

ADDENDI M #1

DATE:	March 3, 2017
PROJECT:	Roof Repair and Exterior Improvements University of South Carolina at Aiken Aiken, South Carolina
PROJECT NUMBER:	HR29-9549, 2KM 14-15

Part 1 – Pre-GMP RFIs:

- 1.101 Front End Document Lump Sum Bid Form
 - **REPLACE** SE-330 Lump Sum Bid Form with revised SE-330 Lump Sum Bid Form (see a. attached)
- 1.102 Reference Division 01 General Requirements a. **REPLACE** Section 01100 Alternates with revised Section 01100 Alternates (see attached
- 1.103 Reference Division 09 Finishes
 - a. **REPLACE** Section 09900 Painting with revised Section 09900 Painting (see attached)

Part 2 – Drawings:

- 1.201 Reference Drawing Set (See attached drawings):
 - a. **REPLACE** the following drawings having an issue date of 03/02/2017:
 - 1. A0.1 Index with revised A0.1 Index (see attached)
 - 2. A1.1 Add Alternate #1 Elevations with revised A1.1 Elevations (see attached)
 - 3. A1.3 Add Alternate #2 Flooring Plan/Enlarged Plan with revised A1.3 Add Alternate #1 Flooring Plan/Enlarged Plans (see attached)

END OF ADDENDUM #1

SUBMITTED BY: _Christopher S. Lehi

Christopher S. Lehi, Project Manager / Contract Administrator

Enclosures: Pre-Bid Meeting Report Meeting Sign-in Sheet SE-330 Lump Sum Bid Form (Revised) Section 01100 Alternates (Revised) Section 09900 Painting (Revised) Drawing A0.1 Index (Revised) Drawing A1.1 Elevations (Revised) Drawing A1.3 Add Alternate #1 Flooring Plan / Enlarged Plans (Revised)



PROJECT MEETING REPORT

Project Name:

Meeting Location: Purpose:

Ruth Patrick Science Center Roof Repairs & Exterior Improvements Project Site (USC Aiken Campus) Pre-Bid Conference & Walk Through

Project No.:	H29-9549
u u	2KM #14-15
Date:	3/02/2017
Time:	10:00 AM

ATTENDEES

	NAME	FIRM	EMAIL	
See Attached Sign -in Sheet				
ITEM	DESCI	RIPTION	ACTION	BY
I.	 Discussion: A. A. Rish with USC Procereviewing key points for 1. Project can begin sia 75-day duration. included at a cost of 2. Project budget range 3. Bid bond, payment required for this prused and can be do procurement websif 4. Bids close on Marcomailed, bids are to address provided in 5. Date of the last adde 8, 2017. Deadline construction docur writing to 2KM Artom 5:00 PM. 6. A. Rish reminded to continue to check to the formation of the continue to check to the c	urement began meeting by or the bid submittal: oon after award and will have Liquidated damages are of \$250.00 per day. ge is \$150,000 to \$200,000 and performance bonds are oject. Current forms are to be wnloaded from the te. ch 13, 2017 @ 1:00 PM. If be sent to the Columbia in the Project Manual. Hendum posting will be March for questions on the nents must be submitted in chitects by March 6, 2017 @ he perspective contractor to he web site for addenda. be issued immediately that seting minutes, sign in sheet	ACTION	
	 the building and to to prevent addition C. Lehi reviewed ti the Construction D Alternate #2 was n will be updated and addendum. Specification section updated to reflect e C. T. Green introduced B. contact for the project a coordination and day to contractors. Additional site visit 	ectations: mpleted to stop all leaks into make exterior improvements al water intrusion issues. the scope of work as listed on ocuments. ot listed on the SE-330. This d released as part of the first on 09900. Painting will also be exterior paint requirements. Enter as the main point of and will be handling campus o day interactions with the ts are allowed, 24 hours'		
	information is <u>Bria</u> 2. There are no antici	to B. Enter. His contact <u>nEn@usca.edu</u> , 803-641-3254 pated work hour restrictions, g use will be coordinated		

	 through B. Enter. 3. Water & electricity will be provided. Port-o-lets to be provided by contractor, all workers are to have an identifying shirt or vest.
	 A. Group began site walk-through. Items emphasized included: 1. Apply Siloxane brick sealer on the rear elevation of the building. Add gutter & downspout and replace as noted 2. Replace and seal all exposed roof fasteners. 3. Reseal gutter and downspouts, pressure wash existing masonry and EFIS bands, re-seal window frames. 4. All site pathways for material movement or delivery should be protected and will be identified closer to project start. 5. Repoint joints, install counterflashing and recoat
	EFIS as required on Contract Documents.6. All areas of disturbance around building should be kept to a minimum.
III.	Meeting Adjourned

Please notify the recorder of these minutes of corrections within 10 days of receipt.

Submitted By: Christopher S. Lehi

Christopher S. Lehi Project Manager/Contract Administrator

University of South Carolina Non Mandatory Pre Bid Sign In Sheet Aiken, SC

 Project Name:
 Ruth Patrick Science Center Roof Repairs & Exterior Repairs

 Project Number:
 H29-9549

 Pre Bid Date & Time:
 03/02/2017 10AM 471 University Parkway

SWMBE Contractor Indicate Below	Name	Company Name	Address	Phone #	Email
42	268 B Belair Frontage Ro	vest Maintenance, Inc. I, Augusta, GA 30909			
SWMBE	6-855-8888 john@mi	LANZ Roofing	Sumtes	803 968-7200	
GWMBE GC	DWAYNE Scott	0		(803) 315-4005	Li in Omdillool
SWMBE	CHEIS LEWI	ZKM ARCHITECTS, FILL	529 GREENE ST AULISTA CA 30001	706-736-3333	CLEHIE ZHAN AZCHIBETS.com
SWMBE	Kelvin Spires	J.D. Gastins Const.	939 Dougherty Rd. Aiken 29,803	803 641-406;	constructøjdgaskins.com
5 W M B E	Corey Lloyd	Lloyd Roofing	2415 Martyre Ave. Granusad SC Ext.	864.223-3716	corey elloydroofing.com
SWMBE		21st Century Waterproof.	BAFAR VV DI	(93)727-4523	harveteralse.rc.com
ŚWMBE) three hours	3		TOWNER OF THE PARTY OF THE
SWMBE			1.5		

****By signing this sheet you agree to receive information electronically.

Bidders shall submit bids on only Bid Form SE-330.

BID	SUBMITTED BY	:				
			(Bi	dder's Name)		
BID	SUBMITTED TO	:				
			(0)	vner's Name)		
FOR	R: PROJECT N	AME: <u>Ruth Pr</u>	atrick Science	Center Roof Re	pairs & Exteri	or Improvements
	PROJECT N	UMBER: <u>H29</u>	-9549			
OFF	ER					
§ 1.	Owner on the terms i	dersigned Bidder p ncluded in the Bid for the prices and w	proposes and agree Iding Documents, within the time fram	es, if this Bid is ac and to perform al	cepted, to enter in Il Work as specif	Bidders for the above- nto a Contract with the fied or indicated in the cordance with the other
§ 2.	Pursuant to Section 11 in the amount and form		Bidding Document			Bid Security as follows
			(Bidder che	ck one)		
§ 3.	Bidder acknowledges of said Addenda into t (<i>Bidder, check all that a</i> , ADDENDA:	his Bid:	-	_		-
§ 4.	disposition of Bid Sec	curity. Bidder agre	ees that this Bid, in shall remain open	ncluding all Bid A for acceptance for	lternates, if any, a period of <u>60</u>	, those dealing with the may not be revoked or Days following the Bid Owner.
§ 5.		tees, and to pay all	royalties, fees, pe	-		accessories, appliances, necessary to complete
§ 6.1	BASE BID WORK (d	is indicated in the Bi	dding Documents a	nd generally describ	ed as follows): <u>R</u>	oof repairs and exterior
	improvement to the R	uth Patrick Science	Center located at	the USC Aiken C	ampus	
	\$, which sum	is hereafter calle	d the Base Bid.

(Bidder to insert Base Bid Amount on line above)

§ 6.2 BID ALTERNATES as indicated in the Bidding Documents and generally described as follows:

ALTERNATE # 1 (Brief Description): Provide underlayment topping, grind to level and install new Solid Vinyl Tile (SVT) over existing Lobby concrete slab. (Grinding, leveling, and cementitious underlayment (topping) is required for slab finish preparation.) See Drawing A1.4. Replace damaged VCT along window wall with SVT. Replace transition strip (Existing VCT to New SVT).

ADD TO or DEDUCT FROM BASE BID: \$

(Bidder to mark appropriate box to clearly indicate the price adjustment offered for each Alternate)

ALTERNATE # 2 (Brief Description): Provide pricing for replacement of 1" Thermal Glazed Storefront Window and Clerestory Windows (approximately 600sf of glass); match various sized sealed units and glazing tint.

ADD TO or DEDUCT FROM BASE BID: \$

(Bidder to mark appropriate box to clearly indicate the price adjustment offered for each Alternate)

ALTERNATE # 3 (Brief Description):

ADD TO or DEDUCT FROM BASE BID: <u>\$</u>

(Bidder to mark appropriate box to clearly indicate the price adjustment offered for each Alternate)

§ 6.3 UNIT PRICES:

BIDDER offers for the Agency's consideration and use, the following UNIT PRICES. The UNIT PRICES offered by BIDDER indicate the amount to be added to or deducted from the CONTRACT SUM for each item-unit combination. UNIT PRICES include all costs to the Agency, including those for materials, labor, equipment, tools of trades and labor, fees, taxes, insurance, bonding, overhead, profit, etc. The Agency reserves the right to include or not to include any of the following UNIT PRICES in the Contract and to negotiate the UNIT PRICES with BIDDER.

<u>No.</u>	ITEM	UNIT OF MEASURE	ADD	DEDUCT
<u> </u>			\$	\$
2.			\$	\$
<u> </u>			\$	\$
4.			\$	\$
_5			\$	\$
6.			\$	\$

§ 7. LISTING OF PROPOSED SUBCONTRACTORS PURSUANT TO SECTION 3020(b)(i), CHAPTER 35, TITLE 11 OF THE SOUTH CAROLINA CODE OF LAWS, AS AMENDED (See Instructions on the following page BF-2A)

Bidder shall use the below-listed Subcontractors in the performance of the Subcontractor Classification work listed:

SUBCONTRACTOR CLASSIFICATION By License Classification and/or Subclassification (Completed by Owner)	SUBCONTRACTOR'S PRIME CONTRACTOR'S NAME (Must be completed by Bidder)	SUBCONTRACTOR'S PRIME CONTRACTOR'S SC LICENSE NUMBER (Requested, but not Required)
	BASE BID	
	ALTERNATE #1	
	ALTERNATE #2	
	ALTERNATE #3	
		· ·

If a Bid Alternate is accepted, Subcontractors listed for the Bid Alternate shall be used for the work of both the Alternate and the Base Bid work.

INSTRUCTIONS FOR SUBCONTRACTOR LISTING

- 1. Section 7 of the Bid Form sets forth an Owner developed list of contractor/subcontractor specialties by contractor license category and/or subcategory for which bidder is required to identify the entity (subcontractor(s) and/or himself) Bidder will use to perform the work of each listed specialty..
 - **a. Column A**: The Owner fills out this column, which identifies the contractor/subcontractor specialties for which the bidder must list either a subcontractor or himself as the entity that will perform this work. Subcontractor specialties are identified by contractor license categories or subcategories listed in Title 40 of the South Carolina Code of laws. Abbreviations of classifications to be listed after the specialty can be found at: <u>http://www.llr.state.sc.us/POL/Contractors/PDFFiles/CLBClassificationAbbreviations.pdf</u> . If the owner has not identified a specialty, the bidder does not list a subcontractor.
 - **b.** Columns B and C: In these columns, the Bidder identifies the subcontractors it will use for the work of each specialty listed by the Owner in Column A. Bidder must identify only the subcontractor(s) who will perform the work and no others. Bidders should make sure that their identification of each subcontractor is clear and unambiguous. A listing that could be any number of different entities may be cause for rejection of the bid as non-responsive. For example, a listing of M&M without more may be problematic if there are multiple different licensed contractors in South Carolina whose names start with M&M.
- 2. Subcontractor Defined: For purposes of subcontractor listing, a subcontractor is an entity who will perform work or render service to the prime contractor to or about the construction site pursuant to a contract with the prime contractor. Bidder should not identify sub-subcontractors in the spaces provided on the bid form but only those entities with which bidder will contract directly. Likewise, do not identify material suppliers, manufacturers, and fabricators that will not perform physical work at the site of the project but will only supply materials or equipment to the bidder or proposed subcontractor(s).
- **3. Subcontractor Qualifications:** Bidder must only list subcontractors who possess a South Carolina Contractor's license with the license classification and/or subclassification identified by the Owner in the first column on the left. The subcontractor license must also be within the appropriate license group for the work of the specialty. If Bidder lists a subcontractor who is not qualified to perform the work, the Bidder will be rejected as non-responsible.
- 4. Use of Own forces: If under the terms of the Bidding Documents, Bidder is qualified to perform the work of a listed specialty and Bidder does not intend to subcontract such work but to use Bidder's own employees to perform such work, the Bidder must insert its own name in the space provided for that specialty.
- 5. Use of Multiple Subcontractors:
 - **a.** If Bidder intends to use multiple subcontractors to perform the work of a single specialty listing, Bidder must insert the name of each subcontractor Bidder will use, preferably separating the name of each by the word "**and**". If Bidder intends to use both his own employees to perform a part of the work of a single specialty listing and to use one or more subcontractors to perform the remaining work for that specialty listing, bidder must insert his own name and the name of each subcontractor, preferably separating the name of each with the word "**and**". Bidder must use each entity listed for the work of a single specialty listing in the performance of that work.
 - **b. Optional Listing Prohibited:** Bidder may not list multiple subcontractors for a specialty listing, in a form that provides the Bidder the option, after bid opening or award, to choose to use one or more but not all the listed subcontractors to perform the work for which they are listed. A listing, which on its face requires subsequent explanation to determine whether it is an optional listing, is non-responsive. If bidder intends to use multiple entities to perform the work for a single specialty listing, bidder must clearly set forth on the bid form such intent. Bidder may accomplish this by simply inserting the word "and" between the names of each entity listed for that specialty. Agency will reject as non-responsive a listing that contains the names of multiple subcontractors separated by a blank space, the word "or", a virgule (that is a /), or any separator that the Agency may reasonably interpret as an optional listing.
- 6. If Bidder is awarded the contract, bidder must, except with the approval of the Agency for good cause shown, use the listed entities to perform the work for which they are listed.
- 7. If bidder is awarded the contract, bidder will not be allowed to substitute another entity as subcontractor in place of a subcontractor listed in Section 7 of the Bid except for one or more of the reasons allowed by the SC Code of Laws.
- 8. Bidder's failure to identify an entity (subcontractor or himself) to perform the work of a subcontractor specialty listed in the first column on the left will render the Bid non-responsive.

§ 8. LIST OF MANUFACTURERS, MATERIAL SUPPLIERS, AND SUBCONTRACTORS OTHER THAN SUBCONTRACTORS LISTED IN SECTION 7 ABOVE (*FOR INFORMATION ONLY*):

Pursuant to instructions in the Invitation for Construction Services, if any, Bidder will provide to Owner upon the Owner's request and within 24 hours of such request, a listing of manufacturers, material suppliers, and subcontractors, other than those listed in Section 7 above, that Bidder intends to use on the project. Bidder acknowledges and agrees that this list is provided for purposes of determining responsibility and not pursuant to the subcontractor listing requirements of SC Code Ann § 11-35-3020(b)(i).

§ 9. TIME OF CONTRACT PERFORMANCE AND LIQUIDATED DAMAGES

a) CONTRACT TIME

Bidder agrees that the Date of Commencement of the Work shall be established in a Notice to Proceed to be issued by the Owner. Bidder agrees to substantially complete the Work within <u>75</u> Calendar Days from the Date of Commencement, subject to adjustments as provided in the Contract Documents.

b) LIQUIDATED DAMAGES

Bidder further agrees that from the compensation to be paid, the Owner shall retain as Liquidated Damages the amount of \$_250.00 for each Calendar Day the actual construction time required to achieve Substantial Completion exceeds the specified or adjusted time for Substantial Completion as provided in the Contract Documents. This amount is intended by the parties as the predetermined measure of compensation for actual damages, not as a penalty for nonperformance.

§ 10. AGREEMENTS

- a) Bidder agrees that this bid is subject to the requirements of the laws of the State of South Carolina.
- **b**) Bidder agrees that at any time prior to the issuance of the Notice to Proceed for this Project, this Project may be canceled for the convenience of, and without cost to, the State.
- c) Bidder agrees that neither the State of South Carolina nor any of its agencies, employees or agents shall be responsible for any bid preparation costs, or any costs or charges of any type, should all bids be rejected or the Project canceled for any reason prior to the issuance of the Notice to Proceed.

§ 11. ELECTRONIC BID BOND

By signing below, the Principal is affirming that the identified electronic bid bond has been executed and that the Principal and Surety are firmly bound unto the State of South Carolina under the terms and conditions of the AIA Document A310, Bid Bond, included in the Bidding Documents.

ELECTRONIC BID BOND NUMBER:

SIGNATURE AND TITLE:

CONTRACTOR'S CLASSIFICATIONS AND SUBCL	ASSIFICATIONS WITH LIMITATION
SC Contractor's License Number(s):	
Classification(s) & Limits:	
Subclassification(s) & Limits:	
By signing this Bid, the person signing reaffirms all rep the person signing and the Bidder, including without lin Instructions to Bidders, is expressly incorporated by re	nitation, those appearing in Article 2 of the
BIDDER'S LEGAL NAME:	
ADDRESS:	
TELEPHONE:	
EMAIL:	
SIGNATURE:	DATE:
PRINT NAME:	
TITLE:	

DIVISION 1 – GENERAL REQUIREMENTS SECTION 01100 – ALTERNATES

PART 1 – GENERAL

1.1 RELATED REQUIREMENTS AND WORK

A. Reference the Proposal Form for all work related to this Section for this Project.

1.2 SUMMARY

- A. The Contractor shall furnish all labor, materials, tools, equipment and perform all work and services necessary for all Alternates as shown on drawings and as specified, in accordance with the provisions of the Contract Documents and coordinated with work of all other trades. All prices shall include overhead and profit.
- B. Although such work is not specifically indicated, furnish and install all supplementary and miscellaneous items, appurtenances and devices incidental to for a complete installation.
- C. Coordinate pertinent related work and modify surrounding work as required by Contract Documents.
- D. All materials and methods of construction used on this project shall conform to the qualifications established by the Contract Documents.

1.3 QUANTITIES

A. When materials, devices or equipment are referred to as if singular in number, it is intended that such reference shall apply to as many such items as are required to complete the work.

PART 2 – ALTERNATES

2.1 ALTERNATES

A. State in proposal the amount to be added or deducted from the Base Bid for each of the Alternates described below. Upon execution of the Contract, implement work and modify work as established under various Alternates as accepted or rejected by the Owner. Clarifications of Alternates shall be as follows:

Alternate #1:

Provide underlayment topping, grind to level and install new Solid Vinyl Tile (SVT) over existing Lobby concrete slab. (Grinding, leveling, and cementitious underlayment (topping) is required for slab finish preparation.) See Drawing A1.4. Replace damaged VCT along window wall with SVT. Replace transition strip (Existing VCT to New SVT).

Alternate #2

Provide pricing for replacement of 1" Thermal Glazed Storefront Window and Clerestory Windows (approximately 600sf of glass); match various sized sealed units and glazing tint.

PART 3 – EXECUTION (Not Used)

END OF SECTION

DIVISION 9 - FINISHES SECTION 09900 - PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes surface preparation and field painting of the following:
 - 1. Exposed interior items and surfaces.
 - 2. Surface preparation, priming, and finish coats specified in this Section are in addition to shop priming and surface treatment specified in other Sections.
- B. Paint exposed surfaces, except where the paint schedules indicate that a surface or material is not to be painted or is to remain natural. If the paint schedules do not specifically mention an item or a surface, paint the item or surface the same as similar adjacent materials or surfaces whether or not schedules indicate colors. If the schedules do not indicate color or finish, the Architect will select from standard colors and finishes available.
 - 1. Painting includes field painting of exposed bare and covered pipes and ducts (including color coding), hangers, exposed steel and iron work, and primed metal surfaces of mechanical and electrical equipment.
- C. Do not paint prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels.
 1. Prefinished items include the following factory-finished components:
 - a. Architectural woodwork and casework.
 - b. Finished mechanical and electrical equipment.
 - c. Light fixtures.
 - 2. Concealed surfaces include walls or ceilings in the following generally inaccessible spaces:
 - a. Furred areas.
 - b. Ceiling plenums.
 - c. Pipe spaces.
 - 3. Finished metal surfaces include the following:
 - a. Anodized aluminum.
 - b. Stainless steel.
 - c. Chromium plate.
 - d. Copper.
 - e. Bronze and brass.
 - Operating parts include moving parts of operating equipment and the following:
 - a. Valves, damper operators and linkages.
 - b. Sensing devices.
 - 5. Labels: Do not paint over Underwriters Laboratories (UL), Factory Mutual (FM), or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.
- D. Related Sections include the following:
 - 1. Division 5 Section 05500 Metal Fabrications for shop priming ferrous metal.
 - 2. Division 8 Section 08110 Steel Doors and Frames for shop priming steel doors and frames.
 - 3. Division 9 Section 09255 Gypsum Board Assemblies for surface preparation for gypsum board.
 - 4. Divisions 15 and 16: Painting of mechanical and electrical work is specified in Divisions 15 and 16, respectively.
- E. See Alternates Section 01100 for Add Alternates.

1.2 DEFINITIONS

4.

- A. General: Standard coating terms defined in ASTM D 16 apply to this Section.
 - 1. Flat refers to a lusterless or matte finish with a gloss range below 15 when measured at an 85degree meter.
 - 2. Eggshell refers to low-sheen finish with a gloss range between 5 and 20 when measured at a 60-degree meter.
 - 3. Satin refers to low-sheen finish with a gloss range between 15 and 35 when measured at a 60-degree meter.
 - 4. Semi-gloss refers to medium-sheen finish with a gloss range between 30 and 65 when measured at a 60-degree meter.
 - 5. Full gloss refers to high-sheen finish with a gloss range more than 65 when measured at a 60degree meter.

1.3 SUBMITTALS

- A. Product Data: For each paint system specified. Include block fillers and primers.
 - 1. Material List: Provide an inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
 - 2. Manufacturer's Information: Provide manufacturer's technical information, including label analysis/instructions for handling, storing & applying each coating material proposed for use.
 - 3. Certifications by the manufacturer that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs).
- B. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for each type of finish-coat material indicated.
- C. Samples for Verification: Of each color and material to be applied, with texture to simulate actual conditions, on representative Samples of the actual substrate.
 - 1. Provide stepped Samples, defining each separate coat, including block fillers and primers. Use representative colors when preparing Samples for review. Resubmit until required sheen, color, and texture are achieved.
 - 2. Provide a list of materials and applications for each coat of each sample. Label each sample for location and application.
 - Submit Samples on the following substrates for Architect's review of color and texture only:
 - a. Gypsum Wallboard: Provide two 12-inch- square samples for each color and finish.
 - b. Ferrous Metal: Provide two 4-inch- (100-mm-) square samples of flat metal and two 8-inch- (200-mm-) long samples of solid metal for each color and finish.
- D. Qualification Data: For firms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

1.4 QUALITY ASSURANCE

3.

- A. Applicator Qualifications: Engage an experienced applicator who has completed painting system applications similar in material and extent to that indicated for this Project with a record of successful in-service performance.
- B. Source Limitations: Obtain block fillers, primers, and undercoat materials for each coating system from the same manufacturer as the finish coats.
- C. Benchmark Samples (Mockups): Provide a full-coat benchmark finish sample of each type of coating and substrate required on the Project. Comply with procedures specified in PDCA P5. Duplicate finish of approved prepared samples.
 - 1. The Architect will select one room or surface to represent surfaces and conditions for each

type of coating and substrate to be painted.

- a. Wall Surfaces: Provide samples on at least 100 sq. ft. (9 sq. m) of wall surface.
- b. Small Areas and Items: The Architect will designate an item or area as required.
- 2. After permanent lighting and other environmental services have been activated, apply coatings in this room or to each surface according to the Schedule or as specified. Provide required sheen, color, and texture on each surface.
 - a. After finishes are accepted, the Architect will use the room or surface to evaluate coating systems of a similar nature.
 - b. Final approval of colors will be from job-applied samples.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the Project Site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label, and the following information:
 - 1. Product name or title of material.
 - 2. Product description (generic classification or binder type).
 - 3. Manufacturer's stock number and date of manufacture.
 - 4. Contents by volume, for pigment and vehicle constituents.
 - 5. Thinning instructions.
 - 6. Application instructions.
 - 7. Color name and number.
 - 8. VOC content.
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F. Maintain containers used in storage in a clean condition, free of foreign materials and residue.
 - 1. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and application.

1.6 EXTRA MATERIALS

- A. Furnish extra paint materials from the same production run as the materials applied in the quantities described below. Package paint materials in unopened, factory-sealed containers for storage and identify with labels describing contents. Deliver extra materials to the Owner.
 - 1. Quantity: Furnish the Owner with an additional 5 percent, but not less than 1 gal. (3.785 L) or 1 case, as appropriate, of each material and color applied.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Products: Subject to compliance w/ requirements, provide one of the products in the paint schedules.
- B. Manufacturers Names: The following manufacturers are referred to in the paint schedules by use of shortened versions of their names, which are shown in parentheses:
 - 1. Sherwin-Williams Co. (SW). (Basis for Design)
 - 2. ICI (Glidden/Devoe).
 - 3. Benjamin Moore & Co. (Moore).

2.2 PAINT MATERIALS, GENERAL

A. Material Compatibility: Provide primers, undercoats, and finish-coat materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.

- B. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified. Paint-material containers not displaying manufacturer's product identification will not be acceptable.
 - 1. Proprietary Names: Use of manufacturer's proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers. Furnish manufacturer's material data and certificates of performance for proposed substitutions.
- C. Colors: Provide custom colors of the finished paint systems to match Architect's selected samples.
- D. Architect may select up to six (6) paint colors.
- E. Contractor shall include the cost to provide one (1) accent wall per room.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with the Applicator present, under which painting will be performed for compliance with paint application requirements.
 - 1. Do not begin to apply paint until unsatisfactory conditions have been corrected and surfaces receiving paint are thoroughly dry.
 - 2. Start of painting will be construed as the Applicator's acceptance of surfaces and conditions within a particular area.
- B. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
 - 1. Notify the Architect about anticipated problems using the materials specified over substrates primed by others.

3.2 **PREPARATION**

- A. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of the size or weight of the item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.
- B. Cleaning: Before applying paint or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings. Remove oil and grease before cleaning.
 - 1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
- C. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.
 - 1. Provide barrier coats over incompatible primers or remove and re-prime.
 - 2. Ferrous Metals: Clean un-galvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with the Steel Structures Painting Council's (SSPC) recommendations.
 - a. Blast steel surfaces clean as recommended by paint system manufacturer and according to requirements of SSPC-SP 10.

- b. Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.
- c. Touch up bare areas and shop-applied prime coats that have been damaged. Wirebrush, clean with solvents recommended by paint manufacturer, and touch up with the same primer as the shop coat.
- 3. Galvanized Surfaces: Clean galvanized surfaces with non-petroleum-based solvents so surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.
- D. Materials Preparation: Mix and prepare paint materials according to manufacturer's written instructions.
 - 1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
 - 2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
 - 3. Use only thinners approved by paint manufacturer and only within recommended limits.
- E. Tinting: Tint each undercoat a lighter shade to simplify identification of each coat when multiple coats of the same material are applied. Tint undercoats to match the color of the finish coat, but provide sufficient differences in shade of undercoats to distinguish each separate coat.

3.3 APPLICATION

- A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
 - 1. Paint colors, surface treatments, and finishes are indicated in the schedules.
 - 2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
 - 3. Provide finish coats that are compatible with primers used.
 - 4. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, convector covers, covers for finned-tube radiation, grilles, and similar components are in place. Extend coatings in these areas, as required, to maintain the system integrity and provide desired protection.
 - 5. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before the final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
 - 6. Paint interior surfaces of ducts with a flat, non-specular black paint where visible through registers or grilles.
 - 7. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.
 - 8. Finish doors on tops, bottoms, and side edges the same as exterior faces.
 - 9. Finish interior of wall and base cabinets and similar field-finished casework to match exterior.
 - 10. Sand lightly between each succeeding enamel coat.
- B. Scheduling Painting: Apply first coat to surfaces have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
 - 1. The number of coats and the film thickness required are the same regardless of application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
 - 2. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.

- 3. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and where application of another coat of paint does not cause the undercoat to lift or lose adhesion.
- C. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.
 - 1. Brushes: Use brushes best suited for the type of material applied. Use brush of appropriate size for the surface or item being painted.
 - 2. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.
 - 3. Spray Equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required.
- D. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate. Provide total dry film thickness of entire system as recommended by the manufacturer.
- E. Mechanical and Electrical Work: Painting of mechanical and electrical work is limited to items exposed in equipment rooms and in occupied spaces.
- F. Prime Coats: Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces.
- G. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- H. Transparent (Clear) Finishes: Use multiple coats to produce a glass-smooth surface film of even luster. Provide a finish free of laps, runs, cloudiness, color irregularity, brush marks, orange peel, nail holes, or other surface imperfections.
 - 1. Provide satin finish for final coats.
- I. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.

3.4 FIELD QUALITY CONTROL

A. The Owner reserves the right to invoke testing of applied materials at any time and as often as the Owner deems necessary during the period when paint is being applied.

3.5 CLEANING

- A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from the site.
 - 1. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping. Be careful not to scratch or damage adjacent finished surfaces.

3.6 PROTECTION

- A. Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect.
- B. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.
 - 1. At completion of construction activities of other trades, touch up and restore damaged or

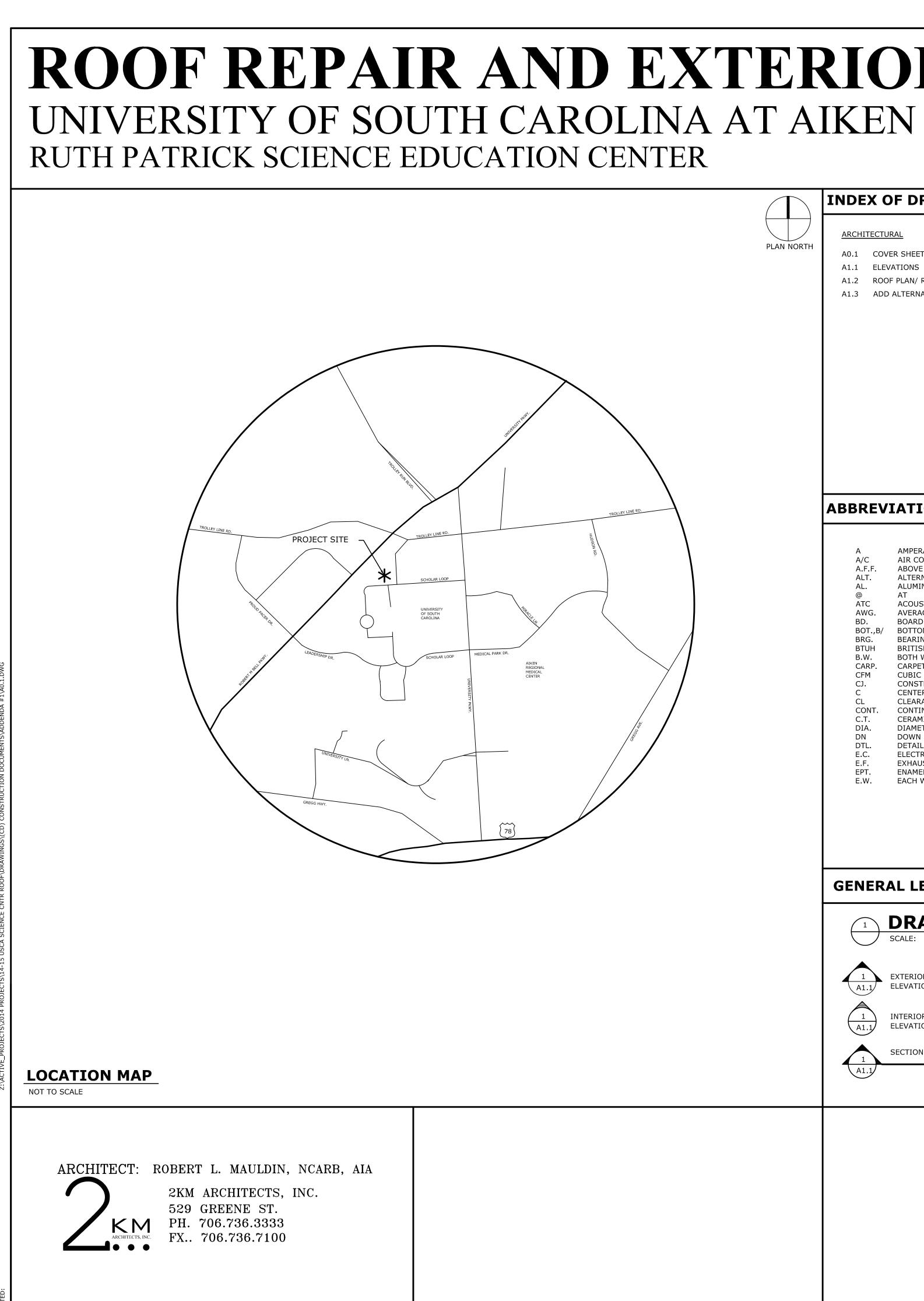
defaced painted surfaces. Comply with procedures specified in PDCA P1.

3.7 PAINT SCHEDULE (All colors subject to approval by Owner, colors to match existing Campus Standards – Sherwin Williams – **Premium Quality**.)

A. Exterior

1.	Ferrous Metal (Shop Primed): (touch-up prime coat)			
	a.	Two Coats	S-W	Exterior oil-base Semi-Gloss 4550.
2.	Ferrous Metal a. b.	l (Not Shop Primed): 1st Coat 2 nd & Top Coats	S-W PPG	Kem-Kronik Oil Based Primer Finish: 7-817 Industrial Enamel Interior / Exterior Gloss Oil - ASU Bronze
3.	Galvanized M a. b.	Ietal: 1st Coat 2 nd & Top Coats	S-W PPG	Kem-Kronik Oil Based Primer Finish: 7-817 Industrial Enamel Interior / Exterior Gloss Oil - ASU Bronze
4.	Exposed Pipin a. b.	ng (except chrome-plate, condu 1st Coat 2 nd & 3 rd Coats	iit, etc.): S-W S-W	Kem-Kronik Oil Based Primer Finish: Semi-Gloss: 2 Coats, All Surface Enamel, AllW201 Oil Based Semi-Gloss
5.	Tactile Warni a. b. c. 1)	ng: – Steps & Landings: 1st Coat 2 nd & 3 rd Coats Exterior Safety Strip: (Stair M 2-part Epoxy Textured Safety texture. (replaces adhered saf	y Coating.	High-contrast color; medium to heavy
6.	Plaster Walls: a. b.	Exterior Block Filler Exterior Latex Duration Hom	ne.	

END OF SECTION



ROOF REPAIR AND EXTERIOR IMPROVEMENTS

INDEX OF DRAWINGS	APPLICABLE CODES
PLAN NORTH ARCHITECTURAL A0.1 COVER SHEET A1.1 ELEVATIONS A1.2 ROOF PLAN/ ROOF DETAIL/ SECTIONS A1.3 ADD ALTERNATE #1 FLOORING PLAN/ ENLARGED PLANS	APPLICABLE CODES120-3-32014STATE MINIMUM FADA2010ADA STANDARDS IIBC2012INTERNATIONAL BIEBC2012INTERNATIONAL EIECC2009INTERNATIONAL FIFC2012INTERNATIONAL FIFC2012INTERNATIONAL FIFC2012INTERNATIONAL PIRC2012INTERNATIONAL PIRC2013STANDARD FOR PONFPA 102013STANDARD FOR PONFPA 702014NATIONAL FIRE ALNFPA 722013NATIONAL FIRE ALNFPA 802013STANDARD FOR FINFPA 1012012STANDARD FOR FINFPA 2412013STANDARD FOR SAOPERATIONS (PERASME A17.12007AMERICAN NATION(ANSI) FOR ELEVA

ABBREVIATIONS

AMPERAGE
AIR CONDITIONER
ABOVE FINISH FLOOR
ALTERNATE
ALUMINUM
AT
ACOUSTICAL TILE CEILING
AVERAGE WIRE GAUGE
BOARD
BOTTOM
BEARING
BRITISH THERMAL UNIT/HOUR
BOTH WAYS
CARPET
CUBIC FEET PER MINUTE
CONSTRUCTION JOINT
CENTER LINE
CLEARANCE
CONTINUOUS
CERAMIC TILE
DIAMETER
DOWN
DETAIL
ELECTRICAL CONDUIT
EXHAUST FAN
ENAMEL PAINT
EACH WAY

	EACH SIDE	M.O.	MASONRY OPE
	ELECTRIC WATER COOLER	M/R	MOISTURE RE
	EXPANSION	MTL.	METAL
	EXTERIOR	NEC	NATIONAL ELE
	FLOOR DRAIN	O.A.	OUTSIDE AIR
	FIRE EXTINGUISHER CABINET	0.C.	ON CENTER
	FINISH FLOOR LEVEL	0.D.	OUTSIDE DIA
	FINISH	O.H.	OVERHEAD
	FLOOR	Р	POLE
	FOOT	PCPL	PORTLAND CE
	FIELD VERIFY	PL.	
	GROUND	PLAM	PLASTIC LAMI
	GAUGE	PLYWD.	PLYWOOD
	GENERAL CONTRACTOR		PRESSURE TR
V	GYPSUM DRYWALL		POLY VINYL C
	GALLONS PER MINUTE	Q.T.	QUARRY TILE
	HANDICAP	R.	
	HOLLOW METAL	R.C.P.	
	HORSE POWER	R.D.	
2	HEAT'G, VENT'G & AIR COND.		
	INSIDE DIAMETER	REF.	
L.	INSULATION	REINF.	REINFORCING
	INTERIOR	RPM	
.C.	INCHES OF WATER COLUMN	S.A.T	
	JOINT		CEILING
	LIGHT GAUGE METAL	S.C.	SOLID CORE
	FRAMING	S.H.	SPRINKLER HE
	MAXIMUM		

