

ADDENDUM NO. 1, DATED JULY 27
TO THE DOCUMENTS FOR
UNCC RENOVATIONS TO FOUNDATION ANNEX SUITE 8730
SCO # 16-12984-01A
UNIVERISITY OF NORTH CAROLINA AT CHARLOTTE
CHARLOTTE, NORTH CAROLINA
COMM. NO. 17009.00

The following Addendum items shall be considered part of the Contract Documents:

GENERAL

PRE-BID MEETING MINUTES AND SIGN IN SHEET

1. The Meeting Minutes and Sign-In Sheet from the Pre-Bid Meeting held on July 18, 2017 are attached and considered part of the Contract Documents.

Note that these meeting minutes were previously distributed to the pre-qualified General Contractor bidders and plan rooms on July 21, 2017.

CHANGES TO PROJECT MANUAL/SPECIFICATIONS

NOTICE TO BIDDERS

2. On page 3 of 4, change third paragraph to read:

"General contractors are notified that Chapter 87, Article 1, General Statutes of North Carolina, will be observed in receiving and awarding general contracts. General contractors submitting bids on this project must have license classification for Building Contractor with an <u>intermediate or unlimited</u> license required by the NC General Contractors Licensing Board.

CHANGES TO DRAWINGS

MECHANICAL

SHEET M001: LEGEND, NOTES AND SCHEDULES

3. Under "Controls and Sequence of Operation", add the following paragraph:

The controls contractor that will be hired directly by the Owner is Platinum Building Automation. Contact Ryan Hobday for additional information:

rhobday@platinumbuildingautomation.com

(704) 785-4778

SHEET E0.04: ELECTRICAL DETAILS

4. Details 6 and 7 on this sheet have been revised. The sheet with Revision #1, dated 7/27/2017 is attached.

SHEET E0.05: EQUIPMENT SCHEDULES, PANELS AND RISER DIAGRAM

5. The Light Fixture Schedule and Detail 2 on this sheet have been revised. The sheet with Revision #1, dated 7/27/2017 is attached.

END OF ADDENDUM

Attachments: Pre-Bid Meeting Minutes dated July 18, 2017

Sheet E0.04 Electrical Details – Revision #1; 7/27/2017

Sheet E0.05 Equipment Schedules, Panels and Riser Diagrams – Revision #1; 7/27/2017



PRE-BID CONFERENCE MINUTES

DATE: JULY 21, 2017

UNC CHARLOTTE
RENOVATIONS TO FOUNDATION ANNEX SUITE 8730
SCO # 16-12984-01A

COMM. NO: 17009.00

ATTENDEES: See Attached List

FROM: Bill Hughes, AIA, LEED

A Pre-Bid Meeting was held on Tuesday, July 18th for the Renovations to Foundation Annex Suite 8730 project, located at UNC Charlotte. The following was discussed:

• The project team members were introduced:

Bill Hughes, YCH Architects – Project Designer and Manager Amanda Caudle, UNC Charlotte – Facilities Management Design Services, Project Manager Dorothy Vick, UNC Charlotte – Facilities Management Capital Projects, HUB Coordinator

- Bill Hughes indicated that 5 General Contractors had been previously prequalified by UNCC to bid on the project. These General Contractors are listed in the Notice to Bidders.
- Bill Hughes asked if anyone in attendance had encountered issues with downloading bid documents from the YCH Sharefile site. To date, the Project Manual and Drawings have been uploaded. None in attendance reported any issues with accessing the bid documents.
- Bill Hughes reviewed the Notice to Bidders, which is included within the Project Manual.

The bids are to be single prime, lump sum. Bids will be received until 1:00 pm on Thursday, August 3rd at the location as indicated within the Notice to Bidders.

Any questions or clarifications are to be sent by General Contractors to Bill Hughes via email. His contact information is included in the Notice to Bidders. Questions will be accepted until 5:00 pm on Tuesday, July 25th. The final addendum, if necessary, will be issued by end of day on Thursday, July 27th.

A bid security of 5% of the total bid is required to be submitted with the bid. This can be in the form of a check, or bid bond issued by the surety.

Retainage of 5% will be held until the final acceptance by UNCC and the closeout documents are completed.

Dorothy Vick outlined the Minority Business Participation requirements for bidding. UNCC has established a
MBE participation goal of 10% for this project. As indicated in the Form of Proposal under the "Minority
Business Participation Requirements", the following must be submitted with the bid, depending on the
amount of MBE participation:

All bidders must submit the "Identification of HUB Minority Business Participation" form with their bid, regardless of the percentage of MBE participation. If there is no MBE participation, then enter zero on the form.

All bidders must also submit "Affidavit A – Listing of Good Faith Efforts", regardless of the percentage of MBE participation.

If the General Contractor intends to perform all elements of the work on the project with its own current work forces, then "Affidavit B – Intent to Perform Contract with Own Workforce" shall be submitted with the General Contractor's Bid.

Upon notification of the apparent low bidder, the bidder shall provide the following within 72 hours: Affidavit C if MBE participation is equal to or more than 10%, or Affidavit D if MBE participation is less than 10%.

- Dorothy Vick provided to each of the prequalified General Contractors the document "UNC Charlotte Good Faith Effort Requirements (Foundation Annex Renovations), which is attached, and shall be considered part of the bid documents. This document provides additional, detailed information for the recruitment of Minority Businesses within the bid process.
- Bill Hughes reviewed the Project Manual.

The Form of Proposal (bid form) is included within the Project Manual and must be filled out completely by bidders.

The project includes 3 Alternates, which are described within Section 01 23 00 ALTERNATES and on the Drawings. These Alternates are also included on the Form of Proposal.

The Supplementary General Conditions include targeted construction duration of 120 days from the notice to proceed, however there are no liquidated damages are to be assessed.

- Any product substitutions are to be submitted in accordance with Section 00 63 27 SUBMITTALS AND SUBSTITUTIONS. Substitution requests are only to be submitted by General Contractors in writing to Bill Hughes and will be accepted until 5:00 on Thursday, July 27th, seven days prior to the bid opening.
- Bill Hughes reviewed the scope of work, which includes the complete interior demolition and renovation of approximately 4,000 square feet of office space. Exterior work is limited, and includes rooftop HVAC equipment and replacing exterior doors.
- Contractor parking will be available on site within the office complex parking lot. Locations for dumpsters, material staging and portable toilets will be available on site and coordinated during the pre-construction meeting.

- Any work effecting the adjacent suite, such as running of fire sprinkler control wiring to the existing UNCC suite within the complex, will have to be performed after hours.
- A Bidder requested clarification of the extent of HVAC controls to be provided by the Owner's controls contractor. Clarification from the mechanical engineer is as follows: As indicated in "Controls and Sequence of Operation" notes on Sheet M001, the HVAC equipment being provided by the mechanical contractor will function with their stand-alone controls. The BAS provided by the Owner's controls contractor will control the on and off functions based upon occupancy schedules, as well as monitor and alarm as outlined in the sequences. The "General" paragraph also instructs the mechanical contractor to first coordinate the communications / integration requirements with the UNCC controls contractor prior to equipment submittals and sent to the Architect / Engineer for review.
- The Bidders in attendance had no other questions regarding the Bid Documents.
- A walk-thru of the project site was conducted after the meeting.

End of Pre-Bid Meeting Minutes

Attachments: UNC Charlotte "Good Faith Effort" Requirements (Foundation Annex Renovations)

Pre-Bid Sign in Sheet

UNC Charlotte "Good Faith Effort" Requirements (Foundation Annex Renovations)

This information is provided as a guide for firms who may be new to UNC Charlotte and may not be familiar with our expectations regarding minority business participation on University Managed Projects (UMP) projects. Bidders should be familiar with the *Guidelines for Recruitment & Selection of Minority Businesses for Participation In University of North Carolina Construction Contracts*

<u>Identification of HUB Certified/Minority Business Participation form</u> – Only list minority firms that you will use as construction subcontractors, vendors, suppliers or professional service providers on this project. The bidder cannot list himself on this form as he cannot subcontract to himself. **Note:** This form should be submitted with your bid, even if left blank.

<u>Affidavit A – Listing of Good Faith Efforts</u> – the bidder is certifying that he has made a good faith effort to comply under those areas checked on the form. Do not check a Good Faith Effort item unless you can provide the following;

 Contacting minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor or available on State or local government maintained lists at least 10 days before the bid or proposal date and notifying them of the nature and scope of the work to be performed.

Example: Copies of written (emailed or faxed) notification to minority businesses and copies of quotes/proposals received for work solicited to minority businesses. Notification should include, at a minimum, project location, location where plans and specifications may be obtained or viewed, trade or scopes of work for which subcontracts are being solicited, contact person within the prime contractor organization.

Be sure to maintain a telephone log to confirm that minority firms received your IFB. The log should contain the date contacted, telephone number, and name of the individual representing the minority firm who acknowledged receipt of your IFB. Also maintain a telephone log to confirm that minority firms acknowledged a "bid/no bid" to your IFB. The log should contain the date contacted, telephone number, and name of the individual representing the minority firm who acknowledged "bid/no bid" to your IFB.

2. Making the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bid or proposals are due.

Example: Copies of written (emailed or faxed) notification to minority businesses should include, at a minimum, project location, location where plans and specifications may be obtained or viewed, trade or scopes of work for which subcontracts are being solicited, contact person within the prime contractor organization.

3. Breaking down or combining elements of work into economically feasible units to facilitate minority participation.

Example: Document steps taken to segment elements of work into economically feasible units to meet minority business availability. Identify sub-contractors/suppliers/consultants and scope of work involved in segmenting.

Be sure that you are soliciting quotes from *at least* three (3) minority firms in scopes of work that typically have adequate numbers of minority firms available that can perform the work required (hauling, concrete, flooring, masonry, painting, electrical suppliers, etc.). Do not solicit quotes from minority firms in those scopes of work that typically do not have minority firms available that

can perform the work required (elevators, fire suppression systems, roofing, etc.). If there are minority firms that you typically use on your projects then by all means, feel free to use them, if you are sure you are receiving reasonable pricing and quality work.

4. Working with minority trade, community or contractor organization identified by the Office for Historically Underutilized Businesses (HUB) and included in the bid documents that provide assistance in recruitment of minority businesses. **Note:** Minority plan rooms are not applicable.

Example: Provide a copy of meeting minutes between prime contractor and minority trade, community or contractor organization. At minimum the following topics should be discussed/reviewed during the meeting: project location; location where plans and specifications may be obtained or viewed; trade or scopes of work for which subcontracts are being solicited; bonding requirements; insurance requirements; prime contractor's contact person; minority trade, community or contractor organization contact person; strategies to segment elements of the work into economically feasible units to meet minority business availability; strategies to increase minority business utilization through joint ventures and/or partnerships; notification that the meeting will be counted toward the contractor's good faith effort.

Example: Maintain a copy of the request, and have the date, telephone number and name of the individual who acknowledged receipt of your request and information regarding any/all assistance provided by the organization

5. Attending any pre-bid meetings scheduled by the public owner.

Example: Attendance will be verified by conference sign-in sheet.

6. Providing assistance in getting required bonding or insurance or providing alternatives to bonding or insurance for subcontractors.

Example: Documentation describing the type of assistance provided or offered to minority businesses. Provide names and contacts of minority businesses to which assistance was offered and names of the contact person of bonding companies or financial institutions offering assistance.

7. Negotiating in good faith with interested minority businesses and not rejecting them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.

Example: Document number of bids received from minority businesses in the trade or scopes of work for which subcontracts are being solicited, the number of minority businesses that submitted low bids or proposals, the number of minority businesses the bidder has offered to negotiate prices or services, and the number of minority businesses the bidder has agreed to utilize on the project, outline steps taken.

8. Providing assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required or assisting minority businesses in obtaining the same unit pricing with the bidders supplier.

Example: Document names, addresses and telephone numbers of minority businesses to which assistance was offered, outline steps taken. Give dates assistance was offered and document outcome.

9. Negotiating joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.

Example: Provide a copy of joint venture or partnership arrangements between bidder and minority business.

10. Providing quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

Example: Provide a copy of quick pay agreements and/or policies and document the number of minority businesses that will utilize the quick pay agreement. Provide a copy of the quick pay agreement between bidder and minority business.

Note: Referencing the Good Faith Efforts listed above in your IFB is not enough. You must be able to document your efforts.

Affidavit B – Intent to Perform Contract with Own Workforce – In making this certification the bidder is stating that he does not customarily subcontract elements of this type project and normally performs and has the capability to perform and will perform all elements of the work on this project with his own current workforce. The bidder agrees to make a Good Faith Effort to utilize minority suppliers where possible. "Self-performing" means the contractor has all equipment, personnel and supplies on hand to perform the contract. If the contractor needs to purchase supplies or rent equipment and operators to perform the work, then the contractor is not self-performing and should make efforts to purchase supplies or equipment, or temporary labor from minority firms. Note: No other Affidavits are required if the Bidder meets this criteria.

<u>Affidavit C – Portion of the Work to be Performed by HUB Certified/Minority Businesses</u> – This form is to be submitted only by the apparent lowest responsible, responsive bidder with equal to or greater than 10% minority participation.

<u>Affidavit D – Good Faith Efforts</u> – This form is to be submitted only by the apparent lowest responsible, responsive bidder with less than 10% minority participation along with their backup documentation.

Minority-owned Pre-qualified Bidders – *must also* meet the minority participation goals set for the project. Work performed by the minority-owned pre-qualified bidder will be counted towards the minority participation goal *only if* the minority contractor is *self-performing* and submitted Affidavit B.

Certification Requirements – Ensure the minority firms you contact for subcontracting opportunities are listed in the Statewide Uniform Certification (SWUC) Vendor database as **only firms** listed in the SWUC Vendor database, at the time of contract award, **will be counted** towards the minority participation goal for this project. Go to http://www.doa.nc.gov/hub/searchhub.aspx for access to the SWUC Vendor database.

Assistance:

Email the UNC Charlotte HUB Coordinator, Dorothy Vick (704-687-0527), no later than 12:00 Noon, Thursday, July 20, 2017 to divick@uncc.edu (Email Subject: Foundation Annex Renovations) for the following;

- 1. Assistance in finding certified minority firms who have worked on UNC Charlotte projects and who can perform the scopes of work (site work, concrete, electrical, etc.) you are seeking, and/or
- A list of minority trade, community or contractor organizations identified by the Office for Historically Underutilized Businesses that provide assistance in recruitment of minority businesses.



Prebid Meeting

UNC Charlotte Renovations to Foundation Annex Suite 8730

SCO # 16-12984-01A

July 18, 2017

Name	Company	Email
DEREK MEACHUM	MV MOMENTUM, COM	DMEACHUME MY MOMENTUM. COM
JOHN ROCAN	IR MECHANICAL	JROCAN @ JRHECHANICALI LOA
JAMES TEAGUE	WALBRIDGE	jteague e Walbridge.com
JERRY BLANCHARD	The Boswell Group	j blanchard othe boswell group. com
Toby Sims	Dyl Mac Powbing	tobysius 7 @ quail.com
LEE A. PARKS	THE BOSWELL GROUP	plumbing w the boswell group, com
Frank Ambrose	PECI	fambrase & peci relect. con
	V	
9		



Prebid Meeting

UNC Charlotte Renovations to Foundation Annex Suite 8730

SCO # 16-12984-01A

July 18, 2017

Name	Company	Email
PAUL NEWTON	NOWTON CONSTRUCTION	prenton crewton construction
STEVE LESSLER	REPUBLIC ELECT.	prenting newton construction services.com
Andy Silagyi	Striel Sexton	asilagyi @ strielsexton.com
Paul Armstrong	Armstrong Mechanical	AMSI49@LIVE. COM
Chris Little	Armstrong Mechanical	Clittle.amsi Doutlook.com
Wade Howard	TECT	whoward apeci- elect. com
BARRY Mosley	Bucket May ALO Brong Servey	Smosley & bucket MOV AND Brown. Com
	V 1	





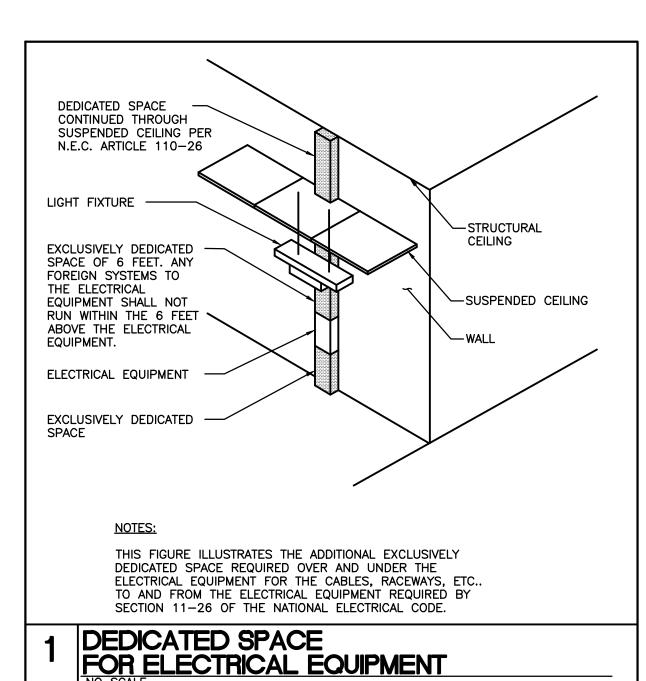
Prebid Meeting

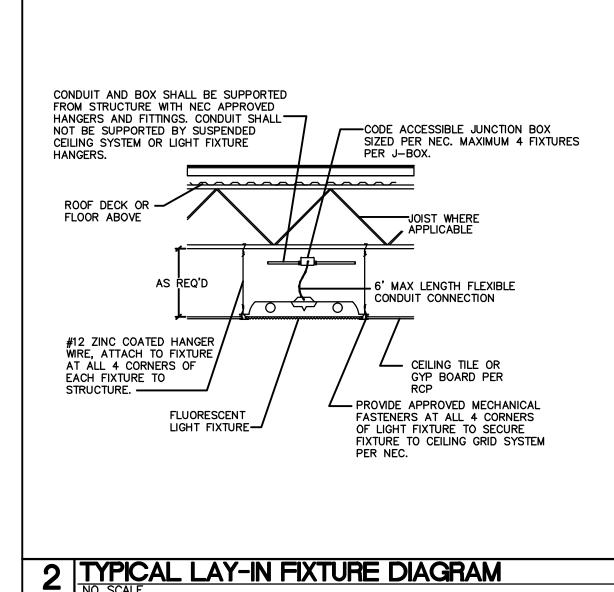
UNC Charlotte Renovations to Foundation Annex Suite 8730

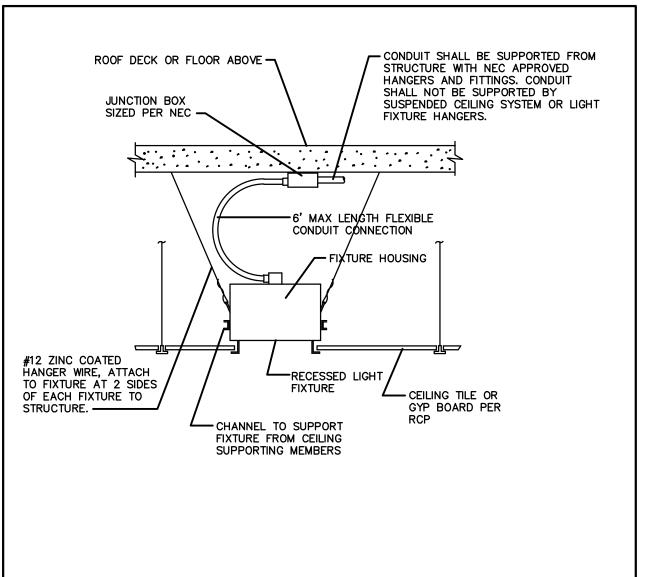
SCO # 16-12984-01A

July 18, 2017

Name	Company	Email
Mike Kemp	Preferred Elec	MKempaPECI-ELECT.com
Cameron Leahy	Providence Paint	CAMERON PROVIDENCE PAINT, COM
EMC FEROUSON	PROGRESSIVE CONTACTING	EFELGUSON @ PLOGRESSIVECCI COM
PHIL GRIGER	NEWTON CONSTRUCTION	pgeiger prewtonconstructionservis, os.
Panty Strond	BMC (Millwork)	Rondy. Strond @ Bukwith BMG.com
amanda (audie	UNCC - tesign Services	
DOROTHY VICK	UNC-CHARIOTTE	alvicka unce edy
Brad Cameron	Aircord Corporation	6 camero N @ aireand. com
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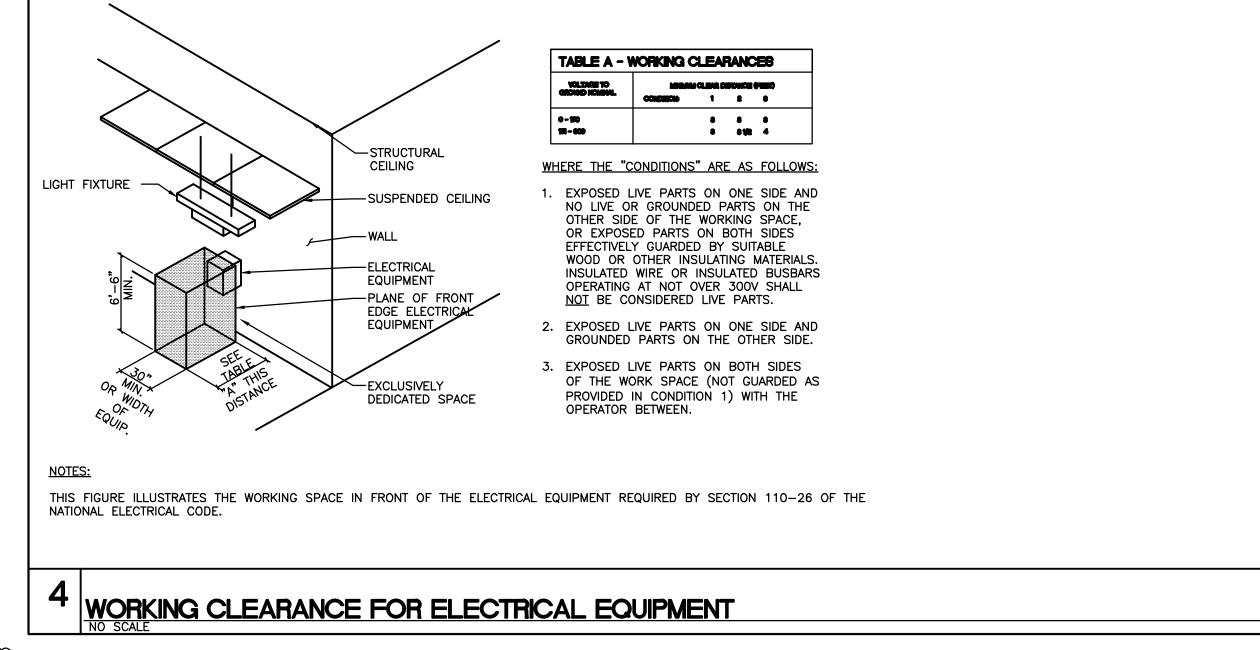


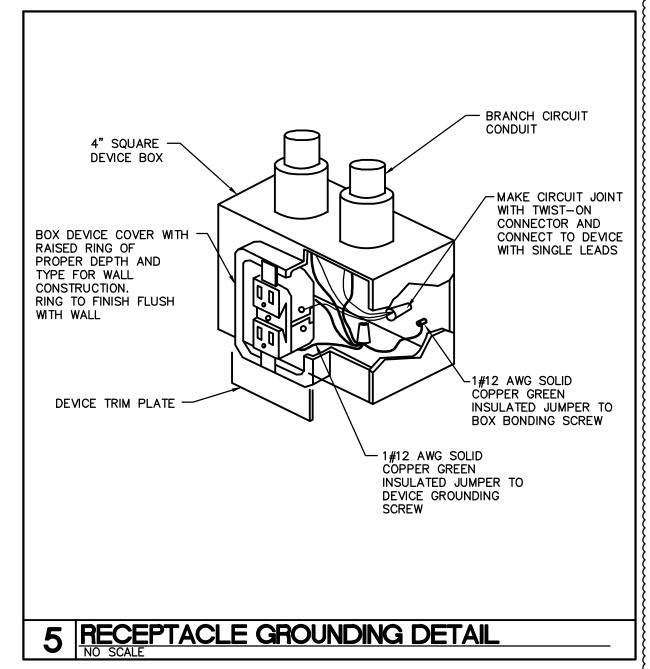


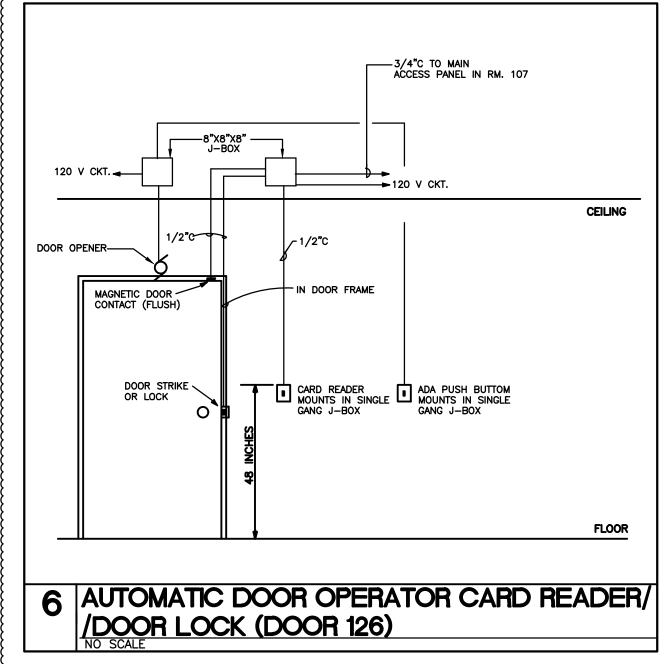


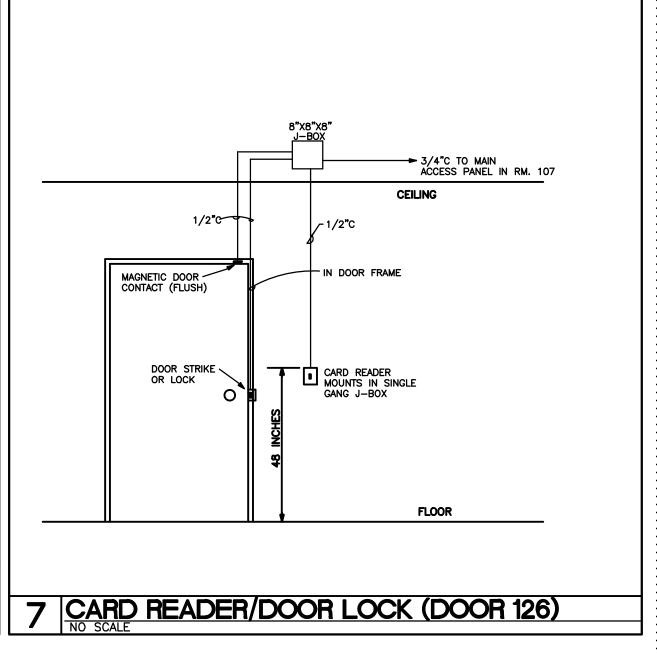
TYPICAL RECESSED DOWN LIGHT

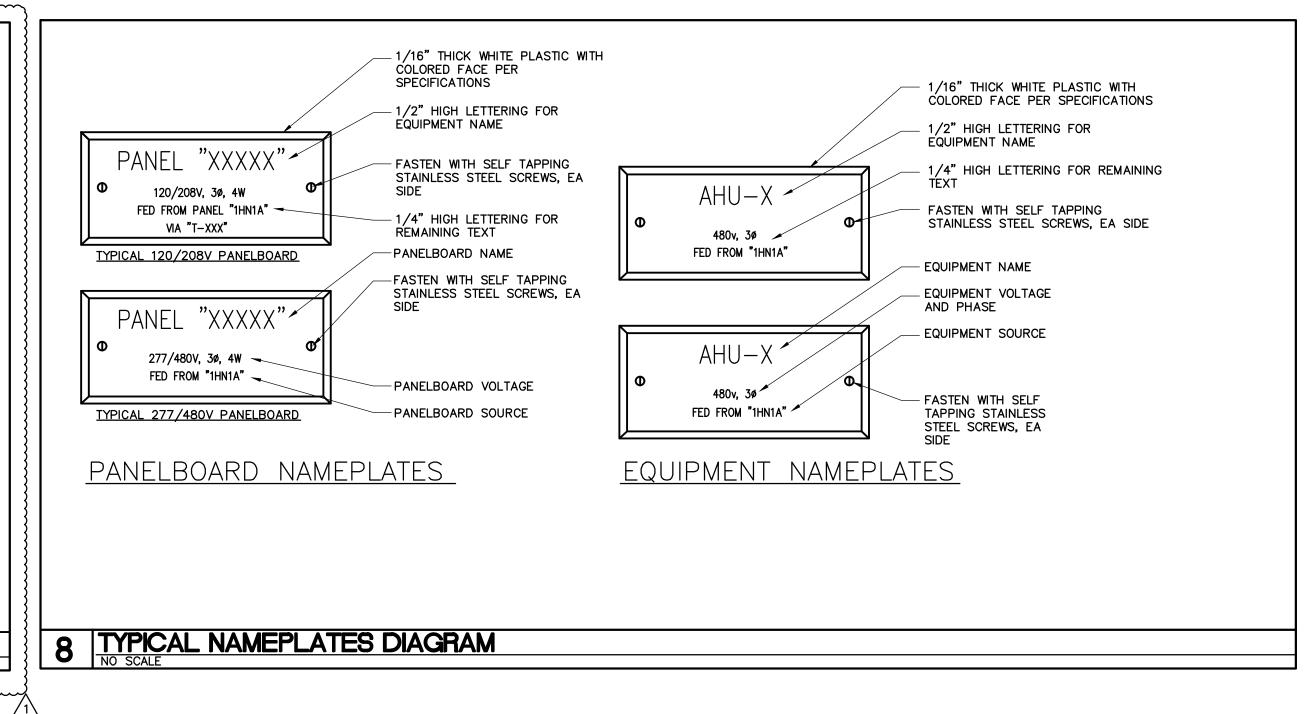
FIXTURE INSTALLATION DIAGRAM









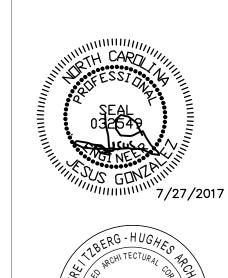




Architecture Interior Design Land Planning Project Management



Professional Seals





OWNERSHIP OF INSTRUMENTS OF SERVICE: All reports, specifications, plans, comput files, field data, notes, and other documer

and instruments of service shall remain the property of the Design Professional. The Desig Professional shall retain all common lo statutory and other reserved rights, includin the copyright theret This drawing is the property Yates - Chreitzberg - Hughes Architects and

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Date: 06-13-17 Revisions:

7/27/2017 REVIEW COMMENTS

ELECTRICAL

YCH Commission Numbe

7035 Northwinds Dr NW Concord, NC 28027 704 . 788 . 2000

17009.00

ycharch.com

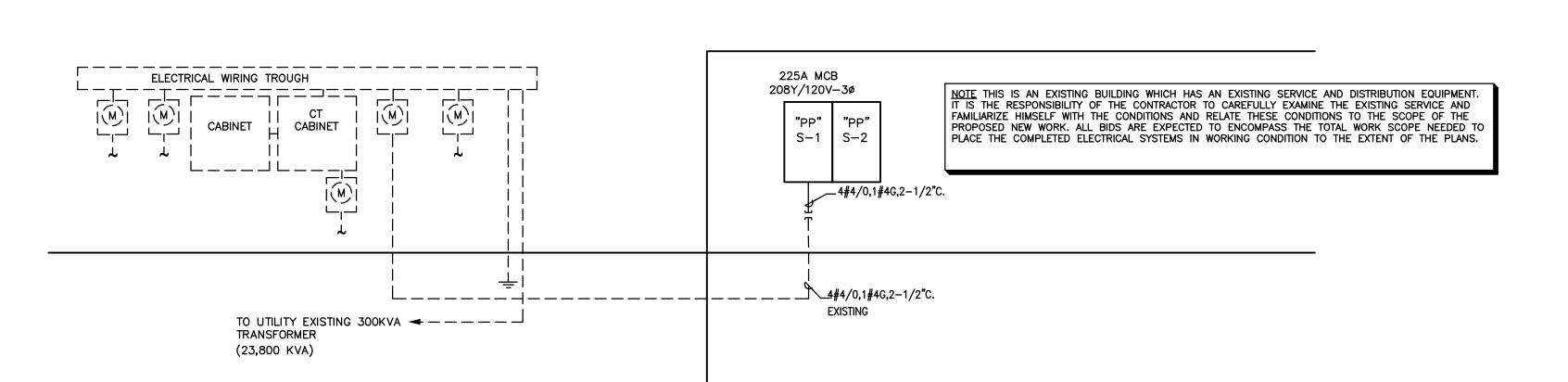
					LIGHT F	IXTURE S	CHEDULE			
TYPE	DESCRIPTION	LAMP	# OF LAMPS	TOTAL FIXTURE WATTAGE	DALLAST/DRIVER 0-10V INTEGRAL DIMMING DRIVER		MANUFACTURER	MODEL	REMARKS	EXAMPLE
А	2X4 VOLUMETRIC LED TROFFER	4000K LED	LED	35W			LITHONIA (OR Z	2ALL4 40L MVOLT EZ1 LP840	0-10V DIMMING, MINIMUM 123 LPW MINIMUM 3000 LUMENS 4000K.	
В	2X2 VOLUMETRIC LED TROFFER	FOUIVALENT)		2ALL2 40L MVOLT EZ1 LP840	0-10V DIMMING, MINIMUM 123 LPW MINIMUM 3000 LUMENS 4000K. (EM) WITH OPTION "EL14L" - 1400LM BATTERY PACK FOR EMERGENCY LIGHT APPLICATION.					
С	4"X2' CEILING MOUNTED LUMINAIRE.	4000K LED	0-10V INTEGRAL DIMMING EQUIVALENT)		MINIMUM 97.7 LPW MINIMUM 1711 LUMENS 4000K.					
D	6" RECESSED LED DOWNLIGHT	LED	LED	30W	0-10V INTEGRAL DIMMING DRIVER	UNIV	GOTHAM PATHWAY CREE COOPER SPECTRUM	EVO 22 6AR LS MVOLT 6VLED 2000 KR 6 20L 35K SSGC WF LD6A 20 2000D010TE ERM6A15 8 35 6LM0 LI SGE6LEDGL 27W 35K MD	6" APERATURE 2000 LUMEN PACKAGE MINIMUM 10% DIMMING. (EM) WITH OPTION "EL" - BATTERY PACK FOR EMERGENCY LIGHT APPLICATION.	
E	PENDANT LIGHT	25W 2700K A19	3	75W				GL-2506 -IN3-3N-NSN-1-A	VERIFY FINISH AND MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS. PROVIDE MAX. 25W DIMMABLE LED LIGHT BULBS. PROVIDE A DIMMING LIGHT SWITCH COMPATIBLE WITH LED.	
XA	SINGLE FACE, BATTERY THERMOPLASTIC EXIT SIGN	LED	LED	1W	INTEGRAL LED DRIVER		HUBBELL JUNO COOPER	QUANTUM LOM'S W R 120/277 EL N DUAL LITE LX U R W E NAVILLITE NXPBA R WH SURE-LITES LPX 7 CHLORIDE VE	NICKEL CADMIUM BATTERY EXIT SIGN 90 MINUTE OPERATION; RED TEST SWITCH PROVIDED UL LISTED FOR DAMP LOCATIONS	ENT
ХВ									SAME AS EX1A, BUT DOUBLE FACE.	EXIP
OWL1	WALL PACK TRAPEZOID LED	2-MODULE LED	20	47W	INTEGRAL LED DRIVERS (2)	UNIV	HUBBELL JUNO	WST LED 2 700 mA SR2 MVOLT TRPC-13LU 5K BZ DT A032 MCGRAW IST B02 LED E1 GZW	BLACK FINISH LS 101 EMERGENCY COMPLIANT 7"HX16"WX9"D 3900 LUMENS	

LIGHTING FIXTURE SCHEDULE NOTES:

- SUBMITTAL SHEETS SHALL BE SUBMITTED WITH FIXTURE SUBMITTALS. DRIVER/DIODE BOARD WARRANTY SHALL BE COMPLETED BY CONTRACTOR AND TURNED OVER TO OWNER AT END OF PROJECT.
- 2. LED DRIVERS SHALL BE PROVIDED FROM PER MANUFACTURER RECOMMENDATION. AS PART OF THIS RECOMMENDATION COORDINATE THE REQUIRED WAVE OUTPUT SO THEY ARE COMPATIBLE. THIS INCLUDES EMERGENCY DRIVERS. 3. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT FIXTURE LOCATIONS.
- 4. NOT USED
- 5. PROVIDE LOW-TEMP (0 degrees F MINIMUM) BALLAST(S)/DRIVER(S) FOR ALL FIXTURES INSTALLED IN EXTERIOR LOCATIONS OR OTHER AREAS SUBJECT TO COLD WEATHER.
- 6. SUSPEND ALL FOUR CORNERS WITH WIRE TO STRUCTURE. DO NOT ALLOW GRID ALONE TO SUPPORT FIXTURE.
- 7. FIXTURES WITH EMERGENCY BATTERY PACKS SHALL BE SUPPLIED WITH MIN. 1100 LUMEN INVERTERS.
- 8. PROVIDE INTEGRAL SURGE PROTECTION ON ALL EXTERIOR LED DRIVER FIXTURE TYPES. 9. DIMMING OF FIXTURES SHALL BE WITH A SWITCH AS RECOMMENDED BY THE BALLAST/DRIVER MANUFACTURER.
- 10. THE CONTRACTOR SHALL VERIFY THE LEAD TIME OF ALL PRODUCTS SPECIFIED IN THIS SCHEDULE AT THE TIME OF PACKAGE QUOTE.
- 11. DURING THE BID PROCESS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DELIVERY/SCHEDULING ISSUES.
- 12. NO SUBSTITUTIONS WILL BE ALLOWED DUE TO LACK OF COORDINATION OF DELIVERY DATES AND CONSTRUCTION SCHEDULE AFTER BID.
- 13. ALL EXPEDITED EXPENSES SHALL BE THE RESPONSIBILTY OF THE CONTRACTOR.
- 14. FIXTURES TO BE INSTALLED IN CEILINGS, INDICATED ON ARCHITECTURAL PLANS AS HAVING INSULATION IN CONTACT WITH CEILING SURFACE, SHALL BE IC RATED BY MANUFACTURER.
- 15. LED DRIVERS LOCATED IN UNCONDITIONED SPACES SHALL BE RATED FOR 90 DEGREES F.
- 16. PROVIDE 90 MINUTE EMERGENCY BATTERY BACK UP. EMERGENCY BACK UP SHALL BE BASED ON TYPE OF FIXTURE, LED DRIVER, BALLAST, ETC. EMERGENCY BACKUP SHALL BE DUAL INPUT FOR BOTH SWITCHING AND CHARGING. PROVIDE UNSWITCHED "HOT" FROM LOCAL CIRCUIT UNLESS OTHERWISE INDICATED ON PLANS. PROVIDE WITH INDICATOR LIGHT. INSTALL LED INDICATOR ON LIGHT FIXTURE UNLESS DECORATIVE. DECORATIVE FIXTURES SHALL HAVE INDICATOR PLACED AT LOCAL CEILING. BODINE, PHILLIPS, POWER SENTRY OR EQUAL.

			N	1EW	PA	NE	L:	PP				SECTION 1 squ	MFGR		
	VOLTAGE:	120 /	208		3	PHAS	SE		4	WIRE		NQOE	TYPE		
	MOUNTING:	SURF	ACE 2			АМР			MAIN CIRCUIT BRI			EAKER 22,000	0 AIC		
_OAD KVA	LOAD SERVED	WIRE	TRIP	FRAME (Note 1)	CKT NO	АВ	С	CKT NO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED	LOAD KVA		
0.31	LIGHTING CENTRAL	12	20		1 _^	•	\Box	_ 2		20	12	LIGHTING OFFICES	0.81		
0.75	LIGHTING CORRIDOR	12	20		3 _^	│ 	- ∤∕	\ 4		20	12	LIGHTING OFFICES	0.65		
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0.60	CONFERENCE RECEPT.	12	20		7 _^	\downarrow	/-	_ 8		20	12	FURNITURE CONNECTION *9 (2)	0.72		
1.08	FURNITURE CONNECTION *9(2)	12	20		9 _^	┤ •	-/	` − 10		20	12	FURNITURE CONNECTION *9 (1)	0.90		
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0.72	FURNITURE CONNECTION *9(1)	12	20		13 -^	\downarrow	- ∤∕	\ 14		20	12	FURNITURE CONNECTION *9 (3)	1.26		
0.90	FURNITURE CONNECTION *9 (2)	12	20		15 -^	│ 	4	` − 16		20	12	FURNITURE CONNECTION *9 (2)	1.08		
1.08	FURNITURE CONNECTION *9 (2)	12	20		17 -^	+	∳-⁄	` − 18		20	12	FURNITURE CONNECTION *9 (1)	0.90		
1.26	FURNITURE CONNECTION *9 (3)	12	20		19 -^	\downarrow	4	` − 20		20	12	FURNITURE CONNECTION *9 (2)	1.44		
0.00	SPARE		20		21 -^	→		\ _ 22		20	12	FURNITURE CONNECTION *9 (3)	0.72		
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0.54	FURNITURE CONNECTION *9	12	20		25 _^	\downarrow	/-	` − 26		20	12	FURNITURE CONNECTION *9	0.72		
0.00	SPARE	12	20		27 _^	┤ •	- ∤∕	` − 28		20	12	FURNITURE CONNECTION*9	0.72		
0.54	FURNITURE CONNECTION *9	12	20		29 _^	+	∳-⁄	√ 30		20	12	PRINTER	0.60		
0.54	FURNITURE CONNECTION *9	12	20		31 -^	+	-/	\ _ 32		20	12	CORRIDOR RECEPT.	1.26		
0.90	LOBBY RECEPT.	12	20		33 _^	+ •	4	` — 34		20		SPARE	0.00		
0.72	GENERAL RECEPT.	12	20		35 _^	+	∳-	` – 36		20		SPARE	0.00		
0.36	IT EQUIPMENT	30	10		37 –∕	\downarrow		\ _ 38			10		0.00		
0.36	IT EQUIPMENT	30	10		39 _^	+		\ 40		30	10	SPD	0.00		
0.40	TV POWER	12	20		41 -^	+	∳-/	\ _ 42			10		0.00		
13.2					S	ÚB-T	OTAL:	S	,			14.1			
	LOAD	KVA	1	TOTAL LO	DAD PI	ER PH	HASE:	:	NOT	ES:					
	LIGHTS	3.7		CC	NNEC	TED			1.	BREAK	ER FRAI	RAME SHALL BE AS REQ'D PER PANEL AIC RA			
	HEATING	7.0	A =	24.4 k	(VA	20	3.4 A		2.	2. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPP					
	COOLING	3.0	B =	23.8 k	(VA	19	7.8 A		3.	ALL INC	OMING	PANEL & BRKR LUGS SHALL MATCH FE	EDERS.		
	VENTILATION	24.8	C =	23.8 k	(VA	19	8.3 A		4.	PROVID	E HINGE	ED DOOR-IN-DOOR WITH OUTER DOOR L	OCK.		
	MOTORS	1.0			DEMAN	1D			5.	5. PROVIDE METAL DIRECTORY FRAME.					
	KITCHEN	0.0	A =	20.9 k	(VA	17	3.6 A		6.	THIS PA	NEL SH	ALL BE U.L. LISTED FOR USE AS S.E. EG	QUIP.		
	RECEPTACLES	27.5	B =	21.6 k	(VA	17	9.7 A		7.	PROVID	/IDE FEED-THRU LUGS.				
	WATER HEATER	4.5	C =	20.8 k	(VA	17	3.3 A		8.	LOADT	OTAL I	NCLUDES FEED-THRU SECTIONS.			
	MISC.	0.5		DEM	AND @	1259	%		9.	PROVID	E A BRI	EAKER TIED TO CONNECT ALL BRK SERV	VING TH		
	SPARE	0.0	A =	26.1 k	(VA	21	7.0 A			SAMEF	URNITU	RE ASSEMBLY			
	TOTAL (CONNECTED)	72.0	B =	27.0 k	(VA	22	4.7 A								
	TOTAL (DEMAND)	63.2	C =	26.0 k	(VA	21	6.6 A								

			N	1EM	PA	NE	EL:	PP				SECTION 2	SQD	MFGR	
	VOLTAGE:	120 /	208		3	PHA	SE		4	WIRE			NQOD	TYPE	
	MOUNTING:	SURF	SURFACE			225 AMP N			MAIN	LUGS	ONLY		22,000 AIC		
LOAD KVA	LOAD SERVED	WIRE	TRIP	FRAME (Note 1)	CKT NO	ΑI	вс	CKT NO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED		LOAD KVA	
2.00 2.00 2.00	RTU-1		30		43 – 45 – 47 –			- 44 - 46 - 48		30		RTU-3		2.00 2.00 2.00	
2.00 2.00 2.00	RTU-2		30		49 – 51 – 53 –	+		50 52 54		35	10 10 10	RTU-4		2.25 2.25 2.25	
1.52	CU-1 / AC-1	12 12	20		55 —	+	lack	^- 56 ^- 58		20 20	12 12	REF KITCHEN RECEPT.		0.60 0.18	
0.50	EWC EWC	12	20		61 - 63 - 65 - 65		 -/	^- 60 ^- 62		20	12 12	KITCHEN RECEPT.	(0.18	
2.25	WATER HEATER	12 12	30				^_ 64 ^_ 66		20 20 12		SPARE EXHAUST FANS		0.00		
	AUTOMATIC DOOR OPENER SPARE SPARE	12	15 20 20		67^ 69^ 71^	4	+	^_ 68 ∱ _ 70 ^_ 72		20 25	12 10 10	ACCESS CONTROL PANEL EDH-1	_	0.50 3.50 3.50	
0.00	SPARE SPARE		20		73 _^ 75 _^	-	$oxed{oxed}$	^_ 74 ^_ 76		20	12	SIGN SPARE		1.20	
0.00	SPARE SPARE		20		77 _^ 79 _^		•	∕_ 78 ∕_ 80		20		SPARE SPARE		0.00	
0.00	SPARE SPARE		20 20		81 _^ 83 _^	- [1 1	^_ 82 ^_ 84		20 20		SPARE SPARE		0.00	
21.1	LOAD	KVA	7	TOTAL LO			OTAL HASE		NOT	ES:				23.5	
	LIGHTS HEATING COOLING	1.2 7.0 3.0	A= B=	13.9 l 15.7 l	CONNECTED 13.9 KVA			4	2.	 BREAKER FRAME SHALL BE AS R ALL BUSSING, INCL GND AND NEU ALL INCOMING PANEL & BRKR LU 			UTRAL, SHALL BE COPPER.		
	VENTILATION MOTORS KITCHEN	24.8 1.0 0.0	C =	15.1 KVA 125.5 A DEMAND 13.9 KVA 115.7 A				5.	 PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DO PROVIDE METAL DIRECTORY FRAME THIS PANEL SHALL BE U.L. LISTED FOR USE AS S 						
	RECEPTACLES WATER HEATER MISC.	2.7 4.5 0.5	B = C =	15.7 l		12	30.7 A 25.5 A		7.	PROVIE	E FEED-	THRU LUGS.			
	SPARE TOTAL (CONNECTED) TOTAL (DEMAND)	0.5 0.0 44.7 44.7	A= B= C=	17.4 l 19.6 l 18.8 l	KVA KVA	14 16	44.6 A 63.4 A 56.9 A	4							





FAN SCHEDULE <u>DISCONNECT</u> <u>EF-1</u> BATHROOM 128 | - | 120V-1ø <u>EF-2</u> BATHROOM 120V-1ø 15A-1P <u>EF-3</u> JANITOR 120V-1ø 15A-1P 15A-1P <u>EF-4</u> BREAK ROOM 53 – 120V-1ø

DUCTLESS SPLIT SYSTEMS (DX COOLING ONLY)

SYMBOL 3

CONDENSING UNIT TO THE A/C UNIT INCLUDING CODE REQUIRED DISCONNECT SWITCHES.

ELECTRIC WATER HEATER SCHEDULE

ELECTRICAL DATA

KW VOLTS PHASE HERTZ FLA

4.5 | 208 | 1 | 60 | 22 | 30A/2P

BUILDING SYSTEM OUTPUTS

SIMPLEX FIRE EXISTING LOCATED IN THE ELECT/DATA RM 105, AT THE EXISTING "COMMUNICATIONS" OFFICE

2 EXISTING FIRE ALARM RISER DIAGRAM
NO SCALE

A. CONNECT NEW FIRE ALARM DEVICES TO EXISTING FIRE ALARM SYSTEM.

B. INSTALLATION SHALL MEET ALL ADA REQUIREMENTS.

acksquare

PROVIDE POWER EXTENDER PANELS AND OTHER EQUIPMENT IF REQUIRED FOR COMPLETE OPERATION. ALL FIRE ALARM DEVICES TO MATCH BUILDING

SPACE.

RTU SCHEDULE - (WITH GAS HEAT)

OUTDOOR UNIT

POWER SUPPLY TO CONDENSING UNIT IS A SINGLE POINT ELECTRICAL CONNECTION FOR THE SYSTEM (A/C UNIT AND CONDENSING UNIT). THE ELECTRICAL CONTRACTOR SHALL PROVIDE POWER TO THE CONDENSING UNIT AND FROM THE

COMPRESSOR (EA)OFMIFMCOMB. FANPOWER EXHAUSTPOWER SUPPLYNO.RLALRAQTY.FLAFLAFLALRAMCAMOCPVOLTAGE

RTU-2 1 11.5 77 1 2 5 1 -- -- 21.4 30 208V-3ø 30A/F30A-3P-3R RTU-3 1 11.5 77 1 2 5 1 -- -- 21.4 30 208V-3ø 30A/F30A-3P-3R

RTU-4 1 14.6 91 1 2 5 1 -- -- 24.1 35 208V-3ø 60A/F35A-3P-3R

| COMPRESSOR | ELECTRICAL DATA | DISCONNECT | LRA | MCA | MOCP | VOLTAGE |

DISCONNECT

18.3 20 208V-1ø 30A/F20A-2P-3R

__ _ _ 21.4 30 208V-3ø 30A/F30A-3P-3R

CENTRAL COMM

1. INTERLOCKED WITH BATHROOM LIGHT SWITCH.

ELECTRICAL DATA

SYMBOL MCA VOLTAGE DISCONNECT

DESCRIPTION

ELECTRIC WATER HEATER

DISCONNECTS INDICATED ARE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED.

<u>A/C-1</u> 0.2 208V-1ø 15A-2P

SYM.

FIRE ALARM SYSTEM MATRIX

| x | x | |

TIE INTO EXISTING FACP AS REQUIRED. FIRE ALARM SUPPLIER

TO PROVIDE ADDITIONAL POWER

C. VERIFY QUANTITIES ON PLAN.

SUPPLIES AS REQUIRED TO

OPERATE NEW DEVICES -

MANUAL FIRE ALARM PULL BOXES

NOTIFICATION DEVICE SHORT CIRCUIT

FIRE ALARM A.C. POWER FAILURE FIRE ALARM SYSTEM LOW BATTERY

BUILDING SMOKE DETECTOR

DUCT SMOKE DETECTOR

OPEN CIRCUIT

GROUND FAULT

	EL	ECTRIC DUCT	H	ΞΑ	TEF	3 S	CH					
			ELECTRICAL DATA									
	SYM.	DESCRIPTION	KW	VOLTS	PHASE	HERTZ	FLA					
	EDH-1	ELECTRIC DUCT HEATER	3.5	208	1	60	17.0					
								_				

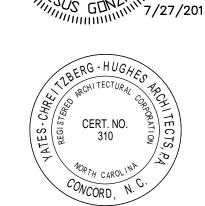
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Project Management

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Date: 06-13-17 7/27/2017 REVIEW COMMENTS

ELECTRICAL **EQUIPMENT SCHEDULES** PANELS AND RISER DIAGRAM

YCH Commission Numbe 17009.00

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Concord, NC 28027 704 . 788 . 2000 ycharch.com

OPTIMA #: 17-0081

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