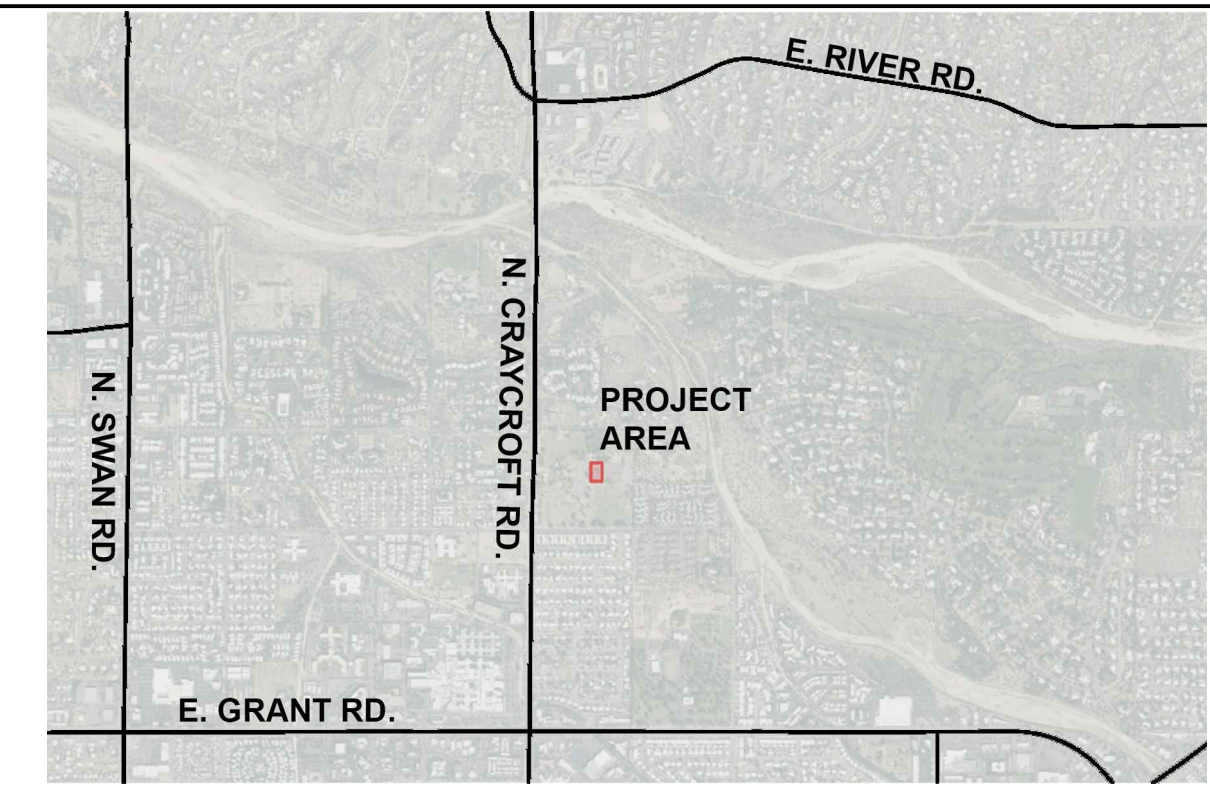


# FORT LOWELL PARK IMPROVEMENTS

## PARK IMPROVEMENTS

CITY OF TUCSON PARKS AND RECREATION DEPARTMENT



### SHEET INDEX

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ACCEPTED BY:

PARKS DIRECTOR	DATE
DISTRICT ADMINISTRATOR	DATE
DISTRICT SUPERINTENDENT	DATE
PROJECT MANAGER	DATE

### PROJECT ADDRESS

Fort Lowell Park  
 2840 N Craycroft Rd., Tucson, AZ 85712  
 2900 N Craycroft Rd., Tucson, AZ 85712  
 2998 N Craycroft Rd., Tucson, AZ 85712  
 City of Tucson Parcel Parcel 110-14-015A

SW4 OF NW4 EXC E 300' OF N 436' THEREOF & EXC  
 ROADS 34/73 AC SEC 36-13-14

### PROJECT DESCRIPTION

1. Bath House Improvements
2. Conversion of wading pool to splash pad.
3. New shade sail and artificial turf in splash pad area.

### GENERAL NOTES

1. Approval of locations and layout of all facilities by Owner is required prior to proceeding with affected work.
2. Every effort has been made to show actual existing conditions, however, some conditions may differ from those shown on these plans, Contractor shall notify the Owner of discrepancies discovered in the field.
3. Contractor shall obtain all Blue Stake clearances.
4. Contractor shall coordinate with Tucson Parks and Recreation Department regarding locations of underground Irrigation and other buried utilities.
5. Contractor shall be responsible for all temporary fencing during construction. Minimum 6' chain link fence required.
6. Contractor shall coordinate any and all special inspections with Owner, whether or not specified in permit.
7. The Contractor shall be responsible for the care, maintenance and repair or replacement of existing improvements in the work area which have been removed or damaged during the course of construction. All repair, replacement or cleanup shall be done to the satisfaction of the Owner.
8. Owner shall pay for all required plan check and permit fees.
9. Contractor shall visit project site & familiarize himself with site conditions prior to submitting bid proposal.
10. Contractor shall take all necessary precautions to preserve and protect existing improvements, including but not limited to: roads, curb, fencing, lighting, structures, utilities, landscape, and irrigation. Any damaged items will be repaired and/or replaced at Contractor's expense. Should damage occur, Contractor shall notify Owner immediately and provide an incident report.
11. All repairs/replacements shall require written submittal pertaining to relevant products, means and methods for Owner approval prior to initiating the work. All repairs/replacements shall be made at the Contractor's earliest opportunity and shall require visual inspection and approval by Owner. Owner may withhold Final Acceptance of the project until said items have been satisfactorily addressed.
12. All areas disturbed by construction activities shall be restored to their original condition prior to Final Acceptance.
13. All work is subject to coordination with the Tucson Parks and Recreation Department. No work may begin without expressed written consent from Owner. Contractor shall also schedule work so as to minimize utility down times and notify Owner 48 hours in advance of any utility shutdowns.
14. All underground utility work shall be inspected by Tucson Parks and Recreation Department staff prior to backfilling. This shall include, but is not limited to: irrigation, potable water, sewer, electrical and gas. Contractor shall notify appropriate staff with a min. of 24 hours advanced notice. 48 hours is preferred.
15. Contractor shall be responsible for all surveying, staking and general layout requirements as needed to construct the project.
16. The Contractor shall be responsible for obtaining all necessary permits for the project. The City of Tucson will pay for all fees (via account number) to the city's Planning and Development Services Dept. Fees for all other jurisdictions shall be the responsibility of the Contractor.
17. The Contractor shall include the services of a private utility locator to locate all city-owned utilities. As-built drawings will be provided, as available. Note - older parks often lack accurate as-builts (if any) and locators will have to work with staff to determine utility locations as best as possible.

### SITE PLAN

**WHEAT DESIGN GROUP**  
 500 N. Tucson Blvd., Suite 150  
 Tucson, AZ 85716  
 (520) 884-7911  
 www.wheatdesigngroup.com

**CITY OF TUCSON**  
 Tucson Parks and Recreation  
 A Nationally Accredited Agency

NO.	DATE	REVISION	BY	CHKD.	APPR.

CITY OF TUCSON PARKS AND RECREATION

FORT LOWELL PARK  
 PARK IMPROVEMENTS  
 COVER SHEET

APPROVALS

SIGNATORY	DATE

APPROVED \_\_\_\_\_ 20\_\_

\_\_\_\_\_  
 DIRECTOR

REF. \_\_\_\_\_ SCALE: 1"=30'

DRWN. BY WDG 2021 DSGN. BY WDG 2021 CHKD. BY WDG 2021

PLAN NO. \_\_\_\_\_

CASE#

L1.1 OF L1.1

1 OF 35

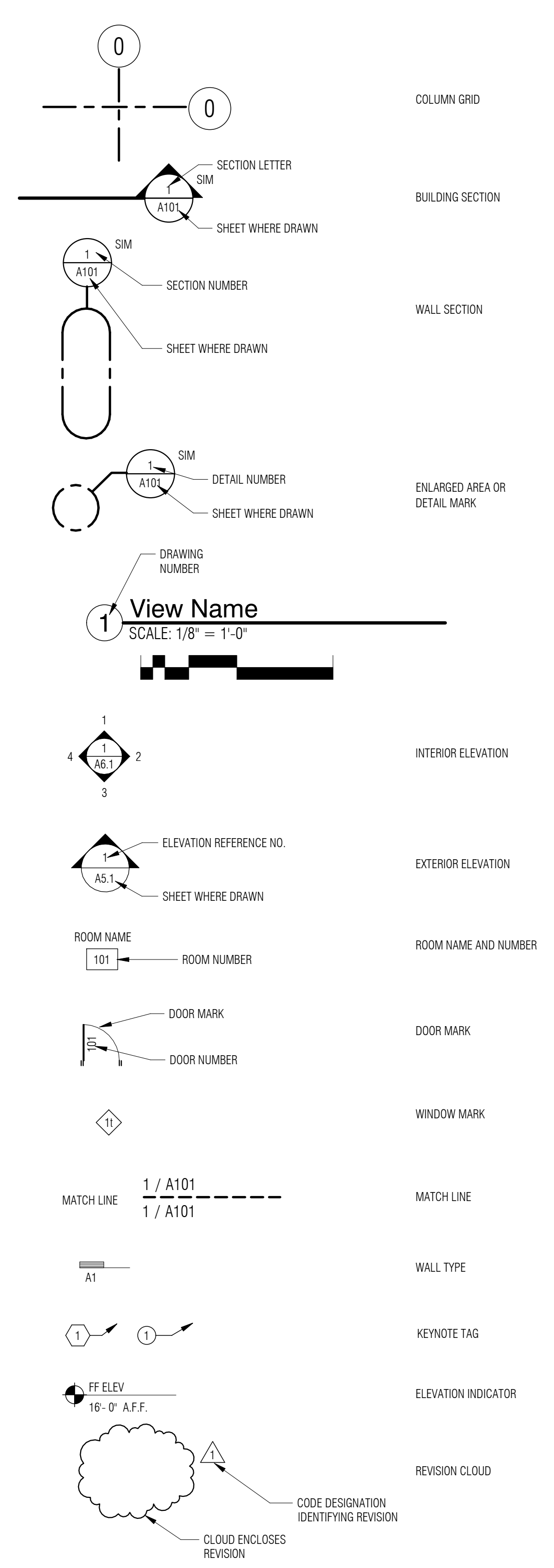
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### ABBREVIATIONS

@	AT	JC	JANITORS CLOSET	THK	THICK(NESS)
A/C	AIR CONDITIONING	JST	JOIST	TO	TOP OF
AB	ANCHOR BOLT	JD	JOINT	TOC	TOP OF CONCRETE
ABC	AGGREGATE BASE COURSE	JT	JOINT	TOM	TOP OF MASONRY
ABBREV.	ABBREVIATIONS	KD	KNOCKED DOWN	TOP	TOP OF PARAPET
AC	ACOUSTICAL CEILING	KIT	KITCHEN	TOS	TOP OF STEEL
ADJ	ADJACENT	KO	KNOCK OUT	TOW	TOP OF WALL
AFF	ABOVE FINISH FLOOR	KP	KICK PLATE	TPD	TOILET PAPER DISPENSER
AGG	AGGREGATE	L	LENGTH	TPD	TOILET PAPER DISPENSER
AL	ALTERNATE	L	LENGTH	TV	TELEVISION
ALUM	ALUMINUM	LAB	LABORATORY	TYP	TYPICAL
ANCH	ANCHOR ANCHORAGE	LAM	LAMINATE	U	UNDERGROUND
AND	AND	LAV	LAVATORY	UG	UNDERGROUND
AESS	ARCHITECTURALLY EXPOSED	LF	LINEAL FEET	UNF	UNFINISHED
		LH	LEFT HAND	UNO	UNLESS NOTED OTHERWISE
BD	BOARD	LLH	LONG LEG HORIZONTAL	VB	VAPOR BARRIER
BFF	BELOW FINISH FLOOR	LLV	LONG LEG VERTICAL	VCT	VINYL COMPOSITION TILE
BLDG	BUILDING	LP	LOW POINT	VERT	VERTICAL
BLK(G)	BLOCKING	LPT	LIGHT POINT	VNR	VENEER
BM	BENCH MARK	LTWT	LIGHTWEIGHT	VPL	VENEER PLASTER
BO	BOTTOM OF	LVR	LOUVER	VWC	VINYL WALL COVERING
BOG	BOTTOM	MAS	MASONRY	W	WIDTH, WIDE, WEST
BRG	BEARING	MAX	MAXIMUM	W/O	WITHOUT
BRK	BRICK	MATL	MATERIAL	W/W	WITH WALL
BSMT	BASEMENT	MED	MEDIUM	W/WC	WATER CLOSET
BUR	BUILT UP ROOFING	MECH	MECHANICAL	WD	WOOD
		MET	METAL	WDW	WINDOW
CMWP	COMPOSITE METAL WALL PANEL	MEZZ	MEZZANINE	WH	WALL HUNG
C	CHANNEL	MFR	MANUFACTURER	WI	WROUGHT IRON
C/C	CENTER TO CENTER	MH	MANHOLE	WM	WIRE MESH
CAB	CABINET	MIM	MINIMUM	WP	WATERPROOFING
CB	CHALK BOARD	MISC	MISCELLANEOUS	WR	WATER REPELLENT
CEM	CEMENT	MO	MASONRY OPENING	WS	WEATHERSTRIP
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	MOD	MODULAR	WSCT	WEINSCOT
CFOI	CONTRACTOR FURNISHED, OWNER INSTALLED	MOW	MOUNTED	WT	WEIGHT
		MWD	MOUNTED	WWF	WELDED WIRE FABRIC
		MWP	METAL WALL PANEL (SYSTEM)	YD	YARD
CG	CORNER GUARD	N	NORTH		
CJ	CAST IN PLACE	NA	NOT APPLICABLE		
CJ	CONTROL JOINT	NIC	NOT IN CONTRACT, (FOI)		
CLG	CEILING	NOM	NOMINAL		
CLG	CEILING (FINANCE)	NRC	NOISE REDUCTION COEFFICIENTS		
CMP	CORRUGATED METAL PIPE	NTS	NOT TO SCALE		
CMTS	COMMENTS	NO	NUMBER		
CMU	CONCRETE MASONRY UNIT	OA	OVERALL		
COL	CLEAN OUT	OC	ON CENTER(S)		
COL	COLUMN	OD	OUTSIDE DIAMETER		
COMB	COMBINATION	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED		
CONC	CONCRETE	OFF	OFFICE		
CONC	CONSTRUCTION	OFI	OWNER FURNISHED OWNER INSTALLED		
CONV	CONTINUOUS OR CONTINUE	OH	OVERHEAD, OPPOSITE HAND		
CORR	CORRIDOR, CORRUGATED	OPG	OPENING		
CPT	CARPET	OPP	OPPOSITE		
CSK	COUNTERSINK	ORD	OVERFLOW ROOF DRAIN		
CT	CERAMIC TILE				
CU	CUBIC				
CU FT	CUBIC FOOT (FEET)	PAR	PARALLEL		
CW	COLD WATER	PART	PARTITION		
D	DEPTH	PART BD	PARTICLE BOARD		
DEMO	DEMOLISH, DEMOLITION	PC	PIECE		
DF	DRINKING FOUNTAIN	PCC	PRECAST CONCRETE		
DIA	DIAMETER	PCF	FOUNDS PER CUBIC FOOT		
DIAG	DIAGONAL	PREFAB	PERFORATE (D)		
DIM	DIMENSION	PERIM	PERIMETER		
DISP	DISPENSER	PERP	PERPENDICULAR		
DN	DOWN	PFB	PREFABRICATED		
DO	DITTO	PJ	PANEL JOINT		
DP	DAMP PROOFING	PL	PLASTER, PLATE, PROPERTY LINE		
DR	DOOR	PLBG	PLUMBING		
DR	DRAIN	PLAM	PLASTIC LAMINATE		
DTL	DETAIL	PLF	POUNDS PER LINEAL FOOT		
DWG	DRAWING	PNL	PANEL		
DWC	DRYWALL CHANNELS (HAT)	PO	POWER OPERATED		
E	EAST	PPF	POUNDS PER SQUARE FOOT		
E	EACH	PSI	POUNDS PER SQUARE INCH		
EF	EACH FACE	PT	POINT		
EJ	EXPANSION JOINT	PTD	PAPER TOWEL DISPENSER		
ELEC	ELECTRICAL	PTR	PAPER TOWEL RECEPTOR		
ELEV	ELEVATION, ELEVATOR	PVC	POLYVINYL CHLORIDE		
EMER	EMERGENCY	PVMT	PAVEMENT		
EP	EPOXY PAINT	PWD	PLYWOOD		
EQ	EQUAL				
EQUIP	EQUIPMENT	QT	QUARRY TILE		
ES	EXPOSED STRUCTURE	QTR	QUARTER		
EST	ESTIMATE	QTY	QUANTITY		
EW	ELECTRIC WATER COOLER	(R)	RECESSED		
EXC	EXCAVATE (TION)	RA	RADIUS, RISER ROUND		
EXH	EXHAUST	RA	RETURN AIR		
EXIST	EXISTING	RB	RESILIENT BASE		
EXP	EXPANSION	RC	REFLECTED CONCRETE PIPE,		
EXT	EXTERIOR	ROP	REFLECTED CEILING PLAN		
EFS	EXTERIOR FINISH SYSTEM	RD	ROOF DRAIN		
EFS	EXTERIOR FINISH SYSTEM	RE(F)	REFERENCE		
F	FAHRENHEIT	REL	RELATION		
FA	FIRE ALARM	REPL	REPLACE		
FAB	FABRICATE	RES	RESILIENT		
FD	FLOOR DRAIN	REV	REVISION(S), REVISED		
FDN	FOUNDATION	RF	RIGID FIBERGLASS		
FE	FIRE EXTINGUISHER	RFG	ROOFING		
FE	FIRE EXTINGUISHER(CABINET)	RH	RIGHT HAND		
FF	FINISH FLOOR	RI	RIGHT OF WAY		
FIN	FINISHED	RM	ROOM		
FLA	FLASHING	RO	ROUGH OPENING		
FLEX	FLEXIBLE	RQ	RIGHT OF WAY		
FLUOR	FLUORESCENT	RW	REQUIRED		
FO	FACE OF	RWL	RAINWATER LEADER		
FP	FIREPROOF				
FR	FIRE RETARDANT	(S)	SEALED, SOUTH		
FRP	FIBER REINFORCED PLASTIC	SC	SURFACE MOUNTED		
FT	FOOT FEET	SCD	SOLID CORE		
FTG	FOOTING	SCHED	SCHEDULE		
FUR	FURRED(ING)	SD	SECTION		
FUT	FUTURE	SD	STORM DRAIN		
		SDG	SIDING		
GA	GAGE (GUAGE)	SF	SQUARE FEET		
GALV	GALVANIZED	SHEET	SHEET		
GC	GENERAL CONTRACT(OR)	SHWR	SHOWER		
GD	GRADE	SIM	SIMILAR		
GL	GLASS, GLAZING	SM	SHEET METAL		
GWB	GYP SUM WALLBOARD	SP	SOUNDPROOF		
GYP	GYP SUM	SPECS	SPECIFICATIONS		
		SPR	SPEAKER		
HW	HIGH IMPACT WOOD FIBER PANEL	SPL	SPECIAL		
HT	HEIGHT	SQ	SQUARE		
HB	HOSE BIBB	SS	SERVICE SINK		
HC	HOLLOW CORE	SSST	STAINLESS STEEL		
HDBD	HARDBOARD	ST	STEEL, STREET		
HD	HEAVY DUTY	STC	SOUND TRANSMISSION COEFFICIENT		
HDWD	HARDWOOD	STD	STANDARD		
HDWR	HARDWARE	STR	STORAGE		
HM	HOLLOW METAL	STRUC	STRUCTURAL		
HORZ	HORIZONTAL	SUSP	SUSPENDED		
HP	HIGH POINT	SV	SEAMLESS VINYL		
HR	HOUR	SW	SWITCH		
HVAC	HEATING/VENTILATING/ AIR CONDITIONING	SWR	SEWER		
HW	HOT WATER	SYM	SYMMETRY(ICAL)		
ICMWP	INSULATED COMPOSITE METAL WALL PANEL	T	THICKNESS, TEE		
ID	INSIDE DIAMETER	TD	TRENCH DRAIN		
IE	INVERT ELEVATION	T&G	TONGUE AND GROOVE		
IN	INCHES	TB	TACKBOARD		
INCL	INCLUDING	TEL	TELEPHONE		
INSUL	INSULATION	TEMP	TEMPERATURE, TEMPORARY		
INT	INTERIOR	TERR	TERRAZZO		

### SYMBOLS



### PROJECT DATA

**GENERAL NOTES:**

- TO THE BEST OF OUR KNOWLEDGE AND INFORMATION AND IN ACCORDANCE WITH ACCEPTED PROFESSIONAL STANDARDS, WE HAVE COMPLIED WITH APPLICABLE PORTIONS OF THE AMERICAN WITH DISABILITIES ACT PERTAINING TO BUILDING ACCESSIBILITY FOR THE PHYSICALLY HANDICAPPED.
- ALL DIMENSIONS GIVEN TO FACE OF MASONRY/CONCRETE, AND GYPSUM BOARD AND METAL STUD CONSTRUCTION. EXCEPTIONS AS INDICATED ON DRAWINGS.
- DRAWINGS SHALL NOT BE SCALED. ALL WORK SHALL BE LAID OUT BY DIMENSIONS NOTED ON THE DRAWINGS.
- CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF ALL EQUIPMENT PADS REQUIRED BY EQUIPMENT MANUFACTURER. ACTUAL SIZE AND LOCATION TO BE COORDINATED WITH APPROVED EQUIPMENT MANUFACTURER.
- HVAC AND ELECTRICAL EQUIPMENT SHOWN ON ARCHITECTURAL DRAWINGS IS FOR GENERAL REFERENCE ONLY. COORDINATE EQUIPMENT AND LOCATIONS WITH MECHANICAL AND ELECTRICAL DRAWINGS.
- FIRE RATINGS SHALL BE MAINTAINED AT FIRE RATED PARTITIONS BY PROVIDING FIRE SAFING MATERIAL AT GAPS AND VOIDS CREATED BY PENETRATIONS, STRUCTURAL MEMBERS, AND INTERSECTIONS WITH ADJACENT SURFACES AS REQUIRED. REFER TO FIRE PROTECTION LISTINGS FOR SPECIFIC ASSEMBLIES.
- ALL DETAILS APPLY WHETHER OR NOT SPECIFICALLY REFERENCED.
- ITEM LOCATED IN CEILING TILES ARE TO BE CENTERED AT THE MIDPOINT OF EACH TILE, TYPICAL. WHERE TWO ITEMS OCCUR, LOCATE AT THIRD POINTS, THREE ITEMS TO BE LOCATED AT QUARTER POINTS.

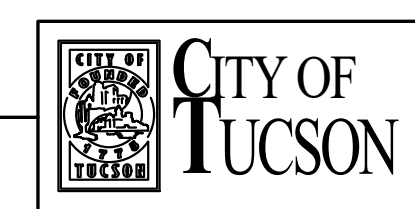
### MATERIALS

SECTION	EARTH	INSULATION BLANKET, BATS	ELEVATION	CONCRETE, PLASTER, GWB
	POROUS FILL, STONE, GRAVEL	RIGID INSULATION		WOOD
	CONCRETE	CERAMIC TILE		SHEET METAL
	CONCRETE MASONRY UNIT	PLASTER, SAND CEMENT & GROUT		GLASS
	METAL (LARGE SCALE)	ROUGH WOOD CONTINUOUS		
	METAL (SMALL SCALE)	ROUGH WOOD NON CONTINUOUS		
	PLYWOOD	ROOFING / FLASHING		
	ACOUSTICAL PANEL/TILE	GYPSUM WALL BOARD		
	BRICK	MILLWORK		

**bws ARCHITECTS**

BURNS WALD-HOPKINS SHAMBACH ARCHITECTS

**WHEAT DESIGN GROUP**  
500 N. Tucson Blvd., Suite 150  
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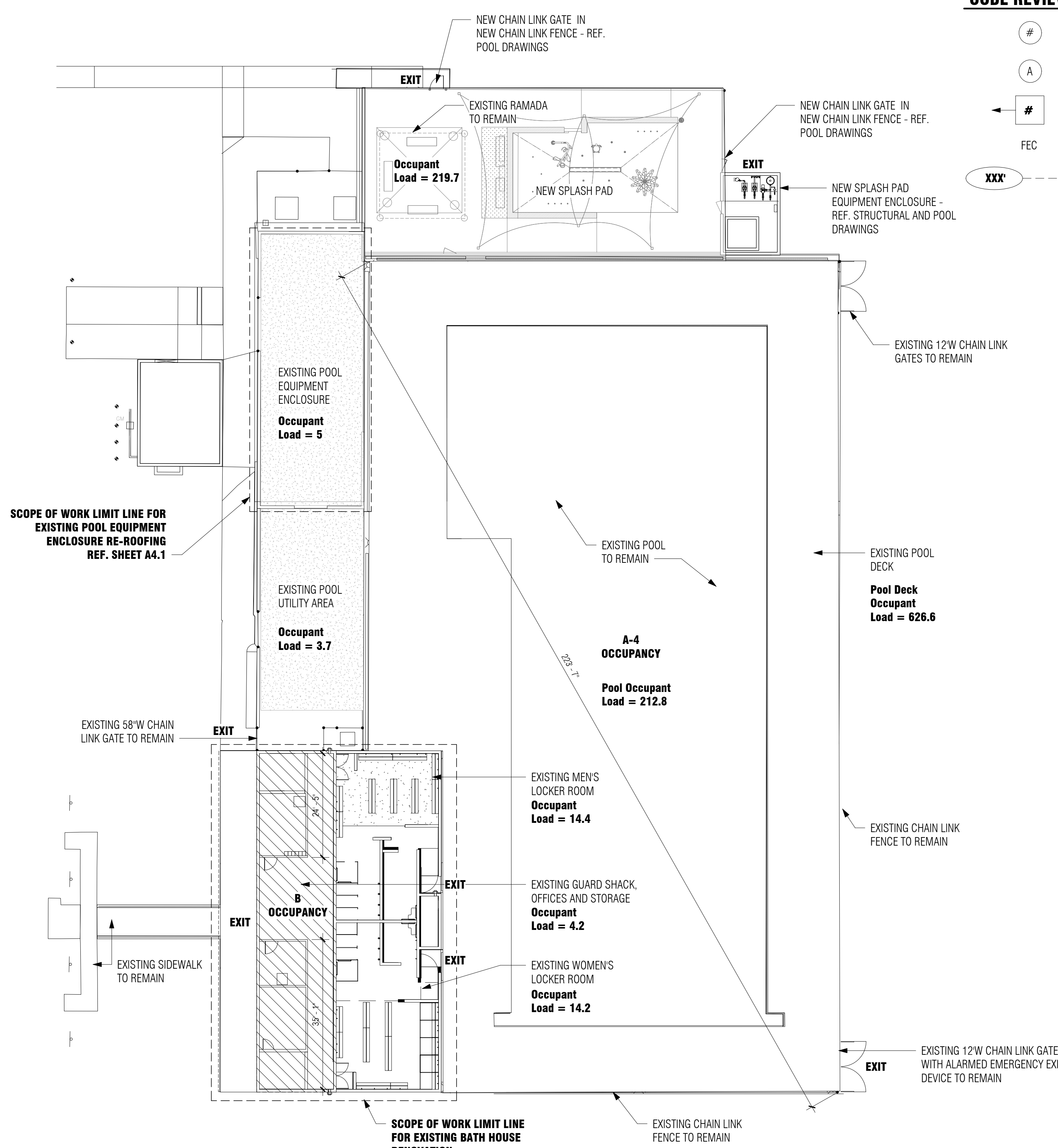
*Robin A. Shambach*  
ROBIN A. SHAMBACH  
DIRECTOR  
CITY OF TUCSON, ARIZONA, U.S.A.

CITY OF TUCSON PARKS AND RECREATION				CASE#
FORT LOWELL PARK PARK IMPROVEMENTS ABBREV., SYMBOLS & PROJECT DATA				G1.1 OF A7.1
APPROVALS	SIGNATORY	DATE	APPROVED _____ 20__	2
			----- DIRECTOR	35
REF. _____ SCALE: _____				
DRWN. BY JT	2021	DSGN. BY FS	2021	CHKD. BY HD
PLAN NO. _____				



Contact Arizona 811 at least two full working days before you begin excavation  
Call 811 or click Arizona811.com

EXPIRES 06/30/2022



**CODE REVIEW PLAN LEGEND**

- # OCCUPANT LOAD
- A ACCESSORY USE
- # EXIT LOAD
- FEC FIRE EXTINGUISHER CABINET
- XXX' MAXIMUM TRAVEL DISTANCE

**BUILDING CODE REVIEW - 2018 IBC**

City of Tucson Applicable Codes:  
 2018 International Building Code (IBC)  
 2018 International Mechanical Code (IMC)  
 2018 International Fuel Gas Code (IFGC)  
 2018 International Plumbing Code (IPC)  
 2018 International Energy Conservation Code (IECC)  
 2017 National Electric Code (NEC)  
 2010 ADA Standards for Accessible Design (ADA)  
 2018 International Existing Building Code (IEBC)

Level 1 Building Alteration Includes the following:  
 Replace existing interior building finishes (paint, millwork, flooring)  
 Replace (2) existing gates with doors  
 Replace existing plumbing fixtures & toilet accessories  
 Replace existing light fixtures  
 Replace existing metal canopies  
 Replace existing concrete slabs (for new trench drains to storm water system)

Type of Construction (Tables 504.3, 504.4): Type VB

Group A-4	1 story / 40 feet
Allowable Height	6,000 SF
Allowable Area	

Actual Building Height and Floor Area:  
 Height 14'-4"  
 Floor Area 3,466 gsf

Site:  
 Replace existing wading pool with new splash pad (includes new splash pad equipment enclosure - ref. pool drawings)  
 Re-roof existing Pool Utility Enclosure

BUILDING ELEMENT	TYPE VB
PRIMARY STRUCTURAL FRAME	0 HRS
BEARING WALLS - EXTERIOR	0 HRS
BEARING WALLS - INTERIOR	0 HRS
NONBEARING WALLS AND PARTITIONS: EXTERIOR	10 ≤ X ≤ 30 = 1 HRS X ≥ 30 = 0 HRS
NONBEARING WALLS AND PARTITIONS: INTERIOR	0 HRS
FLOOR CONSTRUCTION AND ASSOCIATED SECONDARY MEMBER	0 HRS
ROOF CONSTRUCTION AND ASSOCIATED SECONDARY MEMBER	0 HRS

Exit and Occupant Loads (Table 1004.5):

Business Offices	150 SF / Occupant	506 / 150 = 3.4
Storage areas	300 SF / Occupant	235 / 300 = .8
Locker Rooms	50 SF / Occupant	
Men		721 / 50 = 14.4
Women		708 / 50 = 14.2
Utility	300 SF / Occupant	53 / 300 = 9.0
Pool	50 SF / Occupant	10,640 / 50 = 212.8
Pool Deck	15 SF / Occupant	9,399 / 15 = 626.6
Splash Pad area	15 SF / Occupant	3,296 / 15 = 219.7
TOTAL OCCUPANT LOAD		25,558 GSF 1,101 Occupants

Width of Exits (Table 1005):

Doors and Hallways	Occupant Load x .15" / Occupant
Pool & Deck	840 occupants x .15 = 126" required; 202" provided
Splash Pad	220 occupants x .15 = 33" required; 70" provided

Distance to Exits (Table 1017.2):

Group A	200 FT
Group B (ns)	200 FT

Number of Exits (Table 1006.3.2):  
 All rooms and spaces within each story shall be provided with and have access to the minimum number of approved independent exits required by section 1006 based on the occupant load.  
 Minimum 2 Exits or Exit Access Doorways required > 49 occupants in any A & B space  
 Minimum 2 Exits or Exit Access Doorways required when Common Path of Egress > 75 feet  
 3 Exits required when occupant load exceeds 500  
 4 Exits required when occupant load exceeds 1,000

Plumbing Fixtures (Table 2902.1)

	Water Closets		Lavatories		Drinking Fountains	Showers	
	Male	Female	Male	Female		Male	Female
OCCUPANCY A-4	1/75 for 1st 1500	1/40 for 1st 1520	1/200	1/150	1/1000		
Total Occupant Load : 1101 / 2 = 550.5 each	7.3	13.7	2.7	3.67	1.1		
Whole Number Required*	8	14	3	4	2		
Provided	4 WC 2 UR	4	4	3	2	6	4

\* LEVEL ONE REMODEL DOES NOT REQUIRE ADDITIONAL PLUMBING FIXTURES, PER COT BUILDING OFFICIAL

1 CODE PLAN  
 SCALE: 1/16" = 1'-0"

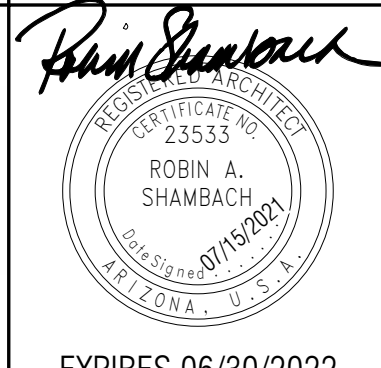


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NO.	DATE	REVISION	BY	CHKD.	APPR.



CITY OF TUCSON PARKS AND RECREATION

FORT LOWELL PARK  
 PARK IMPROVEMENTS  
 CODE ANALYSIS, CODE REVIEW PLANS

APPROVALS	SIGNATORY	DATE	APPROVED _____ 20__	3
			----- DIRECTOR	OF
				35

REF. \_\_\_\_\_ SCALE: \_\_\_\_\_  
 PLAN NO. \_\_\_\_\_

DRWN. BY JT 2021 DSGN. BY FS 2021 CHKD. BY HD 2021

EXPRES 06/30/2022



CASE#



**DEMOLITION PLAN GENERAL NOTES**

1. THE CONTRACTOR IS RESPONSIBLE FOR DEMOLITION AND REMOVAL WITHIN THE DEMOLITION SCOPE OF WORK.
2. THE CONTRACTOR IS RESPONSIBLE FOR ALL BARRICADES AND SAFETY CONCERNS WITHIN AND ADJACENT TO CONSTRUCTION.
3. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION INFORMATION.
4. EXISTING FINISHES TO REMAIN SHALL BE PROTECTED DURING DEMOLITION.
5. CONTRACTOR SHALL PATCH / REPAIR ALL EXISTING FINISHES TO REMAIN AS REQUIRED BY NEW WORK.
6. REMOVE ALL EXISTING PLUMBING FIXTURES, GRAB BARS, SHOWER SEATS, TOILET PARTITIONS, BENCHES AND MIRRORS IN RESTROOMS AND SHOWER AREAS.

**DEMOLITION KEYNOTE LEGEND**

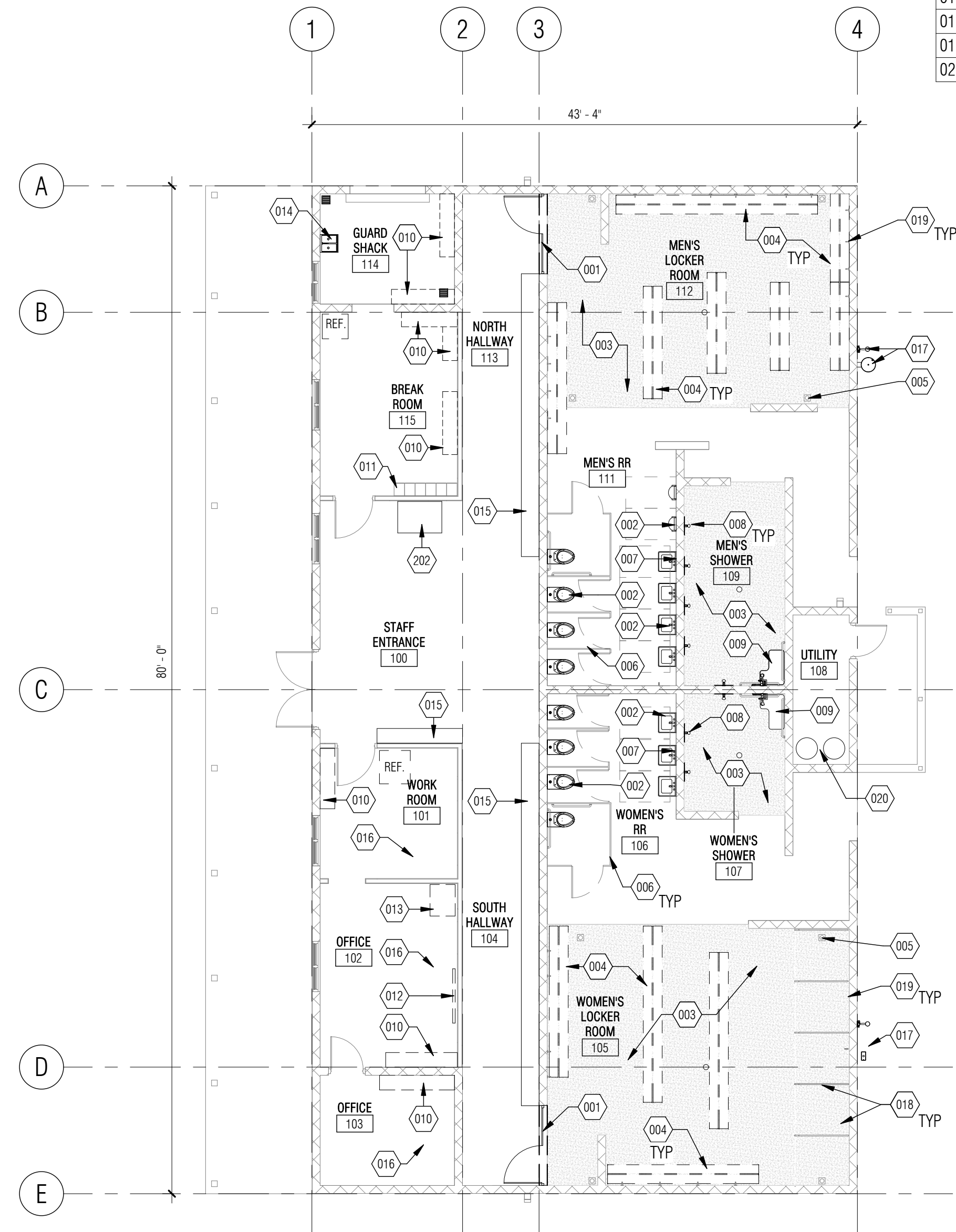
NO.	DESCRIPTION
001	REMOVE EXISTING GATE, HARDWARE, AND OVERHEAD CANOPY
002	REMOVE EXISTING PLUMBING FIXTURE - REF. PLUMBING DRAWINGS
003	REMOVE AND REPLACE EXISTING CONCRETE - REF. PLUMBING & STRUCTURAL DRAWINGS
004	REMOVE EXISTING BENCH
005	REMOVE EXISTING SHADE CANOPY AND REPLACE IN SAME LOCATION - REF. FLOOR PLAN
006	REMOVE EXISTING TOILET PARTITION
007	REMOVE EXISTING MIRROR
008	REMOVE EXISTING SHOWER HEAD
009	REMOVE EXISTING SHOWER BENCH AND GRAB BARS
010	REMOVE EXISTING MILLWORK
011	REMOVE EXISTING LOCKERS - SALVAGE TO OWNER
012	REMOVE EXISTING BULLETIN BOARD - SALVAGE TO OWNER
013	EXISTING SAFE TO REMAIN - RELOCATE PER OWNER DIRECTION
014	REMOVE EXISTING UTILITY SINK - REF. PLUMBING
015	EXISTING SHELVING TO REMAIN
016	REMOVE EXISTING VCT FLOORING AND MASTIC - PREP FOR NEW FLOOR FINISH
017	REMOVE EXISTING DRINKING FOUNTAIN AND SHOWER - REF. PLUMBING
018	REMOVE EXISTING CHANGING ROOM PARTITION AND BENCH
019	EXISTING TOWEL HOOKS TO REMAIN - PROTECT IN PLACE
020	REMOVE EXISTING WATER HEATERS - REF. PLUMBING

**FLOOR PLAN GENERAL NOTES**

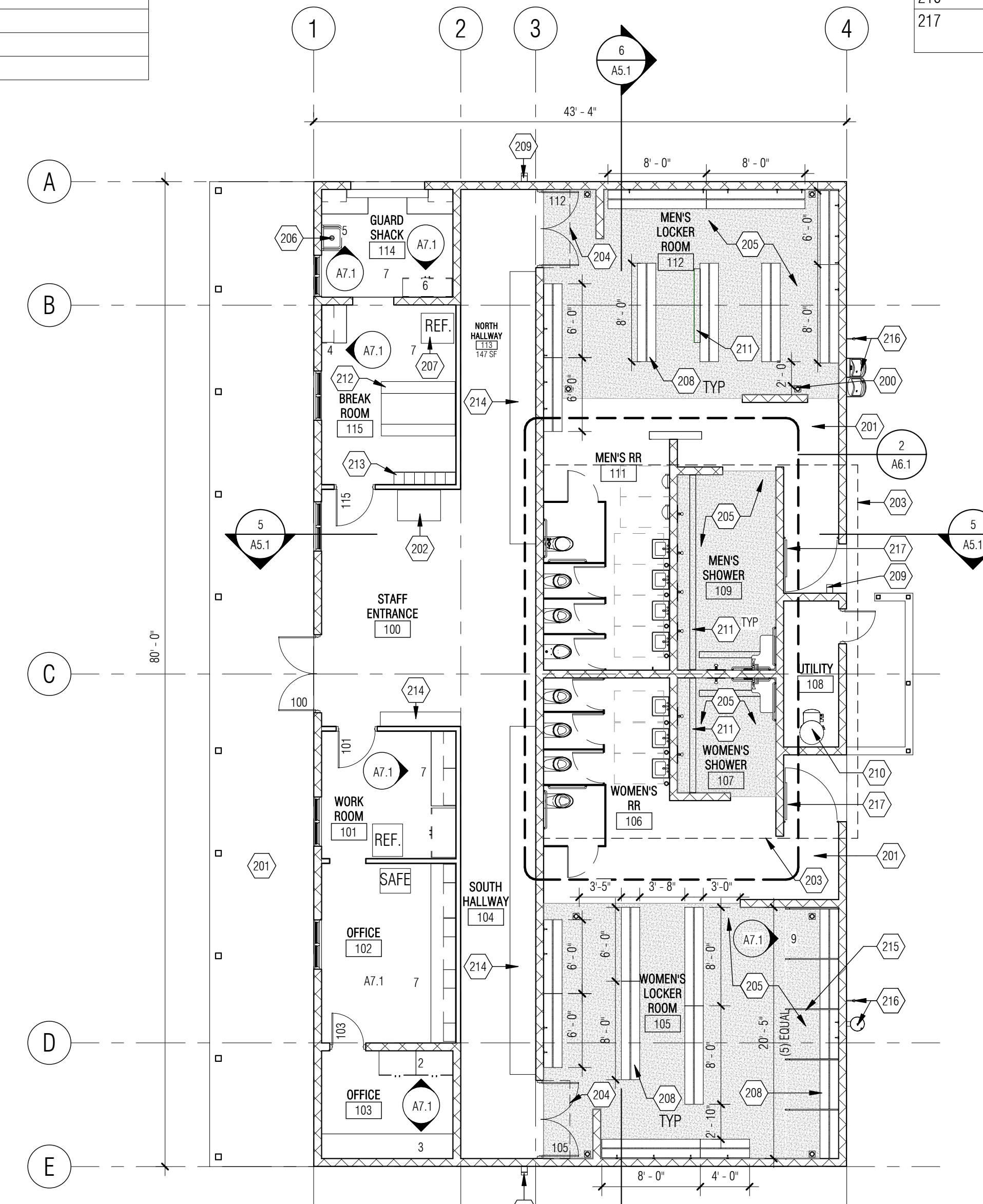
1. DIMENSIONS ARE TO COLUMN CENTERLINE OR FACE OF WALL, U.N.O.
2. REFER TO STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION AND COORDINATION.
3. REFER TO SHEET G1.3 FOR ARCHITECTURAL SPECIFICATIONS
4. REFER TO SHEET A2.2 FOR ROOM FINISHES
5. REFER TO SHEET A2.2 FOR DOOR SCHEDULE
6. REFER TO SHEET A6.1 FOR ENLARGED RESTROOM PLANS
7. REFER TO SHEET A7.1 FOR MILLWORK ELEVATIONS & DETAILS

**FLOOR PLAN KEYNOTE LEGEND**

NO.	DESCRIPTION
200	REINSTALL EXISTING SHADE STRUCTURE IN SAME LOCATION
201	EXISTING FLATWORK TO REMAIN
202	EXISTING GAS FIRED SPLIT SYSTEM FURNACE TO REMAIN - REF. MECHANICAL
203	NEW GALVANIZED CORRUGATED METAL ROOF ABOVE
204	NEW SHADE CANOPY ABOVE - REF. STRUCTURAL
205	NEW CONCRETE SLAB WITH DECK COATING - SLOPE TO DRAIN
206	NEW SINK - REF. PLUMBING
207	REFRIGERATOR - O.F.O.I.
208	NEW CHANGING BENCH - REF. SPECS
209	CLEAN UP & PAINT EXISTING CONDUCTOR HEAD & DOWNSPOUT
210	NEW WATER HEATER - REF. PLUMBING
211	NEW TRENCH DRAIN - REF. PLUMBING
212	PICNIC TABLE - O.F.O.I.
213	NEW LOCKERS - REF. SPECS
214	EXISTING SHELVING TO REMAIN
215	NEW STAINLESS STEEL CHANGING ROOM PARTITION (MATCH TOILET PARTITION)
216	NEW DRINKING FOUNTAIN & SHOWER - REF. PLUMBING
217	PAINT EXISTING STEEL GATE - ADD GATE TO REMAIN OPEN SIGNAGE AS REQUIRED BY CODE



**1 DEMOLITION PLAN**  
SCALE: 1/8" = 1'-0"

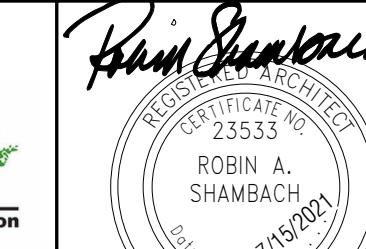
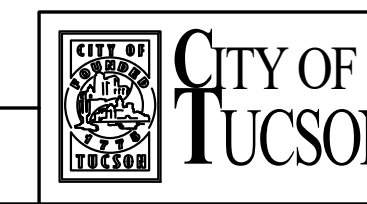


**2 FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

**bws ARCHITECTS**

BURNS WALD-HOPKINS SHAMBACH ARCHITECTS

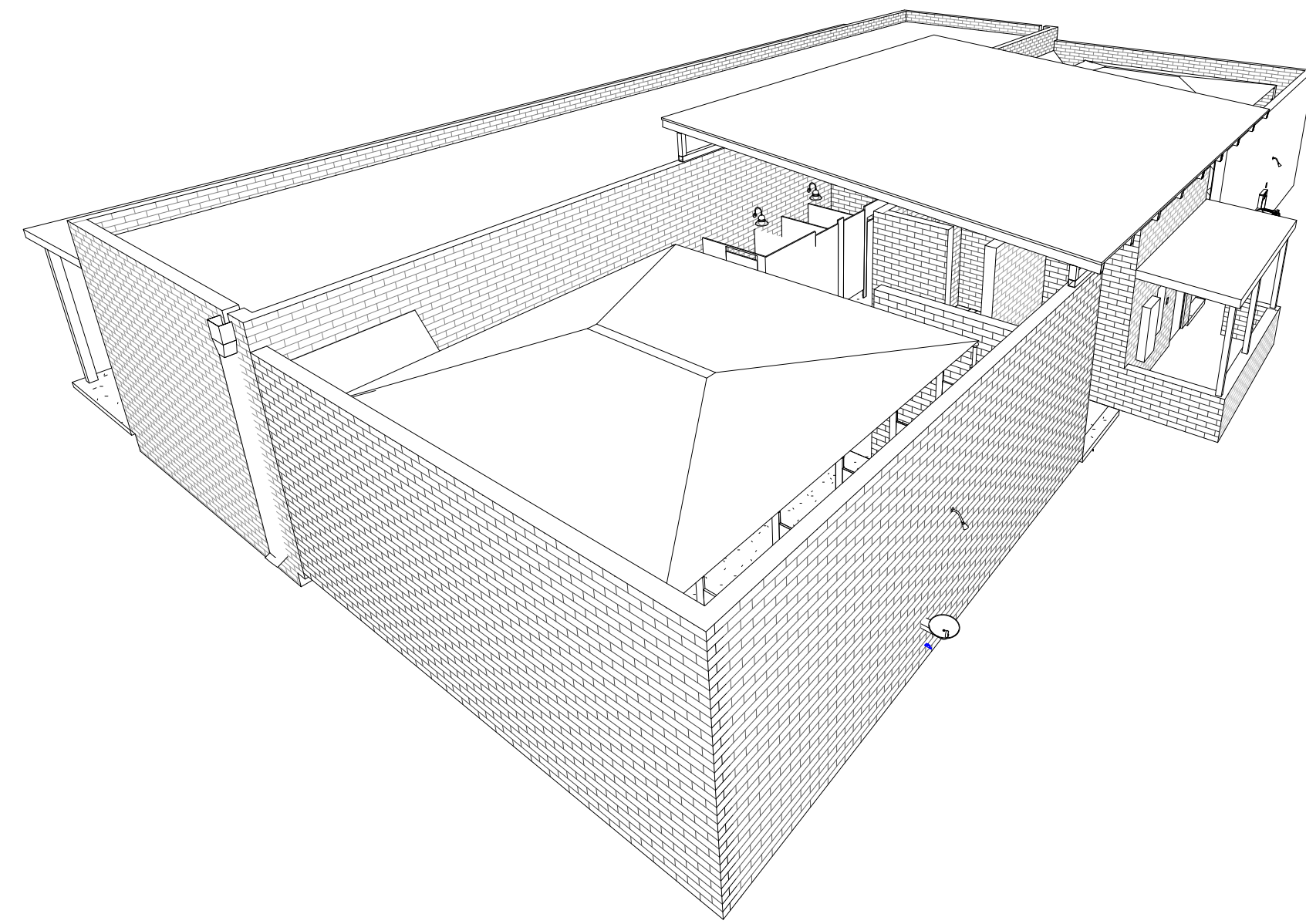
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CITY OF TUCSON PARKS AND RECREATION			CASE#
FORT LOWELL PARK PARK IMPROVEMENTS DEMOLITION AND FIRST FLOOR PLANS			A2.1 OF A7.1
APPROVALS	SIGNATORY	DATE	APPROVED _____ 20__
			OF
			35
			REF. _____ SCALE: _____
DRWN. BY JT 2021	DSGN. BY FS 2021	CHKD. BY HD 2021	PLAN NO. _____

NO.	DATE	REVISION	BY	CHKD.	APPR.

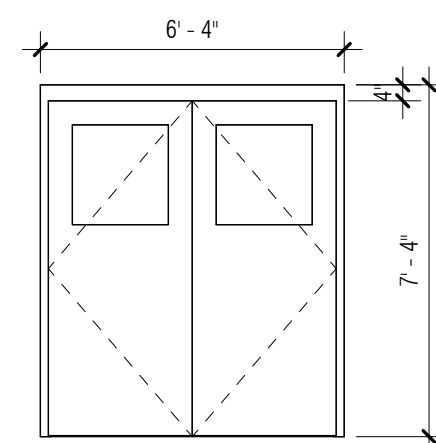




1 AXONOMETRIC VIEW FROM SOUTHEAST - NEW CORRUGATED METAL ROOF ON PAINTED STEEL STRUCTURE

**SCHEDULE ABBREVIATIONS**

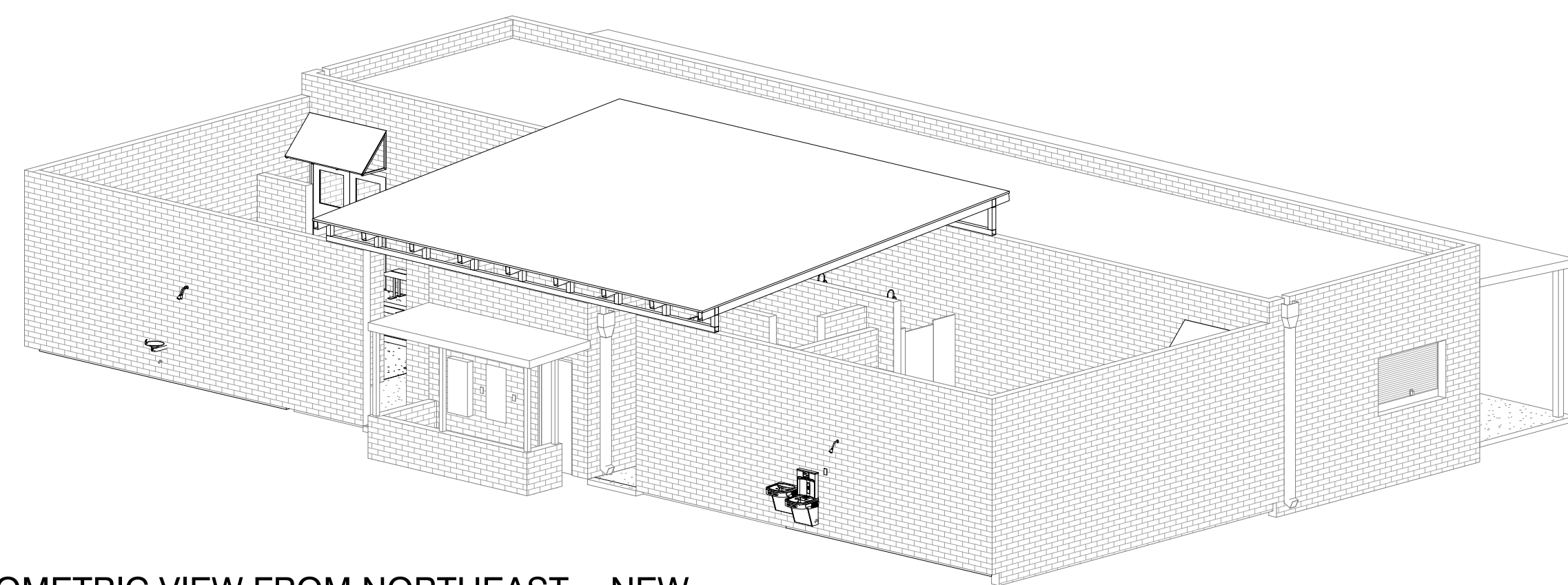
CONC	CONCRETE
CS	CONCRETE SEALER
ES	EXPOSED STRUCTURE
EXIST	EXISTING
FP	FLOOR PAINT
GWB	GYPSUM WALL BOARD
HM	HOLLOW METAL
P	PAINT
PTC	PEDESTRIAN TRAFFIC COATING
RB	RUBBER BASE
VCT	VINYL COMPOSITE TILE
WD	WOOD



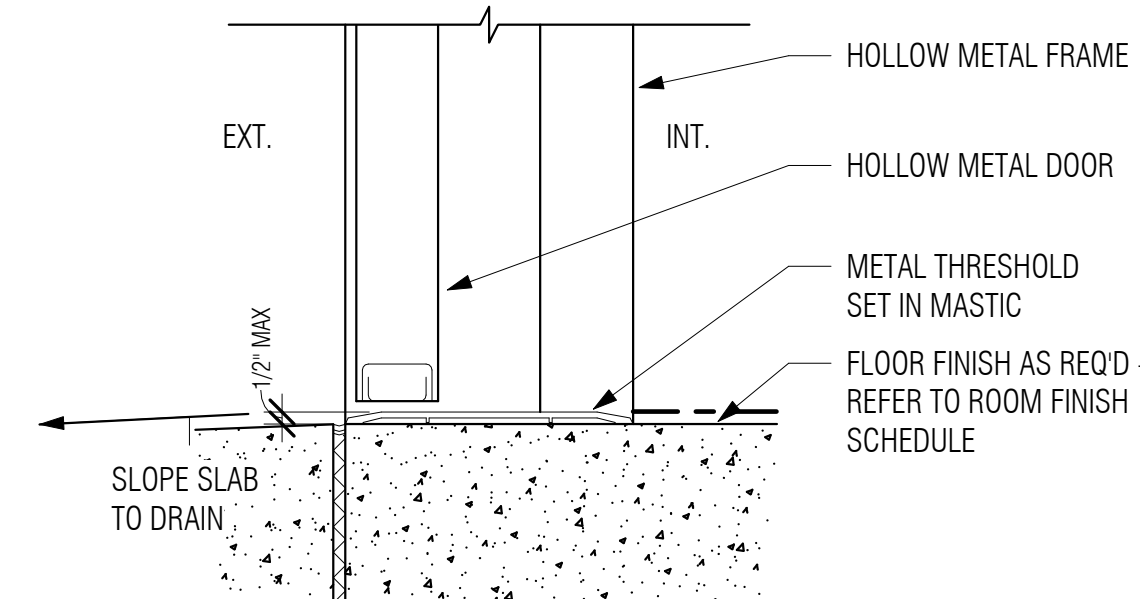
DOOR/FRAME LEGEND

ROOM NUMBER	ROOM NAME	ROOM SCHEDULE												REMARKS
		FLOOR		WALLS								CEILING		
		FINISH	BASE	NORTH		EAST		SOUTH		WEST		SURFACE	FINISH	
100	STAFF ENTRANCE	CS	RB	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P	
101	WORK ROOM	VCT	RB	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P	
102	OFFICE	VCT	RB	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P	
103	OFFICE	VCT	RB	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P	
104	SOUTH HALLWAY	CS	RB	-	-	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P	
105	WOMEN'S LOCKER ROOM	PTC	--	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P1	-	-	
106	WOMEN'S RR	PTC	--	EXIST	P1	EXIST	P1	-	-	EXIST	P1	-	-	
107	WOMEN'S SHOWER	PTC	--	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P1	-	-	
108	UTILITY	PTC	--	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P	
109	MEN'S SHOWER	PTC	--	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P1	-	-	
111	MEN'S RR	PTC	--	-	-	EXIST	P1	EXIST	P1	EXIST	P1	-	-	
112	MEN'S LOCKER ROOM	PTC	--	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P1	-	-	
113	NORTH HALLWAY	CS	RB	EXIST	P1	EXIST	P1	-	-	EXIST	P1	EXIST	P	
114	GUARD SHACK	FP	RB	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P	
115	BREAK ROOM	CS	RB	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P1	EXIST	P	

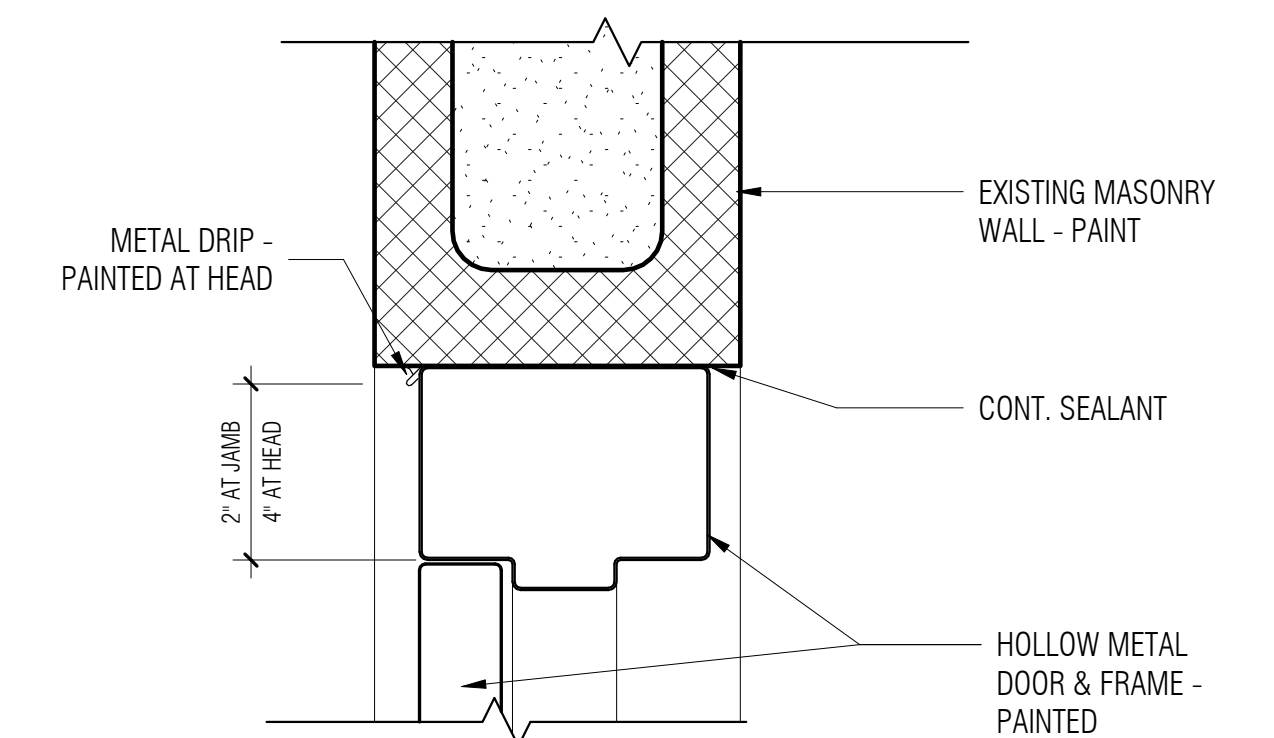
OPENING NO.	TYPE	DOOR										FRAME				FIRE LABEL	HARDWARE SET NO.	REMARKS
		OPENING SIZE					MATERIAL					DETAILS						
		PR	WIDTH	HEIGHT	MATERIAL	FINISH	GLASS	TYPE	MATERIAL	FINISH	HEAD	LATCH	HINGE	SILL				
100	EXIST		3'-0"	7'-0"	EXIST	P-2		EXIST	EXIST HM	P	---	---	---	---				
101	EXIST		3'-0"	6'-8"	EXIST	P-2		EXIST	EXIST WD	P	---	---	---	---				
103	EXIST		2'-7"	6'-8"	EXIST	P-2		EXIST	EXIST WD	P	---	---	---	---				
105	A		3'-0"	7'-0"	HM	P-2	YES	1	HM	P-3	4/A2.2	---	4/A2.2 SIM	3/A2.2			REF SPECS	
108	EXIST		2'-6"	7'-0"	EXIST	P-2		EXIST	EXIST	EXIST	---	---	---	---				
112	A		3'-0"	7'-0"	HM	P-2	YES	1	HM	P-3	4/A2.2	---	4/A2.2 SIM	3/A2.2			REF SPECS	
115	EXIST		3'-0"	6'-8"	EXIST	P-2		EXIST	EXIST WD	P	---	---	---	---				



2 AXONOMETRIC VIEW FROM NORTHEAST -- NEW CORRUGATED METAL ROOF ON PAINTED STEEL STRUCTURE



3 EXT. HM THRESHOLD DETAIL  
3" = 1'-0"

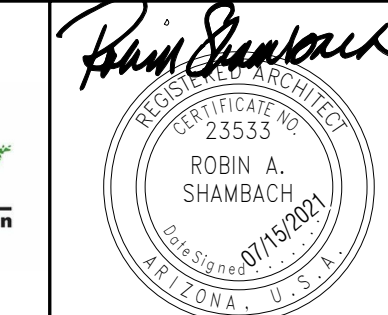
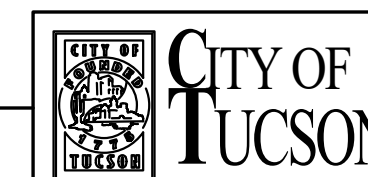


4 HM DOOR HEAD IN CMU WALL - JAMB SIM  
3" = 1'-0"

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EXPIRES 06/30/2022

CITY OF TUCSON PARKS AND RECREATION				CASE#
FORT LOWELL PARK PARK IMPROVEMENTS				A2.2 OF A7.1
FINISH SCHEDULE & DOOR SCHEDULE				
APPROVALS	SIGNATORY	DATE	APPROVED _____ 20__	6 OF 35
			----- DIRECTOR	
REF. _____ SCALE: _____				
DRWN. BY JT 2021	DSGN. BY FS 2021	CHKD. BY HD 2021	PLAN NO. _____	



**REFLECTED CEILING PLAN GENERAL NOTES**

1. COORDINATE CEILING PLANS WITH MECHANICAL AND ELECTRICAL PLANS.
2. ALL GWB CEILINGS SHALL BE FLOATED AND THEN PAINTED - REF. SPECS
3. CENTER NEW LIGHT FIXTURES IN CEILING, U.N.O.

**REFLECTED CEILING PLAN LEGEND**

**CEILING TYPES:**

- A GWB
- B EXPOSED TO STRUCTURE

**CEILING EQUIPMENT:**

- LIGHT FIXTURE - SURFACE MOUNT
- LIGHT FIXTURE - WALL MOUNT.
- EXIT LIGHT

**RCP KEYNOTE LEGEND**

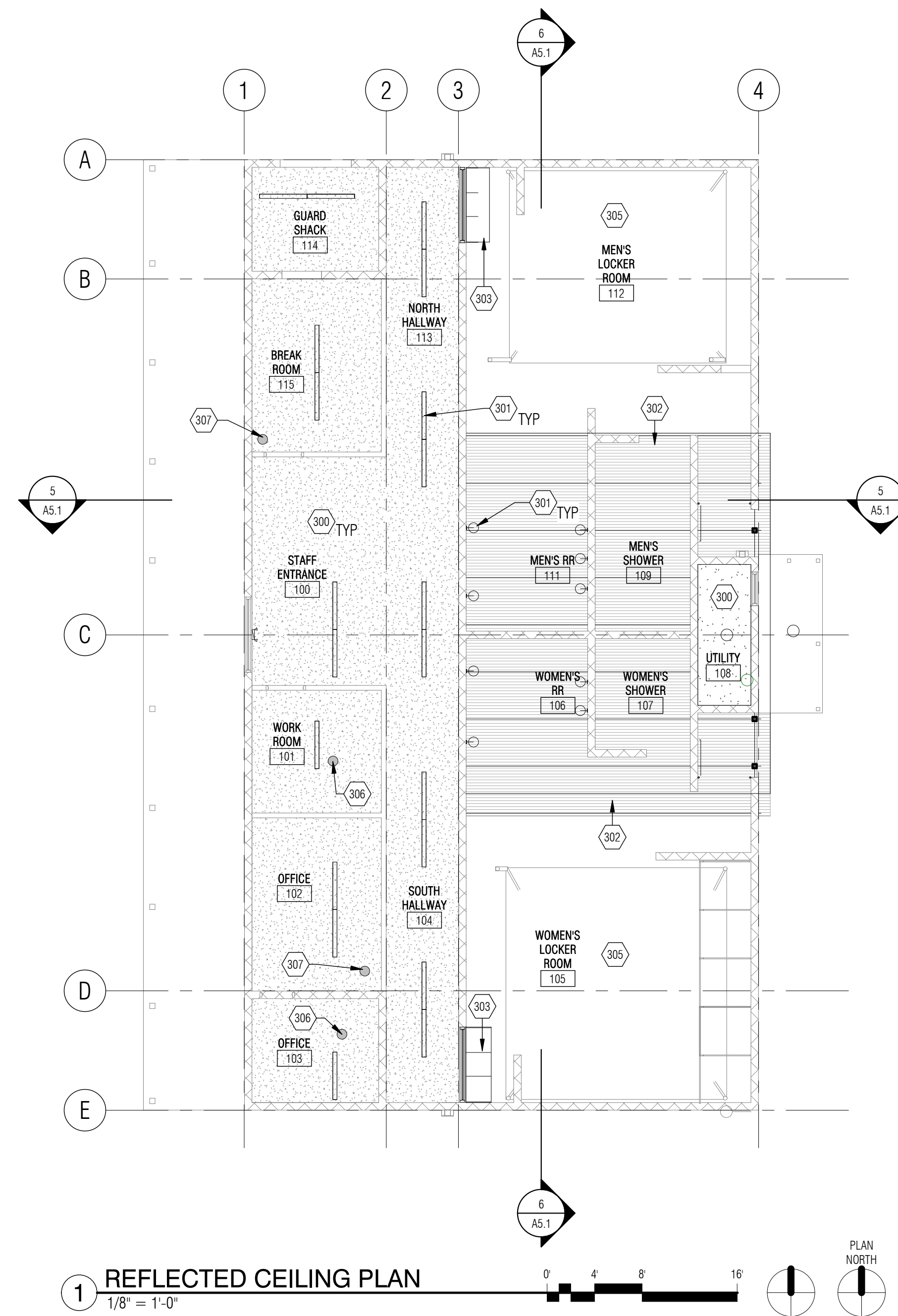
NO.	DESCRIPTION
300	FLOAT AND PAINT EXISTING GWB CEILINGS, TYPICAL
301	NEW LIGHT FIXTURE - REF. ELECTRICAL
302	NEW ROOF ABOVE
303	NEW SHADE CANOPY ABOVE
305	EXISTING SHADE STRUCTURE
306	REMOVE EXISTING SHEET METAL COLAR - PATCH AND TEXTURE GWB CEILING TO MATCH ADJACENT EXISTING
307	REMOVE EXISTING FLUE VENT AND PIPING SUPPORTS - PATCH AND TEXTURE GWB CEILING TO MATCH ADJACENT EXISTING

**ROOFING GENERAL NOTES**

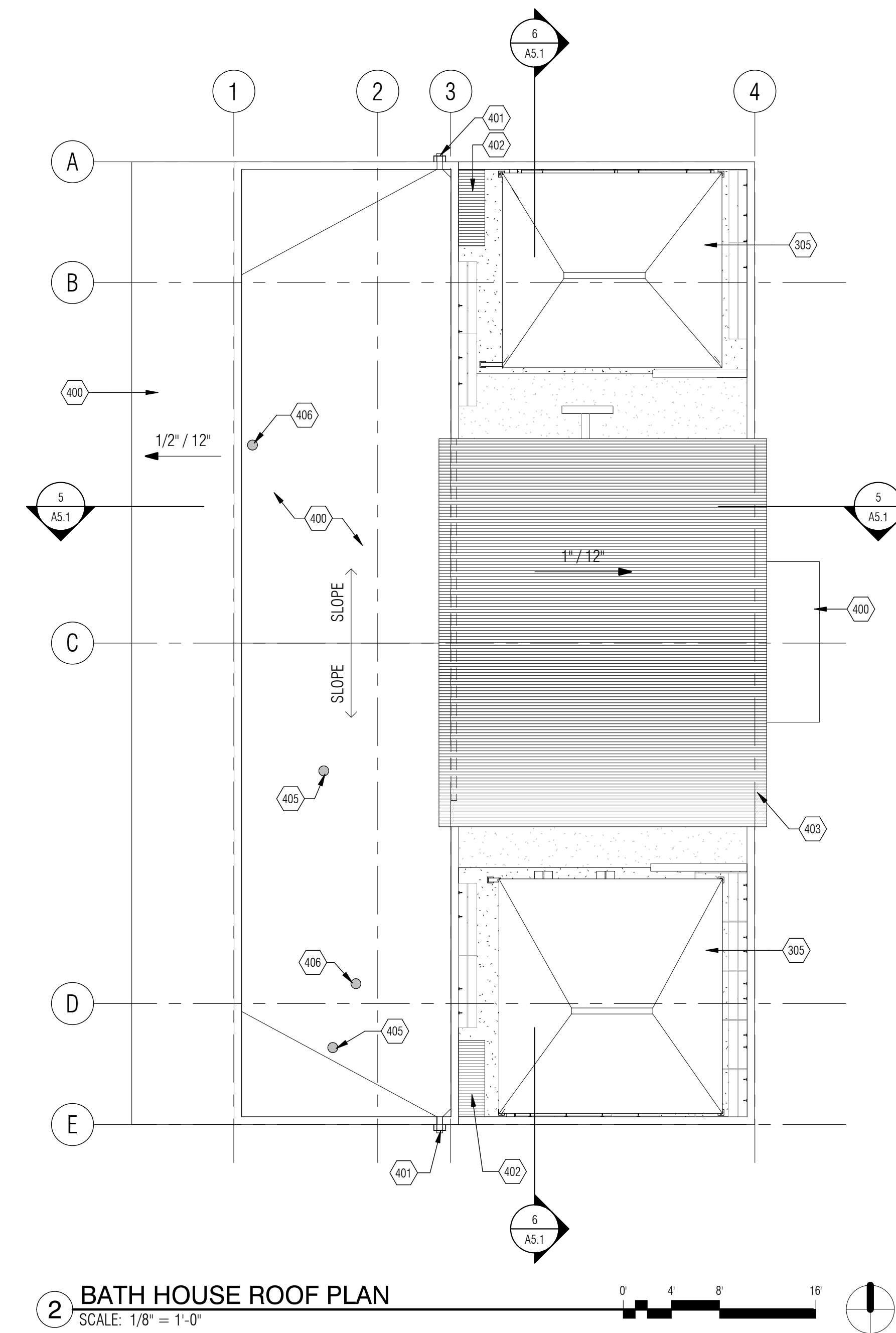
1. COORDINATE ROOF PLAN WITH STRUCTURAL, PLUMBING AND ELECTRICAL DRAWINGS.

**ROOF PLAN KEYNOTE LEGEND**

NO.	DESCRIPTION
400	EXISTING ROOF TO REMAIN
401	EXISTING CONDUCTOR HEAD AND DOWNSPOUT TO REMAIN - CLEAN & PAINT
402	NEW SHADE CANOPY - REF. STRUCTURAL
403	NEW GALVANIZED CORRUGATED METAL ROOF ON PAINTED STEEL STRUCTURE - REF. STRUCTURAL
405	REMOVE EXISTING ROOFTOP MOUNTED GRAVITY RELIEF HOOD - PATCH/REPAIR ROOFING TO MATCH ADJACENT EXISTING
406	REMOVE EXISTING FLUE VENT - PATCH/REPAIR ROOFING TO MATCH ADJACENT EXISTING



1 REFLECTED CEILING PLAN  
1/8" = 1'-0"

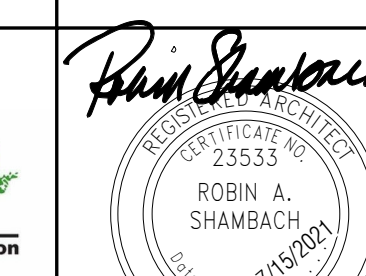


2 BATH HOUSE ROOF PLAN  
SCALE: 1/8" = 1'-0"

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EXPIRES 06/30/2022

CITY OF TUCSON PARKS AND RECREATION

FORT LOWELL PARK  
PARK IMPROVEMENTS  
REFLECTED CEILING PLAN & ROOF PLAN

CASE#

A2.3  
OF  
A7.1

APPROVALS	SIGNATORY	DATE

APPROVED _____ 20__	7
----- DIRECTOR	OF
	35

DRWN. BY JT 2021 DSGN. BY FS 2021 CHKD. BY HD 2021

PLAN NO. \_\_\_\_\_



Contact Arizona 811 at least two full working days before you begin excavation  
Call 811 or click Arizona811.com



NEW ROOFING TO MATCH EXISTING RAMADA

NEW METAL FLASHING AND PAINTED WOOD STRUCTURE TO MATCH EXISTING RAMADA

5 EXISTING RAMADA  
SCALE: 1" = 1'-0"



REMOVE AND REPLACE EXISTING METAL FLASHING WITH NEW - PAINT TO MATCH ADJACENT EXISTING RAMADA

REMOVE EXISTING ROOFING AND UNDERLAYMENT DOWN TO WOOD DECK - PATCH/REPAIR AS REQUIRED - RE-ROOF PER DETAILS 1-4 THIS SHEET

REMOVE AND REPLACE EXISTING GUTTERS AND DOWNSPOUTS WITH NEW - PAINT TO MATCH WOOD

PREP AND PAINT EXISTING EXPOSED WOOD STRUCTURE TO MATCH ADJACENT EXISTING RAMADA WOOD STRUCTURE

6 EXISTING POOL EQUIPMENT ENCLOSURE TO BE RE-ROOFED (SE CORNER)  
1" = 1'-0"



REMOVE EXISTING ROOFING AND UNDERLAYMENT DOWN TO WOOD DECK - PATCH/REPAIR AS REQUIRED - RE-ROOF PER DETAILS 1-4 THIS SHEET

REMOVE AND REPLACE EXISTING METAL FLASHING WITH NEW - PAINT TO MATCH ADJACENT EXISTING ON RAMADA

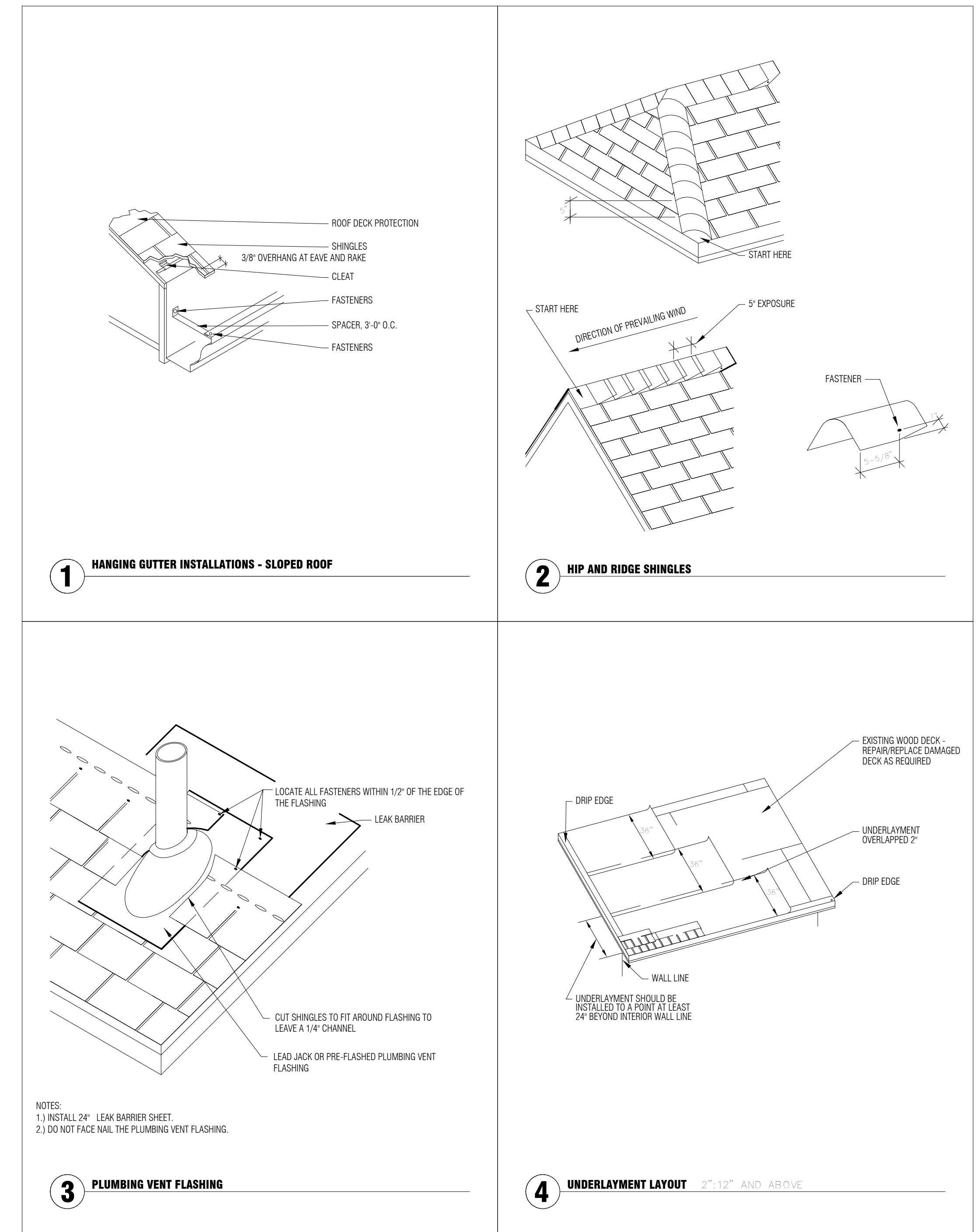
PAINT EXISTING EXPOSED WOOD STRUCTURE TO MATCH ADJACENT EXISTING RAMADA WOOD STRUCTURE

REMOVE AND REPLACE EXISTING GUTTER AND DOWNSPOUTS WITH NEW - PAINT TO MATCH WOOD

7 EXISTING POOL EQUIPMENT ENCLOSURE TO BE RE-ROOFED (NW CORNER)  
1" = 1'-0"

**ROOFING GENERAL NOTES - POOL EQUIPMENT ENCLOSURE**

1. REMOVE EXISTING ROOFING AND UNDERLAYMENT DOWN TO WOOD DECK
2. REPAIR / REPLACE DAMAGED WOOD DECK AS REQUIRED
3. REMOVE AND REPLACE EXISTING METAL FLASHING, GUTTERS AND DOWNSPOUTS
4. CLEAN UP / PREP EXISTING EXPOSED PAINTED WOOD STRUCTURE & PAINT
5. PAINT COLORS TO BE SELECTED BY LANDSCAPE ARCHITECT



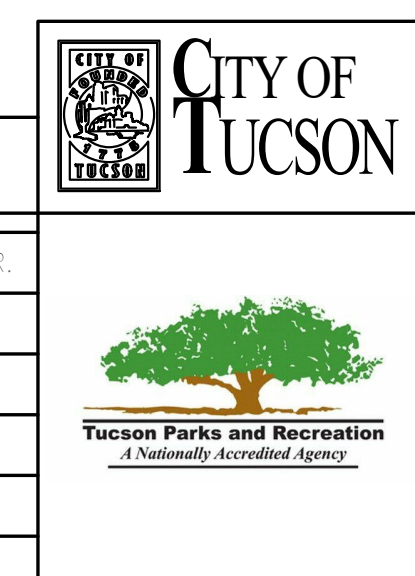
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**bws ARCHITECTS**

BURNS WALD-HOPKINS SHAMBACH ARCHITECTS  
**WHEAT DESIGN GROUP**

NO.	DATE	REVISION	BY	CHKD.	APPR.



*Robin A. Shambach*  
REGISTERED ARCHITECT  
23553  
ROBIN A. SHAMBACH  
LICENSE # 001713-0002  
ARIZONA - U.S.A.  
EXPIRES 06/30/2022

CITY OF TUCSON PARKS AND RECREATION				CASE#
FORT LOWELL PARK PARK IMPROVEMENTS ROOF DETAILS				A4.1 OF A7.1
APPROVALS	SIGNATORY	DATE	APPROVED	8
			APPROVED _____ 20__	OF
			----- DIRECTOR	35
			REF. _____ SCALE: _____	
DRWN. BY Author21	DSGN. BY Designer1	CHKD. BY Checker21	PLAN NO. _____	





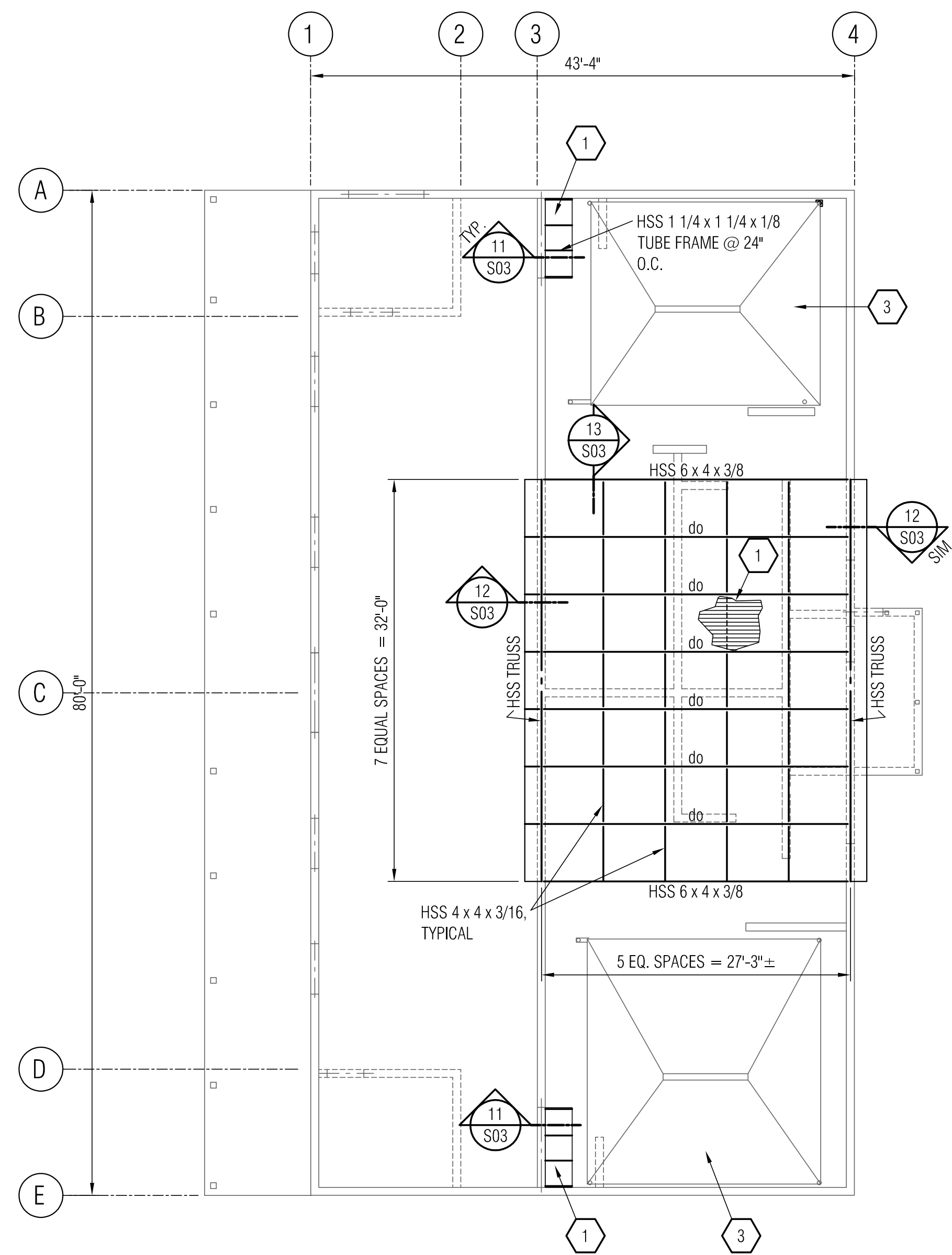


ABBREVIATIONS		SYMBOLS and LEGENDS	
A.B.	ANCHOR BOLT		C.M.U.
A.C.I.	AMERICAN CONCRETE INSTITUTE		GRANULAR BASE COURSE
A.E.	ARCHITECT ENGINEER		PLYWOOD SHEATHING
A.I.A.	AMERICAN INSTITUTE OF ARCHITECTS		STEEL
ALT.	ALTERNATE		SECTION CUT
ARCH.	ARCHITECT (URAL)		KEYNOTE
@	AT		SHEAR WALL
BOT.	BOTTOM		DETAIL TITLE
BD.	BOARD		ELEVATION TARGET
BTWN.	BETWEEN		REVISION
BLDG.	BUILDING		STEP IN FOOTING
BLK.	BLOCK		CENTER LINE
BLKG.	BLOCKING		COLUMN MARK
BM.	BEAM		FOOTING MARK
B.O.F.	BOTTOM OF FOOTING		SLAB DEPRESSION
BRG.	BEARING		OPENINGS
BSMT.	BASEMENT		COLUMN GRID
CHAN.	CHANNEL		DECK SPAN
CEM.	CEMENT		CONTROL/ CONSTRUCTION JOINT
C.I.P.	CAST IN PLACE		PLYWOOD TRUSS JOIST
C.J.	CONTROL/CONSTRUCTION JOINT		"LH" SERIES JOIST MARK
CLR.	CLEAR		STEEL BEAM SIZE
C.M.U.	CONCRETE MASONRY UNIT		"K" SERIES JOIST MARK
COL.	COLUMN		
CONC.	CONCRETE		
CONN.	CONNECT (ION)		
CONST.	CONSTRUCT (ION)		
CONT.	CONTINUOUS		
∅	CENTER LINE		
DBL.	DOUBLE		
DEMO.	DEMOLITION		
DET.	DETAIL		
DIA., Ø	DIAMETER		
DIM.	DIMENSION		
DN.	DOWN		
DO.	DIFFERENT		
DWG.	DRAWING		
EA.	EACH		
EL.	ELEVATION		
ELEC.	ELECTRICAL		
ENG.	ENGINEER		
EQ.	EQUAL		
EQUIP.	EQUIPMENT		
EW.	EACH WAY		
EXTG.	EXISTING		
EXP.	EXPANSION		
EXT.	EXTERIOR		
FDN.	FOUNDATION		
F.F.	FINISH FLOOR		
FIN.	FINISH		
FRMG.	FRAMING		
FT.	FOOT		
FTG.	FOOTING		
GA.	GAUGE		
GALV.	GALVANIZED		
G.L.	GLU-LAM		
GYP.	GYPSONUM		
HORIZ.	HORIZONTAL		
H.S.A.	HEADED STUD ANCHOR		
HT.	HEIGHT		
H.V.A.C.	HEATING/VENTILATING		
IN.	INCH		
INT.	INTERIOR		
JST.	JOIST		
JT.	JOINT		
K	KIP (1000)		
KO.	KNOCK OUT		
L.L.	LIVE LOAD		
L.L.H.	LONG LEG HORIZONTAL		
L.L.V.	LONG LEG VERTICAL		
MAT.	MATERIAL		
MAX.	MAXIMUM		
M.B.	MACHINE BOLT		
MECH.	MECHANICAL		
MFR.	MANUFACTURER		
MIN.	MINIMUM		
MISC.	MISCELLANEOUS		
N.I.C.	NOT IN CONTRACT		
N.T.S.	NOT TO SCALE		
O.C.	ON CENTER		
OPNG.	OPENING		
PL.	PLATE		
PT.	POINT		
PWD.	PLYWOOD		
REINF.	REINFORCE (D)		
REQD.	REQUIRED		
SCHED.	SCHEDULE		
SECT.	SECTION		
SHT.	SHEET		
SIM.	SIMILAR		
SPEC.	SPECIFICATION		
SQ.	SQUARE		
ST.	STEEL		
SYM.	SYMMETRICAL		
T. & B.	TOP AND BOTTOM		
THK.	THICKNESS		
T.O.B.	TOP OF BEAM		
T.O.F.	TOP OF FOOTING		
T.O.J.	TOP OF JOIST		
T.O.S.	TOP OF STEEL		
T.O.W.	TOP OF WALL		
TYP.	TYPICAL		
U.N.O.	UNLESS NOTED OTHERWISE		
VERT.	VERTICAL		
W/	WITH		
W/O	WITHOUT		
W.W.M.	WELDED WIRE MESH		

STANDARD STRUCTURAL NOTES	
<p>I. GENERAL:</p> <ol style="list-style-type: none"> <li>ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE, 2018 EDITION WITH LOCAL MODIFICATIONS.</li> <li>DESIGN LOADS:           <ul style="list-style-type: none"> <li>A. ROOF LIVE LOAD: . . . . . 20 PSF</li> <li>B. BASIC WIND SPEED = 105 MPH</li> <li>C. WIND LOAD: . . . . . RISK CATEGORY II EXPOSURE C SEISMIC DESIGN CATEGORY B SDS = 0.301 SD1 = 0.130 SITE CLASS: D LATERAL SYSTEM: INTERMEDIATE REINFORCED MASONRY SHEAR WALLS LATERAL METHOD: EQUIVALENT LATERAL FORCE PROCEDURE</li> <li>D. EARTHQUAKE DESIGN DATA: . . . . .</li> <li>E. SOIL PRESSURE: 1,500 PSF (NO SOILS REPORT).</li> </ul> </li> <li>THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.</li> <li>DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON DRAWINGS.</li> <li>ALL DETAILS SHOWN APPLY WHETHER SPECIFICALLY REFERENCED OR NOT.</li> <li>ALL STRUCTURAL CALCULATIONS SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW, SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER (STRUCTURAL) REGISTERED IN THE STATE OF ARIZONA.</li> </ol>	<p>IV. METALS:</p> <ol style="list-style-type: none"> <li>STRUCTURAL STEEL:           <ul style="list-style-type: none"> <li>A. ALL STRUCTURAL STEEL CONSTRUCTION SHALL COMPLY WITH AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, AND AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" INCLUDING COMMENTARY, AND THE APPLICABLE PROVISIONS OF THE AWS, "STRUCTURAL WELDING CODE".</li> <li>B. ALL TUBULAR STEEL SHALL BE ASTM A500, GRADE B. ALL OTHER SHAPES AND PLATES SHALL BE ASTM A36.</li> <li>C. ALL UNFINISHED BOLTS AND NUTS SHALL BE ASTM A325, GRADE A HIGH STRENGTH BOLTS.</li> <li>D. E70XX ELECTRODES SHALL BE USED FOR ALL WELDS.</li> <li>E. ALL ANCHOR BOLTS SHALL BE ASTM F-1554, GRADE 36.</li> </ul> </li> <li>STEEL DECKING:           <ul style="list-style-type: none"> <li>A. STEEL DECKING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR DIAPHRAGM ACTION AND SHALL BE CONTINUOUS OVER AT LEAST TWO SPANS. ALL OPENINGS IN STEEL DECK SHALL BE PROPERLY REINFORCED AS NOTED ON THE DRAWINGS OR AS APPROVED BY ARCHITECT/ENGINEER. GENERAL CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF OPENINGS IN THE DECK WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL AND MANUFACTURER'S DRAWINGS.</li> </ul> </li> </ol>
<p>II. FOUNDATION AND EARTHWORK:</p> <ol style="list-style-type: none"> <li>ALL FOOTINGS SHALL BE FOUNDED AT THE DEPTHS INDICATED ON CONSTRUCTION DRAWINGS, OR 18 INCHES MINIMUM BELOW LOWEST ADJACENT GRADE.</li> <li>SCARIFY SOILS TO A DEPTH OF 12" BELOW BOTTOM OF FOOTINGS, MOISTURE CONDITION, AND COMPACT TO 95% OF MAXIMUM DENSITY PER ASTM D698 AT OPTIMUM MOISTURE +/- 3%.</li> <li>SCARIFY, MOISTURE CONDITION, AND COMPACT EXPOSED SOILS TO A DEPTH OF 8 INCHES BELOW BOTTOM OF SLAB.</li> <li>EXTERIOR FINISHED GRADES SHALL SLOPE TO DRAIN AWAY FROM BUILDING WALLS TO ELIMINATE WATER POCKETS ADJACENT TO BUILDING FOUNDATIONS.</li> </ol>	<p>V. EPOXY:</p> <ol style="list-style-type: none"> <li>ALL EPOXY ANCHORS INTO CONCRETE SHALL USE SIMPSON "SET-XP" EPOXY.</li> <li>ALL EPOXY ANCHORS INTO MASONRY SHALL USE SIMPSON "SET-XP" EPOXY.</li> <li>INSTALL PER MANUFACTURER'S RECOMMENDATIONS.</li> <li>EPOXY ANCHORS SET IN MASONRY SHALL BE SET IN SOLID GROUTED CELLS. IF EXISTING MASONRY IS NOT GROUTED, CONTRACTOR SHALL FILL CELLS SOLID WITH GROUT.</li> </ol>
<p>III. CONCRETE:</p> <ol style="list-style-type: none"> <li>ALL CONCRETE SHALL CONFORM WITH ASTM C-94 AND ATTAIN THE FOLLOWING MINIMUM STRENGTHS AT 28 DAYS:           <ul style="list-style-type: none"> <li>A. FOOTINGS, SLAB ON GRADE: . . . . . 3,000 PSI</li> <li>B. CURBS &amp; SIDEWALKS: . . . . . 2,500 PSI</li> </ul> </li> <li>ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE PROVISIONS FOR THE FOLLOWING LATEST ACI STANDARDS.           <ul style="list-style-type: none"> <li>A. ACI 301 - SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS</li> <li>B. ACI 318 - BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE</li> </ul> </li> <li>CONCRETE FOOTINGS AND PADS MAY BE POURED AGAINST NEAT EXCAVATIONS, PROVIDED PLAN DIMENSIONS ARE ADHERED TO.</li> <li>MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE AS FOLLOWS:           <ul style="list-style-type: none"> <li>A. CONCRETE POURED DIRECTLY AGAINST EARTH . . . . . 3 INCHES</li> <li>B. FORMED CONCRETE . . . . . 1 1/2 INCHES</li> </ul> </li> <li>ALL REINFORCING BARS, ANCHOR BOLTS, AND CONCRETE INSERTS SHALL BE SECURED IN POSITION PRIOR TO PLACING CONCRETE.</li> <li>PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING CONCRETE. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CONSULT ARCHITECT/ENGINEER OF SUCH CONFLICTS.</li> <li>NO CONSTRUCTION JOINTS (OTHER THAN THOSE SHOWN ON DRAWINGS) SHALL BE INSTALLED WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER. PROVIDE 3/4" CHAMFER AT ALL EXPOSED CORNERS.</li> <li>CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER TO OBSERVE COMPLETED FOOTING EXCAVATION AND ALL REINFORCING BAR PLACEMENTS BEFORE ANY CONCRETE IS PLACED.</li> <li>REINFORCING STEEL:           <ul style="list-style-type: none"> <li>A. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A-615 GRADE 60.</li> <li>B. ALL REINFORCING IN CONCRETE SHALL BE CONTINUOUS OR LAPPED IN ACCORDANCE WITH ACI 318, AND NOT LESS THAN 48 BAR DIAMETERS.</li> </ul> </li> </ol>	<p>GENERAL NOTES</p> <p>FOR COMPLETE DIMENSIONS SEE ARCHITECTURAL DRAWINGS</p> <p>SPECIAL INSPECTION: THE FOLLOWING PORTIONS OF THE WORK REQUIRE SPECIAL INSPECTION TO BE PERFORMED IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.</p> <ul style="list-style-type: none"> <li>WELDING</li> <li>EPOXY</li> <li>MASONRY</li> </ul> <p>THIS NOTE APPLIES TO ALL EXISTING BUILDING AREAS:</p> <ol style="list-style-type: none"> <li>THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CUTTING OF ALL REQUIRED OPENINGS THROUGH BUILDING FLOORS, WALLS, ROOFS, AND FOR THE INSTALLATION OF WALL STRUCTURAL SUPPORT MEMBERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL EQUIPMENT, FIXTURES, PIPING, AND CONDUIT INCLUDING SLEEVES, CONCRETE INSERTS, THREADED RODS AND HANGERS.</li> <li>THIS PROJECT INVOLVES ADDITIONS AND ALTERATIONS TO EXISTING CONSTRUCTION. EVERY EFFORT HAS BEEN MADE TO DETAIL THE DRAWINGS TO CONFORM WITH EXISTING CONSTRUCTION IN ACCORDANCE WITH THE AS-BUILT DRAWINGS. IF CONDITIONS ARE UNCOVERED WHICH DIFFER FROM WHAT IS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER FOR RECOMMENDATIONS PRIOR TO PROCEEDING WITH THE WORK.</li> <li>THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, PLACEMENT, AND MAINTENANCE OF ALL SHORING AND BRACING OF EXISTING CONSTRUCTION THAT MAY BE REQUIRED TO INSURE THAT NO SETTLEMENT OR MOVEMENT OF ANY EXISTING CONSTRUCTION OCCURS.</li> <li>ALL DIMENSIONS OF EXISTING CONSTRUCTION HAVE BEEN TAKEN FROM AS-BUILT DRAWINGS AND SITE SURVEY INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK.</li> </ol>

<p>TURNER STRUCTURAL ENGINEERING COMPANY 2806 N. Averton Way Ste. 400 • Tucson AZ, 85712 • (520) 333-3422</p>		<p>CITY OF TUCSON</p>		<p>CASE #</p> <p>CITY OF TUCSON PARKS AND RECREATION</p> <p>FORT LOWELL PARK PARK IMPROVEMENTS STANDARD STRUCTURAL NOTES</p>																			
<p>WHEAT DESIGN GROUP 500 N. Tucson Blvd., Suite 150 Tucson, AZ 85716 (520) 884-7911 www.wheatdesigngroup.com</p>		<p>JAMES D. HART Professional Engineer No. 27343 Expires 09/30/2023</p>		<table border="1"> <thead> <tr> <th>APPROVALS</th> <th>SIGNATORY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>		APPROVALS	SIGNATORY	DATE															
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NO.	DATE	REVISION	BY	CHKD.	APPR.																		
<p>DRWN. BY TBG 2021</p>		<p>DSGN. BY JDH 2021</p>		<p>CHKD. BY JDH 2021</p>																			



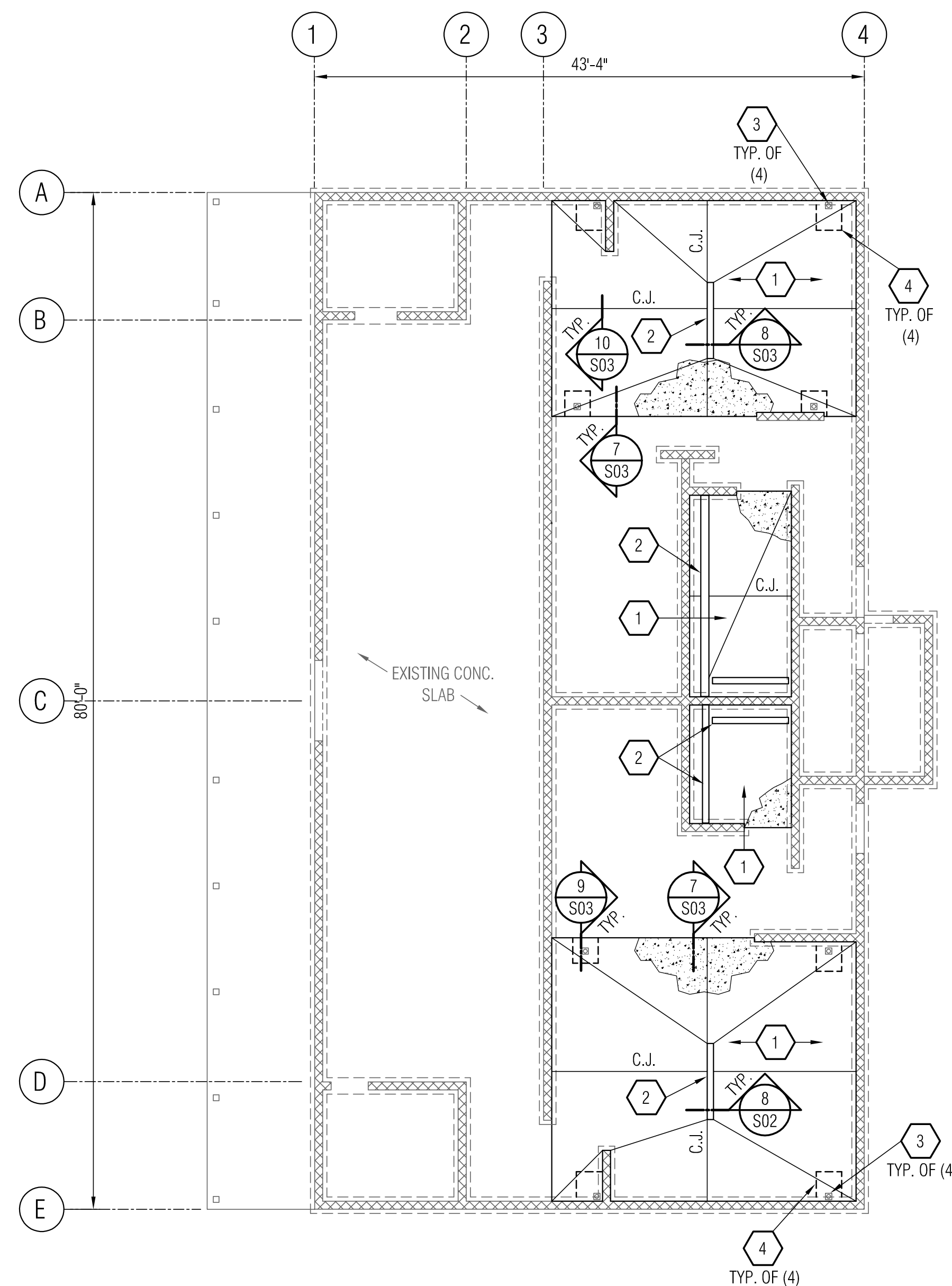


**A ROOF FRAMING PLAN**

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

**FRAMING KEYNOTES:**

- 1 5/16" DEEP, 26 GAGE CORRUGATED METAL ROOF DECK WITH THE FOLLOWING MINIMUM SECTION PROPERTIES: +S = 0.099 in<sup>2</sup> I = 0.073 in<sup>4</sup>  
ATTACH DECKING TO ROOF FRAMING AS FOLLOWS:  
PROVIDE (4) - #8 SCREWS WITH SEALING WASHERS, PER 36" WIDE PANEL, AT ALL END AND INTERMEDIATE DECK SUPPORTS  
PROVIDE #8 SCREWS WITH SEALING WASHERS AT 24" O.C. AT ALL SIDE LAPS.
- T.O.T. (TOP OF TRUSS), SET RELATIVE TO REFERENCE FINISH FLOOR ELEVATION OF ELEVATION OF 0'-0".
- EXISTING CANOPY.

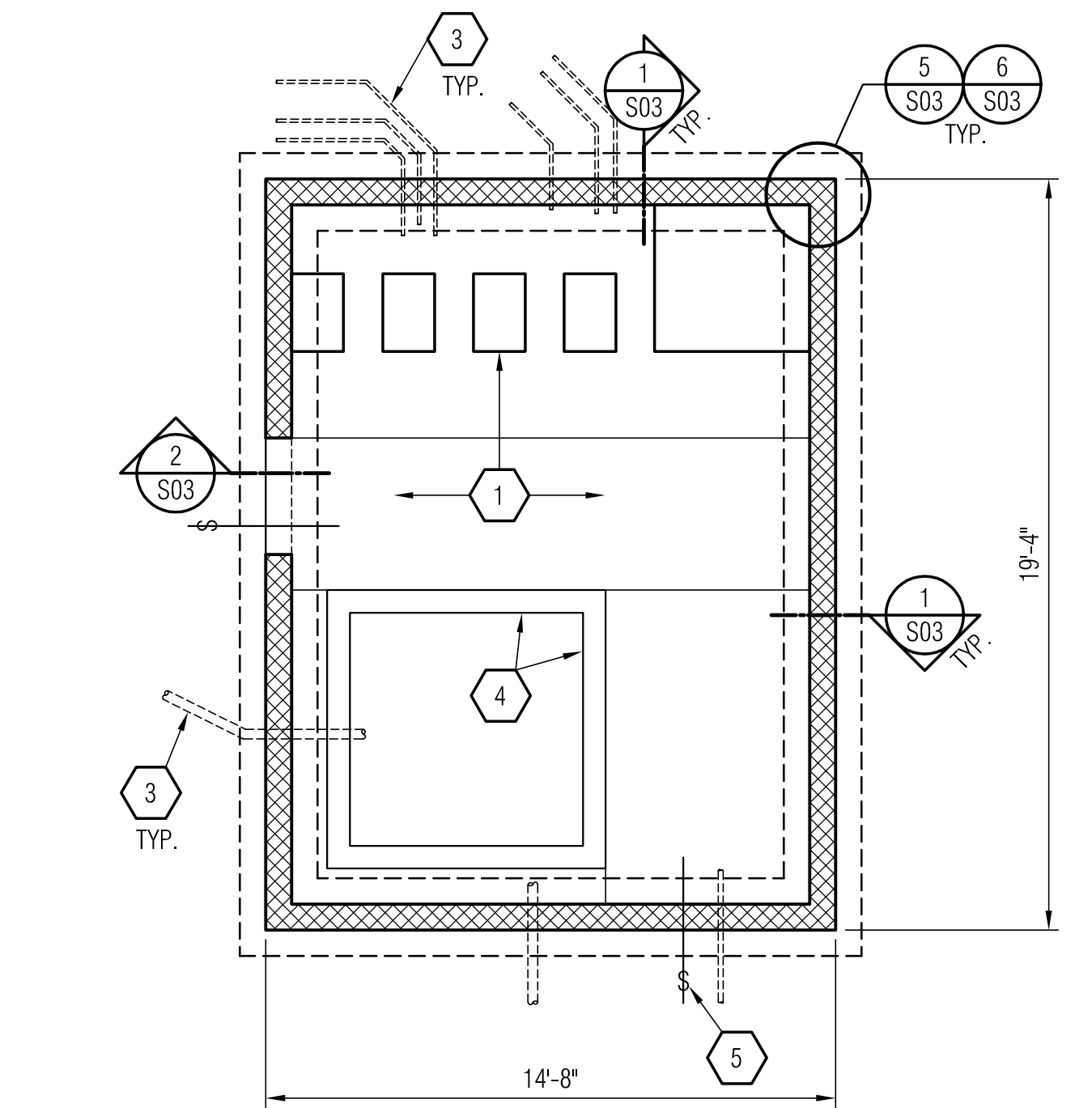


**B FOUNDATION PLAN**

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

**FOUNDATION KEYNOTES:**

- NEW 4" CONCRETE SLAB ON GRADE REINFORCED WITH #4 AT 24" O.C. EACH DIRECTION ON 4" COMPACTED GRANULAR BASE COURSE, TYPICAL.
- TRENCH DRAIN, SLOPE SLAB TO DRAIN.
- EXISTING CANOPY COLUMN. REMOVE/REPLACE AS REQUIRED TO INSTALL NEW CONCRETE SLAB.
- NEW 2'-0" SQUARE x 12" CONCRETE FOOTING BELOW EACH EXISTING CANOPY COLUMN.

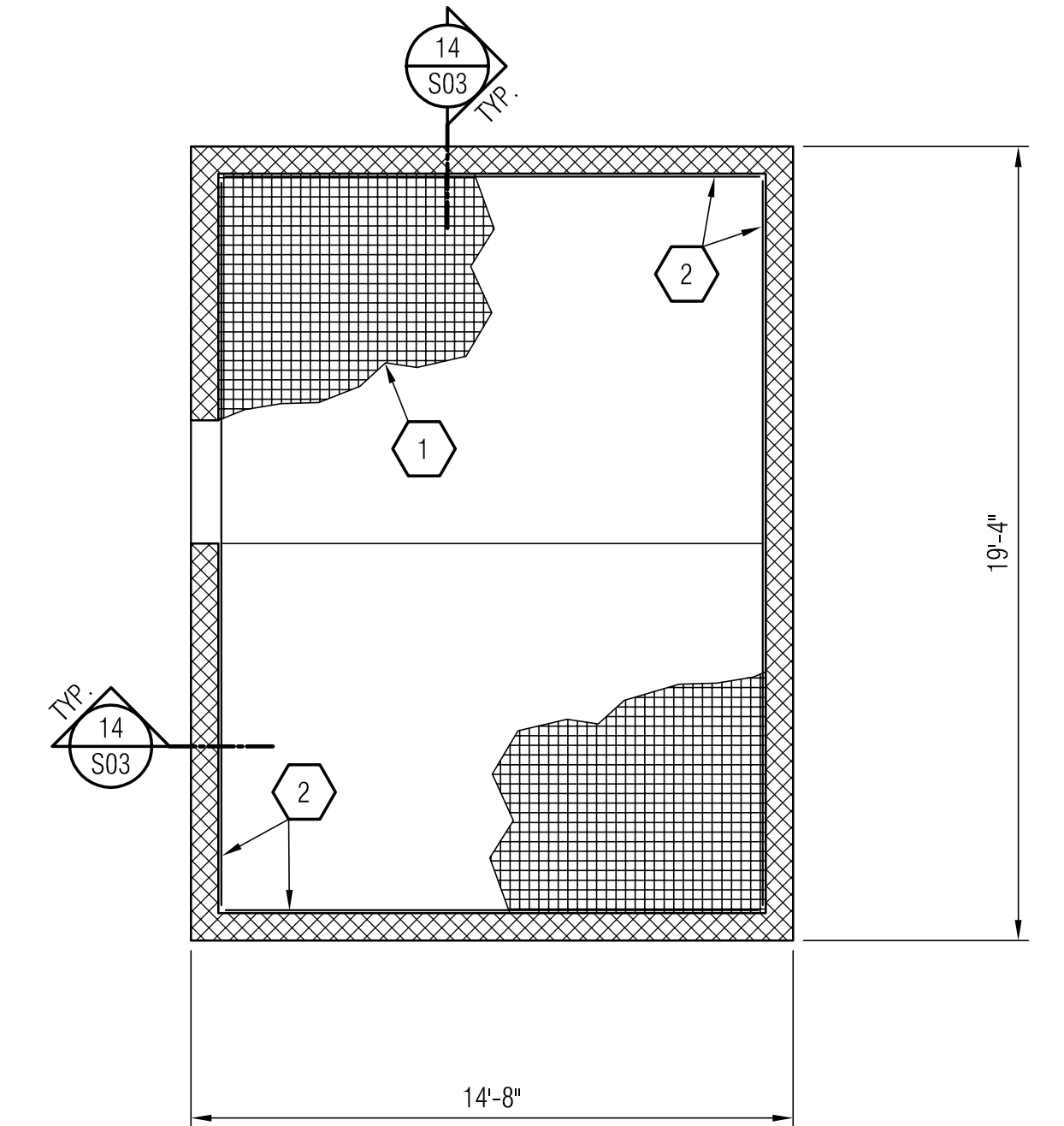


**C FOUNDATION PLAN - Equipment Enclosure**

SCALE: 1/4" = 1'-0"

**FOUNDATION KEYNOTES:**

- FOR EXTERIOR SLAB WORK SEE CIVIL, LANDSCAPE, AND ARCHITECTURAL DRAWINGS.
- T.O.F. (TOP OF FOOTING) ELEVATIONS SET RELATIVE TO REFERENCE FINISH FLOOR ELEVATION OR LOWEST ADJACENT GRADE.
- INDICATES UTILITY PIPE THROUGH STEM WALL. SEE DETAIL 4/S03.
- EQUALIZER BASIN, SEE AQUA DESIGN DRAWINGS.
- INDICATES STEPPED FOOTING, SEE DETAIL 3/S03.



**D ROOF FRAMING PLAN - Equipment Enclosure**

SCALE: 1/4" = 1'-0"

**FRAMING KEYNOTES:**

- SHADE FABRIC OVER CHAIN LINK FENCE.
- L 3 x 3 x 1/4 CONTINUOUS.



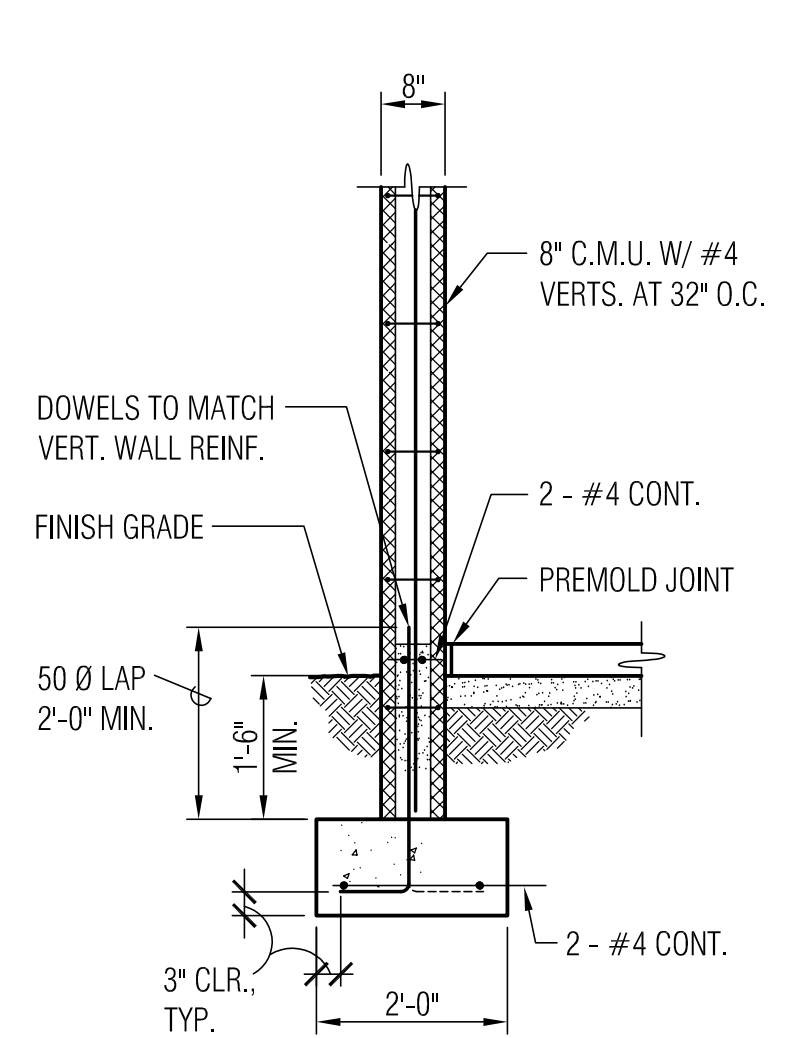
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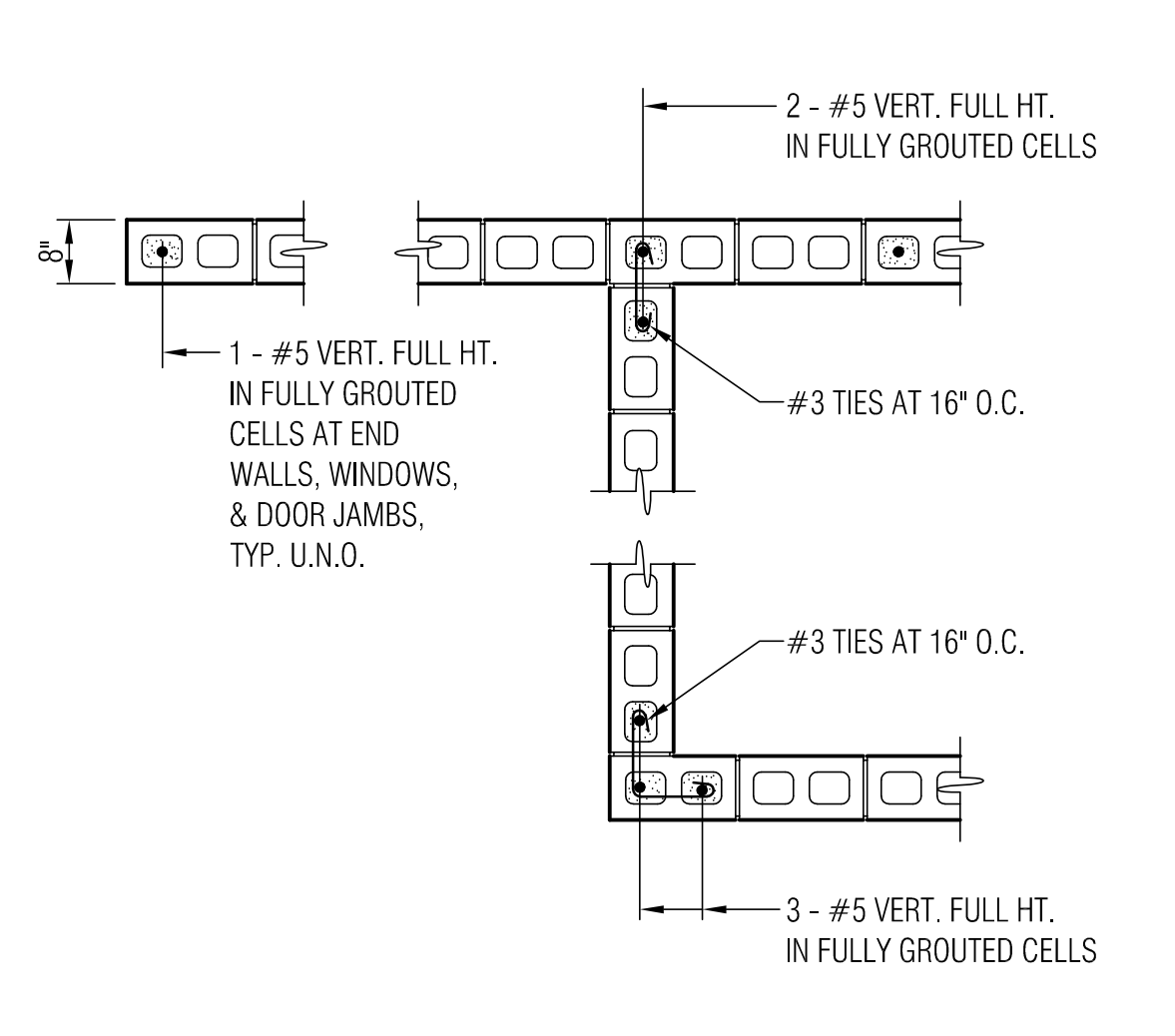
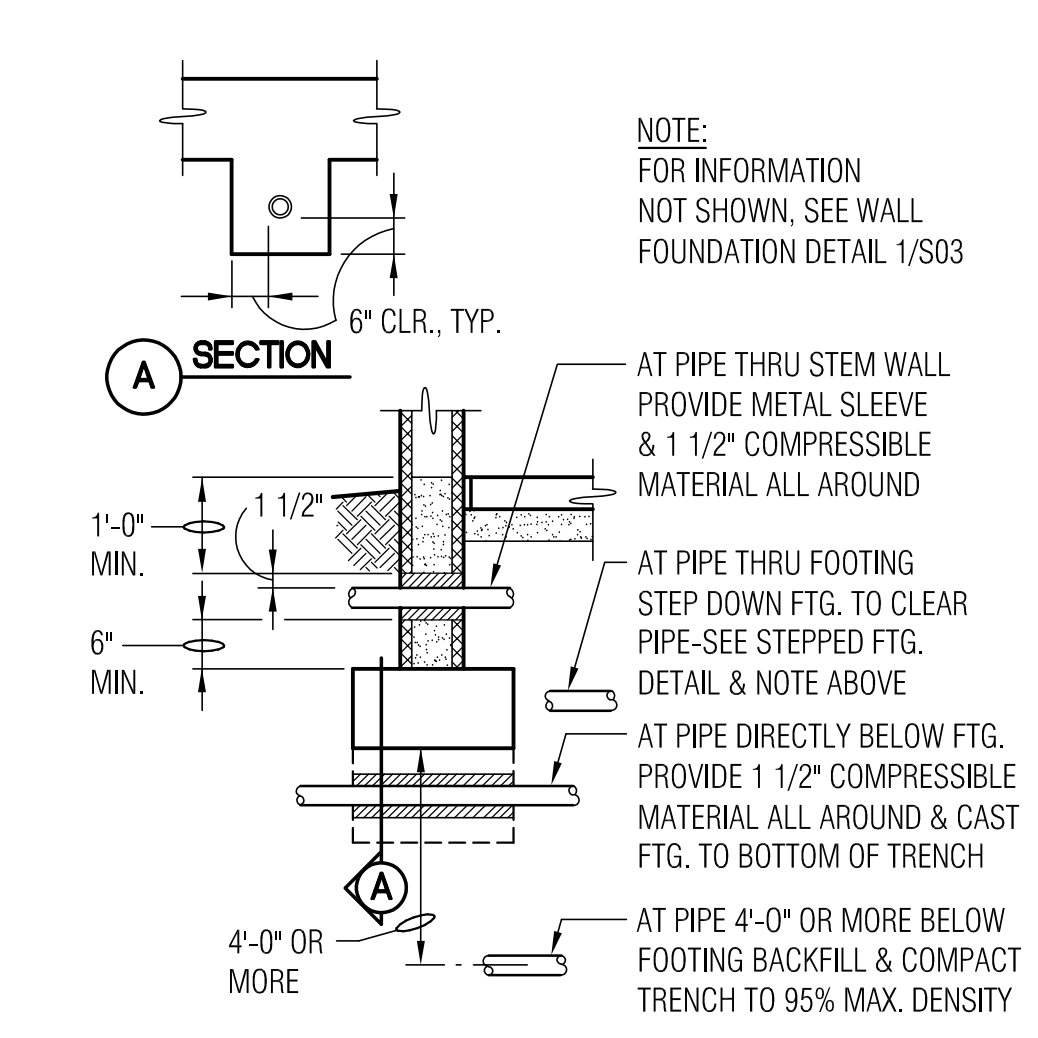
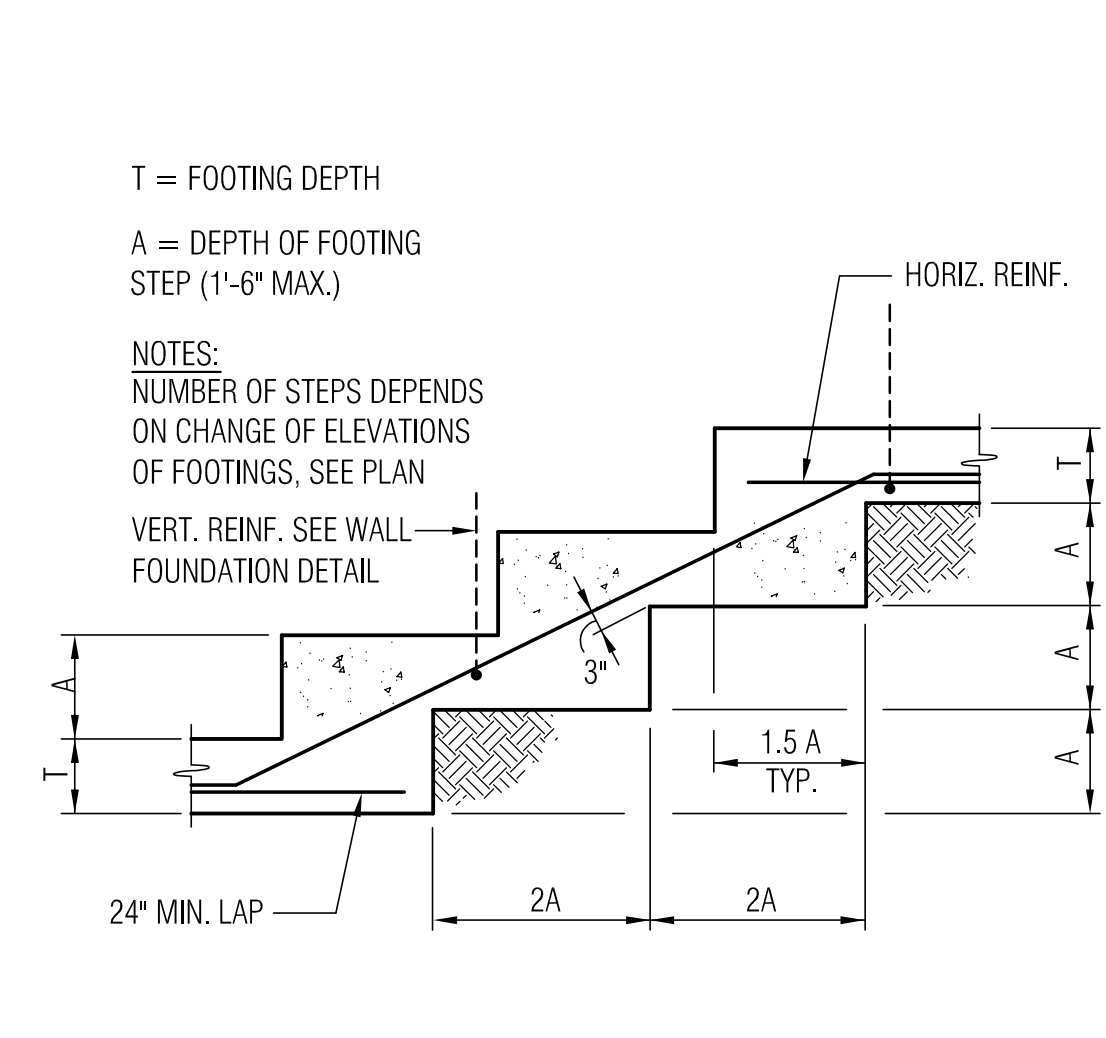
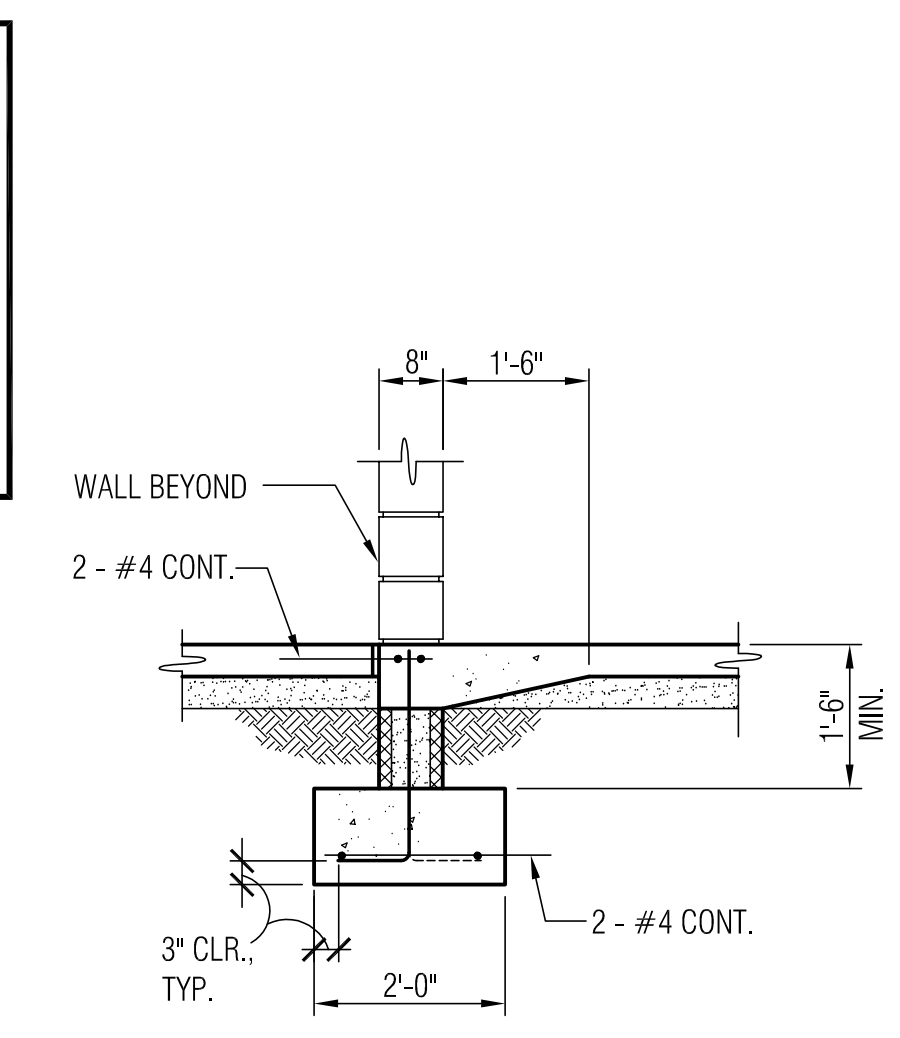
**JAMES D. HART**  
27343  
EXPIRES 09/30/2022

CITY OF TUCSON PARKS AND RECREATION				CASE#
FORT LOWELL PARK PARK IMPROVEMENTS FOUNDATION AND ROOF FRAMING PLANS				S02 OF S03
APPROVALS	SIGNATORY	DATE		APPROVED _____ 20__
				13
				OF
				35
				REF. _____ SCALE: _____
DRWN. BY TBG 2021	DSGN. BY JDH 2021	CHKD. BY JDH 2021		PLAN NO. _____



**NOTE:**

- HORIZ. TRUSS TYPE JOINT REINF. AT 16" O.C., TYP. ALL MASONRY WALLS.
- SOLID GROUT MASONRY WALLS TO FINISH FLOOR ELEVATION OR TO EXTERIOR GRADE ELEVATION WHICHEVER IS HIGHER. TYPICAL ALL MASONRY WALLS.



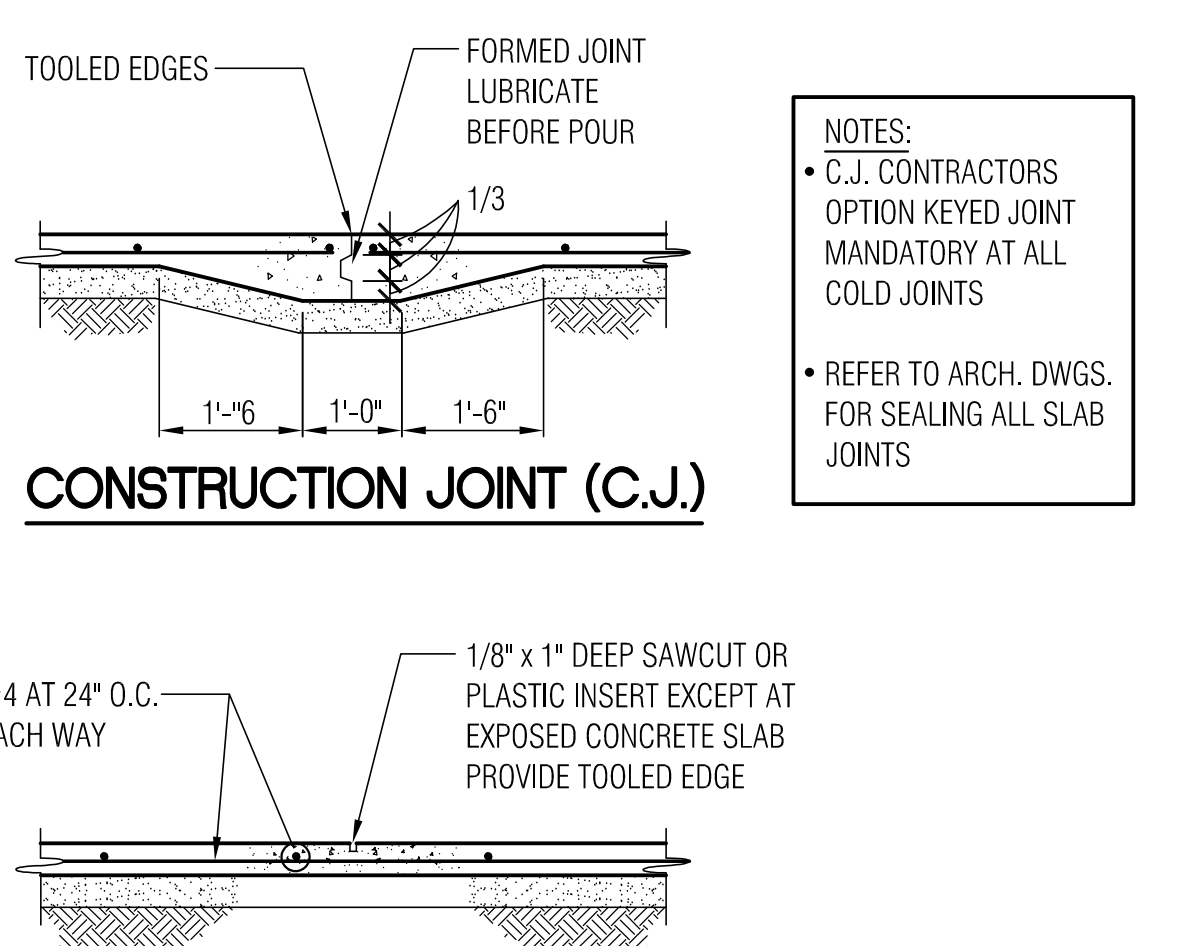
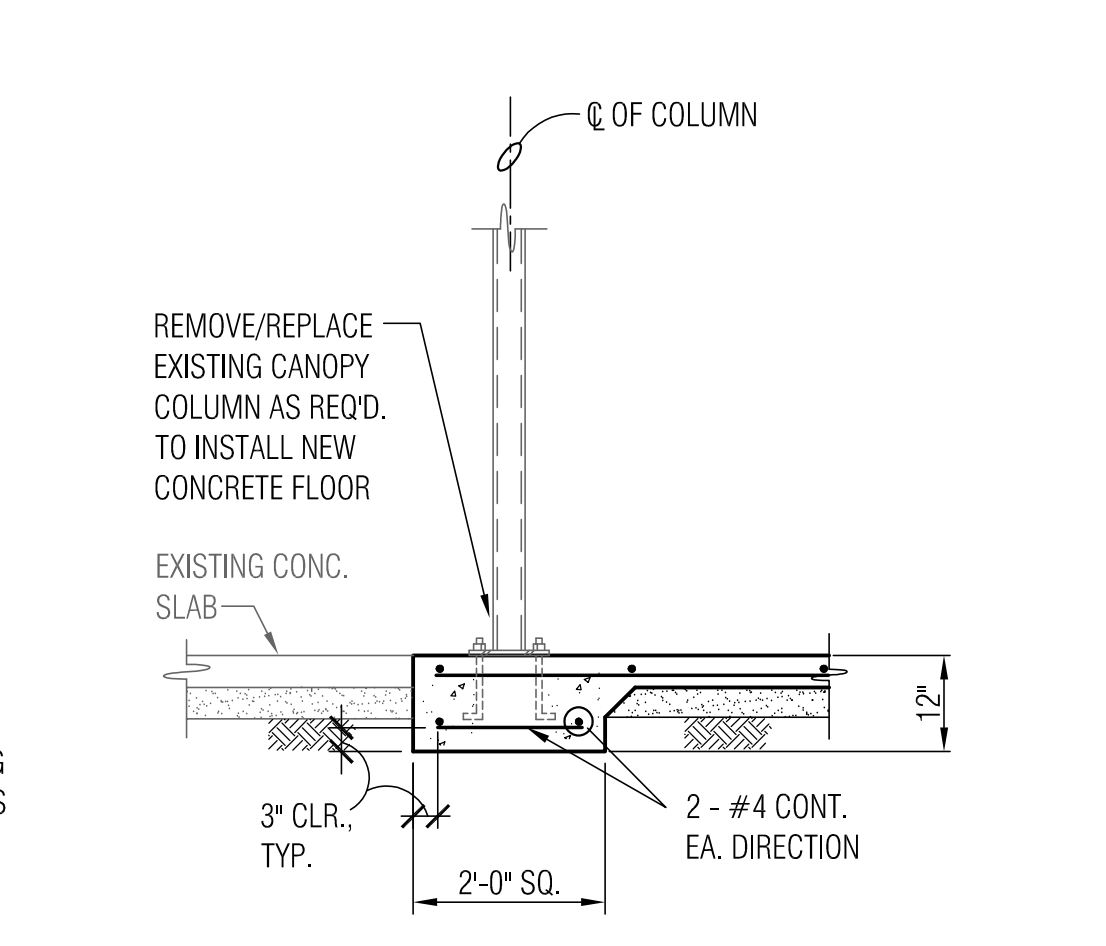
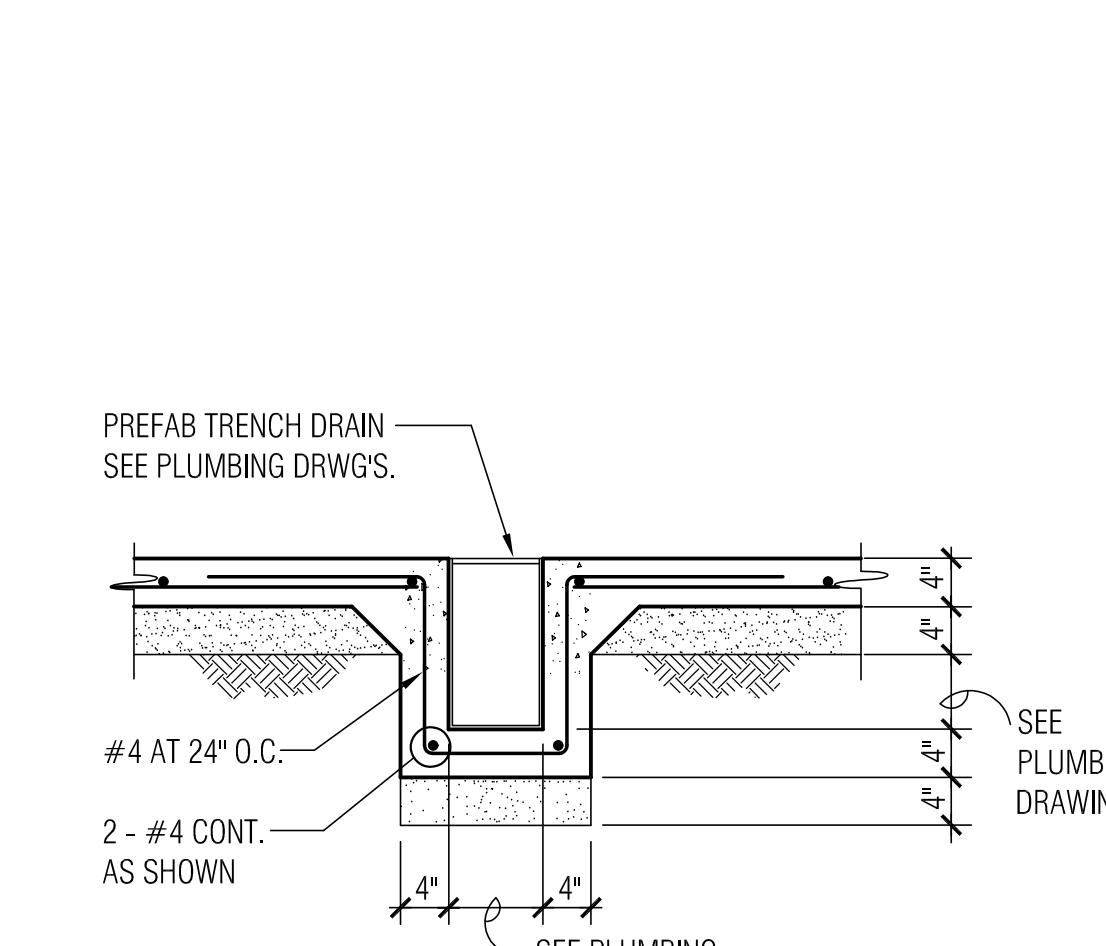
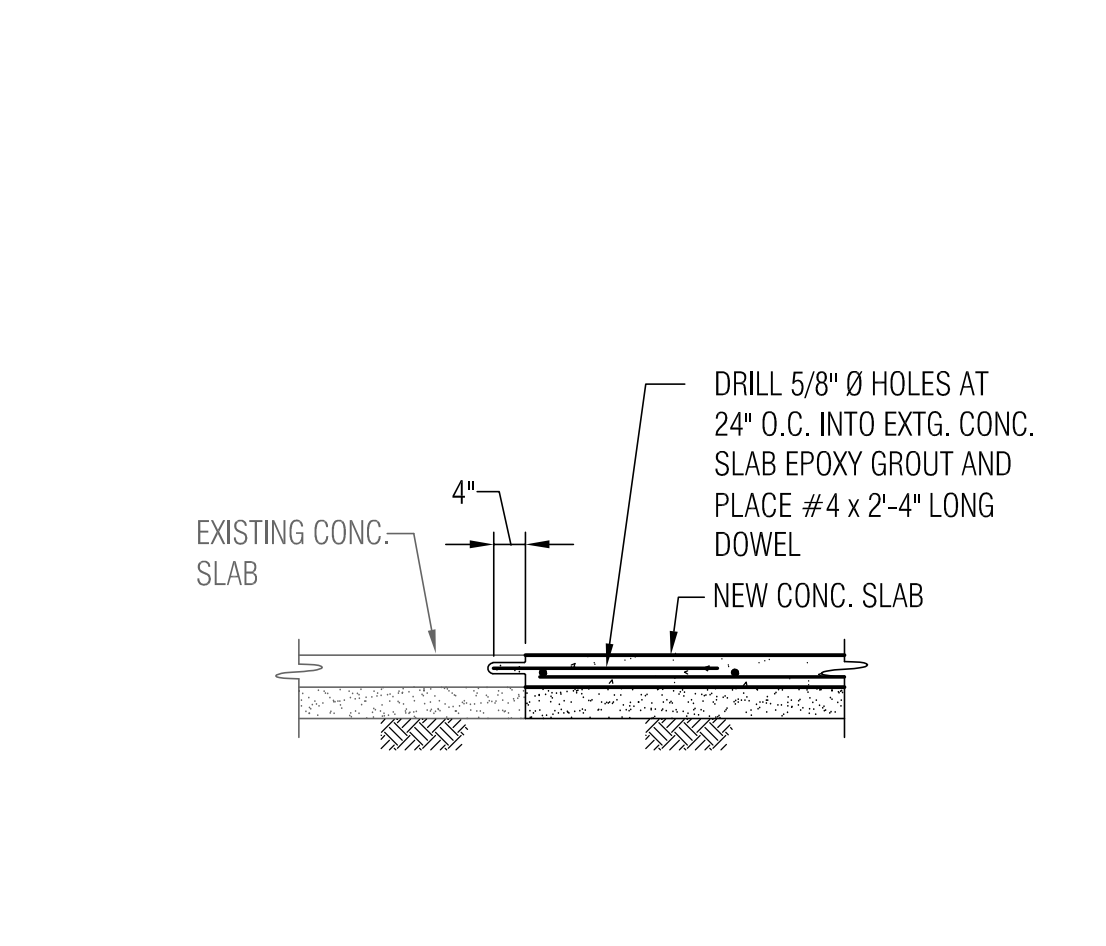
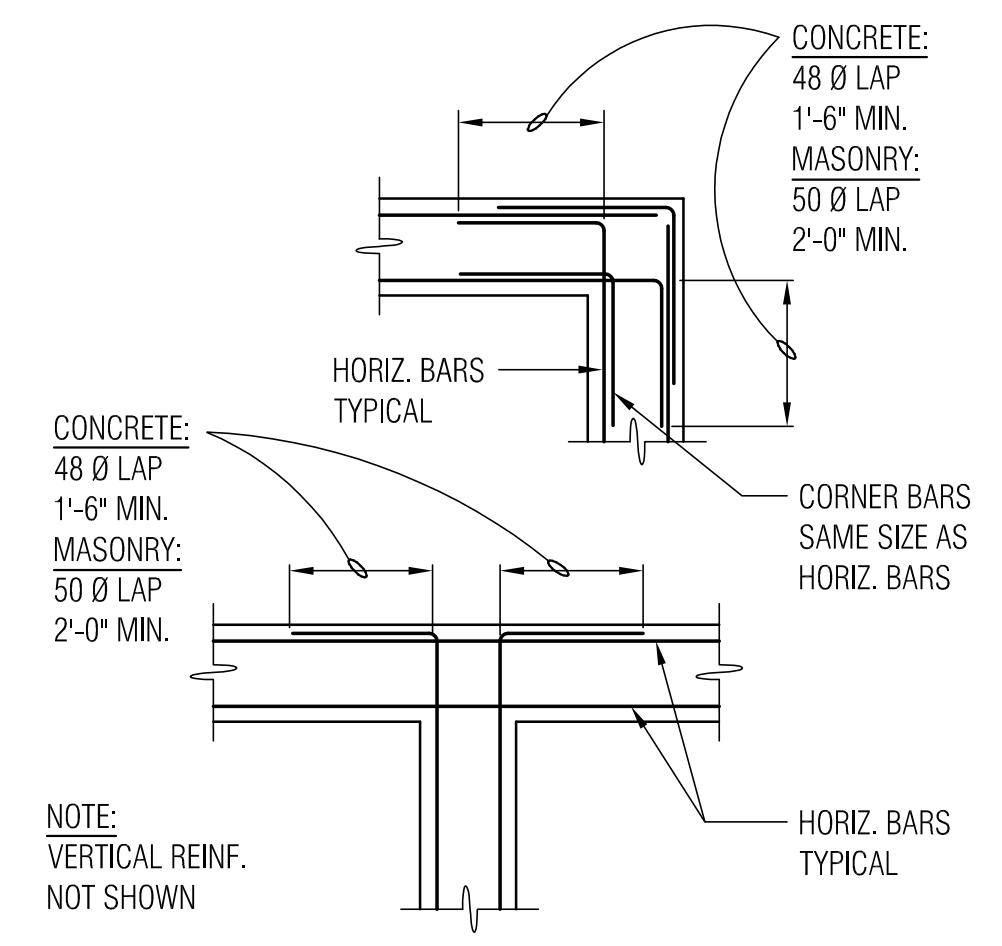
**1** 8" EXTERIOR C.M.U. WALL FOOTING  
1/2" = 1'-0"

**2** DROPPED STEM AT OPENINGS  
1/2" = 1'-0"

**3** TYPICAL STEPPED FOOTING  
NO SCALE

**4** UTILITY PIPE AT WALL FOOTING  
NO SCALE

**5** C.M.U. JUNCTION AND WALL  
1/2" = 1'-0"



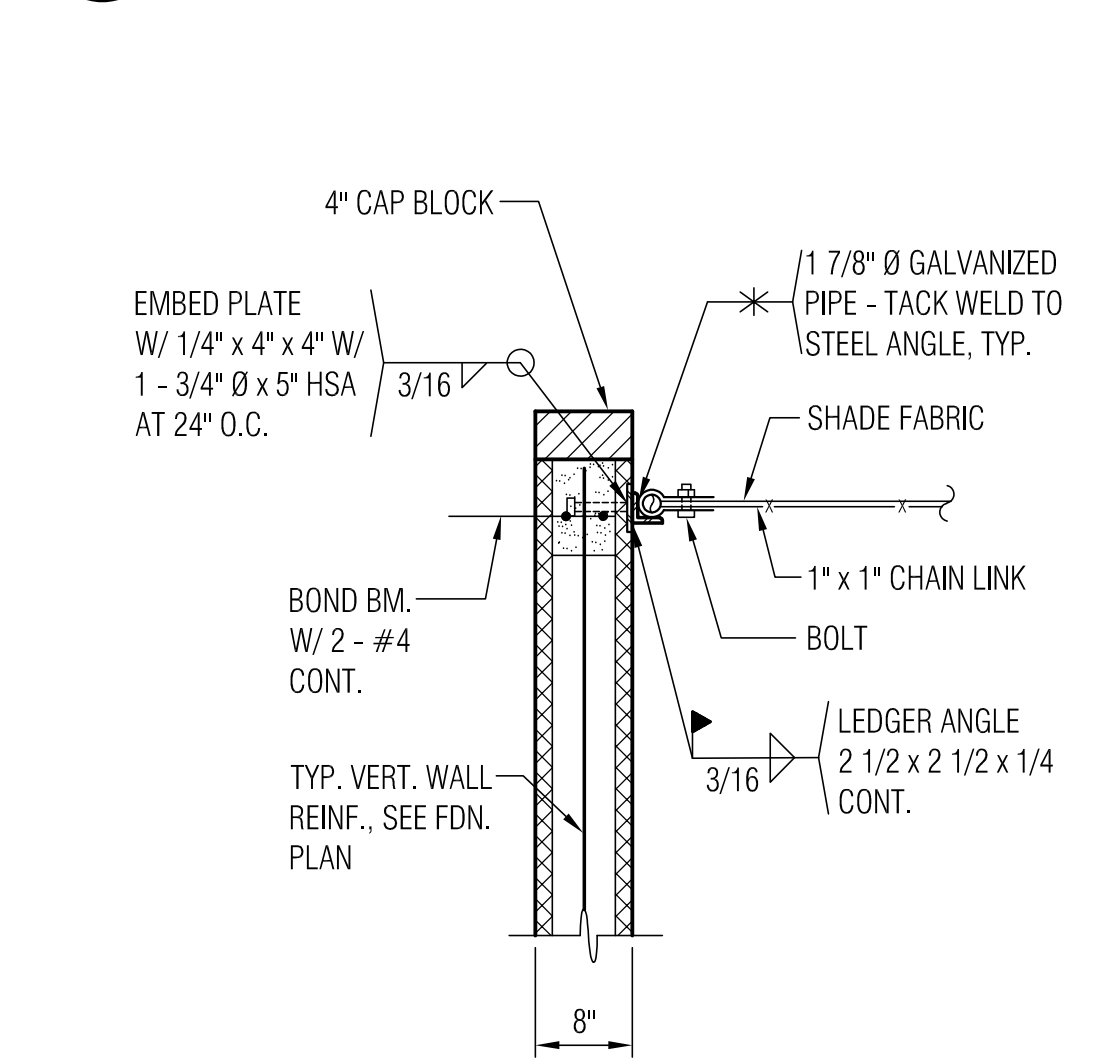
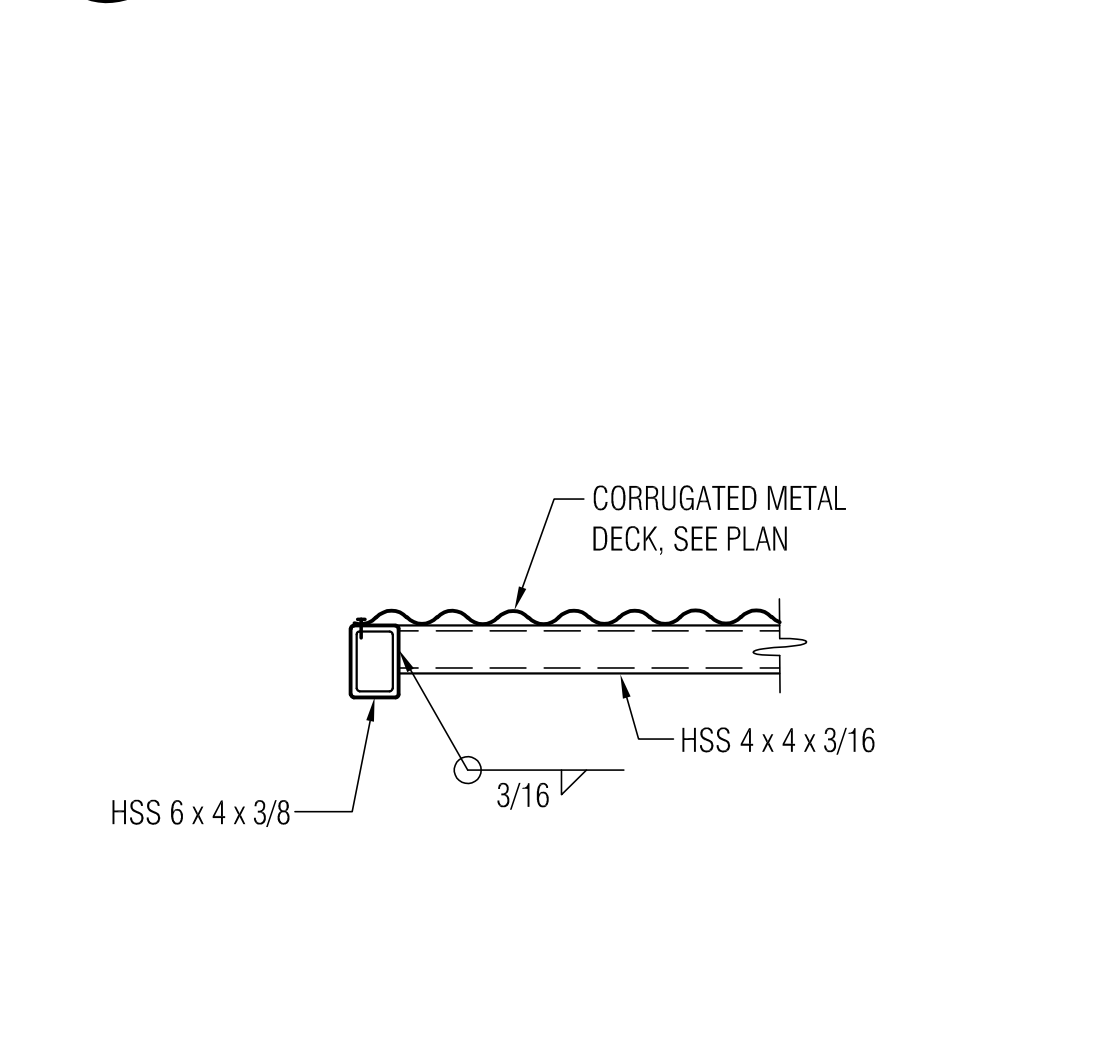
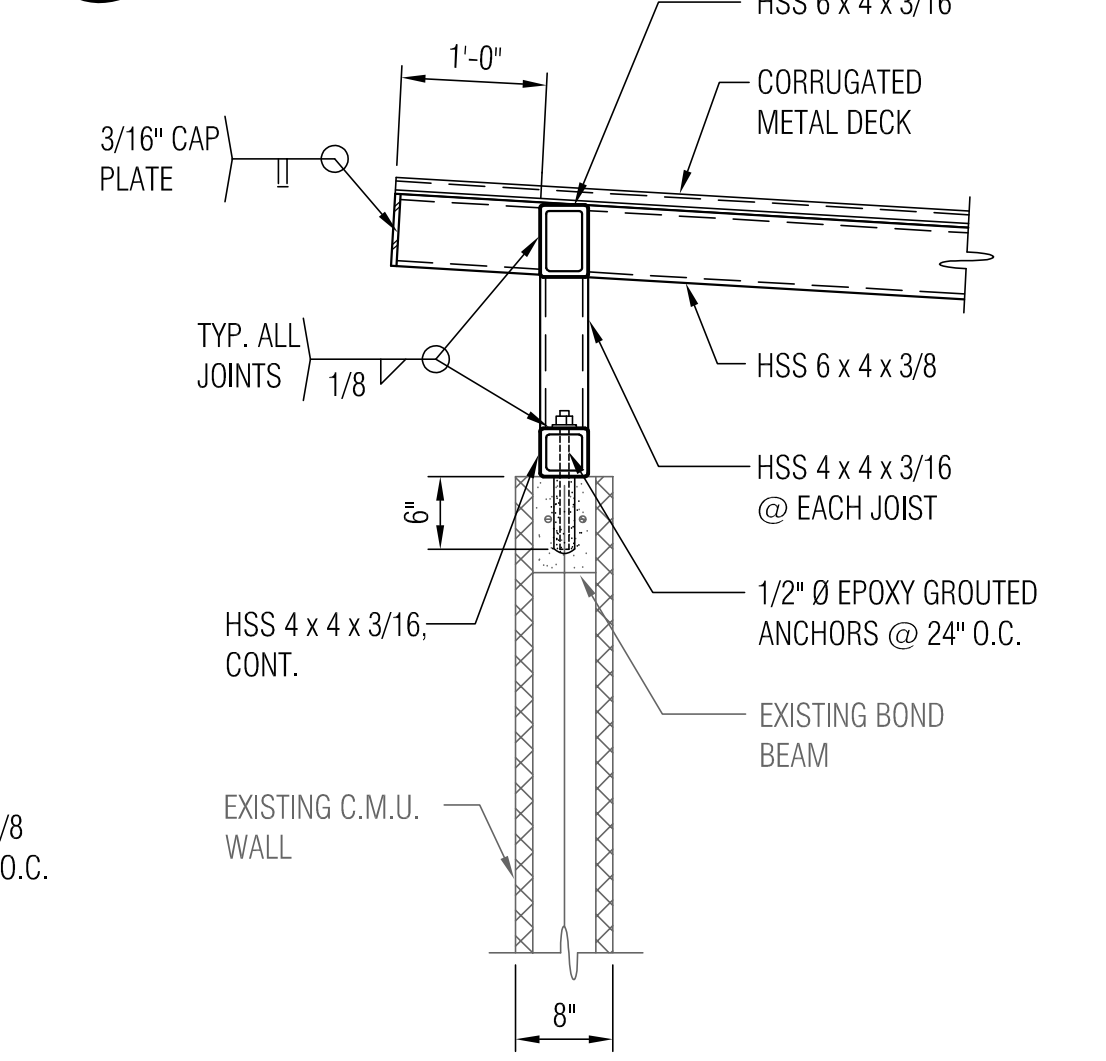
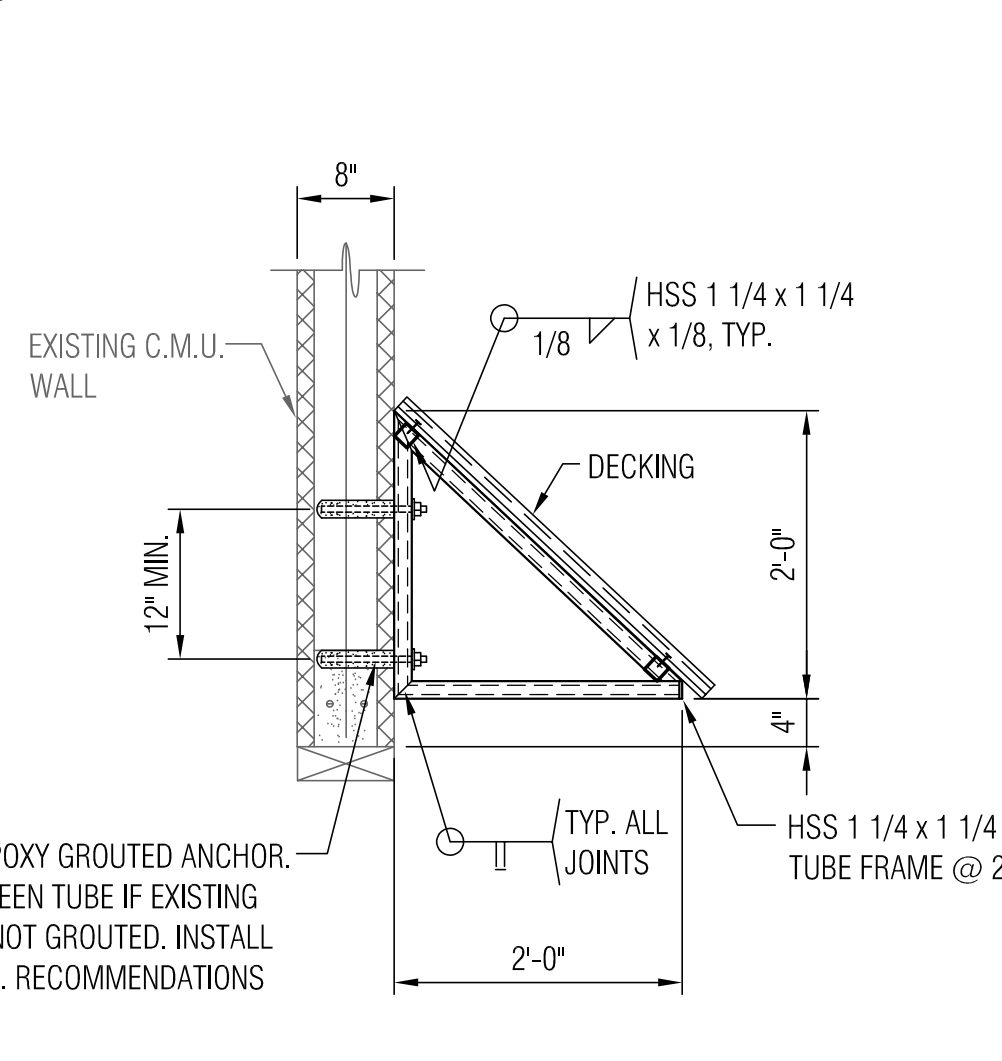
**6** FOUNDATION TIE JUNCTION  
1/2" = 1'-0"

**7** NEW CONCRETE SLAB TO EXTG.  
1/2" = 1'-0"

**8** TYPICAL TRENCH DRAIN  
3/4" = 1'-0"

**9** EXISTING COLUMN FOOTING  
1/2" = 1'-0"

**10** TYPICAL CONTROL JOINT (C.J.)  
1/2" = 1'-0"



**11** NEW AWNING OVER DOOR  
3/4" = 1'-0"

**12** HSS TRUSS BRG. ON C.M.U. WALL  
3/4" = 1'-0"

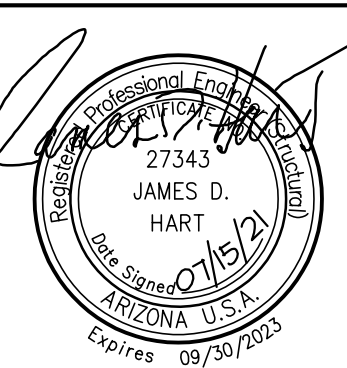
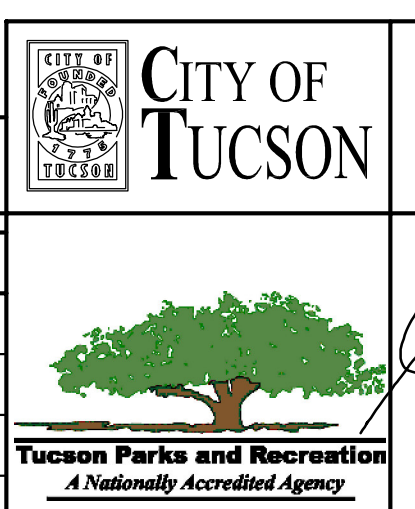
**13** HSS TO HSS CONNECTION  
3/4" = 1'-0"

**14** TYP. SHADE FABRIC CONN. TO C.M.U.  
3/4" = 1'-0"



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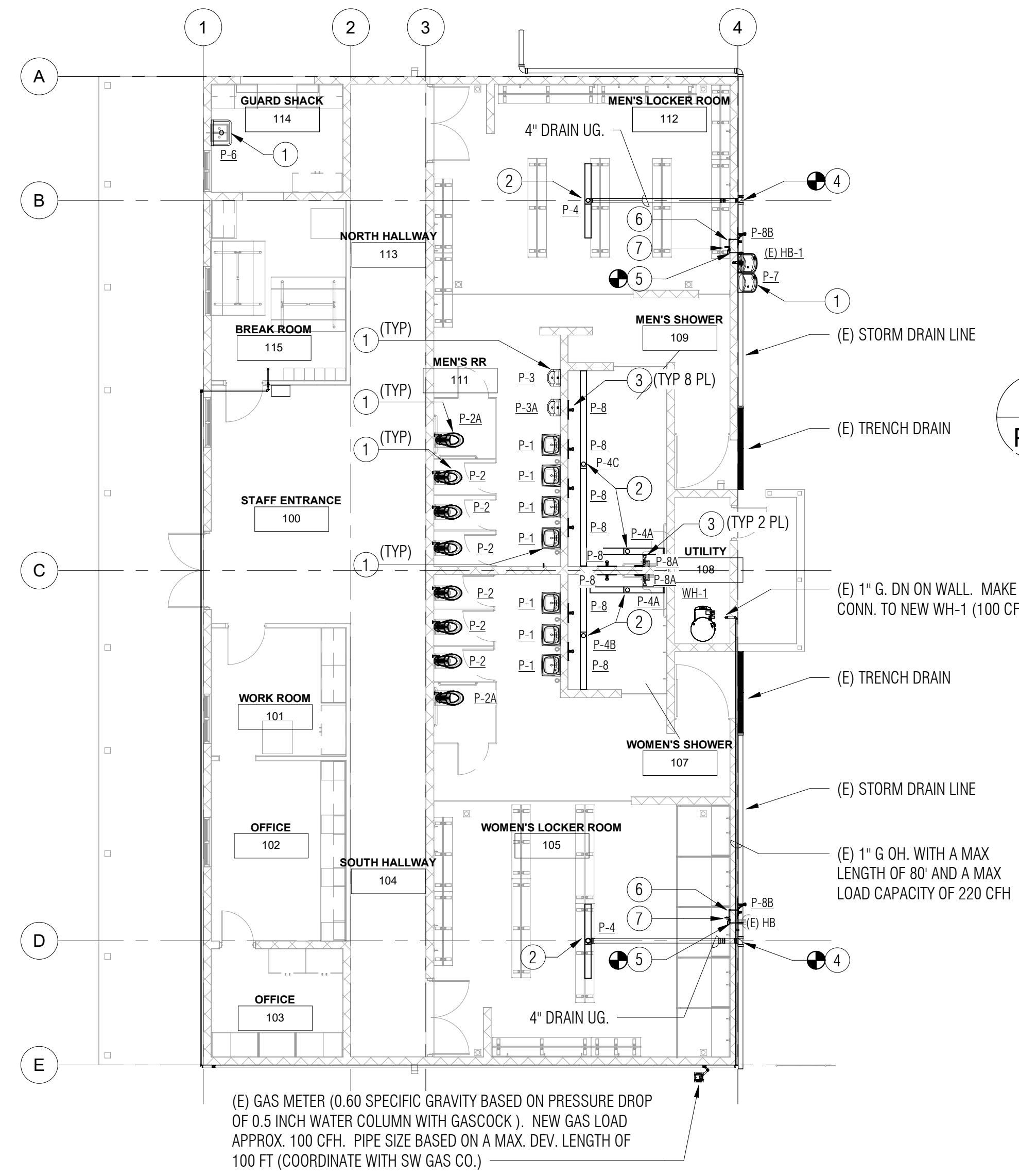
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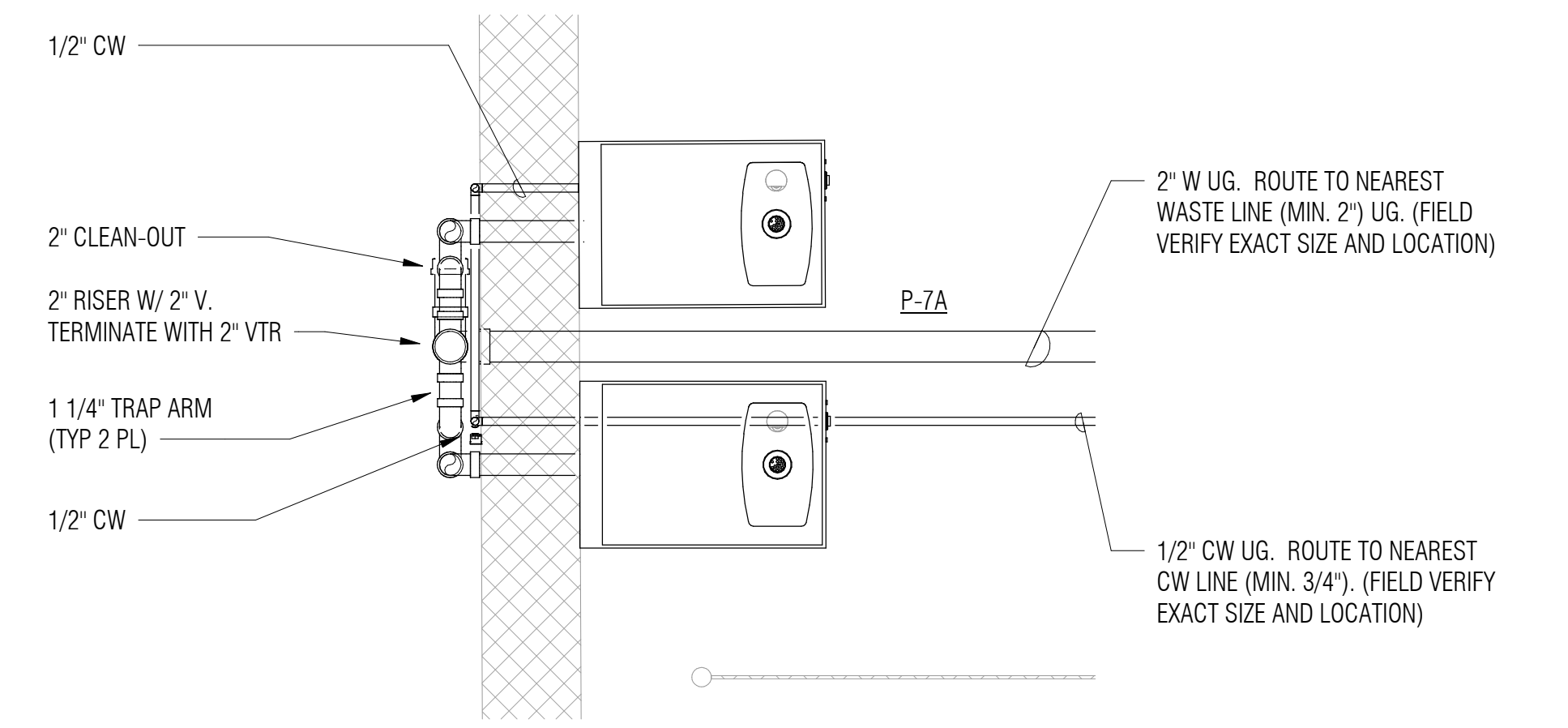
CITY OF TUCSON PARKS AND RECREATION			CASE#
FORT LOWELL PARK PARK IMPROVEMENTS STRUCTURAL DETAILS			S03 OF S03
APPROVALS	SIGNATORY	DATE	APPROVED _____ 20__
			_____ DIRECTOR
REF. _____ SCALE: _____			14 OF 35
DRWN. BY TBG 2021	DSGN. BY JDH 2021	CHKD. BY JDH 2021	PLAN NO. _____



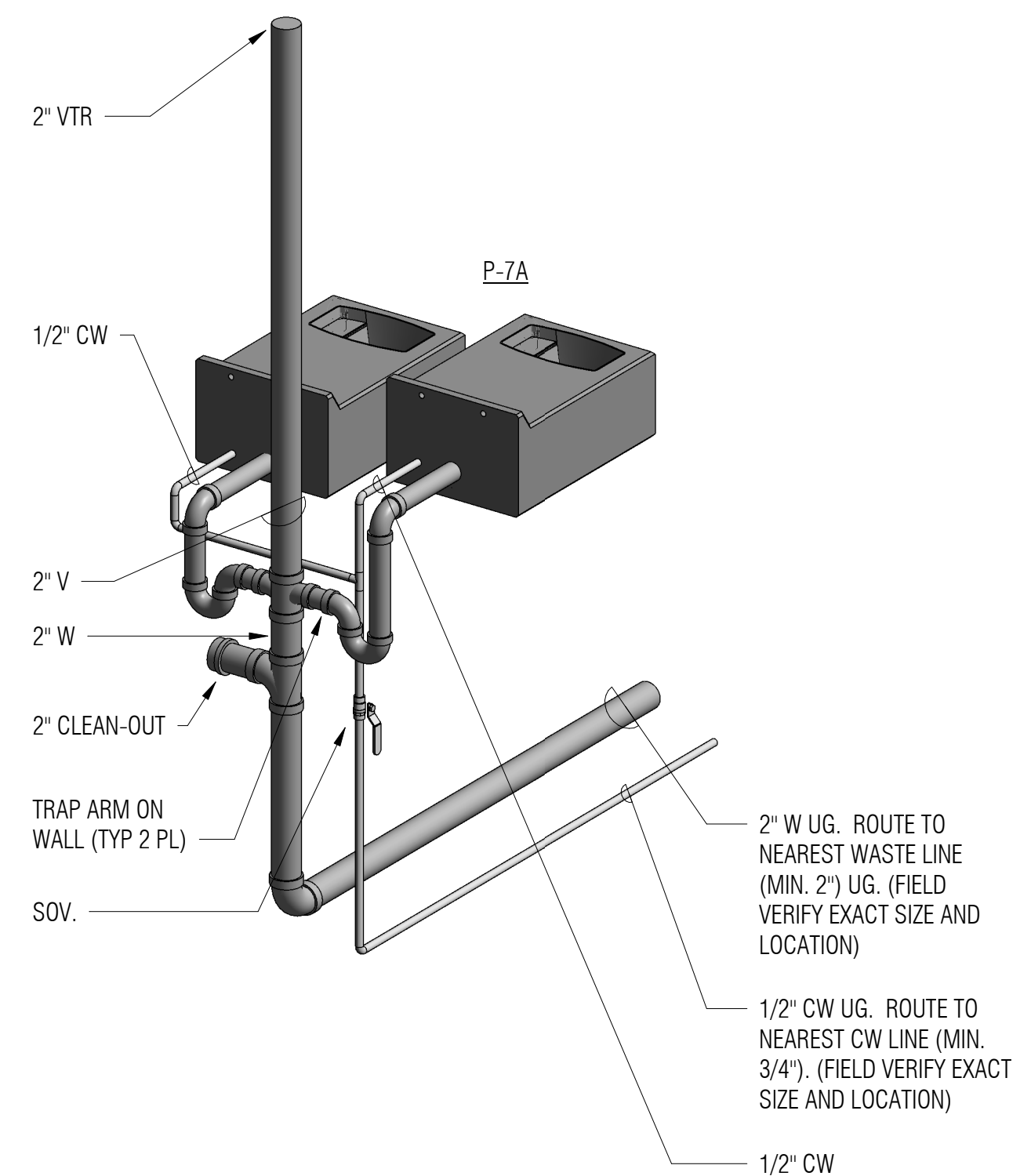
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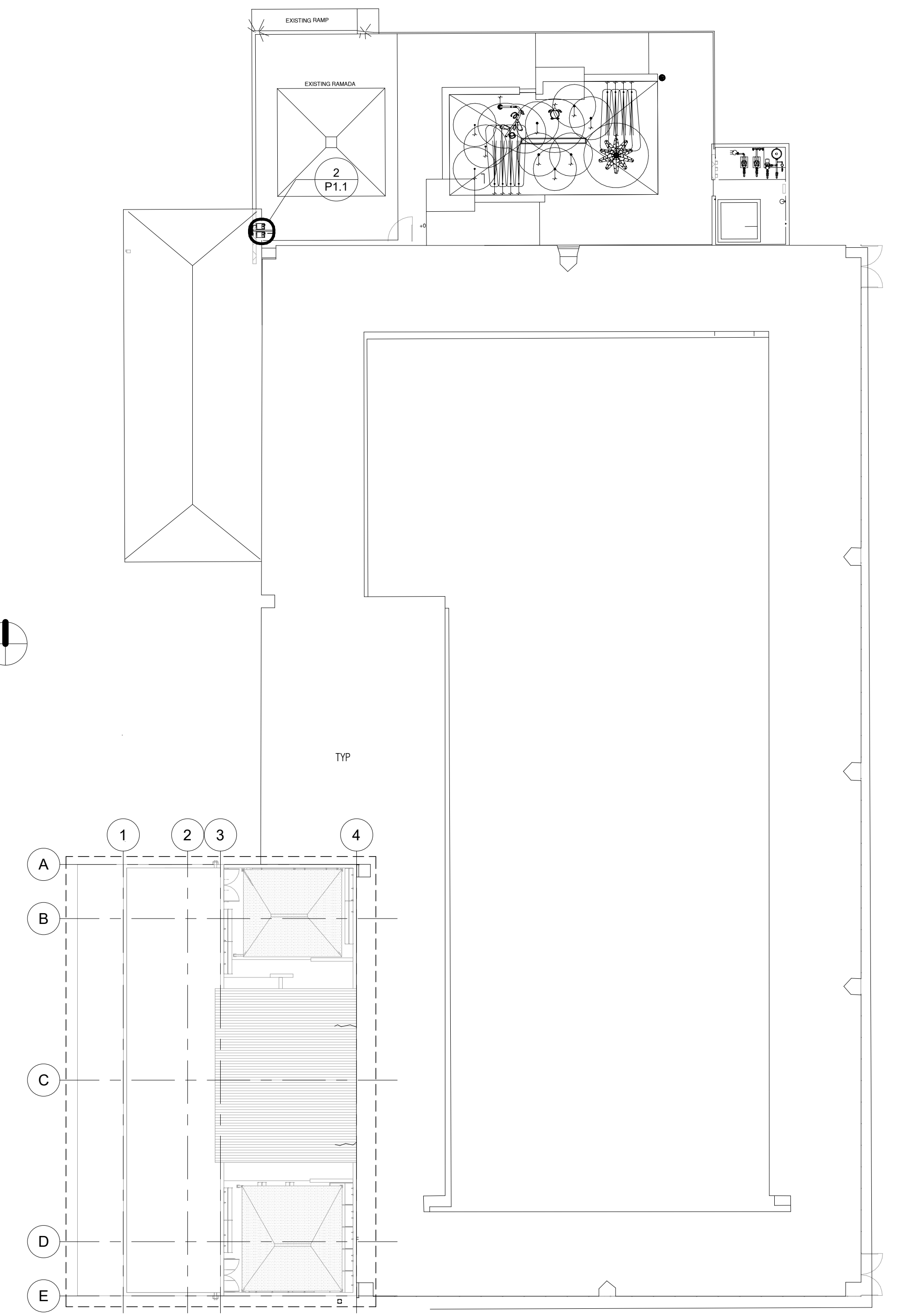
**4 PLUMBING FLOOR PLAN**  
 P1.1 1/8" = 1'-0"



**2 PLUMBING ENLARGED SITE PLAN**  
 P1.1 1" = 1'-0"



**3 PLUMBING ISOMETRIC**  
 P1.1



**1 PLUMBING SITE PLAN**  
 P1.1 1/16" = 1'-0"

- # KEYNOTE
- 1 CONN. FIXTURE TO EXISTING WASTE AND WATER. COORDINATE WITH ARCH/OWNER FOR FIXTURE LOCATION.
  - 2 CONN. FIXTURE TO EXISTING WASTE. COORDINATE WITH ARCH/OWNER FOR FIXTURE LOCATION (FIELD VERIFY EXACT SIZE AND LOCATION).
  - 3 CONN. FIXTURE TO EXISTING WATER. COORDINATE WITH ARCH/OWNER FOR FIXTURE LOCATION (FIELD VERIFY EXACT SIZE AND LOCATION).
  - 4 4" DRAIN UG. MAKE CONN. TO EXISTING STORM DRAIN UG. (FIELD VERIFY EXACT SIZE AND LOCATION).
  - 5 1/2" CW ON WALL. MAKE CONN. TO EXISTING 1/2" CW IN WALL (FIELD VERIFY EXACT SIZE AND LOCATION).
  - 6 1/2" CW UP ON WALL TO FIXTURE.
  - 7 RELOCATED HOSE BIBB. PROVIDE SOV. BETWEEN POC. AND RELOCATED HOSE BIBB.

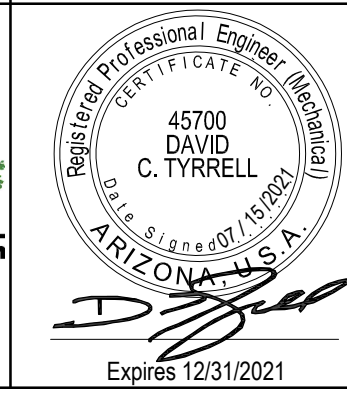
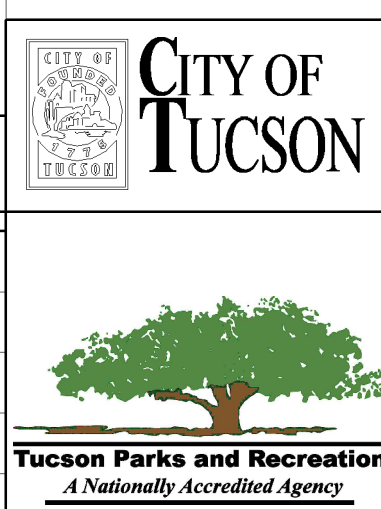
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CITY OF TUCSON PARKS AND RECREATION			CASE#
FORT LOWELL PARK PARK IMPROVEMENTS PLUMBING SITE AND FLOOR PLAN			P1.1 OF P2.2
APPROVALS	SIGNATORY	DATE	APPROVED _____ 20__
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DRWN. BY AES 2021	DSGN. BY AES 2021	CHKD. BY DT 2021	PLAN NO. _____



## PLUMBING DEMO FIXTURE SCHEDULE

MARK	FIXTURE	QTY	WASTE F.U.	WASTE F.U. TOTALS	CW F.U.	CW F.U. TOTALS	WASTE	VENT	CW	HW	Comments
(E) HB-1	EXISTING HOSE BIBB (RELOCATED)	2	0	0	2	4					
D-1	EXISTING LAVATORY	7	1	7	2	14					
D-2	EXISTING WATER CLOSET	8	4	32	10	80					
D-3	EXISTING URINAL	3	2	6	5	15					
D-4	EXISTING SHOWER HEAD AND CONTROLS	8	0	0	4	32					
D-4A	EXISTING ADA SHOWER HEAD AND CONTROLS	2	0	0	4	8					
D-4B	EXISTING EXTERIOR SHOWER HEAD, TRIM AND CONTROLS	2	0	0	4	8					
D-5	EXISTING FLOOR DRAIN	4	2	8	0	0					
D-6	EXISTING EXTERIOR DRINKING FOUNTAIN	2	0.5	1	0.5	1					
D-7	EXISTING SANITARY FLOOR DRAIN	2	2	4	0	0					
D-8	EXISTING HAND SINK	1	2	2	2	2					
D-9	EXISTING WATER HEATER	2		0		0					
Grand total: 43				60		164					

## PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	QTY	WASTE F.U.	WASTE F.U. TOTALS	CW F.U.	CW F.U. TOTALS	WASTE	VENT	CW	HW	Comments
(E) HB-1	EXISTING HOSE BIBB (RELOCATED)	2	0	0	2	4					
P-1	LAVATORY, WALL HUNG	7	1	7	2	14	2"	2"	1/2"	1/2"	
P-2	WATER CLOSET, FV	6	4	24	10	60	3"	2"	1"		
P-2A	WATER CLOSET, ADA FV	2	4	8	10	20	3"	2"	1"		
P-3	URINAL	1	2	2	5	5	2"	2"	3/4"		
P-3A	URINAL, ADA	1	2	2	5	5	2"	2"	3/4"		
P-4	TRENCH DRAIN	2	0	0	0	0	4"				DRAIN LINE TO STORM LINE
P-4A	TRENCH DRAIN	2	2	4	0	0	4"				
P-4B	TRENCH DRAIN	1	2	2	0	0	4"				
P-4C	TRENCH DRAIN	1	2	2	0	0	4"	2"			
P-6	SINK, WALL MOUNTED	1	2	2	2	2	2"	2"	1/2"	1/2"	
P-7	ELECTRIC WATER COOLER (H/L/O) W/ BOTTLE FILL STATION	1	1	1	1	1	2"	2"	1/2"		
P-7A	DRINKING FOUNTAIN, H/L/O	1	1	1	1	1	2"	2"	1/2"		
P-8	SHOWER HEAD AND CONTROLS	8	0	0	4	32				1/2"	
P-8A	ADA SHOWER HEAD AND CONTROLS	2	0	0	4	8				1/2"	1/2"
P-8B	EXTERIOR ADA SHOWER HEAD AND CONTROLS	3		0	2	6				1/2"	CAP HW CONNECTION
WH-1	WATER HEATER	1		0		0					
Grand total: 42				55		158					








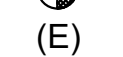












## EXISTING CONDITION NOTES

- EVERY EFFORT HAS BEEN MADE TO PROVIDE ACCURATE INFORMATION REGARDING EXISTING CONDITIONS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS ABOVE THE CEILING PRIOR TO BIDDING THE PROJECT. ANY CONFLICTS DISCOVERED BY PLUMBING CONTRACTOR DURING THE PRE-BID PROCESS WHICH MAY AFFECT THE SCOPE OR COST SHALL BE REPORTED TO THE ARCHITECT AND ENGINEER PRIOR TO PROVIDING A BID. THE SUBMISSION OF A BID SHALL INDICATE PLUMBING CONTRACTOR COMPLETELY UNDERSTANDS THESE CONTRACT DOCUMENTS AND THE EXISTING CONDITIONS.
- THERE ARE NO AVAILABLE RECORDS FOR THE UNDERGROUND BUILDING WASTE PIPING FOR THIS PROJECT. ALL ROUTING OF THE EXISTING WASTE PIPING SHOWN ON THE CONSTRUCTION DOCUMENTS HAS BEEN ASSUMED BY THE ENGINEER OF RECORDS BASED ON OUR VISUAL ANALYSIS OF THE BUILDING SYSTEMS AND KNOWLEDGE OF THE SITE CIVIL DOCUMENTS. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COMPLETE SURVEY OF THE EXISTING BUILDING WASTE PIPING SYSTEMS TO INCLUDE ROUTING AND INVERTS AT THE TIME OF DEMOLITION. THE PLUMBING CONTRACTOR SHALL SUBMIT A SHOP DRAWING THAT INCLUDES FINAL CONNECTIONS WITH INVERTS OF ALL NEW PIPING TO THE EXISTING BUILDING WASTE PIPING PRIOR TO THE START OF CONSTRUCTION.
- THE NEW SYSTEMS INDICATED ON THE DRAWINGS SHALL BE FULLY FURNISHED AND INSTALLED. ANY ITEMS INCIDENTAL TO THE COMPLETION OF THESE CONTRACT DOCUMENTS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- PLUMBING CONTRACTOR SHALL COORDINATE ALL PATCHING AND REPAIRING WORK WITH THE GENERAL CONTRACTOR AND ARCHITECT.

## PLUMBING GENERAL NOTES

- COORDINATE ALL OVERHEAD PIPING WITH HVAC DUCTWORK AND WORK OF OTHER TRADES.
- PLUMBER TO VERIFY EXACT SIZE AND LOCATION OF ALL EXIST. PIPING AND TO VERIFY INVERTS TO ASSURE PROPER SLOPE MAY BE OBTAINED BEFORE BEGINNING WORK.
- RUN ALL WASTE LINES AT 2% SLOPE UNLESS NOTED OTHERWISE.
- SAWCUT EXISTING CONCRETE SLAB AS REQUIRED FOR INSTALLATION AND CONNECTION OF U.G. PIPING TO EXISTING U.G. PIPING. BACKFILL AND PATCH CONCRETE SLAB TO MATCH EXISTING.
- PROVIDE GASCOCK, UNION, AND A MINIMUM 4" DIRTLEG AT EACH GAS APPLIANCE CONNECTION. INSTALL READILY ACCESSIBLE AND AS CLOSE AS POSSIBLE TO INLET.
- EXTEND P-T RELIEF (FULL SIZE) ON WALL FROM WH-1 TO DAYLIGHT. ELBOW DOWN TO A MIN. 6" AND MAX. 24" ABOVE FINISHED GRADE.
- CONTRACTOR TO FIELD VERIFY EXISTING ROUGH-IN DIMENSIONS. WHERE EXISTING FIXTURES ARE TO BE REPLACED, PROVIDE NEW ROUGH-INS AS REQUIRED.
- THIS PROJECT SHALL BE IN CODE COMPLIANCE WITH THE 2018 IBC, THE 2018 IECC, THE 2018 IPC AND ALL LOCAL CODE AMENDMENTS.


## PLUMBING LEGEND

SYMBOL	ABBREVIATION	ITEM
	CW	COLD WATER
	W	WASTE PIPING
	V	VENT PIPING
	G	GAS
	D	DRAIN LINE
	HB	HOSE BIBB
	SOV	SHUT-OFF VALVE ( -TURN BALL VALVE)
		UNION
		CHECK VALVE
		CIRCUIT SETTER
		GAS COCK
	AP	ACCESS PANEL
	POC	POINT OF CONNECTION
	EXIST.	EXISTING
	UG	UNDERGROUND
	OH	OVERHEAD
	DN	DOWN
	ABV.	ABOVE
	BLW.	BELOW
	CONN.	CONNECT
	C.I.	CAST IRON
	CLG.	CEILING
	HDR	HEADER
	WCO	WALL CLEANOUT
	PT	PRESS./TEMP. RELIEF

## PLUMBING FIXTURE SPECIFICATIONS

MARK	FIXTURE	NOMENCLATURE
(E) HB-1	EXISTING HOSE BIBB (RELOCATED)	N/A
P-1	LAVATORY, WALL HUNG	KOHLER KINGSTON® MODEL #K-2005 WALL MOUNTED, ADA COMPLIANT, VITREOUS CHINA LAVATORY, THREE FAUCET HOLE DRILLING, 21-1/4" x 18-1/8" FAUCET AND DRAIN; DELTA MODEL NO. 87111, ADA COMPLIANT, SINGLE HOLE, DECK MOUNTED, METERING FAUCET. PROVIDE COVERPLATE (DELTA MODEL NO. 87151, 4" CENTERS.) CHROME PLATED, VANDAL RESISTANT, METERING CARTRIDGE, MIXING TEE AND INLET CHECKS. .25 GAL PER ACTIVATION. ACTIVATION IS SET FOR 15 SEC. PROVIDE GRID STRAINER DRAIN ASSEMBLY AND ADA COMPLIANT OFFSET DRAIN TAILPIECE. TRAP: MCGUIRE MODEL #8902 CHROME PLATED HEAVY CAST BRASS GROUND JOINT P-TRAP WITH 17 GAUGE TUBULAR BRASS WALL BEND, CAST BRASS CHROME PLATED WALL FLANGE WITH SETSCREW, CLEANOUT PLUG AND CHROME PLATED BRASS NUTS. 1-1/4" x 1-1/2". SUPPLIES: MCGUIRE MODEL #H2165-LK-R15 HEAVY FLEXIBLE SUPPLIES. COMPLETE WITH CHROME PLATED 1/2" I.P.S. x 3/8" OD ANGLE STOPS WITH LOOSE KEY HANDLES AND BRASS STEMS. PROVIDE 15' OPTIONAL RISER, CHROME PLATED BRASS NUTS AND INSULATE HOT WATER, COLD WATER AND WASTE PIPING BELOW LAVATORY WITH TRUEBRO #103-EZ INSULATION KIT. CARRIER: WADE MODEL #W-520-08 FLOOR MOUNTED SINGLE LAVATORY CARRIER WITH CONCEALED ARMS, STRUCTURAL STEEL UPRIGHTS, BASE FEET, AND NON-SLIP LOCKING DEVICES.
P-2	WATER CLOSET, FV	AMERICAN STANDARD, MADERA FLOWISE 15" HEIGHT, MODEL #2855.128, FLOOR MOUNTED, HIGH EFFICIENCY, 1.28 GALLON FLUSH, 15" HIGH, VITREOUS CHINA, CONDENSATION CHANNEL, DIRECT FEED SIPHON JET, ELONGATED WATER CLOSET. SEAT: CHURCH MODEL #9500 SSC WHITE HEAVY DUTY SOLID HIGH IMPACT PLASTIC ELONGATED OPEN FRONT SEAT LESS COVER COMPLETE WITH #3145 STAINLESS STEEL, HINGE POSTS WITH COMBINATION SELF-SUSTAINING AND CONCEALED CHECK. FIXTURE INCLUDES: FLUSH VALVE: AMERICAN STANDARD, MODEL #6047.121, EXPOSED, MANUAL, PISTON TYPE, 1-1/2" TOP SPUD FLUSH VALVE (1.28 GPF). CHROME PLATED, SELF-CLEANING, NO HANDLE RESET WITH LOSS OF WATER PRESSURE, ADJUSTABLE TAILPIECE, LEFT/RIGHT INSTALLATION AND ADA COMPLIANT. (NOTE: CONTRACTOR SHALL ENSURE FLUSH CONTROL IS ON THE OPEN SIDE OF WATER CLOSET WHEN INSTALLING). INLET SPUD: BOLT CAPS WITH RETAINERS. 1" IPS ANGLE STOP WITH BACKFLOW PREVENTION AND VANDAL RESISTANT CAP. -SOLDER KIT INCLUDING COVER TUBE AND WALL FLANGE. -HIGH BACK PRESSURE VACUUM BREAKER WITH DOWN TUBE. SPUD COUPLING & FLANGE FOR 1-1/2" TOP SPUD.
P-2A	WATER CLOSET, ADA FV	AMERICAN STANDARD, MADERA FLOWISE 16-1/2" HEIGHT, MODEL #2857.128, FLOOR MOUNTED, HIGH EFFICIENCY, 1.28 GALLON FLUSH, 16-1/2" HIGH, VITREOUS CHINA, CONDENSATION CHANNEL, DIRECT FEED SIPHON JET, ELONGATED WATER CLOSET. SEAT: CHURCH MODEL #9500 SSC WHITE HEAVY DUTY SOLID HIGH IMPACT PLASTIC ELONGATED OPEN FRONT SEAT LESS COVER COMPLETE WITH #3145 STAINLESS STEEL, HINGE POSTS WITH COMBINATION SELF-SUSTAINING AND CONCEALED CHECK. FIXTURE INCLUDES: FLUSH VALVE: AMERICAN STANDARD, MODEL #6047.121, EXPOSED, MANUAL, PISTON TYPE, 1-1/2" TOP SPUD FLUSH VALVE (1.28 GPF). CHROME PLATED, SELF-CLEANING, NO HANDLE RESET WITH LOSS OF WATER PRESSURE, ADJUSTABLE TAILPIECE, LEFT/RIGHT INSTALLATION AND ADA COMPLIANT. (NOTE: CONTRACTOR SHALL ENSURE FLUSH CONTROL IS ON THE OPEN SIDE OF WATER CLOSET WHEN INSTALLING). INLET SPUD: BOLT CAPS WITH RETAINERS. 1" IPS ANGLE STOP WITH BACKFLOW PREVENTION AND VANDAL RESISTANT CAP. -SOLDER KIT INCLUDING COVER TUBE AND WALL FLANGE. -HIGH BACK PRESSURE VACUUM BREAKER WITH DOWN TUBE. SPUD COUPLING & FLANGE FOR 1-1/2" TOP SPUD.
P-3	URINAL	AMERICAN STANDARD, WASHBROOK FLOWISE, MODEL #6590.503, 0.125 GPF, EXPOSED TOP SPUD URINAL, VITREOUS CHINA, FLUSHING RIM, ELONGATED RIM, WASHOUT FLUSH ACTION, 3/4" INLET SPUD, 2" OUTLET AND STRAINER. MODEL NO. INCLUDES FLUSH VALVE, WALL HANGERS 3/4" ANGLE STOP WITH BACKFLOW PROTECTION AND VANDAL RESISTANT CAP, HIGH BACKPRESSURE VACUUM BREAKER, SPUD COUPLING AND 3.4" TOP SPUD FLANGE. FLUSH VALVE (INCLUDED): EXPOSED, CHROME PLATED CAST BRASS, SELF-CLEANING BRASS PISTON WITH INTEGRAL WIPER SPRING, EPDM SEALS AND ADJUSTABLE TAILPIECE. FOR 3/4" TOP SPUD URINALS. (AMERICAN STANDARD, MODEL #6045.013). CARRIER: WADE MODEL #W-400-AM11-M36 FLOOR MOUNTED SINGLE URINAL CARRIER WITH HANGER PLATE AND RECTANGULAR UPRIGHTS. NOTE: BEFORE ORDERING CARRIER, ENSURE EXISTING CARRIER IS USABLE AND COMPATIBLE WITH SPECIFIED URINAL.
P-3A	URINAL, ADA	SAME AS P-3, EXCEPT MOUNT AT ADA HEIGHT.
P-4	TRENCH DRAIN	DRAIN: JR. SMITH, MODEL #9666, 2" WIDE, 304 STAINLESS STEEL, VANDAL PROOF, SLOPED ADA SHOWER DRAIN. NO-HUB BOTTOM OUTLET. SPECIFY DIMENSION WHEN ORDERING. GRATE: JR. SMITH, 14 GAUGE, 304 STAINLESS STEEL. ENSURE GRATE IS ADA COMPLIANT BEFORE ORDERING.
P-4A	TRENCH DRAIN	DRAIN: JR. SMITH, MODEL #9666, 2" WIDE, 304 STAINLESS STEEL, VANDAL PROOF, SLOPED ADA SHOWER DRAIN. NO-HUB BOTTOM OUTLET. SPECIFY DIMENSION WHEN ORDERING. GRATE: JR. SMITH, 14 GAUGE, 304 STAINLESS STEEL. ENSURE GRATE IS ADA COMPLIANT BEFORE ORDERING.
P-4B	TRENCH DRAIN	DRAIN: JR. SMITH, MODEL #9666, 2" WIDE, 304 STAINLESS STEEL, VANDAL PROOF, SLOPED ADA SHOWER DRAIN. NO-HUB BOTTOM OUTLET. SPECIFY DIMENSION WHEN ORDERING. GRATE: JR. SMITH, 14 GAUGE, 304 STAINLESS STEEL. ENSURE GRATE IS ADA COMPLIANT BEFORE ORDERING.
P-4C	TRENCH DRAIN	DRAIN: JR. SMITH, MODEL #9666, 2" WIDE, 304 STAINLESS STEEL, VANDAL PROOF, SLOPED ADA SHOWER DRAIN. NO-HUB BOTTOM OUTLET. SPECIFY DIMENSION WHEN ORDERING. GRATE: JR. SMITH, 14 GAUGE, 304 STAINLESS STEEL. ENSURE GRATE IS ADA COMPLIANT BEFORE ORDERING.
P-6	SINK, WALL MOUNTED	ELKAY, MODEL # E5521182, WALL MOUNTED, STAINLESS STEEL SINK WITH WALL MOUNTED FAUCET. BOWL DIMS - 21"x14"x12". ORDER WITH CENTER REAR DRAIN LOCATION. CARRIER: WADE, MODEL #W-520-08, FLOOR MOUNTED SINGLE LAVATORY CARRIER WITH CONCEALED ARMS, STRUCTURAL STEEL UPRIGHTS, BASE FEET, AND NON-SLIP LOCKING DEVICES. NOTE: BEFORE ORDERING CARRIER, ENSURE EXISTING CARRIER IS USABLE AND COMPATIBLE WITH SPECIFIED URINAL. FAUCET AND DRAIN: MARLINE MODEL #XD141-RC, WALL MOUNTED, ROUGH CHROME, 8" SERVICE FAUCET, COMPLETE WITH BRASS WATER WAYS, VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, PAIL HOOK AND 3/4" HOSE THREAD ON SPOUT. TRAP: MCGUIRE MODEL #V-8902-CNC CHROME PLATED VANDAL RESISTANT HEAVY CAST BRASS GROUND JOINT P-TRAP WITH 17 GAUGE TUBULAR BRASS WALL BEND, ALL BRASS COMPRESSION RINGS ON INLET AND OUTLET, AND CHROME PLATED ESCUTCHEON. 1 1/4" x 1 1/2". SUPPLIES: MCGUIRE MODEL #2165-LK-R15 FLEXIBLE SUPPLIES. COMPLETE WITH CHROME PLATED BRASS 1/2" I.P.S. x 3/8" OD ANGLE STOPS WITH LOOSE KEY HANDLES AND BRASS STEMS. PROVIDE 15' OPTIONAL RISER AND INSULATE HOT AND COLD WATER PIPING AND WASTE PIPING BELOW LAVATORY WITH TRUEBRO #103-K INSULATION KIT.
P-7	ELECTRIC WATER COOLER (H/L/O) W/ BOTTLE FILL STATION	ELKAY, MODEL #E25TLBWSLX, BI-LEVEL, ADA WATER COOLER WITH BOTTLE FILLING STATION. WALL MOUNTED, SAFETY BUBBLER, ELECTRONIC SENSORED BOTTLER FILLER, FRONT AND SIDE PUSHBAR ACTIVATION. HFC-134A REFRIGERANT, 8.0 GPH, 1/5 HP, 370 WATTS, 4.0 FLA, 115V/160. NOTE: a. COORDINATE WITH OWNER FOR OPTIONAL WATER FILTER (ELKAY, MODEL #EWF3000) b. PROVIDE APRON, AS REQUIRED (ELKAY, MODEL #LKAPPEZL).
P-7A	DRINKING FOUNTAIN, H/L/O	ELKAY, MODEL #LK4593, OUTDOOR STONE FOUNTAIN, WALL MOUNTED, NON FILTERED, NON REFRIGERATED DRINKING FOUNTAIN. VANDAL RESISTANT BUBBLER. FRONT BUTTON ACTIVATION. NOTE: ORDER 2 DRINKING FOUNTAINS FOR STANDARD AND ADA HEIGHT.
P-8	SHOWER HEAD AND CONTROLS	SYMMONS, SHOWEROFF SYSTEM, MODEL #3-325, INCLUDES 4-420 VALVE AND 4-295 SHOWER HEAD. PROVIDE 1.5 FLOW RESTRICTOR. 4-420 LIMITER VALVE. 4-295 SHOWERHEAD WITH ADJUSTABLE SPRAY AND NOZZLE. VANDAL RESISTANT, CHROME FINISH.
P-8A	ADA SHOWER HEAD AND CONTROLS	SYMMONS "ORIGINS," MODEL #9603-PLR, ADA COMPLIANT, TEMPTROL® PRESSURE BALANCING VALVE, 36" GRAB BAR FOR HAND SHOWER WAND, DUAL CHECKS FOR BACKFLOW PREVENTION AND 60" FLEXIBLE METAL HOSE. PROVIDE 1.5 GPM FLOW RESTRICTOR AND VANDAL RESISTANT ESCUTCHEON. COORDINATE WITH SYMMONS FOR METERING ON/OFF BUTTON/VALVE (4-420) BEFORE ORDERING, OR EQUIVALENT.
P-8B	EXTERIOR ADA SHOWER HEAD AND CONTROLS	SYMMONS "ORIGINS," MODEL #9603-PLR-TRM, ADA COMPLIANT, 36" GRAB BAR FOR HAND SHOWER WAND, DUAL CHECKS FOR BACKFLOW PREVENTION AND 60" FLEXIBLE METAL HOSE. PROVIDE 1.5 GPM FLOW RESTRICTOR AND VANDAL RESISTANT ESCUTCHEON. COORDINATE WITH SYMMONS FOR METERING ON/OFF BUTTON/VALVE (4-420) BEFORE ORDERING, OR EQUIVALENT.
WH-1	WATER HEATER	HEAT TRANSFER PRODUCTS, "PHOENIX" SERIES, MODEL #PH100-80, SEALED COMBUSTION SYSTEM, W/ 100,000 BTUH INPUT RATING AND 80 GAL. RECOVERY/AN 152 GPH AT 80 DEG. RISE. STORAGE, STAINLESS STEEL TANK CONSTRUCTION, CORROSION RESISTANT, CUPRO-NICKEL HEAT EXCHANGER (120V/60), 15 AMP DEDICATED SERVICE. 2" ROOF VENT WITH TEE (INTAKE) PROVIDED WITH THE WATER HEATER AND COUPLING (EXHAUST). CONDENSATE NEUTRALIZER PART #N1100 WITH SCHEDULE 40 PVC CONDENSATE LINE AND TEE AFTER THE NEUTRALIZER TO REDUCE VACUUM LOCK. PROVIDE MEANS FOR EASY REMOVAL FOR PERIODIC REPLACEMENT. START-UP AND FINAL TUNING BY FACTORY AUTHORIZED TECHNICIAN. EXPANSION TANK: AMTROL, "THERM-X-TROL," MODEL #ST-25V, EXPANSION TANK WITH PRE-CHARGED AIR CHAMBER, AIR VALVE, HEAVY-DUTY DIAPHRAGM AND POLYPROPYLENE LINER. MAXIMUM CAPACITY = 10.3 GALLONS. RP-1: RECIRCULATING PUMP: ARMSTRONG "ASTRO 2," MODEL #250-SS, 3 SPEED, LEAD FREE BRONZE CONSTRUCTION WITH CERAMIC SHAFT AND BEARINGS, 3/4" FLANGE PIPE SIZE AND REPLACEABLE STAINLESS STEEL CARTRIDGE IMPELLER ASSEMBLY. PUMP SHALL BE COMPLETE WITH 12 HOUR ANALOG CLOCK WITH AM/PM INDICATION AND ADJUST. 2 GPM AT 9.5' HEAD. 117 WATTS, 115V/1/60Hz, 0.98A. T.M.V.-1: THERMOSTATIC MIXING VALVE: SYMMONS "TEMPCONTROL," MODEL #7-400A-P-W-RC, 3/4" INLETS, 1" OUTLET, MIXING VALVE WITH CHECK STOPS. REMOVABLE CARTRIDGE WITH STRAINER, STAINLESS STEEL PISTON, LIQUID FILL THERMAL MOTOR WITH BELLOWS, VOLUME CONTROL SHUT OFF VALVE, DIAL THERMOMETER AND ALL FITTINGS AND UNIONS. PROVIDE POLISH CHROME FINISH, WALL MOUNTING BRACKET AND SPARE CARTRIDGES FOR UN-INTERRUPTED SERVICE. 18 GPM AT 5 PSI PRESSURE DROP.

NOTE: COORDINATE ALL FIXTURES WITH ARCHITECT/OWNER PRIOR TO ORDERING.



MECHANICAL/ELECTRICAL/FIRE PROTECTION ENGINEERS

6422 E. SPEEDWAY BLVD # SUITE 130  
TUCSON, AZ 85710  
PHONE: (520) 323-8858

14425 N. 7TH ST # SUITE 105  
PHOENIX, AZ 85022  
PHONE: (480) 407-0787


PROJECT: 20134

**WHEAT** DE IGN GROUP

WEB: ADAMSMEP.COM

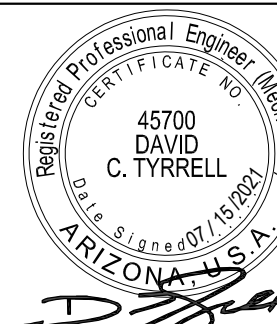
500 N. Tucson Blvd., Suite 150  
Tucson, AZ 85716  
(520) 884-7911  
www.wheatdesigngroup.com

NO.	DATE	REVISION	BY	CHKD.	APPR.



**CITY OF TUCSON**

Tucson Parks and Recreation  
A Nationally Accredited Agency



45700 DAVID C. TYRRELL  
C. TYRRELL  
Expires 12/31/2021

CITY OF TUCSON PARKS AND RECREATION				CASE#
FORT LOWELL PARK PARK IMPROVEMENTS PLUMBING NOTES AND SCHEDULES				P2.1 OF P2.2
APPROVALS	SIGNATORY	DATE		17
			APPROVED _____ 20__	OF
			----- DIRECTOR	35
REF. _____ SCALE: _____				
DRWN. BY AES 2021	DSGN. BY AES 2021	CHKD. BY DT 2021	PLAN NO. _____	



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POWER SYMBOLS LEGEND		
SYMBOLS	DESCRIPTION	MOUNTING HEIGHT
	DUPLEX RECEPTACLE (20A/125V/2P/3W/G NEMA 5-15R)	15" AFF
	QUADRUPLEX RECEPTACLE (20A/125V/2P/3W/G NEMA 5-15R)	15" AFF
	ABOVE COUNTER DUPLEX RECEPTACLE (20A/125V/2P/3W/G NEMA 5-15R)	48" AFF
	ABOVE COUNTER QUADRUPLEX RECEPTACLE (20A/125V/2P/3W/G NEMA 5-15R)	48" AFF
	DUPLEX RECEPTACLE FOR TELEVISION. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT MOUNTING HEIGHT (20A/125V/2P/3W/G NEMA 5-15R)	84" AFF
	DUPLEX RECEPTACLE GFCI PROTECTION. (20A/125V/2P/3W/G NEMA 5-15R)	15" AFF
	DUPLEX RECEPTACLE W/ WEATHER PROOF ENCLOSURE AND GFCI. (20A/125V/2P/3W/G NEMA 5-15R)	15" AFF
	SPECIAL NEMA CONFIGURATION RECEPTACLE. REFER TO FLOOR PLANS FOR EXACT NEMA CONFIGURATION.	15" AFF
	JUNCTION BOX, SIZING AND MOUNTING AS REQUIRED BY SPECIFICATIONS AND NEC.	-
	HEAVY DUTY DISCONNECT, FRAME, FUSE AND POLES INDICATED ON FLOOR PLAN.	AS REQUIRED
	COMBINATION MOTOR STARTER/DISCONNECT	AS REQUIRED
	208Y/120V BRANCH PANEL BOARD. REFER TO PANEL SCHEDULE FOR ADDITIONAL INFORMATION.	-
	480Y/277V BRANCH PANEL BOARD. REFER TO PANEL SCHEDULE FOR ADDITIONAL INFORMATION.	-
	480V-208Y/120V TRANSFORMER	-
	CIRCUIT HOMERUN TO PANEL BOARD VIA 2#12, 1#12 G, 3/4" C. AND 20A/1P CB UNO	-
	THREE SINGLE POLE DEVICE CIRCUIT NUMBERS	-
	MULTI-POLE DEVICE CIRCUIT NUMBERS	-

LIGHTING SYMBOLS LEGEND		
SYMBOLS	DESCRIPTION	MOUNTING HEIGHT
	2X4 FIXTURE	SEE FIXTURE SCHEDULE
	2X2 FIXTURE	SEE FIXTURE SCHEDULE
	WALL MOUNTED SCONCE FIXTURE	SEE FIXTURE SCHEDULE
	WALL MOUNTED LINEAR FIXTURE	SEE FIXTURE SCHEDULE
	LINEAR FIXTURE	SEE FIXTURE SCHEDULE
	DOWNLIGHT FIXTURE	SEE FIXTURE SCHEDULE
	EXIT SIGN	SEE FIXTURE SCHEDULE
	WALL MOUNTED EMERGENCY FIXTURE	SEE FIXTURE SCHEDULE
	WALL SWITCH	44" AFF
	3-WAY WALL SWITCH	44" AFF
	DIMMER WALL SWITCH (0-10V)	44" AFF
	3-WAY DIMMER WALL SWITCH (0-10V)	44" AFF
	WALL SWITCH WITH DUAL TECHNOLOGY VACANCY SENSOR	44" AFF
	VACANCY SENSOR WITH DUAL TECHNOLOGY	CLG MOUNTED
	INTERIOR PHOTOCCELL AT LOCATIONS BASED ON IECC	CLG MOUNTED

LIGHT FIXTURE SCHEDULE								
FIXTURE NAME	DESCRIPTION	WATTAGE	LUMENS	COLOR TEMP	MOUNTING	MANUFACTURER	SPECIFICATION NUMBER	ALTERNATE MANUFACTURER
A	EXTERIOR LED FULL CUT OFF WALL PACK	10	2,000	2,700K	WALL MOUNTED	LITHONIA	WDGE2 LED-P2SW-27K-80CRI-VF-PE-DBXD	
B	4' LED STRIP FIXTURE	25	3,000	4,000K	SURFACE MOUNTED	LITHONIA	ZL1N-L48-SMR-3,000LM-FST-MVOLT-40K-80CRI-WH	COLUMBIA, PHILLIPS
BE	4' LED STRIP FIXTURE WITH INTEGRAL BATTERY BACK UP	25	3,000	4,000K	SURFACE MOUNTED	LITHONIA	ZL1N-L48-SMR-3,000LM-FST-MVOLT-40K-80CRI-E7W-WH	COLUMBIA, PHILLIPS
C	CANOPY LED FIXTURE	27	3,500	4,000K	SURFACE MOUNTED	LITHONIA	CNY-P0-40K-MVOLT-DBD	COLUMBIA, PHILLIPS
EM	EMERGENCY BUG EYE LED WITH EXIT SIGN	4	N/A	N/A	WALL MOUNTED ABOVE DOOR	LITHONIA	LHQM-LED-R-HO	COLUMBIA, PHILLIPS

ELECTRICAL ABBREVIATIONS			
ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
AFC	ABOVE FINISHED CEILING	LTG	LIGHTING LIGHTS
AFF	ABOVE FINISHED FLOOR	LTS	LOW VOLTAGE
ARCH	ARCHITECT	LV	LOW VOLTAGE
ATS	AUTOMATIC TRANSFER SWITCH	MCB	MAIN CIRCUIT BREAKER
BFC	BELOW FINISHED FLOOR	MCC	MOTOR CONTROL CENTER
CB, C/B	CIRCUIT BREAKER	MH	MAN HOLE
CKT	CIRCUIT	MLO	MAIN LUGS ONLY
CLG	CEILING	N.C.	NORMALLY CLOSED
CR	CIRCUIT	NEC	NATIONAL ELECTRIC CODE
EC	EMPTY CONDUIT	(R)	RELOCATED
ELEC	ELECTRIC	RCPT	RECEPTACLE
EMS,BMS	ENERGY/BUILDING AUTOMATION SYSTEM	S.O.	SPACE ONLY
E	EMERGENCY	SPD	SURGE PROTECTION DEVICE
EP	EXPLOSION PROOF	ST	SHUNT TRIP
EW	ELECTRICAL WATER COOLER	TP	TAMPER PROOF
(E)	EXISTING	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
FA	FIRE ALARM		UNLESS NOTED OTHERWISE
FAFCP, FAP	FIRE ALARM CONTROL PANEL	UNO	UNO VOLTAGE
FLR	FLOOR	V	VARIABLE FREQUENCY DRIVE
FUT	FUTURE	VP	VAPOR PROOF
G	EQUIPMENT GROUND	W	WIRE
GFI, GFCI	GROUND FAULT CIRCUIT INTERRUPTER	W/	WITH
HP	HORSE POWER	WP	WEATHER PROOF
IG	ISOLATED GROUND	XFMR	TRANSFORMER
		(X)	DEMOLISHED

DATA SYMBOLS LEGEND		
SYMBOLS	DESCRIPTION	MOUNTING HEIGHT
	DATA OUTLET, 4" SQUARE BOX AND SINGLE GANG ADAPTER OUTLET. PROVIDE 3/4" C TO ABOVE ACCESSIBLE CEILING FROM BOX.	15" AFF

CONFIRM ALL BACKBOX AND CONDUIT SIZES WITH VENDOR AND/OR OWNER GROUP PRIOR TO INSTALLATION. ALL CONDUITS SHALL HAVE NYLON PULLCORDS AND NYLON BUSHINGS AT EACH END. COORDINATE CABLE COUNTS WITH OWNER.

ONE-LINE SYMBOLS LEGEND			
SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
	BRANCH PANEL BOARD, REFER TO PANEL SCHEDULE FOR ADDITIONAL INFORMATION.		TRANSFORMER
	CIRCUIT BREAKER		GROUNDING ELECTRODE
	AT=TRIP		GROUNDING ELECTRODE
	LSIG = LONG TIME, SHORT TIME, INSTANTANEOUS AND GROUND FAULT SETTINGS		ELECTRICAL METER
	FUSED SWITCH		ELECTRICAL METER
	AF = SWITCH FRAME RATING		
	AT = FUSE TRIP RATING		

## ELECTRICAL SPECIFICATIONS

### PART I - GENERAL:

- 1.01 ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL CODES, LAWS, RULES, AND REGULATIONS OF ALL NATIONAL, COUNTY, STATE AND LOCAL AUTHORITIES HAVING JURISDICTION OVER THE PREMISES. IN CASE OF DIFFERENCES, MOST STRINGENT SHALL GOVERN.
- 1.02 ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO SHOW THE APPROXIMATE LOCATION OF EQUIPMENT AND DEVICES. DIMENSIONS GIVEN IN FIGURES ON THE PLANS SHALL TAKE PRECEDENCE COVER SCALED DIMENSIONS, AND ALL DIMENSIONS, WHETHER GIVEN IN FIGURES OR SCALED, SHALL BE FIELD VERIFIED.
- 1.03 THE SCOPE OF THE WORK SHALL INCLUDE THE FURNISHING AND INSTALLATION OF THE NECESSARY MATERIAL AND LABOR TO ACCOMPLISH THE WORK INDICATED BY THE DRAWINGS AND HEREIN SPECIFIED.
- 1.04 THE ELECTRICAL DRAWINGS ARE NOT INTENDED TO SHOW ALL EXISTING CONDITIONS, SYSTEMS, EQUIPMENT OR MATERIALS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS ON SITE BEFORE SUBMITTING FINAL PRICING AND PROPOSALS. THE LACK OF SPECIFIC EXISTING INFORMATION ON THE DRAWINGS DOES NOT ALLEVIATE THE CONTRACTOR OF ANY RESPONSIBILITY. THIS CONTRACT SHALL INCLUDE ALL CONTINGENCIES THAT MAY BE REQUIRED FOR RELOCATION, ALTERATION AND DEMOLITION WORK NOT INDICATED ON DRAWINGS. THIS WILL INCLUDE BUT NOT LIMITED TO ALL RELOCATION, REWORK, AND REMOVAL OF EXISTING ELECTRICAL SYSTEM, OUTLETS, CONDUIT, CONDUCTORS AND EQUIPMENT.
- 1.05 CONTRACTOR SHALL INSTALL ALL ELECTRICAL SYSTEMS WITH OUT CONFLICTS AND IN COORDINATION WITH OTHER TRADES.
- 1.06 ALL EQUIPMENT AND MATERIALS FURNISHED AND INSTALLED IN SCOPE OF WORK SHALL BE NEW AND SHALL CONFORM WITH THE STANDARDS OF THE UNDERWRITERS LABORATORIES, INC OR OTHER NATIONALLY RECOGNIZED LABORATORY WHERE APPLICABLE. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTIVE MATERIALS AND WORKMANSHIP FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR AFTER COMPLETION AND ACCEPTANCE BY THE OWNER.
- 1.07 INSTALL EQUIPMENT WITH WORKING CLEARANCES COMPLYING WITH NEC 110-16 AND 110-34.

### PART II - PRODUCTS:

- 2.01 CONDUIT
  - A. RIGID STEEL CONDUIT (GRC - GALVANIZED RIGID CONDUIT): CONSTRUCTED OF MILD STEEL PIPING, GALVANIZED INSIDE AND OUTSIDE, CONFORMING WITH FED. SPEC. WW-C-581C, ANSI C80.1 AND APPLICABLE UL STANDARDS.
  - B. INTERMEDIATE METAL CONDUIT (IMC): CONSTRUCTED OF ZINC COATED STEEL TUBING MANUFACTURED IN ACCORDANCE WITH UL-1242 AND MEETING THE REQUIREMENTS OF THE NEC.
  - C. ELECTRIC METALLIC TUBING (EMT): OF HIGH GRADE STEEL, MANUFACTURED SPECIFICALLY TO STANDARDS ASSURING MAXIMUM WELDING CHARACTERISTICS AND DUCTILITY, AND SHALL CONFORM TO FED. SPEC. WW-T-806b.
  - D. FLEXIBLE METAL CONDUIT: MANUFACTURED OF MILD STEEL STRIP MATERIAL HAVING A HOT-DIP GALVANIZED COATING AND MEETING REQUIREMENTS OF FED. SPEC. WW-C-566B. LIQUID TIGHT FLEXIBLE CONDUIT: FLEXIBLE METAL CONDUIT AS SPECIFIED HEREIN WITH A COPPER GROUNDING STRAND AND FACTORY-APPLIED NEOPRENE JACKET. LIQUID TIGHT FLEXIBLE CONDUIT SHALL BE UL LISTED, EQUIVALENT TO ANACONDA "SEALTITE", TYPE UA. LIQUID TIGHT CONDUIT AND FITTINGS SHALL BE UTILIZED FOR ALL EXTERIOR AND EQUIPMENT CONNECTIONS.
- 2.02 OUTLET BOXES
  - A. OUTLET BOXES SHALL BE UL LISTED, AND OF SIZES AND TYPES REQUIRED FOR THE APPLICATION. OUTLET BOXES SHALL BE SHEET STEEL, NO LIGHTER THAN 14 GAUGE, GALVANIZED AFTER FABRICATION. SET BOX SO FACE OF BOX WILL FINISH FLUSH WITH BUILDING SURFACE.
  - A.1. FOR LIGHTING FIXTURE OUTLETS: 4 INCH SQUARE BY 1-1/2 INCHES DEEP WITH RAISED FIXTURE RING.
  - A.2. FOR WALL SWITCHES, RECEPTACLES, AND COMMUNICATION USE: 4 INCH SQUARE, BY 1-1/2 INCHES DEEP. USE BOXES WITH PLASTER RINGS IN ALL PLASTERED WALLS WHERE WALL THICKNESS PERMITS. USE BOXES LESS THAN 1-1/2 INCH DEEP ONLY IN LOCATIONS WHERE DEEP BOXES CANNOT BE ACCOMMODATED BY CONSTRUCTION.
- 2.03 CONDUCTORS
  - A. NO CONDUCTORS SHALL BE SMALLER THAN NO. 12, EXCEPT FOR SIGNAL OR CONTROL CIRCUITS AND FOR INDIVIDUAL LIGHTING FIXTURE TAPS AS PERMITTED BY NEC.
  - B. CONDUCTORS SHALL BE 98% CONDUCTIVITY SOFT DRAWN ANNEALED COPPER, 600 VOLT, THHN/THWN INSULATION, # 10 AND SMALLER - SOLID, #8 AND LARGER - STRANDED. XHHW TO BE UTILIZED FOR EXTERIOR INSTALLATION.
- 2.04 WIRING DEVICES, COVER PLATES AND ACCESSORIES
  - A. PROVIDE WIRING DEVICES AND ASSOCIATED ACCESSORIES OF HEALTHCARE GRADE. DEVICES OF LEVITON, HUBBELL OR PASS & SEYMORE ARE ACCEPTABLE. SUBMIT FOR REVIEW A COMPLETE LIST OF ANY SUBSTITUTES OFFERED FROM THOSE SPECIFIED.
  - B. COLOR OF WALL SWITCHES, RECEPTACLES AND FACEPLATES: MATCH EXISTING
  - C. WHERE LIGHTING CIRCUITS ARE SHOWN TO BE LINE VOLTAGE SWITCHED, PROVIDE WITH SPECIFICATION GRADE, HORSEPOWER RATED, UL LISTED, BACK- AND SIDE-WIRED, TOGGLE SWITCHES RATED 20-AMP, 120 VOLTS OR 277 VOLTS. SWITCHES SHALL BE SPST, DPST, 3-WAY OR 4-WAY, WITH OR WITHOUT PILOT LIGHT, AS INDICATED ON THE DRAWINGS.
  - D. RECEPTACLES
    - D.1. STANDARD WALL RECEPTACLES SHALL BE HEALTHCARE GRADE, RATED 20-AMP, 120-VOLT, 2 POLE, 3-WIRE, GROUNDING TYPE, SIDE-WIRED, NEMA 5-20R.
    - D.2. SPECIAL PURPOSE RECEPTACLES SHALL BE SPECIFICATION GRADE DEVICES FOR THE NEMA CONFIGURATIONS SCHEDULED OR INDICATED ON THE DRAWINGS.
    - D.3. GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLES SHALL BE 20 AMP, 120 VOLT, 2 POLE, 3-WIRE, NEMA 5-20R.
  - E. LABEL ALL WIRING DEVICES WITH PERMANANT LABEL INDICATING PANEL NAME AND CIRCUIT NUMBER.
- 2.05 DISCONNECT SWITCHES
  - A. AS MANUFACTURED BY SQUARE D, GENERAL ELECTRIC, CUTLER-HAMMER OR SIEMENS.
  - B. FUSIBLE/NON-FUSIBLE SWITCHES
    - B.1. ALL SWITCHES: HEAVY DUTY TYPE; UL LISTED AND MEET LATEST NEMA STANDARDS KS-1; HORSEPOWER RATED; QUICK-MAKE, QUICK-BREAK; LUGS FRONT REMOVABLE AND UL LISTED FOR 75°C ALUMINUM OR COPPER WIRE; OPERATING HANDLE IN CONTROL OF SWITCH WITH DOOR OPEN AND CLOSED; HANDLE POSITION CLEARLY INDICATE "ON" AND "OFF" POSITIONS; PROVISIONS FOR PADLOCKING IN "OFF" POSITION; SAFETY INTERLOCKS TO PREVENT THE ENCLOSURE DOOR FROM BEING OPENED WHILE THE HANDLE IS IN THE "ON" POSITION AND TO PREVENT THE HANDLE FROM BEING TURNED TO THE "ON" POSITION WHILE THE ENCLOSURE DOOR IS OPEN; MEANS TO PERMIT AUTHORIZED PERSONNEL TO RELEASE THE SAFETY INTERLOCKS FOR MAINTENANCE OR INSPECTION; AUXILIARY POLES, AS REQUIRED, TO DISCONNECT CONTROL VOLTAGE(S) WHEN POWER VOLTAGE IS DISCONNECTED.

- B.2. ENCLOSURES: NEMA 1 OR NEMA 3R, AS INDICATED ON DRAWINGS; CLEAN STEEL, GALVANIZED AFTER FORMING, PRIMED AND GREY BAKED ENAMEL FINISHED; NEMA 1 COVERS ON PIN TYPE HINGES; NEMA 3R COVERS SECURABLE IN THE OPEN POSITION. INTERCHANGEABLE BOLT-ON THREADED HUBS ON NEMA 3R SWITCHES THRU 200 AMPERE.
- B.3. FUSIBLE SWITCHES: FOR 600 AMPERE AND SMALLER SWITCHES, PROVIDE UL LISTED REJECTION CLIPS TO REJECT ALL FUSES EXCEPT CLASS R; FOR 800 AMPERE AND LARGER SWITCHES, PROVIDE FUSE CLIPS FOR CLASS L FUSES. ALL SWITCHES UL LISTED SHORT CIRCUIT RATING OF 200.00 AMPERES RMS SYMMETRICAL.

### 2.06 PANELBOARDS

- A. AS MANUFACTURED BY SQUARE D, GENERAL ELECTRIC, CUTLER-HAMMER OR SIEMENS.
- B. LIGHTING AND APPLIANCE PANELBOARDS
  - B.1. PANELBOARD BUS STRUCTURE AND MAIN LUGS OR MAIN CIRCUIT BREAKER SHALL HAVE CURRENT RATINGS AS INDICATED ON THE DRAWINGS. BUS BARS SHALL ACCEPT BOLT-ON CIRCUIT BREAKERS. ALL CURRENT CARRYING PARTS OF THE BUS STRUCTURE SHALL BE PLATED. UL LABELED.
  - B.2. THE PANELBOARD BUS ASSEMBLY SHALL BE ENCLOSED IN A SURFACE OR FLUSH MOUNTED STEEL CABINET AS INDICATED ON THE DRAWINGS.
  - B.3. EACH PANELBOARD SHALL HAVE A SHORT CIRCUIT CURRENT RATING EQUAL TO OR GREATER THAN THE FAULT CURRENT INDICATED ON THE DRAWINGS. PANELBOARDS SHALL BE MARKED WITH THEIR MAXIMUM SHORT CIRCUIT RATING AT THE SUPPLY VOLTAGE.
  - B.4. PROVIDE AFCI TYPE BREAKERS FOR ALL INTERIOR RESIDENTIAL FEEDS PER NEC.

### 2.07 GROUNDING

- A. GROUNDING SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
- B. GROUNDING CONDUCTORS SHALL BE ANNEALED COPPER CABLES OF THE SIZES INDICATED OR REQUIRED.
- C. A "GREEN WIRE" EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED WITHIN EACH FEEDER AND BRANCH CIRCUIT RACEWAY, WHETHER METALLIC OR NON-METALLIC, TO FORM A COMPLETE AND CONTINUOUS GROUNDING PATH. CONNECT GROUNDING CONDUCTORS TO GROUND TERMINALS AT EACH END OF THE RUN.

### PART III - EXECUTION:

#### 3.01 CONDUIT INSTALLATION

- A. RACEWAYS INSTALLED IN INTERIOR OF BUILDING TO EMT. RACEWAYS IN DAMP OR WET LOCATIONS, OR IN HAZARDOUS LOCATIONS, SHALL BE GRC OR IMC.
- B. CONDUITS TO BE SIZED AND INSTALLED SUCH THAT THE CONDUCTORS MAY BE DRAWN THROUGH WITHOUT DAMAGE OR EXCESSIVE STRAIN.
- C. CONDUITS SHALL HAVE APPROPRIATE BUSHINGS INSIDE AND BUSHINGS SHALL BE INSULATING TYPE WITH BOND GROUND CLAMPS.
- D. USE LENGTHS OF FLEXIBLE METAL CONDUIT NOT LESS THAN 12 INCHES LONG AT FINAL CONNECTIONS TO ALL MOTORS, TRANSFORMERS AND SIMILAR DEVICES SUBJECT TO MOVEMENT BECAUSE OF VIBRATION OR MECHANICAL ADJUSTMENT. USE LIQUID TIGHT FLEXIBLE METAL CONDUIT, WITH APPROPRIATE CONNECTIONS, IN DAMP OR WET LOCATIONS, AT MOTOR OR EQUIPMENT LOCATIONS IN MECHANICAL EQUIPMENT ROOMS, AT OR NEAR PUMPS, AND WHEN INSTALLED OUTDOORS.
- E. GROUND METALLIC CONDUITS AS REQUIRED BY NEC.
- F. RUN ALL CONDUITS PARALLEL/PERPENDICULAR TO BUILDING SURFACE PLANES.
- G. CAREFULLY FILL ANY SPACE BETWEEN THE OUTSIDE OF THE RACEWAY WHEREVER RACEWAYS PASS THROUGH FLOORS, WALLS, PENETRATIONS, OR OTHER PARTITIONS. FILLING MATERIAL SHALL BE A UL LISTED, INTUMESCENT SEALING HAVING FIRE/SMOKE RESISTIVE RATING EQUAL TO THE BUILDING MATERIAL PENETRATED.
- H. TYPE MC METAL CLAD CABLES SHALL BE ACCEPTABLE TO BE INSTALLED IN WALLS AND CEILINGS IN CONFORMANCE WITH THE REQUIREMENTS OF NEC 334. TYPE MC CABLE SHALL BE USED ONLY FOR BRANCH CIRCUITS FOR LIGHTING AND SPECIFIC AND GENERAL PURPOSE RECEPTACLES. TYPE MC CABLE SHALL NOT BE USED FOR FEEDERS OR MULTIPLE BRANCH CIRCUIT HOMERUNS. CABLE SHALL TRANSITION TO A RIGID TYPE CONDUIT PRIOR TO ENTERING ELECTRICAL EQUIPMENT ROOMS.

#### 3.02 INSTALLATION OF PULL AND JUNCTION BOXES

- A. ALL BOXES TO BE FASTENED SECURELY TO THE BUILDING CONSTRUCTION, INDEPENDENT OF CONDUIT SYSTEMS.
- B. SET BOXES FLUSH WITH FINISHED SURFACES FOR ACCESS, AND PROVIDE OVERLAPPING COVERS ON CONCEALED CONDUIT SYSTEMS WHERE BOXES ARE NOT OTHERWISE ACCESSIBLE.

#### 3.03 INSTALLATION OF OUTLET BOXES

- A. TERMINATE CONDUITS AT A METAL OUTLET BOX AT EACH OUTLET OR DEVICE. ALL BOXES SHALL CONFORM TO THE NEC.
- B. OUTLET BOXES SHALL BE SUPPORTED INDEPENDENT OF THE CONDUIT SYSTEM.

#### 3.04 INSTALLATION OF CONDUIT HANGERS AND SUPPORTS

- A. FURNISH AND INSTALL ALL HANGERS AND SUPPORTS REQUIRED BY RACEWAY SYSTEMS.
- B. SUPPORT ALL ABOVE-GROUND ELECTRICAL CONDUITS FROM THE BUILDING STRUCTURE/CONSTRUCTION. SUPPORT CONDUITS RUNNING VERTICALLY OR HORIZONTALLY ALONG WALLS WITH GALVANIZED MALLEABLE IRON ONE-HOLE CLAMPS. CARRY INDIVIDUALLY SUPPORTED HORIZONTAL CONDUITS 1-1/4 INCH AND LARGER ON SUITABLE HANGERS.
- C. LOCATE HANGERS AND TRAPEZES TO SUPPORT HORIZONTAL RACEWAYS WITHOUT APPRECIABLE SAGGING. HANGER SPACING SHALL NOT EXCEED NEC REQUIREMENTS, OR RECOMMENDATIONS OF THE NECA "STANDARD OF INSTALLATION".
- D. WHERE CONDUITS SMALLER THAN 1-1/4 INCH ARE INSTALLED ABOVE REMOVABLE TYPE DRY CEILINGS, SUPPORT THEM ON SUITABLE HANGER RODS WITH METAL CLIPS AT A DISTANCE ABOVE THE CEILING SUFFICIENT TO PERMIT REMOVAL OF CEILING PANELS AND LAY-IN LIGHT FIXTURES. LOCATE SUCH CONDUITS SO AS NOT TO HINDER ACCESS TO MECHANICAL EQUIPMENT THROUGH CEILING PANELS.

#### 3.05 INSTALLATION OF CONDUCTORS

- A. PULL NO CONDUCTORS INTO CONDUITS UNTIL ALL WORK OF A NATURE WHICH MAY CAUSE INJURY TO CONDUCTORS IS COMPLETED.
- B. RUN FEEDERS IN CONTINUOUS PIECES, WITHOUT JOINTS OR SPLICES, INSOFAR AS PRACTICABLE.
- C. RUN CONDUITS FOR EMERGENCY POWER CONDUCTORS SEPARATE FROM ALL OTHER WIRING.

#### 3.06 LABELING

- A. LABELS TO BE PROVIDED FOR THE FOLLOWING EQUIPMENT: SERVICE ENTRANCE SECTIONS AND ALL ASSOCIATED OCPD, DISTRIBUTIONS SECTIONS AND ALL ASSOCIATED OCPD, MOTOR CONTROL CENTERS AND ALL ASSOCIATED OCPD, PANELBOARDS, DISCONNECTS, MOTOR STARTERS, VFDS, TRANSFORMERS, ETC.
  - A.1. LABELS TO BE ENGRAVED PLASTIC LAMINATE. LABEL TO BE SECURED TO EQUIPMENT VIA METAL RIVETS OR IRREVERSIBLE SCREWS.
- B. LABEL EQUIPMENTS WITH NAME, VOLTAGE, AMPERAGE, PHASE AND WIRING.
  - B.1. SUBMIT SAMPLE LABELS TO ENGINEER PRIOR TO INSTALLATION.
- C. PROVIDE LABELING FOR ALL PULL BOXES AND JUNCTION BOXES. LABEL TO INCLUDE PANEL NAME, CIRCUIT NUMBERS AND VOLTAGE.
- D. PROVIDE LABELING FOR ALL RECEPTACLES AND LIGHT SWITCHES, LABEL TO INDICATE PANEL NAME AND CIRCUIT NUMBER, 3/16" TEXT SIZE.

MECHANICAL/ELECTRICAL/FIRE PROTECTION ENGINEERS

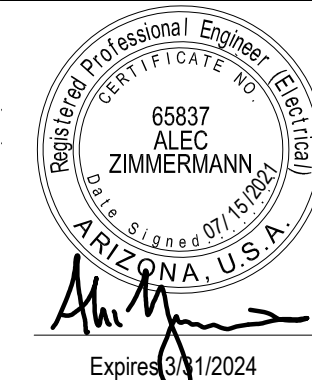
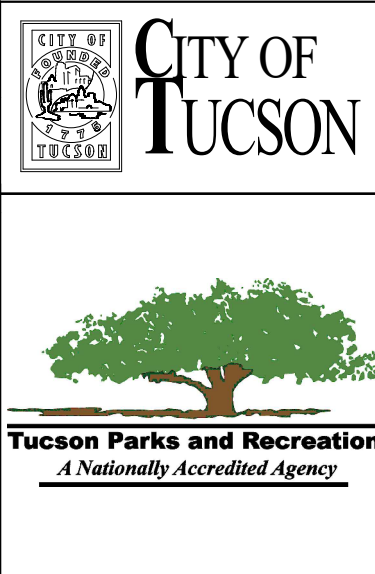
6422 E. SPEEDWAY BLVD # SUITE 130  
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NO.	DATE	REVISION	BY	CHKD.	APPR.



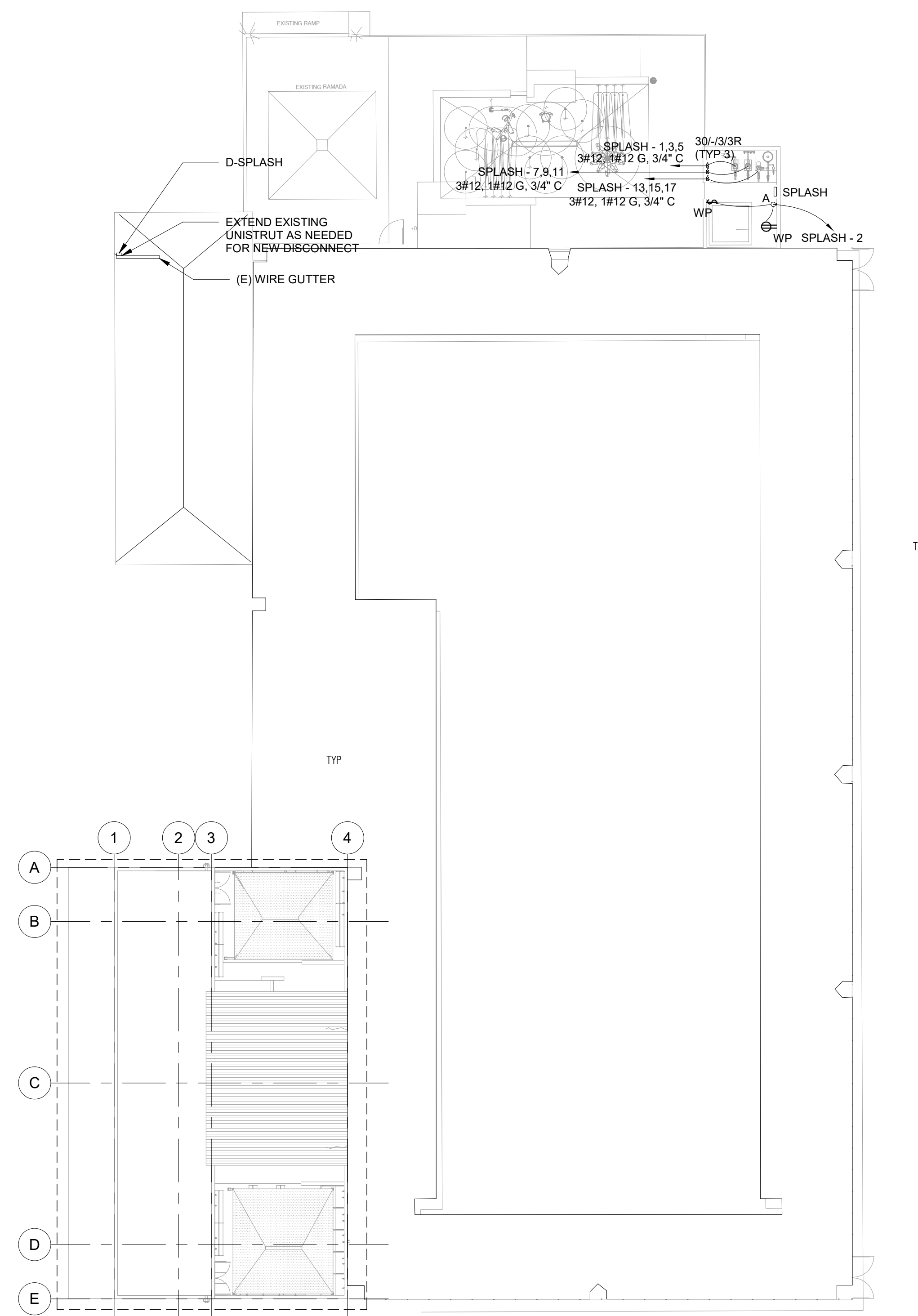
CASE #			
CITY OF TUCSON PARKS AND RECREATION			
FORT LOWELL PARK PARK IMPROVEMENTS ELECTRICAL GENERAL INFORMATION			
APPROVALS	SIGNATORY	DATE	
			APPROVED _____ 20__
			----- DIRECTOR
			REF. _____ SCALE: _____
DRWN. BY AZ	2021	DSGN. BY AZ	2021
CHKD. BY AZ	2021	PLAN NO.	

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**CITY OF TUCSON AND PIMA COUNTY OUTDOOR LIGHTING CODE**

- SITE INFORMATION
  - EXTERIOR LOCKER ROOM AND SPLASH PAD LIGHT FIXTURES ARE UNDER CANOPIES AND ARE FULL CUT OFF. THEREFORE THEY ARE NOT REQUIRED IN THE OUTDOOR LIGHTING CODE CALCULATIONS PER SECTION 401.2.1(3)



**1 SITE PLAN - ELECTRICAL**  
 E02 1/16" = 1'-0"

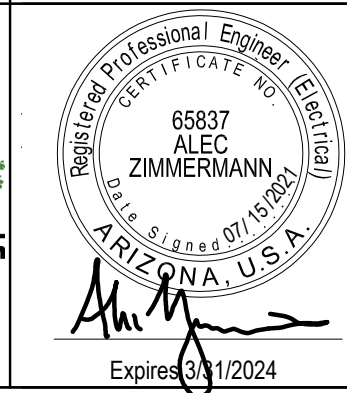
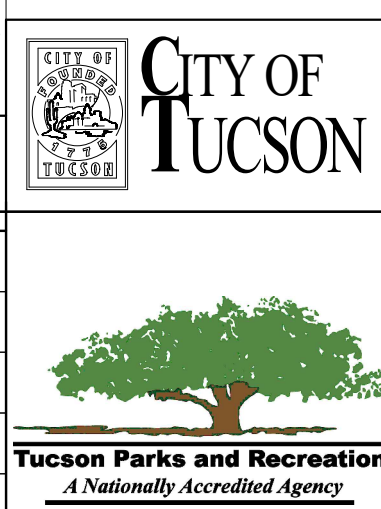
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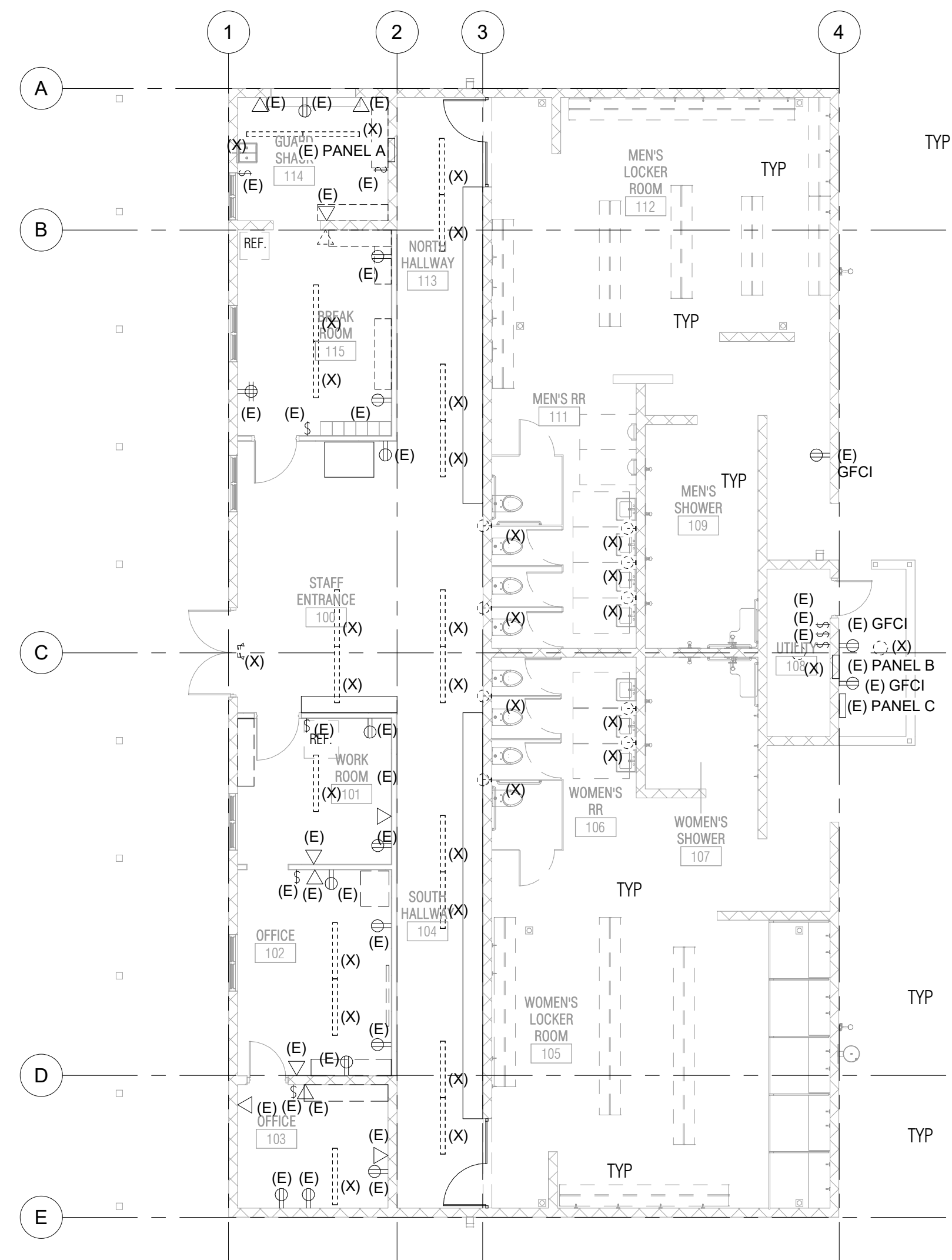


CITY OF TUCSON PARKS AND RECREATION			CASE#
FORT LOWELL PARK PARK IMPROVEMENTS ELECTRICAL SITE PLAN			E02 OF E04
APPROVALS	SIGNATORY	DATE	APPROVED _____ 20__
			OF
			35
			REF. _____ SCALE: _____
DRWN. BY AZ 2021	DSGN. BY AZ 2021	CHKD. BY AZ 2021	PLAN NO. _____

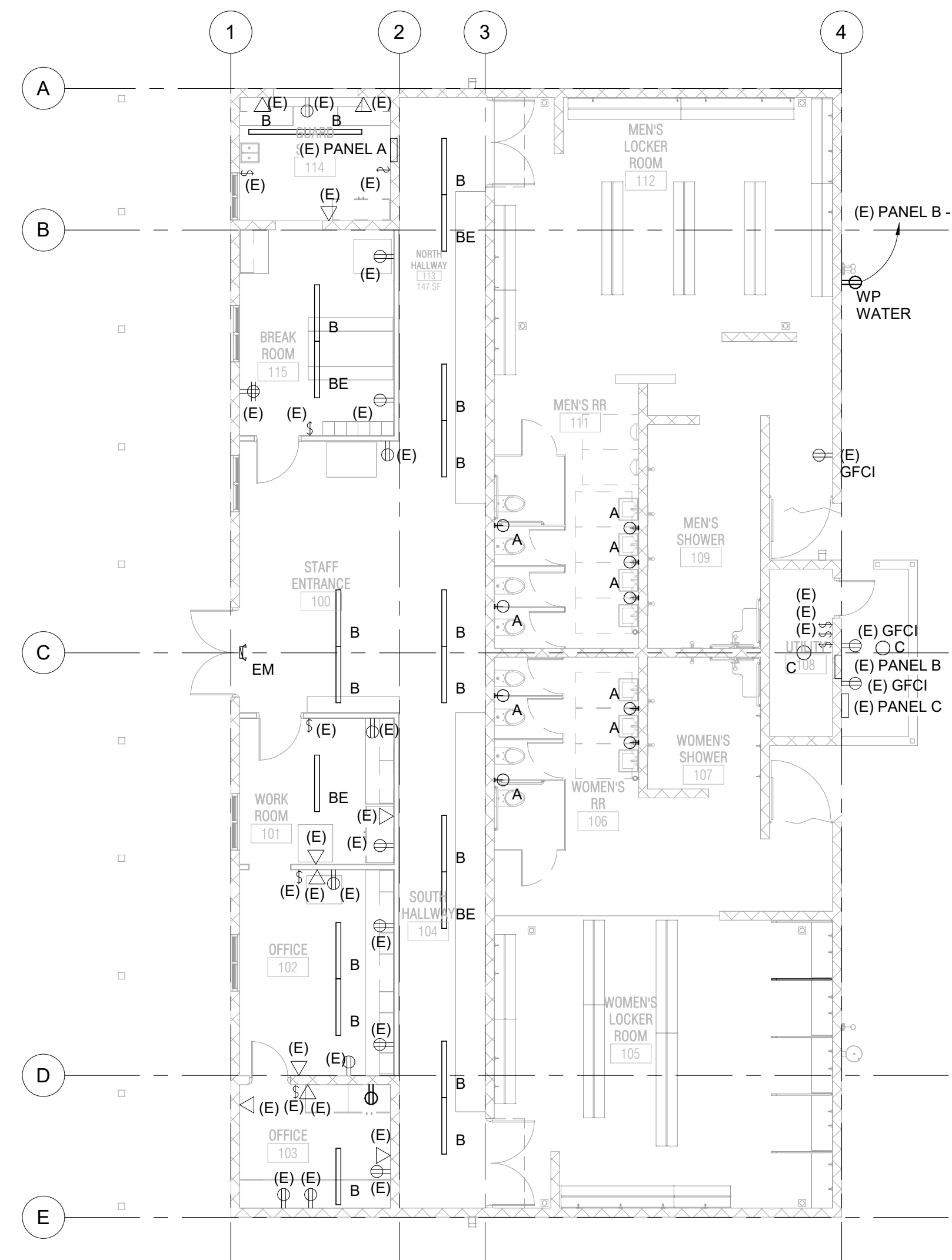


## ELECTRICAL GENERAL NOTES

- A. DESIGNATION '(E)' REPRESENTS EXISTING ELECTRICAL DEVICE OR EQUIPMENT EXISTING TO REMAIN AS CIRCUITED AND SWITCHED UNLESS NOTED OTHERWISE.
- B. DESIGNATION '(X)' REPRESENTS EXISTING ELECTRICAL DEVICE OR EQUIPMENT TO BE DEMOLISHED IN SCOPE OF THIS PROJECT. DEMOLISH DEVICE(S), CONDUIT(S) AND CONDUCTOR(S) BACK TO POINT OF ORIGINATION. IF PANEL BOARD IS POINT OF ORIGINATION, TURN OFF AND LABEL AS 'SPARE'.
- C. DESIGNATION '(R)' REPRESENTS EXISTING ELECTRICAL DEVICE OR EQUIPMENT TO BE RELOCATED IN SCOPE OF THIS PROJECT. RELOCATE AND EXTEND DEVICE(S), CONDUIT(S) AND CONDUCTOR(S) AS NEED TO PROVIDE A CODE COMPLIANT FINAL INSTALLATION.
- D. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL PATCHING AND REPAIRING WORK WITH THE GENERAL CONTRACTOR.
- E. CONTRACTOR SHALL REMOVE ALL CONDUIT AND WIRING ASSOCIATED WITH DEVICES AND EQUIPMENT TO BE REMOVED AND/OR RELOCATED UNLESS NOTED OTHERWISE. PROVIDE AND INSTALL NECESSARY DEVICES, EQUIPMENT AND ACCESSORIES REQUIRED TO MAINTAIN SERVICE TO ALL "EXISTING TO REMAIN" DEVICES AND EQUIPMENT THAT MAY BE INTERRUPTED DURING DEMOLITION.
- F. PROVIDE FOR ANY AND ALL DEMOLITION WORK NECESSARY TO ACCOMMODATE ALL NEW CONSTRUCTION, INCLUDING BUT NOT LIMITED TO ARCHITECTURAL, MECHANICAL, PLUMBING OR ELECTRICAL WORK.
- G. CONTRACTOR TO VERIFY ALL ELECTRICAL CONNECTIONS TO OWNER PROVIDED EQUIPMENT. IF EQUIPMENT SIZES AND CONNECTIONS ARE DIFFERENT, PROVIDE MODIFIED CB, CONDUIT AND CONDUCTORS PER NEC REQUIREMENTS.
- H. PROVIDE UPDATED TYPE WRITTEN DIRECTORY OF ALL CORRECT CIRCUITS WITH LOAD DEFINITIONS FOR EACH PANEL BOARD. DIRECTORY SHALL BE LOCATED INSIDE PANEL DOOR. CONNECT ALL NEW LIGHT FIXTURES TO EXISTING CIRCUIT MADE AVAILABLE FROM DEMOLITION OF EXISTING LIGHTS. UTILIZE SAME JUNCTION BOTH AND CONNECTION POINT. IT IS THE INTENT OF THE DESIGN TO DIRECTLY REPLACE EXISTING LIGHTS WITH NEW LED LIGHTS. RETAIN EXISTING SWITCHING.
- I. CITY OF TUCSON OUTDOOR LIGHTING CODE CALCULATIONS ARE NOT REQUIRED SINCE ALL NEW LIGHTING IS FULL CUT-OFF LOCATED UNDER EXTERIOR CANOPY PER 401.2.1(3).
- J.



**1** DEMOLITION PLAN - ELECTRICAL  
E03 1/8" = 1'-0"

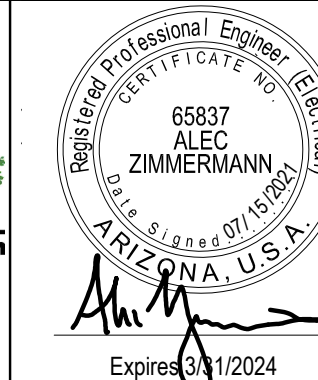
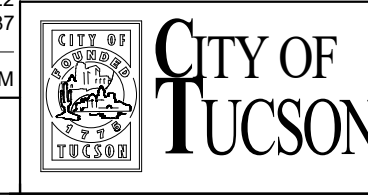


**2** FLOOR PLAN - ELECTRICAL  
E03 1/8" = 1'-0"

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NO.	DATE	REVISION	BY	CHKD.	APPR.



CITY OF TUCSON PARKS AND RECREATION			CASE#
FORT LOWELL PARK PARK IMPROVEMENTS ELECTRICAL FLOOR PLANS			E03 OF E04
APPROVALS	SIGNATORY	DATE	
			APPROVED _____ 20__
			----- DIRECTOR
			REF. _____ SCALE: _____
DRWN. BY AZ 2021	DSGN. BY AZ 2021	CHKD. BY AZ 2021	PLAN NO. _____

U:\Projects\2020\20134\_Ft. Lowell\_Park\_Improvements\_Remodel\04\_2016\Plan\Rev\Units\2\AD\20134-FortLowell\_TB.dwg\_21.03.10.dwg\_Model\_1.dwg\_2021\_08-Jul-2021\_Ey\_A5mreley\_Plot.dwg Wednesday, January 20, 2021 11:03:31 AM



# COMcheck Software Version 4.1.1.0 Interior Lighting Compliance Certificate

## Project Information

Energy Code: 2018 IECC  
Project Title: Alteration  
Project Type: Alteration

Construction Site: Owner/Agent: Designer/Contractor:  
Alec Zimmermann  
Adams & Associates  
6422 E Speedway Blvd  
Suite 130  
Tucson, AZ 85710  
5203233858

## Allowed Interior Lighting Power

A Area Category	B Floor Area (ft <sup>2</sup> )	C Allowed Watts /ft <sup>2</sup>	D Allowed Watts (B X C)
1-Life Guard Common Areas (Office)	1368	0.79	1081
Total Allowed Watts =			1081

## Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Life Guard Common Areas (Office 1368 sq.ft.) LED 1: B:BE: 4 LINEAR LED; LED Linear 22W; LED 2: C: ROUND LED; Other:	1	20	25	500
	1	1	27	27
Total Proposed Watts =				527

## Interior Lighting PASSES

### Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Alec Zimmermann, PE - Electrical Engineer  
Signature:  Date: 07/08/2021

Project Title: L:\Projects\2020\20202 Benson City Modular Renovation\07\_Calcs\Electrical\COMcheck.cck Report date: 07/08/21  
Data filename: L:\Projects\2020\20202 Benson City Modular Renovation\07\_Calcs\Electrical\COMcheck.cck Page 1 of 7

# COMcheck Software Version 4.1.1.0 Exterior Lighting Compliance Certificate

## Project Information

Energy Code: 2018 IECC  
Project Title: Alteration  
Project Type: Alteration  
Exterior Lighting Zone: 2 (Residential mixed use area)

Construction Site: Owner/Agent: Designer/Contractor:  
Alec Zimmermann  
Adams & Associates  
6422 E Speedway Blvd  
Suite 130  
Tucson, AZ 85710  
5203233858

## Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Splash Pad Equip Yard (Loading dock)	234 ft <sup>2</sup>	0.35	Yes	82
Exterior Locker Rooms (Special feature area)	256 ft <sup>2</sup>	0.1	Yes	26
Total Tradable Watts (a) =				108
Total Allowed Watts =				108
Total Allowed Supplemental Watts (b) =				400

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.  
(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

## Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Splash Pad Equip Yard (Loading dock 234 ft <sup>2</sup> ): Tradable Wattage LED 1: A: LED WALL PACK; Other:	1	10	1	10
Exterior Locker Rooms (Special feature area 256 ft <sup>2</sup> ): Tradable Wattage LED 1 copy 1: A: LED WALL PACK; Other:	1	10	9	90
Total Tradable Proposed Watts =				100

## Exterior Lighting PASSES

### Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Alec Zimmermann, PE - Electrical Engineer  
Signature:  Date: 07/08/2021

Project Title: L:\Projects\2020\20202 Benson City Modular Renovation\07\_Calcs\Electrical\COMcheck.cck Report date: 07/08/21  
Data filename: L:\Projects\2020\20202 Benson City Modular Renovation\07\_Calcs\Electrical\COMcheck.cck Page 2 of 7

# COMcheck Software Version 4.1.1.0 Inspection Checklist

Energy Code: 2018 IECC

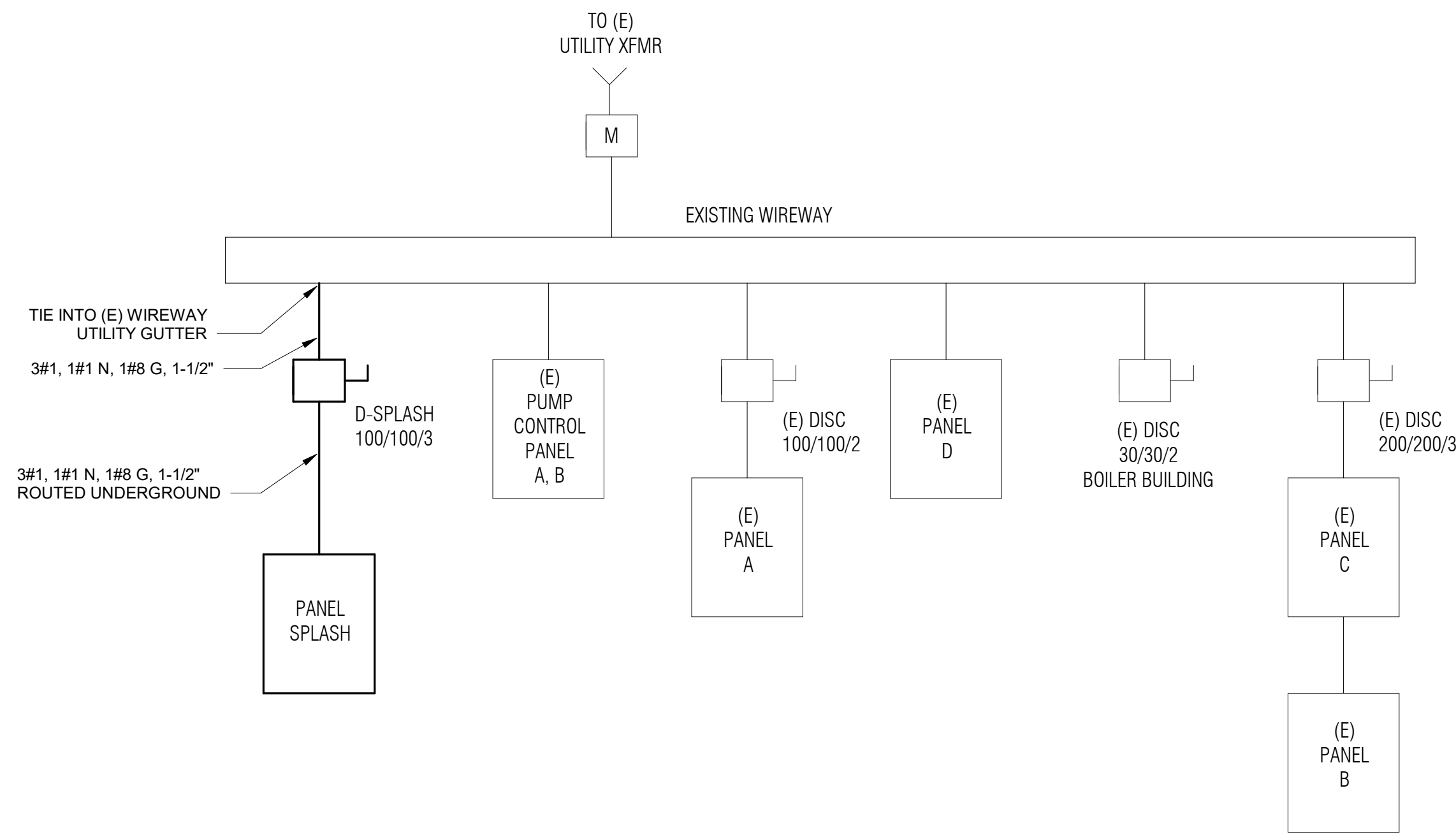
Requirements: 0.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & ReqID	Plan Review	Complies?	Comments/Assumptions
C103.2 (PR4) <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C103.2 (PR8) <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

## Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)  
Project Title: L:\Projects\2020\20202 Benson City Modular Renovation\07\_Calcs\Electrical\COMcheck.cck Report date: 07/08/21  
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Branch Panel: (E) PANEL B		Branch: NORMAL	
Location:	GUARD SHACK	Voltage:	120/208 Wye
Fed From:	UTILITY GUTTER	Phases:	3
Mounting:	Recessed	Wires:	4
Enclosure:	Type 3R	Neutral Bus:	Y
Feed Thru Lugs:	Y	Ground Bus:	Y
A.L.C. Rating:		AFC Value:	
200 A		200 A	
M.C.B.:		COPPER	
Bus Type:		COPPER	

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	Existing Load	20 A	1	800 VA	0 VA		2	20 A	Spare	2	
3	Existing Load	20 A	1		800 VA	0 VA				4	
5	Existing Load	20 A	1			800 VA	0 VA	2	20 A	Spare	6
7	Spare	20 A	1	0 VA	0 VA					8	
9	Spare	20 A	1		0 VA	0 VA		2	20 A	Spare	10
11	Spare	20 A	1			0 VA	0 VA			12	
13	Existing Load	20 A	1	750 VA	0 VA			2	20 A	Spare	14
15	Spare	20 A	1		0 VA	0 VA				16	
17	Existing Load	20 A	1			900 VA	0 VA	2	20 A	Spare	18
19	Spare	20 A	1	0 VA	0 VA					20	
21	Spare	20 A	1		0 VA	0 VA		1	20 A	Spare	22
23	Spare	20 A	1			0 VA	0 VA	1	20 A	Spare	24
25	Spare	20 A	1	0 VA	540 VA			1	20 A	Existing Load	26
27	Spare	20 A	1		0 VA	950 VA		1	20 A	Existing Load	28
29	Spare	20 A	1			0 VA	800 VA	1	20 A	Existing Load	30
31	*DRINKING FOUNTAIN	20 A	1	800 VA	0 VA			1	20 A	Existing Load	32
33	Existing Load	20 A	1		700 VA	0 VA		1	20 A	Existing Load	34
35	Existing Load	20 A	1			900 VA	700 VA	1	20 A	Existing Load	36
37	Existing Load	20 A	1	850 VA	0 VA			1	20 A	Existing Load	38
39	Existing Load	20 A	1		550 VA	0 VA		1	20 A	Existing Load	40
41	Existing Load	20 A	1			1100...	900 VA	1	20 A	Existing Load	42
Total Load:				3740 VA	3000 VA	6100 VA					
Total Amps:				32 A	25 A	52 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
				Total Conn. Load: 12840 VA
				Total Est. Demand: 12840 VA
				Total Conn. Current: 36 A
				Total Est. Demand Current: 36 A

NEW Branch Panel: SPLASH		Branch: NORMAL	
Location:	SPLASH PAD	Voltage:	120/208 Wye
Fed From:	UTILITY GUTTER	Phases:	3
Mounting:	Surface	Wires:	4
Enclosure:	Type 3R	Neutral Bus:	N/A
Feed Thru Lugs:	Y	Ground Bus:	Y
A.L.C. Rating:		10 KAIC	
M.C.B.:		N/A	
Bus Type:		COPPER	

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	SPLASH PAD BOOSTER PUMP 1	20 A	3	553 VA	900 VA		1	20 A	SPLASH PAD LTG/RCP	2	
3	--	--	--		553 VA	0 VA	1	20 A	Spare	4	
5	--	--	--			553 VA	0 VA	1	20 A	Spare	6
7	SPLASH PAD BOOSTER PUMP 2	20 A	3	553 VA	0 VA		1	20 A	Spare	8	
9	--	--	--		553 VA	0 VA	1	20 A	Spare	10	
11	--	--	--			553 VA	0 VA	1	20 A	Spare	12
13	SPLASH PAD CIRC PUMP	20 A	3	793 VA	0 VA		1	20 A	Spare	14	
15	--	--	--		793 VA	0 VA	1	20 A	Spare	16	
17	--	--	--			793 VA	0 VA	1	20 A	Spare	18
19	Spare	20 A	1	0 VA	0 VA		1	20 A	Spare	20	
21	Spare	20 A	1		0 VA	0 VA	1	20 A	Spare	22	
23	Spare	20 A	1			0 VA	0 VA	1	20 A	Spare	24
25	Spare	20 A	1	0 VA	0 VA		1	20 A	Spare	26	
27	Spare	20 A	1		0 VA	0 VA	1	20 A	Spare	28	
29	Spare	20 A	1			0 VA	0 VA	1	20 A	Spare	30
Total Load:				2799 VA	1899 VA	1899 VA					
Total Amps:				23 A	16 A	16 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
				Total Conn. Load: 6597 VA
				Total Est. Demand: 7192 VA
				Total Conn. Current: 18 A
				Total Est. Demand Current: 20 A

**ADAMS**  
MECHANICAL/ELECTRICAL/FIRE PROTECTION ENGINEERS

6422 E. SPEEDWAY BLVD # SUITE 130  
TUCSON, AZ 85710  
PHONE: (520) 323-8858

14425 N. 7TH ST # SUITE 105  
PHOENIX, AZ 85022  
PHONE: (480) 407-0787

PROJECT: 20134  
WEB: ADAMSMEEP.COM

500 N. Tucson Blvd., Suite 150  
Tucson, AZ 85716  
(520) 884-7911  
www.wheatdesigngroup.com

**WHEAT DE IGN GROUP**

NO.	DATE	REVISION	BY	CHKD.	APPR.

CITY OF TUCSON  
Tucson Parks and Recreation  
A Nationally Accredited Agency

CITY OF TUCSON  
TUCSON, ARIZONA, U.S.A.

CITY OF TUCSON  
65837  
ALEC  
ZIMMERMANN  
Professional Engineer  
Arizona, U.S.A.

Expires: 01/2024

CASE#

CITY OF TUCSON PARKS AND RECREATION  
PORT LOWELL PARK  
PARK IMPROVEMENTS  
ELECTRICAL ONE-LINE AND SCHEDULES

APPROVALS	SIGNATORY	DATE	
APPROVED	-----	20--	22
-----	DIRECTOR		35

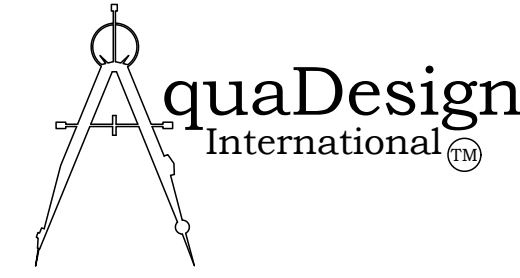
REF. \_\_\_\_\_ SCALE: \_\_\_\_\_

DRWN. BY AZ 2021 DSGN. BY AZ 2021 CHKD. BY AZ 2021 PLAN NO. \_\_\_\_\_

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# AQUATIC CONSULTANT



AQUADESIGN INTERNATIONAL  
7536 N. LA CHOLLA BLVD.  
TUCSON, AZ 85741  
520-219-8929  
Attn: KEN PAULSON

# SHEET INDEX

- SP-001 SPLASH PAD COVER SHEET
- SP-002 SPLASH PAD SITE PLAN
- SP-101 SPLASH PAD LAYOUT & KEYNOTES
- SP-111 SPLASH PAD PLUMBING
- SP-301 SPLASH PAD SECTIONS
- SP-302 SPLASH PAD SECTIONS
- SP-501 DETAILS
- SP-502 DETAILS
- SP-901 EQUIPMENT YARD LAYOUT & KEYNOTES

# AQUATIC FEATURE DATA

- SPLASH PAD**  
SURFACE AREA: 772 SQ FT.  
4' PERIMETER WALKWAY: SEE LANDSCAPE SHEETS
- HOLDING TANK**  
PERIMETER: 24'  
SURFACE AREA: 36 SQ FT.  
APPROXIMATE VOLUME: 1,350 GALLONS  
DESIGN TURN OVER: 15 MIN.  
DESIGN FLOW RATE: 90 GPM
- EXISTING POOL PER OPERATIONAL PERMIT - PENDING**  
SURFACE AREA: 10,614 SQ FT.  
APPROXIMATE VOLUME: 440,000 GALLONS  
DESIGN TURN OVER: 8 HRS.  
DESIGN FLOW RATE: 925 GPM  
EXISTING 2ND SANITATION SYSTEM: CD OZONE

# SCOPE OF WORK

THESE DRAWINGS REPRESENT THE SPLASH PAD FEATURES FOR THIS PROJECT. DECK & WALKWAYS, FENCING DESIGN, BATHROOMS DESIGN, UTILITIES, AND OTHER STRUCTURES SHOWN ON THE PLAN SHALL BE DOCUMENTED BY OTHER DISCIPLINES. THE CONTRACTED SCOPE OF WORK REPRESENTS THE FOLLOWING:

### SP SERIES DRAWING DOCUMENTATION:

- DEMOLITION OF WADING POOL AND DECK.
- SHAPE AND LOCATION OF SPLASH PAD.
- WATER PLAY TOY SELECTION AND POSITIONING.
- SPLASH PAD STRUCTURAL AND SUBGRADE INFORMATION.
- GRADING/ELEVATIONS OF ENTRY RAMP, DECK AND SPLASH PAD
- EQUIPMENT YARD LAYOUT AND LOCATION.
- CIRCULATION AND BOOSTER PUMPS.
- SIZE AND LOCATION OF HOLDING TANK.
- HOLDING TANK STRUCTURAL AND SUBGRADE INFORMATION.
- TANK FILTRATION AND SANITATION EQUIPMENT.
- PLUMBING LAYOUT FOR WATER PLAY TOYS.
- DRAINAGE FROM PAD TO HOLDING TANK.
- PLUMBING CONNECTION FROM POOL TO HOLDING TANK.
- DECK CHANNEL DRAIN AND DRAINAGE LINE.
- SPLASH PAD CONTROLLER AND ACTIVATION SYSTEM.
- SPLASH PAD STEPS, HANDRAIL, AND ANCHORS.
- SPLASH PAD AND DECK RETAINING WALLS.
- ELECTRICAL PANEL BY ELEC. ENGINEER.
- CONTRACTOR RESPONSIBILITIES
- RELATED PERMITTING AND INFORMATION.
- START-UP AND OWNER TRAINING.
- OPERATION GUIDE MANUAL.

# CODE COMPLIANCE

- AMERICANS WITH DISABILITIES ACT
- VIRGINIA GRAEME BAKER SAFETY ACT
- PIMA COUNTY HEALTH DEPARTMENT

# SPECIFICATIONS

NO WRITTEN SPECIFICATIONS

# SUBMITTALS

- PRODUCT SUBMITTAL:  
POOL CONTRACTOR TO INCLUDE MANUFACTURER'S DATA, INSTALLATION INSTRUCTIONS AND GENERAL RECOMMENDATIONS FOR EACH SPECIFIED PRODUCT.
- SHOP DRAWING SUBMITTAL:  
SHOP DRAWINGS OF EACH ITEM SPECIFIED SHOWING LAYOUT, PROFILES, METHODS OF JOINING AND ANCHORAGE DETAILS
- SUBMITTAL FORM:  
CONTACT RICK BOOTH AT RICK@AQUADESIGN.NET FOR SUBMITTAL FORM

# INSPECTIONS

POOL CONTRACTOR OR ARCHITECT SHALL NOTIFY AQUA DESIGN INTERNATIONAL FOR THE FOLLOWING AQUATIC FEATURE INSPECTION COORDINATION:

- LAYOUT AND FEATURE ELEVATION (SURVEYOR VERIFIED)
- PLUMBING INSTALLATION AND PRESSURE TEST
- HEALTH DEPARTMENT FINAL APPROVAL
- AQUA DESIGN PUNCH LIST & PROJECT SIGNOFF

# GENERAL NOTES

- ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- SURFACES WITHIN THE FEATURE SHALL BE WATERTIGHT, SLIP RESISTANT, AND WITHSTAND DESIGN STRESSES.
- ANY CHANGES IN CONSTRUCTION PLANS OR EQUIPMENT MUST BE APPROVED BY THE PIMA COUNTY HEALTH DEPARTMENT. CHANGES MAY REQUIRE ADDITIONAL PLAN CHECK FEES AND RE-SUBMITTAL OF PLANS.
- SPLASH PAD PLAN APPROVAL DOES NOT AUTHORIZE THE VIOLATION OF ANY LAW, ORDINANCE, OR REGULATION AND FINAL APPROVAL IS SUBJECT TO FIELD INSPECTION AND EVALUATION.
- NO SPLASH PAD SHALL BE PLACED IN OPERATION WITHOUT WRITTEN APPROVAL OF THE PIMA COUNTY HEALTH DEPARTMENT.
- THE POOL CONTRACTOR SHALL PERFORM A HYDROSTATIC TEST TO 50 PSI FOR 30 MINUTES AND KEEP A MINIMUM OF 15 PSI ON SYSTEM UNTIL FINAL HOOK-UP TO SPLASH PAD.
- THE PIPING SYSTEMS INDICATED ON THE PIPING SCHEMATIC ARE DIAGRAMMATIC ONLY. CONTRACTOR MUST DETERMINE THE EXACT ROUTING ON SITE. THE CONTRACTOR SHALL PROVIDE ALL PIPING AND FITTINGS, REDUCERS, BRACES, HANGERS, SUPPORTS, ISOLATION JOINTS, AND EXPANSION EQUIPMENT REQUIRED FOR THE COMPLETE INSTALLATION.
- ALL EQUIPMENT AND MATERIALS NOT SHOWN OR SPECIFIED ON THE PLANS OR SPECIFICATIONS, BUT REQUIRED TO COMPLETE THIS PROJECT, SHALL BE SUPPLIED BY THE POOL CONTRACTOR AS PART OF THIS CONTRACT WORK.
- VACUUM GAUGES SHALL BE INSTALLED ON THE INLET TO EACH SPLASH PAD PUMP AND INSTALLED WHERE THEY CAN BE EASILY READ.
- THE PIPING INSTALLATION IN EACH EQUIPMENT ROOM SHALL BE SUPPORTED IN ACCORDANCE WITH TABLE 308.5 IN THE IPC. CONTRACTOR SHALL SUBMIT SUPPORT SYSTEM DESIGN TO AQUATICS CONSULTANT PRIOR START OF WORK.
- LABEL PIPE SIZE, TYPE, AND FLOW DIRECTION FOR ALL SPLASH PAD EQUIPMENT WITH A MINIMUM OF 3/4 INCH TEXT PER ANSI A13.
- SPLASH PAD BARRIER/ENCLOSURE SHALL BE PROVIDED TO MEET LOCAL CODES.
- POOL CONTRACTOR SHALL BE RESPONSIBLE FOR BLUE STAKE IN ALL AREAS OF EXCAVATION PRIOR TO WORK.
- ALL SPLASH PAD TOY BOOSTER PUMPS SHALL BE SET AT START-UP FOR THE FLOW RATES LISTED ON SHEET OR FINAL DESIRED JET SPRAY HEIGHT.
- A DAILY RECORD OF SPLASH PAD MAINTENANCE AND OPERATION SHALL BE KEPT AND AVAILABLE FOR INSPECTION AND REVIEW BY COT.

# CONTRACTOR NOTES

- CONTRACTOR RESPONSIBILITY
  - THE POOL CONTRACTOR SHALL HAVE CONTROL AND RESPONSIBILITY TO THE GENERAL CONTRACTOR FOR THE WORK REQUIRED TO RESULT IN A FULLY FUNCTIONING COMMERCIAL SPLASH PAD AS DEFINED IN THE CONTRACT DOCUMENTS.
  - THE GENERAL CONTRACTOR SHALL NOT SUB-CONTRACT ANY PART OF THE SPECIFIED SPLASH PAD CONSTRUCTION TO ANYONE OTHER THAN A LICENSED AND BONDED POOL SUB-CONTRACTOR MEETING ALL REQUIREMENTS OF THIS AND RELATED SECTIONS.
- CONTRACTOR QUALIFICATION
  - POOL CONTRACTOR SHALL SUBMIT EVIDENCE OF QUALIFICATIONS TO THE GENERAL CONTRACTOR WITH - OR IN ADVANCE OF - HIS BID TO THE GENERAL CONTRACTOR SO THAT THE LANDSCAPE ARCHITECTURAL TEAM AND GENERAL CONTRACTOR CAN BE ASSURED PRIOR TO AWARDED THE CONTRACT THAT THE POOL CONTRACTOR COMPLIES WITH THE FOLLOWING QUALIFICATION REQUIREMENTS.
    - EVIDENCE OF SUCCESSFUL EXPERIENCE IN THE CONSTRUCTION OF NOT LESS THAN TWO (2) COMMERCIAL SPLASH PADS OF SIMILAR DESIGN IN THE LAST FIVE (5) YEARS.
      - NOT LESS THAN 500 SQUARE FEET OF PAD SURFACE AREA.
      - AUTOMATED CONTROL PANEL FOR WATER SYSTEMS.
    - PROVIDE A LIST OF NOT LESS THAN TWO (2) COMMERCIAL SPLASH PAD FACILITIES MATCHING CRITERIA 2.2 COMPLETE WITH VERIFIED NAMES, ADDRESSES, TELEPHONE NUMBERS OF THE GOVERNMENT REPRESENTATIVE, THE CONTRACTING OFFICER, THE MECHANICAL, ELECTRICAL & PLUMBING SUBCONTRACTORS, AND THE GENERAL CONTRACTOR.
    - PROVIDE NARRATIVE DESCRIPTION OF EACH COMPARATIVE LISTED SPLASH PAD FACILITY, INCLUDING - BUT NOT LIMITED TO - DATE OF CONSTRUCTION START AND COMPLETION, SPLASH PAD SURFACE AREA, TYPE AND SIZE OF FILTRATION SYSTEM, TYPE AND SIZE OF WATER TREATMENT SYSTEM.
  - WARRANTY
    - ALL RELATED WORK SHALL BE WARRANTED AGAINST FAILURE TO HOLD WATER FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
    - ALL EQUIPMENT SHALL BE WARRANTED BY THE MANUFACTURER AND OR PAD CONTRACTOR FOR A MINIMUM OF TWO (2) YEARS FOLLOWING THE DATE OF SUBSTANTIAL COMPLETION.
    - WARRANT FINISH SURFACES AND FINISHES PER LANDSCAPE DRAWINGS AGAINST DELAMINATING.
  - OPERATION AND MAINTENANCE MANUALS
    - MANUALS, GENERAL
      - ORGANIZE EACH MANUAL INTO A SEPARATE SECTION FOR EACH SYSTEM AND SUBSYSTEM, AND A SEPARATE SECTION FOR EACH PIECE OF EQUIPMENT NOT PART OF A SYSTEM. EACH MANUAL SHALL CONTAIN THE FOLLOWING MATERIALS, IN THE ORDER LISTED
    - OPERATION MANUALS
      - SYSTEM, SUBSYSTEM, AND EQUIPMENT DESCRIPTIONS
      - OPERATING STANDARDS
      - OPERATING PROCEDURES
      - OPERATING LOGS
      - WIRING DIAGRAMS
      - PIPED SYSTEMS DIAGRAMS
      - PRECAUTIONS AGAINST IMPROPER USE
    - MAINTENANCE MANUALS
      - PRODUCT INFORMATION
      - MAINTENANCE PROCEDURES
      - REPAIR INSTRUCTIONS, MATERIALS AND SOURCES
    - DRAWINGS
      - MOST RECENT SET OF CONSTRUCTION DRAWINGS
      - AS-BUILT DRAWINGS

# BONDING & GROUNDING

- ALL GROUNDING SHALL BE COMPLETED IN ACCORDANCE WITH 2017 NATIONAL ELECTRIC CODE (NEC) AND THE LOCAL AUTHORITY HAVING JURISDICTION.
- THESE PLANS ARE DIAGRAMMATIC AND MAY NOT REPRESENT THE FINAL LOCATIONS OF THE EQUIPMENT. THE PAD CONTRACTOR SHALL COORDINATE ALL GROUNDING REQUIREMENTS AND EQUIPMENT ELECTRICAL CONNECTIONS WITH ALL OTHER WORK TO BE COMPLETED WITH CONSIDERED FIELD CONDITIONS.
- THE GROUNDING GRID TO BE INSTALLED WITHIN THE INTERACTIVE WATER FEATURE ASSEMBLIES SHALL BE INSTALLED WITH A MINIMUM OF BARE #8 GROUND WIRE (99% PURE COPPER) AND INSTALLATION IS TO BE COORDINATED WITH FINAL FEATURE CONSTRUCTION.
- GROUNDING GRID SHALL BE INSTALLED A MINIMUM OF 3 FEET AROUND THE EXTENTS OF THE SPLASH PAD EDGES IN ACCORDANCE WITH NEC.
- ALL GROUNDING CONNECTIONS SHALL BE CAD-WELDED OR AS OTHERWISE REQUIRED, CAD WELDING SHALL BE COPPER TO COPPER WITH 6% SILVER FOR DUCTILITY.
- PROVIDE #8 BARE COPPER WIRE SPACED AT 1 FOOT APART FOR ENTIRE LENGTH OF BONDING GRID, COPPER WELD AT EACH JOINT.

# SITE PLAN NOTES

- THESE DRAWINGS REPRESENT THE SPLASH PAD FEATURES FOR THIS PROJECT. ALL WALKWAYS, FENCING AND LANDSCAPE DESIGN, UTILITIES, AND OTHER STRUCTURES SHOWN ON THE SITE PLAN SHALL BE DOCUMENTED BY OTHER DISCIPLINES.
- ACCESS PATHWAYS TO THE SPLASH PAD EDGE SHALL BE PROVIDED ON THE LANDSCAPE ARCHITECT'S SHEETS. A MINIMUM OF ONE (1) ADA COMPLIANT ACCESS WAY SHALL BE PROVIDED FOR THIS PROJECT.

# ELECTRICAL NOTES

- ALL ELECTRICAL WORK SHALL COMPLY WITH: NEC 2017 - ARTICLE 680 - SWIMMING POOL INSTALLATIONS - SEE: ELECTRICAL SHEETS FOR ADDITIONAL NOTES:
  - 680.3 - CORD AND PLUG-CONNECTED EQUIPMENT
  - 680.8 - OVERHEAD CONDUCTOR CLEARANCES
  - 680.10 - UNDERGROUND WIRING LOCATION
  - 680.11 - EQUIPMENT ROOM AND PITS
  - 680.12 - DISCONNECTING MEANS
  - 680.21 - MOTORS
  - 680.22 - AREA LIGHTING, RECEPTACLES AND EQUIPMENT
  - 680.24 - JUNCTION BOXES
  - 680.25 - FEEDERS
  - 680.26 - BONDING
  - 680.27 - SPECIALIZED EQUIPMENT
  - ANY ADDITIONAL STATE AND LOCAL REQUIREMENTS

# START-UP

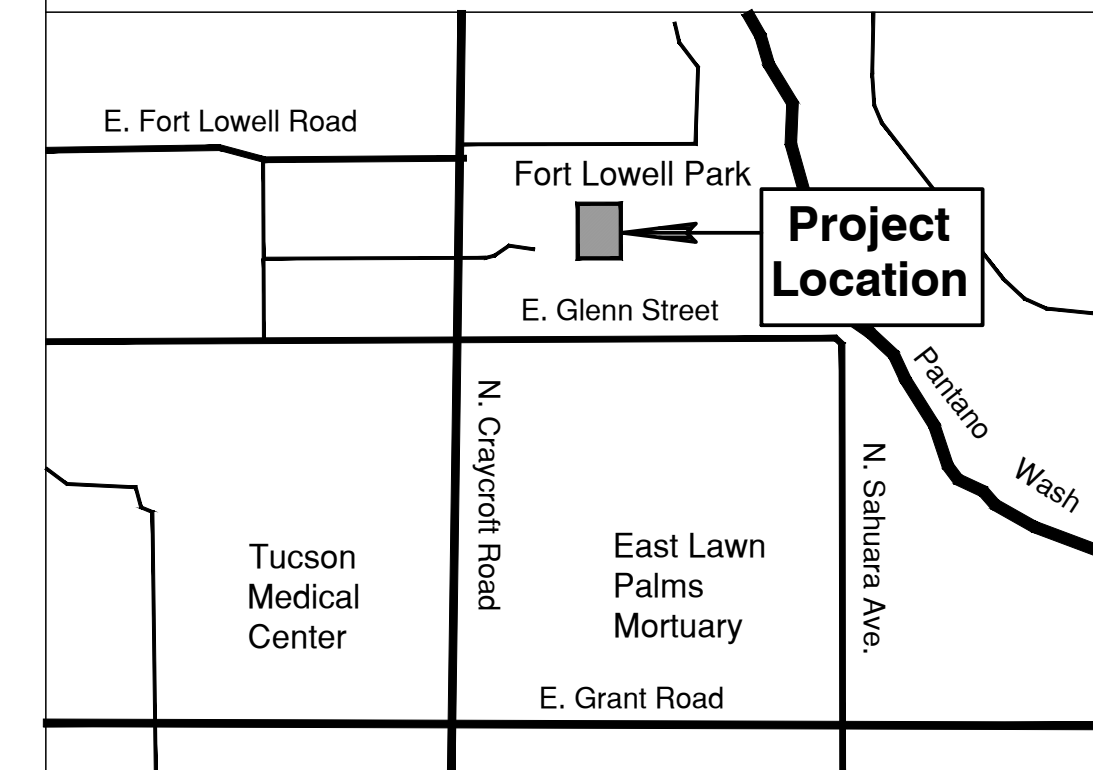
- CONTRACTOR SHALL MAINTAIN SPRAY PAD EQUIPMENT FOR 14 CONSECUTIVE DAYS IN CONJUNCTION WITH MECHANICAL SYSTEM OPERATIONAL TEST.
- DURING THIS TIME, BLOW OFF SPRAY PAD SURFACE TO REMOVE DUST, PERIODICALLY CLEAN GRATES UNTIL NO FURTHER ACCUMULATION OF FOREIGN MATERIALS OCCURS, AND ADD CHEMICALS AS REQUIRED FOR ACCEPTABLE WATER QUALITY.
- SPRAY PAD SHALL BE VACUUMED THROUGHOUT 14-DAY PERIOD.
- AFTER SUCCESSFUL CONCLUSION OF MECHANICAL SYSTEM OPERATIONAL TESTING, CLEAN GRATES, VACUUM TANK, AND LEAVE SPRAY PAD READY FOR USE.

# SPLASH PAD SIGNAGE

RULES TO BE POSTED AT FACILITY APPLICABLE TO OPERATION OF A SPLASH PAD PER PIMA COUNTY HEALTH DEPARTMENT

- PLEASE OBSERVE THE FOLLOWING RULES WHEN USING THE SPLASH PAD.
- THE SPLASH PAD IS OPEN TO CHILDREN 12 AND UNDER, AND TO THOSE WHO ACCOMPANY THEM.
- USE OF THE SPLASH PAD IS AT YOUR OWN RISK.
- ALL CHILDREN MUST BE SUPERVISED AT ALL TIMES WHILE IN THE SPLASH PAD.
- NO RUNNING AND NO CLIMBING ON THE SPRAY EQUIPMENT AND SEAT WALLS.
- NO PETS, GLASS, ROCKS, BOTTLES, OR OTHER FOREIGN OBJECTS ARE ALLOWED IN THE SPLASH PAD.
- NO SKATEBOARDS, ROLLER-BLADES, OR BICYCLES ALLOWED.
- PLEASE OBSERVE GOOD HYGIENE.
- HAVE CHILDREN USE THE RESTROOM BEFORE GOING INTO THE SPLASH PAD.
- DO NOT ALLOW CHILDREN WHO ARE ILL INTO THE SPLASH PAD.
- DO NOT CHANGE DIAPERS IN THE SPLASH PAD.
- IF THERE ARE ANY PROBLEMS WITH THE SPLASH PAD SYSTEM PLEASE CONTACT (XXX) XXX-XXXX.
- BE CONSIDERATE OF OTHERS. ENJOY THE SPLASH PAD!

# VICINITY MAP



# ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	AMERICAN SOCIETY OF TESTING MATERIALS
FFE	FINISHED FLOOR ELEVATION
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
IPC	INTERNATIONAL PLUMBING CODE
MEP	MECHANICAL ELECTRICAL PLUMBING
NTS	NOT TO SCALE
NSF	NATIONAL SANITATION FOUNDATION
pH	POTENTIAL HYDROGEN
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE

# WATERPROOFING NOTES

- INSIDE SPLASH PAD HOLDING TANK AND SPLASH PAD DRAIN SUMP, APPLY TWO COATS OF XYPEX CONCENTRATE, CEMENTITIOUS CRYSTALLINE WATERPROOFING. WWW.XYPEX.COM.
- CAN BE BRUSHED OR SPRAYED ON. FOLLOW MANUFACTURER'S GUIDELINES FOR COMPLETE PREPARATION AND APPLICATION PROCEDURES.

# PROJECT PLUMBING NOTES

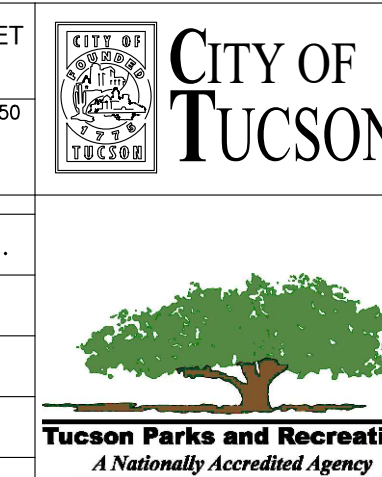
- SPLASH PAD PIPE ROUTING IS FOR DIAGRAM ONLY. THE PAD CONTRACTOR AND G.C. SHALL COORDINATE ROUTING LOCATIONS.
- ALL PIPING FOR THE SPLASH PAD SHALL BE SCHEDULE 80 PVC UNLESS OTHERWISE NOTED.

CASE#

CITY OF TUCSON PARKS AND RECREATION			SP-001 of SP-901
<b>FORT LOWELL PARK</b> PARK IMPROVEMENTS <b>SPLASH PAD COVER SHEET</b>			
APPROVALS	SIGNATORY	DATE	APPROVED _____ 20__
			OF
			35
			REF. _____ SCALE: _____
DRWN. BY TJ 2021	DSGN. BY TJ 2021	CHKD. BY KP 2021	PLAN NO. _____

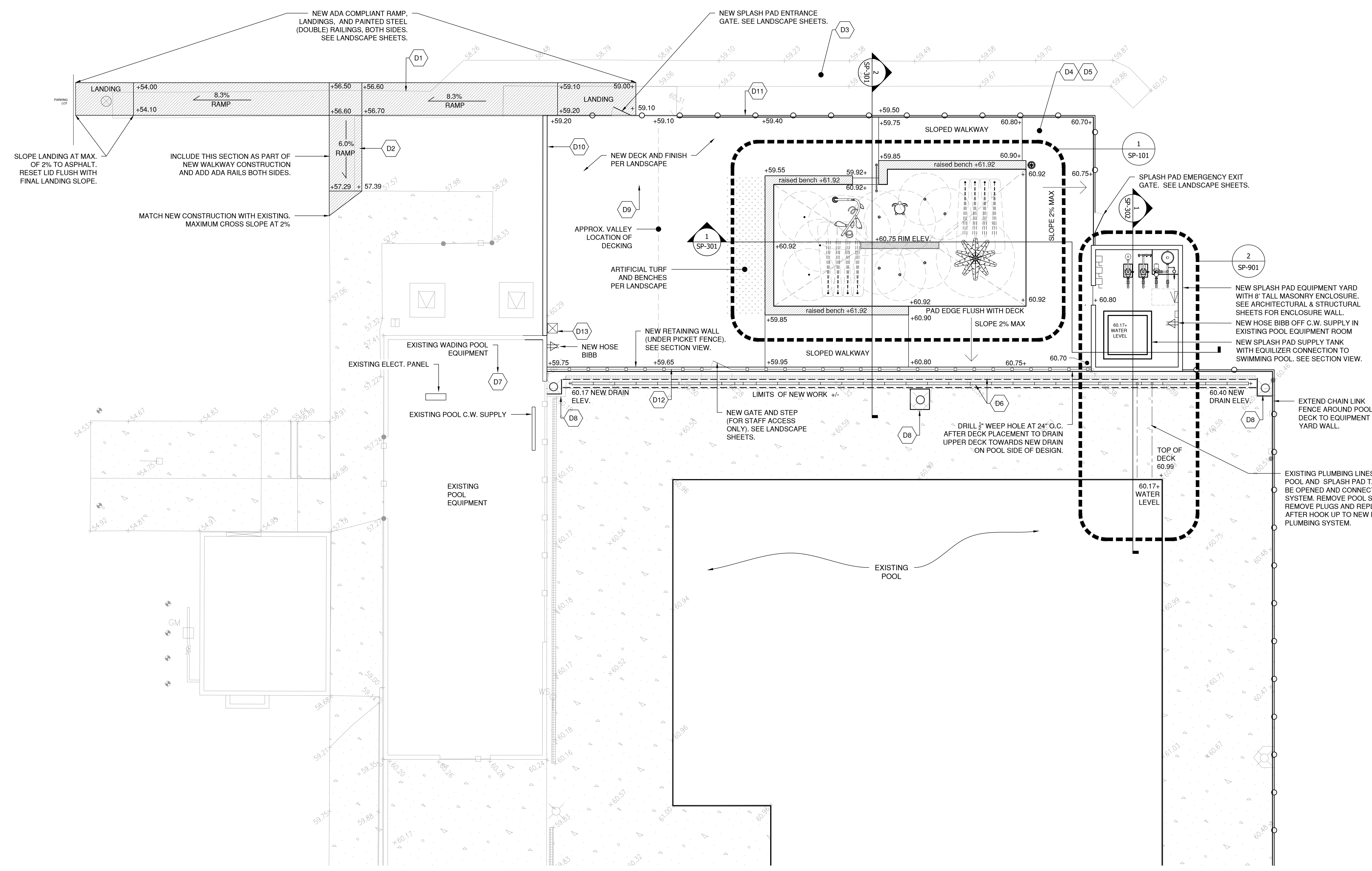
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TUCSON, ARIZONA 85741

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Tucson, AZ 85716 (520) 884-7911  
www.wheatdesigngroup.com



EXP. 9-30-23

- ### DEMOLITION KEYNOTES:
- D1. REMOVE EXISTING ENTRY RAMP AND REPLACE WITH ADA-COMPLIANT RAMP. PROPOSED SPOT ELEVATIONS FOR LANDINGS AND RAMP SECTIONS SHOWN ON PLAN. ADD PAINTED STEEL (DOUBLE) RAILS THAT MEET ADA STANDARDS ON BOTH SIDES. SEE LANDSCAPE PLANS.
  - D2. REMOVE EXISTING SIDEWALK AND POUR NEW CONCRETE SIDEWALK WITH MAXIMUM CROSS-SLOPE OF 2%. MATCH GRADE WITH LANDING ON NEW ENTRY RAMP. FURTHER REMOVE AND RECONSTRUCT PORTION OF SIDEWALK IN SOUTHWEST CORNER UNTIL GRADES CAN BE BLENDED TO EXISTING BASED ON A 2% MAXIMUM CROSS-SLOPE.
  - D3. COORDINATE WITH COT PARKS & RECREATION WHETHER SIDEWALK NORTH OF SPLASH PAD SHALL BE REMOVED OR REPLACED WITH A NEW DESIGN.
  - D4. EXISTING DECK TO BE REMOVED AND REPLACED. GRADE NEW DECK TO DRAIN AWAY FROM SPLASH PAD (MAX. 2%). SEE LANDSCAPE SHEETS FOR NEW DECK FINISH, SLAB, AND SUBGRADE.
  - D5. EXISTING WADING POOL TO BE REMOVED. REPLACE WITH NON-EXPANSIVE ENGINEERED SUBGRADE COMPACTED TO A MIN OF 95%. SEE SECTION VIEW FOR NEW SPLASH PAD SLAB AND SUBGRADE INFORMATION. SEE LANDSCAPE SHEETS FOR FINISH.
  - D6. EXISTING TRENCH DRAIN TO BE REMOVED. REPLACE WITH NEW TRENCH DRAIN PER KEYNOTE. SEE SHEET SP-101.
  - D7. REMOVE WADING POOL PUMP AND ELECTRICAL BACK TO EXISTING PANEL. REMOVE FILTER AND ALL ASSOCIATED PLUMBING, CAP ABOVE SLAB.
  - D8. EXISTING LIGHT POLE AND BASE TO REMAIN.
  - D9. EXISTING RAMADA TO REMAIN. NEW FINISH PER LANDSCAPE ARCHITECT.
  - D10. EXISTING MASONRY WALL TO REMAIN. NEW FINISH PER LANDSCAPE ARCHITECT.
  - D11. REMOVE EXISTING CHAIN LINK FENCE AND REPLACE WITH 8' TALL CHAIN LINK WITH 1"X1" MESH. SEE LANDSCAPE SHEETS.
  - D12. REMOVE EXISTING CHAIN LINK FENCE AND REPLACE WITH 4' TALL WROUGHT IRON PICKET FENCE. SEE LANDSCAPE SHEETS.
  - D13. REMOVE EXISTING DRINKING FOUNTAIN AND REPLACE WITH NEW ADA-COMPLIANT FOUNTAIN. SEE PLUMBING SHEETS FOR MAKE/MODEL.



**1 SITE PLAN, GRADING & DEMOLITION NOTES**  
Scale: 1/8" = 1'-0"

P:\2020 Commercial\Lowell Park\CAD Drawings\Lowell Splash-Pad-Master-5-5-21-RAMP.dwg SP-002 Last Saved: Thu, 15 Jul 2021 10:19:35 PM Plotted: Thursday, July 15, 2021 4:19:35 PM



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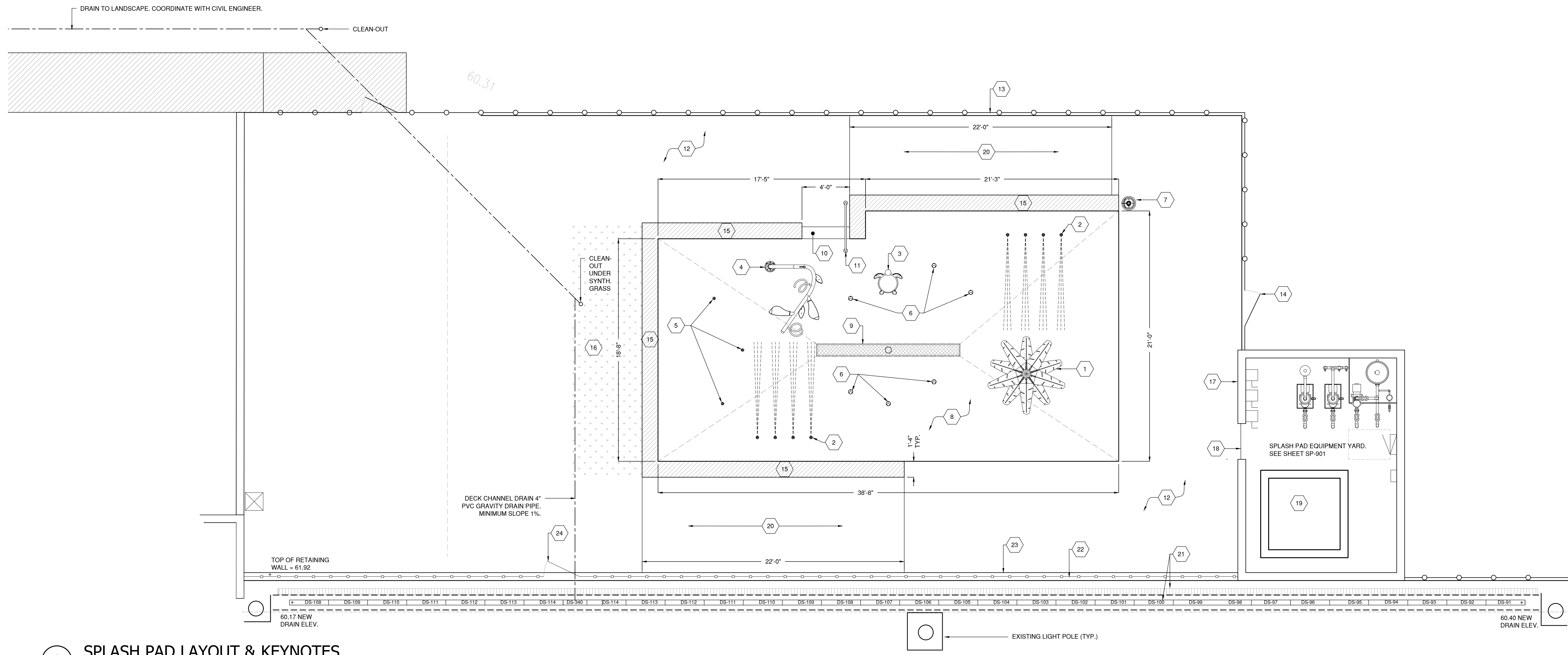
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NO.	DATE	REVISION	BY	CHKD.	APPR.



CITY OF TUCSON PARKS AND RECREATION				CASE#
FORT LOWELL PARK PARK IMPROVEMENTS SPLASH PAD SITE PLAN				SP-002 of SP-901
APPROVALS	SIGNATORY	DATE	APPROVED _____ 20__	24 OF 35
			____ DIRECTOR	
REF. _____ SCALE: _____			PLAN NO. _____	
DRWN. BY TJ 2021	DSGN. BY TJ 2021	CHKD. BY KP 2021	EXP. 9-30-23	

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**1 SPLASH PAD LAYOUT & KEYNOTES**  
Scale: 1/4" = 1'-0"

- SPLASH PAD KEYNOTES:**
- PALM TREE: VORTEX, PART #VOR-0509, 20-30 GPM. SEE: SHEET SP-501, DETAIL 7. (QTY. 1)
  - DIRECTIONAL JET NO.1: VORTEX, PART #VOR-0305, 2-4 GPM EACH. SEE: SHEET SP-501, DETAIL 4. (QTY. 8)
  - TURTLE NO.3: VORTEX, PART #VOR-7219, 16-23 GPM. SEE: SHEET SP-501, DETAIL 1. (QTY. 1)
  - VINE: VORTEX, PART #VOR-7784, 4-6 GPM. SEE: SHEET SP-501, DETAIL 8. (QTY. 1)
  - GEYSER: VORTEX, PART #VOR-0301, 5-10 GPM EACH. SEE: SHEET SP-501, DETAIL 2. (QTY. 3)
  - JET STREAM NO.2: VORTEX, PART #VOR-7513, 3-5 GPM EACH. SEE: SHEET SP-501, DETAIL 3. (QTY. 3)
  - BOLLARD ACTIVATOR NO.3: VORTEX, PART #VOR-0611. SEE: SHEET SP-501, DETAIL 9. (QTY. 1)
  - SPLASH PAD: REINFORCED CONCRETE WITH X-CEL SLIP-RESISTANT TOP COAT. COORDINATE COLOR AND PATTERNS WITH LANDSCAPE ARCHITECT. SLOPE TO CENTRAL DRAIN AT 2% MAX (SPOT ELEVATIONS ON SP-002). SEE: SHEET SP-301.
  - SPLASH PAD DRAIN GRATE: DALDORADO, PVC, PART #DPAS-12, 1'-0" X 12'-0". COLOR OPTIONS: WHITE, BONE, OR GRAY. COORDINATE COLOR SELECTION WITH LANDSCAPE ARCHITECT. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS. (QTY. 1)
  - STAIRS: DECK TO SPLASH PAD. 4' WIDTH, 12" TREAD, 6" RISERS (2X). SEE: SHEET SP-301.

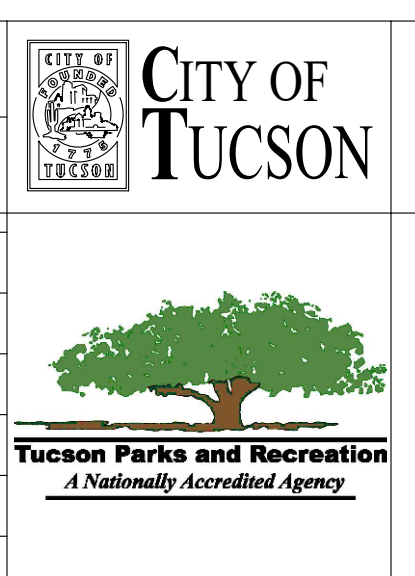
- KEYNOTES (CONT):**
- HANDRAIL: SPECTRUM, CUSTOM, STAINLESS STEEL, 1.5" O.D., .120" WALL THICKNESS, GRADE 304, POWDER COATED, COORDINATE COLOR WITH LANDSCAPE. ESCUTCHEON (QTY. 2), AND BRONZE WEDGE ANCHORS (QTY. 2). SEE: SHEET SP-301, DETAIL 6.
  - SPLASH PAD DECK: SLOPE MAXIMUM 2% AWAY FROM SPLASH PAD (SPOT ELEVATIONS ON SHEET SP-002). SEE LANDSCAPE SHEETS.
  - SPLASH PAD ENCLOSURE FENCE: 8' TALL CHAIN LINK. SEE LANDSCAPE SHEETS.
  - EMERGENCY EXIT GATE: SEE LANDSCAPE SHEETS.
  - SEATWALL/RETAINING WALLS: 16" WIDE WITH CAP. SEE LANDSCAPE SHEETS FOR FINISH. SEE: SHEET SP-301.
  - ARTIFICIAL TURF/BENCHES: SEE LANDSCAPE SHEETS.
  - EQUIPMENT YARD ENCLOSURE WALL: 8' HIGH MASONRY WALL. SECURITY COVER ON TOP. SEE ARCHITECTURAL AND STRUCTURAL SHEETS.
  - EQUIPMENT YARD GATE: SEE ARCHITECTURAL SHEETS.
  - SPLASH PAD SUPPLY TANK: SEE: SHEETS SP-301 AND SP-901.
  - SLOPED WALKWAY: SPOT ELEVATIONS ON SHEET SP-002.
  - REMOVE EXISTING CHANNEL DRAIN AND REPLACE WITH WITH NDS DURASLOPE CHANNEL DRAIN SYSTEM WITH ADA GRATING. SEE SHEET SP-301, DETAIL 5.
  - FENCE: 4' TALL WROUGHT IRON PICKET, SEPARATES SPLASH PAD & POOL. SEE LANDSCAPE SHEETS.
  - RETAINING WALL: 8" WIDE, UNDER METAL PICKET FENCE. SEE: SHEET SP-301.
  - STAFF ACCESS GATE AND STEPS: SEE LANDSCAPE SHEETS.



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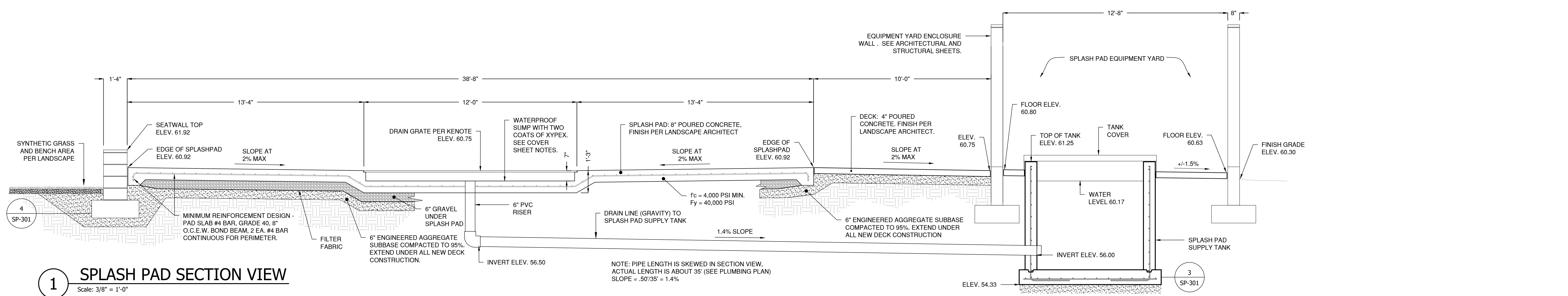


CITY OF TUCSON PARKS AND RECREATION			CASE#
FORT LOWELL PARK PARK IMPROVEMENTS SPLASH PAD LAYOUT & KEYNOTES			SP-101 of SP-901
APPROVALS	SIGNATORY	DATE	APPROVED _____ 20__
			_____ OF
			_____ DIRECTOR
			REF. _____ SCALE: _____
DRWN. BY TJ 2021	DSGN. BY TJ 2021	CHKD. BY KP 2021	PLAN NO. _____

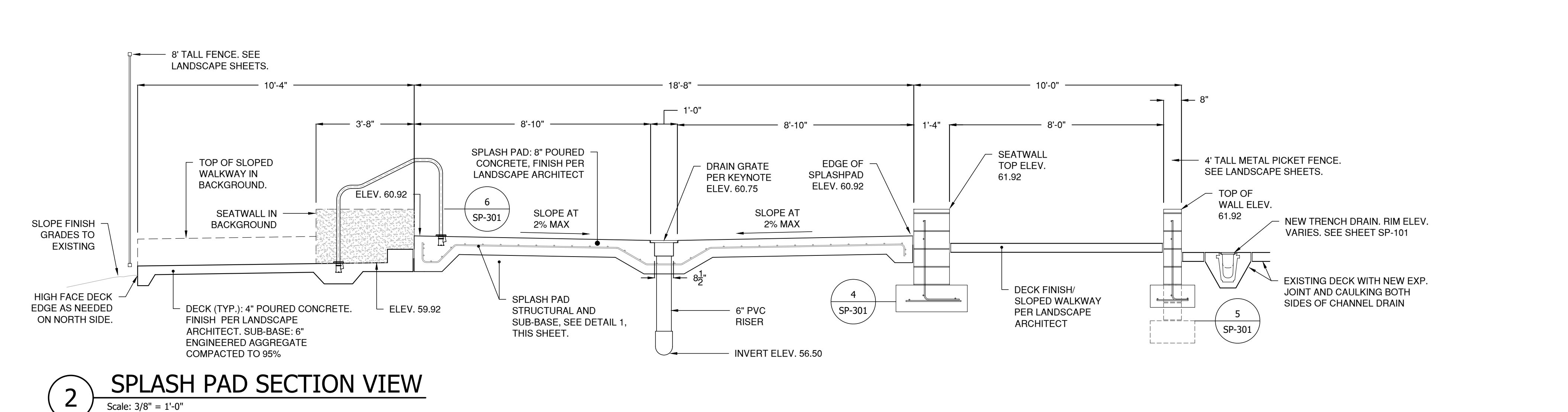
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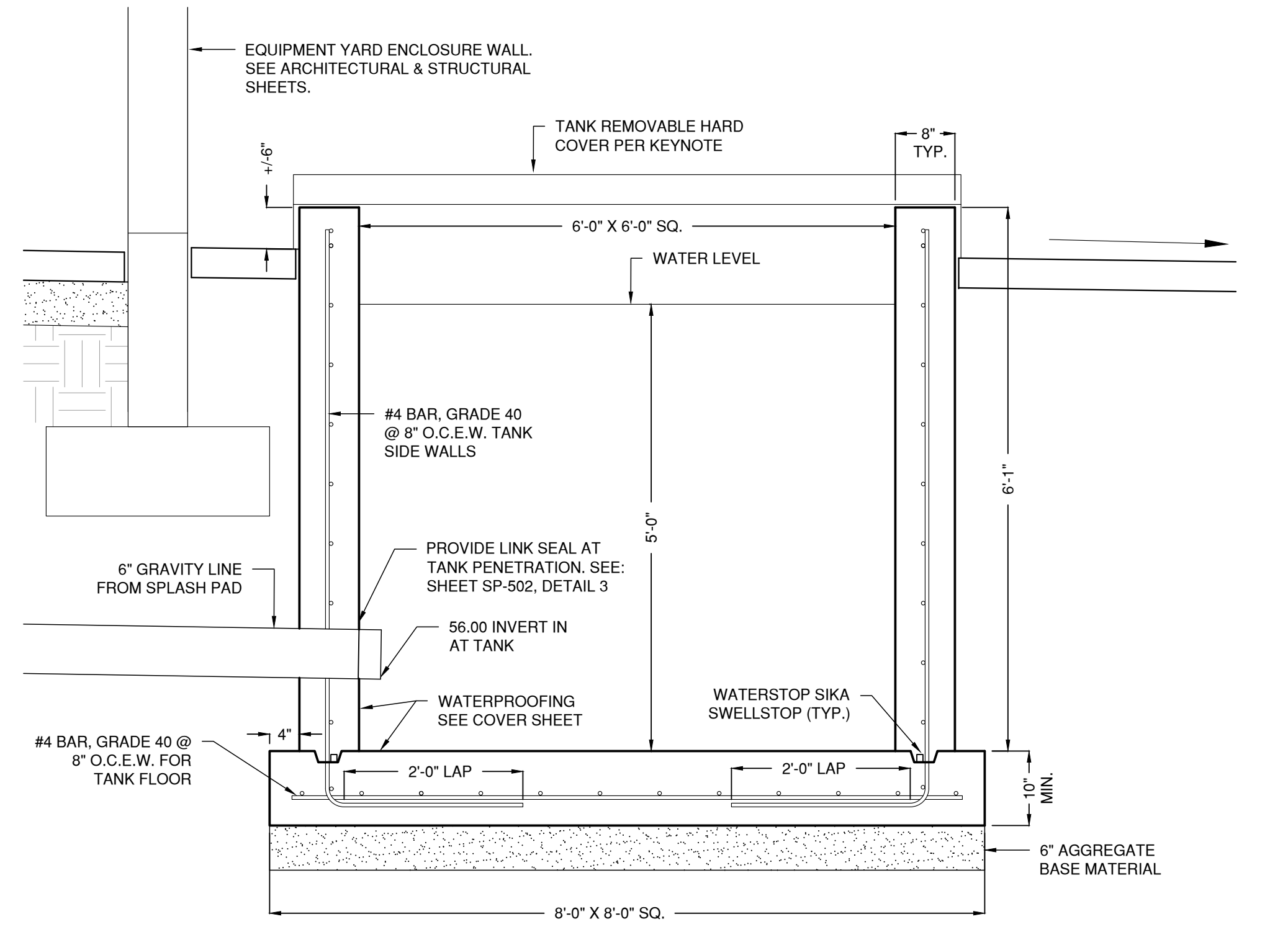
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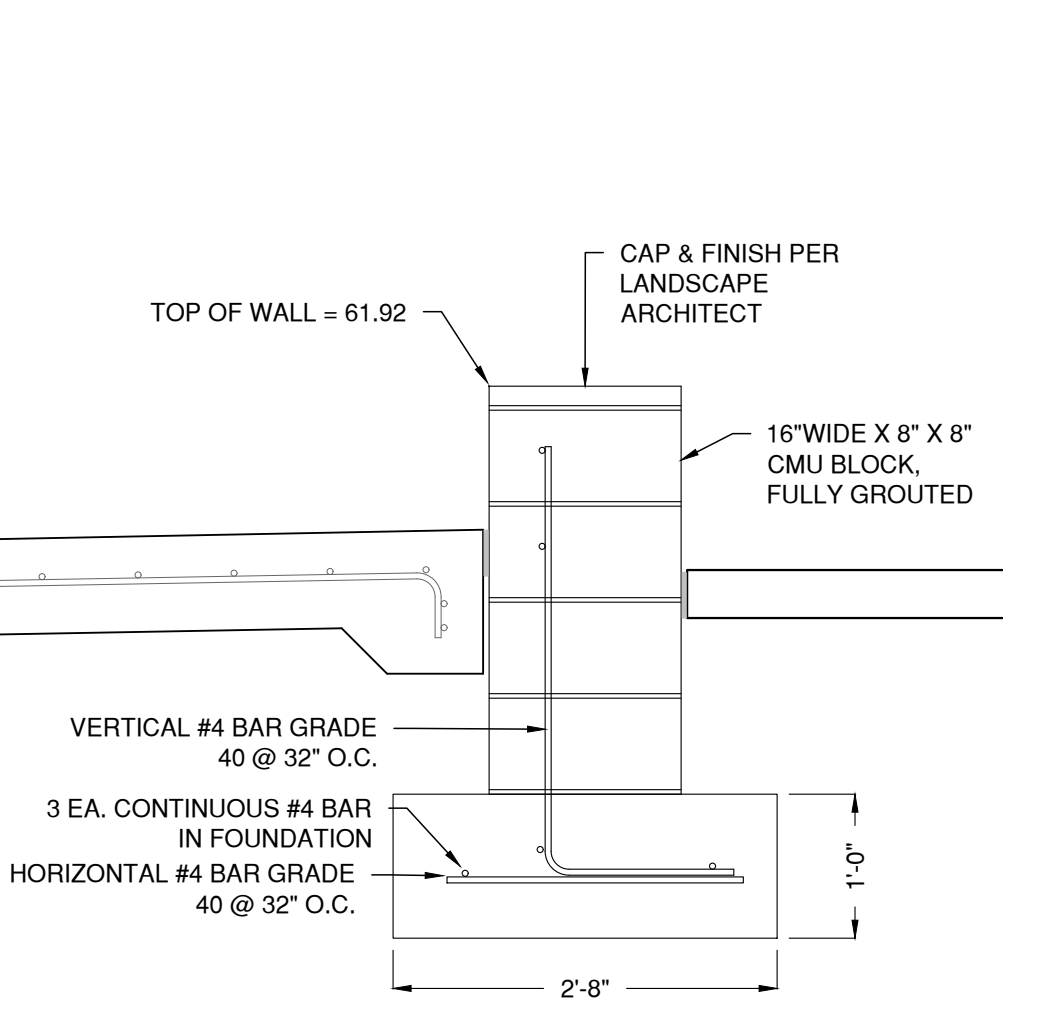
**1 SPLASH PAD SECTION VIEW**  
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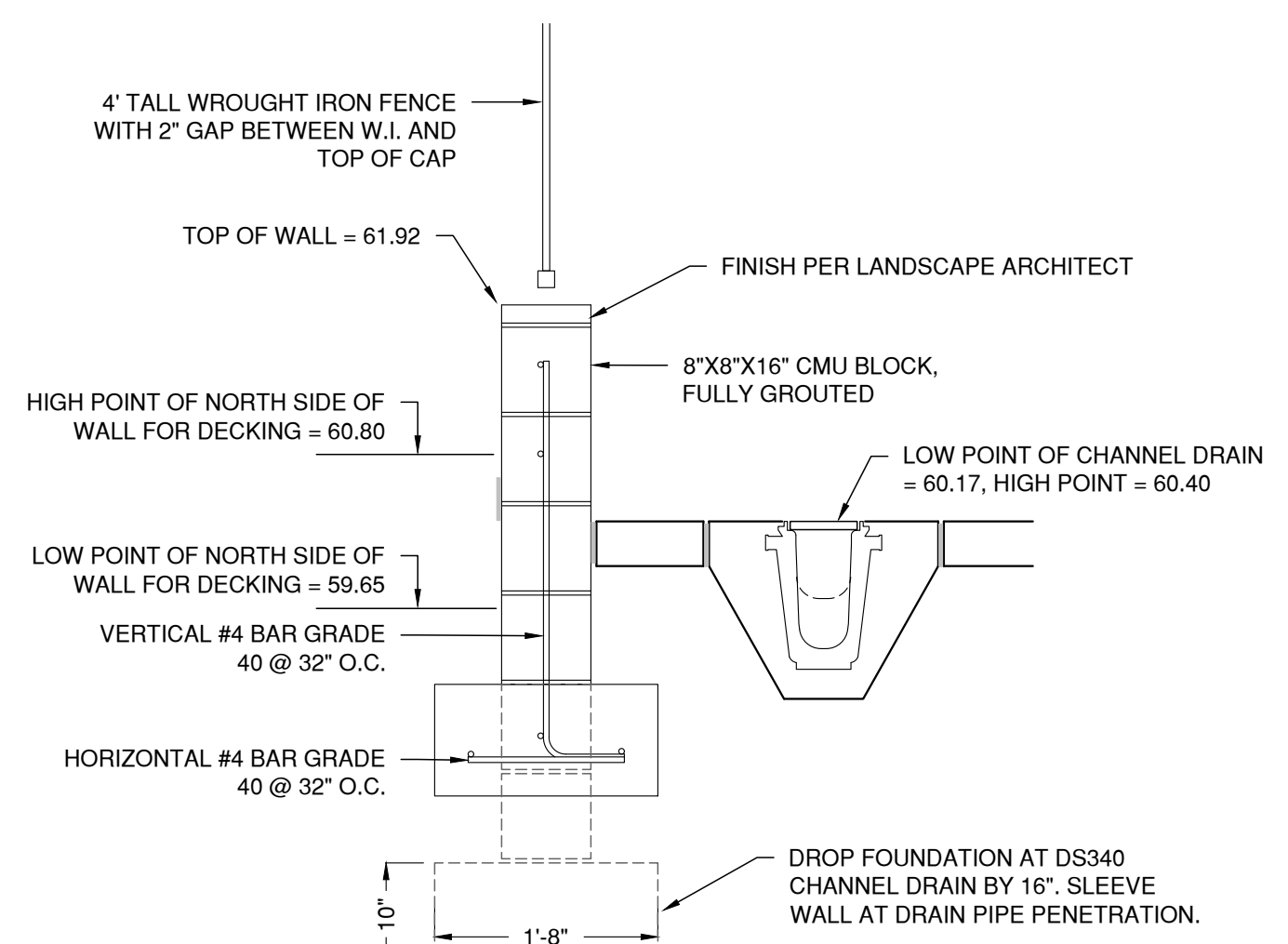
**2 SPLASH PAD SECTION VIEW**  
Scale: 3/8" = 1'-0"



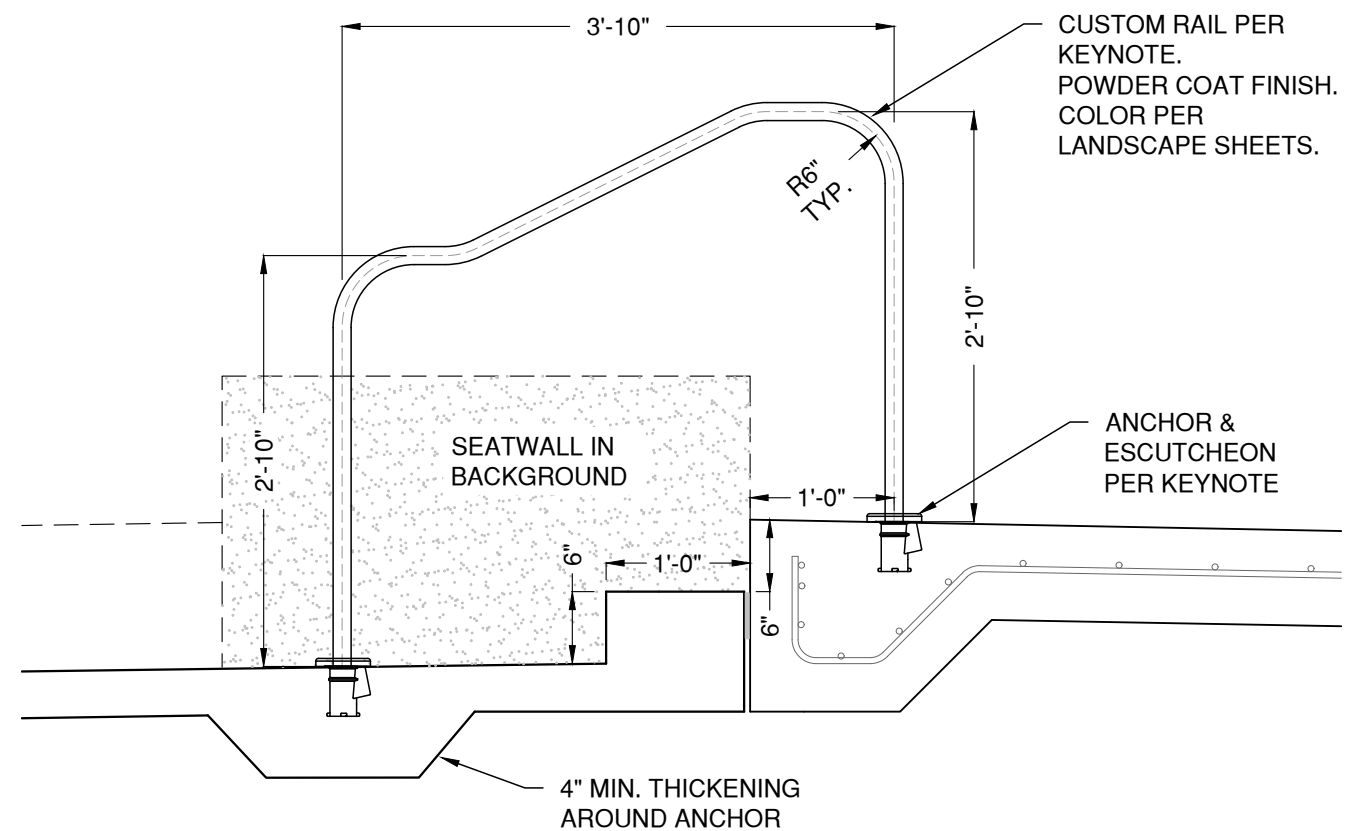
**3 SPLASH PAD SUPPLY TANK**  
Scale: 3/4" = 1'-0"



**4 SEAT WALL**  
Scale: 3/4" = 1'-0"



**5 RETAINING WALL**  
Scale: 3/4" = 1'-0"

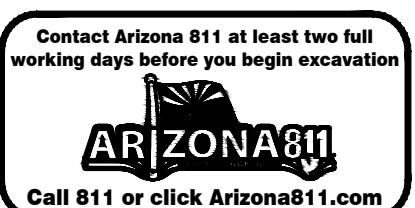


**6 STEPS AND HANDRAIL**  
Scale: 3/4" = 1'-0"

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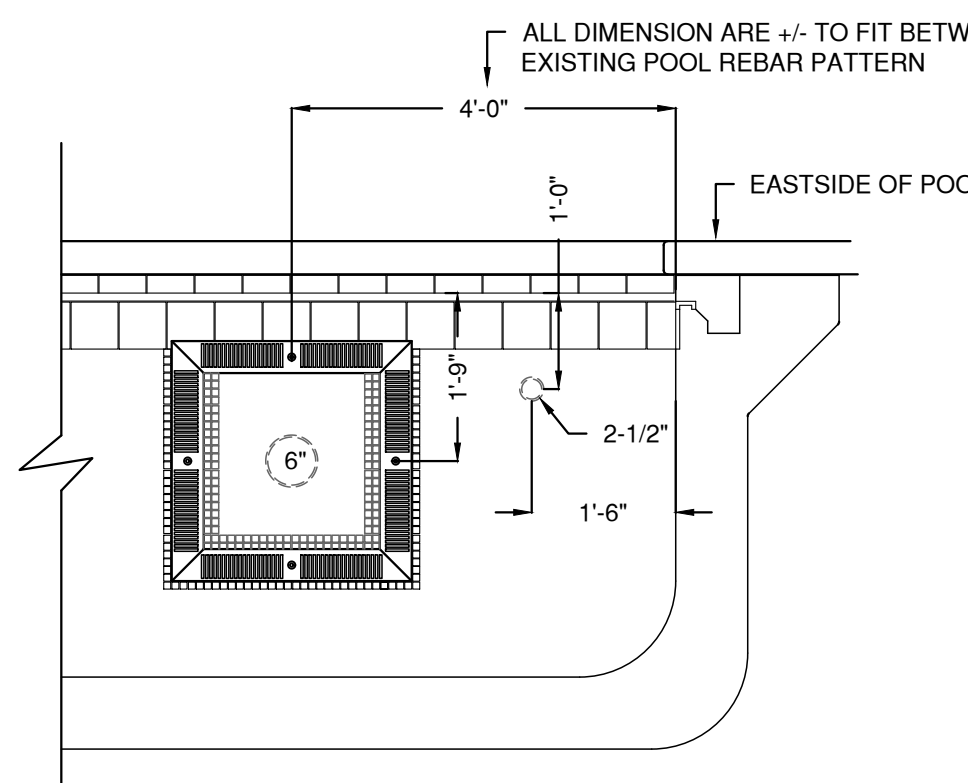
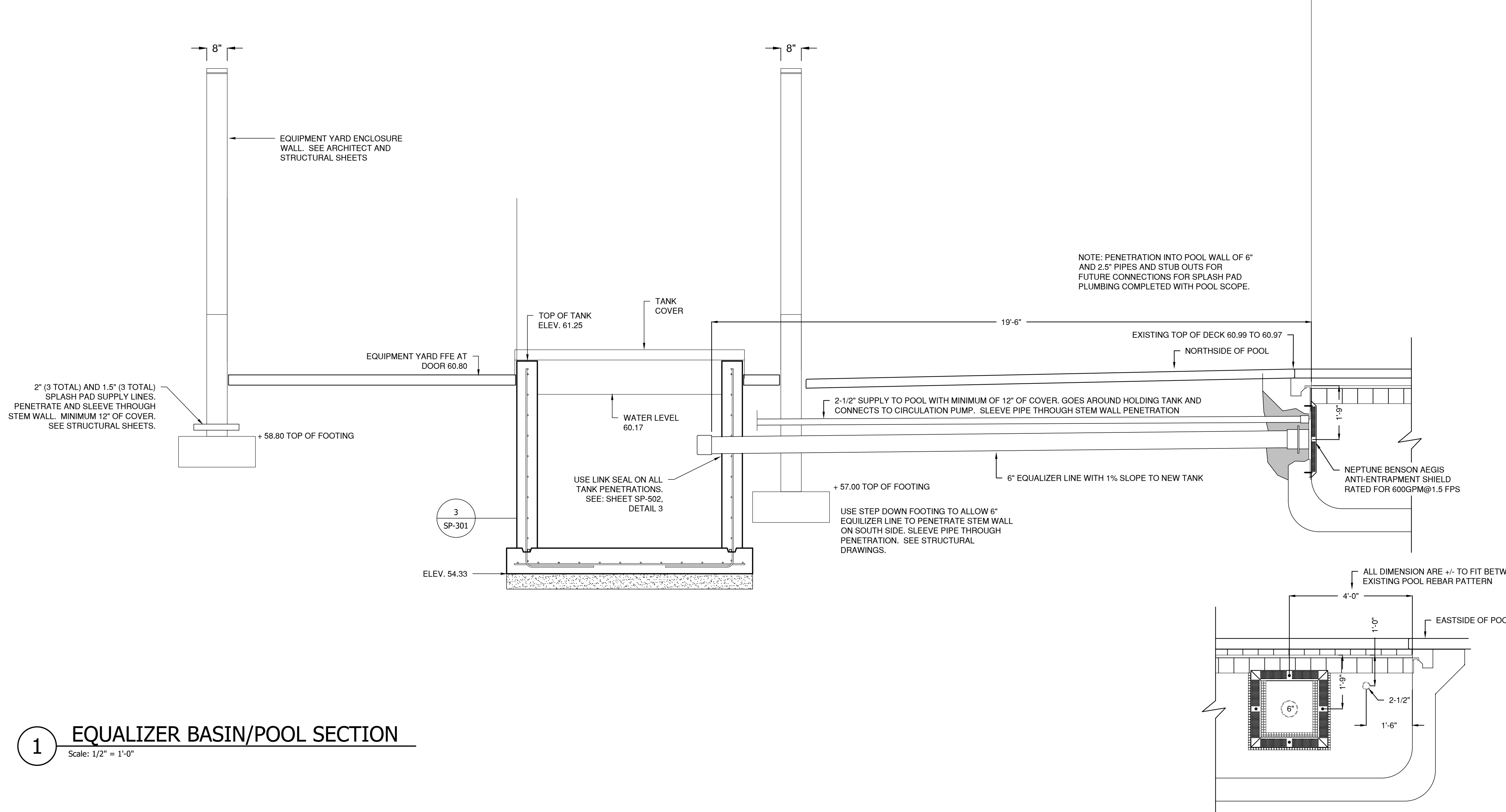
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APPROVALS	SIGNATORY	DATE	APPROVED	27
			APPROVED _____ 20__	OF
			____ DIRECTOR	35
REF. _____ SCALE: _____				
DRWN. BY TJ 2021	DSGN. BY TJ 2021	CHKD. BY KP 2021	PLAN NO. _____	



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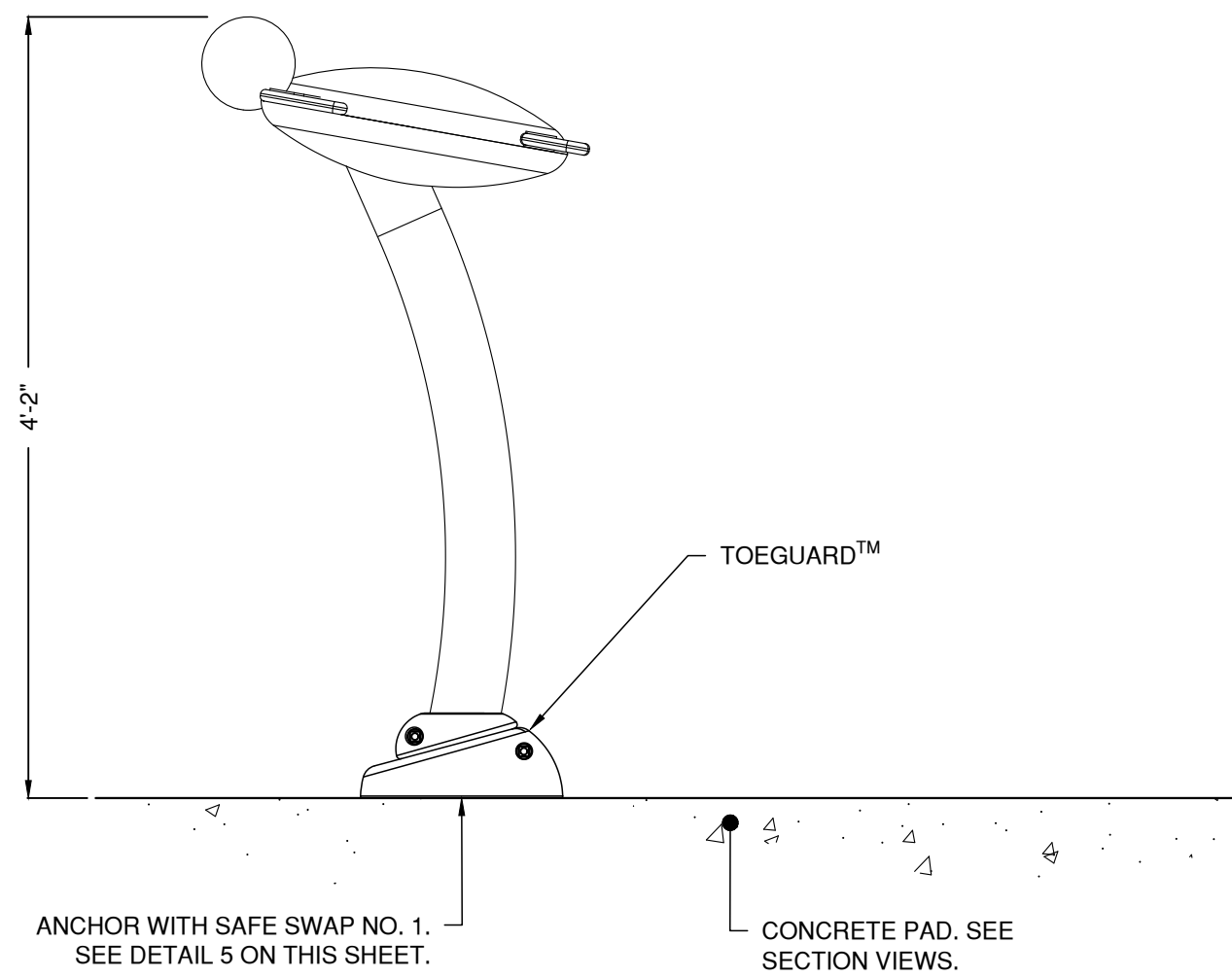
**1 EQUALIZER BASIN/POOL SECTION**  
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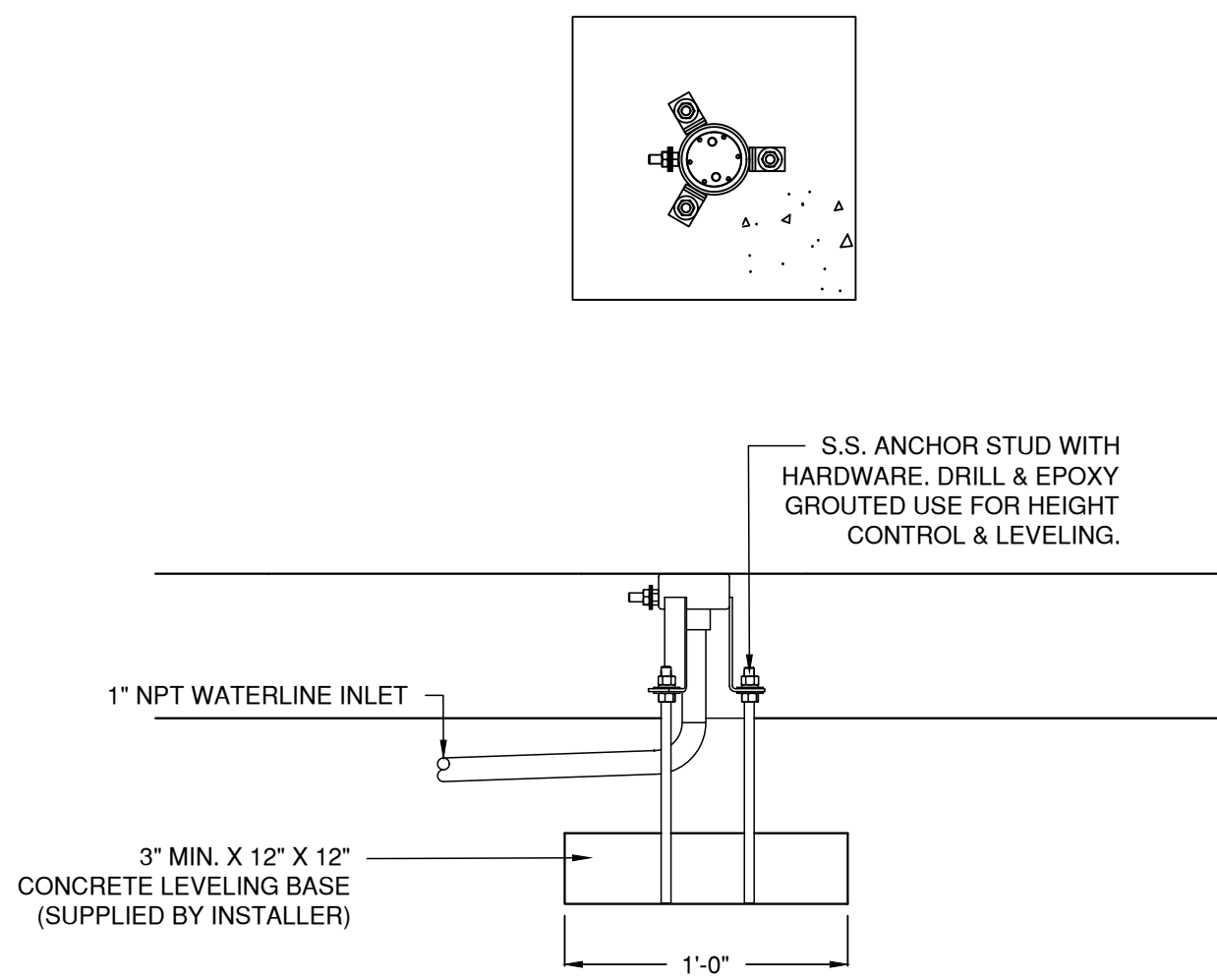
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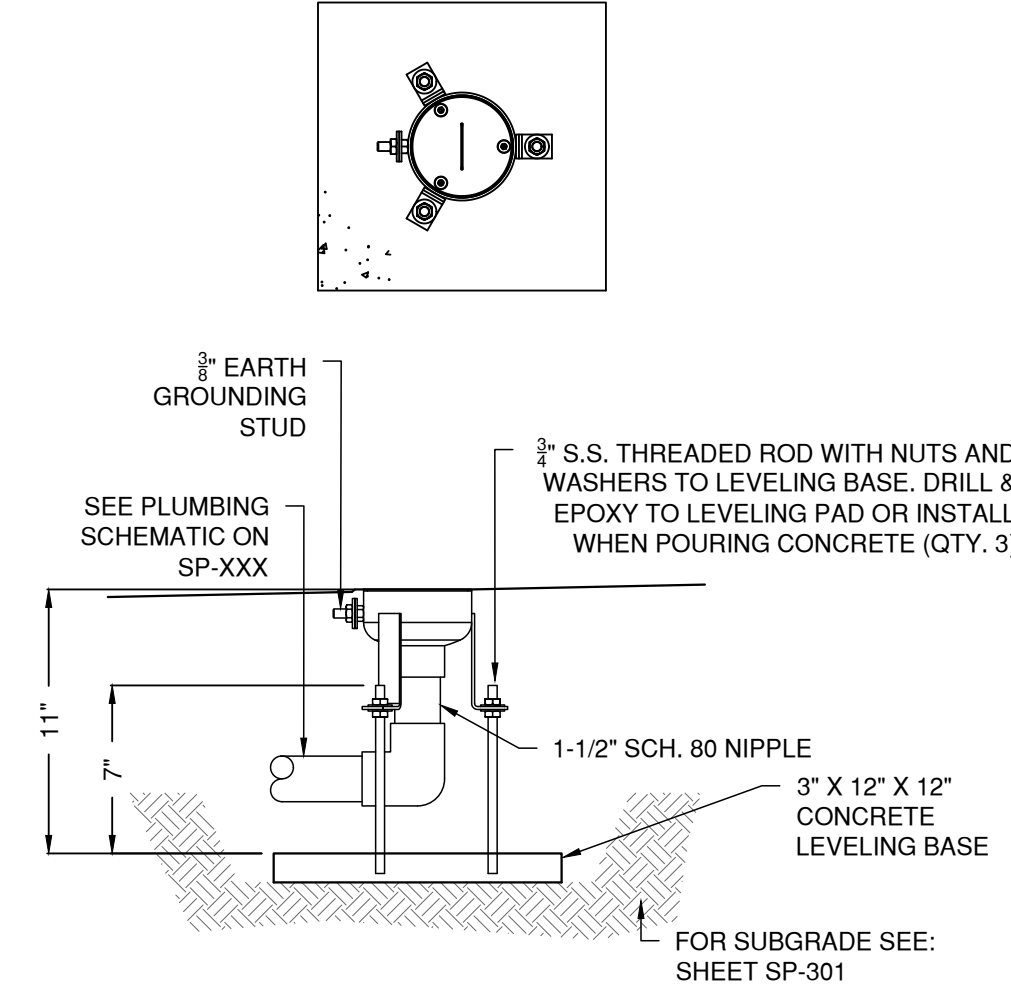
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FORT LOWELL PARK PARK IMPROVEMENTS SPLASH PAD SECTIONS				SP-302 of SP-901
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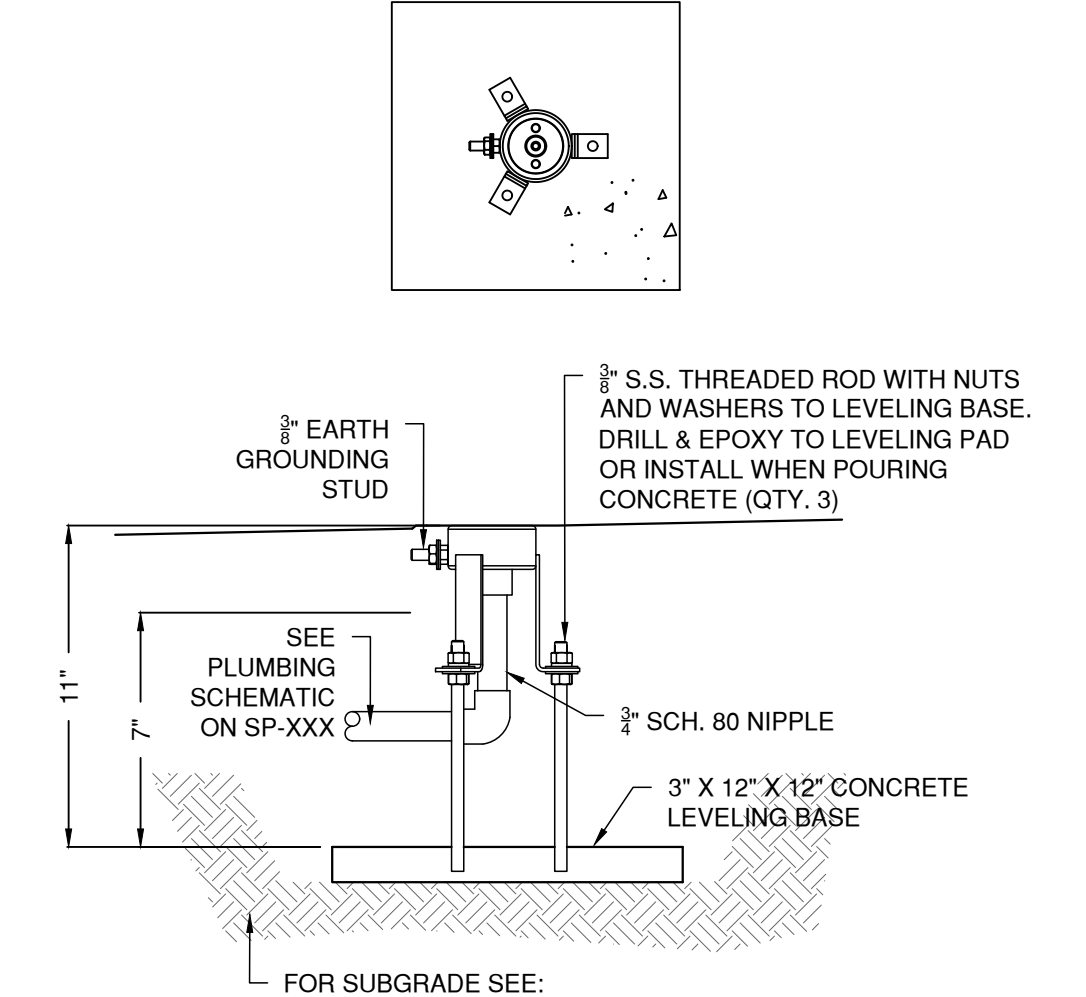
**1 TURTLE NO.3**  
Scale: 1" = 1'-0"



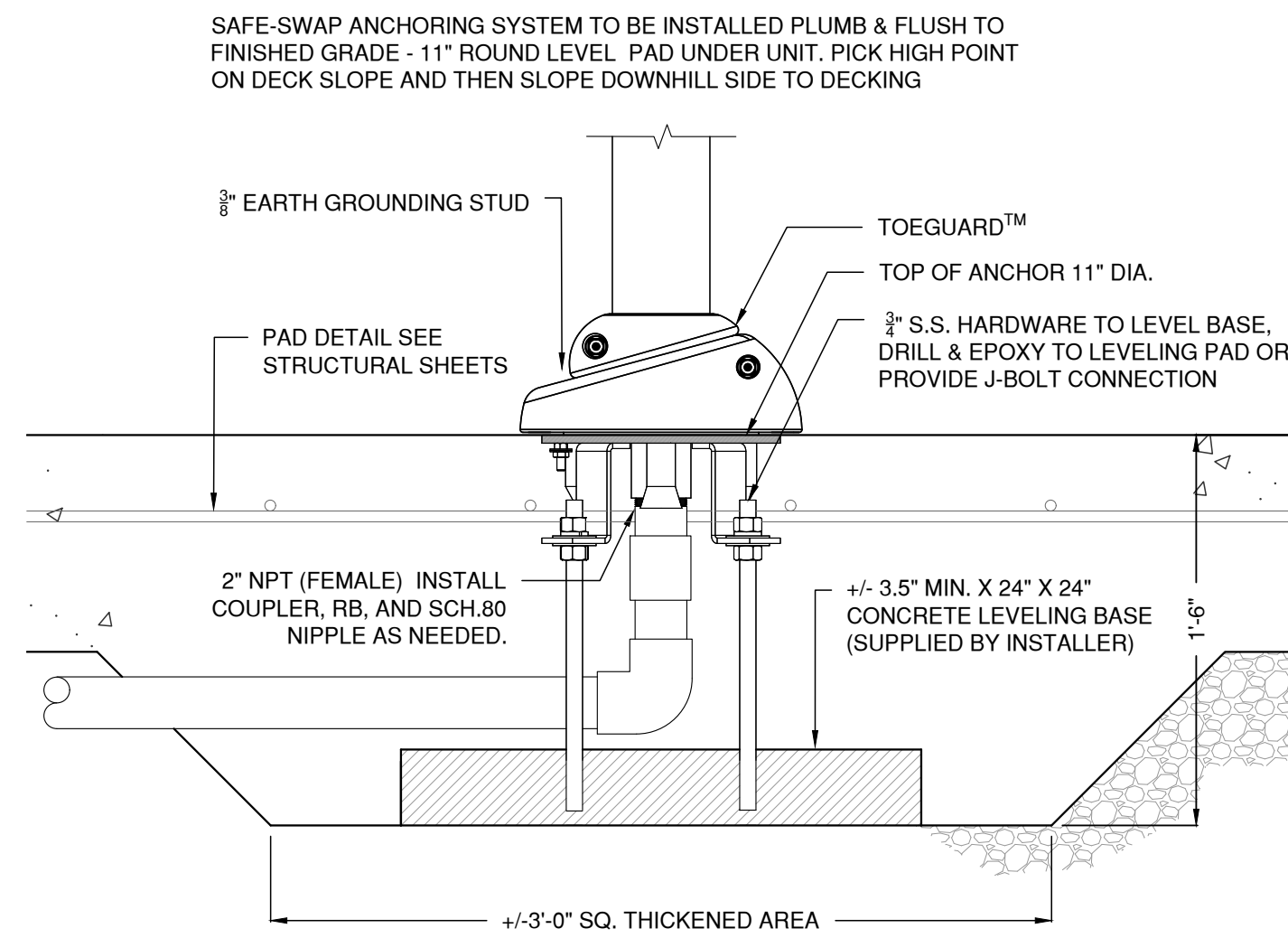
**2 GEYSER**  
Scale: 1-1/2" = 1'-0"



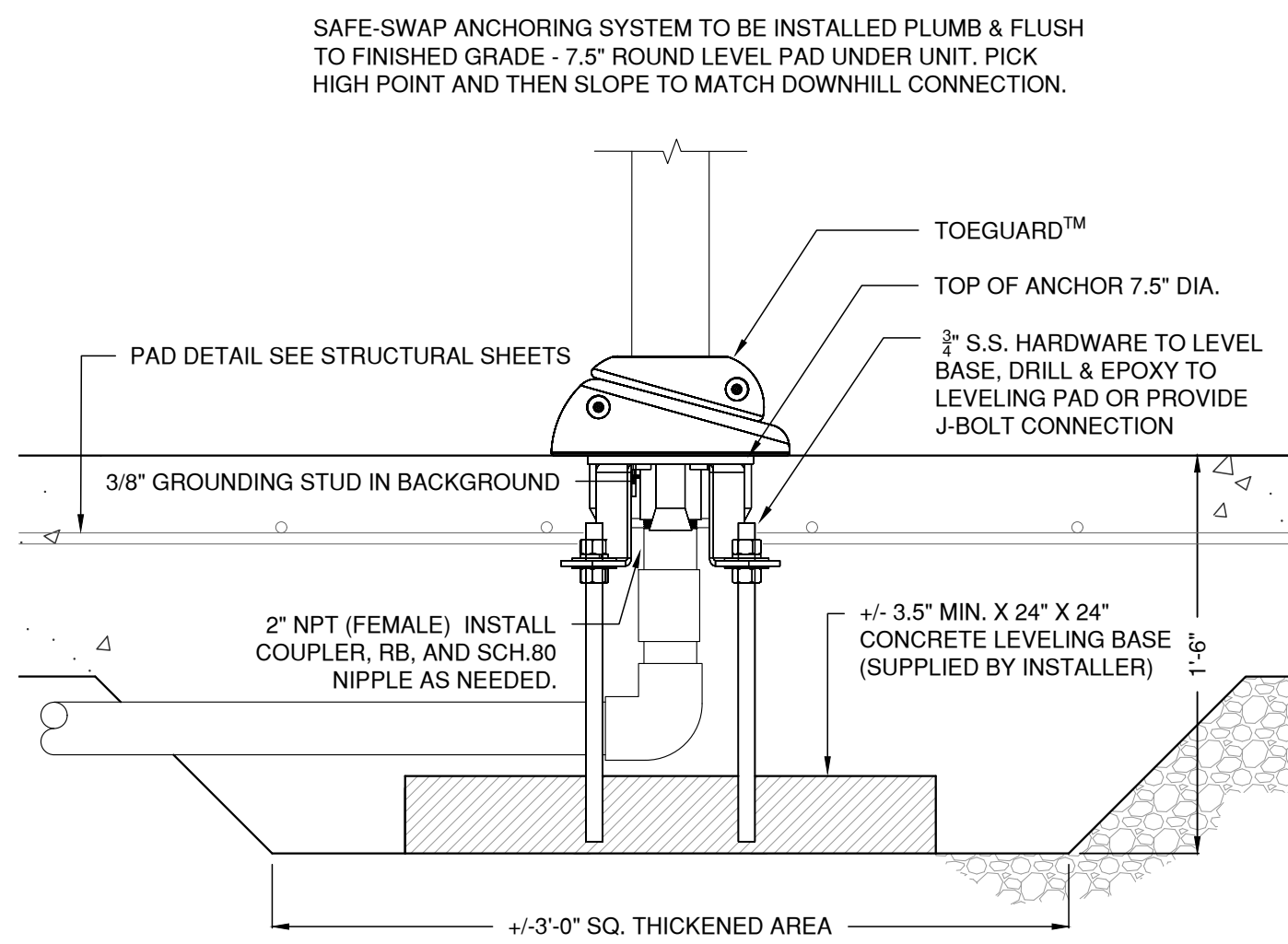
**3 JET STREAM NO.2**  
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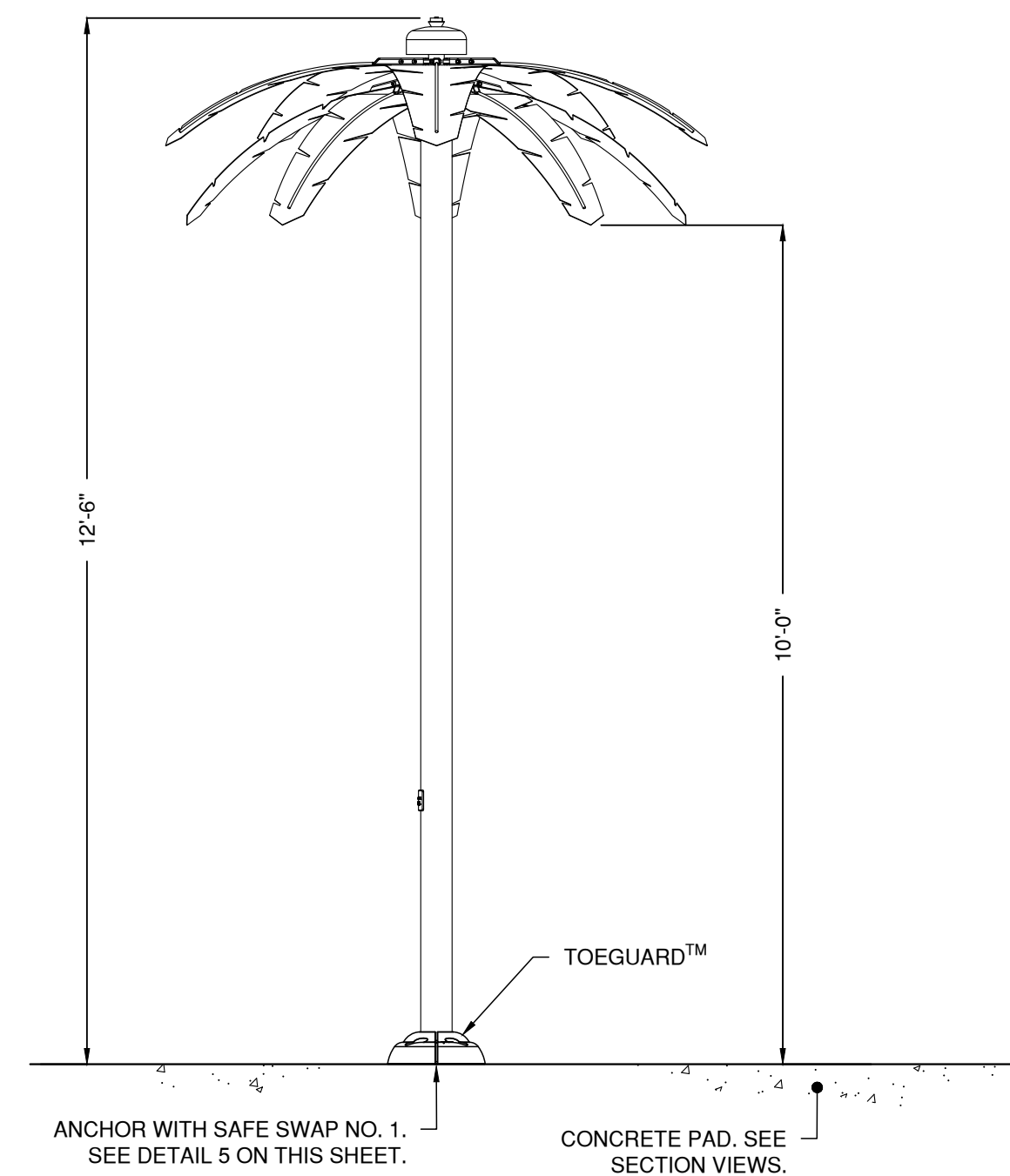
**4 DIRECTIONAL JET NO.1**  
Scale: 1-1/2" = 1'-0"



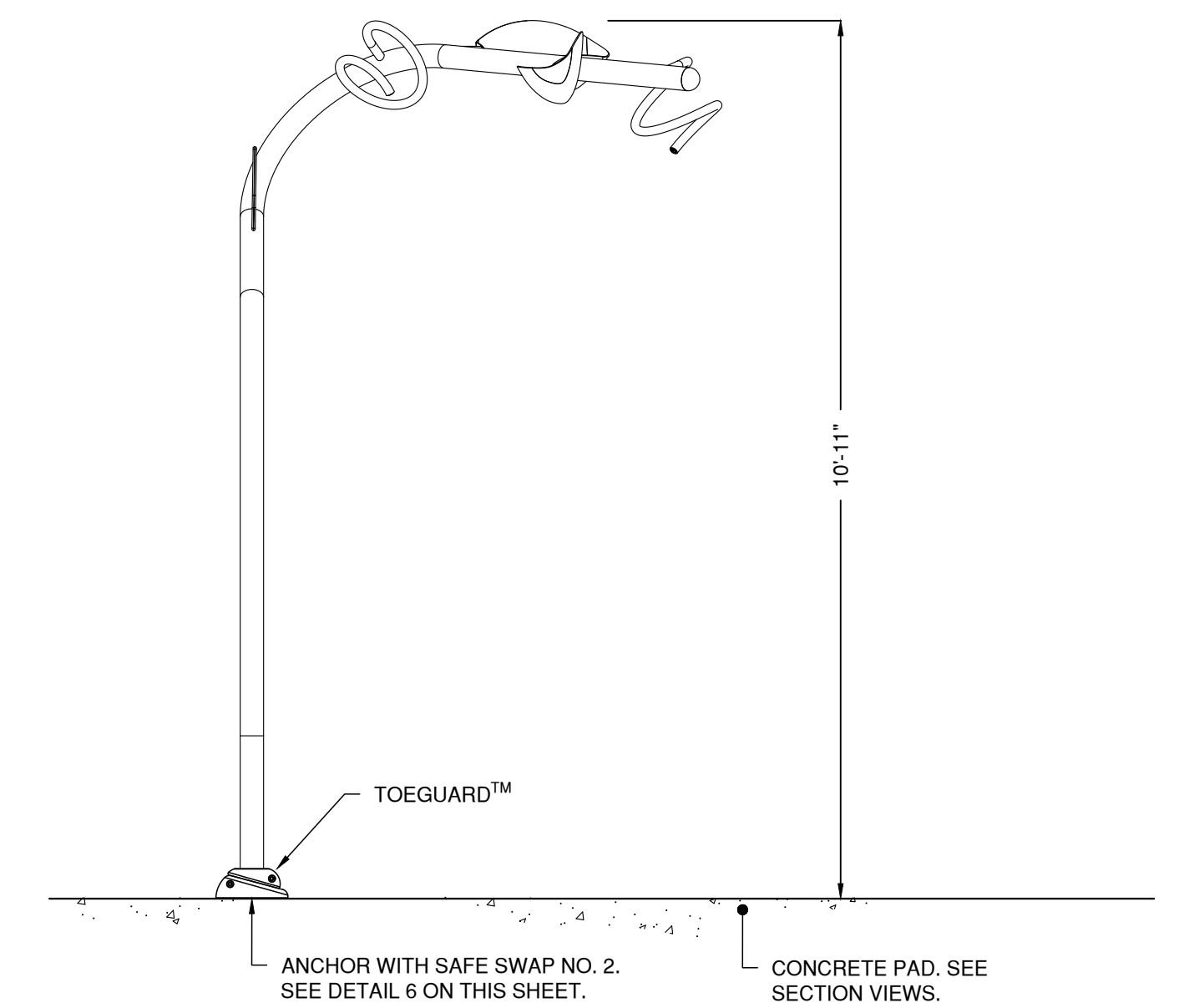
**5 SAFE SWAP No1 (LARGE)**  
Scale: 1-1/2" = 1'-0"



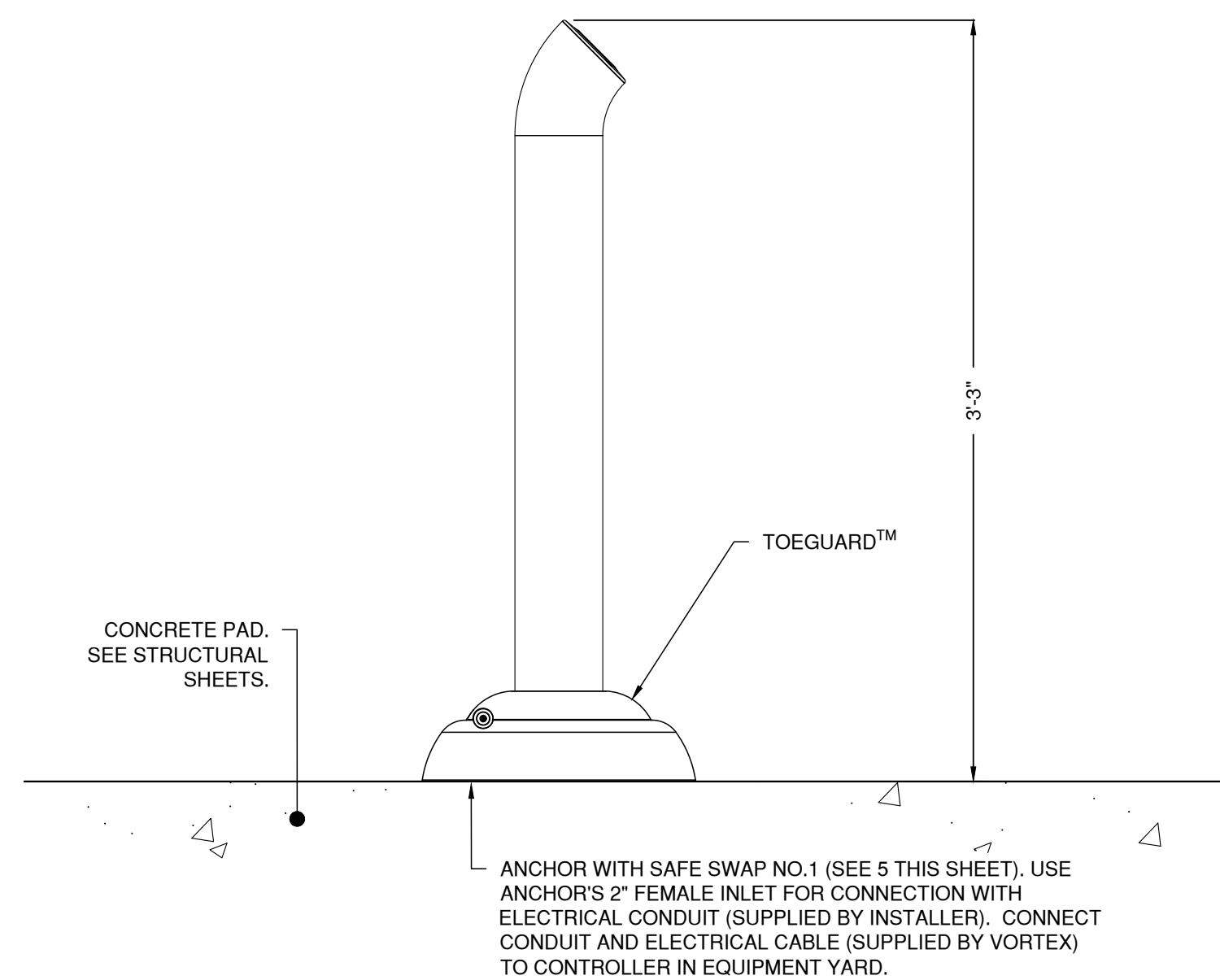
**6 SAFE SWAP No2 (MEDIUM)**  
Scale: 1-1/2" = 1'-0"



**7 PALM TREE**  
Scale: 1/2" = 1'-0"



**8 VINE**  
Scale: 1/2" = 1'-0"



**9 BOLLARD ACTIVATOR NO.3**  
Scale: 1-1/2" = 1'-0"

P: \\2020 Commercial\VF Lowell Park\CAD Drawings\VF-Lowell-Splash-Pad-Details.dwg SP-501 Last Saved: Thu, 15 Jul 2021 10:27:25 PM Plotted: Thursday, July 15, 2021 4:27:25 PM



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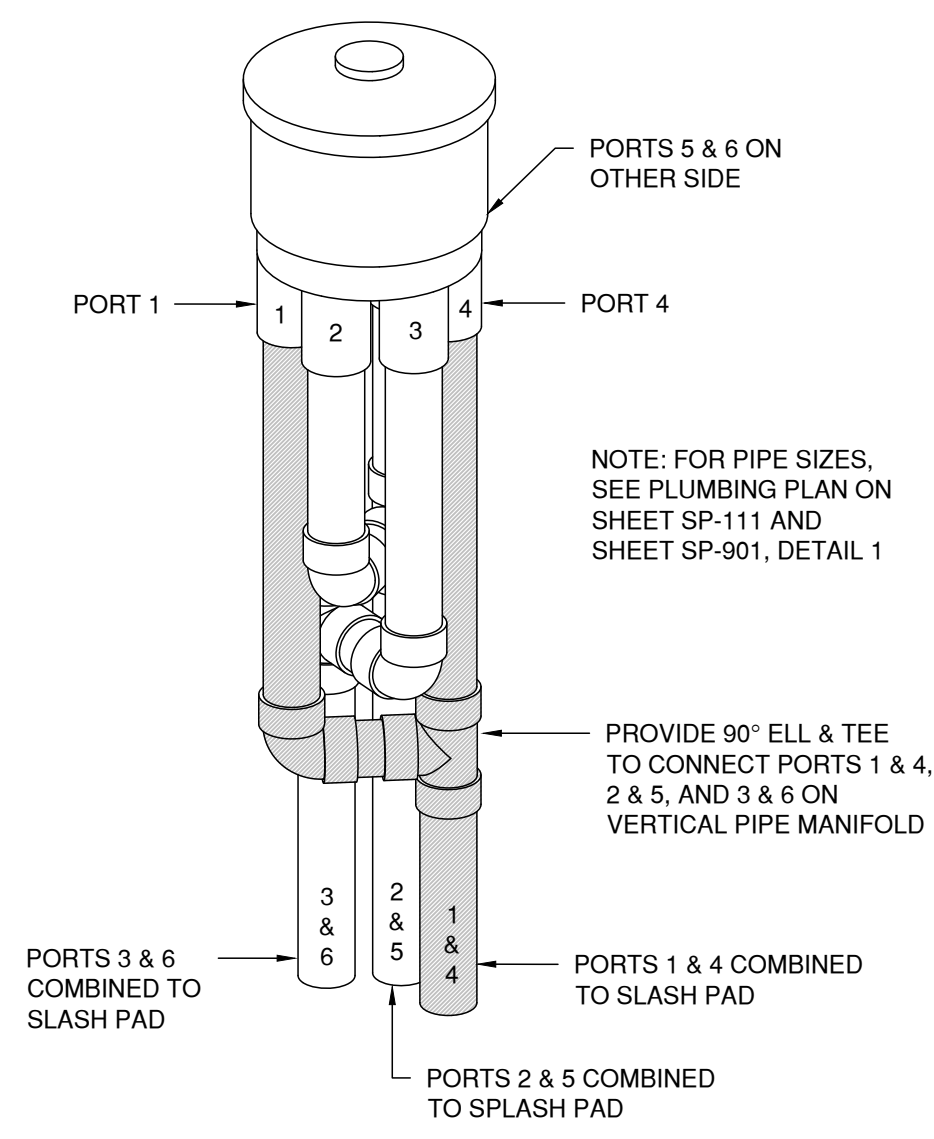
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**REGISTERED LANDSCAPE ARCHITECT**

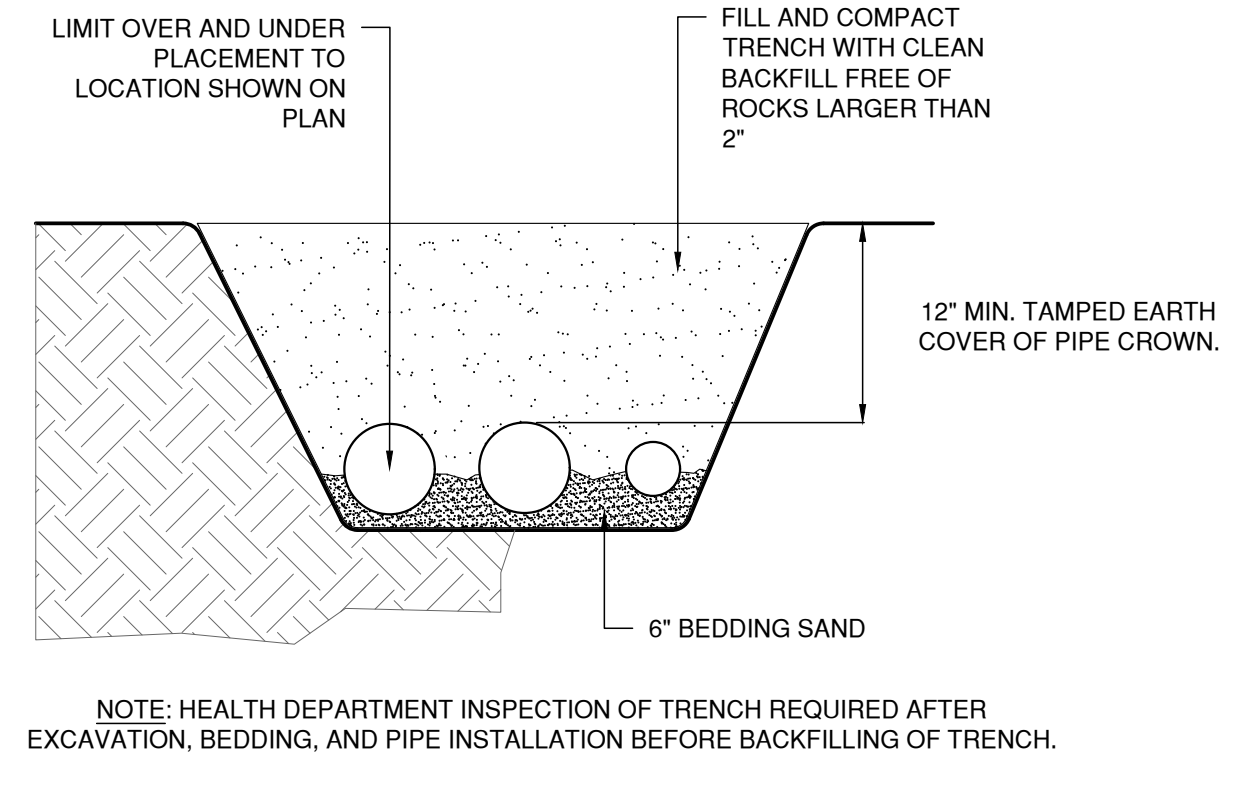
34189  
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7-15-21  
ARIZONA U.S.A.

EXP. 9-30-23

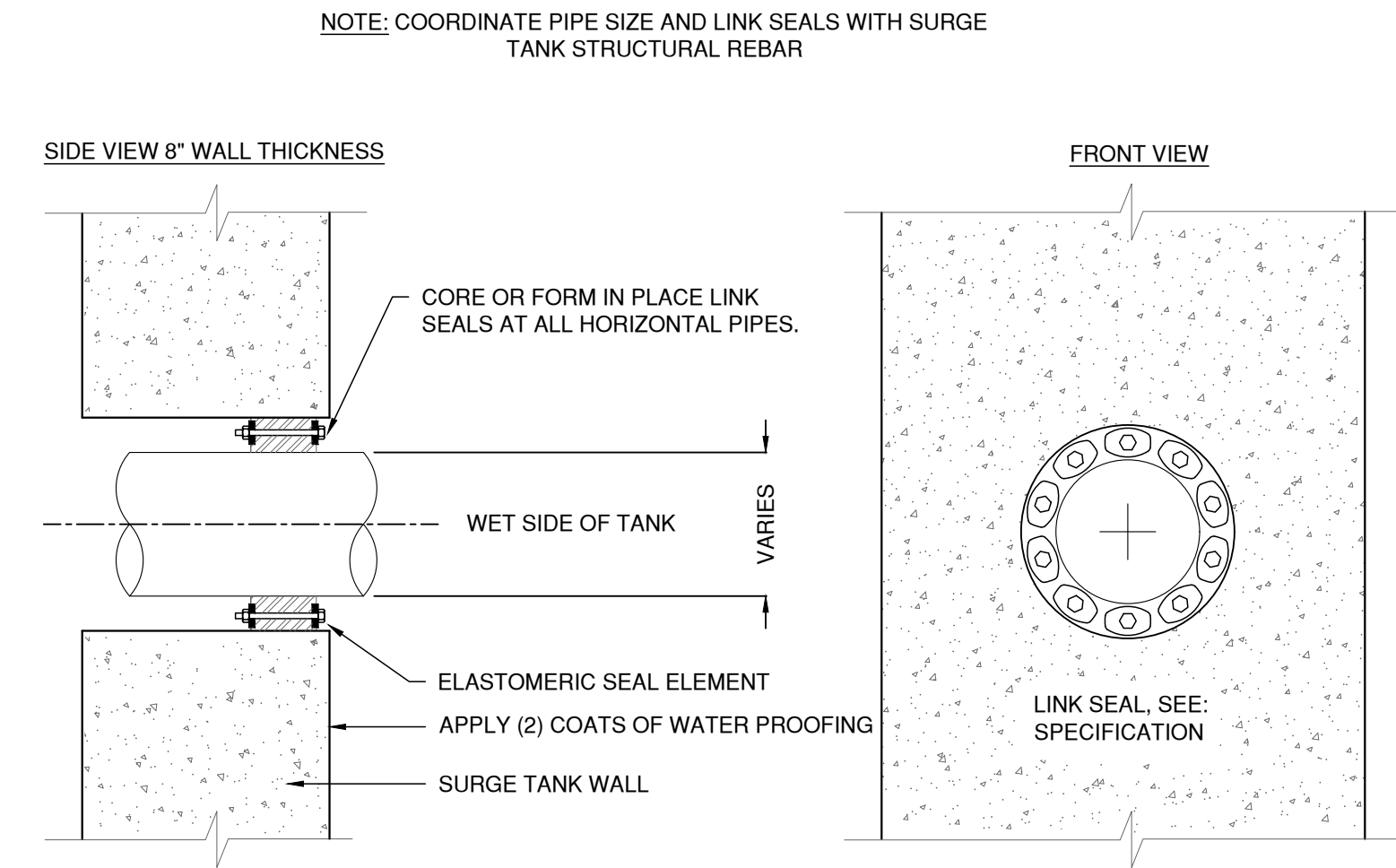
CITY OF TUCSON PARKS AND RECREATION				CASE#
FORT LOWELL PARK PARK IMPROVEMENTS SPLASH PAD DETAILS				SP-501 of SP-901
APPROVALS	SIGNATORY	DATE	APPROVED	29
			APPROVED _____ 20__	OF
			--- DIRECTOR	35
			REF. _____	SCALE: _____
DRWN. BY TJ 2021	DSGN. BY TJ 2021	CHKD. BY KP 2021	PLAN NO. _____	



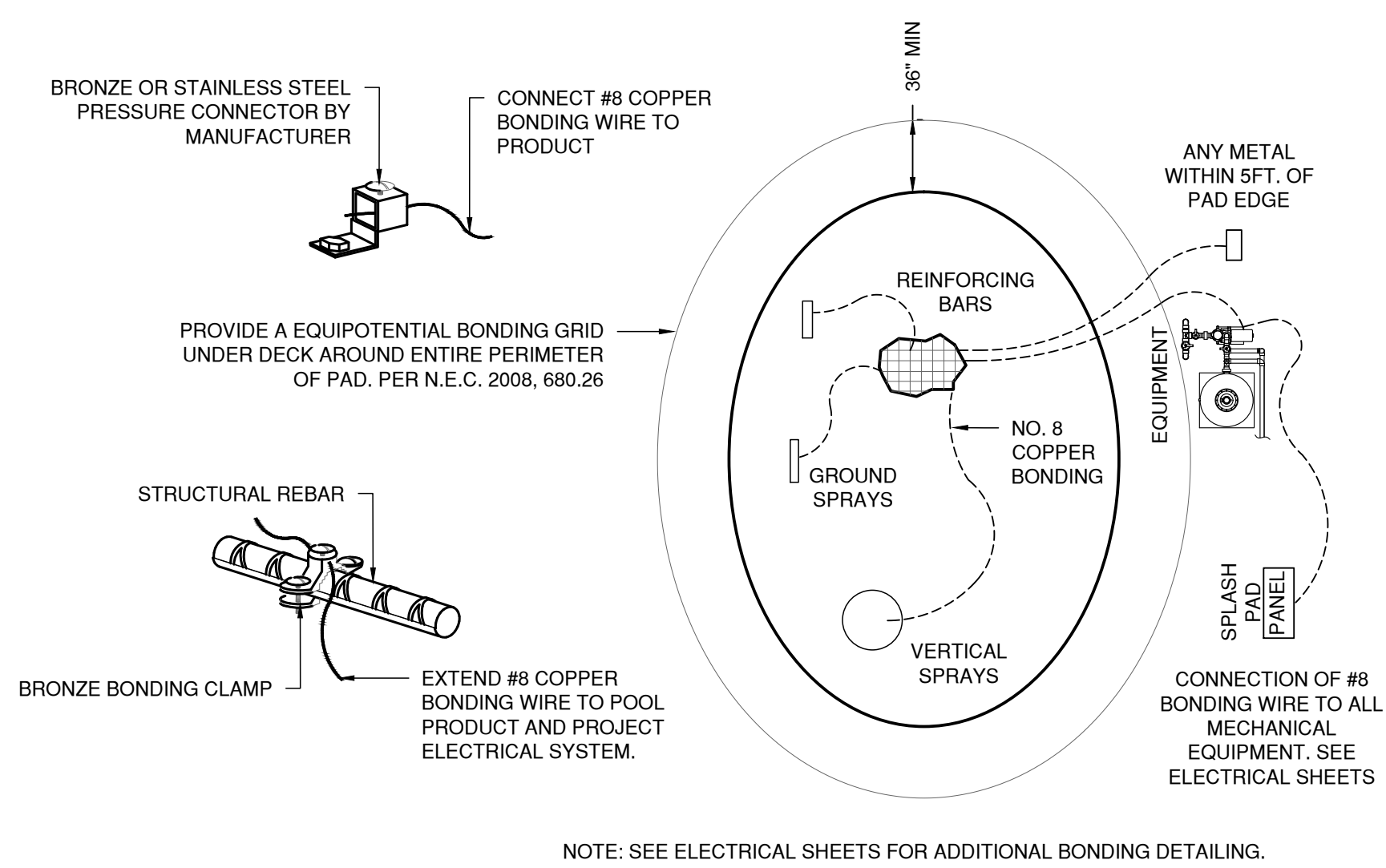
**1 A & A WATER VALVE SCHEMATIC**  
Scale: NTS



**2 PIPE PLACEMENT SCHEMATIC**  
Scale: NTS

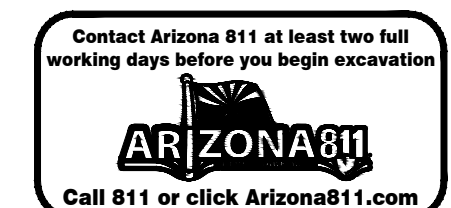


**3 LINK SEAL SCHEMATIC**  
Scale: NTS



**4 BONDING SCHEMATIC**  
Scale: NTS

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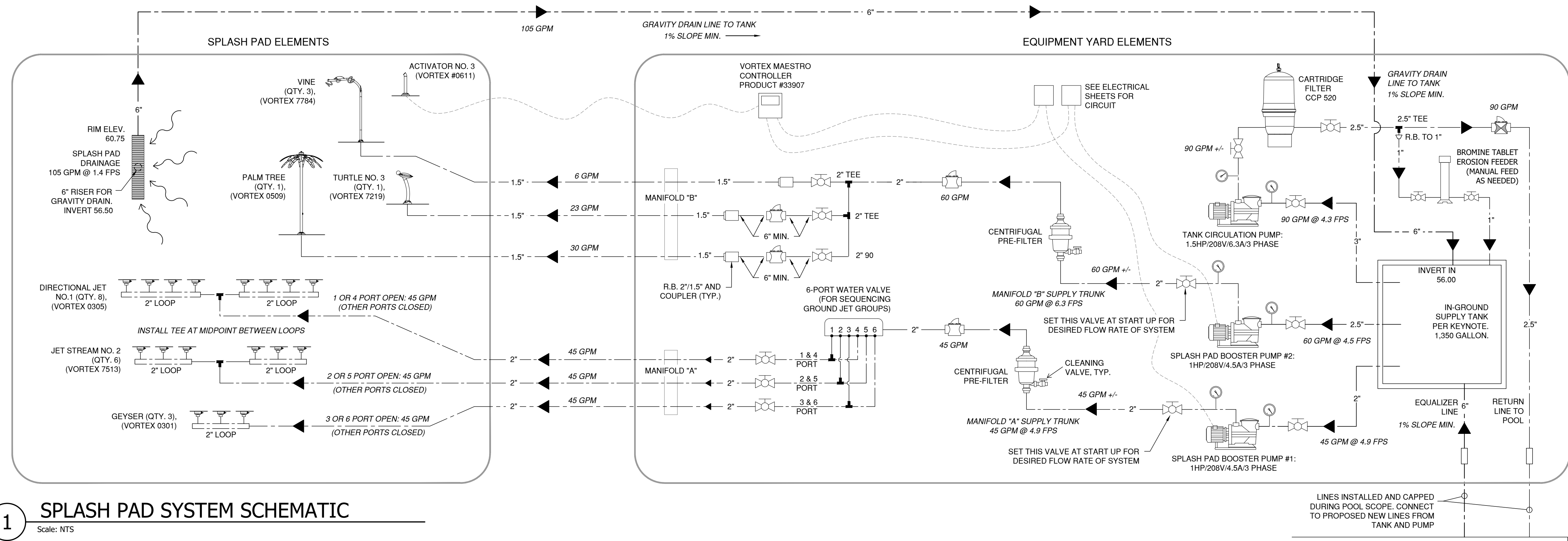


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<b>FORT LOWELL PARK</b> PARK IMPROVEMENTS <b>SPLASH PAD DETAILS</b>				SP-502 of SP-901
APPROVALS	SIGNATORY	DATE	APPROVED _____ 20__	30
			----- DIRECTOR	OF 35
			REF. _____	SCALE: _____
				PLAN NO. _____

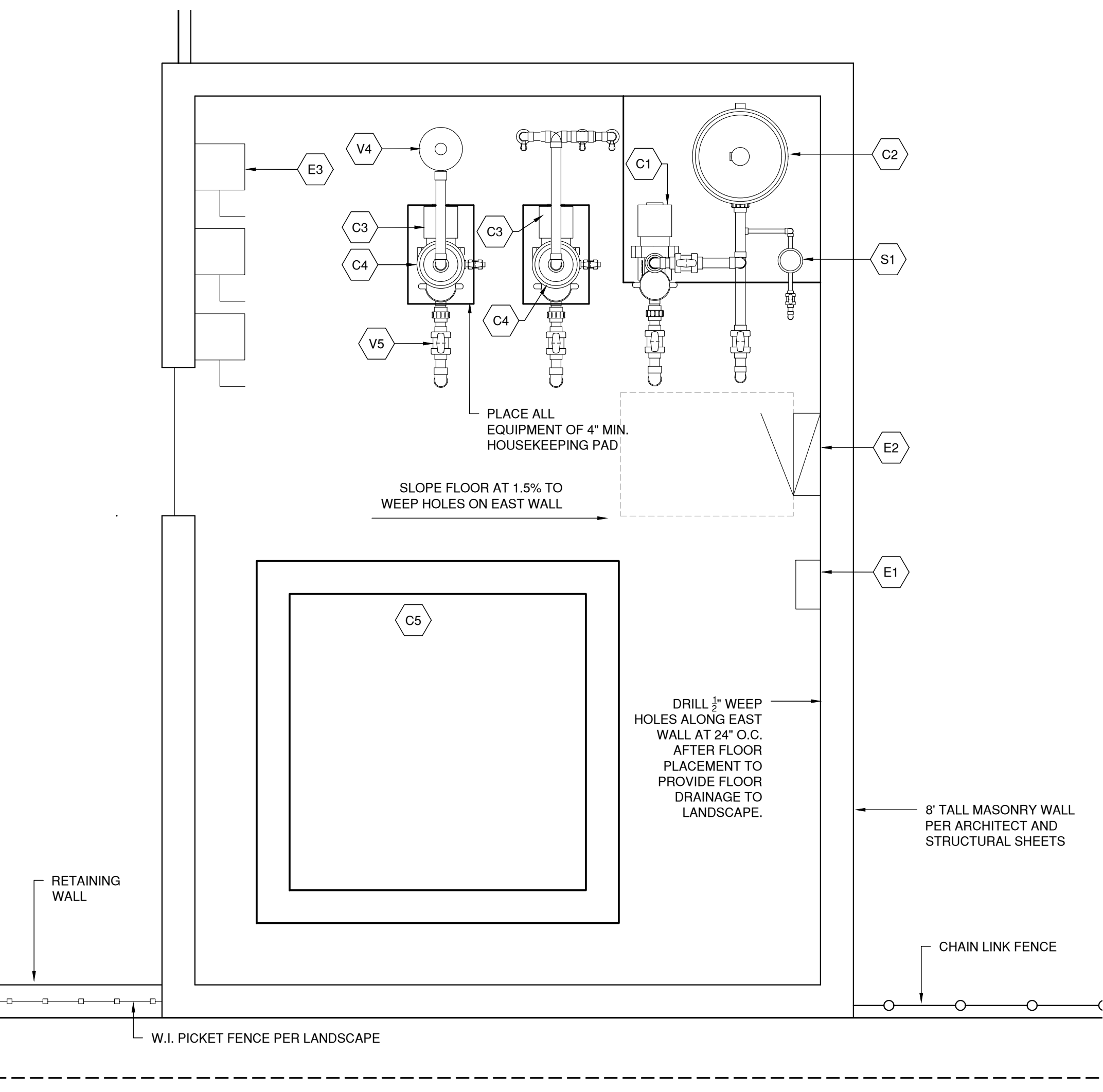
DRWN. BY TJ 2021 DSGN. BY TJ 2021 CHKD. BY KP 2021 EXP. 9-30-23



**SYMBOL KEY**

	TRUE UNION BALL VALVE
	FLOVIS FLOW METER WITHOUT CHECK VALVE (2" MODEL: FV-C-S)
	FLOVIS FLOW METER WITH CHECK VALVE
	VACUUM PRESSURE GAUGE

**1 SPLASH PAD SYSTEM SCHEMATIC**  
Scale: NTS



- C CIRCULATION EQUIPMENT**
- C1. CIRCULATION PUMP (P1) - TANK: PENTAIR POOL PRODUCTS, WHISPERFLO WFK-6, PART #011642, 1.5 HP, 208V, 6.3 AMPS, 3 PH. (QTY. 1)
  - C2. CIRCULATION FILTER: PENTAIR, MODEL: CCP520, CARTRIDGE FILTER, 520 SQFT, PART #160332. (QTY. 1)
  - C3. BOOSTER PUMP (P2 & P3) - SPLASH PAD FEATURES: PENTAIR POOL PRODUCTS, WHISPERFLO WFK-4, PART #011641, 1 HP, 208V, 4.5 AMPS, 3 PH. (QTY. 2)
  - C4. BOOSTER FILTER: WATERCO, MODEL: MULTI CYCLONE 16 PRO, PRODUCT #200385. (QTY. 2)
  - C5. SPLASH PAD IN-GROUND TANK: POURED-IN-PLACE CONCRETE, 6'-0" x 6'-0" x 6'-1" DEEP (INSIDE DIMENSIONS), WALLS ARE 8" WIDE. HOLDS 1,350 GALLONS AT OPERATIONAL WATER DEPTH OF 5'-0". WATERPROOFING: APPLY TWO COATS OF XYPEX CONCENTRATE TO ALL INNER SURFACES; WATERSTOPS AND STEEL REINFORCEMENT PER SECTION VIEWS. SAFETY HARD COVER INSTALLED OVER LID OF TANK WITH 4" OVER LAPPING SKIRT AND TIE DOWNS ATTACHED TO CURB. (QTY. 1)
- S SANITATION EQUIPMENT**
- S1. BROMINE DISINFECTANT: PENTAIR POOL PRODUCT, RAINBOW, HIGH CAPACITY CHLORINE/BROMINE FEEDER, MODEL HC-3315, PART #171215, VALVE ADJUSTMENT BY COT, MANUALLY PROVIDE ADDITIONAL BROMINE TO TANK AS NEEDED. (QTY. 1)
  - S2. HOSE BIB: PER PLUMBING ENGINEER. HOSE CONNECTION FOR CLEANING SPLASH PAD. COORDINATE LOCATION WITH CIVIL ENGINEER FOR POTABLE WATER SUPPLY. (QTY. 2; ONE ON DECK & ONE IN EQUIPMENT YARD) COORDINATE LOCATION SHOWN ON SP-002 WITH PLUMBING SHEETS BEFORE INSTALLATION.

- V VALVES & GAUGES**
- V1. PRESSURE-VACUUM GAUGES: PRODUCT OF MILIJOCO CORPORATION, MODEL #PLF2598L2005SS, INDUSTRIAL GAUGE, 2.5-INCH DIAL, 316 STAINLESS STEEL CASE, GLYCERIN FILLED, RANGE OF 0-100 PSI FOR PRESSURE, AND 0-30 INCHES OF MERCURY FOR VACUUM. SEE: SHEET SP-901, DETAIL 1. (ONE ON EACH PUMP INLET/OUTLET, ONE ON EACH FILTER OUTLET).
  - V2. BALL VALVES: HAYWARD POOL PRODUCT. MODEL TYPE: TRUE UNION, 1-INCH TO 3-INCH, WITH EPDM SEALS. SEE: SHEET SP-901, DETAIL 1. (QTY. AS NEEDED)
  - V3. FLOW METER/CHECK VALVE: H2FLOW, FLOWVIS, WWW.H2FLOW.NET, MODELS FV-15 (1.5"), FV-2 (2"), AND FV-25 (2.5") HAVE BUILT-IN CHECK VALVE. MODEL FV-C-S (2") IS WITHOUT A CHECK VALVE. SEE: SHEET SP-901 FOR PROJECT FLOW METER USAGE. INSTALL FOR READABILITY.
  - V4. A&A MFG.: 6-PORT VALVE, USED FOR GROUND SPRAY SEQUENCER, CALL JAIME GUZMAN (TEL: 520-247-4096) FOR PRODUCT WITH SPECIAL INTERNALS GEAR ASSEMBLY. (QTY. 1)
- E ELECTRICAL**
- E1. CONTROLLER: VORTEX, MAESTRO, PRODUCT #33907. FOR PUMPS ACTIVATED BY BOLLARD. BEFORE ORDERING, CONTRACTOR MUST CONTACT VORTEX (KATHERYN VEZINA, EMAIL: Kvezina@vortex-intl.com) TO HAVE VORTEX PROGRAM THE CONTROLLER SO THAT IT WILL NOT AUTOMATICALLY RESTART IF THERE IS A POWER OUTAGE. (QTY. 1)
  - E2. ELECTRICAL PANEL: SEE ELECTRICAL SHEETS.
  - E3. PUMP MOTOR STARTERS/DISCONNECTS: SEE ELECTRICAL SHEETS.

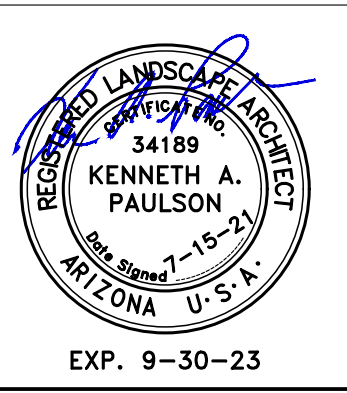
**2 EQUIPMENT ROOM LAYOUT & KEYNOTES**  
Scale: 1/4" = 1'-0"



**AQUADESIGN INTERNATIONAL** 7536 N. LA CHOLLA BLVD. TUCSON, ARIZONA 85741 WWW.AQUADESIGN.NET

**WHEAT DESIGN GROUP** 500 N. TUCSON BLVD., SUITE 150 TUCSON, AZ 85716 (520) 884-7911 www.wheatdesigngroup.com

NO.	DATE	REVISION	BY	CHKD.	APPR.



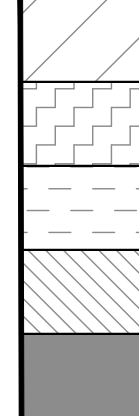

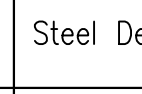
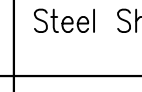

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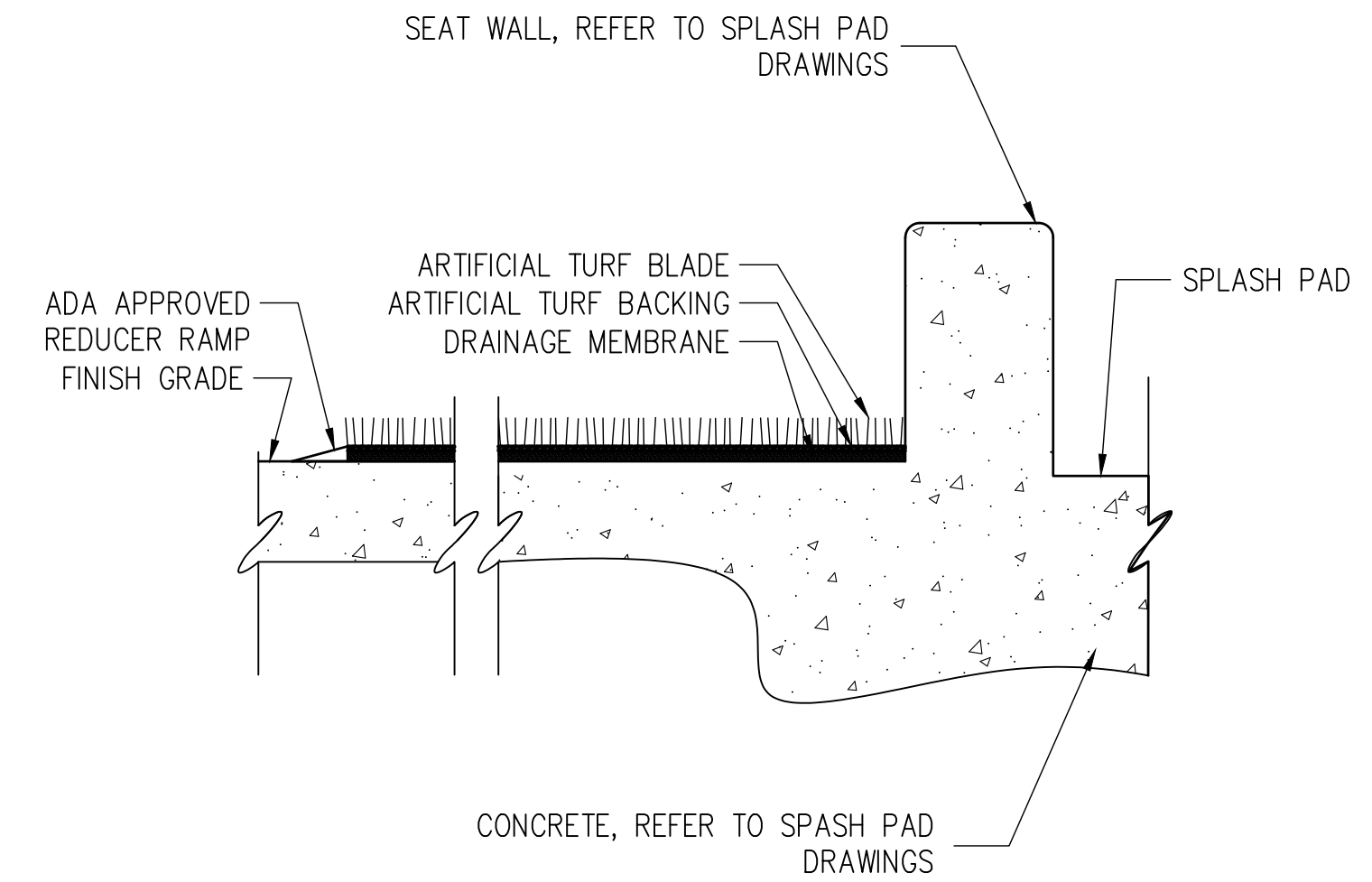
CITY OF TUCSON PARKS AND RECREATION			FORT LOWELL PARK PARK IMPROVEMENTS EQUIPMENT ROOM LAYOUT & KEYNOTES	SP-901 of SP-901
APPROVALS	SIGNATORY	DATE		
			APPROVED _____ 20__	31
			----- DIRECTOR	OF 35
			REF. _____ SCALE: _____	
DRWN. BY TJ 2021 DSGN. BY TJ 2021 CHKD. BY KP 2021			PLAN NO. _____	

P:\2020 Commercial\Lowell Park\CAD Drawings\Pool-Master-5-5-21-RAMP.dwg SP-901 Last Saved: Thu, 15 Jul 2021 4:22:23 PM Plotted: Thursday, July 15, 2021 4:22:23 PM



**MATERIALS AND FINISHES SCHEDULE**

SYMBOL	ITEM	QTY	UNITS	SIZE	COLOR	FINISH	MANUFACTURER & MODEL	DETAIL/PAGE	NOTES
	Splash Pad Surfacing	3,100	S.F.	N/A	"Coco Parfait"	N/A	Xcel Topcoat		Refer to Sheet LS1.1
		232	S.F.		"Pearl Grey"				
		54	S.F.		"Desert Sand"				
		30	S.F.		"Tea & Cream"				
		29	S.F.		"Brick Red"				
Refer to Plans	Seatwall Surfacing	369	S.F.	N/A	"Brick Red"	N/A	Xcel Topcoat		
	Flat Bench with Center Handrest	5	E.A.	24" x 84"	N/A	N/A	Outdoor Creations Inc. 417SKB2 - Flat Bench	3/LS1.2	
	Steel Decorative Fence	84	L.F.	4' Tall	RAL 1015 - Light Ivory	Powdercoat		3/LS1.3	
	Steel Shade Sail Post	91	L.F.	6" Square	RAL 1015 - Light Ivory	Powdercoat			
Refer to Plans	Handrail at Ramp	170	L.F.	1-1/2" DIA	RAL 1015 - Light Ivory	Powdercoat		2/LS1.2	
Refer to Plans	Shade Cloth at Splash Pad	1079	S.F.	N/A	"Navy Blue" & "Charcoal"	N/A	Commercial Ninety-Five 340 by Shade Industries	1/LS1.4	
Refer to Plans	Shade Cloth at Equipment Enclosure	228	S.F.	N/A	"Charcoal"	N/A	Commercial Ninety-Five 340 by Shade Industries	1/LS1.3	
	Artificial Turf	152	S.F.	N/A	N/A	N/A	Pioneer Materials "Pro"	1/LS1.2	
Refer to Plans	Paint	TBD	S.F.	N/A	Match Existing Bathhouse Exterior Color	Satin			Paint Existing Ramada, New Equipment Enclosure, and Existing West Wall

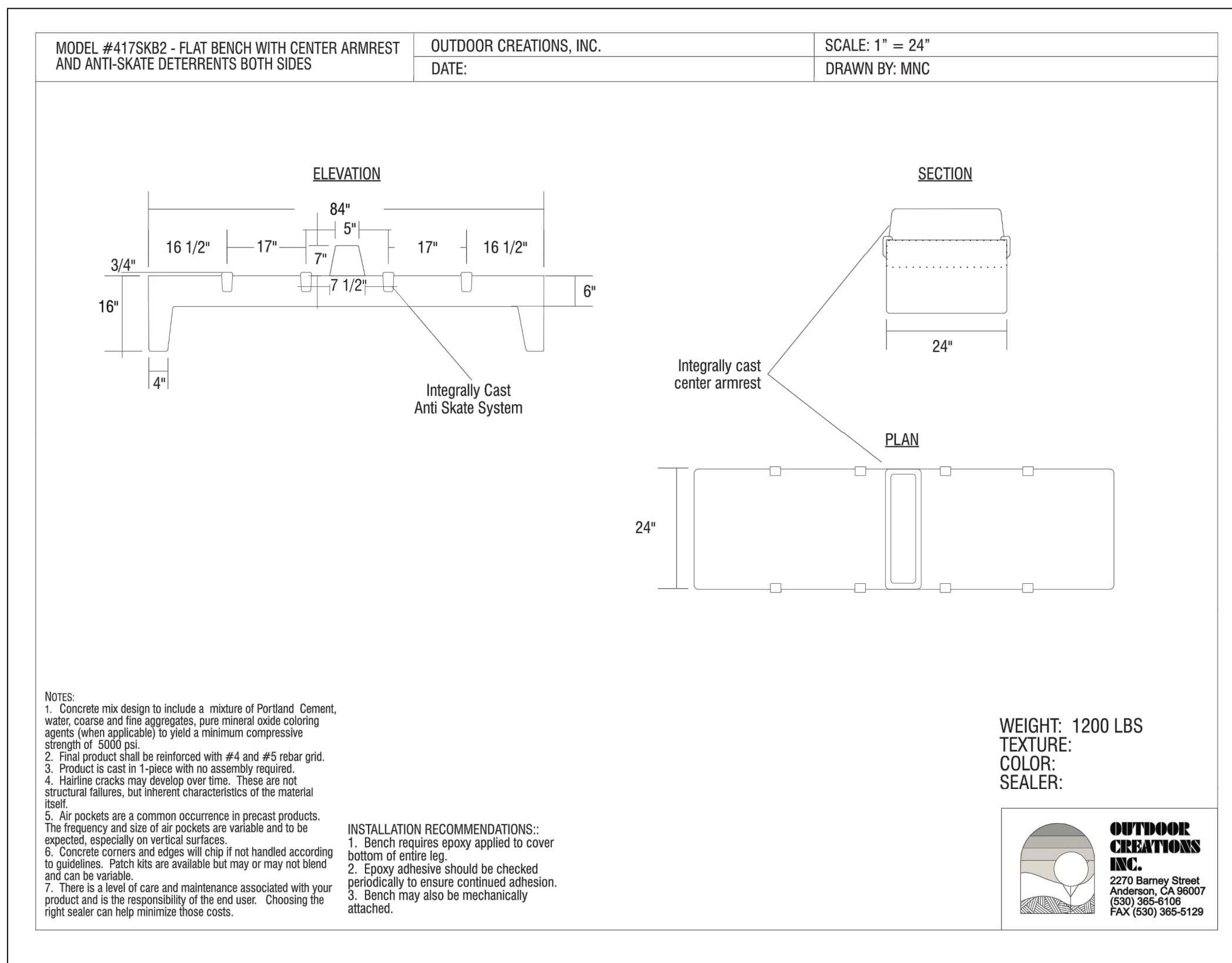


**NOTES:**

- Contractor responsible for installing Artificial Turf per ADA standards.
- Reducer ramp to be SafePath CER 30-150 or approved equal.
- Drainage membrane to be AirDrain Geocell or approved equal.

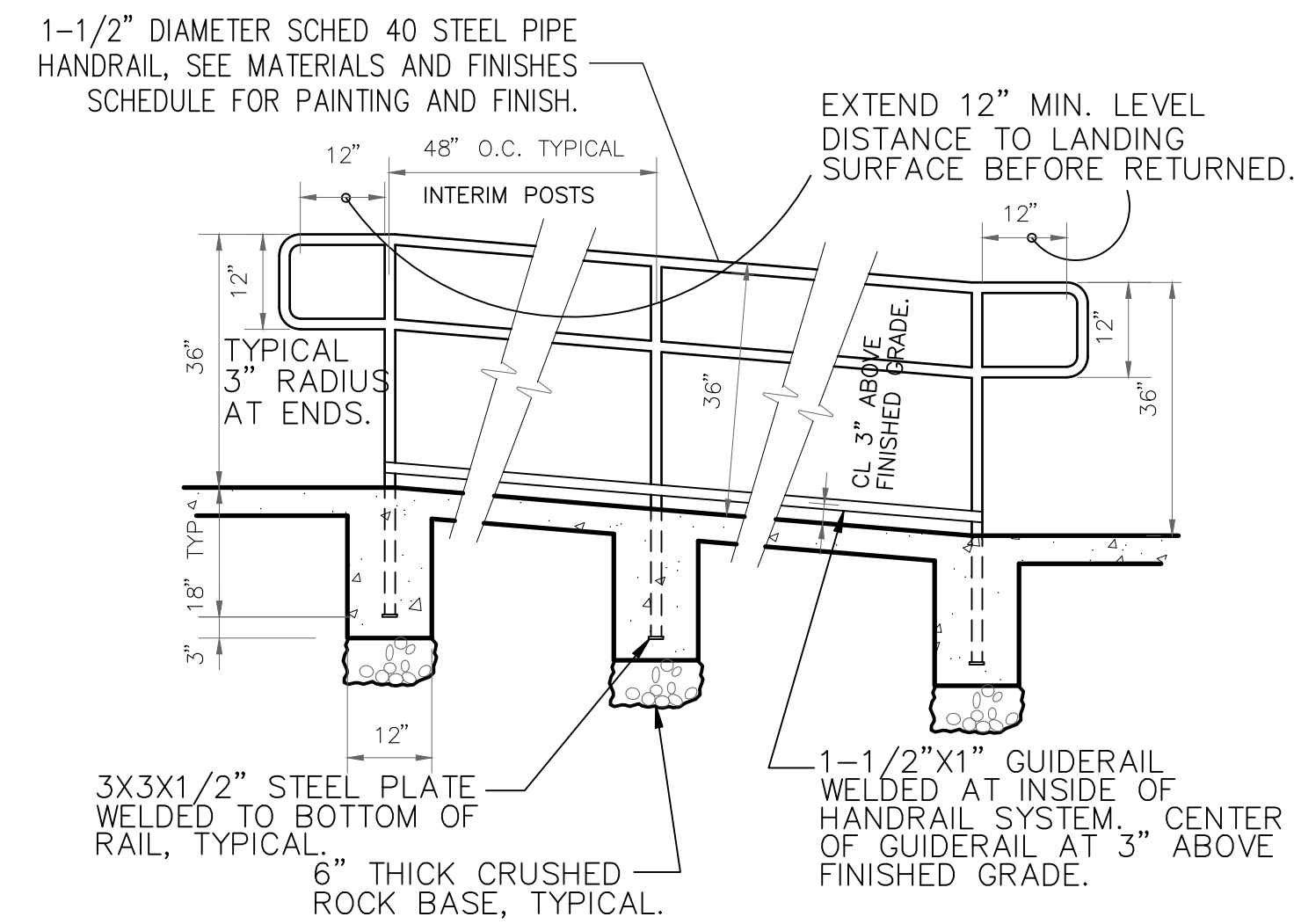
**2 ARTIFICIAL TURF**

1"=1'-0"



**1 FLAT BENCH WITH CENTER ARMREST**

N.T.S.



**3 HANDRAIL AT RAMP**

N.T.S.

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**NOTES:**

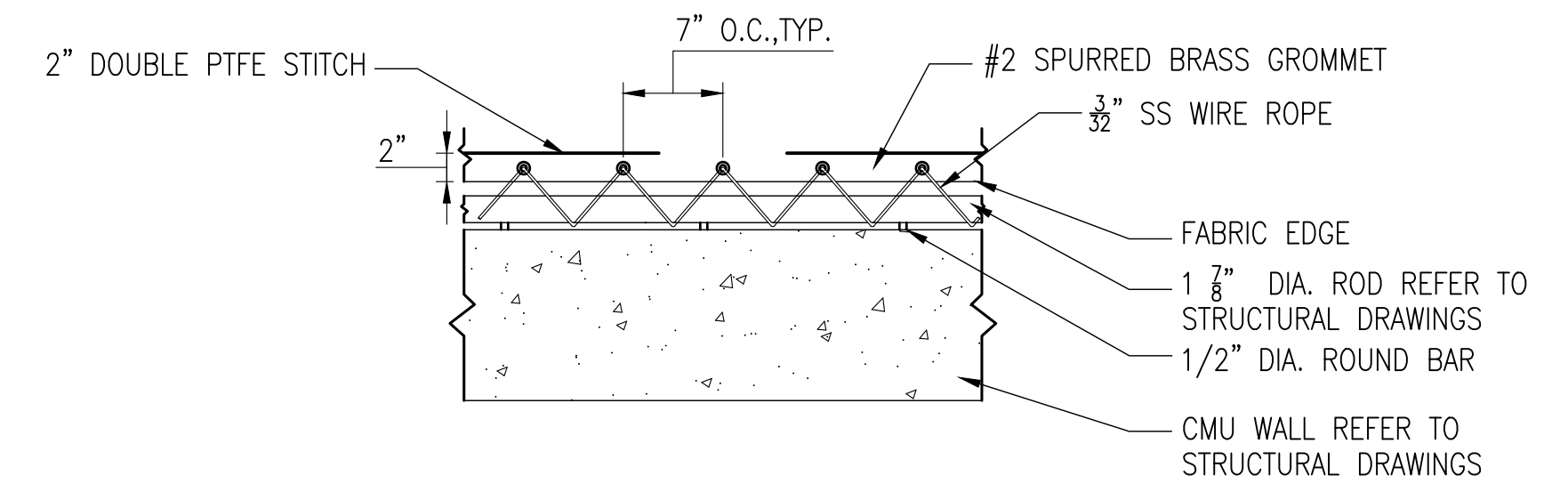
- Shade membranes to be Color "NAVY BLUE" and "CHARCOAL".
- Shade membrane sag curvature not to exceed 10% of span.
- Shade Sail manufacturer to complete structural calculation for the shade sail and submit shop drawings for approval prior to construction.
- Mounting brackets and hardware included in the cost of the Shade Sails.

**SHADE SAIL STRUCTURE FABRICATOR:**

SHADE Industries  
 2940 Grand Avenue  
 Phoenix, Arizona 85017  
 Contact: Josh Henderson  
 Cell: 602-290-8671  
 Office: 602-258-2248  
 Fax: 602-258-2249

**1 SHADE SAIL**

N.T.S.



**NOTES:**

- Lace Rail Shade Sail Connection to be used for equipment enclosure only.
- Refer to Materials Schedule for Shade Sail color.

**2 LACE RAIL SHADE SAIL CONNECTION**  
 N.T.S.

**SHADE SAIL SPECIFICATIONS**

**SUMMARY**

This Section includes tensioned fabric structures (TFS). The intent of this specification is to have a single source responsibility from a Tensioned Fabric Structure Manufacturer, SHADE Industries, Inc. (hereafter referred to as "SHADE Industries"). SHADE Industries shall be responsible for the design, engineering, fabrication, supply, and installation of the work specified herein.

**SUBMITTALS**

SHADE Industries shall be responsible for the design, engineering, fabrication, supply and installation of the work specified herein. The intent of this specification is to have single source responsibility for the outlined functions.

Performance Requirements: SHADE Industries shall be responsible for the configuration, fabrication and erection of the tensioned membrane structure. All materials provided shall be new and unused.

Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and accessories for each canopy.

Shop Drawings: Include plans, elevations, sections, details, joinery methods, and attachments to other Work. Detail assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.

Engineering drawings: 8.5" x 11" or 11"x17", dimensioned for the TFS signed and sealed by licensed structural engineer in the state of construction, include plan view, elevations, details, and connections.

Structural calculations: Signed and sealed by a registered structural engineer in the state of construction.

Erection of the complete system shall be the responsibility of the same firm designing and manufacturing the building, SHADE Industries.

The fabric structure shall be a tensioned membrane structure. The fabric shall have low elongation characteristics under tension and shall assume an anticlastic configuration. Structures that have designs incorporating fabric in a flat or mono-axially curved configuration at any location in the roof generally, will not be acceptable.

**QUALITY ASSURANCE**

Source Limitations: Obtain components through one source from a single manufacturer, SHADE Industries.

Preinstallation Conference: Conduct conference at project prior to installation

TFS Manufacturer is required to be a current member of a professional trade association, i.e., IFAI, Lightweight Structures Association.

Contractor's license in the state of Arizona. Hold a valid contractor's license.

Professional Engineer Qualifications: A professional engineer who is legally authorized to practice in the jurisdiction where project is located and who is experienced in providing engineering services for installing Tensioned Fabric Structures similar to those indicated for this project and with a record of successful in service performance

**DELIVERY, STORAGE, AND HANDLING**

Do not deliver fabric structures until operations that could damage them have been completed in installation areas.

**PROJECT CONDITIONS**

Field Measurements: Verify dimensions for by field measurements before fabrication and indicate measurements on Shop Drawings.

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<b>WHEAT DESIGN GROUP</b> <small>500 N. Tucson Blvd., Suite 150        Tucson, AZ 85716        (520) 884-7911        www.wheatdesigngroup.com</small>								<b>CITY OF TUCSON</b>		CASE#																																																				
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