

ADDENDUM NO. 3

THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND HEREBY MODIFIES THE ORIGINAL CONSTRUCTION DOCUMENTS DATED OCTOBER 18, 2021 RESPECTIVELY.

NAME OF COMPANY

BY



CLARIFICATION

- Item #1** Low Voltage/ Network System is not included in the AV Package. Refer to electrical and Bid Package Summary.
- Item #2** The Extron switch in the AV Package– 1608 xi IPCP MA70 – has been retired. Replace with IN1608 xi IPCP Q MA 70 (60-1238-96).
- Item #3** Camera [CAM] infrastructure is shown in all courtrooms for future cameras. County and Circuit Courtrooms receive (1) camera (Audience position) for image of Judge. Camera's image is routed to HDBT Tx > HDBT Rx > Mediaport 200 > Owner furnished computer running Zoom, Teams, etc. HDMI output of Owner furnished computer to connect to HDBT Tx > Extron switcher, to display far end image on local display. Reference AV301 #2.
- Item #4** Stair nosings are to be installed on all exterior stair locations as specified.
- Item #5** Storefront and Curtainwall systems do not need to meet IR / Blast Resistant protocol.
- Item #6** The project does not include LEED Certifications.
- Item #7** The millwork manufacturer to meet AWI certifications only.
- Item #8** 1/2" Solid Surface material is acceptable so long as profiles are provided per contract documents.
- Item #9** Sound batt insulation to be installed above all ceilings, typ.
- Item #10** Concrete sealant shall be Master Protech H-1000 or equal. For all areas designated as sealed concrete on the finish schedule.
- Item #11** Government Complex Logistics Plan has been added to the end of this Addendum Document.

PRE-BID MEETING

Item #12 PRE-BID MEETING NOTES AND SIGN-IN SHEET

ADD: The attached pre-bid meeting notes and sign-in sheet dated November 17, 2021.

PROJECT MANUAL

Item #13 SPECIFICATION INDEX

REPLACE: Section in its entirety.

Item #14 SECTION 004113.00 SITE PACKAGE BID FORM

REPLACE: Section in its entirety.

Item #15 SECTION 004113.01 GENERAL TRADES BID PACKAGE FORM

REPLACE: Section in its entirety.

Item #16 SECTION 004113.02 MECHANICAL AND PLUMBING BID PACKAGE FORM

REPLACE: Section in its entirety.

Item #17 SECTION 004113.03 FIRE PROTECTION PACKAGE BID FORM

REPLACE: Section in its entirety.

Item #18 SECTION 004113.04 ELECTRICAL PACKAGE BID FORM

REPLACE: Section in its entirety.

Item #19 SECTION 004113.05 AUDIO VISUAL PACKAGE BID FORM

REPLACE: Section in its entirety.

**Item #20 SECTION 004113.06 SITE / GENERAL TRADES COMBO PACKAGE
BID FORM**

REPLACE: Section in its entirety.

Item #21 SECTION 004113.07 ELECTRICAL / AUDIO/VISUAL PACKAGE BID FORM

REPLACE: Section in its entirety.

Item #22 SECTION 011001 BID PACKAGE SUMMARY

REPLACE: Section in its entirety.

Item #23 SECTION 012100 ALLOWANCES

REPLACE: Section in its entirety.

Item #24 SECTION 012200 UNIT PRICES

REPLACE: Section in its entirety.

Item #25 SECTION 012300 ALTERNATES

REPLACE: Section in its entirety.

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- Item #26 SECTION 096519 RESISLIENT FLOORING**
REVISE: Section 2.2 LVT Basis of Design Product: Change the Mohawk Trenta Collection to (Large and Local) by Mowhawk 4.5 mil.
- Item #27 SECTION 310513 SOILS FOR EARTHWORK**
ADD: Section in its entirety.
- Item #28 SECTION 310515 CRUSHED LIMESTONE**
ADD: Section in its entirety.
- Item #29 SECTION 311000 SITE CLEARING**
ADD: Section in its entirety.
- Item #30 SECTION 311001 SITE DEMOLITION**
ADD: Section in its entirety.
- Item #31 SECTION 312000 EARTH MOVING**
ADD: Section in its entirety.
- Item #32 SECTION 312315 BACKFILLING**
ADD: Section in its entirety.
- Item #33 SECTION 312316 EXCAVATION**
ADD: Section in its entirety.
- Item #34 SECTION 312317 TRENCHING**
ADD: Section in its entirety.
- Item #35 SECTION 312500 EROSION AND SEDIMENTATION CONTROLS**
ADD: Section in its entirety.
- Item #36 SECTION 313215 LIME SOIL STABILIZATION**
ADD: Section in its entirety.
- Item #37 SECTION 320001 SITEWORK CAST-IN-PLACE CONCRETE**
ADD: Section in its entirety.
- Item #38 SECTION 321216 ASPHALT PAVING**
ADD: Section in its entirety.
- Item #39 SECTION 321313 CONCRETE PAVING**
ADD: Section in its entirety.
- Item #40 SECTION 321314 SIDEWALK**
ADD: Section in its entirety.
- Item #41 SECTION 321315 CURB AND GUTTER**
ADD: Section in its entirety.

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- Item #42 SECTION 321343 GRASSCRETE**
ADD: Section in its entirety.
- Item #43 SECTION 321723 PAVEMENT MARKINGS**
ADD: Section in its entirety.
- Item #44 SECTION 329219 SEEDING**
ADD: Section in its entirety.
- Item #45 SECTION 329223 SODDING**
ADD: Section in its entirety.
- Item #46 SECTION 330513 MANHOLES AND STRUCTURES**
ADD: Section in its entirety.
- Item #47 SECTION 331116 SITE WATER UTILITY DISTRIBUTION PIPING**
ADD: Section in its entirety.
- Item #48 SECTION 331117 DISINFECTION AND TESTING FOR WATER LINES**
ADD: Section in its entirety.
- Item #49 SECTION 333100 SANITARY UTILITY SEWERAGE PIPING**
ADD: Section in its entirety.
- Item #50 SECTION 334100 STORM UTILITY DRAINAGE PIPING**
ADD: Section in its entirety.

DRAWINGS

- Item #51 SHEET G001 – INDEX OF DRAWINGS**
REPLACE: Sheet G001, Addendum #3 dated 11/19/2021
- Item #52 SHEET H100 – HARDSCAPE PLAN**
DELETE: All site furnishing (benches, trash cans, table and chairs) Flag poles to remain.
- Item #53 SHEET H200 – HARDSCAPE DETAILS**
DELETE: Requirements for colored admixture for stamped concrete.
- Item #54 SHEET A000 – SITE PLAN – GROUND LEVEL**
REPLACE: Sheet A000.
- Item #55 SHEET A703 – FIRST FLOOR – ENLARGED REFLECTED CEILING PLAN B**
REPLACE: Sheet A703.
- Item #56 SHEETS S103 AND S104 – FOUNDATION AND FLOOR FRAMING PLANS**
CLARIFICATION: All interior slab on grades shall be 5” concrete slabs w/ #3 @ 16” o.c., ea. Way.

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- Item #57 SHEET S104 – FOUNDATION AND FLOOR PLANS PART “B”**
REPLACE: Sheet S104, Addendum #3 dated 11/19/2021
(Revise (1) footing depth, omit section, revise ramp framing)
- Item #58 SHEET S105 – SECOND FLOOR FRAMING PLAN PART “A”**
REPLACE: Sheet S105 Addendum #3 dated 11/19/2021
(Revise beam framing on grids B, C, D, E, and F between 9 and 7)
- Item #59 SHEET S106 – SECOND FLOOR FRAMING PLANS PART “B”**
REPLACE: Sheet S106 Addendum #3 dated 11/19/2021
(Revise framing and add section marks)
- Item #60 SHEET S108 – ROOF FRAMING PLANS PART “B”**
REPLACE: Sheet S108 Addendum #3 dated 11/19/2021
(Revise beam framing and add section marks.)
- Item #61 SHEET S110 – DETENTION AREA FRAMING PLANS**
REPLACE: Sheet S110 Addendum #3 dated 11/19/2021
(Add note for 8” concrete slab over detention areas.)
- Item #62 SHEET S111 – FRONT ENTRANCE FOUNDATION FRAMING PLANS AND DETAILS**
REPLACE: Sheet S111 Addendum #3 dated 11/19/2021
(Revise detail 1, revise ramp framing.)
- Item #63 SHEET S201 – FOUNDATION DETAILS**
CLARIFICATION: Detail 8/S201 – Note for 8” CMU walls shall be “8” CMU wall, see S305 for details.”
- Item #64 SHEET S202 – FOUNDATION DETAILS**
REPLACE: Sheet S202 Addendum #3 dated 11/19/2021
(Revise details)
- Item #65 SHEET S203 – FOUNDATION DETAILS**
CLARIFICATION: Detail 6/S203 – Add note: “See 1/S203 for grade beam reinforcing.”
- Item #66 SHEET S304 – STEEL DETAILS**
REPLACE: Sheet S304 Addendum #3 dated 11/19/2021
(Revised detail 7/S304 and 8/S304)
- Item #67 SHEET S307 – STEEL DETAILS**
CLARIFICATION: Detail 3/S307 – Omit HSS12x6x3/8.
- Item #68 SHEET E001 – ELECTRICAL LIGHTING FIXITURE SCHEULE, LEGEND, NOTES**
REPLACE: Sheet E001.
- Item #69 SHEET E002 – ELECTRICAL EQUIPMENT CONNECTION SCHEDULE**
REPLACE: Sheet E001.

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- Item #70 SHEET E100 – ELECTRICAL SITE PLAN**
REPLACE: Sheet E100.
- Item #71 SHEET E211 – LIGHTING FIRST FLOOR PLAN PART B**
REPLACE: Sheet E211.
- Item #72 SHEET E221 – POWER FIRST FLOOR PLAN PART B**
REPLACE: Sheet E221.
- Item #73 SHEET E222 – POWER SECOND FLOOR PLAN PART A**
REPLACE: Sheet E222.
- Item #74 SHEET E230 – POWER CONNECTIONS FIRST FLOOR PLAN PART A**
REPLACE: Sheet E230.
- Item #75 SHEET E231 – POWER CONNECTIONS FIRST FLOOR PLAN PART B**
REPLACE: Sheet E231.
- Item #76 SHEET E233 – POWER CONNECTIONS SECOND FLOOR PLAN PART B**
REPLACE: Sheet E233.
- Item #77 SHEET E241 – COMMUNICATIONS FIRST FLOOR PLAN PART B**
REPLACE: Sheet E241.
- Item #78 SHEET E242 – COMMUNICATIONS SECOND FLOOR PLAN PART A**
REPLACE: Sheet E242.
- Item #79 SHEET E254 – SPECIAL SYSTEMS – OVERALL – SECURITY CAMERAS**
REPLACE: Sheet E254.
- Item #80 SHEET EA001 – ELECTRICAL ADDENDUM ITEMS**
REPLACE: Sheet EA001.
- Item #81 SHEET EA002 – ELECTRICAL ADDENDUM ITEMS**
REPLACE: Sheet EA002.

END OF ADDENDUM NO. 3

November 18, 2021

**Lauderdale County
Government Building
19-4894A**

Pre-Bid Conference Meeting No 2 - Meeting Minutes

AGENDA:

1. Introductions/LPK/Yates:

2. Registration of Attendees:

- a. Attendees will all list their name, company and contact information on the provided sign-in sheet by LPK.
- b. Notes from today's conference will be included in Addendum No. 3 to all registered plan holders.

3. Project Overview & Bid Information

- a. Description of project: A 2-story 91,180 sf government building for Lauderdale County. Construction is comprised of concrete foundations, concrete slab and composite steel framing. Exterior materials are storefront and curtain wall, painted brick veneer and pre-finished metal wall panels. Roofing is a TPO membrane system. HVAC is a 2-pipe / electric re-heat system. Electrical is 480v/3 phase with generator backup. The building is to be fully sprinkled.
- b. Bid date: The Lauderdale County Board of Supervisors will receive sealed competitive bids at the office of Lauderdale County Administrator, Chris Lafferty, 410 Constitution Avenue, 11th Floor, Meridian, MS 39301 until **2:00 p.m. CST on December 2, 2021**
- c. Plans and Specifications can be viewed and purchased online at Jackson Blueprint Online Plan Room. Plans and Specifications can also be downloaded from Central Bidding at www.centralbidding.com. Electronic bids can be submitted at www.centralbidding.com. The plans are issued as a complete set, contractor is responsible to review entire set.
 1. Do not wait until last minute for submitting electronic bids, allow for adequate upload time.
- d. Completion time is 540 days from Notice to Proceed.
- e. Addendum process, timing, and known items: The deadline for submitting questions/clarifications to LPK to be addressed by Addenda is Friday, November 23, 2021 by 10:00 am. All questions must be submitted to the following email address: barmstrong@lpkarchitects.com, and cladner@lpkarchitects.com

- f. All Bid Packages must be identified on the outside of the envelope. Each bid form to submitted in its own envelope.

4. Open Discussion

- a. Site released in the last addendum (Addendum No. 2)
- b. New bid forms and alternate revisions will be release in Addendum No. 3.
- c. Site package hardscape – Alternate No. 4 is to remove seat walls and stamped concrete.
- d. Logistics plan to be released in Addendum No. 3 to clarify extents of work.
- e. Contractors must review the Bid Package Summary for responsibilities of connections of the water, sewer, electrical, fire protection, storm water, etc.
- f. The existing 610 concrete can be used where indicated on the contract documents.
- g. Existing sediment protection can be taken over as is, contractor is responsible for reviewing existing conditions prior to bid.
- h. All landscaping has been removed via Addendum No. 2, irrigation sleeves are to remain within the project.
- i. The existing 610 concrete is available for the building construction, any remaining stone is property of the Owner.
- j. Access Control is in Division 8. Contractor to reference the bid package summary to describe power termination responsibility regarding access control.
- k. The aggregate piles are currently in place, Contractors can request the as-built drawings (for reference only) by email to cladner@lpkarchitects.com. There is loose aggregate and slurry that will need to be excavated to pour the additional concrete structure.
- l. Project schedule – Upon contract aware each Contractor to generate their project schedules and submit to Yates, schedules are then merged and coordinated by Yates.

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NOT APPLICABLE

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APPENDIX (SUPPLEMENTAL DOCUMENTS)

NOT APPLICABLE

END OF INDEX

SECTION 004113.00 – **SITE PACKAGE BID FORM**

To: Lauderdale County Board of Supervisors
Meridian, MS

Re: Project Number: 19-4894A

The undersigned, having examined the Contract Documents and being familiar with the contents contained therein all of which are on file in the office of LPK Architects, P.A., Meridian, MS, does hereby propose to furnish and deliver all labor, materials, and equipment necessary for the successful completion of the Contract on which we submit a bid according to Plans and Specifications as follows:

Lauderdale County Government Building:

BASE BID AMOUNT

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 1 - Replace all terrazzo flooring, stair risers and treads indicated in the drawings with stained concrete.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 2 – Remove all ballistic glazing and Kevlar panels at service counters throughout the project except in courtrooms, provide ¼” tempered glazing.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 3 - Shell space Chancery Court 2197 as indicated below: Delete Vestibule 2200, Meeting 2201, Meeting 2202, Meeting 2203, Meeting 2204, Court Storage 2199. Delete finish floor and base. Delete lay-in ceiling, and ceiling furrings. Delete all millwork. Delete all doors except 2200, 2197A, and 2197B. All shell space perimeter walls to go tight to deck with gypsum board and insulation as scheduled. Refer to mechanical, electrical and fire protection for revisions to this area.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 4 – Remove select site hardscape as indicated on sheet A000. Provide 6” topsoil, replace stamped concrete crosswalk with paving and striping.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 5 – Replace all prefinished metal wall panels indicated in the drawings with 2” E.I.F.S.; basis of design to be StoTherm® ci or approved equal. All metal fascia and soffits to remain.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 6 – Delete compacted 610 crushed concrete road as indicated on C202.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

COMPLETION TIME: The undersigned agrees that work to be performed under this contract must be substantially complete within **540 Days**. Substantial completion may be established separately for each project. Prior to award, the Contractor shall provide schedule documentation acceptable to the Construction Manager within 15 calendar days to develop the Master Project Schedule that best meets the Project Schedule Requirements as determined by the Owner. Contractors agree that the Master Project Schedule as approved by the Construction Manager, Architect, and the Owner will be the Master Project Schedule for the Project. Contractors shall cooperate fully with Owner forces or separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying the Work.

ADDENDA: Receipt of the following Addenda is acknowledged:

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

ACCEPTANCE: I agree to hold this proposal open for acceptance for forty-five (45) days after the bid date, and certify that I am authorized to enter my firm into a binding contract if this proposal is accepted.

Signature _____ Date _____

Name and Title _____

Name of Business _____

Address _____

City/State/Zip Code _____

Phone/Fax _____

Certificate of Responsibility Numbers(s): _____

DO NOT ENCLOSE THIS PAGE WITH BID

- A. Submittal: Enclose the following in envelope.
1. Proposal on form furnished
 2. Bid Security.
 3. Addenda.

- B. Envelope:

Seal envelope and mark on face:

Contractor's name and address
(upper left corner)

Bid Package included in envelope.
(upper left corner)

Certificate of Responsibility #
(lower left hand corner)

END OF SECTION 004113.01

SECTION 004113.01 – **GENERAL TRADES BID PACKAGE FORM**

To: Lauderdale County Board of Supervisors
Meridian, MS

Re: Project Number: 19-4894A

The undersigned, having examined the Contract Documents and being familiar with the contents contained therein all of which are on file in the office of LPK Architects, P.A., Meridian, MS, does hereby propose to furnish and deliver all labor, materials, and equipment necessary for the successful completion of the Contract on which we submit a bid according to Plans and Specifications as follows:

Lauderdale County Government Building:

BASE BID AMOUNT

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 1 - Replace all terrazzo flooring, stair risers and treads indicated in the drawings with stained concrete.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 2 – Remove all ballistic glazing and Kevlar panels at service counters throughout the project except in courtrooms, provide ¼” tempered glazing.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 3 - Shell space Chancery Court 2197 as indicated below: Delete Vestibule 2200, Meeting 2201, Meeting 2202, Meeting 2203, Meeting 2204, Court Storage 2199. Delete finish floor and base. Delete lay-in ceiling, and ceiling furrings. Delete all millwork. Delete all doors except 2200, 2197A, and 2197B. All shell space perimeter walls to go tight to deck with gypsum board and insulation as scheduled. Refer to mechanical, electrical and fire protection for revisions to this area.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 4 – Remove select site hardscape as indicated on sheet A000. Provide 6” topsoil, replace stamped concrete crosswalk with paving and striping.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 5 – Replace all prefinished metal wall panels indicated in the drawings with 2” E.I.F.S.; basis of design to be StoTherm® ci or approved equal. All metal fascia and soffits to remain.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 6 – Delete compacted 610 crushed concrete road as indicated on C202.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

COMPLETION TIME: The undersigned agrees that work to be performed under this contract must be substantially complete within **540 Days**. Substantial completion may be established separately for each project. Prior to award, the Contractor shall provide schedule documentation acceptable to the Construction Manager within 15 calendar days to develop the Master Project Schedule that best meets the Project Schedule Requirements as determined by the Owner. Contractors agree that the Master Project Schedule as approved by the Construction Manager, Architect, and the Owner will be the Master Project Schedule for the Project. Contractors shall cooperate fully with Owner forces or separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying the Work.

ADDENDA: Receipt of the following Addenda is acknowledged:

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

ACCEPTANCE: I agree to hold this proposal open for acceptance for forty-five (45) days after the bid date, and certify that I am authorized to enter my firm into a binding contract if this proposal is accepted.

Signature _____ Date _____

Name and Title _____

Name of Business _____

Address _____

City/State/Zip Code _____

Phone/Fax _____

Certificate of Responsibility Numbers(s): _____

DO NOT ENCLOSE THIS PAGE WITH BID

- A. Submittal: Enclose the following in envelope.
1. Proposal on form furnished
 2. Bid Security.
 3. Addenda.

- B. Envelope:

Seal envelope and mark on face:

Contractor's name and address
(upper left corner)

Bid Package included in envelope.
(upper left corner)

Certificate of Responsibility #
(lower left hand corner)

END OF SECTION 004113.01

SECTION 004113.02 – **MECHANICAL PLUMBING BID PACKAGE FORM**

To: Lauderdale County Board of Supervisors
Meridian, MS

Re: Project Number: 19-4894A

The undersigned, having examined the Contract Documents and being familiar with the contents contained therein all of which are on file in the office of LPK Architects, P.A., Meridian, MS, does hereby propose to furnish and deliver all labor, materials, and equipment necessary for the successful completion of the Contract on which we submit a bid according to Plans and Specifications as follows:

Lauderdale County Government Building:

BASE BID AMOUNT

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 1 - Replace all terrazzo flooring, stair risers and treads indicated in the drawings with stained concrete.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 2 – Remove all ballistic glazing and Kevlar panels at service counters throughout the project except in courtrooms, provide ¼” tempered glazing.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 3 - Shell space Chancery Court 2197 as indicated below: Delete Vestibule 2200, Meeting 2201, Meeting 2202, Meeting 2203, Meeting 2204, Court Storage 2199. Delete finish floor and base. Delete lay-in ceiling, and ceiling furrings. Delete all millwork. Delete all doors except 2200, 2197A, and 2197B. All shell space perimeter walls to go tight to deck with gypsum board and insulation as scheduled. Refer to mechanical, electrical and fire protection for revisions to this area.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 4 – Remove select site hardscape as indicated on sheet A000. Provide 6” topsoil, replace stamped concrete crosswalk with paving and striping.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 5 – Replace all prefinished metal wall panels indicated in the drawings with 2” E.I.F.S.; basis of design to be StoTherm® ci or approved equal. All metal fascia and soffits to remain.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____

ALTERNATE NUMBER 6 – Delete compacted 610 crushed concrete road as indicated on C202.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

COMPLETION TIME: The undersigned agrees that work to be performed under this contract must be substantially complete within **540 Days**. Substantial completion may be established separately for each project. Prior to award, the Contractor shall provide schedule documentation acceptable to the Construction Manager within 15 calendar days to develop the Master Project Schedule that best meets the Project Schedule Requirements as determined by the Owner. Contractors agree that the Master Project Schedule as approved by the Construction Manager, Architect, and the Owner will be the Master Project Schedule for the Project. Contractors shall cooperate fully with Owner forces or separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying the Work.

ADDENDA: Receipt of the following Addenda is acknowledged:

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

ACCEPTANCE: I agree to hold this proposal open for acceptance for forty-five (45) days after the bid date, and certify that I am authorized to enter my firm into a binding contract if this proposal is accepted.

Signature _____ Date _____

Name and Title _____

Name of Business _____

Address _____

City/State/Zip Code _____

Phone/Fax _____

Certificate of Responsibility Numbers(s): _____

DO NOT ENCLOSE THIS PAGE WITH BID

- A. Submittal: Enclose the following in envelope.
1. Proposal on form furnished
 2. Bid Security.
 3. Addenda.

- B. Envelope:

Seal envelope and mark on face:

Contractor's name and address
(upper left corner)

Bid Package included in envelope.
(upper left corner)

Certificate of Responsibility #
(lower left hand corner)

END OF SECTION 004113.01

SECTION 004113.03 – FIRE PROTECTION PACKAGE BID FORM

To: Lauderdale County Board of Supervisors
Meridian, MS

Re: Project Number: 19-4894A

The undersigned, having examined the Contract Documents and being familiar with the contents contained therein all of which are on file in the office of LPK Architects, P.A., Meridian, MS, does hereby propose to furnish and deliver all labor, materials, and equipment necessary for the successful completion of the Contract on which we submit a bid according to Plans and Specifications as follows:

Lauderdale County Government Building:

BASE BID AMOUNT

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 1 - Replace all terrazzo flooring, stair risers and treads indicated in the drawings with stained concrete.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 2 – Remove all ballistic glazing and Kevlar panels at service counters throughout the project except in courtrooms, provide ¼” tempered glazing.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 3 - Shell space Chancery Court 2197 as indicated below: Delete Vestibule 2200, Meeting 2201, Meeting 2202, Meeting 2203, Meeting 2204, Court Storage 2199. Delete finish floor and base. Delete lay-in ceiling, and ceiling furrings. Delete all millwork. Delete all doors except 2200, 2197A, and 2197B. All shell space perimeter walls to go tight to deck with gypsum board and insulation as scheduled. Refer to mechanical, electrical and fire protection for revisions to this area.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 4 – Remove select site hardscape as indicated on sheet A000. Provide 6” topsoil, replace stamped concrete crosswalk with paving and striping.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 5 – Replace all prefinished metal wall panels indicated in the drawings with 2” E.I.F.S.; basis of design to be StoTherm® ci or approved equal. All metal fascia and soffits to remain.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 6 – Delete compacted 610 crushed concrete road as indicated on C202.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

COMPLETION TIME: The undersigned agrees that work to be performed under this contract must be substantially complete within **540 Days**. Substantial completion may be established separately for each project. Prior to award, the Contractor shall provide schedule documentation acceptable to the Construction Manager within 15 calendar days to develop the Master Project Schedule that best meets the Project Schedule Requirements as determined by the Owner. Contractors agree that the Master Project Schedule as approved by the Construction Manager, Architect, and the Owner will be the Master Project Schedule for the Project. Contractors shall cooperate fully with Owner forces or separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying the Work.

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No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

ACCEPTANCE: I agree to hold this proposal open for acceptance for forty-five (45) days after the bid date, and certify that I am authorized to enter my firm into a binding contract if this proposal is accepted.

Signature _____ Date _____

Name and Title _____

Name of Business _____

Address _____

City/State/Zip Code _____

Phone/Fax _____

Certificate of Responsibility Numbers(s): _____

DO NOT ENCLOSE THIS PAGE WITH BID

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1. Proposal on form furnished
 2. Bid Security.
 3. Addenda.

- B. Envelope:

Seal envelope and mark on face:

Contractor's name and address
(upper left corner)

Bid Package included in envelope.
(upper left corner)

Certificate of Responsibility #
(lower left hand corner)

END OF SECTION 004113.03

SECTION 004113.04 –ELECTRICAL PACKAGE BID FORM

To: Lauderdale County Board of Supervisors
Meridian, MS

Re: Project Number: 19-4894A

The undersigned, having examined the Contract Documents and being familiar with the contents contained therein all of which are on file in the office of LPK Architects, P.A., Meridian, MS, does hereby propose to furnish and deliver all labor, materials, and equipment necessary for the successful completion of the Contract on which we submit a bid according to Plans and Specifications as follows:

Lauderdale County Government Building:

BASE BID AMOUNT

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 1 - Replace all terrazzo flooring, stair risers and treads indicated in the drawings with stained concrete.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 2 – Remove all ballistic glazing and Kevlar panels at service counters throughout the project except in courtrooms, provide ¼” tempered glazing.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 3 - Shell space Chancery Court 2197 as indicated below: Delete Vestibule 2200, Meeting 2201, Meeting 2202, Meeting 2203, Meeting 2204, Court Storage 2199. Delete finish floor and base. Delete lay-in ceiling, and ceiling furrings. Delete all millwork. Delete all doors except 2200, 2197A, and 2197B. All shell space perimeter walls to go tight to deck with gypsum board and insulation as scheduled. Refer to mechanical, electrical and fire protection for revisions to this area.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 4 – Remove select site hardscape as indicated on sheet A000. Provide 6” topsoil, replace stamped concrete crosswalk with paving and striping.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 5 – Replace all prefinished metal wall panels indicated in the drawings with 2” E.I.F.S.; basis of design to be StoTherm® ci or approved equal. All metal fascia and soffits to remain.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 6 – Delete compacted 610 crushed concrete road as indicated on C202.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

COMPLETION TIME: The undersigned agrees that work to be performed under this contract must be substantially complete within **540 Days**. Substantial completion may be established separately for each project. Prior to award, the Contractor shall provide schedule documentation acceptable to the Construction Manager within 15 calendar days to develop the Master Project Schedule that best meets the Project Schedule Requirements as determined by the Owner. Contractors agree that the Master Project Schedule as approved by the Construction Manager, Architect, and the Owner will be the Master Project Schedule for the Project. Contractors shall cooperate fully with Owner forces or separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying the Work.

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No. ____ Date _____ No. ____ Date _____

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No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

ACCEPTANCE: I agree to hold this proposal open for acceptance for forty-five (45) days after the bid date, and certify that I am authorized to enter my firm into a binding contract if this proposal is accepted.

Signature _____ Date _____

Name and Title _____

Name of Business _____

Address _____

City/State/Zip Code _____

Phone/Fax _____

Certificate of Responsibility Numbers(s): _____

DO NOT ENCLOSE THIS PAGE WITH BID

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1. Proposal on form furnished
 2. Bid Security.
 3. Addenda.

- B. Envelope:

Seal envelope and mark on face:

Contractor's name and address
(upper left corner)

Bid Package included in envelope.
(upper left corner)

Certificate of Responsibility #
(lower left hand corner)

END OF SECTION 004113.04

SECTION 004113.05 –AUDIO/VISUAL PACKAGE BID FORM

To: Lauderdale County Board of Supervisors
Meridian, MS

Re: Project Number: 19-4894A

The undersigned, having examined the Contract Documents and being familiar with the contents contained therein all of which are on file in the office of LPK Architects, P.A., Meridian, MS, does hereby propose to furnish and deliver all labor, materials, and equipment necessary for the successful completion of the Contract on which we submit a bid according to Plans and Specifications as follows:

Lauderdale County Government Building:

BASE BID AMOUNT

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 1 - Replace all terrazzo flooring, stair risers and treads indicated in the drawings with stained concrete.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 2 – Remove all ballistic glazing and Kevlar panels at service counters throughout the project except in courtrooms, provide ¼” tempered glazing.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 3 - Shell space Chancery Court 2197 as indicated below: Delete Vestibule 2200, Meeting 2201, Meeting 2202, Meeting 2203, Meeting 2204, Court Storage 2199. Delete finish floor and base. Delete lay-in ceiling, and ceiling furrings. Delete all millwork. Delete all doors except 2200, 2197A, and 2197B. All shell space perimeter walls to go tight to deck with gypsum board and insulation as scheduled. Refer to mechanical, electrical and fire protection for revisions to this area.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 4 – Remove select site hardscape as indicated on sheet A000. Provide 6” topsoil, replace stamped concrete crosswalk with paving and striping.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 5 – Replace all prefinished metal wall panels indicated in the drawings with 2” E.I.F.S.; basis of design to be StoTherm® ci or approved equal. All metal fascia and soffits to remain.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 6 – Delete compacted 610 crushed concrete road as indicated on C202.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

COMPLETION TIME: The undersigned agrees that work to be performed under this contract must be substantially complete within **540 Days**. Substantial completion may be established separately for each project. Prior to award, the Contractor shall provide schedule documentation acceptable to the Construction Manager within 15 calendar days to develop the Master Project Schedule that best meets the Project Schedule Requirements as determined by the Owner. Contractors agree that the Master Project Schedule as approved by the Construction Manager, Architect, and the Owner will be the Master Project Schedule for the Project. Contractors shall cooperate fully with Owner forces or separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying the Work.

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No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

ACCEPTANCE: I agree to hold this proposal open for acceptance for forty-five (45) days after the bid date, and certify that I am authorized to enter my firm into a binding contract if this proposal is accepted.

Signature _____ Date _____

Name and Title _____

Name of Business _____

Address _____

City/State/Zip Code _____

Phone/Fax _____

Certificate of Responsibility Numbers(s): _____

DO NOT ENCLOSE THIS PAGE WITH BID

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 - 1. Proposal on form furnished
 - 2. Bid Security.
 - 3. Addenda.

- B. Envelope:

Seal envelope and mark on face:

Contractor's name and address
(upper left corner)

Bid Package included in envelope.
(upper left corner)

Certificate of Responsibility #
(lower left hand corner)

END OF SECTION 004113.05

SECTION 004113.06 – **SITE / GENERAL TRADES COMBO PACKAGE BID FORM**

To: Lauderdale County Board of Supervisors
Meridian, MS

Re: Project Number: 19-4894A

The undersigned, having examined the Contract Documents and being familiar with the contents contained therein all of which are on file in the office of LPK Architects, P.A., Meridian, MS, does hereby propose to furnish and deliver all labor, materials, and equipment necessary for the successful completion of the Contract on which we submit a bid according to Plans and Specifications as follows:

Lauderdale County Government Building:

BASE BID AMOUNT

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 1 - Replace all terrazzo flooring, stair risers and treads indicated in the drawings with stained concrete.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 2 – Remove all ballistic glazing and Kevlar panels at service counters throughout the project except in courtrooms, provide ¼” tempered glazing.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 3 - Shell space Chancery Court 2197 as indicated below: Delete Vestibule 2200, Meeting 2201, Meeting 2202, Meeting 2203, Meeting 2204, Court Storage 2199. Delete finish floor and base. Delete lay-in ceiling, and ceiling furrings. Delete all millwork. Delete all doors except 2200, 2197A, and 2197B. All shell space perimeter walls to go tight to deck with gypsum board and insulation as scheduled. Refer to mechanical, electrical and fire protection for revisions to this area.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 4 – Remove select site hardscape as indicated on sheet A000. Provide 6” topsoil, replace stamped concrete crosswalk with paving and striping.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 5 – Replace all prefinished metal wall panels indicated in the drawings with 2” E.I.F.S.; basis of design to be StoTherm® ci or approved equal. All metal fascia and soffits to remain.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 6 – Delete compacted 610 crushed concrete road as indicated on C202.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

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Words

COMPLETION TIME: The undersigned agrees that work to be performed under this contract must be substantially complete within **540 Days**. Substantial completion may be established separately for each project. Prior to award, the Contractor shall provide schedule documentation acceptable to the Construction Manager within 15 calendar days to develop the Master Project Schedule that best meets the Project Schedule Requirements as determined by the Owner. Contractors agree that the Master Project Schedule as approved by the Construction Manager, Architect, and the Owner will be the Master Project Schedule for the Project. Contractors shall cooperate fully with Owner forces or separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying the Work.

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No. ____ Date _____ No. ____ Date _____

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No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

ACCEPTANCE: I agree to hold this proposal open for acceptance for forty-five (45) days after the bid date, and certify that I am authorized to enter my firm into a binding contract if this proposal is accepted.

Signature _____ Date _____

Name and Title _____

Name of Business _____

Address _____

City/State/Zip Code _____

Phone/Fax _____

Certificate of Responsibility Numbers(s): _____

DO NOT ENCLOSE THIS PAGE WITH BID

A. Submittal: Enclose the following in envelope.

1. Proposal on form furnished
2. Bid Security.
3. Addenda.

B. Envelope:

Seal envelope and mark on face:

Contractor's name and address
(upper left corner)

Bid Package included in envelope.
(upper left corner)

Certificate of Responsibility #
(lower left hand corner)

END OF SECTION 004113.06

SECTION 004113.07 – **ELECTRICAL / AUDIO/VISUAL COMBO PACKAGE BID FORM**

To: Lauderdale County Board of Supervisors
Meridian, MS

Re: Project Number: 19-4894A

The undersigned, having examined the Contract Documents and being familiar with the contents contained therein all of which are on file in the office of LPK Architects, P.A., Meridian, MS, does hereby propose to furnish and deliver all labor, materials, and equipment necessary for the successful completion of the Contract on which we submit a bid according to Plans and Specifications as follows:

Lauderdale County Government Building:

BASE BID AMOUNT

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 1 - Replace all terrazzo flooring, stair risers and treads indicated in the drawings with stained concrete.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 2 – Remove all ballistic glazing and Kevlar panels at service counters throughout the project except in courtrooms, provide ¼” tempered glazing.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 3 - Shell space Chancery Court 2197 as indicated below: Delete Vestibule 2200, Meeting 2201, Meeting 2202, Meeting 2203, Meeting 2204, Court Storage 2199. Delete finish floor and base. Delete lay-in ceiling, and ceiling furrings. Delete all millwork. Delete all doors except 2200, 2197A, and 2197B. All shell space perimeter walls to go tight to deck with gypsum board and insulation as scheduled. Refer to mechanical, electrical and fire protection for revisions to this area.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 4 – Remove select site hardscape as indicated on sheet A000. Provide 6” topsoil, replace stamped concrete crosswalk with paving and striping.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 5 – Replace all prefinished metal wall panels indicated in the drawings with 2” E.I.F.S.; basis of design to be StoTherm® ci or approved equal. All metal fascia and soffits to remain.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

ALTERNATE NUMBER 6 – Delete compacted 610 crushed concrete road as indicated on C202.

ADD () or DEDUCT () NOT APPLICABLE / NO CHANGE ()

\$ _____ Dollars _____
Words

COMPLETION TIME: The undersigned agrees that work to be performed under this contract must be substantially complete within **540 Days**. Substantial completion may be established separately for each project. Prior to award, the Contractor shall provide schedule documentation acceptable to the Construction Manager within 15 calendar days to develop the Master Project Schedule that best meets the Project Schedule Requirements as determined by the Owner. Contractors agree that the Master Project Schedule as approved by the Construction Manager, Architect, and the Owner will be the Master Project Schedule for the Project. Contractors shall cooperate fully with Owner forces or separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying the Work.

ADDENDA: Receipt of the following Addenda is acknowledged:

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

No. ____ Date _____ No. ____ Date _____

ACCEPTANCE: I agree to hold this proposal open for acceptance for forty-five (45) days after the bid date, and certify that I am authorized to enter my firm into a binding contract if this proposal is accepted.

Signature _____ Date _____

Name and Title _____

Name of Business _____

Address _____

City/State/Zip Code _____

Phone/Fax _____

Certificate of Responsibility Numbers(s): _____

DO NOT ENCLOSE THIS PAGE WITH BID

- A. Submittal: Enclose the following in envelope.
1. Proposal on form furnished
 2. Bid Security.
 3. Addenda.

- B. Envelope:

Seal envelope and mark on face:

Contractor's name and address
(upper left corner)

Bid Package included in envelope.
(upper left corner)

Certificate of Responsibility #
(lower left hand corner)

END OF SECTION 004113.07

SECTION 011001 – BID PACKAGE SUMMARY – REVISED 11/19/2021

PART 1- GENERAL

SUMMARY

1. WORK EXECUTED IN THE CONTRACT

- a. The Scope of Work included herein will be required of the selected Bidder. This information is complementary with the requirements of the other bid documents. The Scope of Work identified herein will become part of the Agreement between the Contractor and the Owner. The Scope of Work listed below shall include all labor, materials, equipment, supervision, insurance, payment and performance bonds, applicable taxes and all other work in accordance with the contract documents.
- b. Contractor will be responsible their own Construction Facilities and Temporary Controls except as specifically identified in the plans, specifications, and logistics plan.
- c. The General Trades Contractor will be required to provide dumpsters, temporary toilets, and hand/eye wash station for all Prime Contractors included in this bid package summary. It will still be the Prime contractors' responsibility to put their debris and trash in the dumpsters, as well as keeping the porta johns in decent working order.
- d. It will be all Prime Contractors responsibility to keep the floors orderly, swept, and free from tripping hazards.
- e. The Electrical Contractor will maintain temporary power and add to the temporary lighting for construction activities as needed by all Prime Contractors. Reasonable usage will be paid for by the Owner.
- f. The Mechanical and Plumbing Contractor will provide temporary water onsite for construction activities as needed by all Prime Contractors. Reasonable usage will be paid for by the Owner.
- g. The General Trades contractor will be required to provide any temporary measures for temporary dry in or required temporary conditioning for finishes, should it be necessary for the schedule or manufacturers recommendations.
- h. All Contractors will be required to provide one designated representative for continuous cleanup. Should the Contractor exceed ten (10) persons, then the Contractor shall provide an additional designated representative for continuous cleanup at the discretion of the Owner, Architect, or Construction Manager. Should the Contractor not provide manpower for cleanup and the job site become unclean or unsafe, all work will be stopped, and all manpower used to address the issues before work can resume. Should the Contractor(s) continually not maintain a clean jobsite, the project clean up can be supplemented after 48 hours' notice. Cost of supplementary cleaning will be back charged to the Contractor.
- i. The Contractor shall cooperate fully with Owner forces or separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract.
- j. All work shall be closely coordinated with Architect and the Construction Manager to prevent impacts to the existing facility operations.
- k. All Contractor Project Supervision shall be approved by the Owner, Architect, and the Construction Manager.
- l. All Contractors will be required to coordinate with the Owners representatives and make provisions to maintain vehicle and personnel egress for the building and site, maintain clear access for emergency personnel.
- m. All personnel onsite shall be required to wear PPE, including a minimum of hard hats, high visibility clothing, safety glasses, long pants, and appropriate protective footwear.
- n. Items referenced as General Trades responsibility are to be included in the General Trades without Concrete and Steel Bid Package as well. Those two General Trades Packages are synonymous with the only exception being the providing of Turnkey Concrete and Steel as outlined in those packages.

2. PROJECT PHASING

- a. Contractors agree that the Master Project Schedule as developed and approved by the Construction Manager, Architect, and Owner will be the Master Schedule for the Project.
- b. Through collaborative meetings and coordination, the individual schedules of Prime Contractors will be used to develop the Master Project Schedule that completes the project in no more than 540 Days.

3. OWNER PROVIDED

- a. Soil Borings and Geo-Tech Report
- b. Select Fill Pad at the Building location + 5' outside perimeter.
- c. Piles up to subgrade as shown on documents. The aggregate and small traces of slurry of the piles extends to the surface, or slab subgrade, and is to be removed by the General Trades contractor during installation of foundations. Uncontaminated spoils can be wasted onsite, but contaminated spoils will have to be removed.
- d. Crushed concrete as currently stored onsite in two locations. Any remaining stone at completion will remain the property of the owner and shall not leave the site.
- e. Testing Agency Services
- f. Power, Water and Sewer reasonable consumption costs will be provided by Owner at no cost to the Project. Bid Package Contractors will be responsible for all temporary facilities and controls as required for their work, including taps, hook ups, meters, etc.
- g. Project Identification for temporary operational purposes. Safety and construction signage will remain the responsibility of the contractor.
- h. The Owner reserves the right to award contracts to multiple contractors for the project. The Contractor and its subcontractors shall coordinate and cooperate fully as required by the Owner.

4. SITE PACKAGE

- a. The Site Package includes, but is not limited to, site demo as shown, removal of old asphalt parking, all earthwork, hardscape, concrete paving, asphalt, bollards, fencing, electrical gates, storm drainage system(to within 5' building), removal of temporary fence at completion. Cleaning and pressure washing of hardscape at completion. Work outside of the exterior façade of the building, but within the boundaries of the project limits, including removal of construction fence at project completion.
- b. No Landscaping is to be included in the site. Where identified or directed, provide 6" of topsoil.
- c. The Site Package does not include utilities being installed by the plumber, electrician, and utility companies.
- d. The Site Bid Package will establish and maintain the SWPPP, including the necessary reporting and oversight until the final limits are established and permit closed.
- e. Any existing silt fence or erosion control measures in place at the time of award can be assumed and maintained by this package if it works for the ongoing controls.
- f. SPECIFICATIONS INCLUDED
 - i. DIVISION 00 – Included in its entirety
 - ii. DIVISION 01 – Included in its entirety
 - iii. DIVISION 02 – Included in its entirety
 - iv. DIVISION 03 – Included as it relates to Sitework
 - v. DIVISION 04 – For reference and coordination
 - vi. DIVISION 05 – Included as it relates to Sitework
 - vii. DIVISION 06 – For reference and coordination
 - viii. DIVISION 07 – Included as it relates to Sitework
 - ix. DIVISION 08 – For reference and coordination
 - x. DIVISION 09 – For reference and coordination

- xi. DIVISION 10 – For reference and coordination
- xii. DIVISION 11 – For reference and coordination
- xiii. DIVISION 12 – For reference and coordination
- xiv. DIVISION 14 – For reference and coordination
- xv. DIVISION 21 – For reference and coordination
- xvi. DIVISION 22 - Included as it relates to Sitework
- xvii. DIVISION 23 - For reference and coordination
- xviii. DIVISION 26 - For reference and coordination
- xix. DIVISION 27 - For reference and coordination
- xx. DIVISION 28 - For reference and coordination
- xxi. DIVISION 31 – Included in its entirety, except General Trades includes Termite Treatment
- xxii. DIVISION 32 - Included in its entirety
- xxiii. DIVISION 33 - Included as it relates to Sitework

5. GENERAL TRADES PACKAGE

- a. All scope in drawings, specifications, and contract documents not provided by Owner above, or other Prime Packages above and below are included in this Bid Package.
- b. The General Trades contractor will be required to provide dumpsters, temporary toilets, and hand/eye wash stations for all Prime Contractors included in this bid package summary. It will still be the Prime contractors' responsibility to put their debris and trash in the dumpsters, as well as keeping the porta johns in decent working order.
- c. It will be all Prime Contractors responsibility to keep the floors orderly, swept, and free from tripping hazards.
- d. The General Trades Contractor shall provide all caulking or sealants including but not limited to fireproofing, fire caulking, mineral wool, and sound caulking. All mechanical, fire protection, plumbing, and electrical contractors shall ensure any penetrations they cut through walls leave no more than a $\frac{3}{4}$ " gap for proper sealing.
- e. No materials, fixtures, tie ins, or provisions will be made or provided by the Owner unless otherwise noted in the contract documents.
- f. General Trades Package shall include, but is not limited to, necessary demolition of pile caps, foundations, steel structure, concrete decks, exterior façade in its entirety, roofing, thermal and moisture components, all interior finishes, doors, frames, windows, specialties, conveying equipment, furnishings identified in drawings as by contractor.
- g. General Trades includes termite treatment where required under slab and foundations.
- h. Final Cleaning as described in specification section 017420 shall be the responsibility of the General Trades Contractor. Cleaning shall include a thorough clean before a Architect's and Owner's punch list and touched up afterwards to ensure the Owner receives a clean project at final completion.
- i. Under slab rough in and utility work for all mechanical, plumbing, electrical, low voltage, fire protection, will be performed by the respective contractors and coordinated with the General Trades Contractor.
- j. Includes all demolition and excavation necessary for the installation of new building shall be backfilled and compacted per the architect's direction here in and brought to a under slab elevation.
- k. No materials, fixtures, tie ins, or provisions will be made or provided by the Owner unless otherwise noted in the contract documents.
- l. The Contractor shall review documents for alternates that pertain to the scope of work in this bid package and include as required.
- m. SPECIFICATIONS INCLUDED
 - i. DIVISION 00 – Included in its entirety
 - ii. DIVISION 01 – Included in its entirety
 - iii. DIVISION 02 – Included as it relates to General Trades
 - iv. DIVISION 03 – Included in its entirety
 - v. DIVISION 04 – Included in its entirety

- vi. DIVISION 05 – Included in its entirety
- vii. DIVISION 06 – Included in its entirety
- viii. DIVISION 07 – Included in its entirety
- ix. DIVISION 08 – Included in its entirety
- x. DIVISION 09 – Included in its entirety
- xi. DIVISION 10 – Included in its entirety
- xii. DIVISION 11 – Included in its entirety
- xiii. DIVISION 12 – Included in its entirety
- xiv. DIVISION 14 – Included in its entirety
- xv. DIVISION 21 – For reference and coordination
- xvi. DIVISION 22 - For reference and coordination
- xvii. DIVISION 23 - For reference and coordination
- xviii. DIVISION 26 - For reference and coordination
- xix. DIVISION 27 - For reference and coordination
- xx. DIVISION 28 - For reference and coordination
- xxi. DIVISION 31 – Included as it relates to General Trades
- xxii. DIVISION 32 - Included as it relates to General Trades
- xxiii. DIVISION 33 - Included as it relates to General Trades

6. MECHANICAL & PLUMBING BID PACKAGE

- a. The Mechanical and Plumbing Bid Package includes all mechanical, plumbing, and associated work as outlined on the plans, specifications, and addendum herein to provide a complete system.
- b. The Mechanical and Plumbing Contractor shall provide a complete HVAC system with controls as outlined here in. Raceways, j hooks, etc. for the routing of the controls is to be in this bid package unless otherwise shown on in the drawings by others.
- c. No materials, fixtures, tie ins, or provisions will be made or provided by the Owner unless otherwise noted in the contract documents.
- d. Site utility work associated with plumbing, sewer, gas, etc. will be performed by the mechanical/plumbing contractor. All excavation for work in this package shall be backfilled and compacted per the architect's direction. Stone fill and thrust blocks in trenches shall be the responsibility of this contractor and be brought to finish elevation where the work will be handed off to the Site Contractor. The Site Package contractor shall be responsible for the asphalt, concrete, or top soil necessary to finish the exterior as shown in the documents.
- e. Contractor shall be responsible for connecting and running the fire main to 1' above finish floor, where the fire protection contractor will connect the flange for their system. This work shall include any PIV and tamper switch that shall be run to the riser location for tie in with the fire protection system. The lines shall be jointly flushed out and checked once water can be put on the system.
- f. The Contractor shall be responsible for making penetrations as required for their systems, and as required for complete fireproofing, fire sealants, or fire taping. All penetrations shall leave no larger than a 3/4" gap. Any fire dampers or mechanical components that provide fire or sound ratings, shall be a part of this package.
- g. SPECIFICATIONS INCLUDED
 - i. DIVISION 00 – Included in its entirety
 - ii. DIVISION 01 – Included in its entirety
 - iii. DIVISION 02 – As required by this Package
 - iv. DIVISION 03 – As required for trust blocks, equipment pads, etc.,
 - v. DIVISION 04 – For reference and coordination

- vi. DIVISION 05 – 14 Included were applicable to mechanical and plumbing scopes.
- vii. DIVISION 21 – Included were applicable to mechanical and plumbing scopes.
- viii. DIVISION 22 – Included in its entirety.
- ix. DIVISION 23 – Included in its entirety.
- x. DIVISION 26-33 – Included were applicable to mechanical and plumbing scopes.

7. FIRE PROTECTION BID PACKAGE

- a. The Fire Protection Bid Package includes all fire protection as outlined in the plans, specifications, and other contract documents as to provide a complete system and to the satisfaction of the Owner. Scope includes both the Clean Agent system and the normal fire suppression system. Scope of work shall consist of starting at one foot (1') above finished floor. Scope of work shall include flow tests: fire protection design: shop drawings: materials, equipment and installation to meet NFPA, local, state, and federal codes, regulations, and requirements as to provide a complete fire protection system
- b. The Contractor shall furnish and install all electrical components for the fire protection system including tamper switches and post indicator valves. Electrical Bid Package Contractor will provide final termination to the Fire Protection System.
- c. SPECIFICATIONS INCLUDED:
 - i. DIVISION 00 – Included in its entirety
 - ii. DIVISION 01 – Included in its entirety
 - iii. DIVISION 02 – 14 – For reference and coordination
 - iv. DIVISION 21 – Included in its entirety
 - v. DIVISION 22 - For reference and coordination
 - vi. DIVISION 23 - For reference and coordination
 - vii. DIVISION 26 - For reference and coordination
 - viii. DIVISION 27 - For reference and coordination
 - ix. DIVISION 28 - For reference and coordination
 - x. DIVISION 31 – Included as it relates to Fire Protection Package
 - xi. DIVISION 32 - Included as it relates to Fire Protection Package
 - xii. DIVISION 33 - Included as it relates to Fire Protection Package
 - xiii. DIVISION 22 – 33 – For reference and coordination

8. ELECTRICAL BID PACKAGE

- a. The Electrical Bid Package includes all electrical and associated work for the Government Building and site work as outlined on the plans, specifications, and addendums herein to provide a complete system.
- b. The Contractor shall provide all electrical site utilities or connections to existing services.
- c. Contractor shall provide new site lighting shown within the construction limits outlined in the Public Safety Building documents.
- d. The Contractor shall provide the low voltage systems as outlined in the documents including, but not limited to, fire alarm, phone, data, and security.
- e. The Audio/Visual system shall be part of the Audio/Visual Bid Package. Any A/V raceways required under slab, in walls, and above hard ceilings, shall be installed under this package with a pull string.
- f. The Electrical package includes power into any powered doors or frames, including automatics, hold opens, access control doors, etc. Final terminations into their products will be by the door installers in the General Trades package.

- g. The Electrical Contractor shall provide concrete pads for electrical equipment as required by documents and manufacturer requirements.
- h. Site utility work associated with electrical will be performed by the electrical contractor. All excavation shall be backfilled and compacted per the architect's direction. Stone fill or concrete encasement in trenches shall be the responsibility of this contractor and be brought to finish elevation. The site contractor and general trades contractor shall be responsible for the asphalt, topsoil, and concrete necessary to finish out the interior and exterior as shown in the documents.
- i. No materials, fixtures, tie ins, or provisions will be made or provided by the Owner unless otherwise noted in the contract documents.
- j. The Contractor shall be responsible for making penetrations as required for their systems, and as required for complete fireproofing, fire sealants, or fire taping. All penetrations shall leave no larger than a $\frac{3}{4}$ " gap.
- k. The Contractor shall provide final terminations to the fire protection system including switches located inside and outside the building.
- l. SPECIFICATIONS INCLUDED
 - i. DIVISION 00 – Included in its entirety
 - ii. DIVISION 01 – Included in its entirety
 - iii. DIVISION 02 – 14 – For reference and coordination
 - iv. DIVISION 21 – Included in its entirety
 - v. DIVISION 22 - For reference and coordination
 - vi. DIVISION 23 - For reference and coordination
 - vii. DIVISION 26 - Included in its entirety
 - viii. DIVISION 27 - Included in its entirety, except Section 274100 covered in AV Package
 - ix. DIVISION 28 - Included in its entirety
 - x. DIVISION 31 – Included as it relates to Electrical Package
 - xi. DIVISION 32 - Included as it relates to Electrical Package
 - xii. DIVISION 33 - Included as it relates to Electrical Package

9. AUDIO / VISUAL PACKAGE

- a. The Audio Visual Bid Package includes all associated work for the Government Building as outlined on the plans, specifications, and addendums herein to provide a complete system described in Specification Section 274100.
- b. The Contractor shall be responsible for making penetrations as required for their systems, and as required for complete fireproofing, fire sealants, or fire taping. All penetrations shall leave no larger than a $\frac{3}{4}$ " gap.
- c. Any Audio Visual raceways required under slab, in walls, and above hard ceilings, shall be installed under the Electrical package with a pull string. All other arrangements are included in this package to make a complete installation.
- d. All blocking or supports in the walls or ceiling for the A/V System are to be installed as part of this package.
 - i. DIVISION 00 – Included in its entirety
 - ii. DIVISION 01 – Included in its entirety
 - iii. DIVISION 02 – 14 – For reference and coordination
 - iv. DIVISION 21 – For reference and coordination
 - v. DIVISION 22 - For reference and coordination
 - vi. DIVISION 23 - For reference and coordination
 - vii. DIVISION 26 - For reference and coordination
 - viii. DIVISION 27 - Included as it relates to Audio Visual Package

- ix. DIVISION 28 - For reference and coordination
- x. DIVISION 31 – For reference and coordination
- xi. DIVISION 32 - For reference and coordination
- xii. DIVISION 33 - For reference and coordination

10. SITE / GENERAL TRADES COMBO Package

- a. Provide an opportunity for contractors to submit a combination price for both the Site Package and General Trades Package in their entirety.

11. ELECTRICAL / AUDIO / VISUAL COMBO Package

- a. Provides an opportunity for contractors to submit a combination price for both the Electrical and Audio/Visual Packages in their entirety.

END OF SECTION 011001

SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
 - 1. Lump-sum allowances.
 - 2. Unit-cost allowances.
 - 3. Quantity allowances.
 - 4. Contingency allowances.
 - 5. Testing and inspecting allowances.

1.2 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract advise Architect of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

1.3 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

1.4 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.5 COORDINATION

- A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.6 LUMP-SUM, UNIT-COST AND QUANTITY ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.
- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.
 - 1. If requested by Architect, retain and prepare unused material for storage by Owner. Deliver unused material to Owner's storage space as directed.

1.7 CONTINGENCY ALLOWANCES

- A. Use the contingency allowance only as directed by Architect for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
- C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit margins.
- D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

1.8 TESTING AND INSPECTING ALLOWANCES

- A. Testing and inspecting allowances include the cost of engaging testing agencies, actual tests and inspections, and reporting results.
- B. The allowance does not include incidental labor required to assist the testing agency or costs for retesting if previous tests and inspections result in failure. The cost for incidental labor to assist the testing agency shall be included in the Contract Sum.

- C. Costs of services not required by the Contract Documents are not included in the allowance.
- D. At Project closeout, credit unused amounts remaining in the testing and inspecting allowance to Owner by Change Order.

1.9 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
 - 3. Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.
 - 4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.
 - 1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.
 - 2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Brick Veneer Allowance: Include in the base bid the amount of Four Hundred Fifty Dollars (\$450.00) per thousand brick.
- B. General Trades Unforeseen Condition: Include in the base bid the amount of Fifty Thousand Dollars (\$50,000.00) for unforeseen conditions.
- C. Mechanical and Plumbing Unforeseen Condition: Include in the base bid the amount of Forty Thousand Dollars (\$40,000.00) for unforeseen conditions.
- D. Electrical Unforeseen Condition: Include in the base bid the amount of Forty Thousand Dollars (\$40,000.00) for unforeseen conditions.
- E. Fire Protection Unforeseen Condition: Include in the base bid the amount of Twenty Thousand Dollars (\$20,000.00) for unforeseen conditions.
- F. Audio Visual Unforeseen Condition: Include in the base bid the amount of Twenty Thousand Dollars (\$20,000.00) for unforeseen conditions.
- G. Site Unforeseen Condition: Include in the base bid the amount of Twenty Thousand Dollars (\$20,000.00) for unforeseen conditions.

END OF SECTION 012100

SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for unit prices.
- B. Related Requirements:
 - 1. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.

1.2 DEFINITIONS

- A. Unit price is an amount incorporated in the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF INDIVIDUAL UNIT PRICES

- 1. None

END OF SECTION 012200

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- A. ALTERNATE NUMBER 1 – Remove all terrazzo flooring, stair risers and treads indicated in the drawings, provide stained concrete in these areas including stair risers and treads.
- B. ALTERNATE NUMBER 2 – Remove all ballistic glazing and Kevlar panels at service counters throughout the project except in courtrooms, provide ¼” tempered glazing.
- C. ALTERNATE NUMBER 3 – Shell space Chancery Court 2197 as indicated below: Delete Vestibule 2200, Meeting 2201, Meeting 2202, Meeting 2203, Meeting 2204, Court Storage 2199. Delete finish floor and base. Delete lay-in ceiling, and ceiling furrings. Delete all millwork. Delete all doors except 2200, 2197A, and 2197B. All shell space perimeter walls to go tight to deck with gypsum board and insulation as scheduled. Refer to mechanical, electrical and fire protection for revisions to this area.
- D. ALTERNATE NUMBER 4 – Remove select site hardscape as indicated on sheet A000. Provide 6” topsoil, replace stamped concrete crosswalk with paving and striping.
- E. ALTERNATE NUMBER 5 – Replace all prefinished metal wall panels indicated in the drawings with 2” E.I.F.S.; basis of design to be StoTherm® ci or approved equal. All metal fascia and soffits to remain.
- F. ALTERNATE NUMBER 6 – Delete compacted 610 crushed concrete road as indicated on C202.

END OF SECTION 012300

SECTION 310513 - SOILS FOR EARTHWORK

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Subsoil and topsoil materials.

1.2 RELATED SECTIONS

- A. Section 312000 - Earth Moving.
- B. Section 312317 - Trenching.

1.3 REFERENCES

- A. ASTM C33 - Concrete Aggregates.
- B. ASTM C136 - Sieve Analysis of Fine and Coarse Aggregates.
- C. ANSI/ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8 mm) Drop.
- D. ASTM D2487 - Classification of Soils for Engineering Purposes.
- E. ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- F. ASTM D4318 - Liquid Limit, Plastic Limit, and Plasticity Index of Soils.

1.4 SUBMITTALS

- A. Materials Source: Submit name of imported materials suppliers. Provide materials from same source throughout the work. Change of source requires approval.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. Type S1 - Select Fill: Material shall consist of select, nonorganic and debris-free silty clays (CL) or sandy clays (CL) having a plasticity index (PI) within the range of 10 to 24 and a liquid limit

less than 45. To be classified as silty clays (CL) or sandy clays (CL), the fill soils must have more than 50 percent fines passing the No. 200 sieve.

- B. Type S2 - Course Aggregate: Washed stone; free of shale, clay, friable material, sand, debris; graded in accordance with ANSI/ASTM C33, size number 467.
- C. Type S3 - Pea Gravel: Natural stone; washed, free of clay, shale, organic matter; graded to the following:
 - 1. Minimum Size: 1/4 inch.
 - 2. Maximum Size: 5/8 inch.
- D. Type S4 - Sand: Natural river or bank sand; washed, free of silt, clay, loam, friable or soluble materials, or organic matter; graded in accordance with ANSI/ASTM C33.
- E. Type S5 - Crushed Stone: Crushed Limestone, No. 610 gradation.

2.2 SOURCE QUALITY CONTROL

- A. Tests and analysis of soil material will be performed in accordance with ASTM D4318 or ASTM C136.
- B. If tests indicate materials do not meet specified requirements, change material and retest at no cost to Owner.
- C. Maximum dry density of the soil materials will be determined by ASTM D698 and field density of in-place materials by ASTM D2922.

PART 3 - EXECUTION

3.1 STOCKPILING

- A. Stockpile materials on site in sufficient quantities to meet project schedule and requirements.
- B. Separate differing materials with dividers or stockpile apart to prevent mixing.
- C. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

3.2 STOCKPILE CLEANUP

- A. Remove stockpile, leave area in a clean and neat condition. Grade site surface to prevent free standing surface water.

END OF SECTION 310513

SECTION 310515 - CRUSHED LIMESTONE

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Crushed Limestone, No. 610 gradation.

1.2 REFERENCES

- A. ASTM D1557 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 10 lb (4.54 Kg) Rammer and 18 inch (457 mm) Drop.
- B. ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- C. ASTM D3017 - Test Methods for Moisture Content of Soil and Soil-Aggregate Mixtures.

1.3 SUBMITTALS

- A. Field Test Reports:
 - 1. Gradation Tests.
 - 2. Compaction Tests.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Crushed limestone shall be hard, durable particles that are thoroughly clean, free from adherent coatings of injurious character, and reasonably free of soft or disintegrated pieces, frozen lumps, vegetable or other deleterious matter.
- B. The gradation of the composite mixture shall meet the following requirements:

<u>SQUARE MESH SIEVES</u>	<u>PERCENTAGE PASSING (By Weight)</u>
1 ½"	100
1"	90 - 100
¾"	70 - 100
½"	62 - 90
⅜"	50 - 80
No. 4	35 - 65
No. 40	12 - 26
No. 200	5 - 12

- C. Geotextile or filter fabric shall be Mirafi 500X by Tencate Geosynthetics.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify subbase has been inspected, gradients and elevations are correct, and dry.

3.2 AGGREGATE PLACEMENT

- A. Place geotextile fabric per manufacturer's recommendations.
- B. The material for the crushed limestone base may be deposited in one or two equal lifts. The material shall be deposited and spread in a uniform layer without appreciable segregation of the material. Addition of water or drying will be required as needed to produce a material which shall be compacted to 100% maximum ASTM D 1557 density at optimum moisture content. The material shall be rolled with a rubber tire roller (traffic or wobble wheel type) or other type smooth wheel roller as approved by the Engineer.
- C. The surfaces of the completed surface shall present a uniform appearance and a smooth riding surface without sharp breaks or depressions which will collect or hold water. The finished grade and slope shall be in reasonably close conformity to the contract drawings.
- D. Allowable tolerances in thickness for crushed limestone base shall be minus 1/4 inch deviation from the required thickness shown on the plans. Sections which are deficient in the thickness by more than 1/4 inch tolerance shall be corrected by scarifying and incorporating additional material to provide the full thickness as required.

3.3 FIELD QUALITY CONTROL

- A. Compaction testing will be performed in accordance with ASTM D1557 Method "A".
- B. If tests indicate Work does not meet specified requirements, remove Work, replace and retest.

C. Frequency of Tests: One per lift per 3000 square feet.

END OF SECTION 310515

SECTION 311000 - SITE CLEARING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Remove surface debris.
- B. Clear site of plant life and grass.
- C. Remove trees and shrubs.
- D. Remove root system of trees and shrubs.

1.2 RELATED SECTIONS

- A. Section 311001 - Site Demolition.
- B. Section 312500 - Erosion and Sedimentation Controls.
- C. Section 329219 - Seeding.
- D. Section 329223 - Sodding.

1.3 REGULATORY REQUIREMENTS

- A. Conform to applicable code and/or ordinances for disposal of debris.
- B. Coordinate clearing Work with utility companies.
- C. Obtain all necessary permits before proceeding with the work.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Clearing limits shall be as necessary to complete the work.

- B. Install silt fence prior to beginning clearing operations.

3.2 PROTECTION

- A. Locate, identify, and protect utilities that remain, from damage.
- B. Protect trees, plant growth, and features at the edge of clearing limits and trees designed to remain. All trees shall be felled inward away from silt fence.
- C. Protect bench marks from damage or displacement.

3.3 CLEARING

- A. All trees, shrubs and plant life within the work limits shown on the plans shall be removed.
- B. Remove stumps and root system to a depth of 18 inches below subgrade.
- C. Remove roots that are larger than 1/2 inches in diameter.

3.4 DISPOSAL

- A. The Contractor shall make a reasonable effort to channel merchantable material into the commercial market to make beneficial use of materials resulting from clearing and grubbing operations.
- B. All debris shall be removed to off-site disposal areas furnished by the Contractor. Such disposal shall comply with all applicable Federal, State and local laws.

END OF SECTION 311000

SECTION 311001 - SITE DEMOLITION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Remove asphalt and concrete paving, concrete curb and gutter, concrete sidewalks and steps, as shown on the demolition plan.
- B. Remove other items as shown on the sitework demolition plan.
- C. Relocate gas line and water line as shown on the demolition plan.

1.2 RELATED SECTIONS

- A. Section 311000 - Site Clearing.
- B. Section 312000 - Earth Moving.
- C. Section 312500 - Erosion and Sedimentation Controls.

1.3 REGULATORY REQUIREMENTS

- A. Conform to applicable code and ordinances for disposal of debris.
- B. Coordinate demolition work with utility companies.
- C. Conform to applicable regulatory procedures when discovering hazardous or contaminated materials.
- D. Test soils around buried tanks for contamination.

PART 2 – PRODUCTS

Not Used.

PART 3 - EXECUTION

3.1 PROTECTION

- A. Locate, identify, and protect utilities that remain from damage.
- B. Protect trees, plant growth, and features designated to remain.

- C. Protect bench marks from damage or displacement.
- D. Protect existing structures and other existing construction which are not to be demolished.

3.2 EXECUTION

- A. Demolish indicated structures and appurtenances in orderly and careful manner.
- B. Cease operations and notify Engineer immediately if existing structure or utilities appear to be endangered. Notify Engineer of any unknown utilities that are discovered.
- C. Care shall be taken to protect all items that are to remain. Items removed or destroyed that were to remain shall be replaced at the expense of the Contractor.
- D. Items to be relocated shall be carefully removed and stored until it is needed for new construction.

3.3 DISPOSAL

- A. The Contractor shall make a reasonable effort to channel merchantable material into the commercial market to make beneficial use of materials resulting from demolition operations.
- B. Except where noted otherwise, immediately remove demolished material from site to a site disposal area furnished by the Contractor. Such disposal shall comply with all applicable federal, state and local laws.
- C. Backfill areas excavated and open pits and holes caused as a result of demolition.
- D. Rough grade to drain and compact areas affected by demolition.

END OF SECTION 31101

SECTION 312000 - EARTH MOVING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Cutting, grading, filling and rough contouring the site for structures, paving, landscaping and etc.

1.2 RELATED SECTIONS

- A. Section 014533 - Code-Required Special Inspections.
- B. Section 311001 - Site Demolition
- C. Section 311000 - Site Clearing.
- D. Section 310513 - Soils for Earthwork.
- E. Section 312317 - Trenching.

1.3 REFERENCES

- A. ANSI/ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8 mm) Drop.
- B. ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- C. ASTM D3017 - Test Methods for Moisture Content of Soil and Soil-Aggregate Mixtures.
- D. ASTM D4254 - Test Method for Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density.

1.4 PROJECT RECORD DOCUMENTS

- A. Accurately record actual locations of utilities remaining, by horizontal dimensions, elevations or inverts, and slope gradients.

1.5 STRUCTURAL SPECIAL INSPECTION AND TESTING

- A. Inspector shall observe and check material at bottom of footings and grade.
- B. Verify excavations are at proper depth prior to concrete placement.

- C. Perform classification and testing of controlled fill material. Refer to Paragraph 3.07.
- D. Monitor and check for proper materials, densities, and lift thickness, during placement and compaction of controlled fill.
- E. Prior to filling, observe proof rolling to determine that subgrade has been prepared properly.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Fill: Type S1 as specified in Section 310513 unless noted otherwise.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify site conditions.
- B. After stripping and/or excavation, proofroll building sites and pavement areas with a loaded dump truck. Excavate pumping or yielding areas and backfill with S1 material compacted to 95% maximum ASTM D698 density.
- C. Verify that survey bench mark and intended elevations for the Work are as indicated.

3.2 PREPARATION

- A. Identify required lines, levels, contours, and datum.
- B. Stake and flag locations of known utilities.
- C. Locate, identify, and protect utilities that remain, from damage.
- D. Notify utility company to remove and/or relocate utilities, as necessary.
- E. Protect above and below grade utilities that remain.

3.3 SUBSOIL EXCAVATION

- A. Prior to excavating, strip a minimum of six inches of soil from the surface of the area to be excavated and stockpile for use as topsoil.
- B. Excavate subsoil from areas required by the drawings.

- C. Excavated material may be reused or stockpiled provided the material meets the requirements of Soil Material Type S1. Submit test reports to verify soil properties.
- D. All excess material and material not suitable for fill material shall be removed from the site.
- E. After excavation and prior to placing fill or pavements, scarify the top 6 inches of soil from ground surface and recompact to 95% ASTM D 698 density with stability. If soil is unstable, adjust moisture content as described in paragraph 3.4 G of this Section.

3.4 FILLING

- A. Prior to placing fill, strip a minimum of six inches of soil from the surface of the area to be filled and stockpile for use as topsoil.
- B. After stripping and proofrolling, scarify the top 6 inches of the ground surface and recompact to 95% maximum ASTM D698 density with stability. If soil is unstable, adjust moisture content as described in paragraph 3.4 G of this Section.
- C. Fill areas to contours and elevations with type S1 material unless shown or specified otherwise.
- D. Employ a placement method that does not disturb or damage other work.
- E. Fill simultaneously on each side of unsupported foundation walls until supports are in place.
- F. In building and pavement areas, place fill materials in continuous 8 inch thick horizontally placed loose layers and compact to 98% ASTM D698 maximum density with stability (stability is defined as the absence of significant pumping or yielding of soils under compactive effort). In all other areas, place fill materials in continuous 8 inch thick horizontally placed loose layers and compact to 95% ASTM D698 maximum dry density with stability. Loose layers shall be 5 inch thickness when hand-held compaction is used.
- G. Adjust moisture content of fill materials to within 3 percentage points of the optimum water content. The natural soils at this site are susceptible to a lack of stability (pumping) under wet conditions. The actual condition of these natural soils at the time of construction will be strongly influenced by the season of the year and the rainfall conditions preceding and during construction. If pumping is present, treating or drying of soils will be required to restore stability.
- H. The surface of each lift shall be scarified prior to placement of subsequent lifts.
- I. Make grade changes gradual. Blend slope into level areas.
- J. All areas not meeting required density or stability shall be excavated, reworked and retested.
- K. Reshape and recompact fills subject to vehicular traffic.
- L. Slope grade away from building.

3.5 DRAINAGE AND DEWATERING

- A. The Contractor shall keep the area of work properly drained at all times during the time of the Contract. He shall construct and maintain, as required, any and all necessary ditches, flumes, and other temporary diversion and protective measures necessary. Any such protective measures other than channels or ditches called for on the plans or authorized by the Engineer shall be provided at the Contractor's expense. The Contractor shall furnish, install, maintain, and operate at his expense all necessary pumps, well points, deepwells, and/or other equipment required for dewatering the various parts of the work, and for maintaining the foundations, embankments, and other parts of the work, free from water as required for construction.

3.6 TOLERANCES

- A. Top surface under paved areas and buildings: plus or minus .04 feet from required elevations.
- B. Top Surface of Other Areas: Plus or minus 1/10 foot.

3.7 FIELD QUALITY CONTROL

- A. Laboratory classification tests including Atterburg limit determinations and grain size analysis shall be performed on the fill and backfill soils initially and routinely during earthwork operations to check for compliance with the requirements for S1 fill.
- B. Compaction testing will be performed in accordance with ANSI/ASTM D698 and/or ASTM D4254 and ASTM D2922.
- C. If tests indicate Work does not meet specified requirements, remove Work, replace and retest.
- D. Frequency of Tests: Compaction tests shall be taken at the rate of one per 5,000 sq.ft. per lift in pavement areas and one per 2,500 sq.ft. per lift in building areas.
- E. All areas to receive concrete pavement, asphalt pavement, sidewalks or hardscape shall be proofrolled and density rechecked within 24 hours prior to placing concrete pavement, asphalt pavement, sidewalks or hardscape. If soft areas are encountered or density tests do not meet specified requirements, Contractor shall correct.

END OF SECTION 312000

SECTION 312315 - BACKFILLING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Building perimeter and site structures backfilling to grade.
- B. Site filling and backfilling.
- C. Fill under paving.
- D. Consolidation and compaction as scheduled.
- E. Fill for over-excavation.

1.2 RELATED SECTIONS

- A. Section 310513 - Soils for Earthwork.
- B. Section 312316 - Excavating.
- C. Section 312317 - Trenching.
- D. Section 033000 - Cast-in-Place Concrete.

1.3 REFERENCES

- A. ANSI/ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8 mm) Drop.
- B. ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

PART 2 - PRODUCTS

2.1 FILL MATERIALS

- A. Fill Types: Type S1 specified in Section 310513 - Soil Materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify subdrainage, dampproofing or waterproofing installation has been inspected.

3.2 PREPARATION

- A. Proof roll subgrade prior to placing backfill materials.
- B. Cut out soft areas of subgrade not capable of in situ compaction. Backfill with Type S1 fill and compact to density equal to or greater than requirements for subsequent fill material.
- C. Scarify subgrade surface to a depth of 6 inches; fill and compact to density equal to or greater than requirements for subsequent fill material.

3.3 BACKFILLING

- A. Backfill areas to contours and elevations with unfrozen materials.
- B. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen or spongy subgrade surfaces.
- C. Employ a placement method that does not disturb or damage other work.
- D. Maintain optimum moisture content of backfill materials to attain required compaction density. Do not backfill against unsupported foundation walls.
- E. Compaction shall attain a minimum 95% of standard proctor (ASTM D698) density at optimum moisture.
- F. Backfill simultaneously on each side of unsupported foundation walls until supports are in place.
- G. Slope grade away from building.
- H. Make gradual grade changes. Blend slope into level areas.
- I. Remove surplus backfill materials from site.

3.4 TOLERANCES

- A. Top Surface of Backfilling Under Paved Areas: Plus or minus .04 feet from required elevations.
- B. Top Surface of General Backfilling: Plus or minus 1 inch from required elevations.

3.5 FIELD QUALITY CONTROL

- A. Compaction testing will be performed in accordance with ANSI/ASTM D698 and ASTM D2922.
- B. If tests indicate Work does not meet specified requirements, remove Work, replace and retest.
- C. Frequency of Tests: Compaction tests shall be taken at the rate of one per 3,000 sq.ft. per lift under slabs and pavement and one per 4,000 sq.ft. per lift in general fill areas.
- D. Proof roll compacted fill surfaces under slabs-on-grade and paving.

3.6 PROTECTION OF FINISHED WORK

- A. Protect finished Work.
- B. Reshape and re-compact fills subjected to vehicular traffic.

END OF SECTION 312315

SECTION 312316 - EXCAVATION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Excavating for building foundations.
- B. Excavating for grade beams, slabs, paving, and landscaping.
- C. Excavating for site structures.

1.2 RELATED SECTIONS

- A. Section 312000 - Earth Moving.
- B. Section 312315 - Backfilling.
- C. Section 312317 - Trenching.

1.3 FIELD MEASUREMENTS

- A. Verify that survey bench mark and intended elevations for the Work are as indicated.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Identify required lines, levels, contours, and datum.
- B. Locate, identify, and protect utilities that remain, from damage.

3.2 EXCAVATION

- A. Excavate subsoil required to accommodate building foundations, slabs-on-grade, paving and site structures.

- B. Excavate to working elevations for piling work.
- C. Machine slope banks to angle of repose or less, until shored.
- D. Do not interfere with 45 degree bearing splay of foundation.
- E. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- F. Hand trim excavation. Remove loose matter.
- G. Notify Architect/Engineer of unexpected subsurface conditions.
- H. Correct areas over-excavated in accordance with Section 312315 - Backfilling.
- I. Stockpile excavated material meeting requirements of fill material type S1 for reuse on site and remove excess material not being reused, from site.

3.3 PROTECTION

- A. Protect excavations by methods required to prevent cave-in or loose soil from falling into excavation.
- B. Protect bottom of excavations and soil adjacent to and beneath foundation, from freezing.

END OF SECTION 312316

SECTION 312317 - TRENCHING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Excavating trenches for utilities from outside of building.
- B. Compacted fill from top of utility bedding.
- C. Backfilling and compaction.

1.2 RELATED SECTIONS

- A. Section 310513 - Soils for Earthwork.
- B. Section 312000 - Earth Moving.
- C. Section 331116 - Site Water Utility Distribution Piping.
- D. Section 334100 - Storm Utility Drainage Piping.
- E. Section 333100 - Sanitary Utility Sewerage Piping.

1.3 REFERENCES

- A. ANSI/ASTM C136 - Method for Sieve Analysis of Fine and Coarse Aggregates.
- B. ANSI/ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8 mm) Drop.
- C. ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

1.4 DEFINITIONS

- A. Utility: Any buried pipe, conduit, or cable.

1.5 FIELD MEASUREMENTS

- A. Verify that survey bench mark and intended elevations for the Work are as shown on drawings.

1.6 COORDINATION

- A. Coordinate work with other trades.
- B. Verify work associated with lower elevation utilities are complete before placing higher elevation utilities.

PART 2 - PRODUCTS

2.1 FILL MATERIALS

- A. Fill Type S1, S2, S3, or S4: As specified in Section 310513 and as indicated on the drawings.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Identify required lines, levels, contours, and datum.
- B. Protect plant life, lawns, and other features remaining as a portion of final landscaping.
- C. Protect bench marks, sidewalks, paving, and curbs from excavation equipment and vehicular traffic.
- D. Maintain and protect above and below grade utilities which are to remain.
- E. Cut out soft areas of subgrade not capable of in situ compaction. Backfill with Fill Type S1 and compact to density equal to or greater than requirements for subsequent backfill material.

3.2 EXCAVATION

- A. Excavate subsoil required for utilities.
- B. Cut trenches sufficiently wide to enable installation and allow inspection.
- C. Hand trim excavation. Hand trim for bell and spigot pipe joints. Remove loose matter.
- D. Remove lumped subsoil.
- E. Correct areas over excavated in accordance with Section 312000.

3.3 BACKFILLING

- A. Backfill trenches to contours and elevations with unfrozen materials.

- B. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen or spongy subgrade surfaces.
- C. Granular Fill Type S2, S3, and S4: Place and compact materials as illustrated on the drawings in continuous layers not exceeding 6 inches compacted depth. Compact with vibratory equipment.
- D. Soil Fill Type S1: Place and compact material in continuous layers not exceeding 8 inches compacted depth. Compact to 95% of standard proctor density (ASTM D698).
- E. Employ a placement method that does not disturb or damage pipe in trench.
- F. Maintain optimum moisture content of fill materials to attain required compaction density.
- G. Remove surplus fill materials from site.

3.4 TOLERANCES

- A. Top Surface of General Backfilling: Plus or minus 0.08 feet from required elevations.

3.5 FIELD QUALITY CONTROL

- A. Compaction testing will be performed in accordance with ANSI/ASTM D698 and ASTM D2922.
- B. If tests indicate Work does not meet specified requirements, remove Work, replace, compact, and retest.
- C. Frequency of Tests: Compaction tests shall be taken each lift at 200 feet intervals.

3.6 PROTECTION OF FINISHED WORK

- A. Protect finished Work.
- B. Reshape and recompact fills subjected to vehicular traffic during construction.

END OF SECTION 312317

SECTION 312500 - EROSION AND SEDIMENTATION CONTROLS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The work consists of installing and maintaining erosion and sedimentation control measures to minimize the production of sediment and other pollutants to air and water during construction activities.
- B. The Contractor shall prepare a Stormwater Pollution Prevention Plan in accordance with Mississippi Department of Environmental Quality Regulations.
- C. The sedimentation control measures specified herein and shown on the drawings are minimum requirements. Additional requirements to meet sediment and erosion control ordinances shall be designed, installed and maintained by the Contractor.
- D. Contractor shall use Best Management Practice Standards from the current "Planning and Design Manual for the Control of Erosion, Sediment and Stormwater" by Mississippi DEQ.

1.2 RELATED SECTIONS

- A. Section 329219 - Seeding.
- B. Section 329223 - Sodding.

1.3 REFERENCES

- A. MDOT - Mississippi Standard Specifications for Road and Bridge Construction, latest edition.

1.4 REGULATORY REQUIREMENTS

- A. Contractor shall comply with all federal, state and local regulatory and statutory requirements.

1.5 QUALITY ASSURANCE

- A. Contractor shall establish sediment control barriers prior to the beginning of clearing and maintain during the entire period of construction.
- B. Contractor shall conduct weekly inspections and within 24 hours of a rainfall event of 1 inch or greater to ensure that the sediment control devices are in place and are working adequately.

- C. Contractor shall clean out and dispose of any sediment that inhibits the proper functioning of erosion control measures or when the storage capacity of any sediment facility is reduced by one-half.
- D. Seeding shall be as specified in Section 329219 - Seeding.
- E. Sodding shall be as specified in Section 329223 - Sodding.

PART 2 - PRODUCTS

2.1 SEDIMENTATION CONTROL

- A. Straw Bales: Either wire bound or string tied with bindings oriented around sides rather than over and under.
- B. Geotextile fabric for silt fence shall meet requirements for Type I or II in Section 714.13.2 of MDOT Specifications. Silt fence shall be reinforced with 6" x 6" woven wire backing minimum 14 gauge.

PART 3 - EXECUTION

3.1 GENERAL

- A. Construct and maintain grass, silt fencing and straw bale barriers and other sediment control devices, as required to prevent and control the loss of soil from the construction site.
- B. The excavation and moving of soil materials shall be scheduled to minimize the size of areas disturbed and unprotected from erosion for the shortest possible time.
- C. Seeding or sodding to protect disturbed areas shall occur as soon as reasonably possible following completion of that earthwork activity.
- D. Contractor shall construct diversions as required to divert water from work areas and to collect water from work areas for treatment and safe disposition.

3.2 STRAW BALE BARRIERS

- A. Install straw bales around each storm drain entrance to prevent sediment from entering underground storm drains. Place each bale in a 4" trench and backfill to anchor and prevent undermining.
- B. Drive at least two stakes through each bale.
- C. Fill gaps between bales with wedging straw to prevent water from escaping between the bales.
- D. Remove straw bale barriers when they are no longer required.

3.3 SILT FENCING

- A. Contractor shall install silt fencing in locations as shown on the drawings and at other locations as required to control sediment.
- B. Install silt fence in accordance with the manufacturer's recommendations and details shown on the drawings.

3.4 CONSTRUCTION INGRESS AND EGRESS

- A. Construct stone stabilized pad as shown on the drawings for construction access at construction entrances.
- B. Pad should be constructed of crushed stone.

3.5 CHEMICAL POLLUTION

- A. Contractor shall provide retention area for concrete mixer wash water. At the completion of construction activities, the waste material shall be removed and disposed off site.

3.6 AIR POLLUTION

- A. Contractor shall sprinkle or use chemical dust suppressants to control dust on the site. If chemical dust suppressants are applied, the material shall be a commercially available product specifically designed for dust suppression and the application shall follow manufacturer's requirements and recommendations.

END OF SECTION 312500

SECTION 313215 - LIME SOIL STABILIZATION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Lime treated base course (Class C).

1.2 RELATED SECTIONS

- A. Section 310513 - Soils for Earthwork.
- B. Section 312000 - Earth Moving.

1.3 REFERENCES

- A. Mississippi Standard Specifications for Road and Bridge Construction (MDOT), latest edition.

1.4 QUALITY ASSURANCE

- A. Perform work in accordance with MDOT specifications.
- B. Obtain materials from same source throughout.

1.5 ENVIRONMENTAL REQUIREMENTS

- A. Lime shall not be applied unless the temperature in the shade is at least 40°F and is expected to remain at least 40°F during the mixing period.
- B. Lime shall not be applied on a frozen foundation.
- C. All material shall be kept moist at all times after lime is applied.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Soil - As specified in Section 312000.
- B. Water - As specified in Subsection 714.01.3 of MDOT Specifications.

- C. Lime - Hydrated lime as specified in Subsection 714.03.2 of MDOT Specifications.
- D. Curing Seal - Emulsified Asphalt, Grade EA-1, SS-1, CMS-2h or MS-2h meeting applicable requirements of Section 702 of MDOT Specifications.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify base conditions for proper moisture content.
- B. Verify compacted subgrade is acceptable and ready to support imposed loads.
- C. Verify gradients and elevations are correct.

3.2 PREPARATION

- A. Prior to the application of dry lime, a light windrow shall be bladed along the edges of the area to be treated, or the surface on which the lime is to be applied shall be disk-harrowed or scarified as deemed necessary, depending on the method of spreading, in order to retain the spread, dry lime.
- B. Prior to the application of slurry, the full width of the area on which slurry is to be placed shall be disk-harrowed, scarified or partially pulverized with suitable approved equipment to the depth necessary and in such a manner as to retain the application of lime slurry until it has been incorporated.

3.3 APPLICATION

- A. Application of lime may be accomplished by either an approved "dry application" or "slurry application" method.
- B. Lime treated base course shall consist of five (5) percent of lime by dry weight.
- C. Maximum thickness per lift shall be 6 inches.

3.4 MIXING

- A. Mixing requirements are the same for "dry application" or "slurry application."
- B. Lime and water shall be incorporated uniformly into the soil.
- C. One hundred (100) percent of the homogeneous mixture, exclusive of gravel and stone, shall pass a two-inch sieve and sixty (60) percent shall pass a No. 4 sieve.
- D. No mellowing period will be required or permitted.

3.5 COMPACTION

- A. Compaction shall begin immediately after completion of mixing and completed during the same work day.
- B. Mixture shall be aerated or sprinkled as necessary to maintain required moisture content.
- C. Minimum density shall be ninety-five (95) percent ASTM D698.
- D. Testing shall be as specified in Section 312000 – Earth Moving.

3.6 FINISHING, CURING, PROTECTION AND MAINTAINING

- A. Surface of the course shall be smooth and conform to the lines and grades as shown on the plans.
- B. Surface shall be kept continuously moist and satisfactorily maintained until placement of subsequent layer.
- C. Subsequent layer shall be placed within two (2) days or at contractor's option placement may be deferred, for up to 21 days by placing a curing seal over the lime treated course within two (2) days after finishing course.

END OF SECTION 313215

SECTION 320001 - SITEWORK CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Cast-in-place concrete and curb inlets and headwalls.

1.2 REFERENCES

- A. ACI 301 - Structural Concrete for Buildings.
- B. ACI 304 - Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete.
- C. ACI 305R - Hot Weather Concreting.
- D. ACI 306R - Cold Weather Concreting.
- E. ACI 308 - Standard Practice for Curing Concrete.
- F. ACI 318 - Building Code Requirements for Reinforced Concrete.
- G. ANSI/ASTM D1190 - Concrete Joint Sealer, Hot-Poured Elastic Type.
- H. ASTM A615 – Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
- I. ASTM C33 - Concrete Aggregates.
- J. ASTM C94 - Ready-Mixed Concrete.
- K. ASTM C150 - Portland Cement.
- L. ASTM C260 - Air Entraining Admixtures for Concrete.
- M. ASTM C494 - Chemicals Admixtures for Concrete.
- N. ASTM C618 - Fly Ash and Raw or Calcinated Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete.

1.3 SUBMITTALS

- A. Product Data: Provide data on joint devices, attachment accessories and admixtures.

- B. Manufacturer's Installation Instructions: Indicate installation procedures and interface required with adjacent Work.

1.4 PROJECT RECORD DOCUMENTS

- A. Accurately record actual locations of embedded utilities and components that are concealed from view.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 301.
- B. Maintain one copy of each document on site.
- C. Acquire cement and aggregate from same source for all work.
- D. Conform to ACI 305R when concreting during hot weather.
- E. Conform to ACI 306R when concreting during cold weather.

1.6 COORDINATION

- A. Coordinate the placement of joint devices with erection of concrete formwork and placement of form accessories.
- B. Coordinate all embedded items.

PART 2 - PRODUCTS

2.1 CONCRETE MATERIALS

- A. Cement: ASTM C150, Type I or Type II.
- B. Fine and Coarse Aggregates: ASTM C33.
- C. Water: Clean and not detrimental to concrete.

2.2 ADMIXTURES

- A. Air Entrainment: ASTM C260 - required.
- B. Chemical: ASTM C494 Type F - Water Reducing, High Range added at job site after slump tests have been performed - optional.

- C. Fly Ash: ASTM C618 - optional.

2.3 CONCRETE MIX

- A. Mix and deliver concrete in accordance with ASTM C94, Alternative No. 2.
- B. Select proportions for normal weight concrete in accordance with ACI 301 Method 1 or Method 2.
- C. Provide concrete to the following criteria:
 - 1. Compressive strength: 4,000 psi at 28 days.
 - 2. Slump: 3 to 5 inches.
- D. Use accelerating admixtures in cold weather only when approved by Architect/Engineer. Use of admixtures will not relax cold weather placement requirements.
- E. Do not use calcium chloride.
- F. Use set retarding admixtures during hot weather only when approved by Architect/Engineer.
- G. Add air-entraining agent to normal weight concrete mix.

2.4 REINFORCEMENT

- A. Reinforcing Steel: ASTM A615, 60 ksi yield grade; deformed billet steel bars.
- B. Fiber Reinforcement: Similar and equal to Fibermesh as manufactured by Synthetic Industries. Application rate shall be 1.5 pounds per cubic yard.

2.5 ACCESSORY MATERIALS

- A. Tie Wire: Minimum 16 gage annealed type.
- B. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions.
- C. Special Chairs, Bolsters, Bar Supports, Spacers Adjacent to Weather Exposed Concrete Surfaces: Plastic coated steel type; size and shape as required.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify site conditions.

- B. Verify requirements for concrete cover over reinforcement.
- C. Verify that anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not cause hardship in placing concrete.

3.2 PREPARATION

- A. Prepare previously placed concrete by cleaning with steel brush and applying bonding agent in accordance with manufacturer's instructions.

3.3 PLACING CONCRETE

- A. Place concrete in accordance with ACI 318.
- B. Notify Architect/Engineer minimum 24 hours prior to commencement of operations.
- C. Ensure reinforcement, inserts, embedded parts, formed expansion and contraction joints are not disturbed during concrete placement.
- D. Install joint devices in accordance with manufacturer's instructions.
- E. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- F. Place concrete continuously between predetermined expansion, control, and construction joints.
- G. Do not interrupt successive placement; do not permit cold joints to occur.

3.4 CONCRETE FINISHING

- A. Provide formed concrete surfaces to be left exposed with smooth rubbed finish.
- B. Finish concrete slab surfaces in accordance with ACI 301.

3.5 CURING AND PROTECTION

- A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.

3.6 FIELD QUALITY CONTROL

- A. Testing will be performed in accordance with ACI 301.

- B. Provide free access to Work and cooperate with appointed firm.
- C. Submit proposed mix design of each class of concrete for review prior to commencement of Work.
- D. Tests of cement and aggregates may be performed to ensure conformance with specified requirements.
- E. Three concrete test cylinders will be taken for every 100 or less cu yds of each class of concrete placed each day.
- F. One additional test cylinder will be taken during cold weather concreting, cured on job site under same conditions as concrete it represents.
- G. One slump test will be taken for each set of test cylinders taken.

3.7 PATCHING

- A. Allow Architect/Engineer to inspect concrete surfaces immediately upon removal of forms.
- B. Excessive honeycomb or embedded debris in concrete is not acceptable. Notify Architect/Engineer upon discovery.
- C. Patch imperfections as directed in accordance with ACI 301.

3.8 DEFECTIVE CONCRETE

- A. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.
- B. Repair or replacement of defective concrete will be determined by the Architect/Engineer.

END OF SECTION 320001

SECTION 321216 - ASPHALT PAVING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Asphaltic concrete paving.

1.2 RELATED SECTIONS

- A. Section 312000 – Earth Moving.
- B. Section 313215 – Lime Soil Stabilization.

1.3 REFERENCES

- A. Mississippi Standard Specifications for Road and Bridge Construction (MDOT), latest edition.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with MDOT Specifications.
- B. Mixing Plant: Conform to Section 401.03.2 of MDOT Specifications.
- C. Obtain materials from same source throughout.
- D. Maintain one copy of document on site.

1.5 ENVIRONMENTAL REQUIREMENTS

- A. Do not place asphalt when base surface temperature is less than the temperature limitations listed in MDOT Section 401.03.1.1 or when the surface is wet or frozen.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. All materials for asphalt paving and related work shall comply with Mississippi Standard Specifications for Road and Bridge Construction, MDOT.
 - 1. Base Course - Section 301.

2. Tack Coat - Section 407.
3. Binder Course - Section 403.
4. Surface Course - Section 403.

2.2 SOURCE QUALITY CONTROL

- A. Provide mix design for asphalt.
- B. Submit proposed mix design of each class of mix for review prior to commencement of work.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify base conditions.
- B. Verify that compacted subgrade is dry and ready to support paving.
- C. Verify gradients and elevations of base are correct.

3.2 PREPARATION - TACK COAT

- A. Apply tack coat in accordance with MDOT Specifications.
- B. Apply tack coat to contact surfaces of curbs, gutters and other items.

3.3 ASPHALT PAVEMENT

- A. Install Work in accordance with MDOT Specifications.
- B. Asphalt shall conform to MDOT Number SC-1 Type 8 for surface course, BB-1 Type 6 for base course and BC-1 Type 6 for binder course.
- C. Place surface course asphalt within 24 hours of applying tack coat.
- D. Place to 4 inch compacted thickness per lift (maximum).
- E. Average density shall be 96% of the average laboratory density.
- F. Compact pavement by rolling. Do not displace or extrude pavement from position.
- G. Develop rolling with consecutive passes to achieve even and smooth finish, without roller marks.

3.4 FIELD QUALITY CONTROL

- A. Density test shall be taken at the rate of one per 5,000 sq.ft. of paved area.
- B. Finished surface coarse shall be within plus or minus .02 feet from finished grade and cross section. The maximum variance at any point from a 10 foot straight edge shall be 1/8 inch.

3.5 PROTECTION

- A. Immediately after placement, protect pavement from mechanical injury for 7 days.

END OF SECTION 321216

SECTION 321313 - CONCRETE PAVING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Concrete paving.
- B. Curb and gutters.

1.2 RELATED SECTIONS

- A. Section 312000 - Earth Moving.
- B. Section 031000 - Concrete Forming and Accessories.
- C. Section 032000 - Concrete Reinforcing.
- D. Section 033000 - Cast-in-Place Concrete.

1.3 REFERENCES

- A. ACI 301 - Specifications for Structural Concrete for Buildings.
- B. ASTM C94 - Ready-Mixed Concrete.
- C. ANSI/ASTM D1751 - Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction.
- D. ASTM C309 - Liquid Membrane-Forming Compounds for Curing Concrete.

1.4 SUBMITTALS

- A. Product Data: Provide data on joint filler, admixtures, curing compounds, and sealants.
- B. Concrete mix design.

1.5 QUALITY ASSURANCE

- A. Perform work in accordance with requirements of Sections 031000, 032000 and 033000.
- B. Obtain cementitious materials from same source throughout.

1.6 ENVIRONMENTAL REQUIREMENTS

- A. Do not place concrete when base surface temperature is less than 40 degrees F, or surface is wet or frozen.

PART 2 - PRODUCTS

2.1 FORM MATERIALS

- A. Wood or Steel form material, profiled to suit conditions.
- B. Joint Filler: ANSI/ASTM D1751.

2.2 CONCRETE MATERIALS

- A. Concrete Materials: As specified in Section 033000.

2.3 ACCESSORIES

- A. Curing Compound: ASTM C309, Type 1, Class A.
- B. Sealant: Silicone joint sealant Dow Corning 888 or equal.

2.4 CONCRETE MIX - BY PERFORMANCE CRITERIA

- A. Mix and deliver concrete in accordance with ASTM C94, Alternative No. 2.
- B. Select proportions for normal weight concrete in accordance with ACI 301 Method 1 or Method 2.
- C. Provide concrete to the following criteria:
 - 1. Compressive Strength: 4,000 psi @ 28 days.
 - 2. Slump: 3 to 5 inches.
 - 3. Air Entrained: 6 percent.
- D. Use accelerating admixtures in cold weather only when approved by Architect/Engineer. Use of admixtures will not relax cold weather placement requirements.
- E. Do not use calcium chloride.
- F. Use set retarding admixtures during hot weather only when approved by Architect/Engineer.

2.5 SOURCE QUALITY CONTROL

- A. Submit proposed mix design of each class of concrete to Engineer prior to commencement of work.

- B. Tests on cement and aggregates will be performed to ensure conformance with specified requirements.
- C. Test samples in accordance with ACI 301.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify compacted subgrade is acceptable and ready to support paving and imposed loads.
- B. Verify gradients and elevations of base are correct.

3.2 PREPARATION

- A. Moisten base to minimize absorption of water from fresh concrete.
- B. Coat surfaces of catch basin frames with oil to prevent bond with concrete pavement.
- C. Notify Architect/Engineer minimum 24 hours prior to commencement of concreting operations.

3.3 FORMING

- A. Place and secure forms to correct location, dimension, and profile.
- B. Assemble formwork to permit easy stripping and dismantling without damaging concrete.
- C. Place joint filler vertical in position, in straight lines. Secure to formwork during concrete placement.

3.4 PLACING CONCRETE

- A. Place concrete as specified in Section 033000.
- B. Place concrete continuously between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur.

3.5 JOINTS

- A. Place control joints as shown on the drawings.
- B. Place joint filler between paving components and building or other appurtenances.
- C. Provide joints as detailed on the drawings.

3.6 FINISHING

- A. Paving: Light broom.
- B. Place curing compound on exposed concrete surfaces immediately after finishing. Apply in accordance with manufacturer's instructions.

3.7 FIELD QUALITY CONTROL

- A. Three concrete test cylinders will be taken for every 50 or less cu yds of each class of concrete placed each day.
- B. One additional test cylinder will be taken during cold weather and cured on site under same conditions as concrete it represents.
- C. One slump test will be taken for each set of test cylinders taken.
- D. Maintain records of placed concrete items. Record date, location of pour, quantity, air temperature, and test samples taken.

3.8 PROTECTION

- A. Immediately after placement, protect pavement from premature drying, excessive hot or cold temperatures, and mechanical injury.

END OF SECTION 321313

SECTION 321314 – SIDEWALK

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Concrete sidewalks.

1.2 RELATED SECTIONS

- A. Section 312000 - Earth Moving.
- B. Section 031000 - Concrete Forming and Accessories.
- C. Section 032000 - Concrete Reinforcing.
- D. Section 033000 - Cast-in-Place Concrete.

1.3 REFERENCES

- A. ACI 301 - Specifications for Structural Concrete for Buildings.
- B. ACI 304 - Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete.
- C. ASTM C94 - Ready-Mixed Concrete.
- D. ANSI/ASTM D1751 - Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction.
- E. ASTM C309 - Liquid Membrane-Forming Compounds for Curing Concrete.

1.4 SUBMITTALS

- A. Product Data: Provide data on joint filler, admixtures, curing compounds, and sealants.
- B. Concrete Mix Design.

1.5 ENVIRONMENTAL REQUIREMENTS

- A. Do not place concrete when base surface temperature is less than 40 degrees F or surface is wet or frozen.

PART 2 - PRODUCTS

2.1 FORM MATERIALS

- A. Wood or Steel form material, profiled to suit conditions.
- B. Joint Filler: ANSI/ASTM D1751.

2.2 CONCRETE MATERIALS

- A. Concrete Materials: As specified in Section 033000.

2.3 ACCESSORIES

- A. Curing Compound: ASTM C309, Type 1, Class A.
- B. Sealant: Silicone joint sealant Dow Corning 888 or equal.

2.4 CONCRETE MIX - BY PERFORMANCE CRITERIA

- A. Mix and deliver concrete in accordance with ASTM C94, Alternative No. 2.
- B. Select proportions for normal weight concrete in accordance with ACI 301 Method 1 or Method 2.
- C. Provide concrete to the following criteria:
 - 1. Compressive Strength: 4,000 psi @ 28 days.
 - 2. Slump: 3 to 5 inches.
 - 3. Air Entrained: 6 percent.
- D. Use accelerating admixtures in cold weather only when approved by Architect/Engineer. Use of admixtures will not relax cold weather placement requirements.
- E. Do not use calcium chloride.
- F. Use set retarding admixtures during hot weather only when approved by Architect/Engineer.

2.5 SOURCE QUALITY CONTROL

- A. Submit proposed mix design to Architect/Engineer for review prior to commencement of work.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify compacted subgrade is acceptable and ready to support paving and imposed loads.
- B. Verify gradients and elevations of base are correct.

3.2 PREPARATION

- A. Moisten base to minimize absorption of water from fresh concrete.
- B. Coat surfaces of manholes and catch basin frames with oil to prevent bond with concrete pavement.
- C. Notify Architect/Engineer minimum 24 hours prior to commencement of concreting operations.

3.3 FORMING

- A. Place and secure forms to correct location, dimension, and profile.
- B. Assemble formwork to permit easy stripping and dismantling without damaging concrete.
- C. Place joint filler vertical in position, in straight lines. Secure to formwork during concrete placement.

3.4 PLACING CONCRETE

- A. Place concrete as specified in Section 033000.
- B. Place concrete continuously between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur.

3.5 JOINTS

- A. Place expansion and contraction joints as shown on the drawings. Align curb, gutter, and sidewalk joints.
- B. Place joint filler between paving components and building or other appurtenances. Recess top of filler 1/2 inch for sealant placement. Install sealer in accordance with manufacturer's recommendations.

3.6 FINISHING

- A. Sidewalk paving: Light broom, across the traffic flow.
- B. Place curing compound on exposed concrete surfaces immediately after finishing. Apply in accordance with manufacturer's instructions.

3.7 FIELD QUALITY CONTROL

- A. Testing firm will take cylinders and perform slump and air entrainment tests in accordance with ACI 301.
- B. Three concrete test cylinders will be taken for every 50 or less cu yds of each class of concrete placed each day.
- C. One additional test cylinder will be taken during cold weather and cured on site under same conditions as concrete it represents.
- D. One slump test will be taken for each set of test cylinders taken.
- E. Maintain records of placed concrete items. Record date, location of pour, quantity, air temperature, and test samples taken.

3.8 PROTECTION

- A. Immediately after placement, protect pavement from premature drying, excessive hot or cold temperatures, and mechanical injury.

END OF SECTION 321314

SECTION 321315 - CURB AND GUTTER

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Concrete curb and gutter.

1.2 RELATED SECTIONS

- A. Section 312000 - Earth Moving.
- B. Section 031000 - Concrete Forming and Accessories.
- C. Section 032000 - Concrete Reinforcing.
- D. Section 033000 - Cast-in-Place Concrete.

1.3 REFERENCES

- A. ACI 301 - Specifications for Structural Concrete for Buildings.
- B. ACI 304 - Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete.
- C. ASTM C94 - Ready-Mixed Concrete.
- D. ANSI/ASTM D1751 - Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction.
- E. ASTM C309 - Liquid Membrane-Forming Compounds for Curing Concrete.

1.4 SUBMITTALS

- A. Product Data: Provide data on joint filler, admixtures, curing compounds, and sealants.
- B. Concrete Mix Design.

1.5 QUALITY ASSURANCE

- A. Perform work in accordance with requirements of Sections 031000, 032000 and 033000.
- B. Obtain cementitious materials from same source throughout.

1.6 ENVIRONMENTAL REQUIREMENTS

- A. Do not place concrete when base surface temperature is less than 40 degrees F or surface is wet or frozen.

PART 2 - PRODUCTS

2.1 FORM MATERIALS

- A. Wood or Steel form material, profiled to suit conditions.
- B. Joint Filler: ANSI/ASTM D1751.

2.2 CONCRETE MATERIALS

- A. Concrete Materials: As specified in Section 033000.

2.3 ACCESSORIES

- A. Curing Compound: ASTM C309, Type 1, Class A.
- B. Sealant: Silicone joint sealant Dow Corning 888 or equal.

2.4 CONCRETE MIX - BY PERFORMANCE CRITERIA

- B. Mix and deliver concrete in accordance with ASTM C94, Alternative No. 2.
- C. Select proportions for normal weight concrete in accordance with ACI 301 Method 1 or Method 2.
- D. Provide concrete to the following criteria:
 - 1. Compressive Strength: 4,000 psi @ 28 days.
 - 2. Slump: 3 to 5 inches.
 - 3. Air Entrained: 6 percent.
- E. Use accelerating admixtures in cold weather only when approved by Architect/Engineer. Use of admixtures will not relax cold weather placement requirements.
- F. Do not use calcium chloride.
- G. Use set retarding admixtures during hot weather only when approved by Architect/Engineer.

2.5 SOURCE QUALITY CONTROL

- A. Submit proposed mix design to Architect/Engineer for review prior to commencement of work.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify compacted subgrade is acceptable and ready to support paving and imposed loads.
- B. Verify gradients and elevations of base are correct.

3.2 PREPARATION

- A. Moisten base to minimize absorption of water from fresh concrete.
- B. Coat surfaces of manholes and catch basin frames with oil to prevent bond with concrete pavement.
- C. Notify Architect/Engineer minimum 24 hours prior to commencement of concreting operations.

3.3 FORMING

- A. Place and secure forms to correct location, dimension, and profile.
- B. Assemble formwork to permit easy stripping and dismantling without damaging concrete.
- C. Place joint filler vertical in position, in straight lines. Secure to formwork during concrete placement.

3.4 PLACING CONCRETE

- A. Place concrete as specified in Section 033000.
- B. Place concrete continuously between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur.

3.5 JOINTS

- A. Place expansion and contraction joints as shown on the drawings. Align curb, gutter, and sidewalk joints.
- B. Place joint filler between paving components and building or other appurtenances. Recess top of filler 1/2 inch for sealant placement. Install sealer in accordance with manufacturer's recommendations.

3.6 FINISHING

- A. Curbs and Gutters: Light broom.
- B. Place curing compound on exposed concrete surfaces immediately after finishing. Apply in accordance with manufacturer's instructions.

3.7 FIELD QUALITY CONTROL

- A. Three concrete test cylinders will be taken for every 50 or less cu yds of each class of concrete placed each day.
- B. One additional test cylinder will be taken during cold weather and cured on site under same conditions as concrete it represents.
- C. One slump test will be taken for each set of test cylinders taken.
- D. Maintain records of placed concrete items. Record date, location of pour, quantity, air temperature, and test samples taken.

3.8 PROTECTION

- A. Immediately after placement, protect pavement from premature drying, excessive hot or cold temperatures, and mechanical injury.

END OF SECTION 321315

SECTION 321343 - GRASSCRETE

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Work specified in this section includes all labor, materials, equipment and services necessary to complete the Grasscrete Molded Pulp Partially Concealed System, including single use formers, concrete reinforcement, sub-base materials and curing compound.

1.2 Related Sections:

- A. Section 032000 - Concrete Reinforcing.
- B. Section 033000 - Cast-In-Place Concrete.

1.3 SUBMITTALS

- A. Product Requirements:
 - 1. Provide submittal information within 35 calendar days after the contractor has received the owner's notice to proceed.
- B. Product Data:
 - 1. Submit Grasscrete Paving System specifications, test data and other data required for each type of manufactured material and product indicated.
- C. Field quality-control test and inspection reports.
 - 1. Documentation by the concrete contractor or General Contractor of the sub-grade compaction results prior to concrete placement.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: A firm experienced in the installation of cast-in-place void structured concrete products designed for vehicular use.
- B. Source Limitations:
 - 1. Obtain each type or class of cementitious material of the same brand from same manufacturer's plant, obtain aggregate from one source, and obtain admixtures through one source from a single manufacturer, obtain Grasscrete Formers from one source.

C. Mock-ups:

1. On or suitable offsite mockups are required to demonstrate finished appearance and standard of workmanship.
 - a. Mock-up shall include entire system, including sub-base, and reinforcement with voids opened and ready for grass fill.
 - b. Notify Architect seven days in advance of dates and time when mock-ups will be constructed.
 - c. Obtain from Architect approval of mock-ups before starting construction.
 - d. If the Architect determines that the mock-ups do not meet requirements, General Contractor will demolish and remove them from the site and arrange to assemble more until approved.
 - e. Maintain mock-ups during construction in an undisturbed condition as a standard for judging the completed work.

C. See Section 033000 for concrete quality assurance requirements.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials in original packages and containers, with seals unbroken, bearing manufacturers labels indicating brand name and directions for storage, mixing with other components and application.
- B. Store materials to comply with manufacturers written instructions to prevent deterioration from moisture or other detrimental effects.

1.6 PROJECT CONDITIONS

- A. Environmental Limitations:
 1. Comply with American Concrete Institute written instructions for ambient temperature and other conditions affecting exterior concrete construction.
 2. Concrete must be cured a minimum of 14 days or as directed by the manufacturer before vehicular trafficking of Grasscrete can begin.

1.7 PERFORMANCE REQUIREMENTS

- A. The product is required to be continuously reinforced with integral rebar spacing chairs set at 8" on center.
- B. The product is required to be manufactured from cast in place concrete with an average thickness of 5½".

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce products, the following requirements apply to product selection:
 - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturer listed. For other manufacturers to be considered, submit according to the specifications in "Product Requirements."

2.2 MATERIALS

- A. Grasscrete Molded Pulp Formers: Vacuum formed bio-degradable tools designed to construct void structured concrete with an average thickness of 5½".
- B. Dayton Superior Cure & Seal 1315 EF: Water-based polymer curing compound designed to bond to fresh concrete and holds in the mix water to achieve improved concrete properties and complies with < 100 g/l VOC content requirements.
- C. Propex Novomesh 950 Fibers: blended fibers packaged in 5-pound, water-soluble bags for ready mix plant or jobsite addition to the ready mix truck.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Sub-grade for vehicle traffic shall be in accordance with local concrete street specifications. For most applications, except for very heavy loads, native soil having a minimum "R" Value of 30 and a compaction of 95% will provide a suitable sub-grade. A minimum 2" bed of well graded granular stone (road base) will be required to provide an adequate sub-base under the Partially Concealed System. Consult General Contractor, Structural Engineer, Architect and Concrete Contractor prior to installation of concrete slab to ensure complete understanding of substrate preparation, reinforcement, penetrations, mix design, placing and finishing requirements, water capacity, elevations, etc.
- B. The concrete shall have a minimum compressive strength of 4,000 psi in 28 days. Provide a "Pea-Gravel" mix. Aggregates shall conform to ASTM C 33. See Section 033000 for other requirements.
- C. The Grasscrete slab shall have a minimum thickness of 5 1/2". All perimeters of the Grasscrete slab should be restrained by a 6" minimum concrete border poured monolithically.

3.2 PREPARATION

- A. Examine sub-grade, with installer present, for conditions affecting performance of finish. Rectify conditions detrimental to timely and proper work. Do not proceed until unsatisfactory conditions are corrected.
- B. Verify that elevations and compaction meet Project Conditions above.
- C. Prior to concrete pour, verify that formers are free of construction damage and contaminants.

3.3 INSTALLATION

- A. Construction Process:
 - 1. Sub-grade shall be leveled to a uniform plane 6 1/2" below the final grade of the Grasscrete slab with 1/2" to 1" maximum layer placed over the sub-base comprised of coarse washed sand (squeegee) for use as a setting bed for the Grasscrete formers.
 - 2. Grasscrete formers shall be placed on the sub-grade. In sloped situations the use of steel spikes or rebar lengths hammered through the formers into the sub-base may be necessary to hold the formers in place during the concrete placement process.
 - 3. The reinforcement is placed 8" on center in an alternating, stacking pattern. This stacking of the steel will place it at the most desirable height with minimal exposure to former material. Alternately approved rebar chairs can be used to elevate the steel slightly off the Grasscrete formers.
 - 4. Five pounds of fibers are added to the ready mix truck in conjunction with the high range water reducers (if required to meet mix design specifications).
 - 5. Concrete shall be placed and leveled to the top of the Grasscrete formers. The concrete surface shall have a coarse broom swept finish.
 - 6. Grasscrete formers shall have the void tops removed after the concrete has hardened sufficiently with some residual paper pulp left in the voids acceptable.
 - 7. The open voids will be filled with top soil and seeded with grass. The final elevation of the soil will be a minimum of 1/2" of the concrete surface.

3.4 PROTECTION

- A. General: Protect finished work from traffic until fully cured in accordance with manufacturer's recommendations.

END OF SECTION 321343

SECTION 321723 - PAVEMENT MARKINGS

PART 1 - GENERAL

1.1 SCOPE

- A. Where indicated on plans, work consists of furnishing and applying paint (for stripes, emblems, symbols, and similar items) on pavement surfaces and on curbs, in accordance with these specifications and as shown on the plans. Location, widths, and lengths shall be as shown on plans. Comply with MDOT, Section 625 - Painted Traffic Markings.

1.2 REFERENCES

- A. MDOT - Mississippi Standard Specifications for Road and Bridge Construction, latest edition.

1.3 SUBMITTALS

- A. Submit products data on paint material.
- B. Submit paint certifications.
- C. Submit application instructions.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Paint used for traffic marking: White (Code TW) or Blue (Code TB) for stripes, symbols, and similar items as shown on the plans. Paint components, composition, inspection and testing shall be in accordance with applicable provisions of MDOT Section 710.

PART 3 - EXECUTION

3.1 EQUIPMENT

- A. Applied by approved mechanical equipment by experienced technicians thoroughly familiar with equipment, materials and marking layouts.

3.2 SURFACE PREPARATION

- A. Prior to painting, clean pavement by whatever means necessary to without damaging the surface. Markings shall follow as closely as practicable after the surface has been cleaned.

3.3 APPLICATION

- A. Uniformly painted markings of required lengths and width with true, sharp edges and ends shall be applied on properly cured, prepared and dried surfaces in conformity to the specifications and drawings.
- B. The rate of application shall not be less than one (1) gallon of paint per each three hundred and thirty (330) linear feet of four (4) inch line applied.

3.4 PROTECTION

- A. The newly painted markings shall be protected as required until dry.

3.5 TESTING

- A. The Contractor shall submit to the Architect/Engineer, for approval, certification from the manufacturer that the paint proposed for use will meet the requirements of MDOT, the manufacturer's name and address along with the trade designation of each paint and a true copy of the proposed formulation, complete with decoding information, for the proposed paint.

END OF SECTION 321723

SECTION 329219 - SEEDING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Topsoil salvage and spreading.
- B. Preparation of seedbed.
- C. Lime and fertilizer application.
- D. Seeding and mulching.

1.2 RELATED SECTIONS

- A. Section 311001 - Site Demolition.
- B. Section 310513 - Soils for Earthwork.
- C. Section 312000 - Earth Moving.

1.3 QUALITY ASSURANCE

- A. Provide seed requirements in containers showing percent pure seed, percent germination, percent weed seed, date and location of packaging. Information on the bag tag shall be from a seed test made within six (6) months prior to date of planting.
- B. Provide fertilizer of good quality meeting the specified nutrient content specified for the site.
- C. Provide wheat or oats straw for mulching that is free from noxious weed seeds.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. The delivery of the grass seed shall be in closed and sealed bags or containers. Any damaged bags or containers shall be replaced. Seed shall be stored in a dry area, safe from vehicle or rodent damage.
- B. Delivery of lime or fertilizer in bulk or in bags shall be stored in a safe, dry place. Bags shall not be placed on the ground. Bulk materials may be spread immediately when delivered in bulk spreading vehicles.

- C. Straw delivered for mulching or other erosion control needs shall be protected from rainfall and ground moisture.

PART 2 - PRODUCTS

2.1 TOPSOIL

- A. Existing topsoil on the construction site shall be salvaged. This shall consist of the top 4-6 inches of soil from the disturbed areas after site clearing is complete. The topsoil shall be a rich, friable soil containing decaying organic matter but will be free of large stones, roots, sticks, weeds and any toxic material harmful to plant growth.
- B. Additional topsoil, if needed, shall be imported from an off-site source provided by the Contractor. Natural on-site soils may be blended with imported materials to provide desired results.

2.2 SEED

- A. All seeds shall comply with the seed laws of the State of Mississippi and current regulations. The seed shall be delivered in bags showing percent of germination and purity of seed, also the percent of obnoxious weeds and inert matter. The seed or seed mixture and planting shall conform to the following planting schedule.

1. Spring Seeding (March 1 to August 31)

	<u>Percent Purity</u>	<u>Percent Germination</u>	<u>Mix (Dry wt.) Pounds per Acre</u>
Common Bermuda (hulled)	95	90	<u>15</u>
		Total	15

2. Fall Seeding (September 1 to November 30)

	<u>Percent Purity</u>	<u>Percent Germination</u>	<u>Mix (Dry wt.) Pounds per Acre</u>
Common Bermuda (unhulled)	95	90	15
Rye Grass	95	85	<u>40</u>
		Total	55

3. Winter (December 1 to February 28)

Provide mulch at an application rate of 1 1/2 tons per acre or provide an erosion control blanket during the winter period. The area shall then be seeded during the next spring seeding period, according to the spring planting schedule.

2.3 ACCESSORIES

- A. Mulching Material: Oat or wheat straw, free from weeds, foreign matter detrimental to plant life, and dry.
- B. Erosion Control Blanket: Minimum 0.5 lbs./sq.yd. straw material sewn between two layers of biodegradable net similar and equal to S150 as manufactured by North American Green.
- C. Fertilizer: Use a common 13-13-13 mixture at a rate of 600 lbs per acre.
- D. Water: Clean, fresh and free of substances or matter which could inhibit vigorous growth of grass.
- E. Lime: Ground agricultural limestone.
- F. Wood Pegs: Softwood, sufficient in size and length to ensure anchorage of sod on slope.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that all other work has been completed that would disrupt or disturb the seeded areas.

3.2 PREPARATION OF SEEDBED

- A. Prepare seedbed to eliminate low spots, uneven areas, or erosion gullies. Maintain lines, grades, profiles and contours shown on the plans. Make changes gradual and blend slopes into level areas.
- B. Remove foreign materials, weeds, and undesirable plants. Cover any exposed subsoil.
- C. Except in areas of future buildings and pavement, spread topsoil to a minimum depth of 6 inches to the cut and fill slopes and to other unpaved areas.
- D. Scarify subsoil to a depth of 4-inches. Repeat scarifying in areas where hauling and spreading equipment has compacted the subsoil.

3.3 LIME

- A. Apply lime at a uniform rate of 2 tons per acre after topsoil has been applied. Apply 1 ton/ac. of lime on 2 separate passes in cross directions.
- B. Mix lime into the upper 4 inches of soil by disking.

3.4 FERTILIZER

- A. Apply fertilizer at a uniform rate of 600 #/acre over all disturbed areas after topsoil, if required, has been applied.
- B. Do not apply fertilizer at the same time or with the same machine that will be used to apply the seed.
- C. Mix the fertilizer thoroughly into the upper 4" of soil by disking.

3.5 SEEDING

- A. Seeding shall be applied to all disturbed areas not receiving a specific surface treatment.
- B. Each type of seed required shall be applied separately.
- C. Apply seed evenly by applying half the seed at each of two intersecting directions. Do not sow immediately following a rain, when ground is too dry, or during windy periods.
- D. Cover the seed by light raking, dragging a chain over area, or other pre-approved method.
- E. Firm the soil around the seed with a roller or cultipacker.
- F. Seeded areas shall be covered with mulch or erosion control blanket.
- G. Do not seed areas in excess of that which can be mulched on the same day.

3.6 MULCHING

- A. Apply the mulch cover at rate of 1 1/2 tons per acre to the specified areas immediately following the seeding and compacting operations.

3.7 EROSION CONTROL BLANKET

- A. Install the erosion control blanket to seeded areas immediately following the seeding and compacting operations according to manufacturer's written instructions.

3.8 MAINTENANCE

- A. Provide maintenance as needed after seeding operations (or separate portions thereof) are complete and continue until final acceptance of the contract.
- B. Needed maintenance will include reseeding, watering, mowing, repairing erosion rills and gullies, and other necessary operations to establish and maintain a vigorous vegetative cover.
- C. Water at 7-day intervals if rainfall exceeding 1.0 inch accumulation has not been received. Apply 1.0 inches of water at each application.
- D. Mow grass as needed to maintain grass in the 2.5 inch (minimum) to 4.0 inch (maximum) height range. Do not cut more than 1/3 of the grass blade at any one mowing. Do not mow within first 21 days after grass emergence. Use only a rotary or reel mower with sharp blades (no bushhog or flail mowers).

END OF SECTION 329219

SECTION 329223 - SODDING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Topsoil salvage and spreading.
- B. Preparation of sodbed.
- C. Lime and fertilizer application.
- D. Sodding.

1.2 RELATED SECTIONS

- A. Section 311001 - Site Demolition.
- B. Section 310513 - Soils for Earthwork.
- C. Section 312000 - Earth Moving.

1.3 QUALITY ASSURANCE

- A. Provide fertilizer of good quality meeting the specified nutrient content specified for the site.
- B. Sod shall have a minimum age of 12 months with root development, sufficient to support its own weight without tearing when suspended vertically by holding the upper two corners. Submit sod certification for grass specie and location of sod source.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Delivery of lime or fertilizer in bulk or in bags shall be stored in a safe, dry place. Bags shall not be placed on the ground. Bulk materials may be spread immediately when delivered in bulk spreading vehicles.
- B. Sod delivered to the site shall be stored, handled and protected according to the producers instructions. All exposed roots shall be protected from dehydration. All sod delivered shall not be stored longer than 24 hours.

PART 2 - PRODUCTS

2.1 TOPSOIL

- A. Existing topsoil on the construction site shall be salvaged. This shall consist of the top 4-6 inches of soil from the disturbed areas after site clearing is complete. The topsoil shall be a rich, friable soil containing decaying organic matter but will be free of large stones, roots, sticks, weeds and any toxic material harmful to plant growth.
- B. Additional topsoil, if needed, shall be imported from an off-site source provided by the Contractor. Natural on-site soils may be blended with imported materials to provide desired results.

2.2 SOD

- A. Sod shall be ASPA certified field grown, cultivated bermuda grass with a strong fibrous root system, free of stones or bare spots, and contain no more than 10 weeds per 1,000 sq.ft.
- B. Sod shall be harvested (machine cut) in accordance with ASPA guidelines.

2.3 ACCESSORIES

- A. Fertilizer: Use a common 13-13-13 mixture at a rate of 600 lbs per acre.
- B. Water: Clean, fresh and free of substances or matter which could inhibit vigorous growth of grass.
- C. Lime: Ground agricultural limestone.
- D. Wood Pegs: Softwood, sufficient in size and length to ensure anchorage of sod on slope.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that all other work has been completed that would disrupt or disturb the sodded areas.

3.2 PREPARATION OF SOIL

- A. Prepare soil to eliminate low spots, uneven areas, or erosion gullies. Maintain lines, grades, profiles and contours shown on the plans. Make changes gradual and blend slopes into level areas.
- B. Remove foreign materials, weeds, and undesirable plants. Cover any exposed subsoil.
- C. Except in areas of future buildings and pavement, spread topsoil to a minimum depth of 6 inches to the cut and fill slopes and to other unpaved areas.

- D. Scarify subsoil to a depth of 4-inches. Repeat scarifying in areas where hauling and spreading equipment has compacted the subsoil.

3.3 LIME

- A. Apply lime at a uniform rate of 2 tons per acre after topsoil has been applied. Apply 1 ton/ac. of lime on 2 separate passes in cross directions.
- B. Mix lime into the upper 4 inches of soil by disking.

3.4 FERTILIZER

- A. Apply fertilizer at a uniform rate of 600 #/acre over all disturbed areas after topsoil, if required, has been applied.
- B. Mix the fertilizer thoroughly into the upper 4" of soil by disking.
- C. Sod shall be installed after fertilizer is mixed in.

3.5 SODDING

- A. All disturbed areas not receiving pavement or landscaping that is on a slope greater than 4H to 1V shall be sodded.
- B. Prepare the site so sod will lay smooth with any adjacent concrete surface. Loosen the soil slightly for root penetration and moisten the surface immediately prior to laying sod.
- C. Lay sod immediately after delivery to site to prevent root and plant deterioration.
- D. Lay sod tight with no open joints visible and do not overlap. Stagger end joints 12 inches minimum and lay smooth without stretching.
- E. On slopes, lay sod perpendicular to the slope and secure every row with wooden pegs at maximum 2 feet on center. Drive pegs flush with soil portion of sod.
- F. Water sodded areas immediately after installation. Saturate the sod and wet seedbed to a depth of 4 inches.
- G. After sod and soil have drained but still wet, roll sodded areas to ensure good bond between sod and soil and to remove minor depressions and irregularities.

3.6 MAINTENANCE

- A. Provide maintenance as needed after seeding and sodding operations (or separate portions thereof) are complete and continue until final acceptance of the contract.

- B. Needed maintenance will include resodding, watering, mowing, repairing erosion rills and gullies, and other necessary operations to establish and maintain a vigorous vegetative cover.
- C. Water at 7-day intervals if rainfall exceeding 1.0 inch accumulation has not been received. Apply 1.0 inches of water at each application.
- D. Mow grass as needed to maintain grass in the 2.5 inch (minimum) to 4.0 inch (maximum) height range. Do not cut more than 1/3 of the grass blade at any one mowing. Do not mow within first 21 days after grass emergence. Use only a rotary or reel mower with sharp blades (no bushhog or flail mowers).

END OF SECTION 329223

SECTION 330513 - MANHOLES AND STRUCTURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Modular precast concrete manhole sections with tongue-and-groove joints, covers, anchorage and accessories.

1.2 RELATED SECTIONS

- A. Section 310513 - Soils for Earthwork.
- B. Section 333100 - Sanitary Utility Sewerage Piping.
- C. Section 033000 - Cast-In-Place Concrete.

1.3 REFERENCES

- A. ASTM A48 - Gray Iron Castings.
- B. ASTM C443 - Joints for Circular Concrete Sewer and Culvert Pipe, using Rubber Gaskets.
- C. ASTM C478 - Precast Reinforced Concrete Manhole Sections.
- D. ASTM C923 - Resilient Connectors Between Reinforced Concrete Manhole Structures and Pipes.

1.4 SUBMITTALS

- A. Shop Drawings: Indicate manholes locations, elevations, sizes and elevations of penetrations.
- B. Product Data: Provide manhole covers, component construction, features, waterproofing and epoxy lining.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Manhole base shall be precast integral with first manhole section or cast-in-place concrete.
- B. Manhole Sections: Reinforced precast concrete in accordance with ASTM C478 with rubber gaskets in accordance with ASTM C443.

- C. Concrete: As specified in Section 033000 (3,000 psi).
- D. Reinforcement: As specified in Section 032000.
- E. Mortar: Cement, ASTM C-150, Type I with clean well graded sand, ASTM C-33, and potable water.
- F. Gasket Material for Precast Section Joints: Kent Seal No. 2 as manufactured by Hamilton Kent Manufacturing Company or RAM-NEK as manufactured by K.T. Snyder Company.

2.2 COMPONENTS

- A. Lid and Frame: ASTM A48, Class 30B cast iron construction machined flat bearing surface, removable lid.
- B. Manhole Steps: Plastic encased steel.
- C. Interior Epoxy Coating: Koppers 300M coal tar epoxy or approved equal used with the manufacturer's recommended primers and thinners.
- D. Exterior Waterproofing: Bitumastic material, or coal tar epoxy.
- E. Flexible Boots: Kor-N-Seal or approved equal.
- F. Foundations: Shall be either precast concrete units or poured-in-place reinforced concrete, set on undisturbed earth or compacted S1 material. Concrete shall have a 28 day strength of 3,000 psi.

2.3 CONFIGURATION

- A. Shaft Construction: Concentric with eccentric cone top section.
- B. Clear Inside Dimensions: As indicated.
- C. Design Depth: As indicated.
- D. Clear Lid Opening: As indicated.
- E. Pipe Entry: Provide openings as required and provide with water tight seal using flexible boots.
- F. Steps: 12 inches wide, 12 inches on center vertically, set into manhole wall.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify items provided by other sections of Work are properly sized and located.

- B. Verify that built-in items are in proper location, and ready for roughing into Work.
- C. Verify excavation for manholes is correct.

3.2 PREPARATION

- A. Coordinate placement of inlet and outlet pipe.

3.3 PLACING MANHOLE SECTIONS

- A. Place base pad, trowel top surface level or use precast base.
- B. Form and place manhole sections plumb and level, to correct dimensions and elevations.
- C. Cut and fit for pipe. Use flexible boots at all pipe connections.
- D. Grout invert channels at base of sections to achieve slope to exit piping. Trowel smooth. Contour as required. Invert grout shall extend to the spring line of the pipe.
- E. Set cover frames and covers level without tipping, to correct elevations.
- F. Coordinate with other sections of work to provide correct size, shape, and location.
- G. Coat outside of manhole, below ground line with two coats of bitumastic, or coal tar epoxy, 20 mills total dry film thickness.
- H. Line inside of manhole with coal tar epoxy coating, 20 mills total dry film thickness. Apply lining in accordance with the coating manufacturer's written instructions and at the concrete casting facilities.

3.4 BACKFILL

- A. Backfill in 8 inch lifts with S1 fill material uniformly around manhole. Avoid any horizontal displacement of manhole. Compact backfill to 95% maximum Standard Proctor Density (ASTM D 698).
- B. Place backfill material so finished grade will slope away from manhole cover.

3.5 TESTING

- A. A representative sample of manholes constructed shall receive an exfiltration test. This test shall be performed by the Contractor and observed by the Engineer's representative. Exfiltration will be measured by stopping the manhole outlets and filling the manhole with water to a depth as directed. Exfiltration in a manhole shall not exceed 0.038 gallons per inch diameter per foot of depth for a 24 hour test.

END OF SECTION 330513

SECTION 331116 - SITE WATER UTILITY DISTRIBUTION PIPING

PART 1- GENERAL

1.1 SECTION INCLUDES

- A. Pipe and fittings for site water lines.
- B. Valves.

1.2 RELATED SECTIONS

- A. Section 312000 - Earth Moving.
- B. Section 312317 - Trenching.
- C. Section 033000 - Cast-in-Place Concrete.

1.3 REFERENCES

- A. ANSI/AWWA C104 - Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water.
- B. ANSI/AWWA C105/A21.5 - Polyethylene Encasement for Ductile-Iron Pipe Systems.
- C. ANSI/AWWA C110/A21.10 - Ductile Iron and Gray-Iron Fittings, 3 in. through 48 in. for Water and Other Liquids.
- D. ANSI/AWWA C111 - Rubber-Gasket Joints for Ductile Iron Pressure Pipe and Fittings.
- E. ANSI/AWWA C151 - Ductile-Iron Pipe, Centrifugally Cast for Water or Other Liquids.
- F. ANSI/AWWA C153/A21.53 - Ductile Iron Compact Fittings, 3 in. through 16 in. for Water and Other Liquids.
- G. ANSI/AWWA C500 - Metal-Seated Gate Valves for Water Supply Service.
- H. ANSI/AWWA C502 - Dry-Barrel Fire Hydrants.
- I. ANSI/AWWA C508 - Swing-Check Valves for Waterworks Service, 2 in through 24 in NPS.
- J. ANSI/AWWA C600 - Installation of Ductile-Iron Water Mains and Their Appurtenances.
- K. AWWA C900 - Polyvinyl Chloride (PVC) Pressure Pipe, 4 in. through 12 in., for Water Distribution.

- L. ASTM D2241 - Poly (Vinyl Chloride) (PVC) Plastic Pipe(SDR-PR).
- M. ASTM D2855 - Making Solvent-Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings.
- N. ASTM D2564 - Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Pipe Systems.
- O. ASTM F477 - Elastomeric Seals (Gaskets) for Joining Plastic Pipe.
- P. UL 262 - Gate Valves for Fire-Protection Service.
- Q. UL 789 - Indicator Posts for Fire-Protection Service.

PART 2 - PRODUCTS

2.1 PIPE, COUPLINGS AND ACCESSORIES

- A. PVC Pipe:
 - 1. All PVC pipe and fittings four (4) inches and larger in diameter shall conform to the latest edition of AWWA C-900 and shall be made from Class 12454-A or B materials per the latest edition of ASTM D-1784. Pipe shall be a minimum of DR 18 unless otherwise specified, for a working pressure rating of 150 PSI. All pipe shall conform with the outside diameter (OD) dimensions of ductile iron pipe to facilitate use of DIP fittings, standard cast iron valves and specials. All joints shall have elastomeric seals conforming to the latest edition of ASTM F-477. All pipe shall bear the seal of the National Sanitation Foundation (NSF). All jointing shall be made in accordance with the manufacturer's recommendations. Provide a magnetic detectable tracer wire with a plastic covering imprinted with water service 18 inches above top of pipe.
 - 2. All PVC pipe three (3) inches and smaller in diameter shall conform to the latest edition of ASTM D-2241 and shall be made from Type 1120 material. Pipe shall be a minimum of SDR 26 unless otherwise specified, for a working pressure of 160 PSI. All joints shall be solvent weld in accordance with the latest edition of ASTM D-2855 with the solvent cement conforming to the latest edition of ASTM D-2564. All pipe shall bear the seal of the NSF. All jointing shall be made in accordance with the manufacturer's recommendations. Provide a magnetic detectable tracer wire with a plastic covering imprinted with water service 18 inches above top of pipe.
- B. Ductile Cast Iron Pipe: All pipe shall be centrifugally cast manufactured in accordance with the latest edition of ANSI A21.51 (AWWA C 151). Pipe shall be pressure class 350 psi. All pipes and fittings shall be factory-coated on the outside with coal tar enamel conforming to the latest edition of A 21.5 and lined inside with a minimum of 1/16 inch cement lining in accordance with the latest edition of ANSI A 21.4 (AWWA C-104).

1. Joints for ductile cast iron pipe shall be slip-on type unless otherwise specified. All joints for fittings, valves and specials shall be mechanical joints. Slip-on pipe joint for ductile cast iron pipe shall conform to the latest edition of ANSI A 21.11 (AWWA C 111) except that the joints shall be made with a special gasket seal Super-Bel Tite as manufactured by Clow Corporation or approved equal. Lubricants shall be non-toxic, odorless, tasteless and shall not support bacteria and shall be specifically manufactured for the pipe utilized. Mechanical joints shall conform to the latest edition of ANSI A 21.11 (AWWA C 111).
2. All fittings shall be ductile iron and shall conform to the latest edition of AWWA C110 or C153 for ductile iron fittings.
3. All fittings shall be tar coated outside and cement lined inside in accordance with the latest edition of AWWA C-104 (ANSI 21-4), except cement lining may be half of thickness (enamel type) with bituminous seal coating.

C. Valves:

1. Gate Valves larger than 3-inch - Shall comply with the latest edition of AWWA C-500 as manufactured by Mueller, American-Darling or approved equal. Gate valves shall be iron body, fully bronze mounted, double disc, parallel seat, non-rising stem, and shall open counterclockwise. All gate valves shall have a maximum working pressure of 200 PSI and be tested at 400 PSI. The thrust collar and other bearing surfaces shall be permanently lubricated with oil. The disc mechanism shall be designed so that the seating pressure is applied equally at multiple separate contact points near the outer edge of each disc by a bronze or alloy wedging mechanism. Gate valves shall be equipped with mechanical joint connections unless otherwise specified.
2. Valve Boxes - Cast iron box having top section and cover with lettering water. Bottom section with base of size to fit over valve and barrel approximately 5" in diameter, and adjustable cast-iron extension of length required for depth of bury of valve. Provide steel T-handle wrench with each valve box.
3. Post Indicator Valves - Provide with operating nut located about 3 feet above finish grade. Gate valves for use with indicator posts shall conform to U.L. 262. Indicator posts shall conform to U.L. 789. Provide each indicator post with one coat of primer and two coats of red enamel paint. Valves and posts shall be similar and equal to Mueller or American Darling.
4. Check Valves - Shall be iron body, spring loaded, swing type with straight-away passage of full pipe area and renewable bronze seat ring with resilient faced disc. Valves shall be as manufactured by Mueller, American-Darling or approved equal.
5. Gate Valves smaller than 3-inch shall be Class 200, solid wedge, nonrising stem. Valves shall have flanged end connections or threaded end connections with a union on one side of valve.

- D. Services: Service piping shall be 200 PSI Polybutyl or Type "K" copper and shall conform to the applicable AWWA/ASTM/ANSI Standards and designed for working pressure compatible with the water mains specified above.

- E. Specials: Specials shall be of the same material as the pipe material being used or as approved by the Engineer. The term specials shall include plugs, caps, and other items as needed. Specials shall conform to the applicable AWWA/ASTM/ANSI Standards and shall be designed for the working pressure of the water mains on which they are being installed.
- F. System Materials: Pipe materials shall comply with the following schedule:

SYSTEM

MATERIAL

Yard Piping

PVC

G. Fire Hydrants

1. Fire hydrants shall be 5-1/4" valve opening and be Mueller A-436 or American Flow Control B-84-B. Fire hydrants shall comply with the latest edition of AWWA C502. Each hydrant shall be 6 inch mechanical joint ends with harnessing lugs ("dog ears") and shall open by turning to the left (counterclockwise). Fire hydrant shall be of ample length for 3-1/2 foot depth of bury. It shall be provided with two 2-1/2 inch hose nozzles and one 4-1/2 inch pumper nozzle, all having National Standard hose threads approved by the Local Fire Department. Nozzles shall have caps attached by chains. Operating nuts shall be AWWA Standard (pentagonal, measuring 1-1/2" point to flat). Fire hydrants shall be equipped with "O-Ring" packing. Fire hydrant shall be furnished with two coats of red alkyd gloss enamel paint over a prime coat.

H. Backflow Prevention Assembly

1. Shall be listed in the latest version of the "List of Approved Backflow Prevention Assemblies" published by the Mississippi State Department of Health, Division of Water Supply, or as approved by the University of Southern California's Foundation for Cross Connection Control and Hydraulic Research. These assemblies shall be furnished as a complete set with the approved shut-off valves specified in the above lists.

I. Heated Insulated Enclosure for Backflow Prevention Assembly

1. Shall be fabricated from aluminum. Insulation shall be a minimum of 1.5 inches of polyisocyanurate foam or board stock laminated between two layers of fiberglass mat. Structural members shall be aluminum. Roof and wall panels shall be factory assembled with no on-site drilling required. Multi sectional enclosures shall fit together with overlapping tongue and groove joints. The unit shall be fastened to the concrete foundation. Access panels shall be provided to allow for easy access for operation, maintenance, and testing of backflow prevention assembly without removal or disassembly. Access panels shall be lockable. Heating equipment shall maintain an interior temperature of + 40°F with and exterior outside temperature of 0°F with a wind velocity of 15 mph. Heating equipment shall be UL, ETL or CSA certified. Electric power source for heat and accessories shall be G.F.I. protected. Hardware shall be stainless steel or aluminum.

PART 3 - EXECUTION

3.1 PIPE LAYING

- A. General: Pipe shall be installed as shown on the drawings and in accordance with the manufacturer's recommendations.
- B. Pipe, appurtenances, and fittings shall be laid to the line and grade established on the plans. Standard cover depth shall be 3' minimum.
- C. The inside of the bells and the outside of the spigots shall be thoroughly cleaned before they are placed. The inside of all pipe shall be thoroughly swabbed to ensure that the pipe is clean and free of obstructions and foreign matter until the work is completed.
- D. Where pipe laying ceases at the end of the day or for any cause, the end of the pipe shall be securely closed in order to prevent the entrance of water, mud or any other objectionable matter.
- E. Pipe shall not be lain when water is in the trench.
- F. Thrust Blocking shall be installed at locations as indicated on the drawings.

3.2 MAKING JOINTS

- A. All joints shall be constructed in accordance with the manufacturer's recommendations using the jointing materials, specials and lubricants specified by the manufacturer and approved by the Engineer. Restrain joints as required to prevent separation.

3.3 SETTING FITTINGS, VALVES, AND SPECIALS

- A. All fittings, valves, valve boxes, and other appurtenances shall be set at the location indicated on the plans. Omission of any of these items shall be corrected by the Contractor without extra cost to the Owner. Valves and fittings shall be jointed to pipe as recommended by manufacturers.
- B. All buried valves, including by-pass valves, shall be provided with a valve box. The valve box shall not transmit shock or stress to the valve and shall be centered and plumb over the operating nut with the cover flush with the pavement surface or such other level as directed. Valve box slabs or marker posts shall be provided where specified on the drawings.

3.4 SERVICE ASSEMBLIES AND SERVICE LINE INSTALLATION

- A. Assemblies shall consist of a corporation stop, service clamp, curb stop and other appurtenances needed to complete the assembly in accordance with the plans. They shall be installed in a good and workmanlike manner in the places designated on the plans or as directed by the Engineer.

3.5 CONNECTION TO EXISTING MAINS

- A. Where indicated on the Plan, cut-ins must be made by the Contractor in order to connect the new main with existing water mains. The Contractor shall coordinate connections with the utility owner. The Contractor shall furnish all labor and materials and service required for the excavating, cutting the existing mains, removal and relocation of sections of old, connecting the new main with the pipe, de-watering the trench old and the setting of necessary fittings, specials and valves as shown on the PLANS. Connection to existing mains shall be made after the new line has been disinfected and tested.
- B. The Contractor shall provide temporary blocking and bracing a properly placed to prevent movement or blowing off of any pipe, valves or fittings due to water pressure on the main. All connections shall be made in a most expeditious and workmanlike manner to cause the least inconvenience.
- C. Any time that the interruption of water service in the existing system is necessary because of operations under this Contract, the Contractor shall notify the Owner at least 48 hours in advance. Interruptions of water service shall be coordinated with the Owner. The developed schedule will be strictly adhered to.

3.6 SEPARATION OF WATER AND SEWER MAINS

- A. Water Piping installation Parallel with Sanitary Sewer Piping
 - 1. Normal Conditions. Water Piping shall be laid at least 10 feet horizontally from a sewer manhole whenever possible. Distance shall be measured edge to edge.
 - 2. Unusual Conditions. When local conditions prevent a horizontal separation of 10 feet, water piping may be laid closer to a sewer or sewer manhole provided:
 - a) Bottom (invert) of the water piping shall be at least 18 inches above the top (crown) of the sewer piping.
 - b) Where this vertical separation cannot be obtained, sewer piping shall be constructed of AWWA-approved water pipe, pressure tested in place without leakage prior to backfilling.
 - c) Sewer manhole shall be of watertight construction and tested in place.
- B. Installation of Water Piping Crossing Sanitary Sewer Piping
 - 1. Normal Conditions. Water piping crossing above sewer piping shall be laid to provide a separation of at least 18 inches between the bottom of the water piping and the top of the sewer piping. The length (minimum 18 feet) of water piping shall be centered at the point of crossing so that joints shall be equidistant and as far as possible from sewer piping.
 - 2. Unusual Conditions. When local conditions prevent a vertical separation described above, the following construction shall be used:

- a) Sewer piping passing over or under water piping shall be constructed of AWWA-approved water piping, pressure tested in place without leakage prior to backfilling.
 - b) Water piping passing under sewer piping shall, in addition, be protected by providing the following. A vertical separation of at least 18 inches between bottom of sewer piping and top of water piping; adequate structural support for sewer piping to prevent excessive deflection of joints and settling on and breaking of water piping; and that the length (minimum 18 feet) of water piping be centered at the point of crossing so that joints shall be equidistant and as far as possible from sewer piping.
- C. Sanitary Sewer Piping or Sanitary Sewer Manholes. No water piping shall pass through or come in contact with any part of a sewer manhole.

3.7 HYDROSTATIC TESTS

- A. After the pipe is laid and the line flushed, it shall be filled with water with care being exercised to expel all air from the pipe. During the test period all pipe, valves, fittings, and joints shall be examined carefully for defects. Any observed leaks or defective pipe shall be satisfactorily repaired or replaced, at the expense of the Contractor and the test repeated until the section tested is within the limits prescribed hereinafter. The entire distribution system or parts thereof shall be tested under hydrostatic pressure of 150 psi, for a period of 4 hours, if joints are exposed, or for an 8 hour period, if joints are covered. Repairs shall be made using approved materials and new replacement fittings, specials, of gaskets where leakage occurs.
- B. Leakage shall be measured by an approved calibrated meter through which all of the water required to maintain test pressure shall be pumped. All testing shall be performed in the presence of the Engineer or his authorized representative, and the Engineer shall be notified at least 24 hours in advance of the start of the test.
- C. The Contractor shall furnish the pump, pipe connections, fittings, gates, meters, and all necessary apparatus and shall furnish all labor and work required to make the tests. All costs of testing shall be borne by the Contractor and testing operations shall remain in operation until approved by the Engineer. Allowable leakage shall not exceed 10 gallons per 24 hours per inch of diameter per mile of pipe, at the specified test pressure.
- D. Tests shall be completed in accordance with the latest edition of AWWA C-600 except as modified herein.

3.8 DISINFECTION OF PIPELINES

- A. Disinfecting of water lines shall be in accordance with Section 331117.

END OF SECTION 331116

SECTION 331117 - DISINFECTION AND TESTING FOR WATER LINES

PART 1 - GENERAL

1.1 GENERAL

- A. This item includes furnishing all labor, materials, equipment and incidentals for disinfecting and testing the water lines.
- B. The Contractor shall disinfect all constructed water lines in strict accordance with Mississippi State Board of Health guidelines and AWWA C651.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 331116 - Site Water Utility Distribution Piping.

PART 2 - MATERIALS

- 2.1 Materials used for disinfection shall conform to AWWA-C651, Section 2.

PART 3 - EXECUTION

3.1 WATER LINES

- A. Any connection of new water line to the active distribution system prior to receipt of satisfactory bacteriological samples may constitute a cross-connection. The new water line must be isolated until bacteriological test in paragraph C below are satisfactorily completed.
- B. After completion of the construction and pressure testing of water lines, they shall be flushed and disinfected using at least a 50 mg/L free chlorine solution for 24 hours or as described in AWWA C651.
- C. Before a water line can be placed in operation, water samples shall be taken and analyzed in accordance to Mississippi State Board of Health requirements. Disinfection will continue until the water shows no coliform bacteria and no confluent growth. Samples shall be taken by the system operator or county sanitarian.

END OF SECTION 331117

SECTION 333100 - SANITARY UTILITY SEWERAGE PIPING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Sanitary sewerage drainage piping, fittings, accessories and bedding.
- B. Connection of building sanitary drainage system to municipal sewers.

1.2 RELATED SECTIONS

- A. Section 312317 - Trenching.
- B. Section 330513 - Manholes and Structures.

1.3 REFERENCES

- A. ANSI/ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8 mm) Drop.
- B. ASTM 2241 - Poly (Vinyl Chloride) (PVC) Pressure Rated Pipe (SDR-Series).
- C. ANSI/ASTM D3034 - Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
- D. ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- E. ASTM D3212 - Joints for Drain and Sewer Plastic Pipe Using Flexible Elastomeric Seals.
- F. ASTM F477 - Elastomeric Seals (Gaskets) for Joining Plastic Pipe.
- G. ANSI/AWWA C104 - Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water.
- H. ANSI/AWWA C110/A21.10 - Ductile Iron and Gray-Iron Fittings, 3 in. through 48 in. for water and other liquids.
- I. ANSI/AWWA C111 - Rubber-Gasket Joints for Ductile Iron Pressure Pipe and Fittings.
- J. ANSI/AWWA C151 - Ductile-Iron Pipe, Centrifugally Cast for Water or Other Liquids.
- K. ANSI/AWWA C153/A21.53 - Ductile Iron Compact Fittings, 3 in. through 16 in. for Water and Other Liquids.
- L. ANSI/AWWA C500 - Metal-Seated Gate Valves for Water Supply Service.

1.4 DEFINITIONS

- A. Bedding: Fill placed under, beside and directly over pipe, prior to subsequent backfill operations.

1.5 SUBMITTALS

- A. Product Data: Provide data indicating pipe, and pipe accessories.

1.6 PROJECT RECORD DOCUMENTS

- A. Record location of pipe runs, connections, and invert elevations.

1.7 FIELD MEASUREMENTS

- A. Verify that field measurements and elevations are as indicated.

1.8 COORDINATION

- A. Coordinate the Work with termination of sanitary sewer connection outside building, and connection to municipal sewer utility service.

PART 2 - PRODUCTS

2.1 POLYVINYL CHLORIDE (PVC) GRAVITY SEWER PIPE AND FITTINGS

- A. All PVC gravity pipe and fittings shall be suitable for use as a gravity sewer conduit and shall conform to ASTM D-3034 (SDR 26), latest revision, minimum pipe stiffness, 115 psi. All fittings and accessories shall have bell and spigot configurations identical to that of the pipe.
- B. Joints for PVC sewer pipe shall be integral bell gasketed joint designed so that when assembled, the elastomeric gasket inside the bell is compressed radially on the pipe spigot to form a positive seal. The joint shall be so designed to avoid displacement of the gasket when installed in accordance with the manufacturer's recommendation. Joints shall conform to ASTM D-3212, latest revision. Gaskets shall conform to ASTM F-477, latest revision.

2.2 PRESSURE SEWER PIPE AND FITTINGS

- A. PVC Pipe. All PVC pressure pipe shall conform to the latest edition of ASTM D-2241 and shall be made from Type 1120 materials, Pipe shall be a minimum of SDR 26 unless otherwise specified, for a working pressure rating of 150 psi. All joints shall have elastomeric seals conforming to the latest edition of ASTM F-477. All jointing shall be made in accordance with the manufacturer's recommendations. All fittings shall be cast iron or ductile iron, mechanical joint.

- B. Ductile Cast Iron Pipe: All pipe shall be centrifugally cast manufactured in accordance with the latest edition of ANSI A21.51 (AWWA C 151). Pipe shall be pressure class 350 psi. All pipes and fittings shall be factory-coated on the outside with coal tar enamel conforming to the latest edition of A21.5 and lined inside with a minimum of 1/16 inch cement lining in accordance with the latest edition of ANSI A21.4 (AWWA C-104).
1. Joints for ductile cast iron pipe shall be slip-on type unless otherwise specified. All joints for fittings, valves and specials shall be mechanical joints. Slip-on pipe joint for ductile cast iron pipe shall conform to the latest edition of ANSI A 21.11 (AWWA C 111) except that the joints shall be made with a special gasket seal Super-Bel Tite as manufactured by Clow Corporation or approved equal. Lubricants shall be non-toxic, odorless, tasteless and shall not support bacteria and shall be specifically manufactured for the pipe utilized. Mechanical joints shall conform to the latest edition of ANSI A 21.11 (AWWA C 111).
 2. All fittings shall be ductile iron and shall conform to the latest edition of AWWA C110 or C153 for ductile iron fittings.
 3. All fittings shall be tar coated outside and cement lined inside in accordance with the latest edition of AWWA C-104 (ANSI 21-4), except cement lining may be half of thickness (enamel type) with bituminous seal coating.
- C. Valves:
1. Gate Valves - Shall comply with the latest edition of AWWA C-500 as manufactured by Mueller, A-2380-6, American-Darling or approved equal. Gate valves shall be iron body, fully bronze mounted, double disc, parallel seat, non-rising stem, and shall open counterclockwise. All gate valves shall have a maximum working pressure of 200 PSI and be tested at 400 PSI. The thrust collar and other bearing surfaces shall be permanently lubricated with oil. The disc mechanism shall be designed so that the seating pressure is applied equally at multiple separate contact points near the outer edge of each disc by a bronze or alloy wedging mechanism. Gate valves shall be equipped with mechanical joint connections unless otherwise specified.
 2. Check Valves - Shall iron body, spring loaded, swing type with straight-away passage of full pipe area and renewable bronze seat ring with resilient faced disc. Valves shall be as manufactured by Mueller, A2602-6-02, American-Darling or approved equal.
 3. Air Release Valve - Valves shall be stainless steel with a 2-inch inlet, 1/2-inch outlet and 5/16-inch orifice and be similar and equal to Model No. 48 BW manufactured by Valmatic.
 4. Air Release and Vacuum Breaker Valve - Valves shall be stainless steel with a 2-inch inlet and 2-inch orifice with a minimum air flow of 6 scfs (Standard Cubic Feet of Free Air per Second). Vacuum valves shall be similar and equal to Model No. 302 BW manufactured by Valmatic.

2.3 PIPE ACCESSORIES

- A. Fittings: Same material as pipe molded or formed to suit pipe size and end design, in required tee, bends, elbows, cleanouts, reducers, traps and other configurations required.

2.4 MANHOLES

- A. Manhole Construction: Section 330513.

2.5 BEDDING MATERIALS

- A. Bedding: Fill Type S3 or S4 as specified in Section 310513.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that trench cut and excavation base is ready to receive work and excavations, dimensions, and elevations are as indicated on drawings.

3.2 PREPARATION

- A. Hand trim excavations to required elevations. Correct over excavation with compacted fill material.
- B. Remove large stones or other hard matter which could damage pipe or impede consistent backfilling or compaction.

3.2 BEDDING

- A. Excavate pipe trench in accordance with Section 31 23 17 for work of this Section. Hand trim excavation for accurate placement of pipe to elevations indicated.
- B. Place bedding material at trench bottom, level materials in continuous layer not exceeding 6 inches compacted depth, compact to 95 percent (ASTM D698).
- C. Maintain moisture content of bedding material to attain required compaction density.

3.3 INSTALLATION - PIPE

- A. Install pipe, fittings, and accessories in accordance with manufacturer's instructions. Seal joints watertight.
- B. Lay pipe to slope gradients and alignment noted on drawings. Pipe which is not true in alignment or which shows any settlement after laying shall be taken up and relaid without extra compensation.
- C. Install bedding at sides and over top of pipe to minimum compacted thickness of 6 inches; compacted to 95 percent. Bedding and backfill shall be as shown on the drawings.
- D. Refer to Section 312317 for trenching requirements. Do not displace or damage pipe when compacting.

- E. Refer to Section 330513 for manhole requirements. All connections to manholes shall be watertight and shall conform to a smooth and uniform flow line.
- F. Connect to building sanitary sewer outlet and sewer system.
- G. Thrust blocking on pressure pipe shall be installed as indicated on drawings at all fittings and as otherwise directed by the Engineer.

3.4 FIELD QUALITY CONTROL

- A. Request inspection prior to placing bedding.
- B. Compaction testing will be performed in accordance with ANSI/ASTM D698 and ASTM D2922.
- C. If tests indicate Work does not meet specified requirements, remove Work, replace and retest at no cost to Owner.
- D. Frequency of Tests: One test per lift per 300 feet.

3.5 PROTECTION

- A. Protect pipe and aggregate cover from damage or displacement until backfilling operation is in progress.

3.6 TESTING FOR GRAVITY PIPE

- A. All pipe shall be tested for infiltration/exfiltration using an approved air test method. The tests shall be performed by the Contractor and observed by the Engineer's representative. Any defects in material or workmanship or any obstruction to the flow in the pipe system shall be corrected by the Contractor without additional compensation.
- B. The alignment and grade of sewer pipe intended to be straight shall be so true that a section of laid line will show a full circle of light when viewed from the end.
- C. Sanitary Sewer mains shall be air tested. The air test procedures shall be as follows:
 - 1. Clean the section of pipe to be tested using an approved method.
 - 2. Plug all pipe outlet with suitable test plugs. Brace each plug securely.
 - 3. The seal at one end of the pipe section being tested shall have an orifice through which air can be injected into the pipe. The air supply line shall contain an on-off air valve and a pressure gauge. The pressure gauge shall have a range of from 0 to 5 psi, with minimum division of 0.10 psi and shall have an accuracy of ± 0.04 psi.
 - 4. If the pipe section being tested is submerged in ground water, insert a pipe probe, by boring or jetting, into the backfill material adjacent to the center of the pipe and determine the pressure in the probe when air passes slowly through it. This is the back pressure due to ground water submergence. Increase all gauge pressures in the test by this amount.

- Alternately, if the depth of pipe submergence below the ground water is known, gauge pressures may be adjusted by adding 0.433 psi for each foot of submergence.
5. Add air slowly to the portion of the pipe installation under test until the internal air pressure is raised to 4.0 psi.
 6. Check exposed pipe and plugs for abnormal leakage by coating with a soap solution. If any failures are observed, bleed off air and make necessary repairs.
 7. After an internal pressure of 4.0 psi is obtained, allow at least two minutes for air temperature to stabilize, adding only the amount of air required to maintain pressure.
 8. After the two minute period, disconnect air supply.
 9. When pressure decreases to 3.5 psi, start stopwatch. Determine the time in seconds that it required for the internal air pressure to reach 2.5 psi. This time interval should then be compared with the time required by specification in the Low Pressure Air Sewer Test table in these specifications.
 10. If the time lapse is greater than that specified, the section undergoing test shall have passed, and the test may be discontinued at that time. If the time is less than that specified, the line has not passed the test and the Contractor will be required to repair and prepare the line for retest.
- D. PVC sewer mains shall also be tested for deflection. The test shall be conducted after backfill has been in place for at least 30 days. The test shall be conducted by pulling a rigid ball or mandrel through the sewer pipe. The ball or mandrel shall have a diameter equal to 95% of the inside diameter of the sewer pipe. The test shall be performed without mechanical pulling devices.
- E. Sewer lines failing to meet test requirements shall be repaired until they conform to these requirements of the pipe removed and replaced.

LOW PRESSURE AIR SEWER TEST
Minimum Time in Seconds for 1 psi Drop

Length Test Section <u>(feet)</u>	<u>8 Inch Pipe</u>
50	35
100	70
150	106
200	141
250	176
300	211
350	227

3.7 HYDROSTATIC TESTS FOR PRESSURE PIPE

- A. After the pipe is laid and the line flushed, it shall be filled with water with care being exercised to expel all air from the pipe. Taps made for the purpose of discharging air shall be at the CONTRACTOR'S expense. During the test period all pipe, valves, fittings, and joints shall be examined carefully for defects. Any observed leaks or defective pipe shall be satisfactorily repaired or replaced, at the expense of the CONTRACTOR and the test repeated until the section tested is within the limits prescribed hereinafter. The entire force main system or parts thereof

shall be tested under hydrostatic pressure of 100 psi, for a period of 4 hours, if joints are exposed, or for an 8 hour period, if joints are covered. Repairs shall be made using approved materials and new replacement fittings, specials, or gaskets where leakage occurs.

- B. Leakage shall be measured by an approved calibrated meter through which all of the water required to maintain test pressure shall be pumped. All testing shall be performed in the presence of the ENGINEER or his authorized representative, and the ENGINEER shall be notified at least 24 hours in advance of the start of the test.
- C. The CONTRACTOR shall furnish the pump, pipe connections, fittings, gates, meters, and all necessary apparatus and shall furnish all labor and work required to make the tests. All costs of testing shall be borne by the CONTRACTOR and testing operations shall remain in operation until approved by the ENGINEER. Allowable leakage shall not exceed 100 gallons per 24 hours per inch of diameter per mile of pipe, at the specified test pressure.

END OF SECTION 333100

SECTION 334100 - STORM UTILITY DRAINAGE PIPING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Site storm sewerage drainage piping, fittings and accessories, and bedding.
- B. Curb inlets, catch basin and headwalls.

1.2 RELATED SECTIONS

- A. Section 312317 - Trenching.
- B. Section 033000 - Cast-in-Place Concrete.

1.3 REFERENCES

- A. ANSI/ASTM C76 - Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe.
- B. ANSI/ASTM C443 - Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets.
- C. ANSI/ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8 mm) Drop.
- D. ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- E. ASTM D3034 - Type PSM Poly (Vinyl Chloride)(PVC) Sewer Pipe and Fittings.
- F. ASTM D3212 - Joints for Drain and Sewer Plastic Pipe Using Flexible Elastomeric Seals.
- G. ASTM F477 - Elastomeric Seals (Gaskets for Joining Plastic Pipe).
- H. AASHTO M294 - Corrugated Polyethylene Pipe, 305 to 915 mm (12 to 36 in.) Diameter.

1.4 DEFINITIONS

- A. Bedding: Fill placed under, beside and directly over pipe, prior to subsequent backfill operations.

1.5 SUBMITTALS

- A. Product Data: Provide data indicating pipe, pipe accessories, and grates.

1.6 PROJECT RECORD DOCUMENTS

- A. Accurately record actual locations of pipe runs, connections, curb inlets, and invert elevations.

1.7 FIELD MEASUREMENTS

- A. Verify that field measurements and elevations are as indicated.

1.8 COORDINATION

- A. Coordinate the Work with termination of storm sewer connection outside building, connection to municipal sewer utility service, and trenching.

PART 2 - PRODUCTS

2.1 CONCRETE PIPE MATERIALS

- A. Reinforced Concrete Pipe: ANSI/ASTM C76, Class III; mesh or bar reinforcement; inside nominal diameter as indicated, tongue and groove joints.
- B. Reinforced Concrete Pipe Joint Device: ANSI/ASTM C443, rubber compression gasket joint.

2.2 POLYVINYL CHLORIDE (PVC) GRAVITY SEWER PIPE AND FITTINGS

- A. All PVC gravity pipe and fittings shall be suitable for use as a gravity sewer conduit and shall conform to ASTM D-3034 (SDR 26), latest revision, minimum pipe stiffness, 115 psi. All fittings and accessories shall have bell and spigot configurations identical to that of the pipe.
- B. Joints for PVC sewer pipe shall be integral bell gasketed joint designed so that when assembled, the elastomeric gasket inside the bell is compressed radially on the pipe spigot to form a positive seal. The joint shall be so designed to avoid displacement of the gasket when installed in accordance with the manufacturer's recommendation. Joints shall conform to ASTM D-3212, latest revision. Gaskets shall conform to ASTM F-477, latest revision.

2.3 HDPE PIPE - HIGH DENSITY POLYETHYLENE PIPE

- A. All HDPE pipe and fittings shall conform to AASHTO - M294, latest revision Type S.
- B. Joints shall be gasket type joints and shall be water tight in accordance to ASTM D3212.

2.4 CURB INLETS AND CATCH BASINS

- A. Grate and Frames: Cast iron construction, frames and grate as scheduled on the drawings.

- B. Cast-in-Place Concrete (Section 033000) or precast units: Size and depth as shown on the drawings.

2.5 BEDDING MATERIALS

- A. Bedding: Fill Type S2, S3 or S4 as specified in Section 310513.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that trench cut and excavation is ready to receive work and excavations, dimensions, and elevations are as indicated on drawings.

3.2 PREPARATION

- A. Hand trim excavations to required elevations. Correct over excavation with compacted fill.
- B. Remove large stones or other hard matter which could damage piping or impede consistent backfilling or compaction.

3.3 PIPE BEDDING

- A. Excavate pipe trench in accordance with Section 312317 for work of this section. Hand trim excavation for accurate placement of pipe to elevations indicated.
- B. Place bedding material at trench bottom, level materials in continuous layer not exceeding 6 inches compacted depth. Bedding material shall be placed as shown on the drawings.
- C. Maintain moisture content of bedding material to attain required compaction density.

3.4 INSTALLATION OF PIPE

- A. Install pipe, fittings, and accessories in accordance with manufacturer's instructions. Seal joints watertight.
- B. Lay pipe to slope gradients shown on drawings.
- C. Install aggregate at sides, compact to 95 percent ASTM D698.
- D. Refer to Section 312317 for trenching requirements. Do not displace or damage pipe when compacting. Bedding and backfill requirements shall be as shown on the drawings.

3.5 INSTALLATION - CURB INLETS AND CATCH BASINS

- A. Form bottom of excavation clean and smooth to correct elevation.
- B. Form and place cast-in-place concrete base pad, with provision for storm sewer pipe end sections.
- C. Form and place cast-in-place walls.
- D. Establish elevations and pipe inverts for inlets and outlets as indicated.
- E. Mount lid and frame level in grout, secured to top at elevation indicated.

3.6 FIELD QUALITY CONTROL

- A. Request inspection prior to covering pipe.
- B. Compaction testing will be performed in accordance with ANSI/ASTM D698 or ASTM D2922.
- C. If tests indicate Work does not meet specified requirements, remove Work, replace and retest.
- D. Frequency of Tests: One compaction test per lift per 200 linear feet.

3.7 PROTECTION AND CLEANING

- A. Protect finished Work from damage.
- B. Protect pipe and aggregate bedding from damage or displacement until backfilling operation is in progress.
- C. At the conclusion of the work, thoroughly clean all of the pipelines by flushing with water or other means to remove all dirt, stones, pieces of wood or other material which may have entered during the construction period. Debris cleaned from the lines shall be removed from the lowest outlet. If, after the outlet cleaning, obstructions remain, they shall be removed.

END OF SECTION 334100

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C302	GRADING AND DRAINAGE PLAN - COURTHOUSE	4	11/12/2021
C303	EROSION AND SEDIMENTATION CONTROL PLAN	4	11/12/2021
C304	GRADING AND DRAINAGE PLAN - ENLARGED COURTYARD	4	11/12/2021
C400	OVERALL UTILITY PLAN	4	11/12/2021
C401	UTILITY PLAN - PUBLIC SAFETY BUILDING	4	11/12/2021
C402	UTILITY PLAN - COURTHOUSE	4	11/12/2021
C500	SITE DETAILS	4	11/12/2021
C501	SITE DETAILS	4	11/12/2021
C502	SITE DETAILS	4	11/12/2021
C503	SITE DETAILS	4	11/12/2021
CIVIL: 19			
LANDSCAPE			
L100	HARDSCAPE PLAN		
L101	HARDSCAPE PLAN		
H200	HARDSCAPE DETAILS		
H201	HARDSCAPE DETAILS		
H202	HARDSCAPE DETAILS		
H203	HARDSCAPE DETAILS		
I100	IRRIGATION PLAN		
I101	IRRIGATION PLAN		
I200	IRRIGATION DETAILS		
L100	PLANTING PLAN		
L101	PLANTING PLAN		
L200	LANDSCAPE DETAILS		
LANDSCAPE: 12			
ARCHITECTURAL			
A000	SITE PLAN - GROUND LEVEL	2	11/19/2021
A001	DUMPSTER ENCLOSURE DETAILS		
A002	EXTERIOR STAIR AND RAMP DETAILS	1	11/12/2021
A101	OVERALL FIRST & SECOND FLOOR PLAN & NOTES	1	11/12/2021
A102	FIRST FLOOR - ENLARGED FLOOR PLAN A	1	11/12/2021
A103	FIRST FLOOR - ENLARGED FLOOR PLAN B	1	11/12/2021
A104	SECOND FLOOR - ENLARGED FLOOR PLAN A	1	11/12/2021
A105	SECOND FLOOR - ENLARGED FLOOR PLAN B	1	11/12/2021
A106	OVERALL FIRST & SECOND FLOOR PLAN - WALL HEIGHT	1	11/12/2021
A201	DOOR SCHEDULE - FIRST FLOOR	1	11/12/2021
A202	DOOR SCHEDULE - SECOND FLOOR	1	11/12/2021
A203	HJS DETAILS		
A205	GLAZING ELEVATIONS	1	11/12/2021
A206	GLAZING ELEVATIONS		
A301	OVERALL ROOF PLAN & DETAILS		
A302	ENLARGED ROOF PLAN A & DETAILS		
A303	ENLARGED ROOF PLAN B & DETAILS		
A304	ROOF DETAILS		
A401	EXTERIOR ELEVATIONS	1	11/12/2021
A501	BUILDING SECTIONS		
A502	BUILDING SECTIONS		
A503	WALL SECTIONS		
A504	WALL SECTIONS		
A505	WALL SECTIONS		
A506	WALL SECTIONS		
A507	ENLARGED SECTION DETAILS		
A508	ENLARGED SECTION DETAILS		
A509	ENLARGED SECTION DETAILS		
A601	ENLARGED TOILET PLANS		
A602	ENLARGED TOILET PLANS		
A603	ENLARGED TOILET PLANS		
A604	ENLARGED STAIR PLANS AND DETAILS		
A605	STAIR SECTIONS AND DETAILS		
A606	ENLARGED STAIR PLANS AND DETAILS		
A607	ENLARGED ELEVATOR PLANS AND DETAILS	1	11/12/2021
A608	ENLARGED PLANS		
A609	ENLARGED PLANS		
A610	ENLARGED PLANS	1	11/12/2021
A611	ENLARGED PLAN DETAILS	1	11/12/2021
A701	OVERALL FIRST & SECOND FLOOR REFLECTED CEILING PLAN & NOTES	1	11/12/2021
A702	FIRST FLOOR - ENLARGED REFLECTED CEILING PLAN A	1	11/12/2021
A703	FIRST FLOOR - ENLARGED REFLECTED CEILING PLAN B	2	11/19/2021
A704	SECOND FLOOR - ENLARGED REFLECTED CEILING PLAN A	1	11/12/2021
A705	SECOND FLOOR - ENLARGED REFLECTED CEILING PLAN B	1	11/12/2021
A801	INTERIOR ELEVATIONS		
A802	INTERIOR ELEVATIONS		
A803	INTERIOR ELEVATIONS		
A804	INTERIOR ELEVATIONS		
A901	MILLWORK DETAILS		
A902	MILLWORK DETAILS		
A903	MILLWORK DETAILS		
A904	MILLWORK DETAILS		
F101	INTERIOR FINISH PLAN - FIRST FLOOR	1	11/12/2021
F102	INTERIOR FINISH PLAN - SECOND FLOOR	1	11/12/2021
ARCHITECTURAL: 54			
STRUCTURAL			
S100	STRUCTURAL NOTES		
S103	FOUNDATION AND FLOOR PLANS PART "A"	2	11-19-21
S104	FOUNDATION AND FLOOR PLAN PART "B"	2	11-19-21
S105	SECOND FLOOR FRAMING PLANS PART "A"	2	11-19-21
S106	SECOND FLOOR FRAMING PLANS PART "B"	2	11-19-21
S107	ROOF FRAMING PLANS PART "A"	1	11-12-21
S108	ROOF FRAMING PLANS PART "B"	2	11-19-21
S109	HIGH ROOF FRAMING PLANS		
S110	RETENTION AREA FRAMING PLANS	2	11-19-21
S111	FRONT ENTRANCE FOUNDATION FRAMING PLANS AND DETAILS	2	11-19-21
S112	SECOND FLOOR ENLARGED PLAN	1	11-12-21
S201	FOUNDATION DETAILS	2	11-19-21
S202	FOUNDATION DETAILS	2	11-19-21
S203	FOUNDATION DETAILS	2	11-19-21
S301	STEEL DETAILS		
S302	STEEL DETAILS		
S303	STEEL DETAILS		
S304	STEEL DETAILS	2	11-19-21
S305	CMU DETAILS		
S306	STAIR PLANS AND DETAILS	1	11-12-21
S307	STEEL DETAILS	2	11-19-21
S308	STEEL DETAILS		
S401	COLUMN SCHEDULE		
S402	COLUMN SCHEDULE		
S403	COLUMN SCHEDULE		
STRUCTURAL: 25			

SHEET NUMBER	SHEET NAME	REVISION NUMBER	REVISION DATE
FIRE PROTECTION / PLUMBING			
FP201	FIRST FLOOR PLAN - FIRE PROTECTION - PART A		
FP202	FIRST FLOOR PLAN - FIRE PROTECTION - PART B		
FP203	SECOND FLOOR PLAN - FIRE PROTECTION - PART A	1	11/12/2021
FP204	SECOND FLOOR PLAN - FIRE PROTECTION - PART B		
FP301	FIRE PROTECTION DETAILS AND SCHEDULES		
PLUMBING LEGEND, SYMBOLS, ABBREVIATIONS AND GENERAL NOTES			
P201	FIRST FLOOR PLAN - BELOW FLOOR PLUMBING SANITARY - PART A	1	11/12/2021
P202	FIRST FLOOR PLAN - BELOW FLOOR PLUMBING SANITARY - PART B	1	11/12/2021
P203	FIRST FLOOR PLAN - PLUMBING SANITARY - PART A	1	11/12/2021
P204	FIRST FLOOR PLAN - PLUMBING SANITARY - PART B	1	11/12/2021
P205	FIRST FLOOR PLAN - PLUMBING SUPPLY - PART A	1	11/12/2021
P206	FIRST FLOOR PLAN - PLUMBING SUPPLY - PART B	1	11/12/2021
P207	SECOND FLOOR PLAN - PLUMBING SANITARY - PART A	1	11/12/2021
P208	SECOND FLOOR PLAN - PLUMBING SANITARY - PART B	1	11/12/2021
P209	SECOND FLOOR PLAN - PLUMBING SUPPLY - PART A	1	11/12/2021
P210	SECOND FLOOR PLAN - PLUMBING SUPPLY - PART B	1	11/12/2021
P301	PLUMBING DETAILS		
P302	PLUMBING RISERS		
P303	PLUMBING RISERS		
P304	PLUMBING RISERS		
P305	PLUMBING RISERS		
P401	PLUMBING SCHEDULES	1	11/12/2021
P402	PLUMBING SCHEDULES	1	11/12/2021
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MECHANICAL			
M001	HVAC LEGENDS, ABBREVIATIONS AND NOTES		
M100	OVERALL FIRST FLOOR PLAN - HVAC		
M101	OVERALL SECOND FLOOR PLAN - HVAC		
M102	OVERALL ROOF PLAN - HVAC		
M103	FIRST FLOOR PLAN - HVAC (SUPPLY) - PART "A"		
M104	FIRST FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "A"		
M105	FIRST FLOOR PLAN - HVAC (SUPPLY) - PART "B"		
M106	FIRST FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "B"		
M107	FIRST FLOOR PLAN - HVAC (SUPPLY) - PART "C"		
M108	FIRST FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "C"		
M109	FIRST FLOOR PLAN - HVAC (SUPPLY) - PART "D"	1	11/12/21
M110	FIRST FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "D"	1	11/12/21
M111	FIRST FLOOR PLAN - HVAC (SUPPLY) - PART "E"		
M112	FIRST FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "E"		
M113	FIRST FLOOR PLAN - HVAC (SUPPLY) - PART "F"		
M114	FIRST FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "F"		
M115	SECOND FLOOR PLAN - HVAC (SUPPLY) - PART "A"		
M116	SECOND FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "A"		
M117	SECOND FLOOR PLAN - HVAC (SUPPLY) - PART "B"	1	11/12/21
M118	SECOND FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "B"	1	11/12/21
M119	SECOND FLOOR PLAN - HVAC (SUPPLY) - PART "C"		
M120	SECOND FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "C"		
M121	SECOND FLOOR PLAN - HVAC (SUPPLY) - PART "D"		
M122	SECOND FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "D"		
M123	SECOND FLOOR PLAN - HVAC (SUPPLY) - PART "E"		
M124	SECOND FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "E"		
M125	SECOND FLOOR PLAN - HVAC (SUPPLY) - PART "F"	1	11/12/21
M126	SECOND FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "F"	1	11/12/21
M127	SECOND FLOOR PLAN - HVAC (SUPPLY) - PART "G"		
M128	SECOND FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "G"		
M129	SECOND FLOOR PLAN - HVAC (SUPPLY) - PART "H"		
M130	SECOND FLOOR PLAN - HVAC (RETURNEXHAUST) - PART "H"		
M131	ROOF PLAN - HVAC - PART "A"		
M132	ROOF PLAN - HVAC - PART "B"		
M200	OVERALL FIRST FLOOR PLAN - HVAC PIPING		
M201	OVERALL SECOND FLOOR PLAN - HVAC PIPING		
M202	FIRST FLOOR PLAN - HVAC PIPING - PART "A"		
M203	FIRST FLOOR PLAN - HVAC PIPING - PART "B"		
M204	SECOND FLOOR PLAN - HVAC PIPING - PART "A"		
M205	SECOND FLOOR PLAN - HVAC PIPING - PART "B"		
M206	PARTIAL ROOF PLAN - HVAC PIPING		
M401	ENLARGED MECHANICAL ROOM HVAC PLAN		
M402	ENLARGED MECHANICAL ROOM HVAC PLAN		
M403	ENLARGED MECHANICAL ROOM HVAC PIPING PLAN		
M404	ENLARGED MECHANICAL ROOM HVAC PLAN		
M501	HVAC DETAILS		
M502	AHU SECTIONS		
M601	HVAC SCHEDULES	1	11/12/21
M602	HVAC SCHEDULE	1	11/12/21
M603	HVAC SCHEDULE	1	11/12/21
M604	HVAC SCHEDULES		
M701	HVAC CONTROLS		
M702	HVAC CONTROLS		
M703	HVAC CONTROLS		
M801	CHILLED WATER SCHEMATIC		
MECHANICAL: 55			
ELECTRICAL			
E001	ELECTRICAL LIGHTING FIXTURE SCHEDULE, LEGEND, NOTES	1	11/18/2021
E002	ELECTRICAL EQUIPMENT CONNECTION SCHEDULE	1	11/18/2021
E100	ELECTRICAL SITE PLAN	1	11/18/2021
E210	LIGHTING FIRST FLOOR PLAN PART A		
E211	LIGHTING FIRST FLOOR PLAN PART B	1	11/18/2021
E212	LIGHTING SECOND FLOOR PLAN PART A		
E213	LIGHTING SECOND FLOOR PLAN PART B		
E220	POWER FIRST FLOOR PLAN PART A		
E221	POWER FIRST FLOOR PLAN PART B	1	11/18/2021
E222	POWER SECOND FLOOR PLAN PART A	1	11/18/2021
E223	POWER SECOND FLOOR PLAN PART B		
E230	POWER CONNECTIONS FIRST FLOOR PLAN PART A	1	11/18/2021
E231	POWER CONNECTIONS FIRST FLOOR PLAN PART B	1	11/18/2021
E232	POWER CONNECTIONS SECOND FLOOR PLAN PART A		
E233	POWER CONNECTIONS SECOND FLOOR PLAN PART B	1	11/18/2021
E240	COMMUNICATIONS FIRST FLOOR PLAN PART A		
E241	COMMUNICATIONS FIRST FLOOR PLAN PART B	1	11/18/2021
E242	COMMUNICATIONS SECOND FLOOR PLAN PART A	1	11/18/2021
E243	COMMUNICATIONS SECOND FLOOR PLAN PART B		
E250	SPECIAL SYSTEMS FIRST FLOOR PLAN PART A		
E251	SPECIAL SYSTEMS FIRST FLOOR PLAN PART B		
E252	SPECIAL SYSTEMS SECOND FLOOR PLAN PART A		
E253	SPECIAL SYSTEMS SECOND FLOOR PLAN PART B		
E254	SPECIAL SYSTEMS - OVERALL - SECURITY CAMERAS	1	11/18/2021
E300	ELECTRICAL PANEL DETAILS		
E301	ELECTRICAL POWER RISER		
E400	ELECTRICAL PANEL SCHEDULES		
E401	ELECTRICAL PANEL SCHEDULES		
E402	ELECTRICAL PANEL SCHEDULES		
E403	ELECTRICAL PANEL SCHEDULES		
E404	ELECTRICAL PANEL SCHEDULES		
E405	ELECTRICAL PANEL SCHEDULES		
E406	ELECTRICAL PANEL SCHEDULES		
E407	ELECTRICAL PANEL SCHEDULES		
E408	ELECTRICAL PANEL SCHEDULES		
E500	TELECOMMUNICATIONS RISER		
E600	ELECTRICAL DETAILS		
EA001	ELECTRICAL ADDENDUM ITEMS	1	11/18/2021
EA002	ELECTRICAL ADDENDUM ITEMS	1	11/18/2021
ELECTRICAL: 39			
AUDIO / VISUAL			
AV100	AV FIRST LEVEL - OVERALL		
AV101	AV FIRST LEVEL - 1111 ENLARGED		
AV102	AV FIRST LEVEL - 1011 ENLARGED		
AV200	AV SECOND LEVEL - OVERALL		
AV201	AV SECOND LEVEL - 2197 / 2171 ENLARGED		
AV202	AV SECOND LEVEL RCP - 2197 / 2171 ENLARGED		
AV203	AV SECOND LEVEL - 2130 / 2121 / 2096 ENLARGED		
AV204	AV SECOND LEVEL RCP - 2130 / 2121 / 2096 ENLARGED		
AV300	AV SYSTEM SCHEMATIC - PART 1		
AV301	AV SYSTEM SCHEMATIC - PART 2		
AV302	AV SYSTEM SCHEMATIC - PART 3		
AUDIO / VISUAL: 11			

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PROJECT INFORMATION
PROJECT:



Lauderdale County
Government Building

PROJECT ADDRESS:

VILLAGE FAIR MALL
612 22ND AVENUE
MERIDIAN, MS 39301

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W.G. YATES & SONS
CONSTRUCTION CO.
ONE GULLY AVENUE
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MERIDIAN, MS 39301
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KEY PLAN

ACTIVE DESIGN PHASE
☐ FOR REVIEW ONLY
☐ FOR PERMITTING ONLY
☐ SCHEMATIC DESIGN
☐ DESIGN DEVELOPMENT
☐ CONSTRUCTION BIDDING
☒ CONSTRUCTION DOCUMENTS
☐ AS-BUILT RECORD SET

SEAL



REVISIONS/SUBMISSIONS

NO.	DATE	DESCRIPTION
2	11/19/2021	Addendum #3

SHEET TITLE
SHEET INDEX

PROJECT NO.: 19-4894A
SHEET NO.:
10/18/2021
DRAWN BY: BA/CL
REVIEWED BY: JS
G001



Lauderdale County
Government Building

PROJECT ADDRESS:

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KEY PLAN

ACTIVE DESIGN PHASE
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REVISIONS/SUBMISSIONS

NO.	DATE	DESCRIPTION
1	11/12/2021	Addendum #2
2	11/19/2021	Addendum #3

SHEET TITLE

SITE PLAN - GROUND LEVEL

PROJECT NO.: 19-4294A

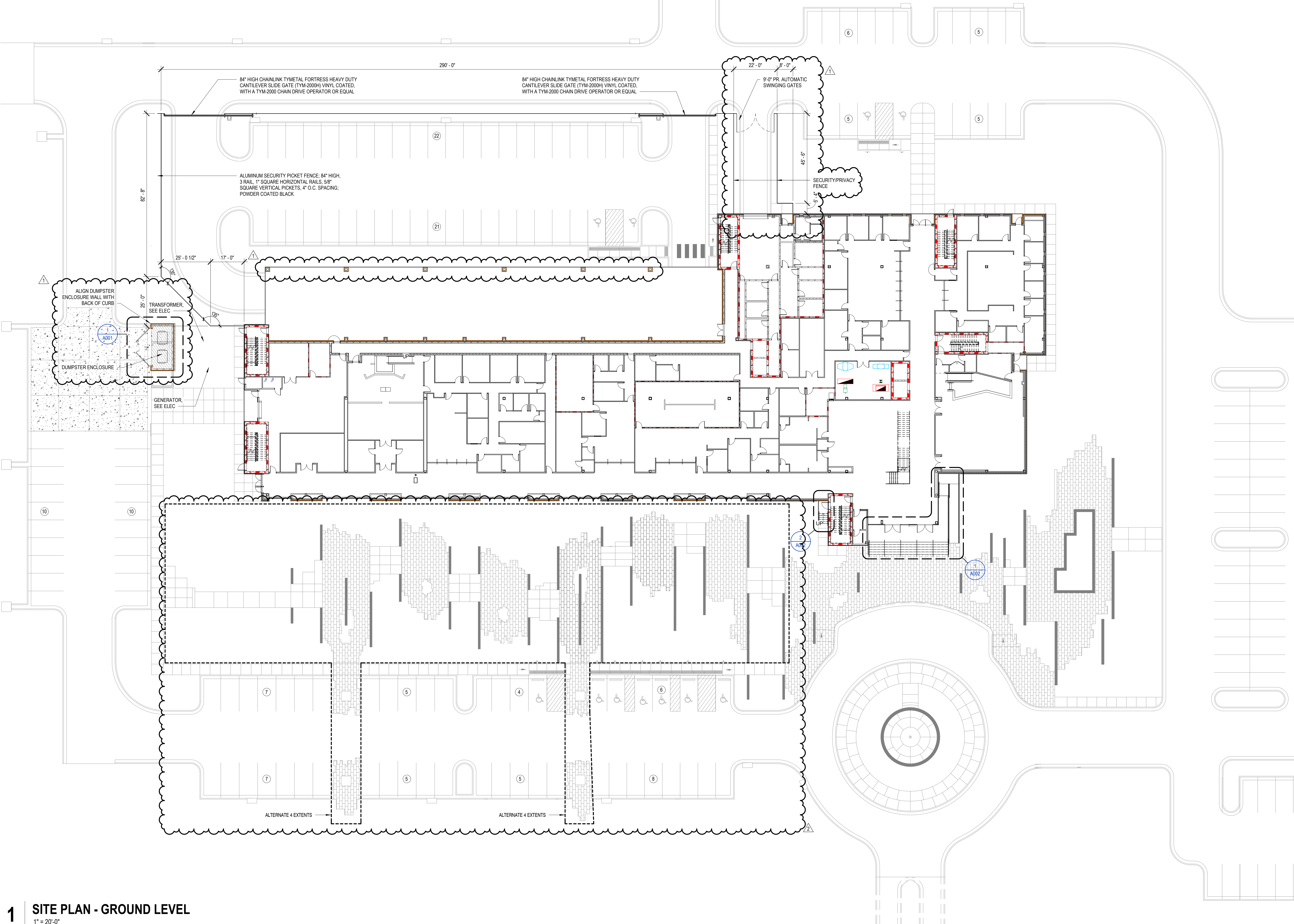
SHEET ISSUED: 10/18/2021

DRAWN BY: BA/CL

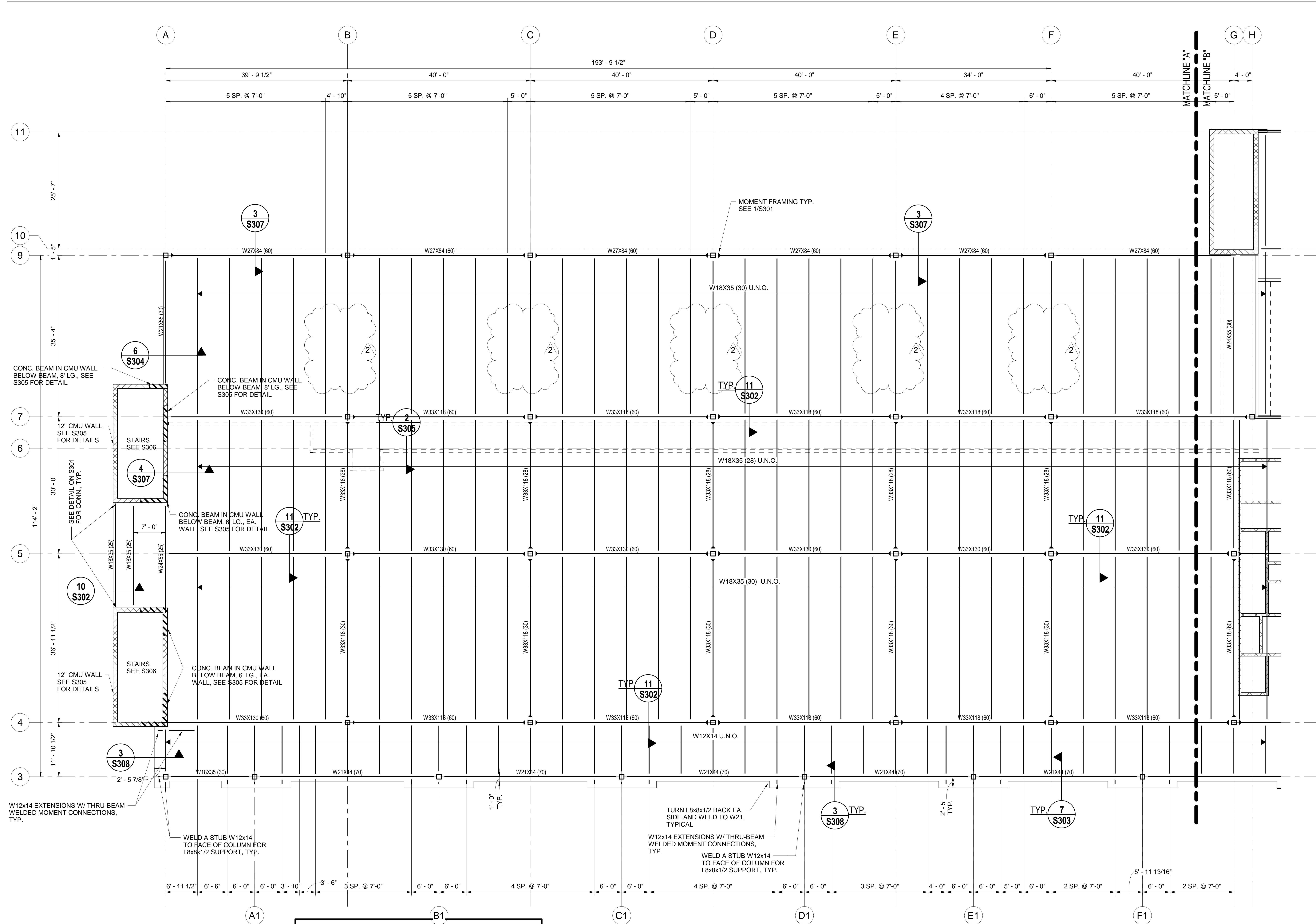
REVIEWED BY: JS

TRUE NORTH

A000



1 SITE PLAN - GROUND LEVEL
1" = 20'-0"



FLOOR SYSTEEM: 5" THICK CONCRETE SLAB ON 1 1/2" GALV. METAL DECK W/ 6X6-W2.1XW2.1 WIRE MESH REINF.

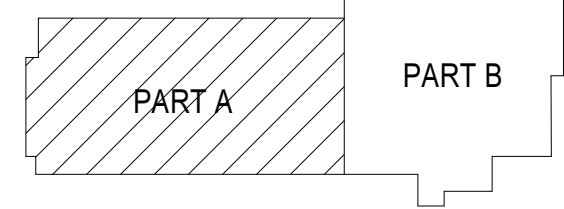
NUMBER IN () IS NUMBER OF 4" LG. STUDS WELDED TO BEAM, PER DETAIL ON S301 EQUALLY SPACED.
ALL STUDS - 3/4" DIA. STUDS X 4" LG.

METAL DECK: COMPOSITE DECK 1 1/2" INCH DEPTH, 20 GA. GALV., 3 SPAN MIN. (VULCRAFT 1.5VL OR EQUAL)

SECOND FLOOR FRAMING PLAN PART "A"

NOTES:
1. VERIFY ALL DIMENSIONS W/ ARCH.
2. PROVIDE L5X5X3/8 AT ALL FLOOR EDGES AND OPENINGS.

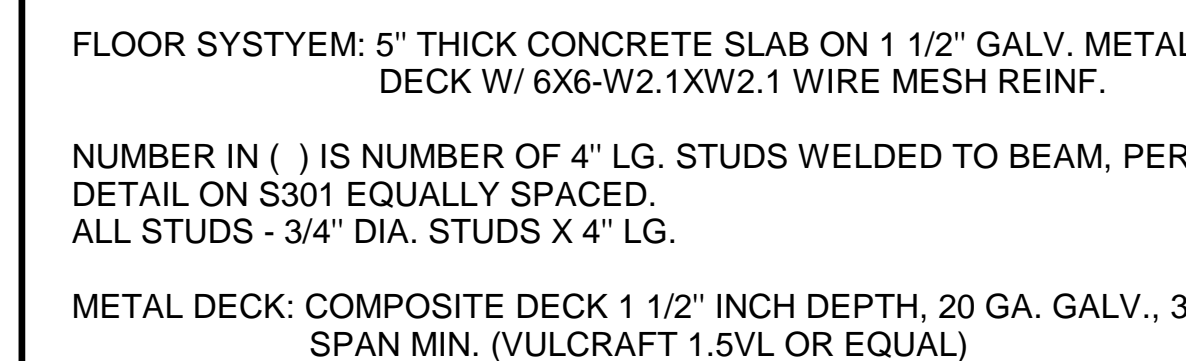
SE# 20037
Spencer-Engineers, Inc.
Consultants
P.O. BOX 4328 JACKSON, MS 39216
(601) 982-7766



ACTIVE DESIGN PHASE	
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<input type="checkbox"/>	CONSTRUCTION DOCUMENTS
<input type="checkbox"/>	AS-BUILT RECORD SET



NO.	DATE	DESCRIPTION
2	11-19-21	ADDENDUM #3

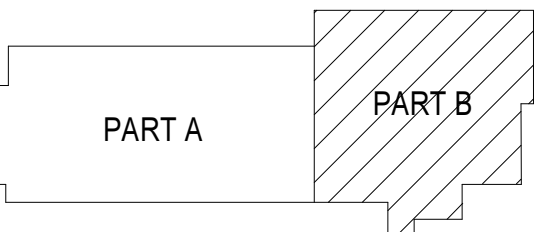


NOTES:
1. VERIFY ALL DIMENSIONS W/ ARCH.
2. PROVIDE L5X5X3/8 AT ALL
ROOF DECK EDGES AND OPENINGS
3. FOR LOOSE LINTELS SEE S100

SE# 20037



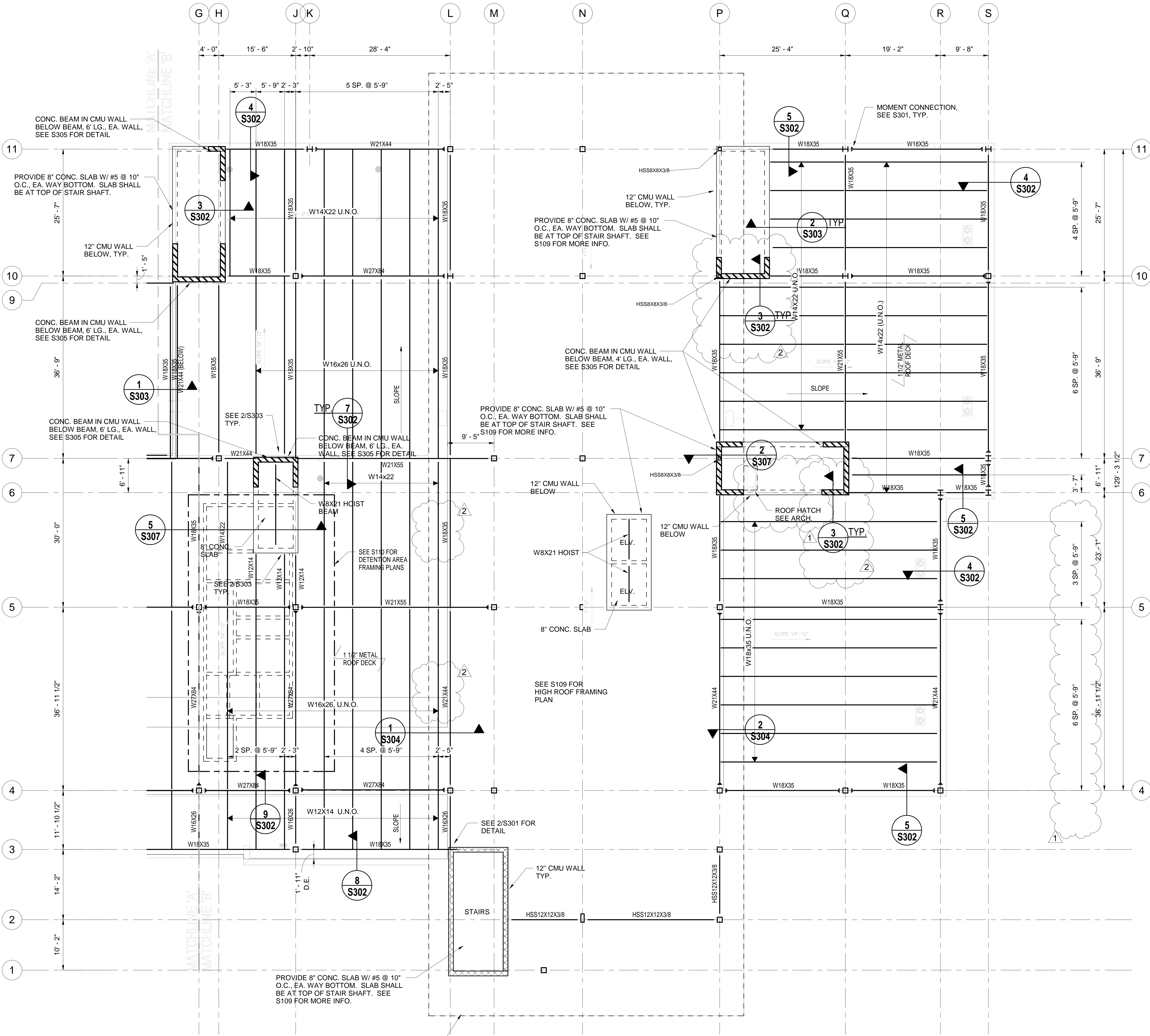
Spencer-Engineers, Inc.
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(601) 982-7766



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<input type="checkbox"/>	DESIGN DEVELOPMENT
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<input type="checkbox"/>	AS-BUILT RECORD SET

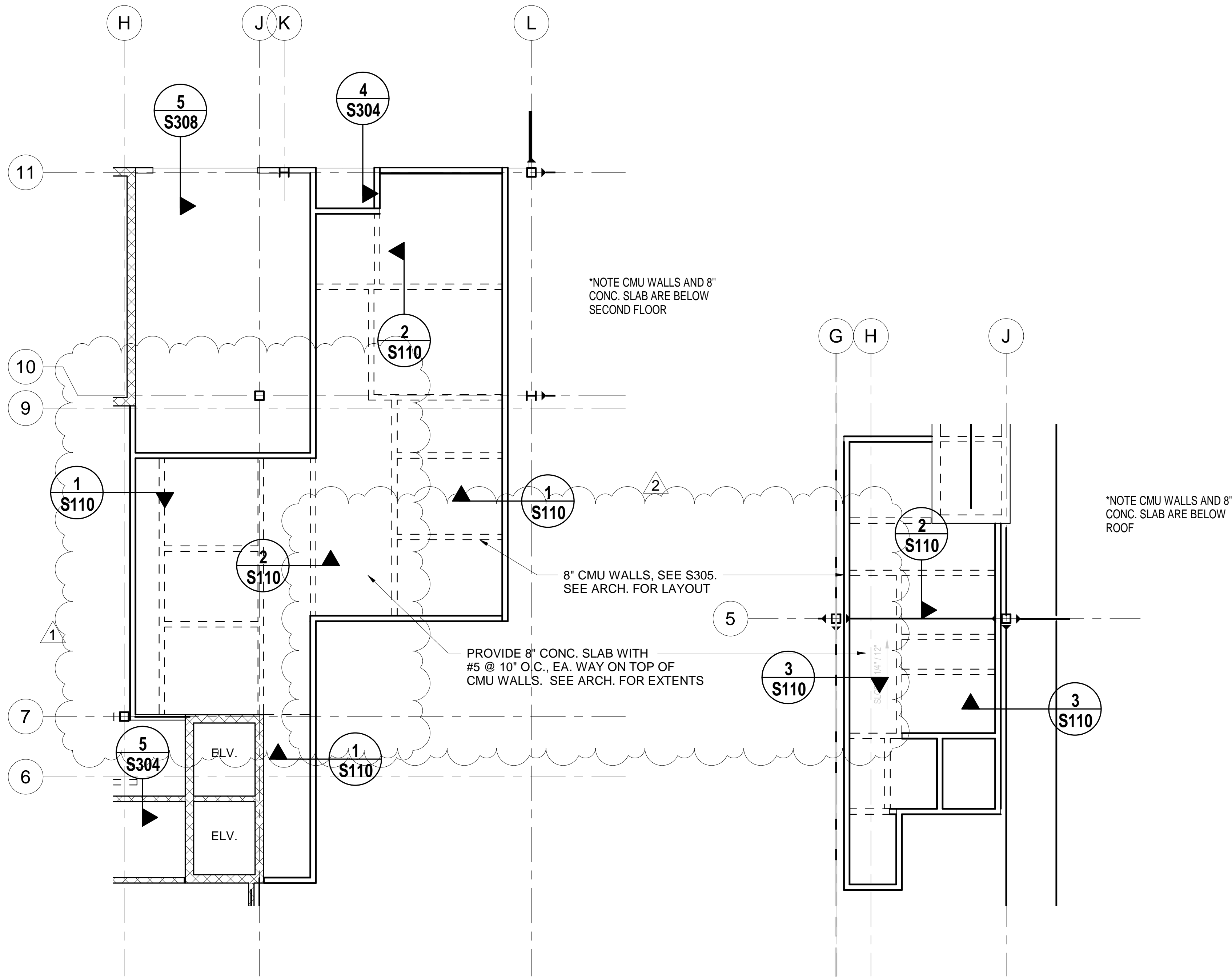


NO.	DATE	DESCRIPTION
1	11-10-21	Addendum #2
2	11-19-21	Addendum #3





NO.	DATE	DESCRIPTION
1	11-12-21	Addendum #2
2	11-19-21	Addendum #3

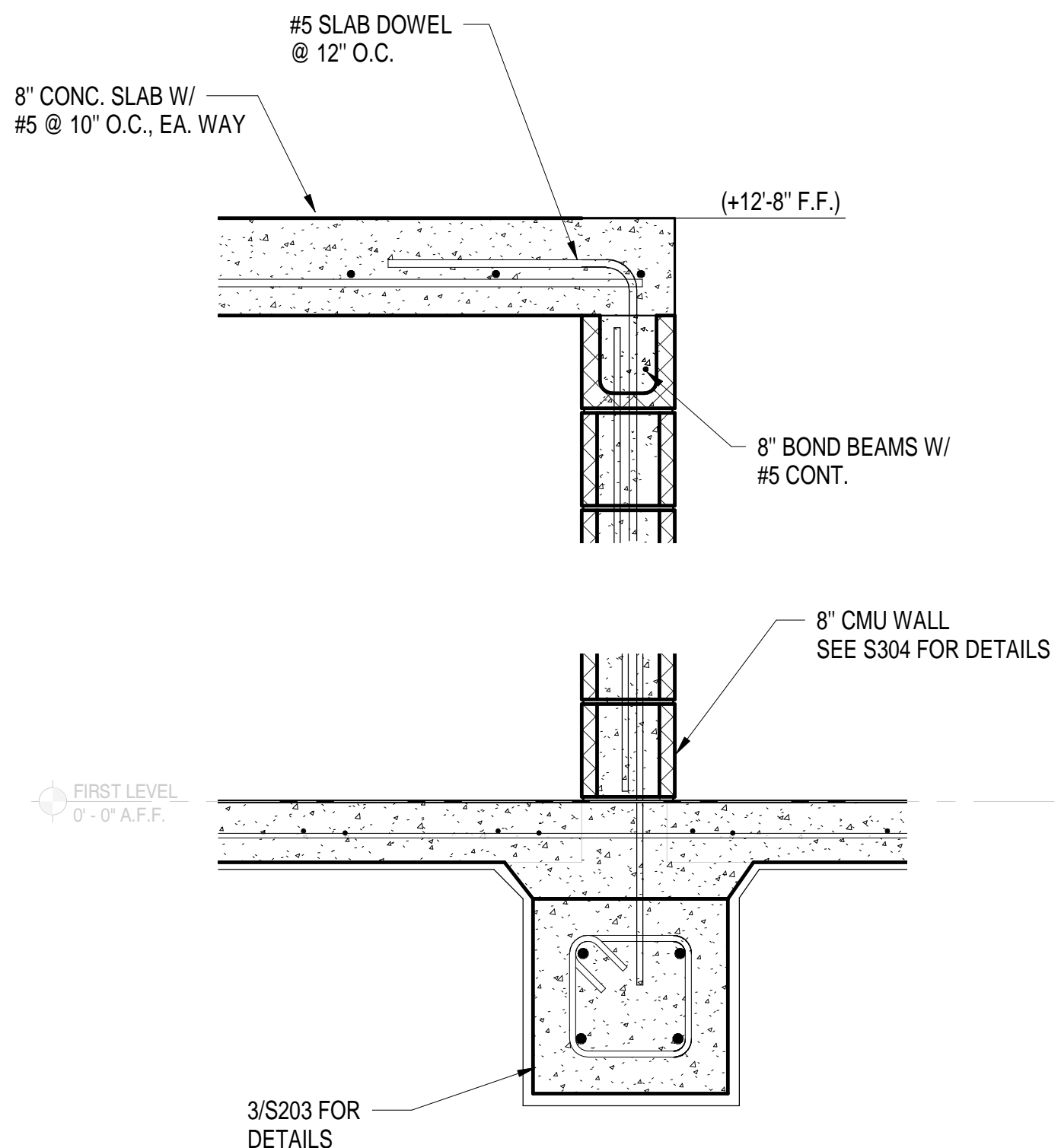


FIRST FLOOR DETENTION AREA FRAMING PLAN

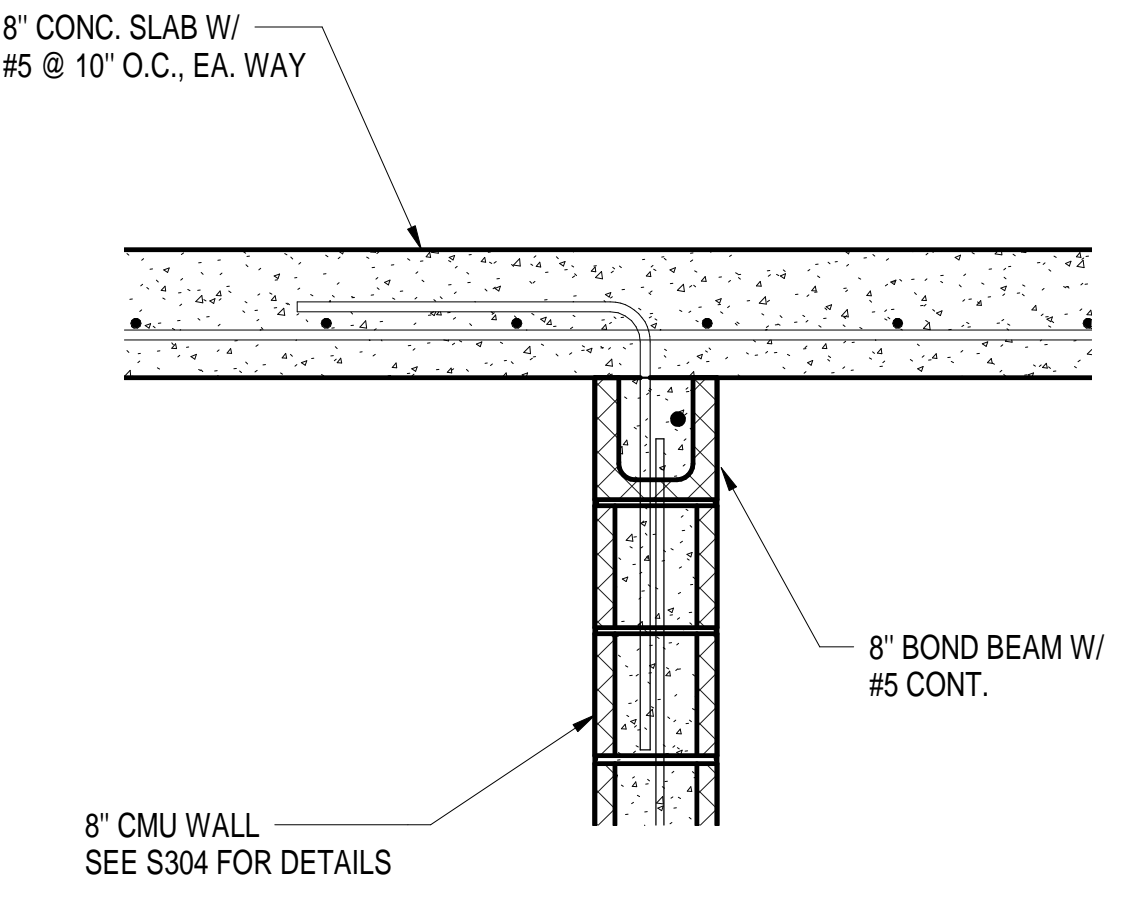
1/8" = 1'-0"

SECOND FLOOR DETENTION AREA FRAMING PLANS

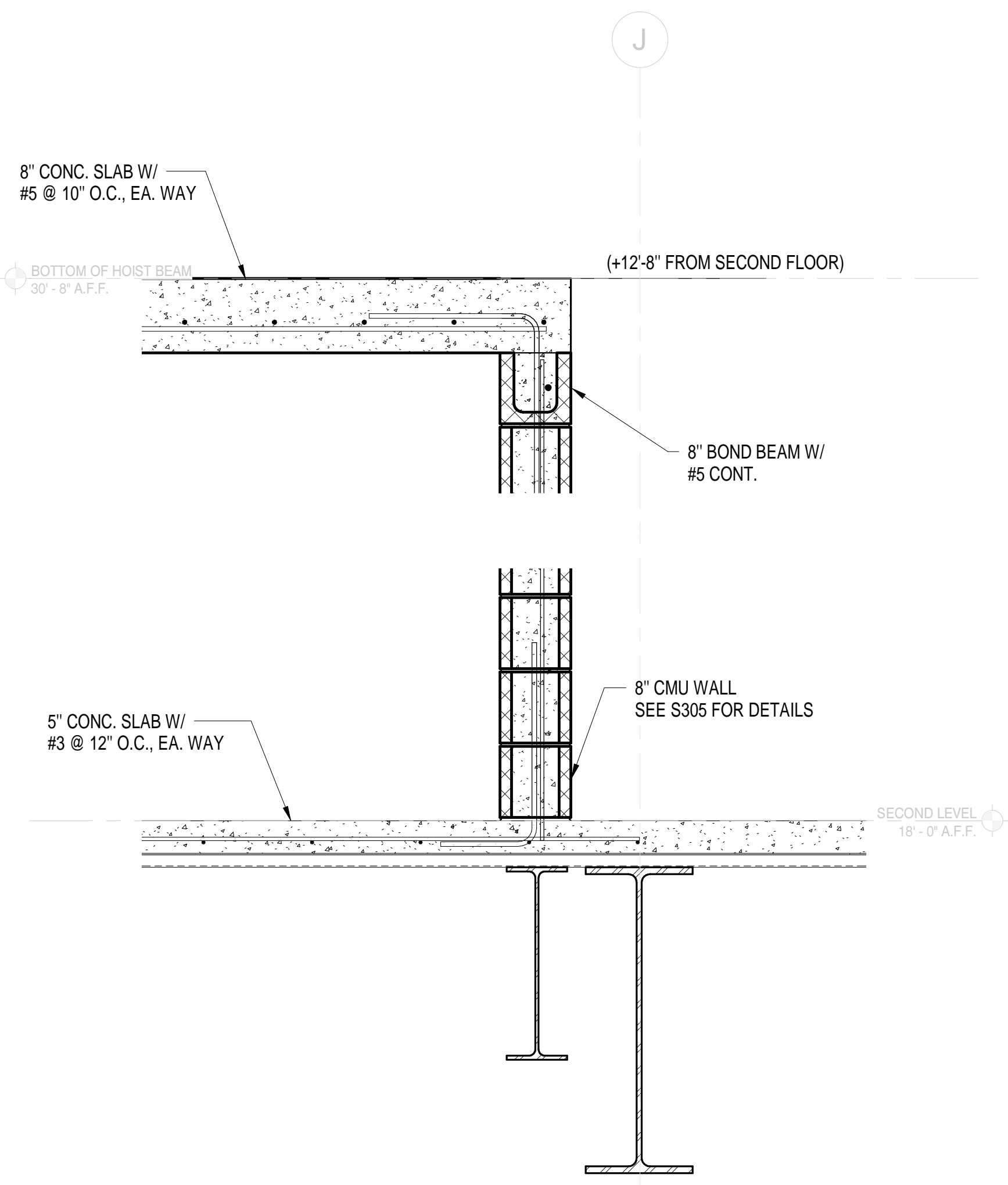
1/8" = 1'-0"



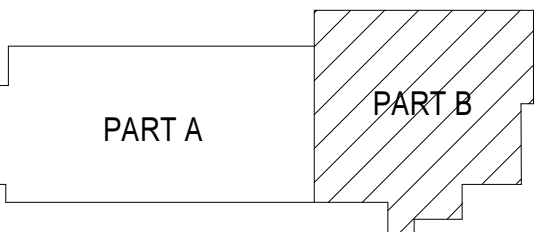
1
S110 1" = 1'-0"



2
S110 1" = 1'-0"



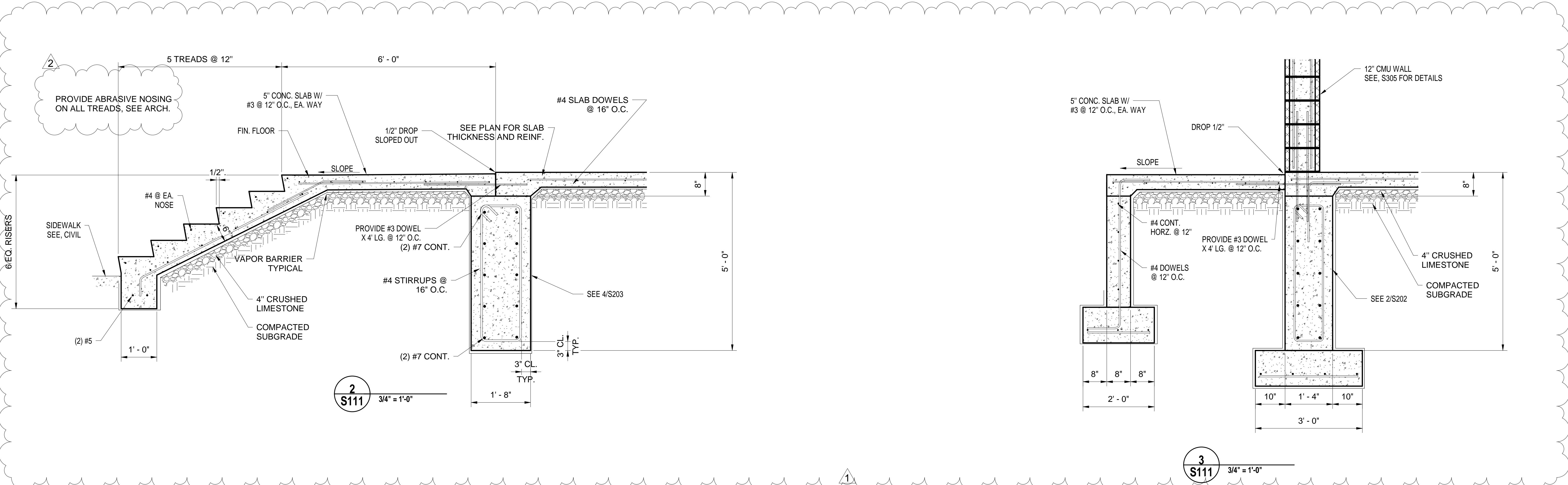
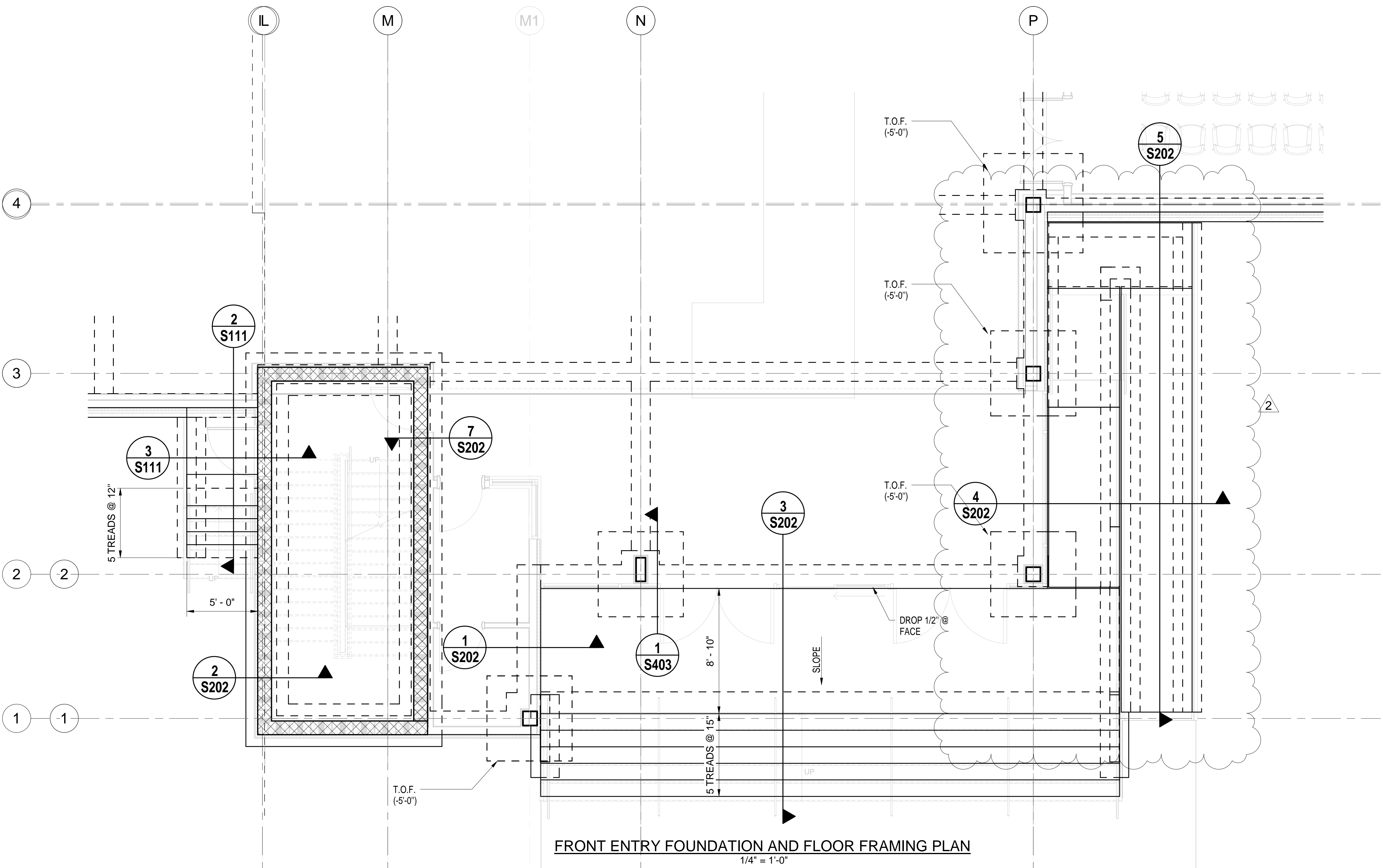
3
S110 1" = 1'-0"



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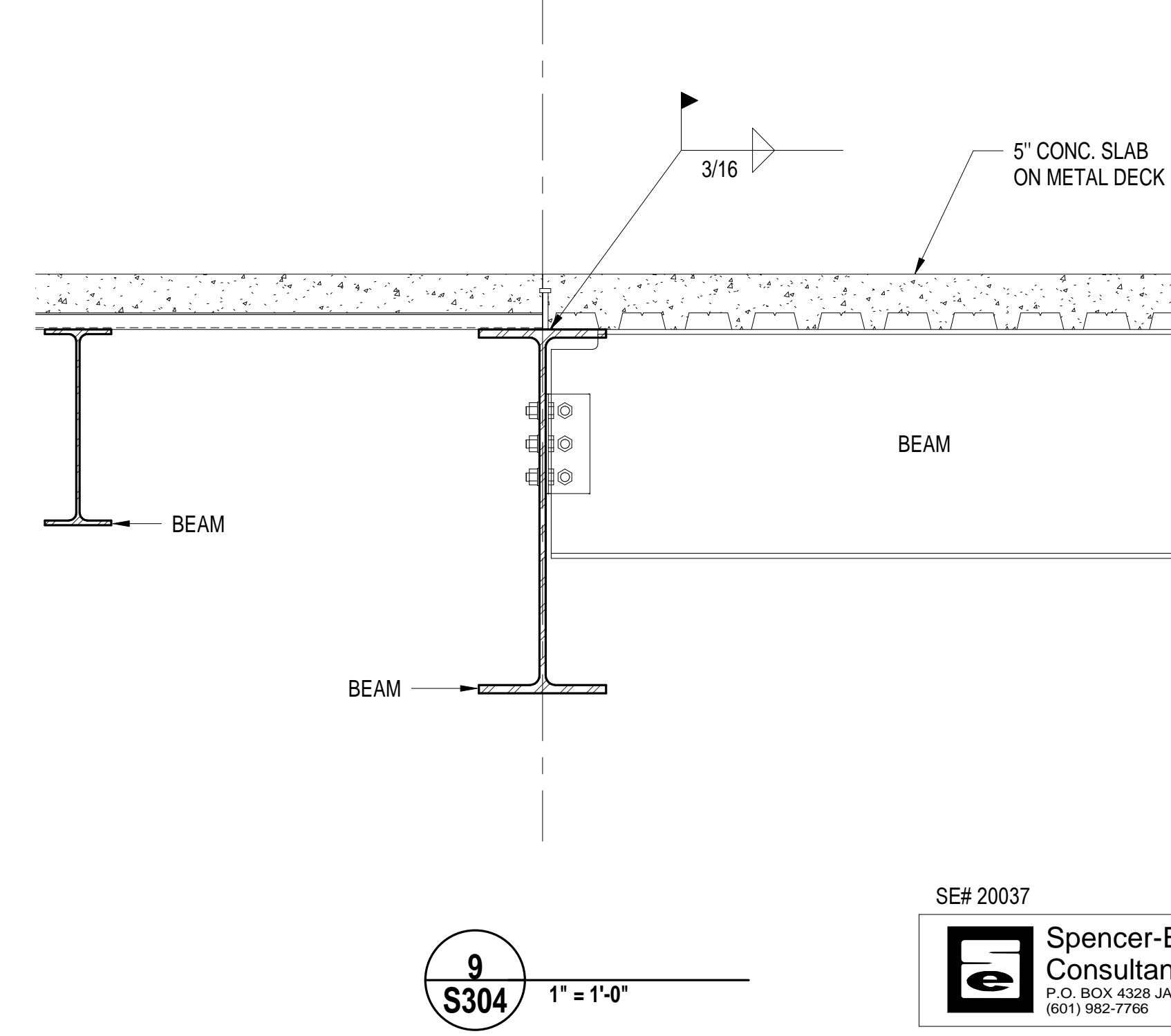
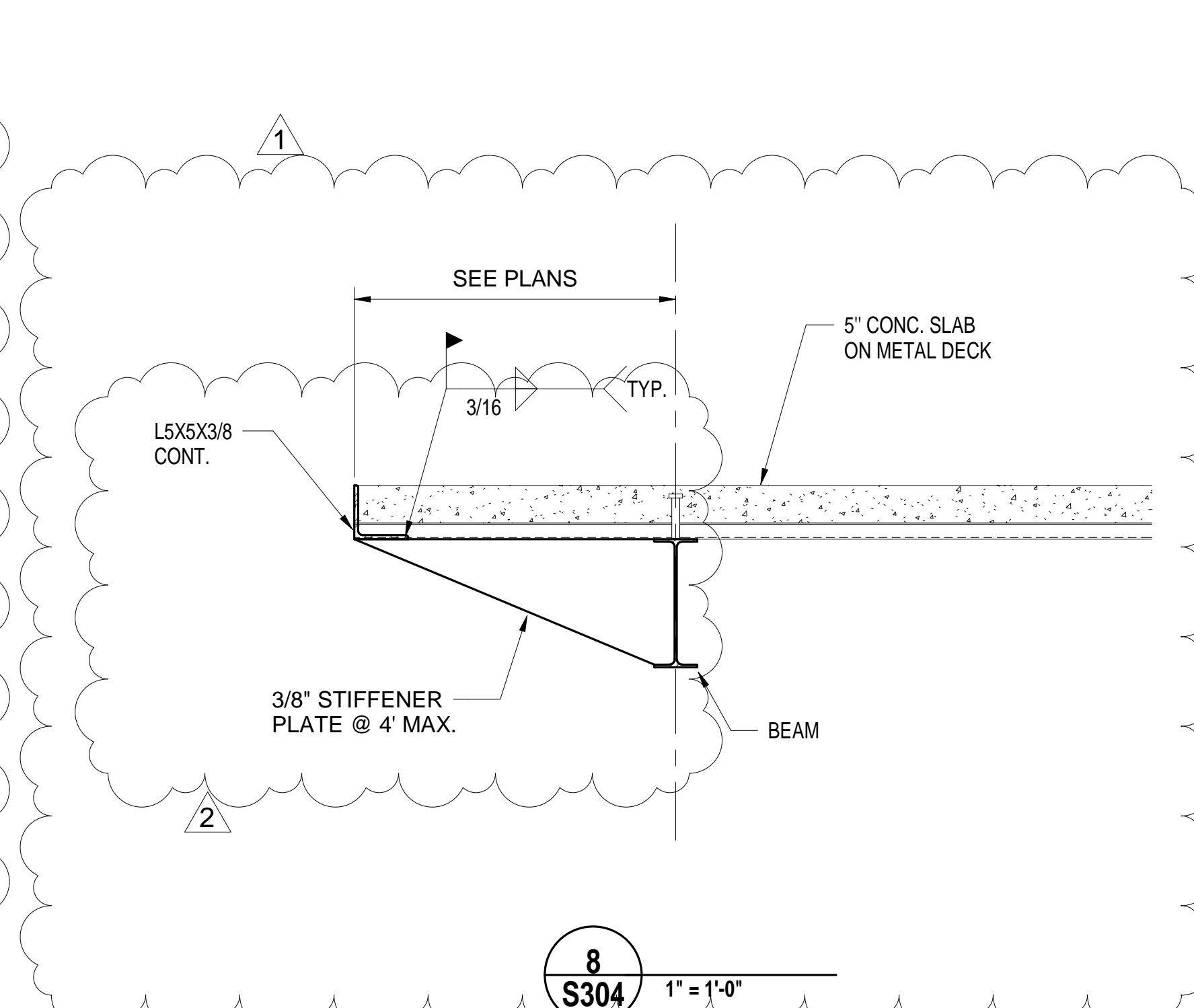
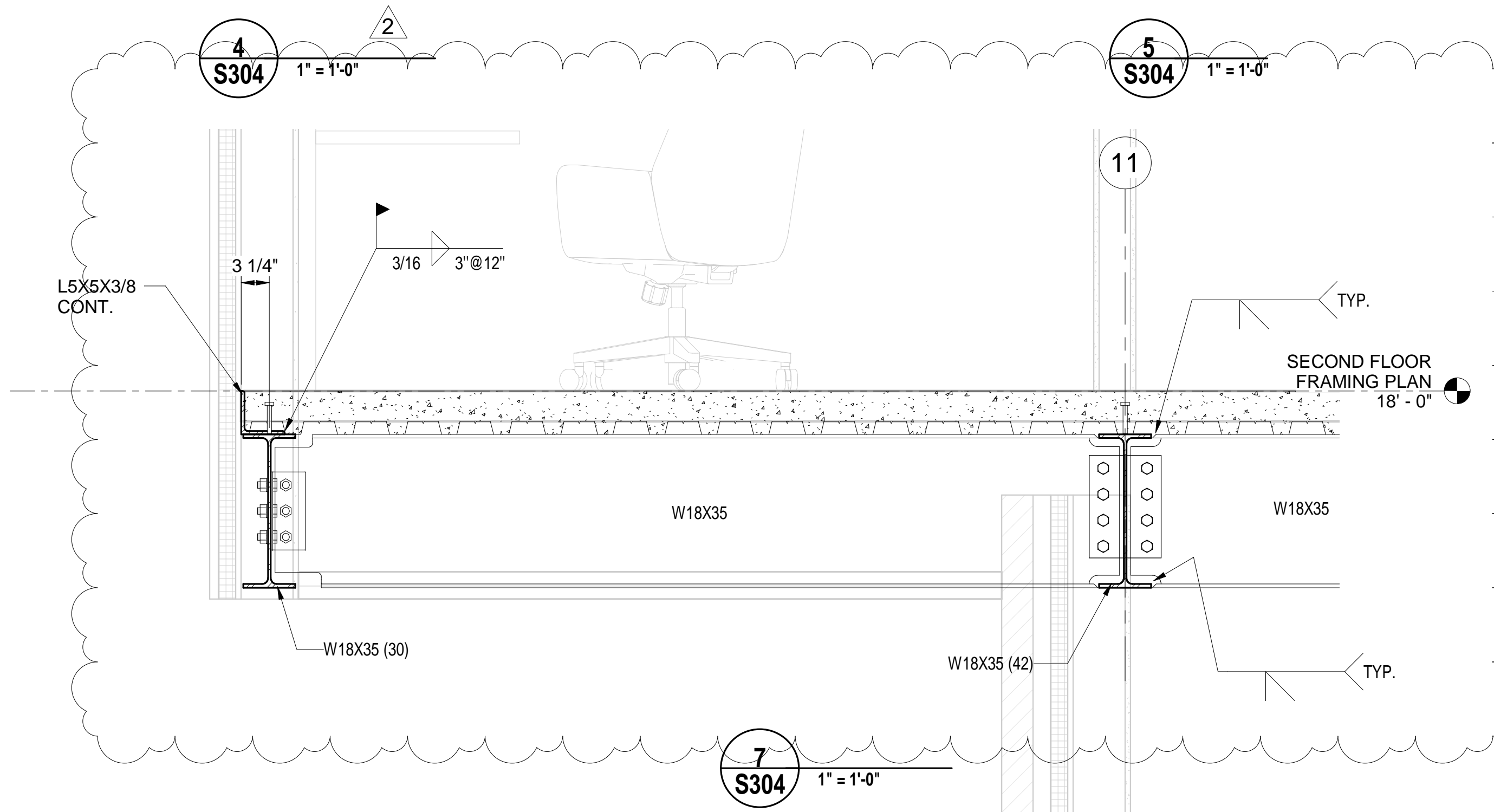
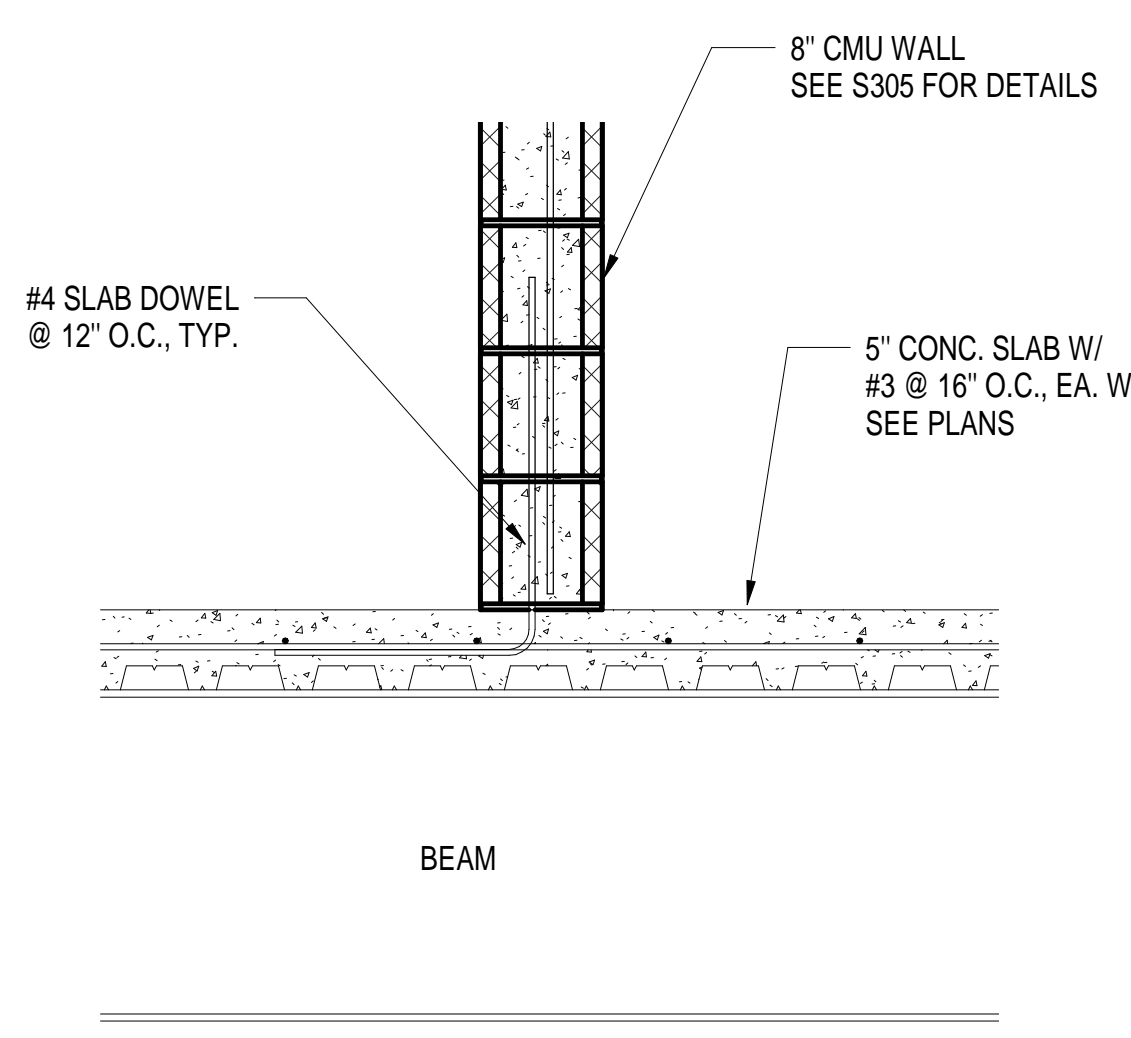
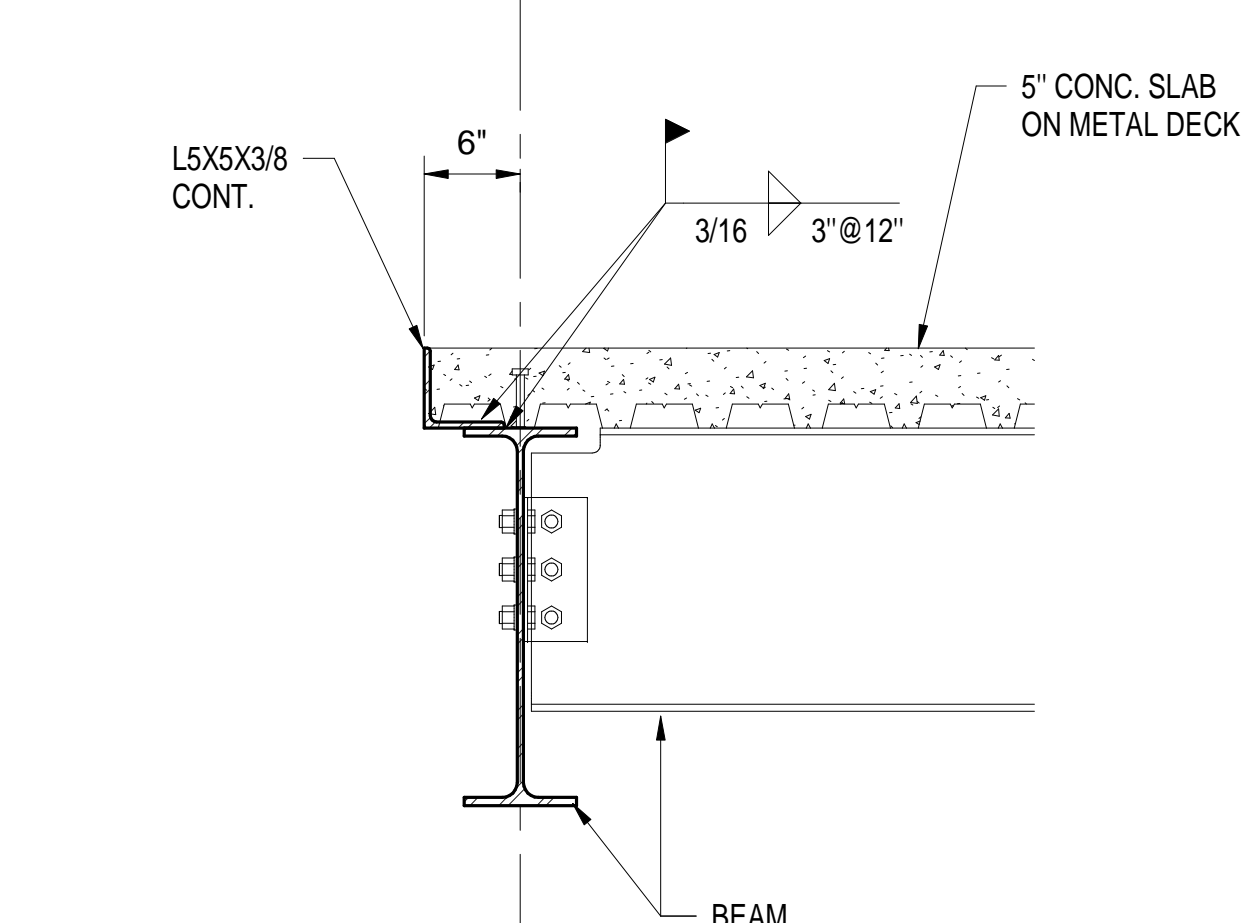
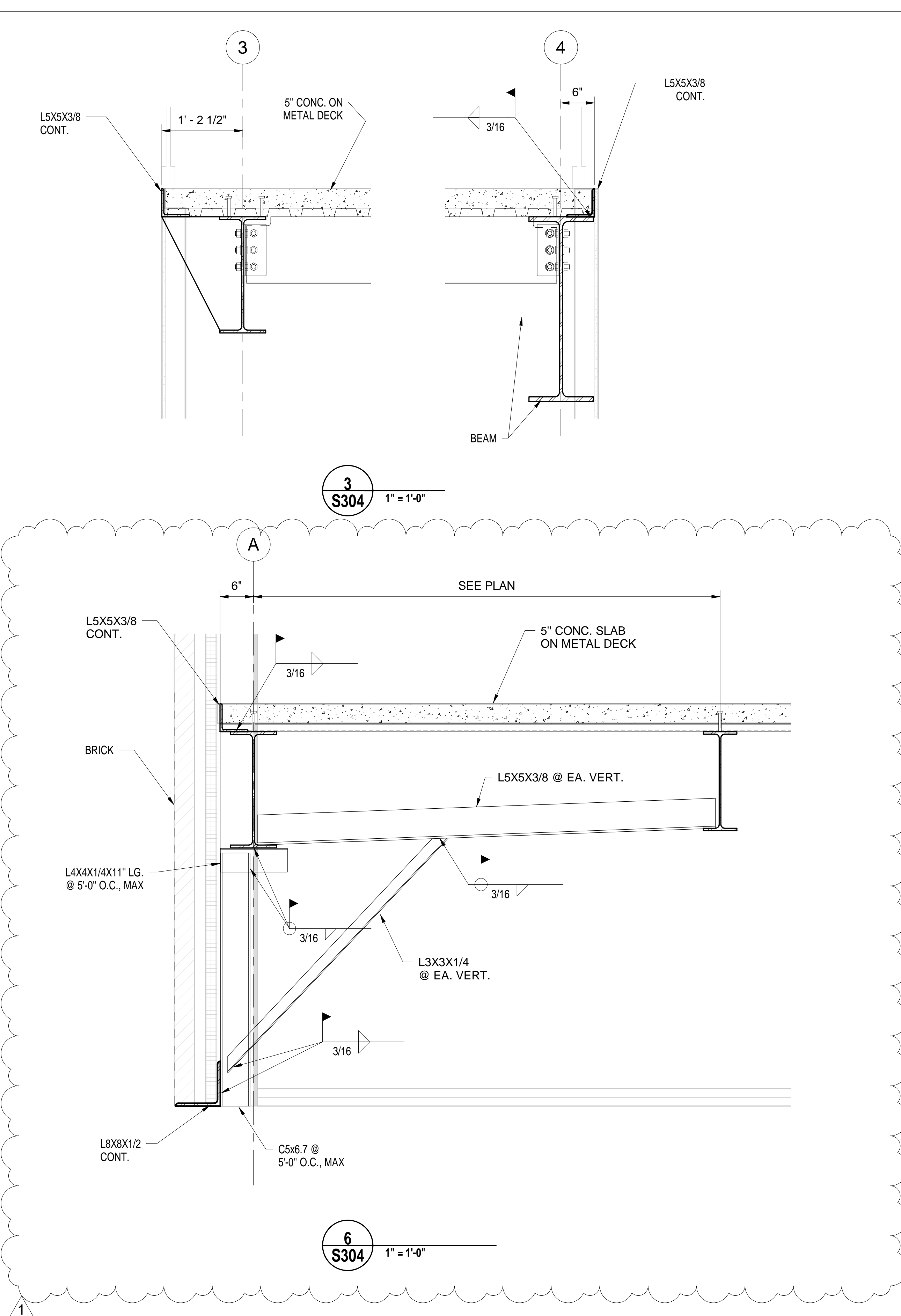
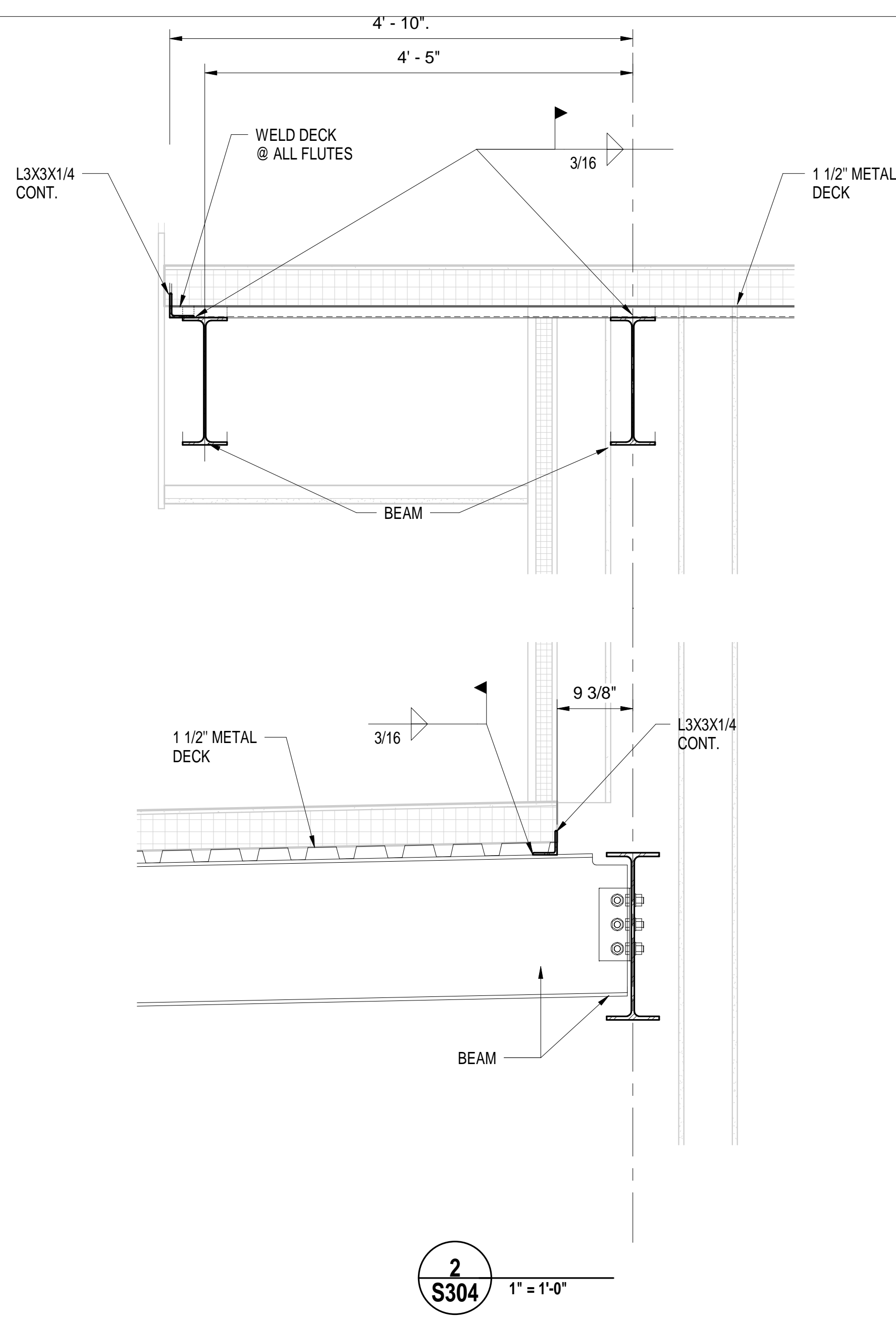
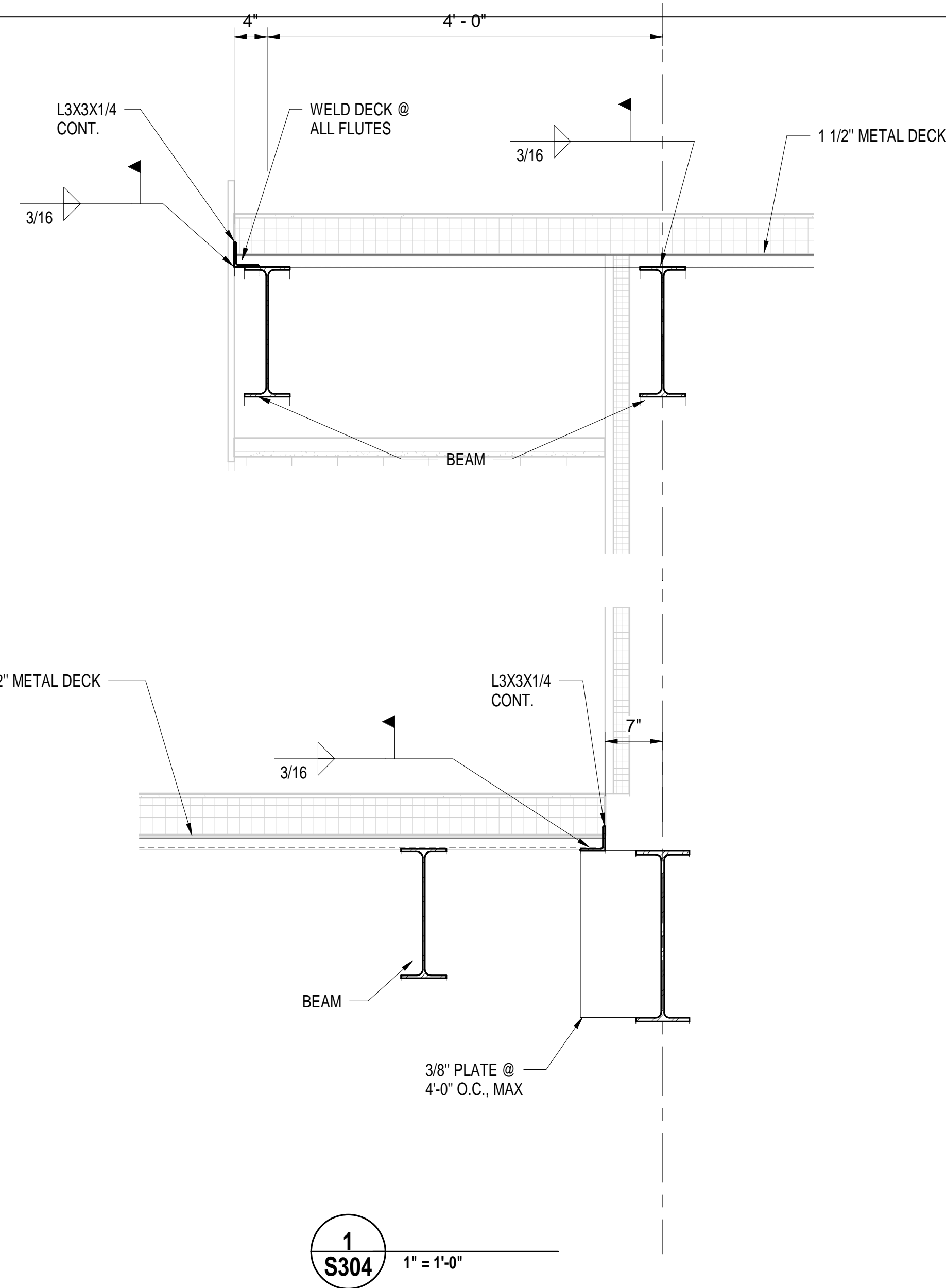


NO.	DATE	DESCRIPTION
1	11-19-21	Addendum #2
2	11-19-21	Addendum #3





NO.	DATE	DESCRIPTION
1	11-10-21	Addendum #2
2	11-19-21	Addendum #3



EQUIPMENT CONNECTION SCHEDULE NOTES	
1.	BRANCH CIRCUIT TO INCLUDE GREEN GROUNDING CONDUCTOR (G) SIZED AS INDICATED OR PER THE SERVING OVERCURRENT PROTECTION DEVICE PER THE N.E.C.
2.	PROVIDE & CONNECT N.E.C. COMPLIANT DISCONNECT SWITCH OF PROPER VOLTAGE RATING FOR CONNECTED BRANCH CIRCUIT & PROPER NEMA RATING FOR INSTALLED ENVIRONMENT. WHERE FUSE SIZE IS INDICATED, DISCONNECT SWITCH SHALL BE FUSIBLE TYPE WITH DUAL-ELEMENT FUSE.
3.	PROVIDE & CONNECT W.P. G.F.I. DUPLEX RECEPTACLE ON ROOF WITHIN 25' OF ROOF TOP HVAC EQUIPMENT. PROVIDE & CONNECT 20A, 120V BRANCH CIRCUIT SERVED FROM NEAREST ADEQUATE ELECTRICAL PANELBOARD. CONNECT NO MORE THAN FOUR DEVICES TO A CIRCUIT.
4.	BRANCH CIRCUIT FINAL CONNECTION TO EQUIPMENT SHALL BE LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) WITH PROPER FITTINGS.
5.	INSTALL DISCONNECT SWITCH & CONTROL DEVICE (I.E. STARTER, VFD, ETC.) ADJACENT TO EQUIPMENT & CONNECT SERVING BRANCH CIRCUIT THRU EACH. MAINTAIN WORKING SPACE CLEARANCES PER N.E.C. ARTICLE 110.
6.	DISCONNECT SWITCH SHALL BE NEMA 3R RATED.
7.	DISCONNECT SWITCH SHALL BE MOUNTED ABOVE ACCESSIBLE CEILING ADJACENT TO EQUIPMENT.
8.	EQUIPMENT & BRANCH CIRCUIT POWER CONNECTION POINT LOCATED ON ROOF.
9.	DISCONNECT SWITCH IS INTEGRAL TO EQUIPMENT.
10.	BRANCH CIRCUIT FINAL CONNECTION TO EQUIPMENT SHALL BE FLEXIBLE METALLIC CONDUIT (FMC) WITH PROPER FITTINGS.
11.	PROVIDE & CONNECT THROUGH N.E.C. COMPLIANT DISCONNECT SWITCH OF INDICATED AMPERE RATING & NUMBER OF POLES.
12.	PROVIDE & CONNECT THROUGH CIRCUIT BREAKER WITH INDICATED AMPERE RATING, NUMBER OF POLES, PROPER NEMA ENCLOSURE FOR INSTALLED ENVIRONMENT & N.E.C. COMPLIANT PERMANENT LOCK-OUT/TAG-OUT PROVISIONS.
13.	BRANCH CIRCUIT FINAL CONNECTION SHALL BE RECEPTACLE TO MATCH EQUIPMENT PLUG. RECEPTACLE SHALL HAVE PROPER NEMA CONFIGURATION & VOLTAGE & AMPERE RATINGS. VERIFY MOUNTING LOCATION WITH EQUIPMENT PROVIDER PRIOR TO ROUGH-IN.
14.	BRANCH CIRCUIT OVERCURRENT DEVICE SHALL BE SHUNT-TRIP TYPE. PROVIDE & CONNECT 120V CONTROL CIRCUIT ROUTED THROUGH ASSOCIATED FIRE ALARM SYSTEM CONTROL DEVICE.
15.	BRANCH CIRCUIT OVERCURRENT DEVICE SHALL BE G.F.I. TYPE. PROVIDE SEAL-OFF FITTINGS IN BRANCH CIRCUIT CONDUIT IN AN ACCESSIBLE LOCATION WHERE CONDUITS ENTER/LEAVE A HAZARDOUS AREA.
17.	PROVIDE SEAL-OFF FITTINGS IN BRANCH CIRCUIT CONDUIT IN AN ACCESSIBLE LOCATION WHERE CONDUITS ENTER/LEAVE A COOLER/FREEZER OR HVAC SYSTEM EQUIPMENT/DUCT.
18.	INSTALL & CONNECT CONTROL STATION(S) FURNISHED BY EQUIPMENT PROVIDER AS DIRECTED BY EQUIPMENT PROVIDER OR THE SPECIFYING PROFESSIONAL.
19.	PROVIDE AUXILIARY CONTROLS IN ELEVATOR DISCONNECT SWITCH FOR USE BY ELEVATOR MANUFACTURER. PROVIDE 3/4" CONDUIT FROM DISCONNECT SWITCH TO ELEVATOR CONTROLLER.
20.	ASSOCIATED INDOOR BLOWER UNIT IS SERVED FROM OUTDOOR CONDENSING UNIT. PROVIDE & CONNECT REQUIRED WIRING PER EQUIPMENT MANUFACTURER'S SPECS. FROM OUTDOOR UNIT TO INDOOR UNIT IN PROPERLY SIZED CONDUIT.
21.	EQUIPMENT CONTROL BY VARIABLE FREQUENCY DRIVE (VFD). INSTALL & CONNECT VFD AS DIRECTED BY EQUIPMENT PROVIDER. ROUTE SERVING BRANCH CIRCUIT THRU VFD.
22.	SEE FLOOR PLANS FOR CIRCUITRY.
23.	CONNECT TO UNSWITCHED 120V CIRCUIT IN AREA THROUGH CONTROLS PROVIDED BY ANOTHER DIVISION.

EQUIPMENT CONNECTION SCHEDULE														
MARK	EQUIPMENT DESCRIPTION	VOLT S	Poles	FLA	MCA	MOC P	SIZE	UNI TS	Panel	Circuit Number	DISC?	DISC.SW/ FUSE	NOTES	
AHU-1	AIR HANDLING UNIT	480 V	3	33 A			(3) 8	HP	HP1B(II)	1,3,5	Yes	60A3P		
AHU-2	AIR HANDLING UNIT	480 V	3	33 A			(3) 6	HP	HP1B(II)	2,4,6	Yes	60A3P		
AHU-3	AIR HANDLING UNIT	480 V	3	33 A			(3) 6	HP	HP2A	38,40,42	Yes	60A3P		
AHU-4	AIR HANDLING UNIT	480 V	3	33 A			(3) 6	HP	HP2A(II)	8,10,12	Yes	60A3P		
AHU-5	AIR HANDLING UNIT	480 V	3	33 A			(3) 6	HP	HP2A(II)	13,15,17	Yes	60A3P		
CH-1 (ROOF)	AIR COOLED CHILLER	480 V	3	435 A	544 A	700 A			MSB	1	Yes	800A3P		
CHP-1	CHILLED WATER PUMP	480 V	3	21 A			15	HP	HP1A(II)	9,11,13	Yes	30A3P		
CHP-2	CHILLED WATER PUMP	480 V	3	21 A			15	HP	HP1A(II)	10,12,14	Yes	30A3P		
CU-1 (ROOF)	MINI SPLIT SYSTEM	208 V	2	22 A	11 A	28 A			L1A(II)	29,30	Yes	30A2P		
CU-2 (ROOF)	MINI SPLIT SYSTEM	208 V	2	22 A	11 A	28 A			L1B	32,33	Yes	30A2P		
CU-3 (ROOF)	MINI SPLIT SYSTEM	208 V	2	22 A	11 A	28 A			L2A(II)	4,5	Yes	30A2P		
CU-4 (ROOF)	MINI SPLIT SYSTEM	208 V	2	22 A	11 A	28 A			L2A(II)	6,7	Yes	30A2P		
CU-5 (ROOF)	MINI SPLIT SYSTEM	208 V	2	22 A	11 A	28 A			L2B(II)	5,6	Yes	30A2P		
CU-6 (ROOF)	MINI SPLIT SYSTEM	208 V	2	24 A	25 A	31 A			L2C(II)	39,40	Yes	30A2P		
CU-7 (ROOF)	MINI SPLIT SYSTEM	208 V	2	24 A	35 A	31 A			L2C(II)	41,42	Yes	30A2P		
DSS-1	MINI SPLIT SYSTEM	208 V	2								No			
DSS-2	MINI SPLIT SYSTEM	208 V	2								No			
DSS-3	MINI SPLIT SYSTEM	208 V	2								No			
DSS-4	MINI SPLIT SYSTEM	208 V	2								No			
DSS-5	MINI SPLIT SYSTEM	208 V	2								No			
DSS-6	MINI SPLIT SYSTEM	208 V	2								No			
DSS-7	MINI SPLIT SYSTEM	208 V	2								No			
ELEV-1	PUBLIC ELEVATOR 1	480 V	3	34 A			25	HP	HDPM	13,15,17	No			
ELEV-2	SECURE ELEVATOR	480 V	3	27 A			20	HP	HDPM	14,16,18	No			
ELEV-3	PUBLIC ELEVATOR 2	480 V	3	34 A			25	HP	HDPM	7,9,11	No			
ELEV-4	PUBLIC ELEVATOR 3	480 V	3	34 A			25	HP	HDPM	8,10,12	No			
EUH-1	ELECTRIC UNIT HEATER	208 V	2	19 A			4	KW	L1A(II)	25,26	Yes	60A2P		
EUH-2	ELECTRIC UNIT HEATER	208 V	2	19 A			4	KW	L1A(II)	27,28	Yes	60A2P		
EUH-3	ELECTRIC UNIT HEATER	208 V	2	19 A			4	KW	L1B(II)	27,28	Yes	60A2P		
EUH-4	ELECTRIC UNIT HEATER	208 V	2	19 A			4	KW	L1C(II)	9,10	Yes	60A2P		
EUH-5	ELECTRIC UNIT HEATER	208 V	2	19 A			4	KW	L1B(II)	29,30	Yes	60A2P		
EW-1	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L1A(II)	14,15	Yes	40A2P		
EW-2	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L1A(II)	33,34	Yes	40A2P		
EW-3	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L1C	18,19	Yes	40A2P		
EW-4	ELECTRIC WATER HEATER	208 V	3	29 A			11	KW	L1C	20,21,22	Yes	60A3P		
EW-5	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L1B	26,27	Yes	40A2P		
EW-6	ELECTRIC WATER HEATER	208 V	3	29 A			11	KW	L1C	23,24,25	Yes	60A3P		
EW-7	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L1B	30,31	Yes	40A2P		
EW-8	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L2B(II)	38,39	Yes	40A2P		
EW-9	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L2A	26,27	Yes	40A2P		
EW-10	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L2B	4,5	Yes	40A2P		
EW-11	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L2C	1,2	Yes	40A2P		
EW-12	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L2C(II)	31,32	Yes	40A2P		
EW-13	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L2C(II)	29,30	Yes	40A2P		
EW-14	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L2C(II)	34,35	Yes	40A2P		
EW-15	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L2D(II)	12,13	Yes	40A2P		
EW-16	ELECTRIC WATER HEATER	208 V	2	29 A			6	KW	L2D(II)	15,16	Yes	40A2P		
FCU-1	FAN COIL UNIT	208 V	2				179	W	L2A(II)	2,3	Yes	30A2P		
FCU-2	FAN COIL UNIT	208 V	2				179	W	L2A(II)	2,3	Yes	30A2P		
FCU-3	FAN COIL UNIT	208 V	2				179	W	L2C(II)	37,38	Yes	30A2P		
FCU-4	FAN COIL UNIT	208 V	2				179	W	L2C(II)	37,38	Yes	30A2P		
FCU-5	FAN COIL UNIT	208 V	2				179	W	L2D(II)	17,18	Yes	30A2P		
FCU-6	FAN COIL UNIT	208 V	2				179	W	L2D(II)	17,18	Yes	30A2P		
MOTORIZED GATE 1		208 V	2	8 A					XL1B	24,25	No			
MOTORIZED GATE 2		208 V	2	8 A					XL1A	22,23	No			
MOTORIZED GATE 3		208 V	2	8 A					XL1A	20,21	No			
T-1.1	VAV BOX	277 V	1		9 A	15 A	2	KW	HP1A(II)	7	Yes	20A1P		
T-1.2	VAV BOX	277 V	1		9 A	15 A	2	KW	HP1A(II)	8	Yes	20A1P		
T-1.3	VAV BOX	277 V	1		5 A	15 A	1	KW	HP1A(II)	8	Yes	20A1P		
T-1.4	VAV BOX	277 V	1		5 A	15 A	1	KW	HP1A(II)	7	Yes	20A1P		
T-1.5	VAV BOX	480 V	3		17 A	20 A	11	KW	HP1A(II)	2,4,6	Yes	30A3P		
T-1.6	VAV BOX	480 V	3		4 A	15 A	2.5	KW	HP1A(II)	1,3,5	Yes	20A3P		
T-1.7	VAV BOX	480 V	3		6 A	15 A	4	KW	HP1A(II)	1,3,5	Yes	20A3P		
T-1.8	VAV BOX	480 V	3		5 A	15 A	3	KW	HP1A	80,82,84	Yes	20A3P		
T-1.9	VAV BOX	480 V	3		5 A	15 A	3.5	KW	HP1A	80,82,84	Yes	20A3P		
T-1.10	VAV BOX	480 V	3		5 A	15 A	3.5	KW	HP1A	75,77,79	Yes	20A3P		
T-1.11	VAV BOX	480 V	3		5 A	15 A	3.5	KW	HP1A	75,77,79	Yes	20A3P		
T-1.12	VAV BOX	480 V	3		5 A	15 A	3	KW	HP1A	74,76,78	Yes	20A3P		
T-1.13	VAV BOX	480 V	3		4 A	15 A	2.5	KW	HP1A	74,76,78	Yes	20A3P		
T-1.14	VAV BOX	277 V	1		9 A	15 A	2	KW	HP1A	67	Yes	20A1P		
T-1.15	VAV BOX	277 V	1		9 A	15 A	2	KW	HP1A	65	Yes	20A1P		
T-1.16	VAV BOX	277 V	1		7 A	15 A	1.5	KW	HP1A	63	Yes	20A1P		
T-1.17	VAV BOX	480 V	3		5 A	15 A	3	KW	HP1A	62,64,66	Yes	20A3P		
T-1.18	VAV BOX	277 V	1		7 A	15 A	1.5	KW	HP1A	61	Yes	20A1P		
T-1.19	VAV BOX	277 V	1		7 A	15 A	1.5	KW	HP1A	61	Yes	20A3P		
T-1.20	VAV BOX	277 V	1		9 A	15 A	2	KW	HP1A	57	Yes	20A1P		
T-1.21	VAV BOX	480 V	3		5 A	15 A	3.5	KW	HP1A	56,58,60	Yes	20A3P		
T-1.22	VAV BOX	277 V	1		5 A	15 A	1	KW	HP1A	59	Yes	20A1P		
T-1.23	VAV BOX	480 V	3		8 A	15 A	5	KW	HP1A	62,64,66	Yes	20A3P		
T-1.24	VAV BOX	277 V	1		5 A	15 A	1	KW	HP1A	59	Yes	20A1P		
T-1.25	VAV BOX	480 V	3		5 A	15 A	3	KW	HP1A	56,58,60	Yes	20A3P		
T-1.26	VAV BOX	480 V	3		21 A	25 A	14	KW	HP1A	68,70,72	Yes	30A3P		
T-1.27	VAV BOX	480 V	3		24 A	25 A	16	KW	HP1A	69,71,73	Yes	30A3P		
T-1.28	VAV BOX	480 V	3		14 A	15 A	9	KW	HP1A	51,53,55	Yes	20A3P		
T-1.29	VAV BOX	480 V	3		5 A	15 A	3	KW	HP1A	50,52,54	Yes	20A3P		
T-1.30	VAV BOX	480 V	3		5 A	15 A	3	KW	HP1A	50,52,54	Yes	20A3P		
T-1.31	VAV BOX	480 V	3		6 A	15 A	4	KW	HP1A	45,47,49	Yes	20A3P		
T-1.32	VAV BOX	480 V	3		5 A	15 A	3	KW	HP1A	44,46,48	Yes	20A3P		
T-1.33	VAV BOX	480 V	3		8 A	15 A	5.5	KW	HP1A	45,47,49	Yes	20A3P		
T-1.34	VAV BOX	480 V	3		6 A	15 A	4	KW	HP1A	44,46,48	Yes	20A3P		
T-1.35	VAV BOX	277 V	1		5 A	15 A	1	KW	HP1A	43	Yes	20A1P		
T-1.36	VAV BOX	277 V	1		9 A	15 A	2	KW	HP1A	43	Yes	20A1P		



Lauderdale County
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PROJECT ADDRESS:

VILLAGE FAIR MALL
612 22ND AVENUE
MERIDIAN, MS 39301

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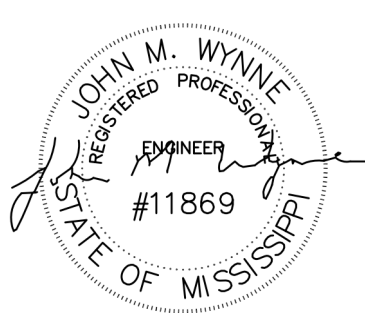
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CONSTRUCTION CO.
ONE GULLY AVENUE
PHILADELPHIA, MS 39350
P: 601-655-5411
F: 601-655-4140

KEY PLAN

ACTIVE DESIGN PHASE

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☐ SCHEMATIC DESIGN
☐ DESIGN DEVELOPMENT
☐ CONSTRUCTION BIDDING
☒ CONSTRUCTION DOCUMENTS
☐ AS-BUILT RECORD SET

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REVISIONS/SUBMISSIONS

NO.	DATE	DESCRIPTION
1	11/18/2021	ADDENDUM 3

SHEET TITLE
ELECTRICAL SITE PLAN

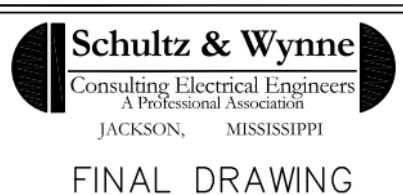
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SHEET ISSUED: 10/18/2021

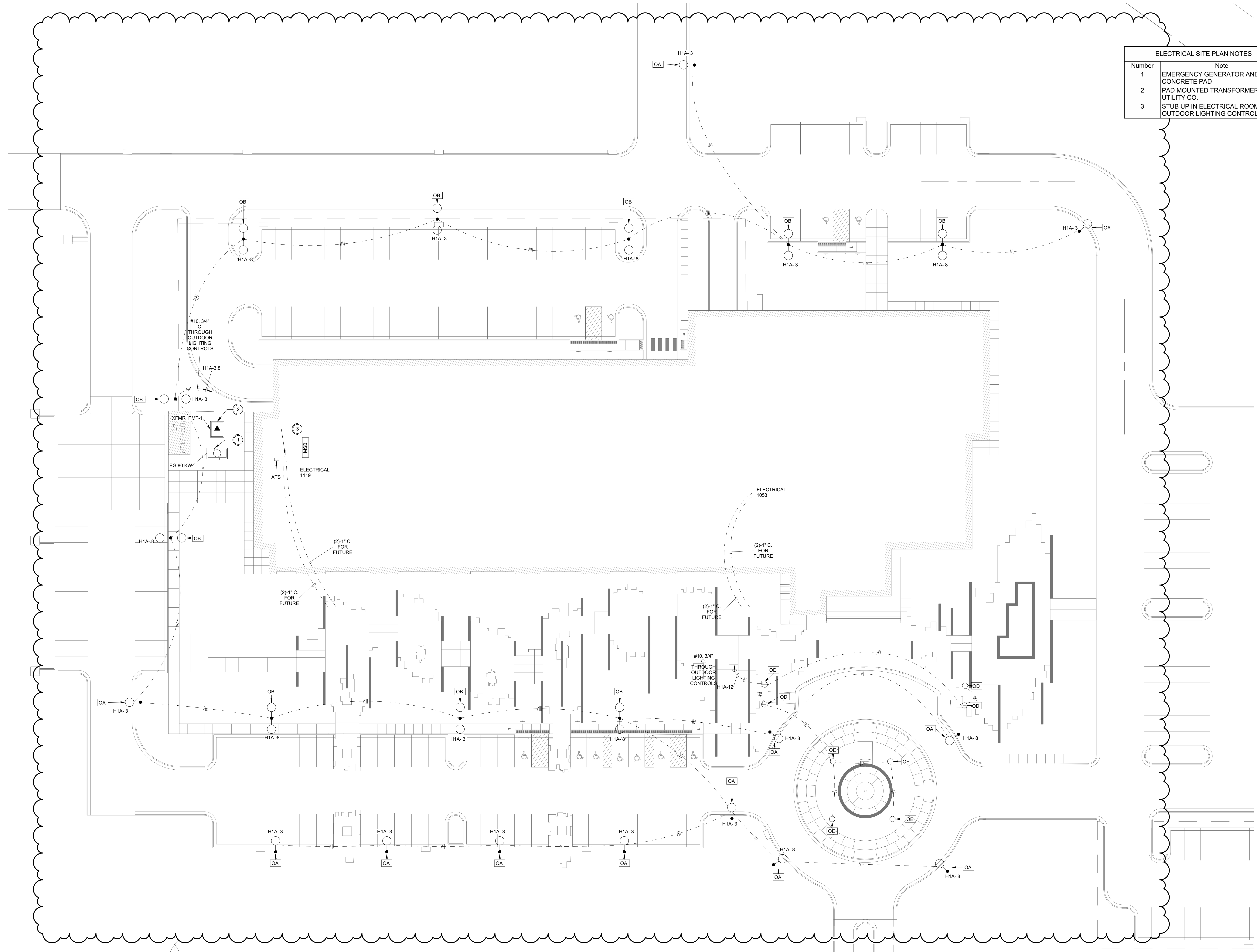
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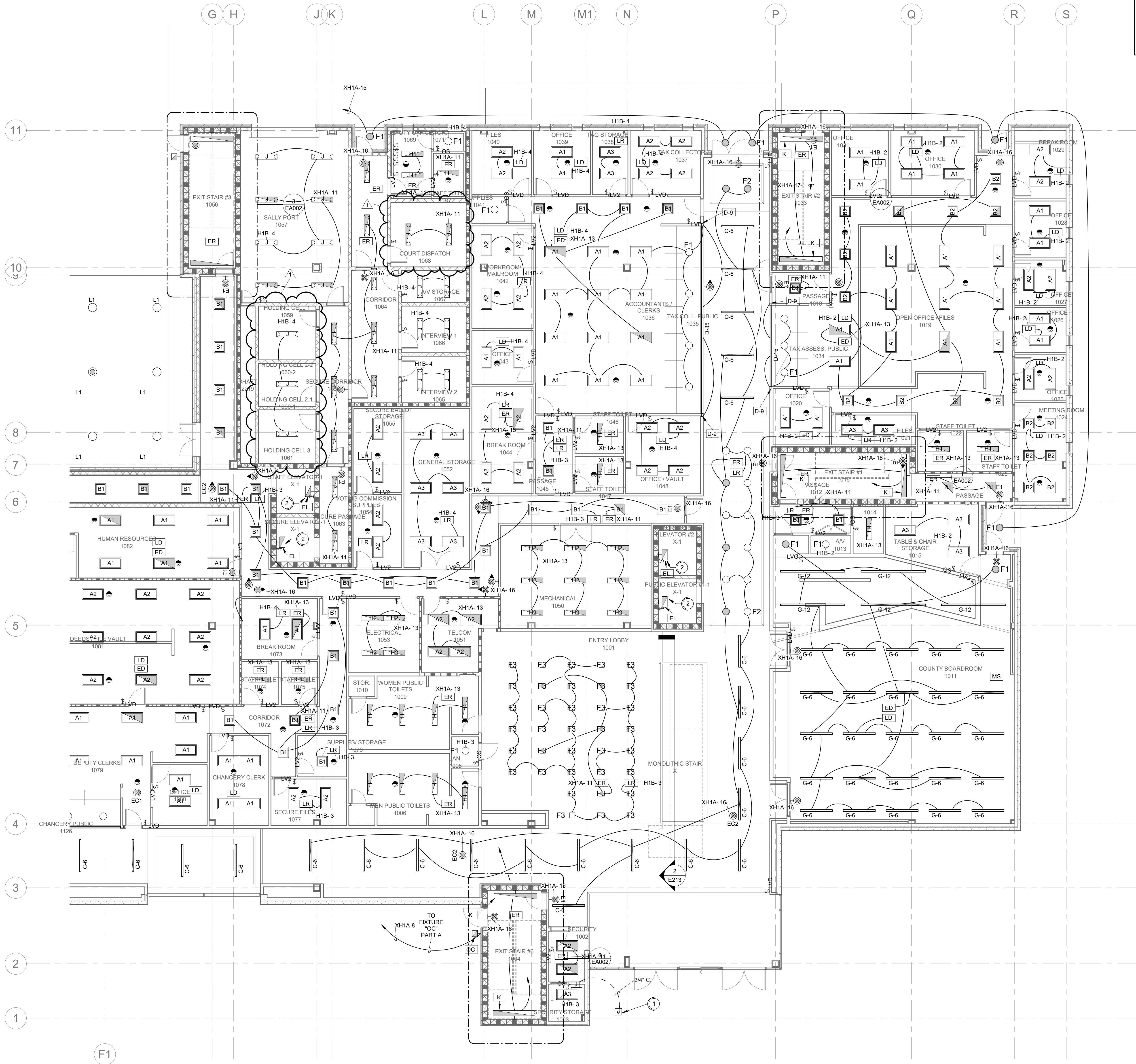


FINAL DRAWING

Number	Note
1	EMERGENCY GENERATOR AND CONCRETE PAD
2	PAD MOUNTED TRANSFORMER BY UTILITY CO.
3	STUB UP IN ELECTRICAL ROOM AT OUTDOOR LIGHTING CONTROLS.



LIGHTING PLAN NOTES	
Number	Note
1	CONNECTION TO LIGHTED HANDRAIL. LOCATE WHERE DIRECTED BY ARCHITECT. CONNECT TO REMOTE DRIVER IN SECURITY STORAGE 1003. NUMBER AND LOCATION OF CONNECTIONS PER ARCHITECT PLANS.
2	CONNECT ELEVATOR LIGHT TO RECEPTACLE IN PIT THROUGH SWITCH SHOWN.



1 FIRST LEVEL - PART B
1/8" = 1'-0"

L P K
architects

LPK ARCHITECTS, P.A.
ROBERT E. LARK, ARCHITECT

PROJECT INFORMATION
PROJECT:



Lauderdale County
Government Building
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PROJECT ADDRESS:

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612 22ND AVENUE
MERIDIAN, MS 39301

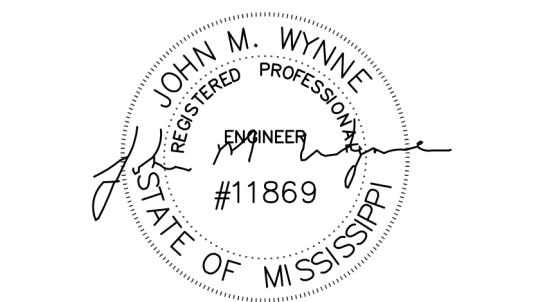
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REVISIONS/SUBMISSIONS

NO.	DATE	DESCRIPTION
1	11/18/2021	ADDENDUM 3
2		
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SHEET TITLE
LIGHTING FIRST FLOOR PLAN
PART B

PROJECT NO.: 19-4294A

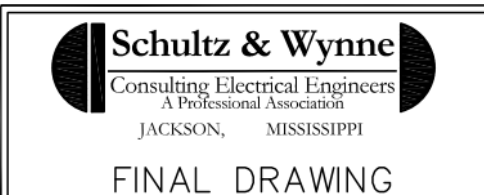
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SHEET ISSUED: 10/18/2021

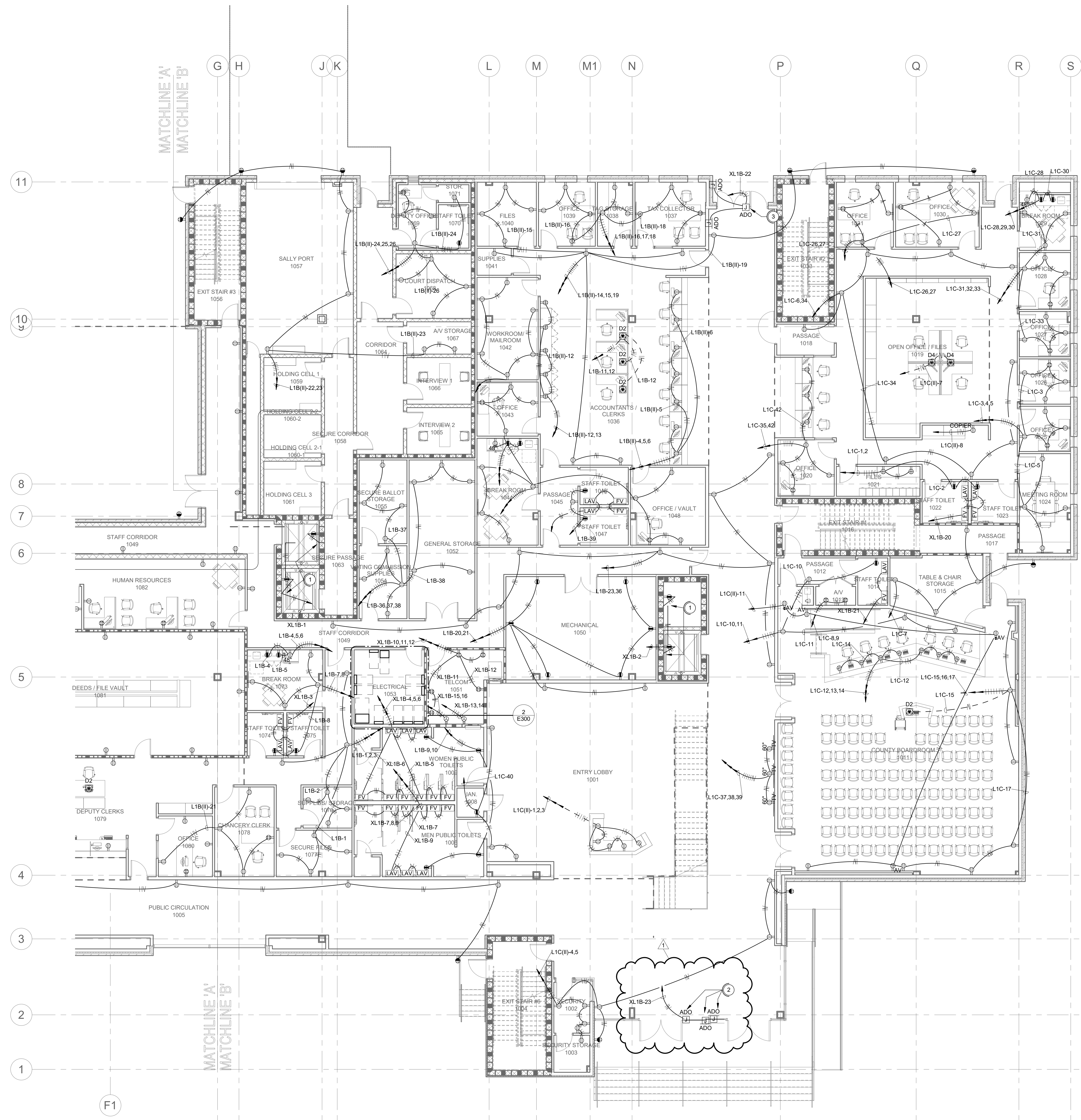
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E211



FINAL DRAWING



POWER PLAN NOTES	
Number	Note
1	CONNECT ELEVATOR LIGHT THROUGH SWITCH SHOWN.
2	CONNECTION TO AUTOMATIC DOOR OPENER AND SENSORS. TYPICAL FOR (1) DOORS IN ENTRY LOBBY 1001. 3/4" C. FROM SENSORS TO OPENER MECHANISM.
3	CONNECTION TO AUTOMATIC DOOR OPENER FOR HANDICAP ACCESS. 3/4" C. TO OPERATOR BUTTONS AS SHOWN.

L P K
architects

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PROJECT INFORMATION
PROJECT:



Lauderdale County
Government Building
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PROJECT ADDRESS:

VILLAGE FAIR MALL
612 22ND AVENUE
MERIDIAN, MS 39301

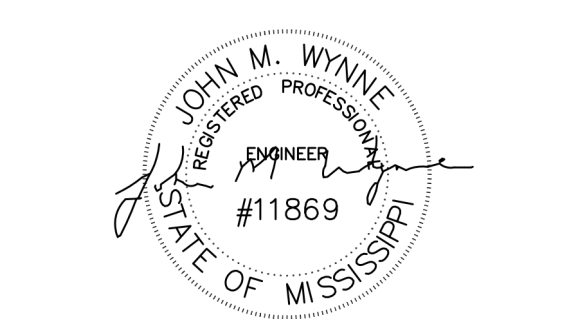
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KEY PLAN

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REVISIONS/SUBMISSIONS

NO.	DATE	DESCRIPTION
1	11/18/2021	ADDENDUM 3

SHEET TITLE
POWER FIRST FLOOR PLAN
PART B

PROJECT NO.: 19-4294A

SHEET NO.

SHEET ISSUED: 10/18/2021

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REVIEWED BY: JMW

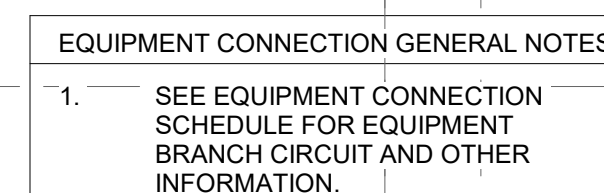
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A Professional Association
JACKSON, MISSISSIPPI
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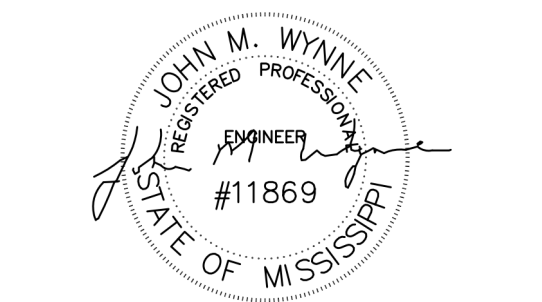
1 FIRST LEVEL - PART B - POWER
1/8" = 1'-0"

004-3063 Lauderdale County Government
19-4294A, Contract # 500-01
11/18/2021 1:22:20 AM

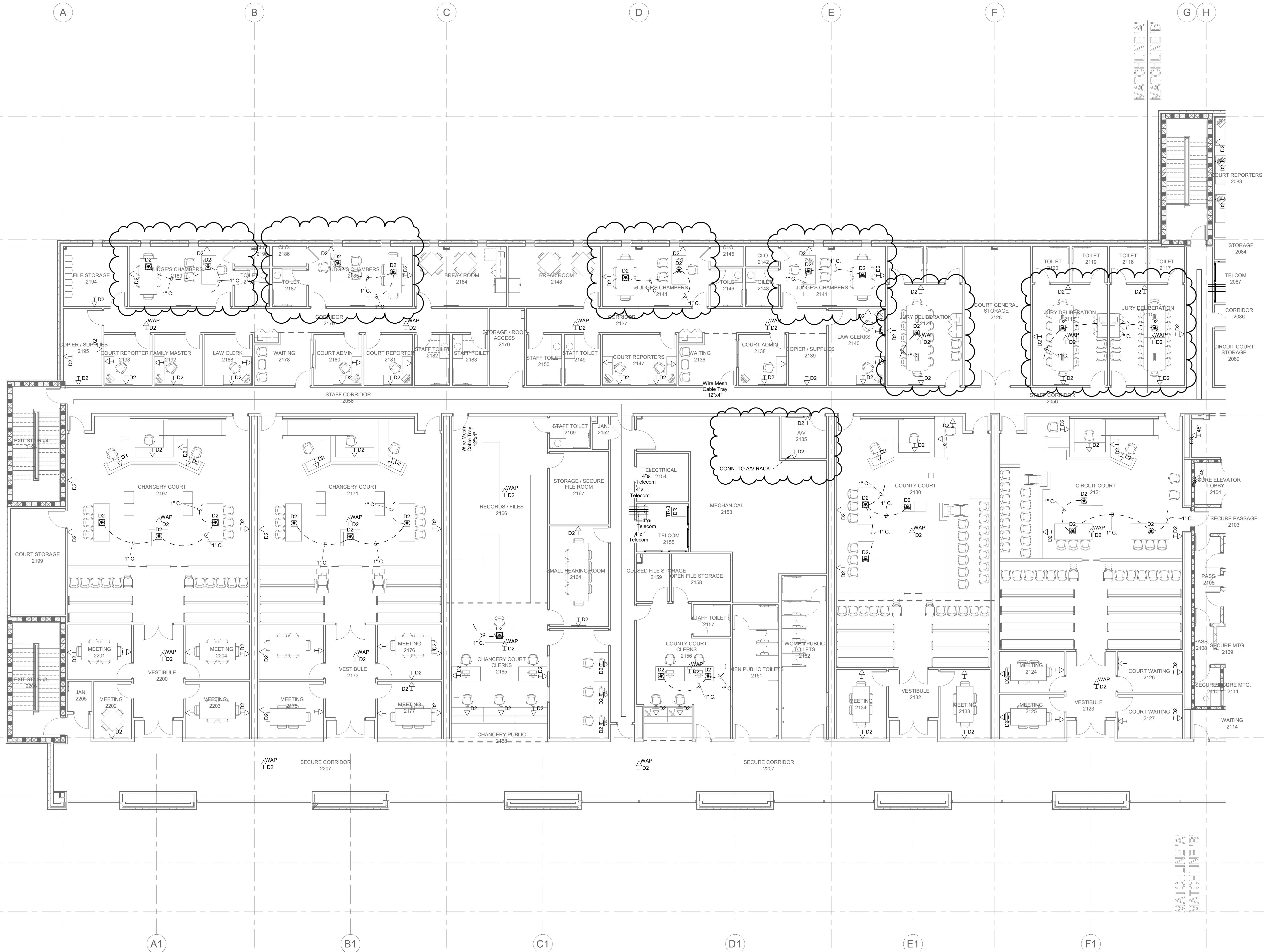




1 FIRST LEVEL - PART A - POWER CONNECTIONS
1/8" = 1'-0"



NO.	DATE	DESCRIPTION
1	11/18/2021	ADDENDUM 3





Lauderdale County
Government Building
Package

PROJECT ADDRESS:

VILLAGE FAIR MALL
612 22ND AVENUE
MERIDIAN, MS 39301

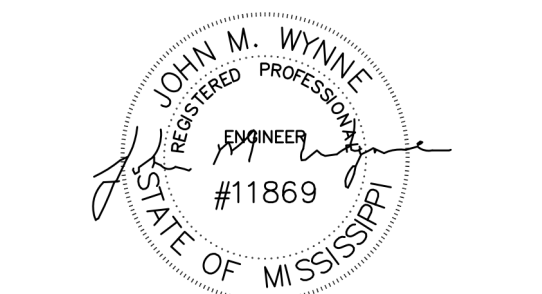
YATES
CONSTRUCTION

W.G. YATES & SONS
CONSTRUCTION CO.
ONE GULLY AVENUE
PHILADELPHIA, MS 39350
P: 601-656-5411
F: 601-656-4140

KEY PLAN

ACTIVE DESIGN PHASE
☐ FOR REVIEW ONLY
☐ FOR PERMITTING ONLY
☐ SCHEMATIC DESIGN
☐ DESIGN DEVELOPMENT
☐ CONSTRUCTION BIDDING
☒ CONSTRUCTION DOCUMENTS
☐ AS-BUILT RECORD SET

SEAL



REVISIONS/SUBMISSIONS

NO.	DATE	DESCRIPTION
1	11/18/2021	ADDENDUM 3

SHEET TITLE
SPECIAL SYSTEMS - OVERALL -
SECURITY CAMERAS

PROJECT NO.: 19-4294A

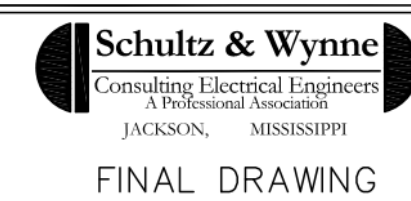
SHEET NO.

SHEET ISSUED: 10/18/2021

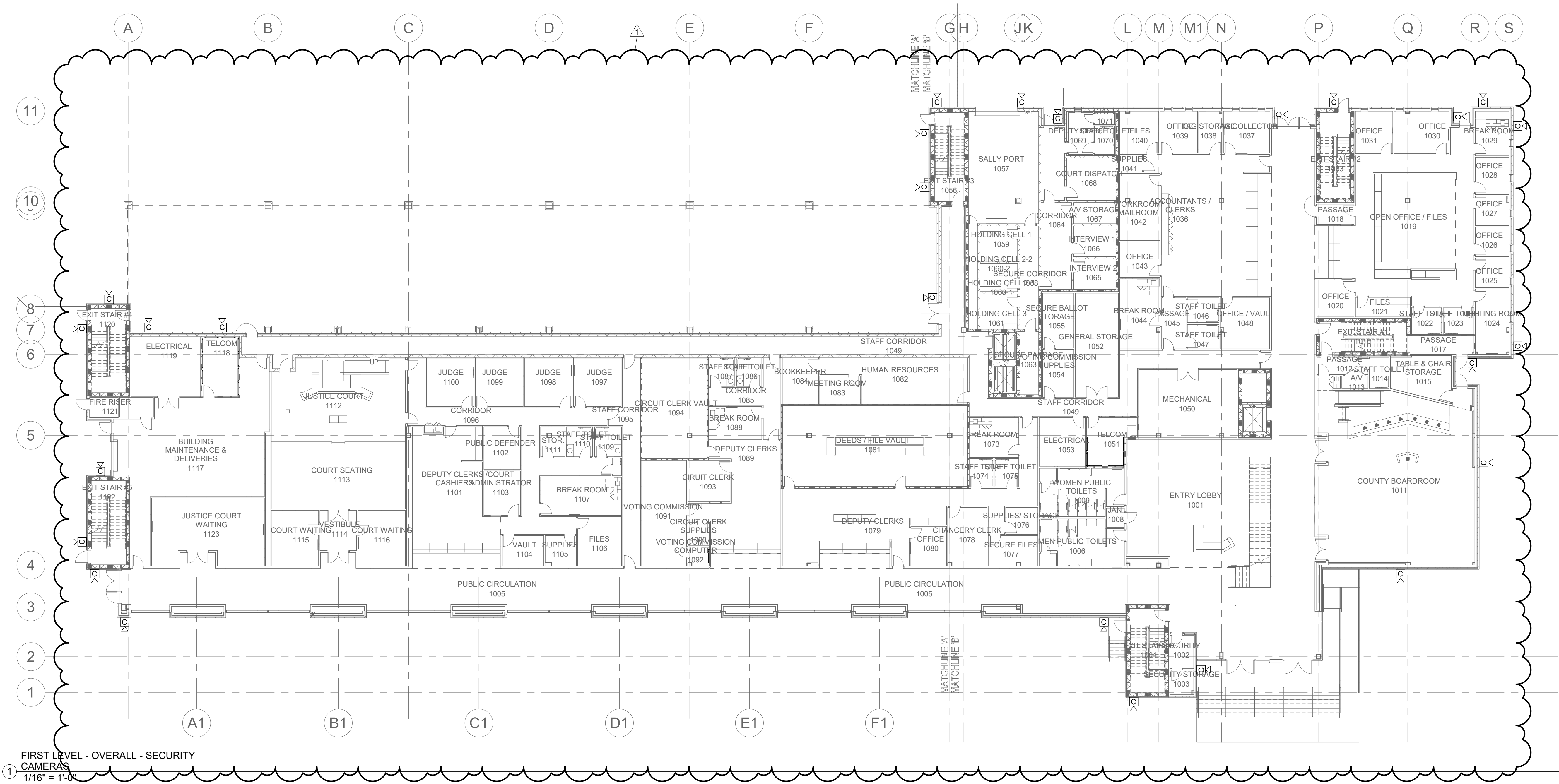
DRAWN BY: RO

REVIEWED BY: JMW

E254



FINAL DRAWING



FIRST LEVEL - OVERALL - SECURITY
CAMERAS
1/16" = 1'-0"

LIGHTING FIXTURE SCHEDULE						
VOLTS	SYMBOL	WATTS	DESCRIPTION	MANUFACTURER	C AT. NO.	MOUNTING
120/277	EL	18	INDUSTRIAL LED LUMINAIRE, VAPORTIGHT, 24", LOW-PROFILE, FIBERGLASS HOUSING, FROSTED POLYCARB. LENS, 2000LM, 4000K, 80CRI, S.S. HARDWARE	LITHONIA LTG.	FEM-L24-2000LM-W0-G21D-40K-80CRI-S7SL	ELEVATOR PIT AS DIRECTED
120/277	F1	20	LED OPEN DOWNLIGHT, 6" APERTURE, SPEC-GRADE, 1500 LUMENS, 3500° K, 0-10V 1% DIMMING DRIVER	LITHONIA LTG.	LDN6-35/15-L06-AR-LSS-GZ1	RECESSED AT CEILING
120/277	F2	45	LED OPEN DOWNLIGHT, 6" APERTURE, SPEC-GRADE, 4000 LUMENS, 3500° K, 0-10V 1% DIMMING DRIVER	LITHONIA LTG.	LDN6-35/40-L06-AR-LSS-GZ1	RECESSED AT CEILING
120/277	F3	45	LED OPEN DOWNLIGHT, 6" APERTURE, SPEC-GRADE, 4000 LUMENS, 3500° K, 0-10V 1% DIMMING DRIVER	LITHONIA LTG.	LDN6S2-35/40-L06-AR-LSS-GZ1	RECESSED AT CEILING
120/277	G2	4/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 2' LENGTH, 1250 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS,	FOCAL POINT LTG.	FSM4L-FL-1250LF-35K-1C-L11-XX-WH-2'	RECESSED AT CEILING
120/277	G4	4/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 4' LENGTH, 1250 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS,	FOCAL POINT LTG.	FSM4L-FL-1250LF-35K-1C-L11-XX-WH-4'	RECESSED AT CEILING
120/277	G6	4/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 6' LENGTH, 1250 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS,	FOCAL POINT LTG.	FSM4L-FL-1250LF-35K-1C-L11-XX-WH-6'	RECESSED AT CEILING
120/277	G8	4/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 8' LENGTH, 1250 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS,	FOCAL POINT LTG.	FSM4L-FL-1250LF-35K-1C-L11-XX-WH-8'	RECESSED AT CEILING
120/277	G10	4/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 10' LENGTH, 1250 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS,	FOCAL POINT LTG.	FSM4L-FL-1250LF-35K-1C-L11-XX-WH-10'	RECESSED AT CEILING
120/277	G12	4/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 12' LENGTH, 1250 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS,	FOCAL POINT LTG.	FSM4L-FL-1250LF-35K-1C-L11-XX-WH-12'	RECESSED AT CEILING
120/277	H1	35	LED LENSED STRIP LUMIAIRE, 48", SYMMETRICAL, 5000LM, 3500K, 80CRI, WHITE FINISH	LITHONIA LTG.	ZLIN-L48-SMR-5000LM-FST-35K-80CRI-WH	SURFACE OR SUSPENDED AS DIRECTED
120/277	H2	35	LED LENSED STRIP LUMIAIRE, 48", SYMMETRICAL, 5000LM, 3500K, 80CRI, WHITE FINISH	LITHONIA LTG.	ZLIN-L48-SMR-5000LM-FST-35K-80CRI-WH	SURFACE OR SUSPENDED AS DIRECTED
-	I	-	NOT USED	-	-	-
120/277	J	46	SURFACE CORRECTIONAL LED LUMIAIRE, 12"x48", 6000LM, 3500K, WHITE FINISH, 14 GA. CR3 HOUSING, 0.125 TEMPERED GLASS/0.125 PRISMATIC POLYCARB., DIMMING DRIVER	LITHONIA LTG.	ZLIN-L48-SMR-5000LM-FST-35K-80CRI-WH	SURFACE AT CEILING
120/277	K	10/FT	LED WALL BRACKET LUMIAIRE, 96", INDIRECT/DIRECT, 8000LMF/6000LMF, 3500K, 80CRI, EXTRUDED ALUM. HOUSING, INTEGRAL OCC. SENSOR, STD. FOR AUTO. DIMMING, STD. FINISH PER ARCH.	MARK LTG.	S4LWB-L1P-RFT-80CRI-35K-800LMF-600LMF-MINI-SC-T-XXX-NUGHT	WALL - 7'-6" ABOVE LANDING
120/277	L1	45	LED PARKING GARAGE LUMINAIRE, DIE-CAST ALUM. HOUSING, 19"DIA., 4" DEPTH, 6200LM, 4000K, 80CRI, TYPE 5 WIDE DISTR., STD. FINISH PER ARCH.	LITHONIA LTG.	VCPOLED-V4-P3-40K-80CRI-15W-XXX	CEILING/OVER-HEAD STRUCTURE

OUTDOOR LIGHTING FIXTURE SCHEDULE						
VOLTS	SYMBOL	WATTS	DESCRIPTION	MANUFACTURER	C AT. NO.	MOUNTING
120/277	0A	LED	O.D. LED AREA LUMINAIRE, DIE-CAST ALUM. HOUSING, ALUM. HOUSING, 19000 LM, 183W, 4000K, TYPE 3M DISTR., 25'X5'X7GA. SQUARE STRAIGHT STEEL POLE, STD. FINISH PER ARCHITECT	LITHONIA LTG.	DSX1-LED-P7-40K-T3M-S5S255G	CONCRETE POLE BASE PER DETAIL
120/277	0B	LED	O.D. LED AREA LUMINAIRES, DIE-CAST ALUM. HOUSING, ALUM. HOUSING, 19000 LM, 183W, 4000K, TYPE 3M DISTR., 25'X5'X7GA. SQUARE STRAIGHT STEEL POLE, STD. FINISH PER ARCHITECT	LITHONIA LTG.	DSX1(2)-LED-P7-40K-T3M-S5S255G	CONCRETE POLE BASE PER DETAIL
120/277	0C	LED	OUTDOOR DECO. LED WALL BRACKET, DIE-CAST ALUM. HOUSING, FULL CUT-OFF DISTR., 6500 LUMENS, 51W, 4000K, STD. FINISH PER ARCH.	LITHONIA LTG.	ARC2LED-P5-40K-XXX	EXT. WALL PER ARCH EXT. ELEV.
120/277	0D	107	OUTDOOR DECO. LED FLOOD LIGHT, DIE-CAST ALUM. HOUSING, NARROW SPOT DISTR.,11800LM, 4000K, STANCHION MTG., STD. FINISH PER ARCH.	LITHONIA LTG.	DSXF3LED-P-P1-40K-70CRI-NSP-IS-51W-XXX	STANCHION WITH CONCRETE BASE
120/277	0E	170	OUTDOOR DECO. LED FLOOD LIGHT, DIE-CAST ALUM. HOUSING, NARROW SPOT DISTR.,14500LM, 4000K, STANCHION MTG., STD. FINISH PER ARCH.	LITHONIA LTG.	DSXF3LED-P-P2-40K-70CRI-NSP-IS-51W-XXX	STANCHION WITH CONCRETE BASE

LIGHTING FIXTURE SCHEDULE						
VOLTS	SYMBOL	WATTS	DESCRIPTION	MANUFACTURER	C AT. NO.	MOUNTING
120/277	A1	45	LED FLAT PANEL, 2'X4', EDGE-LIT, ALUM. FRAME, 4800LM, 3500° K, 1% 0-10V DIMMING DRIVER	LITHONIA LTG.	EPANL-24-48L-35K	RECESSED AT CEILING
120/277	A2	38	LED FLAT PANEL, 2'X4', EDGE-LIT, ALUM. FRAME, 4000LM, 3500° K, 1% 0-10V DIMMING DRIVER	LITHONIA LTG.	EPANL-24-40L-35K	RECESSED AT CEILING
120/277	A3	29	LED FLAT PANEL, 2'X4', EDGE-LIT, ALUM. FRAME, 3000LM, 3500° K, 1% 0-10V DIMMING DRIVER	LITHONIA LTG.	EPANL-24-30L-35K	RECESSED AT CEILING
120/277	B1	45	LED FLAT PANEL, 2'X2', EDGE-LIT, ALUM. FRAME, 4000LM, 3500° K, 1% 0-10V DIMMING DRIVER	LITHONIA LTG.	EPANL-22-40L-35K	RECESSED AT CEILING
120/277	B2	45	LED FLAT PANEL, 2'X2', EDGE-LIT, ALUM. FRAME, 4800LM, 3500° K, 1% 0-10V DIMMING DRIVER	LITHONIA LTG.	EPANL-22-48L-35K	RECESSED AT CEILING
120/277	C6 **	8/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 6' LENGTH, 875 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS, GRID OR DRYWALL MOUNTING PER RCP	FOCAL POINT LTG.	FSM4L-FL-875LF-35K-1C-L11-XX-WH-6'	RECESSED AT CEILING
120/277	C8 **	8/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 8' LENGTH, 875 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS, GRID OR DRYWALL MOUNTING PER RCP	FOCAL POINT LTG.	FSM4L-FL-875LF-35K-1C-L11-XX-WH-8'	RECESSED AT CEILING
120/277	D9	4/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 9' LENGTH, 375 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS, DRYWALL CEILING/WALL TRIM KIT	FOCAL POINT LTG.	FSM4L-FL-375LF-35K-1C-L11-TF-WH-9'	RECESSED AT CEILING/WALL
120/277	D10	4/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 10' LENGTH, 375 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS, DRYWALL CEILING/WALL TRIM KIT	FOCAL POINT LTG.	FSM4L-FL-375LF-35K-1C-L11-TF-WH-10'	RECESSED AT CEILING/WALL
120/277	D15	4/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 15' LENGTH, 375 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS, DRYWALL CEILING/WALL TRIM KIT	FOCAL POINT LTG.	FSM4L-FL-375LF-35K-1C-L11-TF-WH-15'	RECESSED AT CEILING/WALL
120/277	D20	4/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 20' LENGTH, 375 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS, DRYWALL CEILING/WALL TRIM KIT	FOCAL POINT LTG.	FSM4L-FL-375LF-35K-1C-L11-TF-WH-20'	RECESSED AT CEILING/WALL
120/277	D25	4/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 25' LENGTH, 375 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS, DRYWALL CEILING/WALL TRIM KIT	FOCAL POINT LTG.	FSM4L-FL-375LF-35K-1C-L11-TF-WH-25'	RECESSED AT CEILING/WALL
120/277	D35	4/FT	RECESSED LINEAR LED LUMIAIRE, 4" WIDTH, 35' LENGTH, 375 LM/FT, 3500K, EXTRUDED ALUMINUM HOUSING, HOUSING, EXTRUDED FLUSH SATIN ACRYLIC LENS, DRYWALL CEILING/WALL TRIM KIT	FOCAL POINT LTG.	FSM4L-FL-375LF-35K-1C-L11-TF-WH-35'	RECESSED AT CEILING/WALL
120/277	E1	4	EXIT SIGN, LED, EDGE-LIT, SINGLE FACE, RECESS MTG., GREEN LED'S, ARROWS AS INDICATED	LITHONIA LTG.	EDGR-1C-WM	WALL AS INDICATED
120/277	EC1	4	EXIT SIGN, LED, EDGE-LIT, SINGLE FACE, RECESS MTG., GREEN LED'S, ARROWS AS INDICATED	LITHONIA LTG.	EDGR-1G	CEILING AS INDICATED
120/277	EC2	8	EXIT SIGN, LED, EDGE-LIT, DOUBLE FACE, RECESS MTG., GREEN LED'S, ARROWS AS INDICATED	LITHONIA LTG.	EDGR-2GMR	CEILING AS INDICATED

- ADDENDUM #3 ELECTRICAL NOTES
1.

DELETE CONNECTIONS TO FLUSH VALVES AND FAUCET VALVES FOR ALL RESTROOMS EXCEPT PUBLIC TOILETS 1006, 1008, 2161, 2162. PUBLIC TOILETS SHALL RETAIN CONNECTIONS TO FLUSH VALVES AND FAUCET VALVES.
2.

ALL WORK IN CHANCERY COURT 2197, COURT STORAGE 2199, MEETING 2201, MEETING 2204, MEETING 2202, MEETING 2203, VESTIBULE 2200 SHALL BE PART OF ALTERNATE #6 UNDER BASE BID, THESE AREAS SHALL BE SHELL ONLY.

L P K
architects

LPK ARCHITECTS, P.A.
Robert E. Lane, Architect
601 22ND AVENUE, SUITE 200
MERIDIAN, MS 39301
P: 661-486-5411
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PROJECT INFORMATION
PROJECT:



Lauderdale County
Government Building
Package

PROJECT ADDRESS:

VILLAGE FAIR MALL
612 22ND AVENUE
MERIDIAN, MS 39301

YATES
CONSTRUCTION
W.G. YATES & SONS
CONSTRUCTION CO.
ONE GULLY AVENUE
PHILADELPHIA, MS 39350
P: 661-656-5411
F: 661-656-4140

KEY PLAN

- ACTIVE DESIGN PHASE
- ☐

FOR REVIEW ONLY
- ☐

FOR PERMITTING ONLY
- ☐

SCHEMATIC DESIGN
- ☐

DESIGN DEVELOPMENT
- ☐

CONSTRUCTION BIDDING
- ☒

CONSTRUCTION DOCUMENTS
- ☐

AS-BUILT RECORD SET

SEAL

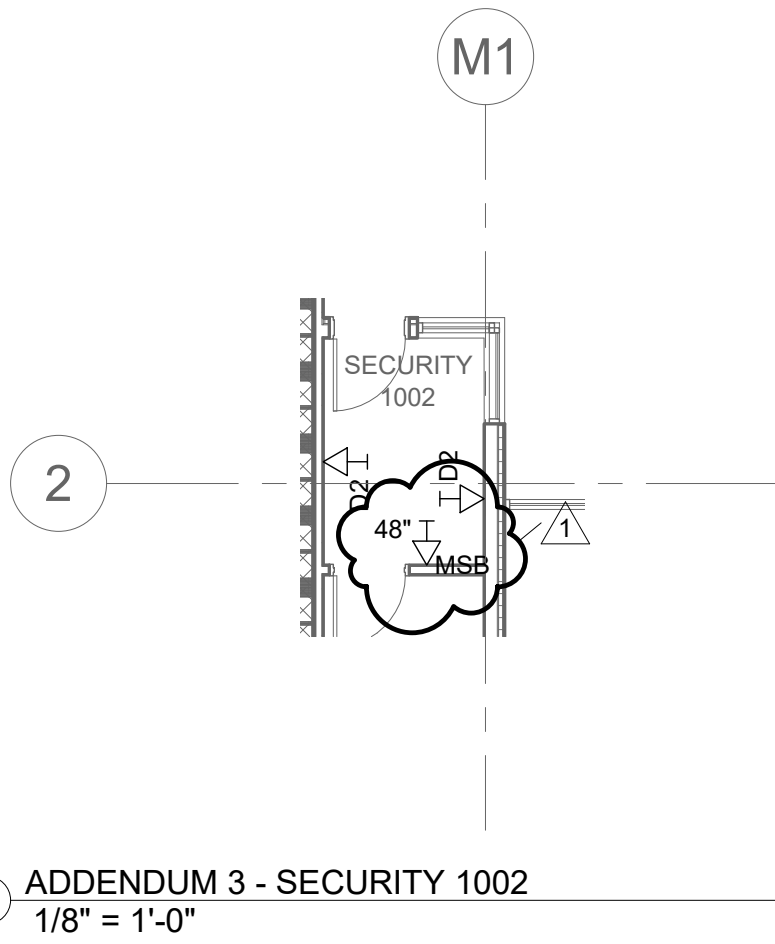


REVISIONS/SUBMISSIONS		
NO.	DATE	DESCRIPTION
1	11/18/2021	ADDENDUM 3

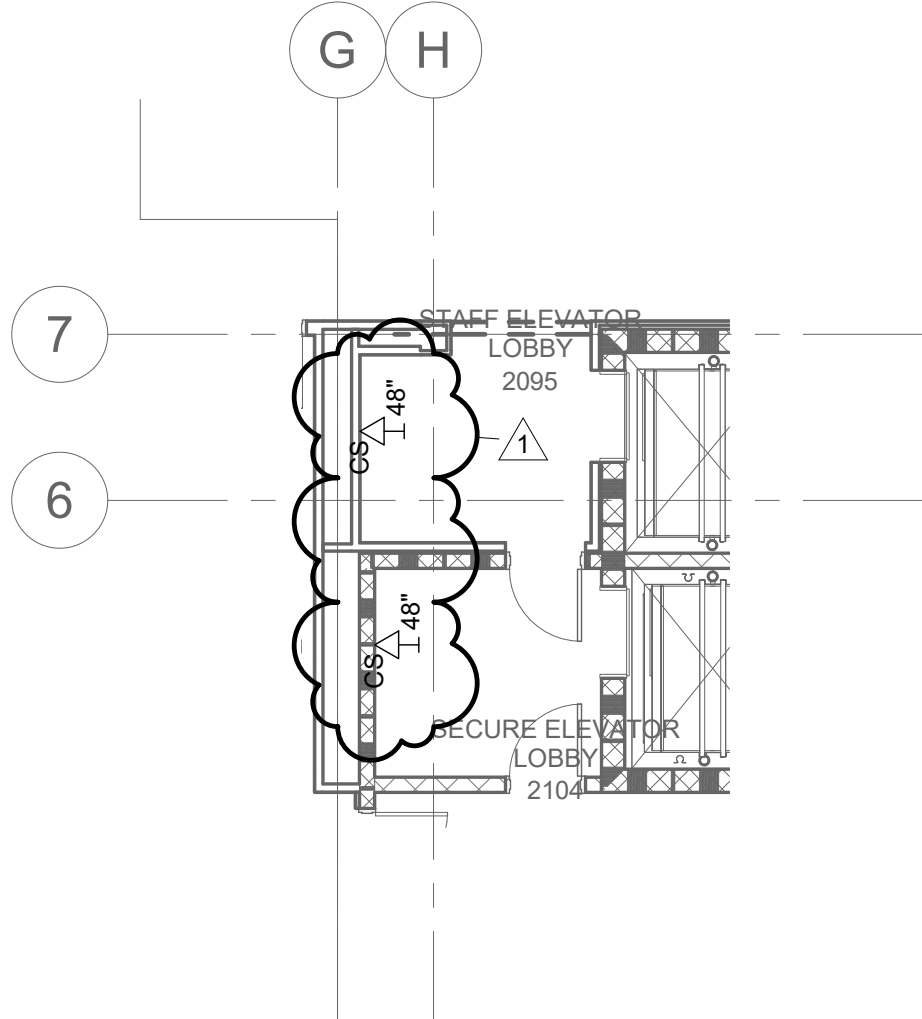
SHEET TITLE:
ELECTRICAL ADDENDUM ITEMS

Schultz & Wynne
Consulting Electrical Engineers
A Professional Association
LICKSACK, MISSISSIPPI
FINAL DRAWING

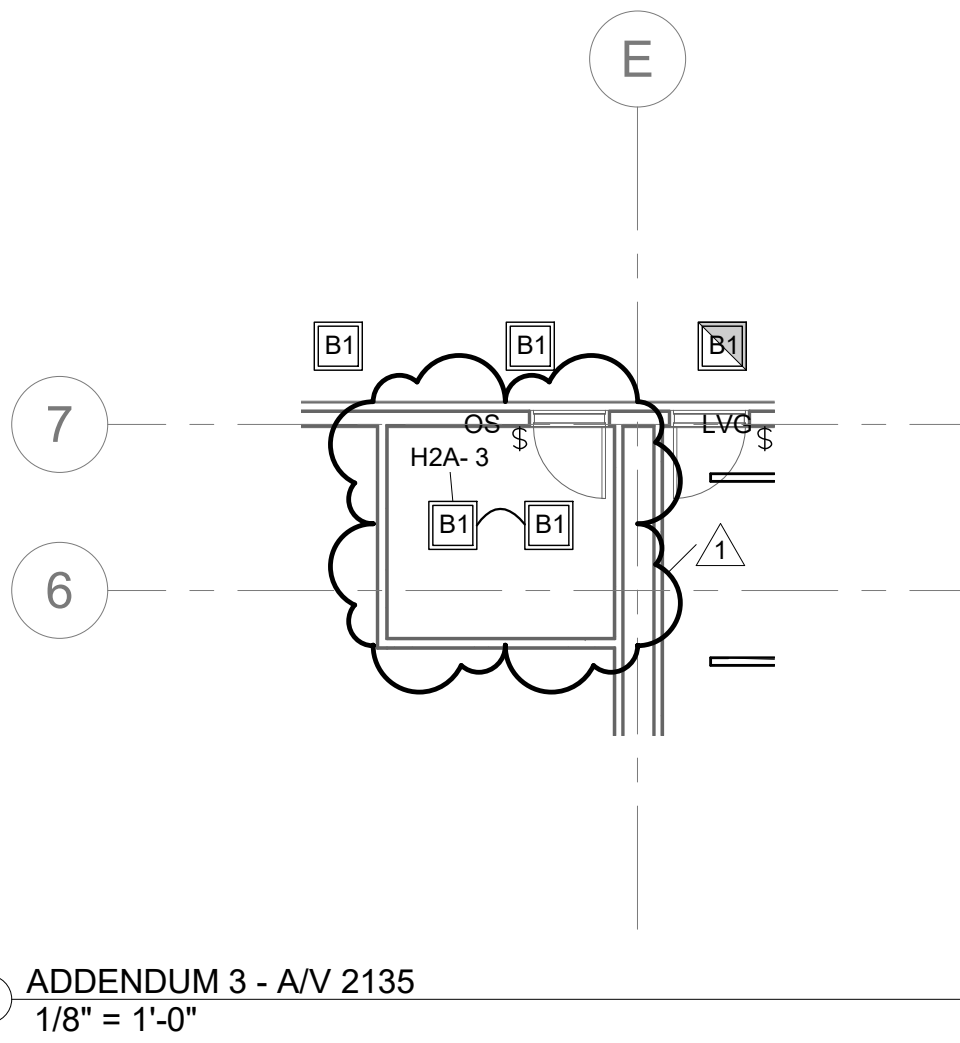
PROJECT NO.: 19-4294A
SHEET ISSUED: 10/18/2021
DRAWN BY: RO
REVIEWED BY: JMW
SHEET NO.: EA001



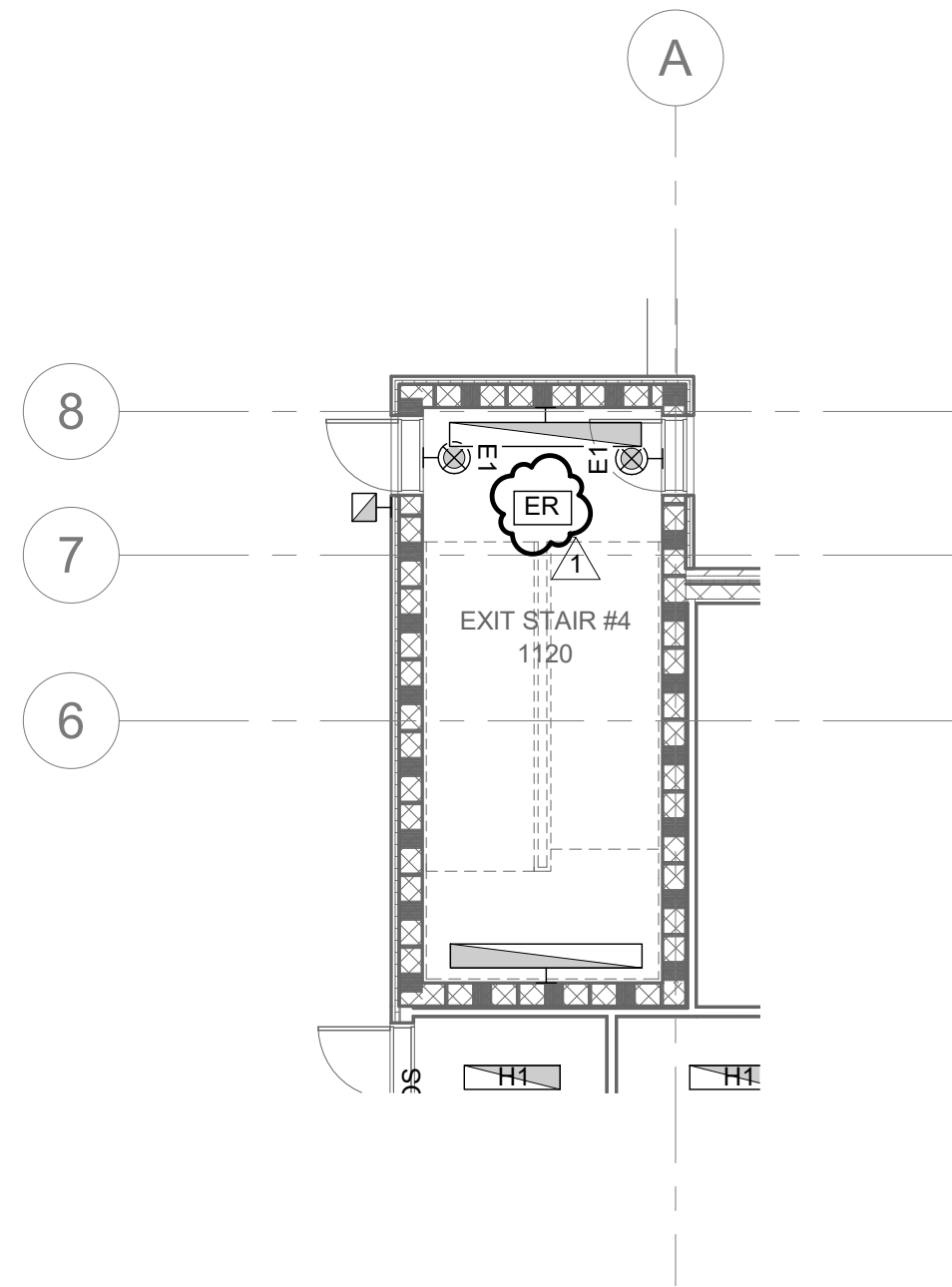
9 ADDENDUM 3 - SECURITY 1002
1/8" = 1'-0"



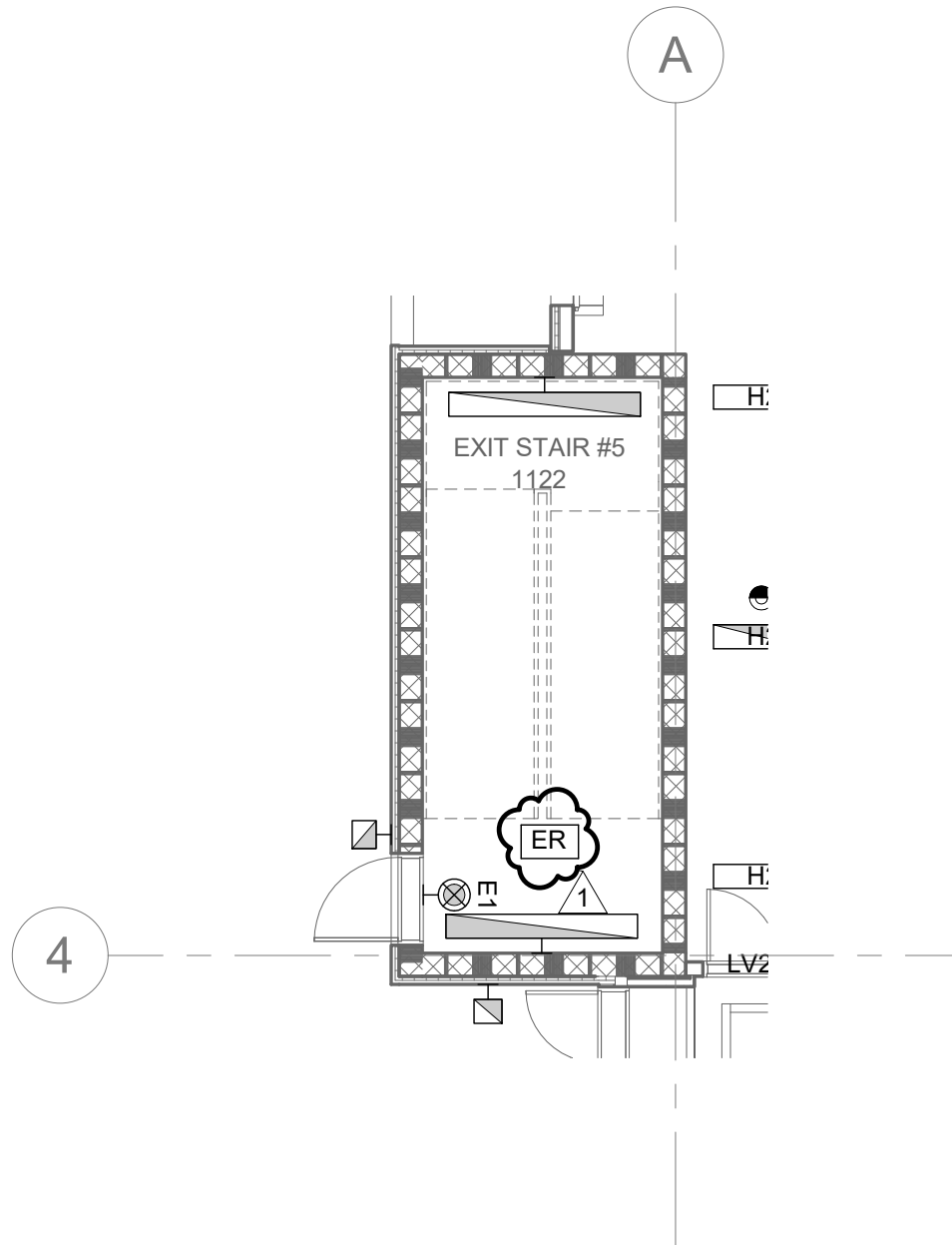
8 ADDENDUM 3 - ELEVATOR 2095, 2104
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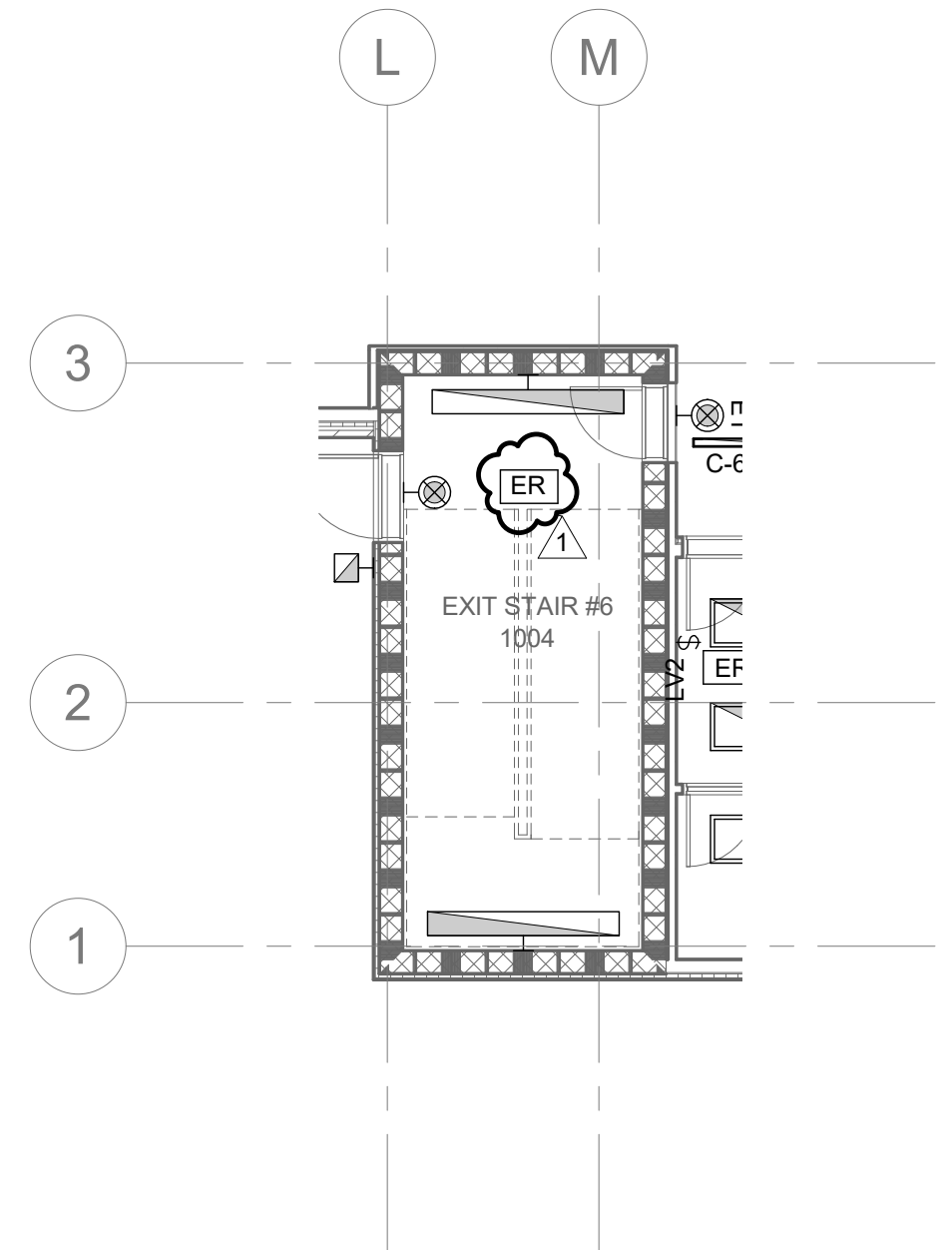
7 ADDENDUM 3 - AV 2135
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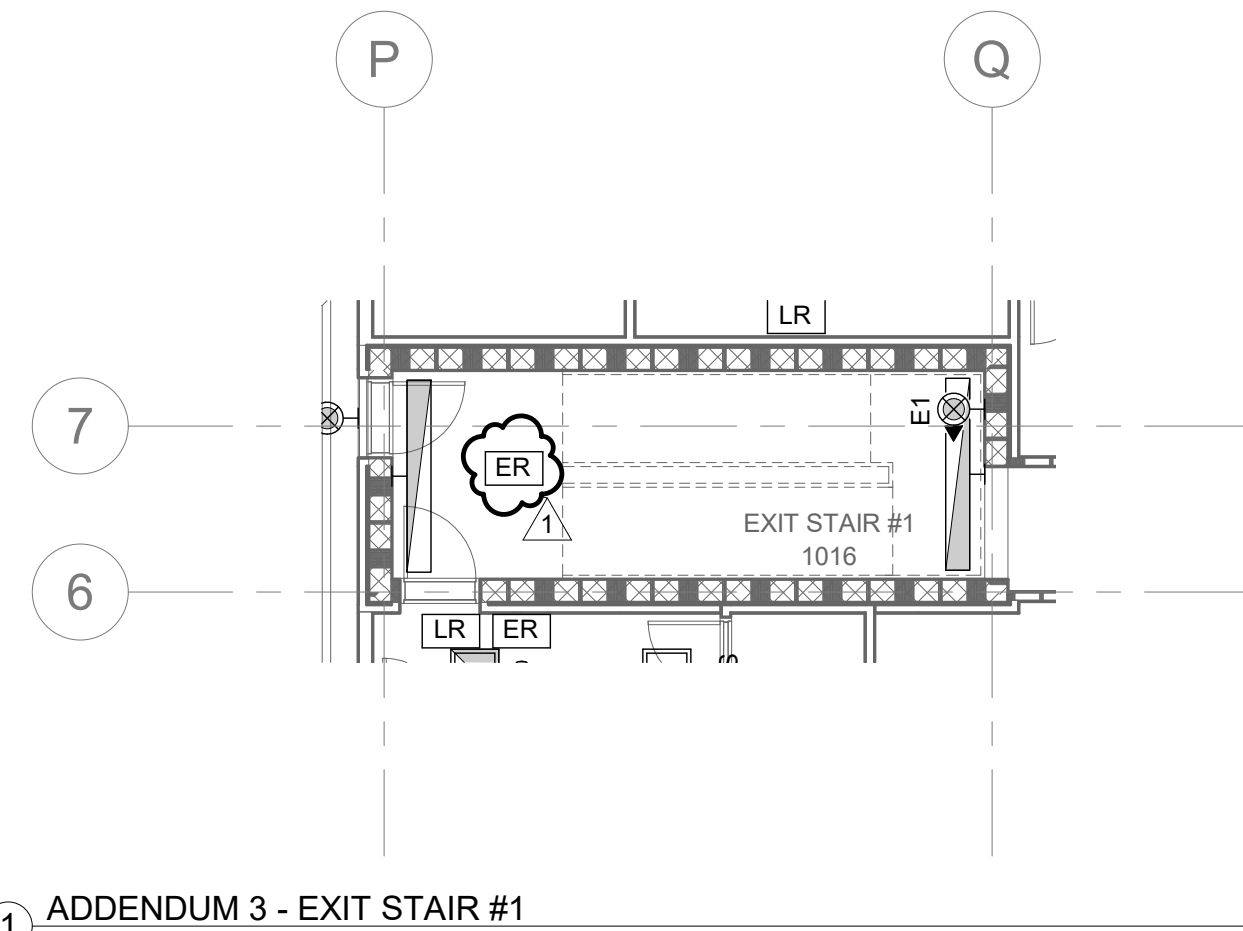
4 ADDENDUM 3 - EXIT STAIR #4
1/8" = 1'-0"



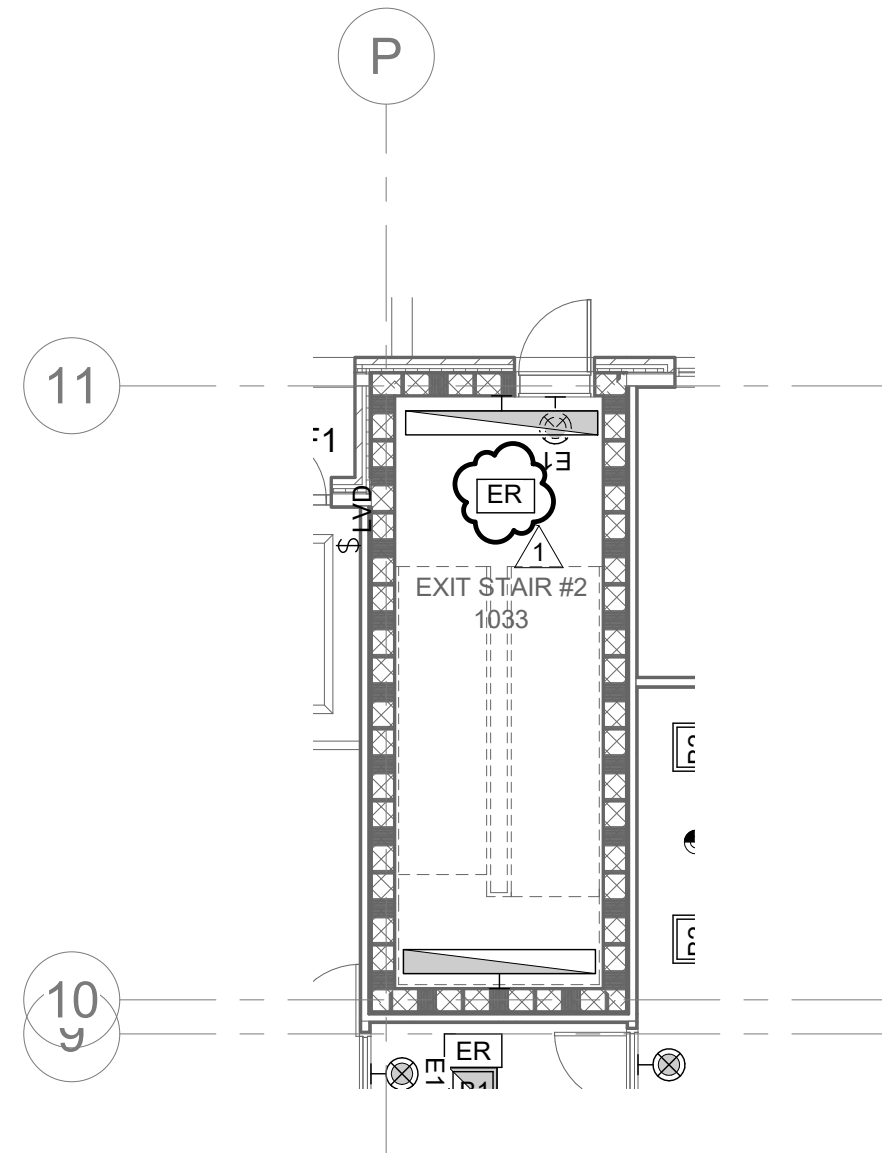
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1/8" = 1'-0"



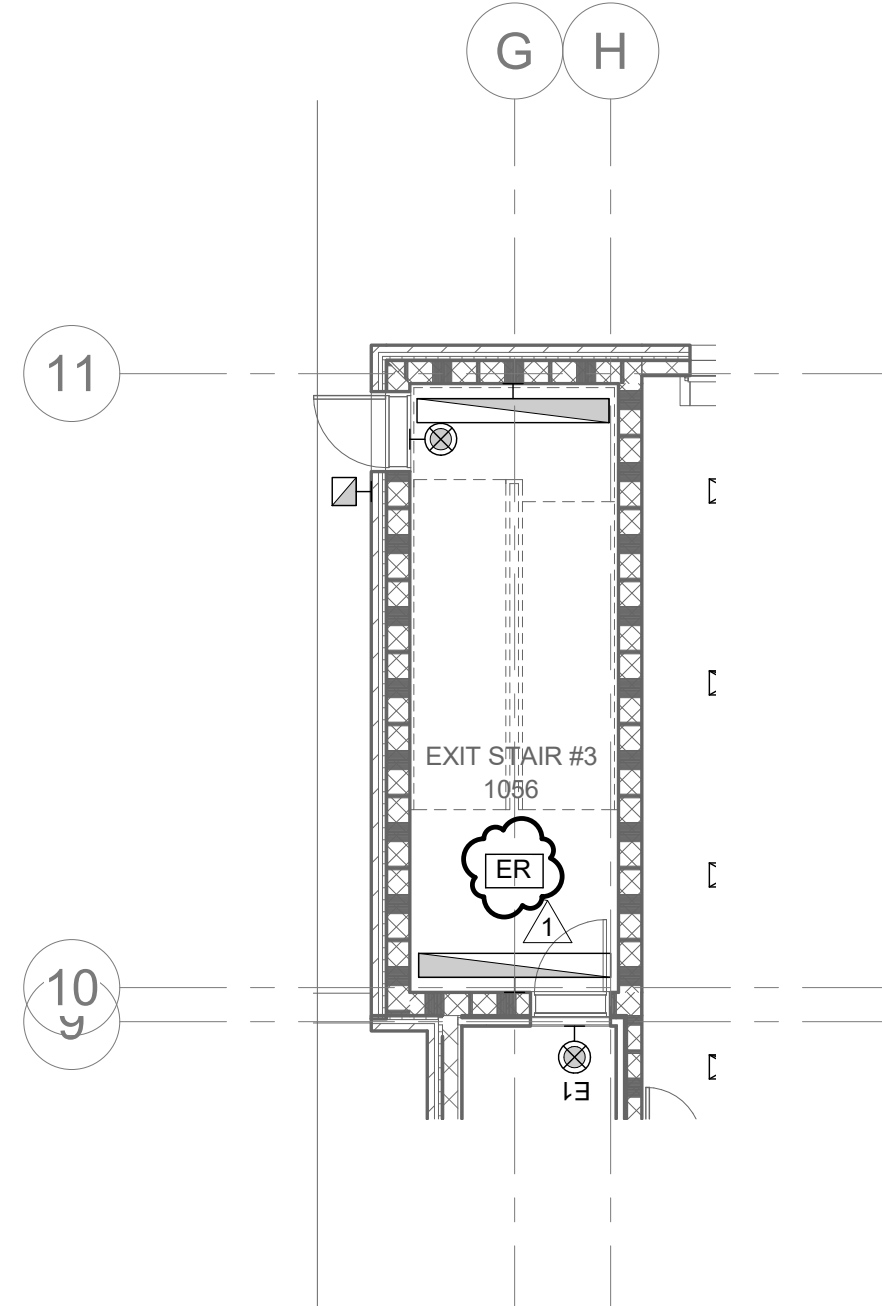
6 ADDENDUM 3 - EXIT STAIR #6
1/8" = 1'-0"



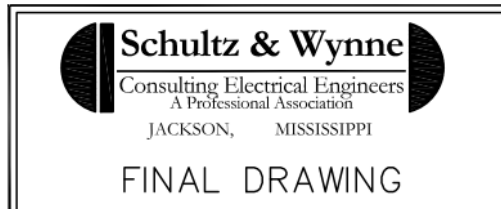
1 ADDENDUM 3 - EXIT STAIR #1
1/8" = 1'-0"



2 ADDENDUM 3 - EXIT STAIR #2
1/8" = 1'-0"



3 ADDENDUM 3 - EXIT STAIR #3
1/8" = 1'-0"



LPK
architects

LPK ARCHITECTS, P.A.
Robert E. Lusk, Architect

1017 22ND AVENUE, P.O. BOX 600
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PROJECT INFORMATION
PROJECT:



Lauderdale County
Government Building
Package

PROJECT ADDRESS:

VILLAGE FAIR MALL
612 22ND AVENUE
MERIDIAN, MS 39301

YATES
CONSTRUCTION

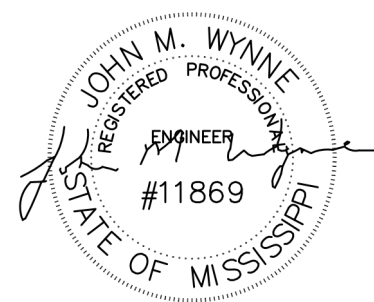
W.G. YATES & SONS
CONSTRUCTION CO.
ONE GULLY AVENUE
PHILADELPHIA, MS 39350
P: 601-655-5411
F: 601-655-4140

KEY PLAN

ACTIVE DESIGN PHASE

<input type="checkbox"/>	FOR REVIEW ONLY
<input type="checkbox"/>	FOR PERMITTING ONLY
<input type="checkbox"/>	SCHEMATIC DESIGN
<input type="checkbox"/>	DESIGN DEVELOPMENT
<input type="checkbox"/>	CONSTRUCTION BIDDING
<input checked="" type="checkbox"/>	CONSTRUCTION DOCUMENTS
<input type="checkbox"/>	AS-BUILT RECORD SET

SEAL



REVISIONS/SUBMISSIONS

NO.	DATE	DESCRIPTION
1	11/18/2021	ADDENDUM 3

SHEET TITLE
ELECTRICAL ADDENDUM ITEMS

PROJECT NO.: 19-4294A

SHEET NO.

SHEET ISSUED: 10/18/2021

DRAWN BY: RO

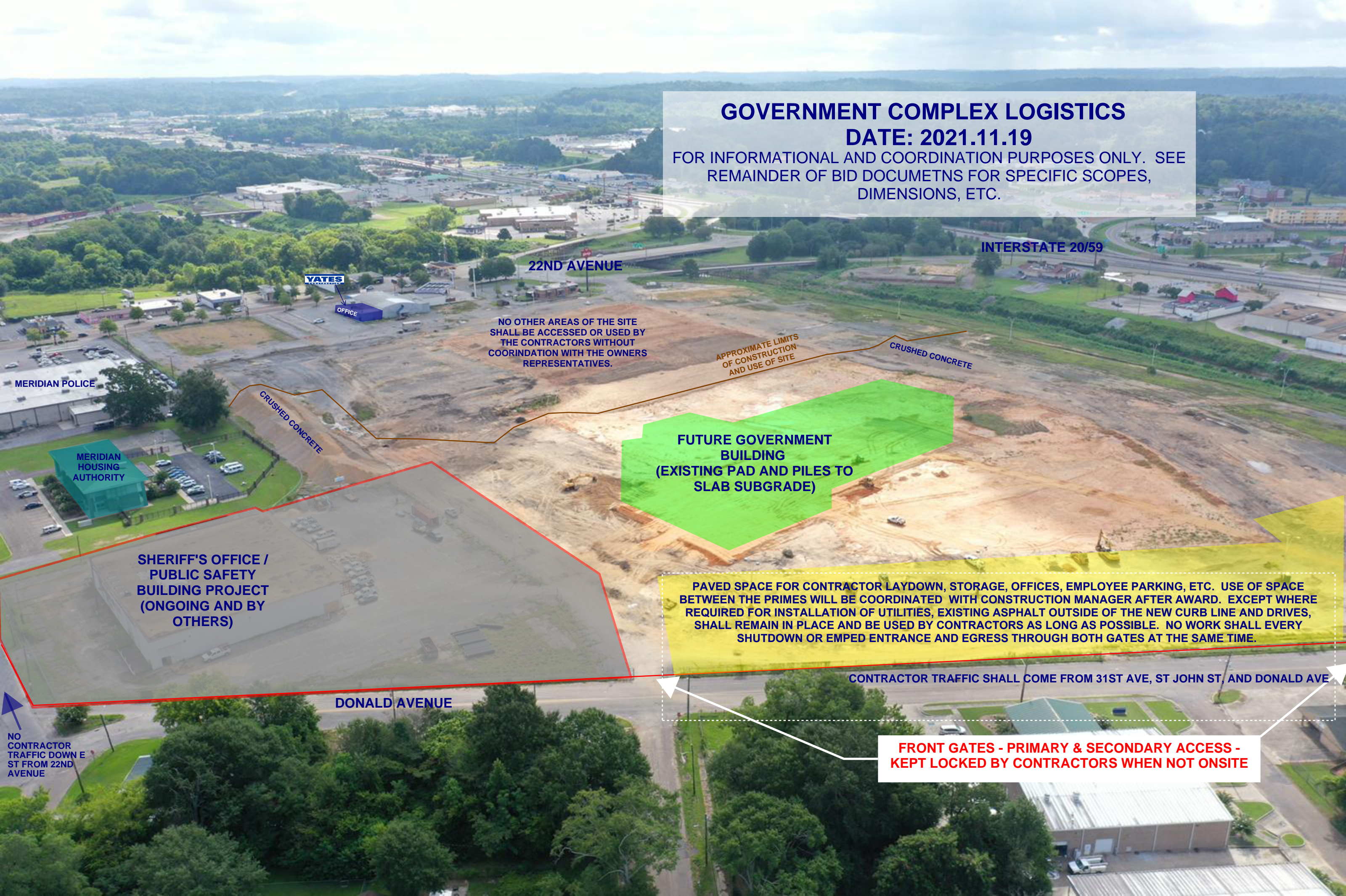
REVIEWED BY: JMW

EA002

GOVERNMENT COMPLEX LOGISTICS

DATE: 2021.11.19

FOR INFORMATIONAL AND COORDINATION PURPOSES ONLY. SEE
REMAINDER OF BID DOCUMENTS FOR SPECIFIC SCOPES,
DIMENSIONS, ETC.



22ND AVENUE

INTERSTATE 20/59

YATES

OFFICE

NO OTHER AREAS OF THE SITE
SHALL BE ACCESSED OR USED BY
THE CONTRACTORS WITHOUT
COORDINATION WITH THE OWNERS
REPRESENTATIVES.

APPROXIMATE LIMITS
OF CONSTRUCTION
AND USE OF SITE

CRUSHED CONCRETE

CRUSHED CONCRETE

MERIDIAN POLICE

MERIDIAN
HOUSING
AUTHORITY

SHERIFF'S OFFICE /
PUBLIC SAFETY
BUILDING PROJECT
(ONGOING AND BY
OTHERS)

FUTURE GOVERNMENT
BUILDING
(EXISTING PAD AND PILES TO
SLAB SUBGRADE)

PAVED SPACE FOR CONTRACTOR LAYDOWN, STORAGE, OFFICES, EMPLOYEE PARKING, ETC. USE OF SPACE
BETWEEN THE PRIMES WILL BE COORDINATED WITH CONSTRUCTION MANAGER AFTER AWARD. EXCEPT WHERE
REQUIRED FOR INSTALLATION OF UTILITIES, EXISTING ASPHALT OUTSIDE OF THE NEW CURB LINE AND DRIVES,
SHALL REMAIN IN PLACE AND BE USED BY CONTRACTORS AS LONG AS POSSIBLE. NO WORK SHALL EVERY
SHUTDOWN OR EMPED ENTRANCE AND EGRESS THROUGH BOTH GATES AT THE SAME TIME.

CONTRACTOR TRAFFIC SHALL COME FROM 31ST AVE, ST JOHN ST, AND DONALD AVE

DONALD AVENUE

FRONT GATES - PRIMARY & SECONDARY ACCESS -
KEPT LOCKED BY CONTRACTORS WHEN NOT ONSITE

NO CONTRACTOR
TRAFFIC DOWN E
ST FROM 22ND
AVENUE