

**SOLICITATION AMENDMENT
RFP(LPTA) #2019019
CITY OF BUCKEYE
CONSTRUCTION & CONTRACTING DIVISION**

AMENDMENT #2

NOTE: Attach to Original RFP(LPTA). However, if Proposal has already been returned, complete this amendment and return for attachment to your Proposal by **1:00pm, October 10, 2019.**

City of Buckeye
530 East Monroe Avenue
Buckeye, Arizona 85326
Attn: Erin Reilly

SOLICITATION: RFP# 2019019: FIRE STATION #705 TARTESSO

NOTICE TO CONTRACTORS:

This Amendment forms a part of the Contract and clarifies, corrects, or modifies the original Request for Proposals documents prepared by the City of Buckeye.

Bid Due Date and Time: **October 10, 2019 at 1:00 PM**

Last Day for Questions: **October 3, 2019 at 5:00 PM**

I. THE FOLLOWING QUESTIONS WERE ASKED BY CONTRACTORS:

Q1: In reference to the TAB D Price Proposal, please confirm that we are to submit only one copy of the separate TAB D Price Proposal in a separate envelope instead of five copies and one USB flash drive in the separate envelope.

A1: Please submit only one original of the section 400 Tab D Price Proposal in a separate sealed envelope. Please use one of the Price Proposal Sheet options provided in Attachment 1.

Q2: The proposal form provided appears to be from an editable format, can this form be provided? This would be helpful in entering the bid and alternate amounts as well as the subcontractor listing.

A2: Please use updated editable Price Proposal Sheet (section 400) in Attachment 1.

Q3: The RFP states on page 9 under Tab D - Price Proposal requirements to include Section 300, however the proposal form provided is Section 400. Please confirm that this is the correct form.

A3: Price Proposal Sheet is section 400. Please use one of the Price Proposal Sheet options provided in Attachment 1.

- Q4:** Sheet M2.1 keynote 6 states "...general contractor shall include controls contractor price for complete system." I could not find a spec section for a controls / EMS system. If the contractor is responsible for controls, please provide more information.
A4: Refer to sheet M4.2 for information
- Q5:** Several items are called out as composite wood i.e. 4x10 composite rafter tail. I could not find any composite wood referenced in the specifications. Can you please provide more information as to what these items are?
A5: These items are to be molded high density polyurethane. Basis of design is Arizona Arch Products (480-735-2023).
- Q6:** On the room finish schedule on sheet A6.1, the exam rooms calls for mosaic tile on the walls, however on sheet A11.1 the elevations to the exam room do not clarify where on the walls the mosaic tile is to go. Please clarify.
A6: Mosaic tiles were removed from exam room – please disregard mosaic tile (MT) reference on finish schedule.
- Q7:** Specs section 32 31 19, part 1.05 calls for a factory made product with a 20-year warranty that they do not make, however the plans and details show custom panels and a custom fabricated gate that would only have a max of a 2-year warranty. Please clarify if we are to use a factory made product or a custom fabricated product.
A7: Plans call for custom fabricated product and are subject to Section 05 50 00. Any factory made products that are submitted for this project shall be per section 32 31 19.
- Q8:** There is a spec for mini blinds, however black out shades are called out as well on A2.1 with no spec. Please provide.
A8: Blackout shades to be Mecho Shade, Roller Shade – Midnite Blackout (0200 Series), Color to be selected.
- Q9:** Sheet A11.9 shows a stainless steel shelf in the janitor/fire riser room elevations, however it does not show up on the floor plans sheet A2.1. Please confirm that we are to include this shelf.
A9: Shelf is to be included.
- Q10:** Sheet A11.9 shows a 7'-6" steel cabinet in the workshop elevations, however it does not show up on the floor plans sheet A2.1. Please confirm that we are to include the steel cabinet.
A10: Steel cabinet to be included.
- Q11:** Please clarify if City of Buckeye will be providing the low voltage systems for Telecomm/Data/IT? If not, please provide the layout for the Data/Comm room buildout (ladder rack, racks, vertical and horizontal wire manager, etc.)
A11: City of Buckeye will be providing the low voltage systems.

- Q12:** Is the City of Buckeye providing the Backbone (Copper or Fiber) to the building?
A12: Utility to provide the lines but Contractor to provide trenching and conduit as noted on electrical / civil plans. Refer to note 6 on sheet E1.1. For bidding purposes assume connection to pedestal at Allyson Ave. (315').
- Q13:** Who is responsible for the furnish and install of the complete Dispatch System. Is the city contracting any portion of this directly?
A13: City of Buckeye will contract with vendor on equipment. Refer to Dispatch System Plan and Details. Contractor to provide conduit, backboxes, infrastructure, rough-in, etc.
- Q14:** Are there any door position switches required? None appear to be shown on the plans.
A14: Yes, refer to Hardware Package.
- Q15:** What type of cabling is required for the TV boxes?
A15: Electrical plan legend notes this information.
- Q16:** Please confirm that MC Cable is only allowed for lighting fixture whip, and none in walls or runs from panelboards per note 3 on E2.1.
A16: Correct per electrical plans.
- Q17:** The Keynotes located near the four fold doors appear to be mislabeled as #32, and should be note #33. Please confirm.
A17: Correct – note should be #33.
- Q18:** Landscaping legend calls for decomposed granite and angular rock colors to match existing. Can a color be provided so all bidders are assuming the same product?
A18: For bidding purposes: Pioneer Gold
(https://www.pioneersand.com/products/decorative_rock/decorative_landscape_rock/pioneer_gold)
Contractor to verify once project begins construction.
- Q19:** Please clarify if the City of Buckeye will be procuring the fuel dispensing system directly.
A19: No – contractor is responsible for this item. Refer to Attachment 2 updated Sheet A1.2 detail with current City of Buckeye OSM requirements listed on schedule.
- Q20:** Please clarify if the exterior masonry site walls are to receive anti-graffiti guard on the public side of the walls.
A20: No anti-graffiti coating specified.
- Q21:** Will any of the water lines, hot or cold, require insulation?
A21: Specifications call for all hot water lines and hot water return to be insulated.

Q22: Spec section for AV Equipment lists out Projection Screen, TV Support Brackets, and Projector Support Brackets; all being as scheduled in drawings or as otherwise selected by Architect and/or Owner. After reviewing the drawings it does not appear to show any of these items. Please clarify.

A22: City of Buckeye to provide items noted above. Contractor is to provide solid backing as required and shall coordinate with City of Buckeye and Architect prior to placing backing.

Q23: Who will be responsible for the communications Monopole as described in keynote 23 on A1.0?

A23: Contractor is responsible for the communications Monopole and all items related to its installation. Refer to Section III, No. 2 of this Amendment for specific information about Monopole.

Q24: Can you clarify how you would like us to document or verify our bonding capacity, backlog, and insurance provider rating in our proposal?

A24: Include with your submittal, a letter from the bonding agent that shows this information.

Q25: Please clarify the sentence in the first paragraph on page 7 of the RFP that says, "Note that a letter of commitment from the Subcontractor is required in order for the Subcontractor to be considered in the evaluation." Are you asking for a letter of commitment from each of the subcontractors in Tab D to be included with the price proposal?

A25: The requirement for a letter of commitment is only if the General Contractor is submitting a project in TAB A which represents work performed by a subcontractor of the Prime.

II. SUBSTITUTION REQUESTS/APPROVED EQUALS:

1. Reference Specification Section 22 00 00 Plumbing
 - Proposed Substitution: Trench Drain Systems - 3000 Series Presloped Fiberglass Trench Drain System - **Approved**
2. Reference Specification Section 07 24 13 Textured Acrylic Finishing System
 - Proposed Substitution: Master Wall Inc. - ICF Coatings- **Approved**
3. Reference Specification Section 07 27 26 Fluid Applied Vapor Permeable Air Barrier Membrane
 - Proposed Substitution: Master Wall Inc. – Rollershield LAB - **Approved**

III. DRAWINGS AND OTHER CLARIFICATIONS:

1. Fuel Tank / Dispensing

- Revised equipment callouts and added schedule to drawing with City of Buckeye Fuel Dispensing Standards.

See: [Attachment 2](#) "FS705 – Add2 -Sheet A1.2.pdf"

2. Monopole Information

- Rohn 100ft Monopole Cut Sheet and ITS No 9 Vault Standard Detail.

See: [Attachment 3](#) "FS705 – Add2 – Rohn 100ft Monopole.pdf"

[Attachment 4](#) "FS705 – Add2 – ITS No 9 Vault.pdf"

3. Electrical Plans

- Clarification of electrical plans to reflect Access Control matching Architectural plans.

See: [Attachment 5](#) "FS705 – Add2 – Sheet E1.1.pdf"

[Attachment 6](#) "FS705 – Add2 – Sheet E3.1.pdf"

[Attachment 7](#) "FS705 – Add2 – Sheet E4.1.pdf"

- Clarification of electrical plans to reflect City IT requested conduit and data / TV locations.

See: [Attachment 5](#) "FS705 – Add2 – Sheet E1.1.pdf"

[Attachment 6](#) "FS705 – Add2 – Sheet E3.1.pdf"

[Attachment 7](#) "FS705 – Add2 – Sheet E4.1.pdf"

4. Hardware Package

- Clarification of hardware specification (08-) to reflect updated City of Buckeye OSM. Acceptable manufacturers have been revised.

See: [Attachment 8](#) "FS705 – Add2 – Hardware Spec.pdf"

ATTACHMENTS:

1. **OPTION 1: EDITABLE PRICE PROPOSAL SHEET (FILLABLE PDF), AND
OPTION 2: BLANK PRINTABLE PRICE PROPOSAL SHEET**
2. **FS705 – ADD2 – SHEET A1.2**
3. **FS705 – ADD2 – ROHN 100FT MONOPOLE**
4. **FS705 – ADD2 – ITS NO 9 VAULT**
5. **FS705 – ADD2 – SHEET E1.1**
6. **FS705 – ADD2 – SHEET E3.1**
7. **FS705 – ADD2 – SHEET E4.1**
8. **FS705 – ADD2 – HARDWARE SPEC**

The balance of the specifications and instructions remain the same. Offerors must acknowledge receipt and acceptance of this amendment by returning the entire amendment with the Proposal.

PLEASE ACKNOWLEDGE YOUR FIRM'S RECEIPT OF THIS AMENDMENT BY SIGNING THE ATTACHED SOLICITATION AMENDMENT ACKNOWLEDGEMENT.

SOLICITATION AMENDMENT ACKNOWLEDGEMENT

**RFP(LPTA)# 2019019: FIRE STATION #705 TARTESSO
AMENDMENT NUMBER 2
AMENDMENT ISSUE DATE: October 7, 2019**

Offeror certifies that Offeror has read, understands, and will fully and faithfully comply with this Request for Proposals, its attachments and any referenced documents. Offeror also certifies that this offer was independently developed without consultation with any of the other Offerors or potential Offerors.

Name of Company: _____

Authorized Signature: _____

Print Name and Title: _____

Date: _____

Address: _____

City, State, Zip Code: _____

Telephone Number: _____

Email Address: _____

**SOLICITATION AMENDMENT #2
RFP(LPTA) #2019019**

ATTACHMENT 1:

- **OPTION 1: EDITABLE PRICE PROPOSAL SHEET (FILLABLE PDF)**
- **OPTION 2: BLANK, PRINTABLE PRICE PROPOSAL SHEET**

**CITY OF BUCKEYE FIRE STATION NO. 705
PROPOSAL FORM**

INSTRUCTIONS: COMPLETE THE SHADED AREAS ONLY

Date	
To:	City of Buckeye, Buckeye, Arizona
From:	Contractor
	Address
	Mark if City or Town
	City <input type="checkbox"/> Town <input type="checkbox"/>
	County
	City
	State & ZIP
	Phone
	Fax
	E-mail Address

Project: BUCKEYE FIRE STATION NO. 705

The undersigned has carefully examined the plans, Project Manual, and sample contract documents, carefully examined the site, is familiar with local conditions affecting cost of the WORK and miscellaneous items of adjunct work, the nature and extent of excavation needed and type, character and general conditions of material to be excavated, existing and probable construction difficulties and hazards, and all other factors and conditions affected by specified WORK, and proposes to furnish labor, supervision, tools, equipment, materials, utilities and transportation services, and all other things necessary to perform and complete the WORK in an acceptable manner as described in the plans, Project Manual and sample contract documents for the following unit prices, which shall prevail over all other proposals made by the undersigned:

**CITY OF BUCKEYE FIRE STATION NO. 705
PROPOSAL FORM**

BASE BID					
NO.	ITEM DESCRIPTION	QTY.	UNIT	UNIT COST	TOTAL COST
1.	Provide and install all work as detailed on plans, specifications and addenda issued.		LS		
	TOTAL:				
	<i>CONTINGENCY SUBTOTAL</i>				
<i>(Total x 0.10 Rounded upward to nearest 0.01)</i>					
TOTAL CONTRACT- BASE BID PROPOSAL					
ADDITIVE ALTERNATE BIDS					
ITEM NO.	ITEM DESCRIPTION	QTY.	UNIT	UNIT COST	TOTAL COST
1.	Provide and install all work as detailed on plans, specifications and addenda issued for add. alternate bid no. 1- Pre-Fab Covered Parking Canopy for 12-spaces, per sheet A1.0.		LS		
2.	Provide and install all work as detailed on plans, specifications and addenda issued for add. alternate bid no. 2- Two (2) "Big Ass" Fans located in apparatus bays, per sheet A5.1.		LS		
	TOTAL:				
	<i>CONTINGENCY SUBTOTAL</i>				
<i>(Total x 0.10 Rounded upward to nearest 0.01)</i>					
TOTAL CONTRACT ALTERNATE BID PROPOSAL					

CITY OF BUCKEYE FIRE STATION NO. 705 PROPOSAL FORM

Listing of Contractors/Subcontractors. The Contractor must identify the subcontractors that will be performing the work listed as subcontract work below. **If the Contractor, as the Prime, will be performing any of the Trades identified below, then the Contractor's name must be placed on the appropriate line(s).**

Failure to comply with the above will render the Proposal as non-responsive and the Proposal will not be accepted or read at the Proposal opening.

SUBCONTRACTORS: If awarded a contract for this project, the undersigned will employ the following:

Trade	Contractor/Subcontractor
Earthwork	
Asphalt	
Concrete	
Masonry	
Light Gauge Metal Framing & Drywall	
Steel	
Rough Carpentry	
Roofing	
EIFS	
Insulation	
Aluminum Windows & Doors	
Hollow Metal Frames/Doors	
Glass & Glazing	
Finish Hardware	
Overhead & Four-Fold Doors	
Ceramic Tile	
Millwork	
Electrical	
Fencing	
HVAC	
Plumbing	
Roofing	
Sprinkler System	
Landscape & Irrigation	

**CITY OF BUCKEYE FIRE STATION NO. 705
PROPOSAL FORM**

TIME OF COMPLETION: The undersigned proposed to complete the WORK, within **240 calendar days**, after the date of commencement as established by the Notice to Proceed. The undersigned agrees to the terms for liquidated damages as described in the Instructions to Bidders.

PROPOSAL: The undersigned agrees to hold this offer open for **90 days** after the date set for receipt of proposals.

CITY'S RIGHTS: The undersigned recognizes the City's right to waive informalities in the bidding and to accept or reject any or all bids.

CONTRACT AND BONDS: Upon receipt of written notice that this bid has been accepted, the undersigned will execute the formal Contract, a sample of which is appended, and will deliver a one hundred percent Statutory Performance Bond for the Contract together with a one hundred percent Statutory Payment Bond .

SURETY BOND: The attached Surety Bond in the sum of not less than ten percent (10%) of the total maximum proposal price will be retained by the City of Buckeye if the Contract and Bonds are not executed as specified in the Instructions to Proposers.

The undersigned understands that any quantities stated or implied in the Plans or Project Manual are approximate only and are subject to increase or decrease, and hereby proposes to perform all quantities of WORK either increased or decreased, in accordance with the provisions of the Project Manual, at the Unit Bid Price in the Proposal Form.

Respectfully Submitted (*Signature required below*)

Contractor

Name

Address

City

State & ZIP

**CITY OF BUCKEYE FIRE STATION NO. 705
PROPOSAL FORM**

Arizona Contractor's Classification & License No.

If Proposer is a Partnership/Joint Venture, list names and address of partners. If the Proposer is a corporation, list name and titles of all officers of the corporation.

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Date	
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Glass & Glazing	
Finish Hardware	
Overhead & Four-Fold Doors	
Ceramic Tile	
Millwork	
Electrical	
Fencing	
HVAC	
Plumbing	
Roofing	
Sprinkler System	
Landscape & Irrigation	

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Respectfully Submitted (*Signature required below*)

Contractor

Name

Address

City

State & ZIP

**CITY OF BUCKEYE FIRE STATION NO. 705
PROPOSAL FORM**

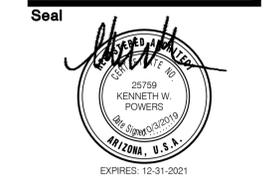
Arizona Contractor's Classification & License No.

If Proposer is a Partnership/Joint Venture, list names and address of partners. If the Proposer is a corporation, list name and titles of all officers of the corporation.

**SOLICITATION AMENDMENT #2
RFP(LPTA) #2019019**

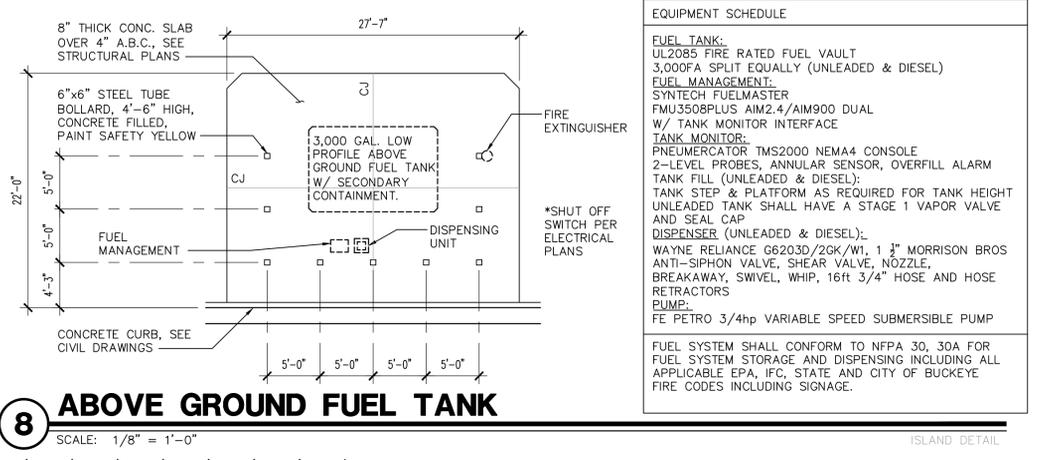
ATTACHMENT 2:

FS705 – ADD2 – SHEET A1.2



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© COPYRIGHT 2019, HOWARD PERLMAN, AIA.

Rev	Date	By	Description
1	7.17.19	JLC	CITY COMMENTS - 1st REVIEW
2	10.04.19	JR	BIDDING ADDENDUM



EQUIPMENT SCHEDULE

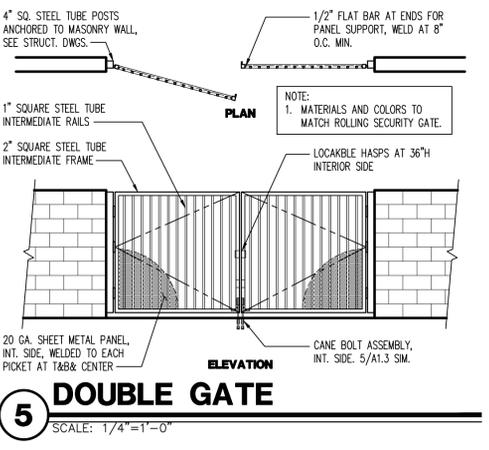
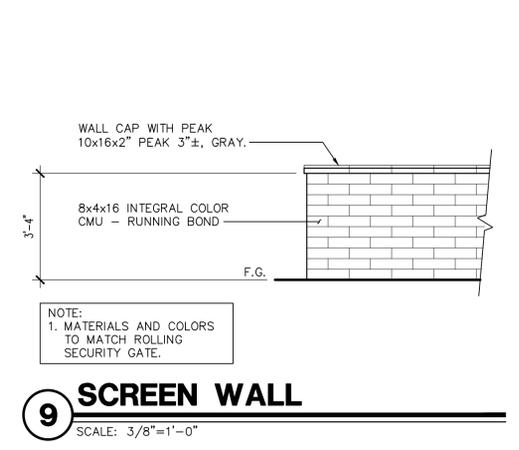
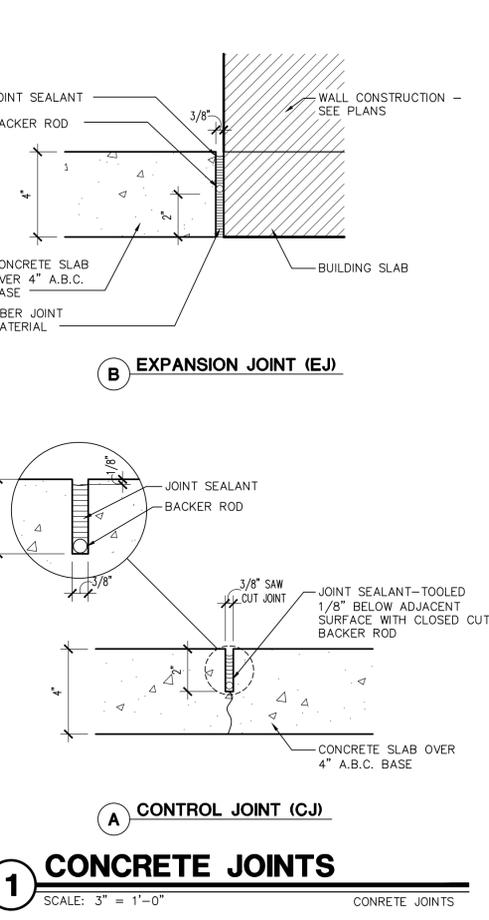
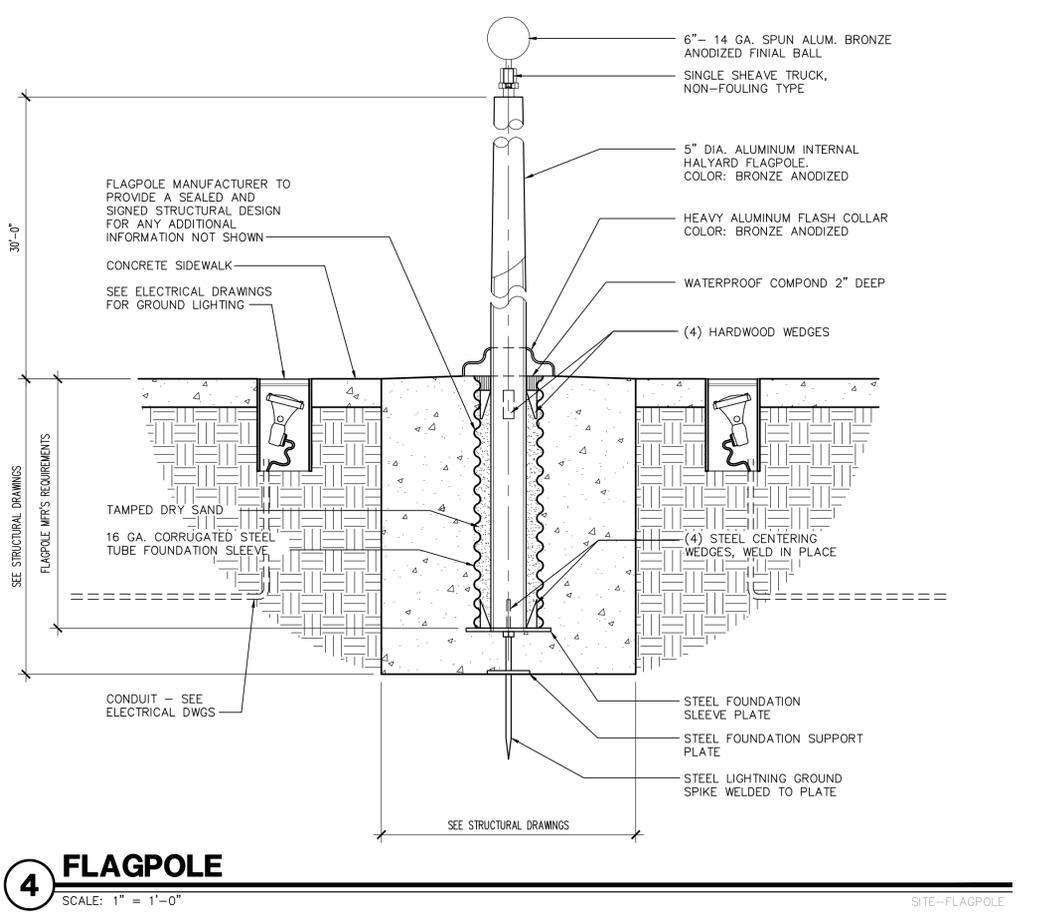
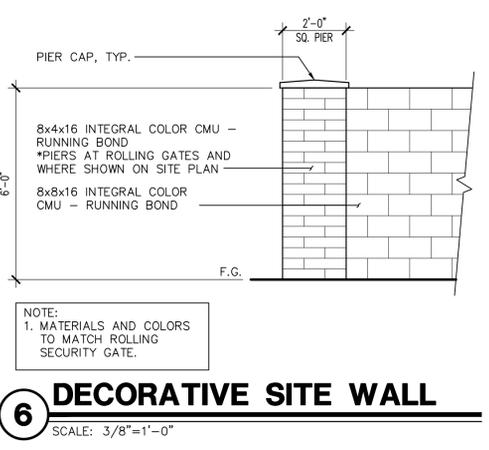
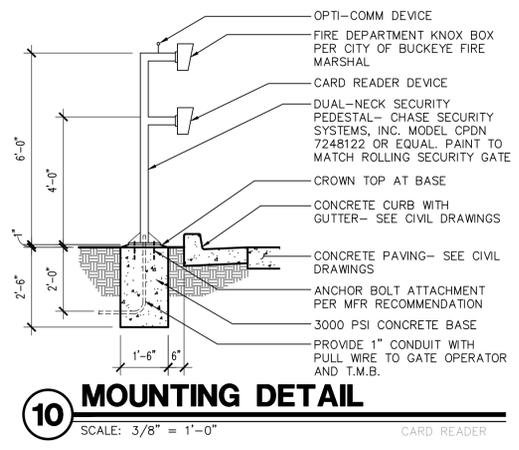
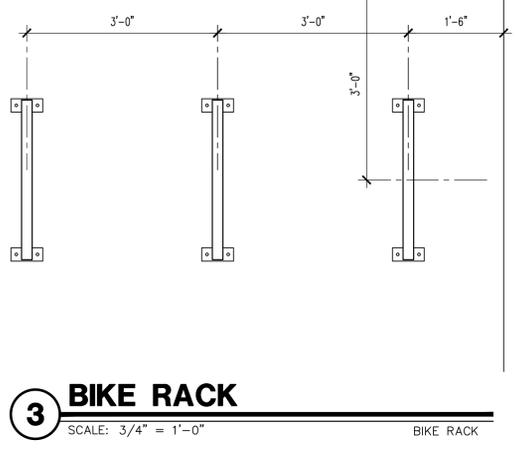
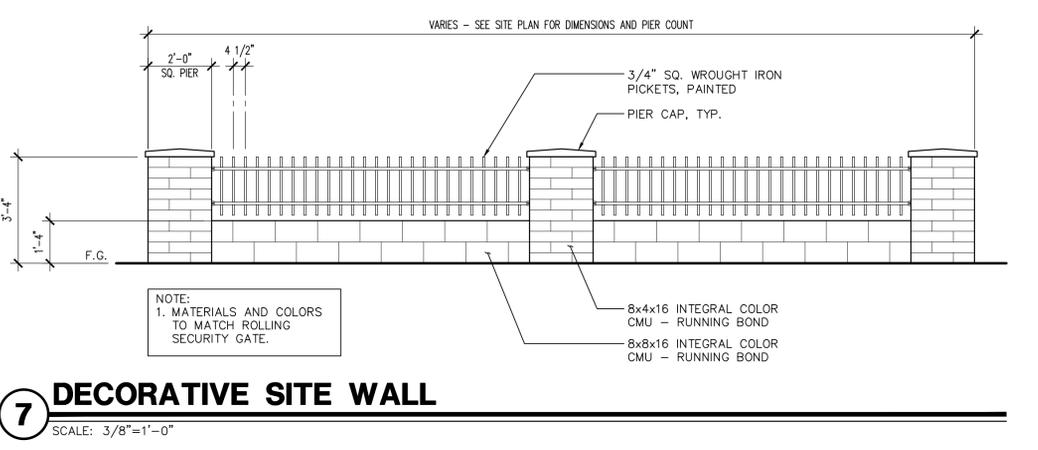
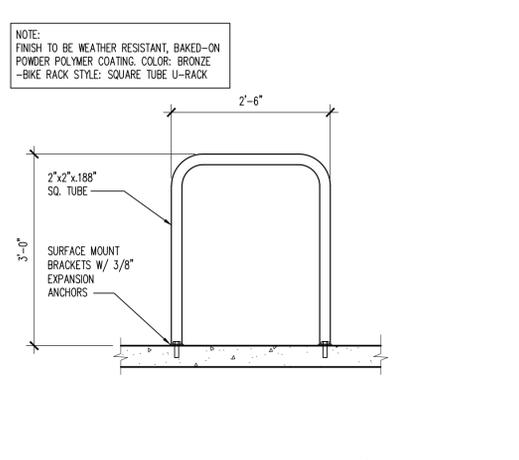
FUEL TANK:
UL2085 FIRE RATED FUEL VAULT
3,000FA SPLIT EQUALLY (UNLEADED & DIESEL)

FUEL MANAGEMENT:
SYNTECH FUELMASTER
FMU3508PLUS AIM2.4/AM900 DUAL
W/ TANK MONITOR INTERFACE

TANK MONITOR:
PNEUMATORCATOR TMS2000 NEMA4 CONSOLE
2-LEVEL PROBES, ANNULAR SENSOR, OVERFILL ALARM
TANK FILL (UNLEADED & DIESEL);
TANK STEP & PLATFORM AS REQUIRED FOR TANK HEIGHT
UNLEADED TANK SHALL HAVE A STAGE 1 VAPOR VALVE
AND SEAL CAP

DISPENSER (UNLEADED & DIESEL):
WAYNE RELIANCE G6203D/20K/W1, 1 3/4" MORRISON BROS
ANTI-SIPHON VALVE, SHEAR VALVE, NOZZLE,
BREAKAWAY, SWIVEL, WHIP, 16ft 3/4" HOSE AND HOSE
RETRACTORS
PUMP:
FE PETRO 3/4hp VARIABLE SPEED SUBMERSIBLE PUMP

FUEL SYSTEM SHALL CONFORM TO NFPA 30, 30A FOR
FUEL SYSTEM STORAGE AND DISPENSING INCLUDING ALL
APPLICABLE EPA, IFC, STATE AND CITY OF BUCKEYE
FIRE CODES INCLUDING SIGNAGE.



City of Buckeye
Fire Station No. 705
30551 W. Tartesso Pkwy.
Buckeye, AZ 85396

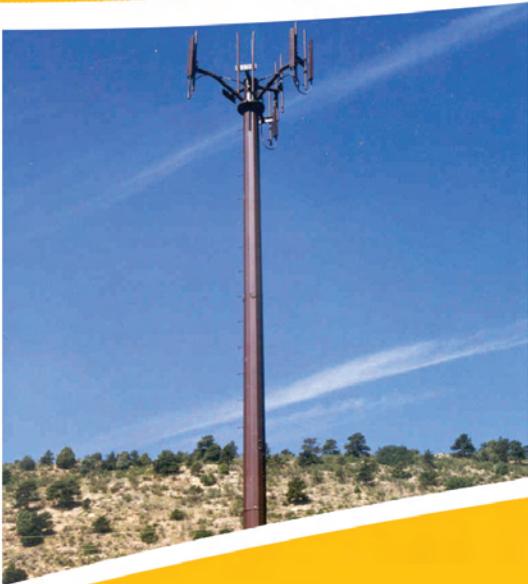
1ST SUBMITTAL
Drawn/Checked By
JLC / JRS
Date
07.17.19
Project Number
318009
Sheet Number
A1.2
SITE DETAILS

**SOLICITATION AMENDMENT #2
RFP(LPTA) #2019019**

ATTACHMENT 3:

FS705 – ADD2 – ROHN 100FT MONOPOLE

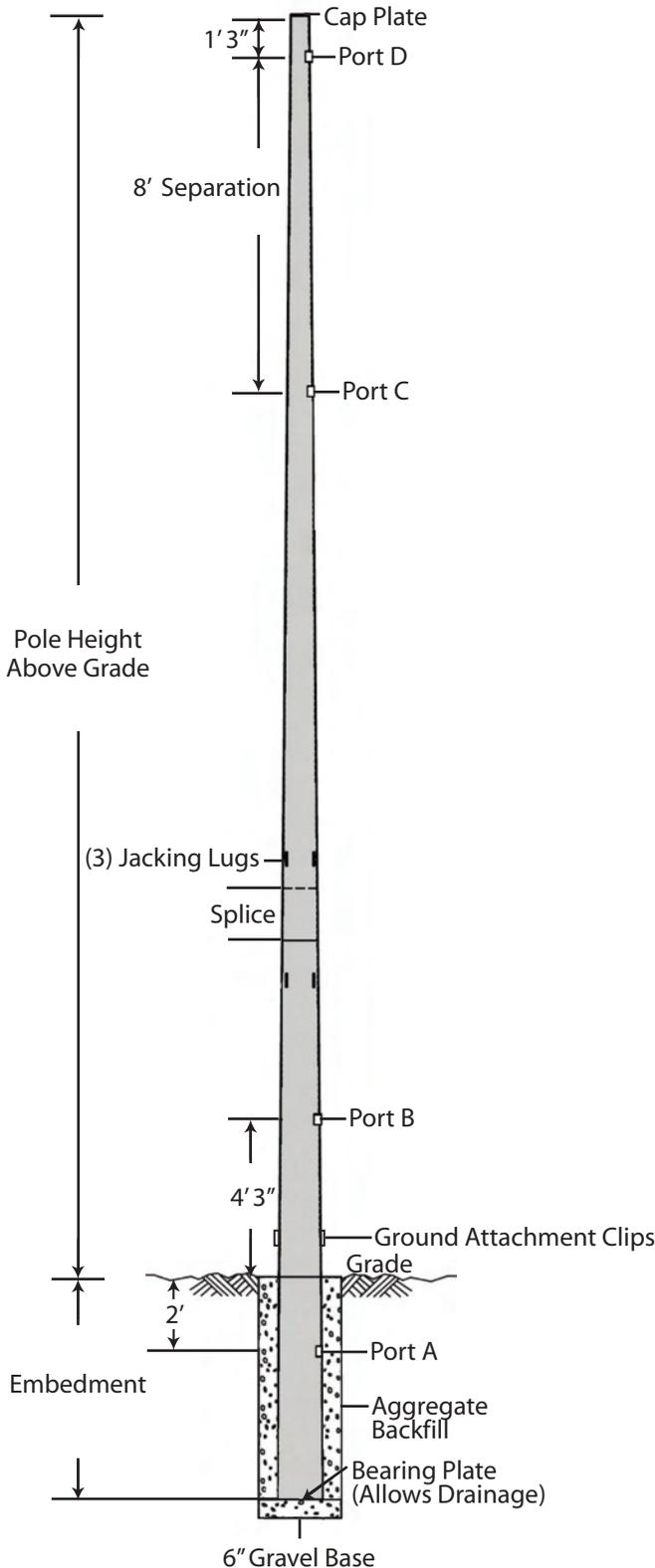
POLES





DIRECT EMBED POLE STANDARD DESIGNS

DIRECT EMBED POLES

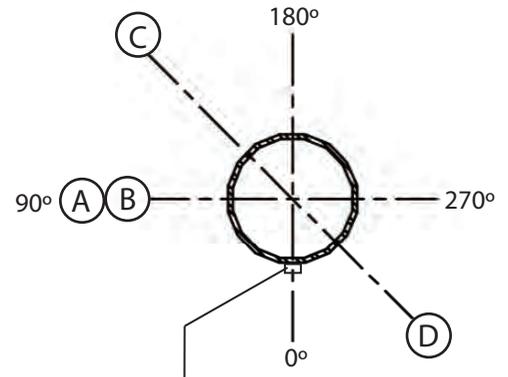


GENERAL USE

ROHN Direct Embed Poles minimize site requirements, lowering lease rates and acquisition costs. They are designed for rapid installation, meeting the demands of today's dynamic communication environments. Whether you are supporting broadband, PCS, security or other lightweight systems, ROHN Tapered Steel Poles offer extremely efficient designs.

FEATURES

- Completely hot-dip galvanized after fabrication
- Fast, easy installation
- Designed for applications with stringent deflection requirements
- Internal routing of transmission lines
- Each pole ships with the following:
 - Assembly Drawings and Standard Foundation Details
 - (4) 5" x 7" Ports with (2) port covers
 - (3) Jacking Lugs on each side of splices
 - (3) Ground attachment clips
 - (1) Vented cap plate
 - (1) Bearing plate welded to bottom
 - Safety Climb Support Brackets
 - (1) Safety warning sign
 - (1) Pole ID tag
 - Attachment clips for optional step bolts
- Optional items are available and may be ordered separately. Please see accessories on page 225.
- Custom designs available for any height or application.



Safety Climb Support Bracket (Safety Cable System Ordered Separately)

PORT ORIENTATIONS

Per Rev G requirements, any structure greater than 10' requires a climber safety device. Please see page 225 for ordering information.



BUYERS GUIDE

The pole loading charts included in this section were created to help you identify the standard pole that most closely meets your needs. The charts include the design wind speed, sway, total EPA that the pole can support and pole embedment requirements. Once the correct structure is identified, use the part number at the top of each section to order your pole.

Part Number for ordering direct embed poles

Sway at TIA operational wind speed

30'
Height Above Grade

WIND SPEED (MPH)		LIGHT			MEDIUM			HEAVY		
		DEP30LA			DEP30MA			DEP30HA		
FASTEST MILE	3-SECOND GUST	SWAY LIMIT			SWAY LIMIT			SWAY LIMIT		
		4°	3°	2°	4°	3°	2°	4°	3°	2°
		EPA (FT ²)			EPA (FT ²)			EPA (FT ²)		
70	85	69	49	29	110	108	68	170	170	143
80	100	52	49	29	80	80	68	126	126	126
90	110	38	38	29	59	59	59	95	95	95
100	120	27	27	27	44	44	44	74	74	74
110	130	19	19	19	32	32	32	57	57	57
120	140	13	13	13	24	24	24	45	45	45
EMBEDMENT		DEPTH 10'	DIA. 2.5'		DEPTH 11'	DIA. 2.5'		DEPTH 13'	DIA. 3.0'	

Total effective projected area of antennas, mounts and lighting allowed on pole (see pg. 226)

Depth and diameter of embedment for gravel backfill. Installation adds 6" to the depth for gravel base

LOADING CHARTS

40'

WIND SPEED (MPH)		LIGHT			MEDIUM			HEAVY		
		DEP40LA			DEP40MA			DEP40HA		
FASTEST MILE	3-SECOND GUST	SWAY LIMIT			SWAY LIMIT			SWAY LIMIT		
		4°	3°	2°	4°	3°	2°	4°	3°	2°
		EPA (FT ²)			EPA (FT ²)			EPA (FT ²)		
70	85	69	49	29	110	108	68	170	170	143
80	100	52	49	29	80	80	68	126	126	126
90	110	38	38	29	59	59	59	95	95	95
100	120	27	27	27	44	44	44	74	74	74
110	130	19	19	19	32	32	32	57	57	57
120	140	13	13	13	24	24	24	45	45	45
EMBEDMENT		DEPTH 12'	DIA. 2.5'		DEPTH 13'	DIA. 2.5'		DEPTH 15'	DIA. 3.0'	

50'

WIND SPEED (MPH)		LIGHT			MEDIUM			HEAVY		
		DEP50LA			DEP50MA			DEP50HA		
FASTEST MILE	3-SECOND GUST	SWAY LIMIT			SWAY LIMIT			SWAY LIMIT		
		4°	3°	2°	4°	3°	2°	4°	3°	2°
		EPA (FT ²)			EPA (FT ²)			EPA (FT ²)		
70	85	69	49	29	110	108	68	170	170	143
80	100	52	49	29	80	80	68	126	126	126
90	110	38	38	29	59	59	59	95	95	95
100	120	27	27	27	44	44	44	74	74	74
110	130	19	19	19	32	32	32	57	57	57
120	140	13	13	13	24	24	24	45	45	45
EMBEDMENT		DEPTH 15'	DIA. 2.5'		DEPTH 16'	DIA. 2.5'		DEPTH 17'	DIA. 3.0'	



LOADING CHARTS

60'

WIND SPEED (MPH)		LIGHT			MEDIUM			HEAVY		
		DEP60LA			DEP60MA			DEP60HA		
		SWAY LIMIT			SWAY LIMIT			SWAY LIMIT		
FASTEST MILE	3-SECOND GUST	4°	3°	2°	4°	3°	2°	4°	3°	2°
		EPA (FT ²)			EPA (FT ²)			EPA (FT ²)		
70	85	52	35	19	99	80	48	150	150	104
80	100	46	35	19	71	71	48	109	109	104
90	110	32	32	19	50	50	48	81	81	81
100	120	21	21	19	36	36	36	61	61	61
110	130	14	14	14	25	25	25	46	46	46
120	140	8	8	8	17	17	17	35	35	35
EMBEDMENT		DEPTH 15'	DIA. 2.5'		DEPTH 17'	DIA. 3.0'		DEPTH 19'	DIA. 3.0'	

70'

WIND SPEED (MPH)		LIGHT			MEDIUM			HEAVY		
		DEP70LA			DEP70MA			DEP70HA		
		SWAY LIMIT			SWAY LIMIT			SWAY LIMIT		
FASTEST MILE	3-SECOND GUST	4°	3°	2°	4°	3°	2°	4°	3°	2°
		EPA (FT ²)			EPA (FT ²)			EPA (FT ²)		
70	85	42	28	13	89	63	36	137	129	81
80	100	42	28	13	63	63	36	98	98	81
90	110	28	28	13	43	43	36	72	73	73
100	120	17	17	13	29	29	29	53	53	53
110	130	9	9	9	19	19	19	39	39	39
120	140	3	3	3	10	10	10	28	28	28
EMBEDMENT		DEPTH 16'	DIA. 3.0'		DEPTH 18'	DIA. 3.0'		DEPTH 20'	DIA. 3.5'	

80'

WIND SPEED (MPH)		LIGHT			MEDIUM			HEAVY		
		DEP80LA			DEP80MA			DEP80HA		
		SWAY LIMIT			SWAY LIMIT			SWAY LIMIT		
FASTEST MILE	3-SECOND GUST	4°	3°	2°	4°	3°	2°	4°	3°	2°
		EPA (FT ²)			EPA (FT ²)			EPA (FT ²)		
70	85	28	17	6	65	44	23	117	93	56
80	100	28	17	6	50	44	23	82	82	56
90	110	19	17	6	32	32	23	58	58	56
100	120	9	9	6	19	19	19	41	41	41
110	130	2	2	2	9	9	9	28	28	28
120	140	-	-	-	2	2	2	18	18	18
EMBEDMENT		DEPTH 16'	DIA. 3.0'		DEPTH 18'	DIA. 3.0'		DEPTH 20'	DIA. 3.5'	

90'

WIND SPEED (MPH)		LIGHT			MEDIUM			HEAVY		
		DEP90LA			DEP90MA			DEP90HA		
		SWAY LIMIT			SWAY LIMIT			SWAY LIMIT		
FASTEST MILE	3-SECOND GUST	4°	3°	2°	4°	3°	2°	4°	3°	2°
		EPA (FT ²)			EPA (FT ²)			EPA (FT ²)		
70	85	21	11	2	51	33	16	106	77	44
80	100	21	11	2	43	33	16	73	73	44
90	110	14	11	2	25	25	16	50	50	44
100	120	4	4	2	12	12	12	33	33	33
110	130	-	-	2	3	3	3	21	21	21
120	140	-	-	-	-	-	-	13	13	13
EMBEDMENT		DEPTH 18'	DIA. 3.0'		DEPTH 20'	DIA. 3.0'		DEPTH 22'	DIA. 3.5'	

(-) Indicates that pole is not recommended for the tabulated wind speed



LOADING CHARTS

100'

WIND SPEED (MPH)		LIGHT			MEDIUM			HEAVY		
		DEP100LA			DEP100MA			DEP100HA		
		SWAY LIMIT			SWAY LIMIT			SWAY LIMIT		
FASTEST MILE	3-SECOND GUST	4°	3°	2°	4°	3°	2°	4°	3°	2°
		EPA (FT ²)			EPA (FT ²)			EPA (FT ²)		
70	85	16	7	-	42	26	11	91	63	36
80	100	16	7	-	36	26	11	65	63	36
90	110	9	7	-	18	18	11	43	43	36
100	120	-	-	-	6	6	6	26	26	26
110	130	-	-	-	-	-	-	14	14	14
120	140	-	-	-	-	-	-	7	7	7
EMBEDMENT		DEPTH 18'	DIA. 3.0'		DEPTH 20'	DIA. 3.5'		DEPTH 22'	DIA. 3.5'	

110'

WIND SPEED (MPH)		LIGHT			MEDIUM			HEAVY		
		DEP110LA			DEP110MA			DEP110HA		
		SWAY LIMIT			SWAY LIMIT			SWAY LIMIT		
FASTEST MILE	3-SECOND GUST	4°	3°	2°	4°	3°	2°	4°	3°	2°
		EPA (FT ²)			EPA (FT ²)			EPA (FT ²)		
70	85	23	13	-	51	32	14	103	70	41
80	100	23	13	-	47	32	14	77	70	41
90	110	13	13	-	25	25	14	50	50	41
100	120	-	-	-	9	9	9	31	31	31
110	130	-	-	-	-	-	-	17	17	17
120	140	-	-	-	-	-	-	8	8	8
EMBEDMENT		DEPTH 19'	DIA. 3.5'		DEPTH 21'	DIA. 4.0'		DEPTH 22'	DIA. 4.0'	

120'

WIND SPEED (MPH)		LIGHT			MEDIUM			HEAVY		
		DEP120LA			DEP120MA			DEP120HA		
		SWAY LIMIT			SWAY LIMIT			SWAY LIMIT		
FASTEST MILE	3-SECOND GUST	4°	3°	2°	4°	3°	2°	4°	3°	2°
		EPA (FT ²)			EPA (FT ²)			EPA (FT ²)		
70	85	18	10	-	39	24	6	90	62	35
80	100	18	10	-	36	24	6	80	62	35
90	110	5	5	-	15	15	6	55	55	35
100	120	-	-	-	-	-	-	36	36	35
110	130	-	-	-	-	-	-	23	23	23
120	140	-	-	-	-	-	-	14	14	14
EMBEDMENT		DEPTH 19'	DIA. 3.5'		DEPTH 22'	DIA. 4.0'		DEPTH 23'	DIA. 4.0'	

130'

WIND SPEED (MPH)		LIGHT			MEDIUM			HEAVY		
		DEP130LA			DEP130MA			DEP130HA		
		SWAY LIMIT			SWAY LIMIT			SWAY LIMIT		
FASTEST MILE	3-SECOND GUST	4°	3°	2°	4°	3°	2°	4°	3°	2°
		EPA (FT ²)			EPA (FT ²)			EPA (FT ²)		
70	85	19	8	-	39	24	6	83	57	30
80	100	19	8	-	39	24	6	76	57	30
90	110	14	8	-	24	24	6	51	51	30
100	120	2	2	-	11	11	6	32	32	30
110	130	-	-	-	-	-	-	21	21	21
120	140	-	-	-	-	-	-	10	10	10
EMBEDMENT		DEPTH 22'	DIA. 4.0'		DEPTH 23'	DIA. 4.0'		DEPTH 24'	DIA. 4.5'	

(-) Indicates that pole is not recommended for the tabulated wind speed



LOADING CHARTS

140'

WIND SPEED (MPH)		LIGHT			MEDIUM			HEAVY		
		DEP140LA			DEP140MA			DEP140HA		
		SWAY LIMIT			SWAY LIMIT			SWAY LIMIT		
FASTEST MILE	3-SECOND GUST	4°	3°	2°	4°	3°	2°	4°	3°	2°
		EPA (FT ²)			EPA (FT ²)			EPA (FT ²)		
70	85	16	5	-	42	26	6	86	62	31
80	100	16	5	-	42	26	6	86	62	31
90	110	8	5	-	36	26	6	66	62	31
100	120	-	-	-	16	16	6	45	45	31
110	130	-	-	-	-	-	-	28	28	28
120	140	-	-	-	-	-	-	13	13	13
EMBEDMENT		DEPTH 24'	DIA. 4.0'		DEPTH 25'	DIA. 4.5'		DEPTH 26'	DIA. 4.5'	

150'

WIND SPEED (MPH)		LIGHT			MEDIUM			HEAVY		
		DEP150LA			DEP150MA			DEP150HA		
		SWAY LIMIT			SWAY LIMIT			SWAY LIMIT		
FASTEST MILE	3-SECOND GUST	4°	3°	2°	4°	3°	2°	4°	3°	2°
		EPA (FT ²)			EPA (FT ²)			EPA (FT ²)		
70	85	17	5	-	47	26	6	89	63	31
80	100	17	5	-	47	26	6	89	63	31
90	110	17	5	-	30	26	6	65	63	31
100	120	-	-	-	10	10	6	39	39	31
110	130	-	-	-	-	-	-	22	22	22
120	140	-	-	-	-	-	-	6	6	6
EMBEDMENT		DEPTH 24'	DIA. 4.0'		DEPTH 26'	DIA. 4.5'		DEPTH 27'	DIA. 5.0'	

(-) Indicates that pole is not recommended for the tabulated wind speed

1. Pole designs conform to ANSI/TIA/EIA-222-F with 1/2" radial ice and to ANSI/TIA-222-G (Class I, Exposure B, Topographic Category I). Design criteria must be verified prior to installation based on site-specific requirements.
2. Embedment depths are based on "Normal" soil (TIA Rev. F) and clay "Presumptive" soil (TIA Rev. G) with aggregate backfill. Actual site soil design parameters must be verified prior to installation.
3. For corrosive groundwater and/or soil conditions, ROHN recommends additional corrosion control protection such as concrete backfill, additional protective coating over galvanizing or the installation of sacrificial anodes.
4. Embedment depths may require adjustment based on local soil conditions.

PARTS & ACCESSORIES

<p>STEP BOLTS</p> <p>STEP BOLTS START AT 20' ABOVE GRADE (NOMINAL). WHEN ORDERING STEP BOLTS, PLEASE SPECIFY POLE HEIGHT.</p> <p>EX. SBDEP120 for a 120' POLE</p>	<p>JOURNEYMAN CLIMBING HARNESS TTFBH-4D</p> <p>PROFESSIONAL CLIMBING HARNESS TTFBH-C/P</p>	<p>SAFETY CABLE SLIDER WITH CARABINEER TT-WG-500-W/SMC</p>	<p>SAFETY CABLE SYSTEM</p> <table border="1"> <thead> <tr> <th>Pole Height</th> <th>Part Number</th> </tr> </thead> <tbody> <tr> <td>30' - 50'</td> <td>TT050TSP</td> </tr> <tr> <td>60' - 100'</td> <td>TT100TSP</td> </tr> <tr> <td>110' - 150'</td> <td>TT150TSP</td> </tr> </tbody> </table>	Pole Height	Part Number	30' - 50'	TT050TSP	60' - 100'	TT100TSP	110' - 150'	TT150TSP
Pole Height	Part Number										
30' - 50'	TT050TSP										
60' - 100'	TT100TSP										
110' - 150'	TT150TSP										

LIGHTNING ROD
LRCL
5' COPPER CLAD BOLTS TO CAP PLATE, PROVIDED WITH POLE.

GROUNDING KIT
BGK5GGX
KIT INCLUDES (1) GROUND LEAD, GROUND ROD AND CONNECTIONS. ORDER (3) KITS FOR REV G GROUNDING.

PORT DIMENSIONS

A through D PORTS
Larger ports are available, upon request.



ANTENNA INDEX

DISH ANTENNA			
DIAMETER	EPA - FT ²		SWAY LIMIT
	W/ RADOME	W/O RADOME	
(1) 2 FT.	3	6	4°
(1) 3 FT.	7	13	3°
(1) 4 FT.	11	22	2°
(2) 2 FT. B-TO-B	5	8	4°
(2) 3 FT. B-TO-B	11	18	3°
(2) 4 FT. B-TO-B	19	34	2°

FLAT PANEL ANTENNA		
DIMENSION	EPA - FT ²	SWAY LIMIT
1 FT. SQUARE W/ MOUNT	2	4°
2 FT. SQUARE W/ MOUNT	5	2°
3 FT. SQUARE W/ MOUNT	11	2°

1. The above antenna data is intended to assist in the selection of the appropriate ROHN pole. Once the total EPA and sway limit is determined for the antennas, the standard ROHN pole can be selected from the tabulated values. (See example below)
2. Tabulated pole EPA capacities represent the maximum EPA capacity of a pole. The capacity is based on the assumption that 80% of the total EPA is located at the top of the pole and the remaining 20% is located 20 ft. below the top. When all loading is located at the top of the pole, the tabulated EPA capacity must be reduced by 20%.
3. Sway limits are determined under a 50 MPH fastest-mile (Rev. F) or 60 MPH 3-second gust (Rev. G) wind speed.
4. The antenna effective projected areas (EPA) and sway limits provided in the antenna index are guidelines for typical antenna systems. Other values may apply for specific antenna models or for site-specific systems.

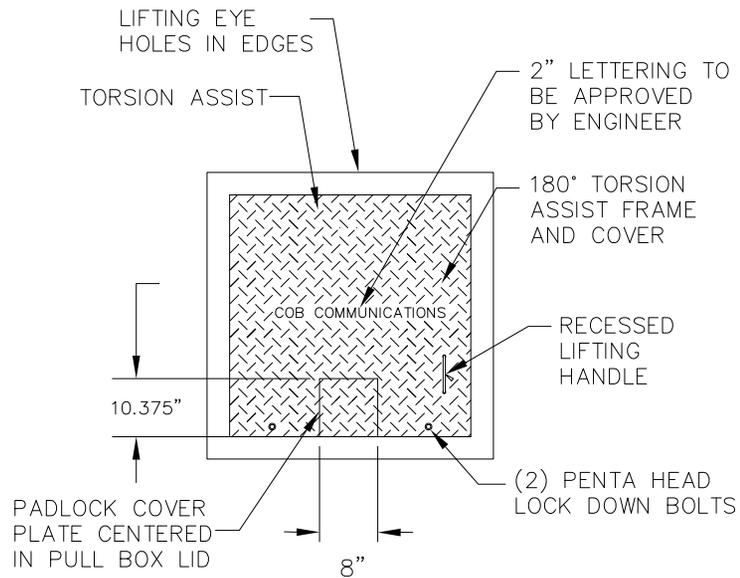
Determine EPA & Sway Limit for Dishes or Flat Panel Antennas

1. Using the antenna index, determine the types of antennas to be installed on the pole.
2. Add together the EPA value of all the antennas to be supported.
3. Determine the most restrictive sway limit considering all the antennas to be supported. For example, for one 3' dish with a 3° sway limit and one 1' flat panel with a 4° sway limit, the sway limit for the pole would be 3° and the required pole EPA capacity would be 13+2=15 ft².
4. If all antennas are to be supported at the top of the pole, only 80% of the tabulated EPA capacity shown may be considered when selecting a pole. Alternately, the antenna EPA to be supported may be increased by 25%. For example, the required pole capacity would be 15x1.25=19 ft².
5. Using the pole sway limit and the required EPA capacities, the appropriate pole may be determined from the tabulated values. For example, for a 120 ft. pole and a 100 mph 3-sec gust wind speed, a medium pole [P/N: DEP120MA] would be required for an EPA capacity greater than 19 ft² for a 3° sway limit.

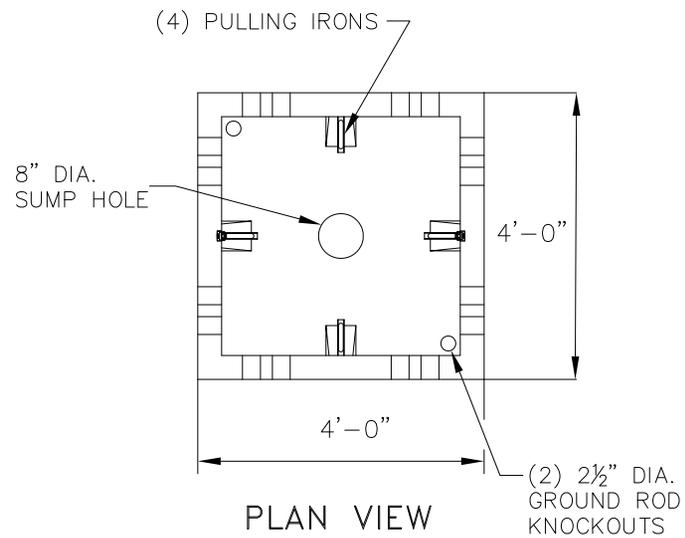
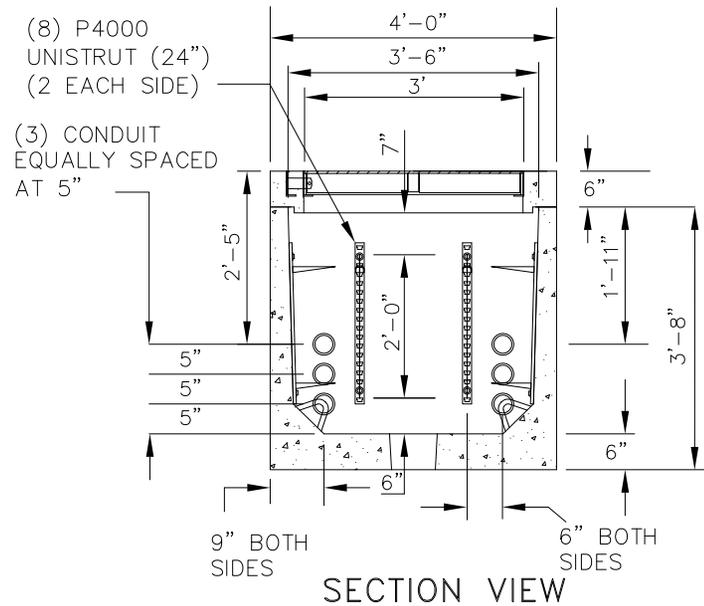
**SOLICITATION AMENDMENT #2
RFP(LPTA) #2019019**

ATTACHMENT 4:

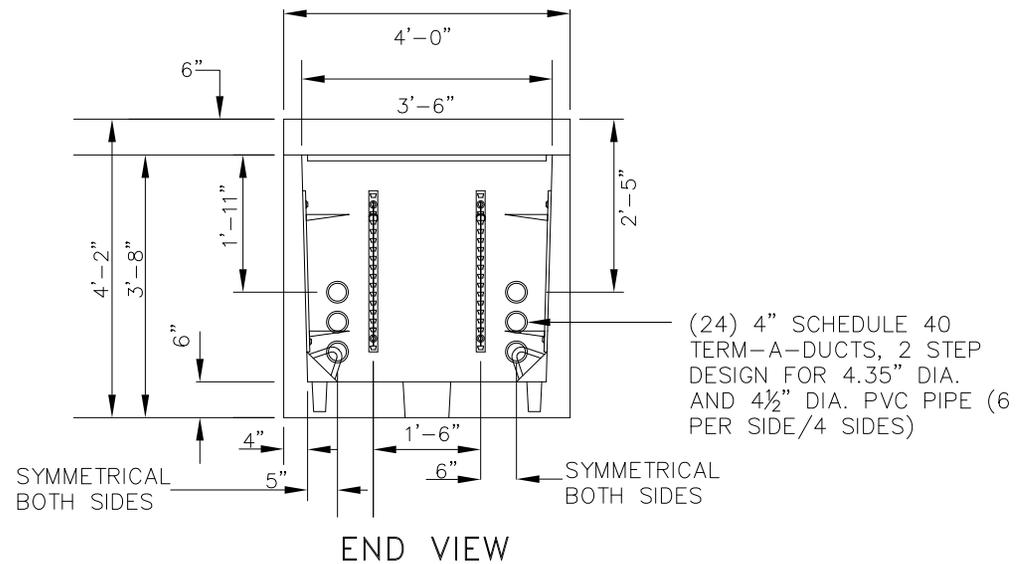
FS705 – ADD2 – ITS NO 9 VAULT



PLAN VIEW WITH COVER



PLAN VIEW

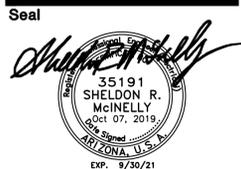


END VIEW

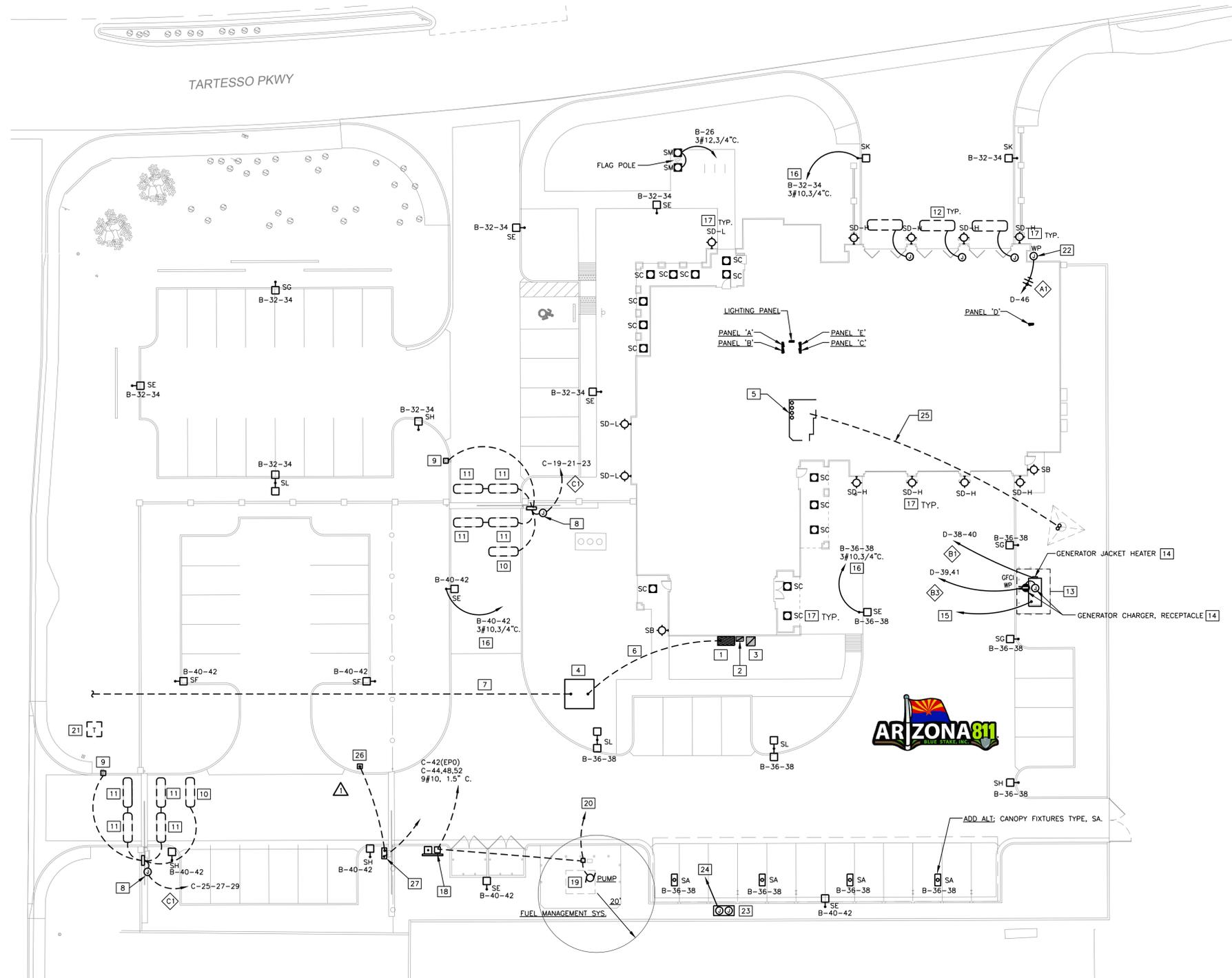
**SOLICITATION AMENDMENT #2
RFP(LPTA) #2019019**

ATTACHMENT 5:

FS705 – ADD2 – SHEET E1.1



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ELECTRICAL SITE PLAN

SCALE: 1"=20'-0"



GENERAL NOTES

- COORDINATE ALL SITE TRENCHING AND ROUTING OF CONDUITS WITH EXISTING CONTRACTOR/OWNER PRIOR TO COMMENCEMENT OF WORK TO AVOID EXISTING UNDERGROUND UTILITIES AND CONDITIONS.
- PROVIDE SAW-CUT, BORING, AND TRENCHING AS REQUIRED TO COMPLETE SCOPE OF WORK SHOWN. RETURN ALL CONCRETE, ASPHALT AND EARTH GRADING BACK TO ORIGINAL OR MATCHING CONDITION. REFER TO TYPICAL TRENCH DETAIL FOR ADDITIONAL INFORMATION.
- PROVIDE #14 COPPER INSULATED TRACER WIRE SECURELY ATTACHED AT 8' ON CENTER OR WRAPPED AROUND NONMETALLIC CONDUITS AND LINES AND HAVE 12" OF WIRE EXPOSED ON ONE END PER BLUE STAKE LAW ARS 40-360.
- PROVIDE COMPLETE MANDREL TESTING OF ALL UNDERGROUND CONDUITS AND PROVIDE 250 POUND TENSILE STRENGTH MULE TAPE WITH TRACER WIRE.
- PROVIDE 48"-36" SWEEPS ON CONDUIT RUNS WITH NO MORE THAN TWO 90 DEGREE SWEEPS PER RUN.
- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE REPRESENTATIVE UTILITY COMPANIES WITHIN (2) WEEKS OF AWARD OF CONTRACT AND SHALL FURNISH EACH REPRESENTATIVE (2) COMPLETE SET OF CONSTRUCTION DOCUMENTS, TRENCH ROUTING, SERVICE LOCATIONS, ETC., WITH UTILITY COMPANY DESIGN CONSTRUCTION DRAWINGS AND SPECIFICATIONS PRIOR TO COMMENCING REQUIRED WORK.

KEY NOTES

- SERVICE ENTRANCE SECTION ON HOUSEKEEPING PAD. REFER TO ONE LINE DIAGRAM ON SHEET E5.1. PRIOR TO CONSTRUCTION, OBTAIN APPROVAL OF LOCATION OF SES FROM POWER COMPANY. ARRANGE PULL SECTION IN ORDER TO ACHIEVE 25 FEET MINIMUM OF CONDUCTOR LENGTH BETWEEN POWER COMPANY SECONDARY AND LANDING LUGS IN PULL SECTION.
- AUTOMATIC TRANSFER SWITCH. REFER TO ONE LINE DIAGRAM ON SHEET E5.1.
- DISTRIBUTION SECTION DS-1. REFER TO ONE LINE DIAGRAM ON SHEET E5.1.
- PROPOSED LOCATION OF UTILITY COMPANY TRANSFORMER. PROVIDE TRANSFORMER PAD PER POWER COMPANY. FIELD VERIFY EXACT LOCATION WITH POWER COMPANY. PROVIDE PRIMARY CONDUITS FOR NEW POWER COMPANY TRANSFORMER. COORDINATE WITH CIVIL AND APS.
- APPROXIMATE LOCATION OF TELEPHONE, CABLE AND DATA EQUIPMENT MOUNTING BOARD. REFER TO SHEET E3.1 FOR ADDITIONAL INFORMATION. PROVIDE THREE 3" CONDUITS TOTAL FOR TELCO/CABLE TO TELEPHONE COMPANY AND CABLE COMPANY POINT OF CONNECTION. COORDINATE WITH RESPECTIVE UTILITY COMPANY FOR POINTS OF CONNECTION. STUB UP CONDUITS 6" ABOVE FINISHED FLOOR IN EQUIPMENT ROOM.
- (2) 4" SECONDARY CONDUITS FROM UTILITY TRANSFORMER TO BUILDING SES. SECONDARY CONDUITS TO BE BURIED 36" FROM FINISH GRADE. REFER TO ONE LINE DIAGRAM ON SHEET E5.1 FOR ADDITIONAL INFORMATION.
- (2) 4" POWER COMPANY PRIMARY CONDUITS FROM UTILITY PRIMARY POINT OF CONNECTION TO UTILITY TRANSFORMER. PRIMARY CONDUITS TO BE BURIED 48" FROM FINISH GRADE. COORDINATE WITH APS AS REQUIRED.
- GATE OPERATOR. PROVIDE IN-GRADE PULL-BOX AND CONNECTION TO SMART TOUCH CONTROL PANEL, DRIVE RAIL, TRAVEL STOPS, PHOTO EYES, SAFETY EDGE, LOOPS, KEYPAD, OPTICON PHOTOSENSOR, LIMIT SWITCHES, ETC. AS REQUIRED. PROVIDE CONCRETE BASE PER MFR'S RECOMMENDATION. PROVIDE CONNECTION TO OVERRIDE SWITCH IN AT KITCHEN. REFER TO SHEET E3.1.
- GATE KEYPAD. PROVIDE CONNECTION TO GATE OPERATOR PER MANUFACTURER'S RECOMMENDATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR INSTALLATION AND ADDITIONAL DETAILS.
- FREE EXIT LOOP #12 TWISTED STRANDED WIRE WITH DIRECT BURIAL JACKET.
- OBSTRUCTION LOOP: #12 TWISTED STRANDED WIRE WITH DIRECT BURIAL JACKET.
- OBSTRUCTION LOOP: #12 TWISTED STRANDED WIRE WITH DIRECT BURIAL JACKET. REFER TO OVERHEAD DOOR WIRING DIAGRAM ON SHEET E5.2 FOR ADDITIONAL INFORMATION. COORDINATE FINAL LOCATION WITH MESA PROJECT MANAGER.
- ENGINE GENERATORS AND WEATHERPROOF HOUSING. REFER TO ONE LINE DIAGRAM AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- PROVIDE CONNECTION TO ENGINE GENERATOR JACKET HEATER, BATTERY CHARGER. PROVIDE RECEPTACLE INSIDE GENERATOR HOUSING.
- PROVIDE 1" CONDUIT WITH PULL STRING TO GENERATOR ANNUNCIATOR PANEL AT DINING ROOM.
- ROUTE LIGHTING CIRCUIT VIA LIGHTING CONTACTOR. REFER TO SHEET E2.2 FOR ADDITIONAL INFORMATION. CIRCUITING SHALL NOT VARY FROM THAT SHOWN ON PLAN WITHOUT APPROVAL FROM PROJECT COORDINATOR.
- BUILDING MOUNTED LIGHTS. SEE SHEET E2.1 FOR LIGHTING FIXTURE CIRCUIT(S).
- PROVIDE WEATHERPROOF PULL-BOX WITH 6-POLE CONTACTOR WITH 120V COIL FOR EMERGENCY FUEL SYSTEM SHUT-OFF. PROVIDE 120V FUEL SYSTEM WP EOP PUSH-BUTTON CONNECTED TO CONTACTOR. PROVIDE SWITCHED NEUTRAL BREAKERS AT PANEL PER NEC 514.11(A) AND 514.11(C). LABEL EPO 'EMERGENCY FUEL PUMP SHUTOFF.' PROVIDE ON CONCRETE PAD WITH STRUT FRAME. MOUNT SIGN ON STRUT - FACING DRIVE.
- PROVIDE THREADED CONDUIT PER NEC 514.8. SEAL CONDUIT AT DISPENSER PER NEC 514.9. PROVIDE CONNECTION TO PUMP PER MANUFACTURER'S REQUIREMENTS. SEE TYPICAL CLASSIFICATION AND CLEARANCE DETAILS ON SHEET E5.3 FOR ADDITIONAL INFORMATION.
- PROVIDE (3) 1.5" CONDUITS WITH PULL-STRING TO COMM ROOM FOR FUEL SYSTEM COMMUNICATION AND LEAK DETECTION. COORDINATE FINAL ROUGH-IN AT TANK AND COMM ROOM WITH INSTALLER AND PROJECT MANAGER.
- REMOVE EXISTING RESIDENTIAL TRANSFORMER. COORDINATE WITH APS FOR RELOCATION / REMOVAL OF TRANSFORMERS AND PRIMARY FEEDERS.
- PROVIDE 120V CONNECTION TO IRRIGATION CONTROLLER.
- PROVIDE IN-GROUND PULL-BOX FOR CONNECTION TO FUTURE PV SYSTEM. CAP AND TAPE OFF UNUSED WIRES IN BELL BOX FOR CONNECTION TO FUTURE CANOPY LIGHTS.
- PROVIDE 2" CONDUIT FROM PULL-BOX TO SES LOCATION FOR FUTURE PV SYSTEM. COORDINATE PV CONDUIT STUB UP LOCATION WITH ARCHITECT AND OWNER.
- PROVIDE CONDUITS FROM MONOPOLE TO IT ROOM. SEE SHEET E4.1 FOR ADDITIONAL INFORMATION.
- PROVIDE 3/4" CONDUIT WITH PULL-STRING FROM GATE OPERATOR PULL-BOX TO IN-GROUND PULL-BOX FOR POWER/DATA TO FUTURE GATE PEDESTAL.
- PROVIDE 1" CONDUIT WITH PULL-STRING FROM ELECTRICAL ROOM (RM 110) TO IN-GROUND PULL-BOX FOR POWER/DATA TO FUTURE GATE OPERATOR. STUB CONDUIT IN ELECTRICAL ROOM 6" ABOVE FINISH FLOOR.

Rev	Date	By	Description
1	7/17/19		CITY COMMENTS
2	8/05/19		COORDINATION
3	8/19/19		USDD COMMENTS
4	9/10/19		FIELD CHANGES
5	9/18/19		FIELD CHANGES

City of Buckeye
Fire Station No. 705
3051 W. Tartesso Pkwy.
Buckeye, AZ 85396

2ND SUBMITTAL

Drawn/Checked By

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Date

07-17-19

Project Number

318009

Sheet Number

SITE ELECTRICAL PLAN

E1.1

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**SOLICITATION AMENDMENT #2
RFP(LPTA) #2019019**

ATTACHMENT 6:

FS705 – ADD2 – SHEET E3.1



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Rev	Date	By	Description
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3	8/19/19		USDD COMMENTS
4	9/10/19	DGM	FIELD CHANGES
5	9/18/19	DGM	FIELD CHANGES

City of Buckeye
Fire Station No. 705
30551 W. Tartesso Pkwy.
Buckeye, AZ 85396

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Date
07-17-19
Project Number
318009
Sheet Number
POWER PLAN

E3.1

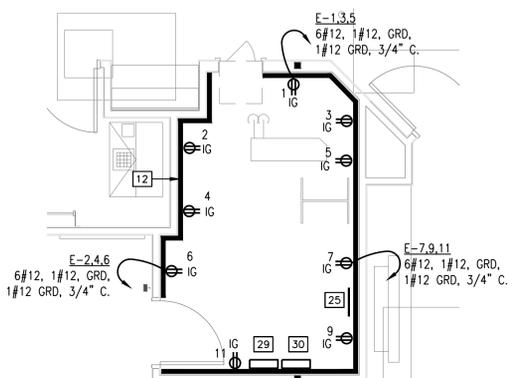
GENERAL NOTES

1. DEVICE MOUNTING HEIGHTS ARE SHOWN FOR REFERENCE ONLY. COORDINATE ALL FINAL MOUNTING HEIGHTS AND/OR LOCATIONS AS REQUIRED WITH ARCHITECTURAL DETAILS, ELEVATIONS AND MILLWORK CONTRACTOR.
2. ALL RECEPTACLES IN THE APPARATUS BAY - 140, JAN. CLOSET - 142, WORKSHOP - 143 AND SCBA - 145 SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 24" ABOVE FINISHED FLOOR.
3. HOMERUN CIRCUITS MAY BE COMBINED INTO COMMON CONDUITS WHERE ALLOWED BY NEC. PROVIDE DEDICATED NEUTRALS WHEN FEEDING AFCI OR GFCI CIRCUIT BREAKERS. PROVIDE COMMON TRIP HANDLES IF COMBINING CIRCUITS AND SHARING NEUTRAL CONDUCTORS.

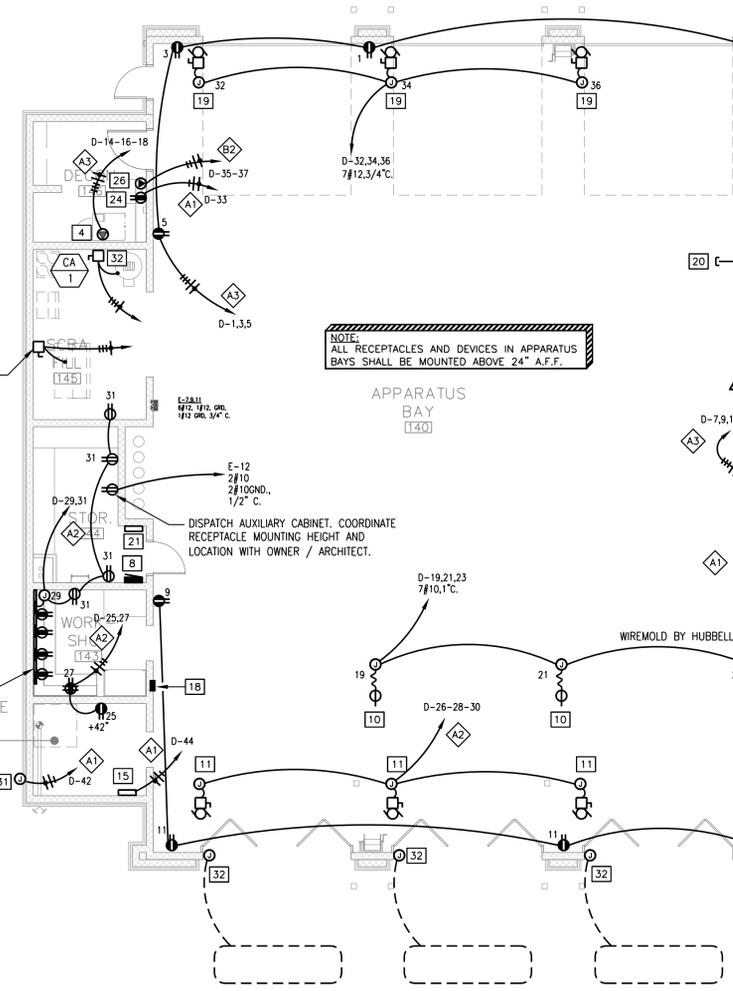
KEY NOTES

1. SERVICE ENTRANCE SECTION. REFER TO ONE LINE DIAGRAM ON SHEET E5.1 FOR ADDITIONAL INFORMATION. VERIFY EXACT LOCATION WITH ARCHITECTURAL PLANS.
2. AUTOMATIC TRANSFER SWITCH. REFER TO ONE LINE DIAGRAM ON SHEET E5.1 FOR ADDITIONAL INFORMATION.
3. DISTRIBUTION SWITCHBOARD, DS-1. REFER TO ONE LINE DIAGRAM ON SHEET E5.1 FOR ADDITIONAL INFORMATION.
4. EXTRACTOR: COORDINATE NEMA CONFIGURATION / PLUG TYPE WITH OWNER/MANUFACTURER. LOCATION TO BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
5. PANEL A.
6. PANEL B.
7. PANEL C.
8. PANEL D.
9. PANEL E.
10. PROVIDE INDUSTRIAL CORD REEL WITH 30 AMP RECEPTACLE. MOUNT FROM STRUCTURE. REFER TO SHEET E5.3 FOR ADDITIONAL INFORMATION. COORDINATE LOCATION WITH LIGHTING FIXTURES AND MECHANICAL EQUIPMENT.
11. APPARATUS BAY DOOR OPENER: 3/4 HP @ 208V/3 PH. FURNISH AND INSTALL 30A/3P DISCONNECT SWITCH WITH CLASS RK1 FUSES PER MANUFACTURER'S REQUIREMENTS. STARTER INTEGRAL WITH UNIT. REFER TO OVERHEAD DOOR WIRING DIAGRAM, AND MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR CONTROL WIRING AND ADDITIONAL INFORMATION.
12. PROVIDE 3/4" FIRE RATED TMB GRADE PLYWOOD MOUNTING BOARD TO COVER ALL WALLS OF ROOM. VERIFY EXACT LOCATIONS OF ALL RECEPTACLES PRIOR TO ROUGH-IN WITH CITY PROJECT MANAGER.
13. SEE LARGE SCALE PLAN THIS SHEET FOR ADDITIONAL ELECTRICAL REQUIREMENTS IN ITD AND COMMUNICATIONS ROOMS.
14. PROVIDE REMOTE ANNUNCIATOR FOR GENERATOR. PROVIDE CONTROL CIRCUITING FROM GENERATOR AND ATS AS REQUIRED BY GENERATOR/ATS MANUFACTURER.
15. FIRE ALARM CONTROL PANEL.
16. PROVIDE RECEPTACLE FOR ICE MAKER. VERIFY RECEPTACLE CONFIGURATION WITH SUPPLIER.
17. PROVIDE CONNECTION TO RANGE AND RANGE HOOD/LIGHT AND FAN/LIGHT SWITCHES. ELECTRICAL CONTRACTOR SHALL COORDINATE ROUGH-IN LOCATIONS OF ALL COMPONENTS FOR FINAL SELECTED SYSTEM. RECEPTACLE IS APPROXIMATELY 10.5" AFF TO CENTER OF RECEPTACLE PER MANU. REFER TO DETAIL A ON SHEET E5.3 FOR HOOD AND RANGE CONNECTION INFORMATION.
18. PROVIDE RECESSED OVERHEAD DOOR CONTROLLERS. REFER TO DIAGRAM ON SHEET E5.2 FOR DETAILS.
19. APPARATUS BAY DOOR OPENER: 3/4 HP @ 120V/1 PH. FURNISH AND INSTALL 30A/3P DISCONNECT SWITCH WITH CLASS RK1 FUSES PER MANUFACTURER'S REQUIREMENTS. STARTER INTEGRAL WITH UNIT. REFER TO OVERHEAD DOOR WIRING DIAGRAM, AND MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR CONTROL WIRING AND ADDITIONAL INFORMATION.
20. PROVIDE 2.5" EMPTY CONDUIT FROM DISTRIBUTION SECTION DS-1 TO STRUCTURE IN APPARATUS BAY. REFER TO ONE LINE DIAGRAM FOR ADDITIONAL INFORMATION. VERIFY EXACT LOCATION OF STUBBOUT WITH ARCHITECT.
21. PROVIDE 18" BY 18" BY 8" NEMA 1, PIANO HINGED, LOCKABLE CABINET WITH A COMPLETE SET OF DUPLICATE FUSES FOR EACH SWITCH IN SE'S AND DS-1. MOUNT ABOVE LIGHTING CONTACTOR.
22. (2) GATE OPERATOR KEYED SWITCHES FOR (2) SITE ACCESS GATE OVERRIDES. REFER TO SHEET E1.1 FOR ADDITIONAL INFORMATION. PROVIDE ENGRAVED LABEL ON SWITCHES.
23. MOUNT RECEPTACLE AND CABLE TV OUTLET AT 18" BELOW FINISHED CEILING.
24. PROVIDE DUPLEX RECEPTACLE FOR WASHER AT +48" AFF UNO.
25. PROVIDE 1/4" BY 2" BY 24" COPPER GROUNDING BUSS BAR WITH 17" INSULATED BUSHINGS MOUNTED ON PLYWOOD BACKBOARD AS DIRECTED BY CITY PROJECT MANAGER. PROVIDE #4 AWG COPPER INSULATED CONDUCTOR TO BUILDING SYSTEM GROUND. DO NOT COMBINE GROUND CONDUCTORS.
26. PROVIDE DRYER RECEPTACLE. MOUNT AT 48" AFF UNO.
27. LIGHTING CONTACTOR. REFER TO WIRING DIAGRAM ON SHEET E5.1 FOR ADDITIONAL INFORMATION.
28. PROVIDE REMOTE FIRE ALARM SYSTEM ANNUNCIATOR.
29. PROVIDE CABLE TV CABINET. REFER TO SHEET E5.2 FOR DETAILS AND ADDITIONAL INFORMATION. PROVIDE CONDUITS FROM TELCO/CABLE PEDESTAL. REFER TO SHEET E1.1 FOR ADDITIONAL INFORMATION.
30. CARD READER SYSTEM. REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. PROVIDE CONNECTION TO RECEPTACLE CIRCUIT AS REQUIRED.
31. PROVIDE CONNECTION TO FIRE ALARM BELL. VERIFY EXACT LOCATION WITH SUPPLIER PRIOR TO INSTALLATION.
32. PROVIDE CONNECTION TO COMPRESSOR. REFER TO ONE LINE DIAGRAM FOR ADDITIONAL INFORMATION.
33. PROVIDE 3/4" CONDUIT AND SINGLE GANG BOX AT DOOR CONTROLLER ABOVE DOOR FOR DOOR OBSTRUCTION LOOP. COORDINATE FINAL ROUGH-IN LOCATION WITH DOOR VENDOR AND ARCHITECT.
34. PROVIDE CONDUIT(S) FROM COMMUNICATION ROOM 137 AND INTO ROOM 107 FOR IT/IDF EQUIPMENT. VERIFY CONDUIT SIZE AND EXACT LOCATION OF STUB OUT WITH ARCHITECT / OWNER.
35. PROVIDE FLOOR BOX. REFER TO PARTIAL SYMBOL LEGEND ON SHEET E0.1 FOR ADDITIONAL INFORMATION.
36. PROVIDE CEILING MOUNTED RECEPTACLE FOR PROJECTOR. COORDINATE EXACT LOCATION WITH ARCHITECT.
37. PROVIDE 3/4" CONDUIT STUBBED INTO PLENUM SPACE WITH (2) CAT-6 CABLES TO DATA ROOM PER CITY "IT" FOR FUTURE CABLE. VERIFY EXACT MOUNTING HEIGHT WITH CITY OF BUCKEYE PRIOR TO ROUGH-IN.
38. PROVIDE SINGLE-GANG BOX WITH (2) CAT-6 CABLES TO DATA ROOM IN CEILING FOR WIFI CONNECTION.

ALL DATA DEVICES TO BE PROVIDED WITH (2) CAT-6 PLENUM RATED CABLES FROM DEVICE TO IT ROOM AS DIRECTED BY BUCKEYE IT DEPARTMENT.
TV DROPS SHALL BE PROVIDED WITH (1) COAX CABLE AND (1) CAT-6 PLENUM RATED CABLE FROM DEVICE TO IT ROOM AS DIRECTED BY BUCKEYE IT DEPARTMENT.



DATA/COMM. ROOM PLAN
SCALE: 1/4" = 1'-0"



NOTE: ALL RECEPTACLES AND DEVICES IN APPARATUS BAY SHALL BE MOUNTED ABOVE 24" A.F.F.

PROVIDE CONNECTION TO SCBA. VERIFY ROUTING WITH MANUFACTURER. SEE ONE-LINE DIAGRAM FOR CIRCUITING AND DISCONNECT SWITCH SIZE.

DISPATCH AUXILIARY CABINET. COORDINATE RECEPTACLE MOUNTING HEIGHT AND LOCATION WITH OWNER / ARCHITECT.

WIREMOLD BY HUBBELL

JAN./FIRE RISER (142)

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

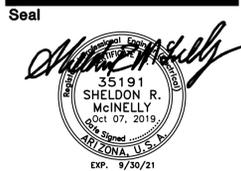


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RFP(LPTA) #2019019**

ATTACHMENT 7:

FS705 – ADD2 – SHEET E4.1



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GENERAL NOTES

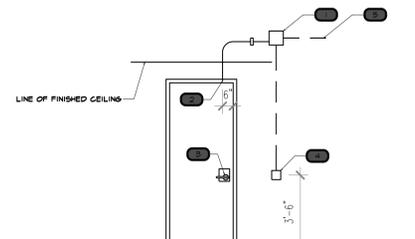
- ALL EXTERIOR SPEAKERS SHALL BE MOUNTED AT 13'-0" AFF WITH 4" SQ BOX AND 2 GANG TRIM RING.
- INSTALL 3/4" CONDUITS WITH PULL STRING FOR ALL VOICE, DATA AND CABLE TV OUTLETS.
- SEE SHEET E4.2 FOR DISPATCH SYSTEM DETAILS.

KEY NOTES

- PROVIDE WIDE AREA DISPATCH CABINET.
- PHOENIX PROVIDED AND GC INSTALLED HOCKEY SIGN PAN. MOUNT IN A MANNER THAT BOTTOM OF PAN IS 18" ABOVE BAY DOOR HEADERS. BRING 2" CONDUIT TO PULL-BOX ABOVE PAN. SLEEVE 1" CONDUIT DOWN TO 12" ABOVE PAN.
- PROVIDE DORM REMOTE.
- PROVIDE ROOF PENETRATIONS FOR WIDE AREA DISPATCH ANTENNA. COORDINATE LOCATION OF PENETRATIONS WITH MECHANICAL AND ARCHITECTURAL PLANS. VERIFY EXACT LOCATION WITH DISPATCH SYSTEM SUPPLIER. PROVIDE #2 AWG COPPER GROUND TO SES GROUNDING ELECTRODE SYSTEM.
- PROVIDE WITH 4" SQ. BOX AND 2 GANG TRIM RING. MOUNT AT +13'-0" AFF OR AS SHOWN ON ARCHITECTURAL ELEVATIONS.
- PROVIDE 12" BY 12" BY 8" JUNCTION BOX LOCATED IN CEILING FOR WIDE AREA DISPATCH SYSTEM CABLING.
- PROVIDE ONE (1) 3" CONDUIT FROM JUNCTION BOX TO WIDE AREA DISPATCH CABINET IN ROOM 137.
- COUNT UP TIMER GSS ROUGH-IN ONLY. HORIZONTAL SINGLE GANG BOXES PLACED AT 9' AFF. PROVIDE CABLE PATHWAY AND CAT 6 TO COMMUNICATION ROOM. COORDINATE ROUGH-IN LOCATION WITH ARCHITECT.
- RINGDOWN EMERGENCY PHONE. VERTICAL SINGLE GANG BOX AT ADA HEIGHT. EXTERIOR CALL BOX HOUSING TO BE PHOENIX PROVIDED AND GC INSTALLED. VERIFY LOCATION PRIOR TO ROUGH-IN.
- CAT 6 IN 3/4" C. TO TMB.
- ALL CABLING IN APPARATUS BAY SHALL BE INSTALLED IN CONDUIT.
- PROVIDE VERTICAL SINGLE GANG BOX AT ADA HEIGHT FOR PUSH BUTTON AT DOOR WITH 3/4" CONDUIT TO DISPATCH CABINET IN COMMUNICATIONS ROOM.
- COORDINATE AIRMOBILE AP EQUIPMENT LOCATION WITH FINAL DISPATCH LAYOUT FROM PHOENIX FIRE DEPARTMENT. VERTICAL SINGLE GANG BOX WITH 2 POSITION MODULAR RJ-45 FACEPLATE. MOUNT AT 13' AFF.
- FROM MONOPOLE TO COMMUNICATIONS ROOM 137.
 - DISPATCH SYSTEM - PROVIDE STRAIGHT RUN OF (1) 3" CONDUIT AND (1) 3" CONDUIT WITH LONG RADIUS/SWEEP ELBOWS. RUN SHALL BE SHORTEST DIRECT ROUTE POSSIBLE. COORDINATE WITH STRUCTURAL FOOTINGS.
 - IT DEPARTMENT CONDUITS - PROVIDE (3) CONDUITS WITH LONG/RADIUS/SWEEP ELBOWS. RUN SHALL BE SHORTEST DIRECT ROUTE POSSIBLE. COORDINATE WITH STRUCTURAL FOOTINGS.
- 80' TOWER AND INCLUDE CONDUITS FOR IT DATA AND DISPATCH COMMUNICATION. ALL CONDUIT TO BE ALIGNED IN THE LOWER RIGHT HAND CORNER OF COMMUNICATION ROOM.
- PROVIDE VERTICAL SINGLE GANG BOX AT ADA HEIGHT.
- PROVIDE 4" SQUARE BOX WITH BLANK COVER PLATE FIRMLY ATTACHED TO THE CEILING STRUCTURE.
- PROVIDE 12" BY 12" BY 8" JUNCTION BOX LOCATED IN CEILING FOR IT SYSTEM CABLING.
- PROVIDE (3) 2" CONDUITS FROM IT/COMM ROOM TO ROOF.
- PROVIDE (2) 2" OVER BAY AT STRUCTURE TO IT CLOSET.
- PROVIDE CARD READER J-BOXES AND CONDUIT. REFER TO DETAIL THIS SHEET, ARCHITECTURAL SHEET A2.1 AND ARCHITECTURAL SPECS AND DOOR HARDWARE REQUIREMENTS FOR ADDITIONAL DOOR HARDWARE REQUIREMENTS. COORDINATE WITH GENERAL CONTRACTOR AND DOOR HARDWARE SUPPLIER FOR FINAL REQUIREMENTS. PROVIDE 20A/120V CIRCUIT TO EACH DOOR HARDWARE, PROVIDE 3#10, 1/2" CONDUIT FROM PANEL E, CIRCUIT 14.

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4	9/10/19	DGM	FIELD CHANGES
5	9/18/19	DGM	FIELD CHANGES

FOR REFERENCE ONLY - SEE SHEET A2.1 FOR ADD'L INFO



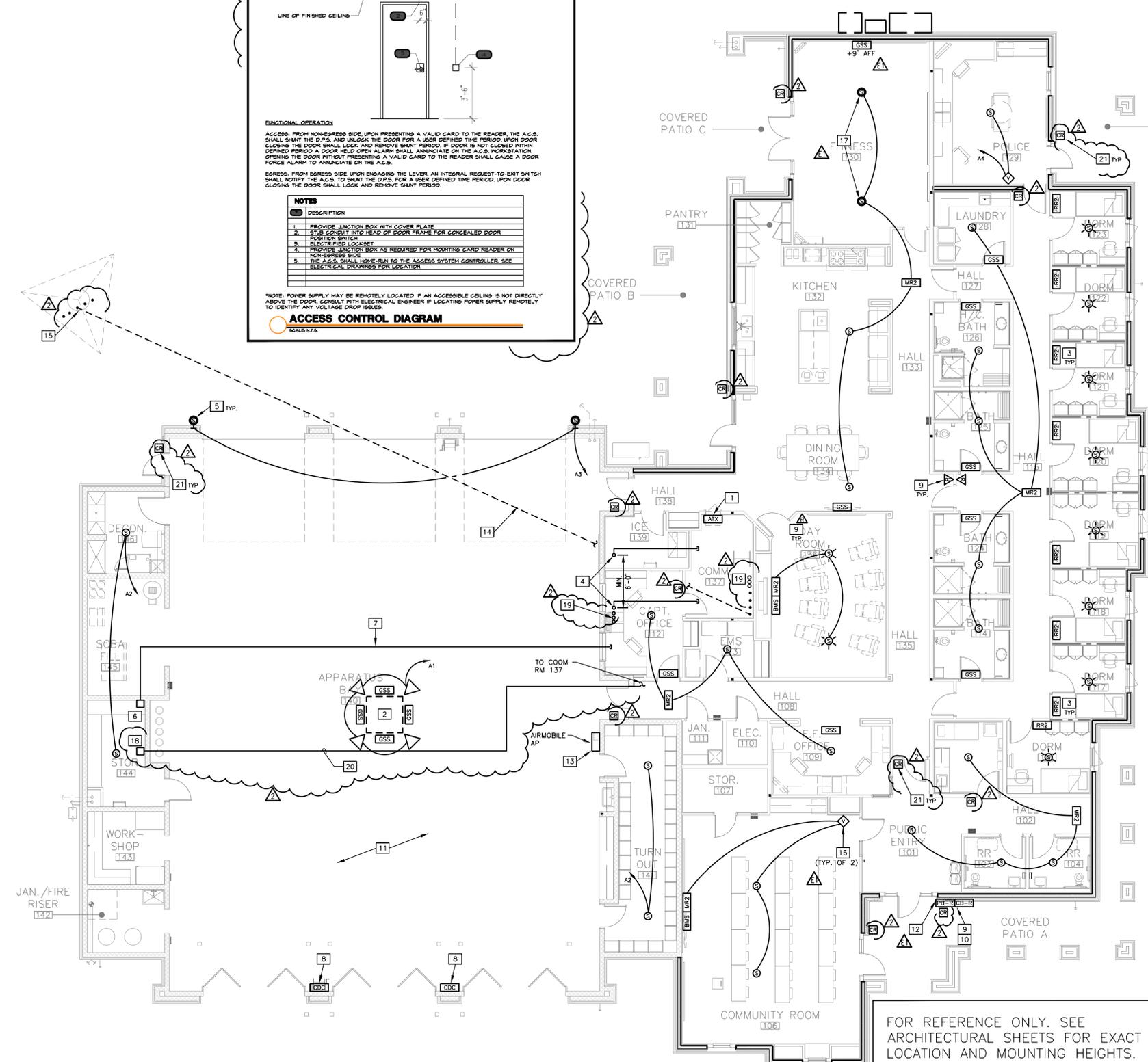
FUNCTIONAL OPERATION
ACCESS: FROM NON-EGRESS SIDE, UPON PRESENTING A VALID CARD TO THE READER, THE A.C.S. SHALL SHUNT THE D.F.S. AND UNLOCK THE DOOR FOR A USER DEFINED PERIOD. UPON DOOR CLOSING THE DOOR SHALL LOCK AND REMOVE SHUNT PERIOD. IF DOOR IS NOT CLOSED WITHIN DEFINED PERIOD A DOOR HELD OPEN ALARM SHALL ANNUNCIATE ON THE A.C.S. RE-OPENING THE DOOR WITHOUT PRESENTING A VALID CARD TO THE READER SHALL CAUSE A DOOR FORCE ALARM TO ANNUNCIATE ON THE A.C.S.
EGRESS: FROM EGRESS SIDE, UPON ENGAGING THE LEVER, AN INTEGRAL REQUEST-TO-EXIT SWITCH SHALL NOTIFY THE A.C.S. TO SHUNT THE D.F.S. FOR A USER DEFINED TIME PERIOD. UPON DOOR CLOSING THE DOOR SHALL LOCK AND REMOVE SHUNT PERIOD.

NOTES

NO.	DESCRIPTION
1	PROVIDE JUNCTION BOX WITH COVER PLATE
2	STUB CONDUIT INTO HEAD OF DOOR FRAME FOR CONCEALED DOOR
3	POSITION SWITCH
4	ELECTRIFIED LOCKSET
5	PROVIDE JUNCTION BOX AS REQUIRED FOR MOUNTING CARD READER ON
6	NON-EGRESS SIDE
7	THE A.C.S. SHALL WIRE-RUN TO THE ACCESS SYSTEM CONTROLLER. SEE ELECTRICAL DRAWINGS FOR LOCATION.

NOTE: POWER SUPPLY MAY BE REMOTELY LOCATED IF AN ACCESSIBLE CEILING IS NOT DIRECTLY ABOVE THE DOOR. CONSULT WITH ELECTRICAL ENGINEER IF LOCATING POWER SUPPLY REMOTELY TO IDENTIFY ANY VOLTAGE DROP ISSUES.

ACCESS CONTROL DIAGRAM
SCALE: 1/8" = 1'-0"



FOR REFERENCE ONLY. SEE ARCHITECTURAL SHEETS FOR EXACT LOCATION AND MOUNTING HEIGHTS.

SYMBOL	DESCRIPTION
ATX	G2 ATX STATION CONTROLLER
CB-R	CALL BOX - RED
PB-R	PUSH BUTTON - RED
GSS	G2 24" MESSAGE SIGN
RR2	G2 ROOM REMOTE 2
MR2	G2 MESSAGE REMOTE 2 (MOUNTED ABOVE ACCESSIBLE CEILING SPACE)
BMS	BETA BRITE (MS)
☀	G2 LED SPEAKER FLUSH MOUNT
☀	SPEAKER, WEATHER-PROOF
☀	SPEAKER, FLUSH MOUNT
◇	VOLUME CONTROL
▽	RED PHONE
▽	HORN SPEAKER

*** STATION ALERTING EQUIPMENT LAYOUT, DEVICE LOCATIONS AND TYPES SUBJECT TO CHANGE UPON REVIEW OF FINAL PLAN SET ***

- DISPATCH SYSTEM NOTES**
- ALL SIGN BACK BOXES TO BE INSTALLED HORIZONTALLY AND LOCATED 1" FROM CEILING OR CENTERED BETWEEN CEILING AND DOORS, CEILING AND SOFFITS, UNLESS NOTED OTHERWISE.
 - REFER TO ALERTING SYSTEM DETAIL DRAWINGS FOR ADDITIONAL INFORMATION ON ROUGH-IN REQUIREMENTS, CABLE REQUIREMENTS, ETC.
 - INSTALL PULL-STRING IN ALL ALERTING SYSTEM CONDUITS INCLUDING VOICE, DATA, DOORBELL, ROOFTOP ANTENNA LOCATIONS, ETC.
 - PROVIDE TWO (2) 1.25"-2" RIGID TYPES, SPACED 4'-6" APART AND MOUNTED TO PARAPET WALL FOR ALERTING SYSTEM ANTENNAS.
 - PROVIDE ANTENNA MAST BONDING TO THE BUILDING GROUND SYSTEM. REQUIRE A SEPARATE ROOF PENETRATION.
 - PROVIDE MASTER GROUND BUS IN THE COMM ROOM BONDED TO THE BUILDING GROUND SYSTEM.

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Date: 07-17-19
Project Number: 318009
Sheet Number: DISPATCH SYSTEM PLAN
E4.1 LAYOUT CHS

DISPATCH SYSTEM PLAN / IT CONDUITS / CARD READERS

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

**SOLICITATION AMENDMENT #2
RFP(LPTA) #2019019**

ATTACHMENT 8:

FS705 – ADD2 – HARDWARE SPEC

SECTION 08 71 00

DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY:

- A. Section Includes: Finish Hardware for door openings, except as otherwise specified herein.
 - 1. Door hardware for steel (hollow metal) doors.
 - 2. Door hardware for aluminum doors.
 - 3. Door hardware for wood doors.
 - 4. Door hardware for other doors indicated.
 - 5. Keyed cylinders as indicated.
- B. Related Sections:
 - 1. Division 6: Rough Carpentry.
 - 2. Division 8: Aluminum Doors and Frames
 - 3. Division 8: Hollow Metal Doors and Frames.
 - 4. Division 8: Wood Doors.
 - 5. Division 26 Electrical
 - 6. Division 28: Electronic Security
- C. References: Comply with applicable requirements of the following standards. Where these standards conflict with other specific requirements, the most restrictive shall govern.
 - 1. Builders Hardware Manufacturing Association (BHMA)
 - 2. NFPA 101 Life Safety Code
 - 3. NFPA 80 -Fire Doors and Windows
 - 4. ANSI-A156.xx- Various Performance Standards for Finish Hardware
 - 5. UL10C – Positive Pressure Fire Test of Door Assemblies
 - 6. ANSI-A117.1 – Accessible and Usable Buildings and Facilities
 - 7. DHI /ANSI A115.IG – Installation Guide for Doors and Hardware
 - 8. ICC – International Building Code
- D. Intent of Hardware Groups
 - 1. Should items of hardware not definitely specified be required for completion of the Work, furnish such items of type and quality comparable to adjacent hardware and appropriate for service required.
 - 2. Where items of hardware aren't definitely or correctly specified, are required for completion of the Work, a written statement of such omission, error, or other discrepancy to be submitted to Architect, prior to date specified for receipt of bids for clarification by addendum; or, furnish such items in the type and quality established by this specification, and appropriate to the service intended.
- E. Allowances
 - 1. Refer to Division 1 for allowance amount and procedures.
- F. Alternates
 - 1. Refer to Division 1 for Alternates and procedures.

- 1.2 SUBSTITUTIONS:
- A. Comply with Division 1.
- 1.3 SUBMITTALS:
- A. Comply with Division 1.
 - B. Special Submittal Requirements: Combine submittals of this Section with Sections listed below to ensure the "design intent" of the system/assembly is understood and can be reviewed together.
 - C. Product Data: Manufacturer's specifications and technical data including the following:
 - 1. Detailed specification of construction and fabrication.
 - 2. Manufacturer's installation instructions.
 - 3. Wiring diagrams for each electric product specified. Coordinate voltage with electrical before submitting.
 - 4. Submit 6 copies of catalog cuts with hardware schedule.
 - 5. Provide 9001-Quality Management and 14001-Environmental Management for products listed in Materials Section 2.2
 - D. Shop Drawings - Hardware Schedule: Submit 6 complete reproducible copy of detailed hardware schedule in a vertical format.
 - 1. List groups and suffixes in proper sequence.
 - 2. Completely describe door and list architectural door number.
 - 3. Manufacturer, product name, and catalog number.
 - 4. Function, type, and style.
 - 5. Size and finish of each item.
 - 6. Mounting heights.
 - 7. Explanation of abbreviations and symbols used within schedule.
 - 8. Detailed wiring diagrams, specially developed for each opening, indicating all electric hardware, security equipment and access control equipment, and door and frame rough-ins required for specific opening.
 - E. Templates: Submit templates and "reviewed Hardware Schedule" to door and frame supplier and others as applicable to enable proper and accurate sizing and locations of cutouts and reinforcing.
 - 1. Templates, wiring diagrams and "reviewed Hardware Schedule" of electrical terms to electrical for coordination and verification of voltages and locations.
 - F. Samples: (If requested by the Architect)
 - 1. 1 sample of Lever and Rose/Escutcheon design, (pair).
 - 2. 3 samples of metal finishes
 - G. Contract Closeout Submittals: Comply with Division 1 including specific requirements indicated.
 - 1. Operating and maintenance manuals: Submit 3 sets containing the following.
 - a. Complete information in care, maintenance, and adjustment, and data on repair and replacement parts, and information on preservation of finishes.
 - b. Catalog pages for each product.
 - c. Name, address, and phone number of local representative for each manufacturer.
 - d. Parts list for each product.
 - 2. Copy of final hardware schedule, edited to reflect, "As installed".

3. Copy of final keying schedule
4. As installed "Wiring Diagrams" for each piece of hardware connected to power, both low voltage and 110 volts.
5. One set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

1.4 QUALITY ASSURANCE

A. Comply with Division 1.

1. Statement of qualification for distributor and installers.
2. Statement of compliance with regulatory requirements and single source responsibility.
3. Distributor's Qualifications: Firm with 3 years experience in the distribution of commercial hardware.
 - a. Distributor to employ full time Architectural Hardware Consultants (AHC) for the purpose of scheduling and coordinating hardware and establishing keying schedule.
 - b. Hardware Schedule shall be prepared and signed by an AHC.
4. Installer's Qualifications: Firm with 3 years experienced in installation of similar hardware to that required for this Project, including specific requirements indicated.
5. Regulatory Label Requirements: Provide testing agency label or stamp on hardware for labeled openings.
 - a. Provide UL listed hardware for labeled and 20 minute openings in conformance with requirements for class of opening scheduled.
 - b. Underwriters Laboratories requirements have precedence over this specification where conflict exists.
6. Single Source Responsibility: Except where specified in hardware schedule, furnish products of only one manufacturer for each type of hardware.

- ##### B. Review Project for extent of finish hardware required to complete the Work. Where there is a conflict between these Specifications and the existing hardware, notify the Architect in writing and furnish hardware in compliance with the Specification unless otherwise directed in writing by the Architect.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Packing and Shipping: Comply with Division 1.

1. Deliver products in original unopened packaging with legible manufacturer's identification.
2. Package hardware to prevent damage during transit and storage.
3. Mark hardware to correspond with "reviewed hardware schedule".
4. Deliver hardware to door and frame manufacturer upon request.

B. Storage and Protection: Comply with manufacturer's recommendations.

1.6 PROJECT CONDITIONS:

- ##### A. Coordinate hardware with other work. Furnish hardware items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements indicated, as necessary for the proper installation and function, regardless of omissions or conflicts in the information on the Contract Documents.
- ##### B. Review Shop Drawings for doors and entrances to confirm that adequate provisions will be made for the proper installation of hardware.

1.7 WARRANTY:

- A. Refer to Conditions of the Contract
- B. Manufacturer's Warranty:
 - 1. Closers: Lifetime
 - 2. Exit Devices: Five Years
 - 3. Locksets & Cylinders: Ten years
 - 4. All other Hardware: Two years.

1.8 OWNER'S INSTRUCTION:

- A. Instruct Owner's personnel in operation and maintenance of hardware units.

1.9 MAINTENANCE:

- A. Extra Service Materials: Deliver to Owner extra materials from same production run as products installed. Package products with protective covering and identify with descriptive labels. Comply with Division 1 Closeout Submittals Section.
 - 1. Special Tools: Provide special wrenches and tools applicable to each different or special hardware component.
 - 2. Maintenance Tools: Provide maintenance tools and accessories supplied by hardware component manufacturer.
 - 3. Delivery, Storage and Protection: Comply with Owner's requirements for delivery, storage and protection of extra service materials.
- B. Maintenance Service: Submit for Owner's consideration maintenance service agreement for electronic products installed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

- A. The following manufacturers are approved subject to compliance with requirements of the Contract Documents. Approval of manufacturers other than those listed shall be in accordance with Division 1.

<u>Item:</u>	<u>Manufacturer:</u>	<u>Approved:</u>
Hinges	Stanley	Bommer, McKinney
Continuous Hinges	Stanley	Select, ABH
Locksets	Best	No Substitution
Cylinders	Best	No Substitution
Exit Devices	Precision	No Substitution
Closers	Stanley QDC	No Substitution
Access Control System	by Owners Security Contractor	
Push/Pull Plates	Trimco	Don-Jo, Hager
Push/Pull Bars	Trimco	Don-Jo, Hager
Protection Plates	Trimco	Don-Jo, Hager
Overhead Stops	ABH	Rixson
Door Stops	Trimco	Don-Jo, Hager
Flush Bolts	Trimco	Don-Jo, Hager
Coordinator & Brackets	Trimco	Don-Jo, Hager
Threshold & Gasketing	National Guard	Hager, Pemko

2.2 MATERIALS:

A. Hinges: Shall be Five Knuckle Ball bearing hinges

1. Template screw hole locations
2. Bearings are to be fully hardened.
3. Bearing shell is to be consistent shape with barrel.
4. Minimum of 2 permanently lubricated non-detachable bearings on standard weight hinge and 4 permanently lubricated bearing on heavy weight hinges.
5. Equip with easily seated, non-rising pins.
6. Non Removable Pin screws shall be slotted stainless steel screws.
7. Hinges shall be full polished, front, back and barrel.
8. Hinge pin is to be fully plated.
9. Bearing assembly is to be installed after plating.
10. Sufficient size to allow 180-degree swing of door
11. Furnish five knuckles with flush ball bearings
12. Provide hinge type as listed in schedule.
13. Furnish 3 hinges per leaf to 7 foot 6 inch height. Add one for each additional 30 inches in height or fraction thereof.
14. Tested and approved by BHMA for all applicable ANSI Standards for type, size, function and finish
15. UL10C listed for Fire rated doors.

B. Geared Continuous Hinges:

1. Tested and approved by BHMA for ANSI A156.26-1996 Grade 1
2. Anti-spinning through fastener
3. UL10C listed for 3 hour Fire rating
4. Non-handed
5. Lifetime warranty
6. Provide Fire Pins for 3-hour fire ratings
7. Sufficient size to permit door to swing 180 degrees

C. Cylindrical Type Locks and Latchsets:

1. Provide locksets tested and approved by BHMA/ANSI A156.2, Series 4000, Operational Grade 1, Extra-Heavy Duty.
2. Provide locksets listed by Underwriters Laboratories for use on fire rated single or double swinging doors.
3. Provide locksets that meet the design and operation of the cylindrical lock to meet the accessible requirements of ANSI A117.1 and ADA–Americans with Disabilities Act.
4. Provide locksets that meet Florida Building Code and Miami-Dade County Code:
 - a. 9/16" latch throw – Listed by Florida Building Code and Miami-Dade County at ± 75 PSF for single doors.
 - b. 3/4" latch throw – Listed by Florida Building Code and Miami Dade County at ± 80 PSF for single doors and ± 50 PSF for double doors.
5. Provide locksets that are listed with the California State Fire Marshal.
6. Provide locksets made in a manufacturing facility to compliant with ISO 9001-Quality Management and ISO 14001-Environmental Management.
7. Provide locksets that meet or exceed 20 Million cycle test verified by third party testing agency.
8. Provide locksets with the following mechanical features
 - a. Locksets outside locked lever must withstand minimum 1400 inch-pounds of torque. In excess of that, a replaceable part will shear. Key from outside and/or inside lever will still operate lockset.
 - b. Locksets shall fit modified ANSI A115.2 door preparation.
 - c. 2-3/4 inch (70 mm) backset, standard.
 - d. Door thickness – Available for 1 3/8" to 2 1/4" doors.
 - e. 9/16 inch (14 mm) throw latchbolt.

- f. Latch to have single piece tail-piece construction.
 - g. Chassis – Critical latch and chassis components to be brass or corrosion-treated steel.
 - h. Lock shall allow the lever handle to move 45 degrees from parallel to the horizontal plane without engaging the latchbolt assembly.
 - i. Hub, side plate, shrouded rose, locking pin to be a one-piece casting with a shrouded locking lug.
 - j. Locksets to have anti-rotational studs that are thru-bolted.
 - k. Provide sufficient curved strike lip to protect door trim at single doors. At pairs of doors, provide 7/8" Lip to Center Strike.
 - l. Each lever to have independent spring mechanism.
 - m. Lever springs to be contained in the main lock hub.
 - n. Outside lever sleeve to be seamless, of one-piece construction made of a hardened steel alloy.
 - o. Keyed lever to be removable only after core is removed, by authorized control key.
 - p. Abrasive lever handles to have a special abrasive strip on back of the hand grasp portion of the lever.
 - q. Tactile lever handles to have grooves machined into the back of the hand grasp portion of the lever.
9. Locksets to have the capability of supporting manufacturers' conventional core as well as large and small interchangeable cores.
10. Provide core face with the same finish as the lockset.
11. Provide functions and design as indicated in the hardware groups.
12. Acceptable manufacturers and/or products:
- a. **Best 9K Series – No Substitution**

D. Exit Devices:

- 1. Exit devices to meet or exceed BHMA for ANSI 156.3, Grade 1.
- 2. Exit devices to be tested and certified by UL or by a recognized independent laboratory for mechanical operational testing to 10 million cycles minimum with inspection confirming Grade 1 Loaded Forces have been maintained.
- 3. Exit devices chassis to be investment cast steel, zinc dichromate.
- 4. Exit devices to have stainless steel deadlocking 3/4" through latch bolt.
- 5. Exit devices to be equipped with sound dampening on touchbar.
- 6. Non-fire rated exit devices to have cylinder dogging.
- 7. Non-fire rated exit devices to have 1/4" minimum turn hex key dogging.
- 8. Touchpad to be "T" style constructed of architectural metal with matching metal end caps.
- 9. Touchbar assembly on wide style exit devices to have a 1/4" clearance to allow for vision frames.
- 10. All exposed exit device components to be of architectural metals and "true" architectural finishes.
- 11. Provide strikes as required by application.
- 12. Fire exit hardware to conform to UL10C and UBC 7-2. UL tested for Accident Hazard.
- 13. The strike is to be black powder coated finish.
- 14. Exit devices to have field reversible handing.
- 15. Provide heavy duty vandal resistant lever trim with heavy duty investment cast stainless steel components and extra strength shock absorbing overload springs. Lever shall not require resetting. Lever design to match locksets and latchsets.
- 16. Provide 9001-Quality Management and 14001-Environmental Management.
- 17. Vertical Latch Assemblies to have gravity operation, no springs.
- 18. Approved Manufacturers
 - a. The following manufacturers will be approved contingent on meeting or exceeding the above performance criteria:
 - 1) Precision – **No Substitution**

E. Cylinders:

- 1. Provide the necessary cylinder housings, collars, rings & springs as recommended by the manufacturer for proper installation.

2. Provide the proper cylinder cams or tail piece as required to operate all locksets and other keyed hardware items listed in the hardware sets.
 3. Coordinate and provide as required for related sections.
- F. Door Closers shall:
1. Tested and approved by BHMA for ANSI 156.4, Grade 1
 2. UL10C certified
 3. Provide 9001-Quality Management and 14001-Environmental Management.
 4. Closer shall have extra-duty arms and knuckles
 5. Conform to ANSI 117.1
 6. Maximum 2 7/16 inch case projection with non-ferrous cover
 7. Separate adjusting valves for closing and latching speed, and backcheck
 8. Provide adapter plates, shim spacers and blade stop spacers as required by frame and door conditions
 9. Full rack and pinion type closer with 1½" minimum bore
 10. Mount closers on non-public side of door, unless otherwise noted in specification
 11. Closers shall be non-handed, non-sized and multi-sized.
 12. Approved Manufacturers
 - a. The following manufacturers will be approved contingent on meeting or exceeding the above performance criteria:
 - 1) Stanley QDC – **No Substitution**
 - 13.
- G. Door Stops: Provide a dome floor or wall stop for every opening as listed in the hardware sets.
1. Wall stop and floor stop shall be wrought bronze, brass or stainless steel.
 2. Provide fastener suitable for wall construction.
 3. Coordinate reinforcement of walls where wall stop is specified.
 4. Provide dome stops where wall stops are not practical. Provide spacers or carpet riser for floor conditions encountered
- H. Over Head Stops: Provide a Surface mounted or concealed overhead when a floor or wall stop cannot be used or when listed in the hardware set.
1. Concealed overhead stops shall be heavy duty bronze or stainless steel.
 2. Surface overhead stops shall be heavy duty bronze or stainless steel.
- I. Push Plates: Provide with four beveled edges ANSI J301, .050 thickness, size as indicated in hardware set. Furnish oval-head countersunk screws to match finish.
- J. Pulls with plates: Provide with four beveled edges ANSI J301, .050 thickness Plate s with ANSI J401 Pull as listed in hardware set. Provide proper fasteners for door construction.
- K. Push Pull Bars: Provide ANSI J504, .1" Dia. Pull and push bar model and series as listed in hardware set. Provide proper fasteners for door construction.
- L. Kickplates: Provide with four beveled edges ANSI J102, 10 inches high by width less 2 inches on single doors and 1 inch on pairs of doors. Furnish oval-head countersunk screws to match finish.
- M. Mop plates: Provide with four beveled edges ANSI J103, 4 inches high by width less 1 inch on single doors and 1 inch on pairs of doors. Furnish oval-head countersunk screws to match finish.
- N. Power Supply: Provide power supply for (MLR) Motorized Latch Retraction exit devices
1. Motherboard will accept up to four plug-in Control Modules. Provide the appropriate necessary control module to operate the number of MLR exit devices used at each opening. The Control Module shall

- include a Time delay Feature, variable (0-4 minutes) latch retraction period in response to a momentary input.
2. UL Listed for class II output
 3. Include circuit breakers for protection of motherboard
 4. 115 or 230 Volt user selectable switch, with AC input= 115 Volt at 1 Amp
 5. Control module shall include Fire alarm terminal and Auxiliary contacts for remote signaling.
 6. Optional card for Battery Backup (BT) power tap module to operate a Card reader or when MLR devices require battery backup (Lead Acid Batteries are not included and is to be furnished by others)
 7. Precision RPSMLR2 Series – **No Substitution**.
- O. Quick Connect Power Transfer: Power transfer device shall be a steel housing and flexible tube. Secure and inconspicuous channel is to bring power from the frame to the door.
1. Precision EPT-12C – **No Substitution**
 2. Tube shall contain 12 Wire bundle with Stanley Quick Connect Connectors one 4 wire connector consisting of two 18AWG wires and 2 24AWG wires and one 8 wire connector with 8 24AWG wires.
- P. Quick Connect plug-in connectors: Stanley quick connect plug-in must be used with a combination of the following components to work as a complete plug and play system.
1. Best locks series 45HW, 45HM, 8KW, 9KW, 9KM
 2. To include Quick connectors to Best lock products Suffix “C” Example (45HW-7DEL14H DS **C**)
 3. Precision Exit Devices 2000 Series, DE, DS, TS, TDS, LDS, ELR
 4. To include Quick connectors to Precision Electric Exit device products Prefix “C” Example (**C** ELR 2108 x V4908A TS)
 5. Precision 12 Conductor Electric Power Transfer EPT-12C
 6. Stanley 12 Hinges Conductor Hinge CECB179-12C
- Q. Quick Connect Wire Harnesses: The Quick Connect wire harness shall have of one four wire connector and one eight wire connector. The four wire connector has two 18AWG and two 24AWG wires. The eight wire connector has eight 24AWG wires Stanley quick connect wire harnesses are available in various length's, 3” (76mm), 6” (152mm), 12” (304mm), 26” (660mm) 32” (812mm) 38” (965mm), 44” (1117mm), 50” (1270mm) and 192” (4876mm).
1. Wire Harness that is terminated at both ends is specified as WH-size (Example WH-3).
 2. Wire Harness that is terminated at one end with exposed pin head at the other is specified as WH-size P (Example WH-3P).
 3. Wire Harness 6” (152mm) terminated at one end with bray leads on the other is specified as WH-6E.
- Notes The Wire harnesses with suffix “E” has brae wire ends, is used to connect the quick connect harness to a hardwired connection.
Wire harnesses of different lengths may be combined to form a desired length
The maximum size hole needed to pass through the quick connect plug is 1” (25MM).
- R. Seals: All seals shall be finished to match adjacent frame color. Seals shall be furnished as listed in schedule. Material shall be UL listed for labeled openings.
- S. Weatherstripping: Provide at head and jambs only those units where resilient or flexible seal strip is easily replaceable. Where bar-type weatherstrip is used with parallel arm mounted closers install weatherstrip first.
1. Weatherstrip shall be resilient seal of (Neoprene, Polyurethane, Vinyl, Pile, Nylon Brush, Silicone)
 2. UL10C Positive Pressure rated seal set when required.
- T. Door Bottoms/Sweeps: Surface mounted or concealed door bottom where listed in the hardware sets.
1. Door seal shall be resilient seal of (Neoprene, Polyurethane, Nylon Brush, Silicone)
 2. UL10C Positive Pressure rated seal set when required.

- U. Thresholds: Thresholds shall be aluminum beveled type with maximum height of 1/2" for conformance with ADA requirements. Furnish as specified and per details. Provide fasteners and screws suitable for floor conditions.

2.3 FINISH:

- A. Designations used in Schedule of Finish Hardware - 3.05, and elsewhere to indicate hardware finishes are those listed in ANSI/BHMA A156.18 including coordination with traditional U.S. finishes shown by certain manufacturers for their products
- B. Powder coat door closers to match other hardware, unless otherwise noted.
- C. Aluminum items shall be finished to match predominant adjacent material. Seals to coordinate with frame color.

2.4 KEYS AND KEYING:

- A. Provide keyed brass construction cores and keys during the construction period. Construction control and operating keys and core shall not be part of the Owner's permanent keying system or furnished in the same keyway (or key section) as the Owner's permanent keying system. Permanent cores and keys (prepared according to the accepted keying schedule) will be furnished to the Owner.
- B. Cylinders, removable and interchangeable core system: Best CORMAX™ Patented 7-pin – **No Substitution**
- C. Permanent keys and cores: Stamped with the applicable key mark for identification. These visual key control marks or codes will not include the actual key cuts. Permanent keys will also be stamped "Do Not Duplicate."
- D. Transmit Grand Masterkeys, Masterkeys and other Security keys to Owner by Registered Mail, return receipt requested.
- E. Furnish keys in the following quantities:
 - 1. 1 each Grand Masterkeys
 - 2. 4 each Masterkeys
 - 3. 2 each Change keys each keyed core
 - 4. 15 each Construction masterkeys
 - 5. 1 each Control keys
- F. The Owner, or the Owner's agent, will install permanent cores and return the construction cores to the Hardware Supplier. Construction cores and keys remain the property of the Hardware Supplier.
- G. Keying Schedule: Arrange for a keying meeting, and programming meeting with Architect Owner and hardware supplier, and other involved parties to ensure locksets and locking hardware, are functionally correct and keying and programming complies with project requirements. Furnish 3 typed copies of keying and programming schedule to Architect.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verification of conditions: Examine doors, frames, related items and conditions under which Work is to be performed and identify conditions detrimental to proper and or timely completion.
 - 1. Do not proceed until unsatisfactory conditions have been corrected.

3.2 HARDWARE LOCATIONS:

- A. Mount hardware units at heights indicated in the following publications except as specifically indicated or required to comply with the governing regulations.
 - 1. Recommended Locations for Builder's Hardware for Standard Steel Doors and Frames, by the Door and Hardware Institute (DHI).
 - 2. Recommended locations for Architectural Hardware for flush wood doors (DHI).
 - 3. WDMA Industry Standard I.S.-1A-04, Industry Standard for Architectural wood flush doors.

3.3 INSTALLATION:

- A. Install each hardware item per manufacturer's instructions and recommendations. Do not install surface mounted items until finishes have been completed on the substrate. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
- B. Conform to local governing agency security ordinance.
- C. Install Conforming to ICC/ANSI A117.1 Accessible and Usable Building and Facilities.
 - 1. Adjust door closer sweep periods so that from the open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches from the latch, measured to the landing side of the door.
- D. Installed hardware using the manufacturers fasteners provided. Drill and tap all screw holes located in metallic materials. Do not use "Riv-Nuts" or similar products.

3.4 FIELD QUALITY CONTROL AND FINAL ADJUSTMENT

- A. Contractor/Installers, Field Services: After installation is complete, contractor shall inspect the completed door openings on site to verify installation of hardware is complete and properly adjusted, in accordance with both the Contract Documents and final shop drawings.
 - 1. Check and adjust closers to ensure proper operation.
 - 2. Check latchset, lockset, and exit devices are properly installed and adjusted to ensure proper operation.
 - a. Verify levers are free from binding.
 - b. Ensure latchbolts and dead bolts are engaged into strike and hardware is functioning.
 - 3. Report findings, in writing, to architect indicating that all hardware is installed and functioning properly. Include recommendations outlining corrective actions for improperly functioning hardware if required.

3.5 SCHEDULE OF FINISH HARDWARE:

Manufacturer List

<u>Code</u>	<u>Name</u>
BE	Best Access Systems
BY	By Others
DO	Dorma
NA	National Guard
PR	Precision
ST	Stanley
TR	Trimco

Finish List

<u>Code</u>	<u>Description</u>
AL	Aluminum
600	Primed for Painting
626	Satin Chromium Plated
628	Satin Aluminum, Clear Anodized
630	Satin Stainless Steel
689	Aluminum Painted
US26D	Chromium Plated, Dull

Option List

<u>Code</u>	<u>Description</u>
C	Quick Connect Wiring System
CSK	Counter Sunk Screw Holes
MLR	Motorized Latch Retraction
RQE	Request to Exit
TDS	Touchbar Double Monitoring Switch
CA-03	Cylinder Attachment Kit
EPT	Electric Power Transfer
B4E	Beveled 4 Edges

Hardware Sets

SET #01

Doors: 103, 104, 114, 124, 125, 126

3 Hinges	FBB179 4 1/2 X 4 1/2(NRP @ outswing doors)	US26D	ST
1 Privacy Set	9K3-0L15D	626	BE
1 Door Closer Rw/PA	QDC111	689	ST
1 Kick Plate	KO050 10" x 2" LDW B4E CSK	630	TR
1 Wall Bumper	1270CVSV	626	TR
1 Gasketing	5050B Head & Jambs		NA

SET #02

Doors: 105, 113, 128, 139

3 Hinges	FBB179 4 1/2 X 4 1/2(NRP @ outswing doors)	US26D	ST
1 Passage Set	9K3-0N15D	626	BE
1 Wall Bumper	1270CVSV	626	TR
1 Gasketing	5050B Head & Jambs		NA

SET #03

Doors: 107

3 Hinges	FBB179 4 1/2 X 4 1/2(NRP @ outswing doors)	US26D	ST
1 Electro-mech Lock	9KW3-7DEU15D PATD C RQE	626	BE
1 Door Closer - EDA	QDC115	689	ST
1 Kick Plate	KO050 10" x 2" LDW B4E CSK	630	TR
1 Wall Bumper	1270CVSV	626	TR
1 Wire Harness	WH-26P		ST
1 Power Transfer	EPT-12C		PR
1 Gasketing	5050B Head & Jambs		NA
1 MultiTech Reader	by Owners Security Contractor		BY
1 Door Position Switch	MC-4		DO
1 Power Supply	8Q00314	626	ST

NOTE: Door is normally closed and locked. Entry by authorized credentials at keypad reader. Free egress at all times without use of credentials, key, special knowledge or effort. Key override available in an emergency.

SET #04

Doors: 137

3 Hinges	FBB179 4 1/2 X 4 1/2(NRP @ outswing doors)	US26D	ST
1 Electro-mech Lock	9KW3-7DEU15D PATD C RQE	626	BE
1 Door Closer - EDA	QDC115	689	ST
1 Kick Plate	KO050 10" x 2" LDW B4E CSK	630	TR
1 Wall Bumper	1270CVSV	626	TR
1 Power Transfer	EPT-12C		PR
1 Wire Harness	WH-26P		ST
1 MultiTech Reader	by Owners Security Contractor		BY
1 Door Position Switch	MC-4		DO
1 Power Supply	8Q00314	626	ST
1 Gasketing	5050B Head & Jambs		NA

NOTE: Door is normally closed and locked. Entry by authorized credentials at keypad reader. Free egress at all times without use of credentials, key, special knowledge or effort. Key override available in an emergency.

SET #05

Doors: 108A

3 Hinges	FBB168 4 1/2 X 4 1/2 NRP	US26D	ST
1 Exit Device	C MLR TDS 2103 X 4903A	630	PR
1 Door Closer - EDA	QDC115	689	ST
1 Kick Plate	KO050 10" x 2" LDW B4E CSK	630	TR
1 Wall Bumper	1270CVSV	626	TR
1 Power Transfer	EPT-12C		PR
1 Wire Harness	WH-26P		ST
1 MultiTech Reader	by Owners Security Contractor		BY
1 Door Position Switch	MC-4		DO
1 Power Supply	RPSMLR2		PR
1 Gasketing	5050B Head & Jambs		NA

NOTE: Door is normally closed and locked. Entry by authorized credentials at keypad reader. Free egress at all times without use of credentials, key, special knowledge or effort. Key override available in an emergency. RX switch in panic device shunts door forced open alarm in access control system.

SET #06

Doors: 111

3 Hinges	FBB179 4 1/2 X 4 1/2(NRP @ outswing doors)	US26D	ST
1 Lockset	9K3-7D15D PATD	626	BE
1 Door Closer - Cush Stop	QDC119	689	ST
1 Kick Plate	KO050 10" x 2" LDW B4E CSK	630	TR
1 Gasketing	5050B Head & Jambs		NA

SET #07

Doors: 110

3 Hinges	FBB179 4 1/2 X 4 1/2(NRP @ outswing doors)	US26D	ST
1 Exit Device	2103 X 4903A	630	PR
1 Rim Cylinder	12E-72 PATD	626	BE
1 Door Closer - Cush Stop	QDC119	689	ST
1 Kick Plate	KO050 10" x 2" LDW B4E CSK	630	TR
1 Gasketing	5050B Head & Jambs		NA

SET #08

Doors: 112

3 Hinges	FBB179 4 1/2 X 4 1/2(NRP @ outswing doors)	US26D	ST
1 Lockset	9K3-7AB15D PATD	626	BE
1 Wall Bumper	1270CVSV	626	TR
1 Gasketing	5050B Head & Jambs		NA

SET #09

Doors: 115A, 115B, 127, 130A, 136

3 Hinges	FBB179 4 1/2 X 4 1/2(NRP @ outswing doors)	US26D	ST
1 Exit Device	2114 X 4914A	630	PR
1 Door Closer - EDA	QDC115	689	ST
1 Kick Plate	KO050 10" x 2" LDW B4E CSK	630	TR
1 Wall Bumper	1270CVSV	626	TR
1 Gasketing	5050B Head & Jambs		NA

SET #10

Doors: 116, 117, 118, 119, 120, 121, 122, 123

3 Hinges	FBB179 4 1/2 X 4 1/2(NRP @ outswing doors)	US26D	ST
1 Privacy Set	9K3-0L15D	626	BE
1 Wall Bumper	1270CVSV	626	TR
1 Gasketing	5050B Head & Jambs		NA
1 Door Bottom	36VA		NA

SET #11

Doors: 108B, 138

3 Hinges	FBB168 4 1/2 X 4 1/2 NRP	US26D	ST
1 Exit Device	2114 X 4914A	630	PR
1 Door Closer Rw/PA	QDC111	689	ST
1 Kick Plate	KO050 10" x 2" LDW B4E CSK	630	TR
1 Wall Bumper	1270CVSV	626	TR
1 Gasketing	5050B Head & Jambs		NA
1 Door Sweep	200NA		NA
1 Handicap Threshold	513A	AL	NA

SET #12

Doors: 141A, 141B, 146

3 Hinges	FBB168 4 1/2 X 4 1/2 NRP	US26D	ST
1 Passage Set	9K3-0N15D	626	BE
1 Door Closer Rw/PA	QDC111	689	ST
1 Kick Plate	KO050 10" x 2" LDW B4E CSK	630	TR
1 Wall Bumper	1270CVSV	626	TR
1 Gasketing	5050B Head & Jambs		NA
1 Door Bottom	36VA		NA
1 Handicap Threshold	513A	AL	NA

SET #13

Doors: 144

3 Hinges	FBB168 4 1/2 X 4 1/2 NRP	US26D	ST
1 Lockset	9K3-7D15D PATD	626	BE
1 Door Closer - EDA	QDC115	689	ST
1 Kick Plate	KO050 10" x 2" LDW B4E CSK	630	TR
1 Wall Bumper	1270CVSV	626	TR
1 Gasketing	5050B Head & Jambs		NA
1 Door Sweep	200NA		NA
1 Handicap Threshold	513A	AL	NA

SET #14

Doors: 140D

1 Continuous Hinge	661HD UL EPT	AL	ST
1 Exit Device	C MLR TDS 2103 X 4903A	630	PR
1 Rim Cylinder	12E-72 PATD	626	BE
1 Door Closer - EDA	QDC115	689	ST
1 Kick Plate	KO050 10" x 2" LDW B4E CSK	630	TR
1 Floor Stop	1211	626	TR
1 Power Transfer	EPT-12C		PR
1 Wire Harness	WH-26P		ST
1 MultiTech Reader	by Owners Security Contractor		BY
1 Door Position Switch	MC-4		DO
1 Power Supply	RPSMLR2		PR

**City of Buckeye Fire Station No. 705
Buckeye, AZ**

**DOOR HARDWARE
SECTION 08 71 00**

1 Door Sweep	200NA		NA
1 Handicap Threshold	513A	AL	NA

NOTE: Door is normally closed and locked. Entry by authorized credentials at keypad reader. Free egress at all times without use of credentials, key, special knowledge or effort. Key override available in an emergency. RX switch in panic device shunts door forced open alarm in access control system.

SET #15

Doors: 129B

3 Hinges	FBB179 4 1/2 X 4 1/2(NRP @ outswing doors)	US26D	ST
1 Lockset	9K3-7AB15D PATD	626	BE
1 Door Closer Rw/PA	QDC111	689	ST
1 Kick Plate	KO050 10" x 2" LDW B4E CSK	630	TR
1 Wall Bumper	1270CVSV	626	TR
1 Gasketing	5050B Head & Jambs		NA

SET #AL01

Doors: 101, 106A, 129A, 134

1 Continuous Hinge	661HD UL EPT	AL	ST
1 Exit Device	C MLR TDS 2103 CA-03	630	PR
1 Rim Cylinder	12E-72 PATD	626	BE
1 Door Pull	1191-3	628	TR
1 Door Closer - EDA	QDC115	689	ST
1 Floor Stop	1211	626	TR
1 Power Transfer	EPT-12C		PR
1 Wire Harness	WH-26P		ST
1 MultiTech Reader	by Owners Security Contractor		BY
1 Door Position Switch	MC-4		DO
1 Power Supply	RPSMLR2		PR
1 Wiring Diagram	by Hardware Supplier		BY
1 Integral Seals	by Door/Frame Mfg.		BY
1 Handicap Threshold	513A	AL	NA

NOTE: Door is normally closed and locked. Entry by authorized credentials at keypad reader. Free egress at all times without use of credentials, key, special knowledge or effort. Key override available in an emergency. RX switch in panic device shunts door forced open alarm in access control system.

SET #AL02

Doors: 106B

1 Continuous Hinge	661HD UL EPT	AL	ST
1 Exit Device	C MLR TDS 2103 CA-03	630	PR
1 Rim Cylinder	12E-72 PATD	626	BE
1 Door Pull	1191-3	628	TR
1 Door Closer - EDA	QDC115	689	ST
1 Wall Bumper	1270CVSV	626	TR
1 Power Transfer	EPT-12C		PR
1 Wire Harness	WH-26P		ST
1 MultiTech Reader	by Owners Security Contractor		BY

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**DOOR HARDWARE
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1 Door Position Switch	MC-4		DO
1 Power Supply	RPSMLR2		PR
1 Wiring Diagram	by Hardware Supplier		BY
1 Spacer Block	P45HD-110	689	SD
1 Handicap Threshold	513A	AL	NA

SET #AL03

Doors: 130B

2 Continuous Hinge	661HD UL	AL	ST
1 Removable Mullion	FLKR822	600	PR
1 Exit Device	2101	630	PR
1 Exit Device	2103 CA-03	630	PR
1 Rim Cylinder	12E-72 PATD	626	BE
2 Door Pull	1191-3	628	TR
2 Door Closer - EDA	QDC115	689	ST
2 Floor Stop	1211	626	TR
2 Spacer Block	P45HD-110	689	ST
1 Integral Seals	by Door/Frame Mfg.		BY
1 Mullion Seal	5100N		NA
2 Handicap Threshold	513A	AL	NA

SET #FLD01

Doors: 140A, 140B, 140C

NOTE: All hardware by Door/Frame Mfg.

SET #OH01

Doors: 140E, 140F, 140G

NOTE: All hardware by Door/Frame Mfg.