WAYNE STATE UNIVERSITY

Science Hall Lecture Room Upgrades - 2nd Floor

Detroit, Michigan

WSU Project No. 005-226260



Wayne State University Owner Project Number: 005-226260

Owner Project 5045 Cass Ave. Detroit, MI 48201 PH: 313.577.4301 FX: 313.577.1817



Collaborative Architecture Architect -- Project Number: 12089

210 East Huron St. Ann Arbor, MI 48104 PH: 734.663.1910 FX: 734.663.8427

Peter Basso Associates, Inc.

Mechanical / Electrical Engineering Consultant 5145 Livernois Rd. Suite 100 Troy, MI 48098 PH: 248.879.5666 FX: 248.879.0007

PROJECT GENERAL NOTES:

- ALL DIMENSIONS ARE FROM FINISH FACE OF MATERIAL, UNO
- 2. ALL ANGLES ARE 90 DEGREES, UNO
- 3. SITE CONDITIONS: THE CONTRACTOR BY COMMENCING THE WORK ACCEPTS THE CONDITIONS OF THE SITE AND THE COMPLETENESS OF THE CONTRACT DOCUMENTS ANY DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL CONDITIONS SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BEGINNING THE WORK. NO EXTRAS SHALL BE ALLOWED FOR DISCREPANCIES AFTER THE WORK HAS BEGUN.
- AFFECTING ALL TRADES ARE PLACED THROUGHOUT THE SET OF DRAWINGS. NO CONTRACTORS SHALL PROMPTLY NOTIFY THE ARCHITECT OF ANY AMBIGUITY
- BUT WHICH IS OBVIOUSLY NECESSARY TO COMPLETE THE WORK OF A SIMILAR NATURE GREATER VALUE SHALL PREVAIL AND BE PROVIDED BY THE CONTRACTOR AS A PART OF HIS BASE CONTRACT AND SHALL NOT BECOME A BASIS FOR CHANGE ORDERS OR CLAIMS FOR ADDITIONAL COMPENSATION
- IN THE CASE OF CONFLICTING OR INCONSISTENT INFORMATION, THE MOST STRINGENT REQUIREMENTS SHALL PREVAIL AND BE PROVIDED BY THE CONTRACTOR AS A PART OF HIS BASE CONTRACT AND SHALL NOT BECOME A BASIS FOR CHANGE ORDERS OR CLAIMS FOR ADDITIONAL COMPENSATION
- 6. PROTECTION: GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALSO BE RESPONSIBLE FOR PROJECT SECURITY FROM THE START OF THE WORK UNTIL THE OWNER ACCEPTS THE PROJECT AS SUBSTANTIALLY COMPLETE AND/OR OCCUPIABLE.
- 1. ALL WORK NOT INDICATED AS ALTERNATE BID AND WITHIN AREA DEFINED AS IN CONTRACT SHALL BE CONSIDERED BASE BID.
- 8. PROVIDE I HOUR CONSTRUCTION BARRIER WITH EXISTING PARTITIONS. SEE GENERAL CONDITIONS.

INSIDE DIAMETER

NOTE: SEE DOOR, WINDOW AND

INTERIOR FINISH SCHEDULES FOR

ADDITIONAL ABBREVIATIONS

ABBREVIATIONS LIST

LAVATORY

11011-GO.01

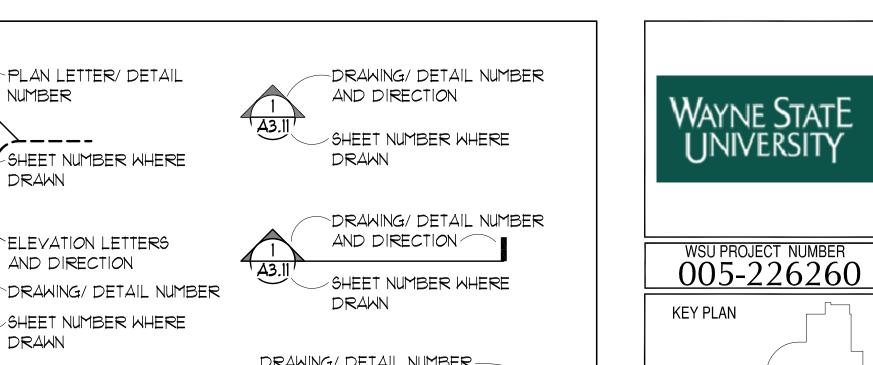
WORK COUNTER

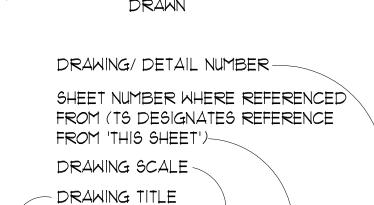
WATER RESISTANT

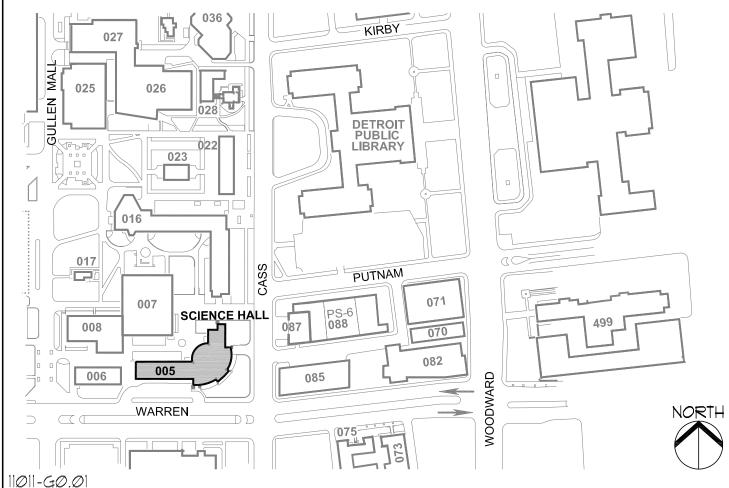
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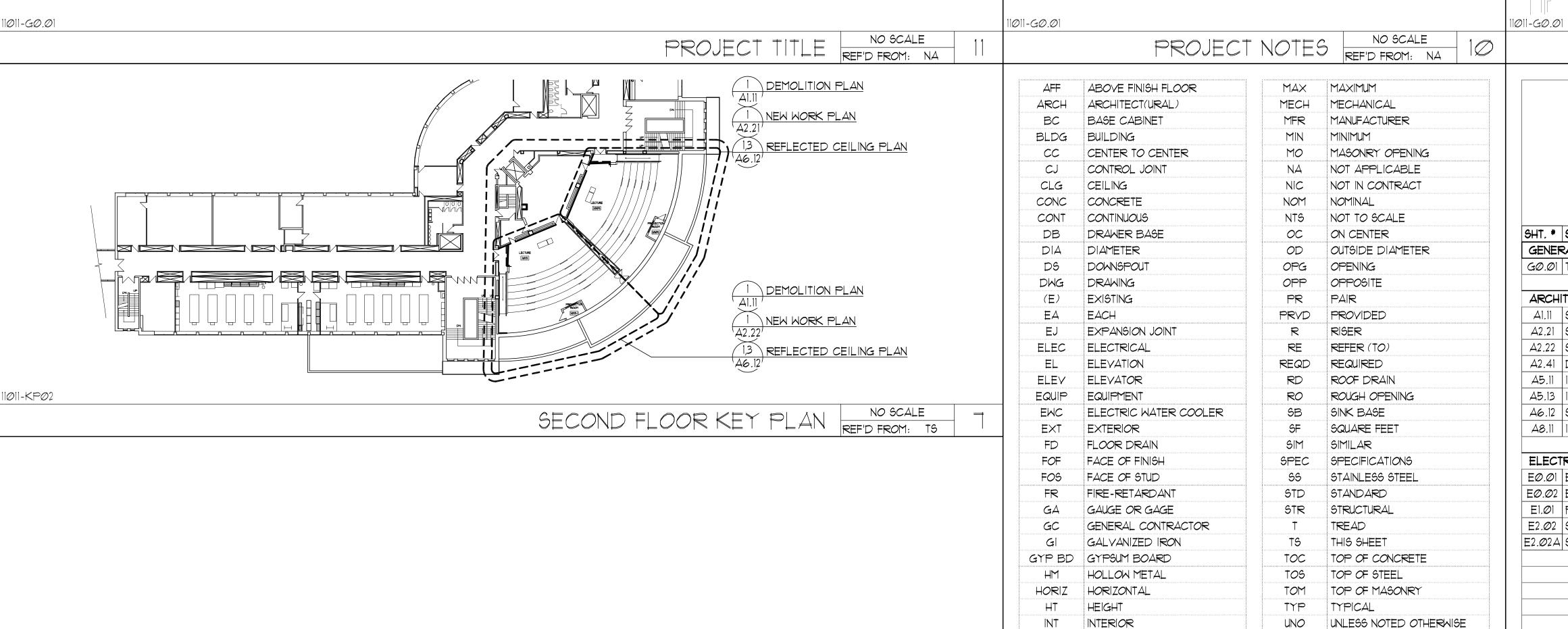
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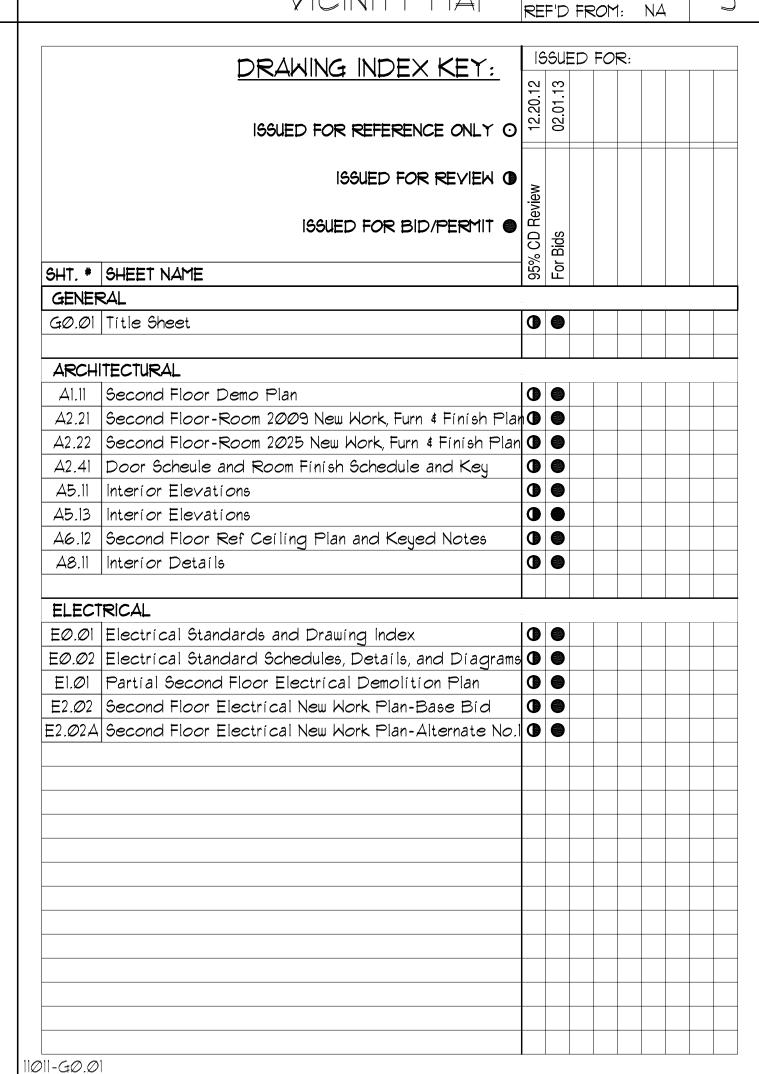
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ELEVATION LETTER

ELEVATION TITLE

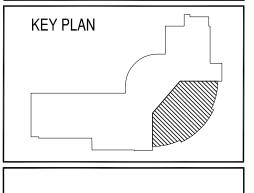


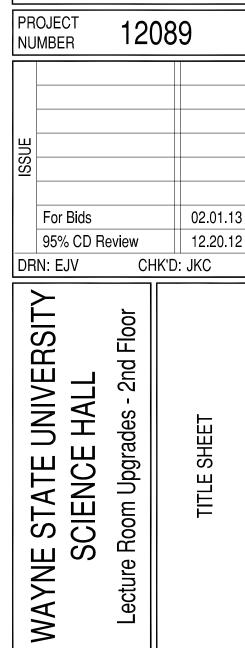


DRAWING INDEX

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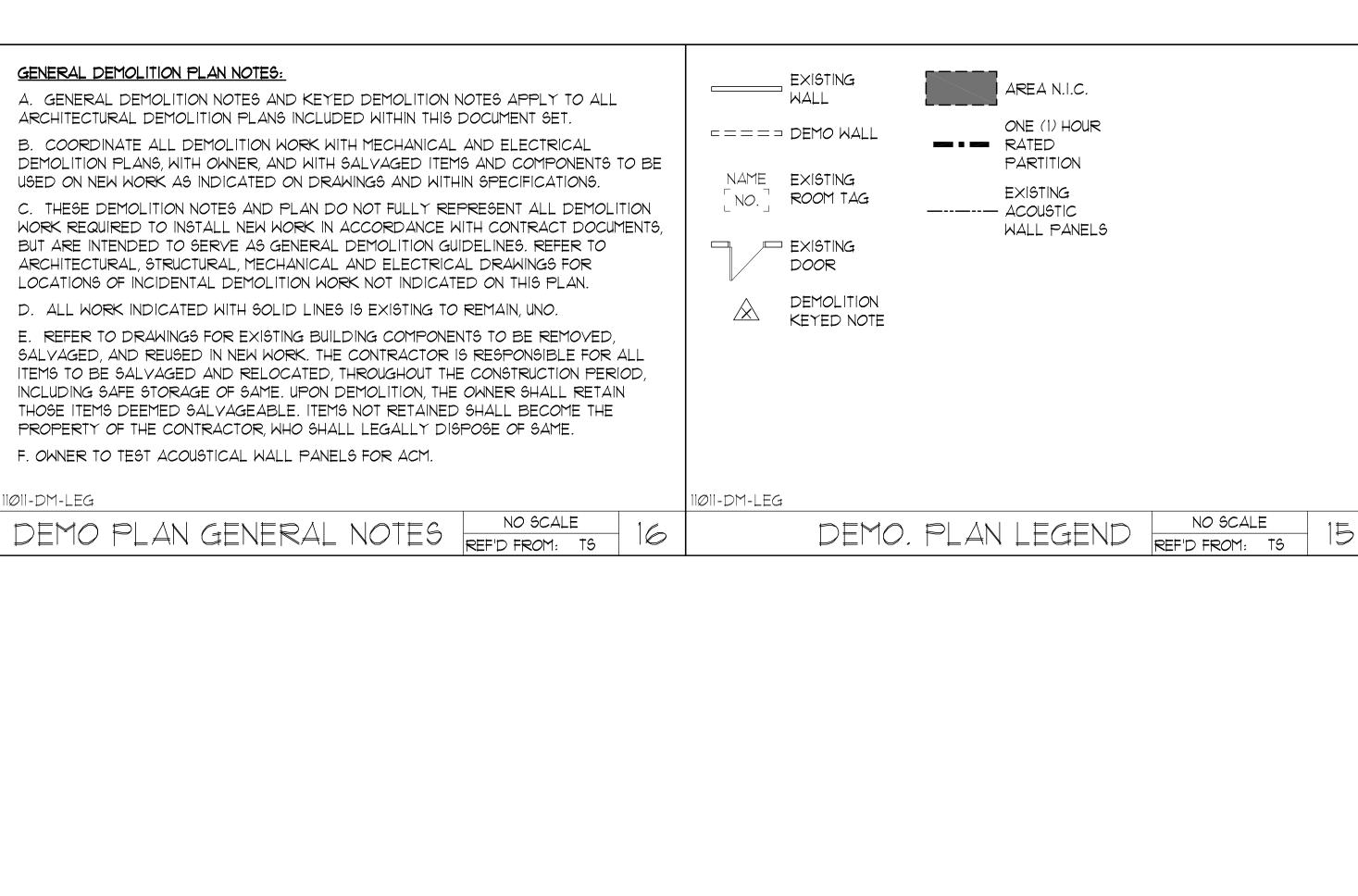








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12 REMOVE EXISTING PERIODIC TABLES, FRAME AND MOUNTING HARDWARE. DEMOLITION PLAN KEYED NOTES: SALVAGE FOR REINSTALLATION. REMOVE AND DISPOSE OF ALL EXISTING FIXED CHAIRS AND TABLES COMPLETE, EXCEPT FOR DEMONSTRATION STATION.

/2\ REMOVE EXISTING CARPET AND RESILIENT WALL BASE COMPLETE, INCLUDING

FINISH AND CARPET WHERE SCHEDULED.

NETWORK PODIUM DURING CONSTRUCTION.

/9\ (NOT USED)

/II (NOT USED)

11011-DM-LEG

 $\overline{/4}$ REMOVE CLOCK AND SALVAGE FOR REINSTALLATION.

AND REINSTALLATION. TYPICAL FOR ALL LOCATIONS.

CEILINGS LIGHTS, AND THE TWO PROJECTOR SCREENS

ADHESIVES AND OTHER SUBSTANCES NECESSARY FOR NEW EPOXY FLOOR

 $\overline{ extstyle 3 extstyle}$ REMOVE ALL EXISTING ACOUSTICAL WALL PANELS AND WOOD TRIM COMPLETE,

INCLUDING ADHESIVES AND RESIDUE NECESSARY FOR NEW PAINTED WALL

<u>/5\</u> REMOVE RETURN AIR GRILL COVERS FOR CLEANING. SALVAGE FOR PAINTING

 ${f /6ackslash}$ remove and dispose of existing coat racks and shelves complete.

/8\ OWNER IS RESPONSIBLE FOR UNLOCKING AND TEMPORARY RELOCATION OF

BID ALTERNATE ** - REMOVE CEILING PANELS AND GRID, GYPSUM BOARD

/1ackslash Remove existing pencil sharpeners and salvage for reinstallation.

FINISH. ACOUSTICAL PANELS WILL BE SAMPLED FOR ACM BY OWNER.

13 CAP EXISTING ELECTRICAL OUTLETS NEAR CEILING. SEE ELECTRICAL DRAWINGS. $\cancel{14}$ REMOVE EXISTING CEILING MOUNTED PROJECTOR AND HOUSING IN ROOMS 2009 AND 2025, SALVAGE AND TURN OVER TO OWNER, ABOVE-CEILING SUPPORT TO

15 REMOVE ALL EXISTING SIGNAGE IN CLASSROOM

(NOT USED)

17\ REMOVE MANUAL PROJECTION SCREEN.

18 BID ALTERNATE 1 - REMOVE AND SALVAGE MANUAL AND ELECTRIC PROJECTION SCREENS.

BID ALTERNATE 1 - REMOVE AND SALVAGE ELECTRIC PROJECTION SCREEN.

REMOVE EXISTING STEEL HANDRAIL.

(NOT USED)

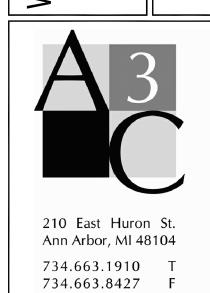
(NOT USED)

23 REMOVE DRAWERS AND DRAWER FRONTS WHERE DAMAGED.

24 REMOVE PORTION OF EXISTING PARTIAL HEIGHT METAL STUD WALL AS NEEDED TO ACCOMMODATE ALTERATIONS TO PLATFORM - SEE NEW WORK PLAN. SALVAGE WOOD CAP FOR REINSTALLATION.

DEMO PLAN KETED NOTES REF'D FROM: TS

PROJECT NUMBER DRN: EJV WAYNE STATE UNIVERSITY SCIENCE HALL



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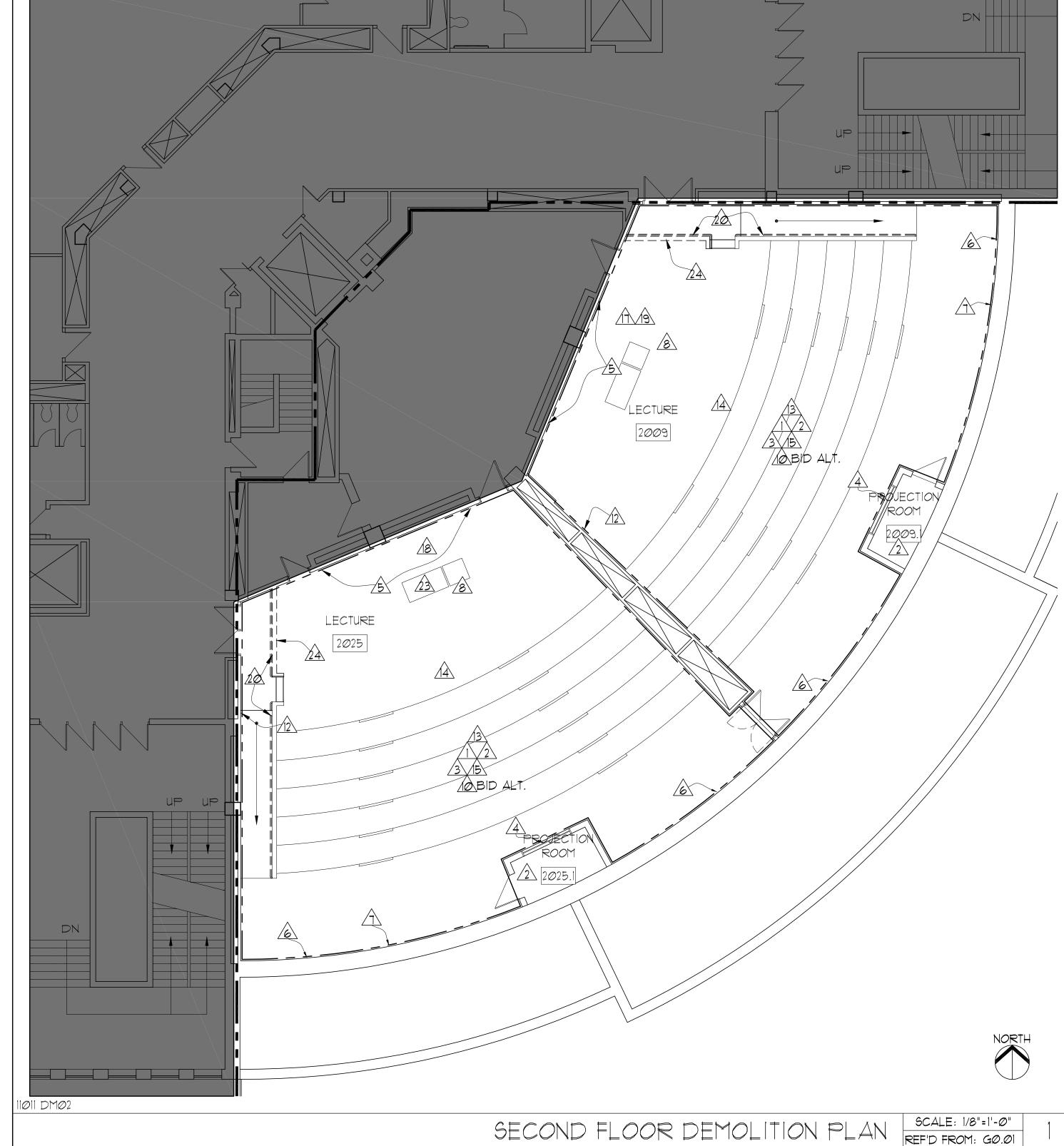
SECOND FLOOR DEMO PLAN

CHK'D: JKC

For Bids

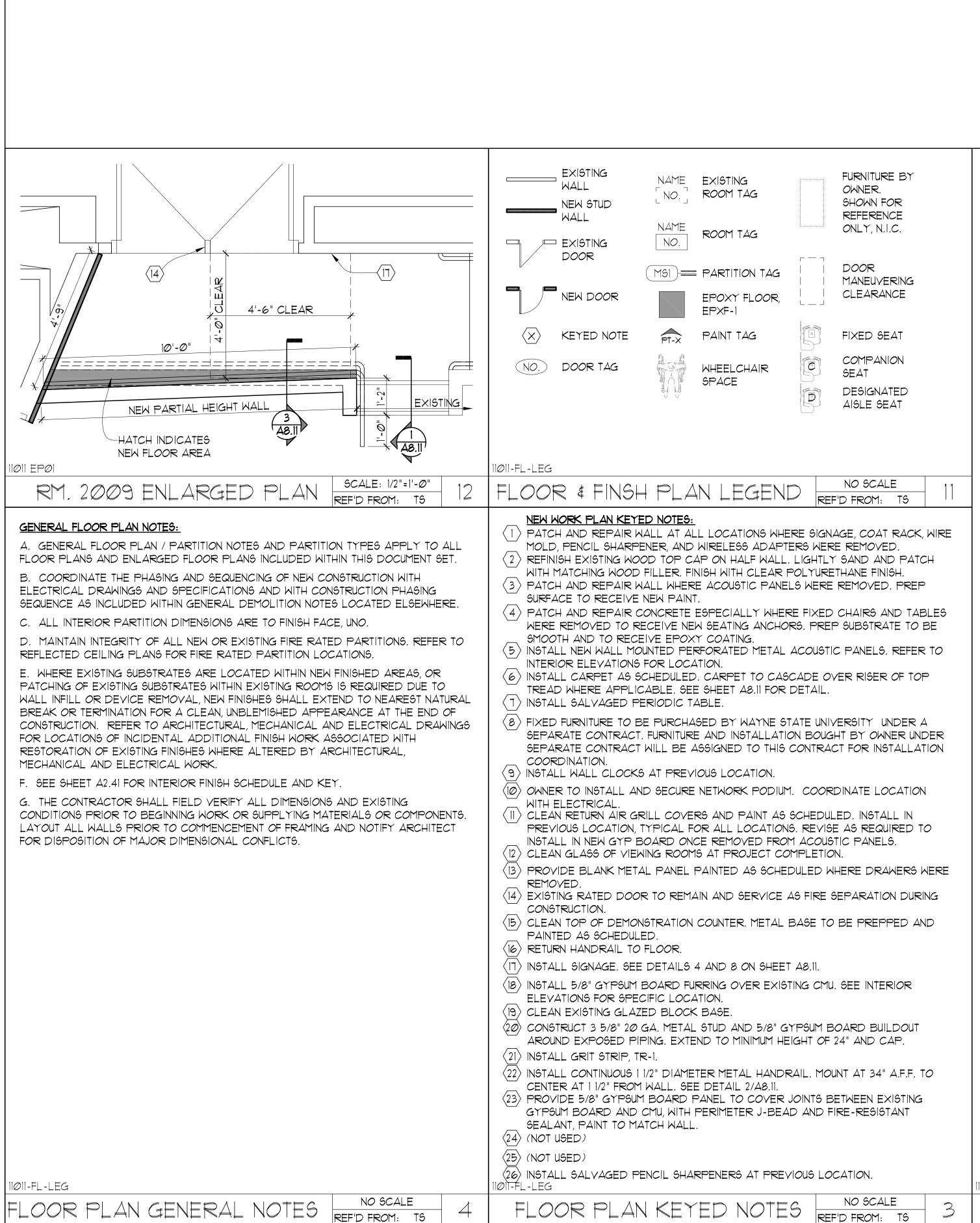
95% CD Review

www.a3c.com SHEET A1.11

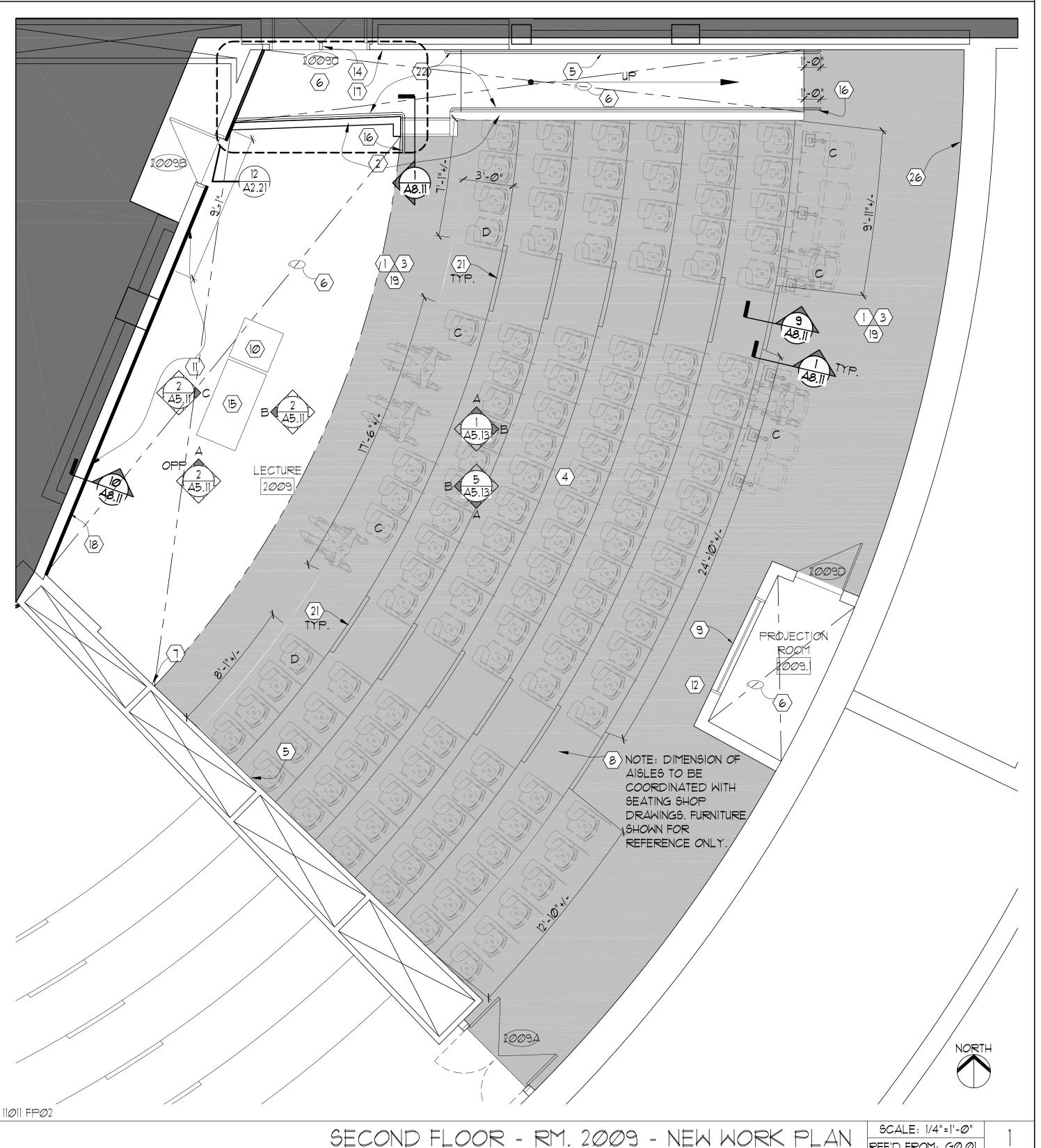






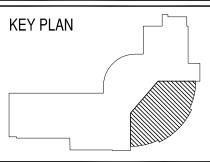


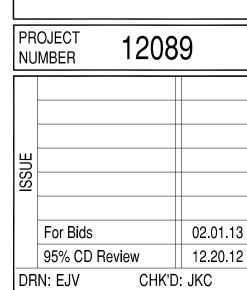
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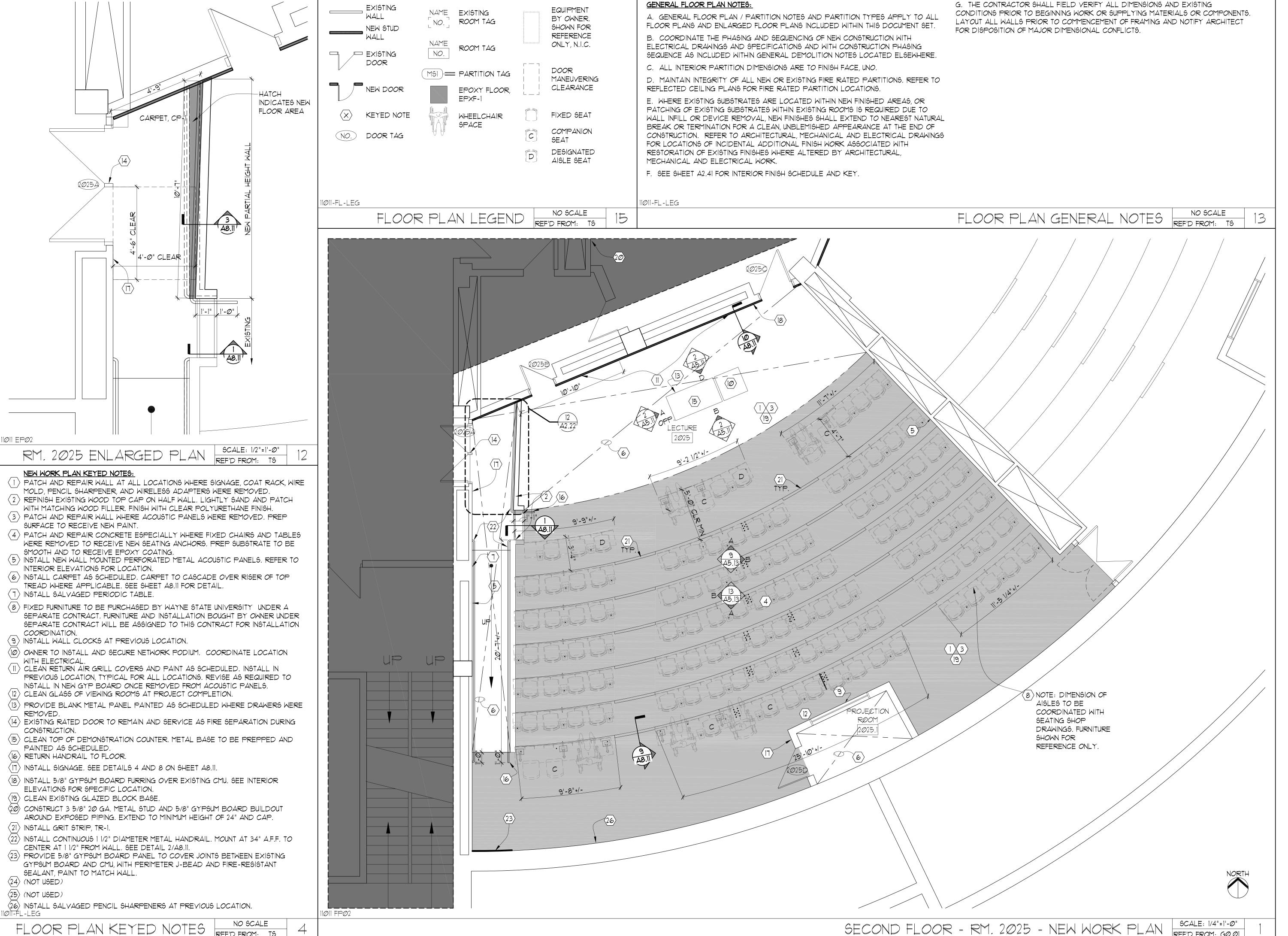
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SHEET

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WAYNE STATE UNIVERSITY

WSU PROJECT NUMBER 005-226260

KEY PLAN

PROJECT NUMBER

For Bids 02.01.13 95% CD Review 12.20.12 DRN: EJV CHK'D: JKC

UNIVERSITY

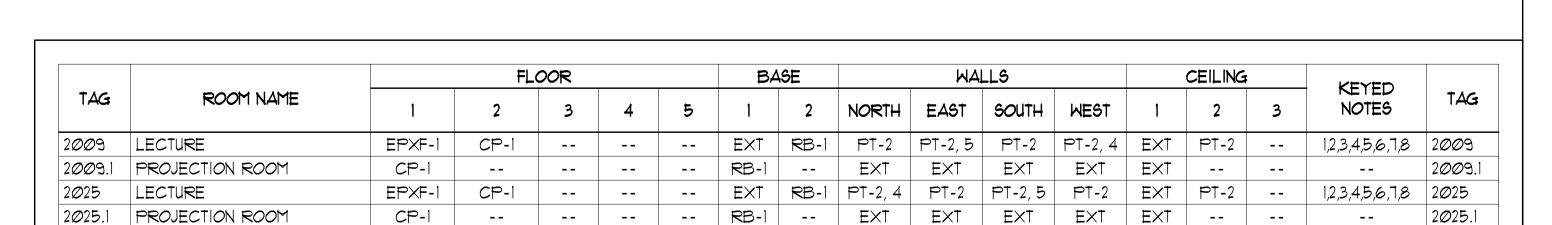
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ROOM FINISH SCHEDULE GENERAL NOTES:

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE DIRECTION OF APPLICATION FOR ALL DIRECTIONAL FINISHES.
- B. SEE INTERIOR ELEVATIONS AND FLOOR PLANS FOR FINISH APPLICATION.
- C. FLOORING CONTRACTOR TO COORDINATE FINAL FURNITURE LOCATIONS BEFORE INSTALLATION WITH FURNITURE VENDOR AND ARCHITECT.
- D. EXT = EXISTING TO REMAIN
- E. PAINT EXPOSED CONDUIT AND SURFACE RACEWAYS TO MATCH ADJACENT WALL.

ROOM FINISH SCHEDULE KEYED NOTES:

- 1. PAINT EXISTING AND NEW HANDRAILS AND GUARDRAILS PT-3B.
- 2. PAINT EXISTING DEMONSTRATION COUNTER BASE PT-5. SEE ELEVATIONS. 3. PAINT MECHANICAL GRILLE COVERS TO MATCH WALL WHERE SHOWN ON ELEVATIONS.
- 4. REFINISHED WOOD TOP CAP TO RECEIVE CLEAR POLYURETHANE FINISH.
- 5. PAINT GYPSUM BOARD CEILING SOFFITS PT-1 AS PART OF BASE BID.
- 6. INSTALL ACG-1 AND ACT-1 CEILING IF BID ALTERNATE 1 IS ACCEPTED.
- 7. INSTALL RB-1 ON GYPSUM BOARD WALLS ONLY.
- 8. PATCH ALL HOLES IN EXISTING WALLS PRIOR TO PAINTING.

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OOM EINIGH GOHEDH E	NO SCALE	
DOM FINISH SCHEDULE	REF'D FROM: A2.22	

		DOOR							FRAME					→ ₩		DETAIL		- <u>я</u>	
TAG	ROOM NAME	SIZE (WxH)	THICKNESS	MATERIAL	FINISH	CORE	GLA56	SIDELITE	MATERIAL	FINI9H	THRESHOLD	LABEL	HARDWARE SET	ELEVATION DOOR/ FRAM	HEAD	JAMB	THRESHOLD	KEYED NOTES	TAG
2009A	LECTURE	PR 3'0" × 1'0"		EXT	PT-4		EXT		EXT	PT-3B			EXT						2009A
2009B	LECTURE	3'Ø" × 7'Ø"		EXT	PT-4				EXT	PT-3B			<i>Ø</i> 5						2009B
20090	LECTURE	PR 3'0" × 1'0"		EXT	EXT, PT-4		EXT		EXT	EXT, PT-3B			Ø 2					1	20090
2009D	LECTURE	3'Ø" × 7'Ø"		EXT	PT-4				EXT				EXT						2009D
2Ø25Д	LECTURE	PR 3'0" X 7'0"		EXT	EXT, PT-4		EXT		EXT	EXT, PT-3B			Ø2					1	2Ø25A
2Ø25B	LECTURE	3'Ø" × 7'Ø"		EXT	PT-4		EXT		EXT	PT-3B			Ø5						2Ø25B
2Ø25C	LECTURE	3'Ø" × 7'Ø"		EXT	PT-4				EXT	PT-3B			Ø5						2Ø25C
2Ø25D	LECTURE	3'Ø" × 7'Ø"		EXT	PT-4				EXT	PT-3B			EXT						2Ø25D

DOOR SCHEDULE GENERAL NOTES:

- A. ALL DOOR HARDWARE SHALL MEET AMERICAN WITH DISABILITIES ACT (ADA) AND
- MICHIGAN BUILDING CODE REQUIREMENTS. B. REFER TO PROJECT MANUAL FOR HARDWARE SETS.
- C. EXT = EXISTING TO REMAIN.

11011 DRS

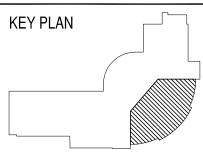
- D. CLEAN ALL EXISTING DOOR KICKPLATES TO REMAIN. E. PAINT BOTH SIDES OF ALL FRAMES AND DOORS U.O.N.
- F. HOLD \$2000 FOR OWNERS HARDWARE MAINTENANCE ALLOWANCE WITHIN BASE BID.

DOOR SCHEDULE KEYED NOTES:

1. PAINT LECTURE ROOM SIDE OF DOORS AND FRAMES PT-3B. PAINT CORRIDOR SIDE OF DOORS AND FRAMES TO MATCH EXISTING.

CODE	MATERIAL	MANUFACTURER	STYLE	COLOR	SIZE	MANUFACTURER'S CODE	NOTES
ACG-1	ACOUSTIC CEILING GRID	USG	DONN DX/DXL	WHITE	15/16"		USED IN ALT #1
ACT-1	ACOUSTIC CEILING TILE	USG	FROST CLIMA PLUS	WHITE	24"×24"	418	USED IN ALT #1
CP-1	CARPET	SHAW CONTRACT	EVOLVE	GLOW WITH FLAIR	12 'W	60561-56235	RAMPS AND FRONT TO FRONT OF SEATING
EPXF-1	EPOXY FLOOR	PPG	AQUAPON WB 98-1 SERIES	SANDSTONE	6 MIL TH.		
FT-3	FLOOR TRANSITION	JOHNSONITE	QUARTER ROUND	BLACK	1/2" × 1/2"	QTR-40-A	WHERE CARPET RISER MEETS EPXF-1. SEE DETAIL ON SHEET A8.11.
MAP-1	METAL ACOUSTIC PANELS	ALPRO	ACOUST-X	ASTI II SATIN	3Ø"×3Ø"	PDR-20811	SEE ELEVATIONS
PT-1	PAINT	SHERWIN WILLIAMS	FLAT	ALABASTER		SW7008	CEILING PAINT, USED IN ALT #1
PT-2	PAINT	SHERWIN WILLIAMS	SATIN	NAVAJO WHITE		SW6126	GENERAL PAINT
PT-3A	PAINT	SHERWIN WILLIAMS	SATIN	PORTABELLO		SW6102	WOOD TRIM PAINT
PT-3B	PAINT	SHERWIN WILLIAMS	SEMI-GLOSS	PORTABELLO		SW6102	WOOD TRIM PAINT
PT-4	PAINT	SHERWIN WILLIAMS	SATIN	STONEBRIAR		SM1693	LECTURE HALL FRONT WALL AND RAMP WALLS, LOUNGE CORRIDOR WALL
PT-5	PAINT	SHERWIN WILLIAMS	SATIN	GINGERY		SW6363	LECTURE HALL BACK WALL ACCENT
RB-1	RESILIENT BASE	JOHNSONITE	COYE	BLACK	4"H	DC	LECTURE HALLS
TR-1	TREAD - GRIT	FLEX - TREAD	46 GRIT	FLAT BLACK MEDIUM	3/4"		INSTALL IN ROOMS 2009 AND 2025 EVERY 6", SEE PLANS.

WSU PROJECT NUMBER 005-226260



For Bids 95% CD Review DRN: EJV CHK'D: JKC WAYNE STATE UNIVERSITY SCIENCE HALL

02.01.13

12.20.12

PROJECT NUMBER

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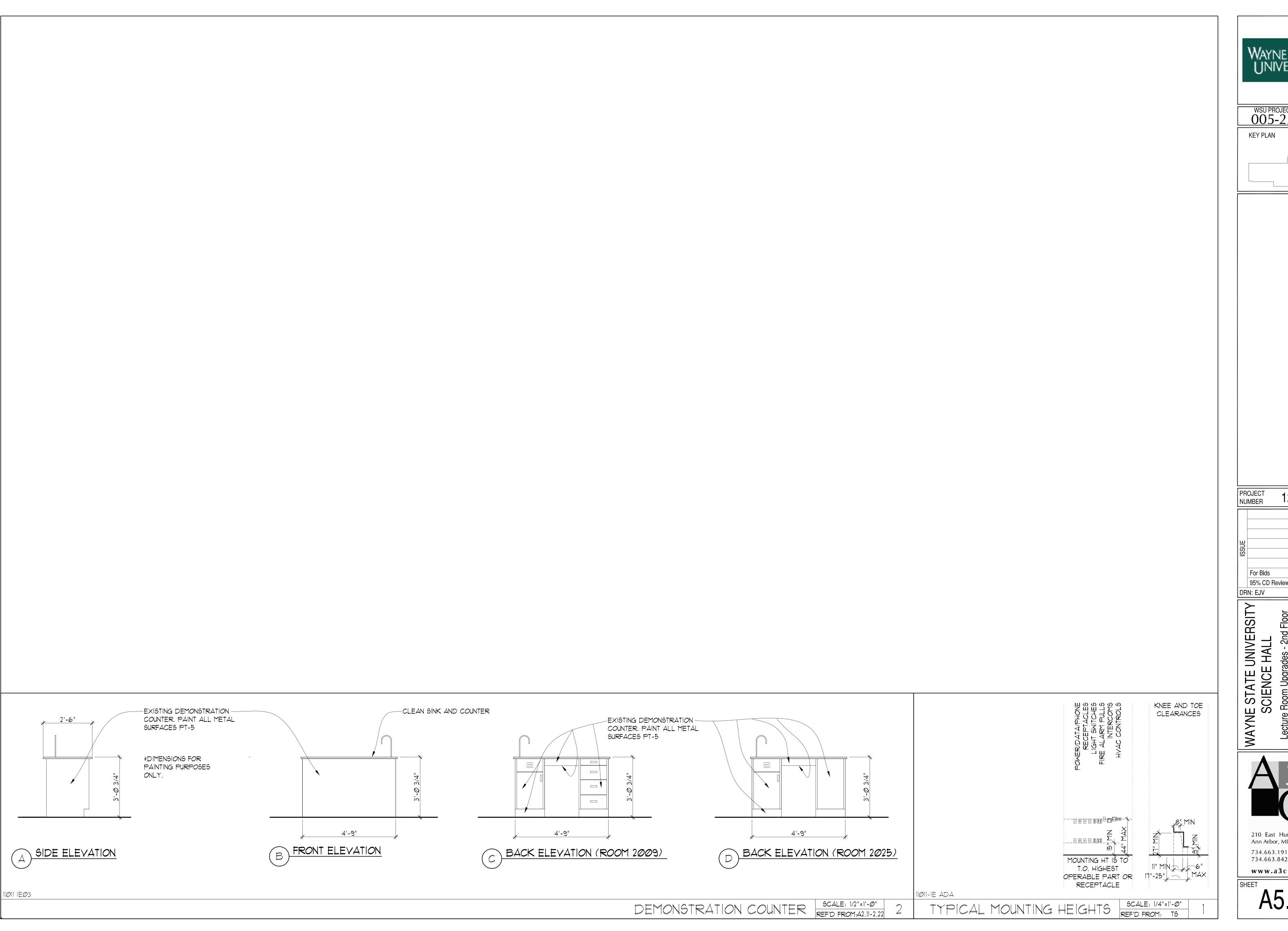
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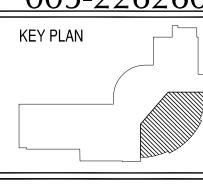
DOOR SCHEDULE | NO SCALE | REF'D FROM:A1.11-2.22

ROOM FINISH KEY REF'D FROM:A2.11-2.22





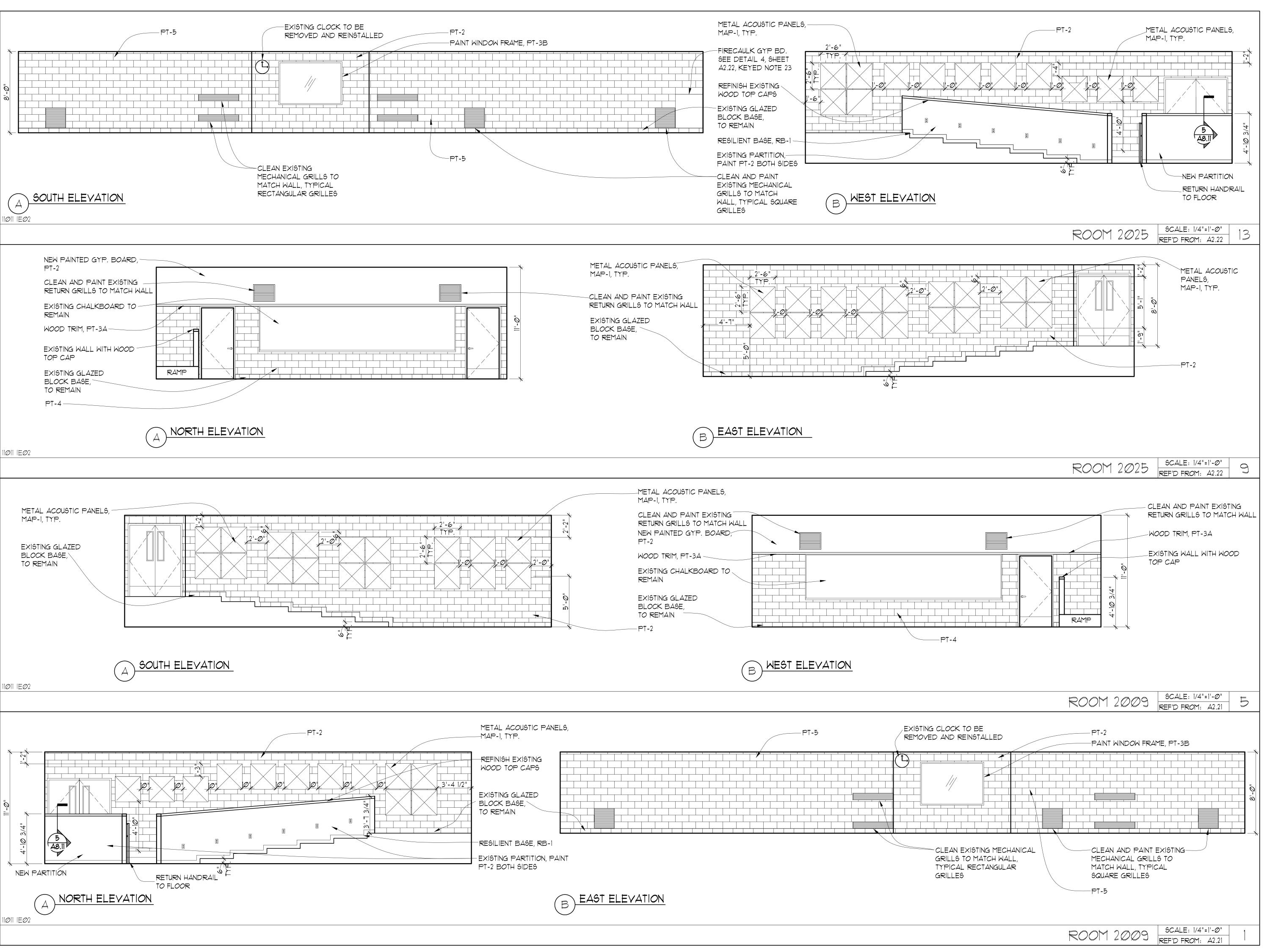
wsu project number 005-226260



02.01.13 95% CD Review 12.20.12 CHK'D: JKC

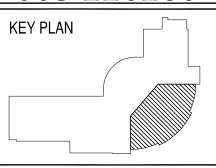


A5.11

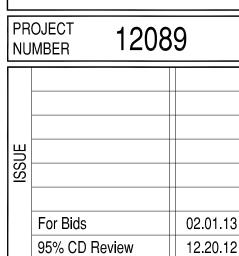




WSU PROJECT NUMBER 005-226260



NOTE: SEE DETAIL SHEET A5.11 FOR TYPICAL MOUNTING HEIGHTS.



CHK'D: JKC

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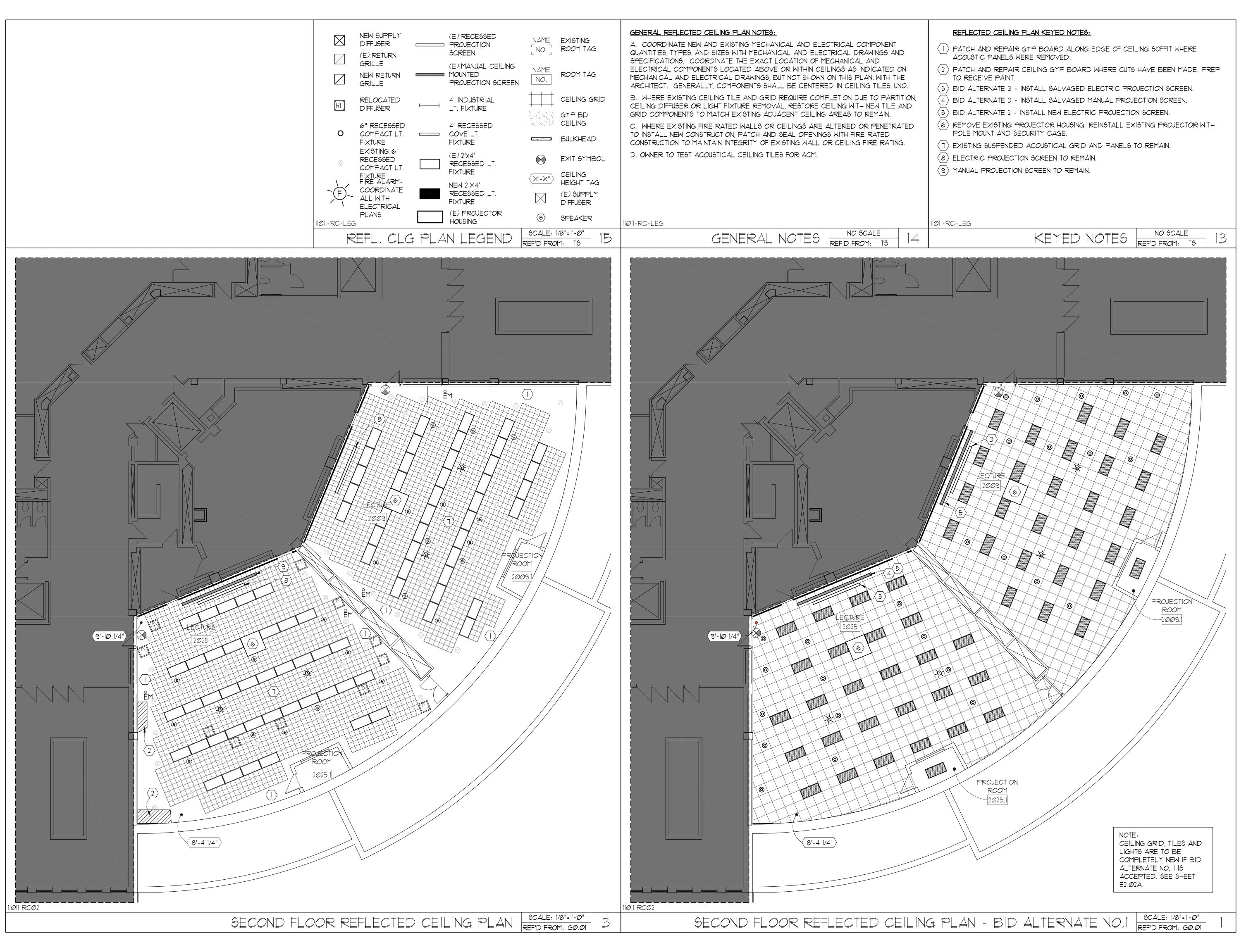
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SHEET A5.13





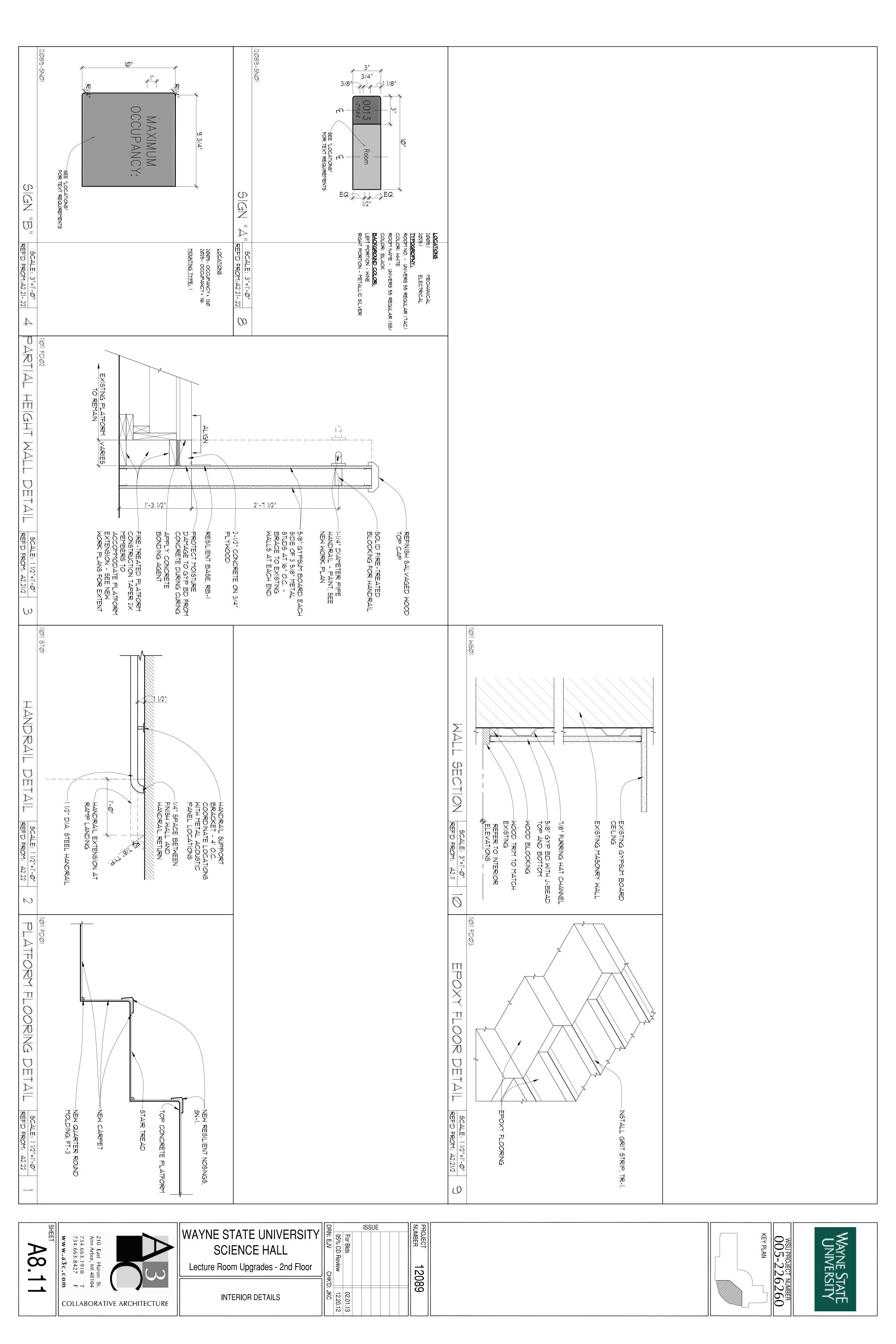
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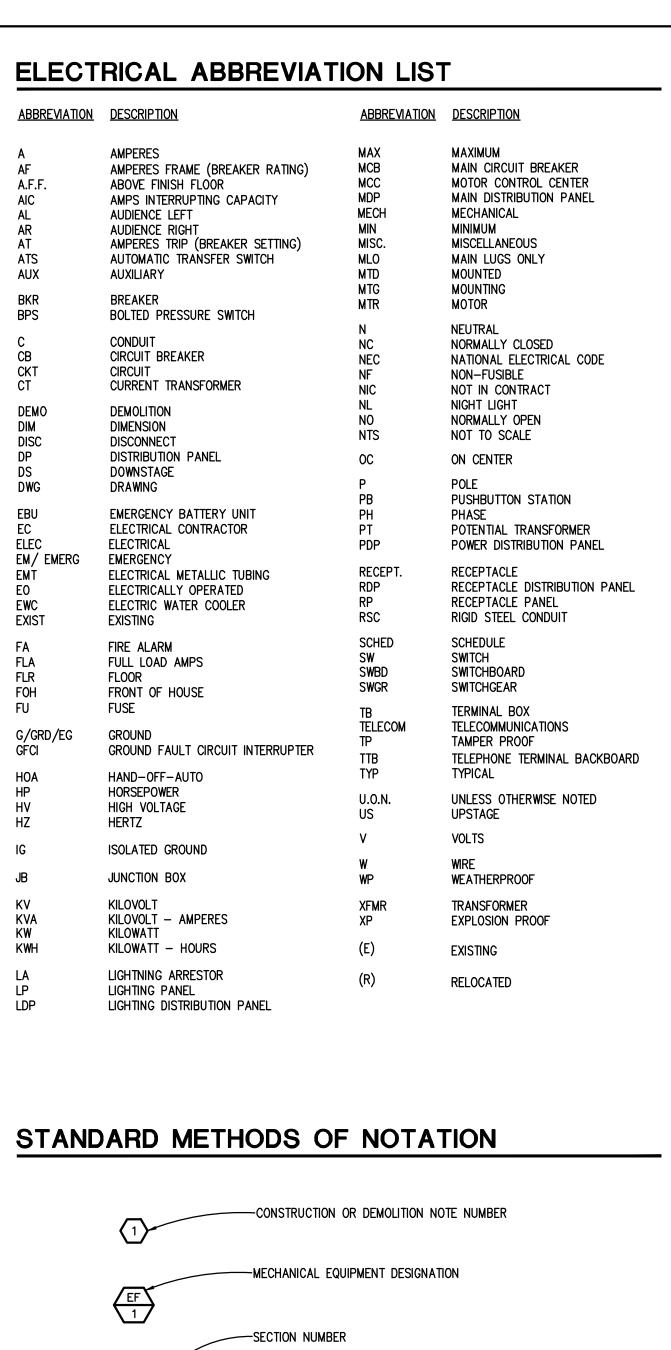
KEY PLAN

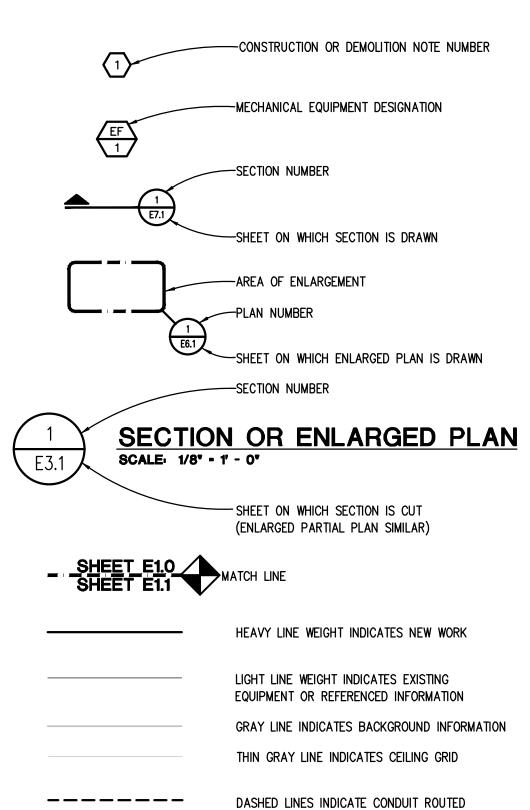
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A6.12







IN OR BELOW SLAB OR GRADE

BE DISCONNECTED AND REMOVED.

CIRCUIT HOMERUN

HATCH MARKS INDICATE EQUIPMENT TO

ELECTRICAL SYMBOL LIST

CEILING MOUNTED DUPLEX RECEPTACLE

MULTI-OUTLET RACEWAY

BRANCH CIRCUIT PANELBOARD

SPECIAL RECEPTACLE - REFER TO ELECTRICAL STANDARD

SCHEDULES

<u>SYMBOL</u>	DESCRIPTION	<u>SYMBOL</u>	<u>DESCRIPTION</u>	<u>SYMBOL</u>
FA	FIXTURE TYPE		MOTOR CONTROL CENTER	%
	LIGHTING FIXTURE	Т	TRANSFORMER	\^ °
	DIRECT/INDIRECT LIGHTING FIXTURE		DISTRIBUTION PANEL	
	DINEOT/INDINEOT CIGHTING TIXTORE	PTX	POKE THRU SERVICE FITTING "X" INDICATES TYPE	uw m
	EMERGENCY FIXTURE	FBX	FLOOR BOX SERVICE FITTING "X" INDICATES TYPE	\rightarrow
FX-NL	NIGHT LIGHTING FIXTURE	AFX	ACCESS FLOOR SERVICE FITTING	38
	LIGHTING FIXTURE	RX	"X" INDICATES TYPE CORD REEL "X" INDICATES TYPE	→ • ·
	EMERGENCY FIXTURE	RGP	"X" INDICATES TYPE REMOTE GENERATOR ANNUCIATOR PANEL	X
├	WALL MOUNTED LIGHTING FIXTURE	ATS	AUTOMATIC TRANSFER SWITCH	<u>÷</u> ▼
\circ	LIGHTING FIXTURE	UPS	UN-INTERRUPTABLE POWER SUPPLY	K
$lue{egin{array}{c}}$	EMERGENCY FIXTURE	VFC	VARIABLE FREQUENCY/ CONTROLLER.	G
\bigcirc	DIRECTIONAL LIGHTING FIXTURE	CP	CONTROL PANEL	M
\odot	PENDANT LIGHTING FIXTURE WALL SCONCE	<u> </u>	MOTOR	EMU
	LIGHTING TRACK		MANUAL CONTROLLER	(A)
∇	TRACK LIGHTING FIXTURE		MAGNETIC CONTROLLER	\bigcirc
4	EMERGENCY LIGHTING UNIT		COMBINATION MAGNETIC CONTROLLER	AS
•	POLE MOUNTED LIGHTING FIXTURE		NON-FUSIBLE DISCONNECT SWITCH	VS
	POLE MOUNTED LIGHTING FIXTURE - POST TOP		FUSIBLE DISCONNECT SWITCH	SPD
<u> </u>	BOLLARD LIGHTING FIXTURE	CB□ —	ENCLOSED CIRCUIT BREAKER	(CR)
	EXIT LIGHTING FIXTURE WITH DIRECTIONAL	•	PUSH BUTTON STATION	(TDR)
	ARROWS (SHADED AREA INDICATES FACE)		JUNCTION BOX	
† ※ †	EXIT LIGHTING FIXTURE WITH DIRECTIONAL ARROWS (SHADED AREA INDICATES FACE)	•	HARD WRE POWER CONNECTION	0
H	EXIT LIGHTING FIXTURE — WALL MOUNTED	DP	AUTOMATIC DOOR CONTROLLER	0
S	SINGLE POLE TOGGLE SWITCH	PP	AUTOMATIC DOOR PUSH PAD OPERATOR	
S2	TWO POLE TOGGLE SWITCH	• -•-	GROUND ROD GROUND CONNECTION	ماه
S3	3 WAY TOGGLE SWITCH		CONDUIT SLEEVE WITH BUSHINGS	0
S4	4 WAY TOGGLE SWITCH	' 'X	LENGTH AS REQUIRED "X" INDICATES CONDUIT SIZE	<u></u>
K	KEY OPERATED SWITCH	0	CONDUIT UP	⊢GB⊢
K3	3 WAY KEY OPERATED SWITCH	•	CONDUIT DOWN	⊢TGB− ⊢TMGB−
Ķ4	4 WAY KEY OPERATED SWITCH	\triangleleft	EMPTY BOX FOR FUTURE TELECOMMUNICATION OUTLET	- - -
D	DIMMER SWITCH	\triangleleft	EMPTY BOX FOR FUTURE TELECOMMUNICATION OUTLET MOUNTED 8" ABOVE COUNTERTOP	
D3	3 WAY DIMMER SWITCH	·	EMPTY BOX FOR FUTURE CEILING MOUNTED	_
Sp	PILOT SWITCH		TELECOMMUNICATION OUTLET	X"
55	DUAL SWITCHING FOR INNER/OUTER LAMPS	\blacktriangleleft_{X}	TELECOMMUNICATION OUTLET "X" INDICATES TYPE	F
1	OF FLUORESCENT LIGHT FIXTURES 3-WAY DUAL SWITCHING FOR INNER/OUTER	\blacktriangleleft	TELECOMMUNICATION OUTLET MOUNTED 8" ABOVE COUNTERTOP	SD
5353	LAMPS OF FLUORESCENT LIGHT FIXTURES	۸	"X" INDICATES TYPE	DD
5454	4-WAY DUAL SWITCHING FOR INNER/OUTER LAMPS OF FLUORESCENT LIGHT FIXTURES	\bigcirc_{χ}	TELECOMMUNICATION CEILING MOUNTED OUTLET "X" INDICATES TYPE	RT
ST	DIGITAL TIME SWITCH	KXXXXX	TELECOMMUNICATION BACKBOARD	TD
SL	LOW VOLTAGE SWITCH	IC	INTERCOM OUTLET	BD
So	OCCUPANCY SENSOR — REFER TO ELECTRICAL STANDARD	S	SPEAKER	FO
5050	SCHEDULES OCCUPANCY SENSOR — REFER TO ELECTRICAL STANDARD	HS	SPEAKER - WALL MOUNTED	F
	SCHEDULES OCCUPANCY SENSOR — REFER TO ELECTRICAL STANDARD	MIC	MICROPHONE	
os	SCHEDULES — "X" INDICATES TYPE	VC	VOLUME CONTROL	/ XX
CSX	LOW VOLTAGE CONTROL STATION "X" INDICATES TYPE	BO	SIGNALING BELL	$\longrightarrow \frac{1}{X}$
ELTD	EMERGENCY LOAD TRANSFER DEVICE	\bigcirc	SINGLE FACE CLOCK — CEILING MOUNTED	\ /
	TIME CLOCK	$\vdash \bigcirc$	SINGLE FACE CLOCK — WALL MOUNTED	-F-XX
С	CONTACTOR	\Re	DOUBLE FACE CLOCK — CEILING MOUNTED	_/
P	PHOTOCELL	\bigcirc	DOUBLE FACE COMBINATION OF COM /CDFAVED	-\\\\-\\\-\\
(TT)	TWIST TIMER	S	DOUBLE FACE COMBINATION CLOCK/SPEAKER CEILING MOUNTED	4
ф	SINGLE RECEPTACLE		DOUBLE FACE CLOCK - WALL MOUNTED	F
ф	DUPLEX RECEPTACLE		DOUBLE FACE COMBINATION CLOCK/SPEAKER	
#	QUAD RECEPTACLE	H	WALL MOUNTED	CM
Ψ	DUPLEX RECEPTACLE MOUNTED 8" ABOVE		SECURITY CAMERA	TS
-	COUNTER TOP (UNLESS NOTED OTHERWISE) (SIMILAR FOR ISOLATED GROUND, EMERGENCY AND	MD	MOTION DETECTOR	FS
-11-	GFI RECEPTACLES)	⟨K⟩	SECURITY KEY SWITCH	DR
ф	DUPLEX RECEPTACLE—GROUND FAULT CIRCUIT INTERRUPTER	DC	DOOR CONTACT	FACP
•	DUPLEX EMERGENCY RECEPTACLE	KP	KEY PAD	FAA
\$	DUPLEX ISOLATED GROUND RECEPTACLE WITH	CR	ACCESS CONTROL STATION	
*	DEDICATED NEUTRAL CONDUCTOR	<u> </u>	CIRCUIT BREAKER	
	QUAD ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR	°∕ }.		
		-)	DRAWOUT CIRCUIT BREAKER	

DRAWOUT CIRCUIT BREAKER

ELECTRICALLY/ OPERATED

MANUALLY/ OPERATED

ELECTRICAL DRAWING INDEX

<u>DESCRIPTION</u>

AUTOMATIC OR MANUAL TRANSFER SWITCH

SWITCH

FUSE

TRANSFORMER

CURRENT TRANSFORMER

POTENTIAL TRANSFORMER

"X" INDICATES PANELBOARD NAME

STRESS CONE TERMINATION

SECURITY KEY INTERLOCK

ELECTRONIC METERING UNIT

ENGINE GENERATOR

UTILITY METER

AMMETER

VOLTMETER

AMMETER SWITCH

VOLTMETER SWITCH

CONTROL RELAY

CABLE VAULT

GROUND BUS

PLUG IN BUSWAY

FEEDER BUSWAY

MULTI-SERVICE DROP

"X" INDICATES TYPE

SMOKE DETECTOR

MANUAL FIRE ALARM BOX

DUCT SMOKE DETECTOR

THERMAL DETECTOR

FIRE ALARM BELL

CEILING MOUNTED

TAMPER SWITCH

FLOW SWITCH

PROJECTED BEAM DETECTOR

"XX" INDICATES CANDELA RATING

"XX" INDICATES CANDELA RATING

"XX" INDICATES CANDELA RATING

"XX" INDICATES CANDELA RATING

ADDRESSABLE MONITORING MODULE

ADDRESSABLE CONTROL MODULE

MAGNETIC DOOR RELEASE

FIRE ALARM CONTROL PANEL

FIRE ALARM ANNUNCIATOR PANEL

FIREFIGHTERS PHONE JACK

"X-X" INDICATES TYPE

TIME DELAY RELAY

SURGE PROTECTIVE DEVICE

THERMAL OVERLOAD RELAY

NORMALLY OPEN CONTACTS

NORMALLY CLOSED CONTACTS

N.O. PUSH BUTTON SINGLE CIRCUIT

N.C. PUSH BUTTON SINGLE CIRCUIT

TELECOMMUNICATION GROUNDING BUS BAR

TELECOMMUNICATION MAIN GROUNDING BUS BAR

SEE ELECTRICAL DETAILS AND DIAGRAMS SHEET

REMOTE TEST STATION (FOR DUCT DETECTOR)

FIRE ALARM AUDIBLE NOTIFICATION APPLIANCE

FIRE ALARM VISUAL NOTIFICATION APPLIANCE

FIRE ALARM COMBINATION VISUAL/ AUDIBLE

FIRE ALARM COMBINATION VISUAL/ AUDIBLE NOTIFICATION APPLIANCE— CEILING MOUNTED

FIRE ALARM VISUAL NOTIFICATION APPLIANCE

LIGHTNING ARRESTOR

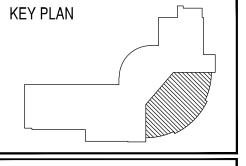
PANELBOARD

GROUND

SHEET NO. SHEET TITLE E0.01 ELECTRICAL STANDARDS AND DRAWING INDEX E0.02 ELECTRICAL SCHEDULES, DETAILS, AND DIAGRAMS E1.02 PARTIAL SECOND FLOOR ELECTRICAL DEMOLITION PLAN E2.02 SECOND FLOOR ELECTRICAL NEW WORK PLAN — BASE BID E2.02A SECOND FLOOR ELECTRICAL NEW WORK PLAN - ALTERNATE



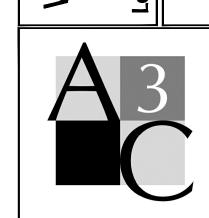
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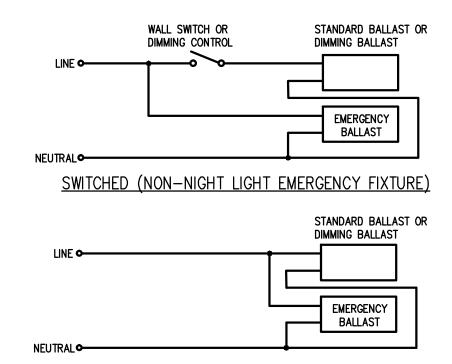
STANDARD MOUNTING HEIGHTS

CONVENIENCE AND SPECIAL PURPOSE 16" A.F.F. TO BOTTOM RECEPTACLE OUTLETS AND TELECOMMUNICATION OUTLETS. OF BOX, U.O.N. LIGHT SWITCHES, MOTOR CONTROL DEVICES 48" A.F.F. TO TOP OF AND MANUAL FIRE ALARM BOXES. BOX, U.O.N. FIRE ALARM HORNS, SPEAKERS, STROBES 96" A.F.F. OR 6" BELOW CEILING, AND COMBINATION DEVICES. WHICHEVER IS LESS, U.O.N. GFI RECEPTACLES IN TOILET ROOMS AND 48" A.F.F. TO TOP OF JANITOR CLOSETS. BOX, U.O.N. BRANCH CIRCUIT PANELBOARDS AND 6'-6" A.F.F. TO TOP OF LIGHTING CONTROLLERS. ENCLOSURE, U.O.N. CLOCKS AND SPEAKERS COORDINATE MOUNTING HEIGHTS

NOTE: SOME SYMBOLS AND ABBREVIATIONS SHOWN MAY NOT APPLY TO THIS PROJECT.

WITH ARCHITECT

FIXTURE INSTALLATION DETAIL



NOTE: PRIMARY CIRCUIT ONLY. LAMP LEADS NOT SHOWN.

UNSWITCHED (NIGHT LIGHT EMERGENCY FIXTURE)

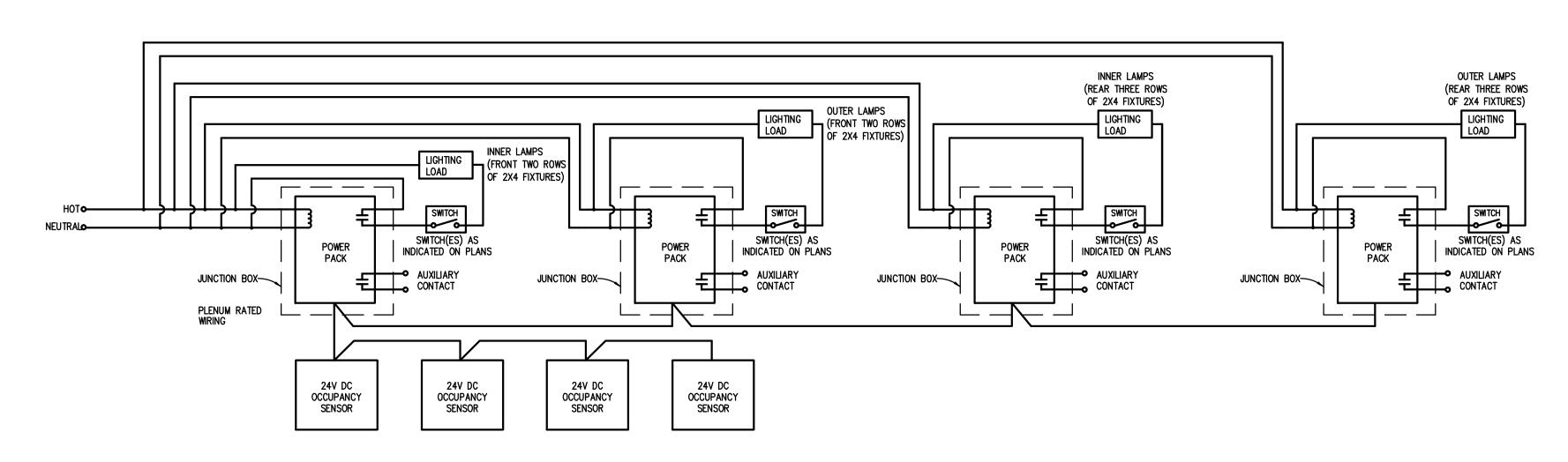
EMERGENCY BALLAST DIAGRAM

	FEEDER	R AND BF	RANCH CIRCU	IT SIZING SCHI	EDULE - GENE	RAL PURPOSE					
			C	OPPER CONDUCTORS	8						
	WIRE SIZE CONDUIT SIZE (AWG OR KCMIL)										
OVERCURRENT DEVICE RATING (AMPERES)			SINGLE PHASE 2 WIRE+G (1PH,1N,1G)	SINGLE PHASE 3 WIRE+G (2PH,1N,1Q)	THREE PHASE 3 WIRE+G (3PH,1G)	THREE PHASE & NEUTRAL 4 WIRE+G (3PH,1N,1G)	ISOLATED GROUND 4 WIRE+2G (3PH,1N,2G)				
15-20	12	12	3/4"	3/4"	3/4"	3/4"	3/4"				
25-30	10	10	3/4"	3/4"	3/4"	3/4"	3/4"				
35-40	8	10	3/4"	3/4"	3/4"	3/4"	3/4"				
45-50	8 (6)	10	3/4"	3/4"	3/4"	3/4"	3/4"				
60	6 (4)	10	3/4" (1)	3/4" (1)	3/4" (1)	3/4" (1)	1"				
70	4	8	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"				
80	4 (3)	8	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"				
90-100	3 (2)	8	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/2"				
110	2 (1)	6	-	1 1/4"	1 1/4"	1 1/4" (1 1/2")	2"				
125	1 (1/0)	6	-	1 1/4" (1 1/2")	1 1/4" (1 1/2")	1 1/2"	2"				
150	1/0	6	_	1 1/2"	1 1/2"	1 1/2"	2"				
175	2/0	6	-	2"	2"	2"	2"				
200	3/0	6	-	2"	2"	2 1/2"	2 1/2"				
225	4/0	4	-	2*	2"	2 1/2"	2 1/2"				
250	250	4	-	2 1/2"	2 1/2"	2 1/2"	2 1/2*				
300	350	4	-	2 1/2"	2 1/2"	3"	3"				
350	500	3	-	3"	3"	3"	3"				
400	600	3	-	3"	3"	3 1/2"	4"				
450	2-4/0	2–2	-	2-2"	2-2"	2-2 1/2"	2-2 1/2"				
500	2-250	2–2	-	2-2 1/2"	2-2 1/2"	2-2 1/2"	2-2 1/2"				
600	2-350	2–1	-	2-2 1/2"	2-2 1/2"	2-3"	2-3"				
700	2-500	2-1/0	-	2-3"	2-3"	2-3"	2-3 1/2"				
800	2-600	2-1/0	-	2-3"	2-3"	2-3 1/2"	2-4"				
1000	3-400	3-2/0	1	3–3"	3–3"	3–3"	3-3"				
1200	3-600	3-3/0	-	3-3 1/2"	3-3 1/2"	3-3 1/2"	3-4"				
1600	4-600	4-4/0	-	4-3 1/2"	4-3 1/2"	4-3 1/2"	4-4"				
2000	5-600	5-250	-	5-3 1/2"	5-3 1/2"	5-3 1/2"	5-4"				

* SEE NOTE 4.

- 1. CONTRACTOR TO SIZE FEEDERS AND BRANCH CIRCUITS BASED ON THIS SCHEDULE AND OVER CURRENT DEVICE SIZE, UNLESS NOTED OTHERWISE.
- 2. CONTRACTOR MAY COMBINE 20A CIRCUITS AS NOTED IN SPECIFICATION.
- 3. CONDUCTORS ARE BASED ON THHN/THWN UP TO AND INCLUDING #4/0. LARGER THAN #4/0 ARE BASED ON TYPE XHHW.
- 4. CONDUCTORS ARE BASED ON 90°C, 600V. INSULATED COPPER WIRE APPLIED AT 75°C FOR TERMINATION RATED 60/75°C OR 75°C. FOR TERMINATION RATED AT 60°C, USE CONDUCTORS AND CONDUIT SIZES INDICATED IN PARENTHESES.
- 5. CONDUIT SIZES ARE VALID FOR EMT OR RGS. CONDUIT SIZES SHALL BE ADJUSTED AS REQUIRED FOR OTHER TYPES OF
- 6. ELECTRICAL CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR AND PROVIDE REQUIRED WIRE SIZES TO ACCOMMODATE MECHANICAL EQUIPMENT LUG SIZES. (EXAMPLE: 2#3/0 IN LIEU OF 1#600 KCMIL PER PHASE FOR 400 AMPERE
- 7. SIZE OF DISCONNECT SWITCH LOCATED AT EQUIPMENT SHALL BE SIZED BASED UPON OVERCURRENT PROTECTION OF THAT
- 8. PRIOR APPROVAL FROM ENGINEER SHALL OCCUR IF A DIFFERENT SIZE/NUMBER OF CONDUCTORS IS TO BE USED. AMPACITY SHALL BE EQUAL OR GREATER.

	OCCUPANCY SENSOR LEGEND
TYPE	DESCRIPTION
OS A	360° CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR
os _B	90° CEILING/WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR
os _c	180° CEILING/WALL MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR
OS D	360° CEILING MOUNTED ULTRASONIC OCCUPANCY SENSOR
So	WALL SWITCH PASSIVE INFRARED OCCUPANCY SENSOR
SoSo	WALL SWITCH PASSIVE INFRARED OCCUPANCY SENSOR — DUAL LEVEL SWITCHING



CEILING MOUNTED OCCUPANCY SENSOR WIRING DIAGRAM (DUAL SWITCHING)

NO SCALE

NOTES:
1. PROVIDE POWER PACKS AND SLAVE PACKS AS REQUIRED FOR SWITCHING AS INDICATED ON PLAN. REVISE DETAIL AS

	RA	CE	W <i>F</i>	۱Y	Al	PPL	IC#	\TI	ON :	SC	HEC	DULE
		RACEWAY	H	L MET		GENERAL-USE OPTICAL FIBER/COMMUNICATION CABLE RACEWAY	INTERMEDIATE METAL CONDUIT (IMC)	LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC)	PLENUM-TYPE OPTICAL FIBER/COMMUNICATIONS CABLE RACEWAY	RIGID STEEL CONDUIT	RISER-TYPE OPTICAL FIBER/COMMUNICATIONS CABLE RACEWAY	KEYED NOTES
	EXPOSED NOT SUBJECT TO PHYSICAL DAMAGE			Х								
	CONCEALED IN CEILINGS, INTERIOR WALL AND PARTITIONS		х	х		·						NOT TO EXCEED 6'-0" IN CEILING SPACE
INDOOOR	CONNECTED TO VIBRATING EQUIPMENT				х			х				EQUIPMENT INCLUDING: TRANSFORMERS, HYDRAULIC PNEUMATIC, ELECTRIC SOLENOID, MOTOR DRIVEN EQUIPMENT USE LFMC IN DAMP/WET LOCATIONS
	DAMP AND WET LOCATIONS						Χ			Х		
	CONCEALED GENERAL PURPOSE DISTRIBUTION OF OPTICAL FIBER OR COMMUNICATION CABLE			х		х			х		х	

<u>GENERAL NOTES</u>

1. 'X' INDICATES ACCEPTABLE SELECTION. IF MORE THAN ONE SELECTION IS INDICATED FOR A DUCT SYSTEM, CONTRACTOR MAY SELECT FROM THOSE INDICATED 2. REFER TO "CONDUCTORS AND CABLES" SPECIFICATION FOR APPLICATION LIMITATIONS OF AC/MC CABLE.

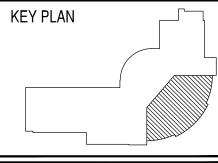
BRANCH CIRCUIT VOLTAGE DROP WIRING SCHEDULE FOR SINGLE PHASE CIRCUITS											
BRANCH CKT											
RATING (A)	(AWG)	120V	208V	277V	480V						
	12	83	143	165	191	331					
20A	10	128	222	256	295	511					
2011	8	201	348	402	464	804					
	6	313	542	625	721	1250					
	10	85	148	170	197	341					
704	8	134	232	268	309	536					
30A ·	6	208	361	417	481	833					
	4	313	542	625	721	1250					

- 1. THE ABOVE TABLE VALUES ARE BASED ON COPPER CONDUCTORS, IN STEEL CONDUIT, WITH A LOAD POWER FACTOR OF 0.85 PER NEC CHAPTER 9, TABLE 9.
- 2. PROVIDE BRANCH CIRCUIT CONDUCTORS AS INDICATED IN THE TABLE ABOVE FOR ALL LIGHTING AND RECEPTACLE BRANCH CIRCUITS. WHERE BRANCH CIRCUITS SERVE DEDICATED EQUIPMENT, THE CONTRACTOR MAY PERFORM VOLTAGE DROP CALCULATIONS BASED ON ACTUAL EQUIPMENT CONNECTED LOAD AND PROVIDE CONDUCTORS APPROPRIATELY SIZED TO LIMIT VOLTAGE DROP TO A MAXIMUM OF 3%.
- 3. CONDUCTOR SIZES ARE BASED ON MAXIMUM OF 9 CURRENT CARRYING CONDUCTORS IN A SINGLE CONDUIT.
- 4. LIMITS FOR CONDUCTOR LENGTHS SHOWN ARE BASED ON A MAXIMUM BRANCH CIRCUIT LOADING OF 64% OF THE BRANCH BREAKER RATING AND A MAXIMUM OF 3 PERCENT VOLTAGE DROP TO COMPLY WITH ASHRAE/IES 90.1 1999 AND THE NEC. FOR CIRCUITS LOADED GREATER THAN 64% OF BRANCH BREAKER RATING, THE CONTRACTOR SHALL PROVIDE CONDUCTORS APPROPRIATELY SIZED TO LIMIT VOLTAGE DROP TO 3%.

NOTE: SOME SYMBOLS AND ABBREVIATIONS

SHOWN MAY NOT APPLY TO THIS PROJECT.

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PARTIAL SECOND FLOOR ELECTRICAL DEMOLITION PLAN SCALE: 1/8" - 1' - 0"

GENERAL DEMOLITION NOTES:

- 1. VISIT THE SITE PRIOR TO SUBMISSION OF BID TO EXAMINE THE EXISTING CONDITIONS AND THE EXTENT OF DEMOLITION WORK.
- 2. EXAMINE THE DRAWINGS OF OTHER TRADES AND BE FAMILIAR WITH THE DEMOLITION REQUIRED BY OTHER TRADES. PERFORM ALL INCIDENTAL ELECTRICAL DEMOLITION AND/OR RELOCATION REQUIRED TO FACILITATE THE DEMOLITION WORK OF OTHER TRADES, WHETHER OR NOT SPECIFICALLY INDICATED.
- 3. REMOVE LIGHTING FIXTURES AND ELECTRICAL DEVICES AS INDICATED ON PLAN WITH CROSS HATCHING. DEMOLITION SHALL INCLUDE, BUT NOT BE LIMITED TO, THOSE DEVICES SHOWN.
- 4. COORDINATE WITH NEW WORK PLANS, ONE LINE DIAGRAMS AND RISER DIAGRAMS FOR EXTENT OF DEMOLITION WORK.
- 5. PROVIDE PROPER SUPPORT FOR EXISTING TO REMAIN CONDUITS AND BOXES WHERE EXISTING SUPPORT IS TO BE REMOVED. RE—ROUTE BRANCH CIRCUIT CONDUITS AND RELOCATE JUNCTION BOXES AS REQUIRED TO FACILITATE INSTALLATION OF NEW EQUIPMENT AND SYSTEMS IN CEILING SPACES.
- 6. REMOVE ALL CONDUIT AND WIRE BACK TO THE SOURCE OR NEAREST UPSTREAM DEVICE REMAINING IN SERVICE.
- 7. MAINTAIN ELECTRICAL SERVICE TO ALL LIGHTING FIXTURES, DEVICES AND EQUIPMENT THAT ARE TO REMAIN. EXTEND CONDUIT AND WIRE AS REQUIRED WHERE DEMOLITION WORK AFFECTS ELECTRICAL SERVICE TO DOWNSTREAM LOADS THAT ARE TO REMAIN.
- 8. DISPOSE OF ALL MATERIALS OFF SITE AND INCLUDE ALL COSTS FOR DISPOSAL IN BID. ALL MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, INCLUDING TCLP TESTING, PROPER DISPOSAL AND/OR RECYCLING OF FLUORESCENT LAMPS.
- 9. PROVIDE BLANK COVER PLATES WHERE SWITCHES AND DEVICES ARE REMOVED BUT EXISTING WALLS REMAIN INTACT.
- 10. RING OUT AND TAG ALL CIRCUITS AFFECTED BY THIS ALTERATION AT BOTH ENDS.

 MARK ALL UNUSED CIRCUIT BREAKERS "SPARE".
- 11. PROVIDE UPDATED TYPED—IN DIRECTORIES FOR ALL PANELS AFFECTED BY THIS ALTERATION.
- 12. COORDINATE ANY SHUT DOWN OF EXISTING SERVICES AND EQUIPMENT THAT ARE REMAINING IN USE WITH THE OWNER'S REPRESENTATIVE. WHERE EXISTING BUILDING SERVICE IS REQUIRED TO BE SHUT DOWN, INCLUDE ALL ASSOCIATED OVERTIME COSTS TO PERFORM THIS WORK DURING WEEKENDS AND EVENINGS INCLUDE ALL COSTS FOR PROVIDING TEMPORARY POWER WHERE SHUT DOWNS MUST OCCUR FOR PERIODS LONGER THAN THESE HOURS. COORDINATE ELECTRICAL SHUT DOWNS WITH THE OWNER 72 HOURS PRIOR TO SHUT DOWN.

DEMOLITION NOTES:

- A. REMOVE AND REPLACE EXISTING RECEPTACLES AND TELECOMMUNICATIONS OUTLETS AS WELL AS ASSOCIATED COVER PLATES TO FACILITATE ROOM FINISH UPGRADES. REMOVE EXISTING RECEPTACLES AND TELECOMMUNICATIONS DEVICES MOUNTED HIGH ON THE WALL TO ACCOMMODATE SOUND ATTENUATION PANEL REPLACEMENT. FOR DEVICES MOUNTED IN SOUND ATTENUATION PANELS, REMOVE COMPLETELY INCLUDING EXISTING CONDUIT AND WIRE, UNLESS OTHERWISE INDICATED. REMOVE AND REINSTALL EXISTING THERMOSTATS AS REQUIRED TO ACCOMMODATE SOUND ATTENUATION PANEL REPLACEMENT AND WALL FINISH UPGRADES.
- B. REMOVE DEVICES, ASSOCIATED SURFACE RACEWAY/CONDUIT, AND ASSOCIATED WRING. NEW DEVICES TO BE INSTALLED IN NEW LOCATIONS AS INDICATED. REFER TO NEW WORK PLAN FOR NEW LOCATION. EXTEND CONDUIT AND WRING AS REQUIRED.
- C. REMOVE, PROTECT AND STORE WALL CLOCK FOR REINSTALLATION. REFER TO NEW WORK PLAN FOR NEW LOCATION.
- D. RE-CONFIGURE EXISTING TELECOMMUNICATIONS SURFACE RACEWAY TO FACILITATE ACOUSTIC WALL PANEL REMOVAL. RACEWAY TO BE FLUSH TO WALL AT COMPLETION. COORDINATE TELECOMMUNICATIONS CABLING DISCONNECTION/RECONNECTION WITH
- E. ALTERNATE NO. 1: REMOVE ALL 2X4 LINEAR FLUORESCENT LIGHTING FIXTURES AND DOWNLIGHT FIXTURES WITHIN ROOM. EXTEND EXISTING BRANCH CIRCUIT CONDUIT AND WRING TO NEW FIXTURE LOCATIONS INDICATED ON SHEET E202A. REFER TO SPECIFICATIONS FOR EXACT ALTERNATE NUMBERS AND REQUIREMENTS.
- F. ALTERNATE NO. 1: REMOVE EXISTING SPEAKER AND/OR MICROPHONE. PROTECT, AND RETURN TO OWNER FOR REINSTALLATION. REMOVE EXISTING WIRING TO PROJECTION BOOTH. NEATLY COIL AND PROTECT FOR REINSTALLATION BY OWNER.
- G. ALTERNATE NO. 1: EXISTING PROJECTOR TO BE REMOVED BY OWNER. OWNER TO INSTALL NEW PROJECTOR. COORDINATE NEW PROJECTOR LOCATION WITH OWNER AND RELOCATED EXISTING RECEPTACLE AND LOW VOLTAGE RACEWAY AS REQUIRED TO ACCOMMODATE NEW LOCATION. EXTEND CONDUIT AND WIRING AS REQUIRED.
- H. BASE BID: EXISTING MOTORIZED PROJECTION SCREEN TO REMAIN. CONTROL SWITCH TO BE REPLACED AND RELOCATED AS INDICATED. PROVIDE NEW CONDUIT AND CONTROL WIRING TO PROJECTION SCREEN.
- ALTERNATE NO. 1 AND ALTERNATE NO. 3: EXISTING SCREEN TO BE REMOVED. REMOVE EXISTING SWITCH AND ASSOCIATED CONTROL WIRING. EXISTING BRANCH CIRCUIT TO REMAIN.
- REMOVE/TEMPORARILY SUPPORT TEMPERATURE CONTROLS DEVICE TO ACCOMMODATE WALL FINISH UPGRADES. CLEAN AND REINSTALL EXISTING DEVICES.
- J. REMOVE EXISTING RECEPTACLE. EXTEND EXISTING BRANCH CIRCUIT TO NEW DEVICE LOCATION VIA SURFACE MOUNTED RACEWAY.



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KEY PLAN



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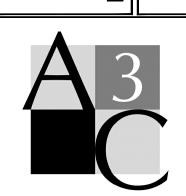
CONSULTING ENGINEERS

PROJECT 12089

95% CD REVIEW

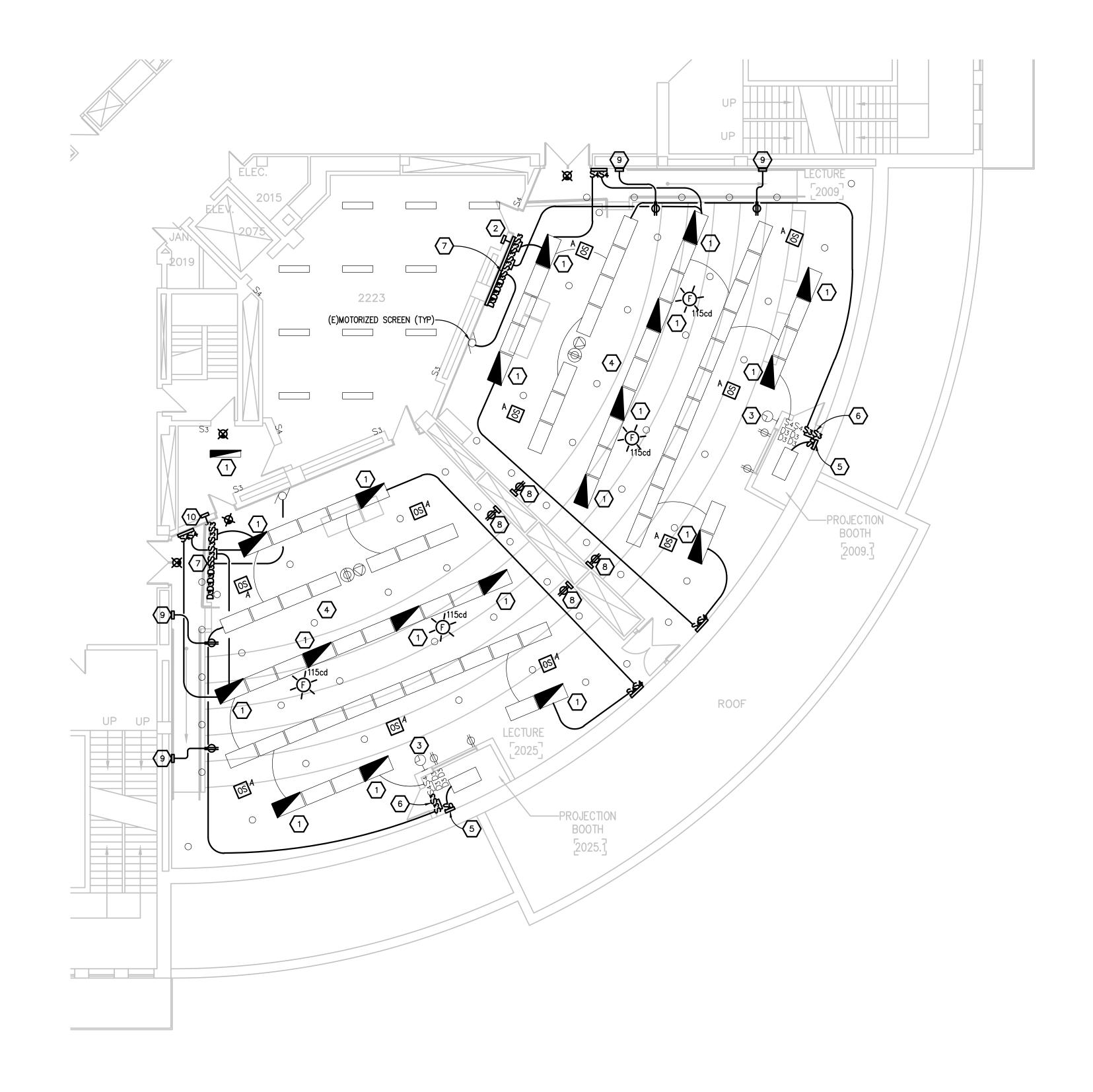
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SECOND FLOOR ELECTRICAL NEW WORK PLAN - BASE BID SCALE: 1/8' - 1' - 0'

GENERAL NOTES:

- THESE DRAWINGS REPRESENT THE GENERAL EXTENT AND ARRANGEMENT OF SYSTEMS, BUT ARE NOT TO BE CONSIDERED FABRICATION DRAWINGS. COORDINATE WITH OTHER TRADES, AND PROVIDE EACH SYSTEM COMPLETE, INCLUDING ALL NECESSARY COMPONENTS, FITTINGS, AND OFFSETS.
- 2. INSTALL SYSTEMS SUCH THAT REQUIRED CLEARANCE AND SERVICE ACCESS SPACE IS PROVIDED AROUND ALL MECHANICAL AND ELECTRICAL EQUIPMENT, AND AROUND ANY COMPONENTS WHICH REQUIRE SERVICE ACCESS.
- COORDINATE AND PROVIDE ACCESS DOORS WITHIN INACCESSIBLE CEILING, SHAFT, AND CHASE AREAS FOR ALL COMPONENTS WHICH REQUIRE SERVICE ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
- 4. PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL SYSTEMS.
- 5. COORDINATE THE MOUNTING HEIGHTS OF OUTLETS WITH ARCHITECTURAL ELEVATIONS AND THE TRADES INSTALLING THE WORK.
- 6. EXISTING AUTOCALL FIRE ALARM CONTROL PANEL IS LOCATED IN MECHANICAL ROOM IN BASEMENT. EXISTING SIMPLEX GRINNELL NAC PANEL LOCATED IN ELECTRICAL ROOM 2015. CONNECT NEW FIRE ALARM DEVICES TO EXISTING NAC PANEL. PROVIDE ALL FIRE ALARM SYSTEM COMPONENTS AS REQUIRED FOR FULLY FUNCTIONAL SYSTEM. TEST SYSTEM AT COMPLETION OF RENOVATION.
- 7. ALL EXIT SIGNS SHALL BE TYPE "X" AND SHALL BE CONNECTED TO UNSWITCHED HOT LEG OF ADJACENT CIRCUIT.
- 8. ELECTRICAL CONTRACTOR TO PROVIDE BID PRICE FOR ALL WORK AS DESCRIBED ON SHEET E102 AND SHEET E202 AND A LINE ITEM ADD ON PRICE FOR ALTERNATES SHOULD THEY BE ACCEPTED.
- 8.1. BASE BID IS TO BE FOR ALL WORK AS DESCRIBED ON SHEETS E102 AND E202, UNLESS OTHERWISE NOTED. EXISTING LIGHT FIXTURES ARE TO BE CONNECTED TO NEW CONTROL DEVICES AS INDICATED.
- 8.2. FOR ALTERNATE NO. 1, NO. 2, AND NO. 3, PROVIDE ADDITIONAL COST TO REMOVE EXISTING LIGHT FIXTURES AND CONTROLS AND PROVIDE NEW LIGHT FIXTURES AND CONTROLS, AS WELL AS CONDUIT, CONTROL SWITCH, AND CONTROL WIRING FOR MOTORIZED PROJECTION SCREEN AS INDICATED ON SHEET E202A. REFER TO SHEET E102 FOR EXISTING LIGHT FIXTURE LOCATIONS AND QUANTITIES. ALL OTHER WORK AS DESCRIBED IN THE BASE BID IS STILL TO BE COMPLETED.

CONSTRUCTION NOTES:

- 1. PROVIDE EMERGENCY BATTERY BALLAST IN EXISTING FIXTURE.
- 2. SURFACE RACEWAY TO BE ROUTED ON BACKSIDE OF WALL AS INDICATED. CONDUITS TO TERMINATE INTO RACEWAY THROUGH WALL AT CEILING LEVEL, AND TO BE ROUTED FROM SURFACE RACEWAY THROUGH WALL INTO SURFACE RACEWAY ON WALL FOR LIGHTING CONTROL DEVICES AS INDICATED. COORDINATE EXACT LOCATIONS AND REQUIREMENTS WITH ARCHITECTURAL DRAWINGS AND TRADES.
- 3. REINSTALL PREVIOUSLY REMOVED CLOCK.
- 4. CLEAN, RELAMP, AND PROVIDE NEW LENS AS APPLICABLE FOR EXISTING LINEAR FLUORESCENT FIXTURES AND DOWNLIGHTS WITHIN SPACE.
- 5. PROVIDE NEW LIGHT SWITCH IN NEW SURFACE RACEWAY. CONNECT TO EXISTING BRANCH CIRCUITING. EXTEND CONDUIT AND WIRE AS REQUIRED.
- 6. PROVIDE NEW DUAL SWITCHES AS INDICATED IN EXISTING 5—GANG BACKBOX.
 CONNECT TO EXISTING BRANCH CIRCUIT. PROVIDE NEW CONDUIT AND WIRING AS
 REQUIRED SO THAT EXISTING LIGHTING FIXTURES MAY BE CONTROLLED AS INDICATED.
- 7. BASE BID, ALTERNATE NO. 3: NEW CONTROL SWITCH FOR EXISTING MOTORIZED PROJECTION SCREEN. NEW SWITCH TO MATCH EXISTING SWITCHES AND PROPERLY CONTROL SCREEN. PROVIDE NEW 3/4" CONDUIT AND REQUIRED CONTROL WIRING TO FXISTING PROJECTOR.

ALTERNATE NO. 2: NEW CONTROL SWITCH FOR NEW MOTORIZED PROJECTION SCREEN. PROVIDE NEW 3/4" CONDUIT AND REQUIRED CONTROL WIRING TO NEW PROJECTION SCREEN. COORDINATE SWITCH AND CONTROL WIRING REQUIREMENTS WITH MANUFACTURER.

- 8. NEW RECEPTACLE IN SURFACE MOUNTED RACEWAY EXTENDED FROM EXISTING JUNCTION BOX LOCATION. EXTEND WIRING AS REQUIRED.
- 9. EXTEND EXISTING WIRING FROM EXISTING JUNCTION BOX VIA SURFACE MOUNTED RACEWAY DOWN WALL AND INTO CAVITY UNDER RAMP. EXTEND VIA CONDUIT TO
- LOCATIONS INDICATED IN EXISTING WING WALL. COORDINATE ACCESS TO BELOW RAMP, LOCATIONS, AND EXACT REQUIREMENTS WITH ARCHITECTURAL DRAWINGS AND TRADES.
- 10. SURFACE RACEWAY TO BE ROUTED ON BACKSIDE OF WALL AS INDICATED. CONDUITS TO TERMINATE INTO RACEWAY THROUGH WALL AT CEILING LEVEL, AND TO BE ROUTED FROM SURFACE RACEWAY THROUGH WALL INTO WING WALL FOR LIGHTING CONTROL DEVICES AS INDICATED. COORDINATE EXACT LOCATIONS AND REQUIREMENTS WITH ARCHITECTURAL DRAWINGS AND TRADES.



wsu project number 005-226260

KEY PLAN



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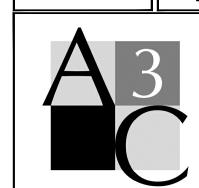
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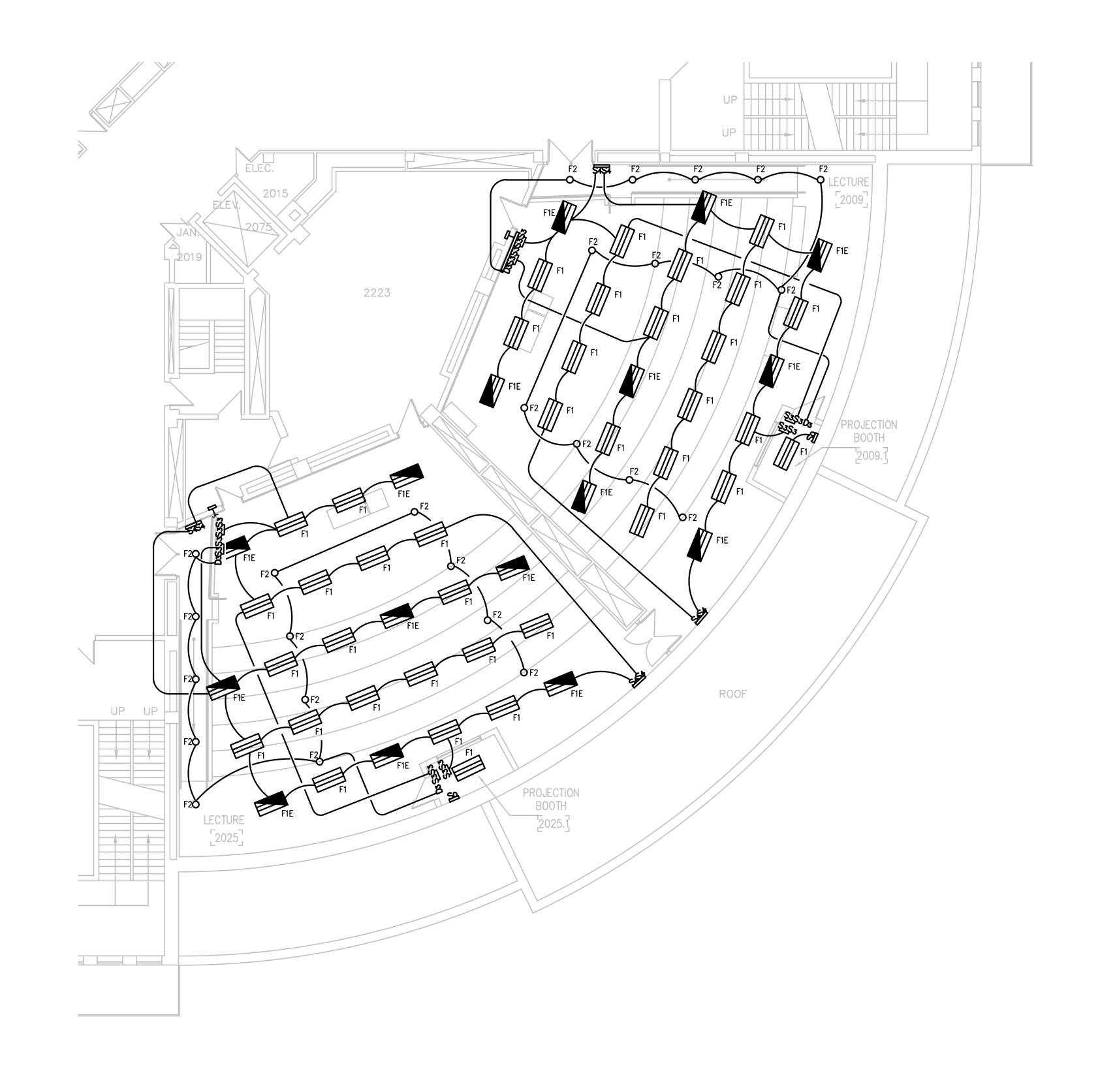
NE STATE UNIVERSITY
SCIENCE HALL
Room Upgrades - 2nd Floor
COND FLOOR
TRICAL NEW WORK
SSWING

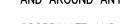
95% CD REVIEW



210 East Huron St. Ann Arbor, MI 48104 734.663.1910 T 734.663.8427 F www.a3c.com

E2.02





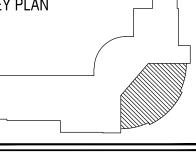
GENERAL NOTES:

- THESE DRAWINGS REPRESENT THE GENERAL EXTENT AND ARRANGEMENT OF SYSTEMS, BUT ARE NOT TO BE CONSIDERED FABRICATION DRAWINGS. COORDINATE WITH OTHER TRADES, AND PROVIDE EACH SYSTEM COMPLETE, INCLUDING ALL NECESSARY COMPONENTS, FITTINGS, AND OFFSETS.
- 2. INSTALL SYSTEMS SUCH THAT REQUIRED CLEARANCE AND SERVICE ACCESS SPACE IS PROVIDED AROUND ALL MECHANICAL AND ELECTRICAL EQUIPMENT, AND AROUND ANY COMPONENTS WHICH REQUIRE SERVICE ACCESS.
- 3. COORDINATE AND PROVIDE ACCESS DOORS WITHIN INACCESSIBLE CEILING, SHAFT, AND CHASE AREAS FOR ALL COMPONENTS WHICH REQUIRE SERVICE ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
- 4. PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL SYSTEMS.
- 5. COORDINATE THE MOUNTING HEIGHTS OF OUTLETS WITH ARCHITECTURAL ELEVATIONS AND THE TRADES INSTALLING THE WORK.
- 6. EXISTING AUTOCALL FIRE ALARM CONTROL PANEL IS LOCATED IN MECHANICAL ROOM IN BASEMENT. EXISTING SIMPLEX GRINNELL NAC PANEL LOCATED IN ELECTRICAL ROOM 2015. CONNECT NEW FIRE ALARM DEVICES TO EXISTING NAC PANEL. PROVIDE ALL FIRE ALARM SYSTEM COMPONENTS AS REQUIRED FOR FULLY FUNCTIONAL SYSTEM. TEST SYSTEM AT COMPLETION OF RENOVATION.
- 7. ALL EXIT SIGNS SHALL BE TYPE "X" AND SHALL BE CONNECTED TO UNSWITCHED HOT LEG OF ADJACENT CIRCUIT.
- 8. ELECTRICAL CONTRACTOR TO PROVIDE BID PRICE FOR ALL WORK AS DESCRIBED ON SHEET E102 AND SHEET E202 AND A LINE ITEM ADD ON PRICE FOR ALTERNATES SHOULD THEY BE ACCEPTED.
- 8.1. BASE BID IS TO BE FOR ALL WORK AS DESCRIBED ON SHEETS E102 AND E202, UNLESS OTHERWISE NOTED. EXISTING LIGHT FIXTURES ARE TO BE CONNECTED TO NEW CONTROL DEVICES AS INDICATED.
- 8.2. FOR ALTERNATE NO. 1, NO. 2, AND NO. 3, PROVIDE ADDITIONAL COST TO REMOVE EXISTING LIGHT FIXTURES AND CONTROLS AND PROVIDE NEW LIGHT FIXTURES AND CONTROLS, AS WELL AS CONDUIT, CONTROL SWITCH, AND CONTROL WIRING FOR MOTORIZED PROJECTION SCREEN AS INDICATED ON SHEET E202A. REFER TO SHEET E102 FOR EXISTING LIGHT FIXTURE LOCATIONS AND QUANTITIES. ALL OTHER WORK AS DESCRIBED IN THE BASE BID IS STILL TO BE COMPLETED.



wsu project number 005-226260

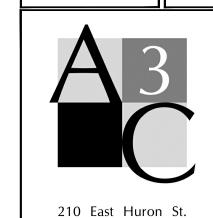
KEY PLAN





5145 Livernois, Suite 100 Troy, Michigan 48098-3276 Tel: 248-879-5666 Fax: 248-879-0007 www.PeterBassoAssociates.com PBA Project No. 2012.0383.00

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	BIDS		02.01.13
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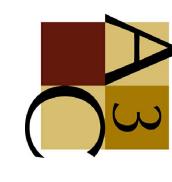


734.663.1910 734.663.8427 www.a3c.com



Wayne Science State Project Number: 005-226260 pgrades University WSU Project No. Detroit, Michigan 2nd Floor 005-226260 Collaborative Architecture Architect -- Project Number: 12089 210 East Huron St. Ann Arbor, MI 48104 PH: 734.663.1910 FX: 734.663.8427 A3C IN THE CASE OF CONFLICTING OR INCONSISTENT INFORMATION, THE MOST STRINGENT REQUIREMENTS SHALL PREVAIL AND BE PROVIDED BY THE CONTRACTOR AS A PARTOF HIS BASE CONTRACT AND SHALL NOT BECOME A BASIS FOR CHANGE ORDERS OR CLAIMS FOR ADDITIONAL COMPENSATION. 5. COMPLETENESS: ANY MATERIAL NOT SHOWN ON THE DRAWINGS, NOR SPECIFIED, BUT WHICH IS OBVIOUSLY NECESSARY TO COMPLETE THE WORK OF A SIMILAR NATURE SHALL BE FURNISHED WITHOUT ADDITIONAL COST TO THE OWNER OR ARCHITECT. IN THE CASE OF CONFLICTING QUANTITIES/VALUES, THE GREATER AMOUNT OR THE ONE OF GREATER VALUE SHALL PREVAIL AND BE PROVIDED BY THE CONTRACTOR AS A PART OF HIS BASE CONTRACT AND SHALL NOT BECOME A BASIS FOR CHANGE ORDERS OR CLAIMS FOR ADDITIONAL COMPENSATION. PROJECT GENERAL NOTES: ONDITIONS: THE CONTRACTOR BY COMMENCING THE WORK ACCEPTS THE ONDITIONS OF THE SITE AND THE COMPLETENESS OF THE CONTRACT DOCUMENTS. NY DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL CONDITIONS SHOULD BE ROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BEGINNING THE WORK. NY TRAS SHALL BE ALLOWED FOR DISCREPANCIES AFTER THE WORK HAS BEGUN. DRAWINGS: ALL CONTRACTORS SHALL REVIEW ALL DRAWINGS AND PECIFICATIONS. CONTRACTORS ARE RESPONSIBLE FOR COMPLETE REVIEW. ITEMS FIECTING ALL TRADES ARE PLACED THROUGHOUT THE SET OF DRAWINGS. NO XTRAS" FOR MISSED ITEMS IN OTHER SECTIONS WILL BE PERMITTED. THE ONTRACTORS SHALL PROMPTLY NOTIFY THE ARCHITECT OF ANY AMBIGUITY, CONSISTENCY OR ERROR WHICH THEY DISCOVER UPON EXAMINATION OF THE OTRACT DOCUMENTS, THE SITE, OR LOCAL CONDITIONS. GENERAL CONTRACTORS HALL DISTRIBUTE COMPLETE SETS OF DRAWINGS TO ALL SUBCONTRACTORS. DO NOT ARRAITE DRAWINGS BY DISCIPLINE. DO NOT SCALE DRAWINGS. ALL DIMENSIONS ARE FROM FINISH FACE ANGLES ARE 90 DEGREES, UNO OF MATERIAL, UNO 10.00.01 A5. \triangleright





8. PROVIDE I HOUR CONSTRUCTION BARRIER WITH CONDITIONS.

ABOYE FINISH FLOOR

REFID FROM:

 \overline{Q}

DRAWING INDEX KEY:

NO SCALE

Z

10.0t

ENTER TO CENTER

ONTROL JOINT

MASONRY OPENING
NOT APPLICABLE
NOT IN CONTRACT

NOMINAL

ISSUED FOR BID/PERMIT

95% CD Review

ISSUED FOR REVIEW (

AT Y

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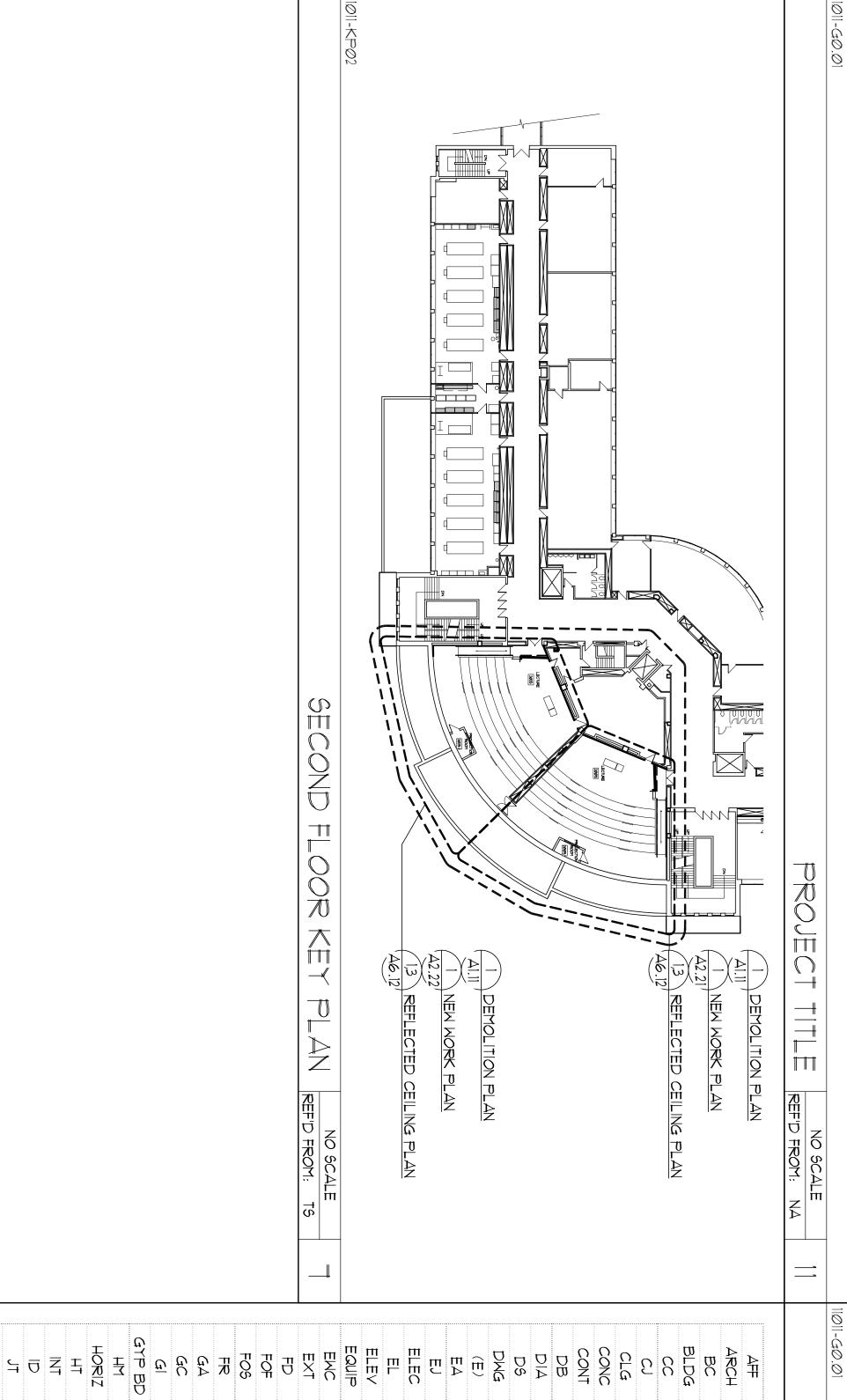
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02.01.13 02.25.13

12089

ONTRACT SHALL BE CONSIDERED BASE BID.





CONCRETE
CONTINUOUS
DRAWER BASE
DIAMETER
DOWNSPOUT

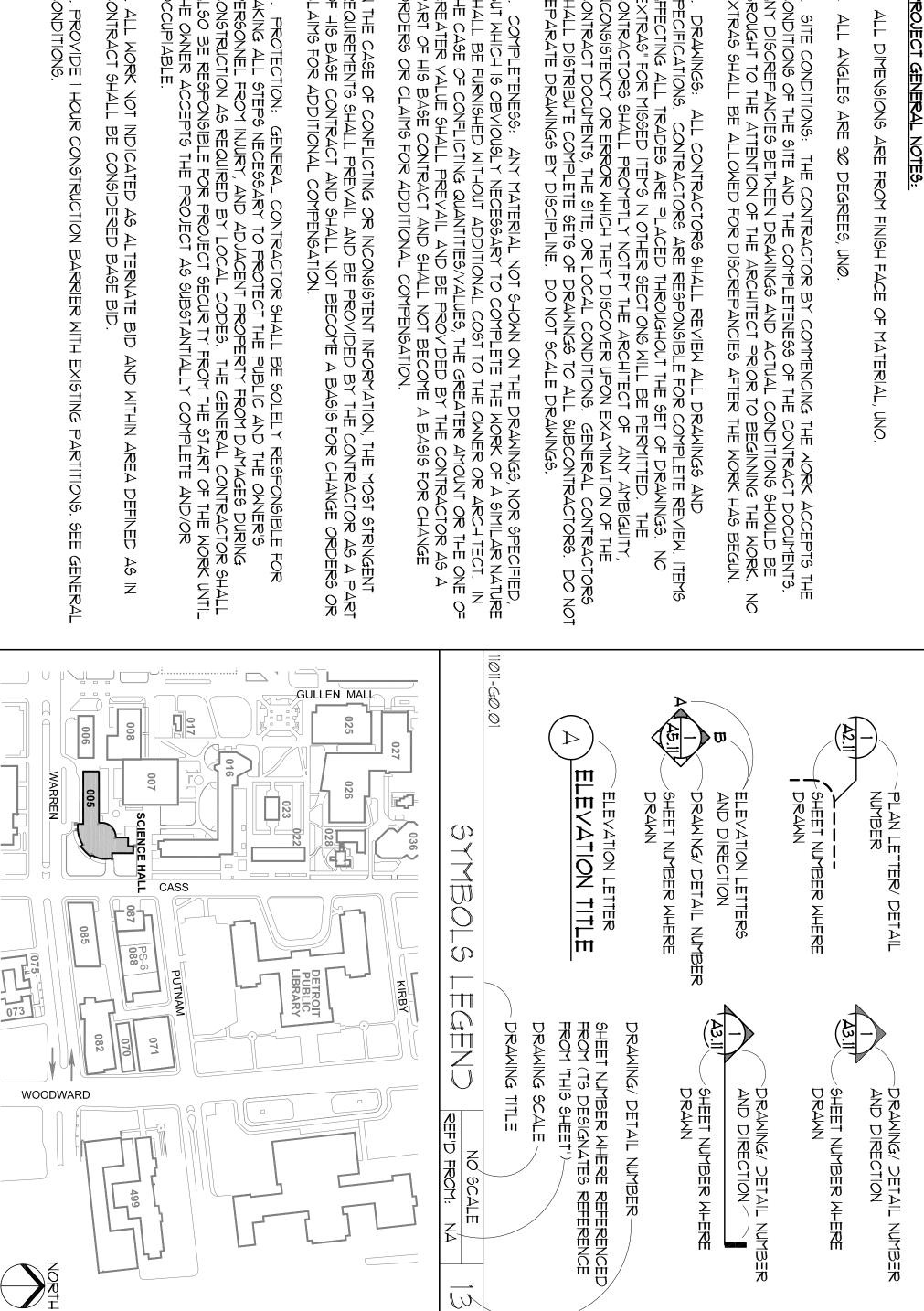
NOT TO SCALE
ON CENTER
OUTSIDE DIAMETER

SHT. * SHEET NAME
GENERAL
GØ.ØI Title Sheet

SSU Addendum 1
For Bids
95% CD Review

02.25.13 02.01.13 12.20.12 JKC

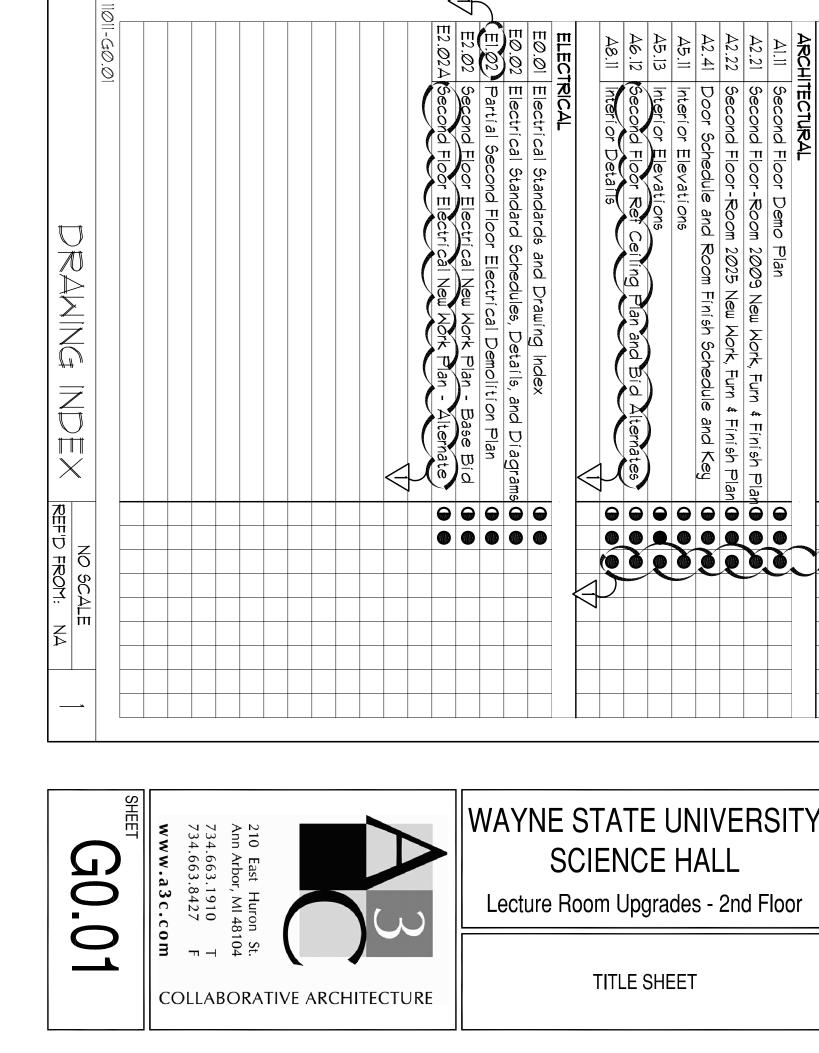
DRAWING EXISTING



WAYNE STATE UNIVERSITY

KEY PLAN

005-226260



NOTE: SEE DOOR, WINDOW AND INTERIOR FINISH SCHEDULES FOR ADDITIONAL ABBREVIATIONS

ABBREVIATIONS

<u>Ø</u>

NSIDE DIAMETER

GENERAL CONTRACTOR
GALVANIZED IRON
GYPSUM BOARD
HOLLOM METAL
HORIZONTAL

THIS SHEET
TOP OF CONCRETE
TOP OF STEEL
TOP OF MASONRY

INLESS NOTED OTHERWISE

EXPANSION JOINT
ELECTRICAL
ELEVATION
ELEVATOR

\(\frac{1}{2}\) \(\frac{1}2\) \(\frac{1}2\) \(\frac{1}2\) \(\frac{1}2\) \(\frac{1}2\) \(\frac{1}2\) \(\frac{1

REQUIRED
ROOF DRAIN
ROUGH OPENING
SINK BASE

SQUARE FEET

REFER (TO)

ARCHITECTURAL

AI.II Second Flo

A2.21 Second Flo

A2.22 Second Flo

A2.41 Door Sche

A5.11 Interior Ele

A6.12 Second Flo

A8.11 Interior De

New Work, I

, Furn ≰ Fínísh Plan , Furn ≰ Fínísh Plan

H L Turn

‡ Finish

Interior Elevations

Second Floor Demo Plan
Second Floor-Room 2009 New Work,
Second Floor-Room 2025 New Work,

ROVIDED

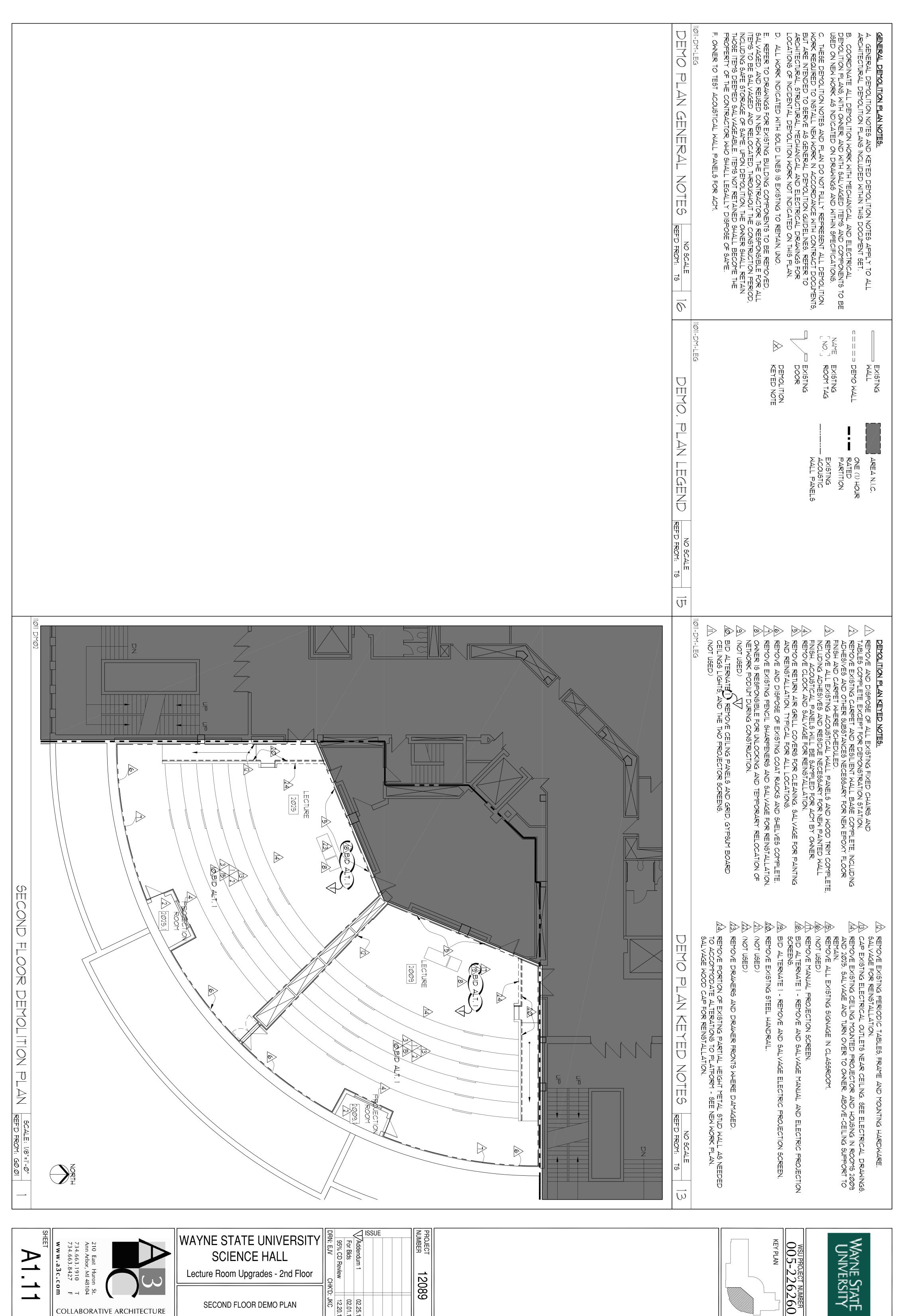
EXTERIOR FLOOR DRAIN

ACE OF STUD

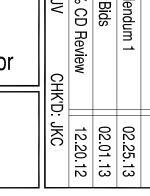
SPECIFICATIONS
STAINLESS STEEL
STANDARD

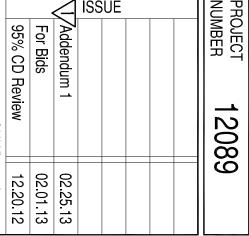
STRUCTURAL

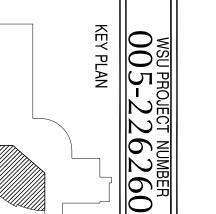
RE-RETARDANT

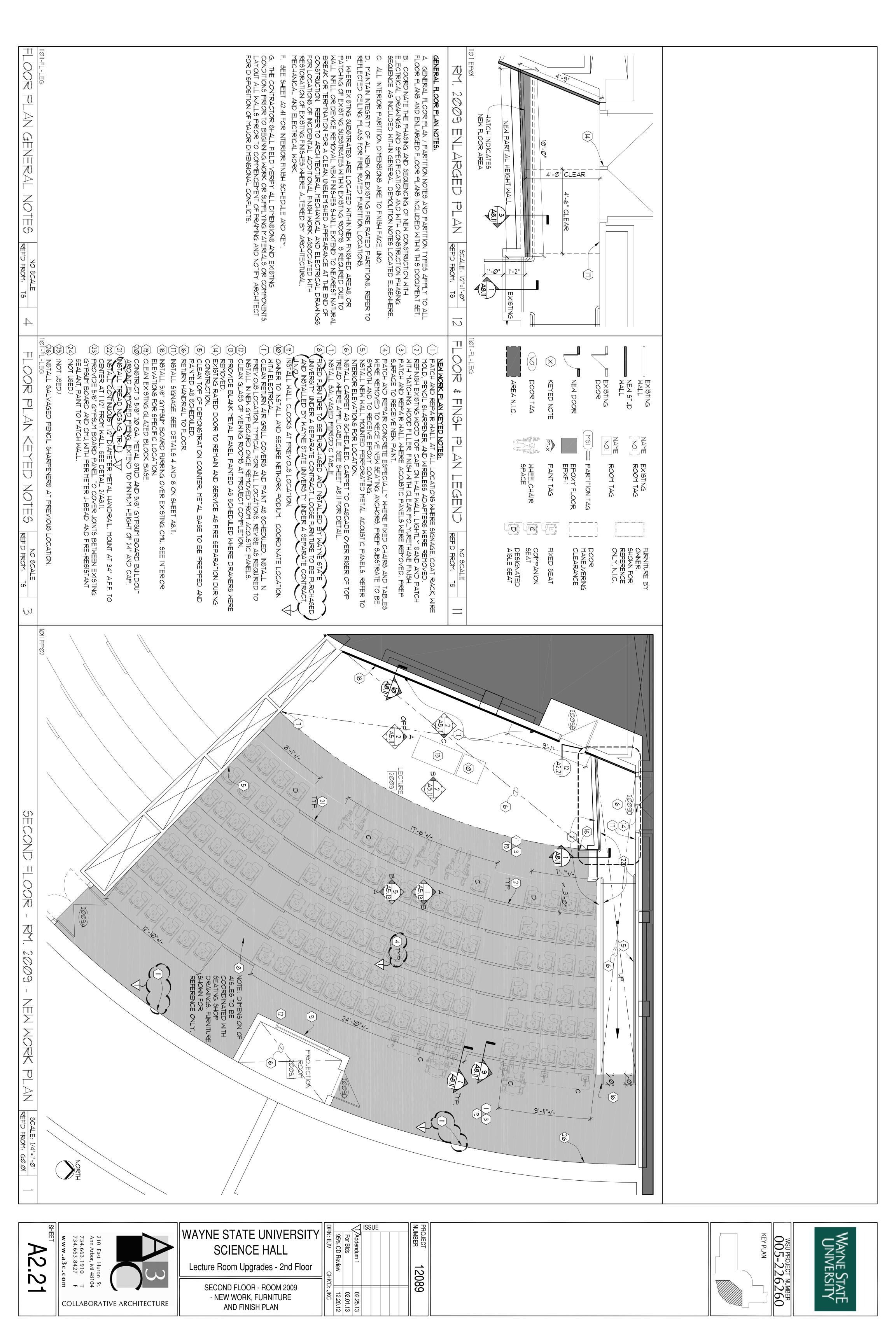


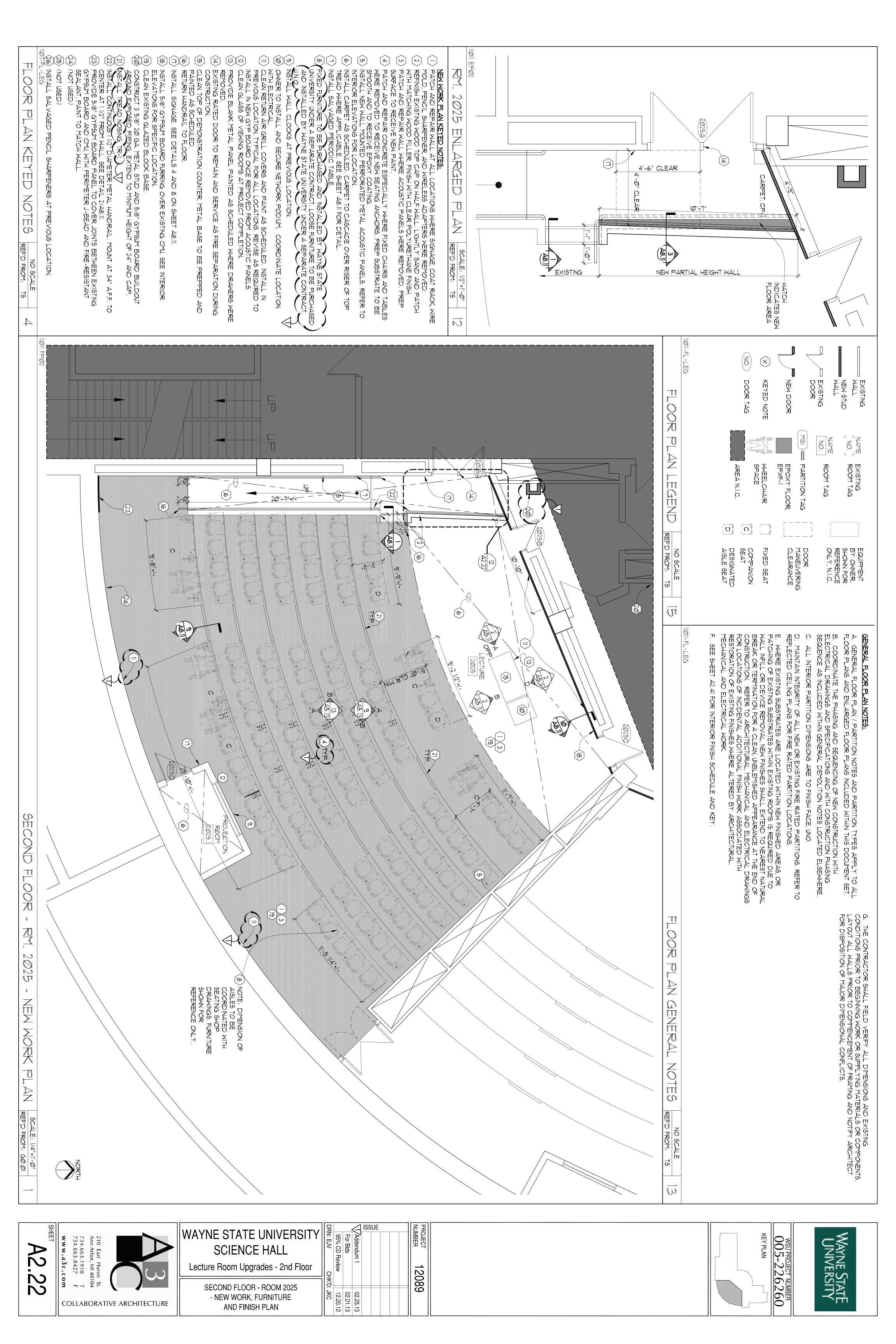


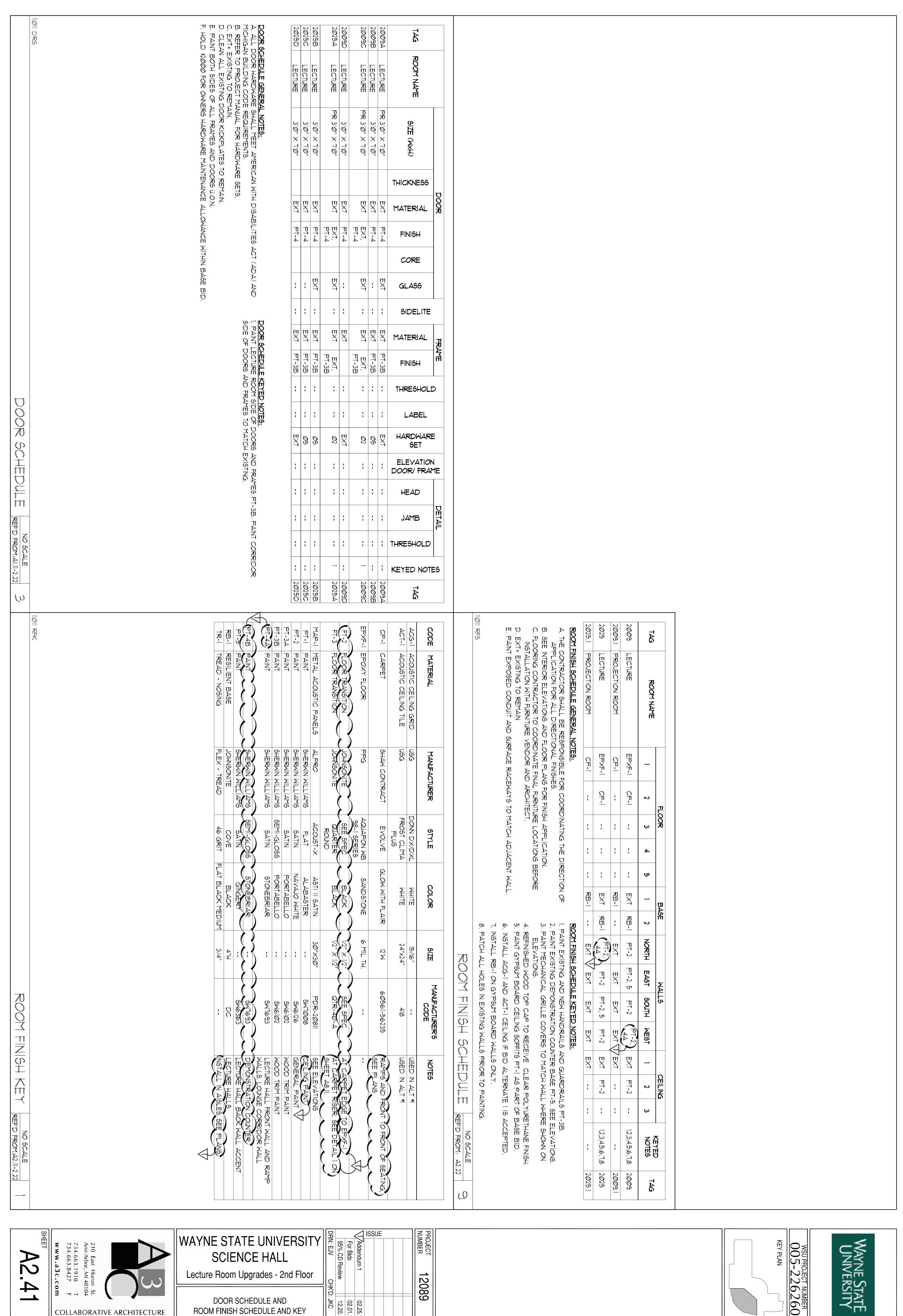








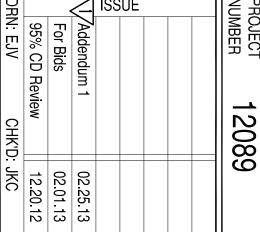


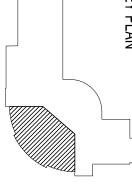




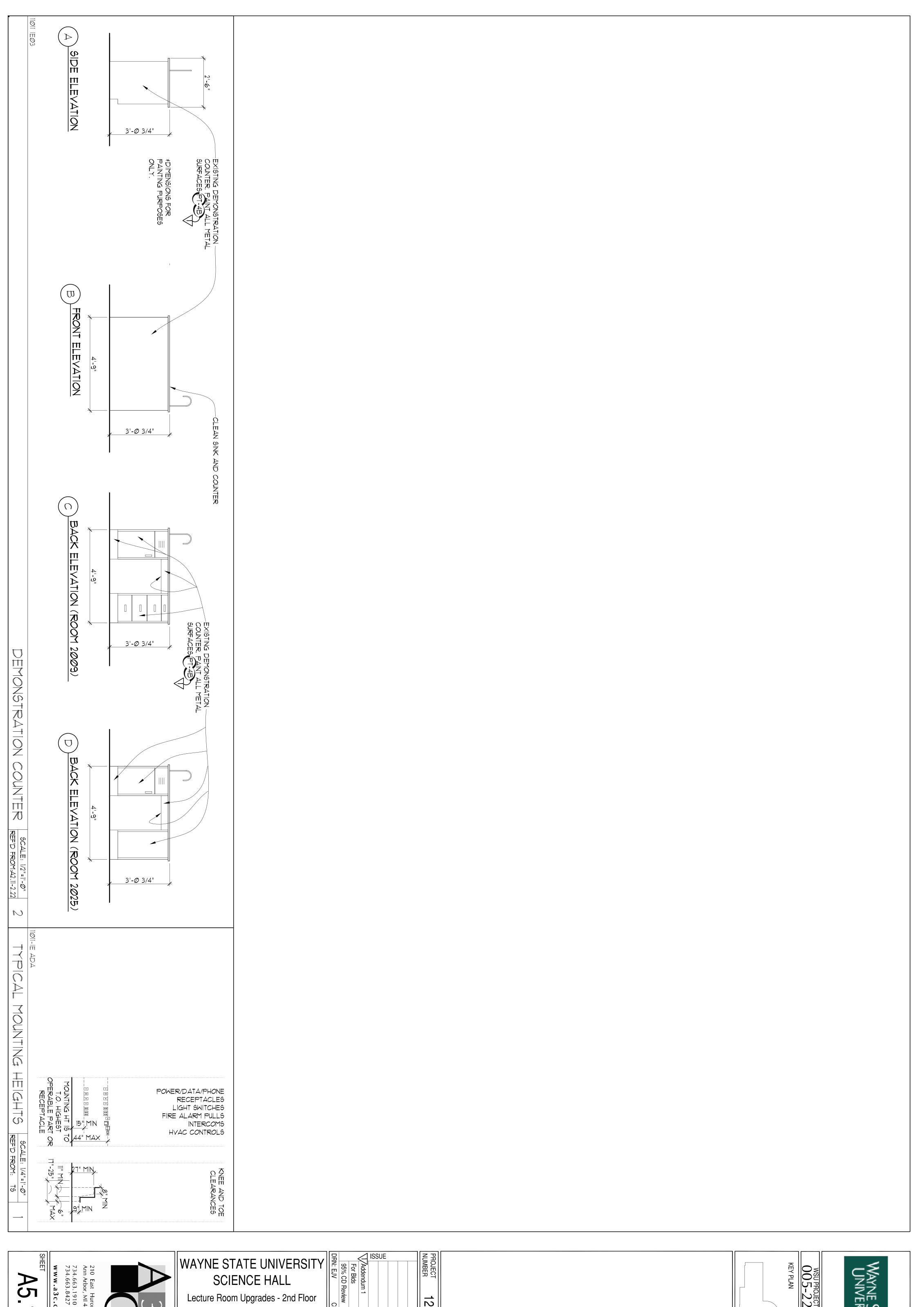


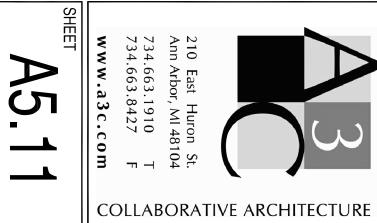
DOOR SCHEDULE AND
ROOM FINISH SCHEDULE AND KEY











INTERIOR ELEVATIONS

