

Capital Projects & Purchasing Department 113 Mable T. Willis Blvd. Walterboro, SC 29488 843.539.1968

BID: CPST-09 RECREATION COMPLEX RENOVATION & EXPANSION

BID DUE: TUESDAY, JUNE 27, 2017 at 2:00pm

Addendum #1

dated 6-22-2017

This Addendum issued prior to receipt of Bid hereby becomes a part of the Construction Documents for the above project.

- All information contained in this Addendum supersedes and takes precedence over any conflicting information in the original Bidding Documents dated May 30, 2017. All Articles listed here-in shall replace the corresponding article provided in the original document.
- 2. Bidders shall take the "Article 9 Basis of Bid" page of this addendum and place it as the <u>FIRST</u> page of their submitted bid packet.

CHANGES TO PROJECT MANUAL

SPECIFICATION SECTION 07 25 00 - WEATHER BARRIERS

- 1. 2.02 Air Barrier Materials
 - a. Add the following to "B.7."
 "f. Soprema Sopraseal LM 202 VP Spray Applied Vapor Permeable Air Barrier Membrane."

SPECIFICATION SECTION 07 71 00 – ROOF SPECIALTIES

- 1. 2.01 Manufacturers
 - a. Add the following to "A.""6. Metal Roofing Systems."

SPECIFICATION SECTION 10 21 13.19 – SOLID PLASTIC TOILET COMPARTMENTS

- 1. 2.01 Manufacturers
 - a. Add the following to "A."
 - "2. Columbia Lockers."

SPECIFICATION SECTION 10 51 26 - PLASTIC LOCKERS

- 1. 2.01 Manufacturers
 - a. Delete item "A." in its entirety and replace with the following
 - "A. Basis-of-Design Manufacturer: Subject to compliance with requirements, provide products of Tufftec Lockers: Website www.scrantonproducts.com or Columbia Lockers."

SPECIFICATION SECTION 10 73 00 - ALUMINUM WALL HUNG CANOPY

- 1. 2.01 Manufacturers
 - a. Add the following to "A.1."
 - "c. Mitchell Metals."

SPECIFICATION SECTION 11 66 23 – GYMNASIUM EQUIPMENT

- 1. 2.01 Basketball Equipment
 - a. Add the following to "A."
 - "6. Arizona Courtlines.
 - 7. ADP Lemco Inc."

SPECIFICATION SECTION 23 74 16.11 - PACKAGED, ROOFTOP AIR-CONDITIONING

UNITS WITH ENERGY RECOVE

- 1. 2.2 Manufacturers
 - a. Add the following to "A."
 - "4. Trane"
 - "5. Daikin Applied Inc."

CHANGES TO DRAWINGS

SHEET S002 - BASIS OF DESIGN - Sheet attached.

SHEET S101 – FOUNDATION / SLAB PLAN - Sheet attached.

SHEET S201 - ROOF FRAMING PLAN - Sheet attached.

SHEET S301 - SECTIONS AND DETAILS - Sheet attached.

SHEET A100 – DEMOLITION FLOOR PLAN - Sheet attached.

SHEET A701 - ENLARGED FLOOR PLAN AND INTERIOR ELEVATIONS - Sheet attached.

CLARIFICATIONS

1. The Gymnasium Equipment spec calls for "Model No. 1100 Safstop safety strap (one for each basketball backstop -18 total)" (emphasis added). The new gymnasium has 6 total backstops. Are the other 12 safety straps for existing backstops in the existing gymnasium? Was "18 total" a typo? Answer: "18 total" is incorrect. The total should be 6 safety straps.

- On Sheet E200, there's a note on the east wall that reads: "SCOREBOARD. COORDINATE EXACT HEIGHT WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN." There doesn't appear to be a scoreboard spec included in the project manual. <u>Answer:</u> Wireless Scoreboard is provided by Owner.
- 3. Please confirm that Builders Risk insurance is required by the contractor.

 Answer: Builders Risk Is required as stated.
- 4. Please confirm that Professional Liability Insurance is not required.

 Answer: Professional Liability is not required.
- 5. In the unit prices breakdown, where are we to install the prices for items that are not listed in your unit price breakdown, but are part of the project? Answer: See new requirements for bidding the project.
- Please clarify the Contract description that is described in Section 01-10-00-1.02 of the specifications. <u>Answer</u>: See contract [page 23] of the project manual for additional information.
- 7. Please provide the phasing of the work that is described in the specs.
 - a. Phase 1: Construct new addition and perform Locker Room renovations to 80%.
 - b. Phase 2: HVAC replacement in existing Gym and renovation to existing spaces. Renovation in existing Gym may be started after new Gym is operational.
 - c. Notes: Must maintain one operational Gym at all times. Splash pad work can be done in either phase.
- 8. Please clarify the boundaries of the temporary fencing is to be installed. **Answer: No temporary fencing.**
- 9. Is this a LEED project? Certain areas of the specs mention LEED (03 30 00 1.3B)

 Answer: Not a LEED project.
- 10. There is a unit price for landscaping but no landscaping plan. Is there a landscaping plan?

 Answer: No landscaping other than grass.
- 11. We need to know the loads of all the basketball nets, curtain, and supplemental steel and all else that hangs from the Metal Building roof. The metal building manufacturers will need this for pricing. Answer: See attached drawings.
- 12. We need to know the roof slope of the metal building. Answer: Refer to structural steel drawings.
- 13. Please verify that plumbing below and above is to be cast iron. See sections 22-14 and 22-13.

 Answer: We take no exception to the use of PVC (Type DWV) for the sanitary waste, vent, and storm drainage piping.
- 14. Please clarify which walls are to receive the Birch plywood wainscoting and please clarify the height.
- a. Gym Plan West Wall Plywood from top of CMU up to 17'-4" and up to 17'-4" where there is no CMU.
- b. Gym Plan East Wall Plywood up to 17'-4"
- c. Gym Plan South Wall Plywood up to 17'-4"
- 15. What is the size of the polished block? Answer: 4" x 8" x 16" nominal.
- 16. For footing sections 3 S301, 4 S301 and 8 S301, what is the rebar detail for the continuous footings? **Answer: See attached drawings.**

- 17. Can PVC be used as the 3" and under pipe going into the building?

 Answer: Yes, but it must be per material as outlined in the specifications.
- 18. Can PVC or HDPE be used as the 3" and over pipe? Answer: No for domestic water piping.
- 19. Can we use a tongue and groove RCP with con seal? Answer: No, all RCP to be bell and spigot with rubber O-ring.
- 20. As pertaining to the basketball hoops, the curtain and anything else hanging from the roof; what are the loads and the roof slope? <u>Answer:</u> Roof Slope is noted on structural drawings. ~1/4" per foot.
- 21. Is the building sprinklered now? Answer: No, existing building to remain un-sprinklered. New building addition to have sprinklers installed.
- 22. Do you have water flow data? Answer: Included in Specifications under Division 21
 Appendix.
- 23. Are all of the spaced conditioned? Answer: Refer to HVAC plans.
- 24. Can PVC be used below slab? Answer: We take no exception to the use of PVC (Type DWV) for the sanitary waste, vent, and storm drainage piping.
- 25. What is the total collateral load? **Answer: See attached drawings.**
- 26. Can 40" insulated wall panels be used? Answer: 40" insulated wall panels may be acceptable as long as aesthetic intent is still maintained. Panels must still be flush with reveals at 12".
- 27. What is the height on the ground face CMU? Answer: Ground face CMU up to 3'-4" at gym and full height at fitness.
- 28. On the ground face block, at the return corners at the windows and doors, does the end of the block that will be showing need to be a normal flat end or a ground face return end?

 Answer: All exposed sides to be ground face.
- 29. Are there any alternate Mfg.'s of glass block that you will accept? Pittsburgh Corning offers a good glass block. Assubstitution request can be submitted for alternate manufacturers.
- 30. Plumber asked me how they are to get the toilet supply into a block wall in the remolded rest rooms? No detail to fur out the wall. He says there is no way to get into the wall now and run water. Answer: In Women's Locker Room plan west wall plumbing will have to enter wall above ceiling and wall will have to be chiseled to accommodate piping. At 3 toilet locations part of wall is new and will not require full height chiseling. In Women's Locker Room plan north wall a 4" nominal CMU fur out will be added to the Locker Room side of the wall to accommodate the piping. In Men's Locker Room plan south wall a 4" nominal CMU fur out will be added to the Locker Room side of the wall to accommodate the piping. Refer to revised drawing A701.
- 31. Page A100, "alternates" calls for Alt 1 to be remove and replace existing athletic flooring. Page 70 of the specs alternate pricing bid form calls for Alt 1 to be to provide access controls to doors. Answer: Page A100 is incorrect, refer to page 70 of the project manual. Please see revised Alternates List page 70.
- 32. Structural page S101 has a scale noted as ¼". Isn't this page 1/8" scale?

 Answer: See attached drawings.

ARTICLE 13 - BASIS OF BID; COMPARISON OF BIDS

13.01 Base Bid and Unit Price Schedule

- A. Bidders shall submit a base bid for the project, as listed in the Specifications, General Conditions, Drawings and any Addendums. Failure for the Contractor or Subcontractor(s) to properly perform takeoffs for the project does not relive the bidder of their obligation to provide a complete, finished product, for the submitted base bid amount.
- B. Bidders shall submit a Base Bid as a lump sum.
- C. Within 24 hours of the lowest responsive bidder being notified by Colleton County, the bidder shall submit to Colleton County for review and approval, the attached unit price schedule for each item of work listed. All quantity take offs shall be listed in the form as requested. Failure for the bidder to provide this information in the allotted time will result in the bidder being disqualified and shall forfeit their Bid Bond.
- D. The total of all unit prices will be the sum of the products of the quantity of each item and the corresponding unit price.
- E. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.
- 13.02 The Bid price shall include such amounts as the Bidder deems proper for overhead and profit and any account of cash allowances, if any, named in the Specifications, Drawings, and Addendums or as provided in Paragraph 11.02 of the General Conditions.
- 13.03 Bid prices will be compared after adjusting for differences in the time designated by Bidders for Substantial Completion. The adjusting amount will be determined at the rate set forth in the Contract Documents for liquidated damages for failing to achieve Substantial Completion for each day before or after the desired date appearing in Article 9.
- 13.04 The contents of the successful IFB/RFP are included as if fully reproduced herein. Therefore, the selected contractor must be prepared to be bound by his/her proposal as submitted.

ARTICLE 14 - SUBMITTAL OF BID

- 14.01 With each copy of the Bidding Documents, a Bidder shall furnish one (1) original separate unbound copy of the Bid Documents, to include all forms listed in 2016-1714. Two (2) additional bound copies are to be submitted with the original. The unbound copy of the Bid Form is to be completed and submitted with the Bid security.
- 14.02 A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the Advertisement or Invitation to Bid and shall be enclosed in an opaque sealed envelope plainly marked with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, Contractor's License Number, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate envelope plainly marked on the outside with the notation "CPST-09". A mailed Bid shall be addressed to:

Colleton County Kaye B. Syfrett, Procurement Manager 113 Mable T. Willis Boulevard Walterboro, SC 29488

- 14.03 In the case of Inclement Weather/Closure of Colleton County offices; If the Colleton County office is closed for business at the time scheduled for bid opening, for whatever reason, sealed bids will be accepted and opened on the next scheduled business day, at the originally scheduled time.
- 14.04 The Bid shall be submitted on the Bid Form provided; no other form is acceptable.
- 14.05 The successful Bidder will be required to provide verified breakdown of costs of all services and work in a manner acceptable to the Owner.
- 14.06 All blanks on the Bid Form shall be filled in, either typed or printed in ink. The person signing the bid shall initial all corrections or erasures.
- 14.07 Where so indicated on the Bid Form, the Bid Sum shall be expressed in both words and figures; in case of a discrepancy between the two, the Sums expressed in words shall govern.
- 14.08 List unit price on quantity specified extend and show total. In case of errors in extension, unit prices shall govern.
- 14.09 Bidder shall quote all Alternates in the Bidding Documents. If Bidder fails to bid on all Alternates, then his/her Bid may be considered irregular, non-responsive and may be disqualified.
- 14.10 Bids containing qualifications will be considered irregular, non-responsive and may be disqualified.
- 14.11 A Bid Form submitted by a partnership shall list the names of all partners and shall be signed in the partnership name by one of the members of the partnership who is authorized to sign for the partnership.
- 14.12 A Bid Form submitted by a corporation shall be executed in the legal name of the corporation, followed by the state of incorporation and signed by the President or Vice President or another authorized officer. The name of each person signing the Bid Form shall be typed or printed below the signature.
- 14.13 When the person signing for a corporation is other than the President or Vice President and when requested by the Owner, a resolution or other satisfactory evidence of the authority of the officer signing in behalf of the corporation shall be furnished for the Owner's records. The name of each person signing the Bid Form shall be typed or printed below the signature.

ARTICLE 15 - MODIFICATION OF BID

15.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.

ARTICLE 16 - OPENING OF BIDS

16.01 Bids will be opened at the time and place indicated in the Advertisement or Invitation to Bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids in the form of a Bid Tabulation and Bid Comparison.

ARTICLE 17 - BIDS TO REMAIN SUBJECT TO ACCEPTANCE

17.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner ay, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 18 - EVALUATION OF BIDS AND AWARD OF CONTRACT

- 18.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, non-responsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also, reserves the right to waive all informalities involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.
- 18.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.
- 18.03 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Basis of bid; Comparison of bids, the Bid Form or prior to the Notice of Award.
- 18.04 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the General Conditions.
- 18.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities to perform the Work in accordance with the Contract Documents.
- 18.06 If the Contract is to be awarded, Owner will award the Contract to the Bidder whose Bid is in the best interests of the Project.
- 18.07 The Owner reserves the right not to Award the Project.
- 18.08 The Owner shall have the right to accept Alternates in any order or combination, and to determine the low bidder on the basis of the sum of the Base Bid and alternates accepted.

ARTICLE 5 - CONTRACT PRICE

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraphs 5.01 A & B below:
 - A. For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of that item as indicated in the Unit Price Form attached hereto as part of these Contract Documents.
 - B. Allowances to be used at the owner's discretion shall be included in Base Bid Proposal. Allowances will be listed separately in the submitted schedule of values and unit price sheet.

Allowances				
Signage	LS	1	\$ 5000.00	\$ 5000.00
Irrigation	LS	1	\$ 5000.00	\$ 5000.00
Unfounded issues	LS	1	\$ 5000.00	\$ 5000.00

ARTICLE 9 - BASIS OF BID

BASE BID & ALTERNATE BID UNIT PRICE

ADD Alternate 7: Upgrading Lighting, Venting Diffusers

in same location.

Description Remove and dispose of existing lights,

diffusers/vents throughout as noted. Replace with new

Item No.

7.

Contractor shall be responsible for all aspects of the project to include but not limited to Fees, Permits, Rentals, Electrical and Water Hookups and any other items required to complete the project as listed in the Specification, General Conditions, Drawings and Addendums.

Contractor shall make quantity take-offs using drawings to determine quantities to his satisfaction, reporting promptly any discrepancies which may affect bidding.

The Owner shall have the right to accept Alternates in any order or combination, and to determine the low bidder on the basis of the sum of the Base Bid and alternates accepted.

BASE BID PROPOSAL: Bidder/Proposer agrees to perform all of the work described in the Specifications, General Conditions, Drawings, and Addendums, including allowances, as shown for the sum of:

		Unit	Quantity	Unit Price	Bid Price
ADD Altern	ate 1: Door Card Access Controls				
Item No.	Description Add door access controls to the following	EA	1	\$	\$
1.	doors, 101-4, 129-1, 130-1, 133-3, 134-4, 136-2. See				
	sheet A900 and specification for alternate hardware set.				
ADD Altern	ate 2: Tile Flooring				
Item No.	Description Demolish existing tile flooring and replace	SF	100	\$	\$
2.	with new tile flooring in specified locations.				
ADD Altern	ate 3: Brick Cleaning and Sealing				
Item No.	Description Clean and seal existing interior brick at	SF	100	\$	\$
3.	specified locations.				
ADD Altern	ate 4: Painting Interior Brick				
Item No.	Description Clean and paint existing interior brick at	SF	100	\$	\$
4.	specified locations. Color to be determined by				
	Architect.				
ADD Altern	ate 5: Toilet Partitions				
Item No.	Description Demolish existing toilet partitions and	EA	1	\$	\$
5.	replace with new toilet partitions in locations to match				
	existing. Patch wall and floor as necessary.				
ADD Altern	ate 6: Painting Exterior Brick				
Item No.	Description Clean and Paint all existing exterior brick.	LS		\$	\$
6.	Color to be determined by Architect.				
1	·	1	1	1	

LS

\$

\$

This is not a comprehensive list of items included in the contract documents and represents only a portion of the project total.

- 5.01 Bidder will complete the Work in accordance with the Contract Documents and the following unit prices are established for this project.
 - A. When changes in the work are ordered by the Owner, and such changes involve the following items, the following unit prices will be used to calculate adjustments to the Contract Sum. These unit prices shall be for the Work as specified.
 - B. **Subcontractor** labor, supervision, administrative support, materials, equipment, accessories, shipping, preparation, insurance, testing, overhead, profit, applicable taxes, permits, fees, warranties and all other associated costs for the finished and completed Work shall be listed in item #2 thru #30. All unit prices for utility conduits shall include sweeps, bends, couplings, caps, fittings, etc. which shall be included in the unit price per linear foot. Unit prices for undercut soils shall include material in place, surveyed and compacted pursuant to the Contract Documents.
 - C. **General Contractor** labor, supervision, administrative support, materials, equipment, accessories, shipping, preparation, insurance, testing, overhead, profit, applicable taxes, permits, fees, warranties and all other associated costs for the finished and completed Work shall be listed in item #01.

Submit unit prices for the following items. This list may not include all components necessary to provide a completed product, therefore any applicable items necessary to provide a completed product should be added in your unit price response.

<u>Item</u> No.	<u>Description</u>	<u>Unit</u>	Quantity	<u>Unit Price</u>	Bid Price
1 <u>110.</u> 01	General				
UI	Mobilization	LS	1	\$ -	\$ -
	Site Supervision	DAILY	1	\$ -	Φ -
	Overhead and Profit	LS	1	%	
	Bonds	Ls	1	\$	\$
		LS	1	\$	\$
	Permitting	LS		\$	\$
	Rental Equipment Utilities	LS	1	\$	\$
00	_	LS	1		Ъ
02	Demolition	1.0	1	Φ.	•
	Building Selective Demolition	LS SF		\$ -	\$.
	- temporary partitions		200	\$ -	\$
	- barricades / signs	LS	1	\$ -	\$
	- haul and dump	CY		\$ -	\$
	- dump charges	CY	0.50	\$ -	\$
	- asbestos abatement - duct mastic	SF	850	\$ -	\$
03	Concrete				
	Lines & Batters	SF		\$ -	\$
	Footings	CY		\$ -	\$
	Slab on Grade	SF		\$ -	\$
	Infill/Patch at Existing Slabs	SF		\$ -	\$
04	Masonry				
	C.M.U.				
	- 4" hfgf	EA		\$ -	\$
	- 8" stack bond	EA		\$ -	\$
	Glass Block - 6x6	EA		\$ -	\$
	Mortar	BG		\$ -	\$
	Sand	CY		\$ -	\$.
	Wall Ties	M		\$ -	\$
	Horizontal Reinforcing	LF		\$ -	\$
	Rebar	TN		\$ -	\$
	Concrete Fill	CY		\$ -	\$

				_	_
	Flashing - stnls stl	LF		\$ -	\$ -
	Grout / Brace Door Frames	EA		\$ -	\$ -
	Scaffolding	SF		\$ -	\$ -
	Clean Block	SF		\$ -	\$ -
05	Metals				
	Structural Steel	TN		\$ -	\$ -
	Metal Roof Deck			\$ -	\$ -
	- 1 1/2" flat roof	SF		\$ -	\$ -
	- 3" at gym	SF		\$ -	\$ -
	Miscellaneous Iron			*	,
	- roof access ladder	EA		\$ -	\$ -
	- lintels / angles	LF		\$ -	\$ -
06	Woods & Plastics			*	1
	Rough Carpentry				
	- trtd. nailers	BF		\$ -	\$ -
	- blocking / nailers	BF		\$ -	\$ -
	- plywood at parapet	SHT		\$ -	\$ -
	- plywood at gym wall	SHT		\$ -	\$ -
	- rough hardware	LS	 	\$ -	\$ -
	Casework (solid surface tops)		1	<u> </u>	Ψ -
	- reception desk	LF	1	\$ -	\$ -
	- vanities	LF		\$ -	\$ -
07	Moisture & Thermal Protection	LI			Ψ -
01	Roofing				
	- membrane roofing / insulation / flashing	SQ		\$ -	\$ -
	- membrane parapet / flashing	SQ		\$ -	\$ -
	- roof hatch with ladder	EA		\$ -	\$ -
	Metal			φ -	φ -
	- downspouts	LF		¢	¢
	·	EA		\$ - \$ -	\$ - \$ -
	- scuppers - splash blocks	EA			
		SF		\$ - \$ -	\$ - \$ -
	- suspended metal canopies - metal wall panel	SF SF		\$ -	\$ -
	non-insulated	SF		c	φ.
	1			\$ -	\$ -
	versa wall panel	SF		\$ -	\$ -
	fascia / soffit	SF		\$ -	\$ -
	Building Insulation	05		•	
	- rigid insulation 2"	SF		\$ -	\$ -
	- fluid applied air / vapor barrier	SF		\$ -	\$ -
	Sprayed Fireproofing	SF		\$ -	\$ -
	Caulking / Firesafing	SF		\$ -	\$ -
80	Doors and Windows				
	Doors / Frames / Hardware				
	- h.m. doors	EA		\$ -	\$ -
	- h.m. doors in existing frames	EA		\$ -	\$ -
	- s.c. wood doors	EA		\$ -	\$ -
	- h.m. door frames	EA		\$ -	\$ -
	- finish hardware	EA		\$ -	\$ -
	- replace existing finish hardware	EA		\$ -	\$ -
	Glass & Glazing				
	- alum. glass doors	EA		\$ -	\$ -
	- storefront	SF		\$ -	\$ -
	- view panels	EA		\$ -	\$ -
	- alum. glass doors - in existing frames	EA		\$ -	\$ -
09	Finishes				
	Floors				
	- clean rubber at gym	SF		\$ -	\$ -
		SF			
	- clean existing floors			\$ -	\$

	- stained concrete	SF	\$	_	\$	_
	- gym	SF	\$		\$	_
	- ceramic tile	SF	\$		\$	
	- carpet	SY	\$		\$	_
	- sealer	SF	\$		\$	
	Base		Ψ		Ψ	
	- rubber	LF	\$		\$	
	- ceramic tile	LF	\$		\$	-
	Walls	L	φ	-	φ	-
	- exterior fascia / soffit / parapet					
	stud framing - 4"	SF	Φ.		\$	
	stud framing - 4 stud framing - 6"	SF	\$ \$	-	\$	-
	backer board or sheathing	SF	\$	-	\$	-
	- interior	SF .	Φ	-	φ	-
		SF	Φ.		Φ.	
	stud framing	SF	\$	-	\$	-
	cement board		\$	-	\$	-
	- ceramic tile	SF	\$	-	\$	-
	Ceilings					
	- acoustical	 			_	
	standard	SF	\$	-	\$	-
	moisture resistant	SF	\$	-	\$	-
	- gypsum	SF	\$	-	\$	-
	Painting					
	- h.m. door	EA	\$	-	\$	-
	- h.m. door frames	EA	\$	-	\$	-
	- epoxy / cmu	SF	\$	-	\$	-
	- interior walls	SF	\$	-	\$	-
	- exterior walls	SF	\$		\$	
	- exposed ceiling	SF	\$	-	\$	-
	- existing doors	EA	\$	-	\$	-
10	Specialties					
	Toilet Partitions / Accessories					
	- toilet partitions - phenolic	EA	\$	-	\$	-
	- urinal screens	EA	\$	-	\$	-
	- grab bars	EA	\$	-	\$	-
	- toilet tissue dispensers	EA	\$	-	\$	-
	- toilet seat cover dispenser	EA	\$	-	\$	-
	- mirrors	EA	\$	-	\$	-
	- mirror wall	SF	\$	-	\$	-
	- paper towel dispenser / w.r.	EA	\$	-	\$	-
	- hand dryer	EA	\$	-	\$	-
					T -	
	- soap dispenser	EA	\$	-	\$	-
	- soap dispenser - sanitary napkin disposal			-	\$	-
		EA	\$			- -
	- sanitary napkin disposal - sanitary napkin vendor	EA EA	\$ \$	-	\$	- - -
	- sanitary napkin disposal	EA EA EA	\$ \$ \$	-	\$	- - -
	- sanitary napkin disposal - sanitary napkin vendor - changing table	EA EA EA	\$ \$ \$ \$	- - -	\$ \$ \$ \$	- - - -
	- sanitary napkin disposal - sanitary napkin vendor - changing table - shower curtains / rods - folding shower seat	EA EA EA EA	\$ \$ \$ \$ \$	- - -	\$ \$ \$	-
	- sanitary napkin disposal - sanitary napkin vendor - changing table - shower curtains / rods - folding shower seat - soap dish	EA EA EA EA EA EA	\$ \$ \$ \$ \$ \$	- - - -	\$ \$ \$ \$	- - - - -
	- sanitary napkin disposal - sanitary napkin vendor - changing table - shower curtains / rods - folding shower seat - soap dish - towel / robe hooks	EA	\$ \$ \$ \$ \$ \$ \$	- - - -	\$ \$ \$ \$ \$	
	- sanitary napkin disposal - sanitary napkin vendor - changing table - shower curtains / rods - folding shower seat - soap dish - towel / robe hooks - mop holder	EA	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - -	\$ \$ \$ \$ \$ \$	
	- sanitary napkin disposal - sanitary napkin vendor - changing table - shower curtains / rods - folding shower seat - soap dish - towel / robe hooks - mop holder Signage - (allowances)	EA E	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - -	\$ \$ \$ \$ \$ \$	- - - - - - - -
	- sanitary napkin disposal - sanitary napkin vendor - changing table - shower curtains / rods - folding shower seat - soap dish - towel / robe hooks - mop holder Signage - (allowances) Lockers - double tier (12"x12"x60")	EA	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - -	\$ \$ \$ \$ \$ \$ \$	- - - - - - - - -
	- sanitary napkin disposal - sanitary napkin vendor - changing table - shower curtains / rods - folding shower seat - soap dish - towel / robe hooks - mop holder Signage - (allowances) Lockers - double tier (12"x12"x60") Locker Room Benches	EA	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - - - - -	\$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - - - - - -
11	- sanitary napkin disposal - sanitary napkin vendor - changing table - shower curtains / rods - folding shower seat - soap dish - towel / robe hooks - mop holder Signage - (allowances) Lockers - double tier (12"x12"x60") Locker Room Benches Fire Extinguisher Cabinets	EA	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - - -	\$ \$ \$ \$ \$ \$ \$	- - - - - - - - -
11	- sanitary napkin disposal - sanitary napkin vendor - changing table - shower curtains / rods - folding shower seat - soap dish - towel / robe hooks - mop holder Signage - (allowances) Lockers - double tier (12"x12"x60") Locker Room Benches Fire Extinguisher Cabinets Equipment	EA	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - - - - -	\$ \$ \$ \$ \$ \$ \$ \$ \$	-
11	- sanitary napkin disposal - sanitary napkin vendor - changing table - shower curtains / rods - folding shower seat - soap dish - towel / robe hooks - mop holder Signage - (allowances) Lockers - double tier (12"x12"x60") Locker Room Benches Fire Extinguisher Cabinets Equipment TV Mounts	EA	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - - - - -	\$ \$ \$ \$ \$ \$ \$ \$ \$	
11	- sanitary napkin disposal - sanitary napkin vendor - changing table - shower curtains / rods - folding shower seat - soap dish - towel / robe hooks - mop holder Signage - (allowances) Lockers - double tier (12"x12"x60") Locker Room Benches Fire Extinguisher Cabinets Equipment	EA	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - - - - -	\$ \$ \$ \$ \$ \$ \$ \$ \$	

	- volleyball sleeves and anchor inserts	EA		\$	_	\$	_
	- dividing curtain	LF		\$		\$	
	- wall pads	SF		\$		\$	
12	Furnishings	01		Ψ		Ψ	
12	Walk Off Mat	SF		\$		\$	
13	Special Construction	J SF		φ	-	φ	
13		LS		¢.		\$	
21	Pre-Engineered Frame at Gym Fire Protection	LO		\$	-	Ф	
21		1.0		Φ.		Φ.	
	Fire Main Riser Assembly, 4" - 6"	LS SF		\$	-	\$	
00	Light Hazard Wet Sprinkler System	SF SF		\$	-	\$	
22	Plumbing	1.0				Α	
	Plumbing Demolition	LS		\$	-	\$	
	Plumbing Fixtures & Equipment			Φ.		Φ.	
	Water Closet, Wall-Hung, w/ FV & Carrier	EA		\$	-	\$	
	Urinal, w/ FV & Carrier	EA		\$	-	\$	-
	Lavatory, w/ Trim	EA		\$	-	\$	-
	Electric Water Cooler, Dual Bowl	EA		\$	-	\$	
	Washing Machine Box	EA		\$	-	\$	
	Mop Sink	EA		\$	-	\$	
	Shower Valve, Head & Drain	EA		\$	-	\$	_
	Floor Drain	EA		\$	-	\$	-
	Roof Drain	EA		\$	-	\$	
	Shock Absorber - Allowance	EA		\$	-	\$	
	Electric Water Heater, w/ Recirc Pump - Allowance	EA		\$	-	\$	-
	Thermo-Mixing Valve	EA		\$	-	\$	-
	Wall/ Floor Cleanout	EA		\$	-	\$	-
	Plumbing Piping:						
	Dom Water Piping, Incoming - See New Construction	LF		\$	-	\$	-
	Dom Wtr Piping, w/ Ftgs, Hngrs, Insul, 3/4" - 2"	LF		\$	-	\$	-
	Dom Water Piping, w/ Ftgs, Hngrs, Insul, 2" - 3"	LF		\$	-	\$	-
	Dom Water Piping, w/ Ftgs, Hngrs, Insul, 3" - 4"	LF					
	Dom Water Isolation Valve, 2" - 3"	EA		\$	-	\$	-
	Dom Water Isolation Valve, 3/4" - 1-1/2"	EA		\$	-	\$	-
	Water Heater Piping Hookup	EA		\$	-	\$	-
	Fixture Water Rough-in	EA		\$	-	\$	-
	Sanitary Piping, 2" - 4" U/G	LF		\$	-	\$	-
	Sanitary Piping, 2" - 3" A/G	LF		\$	_	\$	_
	Fixture Sanitary Rough-in	EA		\$	_	\$	-
	Sanitary Vent Thru Roof - Allowance	EA		\$	-	\$	
	Roof Drain Piping - Allowance	LF		\$	-	\$	
23	Mechanical	<u> </u>		1		T	
	HVAC Demolition	LS	1	\$	_	\$	
	HVAC Equipment:	1	•			<u> </u>	
	RTU, 7000 CFM, Energy Recovery, Gas Heat	EA		\$	_	\$	
	RTU, 2400 CFM, Standard, Gas Heat	EA		\$		\$	
	Unit Heater, Gas Heat	EA		\$		\$	
	Wall Prop Exhaust Fan	EA	+	\$		\$	
	Reinstall Existing Condensing Unit	EA	+	\$		\$	
	RTU, 2500 CFM, Energy Recovery Wheel, Gas Heat	EA		\$		\$	
	RTU, 1200 CFM, Standard, Gas Heat	EA		\$		\$	
		EA		φ		φ	
	HVAC Piping:	LF		¢		•	
	Refrigerant Piping			\$	-	\$	-
1	Refrigerant	LS EA		\$	-	\$	-
	LIVAA C Considers and Distinct Live Live I	I I /	1			1 %	_
	HVAC Equipment Piping Hookup				-		
	Natural Gas Piping, 3/4" - 1"	LF		\$	-	\$	_
	Natural Gas Piping, 3/4" - 1" Natural Gas Piping Hookups, 3/4" - 1"						-
	Natural Gas Piping, 3/4" - 1"	LF		\$	-	\$	-

	Premium for Roof-Mtd Ductwork	LF	\$ -	- \$	_
	Exhaust Air Ductwork	LB	•	- \$	
	Outside/ Exhaust Air Louver	EA	\$ -	- \$	
	Grilles, Registers & Diffusers	EA	\$ -	- \$	_
	Controls and Test & Balance:		Ψ	Ψ	
	Temperature Controls	LS	\$ -	- \$	
	Air Test & Balance	LS	\$ -	- \$	
26	Electrical	LO	Ψ -	- ψ	
20	Electrical Power				
<u> </u>	100A MLO 120/208V Panelboard	EA	\$ -	- \$	
<u> </u>	225A MLO 120/208V Panelboard	EA	•	· \$	
	600A MB 120/208V Panelboard	EA	•	· \$	-
	100A MB 120/208V Panelboard	EA	•		-
	600A Connection Only	EA	•	_	-
	20A 1 Pole 120V Circuit Breaker	EA EA		_	-
			Ψ		-
	20A 1 Pole 120V Circuit Breaker GFI	EA	Ψ	- \$	-
<u> </u>	TVSS	LS	Ψ	- \$	-
<u> </u>	75A Feeder EMT	LF	Ψ	- \$	-
<u> </u>	115A Feeder EMT	LF	Ψ	- \$	-
<u> </u>	230A Feeder EMT	LF	Ψ	- \$	-
<u> </u>	Equipment & Mechanical Wiring	LS	Ψ	- \$	-
<u> </u>	Receptacle 20A	EA	Ψ	- \$	-
<u> </u>	Receptacle 20A 2 Gang	EA	Ψ	- \$	-
	Receptacle 20A GFI	EA	Ψ	- \$	-
	Receptacle 20A GFI WP	EA	Ψ	- \$	-
	Receptacle 20A / USB	EA	Ψ	- \$	-
	Core Drill Allowance	LS	Ψ	- \$	-
	Branch circuit	LS	\$ -	Ψ	-
	Demolition	LS	\$ -	- \$	-
	Lighting				
	Fixture Type B40	EA	\$ -	Ψ	-
	Fixture Type B54	EA	Ψ	- \$	-
	Fixture Type B69	EA	\$ -	Ψ	-
	Fixture Type C33	EA	Ψ	- \$	-
	Fixture Type C45	EA	Ψ	- \$	-
	Fixture Type E	EA	Ψ	- \$	-
	Fixture Type EM1	EA	\$ -	- \$	-
	Fixture Type EM2	EA	\$ -	- \$	-
	Fixture Type EM3	EA	Ψ	- \$	-
	Fixture Type EMR1	EA	Ψ	- \$	
	Fixture Type EWG	EA	Φ.	- \$	-
	Fixture Type HB1	EA	•	- \$	-
	Fixture Type HB2	EA	•	- \$	-
	Fixture Type T Fixture	EA	\$ -	- \$	-
	Fixture Type T Track	LF	Φ.	- \$	-
	Switch	EA	•	- \$	-
		EA	•	- \$	-
	Switch Sway				
	Switch 3 Way Occupancy Sensor	EA	\$ -	- \$	-
	Occupancy Sensor	EA		T	
	Occupancy Sensor Power Pack	EA EA	\$ -	- \$	- - -
	Occupancy Sensor Power Pack Lighting Control System	EA EA LS	\$ -	- \$ - \$	- - -
	Occupancy Sensor Power Pack Lighting Control System 1KVA Lighting Inverter	EA EA LS EA	\$ - \$ - \$	- \$ - \$ - \$	- - - -
27	Occupancy Sensor Power Pack Lighting Control System 1KVA Lighting Inverter Branch circuit	EA EA LS	\$ - \$ -	\$ - \$ - \$	- - - -
27	Occupancy Sensor Power Pack Lighting Control System 1KVA Lighting Inverter Branch circuit Special Systems	EA EA LS EA	\$ - \$ - \$	- \$ - \$ - \$	- - - -
27	Occupancy Sensor Power Pack Lighting Control System 1KVA Lighting Inverter Branch circuit Special Systems Fire Alarm System	EA EA LS EA LS	\$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	- - - - -
27	Occupancy Sensor Power Pack Lighting Control System 1KVA Lighting Inverter Branch circuit Special Systems Fire Alarm System F.A. Control Panel	EA EA LS EA LS	\$ - \$ - \$ - \$ -	- \$ - \$ - \$ - \$	- - - - -
27	Occupancy Sensor Power Pack Lighting Control System 1KVA Lighting Inverter Branch circuit Special Systems Fire Alarm System	EA EA LS EA LS	\$ - \$ - \$ - \$ -	- \$ - \$ - \$ - \$	- - - - -

	Pull Station	EA		\$	_	\$	_
	Audio / Visual	EA		\$		\$	
	Smoke Detector	EA		\$		\$	
	Duct Detector	EA		\$		\$	
	Flow & Tamper Switch Connection	EA		\$		\$	
	Module	EA		\$		\$	
	Conduit & Cable	LS		\$		\$	
	CATV Empty Raceway System	LS		φ	-	φ	
	Outlet Empty	EA	+	\$		\$	
	3/4" EMT	LF		\$	-	\$	-
	Pull String	LF		\$	-	\$	
	ŭ .	LF		Φ		Ф	
	Security Empty Raceway System	EA		\$		\$	
	Outlet Empty 3/4" EMT	LF		\$	-	\$	
		LF		\$	-	\$	
	Pull String	LF		Ъ	_	Ъ	
	Scoreboard Empty Raceway System	Ε.Δ		Φ.		Φ.	
	Outlet Empty	EA		\$	-	\$	-
	10" X 10" X 6" Pull Box	EA		\$	-	\$	
	3/4" EMT	LF		\$	-	\$	-
	1 1/2" PVC	LF		\$	-	\$	-
	Pull String	LF		\$	-	\$	-
	Trench Small	LF		\$	-	\$	-
	Telephone/Data Empty Raceway System						
	Telephone / Data Outlet Empty	EA		\$	-	\$	
	J Hook	EA		\$	-	\$	-
	3/4" EMT	LF		\$	-	\$	-
	Pull String	LF		\$	-	\$	-
	Grounding System	LS		\$	-	\$	-
30	Site Work						
	Site Selective Demolition						
	- brick wall	LF		\$	-	\$	-
	- transformer pad	SF		\$	-	\$	-
	- sanitary sewer clean outs	EA		\$	-	\$	-
	- sanitary sewer lines	LF		\$	-	\$	-
	Site Preparation						
	Construction Entrance/Exit	LS	1	\$	-	\$	-
	- earth work						
	mobilization	MSF		\$	-	\$	-
	layout / staking	MSF		\$	-	\$	-
	- clearing	LS		\$	-	\$	-
	- topsoil						
	remove	CY		\$	-	\$	-
	replace	CY		\$	-	\$	-
	- grading						
	cut / fill	CY		\$	-	\$	
	- rock /unsuitable soil allowance	LS		\$	-	\$	
	- erosion control						
	silt fence	LF		\$	-	\$	-
	temporary inlet protection	EA		\$	-	\$	-
	concrete washout	EA		\$	-	\$	-
	construction entrance	EA		\$	-	\$	-
	- fine / final grading	MSF		\$	-	\$	_
	Site Paving						
	- repair asphalt	SY		\$	-	\$	_
	- concrete walks	SF		\$	-	\$	
	Landscaping			1		1	
	- trees	EA		\$	-	\$	_
	- shrubs	EA		\$	-	\$	_
	orn and		ı	ΙΨ		_ Ψ	

	- ground cover	EA		\$	-	\$	-
	- Bermuda grass	AC		\$	-	\$	-
	Site Utilities						
	- water / fire line - connect to existing	LF		\$	-	\$	-
	- storm drain system						
	8" h.d.p.e.	LF		\$	-	\$	-
	12" c.p.p	LF		\$	-	\$	-
	yard inlets	EA		\$	-	\$	-
	Site Mechanical Systems:						
	Connect to Existing Water Main	LS		\$	-	\$	-
	Fire Main, 4" - 6" - Allowance	LF		\$	-	\$	-
	Fire Hydrant Assembly	EA		\$	-	\$	-
	Detector Check Valve/ BFP Assembly, 4" - 6"	LS		\$	-	\$	-
	Misc Water to Site RV Parking - (See Alt #9)	LF		\$	-	\$	-
	Site Electrical Systems			T		,	
	Concrete Pad	EA		\$	-	\$	-
	Meter Pedestal	EA		\$	-	\$	-
	1200A MB 120/208V Switchboard N3R	EA		\$	-	\$	-
	Pull Box	EA		\$	-	\$	-
	5/8" X 8' Cu. Ground Rod	EA		\$	-	\$	-
	Cadweld	EA		\$	-	\$	-
	#12 Wire	LF		\$	-	\$	-
	#4/0 Bare Wire	LF		\$	-	\$	-
	600A Service PVC	LF		\$	-	\$	-
	1200A Service PVC	LF		\$	-	\$	-
	5" PVC	LF		\$	-	\$	-
	5" GRC	LF		\$	-	\$	-
	Pull String	LF		\$	-	\$	-
	Trench Large	LF		\$	-	\$	-
	Concrete	CY		\$	-	\$	-
	Sand Fill	CY		\$	-	\$	-
	Cut & Patch	LF		\$	-	\$	-
31	Allowancesowner's discretion						
	Signage	LS	1	\$ 5000.0	00	\$ 5000.	00
	Irrigation	LS	1	\$ 5000.0		\$ 5000.	
	Unfounded issues	LS	1	\$ 5000.0		\$ 5000.	

O DESIGN LOADS		
.1 DEAD LOADS	MAXIMUM	MINIMUM
1.1.1 ROOF DEAD LOADS	GRAVITY LOADS	GRAVITY LOADS
ROOFING MATERIAL ROOF DECK JOISTS INSULATION CEILINGS	7 PSF 3 PSF 7 PSF 3 PSF 2 PSF	6 PSF 3 PSF 4 PSF 2 PSF 2 PSF

30 PSF 17 PSF 1.1.2 PEMB ROOF COLLATERAL LOAD 20 PSF (MINIMUM) SEE S201 FOR ADDITIONAL COLLATERAL LOADS.

MISCELLANEOUS (MECH., ELEC.) 8 PSF

1.2 LIVE LOADS (PER IBC 2015 EDITION)

4.0.4	DOOF 111/F 1 0 4 DO	00 005
1.2.1	ROOF LIVE LOADS	20 PSF
1.2.2	FIRST FLOOR LIVE LOADS	
	MECHANICAL / ELECTRICAL	150 PSF
	ALL OTHER AREAS	100 PSF

1.3 SNOW LOAD (PER IBC 2015 EDITION)

1.3.1 DESIGN PARAMETERS

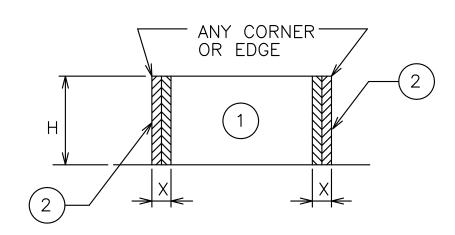
FLAT ROOF SNOW LOAD = 10 PSFSNOW LOAD IMPORTANCE FACTOR, I = 1.10SNOW EXPOSURE FACTOR = 1.0

- 1.4 WIND LOAD (PER IBC 2015 EDITION, ASCE 7-10)
- 1.4.1 BASIC WIND SPEED $V_{ULT} = 146$ MPH (3 SECOND GUST) EXPOSURE C; RISK CATEGORY III NOTE: BUILDING IS LOCATED WITHIN HURRICANE PRONE REGION
- 1.4.2 DESIGN WIND PRESSURE MAIN WIND FORCE RESISTING SYSTEM

LOCATION	WALL WINDWARD (@ MEAN RO) + LEEWARD)OF HEIGHT)	ROOF		X (FT)
	INTERIOR ZONE	END ZONE	INTERIOR ZONE	END ZONE	
ALL AREAS, UNO	30 PSF	45 PSF	-40 PSF	-53 PSF	15

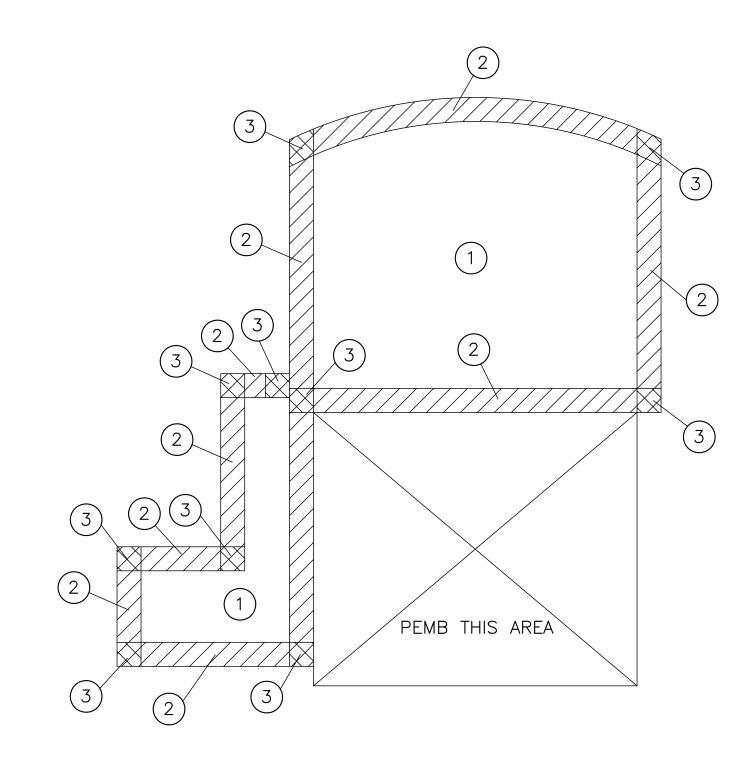
1.4.3 DESIGN WIND PRESSURE - WALL COMPONENTS & CLADDING

EXTERIOR WALL SYSTEMS & THEIR ATTACHMENTS TO THE PRIMARY STRUCTURE SHALL BE DESIGNED FOR THE PRESSURES SHOWN IN THE DIAGRAM BELOW:



PRESSURE ON EXTERIOR WALL SYSTEMS FOR BUILDINGS WITH MEAN ROOF HEIGHT (H) = AS SHOWN

	LOCATION	Н	WINDWARD PRESSURE psf (INWARD)		LEEWARD PRESSURE psf (OUTWARD)		Х
			1	2	1	2	(FT)
	AREA \leq 10 ft 2	0-60'	46	46	-50	-60	15
ALL AREAS, U.N.O.	$AREA = 50 \text{ ft}^2$	0-60'	40	40	-45	-50	15
3.11.3.	AREA \geq 100 ft ²	0-60'	39	39	-42	-47	15



1.4.4 DESIGN WIND PRESSURE - ROOF UPLIFT JOISTS, LIGHT GAGE TRUSSES, ROOF DECK & FASTENERS SHALL BE DESIGNED FOR THE WIND PRESSURES SHOWN BELOW

TDIDLITAD\/	UPLIFT PRESSURE psf			
TRIBUTARY AREA	ZONE ①	ZONE ②	ZONE ③	Х
	T (PSF)	T (PSF)	T (PSF)	(FT)
$A \leq 10 ft^2$	-50	-83	-125	15
$A = 50 ft^2$	-46	-62	-75	15
A > 100ft ²	-45	-54	-54	15

"T" = TYPICAL ROOF AREA EXCLUDING OVERHANG "+" = PRESSURES ACTING TOWARD SURFACES "-" = PRESSURES ACTING AWAY FROM SURFACES

1.5 SEISMIC LOAD (PER IBC 2015, ASCE 7-10)

1.5.1 RISK CATEGORY:

1.5.3	SEISMIC IMPORTANCE FACTOR: SPECTRAL ACCELERATION COEFFICIENTS: SPECTRAL RESPONSE COEFFICIENTS	le = 1.25 Ss = 0.772 S1 = 0.245 Sps = 0.613 Sp1 = 0.312
1.5.5	SOIL SITE CLASS	D
1.5.6	BASIC SEISMIC-FORCE-RESISTING SYSTEM	BUILDING FRAME SYSTEM SPECIAL REINFORCED MASONRY SHEAR WALLS
1.5.7	DESIGN BASE SHEAR	V = 0.153 x W KIPS EQUIVALENT LATERAL FORCE PROCEDURE, TABLE 1616.6.3
1.5.8	SEISMIC DESIGN CATEGORY	D
1.5.9	SEISMIC RESPONSE COEFFICIENT	Cs = 0.153

III (TABLE 1604.5)

R = 5.0

2.0 FOUNDATION DESIGN CRITERIA

- 2.1 MINIMUM FOOTING BEARING DEPTH BELOW GRADE IS 18 INCHES.
- 2.2 MINIMUM FACTOR OF SAFETY FOR STABILITY AGAINST SLIDING,
- OVERTURNING AND UPLIFT FOR INDIVIDUAL COMPONENTS IS 1.5 2.3 ALLOWABLE SOIL BEARING CAPACITY = 2000 PSF
- 2.4 MODULUS OF SUBGRADE K = 175 PSI/IN

1.5.10 RESPONSE MODIFICATION COEFFICIENT.

MMSA, Inc. Michael M. Simpson & Associates, Inc. Consulting Structural Engineers 30 Patewood Drive, Suite 100 Greenville, S.C. 29615 (864) 331-1201

REMARKS

ASTM A572

ASTM A572

ASTM A36

ASTM A36 ASTM A307

ASTM A500

Clark Patterson Lee

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		REMARKS
STRUCTURAL ELEMENT	f'c CONCRETE COMPRESSIVE STRENGTH @ 28 DAYS (PSI)	
ALL FOOTINGS U.N.O.	4000	
SLAB-ON-GRADE	3500	
ALL OTHER CONCRETE	3500	

		, '	51110	10	1 /10/11/11 /10
					GRADE E
CONCRETE COVER SCHEDULE				ANDARD HOOKS	
ANNALIA CONCRETE COVER PROTECTION FOR REINFO	DOEMENT DADS SHALL			ON PER (ACI 3	•
MINIMUM CONCRETE COVER PROTECTION FOR REINFORCEMENT BARS SHALL BE AS FOLLOWS: (SEE ACI 318-14, SECTION 7.7 FOR CONDITIONS NOT NOTED). DIMENSIONS FOR BAR PLACEMENT GIVEN IN SECTIONS AND DETAILS SHALL			HOOK DEVELOPMENT LENGTH Ldh (INCHES)		
DIMENSIONS FOR BAR PLACEMENT GIVEN IN SECTION SUPERSEDE MINIMUM COVER REQUIREMENTS GIVEN F	S AND DETAILS SHALL '		BAR	f'c	f'c
SUPERSEDE MINIMUM COVER REQUIREMENTS GIVEN F	IERE.		SIZE	4000 PSI	3000 PSI
FOOTINGS (EARTH FORMED)	3 INCHES		#3	7	9
COLUMNS / PIERS	1 1/2 INCHES		#4	10	11
GRADE BEAMS OR SLAB TURNED DOWN EDGES:			#5	12	14
TOP BOTTOM	1 1/2 INCHES 3 INCHES		#6	15	17
	7 11101150		#7	17	19
SIDES (BOARD FORMED) #5 BAR & SMALLER #6 THRU #11 BAR	1 1/2 INCHES 2 INCHES		#8	19	22
	ROM TOP 3/4 INCHES		#9	22	25
SLABS-ON-GRADE (EXPOSURE TO WEATHER) FROM			#10	24	28
RETAINING WALLS (NO SURFACES SHALL BE EARTH	FORMED		#11	27	31
RETAINING WALLS (NO SURFACES SHALL BE EARTH EARTH SIDE AND FRONT SIDE (EXPOSED TO WEATHE					
#5 BAR AND SMALLER	1 1/2 INCHES				

NOTES:
1. CONCRETE IS NORMAL WEIGHT CONCRETE.
2. BAR YIELD STRENGTH, fy = 60 KSI.
 SIDE COVER REQUIREMENTS OF ACI SECT. 12.5.3.2 ARE ASSUMED TO NOT BE MET.
4. TIE OR STIRRUP REQUIREMENTS OF ACI SECT. 12.5.3.2 ARE ASSUMED TO NOT BE MET.
5. REDUCTION FOR EXCESS REINFORCEMENT IS NOT TAKEN. 6. HOOK DEVELOPMENT LENGTH IS VALID FOR 180° HOOKS ALSO.

50

66

46 35

PROVIDE STANDARD BAR CHAIRS AND SPACERS AS REQUIRED TO MAINTAIN CONCRETE PROTECTION SPECIFIED.

Lui	I (INCITES)				
BAR SIZE	f'c 4000 PSI	f'c 3000 PSI			
#3	7	9			
#4	10	11			
#5	12	14			
#6	15	17			
#7	17	19			
#8	19	22			
#9	22	25			
#10	24	28			
#11	27	31			
HOOK EXTENSION PER ACI 318-14					

STEEL MATERIALS SCHEDULE

BEAMS & GIRDERS

COLUMNS

ANCHOR

BOLTS

TUBING

CONNECTIONS, PLATES, & ALL OTHERS

YIELD STRENGTH (KSI)

50

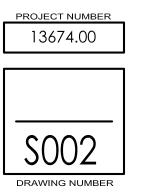
<	
	∠HOOK DEVELOPMENT LENGTH, Ldh

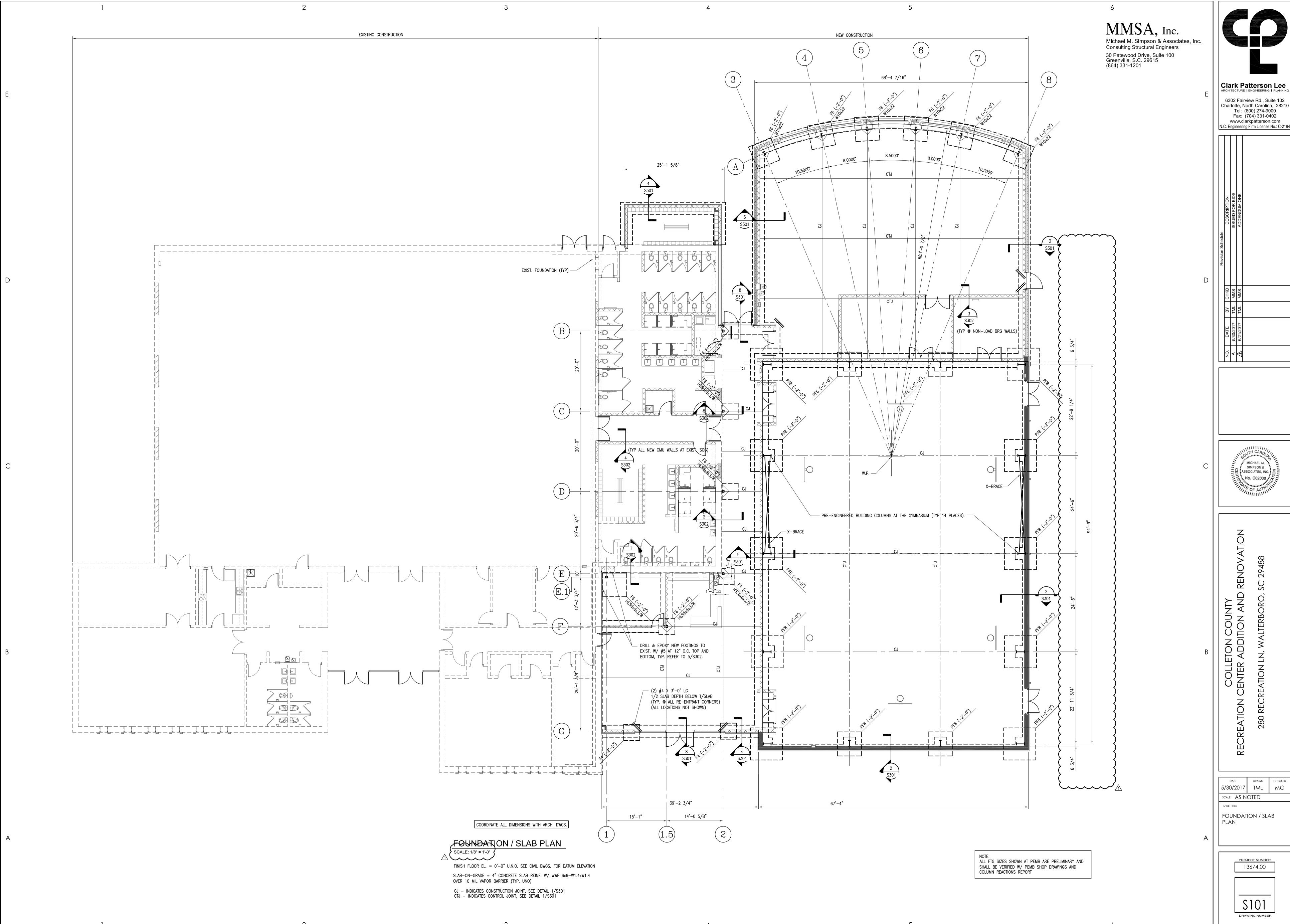
	IAP SP	PLICES OF F	RFINFOR	RCING	
	N TENSIC	ON (PER AC	CI 318-		
R TO R BAR SPACING	(TOP LESS THAN 4db	P BARS) 4db OR MORE	LESS THAN 4db	OTHER 4db OR MORE	BARS)
	21	21	16	16	1 1/2 "
	30	28	23	22	2"
					,

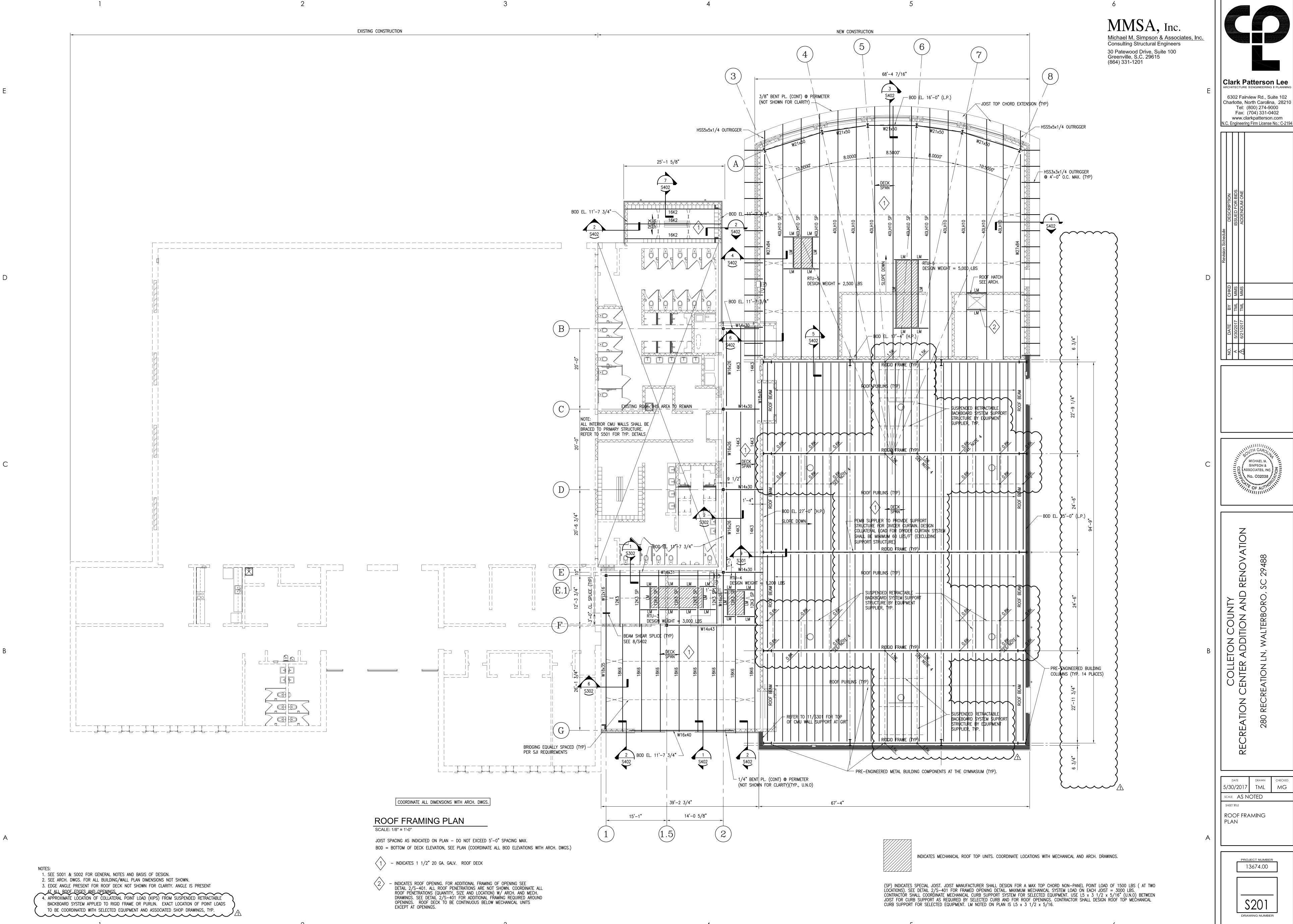
36 | 27 | 2 1/2 " 43 | 51 | 33 | 3" 69 | 39 | 3 1/2 90 | 51 | 4" 148 83 114 64 4 1/2 188 | 106 | 145 | 81 | 231 | 130 | 178 | 100 | 5 5/8 1. YIELD STRENGTH OF REINFORCEMENT, fy, IS 60 ksi (LAP SPLICE LENGTH IS IN INCHES).
2. CONCRETE IS NORMAL WEIGHT (150 pcf). TOP BAR INDICATES HORIZONTAL REINFORCEMENT WHICH IS PLACED ABOVE 12" OR MORE OF FRESH CONCRETE.
 UNLESS NOTED OTHERWISE COLUMNS & PIERS UTILIZE TENSION LAP SPLICES. STRAIGHT DEVELOPMENT LENGTH OF AN UNLAPPED BAR IS EQUAL TO VALUE FROM TABLE DIVIDED BY 1.3. 5. CATEGORY FOR BARS SPACED LESS THAN 4d, ON CENTER CORRESPONDS TO CATEGORY 1 IN THE CRSI HANDBOOK WHEREAS FOR BARS SPACED 4d, OR MORE ON CENTER CORRESPOND TO CRSI CATEGORY 5.

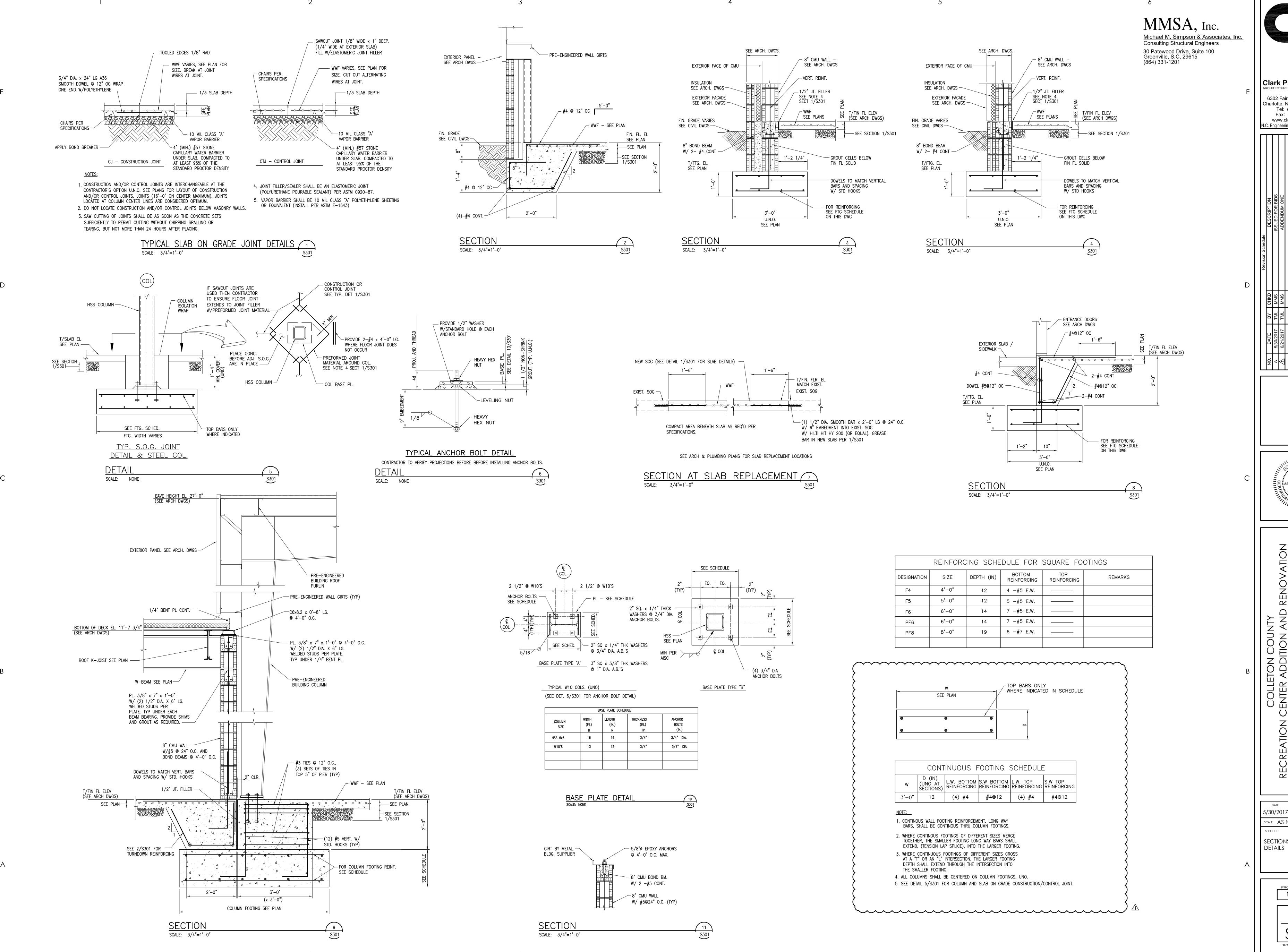
COLLE

DATE	DRAWN	CHECKED				
5/30/2017	TML	MG				
scale AS N	OTED					
SHEET TITLE						
BASIS OF DESIGN						





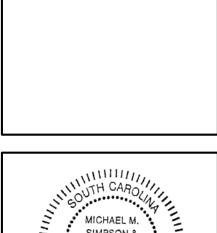




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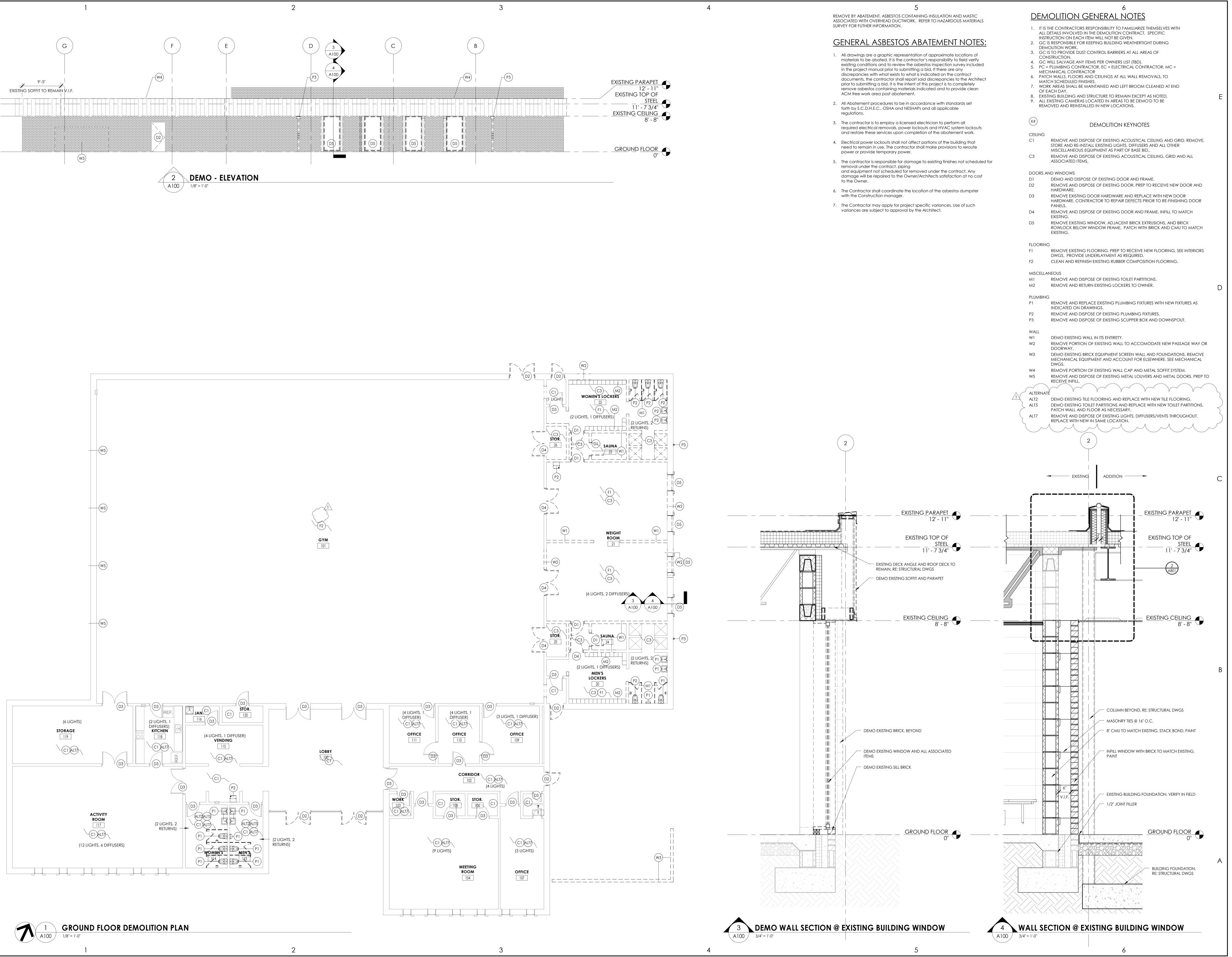


RENO

DRAWN CHECKED 5/30/2017 TML MG scale AS NOTED SECTIONS AND

13674.00

\$301





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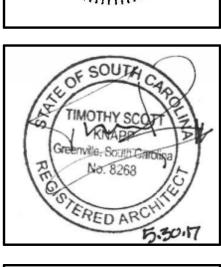
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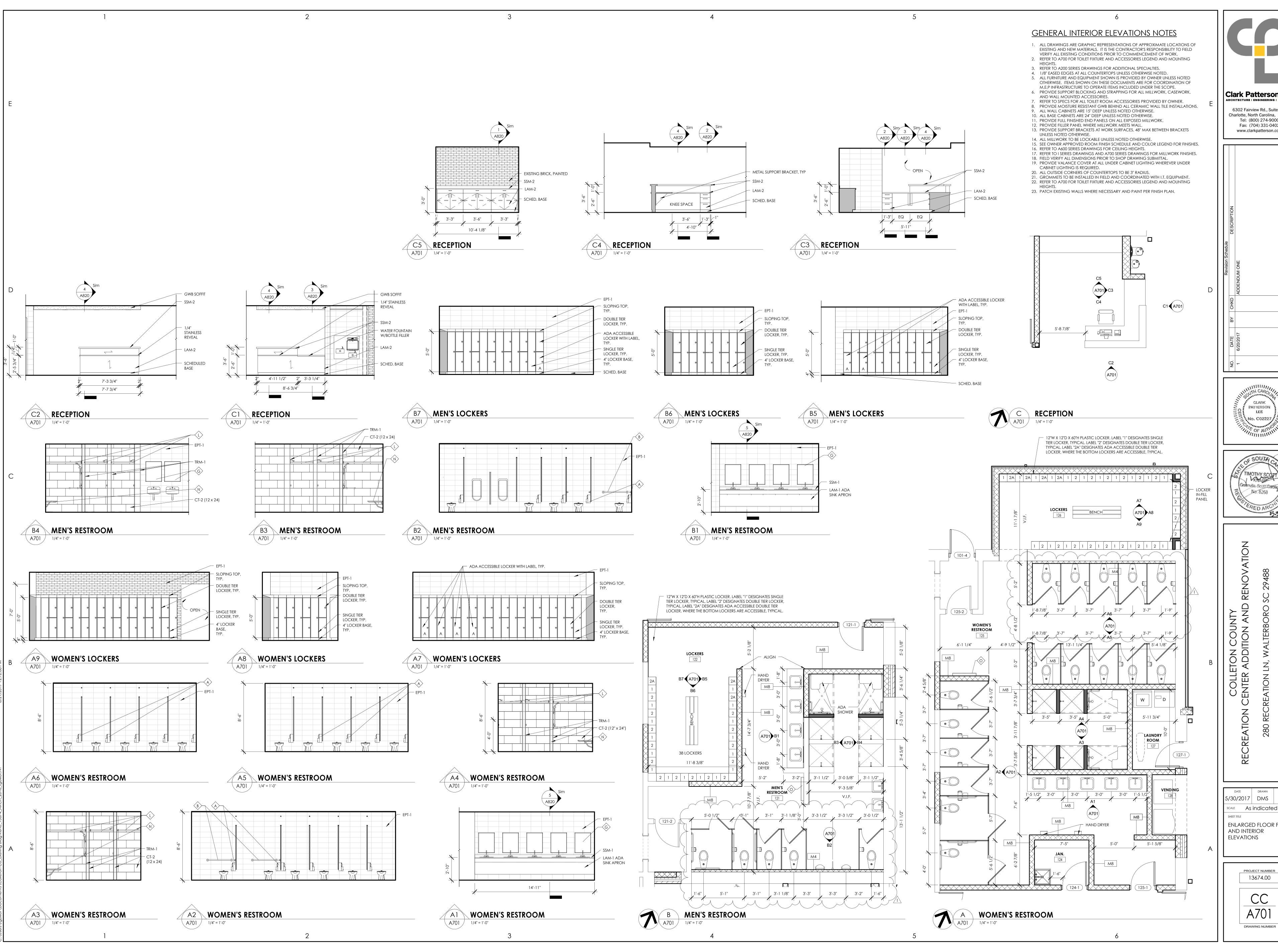
% No. C02227,



DATE DRAWN CHECKED 5/30/2017 DMS RFG SCALE As indicated SHEET TITLE DEMOLITION FLOOR PLAN

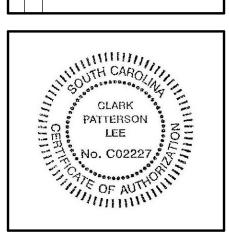
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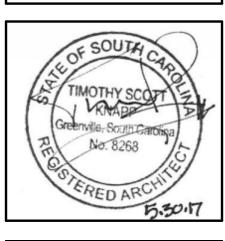
DRAWING NUMBER



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DATE DRAWN CHECKED 5/30/2017 DMS RFG SCALE As indicated ENLARGED FLOOR PLAN AND INTERIOR ELEVATIONS

> 13674.00 CC A701