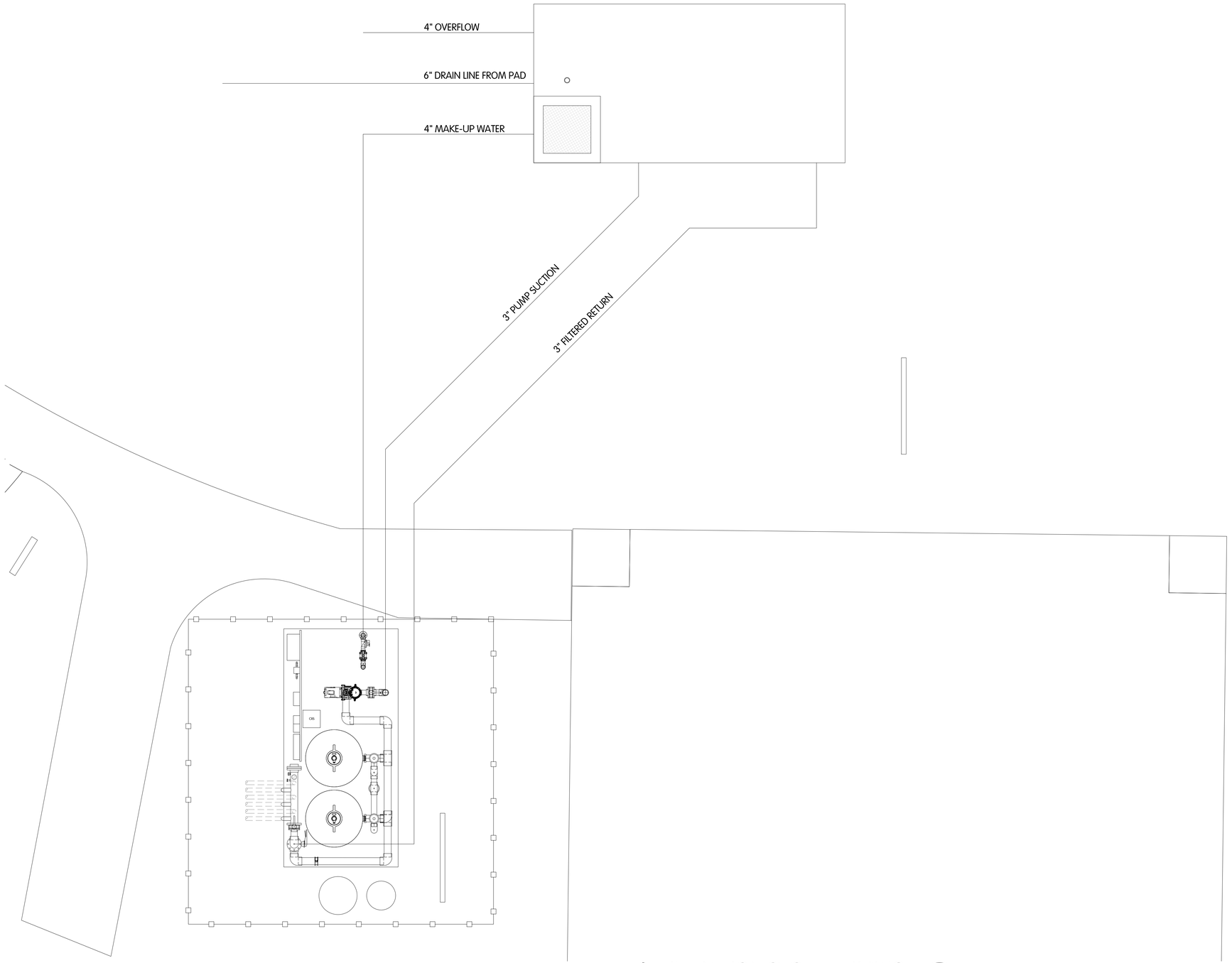

1 FILTRATION SYSTEM PIPING

SCALE: 3/8" = 1'

NORTH

75% KOMPLETE - DESIGN REVIEW

Note: Drawing should not be scaled unless in its original 24" x 36" printed format

kraftsmanplay.com
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SCALE: 3/8" = 1'

SALES REP: Ramon Garza

Benavides Park SplashPark
San Antonio, Texas

SHEET #:	OPTION #:	REVISION #:	DATE:	DRAWN BY	PAGE VIEW:	PROJECT #:
FL303	2	0	02 - 08 - 19	NIF	Filtration System Piping	21588