AIA® Document G802® – 2017

Amendment to the Professional Services Agreement

PROJECT: *(name and address)*
El Paraiso Building
1901 N. Los Ebanos Rd.
Alton, TX 78573

AGREEMENT INFORMATION:
Date: December 28, 2021

AMENDMENT INFORMATION:
Amendment Number: 002
Date: March 22, 2023

OWNER: *(name and address)*
County of Hidalgo
100 East Cano, 2nd Floor
Edinburg, Texas 78539

ARCHITECT: *(name and address)*
ERO Architects
P.O. Box 720428
McAllen, Texas 78504

The Owner and Architect amend the Agreement as follows:

The AIA B101-2017 Agreement between Owner and Architect executed on December 28, 2021, C-21-0723-12-28, Article 1.1.3 Owner's budget for the Cost of Work per AIA G802 approved on 05/03/2022 is $4,782,712 and is now estimated at $6,934,718.46 as submitted to Commissioner's Court for approval on March 21, 2023.

Article 4.1.21 Telecommunications/Data Design - Architect (Responsibility)

Article 4.1.2.1 Description of Supplemental Service - 4. Telecommunications/Data Design

Article 11.1.1 COMPENSATION. For the Architect's Basic Services described under Article 3, the Owner will compensate the Architect and Stipulated Sum of $334,790 and is now increased to $485,430.29. Based on the percentage basis for design and construction at Seven Percent (7)% of the Owner's budget for the Cost of Work of $6,934,718.46.

Article 11.2 COMPENSATION. For the Architect's Supplemental Services designated in 4.1.1, the Owner shall compensate the Architect as follows: 1. Building scan, programming, building diagrams, probable cost of work estimated and project schedule - $38,303, 2. Landscape design - $12,760, 3. Furniture, furnishings, and equipment design (FF&E) - $26,600, 4. Telecommunications/Data - $12,000

The Architect’s compensation and schedule shall be adjusted as follows:

Compensation Adjustment:
The Owner shall compensate the Architect the Stipulated Sum increase from $334,790 to $485,430.29. The Compensation adjustment increase reflects 85% of the fee for a total of $412,615.75 beginning at Design Development Phase.

The Owner shall compensate the Architect for the Architect's Supplemental Services Increase from $38,303 to $89,663.

The Owner has been invoiced by the Architect for Supplemental Service No. 1 of $38,303 and Schematic Design Phase of $50,218.50

Schedule Adjustment:
Begin fee adjustments at Design Development Phase

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User Notes: (3B9ADA56)

SIGNATURES:

ERO Architects	
ARCHITECT *(Firm name)*	**OWNER** *(Firm name)*
	
SIGNATURE	**SIGNATURE**
Brian Godinez, Principal	
PRINTED NAME AND TITLE	**PRINTED NAME AND TITLE**
March 22, 2023	
DATE	**DATE**

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User Notes: (3B9ADA56)

EXECUTED as of the day and year first written above.

APPROVED BY COMMISSIONERS' COURT ON March 21st, 2023.
Agenda Item No. 90084 **Executive Office: _____**

VENDOR:

ERO Architects

_____
By: Brian Godinez, Principal

COUNTY:

COUNTY OF HIDALGO

_____
Hon. Richard F. Cortez, County Judge

APPROVED AS TO FORM
Office of the Hidalgo County
Criminal District Attorney,
Toribio "Terry" Palacios

_____
Michelle Lopez, Assistant District Attorney

ATTEST:

_____
Arturo Guajardo, Jr., County Clerk

ATTACHMENTS:

Exhibit 1 - Health Clinic Supporting Documents

Exhibit 2 - Community Resource Center Supporting Documents

Exhibit 3 - Schematic Design

SUPPLEMENTAL SIGNATURES:

Exhibit 1

Health Clinic Supporting Documents

Table A-1		
C-21-0723-12-28		
Health Clinic Fee Schedule		
ARPA Project No.:		
ARPA Expenditure Category:	1.7 Capital Investments or Physical plant changes to Public Facilities that respond to the COVID-19 public health emergency.	
PO No.:		
Item	Details of Item	Cost of Item
1. Architect's Compensation for Basic Services	Article 11.1.1 Architect's Compensation based on (7)% of the Owner's budget for the Cost of the Work of $ $3,522,833. Begin fee adjustments at Design Development Phase.	$209,608.56
2. Architect's Compensation for Supplemental Services	Article 11.2 Architect's Supplemental Services Compensation for Landscape design - $5,060, Furniture, furnishings, and equipment design (FF&E) - $16,000, Telecommunications/Data - $5,000	$26,060.00

February 13, 2023

Richard F. Cortez, County Judge
County of Hidalgo
100 East Cano, 2nd Floor
Edinburg, Texas 78539

Re: A-E Professional Services for the Hidalgo County El Paraiso Building FF&E Supplemental Services – Health Clinic

Dear Judge Cortez:

ERO Architects is pleased to provide our proposal for the new Hidalgo County El Paraiso Building. The following includes the Scope of Work and Compensation for the Owner-requested Supplemental Services for Fixtures, Furnishings and Equipment Design (FF&E) as it pertains to the referenced project. The basis of this proposal is the AIA B101 – 2017 Owner and Architect Agreement approved by the Hidalgo County Commissioners' Court on January 6, 2022, and a Notice to Proceed issued on May 3, 2022.

Supplemental Services – FF&E Scope of Work

1. ERO will provide an FF&E, for furniture only, Design package for the referenced project as requested by Hidalgo County. The Supplemental Services is to include the following:
    a. Design Development package to include a DD level FF&E furniture layout of the project floor plan as well as cut sheets of proposed FF&E designated items. To achieve this, ERO will interview the pertinent user groups to identify the number, type and quality of FF&E items that will be required to meet the project needs. A DD level cost estimate will also be provided.
    b. Construction Documents package to include a final CD level FF&E layout of the project floor plan. A specifications section will also be provided that provides pictures of the items specified and their descriptions around a basis of design. In order to achieve this, ERO will pick up and incorporate any comments received from the DD submission and additional interviews conducted during the CD phase of design. A CD level cost estimate will also be provided.
    c. Bidding and Negotiation services will include addressing any FF&E related questions and reviewing any substitution requests during the contractor procurement phase. Also, ERO will address any Hidalgo County, contractor, or AHJ comments that may or may not result in any addenda.
    d. Construction administration services will include responding to any contractor or Hidalgo County RFIs and review of any contractor submittals relating to FF&E scope. Substitution requests will be reviewed if necessary. An FF&E preinstall meeting will be held for coordination and two site visits will be conducted.

2. Exclusions and Clarifications:
    a. ERO assumes the budget is for new FF&E.
    b. Does not include ERO performing site visits, assessments, cataloging, and reporting of existing Hidalgo County furniture and product inventory that might be utilized for this project.

c. Does not include ERO's role in the procurement of furniture, fixtures, and equipment.
d. Hidalgo County shall be responsible for disposal of packaging in coordination with the FF&E vendor(s).
e. ERO is not responsible for any surcharges for the procurement and delivery of the FF&E.

Supplemental Services - Compensation

a. Total lump sum fee for the FF&E design as described under the FF&E Scope of Work is submitted as a Supplemental Service as stated in "Article 4 Supplemental and Additional Services" of the AIA B101 – 2017 Owner and Architect Agreement. The proposed Supplemental Services fee for ERO of the proposed Scope of Work is $16,000.
b. The proposed fee is derived by the FF&E estimated budget for the Health Clinic at $20/sf multiplied by 8,000 square feet multiplied by 10%. Delivery and invoicing of design FF&E services follows the approved project schedule and phases.
c. The terms of the Supplemental Service are bound by the terms of the AIA B101 – 2017 Owner and Architect Agreement.

ADDITIONAL SERVICES

The fee quoted above has been set to meet the specific requirements and scope for the abovementioned project. The ERO fee is subject to increase if the scope is modified from the original scope description. Any fee increase for additional services will be discussed and mutually agreed upon.

INSURANCE

ERO carries professional liability, general liability and workers compensation insurance policies in accordance with what we have found are generally acceptable requirements.

We hope this proposal meets your expectations and if you have questions or require clarification, call me anytime at 956-655-4655. If acceptable, please sign and return one copy of this proposal to ERO Architects and then the final Amendment to our Agreement. Thank you!

Respectfully submitted,

Brian Godinez
Principal
ERO Architects

_____
Hidalgo County Judge Richard F. Cortez

_____
Date

Encl: A. 1295 Form Revised

LANDSCAPE ARCHITECTURAL SERVICES AGREEMENT

AGREEMENT made as of this day **9th** day of **February** in the year **2023**

BETWEEN the Landscape Architect's client identified as:

ERO Architects / Engineering / Design / Communications
300 S 8th Street | McAllen, Texas 78501

And the **LANDSCAPE ARCHITECT**;

SITE-WORK LANDSCAPE ARCHITECTURE LLC
Stephen P. Walker R.L.A.
Landscape Architect No. 01774
15028 CR 4255 South
Henderson, Texas 75654
Phone - 956-309-3113

For the following **PROJECT**;

Hidalgo County PCT 3
El Paraiso Landscape Proposal
Clinic Phase of the project
Hidalgo County
Project No. 21087 22 0808
1.68 acres

Company Profile

Name of Firm: **SITE-WORK LANDSCAPE ARCHITECTURE LLC**
Stephen P. Walker R.L.A. – Principal

Business Address: McAllen Office
7217 North 30th Street
McAllen, Texas 78504

Telephone Number: Office: (956) 309-3113

Stephen P. Walker Architectural Services is a collection of individuals offering multi-discipline consulting landscape architectural services capable of meeting the technological necessities of our time. As a team, we strive to serve our clients by combining the skills and talents of our professional and technical staff with proven and accepted forms of technology to meet project goals and intricacies. Our team of seasoned professionals has both the experience and innovative skills to produce technically sound practical recommendations and solutions. All of our members possess coordination, communication and technical skills so as to remain focused on our clients concerns and requirements.

Our combined staffs specialize in the disciplines of landscape architecture, project management, graphic illustration and presentation and computer networking. Our group is experienced and inventive enough to offer solutions for both small and large projects. To achieve these goals our members, use Micro-station V8i. Our services include:

- **Landscape Architecture**
- **Wetland Delineation and Construction documents**
- **Vegetation Management**
- **Model Delineation**

Management and Staffing

Our services will be coordinated with the owner or one of your representatives. Our scope of services is defined by assessing the specific design objectives of the project. Our Project Manager assigned to the project is responsible for the aspects of the project. A principal will be assigned to provide guidance, oversight and review all tasks.

Project Personnel

Key personnel who will be assigned to this project are as follows:

Principal: Stephen P. Walker, L.A.

Task

Landscape Architectural design services for landscape and irrigation improvements at the Hidalgo County PCT 3 El Paraiso. Clinic Phase of the project, Hidalgo County, Texas. Project No. 21087 22 0808 1.12 acres

Scheduling

Based on the projected turn-around time of approximately four-weeks after notice to proceed, we propose the following schedule:

PROJECT PHASE I	HOURS	% OF FEE
Stage A		
1. Base information / drafting	4	8 %
A. Base layout and set up (1" = 30' or 1" = 20' scale)		
Stage B		
1. Landscape design	18	40 %
A. Final Landscape design and layout.	4	
B. Draft Landscape schematic design.	10	
D. Landscape details / general notes.	4	
Stage C		
1. Irrigation design	14	30 %
A Irrigation design and layout.	10	
B. Irrigation details / general notes.	4	
Construction Administration	10	22 %
A. Shop drawings and submittals review	2	
B. Field Inspections (2 trips) & reports	4	
C. Final inspection (1 trip) review and punch list.	4	

Hourly rate:
$35.00 (base labor rate) x 2.6 (over head) x 1.2 (profit) = $110 (Loaded hourly rate)

46 hours x $110.00 = $5,060.00

Site visits, if requested by the owner, will be invoiced at a daily rate of $150.00 plus $0.50 per mile. Overnight stay expenses, if required, will be invoiced at cost.

This schedule does not include the following activities;

- Topographic surveying.
- Contract negotiation with contractors.
- Construction administration.

Stephen P. Walker R.L.A.

If this agreement is acceptable to you, please indicate your acceptance by filling the blanks below and returning a signed copy to our office. This agreement will be considered as a notice to proceed and will begin work immediately upon receipt.

_____ _____

Print name signature

_____ _____

Company name date

February 10, 2023

From:
Daniel Chavez, Principal
EDCON, PLLC
1101 W. Ferguson, Ste. G
Pharr, TX 78577

To:
Brain Godinez
ERO Architects
300 S. 8th St.
McAllen, TX 78501

Project: El Paraiso

EDCON, PLLC is pleased to offer our proposal for Information Technology, Audio/ Video and Security engineering services for the approximately 8100 sqft space consisting of the Health Clinic and Indigent Care Building.

Scope of services to be provided:

1. Provide design and specifications for Information Services
2. Design and specifications for horizontal data cable, patch cords, termination jacks, patch panels, and faceplates.
3. Design and specifications for racks, horizontal and vertical cable managers, cable runway, and supports in MDF/IDF rooms.
4. Design and Specifications for any required fiber and copper backbone between MDF/IDF rooms.
5. Design and specifications for any required Smart TV, projectors, mounts, speakers, control systems, WAPs, and necessary A/V cabling in required rooms.
6. Design and Specifications for any required speakers, DSP, amplifier, touch screen controls, equipment rack, microphones, assistive listening system, A/V cabling.
7. Design and Specifications for security control panel, keypads, door contacts, motion detectors, glass break detectors, power supplies, and necessary security cable.
8. Camera System – Design and Specifications for software, camera server/storage unit, cameras, and mounts.
9. Access Control System – Design and Specifications for security software, controllers, reader interface modules, card readers, card credentials, request-to-exit devices, door position switches, power supplies, and necessary cable.
10. All construction drawings will be produced in AutoCad format.
11. Review of any contractor generated submittal documents is included.
12. Construction Administration site observation visits are included in this proposal. The extent to which they have been included is addressed below.
13. Evaluation of Construction Contractor bids.

Our engineering work in this proposal does not include the following services. These items will be considered extra services and will be invoiced at our extra service rates below:

1. Engineering services other than IT, A/V and Access Control, Camera

Construction Administration:

Construction Administration services, identified in Item 12 above, include the following:

1. Attendance by an electrical engineer at the pre-bid meeting.
2. Attendance by an electrical engineer at the pre-construction meeting.
3. Site visits by an electrical engineer to the project site twice per month, on approximately two-week intervals, for the final months of the project duration.
4. Final punch list preparation by an electrical engineer.
5. Verification of correction of the final punch list by an electrical engineer.
6. Review of contractor generated electrical submittals.

Additional Services:

Engineering work not described above will be considered additional services. Additional services will not be performed without first receiving written direction. Additional services will be invoiced at the hourly rates indicated below. These rates are to be in effect for one calendar year from the date of this proposal.

Registered Professional Engineer	$115.00/Hour
CADD Draftsman	$50.00/Hour
Word Processing	$30.00/Hour

Reimbursable Expenses:

Reimbursable expenses for the project will be invoiced with no markup and will be in addition to the base fee quoted in this proposal. Reimbursable expenses are not anticipated for this project.

Schedule:

EDCON can complete our design work within a reasonable time frame. We anticipate that the project will have deliverables as follows:

1. Design development document submission
2. 50% construction documents submission
3. 95% construction documents submission
4. Sealed 100% construction documents submission.

We are available to start work on this project immediately and anticipate meeting the design schedule.

Professional Fees:

EDCON proposes to perform the base mechanical and electrical engineering design work described above for a fee of Five Thousand dollars ($5,000).

Invoicing:

EDCON anticipates invoicing, on a percentage basis, the base fee at the completion of each deliverable item listed above. The construction administration fee will be invoiced as the corresponding work is performed. Reimbursable expenses will be invoiced as they occur. All invoices are due within thirty (30) days of billing.

Thank you for the opportunity to work with you and your staff on this project.

Authorization to Proceed Accepted this day of _____ By

Signature _____

Name Title _____

Exhibit 2

Community Resource Center Supporting Documents

Table A-2		
C-21-0723-12-28		
Community Resource Center Fee Schedule		
ARPA Project No.:		
ARPA Expenditure Category:	1.7 Capital Investments or Physical plant changes to Public Facilities that respond to the COVID-19 public health emergency.	
PO No.:		
Item	Details of Item	Cost of Item
1. Architect's Compensation for Basic Services	Article 11.1.1 Architect's Compensation based on (7)% of the Owner's budget for the Cost of the Work of $3,411,885.46. Begin fee adjustments at Design Development Phase.	$203,007.19
2. Architect's Compensation for Supplemental Services	Article 11.2 Architect's Supplemental Services Compensation for Landscape design - $7,700, Furniture, furnishings, and equipment design (FF&E) - $10,600, Telecommunications/Data - $7,000	$25,300.00

February 13, 2023

Richard F. Cortez, County Judge
County of Hidalgo
100 East Cano, 2nd Floor
Edinburg, Texas 78539

Re: A-E Professional Services for the Hidalgo County El Paraiso Building FF&E Supplemental Services – CRC

Dear Judge Cortez:

ERO Architects is pleased to provide our proposal for the new Hidalgo County El Paraiso Building. The following includes the Scope of Work and Compensation for the Owner-requested Supplemental Services for Fixtures, Furnishings and Equipment Design (FF&E) as it pertains to the referenced project. The basis of this proposal is the AIA B101 – 2017 Owner and Architect Agreement approved by the Hidalgo County Commissioners' Court on January 6, 2022, and a Notice to Proceed issued on May 3, 2022.

Supplemental Services – FF&E Scope of Work

1. ERO will provide an FF&E, for furniture only, Design package for the referenced project as requested by Hidalgo County. The Supplemental Services is to include the following:
    a. Design Development package to include a DD level FF&E furniture layout of the project floor plan as well as cut sheets of proposed FF&E designated items. To achieve this, ERO will interview the pertinent user groups to identify the number, type and quality of FF&E items that will be required to meet the project needs. A DD level cost estimate will also be provided.
    b. Construction Documents package to include a final CD level FF&E layout of the project floor plan. A specifications section will also be provided that provides pictures of the items specified and their descriptions around a basis of design. In order to achieve this, ERO will pick up and incorporate any comments received from the DD submission and additional interviews conducted during the CD phase of design. A CD level cost estimate will also be provided.
    c. Bidding and Negotiation services will include addressing any FF&E related questions and reviewing any substitution requests during the contractor procurement phase. Also, ERO will address any Hidalgo County, contractor, or AHJ comments that may or may not result in any addenda.
    d. Construction administration services will include responding to any contractor or Hidalgo County RFIs and review of any contractor submittals relating to FF&E scope. Substitution requests will be reviewed if necessary. An FF&E preinstall meeting will be held for coordination and two site visits will be conducted.

2. Exclusions and Clarifications:
    a. ERO assumes the budget is for new FF&E.
    b. Does not include ERO performing site visits, assessments, cataloging, and reporting of existing Hidalgo County furniture and product inventory that might be utilized for this project.

c. Does not include ERO's role in the procurement of furniture, fixtures, and equipment.
d. Hidalgo County shall be responsible for disposal of packaging in coordination with the FF&E vendor(s).
e. ERO is not responsible for any surcharges for the procurement and delivery of the FF&E.

Supplemental Services - Compensation

a. Total lump sum fee for the FF&E design as described under the FF&E Scope of Work is submitted as a Supplemental Service as stated in "Article 4 Supplemental and Additional Services" of the AIA B101 – 2017 Owner and Architect Agreement. The proposed Supplemental Services fee for ERO of the proposed Scope of Work is $10,600.
b. The proposed fee is derived by the FF&E estimated budget for the CRC at $20/sf multiplied by 5,300 square feet multiplied by 10%. Delivery and invoicing of design FF&E services follows the approved project schedule and phases.
c. The terms of the Supplemental Service are bound by the terms of the AIA B101 – 2017 Owner and Architect Agreement.

ADDITIONAL SERVICES

The fee quoted above has been set to meet the specific requirements and scope for the abovementioned project. The ERO fee is subject to increase if the scope is modified from the original scope description. Any fee increase for additional services will be discussed and mutually agreed upon.

INSURANCE

ERO carries professional liability, general liability and workers compensation insurance policies in accordance with what we have found are generally acceptable requirements.

We hope this proposal meets your expectations and if you have questions or require clarification, call me anytime at 956-655-4655. If acceptable, please sign and return one copy of this proposal to ERO Architects and then the final Amendment to our Agreement. Thank you!

Respectfully submitted,

Brian Godinez
Principal
ERO Architects

_____
Hidalgo County Judge Richard F. Cortez

_____
Date

Encl: A. 1295 Form Revised

EDCON
TBPE FIRM REGISTRATION - 20271

February 10, 2023

From:
Daniel Chavez, Principal
EDCON, PLLC
1101 W. Ferguson, Ste. G
Pharr, TX 78577

To:
Brain Godinez
ERO Architects
300 S. 8th St.
McAllen, TX 78501

Project: El Paraiso

EDCON, PLLC is pleased to offer our proposal for Information Technology, Audio/ Video and Security engineering services for the approximately 5500 sqft space consisting of the Community Resource Center (CRC).

Scope of services to be provided:

1. Provide design and specifications for Information Services
2. Design and specifications for horizontal data cable, patch cords, termination jacks, patch panels, and faceplates.
3. Design and specifications for racks, horizontal and vertical cable managers, cable runway, and supports in MDF/IDF rooms.
4. Design and Specifications for any required fiber and copper backbone between MDF/IDF rooms.
5. Design and specifications for any required Smart TV, projectors, mounts, speakers, control systems, WAPs, and necessary A/V cabling in required rooms.
6. Design and Specifications for any required speakers, DSP, amplifier, touch screen controls, equipment rack, microphones, assistive listening system, A/V cabling.
7. Design and Specifications for security control panel, keypads, door contacts, motion detectors, glass break detectors, power supplies, and necessary security cable.
8. Camera System – Design and Specifications for software, camera server/storage unit, cameras, and mounts.
9. Access Control System – Design and Specifications for security software, controllers, reader interface modules, card readers, card credentials, request-to-exit devices, door position switches, power supplies, and necessary cable.
10. All construction drawings will be produced in AutoCad format.
11. Review of any contractor generated submittal documents is included.
12. Construction Administration site observation visits are included in this proposal. The extent to which they have been included is addressed below.
13. Evaluation of Construction Contractor bids.

Our engineering work in this proposal does not include the following services. These items will be considered extra services and will be invoiced at our extra service rates below:

1. Engineering services other than IT, A/V and Access Control, Camera

Construction Administration:

Construction Administration services, identified in Item 12 above, include the following:

1. Attendance by an electrical engineer at the pre-bid meeting.
2. Attendance by an electrical engineer at the pre-construction meeting.
3. Site visits by an electrical engineer to the project site twice per month, on approximately two-week intervals, for the final months of the project duration.
4. Final punch list preparation by an electrical engineer.
5. Verification of correction of the final punch list by an electrical engineer.
6. Review of contractor generated electrical submittals.

Additional Services:

Engineering work not described above will be considered additional services. Additional services will not be performed without first receiving written direction. Additional services will be invoiced at the hourly rates indicated below. These rates are to be in effect for one calendar year from the date of this proposal.

Registered Professional Engineer	$115.00/Hour
CADD Draftsman	$50.00/Hour
Word Processing	$30.00/Hour

Reimbursable Expenses:

Reimbursable expenses for the project will be invoiced with no markup and will be in addition to the base fee quoted in this proposal. Reimbursable expenses are not anticipated for this project.

Schedule:

EDCON can complete our design work within a reasonable time frame. We anticipate that the project will have deliverables as follows:

1. Design development document submission
2. 50% construction documents submission
3. 95% construction documents submission
4. Sealed 100% construction documents submission.

We are available to start work on this project immediately and anticipate meeting the design schedule.

Professional Fees:

EDCON proposes to perform the base mechanical and electrical engineering design work described above for a fee of Seven Thousand dollars ($7,000).

Invoicing:

EDCON anticipates invoicing, on a percentage basis, the base fee at the completion of each deliverable item listed above. The construction administration fee will be invoiced as the corresponding work is performed. Reimbursable expenses will be invoiced as they occur. All invoices are due within thirty (30) days of billing.

Thank you for the opportunity to work with you and your staff on this project.

Authorization to Proceed Accepted this day of _____ By

Signature _____

Name Title _____

LANDSCAPE ARCHITECTURAL SERVICES AGREEMENT

AGREEMENT made as of this day **9th** day of **February** in the year **2023**

BETWEEN the Landscape Architect's client identified as:

ERO Architects / Engineering / Design / Communications
300 S 8th Street | McAllen, Texas 78501

And the **LANDSCAPE ARCHITECT**;

SITE-WORK LANDSCAPE ARCHITECTURE LLC
Stephen P. Walker R.L.A.
Landscape Architect No. 01774
15028 CR 4255 South
Henderson, Texas 75654
Phone - 956-309-3113

For the following **PROJECT**;

Hidalgo County PCT 3
El Paraiso Landscape Proposal
CRC Phase of the project
Hidalgo County
Project No. 21087 22 0808
1.68 acres

Company Profile

Name of Firm: **SITE-WORK LANDSCAPE ARCHITECTURE LLC**
Stephen P. Walker R.L.A. – Principal

Business Address: McAllen Office
7217 North 30th Street
McAllen, Texas 78504

Telephone Number: Office: (956) 309-3113

Stephen P. Walker Architectural Services is a collection of individuals offering multi-discipline consulting landscape architectural services capable of meeting the technological necessities of our time. As a team, we strive to serve our clients by combining the skills and talents of our professional and technical staff with proven and accepted forms of technology to meet project goals and intricacies. Our team of seasoned professionals has both the experience and innovative skills to produce technically sound practical recommendations and solutions. All of our members possess coordination, communication and technical skills so as to remain focused on our clients concerns and requirements.

Our combined staffs specialize in the disciplines of landscape architecture, project management, graphic illustration and presentation and computer networking. Our group is experienced and inventive enough to offer solutions for both small and large projects. To achieve these goals our members, use Micro-station V8i. Our services include:

- **Landscape Architecture**
- **Wetland Delineation and Construction documents**
- **Vegetation Management**
- **Model Delineation**

Management and Staffing

Our services will be coordinated with the owner or one of your representatives. Our scope of services is defined by assessing the specific design objectives of the project. Our Project Manager assigned to the project is responsible for the aspects of the project. A principal will be assigned to provide guidance, oversight and review all tasks.

Project Personnel

Key personnel who will be assigned to this project are as follows:

Principal: Stephen P. Walker, L.A.

Task

Landscape Architectural design services for landscape and irrigation improvements at the Hidalgo County PCT 3 El Paraiso. CRC Phase, Hidalgo County, Texas. Project No. 21087 22 0808

1.68 acres

Scheduling

Based on the projected turn-around time of approximately four-weeks after notice to proceed, we propose the following schedule:

PROJECT PHASE I	**HOURS**	**% OF FEE**
Stage A		
1. Base information / drafting	6	8 %
A. Base layout and set up (1" = 30' or 1" = 20' scale)		
Stage B		
1. Landscape design	28	40 %
A. Final Landscape design and layout.	4	
B. Draft Landscape schematic design.	20	
D. Landscape details / general notes.	4	
Stage C		
1. Irrigation design	22	32 %
A Irrigation design and layout.	18	
B. Irrigation details / general notes.	4	
Construction Administration	14	20 %
A. Shop drawings and submittals review	4	
B. Field Inspections (2 trips) & reports	6	
C. Final inspection (1 trip) review and punch list.	4	

Hourly rate:
$35.00 (base labor rate) x 2.6 (over head) x 1.2 (profit) = $110 (Loaded hourly rate)

70 hours x $110.00 = $7,700.00

Site visits, if requested by the owner, will be invoiced at a daily rate of $150.00 plus $0.50 per mile. Overnight stay expenses, if required, will be invoiced at cost.

This schedule does not include the following activities;

- Topographic surveying.
- Contract negotiation with contractors.
- Construction administration.

Stephen P. Walker R.L.A.

If this agreement is acceptable to you, please indicate your acceptance by filling the blanks below and returning a signed copy to our office. This agreement will be considered as a notice to proceed and will begin work immediately upon receipt.

_____ _____

Print name signature

_____ _____

Company name date

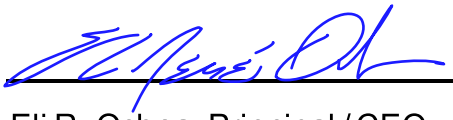
Exhibit 3

Schematic Design

APPROVAL SHEET

Submitted for Approval of Schematic Design

The A/E represents that the drawings and descriptions, to the best of the A/E's knowledge and belief, fulfill the Project Scope requirements and that the construction can be completed for the Construction Budget amount, and within the Project Schedule:



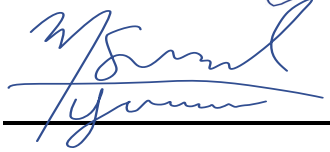
2/6/2023

Eli R. Ochoa, Principal / CEO — Date



2/6/2023

Brian Godinez, Principal / CMO — Date



2/6/2023

Yesenia Suchil, Project Manager — Date

Approval on Behalf of Hidalgo County

Those signing below have reviewed the information contained within this Schematic Design Submittal:

Everardo "Ever" Villarreal -County Commissioner Pct.3 — Date

Eduardo Olivarez, Chief Administrative Officer for the Health Department — Date

PROBABLE COST OF CONSTRUCTION
SCHEMATIC DESIGN

HEALTH CLINIC & INDIGENT CARE: $3,522,833

CRC: $2,578,075

SITE: $833,810

As of January 13, 2023
(See attachments A&B below)

architecture + engineering

ATTACHMENT A

Yesenia Suchil

From: Yesenia Suchil
Sent: Friday, January 13, 2023 12:14 PM
To: david@bstone.biz; monica@bstone.biz; Carlos Del Angel
Cc: Hector Garcia; Jasmin Cantu; 21087 Hidalgo County El Paraiso Building; Brian Godinez; Eli R. Ochoa; Joey Yzaguirre; Eduardo Belmarez
Subject: 21087 23 0113 El Paraiso Probable Cost of Construction

David,

As per your request, please see below the following updated Probable Cost of Construction for the Health Clinic and CRC buildings. As we have mentioned before during our meetings, the average of construction cost increase in the last months is 2.25%. The last Probable Cost of Construction based on the Schematic Design Deliverable provided in Sep. 2022 for the Health Clinic was $3,231,957. The Probable Cost of Construction for the CRC based on the Schematic Design Deliverable as of Sep. 2022 was $2,365,206.
Founded on this industry trend, the updated Probable Cost of Construction for the Health Clinic over the last 4 months will be $3,522,833 for January 2023 in current dollars. The updated Probable Cost of Construction for the CRC over the last 4 months will be $ 2,578,075 as of January 2023 in current dollars. Please consider these numbers are in current dollars (Jan. 2023) and the project will bid in the future which could incur an additional cost increase.

Thank you,

Yesenia Suchil Tijerina, Architectural Associate
Project Manager



ERO
Planning / Architecture / Engineering / Communications
email: ysuchil@goERO.com | **mbl:** 956-569-7067
w: goERO.com | **fb:** ERO Architects
AUSTIN | EL PASO | HOUSTON | RIO GRANDE VALLEY | SAN ANTONIO

From: david@bstone.biz <david@bstone.biz>
Sent: Wednesday, January 11, 2023 3:27 PM
To: Yesenia Suchil <ysuchil@goero.com>
Subject: FW: El Paraiso Probable Cost of Construction

FYI.

From: Jasmin Cantu <jasmin.cantu@co.hidalgo.tx.us>
Sent: Wednesday, January 11, 2023 2:51 PM
To: david@bstone.biz
Cc: Eduardo Belmarez <eduardo.belmarez@co.hidalgo.tx.us>; Hector Garcia <hector.garcia1@co.hidalgo.tx.us>
Subject: El Paraiso Probable Cost of Construction

Good afternoon David,

Could you please send us the most updated probable cost of construction for the El Paraiso project? We are trying to place it on court for approval and need the most up to date cost estimate.

Respectfully,

JASMIN A. CANTU
Contract Specialist III, Hidalgo County Purchasing Department

956-318-2626 ext. 4854 | jasmin.cantu@co.hidalgo.tx.us
2802 S. Business Highway 281, Edinburg, Texas 78539

HALFF ASSOCIATES, INC.
5000 W. MILITARY
SUITE 100, MCALLEN, TX 78503
956-664-0286

ATTACHMENT B

Hidalgo County El Paraiso
Hidalgo, TEXAS
1/12/2023

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

		Quantity	Unit	Unit Cost	Cost
	GENERAL IMPROVEMENTS				
1	Demolition	1	LS	$ 50,000.00	$ 50,000.00
2	Temporary Erosion and Sediment Control	1	LS	$ 8,000.00	$ 8,000.00
3	Traffic Control	1	LS	$ 2,000.00	$ 2,000.00
4	Construction Staking	1	LS	$ 10,000.00	$ 10,000.00
5	Earthwork & Excavation	1	LS	$ 50,000.00	$ 50,000.00
				Sub-Total =	**$ 120,000.00**

		Quantity	Unit	Unit Cost	Cost
	PAVEMENT IMPROVEMENTS				
1	2-inch Hmac w/ Base and Subgrade	3,615	SY	$ 60.00	$ 216,900.00
2	Concrete Sidewalk & Dumpster Pad	1,295	SY	$ 55.00	$ 71,225.00
3	Concrete Curb and Gutter	2,072	LF	$ 30.00	$ 62,160.00
4	Concrete Wheel Stops	38	EA	$ 400.00	$ 15,200.00
5	Handicap Ramp	2	EA	$ 2,500.00	$ 5,000.00
6	Pavement Striping	1	LS	$ 10,000.00	$ 10,000.00
				Sub-Total =	**$ 380,485.00**

		Quantity	Unit	Unit Cost	Cost
	STORM IMPROVEMENTS				
1	18-inch HP Storm	97	LF	$ 50.00	$ 4,850.00
2	18-inch RCP Class III	94	LF	$ 75.00	$ 7,050.00
3	18-inch RCP Class IV	245	LF	$ 120.00	$ 29,400.00
4	24-inch RCP Class IV	51	LF	$ 140.00	$ 7,140.00
5	18-inch Sloped End Treatment	1	EA	$ 2,200.00	$ 2,200.00
6	24-inch Sloped End Treatment	1	EA	$ 2,500.00	$ 2,500.00
7	24" Nyloplast Drain Basin	1	EA	$ 1,000.00	$ 1,000.00
8	PCU Combination Inlet	2	EA	$ 6,500.00	$ 13,000.00
9	Type 'CC' Grate Inlet	1	EA	$ 6,500.00	$ 6,500.00
10	Connect to Existing Inlet	1	EA	$ 5,000.00	$ 5,000.00
				Sub-Total =	**$ 78,640.00**

		Quantity	Unit	Unit Cost	Cost
	UTILITY IMPROVEMENTS				
1	Connect to Existing 4" Water Line - 4" Tee (Cut In)	2	EA	$ 4,000.00	$ 8,000.00
2	4" PVC Water Line DR 18 C-900 w/ Fittings (Tees, Bends, Caps etc)	553	LF	$ 55.00	$ 30,415.00
3	4" Gate Valve w/ Box	2	EA	$ 3,500.00	$ 7,000.00
4	Fire Hydrant Assembly (Spool Piece as Required)	2	EA	$ 8,500.00	$ 17,000.00
5	Trench Protection	1,074	LF	$ 12.00	$ 12,889.80
6	2" Domestic Service	104	LF	$ 15.00	$ 1,562.25
7	6" Wastewater	417	LF	$ 50.00	$ 20,850.00
8	Septic Tanks	2	EA	$ 4,000.00	$ 8,000.00
9	Septic Leech Field	1	LS	$ 10,000.00	$ 10,000.00
				Sub-Total =	**$ 115,717.05**

Contingency (20%) =	**$ 138,968.41**
TOTAL=	**$ 833,810.46**

Note: This statement was prepared utilizing standard cost estimate practices. It is understood and agreed that this is an estimate only and that the Engineer shall not be held liable to the Owner or third party for any failure to accurately estimate the cost of the project or any part thereof.

El Paraiso Project

SCHEMATIC DESIGN

Hidalgo County | Precinct 3

August 30, 2022

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PHASE 2

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THE COUNTY OF HIDALGO TEXAS

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HIDALGO COUNTY EVERARDO VILLARREAL 3 COMMISSIONER PRECINCT 3

01. PROGRAM OF SPACES



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Program of Spaces

PCT 3 El Paraiso

	Name / Type of Space	Qty	people	ASF	Total ASF		Comments
1.00	**HEALTH CLINIC**						
1.01	Reception	1	2	120	120		2 counter work areas. Admin assistant include covid check in, UV Lights through out.
1.02	Lobby	1	30	20	600		30 for health clinic & Indegent Care / 50 seats if shared with WIC
1.03	Clerk Manager	1	1	120	120		
1.04	RN Supervisor	1	1	120	120		
1.05	Clerk 1	1	1	120	120		
1.06	Clerk 2	1	1	120	120		
1.07	MA	1	1	120	120		Medical Assistant
1.08	RN	1	1	120	120		
1.09	CA	1	1	120	120		Social Worker Office/Tansient office.
1.10	LVN 1	1	1	120	120		
1.11	LVN 2	1	1	120	120		
1.12	CSA	1	1	120	120		
1.13	Exam Rooms Central Office 1	1	1	120	120		
1.14	Exam Room 1	1	1	120	120		Needs accoustical capacity
1.15	Exam Room 2	1	1	120	120		Needs accoustical capacity
1.16	Exam Room 3		1	120	120		Needs accoustical capacity
1.17	Exam Rooms Central Office 2		1	120	120		For 1 PA, 1 NP, CA
1.18	Medical Records	1	1	120	120		5 Lateral files, 4 drawers each, 4 ft
1.19	Pharmacy Storage	1	1	120	120		Needs humidity control
1.20	Lab 1	1	1	96	96		Adjacent to Lab 2 with a sliding partition 8x12
1.21	Lab 2	1	1	96	96		Pass through window to restroom 1.19 8x12
1.22	Restroom next to Lab	1	1	64	64		6'x8'
1.23	Immunizatioon room	1	1	200	200		Needs AC control for large refrigerator and freezer (could be in a room) 10x20, needs accoustical capacity
1.24	AutoClave	1	1	64	64		Sink & drain, power for equipment 20 apm, need to verify power
1.25	Bio Hazard	1	1	64	64		Needs exahust, needs to be near exit for waste pick up
1.26	Break Room	1	12	28	336		For 12 people / 20 people if shared with WIC, might go in new construction building. Round tables, sink, fridge, microwave oven, provide exhaust.
1.27	Private Restroom	1	1	64	64		For Staff
1.28	Private Restroom	1	1	64	64		For Staff
1.29	Office Indigent Care		1	120	120		
1.30	Office Indigent Care		1	120	120		
1.31	Receptionist Indigent Care		1	120	120		Adjacent to the lobby

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Program of Spaces

PCT 3 El Paraiso

1.32	Janitor's/Storage Closet	1	1	120	120		For cleaning supplies and floor mop.
1.33	Conference	1	20	30	600		For 20 people / 70" TV and computers / could be shared with WIC
1.34	General Storage	1		200	200		For supplies, equipment, etc.
1.35	IT Closet	1		120	120		12'x10' per meeting with Health Department on 3.2.22. Fire suppression, 30 amp outlet, 4 isolated circuits. Mr. Salinas for coordination. Access control for specific rooms, scheduling system, **Natural gas generator HOLT to power the Immunization room at minimum.**
	Subtotal Assignable sf		93		5,208		
	Department Grossing Factor		28%		1,458		Departmental Circulation
	Total Department					**6,666**	
	Building Grossing Factor		20%		1,333		Electrical room, Mech. Room
	Total Building Gross SF					**7,999**	

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Program of Spaces

PCT 3 El Paraiso

	Name / Type of Space	Qty	People	ASF	Total ASF		Comments
3.00	**CRC**						
3.01	Manager	1	1	144	144		
3.02	Coordinator	1	1	120	120		
3.03	Receptionist	1	1	120	120		Adjacent to Lobby
3.04	Security room/office	1	1	120	120		To have door to the exterior
3.05	Class Rooms 1	1	20	30	600		Hotel type spaces, with cabinetry, sink, mini fridge, microvave, coffee maker, etc. Projector display and screen.
3.06	Class Rooms 2	1	20	30	600		Hotel type spaces, with cabinetry, sink, mini fridge, microvave, coffee maker, etc. Projector display and screen.
3.07	Small Group Study 1	1	6	30	180		Smaller room for 4-6 people.
3.08	Small Group Study 2	1	6	30	180		Smaller room for 4-6 people.
3.09	Small Group Study 3	1	6	30	180		Smaller room for 4-6 people.
3.10	Small Group Study 4	1	6	30	180		Smaller room for 4-6 people.
3.11	Kitchen	1	1	352	352		16'W x 22' L Existing at El Paraiso Building
3.12	Pantry	1	1	80	80		8'x10'
3.13	Furniture Storage 1	1		100	100		Chair cart 22"x8.3' for 34 chairs. 8'x9' storage for chairs (3) carts.
3.14	Furniture Storage 2	1		100	100		Chair cart 22"x8.3' for 34 chairs. 8'x9' storage for chairs (3) carts.
3.15	General Storage	1	1	120	120		for supplies, equipment, etc.
3.16	IT Room	1		120	120		10'x12'
	Subtotal Assignable sf		70		3,296		
	Department Grossing Factor		28%		923		Departmental Circulation
	Total Department					**4,219**	
	Building Grossing Factor		25%		1,055		
	Total Building Gross SF					**5,274**	

	Department	Gross SF		Program for PCC		Notes:
	Health Clinic	7,999	SF	**7,999**	**SF**	WIC program was included as part of Phase 1, project program planning. Due to budget, WIC program will not be included in the Probable Cost of Construction (PCC) of the Phase 1, Preliminary Design, and will not be part of the Phase 2, Design and Construction.
	WIC	3,475	SF			
	CRC	5,274	SF	**5,274**	**SF**	
	Total	16,748	SF	**13,273**	**SF**	

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02. PROBABLE COST OF CONSTRUCTION



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DISCLAIMER

We wish to inform you that because of the uncertainty in the construction industry, resulting from the effects of the COVID-19 pandemic, ERO Architects cannot and does not warrant or represent that bids or negotiated prices will not vary from the Hidalgo County budget for the Cost of the Work (CW), or from any Probable Costs of Construction (PCC) of the CW, or evaluation, prepared or agreed to by ERO Architects. It is acknowledged that ERO Architects has no control over market conditions, in general nor those resulting from COVID-19 responses, that affect; the availability of either contractors, sub-contractors, suppliers or vendors, the cost of labor, materials, or equipment; the Contractor's methods of determining bid prices; or competitive bidding, or negotiating conditions.

For further clarification, Cost of the Work (CW), is defined as the total cost to Hidalgo County to construct all elements of the projects designed or specified by ERO Architects, and includes contractors' general conditions costs, overhead and profit. The CW also includes the reasonable value of labor, materials, and equipment, donated to, or otherwise furnished by Hidalgo County. The CW does not include the compensation of ERO Architects, the costs of the land, rights-of-way, financing, or contingencies for changes in the Work; or other costs that are the responsibility of Hidalgo County.

CLARIFICATIONS & EXCLUSIONS

1. This Probable Cost of Construction (PCC) report is based on the Schematic Design Phase.
2. PCC Report is based on Gross Area of the Building.
3. PCC Report is based on today's pricing available through RS Means (2022 Quarter 2) and local pricing from contractors, sub-contractors, suppliers and vendors.
4. PCC Report includes a 10% drop-off on all items unless otherwise noted.
5. It is the ERO's opinion that the anticipated (PCC) in this report should be escalated through 50% of the anticipated construction period once the construction schedule is determined. The (PCC) provided on this report does not include any escalation.
6. PCC Report includes the following contingencies:
    a. Design Contingency of 10%.
    b. Owner Contingency of 10%.
7. PCC report does not include fixtures, furniture and equipment (FFE) similar but not limited to:
    a. Desks and chairs.
    b. Computers.
8. PCC Report does not include any utility deposits or inspection fees.
9. PCC Report does not include any costs associated with inspections or specialty inspectors of any kind. Owner will provide all required inspections and certified inspectors required in association with permits provided by TCEQ, TPDES and all other governing agencies that may be applicable to this project.
10. PCC Report does not include the cost of relocation or moving expenses.
11. PCC Report does not include materials testing, which shall be paid for and provided by the Owner and will be coordinated with the Contractor.
12. PCC Report does not include hazardous material surveys, abatement, handling and/or removal of any of any environmentally hazardous material encountered, removal or replacement of any unsuitable subsurface materials during the course of the work.
13. The following detailed prices are derived from projects in the Rio Grande Valley, TX.
14. PCC Report excludes the following items:
    a. Early Child Playground.
    b. Landscape & Irrigation.
    c. Walking Trails.
    d. **Civil Sitework.** (Without a Geo-technical report, Civil & Site Design cost estimate number is based on 60% SD drawings. Reference general civil cost estimate number on Page 21)

PCC

HEALTH CLINIC & INDIGENT CARE

8,000 SF

$3,231,957

As of September 2022

(See attached detailed report)

architecture + engineering

Line Number	Description	Quantity	Unit	Unit Cost	Sub-Total	Total
A. SUBSTRUCTURE		**8,000**	**S.F.**	**$26.23**		**$209,808**
A10	**Standard Foundation**			**$15.50**	**$123,970**	
A10101100000	Mobilization and demobilization for dozer or front-end loader or sheepsfoot roller	2	Ea.	$1,369.94	$2,740	
A10101100001	Wall footings: earth formed including reinforcing	109	C.Y.	$475.00	$51,538	
A10102100001	Spread footings: earth formed footings	11	C.Y.	$475.00	$5,273	
A10301204480	Slab on grade, 6" thick, non industrial, reinforced	8,196	S.F.	$7.86	$64,421	
A20	**Basement Excavation**			**$10.73**	**$85,838**	
A20101100001	Excavation: Clear,Grub, Haul	1,274	C.Y.	$36.70	$46,756	
A20101100101	Compacted structural select fill, 42" thick	1,486	C.Y.	$26.30	$39,082	
B. SHELL		**8,000**	**S.F.**	**$67.98**		**$543,871**
B10	**Superstructure**			**$20.76**	**$166,079**	
B10201080101	Steel joists: K-series joists	4.51	Ton	$7,500.00	$33,825	
B10201080201	Roof deck: 1.5B22 roof deck	7.29	Ton	$7,500.00	$54,675	
B10201080301	Steel columns: HSS-shapes	1.03	Ton	$7,500.00	$7,725	
B10201080401	Steel beams: W-shapes	4.26	Ton	$7,500.00	$31,950	
B10201080501	Miscellaneous: 12% of Structural steel	2.05	Ton	$7,500.00	$15,375	
B10203100130	Canopy, freestanding (walkways), vinyl coated steel, 12' wide	240	S.F.	$93.87	$22,529	
B20	**Exterior Closure**			**$22.49**	**$179,920**	
B2010001	Tilt-up concrete wall panels, 5-1/2" thick, sprayed moisture air barrier, 2" polyiso rigid board insulation	7,115	S.F.	$18.78	$133,620	
B20201045750	Windows, steel, picture window, insulated glass, 6' x 4'	15	Ea.	$1,817.20	$27,258	
B20301107150	Door, aluminum & glass, with transom, full vision, double door, hardware, 6'-0" x 10'-0" opening	1	Opng.	$7,864.73	$7,865	
B20302203950	Door, steel 18 gauge, hollow metal, 1 door with frame, "A" label, 3'-0" x 7'-0" opening	2	Opng.	$3,438.72	$6,877	
B20101461500	Exterior Sofit Metal Panel	100	S.F.	$43.00	$4,300	
B30	**Roofing**			**$24.73**	**$197,873**	
B3010 301	Roofing, single ply membrane, PVC w/ elvaloy, 60 mils, fully adhered, 80 mils base sheet, cover board, R25 rigid insulation	8,000	S.F.	$24.00	$192,000	
B30106101300	Gutters, box, steel, galvanized, 26 ga thick, 6", mill finish	80	L.F.	$10.19	$815	
B30106200250	Downspout, aluminum, rectangular, 3" x 4", enameled, .024" thick	224	V.L.F.	$6.91	$1,548	

Line Number	Description	Quantity	Unit	Unit Cost	Sub-Total	Total
B30202100800	Roof hatch, with curb, 1" fiberglass insulation, 2'x6" x 8'-0", aluminum curb and cover, 260 lbs	1	Opng.	$3,509.64	$3,510	
C. INTERIORS		**8,000**	**S.F.**	**$61.31**		**$490,483**
C10	**Interior Construction**			**$46.48**	**$371,805**	
C10101265060	Metal partition, 5/8"fire rated gypsum board face, no base, 3-5/8" @ 16" OC framing, same opposite face, no insulation	32,008	S.F.	$3.40	$108,827	
C10101265080	Metal partition, 5/8"fire rated gypsum board face, no base layer, 3-5/8" @2 16" OC framing, nothing opposite face, no insulation	5,325	S.F.	$2.36	$12,567	
C1020 00	Solid core, 3'x7' PLAM, w/ HM frame, butt welded and door hardware	22	Ea.	$2,209.26	$48,604	
C1020 001	Solid core, 3'x7' PLAM, w/ HM frame, butt welded and door hardware, lite and transom	12	Ea.	$2,279.06	$27,349	
C1020 002	Solid core, 3'x7' PLAM, w/ HM frame, butt welded and door hardware, lite only	14	Ea.	$2,198.64	$30,781	
C1030 001	Casework, base cabinet, solid surface counter, 4"	150	L.F.	$748.38	$112,257	
C1030 002	Casework, wall cabinet, 12" deep, 30" high	150	L.F.	$209.47	$31,421	
C30	**Interior Finishes**			**$14.83**	**$118,678**	
C30102300080	Painting, interior on plaster and drywall, brushwork, primer & 2 coats	23,355	S.F.	$0.63	$14,714	
C30204101580	Vinyl, composition tile, minimum	4,000	S.F.	$1.49	$5,960	
C30204101600	Vinyl, composition tile, maximum	4,000	S.F.	$1.90	$7,600	
C30204101720	Tile, ceramic natural clay	1,488	S.F.	$5.58	$8,303	
C30206000085	Resilient base, 1/8" rubber base, 4" H, straight or cove, std. colors	2,316	L.F.	$2.98	$6,902	
C30302105900	Acoustic ceilings, 5/8" fiberglass board, 24" x 24" tile, tee grid, suspended support	8,000	S.F.	$9.40	$75,200	
D. SERVICES		**8000**	**S.F.**	**$116.97**		**$935,755**
D20	**Plumbing**			**$21.94**	**$175,500**	
D2000 002	General plumbing systems based on MEP input	27	Ea.	$6,500.00	$175,500	
D30	**HVAC**			**$40.25**	**$322,000**	
D30 001 - 00	General mechanical systems based on MEP Engineering input	8,000	S.F.	$40.25	$322,000	
D40	**Fire Protection**			**$0.00**	**$0**	
D4010	Sprinklers					

Line Number	Description	Quantity	Unit	Unit Cost	Sub-Total	Total
D50	**Electrical**			**$54.78**	**$438,255**	
D50 001 - 00	General electrical systems based on MEP engineering input	8,000	S.F.	$48.00	$384,000	
D50902100440	Generator sets, w/battery, charger, muffler and transfer switch, gas/gasoline operated, 3 phase, 4 wire, 277/480 V, 125 kW	150	kW	$361.70	$54,255	
E. EQUIPMENT & FURNISHINGS		**8,000**	**S.F.**	**$0.00**		**$0**
F. SPECIAL CONSTRUCTION & DEMOLITION		**8,000.00**	**S.F.**	**$10.93**		**$87,425**
F10	**Special Construction**			**$10.93**	**$87,425**	
F1010005	Equitone fiber cement board w/ exposed fasteners	1,345	S.F.	$65.00	$87,425	
F20	**Selective Building Demolition**				**$0**	
G. BUILDING SITEWORK		**8,000**	**S.F.**	**$0.00**		**$0**
	LEVEL I - SYSTEMS SUB-TOTAL	8,000	S.F.	**$283.42**		**$2,267,343**
H. CONTRACTOR FEES & CONTINGENCIES		**8,000**	**S.F.**	**$120.58**		**$964,614**
H10	**Contractor Fees (in Series)**			**$49.09**	**$392,704**	
	General Conditions & Bonds			12.00%	$272,081	**$2,539,424**
	Overhead & Profit			4.75%	$120,623	**$2,660,047**
H20	**Contingencies (in Parallel) on "Fee" total above**			**$71.49**	**$571,910**	
	Material Waste			5.50%	$146,303	
	SD Package Design Contingency			8.00%	$212,804	
	Owner Contingency			8.00%	$212,804	
	TOTAL	**8,000**	**S.F.**	**$403.99**		**$3,231,957**

PCC

COMMUNITY RESOURCE CENTER (CRC)

5,300 SF

$2,365,206

As of September 2022

(See attached detailed report)







Line Number	Description	Quantity	Unit	Unit Cost	Sub-Total	Total
A. SUBSTRUCTURE		**5,300**	**S.F.**	**$29.07**		**$154,078**
A10	**Standard Foundation**			**$17.36**	**$91,995**	
A10101100000	Mobilization and demobilization for dozer or front-end loader or sheepsfoot roller	2	Ea.	$1,369.94	$2,740	
A10101100001	Wall footings: earth formed including reinforcing	93	C.Y.	$475.00	$43,938	
A10102100001	Spread footings: earth formed footings	5	C.Y.	$475.00	$2,347	
A10301204480	Slab on grade, 6" thick, non industrial, reinforced	5,467	S.F.	$7.86	$42,971	
A20	**Basement Excavation**			**$11.71**	**$62,084**	
A20101100001	Excavation: Clear, Grub, Haul	921	C.Y.	$36.70	$33,811	
A20101100101	Compacted structural select fill, 42" thick	1,075	C.Y.	$26.30	$28,273	
B. SHELL		**5,300**	**S.F.**	**$106.62**		**$565,071**
B10	**Superstructure**			**$46.48**	**$246,352**	
B10201080101	Steel joists: K-series joists	3.44	Ton	$7,500.00	$25,800	
B10201080201	Roof deck: 1.5B22 roof deck	4.87	Ton	$7,500.00	$36,525	
B10201080301	Steel columns: HSS-shapes	0.47	Ton	$7,500.00	$3,525	
B10201080401	Steel beams: W-shapes	1.77	Ton	$7,500.00	$13,275	
B10201080501	Miscellaneous: 12% of Structural steel	1.27	Ton	$7,500.00	$9,525	
B10203100130	Canopy, freestanding (walkways), vinyl coated steel, 12' wide	1,680	S.F.	$93.87	$157,702	
B20	**Exterior Closure**			**$35.02**	**$185,609**	
B2010001	Tilt-up concrete wall panels, 5-1/2" thick, sprayed moisture air barrier, 2" polyiso rigid board insulation	6,071	S.F.	$18.78	$114,013	
B20201045750	Windows, steel, picture window, insulated glass, 6' x 3'	7	Ea.	$1,508.12	$10,557	
B20201045751	Windows, steel, picture window, insulated glass, 8' x 9'	4	Ea.	$6,032.50	$24,130	
B20301107150	Door, aluminum & glass, with transom, narrow stile, hardware, 3'-0" x 10'-0" opening	3	Ea.	$4,092.51	$12,278	
B20301107151	Door, aluminum & glass, with transom, full vision, double door, hardware, 6'-0" x 10'-0" opening	1	Opng.	$7,864.73	$7,865	
B20302203950	Door, steel 18 gauge, hollow metal, 1 door with frame, "A" label, 3'-0" x 7'-0" opening	3	Opng.	$3,438.72	$10,316	
B20101461500	Exterior Sofit Metal Panel	150	S.F.	$43.00	$6,450	
B30	**Roofing**			**$25.12**	**$133,111**	
B3010 301	Roofing, single ply membrane, PVC w/ elvaloy, 60 mils, fully adhered, 80 mils base sheet, cover board, R25 rigid insulation	5,300	S.F.	$24.00	$127,200	

Line Number	Description	Quantity	Unit	Unit Cost	Sub-Total	Total
B30106101300	Gutters, box, steel, galvanized, 26 ga thick, 6", mill finish	100	L.F.	$10.19	$1,019	
B30106200250	Downspout, aluminum, rectangular, 3" x 4", enameled, .024" thick	200	V.L.F.	$6.91	$1,382	
B30202100800	Roof hatch, with curb, 1" fiberglass insulation, 2'x6" x 8'-0", aluminum curb and cover, 260 lbs	1	Opng.	$3,509.64	$3,510	
C. INTERIORS		**5,300**	**S.F.**	**$45.49**		**$241,099**
C10	**Interior Construction**			**$31.57**	**$167,297**	
C10101265060	Metal partition, 5/8"fire rated gypsum board face, no base, 3-5/8" @ 16" OC framing, same opposite face, no insulation	11,860	S.F.	$3.40	$40,324	
C10101265080	Metal partition, 5/8"fire rated gypsum board face, no base layer, 3-5/8" @2 16" OC framing, nothing opposite face, no insulation	4,672	S.F.	$2.36	$11,026	
C1020 00	Solid core, 3'x7' PLAM, w/ HM frame, butt welded and door hardware	5	Ea.	$2,209.26	$11,046	
C1020 001	Solid core, 3'x7' PLAM, w/ HM frame, butt welded and door hardware, lite and transom	4	Ea.	$2,279.06	$9,116	
C1020 002	Solid core, 3'x7' PLAM, w/ HM frame, butt welded and door hardware, lite only	0	Ea.	$2,198.64	$0	
C1030 001	Casework, base cabinet, solid surface counter, 4"	100	L.F.	$748.38	$74,838	
C1030 002	Casework, wall cabinet, 12" deep, 30" high	100	L.F.	$209.47	$20,947	
C30	**Interior Finishes**			**$13.92**	**$73,802**	
C30102300080	Painting, interior on plaster and drywall, brushwork, primer & 2 coats	9,759	S.F.	$0.63	$6,148	
C30204101580	Vinyl, composition tile, minimum	2,650	S.F.	$1.49	$3,949	
C30204101600	Vinyl, composition tile, maximum	2,650	S.F.	$1.90	$5,035	
C30204101720	Tile, ceramic natural clay	1,139	S.F.	$5.58	$6,356	
C30206000085	Resilient base, 1/8" rubber base, 4" H, straight or cove, std. colors	837	L.F.	$2.98	$2,494	
C30302105900	Acoustic ceilings, 5/8" fiberglass board, 24" x 24" tile, tee grid, suspended support	5,300	S.F.	$9.40	$49,820	
D. SERVICES		**5300**	**S.F.**	**$104.19**		**$552,225**
D20	**Plumbing**			**$15.94**	**$84,500**	
D2000 002	General plumbing systems based on MEP input	13	Ea.	$6,500.00	$84,500	
D30	**HVAC**			**$40.25**	**$213,325**	

Line Number	Description	Quantity	Unit	Unit Cost	Sub-Total	Total
D30 001 - 00	General mechanical systems based on MEP Engineering input	5,300	S.F.	$40.25	$213,325	
D40	**Fire Protection**			**$0.00**	**$0**	
D4010	Sprinklers					
D50	**Electrical**			**$48.00**	**$254,400**	
D50 001 - 00	General electrical systems based on MEP engineering input	5,300	S.F.	$48.00	$254,400	
E. EQUIPMENT & FURNISHINGS		**5,300**	**S.F.**	**$0.00**		**$0**
F. SPECIAL CONSTRUCTION & DEMOLITION		**5,300.00**	**S.F.**	**$17.72**		**$93,925**
F10	**Special Construction**			**$17.72**	**$93,925**	
F1010005	Equitone fiber cement board w/ exposed fasteners	1,445	S.F.	$65.00	$93,925	
G. BUILDING SITEWORK		**5,300**	**S.F.**	**$0.00**		**$0**
	LEVEL I - SYSTEMS SUB-TOTAL	5,300	S.F.	**$303.09**		**$1,606,398**
H. CONTRACTOR FEES & CONTINGENCIES		**5,300**	**S.F.**	**$143.17**		**$758,808**
H10	**Contractor Fees (in Series)**			**$52.50**	**$278,228**	
	General Conditions & Bonds			12.00%	$192,768	$1,799,166
	Overhead & Profit			4.75%	$85,460	$1,884,626
H20	**Contingencies (in Parallel) on "Fee" total above**			**$90.68**	**$480,580**	
	Material Waste			5.50%	$103,654	
	SD Package Design Contingency			10.00%	$188,463	
	Owner Contingency			10.00%	$188,463	
	TOTAL	**5,300**	**S.F.**	**$446.27**		**$2,365,206**

PCC

Site Cost Estimate
By Halff Associates

$616,942

As of September 2022

(See attached detailed report)







HALFF ASSOCIATES, INC.
5000 W. MILITARY
SUITE 100, MCALLEN, TX 78503
956-664-0286

Hidalgo County El Paraiso
Hidalgo, TEXAS
8/26/2022

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

		Quantity	Unit	Unit Cost	Cost
	GENERAL IMPROVEMENTS				
1	Demolition	1	LS	$ 30,000.00	$ 30,000.00
2	Temporary Erosion and Sediment Control	1	LS	$ 8,000.00	$ 8,000.00
3	Traffic Control	1	LS	$ 2,000.00	$ 2,000.00
4	Construction Staking	1	LS	$ 10,000.00	$ 10,000.00
				Sub-Total =	**$ 50,000.00**

		Quantity	Unit	Unit Cost	Cost
	UTILITY IMPROVEMENTS				
1	Connect to Existing 4" Water Line - 4" Tee (Cut In)	2	EA	$ 4,000.00	$ 8,000.00
2	4" PVC Water Line DR 18 C-900 w/ Fittings (Tees, Bends, Caps etc)	553	LF	$ 80.00	$ 44,240.00
3	4" Gate Valve w/ Box	2	EA	$ 3,500.00	$ 7,000.00
4	Fire Hydrant Assembly (Spool Piece as Required)	2	EA	$ 8,500.00	$ 17,000.00
5	Trench Protection	553	LF	$ 12.00	$ 6,636.00
6	2" Domestic Service	104	LF	$ 15.00	$ 1,562.25
7	6" Wastewater		LF	$ 50.00	$ -
8	Septic Tanks	2	EA	$ -	$ -
9	Septic Leech Field	1	LS	$ -	$ -
				Sub-Total =	**$ 84,438.25**

		Quantity	Unit	Unit Cost	Cost
	PAVEMENT IMPROVEMENTS				
1	2-inch Hmac w/ Base and Subgrade	3,622	SY	$ 30.00	$ 108,660.00
2	Concrete Sidewalk	2,000	SY	$ 60.00	$ 120,000.00
3	Concrete Curb and Gutter	2,146	LF	$ 40.00	$ 85,840.00
4	Concrete Wheel Stops	38	EA	$ 400.00	$ 15,200.00
5	Handicap Ramp	2	EA	$ 2,500.00	$ 5,000.00
				Sub-Total =	**$ 334,700.00**

		Quantity	Unit	Unit Cost	Cost
	STORM IMPROVEMENTS				
1	18-inch RCP Class III	94	LF	$ 50.00	$ 4,700.00
2	18-inch RCP Class IV	245	LF	$ 60.00	$ 14,700.00
3	24-inch RCP Class IV	51	LF	$ 80.00	$ 4,080.00
4	24-inch Sloped End Treatment	1	EA	$ 2,500.00	$ 2,500.00
5	PCU Combination Inlet	2	EA	$ 6,500.00	$ 13,000.00
6	Type 'CC' Grate Inlet	1	EA	$ 6,000.00	$ 6,000.00
				Sub-Total =	**$ 44,980.00**

Contingency (20%) =	**$ 102,823.65**
TOTAL=	**$ 616,941.90**

Note: This statement was prepared utilizing standard cost estimate practices. It is understood and agreed that this is an estimate only and that the Engineer shall not be held liable to the Owner or third party for any failure to accurately estimate the cost of the project or any part thereof.

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END OF DOCUMENT

04. SCHEMATIC DESIGN DRAWINGS



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HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY

1901 N. LOS EBANOS RD., ALTON, TX 78573



100% SCHEMATIC DESIGN

ERO'S PROJECT #21087

OWNER: HIDALGO COUNTY

COUNTY OF HIDALGO
100 EAST CANO, 2ND FLOOR
EDINBURG, TX 78539
TEL: (956) 318-2626

CONSULTANT TEAM:

STRUCTURAL ENGINEER:

ERO ARCHITECTS
P.O. BOX 720428
MCALLEN, TX 78504
TEL: (956) 661-0400
FAX: (956) 661-0401
WWW.GOERO.COM

MEP ENGINEER:

EDCON BUILDERS
1101 W FERGUSON AVE
PHARR, TX 78577
TEL: (956) 884-7006
WWW.EDCONBUILDERS.COM

LOCATION: 1901 N. LOS EBANOS RD., ALTON, TX 78573



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P.O. BOX 720428, McAllen, Tx 78504
T 956-661-0400 | goero.com

"NOT FOR CONSTRUCTION"

THIS DOCUMENT IS INTENDED FOR REVIEW ONLY AND IS NOT INTENDED FOR BIDDING, PERMIT OR CONSTRUCTION PURPOSES.

ELI ROCHA, P.E., AIA
TEXAS REGISTRATION NO.
Engineer: 80301
Architect: 16190

HIDALGO COUNTY EL PARAISO PROJECT
HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

PROJECT No.: 21087
ISSUE DATE: 08.16.2022
DRAWN BY: Author
CHECKED BY: Checker
Sheet Name
COVER SHEET

Sheet Number
GI001

Project Status:
100% SCHEMATIC DESIGN

8/16/2022 2:13:25 AM
Autodesk Docs://21087 - Hidalgo County El Paraiso Building/21087 Hidalgo County El Paraiso Bldg_Base.rvt

ABBREVIATIONS

A	
A/C	AIR CONDITIONING
AWP	ACOUSTICAL WALL PANEL
AB	ANCHOR BOLT
ABV	ABOVE
ACT	ACOUSTICAL TILE
AD	AREA DRAIN
ADA	AMERICANS WITH DISABILITIES ACT (1990)
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
AGG	AGGREGATE
AHU	AIR HANDLING UNIT
ALST	ALUMINUM STOREFRONT
AFG	ABOVE FINISH GRADE
ALUM	ALUMINUM
ALT	ALTERNATE
ANG	ANGLE
ANOD	ANODIZED
AP	ACCESS PANEL
APPROX	APPROXIMATELY
ARCHL	ARCHITECTURAL
ASPH	ASPHALT
B	
BD	BOARD
BLDG	BUILDING
BLK	BLOCKING
BM	BEAM
BO	BOTTOM OF ____
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BRZ	BRONZE
BUR	BUILT-UP ROOF
C	
C	CHANNEL
CABT	CABINET
CB	CHALK BOARD
CD	CEILING DIFFUSER
CFMF	COLD FORMED METAL FRAMING
CG	CORNER GUARD
C&G	CURB AND GUTTER
CH	COAT HOOK
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
COMP	COMPRESSIBLE
CONC	CONCRETE
COND	CONDITION
CONNX	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CPT	CARPET
CT	CERAMIC TILE
CTSK	COUNTERSINK
CW	COLD WATER
D	
DBL	DOUBLE
DEF	DEFORMED
DIA	DIAMETER
DIM	DIMENSION
DIV	DIVISION
DN	DOWN
DP	DAMPPROOFING
DR	DOOR
DTL	DETAIL
DS	DOWNSPOUT
DWG	DRAWING
DWL	DOWEL
DWR	DRAWER
E	
EA	EACH
EF	EACH FACE
EGSB	EXTERIOR GYPSUM SOFFIT BOARD
EIFS	EXTERIOR INSULATED FINISH SYSTEM
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EJ	EXPANSION JOINT
EQ	EQUAL
EQUIP	EQUIPMENT
ETC	ETCETERA
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EXGR	XISTING GRADE
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXPD	EXPOSED
EXT	EXTERIOR
F	
FA	FIRE ALARM
FB	FACE BRICK
FC	FIRE CODE
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FFE	FINISH FLOOR ELEVATION
FGD	FINISH GRADE
FHC	FIRE HOSE CABINET
FIN	FINISH
FIXT	FIXTURE
FLR	FLOOR
FLSHG	FLASHING
FLUOR	FLUORESCENT
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
F PART	FOLDING PARTITION
FR-WD	FIRE-RETARDANT TREATED WOOD
FT	FEET
FUR	FURRING
G	
G	GAS
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GCMU	GLAZED CONCRETE MASONARY UNIT
GEN	GENERAL
GI	GALVANIZED IRON
GL	GLASS
GR	GRADE
GRD	GROUND
GSFT	GLAZED STRUCTURAL FACING TILE
GTP	GLAZED TILE PAVER
GWB	GYPSUM WALL BOARD
H	
HB	HOSE BIBB
HC	HANDICAPPED ACCESSIBLE
HD	HEAD, HEADED, HEAVY DUTY
HDG	HOT-DIPPED GALVANIZED
HDW	HARDWARE
HLB	HORIZONTAL LOUVER BLINDS
HORIZ	HORIZONTAL
HM	HOLLOW METAL FRAME
HR	HOUR
HT	HEIGHT
HW	HOT WATER
I	
ID	INSIDE DIAMETER
IG	INSULATING GLASS
IN	INCHES
INC	INCANDESCENT
INCL	INCLUDING
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
J	
JAN	JANITOR
JST	JOIST
JT	JOINT
L	
LAM	LAMINATE
LAV	LAVATORY
LB	POUND
LF	LINEAR FOOT
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LP	LIGHTPOLE
LT	LIGHT
LT WT	LIGHT WEIGHT
L	LOUVER
M	
MAX	MAXIMUM
MANUF	MANUFACTURER
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MOB	MOP BASIN
MB	MARKER BOARD
MECH	MECHANICAL
MEM WP	MEMBRANE WATERPROOFING
MEP	MECHANICAL, ELECTRICAL & PLUMBING
MEZZ	MEZZANINE
MID	MIDDLE
MIR	MIRROR
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLENEOUS
MO	MASONRY OPENING
MOD	MODULE
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MTP	METAL TOILET PARTITIONS
MULL	MULLION
N	
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O	
OC	ON CENTER
OCD	OVERHEAD COILING DOOR
OCG	OVERHEAD COILING GRILL
OD	OUTSIDE DIAMETER/DIMENSION
OFF	OFFICE
OF-CI	OWNER FURNISHED, CONTRACTOR INSTALLED
OH	OVERHEAD
OPHG	OPENING
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN
OTS	OPEN TO STRUCTURE
P	
PAR	PARALLEL
PC	PRECAST
PCP	PORTLAND CEMENT PLASTER
PEN	PENETRATION
PG	PLATE GLASS
PH	PAPER HOLDER
PL	PLATE
PLUMB	PLUMBING
PLWD	PLYWOOD
PNTGR	PAINT GRADE
POL	POLISHED
PP	POWER POLE
PR	PAIR
PRL	PROPERTY LINE
PT	PRESSURE TREATED
PTD	PAPER TOWEL DISPENSER
PTN	PARTITION
PVMT	PAVEMENT
PWB	PREFINISHED WALL BOARD
Q	
QA	QUALITY ASSURANCE
QT	QUARRY TILE
R	
R	RADIUS
RAF	RESILIENT ATHLETIC FLOORING
RBR	RUBBER
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
RE	REFERENCE
RECP	RECEPTACLE
REINF	REINFORCE
REQD	REQUIRED
RES	RESILIENT
REV	REVISED
RF	ROOF
RO	ROUGH OPENING
RM	ROOM
RV	ROOF VENT
RVT	RESILIENT VINYL TILE
S	
SB	SPLASH BLOCK
SC	SEALED CONCRETE
SCHED	SCHEDULE
SCFV	SOLID CORE FLUSH VENEER
SCPL	SOLID CORE PLASTIC LAMINATE
SD	SOAP DISPENSER
SEC	SECTION
SF	SQUARE FEET
SG	SLIDING GLASS DOOR
SGFT	STRUCTURAL GLAZED FACING TILE
SGL	SINGLE
SHT	SHEET
SIM	SIMILAR
SJ	SAWN CONTROL JOINT
SPC	SPECIAL COATING SYSTEM
SPEC	SPECIFICATION
SQ	SQUARE
SS	SOUND STRIP
SSTL	STAINLESS STEEL
SR	SHOWER ROD
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SAC	SUSPENDED ACOUSTICAL CEILING
T	
T&B	TOP AND BOTTOM
TB	TACKBOARD
TDR	TOWEL DISPENSER AND RECEPTACLE
TECH	TECHNICAL
TEMP	TEMPERATURE
TEL	TELEPHONE
TERR	TERRAZZO
THK	THICK
THR	THRESHOLD
TKS	TACKSTRIP
TLT	TOILET
TO	TOP OF ____
TOB	TOP OF WOOD BLOCKING
TOC	TOP OF CURB
TOD	TOP OF DRAIN
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TTD	TOILET TISSUE DISPENSER
TYP	TYPICAL
U	
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
URS	URINAL SCREEN
UTIL	UTILITY
V	
V	VENT
VCT	VINYL COMPOSITION TILE
VEND	VENDING
VENT	VENTILATING
VER	VERIFY
VERT	VERTICAL
VEST	VESTBULE
VIF	VERIFY IN FIELD
VTR	VENT THROUGH ROOF
VGE	PREFINISHED VINYL CLAD GYPSUM BOARD
VWC	VINYL WALL COVERING
W	
W/	WITH
WA	WATT
WB	WIND BRACE
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WH	WATER HEATER
WNDW	WINDOW
W/O	WITHOUT
WP	WATERPROOFING
WR	WASTE RECEPTICLE
WS	WEATHERSTRIP
WT	WEIGHT
WWF	WELDED-WIRE FABRIC

DRAWING CONVENTIONS

PLAN NORTH

COLUMN REFERENCE. GRID (LETTER, NUMBER)

CENTER LINE

LEVEL MARKER

MATCHLINE A-B

MATCH LINE

INTERIOR ELEVATION SYMBOL

EXTERIOR ELEVATION SYMBOL

BUILDING SECTION SYMBOL

WALL SECTION SYMBOL

ROOM NAME AND NUMBER

DOOR DESIGNATION

WINDOW DESIGNATION

ENLARGED PLAN OR DETAIL

DIMENSIONS

ONE HOUR FIRE RATING

MATERIAL LEGEND

MASONRY CMU (PLAN VIEW)
MASONRY CMU (ELEVATION VIEW)
BRICK (COMMON OR FACE PLAN VIEW)
STEEL
ALUMINUM
EXISTING
CONCRETE
STONE (CUT)
POROUS FILL (STONE OR GRAVEL, ETC.)
EARTH
EARTH (UNDISTURBED)
FINISHED WOOD
PLASTER, SAND, CEMENT, GROUT
GYPSUM BOARD
GLASS
RIGID INSULATION
BATT INSULATION
ROUGH WOOD (CONTINUOUS)
ROUGH WOOD (NON-CONTINUOUS)
PLYWOOD
STYROFOAM

PROJECT GENERAL NOTES

PROJECT GENERAL NOTES PROVIDE INFORMATION CONCERNING THE WORK OF THE ENTIRE PROJECT AND ARE NOT LIMITED TO ANY INDIVIDUAL DRAWING OR SHEET.

1. THE CONTRACTOR SHALL CAREFULLY REVIEW AND COMPARE THE CONTRACT DOCUMENTS WITH EACH OTHER AND WITH INFORMATION FURNISHED BY THE OWNER AND SHALL AT ONCE REPORT TO THE ARCHTECT ANY INCONSISTENCIES, OMISSIONS OR ERRORS FOUND. IF THE CONTRACTOR PERFORMS ANY CONSTRUCTION ACTIVITY KNOWING IT INVOKES A RECOGNIZED INCONSISTENCIES, OMISSIONS OR ERROR IN THE CONTRACT DOCUMENT WITHOUT SUCH NOTICE TO THE ARCHITECT, THE CONTRACTOR SHALL ASSUME APPROPRIATE RESPONSIBILITY FOR SUCH PERFORMANCE AN SHALL BEAR AN APPROPRIATE AMOUNT OF HTE ATTRIBUTABLE COST FOR THE CORRECTION.
2. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF WORK UNDER THE CONTRACT, UNLESS THE CONTRACT DOCUMENTS GIVE OTHER SPECIFIC INSTRUCTIONS CONCERNING THESE MATTERS.
3. THE DRAWINGS AND SPECIFICATIONS ARE COOPERATIVE. WHERE DRAWINGS AND SPECIFICATIONS OR DRAWINGS OR SPECIFICATIONS THEMSELVES ARE IN CONFLICT, CONTRACTOR SHALL PROVIDE THE BETTER QUALITY OR GREATER QUANTITY.
4. GENERAL DATA/ INFORMATION SHOWN ON ONE PART OF THE DRAWINGS SHALL APPLY TO ALL SIMILAR CONDITIONS UNO.
5. THE DRAWINGS INDICATE IN GENERAL THE PROJECT IN TERMS OF ARCHITECTURAL DESIGN INTENT, THE DIMENSIONS OF THE BUILDING, THE MAJOR ARCHITECTURAL ELEMENTS AND TYPE OF STRUCTURAL, MECHANICAL AND ELECTRICAL SYSTEMS. THE DRAWINGS DO NOT NECESSARILY INDICATE OR DESCRIBE ALL WORK REQUIRED FOR FULL PERFORMANCE AND COMPLETION OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. AS INDICATED OR DESCRIBED, THE CONTRACTOR SHALL FURNISH ALL ITEMS REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK.
6. THE CONTRACTOR SHALL COORDINATE ALL MECHANICAL FLOOR/WALL SLEEVES AND SHAFTS IN CONCRETE SLABS/WALLS WITH MECHANICAL, PLUMBING, FIRE PROTECTION, SHOULD BE REPORTED TO THE ARCHITECT FOR CLARIFICATION AND VERIFICATION PRIOR TO EXECUTION OF WORK.
7. THE CONTRACTOR SHALL CONDUCT HIS OWN SITE SURVEY OF THE EXISTING GROUND AND CURB ELEVATIONS (LEVELS) AND REPORT ACTUAL ELEVATIONS (LEVELS) TO THE ARCHITECT.
8. CONTRACTOR'S SHOP DRAWINGS SHOULD INDICATE ACTUAL ELEVATIONS (LEVELS).
9. ALL ELEVATIONS (LEVELS) ARE IN FEET.
10. ALL DIMENSIONS ARE IN FEET AND ANGLES IN DEGREES.
11. ONLY WRITTEN DIMENSIONS IN ALL CASES SHALL BE FOLLOWED.
12. ALL EXISTING OR PROPOSED ELEVATIONS (LEVELS) AND DIMENSIONS, ON SITE AND ON DRAWINGS MUST BE CHECKED AND VERIFIED BY THE CONTRACTOR BEFORE THE PREPARATION OF SHOP DRAWINGS OR COMMENCEMENT OF ANY ITEM OF WORK ON THE SITE.
13. ARCHITECTURAL DRAWINGS MUST ALWAYS BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS, SPECIFICATIONS AND CONTRACT DOCUMENTS. ANY DISCREPANCY BETWEEN THESE DRAWINGS AND DOCUMENTS SHOULD BE REPORTED TO THE ARCHITECT FOR CLARIFICATION AND VERIFICATION.
14. ALL SHAFT WALLS TO PROVIDE FOR 2 HRS. FIRE RATING UNO.
15. FOR AREAS WITHOUT SUSPENDED CEILING HAVING EXPOSED SLAB AND BEAMS, WALL FINISH MATERIAL SHALL BE FROM FLOOR LEVEL TO BOTTOM OF SLAB LEVEL.
16. NOTES APPEARING ON VARIOUS DRAWINGS FOR DIFFERENT SYSTEMS AND MATERIALS ARE TO BE REVIEWED, COORDINATED AND ARE TO BE APPLIED TO ALL RELATED DRAWINGS AND DETAILS.

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E102	POWER PLAN CLINIC
E103	POWER PLAN CRC

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TEXAS REGISTRATION NO.
Engineer: 60251
Architect: 19160

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

PROJECT NO.: 21087
ISSUE DATE: 08.16.2022
DRAWN BY: Author
CHECKED BY: Checker

SHEET NAME

INDEX OF DRAWINGS

Sheet Number

GI002

Project Status:

100% SCHEMATIC DESIGN

8/26/2022 1:06:57 PM
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CODE SUMMARY

PROJECT TITLE:	HIDALGO COUNTY EL PARAISO - HEALTH CLINIC
BUILDING LOCATION	ALTON, TEXAS
PROJECT DESCRIPTION:	1-STORY OFFICE BUILDING WITH OFFICES, BREAK ROOM, CONFERENCE ROOM, EXAM ROOMS, ASSEMBLY SPACES.

APPLICABLE CODES

- CITY OF ALTON, TX - CODE OF ORDINANCE
- 2021 INTERNATIONAL BUILDING CODE (IBC)
- 2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC)
- 2021 INTERNATIONAL MECHANICAL CODE (IMC)
- 2021 INTERNATIONAL PLUMBING CODE (IPC)
- 2021 INTERNATIONAL FIRE CODE (IFC)
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
- 2017 NATIONAL ELECTRICAL CODE
- 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN (ADAAG
- TEXAS DEPARTMENT OF LICENSING AND REGULATION: ARCHITECTURAL BARRIERS TEXAS ACCESSIBILITY STANDARDS (TDLR-TAS)
- ALL OTHER APPLICABLE STANDARDS

BUILDING OCCUPANCIES

PRIMARY OCCUPANCY	PER SECTION 304.1 BUSINESS GROUP B (INCLUDES MECHANICAL, ELECTRICAL, MDF AND IDF ROOMS THAT ARE USED FOR THE PROPERLY FUNCTION OF THE PRINCIPAL OCCUPANCY)
NON-SEPARATED OCCUPANCY	NONE
CONSTRUCTION TYPE	IIB

ALLOWABLE BUILDING HEIGHTS AND AREAS

TABULAR ALLOWABLE AREA
- BUSINESS — 23,000 SF (IBC TABLE 506.2)

ACTUAL AREA
- BUSINESS — 7,974 SF

TOTAL ALLOWABLE STORIES (PER 504.4)
- BUSINESS — 3

ACTUAL STORIES — 1

FIRE RESISTANCE RATINGS

OCCUPANCY SEPARATION	NO SEPARATION REQUIRED (508.3)
CORRIDORS	0 HR (IBC TABLE 1020.1)

EXTERIOR WALL RATINGS
- REQUIRED FOR FIRE SEPARATION DISTANCE — NONE (IBC TABLE 602 / TABLE 705.8)

INTERIOR FINISH RATINGS (IBC 803.13)

EXIT STAIRWAYS, RAMPS, PASSAGEWAYS	CLASS A OR B
CORRIDORS	CLASS A, B OR C
ROOMS AND ENCLOSED SPACES	CLASS A, B OR C

FIRE SAFETY SYSTEMS

AUTOMATIC SPRINKLERS	NOT REQUIRED
STANDPIPE SYSTEM	NOT REQUIRED (IBC 905.3)
OCCUPANT NOTIFICATION FIRE ALARM SYSTEM	NOT REQUIRED (IBC 907.2.2) * BUILDING WILL BE EQUIPPED WITH MANUAL FIRE ALARM SYSTEM

FIRE EXTINGUISHERS

• LIMITED AREA COVERAGE	PER IBC SECTION 906.1, PROVIDED IN LOCATION DESCRIBED IN 906.1 ITEMS 2 THROUGH 6
• MINIMUM RATING: 2-A	TABLE 906.3(1)
• MAXIMUM AREA PER 4A EXT: 11,250 SF	TABLE 906.3(1)
• MAXIMUM TRAVEL DISTANCE: 75 FT	TABLE 906.3(1)

OCCUPANT LOAD CALCULATIONS FACTORS (IBC TABLE 1004.5)

BUSINESS	150 SF / OCCUPANT (GROSS)
BUSINESS (CONCENTRATED)	50 SF / OCCUPANT (GROSS)
ASSEMBLY (UNCONCENTRATED)	15 SF / OCCUPANT (NET)
STORAGE / MECHANICAL	300 SF / OCCUPANT (GROSS)
OCCUPANT LOAD BY CODE:	**159**

REQUIRED EGRESS WIDTH FACTORS

LEVEL EXITS: 0.15 IN. / OCC. (IBC 1005.3.2 EXCEPTION 1)

MINIMUM CLEAR WIDTH

LEVEL EXITS:	32 IN. (IBC 1010.1.1)
CORRIDORS:	44 IN. (IBC TABLE 1020.3)

MEANS OF EGRESS CONFIGURATION

MINIMUM EXIT SEPARATION
- 1/3 DIAGONAL OF AREA SERVED — IBC 1007.1.1

MEANS OF EGRESS MARKING/ILLUMINATION

EXIT SIGNAGE
- CHANGES IN DIRECTION — IBC 1013.1
- ROOMS WITH 2 OR MORE EXITS — IBC 1013.1
- CORRIDOR MARKING — IBC 1013.1

SIGNAGE ILLUMINATION — INTERNAL / 90 MIN. (IBC 1013.3)

MEANS OF EGRESS ILLUMINATION

NORMAL POWER
- FLOOR — MIN. 1 FOOTCANDLE (IBC 1008.2.1)

EMERGENCY POWER
- FLOOR — 0.6 FOOT CANDLE AVG. / 0.06 FOOTCANDLE MIN. (IBC 1008.3.5)
- DURATION — 90MIN (IBC 1008.3.4)

MAX. TRAVEL DISTANCES

BUSINESS OCCUPANCY
- COMMON PATH OF TRAVEL — 100FT (IBC TABLE 1006.2.1)
- DEAD-END LIMIT — 20FT (IBC 1020.5)
- TOTAL TRAVEL DISTANCE — 200FT (IBC TABLE 1017.2)

PLUMBING FIXTURE COUNT (IBC TABLE 2902.1)

RESTROOM CALCULATIONS BY FLOOR	TOTAL NUMBER OF OCCUPANTS	GENDER EQUAL DISTRIBUTION	WATER CLOSETS			LAVATORIES			DRINKING FOUNTAINS	SERVICE SINK
			MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX		
TOTAL FIXTURE NEEDED (BUSINESS)	159	80	3	3		2	2		2	1
TOTAL FIXTURE PROVIDED			3	3	1	2	2	1	2	1

PARKING LOT CALCULATION (HIDALGO COUNTY PLANNING DEPARTMENT OFF-STREET PARKING REQUIREMENTS FOR VARIOUS USE)

FOUR (4) SPACES FOR UP TO FOUR HUNDRED (400) SQUARE FEET OF FLOOR AREA, PLUS ONE SPACE FOR EACH ADDITIONAL FOUR HUNDRED (400) SQUARE FEET OF FLOOR AREA UP TO FIVE THOUSAND (5,000) SQUARE FEET FOR BUILDING CONTAINING OVER FIVE THOUSAND (5,000) SQUARE FEET, A SEPARATE PARKING PLAN MUST BE SHOWN.

HEALTH CLINIC AREA	= 7,974 S.F.
PARKING REQUIRED	= 23 SPACES
PARKING PROVIDED	= 31 SPACES
ACCESSIBLE PARKING REQUIRED	= 2 SPACES
ACCESSIBLE PARKING PROVIDED	= 2 SPACES
TOTAL PARKING PROVIDED	**= 31 SPACES**

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TEXAS REGISTRATION NO.
Engineer: 60251
Architect: 19160

HIDALGO COUNTY EL PARAISO
PROJECT
HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Description	Date

PROJECT NO.: 21087
ISSUE DATE: 08.16.2022
DRAWN BY: Author
CHECKED BY: Checker

SHEET NAME
LIFE SAFETY - CODE SUMMARY - HEALTH CLINIC

Sheet Number
GI100

Project Status:
100% SCHEMATIC DESIGN

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CODE SUMMARY

PROJECT TITLE: HIDALGO COUNTY EL PARAISO - COMMUNITY RESOURCE CENTER

BUILDING LOCATION ALTON, TEXAS

PROJECT DESCRIPTION: 1-STORY OFFICE BUILDING WITH OFFICES, PREP KITCHEN, ASSEMBLY SPACES.

APPLICABLE CODES

- CITY OF ALTON, TX - CODE OF ORDINANCE
- 2021 INTERNATIONAL BUILDING CODE (IBC)
- 2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC)
- 2021 INTERNATIONAL MECHANICAL CODE (IMC)
- 2021 INTERNATIONAL PLUMBING CODE (IPC)
- 2021 INTERNATIONAL FIRE CODE (IFC)
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
- 2017 NATIONAL ELECTRICAL CODE
- 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN (ADAAG
- TEXAS DEPARTMENT OF LICENSING AND REGULATION: ARCHITECTURAL BARRIERS TEXAS ACCESSIBILITY STANDARDS (TDLR-TAS)
- ALL OTHER APPLICABLE STANDARDS

BUILDING OCCUPANCIES

PRIMARY OCCUPANCY — PER SECTION 304.1 ASSEMBLY GROUP A-3 (INCLUDES MECHANICAL, ELECTRICAL, MDF AND IDF ROOMS THAT ARE USED FOR THE PROPERLY FUNCTION OF THE PRINCIPAL OCCUPANCY)

NON-SEPARATED OCCUPANCY — NONE

CONSTRUCTION TYPE — IIB

ALLOWABLE BUILDING HEIGHTS AND AREAS

TABULAR ALLOWABLE AREA
- ASSEMBLY A-3 — 9,500 SF (IBC TABLE 506.2)

ACTUAL AREA
- ASSEMBLY A-3 — 5,250 SF

TOTAL ALLOWABLE STORIES (PER 504.4)
- ASSEMBLY A-3 — 2

ACTUAL STORIES — 1

FIRE RESISTANCE RATINGS

OCCUPANCY SEPARATION — NO SEPARATION REQUIRED (508.3)

CORRIDORS — 0 HR (IBC TABLE 1020.1)

EXTERIOR WALL RATINGS
- REQUIRED FOR FIRE SEPARATION DISTANCE — NONE (IBC TABLE 602 / TABLE 705.8)

INTERIOR FINISH RATINGS (IBC 803.13)

EXIT STAIRWAYS, RAMPS, PASSAGEWAYS — CLASS A OR B

CORRIDORS — CLASS A, B OR C

ROOMS AND ENCLOSED SPACES — CLASS A, B OR C

FIRE SAFETY SYSTEMS

AUTOMATIC SPRINKLERS — NOT REQUIRED

STANDPIPE SYSTEM — NOT REQUIRED (IBC 905.3)

OCCUPANT NOTIFICATION FIRE ALARM SYSTEM — NOT REQUIRED (IBC 907.2.2)
* BUILDING WILL BE EQUIPPED WITH MANUAL FIRE ALARM SYSTEM

FIRE EXTINGUISHERS
- LIMITED AREA COVERAGE — PER IBC SECTION 906.1, PROVIDED IN LOCATION DESCRIBED IN 906.1 ITEMS 2 THROUGH 6
- MINIMUM RATING: 2-A — TABLE 906.3(1)
- MAXIMUM AREA PER 4A EXT: 11,250 SF — TABLE 906.3(1)
- MAXIMUM TRAVEL DISTANCE: 75 FT — TABLE 906.3(1)

OCCUPANT LOAD CALCULATIONS FACTORS (IBC TABLE 1004.5)

BUSINESS	150 SF / OCCUPANT (GROSS)
BUSINESS (CONCENTRATED)	50 SF / OCCUPANT (GROSS)
ASSEMBLY (UNCONCENTRATED)	15 SF / OCCUPANT (NET)
STORAGE / MECHANICAL	300 SF / OCCUPANT (GROSS)

OCCUPANT LOAD BY CODE: 174

REQUIRED EGRESS WIDTH FACTORS

LEVEL EXITS: 0.15 IN. / OCC. (IBC 1005.3.2 EXCEPTION 1)

MINIMUM CLEAR WIDTH

LEVEL EXITS: 32 IN. (IBC 1010.1.1)

CORRIDORS: 44 IN. (IBC TABLE 1020.3)

MEANS OF EGRESS CONFIGURATION

MINIMUM EXIT SEPARATION
- 1/3 DIAGONAL OF AREA SERVED — IBC 1007.1.1

MEANS OF EGRESS MARKING/ILLUMINATION

EXIT SIGNAGE
- CHANGES IN DIRECTION — IBC 1013.1
- ROOMS WITH 2 OR MORE EXITS — IBC 1013.1
- CORRIDOR MARKING — IBC 1013.1

SIGNAGE ILLUMINATION — INTERNAL / 90 MIN. (IBC 1013.3)

MEANS OF EGRESS ILLUMINATION
NORMAL POWER
- FLOOR — MIN. 1 FOOTCANDLE (IBC 1008.2.1)

EMERGENCY POWER
- FLOOR — 0.6 FOOT CANDLE AVG. / 0.06 FOOTCANDLE MIN. (IBC 1008.3.5)
- DURATION — 90MIN (IBC 1008.3.4)

MAX. TRAVEL DISTANCES

ASSEMBLY A-3 OCCUPANCY
- COMMON PATH OF TRAVEL — 75FT (IBC TABLE 1006.2.1)
- DEAD-END LIMIT — 20FT (IBC 1020.5)
- TOTAL TRAVEL DISTANCE — 200FT (IBC TABLE 1017.2)

PLUMBING FIXTURE COUNT (IBC TABLE 2902.1)

RESTROOM CALCULATIONS BY FLOOR	TOTAL NUMBER OF OCCUPANTS	GENDER EQUAL DISTRIBUTION	WATER CLOSETS			LAVATORIES			DRINKING FOUNTAINS	SERVICE SINK
			MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX		
TOTAL FIXTURE NEEDED (ASSEMBLY A-3)	174	87	1	2		1	1		1	1
TOTAL FIXTURE PROVIDED			2	2	1	1	1	1	1	1

PARKING LOT CALCULATION (HIDALGO COUNTY PLANNING DEPARTMENT OFF-STREET PARKING REQUIREMENTS FOR VARIOUS USE)

FOUR (4) SPACES FOR UP TO FOUR HUNDRED (400) SQUARE FEET OF FLOOR AREA, PLUS ONE SPACE FOR EACH ADDITIONAL FOUR HUNDRED (400) SQUARE FEET OF FLOOR AREA UP TO FIVE THOUSAND (5,000) SQUARE FEET FOR BUILDING CONTAINING OVER FIVE THOUSAND (5,000) SQUARE FEET, A SEPARATE PARKING PLAN MUST BE SHOWN.

CRC AREA	= 5,250 S.F.
PARKING REQUIRED	= 17 SPACES
PARKING PROVIDED	= 24 SPACES
ACCESSIBLE PARKING REQUIRED	= 2 SPACES
ACCESSIBLE PARKING PROVIDED	= 2 SPACES
TOTAL PARKING PROVIDED	**= 24 SPACES**

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TEXAS REGISTRATION NO.
Engineer: 60251
Architect: 19160

HIDALGO COUNTY EL PARAISO PROJECT
HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

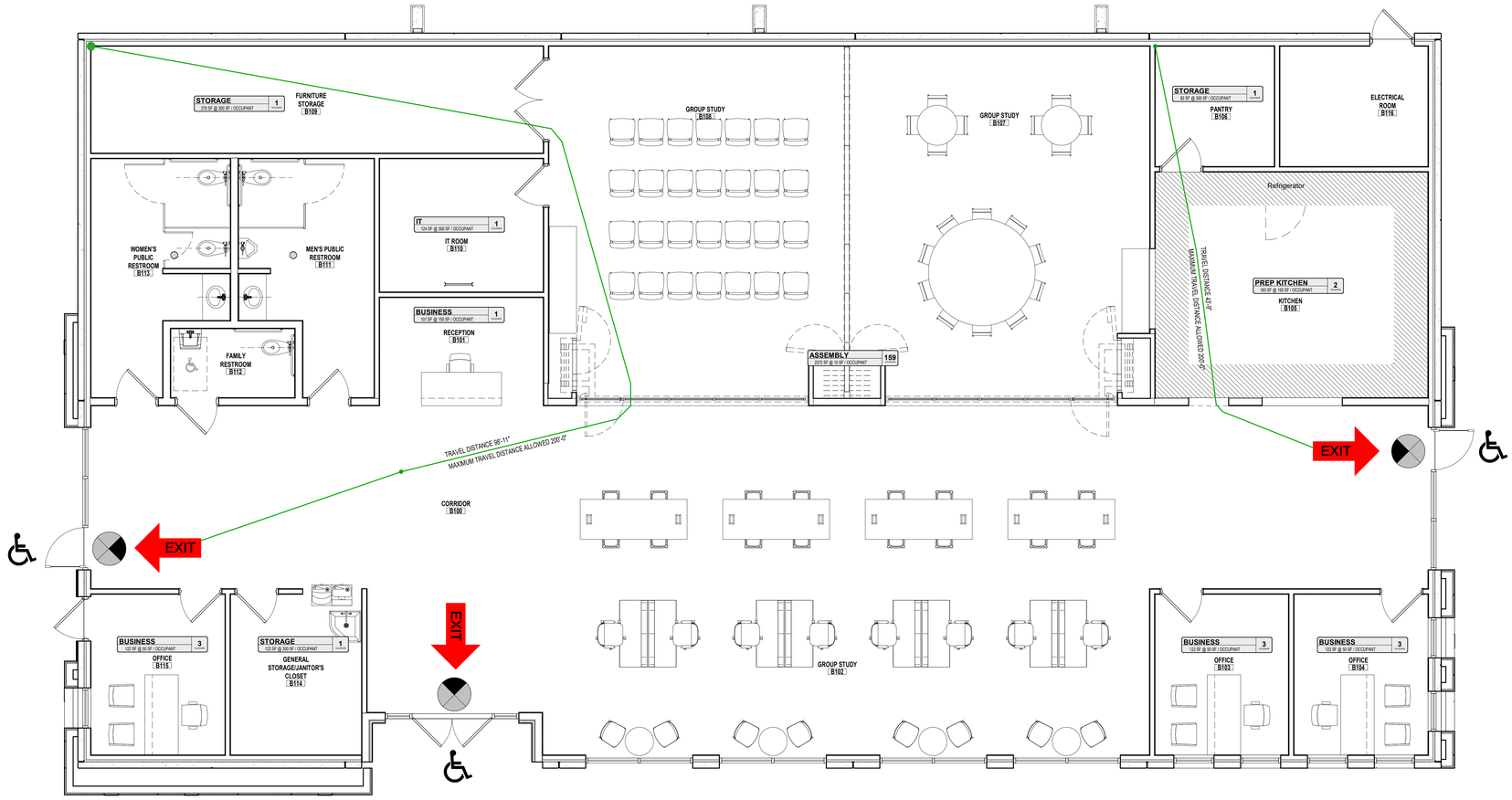
PROJECT NO.: 21087
ISSUE DATE: 08.16.2022
DRAWN BY: Author
CHECKED BY: Checker

SHEET NAME
LIFE SAFETY - CODE SUMMARY - CRC

Sheet Number
GI101

Project Status:
100% SCHEMATIC DESIGN

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LIFE SAFETY GENERAL NOTES

1. MEANS OF EGRESS CALCULATIONS ARE BASED ON ASSUMED OCCUPANT LOADS AND OCCUPANT LOAD FACTORS FOUND IN 2021 IBC, TABLE 1004.1.2.

BUSINESS	150 SF/OCCUPANT (GROSS)
BUSINESS (CONCENTRATED)	50 SF/OCCUPANT (GROSS)
ASSEMBLY (UNCONCENTRATED)	15 SF/OCCUPANT (NET)
STORAGE/MECHANICAL	300 SF/OCCUPANT (GROSS)

2. GROUPS OCCUPANT LOADS WERE ROUNDED UP ON ANY FRACTIONAL OCCUPANT.
3. INCIDENTAL STORAGE, ELECTRICAL, OR MECHANICAL ROOMS < 300 SF (OCCUPANT) WERE TREATED AS PART OF THE BUSINESS OCCUPANCY.
4. PIPE PENETRATIONS THROUGH THE FIRE-RESISTANCE RATED WALLS WILL BE PROTECTED PER IBC SECTION 714.3.
5. PIPE PENETRATIONS THROUGH THE FIRE RESISTANCE-RATED ASSEMBLY WILL BE PROTECTED PER IBC 714.4.1
6. OCCUPANT LOAD IN GENERAL SEATING AREAS ARE BASED ON ASSUMED NET OCCUPANT ESTABLISHED BY THE FURNITURE PLAN.
7. AS INDICATED ON DRAWINGS AND SPECIFICATIONS, ALL EXIT DOORS WILL BE EQUIPPED WITH PANIC AND FIRE EXIT HARDWARE.
8. GROSS OCCUPANT LOAD IS ASSUMED FOR CIRCULATION SPACES, RESTROOMS AND GENERAL USE AREAS WITHIN THE SUITES.
9. WHERE ADJACENT SPACES CREATE DIFFERENCES IN FIRE RESISTANCE RATING REQUIREMENTS, THE MORE RESTRICTIVE RATING SHALL APPLY.
10. FIRE EXTINGUISHER CABINETS RECESSED IN RATED WALL ASSEMBLIES, MUST BE RATED CABINETS OR OTHERWISE NOT COMPROMISE THE RATED WALL ASSEMBLY.
11. DEFIBRILLATOR CABINETS RECESSED IN RATED WALL ASSEMBLIES, MUST BE RATED CABINETS OR OTHERWISE NOT COMPROMISE THE RATED WALL ASSEMBLY.

EGRESS CODE LEGEND

ROOM NAME
123
ROOM NAME /ROOM NUMBER

FUNCTION OF SPACE		
AREA SF	IBC AREA PER OCCUPANT	IBC NUMBER OF OCCUPANTS
DESIGN SPECIFICATION PER CLIENT SPACE PROGRAM		PROGRAM NUMBER OF OCCUPANTS

SPECIFIED OCCUPANT LOAD AREA

25'-0"
PATH OF TRAVEL TO AN EXIT
TRAVEL DISTANCE TO AN EXIT FROM MOST REMOTE POINT
MOST REMOTE POINT SERVED BY EXIT

F.E.C. TYP. SEMI-RECESSED FIRE EXTINGUISHER CABINET, REF LIFE SAFETY FLOOR PLAN

A.E.D. TYP. SEMI-RECESSED DEFIBRILLATOR CABINET, REF LIFE SAFETY FLOOR PLAN

EXIT SIGNS. HATCH INDICATES ILLUMINATED FACE. ARROW NOTES DIRECTION. REFER TO MEP DRAWINGS FOR SPECIFICATIONS OF EXIT SIGNS AND LOCATIONS. COORDINATE WITH ARCHITECT TO PROVIDE ADDITIONAL EXIT SIGNS TO DIRECT FLOW OF OCCUPANTS AS REQUIRED.

ACCESSIBLE ROUTE

EXIT
EXIT

OCCUPANT LOAD SUMMARY			
CONVENTIONAL NAME	Area	IBC OCC LOAD	NUMBER OF OCCUPANTS

ero architecture + engineering
P.O. BOX 720428, McAllen, Tx 78504
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ELI R OCHOA, P.E., AIA
TEXAS REGISTRATION NO.
Engineer: 60251
Architect: 19160

HIDALGO COUNTY EL PARAISO
PROJECT
HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

PROJECT NO.: 21087
ISSUE DATE: 08.16.2022
DRAWN BY: Author
CHECKED BY: Checker

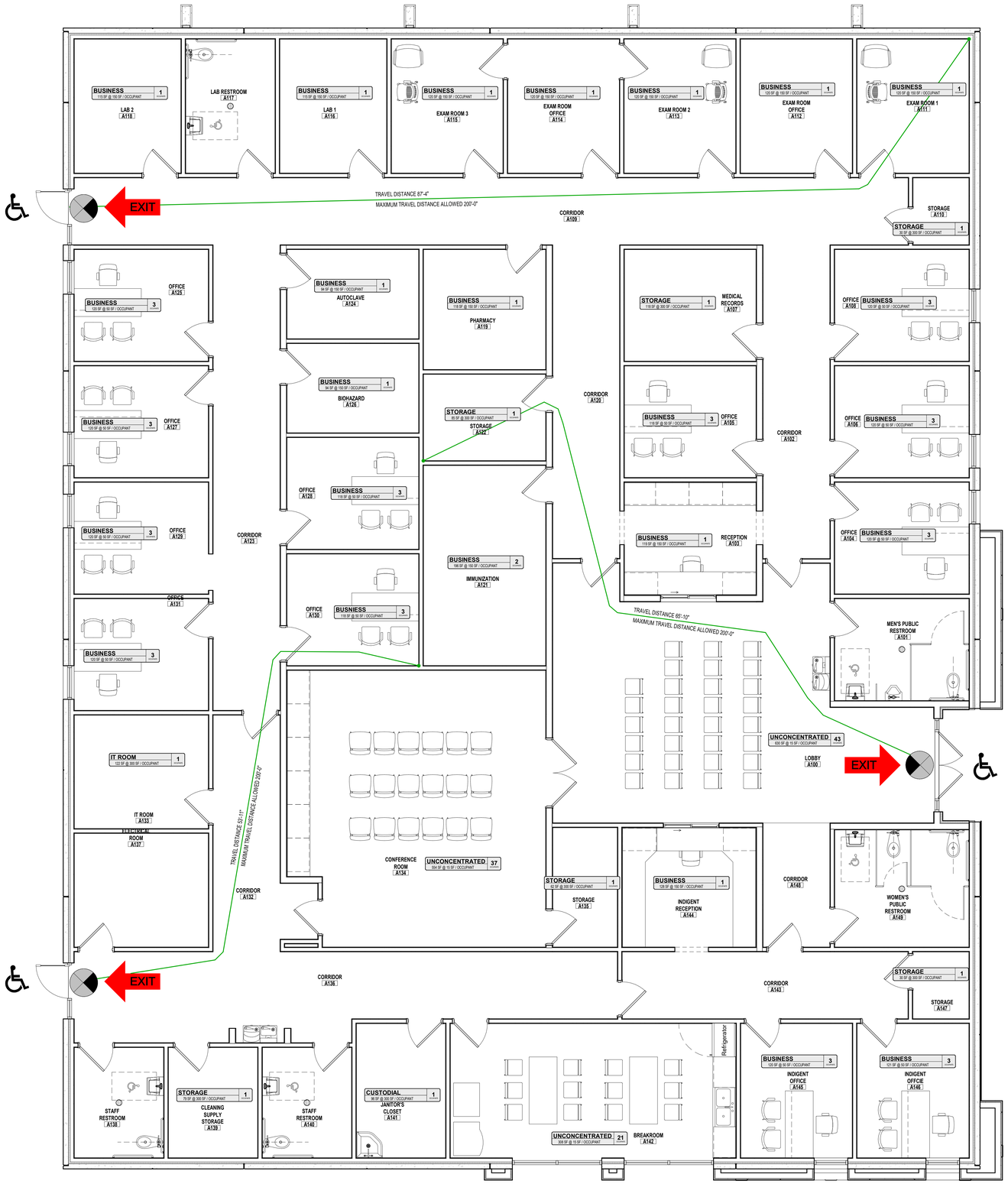
SHEET NAME
LIFE SAFETY PLAN - CRC

Sheet Number
GI102

Project Status:
100% SCHEMATIC DESIGN

A1 LIFE SAFETY PLAN - CRC
PLAN
1/4" = 1'-0"

8/16/2022 9:17:46 AM
Autodesk Docs://21087 - Hidalgo County El Paraiso Building/21087 Hidalgo County El Paraiso Bldg_Base.rvt



LIFE SAFETY GENERAL NOTES

1. MEANS OF EGRESS CALCULATIONS ARE BASED ON ASSUMED OCCUPANT LOADS AND OCCUPANT LOAD FACTORS FOUND IN 2021 IBC, TABLE 1004.1.2.

BUSINESS	150 SF/OCCUPANT (GROSS)
BUSINESS (CONCENTRATED)	50 SF/OCCUPANT (GROSS)
ASSEMBLY (UNCONCENTRATED)	15 SF/OCCUPANT (NET)
STORAGE/MECHANICAL	300 SF/OCCUPANT (GROSS)

2. GROUPS OCCUPANT LOADS WERE ROUNDED UP ON ANY FRACTIONAL OCCUPANT.
3. INCIDENTAL STORAGE, ELECTRICAL, OR MECHANICAL ROOMS < 300 SF (OCCUPANT) WERE TREATED AS PART OF THE BUSINESS OCCUPANCY.
4. PIPE PENETRATIONS THROUGH THE FIRE-RESISTANCE RATED WALLS WILL BE PROTECTED PER IBC SECTION 714.3.
5. PIPE PENETRATIONS THROUGH THE FIRE RESISTANCE-RATED ASSEMBLY WILL BE PROTECTED PER IBC 714.4.1
6. OCCUPANT LOAD IN GENERAL SEATING AREAS ARE BASED ON ASSUMED NET OCCUPANT ESTABLISHED BY THE FURNITURE PLAN.
7. AS INDICATED ON DRAWINGS AND SPECIFICATIONS, ALL EXIT DOORS WILL BE EQUIPPED WITH PANIC AND FIRE EXIT HARDWARE.
8. GROSS OCCUPANT LOAD IS ASSUMED FOR CIRCULATION SPACES, RESTROOMS AND GENERAL USE AREAS WITHIN THE SUITES.
9. WHERE ADJACENT SPACES CREATE DIFFERENCES IN FIRE RESISTANCE RATING REQUIREMENTS, THE MORE RESTRICTIVE RATING SHALL APPLY.
10. FIRE EXTINGUISHER CABINETS RECESSED IN RATED WALL ASSEMBLIES, MUST BE RATED CABINETS OR OTHERWISE NOT COMPROMISE THE RATED WALL ASSEMBLY.
11. DEFIBRILLATOR CABINETS RECESSED IN RATED WALL ASSEMBLIES, MUST BE RATED CABINETS OR OTHERWISE NOT COMPROMISE THE RATED WALL ASSEMBLY.

EGRESS CODE LEGEND

ROOM NAME
123
ROOM NAME /ROOM NUMBER

FUNCTION OF SPACE		
AREA SF	IBC AREA PER OCCUPANT	IBC NUMBER OF OCCUPANTS
DESIGN SPECIFICATION PER CLIENT SPACE PROGRAM		PROGRAM NUMBER OF OCCUPANTS

SPECIFIED OCCUPANT LOAD AREA

25'-0" — PATH OF TRAVEL TO AN EXIT; TRAVEL DISTANCE TO AN EXIT FROM MOST REMOTE POINT; MOST REMOTE POINT SERVED BY EXIT

F.E.C. — TYP. SEMI-RECESSED FIRE EXTINGUISHER CABINET, REF LIFE SAFETY FLOOR PLAN

A.E.D. — TYP. SEMI-RECESSED DEFIBRILLATOR CABINET, REF LIFE SAFETY FLOOR PLAN

EXIT SIGNS. HATCH INDICATES ILLUMINATED FACE. ARROW NOTES DIRECTION. REFER TO MEP DRAWINGS FOR SPECIFICATIONS OF EXIT SIGNS AND LOCATIONS. COORDINATE WITH ARCHITECT TO PROVIDE ADDITIONAL EXIT SIGNS TO DIRECT FLOW OF OCCUPANTS AS REQUIRED.

ACCESSIBLE ROUTE

EXIT — EXIT

OCCUPANT LOAD SUMMARY			
CONVENTIONAL NAME	Area	IBC OCC LOAD	NUMBER OF OCCUPANTS

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TEXAS REGISTRATION NO.
Engineer: 60251
Architect: 19160

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Description	Date

PROJECT NO.: 21087
ISSUE DATE: 08.16.2022
DRAWN BY: Author
CHECKED BY: Checker

SHEET NAME
LIFE SAFETY PLAN - HEALTH CLINIC

Sheet Number
GI103

Project Status:
100% SCHEMATIC DESIGN

A1 LIFE SAFETY PLAN - HEALTH CLINIC
PLAN
1/4" = 1'-0"

8/16/2022 3:15:04 AM
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GENERAL CONSTRUCTION NOTES:

1) ALL IMPROVEMENTS TO BE IN ACCORDANCE WITH CITY OF ALTON CODES.

2) CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING FACILITIES PRIOR TO CONSTRUCTION.

3) CONTRACTOR TO PLAN AND PERFORM HIS WORK IN A MANNER THAT WILL PERMIT SAFE PUBLIC TRAFFIC MOVEMENT ON ALL STREETS.

4) TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO BE IN ACCORDANCE WITH SPECIFICATIONS AND AS REQUIRED BY THE CITY OF ALTON AND THE TEXAS DEPARTMENT OF TRANSPORTATION (NO SEPARATE PAY).

5) CONTRACTOR SHALL PROVIDE PROTECTIVE DEVICES SUCH AS SIGNS, LIGHTS, AND SIGNALS FOR THE SAFETY OF THE PUBLIC AND WORKERS, AS REQUIRED. (NO SEPARATE PAY)

6) CONTRACTOR TO BE RESPONSIBLE FOR PROTECTION AND/OR SAFETY OF THE WORK SITE, WORKERS, SUBCONTRACTORS, MATERIALS AND/OR EQUIPMENT.

7) CONSTRUCTION STAKING SHALL BE PROVIDED BY THE CONTRACTOR AND AT CONTRACTOR'S EXPENSE.

8) MATERIAL TESTING SHALL BE PROVIDED BY THE OWNER. RE-TEST TO BE AT CONTRACTOR'S EXPENSE.

9) CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL BY THE CITY ENGINEERING OFFICE/TXDOT AREA OFFICE PRIOR TO CONSTRUCTION.

10) CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND AT CONTRACTOR'S EXPENSE.

11) ANY DAMAGE TO EXISTING PAVEMENT, DRAINAGE OR EXISTING STRUCTURES SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITION AT CONTRACTOR'S EXPENSE.

12) THESE PLANS, PREPARED BY HALFF DO NOT EXTEND TO OR INCLUDE DESIGN OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF HALFF ASSOCIATES, INC. REGISTERED PROFESSIONAL ENGINEER (S) HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED IN THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS, INCLUDING THE PLANS AND SPECIFICATIONS REQUIRED BY THE HOUSE BILLS 662 AND 665 ENACTED BY THE TEXAS LEGISLATURE IN THE 70TH LEGISLATURE REGULAR SESSION.

13) CONTRACTOR SHALL GIVE NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PRIVATE AND PUBLIC UTILITIES AFFECTED BY HIS OPERATIONS PRIOR TO COMMENCEMENT OF WORK. NOTIFY TEXAS ONE CALL FOR UTILITY LOCATIONS PRIOR TO ANY & ALL EXCAVATIONS.

14) CONTRACTOR TO COORDINATE WITH THE CITY OF ALTON ON WORK SCHEDULES, TESTING, GENERAL INSPECTION, AND EXISTING LINES.

15) CONTRACTOR TO EXERCISE CAUTION WHEN WORKING NEAR EXISTING FACILITIES AND/OR UTILITIES. ALL DAMAGE TO BE REPAIRED AT CONTRACTOR'S EXPENSE. ALL COSTS FOR INTERRUPTION OF GAS, ELECTRICAL, COMMUNICATIONS AND/OR WATER SERVICE DUE TO CONTRACTOR'S WORK SHALL BE BORNE BY THE CONTRACTOR.

16) INFORMATION ON EXISTING UTILITIES IS FROM BEST AVAILABLE INFORMATION OF RECORD AND SPOT FIELD LOCATIONS. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION AND LOCATION OF THESE UNDERGROUND UTILITIES AS REQUIRED AT NO SEPARATE PAY. CITY OF ALTON PERSONNEL WILL BE AVAILABLE FOR ASSISTANCE AND OPERATION OF VALVES AS REQUIRED. CONTRACTOR TO COORDINATE WITH OTHER UTILITIES COMPANIES,ELECTRICAL UTILITIES, GAS UTILITIES AND TELEPHONE UTILITIES.

17) ALL SPOIL MATERIAL AND DEBRIS SHALL BE DISPOSED OFFSITE BY CONTRACTOR IN A LEGAL MANNER. FURNISHING AND TRANSPORTATION OF ALL OFFSITE MATERIAL TO BE AT CONTRACTOR'S EXPENSE.

18) UPON COMPLETION OF CONSTRUCTION CONTRACTOR SHALL RETURN THE SITE TO ORIGINAL CONTOURS UNLESS DIFFERENT FINISHED ELEVATIONS ARE SHOWN ON PLANS. CONTRACTOR TO ENSURE NO AREAS OF PONDING ARE PRESENT.

19) CONCRETE NOTES:
   A) ALL CONCRETE WORK TO BE FORMED, UNLESS OTHERWISE APPROVED.
   B) ALL CONCRETE TO BE 3500 PSI MINIMUM AT 28 DAYS, UNLESS OTHERWISE SHOWN. STRENGTH TO BE DETERMINED BY CYLINDER BREAK TEST.
   C) ALL REINFORCING STEEL TO BE ASTM A-615, GRADE 60, UNLESS OTHERWISE SHOWN.
   D) ALL EXPOSED CONCRETE WORK TO BE CHAMFERED.

20) CONTRACTOR TO ENSURE SAME DAY ACCESS TO ALL RESIDENCES AND BUSINESSES ADJACENT TO CONSTRUCTION.

21) DEMOLITION, REMOVAL & DISPOSAL OF ALL EXCESS CONCRETE, CURBS, RUBBLE, ETC. TO BE DONE IN A LEGAL MANNER AT CONTRACTOR'S EXPENSE.

PAVING CONSTRUCTION NOTES:

1) SUBGRADE EXCAVATION AND RECOMPACTION TO BE INCLUDED IN PRICE BID PER SQUARE YARD FOR "LIME TREATED SUBGRADE."

2) CONTRACTOR TO FILL BEHIND CURBS AND WALKS AND SHAPE TO ENSURE PROPER DRAINAGE.

3) CONTRACTOR SHALL "LAY DOWN" CURB SECTION AT DRIVEWAYS LOCATIONS SHOWN ON DRAWINGS. CONTRACTOR SHALL BE REQUIRED TO GRADE FROM EXISTING DRIVES AND PARKING AREAS TO MATCH GRADES AND ALLOW SMOOTH TRANSITIONS AND PROPER DRAINAGE. (NO SEPARATE PAY)

4) CONSTRUCTION JOINTS TO EXISTING PAVEMENT SHALL BE MADE BY EITHER CUTTING BACK EXISTING TO PRODUCE A SLIGHTLY BEVELED EDGE FOR THE FULL THICKNESS OF THE WEARING COURSE OR A SUITABLE LAP JOINT SHALL BE MADE. SAW CUTTING REQUIRED.

5) NO TRAFFIC SHALL BE ALLOWED ON THE FINISHED WEARING SURFACE UNTIL AT LEAST 12 HOURS AFTER COMPLETION OF ROLLING.

6) WHEN TYING INTO EXISTING CURB, EXPOSE REBAR AND FORM EXPANSION JOINT PER DETAIL.

7) ANY SETTLEMENT UNDER PAVEMENT DUE TO INADEQUATE COMPACTION OF UTILITY LINE BACKFILL SHALL BE CAUSE FOR RECOMPACTION OF TRENCH AND REPLACEMENT OF PAVEMENT SECTION AT CONTRACTOR'S EXPENSE.

STORM DRAINAGE LINE CONSTRUCTION NOTES:

1) CONTRACTOR TO PROVIDE POSITIVE OUTFLOW FOR DRAINAGE BASIN AT ALL TIMES. IN THE CASE OF A STORM EVENT, CAPACITY FOR STORM WATER RUNOFF SHALL BE PROVIDED ON SITE AS A TEMPORARY DETENTION FACILITY TO MINIMIZE ADJACENT LOCAL FLOODING.

2) CONTRACTOR SHALL PROVIDE A SEQUENCE OF WORK FOR STORM DRAINAGE TIE INS THAT PROVIDES POSITIVE OUTFLOW AT ALL TIMES.

3) CONTRACTOR TO FIELD VERIFY THE LOCATION OF EXISTING UTILITIES & FACILITIES PRIOR TO CONSTRUCTION.

UTILITY GENERAL NOTES:

1) CONTRACTOR TO CONTACT ALL UTILITY COMPANIES IN THE AREA FOR FIELD VERIFICATION OF EXISTING FACILITIES. UTILITY COMPANIES TO INCLUDE BUT NOT LIMITED TO THE FOLLOWING :

CITY OF ALTON	(956) 432-0760
TEXAS ONE CALL	(800) 245-4545
811 DIG TESS	(800) 344-8377
TEXAS GAS SERVICE	(800) 700-2443
AT&T TEXAS	(800) 288-2020
TIME WARNER CABLE	(800) 222-5355
AEP TEXAS	(800) 344-8377

2) CONTRACTOR TO EXPOSE ANY EXISTING UTILITY THAT MAY BE IN CONFLICT PRIOR TO START OF EXCAVATION.

3) ALL EXISTING UTILITIES SHOWN ARE FROM BEST INFORMATION AVAILABLE. NEITHER THE ENGINEER NOR THE CITY TAKE RESPONSIBILITY FOR ACCURACY OF LOCATION.

4) CONTRACTOR SHALL AT ALL TIMES ALLOW ACCESS TO EXISTING DRIVEWAY OR PROVIDE/MAINTAIN ALTERNATIVE ALL-WEATHER ROUTES.

5) ALL TRAFFIC CONTROL DEVICES SHALL BE IN CONFORMANCE WITH TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES LATEST EDITION. TRENCHES OR EXCAVATIONS MAY NOT BE LEFT OPEN OVERNIGHT.

6) ANY DAMAGES TO FENCES, WALKS, OR PRIVATE PROPERTY SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

7) ALL CONSTRUCTION MATERIALS TESTING WILL BE COORDINATED THROUGH THE OWNER.

8) WORK REQUIRED TO BE INSPECTED BY THE CITY SHALL OCCUR DURING REGULAR WORKING HOURS, MONDAY THROUGH FRIDAY. NO WORK TO OCCUR DURING CITY HOLIDAYS, NON-WORKING HOURS, MONDAY THROUGH FRIDAY, AND WEEKENDS UNLESS APPROVED BY THE CITY. INSPECTION OVERTIME COSTS TO BE PAID BY CONTRACTOR.

9) USE CLASS 'B' EMBEDMENT FOR UTILITY TRENCHES UNDER PAVEMENT.

10) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ALL EXCAVATED MATERIAL AND DEBRIS FROM THE SITE.

Know what's **below.**
Call before you dig.

THE INFORMATION SHOWN ON THESE DRAWINGS INDICATING SIZE, TYPE AND LOCATION OF UNDERGROUND, SURFACE, AND AERIAL UTILITIES IS NOT GUARANTEED TO BE EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT THE GEORGETOWN AREA "ONE CALL" SYSTEM AT 1-800-344-8377 (DIG TESS) 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION FOR EXISTING UTILITY LOCATIONS. THE CONTRACTOR SHALL ALSO BE FULLY RESPONSIBLE FOR FIELD VERIFYING LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES AFFECTED BY CONSTRUCTION FOR THIS PROJECT IN ORDER TO AVOID DAMAGING THOSE UTILITIES, AND SHALL IMMEDIATELY ARRANGE FOR REPAIR AND RESTORATION OF CONTRACTOR- DAMAGED UTILITIES TO THE UTILITY COMPANY'S APPROVAL AT THE EXPENSE OF THE CONTRACTOR.

HALFF
5000 WEST MILITARY, SUITE 100
McALLEN, TX 78503
(956) 664-0286

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RAUL GARCIA JR. P.E. 94855 8/26/2022
TBPELS FIRM #F-32

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ELI R.OCHOA, P.E., AIA
TEXAS REGISTRATION NO.
Engineer: 60251
Architect: 18160

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX

No.	Date	Description

PROJECT NO.: 21087
ISSUE DATE: 8/26/2022
DRAWN BY: SK
CHECKED BY: RG

SHEET NAME

GENERAL NOTES

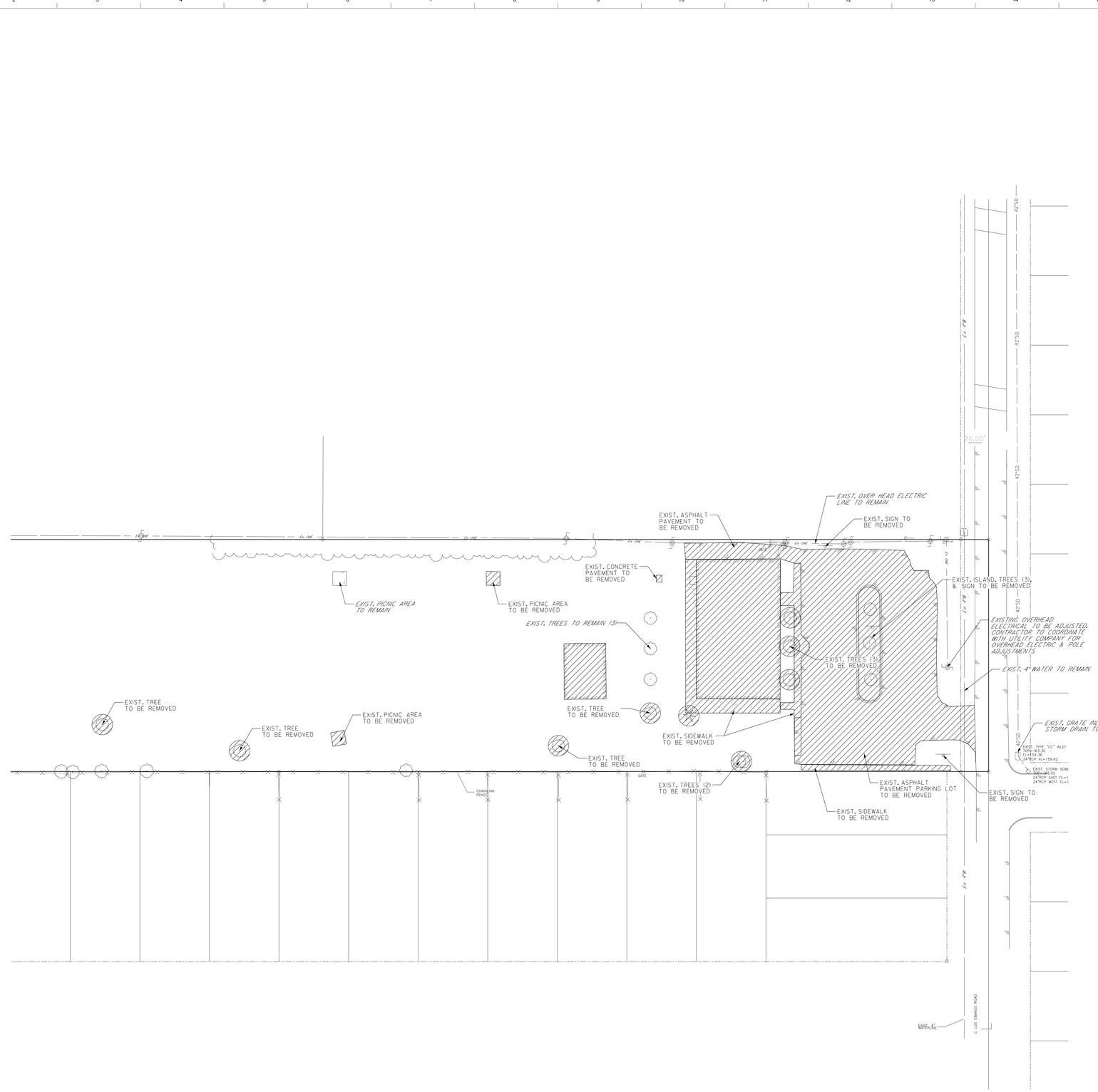
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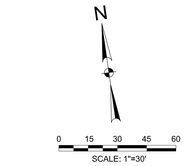
C0.01

Project Status:

60% SCHEMATIC DESIGN

8/11/2022 8:41:25 AM
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LEGEND

PROPOSED	EXISTING	
■	CI ▭	INLET
▥	GI ▭	GRATE INLET
●	MH ◯	MANHOLE
◔	WV ◯	GATE VALVE & BOX
	WM ⊕	WATER METER
✠	FH ●	FIRE HYDRANT
	SSCO ◯	SANITARY CLEAN OUT
	LP ⊙	LIGHT POLE
	EB □	ELECTRIC BOX
	PP ○	POWER POLE
	TPED □	TELEPHONE PEDESTAL
	—x—x—	FENCE
	TS ▭	TRAFFIC SIGN
	— EX OHE —	OVERHEAD ELECTRIC
	— EX UGE —	UNDERGROUND ELECTRIC
	— Ex GAS —	GAS LINE
	— Ex F/O —	FIBER OPTIC LINE
	— Ex TEL —	TELEPHONE LINE
		ASPHALT PAVEMENT
		SAN. SEWER
——	— EX 6"WW —	WATER
— W —	— EX 6"W —	FIRE PROTECTION
— FIRE —	— Ex FIRE —	STORM SEWER
	— 36"SD —	CONTOUR
100.00	— 100.00 —	DRAINAGE FLOW ARROW
+ TP100.00		TOP OF PAVEMENT
+ TC100.00		TOP OF CURB
+ G100.00		GUTTER
+ TW100.00		TOP OF WALK
+ 100.00		FINISHED GRADE
▩		ASPHALT PAVEMENT
▭		ASPHALT OVERLAY
▭	▭	CONCRETE PAVEMENT
▨		TREES TO BE REMOVED
▨		AREA OF DEMOLITION

BM #1
SQUARE CUT: SET ON TOP OF CONCRETE SIDEWALK
ELEVATION = 116.16(NAVD88)
N=X
E=X
(NAD83)

TBM #2
XXXX

NOTES:

1. NO SUBSURFACE UTILITY ENGINEERING HAS BEEN PERFORMED TO VERIFY UNDERGROUND LOCATIONS, SIZES, OR MATERIAL TYPES OF EXISTING UTILITIES.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES AND VERIFYING SIZES OF UTILITIES AND REPORTING FINDINGS TO ENGINEER PRIOR TO CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY UTILITIES DAMAGED DURING CONSTRUCTION WHICH WERE NOT INTENDED TO BE DEMOLISHED OR ABANDONED.
4. CONTRACTOR SHALL VERIFY ALL DEMOLITION WITH ARCHITECT AND ENGINEER PRIOR TO COMMENCEMENT OF DEMOLITION SERVICES AND CONSTRUCTION.
5. IRRIGATION DEMOLITION NOTED WHERE CONFLICTS WITH OTHER IRRIGATION OCCUR, LICENSED IRRIGATOR SHALL DESIGN IRRIGATION SYSTEM IN ACCORDANCE WITH IRRIGATION PERFORMANCE SPECIFICATION INCLUDED WITH LANDSCAPE PLANS.
6. ALL WATER AND SEWER UTILITIES BEING REMOVED ARE TO BE CAPPED/PLUGGED AT LOCATION OF REMOVAL TERMINATION.
7. ALL PAVEMENT REMOVAL IS TO BE SAWCUT.
8. CONTRACTOR SHALL INSTALL PLUG AT UTILITY REMOVAL LOCATIONS THAT ARE ADJACENT TO EXISTING UTILITIES THAT WILL REMAIN IN SERVICE, IN ORDER TO PREVENT POTENTIAL LEAKAGE.
9. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND ELECTRICAL ENGINEER TO DETERMINE WHICH, IF ANY, PIECES OF INFRASTRUCTURE (SUCH AS PULL BOXES, ETC) ARE TO REMAIN. ANY EQUIPMENT TO REMAIN SHALL BE ADJUSTED TO MATCH FINAL GRADE.

811 Know what's below. Call before you dig.

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TEXAS REGISTRATION NO.
Engineer: 60251
Architect: 18160

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HIDALGO COUNTY
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No.	Description	Date

PROJECT NO.: 21087
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DRAWN BY: SK
CHECKED BY: RG

SHEET NAME

DEMOLITION PLAN

Sheet Number
C1.00

Project Status:
60% SCHEMATIC DESIGN

8/11/2022 8:41:25 AM
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NOTICE TO CONTRACTORS

1. PRIOR TO CONSTRUCTION OF ANY PROPOSED IMPROVEMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING THE HORIZONTAL AND VERTICAL LOCATION OF BURIED UTILITIES AND STRUCTURES, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:

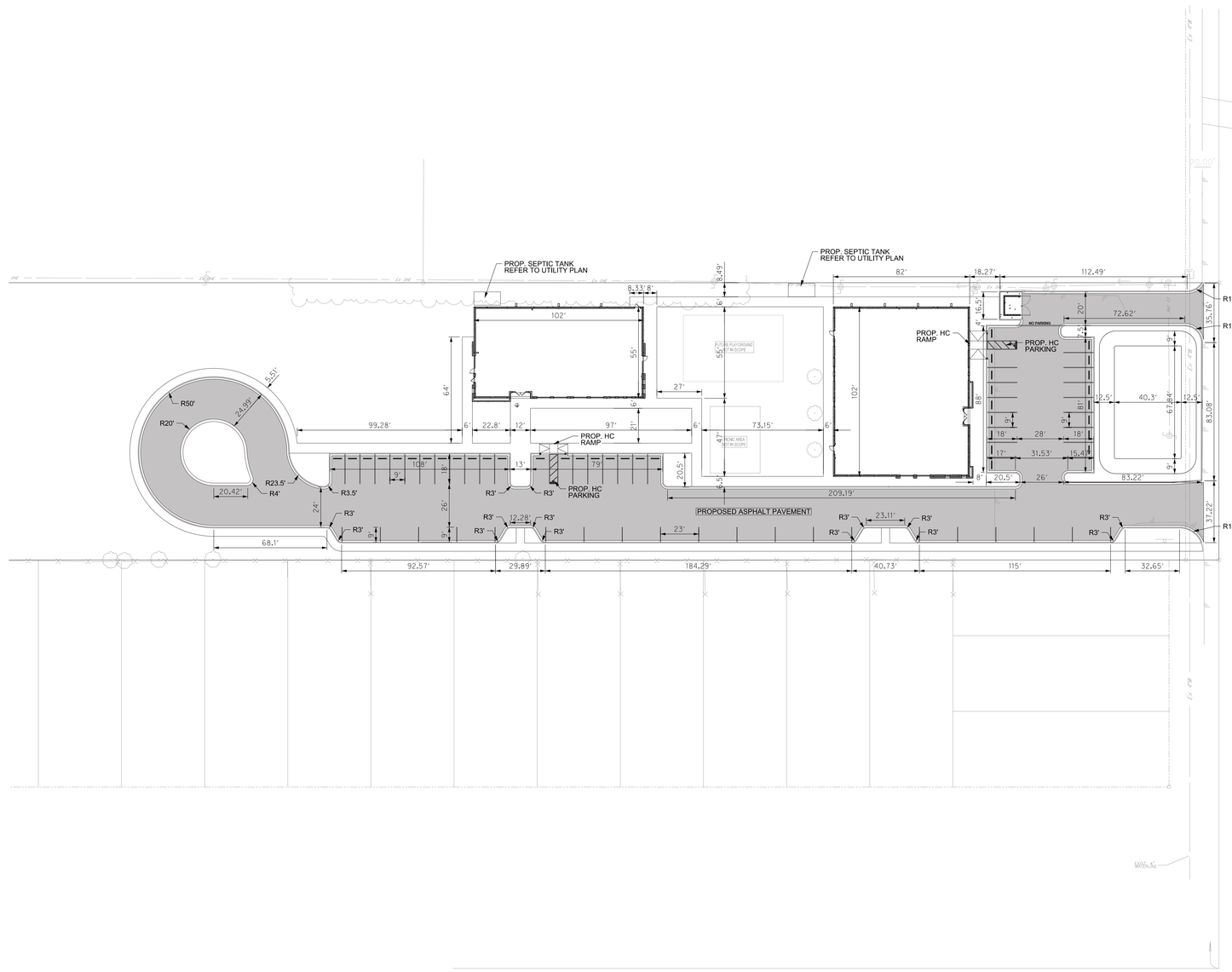
   TELEPHONE, STORMSEWER, WATER, GAS, CABLE TV, SANITARY SEWER, ELECTRIC.

2. IF DISCREPANCIES OCCUR BETWEEN THAT WHICH IS SHOWN ON THE PLANS AND CONDITIONS PRESENT IN THE FIELD, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING IMMEDIATELY. FAILURE TO DO SO SHALL ABSOLVE OWNER AND ENGINEER OF LIABILITY AND ASSOCIATED COST.

*** STOP! CALL BEFORE YOU DIG! ***

AS REQUIRED BY "THE TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT" TEXAS811 MUST BE CONTACTED AT LEAST 2 WORKING DAYS PRIOR TO ANY EXCAVATION OPERATIONS BEING PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM. THE CONTRACTOR SHALL ALSO CALL 811. AND ALL OTHER LOCATED COMPANIES PRIOR TO EXCAVATION ACTIVITIES.

INFORMATION ON EXISTING UTILITIES IS FROM BEST AVAILABLE INFORMATION OF RECORD AND SPOT FIELD LOCATIONS. ALTHOUGH EVERY EFFORT HAS BEEN MADE TO ACCURATELY DEPICT ALL UTILITIES, NOT ALL (PUBLIC AND PRIVATE) MAY BE SHOWN. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION AND LOCATION OF THESE UNDERGROUND UTILITIES AS REQUIRED AT NO SEPARATE PAY. CONTRACTOR TO COORDINATE WITH ALL UTILITY COMPANIES.



N

0 15 30 45 60

SCALE: 1"=30'

LEGEND

PROPOSED	EXISTING	
■	CI ▭	INLET
▨	GI ▭	GRATE INLET
●	MH ◯	MANHOLE
◔	WV ◯	GATE VALVE & BOX
	WM ⊕	WATER METER
✠	FH ●	FIRE HYDRANT
	SSCO ◯	SANITARY CLEAN OUT
	LP ⊙	LIGHT POLE
	EB ▭	ELECTRIC BOX
	PP ○	POWER POLE
	TPED ▭	TELEPHONE PEDESTAL
	—x—x—	FENCE
	TS ▭	TRAFFIC SIGN
	— EX OHE —	OVERHEAD ELECTRIC
	— EX UGE —	UNDERGROUND ELECTRIC
	— Ex GAS —	GAS LINE
	— Ex F/O —	FIBER OPTIC LINE
	— Ex TEL —	TELEPHONE LINE
		ASPHALT PAVEMENT
		SAN. SEWER
		WATER
		FIRE PROTECTION
		STORM SEWER
		CONTOUR
→		DRAINAGE FLOW ARROW
+ TP100.00		TOP OF PAVEMENT
+ TC100.00		TOP OF CURB
+ G100.00		GUTTER
+ TW100.00		TOP OF WALK
+ 100.00		FINISHED GRADE
▒		ASPHALT PAVEMENT
▒		ASPHALT OVERLAY
▒	▒	CONCRETE PAVEMENT

!!CAUTION!!
EXISTING OVERHEAD ELECTRIC LINES

CALL TEXAS 811 BEFORE YOU DIG

!!CAUTION!!
EXISTING UNDERGROUND ELEC. & COMM. LINES

BM #1
SQUARE CUT: SET ON TOP OF CONCRETE SIDEWALK
ELEVATION = 116.16(NAVD88)
N=X
E=X
(NAD83)

TBM #2
XXXX

Know what's **below.**
Call before you dig.

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HALFF
5000 WEST MILITARY, SUITE 100
McALLEN, TX 78503
(956) 664-0286

P.O. BOX 720428, McAllen, Tx 78504
T 956-661-0400 | goero.com

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RAUL GARCIA, JR. P.E. 94855 8/26/2022
TBPELS FIRM #F-32

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ELI R.OCHOA, P.E., A/A
TEXAS REGISTRATION NO.
Engineer: 60251
Architect: 18160

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Description	Date

PROJECT NO.: 21087
ISSUE DATE: 8/26/2022
DRAWN BY: SK
CHECKED BY: RG

SHEET NAME

PAVING & DIMENSIONAL CONTROL PLAN

Sheet Number

C2.00

Project Status:

60% SCHEMATIC DESIGN

8/11/2022, 8:41:25 AM
Autodesk Docs://21087 - Hidalgo County El Paraiso Building/21087 Hidalgo County El Paraiso Bldg_Base.rvt

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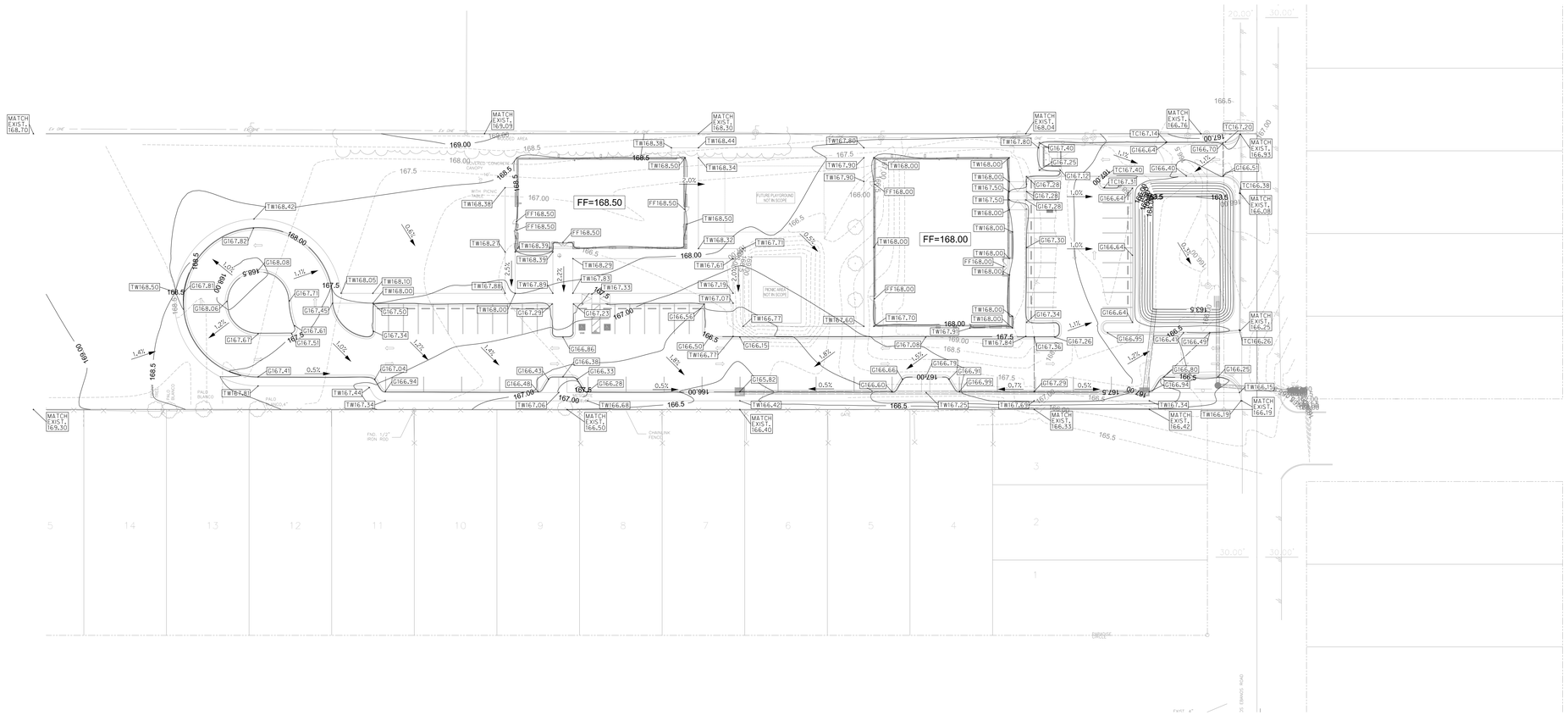
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FF=168.50
FF=168.00
FUTURE PLAYGROUND NOT IN SCOPE
PICNIC AREA NOT IN SCOPE
MATCH EXIST. 169.09
MATCH EXIST. 168.30
MATCH EXIST. 168.04
MATCH EXIST. 166.78
MATCH EXIST. 166.93
MATCH EXIST. 166.08
MATCH EXIST. 166.25
MATCH EXIST. 166.19
MATCH EXIST. 166.42
MATCH EXIST. 166.33
MATCH EXIST. 166.90
MATCH EXIST. 166.40
MATCH EXIST. 169.30
MATCH EXIST. 168.70
TC167.20
TC166.38
TC166.26
TC166.15
TC167.14
TC167.40
TC167.12
TC167.28
TC167.30
TC167.34
TC167.36
TC167.29
TC167.25
TC165.82
TC166.42
TC166.68
TC166.77
TC166.50
TC166.15
TC166.56
TC166.86
TC166.38
TC166.33
TC166.43
TC166.48
TC166.28
TC166.94
TC167.04
TC167.34
TC167.44
TC167.81
TC167.50
TC167.71
TC167.81
TC168.06
TC167.45
TC167.67
TC167.61
TC167.51
TC168.08
TC168.05
TC168.10
TC168.00
TC167.88
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TC167.93
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TC168.42
TC167.82
TC168.27
TC167.90
TC167.80
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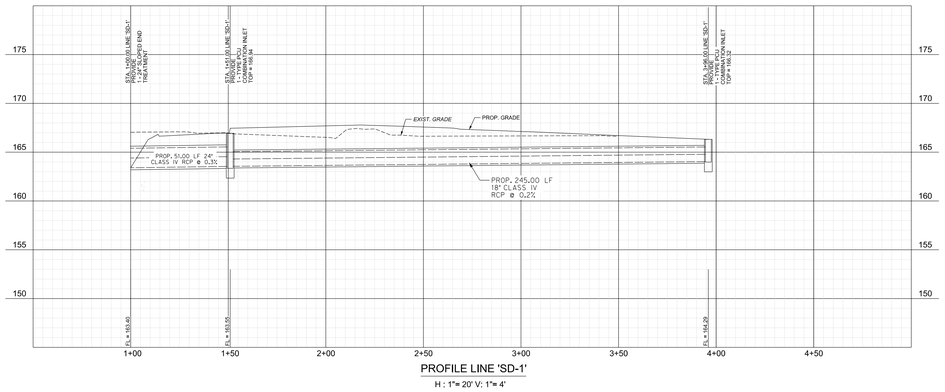
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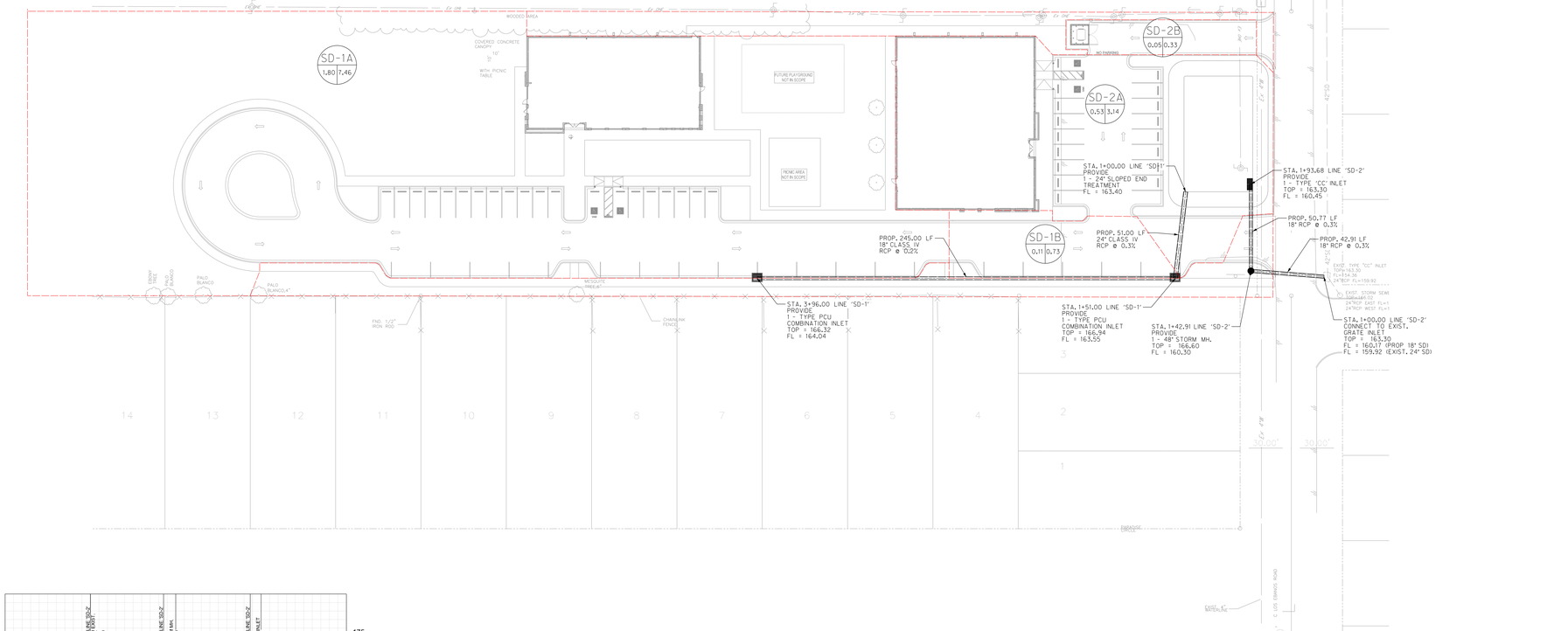
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PROFILE LINE 'SD-1'

H : 1"= 20' V: 1"= 4'


SD-1A
1.80 7.46
SD-2B
0.05 0.33
SD-2A
0.53 3.14
SD-1B
0.11 0.73
WOODED AREA
COVERED CONCRETE CANOPY
WITH PICNIC TABLE
FUTURE PLAYGROUND NOT IN SCOPE
PICNIC AREA NOT IN SCOPE
NO PARKING
PROP. 245.00 LF 18" CLASS IV RCP @ 0.2%
PROP. 51.00 LF 24" CLASS IV RCP @ 0.3%
STA. 1+00.00 LINE 'SD-1' PROVIDE 1 - 24" SLOPED END TREATMENT FL = 163.40
STA. 3+96.00 LINE 'SD-1' PROVIDE 1 - TYPE PCU COMBINATION INLET TOP = 166.32 FL = 164.04
STA. 1+51.00 LINE 'SD-1' PROVIDE 1 - TYPE PCU COMBINATION INLET TOP = 166.94 FL = 163.55
STA. 1+93.68 LINE 'SD-2' PROVIDE 1 - TYPE 'CC' INLET TOP = 163.30 FL = 160.45
PROP. 50.77 LF 18" RCP @ 0.3%
PROP. 42.91 LF 18" RCP @ 0.3%
STA. 1+42.91 LINE 'SD-2' PROVIDE 1 - 48" STORM MH. TOP = 166.60 FL = 160.30
STA. 1+00.00 LINE 'SD-2' CONNECT TO EXIST. GRATE INLET TOP = 163.30 FL = 160.17 (PROP 18" SD) FL = 159.92 (EXIST. 24" SD)
EXIST. TYPE 'CC' INLET TOP=163.30 24"RCP EAST FL=159.92
EXIST. STORM SEWER 24"RCP EAST FL=1 24"RCP WEST FL=1
FND. 1/2" IRON ROD
CHAINLINK FENCE
MESQUITE TREES
PALO BLANCO
PALO BLANCO 4"
EXIST. 6" WATERLINE
EXIST. 8" WATERLINE
EXIST. 12" WATERLINE
EXIST. 6" GAS LINE
EXIST. 8" GAS LINE
EXIST. 12" GAS LINE
EXIST. 6" FIBER OPTIC LINE
EXIST. 8" FIBER OPTIC LINE
EXIST. 12" FIBER OPTIC LINE
EXIST. 6" TELEPHONE LINE
EXIST. 8" TELEPHONE LINE
EXIST. 12" TELEPHONE LINE
EXIST. 6" SANITARY SEWER
EXIST. 8" SANITARY SEWER
EXIST. 12" SANITARY SEWER
EXIST. 6" FIRE PROTECTION
EXIST. 8" FIRE PROTECTION
EXIST. 12" FIRE PROTECTION
EXIST. 6" STORM SEWER
EXIST. 8" STORM SEWER
EXIST. 12" STORM SEWER
EXIST. 6" CONTOUR
EXIST. 8" CONTOUR
EXIST. 12" CONTOUR
EXIST. 6" DRAINAGE FLOW ARROW
EXIST. 8" DRAINAGE FLOW ARROW
EXIST. 12" DRAINAGE FLOW ARROW
EXIST. 6" TOP OF PAVEMENT
EXIST. 8" TOP OF PAVEMENT
EXIST. 12" TOP OF PAVEMENT
EXIST. 6" TOP OF CURB
EXIST. 8" TOP OF CURB
EXIST. 12" TOP OF CURB
EXIST. 6" GUTTER
EXIST. 8" GUTTER
EXIST. 12" GUTTER
EXIST. 6" TOP OF WALK
EXIST. 8" TOP OF WALK
EXIST. 12" TOP OF WALK
EXIST. 6" FINISHED GRADE
EXIST. 8" FINISHED GRADE
EXIST. 12" FINISHED GRADE
EXIST. 6" ASPHALT PAVEMENT
EXIST. 8" ASPHALT PAVEMENT
EXIST. 12" ASPHALT PAVEMENT
EXIST. 6" ASPHALT OVERLAY
EXIST. 8" ASPHALT OVERLAY
EXIST. 12" ASPHALT OVERLAY
EXIST. 6" CONCRETE PAVEMENT
EXIST. 8" CONCRETE PAVEMENT
EXIST. 12" CONCRETE PAVEMENT
EXIST. 6" SAN. SEWER
EXIST. 8" SAN. SEWER
EXIST. 12" SAN. SEWER
EXIST. 6" WATER
EXIST. 8" WATER
EXIST. 12" WAT

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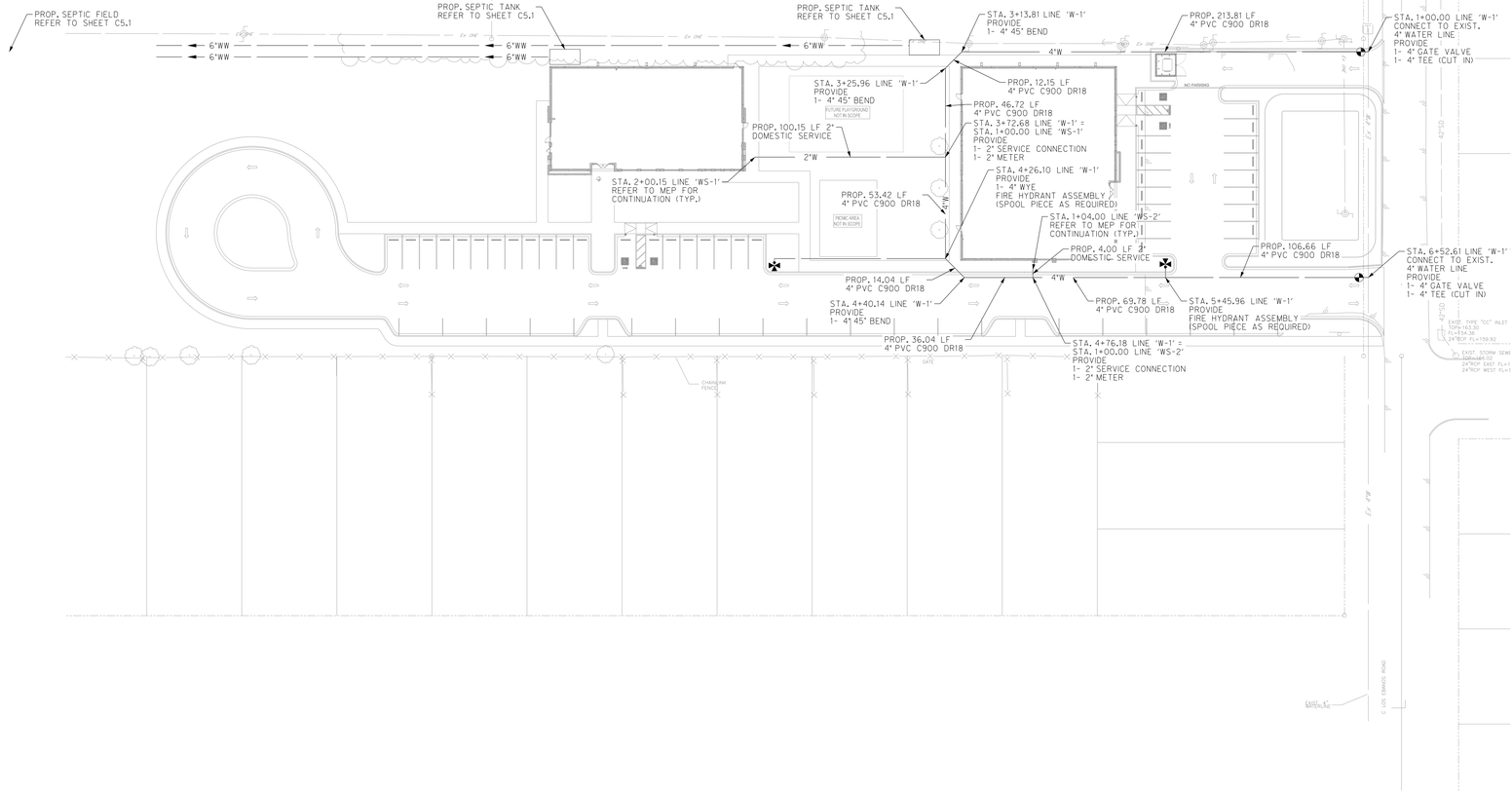
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N

0 15 30 45 60

SCALE: 1"=30'

LEGEND

PROPOSED	EXISTING		
■	CI ▭	INLET	INLET
▨	GI ▭	GRATE INLET	
●	MH ◯	MANHOLE	
◔	WV ◯	GATE VALVE & BOX	
	WM ⊕	WATER METER	
✠	FH ●	FIRE HYDRANT	
	SSCO ◯	SANITARY CLEAN OUT	
	LP ⊙	LIGHT POLE	
	EB ▭	ELECTRIC BOX	
	PP ○	POWER POLE	
	TPED ▭	TELEPHONE PEDESTAL	
	—×—×—	FENCE	
	TS ▭	TRAFFIC SIGN	
	— EX OHE —	OVERHEAD ELECTRIC	
	— EX UGE —	UNDERGROUND ELECTRIC	
	— Ex GAS —	GAS LINE	
	— Ex F/O —	FIBER OPTIC LINE	
	— Ex TEL —	TELEPHONE LINE	
	///	ASPHALT PAVEMENT	
		SAN. SEWER	
		WATER	
		FIRE PROTECTION	
		STORM SEWER	
		CONTOUR	
→		DRAINAGE FLOW ARROW	
+ TP100.00		TOP OF PAVEMENT	
+ TC100.00		TOP OF CURB	
+ G100.00		GUTTER	
+ TW100.00		TOP OF WALK	
+ 100.00		FINISHED GRADE	
■		ASPHALT PAVEMENT	
▭		ASPHALT OVERLAY	
▭	▭	CONCRETE PAVEMENT	

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N=X
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TEXAS REGISTRATION NO.
Engineer: 60251
Architect: 18160

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

PROJECT NO.: 21087
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DRAWN BY: SK
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SHEET NAME

UTILITY PLAN

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Project Status:

60% SCHEMATIC DESIGN

8/11/2022 8:41:25 AM
Autodesk Docs://2087 - Hidalgo County El Paraiso Building/2087 Hidalgo County El Paraiso Bldg_Base.rvt

EROSION GENERAL NOTES

1. IT IS THE INTENT OF THIS SUGGESTED EROSION CONTROL PLAN AND WITHIN THE SPECIFICATIONS TO BE USED AS THE GENERAL GUIDELINES OF THE STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT TO ESTABLISH A MINIMUM BASIS OF COMPLIANCE WITH FEDERAL REGULATIONS. CONTRACTOR SHALL PREPARE AND SUBMIT A NOTICE OF INTENT PER THE REQUIREMENTS IN THE NPDES GENERAL PERMIT. THE CONTRACTOR SHALL PREPARE THE STORM WATER POLLUTION PREVENTION PLAN AND BE SOLELY RESPONSIBLE FOR ITS IMPLEMENTATION. THE STORM WATER POLLUTION PREVENTION PLAN SHALL MEET THE REQUIREMENTS SET FORTH IN THE TEXAS COMISSION ON ENVIRONMENTAL QUALITY (TCEQ) TPDES GENERAL PERMIT FOR REGION 6 FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITES.

2. THE STORM WATER POLLUTION PREVENTION PLAN SHOULD ADDRESS THREE GOALS:
   A) DIVERSION OF UPSLOPE WATER AROUND DISTURBED AREAS OF THE SITE;
   B) LIMITS THE EXPOSURE OF DISTURBED AREAS TO THE SHORTEST DURATION POSSIBLE; AND
   C) REMOVAL OF SEDIMENT FROM STORM WATER BEFORE IT LEAVES THE SITE.

3. THE CONTRACTOR SHALL MAKE THE STORM WATER POLLUTION PREVENTION PLAN AVAILABLE, UPON REQUEST, TO TCEQ.

4. THE CONTRACTOR MUST AMEND PLANS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PLAN, OR WHEN THE EXISTING PLAN PROVES INEFFECTIVE. MODIFICATIONS INCLUDING DESIGN AND ALL ADDITIONAL MATERIALS AND WORK SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

5. STABILIZATION MEASURES ARE TO BE INSPECTED AT A MINIMUM OF ONCE EVERY 14 DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES. REPAIRS AND INADEQUACIES REVEALED BY THE INSPECTION MUST BE IMPLEMENTED WITHIN 7 CALENDAR DAYS FOLLOWING THE INSPECTION.

6. AN INSPECTION REPORT THAT SUMMARIZES INSPECTION ACTIVITIES AND IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE RETAINED AND MADE PART OF THE PLAN.

7. ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN THE PLAN MUST CERTIFY AS TO AN UNDERSTANDING OF THE NPDES GENERAL PERMIT BEFORE CONDUCTING ANY ACTIVITY IDENTIFIED IN THE POLLUTION PREVENTION PLAN.

8. THE CONTRACTOR SHALL ADOPT APPROPRIATE CONSTRUCTION SITE MANAGEMENT PRACTICES TO PREVENT THE DISCHARGE OF OILS, GREASE, PAINTS, GASOLINE, AND OTHER POLLUTANTS TO STORM WATER. APPROPRIATE PRACTICES CAN INCLUDE:

   DESIGNATING AREAS FOR EQUIPMENT MAINTENANCE AND REPAIR;
   REGULAR COLLECTION OF WASTE;
   CONVENIENTLY LOCATED WASTE RECEPTACLES; AND
   DESIGNATING AND CONTROLLING EQUIPMENT WASHDOWN.

9. THE CONTRACTOR SHALL AMEND OR MODIFY THIS PLAN AS REQUIRED BY CONSTRUCTION MEANS, METHODS AND SEQUENCE. MODIFICATIONS SHALL NOT COMPROMISE THE INTENT OF THE REQUIREMENTS OF LAW AND THIS PLAN. MODIFICATIONS SHALL NOT BE BASIS FOR ADDITIONAL COST TO THE OWNER.

10. AREAS OF CONSTRUCTION ELSEWHERE ON THE JOB SITE SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS.

11. BORROW AREAS, IF EXCAVATED, SHALL BE PROTECTED AND STABILIZED UTILIZING THE PLAN DETAILS. ALL WORK SHALL CONFORM TO GOVERNMENTAL REQUIREMENTS AND BECOME PART OF THE STORM WATER POLLUTION PREVENTION PLAN (SWP3). THE WORK SHALL BE DONE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

12. ALL NON-PAVED AREAS SHALL BE MULCHED AND SEEDED WITH EROSION PROTECTION IMMEDIATELY UPON COMPLETION OF FINAL GRADING. THIS INCLUDES ALL DITCHES AND EMBANKMENTS. THE CONTRACTOR SHALL MAINTAIN FINAL GRADING AND KEEP SEEDED AREAS WATERED UNTIL FULLY ESTABLISHED AND ACCEPTED BY THE OWNER.

13. THE CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION EXIT AT ALL TRAFFIC EXIT POINTS PRIOR TO EXITING ONTO ANY PAVED ROADWAY.

EROSION CONTROL LEGEND:

INLET PROTECTION

— SF — SILT FENCE

NOTE:
1. THIS IS NOT A STORM WATER POLLUTION PREVENTION PLAN. CONTRACTOR MUST ADD HIS OPERATION SPECIFIC INFORMATION PER THE PERMIT REQUIREMENTS & INCLUDE ALL DOCUMENTATION & CERTIFICATES AS REQUIRED BY THE PERMIT.
2. CONTRACTOR TO STABILIZE ALL DISTURBED AREAS WITH NATIVE VEGETATION AND MONITOR UNTIL VEGETATION IS ESTABLISHED.
3. STABILIZED CONSTRUCTION EXIT LOCATION TO BE DETERMINED BY CONTRACTOR.

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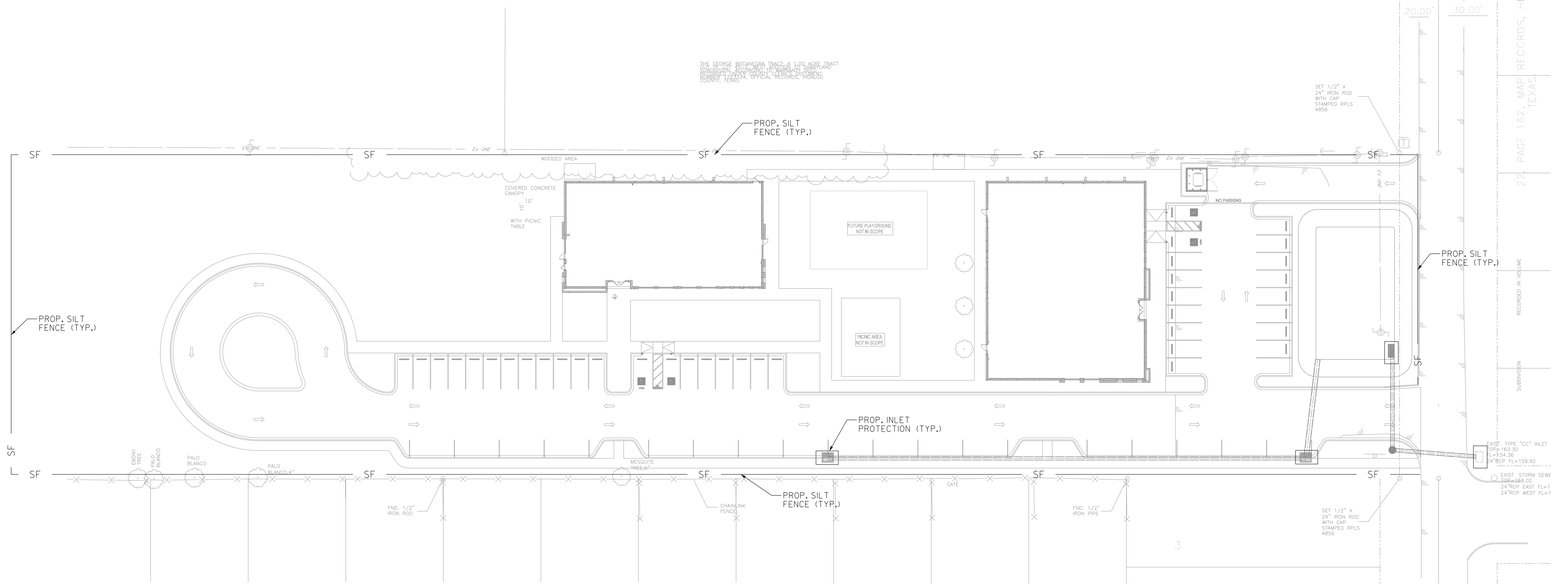
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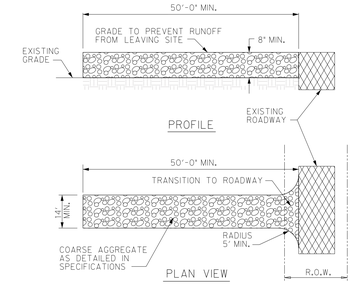
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***** STOP! CALL BEFORE YOU DIG! *****

AS REQUIRED BY "THE TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT" TEXAS811 MUST BE CONTACTED AT LEAST 2 WORKING DAYS PRIOR TO ANY EXCAVATION OPERATIONS BEING PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM. THE CONTRACTOR SHALL ALSO CALL 811. AND ALL OTHER LOCATED COMPANIES PRIOR TO EXCAVATION ACTIVITIES.

INFORMATION ON EXISTING UTILITIES IS FROM BEST AVAILABLE INFORMATION OF RECORD AND SPOT FIELD LOCATIONS. ALTHOUGH EVERY EFFORT HAS BEEN MADE TO ACCURATELY DEPICT ALL UTILITIES, NOT ALL (PUBLIC AND PRIVATE) MAY BE SHOWN. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION AND LOCATION OF THESE UNDERGROUND UTILITIES AS REQUIRED AT NO SEPARATE PAY. CONTRACTOR TO COORDINATE WITH ALL UTILITY COMPANIES.

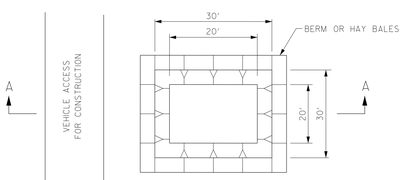




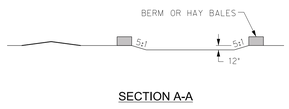
STABILIZED CONSTRUCTION EXIT
NTS

NOTES:

1. STONE SHALL BE 3 TO 5 INCH DIAMETER CRUSHED ROCK OR ACCEPTABLE CRUSHED CEMENT CONCRETE
2. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AN THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
3. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
4. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE A CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PAVED SURFACES, MUST BE REMOVED IMMEDIATELY.
5. STABILIZED CONSTRUCTION EXIT TO BE REMOVED UPON COMPLETION OF CONSTRUCTION.



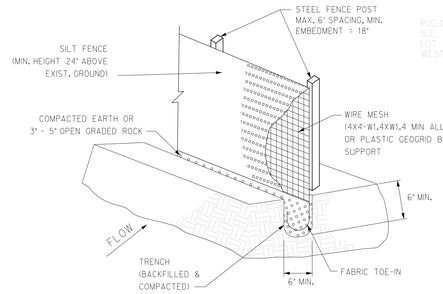
CONCRETE TRUCK WASHOUT PIT
NTS



SECTION A-A

GENERAL NOTES:

1. DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
2. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
3. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.
4. WASHOUT LOCATION TO BE DETERMINED BY CONTRACTOR.



ISOMETRIC VIEW

SILT FENCE DETAIL
NTS

SILT FENCE NOTES:

1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED WITH A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 18".
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE, AS NECESSARY, TO PREVENT FLOW UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED.
4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO BACKING SUPPORT, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. FABRIC SHALL OVERLAP AT ABUTTING ENDS A MINIMUM OF 3 FEET AND SHALL BE JOINED SUCH THAT NO BYPASS OR LEAKAGE OCCURS.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

N

0 15 30 45 60

SCALE: 1"=30'

LEGEND

PROPOSED	EXISTING	
■	CI □	INLET
▥	GI □	GRATE INLET
●	MH ○	MANHOLE
◔	WV ○	GATE VALVE & BOX
	WM ⊕	WATER METER
✠	FH ●	FIRE HYDRANT
	SSCO ○	SANITARY CLEAN OUT
	LP ⊙	LIGHT POLE
	EB □	ELECTRIC BOX
	PP ○	POWER POLE
	TPED □	TELEPHONE PEDESTAL
	—x—x—	FENCE
	TS	TRAFFIC SIGN
	— EX OHE —	OVERHEAD ELECTRIC
	— EX UGE —	UNDERGROUND ELECTRIC
	— Ex GAS —	GAS LINE
	— Ex F/O —	FIBER OPTIC LINE
	— Ex TEL —	TELEPHONE LINE
		ASPHALT PAVEMENT
		SAN. SEWER
		WATER
		FIRE PROTECTION
		STORM SEWER
		CONTOUR
→		DRAINAGE FLOW ARROW
+ TP100.00		TOP OF PAVEMENT
+ TC100.00		TOP OF CURB
+ G100.00		GUTTER
+ TW100.00		TOP OF WALK
+ 100.00		FINISHED GRADE
■		ASPHALT PAVEMENT
▭		ASPHALT OVERLAY
▭	▭	CONCRETE PAVEMENT

!!CAUTION!!
EXISTING OVERHEAD ELECTRIC LINES

CALL TEXAS 811 BEFORE YOU DIG

!!CAUTION!!
EXISTING UNDERGROUND ELEC. & COMM. LINES

BM #1
SQUARE CUT: SET ON TOP OF CONCRETE SIDEWALK
ELEVATION = 116.16(NAVD88)
N=X
E=X
(NAD83)

TBM #2
XXXX

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RAUL GARCIA JR. P.E. 94855 8/26/2022
TBPELS FIRM #F-32

"NOT FOR CONSTRUCTION"

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ELI R.OCHOA, P.E., A/A
TEXAS REGISTRATION NO.
Engineer: 60251
Architect: 18160

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Description	Date

Know what's below.
Call before you dig.

THE INFORMATION SHOWN ON THESE DRAWINGS INDICATING SIZE, TYPE AND LOCATION OF UNDERGROUND, SURFACE, AND AERIAL UTILITIES IS NOT GUARANTEED TO BE EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT THE GEORGETOWN AREA "ONE CALL" SYSTEM AT 1-800-344-8377 (DIG TESS) 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION FOR EXISTING UTILITY LOCATIONS. THE CONTRACTOR SHALL ALSO BE FULLY RESPONSIBLE FOR FIELD VERIFYING LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES AFFECTED BY CONSTRUCTION FOR THIS PROJECT IN ORDER TO AVOID DAMAGING THOSE UTILITIES, AND SHALL IMMEDIATELY ARRANGE FOR REPAIR AND RESTORATION OF CONTRACTOR- DAMAGED UTILITIES TO THE UTILITY COMPANY'S APPROVAL AT THE EXPENSE OF THE CONTRACTOR.

HALFF
5000 WEST MILITARY, SUITE 100
McALLEN, TX 78503
(956) 664-0286

PROJECT NO.: 21087
ISSUE DATE: 8/26/2022
DRAWN BY: SK
CHECKED BY: RG

SHEET NAME

SUGGESTED EROSION CONTROL PLAN

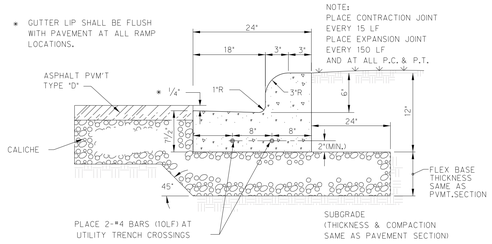
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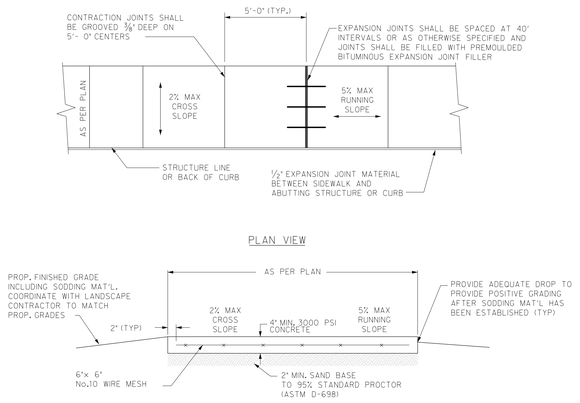
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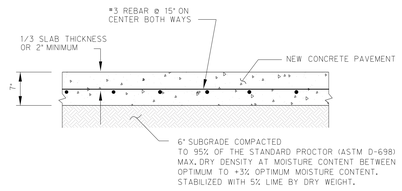
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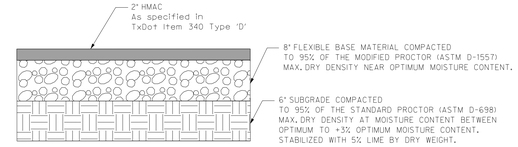
TYPICAL CURB AND GUTTER SECTION
NTS



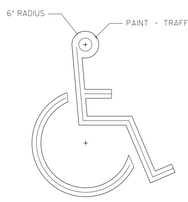
CONCRETE SIDEWALK DETAIL
NTS



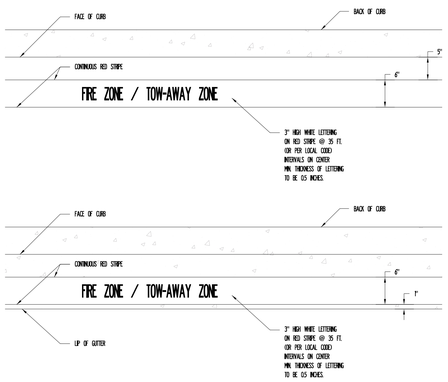
CONCRETE PAVEMENT/DUMPSTER PAD
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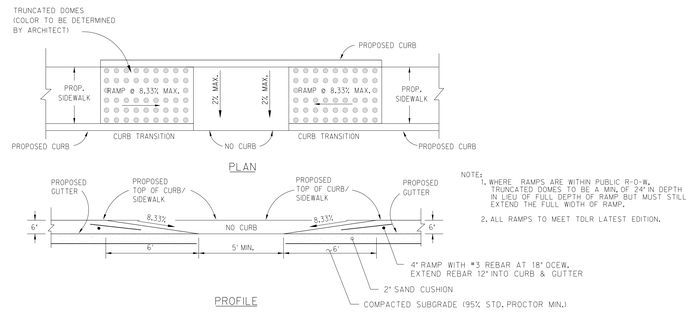
ASPHALT PAVEMENT SECTION
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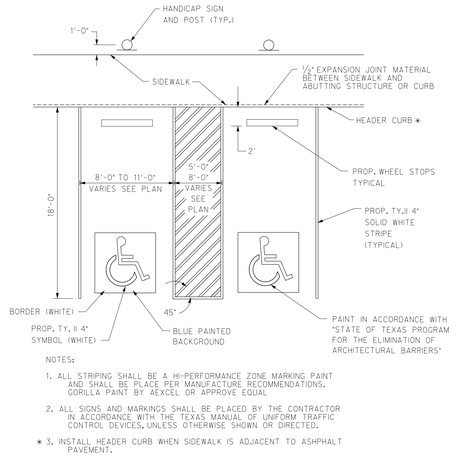
HANDICAP PARKING SYMBOL
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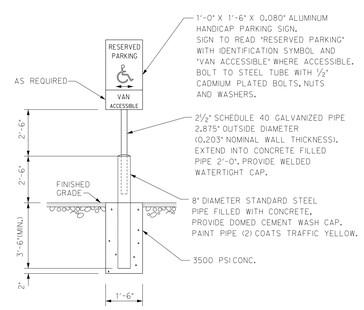
FIRE LANE DESIGNATION
NTS



PARALLEL HANDICAP RAMP
NTS



TYPICAL HANDICAP PARKING SPACE DETAIL
NTS



HANDICAP SIGN & SUPPORT
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ELI R.OCHOA, P.E., A/A
TEXAS REGISTRATION NO.
Engineer: 60251
Architect: 18160

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Description	Date

PROJECT NO.: 21087
ISSUE DATE: 8/26/2022
DRAWN BY: SK
CHECKED BY: RG

SHEET NAME

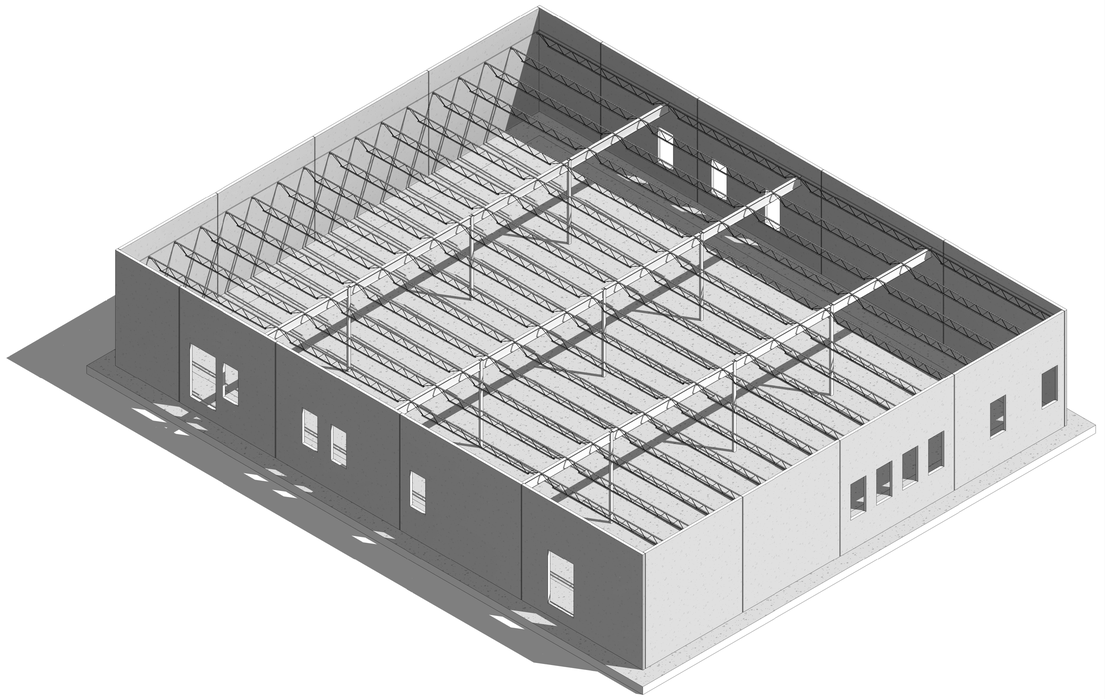
MISCELLANEOUS DETAILS

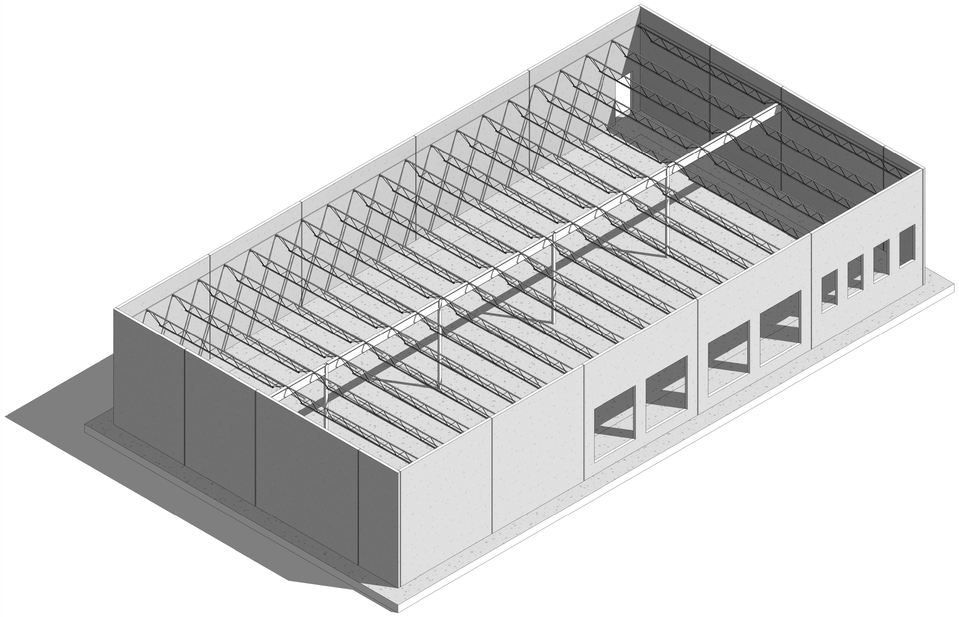
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Project Status:
60% SCHEMATIC DESIGN

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NOTES:

1. 3D VIEWS ARE SHOWN FOR REFERENCE ONLY AND TO PROVIDE A GENERAL ILLUSTRATIVE UNDERSTANDING OF THE STRUCTURAL FRAMES AND FOUNDATIONS OF THE PROJECT BUILDING STRUCTURES. NOT ALL STRUCTURAL MEMBERS MAY BE SHOWN IN THESE VIEWS.

A1 | COVER SHEET
3D VIEW

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ELIA OCHOA, P.E., AIA
TEXAS REGISTRATION NO.
Engineer: 80301
Architect: 16180

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

PROJECT No.: 21087
ISSUE DATE: 08.16.22
DRAWN BY: LA
CHECKED BY: JG
Sheet Name

COVER SHEET

Sheet Number

SG000

Project Status:

100% SCHEMATIC DESIGN

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GENERAL NOTES:

A. GENERAL

1. ALL CONSTRUCTION AND QUALITY OF MATERIALS SHALL COMPLY WITH THE GOVERNING BUILDING CODES AND REGULATIONS, CONTRACT DOCUMENTS, AND SPECIFICATIONS.
2. THE ARCHITECT AND ENGINEER ARE TO BE NOTIFIED IN WRITING WHEN CONSTRUCTION AT THE SITE BEGINS.

B. MEANS AND METHODS

1. THE CONTRACT DOCUMENTS AND SPECIFICATIONS DO NOT INDICATE THE METHOD OF CONSTRUCTION.
2. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
3. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION.

C. SAFETY

1. ALL CONSTRUCTION PROCEDURES AND JOB SITE CONDITIONS SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) LAW AND REGULATIONS.
2. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE CONSTRUCTION WORKERS, INSPECTORS, AND OTHER JOB SITE VISITORS 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.
3. 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.
4. NEITHER THE OWNER NOR THE ARCHITECT NOR THE ENGINEER WILL ENFORCE SAFETY MEASURES OR REGULATIONS. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR THE ENGINEER DO NOT INCLUDE INSPECTION OF OSHA SAFETY LAWS AND REGULATIONS.

D. GENERAL CONTRACTOR RESPONSIBILITIES PRIOR TO CONSTRUCTION

1. THE GENERAL 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.
2. THE GENERAL 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 IN WRITING AND APPROVAL MUST BE OBTAINED PRIOR TO INSTALLATION.
3. ANY OMISSION OR CONFLICT BETWEEN THE VARIOUS ELEMENTS OF THE CONTRACT DOCUMENTS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.

E. SUBCONTRACTOR QUALIFICATION

1. EACH SUBCONTRACTOR IS CONSIDERED AN EXPERT IN HIS/HER 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 IN THE CONTRACT DOCUMENTS IN HIS/HER TRADE THAT CANNOT BE GUARANTEED OR PERFORMED AS INDICATED.

F. STRUCTURAL DRAWINGS AND CONTRACT DOCUMENTS

1. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE.
2. THE STRUCTURAL DRAWINGS ARE ONLY A PORTION OF THE ENTIRE CONTRACT DOCUMENTS.
3. THE GENERAL CONTRACTOR AND ALL TRADE SUBCONTRACTORS ARE NOT LIMITED TO ONE SHEET NOR ONE DRAWING DISCIPLINE. THE GENERAL CONTRACTOR AND ALL TRADE SUBCONTRACTORS ARE RESPONSIBLE FOR ALL APPLICABLE AND ASSOCIATED WORK WITHIN THE ENTIRE CONTRACT DOCUMENTS AND SPECIFICATIONS.
4. IN CASE OF DISCREPANCIES, PROJECT SPECIFIC NOTES AND DETAILS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. DRAWINGS TAKE PRECEDENCE OVER SPECIFICATIONS. IN CASE OF A DISCREPANCY ON THE SAME ITEM, TAKE THE MORE STRINGENT OR MORE EXPENSIVE ITEM.
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. ANY QUESTIONS RELATED TO INTERPRETATION OR INTENT OF THESE DRAWINGS SHALL BE REFERRED TO THE ARCHITECT AND ENGINEER.

G. STRUCTURAL DESIGN

1. THIS STRUCTURE IS DESIGNED AS A STABLE UNIT AFTER ALL COMPONENTS ARE IN PLACE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY BRACING AS REQUIRED TO ENSURE THE VERTICAL AND LATERAL STABILITY OF THE ENTIRE STRUCTURE, OR ANY PORTION THEREOF, DURING CONSTRUCTION.

H. SUBSTITUTIONS

1. TRADE NAMES AND MANUFACTURERS REFERRED TO ARE FOR QUALITY STANDARDS ONLY. SUBSTITUTIONS WILL BE PERMITTED AS APPROVED BY THE ENGINEER.
2. ANY OPTIONS OR APPROVED SUBSTITUTIONS ARE FOR THE CONTRACTOR'S CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CHANGES, ADDITIONAL COSTS (INCLUDING REDESIGN SERVICES BY THE ENGINEER), AND COORDINATION WITH ALL ITEMS THAT THE SUBSTITUTIONS MAY IMPACT.

I. EXISTING UTILITIES AND ADJACENT STRUCTURES

1. 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.
2. THE CONTRACTOR SHALL ALSO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING STRUCTURES NEAR, ADJACENT, OR WITHIN THE EFFECTIVE AREA OF CONSTRUCTION.

J. NON-PERMITTED PROCEDURES

1. PIPES, DUCTS, SLEEVES, CHASES, ETC. SHALL NOT BE PLACED IN BEAMS, COLUMNS, OR WALLS UNLESS SPECIFICALLY SHOWN OR NOTED IN THE STRUCTURAL DRAWINGS.
2. STRUCTURAL MEMBERS SHALL NOT BE CUT OR MODIFIED FOR PIPES, DUCTS, ETC. UNLESS NOTED OTHERWISE.

ALLOWANCES:

A. MATERIAL ALLOWANCE

1. IN ADDITION TO THE MATERIAL SHOWN IN THESE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PROVIDE AN ADDITIONAL MATERIAL ALLOWANCE FOR USE ON THIS PROJECT AS DIRECTED BY THE ARCHITECT AND/OR THE STRUCTURAL ENGINEER OF RECORD.
2. THE MATERIAL ALLOWANCE SHALL BE AS FOLLOWS:

MATERIAL	ALLOWANCE
CONCRETE	10 CU YD
REINFORCING STEEL	1000 LBS
STRUCTURAL STEEL	6000 LBS

3. THE MATERIAL ALLOWANCE COST SHALL INCLUDE MATERIAL COST, LABOR COSTS, AND INSTALLATION PLACEMENT AT THE SITE.

B. CREDIT TO OWNER

1. REMAINING INSTALLATION BALANCE AT THE END OF THE PROJECT SHALL BE RETURNED/CREDITED BACK TO THE OWNER.
2. THE ALLOWANCE SHALL APPEAR ON THE SCHEDULE OF VALUE AS A LINE ITEM.

ROOF DECK:

A. SHEET METAL

MATERIAL:	ASTM A653, STRUCTURAL STEEL (SS) GRADE 33 (Fy = 33 KSI MINIMUM)
GALVANIZING:	G60 ZINC COATED, ACCORDING TO ASTM A653 AND ASTM A924
LOCATION:	TYPICAL
DECK PROFILE:	B, WR
PROFILE DEPTH:	1 1/2"
GAUGE:	20

B. ATTACHMENT

INTERIOR SUPPORT FASTENER PATTERN:	36/4
EXTERIOR SUPPORT FASTENER PATTERN:	36/7
PERIMETER SUPPORT FASTENER PATTERN:	36/5
SUPPORT FASTENER:	SIMPSON STRONG-DRIVE #12 XLQ
SIDE-LAP FASTENER:	#10 SCREW
EDGE FASTENERS:	SIMPSON STRONG-DRIVE #12 XLQ
NO. OF SIDE-LAP FASTENERS PER SPAN:	8
NO. OF EDGE FASTENERS PER SPAN:	3

REFERENCE SHEET SF106 FOR SPECIAL DECK ATTACHMENT REQUIREMENTS.

C. INSTALLATION

1. INSTALL ROOF DECK EXTERIOR ENDS WITH AN END-LAP CONDITION OVER SUPPORTING FRAMING CONSISTING OF A MINIMUM END BEARING OF 1 1/2" WITH END JOINTS LAPPED AT A MINIMUM OF 2".
2. ROOF DECK PANELS SHALL BE 2-SPAN MINIMUM; HOWEVER, DO NOT EXCEED 6-SPAN. SPAN CONDITIONS SHALL BE CLEARLY MARKED UP IN THE SHOP DRAWINGS FOR THE ENGINEER OF RECORD TO REVIEW.
3. PROVIDE THE FULL PANEL WIDTH AT ALL ROOF EDGES AND WHERE THE ROOF DIAPHRAGM LOADS ARE BEING TRANSFERRED TO THE LATERAL FORCE-RESISTING STRUCTURAL ELEMENTS. FILLER SHEETS ARE PERMITTED EXCEPT WHERE THE FULL PANEL WIDTH IS REQUIRED. FILLER SHEETS SHALL BE MARKED IN THE SHOP DRAWINGS FOR THE ENGINEER OF RECORD TO REVIEW.
4. SCREWS MUST BE INSTALLED USING PROPERLY CALIBRATED TOOLS..
5. WELDING ELECTRODES FOR ARC SPOT WELDS SHALL BE E60XX UNLESS NOTED OTHERWISE.
6. PROVIDE CLOSURE SHEETS OVER EXPOSED WALLS AND BEAMS.
7. AT VALLEYS, RIDGES AND WHERE DECK CHANGES DIRECTIONS, PROVIDE 9" WIDE x 1/4" THICK CONTINUOUS FLAT PLATES (BEND AS REQUIRED).

DESIGN CRITERIA:

A. CODES

THE STRUCTURAL SYSTEM(S) SHOWN WITHIN THESE CONTRACT STRUCTURAL DRAWINGS ARE DESIGNED TO COMPLY WITH THE FOLLOWING CODES:

BUILDING CODE:	IBC 2015
STRUCTURAL CONCRETE:	ACI 318-14
STRUCTURAL STEEL:	AISC 360-10
COLD-FORMED STEEL:	AISI S100-2012
WELDING:	AWS D1.1-2020
WELDING (SHEET METAL):	AWS D1.3-2018

B. REFERENCE STANDARDS

THE STRUCTURAL SYSTEM(S) SHOWN WITHIN THESE CONTRACTOR STRUCTURAL DRAWINGS ARE DESIGNED IN ACCORDANCE WITH THE FOLLOWING REFERENCE STANDARDS:

MINIMUM DESIGN LOADS:	ASCE 7-10
STEEL JOISTS:	SJI 100-15
ROOF DECK:	SDI/ANSI-RD-2012
PROFILE STEEL DIAPHRAGM:	AISI S310-13

C. GRAVITY LOADS

1. DEAD LOAD

a. ROOF:	22 PSF
b. SECOND FLOOR:	SELF WEIGHT + 15 PSF SDL

2. ROOF LIVE LOAD: 20 PSF (REDUCIBLE)

3. LIVE LOAD

	UNIFORM	CONCENTRATED
PARTITIONS:	SEE NOTE iv	-
ACCESS FLOOR SYSTEMS		
OFFICE:	50 PSF	2000 LB
COMPUTER:	100 PSF	2000 LB
ASSEMBLY AREAS		
FIXED SEATS:	60 PSF	-
FOLLOW SPOT BOOTHS:	50 PSF	-
LOBBIES:	100 PSF	-
MOVEABLE SEATS:	100 PSF	-
STAGE FLOORS:	150 PSF	-
OTHER ASSEMBLY AREAS:	100 PSF	-
BALCONIES AND DECKS:	SEE NOTE iii	-
CATWALKS:	40 PSF	300 LB
CORRIDORS		
FIRST FLOOR:	100 PSF	1000 LB
OTHER FLOORS:	SEE NOTE ii	1000 LB
DINING ROOMS:	100 PSF	-
LIBRARIES		
READING ROOMS:	60 PSF	1000 LB
STACK ROOMS:	150 PSF	1000 LB
RECREATION USE		
DANCE HALLS:	100 PSF	-
GYMNASIUMS:	100 PSF	-
WEIGHTROOMS:	-	SEE NOTE v
BLEACHERS:	100 PSF	-
SIDEWALKS:	100 PSF	8000 LB
STAIRS AND EXIT WAYS:	100 PSF	300 LB
STORAGE/MECHANICAL		
LIGHT:	125 PSF	SEE NOTE v
HEAVY:	250 PSF	SEE NOTE v

LIVE LOAD NOTES:

i. DESIGN LIVE LOADS ARE BASED ON THE MORE RESTRICTIVE OF THE UNIFORM LOAD OR THE CONCENTRATED LOAD ACTING OVER AN AREA OF 2'-6" BY 2'-6", 4 1/2" BY 4 1/2" FOR PARKING GARAGES, OR 2" BY 2" FOR STAIR TREADS.
ii. SAME AS THE OCCUPANCY SERVED.
iii. 1.5 TIMES THE OCCUPANCY SERVED BUT NOT GREATER THAN 100 PSF.
iv. IN AREAS WHERE PARTITIONS ARE SUBJECTED TO CHANGE, AN ALLOWANCE OF 15 PSF OF ADDITIONAL LIVE LOAD HAS BEEN MADE FOR PARTITIONS AS A UNIFORMLY DISTRIBUTED LIVE LOAD WHERE THE LIVE LOAD IS LESS THAN OR EQUAL TO 80 PSF.
v. DESIGN CONCENTRATED LOAD IS THAT REQUIRED BY THE ASSUMED EQUIPMENT WEIGHT.
vi. LIVE LOADS HAVE BEEN REDUCED USING THE STANDARD PROCEDURE IN THE BUILDING CODE UP TO A MAXIMUM REDUCTION OF 50% FOR MEMBERS SUPPORTING ONE FLOOR AND 60% FOR MEMBERS SUPPORTING TWO OR MORE FLOORS.
vii. LIVE LOADS IN EXCESS OF 100 PSF HAVE NOT BEEN REDUCED, EXCEPT A 20% MAXIMUM REDUCTION HAS BEEN MADE FOR MEMBERS SUPPORTING TWO OR MORE FLOORS.

REFERENCE SHEETS SG005 FOR LIVE LOAD PLANS.

4. RAIN LOAD: 0 PSF
RAINFALL RATE, i: 4.0 IN/HR

THE ROOF STRUCTURE HAS NOT BEEN DESIGNED TO SUPPORT THE WEIGHT OF PONDED WATER SINCE THE ROOF SLOPES TOWARDS POINTS OF FREE DRAINAGE OF AT LEAST 1/4:12.

5. SNOW LOAD
GROUND SNOW LOAD, p_g: 0 PSF

6. ICE LOAD: NOT APPLICABLE

D. LATERAL LOADS

1. WIND LOAD

ULTIMATE WIND SPEED, V_{ult}:	138 MPH
NOMINAL WIND SPEED, V_{asd}:	107 MPH
RISK CATEGORY:	IV
EXPOSURE CATEGORY:	C
ENCLOSURE CLASSIFICATION:	ENCLOSED
INTERNAL PRESSURE COEFFICIENT:	±0.18
THE STRUCTURE IS LOCATED IN A HURRICANE PRONE REGION.	
THE STRUCTURE IS NOT LOCATED WITHIN 1 MILE OF THE COASTAL MEAN WATER LINE.	
THE STRUCTURE IS NOT LOCATED IN A WIND-BORNE DEBRIS REGION.	
PROTECTION OF GLAZING TO WITHSTAND IMPACT OF WIND-BORNE DEBRIS MISSILES IS NOT REQUIRED.	

2. SEISMIC LOAD

SEISMIC IMPORTANCE FACTOR, I_e:	1.25
MAPPED SPECTRAL RESPONSE ACCELERATION (SHORT), S_s:	0.041 g
MAPPED SPECTRAL RESPONSE ACCELERATION (1 SEC), S_1:	0.014 g
SITE CLASS:	D
DESIGN SPECTRAL RESPONSE ACCELERATION (SHORT), S_{DS}:	0.044 g
DESIGN SPECTRAL RESPONSE ACCELERATION (1 SEC), S_{D1}:	0.022 g
SEISMIC DESIGN CATEGORY (SDC):	A
SEISMIC FORCE-RESISTING SYSTEM:	STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
ANALYSIS PROCEDURE USED:	ASCE 7-10 SECTION 1.4.3
RESPONSE MODIFICATION COEFFICIENT, R:	3
OVERSTRENGTH FACTOR, Ω_0:	3
DEFLECTION AMPLIFICATION FACTOR, C_d:	3
SEISMIC RESPONSE COEFFICIENT, C_s:	0.0219
BASE SHEARS, V:	0.0219*W KIPS

3. FLOOD LOAD

FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY-PANEL NO.:	NO STUDY AVAILABLE
REVISION DATE:	N/A
ZONE DESIGNATION:	NO STUDY AVAILABLE

THE PROJECT IS NOT LOCATED IN A FLOOD HAZARD AREA. FLOOD LOADS DO NOT GOVERN THE DESIGN OF THE STRUCTURE.

E. GEOTECHNICAL INFORMATION

1. GEOTECHNICAL REPORT

PREPARED BY:	TERRACON CONSULTANTS INC.
PROJECT NO.:	88205155
DATE:	JANUARY 14, 2021

2. SHALLOW FOUNDATION

a. MINIMUM FOUNDATION REQUIREMENTS:	
MINIMUM PERIMETER BEAM DEPTH BELOW FINISH GRADE:	24 INCHES
MINIMUM BEAM WIDTH:	12 INCHES
b. SOIL PARAMETERS	
MODULUS OF SUBGRADE REACTION, k:	100 PCI (SELECT FILL)
ALLOWABLE SOIL BEARING PRESSURE:	2500 PSF (NET)
c. WIRE REINFORCEMENT INSTITUTE (WRI) CRITERIA:	
CLIMATIC RATING, C_w:	15
EFFECTIVE PLASTICITY INDEX, PI:	26
SOIL SUPPORT INDEX, c:	0.89
POTENTIAL VERTICAL RISE (PVR) - UNDISTURBED SOIL:	1" to 1 1/2"
POTENTIAL VERTICAL RISE (PVR) - WITH SELECT FILL:	1"
TOTAL SETTLEMENT:	1"

SHOP DRAWINGS AND SUBMITTALS:

A. SUBMITTAL LIST AND SCHEDULE

1. THE GENERAL CONTRACTOR SHALL PREPARE A DETAILED LIST AND SCHEDULE OF ALL SUBMITTAL ITEMS TO BE SENT TO THE STRUCTURAL ENGINEER PRIOR TO THE START OF CONSTRUCTION. THE LIST SHALL INCLUDE:
   a. SHOP DRAWINGS
   b. PRODUCTS, ASSEMBLIES, AND HARDWARE
   c. PRODUCT CERTIFICATES, MILL CERTIFICATES, AND FABRICATOR CERTIFICATES
   d. DESIGN CALCULATIONS

B. SHOP DRAWINGS AND SUBMITTALS

1. THE GENERAL CONTRACTOR SHALL SUBMIT FOR ENGINEERING REVIEW SHOP DRAWINGS AND SUBMITTALS FOR THE FOLLOWING ITEMS BUT NOT LIMITED TO:
   a. CONCRETE MIX DESIGN
   b. CONSTRUCTION JOINT LOCATIONS IN FLOORS, WALLS, AND SLAB-ON-GRADE
   c. EMBEDDED PLATES
   d. GROUT MIX DESIGN
   e. MISCELLANEOUS STEEL
   f. MASONRY ASSEMBLAGE
   g. MORTAR MIX DESIGN
   h. REINFORCING STEEL
   i. ROOF DECK
   j. STEEL JOISTS AND JOIST GIRDERS
   k. STRUCTURAL STEEL
2. ALLOW A MINIMUM OF 10 WORKING DAYS FOR REVIEW OF EACH SET OF SHOP DRAWINGS.

C. DEFERRED SUBMITTALS

1. DEFERRED SUBMITTALS SHALL BE PREPARED BY THE CONTRACTOR'S DELEGATED DESIGN PROFESSIONAL ENGINEER WHO IS LICENSED IN THE STATE IN WHICH THE PROJECT IS IN.
2. ALL DEFERRED SUBMITTALS SHALL BE AFFIXED WITH THE DELEGATED DESIGN ENGINEER'S SEAL AND CLEARLY INDICATED SUBMITTAL STATUS SUCH AS, BUT NOT LIMITED TO: "PRELIMINARY", "FOR REVIEW ONLY", "PERMIT REVIEW", "FOR CONSTRUCTION", ETC.
3. THE FOLLOWING DEFERRED SUBMITTALS REQUIRED FOR THIS PROJECT ARE:
   a. COLD-FORMED METAL FRAMING (EXTERIOR)
   b. PRE-ENGINEERED CANOPIES
   c. ROOFTOP UNITS ANCHORAGE
   d. STEEL LADDERS
   e. STRUCTURAL STEEL CONNECTION DESIGN (SEE "STRUCTURAL STEEL", NOTE C)

D. GENERAL CONTRACTOR'S ROLE PRIOR TO SUBMISSION

1. ALL SHOP DRAWINGS AND SUBMITTALS SHALL BE REVIEWED AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTING TO THE ENGINEER FOR REVIEW. REFER TO ARCHITECTURAL FOR SUBMISSION REQUIREMENTS.
2. THE GENERAL CONTRACTOR SHALL REVIEW THE SHOP DRAWINGS SUBMITTED BY THEIR SUB-CONTRACTORS AND COORDINATE SHOP DRAWINGS WITH ALL OTHER TRADES PRIOR TO SUBMISSION TO THE ENGINEER FOR REVIEW.
3. THE GENERAL CONTRACTOR SHALL ANSWER ALL QUESTIONS OR CLARIFICATIONS BY THE SUB-CONTRACTORS BEFORE SUBMITTING TO THE ENGINEER FOR REVIEW.

E. SHOP DRAWING AND SUBMITTAL LEGIBILITY

1. SHOP DRAWINGS AND SUBMITTALS SHALL USE DRAFTING LINE WORK AND LETTERING THAT IS CLEARLY LEGIBLE
2. SHOP DRAWINGS AND SUBMITTALS SHALL SHOW CLEAR AND COMPLETE INFORMATION FOR THE FABRICATION AND INSTALLATION.

F. ERRORS AND OMISSIONS

1. REVIEW OF THE SHOP DRAWINGS AND SUBMITTALS IS FOR GENERAL CONFORMANCE TO THE STRUCTURAL DRAWINGS. REVIEW OF THE SHOP DRAWINGS AND SUBMITTALS BY THE ENGINEER DOES NOT INDEMNIFY THE CONTRACTOR FOR ANY ERRORS AND/OR OMISSIONS IN DIMENSIONS, MATERIALS, AND/OR STRUCTURAL ELEMENTS INDICATED IN THE SHOP DRAWINGS AND SUBMITTALS.

G. DISCREPANCIES

1. IF THERE EXISTS ANY DISCREPANCIES BETWEEN THE STRUCTURAL DRAWINGS AND SHOP DRAWINGS AND/OR SUBMITTALS, THE INFORMATION IN THE STRUCTURAL DRAWINGS SHALL SUPERSEDE.
2. INFORMATION THAT IS NOT INDICATED ON THE SHOP DRAWINGS SHALL BE OBTAINED FROM THE STRUCTURAL DRAWINGS.

H. ELECTRONIC FILES

1. ELECTRONIC FILE FORMATS SUCH AS, BUT NOT LIMITED TO: .rvt, .dwg, .skp, .txt CAN BE PROVIDED TO THE CONTRACTOR UPON REQUEST, TO **ASSIST, NOT TO REPRODUCE**, IN THE PREPARATION OF SHOP DRAWINGS PROVIDED THAT THE CONTRACTOR FILLS OUT AND SUBMITS THE DESIGN TEAM'S UNMODIFIED ELECTRONIC FILE RELEASE FORM AND COMPENSATES THE DESIGN TEAM, PRIOR TO RECEIVING THE REQUESTED ELECTRONIC FILES, WITH THE ASSOCIATED FEES INDICATED ON THE FORM.
2. ELECTRONIC FILES ARE **NOT** CONSIDERED PART OF THE CONTRACT DOCUMENTS.
3. ELECTRONIC FILES ARE FOR REFERENCE ONLY, AND THE DESIGN TEAM CANNOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE CONTENTS RELATION TO THE CONTRACT DOCUMENTS.

I. REPRODUCTION

1. THE USE OF THE ELECTRONIC FILES OR REPRODUCTIONS OF THESE CONTRACT DOCUMENTS BY THE GENERAL CONTRACTOR, AND SUB-CONTRACTOR, ERECTOR, FABRICATOR, OR SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS AND/OR SUBMITTALS INDICATES THEIR ACCEPTANCE OF ALL INFORMATION SHOWN IN THESE DOCUMENTS ARE 100% CORRECT, AND OBLIGATES THEMSELVES TO ANY EXPENSES, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON.
2. REPRODUCTION OF THESE CONTRACT DOCUMENTS BY UNAUTHORIZED USE OF ELECTRONIC FILE FORMATS STATED ABOVE (NOTE G) OR DIRECT EXPORT FROM A .pdf FILE FORMAT TO CAD SOFTWARE INCURS THE CONTRACTOR TO COMPENSATE THE DESIGN TEAM WITH THE ASSOCIATED FEES ON THE DESIGN TEAM'S ELECTRONIC FILE RELEASE FORM.
3. REPRODUCED SHOP DRAWINGS, SUBMITTED PRIOR TO RECEIVING A SIGNED ELECTRONIC FILE RELEASE FORM AND THE ASSOCIATED FEES, **WILL BE IMMEDIATELY REJECTED**, AND THE DESIGN TEAM'S REVIEW OF THE SUBMITTAL WILL NOT COMMENCE UNTIL EITHER, A SIGNED ELECTRONIC FILE RELEASE FORM IS RECEIVED AND PAYMENT IS MADE IN FULL OR THE CONTRACTOR HAS GENERATED AN ENTIRELY NEW SUBMITTAL FROM SCRATCH.

SERVICEABILITY AND MAINTENANCE:

A. CONCRETE CRACKING STATEMENT

1. STRUCTURAL ELEMENTS CONSTRUCTED OUT OF CONCRETE AND/OR MASONRY MAY DEVELOP CRACKS DUE TO INHERENT CONCRETE SHRINKAGE AND CREEP AND RESTRAINING EFFECTS DUE TO CONNECTIONS IN WHICH THE CONCRETE AND/OR MASONRY MEMBERS ARE TIED TO.
2. CRACKING DUE TO SHRINKAGE, CREEP, AND RESTRAINING EFFECTS ARE COSMETIC. THE CONCRETE AND/OR MASONRY MEMBERS WILL MAINTAIN THE STRENGTH AND SERVICEABILITY REQUIREMENTS EVEN WITH SUCH CRACKS PRESENT.
3. SPECIAL EFFORT HAS BEEN MADE TO REDUCE THE POTENTIAL CAUSES AND NUMBER OF CRACKS SUCH AS LOCATING CONTROL JOINTS, EXPANSION JOINTS, ISOLATION JOINTS, CONTRACT JOINTS, AND TEMPERATURE SUPPLEMENTARY REINFORCING; HOWEVER, IT IS NOT PRACTICAL TO ACHIEVE COMPLETE INHIBITION OF ALL CRACKS. THE CONTRACTOR SHALL FOLLOW REASONABLE MEANS AND METHODS TO FURTHER REDUCE THE POTENTIAL FOR CONCRETE CRACKING.
4. MOST CRACKS DEVELOP WITHIN 3 YEARS OF THE LIFESPAN OF THE STRUCTURE. CRACKS WIDER THAN 0.01" SHOULD BE PRESSURE EPOXIED.

B. MAINTENANCE STATEMENT

1. ALL STRUCTURES REQUIRE PERIODIC MAINTENANCE TO EXTEND THE LIFESPAN OF THE STRUCTURE AND TO ENSURE THE STRUCTURAL INTEGRITY FROM EXPOSURE TO THE ENVIRONMENT.
2. THE OWNER SHALL ESTABLISH A PLANNED PROGRAM FOR MAINTENANCE THAT SHALL INCLUDE SERVICING ITEMS INCLUDING BUT NOT LIMITED TO:
   a. STRUCTURAL STEEL PAINT
   b. CONCRETE PROTECTIVE COATING
   c. SEALANTS
   d. CAULKED JOINTS
   e. EXPANSION JOINTS
   f. CONTROL JOINTS
   g. SPALLS AND CRACKS IN CONCRETE
   h. PRESSURE WASHING OF STRUCTURAL ELEMENTS EXPOSED TO SALT OR OTHER DAMAGING CHEMICALS
   i. CLEARING ROOF DRAINS AND SCUPPERS OF DEBRIS TO PREVENT WATER PONDING

C. FUTURE MECHANICAL UNITS

1. THE STRUCTURE HAS BEEN DESIGNED TO RESIST THE WEIGHT OF THE MECHANICAL UNITS SHOWN IN THESE CONTRACT STRUCTURAL DRAWINGS. NO ADDITIONAL OR SUPPLEMENTARY DEAD LOAD HAS BEEN ALLOCATED TO THE FLOOR AND/OR ROOF FOR FUTURE MECHANICAL UNITS, UNLESS NOTED OTHERWISE.
2. WHEN FUTURE MECHANICAL UNITS ARE CONSIDERED BY THE OWNER AFTER SUBSTANTIAL COMPLETION OF THE PROJECT, THE OWNER IS RESPONSIBLE FOR ENGAGING A LICENSED PROFESSIONAL ENGINEER TO ANALYZE THE EXISTING STRUCTURE TO ENSURE STRUCTURAL INTEGRITY, STABILITY, AND COMPLIANCE WITH THE ADOPTED BUILDING CODE.

D. EXPANSIVE SOILS

1. THE SOILS AT THIS SITE ARE HIGHLY EXPANSIVE; THAT IS, THEY WILL SWELL OR SHRINK AS THE MOISTURE CONTENT IN THE SOIL INCREASES OR DECREASES, RESPECTIVELY.
2. THE BUILDING PAD PREPARATION REDUCES THE POTENTIAL FOR THE NATIVE SOILS TO SWELL OR SHRINK WITH THE PRESUMPTION THAT NO EXTERNAL WATER SOURCE PERMEATES DOWN INTO THE EXPANSIVE NATIVE SOILS DIRECTLY BELOW THE BUILDING FOUNDATION.
3. EXAMPLES OF EXTERNAL WATER SOURCES INCLUDE, BUT NOT LIMITED TO: PONDING RAIN WATER IMMEDIATELY ADJACENT TO THE BUILDING (NEGATIVE DRAINAGE), WATER LEAKS, BROKEN IRRIGATION PIPES, ETC.
4. TO AVOID INTRODUCING AN EXTERNAL WATER SOURCE INTO THE EXPANSIVE NATIVE SOILS, THE OWNER SHALL MAINTAIN THE GRADING, LANDSCAPING, IRRIGATION, AND SITE DRAINAGE TO ENSURE POSITIVE DRAINAGE AWAY FROM THE FOUNDATION.
5. THE OWNER SHALL PERFORM PERIODIC LEAK DETECTION TO ENSURE NO WATER LEAKS ARE OCCURRING BELOW THE BUILDING FOUNDATION.
6. IF NOT MAINTAINED, CYCLES OF SWELLING AND SHRINKING OF THE EXPANSIVE NATIVE SOILS FROM AN EXTERNAL WATER SOURCE WILL LIKELY CAUSE COSMETIC DAMAGE TO THE BUILDING FINISHES, LOCALIZED HEAVING AND SETTLING, AND DAMAGE TO THE BUILDING'S FOUNDATION.

NON- COMPOSITE DECK:

A. SHEET METAL

MATERIAL:	ASTM A1008, GRADE 60 (Fy = 60 KSI MINIMUM)
GALVANIZING:	G60 ZINC COATED, ACCORDING TO ASTM A653 AND ASTM A924
LOCATION:	2ND FLOOR
DECK PROFILE:	C
PROFILE DEPTH:	0.6 (9/16")
GAUGE:	26

B. CONCRETE TOPPING

CONCRETE THICKNESS (t):	1 1/5"Ø" (MEASURED FROM TOP OF CORRUGATION CRESTS)
TOTAL SLAB DECK THICKNESS:	2 1/2"
CONCRETE STRENGTH, $f'c$:	3000 PSI
CONCRETE UNIT WEIGHT:	NORMALWEIGHT (w_c = 145 PCF ± 5 PCF MAX)
REINFORCEMENT:	6X6 - W2.9XW2.9 WWR

C. ATTACHMENT

INTERIOR SUPPORT FASTENER PATTERN:	30/4
EXTERIOR SUPPORT FASTENER PATTERN:	30/4
PERIMETER SUPPORT FASTENER PATTERN:	30/7
SUPPORT FASTENER:	SIMPSON STRONG-DRIVE #12 XLQ
SIDE-LAP FASTENER:	#10 SCREW
EDGE FASTENER:	SIMPSON STRONG-DRIVE #12 XLQ
NO. OF SIDE-LAP FASTENERS PER SPAN:	3
NO. OF EDGE FASTENERS PER SPAN:	6

REFERENCE SHEET SF105 FOR SPECIAL DECK ATTACHMENT REQUIREMENTS.

D. INSTALLATION

1. INSTALL NON-COMPOSITE DECK EXTERIOR ENDS WITH A BUTT-JOINT OVER SUPPORTING FRAMING WITH A MINIMUM END BEARING OF 1 1/2".
2. NON-COMPOSITE DECK PANELS SHALL BE 3-SPAN MINIMUM, UNLESS NOTED OTHERWISE. OTHER SPAN CONDITIONS SHALL BE MARKED UP IN THE SHOP D

POST-INSTALLED ANCHORS:

A. GENERAL

1. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONTRACT DOCUMENTS.
2. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE EOR PRIOR TO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS.
3. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REINFORCING STEEL.
4. HOLES SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

B. SUBSTITUTIONS

1. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE SPECIFIED BELOW SHALL BE SUBMITTED BY THE CONTRACTOR TO THE EOR ALONG WITH CALCULATIONS THAT ARE PREPARED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
2. 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 GOVERNING BUILDING CODE.

C. SPECIAL INSPECTION

1. REFERENCE "SPECIAL INSPECTION AND MATERIAL TESTING" FOR SPECIAL INSPECTION REQUIREMENTS FOR POST-INSTALLED ANCHORS.
2. THE SPECIAL INSPECTOR SHALL PROVIDE CONTINUOUS SPECIAL INSPECTION FOR ALL MECHANICAL AND ADHESIVE ANCHORS PER THE APPLICABLE EVALUATION REPORT.

D. INSTALLATION TRAINING/PRE-INSTALLATION CONFERENCE

1. CONTACT MANUFACTURER'S REPRESENTATIVE FOR THE INITIAL TRAINING AND INSTALLATION OF ANCHORS AND FOR PRODUCT RELATED QUESTIONS AND AVAILABILITY PRIOR TO INSTALLING ALL POST-INSTALLED ANCHORS.

E. CONCRETE ANCHORS

1. **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:
   a. SIMPSON STRONG-TIE
      i. SIMPSON STRONG-TIE "TITEN-HD" AND "TITEN-HD ROD HANGER" (ICC-ES ESR-2713)
      ii. SIMPSON STRONG-TIE "STRONG-BOLT" (ICC-ES ESR-1771)
      iii. SIMPSON STRONG-TIE "STRONG-BOLT 2" (ICC-ES ESR-3037)
      iv. SIMPSON STRONG-TIE "TORQ-CUT" (ICC-ES ESR-2705)
   b. HILTI
      i. HILTI "KWIK HUS EZ" AND "KWIK EZ-I SCREW" (ICC-ES ESR-3027)
      ii. HILTI "BOLT-TZ" EXPANSION ANCHOR (ICC-ES ESR-1917)
      iii. HILTI "BOLT 3" EXPANSION ANCHOR (ICC-ES ESR-2302)
      iv. HILTI "HDA" UNDERCUT ANCHOR (ICC-ES ESR-1546)
      v. HILTI "HSL-3" EXPANSION ANCHOR (ICC-ES ESR-1545)
   c. DEWALT
      i. DEWALT POWER-STUD+SD1 (ICC-ES-ESR 2818)
      ii. DEWALT POWER-STUD+SD4, TYPE 304 STAINLESS STEEL (ICC-ES-ESR 2502)
      iii. DEWALT POWER-BOLT+, SLEEVE ANCHOR (ICC-ES-ESR3260)
      iv. DEWALT SCREW BOLT+ (ICC-ES-ESR 3889)
      v. DEWALT ATOMIC+UNDERCUT ANCHOR, (ICC-ES-ESR3067)
      vi. DEWALT SNAKE+, INTERNALLY THREADED (ICC-ES-ESRP2272)
      vii. DEWALT ATOMIC+UNDERCUT ANCHOR, UNDERCUT ANCHOR (ICC-ES-ESR 3067)
      viii. DEWALT MINI-UNDERCUT+ (ICC-ES-ESR 3912)
2. **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. A PRE-APPROVED ADHESIVE ANCHORING SYSTEM INCLUDE:
   a. SIMPSON STRONG-TIE
      i. SIMPSON STRONG-TIE "SET-3G" ADHESIVE (ICC-ES ESR-4057)
      ii. SIMPSON STRONG-TIE "AT-XP" ADHESIVE (IAPMO UES ER-263)
      iii. SIMPSON STRONG-TIE "SET-XP" ADHESIVE (ICC-ES ESR-2508)
   b. HILTI
      i. HILTI "HIT-RE 500-SD" ADHESIVE (ICC-ES ESR-2322)
      ii. HILTI "HIT-HY 150 MAX-SD" ADHESIVE (ICC-ES ESR-3013)
      iii. HILTI "HIT-HY 150 MAX" ADHESIVE (ICC-ES ESR-2282)
   c. DEWALT
      i. DEWALT PURE 110+, EPOXY SYSTEM (ICC-ES-ESR 3298)
      ii. DEWALT AC200+, ACRYLIC ADHESIVE SYSTEM (ICC-ES-ESR 4027)
3. **POWDER ACTUATED FASTENERS** SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED POWDER ACTUATED FASTENERS INCLUDE:
   a. SIMPSON STRONG-TIE
      i. SIMPSON STRONG-TIE "POWER-DRIVEN FASTENERS" (ICC-ES ESR-2138)
   b. DEWALT
      i. DEWALT POWER DRIVEN FASTENERS, POWDER ACTUATED (ICC-ES-ESR 2024)

F. MASONRY ANCHORS

1. **ANCHORAGE TO SOLID-GROUTED CONCRETE MASONRY**

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
      i. SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-1056)
      ii. SIMPSON STRONG-TIE "STRONG BOLT 2" (IAPMO-ES ER-0240)
      iii. SIMPSON STRONG-TIE "WEDGE-ALL" (ICC-ES ESR-1396)
   b. DEWALT
      i. DEWALT POWER-STUD+SD1 (ICC-ES-ESR 2966)
      ii. DEWALT SCREW-BOLT+ (ICC-ES-ESR 4042)
      iii. DEWALT ULTRACON+ SCREW ANCHORS (ICC-ES-ESR 3196)

ADHESIVE ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC58. PRE-APPROVED ADHESIVE ANCHORING SYSTEM INCLUDE:
   a. SIMPSON STRONG-TIE
      i. SIMPSON STRONG-TIE "AT-XP" ADHESIVE (IAPMO UES ER-281)
      ii. SIMPSON STRONG-TIE "SET-XP" ADHESIVE (ICC-ES ESR-2508)
   b. DEWALT
      i. DEWALT AC100+GOLD (ICC-ES-ESR 3200)

2. **ANCHORAGE TO HOLLOW CONCRETE MASONRY/UNREINFORCED CLAY BRICK MASONRY**

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
      i. SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-1056)
   b. DEWALT
      i. DEWALT AC100+GOLD (ICC-ES-ESR 4105)

ADHESIVE ANCHORS WITH SCREEN TUBES SHALL BE TESTED AND QUALIFIED IN ACCORDANCE WITH ICC-ES AC58 OR AC60, AS APPROPRIATE. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED ADHESIVE ANCHORS WITH SCREEN TUBES INCLUDE:
   a. SIMPSON STRONG-TIE
      i. SIMPSON STRONG-TIE "SET-XP" ADHESIVE (ICC-ES ESR-2508)
   b. DEWALT
      i. DEWALT AC100+GOLD (ICC-ES-ESR 4105)

3. **ANCHORAGE TO HOLLOW/MULTI-WYTHE MASONRY**

ADHESIVE ANCHORS WITH SCREEN TUBES SHALL BE TESTED AND QUALIFIED IN ACCORDANCE WITH ICC-ES AC58 OR AC60, AS APPROPRIATE. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED ADHESIVE ANCHORS WITH SCREEN TUBES INCLUDE:
   a. HILTI
      i. HILTI "HIT-HY 70" MASONRY ADHESIVE (ICC-ES ESR-3442)
   b. DEWALT
      i. DEWALT AC100+GOLD (ICC-ES-ESR 4105)

REINFORCING STEEL:

A. GENERAL

1. DEFORMED BAR REINFORCEMENT SHALL CONFORM TO THE FOLLOWING GRADES OF ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE ON THE DRAWINGS OR IN NOTES.
2. DETAILING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH CHAPTER 25 OF ACI 318 (EDITION ON DESIGN CRITERIA), UNLESS OTHERWISE NOTED.
3. REINFORCING STEEL REQUIRED TO BE WELDED SHALL CONFORM TO ASTM A706.
4. WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A1064.
5. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE BEFORE PLACING CONCRETE OR GROUT.

B. SUPPORTS FOR REINFORCEMENT

1. PROVIDE SUPPORT FOR REINFORCEMENT INCLUDING BOLSTERS, CHAIRS, SPACERS, AND OTHER DEVICES FOR SPACING, SUPPORTING, AND FASTENING REINFORCING BARS AND WELDED WIRE REINFORCEMENT IN PLACE.
2. 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).
   a. SLAB-ON-GRADE: USE PRECAST CONCRETE BAR SUPPORTS (DOBIES) OR CHAIRS DESIGNED FOR SOIL-SUPPORTED SLABS SPACED AT 36 INCHES ON CENTER FOR #3 BARS AND 48 INCHES ON CENTER FOR LARGER BARS.
   b. SPREAD FOOTINGS AND GRADE BEAMS: USE PRECAST CONCRETE BAR SUPPORTS (DOBIES) OR CHAIRS DESIGNED FOR SOIL-SUPPORTED SLABS.
   c. PIERS: USE PRECAST CONCRETE BAR SUPPORTS (DOBIES) AND CRSI CLASS 1 WHEELS.
   d. SUSPENDED SLABS, BEAMS, AND GIRDERS: PROVIDE CRSI CLASS 1 SUPPORTS WITH LEGS.

C. DETAILING

1. REINFORCING STEEL DETAILING, BENDING AND PLACING SHALL BE IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE", LATEST EDITION.
2. BARS DETAILED AS CONTINUOUS SHALL BE LAPPED AT SPLICES.
3. REFERENCE APPLICABLE SCHEDULES FOR LAPS AT BAR SPLICES, UNLESS NOTED OTHERWISE.

D. PLACEMENT OF WELDED WIRE REINFORCING

1. WHERE SPECIFIED, WELDED WIRE REINFORCING SHALL BE CONTINUOUS ACROSS THE ENTIRE CONCRETE SURFACE AND NOT INTERRUPTED BY BEAMS OR GIRDERS.
2. LAPS OF WELDED WIRE REINFORCING AT SPLICES SHALL BE AS INDICATED IN THE SCHEDULE. REFERENCE THE TYPICAL CONCRETE DETAILS.

E. NON-PERMITTED ITEMS

1. WELDING OF CROSSING BARS AND TACK WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED.
2. WELDING OF REINFORCING STEEL IS NOT PERMITTED, UNLESS NOTED OTHERWISE.

F. SHOP DRAWINGS

1. CONTRACTOR SHALL SUBMIT REINFORCING STEEL SHOP DRAWINGS FOR REVIEW BEFORE FABRICATION AND INSTALLATION

DRAWING INTERPRETATION:

A. GENERAL

1. DECISIONS REGARDING THE APPLICABILITY OF "TYPICAL" AND/OR "SIMILAR" DRAWING VIEWS SHALL BE DETERMINED BY THE ARCHITECT OF RECORD AND THE STRUCTURAL ENGINEER OF RECORD.

B. DRAWING VIEWS LABELED AS "TYPICAL"

1. PARTIAL PLANS, ELEVATIONS, SECTIONS, DETAILS, OR SCHEDULES LABELED WITH "TYPICAL" SHALL APPLY TO ALL SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME TO THOSE SPECIFICALLY SHOWN.
2. THE APPLICABILITY OF THE CONTENT OF THESE VIEWS TO LOCATIONS ON THE PLAN CAN BE DETERMINED FROM THE TITLE OF THE VIEWS WHETHER OR NOT THEY ARE LABELED OR KEYED IN AT EACH LOCATION.

C. DRAWING VIEWS LABELED AS "SIMILAR"

1. PARTIAL PLANS, ELEVATIONS, SECTIONS, DETAILS, OR SCHEDULES LABELED WITH "SIMILAR" SHALL APPLY TO ALL SITUATIONS OCCURRING ON THE PROJECT THAT ARE OF SIMILAR CONTENT AND DESIGN INTENT.
2. VIEWS LABELED AS "SIMILAR" MAY REFERENCE A PARENT DETAIL THAT MAY NOT MATCH THE EXACT CONTENT OF THE INDICATED DRAWING VIEW, BUT HAS SUFFICIENT AMOUNT INFORMATION TO REPRESENT THE DESIGN INTENT.
3. VIEWS AMBLED AS "SIMILAR" MAY REQUIRE MODIFICATIONS TO THE PARENT DETAIL TO MATCH THE CONDITION OF THE INDICATED DRAWING VIEW.

STRUCTURAL OBSERVATION:

A. SCOPE

1. JOB SITE STRUCTURAL OBSERVATIONS BY THE LICENSED PROFESSIONAL ENGINEER OR HISHER AUTHORIZED REPRESENTATIVE SHALL CONSIST OF VISUAL OBSERVATION OF MATERIALS, EQUIPMENT OR CONSTRUCTION WORK FOR THE PURPOSE OF ASCERTAINING THAT THE WORK IS IN GENERAL CONFORMANCE WITH THE CONTRACT DOCUMENTS AND WITH THE DESIGN INTENT.
2. STRUCTURAL 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 HISHER OBLIGATIONS AND RESPONSIBILITIES UNDER THE CONSTRUCTION CONTRACT.
3. STRUCTURAL OBSERVATIONS BY THE LICENSED PROFESSIONAL ENGINEER OR HISHER AUTHORIZED REPRESENTATIVE SHALL NOT REQUIRE THE STRUCTURAL OBSERVER TO ASSUME RESPONSIBILITY FOR THE MEANS AND METHODS OF CONSTRUCTION, NOR FOR SAFETY ON THE JOB SITE, NOR FOR ITEMS NOT FOUND INSTALLED OR IMPROPERLY INSTALLED BY THE CONTRACTOR OR SUB-CONTRACTORS.
4. A STRUCTURAL OBSERVATION IS NOT TO BE EQUATED NOR TO BE CONSIDERED A REPLACEMENT FOR A SPECIAL INSPECTION. REFERENCE "SPECIAL INSPECTION AND MATERIAL TESTING" GENERAL NOTES FOR DETAILED REQUIREMENTS.
5. A STRUCTURAL OBSERVER IS NOT A SPECIAL INSPECTOR.
6. A STRUCTURAL OBSERVATION DOES NOT REPLACE OR SUBSTITUTE FOR SITE INSPECTIONS REQUIRED BY MUNICIPAL, COUNTY, OR OTHER GOVERNMENTAL ORDINANCES AND REGULATIONS.

B. CONTRACTOR'S RESPONSIBILITY FOR STRUCTURAL OBSERVATIONS

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD 48 HOURS IN ADVANCE WHEN A STRUCTURAL ELEMENT IS READY FOR VISUAL OBSERVATION.
2. THE CONTRACTOR SHALL ENSURE THAT THE STRUCTURAL ELEMENT TO BE OBSERVED IS FULLY PREPARED AND AT OR NEAR ITS COMPLETION PRIOR TO SCHEDULING A STRUCTURAL OBSERVATION.
3. THE CONTRACTOR SHALL ENFORCE SAFETY PRECAUTIONS FOR THE STRUCTURAL OBSERVER DURING A STRUCTURAL OBSERVATION.
4. FOR INACCESSIBLE STRUCTURAL ELEMENTS, THE CONTRACTOR SHALL PROVIDE ALL THE NECESSARY EQUIPMENT SUCH AS LADDERS, LIFTS, SCAFFOLDING, ETC. FOR THE STRUCTURAL OBSERVER TO ACCESS AND VISUALLY OBSERVE.
5. THE GENERAL CONTRACTOR'S SUPERINTENDENT OR APPROVED REPRESENTATIVE MAY ESCORT THE STRUCTURAL OBSERVER THROUGHOUT THE ENTIRE DURATION OF THE STRUCTURAL OBSERVATION.

C. STRUCTURAL ELEMENTS TO BE OBSERVED

1. THE FOLLOWING STRUCTURAL ELEMENTS ARE REQUIRED FOR VISUAL OBSERVATION UNLESS APPROVED OTHERWISE BY THE ENGINEER OF RECORD:
   a. FOUNDATIONS (BEFORE PLACEMENT OF CONCRETE)
   b. SPECIAL STRUCTURAL ELEMENTS (TO BE IDENTIFIED BY THE ENGINEER OF RECORD DURING THE CONSTRUCTION PHASE)
2. THE ENGINEER OF RECORD HAS THE FULL AUTHORITY TO REQUEST A STRUCTURAL OBSERVATION OF ANY PARTICULAR STRUCTURAL ELEMENT HE/SHE WISHES TO VISUALLY OBSERVE DURING THE CONSTRUCTION PHASE.

D. NONCONFORMING STRUCTURAL ELEMENTS

1. ALL DEFICIENT AND NONCONFORMING STRUCTURAL ELEMENTS WILL BE NOTED IN A STRUCTURAL OBSERVATION REPORT AND SUBMITTED TO THE ARCHITECT AND OWNER FOR THEIR RECORDS.
2. THE CONTRACTOR IS RESPONSIBLE FOR ADDRESSING ALL DEFICIENT AND NONCONFORMING STRUCTURAL ELEMENTS.
3. THE CONTRACTOR SHALL SUBMIT A REPAIR SOLUTION OR REMEDY FOR A DEFICIENT AND NONCONFORMING STRUCTURAL ELEMENTS WITH SIGNED AND SEALED CALCULATIONS, REQUIRED SUPPORT DRAWINGS, AND DOCUMENTATION TO THE ENGINEER OF RECORD FOR REVIEW.
4. FAILURE TO PROVIDE A REPAIR SOLUTION OR A REMEDIATION TO ANY DEFICIENT AND NONCONFORMING STRUCTURAL ELEMENTS WILL BE ADDRESSED TO THE ARCHITECT AND OWNER AND LABEL AS OUTSTANDING PUNCH LIST ITEMS FOR PROJECT CLOSE OUT.

MISCELLANEOUS:

A. CONTRACT DOCUMENTS

1. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO OBTAIN ALL CONTRACT DOCUMENTS AND THE LATEST ADDENDA AND TO SUBMIT SUCH DOCUMENTS TO ALL SUB-CONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS, FABRICATION OF ANY STRUCTURAL MEMBERS, AND ERECTION IN THE FIELD.
2. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, AND DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCE.
3. THE GENERAL CONTRACTOR SHALL COORDINATE ALL OPENINGS WITH MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS AND THEIR RESPECTIVE SUB-CONTRACTORS.
4. REFERENCE THE COMPLETE CONTRACT DOCUMENTS ASIDE FROM THE CONTRACT STRUCTURAL DRAWINGS SUCH AS ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, CIVIL, AND OTHER DRAWINGS FOR ITEMS SUCH AS, BUT NOT LIMITED TO DEPRESSIONS, CURBS, OPENINGS, STAIRS, RAMPS, LADDERS, CANOPIES, FENCES, DUMPSTER ENCLOSURES, LIGHTPOLES, MONUMENTS, MARQUEE SIGNS, ETC.
5. IF CERTAIN FEATURES ARE NOT FULLY SHOWN OR SPECIFIED ON THE DRAWINGS OR IN THE SPECIFICATIONS, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS SHOWN OR SPECIFIED IN SIMILAR CONDITIONS.
6. WHERE DETAILS OR SECTIONS ARE NOT SHOWN IN THE DRAWINGS, THE GENERAL CONTRACTOR SHALL DEVELOP THEIR OWN DETAILS OR SECTIONS BASED ON SIMILAR DETAILS OR SECTIONS IN THE DRAWINGS.

B. DRAWING CONFLICTS

1. THE GENERAL CONTRACTOR SHALL REPORT ANY AND ALL DISCREPANCIES WITHIN THE CONTRACT DOCUMENTS PRIOR TO BIDDING, FABRICATION, AND INSTALLATION OF ALL STRUCTURAL MEMBERS.

C. CONFLICTS IN STRUCTURAL REQUIREMENTS

1. WHERE CONFLICTS EXIST WITHIN THE STRUCTURAL DRAWINGS, GENERAL NOTES, OR SPECIFICATIONS, THE MORE STRINGENT, STRICTEST, OR MORE EXPENSIVE REQUIREMENT SHALL SUPERCEDE.

D. EXISTING CONDITIONS

1. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE EXISTING BUILDINGS AT THE JOB SITE AND REPORT ANY DISCREPANCIES FROM ASSUMED CONDITIONS SHOWN ON THE DRAWINGS TO THE ARCHITECT AND ENGINEER PRIOR TO THE FABRICATION, ERECTION, OR INSTALLATION OF ANY STRUCTURAL MEMBERS.
2. WORK SHOWN ON THE DRAWINGS IS NEW CONSTRUCTION, UNLESS NOTED AS EXISTING IN THE DRAWINGS.
3. EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS WAS OBTAINED FROM EXISTING CONSTRUCTION DOCUMENTS AND LIMITED SITE OBSERVATION. THESE DRAWINGS OF EXISTING CONSTRUCTION ARE AVAILABLE FOR CONTRACTOR USE; HOWEVER, THEY MAY NOT BE NECESSARILY COMPLETE. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS.
4. DEMOLITION, CUTTING, DRILLING, ETC. OF EXISTING WORK SHALL BE PERFORMED WITH HIGH CAUTION SUCH THAT IT DOES NOT JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE EXISTING BUILDING. IF ANY ARCHITECTURAL, STRUCTURAL, OR MEP MEMBERS OR ELEMENTS ARE CONFLICTING WITH THE NEW CONSTRUCTION, THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY AND APPROVAL SHALL BE OBTAINED PRIOR TO REMOVING CONFLICTING MEMBERS OR ELEMENTS.
5. THE CONTRACTOR SHALL SHORE EXISTING CONSTRUCTION WHEREVER EXISTING SUPPORTS ARE REMOVED TO ALLOW THE INSTALLATION OF NEW CONSTRUCTION. ALL SHORING METHODS AND SEQUENCING OF DEMOLITION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION AND INITIATE CARE TO PROTECT EXISTING UTILITIES THAT ARE TO REMAIN.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES CAUSED DURING CONSTRUCTION WITH SIMILAR AND DISSIMILAR MATERIALS AS WELL AS WORKMANSHIP TO RESTORE CONDITIONS TO LEVELS ACCEPTABLE TO THE ARCHITECT OF RECORD.

E. ADJACENT BUILDINGS

1. THE GENERAL CONTRACTOR SHALL ENSURE THAT ALL CONSTRUCTION MEANS AND METHODS WILL NOT CAUSE DAMAGE TO THE ADJACENT BUILDINGS AND PROPERTY.

F. RESPONSIBILITY OF THE CONTRACTOR

1. ALL STRUCTURAL ELEMENTS AND MEMBERS OF THE PROJECT HAVE BEEN DESIGNED BY THE STRUCTURAL ENGINEER TO RESIST THE CODE REQUIRED VERTICAL AND LATERAL LOADS THAT COULD OCCUR IN THE FINAL COMPLETED STRUCTURE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BRACE, STABILIZE, AND MAINTAIN SAFETY OF ALL STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PROCESS UNTIL THE STRUCTURAL SYSTEM HAS BEEN COMPLETELY TIED TOGETHER.
2. THE STRUCTURE HAS BEEN DESIGNED TO THE VERTICAL AND LATERAL LOADS INDICATED IN THESE DOCUMENTS. THE CONTRACTOR IS CAUTIONED NOT TO OVERLOAD THE STRUCTURAL SYSTEM DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE ADEQUACY OF THE STRUCTURE TO SUPPORT ANY APPLIED CONSTRUCTION LOADS, INCLUDING THOSE DUE TO CONSTRUCTION VEHICLES OR EQUIPMENT, MATERIAL HANDLING AND STORAGE, SHORING OR RESHORING, OR ANY OTHER CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL SUBMIT CALCULATIONS SIGNED AND SEALED BY A LICENSED REGISTERED ENGINEER IN THE STATE THE PROJECT IS LOCATED TO VERIFY THE ADEQUACY OF THE STRUCTURE FOR ANY PROPOSED CONSTRUCTION LOADS THAT ARE IN EXCESS OF THE STATED DESIGN LOADS. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO DESIGN OR CHECK THE STRUCTURE FOR LOADS APPLIED TO THE STRUCTURE FOR ANY CONSTRUCTION ACTIVITY.

G. SUBSTITUTIONS

1. ANY MATERIALS OR PRODUCTS SUBMITTED FOR APPROVAL THAT DIFFER FROM THE MATERIAL OR PRODUCTS SPECIFIED IN THE CONTRACT STRUCTURAL DOCUMENTS WILL BE APPROVED ONLY IF THERE IS A COST SAVINGS TO THE OWNER, DOCUMENTED, AND AN INTERNATIONAL CODE COUNCIL (ICC) REPORT IS SUBMITTED WITH THE REQUEST.
2. FOR SUBSTITUTIONS FOR ANY MATERIALS OR PRODUCTS SUPPORTING VERTICAL OR LATERAL LOADS SHALL BE SUBMITTED WITH SIGNED AND SEALED CALCULATIONS BY A LICENSED REGISTERED ENGINEER IN THE STATE THE PROJECT IS LOCATED IN ADDITION TO THE CRITERIA STATED ABOVE. REFER TO THE SPECIFICATIONS ON SUBSTITUTIONS.

FOUNDATION SUBGRADE:

A. GENERAL SITE PREPARATION

1. ALL AREAS TO RECEIVE SELECT FILL SHALL BE STRIPPED OF ALL VEGETATION AND/OR ORGANIC TOPSOIL.
2. REMOVE ALL TREES AND ROOTS UNDER THE BUILDING'S FOOTPRINT INCLUDING CANOPIES AND OTHER STRUCTURAL FOUNDATIONS SHOWN IN THESE CONTRACT DOCUMENTS.

B. EXCAVATION

1. WHERE SELECT FILL IS INDICATED IN THESE CONTRACT DOCUMENTS, THE CORRESPONDING SCOPE OF EXCAVATION SHALL BE AS FOLLOWS:
   a. MINIMUM ELEVATION OF EXCAVATION: 3 1/2 FEET BELOW THE UNDERSIDE OF THE SLAB
   b. EXTEND BEYOND THE BUILDING FOOTPRINT: 5 FEET

C. SUBGRADE PREPARATION

1. THE EXPOSED SUBGRADE, AFTER EXCAVATION, SHOULD BE PROOFROLLED (5 PASSES MINIMUM) USING A 15-TON PNEUMATIC ROLLER OR EQUIVALENT EQUIPMENT SUCH AS A FULLY-LOADED DUMP TRUCK OR A SIMILAR HEAVILY-LOADED PIECE OF CONSTRUCTION EQUIPMENT.
2. WEAK OR SOFT AREAS IDENTIFIED DURING PROOFROLLING ACTIVITIES SHOULD BE TREATED WITH HYDRATED LIME OR PORTLAND CEMENT OR REMOVED AND REPLACED WITH SUITABLE, COMPACTED SELECT FILL. IF THE TREATMENT OPTION IS SELECTED, WEAK OR SOFT AREAS MAY BE MIXED WITH HYDRATED LIME OR PORTLAND CEMENT DOWN TO A MINIMUM DEPTH OF 8 INCHES.
3. THE EXPOSED SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF 8 INCHES AND MOISTURE CONDITIONED TO WITHIN 0% TO +4% OF THE OPTIMUM MOISTURE CONTENT.
4. THE SUBGRADE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698.
5. 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.

D. SELECT FILL

1. ONE OF THE FOLLOWING SOILS MAY BE CONSIDERED SATISFACTORY FOR USE AS SELECT FILL MATERIAL AT THIS SITE:
   a. IMPORTED SOILS CLASSIFIED IN ACCORDANCE TO USCS AS CL AND/OR SC AND SHALL MEET THE FOLLOWING CRITERION:
      i. SOIL SHALL HAVE A LIQUID LIMIT OF LESS THAN 40.
      ii. SOIL SHALL HAVE A PLASTICITY INDEX BETWEEN AND INCLUSIVE OF 7 AND 20.
   b. ON-SITE SOILS CLASSIFIED IN ACCORDANCE TO USCS AS CL AND SHALL MEET THE FOLLOWING CRITERIA:
      i. SOIL SHALL HAVE A LIQUID LIMIT OF LESS THAN 40.
      ii. SOIL SHALL HAVE A PLASTICITY INDEX BETWEEN AND INCLUSIVE OF 7 AND 20.
      iii. ON-SITE FAT CLAY (CH) SOILS ARE NOT SUITABLE FOR US AS SELECT FILL.
2. THE ON-SITE NATIVE SOILS ARE CONSIDERED SUITABLE FOR USE AS SELECT FILL MATERIAL PROVIDED THAT THE ON-SITE SOILS MEET THE REQUIREMENTS ABOVE.
3. PLACEMENT OF SELECT FILL SHALL MEET THE FOLLOWING CRITERIA:
   a. SELECT FILL SHALL BE CONDITIONED AND COMPACTED UP TO THE PROPOSED FINISH FLOOR ELEVATION.
   b. FILL LIFTS: NOT EXCEEDING 8 INCH LOOSE LIFTS (8 INCHES COMPACTED)
   c. MOISTURE CONTENT: -2% TO +2% WITHIN OPTIMUM
   d. COMPACTION: 95% OF MAXIMUM DRY DENSITY DETERMINED BY ASTM D698
4. ORGANIC OR OTHER PERISHABLE MATERIAL ARE NOT PERMITTED IN THE SELECT FILL.
5. STONES LARGER THAN 2 INCHES ARE NOT PERMITTED IN THE SELECT FILL.
6. FROZEN MATERIAL ARE NOT PERMITTED IN THE SELECT FILL.
7. SELECT FILL SHALL NOT BE PLACED ON A FROZEN SUBGRADE.
8. THE FINISH FLOOR SHALL BE AS INDICATED ON CIVIL DRAWINGS. INCREASE INDICATED AMOUNT OF FILL AS REQUIRED TO ACHIEVE THE FINISH FLOOR ELEVATION.

E. AGGREGATE BASE COURSE

1. THE TOP 6 INCHES OF THE BUILDING PAD SHALL CONSIST OF AN AGGREGATE BASE COURSE.
2. THE FOLLOWING SOILS MAY BE CONSIDERED SATISFACTORY FOR USE AS AN AGGREGATE BASE COURSE MATERIAL AT THIS SITE:
   a. SOILS CLASSIFIED AS SC OR GC (SEE NOTE 3 BELOW)
   b. CALICHE (SEE NOTE 3 BELOW)
   c. CRUSHED LIMESTONE (SEE NOTE 4 BELOW)
   d. CRUSHED CONCRETE (SEE NOTE 4 BELOW)
3. CLAYEY GRAVEL AND CALICHE MATERIALS SHALL MEET ALL OF THE FOLLOWING CRITERIA:
   i. GRADATION REQUIREMENTS OF THE 2014 TxDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES ITEM 247, TYPE B, GRADES 1 THROUGH 3.
   ii. PLASTICITY INDEX SHALL BE BETWEEN 7 AND 20.
4. CRUSHED LIMESTONE AND CRUSHED CONCRETE MATERIAL SHALL MEET ALL OF THE CRITERIA:
   i. GRADATION REQUIREMENTS OF THE 2014 TxDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES ITEM 247, TYPE A OR D, GRADES 1 THROUGH 3.
   ii. FREE OF ORGANIC MATERIAL AND DEBRIS.
   iii. NO STONES LARGER THAN 2 INCHES.

F. PERIMETER FOUNDATION CAP

1. THE FINAL 18 INCHES OF FILL OUTSIDE THE BUILDING AREA SHOULD CONSIST OF A COHESIVE LOW PERMEANCE CAP (CH OR CL) SOIL. THE CLAY CAP SHALL BE SLOPED AWAY FROM THE FOUNDATION WITH A MINIMUM GRADIENT OF 6 INCHES IN 5 FEET AND THE SURROUNDING AREAS SHOULD HAVE A POSITIVE DRAINAGE. REFER TO THE CIVIL DRAWINGS FOR FINAL ELEVATIONS.
2. THE CLAP CAP CANNOT BE

SPECIAL INSPECTION AND MATERIAL TESTING:

A. GENERAL

1. SPECIAL INSPECTION AND MATERIAL TESTING ARE REQUIRED FOR THIS PROJECT TO ENSURE COMPLIANCE WITH THE PROJECT BUILDING CODE, THE CONTRACT DOCUMENTS, AND SPECIFICATIONS.
2. ALL SPECIAL INSPECTION AND MATERIAL TESTING DUTIES SHALL COMPLY WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE (IBC), PROJECT EDITION.
3. ALL SPECIAL INSPECTION AND MATERIAL TESTING SHALL BE PERFORMED BY A QUALIFIED APPROVED AGENCY.

B. DEFINITIONS

1. SPECIAL INSPECTION: INSPECTION OF CONSTRUCTION REQUIRING THE EXPERTISE OF AN APPROVED SPECIAL INSPECTOR IN ORDER TO ENSURE COMPLIANCE WITH THE APPLICABLE BUILDING CODE AND THE CONTRACT DOCUMENTS.
2. APPROVED AGENCY: AN ESTABLISHED AND RECOGNIZED AGENCY REGULARLY ENGAGED IN CONDUCTING TESTS AND/OR FURNISHING INSPECTION SERVICES APPROVED BY THE BUILDING OFFICIAL OR AUTHORITIES HAVING JURISDICTION.
3. SPECIAL INSPECTOR: A QUALIFIED PERSON, EMPLOYED OR RETAINED BY THE APPROVED AGENCY AND APPROVED BY THE BUILDING OFFICIAL, A HAVING THE COMPETENCE AND QUALIFICATIONS NECESSARY TO INSPECT A PARTICULAR TYPE OF CONSTRUCTION REQUIRING SPECIAL INSPECTION.
4. CONTINUOUS INSPECTION: SPECIAL INSPECTION BY THE SPECIAL INSPECTOR WHO IS PRESENT WHEN AND WHERE THE WORK TO BE INSPECTED IS BEING PERFORMED.
5. PERIODIC INSPECTION: SPECIAL INSPECTION BY THE SPECIAL INSPECTOR WHO IS INTERMITTENTLY PRESENT WHEN THE WORK TO BE INSPECTED HAS BEEN OR IS BEING PERFORMED.
6. APPROVED FABRICATOR: AN AISC OR IAS CERTIFIED FABRICATOR THAT HAS AN ESTABLISHED QUALITY CONTROL MANAGEMENT PROGRAM AND PERIODIC AUDITING OF FABRICATION PRACTICES THAT IS APPROVED BY THE BUILDING OFFICIAL AND THE ENGINEERING OF RECORD THAT ALLOWS WORK TO BE DONE ON THE PREMISES OF THE FABRICATOR WITHOUT SPECIAL INSPECTION.
7. ENGINEER OF RECORD (EOR): REGISTERED DESIGN PROFESSIONAL RESPONSIBLE FOR THE DESIGN OF THE STRUCTURAL SYSTEM.
8. REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE (RDPIRC): A LICENSED ARCHITECT OR ENGINEER ACTING AS THE OWNER'S AGENT WHO IS RESPONSIBLE FOR THE SPECIAL INSPECTION.
9. BUILDING OFFICIAL: AN OFFICER OR OTHER DESIGNATED AUTHORITY CHARGED WITH THE ADMINISTRATION AND ENFORCEMENT OF THE GOVERNING BUILDING CODE.

C. OWNER RESPONSIBILITIES

1. THE OWNER SHALL EMPLOY OR CONTRACT THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE (RDPIRC). THE RDPIRC SHALL NOT BE ANY DESIGN PROFESSIONAL ASSOCIATED WITH THE DESIGN TEAM.
2. THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE (RDPIRC), ACTING AS THE OWNER'S AGENT, SHALL EMPLOY ANY APPROVED AGENCY TO PERFORM SPECIAL INSPECTIONS AND MATERIAL TESTING DUTIES SPECIFIED IN THE SECTION, APPROVED BY THE BUILDING OFFICIAL OR AUTHORITIES HAVING JURISDICTION. THE RDPIRC IS PERMITTED TO ACT AS THE APPROVED AGENCY.

D. REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE RESPONSIBILITIES

1. THE RDPIRC SHALL IMPLEMENT A SPECIAL INSPECTIONS PROGRAM AND IS RESPONSIBLE FOR DETERMINING ALL REQUIRED SPECIAL INSPECTIONS AS DEFINED IN THE PROJECT BUILDING CODE
2. THE RDPIRC SHALL ASSIGN ONLY TRAINED, EXPERIENCED, QUALIFIED SPECIAL INSPECTORS AND TESTING TECHNICIANS.
3. THE RDPIRC IS RESPONSIBLE FOR PROVIDING THE ARCHITECT, THE ENGINEER(S) OF RECORD, AND THE GENERAL CONTRACTOR A LIST OF ALL REQUIRED SPECIAL INSPECTIONS AND THE ASSOCIATED SPECIAL INSPECTORS PRIOR TO CONSTRUCTION.
4. THE RDPIRC SHALL PREPARE A STATEMENT OF SPECIAL INSPECTIONS.
5. THE RDPIRC SHALL SUBMIT APPLICABLE REPORTS AND CERTIFICATES TO THE BUILDING OFFICIAL.

E. STATEMENT OF SPECIAL INSPECTIONS

1. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE (RDPIRC) SHALL PREPARE, SIGN AND SEAL A STATEMENT OF SPECIAL INSPECTIONS IN ACCORDANCE TO THE INTERNATIONAL BUILDING CODE (IBC), PROJECT EDITION, SECTION 1704.3 AND SUBMIT TO THE BUILDING OFFICIAL AS A CONDITION OF PERMIT ISSUANCE.
2. THE STATEMENT OF SPECIAL INSPECTIONS SHALL INCLUDE THE FOLLOWING:
   a. OWNER'S NAME
   b. OWNER'S ADDRESS
   c. PROJECT NAME
   d. PROJECT ADDRESS
   e. PROJECT BUILDING CODE
   f. ARCHITECT OF RECORD
   g. STRUCTURAL ENGINEER OF RECORD
   h. MEP ENGINEER OF RECORD
   i. RDPIRC'S NAME
   j. RDPIRC'S SEAL AND SIGNATURE
   k. BUILDING PERMIT NUMBER
3. THE STATEMENT OF SPECIAL INSPECTIONS SHALL INCLUDE CONTENT, AS REQUIRED IN THE INTERNATIONAL BUILDING CODE SECTION 1704.3, SUCH AS, BUT NOT LIMITED TO:
   a. THE MATERIALS, SYSTEMS, COMPONENTS AND WORK REQUIRED TO HAVE SPECIAL INSPECTION
   b. THE TYPE AND EXTENT OF EACH SPECIAL INSPECTION
   c. THE TYPE AND EXTENT OF EACH TEST
   d. ADDITIONAL REQUIREMENTS FOR SPECIAL INSPECTION OR TESTING FOR SEISMIC OR WIND REQUIREMENTS
   e. IDENTIFICATION AS TO WHERE IT WILL BE CONTINUOUS OR PERIODIC SPECIAL INSPECTION FOR EACH TYPE OF SPECIAL INSPECTION.

F. SUBMITTALS TO THE BUILDING OFFICIAL

1. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE (RDPIRC) SHALL SUBMIT REPORTS AND CERTIFICATES IN ACCORDANCE TO THE INTERNATIONAL BUILDING CODE (IBC), PROJECT EDITION, SECTION 1704.5, TO THE BUILDING OFFICIAL FOR EACH OF THE FOLLOWING:
   a. CERTIFICATES OF COMPLIANCE FOR THE FABRICATION OF STRUCTURAL LOAD-BEARING OR LATERAL LOAD-RESISTING MEMBERS OF ASSEMBLIES ON THE PREMISES OF AN APPROVED FABRICATOR.
   b. CERTIFICATES OF COMPLIANCE FOR THE SEISMIC QUALIFICATION OF NONSTRUCTURAL COMPONENTS, SUPPORTS, AND ATTACHMENTS.
   c. CERTIFICATES OF COMPLIANCE FOR DESIGNATED SEISMIC SYSTEMS.
   d. REPORTS OF PRECONSTRUCTION TESTS FOR SHOTCRETE.
   e. CERTIFICATES OF COMPLIANCE FOR OPEN-WEB STEEL JOISTS AND JOIST GIRDERS.
   f. REPORTS OF MATERIAL PROPERTIES VERIFYING COMPLIANCE WITH THE REQUIREMENTS OF AWS D1.4 FOR WELDABILITY FOR REINFORCING BARS IN CONCRETE COMPLYING WITH A STANDARD OTHER THAN ASTM A706.
   g. REPORTS OF MILL TESTS FOR ASTM A615 REINFORCING BARS USED IN EARTHQUAKE-INDUCED FLEXURAL OR AXIAL FORCES IN SPECIAL MOMENT FRAMES, SPECIAL STRUCTURAL WALLS, OR COMPLING BEAMS OF SEISMIC FORCE-RESISTING SYSTEMS IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY B, C, D, E, OR F.

G. CONTRACTOR RESPONSIBILITIES

1. THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY ACKNOWLEDGING THE SPECIAL INSPECTION REQUIREMENTS OF THE MAIN WIND OR SEISMIC FORCE-RESISTING SYSTEM, AS INDICATED IN THE STATEMENT OF SPECIAL INSPECTION, TO THE ARCHITECT OF RECORD, STRUCTURAL ENGINEER OF RECORD, THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SPECIAL INSPECTOR AND TESTING LABORATORY WITH A CONSTRUCTION SCHEDULE TO FACILITATE THE PROPER COORDINATION. ANY WORK PERFORMED WITHOUT SPECIAL INSPECTION IS SUBJECT TO REMOVAL AT THE CONTRACTOR'S EXPENSE.
3. THE CONSTRUCTION OR WORK FOR WHICH SPECIAL INSPECTION IS REQUIRED SHALL REMAIN ACCESSIBLE AND EXPOSED FOR SPECIAL INSPECTION PURPOSES UNTIL COMPLETION OF THE REQUIRED SPECIAL INSPECTIONS.
4. THE CONTRACTOR SHALL REIMBURSE THE OWNER FOR RETESTING WHERE RESULTS OF INSPECTIONS AND TESTS PROVE UNSATISFACTORY AND INDICATED NONCOMPLIANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

H. SCOPE

1. THE ITEMS LISTED HEREIN PERTAIN TO THE SPECIAL INSPECTIONS AND MATERIAL TESTING REQUIRED BY THE INTERNATIONAL BUILDING CODE (IBC) CHAPTER 17. THE APPROVED AGENCY SHALL DETERMINE ALL THE PROJECT'S APPLICABLE SPECIAL INSPECTION AND MATERIAL TESTING REQUIREMENTS FOR THE PROJECT.
2. PRIOR TO PROJECT COMMENCEMENT, THE APPROVED AGENCY WILL CONFER WITH AND OBTAIN THE APPROVAL FROM THE APPROPRIATE ENGINEER OF RECORD REGARDING THE INSPECTION AND TESTING PROCEDURES OR SPECIFICATIONS INCLUDING ANY APPROPRIATE ASTM METHODS, CODE REQUIREMENTS, OR PROJECT SPECIFICATION REQUIREMENTS AT THE START AND DURING EACH INSPECTION OF THE PROJECT TO ASCERTAIN PROPOSED CONFORMITY OF MATERIALS, PERSONNEL QUALIFICATIONS, AS REQUIRED, AND PROCEDURES WITH THE APPLICABLE CODES, THE CONTRACT DOCUMENTS, AND SPECIFICATIONS.
3. THE FOLLOWING CONSTRUCTION TYPES REQUIRE SPECIAL INSPECTION:
   a. STEEL CONSTRUCTION (1705.2)
      - STRUCTURAL STEEL (1705.2.1)
        STRUCTURAL STEEL WELDING (AISC 360 N5.4)
        NONDESTRUCTIVE TESTING OF WELDED JOINTS (AISC 360 N5.5)
        STRUCTURAL STEEL BOLTING (AISC 360 N5.6)
        STRUCTURAL STEEL FRAMING (AISC 360 N5.7)
        COMPOSITE CONSTRUCTION (AISC 360 N6)
      - STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL (1705.2.2)
      - OPEN-WEB STEEL JOISTS AND JOIST GIRDERS (1705.2.3)
   b. CONCRETE CONSTRUCTION (1705.3)
   c. MASONRY CONSTRUCTION (1705.4)
   d. WOOD CONSTRUCTION (1705.5)
   e. SOILS (1705.6)
   f. DRIVEN DEEP FOUNDATIONS (1705.7)
   g. CAST-IN-PLACE DEEP FOUNDATIONS (1705.8)
   h. HELICAL PILE FOUNDATIONS (1705.9)
   i. FABRICATED ITEMS (1705.10)
   j. WIND RESISTANCE (1705.11)
      - STRUCTURAL WOOD (1705.11.1)
      - COLD-FORMED STEEL (1705.11.2)
      - WIND-RESISTING COMPONENTS (1705.11.3)
   k. SEISMIC RESISTANCE (1705.12)
      - STRUCTURAL STEEL (1705.12.1)
      - STRUCTURAL WOOD (1705.12.2)
      - COLD-FORMED STEEL (1705.12.3)
      - DESIGNATED SEISMIC SYSTEMS (1705.12.4)
      - ARCHITECTURAL COMPONENTS (1705.12.5)
      - MECHANICAL AND ELECTRICAL COMPONENTS (1705.12.6)
      - STORAGE RACKS (1705.12.7)
      - SEISMIC ISOLATION SYSTEMS (1705.12.8)
      - COLD-FORMED STEEL BOLTED MOMENTS FRAMES (1705.12.9)
   l. TESTING FOR SEISMIC RESISTANCE (1705.13)
      - STRUCTURAL STEEL (1705.13.1)
      - NONSTRUCTURAL COMPONENTS (1705.13.2)
      - DESIGNED SEISMIC SYSTEMS (1705.13.3)
      - SEISMIC ISOLATION SYSTEMS (1705.13.4)
   m. SPRAYED FIRE-RESISTANT MATERIALS (1705.14)
   n. MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS (1705.15)
   o. EXTERIOR INSULATION AND FINISH SYSTEMS (1705.16)
   p. FIRE-RESISTANT PENETRATIONS AND JOINTS (1705.17)
   q. SMOKE CONTROL (1705.18)

SPECIAL INSPECTION AND MATERIAL TESTING (CONT):

I. SPECIAL INSPECTION AND TEST REPORTS

1. ALL REPORTS SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE THE PROJECT IS LOCATED IN.
2. ALL COPIES OF THE TEST RESULTS AND FINAL REPORTS SHALL BE FURNISHED TO THE ARCHITECT, ENGINEER, AND BUILDING OFFICIAL WITHIN TWO DAYS AFTER THE ELEMENT HAS BEEN INSPECTED AND/OR TESTED.
3. THE SPECIAL INSPECTOR SHALL FURNISH DAILY INSPECTION REPORTS TO THE ARCHITECT, ENGINEER, AND BUILDING OFFICIAL AT A MINIMUM PER WEEK FREQUENCY. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL REPORT, SIGNED BY BOTH THE INSPECTOR AND THE INSPECTOR'S SUPERVISING LICENSED PROFESSIONAL ENGINEER STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS IN CONFORMANCE WITH THE APPROVED CONTRACT DOCUMENTS, SPECIFICATIONS, AND APPLICABLE BUILDING CODE.
4. IN CASE OF DISCREPANCIES OR DEFICIENCIES, THE APPROVED AGENCY SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD, THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, AND THE BUILDING OFFICIAL. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION; THEN IF UNCORRECTED, TO THE PROPER DESIGN AUTHORITY HAVING JURISDICTION AND THE BUILDING OFFICIAL.
5. SPECIAL INSPECTION REPORTS SHALL INCLUDE, AS A MINIMUM, THE FOLLOWING INFORMATION:
   a. APPROVED AGENCY NAME, ADDRESS, AND PHONE NUMBER
   b. OWNER'S NAME AND ADDRESS
   c. NAME AND ADDRESS OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE
   d. UNIQUE IDENTIFICATION OF THE REPORT
   e. DESCRIPTION OF THE TYPE OF INSPECTION PERFORMED
   f. ANY UNRESOLVED DEVIATION, EXCLUSIONS, AND ADDITIONS TO OR FROM THE APPROVED CONTRACT DOCUMENTS AND SPECIFICATIONS RELEVANT TO THE SPECIFIC INSPECTION OR TEST.
   g. COMPLIANCE OF FINDINGS AND REFERENCE
   h. DESCRIPTION OF LOCATION WHERE THE INSPECTION WAS PERFORMED WITHIN THE PROJECT
   i. TIME AND DATE OF THE INSPECTION
   j. MEASUREMENTS, EXAMINATIONS, AND DERIVED RESULTS SUPPORTED BY TABLES, GRAPHS, SKETCHES, OR PHOTOGRAPHS AS NEEDED
   k. THE NAME, SIGNATURE, AND TITLE OF THE FIELD INSPECTOR PERFORMING THE SPECIAL INSPECTION
   l. SIGNATURE AND PROFESSIONAL ENGINEERING SEAL OF THE SPECIAL INSPECTOR'S SUPERVISING LICENSING PROFESSIONAL ENGINEER IN THE STATE THE PROJECT IS LOCATED IN.

VERIFICATION AND INSPECTION OF STRUCTURAL STEEL WELDING

SPECIAL INSPECTION REQUIRED	VERIFICATION AND INSPECTION TASK	SPECIAL INSPECTOR QCI	SPECIAL INSPECTOR QAI	REFERENCE STANDARD	IBC REFERENCE
	1. INSPECTION TASK PRIOR TO WELDING:				
YES	a. WELDING PROCEDURES SPECIFICATIONS (WPS) AVAILABLE	P	P		
YES	b. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	P	P		
YES	c. MATERIAL IDENTIFICATION (TYPE/GRADE)	O	O		
YES	d. WELDER IDENTIFICATION SYSTEM	O	O		
YES	e. FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY) 1) JOINT PREPARATION 2) DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) 3) CLEANLINESS (CONDITION OF STEEL SURFACES) 4) TACKING (TACK WELD QUALITY AND LOCATION) 5) BACKING TYPE AND FIT (IF APPLICABLE)	O	O	AISC 360-10 TABLE N5.4-1, AWS D1.1	1705.2.1
YES	f. CONFIGURATION AND FINISH OF ACCESS HOLES	O	O		
YES	g. FIT-UP OF FILLET WELDS 1) DIMENSIONS (ALIGNMENT, GAPS AT ROOT) 2) CLEANLINESS (CONDITION OF STEEL SURFACES) 3) TACKING (TACK WELD QUALITY AND LOCATION)	O	O		
YES	h. CHECK WELDING EQUIPMENT	O	-		
	2. INSPECTION TASK DURING WELDING:				
YES	a. USE OF QUALIFIED WELDERS	O	O		
YES	b. CONTROL AND HANDLING OF WELDING CONSUMABLES 1) PACKING 2) EXPOSURE CONTROL	O	O		
YES	c. NO WELDING OVER CRACKED TACK WELDS	O	O		
YES	d. ENVIRONMENTAL CONDITIONS 1) WIND SPEED WITHIN LIMITS 2) PRECIPITATION AND TEMPERATURE	O	O		
YES	e. WPS FOLLOWED 1) SETTINGS ON WELDING EQUIPMENT 2) TRAVEL SPEED 3) SELECTED WELDING MATERIALS 4) SHIELDING GAS TYPE/FLOW RATE 5) PREHEAT APPLIED 6) INTERPASS TEMPERATURE MAINTAINED (MIN/MAX) 7) PROPER POSITION (F,V,H,OH)	O	O	AISC 360-10 TABLE N5.4-2, AWS D1.1	1705.2.1
YES	f. WELDING TECHNIQUES 1) INTERPASS AND FINAL CLEANING 2) EACH PASS WITHIN PROFILE LIMITATIONS 3) EACH PASS MEETS QUALITY REQUIREMENTS	O	O		
	3. INSPECTION TASK AFTER WELDING:				
YES	a. WELDS CLEANED	O	O		
YES	b. SIZE, LENGTH AND LOCATION OF WELDS	P	P		
YES	c. WELD MEET VISUAL ACCEPTANCE CRITERIA 1) CRACK PROHIBITION 2) WELD/BASE-METAL FUSION 3) CRATER CROSS SECTION 4) WELD PROFILES 5) WELD SIZE 6) UNDERCUT 7) POROSITY	P	P	AISC 360-10 TABLE N5.4-3, AWS D1.1	1705.2.1
YES	d. ARC STRIKES	P	P		
YES	e. k-AREA	P	P		
YES	f. REMOVED AND WELD TABS REMOVED	P	P		
YES	g. REPAIR ACTIVITIES	P	P		
YES	h. DOCUMENT ACCEPTANCE OR REJECTION OF WELD JOINT OR MEMBER	P	P		

NOTES:

1. QCI = FABRICATOR'S OR ERECTOR'S QUALITY CONTROL INSPECTOR RESPONSIBLE FOR WORK PERFORMED IS IN COMPLIANCE WITH THE SHOP DRAWINGS, ERECTION DRAWINGS, REFERENCE SPECIFICATIONS, CODES AND STANDARDS.
   QAI = THE OWNER'S APPROVED AGENCY'S QUALITY ASSURANCE INSPECTOR (SPECIAL INSPECTOR) RESPONSIBLE FOR INSPECTION OF FABRICATED ITEMS, INSPECTION OF THE ERECTED STEEL SYSTEM, REVIEW TEST REPORTS AND CERTIFICATIONS, ITEMS NOTED IN THE TABLE ABOVE, AND FURNISHES INSPECTIONS, REPORTS, AND NONDESTRUCTIVE TESTING (NDT) REPORTS.
   O = OBSERVE THESE ITEMS IN A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
   P = PERFORM THE TASK FOR EACH WELDED JOINT OR MEMBER.
2. THE QAI IS NOT REQUIRED TO INSPECT FABRICATED ITEMS IF THE STEEL FABRICATOR IS DEEMED AN APPROVED FABRICATOR.
3. WHERE A TASK IS NOTED TO BE PERFORMED BY BOTH THE QCI AND QAI, IT IS PERMITTED TO COORDINATE THE INSPECTION FUNCTION BETWEEN THE QCI AND QAI SO THAT THE INSPECTION FUNCTION IS PERFORMED BY ONLY ONE PARTY.
4. ALL FIELD WELDING, COMPLETE, AND PARTIAL JOINT PENETRATION WELDS SHALL BE SUBJECTED TO NONDESTRUCTIVE TESTING (NDT) IN ACCORDANCE WITH AWS D1.1. ACCEPTANCE CRITERIA SHALL BE IN ACCORDANCE WITH THE AWS D1.1.
5. ACCEPTABLE NONDESTRUCTIVE TESTING (NDT) METHODS AS PER THE AISC 360 SPECIFICATION ARE AS FOLLOWS:
   a. ULTRASONIC TESTING (UT)
   b. MAGNETIC PARTICLE TESTING (MT)
   c. PENETRANT TESTING (PT)
   d. RADIOGRAPHIC TESTING (RT)
6. THE SPECIAL INSPECTOR SHALL BE RESPONSIBLE FOR DETERMINING THE APPROPRIATE NDT METHOD FOR EACH WELD.
7. ALL NOT PERFORMED SHALL BE DOCUMENTED INTO A REPORT AND SHALL INCLUDE THE FOLLOWING:
   a. LOCATION OF THE TESTED WELD
   b. PIECE MARK
   c. LOCATION OF THE PIECE

VERIFICATION AND INSPECTION OF STRUCTURAL STEEL BOLTING

SPECIAL INSPECTION REQUIRED	VERIFICATION AND INSPECTION TASK	SPECIAL INSPECTOR QCI	SPECIAL INSPECTOR QAI	REFERENCE STANDARD	IBC REFERENCE
	1. INSPECTION TASK PRIOR TO BOLTING:				
YES	a. MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	O	P		
YES	b. FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	O	O		
YES	c. PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	O	O		
YES	d. PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	O	O	AISC 360-10 TABLE N5.6-1	1705.2.1
YES	e. CONNECTING ELEMENTS, INCLUDING THE APPROPRATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	O	O		
YES	f. PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	P	O		
YES	g. PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	O	O		
	2. INSPECTION TASK DURING BOLTING:				
YES	a. FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED	O	O		
YES	b. JOINT BROUGHT TO THE SNUG-TIGHT POSITION CONDITION PRIOR TO THE PRETENSIONING OPERATION	O	O	AISC 360-10 TABLE N5.6-2	1705.2.1
YES	c. FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	O	O		
YES	d. FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	O	O		
	3. INSPECTION TASK AFTER BOLTING:				
YES	a. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	P	P	AISC 360-10 TABLE N5.6-3	1705.2.1

NOTES:

1. QCI = FABRICATOR'S OR ERECTOR'S QUALITY CONTROL INSPECTOR RESPONSIBLE FOR WORK PERFORMED IS IN COMPLIANCE WITH THE SHOP DRAWINGS, ERECTION DRAWINGS, REFERENCE SPECIFICATIONS, CODES AND STANDARDS.
   QAI = THE OWNER'S APPROVED AGENCY'S QUALITY ASSURANCE INSPECTOR (SPECIAL INSPECTOR) RESPONSIBLE FOR INSPECTION FABRICATED ITEMS, INSPECTION OF THE ERECTED STEEL SYSTEM, REVIEW TEST REPORTS AND CERTIFICATIONS, ITEMS NOTED IN THE TABLE ABOVE, AND FURNISHES INSPECTIONS, REPORTS, AND NONDESTRUCTIVE TESTING (NDT) REPORTS.
   O = OBSERVE THESE ITEMS IN A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
   P = PERFORM THE TASK FOR EACH BOLTED CONNECTION.
2. THE QAI IS NOT REQUIRED TO INSPECT FABRICATED ITEMS IF THE STEEL FABRICATOR IS DEEMED AN APPROVED FABRICATOR.
3. WHERE A TASK IS NOTED TO BE PERFORMED BY BOTH THE QCI AND QAI SO THAT THE INSPECTION FUNCTION IS PERFORMED BY ONLY ONE PARTY.

VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

SPECIAL INSPECTION REQUIRED	VERIFICATION AND INSPECTION TASK	INSPECTION FREQUENCY CONTINUOUS	INSPECTION FREQUENCY PERIODIC	REFERENCE STANDARD	IBC REFERENCE
YES	1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT	-	X	ACI 318: 3.5, 7.1-7.7	1910.4
YES	2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1705.2.2, ITEM 2b	-	-	AWS D1.4 ACI 318: 3.5.2	-
YES	3. INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED	-	X	ACI 318: 8.1.3, 21.2.8	1908.5, 1909.1
YES	4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDEN CONCRETE MEMBERS:			ACI 318: APPENDIX D	1909.1
	a. SPECIAL INSPECTOR CERTIFIED ACI/CSI ADHESIVE ANCHOR INSTALLER	X	-		
	b. ADHESIVE ANCHOR INSTALLATION REPORT INDICATING CONFORMANCE TO THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII)	X	-		
	c. INSTALLATION OF MECHANICAL ANCHORS	X	-		
	d. POST-INSTALLED ANCHOR INSTALLERS CERTIFICATIONS AVAILABLE	X	-		
YES	5. VERIFYING USE OF REQUIRED DESIGN MIX	-	X	ACI 318: CH. 4, 5.2-5.4	1904.2, 1910.2, 1910.3
YES	6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	X	-	ASTM C172, ASTM C31, ACI 318: 5.6, 5.8	1910.10
YES	7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	-	ACI 318: 5.9, 5.10	1910.6, 1910.7, 1910.8
YES	8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	-	X	ACI 318: 5.11-5.13	1910.9
	9. INSPECTION OF PRESTRESSED CONCRETE:				
NO	a. APPLICATION OF PRESTRESSING FORCES	X	-	ACI 318: 18.20	-
	b. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC FORCE-RESISTING SYSTEM	X	-	ACI 318:18.18.4	-
YES	10. ERECTION OF PRECAST CONCRETE MEMBERS	-	X	ACI 318: CH. 16	-
NO	11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS	-	X	ACI 318: 6.2	-
YES	12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	-	X	ACI 318: 6.1.1	-

VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL

SPECIAL INSPECTION	VERIFICATION AND INSPECTION TASK	SPECIAL INSPECTOR QCI	SPECIAL INSPECTOR QAI	REFERENCE STANDARD	IBC REFERENCE
	1. INSPECTION OR EXECUTION TASKS PRIOR TO DECK PLACEMENT				
YES	a. VERIFY COMPLIANCE OF MATERIALS (DECK AND ALL DECK ACCESSORIES) WITH CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, AND BASE METAL THICKNESS	P	P	SDI QA/QC TABLE 1.1	1705.2.2
YES	b. DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES	P	P		
	2. INSPECTION OR EXECUTION TASKS AFTER DECK PLACEMENT				
YES	a. VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES INSTALLATION WITH CONSTRUCTION DOCUMENTS	P	P	SDI QA/QC TABLE 1.2	1705.2.2
YES	b. VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS THAT COMPLY WITH THE CONSTRUCTION DOCUMENTS	-	P		
YES	c. DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK ACCESSORIES	P	P		
	3. INSPECTION OR EXECUTION TASKS PRIOR TO WELDING				
YES	a. WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE	O	O	SDI QA/QC TABLE 1.3	1705.2.2
YES	b. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	O	O		
YES	c. MATERIAL IDENTIFICATION (TYPE/GRADE)	O	O		
YES	d. CHECK WELDING EQUIPMENT	O	O		
	4. INSPECTION OR EXECUTION TASKS DURING WELDING				
YES	a. USE OF QUALIFIED WELDERS	O	O	SDI QA/QC TABLE 1.4	1705.2.2
YES	b. CONTROL AND HANDLING OF WELDING CONSUMABLES	O	O		
YES	c. ENVIRONMENTAL CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE)	O	O		
YES	d. WPS FOLLOWED	O	O		
	5. INSPECTION OR EXECUTION TASKS AFTER WELDING				
YES	a. VERIFY SIZE AND LOCATION OF WELDS, INCLUDING SUPPORT, SIDE-LAP AND PERIMETER WELDS	P	P	SDI QA/QC TABLE 1.5	1705.2.2
YES	b. WELDS MEET VISUAL ACCEPTANCE CRITERIA	P	P		
YES	c. VERIFY REPAIR ACTIVITIES	P	P		
YES	d. DOCUMENT ACCEPTANCE OR REJECTION OF WELDS	P	P		
	6. INSPECTION OR EXECUTION TASKS PRIOR TO MECHANICAL FASTENING				
YES	a. MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS	O	O	SDI QA/QC TABLE 1.6	1705.2.2
YES	b. PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION	O	O		
YES	c. PROPER STORAGE FOR MECHANICAL FASTENERS	O	O		
	7. INSPECTION OR EXECUTION TASKS DURING MECHANICAL FASTENING				
YES	a. FASTENERS ARE POSITIONED AS REQUIRED	O	O	SDI QA/QC TABLE 1.7	1705.2.2
YES	b. FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS	O	O		
	8. INSPECTION OR EXECUTION TASKS AFTER MECHANICAL FASTENING				
YES	a. CHECK SPACING, TYPE, AND INSTALLATION OF SUPPORT

SYMBOLS AND ANNOTATIONS:

A. MATERIAL IDENTIFICATION SYMBOLS

STEEL | CAST-IN-PLACE CONCRETE | MASONRY (PLAN VIEW)

MASONRY (ELEVATION VIEW) | GROUT | EXISTING

GRAVEL | EARTH | EARTH (UNDISTURBED)

WOOD | STYROFOAM/POLYSTYRENE | LIGHTWEIGHT INSULATING CONCRETE

ROCK | ALUMINUM | PRECAST STRUCTURAL CONCRETE

STEEL COLUMN | CONCRETE COLUMN | MASONRY COLUMN | WOOD COLUMN

CONCRETE WALL | LOAD-BEARING MASONRY WALL | LOAD-BEARING/EXTERIOR WOOD WALL

METAL DECKING | COMPOSITE OR NON-COMPOSITE METAL DECKING WITH CONCRETE TOPPING | BAR GRATING | PLYWOOD SHEATHING

CONCRETE SLAB AND REINFORCING | CONCRETE SLAB (UNREINFORCED) | BAR GRATING WITH FLOOR PLATING | METAL DECKING WITH LIGHTWEIGHT INSULATING CONCRETE

B. SYMBOLIC LINEWORK

GRIDLINE

CENTERLINE

MATCHLINE

NON-STRUCTURAL LINE

STEEL JOIST

WELDED WIRE REINFORCING

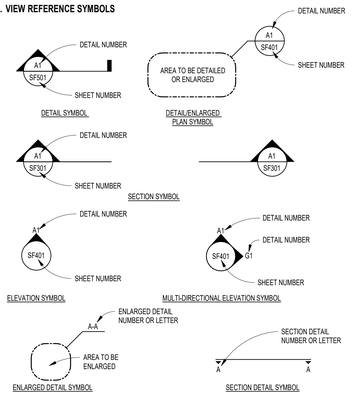
STEEL BEAM

EDGE LINE

HIDDEN LINE

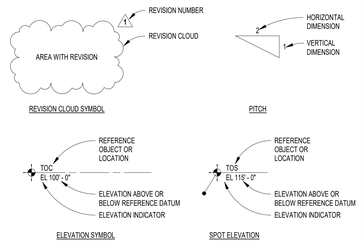
CONTRACTION JOINT

C. VIEW REFERENCE SYMBOLS

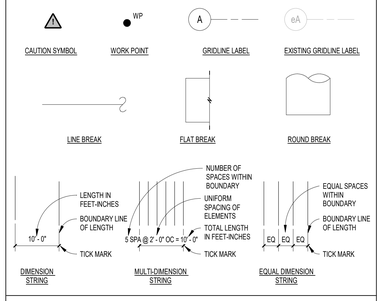


D. UNIVERSAL SYMBOLS

THE FOLLOWING UNIVERSAL SYMBOLS MAY BE USED WITHIN THE DRAWINGS:

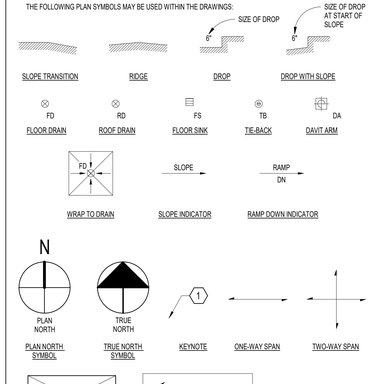


SYMBOLS AND ANNOTATIONS (CONT):



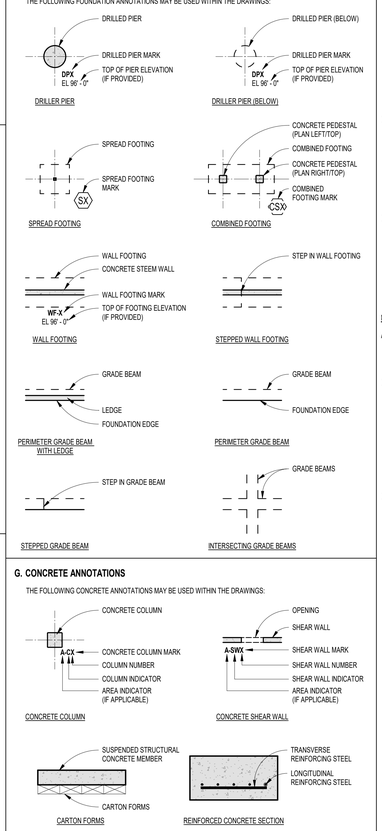
E. PLAN SYMBOLS

THE FOLLOWING PLAN SYMBOLS MAY BE USED WITHIN THE DRAWINGS:



F. FOUNDATION ANNOTATIONS

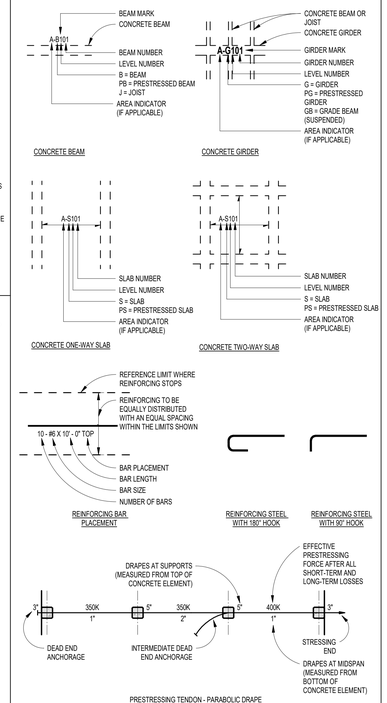
THE FOLLOWING FOUNDATION ANNOTATIONS MAY BE USED WITHIN THE DRAWINGS:



G. CONCRETE ANNOTATIONS

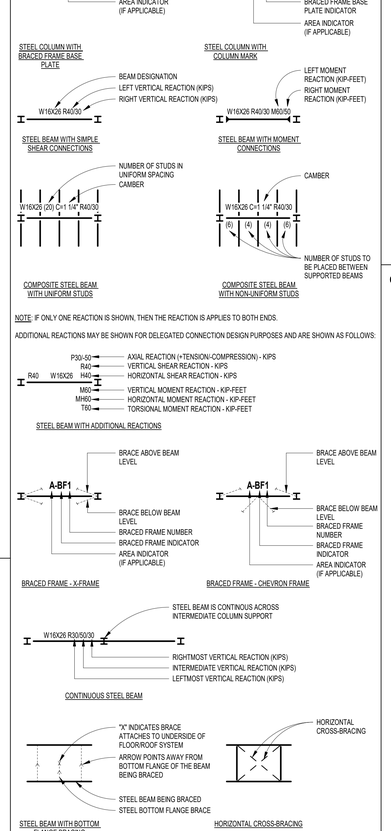
THE FOLLOWING CONCRETE ANNOTATIONS MAY BE USED WITHIN THE DRAWINGS:

SYMBOLS AND ANNOTATIONS (CONT):



F. STEEL ANNOTATIONS

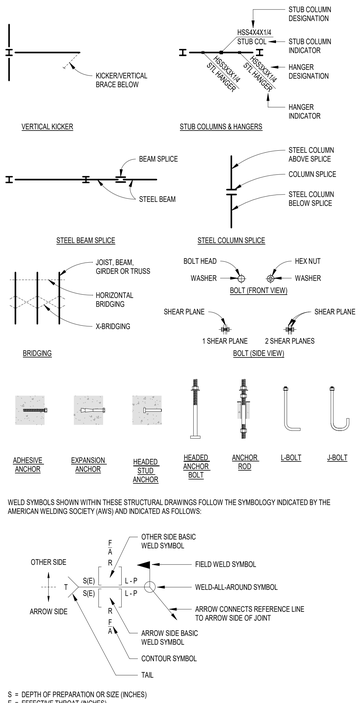
THE FOLLOWING STEEL ANNOTATIONS MAY BE USED WITHIN THE DRAWINGS:



NOTE: IF ONLY ONE REACTION IS SHOWN, THEN THE REACTION IS APPLIES TO BOTH ENDS.

ADDITIONAL REACTIONS MAY BE SHOWN FOR DELEGATED CONNECTION DESIGN PURPOSES AND ARE SHOWN AS FOLLOWS:

SYMBOLS AND ANNOTATIONS (CONT):

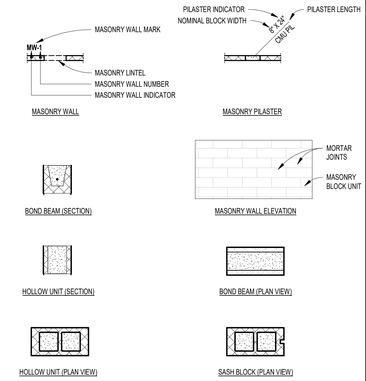


WELD SYMBOLS SHOWN WITHIN THESE STRUCTURAL DRAWINGS FOLLOW THE SYMBOLOGY INDICATED BY THE AMERICAN WELDING SOCIETY (AWS) AND INDICATED AS FOLLOWS:

S = DEPTH OF PREPARATION OR SIZE (INCHES)
E = EFFECTIVE THROAT (INCHES)
L = LENGTH OF WELD (INCHES)
P = PITCH (CENTER-TO-CENTER SPACING) OF WELD (INCHES)
R = ROOT OPENING, DEPTH OF FILLING FOR PLUG AND SLOT WELDS (INCHES)
A = GROOVE ANGLE OR COUNTERSINK ANGLE FOR PLUG WELDS (DEGREES)
F = FINISH SYMBOL
T = SPECIFICATION, PROCESS, OR OTHER REFERENCE

G. MASONRY ANNOTATIONS

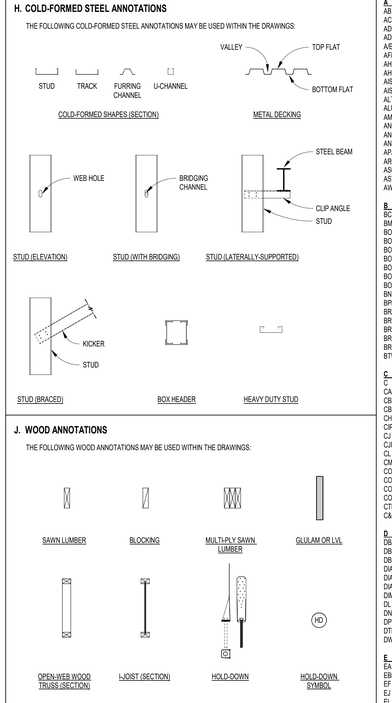
THE FOLLOWING MASONRY ANNOTATIONS MAY BE USED WITHIN THE DRAWINGS:



SYMBOLS AND ANNOTATIONS (CONT):

H. COLD-FORMED STEEL ANNOTATIONS

THE FOLLOWING COLD-FORMED STEEL ANNOTATIONS MAY BE USED WITHIN THE DRAWINGS:



J. WOOD ANNOTATIONS

THE FOLLOWING WOOD ANNOTATIONS MAY BE USED WITHIN THE DRAWINGS:

ABBREVIATIONS:

A	
AB	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
ADDL	ADDITIONAL
ADH	ADHESIVE
AE	ARCHITECT/ENGINEER
AFF	ABOVE FINISH FLOOR
AHR	ANCHOR
AHU	AIR HANDLING UNIT
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ALT	ALTERNATE
ALUM	ALUMINUM
AMSL	ABOVE MEAN SEA LEVEL
ANG	ANGLE
ANG BM	ANGLE BEAM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APA	AMERICAN PLYWOOD ASSOCIATION
ARCHL	ARCHITECTURAL
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
B	
BC	BOTTOM CHORD
BM	BEAM
BO	BOTTOM OF
BOA	BOTTOM OF ANGLE
BOC	BOTTOM OF CONCRETE
BOF	BOTTOM OF FOOTING
BOM	BOTTOM OF MASONRY
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BN	BOUNDARY NAILING
BPL	BASE PLATE
BRA	BRACE
BRCG	BRACING
BRDG	BRIDGING
BRG	BEARING
BRG PL	BEARING PLATE
BTWN	BETWEEN
C	
C	CAMBER
CANTL	CANTILEVER
CB	CONCRETE BEAM
CBF	CONCENTRIC BRACED FRAME
CHFR	CHAMFER
CIP	CAST-IN-PLACE
CJ	CONSTRUCTION/CONTROL/CONTRACTION JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTERLINE
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CONNX	CONNECTION
CONT	CONTINUOUS
COV	COVER
CTR	CENTER
C&C	COMPONENTS AND CLADDING
D	
DBA	DEFORMED BAR ANCHOR
DBL	DOUBLE
DBP	DOUBLE PITCHED
DIA	DIAMETER
DIAG	DIAGONAL
DIAPH	DIAPHRAGM
DIM	DIMENSION
DL	DEAD LOAD
DN	DOWN
DP	DRILLED PIER
DTL	DETAIL
DWL	DOWEL
E	
EA	EACH
EBF	ECCENTRIC BRACED FRAME
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEV	ELEVATOR
EMBED	EMBEDMENT/EMBEDDED
ENGR	ENGINEER
EOD	EDGE OF DECK
EOS	EDGE OF SLAB
EPL	EMBEDDED PLATE
EPS	EXPANDED CELLULAR POLYSTYRENE
EQ	EQUAL
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
ES	EQUALLY SPACED
ETC	AND SO FORTH
EW	EACH WAY
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F	
f'c	28-DAY CONCRETE COMPRESSIVE STREGNTH
f'm	28-DAY MASONRY COMPRESSIVE STREGNTH
FD	FLOOR DRAIN
FFE	FINISH FLOOR ELEVATION
FGE	FINISH GRADE ELEVATION
FH	FLOOR HATCH
FIN	FINISH
FN	FIELD NAILING
FOS	FACE OF STUD
FOUND	FOUNDATION
FOW	FACE OF WALL
FRC	FIBER REINFORCED CONCRETE
FS	FLOOR SINK
FT	FEET
FTG	FOOTING
FV	FIELD VERIFY
G	
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GEN	GENERAL
GL	GRIDLINE
GLU LAM	GLUED LAMINATED WOOD
GR	GRADE
GRTG	GRATING
H	
HC	HOLLOW CORE
HCA	HEADED CONCRETE ANCHOR
HDG	HOT-DIPPED GALVANIZED
HDR	HEADER
HGR	HANGER
HI	HIGH
HLDN	HOLDOWN
HORIZ	HORIZONTAL
HS	HEADED STUD
HSA	HEADED STUD ANCHOR
HSS	HOLLOW STRUCTURAL STEEL
HST	HOIST
HT	HEIGHT
HWH	HEX WASHER HEAD
I	
IBC	INTERNATIONAL BUILDING CODE
IF	INSIDE FACE
IMF	INTERMEDIATE MOMENT FRAME
IN	INCHES
INFO	INFORMATION
INT	INTERIOR
J	
JST	JOIST
JT	JOINT
K	
K	KIPS
KLF	KIPS PER LINEAR FOOT
KPL	KICK PLATE
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
L	
L	ANGLE
LAD	LADDER
LATL	LATERAL
LB(S)	POUND(S)
Ld	TENSION DEVELOPMENT LENGTH
Ldc	COMPRESSION DEVELOPMENT LENGTH
Ldh	HOOK DEVELOPMENT LENGTH
Ldm	MASONRY DEVELOPMENT LENGTH
LG	LONG
LL	LIVE LOAD
LLBB	LONG LENGTH BACK TO BACK
LLH	LONG LEG HORIZONTAL
LLV	LONG LENGTH VERTICAL
LO	LOW
LONG	LONGITUDINAL
LSH	LONG SIDE HORIZONTAL
LSLP	LONG-SLOTTED HOLE PARALLEL
LSLT	LONG-SLOTTED HOLE TRANSVERSE
LSV	LONG SIDE VERTICAL
LT GA	LIGHT GAUGE
LWC	LIGHTWEIGHT CONCRETE
LWIC	LIGHTWEIGHT INSULATING CONCRETE
M	
M	MOMENT
MAS	MASONRY
MATL	MATERIAL
MAUNF	MANUFACTURER
MAX	MAXIMUM
MC	MOMENT CONNECTION
MCJ	MASONRY CONTROL JOINT
MECH	MECHANICAL
MEZZ	MEZZANINE
MID	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MK	MARK
MTL	METAL
MWFRS	MAIN WIND FORCE RESISTING SYSTEM
N	
NF	NEAR FACE
NIC	NOT IN CONTRACT
NIS	NOT IN SCOPE
NS	NEAR SIDE
NTS	NOT TO SCALE
NWC	NORMALWEIGHT CONCRETE
O	
OC	ON CENTER
OF	OUTSIDE FACE
OMF	ORDINARY MOMENT FRAME
OSB	ORIENTED STRAND BOARD
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OVH	OVERHANG
OVS	OVERSIZED HOLE
P	
PAF	POWDER-ACTUATED FASTENER
PAR	PARALLEL
PDF	POWER-DRIVEN FASTENER
PED	PEDESTAL
PEMB	PRE-ENGINEERED METAL BUILDING
PERP	PERPENDICULAR
PCC	PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PCI	POUNDS PER CUBIC INCH
PCY	POUNDS PER CUBIC YARD
PIL	PILASTER
PJP	PARTIAL JOINT PENETRATION
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PLYWD	PLYWOOD
PREFAB	PREFABRICATED
PRELIM	PRELIMINARY
PSF	POUNDS PER SQUARE FOOT
PT	POST-TENSIONED
PTI	POST-TENSIONING INSTITUTE
PW	PUDDLE WELD
R	
R	REACTION
RAD	RADIUS
RBS	REDUCED BEAM SECTION
RC	REINFORCED CONCRETE
REF	REFERENCE
REINF	REINFORCING
REM	REMAINDER
REQD	REQUIRED
REV	REVISION
RD	ROOF DRAIN
REBAR	REINFORCING STEEL BARS
RF	RIGID FRAME
RH	ROOF HATCH
RL	RAIN LOAD
RLL	ROOF LIVE LOAD
RND	ROUND
RTU	ROOF TOP UNIT
S	
SC	SLIP-CRITICAL
SCHED	SCHEDULED
SDI	STEEL DECK INSTITUTE
SDL	SUPERIMPOSED DEAD LOAD
SDS	SELF-DRILLING SCREWS
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SIP	STRUCTURAL INSULATED PANEL
SJI	STEEL JOIST INSTITUTE
SL	SNOW LOAD
SLBB	SHORT LEG BACK TO BACK
SMP	SUMP PUMP
SMS	SHEET METAL SCREW
SOG	SLAB-ON-GRADE
SP	SOUTHERN PINE
SPA	SPACING
SMF	SPECIAL MOMENT FRAME
SSMA	STEEL STUD MANUFACTURERS ASSOCIATION
SSLP	SHORT SLOTTED HOLE PARALLEL
SSLT	SHORT SLOTTED HOLE TRANSVERSE
SST	STAINLESS STEEL
STD	STANDARD
STIFF	STIFFENER
STIRR	STIRRUP
STL	STEEL
STRUCT	STRUCTURAL
SW	SHEAR WALL
SYMM	SYMMETRICAL
T	
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TCX	TOP CHORD EXTENSION
TEMP	TEMPERATURE
THD	THREADED
THK	THICK
THRU	THROUGH
TO	TOP OF
TOA	TOP OF ANGLE
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOJ	TOP OF JOIST
TOM	TOP OF MASONRY
TOP	TOP OF PARAPET
TOS	TOP OF STEEL
TOT	TOP OF TRUSS
TOW	TOP OF WALL
TRANS	TRANSVERSE
TRNBKL	TURNBUCKLE
TYP	TYPICAL
U	
UNO	UNLESS NOTED OTHERWISE
V	
VERT	VERTICAL
VNR	VENEER
VR	VAPOR RETARDER
W	
WD	WOOD
WF	WALL FOOTING
WL	WIND LOAD
WP	WORKING POINT
WS	WATER STOP
WT	WEIGHT
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
WWR	WELDED WIRE REINFORCING
X	
XBRA	CROSSBRACING
XPS	EXTRUDED POLYSTYRENE
XS	EXTRA STRONG
XXS	DOUBLE EXTRA STRONG

SYMBOLS

@	AT
&	AND
#	NUMBER
2L	DOUBLE ANGLE
°	DEGREES
Ø	DIAMETER
w/	WITH
'	FEET
"	INCHES
<	LESS THAN
>	GREATER THAN
≤	LESS THAN OR EQUAL TO
≥	GREATER THAN OR EQUAL TO
±	POSITIVE/PLUS
-	NEGATIVE/MINUS
±	PLUS OR MINUS
X	BY

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ELI R.OCHOA, P.E., AIA
TEXAS REGISTRATION NO.
Engineer: 80351
Architect: 16180

HIDALGO COUNTY EL PARAISO
PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

PROJECT No.: 21087
ISSUE DATE: 08.16.22
DRAWN BY: LA
CHECKED BY: JG

Sheet Name

SYMBOLS AND ANNOTATIONS

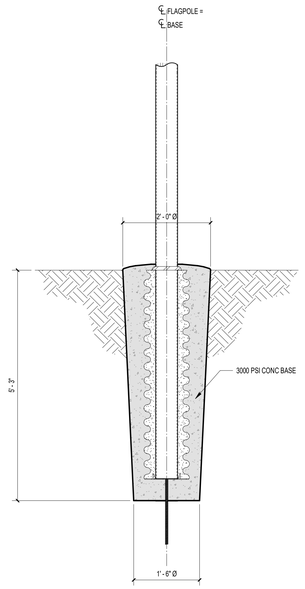
Sheet Number

SG004

Project Status:

100% SCHEMATIC DESIGN

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Autodesk Docs://21087 - Hidalgo County El Paraiso Building/21087 - STRUCT - HC El Paraiso Bldg.rvt



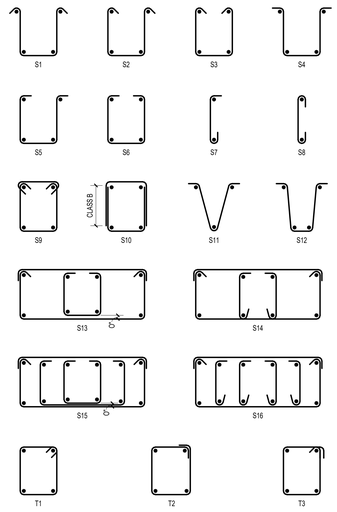
NOTES:

1. THE FLAGPOLE BASE HAS BEEN DESIGNED IN ACCORDANCE WITH THE IBC 2015 SECTION 1807.3 "EMBEDDED POST AND POLES" DESIGN PROCEDURE UTILIZING REACTIONS CALCULATED IN ACCORDANCE WITH THE DESIGN PROCEDURES SET FORTH IN ANSI/NAAMM FP 1001-07.
2. THE FLAGPOLE BASE HAS BEEN DESIGNED WITH THE CONSIDERATION OF THE FOLLOWING CRITERIA:

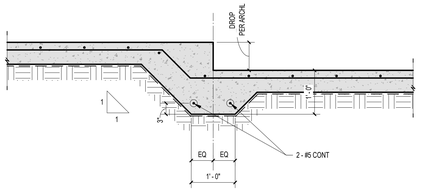
FLAGPOLE PROPERTIES:	
POLE MATERIAL:	ALUMINUM 6063-T6 (NON-WELDED)
EXPOSED FLAGPOLE HEIGHT:	30'-0"
STRAIGHT SECTION LENGTH:	4'-6"
TAPERED SECTION LENGTH:	25'-6"
BUTT DIAMETER:	6"
TIP DIAMETER:	3 1/2"
STRAIGHT SECTION THICKNESS:	0.188"
TAPERED SECTION THICKNESS:	0.156"
MAXIMUM FLAG SIZE:	6'X10' (NYLON OR COTTON)
GRAVITY DESIGN:	
FLAGPOLE WEIGHT:	96.2 LB
ALLOWANCE FOR ACCESSORIES:	10% OF POLE WEIGHT
LATERAL DESIGN:	
MRI 50-YEAR WIND SPEED:	90 MPH
GUST FACTOR:	1.14
FOUNDATION DESIGN:	
LATERAL BEARING SOIL TYPE:	CL (IBC 2015 TABLE 1806.3)
TOP OF BASE CONDITION:	NONCONSTRAINED

3. DESIGN OF THE FLAGPOLE AND ACCESSORIES SHALL BE THE RESPONSIBILITY OF THE FLAGPOLE MANUFACTURER.

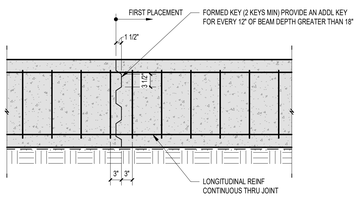
K1 FLAGPOLE BASE
TYPICAL DETAIL
3/4" = 1'-0"



K7 STIRRUP TYPES
TYPICAL DETAIL
1 1/2" = 1'-0"



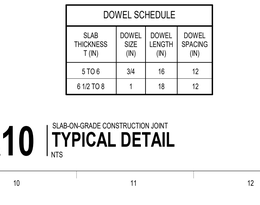
G1 SLAB-ON-GRADE DROP
TYPICAL DETAIL
NTS



NOTES:

1. LOCATIONS NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
2. ALL FORMED KEYS SHALL BE HORIZONTAL.

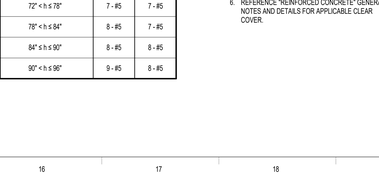
G6 GRADE BEAM CONSTRUCTION JOINTS
TYPICAL DETAIL
NTS



NOTES:

1. THIS DETAIL APPLIES TO GRADE BEAM TOP AND BOTTOM, SCHEDULED OR DETAILED, LONGITUDINAL REINFORCING.
2. LAP SPLICES LENGTHS SHALL BE AS FOLLOWS:
   TOP BARS - CLASS A LAP SPLICE, "TOP BARS"
   BOTTOM BARS - CLASS A LAP SPLICE, "OTHER BARS"
3. REFERENCE THE "TENSION DEVELOPMENT LENGTHS AND LAP SPLICE LENGTHS" SCHEDULE FOR SPECIFIED LAP SPLICE LENGTHS.
4. IF DIFFERENT BAR SIZES ARE SCHEDULED OR DETAILED, THEN L-BARS AND LAP SPLICES SHALL BE DETERMINED FROM THE SMALLER BAR.

G10 GRADE BEAM CORNER
TYPICAL DETAIL
NTS



NOTES:

1. THIS DETAIL APPLIES TO GRADE BEAM TOP AND BOTTOM, SCHEDULED OR DETAILED, LONGITUDINAL REINFORCING.
2. LAP SPLICES LENGTHS SHALL BE AS FOLLOWS:
   TOP BARS - CLASS A LAP SPLICE, "TOP BARS"
   BOTTOM BARS - CLASS A LAP SPLICE, "OTHER BARS"
3. REFERENCE THE "TENSION DEVELOPMENT LENGTHS AND LAP SPLICE LENGTHS" SCHEDULE FOR SPECIFIED LAP SPLICE LENGTHS.
4. IF DIFFERENT BAR SIZES ARE SCHEDULED OR DETAILED, THEN L-BARS AND LAP SPLICES SHALL BE DETERMINED FROM THE SMALLER BAR.

G15 GRADE BEAM DEAD END T-INTERSECTION
TYPICAL DETAIL
NTS

CLOSED STIRRUP OPEN STIRRUP

NOTE:

1. REFERENCE D5 / SG007 FOR TYPICAL REINFORCING BAR BENDS.

D1 TYPICAL STIRRUPS
TYPICAL DETAIL
NTS

BEND DIAMETER	
STIRRUPS AND TIES	4 db FOR #3 THRU #5
	6 db FOR #6 THRU #8
ALL OTHER BARS	6 db FOR #3 THRU #8
	8 db FOR #9 THRU #11
	10 db FOR #14 THRU #18

NOTES:

1. db = BAR DIAMETER

D5 STANDARD HOOKS AND BENDS
TYPICAL DETAIL
NTS

DEVELOPMENT OF WELDABLE REINFORCING		
GRADE 60 ASTM A706 REINFORCING, E70 ELECTRODE		
BAR SIZE	NOMINAL WELD SIZE	MINIMUM PLATE THICKNESS, T
#3	1/4"	1/4"
#4	5/16"	1/4"
#5	3/8"	1/4"
#6	7/16"	5/16"
#7	1/2"	3/8"
#8	9/16"	7/16"
#9	5/8"	1/2"
#10	11/16"	9/16"
#11	3/4"	5/8"

D10 DEVELOPMENT OF WELDABLE REINFORCING
TYPICAL DETAIL
NTS

NOTES:

1. CONDUITS ARE NOT ALLOWED TO BE LOCATED WITHIN THE SLAB THICKNESS (T), WHEN T < 6".
2. FOR VERTICAL PENETRATIONS THROUGH THE SLAB, REFERENCE D5 / SG008.
3. CONDUITS SHALL NOT BE LARGER THAN 1".
4. SERIES OF CONDUITS SHALL BE SPACED APART TO ALLOW FOR SUFFICIENT AMOUNT OF CONCRETE.
5. CONDUITS SHALL BE FABRICATED AND INSTALLED TO AVOID CUTTING, BENDING OR DISPLACEMENT OF REINFORCING STEEL.
6. ALUMINUM CONDUITS, OR OTHER EMBEDS ARE NOT ALLOWED.
7. FOR PIPING GREATER THAN 1", DETAIL AS / SG008 APPLIES.

D15 SERIES OF CONDUITS IN SLAB-ON-GRADE
TYPICAL DETAIL
NTS

PLAN VIEW

NOTES:

1. DETAIL APPLIES TO CONCRETE FOUNDATIONS, CONCRETE FLOORS, AND CONCRETE FILL ON METAL DECKING.
2. DESIGN REINFORCING IS NOT SHOWN FOR CLARITY.

A1 CONCRETE RE-ENTRANT CORNER REINFORCING
TYPICAL DETAIL
NTS

A4 SLAB-ON-GRADE PROFILE
TYPICAL DETAIL
NTS

NOTES:

1. CONTRACT JOINTS SHALL BE SPACED NOT FURTHER THAN 15 FEET EACH WAY.
2. JOINT PATTERN SHALL BE NEARLY SQUARE.

A7 SLAB-ON-GRADE CONTRACTION JOINT
TYPICAL DETAIL
NTS

DOWEL SCHEDULE			
SLAB THICKNESS T (IN)	DOWEL SIZE (IN)	DOWEL LENGTH (IN)	DOWEL SPACING (IN)
5 TO 6	3/4	16	12
6 1/2 TO 8	1	18	12

A10 SLAB-ON-GRADE CONSTRUCTION JOINT
TYPICAL DETAIL
NTS

BEAM DEPTH	BARS EACH FACE	
	c < 3"	c ≥ 3"
36" < h ≤ 42"	4 - #5	4 - #5
42" < h ≤ 48"	4 - #5	4 - #5
48" < h ≤ 54"	5 - #5	5 - #5
54" < h ≤ 60"	6 - #5	5 - #5
60" < h ≤ 66"	6 - #5	6 - #5
66" < h ≤ 72"	7 - #5	6 - #5
72" < h ≤ 78"	7 - #5	7 - #5
78" < h ≤ 84"	8 - #5	7 - #5
84" < h ≤ 90"	8 - #5	8 - #5
90" < h ≤ 96"	9 - #5	8 - #5

NOTES:

1. SKIN REINFORCING IS REQUIRED FOR ALL CONCRETE BEAMS GREATER THAN 36". PROVIDE SKIN REINFORCING AS SCHEDULED UNLESS NOTED OR DETAILED OTHERWISE.
2. SCHEDULED SKIN REINFORCING APPLY TO EACH FACE OF THE BEAM.
3. SKIN REINFORCING SHALL BE CONTINUOUS THROUGH THE SPAN.
4. LAP BOTTOM BARS (BELOW h/2) WITH CLASS B LAP SPLICE AT SUPPORTS. SIMILARLY, LAP TOP BARS, INCLUDING CENTER BARS (ABOVE OR EQUAL TO h/2), WITH A CLASS B LAP SPLICE AT MIDSPAN.
5. SPACE SKIN REINFORCING EVENLY EACH FACE BETWEEN TOP AND BOTTOM REINFORCEMENT.
6. REFERENCE "REINFORCED CONCRETE" GENERAL NOTES AND DETAILS FOR APPLICABLE CLEAR COVER.

A13 CONCRETE BEAM SKIN REINFORCING
TYPICAL DETAIL
NTS

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TEXAS REGISTRATION NO.
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HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

PROJECT No.: 21087
ISSUE DATE: 08.16.22
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TYPICAL CONCRETE DETAILS

Sheet Number

SG007

Project Status:

100% SCHEMATIC DESIGN

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LAP LENGTHS FOR WELDED WIRE REINFORCEMENT
ASTM A1064 REINFORCEMENT, NORMALWEIGHT CONCRETE

WELDED WIRE SIZE		f'c = 3000 PSI	f'c = 3500 PSI	f'c = 4000 PSI	f'c = 4500 PSI	f'c = 5000 PSI	f'c = 6000 PSI
PLAIN	DEFORMED						
W1.4	-	8	8	8	8	8	8
W2	-	8	8	8	8	8	8
W2.5	-	8	8	8	8	8	8
W2.9	-	8	8	8	8	8	8
W3	-	8	8	8	8	8	8
W3.5	-	8	8	8	8	8	8
W4	D4	9	9	8	8	8	8
W4.5	-	11	10	9	9	8	8
W5	D5	12	11	10	10	9	8
W5.5	-	13	12	11	10	10	9
W6	D6	14	13	12	11	11	10
W6.5	-	15	14	13	12	12	11
W7	D7	16	15	14	13	12	11
W7.5	-	17	16	15	14	13	12
W8	D8	18	17	16	15	14	13
W8.5	-	19	18	17	16	15	14
W9	D9	20	19	18	17	16	15
W9.5	-	22	20	19	18	17	15
W10	D10	23	21	20	19	18	16
W10.5	-	24	22	21	20	19	17
W11	D11	25	23	22	20	19	18
W12	D12	27	25	23	22	21	19
W14	D14	32	29	27	26	25	22
W16	D16	36	33	31	29	28	26
W18	D18	40	37	35	33	31	29
W20	D20	45	41	39	37	35	32
W22	D22	49	46	43	40	38	35
W24	D24	54	50	47	44	42	38
W26	D26	58	54	50	48	45	41
W28	D28	63	58	54	51	49	44
W30	D30	67	62	58	55	52	48
W31	D31	69	64	60	57	54	49

NOTES:

1. ALL DEVELOPMENT AND LAP SPLICE LENGTHS ARE IN INCHES.
2. FOR LIGHTWEIGHT CONCRETE, MULTIPLY THE TABULATED DEVELOPMENT LENGTH (Ld) BY 1.33.

M1 LAP SPLICE LENGTHS FOR WELDED WIRE REINFORCEMENT
SCHEDULE
NTS

TENSION DEVELOPMENT AND LAP SPLICE LENGTHS
GRADE 60 REINFORCEMENT, NORMALWEIGHT CONCRETE

BAR SIZE	LAP CLASS	f'c = 3000 PSI		f'c = 3500 PSI		f'c = 4000 PSI		f'c = 4500 PSI		f'c = 5000 PSI		f'c = 6000 PSI	
		TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	A	22	17	20	16	19	15	18	14	17	13	16	12
	B	29	23	26	21	25	20	24	19	23	17	21	16
#4	A	29	22	27	21	25	19	24	18	23	17	21	16
	B	38	29	36	28	33	25	32	24	30	23	28	21
#5	A	36	28	33	26	31	24	30	23	28	22	26	20
	B	47	37	43	34	41	32	39	30	37	29	34	26
#6	A	43	33	40	31	37	29	35	27	34	26	31	24
	B	56	43	52	41	49	38	46	36	45	34	41	32
#7	A	63	48	58	45	54	42	51	40	49	38	45	34
	B	82	63	76	59	71	55	67	52	64	50	59	45
#8	A	72	55	66	51	62	48	59	45	56	43	51	39
	B	94	72	86	67	81	63	77	59	73	56	67	51
#9	A	81	62	75	58	70	54	66	51	63	48	57	44
	B	106	81	98	76	91	71	86	67	82	63	75	58
#10	A	90	69	83	64	78	60	73	56	69	54	63	49
	B	117	90	108	84	102	78	95	73	90	71	82	64
#11	A	98	76	91	70	85	66	80	62	76	59	70	54
	B	128	99	119	91	111	86	104	81	99	77	91	71
#14	A	125	96	116	89	108	84	102	79	97	75	89	68
	B	163	125	151	116	141	110	133	103	127	98	116	89
#18	A	161	124	149	115	139	107	131	101	125	96	114	88
	B	210	162	194	150	181	140	171	132	163	125	149	115

NOTES:

1. ALL DEVELOPMENT AND LAP SPLICE LENGTHS ARE IN INCHES.
2. THE TENSION DEVELOPMENT LENGTH (Ld) IS EQUAL TO A "CLASS A" LAP SPLICE LENGTH.
3. "TOP BARS" INDICATES HORIZONTAL BARS WITH 12" OR MORE OF FRESH CONCRETE CAST BELOW THE BARS BEING DEVELOPED OR SPLICED.
4. "OTHER BARS" PERTAIN TO ALL OTHER CONDITIONS THAT DO NOT SATISFY THE CONDITIONS OF "TOP BARS".
5. FOR EPOXY-COATED BARS, MULTIPLY THE TABULATED BY THE FOLLOWING FACTORS: (db = BAR DIAMETER)

   TOP BARS:
   1.3 FOR BAR COVER < 3db
   1.2 FOR BAR COVER > 3db

   OTHER BARS:
   1.5 FOR BAR COVER < 3db
   1.2 FOR BAR COVER > 3db

6. FOR LIGHTWEIGHT CONCRETE, MULTIPLY TABULATED VALUES BY 1.33.
7. EPOXY AND LIGHTWEIGHT CONCRETE FACTORS ARE MULTIPLICATIVE:

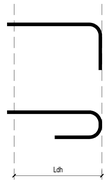
   SPLICE LENGTH = (TABULATED VALUE) x (EPOXY-COATED FACTOR) x (LIGHTWEIGHT CONCRETE FACTOR)

8. WHEN LAP SPLICING BARS OF DIFFERENT SIZES, THE LAP LENGTH IS DETERMINED BY THE SMALLER BAR BUT NOT LESS THAN THE "CLASS A" SPLICE LENGTH OF THE LARGER BAR.

H1 TENSION DEVELOPMENT AND LAP SPLICE LENGTHS
SCHEDULE
NTS

DEVELOPMENT LENGTHS OF STANDARD HOOKS IN TENSION
GRADE 60 REINFORCEMENT, NORMALWEIGHT CONCRETE

BAR SIZE	f'c = 3000 PSI	f'c = 3500 PSI	f'c = 4000 PSI	f'c = 4500 PSI	f'c = 5000 PSI	f'c = 6000 PSI
#3	9	8	8	7	7	6
#4	11	11	10	9	9	8
#5	14	13	12	12	11	10
#6	17	16	15	14	13	12
#7	20	18	17	16	15	14
#8	22	21	19	18	17	16
#9	25	23	22	21	20	18
#10	28	26	24	23	22	20
#11	31	28	27	25	24	22
#14	39	36	34	32	30	28
#18	50	46	43	41	39	35



NOTES:

1. Ldh = DEVELOPMENT LENGTH OF STANDARD HOOKS IN TENSION (INCHES).
2. WHERE 2 1/2" MINIMUM COVER IS PROVIDED NORMAL TO THE PLANE OF THE HOOK AND 2" MINIMUM COVER IS PROVIDED ON THE BAR EXTENSION FOR 90° HOOKS, MULTIPLY THE TABULATED VALUE BY 0.7. (APPLIES TO #11 BARS OR SMALLER)
3. FOR EPOXY-COATED BARS, MULTIPLY THE TABULATED VALUES BY 1.2.
4. FOR LIGHTWEIGHT CONCRETE, MULTIPLY TABULATED VALUES BY 1.33.
5. REFERENCE DETAIL D5 / SG007 FOR STANDARD HOOK BENDS.
6. CLEAR COVER, EPOXY, AND LIGHTWEIGHT CONCRETE FACTORS ARE MULTIPLICATIVE WHEN APPLICABLE.

   Ldh = (TABULATED VALUE) x (CLEAR COVER FACTOR) x (EPOXY-COATED FACTOR) x (LIGHTWEIGHT CONCRETE FACTOR)

H9 TENSION DEVELOPMENT LENGTH OF STANDARD HOOKS
SCHEDULE
NTS

COMPRESSION DEVELOPMENT AND LAP SPLICE LENGTHS
GRADE 60 REINFORCEMENT, NORMALWEIGHT CONCRETE

BAR SIZE	COMPRESSION DEVELOPMENT LENGTH (Ldc)						LAP SPLICE
	f'c = 3000 PSI	f'c = 3500 PSI	f'c = 4000 PSI	f'c = 4500 PSI	f'c = 5000 PSI	f'c = 6000 PSI	
#3	9	8	8	8	8	8	12
#4	11	11	10	9	9	9	15
#5	14	13	12	12	12	12	19
#6	17	16	15	14	14	14	23
#7	20	18	17	16	16	16	27
#8	22	21	19	18	18	18	30
#9	25	23	22	21	21	21	34
#10	28	26	24	23	23	23	38
#11	31	28	27	25	25	25	42
#14	39	36	34	32	32	32	53
#18	50	46	43	41	41	41	68

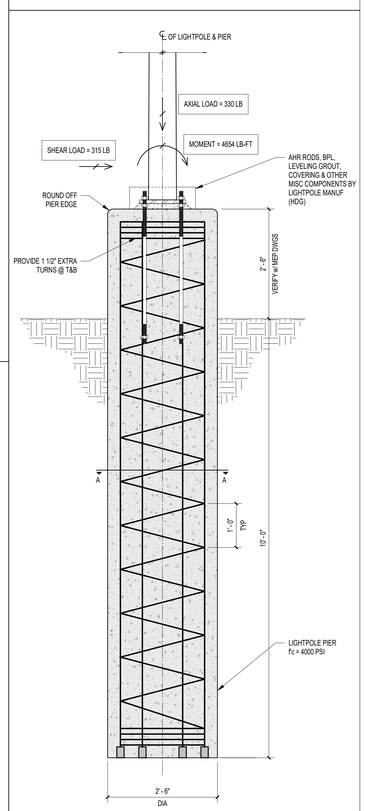
NOTES:

1. ALL DEVELOPMENT AND LAP SPLICE LENGTHS ARE IN INCHES.
2. FOR BARS ENCLOSED IN SPIRALS OR TIES WITH A PITCH OR SPACING NO MORE THAN 4", MULTIPLY THE TABULATED DEVELOPMENT LENGTH (Ldc) BY 0.75.
3. FOR LIGHTWEIGHT CONCRETE, MULTIPLY THE TABULATED DEVELOPMENT LENGTH (Ldc) BY 1.33.
4. SPIRAL/TIE AND LIGHTWEIGHT CONCRETE FACTORS ARE MULTIPLICATIVE:

   Ldc = (TABULATED VALUE) x (SPIRAL/TIE ENCLOSURE FACTOR) x (LIGHTWEIGHT CONCRETE FACTOR)

5. WHEN LAP SPLICING BARS OF DIFFERENT SIZES, THE LAP LENGTH IS DETERMINED BY THE SMALLER BAR BUT NOT LESS THAN THE COMPRESSION DEVELOPMENT LENGTH (Ldc) OF THE LARGER BAR.

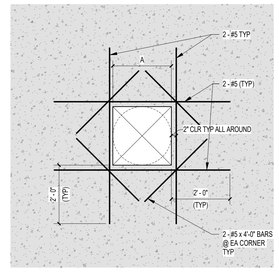
H11 COMPRESSION DEVELOPMENT AND LAP SPLICE LENGTHS
SCHEDULE
NTS



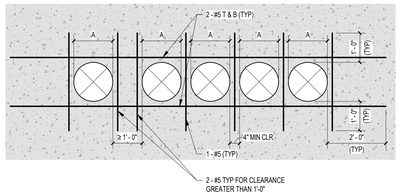
NOTES:

1. THE CONTRACTOR SHALL SUBMIT REACTIONS FOR ALL TYPES OF LIGHTPOLES WITHIN THE PROJECT TO THE ENGINEER FOR VERIFICATION OF PIER CAPACITY PRIOR TO INSTALLATION OF PIER.
2. BASIS OF DESIGN:
   LIGHTPOLE: KW-INDUSTRIES MODEL NO. SSP28-5.0-11
   LAMP: LITHONIA LIGHTING RSX2 LED (EPA = 0.69 FT²)

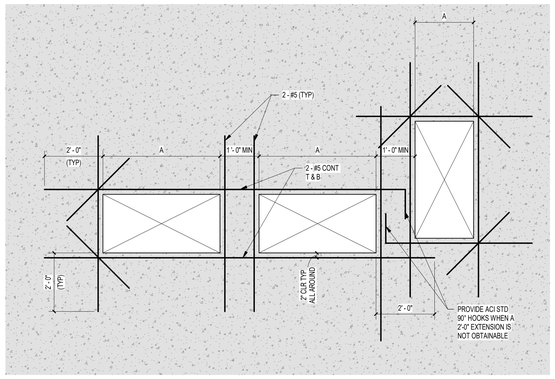
A17 LIGHTPOLE BASE
TYPICAL DETAIL
3/4" = 1'-0"



SINGLE OPENING



MULTIPLE PIPE PENETRATIONS

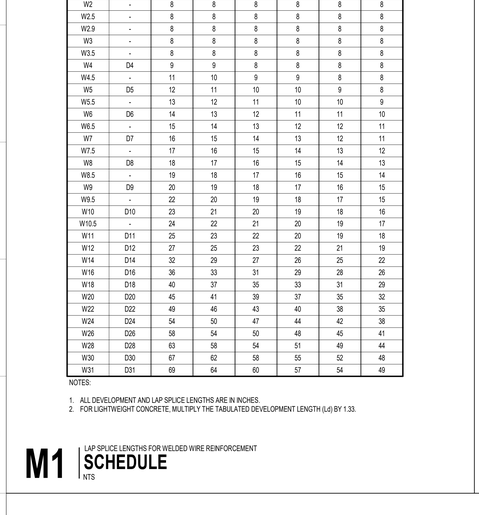


MULTIPLE OPENINGS

NOTES:

1. THIS DETAIL APPLIES TO OPENINGS IN CONCRETE WALLS, SUSPENDED SLABS, CONCRETE CAST ON METAL DECKING AND SLABS-ON-GRADE.
2. COORDINATE OPENING SIZES AND LOCATIONS WITH ARCHITECTURAL AND MECHANICAL/ELECTRICAL/PLUMBING DRAWINGS.
3. DIMENSION "A" APPLIES TO HORIZONTAL DIMENSIONS ON WALLS, OR THE DIRECTION PERPENDICULAR TO THE SPAN OF REINFORCING ON A ONE-WAY SLAB, OR PERPENDICULAR TO THE SPAN OF THE METAL DECK OF COMPOSITE OR NON-COMPOSITE SLAB. DETAIL IS APPLICABLE FOR "A" LESS THAN OR EQUAL TO 4'-0" ("A" ≤ 4'-0").
4. FOR TWO-WAY SLABS AND SLAB-ON-GRADE, THE DIMENSION "A" APPLIES IN BOTH DIRECTIONS WHERE THE MORE STRINGENT REQUIREMENTS APPLY.
5. OPENINGS OR GROUPS OF OPENINGS LESS THAN OR EQUAL TO 10" DO NOT REQUIRE ADDITIONAL REINFORCEMENT.
6. TYPICAL REINFORCING NOT SHOWN FOR CLARITY.

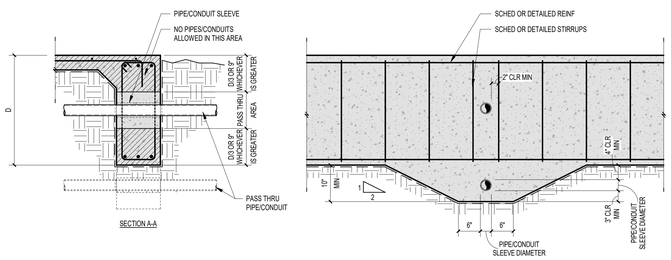
D5 CONCRETE OPENINGS
TYPICAL DETAIL
NTS



NOTES:

1. LOCATIONS NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
2. FOR SUSPENDED/ELEVATED SLABS WITH A THICKNESS GREATER THAN 12", PROVIDE TWO FORMED KEYS.
3. REFERENCE A7 / SG007 AND G6 / SG007 FOR GRADE BEAM AND SLAB-ON-GRADE CONSTRUCTION JOINTS.
4. REFERENCE THE GENERAL NOTES FOR ADDITIONAL INFORMATION.

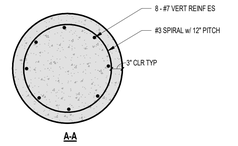
A1 CONCRETE CONSTRUCTION JOINTS
TYPICAL DETAIL
NTS



NOTES:

1. CONDUITS OR PIPING ARE NOT ALLOWED TO BE LOCATED IN THE INDICATED AREAS SHOWN IN THIS DETAIL. FAILURE TO COORDINATE ALL TRADES WITH THIS DETAIL WILL RESULT IN REMOVAL OF NON-COMPLIANT ELEMENTS AT THE CONTRACTOR'S EXPENSE.
2. VERTICAL PENETRATIONS THROUGH GRADE BEAMS OR FOOTINGS ARE NOT ALLOWED.
3. PIPING AND CONDUITS SHALL BE FABRICATED AND INSTALLED TO AVOID CUTTING, BENDING OR DISPLACEMENT OF THE REINFORCING STEEL.
4. ALUMINUM PIPING, CONDUITS, OR OTHER OTHER EMBEDS ARE NOT ALLOWED.
5. FOR MULTIPLE PIPES IN SERIES, PROVIDE A 4" CLEARANCE BETWEEN PIPES.

A5 PENETRATIONS IN GRADE BEAMS OR FOOTINGS
TYPICAL DETAIL
NTS



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TEXAS REGISTRATION NO.
Engineer: 83301
Architect: 16180

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

PROJECT No.: 21087
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DRAWN BY: LA
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Sheet Name

TYPICAL CONCRETE DETAILS

Sheet Number

SG008

Project Status:

100% SCHEMATIC DESIGN

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PRE-ENGINEERED STEEL CONNECTIONS:

A. GENERAL

1. ALL THE PRE-ENGINEERED CONNECTION DETAILS SHOWN ON THIS SHEET ARE PROVIDED TO ASSIST THE STEEL FABRICATOR WITH THE DETAILING OF THE SIMPLE SHEAR CONNECTIONS FOR ALL THE STEEL FRAMING BASED OFF THE REACTIONS INDICATED ON THE STRUCTURAL DRAWINGS.
2. WHERE THESE PRE-ENGINEERED CONNECTION DETAILS ARE USED, NO DESIGN CALCULATIONS ARE REQUIRED TO BE SUBMITTED FROM THE STEEL FABRICATOR.
3. WHERE THESE PRE-ENGINEERED CONNECTION DETAILS ARE USED, ALL ASPECTS OF THE CONNECTIONS MUST CONFORM TO THE APPLICABLE PRE-ENGINEERED CONNECTION DETAIL BEING REFERENCED.

B. REACTIONS

1. THE FABRICATOR SHALL SELECT A TYPICAL PRE-ENGINEERED BEAM CONNECTION FROM THESE DETAILS USING THE REACTION INDICATED ON THE DRAWINGS.
2. ALL REACTIONS INDICATED ON THE DRAWINGS HAVE BEEN FACTORED USING THE LOAD RESISTANCE FACTOR DESIGN (LRFD) METHOD.
3. WHERE REACTIONS HAVE NOT BEEN PROVIDED, THE STEEL FABRICATOR SHALL ASSUMED THE REACTION TO BE 60% OF THE FACTORED SHEAR STRENGTH OF THE BEAM, BUT NOT LESS THAN 10 KIPS.

C. PRE-ENGINEERED CONNECTION PROVISIONS

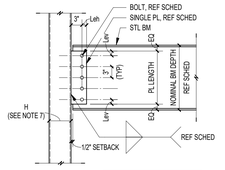
1. BEAMS OF VARIOUS WEB THICKNESSES HAVE BEEN GROUPED BASED ON THEIR NOMINAL DEPTH.
2. THE NUMBER OF BOLTS INDICATED IN ALL DETAILS ARE BASED ON THE THINNEST WEB OF EACH GROUP.
3. BEAMS ARE BASED OFF ASTM A992 (Fy = 50 KSI), ANGLES AND PLATES ARE BASED OFF ASTM A36 (Fy = 36 KSI), BOLTS ARE BASED OFF ASTM A325N (THREADS NOT EXCLUDED FROM THE SHEAR PLANE), AND WELDS ARE BASED OFF E70XX ELECTRODES.

D. CONNECTIONS NOT COVERED BY PRE-ENGINEERED CONNECTIONS

1. CONNECTIONS SHOWN IN THE STRUCTURAL DRAWINGS NOT COVERED BY THE PRE-ENGINEERED CONNECTION DETAILS SHALL BE DESIGNED BY THE STEEL FABRICATOR AND SUBMITTED WITH DESIGN CALCULATIONS SEALED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE THE PROJECT IS IN. REFERENCE THE "STRUCTURAL STEEL" GENERAL NOTES FOR ADDITIONAL INFORMATION.
2. THE STEEL FABRICATOR MAY, AT THEIR OPTION, SUBMIT ALTERNATE CONNECTION DETAILS FOR USE ON THE PROJECT. ALTERNATE CONNECTION DETAILS MUST CONFORM TO THE PRE-ENGINEERED DETAILS AND SUBMITTED WITH SIGNED AND SEAL CALCULATIONS FROM A LICENSED PROFESSIONAL ENGINEER IN THE STATE THE PROJECT IS IN.
3. WHEN A CONNECTION IS SHOWN TO HAVE OTHER REACTIONS OTHER THAN A VERTICAL REACTION (R) SUCH AS: AXIAL REACTION (P) – TENSION (+) OR COMPRESSION (-), HORIZONTAL REACTION (H), VERTICAL MOMENT (M), HORIZONTAL MOMENT (MH), AND/OR TORSION REACTION (T), THEN THE STEEL FABRICATOR SHALL SUBMIT SIGNED AND SEALED CALCULATIONS FROM A LICENSED PROFESSIONAL ENGINEER IN THE STATE THE PROJECT IS IN. DO NOT PROVIDE SLOTTED HOLES WHEN AXIAL OR HORIZONTAL REACTIONS ARE PRESENT UNLESS THE CONNECTION IS SPECIFICALLY DESIGNED FOR SLIP.

SINGLE PLATE AT HSS COLUMN CONNECTION CAPACITY

BEAM DEPTH	NO. OF BOLTS PER VERT ROW	PLATE SIZE	WELD SIZE	MAXIMUM REACTION (LRFD) - KIPS			
				3/4" DIA BOLTS		7/8" DIA BOLTS	
				STD	SSLT	STD	SSLT
W8	2	1/4"	3/16"	24	24	26	26
W10	2	1/4"	3/16"	24	24	26	26
W12	3	1/4"	3/16"	38	38	39	39
W14	3	5/16"	1/4"	43	43	48	48
W16	4	5/16"	1/4"	62	62	65	65
W18	5	5/16"	1/4"	81	80	81	81
W21	6	5/16"	1/4"	89	95	97	97
W24	7	5/16"	1/4"	108	111	114	114
W27	7	3/8"	1/4"	-	118	137	137
W30	8	3/8"	1/4"	-	137	157	156
W33	9	3/8"	1/4"	-	155	175	174
W36	10	3/8"	1/4"	-	173	194	192
W40	11	3/8"	1/4"	-	190	212	210
W44	12	3/8"	1/4"	-	208	230	228



Lev = 1 1/4" FOR 3/4" DIA BOLTS
= 1 1/2" FOR 7/8" DIA BOLTS
Leh = 1 1/2" FOR 3/4" DIA BOLTS
= 1 3/4" FOR 7/8" DIA BOLTS

NOTES:

1. PROVIDED REACTION CAPACITIES ARE GIVEN IN KIPS AND AT STRENGTH DESIGN LEVEL USING LOAD-RESISTANCE FACTOR DESIGN (LRFD).
2. ALL BOLTS SHALL BE ASTM A325N.
3. THE SINGLE PLATE SHALL CONFORM TO ASTM A36 (Fy = 36 KSI).
4. WELDING ELECTRODES SHALL CONFORM TO E70XX.
5. BEAMS OF VARIOUS WEB THICKNESSES ARE GROUPED BASED ON THEIR DEPTH. NUMBER OF BOLTS SHOWN ARE BASED ON THE THINNEST WEB IN EACH GROUP.
6. WHEN THE TOP FLANGE IS COPED OR WHEN BOTH FLANGES ARE COPED, REFERENCE THE APPLICABLE ALL-BOLTED DOUBLE ANGLE PRE-ENGINEERED REACTION CAPACITIES.
7. THIS DETAIL IS ONLY APPLICABLE WHEN THE HSS COLUMN IS CLASSIFIED AS NONSLENDER IN ACCORDANCE WITH AISC 360. THE NONSLENDER CRITERIA IS AS FOLLOWS:

HSS NONSLENDER CRITERIA

SQ OR RECT HSS (Fy = 46 KSI)		ROUND HSS (Fy = 42 KSI)
NOMINAL WALL THICKNESS (IN)	MAXIMUM H (IN)	ALL AISC ROUND HSS SHAPES ARE CLASSIFIED AS NONSLENDER
5/8"	20"	
1/2"	16"	
3/8"	12"	
5/16"	10"	
1/4"	8"	
3/16"	6"	
1/8"	4"	

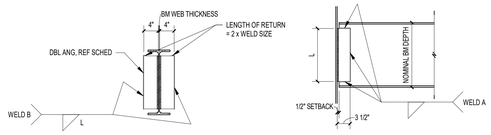
G1 PRE-ENGINEERED SINGLE PLATE TO HSS COLUMN CONNECTION
TYPICAL DETAIL
NTS

ALL-WELDED DOUBLE ANGLE CONNECTION CAPACITY

BEAM DEPTH	L (IN)	ANGLE SIZE	WELD A	WELD B	MINIMUM BEAM WEB THICKNESS	MINIMUM SUPPORT THICKNESS	MAXIMUM REACTION (LRFD) - KIPS
W8	6"	2L4X3 1/2X1/4	3/16"	1/4"	0.286"	0.190"	32
W10	6"	2L4X3 1/2X1/4	3/16"	1/4"	0.286"	0.190"	32
W12	9"	2L4X3 1/2X1/4	3/16"	1/4"	0.286"	0.190"	64
W14	9"	2L4X3 1/2X5/16	1/4"	5/16"	0.381"	0.238"	80
W16	12"	2L4X3 1/2X5/16	1/4"	5/16"	0.381"	0.238"	124
W18	16"	2L4X3 1/2X5/16	1/4"	5/16"	0.381"	0.238"	165
W21	18"	2L4X3 1/2X5/16	1/4"	5/16"	0.381"	0.238"	196
W24	22"	2L4X3 1/2X5/16	1/4"	5/16"	0.381"	0.238"	256
W27	22"	2L4X3 1/2X5/16	1/4"	5/16"	0.381"	0.238"	256
W30	24"	2L4X3 1/2X5/16	1/4"	5/16"	0.381"	0.238"	286
W33	28"	2L4X3 1/2X3/8	5/16"	3/8"	0.476"	0.286"	416
W36	30"	2L4X3 1/2X3/8	5/16"	3/8"	0.476"	0.286"	452
W40	34"	2L4X3 1/2X3/8	5/16"	3/8"	0.476"	0.286"	523
W44	36"	2L4X3 1/2X3/8	5/16"	3/8"	0.476"	0.286"	558

NOTES:

1. PROVIDED REACTION CAPACITIES ARE GIVEN IN KIPS AND AT STRENGTH DESIGN LEVEL USING LOAD-RESISTANCE FACTOR DESIGN (LRFD).
2. DOUBLE ANGLES SHALL CONFORM TO ASTM A36 (F_y = 36 KSI).
3. WELDING ELECTRODES SHALL CONFORM TO E70XX.

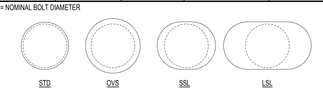


G7 PRE-ENGINEERED ALL WELDED DOUBLE ANGLE CONNECTION
TYPICAL DETAIL
NTS

NOMINAL BOLT HOLE DIMENSIONS

BOLT DIAMETER	STANDARD (DIA)	OVERSIZED (DIA)	SHORT-SLOTTED (WIDTH X LENGTH)	LONG-SLOTTED (WIDTH X LENGTH)
1/2"	9/16"	5/8"	9/16" X 11/16"	9/16" X 1 1/4"
5/8"	11/16"	13/16"	11/16" X 7/8"	11/16" X 1 9/16"
3/4"	13/16"	15/16"	13/16" X 1"	13/16" X 1 7/8"
7/8"	15/16"	1 1/16"	15/16" X 1 1/8"	15/16" X 2 3/16"
1"	1 1/16"	1 1/4"	1 1/16" X 1 5/16"	1 1/16" X 2 1/2"
≥ 1 1/8"	d + 1/16"	d + 1/8"	(d + 1/16") x (d + 3/8")	(d + 1/16") X (2.5*d)

d = NOMINAL BOLT DIAMETER



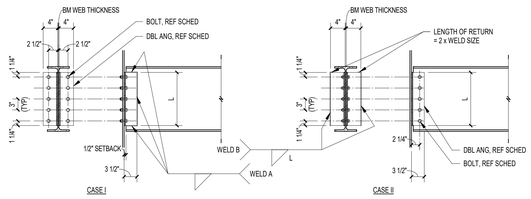
NOTES:

1. ALL BOLT HOLES SHALL BE STANDARD SIZE HOLES UNLESS NOTED OR DETAILED OTHERWISE.
2. NOMINAL BOLT HOLE DESIGNATIONS ARE AS FOLLOWS:
   STD = STANDARD HOLE
   OVS = OVERSIZED HOLE
   SSL = SHORT-SLOTTED HOLE
   LSL = LONG-SLOTTED HOLE
3. SHORT-SLOTTED OR LONG-SLOTTED HOLE DESIGNATIONS SHOWN OR NOTED IN THE DRAWINGS SPECIFY THE ORIENTATION OF THE SLOT BY ADDING A "P" OR "T" TO THE DESIGNATION (i.e. SSLP, SSLT, LSLP, LSLT) INDICATING THE SLOT IS PARALLEL TO THE DIRECTION OF THE APPLIED LOAD OR THE SLOT IS TRANSVERSE TO THE DIRECTION OF THE APPLIED LOAD, RESPECTIVELY.

G13 NOMINAL BOLT HOLE DIMENSIONS
TYPICAL DETAIL
1/2" = 1'-0"

BOLTED/WELDED DOUBLE ANGLE CONNECTION CAPACITY

BEAM DEPTH	NO. OF BOLTS PER VERT ROW	L (IN)	CASE I				CASE II			
			WELD A	MINIMUM BEAM WEB THICKNESS	ANGLE SIZE	REACTION (LRFD) - KIPS	WELD B	MINIMUM SUPPORT THICKNESS	ANGLE SIZE	REACTION (LRFD) - KIPS
W8	2	5 1/2"	3/16"	0.286"	2L4X3 1/2X1/4	75	1/4"	0.190"	2L4X3 1/2X5/16	21
W10	2	5 1/2"	3/16"	0.286"	2L4X3 1/2X1/4	75	1/4"	0.190"	2L4X3 1/2X5/16	21
W12	3	8 1/2"	3/16"	0.286"	2L4X3 1/2X1/4	110	1/4"	0.190"	2L4X3 1/2X5/16	48
W14	3	8 1/2"	1/4"	0.381"	2L4X3 1/2X5/16	147	5/16"	0.238"	2L4X3 1/2X3/8	60
W16	4	11 1/2"	1/4"	0.381"	2L4X3 1/2X5/16	190	5/16"	0.238"	2L4X3 1/2X3/8	99
W18	5	14 1/2"	1/4"	0.381"	2L4X3 1/2X5/16	229	5/16"	0.238"	2L4X3 1/2X3/8	143
W21	6	17 1/2"	1/4"	0.381"	2L4X3 1/2X5/16	267	5/16"	0.238"	2L4X3 1/2X3/8	188
W24	7	20 1/2"	5/16"	0.476"	2L4X3 1/2X3/8	379	3/8"	0.286"	2L4X3 1/2X1/2	280
W27	7	20 1/2"	5/16"	0.476"	2L4X3 1/2X3/8	379	3/8"	0.286"	2L4X3 1/2X1/2	280
W30	8	23 1/2"	5/16"	0.476"	2L4X3 1/2X3/8	422	3/8"	0.286"	2L4X3 1/2X1/2	335
W33	9	26 1/2"	5/16"	0.476"	2L4X3 1/2X3/8	463	3/8"	0.286"	2L4X3 1/2X1/2	389
W36	10	29 1/2"	5/16"	0.476"	2L4X3 1/2X1/2	505	3/8"	0.286"	2L4X3 1/2X1/2	443
W40	11	32 1/2"	5/16"	0.476"	2L4X3 1/2X1/2	548	3/8"	0.286"	2L4X3 1/2X1/2	496
W44	12	35 1/2"	5/16"	0.476"	2L4X3 1/2X1/2	589	3/8"	0.286"	2L4X3 1/2X1/2	550



NOTES:

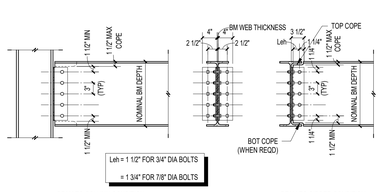
1. PROVIDED REACTION CAPACITIES ARE GIVEN IN KIPS AND AT STRENGTH DESIGN LEVEL USING LOAD-RESISTANCE FACTOR DESIGN (LRFD).
2. ALL BOLTS SHALL BE 3/4" DIAMETER A325N INSTALLED IN STANDARD HOLES.
3. CASE I: BOLTED AT SUPPORT AND WELDED TO BEAM WEB.
   CASE II: BOLTED TO BEAM WEB AND WELDED TO SUPPORT
4. THIS PRE-ENGINEERED CONNECTION IS ONLY APPLICABLE IF THE WEB OR SUPPORT THICKNESSES MEET THE TABULATED MINIMUM THICKNESSES FOR CASE I AND CASE II, RESPECTIVELY.
5. WHEN THE TOP FLANGE IS COPED OR WHEN BOTH FLANGES ARE COPED FOR A CASE II ARRANGEMENT, REFERENCE THE APPLICABLE ALL-BOLTED DOUBLE ANGLE PRE-ENGINEERED REACTION CAPACITIES.
6. WELDING ELECTRODES SHALL CONFORM TO E70XX.

A1 PRE-ENGINEERED BOLTED/WELDED DOUBLE ANGLE CONNECTION
TYPICAL DETAIL
3/4" = 1'-0"

ALL-BOLTED DOUBLE ANGLE CONNECTION CAPACITY

BEAM DEPTH	NO. OF BOLTS PER VERT ROW	MINIMUM BEAM WEB/COLUMN FLANGE THICKNESS	ANGLE SIZE	MAXIMUM REACTION (LRFD) - KIPS												
				3/4" DIAMETER BOLTS							7/8" DIAMETER BOLTS					
				UNCOPED	TOP FLANGE COPED			BOTH FLANGES COPED			UNCOPED	TOP FLANGE COPED			BOTH FLANGES COPED	
				STD/OVS/SSLT	STD	OVS	SSLT	STD	OVS	SSLT	STD/OVS/SSLT	STD	OVS	SSLT	STD	OVS	SSLT
W8	2	0.170"	2L4X3 1/2X1/4	29	22	21	21	21	19	21	34	21	19	20	19	18	19
W10	2	0.190"	2L4X3 1/2X1/4	33	25	23	24	23	22	23	38	23	22	22	22	20	22
W12	3	0.200"	2L4X3 1/2X1/4	52	39	36	38	37	35	37	61	36	34	35	35	33	35
W14	3	0.230"	2L4X3 1/2X5/16	60	44	42	43	42	40	42	70	42	39	40	40	37	40
W16	4	0.250"	2L4X3 1/2X5/16	87	64	60	63	62	58	62	102	60	56	59	58	54	58
W18	5	0.300"	2L4X3 1/2X5/16	131	95	90	94	93	87	93	153	90	84	88	87	82	87
W21	6	0.350"	2L4X3 1/2X5/16	184	133	125	131	130	122	130	185*	125**	117**	123**	122**	115**	122**
W24	7	0.395"	2L4X3 1/2X3/8	242	175	164	173	171	161	171	258*	164**	154**	162**	161**	151**	161**
W27	7	0.460"	2L4X3 1/2X3/8	251*	204**	191**	201**	200**	188**	200**	258*	191**	179**	189**	188**	176**	188**
W30	8	0.470"	2L4X3 1/2X3/8	286*	237**	223**	235**	233**	219**	233**	295*	223**	209**	221**	219**	206**	219**
W33	9	0.550"	2L4X3 1/2X3/8	322*	312**	293**	309**	307**	289**	307**	331*	293**	275**	290**	289**	271**	289**
W36	10	0.600"	2L4X3 1/2X1/2	358*	358*	355**	358*	358*	351**	358*	487*	355**	333**	352**	351**	328**	351**
W40	11	0.630"	2L4X3 1/2X1/2	394*	394*	394*	394*	394*	394*	384**	535*	410**	383**	406**	405**	379**	405**
W44	12	0.710"	2L4X3 1/2X1/2	430*	430*	430*	430*	430*	430*	430*	584*	503**	471**	500**	498**	467**	498**

*INDICATES THAT A REACTION INCREASE IS NOT PERMITTED.
**INDICATES THAT A REACTION INCREASE IS PERMITTED BUT NOT MORE THAN THE CORRESPONDING UNCOPED REACTION CAPACITY.



NOTES:

1. PROVIDED REACTION CAPACITIES ARE GIVEN IN KIPS AND AT STRENGTH DESIGN LEVEL USING LOAD-RESISTANCE FACTOR DESIGN (LRFD).
2. ALL BOLTS SHALL BE ASTM A325N.
3. DOUBLE ANGLES SHALL CONFORM TO ASTM A36 (F_y = 36 KSI).
4. BEAMS OF VARIOUS WEB THICKNESSES ARE GROUPED BASED ON THEIR NOMINAL DEPTH. THE NUMBER OF BOLTS SHOWN ARE BASED ON THE THINNEST WEB IN EACH GROUP.
5. REACTION CAPACITIES TABULATED ARE BASED ON THE THINNEST WEB IN EACH GROUP. AN INCREASE IN THE REACTION CAPACITY IS PERMITTED, WHERE ALLOWED IN THE TABLE, BY MULTIPLYING THE TABULATED VALUE BY THE RATIO OF THE ACTUAL BEAM WEB THICKNESS TO THE MINIMUM BEAM WEB THICKNESS TABULATED. THIS CAN BE EXPRESSED AS FOLLOWS:

   ACTUAL REACTION CAPACITY = (TABULATED REACTION CAPACITY) x (ACTUAL WEB THICKNESS / TABULATED MINIMUM WEB THICKNESS)

6. WHERE TABULATED REACTION CAPACITIES DO NOT HAVE * OR ** INCREASES SHALL NOT EXCEED THE FOLLOWING RESPECTIVE ULTIMATE REACTION CAPACITIES:

DEPTH	ULTIMATE REACTION (KIPS)	
	3/8" DIA BOLTS	7/8" DIA BOLTS
W8	48	45
W10	48	45
W12	76	71
W14	95	89
W16	126	122
W18	156	155
W21	187	-
W24	251	-

A9 PRE-ENGINEERED ALL-BOLTED DOUBLE ANGLE CONNECTION
TYPICAL DETAIL
NTS

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TEXAS REGISTRATION NO.
Engineer: 80351
Architect: 16180

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

PROJECT No.: 21087
ISSUE DATE: 08.16.22
DRAWN BY: LA
CHECKED BY: JG

Sheet Name
TYPICAL PRE-ENGINEERED STEEL CONNECTION DETAILS

Sheet Number
SG009

Project Status:
100% SCHEMATIC DESIGN

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Autodesk Docs://21087 - Hidalgo County El Paraiso Building/21087 - STRUCT - HC El Paraiso Bldg.rvt

GROUT THICKNESS SCHEDLUE	
BASE PLATE SMALLER PLAN DIMENSION	MINIMUM GROUT THICKNESS
18" OR LESS	1 1/2"
19" TO 24"	1 1/2"
25" TO 30"	2"
31" TO 36"	2 1/2"
37" TO 42"	3"
43 TO 48"	3 1/2"
49" TO 54"	4"
> 54"	SEE NOTE 2

NOTES:

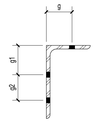
1. REFERENCE SPECIFICATIONS AND GENERAL NOTES FOR GROUT STRENGTH AND INSTALLATION.
2. PROVIDE AN ADDITIONAL 1/2" THICKNESS OF GROUT FOR EACH ADDITIONAL 6" OF SMALLER BASE PLATE PLAN DIMENSION.

J1 GROUT THICKNESS SCHEDULE
NTS

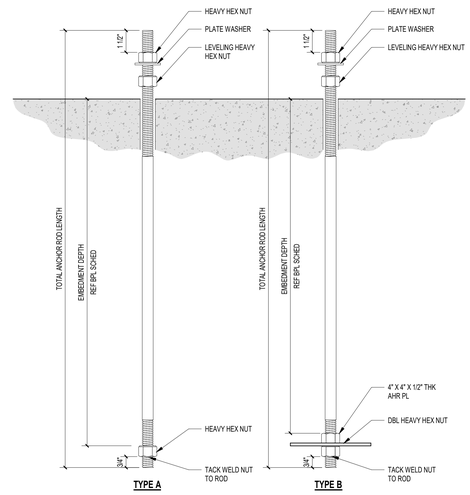
ANGLE LEGS WORKABLE GAGE SCHEDULE									
LEG	8	7	6	5	4	3 1/2	3	2 1/2	2
g	4 1/2	4	3 1/2	3	2 1/2	2	1 3/4	1 3/8	1 1/8
g1	3	2 1/2	2 1/4	2	-	-	-	-	-
g2	3	3	2 1/2	1 3/4	-	-	-	-	-

NOTE:

1. TABULATED VALUES ARE IN INCHES.



J5 ANGLE LEGS WORKABLE GAGE SCHEDULE
NTS



NOTES:

1. REFERENCE COLUMN BASE PLATE SCHEDULE FOR ANCHOR ROD SIZE AND EMBEDMENT LENGTH.
2. ALL NUTS SHALL BE TIGHTENED TO A SNUG-TIGHT CONDITION IN ACCORDANCE TO AISC 360 AND RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC) SPECIFICATION.
3. HEAVY HEX NUTS SHALL CONFORM TO ASTM A563.
4. WASHERS SHALL CONFORM TO ASTM F436.

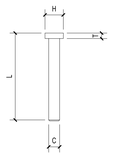
E12 ANCHOR ROD TYPICAL DETAIL
NTS

HEADED STUD DIMENSIONAL SCHEDULE		
SHANK DIAMETER (C)	HEAD * DIAMETER (H)	MINIMUM HEAD HEIGHT (T)
1/2"	1"	9/32"
5/8"	1 1/4"	9/32"
3/4"	1 1/4"	3/8"
7/8"	1 3/8"	3/8"
1"	1 5/8"	1/2"

* TOLERANCE SHALL BE ±1/64"

HEADED STUD STRENGTH PROPERTIES:

STUD TYPE	F_u (KSI)	F_y (KSI)
TYPE A	49	61
TYPE B	51	65
TYPE C	-	80

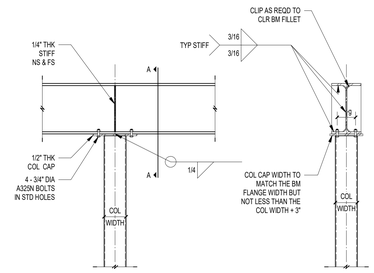


NOTE: "L" IS THE MANUFACTURED LENGTH BEFORE WELDING.

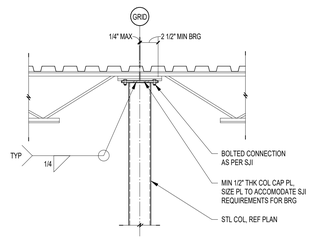
NOTES:

1. TYPE A, B, AND C HEADED STUDS SHALL MEET THE MINIMUM MECHANICAL PROPERTIES IN AWS D1.1 TABLE 7.1 WHEN TESTED IN ACCORDANCE TO ASTM A370.
2. HEADED STUDS SHALL CONFORM TO ASTM A108.
3. TYPE A OR C HEADED STUDS SHALL NOT BE USED FOR SHEAR TRANSFER IN COMPOSITE CONSTRUCTION.
4. HEADED STUDS MUST COMPLY WITH THE DIMENSIONAL REQUIREMENTS AND MECHANICAL PROPERTIES ESTABLISHED IN THIS DETAIL TO BE CONSIDER AN "AWS HEADED STUD".
5. THE CONTRACTOR SHALL SUBMIT CERTIFIED MATERIAL TEST REPORTS INDICATING DIAMETER, CHEMICAL PROPERTIES, AND GRADE ON EACH HEAT NUMBER DELIVERED.

E1 HEADED STUD ANCHOR TYPICAL DETAIL
NTS

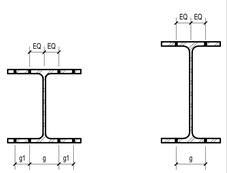


E5 STEEL BEAM BEARING ON HSS COLUMN TYPICAL DETAIL
NTS



E9 STEEL JOIST TO HSS COLUMN TYPICAL DETAIL
NTS

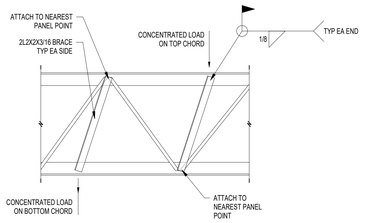
WIDE FLANGE WORKABLE GAGE SCHEDULE		
SHAPE	g (IN)	g1 (IN)
W4 (ALL)	2 1/4	
W5 (ALL)	2 3/4	
W6X8.5 - W6X16	2 1/4	
W6X15 - W6X25	3 1/2	
W8X10 - W8X15	2 1/4	
W8X18 - W8X21	2 3/4	
W8X24 - W8X28	4	
W10X12 - W10X19	2 1/4	
W10X22 - W10X30	2 3/4	
W12X14 - W12X22	2 1/4	
W12X26 - W12X35	3 1/2	
W14X22 - W14X26	2 3/4	
W14X30 - W14X38	3 1/2	
W14X145 - W14X730	7 1/2	3
W16X26 - W16X57	3 1/2	
W18X35 - W18X71	3 1/2	
W21X44 - W21X57	3 1/2	
W24X55 - W24X62	3 1/2	
W36X231 - W36X800	7 1/2	
W40X149 - W40X593	7 1/2	



NOTES:

1. FOR ALL OTHER SHAPES NOT SCHEDULED, THE WORKABLE GAGE, g, EQUALS 5 1/2 INCHES.
2. GAGE DISTANCES ARE MEASURED FROM THE CENTER OF THE BOLT HOLES.

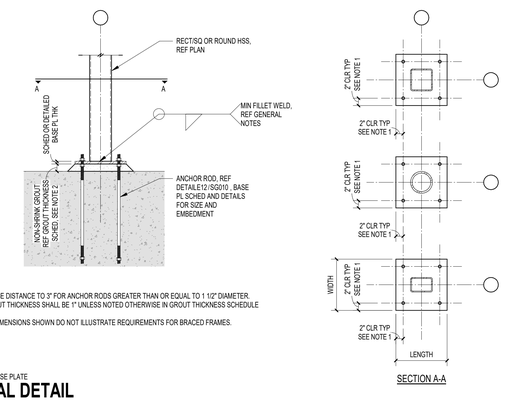
A1 WIDE FLANGE WORKABLE GAGE TYPICAL DETAIL
NTS



NOTES:

1. PROVIDE BRACE AT LOCATIONS OF CONCENTRATED LOADS, SUCH AS, PARTITIONS, HEAVY PIPES, HOT WATER LINES, CHILLED WATER LINES, MECHANICAL UNITS, HEAVY LIGHTS, HEAVY CEILINGS, AND ANY OTHER CONCENTRATED LOADS, AND AS NOTED ELSEWHERE IN THE STRUCTURAL DRAWINGS.
2. PROVIDE THIS DETAIL FOR HANGING LOADS GREATER THAN 50 LBS.
3. THE GENERAL CONTRACTOR SHALL COORDINATE AND SUBMIT ALL CONCENTRATED LOADS AND THEIR LOCATIONS APPLICABLE TO THIS DETAIL TO THE JOIST MANUFACTURER TWO WEEKS PRIOR TO FABRICATION.

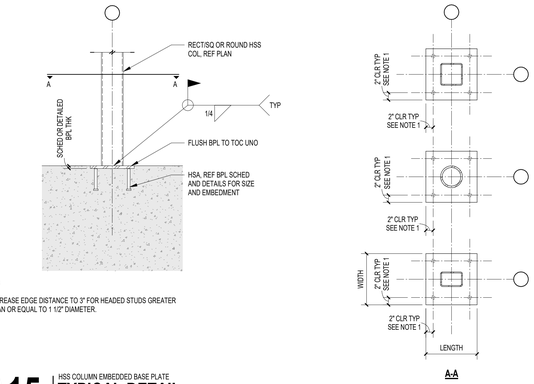
A5 STEEL JOIST BRACING FOR CONCENTRATED LOADS TYPICAL DETAIL
NTS



NOTES:

1. INCREASE EDGE DISTANCE TO 3" FOR ANCHOR RODS GREATER THAN OR EQUAL TO 1 1/2" DIAMETER.
2. MINIMUM GROUT THICKNESS SHALL BE 1" UNLESS NOTED OTHERWISE IN GROUT THICKNESS SCHEDULE OR DETAILS.
3. BASE PLATE DIMENSIONS SHOWN DO NOT ILLUSTRATE REQUIREMENTS FOR BRACED FRAMES.

A9 HSS COLUMN BASE PLATE TYPICAL DETAIL
NTS



NOTES:

1. INCREASE EDGE DISTANCE TO 3" FOR HEADED STUDS GREATER THAN OR EQUAL TO 1 1/2" DIAMETER.

A15 HSS COLUMN EMBEDDED BASE PLATE TYPICAL DETAIL
NTS

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ELI ROCHA, P.E., AIA
TEXAS REGISTRATION NO.
Engineer: 80301
Architect: 16180

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

PROJECT No.: 21087
ISSUE DATE: 08.16.22
DRAWN BY: LA
CHECKED BY: JG

Sheet Name

TYPICAL STRUCTURAL STEEL DETAILS & SCHEDULES

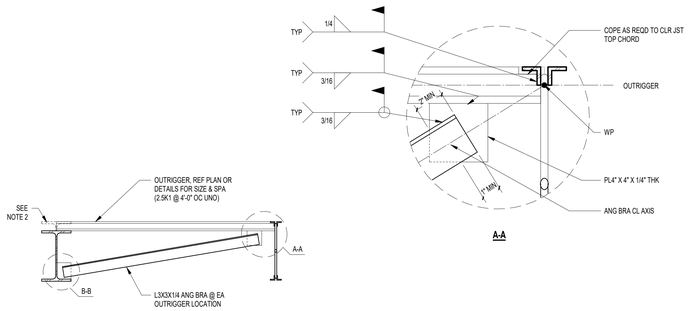
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SG010

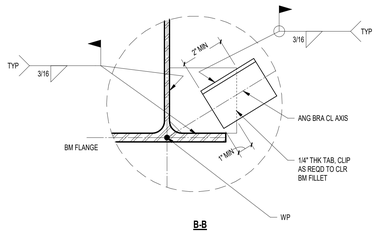
Project Status:

100% SCHEMATIC DESIGN

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A-A

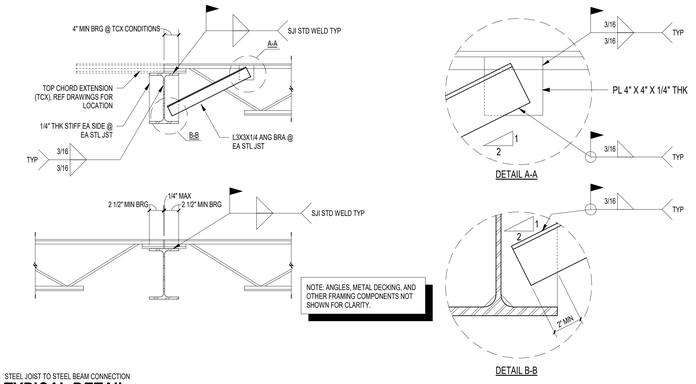


B-B

NOTES:

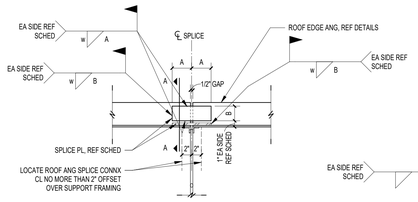
1. THIS DETAIL IS APPLICABLE TO ALL ROOF END BAYS UNLESS NOTED OR DETAILED OTHERWISE.
2. WHEN THE STEEL BEAM IS THE SAME ELEVATION AS THE JOIST, USE THE CONNECTION ARRANGEMENT ILLUSTRATED IN DETAIL A-A.

L1 | END BAY STEEL JOIST TO STEEL BEAM OUTRIGGER CONNECTION
TYPICAL DETAIL
NTS



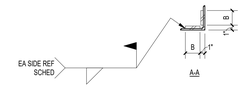
J8 | STEEL JOIST TO STEEL BEAM CONNECTION
TYPICAL DETAIL
NTS

ROOF EDGE ANGLE SPLICE SCHEDULE				
ANGLE	SPLICE PL THICKNESS	DIM "A"	DIM "B"	w
L3X3	1/2"	4"	1 1/2"	3/16"
L4X4	3/8"	4"	2 1/2"	3/16"
L5X5	7/16"	4"	3 1/2"	1/4"

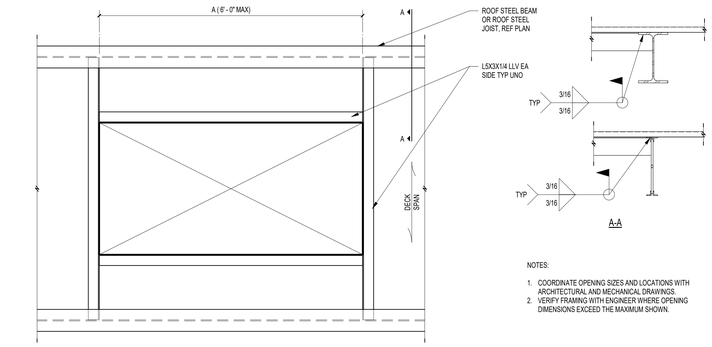


NOTES:

1. THIS DETAIL IS APPLICABLE TO ALL ROOF EDGE ANGLE UNLESS NOTED OR DETAILED OTHERWISE.



J15 | ROOF EDGE ANGLE SPLICE CONNECTION
TYPICAL DETAIL
1" = 1'-0"

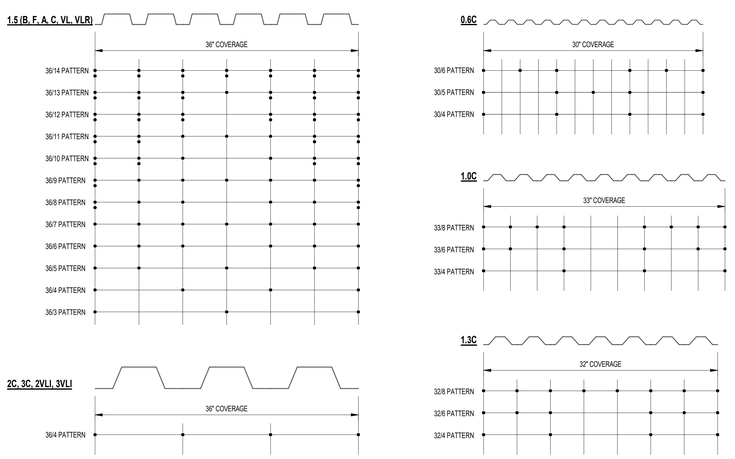


A-A

NOTES:

1. COORDINATE OPENING SIZES AND LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. VERIFY FRAMING WITH ENGINEER WHERE OPENING DIMENSIONS EXCEED THE MAXIMUM SHOWN.

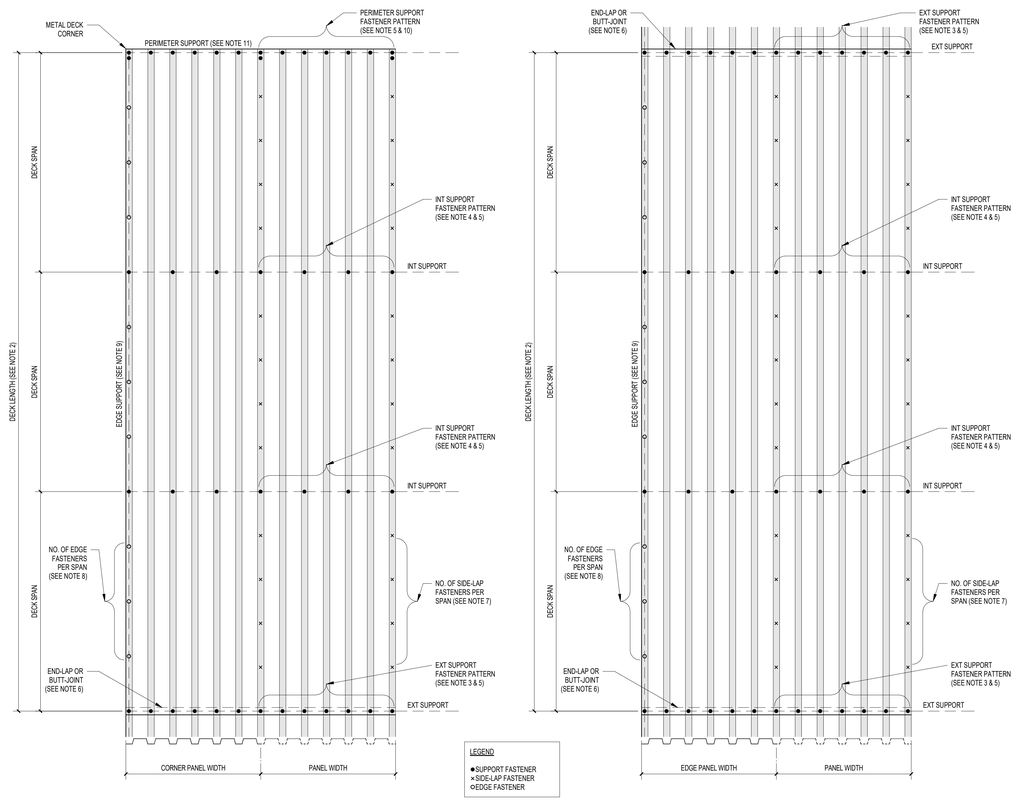
G1 | ROOF OPENING FRAMING
TYPICAL DETAIL
NTS



NOTES:

1. WELDED FASTENERS SHALL BE INSTALLED BY QUALIFIED OPERATORS FOLLOWING AWS D1.3.
2. THE QUALIFIED WELDER SHALL TAKE PARTICULAR CARE WHEN WELDING DECK TO STEEL JOISTS IN ORDER TO AVOID DAMAGE TO THE JOIST CHORDS.
3. WELDING ELECTRODES FOR ARC SPOT WELDS SHALL BE E60XX UNLESS NOTED OTHERWISE.
4. SCREWS MUST BE INSTALLED USING PROPERLY CALIBRATED TOOLS TO AVOID STRIPPING THE THREADS OR SEVER THE SCREW.

A1 | METAL DECKING SUPPORT FASTENER PATTERNS
TYPICAL DETAIL
NTS



NOTES:

1. ALL SUPPORT, SIDE-LAP, AND EDGE FASTENERS SHOWN IN THIS DETAIL ARE FOR ILLUSTRATIVE PURPOSES ONLY. REFERENCE THE GENERAL NOTES FOR ACTUAL PROJECT SPECIFIC FASTENER PATTERNS.
2. THE DECK LENGTH SHOWN IN THIS DETAIL ILLUSTRATES A 3-SPAN CONDITION; HOWEVER, OTHER SPAN CONDITIONS MAY BE SPECIFIED IN THE GENERAL NOTES.
3. AN EXTERIOR SUPPORT FASTENER PATTERN OCCURS AT THE END OF THE DECK LENGTH WHERE AN END-LAP OR A BUTT-JOINT OCCURS.
4. THE INTERIOR SUPPORT FASTENER PATTERN OCCURS OVER INTERIOR SUPPORT PURLINS.
5. REFERENCE DETAIL 04/SG018 FOR TYPICAL SUPPORT FASTENER PATTERNS.
6. THE END OF THE DECK CONDITION SHALL BE AN END-LAP INSTALLATION FOR ROOF DECKS, AND A BUTT-JOINT INSTALLATION FOR FORM DECKS AND COMPOSITE DECKS.
7. SIDE-LAP FASTENERS SHALL BE EQUALLY SPACED WITHIN EACH DECK SPAN AND SHALL BE INSTALLED IN A LAP-DOWN CONFIGURATION.
8. EDGE FASTENERS ARE LOCATED ON PERIMETER EDGE PARALLEL TO THE DECK SPAN. EDGE FASTENERS SHALL BE EQUALLY SPACED WITHIN EACH DECK SPAN.
9. THE EDGE PANEL SHALL BE TERMINATED AT AN EDGE SUPPORT WITH A LAP-DOWN INSTALLATION. LAP-UP INSTALLATIONS ARE NOT PERMITTED.
10. THE PERIMETER SUPPORT FASTENER PATTERN OCCURS AT THE END OF THE DECK TERMINATING AT THE PERIMETER EDGE PERPENDICULAR TO THE DECK SPAN.
11. THE CORNER PANEL SHALL BE TERMINATED AT AN EDGE SUPPORT, PARALLEL TO THE DECK SPAN, WITH A LAP-DOWN INSTALLATION AND TERMINATED AT A PERIMETER SUPPORT, PERPENDICULAR TO THE DECK SPAN, USING A PERIMETER SUPPORT FASTENER PATTERN.

A8 | METAL DECKING ATTACHMENT DIAGRAM
TYPICAL DETAIL
3/4" = 1'-0"

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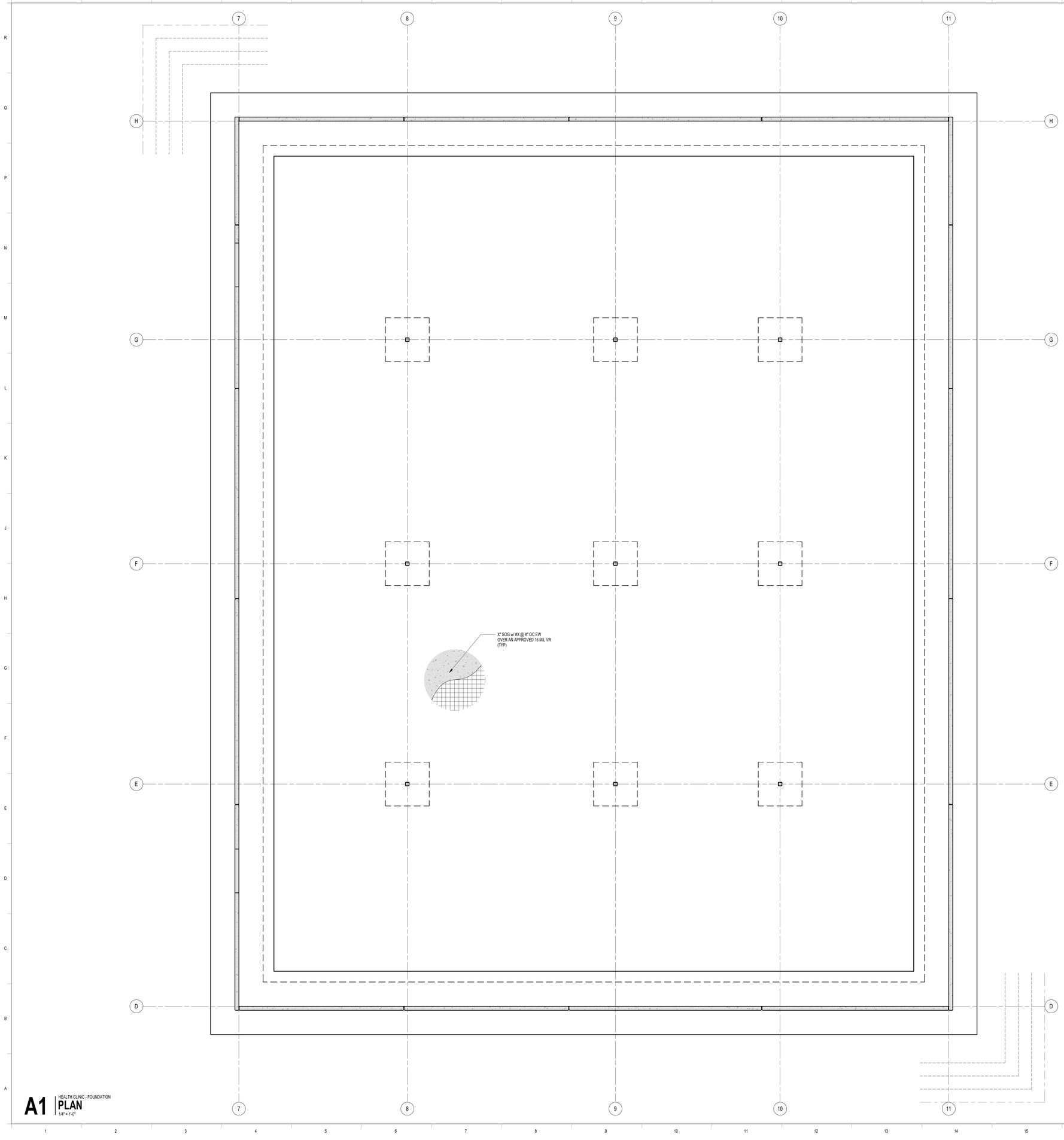
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Project Status:

100% SCHEMATIC DESIGN

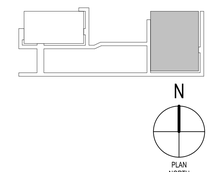
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FOUNDATION NOTES:

1. THE FINISH FLOOR ELEVATION (FFE = 100'-0") IS AN ARCHITECTURAL REFERENCE DATUM. ALL ELEVATIONS SHOWN WITHIN THESE CONTRACT STRUCTURAL DRAWINGS ARE WITH RESPECT TO THE ARCHITECTURAL REFERENCE DATUM. THIS IS NOT THE SAME AS THE ABOVE MEAN SEA LEVEL (AMSL) ELEVATION. REFERENCE THE CIVIL DRAWINGS FOR THE FINISH FLOOR ELEVATION IN ABOVE MEAN SEA LEVEL.
2. REFERENCE THE ARCHITECTURAL DRAWINGS FOR ALL FLOOR DEPRESSIONS, FLOOR DRAINS, AND ADDITIONAL DIMENSIONS COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
3. REFERENCE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR OPENINGS AND PENETRATIONS NOT SHOWN. REFERENCE TYPICAL DETAILS FOR ADDITIONAL STEEL REQUIREMENTS.
4. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS BEFORE COMMENCING WORK. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER PRIOR TO COMMENCING WORK.
5. REFERENCE SG002 FOR THE CLASSES OF CONCRETE MATRIX AND ADDITIONAL INFORMATION.
6. PROVIDE A 15 MIL VAPOR RETARDER UNDER ALL FOUNDATIONS (EXCEPT CANOPY FOUNDATIONS) UNLESS NOTED OR DETAILED OTHERWISE. REFERENCE THE GENERAL NOTES FOR ADDITIONAL INFORMATION.
7. REFERENCE SG007 AND SG008 FOR TYPICAL FOUNDATION DETAILS.
8. FOR LARGE INSERTS SUCH AS (BUT NOT LIMITED TO): FLOOR BOXES, FLOOR SINKS, ETC., PROVIDE A THICKENED SLAB WITH 3" MINIMUM DEPTH BELOW THE BOTTOM OF THE INSERT AND 3" FROM THE EDGE OF THE INSERT ALL AROUND. PROVIDE 0.18% (PERCENT AREA OF THICKENED CONCRETE SLAB) IN REINFORCING STEEL AT THE BOTTOM EACH WAY. REINFORCE AROUND THE OPENING WITH TYPICAL OPENING REINFORCING. REFERENCE FOR OPENING REINFORCING. FOR INSERTS GREATER THAN 1'-0" PROVIDE #3 STIRRUPS AT 8" ON CENTER WITH 1 - #5 TOP AND BOTTOM AROUND PERIMETER OF INSERT.
9. REFERENCE THE "FOUNDATION SUBGRADE" GENERAL NOTES FOR BUILDING PAD REQUIREMENTS. REFERENCE THE PROJECT GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
10. PROVIDE A SMOOTH FINISH AT ALL EXTERIOR FOUNDATION SURFACES 12"(MINIMUM) BELOW THE FINISH FLOOR ELEVATION (FFE).

KEYPLAN



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HEALTH CLINIC - FOUNDATION PLAN

Sheet Number

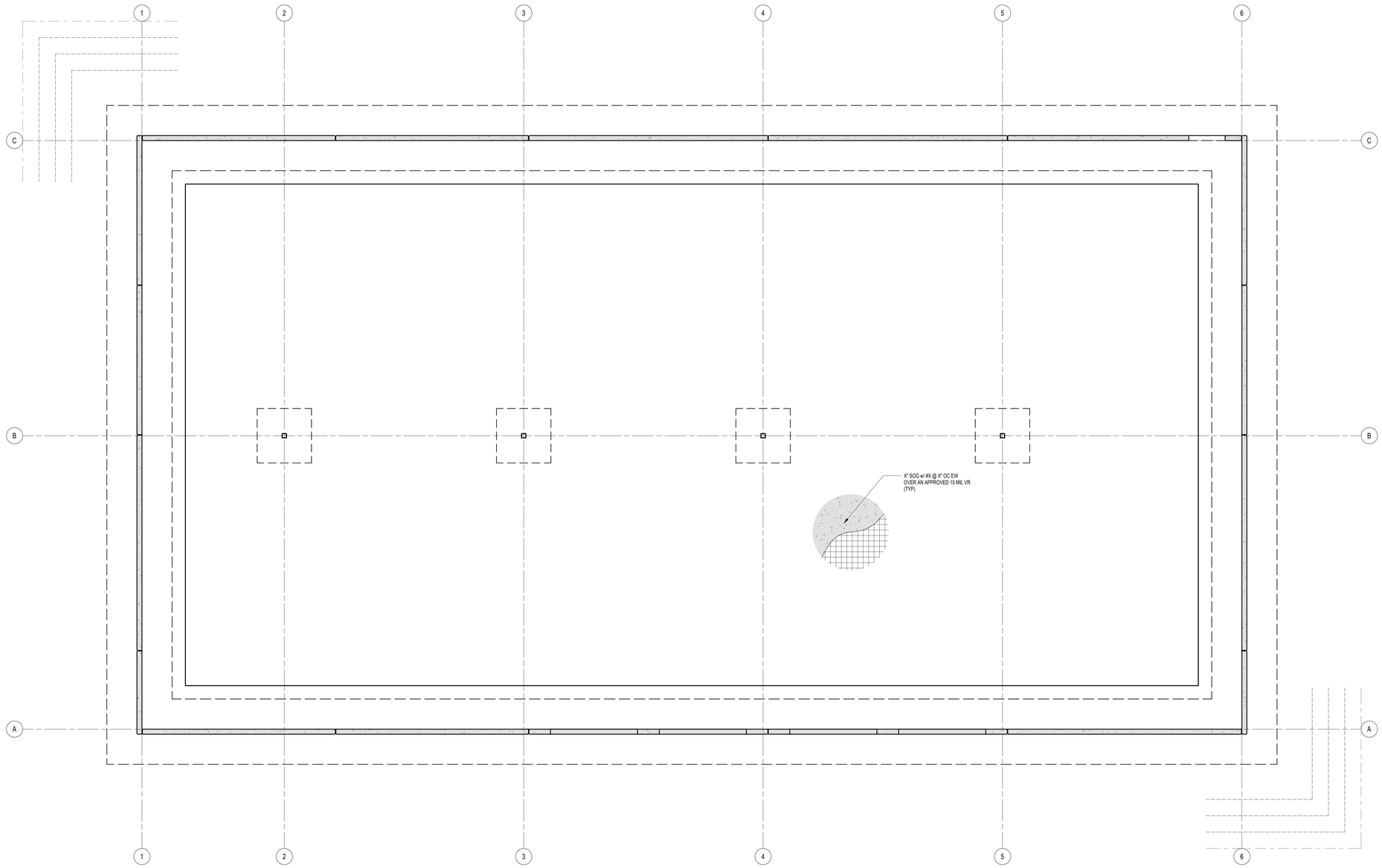
SB101

Project Status:

100% SCHEMATIC DESIGN

A1 HEALTH CLINIC - FOUNDATION
PLAN
1/4" = 1'-0"

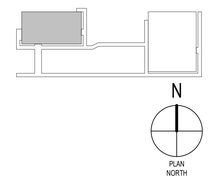
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FOUNDATION NOTES:

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2. REFERENCE THE ARCHITECTURAL DRAWINGS FOR ALL FLOOR DEPRESSIONS, FLOOR DRAINS, AND ADDITIONAL DIMENSIONS. COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
3. REFERENCE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR OPENINGS AND PENETRATIONS NOT SHOWN. REFERENCE TYPICAL DETAILS FOR ADDITIONAL STEEL REQUIREMENTS.
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5. REFERENCE SG002 FOR THE CLASSES OF CONCRETE MATRIX AND ADDITIONAL INFORMATION.
6. PROVIDE A 15 MIL VAPOR RETARDER UNDER ALL FOUNDATIONS (EXCEPT CANOPY FOUNDATIONS) UNLESS NOTED OR DETAILED OTHERWISE. REFERENCE THE GENERAL NOTES FOR ADDITIONAL INFORMATION.
7. REFERENCE SG007 AND SG008 FOR TYPICAL FOUNDATION DETAILS.
8. FOR LARGE INSERTS SUCH AS (BUT NOT LIMITED TO): FLOOR BOXES, FLOOR SINKS, ETC., PROVIDE A THICKENED SLAB WITH 3" MINIMUM DEPTH BELOW THE BOTTOM OF THE INSERT AND 3" FROM THE EDGE OF THE INSERT ALL AROUND. PROVIDE 0.18% (PERCENT AREA OF THICKENED CONCRETE SLAB) IN REINFORCING STEEL AT THE BOTTOM EACH WAY. REINFORCE AROUND THE OPENING WITH TYPICAL OPENING REINFORCING. REFERENCE FOR OPENING REINFORCING. FOR INSERTS GREATER THAN 1'-0" PROVIDE #3 STIRRUPS AT 8" ON CENTER WITH 1 - #5 TOP AND BOTTOM AROUND PERIMETER OF INSERT.
9. REFERENCE THE "FOUNDATION SUBGRADE" GENERAL NOTES FOR BUILDING PAD REQUIREMENTS. REFERENCE THE PROJECT GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
10. PROVIDE A SMOOTH FINISH AT ALL EXTERIOR FOUNDATION SURFACES 12"(MINIMUM) BELOW THE FINISH FLOOR ELEVATION (FFE).

KEYPLAN



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CRC - FOUNDATION PLAN

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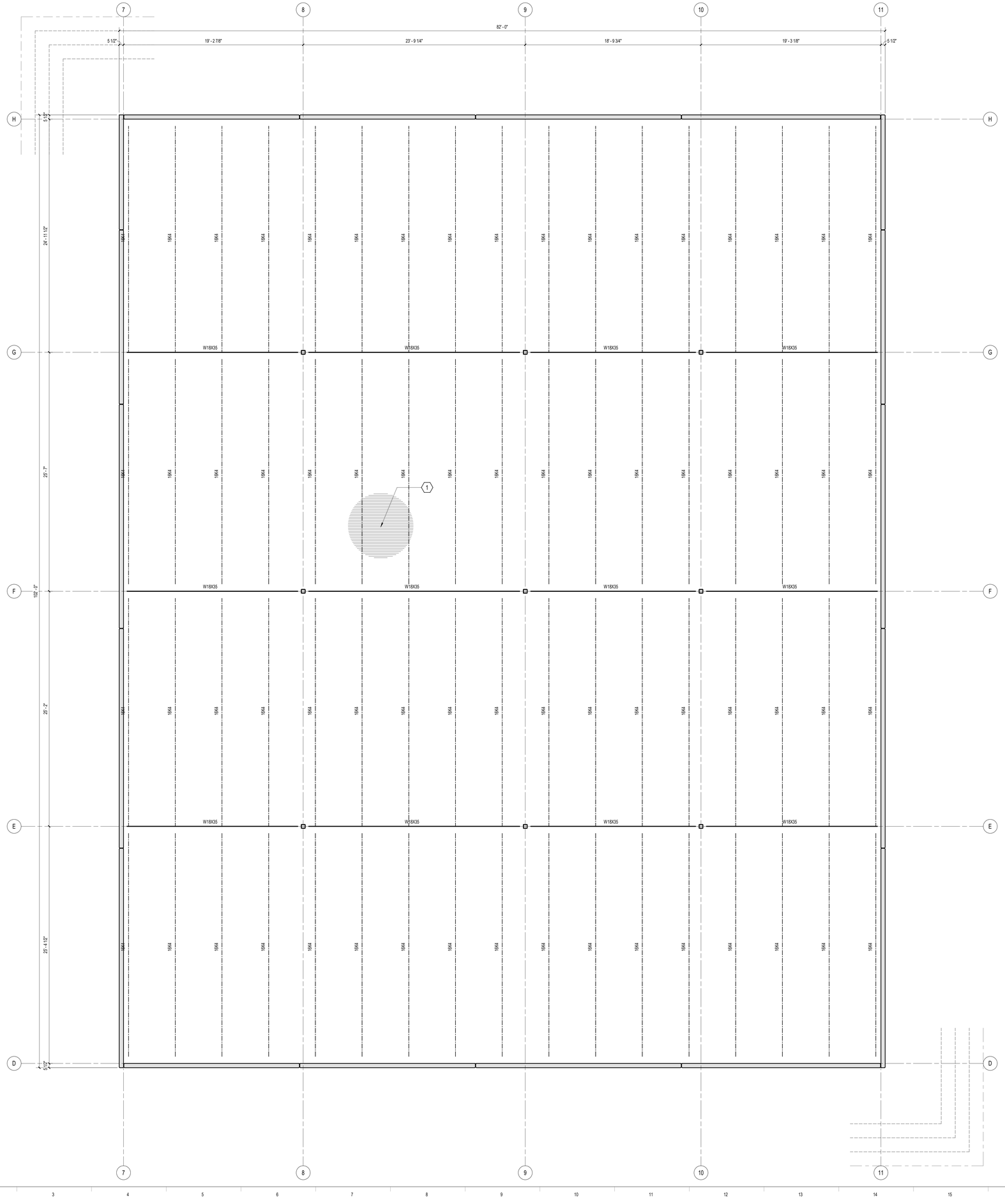
SB102

Project Status:

100% SCHEMATIC DESIGN

A1 CRC - FOUNDATION **PLAN**
1/4" = 1'-0"

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FRAMING NOTES:

1. COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
2. REFERENCE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR OPENINGS AND PENETRATIONS NOT SHOWN. REFERENCE TYPICAL DETAILS FOR ADDITIONAL STEEL REQUIREMENTS.
3. TOP OF STEEL (TOS) ELEVATIONS ARE INDICATED ON THE PLAN.
4. ALL STEEL THAT IS PERMANENTLY EXPOSED TO WEATHER OR IN PERMANENTLY UNCONDITIONED SPACE SHALL BE HOT-DIPPED GALVANIZED. REFERENCE THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
5. PROVIDE A CONTINUOUS L3X3X1/4 AT ALL ROOF EDGES UNLESS NOTED OR DETAILED OTHERWISE.
6. PROVIDE A CONTINOUS 1/4" THICK BENT PLATE AT ALL ROOF VALLEYS AND RIDGES UNLESS NOTED OR DETAILED OTHERWISE.
7. THE CONTRACTOR SHALL SUBMIT THE ACTUAL WEIGHTS OF EQUIPMENT TO BE SUPPORTED BY JOISTS AND/OR JOIST GIRDERS TO THE JOIST MANUFACTURER PRIOR TO FABRICATION AND ERECTION. REFERENCE THE GENERAL NOTES FOR ADDITIONAL INFORMATION.
8. ALL EXTERIOR COMPONENT AND CLADDING SYSTEMS (E.G. WINDOWS, CURTAIN WALLS, STOREFRONTS, EXTERIOR DOORS, ARCHITECTURAL SIDINGS, METAL WALL AND ROOF PANELS, ROOFING SYSTEMS, SKYLIGHTS, ROOF TOP EQUIPMENT, ETC.) MUST MEET MINIMUM WIND REQUIREMENTS AS PRESCIBED BY THE INTERNATIONAL BUILDING CODE (IBC), PROJECT EDITION.
9. ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE.

FRAMING KEYNOTES:

1. 0.6C26 NON-COMPOSITE DECK WITH 2 3/16" NORMALWEIGHT CONCRETE TOPPING REINFORCED WITH 6X6 - W2.9XW2.9 WELD WIRE REINFORCEMENT
2. PRE-ENGINEERED/PRE-MANUFACTURED MISCELLANEOUS METAL STAIRS. REFERENCE ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND ELEVATIONS. REFERENCE THE GENERAL NOTES FOR DESIGN CRITERIA AND ADDITIONAL INFORMATION.

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HEALTH CLINIC - ROOF FRAMING PLAN

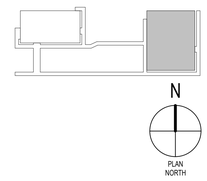
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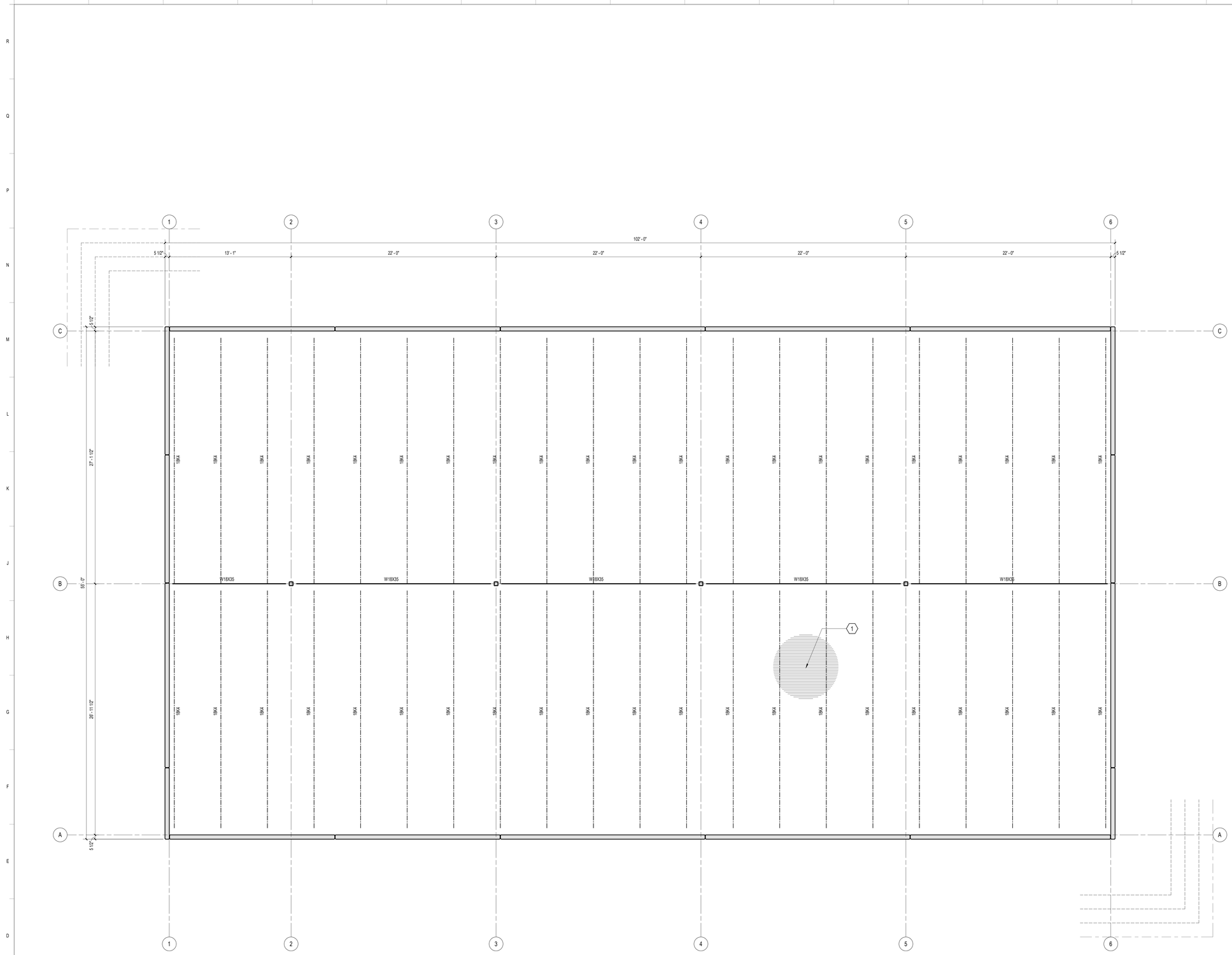
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KEYPLAN



A1 HEALTH CLINIC - ROOF FRAMING
PLAN
1/4" = 1'-0"

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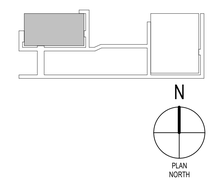
FRAMING NOTES:

1. COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
2. REFERENCE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR OPENINGS AND PENETRATIONS NOT SHOWN. REFERENCE TYPICAL DETAILS FOR ADDITIONAL STEEL REQUIREMENTS.
3. TOP OF STEEL (TOS) ELEVATIONS ARE INDICATED ON THE PLAN.
4. ALL STEEL THAT IS PERMANENTLY EXPOSED TO WEATHER OR IN PERMANENTLY UNCONDITIONED SPACE SHALL BE HOT-DIPPED GALVANIZED. REFERENCE THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
5. PROVIDE A CONTINUOUS L3X3X1/4 AT ALL ROOF EDGES UNLESS NOTED OR DETAILED OTHERWISE.
6. PROVIDE A CONTINOUS 1/4" THICK BENT PLATE AT ALL ROOF VALLEYS AND RIDGES UNLESS NOTED OR DETAILED OTHERWISE.
7. THE CONTRACTOR SHALL SUBMIT THE ACTUAL WEIGHTS OF EQUIPMENT TO BE SUPPORTED BY JOISTS AND/OR JOIST GIRDERS TO THE JOIST MANUFACTURER PRIOR TO FABRICATION AND ERECTION. REFERENCE THE GENERAL NOTES FOR ADDITIONAL INFORMATION.
8. ALL EXTERIOR COMPONENT AND CLADDING SYSTEMS (E.G. WINDOWS, CURTAIN WALLS, STOREFRONTS, EXTERIOR DOORS, ARCHITECTURAL SIDINGS, METAL WALL AND ROOF PANELS, ROOFING SYSTEMS, SKYLIGHTS, ROOF TOP EQUIPMENT, ETC.) MUST MEET MINIMUM WIND REQUIREMENTS AS PRESCIBED BY THE INTERNATIONAL BUILDING CODE (IBC), PROJECT EDITION.
9. ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE.

FRAMING KEYNOTES:

1. 1.5B20 ROOF METAL DECKING. REFERENCE THE GENERAL NOTES FOR ADDITIONAL INFORMATION.

KEYPLAN



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CRC - ROOF FRAMING PLAN

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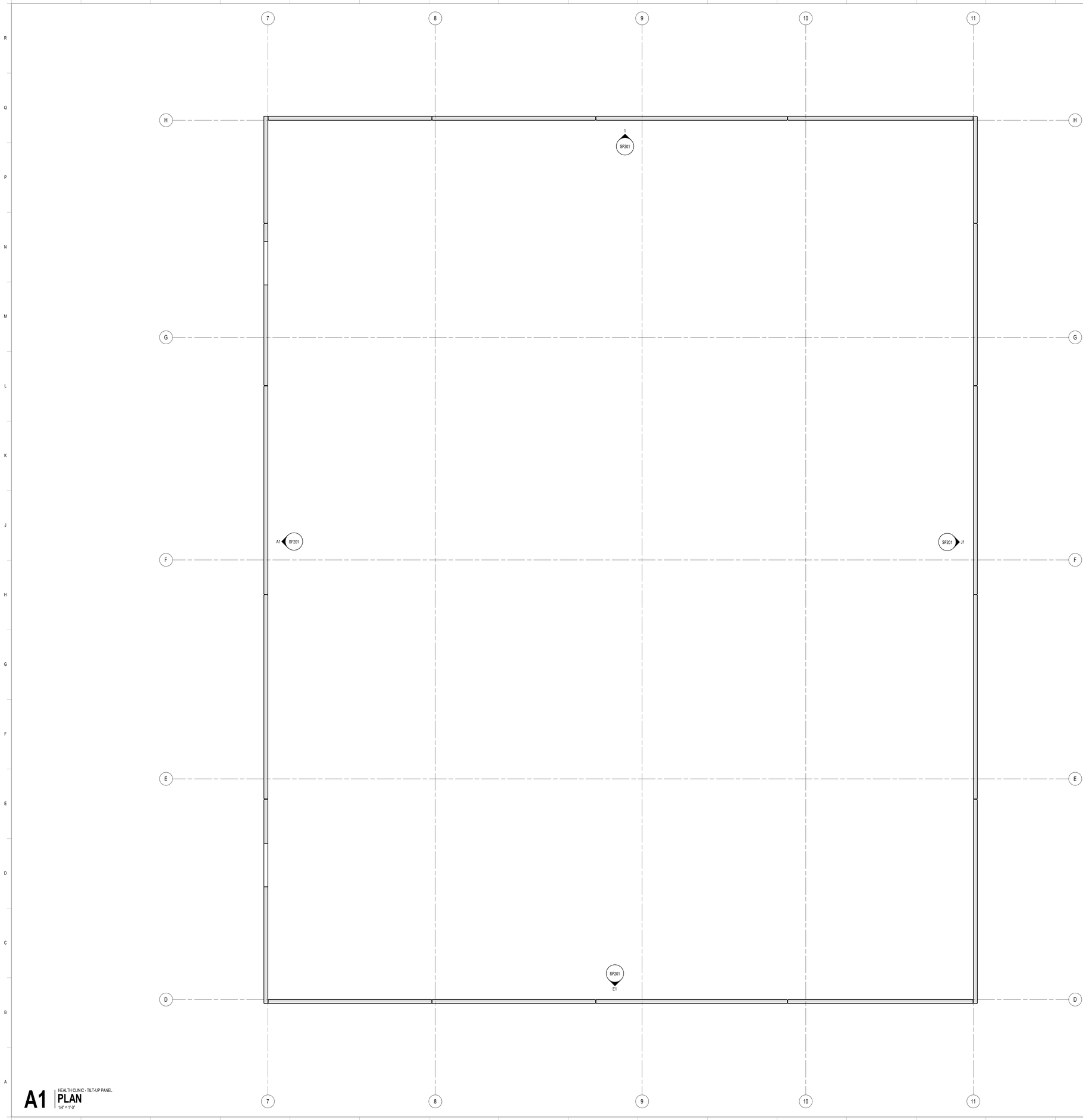
SF102

Project Status:

100% SCHEMATIC DESIGN

A1 CRC - ROOF FRAMING
PLAN
1/4" = 1'-0"

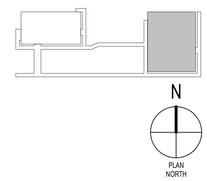
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Autodesk Docs://21087 - Hidalgo County El Paraiso Building/21087 - STRUCT - HC El Paraiso Bldg.rvt



A1 HEALTH CLINIC - TILT-UP PANEL
PLAN
1/4" = 1'-0"

6/16/2022 12:15:51 PM
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ELI ROCHA, P.E., AIA
TEXAS REGISTRATION NO.
Engineer: 80301
Architect: 16180

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
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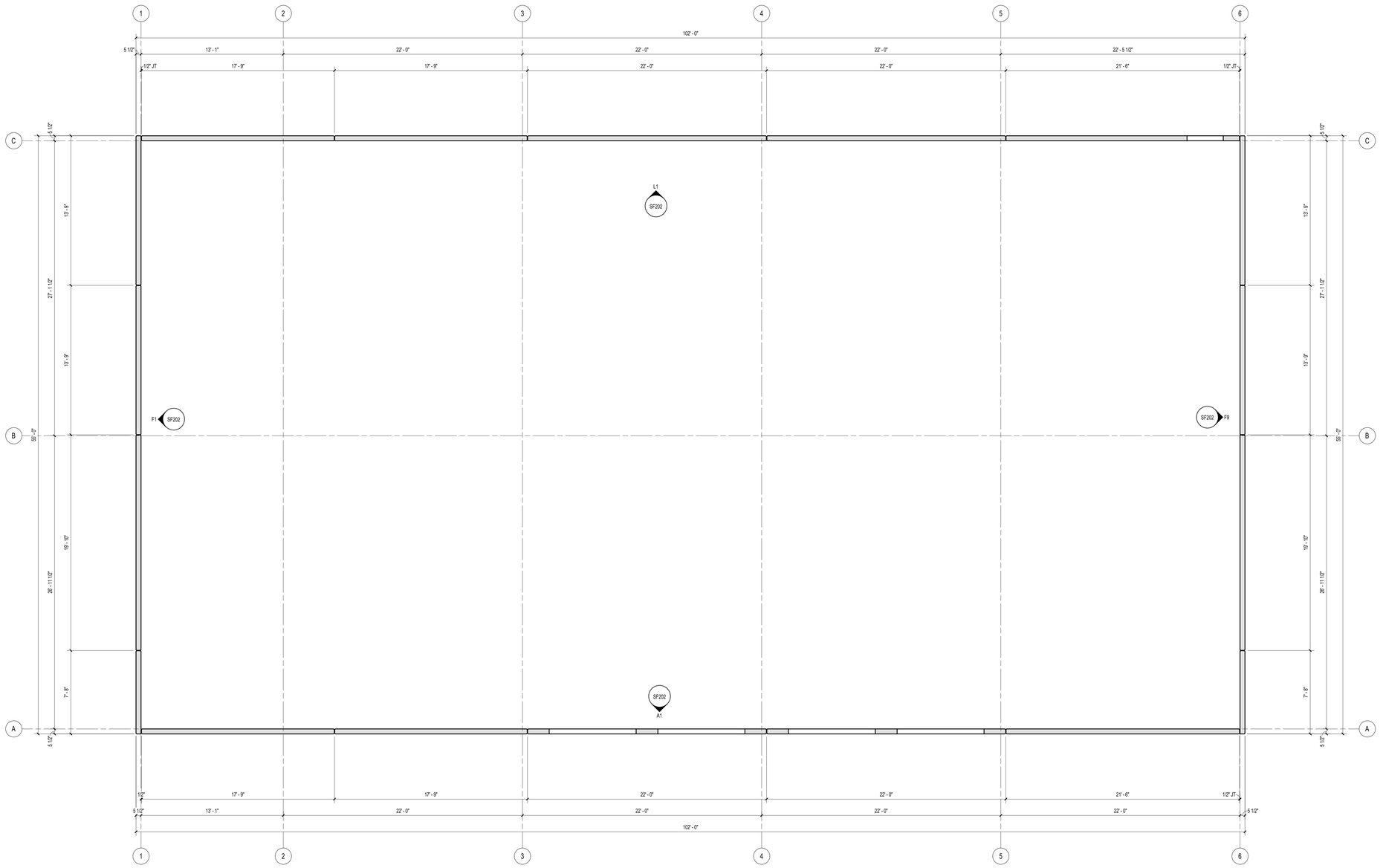
HEALTH CLINIC - TILT-UP PANEL PLAN

Sheet Number

SF103

Project Status:

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HIDALGO COUNTY
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CRC - TILT-UP PANEL PLAN

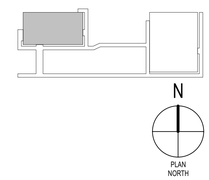
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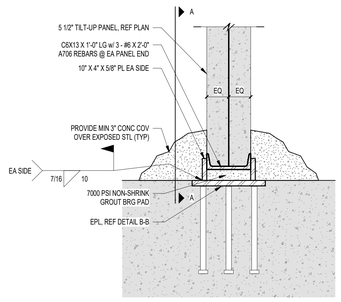
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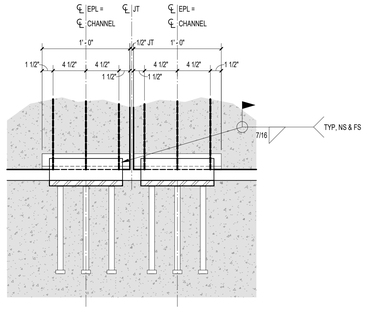
KEYPLAN



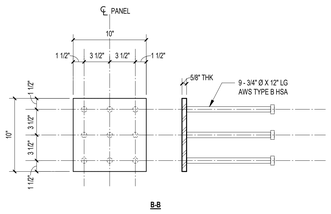
A1 CRC - TILT-UP PANEL
PLAN
1/4" = 1'-0"

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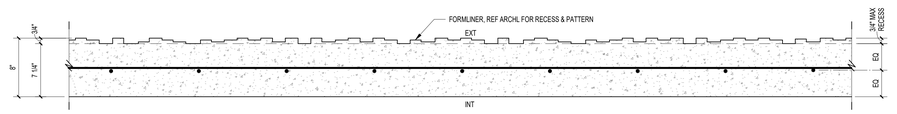




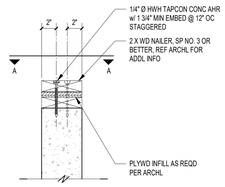
A-A



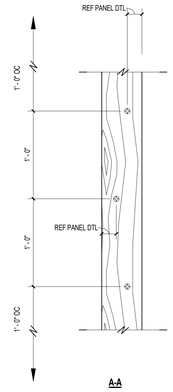
B-B



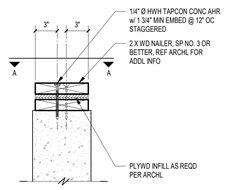
PANELS: P69-P74



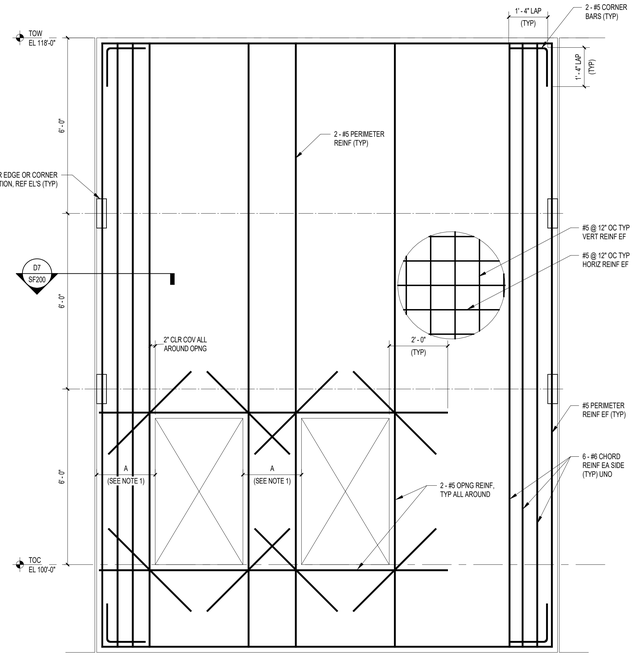
5 1/2" PANEL



A-A



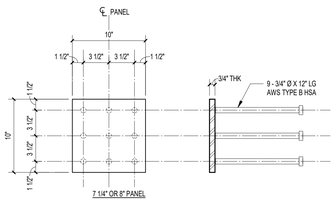
7 1/4" OR 8" PANEL



7 1/4" PANELS: P01, P52
8" PANELS: P69-P74

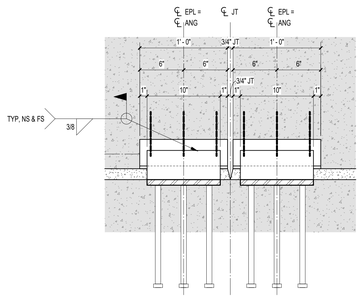
L7 TYPICAL WOOD NAILER ATTACHMENT

NTS

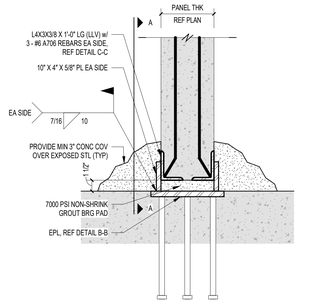


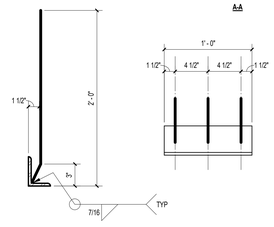
7 1/4" OR 8" PANEL

B-B

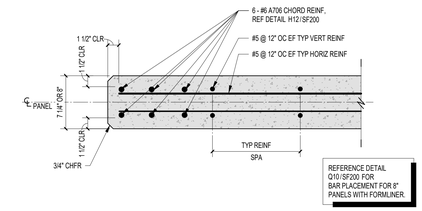


A-A



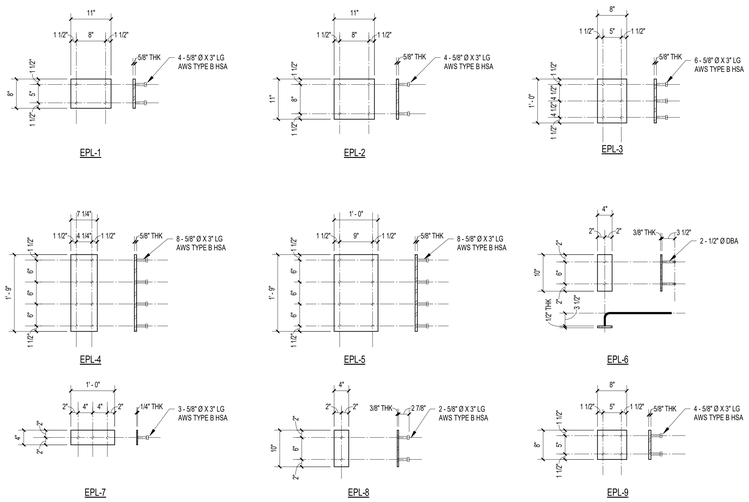


C-C



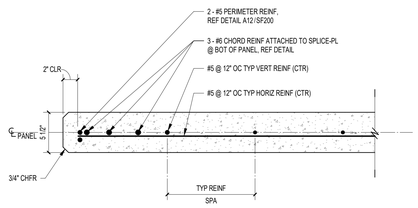
G1 TYPICAL 7 1/4" OR 8" TILT-UP PANEL BEARING DETAIL

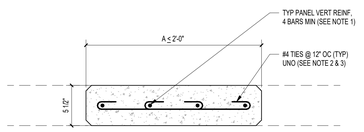
1 1/2" = 1'-0"



G7 7 1/4" OR 8" THICK TILT-UP PANEL BAR PLACEMENT PLAN VIEW

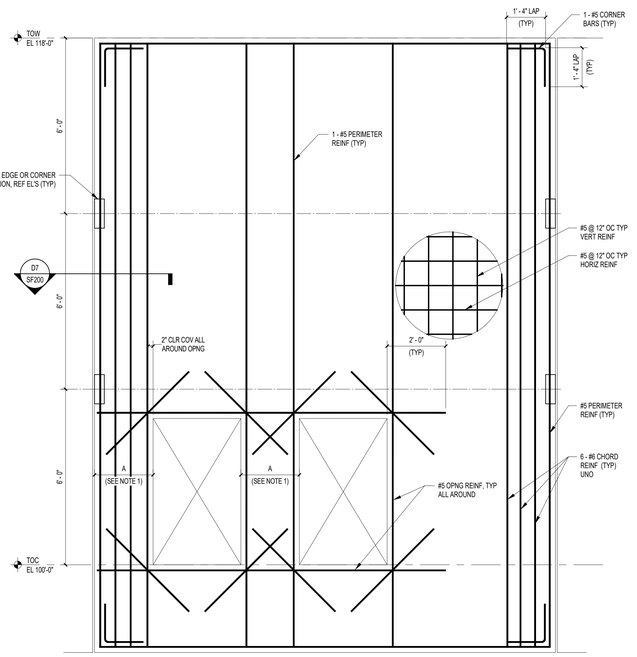
1 1/2" = 1'-0"





NOTES:

1. IN THE CASE A WALL PIER OCCURS BETWEEN THE EDGE OF THE PANEL AND AN OPENING/PENETRATION, THE TYPICAL VERTICAL PERIMETER AND CHORD REINFORCING SHALL BE ENCLOSED BY THE HORIZONTAL TIES.
2. THE TYPICAL HORIZONTAL REINFORCING DOES NOT CONTINUE INTO THE WALL PIER SINCE TIES ARE PRESENT.
3. HORIZONTAL TIES SHALL EXTEND A MINIMUM OF 2'-0" BEYOND THE EXTREME EDGE OF THE OPENING/PENETRATION.



5 1/2" PANELS: P02-P51, P53-P68

A1 EMBEDDED PLATE SCHEDULE1

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Engineer: 80301
Architect: 16190

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
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TYPICAL TILT-UP PANEL ELEVATIONS & DETAILS

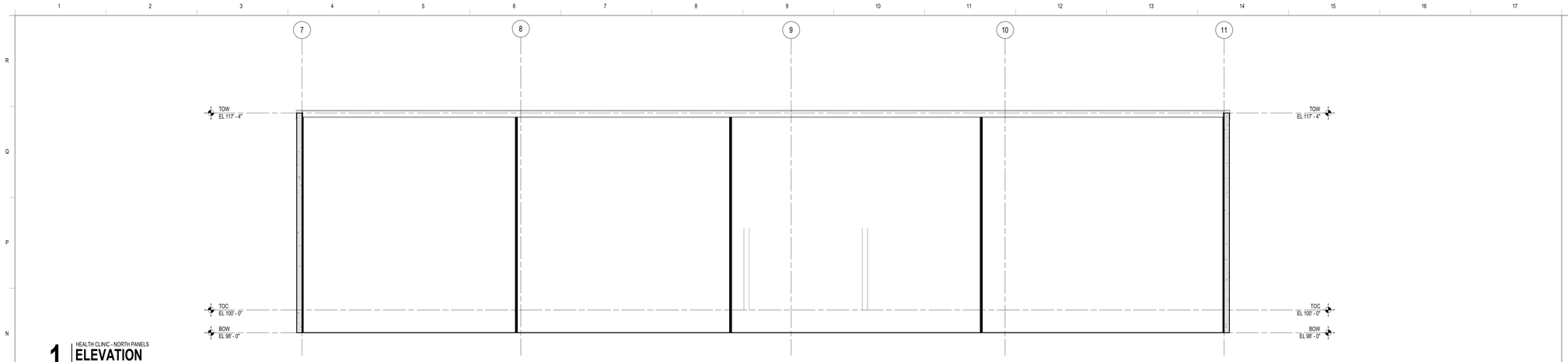
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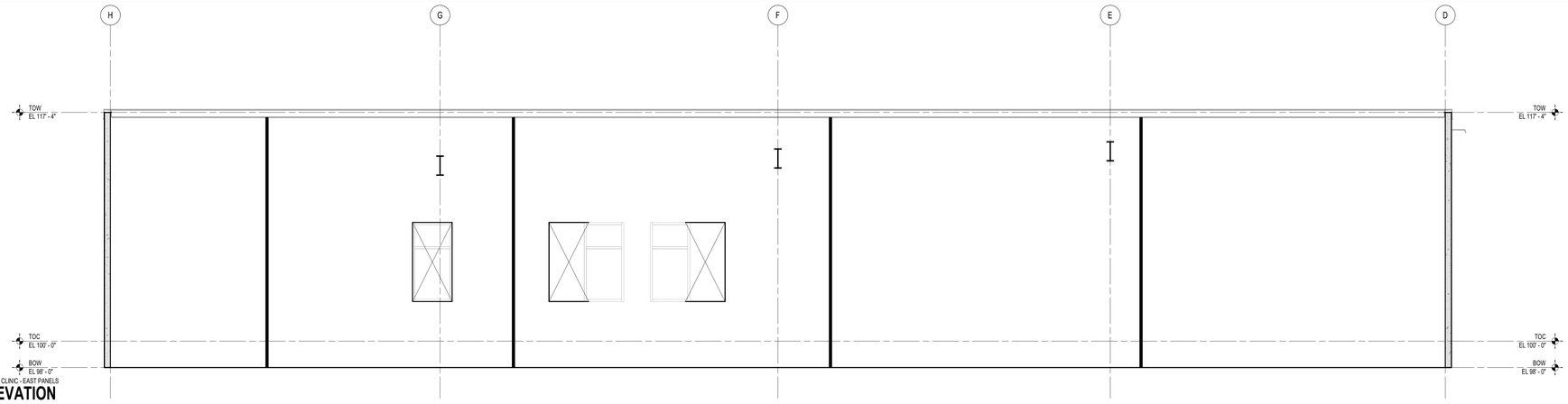
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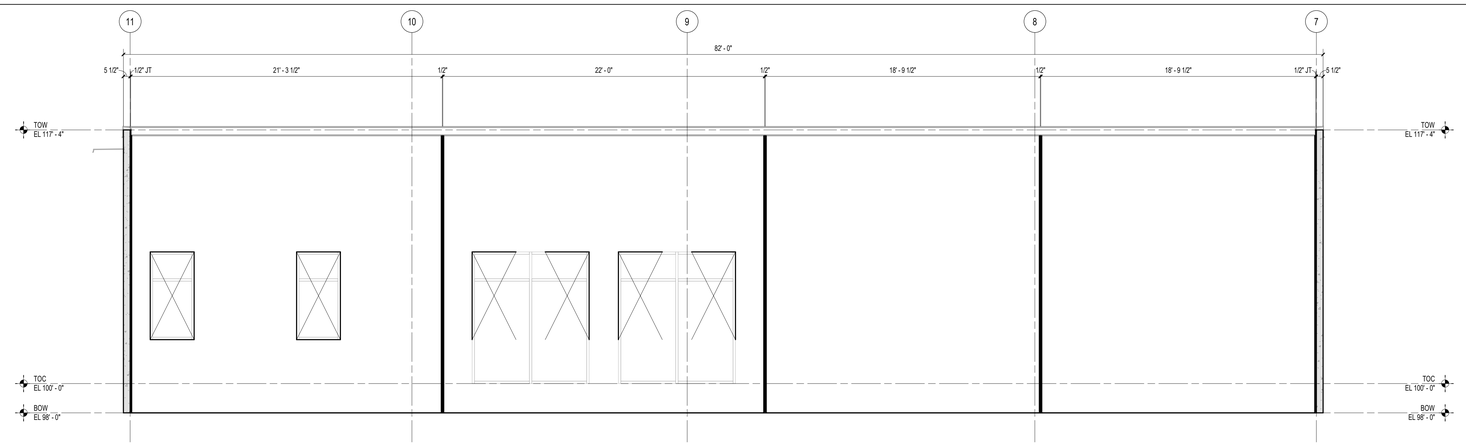
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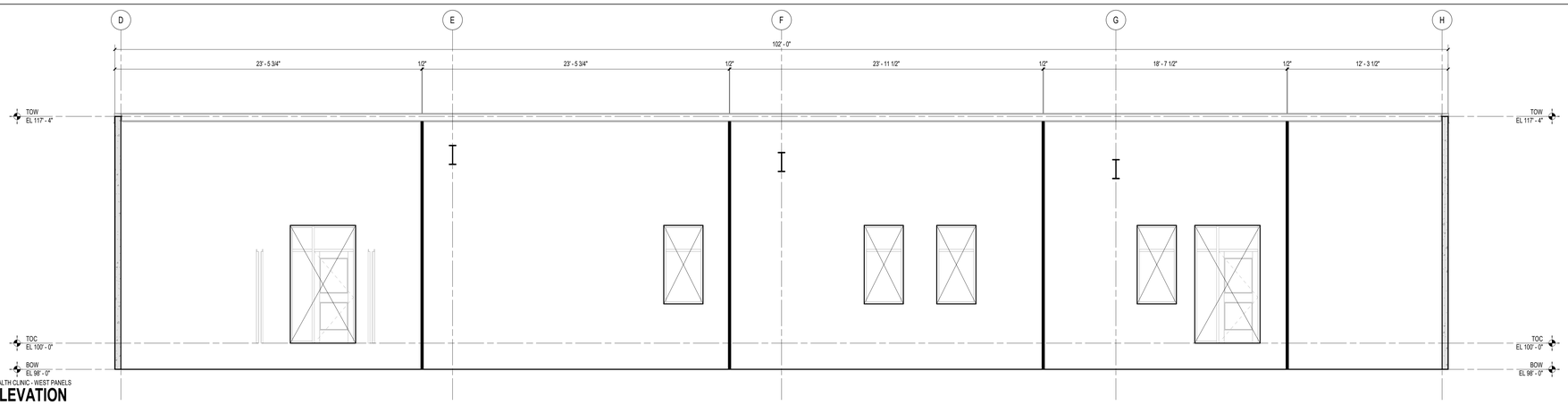
1 HEALTH CLINIC - NORTH PANELS
ELEVATION
1/4" = 1'-0"



J1 HEALTH CLINIC - EAST PANELS
ELEVATION
1/4" = 1'-0"



E1 HEALTH CLINIC - SOUTH PANELS
ELEVATION
1/4" = 1'-0"



A1 HEALTH CLINIC - WEST PANELS
ELEVATION
1/4" = 1'-0"

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Engineer: 80301
Architect: 16180

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TILT-UP PANEL ELEVATIONS

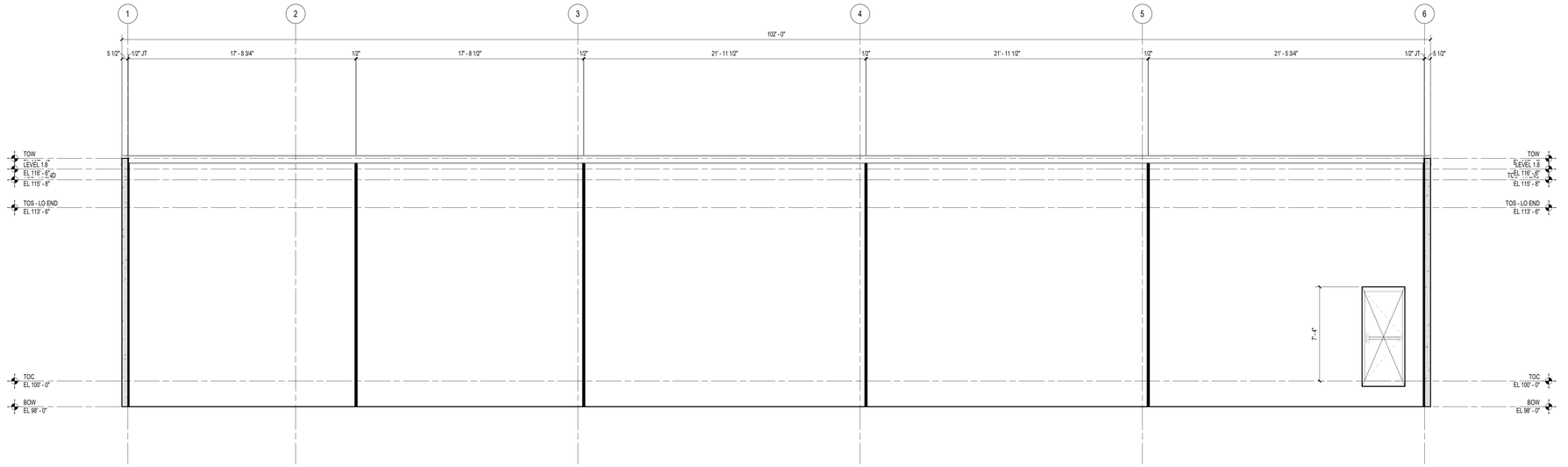
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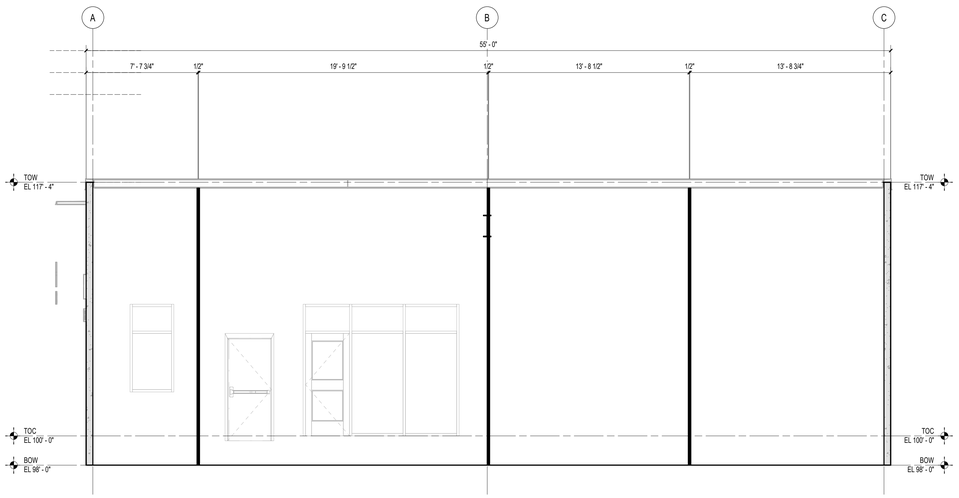
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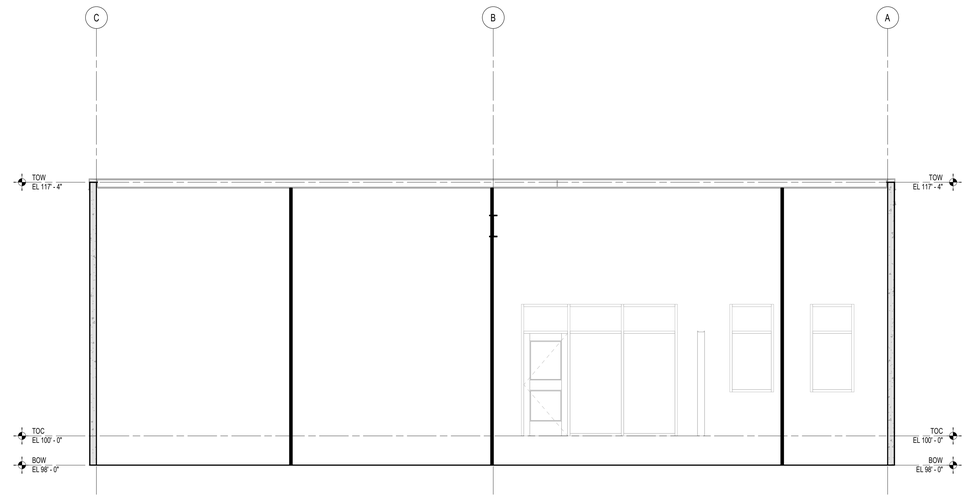
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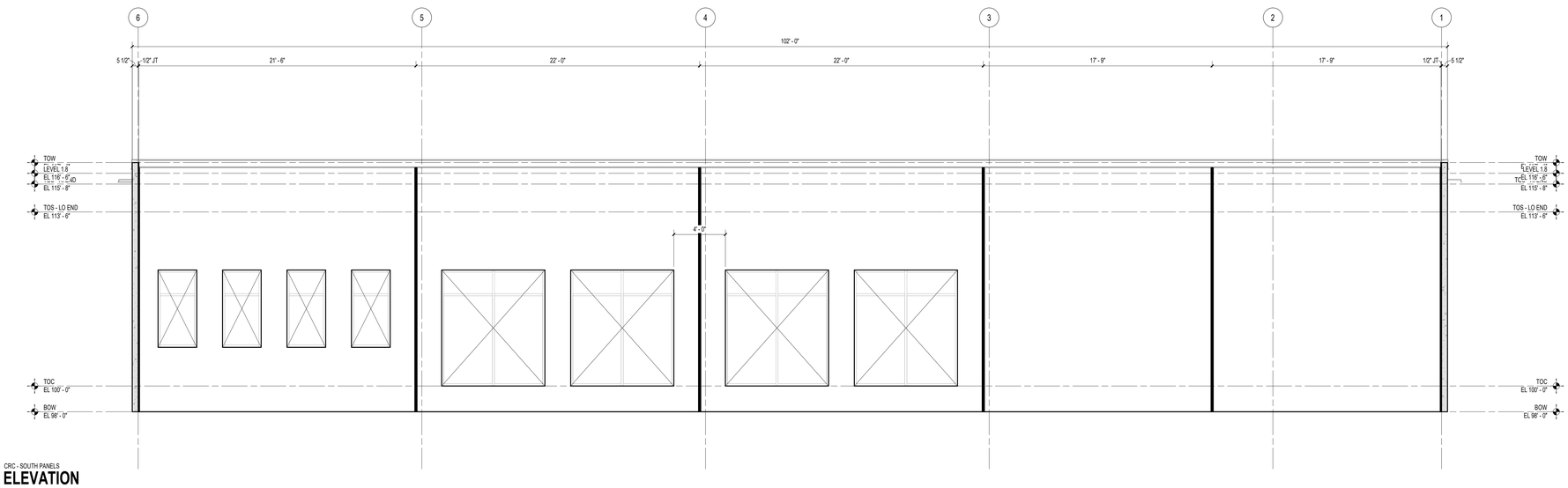
L1 CRC - NORTH PANELS
ELEVATION
1/4" = 1'-0"



F1 CRC - WEST PANELS
ELEVATION
1/4" = 1'-0"



F9 CRC - EAST PANELS
ELEVATION
1/4" = 1'-0"



A1 CRC - SOUTH PANELS
ELEVATION
1/4" = 1'-0"

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HIDALGO COUNTY
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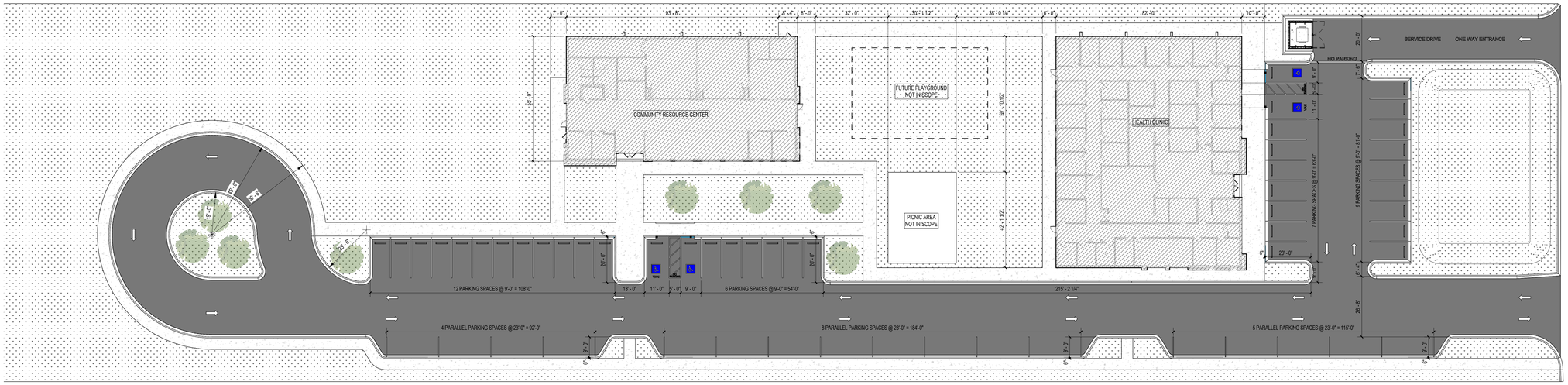
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ISSUE DATE: 08.16.22
DRAWN BY: LA
CHECKED BY: JG

Sheet Name
TILT-UP PANEL ELEVATIONS

Sheet Number
SF202

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A1 SITE **PLAN**
1" = 20'-0"

N
PLAN NORTH
TRUE NORTH

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ELI R OCHOA, P.E., AIA
TEXAS REGISTRATION NO.
Engineer: 60251
Architect: 19160

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

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ISSUE DATE: 08.16.2022
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SHEET NAME

SITE PLAN

Sheet Number

AS101

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SHEET NAME

FLOOR PLAN - BLDG A - HEALTH CLINIC

Sheet Number

AE101

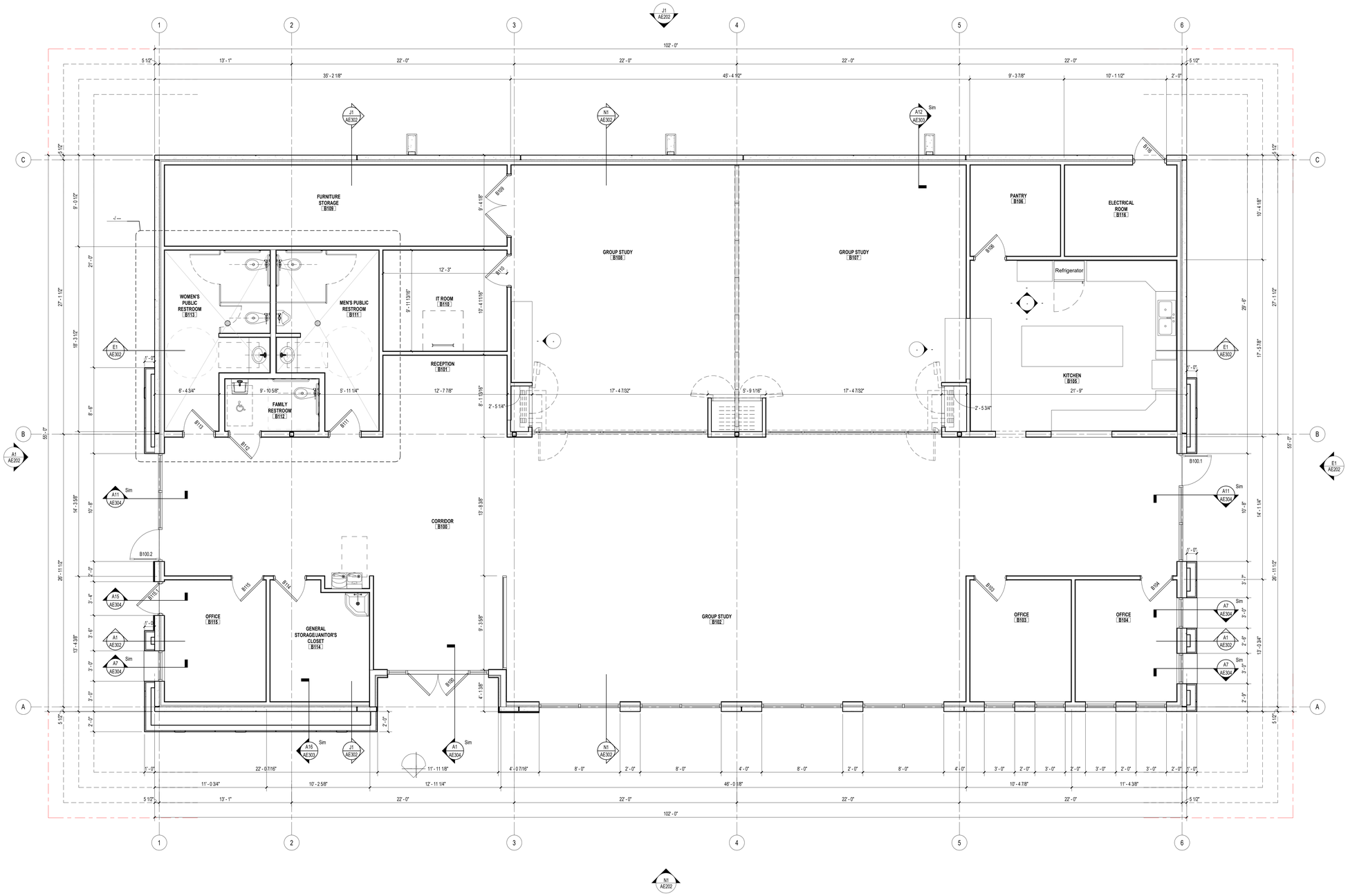
Project Status:

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A1 FLOOR PLAN COMPOSITE - HEALTH CLINIC
PLAN
1/4" = 1'-0"

N
PLAN NORTH
TRUE NORTH

8/16/2022 3:25:12 AM
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A1 | FLOOR PLAN COMPOSITE - CRC
PLAN
1/4" = 1'-0"

N
PLAN NORTH
TRUE NORTH

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Architect: 19160

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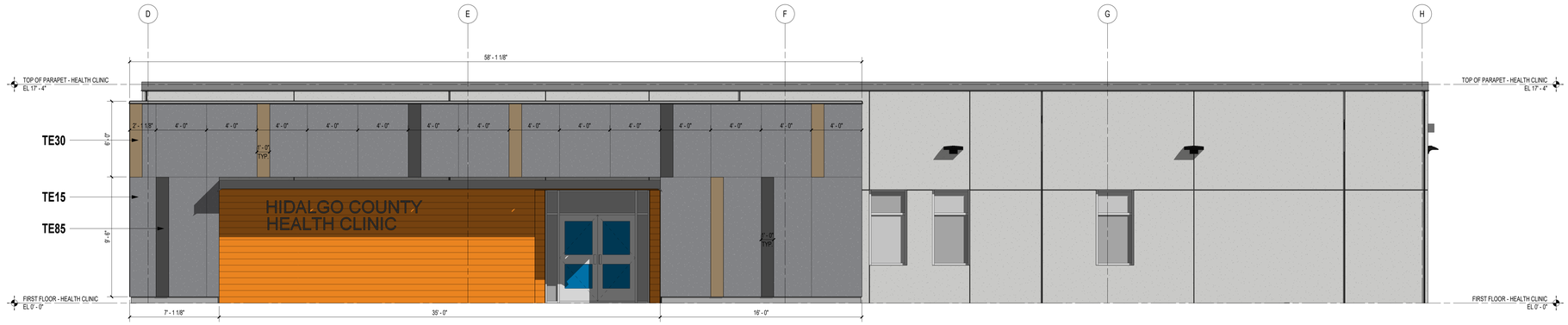
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SHEET NAME
FLOOR PLAN - BLDG B - CRC

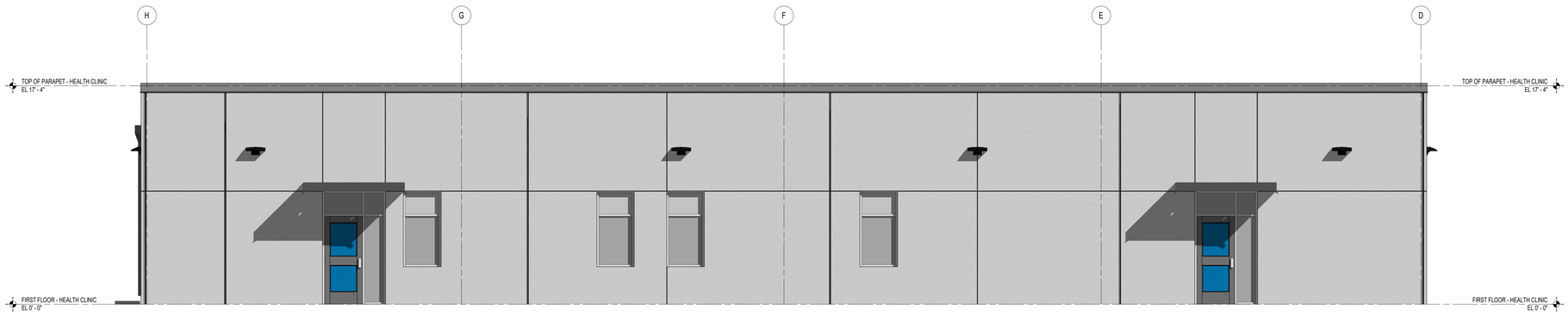
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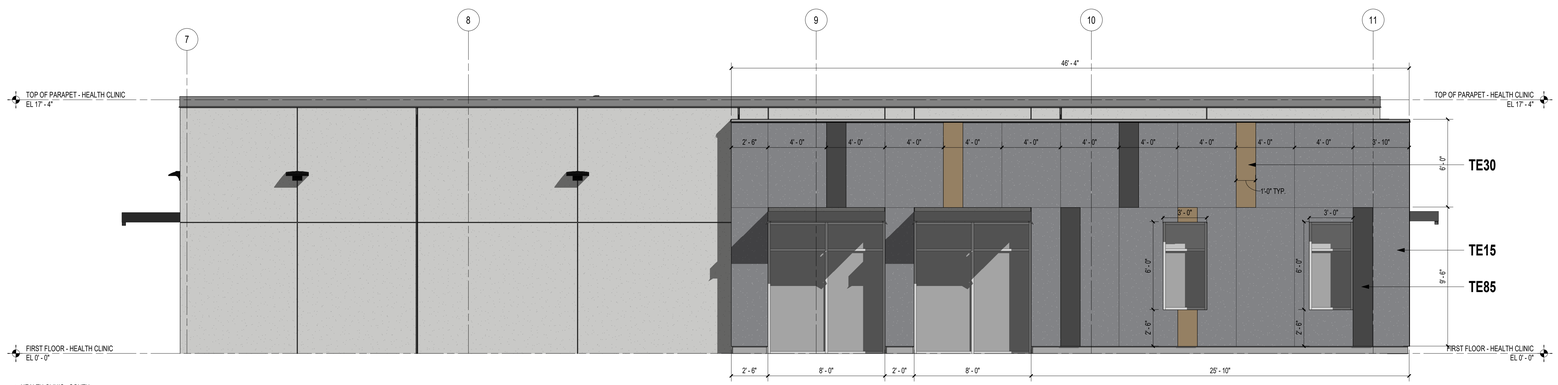
N1 HEALTH CLINIC - EAST ELEVATION

1/4" = 1'-0"



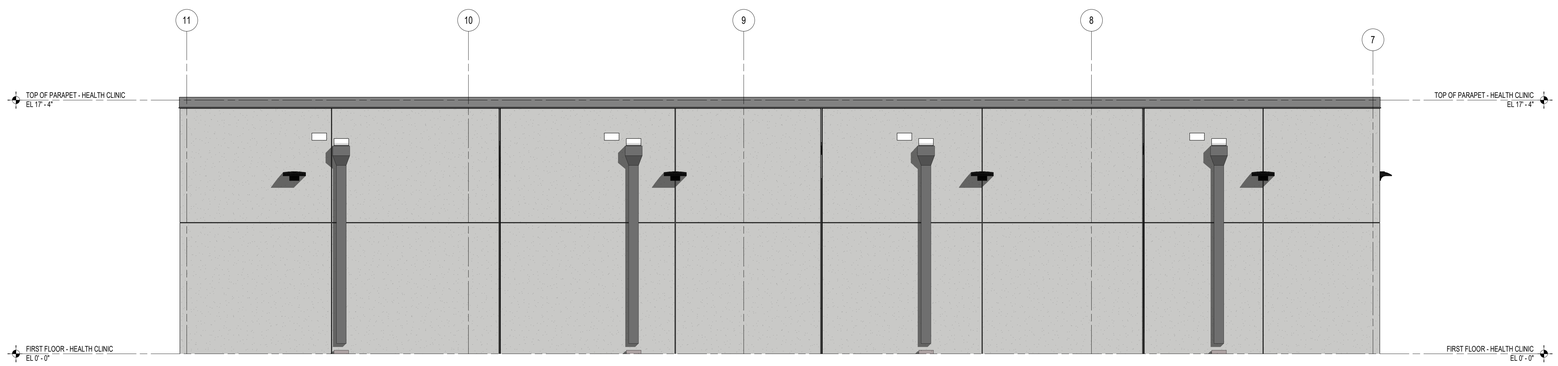
J1 HEALTH CLINIC - WEST ELEVATION

1/4" = 1'-0"



E1 HEALTH CLINIC - SOUTH ELEVATION

1/4" = 1'-0"



A1 HEALTH CLINIC - NORTH ELEVATION

1/4" = 1'-0"

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TEXAS REGISTRATION NO.
Engineer: 60251
Architect: 19160

HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Description	Date

PROJECT NO.: 21087
ISSUE DATE: Issue Date
DRAWN BY: Author
CHECKED BY: Checker

SHEET NAME

ELEVATIONS - BLDG A - HEALTH CLINIC

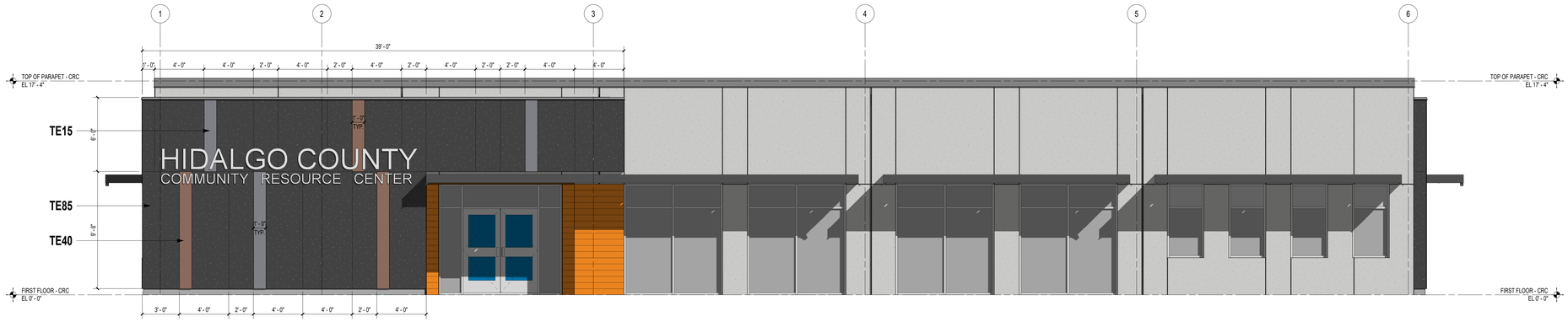
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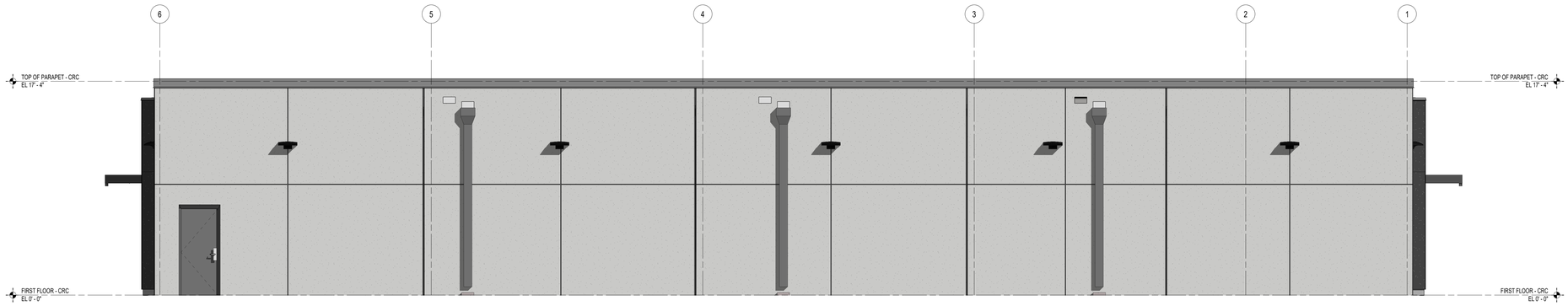
Project Status:

100% SCHEMATIC DESIGN

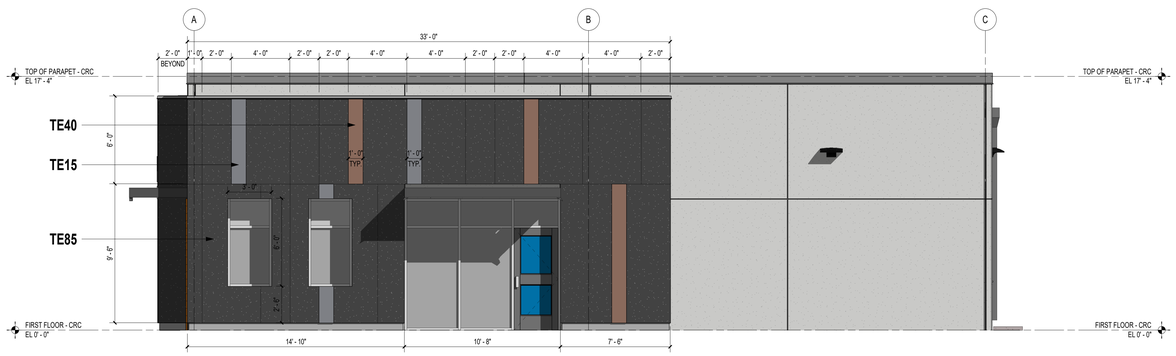
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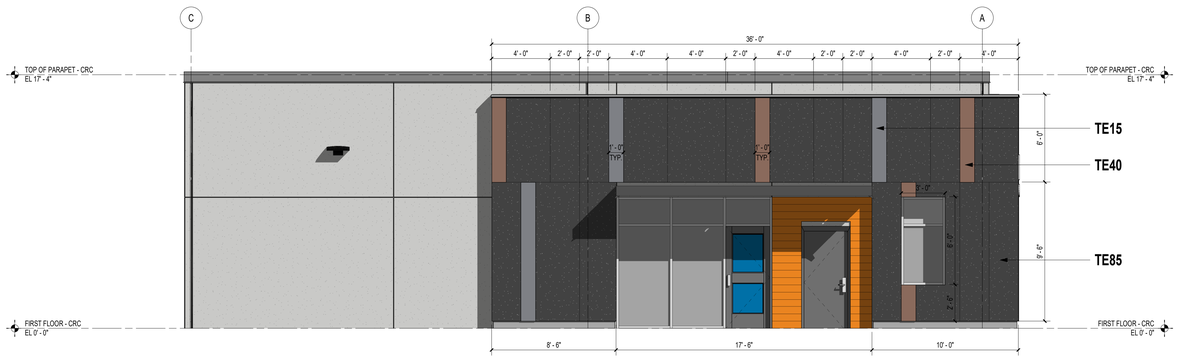
N1 CRC - SOUTH **ELEVATION**
1/4" = 1'-0"



J1 CRC - NORTH **ELEVATION**
1/4" = 1'-0"



E1 CRC - EAST **ELEVATION**
1/4" = 1'-0"



A1 CRC - WEST **ELEVATION**
1/4" = 1'-0"

8/15/2022 9:41:27 AM
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HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

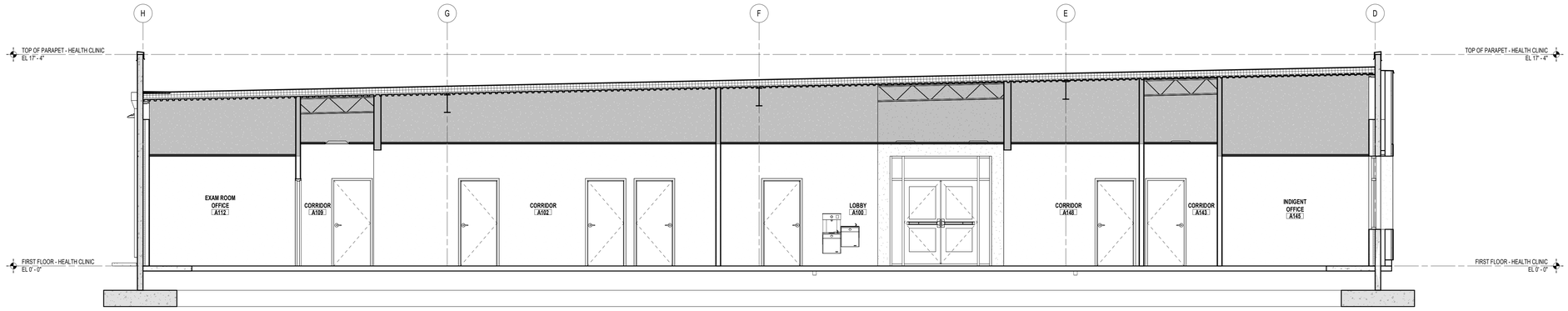
No.	Date	Description

PROJECT NO.: 21087
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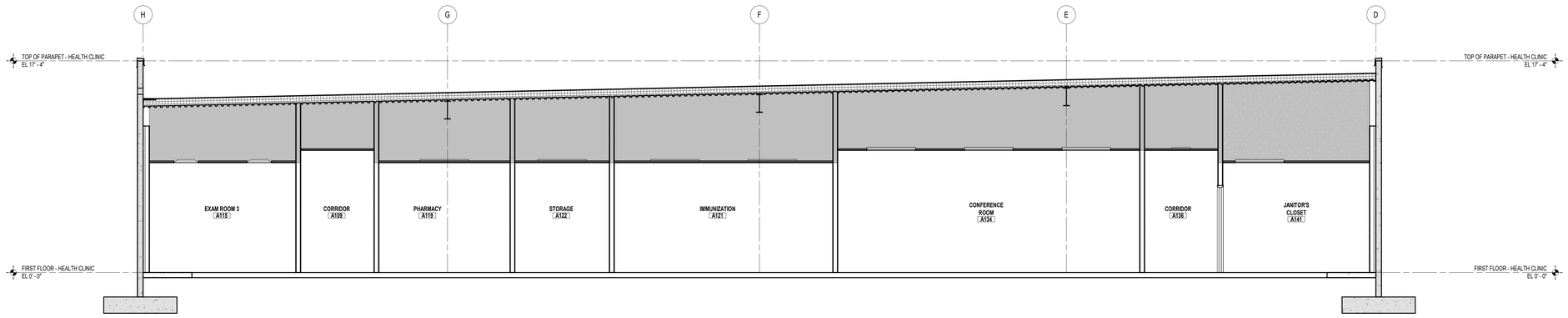
SHEET NAME
ELEVATIONS - BLDG B - CRC

Sheet Number
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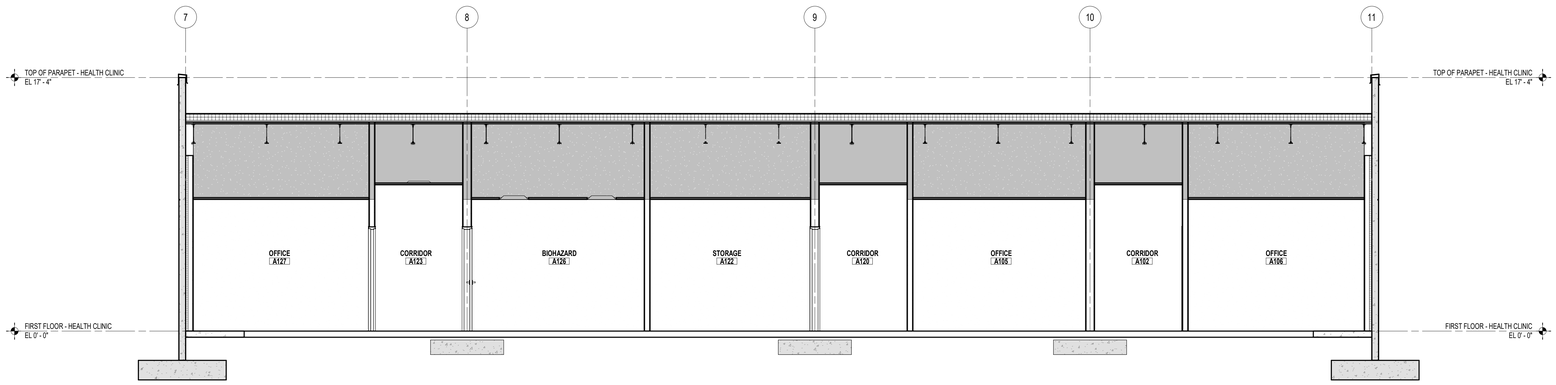
Project Status:
100% SCHEMATIC DESIGN



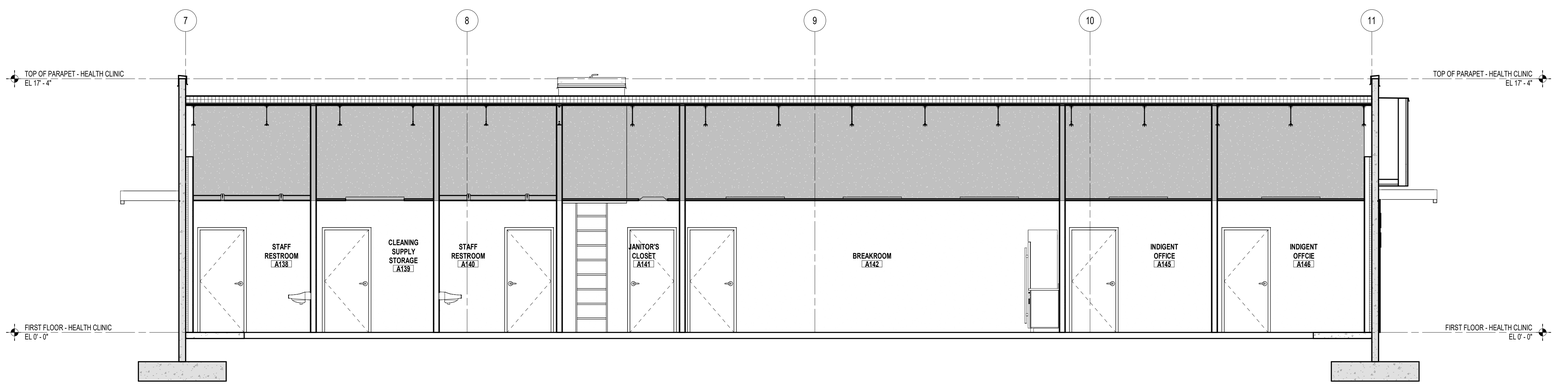
N1 LONGITUDINAL BUILDING **SECTION**
1/4" = 1'-0"



J1 LONGITUDINAL BUILDING **ELEVATION**
1/4" = 1'-0"



E1 TRANSVERSE BUILDING **ELEVATION**
1/4" = 1'-0"



A1 TRANSVERSE BUILDING **SECTION**
1/4" = 1'-0"

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PROJECT NO.: 21087
ISSUE DATE: 08.16.2022
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SHEET NAME

BUILDING SECTIONS - HEALTH CLINIC

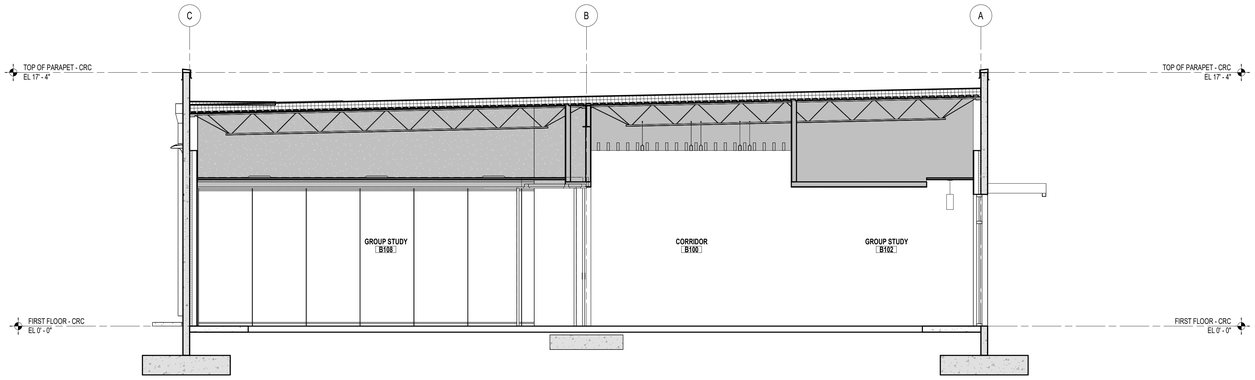
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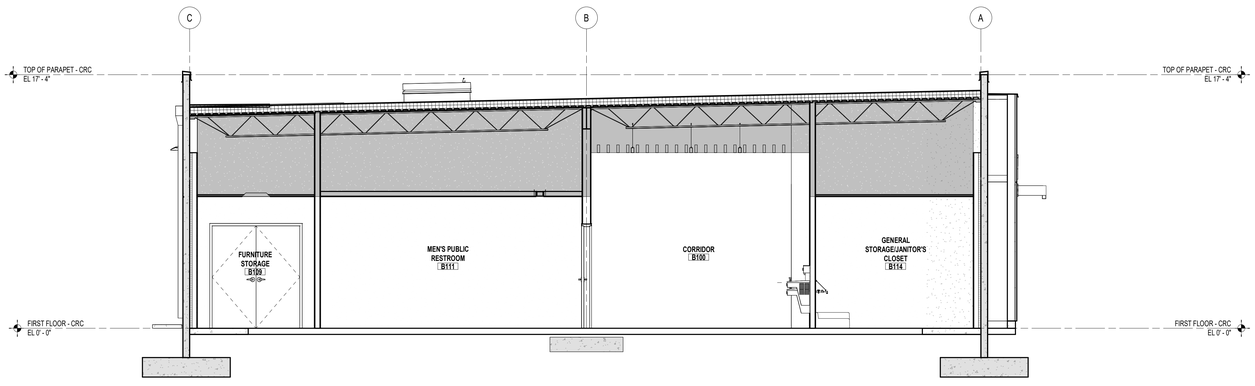
Project Status:

100% SCHEMATIC DESIGN

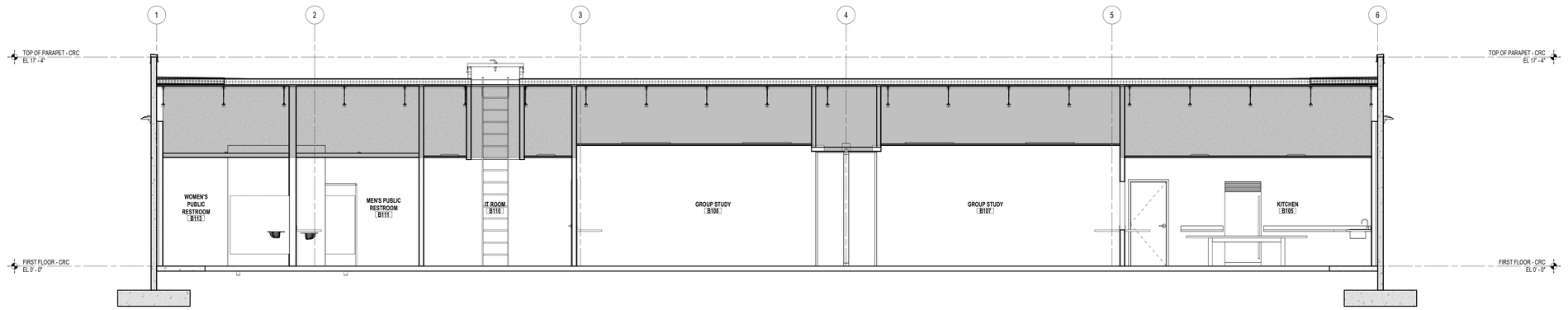
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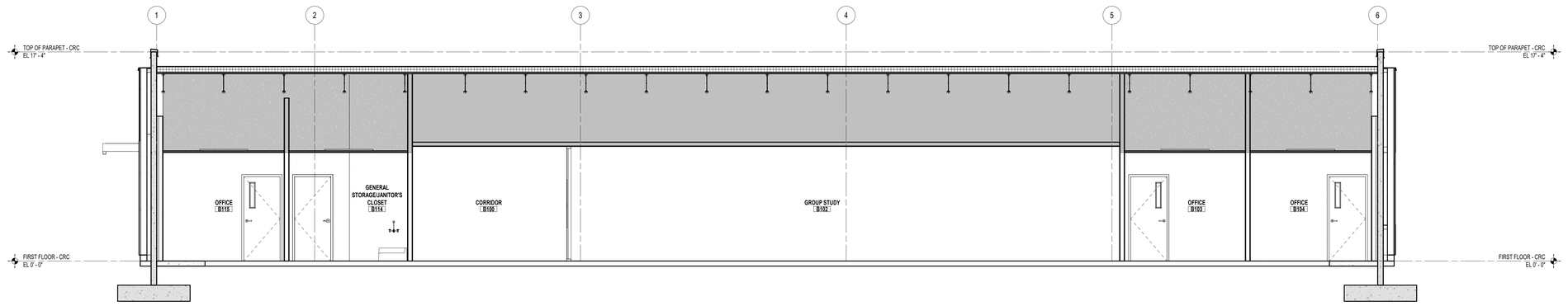
N1 TRANSVERSE BUILDING **ELEVATION**
1/4" = 1'-0"



J1 TRANSVERSE BUILDING **ELEVATION**
1/4" = 1'-0"



E1 LONGITUDINAL BUILDING **ELEVATION**
1/4" = 1'-0"



A1 LONGITUDINAL BUILDING **ELEVATION**
1/4" = 1'-0"

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PROJECT NO.: 21087
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BUILDING SECTIONS - CRC

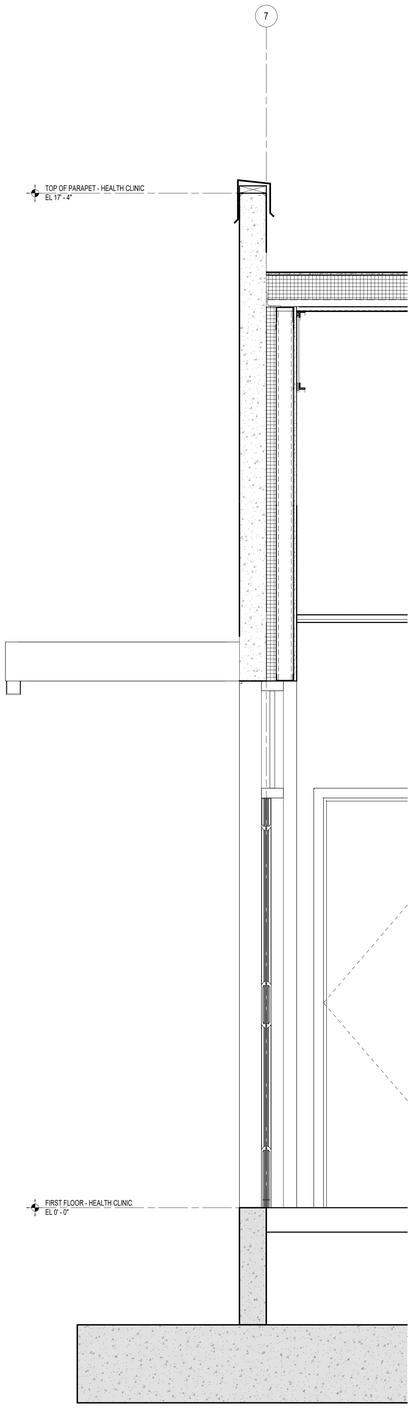
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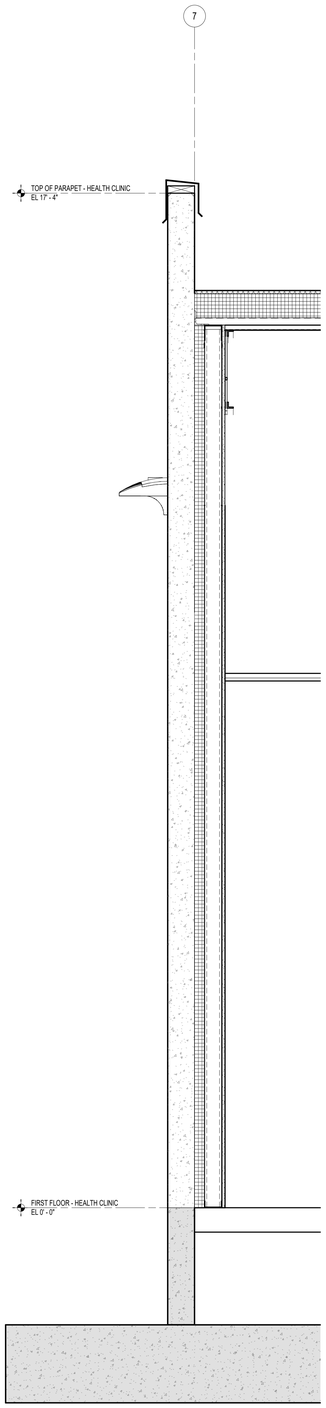
Project Status:

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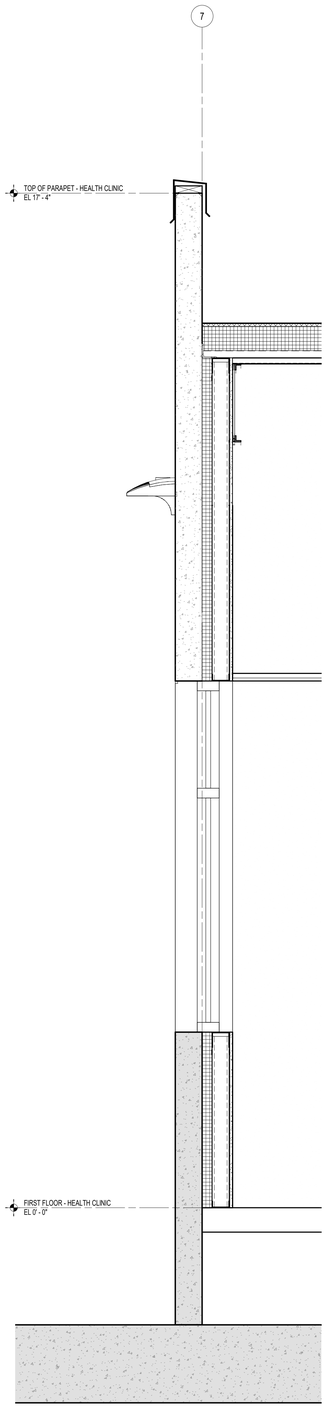
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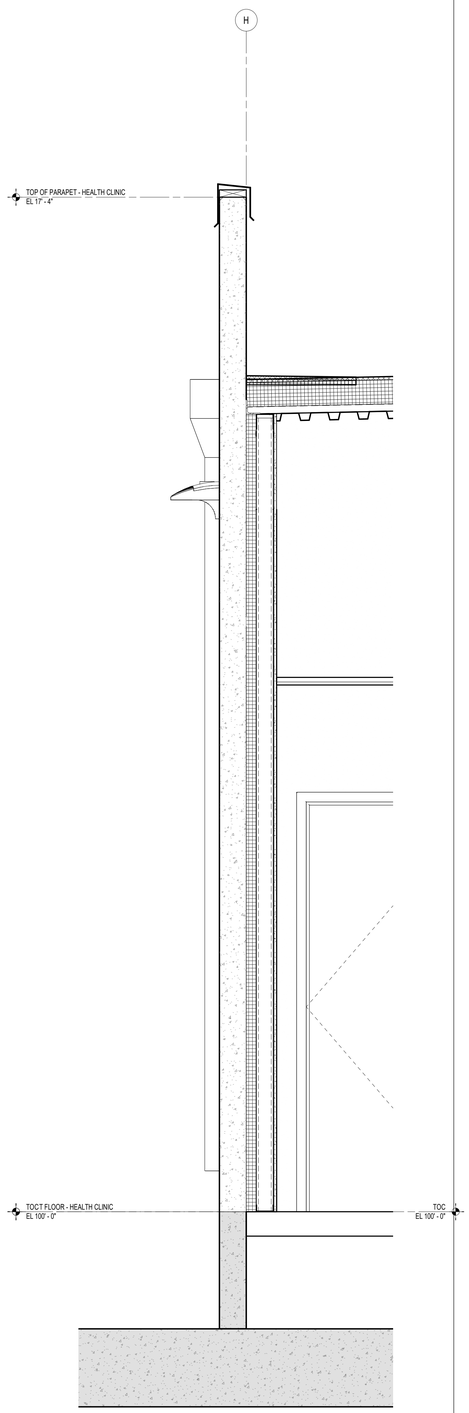
A1 BUILDING WALL SECTION 1" = 1'-0"



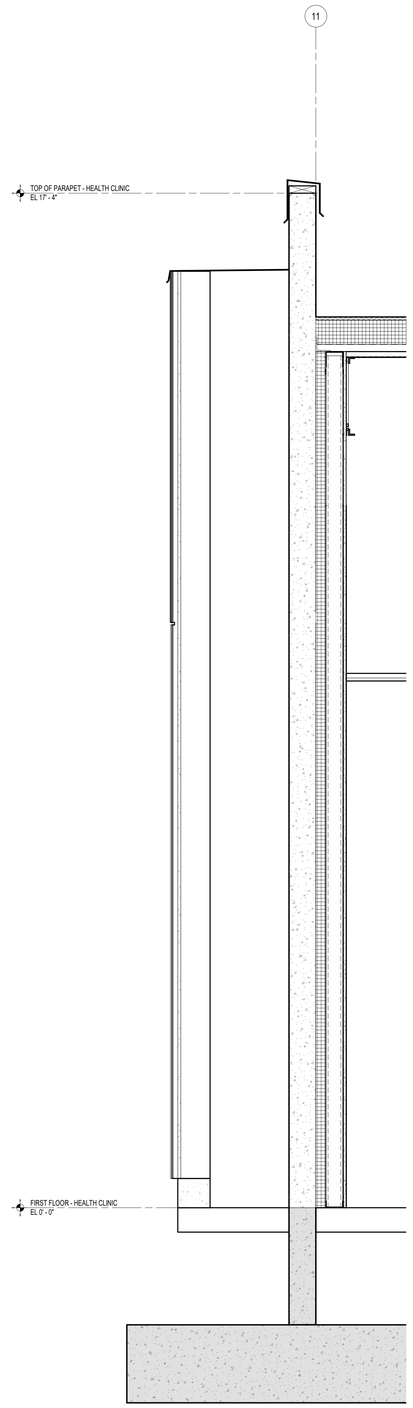
A5 BUILDING WALL SECTION 1" = 1'-0"



A9 BUILDING WALL SECTION 1" = 1'-0"



A12 BUILDING WALL SECTION 1" = 1'-0"



A16 BUILDING WALL SECTION 1" = 1'-0"

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PROJECT NO.: 21087
ISSUE DATE: 08.16.2022
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SHEET NAME

WALL SECTIONS

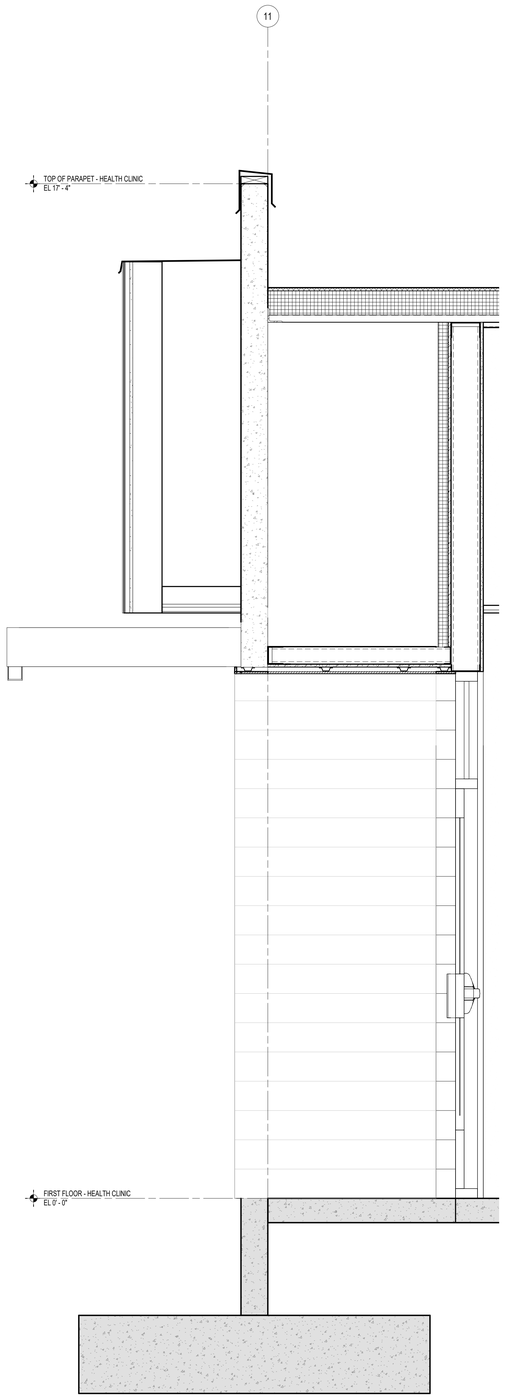
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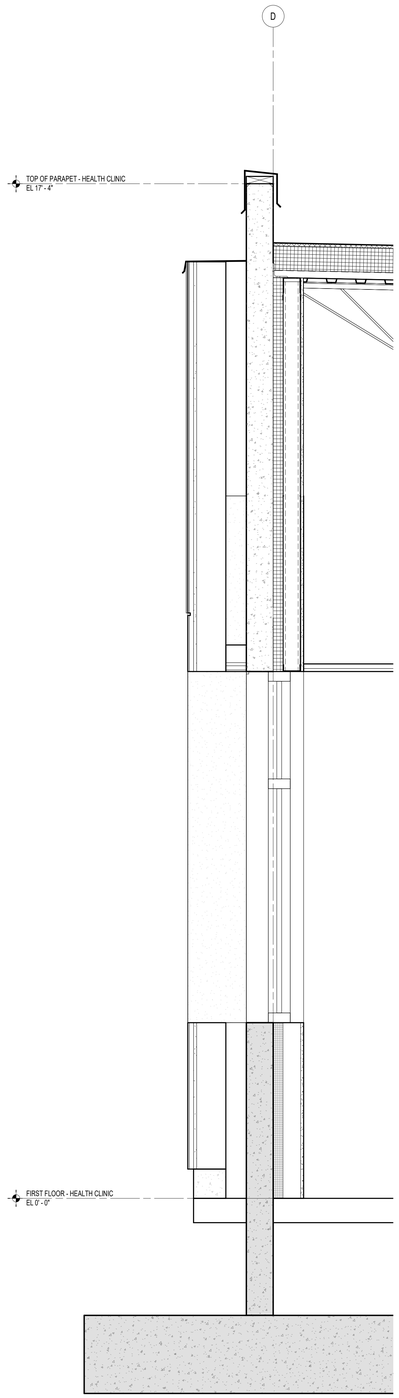
Project Status:

100% SCHEMATIC DESIGN

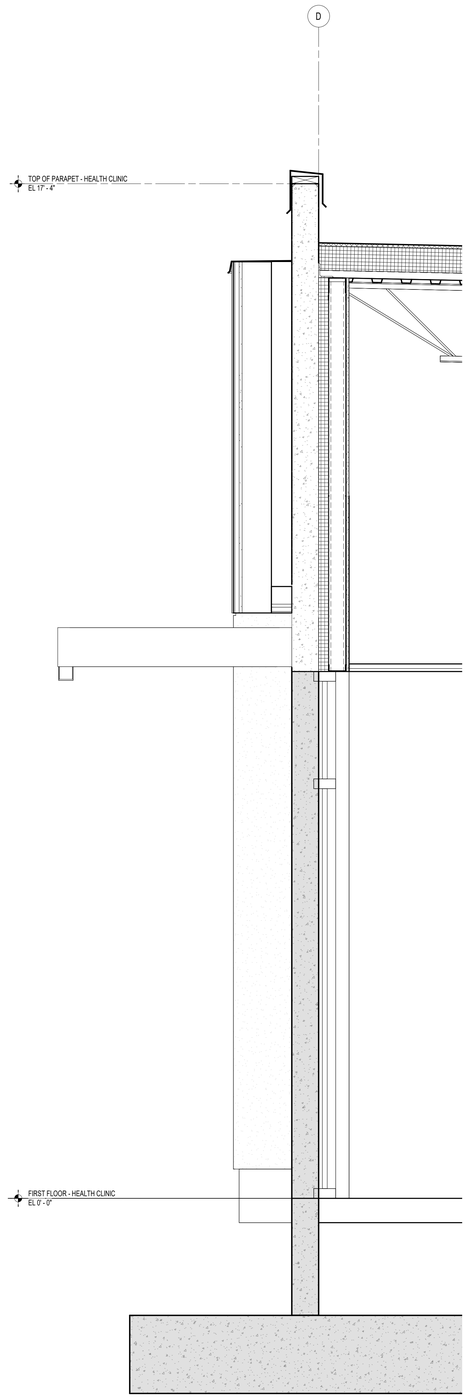
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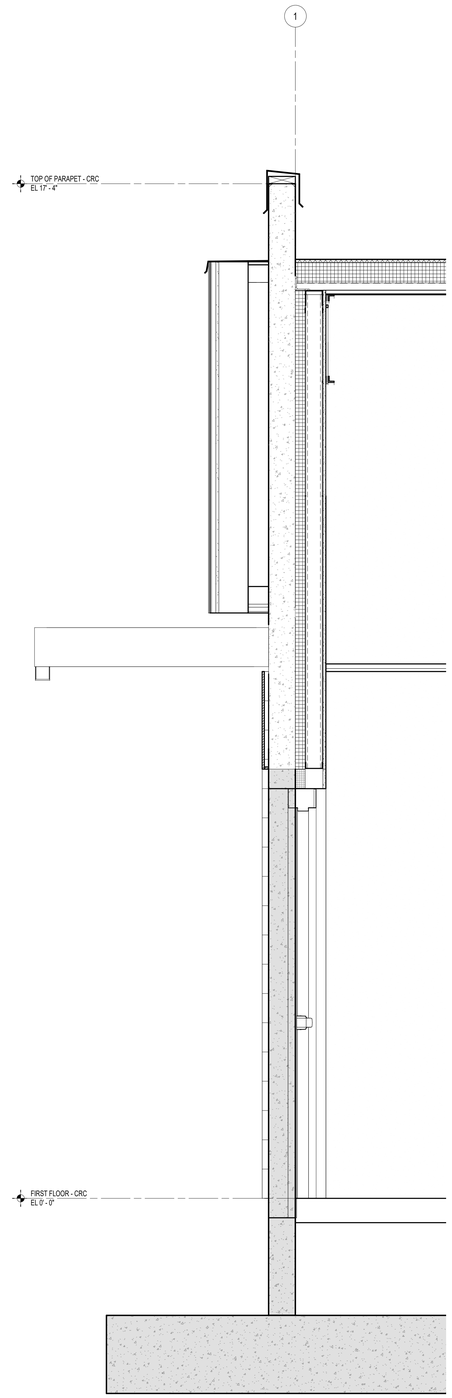
A1 BUILDING WALL SECTION
1" = 1'-0"



A7 BUILDING WALL SECTION
1" = 1'-0"



A11 BUILDING WALL SECTION
1" = 1'-0"



A15 BUILDING WALL SECTION
1" = 1'-0"

8/16/2022 9:44:18 AM
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SHEET NAME

WALL SECTIONS

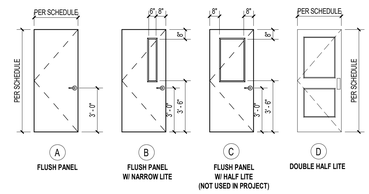
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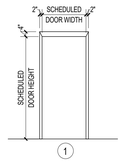
Project Status:

100% SCHEMATIC DESIGN

DOOR PANEL ELEVATIONS



DOOR FRAME ELEVATIONS



DOOR SCHEDULE - BLDG A - HEALTH CLINIC

Mark	S/DBL	Width	Height	Panel Elevation	Panel Thickness	Frame Elevation Type	Frame Material	Hardware Set	Comments
A100	DBL	6' - 0"	6' - 10"	D					
A101	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A102	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A104	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A105	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A106	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A107	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A108	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A109	S	3' - 0"	7' - 0"	D				C715A	
A110	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A111	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A112	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A113	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A113.1	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A114	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A115	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A115.1	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A116	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A117	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A118	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A119	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A120	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A121	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A122	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A123	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A124	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A125	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A126	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A127	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A128	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A129	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A130	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A131	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A133	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A134	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A134.1	DBL	6' - 0"	7' - 0"	A	0' - 1 3/4"	2			
A135	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A136	S	3' - 0"	7' - 0"	D				C715A	
A137	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A138	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A139	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A140	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A141	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A142	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A143	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A145	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A146	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A147	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A148	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
A149	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			

DOOR SCHEDULE - BLDG B - CRC

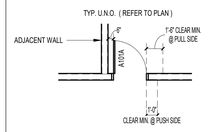
Mark	S/DBL	Width	Height	Panel Elevation	Panel Thickness	Frame Elevation Type	Frame Material	Hardware Set	Comments
B100	DBL	6' - 0"	6' - 10"	D					
B100.1	S	3' - 0"	7' - 0"	D				C715A	
B100.2	S	3' - 0"	7' - 0"	D				C715A	
B103		3' - 0"	7' - 0"						
B104		3' - 0"	7' - 0"						
B106	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
B109	DBL	6' - 0"	7' - 0"	A	0' - 1 3/4"	2			
B110	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
B111	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
B112	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
B113	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
B114	S	3' - 0"	7' - 0"	A	0' - 1 3/4"	1			
B115		3' - 0"	7' - 0"						
B115.1		0' - 0"	7' - 0"	A		1			
B116		0' - 0"	7' - 0"	A		1			
B118		8' - 5 3/8"	7' - 0"						

DOOR & WINDOW GENERAL NOTES

1. ALL DOORS TO BE 1 3/4" THICK U.O.N.
2. ALL H.M. FRAME TO HAVE A 2" FACE DIMENSION W/ 5/8" STOP. PROVIDE 3/4" STOP AS REQUIRED FOR FIRE RATED FRAMES
3. REFER TO DOOR SCHEDULE FOR HARDWARE
4. COORD. W/ MECH. DOCS. FOR DOOR UNDERCUTS & DOOR LOUVERS
5. FLOOR MATERIAL TRANSITIONS OCCUR BENEATH DOOR
6. ALL LIGHTS IN DOORS TO HAVE TEMPERED GLAZING, U.O.N.
7. EXTERIOR DOORS TO HAVE TINTED GLAZING & INTERIOR DOORS TO HAVE CLEAR GLAZING, TYP.
8. ALL EXTERIOR H.M. DOORS TO BE INSULATED AND GALVANIZED
9. FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATING FRAMES
10. AT DRYWALL PARTITIONS, PROVIDE FR-WD BLKG. ALL WALL BEHIND DOORS SCHEDULED TO HAVE WALLMOUNTED DOOR STOPS (REFER HARDWARE SCHEDULE IN SPECIFICATIONS)
11. IF A DOOR HAS A CLOSER, THEN THE SWEEP PERIOD OF CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, TO DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR
12. THE MAXIMUM FORCE FOR PUSHING OR PULLING OPEN A DOOR SHALL BE AS FOLLOWS
    (1) FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWARE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY
    (2) OTHER DOORS.
    (a) EXTERIOR HINGED DOOR: (RESERVED)
    (b) INTERIOR HINGED DOORS: 5 lbf (22.2N)
    (c) SLIDING OR FOLDING DOORS: 5 lbf (22.2N)

    ALL ALUMINUM STOREFRONT WINDOWS AND DOOR FRAMES TO BE CLEAR ANODIZED ALUMINUM FINISH
13. ACCESS CONTROL CONNECTIONS TO BE COMPLETED BY OWNER

TYPICAL DOOR INFORMATION



NOTE:
REFER TO SHEET AE601 FOR DOOR SCHEDULES & FRAME TYPES

GLAZING LEGEND

G1 - TYPE 1 - INSULATING-GLASS UNITS WHERE SAFETY GLAZING NOT REQUIRED

G2 - TYPE 2 - INSULATING-GLASS UNITS

G3 - TYPE 3 - FULLY TEMPERED FLOAT GLASS

G4 - TYPE 4 - CLEAR ANNEALED FLOAT GLASS

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HIDALGO COUNTY EL PARAISO PROJECT

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

PROJECT No.: 21087
ISSUE DATE: 08.16.2022
DRAWN BY: Author
CHECKED BY: Checker

Sheet Name

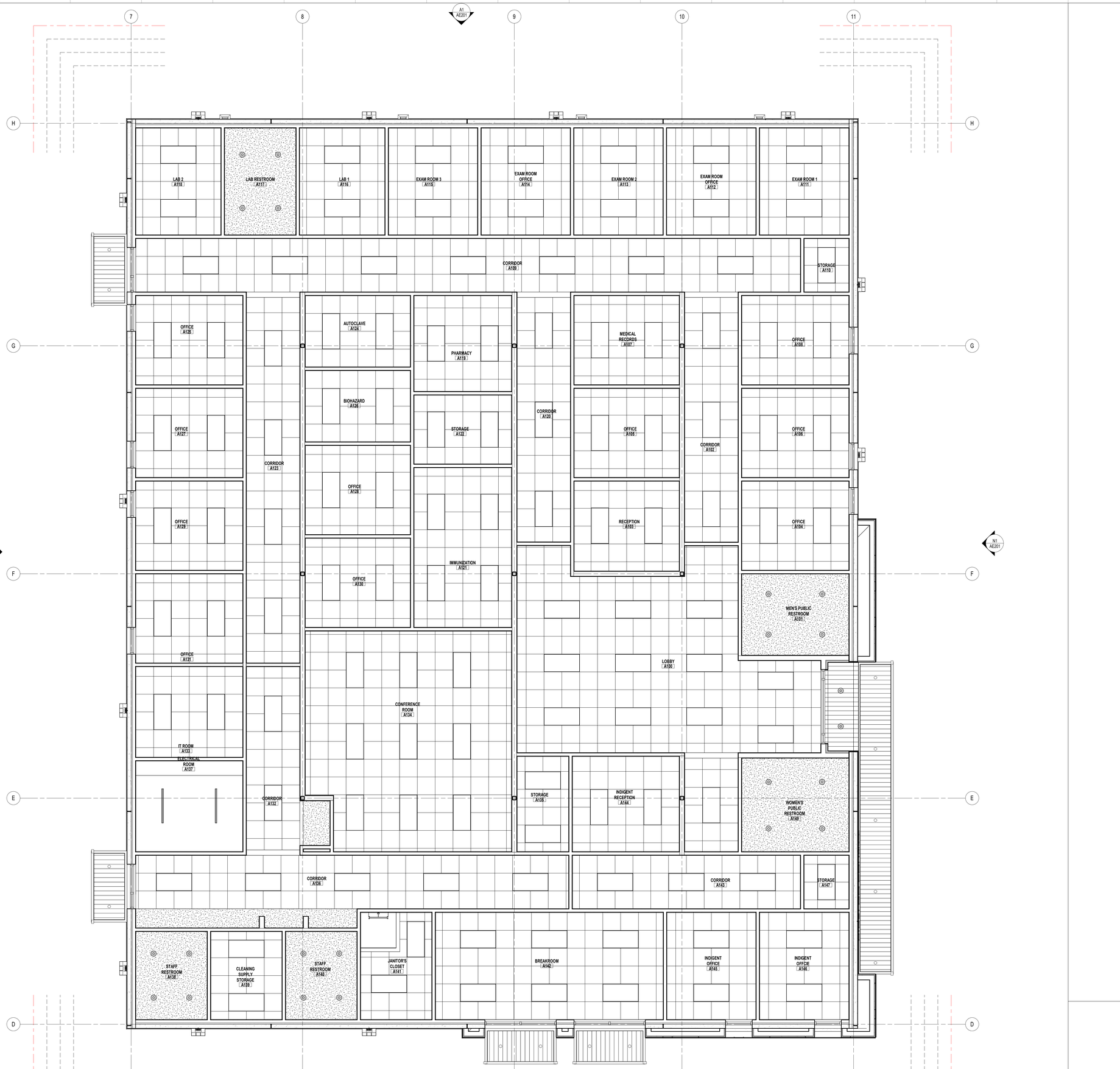
DOOR SCHEDULE

Sheet Number

AE601

Project Status:

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A1 RCP - HEALTH CLINIC **PLAN**
1/4" = 1'-0"

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HIDALGO COUNTY EL PARAISO PROJECT

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No.	Date	Description

PROJECT NO.: 21087
ISSUE DATE: 08.16.2022
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SHEET NAME

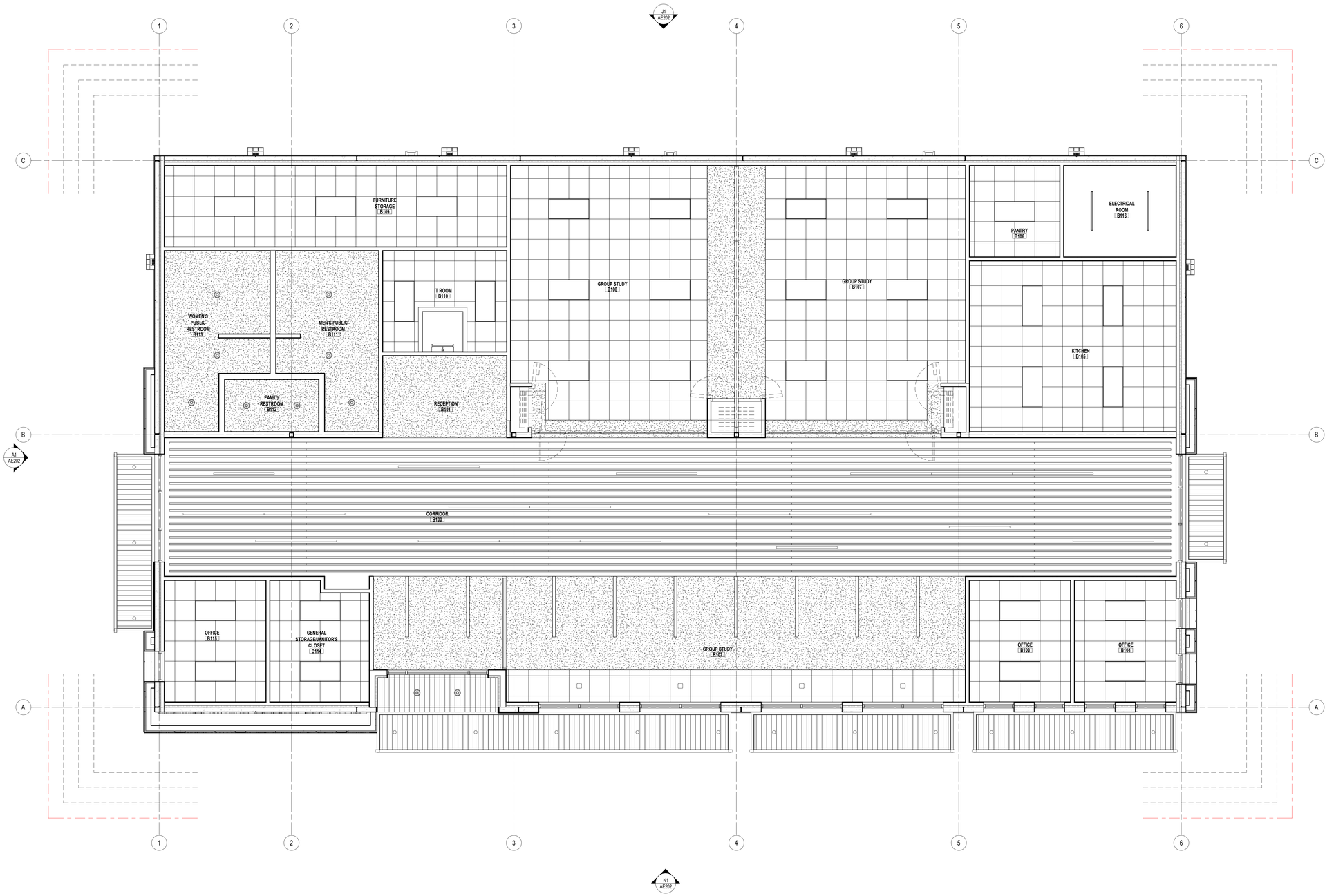
RCP - BLDG A - HEALTH CLINIC

Sheet Number

AE701

Project Status:

100% SCHEMATIC DESIGN



A1 RCP - CRC PLAN

1/4" = 1'-0"

N

PLAN NORTH

TRUE NORTH

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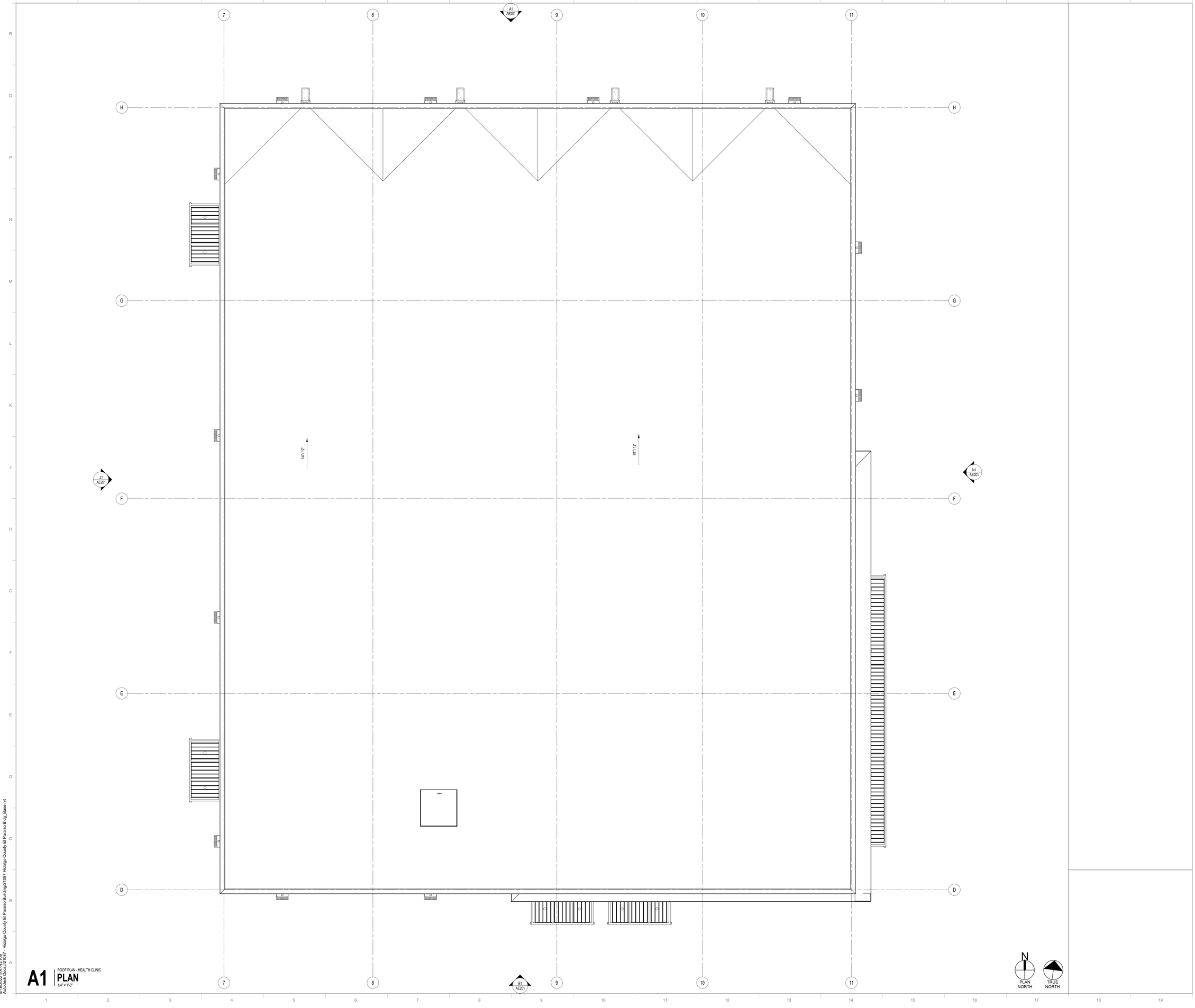
RCP - BLDG B - CRC

Sheet Number

AE702

Project Status:

100% SCHEMATIC DESIGN



A1 ROOF PLAN - HEALTH CLINIC
PLAN
1/4" = 1'-0"

N
PLAN NORTH
TRUE NORTH

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SHEET NAME

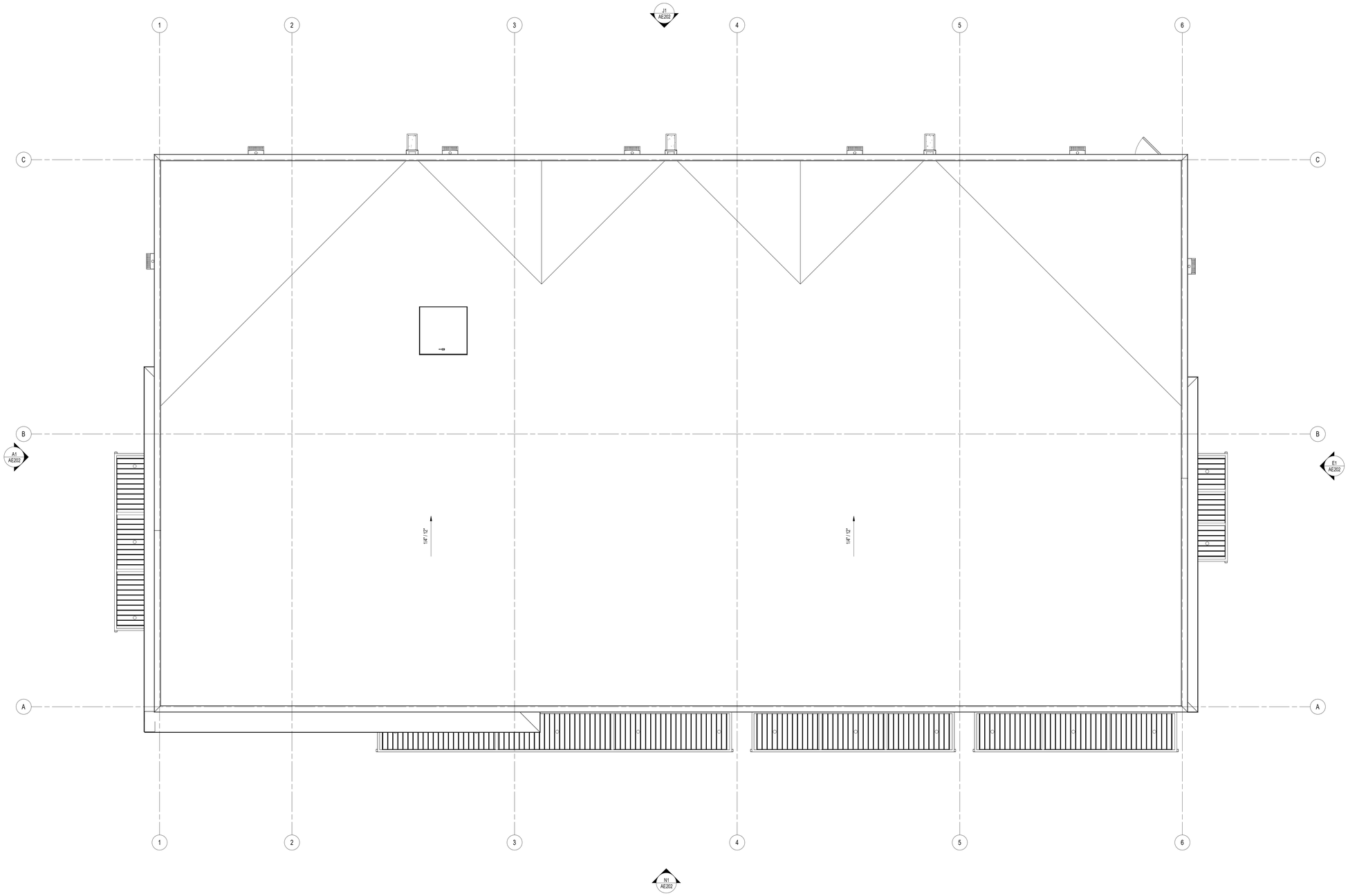
ROOF PLAN - BLDG A - HEALTH CLINIC

Sheet Number

AE801

Project Status:

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No.	Description	Date

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SHEET NAME

ROOF PLAN - BLDG B - CRC

Sheet Number

AE802

Project Status:

100% SCHEMATIC DESIGN

A1 ROOF PLAN - CRC
PLAN
1/4" = 1'-0"

N
PLAN NORTH
TRUE NORTH

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1 First Floor Lighting Plan Clinic
1/8" = 1'-0"

LIGHTING CONTROLS DEVICE SCHEDULE

TYPE	MANUFACTURER/ MODEL	MOUNTING	DESCRIPTION

ELECTRICAL KEYED NOTES: (#)

1. ROUTE 2-#12 AND 1-#12GND IN A 3/4" CONDUIT TO LIGHTING CONTROL PANEL AND (1) 3/4" CONDUIT WITH PULLSTRING FOR DMX CONTROL WIRING TO EQUIPMENT/LIGHTING FIXTURE INDICATED ON SKE SKE DRAWINGS. FIELD COORDINATE EXACT LOCATION AND ADDITIONAL REQUIREMENTS WITH THEATRICAL LIGHTING CONTRACTOR PRIOR TO ROUGH-IN. TYPICAL UNLESS NOTED OTHEWISE.
2. ROUTE 2-#12 AND 1-#12GND IN A 3/4" CONDUIT TO LIGHTING CONTROL PANEL INDICATED ON SKE SERIES DRAWINGS. FIELD COORDINATE EXACT LOCATION AND ADDITIONAL REQUIREMENTS WITH THEATRICAL LIGHTING CONTRACTOR PRIOR TO ROUGH-IN. TYPICAL UNLESS NOTED OTHEWISE.
3. ROUTE CIRCUIT VIA WATTSTOPPER #LMRC-222 UNIVERSAL DIMMING ROOM CONTROLLER . INSTALL ABOVE CEILING.
4. PROVIDE 120V JUNCTION BOX BELOW STAGE FOR STAGE EDGE INDICATOR LIGHTSTRIP. ROUTE (1) 3/4" CONDUIT WITH PULLSTRING FOR DMX CONTROL WIRING TO EQUIPEMENT INDICATED ON SKE SERIES DRAWINGS. FIELD COORDINATE EXACT LOCATION AND ADDITIONAL REQUIREMENTS WITH THEATRICAL LIGHTING CONTRACTOR PRIOR TO ROUGH-IN.
5. PROPOSED LOCATION FOR LOBBY LIGHTING CONTROLS. CONFIRM FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.
6. PROVIDE KEYED SWITCH FOR AFTER HOURS LIGHTING OVERRIDE FOR LOBBY AREA LIGHTING. SWITCH SHALL TURN LIGHTS AT LAST STATE.
7. PROPOSED LOCATION FOR AUDIENCE CHAMBER STEP LIGHTS DIMMERS. FIELD COORDINATE EXACT LOCATION WITH ATCHITECT AND THEATRICAL LIGHTING CONTRACTOR PRIOR TO ROUGH-IN. LVS DIGITAL SWITCH SHALL BE PROGRAMMED PER OWNER'S PREFERENCES.
8. PROVIDE KEYED SWITCH FOR AFTER HOURS LIGHTING OVERRIDE FOR CORRIDOR LIGHTING.

ELECTRICAL GENERAL NOTES:

A. ALL CEILING MOUNTED DEVICES LOCATED IN LAY-IN CEILINGS SHALL BE CENTERED IN THE CEILING TILE.

B. MULTIPLE SWITCHES SHOWN TOGETHER SHALL BE GANGED UNDER A COMMON COVER PLATE.

C. PROVIDE UN-SWITCHED CIRCUIT TO ALL EXIT SIGNS.

D. CONTRACTOR SHALL INDICATE LIGHTING CIRCUIT CONTROLLED BY EACH SWITCH BY PROVIDING TYPE WRITTEN LABELING LOCATED ON INSIDE FACE OF EACH SWITCH COVER PLATE.

E. SPRINKLER CONTRACTOR SHALL COORDINATE SPRINKLER HEAD LOCATIONS WITH CEILING MOUNTED LIGHTING FIXTURES.

F. FIXTURES DESIGNATED "NL" SHALL BE UNSWITCHED NIGHTLIGHT. FIXTURES SHALL BE CONNECTED TO EMERGENCY CIRCUIT INDICATED.

G. PROVIDE ALL EMERGENCY LIGHT FIXTURES WITH UNSWITCHED HOT LEG AS DEFINED IN NEC 700.12

H. ROUTE AN UNSWITCHED AND A SWITCHED HOT LEG TO ALL LIGHT FIXTURES DESIGNATED AS EMERGENCY FIXTURES. UNSWITCHED AND SWITCHED HOT LEGS SHALL ORIGINATE FROM CIRCUIT SERVING NORMAL LIGHTING FIXTURES IN THAT SPACE. UNSWITCHED HOT LEG SHALL CONNECT TO THE NORMAL POWER SENSING LUG ON THE GENERATOR TRANSFER DEVICE.

I. LOWER CASE CHARACTER ADJACENT TO SWITCH AND/OR LIGHTING FIXTURE INDICATES SWITCHING GROUP.

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HIDALGO COUNTY EL PARAISO

HIDALGO COUNTY
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No.	Description	Date

PROJECT No.: 22219
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Sheet Name

LIGHTING PLAN CLINIC

Sheet Number

E100

Project Status:

Schematic Design

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ELECTRICAL KEYED NOTES:

1. xxxx

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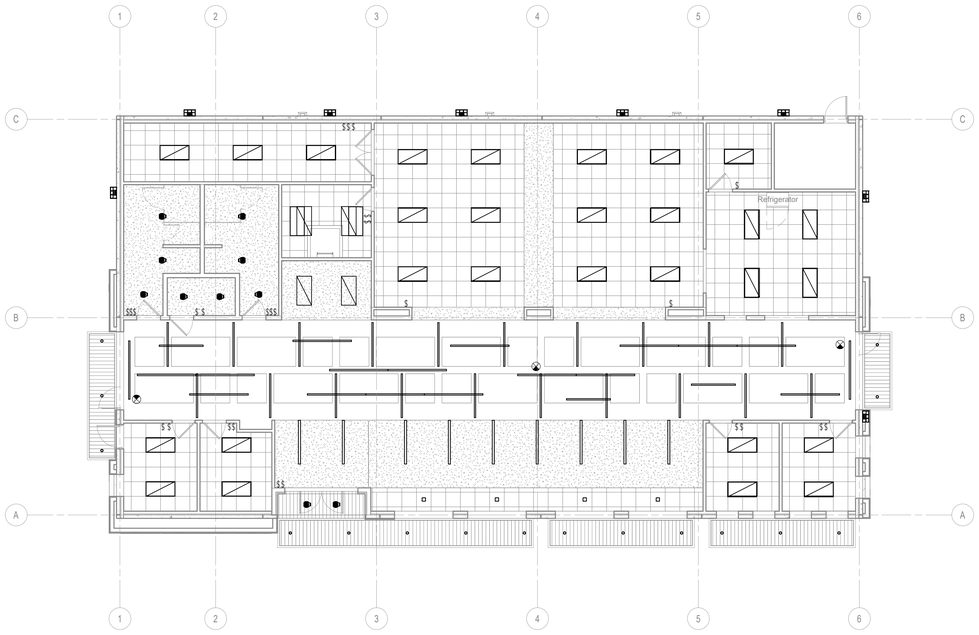
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F. FIXTURES DESIGNATED "NL" SHALL BE UNSWITCHED NIGHTLIGHT. FIXTURES SHALL BE CONNECTED TO EMERGENCY CIRCUIT INDICATED.

G. PROVIDE ALL EMERGENCY LIGHT FIXTURES WITH UNSWITCHED HOT LEG AS DEFINED IN NEC 700.12

H. ROUTE AN UNSWITCHED AND A SWITCHED HOT LEG TO ALL LIGHT FIXTURES DESIGNATED AS EMERGENCY FIXTURES. UNSWITCHED AND SWITCHED HOT LEGS SHALL ORIGINATE FROM CIRCUIT SERVING NORMAL LIGHTING FIXTURES IN THAT SPACE. UNSWITCHED HOT LEG SHALL CONNECT TO THE NORMAL POWER SENSING LUG ON THE GENERATOR TRANSFER DEVICE.

I. LOWER CASE CHARACTER ADJACENT TO SWITCH AND/OR LIGHTING FIXTURE INDICATES SWITCHING GROUP.



1 First Floor Lighting Plan CRC
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LIGHTING PLAN CRC

Sheet Number

E101

Project Status:

Schematic Design

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ELECTRICAL KEYED NOTES: (#)

XXXXX

ELECTRICAL GENERAL NOTES:

A. ELECTRICAL CONTRACTOR SHALL GROUP HOMERUNS WITH THREE HOTS (A,B, AND C PHASE) AND #10 NEUTRAL TO PROVIDE MULTI-WIRE BRANCH CIRCUITS. NO MORE THAN 2 MULTI-WIRE HOMERUNS PER CONDUIT. CONTRACTOR SHALL PROVIDE HANDLE TIES MANUFACTURED BY THE SWITCH GEAR SUPPLIER ON ALL MULTI-WIRE CIRCUITS TO MEET THE REQUIREMENTS OF ARTICLE 210.4(B) OF THE 2017 NEC. AT THE CONTRACTOR'S OPTION, TWO AND THREE POLE BREAKERS MAY BE USED.

B. CONTRACTOR SHALL VERIFY DEVICE LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN. COORDINATE ELECTRICAL AND DATA DEVICE LOCATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL CASEWORK AND MILLWORK ELEVATIONS FOR ADDITIONAL INFORMATION.

C. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, OUTLET BOXES, JUNCTION BOXES, AND FOR ALL TELEPHONE OUTLETS, DATA OUTLETS, CATV OUTLETS, SECURITY OUTLETS, CARD READERS, DOOR ACCESSORIES, AND CAMERAS. REFER TO DIVISION 26 SPECIFICATIONS AND TECHNOLOGY/SECURITY DRAWINGS FOR ADDITIONAL SCOPE OF WORK. UNLESS OTHERWISE NOTED BY DETAILS, PROVIDE (1) 1" CONDUIT WITH PULLSTRING UP TO ABOVE ACCESSIBLE CEILING AND TERMINATE WITH CONDUIT NYLON BUSHING. REFER TO TECHNOLOGY DETAILS FOR EXACT CONDUIT SIZE REQUIRED PER DEVICE TYPE.

D. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR FOR ALL EXHAUST FAN CONTROLS. PROVIDE A FAN SWITCH IF INDICATED BY MECHANICAL. ALL EXHAUST FANS SHALL BE PROVIDED WITH BUILT-IN DISCONNECT SWITCH.

E. HVAC AND PLUMBING EQUIPMENT MAY DIFFER FROM LOCATIONS AS SHOWN ON ELECTRICAL DRAWINGS. COORDINATE EXACT LOCATIONS WITH MECHANICAL AND PLUMBING CONTRACTOR.

F. CONTRACTOR SHALL INDICATE CIRCUIT SERVING EACH RECEPTACLE BY PROVIDING TYPE WRITTEN LABELING LOCATED ON INSIDE FACE OF EACH RECEPTACLE COVER PLATE.

G. ELECTRICAL CONTRACTOR SHALL ROUTE ELECTRICAL CONDUIT AND WIRING TO ALL ROOF HVAC EQUIPMENT THROUGH ROOF CURBS. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ROOFING AND MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

H. CONTRACTOR SHALL ARRANGE PANELBOARDS IN ELECTRICAL ROOM TO PROVIDE WORKING CLEARANCES PER NEC 110.26.

I. ALL LOW-VOLTAGE EQUIPMENT SHALL BE CONNECTED BY MECHANICAL CONTRACTOR.

J. ELECTRICAL CONTRACTOR SHALL PROVIDE RACEWAYS FOR ALL LOW VOLTAGE CABLING IN AREAS WITH EXPOSED STRUCTURE. NO CABLING SHALL BE ROUTED EXPOSED.

K. ALL RECEPTACLES LOCATED IN RESTROOMS, JANITOR CLOSETS, MECHANICAL ROOMS, SERVING ELECTRIC DRINKING FOUNTAINS OR VENDING MACHINES, LOCATED WITHIN 6' OF A SINK, LOCATED ABOVE A WET COUNTERTOP OR IN A KITCHEN OR COFFEE BAR SHALL BE GFCI. EACH GFCI PROTECTED RECEPTACLE SHARING THE SAME CIRCUIT SHALL HAVE ITS OWN RESET AND TEST BUTTON. FEED-THUR GFCI IS NOT PERMISSIBLE.

L. ALL ROOF AND/OR EXTERIOR MOUNTED EQUIPMENT, EQUIPMENT MOTOR STARTERS, AND DISCONNECTS SHALL BE PROVIDED AS NEMA-3R UNLESS NOTED OTHERWISE. SAFETY DISCONNECT SWITCHES SHALL BE SIZED PER N.E.C.

M. PROVIDE WEATHERPROOF BOX AND GFCI TYPE DUPLEX RECEPTACLE WITHIN A 25 FT RADIUS OF ROOF-MOUNTED HVAC EQUIPMENT SUCH AS ACCU'S, RTU'S, ETC.

N. HVAC EQUIPMENT DISCONNECTS SHALL BE PROVIDED, INSTALLED, AND WIRED BY ELECTRICAL CONTRACTOR, U.N.O. BY MECHANICAL CONTRACTOR AND/OR MECHANICAL SCHEDULES.

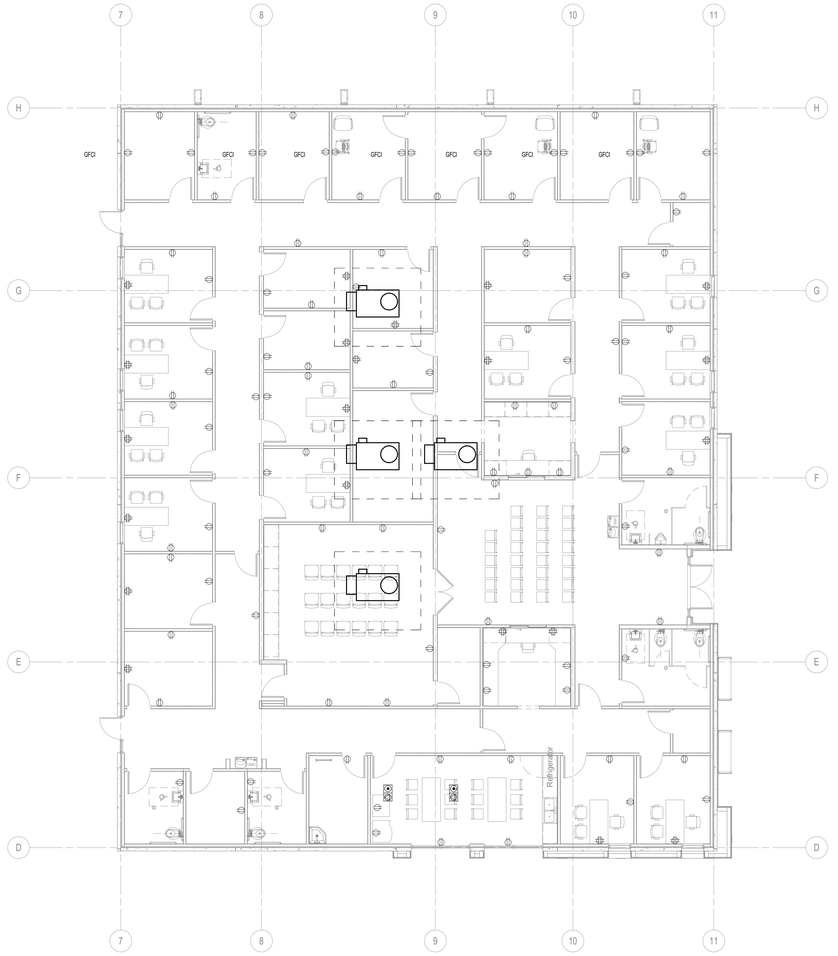
O. VERIFY POWER AND OUTLET REQUIREMENTS FOR ALL EQUIPMENT AND APPLIANCES PRIOR TO ROUGH-IN. ANY DISCREPANCIES SHALL REQUEST INFORMATION FROM ENGINEER OF RECORD.

P. FIRESTOP ALL CONDUIT PENETRATIONS IN RATED WALLS. SEE ARCHITECTURAL DRAWINGS FOR WALL RATINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO SHEET ROCK AND REPAIRS.

Q. ALL 20 AMP. RECEPTACLES AT 120V AND 250V NON-LOCKING RECEPTACLES SHALL BE TAMPER RESISTANT TYPE.

R. ALL EXPOSED CONDUIT SHALL BE ROUTED PERPENDICULAR, PARALLEL, AND TIGHT TO COLUMNS AND BEAMS. ALL EXPOSED CONDUIT ROUTING SHALL BE COORDINATED WITH ENGINEER AND ARCHITECT PRIOR TO INSTALLATION. NO ADDITIONAL COST TO OWNER WILL BE ALLOWED FOR RELOCATING CONDUIT DUE TO THE LACK OF COORDINATION WITH ARCHITECT.

S. ELECTRICAL CONTRACTOR SHALL PROVIDE WIRE BASKET TYPE CABLE TRAY ABOVE ACCESSIBLE CEILING FOR DATA CABLING. REFER TO "T" SERIES DRAWINGS FOR ROUTING ANDADDITIONAL INFORMATION.



1 First Floor Power Plan Clinic
1/8" = 1'-0"

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No.	Description	Date

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Sheet Name

POWER PLAN CLINIC

Sheet Number

E102

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ELECTRICAL KEYED NOTES:

1. XXX

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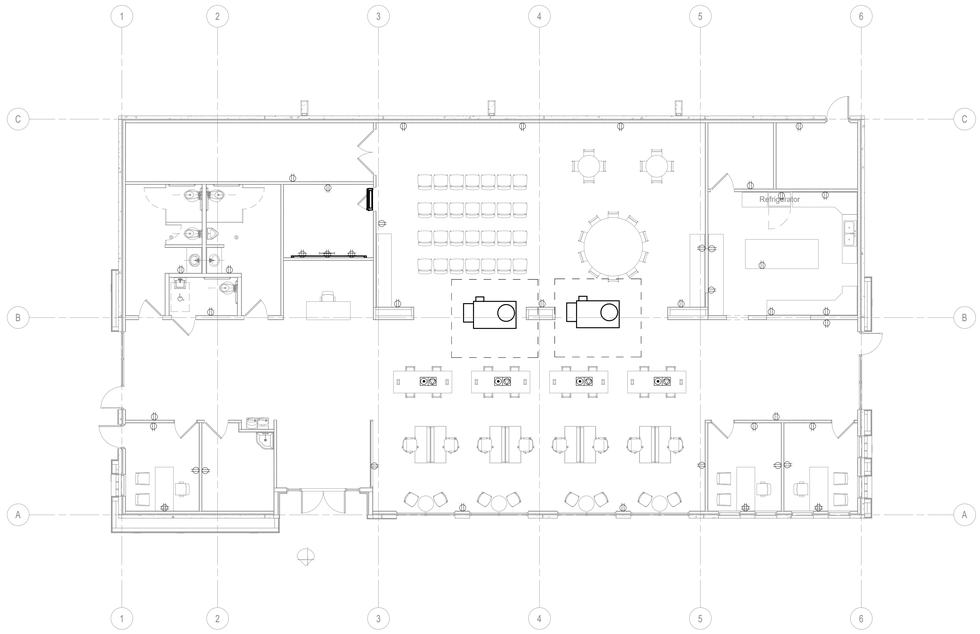
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P. FIRESTOP ALL CONDUIT PENETRATIONS IN RATED WALLS. SEE ARCHITECTURAL DRAWINGS FOR WALL RATINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO SHEET ROCK AND REPAIRS.

Q. ALL 20 AMP. RECEPTACLES AT 120V AND 250V NON-LOCKING RECEPTACLES SHALL BE TAMPER RESISTANT TYPE.

R. ALL EXPOSED CONDUIT SHALL BE ROUTED PERPENDICULAR, PARALLEL, AND TIGHT TO COLUMNS AND BEAMS. ALL EXPOSED CONDUIT ROUTING SHALL BE COORDINATED WITH ENGINEER AND ARCHITECT PRIOR TO INSTALLATION. NO ADDITIONAL COST TO OWNER WILL BE ALLOWED FOR RELOCATING CONDUIT DUE TO THE LACK OF COORDINATION WITH ARCHITECT.

S. ELECTRICAL CONTRACTOR SHALL PROVIDE WIRE BASKET TYPE CABLE TRAY ABOVE ACCESSIBLE CEILING FOR DATA CABLING. REFER TO "T" SERIES DRAWINGS FOR ROUTING AND ADDITIONAL INFORMATION.



1 First Floor Power Plan CRC
1/8" = 1'-0"

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Fernando Gallegos P.E.
TEXAS REGISTRATION NO.
Fern. 20271

HIDALGO COUNTY EL PARAISO

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Description	Date

PROJECT No.: 22219
ISSUE DATE: 08.16.22
DRAWN BY: Author
CHECKED BY: Checker
Sheet Name

POWER PLAN CRC

Sheet Number

E103

Project Status:

Schematic Design

EDCON
1101 W. Ferguson Ave., STE G Pharr, TX O:956.884.7006
TBPE:20271

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MECHANICAL KEYED NOTES:

1. PROVIDE VOLUME DAMPER.
2. PROVIE 45 DEGREE TRANSITION ON ALL BRANCH CONNECTIONS.
3. COORDINATE RETURN DIFFUSER WITH STUCTURE AND OFFSET AS NEEDED.
4. INSTALL VAV IN THE VERTICAL DIRECTION. PROVIDE HANGING SUPPORT OR WALL SUPPORT.
5. PROVIDE FLEXIBLE CONNECTION ON VAV CONNECTION. TYPICAL ALL VAV'S
6. ROUTE DUCT UP TO SECOND FLOOR REFER TO SECOND FLOOR PLAN.
7. ROUTE DUCT UP TO SECOND FLOOR MECHANICAL ROOM. CONTRACTOR SHALLCOORDINATE SLAB OPENING WITH STRUCTURE.
8. RUN DUCT DOWN AN IN BETWEEN STUCTURAL BEAMS.
9. RUN DUCT BETWEEN A FRAME PROUDE PROPER SUPPORT.
10. RUN DUCT IN CAVITY AREA UNDERNEATH SEATS.
11. PROVIDE VAV DIFFUSER AS SCHEDULED.
12. INSTALL AIR DEVICES ON BALCONY BOTTOM CEILING.
13. PROVIDE SPIN IN DAMPER .
14. REFER TO CHILLED WATER PLANS FOR SIZES.
15. ROUTE DUCT DOWN TO RIGGING PIT.
16. PROVIDE SUPPORT FOR VAV
17. ROUTE DXYER EXHAUST TO LOUVER ON WALL.
18. ROUTE 6" EXHAUSTR DUCT UP TO WALL LOUVER.
19. PRONDE VOLUME AND MOTORIZED DAMPER.
20. DUCT UP TO UPPER STAGE AREA. REFER TO 2ND FLOOR PLAN.

MECHANICAL GENERAL NOTES:

A. WORK SHALL COMPLY WITH APPLICABLE NATIONAL, STATE, AND LOCAL CODES.

B. DEFINITIONS: "FURNISH " SHALL MEAN TO PURCHASE AND LOCATE AN ITEM ON THE JOBSITE. "INSTALL" SHALL MEAN TO PHYSICALLY INSTALL AN ITEM, AND TO CONNECT ALL REQUIRED SERVICES TO MAKE THAT ITEM FULLY FUNCTIONAL. "PROVIDE" SHALL MEAN BOTH FURNISH AND INSTALL AN ITEM.

C. COORDINATE WITH OTHER TRADES TO PREVENT INTERFERENCE WITH , ELECRICAL LIGHTING, AND STRUCTURE, IN THE CEILING PLENUMS.

D. ALL WORK, BOTH MATERIAL AND INSTALLATION, SHALL BE GUARANTEED FOR A MINIMUM OF ONE YEAR FROM THE TATE OF OWNER ACCEPTANCE(CERTIFICATE OF OCCUPANCY.

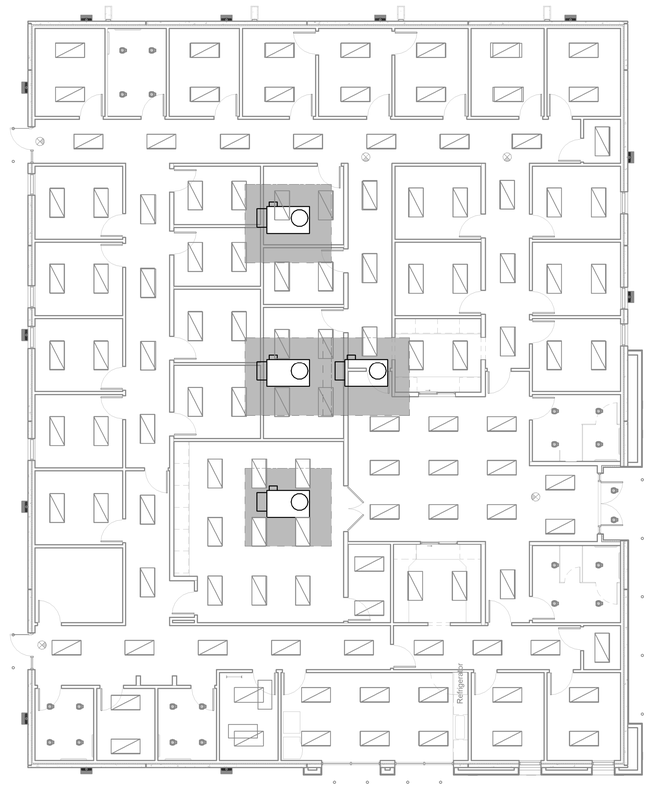
E. MECHNACIAL PLANS ARE DIAGRAMATIC IN NATURE. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF DEVICES AND EQUIPMENT WITH BUILDING ELEMENTS AND THE WORK OF OTHER TRADES

F. EQUIPMENT SIZES, DIMENSION AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK AND PIPING.

G. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC EQUIPMENT PRIOR TO INSTALLATION.

H. ALL DUCT SHALL BE SHEET METAL. MAXIMUM FLEX DUCT SHALL BE 6' FROM DUCT TO DIFUSER. PROVIDE BALANCING DAMPER ON ALL SUPPLY DFUSERS WITH SPIN INS. PROVIDE OBD ON RETURN GRILLES WHEN SPECIFIED ON PLANS OR SCHEDULES.

I. CONTRACTOR SHALL REFER TO SECTION 23 05 48 AND 23 05 50 FOR SOUND ATTENUATION SCHEDULES AND SPECIFICATIONS.



1 First Floor Mechanical Plan Clinic
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HIDALGO COUNTY EL PARAISO

HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

No.	Date	Description

EDCON
1101 W. Ferguson Ave., STE G Pharr, TX O:956.884.7006
TBPE:20271

PROJECT No.: 22219
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Sheet Name

Mechanical Plan Clinic

Sheet Number

M100

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MECHANICAL KEYED NOTES:

xxxxx

MECHANICAL GENERAL NOTES:

A. WORK SHALL COMPLY WITH APPLICABLE NATIONAL, STATE, AND LOCAL CODES.

B. DEFINITIONS: "FURNISH " SHALL MEAN TO PURCHASE AND LOCATE AN ITEM ON THE JOBSITE. "INSTALL" SHALL MEAN TO PHYSICALLY INSTALL AN ITEM, AND TO CONNECT ALL REQUIRED SERVICES TO MAKE THAT ITEM FULLY FUNCTIONAL. "PROVIDE" SHALL MEAN BOTH FURNISH AND INSTALL AN ITEM.

C. COORDINATE WITH OTHER TRADES TO PREVENT INTERFERENCE WITH , ELECRICAL LIGHTING, AND STRUCTURE, IN THE CEILING PLENUMS.

D. ALL WORK, BOTH MATERIAL AND INSTALLATION, SHALL BE GUARANTEED FOR A MINIMUM OF ONE YEAR FROM THE TATE OF OWNER ACCEPTANCE(CERTIFICATE OF OCCUPANCY.

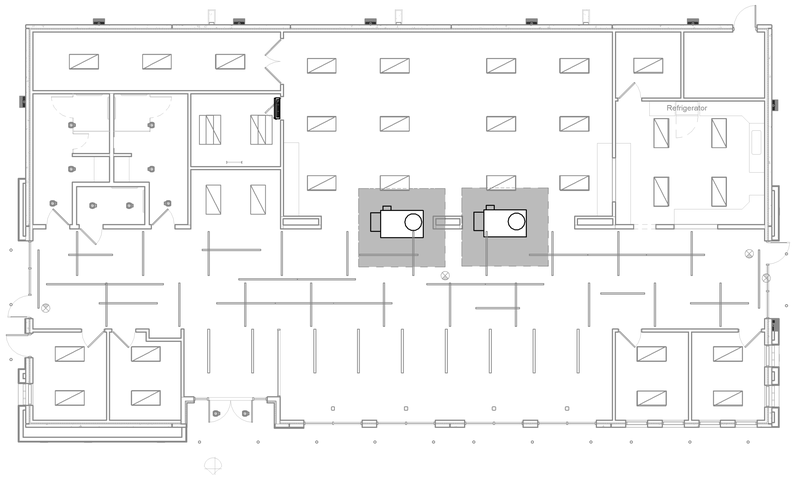
E. MECHNICAL PLANS ARE DIAGRAMATIC IN NATURE. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF DEVICES AND EQUIPMENT WITH BUILDING ELEMENTS AND THE WORK OF OTHER TRADES

F. EQUIPMENT SIZES, DIMENSION AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK AND PIPING.

G. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC EQUIPMENT PRIOR TO INSTALLATION.

H. ALL DUCT SHALL BE SHEET METAL. MAXIMUM FLEX DUCT SHALL BE 6' FROM DUCT TO DIFUSER. PROVIDE BALANCING DAMPER ON ALL SUPPLY DIFUSERS WITH SPIN INS. PROVIDE OBD ON RETURN GRILLES WHEN SPECIFIED ON PLANS OR SCHEDULES.

I. CONTRACTOR SHALL REFER TO SECTION 23 05 48 AND 23 05 50 FOR SOUND ATTENUATION SCHEDULES AND SPECIFICATIONS.



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HIDALGO COUNTY
1901 N. LOS EBANOS RD., ALTON, TX 78573

EDCON
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No.	Description	Date

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Sheet Name

Mechanical Plan CRC

Sheet Number

M101

Project Status:

Schematic Design

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PLUMBING GENERAL NOTES:

A. WORK SHALL COMPLY WITH APPLICABLE NATIONAL, STATE, AND LOCAL CODES.

B. DEFINITIONS: "FURNISH " SHALL MEAN TO PURCHASE AND LOCATE AN ITEM ON THE JOBSITE. "INSTALL" SHALL MEAN TO PHYSICALLY INSTALL AN ITEM, AND TO CONNECT ALL REQUIRED SERVICES TO MAKE THAT ITEM FULLY FUNCTIONAL. "PROVIDE" SHALL MEAN BOTH FURNISH AND INSTALL AN ITEM.

C. VERIFY ALL POINTS OF CONNECTIONS WITH OTHER DISPLINES (LOCATION AND INVERT) PRIOR TO INSTALLATION. THIS SHALL INCLUDE EXISTING UTILITIES AS WELL AS NEW UTILITIES INSTALLED UNDER THE SCOPE OF WORK FOR THIS PROJECT.

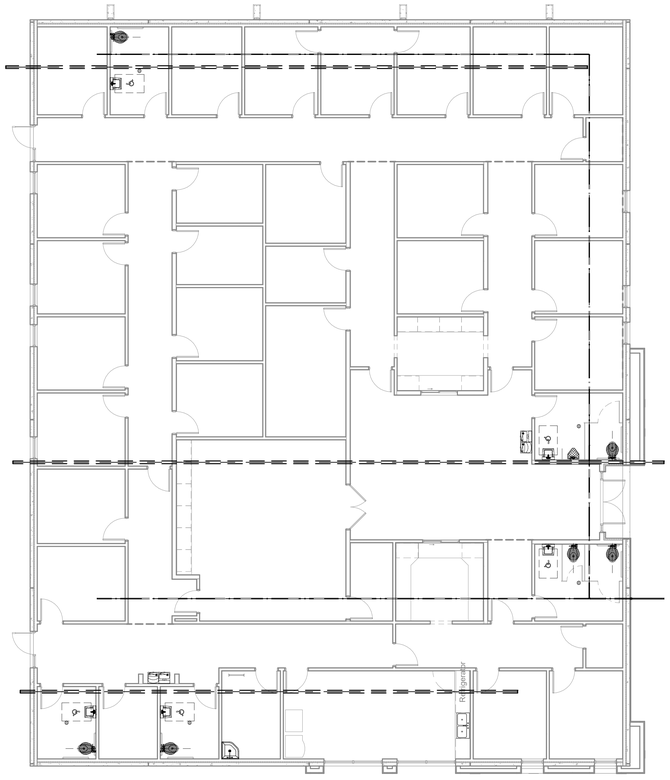
D. COORDINATE WITH OTHER TRADES TO PREVENT INTERFERENCE WITH HVAC DUCTS, ELECRICAL LIGHTING, AND STRUCTURE, IN THE CEILING PLENUMS.

E. COORDINATE DROPPED AND STEP-DOWN FOOTERS AT ALL BUILDING FOUNDATION. PROVIDE SLEEVE THRU FOUNDATION WALL OR BELOW FOOTERS TWO NOMINAL PIPE SIZES LARGER THAN THE SERVICE PIPE.

F. ALL WORK, BOTH MATERIAL AND INSTALLATION, SHALL BE GUARANTEED FOR A MINIMUM OF ONE YEAR FROM THE TATE OF OWNER ACCEPTANCE/CERTIFICATE OF OCCUPANCY .

G. PLUMBING PLANS ARE DIAGRAMATIC IN NATURE. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING ELEMENTS AND THE WORK OF OTHER TRADES.

H. CONTRACTOR SHALL COORDINATE SEWER AND WATER LINES WITH CIVIL DRAWINGS AND NOTIFY MEP ENGINEERING OF ANY DISCREPANCIES.



1 First Floor Sewer Plumbing Plan Clinic
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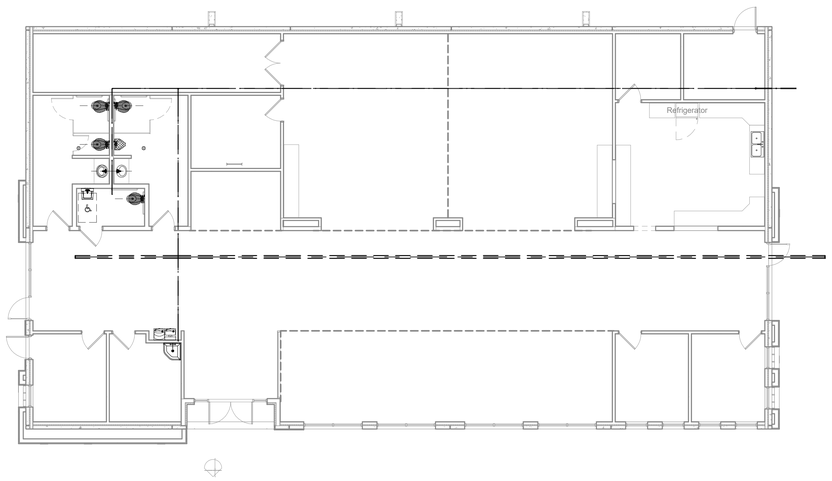
Sewer Plumbing Plan Clinic

Sheet Number

P100

Project Status:

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Sewer Plumbing Plan CRC

Sheet Number

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