Milnet Architectural Services, PLLC

ADDENDUM NUMBER: #1 - 160111 **Date: January 11, 2016**

Project Name: City of Edinburg. Fire Station #5 Milnet Project No.: 214000

Date: January 11, 2016

Bid Date: January 18, 2016

Architect: Milnet Architectural Services
608 S. 12th St.
McAllen, TX 78501

NOTICE TO ALL BIDDERS

This Addendum forms a part of the Contract Document and modifies the original Drawings issued for bid, to the extent noted herein.

Careful note of this Addendum shall be taken by all parties of interest so that proper allowance is made in all computations, estimates and contracts and so that all trades affected are fully advised in the performance of work that will be required by them. Acknowledge receipt of this addendum by inserting its number and date of issue in the place provided for same in the proposal.

Items revised on the Drawings are designated by a cloud line and triangle surrounding the corresponding revision number.

This Addendum supersedes all previous Drawings, Specifications and instructions pertaining to these items. It is imperative that this addendum be inserted INTO set of specifications.

1.01 Refer to detail 1/A8.0-SK1 for proposed building plaque layout.

1.02 For Wire shelf at Laundry room 118, please use ClosetMaid white with adjustable mount wire shelving or equal

1.03 Approved manufacturer for FOLDING PARTITIONS 10651 Part 2 Products – 2.02. B. Signature 8600 Individual Panels from MODERCO. Contact: Lance Finley, Rob Pelletier Construction. 12402 Eastex Freeway, Houston, TX. 77039. P: 512-962-9522.

1.04 Update spec section 10350.1.5.A to read: The General Contractor shall furnish and install two tapered aluminum flagpoles and all fittings, top ornament, lighting, ground spike with plate, foundation, grounding facilities and all appurtenant work, all in accordance with the requirements of the Contract Documents.

1.05 Update spec section 10350.2.3.C to read: Flags: Owner provided.

1.06 APPEND spec section 08411 ALUMINUM ENTRANCES AND STOREFRONTS

1.07 APPEND spec section 08730 THRESHOLDS, WEATHERSTRIPPING AND SEALS

1.08 CLARIFICATION: Provide and install fourteen (14) wall mounted Red Ready Racks 24” Wide.

1.09 CLARIFICATION: Materials listed in sheet A4.0 pertain to ceiling finishes only

1.10 CLARIFICATION: Numbers listed in TOILET ACCESSORIES LEGEND pertain to corresponding TOILET ACCESSORIES NOTES.

1.11 CLARIFICATION: On bid form mark OTHER and specify GENERAL CONTRACTOR if pricing not from Texas recognized and approved cooperatives such as: Buyboard, TXMAS, etc.

1.12 CLARIFICATION: General Contractor is responsible to obtain building permit, however the City of Edinburg waives permit fees. General Contractor is responsible to pay for new water meter fees.

1.13 CLARIFICATION: Door type G is 12'-0"W x 14'-0"H

1.14 CORRECTION: Alternates definition:

1.14.1 Alternate #1: Provide mezzanine at garage area.

1.14.2 Alternate #2: Provide truck wash station at driveway along north property line (Base Bid is heavy duty HMAC pavement).

1.14.3 Alternate #3: Build community rooms, kitchen & restrooms (Rm #101, 102, 104, 105, 106 & 107). Provide parking lot on the south, total of 37 parking spaces.

1.14.4 Alternate #4: Build third bay at garage (Rm #124). Base bid the garage dimensions are: 44'-8"W x 120'-0"D, with alternate #4 approved, it would be: 60'-8"W x 120'-0"D. Also part of alternate #4 is to make truck driveway 44'-0" wide.

1.15 CORRECTION: Update AIA Document A101-2007. Section 3.3. to read: The Contractor shall achieve Substantial Completion of the entire Work not later than Three Hundred (300) days from the date of commencement, or as follows:

1.16 CORRECTION: Update detail 2/A3.0 with the attached 1/A3.0-SK-1

1.17 CORRECTION: Replace sheets A4.0, A5.0, A7.1 with the attached corresponding sheets

1.18 CORRECTION: Update Hinojosa Engineering address and phone number to read: 108 W. 18TH ST., MISSION, TX. 78572. Ph. (956) 581-0143.

1.19 CORRECTION: Replace with the attached 09910 Painting & Finishing spec section the 09900 spec section.

1.20 Refer attached MEP, CIVIL & STR addenda

END OF ADDENDUM

FONT HELVETICA MEDIUM H-709. 3/8" HIGH LETTER UNLESS NOTED OTHERWISE.

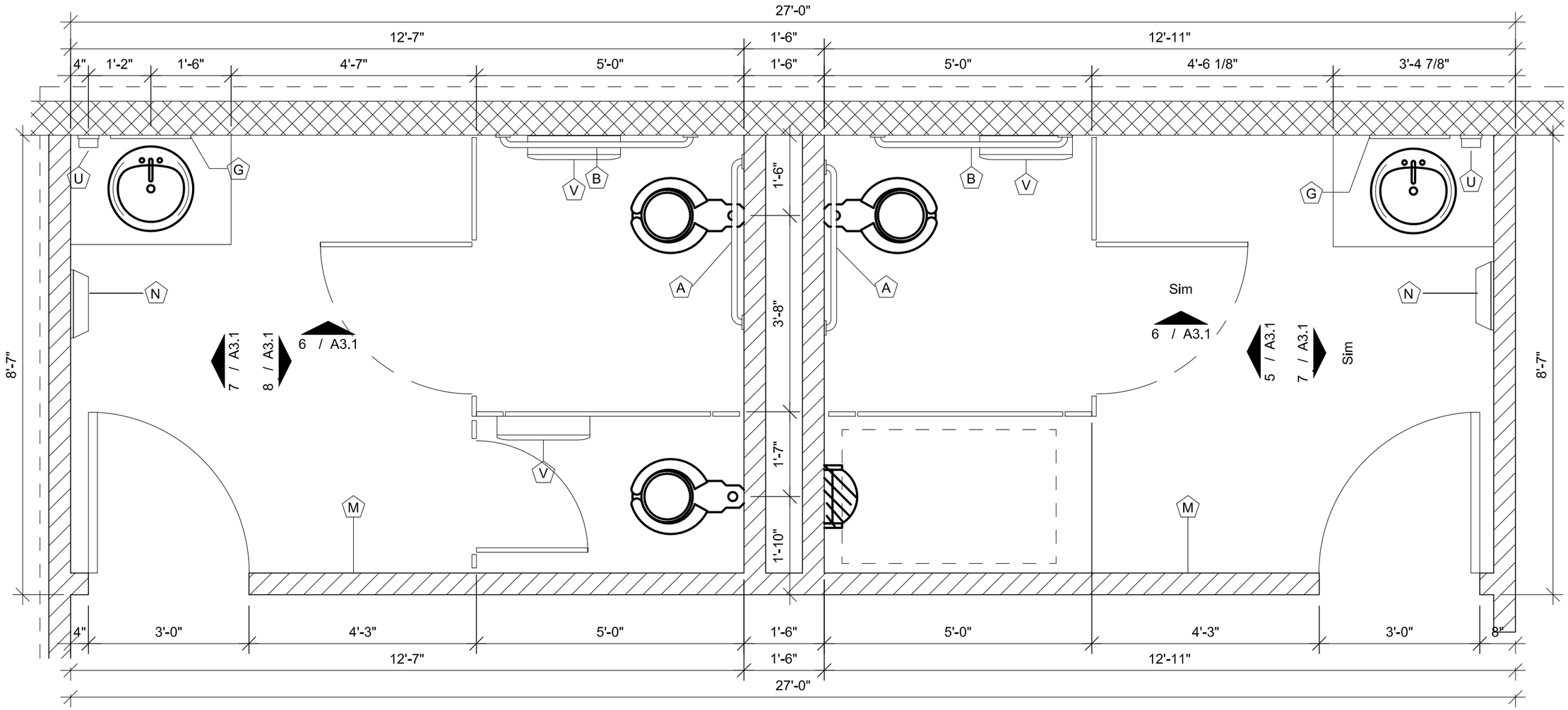
1 DETAIL

SCALE: 3" = 1'-0"

A8.0-SK1

MILNET ARCHITECTURAL SERVICES
Ph: (956) 688-5656
Fax: (956) 687-9289
Email: milnet@swbell.net

Project Name:	CITY OF EDINBURG. FIRE STATION #5
Address:	EDINBURG, TEXAS
Date:	1/11/16
Job Number:	214000



1 RR. ENLARGED PLAN

SCALE: NTS

FROM A3.0

SK1

MILNET
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SERVICES
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Email: milnet@swbell.net

Project Name:	FIRE STATION #5
Address:	CITY OF EDINBURG
Date:	1/7/16
Job Number:	214000

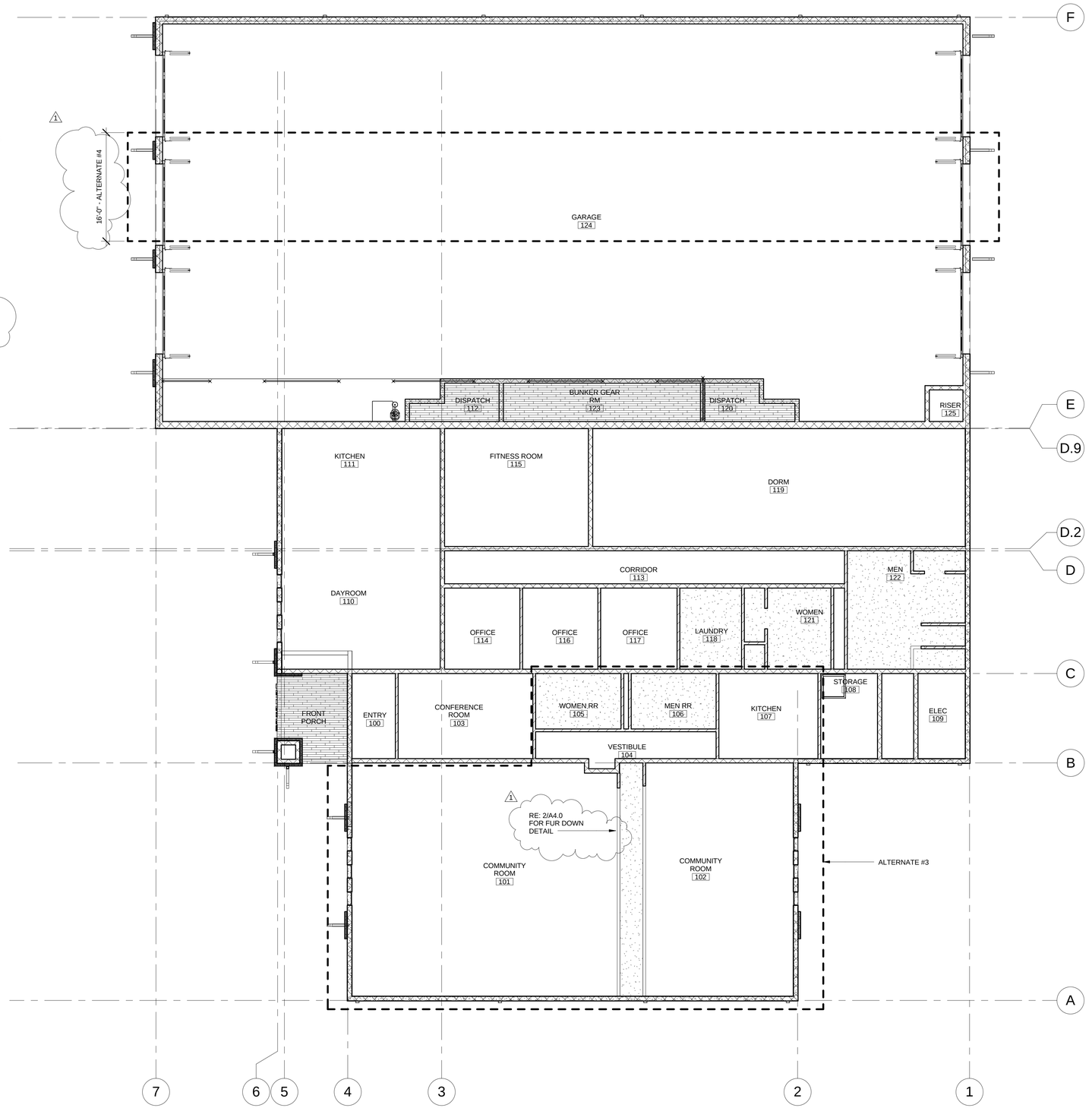
GENERAL NOTES:

1. ALL OUTLETS SHALL BE @ 15" A.F.F. UNLESS NOTED OTHERWISE. ALSO, OUTLETS SHALL BE PLACED 12'-0" MAX. DISTANCE ALONG INSIDE WALLS.
2. GROUND FAULT INTERRUPTERS (GFI) ARE REQ'D ON CONVENIENCE OUTLETS IN RESTROOMS & KITCHEN.
3. WEATHER PROOF (W.P.) CONVENIENCE OUTLETS ARE REQUIRED OUTSIDE.
4. ALL CLG. ARE 8'-0" A.F.F. UNLESS NOTED OTHERWISE.
5. LIGHT SWITCH @ H.C. RESTROOMS @ 48" O.C. RM #'s 105, 106, 121 & 122. (1)
6. RE: MEP DWGS. FOR ADDITIONAL INFO.

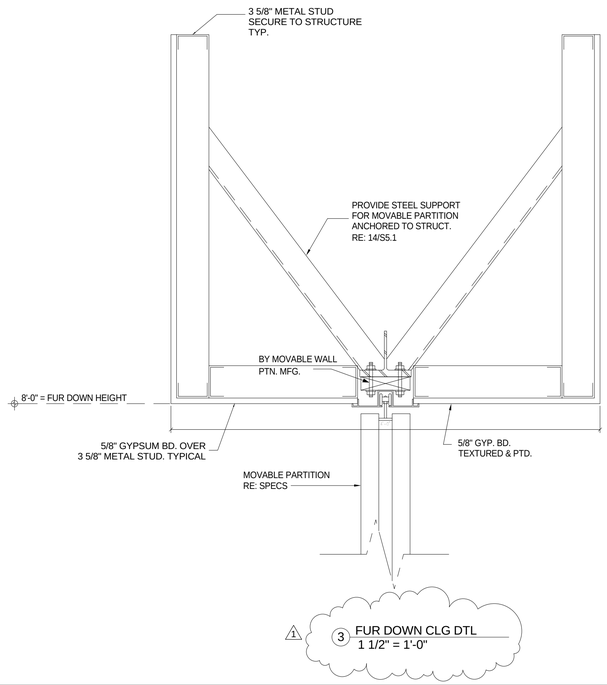
LEGEND

(1)

- PAINTED GYPSUM BOARD
- OPEN STRUCTURE. PAINTED
- TONGUE AND GROOVE CEDAR WOOD PAINTED



(1) CEILING PLAN
1/8" = 1'-0"



(1) (3) FUR DOWN CLG DTL
1 1/2" = 1'-0"

Milnet Architectural Services
AMERICAN INSTITUTE OF ARCHITECTS

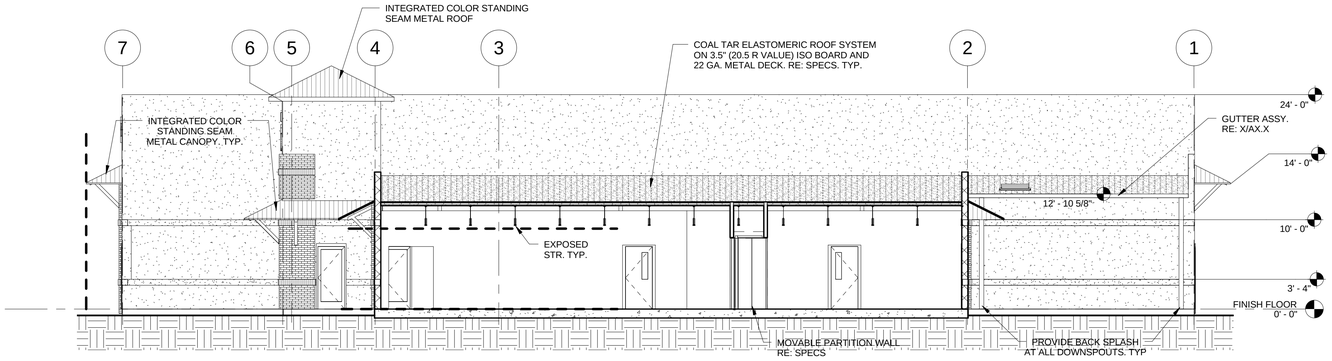
EDINBURG FIRE STATION #5
CITY OF EDINBURG
JASMAN RD & FM2812

PROJECT NUMBER
214000

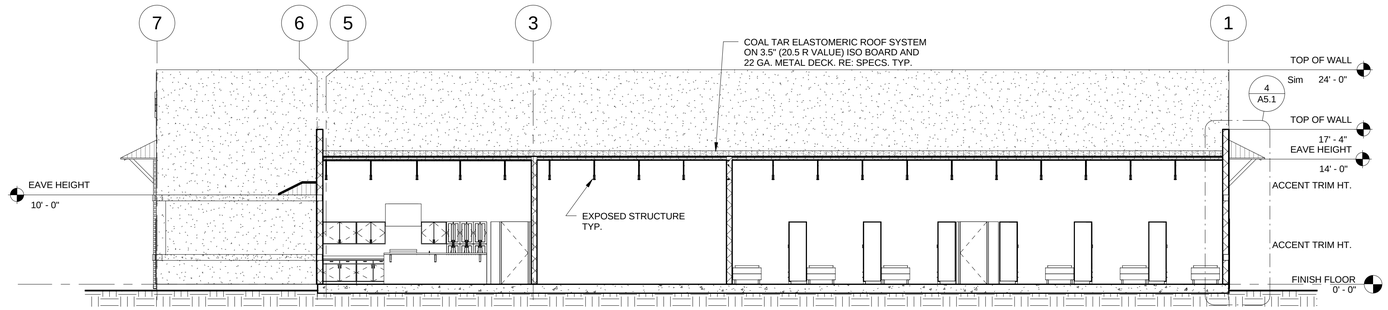
DATE
DECEMBER 18, 2015

ISSUED FOR BIDS

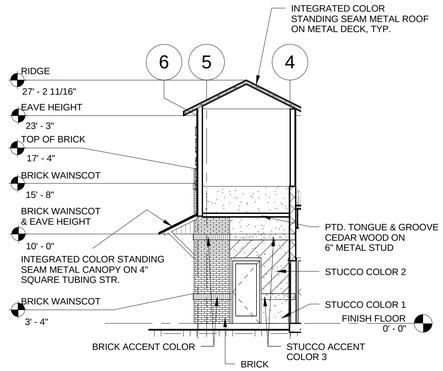
SHEET
A4.0
OF



6 BUILDING SECTION
1/8" = 1'-0"



4 BUILDING SECTION
1/8" = 1'-0"



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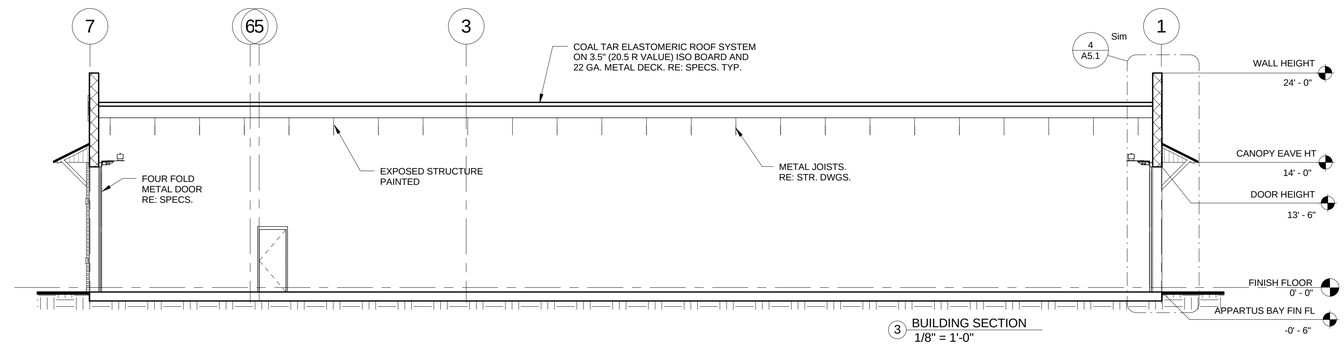
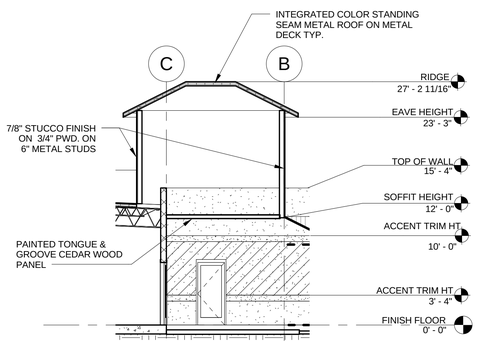
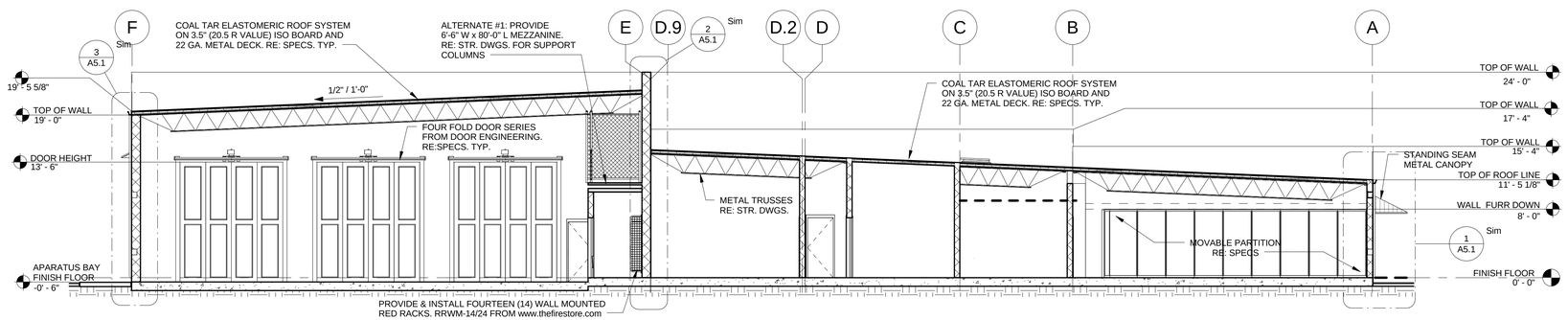
1/8" = 1'-0"



3 BUILDING SECTION
1/8" = 1'-0"



2 BUILDING SECTION
1/8" = 1'-0"



1 BUILDING SECTION
1/8" = 1'-0"

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AMERICAN INSTITUTE OF ARCHITECTS

EDINBURG FIRE STATION #5
CITY OF EDINBURG
JASMAN RD & FM2812

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DATE
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ISSUED FOR BIDS

SHEET
1
A5.0
OF

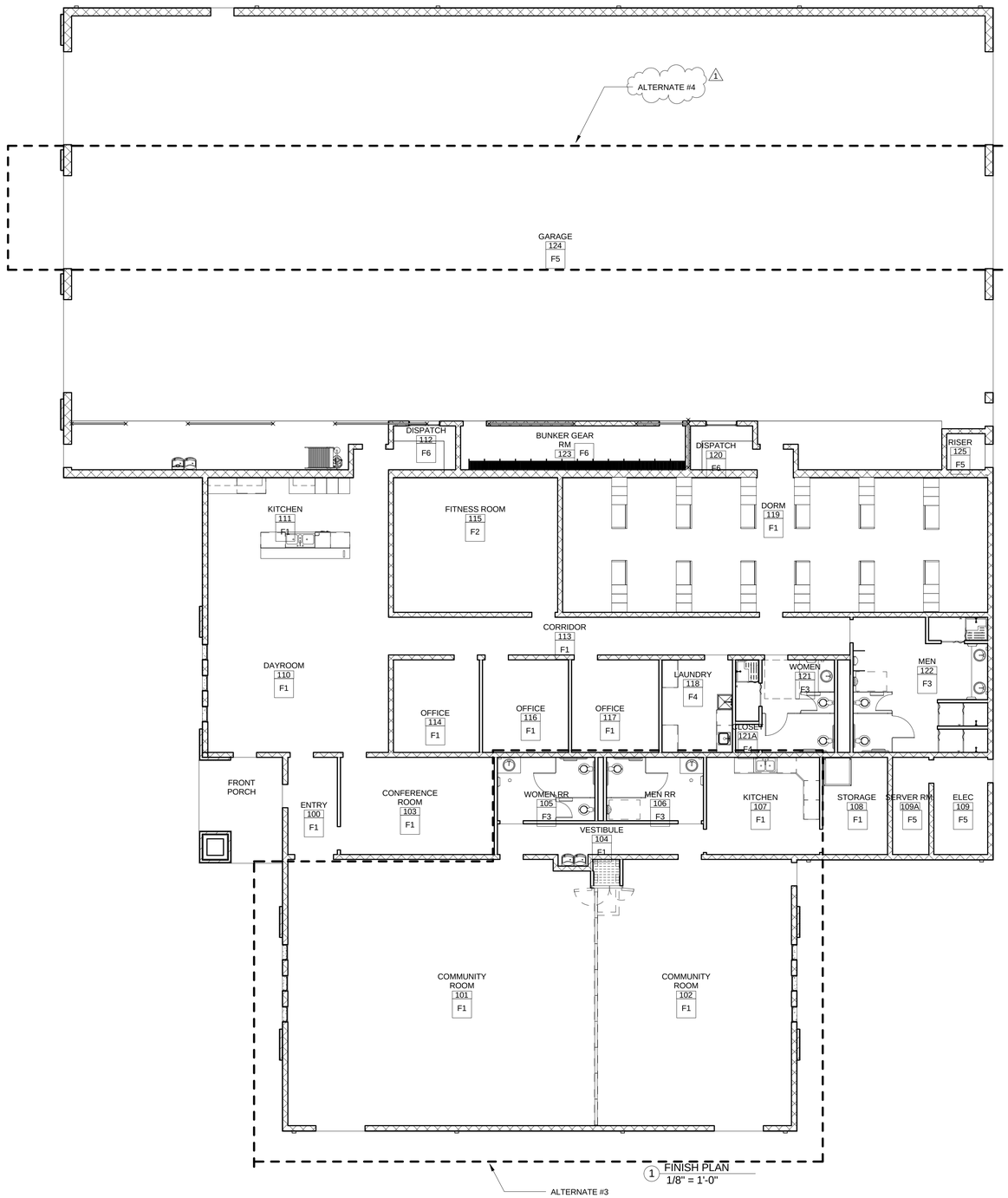
ROOM FINISH SCHEDULE

ROOM #	DESCRIPTION	FINISH #	WALLS	BASE	FLOOR	CEILING	COMMENTS
100	ENTRY	F1	P-1	B-1	F-1	C-1	
101	COMMUNITY ROOM	F1	P-1	B-1	F-1	C-1	
102	COMMUNITY ROOM	F1	P-1	B-1	F-1	C-1	
103	CONFERENCE ROOM	F1	P-1	B-1	F-1	C-1	
104	VESTIBULE	F1	P-1	B-1	F-1	C-1	
105	WOMEN RR	F3	P-2	B-2	CT	C-2	
106	MEN RR	F3	P-2	B-2	CT	C-2	
107	KITCHEN	F1	P-1	B-1	F-1	C-1	
108	STORAGE	F1	P-1	B-1	F-1	C-1	
109	ELEC	F5	P-1	B-1	SC	C-1	
109A	SERVER RM.	F5	P-1	B-1	SC	C-1	
110	DAYROOM	F1	P-1	B-1	F-1	C-1	
111	KITCHEN	F1	P-1	B-1	F-1	C-1	
112	DISPATCH	1\F6	P-1	B-1	F-1	C-3	
113	CORRIDOR	F1	P-1	B-1	F-1	C-1	
114	OFFICE	F1	P-1	B-1	F-1	C-1	
115	FITNESS ROOM	F2	P-1	B-1	F-2	C-1	PROVIDE MIRROR FROM 10" TO 8'-0" AFF AT ALL FOUR WALLS
116	OFFICE	F1	P-1	B-1	F-1	C-1	
117	OFFICE	F1	P-1	B-1	F-1	C-1	
118	LAUNDRY	F4	P-1	B-2	CT	C-2	
119	DORM	F1	P-1	B-1	F-1	C-1	
120	DISPATCH	1\F6	P-1	B-1	F-1	C-3	
121	WOMEN	F3	P-2	B-2	CT	C-2	
121A	CLOSET	F4	P-1	B-2	CT	C-2	
122	MEN	F3	P-2	B-2	CT	C-2	
123	BUNKER GEAR RM	1\F6	P-1	B-1	F-1	C-3	
124	GARAGE	F5	P-1	B-1	SC	C-1	
125	RISER	F5	P-1	B-1	SC	C-1	

ROOM FINISH STANDARDS

WALLS	P-1	PAINTED GYPSUM BOARD OR CMU (LATEX PAINT)
	P-2	PAINTED GYPSUM BOARD OR CMU (EPOXY PAINT)
BASE	B-1	4" RUBBER BASE
	B-2	CERAMIC TILE BASE
FLOOR	F-1	POLISHED CONCRETE FLOOR
	F-2	RUBBER TILE FLOORING
	CT	CERAMIC TILE
	SC	SEALED CONCRETE
CEILING	C-1	EXPOSED OPEN CEILING PAINTED
	C-2	PAINTED GYPSUM BOARD (EPOXY PAINT)
	C-3	PAINTED TONGUE & GROOVE CEDAR WOOD PANEL

NOTE: POLISHED CONCRETE FLOOR CUT & SHINE LEVELS:
CUT LEVEL: GRADE 2, LIGHT EXPOSURE OF COURSE AGGREGATE
SHINE LEVEL: CLASS 1, 400 GRIT POLISH.
FINISH COAT: APPLY TWO APPLICATIONS OF SCOFIELD FINISH COAT



1 FINISH PLAN
1/8" = 1'-0"

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SHEET
A7.1
OF

SECTION 09910 – PAINTING AND FINISHING

PART 1 - GENERAL

1.1 COORDINATION

A. The General Conditions of the Contract for Construction and the Supplementary Conditions to the General Conditions of the Contract for Construction shall be considered as part of this section of the specifications.

B. Each Bidder shall be responsible for determining during the bidding period the extent that any addenda issued during the bidding period may affect this section of the specifications.

C. Reference Instructions to Bidders for requirements regarding substitutions of materials and products.

D. Where conflicts occur between the drawings and specifications, between different drawings, between different portions of this section of the specifications, or between different sections of the specifications, the more stringent requirements and the greater quantity shall apply.

1.2 WORK INCLUDED

A. Provide all labor, materials, and equipment required for all painting, staining and finishing as indicated in the drawings, the approved submittals, and as specified herein. Painted or stained systems include but are not necessarily limited to the items listed below:

B. EXTERIOR SYSTEMS:

1. All visible wood unless noted otherwise.
2. All ferrous metal. All galvanized metal unless noted otherwise. Touch-up on welds or damaged finishes.
3. Exposed conduit, piping, etc., except for roof mounted piping not visible.
4. Exposed roof mounted equipment visible from ground level or from upper floors of the building.
5. All exposed concrete masonry units.
6. All items normally painted in accordance with good construction practice.

C. INTERIOR SYSTEMS:

1. All visible wood or behind cabinet doors unless noted otherwise.
2. All ferrous metal. All galvanized metal unless noted otherwise. Touch-up on welds or damaged finishes. Structural steel, steel joists and deck exposed to view except in mechanical rooms.
3. Exposed conduit, piping, outlet boxes, raceways, and panel boxes except galvanized or aluminum piping located in mechanical or electrical rooms.
4. All exposed concrete masonry units, gypsum board and plaster unless otherwise noted.
5. All factory-primed hardware. Back-priming of all wood trim, millwork or finished carpentry prior to installation.
6. All hollow metal doors and frames.
7. All items normally painted in accordance with good construction practice.
8. All unfinished louvers and grilles.

1.3 WORK TYPICALLY EXCLUDED

A. Shop applied primer on structural steel and miscellaneous metals items.

B. Aluminum frames, doors, and windows.

C. Plastic clad casework, millwork, and wall panels.

D. Factory finished equipment unless noted otherwise (provide job touch-up).

1.4 DRAWING REFERENCE: Reference any paint or finish notes in the drawings for any pre-selected colors or other requirements.

1.5 SUBMITTALS

A. Submit manufacturer's product data describing each proposed type of paint, sealer, stain, or coating and it's recommended use. Include viscosity and percent solids information. Where not the specified base manufacturer, list the specified brand name and type and the proposed substitute. The Architect shall be the sole judge as to equivalency of systems.

B. Reference Section 01340 SUBMITTALS for additional submittal requirements.

1.6 WARRANTY

A. Provide written warranty against defects in materials and workmanship for the work under this section for a period of two years after the date of Substantial Completion of the project.

B. Warranted defects shall include but not necessarily be limited to peeling, crazing, cracking, blistering, mildewing, chalking or dusting, pin holes, color fade or loss of hardness or sheen.

1.7 QUALITY ASSURANCE

A. Painting contractor shall have a minimum of 5 years experience in the application of the specified systems for projects of similar size and scope as this project.

B. If requested by the Architect, provide system manufacturer's certification of the proposed painting contractor as approved for application of the product.

1.8 DELIVERY, STORAGE AND HANDLING

A. Do not deliver painting materials to the jobsite until spaces and surfaces are ready for painting.

B. Deliver materials in manufacturer's original containers, unopened except for shop mixing of colors. Containers shall bear manufacturer's readable labels indicating brand and type of paint. Any additional containers with labels indicating products not approved shall be removed form the jobsite. Any applied material not previously approved by the Architect is subject to removal and reapplication with the appropriate approved product.

C. Store materials in environmentally controlled area. Interior products shall be acclimated to a temperature range of 50-80 degrees F. at least 24 hours prior to application.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. TYPICAL PAINTS: Systems are based on the first listed manufacturer. Only equivalent systems provided by specified manufacturers in accordance with attached Product Comparison sheet and as approved by the Architect are approved for use.

1. Sherwin Williams, Inc.
2. Pittsburgh Paints
3. Pratt & Lambert
4. Benjamin Moore Co.

B. SPECIALTY PAINTS:

1. Epoxies: Sherwin Williams, PPG, Pratt & Lambert.

C. SUBSTITUTIONS: In accordance with Section 01600 Substitution Procedures.

2.2 INTERIOR SYSTEMS

A. SYSTEM TYPES FOR NEW WALLS (Unless indicated otherwise on Finish Schedule or drawings):

1. Drywall in toilet rooms, storage rooms, and mechanical/electrical/toilet rooms/ classrooms: **Semi Gloss Enamel** at walls and ceilings.
2. Drywall soffits: **Eggshell Enamel**.
3. Typical masonry (CMU): **Gloss Enamel.**
4. Masonry (CMU) in toilet rooms: **Gloss Epoxy.**
5. Steel railings: **Gloss Aliphatic Urethane.**
6. Suspended rigging over stage: **Dry Fog.**

B. SYSTEM DESCRIPTIONS (Reference item 3.3 for modifications and preparation required for these systems when applied to existing walls already painted):

1. Primer on gypsum board: SW PrepRite High Build Primer B28W601 – one coat over light to medium texture (submit texture sample for approval)
2. Eggshell Enamel on Drywall: SW Pro Mar 400 Latex Eg-Shel B20W4400 – one coat over specified primer.
3. Semi-Gloss Enamel on Drywall: SW Pro Mar 400 Latex Semi Gloss B31W4400 - one coat over specified primer.
4. Epoxy Paint on Drywall: One coat SW PrepRite 200 Latex Primer B28W200 over specified primer.
5. Gloss Enamel on Drywall: Two coats SW Water Based Catalyzed Epoxy B70 Series gloss acrylic over specified primer.
6. Semi-Gloss Enamel on shop-primed metals: SW Water Based Industrial Enamel B53-300 acrylic gloss Enamel – two coats.
7. Natural Finish on Wood: SW Sherwood BAC Wiping Stain (one coat) + SW Wood Classics Sanding Sealer B26V3 (one coat) + SW Wood Classics Satin Varnish A66.
8. Clear Finish on Wood: SW Wood Classics Polyurethane Varnish A67 (two coats). Sand lightly between all coats.
9. Block Filler: SW Prep Rite Block Filler B25W25 (for areas not subject to moisture); SW Heavy Duty Block Filler (for areas subject to moisture). Provide 2 coats as specified under "Execution".

10. Gloss Enamel on CMU or concrete: Two coats block filler plus two coats SW Water based Industrial Enamel gloss acrylic latex over specified primer.
11. Semi-Gloss Enamel on CMU or concrete: Two coats block filler plus two coats SW Water Based Industrial Enamel semi-gloss acrylic latex over specified primer.
12. Semi-Gloss Epoxy Paint on concrete: One coat SW Water Based Epoxy semi-gloss over cured concrete plus finish coat of SW Water Based Epoxy semi-gloss. Minimum paint thickness 3.0 dry mils.
13. Gloss Epoxy Paint on CMU: Two coats block filler (unless surface-bonded) plus finish coat of gloss. Minimum paint thickness 3.0 dry mils.
14. Gloss Epoxy Paint on concrete: One coat SW Water Based Epoxy gloss over cured concrete plus finish coat of SW Water Based Epoxy gloss. Minimum paint thickness 3.0 dry mils.
15. Semi-Gloss Enamel on utility piping and galvanized metals: SW Pro-Cryl Universal Metal Primer – one coat + SW DTM Acrylic Semi Gloss – two coats.
16. Semi-Gloss Epoxy Paint on CMU: Two coats block filler plus finish coat of SW Water Based Epoxy semi-gloss. Minimum paint thickness 3.0 dry mils.
17. Gloss Aliphatic Urethane Enamel on primed steel railings: Over epoxy shop primer apply two coats SW Hydrogloss Single Component Water Based Urethane B65-181 Urethane Gloss Enamel using airless spray equipment.
18. Dry Fall Acrylic (exposed deck, structure and rigging): One coat SW Super Save Lite Acrylic Dry Fall Eggshell Primer & Finish. Black color. Overspray dries to non-adhering dust in a ten foot fall.

2.3 EXTERIOR SYSTEMS

A. SYSTEM TYPES:

1. Exterior Metals: **Gloss Enamel.**
2. Field welds: **Zinc-Rich Coating.**

B. SYSTEM DESCRIPTION:

1. Gloss Enamel on Galvanized Metals: SW Pro-Cryl Universal Metal Primer B66W310 (one coat) + SW Sher-Cryl HPA B66-300 enamel – two coats.
2. Block Filler on CMU: SW Heavy Duty Block Filler B24W46, one coat.
3. Gloss Enamel on Shop-Primed Metals: SW Sher-Cryl HPA B66-300 gloss enamel-two coats.
4. Gloss Enamel on Aluminum: SW Pro-Cryl Universal Metal Primer B66W310 – (one coat) + SW Sher-Cryl HPA B66-300 gloss enamel – two coats.
5. Field Welds: "ZRC" cold-applied galvanizing.

PART 3 - EXECUTION

3.1 PREPARATION

A. METALS: Remove grease, oil, and dirt. Touch-up any damaged primer with like material. Remove any welding tags and grind smooth before painting. Fill any open galvanizing ports.

B. PLASTER, CMU, CONCRETE: Remove dusting and mortar residue. Remove any efflorescence and seal. Ensure that plaster, concrete and mortar joints are dry and fully cured.

3.2 APPLICATION

A. GENERAL: All paint and finishes be brushed or sprayed in even, uniform coats without runs or sags. Allow each coat to dry completely before applying succeeding coats. All surfaces shall be dry and no painting shall be done in damp conditions or when the ambient temperature is below 50 degrees F.

B. WOOD DOORS: Factory sealed tops, bottoms, and edges of plastic laminate surfaced doors left undisturbed require no additional finishing. Reseal any job cuts. Paint metal glazing stops.

C. MECHANICAL/ELECTRICAL EQUIPMENT: Painting contractor shall examine the mechanical and electrical drawings to determine quantities and locations of exposed piping, louvers not shown in Architectural drawings, electrical and telephone panels in finished areas, exposed electrical conduit in finished areas.

D. BLOCK FILLER AT CMU: Apply **first coat** of filler to ensure penetration into voids and work into block texture with bristle brush. Follow with a **minimum of one additional coat.** Provide uniform finish with no pinholes.

E. DRYWALL: Paint finish, sheen and texture shall be uniform and match the samples submitted to and approved by the Architect.

3.3 PREPARATION OF EXISTING PAINTED SURFACES

A. Maintenance painting will frequently not permit or require complete removal of all old coatings prior to repainting. However, all surface contamination such as oil, grease. Loose paint, mill scale dirt, foreign matter, rust, mold, mildew, mortar, efflorescence, and sealers must be removed to assure sound bonding to the tightly adhering old paint. Glossy surfaces of old paint films must be clean and dull before repainting. Thoroughly washing with an abrasive cleanser will clean and dull in one operation, or, wash thoroughly and dull by sanding. Spot prime any bare areas with an appropriate primer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system. Check for compatibility by applying a test patch of the recommended coating system, covering at least 2 to 3 square feet. Allow to dry one week before testing adhesion per ASTM D3359. If the coating system is incompatible, complete removal is required.

PART 4 – SCHEDULES

4.1 COLOR SELECTIONS

A. SCHEDULE: Unless colors are pre-selected in the Bidding Documents, the Architect shall prepare color schedule for the project using colors selected from the approved paint manufacturer(s). Where colors are pre-selected, the painting contractor shall use the colors selected or submit a schedule of proposed exact color matches by one of the specified paint manufacturers. **Provide 12” x 12” samples of actual paint for each color** whether pre-selected color or proposed color match.

B. DOCUMENTATION: Upon completion of the Project, painting contractor shall furnish to the Architect a complete schedule of paint brands, types, and colors actually used for each room and area.

4.2 EXTRA MATERIALS

B. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents. Furnish quantity not less than 5 percent for each color (field and accent) of paint used.

END OF SECTION

SECTION 08411 – ALUMINUM STOREFRONTS

PART 1 - GENERAL

1.0 COORDINATION

A. The General Conditions of the Contract for Construction and the Supplementary Conditions to the General Conditions of the Contract for Construction shall be considered as part of this section of the specifications.

B. Each Bidder shall be responsible for determining during the bidding period the extent that any addenda issued during the bidding period may affect this section of the specifications.

C. Reference Instructions to Bidders for requirements regarding substitutions of materials and products.

D. Where conflicts occur between the drawings and specifications, between different drawings, between different portions of this section of the specifications, or between different sections of the specifications, the more stringent requirements and the greater quantity shall apply.

1.1 SUMMARY

A. Related Documents: Conditions of the Contract, Division 1 - General Requirements, and Drawings apply to Work of this Section.

B. Section Includes:
1. Entrance and storefront systems, complete with reinforcing, fasteners, anchors and attachment devices.
2. Aluminum doors complete with hardware.
3. Accessories necessary to complete work.

C. Related Sections:
1. Section 01400 - Quality Requirements.
2. Section 05500 - Metal Fabrications.
3. Section 06100 - Rough Carpentry.
4. Section 07920 - Joint Sealants.
5. Section 08710 - Door Hardware.
6. Section 08810 - Glass and Glazing.

1.2 REFERENCES

A. Aluminum Association (AA):
1. DAF-45 Designation System for Aluminum Finishes.

B. American Architectural Manufacturers Association (AAMA):
1. 503.1 Test Method for Condensation Resistance of Windows, Doors and Glazed Wall Systems.
2. 701.2 Specifications for Pile Weatherstripping.
3. Manual #10 Care and Handling of Architectural Aluminum From Shop to Site.
4. SFM-1 Aluminum Storefront and Entrance Manual.

C. American National Standards Institute (ANSI):
1. A117.1 Safety Standards for the Handicapped.

D. American Society for Testing and Materials (ASTM):

1.	A36	Structural Steel.
2.	B209	Aluminum and Aluminum - Alloy Sheet and Plate.
3.	B221	Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes and Tubes.
4.	B308	Aluminum-Alloy 6061-T6 Standard Structural Shapes, Rolled or Extruded.
5.	C509	Cellular Elastomeric Pre-formed Gasket and Sealing Material.
6.	C864	Dense Elastomeric Compression Seal Gaskets, Setting Blocks and Spacers.
7.	E283	Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors.
8.	E330	Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.
9.	E331	Test Method for Water Penetration of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.

E. Federal Specifications (FS):

1.	TT-P-645A	Primer, Paint, Zinc Chromate, Alkyd Type.

F. Steel Structures Painting Council (SSPC):

1.	Paint 12	Cold-Applied Asphalt Mastic (Extra Thick Film).

1.3 SYSTEM REQUIREMENTS

A. Design Requirements:

1. Drawings are diagrammatic and do not purport to identify nor solve problems of thermal or structural movement, glazing, anchorage or moisture disposal.
2. Requirements shown by details are intended to establish basic dimension of units, sight lines and profiles of members.
3. Provide concealed fastening.
4. Provide entrance and storefront systems, including necessary modifications, to meet specified requirements and maintaining visual design concepts.
5. Attachment considerations are to take into account site peculiarities and expansion and contraction movements so there is no possibility of loosening, weakening or fracturing connection between units and building structure or between units themselves.
6. Anchors, fasteners and braces shall be structurally stressed not more than 50% of allowable stress when maximum loads are applied.
7. Provide for expansion and contraction without detriment to appearance or performance.
8. Assemblies shall be free from rattles, wind whistles and noise due to thermal and structural movement and wind pressure.

B. Performance Requirements:

1. Air infiltration: Air leakage through fixed light areas of storefront shall not exceed 0.06 cfm per square foot (0.0003 m3/sm2) of surface area when tested in accordance with ASTM E283 at differential static pressure of 6.24 psf (300 Pa).

2. Water infiltration: No uncontrolled water penetration when tested in accordance with ASTM E 331 at test pressure of 8.0 psf 380 Pa.

C. Thermal Requirements:
1. Framing systems shall accommodate expansion and contraction movement due to surface temperature differentials of 180 degrees Fahrenheit (82 degrees Celsius) without causing buckling, stress on glass, failure of joint seals, excessive stress on structural elements, reduction of performance, or other detrimental effects.
2. Ensure doors function normally within limits of specified temperature range.

D. Structural Requirements, as measured in accordance with ANSI/ASTM E330:
1. Wind loads for exterior assemblies:
a. Basic loading:
1) [_____] psf acting inward.
2) [_____] psf acting outward.

2. Deflection: Maximum calculated deflection of any framing member in direction normal to plane of wall when subjected to specified design pressures shall not exceed 1/175 of its clear span.

E. Testing Requirements: Provide components that have been previously tested by an independent testing laboratory.

1.4 SUBMITTALS

A. General: Submit in accordance with Section 01300.

B. Product Data:
1. Submit manufacturer's descriptive literature and product specifications.
2. Include information for factory finishes, hardware, accessories and other required components.
3. Include color charts for finish indicating manufacturer's standard colors available for selection.

C. Shop Drawings:

1. Submit shop drawings covering fabrication, installation and finish of specified systems.

2. Include following:
a. Fully dimensioned plans and elevations with detail coordination keys.
b. Locations of exposed fasteners and joints.

3. Provide detailed drawings of:
a. Composite members.
b. Joint connections for framing systems and for entrance doors.
c. Anchorage.
d. System reinforcements.
e. Expansion and contraction provisions.
f. Hardware, including locations, mounting heights, reinforcements and special installation provisions.
g. Glazing methods and accessories.
h. Internal sealant requirements as recommended by sealant manufacturer.

4. Schedule of finishes.

D. Samples:

1. Submit samples indicating quality of finish, in required colors, on alloys used for work, in sizes as standard with manufacturer.
2. Where normal texture or color variations are expected, include additional samples illustrating

range of variation.

E. Test Reports:

1. Standard Systems: Submit certified copies of previous test reports substantiating performance of system in lieu of re-testing. Include other supportive data as necessary.

F. Certificates:

1. Submit manufacturer's certification stating that systems are in compliance with specified requirements.

G. Qualification Data:

1. Submit installer qualifications verifying years of experience.
2. Include list of projects having similar scope of work identified by name, location, date, reference name and phone number.

H. Manufacturer's Instructions: Submit manufacturer's printed installation instructions.

1.5 QUALITY ASSURANCE

A. Single Source Responsibility:

1. To ensure quality of appearance and performance, obtain materials for each system from either a single manufacturer or from manufacturer approved by each system manufacturer.

B. Installer Qualifications: Certified in writing by Contractor as qualified for installation of specified systems.

C. Perform Work in accordance with AAMA SFM-1 and manufacturer's written instructions.

D. Conform to requirements of ANSI A117.1 and local amendments.

1.6 DELIVERY, STORAGE AND HANDLING

A. Comply with requirements of Section 01600.

B. Protect finished surfaces as necessary to prevent damage.

C. Do not use adhesive papers or sprayed coatings which become firmly bonded when exposed to sun.

D. Do not leave coating residue on any surfaces.

E. Replace damaged units.

1.7 WARRANTY

A. Provide warranties in accordance with Section 01700.

B. Provide written manufacturer's warranty, executed by company official, warranting against defects in materials and products for two (2) years from date of Substantial Completion.

C. Provide written installer's warranty, warranting work to be watertight, free from defective materials, defective workmanship, glass breakage due to defective design, and agreeing to replace components which fail within 1 year from date of Substantial Compleiton.

1. Warranty shall cover following:
   a. Complete watertight and airtight system installation within specified tolerances.

b. Completed installation will remain free from rattles, wind whistles and noise due to thermal and structural movement and wind pressure.

c. System is structurally sound and free from distortion.

d. Glass and glazing gaskets will not break or "pop" from frames due to design wind, expansion or contraction movement.

e. Glazing sealants and gaskets will remain free from abnormal deterioration or dislocation due to sunlight, weather or oxidation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS AND PRODUCTS

A. Subject to compliance with requirements indicated, provide products by one of the following:

1. United States Aluminum, 200 Singleton Drive, Waxahachie, Texas 75165; (972) 937-9651 (voice); (972) 937-0405 (data).

B. Substitutions: Submit under provisions of Section 01600, a minimum of 7 days prior to bid date.

C. Acceptable Entrance Doors:

1. Standard Duty Doors: Series 550 with Mid-panel panic device system.

D. Acceptable Storefront Framing Systems:

1. Framing System: Series 450.

2.2 FRAMING MATERIALS AND ACCESSORIES

A. Aluminum:

1. ASTM B221, alloy 6063-T5 for extrusions; ASTM B209, alloy 5005-H34 for sheets; or other alloys and temper recommended by manufacturer appropriate for specified finish.

B. [Internal Reinforcing:
1. ASTM A36 for carbon steel; or ASTM B308 for structural aluminum.
2. Shapes and sizes to suit installation.
3. Shop coat steel components after fabrication with alkyd type zinc chromate primer complying with FS TT-P-645.]

C. Anchorage Devices:
1. Manufacturer's standard formed or fabricated steel or aluminum assemblies of shapes, plates, bars or tubes.

D. Fasteners:

1. Aluminum, non-magnetic stainless steel or other materials warranted by manufacturer to be non-corrosive and compatible with components being fastened.
2. Do not use exposed fasteners, except where unavoidable for application of hardware.
3. For exposed locations, provide countersunk Phillips head screws with finish matching items fastened.
4. For concealed locations, provide manufacturer's standard fasteners.
5. Provide nuts or washers of design having means to prevent disengagement; deforming of fastener threads is unacceptable.

E. Expansion Anchor Devices: Lead-shield or toothed-steel, drilled-in, expansion bolt anchors.

F. Protective Coatings: Cold-applied asphalt mastic complying with SSPC-Paint 12, compounded for 30 mil (0.77 mm) thickness for each coat; or alkyd type zinc chromate primer complying with FS TT-P-645.

G. Glazing Gaskets:

1. Compression type design, replaceable, molded or extruded, of neoprene, or ethylene propylene diene monomer (EPDM).
2. Conform to ASTM C509 or C864.
3. Profile and hardness as required to maintain uniform pressure for watertight seal.
4. Provide in manufacturer's standard black color.

H. Weatherstripping:

1. Wool pile conforming to AAMA 701.2; or extruded EPDM elastomeric conforming to ASTM C509 or C864.
2. Provide EPDM or vinyl-blade gasket weatherstripping in bottom door rail, adjustable for contact with threshold.

I. Internal Sealants: Types recommended by sealant manufacturer.

J. "Anti-Walk" Edge Blocking: "W" shaped EPDM blocks for use in keeping glazing material stationary under vibration or seismic loading.

K. Baffles (at weep holes): Type as recommended by system manufacturer and shown in published installation instructions.

2.3 GLASS AND GLAZING ACCESSORIES

A. Refer to Section 08810.

2.4 FABRICATION

A. Coordination of Fabrication:

1. Check actual frame or door openings required in construction work by accurate field measurements before fabrication.
2. Fabricate units to withstand loads which will be applied when system is in place.

B. General:

1. Conceal fasteners wherever possible.
2. Reinforce work as necessary for performance requirements and for support to structure.
3. Separate dissimilar metals and aluminum in contact with concrete utilizing protective coating or pre-formed separators which will prevent contact and corrosion.
4. Comply with Section 08810 for glazing requirements.

C. Aluminum Framing:

1. Provide members of size, shape and profile indicated, designed to provide for glazing from interior.
2. Fabricate frame assemblies with joints straight and tight fitting.
3. Reinforce internally with structural members as necessary to support design loads.
4. Maintain accurate relation of planes and angles, with hairline fit of contacting members.
5. Seal horizontals and direct moisture accumulation to exterior.
6. Provide flashings and other materials used internally or externally that are corrosive resistant, non-staining, non-bleeding and compatible with adjoining materials.
7. Provide manufacturer's extrusions and accessories to accommodate expansion and contraction due to temperature changes without being

detrimental to appearance or performance.

8. Make provisions in framing for minimum edge clearance, nominal edge cover and nominal pocket width for thickness and type of glazing or infill used in accordance with recommendations of manufacturer and FGMA Glazing Manual.
9. Provide tight fitting, injection molded, plastic water deflectors at all intermediate horizontals.

D. Entrance Doors:

1. Fabricate with mechanical joints using internal reinforcing plates and shear blocks attached with fasteners and by welding.
2. Provide extruded aluminum glazing stops of [square] [beveled and mitered (for single glazing only)] design, [permanently anchored on security side and removable on opposite side.]

E. Hardware:

1. Receive hardware supplied in accordance with Section 08710 and install in accordance with requirements of this Section.
2. Cut, reinforce, drill and tap frames and doors as required to receive hardware.
3. Comply with hardware manufacturer's templates and instructions.
4. Use concealed fasteners wherever possible.

F. Welding:

1. Comply with recommendations of the American Welding Society.
2. Use recommended electrodes and methods to avoid distortion and discoloration.
3. Grind exposed welds smooth and flush with adjacent surfaces; restore mechanical finish.

G. Flashings: Form from sheet aluminum with same finish as extruded sections. Apply finish after fabrication. Material thickness as required to suit condition without deflection or "oil-canning".

2.5 FINISH

A. Manufacturer's standard colors as selected by Architect.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine conditions and proceed with Work in accordance with Section 01400.

B. Verify dimensions, tolerances and method of attachment with other Work.

3.2 INSTALLATION

A. Erection Tolerances:

1. Limit variations from plumb and level:
   a. 1/8 inch (3 mm) in 10 feet (3 M) vertically.
   b. 1/8 inch (3 mm) in 20 feet (6 M) horizontally.
2. Limit variations from theoretical locations: 1/4 inch (6 mm) for any member at any location.
3. Limit offsets in theoretical end-to-end and edge-to-edge alignment: 1/16 inch (2 mm) from flush surfaces not more than 2 inches (51 mm) apart or out-of-flush by more than 1/4 inch (6 mm).

B. Install doors and hardware in accordance with manufacturer's printed instructions.

C. Set units plumb, level and true to line, without warp or rack of frame.

D. Anchor securely in place, allowing for required movement, including expansion and contraction.

E. Separate dissimilar materials at contact points, including metal in contact with masonry or concrete surfaces, with bituminous paint or pre-formed separators to prevent contact and corrosion.

F. Seal perimeter members as shown on manufacturer’s installation instructions or as required for unique job conditions. Set other members with internal sealants and baffles as called for in manufacturer’s installation instructions. Use sealants as recommended by sealant manufacturer.

G. Coordinate installation of perimeter sealant and backing materials between assemblies and adjacent construction in accordance with requirements of Section 07920.

H. Glazing: Refer to requirements of Section 08810. Utilize "anti-walk" edge blocking on all vertical edges of glazing.

3.3 ADJUSTING

A. Test door operating functions. Adjust closing and latching speeds and other hardware in accordance with manufacturer's instructions to ensure smooth operation.

3.4 CLEANING

A. Clean surfaces in compliance with manufacturer's recommendations; remove excess mastic, mastic smears, foreign materials and other unsightly marks.

B. Clean metal surfaces exercising care to avoid damage.

END OF SECTION

SECTION 08730 — THRESHOLDS, WEATHERSTRIPPING AND SEALS

PART 1 - GENERAL

1.1 COORDINATION

A. The General Conditions of the Contract for Construction and the Supplementary Conditions to the General Conditions of the Contract for Construction shall be considered as part of this section of the specifications.

B. Each Bidder shall be responsible for determining during the bidding period the extent that any addenda issued during the bidding period may affect this section of the specifications.

C. Reference Instructions to Bidders for requirements regarding substitutions of materials and products.

D. Where conflicts occur between the drawings and specifications, between different drawings, between different portions of this section of the specifications, or between different sections of the specifications, the more stringent requirements and the greater quantity shall apply.

1.2 WORK INCLUDED

A. Provide and install thresholds. Weatherstripping, door sweeps, and sound seals as scheduled or indicated on the drawings and as specified herein.

B. All exterior doors shall receive thresholds, weatherstripping and door sweeps whether or not indicated on the drawings.

1.3 RELATED WORK SPECIFIED IN OTHER SECTIONS

A. Doors and frames.

1.4 SUBMITTALS

A. Submit manufacturer’s product literature indicating model numbers, configurations and materials.

B. Upon request submit sample sections of thresholds or seals.

C. Reference Section 01340 SUBMITTALS for additional submittal requirements.

1.5 WARRANTY

A. Provide written warranty against defects in materials and workmanship for the work under this section for a period of one year after the date of Substantial Completion of the project.

1.6 QUALITY ASSURANCE

A. Installer shall have a minimum of 3 years experience in the installation of thresholds, weatherstripping and seals for projects of similar size and scope as this project.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. National Guard.
B. A. J. May Co.
C. Zero International, Inc.
D. Balco, Inc.
E. Metalines

2.2 MATERIALS

A. GENERAL: Items specified below are from the catalog of the particular manufacturer named for each item. Equivalent products by other specified manufacturers shall match dimensions and profiles of the scheduled items.

B. METAL THRESHOLDS: Shall be extruded mill finished aluminum thresholds complete with ¼" stainless steel machine screws set in expansion anchors. Provide sizes and configurations as indicated in the drawings and as manufactured by A.J. May. Profiles and dimensions shall comply with state and federal regulations for the elimination of Architectural Barriers.

C. WEATHERSTRIPPING: At all exterior hollow metal doors, provide cushion weatherstripping as manufactured by A.J. May or equivalent by specified manufacturer.

D. DRIP CAP: At all exterior hollow metal doors not protected with overhang, provide aluminum duranodic drip cap as manufactured by A.J. May or equivalent by specified manufacturer. Mount on frame over door head. Mount in bed of silicone.

E. DOOR SWEEP: At all exterior hollow metal doors and aluminum doors, provide No.198NDkB duranodic aluminum/neoprene door bottom weather seal as manufactured by National Guard or equivalent by specified manufacturer.

PART 3 - EXECUTION

3.1 INSTALLATION

A. THRESHOLDS: Install metal thresholds in solid bed of clear silicone rubber sealant using specified anchors with stainless steel screws. Field cut ends of thresholds to fit neatly around door frame configurations.

B. OTHER: Install weatherstripping, drip caps, door sweeps and seals with stainless steel screws in accordance with manufacturer's printed instructions. Set items in a bed of clear silicone rubber sealant.

3.2 ADJUSTING

A. Adjust all items for continuous snug contact to prevent water entry.

END OF SECTION

HINOJOSA ENGINEERING, INC. Structural Engineering • Civil Engineering • Land Surveying
REGISTRATION NUMBER F-908 EXPIRATION DATE 09/30/2016

ADDENDUM No. 1
Civil Items

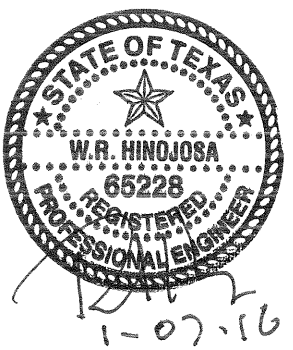
PROJECT: EDINBURG FIRE STATION #5

January 7, 2016

Civil Items:

1. **C2** – Replace sheet C2 dated 9-16-15 with attached sheet C2 dated 1-07-16.
2. **C2A** – Add Sheet C2A "Proposed Site Plan Layout – Alternates" to the Contract documents. See attached.
3. **C3** – Replace sheet C3 dated 9-16-15 with attached sheet C3 dated 1-07-16.
4. **C3A** – Add Sheet C2A "Proposed Striping Plan Layout – Alternates" to the Contract documents. See attached.
5. **C4** – Replace sheet C4 dated 9-16-15 with attached sheet C4 dated 1-07-16.
6. **C4A** – Add Sheet C4A "Proposed Grading and Drainage Plan Layout – Alternate #3" to the Contract documents. See attached.
7. **C5** – Replace sheet C5 dated 9-16-15 with attached sheet C5 dated 1-07-16.
8. **C5A** – Add Sheet C5A "Proposed Utility Layout – Alternates" to the Contract documents. See attached.
9. **C7** – Replace sheet C7 dated 9-16-15 with attached sheet C7 dated 1-07-16. Paving details revised, curb and gutter detail revised, and monolithic curb detail added.
10. Monolithic curb may be constructed in concrete pavement drives. Standard curb and gutter to be constructed in asphalt pavement areas. Refer to details sheet C7.

END of Addendum No. 1 Civil Items



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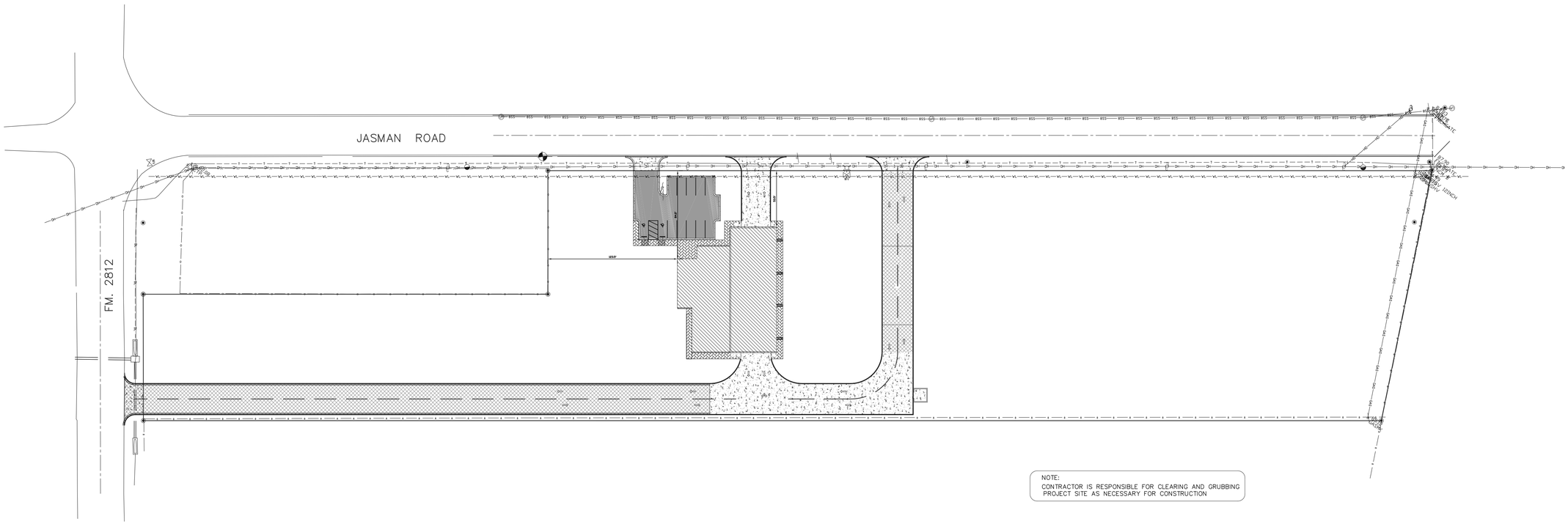

NOTE:
CONTRACTOR IS RESPONSIBLE FOR CLEARING AND GRUBBING PROJECT SITE AS NECESSARY FOR CONSTRUCTION

LEGEND

- PROPOSED CONC. PVMT.
- PROPOSED HMAC PVMT.
- PROPOSED HEAVY DUTY HMAC PVMT.
- PROPOSED CONC. SIDE WALK
- PROPOSED ELEVATION CONTOUR

PROPOSED SITE PLAN LAYOUT

SCALE: 1"=50'

STATE OF TEXAS
W.R.HINOJOSA
65228
REGISTERED PROFESSIONAL ENGINEER
1-07-16

HINOJOSA ENGINEERING, INC.
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E-MAIL: HinojosaEnglnc@aol.com
REGISTRATION NUMBER F-908 EXPIRATION DATE 9/30/2016

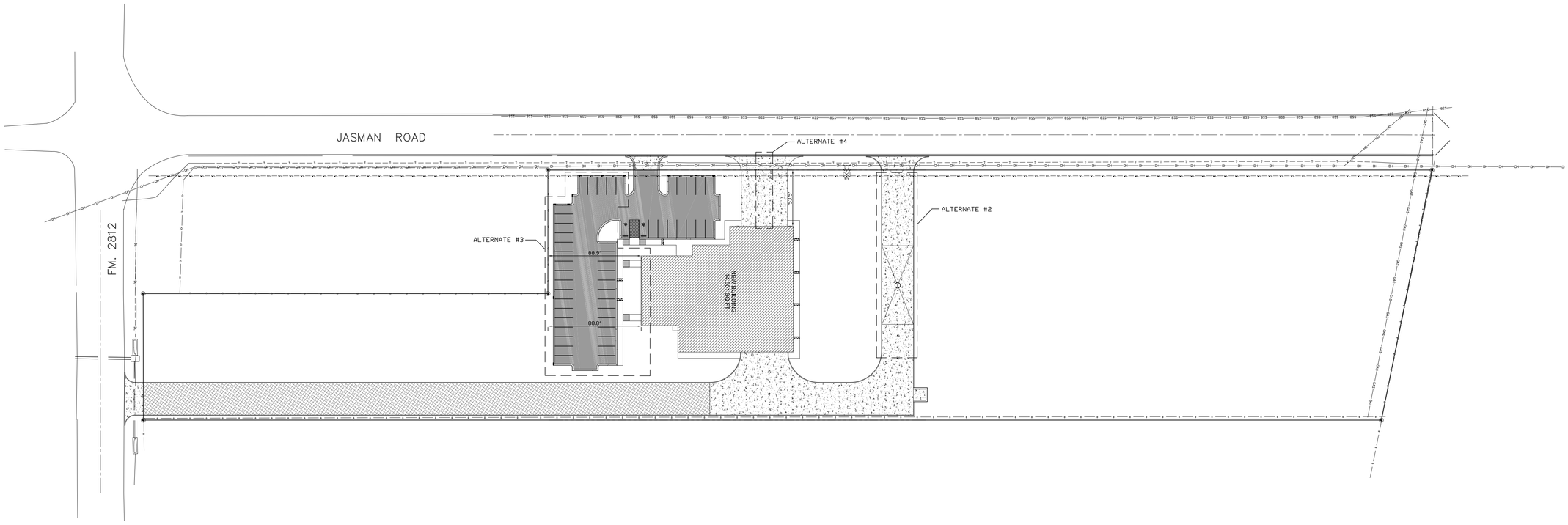
Milnet Architectural Services
AMERICAN INSTITUTE OF ARCHITECTS

EDINBURG FIRE STATION # 5
CITY OF EDINBURG
JASMAN RD & FM 2812

PROJECT NUMBER
15-119

DATE
09-16-2015
ADDENDUM #1 1-07-16

SHEET
C2
OF



NOTE:
CONTRACTOR IS RESPONSIBLE FOR CLEARING AND GRUBBING PROJECT SITE AS NECESSARY FOR CONSTRUCTION

LEGEND

- PROPOSED CONC. PVMT.
- PROPOSED HMAC PVMT.
- PROPOSED HEAVY DUTY HMAC PVMT.
- PROPOSED CONC. SIDE WALK

PROPOSED SITE PLAN
LAYOUT – ALTERNATES

SCALE: 1"=50'

STATE OF TEXAS
W.R. HINOJOSA
65228
PROFESSIONAL ENGINEER
1-07-16

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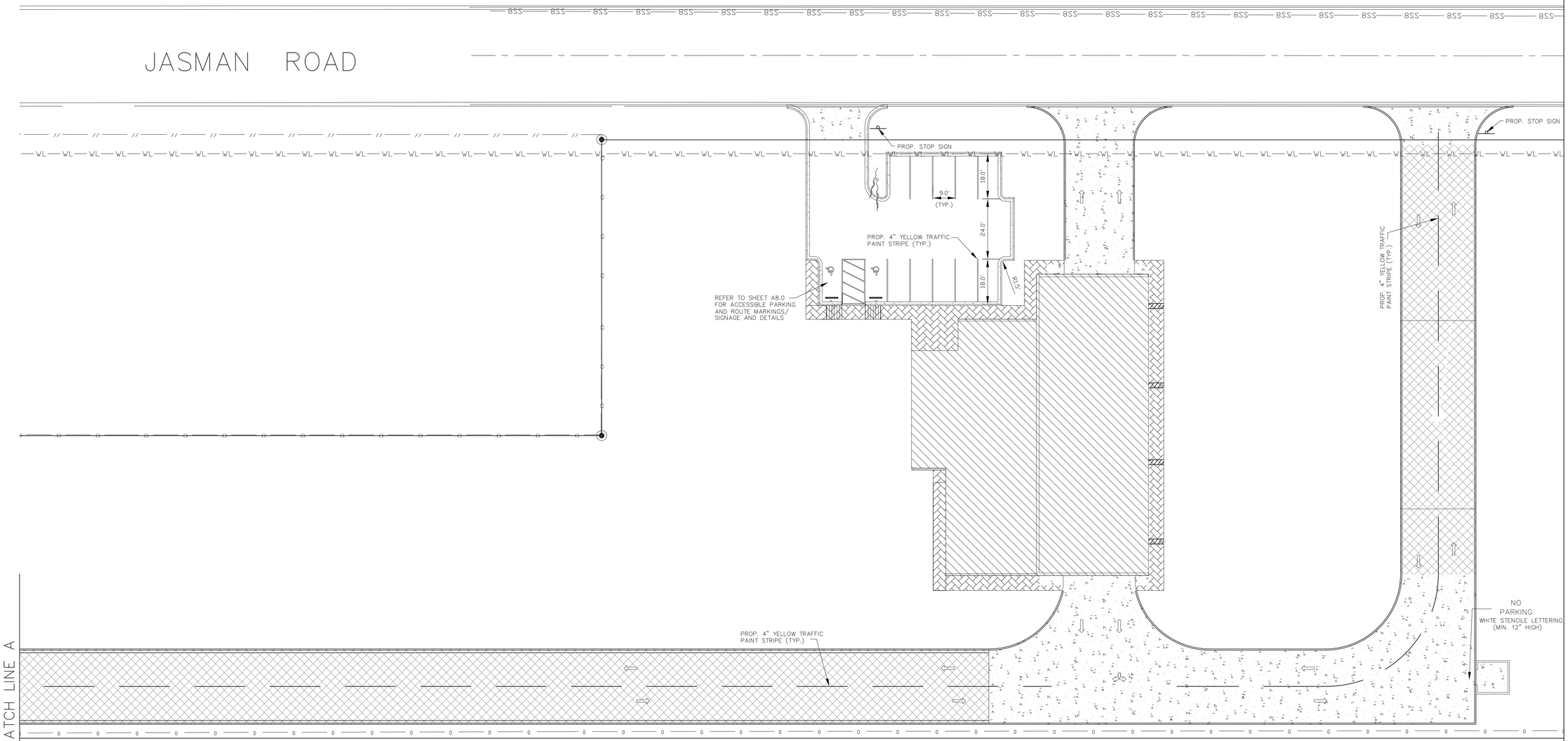

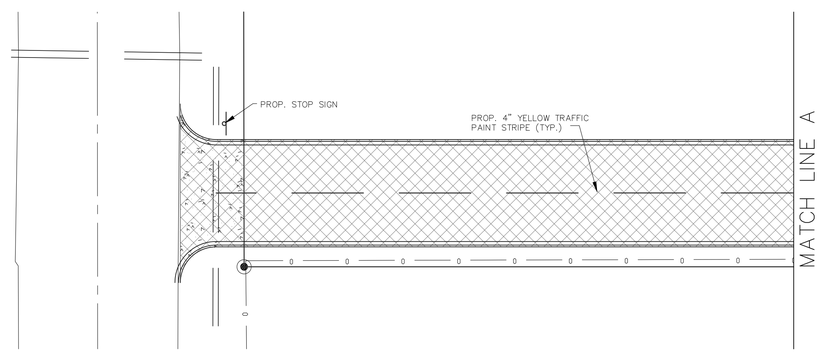

PROPOSED STRIPING PLAN LAYOUT

SCALE: 1"=20'

STATE OF TEXAS
N.R.HINOJOSA
65228
LICENSED
PROFESSIONAL ENGINEER
1-07-16

HINOJOSA ENGINEERING, INC.
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EDINBURG FIRE STATION # 5
CITY OF EDINBURG
JASMAN RD & FM 2812

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ADDENDUM #1 1-07-16

SHEET
C3
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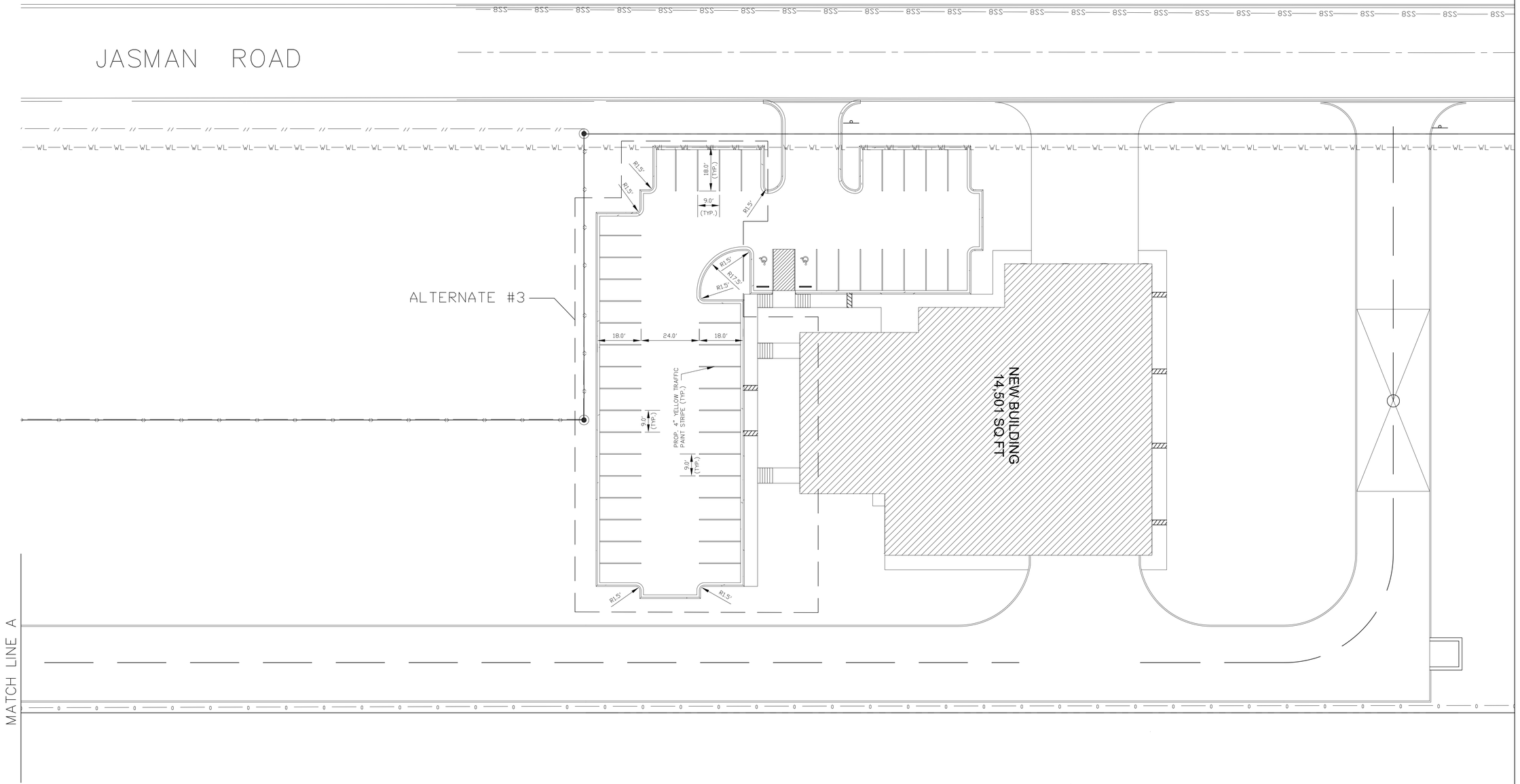

PROPOSED STRIPING PLAN LAYOUT – ALTERNATES

SCALE: 1"=20'

STATE OF TEXAS
W.R.HINOJOSA
65228
REGISTERED PROFESSIONAL ENGINEER
1-07-16

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Milnet Architectural Services
AMERICAN INSTITUTE OF ARCHITECTS

EDINBURG FIRE STATION # 5
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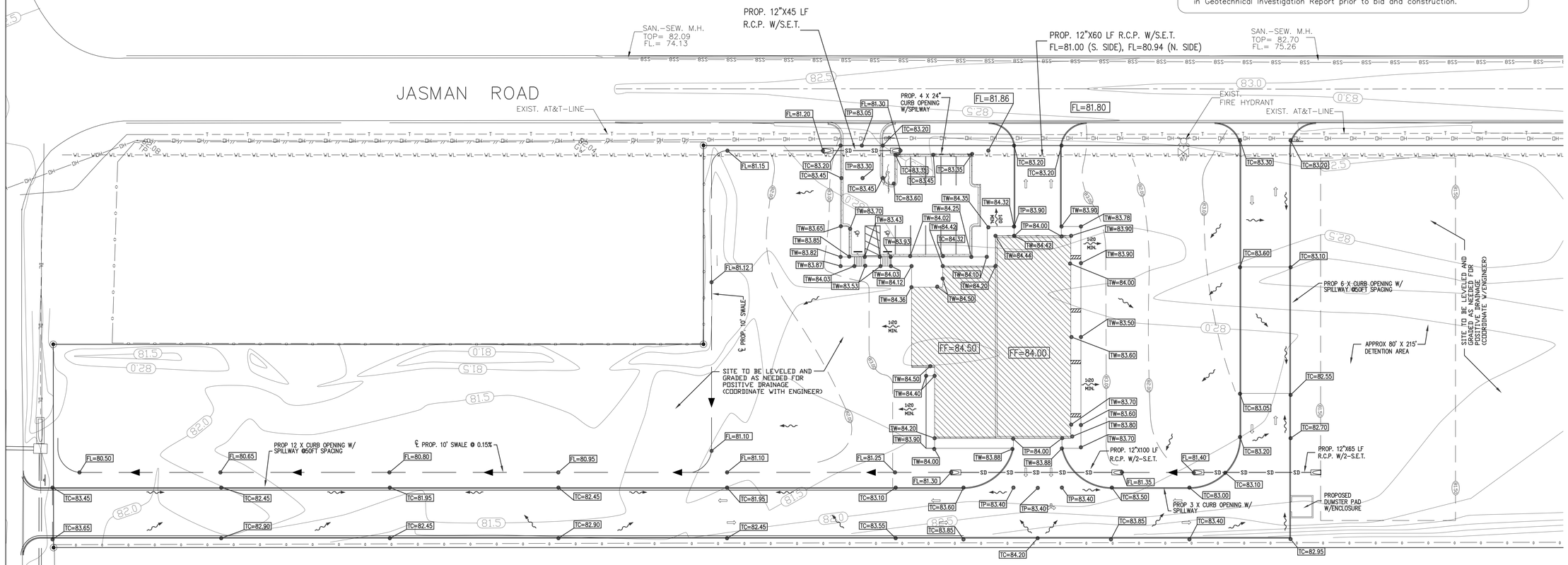
09-16-2015
ADDENDUM #1 1-07-16

SHEET
C3A
OF

NOTE:
Contractor shall grade areas within 10' of the building at a minimum slope of 1:20 away from the building. Coordinate with Engineer if any areas are found which will not meet minimum slope.

NOTE:
Refer to Geotechnical Investigation Report for ground water and soil conditions and for recommendations. Contractor is to be familiar with information contained in Geotechnical Investigation Report prior to bid and construction.



GENERAL NOTES:

1.) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH LOCAL, STATE AND FEDERAL LAWS AND OTHER SAFETY REGULATIONS THAT MAY GOVERN THE WORK OF THIS PROJECT.

2.) CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CONSTRUCTION PERMITS AS NEEDED FROM CITY AND/ OR OTHER LOCAL AUTHORITIES. CONTRACTOR SHALL PAY ALL PERMIT FEES ASSOCIATED WITH OBTAINING PERMITS.

3.) CONTRACTOR SHALL BE RESPONSIBLE FOR THE WELL BEING OF ALL MATERIALS USED IN THIS PROJECT UNTIL THE TIME OF ACCEPTANCE AND FINAL PAYMENT.

4.) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL WORK IN ACCORDANCE WITH THE CONTRACT DRAWINGS. NO ADDITIONS, DELETIONS OR MODIFICATIONS TO THE WORK SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.

5.) CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE GROUND. ANY DISCREPANCY BETWEEN CONTRACTOR'S MEASUREMENTS AND CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND CONTRACTOR SHALL CEASE WORK UNTIL THE DISCREPANCY IS RESOLVED.

6.) CONTRACTOR SHALL HAND DIG WITHIN 5 FEET EITHER SIDE OF CROSSINGS UNTIL THE UTILITY IS PHYSICALLY EXPOSED PRIOR TO PERFORMING MECHANICAL TRENCHING OR EXCAVATION.

7.) EXISTING BURIED UTILITIES SHOWN IN THE CONTRACT DOCUMENTS WERE ESTABLISHED BY SEARCH OF RECORDS AND BY LOCATING GROUND INFORMATION. THESE UTILITIES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND THE LOCATIONS OF SUCH MAY NOT BE EXACT, AND OTHER UTILITIES NOT SHOWN MAY EXIST. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE PROPER UTILITY AUTHORITIES OF ALL EXCAVATION WORK AND PHYSICALLY LOCATE AND PROTECT ALL UTILITIES DURING THE ENTIRE CONSTRUCTION PROCESS.

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9.) CONTRACTOR SHALL RESTORE TO ITS ORIGINAL CONDITION OR BETTER, ALL SURFACE MEDIA SPECIFIED ON THE DRAWINGS FOR REPAIR OR ANY DAMAGED AREAS NOT SPECIFIED WHICH ARE DAMAGED BY THE CONTRACTOR'S OWN NEGLECT.

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LEGEND

	SIDEWALK TRENCH
TC=00.00	TOP OF CURB ELEVATION
TW=00.00	TOP OF WALK ELEVATION
TP=00.00	TOP OF PAVEMENT ELEVATION
FL=00.00	FLOWLINE ELEVATION
FF=00.00	FINISHED FLOOR ELEVATION
83.00	PROPOSED CONTOUR ELEVATION

PROPOSED GRADING AND DRAINAGE PLAN LAYOUT

SCALE: 1"=30'

STATE OF TEXAS
W.R.HINOJOSA
65228
REGISTERED PROFESSIONAL ENGINEER
1-07-16

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CIVIL ENGINEERING•LAND SURVEYING
108 W. 18TH ST. MISSION, TEXAS
(956) 581-0143 FAX: (956) 581-2074
E-MAIL: HinojosaEnginc@aol.com
REGISTRATION NUMBER F-908 EXPIRATION DATE 9/30/2016

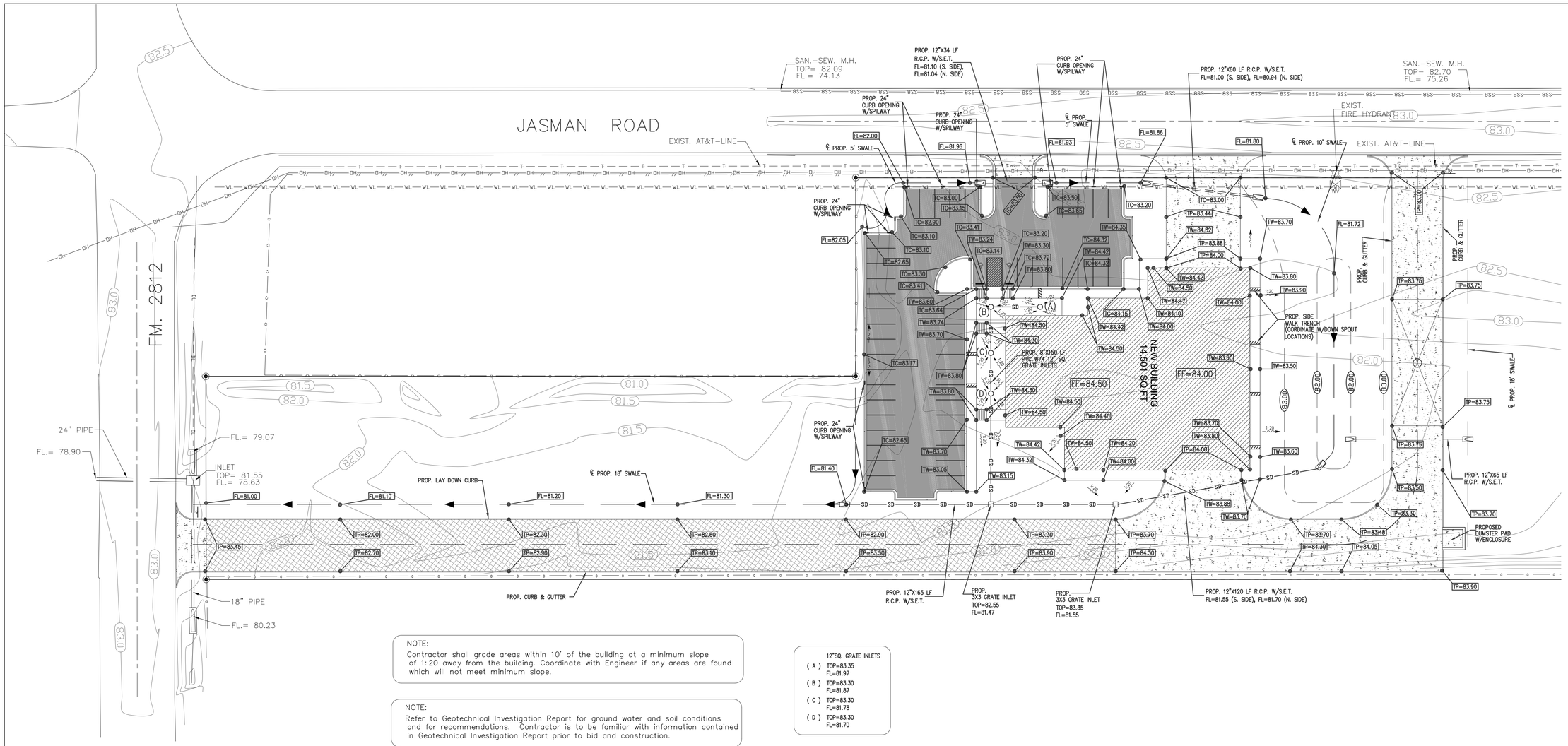
Milnet Architectural Services
AMERICAN INSTITUTE OF ARCHITECTS

EDINBURG FIRE STATION #5
CITY OF EDINBURG
JASMAN RD & FM 2812

PROJECT NUMBER
15-119

DATE
09-16-2015
ADDENDUM #1 1-07-16

SHEET
C4
OF



NOTE:
Contractor shall grade areas within 10' of the building at a minimum slope of 1:20 away from the building. Coordinate with Engineer if any areas are found which will not meet minimum slope.

NOTE:
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12"SQ. GRATE INLETS
(A) TOP=83.35 FL=81.97
(B) TOP=83.30 FL=81.87
(C) TOP=83.30 FL=81.78
(D) TOP=83.30 FL=81.70

NOTES:

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PROPOSED GRADING AND DRAINAGE PLAN LAYOUT - ALTERNATE #3

SCALE: 1"=30'

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SHEET
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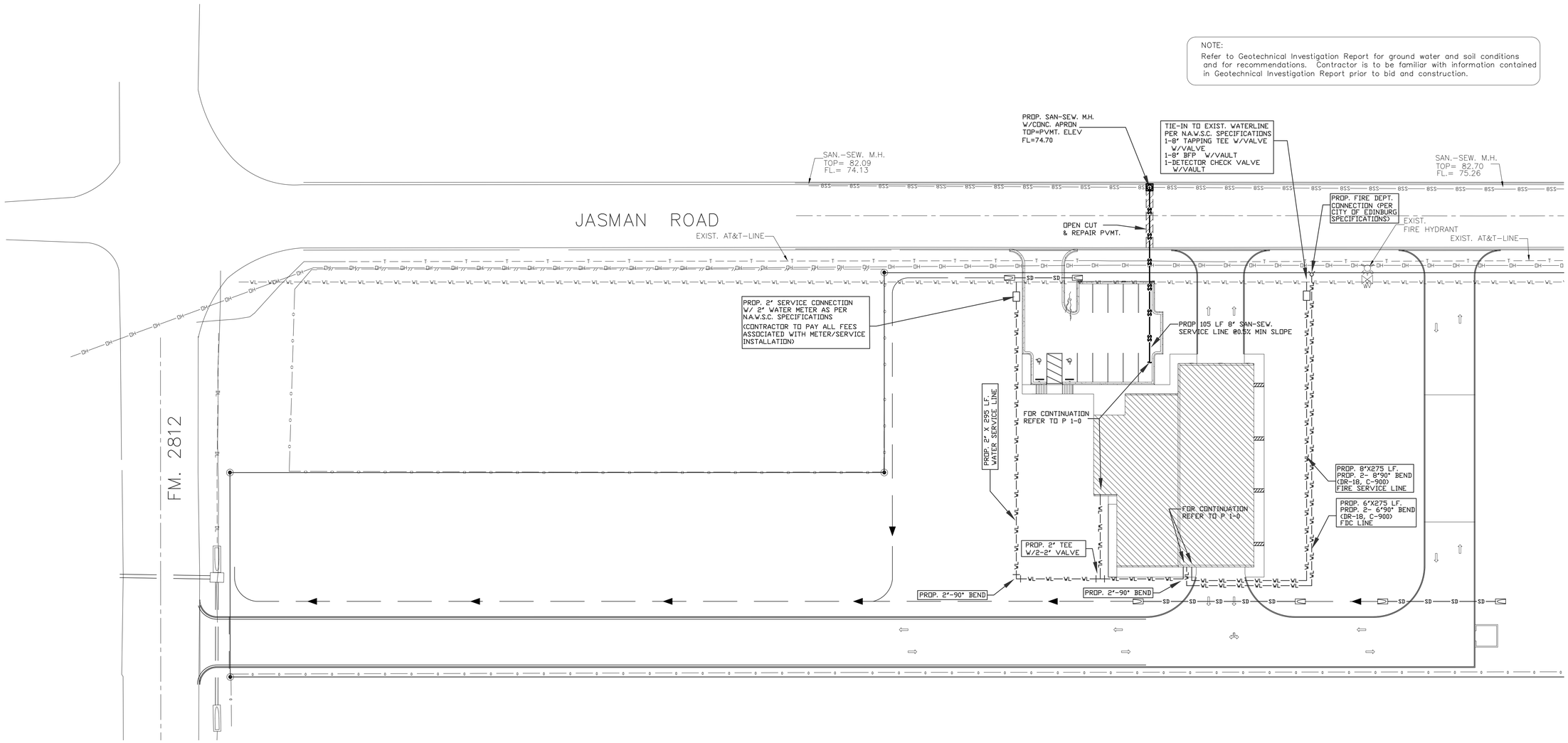

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PROPOSED UTILITY PLAN LAYOUT

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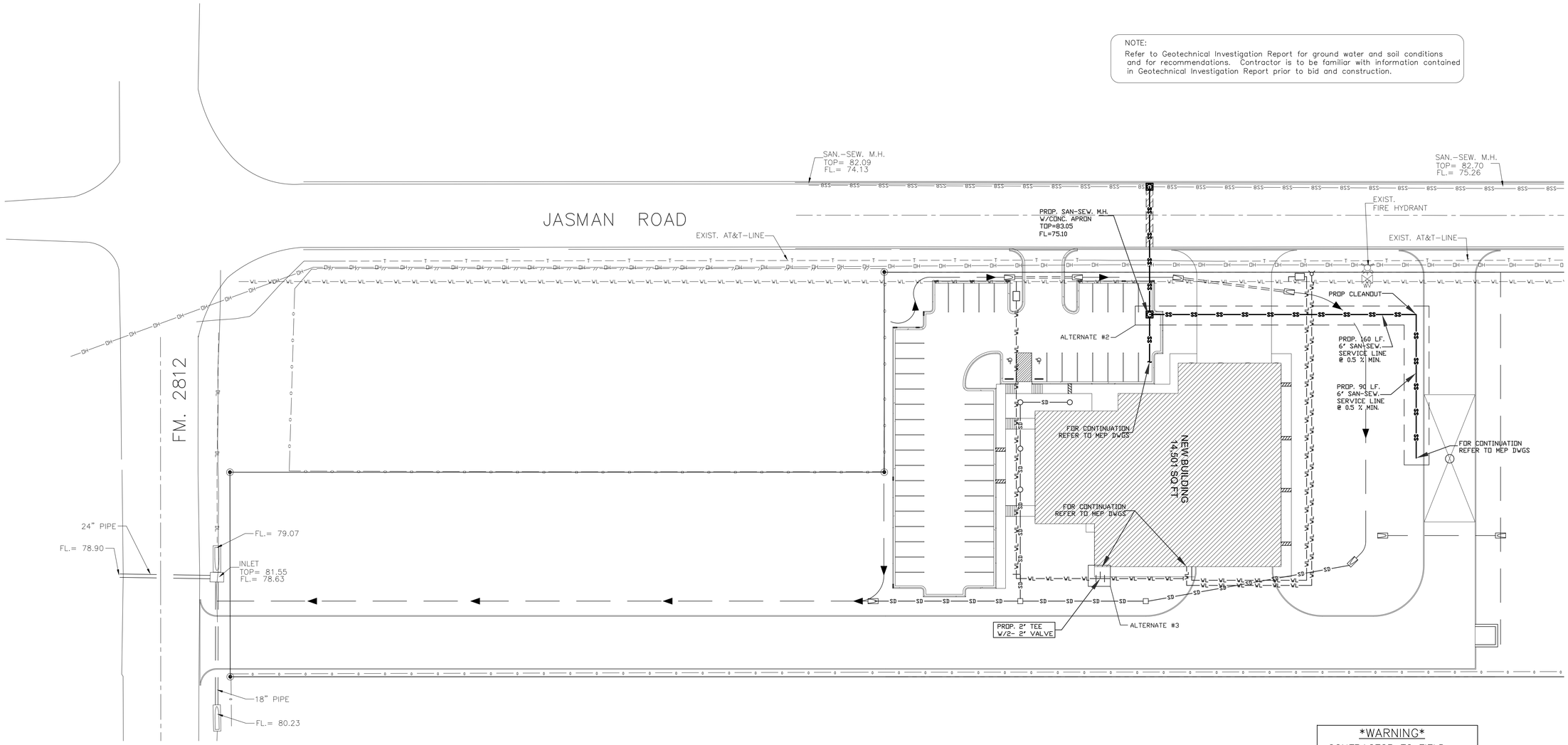

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PROPOSED UTILITY LAYOUT - ALTERNATES

SCALE: 1"=30'

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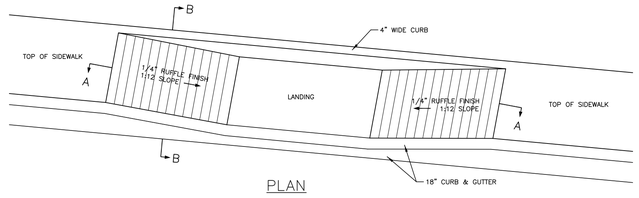
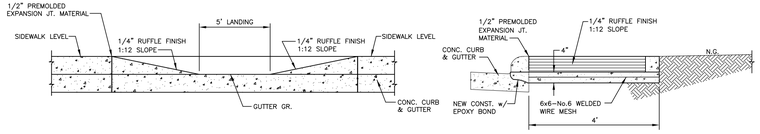


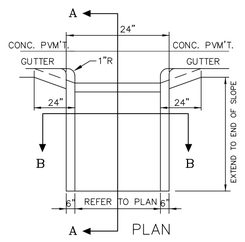
PLAN



SECTION "A–A"

SECTION "B–B"

SIDEWALK RAMP DETAILS



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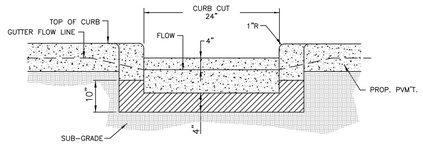
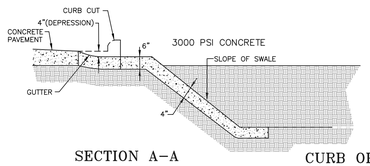


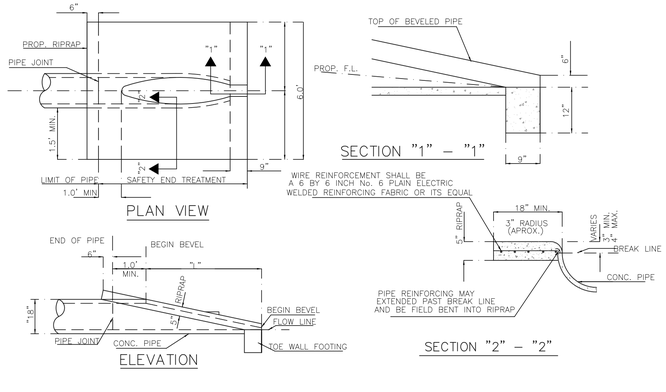
SECTION B–B



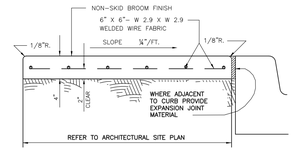
SECTION A–A

CURB OPENNING w/CONC. SPILLWAY

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

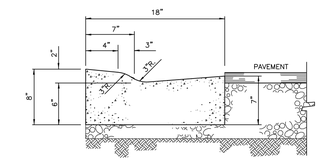


SAFETY END TREATMENT

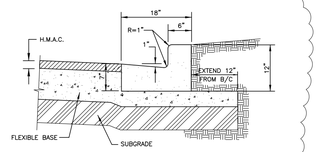


NOTE:
EXPANSION JOINTS @ 20' O.C. TYP. W/ ASPHALTIC MATERIAL (1/2") 1/4" "DUMMY JOINTS" (CONTROL JOINTS) @5' O.C.

SIDEWALK DETAIL

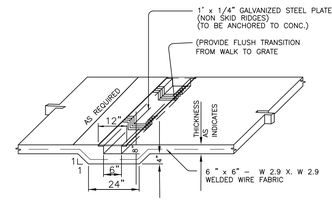


CONC LAY DOWN CURB & GUTTER DETAIL

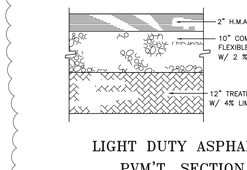


NOTE:
PROVIDE SAWED CONTRACTION JOINTS @10'O.C. MAX. PROVIDE 1/2" EXPANSION JOINTS @30'O.C. MAX. AND POINT OF CURVATURE, CURB INLETS, BOX CULVERTS, ADJACENT TO DRIVEWAYS AND SIDEWALKS

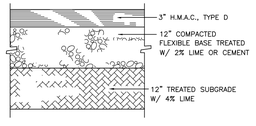
TYPICAL CONCRETE CURB & GUTTER



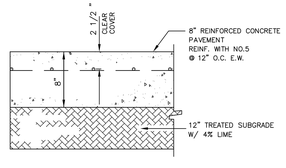
SIDEWALK TRENCH DRAIN



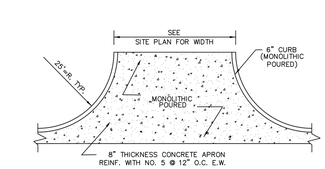
LIGHT DUTY ASPHALT PVM'T. SECTION



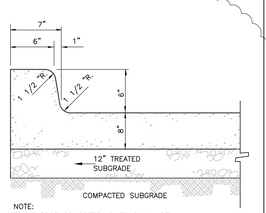
HEAVY DUTY ASPHALT PVM'T. SECTION



HEAVY DUTY CONC. PVM'T. SECTION
CONC. STRENGTH: 5000 PSI @ 28 DAY

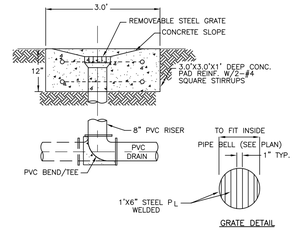


TYPICAL CONCRETE APRON

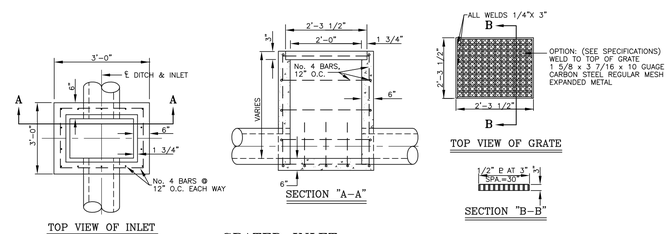


NOTE:
TRANSVERSE CONCRETE JOINTS SHALL BE CONSTRUCTED THROUGH TO BACK OF ALL CURBS

MONOLITHIC CURB



BEE HIVE INLETS



GRATED INLET

PROPOSED PAVING AND DRAINAGE DETAILS

STATE OF TEXAS
W.R.HINOJOSA
65228
PROFESSIONAL ENGINEER
1-07-16

HINOJOSA ENGINEERING, INC.
STRUCTURAL ENGINEERING
CIVIL ENGINEERING•LAND SURVEYING
108 W. 18TH ST. MISSION, TEXAS
(956) 581–0143 FAX: (956) 581–2074
E–MAIL: HinojosaEnginc@aol.com
REGISTRATION NUMBER F–908 EXPIRATION DATE 9/30/2016

General Notes:

1. Strip the top 6" of topsoil and vegetation from proposed paving and sidewalks. Stripped topsoil may be stockpiled and used for fill in landscape and lawn areas provided it is free of rocks and trash.
2. Fill below proposed pavement areas may be select fill with plasticity index ranging from 5–17%.
3. Refer to the structural plans for fill below proposed building foundation.
4. All sidewalks shall have a minimum slope of 1/4" per foot. Elevations of top of curb near building assume 1/4" per foot slope across covered entry and sidewalk.
5. All gutters shall have a minimum slope of 0.2%. Unless otherwise noted on the plans.
6. Expansion joints to be placed where building foundation meets concrete pavement or sidewalk.
7. Contractor to notify all utility companies 48 hours prior to construction of any site improvements for location of gas lines, telephone lines, television cables, water lines and sewer lines.
8. All required select fill to be placed in 6" lifts with compaction to 95 % proctor.
9. All curb and gutter to be backfilled and stabilized as required.
10. All grading to be established to provide surface to drainage.
11. Construction pad to be grated as required to facilitate drainage run–off from construction site. Silt Fence And/Or Silt Traps Shall Be Provided Before Discharge Of Run–Off From Construction Site To Street Drainage. Contractor shall be responsible for compliance with Federal, state, & local permits regarding storm water pollution prevention.
12. All obstructions buildings, poles, wires, slabs, fencing, or guard rails conflicting with the proposed improvements to be removed, relocated and or disposed of by contractor as per engineers written instructions.
13. Contractor to match transition of new pavement to existing pavement as proposed by engineer.
14. Handicap signage to conform with federal regulations (A.D.A.).
15. Contractor to include all striping for parking lots.
16. Civil engineer will not provide construction staking on (on–site) improvements.
17. Contractor to grade swales as required from sidewalk drainage openings, fire lanes, culverts and curb slots to inlets.
18. Contractor to verify horizontal and vertical location of new and/ or existing utilities which may conflict with proposed alignment of new facilities.
19. Contractor shall be familiar with special construction requirements while working within Edinburg, Texas.
20. All excavation and trenching operations shall be conducted in accordance with all safety osha publication 2226 and as required in house bill 662 passed by the Texas legislature.
21. Contractor shall provide Erosion and Sediment Control Plans and attain required permits.

Milnet Architectural Services
AMERICAN INSTITUTE OF ARCHITECTS

EDINBURG FIRE STATION #5
CITY OF EDINBURG
JASMAN RD & FM 2812

PROJECT NUMBER
15–119

DATE
09–16–2015
ADDENDUM #1 1–07–16

SHEET
C7
OF

GENERAL NOTES

1. THIS CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR EARTH BANKS, FORMS, SCAFFOLDING, PLANKING SAFETY NETS, SUPPORT AND BRACING FOR CRANES, POLES, ETC. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR THE ENGINEER DO NOT INCLUDE INSPECTION OF THE ABOVE AND BELOW ITEMS.
2. ALL CONSTRUCTION AND QUALITY OF MATERIALS SHALL COMPLY WITH THE GOVERNING BUILDING CODES AND REGULATIONS.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, TOLERANCES AND CONDITIONS AT THE JOB SITE BEFORE COMMENCEMENT OF WORK AND SHALL IMMEDIATELY REPORT ANY DISCREPANCIES OR OMISSIONS TO THE ARCHITECT AND ENGINEER IN WRITING BEFORE PROCEEDING WITH THAT PORTION OF THE WORK. ANY OMISSION OR CONFLICT BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.
4. IN CASE OF CONFLICT; NOTES AND DETAILS ON THE BALANCE OF THE DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. DRAWINGS TAKE PRECEDENCE OVER SPECIFICATIONS.
5. WHERE CONSTRUCTION DETAILS ARE NOT SPECIFICALLY SHOWN OR NOTED FOR ANY PART OF THE WORK, SUCH DETAILS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS SHOWN FOR SIMILAR CONDITIONS AND MATERIALS. WHERE SUFFICIENTLY SIMILAR WORK IS NOT SHOWN, THE ENGINEER SHALL BE CONSULTED FOR CLARIFICATION.
6. EACH SUBCONTRACTOR IS CONSIDERED AN EXPERT IN HIS RESPECTIVE FIELD AND SHALL PRIOR TO THE SUBMISSION OF A BID OR PERFORMANCE OF WORK, NOTIFY THE GENERAL CONTRACTOR, ARCHITECT, ENGINEER OR OWNER, IN WRITING OF ANY WORK CALLED OUT ON THE DRAWINGS IN HIS TRADE THAT CANNOT BE GUARANTEED OR PERFORMED AS INDICATED.
7. THE CONTRACTOR SHALL COORDINATE ALL MECHANICAL AND ELECTRICAL EQUIPMENT, AS TO WEIGHTS AND EXACT LOCATIONS, WITH STRUCTURAL SUPPORTS. IN THE EVENT THAT THE PURCHASED EQUIPMENT DEVIATES IN WEIGHT AND LOCATION FROM THOSE INDICATED ON THE PLANS, THE ARCHITECT AND ENGINEER MUST BE NOTIFIED AND APPROVAL OBTAINED PRIOR TO INSTALLATION.
8. THIS STRUCTURE IS DESIGNED AS A STABLE UNIT AFTER ALL COMPONENTS ARE IN PLACE. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY BRACING AS REQUIRED TO INSURE THE VERTICAL AND LATERAL STABILITY OF THE ENTIRE STRUCTURE, OR ANY PORTION THEREOF, DURING CONSTRUCTION.
9. NEITHER THE OWNER NOR THE ARCHITECT NOR THE ENGINEER WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND BRACING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
10. TRADE NAMES AND MANUFACTURERS REFERRED TO ARE FOR QUALITY STANDARDS ONLY. SUBSTITUTIONS WILL BE PERMITTED AS APPROVED BY THE ENGINEER.
11. ANY OPTIONS OR APPROVED SUBSTITUTIONS ARE FOR CONTRACTORS CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CHANGES, ADDITIONAL COSTS (INCLUDING REDESIGN BY THE ENGINEER), AND COORDINATION WITH ALL ITEMS THAT THE SUBSTITUTIONS MAY IMPACT.
12. THE ARCHITECT AND ENGINEER ARE TO BE NOTIFIED IN WRITING WHEN CONSTRUCTION AT THE SITE BEGINS.
13. ANY QUESTIONS RELATED TO INTERPRETATION OR INTENT OF THESE DRAWINGS SHALL BE REFERRED TO THE ENGINEER.
14. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO LOCATE AND PROTECT ANY EXISTING UNDERGROUND OR CONCEALED CONDUIT, PLUMBING, OR OTHER UTILITIES PRIOR TO BEGINNING ANY WORK.
15. PIPES, DUCTS, SLEEVES, CHASES, ETC. SHALL NOT BE PLACED IN BEAMS OR WALLS UNLESS SPECIFICALLY SHOWN OR NOTED. NOR SHALL ANY STRUCTURAL MEMBER BE CUT FOR PIPES, DUCTS, ETC. UNLESS NOTED CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FOR INSTALLATION OF ANY ADDITIONAL PIPES, DUCTS, ETC.

DESIGN CRITERIA

1. DESIGN LOADS, STRUCTURAL ANALYSIS AND PREPARATIONS OF STRUCTURAL MEMBERS IS BASED UPON THE FOLLOWING CRITERIA:
2. CODE: IBC 2012
3. ROOF DEAD LOAD:
   A. CONVENTIONAL BUILDING: 20 PSF
   B. COLLATERAL LOAD (JOIST BOTTOM CHORD): 5 PSF
4. ROOF LIVE LOAD (REDUCIBLE): 20 PSF
5. ROOF RAIN LOAD: 0 PSF
6. ROOF SNOW LOAD DATA:
   A. GROUND SNOW LOAD, P_g: 0 PSF
7. MEZZANINE DEAD LOAD: 45 PSF
8. MEZZANINE LIVE LOAD: 125 PSF
10. WIND DESIGN DATA: (ASCE 7-10)
   A. ULTIMATE DESIGN WIND SPEED
      (1) (3-SECOND GUST), V_{ult}: 140 MPH
      (2) (V_{ASD}): 110 MPH
   B. RISK CATEGORY: IV
   C. WIND EXPOSURE: C
   D. INTERNAL PRESSURE COEFFICIENT: (+0.18,-0.18)
   E. COMPONENTS AND CLADDING: SEE TABLE
11. EARTHQUAKE DESIGN DATA:
   A. RISK CATERGORY: IV
   B. SEISMIC IMPORTANCE FACTOR, I_e: 1.5
   C. MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS, S_s AND S_1: 0.045g & 0.015g
   D. SITE CLASS: D
   E. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS, S_{DS} AND S_{D1}: 0.048g & 0.024g
   F. SEISMIC DESIGN CATEGORY: A
12. GEOTECHNICAL INFORMATION
   A. PREPARED BY: L & G CONSULTING ENGINEERS, INC
      PROJECT NO.: GL15013
      DATE: AUGUST 27, 2015
   B. SHALLOW FOUNDATION
      MINIMUM FOOTING DEPTH BELOW F.G.E.: 24 INCHES
      MINIMUM FOOTING WIDTH: 12 INCHES
      ALLOWABLE BEARING PRESSURE (CONTINUOUS FOOTING): 375 PSF
      ALLOWABLE BEARING PRESSURE (INSULATED FOOTING): 450 PSF
      WIRE REINFORCEMENT INSTITUTE (WRI) CRITERIA
      FOR EXISTING CONDITIONS:
      EFFECTIVE PLASTICITY INDEX: -
      CLIMATIC RATING Cw: 15
      SOIL SUPPORT INDEX, (C): -
      PVR: 0.3 INCHES
      FOR PROPOSED CONDITIONS:
      EFFECTIVE PLASTICITY INDEX: 11
      CLIMATIC RATING Cw: 15
      SOIL SUPPORT INDEX, (C): 1
      PVR: >1 INCH

STRUCTURAL OBSERVATIONS

1. JOB SITE OBSERVATIONS BY THE PROFESSIONAL ENGINEER OR HIS AUTHORIZED REPRESENTATIVE SHALL CONSIST OF VISUAL OBSERVATION OF MATERIALS, EQUIPMENT OR CONSTRUCTION WORK FOR THE PURPOSE OF ASCERTAINING THAT THE WORK IS IN SUBSTANTIAL CONFORMANCE WITH THE CONTRACT DOCUMENTS AND WITH THE INTENT.
2. SUCH OBSERVATIONS SHALL NOT BE RELIED UPON BY OTHERS AS ACCEPTANCE OF THE WORK, NOR SHALL IT BE CONSTRUED TO RELIEVE THE CONTRACTOR IN ANY WAY FROM HIS OBLIGATIONS AND RESPONSIBILITIES UNDER THE CONSTRUCTION CONTRACT.
3. SPECIFICALLY BUT WITHOUT LIMITATION, OBSERVATIONS BY THE DESIGN PROFESSIONAL SHALL NOT REQUIRE THE DESIGN PROFESSIONAL TO ASSUME RESPONSIBILITY FOR THE MEANS AND METHODS OF CONSTRUCTION, NOR FOR SAFETY ON THE JOB SITE, NOR FOR ITEMS NOT INSTALLED OR IMPROPERLY INSTALLED BY THE CONTRACTOR OR HIS SUBCONTRACTORS.
4. NOTIFY ENGINEER 48 HOURS IN ADVANCE WHEN A STRUCTURAL OBSERVATION IS REQUIRED.
5.

CONSTRUCTION STAGE	REQUIRED
BEFORE PLACEMENT OF CONCRETE FOR SLAB/FOUNDATION	X
BEFORE PLACEMENT OF FOUR (4) FEET OF GROUT IN CMU & BMU WALL	X
AFTER FRAMING OF ROOF STRUCTURE BUT BEFORE PLACEMENT OF ROOFING MATERIAL.	X

SHOP DRAWINGS AND SUBMITTALS

1. SHOP DRAWINGS SHALL BE PREPARED AND SUBMITTED FOR REVIEW TO THE STRUCTURAL ENGINEER FOR EACH STRUCTURAL BUILDING MATERIAL AS INDICATED IN THE STRUCTURAL GENERAL NOTES AND THE CONTRACT SPECIFICATIONS. SEE THE CONTRACT SPECIFICATIONS FOR SUBMITTAL PROCEDURES AND ADDITIONAL INFORMATION
2. SHOP DRAWINGS SHALL USE DRAFTING LINE WORK AND LETTERING THAT IS CLEARLY LEGIBLE. SHOP DRAWINGS SHALL NOT CONTAIN NO REPRODUCTIONS OF THE CONTRACT DRAWING PLANS OR DETAILS.
3. SUBMIT ONE REPRODUCIBLE VELLUM AND ONE COPY OF EACH SHOP DRAWING.
4. SHOP DRAWINGS SHALL NOT SHOW MATERIALS FOR MORE THAN ONE LEVEL OF THE SAME PLAN.
5. SHOP DRAWINGS SHALL SHOW CLEAR AND COMPLETE INFORMATION FOR THE FABRICATION (DETAIL SHEETS AND/OR MATERIAL LISTS) AND INSTALLATION.
6. ALLOW A MINIMUM OF (2) WEEKS FOR REVIEW OF EACH SET OF SHOP DRAWINGS.
7. CONTRACTOR SHALL REVIEW THE SHOP DRAWINGS SUBMITTED BY THE SUB-CONTRACTOR AND COORDINATE SHOP DRAWINGS WITH ALL OTHER TRADES PRIOR TO SUBMITTING THEM FOR ENGINEER REVIEW.
8. CONTRACTOR SHALL ANSWER ALL QUESTIONS OR CLARIFICATIONS BY THE SUB-CONTRACTOR BEFORE SUBMITTING TO ENGINEER FOR REVIEW. ANY QUESTIONS THAT THE CONTRACTOR CANNOT ANSWER WITH THE INFORMATION ON THE DRAWINGS SHALL CLEARLY BE MARKED FOR THE ENGINEER FOR REVIEW.
9. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS, SEE NOTE NUMBER 3 UNDER GENERAL NOTES.
10. REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS FOR GENERAL CONFORMANCE TO THE STRUCTURAL DRAWINGS. APPROVAL OF THE SHOP DRAWINGS BY THE ENGINEER DOES NOT RELIEF THE CONTRACTOR FOR ANY ERRORS IN DIMENSIONS OR MATERIALS INDICATED ON THE SHOP DRAWINGS.
11. IF THERE IS ANY DISCREPANCY BETWEEN THE STRUCTURAL DRAWINGS AND SHOP DRAWINGS, THE INFORMATION SHOWN ON THE STRUCTURAL DRAWINGS GOVERN. INFORMATION THAT IS NOT INDICATED ON THE SHOP DRAWINGS SHALL BE OBTAINED FROM THE STRUCTURAL DRAWINGS.
12. PROVIDE SUBMITTALS FOR THE FOLLOWING ITEMS:

ITEM	REQUIRED
A. CONCRETE MIX DESIGN	X
B. CURING COMPOUND FOR CONCRETE	X
C. REINFORCING STEEL	X
D. STRUCTURAL STEEL	X
E. STEEL JOIST	X
F. METAL DECKING (INDICATE LAYOUT AND TYPES OF DECK PANELS, ANCHORAGE DETAILS, REINFORCING CHANNELS, PANS, DECK OPENINGS, SPECIAL JOINTING, ACCESSORIES, AND ATTACHMENTS TO OTHER CONSTRUCTION.)	X
G. MORTAR MIX DESIGN	X
H. GROUT MIX DESIGN	X
I. MASONRY ASSEMBLAGE	X
J. PRE-MANUFACTURED METAL BUILDING (INCLUDE CALC'S & REACTIONS)	N.A.

REINFORCING STEEL

1. BAR REINFORCEMENT SHALL CONFORM TO THE FOLLOWING GRADES OF ASTM A615, INCLUDING SUPPLEMENT S1. GRADE 40 - #3 AND SMALLER, GRADE 60 - #4 AND LARGER
2. DETAILS OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH CHAPTER 7 OF THE AMERICAN CONCRETE INSTITUTE (ACI) 318, UNLESS OTHERWISE NOTED.
3. VERTICAL REINFORCEMENT SHALL BE TIED AND FIXED IN POSITION AT THE TOP AND BOTTOM AND AT INTERMEDIATE LOCATIONS, SPACED NOT GREATER THAN 48 INCHES O.C.
4. WELDED STEEL WIRE FABRIC REINFORCEMENT SHALL CONFORM TO ASTM A185
5. LAPS OF WELDED STEEL WIRE FABRIC AT SPLICES SHALL BE NOT LESS THAN 12 INCHES.
6. WALLS, PILASTERS, COLUMNS SHALL BE DOWELED TO THE SUPPORTING FOOTINGS WITH REINFORCEMENT OF THE SAME SIZE, GRADE AND AT THE SAME SPACING AS THE VERTICAL REINFORCEMENT IN THE WALLS, PILASTERS, OR COLUMNS.
7. BAR SUPPORTS SHALL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF "BAR SUPPORT SPECIFICATIONS" AS CONTAINED IN THE LATEST EDITION OF THE "MANUAL OF STANDARD PRACTICE" BY THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI), EXCEPT AT SLABS; THE REINFORCING SHALL BE SUPPORTED BY CHAIRS SPACED AT 36 INCHES O.C. FOR #3 REBARS AND 48 INCHES ON CENTER FOR LARGER REBARS. CHAIRS FOR SLAB ON GRADE SHALL BE CONCRETE BLOCKS.
8. REINFORCING STEEL DETAILING, BENDING AND PLACING SHALL BE IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE", LATEST EDITION.
9. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE BEFORE PLACING CONCRETE OR GROUT.
10. PROVIDE CORNER BARS TOP AND BOTTOM AT ALL BEAM CORNERS AND DEAD END BEAM INTERSECTIONS. BARS TO EQUAL SIZE AND QUANTITY OF THE NOTED BEAM STEEL. BARS SHALL LAP BEAM REINFORCEMENTS.
11. BARS DETAILED AS CONTINUOUS SHALL BE LAPPED AT SPLICES.
12. EXTEND THE SLAB REINFORCING STEEL, PERPENDICULAR TO BEAM, TO THE TOP OUTSIDE REINFORCING BAR OF PERIMETER BEAMS. START THE SLAB REINFORCING STEEL, PARALLEL TO BEAM, NOT MORE THAN 6" FROM THE TOP INSIDE REINFORCING BAR OF PERIMETER BEAMS.
13. PROVIDE #4 "Z" BARS AT 12" ON CENTER WHERE THE SLAB STEPS DOWN MORE THAN 2". THE "Z" BARS SHALL LAP THE MAIN SLAB REINFORCING STEEL.
14. ALL CONDUIT OR PLUMBING LINES IN SLAB SHALL BE PLACED BELOW SLAB THICKNESS AREA. ALL CONDUIT NO GREATER THAN 1" DIAMETER MAY BE PLACED IN CENTER OF SLAB. NO CONDUITS OR PLUMBING LINES GREATER THAN 1 INCH ALLOWED IN THE SLAB.
15. WELDING OF CROSSING BARS AND TACK WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED.
16. WELDING OF REINFORCING STEEL IS NOT PERMITTED.
17. CONTRACTOR SHALL SUBMIT REINFORCING STEEL SHOP DRAWINGS FOR REVIEW BEFORE FABRICATION AND INSTALLATION.
18. LAPS AT BAR SPLICES, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:

MASONRY - GRADE 60: LAP 50 DIA. (30" MIN.)
GRADE 40: LAP 48 DIA. (24" MIN.)
CONCRETE - LAP PER SCHEDULE BELOW

BAR SPLICE LAP LENGTH IN CONCRETE

BAR SIZE	f'c = 2000 PSI	f'c = 3000 PSI	f'c = 4000 PSI	f'c = 5000 PSI
#3	22	22	22	22
#4	29	29	29	29
#5	40	40	40	40
#6	57	57	57	57
#7	77	63	54	54
#8	100	82	71	71

FOR WELDED WIRE FABRIC: SPACING OF WIRE PLUS 12".

19. CONCRETE COVER FOR REINFORCING AS FOLLOWS:

EXPOSURE CONDITION	MINIMUM COVER	TOLERANCE
DRILLED PIERS, FOOTINGS AND OTHER PRINCIPAL STRUCTURAL MEMBERS IN WHICH CONCRETE IS DEPOSITED AGAINST GROUND:	3"	3/8"
WHERE CONCRETE SURFACES, AFTER REMOVAL OF FORMS, ARE EXPOSED TO WEATHER OR GROUND:		
FOR BARS 5/8" IN DIAMETER	3"	1/4"
FOR BARS 5/8" OR LESS IN DIAMETER	3"	1/4"
WHERE SURFACES ARE NOT DIRECTLY EXPOSED TO WEATHER OR GROUND:		
FOR SLAB ON GRADE (FROM TOP OF SLAB)	1 1/2"	1/4"
FOR BEAMS, COLUMNS	2"	1/4"
FOR JOISTS AND SLABS	2 1/2"	1/8"

SPECIAL NOTES TO OWNER

1. UNDER NORMAL CONDITIONS, AND FOR CONVENTIONAL BUILDINGS SUCH AS THE SUBJECT MATTER, REINFORCED CONCRETE AND MASONRY DEVELOP CRACKS. THE CRACKS ARE DUE TO INHERENT SHRINKAGE OF CONCRETE, CREEP AND RESTRAINING EFFECTS OF VERTICAL AND OTHER STRUCTURAL ELEMENTS TO WHICH THE BEAMS/SLABS ARE TIED.
2. THE CRACKS FORMED ARE NORMALLY COSMETIC. THE SLAB MAINTAINS ITS SERVICEABILITY AND STRENGTH REQUIREMENTS. IT IS EMPHASIZED THAT ALTHOUGH SPECIAL EFFORT IS MADE TO REDUCE THE POTENTIAL CAUSES AND NUMBER OF SUCH CRACKS, IT IS NOT PRACTICAL TO PROVIDE TOTAL ARTICULATION BETWEEN THE FLOOR SYSTEM AND ITS SUPPORTS AND THEREBY ACHIEVE COMPLETE INHIBITION OF ALL CRACKS.
3. MOST SUCH CRACKS DEVELOP OVER THE FIRST THREE YEARS OF THE LIFE OF THE FLOOR SYSTEM. CRACKS WHICH ARE WIDER THAN 0.01 INCH MAY NEED TO BE PRESSURE EPOXIED. REFER TO THE NOTES UNDER "ALLOWANCES".
4. THE OBJECT OF THE JOINTS PROVIDED IS TO ALLOW MOVEMENT. MOVEMENTS DUE TO CREEP AND SHRINKAGE MAY BE NOTICEABLE AT JOINTS UP TO TWO YEARS AFTER CONSTRUCTION, BEYOND WHICH MOVEMENTS DUE TO VARIATIONS IN TEMPERATURE WILL PERSIST.

STRUCTURAL STEEL

1. MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE LATEST EDITION OF THE AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
2. STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING ASTM DESIGNATIONS:

MATERIAL	DESIGNATION	STRENGTH
ANCHOR BOLTS	A36	Fy=36 ksi
PLATES	A36	Fy=36 ksi
ANGLES	A36	Fy=36 ksi
CHANNELS	A36	Fy=36 ksi
WIDE FLANGE SHAPES	A572	Fy=50 ksi
STEEL PIPE	A53 GRADE B	Fy=35 ksi
SQUARE & RECT. STEEL TUBES (HSS)	A500 GRADE B	Fy=46 ksi
ROUND TUBES (HSS)	500 GRADE B	Fy=42 ksi

3. ALL STRUCTURAL STEEL SHALL BE FABRICATED, ERECTED, AND PAINTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AS AMENDED TO DATE AND THE CODE OF STANDARD PRACTICE, LATEST EDITION AS ADOPTED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AMENDED AS FOLLOWS:
   SECTION 4.2.1, DELETE FIRST TWO SENTENCES.
   SECTION 7., ALL REFERENCE TO OWNER SHALL BE CHANGED TO GENERAL CONTRACTOR.
   SECTION 7.9.3, THE CONTRACTOR SHALL PROVIDE THE SEQUENCE AND SCHEDULE OF PLACEMENT OF NON-SELF SUPPORTING STEEL FRAMES.
   SECTION 7.9.4, THE CONTRACTOR TO DESIGN SHORES, JACKS OR LOADS.
4. WELDING SHALL BE DONE IN ACCORDANCE WITH THE STANDARD CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION AS PUBLISHED BY THE AMERICAN WELDING SOCIETY, EXCEPT THAT ALL WELDING SHALL BE DONE BY THE ELECTRIC ARC PROCESS. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS AND SHALL CONFORM TO ANSI/AWS D1.1-04
5. DETAILED AND OR SCHEDULED CONNECTIONS HAVE BEEN DESIGNED BY STRUCTURAL ENGINEER. ANY CONNECTION NOT DETAILED OR SCHEDULED OR ALTERED FOR FABRICATION PURPOSES SHALL BE SIZED AND DETAILED BY FABRICATOR AND SHALL BE MARKED FOR ENGINEER'S VERIFICATION. FABRICATOR SIZED AND DETAILED CONNECTIONS SHALL SUPPORT ONE HALF THE TOTAL UNIFORM LOAD CAPACITY SHOWN IN THE TABLES OF UNIFORM CONSTANTS, PART 2 OF THE AISC MANUAL OF STEEL CONSTRUCTION FOR THE GIVEN BEAM, SPAN AND GRADE OF STEEL SPECIFIED. THE EFFECT OF ANY CONCENTRATION LOADS MUST BE TAKEN INTO ACCOUNT.
6. SEE ARCHITECTURAL PLANS FOR MISCELLANEOUS STEEL ITEMS NOT INDICATED ON STRUCTURAL DRAWINGS. STEEL ITEMS SHOWN ON ARCHITECTURAL DRAWINGS AND NOT SPECIFIED ON THE STRUCTURAL DRAWINGS SHALL BE DESIGN BY THE STEEL FABRICATOR. SEE DESIGN CRITERIA FOR LOADING.
7. ALL WELDED CONNECTIONS SHALL BE MADE USING 1/4" FILLET WELD, U.N.O.
8. ALL BOLTED CONNECTIONS SHALL BE MADE USING 3/4" DIAMETER HIGH STRENGTH BOLTS, ASTM A325, BEARING TYPE CONNECTION w/ WASHERS ASTM F436, U.N.O. ON DESIGN DRAWINGS. SPECIAL INSPECTION REQUIRED FOR ALL HIGH STRENGTH BOLTING. ALL NUTS SHALL BE PER ASTM A563
9. ALL CONNECTION PLATES AND STIFFENERS SHALL BE MADE WITH 1/4" THICK PLATES, UNLESS OTHERWISE NOTED ON PLANS.
10. ALL STEEL (INCLUDING BOLTS) EXPOSED TO THE WEATHER SHALL BE HOT DIPPED GALVANIZED. (INCLUDES STEEL THAT IS ONLY COVERED WITH PLASTER OR STUCCO). SEE ARCHITECTURAL PLANS IF STRICTER REQUIREMENTS ARE REQUIRED.
11. ALL EXPOSED STEEL SHALL FOLLOW SECTION 10 OF THE CODE OF STANDARD PRACTICE OF AISC. SECTION 10 OF THE CODE ADDRESSES ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS)
12. CONNECTIONS SHALL BE PER HOLLOW STRUCTURAL SECTIONS, CONNX. MANUAL BY AISC.
13. WHERE STEEL MEMBER PASS THROUGH CMU WALLS, PROVIDE HALF INCH GAP BETWEEN THE CMU AND THE STEEL MEMBER. PROVIDE ELASTOMERIC MATERIAL BETWEEN THE THE STEEL MEMBER AND CMU WALL.
14. ALL BEAMS NOT SHOWN SHALL BE W18x35. ALL COLUMNS NOT SHOWN SHALL BE HSS5x5x1/4.
15. STEEL SHOP SHALL BE AISC CERTIFIED.
16. HOLES FOR BOLTS IN STRUCTURAL STEEL SHALL BE DRILLED OR PUNCHED. BURNING OF HOLES SHALL NOT BE PERMITTED. UNLESS NOTED OTHERWISE, HOLES SHALL BE STANDARD SIZE 1/16 INCH LARGER THAN THE BOLT.
17. ALL STRUCTURAL STEEL SHAPES SHALL BE PRIMED WITH A RUST RESISTANT PRIMER BEFORE SHIPMENT TO THE PROJECT SITE. PRIMER SHALL NOT BE APPLIED TO THE IMMEDIATE AREA OF STEEL INTENDED TO RECEIVE SLIP CRITICAL BOLTED CONNECTIONS
18. HIGH STRENGTH BOLTS INSTALLATION SHALL BE CONTINUOUSLY INSPECTED BY A SPECIAL INSPECTOR. FOLLOWING ARE REQUIREMENTS OF THE SPECIAL INSPECTOR:
   A. HE SHALL VERIFY THE MILL CERTIFICATES FOR MATERIAL.
   B. HE SHALL VERIFY THAT THE MATERIAL USED ARE PROPERLY STORED AND PREPARED FOR USE.
   C. HE SHALL VERIFY THAT CONSTRUCTION DETAILS, PROCEDURES, TOOL CALIBRATIONS WORKMANSHIP ARE IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND AND BUILDING CODE.
   D. FOR SNUG-TIGHT CONNECTIONS, HE SHALL VERIFY THAT THE PLIES OF THE CONNECTED ELEMENTS HAVE BEEN BROUGHT INTO SNUG CONTACT WITH EACH OTHER.
   E. FOR SLIP-TIGHT CONNECTIONS, HE SHALL VERIFY THE PRETENSION METHOD SELECTED BY THE CONTRACTOR HAS INDUCED THE REQUIRED MINIMUM TENSION IN THE BOLT.
   F. A CERTIFICATE OF INSPECTION SHALL BE FURNISHED BY THE SPECIAL INSPECTOR TO THE BUILDING OFFICIAL PRIOR TO HIS INSPECTION AND TO THE ARCHITECT AND ENGINEER.
19. WELDING IN THE FIELD SHALL BE CONTINUOUSLY INSPECTED, BY A SPECIAL INSPECTOR FOLLOWING ARE REQUIREMENTS OF THE SPECIAL INSPECTOR:
   A. HE SHALL VERIFY THAT THE MATERIAL USED ARE PROPERLY STORED AND PREPARED FOR USE.
   B. HE SHALL VERIFY THE WELDER'S QUALIFICATIONS.
   C. HE SHALL VERIFY THAT CONSTRUCTION DETAILS, PROCEDURES AND WORKMANSHIP ARE IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND BUILDING CODE.
   D. A CERTIFICATE OF INSPECTION SHALL BE FURNISHED BY THE SPECIAL INSPECTOR TO THE BUILDING OFFICIAL PRIOR TO HIS INSPECTION AND TO THE ARCHITECT AND ENGINEER.
20. ALL NON SHRINK GROUT FOR LEVELING OF BASE PLATES SHALL HAVE A MINIMUM 5000 PSI COMPRESSIVE STRENGTH AT 28 DAYS. GROUT SHALL COMPLY WITH CORPS OF ENGINEERS SPECIFICATION CRD-C 621.

ABBREVIATIONS

ASML	ABOVE MEAN SEA LEVEL
BMU	BRICK MASONRY UNIT
BOS	BOTTOM OF STEEL
CMU	CONCRETE MASONRY UNIT
TYP	TYPICAL
TOS	TOP OF STEEL
SIM	SIMILAR
S&T	SIMILAR AND TYPICAL

REINFORCED CONCRETE MASONRY UNIT WALLS

1. CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO ASTM C90, ASTM C426 AND AS FOLLOWS:
   * UNIT COMPRESSIVE STRENGTH: 1900 PSI MINIMUM AVERAGE NET AREA COMPRESSIVE STRENGTH.
   * WEIGHT CLASSIFICATION: MEDIUM WEIGHT
   * CONCRETE MASONRY ASSEMBLAGE (f'm) SHALL BE 1500 PSI.
   * MORTAR SHALL BE TYPE "S".
2. ALL REINFORCING BARS SHALL BE NEW BILLET STEEL AND SHALL CONFORM TO ASTM A-615, GRADE 60, REINFORCING BARS #3 AND SMALLER MAY BE GRADE 40.
3. CONCRETE SHALL CONFORM TO ASTM C150 TYPE I, LOW ALKALI, MASONRY CEMENTS ARE NOT ALLOWED.
4. UNLESS DETAILED OTHERWISE, TYPICAL VERTICAL REINFORCEMENT SHALL BE #6 AT 48" ON CENTER, AND TWO (2) #6 AT JAMBS OF ALL OPENINGS, THREE (3) #6 AT CORNERS, PROVIDE ADDITIONAL VERTICAL REINFORCEMENT FOR SPECIAL CONDITIONS AS DETAILED, ALL VERTICAL REINFORCMENT TO BE IN CONCRETE OR GROUT FILLED CELLS, PROVIDE DOWELS FROM FOUNDATION, SAME SIZE AND SPACING.
5. VERTICAL CELLS TO BE FILLED SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR, UNOBSTRUCTED CONTINUOUS VERTICAL.
6. ALL REINFORCING SHALL BE IN PLACE PRIOR TO PLACING CONCRETE OR GROUT. VERTICAL REINFORCING BARS SHALL BE HELD IN POSITION AT THE TOP, BOTTOM AND AT INTERVALS NOT FARTHER APART THAN 50 BAR DIAMETERS.
7. TYPICAL HORIZONTAL REINFORCEMENT SHALL BE TWO (2) #5 CONTINUOUS IN 8"x16" DEEP CONTINUOUS CONCRETE FILLED BOND BEAM BELOW EACH FLOOR AND ROOF LEVEL, UNLESS NOTED OTHERWISE. PROVIDE STANDARD DUR-O-WALL TRUSS-TYPE REINFORCING OR PREVIEWED EQUIVALENT EVERY OTHER COURSE (16" ON CENTER) AND AS PRE MANUFACTURER'S RECOMMENDATIONS.
8. WALL LENGTHS LESS THAN OR EQUAL TO FOUR (4) TIMES ITS THICKNESS SHALL BE CONSIDERED COLUMN SECTIONS AND SHALL BE REINFORCED WITH #6 VERTICAL REINFORCING IN FILLED CELLS, PROVIDE 1/4 INCH DIAMTER TIES EVERY COURSE (8" ON CENTER) IN LIEU OF DUR-O-WALL REINFORCING, PLACE TIES NOT LESS THAN 1 1/2" NOR MORE THAN 5" FROM THE SURFACE OF THE COLUMN.
9. PROVIDE HORIZONTAL JOINT REINFORCEMENT EVERY OTHER COURSE WHERE HORIZONTAL BAR REINFORCEMENT IS NOT SPECIFIED.
10. ALL CELLS CONTAINING VERTICAL REINFORCEMENT SHALL BE FILLED SOLIDLY WITH PEA GRAVEL CONCRETE (3/8" MAX. AGGREGATE SIZE) OR GROUT, EACH WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, GROUT OR CONCRETE SHALL BE A WORKABLE MIX SUITABLE FOR PUMPING WITHOUT SEGRAGATION AND SHALL BE THOROUGHLY MIXED, GROUT OR CONCRETE SHALL BE PLACED BY PUMPING OR AN APPROVED ALTERNATE METHOD AND SHALL BE PLACED BEFORE INITIAL SET OR HARDENING OCCURS. GROUTING SHALL BE PER NCMA TEK 3-2
11. ALLOW C.M.U. WALLS TO SET AT LEAST 24 HOURS AFTER COMPLETION BEFORE GROUTING, GROUT OR CONCRETE SHALL BE CONSOLIDATED BY RECONSOLIDATION AFTER EXCESS MOISTURE HAS BEEN ABSORBED BUT BEFORE WORKABILITY IS LOST, THE FILLING OF ANY SECTION OF A WALL SHALL BE COMPLETED IN ONE DAY WITHOUT INTERRUPTIONS GREATER THAN ONE HOUR, AND PLACED IN LAYERS OF 4 FEET MAXIMUM.
12. WHERE THE CONCRETE OR GROUT POUR EXCEEDS 4 FEET IN HEIGHT, CLEANOUTS SHALL BE PROVIDED BY SUITABLE OPENINGS IN THE FACE SHELLS IN THE BOTTOM COURSE OF EACH CELL TO BE FILLED, OR OTHER APPROVED LOCATIONS, THE CLEANOUTS SHALL BE SEALED AFTER INSPECTION AND BEFORE BEING FILLED.
13. WHEN CELL FILLING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINT SHALL BE FORMED BY STOPPING THE POUR OF CONCRETE OR GROUT APPROXIMATELY 1/2 INCH ABOVE OR BELOW BED JOINT.
14. END WALLS AND CROSS WEBS FORMING CELLS TO BE FILLED SHALL BE FULL BEDDED IN MORTAR TO PREVENT LEAKAGE OF CONCRETE OR GROUT UNLESS WALL IS TO BE POURED SOLID.
15. PROVIDE VERTICAL CONTROL JOINTS AT A MAXIMUM SPACING OF 24' (10' FROM CORNERS). DO NOT CONTINUE THE TYPICAL TRUSS TYPE JOINT REINFORCEMENT THROUGH THE JOINT. CONTROL JOINTS LOCATIONS SHALL BE COORDINATED WITH ARCHITECT BUT NOT EXCEED THE MAXIMUM SPACING. BOND BEAM REINFORCEMENT SHALL BE INTERRUPTED AT THE CONTROL JOINT, ALTHOUGH CHORD REINFORCING STEEL AT FLOORS & ROOFS MUST CONTINUE THROUGH THE CONTROL JOINTS.
16. DURING ERECTION, COVER TOP OF WALLS, PROJECTIONS AND SILLS WITH WATERPROOF SHEATHING AT THE END OF EACH DAY'S WORK.
17. ALLOW CMU WALL GROUT TO SET AT LEAST 24 HOURS AFTER GROUTING BEFORE CONTINUING BLOCK INSTALLATION ON TOP OF IT.

POST-INSTALLED ANCHORS

1. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER-OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REBAR. HOLES SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE SPECIFIED BELOW SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER-OF-RECORD ALONG WITH CALCULATIONS THAT ARE PREPARED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERTINENT EQUIVALENT PERFORMANCE VALUES (MINIMUM) OF THE SPECIFIED PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR STANDARD(S) AS REQUIRED BY THE BUILDING CODE. PROVIDE CONTINUOUS SPECIAL INSPECTION FOR ALL MECHANICAL AND ADHESIVE ANCHORS PER THE APPLICABLE EVALUATION REPORT. CONTACT MANUFACTURER'S REPRESENTATIVE FOR THE INITIAL TRAINING AND INSTALLATION OF ANCHORS AND FOR PRODUCT RELATED QUESTIONS AND AVAILABILITY. CALL SIMPSON STRONG-TIE AT (800) 999-5099.

A. **CONCRETE ANCHORS**
   i. **MECHANICAL ANCHORS** SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.2 AND ICC-ES AC193 FOR CRACKED AND UNCRACKED CONCRETE RECOGNITION. PRE-APPROVED MECHANICAL ANCHORS INCLUDE:
   SIMPSON
   (1) SIMPSON STRONG-TIE "TITEN-HD" AND "TITEN-HD ROD HANGER" (ICC-ES ESR-2713)
   (2) SIMPSON STRONG-TIE "STRONG-BOLT" (ICC-ES ESR-1771)
   (3) SIMPSON STRONG-TIE "STRONG-BOLT 2" (ICC-ES ESR-3037)
   (4) SIMPSON STRONG-TIE "TORQ-CUT" (ICC-ES ESR-2705)
   HILTI
   (1) HILTI KWIK HUS EZ AND KWIK EZ-I SCREW ANCHORS PER ICC ESR-3027
   (2) HILTI KWIK BOLT-TZ EXPANSION ANCHORS PER ICC ESR-1917
   (3) HILTI KWIK BOLT 3 EXPANSION ANCHORS PER ICC ESR-2302
   (4) HILTI HDA UNDERCUT ANCHORS PER ICC ESR-1546
   (5) HILTI HSL-3 EXPANSION ANCHORS PER ICC ESR-1545
   ii. **ADHESIVE ANCHORS** SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED AND UNCRACKED CONCRETE RECOGNITION. PRE-APPROVED ADHESIVE ANCHORS INCLUDE:
   SIMPSON
   (1) SIMPSON STRONG-TIE "SET-XP" (ICC-ES ESR-2138)
   HILTI
   (1) HILTI HIT-RE 500-SD EPOXY ADHESIVE ANCHORING SYTEM PER ICC ESR-2322
   (2) HILTI HIT-HY 150 MAX-SD ADHESIVE ANCHORING SYSTEM PER ICC ESR-3013
   (3) HILTI HIT-HY 150 MAX-SD ADHESIVE ANCHOR SYSTEM PER ICC ESR-2262
   (4) STEEL ANCHOR ELEMENT SHALL BE HILTI HIS-N INTERNALLY THREADED INSERTS (USED WITH RE 500-SD AND HY 150 MAX ONLY). HILTI HAS-E CONTINUOUSLY THREADED ROD, CONTINUOUSLY DEFORMED STEEL REBAR.
   iii. **POWDER ACTUATED FASTENERS** SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED POWDER ACTUATED FASTENERS INCLUDE:
   (1) SIMPSON STRONG-TIE "POWER-DRIVEN FASTENERS" (ICC-ES ESR-2138)

B. **MASONRY ANCHORS**
   i. **ANCHORAGE TO SOLID-GROUTED CONCRETE MASONRY**
   (1) MECHANICAL ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC01 OR AC106. PRE-APPROVED MECHANICAL ANCHORS INCLUDE:
      (a) SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-1056)
      (b) SIMPSON STRONG-TIE "STRONG BOLT 2" (IAPMO-ES ER-0240)
      (c) SIMPSON STRONG-TIE "WEDGE-ALL" (ICC-ES ESR-1396)
   (2) ADHESIVE ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC58. PRE-APPROVED ADHESIVE ANCHORS INCLUDE:
      (a) SIMPSON STRONG-TIE "SET" (ICC-ES ESR-1772)
   ii. **ANCHORAGE TO HOLLOW CONCRETE MASONRY/ UNREINFORCED CLAY BRICK MASONRY**
   SIMPSON
   (1) MECHANICAL ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC01 OR AC106. PRE-APPROVED MECHANICAL ANCHORS
      (a) SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-1056)
   (2) ADHESIVE ANCHORS WITH SCREEN TUBES SHALL BE TESTED AND QUALIFIED IN ACCORDANCE WITH ICC-ES AC58 OR AC60, AS APPROPRIATE. THE APPROPIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED ADHESIVE ANCHORS WITH SCREEN TUBES INCLUDE:
      (a) SIMPSON STRONG-TIE "SET" (ICC-ES ESR-1772)
   iii. **ANCHORAGE TO HOLLOW / MULTI-WYTHE MASONRY**
   HILTI
   (1) HILTI HIT-HY 70 MASONRY ADHESIVE ANCHORING SYSTEM PER ICC ESR-3442
   (2) STEEL ANCHOR ELEMENT SHALL BE HILTI HAS-E CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR
   (3) THE APPROPRIATE SIZE SCREEN TUBE SHALL BE USED PER ADHESIVE MANUFACTURES RECOMMENDATION.

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STRUCTURAL MASONRY (SPECIAL INSPECTION)

INSPECTION TASK	INSPECTION: CONTINUOUS DURING TASK LISTED	INSPECTION: PERIODICALLY DURING TASK LISTED
1. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. PROPORTIONS OF SITE PREPARED MORTAR.		X
B. CONSTRUCTION OF MORTAR JOINTS.		X
C. LOCATION OF REINFORCEMENT AND CONNECTORS.		X
2. THE INSPECTION PROGRAM SHALL VERIFY:		
A. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.		X
B. TYPE, SIZE AND LOCATION OF DOWELS, ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES AND OTHER CONSTRUCTION		X
C. CHECK GROUT MIX FOR COMPLIANCE WITH CODE AND SPECIFICATIONS.		X
D. WELDING OF REINFORCING BARS.	X	
E. PROTECTION OF MASONRY DURING COLD WEATHER (TEMP. BELOW 40 °F) OR HOT		X
F. WEATHER (TEMP. ABOVE 90 °F). CUTTING OF CLEAN OUT HOLES, KNOCKING DOWN OF FINS AND REMORAL OF DEBRIS.		X
3. PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. GROUT SPACE IS CLEAN.	X	
B. PLACEMENT OF REINFORCEMENT AND CONNECTOR.	X	
C. CHECK GROUT MIX FOR COMPLIANCE WITH CODE AND SPECIFICATIONS.	X	
D. CONSTRUCTION OF MORTAR JOINTS.	X	
E. CHECK INSTALLATION OF CLEAN OUT CLOSURE.	X	
4. GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENT PROVISIONS. (SUCH AS MECHANICAL VIBRATION DURING PLACEMENT AND LATER DURING RECONSOLIDATION.)	X	
5. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED.	X	
6. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE PROVISIONS OF THE CONSTRUCTON DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.		X
7. CHECK THAT CURING REQUIREMENTS ARE BEING FOLLOWED		X
8. VERIFY PLACEMENT OF ANCHORS INTO CONCRETE MASONRY UNITS.	X	
9. FREQUENCY OF TESTS:	X	
A. CONCRETE MASONRY UNIT TEST- FOR EACH TYPE, CLASS, AND GRADE OF CONCRETE MASONRY UNIT INDICATED, TEST UNITS BY METHOD OF SAMPLING AND TESTING OF ASTM C140. ONE SET FO CMU STANDARD PRISM TEST SHALL BE CONDUCTED FOR EVERY 5,000 SQ. FT. OF WALL DURING CONSTRUCTION IN ACCORDANCE TO ASTM C1314, BUT NOT LESS THAN ONE SET OF 3 MASONRY PRISMS FOR THE PROJECT		
B. MORTAR TEST: FOR EACH TYPE INDICATED, TEST MORTAR BY METHODS OF SAMPLING AND TESTNG OF ASTM C780. CONDUCT TESTS NO LESS FREQUENTLY THAN THAT REQUIRED TO EVALUATE MORTAR USED TO INSTALL EACH INCREMENT OF MASONRY UNITS INDICATED ABOVE FROM WHICH SAMPLES ARE TAKEN FOR TESTING. TEST MORTAR FOR EVERY 1,500 SQ. FT. OF WALL CONSTRUCTION.		
C. GROUT TEST: AT START OF GROUTNG OPERATION, TAKE ONE TEST PER DAY FOR FIRST 3 DAYS. EACH GROUT TEST CONSISTS OF THREE SPECIMENS MADE IN ACCORDANCE WITH ASTM C1019. AFTER FIRST THREE TESTS, SPECIMENS FOR CONTINUING QUALITY CONTROL SHOULD BE TAKEN ONCE A WEEK FOR EVERY 25 CUBIC YARDS OF GROUT OR FOR EVERY 2,500 SQ. FT. OF WALL, WHICHEVER COMES FIRST.		
10. MASONRY TESTING REQUIREMENTS	X	

TESTING METHOD OPTIONS	PRIOR TO CONSTRUCTION	DURING CONSTRUCTION
METHOD 1: MASONRY PRISM TESTING	5 PRISMS	3 PRISMS FOR EVERY 5,000 S.F. OF WALL
METHOD 2: MASONRY PRISM TEST RECORD	APPROVED 30 PRISM RECORD	3 PRISMS FOR EVERY 5,000 S.F. OF WALL
METHOD 3: UNIT STRENGTH METHOD	UNITS AND GROUT OR 5 PRISM	UNITS AND GROUT OR 3 PRISMS FOR EVERY 5,000 S.F. OF WALL

Milnet Architectural Services
AMERICAN INSTITUTE OF ARCHITECTS

STATE OF TEXAS
W.R.HINOJOSA
65228
REGISTERED PROFESSIONAL ENGINEER
1-07-16

EDINBURG FIRE STATION #5
CITY OF EDINBURG
JASMAN RD & FM2812

PROJECT NUMBER
15-118

DATE
09-16-15

ADDENDUM #1
01-17-16

SHEET
STRUCTURAL GENERAL NOTES

S1.1

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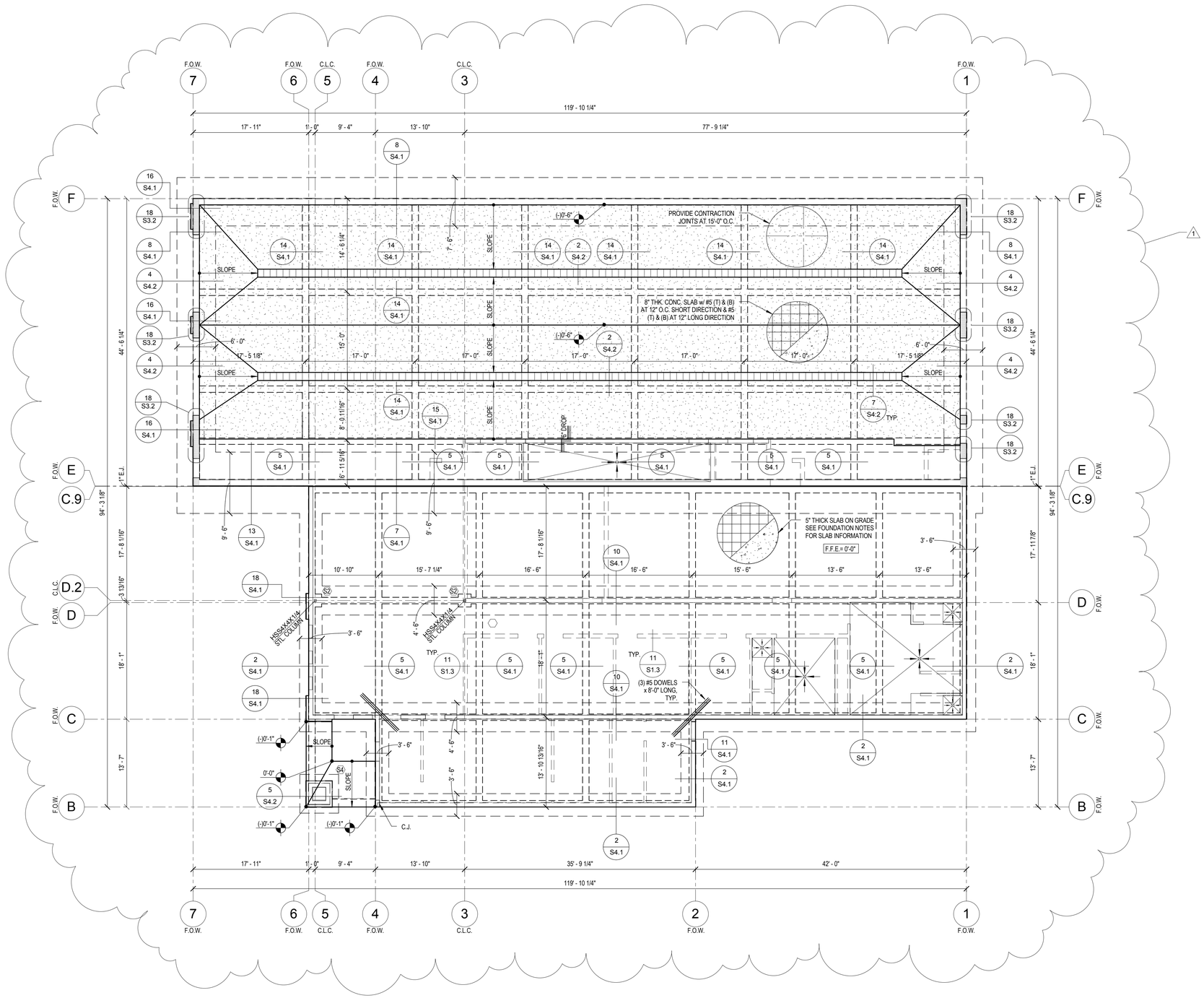

1 BASE BID FOUNDATION PLAN
1/8" = 1'-0"

FOUNDATION SUBGRADE

1. PREPARATION OF EXISTING GROUND
   ALL AREAS TO SUPPORT SELECT FILL SHALL BE STRIPPED OF ALL VEGETATION AND/OR ORGANIC TOPSOIL.
   MINIMUM DEPTH OF REMOVAL: 8 INCHES
   EXTEND BEYOND BUILDING FOOT PRINT: 2 FEET
   REMOVE THE EXISTING SUBGRADE SOILS
   DOWN TO A MINIMUM ELEVATION OF: 80.75' AMSL

   EXTEND BEYOND BUILDING FOOT PRINT 3 FEET
   THE EXPOSED SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF 6 INCHES AND MOISTURE CONDITIONED FROM 0 TO 3% ABOVE OPTIMUM. THE SUBGRADE SHALL BE COMPACTED TO 95 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY THE STANDARD MOISTURE-DENSITY RELATION (ASTM D-698). FOLLOWING COMPLETE CLEARING AND PREPARATION OF THE SITE FOR CONSTRUCTION, THE GEOTECHNICAL ENGINEER SHALL OBSERVE THE SITE TO DETERMINE THAT SATISFACTORY PREPARATION HAS BEEN ACCOMPLISHED.
2. SELECT FILL MATERIAL
   A) THE FOLLOWING SOILS, AS CLASSIFIED ACCORDING TO THE USCS MAY BE CONSIDERED SATISFACTORY FOR USE AS SELECT FILL MATERIALS AT THIS SITE: SM, SC, GM, GC, CH, MH, AND COMBINATIONS OF THESE SOILS.
   B) AGGREGATE BASE COURSE
   THE CLAYEY GRAVEL AND CAUICHE MATERIALS SHOULD MEET THE GRADATION REQUIREMENTS OF ITEM 247, TYPE B, GRADES 1 THROUGH 3 AS SPECIFIED IN THE 2004 TXDOT STANDARD SPECIFICATIONS MANUAL AND A PLASTICITY INDEX BETWEEN 7 AND 20. CRUSHED LIMESTONE OR CRUSHED CONCRETE MATERIAL SHOULD MEET THE REQUIREMENTS OF 2004 TXDOT ITEM 247, TYPE A OR D, GRADE 1. THE SELECT FILL MATERIALS SHOULD BE FREE OF ORGANIC MATERIAL AND DEBRIS, AND SHOULD NOT RETAIN STONES LARGER THAN 2 INCHES IN THE MAXIMUM DIMENSION.
   C) THE FOLLOWING SOILS, AS CLASSIFIED ACCORDING TO THE USCS, ARE NOT CONSIDERED SATISFACTORY FOR USE AS SELECT FILL MATERIALS AT THIS SITE: AS, CH, MH, OH, OL AND PT. THE NATURE OF SOILS AT THIS SITE ARE NOT CONSIDERED SUITABLE FOR USE AS SELECTED FILL MATERIAL.
   * FINISH FLOOR SHALL BE 18" MINIMUM ABOVE TOP OF CURB ELEVATION OR 18" MINIMUM ABOVE CROWN OF STREET, OR AS INDICATED ON CIVIL DRAWINGS, INCREASE INDICATED AMOUNT OF FILL AS REQUIRED TO ACHIEVE MOST STRINGENT REQUIREMENTS.
   MINIMUM AMOUNT OF SELECT FILL: 45 INCHES
   PLASTICITY INDEX: BETWEEN 8 AND 20
   MAXIMUM LIQUID LIMIT: LESS THAN 40
   NO ORGANIC OR OTHER PERISHABLE MATERIAL
   NO STONES LARGER THAN TWO (2) INCHES
3. PLACING SELECT FILL
   FILL LIFTS: NOT EXCEEDING 8 INCHES, LOOSE LIFTS
   MINIMUM AMOUNT OF SELECT FILL: 44 INCHES
4. COMPACTION OF SELECT FILL
   MOISTURE: WITHIN (-2) PERCENT BELOW TO (3) PERCENT ABOVE OPTIMUM MOISTURE CONTENT.
   COMPACTION: 98 PERCENT MAXIMUM DENSITY, IN ACCORDANCE WITH ASTM D698
5. COMPACTION TESTING
   ATTERBERG LIMITS: ONE AT A RATE OF 5,000 CUBIC YARDS.
   COMPACTION: ONE TEST PER 3,000 SQUARE FEET PER LIFT (MINIMUM OF 3 PER LIFT)
6. THE SOILS ENGINEER SHALL BE THE OWNERS REPRESENTATIVE TO CONTROL THE PLACEMENT OF COMPACTED FILL. THE SOILS ENGINEER SHALL APPROVE THE SUB-GRADE PREPARATION, THE FILL MATERIALS, THE METHOD OF PLACEMENT AND COMPACTION, SHALL GIVE WRITTEN APPROVAL OF THE COMPLETED FILL.
7. THE SOILS REPORT/FOUNDATION INVESTIGATION IS TO BE CONSIDERED A PART OF THESE PLANS AND SHALL BE COMPLIED WITH BY THE CONTRACTOR. ALL EARTHWORK AND GRADING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE FOUNDATION INVESTIGATION OR PER NOTES 1 THRU 4 ABOVE WHICHEVER HAS THE MOST STRINGENT REQUIREMENTS.
8. IN THE EVENT FOUNDATION EXCAVATIONS ARE CARRIED TO A DEPTH GREATER THAN REQUIRED, THE ADDITIONAL DEPTH SHALL BE FILLED WITH THE SAME CONCRETE AS THAT USED FOR FOOTING AT NO ADDITIONAL EXPENSE TO THE OWNER. NO UNCONTROLLED FILL WILL BE PERMITTED. REFER TO GEOTECHNICAL INVESTIGATION REPORT FOR GROUND WATER ELEVATIONS AND SOIL CONDITIONS. DEWATERING SHALL BE ANTICIPATED BY THE CONTRACTOR.
9. THE FOOTING EXCAVATIONS SHALL BE KEPT FREE FROM LOOSE MATERIAL AND STANDING WATER.
10. THE FOUNDATION EXCAVATIONS SHOULD BE OBSERVED BY THE SOILS ENGINEER PRIOR TO STEEL OR CONCRETE PLACEMENT TO ASSESS THAT THE FOUNDATION MATERIALS ARE CAPABLE OF SUPPORTING THE DESIGN LOADS AND ARE CONSISTENT WITH THE MATERIALS DISCUSSED IN THE REPORT. THIS IS ESPECIALLY IMPORTANT TO IDENTIFY THE ACCEPTABILITY OF THE SUBGRADE OR FILL MATERIAL UNDER THE FOOTING. SOFT OR LOOSE SOIL ZONES ENCOUNTERED AT THE BOTTOM OF THE FOOTING OR BEAM EXCAVATIONS SHOULD BE REMOVED TO THE LEVEL OF COMPETENT SOIL AS DIRECTED BY THE GEOTECHNICAL ENGINEER. CAVITIES FORMED AS A RESULT OF EXCAVATION OF SOFT OR LOOSE SOIL ZONES SHOULD BE BACKFILLED WITH LEAN CONCRETE OR SELECT FILL AS DETERMINED BY THE GEOTECHNICAL ENGINEER .
11. CARE SHOULD BE TAKEN TO SHAPE THE BUILDING AREAS SUCH THAT WATER WILL NOT POND AROUND THE STRUCTURE DURING CONSTRUCTION AND CAUSE THE NEAR SURFACE CLAYS TO SWELL. THE PROPOSED STRUCTURE SHALL BE ISOLATED FROM ANY MOISTURE SOURCE WHICH MIGHT ALSO CAUSE SWELLING OF THE CLAYS AFTER COMPLETION OF THE CONSTRUCTION.
12. WHEN THE STRUCTURE IS COMPLETE, THE GROUND SURFACE SHOULD SLOPE AWAY FROM THE STRUCTURE AND DOWN SPOUTS SHOULD CARRY RUNOFF WATER SEVERAL FEET FROM THE BUILDING, PREFERABLY INTO PAVED AREAS OR BEWERS, BEFORE DISCHARGING.
13. DO NOT PLANT OR LEAVE IN PLACE DEEP ROOTED TREES WITHIN PROXIMITY TO THE PERIMETER OF THE STRUCTURE. DEEP ROOTED TREES HAVE POTENTIAL TO REMOVE MOISTURE FROM BENEATH THE BUILDING IF PLANTED CLOSE ENOUGH TO ALLOW THE ROOT BULB EXTEND NEAR OR BENEATH THE BUILDING.
14. AIR CONDITIONING CONDENSER DRAIN LINES TO DISCHARGE WATER A MINIMUM OF 5 FEET FROM THE PERIMETER OF THE STRUCTURE. THE DISCHARGE AREA SHALL HAVE SUFFICIENT SLOPE AWAY FROM THE STRUCTURE TO PREVENT STANDING WATER.

FOUNDATION NOTES

1. FOR GENERAL NOTES SEE SHEET S1.1 & S1.2
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3. CONTRACTOR/SUBCONCRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS WITH ARCHITECTURAL PLANS BEFORE COMMENCING ANY WORK. THE CONTRACTOR/ SUBCONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT/ ENGINEER BEFORE THE WORK HAS BEGUN.
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12. VERIFY ALL SLAB DEPRESSIONS w/ ARCH'L DWGS. FOR EXTENT AND LOCATION.

STATE OF TEXAS
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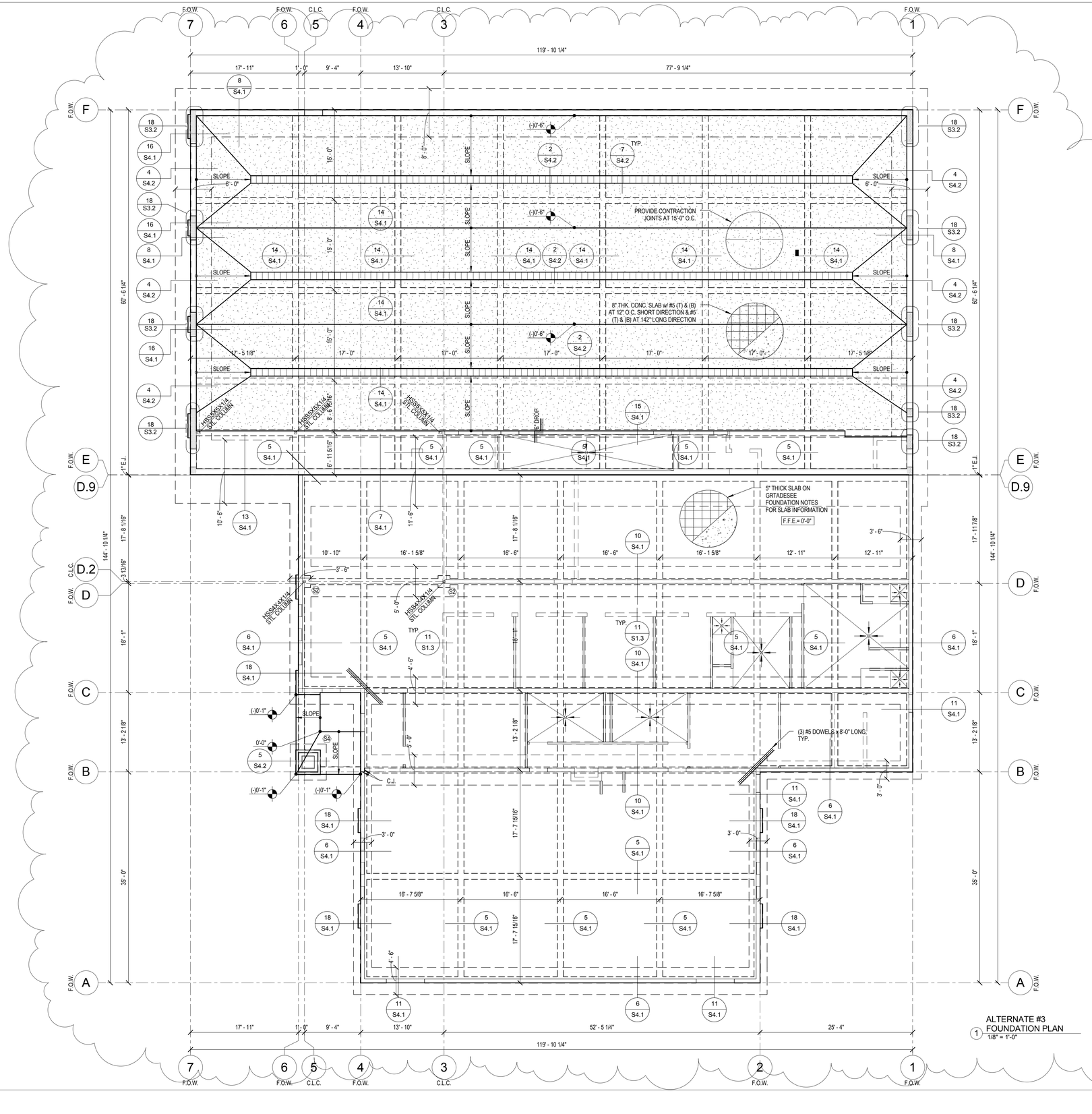
SHEET
STRUCTURAL FOUNDATION PLAN

S2.1



FOUNDATION SUBGRADE

1. PREPARATION OF EXISTING GROUND
   ALL AREAS TO SUPPORT SELECT FILL SHALL BE STRIPPED OF ALL VEGETATION AND/OR ORGANIC TOPSOIL.
   MINIMUM DEPTH OF REMOVAL: 8 INCHES
   EXTEND BEYOND BUILDING FOOT PRINT: 2 FEET
   REMOVE THE EXISTING SUBGRADE SOILS DOWN TO A MINIMUM ELEVATION OF: 80.75' AMSL

   EXTEND BEYOND BUILDING FOOT PRINT 3 FEET
   THE EXPOSED SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF 6 INCHES AND MOISTURE CONDITIONED FROM 0 TO 3% ABOVE OPTIMUM. THE SUBGRADE SHALL BE COMPACTED TO 95 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY THE STANDARD MOISTURE-DENSITY RELATION (ASTM D-698). FOLLOWING COMPLETE CLEARING AND PREPARATION OF THE SITE FOR CONSTRUCTION, THE GEOTECHNICAL ENGINEER SHALL OBSERVE THE SITE TO DETERMINE THAT SATISFACTORY PREPARATION HAS BEEN ACCOMPLISHED.
2. SELECT FILL MATERIAL
   A) THE FOLLOWING SOILS, AS CLASSIFIED ACCORDING TO THE USCS MAY BE CONSIDERED SATISFACTORY FOR USE AS SELECT FILL MATERIALS AT THIS SITE: SM, SC, GM, GC, CH, MH, AND COMBINATIONS OF THESE SOILS.
   B) AGGREGATE BASE COURSE
   THE CLAYEY GRAVEL AND CALICHE MATERIALS SHOULD MEET THE GRADATION REQUIREMENTS OF ITEM 247, TYPE B, GRADES 1 THROUGH 3 AS SPECIFIED IN THE 2004 TXDOT STANDARD SPECIFICATIONS MANUAL AND A PLASTICITY INDEX BETWEEN 7 AND 20. CRUSHED LIMESTONE OR CRUSHED CONCRETE MATERIAL SHOULD MEET THE REQUIREMENTS OF 2004 TXDOT ITEM 247, TYPE A OR D, GRADE 1. THE SELECT FILL MATERIALS SHOULD BE FREE OF ORGANIC MATERIAL AND DEBRIS, AND SHOULD NOT RETAIN STONES LARGER THAN 2 INCHES IN THE MAXIMUM DIMENSION.
   C) THE FOLLOWING SOILS, AS CLASSIFIED ACCORDING TO THE USCS, ARE NOT CONSIDERED SATISFACTORY FOR USE AS SELECT FILL MATERIALS AT THIS SITE: AS, CH, MH, OH, OL AND PT. THE NATURE OF SOILS AT THIS SITE ARE NOT CONSIDERED SUITABLE FOR USE AS SELECTED FILL MATERIAL.
   * FINISH FLOOR SHALL BE 18" MINIMUM ABOVE TOP OF CURB ELEVATION OR 18" MINIMUM ABOVE CROWN OF STREET, OR AS INDICATED ON CIVIL DRAWINGS, INCREASE INDICATED AMOUNT OF FILL AS REQUIRED TO ACHIEVE MOST STRINGENT REQUIREMENTS
   MINIMUM AMOUNT OF SELECT FILL: 45 INCHES
   PLASTICITY INDEX: BETWEEN 8 AND 20
   MAXIMUM LIQUID LIMIT: LESS THAN 40
   NO ORGANIC OR OTHER PERISHABLE MATERIAL
   NO STONES LARGER THAN TWO (2) INCHES
3. PLACING SELECT FILL
   FILL LIFTS: NOT EXCEEDING 8 INCHES, LOOSE LIFTS
   MINIMUM AMOUNT OF SELECT FILL: 44 INCHES
4. COMPACTION OF SELECT FILL
   MOISTURE: WITHIN (-2) PERCENT BELOW TO (3) PERCENT ABOVE OPTIMUM MOISTURE CONTENT
   COMPACTION: 98 PERCENT MAXIMUM DENSITY, IN ACCORDANCE WITH ASTM D698
5. COMPACTION TESTING
   ATTERBERG LIMITS: ONE AT A RATE OF 5,000 CUBIC YARDS.
   COMPACTION: ONE TEST PER 3,000 SQUARE FEET PER LIFT (MINIMUM OF 3 PER LIFT)
6. THE SOILS ENGINEER SHALL BE THE OWNERS REPRESENTATIVE TO CONTROL THE PLACEMENT OF COMPACTED FILL. THE SOILS ENGINEER SHALL APPROVE THE SUB-GRADE PREPARATION, THE FILL MATERIALS, THE METHOD OF PLACEMENT AND COMPACTION, SHALL GIVE WRITTEN APPROVAL OF THE COMPLETED FILL.
7. THE SOILS REPORT/FOUNDATION INVESTIGATION IS TO BE CONSIDERED A PART OF THESE PLANS AND SHALL BE COMPLIED WITH BY THE CONTRACTOR. ALL EARTHWORK AND GRADING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE FOUNDATION INVESTIGATION OR PER NOTES 1 THRU 4 ABOVE WHICHEVER HAS THE MOST STRINGENT REQUIREMENTS.
8. IN THE EVENT FOUNDATION EXCAVATIONS ARE CARRIED TO A DEPTH GREATER THAN REQUIRED, THE ADDITIONAL DEPTH SHALL BE FILLED WITH THE SAME CONCRETE AS THAT USED FOR FOOTING AT NO ADDITIONAL EXPENSE TO THE OWNER. NO UNCONTROLLED FILL WILL BE PERMITTED. REFER TO GEOTECHNICAL INVESTIGATION REPORT FOR GROUND WATER ELEVATIONS AND SOIL CONDITIONS. DEWATERING SHALL BE ANTICIPATED BY THE CONTRACTOR.
9. THE FOOTING EXCAVATIONS SHALL BE KEPT FREE FROM LOOSE MATERIAL AND STANDING WATER.
10. THE FOUNDATION EXCAVATIONS SHOULD BE OBSERVED BY THE SOILS ENGINEER PRIOR TO STEEL OR CONCRETE PLACEMENT TO ASSESS THAT THE FOUNDATION MATERIALS ARE CAPABLE OF SUPPORTING THE DESIGN LOADS AND ARE CONSISTENT WITH THE MATERIALS DISCUSSED IN THE REPORT. THIS IS ESPECIALLY IMPORTANT TO IDENTIFY THE ACCEPTABILITY OF THE SUBGRADE OR FILL MATERIAL UNDER THE FOOTING. SOFT OR LOOSE SOIL ZONES ENCOUNTERED AT THE BOTTOM OF THE FOOTING OR BEAM EXCAVATIONS SHOULD BE REMOVED TO THE LEVEL OF COMPETENT SOIL AS DIRECTED BY THE GEOTECHNICAL ENGINEER. CAVITIES FORMED AS A RESULT OF EXCAVATION OF SOFT OR LOOSE SOIL ZONES SHOULD BE BACKFILLED WITH LEAN CONCRETE OR SELECT FILL AS DETERMINED BY THE GEOTECHNICAL ENGINEER.
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E-MAIL: HinojosaEngInc@aol.com
REGISTRATION NUMBER F908 EXPIRATION DATE 09/30/2016

Milnet Architectural Services
AMERICAN INSTITUTE OF ARCHITECTS

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S2.1A

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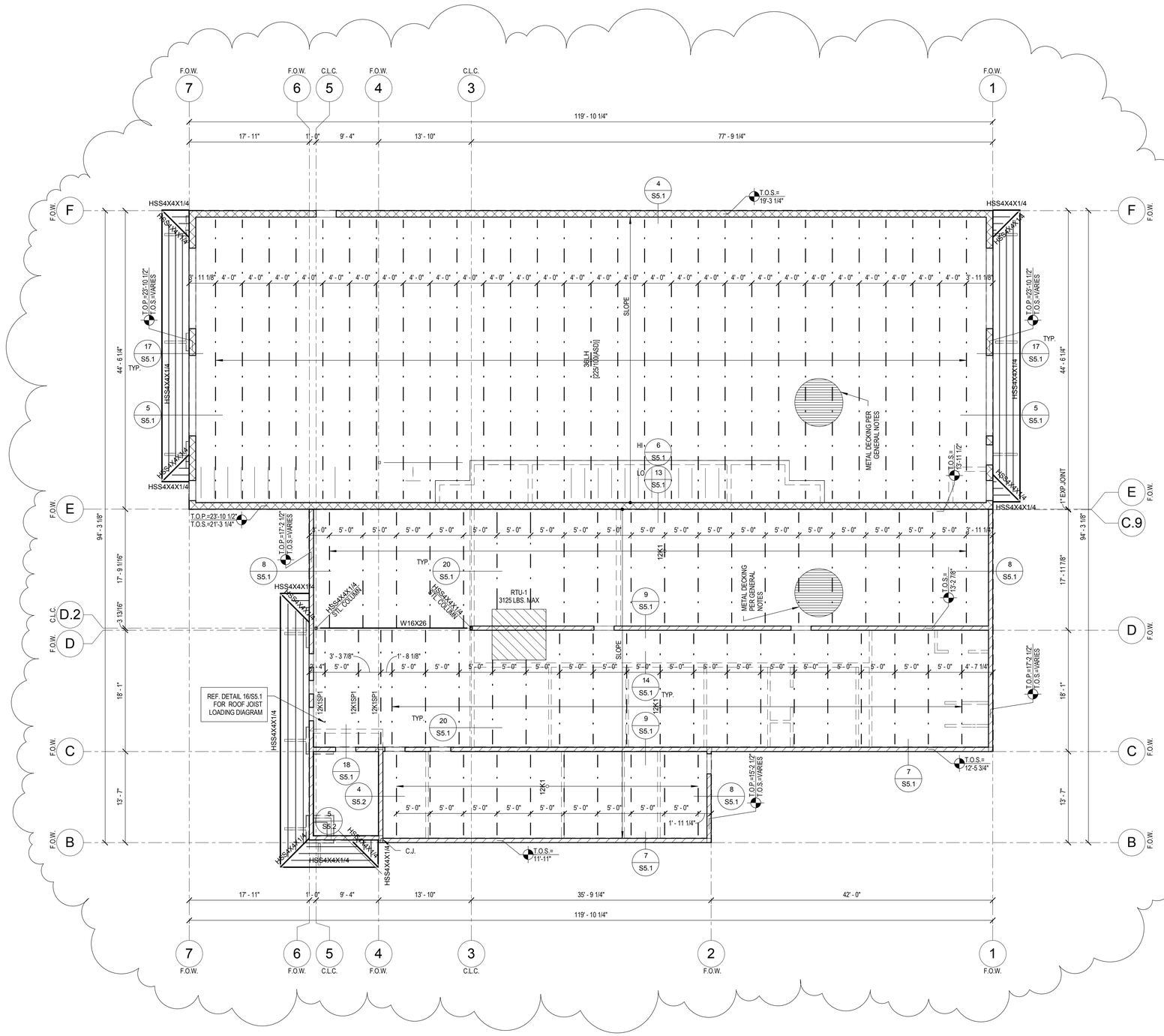

ROOF COMPONENT AND CLADDING GROSS WIND PRESSURES

ROOF ZONE		TRIBUTARY AREA					
		10 SF.		20 SF.		50 SF.	
		GCp(+)	GCp(-)	GCp(+)	GCp(-)	GCp(+)	GCp(-)
#1	INTERM.	+18.6	-45.6	+17.4	-44.5	+15.9	-42.9
#2	EDGE	+18.6	-76.6	+17.4	-68.4	+15.9	-57.6
#3	CORN.	+18.6	-115.2	+17.4	-95.4	+15.9	-69.3

(-) INDICATES AN UPWARD DIRECTION

*WIND PRESSURES SHOWN ARE GROSS VALUES USING LOAD RESISTANCE FACTOR DESIGN (LRFD).
*NET UPLIFT IS THE GROSS UPLIFT MINUS THE ALLOWABLE PORTION OF DEAD LOAD INCLUDING THE WEIGHT OF THE JOIST.
*EDGE DISTANT ("a")=8 ft.
*ALLOWABLE PORTION OF DEAD LOAD TO BE SUBTRACTED FROM GROSS UPLIFT= 10 PSF.
*ULTIMATE DESIGN WIND SPEED= 140 MPH.

1. DOORS & WINDOWS MAXIMUM DESIGN WIND PRESSURES:
   P+ = +45.6 TOWARDS THE SURFACE.
   P- = -61.1 AWAY FROM THE SURFACE.
2. THE STRUCTURE IS DESIGNED TO MEET ASCE 7-10 WIND PRESSURES. ALL COMPONENTS AND CLADDING (EX. WINDOWS, DOORS, RTU'S AND ARCHITECTURAL COPING AND ROOFING MATERIALS); SHALL MEET MINIMUM CODE REQUIREMENTS.

2 WIND LOAD ZONE DIAGRAMS

FRAMING NOTES

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3. DIMENSIONS ARE SHOWN FOR GENERAL INFORMATION. COORDINATE WITH ARCHITECTURAL PLANS.
4. SEE ARCHITECTURAL ROOF PLAN FOR ROOF HATCHES.
5. DESIGN JOISTS UNDER UNITS WITH LOADS INDICATED ON THE DRAWINGS. STEEL JOIST MANUFACTURER TO PROVIDE STEEL JOIST SIZE (MAX JOIST DEPTH TO BE AS SHOWN ON PLANS) DESIGN JOIST FOR 1/600. (MECHANICAL WEIGHT + DEAD LOAD ONLY) COORDINATE OPENINGS WITH MECHANICAL PLANS.
6. JOIST MANUFACTURER TO VERIFY THE MINIMUM ROW OF BRIDGING AND BRIDGING SIZE, AS REQUIRED BY SJI.
7. STEEL BEAM TO STEEL COLUMN CONNECTION PER DETAIL: 15 S1.3
8. STEEL BEAM TO STEEL BEAM CONNECTION PER DETAIL: 16 S1.3
9. ALL STEEL COLUMN SHALL BE HSS 5x5x1/4 U.N.O. ON PLANS.
10. WHERE STEEL JOIST IS SUPPORTED BY A STEEL COLUMN, SEE DETAIL: 18 S1.3
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12. [CMU] INDICATES 12" CMU WALL (2) #6 (V) AT 48" AND (2) #5 (H) AT 48" O.C., U.N.O. VERIFY CMU WALLS THICKNESS WITH ARCHITECTURAL PLANS. 12" WALLS SHOWN ON STRUCTURAL PLANS ARE MINIMUM THICKNESS AND GOVERN OVER ARCHITECTURAL DRAWINGS.
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1 BASE BID
FRAMING PLAN
1/8" = 1'-0"

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S3.1

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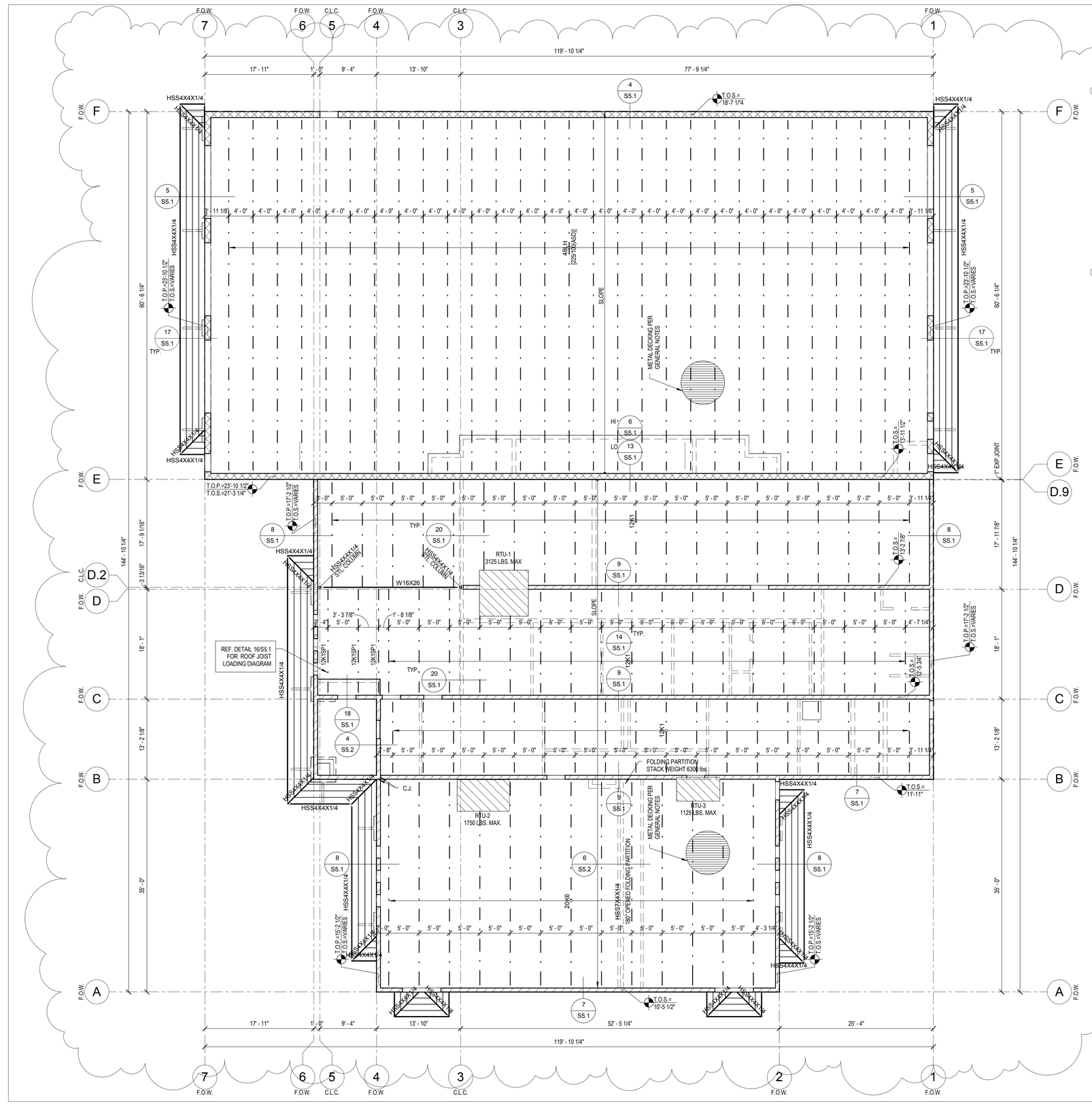

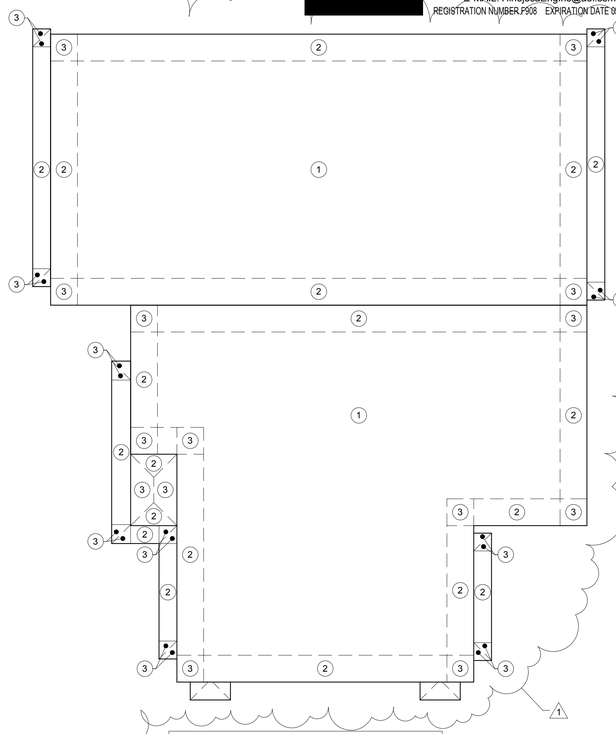

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1 ALTERNATE #3 FRAMING PLAN
1/8" = 1'-0"

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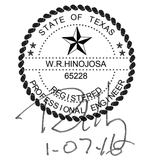
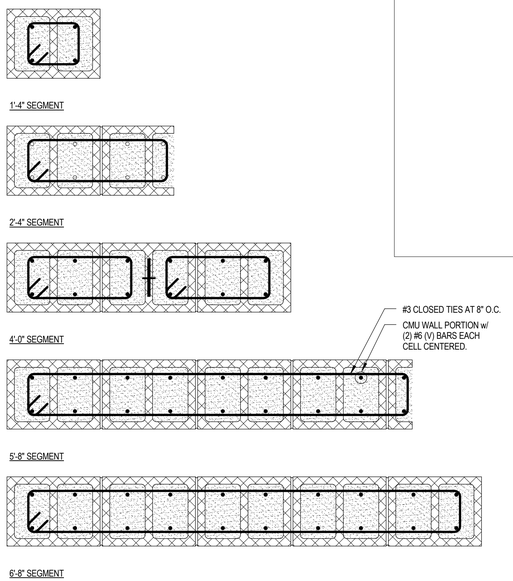
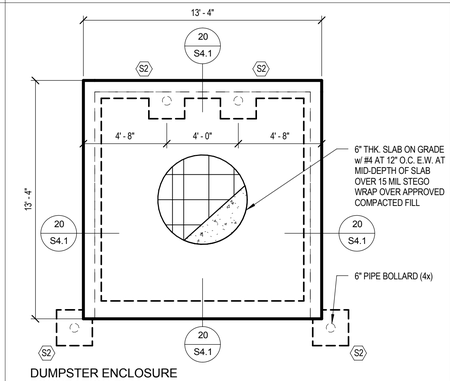
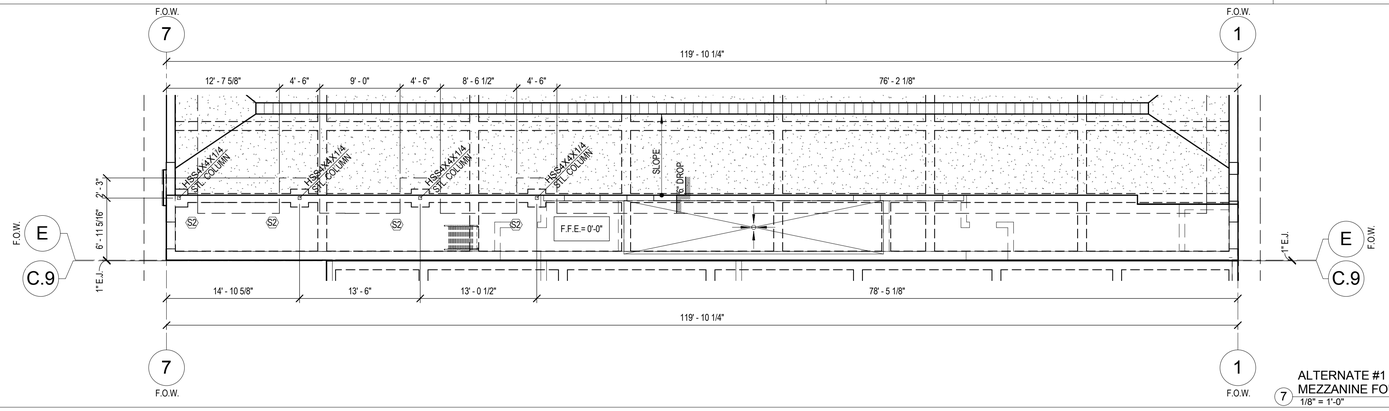




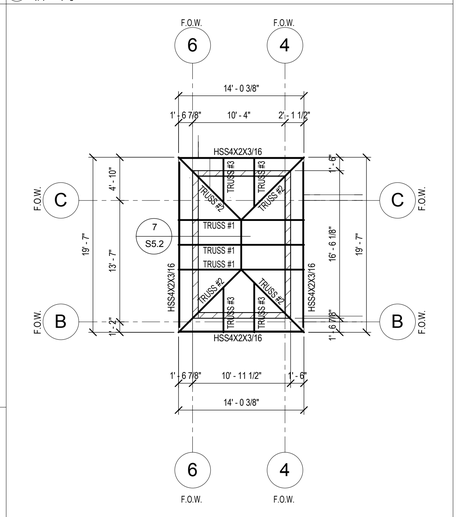
18 12" WALL SEGMENTS



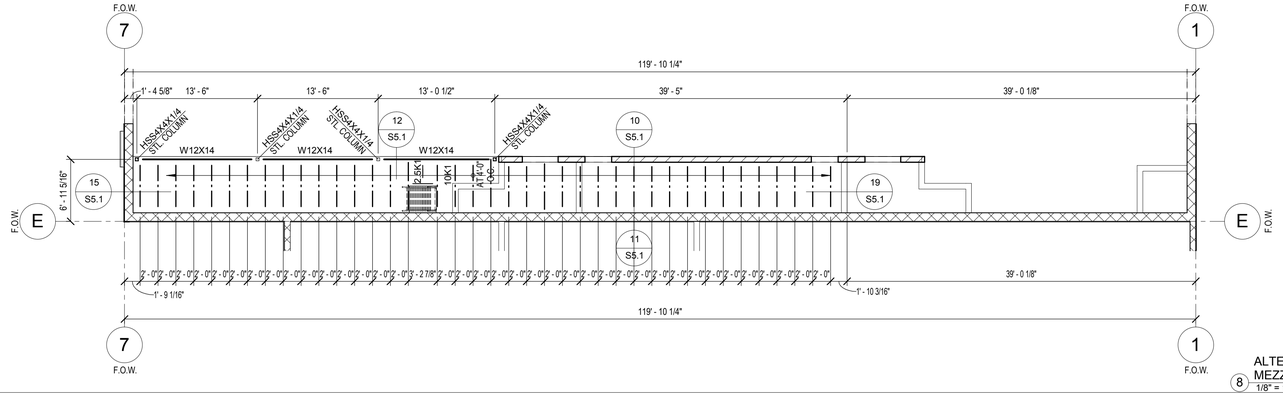
2 DUMPSTER ENCLOSURE FOUNDATION PLAN
1/4" = 1'-0"



7 ALTERNATE #1
MEZZANINE FOUNDATION PLAN
1/8" = 1'-0"



4 HIGH TOWER FRAMING PLAN
1/8" = 1'-0"



8 ALTERNATE #1
MEZZANINE FRAMING PLAN
1/8" = 1'-0"

EDINBURG FIRE STATION #5
CITY OF EDINBURG
JASMAN RD & FM2812

PROJECT NUMBER
15-118

DATE
09-16-15

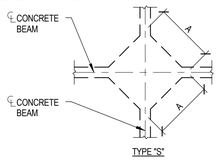
1 ADDENDUM #1
01-17-16

SHEET
STRUCTURAL FRAMING PLAN

S3.2

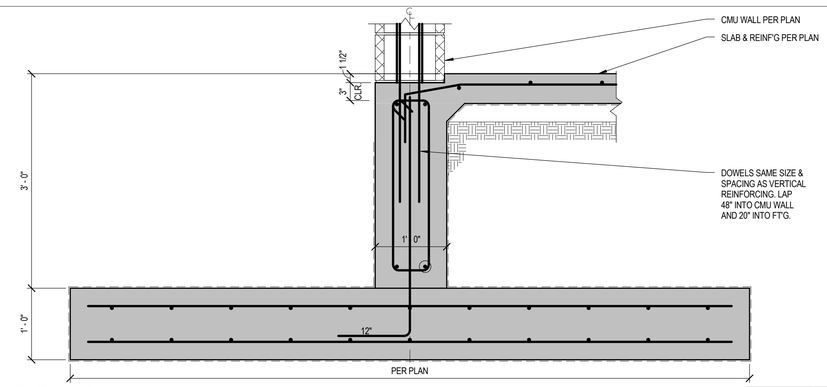
FOOTING SCHEDULE					
TYPE	A	B	C	D	REINFORCING
S2	2'-0"			3'-0"	#5'S @ 10" O.C. E.W TOP & BOTT.
S4	4'-0"			3'-0"	#5'S @ 10" O.C. E.W TOP & BOTT.
S7	7'-0"			3'-0"	#5'S @ 10" O.C. E.W TOP & BOTT.
S5	5'-0"			3'-0"	#5'S @ 10" O.C. E.W TOP & BOTT.

NOTES:
1. D = FOOTING DEPTH BELOW FINISH FLOOR.
2. FOOTING DIMENSIONS ARE FOR BIDDING PURPOSES ONLY. ACTUAL DIMENSION MAY VARY.
3. PROVIDE UNIT PRICES (ON A CUBIC YARD BASIS) FOR REINFORCED (#5'S @ 12" O.C. E.W. TOP & BOTT.) WIDENED BEAM CONCRETE FOOTINGS.



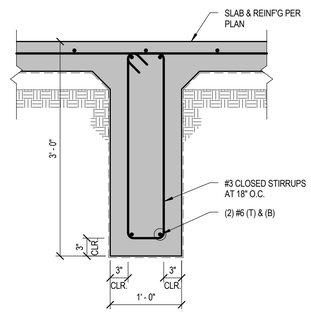
WIDENED BEAM FOOTINGS

17 FOOTING SCHEDULE 1



13 EXTERIOR GRADE BEAM

FOR ADDITIONAL INFO SEE DETAIL 2 S4.1



5 INTERIOR GRADE BEAM

FOR ADDITIONAL INFO SEE DETAIL 2 S4.1

HINOJOSA ENGINEERING, INC.
STRUCTURAL ENGINEERING
CIVIL ENGINEERING • LAND SURVEYING
108 W. 18TH ST. MISSION , TEXAS
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E-MAIL: HinojosaEngInc@aol.com
REGISTRATION NUMBER F908 EXPIRATION DATE 09/30/2016

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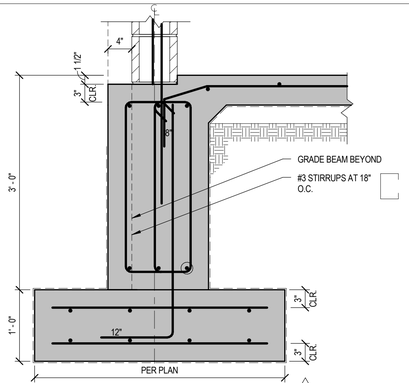
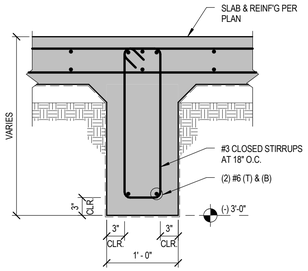


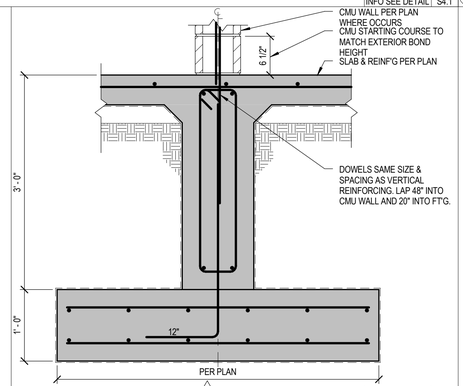
18 EXTERIOR GRADE BEAM AT BRICK VENEER 1

FOR ADDITIONAL INFO SEE DETAIL 8 S4.1



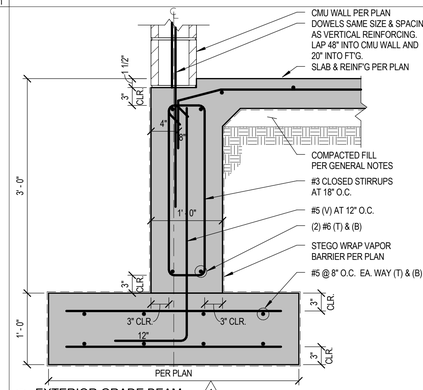
14 INTERIOR GRADE BEAM 1

FOR ADDITIONAL INFO SEE DETAIL 2 S4.1

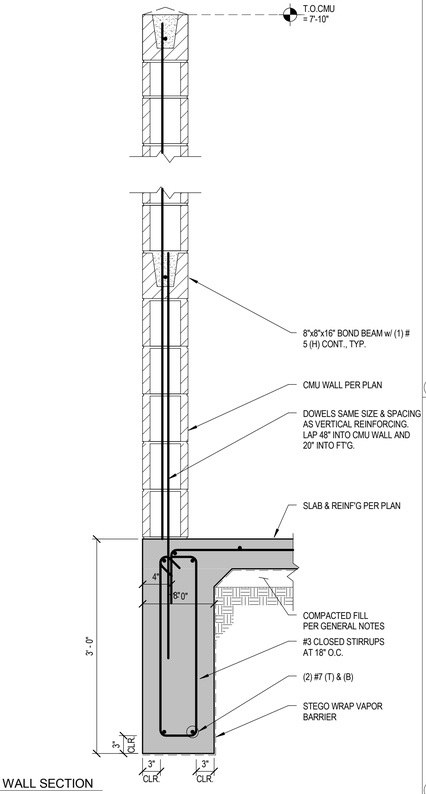


10 INTERIOR GRADE BEAM 1

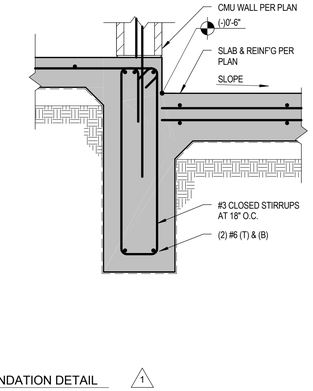
FOR ADDITIONAL INFO SEE DETAIL 2 S4.1



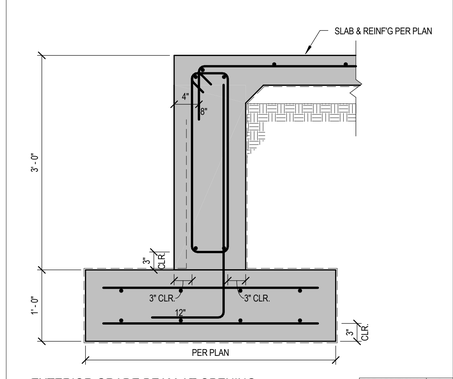
2 EXTERIOR GRADE BEAM 1



20 WALL SECTION

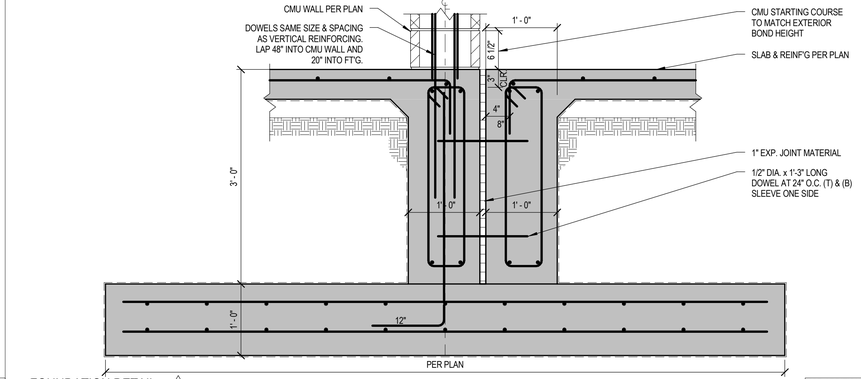


15 FOUNDATION DETAIL 1



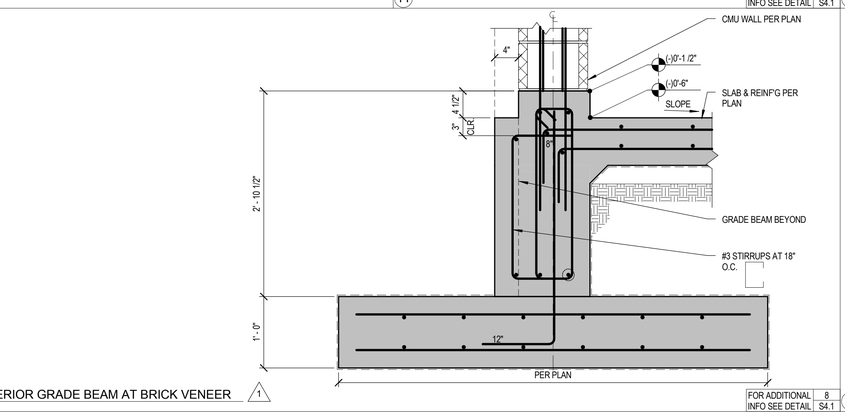
11 EXTERIOR GRADE BEAM AT OPENING

FOR ADDITIONAL INFO SEE DETAIL 2 S4.1



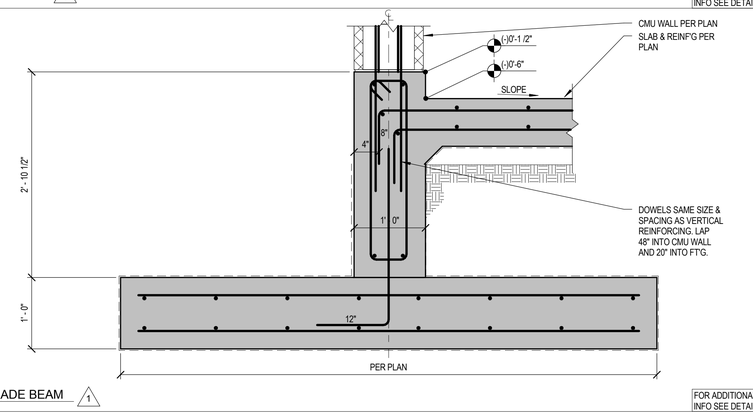
7 FOUNDATION DETAIL 1

FOR ADDITIONAL INFO SEE DETAIL 2 S4.1



16 EXTERIOR GRADE BEAM AT BRICK VENEER 1

FOR ADDITIONAL INFO SEE DETAIL 8 S4.1



8 EXTERIOR GRADE BEAM 1

FOR ADDITIONAL INFO SEE DETAIL 2 S4.1

EDINBURG FIRE STATION #5
CITY OF EDINBURG
JASMAN RD & FM2812

PROJECT NUMBER
15-118

DATE
09-16-15

1 ADDENDUM #1
01-17-16

SHEET
STRUCTURAL FOUNDATION DETAILS

S4.1

HINOJOSA
ENGINEERING, INC.
STRUCTURAL ENGINEERING
CIVIL ENGINEERING • LAND SURVEYING
108 W. 18TH ST. MISSION , TEXAS
(956) 581-0143 FAX:(956) 581-2071
E-MAIL: HinojosaEngInc@aol.com
REGISTRATION NUMBER F908 EXPIRATION DATE 09/30/2016

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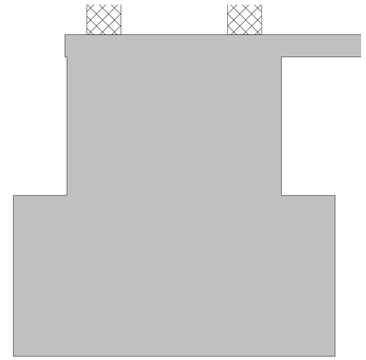
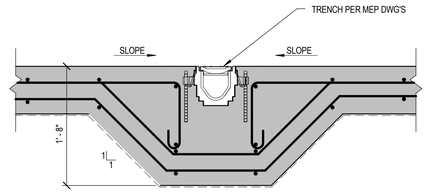
Services
AMERICAN INSTITUTE OF ARCHITECTS

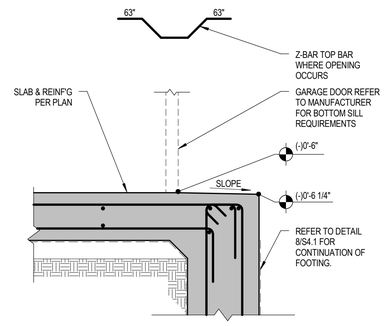


5 FOUNDATION DETAIL



2 TRENCH DETAIL

7 INT. GRADE BEAM AT TRENCH



4 FOOTING AT GARAGE DOOR

FOR ADDITIONAL INFO SEE DETAIL 8 S4.1

STATE OF TEXAS
W.R.HINOJOSA
65228
REGISTERED
PROFESSIONAL ENGINEER
1-07-16

EDINBURG FIRE STATION #5
CITY OF EDINBURG
JASMAN RD & FM2812

PROJECT NUMBER
15-118

DATE
09-16-15

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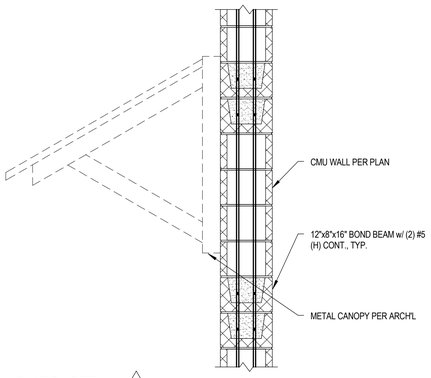
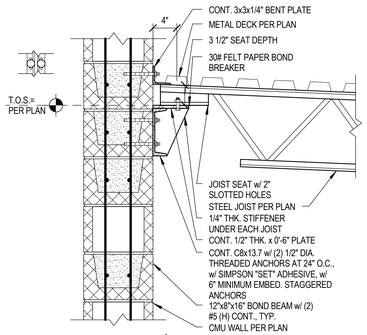
01-17-16

SHEET
STRUCTURAL
FOUNDATION DETAILS

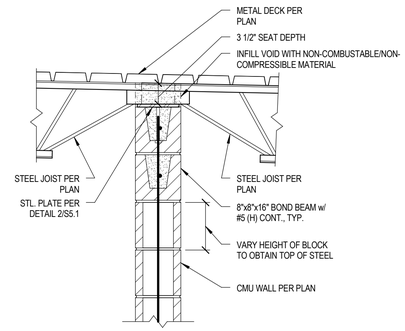
S4.2



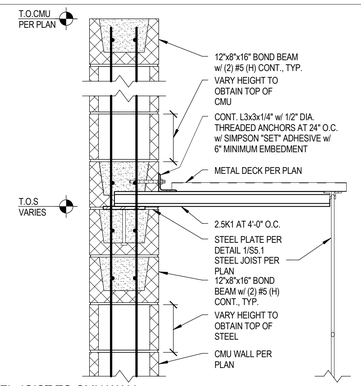
17 CANOPY DETAIL 1



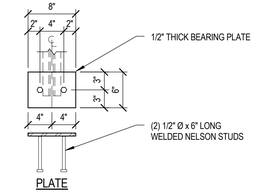
13 STEEL JOIST TO CMU WALL 1



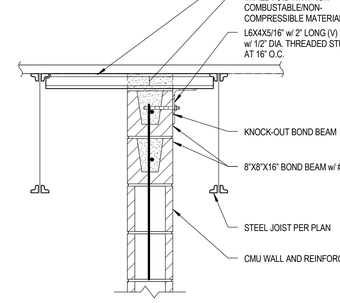
9 STEEL JOIST TO CMU WALL 1



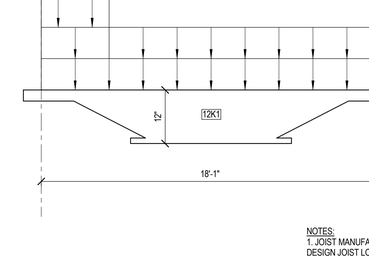
5 STEEL JOIST TO CMU WALL 1



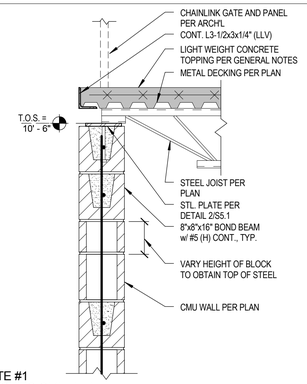
1 1/2" SINGLE JOIST BEARING PLATE 1



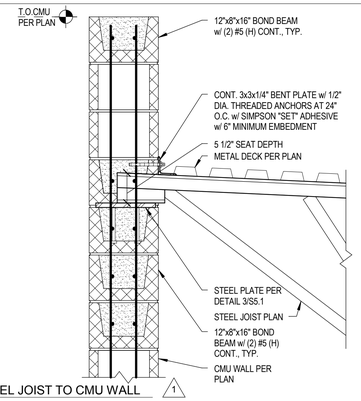
18 STEEL JOIST TO CMU WALL 1



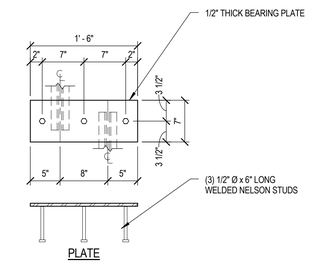
14 TYP. CMU WALL TO METAL DECK 1



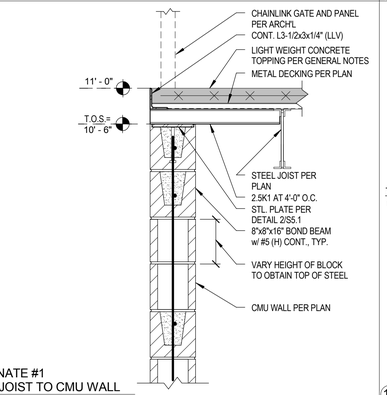
ALTERNATE #1
10 STEEL JOIST TO CMU WALL



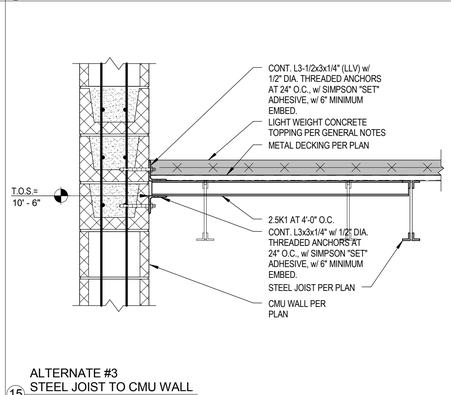
6 STEEL JOIST TO CMU WALL 1



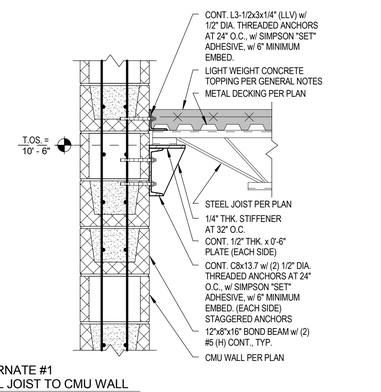
2 1/2" OFFSET JOIST BEARING PLATE 1



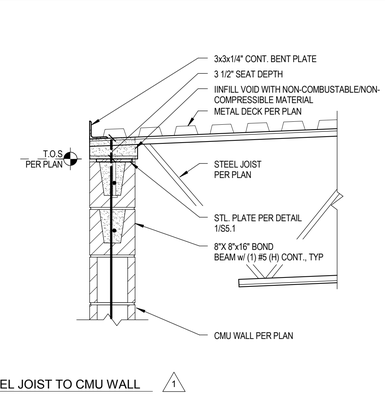
ALTERNATE #1
19 STEEL JOIST TO CMU WALL



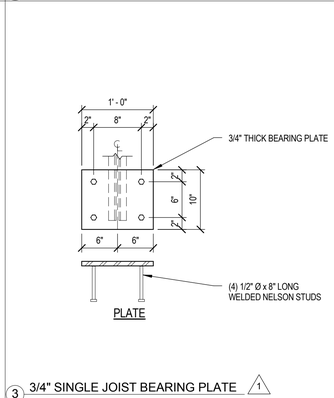
ALTERNATE #3
15 STEEL JOIST TO CMU WALL



ALTERNATE #1
11 STEEL JOIST TO CMU WALL



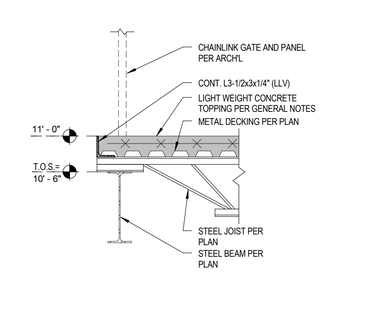
7 STEEL JOIST TO CMU WALL 1



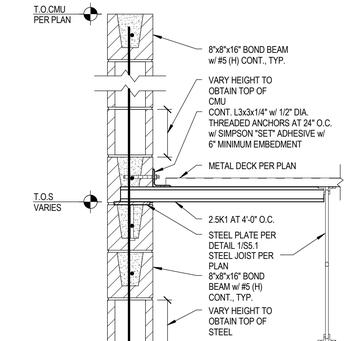
3 3/4" SINGLE JOIST BEARING PLATE 1

20 TYP. CMU WALL TO METAL DECK 1

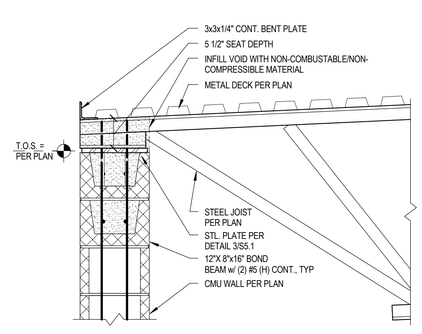
16 JOIST LOADING DIAGRAM



ALTERNATE #1
12 STEEL JOIST TO STEEL BEAM



8 STEEL JOIST TO CMU WALL 1



4 STEEL JOIST TO CMU WALL 1

HINOJOSA ENGINEERING, INC.
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Milnet Architectural Services
AMERICAN INSTITUTE OF ARCHITECTS

STATE OF TEXAS
W.R.HINOJOSA
65228
REGISTERED PROFESSIONAL ENGINEER
1-07-16

EDINBURG FIRE STATION #5
CITY OF EDINBURG
JASMAN RD & FM2812

PROJECT NUMBER
15-118

DATE
09-16-15

1 ADDENDUM #1
01-17-16

SHEET
STRUCTURAL FRAMING DETAILS

S5.1

HINOJOSA
ENGINEERING, INC.
STRUCTURAL ENGINEERING
CIVIL ENGINEERING • LAND SURVEYING
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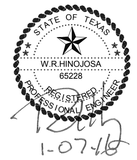
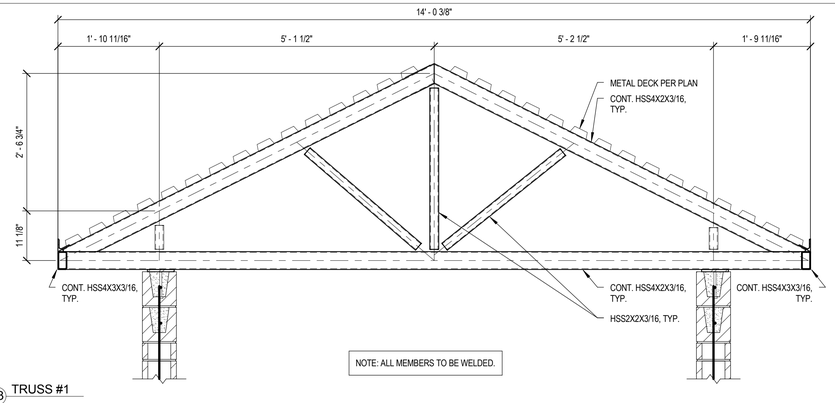
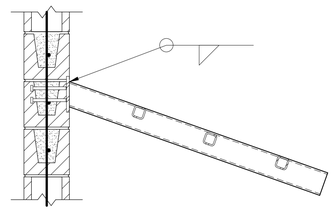
AMERICAN INSTITUTE OF ARCHITECTS

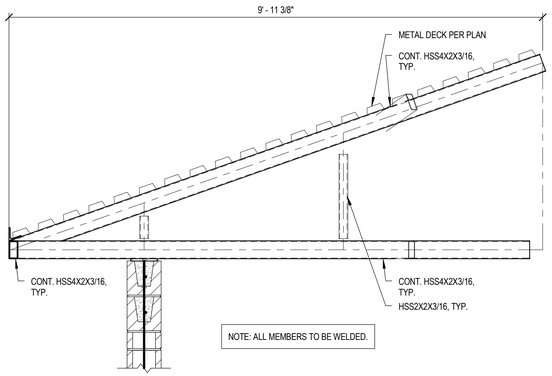




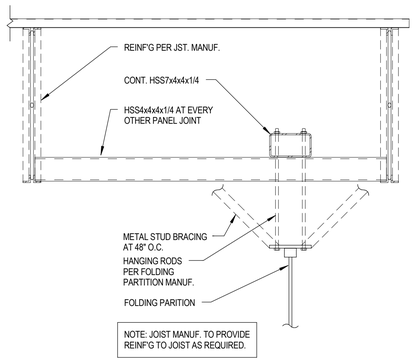
13 TRUSS #1



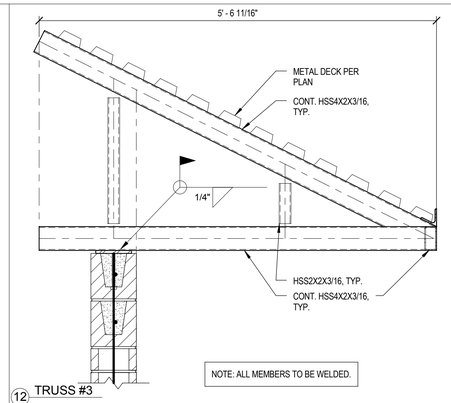
5 CANOPY DETAIL



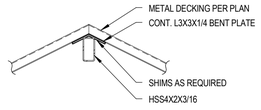
14 TRUSS #2



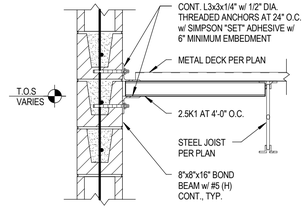
6 FOLDING PARTITION SUPPORT



12 TRUSS #3



7 TYP. HIGH TOWER HIP/RIDE DETAIL



4 FRAMING SECTION

EDINBURG FIRE STATION #5
CITY OF EDINBURG
JASMAN RD & FM2812

PROJECT NUMBER
15-118

DATE
09-16-15

1 ADDENDUM #1
01-17-16

SHEET
STRUCTURAL FRAMING DETAILS

S5.2

200 South 10th Street
Suite 901
McAllen, TX 78501

v 956.683.1640
f 956.683.1903

www.dbrinc.com

Addendum

DATE
January 7, 2016

ADDENDUM NO. 1

PROJECT 14815.000 | Edinburg Fire Station #5

The work described herein shall be added to the scope of work defined by the contract documents or it shall modify the scope of work defined by the contract documents as described. This work shall become a part of the contract documents by addendum.

DRAWINGS

Item 01 **Sheet M2.1**

A. Mechanical plan shows complete drawings including all alternates.
B. For base bid in bay area, third bay was removed. Shift all equipment to fit in two bays. Remove 2 Airvac units, for two bay in lieu of 3 bays. Remove gas heaters number 5 and 6.
C. Remove FPB-10 and associated ductwork and grills and make FPB-9 725 cfm in lieu of 500. Add a supply diffuser to the entry corridor and balance it to 75 cfm. Also extend the ductwork to new location of supply room and add a supply diffuser balanced to 100 cfm. Readjust the dustless mini-split and condensing unit as well.
D. Resize and relocate the condensate drain lines to new location of room 109.
E. Mechanical drawing show complete drawing including alternate 3. Alternate three is including the community rooms. For base bid remove rooftop units, ductwork, grilles and controls serving the community rooms only.
F. For base bid remove exhaust fan number 4 and everything associated with it.

Item 02 **Sheet EL2.1**

A. Lighting plan shown is to be provided as part of Alternate #4. Base bid plan shall have two (2) bays in Garage #124 in lieu of the three (3) shown. For base bid remove one row of type 'A2' light fixtures connected to circuit LB-1 and rearrange the remaining fixtures for adequate coverage. Remove associated lighting controls for fixtures removed.
B. For base bid remove two (2) type 'WP' exterior wall pack fixtures, one at west side and one at east side as required for two bays instead of three.

Item 03 **Sheet EP2.1**

A. Power plan shown is to be provided as part of Alternate #4. Base bid plan shall have two (2) bays in Garage #124 in lieu of the three (3) shown. For base bid remove electrical items associated with the additional bay including: electrical circuit and controls for overhead doors, electrical receptacles at east and west walls and all electrical associated with any mechanical items to be removed.

Item 04 **Sheet MEP2.1 – MEP Site Plan**

A. Alternate #2 – Wash Area - Route 2" domestic water up and stub up with 2" threaded fitting. Re: MEP2.1.
B. Alternate # 2 – Wash Area – Provide catch basin CB-1 at wash area. Provide catch basin type "CC" inlet with junction box lid. Re: MEP2.1 and detail 6/P4.3.
C. Remove one type H2 light fixture referred to in electrical keynote #13 for a total of two (2) type H2 light fixtures.

Item 05 **Sheet P2.1 – Plumbing Floor Plan**

A. Provide TP-2 for FD-1 at ESEW-1 and FD-1 at air compressor.

Addendum No.

B. If Alternate # 1 is not accepted, locate air compressor and 3"FD-1 in Garage Area floor.

C. Alternate #2 – Wash Area –Provide 2" domestic water from 2" line in Garage area and route below ground and route to remote wash area. Refer to attached P2.1 and MEP2.1 for continuation.

D. Alternate #2 – Wash Area - Route 6" oil waste line from wash area to oil/sand/mud interceptor. If Alternate # 2 is accepted upsize OSM-1 to model SOCMP-1000 capacity in lieu of 750 and upsize sanitary sewer piping to 6". Refer to attached P2.1 and MEP2.1.

E. Base Bid – Omit all utilities and plumbing fixtures (CW,HW, sanitary waste & vent) serving Women 105 and Men 106, EDF-1 in Vestibule 104 and SK-1 in Kitchen 107. Refer to architectural base bid plans.

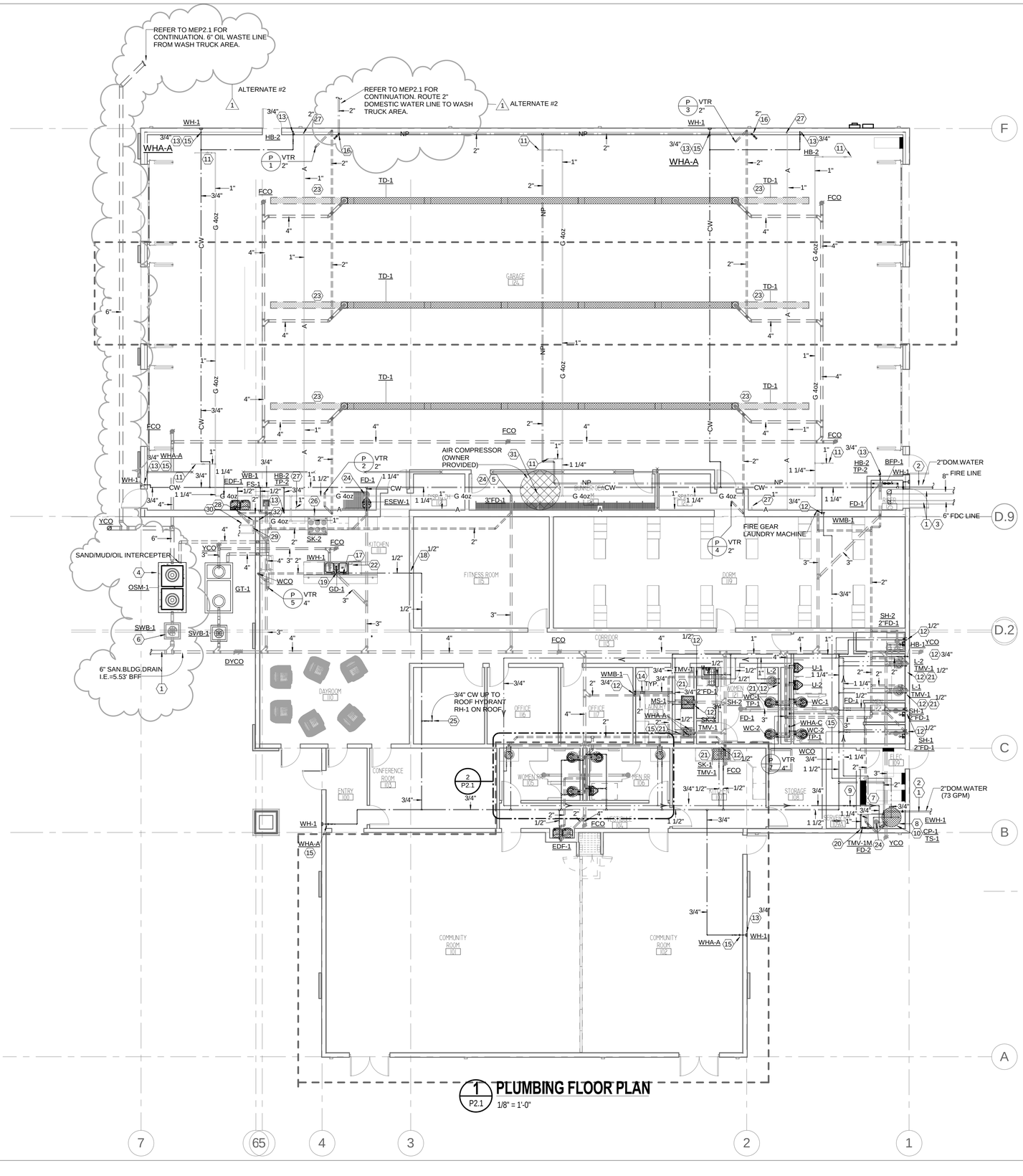
F. Base Bid – Locate EWH-1 and all associated plumbing equipment/fixtures to new location of Elec.109 including domestic water entry and wall hydrant on east wall of Elec.109. Route sanitary to nearest sanitary in Corridor 113. Refer to architectural base bid plans.

G. Base Bid – Omit TD-1 where third bay was located and locate all WH-1 on exterior wall, VTRs, and all 2"CW for "quick filling" of fire trucks to new wall of two bay floor plan. Omit gas supply to unit heaters at third bay. Gas demand in building to 438CFH. Refer to architectural base bid plans.

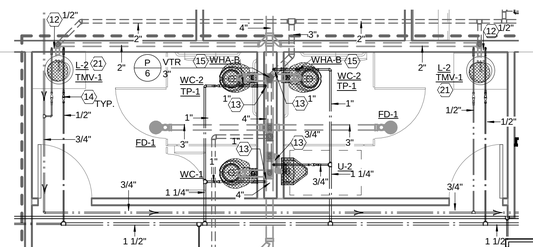
Item 06 **Sheet P4.1 – Plumbing Schedules**

A. WC-1/WC-2 provide exposed electronic battery powered sensor activated flush valve omit dual flush note.

END OF ADDENDUM



1 PLUMBING FLOOR PLAN
P2.1
1/8" = 1'-0"



2 ENLARGED PLAN - WOMEN RR 105 & MEN RR 106
P2.1
1/4" = 1'-0"

PLUMBING KEYED NOTES:

1. REFER TO CIVIL SITE UTILITY PLAN FOR CONTINUATION. CONTRACTOR TO BE RESPONSIBLE FOR COORDINATION, VERIFICATION AND CONNECTION OF ALL UTILITIES TO SITE UTILITY STUB-OUTS.
2. DOMESTI WATER ENTRY. RE: DETAIL 1/P4.2
3. FIRE SPRINKLER SYSTEM BY FIRE PROTECTION CONTRACTOR. PROVIDE FIRE SPRINKLER CONTROL/ALARM VALVE ASSEMBLY RISERS AND REMOTE FIRE DEPARTMENT CONNECTION (FDC). REFER TO CIVIL SITE PLAN FOR LOCATION OF ROADSIDE VALVE, FDC, DOUBLE CHECK VALVE BACKFLOW PREVENTER, AND POST INDICATOR VALVE. CONTRACTOR IS RESPONSIBLE FOR FINAL SIZING OF PIPES AND COMPONENTS BASED ON THEIR HYDRAULIC CALCULATIONS RE: DETAIL 21/P4.2 AND 22/P4.2.
4. PROVIDE SAND/OIL INTERCEPTOR EQUAL TO PARK MODEL NO. SOCMP-750 GALLON PRE-CAST, DIRECT BURIAL INTERCEPTOR. RE: DETAIL 1/P4.3
5. PROVDIE FLOOR DRAIN IN MEZZANINE FLOOR. ROUTE SANITARY DOWN THROUGH WALL.
6. PROVIDE SAMPLE WELL BASIN EQUAL TO PARK MODEL SWB-154, SEE DETAIL 3/P4.3.
7. COORDINATE LOCATION OF FLOOR DRAINS WITH MECHANICAL CONTRACTOR PRIOR TO SLAB CONSTRUCTION.
8. ELECTRIC WATER HEATER, REFER TO DETAIL 11/P4.2.
9. HOT WATER CIRCULATING SYSTEM BALANCING VALVE. RE: DETAIL 11/P4.2.
10. 3/4" HOT WATER RETURN DROP TO CIRCULATING PUMP (CP-1) WITH TIME SWITCH (TS-1); SEE DETAIL 19/P4.2.
11. 1" GAS (75 CFH) TO EACH HVAC EQUIPMENT, SIZE AS NOTED AND AS SHOWN ON PLAN. PROVIDE ALL FINAL ONNECTIONS AN ASSOCIATED VALVES
12. COLD AND HOT WATER DROPS TO FIXTURE(S) OR EQUIPMENT; SIZED AS NOTED. PROVIDE WATER HAMMER ARRESTORS AS INDICATED. REFER TO PLUMBING RISER DIAGRAM FOR CONTINUATION IN WALL OR CHASE.
13. COLD WATER DROP TO FIXTURE(S) OR EQUIPMENT; SIZED AS NOTED. PROVIDE WATER HAMMER ARRESTOR AS INDICATED. REFER TO PLUMBING RISER DIAGRAM FOR CONTINUATION IN WALL OR CHASE.
14. BALL VALVE ABOVE CEILING. PROVIDE ACCESS PANEL WHERE LOCATED IN AN INACCESSIBLE CEILING. PANEL SHALL BE 12"X12" PAINTED TO MATCH CEILING.
15. WATER HAMMER ARRESTOR, PROVIDE ACCESS PANEL WHERE LOCATED IN AN INACCESSIBLE WALL/CEILING. PANEL SHALL BE 12'12" PAINTED TO MATCH WALL/CEILING.
16. 2" CW (NON-POTABLE) DOWN ANCHORED TO WALL AND PROVIDE A 2" BALL VALVE WITH 2" THREADED FITTING FOR "QUICK FILLING" OF FIRE TRUCKS. EXACT LOCATION AND MOUNTING HEIGHT ABOVE FINISH FLOOR AS DIRECTED BY ARCHITECT/OWNER.
17. PROVIDE PER CODE ISLAND VENT AND WASTE, REFER TO DETAIL 10/P4.2.
18. 1/2" CW DOWN IN WALL/CHASE. CONTINUE ROUTING BELOW SLAB IN SLEEVE TO SK-2 AS SHOWN ON PLAN.
19. 1/2" CW UP FROM BELOW SLAB IN SLEEVE TO SK-2.
20. PROVIDE TMV-1M AND SUPPLY TEMPERED WATER MAXIMUM OF 110°F TO FIXTURES. RE: DETAIL 11/P4.2.
21. PROVIDE LAVATORY WITH TMV-1 SET AT MAXIMUM OF 105°F. INSTALL TMV BELOW FIXTURE AS HIGH AS POSSIBLE. RE: 12/P4.2.
22. CONNECT DISHWASHER WASTE DISCHARGE FULL SIZE TO DISPOSAL UNDER SINK WITH AIRGAP FITTING. RE: DETAIL 13/P4.2.
23. 4" WASTE DOWN FROM TRENCH DRAIN TD-1. PROVIDE ZURN MODEL No. Z812 FIBER REINFORCED POLYMER TRENCH DRAIN SYSTEM WITH STEEL FRAME. REFER TO P4.1 FOR SCHEDULE.
24. PROVIDE PROSET SYSTEMS INC. "TRAP GUARD" SEWER GAS EMISSION PROTECTION IN THIS FLOOR DRAIN. RE: DETAIL 14/P4.2.
25. 3/4" CW UP TO ROOF HYDRANT RH-1. ROUTE DRAIN TO NEAREST LAVATORY TAILPIECE. COORDINATE WITH STRUCTURAL PRIOR TO ROOF PENETRATIONS. RE: DETAIL 17/P4.2.
26. 1" GAS (213 CFH) PIPING DN IN WALL/CHASE IN PVC SLEEVE FOR STOVE. PROVIDE ALL FINAL CONNECTIONS, ASSOCIATED VALVE AND DIRT LEG.
27. COMPRESSED AIR OUTLET WITH REGULAR AUTOMOTIVE AIR HOSE BIBB FEMALE CONNECTOR AND UNIVERSAL TWIST LOCK CONNECTOR WITH 1/4 TURN GATE VALVE.
28. GAS PRESSURE REGULATOR, 7" W.C. PRESSURE SET TO DELIVER A DEMAND OF 663 CFH, 200 FT. DEVELOPED LENGTH. CONTACT GAS COMPANY AND COORDINATE EXACT LOCATION WITH OWNER. PENETRATE EXTERIOR WALL TO ROUTE GAS PIPING INSIDE BUILDING.
29. GAS METER ASSEMBLY BY LOCAL UTILITY COMPANY. TOTAL DEMAND AT 2,706 CFH.
30. 1-1/4" GAS LINE BELOW GRADE TO EMERGENCY GENERATOR; REFER TO SITE PLAN FOR CONTINUATION. PROVIDE SCHEDULE 40 PVC SLEEVE BELOW PAVED AREAS.
31. AIR LINE FROM AIR COMPRESSOR PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. CONTRACTOR TO PROVIDE ALL FINAL CONNECTIONS.
32. SLEEVE GAS PIPING THRU WALL. TYPICAL

NOTES:

A. DRAWING IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING ELEMENTS AND THE WORK OF OTHER TRADES.

B. ALL PIPING SUBJECT TO FREEZE IN GARAGE AREA SHALL BE INSULATED.

Milnet Architectural Services
AMERICAN INSTITUTE OF ARCHITECTS

STATE OF TEXAS
EDWARD PUENTES
102338
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PROFESSIONAL ENGINEER

01-07-2016

EDINBURG FIRE STATION #5
CITY OF EDINBURG
JASMAN RD & FM2812

PROJECT NUMBER
214000

DATE
JANUARY 07, 2016

1 ADDENDUM#1 01-07-16

SHEET
P2.1
OF

DBR
200 South 10th Street Suite 901
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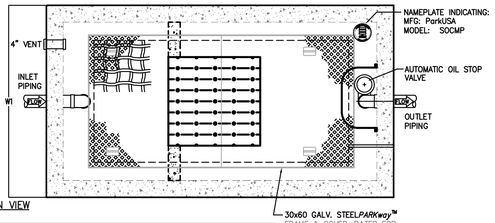
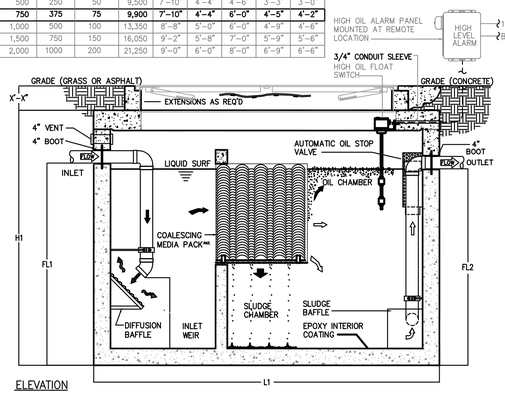
TBPE Firm Registration No. 2234

DBR Project Number	14815.000		
EP	AS	DL	MG



SAND-OIL INTERCEPTOR SCHEDULE

MODEL NO.	CAPACITY USGal	OIL CAP. US (GAL.)	FLOW RATE (GPM)	EMPTY WT (LBS)	LENGTH L1	WIDTH W1	HEIGHT H1	INLET FL1	OUTLET FL2
SOCMP-500	500	250	50	9,500	7'-10"	4'-4"	4'-6"	3'-3"	3'-0"
SOCMP-750	750	375	75	9,900	7'-10"	4'-4"	6'-0"	4'-5"	4'-2"
SOCMP-1000	1,000	500	100	13,350	8'-8"	5'-0"	6'-0"	4'-9"	4'-6"
SOCMP-1500	1,500	750	150	16,050	9'-2"	5'-8"	7'-0"	5'-9"	5'-6"
SOCMP-2000	2,000	1000	200	21,250	9'-0"	6'-0"	8'-0"	6'-9"	6'-6"



Specifications

CONCRETE : Class II concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth.

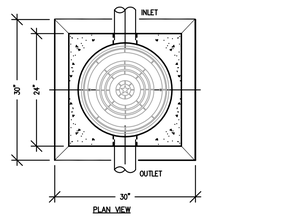
REINFORCEMENT: Grade 60 reinforced with steel rebar conforming to ASTM A615 on required centers or equal.

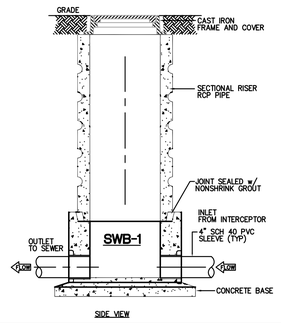
MATERIALS: Access frame & cover shall be fabricated with min. 1/4" thick nonskid floor plate, boltdown, & lifting handles. All materials to be corrosion resistant.

Engineering Data

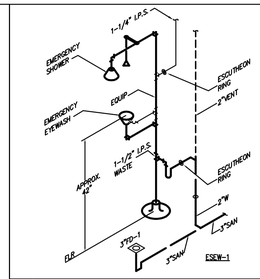
Interceptor is structurally and hydraulically engineered conforming to Uniform Plumbing Code. Nominal total liquid capacity and oil holding capacity as indicated. Recommended for flow rates of 5 to 200 GPM (consult Park for proper sizing). Manufacturer shall submit performance calculations for oil & water seperation certified by a licensed professional engineer. Field excavation and preparation shall be completed prior to delivery of interceptor.

1 SAND/OIL INTERCEPTOR DETAIL (OSM-1)

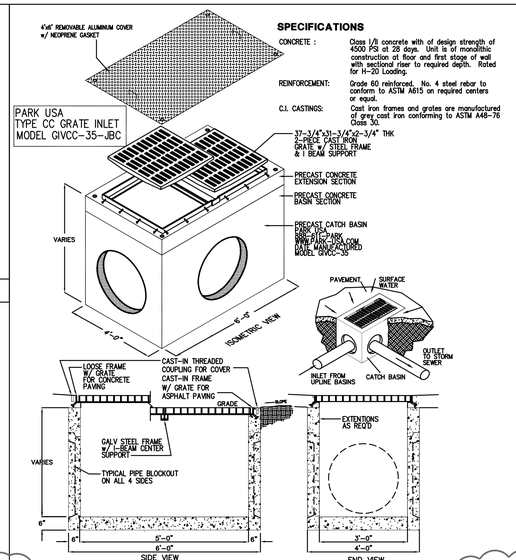




3 SAMPLE WELL BASIN DETAIL



4 FREE STANDING SAFETY SHOWER
NOT TO SCALE



SPECIFICATIONS

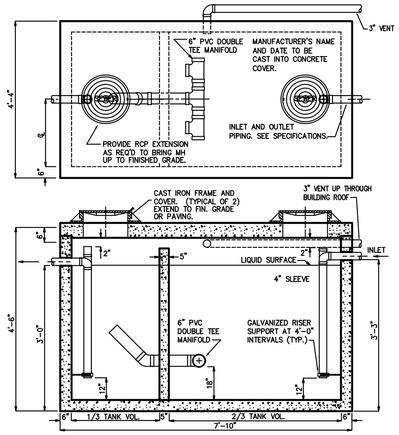
CONCRETE : Class I/II concrete with of design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth. Rated for H-20 Loading.

REINFORCEMENT: Grade 60 reinforced, No. 4 steel rebar to conform to ASTM A615 on required centers or equal.

C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 30.

5 CATCH BASIN CB-1 W/ JUNCTION BOX LID
NOT TO SCALE

1 ALTERNATE #2



SPECIFICATIONS: 500 GALLONS

CONCRETE: CLASS I CONCRETE WITH DESIGN STRENGTH OF 4500 PSI AT 28 DAYS.

REINFORCEMENT: GRADE 60 REINFORCED. NO. 4 STEEL REBAR TO CONFORM TO ASTM A615 ON 12" CENTERS OR EQUAL.

MANHOLE COVERS: MANHOLE FRAMES AND COVERS SHALL BE MANUFACTURED OF GREY CAST IRON CONFORMING TO ASTM A48-76 CLASS 35. MANHOLE SHALL HAVE 24" INSIDE DIAMETER AND BE TRAFFIC DUTY.

2 GREASE INTERCEPTOR DETAIL (GT-1)
NOT TO SCALE

GREASE TRAP SIZE CALCULATION

Type of Fixture (Trap Arm Size)	Fixture Unit	Quantity	Total
Floor Drain (3" trap arm)	3	0	0
Floor Sink (4" trap arm)	4	0	0
Bar Sink	2	0	0
Vegetable Sink	2	0	0
3 Compartment-1.5" arm	3	0	0
3-Compartment - 2" arm	4	1	4
Pre-Rinse Station	3	0	0
Mop Sink (3" trap arm)	3	0	0
Hand Wash Sink (1 Compartment)	2	0	0
Wok Stove	4	0	0
Garbage Grinder	na	0	0
Dishwasher	4	0	4
Total Fixture Unit Count		2	8

Holding Capacity = total fixture count x flow rate x retention time = 8 x 3 x 12 = 288 gallons

GREASE INTERCEPTOR SCHEDULE

MODEL NO.	CAPACITY USGal	GREASE CAP. (LBS)	EMPTY WT (LBS)	LENGTH L	WIDTH W	HEIGHT H	INLET FL1	OUTLET FL2
GT-500	500	1,200	9,500	7'-10"	4'-4"	4'-6"	3'-3"	3'-0"

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DBR Project Number 14815.000

EP | AS | 1" = 60'-0" | MG

Milnet Architectural Services
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EDWARD PUENTES
102338
LICENSED
PROFESSIONAL ENGINEER
01-07-2016

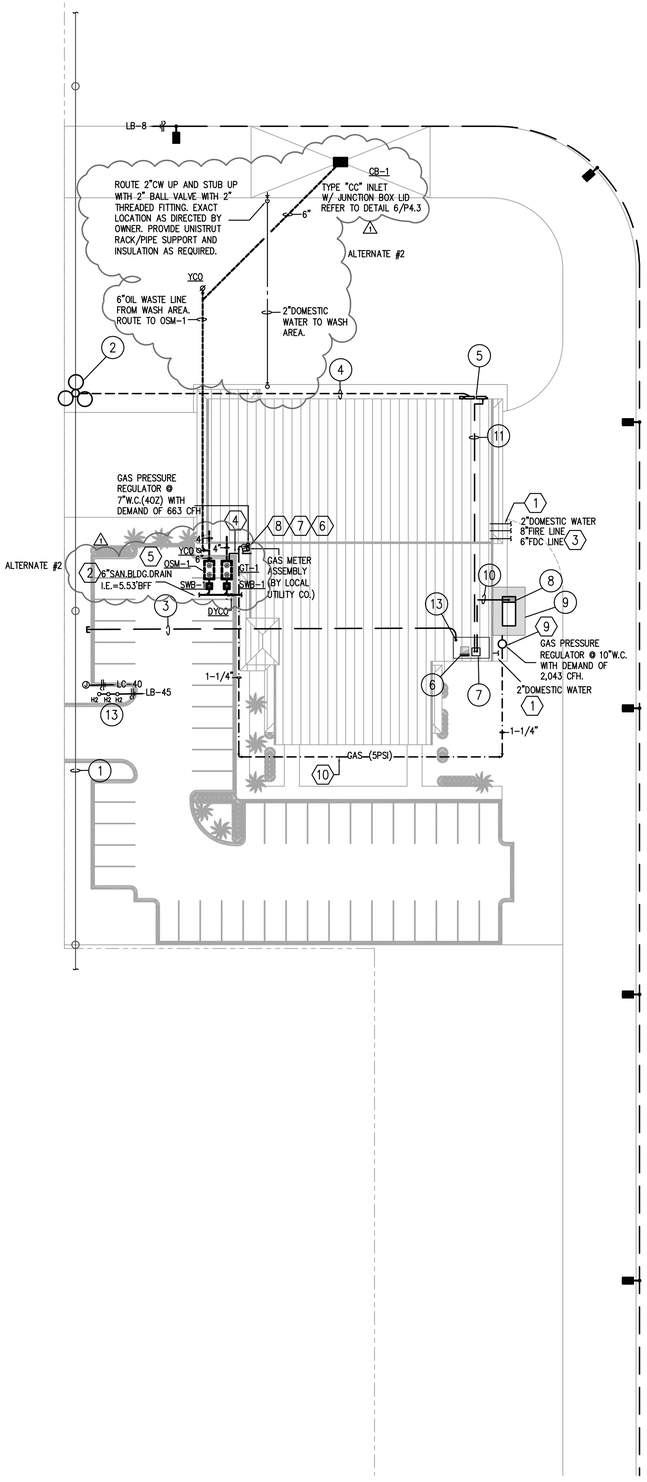
FIRE STATION #5
CITY OF EDINBURG
EDINBURG, TX.

PROJECT NUMBER
214000

DATE
JANUARY 07, 2016

1 ADDENDUM#1 01-07-16

SHEET
P4.3
OF



ELECTRICAL KEYED NOTES:

1. APPROXIMATE LOCATION OF EXISTING OVERHEAD UTILITY POWER LINE. FIELD VERIFY AND COORDINATE EXACT ROUTING WITH AEP PRIOR TO BID.
2. PROPOSED LOCATION OF NEW POLE MOUNTED TRANSFORMER PROVIDED BY AEP. PROVIDE 16'–0" X 24"–0" EASEMENT.
3. ROUTE (4) 4" UNDERGROUND PVC CONDUITS TO RIGHT OF WAY, FOR COPPER TELEPHONE, FIBER, CABLE TV AND SPARE.
4. PROPOSED ROUTING OF NEW UNDERGROUND SECONDARY SERVICE LATERAL. RE: 8/E3.01.
5. PROPOSED LOCATION OF NEW C/T CAN, METER AND SERVICE DISCONNECT.
6. APPROXIMATE LOCATION OF MDP IN BUILDING ELECTRICAL ROOM.
7. APPROXIMATE LOCATION OF NEW AUTOMATIC TRANSFER SWITCH "ATS". REFER TO ONE–LINE DIAGRAM AND POWER PLAN FOR ADDITIONAL INFORMATION.
8. APPROXIMATE LOCATION OF NEW DIESEL & NATURAL GAS GENERATOR. REFER TO SPECIFICATIONS.
9. PROVIDE 6" CONCRETE PAD.
10. APPROXIMATE ROUTING OF NEW UNDERGROUND GENERATOR POWER FEEDERS TO ATS, PROVIDE ADDITIONAL CONDUITS FOR CONTROL AND FOR CADLING TO ANNUNCIATOR.
11. PROPOSED ROUTING OF SECONDARY SERVICES FROM MAIN DISCONNECT TO ELECTRICAL ROOM.
12. APPROXIMATE LOCATION OF DATA ROOM. REFER TO FIRST LEVEL POWER PLAN FOR CONDUIT STUB UP LOCATIONS.
13. LIGHTING FOR THREE FLAGPOLES. COORDINATE WITH ARCHITECT/OWNER FOR EXACT LOCATION.

PLUMBING KEYED NOTES:

1. DOMESTIC WATER SERVICE ENTRY, SIZE AS NOTED. REFER TO CIVIL UTILITY DRAWINGS FOR CONTINUATION AND LOCATION OF METER WITH BACKFLOW PREVENTOR.
2. SANITARY BUILDING DRAIN, SIZE AS NOTED. REFER TO CIVIL UTILITY DRAWINGS FOR CONTINUATION BEYOND 5' OF BUILDING AND PLUMBING FLOOR PLAN FOR INVERTED ELEVATION INFORMATION.
3. FIRE SPRINKLER WATER SERVICE ENTRY, SIZE AS NOTED. REFER TO CIVIL UTILITY DRAWINGS FOR CONTINUATION AND LOCATION OF BACKFLOW PREVENTOR, FIRE DEPARTMENT CONNECTION AND POST INDICATOR VALVE..
4. 4" VENT BELOW GRADE FROM INTERCEPTOR.
5. SAND/OIL INTERCEPTOR (750 GALLON); REFER TO DETAIL 4/P4.3.
6. GAS METER ASSEMBLY AND PRESSURE REGULATOR INSTALLED BY GAS UTILITY COMPANTY FOR A TOTAL CONNECTED DEMAND OF APPROX. 2,706 CFH TO BE SUPPLIED AT A 5 PSIG BUILDING SERVICE PRESSURE.
7. GAS PRESSURE REGULATOR TO 7"W.C. PRESSURE SET TO DELIVER A DEMAND OF 663 CFH.
8. GAS METER ASSEMBLY AND UTILITY GAS LINE TO BE INSTALLED AND PROVIDED BY UTILITY COMPANY.
9. GAS PRESSURE REGULATOR FROM 5 PSIG TO 10"W.C. PRESSURE SET TO DELIVER A DEMAND OF 2,043 CFH FOR EMERGENCY GENERATOR.
10. 1–1/4" GAS LINE BELOW GRADE TO EMERGENCY GENERATOR; CONTRACTOR TO MAKE FINAL CONNECTION. PROVIDE SCHEDULE 40 PVC SLEEVE FOR ALL GAS LINES BELOW PAVING.

N

1 MEP2.1 **MEP SITE PLAN**
1"=30'–0"

Milnet Architectural Services
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CITY OF EDINBURG
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1 ADDENDUM#1 01–07–16

SHEET
MEP2.1
OF