

May 10, 2019

ADDENDUM ACKNOWLEDGEMENT FORM

To Whom It May Concern:

Concerning the **PSJA ISD CARNAHAN, FRANKLIN, AND BUELL CENTRAL HVAC ADDITIONS TO GYMS # 18-19-052**, to be opened at 4:00 p.m., Thursday, May 23, 2019. Please consider the following:

Addendum Number:	Description of REVISED Addendum:
1	PRE-BID AGENDA REVISED BID FORM PRE-BID SIGN IN SHEET ATTACHMENTS / DRAWINGS

For any questions pertaining to these changes, please contact Emily Garza, Director of Purchasing at (956) 354-2000.

Sincerely,



Emily Garza

Director of Purchasing

With the acceptance of this form, I acknowledge that I have received the above ***“ADDENDUM ACKNOWLEDGEMENT FORM”*** for the **PSJA ISD CARNAHAN, FRANKLIN, AND BUELL CENTRAL HVAC ADDITIONS TO GYMS # 18-19-052**, to be opened at 4:00 p.m., Thursday, May 23, 2019. Please include a signed copy of this ***“ADDENDUM ACKNOWLEDGMENT FORM”*** with your bid/proposal.

Company Name:	_____	Authorized Signature:	_____
Address:	_____ _____	Authorized Signature (Print):	_____
City / State / Zip:	_____	Email:	_____
Telephone Number:	_____	Fax Number:	_____

START COLLEGE NOW! COMPLETE EARLY! GO FAR!

ADDENDUM # 1

Date: May 10, 2019

PROJECT: P S J A I. S. D.
Carnahan, Franklin & Buell
HVAC Additions to Gyms
Bid # 18-19-052

ARCHITECT: EGV Architects, Inc.
220 S. Bridge
Hidalgo, TX 78557
(956) 843-2987



This addendum applies to work designated herein, shall be understood to be and as such shall be part and is included in the contract.

ITEM #1 Information, Pre Bid Agenda and Sign-In Sheets

- Refer to attached Pre-Bid Meeting Agenda and Sign-in Sheet labeled **ATTACHMENT #1** (2 pages).

ITEM #2 Information, Dates and Times

- **Last Day for Questions:** Monday, May 20, 2019, before 10:00 am.
- **Electronic Bid Due Date:** Thursday, May 23, 2019, before 4:00 pm

ITEM #3 Addition, Specifications, Table of Contents

- Add section 01030 ALTERNATES.....01030-1-2, to Division 1 below section 01027 Application for Payment.

ITEM #4 Substitution, Specifications Section 00200, Bid Form

- Substitute herein attached revised Bid form labeled **ATTACHMENT #2** (2 pages).

ITEM #5 Deletion, Specifications Section 01010, Item 1.19 Project Signs

- No project signs will be required for these projects.

ITEM #6 Addition, Specifications Section 01030, Alternates

- Refer to attached specification section 01030 Alternates labeled **ATTACHMENT #3** (2 pages).

ITEM #7 Addition, Specifications Section 08110 Steel Doors and Frames

- Insert herein attached specification Section 08110 Steel Doors and Frames labeled **ATTACHMENT #4** (2 pages).

ITEM #8 Addition, Finish Hardware for Doors H101 and H102

- Add the following finish hardware sets for Doors H101 and H102.

NOTIFICATION: It is the responsibility of the General Contractor to notify all of his subcontractors of the contents of all addenda.

ADDENDUM # 1

DOORS

H101

EACH TO HAVE:

1	EA	CONT. HINGE	112HD-DOOR HEIGHT	628	IVE
1	EA	STOREROOM LOCK	T581BD DANE	626	FAL
1	EA	PERMANENT CORE	C607 X 3 KEYS	626	FAL
1	EA	CONSTRUCTION CORE	C607CCA	BLK	FAL
1	EA	LOCK GUARD	LG12	630	IVE
1	EA	OH STOP & HOLDER	90F	630	GLY
1	EA	DRIP CAP	16A-FRAME WIDTH PLUS 4"	CL	NGP
1	SET	SEALS	162S-HEAD & JAMBS	AL	NGP
1	EA	DOOR SWEEP	1025VA-DOOR WIDTH	CL	NGP
1	EA	THRESHOLD	896S SIA-FRAME WIDTH	AL	NGP

DOORS

H102

EACH TO HAVE:

1	EA	PADLOCK	KS41F1200 X 4" SHACKLE		SCH
1	EA	PERMANENT CORE	C607 X 3 KEYS	626	FAL
1	EA	CONSTRUCTION CORE	C607CCA	BLK	FAL
		GATE HARDWARE	BALANCE OF HARDWARE BY GATE MANUFACTURER		

ITEM #9 Information, Sheet AB1.0, Buell Gymnasium – Mean of egress

- Refer to chart below for Occupancy classification for the gymnasium at Buell

P.S.J.A. I.S.D. BUELL HIGH SCHOOL GYM OCCUPANCY CLASSIFICATION	
USE GROUP E - EDUCATIONAL	
1. BUILDING AREA	
EXERCISE GYM - 4,929	
2. MEANS OF EGRESS:	
OCCUPANT LOAD CALCULATIONS	
(EXERCISE GYM 4,929 S.F. + 50 O.L.F.)	
OCCUPANCY LOAD (O.L.) = 99	
3. EGRESS COMPONENTS:	
EXIT DOORS	
99 OCCUPANTS x 0.2" = DOOR WIDTH	
REQUIRED	PROVIDED
20"	108"

ITEM #10 Addition, Drawings Sheet AH1.0 Detail #1

- Add fire riser room per drawing labeled **ATTACHMENT #5** (1 page).
- Add new door detail & top of wall reinforcement per drawing labeled **ATTACHMENT #6** (1 page).
- Provide 6" reflective letters on riser room door to read: RISER ROOM

ITEM #11 Corrections, MEP Addendum

- Refer to attached MEP addendum labeled **ATTACHMENT #7** (8 pages).

NOTIFICATION: It is the responsibility of the General Contractor to notify all of his subcontractors of the contents of all addenda.

P S J A I. S. D. CARNAHAN, FRANKLIN & BUELL HVAC ADDITIONS TO GYMS

BID #18-19-052

PRE-BID MEETING

May 9, 2019 at 10:00 AM

BID OPENING:	May 23, 2019, at 4:00 pm
PLACE OF OPENING:	P S J A I. S. D. Administration Building, Room # 205 601 E. Kelly Pharr, TX 78577
ARCHITECT:	E G V Architects, Inc. 220 S. Bridge Hidalgo, TX 78557 (956) 843-2987

1. BID REQUIREMENTS: Each bid must be submitted electronically.

The following items must be uploaded with the bid package, with the exception of those indicated to be turned in before.

- A. Bid Form (Section 00200)
- B. Bid Bond (surety co. shall be licensed in the State of Texas and Treasury listed).
- C. List of Subcontractors
- D. Contractor's Pre-bid Disclosure Statement (Section 00400) Due 5 working days before bid opening. **This form must be emailed. Do not upload to PSJA website.**
- E. PSJA ISD General Provisions
- F. Form A- Notice of Invitation to Bid
- G. Form B- Deviations from Specifications or General Terms & Conditions / Compliance Signature Form
- H. Form C- Bidder Preference / Texas Family Code Certification
- I. Form D- Historically Underutilized Business (HUB) Certification
- J. Form E- Supplier Diversity Form
- K. Form F- Instructions to School District Contractors Regarding Criminal History Background Searches Under Senate Bill 9
- L. Form G- Felony Conviction Disclosure Statement
- M. Form H- Form for Authorization of Electronic Direct Deposit

2. SPECIAL REQUIREMENTS:

- A. Bidder is responsible for printing hard copies of the plans, if needed. Owner will provide PDF format only.
- B. Contractor shall be familiar with the Evaluation Factors & Criteria for preparation of proposal.
- C. Addendum # 1 is pending.
- D. Liquidated damages: Refer to A101 Standard Form of Agreement Between Owner and Contractor, Section 3.4.
- E. Refer to Specifications Section 01010 Summary of Work, Items 1.18 and 1.29 for substitution guidelines.

3. GENERAL REQUIREMENTS:

- A. General conditions and special conditions to the Contract.
- B. If a conflict arises, contact the Architect, otherwise the most stringent of requirements will govern.

4. QUESTIONS

PHARR-SAN JUAN-ALAMO I.S.D.
PSJA ISD CARNAHAN, FRANKLIN, AND BUELL CENTRAL HVAC ADDITIONS TO GYMS BID # 18-19-052
PRE-BID MEETING DATE: MAY 9, 2019 @ 10:00 A.M.

ADDENDUM #1, ATTACHMENT #1

[illegible]

BID FORM

Bidder/Contractor: _____

TO OWNER: Pharr-San Juan-Alamo I.S.D.
601 E. Kelly
Pharr, TX 78577

PROJECT: PSJA ISD Carnahan, Franklin & Buell HVAC Additions to Gyms
Bid #18-19-052

Ladies and Gentlemen:

The bidder in compliance with Notice to Bidders for the construction of this project, having examined the plans and specifications with related documents and having examined the site and all conditions affecting the work, hereby proposes to furnish and to construct the project in accordance with Contract Documents for the sum set below.

All labor, materials, services, and equipment necessary for completion of work shown on the drawings and in the specifications, except the work indicated by the Alternatives.

Refer to Specifications Section 01020 for allowances to be included in each base bid.

ALLOWANCES

- | | |
|----------------|-----------|
| 1. CONTINGENCY | \$ 50,000 |
| 2. LAB TESTING | By Owner |

BASE BID:

_____ Dollars
\$ _____

Time of completion: 75 consecutive calendar days for Carnahan.
Time of completion: 90 consecutive calendar days for Buell and Franklin.

Contingency Allowance: Add \$50,000 to this base bid

ADD ALTERNATE #1: Upgrade Fire Alarm panel at Buell

_____ Dollars
\$ _____

Time of completion: _____ consecutive calendar days.

ADD ALTERNATE #2: Upgrade Fire Alarm panel at Franklin

_____ Dollars
\$ _____

Time of completion: _____ consecutive calendar days.

THE 75 AND 90 DAYS LISTED ABOVE SHALL RUN CONCURRENT.

Refer to specification Section 01010 Summary of Work, Items 1.18 and 1.29 for substitution guidelines.

The Undersigned, if awarded the contract agrees to commence work within eight consecutive calendar days from date of Notice to Proceed.

It is understood that if accepted by Owner, this bid becomes a part of the contract documents upon signing of this contract.

It is also understood that the Owner reserves the right to reject any or all bid and waive irregularities and formalities or to accept any bid considered advantageous.

The Undersigned agrees to waive any claim against the district, the architect, or engineer on the project, or any of their employees, arising out of or in connection with the administration, evaluation, or recommendation of any bid.

The undersigned agrees that he will not withdraw this bid for a period of thirty days from the date thereof.

I hereby acknowledge the receipt of Addendum No. _____ Dated: _____
Addendum No. _____ Dated: _____
Addendum No. _____ Dated: _____
Addendum No. _____ Dated: _____
Addendum No. _____ Dated: _____

Date: _____ Signed _____
By _____
Address _____

(Seal if Bid is by corporation)

DIVISION 1 GENERAL REQUIREMENTS
01030 ALTERNATES

PART 1 GENERAL

1.1 DESCRIPTION:

- A. Work Included: Certain Alternates have been established as described herein. These are to allow the Owner to:
 - 1. Compare costs where Alternate materials and methods may be used.
 - 2. Make a decision concerning Alternate materials and methods prior to awarding the Contract.

1.2 RELATED WORK:

- A. Pertinent Sections of the Specifications describe the materials and methods required under the Various Alternates.
- B. The method for stating the proposed Contract Sum is described on the Bid Form.

1.3 SUBMITTALS:

- A. Indicate on the Bid Form a proposal for each Alternate listed.
- B. If no figure is indicated for an Alternate, that Alternate may be accepted at no charge in the Base Bid.
- C. Do not submit Alternates other than those described in this Section.
- D. Do not submit statements qualifying alternates.

PART 2 - PRODUCT HANDLING

2.1 ALTERNATES:

- A. If the Owner elects to accept one or more Alternates, make all modifications required if furnishing and installation of the selected Alternates to approval of Architect and at no additional cost other than proposed on the Bid Form.

ADD ALTERNATE #1: UPGRADE FIRE ALARM PANEL AT BUELL AS PER ELECTRICAL ADDENDUM #1.

ADD ALTERNATE #2: UPGRADE FIRE ALARM PANEL AT FRANKLIN AS PER ELECTRICAL ADDENDUM #1.

PART 3 EXECUTION

3.1 ADVANCED COORDINATION:

- A. Immediately after award of Contract, advise necessary subcontractors and suppliers as to:
 - 1. Nature and extent of accepted alternates.
 - 2. Involved changes caused by alternates selection.

3.2 SURFACE CONDITIONS:

- A. Prior to installation of Alternative items, verify that work has been modified as necessary to accept the installation and that items may be installed in complete accordance with their manufacturer's current recommendations. In the event of discrepancy, notify Architect and proceed as directed.

END OF SECTION

DIVISION 8 DOORS AND WINDOWS
08110 STEEL DOORS AND FRAMES
(For Carnahan Elementary Gym Only)

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data, door schedule, and shop drawings that indicate general construction, configurations, jointing methods, reinforcements, and location of hardware.
 - 1. Provide manufacturers installation instructions and cut sheets for fire and smoke seals as required to comply with UL-10C and UL 1784
- B. Comply with ANSI/SDI 100.
- C. Fire-Rated Door Assemblies: NFPA 80, tested per ASTM E 152 and tested to meet UL 10B and 10C for neutral and positive pressure requirements. Labeled and listed by UL, ITS, or another testing and inspecting agency acceptable to authorities having jurisdiction.

1.2 QUALITY ASSURANCE

- A. Applicable Standards: Specifications and standards of SDI 100 (ANSI A250.8-2003).
- B. Fire-Rated Door Assemblies: Where fire-rated door assemblies are indicated or required, provide fire-rated door and frame assemblies that comply with NFPA 80 and have been tested, listed, and labeled in accordance with ASTM E2074-2001.
 - 1. Oversize Fire-Rated Door Assemblies: For door assemblies required to be fire-rated and exceeding sizes of tested assemblies, provide certificate or label from approved independent testing and inspection agency, indicating that door and frame assembly conforms to requirements of design, materials and construction as established by individual listings for tested assemblies.
 - 2. Temperature Rise Rating: At stairwell enclosures, provide doors, which have Temperature Rise Rating of 450 degrees F maximum in 30 minutes of fire exposure.
 - 3. Smoke and Fire Door Seals: Door supplier to provide UL-10c and UL1784 compliant seals as required at labeled openings.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Hot-Rolled Steel Sheets: ASTM A 569/A 569M.
- B. Cold-Rolled Steel Sheets: ASTM A 366/A 366M or ASTM A 620/A 620M.
- C. Galvanized Steel Sheets: ASTM A 653/A 653M, commercial steel, or ASTM A 642/A 642M, drawing quality, with **A40 or A60 (ZF180 or Z180)** coating designation, mill phosphatized.

2.2 STEEL DOORS AND FRAMES

- A. Hollow metal doors and frames shall be from one of the following:
 - 1. Dean Steel Manufacturing Co.
 - 2. Allied Steel Products, Inc.
 - 3. Ceco Corp.
 - 4. or approved equal

- B. Hollow metal doors shall be constructed with continuous vertical 16 ga channels and horizontal inverted 16 ga top and bottom channels. Hinge and lock reinforcements must be projection welded to the vertical channels.
- C. Steel Doors: 1-3/4-inch thick of materials and ANSI/SDI 100 grades and **specified below**.
 - 1. Interior Doors: GRADE II, heavy duty, Model 1, full flush design, minimum 18 ga. thick, cold-rolled steel sheet faces.
 - 2. Exterior Doors: GRADE III, extra heavy-duty, Model 2, insulated, full flush design, minimum 16 ga. Thick.
- D. Door Louvers: sight proof per SDI 111C.
 - 1. Fire-Rated Automatic Louvers: Actuated by fusible links at 150 deg F(65 deg C) and listed and labeled.
 - 2. Provide sight proof louvers for interior doors where indicated, constructed of 24-gauge steel V-shaped or y-shaped blades, set into 20-gauge steel frame.
 - 3. Provide weatherproof louvers with insect screen for exterior doors where indicated, constructed of 18 ga. steel.
- E. Door Silencers: Three on strike jambs of single-door frames and two on heads of double-door frames.
- F. Plaster Guards: Provide 26 gauge where mortar might obstruct hardware operation and to close off interior of openings.
- G. Fabricate steel frames to be rigid, neat in appearance, and free from defects, warp, or buckle.
 - 1. Interior Frames: Fabricate with mitered or coped **and face welded corners** formed from **16 ga.** thick, cold-rolled steel for openings indicated on the drawings.
 - 2. Exterior Frames: Fabricate with mitered or coped and face welded corners, formed from 16 ga. thick steel sheet.
- H. Prepare doors and frames to receive hardware that is not surface applied according to SDI 107, see Division 8 Section "Door Hardware".
- I. Sealants: Per SDI 100 / ANSI A250.8 Appendix B (water penetration).
- J. Metal Door Frame Undercoating: Per SDI 100 / ANSI A250.8 section 4.2.2.
- K. Prime Coat: Standard manufacturers primer per SDI 100 / A250.8 section 2.05.
- L. Door Schedule: Provide materials and products that result in colors and finishes of surfaces complying with the Door Schedule.

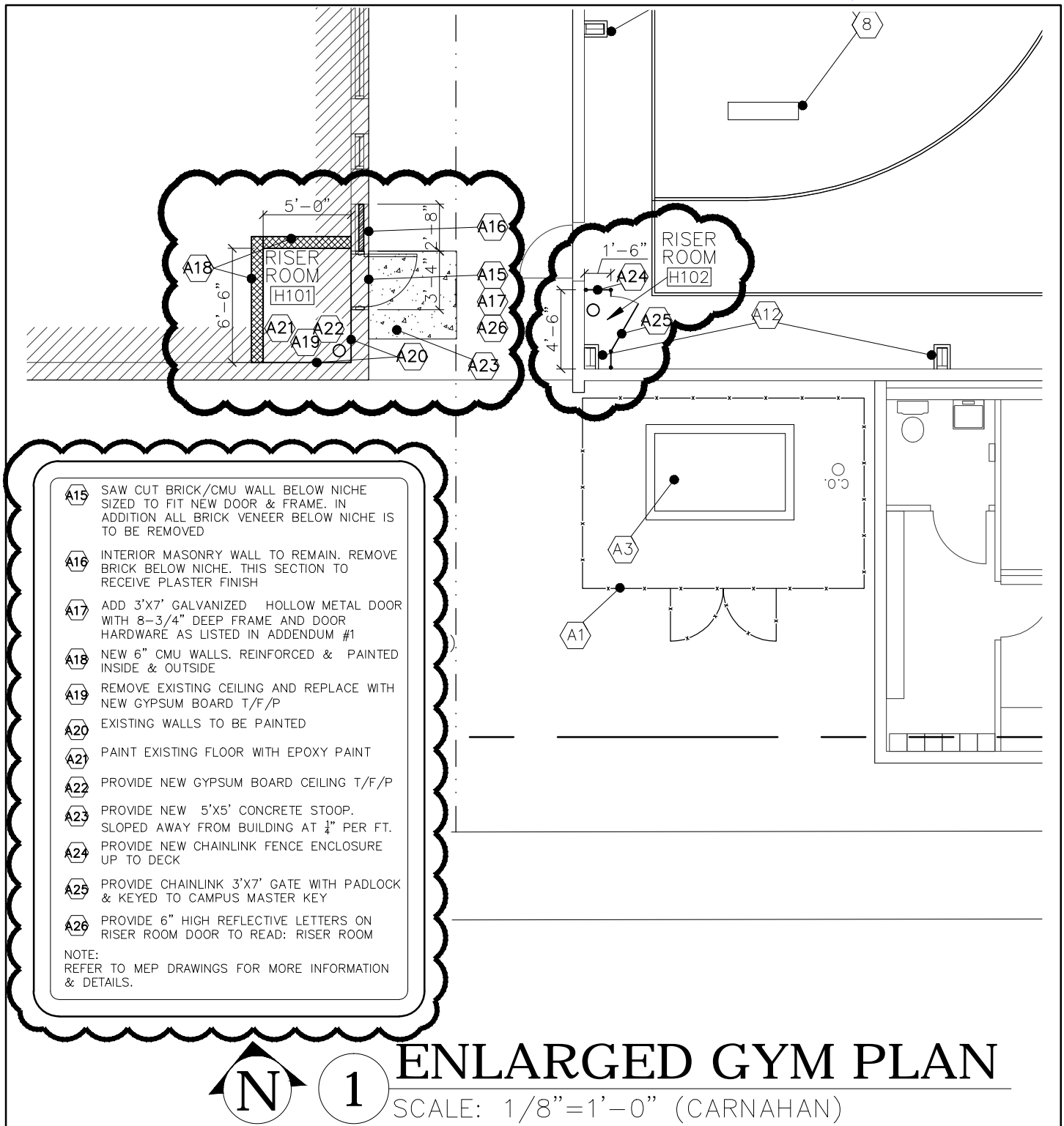
2.3 ANCHORS AND ACCESSORIES

- A. Manufacturer's standard units. Use galvanized items for units built into exterior walls, complying with ASTM A 153.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Place steel frames to comply with SDI 105.
- B. Install steel doors accurately in frames, within clearances specified in ANSI/SDI 100.
 - 1. Fire-Rated Doors: Install with clearances specified in NFPA 80.
 - 2. Smoke-Control Doors: Comply with NFPA 105.
- C. DOORS AND FRAMES must be stored elevated from the floor and warranty requires they be stored in cool, dry place.



P.S.J.A. ISD - CARNAHAN, FRANKLIN & BUELL
HVAC ADDITIONS TO GYMS

ADDENDUM #1

DATE:

FILE:
DWG/

SCALE:

SHEET
AH1.0
1 OF 1

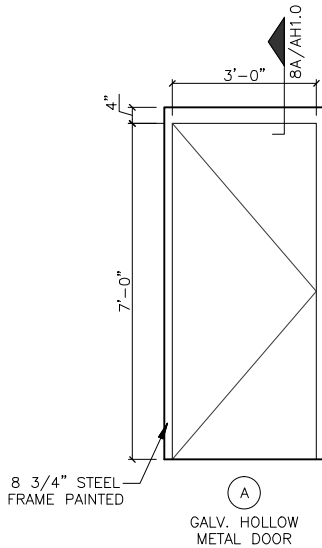


EGV ARCHITECTS, INC.
220 S. BRIDGE STREET
PO BOX 8627
HIDALGO, TX 78557

TEL: (956) 843-2987
FAX: (956) 843-9726

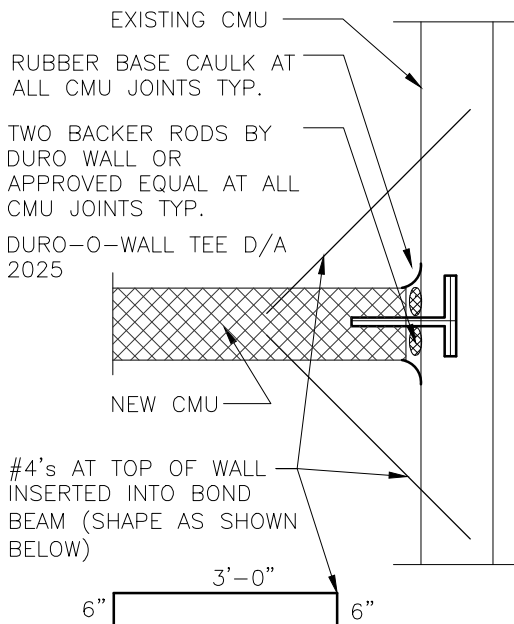


MAY 10 2019



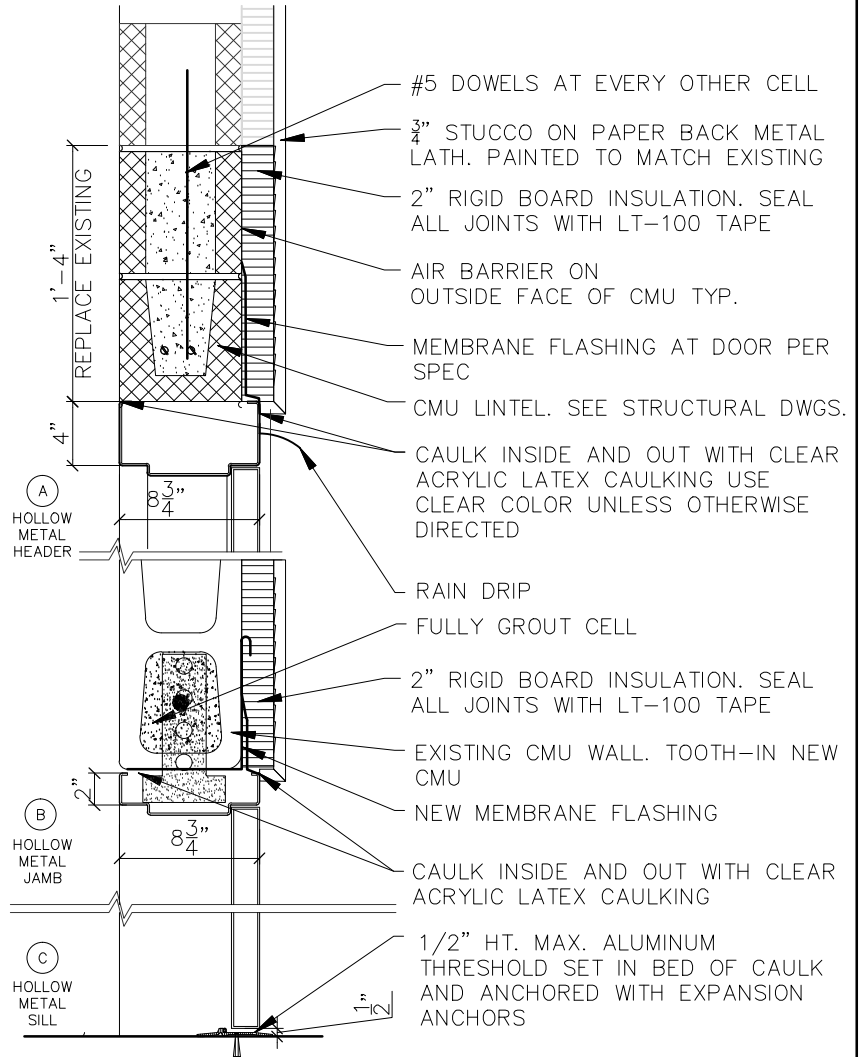
7 DOOR DET.

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



9 WALL DET.

SCALE: 3/4"=1'-0"



8 DOOR DET.

SCALE: 1"=1'-0"

P.S.J.A. ISD - CARNAHAN, FRANKLIN & BUELL
HVAC ADDITIONS TO GYMS

ADDENDUM #1



EGV ARCHITECTS, INC.
220 S. BRIDGE STREET
PO BOX 8627
HIDALGO, TX 78557
TEL: (956) 843-2987
FAX: (956) 843-9726

DATE:

FILE:
DWG/

SCALE:

SHEET
AH1.0
1 OF 1



MAY 10 2019

05/08/19



ADDENDUM #1

Architect: EGV Architects

Project Name: PSJA -Carnahan. Franklin & Buell Additions To Gyms

Project Number: 19.1.31

Date: 05-08-19

Note: The work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time Proceeding with the Work in accordance with these instructions indicates your acknowledgement that there will be no change in the Contract Sum or Contract Time.

I. Specifications: N/A

II. General: N/A

III. Mechanical:

IV. Electrical:

1. Sheet E0.0 – Revised Light fixture schedule.
2. Sheet EB1.0 – Revised plans refer to Addendum #1.
3. Sheet EB1.1 – Revised plans refer to Addendum #1.
4. Sheet EH1.1 – Revised plans refer to Addendum #1.
5. Sheet EI1.1 – Revised plans refer to Addendum #1.
6. Sheet E1.1 – Revised electrical riser and schedules. Refer to Addendum #1.

V. Plumbing: n/a

VI. Fire Protection:

1. Sheet FH1.0 – Revised Keynote #5 refer to attachment FH1.0.
2. Sheet FH1.0 – Revised Fire Line And F.D.C. Line refer to attachment FH1.0.

ELECTRICAL LEGEND-LIGHTING

---ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

SYMBOL	DESCRIPTION
	2'x4' LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	2'x4' LIGHT FIXTURE W/EMERGENCY BATTERY PACK, REFER TO LUMINAIRE SCHEDULE
	2'x2' LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	2'x2' LIGHT FIXTURE W/EMERGENCY BATTERY PACK, REFER TO LUMINAIRE SCHEDULE
	1'x4' LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	TRACK LIGHT WITH HEADS AS INDICATED
	INCANDESCENT, LED, FLUORESCENT, OR HID WALL WASHER LIGHT FIXTURE CEILING MTD, REFER TO LUMINAIRE SCHEDULE
	INCANDESCENT, LED, FLUORESCENT, OR HID FIXTURE CLG. OR WALL MTD, REFER TO LUMINAIRE SCHEDULE
	LED, FLUORESCENT, OR HID FIXTURE WITH EMERGENCY BATTERY PACK, CLG. OR WALL MTD, REFER TO LUMINAIRE SCHEDULE
	EXIT LIGHT, CEILING OR WALL MOUNTED - SHADING INDICATING SINGLE OR DOUBLE FACE; DIRECTIONAL ARROWS AS INDICATED REFER TO LUMINAIRE SCHEDULE
	EXIT LIGHT SAME AS ABOVE, EXCEPT WITH AN EMERGENCY UNIT AS A COMBO, REFER TO LUMINAIRE SCHEDULE
	CEILING FAN
	STRIP UTILITY LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	STRIP UTILITY STRIP LIGHT WITH EMERGENCY BATTERY PACK, REFER TO LUMINAIRE SCHEDULE
	WALL SWITCH SPST, 20A, 120/277V
	DOUBLE POLE TOGGLE SWITCH, 20A/120/277V
	3-WAY WALL SWITCH, 20A, 120/277V
	4-WAY WALL SWITCH, 20A, 120/277V
	WALL DIMMER SWITCH
	WALL SWITCH SPST, 20A, 120/277V - PILOT LIGHT SWITCH
	WALL SWITCH SPST, 20A, 120/277V - KEYED SWITCH, X = 3 OR 4 WAY

ELECTRICAL LEGEND-SPECIAL SYSTEMS

---ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

SYMBOL	DESCRIPTION
	WALL MOUNTED TELEPHONE/DATA OUTLET, FURNISH AND INSTALL 1.25" C., WITH PULLSTRING AND INSULATED BUSHING, STUBBED ABOVE CEILING. +24" UNLESS OTHERWISE NOTE. BOX TO BE MINIMUM 2 1/8" DEEP.
	WALL MOUNTED TELEPHONE OUTLET, FURNISH AND INSTALL 1" C. WITH PULLSTRING AND INSULATED BUSHING, STUBBED ABOVE CEILING. +24" UNLESS OTHERWISE NOTE. BOX TO BE MINIMUM 2 1/8" DEEP.
	WALL MOUNTED DATA OUTLET, FURNISH AND INSTALL 1.25" C. WITH PULLSTRING AND INSULATED BUSHING, STUBBED ABOVE CEILING. +24" UNLESS OTHERWISE NOTE. BOX TO BE MINIMUM 2 1/8" DEEP.
	PUBLIC TELEPHONE OUTLET.. J-BOX & 1" C
	TELEVISION OUTLET. CLG. OR WALL MOUNTED - STUB 1" C. ABOVE CEILING FROM OUTLET BOX
	PUSHBUTTON WALL MOUNTED.
	AUDIO VIDEO DROP, REFER TO DETAIL
	INTERCOM - CALL SWITCH- JBOX WITH 3/4" C
	INTERCOM/PAGING LAY-IN SPEAKER
	PA EXTERIOR SPEAKER
	SECURITY DOOR CONTACT SENSOR - STUB 1/2" C ABOVE CEILING FROM OUTLET BOX
	SECURITY MOTION DETECTOR SENSOR - STUB 1/2" C ABOVE CEILING FROM OUTLET BOX
	SECURITY GLASS BREAK SENSOR - STUB 1/2" C ABOVE CEILING FROM OUTLET BOX
	SECURITY KEY PAD - STUB 3/4" C ABOVE CEILING FROM OUTLET BOX
	SECURITY PANEL JUNCTION BOX
	ACCESS CONTROL PANEL JUNCTION BOX - BY OTHERS
	CARD READER BOX - STUB 3/4" C ABOVE CEILING LEVEL FROM OUTLET BOX SYSTEM BY OTHERS
	MAGNETIC LOCK BOX - STUB 3/4" C ABOVE CEILING LEVEL FROM OUTLET BOX SYSTEM BY OTHERS
	INTRUSION EXTERIOR SPEAKER
	SINGLE SIDED CLOCK, J-BOX W/3/4" C
	DOUBLE SIDED CLOCK, J-BOX W/3/4" C
	CAMERA J-BOX W/ 3/4" C CONDUIT
	TELEPHONE BOARD- 3/4"x8" FIRE RATED

ELECTRICAL LEGEND-FIRE ALARM

---ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

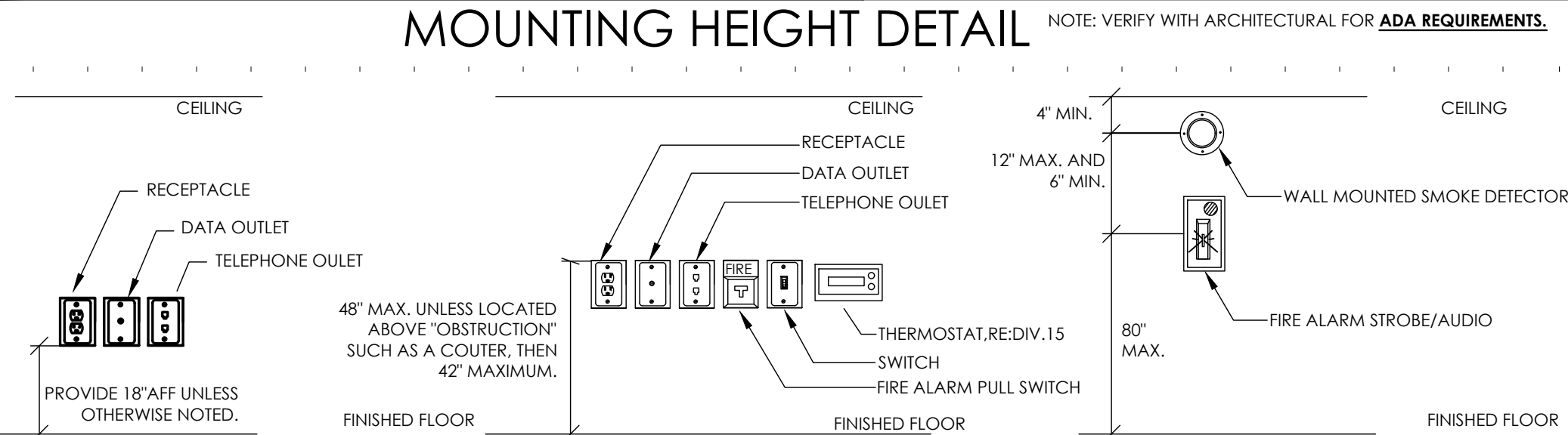
SYMBOL	DESCRIPTION
	FIRE ALARM PULL STATION: STUB 3/4" C ABOVE CEILING FROM J-BOX
	FIRE ALARM AUDIBLE/VISUAL SIGNAL: STUB 3/4" C ABOVE CEILING FROM J-BOX
	FIRE ALARM VISUAL SIGNAL: STUB 3/4" C ABOVE CEILING FROM J-BOX
	FIRE ALARM CEILING MOUNT SPEAKER STROBE, UL LISTED, : J-BOX WITH 3/4" C
	FIRE ALARM CEILING WALL MOUNT OUTDOOR SPEAKER STROBE, UL LISTED, : J-BOX WITH 3/4" C
	FIRE ALARM SMOKE DETECTOR CEILING OR WALL MOUNTED: STUB 3/4" C ABOVE CEILING FROM J-BOX
	HEAT DETECTOR CEILING OR WALL MOUNTED: STUB 3/4" C ABOVE CEILING FROM J-BOX
	DUCT SMOKE DETECTOR: STUB 3/4" C ABOVE CEILING FROM J-BOX
	SMOKE DETECTOR WITH AN AUDIBLE BASE: STUB 3/4" C ABOVE CEILING FROM J-BOX
	FIRE ALARM CONTROL PANEL, ADDRESSABLE, SURFACE MTD UNO, INCLUDE A FIRE DOCUMENT BOX EQUAL TO MFR. SPACE AGE ELECTRONICS #FDB-ACE-11.
	FIRE ALARM CONTROL PANEL WITH EMERGENCY VOICE SYSTEM, ADDRESSABLE, FLUSH MTD UNO, INCLUDE A FIRE DOCUMENT BOX EQUAL TO MFR. SPACE AGE ELECTRONICS #FDB-ACE-11.
	FIRE ALARM EMERGENCY VOICE EVACUATION SYSTEM, FLUSH OR SURFACE.
	FIRE ALARM REMOTE ANNUNCIATOR PANEL, FLUSH MOUNTED UNO
	POWER SUPPLY, DEDICATED 110V
	DOOR HOLDER DEVICE: STUB 3/4" C ABOVE CEILING FROM J-BOX
	TAMPER SWITCH: STUB 3/4" C ABOVE CEILING FROM J-BOX
	FLOW SWITCH: STUB 3/4" C ABOVE CEILING FROM J-BOX
	FIRE ALARM OUTDOOR SPEAKER, WEATHER PROOF: STUB 3/4" C ABOVE CEILING FROM J-BOX

ELECTRICAL LEGEND-GENERAL

---ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

SYMBOL	DESCRIPTION
	HEAVY DUTY DISCONNECT SWITCH FUSED
	HEAVY DUTY DISCONNECT SWITCH NONFUSED
	HEAVY DUTY COMBINATION DISCONNECT/MOTOR STARTER
	HEAVY DUTY MOTOR STARTER
	ENCLOSED BREAKER, RE: TO SCH. FOR MORE INFO.
	ROTARY TYPE DISCONNECT SWITCH
	120/277-208/480V, 20A MP, MOTOR RATED SWITCH, NEMA-1 (INTERIOR) ENCLOSURE, NEMA-3R (EXTERIOR) ENCLOSURE. VOLTAGE TO BE SELECTED PER EQUIPMENT CIRCUIT REQUIREMENTS.
	MOTOR
	PANELBOARD, CLEARANCE AS PER LATEST NEC SWITCH LEG
	ELECTRICAL CONDUIT
	UNDERGROUND ELECTRICAL CONDUIT
	COMMUNICATION CONDUIT AND WIRING
	MULTI-POLE DEVICE CIRCUIT NUMBERS
	THREE SINGLE POLE DEVICE CIRCUIT NUMBERS
	CONDUIT AND WIRE HOMERUN TO PANEL, SHORT HATCH INDICATES NEUTRAL CONDUCTOR, LONG HATCHES INDICATE PHASE CONDUCTORS, AND LONG HATCH WITH CIRCLE INDICATES ISOLATES OR INSULATED GROUND. ALPHANUMERIC DESCRIPTION INDICATES PANEL AND BREAKER.
	UNDERGROUND CONDUIT AND WIRE HOMERUN TO PANEL, SHORT HATCH INDICATES NEUTRAL CONDUCTOR, LONG HATCHES INDICATE PHASE CONDUCTORS, AND LONG HATCH WITH CIRCLE INDICATES ISOLATED OR INSULATED GROUND. ALPHANUMERIC DESCRIPTION INDICATES PANEL AND BREAKER.
	DETAIL NUMBER
	SHEET NUMBER
	THERMOSTAT WALL MOUNTED - STUB 1/2" C ABOVE CEILING FROM OUTLET BOX. COORDINATE EXACT LOCATION AND HEIGHT WITH MECHANICAL DIVISION.
	JUNCTION BOX - SIZE & MOUNTING AS REQUIRED MINIMUM OF 4" SQUARE
	PHOTO CELL (MFR. INTERMATIC #K4136M)
	LIGHTING CONTACTOR, NEMA-1, W/H.O.A. SWITCH
	TIME CLOCK (MFR. TORK #7202Z)
	CIRCULATING PUMP
	ELECTRICAL DEVICE AS SHOWN ON PLANS SURFACE MOUNT RACEWAY. SURFACE MOUNT RACEWAY SHALL BE WIREMOLD #V700 SERIES. PROVIDE ALL RELATED #V700 SERIES ACCESSORIES FOR AN OPERABLE SYSTEM.

MOUNTING HEIGHT DETAIL



ELECTRICAL ABBREVIATIONS:

ABBV:	DESCRIPTION	ABBV:	DESCRIPTION
AFF	ABOVE FINISHED FLOOR	MFR.	MANUFACTURER
BFC	BELOW FINISHED CEILING	(S.C.)	SHARE CIRCUIT
C	CONDUIT	QRCPT(S)	QUAD RECEPTACLE(S)
CB	CIRCUIT BREAKER	RCPT(S)	DUPLEX RECEPTACLE(S)
EC	EMPTY CONDUIT	QRCPT(S)	I.G. RECEPTACLE(S)
EX	EXISTING	QRCPT(S)	QUAD I.G. RECEPTACLE(S)
F	FUSE	SO (S.O.)	SPACE ONLY
G	GROUND (EQUIPMENT)	SP	SPARE
GFI	GROUND FAULT INTERRUPTER	ST (S.T.)	SHUNT TRIP
MTD	MOUNT OR MOUNTED	SW	SWITCH
NF	NONFUSED	UF	UNDERFLOOR
NIC	NOT IN CONTRACT	UG	UNDERGROUND
H.D	HEAVY DUTY	UNO (U.N.O.)	UNLESS NOTED OTHERWISE
NL	NIGHT LIGHT	WG	WIRE GUARD
AC	ABOVE COUNTER	WP	WEATHERPROOF
HT.	HEIGHT	XFMR	TRANSFORMER
MTD.	MOUNTING	MB	MAIN BREAKER
FDR.	FEEDER	MLO	MAIN LUGS ONLY
CKT.	CIRCUIT	RMC	RIGID METAL CONDUIT
LTG.	LIGHTING	RNC	RIGID NONMETALLIC CONDUIT
LC	LIGHTING CONTACTOR	EMT	ELECTRICAL METALLIC TUBING CONDUIT
IG	ISOLATED GROUND	S/N	SOLID NEUTRAL
EA.	EACH	AC	ABOVE COUNTER
N1	NEMA-1	AHJ	AUTHORITY HAVING JURISDICTION
N3R	NEMA-3R	T	TAMPER PROOF
N4X	NEMA-4X		
SS	STAINLESS STEEL		

NOTES:

- 1.) 48" AFF INDICATES TO TOP OF DEVICE.
- 15" AFF INDICATES TO BOTTOM OF DEVICE.
- ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.
- AC INDICATES 6" ABOVE COUNTER TO BOTTOM OF DEVICE.

ELECTRICAL LEGEND - WIRING DEVICES

---ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

	SINGLE RECEPTACLE - 20A/125V/2P/3W/G NEMA 5-20R
	DUPLEX RECEPTACLE - 20A/125V/2P/3W/G NEMA 5-20R
	DUPLEX RECEPTACLE TAMPER RESISTANT - 20A/125V/2P/3W/G NEMA 5-20R
	HOSPITAL GRADE DUPLEX RECEPTACLE/GFI - 20A/125V/2P/3W/G NEMA 5-20R
	DUPLEX RCPT, GFI - 20A/125V/2P/3W/G NEMA 5-20R
	DUPLEX RCPT, WEATHER RESISTANT "WR", GFI INSTALLED IN A "IN-USE" WEATHER PROOF STEEL ENCLOSURE: 20A/125V/2P/3W/G NEMA 5-20R WP/IN-USE" SHALL BE EQUAL TO MFR. CARLON, METALLIC SERIES SINGLE GANG, VERTICAL MOUNT #ME9UVMG DOUBLE GANG, VERTICAL MOUNT #ME9UVMG
	QUADRAPLEX RECEPTACLE
	ISOLATED GROUND QUADPLEX RECEPTACLE
	ISOLATED GROUND DUPLEX RECEPTACLE - 20A/125V NEMA 5-20R
	208V RECEPTACLE, VERIFY NEMA NO. WITH EQUIPMENT SUPPLIER
	SPECIAL PURPOSE RECEPTACLE (NEMA NO. AS INDICATED)
	J-BOX - AIR HAND DRYER; (RECESSED HAND DRYERS TO BE PROVIDED BY DIVISION 16. ELECTRICAL) #B-750 AUTOMATIC HANDCRAFT AS MANUFACTURER BY BOBRICK. (COLOR WHITE) QUANTITY; REFER TO DRAWINGS (MIN. ONE PER LAV. COMPLETE W/ ELE. CONNECTIONS TYP.)
	4-GANG FLOOR MOUNTED BOX, 2-DUPLEX RECEPTACLE (INCLUDE RECEPTACLE WITH COVER PLATE)/2-GANG FOR DATA - FLUSH MOUNTED UNO FLOOR BOX = MFR.-HUBBELL MODEL# CFB4G30CR-24GCVRNK (COVER)- (2)FBMPDUP-FBMP6KS -CFBHB2 (MULTISERVICE STEEL RECESSED FLOOR BOX-VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS.
	6-GANG FLOOR MOUNTED BOX, 2-DUPLEX RECEPTACLE (INCLUDE RECEPTACLE WITH COVER PLATE)/2-GANG FOR DATA - FLUSH MOUNTED UNO FLOOR BOX = MFR.-HUBBELL MODEL# CFB6G30CR-CFB1S1R8CVRALL (COVER)- (3)FBMPDUP-FBMP6KS -CFBHB2 (MULTISERVICE STEEL RECESSED FLOOR BOX-VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS.
	6" FIRE RATED POKE-THROUGHS BOX, 2-DUPLEX RECEPTACLE (INCLUDE RECEPTACLE WITH COVER PLATE)- MFR.-HUBBELL MODEL# S1R6PTFT-S1R6SP-S1R6SPL-S1R6SPH (50/50 DEVICE PLATE COMBINATION)-S1R6CVRALL (COVER)- VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS.
	6" FIRE RATED POKE-THROUGHS BOX, FURNITURE FEED- MFR.-HUBBELL MODEL# S1R6PTFTFA-LUJ ALUMINUM COVER)- VERIFY FLOOR FINISH PRIOR TO ORDER.
	8" FIRE RATED POKE-THROUGHS BOX, 2-DUPLEX RECEPTACLE (INCLUDE RECEPTACLE WITH COVER PLATE)- MFR.-HUBBELL MODEL# S1R8PTFT-S1R8CSPK-S1R8CSPK-S1R8SPZ (50/50 DEVICE PLATE COMBINATION)-S1R8CVRALL (COVER)- VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS.

GENERAL ELECTRICAL NOTES

1. ALL SYMBOLS AND ABBREVIATIONS SHOWN ON THIS LEGEND MAY NOT APPEAR ON THIS SET OF DRAWINGS.
2. USE DIRECTIONAL ARROW ON EXIT SIGNS AS REQUIRED.
3. IEEE STANDARD C37.2-1991, ELECTRICAL POWER SYSTEM DEVICE FUNCTION NUMBERS.
4. CONTRACTOR SHALL NOT INSTALL MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A COMMON RACEWAY. IF CONTRACTOR IS PLANNING ON GROUPING MULTIPLE CIRCUITS IN A SINGLE RACEWAY, THE CONTRACTOR MUST SUBMIT ALL DERATING CALCULATIONS FOR THE PROPOSED INSTALLATION IN ACCORDANCE WITH NEC ARTICLE 310.15 (B) (2) FOR APPROVAL PRIOR TO INSTALLATION. NON APPROVED INSTALLATIONS WILL BE REMOVED AND REINSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE NEC AT NO ADDITIONAL COST TO THE OWNER.
5. THERE SHALL NOT BE MORE THAN THE EQUIVALENT OF THREE 90° BENDS (270 DEGREES TOTAL) BETWEEN PULL POINTS. WHERE THERE ARE MORE THAN THREE QUARTER BENDS, CONTRACTOR SHALL PROVIDE PULL BOXES AS SPECIFIED AND SIZED IN ACCORDANCE WITH NEC.
6. COMPLY WITH NEC REQUIREMENTS FOR ELECTRICAL INSTALLATIONS. ALL ELECTRICAL EQUIPMENT AND MATERIAL TO BE APPROVED, LISTED, LABELED, IDENTIFIED AND INSTALLED PER RECOGNIZED ELECTRICAL TESTING LABORATORY.
7. ALL RECEPTACLES, SWITCHES AND JUNCTION BOXES SERVED BY EMERGENCY BRANCH CIRCUITS SHALL BE "RED" IN COLOR. COVERPLATES SHALL BE LABELED IN ACCORDANCE WITH SPECIFICATIONS TO INDICATE PANELBOARD AND CIRCUIT NO. (IE: ET1A-3).

LUMINAIRE SCHEDULE

MARK	VOLTAGE	LAMP	MOUNTING	DESCRIPTION	MODEL NO.
A	120V	LED 12000 LM 3500K 77.3W	SURFACE	2FT LED HIGH BAY FIXTURE WITH INTEGRAL OCCUPANCY SENSOR AND LED DRIVER.	LITHONIA IBG-2FT-12000LM-SEF-WD-AFL-40K-70CRI-GZ10-WGX-LAH05ZU
AE	SAME AS TYPE 'A' EXCEPT WITH 1400 LUMEN EMERGENCY BATTERY PACK				
B	120V	LED 4000 LM 3500K 77.3W	SURFACE	2FT VANDAL RESISTANT LED HIGH BAY FIXTURE WITH INTEGRAL OCCUPANCY SENSOR AND LED DRIVER.	LUX DYNAMICS LUX-IK10+-E-1-SA-HO3-835-2"-U10-CA2-OCC-DIR-STD-HNDZ-GYM
BE	SAME AS TYPE 'B' EXCEPT WITH 1400 LUMEN EMERGENCY BATTERY PACK				
E	120V	INCLUDED	SURFACE	EMERGENCY LIGHTING UNIT W/ SELF-DIAGNOSTICS	LITHONIA ELM2 LED SD
X1	120V	INCLUDED	SURFACE	LED THERMOPLASTIC EXIT/EMERGENCY UNIT WITH SELF-DIAGNOSTICS	LITHONIA LHQM LED _R SD
X2	120V	INCLUDED	SURFACE	VANDAL RESISTANT LED THERMOPLASTIC EXIT/EMERGENCY UNIT WITH SELF-DIAGNOSTICS	KENALL METEC-24N-MW-R-2-6.5L-120

NOTE:

- 1.) EQUAL MANUFACTURER SHALL BE ACCEPTABLE WITH EQUAL PERFORMANCE OF SPECIFIED EQUIPMENT AND APPROVED BY ENGINEER.
- 2.) SUBMIT EQUAL MANUFACTURERS TO ENGINEER 10 DAYS PRIOR TO BID DATE.
- 3.) SUBMIT LIGHT FIXTURES CUTSHEETS TO OWNER FOR APPROVAL PRIOR TO ORDER.
- 4.) CONTRACTOR SHALL VERIFY THAT ANY IRRIGATION SPRINKLER HEAD IS AWAY FROM ANY LIGHT POLE A MINIMUM OF 75' TO AVOID CONSISTENT WATER TO LIGHT POLE. COORDINATE WITH IRRIGATION CONTRACTOR PRIOR TO ANY WORK.
- 5.) CONTRACTOR SHALL VERIFY THAT ANY LIGHT POLES ON COMMON AREAS AND SIDE WALKS, THAT THE LOCATION OF THE POLE TO MEET THE ADA REQUIREMENTS.
- 6.) CONTRACTOR SHALL FIELD VERIFY FOR EXISTING/NEW UNDERGROUND UTILITIES PRIOR TO ANY WORK.

EGV ARCHITECTS, INC.
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ARCHITECTS, INC.

05/08/19

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Texas Registered Engineering Firm - F 13382
Project number:
T 12081918-1 31 DWG/18-1 31 ELEC-Carnahan Gym.dwg

P.S.J.A. ISD - CARNAHAN, FRANKLIN & BUELL
HVAC ADDITIONS TO GYMS

JOB NO.
FILE NO. **dwg/psajp/reroofing 17-18**

E.O.
OF

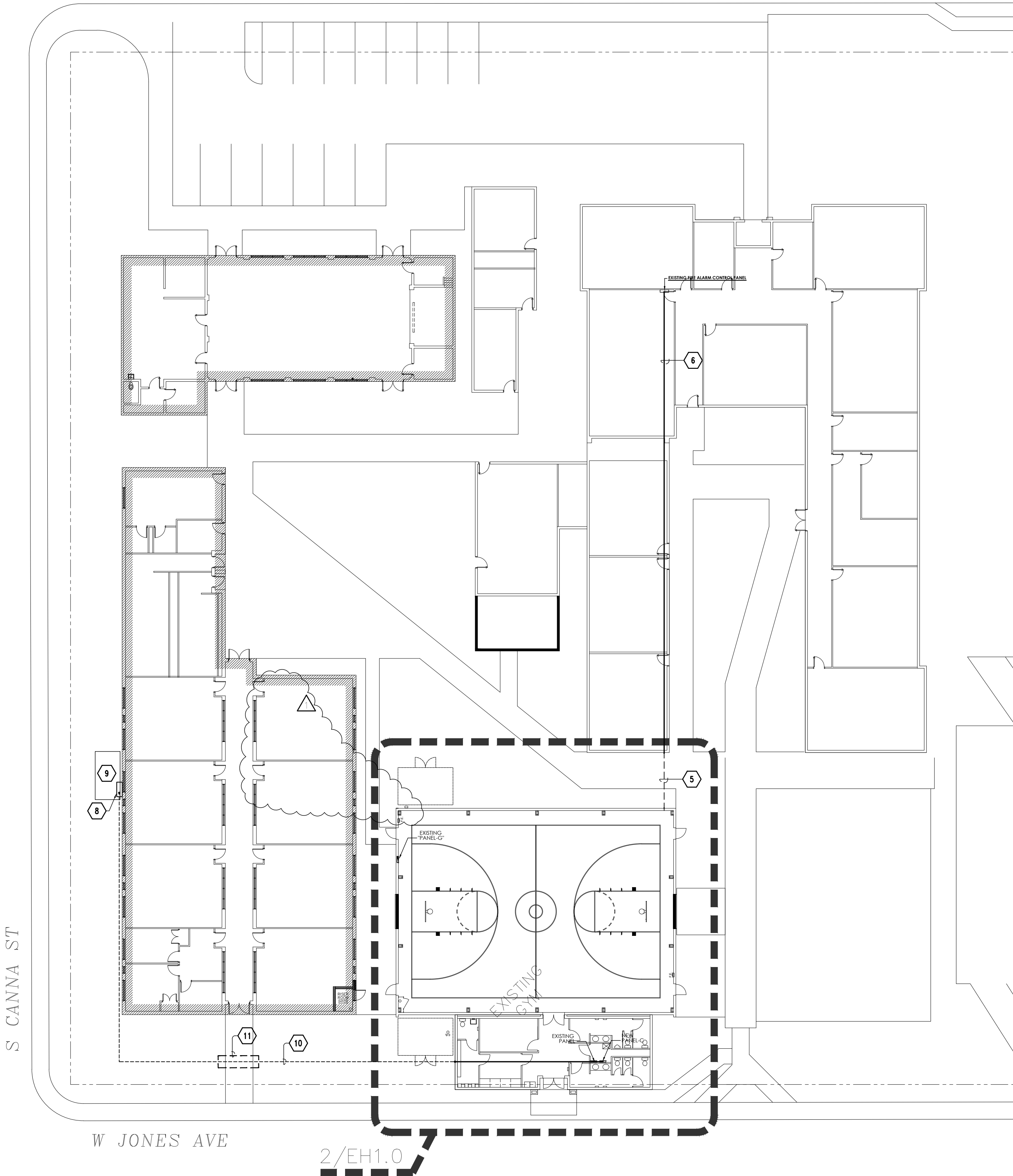
KEYED NOTES: ELECTRICAL

- 1
- EXISTING CIRCUIT AND EXISTING MEANS OF CONTROL SHALL BE RE CONNECTED, FIELD VERIFY EXISTING CONDITIONS AND EXISTING VOLTAGES. ALL WORK MUST BE DONE IN ACCORDANCE WITH ALL LATEST CODES AND MUST BE OPERATIONAL.
- 2
- PROVIDE NEW FIRE ALARM DUCT/SMOKE DETECTOR WITH CONDUIT TO NEAREST FIRE ALARM INITIATING DEVICE. PROVIDE 3/4" C FOR EACH AND PROVIDE ALL MATERIALS REQUIRED FOR A FULLY OPERABLE CODE COMPLIANT SYSTEM. FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING ANY WORK.
- 3
- NEW J-BOX FOR UNIT CONTROL WIRING. FROM J-BOX TO THERMOSTAT PROVIDE 1-1" C. REFER TO MECHANICAL DRAWINGS FOR THERMOSTAT LOCATION.
- 4
- ROUTE NEW CONDUITS ABOVE CEILING ALONG EXTERIOR GYM WALL. ALL EXPOSED CONDUIT ON INTERIOR AND EXTERIOR SHALL BE PAINTED TO MATCH ATTACHED FINISHED SURFACE COLOR.
- 5
- PROVIDE 2-2" C WITH PULLSTRING. FIELD VERIFY ROUTING WITH EXISTING CONDITIONS INCLUDING EXISTING UTILITIES PRIOR T COMMENCING ANY WORK.
- 6
- PROVIDE 2-2" C WITH PULLSTRING CONCEALED ABOVE CEILING. FIELD VERIFY ROUTING WITH EXISTING CONDITIONS INCLUDING CEILINGS AND OBSTRUCTIONS PRIOR TO COMMENCING ANY WORK.
- 7
- PROVIDE NEW CIRCUIT TO EXISTING PANEL "G" FIELD VERIFY EXISTING LOCATION PRIOR TO COMMENCING ANY WORK. PROVIDE 20AMP, 120V, BREAKER. WIRE SHALL BE 2# 10, 1# 10G, 3/4" C.
- 8
- PROPOSED LOCATION OF NEW ELECTRICAL SERVICE EQUIPMENT. REFER TO ELECTRICAL RISER DIAGRAM.
- 9
- EXISTING ELECTRICAL YARD. FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING ANY WORK.
- 10
- NEW FEEDER REFER TO ELECTRICAL RISER DIAGRAM. FIELD VERIFY WITH ALL UTILITIES.
- 11
- BOBE AND BACK FILL UNDER PLATWORK. FIEDL VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING ANY WORK.
- 12
- J-BOX FOR FIRE SPRINKLER RISER. COORDINATE EXACT LOCATION AND ALL REQUIRED ELECTRICAL CONNECTIONS PRIOR TO COMMENCING ANY WORK.

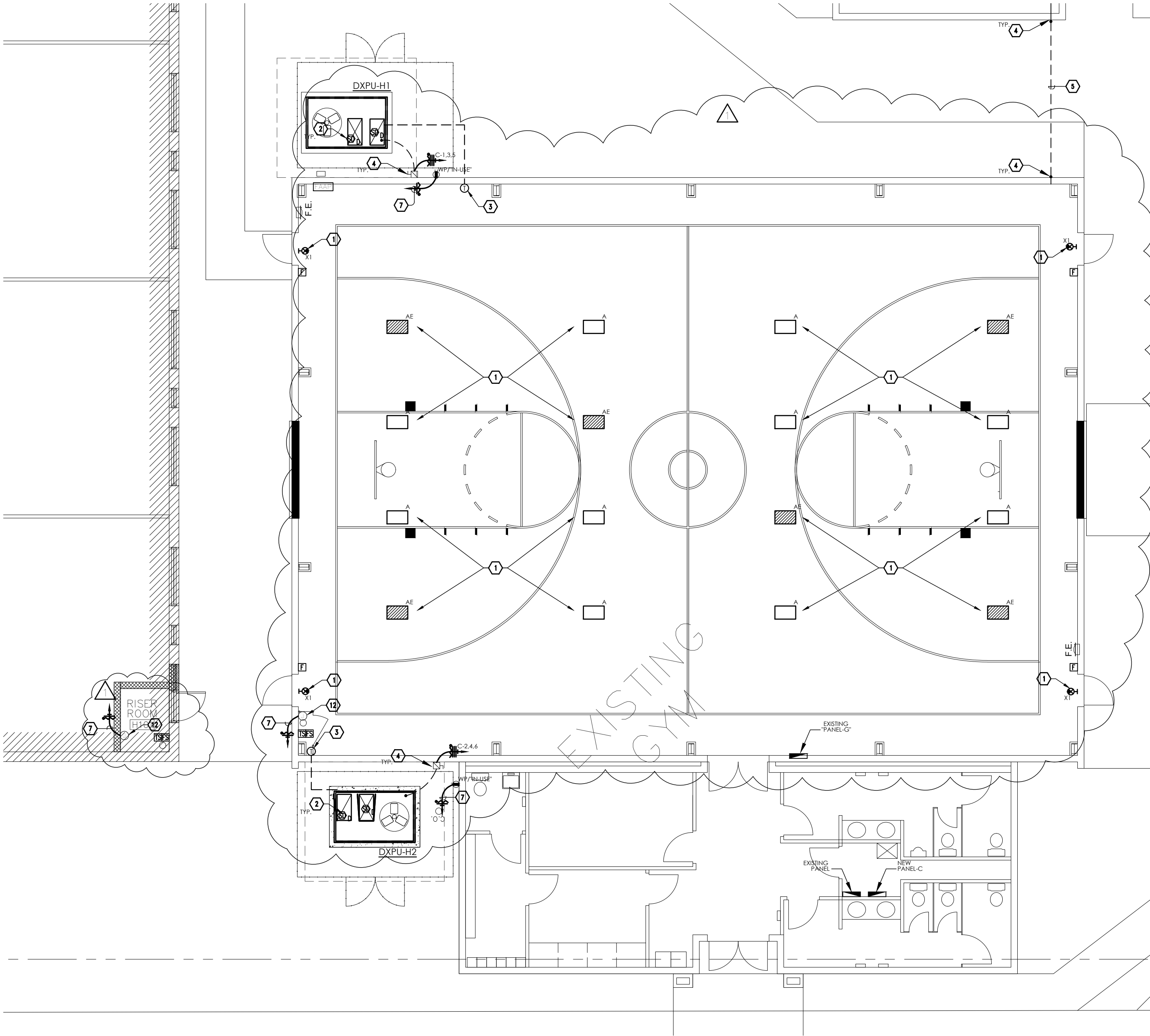
GENERAL NOTES: ELECTRICAL

- A.
- COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL POWER SOURCE WIRING IN ACCORDANCE WITH ARCHITECTURAL MILLWORK.
- B.
- ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTION TO H.V.A.C EQUIPMENT. PLUMBING EQUIPMENT, REFER TO PANEL SCHEDULE FOR WIRE SIZE.
- C.
- ELECTRICAL CONTRACTOR SHALL PROVIDE STARTERS, RELAYS, CONTACTORS AND THE REQUIRED ELECTRICAL ACCESSORIES FOR MECHANICAL SYSTEM AS REQUIRED.
- D.
- COORDINATE EXACT LOCATION OF ALL MECHANICAL EQUIPMENT IN ACCORDANCE WITHMECHANICAL DRAWINGS TO MEET ELECTRICAL AND MECHANICAL REQUIRED CLEARANCE BY THE LATEST CODE.
- E.
- COORDINATE EXACT LOCATION OF ISOLATED OUTLETS FOR COMPUTERS WITH OWNER.
- F.
- ELECTRICAL CONTRACTOR SHALL PROVIDE J-BOX AND CONDUIT FOR H.V.A.C, CONTROLS AND THERMOSTATS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
- G.
- NEMA RATED OUTLETS, REFER TO BREAKER SIZE AND COORDINATE WITH EQUIPMENT REQUIREMENTS PRIOR TO BID.
- H.
- CONTRACTOR SHALL REFER TO EQUIPMENT SUBMITTAL FOR ALL ELECTRICAL REQUIREMENTS PRIOR TO COMMENCING ANY WORK.
- I.
- ALL ELECTRICAL POWER RECEPTACLES SHALL BE TAMPER PROOF.
- J.
- ALL EXIT FIXTURES TYPE "X1" & X2", EMERGENCY LIGHT FIXTURE TYPE "E" AND ALL EMERGENCY BALLAST SHALL BE ON CIRCUIT "X-X". FIXTURE TYPE LABEL WITH AN "E" ARE LIGHT FIXTURES WITH EMERGENCY BALLAST. REFER TO LIGHT FIXTURE SCHEDULE.
- K.
- VERIFY CEILING TYPES AND COORDINATE WITH FIXTURE TYPE LIGHT FIXTURE SHALL BE COMPATIBLE WITH CEILING TYPE AS INDICATED ON THE ARCHITECTURAL DOCUMENTS. NOTIFY ENGINEER IF DISCREPANCIES EXIST PRIOR TO ORDERING FIXTURES.
- L.
- COORDINATE EXACT ROUTING OF ALL CONDUIT ABOVE CEILING IN BUILDING. TYPICAL FOR ALL BUILDING EXTERIOR LIGHTING.
- M.
- COORDINATE LOCATION OF LIGHTS WITH DIFFUSERS AND GRILLES.
- N.
- SWITCH LEGS ARE NOT SHOWN WHERE SWITCHING SCHEME IS OBVIOUS.
- O.
- CONTRACTOR SHALL REFER TO EQUIPMENT SUBMITTAL FOR ALL ELECTRICAL REQUIREMENTS PRIOR TO COMMENCING ANY WORK.

DATE:	DESIGNED:	DRAWN:	CHECKED:	SCALE:
05-08-2019				
NO.	REVISIONS	ADDENDUM #1		
DATE APPROVED				
05-08-2019				
EGV ARCHITECTS, INC. 220 S. BRIDGE STREET PO BOX 8827 HIDALGO, TX 78557 TEL: (956) 843-2987 FAX: (956) 843-9726				
ARCHITECTS, INC.				
05/08/19				
STATE OF TEXAS LEONARDO MUÑOZ Professional Engineer No. 15053 Exp. 12/31/2021				
TRINITY MEP ENGINEERING 3553 Moreland Dr. Ste A Westaco, Tx 78596 p: 956.873.0500 f: 956.351.9759 www.trinitymep.com Copyright 2019 Texas Registered Engineering Firm - P 103662 Project number: T 1001919.1.1 31 DWG 19.1.31 ELEC Carnahan Gym.dwg				
P.S.J.A. ISD - CARNAHAN, FRANKLIN & BUELL HVAC ADDITIONS TO GYMS				
JOB NO. FILE NO. dwg/psjp/reroofing 17-18				
EH1.1				



1 CARNAHAN ELEM. SITE PLAN
SCALE: 1"=20'



2 ENLARGED GYM PLAN
SCALE: 1/8"=1'-0" (CARNAHAN)

PANEL-C	AMP	LUGS	NEMA	V(LL)		(P)	(W)		V(LN)	MNT	KAIC	FDR	
LOCATION: CARNAHAN	400	MB	1	240		3	4		120	SUR.	10	1-RUN 4#350KCML, 1#3G, 4°C	
LOAD SERVED	CTK #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	C	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CTK #
DXPU-H1	1	7.48	80	3	4#4, 1#BG, 1 1/2°C	*			4#4, 1#BG, 1 1/2°C	3	80	7.48	2
"	3	7.48			-	*	*		-			7.48	4
"	5	7.48			-	*	*		-			7.48	6
EXISTING PANEL	7	12	100	3	4#2, 1#BG, 2°C	*			4#2, 1#BG, 2°C	3	100	12	8
"	9	12			-	*	*		-			12	10
SPACE	11				-	*	*		-			12	SPACE
SPACE	13				-	*	*		-			14	SPACE
SPACE	15				-	*	*		-			16	SPACE
SPARE	17		20	1	-	*	*		-	1	20	18	SPARE
SPARE	19		20	1	-	*	*		-	1	20	20	SPARE
LOADS	-	(KVA)				39	39	15	(KVA)	-	DESRIPTIVE LOADS		
CONNECTED LOAD	-	93									0	- LIGHTING	
RESERVE	25	23									0	- RECEPTACLES	
TOTAL LOAD	-	116									45	- COOLING	
											0	- HEATING	
TOTAL AMPS	-	279									48	- OTHER	

NOTES:
1) HIGHLEG ON PHASE-C. FIELD VERIFY EXISTING HIGHLEG ASSIGNED PHASE.
2) PROVIDE WITH 300AMP MAIN BREAKER.
3)

PANEL-C	AMP	LUGS	NEMA	V(LL)		(P)	(W)		V(LN)	MNT	KAIC	FDR	
LOCATION: FRANKLIN	400	MB	1	240		3	4		120	SUR.	10	1-RUN 4#400KCML, 1#3G, 4°C	
LOAD SERVED	CTK #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	C	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CTK #
DXPU-H1	1	7.48	80	3	4#4, 1#BG, 1 1/2°C	*			4#4, 1#BG, 1 1/2°C	3	80	7.48	2
"	3	7.48			-	*	*		-			7.48	4
"	5	7.48			-	*	*		-			7.48	6
EXISTING PANEL	7	12	100	3	4#2, 1#BG, 2°C	*			4#2, 1#BG, 2°C	3	100	12	8
"	9	12			-	*	*		-			12	10
SPACE	11				-	*	*		-			12	SPACE
SPACE	13				-	*	*		-			14	SPACE
SPACE	15				-	*	*		-			16	SPACE
SPARE	17		20	1	-	*	*		-	1	20	18	SPARE
SPARE	19		20	1	-	*	*		-	1	20	20	SPARE
LOADS	-	(KVA)				39	39	15	(KVA)	-	DESRIPTIVE LOADS		
CONNECTED LOAD	-	93									0	- LIGHTING	
RESERVE	25	23									0	- RECEPTACLES	
TOTAL LOAD	-	116									45	- COOLING	
											0	- HEATING	
TOTAL AMPS	-	279									48	- OTHER	

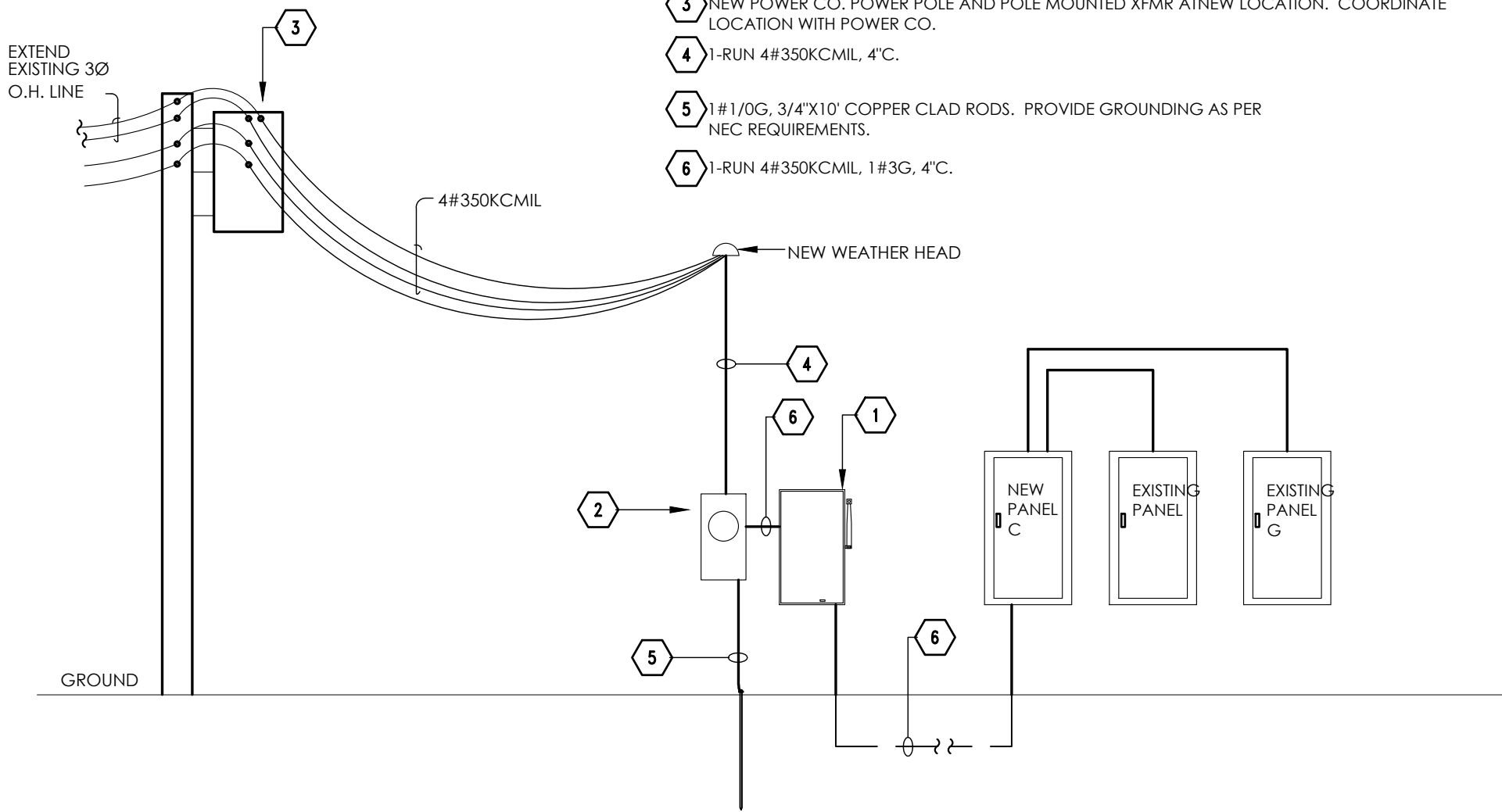
NOTES:
1) HIGHLEG ON PHASE-C. FIELD VERIFY EXISTING HIGHLEG ASSIGNED PHASE.
2) PROVIDE WITH 300AMP MAIN BREAKER.
3)

TYPICAL GENERAL NOTES FOR ALL ELECTRICAL RISERS:

- A. PROVIDE GROUND /BONDING AS INDICATED ON THE NATIONAL ELECTRICAL CODE.
- B. NAME PLATES SHALL BE PROVIDED FOR ALL ELECTRICAL SWITCH GEAR, PANEL BOARDS, LIGHTING CONTACTORS, LIGHTING CONTROL PANELS, ETC., BY ELECTRICAL CONTRACTOR.
- C. NEW ELECTRICAL METERING AND SERVICE EQUIPMENT SHALL BE PROVIDED AND INSTALLED ACCORDING TO THE LOCAL POWER UTILITY CO. AND CITY REQUIREMENTS. VERIFY AND COORDINATE WITH POWER UTILITY CO. AND AHJ BEFORE BID AND INSTALLATION.
- D. COMPLY WITH NFPA 70E SAFETY REQUIREMENTS.
- E. PANELBOARDS WITH MORE THAN 42 CIRCUITS SHALL BE IN ONE CABINET ENCLOSURE, UNLESS OTHERWISE NOTED.
- F. PROVIDE 4"CONCRETE PAD FOR ALL DRY-TYPE TRANSFORMERS.
- G. ALL TWO SECTION PANELBOARDS SHALL BE FEED THRU LUGS.
- H. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY OF ELECTRICAL SERVICE TO THE NEW BUILDING WITHIN PROJECT SCHEDULE. COORDINATE ALL COST FOR LABOR AND MATERIALS WITH LOCAL ELECTRICAL UTILITY COMPANY PRIOR TO BID. ALL COST ASSOCIATED WITH THE DELIVERY OF ELECTRICAL SERVICE INCLUDING ALL MATERIALS SHALL BE INCLUDED IN BID. TRANSITION OF NEW ELECTRICAL SERVICE SHALL PROCEED IN WEEKENDS OR HOLIDAYS. INCLUDE ALL COST IN BID FOR OVERTIME FROM ELECTRIC UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE MADE FOR SERVICE DELIVERY COSTS AFTER CONTRACT HAS BEEN AWARDED.
- I. ELECTRICAL SERVICE 480/277V 1000AMPS OR MORE SHALL INCLUDE GROUND FAULT PROTECTION.
- J. ELECTRICAL SERVICE 120V THRU 480V 1000AMPS OR MORE SHALL INCLUDE AN ARC REDUCTION MAINTENANCE SWITCH. COORDINATE EXACT LOCATION OF SUCH SWITCH.

ELECTRICAL RISER
DIAGRAM KEYED NOTES:

- 1 400AMPS, 240V, 3Ø, 4W, S/N, N3R, HEAVY DUTY FUSED DISCONNECT, FUSED@300AMPS.
- 2 NEW ELECTRICAL SERVICE METER 120/208V, 3Ø, 4W. CONTRACTOR SHALL COORDINATE ALLOCATION OF METER, METER SOCKETS AND WIRING WITH POWER COMPANY.
- 3 NEW POWER CO. POWER POLE AND POLE MOUNTED XFMR ATNEW LOCATION. COORDINATE LOCATION WITH POWER CO.
- 4 1-RUN 4#350KCML, 4°C.
- 5 1#1/ØG, 3/4"x1Ø" COPPER CLAD RODS. PROVIDE GROUNDING AS PER NEC REQUIREMENTS.
- 6 1-RUN 4#350KCML, 1#3G, 4°C.

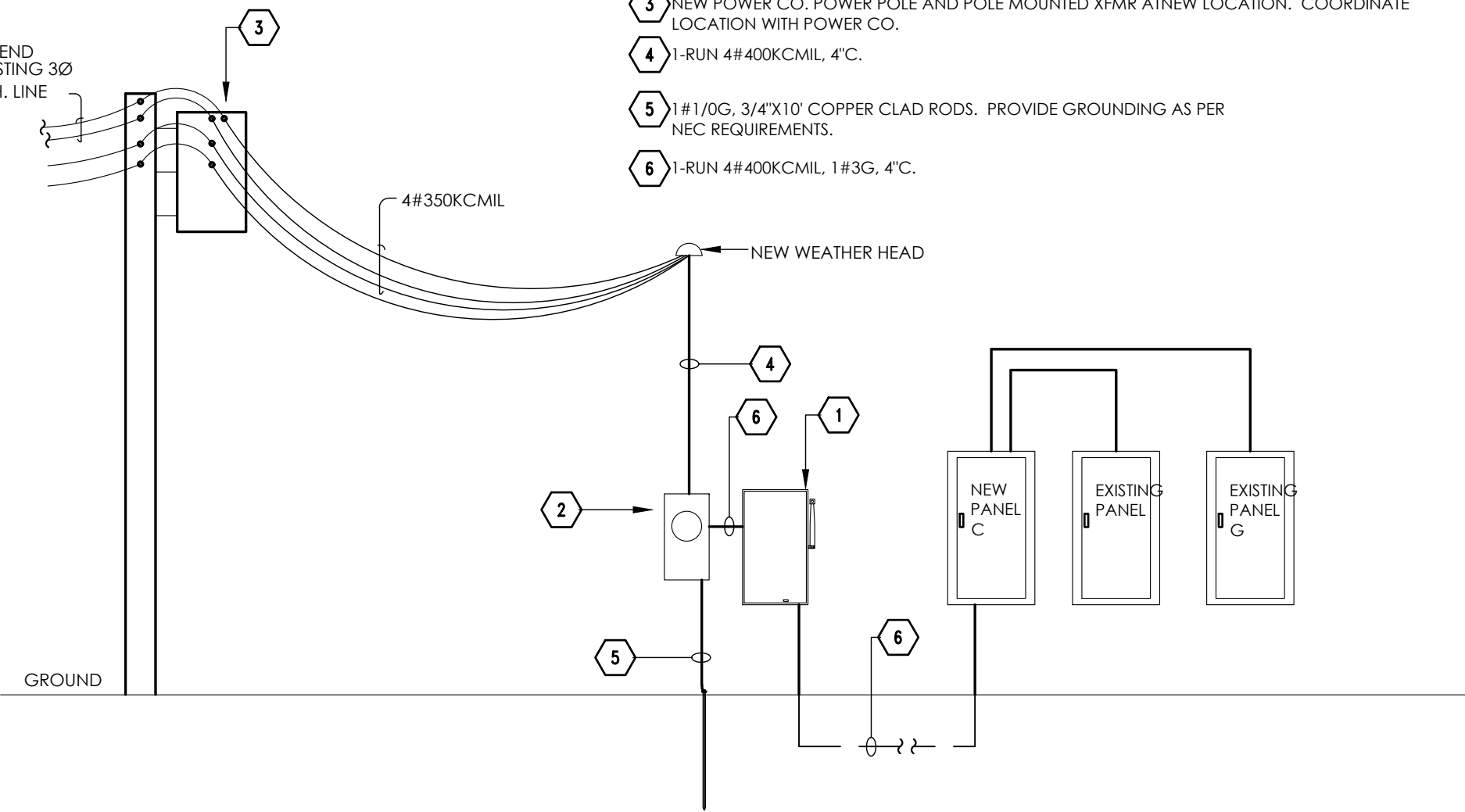


CARNAHAN
ELECTRICAL SCHEMATIC DIAGRAM

SCALE: N.T.S.

ELECTRICAL RISER
DIAGRAM KEYED NOTES:

- 1 400AMPS, 240V, 3Ø, 4W, S/N, N3R, HEAVY DUTY FUSED DISCONNECT, FUSED@300AMPS.
- 2 NEW ELECTRICAL SERVICE METER 120/208V, 3Ø, 4W. CONTRACTOR SHALL COORDINATE ALLOCATION OF METER, METER SOCKETS AND WIRING WITH POWER COMPANY.
- 3 NEW POWER CO. POWER POLE AND POLE MOUNTED XFMR ATNEW LOCATION. COORDINATE LOCATION WITH POWER CO.
- 4 1-RUN 4#400KCML, 4°C.
- 5 1#1/ØG, 3/4"x1Ø" COPPER CLAD RODS. PROVIDE GROUNDING AS PER NEC REQUIREMENTS.
- 6 1-RUN 4#400KCML, 1#3G, 4°C.



FRANKLIN
ELECTRICAL SCHEMATIC DIAGRAM

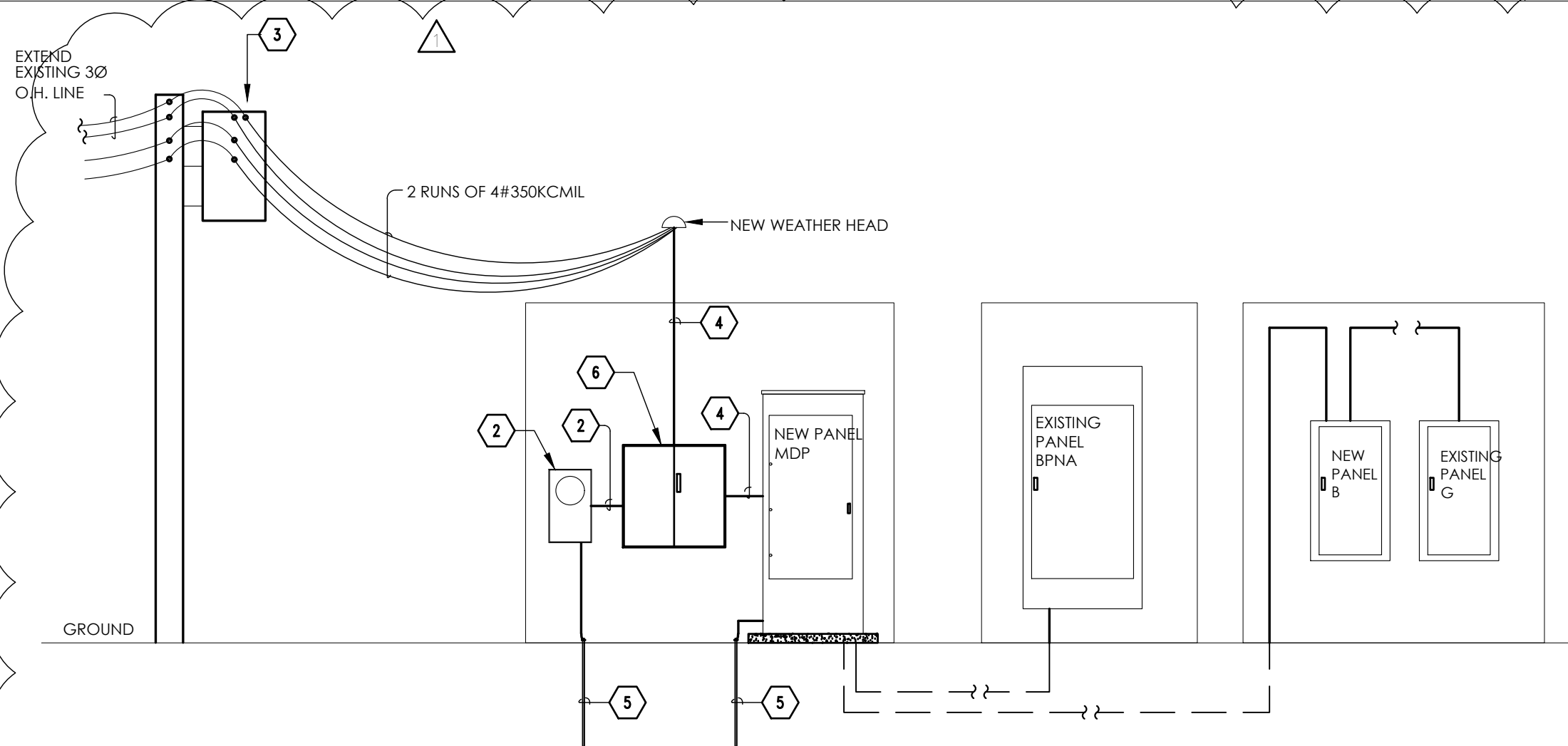
SCALE: N.T.S.

TYPICAL FOR CARNAHAN AND FRANKLIN	
240/120V, 3Ø, 4W ELECTRICAL LOAD ANALYSIS	
DESCRIPTION	TOTAL KVA
A/C	45
EXISTING	48
TOTAL WATTS: 93 KVA	
TOTAL AMPS: 223.56 AMPS	
TOTAL AMPS+25%: 279.45 AMPS	
WIRE SIZE AMPS: 300 AMPS	

FOR BUELL	
240/120V, 3Ø, 4W ELECTRICAL LOAD ANALYSIS	
DESCRIPTION	TOTAL KVA
A/C	40
EXISTING	137
TOTAL WATTS: 177 KVA	
TOTAL AMPS: 425.50 AMPS	
TOTAL AMPS+25%: 531.86 AMPS	
WIRE SIZE AMPS: 600 AMPS	

ELECTRICAL RISER
DIAGRAM KEYED NOTES:

- 1 600AMPS, 240V, 3Ø, 4W, S/N, N3R, HEAVY DUTY FUSED DISCONNECT, FUSED@600AMPS.
- 2 PROVIDE 1-2" WITH PULLSTRING.
- 3 NEW POWER CO. POWER POLE AND POLE MOUNTED XFMR ATNEW LOCATION. COORDINATE LOCATION WITH POWER CO.
- 4 2-RUNS OF 4#350KCML, 4°C.
- 5 1#2/ØG, 3/4"x1Ø" COPPER CLAD RODS. PROVIDE GROUNDING AS PER NEC REQUIREMENTS.
- 6 PROVIDE NEMA-3R ENCLOSURE FOR UTILITY POWER COMPANY CTS. COORDINATE WITH UTILITY POWER COMPANY FOR REQUIREMENTS PRIOR TO BID DATE.



BUELL
ELECTRICAL SCHEMATIC DIAGRAM

SCALE: N.T.S.

PANEL-B	AMP	LUGS	NEMA	V(LL)		(P)	(W)		V(LN)	MNT	KAIC	FDR	
LOCATION:	225	MLO	1	240		3	4		120	SUR.	10	1-RUN 4#4/Ø, 1#4G, 2°C	
LOAD SERVED	CTK #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	C	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CTK #
DXPU-H1	1	13.28	125	3	4#1, 1#4G, 2°C	*			4#1, 1#4G, 2°C	3	125	13.28	2
"	3	13.28			-	*	*		-			13.28	4
"	5	13.28			-	*	*		-			13.28	6
EXISTING PANEL	7	12	100	3	4#2, 1#BG, 2°C	*			4#2, 1#BG, 2°C	3	100	12	8
"	9	12			-	*	*		-			12	10
SPACE	11				-	*	*		-			12	SPACE
SPACE	13				-	*	*		-			14	SPACE
SPACE	15				-	*	*		-			16	SPACE
SPARE	17		20	1	-	*	*		-	1	20	18	SPARE
SPARE	19		20	1	-	*	*		-	1	20	20	SPARE
LOADS	-	(KVA)				25	25	13	(KVA)	-	DESRIPTIVE LOADS		
CONNECTED LOAD	-	64									0	- LIGHTING	
RESERVE	25	16									0	- RECEPTACLES	
TOTAL LOAD	-	80									40	- COOLING	
											0	- HEATING	
TOTAL AMPS	-	192									24	- OTHER	

NOTES:
1) HIGHLEG ON PHASE-C. FIELD VERIFY EXISTING HIGHLEG ASSIGNED PHASE.
2)
3)

PANEL-MDP	AMP	LUGS	NEMA	V(LL)		(P)	(W)		V(LN)	MNT	KAIC	FDR	
LOCATION:	600	MB	3R	240		3	4		120	SUR.	42	2-RUN 4#350KCML, 1#1G, 4°C	
LOAD SERVED	CTK #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	C	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CTK #
PANEL-B	1	25	225	3	4#350KCML, 1#3G, 4°C	*			2-RUNS 4#350KCML, 1#1G, 4°C	3	600	37.67	2
NEW	3	25			-	*	*		-			37.67	4
"	5	13			-	*	*		-			37.67	6
SPACE	7				-	*	*		-			8	SPACE
SPACE	9				-	*	*		-			10	SPACE
SPACE	11				-	*	*		-			12	SPACE
SPACE	13				-	*	*		-			14	SPACE
SPACE	15				-	*	*		-	3	30	16	SPD
SPARE	17		20	1	-	*	*		-			18	"
SPARE	19		20	1	-	*	*		-			20	"
LOADS	-	(KVA)				63	63	51	(KVA)	-	DESRIPTIVE LOADS		
CONNECTED LOAD	-	177									0	- LIGHTING	
RESERVE	25	44									0	- RECEPTACLES	
TOTAL LOAD	-	221									177	- COOLING	
											0	- HEATING	
TOTAL AMPS	-	532									0	- OTHER	

NOTES:
1) HIGHLEG ON PHASE-C. FIELD VERIFY EXISTING HIGHLEG ASSIGNED PHASE.
2) PROVIDE INTEGRAL SURGE PROTECTION DEVICE, 100KA.
3)

DATE:	DESIGNED:	DRAWN:	CHECKED:	SCALE:
NO.	REVISIONS	DATE	APPROVED	
1	ADDENDUM #1	05-08-2019		

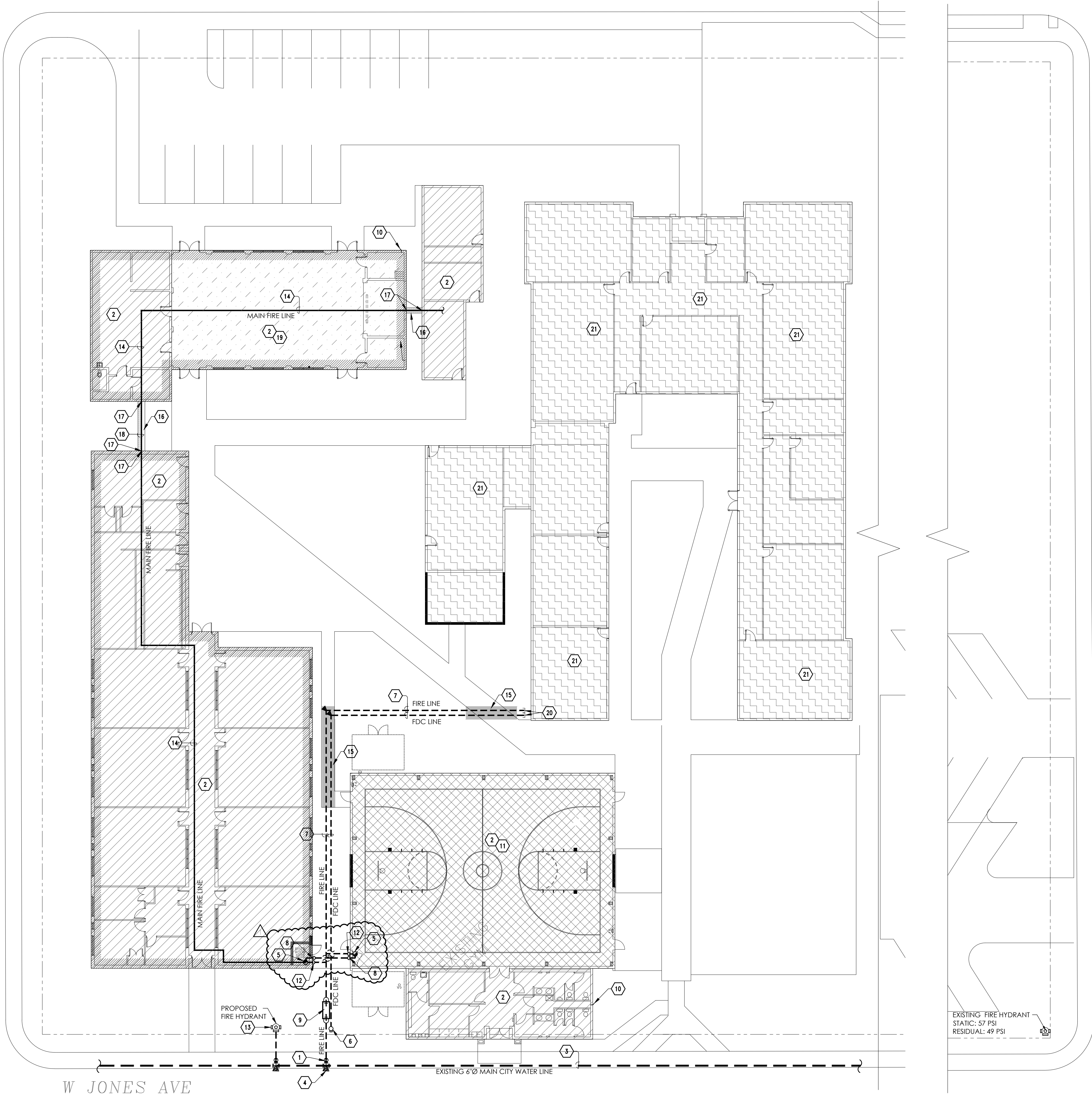
EGV ARCHITECTS, INC.
220 S. BRIDGE STREET
PO BOX 8827
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TEL: (956) 843-2987
FAX: (956) 843-9726

05/08/19

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Project number:
T:1001918-1-31 DWG 18-1-31 ELEC Carnahan Gym.dwg

P.S.J.A. ISD - CARNAHAN, FRANKLIN & BUELL
HVAC ADDITIONS TO GYMS

JOB NO.
FILE NO. dwg/pajp/reeroofing 18-18



CARNAHAN ELEM. SITE PLAN
SCALE: 1"=20'

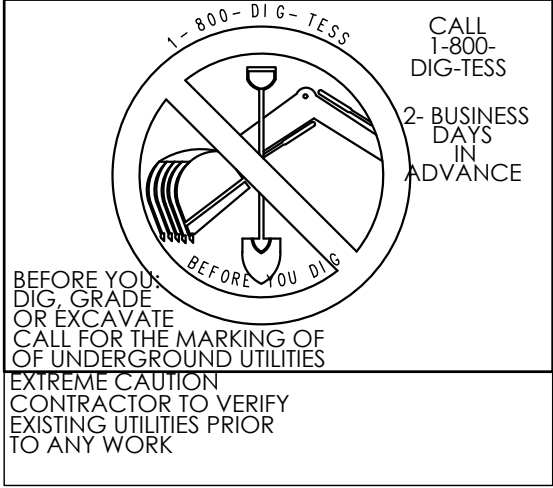
KEYED NOTES - FIRE PROTECTION:

- 1 FIRE SPRINKLER MAIN TO CONNECT TO CITY MAIN WATER LINE. SEE DETAIL #2.
- 2 THIS IS AN EXISTING BUILDING FACILITY. PROVIDE A NEW FIRE SPRINKLER SYSTEM. FIRE PROTECTION SYSTEM TO COORDINATE WITH ALL OTHER TRADES.
- 3 ESTIMATED LOCATION OF EXISTING CITY MAIN WATER LINE. SEE CIVIL SITE PLAN FOR EXACT LOCATION AND SIZE.
- 4 3000 PSI CONCRETE THRUST BLOCK AT EVERY CHANGE IN DIRECTION AS PER NFPA 24.
- 5 FIRE SPRINKLER SYSTEM RISER SHALL BE PLACED IN THIS PROPOSED RISER ROOM. REFER TO DETAIL #4.
- 6 PROVIDE FREE STANDING F.D.C. COORDINATE EXACT LOCATION WITH A.H.J. PROVIDE SIGN WITH BUILDING IT SERVE. REFER TO DETAIL #5.
- 7 RUN FIRE MAIN AND FDC LINES BETWEEN 3 AND 4 FEET DEEP. PROVIDE 4 INCHES OF SAND UNDER PIPE. COVER ALL PIPE AND LEAVE JOINTS EXPOSED FOR ENGINEER AND FIRE DEPARTMENT INSPECTION.
- 8 DROP F.D.C. LINE DOWN @ THIS POINT CONTRACTOR COORDINATE EXACT LOCATION.
- 9 PLACE BACKFLOW PREVENTER IN THIS LOCATION. CONTRACTOR COORDINATE EXACT LOCATION. REFER TO DETAIL #7.
- 10 INSPECTOR'S TEST TO CONNECT TO FIRE PROTECTION SYSTEM. REFER TO DETAIL #3. CONTRACTOR COORDINATE WITH ARCHITECTURAL FOR PIPE ROUTE, VALVE LOCATION AND ACCESS. INSPECTOR'S TEST SHALL BE INSIDE A FIRM-OUT WITH ACCESS PANEL IF INSPECTOR'S TEST IS LOCATED IN COMMON AREA.
- 11 PROVIDE BRASS UPRIGHT SPRINKLER HEADS WITH HEAD GUARDS @ THIS AREA.
- 12 RISE FIRE LINE @ THIS POINT. CONTRACTOR COORDINATE EXACT LOCATION. REFER TO DETAIL #4.
- 13 PROPOSED FIRE HYDRANT. REFER TO DETAIL #6.
- 14 COORDINATE ROUTING WITH EXISTING CONDITIONS.
- 15 CONCRETE SIDE WALK TO BE REMOVED AND REPLACED AFTER LINES ARE INSTALLED AND INSPECTED.
- 16 PROVIDE 2" INSULATION AND COVER WITH ALUMINUM JACKET.
- 17 SEAL PENETRATION WATER TIGHT.
- 18 PROVIDE PIPE SUPPORT @ EVERY 3 FEET.
- 19 SPRINKLER SYSTEM SHALL RUN EXPOSED UNDER CEILING.
- 20 TERMINATE LINES AT 1' ABOVE FLOOR, LABEL AND CAPPED FOR FUTURE CONNECTION.
- 21 EXISTING BUILDING. NO WORK WILL BE DONE AT THIS BUILDING.

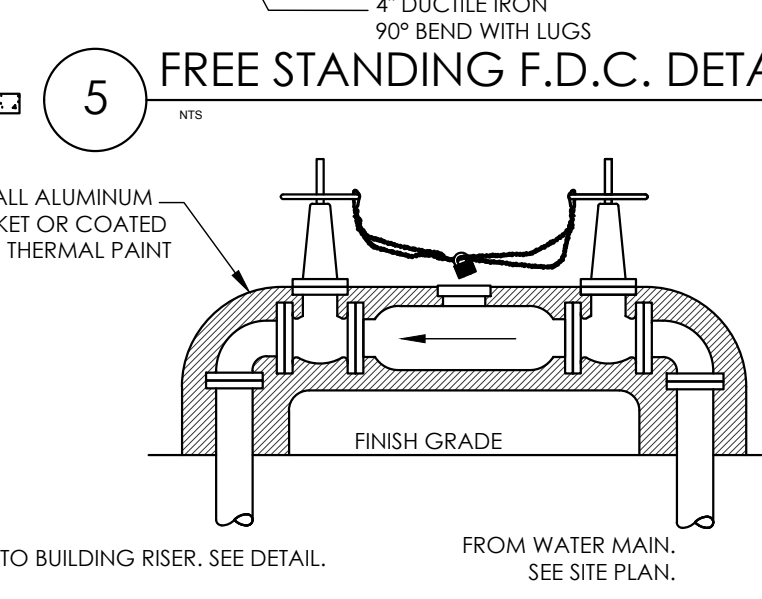
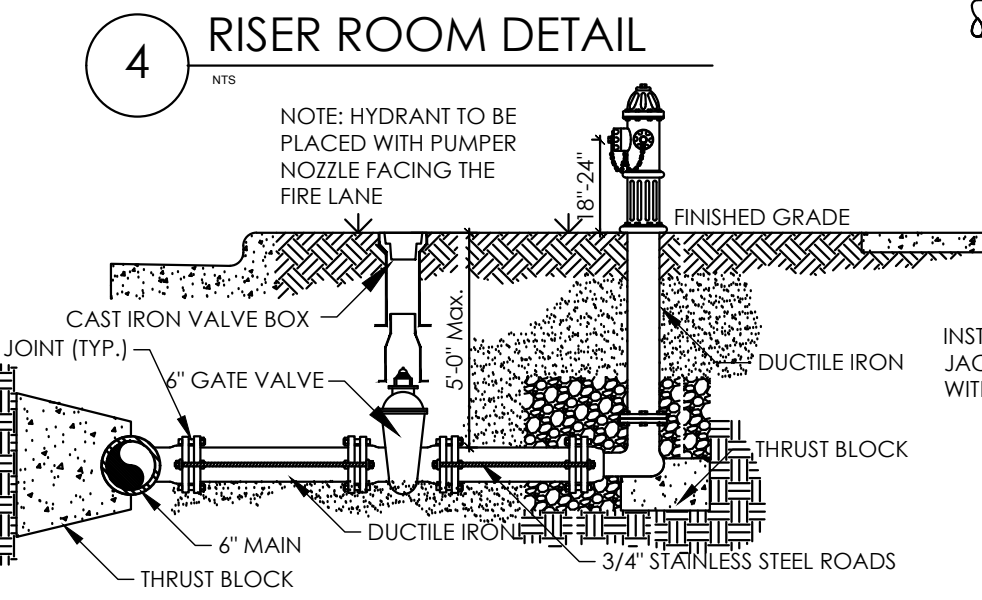
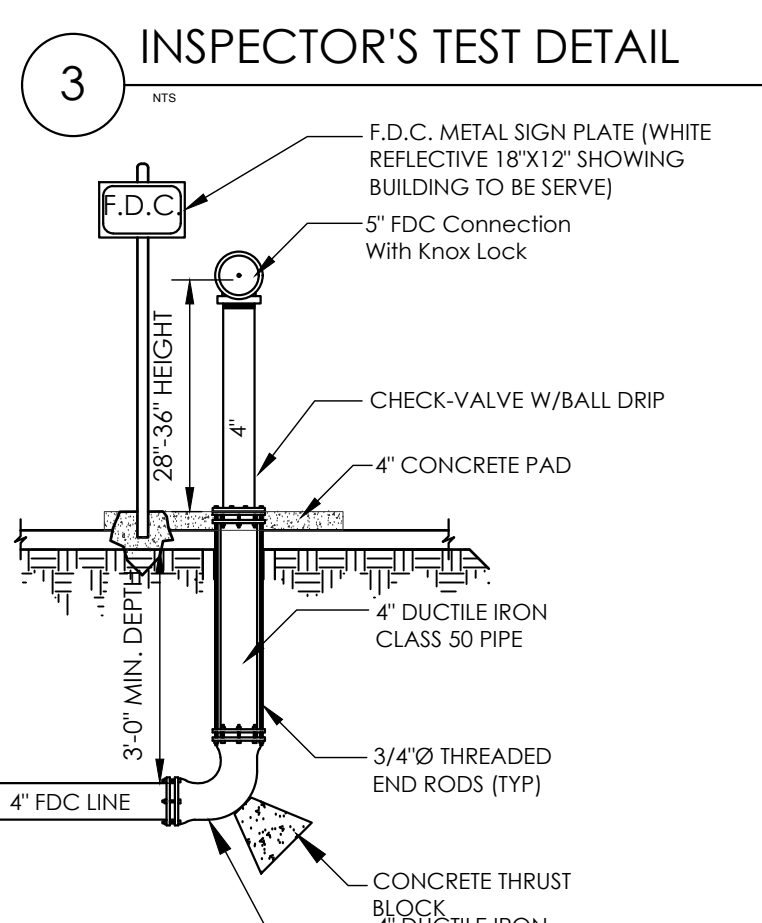
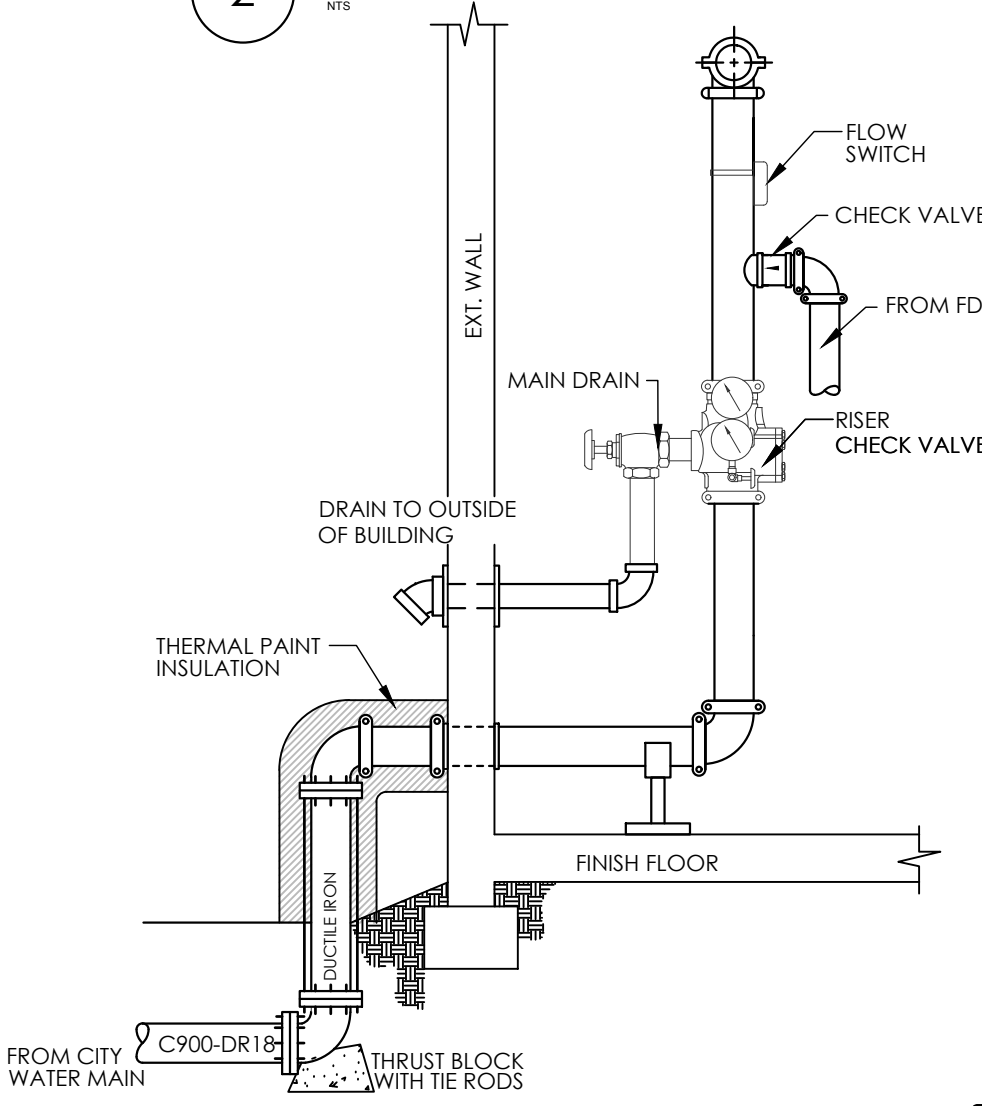
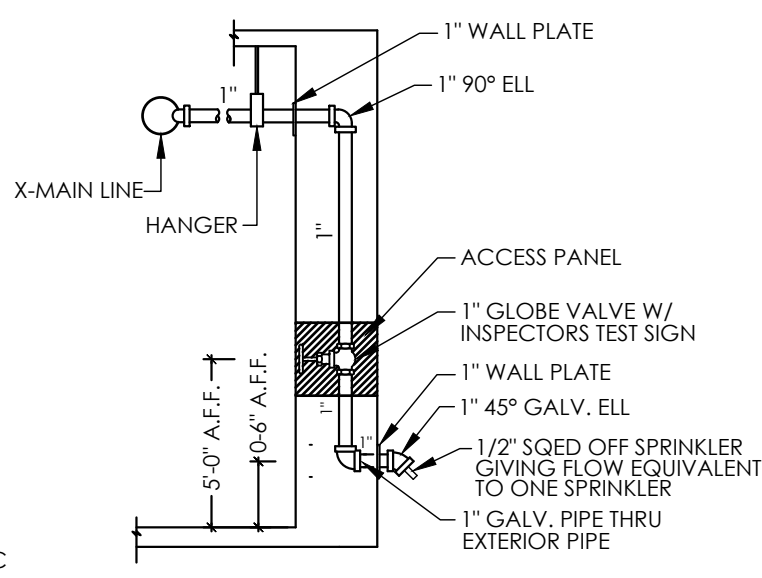
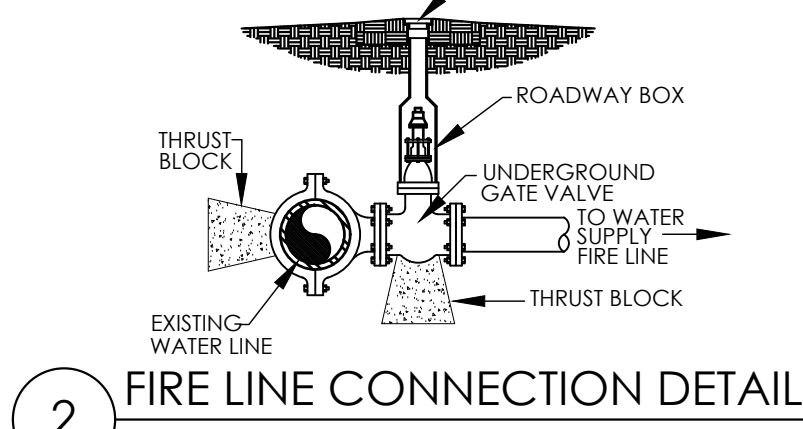
GENERAL NOTES - FIRE PROTECTION:

- A. SYSTEM TO BE DESIGNED TO MEET CITY OF PHARR AND FIRE MARSHAL CODES. PLANS SHALL BE SUBMITTED TO THE CITY OF PHARR FOR REVIEW AND APPROVAL. FIRE MARSHAL TO BE THE FINAL APPROVING AUTHORITY FOR ALL FIRE PROTECTION WORK.
- B. FIRE DEPARTMENT CONNECTION SHALL BE AS REQUIRED BY LOCAL FIRE MARSHAL.
- C. ALL PIPE TO BE SIZED HYDRAULICALLY.
- D. ALL PIPING UNDER SLAB SHALL BE STAINLESS STEEL. ELSE USE DUCTILE IRON. VERIFY WITH LOCAL APPROVING AUTHORITY.
- E. DETAILS DESCRIBE SOME SPRINKLER COMPONENTS REQUIRED BY A AUTOMATICALLY OPERATED SYSTEM. SPRINKLER CONTRACTOR TO PROVIDE ALL SYSTEM COMPONENTS REQUIRED FOR A TURN KEY FIRE SPRINKLER SYSTEM.
- F. PROVIDE SIGNS FOR FDC, ALL VALVES, AND RISER.
- G. HAZARD CLASSIFICATION SHALL BE AS PER NFPA 13.
- H. ALL UNDERGROUND PIPE TO BE DR-18 C900 AND TO BE INSTALLED AS PER NFPA 24.
- I. REFER TO SPECIFICATIONS FOR FURTHER INSTRUCTIONS.
- J. ALL ABOVE CEILING PIPING WILL NEED TO BE ROUTED AROUND EXISTING CONDUITS, BEAMS, MECHANICAL DUCT WORK AND DRAIN LINES. ALL PIPE LEFT WITH TRAP WATER NEEDS TO BE PROVIDED W/ A DRAIN VALVE.
- K. SEAL ALL WALL OPENINGS W/ MORTAR OR FIRE CAULKING.
- L. NO FIRE SPRINKLER PIPING TO RUN OVER ELECTRICAL EQUIPMENT, IT ROOM AND ANY OTHER SYSTEM THAT MAY BE DAMAGED FROM WATER LEAK.
- M. CONTRACTOR MUST VISIT SITE TO ASSESS PRESENT CONDITION BEFORE BID DATE.
- N. FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW THE ARCHITECTURAL DOCUMENTS TO DETERMINE THE COMPLETE SCOPE OF WORK.

NOTE: CARE SHALL BE TAKEN DURING DIGGING. ALL LINES DAMAGED UNDERGROUND WILL BE FIXED BY THE CONTRACTOR.



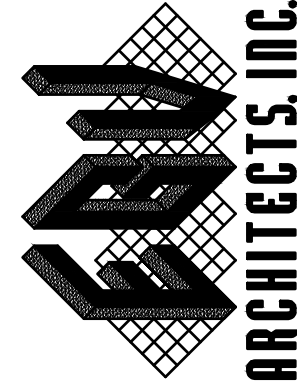
THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED AS REFERENCE FOR BIDDING PURPOSES ONLY. THIS DRAWING SHALL NOT BE USED FOR PERMIT OR CONSTRUCTION. CONTRACTOR IS FULLY RESPONSIBLE FOR THE DESIGN OF THE NEW FIRE SPRINKLER SYSTEM. ALL NFPA CODES APPLICABLE SHALL BE USED AND FOLLOWED.



S. BLUEBONNET ST.

EXISTING FIRE HYDRANT
STATIC: 57 PSI
RESIDUAL: 49 PSI

EGV ARCHITECTS, INC.
220 S. BRIDGE STREET
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Project number:
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HVAC ADDITIONS TO GYMS

JOB NO.
FILE NO. dwg/psjp/reeroofing 17-18

FH1.0