

C:\Revit Local Files\11738.001\_LCCC SE\_CCR\_Central\_twellner@hcm

GOVERNING CODES: 2015 INTERNATIONAL BUILDING CODE 2015 INTERNATIONAL EXISTING BUILDING CODE

2015 INTERNATIONAL FIRE CODE 2015 INTERNATION MECHANICAL CODE 2015 INTERNATIONAL ENERGY CODE 2015 INTERNATIONAL PLUMBING CODE 2015 INTERNATIONAL FUEL CODE

2009 ICC/ANSI A117.1 ACCESAIBILITY CODE

2017 NATIONAL ELECTRICAL CODE

CHEYENNE CITY CODE THIS IS A 10,349 SF RENOVATION INSIDE OF THE EXISTING 14,950 GSF CROSSROADS BUILDING. THE EXISTING BUILDING STRUCTURE IS CONCRETE POST AND BEAM WITH PRECAST CONCRETE DOUBLE TEE ROOF SLABS. THE RENOVATION WILL CONSIST OF NEW PARTITION WALLS, INTERIOR FINISH REPLACEMENT, NEW FIRE PROTECTION THROUGHOUT SPACE, AND MECHANICAL AND ELECTRICAL UPGRADES TO THE PROGRAM SPACE.

CONSTRUCTION TYPE: II-B, EXISTING BUILDING PARTIAL SPRINKLERED (NEW SCOPE WILL SPRINKLER REMAINING BUILDING AND FULLY DETECTED) NUMBER OF STORIES: OCCUPANCY:

EXITING: PER TABLE 1020.1 CORRIDOR FIRE-RESISTANCE RATING FOR BUSINESS SPACES 0 HR WITH SPRINKLERS

EXISTING 2 HOUR AREA SEPARATION BETWEEN CROSSROADS BUILDING AND ADJACENT BUILDINGS TO THE WEST AND EAST AREA SEPARATION: PER 2015 IBC TABLE 504.3 AND 504.4, AND 506.2: ALLOWABLE AREA, HEIGHT AND NUMBER OF STORIES AS FOLLOWS:

STORIES: TYPE: HEIGHT ALLOWABLE AREA: OCCUPANCY GROUP: 75 FEET 108,560 SF

ACTUAL: 14,950 GSF = IN COMPLIANCE

PER SECTION 303.1.1 AND 303.1.2 SMALL ASSEMBLY SPACES SHALL BE CLASSIFIED AS GROUP B OCCUPANCY

TOTAL BUILDING OCCUPANTS = 198

### PLUMBING COUNTS

### PLUMBING COUNTS ARE BASED ON BUILDING OCCUPANCY:

SERVICE

102A

\*\* FOR THE PURPOSE OF PLUMBING CALCULATION, WE PROPOSE THE FOLLOWING OCCUPANT LOAD AND FIXTURE COUNTS BASED ON ACTUAL BUILDING USAGE. WE PROPOSE THESE FOLLOWING ASSUMPTIONS:

1. NON-OCCUPIED SPACES (VESTIBULES, STAIRS, ELEVATORS, TOILET ROOMS, SHAFTS, CLOSETS) WILL NOT BE COUNTED TOWARDS OCCUPANT LOAD FOR EXISTING OR FIXTURE COUNT, BECAUSE THE SAME OCCUPANTS ARE IN EITHER OR SCENARIO OR THOSE SPACES ARE NON-

**OCCUPANCY TYPE** 

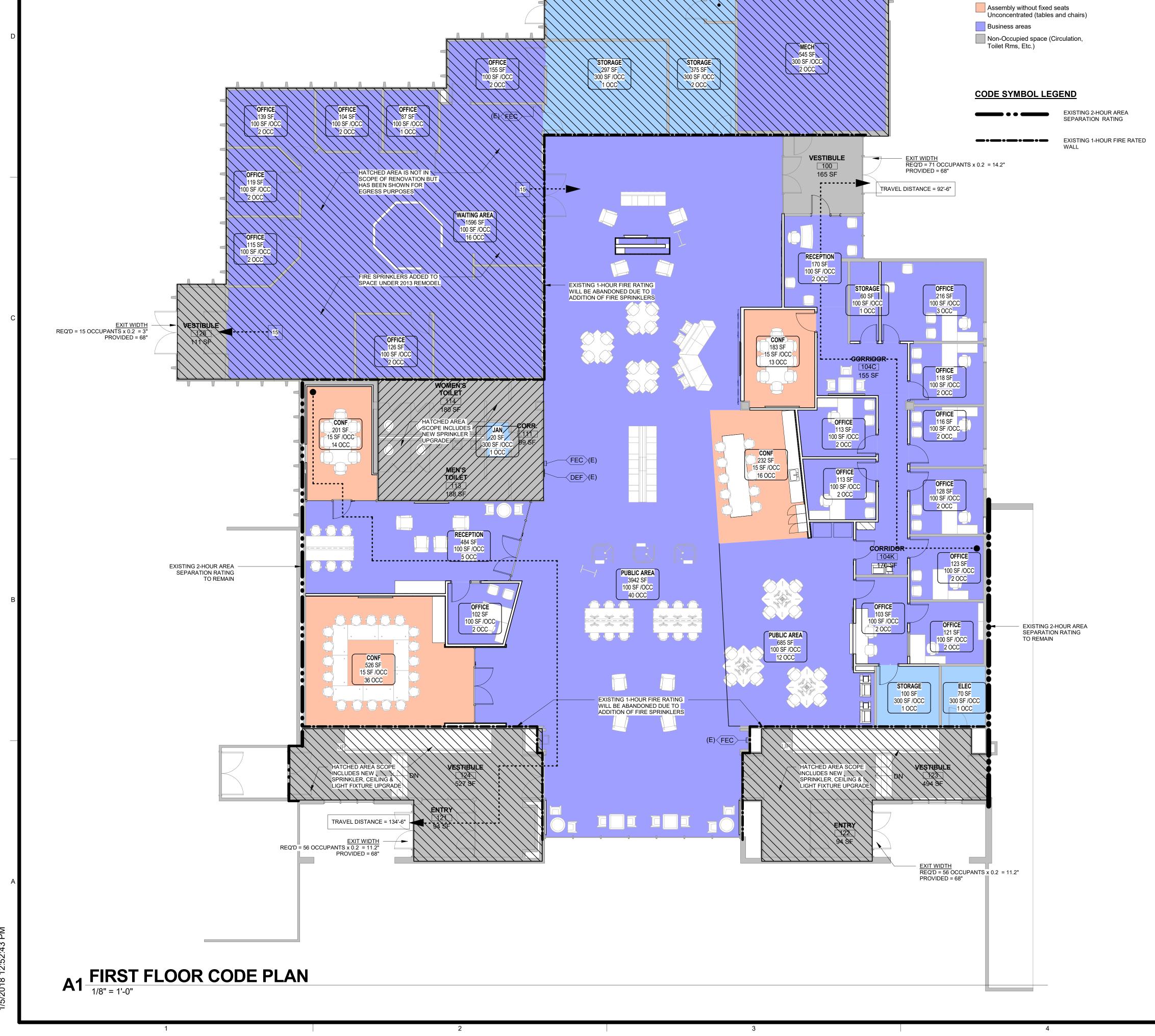
equipment room

Accessory storage areas, Mechanical

2. BECAUSE SOME CIRCULATION SPACES SERVES AS PUBLIC AREAS FOR LOUNGING AND WAITING, THOSE SPECIFIC AREAS HAVE BEEN INCLUDED IN THE OCCUPANT LOAD COUNT FOR PLUMBING AND EXITING.

3. DUE TO EXISTING CONDITIONS WE ARE REQUESTING A VARIANCE WITH ONE LAVATORY SHORT FOR EACH MALE & FEMALE AND SHORT ONE DRINKING FOUNTAIN.

WC (MALE)	WC (FEMALE)	LAV5		DΓ	OTHER	
GROUP 'B' 1:25 FOR 50 1:50	1:25 FOR 50 1:50	1:40 FOR 1:80	1:40 FOR 80 1:80		1 SVC SIN	
		WC / URINAL	LAVS	DF	SVC SINK	
FIXTURES REQUIRED (MALE)		3	3	-	-	
FIXTURES REQUIRED (FEMALE)		3	3	-	-	
TOTAL REQUIRED		6	6	2	1	
FIXTURE PROVIDED		6	4	1	<u> </u>	



### **IBC CHAPTER 10: MEANS OF EGRESS:**

### **SECTION 1005: MEANS OF EGRESS SIZING:**

1005.3.1 STAIRWAYS: CAPACITY SHALL BE DETERMINED BY MULTIPLYING CALCULATED OCCUPANT LOAD PER FLOOR BY 0.3 INCH

1005.3.2 OTHER EGRESS COMPONENTS: CAPACITY SHALL BE DETERMINED BY MULTIPLYING CALCULATED OCCUPANT LOAD PER FLOOR BY 0.2 INCH PER OCCUPANT

1005.7.1 ENCROACHMENT (DOORS): WHEN FULLY OPEN SHALL NOT REDUCE REQUIRED WIDTH MORE THAN 7 INCHES IN ANY POSITION, DOOR SHALL NOT REDUCE REQUIRED WIDTH MORE THAN HALF

### SECTION 1006: NUMBER OF EXITS AND EXIT ACCESS DOORWAYS:

1006.2.1 EGRESS BASED ON OCCUPANT LOAD AND COMMON PATH OF EGRESS TRAVEL DISTANCE (CPET): TWO EXITS OR EXIT ACCESS DOORWAYS FROM ANY SPACE SHALL BE PROVIDED WHERE THE DESIGN OCCUPANT LOAD OR THE COMMON PATH OF EGRESS TRAVEL DISTANCE EXCEEDS THE VALUES LISTED IN TABLE 1006.2.1.

OCCUPANCY MAX CPET DISTANCE 100' (SPRINKLED)

T1006.3.1 MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS PER STORY

OCCUPANT LOAD PER STORY MIN. NUMBER OF EXITS FROM STORY

T1006.2.1 SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY

### **SECTION 1009: ACCESSIBLE MEANS OF EGRESS:**

1009.1 ACCESSIBLE MEANS OF EGRESS REQUIRED: WHERE MORE THAN ONE MEANS OF EGRESS IS REQUIRED FROM AN ACCESSIBLE SPACE, THE ACCESSIBLE SPACE SHALL BE SERVED BY NO LESS THAN TWO ACCESSIBLE MEANS OF. 1009.8 TWO-WAY COMMUNICATION SYSTEM COMPLYING WITH SECTIONS 1009.8.1 AND 1009.8.2 SHALL BE PROVIDED AT THE LANDING SERVING EACH ELEVATOR OR BANK OF ELEVATORS ON EACH ACCESSIBLE FLOOR THAT IS ONE OR MORE STORIES ABOVE OR BELOW THE LEVEL OF EXIT DISCHARGE

### **SECTION 1010: DOORS, GATES AND TURNSTILES:**

1010.1.1 SIZE OF DOORS: MINIMUM WIDTH OF DOOR OPENING SHALL BE AS REQUIRED FOR OCCUPANT LOAD AND SHALL

PROVIDE A MINIMUM 32 INCH CLEAR WIDTH

1010.1.9.8 ACCESS-CONTROLLED EGRESS DOORS: EGRESS DOORS w/ APPROVED ACCESS CONTROL SYSTEMS SHALL DISENGAGE w/ SIGNAL OR LOSS OF POWER, MANUAL UNLOCKING DEVICES, ACTIVATION OF BUILDING FIRE ALARM SYSTEM AND/OR ACTIVATION OF BUILDING AUTOMATIC SPRINKLER SYSTEM

### **SECTION 1011: STAIRWAYS:**

1011.3.1.2 FIRE-RESISTANCE RATING: STAIRWAY ENCLOSURES CONNECTING FOUR OR MORE STORIES SHALL HAVE A

FIRE-RESISTANCE RATING NOT LESS THAN TWO HOURS.

1011.4 WIDTH: REQUIRED WIDTH SHALL BE DETERMINED BY OCCUPANT LOAD BUT SHALL NOT BE LESS THAN 44 INCHES.

### **SECTION 1013: EXIT SIGNS:**

WHERE REQUIRED: EXIT SIGN PLACEMENT SHALL BE SUCH THAT NO POINT IN AN EXIT ACCESS CORRIDOR IS MORE THAN 100 FEET FROM EXIT ACESS OR EXIT SIGN

# **SECTION 1015: GUARDS:**

1015.2 WHERE REQUIRED: OPEN-SIDES OF WALKING SURFACES AND BALCONIES THAT ARE LOCATED MORE THAN 30 INCHES **VERTICALLY ABOVE GRADE** 

### **SECTION 1016: EXIT ACCESS:**

1016.2 EGRESS THROUGH INTERVENING SPACES: EGRESS THROUGH INTERVENING SPACE IS PERMITTED WHERE SUCH ADJOINING SPACES ARE ACCESSORY AND PROVIDE A DISCERNIBLE PATH OF EGRESS TO AN EXIT

# **SECTION 1017: EXIT ACCESS TRAVEL DISTANCE:**

T1017.2 EXIT ACCESS TRAVEL DISTANCE:

OCCUPANCY: MAX TRAVEL DISTANCE:

300 FEET (SPRINKLERS)

# **SECTION 1020: CORRIDORS:**

T1020.1 CORRIDOR FIRE-RESISTANCE RATING:

0 HR (SPRINKLERS) **BUSINESS SPACES:** STORAGE SPACES: 0 HR (SPRINKLERS)

T1020.2 MINIMUM CORRIDOR WIDTH:

44 INCHES CLEAR (MIN)

ASSEMBLY, BUSINESS: 1020.4 DEAD ENDS, WHERE MORE THAN ONE EXIT OR EXIT ACCESS DOORWAY IS REQUIRED, THE EXIT ACCESS SHALL BE ARRANGED SUCH THAT THERE ARE NO DEAD ENDS IN CORRIDORS MORE THAN 20 FEET IN LENGTH. EXCEPTION 2: IN OCCUPANCIES IN GROUP B, WHERE THE BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH 903.3.1.1, THE LENGTH OF THE DEAD-END CORRIDORS SHALL NOT EXCEED 50 FEET.

# **SECTION 1023: INTERIOR EXIT STAIRWAYS AND RAMPS**

1023.7 EXTERIOR WALLS OF INTERIOR EXITS THAT ARE NOT PROTECTED AND AT AN ANGLE LESS THAN 180 DEGREES SHALL BE PROTECTED 10' HORIZONTALLY BY A 1 HR RATING WITH OPENING PROTECTION OF NOT LESS THAN 45 MIN.

			O	CCUPANCY	SCHEDULE	
Number	Name	Code Plan Name	Area	Area Per Occupant Calculated	Occupancy Classification	Occupancy
101	MECHANICAL	MECH	545 SF	100 SF	Business areas	2
	FOOD PANTRY	STORAGE	375 SF	300 SF	Accessory storage areas, Mechanical equipment room	2
	FIRE SERVICE	MECH	22 SF	300 SF	Accessory storage areas, Mechanical equipment room	1
	COLLABORATION	PUBLIC AREA	3942 SF	100 SF	Business areas	40
	RECEPTION/WAITING	RECEPTION	170 SF	100 SF	Business areas	2
	CONFERENCE ROOM	CONF	183 SF	15 SF	Assembly without fixed seats Unconcentrated (tables and chairs)	13
	CORRIDOR	CONF	155 SF	100 SF	Business areas	0
	STORAGE		60 SF	100 SF	Business areas	1
	OFFICE	OFFICE	216 SF	100 SF	Business areas	3
	OFFICE	OFFICE	118 SF	100 SF	Business areas	2
	OFFICE	OFFICE	116 SF	100 SF	Business areas	2
	OFFICE	OFFICE	128 SF	100 SF	Business areas	2
	OFFICE	OFFICE	123 SF	100 SF	Business areas	2
	CORRIDOR	CIRC	170 SF	100 SF	Business areas	0
	OFFICE	OFFICE	113 SF	100 SF	Business areas	2
	OFFICE	OFFICE	113 SF	100 SF	Business areas	2
	IT/HELP DESK	OFFICE	103 SF	100 SF	Business areas	2
	SPECIALIST OFFICE	OFFICE	121 SF	100 SF	Business areas	2
	STORAGE	STORAGE	100 SF	300 SF	Accessory storage areas, Mechanical equipment room	1
	ELEC.	ELEC	70 SF	300 SF	Accessory storage areas, Mechanical equipment room	1
	COMPUTER STATIONS		685 SF	100 SF	Business areas	12
108	COMMUNITY CAFE	CONF	232 SF	15 SF	Assembly without fixed seats Unconcentrated (tables and chairs)	16
	CONF ROOM	CONF	526 SF	15 SF	Assembly without fixed seats Unconcentrated (tables and chairs)	36
	STUDENT VETERANS LOUNGE		484 SF	100 SF	Business areas	5
110B	SVA OFFICE	OFFICE	102 SF	100 SF	Business areas	2
110C	STUDY / COMPUTER	CONF	201 SF	15 SF	Assembly without fixed seats Unconcentrated (tables and chairs)	14
112	JAN.	JAN	20 SF	300 SF	Accessory storage areas, Mechanical equipment room	1
118	WAITING AREA	WAITING AREA	1596 SF	100 SF	Business areas	16
119	OFFICE	OFFICE	87 SF	100 SF	Business areas	1
120	OFFICE	OFFICE	104 SF	100 SF	Business areas	2
125	OFFICE	OFFICE	139 SF	100 SF	Business areas	2
126	OFFICE	OFFICE	119 SF	100 SF	Business areas	2
127	OFFICE	OFFICE	115 SF	100 SF	Business areas	2
129	STORAGE	STORAGE	297 SF	300 SF	Accessory storage areas, Mechanical equipment room	1
	OFFICE	OFFICE	155 SF	100 SF	Business areas	2
131	OFFICE	OFFICE	126 SF	100 SF	Business areas	2

# hord | coplan | macht

1331 Nineteenth Street Denver, CO. 80202

P 303.607.0977 www.hcm2.com

CONSULTANT:

PROJECT:

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

1.4.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION: PROJECT NO:

DRAWN BY:

**CHECKED BY** APPROVED BY: SHEET TITLE:

11738.001

FIRST FLOOR CODE PLAN

G-101

NOTE#	NOTE
1	DEMO EXISTING CARPET THRU-OUT
2	DEMO EXISTING DEMOUNTABLE PARTITIONS, DOOR FRAMES, DOOR & HARDWARE
3	DEMO EXISTING CERAMIC TILE
4	DEMO EXISTING WALL AND WINDOW
5	DEMO EXISTING TRANSACTION COUNTER
6	DEMO EXISTING SLIDING SECURITY GRILLE
7	DEMO EXISTING POWER POLE WOOD POST
9	DEMO EXISTING CASEWORK AND COUNTER TOP IN ITS ENTIRETY
10	DEMO EXISTING WALL FOR NEW DOOR
11	DEMO EXISTING GYP. BOARD SOFFIT ABOVE
12	DEMO EXISTING WALL
13	DEMO EXISTING DOOR
14	DEMO EXISTING VAULT DOOR AND CMU WALL AND LINTEL ABOVE DOOR

REMOVE EXISTING DEFLIBERATOR AND REINSTALL AS NOTED

REMOVE EXISTING FIRE EXTINGUISHER AND CABINET AND

REINSTALL AS NOTED

# **DEMOLITION GENERAL NOTES**

- WORK WITH OWNER.
- AND/OR CONFLICTS TO ARCHITECT.
- DISTURB ANY EXISTING CONDITIONS THAT ARE TO REMAIN. GENERAL CONTRACTOR OR SUBCONTRACTOR
- PROVIDE PROTECTION FOR FLOORS, WALLS, & CEILING AT ALL EXISTING CONDITIONS TO REMAIN, INCLUDING TRAFFIC AREA FOR DEMOLITION REMOVAL IN COMMON BUILDING AREAS & FREIGHT ELEVATORS. DAMAGED FLOORS WILL BE REPLACED @ NO COST TO OWNER.
- REMOVED PROVIDE SHORING AND BRACING AS REQUIRED.
- 7. ALL ITEMS WITHIN WALLS TO BE REMOVED ARE NOT SHOWN -FIELD VERIFY EXISTING CONDITIONS AND TEMPORARILY OR PERMANENTLY REMOVE ITEMS AS NECESSARY FOR NEW CONSTRUCTION.
- REMOVE ALL EXISTING POWER AND ASSOCIATED CONDUIT (AND OTHER MISCELLANEOUS ITEMS WHERE INDICATED) ON EXISTING WALLS TO BE REUSED. IF REMOVAL WILL DISRUPT PERFORMANCE OF ANY ITEM NOT INCLUDED IN THIS SCOPE,
- REMOVED BEFORE WORK TO BEGIN IN THIS AREA.
- CONDITIONS, CUTTING AND PATCHING AND SELECTIVE DEMOLITION REQUIREMENTS THAT APPLY TO ALL WORK KEY NOTES DESCRIBED ON THIS SHEET.
- 11. REFER TO (ELECTRICAL, MECHANICAL, STRUCTURAL, LANDSCAPE, ETC.) DEMOLITION DRAWINGS FOR ADDITIONAL
- 12. COORDINATE W/BUILDING OWNER DURING DEMOLITION TO DETERMINE WHETHER EXISTING FIRE & SMOKE DETECTION SYSTEMS ARE TO BE BAGGED, PROTECTED & REMAIN IN OPERATION OR TO BE TAKEN OFF LINE.
- 13. AREAS OF DEMOLITION SHALL BE FREE OF (FURNITURE AND MOBILE EQUIPMENT AND ACCESSORIES) PRIOR TO START OF
- 14. REMOVE (STAPLES, NAILS AND SCREWS) FROM WALLS TO REMAIN, TYPICAL THROUGHOUT.
- REMOVE AND SALVAGE (ALL SIGNAGE, CLOCKS, EMERGENCY KITS, PENCIL SHARPENERS AND PHONES) FROM WALLS, (INSIDE CLASSROOMS AND IN LOBBY AREAS). PATCH AND REPAIR WALLS WHERE DAMAGED BY REMOVAL. (SALVAGE AND RETURN TO OWNER) (OR) (SALVAGE FOR NEW LOCATION)
- 17. REMOVE ALL EXISTING WALL MOUNTED DOOR
- WALL BASE. PROTECT WALLS FROM DAMAGE.

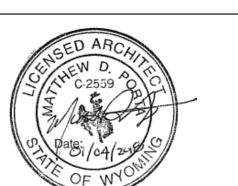
- GENERAL CONTRACTOR TO COORDINATE SCHEDULING ALL
- WORK LABELED (NIC), OR OTHERWISE NOT NOTED IS NOT IN CONTRACT FOR ANY ARCHITECTURAL IMPROVEMENTS.
- THE GENERAL CONTRACTOR & THEIR SUBCONTRACTORS SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS WITH CONDITIONS SHOWN IN THE CONTRACT DOCUMENTS AND SHALL REPORT ANY DEVIATIONS, DISCREPANCIES
- THE GENERAL CONTRACTOR & SUBCONTRACTOR SHALL TAKE EXTREME CARE DURING DEMOLITION NOT TO DAMAGE OR SHALL REPAIR ANY DAMAGE OR DISTURBANCE TO EXISTING
- CONDITIONS AT NO COST TO THE OWNER.
- REMOVE ALL WALLS, DOORS (AND OTHER ITEMS) SHOWN DASHED - FIELD VERIFY CONSTRUCTION OF ALL WALLS TO BE
- RELOCATE AND ENSURE PROPER FUNCTION IS RESTORED.
- GENERAL CONTRACTOR TO COORDINATE ABATEMENT CONSULTANT FOR ANY CONTAMINATED MATERIALS TO BE
- 10. REFER TO SPECIFICATIONS REGARDING; EXISTING

- REMOVE AND REPLACE ALL EXISTING SWITCH PLATES AND OUTLET COVERS FROM EXISTING WALLS AND REPLACE WITH NEW PLATES PER SPEC.
- STOPPERS. PATCH AND REPAIR WALLS WHERE DAMAGED BY
- 18. REMOVE ALL FLOORING (INCLUDING ADHESIVES, SETTING MATERIALS, TRANSITION MATERIALS, ETC.) AND (RUBBER)
- 19. REMOVE ALL WOOD DOORS. SAND DOORS SMOOTH & REFINISH TO ORIGINAL LUSTER.

hord | coplan | macht

P 303.607.0977 1331 Nineteenth Street www.hcm2.com Denver, CO. 80202

CONSULTANT:



**PROJECT:** 

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

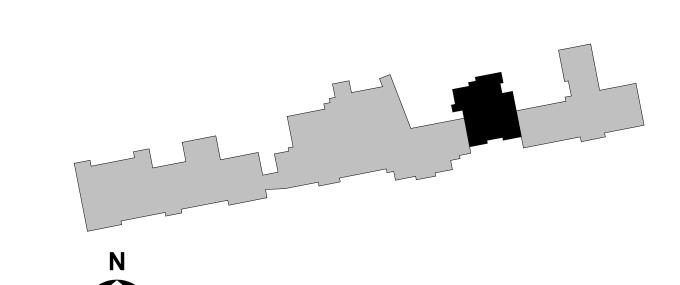
OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

1.4.2018 CONTRACT DOCUMENTS

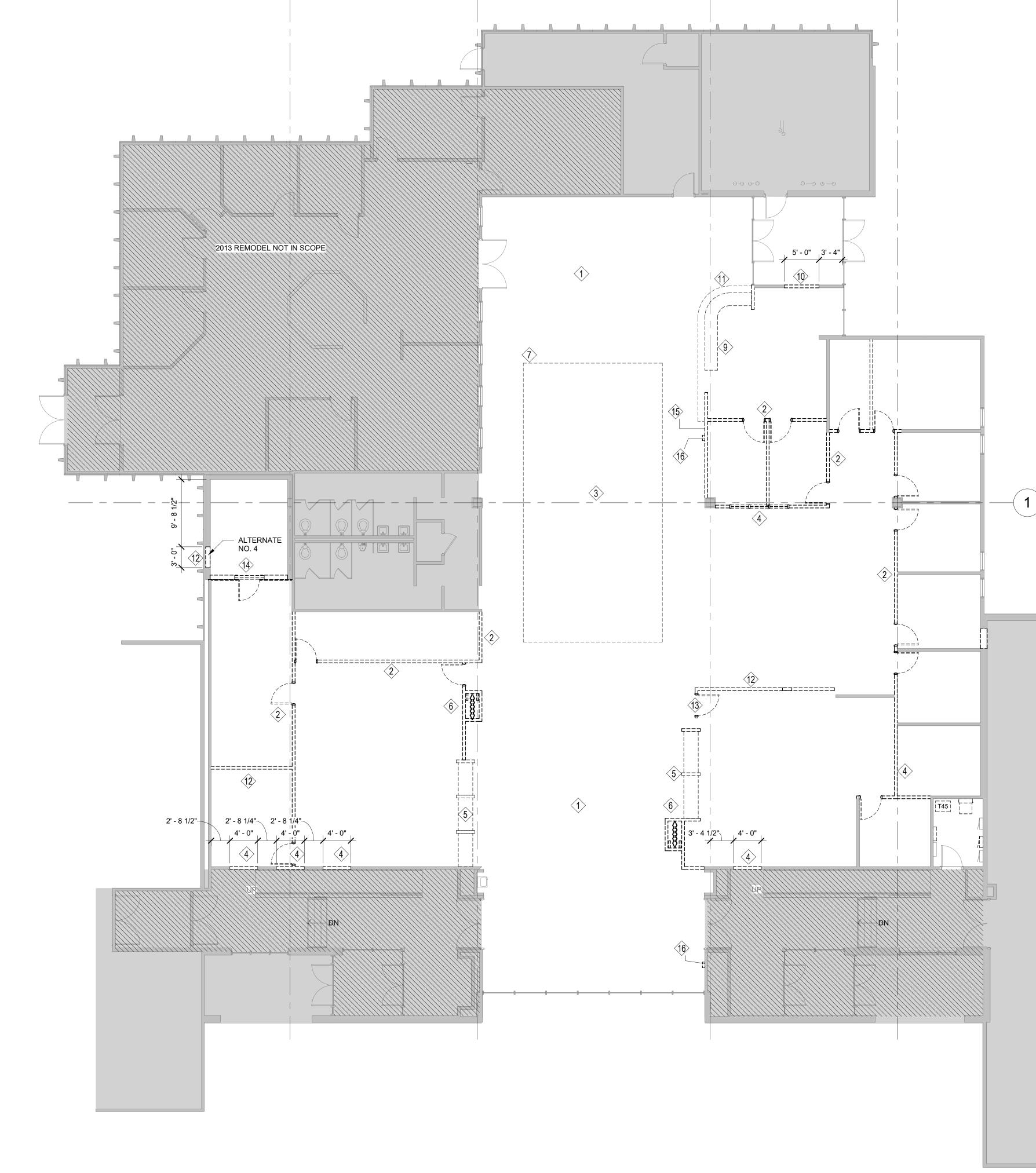


DRAWING INFORMATION: 11738.001 PROJECT NO: DRAWN BY: Checker APPROVED BY: Approver

FIRST FLOOR **DEMOLITION PLAN** 

SHEET TITLE:

**AD-111** 



A1 DEMOLITION FLOOR PLAN

1/8" = 1'-0"

# SHEET NOTES - DEMOLITION REFLECTED CEILING PLANS

NOTE# DEMO EXISTING CEILING AND GRID DEMO EXISTING BULKHEAD DEMO EXISTING WOOD CEILING

DEMO EXISTING OPERABLE PARTITIONS AND HOUSING DEMO EXISTING SOFFIT DEMO PORTION OF EXISTING CONCRETE CEILING. RE: DEMO DETAILS

- GENERAL CONTRACTOR TO COORDINATE SCHEDULING ALL WORK WITH OWNER.
- THE GENERAL CONTRACTOR & SUBCONTRACTOR SHALL TAKE DISTURB ANY EXISTING CONDITIONS THAT ARE TO REMAIN. GENERAL CONTRACTOR OR SUBCONTRACTOR
- PROVIDE PROTECTION FOR FLOORS, WALLS, & CEILING AT ALL EXISTING CONDITIONS TO REMAIN, INCLUDING TRAFFIC AREA FOR DEMOLITION REMOVAL IN COMMON BUILDING AREAS & FREIGHT ELEVATORS. DAMAGED FLOORS WILL BE REPLACED
- REMOVE ALL EXISTING POWER AND ASSOCIATED CONDUIT
- GENERAL CONTRACTOR TO COORDINATE ABATEMENT CONSULTANT FOR ANY CONTAMINATED MATERIALS TO BE
- REFER TO (ELECTRICAL, MECHANICAL, ETC.) DEMOLITION

REMOVE ALL FLOORING (INCLUDING ADHESIVES, SETTING WALL BASE. PROTECT WALLS FROM DAMAGE.

# **DEMOLITION RCP GENERAL NOTES**

- AND/OR CONFLICTS TO ARCHITECT.
- CONDITIONS AT NO COST TO THE OWNER.
- @ NO COST TO OWNER.
- DASHED FIELD VERIFY CONSTRUCTION OF ALL WALLS TO BE REMOVED - PROVIDE SHORING AND BRACING AS REQUIRED.
- ALL ITEMS WITHIN WALLS TO BE REMOVED ARE NOT SHOWN -PERMANENTLY REMOVE ITEMS AS NECESSARY FOR NEW CONSTRUCTION.
- COORDINATE W/ BUILDING OWNER DURING DEMOLITION TO DETERMINE WHETHER EXISTING FIRE & SMOKE DETECTION SYSTEMS ARE TO BE BAGGED, PROTECTED & REMAIN IN OPERATION OR TO BE TAKEN OFF LINE.
- REMOVE ALL EXISTING WALL MOUNTED DOOR STOPPERS. PATCH AND REPAIR WALLS WHERE DAMAGED BY
- MATERIALS, TRANSITION MATERIALS, ETC.) AND (RUBBER)

WORK LABELED (NIC), OR OTHERWISE NOT NOTED IS NOT IN CONTRACT FOR ANY ARCHITECTURAL IMPROVEMENTS.

THE GENERAL CONTRACTOR & THEIR SUBCONTRACTORS SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS WITH CONDITIONS SHOWN IN THE CONTRACT DOCUMENTS AND SHALL REPORT ANY DEVIATIONS, DISCREPANCIES

EXTREME CARE DURING DEMOLITION NOT TO DAMAGE OR SHALL REPAIR ANY DAMAGE OR DISTURBANCE TO EXISTING

REMOVE ALL WALLS, DOORS (AND OTHER ITEMS) SHOWN

FIELD VERIFY EXISTING CONDITIONS AND TEMPORARILY OR

(AND OTHER MISCELLANEOUS ITEMS WHERE INDICATED) ON EXISTING WALLS TO BE REUSED. IF REMOVAL WILL DISRUPT PERFORMANCE OF ANY ITEM NOT INCLUDED IN THIS SCOPE, RELOCATE AND ENSURE PROPER FUNCTION IS RESTORED.

REMOVED BEFORE WORK TO BEGIN IN THIS AREA.

REFER TO SPECIFICATIONS REGARDING; EXISTING CONDITIONS, CUTTING AND PATCHING AND SELECTIVE DEMOLITION REQUIREMENTS THAT APPLY TO ALL WORK KEY NOTES DESCRIBED ON THIS SHEET.

DRAWINGS FOR ADDITIONAL ITEMS.

- AREAS OF DEMOLITION SHALL BE FREE OF (FURNITURE AND MOBILE EQUIPMENT AND ACCESSORIES) PRIOR TO START OF
- REMOVE (STAPLES, NAILS AND SCREWS) FROM WALLS TO REMAIN, TYPICAL THROUGHOUT.
- REMOVE AND SALVAGE (ALL SIGNAGE, CLOCKS, EMERGENCY KITS, PENCIL SHARPENERS AND PHONES) FROM WALLS. PATCH AND REPAIR WALLS WHERE DAMAGED BY REMOVAL. (SALVAGE AND RETURN TO OWNER, U.O.N.
- REMOVE AND REPLACE ALL EXISTING SWITCH PLATES AND OUTLET COVERS FROM EXISTING WALLS AND REPLACE WITH

1331 Nineteenth Street

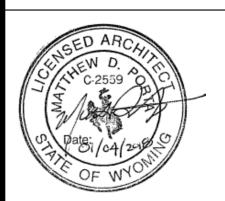
hord | coplan | macht

P 303.607.0977

www.hcm2.com

Denver, CO. 80202

CONSULTANT:



**PROJECT:** 

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

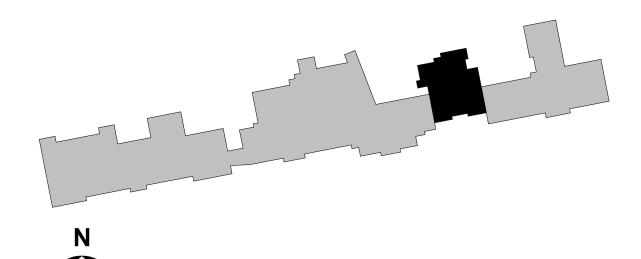
1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

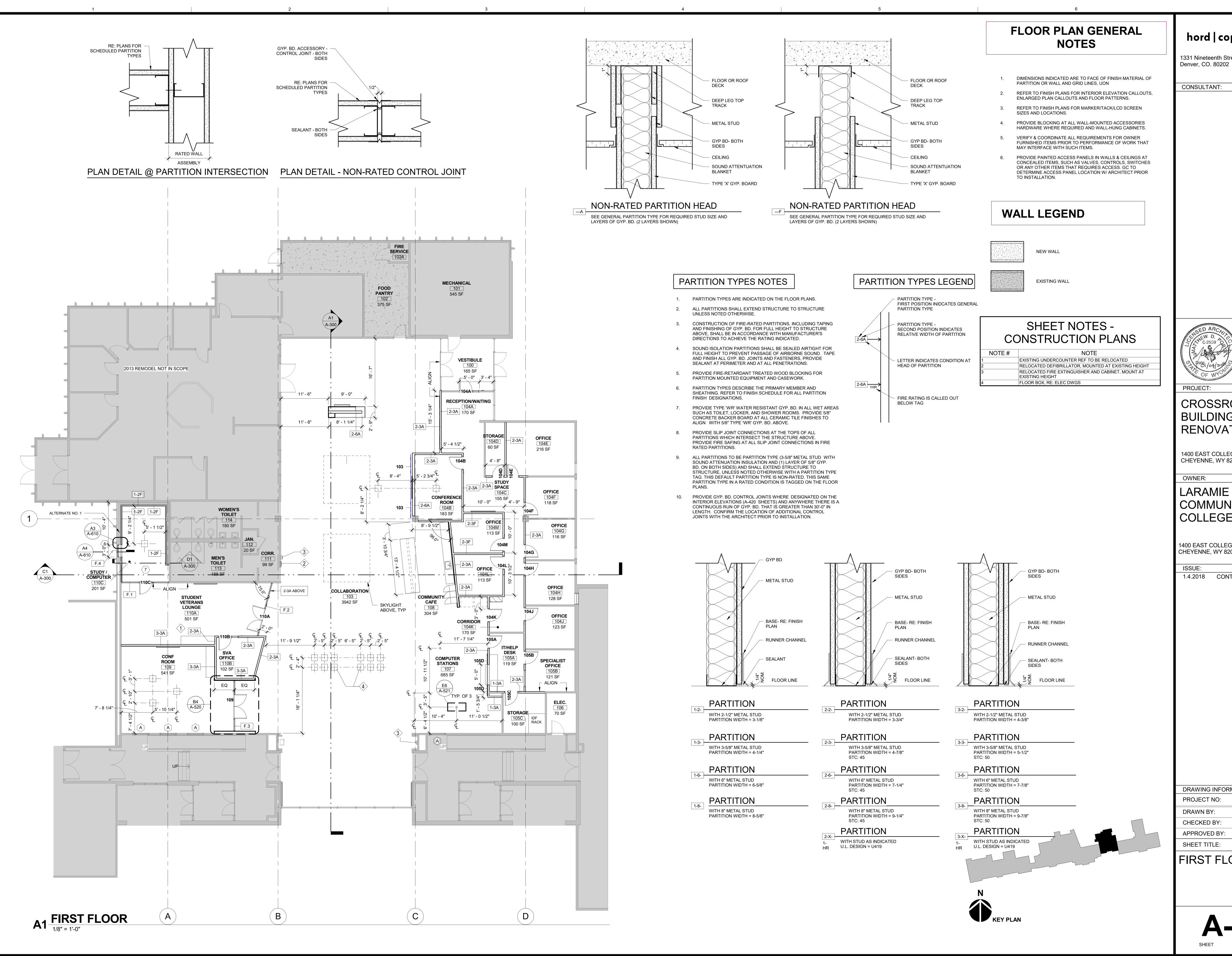
1.4.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION: 11738.001 DRAWN BY: Checker APPROVED BY: Approver SHEET TITLE:

FIRST FLOOR REFLECTED CEILING **DEMOLITION PLAN** 

**AD-121** 





hord | coplan | macht

1331 Nineteenth Street

P 303.607.0977 www.hcm2.com

CONSULTANT:

**PROJECT:** CROSSROADS

BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

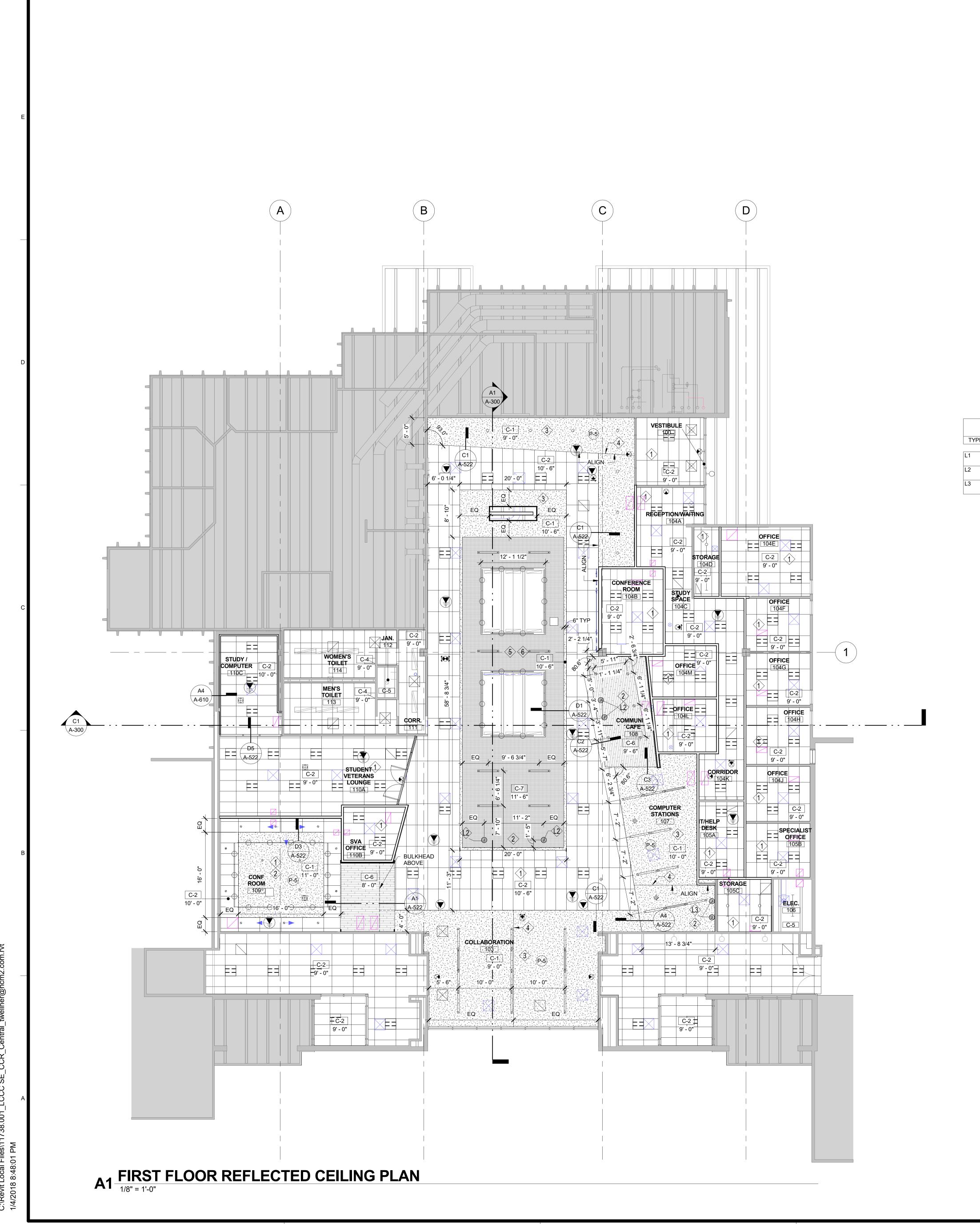
1.4.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION:

11738.001 PROJECT NO: DRAWN BY: CHECKED BY:

APPROVED BY: SHEET TITLE:

FIRST FLOOR PLAN



# **SHEET NOTES - RCP**

NOTE#	NOTE
	NEW GRID, CEILING TILES & LIGHT FIXTURES AS SCHEUDLED THROUGHOUT SCOPE OF WORK. RE: ELEC DRAWINGS FOR ADDITIONAL INFORMATION
	DECORATIVE PENDANT LIGHT FIXTURE, RE: ELEC DRAWINGS
	NEW GYP & LIGHTING
	CONTROL JOINT, TYP
	NEW METAL GRID TILES & LIGHT FIXTURES AS SCHEUDLED THROUGHOUT SCOPE OF WORK. RE: ELEC DRAWINGS FOR ADDITIONAL INFORMATION
	AT C-5, PAINT ALL EXPOSED ELEMENTS (PIPING, DUCTWORK, STRUCTURE) ABOVE GRID P-7

- ALL CEILING ELEVATIONS DIMENSIONED FROM FINISH FLOOR BELOW.
- CENTER ALL DEVICES, SPRINKLER HEADS, ETC. IN CEILING TILE.

RCP GENERAL NOTES

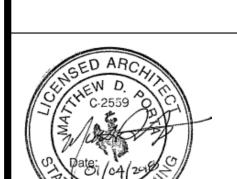
- FIRE SPRINKLER CONTRACTOR TO REFERENCE ALL DRAWINGS & SPECIFICATIONS FOR DETERMING REQUIRED COVERAGE & HEAD
  - PAINT ALL EXPOSED STRUCTURE, RE: FINISH LEGEND
  - ALL GYPSUM BOARD SOFFITS AT 9'-0" AFF U.O.N.
- 6. PAINT ALL SOFFITS P-5 U.O.N.

# **CEILING TYPE LEGEND**

C-1	NEW GYP BD	

- C-2 NEW 2X4 ACT, EXISTING GRID
- C-3 EXISTING 1X1 ACT, EXISTING 2X4 GRID
- C-4 EXISTING 2X4 ACT, EXISTING 2X4 GRID C-5 OPEN TO STRUCTURE
- C-6 WOOD CEILING
- C-7 PERFORATED METAL CEILING, PAINT STRUCTURE ABOVE P-7

	DECORATIVE LIGHT FIXTURE SCHEDULE												
Έ	DESCRIPTION	LAMP	MANUFACTURER	FINISH	MOUNTING	NOTE							
	PENDANT ACCENT LIGHT, 277V ELECTRONIC LED DRIVER, 0-10V DIMMING, 1309 LUMENS, 5-YR WARRANTEE	LED, 3000, 26.9W, 80 CRI	BEGA	VELVET BLACK W/ MATTE COPPER INTERIOR	CEILING, +8'-6" AFF	GENTS							
	PENDANT ACCENT LIGHT, ELECTRONIC LED DRIVER, 0-10V DIMMING, WITH SOCKET HOLDER FOR EDISON BASE, 1-YR WARRANTEE	LED, 2200K, 2W	BRUCK LIGHTING BY LEDRA BRANDS	BRUSHED NICKEL	*	MULTI LINE VOLTAGE PENDANT - 5 POINT CANOPY, BRONZE							
	WALL MOUNTED ACCENT LIGHT WITH INDUSTRIAL PIPING	LED	CUSTOM			REFER TO ALLOWANCE NO. 1 FOR ADDITIONAL INFORMATION							



hord | coplan | macht

1331 Nineteenth Street

Denver, CO. 80202

CONSULTANT:

P 303.607.0977

www.hcm2.com

CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

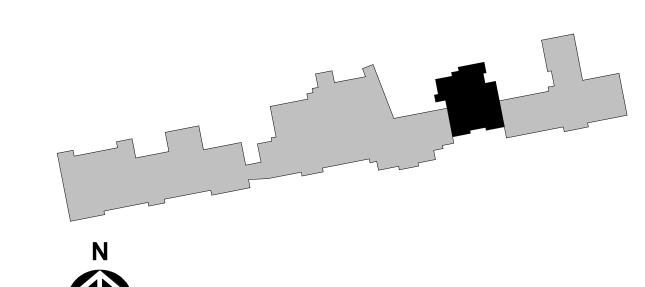
OWNER:

PROJECT:

LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

1.4.2018 CONTRACT DOCUMENTS



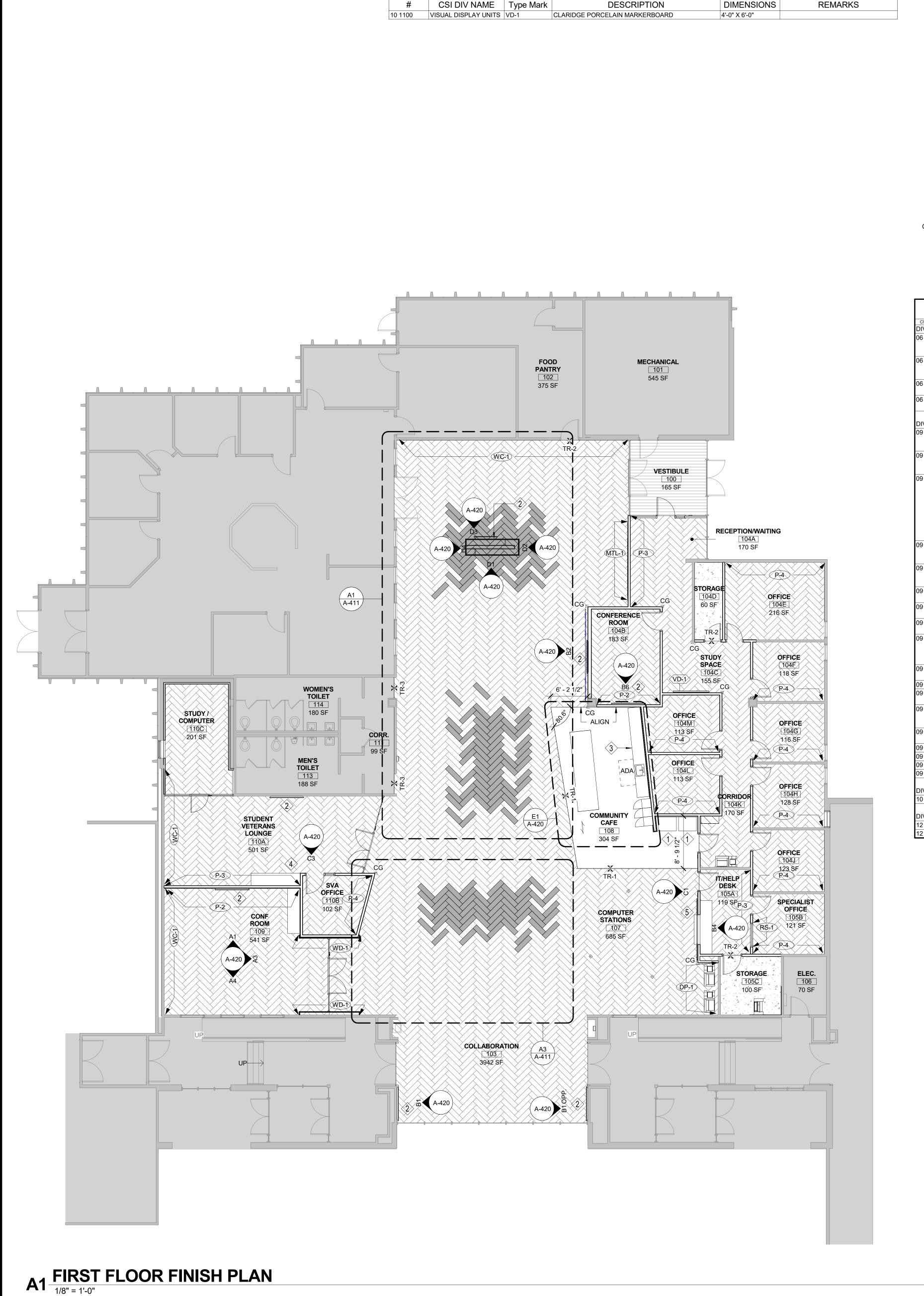
DRAWING INFORMATION: 11738.001

DRAWN BY: APPROVED BY:

PLAN

SHEET TITLE: FIRST FLOOR REFLECTED CEILING

**A-121** 



ACCESSORY SCHEDULE-VISUAL DISPLAY UNITS

# FLOOR FINISH LEGEND

CPT 2

# FINISH SYMBOL LEGEND

PATTERN DIRECTION

(XX) CEILING FINISH SYMBOL TRANSITION TAG

\$\(\frac{\pma}{2}\) SHEET NOTE SYMBOL CORNER GUARD

XXX WALL FINISH SYMBOL

# SHEET NOTES - FINISH PLANS

NOTE# VENDING MACHINE, OFOI LCD MONITOR (2) UNDERCOUNTER MICROWAVE, OFCI (1) UNDERCOUNTER REF, OFCI

# FLOOR TRANSITION LEGEND

TR-1 CARPET - LVT

TR-2 CARPET - CONCRETE TR-3 CARPET - PORCELAIN TILE

SLIDING BARN DOOR

# THE FOLLOWING INTERIOR FINISHES ARE LOCATED

THROUGHOUT THE SCOPE OF WORK, UNLESS NOTED OTHERWISE. REFER TO INTERIOR FINISH LEGEND FOR

FINISH PLAN GENERAL NOTES

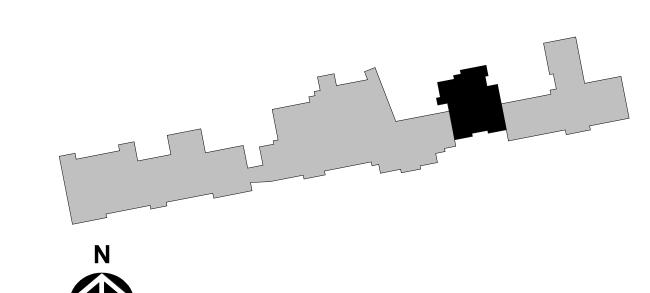
- ALL INTERIOR WALLS TO BE PAINTED P-1 CARPET THROUGHOUT TO BE CPT-1
- BASE THROUGHOUT TO BE RB-1 ALL WINDOW SILLS TO BE SS-1 e. ALL HM DOOR FRAMES TO BE PAINTED P-6
- TRANSITIONS ON CENTER OF DOOR WHERE APPLICABLE, UNO. PROVIDE EDGE PROTECTION AND TRANSITION PROFILES WHERE FLOOR MATERIAL CHANGES AND/OR STOPS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

ALL FLOOR MATERIALS TO BE BUTT JOINTED AT

- PAINT ALL (EXPOSED PIPES, AIR GRILLES, ETC.) TO MATCH ADJACENT WALL COLOR.
- 4. ALL WALL (MOUNTED CASEWORK, MILLWORK, HARDWARE, EQUIPMENT, ETC.) SHALL BE ANCHORED TO METAL STRAPPING OR 1/2" FRT PLYWOOD BACKING BETWEEN STUDS, U.N.O. COORDINATE ACCORDINGLY.
- REFER TO A-400 SHEETS AND OTHER DRAWINGS IN ADDITION TO THE FINISH PLANS AND KEYNOTE LEGEND FOR THE FULL EXTENT OF INTERIOR FINISHES.
- ALL FLOORING MATERIALS CONTINUE UNDER CASEWORK TO TOE KICK OR IF OPEN, TO WALL.
- 7. REPLACE ALL EXISTING VINYL CORNER GUARDS.

				FINISH	LEGEND				
CSI SECTION NUMBER	CSI SECTION NAME	TYPE	CODE	MANUFACTURER	PRODUCT	SIZE	COLOR	CONTACT	REMARKS
DIVISION 6 06 2023	INTERIOR FINISH CARPENTRY	DECORATIVE METAL PANELS	DP-1	FORMS & SURFACES	FUSED METAL - DALLAS	48X120 SHEET	GRAPHITE DIAMOND	CHAD SCHAEFER chad.schaefer@forms-surface s.com	.0625" THICK
06 2023	INTERIOR FINISH CARPENTRY	RECLAIMED WYOMING LICENSE PLATES	MTL-1	LOCAL ARTIST OR MILLWORKER	PLATE SIZES OF EQUAL DIMENSIONS WITH A VARIETY OF STYLES AND COLORS	-	-		SCREW ATTACHMENT AT PAINTED PLYWOOD BACKER WITH 1/2" SPACING
06 2023	INTERIOR FINISH CARPENTRY	WOOD BOARD PANELING	WD-1	PIONEER MILLWORKS	MIXED HARDWOODS	3/4X4	SETTLERS' PLANT		
06 4116	PLASTIC LAMINATE FACED ARCHITECTURAL CABINETS	PLASTIC LAMINATE (VERTICAL)	PL-1	WILSONART	HIGH LINE	-	7970K-18	BRYNN BISHOP brynn.bishop@wilsonart.com	
DIVISION 9									
09 3013	CERAMIC TILING	CERAMIC TILE	CT-1	CROSSVILLE	CRUX BY STILE	12X24	EARTH	JESSICA MAGEE jmagee@crossvillestudios.co	
09 5113	ACOUSTICAL PANEL CEILINGS	ACOUSTICAL CEILING	ACP-1	ARMSTRONG	895 FISSURED	24X48		KELLY HEDLUND kshedlund@armstrongceilings .com	
09 5133	ACOUSTICAL METAL PAN CEILINGS	METAL CEILING	MTL-2	ARMSTRONG	6188 METALWORKS OPEN CELL	24X24 PANEL	RAL 7032 PEBBLE GREY		3" CELL SIZE. INSTALLS AS A LOCK-IN SYSTEM OF UNFRAMED OPEN CELL PANELS THAT CONNECT TO MOUNTING AND CROSS RAILS FOR A SELF-SUSPENDING SYSTEM - NO OTHER SUSPENSION SYSTEM REQUIRED.
09 6513	RESILIENT BASE AND ACCESSORIES	RESILIENT BASE	RB-1	JOHNSONITE	RUBBER BASE	4" COVE, ROLLED GOODS	63 BURNT UMBER		
09 6519	RESILIENT TILE FLOORING	LUXURY VINYL TILE	LVT-1	ARMSTRONG	NATURAL CREATIONS, MYSTIX SPETTRO	6X36	NA 931 CASPIAN SAND	KRISTIN KNIGHT krknight@armstrongflooring.co m	BRICK ASHLAR INSTALLATION
09 6813	TILE CARPETING	CARPET (FIELD)	CPT-1	MILLIKEN	COLOR FIELD	TBD	COL122 PALE GULL	SHANNON WILSON shannon.wilson@milliken.com	HERRINGBONE INSTALLATION
09 6813		CARPET (ACCENT)	CPT-2	MILLIKEN	COLOR FIELD	TBD	COL182-94-48 OIL BLUE		HERRINGBONE INSTALLATION
09 6813		CARPET (WALK-OFF)	CPT-3	TANDUS	GEO CARPET #979	24X24	CHARCOAL #00154	PAM HEITMAN pamela.heitman@tarkett.com	
09 7200	WALL COVERING	VINYL WITH CUSTOM PRINTED GRAPHIC	WC-1	MAHARAM	TEXTURED	54"	TBD		CUSTOM GRAPHIC PROVIDED BY ARCHITECT AS A PRINT-READY ELECTRONIC FILE.
09 9123	INTERIOR PAINTING	PAINT (FIELD)	P-1	SHERWIN WILLIAMS	EGGSHELL	-	SW 7005 PURE WHITE	PETER KREMM Peter.Kremm@sherwin.com	
09 9123		PAINT (ACCENT)	P-2	SHERWIN WILLIAMS	EGGSHELL	-	SW 6244 NAVAL	-	
09 9123		PAINT (ACCENT)	P-3	SHERWIN WILLIAMS	EGGSHELL	-	SW 6520 GRANITE PEAK	-	
09 9123		PAINT (ACCENT)	P-4	SHERWIN WILLIAMS	EGGSHELL	-	SW 9026 TARNISHED TRUMPET		
09 9123		PAINT (CEILING)	P-5	SHERWIN WILLIAMS	FLAT	-	SW 7005 PURE WHITE	-	
09 9123		PAINT (DOOR FRAME)	P-6	SHERWIN WILLIAMS	SEMI-GLOSS	-	SW 6990 CAVIAR	-	
09 9123		PAINT (STRUCTURE)	P-7	SHERWIN WILLIAMS	FLAT	-	SW 6990 CAVIAR		
09 9123		CHALKBOARD PAINT	P-8	TBD	TBD	-	TBD		
09 9123	INTERIOR PAINTING	SEALED CONCRETE	SC-1			-	MATTE		
DIVISION 10 10 1100	VISUAL DISPLAY UNITS	PORCELAIN MARKERBOARD	VD-1	CLARIDGE	TBD		TBD		
DIVISION 12						•			
12 2413	ROLLER WINDOW SHADES	ROLLER SHADES	RS-1	MECCOSHADE	TBD	TBD	TBD		
12 3661.16	SOLID SURFACING		SS-1	DU PONT	CORIAN	1/2" THICK	CLAM SHELL	-	

ROOM FINISH SCHEDULE											
ROOM			FINISH		MILLV						
NUMBER	ROOM NAME	FLOOR	BASE	WALL	HORIZONTAL	VERTICAL	MISC				
100	VESTIBULE	CPT-3	RB-1	P-1							
103	COLLABORATION	CPT-1, CPT-2	RB-1	P-1, MTL-1, WC-1			FIREPLACE: CT-1, WD-1				
104A	RECEPTION/WAITING	CPT-1	RB-1	P-1, P-3							
104B	CONFERENCE ROOM	CPT-1	RB-1	P-1, P-2, WD-1							
104C	STUDY SPACE	CPT-1	RB-1	P-1							
104D	STORAGE	SC-1	RB-1	P-1							
104E	OFFICE	CPT-1	RB-1	P-1, P-4							
104F	OFFICE	CPT-1	RB-1	P-1, P-4							
104G	OFFICE	CPT-1	RB-1	P-1, P-4							
104H	OFFICE	CPT-1	RB-1	P-1, P-4							
104J	OFFICE	CPT-1	RB-1	P-1, P-4							
104K	CORRIDOR	CPT-1	RB-1	P-1							
104L	OFFICE	CPT-1	RB-1	P-1, P-4							
104M	OFFICE	CPT-1	RB-1	P-1, P-4							
105A	IT/HELP DESK	CPT-1	RB-1	P-1, P-3	SS-1	PL-1					
105B	SPECIALIST OFFICE	CPT-1	RB-1	P-1, P-4	RS-1						
105C	STORAGE	SC-1	RB-1	P-1							
107	COMPUTER STATIONS	CPT-1	RB-1	P-1							
108	COMMUNITY CAFE	LVT-1	RB-1	WD-1, P-3	SS-1	PL-1					
109	CONF ROOM	CPT-1	RB-1	P-1, P-2, WC-1	SS-1	PL-1					
110A	STUDENT VETERANS LOUNGE	CPT-1	RB-1	P-1, P-3, WC-1	SS-1	PL-1					
110B	SVA OFFICE	CPT-1	RB-1	P-1, P-4							
110C	STUDY / COMPLITER	CPT-1	RR-1	P_1							



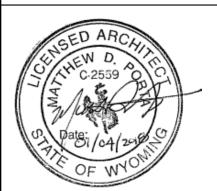
hord | coplan | macht

P 303.607.0977

www.hcm2.com

1331 Nineteenth Street Denver, CO. 80202

CONSULTANT:



CROSSROADS BUILDING

RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

**PROJECT:** 

LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

1.4.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION: 11738.001 PROJECT NO:

DRAWN BY: APPROVED BY:

FIRST FLOOR FINISH PLAN

SHEET TITLE:

# **FURNITURE GENERAL NOTES**

- DO NOT SCALE DRAWINGS. CONTACT ARCHITECT FOR
- 2. FURNITURE AS SHOWN BEST REPRESENTS HOW EACH SPACE IS INTENDED TO BE USED. FINAL SELECTIONS (AS PART OF FF&E), SIZES & LOCATIONS MAY DIFFER FROM DRAWINGS. WHEN COORDINATING ELECTRICAL & SIMILAR ITEMS BASED ON FURNITURE LAYOUT, CONFIRM WITH ARCHITECT & OWNER PRIOR TO PROCEEDING.

FURNITURE DEALER AND ARCHITECT.

- DO NOT INSTALL FIRE STROBES & ALARMS AT (AREAS) WHERE ARTWORK OR WALL HUNG FF&E ITEMS ARE INDICATED. COORDINATE HEIGHTS WITH ARCHITECT.
- 4. ALL FURNITURE SPECIFICATIONS TO BE COORDINATED WITH FURNITURE DEALER AND ARCHITECT.
- ALL FURNITURE PROCUREMENT TO BE COORDINATED WITH
- REFER TO ARCHITECTURAL & ELECTRICAL DRAWINGS FOR ALL DECORATIVE LIGHTING, WALL MOUNTED T.V.'s, CONFERENCT TABLES, ETC. REQUIRING HARDWIRING.
- 7. FURNITURE NOTED WITH AN "E" REPRESENTS PRODUCTS THAT ARE EXISTING.

NOTE

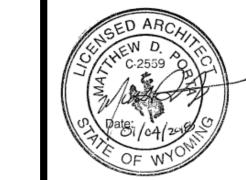
# **SHEET NOTES - FURNITURE PLANS**

NOTE#

PRINTER, OFOI

ALL FURNITURE IS SHOWN FOR REFERENCE ONLY AND IS NOT PART OF THIS PROJECT SCOPE.

BUILT IN SHELVING TO REMAIN



**PROJECT:** 

# CROSSROADS BUILDING RENOVATION

hord | coplan | macht

1331 Nineteenth Street

Denver, CO. 80202

CONSULTANT:

P 303.607.0977

www.hcm2.com

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

1.4.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION: 11738.001 PROJECT NO: DRAWN BY: APPROVED BY: SHEET TITLE:

FIRST FLOOR FURNITURE PLAN

**A-150** 

Ø→ Ø→ Ø→ COLLABORATION **VESTIBULE** 100 3942 SF 165 SF STUDENT ORGANIZATIONS CONFERENCE ROOM 104B 183 SF **OFFICE**104E
216 SF STUDY SPACE 104C 155 SF STUDY / COMPUTER 110C 201 SF **OFFICE**104G
116 SF MEN'S TOILET **OFFICE**104H
128 SF SKYLIGHT ABOVE, TYP COMMUNITY CAFE 108 304 SF STUDENT VETERANS LOUNGE 110A 501 SF DESK 000 105A 119 SF SPECIALIST OFFICE 105B OFFICE ( **CONF ROOM**109
541 SF ELEC. 106 70 SF A1 FIRST FLOOR FURNITURE PLAN

1/8" = 1'-0"

SERVICE

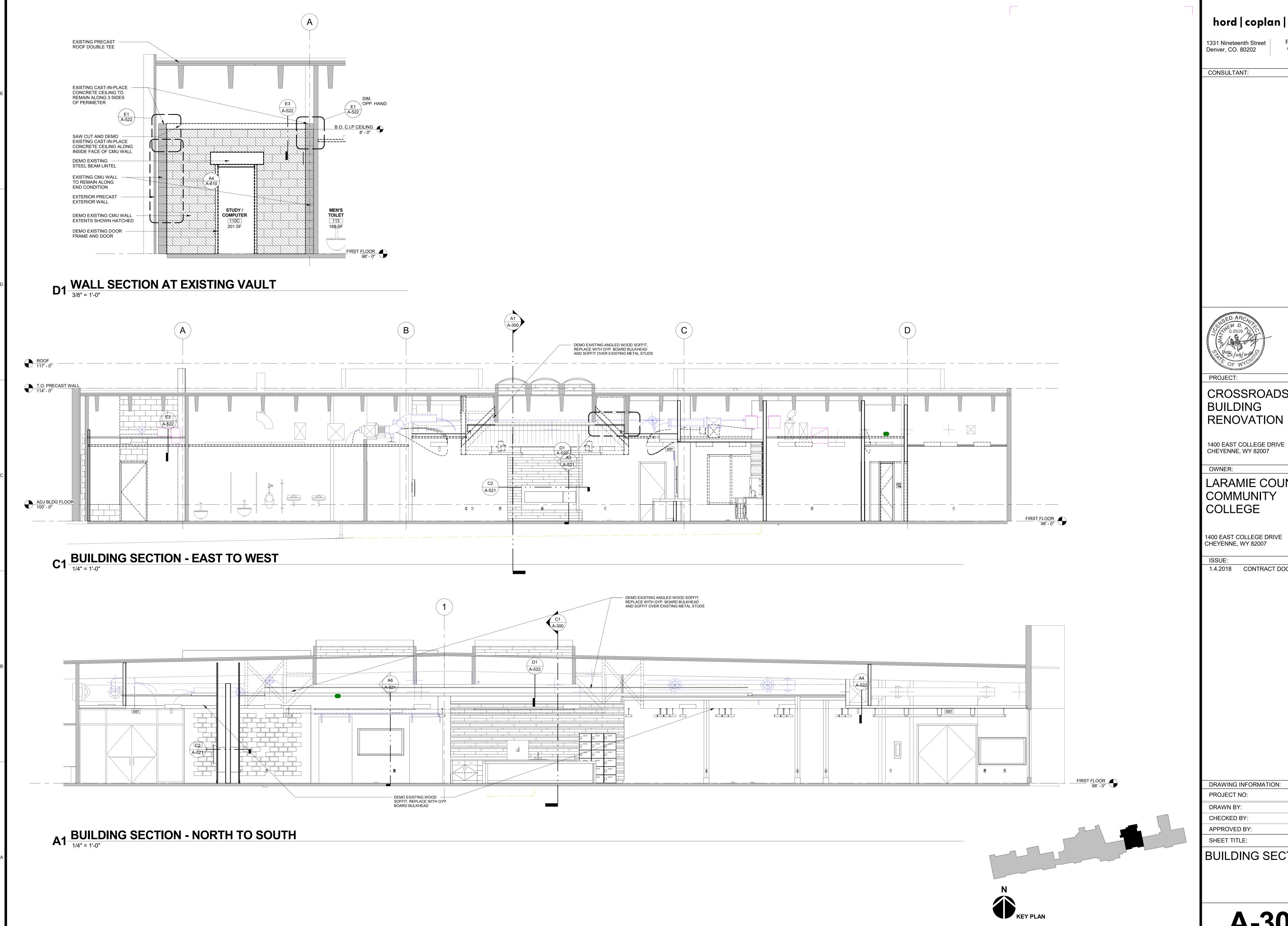
\_\_\_\_\_\_102A\_\_\_\_

22 SF

PANTRY

102 375 SF **MECHANICAL** 

545 SF



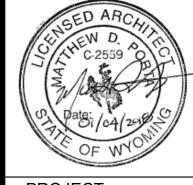
hord | coplan | macht

P 303.607.0977

www.hcm2.com

1331 Nineteenth Street

CONSULTANT:



CROSSROADS BUILDING

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

1.4.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION: 11738.001

DRAWN BY:

**BUILDING SECTIONS** 

**A-300** 

hord | coplan | macht FLOOR FINISH LEGEND 1331 Nineteenth Street Denver, CO. 80202 CONSULTANT: PROJECT: CROSSROADS 80% CPT-2, 20% CPT-1/ BUILDING RENOVATION 1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007 **FIREPLACE** OWNER: LARAMIE COUNTY COMMUNITY COLLEGE 1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007 1.4.2018 CONTRACT DOCUMENTS 7' - 1 1/2" 10 FULL TILES 80% CPT-2, 20% CPT-1 ∕6 FÙLL TILES ✓ 80% CPT-2, 20% CPT-1

ENLARGED FINISH PLAN @
COLLABORATION 2

1/4" = 1'-0"

A1 ENLARGED FINISH PLAN @ FIREPLACE

APPROVED BY: SHEET TITLE:

11738.001

P 303.607.0977 www.hcm2.com

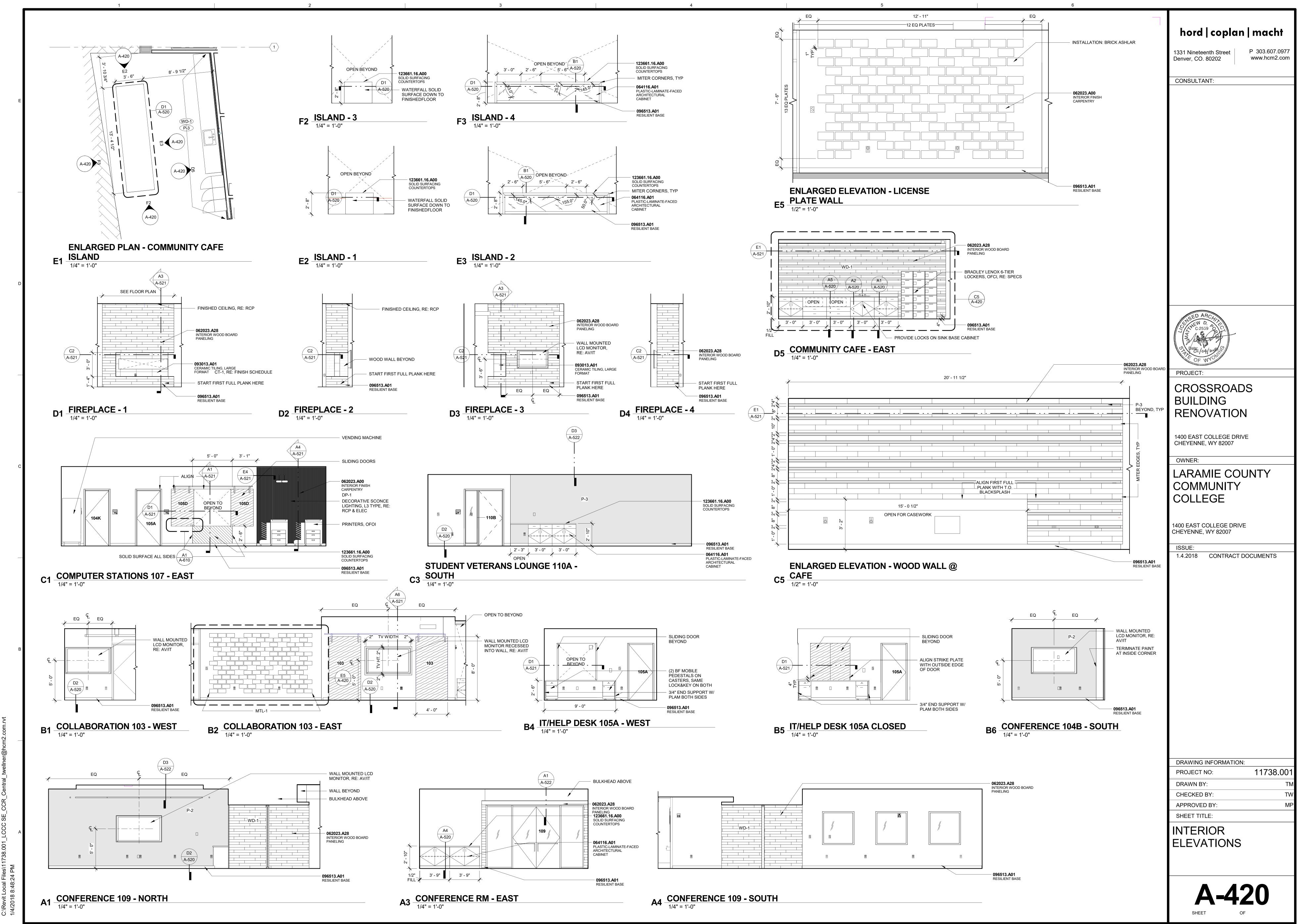
ENLARGED FINISH PLAN AND DETAILS

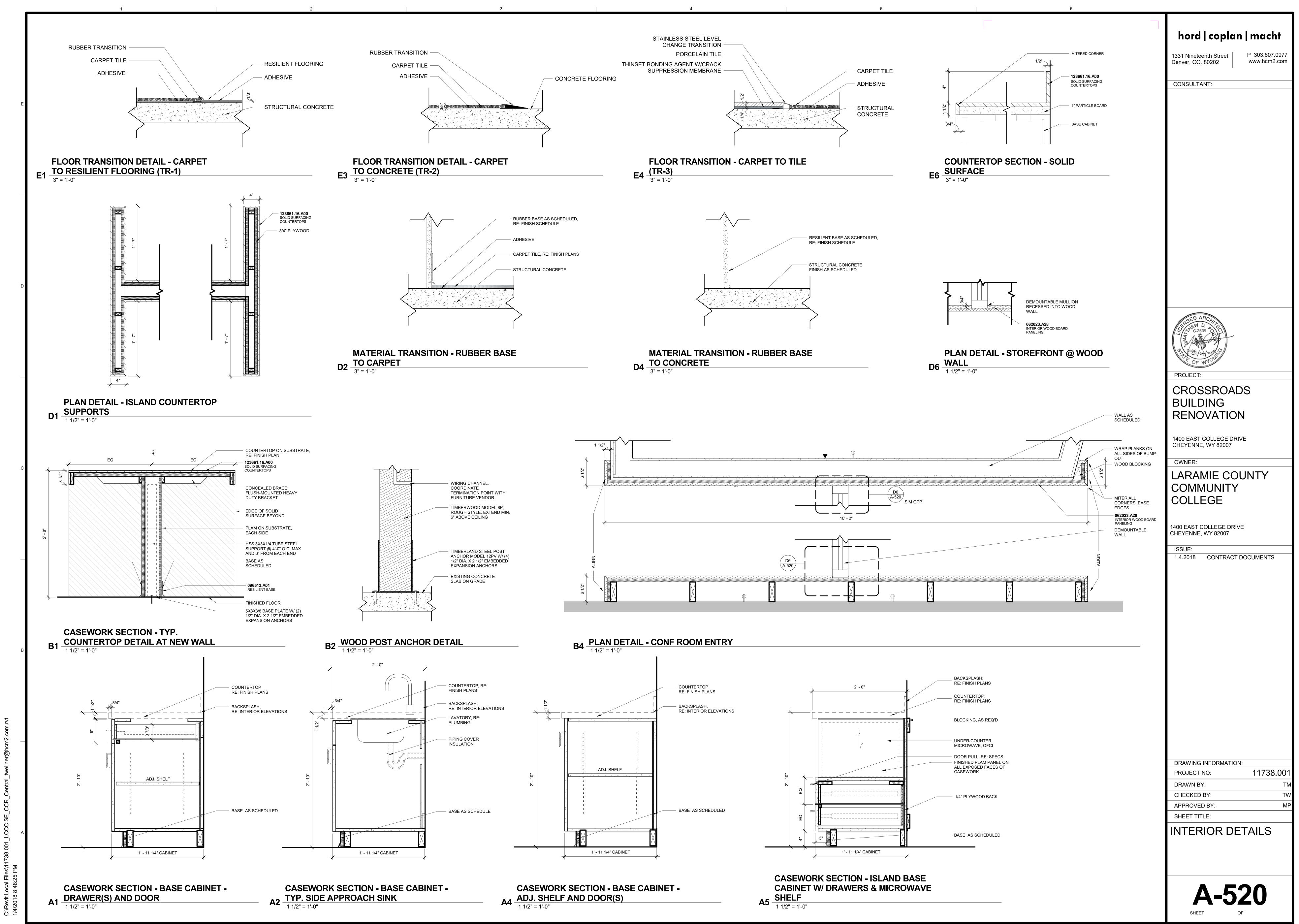
DRAWING INFORMATION:

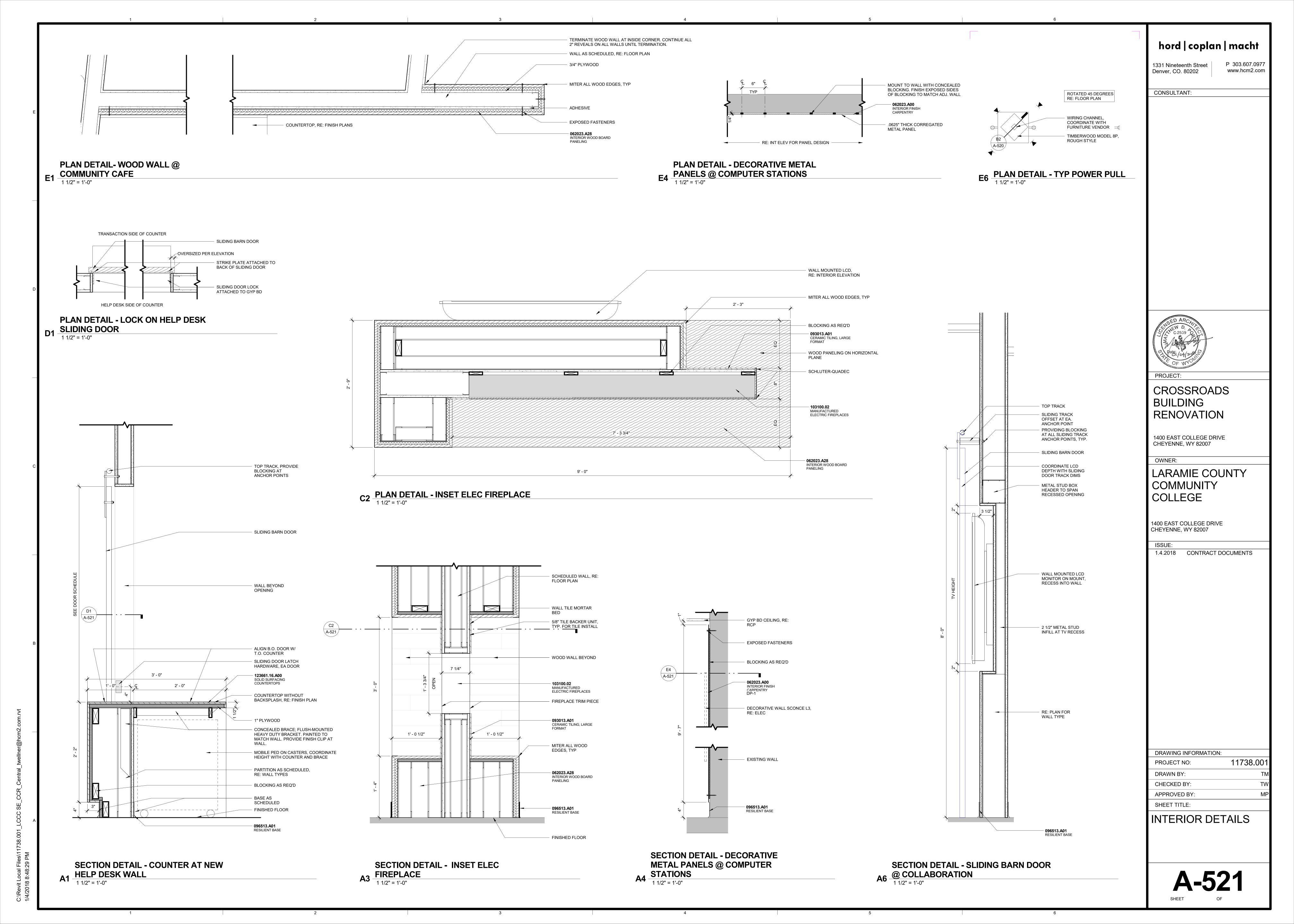
PROJECT NO:

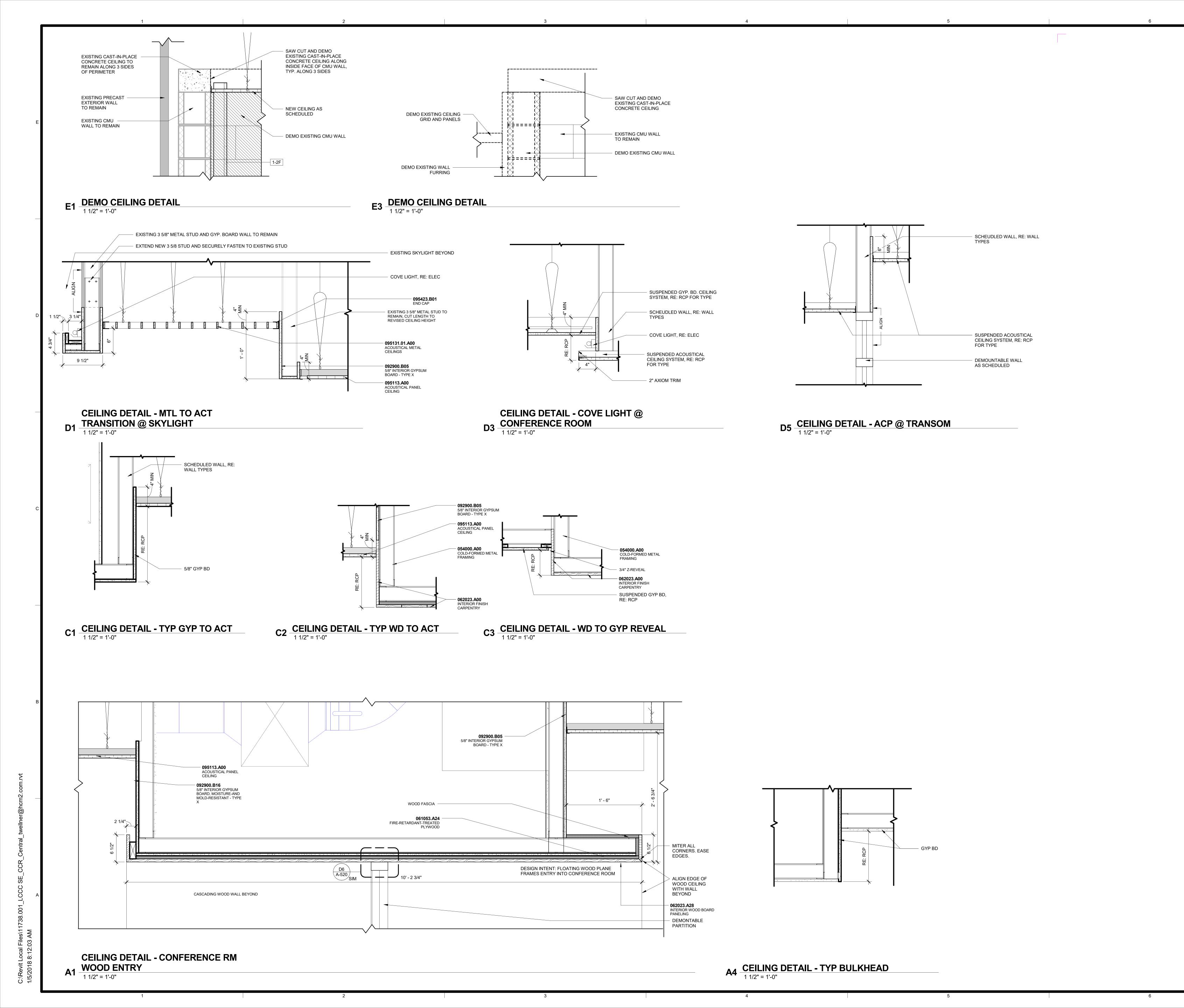
DRAWN BY:

CHECKED BY:









hord | coplan | macht

1331 Nineteenth Street Denver, CO. 80202

nth Street P 303.607.0977 80202 www.hcm2.com

CONSULTANT:

PROJECT:

CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

1.4.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION:

PROJECT NO: 11738.001

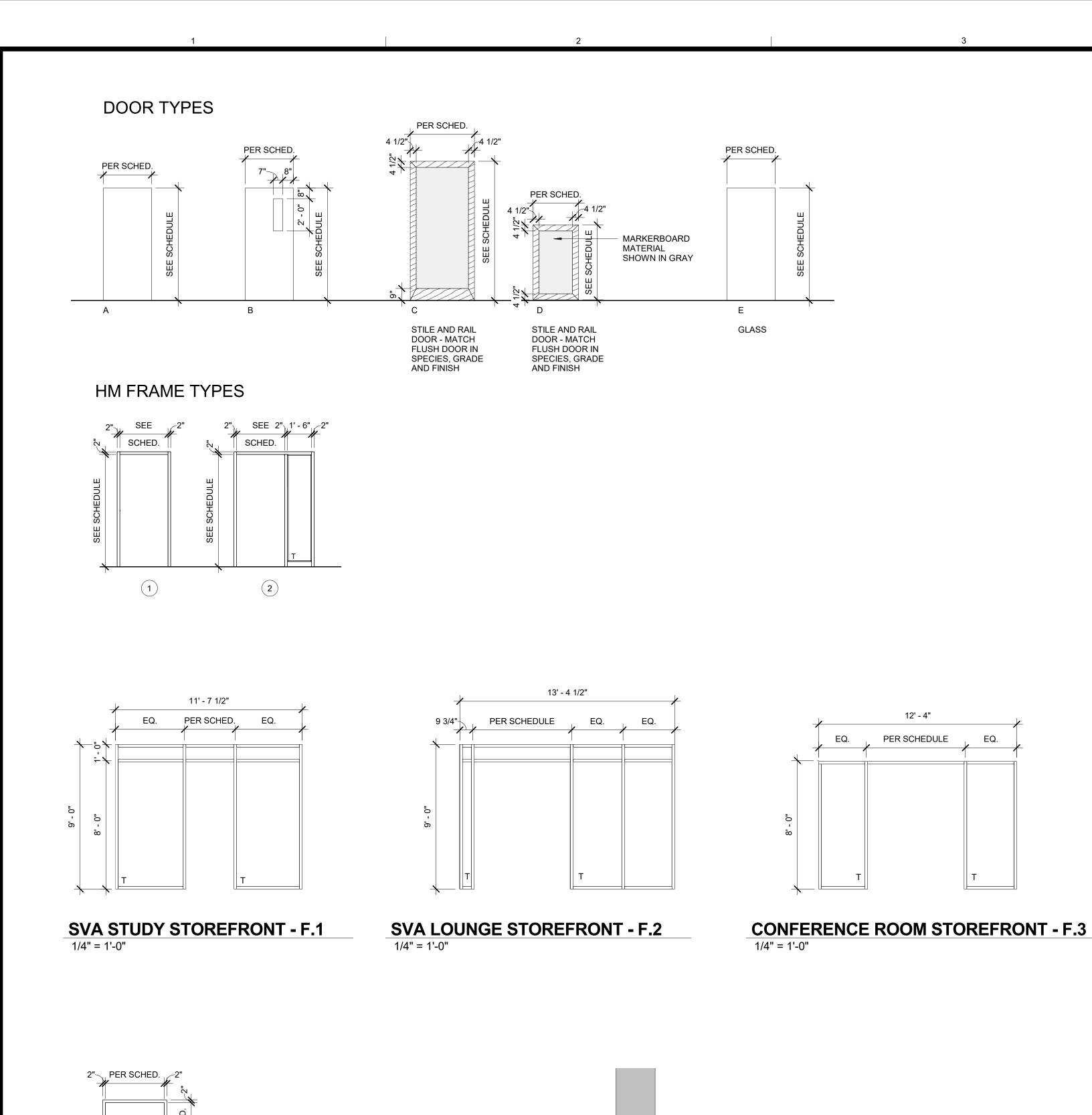
DRAWN BY: CM

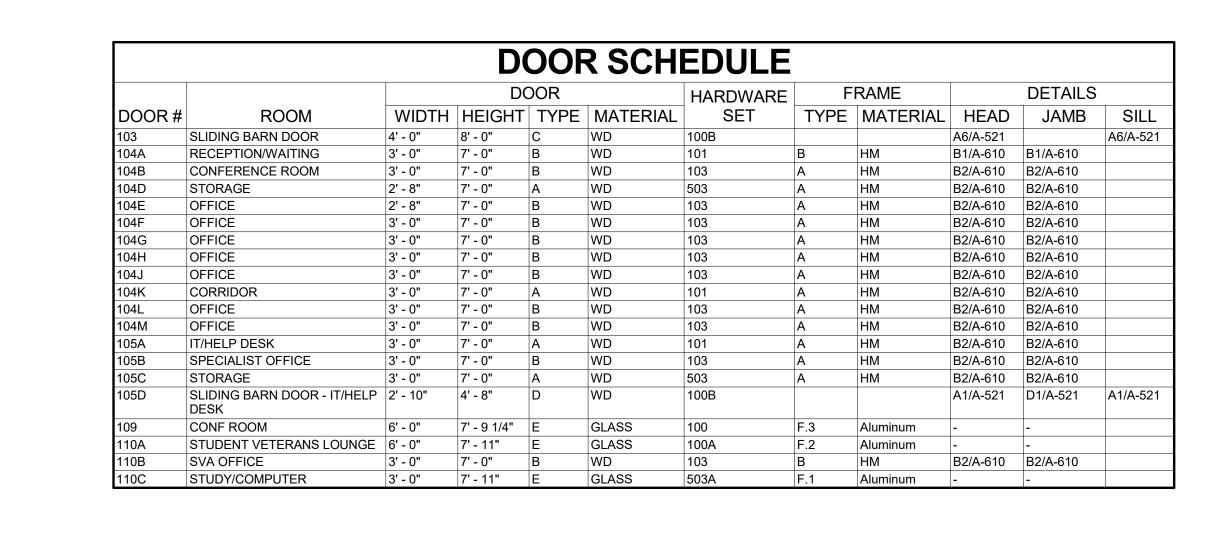
CHECKED BY: TW

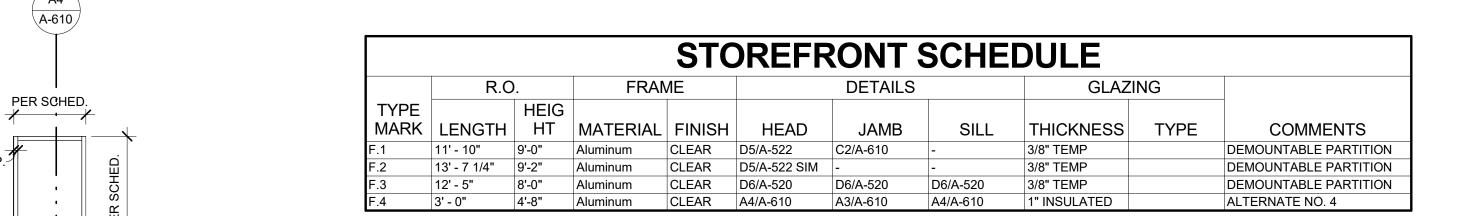
APPROVED BY:
SHEET TITLE:

CEILING DETAILS

**A-522** 

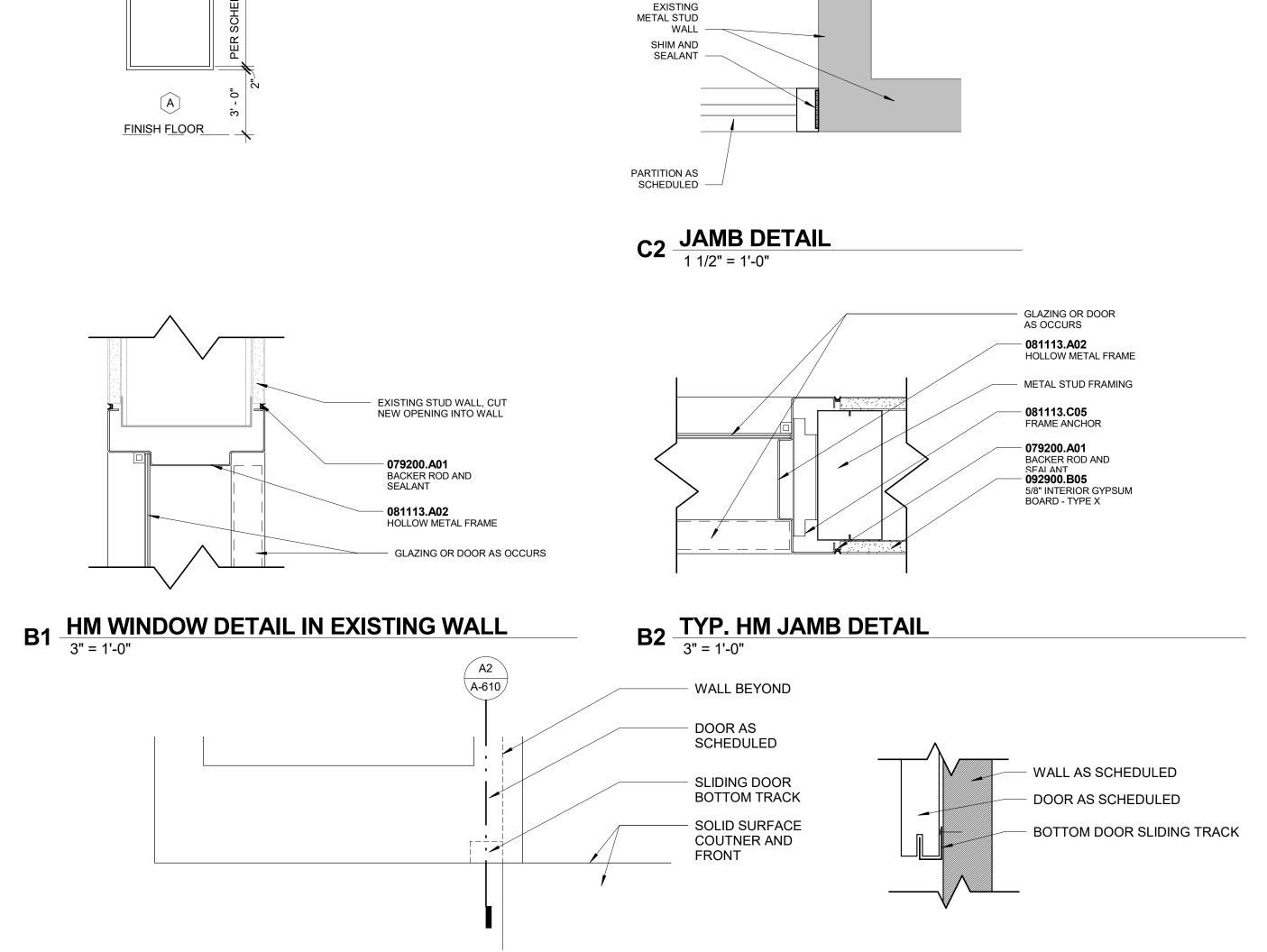






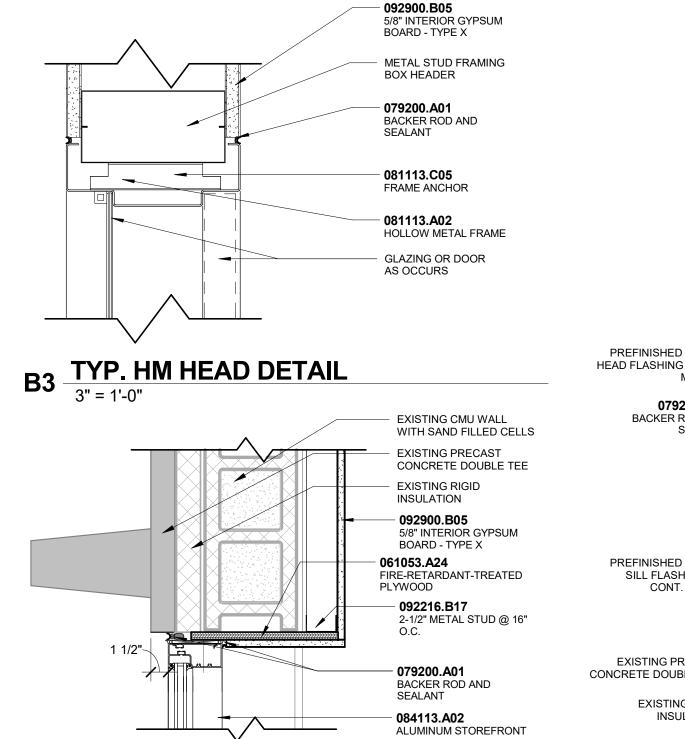
WINDOW SCHEDULE										
Туре	Type R.O.			Glaz	ring	HEAD	JAMB	SILL		
Mark	Width	Height	Finish	Thickness	Type	DETAIL	DETAIL	DETAIL	Comments	
	Δ' _ O"	4' - 2"	HM-PAINT	1/4"	CLEAR	B1/Δ-610	B1/Δ-610	B1/Δ_610		

- EXISTING PRECAST



A2 SLIDING DOOR DETAIL

3" = 1'-0"

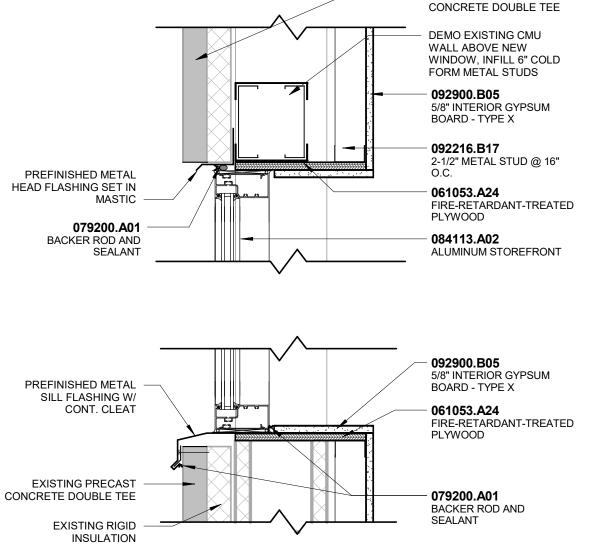


A3 STOREFRONT JAMB DETAIL
1 1/2" = 1'-0"

FINISH FLOOR

1/4" = 1'-0"

**EXTERIOR FRAME - F.4** 



A4 STOREFRONT HEAD & SILL DETAIL
1 1/2" = 1'-0"

hord | coplan | macht

1331 Nineteenth Street Denver, CO. 80202

P 303.607.0977 www.hcm2.com

CONSULTANT:

PROJECT:

CROSSROADS BUILDING

RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

1.4.2018 CONTRACT DOCUMENTS

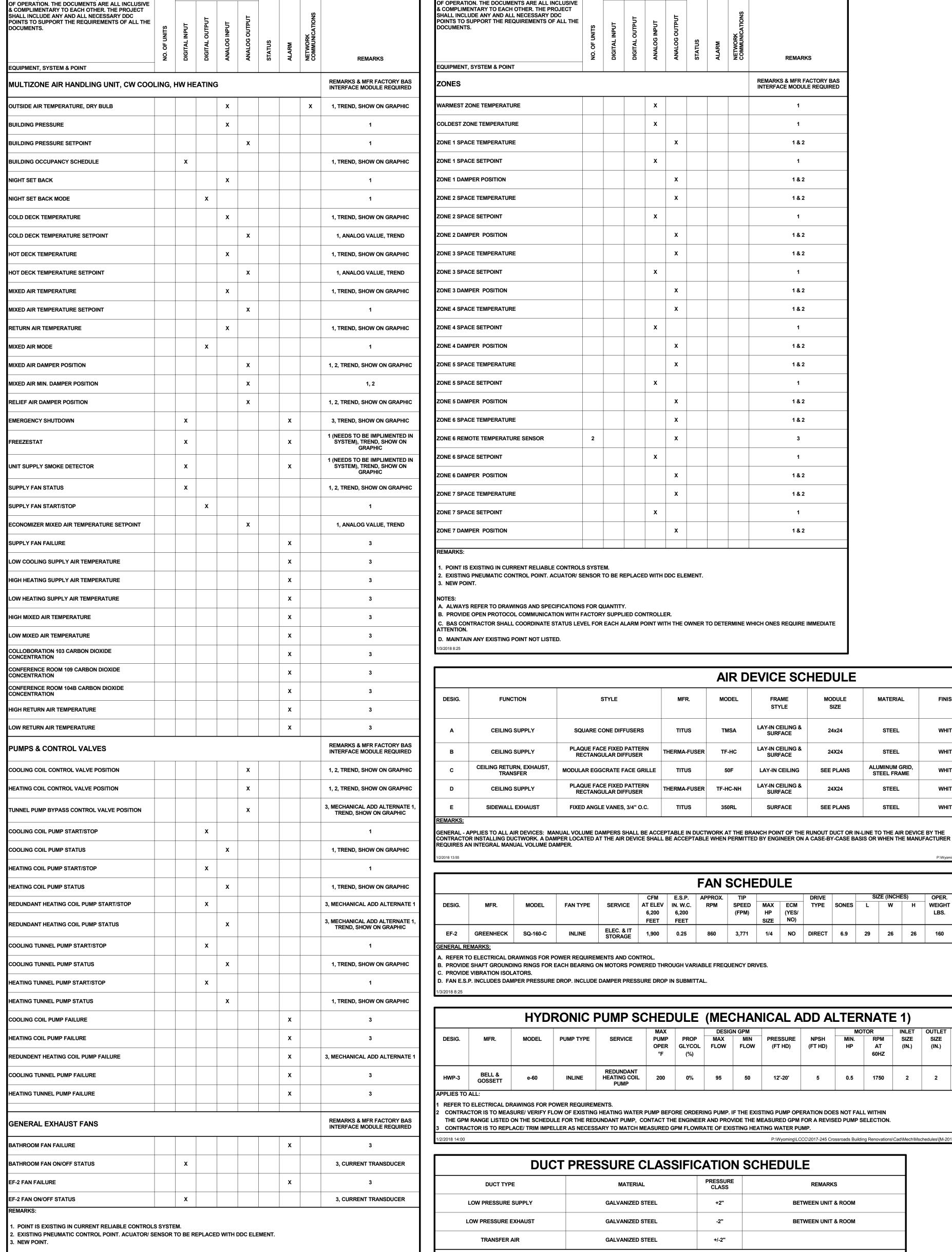
DRAWING INFORMATION:
PROJECT NO: 11738.001

DRAWN BY: Author
CHECKED BY: Checker
APPROVED BY: Approver
SHEET TITLE:

DOOR, WINDOW & STOREFRONT SCHEDULE & TYPES

**A-610**SHEET OF

A1 SLIDING DOOR DETAIL
1 1/2" = 1'-0"



**BUILDING AUTOMATION SYSTEM CONTROL MATRIX (MECHANICAL ADD ALTERNATE 2)** 

IN ADDITION TO THE DDC POINTS LISTED BELOW, THE CONTRACTOR SHALL CAREFULLY REVIEW ALL

DRAWINGS, ALL SPECIFICATIONS, & ALL SEQUENCES

N ADDITION TO THE DDC POINTS LISTED BELOW, THE CONTRACTOR SHALL CAREFULLY REVIEW ALL			POINT	TYPE					
DRAWINGS, ALL SPECIFICATIONS, & ALL SEQUENCES OF OPERATION. THE DOCUMENTS ARE ALL INCLUSIVE & COMPLIMENTARY TO EACH OTHER. THE PROJECT SHALL INCLUDE ANY AND ALL NECESSARY DDC POINTS TO SUPPORT THE REQUIREMENTS OF ALL THE DOCUMENTS.	NO. OF UNITS	DIGITAL INPUT	DIGITAL OUTPUT	ANALOG INPUT	ANALOG OUTPUT	STATUS	ALARM	NETWORK COMMUNICATIONS	DEMARKS
EQUIPMENT, SYSTEM & POINT						0,		20	REMARKS
ZONES									REMARKS & MFR FACTORY BAS INTERFACE MODULE REQUIRED
WARMEST ZONE TEMPERATURE				х					1
COLDEST ZONE TEMPERATURE				x					1
ZONE 1 SPACE TEMPERATURE					x				1 & 2
ZONE 1 SPACE SETPOINT				x					1
ZONE 1 DAMPER POSITION					x				1 & 2
ZONE 2 SPACE TEMPERATURE					х				1 & 2
ZONE 2 SPACE SETPOINT				x					1
ZONE 2 DAMPER POSITION					x				1 & 2
ZONE 3 SPACE TEMPERATURE					х				1 & 2
ZONE 3 SPACE SETPOINT				х					1
ZONE 3 DAMPER POSITION					x				1 & 2
ZONE 4 SPACE TEMPERATURE					x				1 & 2
ZONE 4 SPACE SETPOINT				х					1
ZONE 4 DAMPER POSITION					x				1 & 2
ZONE 5 SPACE TEMPERATURE					x				1 & 2
ZONE 5 SPACE SETPOINT				х					1
ZONE 5 DAMPER POSITION					x				1 & 2
ZONE 6 SPACE TEMPERATURE					x				1 & 2
ZONE 6 REMOTE TEMPERATURE SENSOR	2				x				3
ZONE 6 SPACE SETPOINT				x					1
ZONE 6 DAMPER POSITION					x				1 & 2
ZONE 7 SPACE TEMPERATURE					x				1 & 2
ZONE 7 SPACE SETPOINT				x					1
ZONE 7 DAMPER POSITION					x				1 & 2
REMARKS:  1. POINT IS EXISTING IN CURRENT RELIABLE CONTROL: 2. EXISTING PNEUMATIC CONTROL POINT. ACUATOR/ S 3. NEW POINT.			EPLACE	D WITH I	DDC ELE	MENT.			

STYLE

SQUARE CONE DIFFUSERS

PLAQUE FACE FIXED PATTERN

RECTANGULAR DIFFUSER

MODULAR EGGCRATE FACE GRILLE

PLAQUE FACE FIXED PATTERN

RECTANGULAR DIFFUSER

FIXED ANGLE VANES, 3/4" O.C.

3. PROVIDE SHAFT GROUNDING RINGS FOR EACH BEARING ON MOTORS POWERED THROUGH VARIABLE FREQUENCY DRIVES.

HEATING COIL

CONTRACTOR IS TO REPLACE/ TRIM IMPELLER AS NECESSARY TO MATCH MEASURED GPM FLOWRATE OF EXISTING HEATING WATER PUMP.

**GALVANIZED STEEL** 

**GALVANIZED STEEL** 

**GALVANIZED STEEL** 

FUNCTION

CEILING SUPPLY

CEILING RETURN, EXHAUST

SIDEWALL EXHAUST

. REFER TO ELECTRICAL DRAWINGS FOR POWER REQUIREMENTS AND CONTROL.

EF-2 GREENHECK

HWP-3

C. PROVIDE VIBRATION ISOLATORS.

GOSSETT

DUCT TYPE

LOW PRESSURE SUPPLY

LOW PRESSURE EXHAUST

TRANSFER AIR

REFER TO ELECTRICAL DRAWINGS FOR POWER REQUIREMENTS.

**AIR DEVICE SCHEDULE** 

STYLE

LAY-IN CEILING &

SURFACE

I AY-IN CEILING &

SURFACE

LAY-IN CEILING

**LAY-IN CEILING &** 

SURFACE

SPEED MAX ECM

(FPM) HP (YES/

FLOW (FT HD)

12'-20'

MODULE

SEE PLANS

860 3,771 1/4 NO DIRECT 6.9 29 26 26 160

REMARKS

**BETWEEN UNIT & ROOM** 

BETWEEN UNIT & ROOM

MATERIAL

STEEL

STEEL

ALUMINUM GRID.

STEEL FRAME

1750

FINISH

WEIGHT

DROP-FACE CONE LOUVERS, ADJUSTABLE DISCHARGE

PATTERN. PROVIDE OPTIONAL DAMPER WHERE NOTED ON

THERMALLY POWERED DIFFUSER WITH VAV HEATING AND

1/2"x1/2"x1"H CORE WITH 10x22 OR 22x22 DUCT COLLAR

THERMALLY POWERED DIFFUSER WITH VAV COOLING

(CLOSES IN HEATING MODE).

BLADES PARALLEL WITH LONG DIMENSION, UPTURNED FOR

VISION BLOCK

P:\Wyoming\LCCC\2017-245 Crossroads Building Renovations\Cad\Mech\Mschedules\[M-2017-245.xlsx]BAS-CONTROL M

REMARKS

VAV COOLING.

MODEL

TMSA

TITUS

AT ELEV IN. W.C.

6,200 6,200

CONTRACTOR IS TO MEASURE/ VERIFY FLOW OF EXISTING HEATING WATER PUMP BEFORE ORDERING PUMP. IF THE EXISTING PUMP OPERATION DOES NOT FALL WITHIN

THE GPM RANGE LISTED ON THE SCHEDULE FOR THE REDUNDANT PUMP. CONTACT THE ENGINEER AND PROVIDE THE MEASURED GPM FOR A REVISED PUMP SELECTION.

**DUCT PRESSURE CLASSIFICATION SCHEDULE** 

+2"

+/-<u>2</u>"

		GENER (Not all symbols list	RAL LEG		wings)	
ABBR.	SYMBOL	DESCRIPTION	ABBR.	SYI	MBOL	DESCRIPTION
	X	— VIEW NUMBER		DETAIL SHEETS	PLAN SHEETS	
	M-X	SHEET VIEW IS DRAWN ON		—— <u> </u>	—— <u> </u>	CAP END OF PIPE
	UNIT	EQUIPMENT UNIT IDENTIFICATION		XX	xx	PITCH DOWN IN DIRECTION OF ARROW
	#	- EQUIPMENT UNIT NUMBER				UNION OR FLANGE
	NECK.	DIFFUSER IDENTIFICATION     DIFFUSER NECK DIAMETER				PLUG VALVE
	X NECK CFM	— DIFFUSER NECK DIAMETER — DIFFUSER CFM	GV	<del></del>	—⋈—	GATE VALVE
(E)		EXISTING			<b>─</b> ₩─	VERTICAL PIPE VALVE
(N)		NEW	GLV	—\ <b>®</b>  —	<b>─</b> ₩─	GLOBE VALVE
(R)		RELOCATED	BFV	<del></del>	<b>─</b> ₩—	BUTTERFLY VALVE
	•	POINT OF CONNECTION, NEW TO EXISTING	BV	—д—	<u></u> —⋈—	BALL VALVE
DIA		DIAMETER	cv	<b>—</b> Ā—	<b>—</b> □	CHECK VALVE
NIC		NOT IN CONTRACT		<u> </u>		SOLENOID VALVE
AFF		ABOVE FINISHED FLOOR		<del></del>		BUTTERFLY SOLENOID VALVE
GC		GENERAL CONTRACTOR		—дн		HOSE END DRAIN VALVE
МС		MECHANICAL CONTRACTOR	P/T			PRESSURE / TEMPERATURE TAP
EC		ELECTRICAL CONTRACTOR		<del></del>		STRAINER
						STRAINER W/ BLOWDOWN
						FLEXIBLE PIPE CONNECTOR
				<u> </u>		THERMOMETER
				9		PRESSURE GAUGE
				<del>-</del> 0-		SIGHT GLASS
			C.A.P.			CEILING ACCESS PANEL
				<del>-</del>		PUMP

		DOUBL	E/SINGLE L	INE DUCT	LEGEND		
		(Not al	I symbols listed below	are used on these dr	awings)		
SINGLE LINE	DOUBLE LINE	SINGLE LINE	DOUBLE LINE	SINGLE LINE	DOUBLE LINE	SINGLE LINE	DOUBLE LIN
\$ 45° TEE	E (ROUND)	TAK	DUCT————————————————————————————————————	RIGID FLEX	RIGID FLEX DUCT	90° RADIUS	S ELBOW
45° TEE (R	ECTANGULAR)		CONICAL TEE	<del>∫ [ </del>	LUME DAMPER	90° ELE	sow + T
⊢ H H		45°T. SF	AKEOFF IN	<b>S</b>		J	
DUCT	T SPLIT	☐ ☐ ☐ GRD	RUNOUT 🛛 🔟	REDU	ICER	45° ELE	BOW

ABBR.	SYMBOL	DESCRIPTION	
עהחוץ.	STWBOL	SUPPLY DUCT UP / SUPPLY DUCT DOWN	$\dashv$
		RETURN DUCT UP / RETURN DUCT DOWN	$\dashv$
		EXHAUST DUCT UP / EXHAUST DUCT DOWN	-
		ROUND DUCT UP / ROUND DUCT DOWN	-
		FLEXIBLE DUCT CONNECTION	
BDD	* *	BACKDRAFT DAMPER	_
	<del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>     <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>     <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>     <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>   <del> </del>     <del> </del>   <del> </del>     <del> </del>     <del> </del>   <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>     <del> </del>       <del> </del>	TEMP. CONTROL DAMPER-OPPOSED BLADE	_
TCD			_
TCD		TEMP. CONTROL DAMPER- PARELLEL BLADE	_
MVD	<u>*</u>	MANUAL VOLUME DAMPER	_
	* * *	MOTOR OPERATED DAMPER	_
	<del>                                     </del>	SPIN-IN FITTING WITH MVD	_
FD		DUCT FIRE DAMPER	
FSD		COMBINATION DUCT SMOKE & FIRE DAMPER	
SD	<u> </u>	DUCT SMOKE DAMPER	_
	F	DUCT SMOKE DETECTOR	
DAD		DUCT ACCESS DOOR	
	(Co.)	TURNING VANES IN DUCT ELBOW	(E)
EP	F	ELECTRIC-PNEUMATIC CONTROL VALVE	F
0		PNEUMATIC-ELECTRIC CONTROL SWITCH	
	TS	TEMPERATURE SENSOR	
	T	WALL MOUNTED THERMOSTAT	
	0	WALL MOUNTED CARBON DIOXIDE SENSOR	
SP IN WC		STATIC PRESSURE IN INCHES WATER COLUMN	
SD		SUPPLY AIR DEVICE	
RG		RETURN AIR DEVICE	$\neg$
RG		RETURN AIR DEVICE WITH SOUND BOOT	$\dashv$
EG		EXHAUST AIR DEVICE	
	(X)	KEYNOTE	$\dashv$
HWS	—HWS—	HOT WATER SUPPLY PIPING	
HWR	HWR	HOT WATER RETURN PIPING	$\dashv$ $I$
cws	—cws—	CHILLED WATER SUPPLY PIPING	$\dashv$ $\blacksquare$
CWR	cwr	CHILLED WATER RETURN PIPING	$\dashv$ $\blacksquare$
D	— D —	COOLING COIL DRAIN PAN PIPING	$\dashv$ $\blacksquare$
TCV	<del> </del>	(2 OR 3-WAY) TEMPERATURE CONTROL VALVE	
		VENTURI METER	-
			-
84817	<u> </u>	CALIBRATED BALANCING VALVE	$\dashv$ $I$
MAV		MANUAL AIR VENT	$\dashv$ $\mathbf{I}$
AAV	<u>\$</u>	AUTOMATIC AIR VENT	<b>-  I</b>
FS		FLOW SWITCH	<b>I</b>
EJ		EXPANSION JOINT	

**HVAC LEGEND** 

# (Not all symbols listed below are used on these drawings)

# SUPPORT FROM OVERHEAD STRUCTURE LINED SHEET METAL DUCTWORK OR FIBERGLASS A+12" ---

PROVIDE ON ALL LAY-IN RETURN AIR DEVICES, UNLESS NOTED "A" EQUALS LONGEST DIMENSION OF AIR DEVICE NEK. EXAMPLE: FOR A 22/10 AIR DEVICE, "A" EQUALS 22".

SOUND ELBOW DETAIL

## **GENERAL NOTES:**

3. COORDINATE WORK WITH ALL TRADES.

- 1. WORK INCLUDED IN THE CONTRACT IS DENOTED IN BOLD. EXISTING CONDITIONS TO REMAIN ARE DENOTED LIGHTLY.
- 2. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF ANY WORK AND SHALL NOTIFY THE ENGINEER/ARCHITECT OF ANY DISCREPANCIES FOR RESOLUTION.
- 4. COORDINATE ALL DUCTWORK AND PIPING WITH EQUIPMENT, STRUCTURE,
- 5. EXISTING DUCTWORK IS DUCT BOARD AND IS TO REMAIN EXCEPT IN THE
- AREAS WHERE NEW DUCTWORK IS SHOWN. 6. CONTRACTOR SHALL NOT SHUT DOWN / TAKE OUT OF SERVICE ANY
- 7. ALL DUCTWORK DIMENSIONS/ TAGS ARE FOR INTERIOR CLEAR AREA. CONTRACTOR TO ACCOUNT FOR ADDITIONAL DUCT SIZE WHERE LINEAR IS REQUIRED ON NEW DUCT MAINS PER SPECIFICATION.

# **DEMOLITION GENERAL NOTES:**

- 1. EXISTING ITEMS TO REMAIN ARE DENOTED LIGHTLY UNLESS OTHERWISE NOTED. ALL ITEMS SHOWN HATCHED SHALL BE REMOVED UNLESS OTHERWISE NOTED.
- 2. CONTRACTOR SHALL NOT SHUT-OFF OR PUT-OUT OF SERVICE ANY SYSTEMS OR SERVICE WITHOUT FIRST COORDINATING WITH THE OWNER.
- 3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE SITE AND UNDERSTAND THE EXTENT OF THE REMODEL WORK REQUIRED PRIOR TO BID. NO EXTRAS WILL BE ALLOWED FOR WORK REQUIRED TO ACHIEVE THE
- 4. CONTRACTOR SHALL DETERMINE AND COORDINATE THE EXACT EXTENT OF DEMOLITION TO FACILITATE ALL WORK INDICATED BY THE CONTRACT
- 5. PRIOR TO COMMENCEMENT OF ANY DEMOLITION WORK, VERIFY EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.
- 6. ALL ITEMS IDENTIFIED TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY UNLESS OTHERWISE NOTED. REMOVE FROM SITE AND LEGALLY

END RESULT AS INDICATED BY THE CONTRACT DOCUMENT.

DISPOSE OF ALL ITEMS. 7. WHERE EXISTING PIPING, T.C. TUBING/WIRING ETC. ARE TO BE REMOVED FROM WALLS WHICH ARE REMAINING, THE WALLS SHALL BE REPAIRED TO

# **HVAC PLAN NOTES:**

MATCH ORIGINAL CONDITIONS.

1. ALL SUPPLY AIR DIFFUSERS ARE 4-WAY AIR PATTERN UNLESS SHOWN

- 2. DUCT SIZE OF BRANCH DUCT TO AIR DEVICE SHALL BE THE SAME SIZE AS
- NECK SIZE OF AIR DEVICE UNLESS NOTED OTHERWISE. 3. PROVIDE ROOM AIR BALANCE TO ACHIEVE CFMS INDICATED ON THE

POSITION FOR 15% OF THE TOTAL UNIT AIRFLOW VOLUME (MIN. 3,100 CFM).

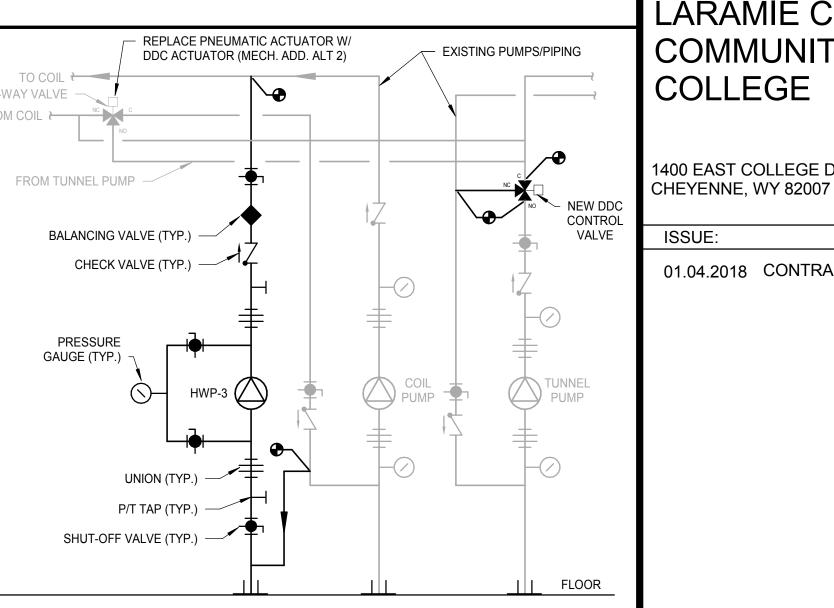
4. TEST AND BALANCE CONTRACTOR TO MEASURE AIRFLOW OF EXISTING MULTI-ZONE AIR HANDLING UNIT AND SET MINIMUM OUTDOOR AIR DAMPER

# **MECHANICAL PRICING NOTES:**

1. MECHANICAL ADD ALTERNATE 1: REDUNDANT HOT WATER COIL PUMP.

THE SCOPE OF THIS PROJECT.

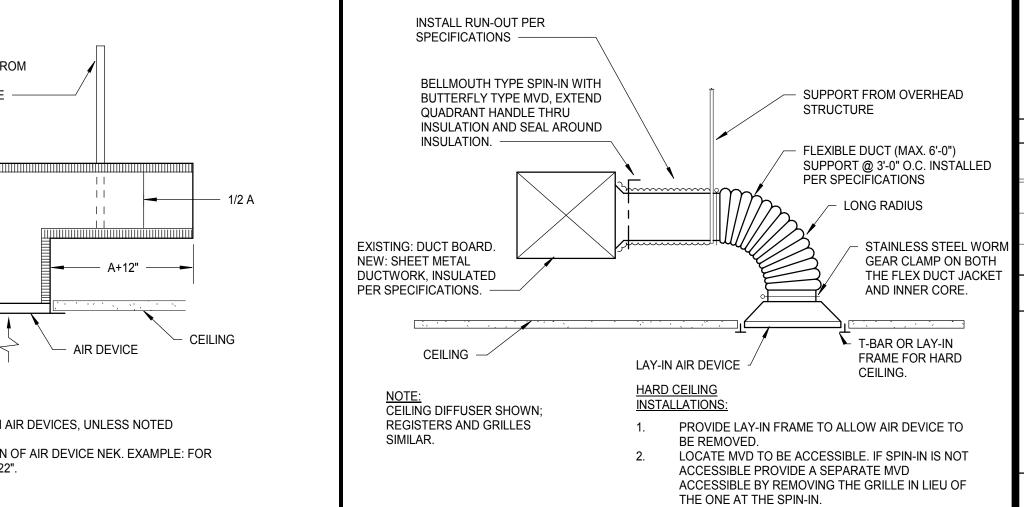
- 2. MECHANICAL ADD ALTERNATE 2: UPGRADE PNEUMATIC CONTROLS TO DDC
- 3. CONTRACTOR WILL BE REQUIRED TO MEASURE THE FLOW OF THE EXISTING HOT WATER COIL PUMP BEFORE ORDERING THE REDUNDANT PIPE. SEE NOTES ON PLANS AND IN THE HYDRONIC PUMP SCHEDULE FOR DETAILS.
- 4. EXISTING DUCTWORK IS DUCT BOARD WHICH WILL REMAIN, EXCEPT FOR WHERE NEW DUCTWORK IS SHOWN. REPLACING THE DUCT BOARD IS NOT IN



PUMPING PIPING DETAIL (MECHANICAL ADD ALTERNATE 1)

> SUPPORT FROM OVERHEAD STRUCTURE FLEXIBLE DUCT (MAX. 6'-0") PROJECT NO: SUPPORT @ 3'-0" O.C. INSTALLED PER SPECIFICATIONS LONG RADIUS STAINLESS STEEL WORN GEAR CLAMP ON BOTH THE FLEX DUCT JACKET AND INNER CORE. T-BAR OR LAY-IN FRAME FOR HARD LAY-IN AIR DEVICE -HARD CEILING INSTALLATIONS: PROVIDE LAY-IN FRAME TO ALLOW AIR DEVICE TO BE REMOVED.

**MECHANICAL** LEGENDS, NOTES, SCHEDULES &



**ROUND NECK** 

AIR DEVICE DETAIL

CATOR RUMA SYSTEMS WITHOUT FIRST COORDINATING WITH OWNER. & ASSOCIATES, CO

CONSULTANT:

1331 Nineteenth Street

Denver, CO. 80202

896 Tabor Street Lakewood, CO 80401 303.232.6200 (P) 303.233.3701 (F)

hord | coplan | mach

420 W. Lincolnway Cheyenne, WY 82001 307.274.3830 (P) 303.233.3701 (F) www.catorruma.com

P 303.607.0977

www.hcm2.com

PROJECT:

CROSSROADS RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

LARAMIE COUNTY COLLEGE

1400 EAST COLLEGE DRIVE

ISSUE:

01.04.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION:

2123-05

3713-08

DRAWN BY: CHECKED BY: APPROVED BY: SHEET TITLE:

11738.00

**DETAILS** 

A. ALWAYS REFER TO DRAWINGS AND SPECIFICATIONS FOR QUANTITY.

D. MAINTAIN ANY EXISTING POINT NOT LISTED.

B. PROVIDE OPEN PROTOCOL COMMUNICATION WITH FACTORY SUPPLIED CONTROLLER.

C. BAS CONTRACTOR SHALL COORDINATE STATUS LEVEL FOR EACH ALARM POINT WITH THE OWNER TO DETERMINE WHICH ONES REQUIRE IMMEDIATE

H1 DEMOLISH AND DISPOSE OF EXISTING DIFFUSER, FLEX AND DISTRIBUTION DUCT. RE-USE DUCT TAP WHERE POSSIBLE FOR REVISED DISTRIBUTION, OTHERWISE CAP AT MAIN. H2 DEMOLISH AND DISPOSE OF EXISTING DIFFUSER AND FLEX DUCT.

H3 DEMOLISH AND DISPOSE OF EXISTING DUCT MAIN AND ASSOCIATED DISTRIBUTION AND DIFFUSERS. H4 DISPOSE OF EXISTING RETURN AIR GRILLES AND ANY ASSOCIATED RETURN BOOTS. TYP.

H5 EXISTING DUCT BOARD MAINS AND DISTRIBUTION DUCTWORK NOT SHOWN HATCHED ARE TO REMAIN, TYP. H6 EXISTING RETURNS ARE TO REMAIN.

H7 (E) CONTROL AIR COMPRESSOR TO BE DEMOLISHED IF CONTROLS ARE UPGRADED TO DDC (MECHANICAL ADD ALTERNATE 2).

H8 EXISTING RETURN AIR GRILLES IN SKYLIGHT SOFFITS TO REMAIN. H18 NUMBER DENOTES ZONE COORDINATING WITH THERMOSTAT ZONE H19 REMOVE (E) DAMPER ACTUATORS AND LOCK DAMPERS IN "OPEN"

POSITION. (MECHANICAL ADD ALTERNATE 2). H20 REMOVE (E) THERMOSTAT. (MECHANICAL ADD ALTERNATE 2). H31 EXISTING SPIN-INS HAVE MANUAL VOLUME DAMPERS. TYP. H32 DISCONNECT AND REMOVE (E) DIFFUSERS SERVING ABANDONED IN PLACE FAN COIL UNIT IN PLENUM.

# hord | coplan | mach

1331 Nineteenth Street Denver, CO. 80202

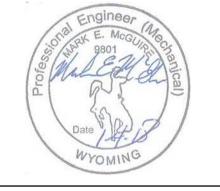
P 303.607.0977 www.hcm2.com

CONSULTANT:



896 Tabor Street 420 W. Lincolnway Lakewood, CO 80401 303.232.6200 (P) 303.233.3701 (F)

Cheyenne, WY 82001 307.274.3830 (P) 303.233.3701 (F) www.catorruma.com



PROJECT:

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

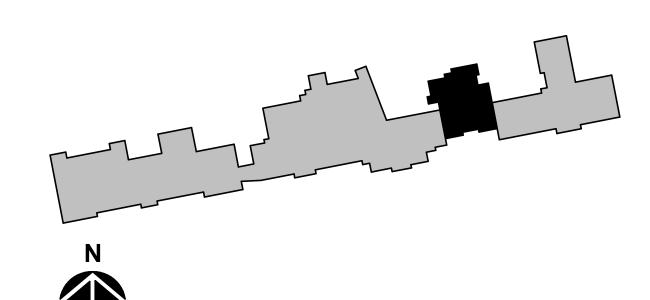
1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

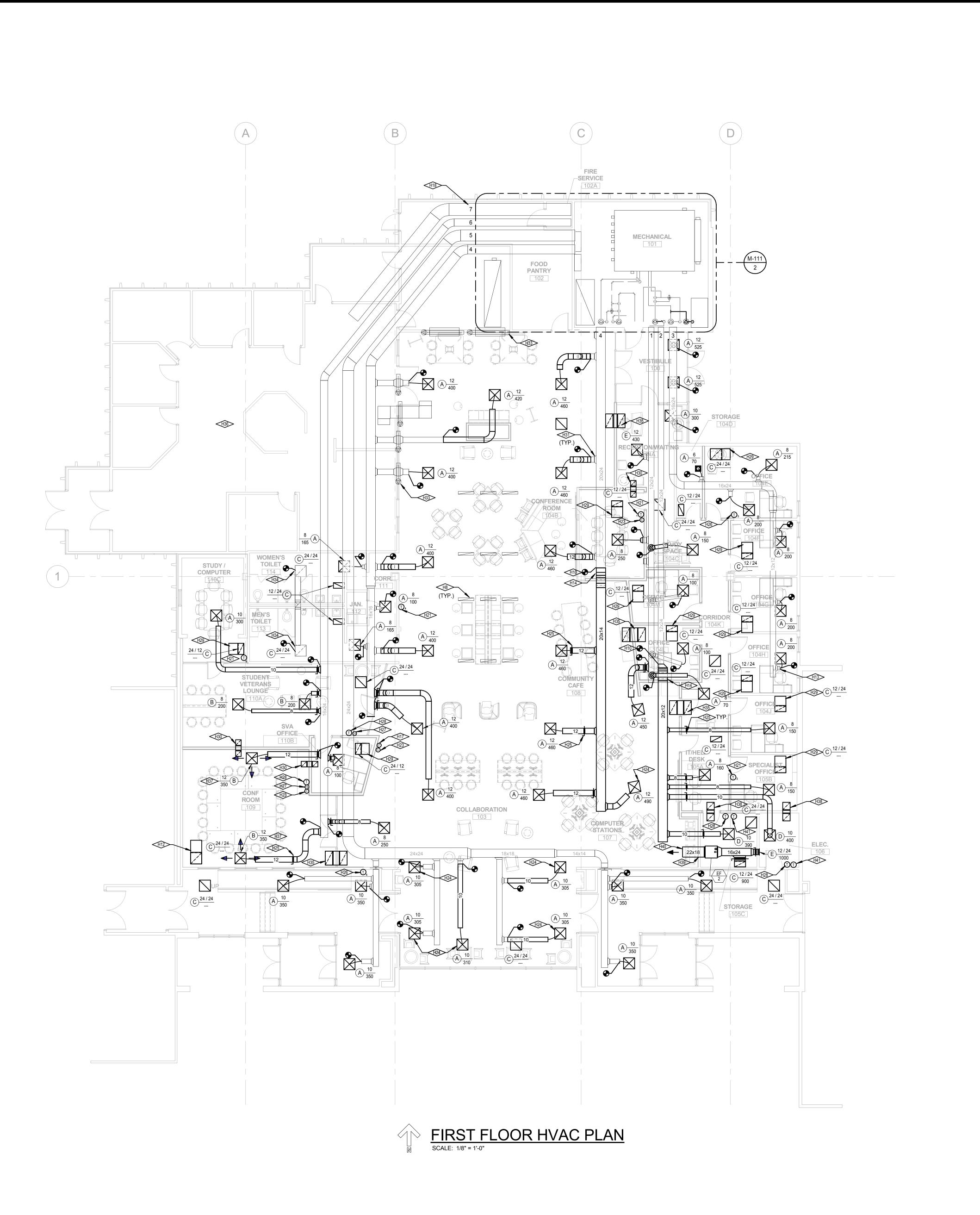
01.04.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION: 11738.001 PROJECT NO: DRAWN BY: CHECKED BY: APPROVED BY: SHEET TITLE:

FIRST FLOOR HVAC **DEMOLITION PLAN** 

MD-111





- H7 (E) CONTROL AIR COMPRESSOR TO BE DEMOLISHED IF CONTROLS ARE UPGRADED TO DDC (MECHANICAL ADD ALTERNATE 2).

  H8 EXISTING RETURN AIR GRILLES IN SKYLIGHT SOFFITS TO REMAIN.

  H9 (E) PNEUMATIC DAMPER ACTUATOR TO BE REPLACED WITH DDC ACUATOR FOR CONTROLS UPGRADE (MECHANICAL ADD ALTERNATE
- ACUATOR FOR CONTROLS UPGRADE (MECHANICAL ADD ALTERNAT 2).

  H10 CONNECT TO EXISTING DUCT BOARD IN THIS APPROXIMATE
- LOCATION.

  H12 INSTALL 1" LINED RETURN BOOT BEHIND GRILLE. RE: SOUND ELBOW
- H13 CONNECT NEW FLEX DUCT TO EXISTING TAP/ DISTRIBUTION. TYP.

  H14 ALIGN TOP OF DUCTS AT TRANSITION. OFFSET DUCTWORK UP TO ACCOMMODATE RAISED CEILING IN THIS AREA.

  H15 (E) PNEUMATIC DUCT SMOKE DETECTOR. REPLACE SMOKE DETECTOR AND ASSOCIATED SENSORS FOR DDC UPGRADE
- (MECHANICAL ADD ALTERNATE 2).

  H16
  (E) PNEUMATIC ACTUATOR ON EXISTING CONTROL VALVE. REPLACE ACTUATOR ON VALVE FOR DDC UPGRADE (MECHANICAL ADD
- ALTERNATE 2).

  H17 LOCATION OF BUILDING STATIC PRESSURE SENSOR. (MECHANICAL

ADD ALTERNATE 2).

H18 NUMBER DENOTES ZONE COORDINATING WITH THERMOSTAT ZONE NUMBER. TYP.
 H21 INSTALL NEW DDC THERMOSTAT IN THIS APPROXIMATE LOCATION. FIELD COORDINATE. (MECHANICAL ADD ALTERNATE 2). IF

ALTERNATE IS NOT ACCEPTED, RELOCATE EXISTING ZONE

- THERMOSTAT TO THIS APPROXIMATE LOCATION.

  H22 LOCATION OF (E) PNEUMATIC RELIEF AIR DAMPER ACTUATOR TO BE FIELD VERIFIED AND REPLACED FOR DDC UPGRADE (MECHANICAL ADD ALTERNATE 2).
- H23 CO2 SENSOR. (MECHANICAL ADD ALTERNATE 2).
   H24 PROVIDE DIFFUSER WITH OPTIONAL DAMPER FOR BALANCING IN HARD LID CEILING.
- HARD LID CEILING.

  H25 PROVIDE MANUAL BALANCING DAMPER OVER ACCESSIBLE CEILING.
- H26 INSTALL NEW DDC THERMOSTAT IN THIS APPROXIMATE LOCATION.
  FIELD COORDINATE. (MECHANICAL ADD ALTERNATE 2). IF
  ALTERNATE IS NOT ACCEPTED, EXISTING ZONE THERMOSTAT TO
- REMAIN IN THIS LOCATION.

  H27 REMOTE TEMPERATURE SENSOR FOR ZONE THERMOSTAT T6 (MECHANICAL ADD ALTERNATE 2). REFER TO SPECIFICATIONS FOR
- H28 THERMA-FUSER THERMOSTAT FOR DIFFUSER(S) IN ASSOCIATED
- H29 PROVIDE LINED ELBOW BEHIND RETURN GRILLE. RE: SOUND ELBOW DETAIL.
- H30 PROVIDE 12"X12" (1" LINED) TRANSFER AIR "U" BOOT ABOVE THE CEILING IN THIS APPROXIMATE LOCATION.

  H31 EXISTING SPIN-INS HAVE MANUAL VOLUME DAMPERS. TYP.
- H33 EXISTING FIRE/SMOKE DAMPERS TO REMAIN. SEPARATION IS NO LONGER REQUIRED SINCE ALL AREAS WILL NOW BE SPRINKLED.

  H34 TRANSITION AS NEEDED FROM NEW GRILLE TO (E) EXHAUST
- H34 TRANSITION AS NEEDED FROM NEW GRILLE TO (E) EXHAUST DUCTWORK TO ACCOMMODATE NEW CEILING GRID.

  H35 PROVIDE 30"X16" (1" LINED) TRANSFER AIR "U" BOOT ABOVE THE CEILING IN THIS APPROXIMATE LOCATION. COORDINATION FINAL
- CEILING IN THIS APPROXIMATE LOCATION. COORDINATION FINAL LOCATION IN FIELD WITH STRUCTURE. COORDINATE BLOCKING THROUGH FRAMING WITH G.C.

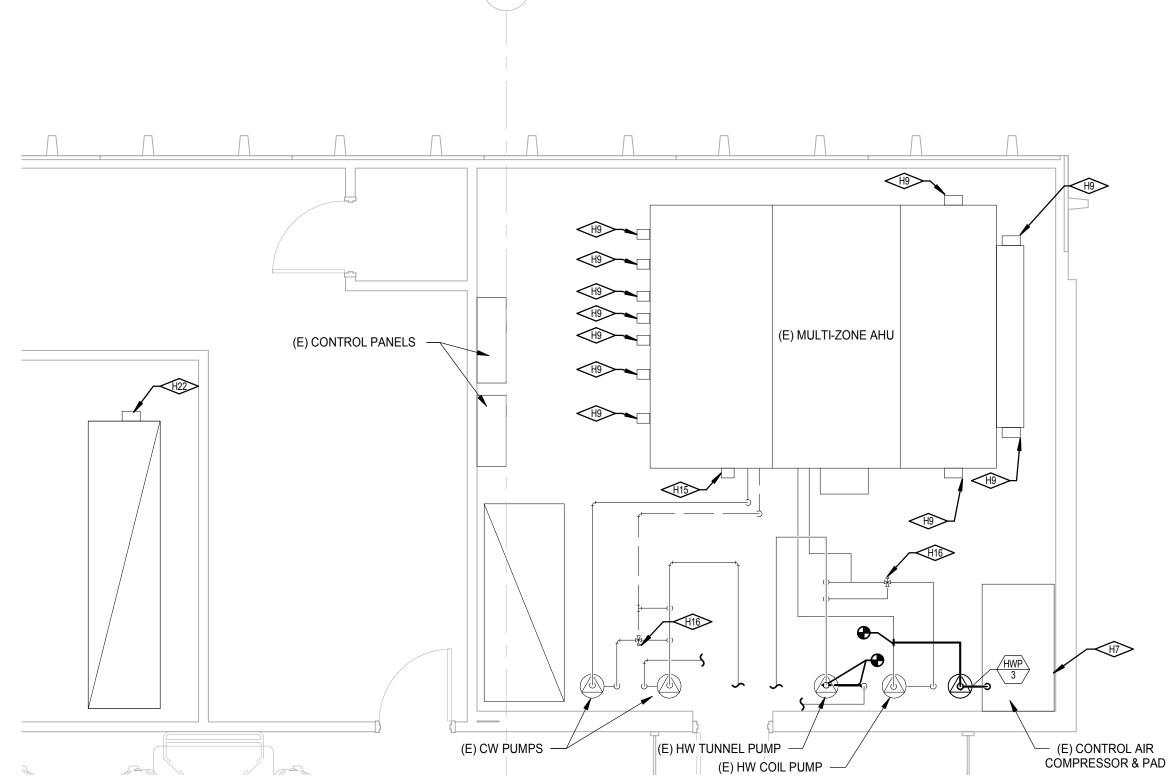
  H36 NO SCOPE IN AREA NOTED.
- H37 PROVIDE ACUTHERM DIRECTIONAL BAFFLES FOR 3-WAY FLOW PATTERN.

  H38 PROVIDE 16"X16" (1" LINED) TRANSFER AIR "U" BOOT ABOVE THE
- CEILING IN THIS APPROXIMATE LOCATION. COORDINATION FINAL LOCATION IN FIELD WITH STRUCTURE. COORDINATE BLOCKING THROUGH FRAMING WITH G.C.
- THROUGH FRAMING WITH G.C.

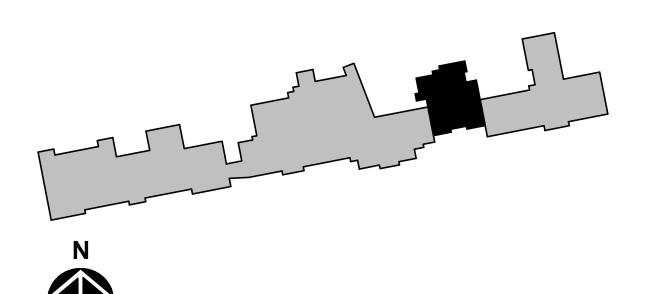
  H39 COORDINATE BLOCKING FOR DUCT THROUGH FULL HEIGHT WALL
  FRAMING WITH G.C.
- FRAMING WITH G.C.

  H40 TERMINATE DUCT OPEN ENDED WITH 1/4" MESH SCREEN IN
- PLENUM.

  H41 LINE VOLTAGE HIGH-LIMIT THERMOSTAT TO TURN EF-2 "ON" AT 70 DEG. (ADJ.). RE: ELEC. PLANS.



2 ENLARGED MECHANICAL ROOM 1/4" = 1'-0"



# hord | coplan | mach

1331 Nineteenth Street Denver, CO. 80202

CONSULTANT:

P 303.607.0977 www.hcm2.com

Cheyenne, WY 82001

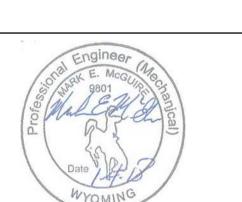
307.274.3830 (P)

303.233.3701 (F)



www.catorruma.com

896 Tabor Street Lakewood, CO 80401 303.232.6200 (P) 303.233.3701 (F)



PROJECT:

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

01.04.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION:
PROJECT NO: 11738.001

DRAWN BY: ELC

FIRST FLOOR HVAC PLAN

CHECKED BY:

APPROVED BY:

SHEET TITLE:

M-111

	PLUMBING LEGEND (Not all symbols listed below are used on these drawings)								
ABBR.	SYMBOL	DESCRIPTION	ABBR.	SYMBOL	DESCRIPTION				
CW		DOMESTIC COLD WATER PIPING	sco	Φ	SURFACE CLEANOUT				
HW		DOMESTIC HOT WATER PIPING	FCO	•	FLOOR CLEANOUT				
HWC		DOMESTIC HOT WATER CIRC. PIPING	wco	O-II	WALL CLEANOUT				
C-SW	sw-	SOFTENED DOMESTIC COLD WATER PIPING	сот	О	CLEANOUT TEE				
H-SW	sw-	SOFTENED DOMESSTIC HOT WATER PIPING	LCO	424	LINE CLEANOUT				
140° HW	140°-	DOMESTIC HOT WATER PIPING @ TEMPERATURE SHOWN		∞—	FIXTURE OR DRAIN P-TRAP				
٧		VENT PIPING	AD		AREA DRAIN				
AV	— AV —	ACID RESISTANT VENT PIPING	FD	0	FLOOR DRAIN (ROUND GRATE)				
W	w	WASTE PIPING (ABOVE FLOOR IN BUILDING)	FS		FLOOR SINK (SQUARE GRATE)				
W	w	WASTE PIPING (BELOW FLOOR IN BUILDING)	RD / OD	0	ROOF DRAIN OR OVERFLOW DRAIN				
AW	— AW—	ACID RESISTANT WASTE PIPING (ABOVE FLOOR IN BLDG)		\$	GAS PRESSURE REDUCING VALVE				
AW	aw	ACID RESISTANT WASTE PIPING (BELOW FLOOR IN BLDG)	VB		ATMOSPHERIC VACUUM BREAKER				
GD	— GD —	GREASE DRAIN (WASTE LINE TO GREASE INTERCEPTOR)	BFP	<del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del> - <del>-</del>	DOUBLE CHECK BACKFLOW PREVENTER				
IW	— IW —	INDIRECT WASTE PIPING	SA	<u> </u>	SHOCK ARRESTOR W / ISOLATION VALVE				
S	— s —	SANITARY SEWER PIPING (OUTSIDE BUILDING)	GC	<del>-</del>	GAS SHUT-OFF VALVE				
ST	st	STORM SEWER PIPING (BELOW GRADE OUTSIDE BUILDING)		宀	STOP AND DRAIN VALVE				
SSD	—ssd—	SUB-SURFACE DRAIN PIPING	FC	♡	HWC BALANCING VALVE				
SD	— sp —	STORM DRAIN PIPING (ABOVE FLOOR IN BUILDING)	WH	+-	WALL HYDRANT				
SD	sp	STORM DRAIN PIPING (BELOW FLOOR IN BUILDING)	НВ	+	HOSE BIBB				
OD	— OD —	OVERFLOW DRAIN PIPING (ABOVE FLOOR IN BUILDING)	YH		YARD HYDRANT				
OD	oD	OVERFLOW DRAIN PIPING (BELOW FLOOR IN BUILDING)	МН		MANHOLE				
Α	— а —	COMPRESSED AIR	CI		CAST IRON				
G	— с —	NATURAL GAS PIPING	VCP		VITRIFIED CLAY PIPE				
			СВ		CATCH BASIN				
			VTR		VENT THRU ROOF				
			IE		INVERT ELEVATION				
			PVC		POLYVINYL CHLORIDE				

ABBR.	SYMBOL	DESCRIPTION	ABBR.	SYI	MBOL	DESCRIPTION
	X	- VIEW NUMBER		DETAIL SHEETS	PLAN SHEETS	
	M-X	SHEET VIEW IS DRAWN ON				CAP END OF PIPE
	UNIT	EQUIPMENT UNIT IDENTIFICATION		XX	XX	PITCH DOWN IN DIRECTION OF ARROW
	#	- EQUIPMENT UNIT NUMBER				UNION OR FLANGE
	NECK- CFM	DIFFUSER IDENTIFICATION				PLUG VALVE
	X CFM	<ul><li>─ DIFFUSER NECK DIAMETER</li><li>─ DIFFUSER CFM</li></ul>	GV	<b>——</b>	—₩—	GATE VALVE
(E)		EXISTING			—₩—	VERTICAL PIPE VALVE
(N)		NEW	GLV	—>XX	—₩—	GLOBE VALVE
(R)		RELOCATED	BFV	<del></del>	<b>─</b> ₩─	BUTTERFLY VALVE
	•	POINT OF CONNECTION, NEW TO EXISTING	BV	—	—⋈—	BALL VALVE
DIA		DIAMETER	cv	— <del>-</del>	— <del>-</del>	CHECK VALVE
NIC		NOT IN CONTRACT		<u> </u>		SOLENOID VALVE
AFF		ABOVE FINISHED FLOOR		<del></del>		BUTTERFLY SOLENOID VALVE
GC		GENERAL CONTRACTOR		—дн		HOSE END DRAIN VALVE
МС		MECHANICAL CONTRACTOR	P/T	<del>P/T</del> _		PRESSURE / TEMPERATURE TAP
EC		ELECTRICAL CONTRACTOR				STRAINER
				- <del></del>		STRAINER W/ BLOWDOWN
						FLEXIBLE PIPE CONNECTOR
				<u> </u>		THERMOMETER
				9		PRESSURE GAUGE
				<del>-</del> 0-		SIGHT GLASS
			C.A.P.	М		CEILING ACCESS PANEL

	FIRE PROTECTION LEGEND (Not all symbols listed below are used on these drawings)									
ABBR.	SYMBOL	DESCRIPTION	ABBR.	SYMBOL	DESCRIPTION					
F	— ғ —	FIRE SERVICE PIPING		0	NEW SPRINKLER HEAD					
FS	— FS —	FIRE SPRINKLER PIPING		0	EXISTING SPRINKLER HEAD					
WSP	— N20—	WET STANDPIPE		0	RELOCATED SPRINKLER HEAD					
	<b>─</b> ⋈—	O.S.&Y. VALVE W/ TAMPER SWITCH		$\triangleright$	SIDEWALL SPRINKLER HEAD					
FS		FLOW SWITCH		D24	DRY SPRINKLER HEAD (SHAFT)					
PIV	<u> </u>	POST INDICATOR VALVE	FHC		FIRE HOSE CABINET					
FH	쩐	FIRE HYDRANT	FVC		FIRE VALVE CABINET					
FDC	<	FIRE DEPARTMENT CONNECTION	A/S		AUTOMATIC FIRE SPRINKLER					

# PLUMBING NOTES:

MEMBERS AND OPENINGS.

- CONTRACTOR SHALL NOT SHUT-OFF/PUT OUT OF SERVICE ANY SYSTEMS/SERVICES WITHOUT FIRST COORDINATING WITH OWNER.
- 2. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF ANY WORK AND SHALL NOTIFY
- THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES FOR RESOLUTIONS.
  3. THIS CONTRACTOR SHALL COORDINATE LOCATIONS OF PIPING WITH OTHER TRADES AND ADVISE ARCHITECT/ENGINEER OF ANY POSSIBLE CONFLICTS.

VERIFY EXACT LOCATIONS, ELEVATIONS AND DIMENSIONS OF STRUCTURAL

- 4. SEE PLUMBING FIXTURE SCHEDULE FOR PIPE SIZING TO INDIVIDUAL PLUMBING FIXTURES.
- 5. REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE ELEVATIONS AND LOCATIONS.
- 6. INVERT ELEVATIONS SHOWN ARE BASED ON A GROUND FLOOR FINISH ELEVATION OF 100'-0".
- 7. SEE ARCHITECTURAL CONSTRUCTION DOCUMENTS FOR DIMENSIONED LOCATION OF PLUMBING FIXTURES AND WALLS.
- PROVIDE CLEANOUTS IN ACCESSIBLE LOCATIONS PER THE PROJECT SPECIFICATIONS AND LOCAL PLUMBING CODES.

# FIRE PROTECTION PLAN NOTES:

- FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY
  FOR THE INSTALLATION OF A COMPLETE AND PROPERLY FUNCTIONING FIRE
  PROTECTION SYSTEM.
- 2. THE FIRE PROTECTION WORK INVOLVES ENGINEERING AND DESIGN BY THE CONTRACTOR TO DETERMINE THE EXTENT OF NEW WORK AND THE MODIFICATION AND EXTENSION OF EXISTING SYSTEMS TO PROVIDE FULL COVERAGE TO THE PROJECT AREA SHOWN ON THESE AND THE ARCHITECTURAL PLANS.
- 3. THE INFORMATION PRESENTED ON THESE DRAWINGS IS DIAGRAMMATIC. IT DOES NOT NECESSARILY REPRESENT ALL ELBOWS, OFFSETS, HANGERS,

ETC., REQUIRED FOR A COMPLETE WORKING SYSTEM.

- 4. ALL FIRE PROTECTION SYSTEMS INSTALLED SHALL BE IN ACCORDANCE WITH NFPA-13, 14, 20, ETC. AND LOCAL BUILDING CODES AND ORDINANCES.
- 5. FIRE PROTECTION CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL NEW FIRE PROTECTION EQUIPMENT AND PIPING WITH ALL OTHER TRADES PRIOR TO SUBMITTAL OF SHOP DRAWINGS AND SYSTEM INSTALLATION, SO AS NOT TO INTERFERE WITH THE ROUTING OF NEW DUCTWORK, PLUMBING PIPING, ETC.
- PROVIDE ALL FITTINGS, RISER NIPPLES, ARM-OVERS, HANGERS, ETC. TO MAINTAIN CONFORMANCE WITH APPLICABLE STANDARDS AND TO POSITION THE SPRINKLERS IN THE PROPER LOCATIONS.
- 7. SEAL ALL PIPE PENETRATIONS THROUGH FIRE RATED WALLS AND CEILINGS WITH FIRE STOPPING MATERIALS AS REQUIRED.
- 8. FOR REMODEL AREAS NEW SPRINKLERS SHALL MATCH EXISTING
- PROVIDE WORKING DRAWINGS AND HYDRAULICALLY CALCULATE THIS FIRE SPRINKLER SYSTEM PER NFPA-13 WHERE REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
- 10. PROVIDE FIELD COORDINATION OF PIPING AND SPRINKLER INSTALLATIONS WITH DUCTWORK, LIGHTS, SMOKE DETECTORS, DIFFUSERS, ETC.

	PLUMBING SPECIALTY SCHEDULE								
PLAN CODE	FIXTURE TYPE	LOCATION	MANUFACTURER	MODEL	REMARKS				
WCO-1	WALL CLEANOUT	INTERIOR FINISHED AREAS	J.R.SMITH	4452C					
AAV-1	AIR ADMITTANCE VALVE	CAFÉ SINK	STUDOR	MINI-VENT	INSTALL AIR ADMITTANCE VALVE A MINIMUM OF 18" ABOVE FINISHED FLOOR.				
1/2/2018 11:44									

$\overline{}$			 I			EL	ECTRIC HEAT											
DESIG.	MFR.	MODEL	SERVICE	LOCATION	EFFICIENCY RATING	NUMBER OF ELEMENTS	KW PER ELEMENT	KW TOTAL	TURN-ON GPM	GPM	TEMP RISE (°F)	EWT (°F)	LWT (°F)	L	w	н	OPER WT (LBS)	REMAF
EWH-1	EEMAX	ED020480T2T	CAFÉ SINK	CABINET UNDER SINK	99%	1	20	20	0.7	2	68	40	108	19	6	13	15	1

	PLUMBING FIXTURE SCHEDULE													
SYMBOL		F	IXTURE					TRIM		ELECTRICAL ACCESSORY REQUIREMENTS	LEED		CONNECTIONS	REMARKS
	FIXTURE NAME	FIXTURE DESCRIPTION	MANUFACTURER	MODEL	TYPE	SIZE	MANUFACTURER	MODEL	SUPPLY	I.R. / BATTERY / HP	GPF	WASTE	VENT CW	HW
S-1	1 COMPT. SINK	SINGLE BOWL UNDERMOUNT 18 GAUGE STAINLESS STEEL SINK ADA COMPLIANT MANUAL OPERATED GOOSENECK FAUCET WITH VANDEL-RESISTANT 2.2 GPM LAMINAR FLOW OUTLET AND 4" WIDESPREAD WRISTBLADES	ELKAY	ELUH211510	UNDERMOUNT STAINLESS STEEL	23.5" X 18.25" X 10"	ZURN	Z831B4-XL-ICT-4F	RE: SPEC	MANUAL	2.2 GPM	2"	1 1/2" 1/2"	1/2" PROVIDE WATTS LF1170 WATER TEMPERING VALVE WITH FAUCET. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND MOUNTING HEIGHT.
	O GENERAL SPECIFICATIONS FOR SINKS AND MISCELLANEOUS FIXTURE REQUIREMENTS. EDULE INCLUDES ITEMS THAT MAY NOT BE INCLUDED IN THE DRAWING DOCUMENTS.										1			

# hord | coplan | mach

1331 Nineteenth Street Denver, CO. 80202

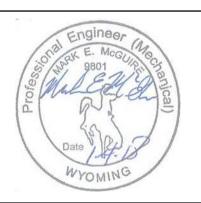
P 303.607.0977 www.hcm2.com

CONSULTANT:



896 Tabor Street 420 W. Lincolnway
Lakewood, CO 80401 Cheyenne, WY 82001
303.232.6200 (P) 307.274.3830 (P)
303.233.3701 (F) 303.233.3701 (F)

www.catorruma.com



PROJECT:

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

01.04.2018 CONTRACT DOCUMENTS

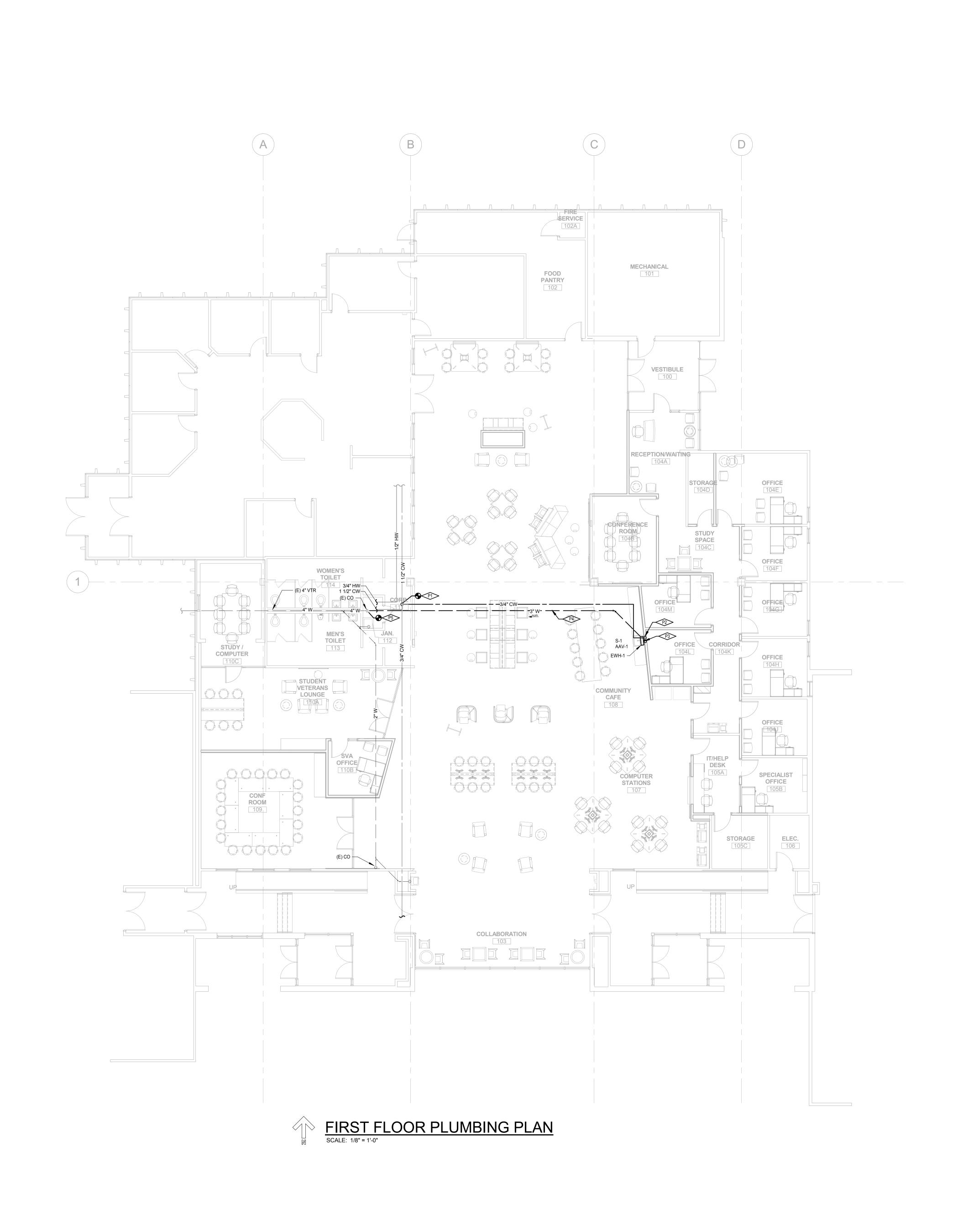
DRAWING INFORMATION:
PROJECT NO: 11738.001

DRAWN BY: ELC
CHECKED BY: MEI
APPROVED BY: MEI

PLUMBING & FIRE PROTECTION LEGENDS, NOTES &

SCHEDULES

P-001



P1 CONNECT TO EXISTING 1 1/2"CW MAIN IN THIS APPROXIMATE LOCATION. P2 PROVIDE 1/2"CW TO EWH-1 LOCATED IN CABINET UNDER SINK. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

P3 PROVIDE 1/2"HW FROM EWH-1 AND 1/2"CW TO SINK, PROVIDE 2"W FROM SINK W/ WCO AND STUDOR AIR ADMITTANCE VALVE. INSTALL STUDOR VALVE PER MANUFACTURER'S INSTRUCTIONS. UPSIZE WASTE PIPE TO 3" BEFORE DROPPING BELOW FLOOR.

P4 CONTRACTOR TO COORDINATE SAW CUTTING AND PATCHING OF FLOOR AS NEEDED TO INSTALL SANITARY PIPING. SLOPE UNDERGROUND PIPING AT 1/8"/12".

AND ENSURE INVERT CAN BE HIT.

P5 CONNECT TO EXISTING 4" SANITARY IN THIS APPROXIMATE LOCATION. CONTRACTOR TO VERIFY LOCATION OF SANITARY MAIN

# hord | coplan | mach

1331 Nineteenth Street Denver, CO. 80202

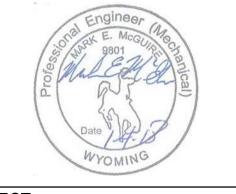
P 303.607.0977 www.hcm2.com

CONSULTANT:



www.catorruma.com

896 Tabor Street 420 W. Lincolnway Lakewood, CO 80401 Cheyenne, WY 82001 307.274.3830 (P) 303.232.6200 (P) 303.233.3701 (F) 303.233.3701 (F)



PROJECT:

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

01.04.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION: 11738.001 PROJECT NO: DRAWN BY:

CHECKED BY: APPROVED BY: SHEET TITLE:

FIRST FLOOR PLUMBING PLAN

P-111

- P10 PROTECT THESE AREAS WITH AN AUTOMATIC WET SPRINKLER SYSTEM. DESIGN THE SYSTEM BASED ON LIGHT HAZARD PER THE REQUIREMENTS OUTLINED IN THE SPECIFICATIONS.
- P11 PROTECT THESE AREAS WITH AN AUTOMATIC WET SPRINKLER SYSTEM. DESIGN THE SYSTEM BASED ON ORDINARY HAZARD PER THE REQUIREMENTS OUTLINED IN THE SPECIFICATIONS.
- P12 AREA IS ALREADY PROTECTED BY A SPRINKLER SYSTEM FROM A PREVIOUS RENOVATION.
- P13 CONNECT TO EXISTING FIRE PROTECTION MAIN IN THIS APPROXIMATE LOCATION. FIELD COORDINATE.

hord | coplan | mach

1331 Nineteenth Street

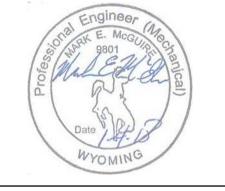
P 303.607.0977 www.hcm2.com Denver, CO. 80202

CONSULTANT:



896 Tabor Street 420 W. Lincolnway Lakewood, CO 80401 Cheyenne, WY 82001 303.232.6200 (P) 303.233.3701 (F)

307.274.3830 (P) 303.233.3701 (F) www.catorruma.com



PROJECT:

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

01.04.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION: 11738.001 PROJECT NO:

DRAWN BY: CHECKED BY: APPROVED BY: SHEET TITLE:

FIRE SPRINKLER ZONES

FP-111

	CABINET AS NOTED										
	LIGHTING LEGEND (Not all symbols listed below are used on these drawings)										
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION								
a A	SHADING INDICATES EM SYSTEM, LOWER CASE SUBSCRIPT INDICATES SWITCHING, UPPER CASE SUBSCRIPT INDICATES LUMINAIRE TYPE (TYP)	$\oplus$	DECORATIVE ADJUSTABLE ACCENT DOWNLIGHT								
	SURFACE OR PENDANT MOUNTED LUMINAIRE		SQUARE DOWNLIGHT								
	LENSED TROFFER	<b>/</b>	SQUARE WALL WASH DOWNLIGHT								
	DIRECT/INDIRECT TROFFER	፟	SQUARE ADJUSTABLE ACCENT DOWNLIGHT								
	PATIENT OVERBED LIGHT	0	SQUARE DOWNLIGHT								
o====o	DIRECT/INDIRECT DISTRIBUTION, SUSPENDED LINEAR PENDANT		SQUARE WALL WASH DOWNLIGHT								
o———o	INDIRECT DISTRIBUTION, SUSPENDED LINEAR PENDANT	→	SQUARE ADJUSTABLE ACCENT DOWNLIGHT								
00	DIRECT DISTRIBUTION, SUSPENDED LINEAR PENDANT	<b>+</b>	DECORATIVE PENDANT								
	DIRECT/INDIRECT DISTRIBUTION, WALL MOUNT LINEAR	ф	PENDANT								
	INDIRECT DISTRIBUTION, WALL MOUNT LINEAR		RECESS MOUNTED WALL LUMINAIRE								
	DIRECT DISTRIBUTION, WALL MOUNT LINEAR	9	WALL PACK OR EXTERIOR NON-DECORATIVE WALL SIGNAGE								
<u>⊕</u>	DECORATIVE LINEAR WALLMOUNT	<b>+</b>	DECORATIVE SCONCE								
<u></u> — <u>Ş</u> —	STRIP LINEAR WALLMOUNT	<b>→</b>	DECORATIVE POLE								
<b>——</b>	SURFACE OR PENDANT MOUNTED STRIP OR INDUSTRIAL LUMINAIRE	0-0	POLE								
	THEATRICAL PIPE OR TRACK LIGHTING	0	BOLLARD								
$\nabla$	TRACK HEAD	® <sub>PC</sub>	PORCELAIN KEYLESS LAMPHOLDER, BRYANT #5228 W/ 100W A19 I.F. LAMP. 'PC' INDICATES PULLCHAIN								
0	SURFACE DOWNLIGHT	1	EMERGENCY LIGHTING UNIT								
0	DOWNLIGHT	×	EXTERIOR STAKE MOUNTED								
<b>Ø</b> >	WALL WASH DOWNLIGHT	9	DOCK LIGHT								
<b>⊘</b> >	ADJUSTABLE ACCENT DOWNLIGHT		DARKROOM SAFE LIGHT (TWO COMPARTMENT SHOWN)								
Φ	DECORATIVE DOWNLIGHT		UNDERCABINET LIGHT								
⊕>	DECORATIVE WALL WASH DOWNLIGHT		EXIT LIGHT, ARROWS AS INDICATED, FACES INDICATED BY SHADING								

CONTROLS LEGEND (Not all symbols listed below are used on these drawings)									
SYMBOL	DESCRIPTION		SYMBOL	DESCRIPTION					
S;	SINGLE POLE SWITCH (SUBSCRIPT DENOTES SWITCHING)		S <sub>VS</sub>	VARIABLE SPEED/SPEED CONTROLLER SWITCH					
S;	TWO POLE SWITCH		S <sub>FP</sub>	EXPLOSION PROOF SWITCH					
S <sub>ξ</sub>	THREE-WAY SWITCH	ĺ	S <sub>TO</sub>	THERMAL OVERLOAD SWITCH					
S,	FOUR-WAY SWITCH	ĺ	S <sub>MC</sub>	MOMENTARY CONTACT SWITCH					
S	KEY OPERATED SWITCH	ĺ	98	COMBINATION SWITCH AND DUPLEX RECEPTACLE					
S	MANUAL SWITCH, HORSEPOWER RATE	ĺ	P	PHOTOCELL					
S <sub>[</sub>	DIMMER SWITCH		•	PUSH BUTTON					
S <sub>Pl</sub>	SWITCH WITH PILOT LIGHT (PILOT LIGHT IS 'ON' WHEN SWITCH IS 'ON')		TC	TIME CLOCK					
S <sub>F</sub>	SWITCH WITH PILOT LIGHT LOCATOR (CONTINUOUSLY LIGHTED HANDLE)		<b>B</b>	OCCUPANCY SENSOR - WALL MOUNTED IR=INFRARED, US=ULTRASONIC, DT=DUAL TECHNOLOGY					
S <sub>LV</sub>	LOW VOLTAGE SWITCH	Ī		, ,					

	REFERENCE SYMBOLS LEGEND (Not all symbols listed below are used on these drawings)								
SYMBOL	DESCRIPTION	CRIPTION SYMBOL DESCRIPTI							
$\bigcirc$	KEY NOTE REFERENCE	1	KITCHEN/OWNER/MEDICAL EQUIPMENT REFERENCE						
LPA-#	TYPICAL CIRCUIT NUMBER	Ē	EXISTING TO REMAIN						
) TG# (	TYPICAL LUMINAIRE TYPE	R	EXISTING TO BE REMOVED						
	TYPICAL ROOM REFERENCE (TOP = RM #, BOTTOM = FLR)	RL	EXISTING TO BE RELOCATED						
(UH)	MECHANICAL EQUIPMENT REFERENCE		EXISTING TO REMAIN - REPLACE DEVICE						
	LIGHTING CONTROL / EQUIPMENT REFERENCE	<u></u>	EXISTING TO BE REMOVED AND REPLACED						

		IATIONS I	d on these drawings)
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
Α	AMPERES	МСР	MOTOR CIRCUIT PROTECTOR
AC	ABOVE COUNTER, MOUNT HORIZONTALLY TO CENTERLINE OF DEVICE, +6" ABOVE COUNTER OR BACK SPLASH	MEC	SEE MECHANICAL EQUIPMENT SCHEDULE
AFF	ABOVE FINISHED FLOOR	MIN	MINIMUM
AFG	ABOVE FINISHED GRADE	MLO	MAIN LUGS ONLY
ANN	ANNUNCIATOR	MTS	MANUAL TRANSFER SWITCH
ARF	ABOVE RAISED FLOOR	NC	NORMALLY CLOSED
ASSD	AIR SAMPLING SMOKE DETECTION	NIC	NOT IN CONTRACT
ATS	AUTOMATIC TRANSFER SWITCH	NL	NIGHT LIGHT
BFG	BELOW FINISHED GRADE	NO	NORMALLY OPEN
С	CONDUIT	NTS	NOT TO SCALE
CATV	CABLE TELEVISION	ос	ON CENTER
СВ	CIRCUIT BREAKER	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
ссту	CLOSED CIRCUIT TELEVISION	OFOI	OWNER FURNISHED, OWNER INSTALLED
(E)	EXISTING	OSWF	ON SITE WORK FORCE
EM	EMERGENCY	РВ	PULL BOX
EMDC	EMERGENCY MAIN DISTRIBUTION CENTER	SB	STAND-BY
EP	EXPLOSION PROOF	SDC	SUB-DISTRIBUTION CENTER
EPO	EMERGENCY POWER OFF	SPD	SURGE PROTECTIVE DEVICE
EVO	EMERGENCY VENTILATION ON/OFF	ТР	TAMPER PROOF
EWC	ELECTRIC WATER COOLER	ТҮР	TYPICAL
FA	FIRE ALARM	UF	UNDER FLOOR
G	GROUND	UG	UNDER GROUND
GCP	GENERATOR CONTROL PANEL	UON	UNLESS OTHERWISE NOTED
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	UPS	UNINTERRUPTIBLE POWER SUPPLY
НОА	HAND OFF AUTOMATIC	v	VOLTS
IG	ISOLATED GROUND	VFD	VARIABLE FREQUENCY DRIVE
MAX	MAXIMUM	W/	with
MCB	MAIN CIRCUIT BREAKER	W/O	without
MCC	MOTOR CONTROL CENTER	WP	WEATHER PROOF
MDC	MAIN DISTRIBUTION CENTER	XFMR	TRANSFORMER

	FIRE ALARM SYSTEM LEGEND (Not all symbols listed below are used on these drawings)									
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION							
FACP	FIRE ALARM CONTROL PANEL	$\square_{M}$	MANUAL PULL STATION							
FAPS	FIRE ALARM (NAC) POWER SUPPLY		ADDRESSABLE INPUT MODULE							
FSA	FIRE ALARM SYSTEM ANNUNCIATOR PANEL (GRAPHIC/LED)		ADDRESSABLE OUTPUT MODULE							
FAA	REMOTE ANNUNCIATOR PANEL	⊠⊲ <sub>H15cd</sub>	AUDIOVISUAL DEVICE (H##cd=HORN/STROBE COMBINATION S=SPEAKER/STROBE COMBINATION, C=CHIME/STROBE COMBINATION)							
GZM	GRAPHIC ZONE MAP	□Фн	AUDIBLE DEVICE (H=HORN, S=SPEAKER, C=CHIME)							
RACP	RESCUE ASSISTANCE SYSTEM HEAD END UNIT	≭ <sub>15cd</sub>	FIRE ALARM STROBE (cd= CANDELA RATING 15, 30, 75, 110)							
FSC	FIRE FIGHTER SMOKE CONTROL PANEL	I J	EMERGENCY TELEPHONE STATION (J=JACK, H=HANDSET)							
FAD	FIRE ALARM DIRECTORY ANNUNCIATOR		RESCUE ASSISTANCE TELEPHONE STATION)							
<b>⊘</b> ₁	SMOKE DETECTOR (P=PHOTOELECTRIC, SB=WITH SOUNDER BASE, BR=BEAM RECEIVER, BT=BEAM TRANSMITTER)	φ	MAGNETIC DOOR HOLD							
<b> </b>	THERMAL DETECTOR F=FIXED TEMPERATURE, R=FIXED TEMPERATURE & RATE OF RISE (TEMP. RATING)	Q	TAMPER SWITCH							
Ouv	FLAME DETECTOR (UV=ULTRAVIOLET, IR=INFRARED)	<b>\\$</b>	FLOW DETECTOR SWITCH							
<b>⊙</b> =	DUCT SMOKE DETECTOR S=SUPPLY, R=RETURN	۶ <del>*</del> ,	PRESSURE SWITCH							
<b>⊠</b> RTS	DUCT DETECTOR REMOTE INDICATOR ALARM AND TEST	● <sub>FSD</sub>	FIRE/SMOKE DAMPER							
×	REMOTE INDICATOR LIGHT	O co	CARBON MONOXIDE ALARM/DETECTOR							

		- 60	
,			
	ONE-LINE DI		
SYMBOL	(Not all symbols listed DESCRIPTION	SYMBOL	DESCRIPTION
-/_	DISCONNECT SWITCH	A	PANELBOARD "A"
<b></b>	DISCONNECT SWITCH, FUSED	PM	EM=ENERGY METER, PM=POWER METER, CM=CIRCUIT MONITOR
	CIRCUIT BREAKER		VOLTMETER TEST SWITCH
	FUSE	AS	AMMETER TEST SWITCH
Ť	GROUND	w w	VOLTMETER
T #	STEP DOWN TRANSFORMER, ## INDICATES KVA	A	AMMETER
TK #	K-RATED STEP DOWN TRANSFORMER ## INDICATES KVA, # INDICATES K RATING	(XXX)	SEE FEEDER/MEC/TRANSFORMER SCHEDULES FOR FEEDER SIZE
<del>-</del>	CURRENT TRANSFORMER	G	ENGINE GENERATOR
-}⊱	POTENTIAL TRANSFORMER	<b>│</b> —	CONTACTOR/RELAY/CAPACITOR (AS NOTED)
∰ OR	SERVICE ENTRANCE TRANSFORMER	.\.	TRANSFER SWITCH - ATS=AUTOMATIC, MTS=MANUAL
M	METER	GFI	GROUND FAULT INTERRUPTER
	EQUIPMENT ENCLOSURE	SPD	SURGE PROTECTIVE DEVICE
\lang≡	SERVICE WEATHERHEAD	(ST)	SHUNT TRIP
ISCA	SHORT CIRCUIT CURRENT AVAILABLE	<b>&gt;&gt;</b>	TERMINATIONS LB=LOAD BREAK, NLB=NO LOAD BREAK
⟨k⟩ <sub>a</sub>	KIRK KEY INTERLOCK, SUBSCRIPT INDICATES INTERLOCKED GROUP	<b>→</b> >>→	DRAW-OUT DEVICE
⟨E⟩ <sub>a</sub>	ELECTRICAL INTERLOCK, SUBSCRIPT INDICATES INTERLOCKED GROUP	$\rightarrow \!$	PLUG-IN DEVICE
<b>⟨</b> M⟩	MECHANICAL INTERLOCK	EO	ELECTRICALLY OPERATED

# **GENERAL NOTES:**

- 1. FOR REMODELING, WORK INCLUDED IS DENOTED IN BOLD. EXISTING CONDITIONS TO REMAIN ARE DENOTED LIGHTLY.
- 2. PROTECT STRUCTURE AND OWNER EQUIPMENT FROM DAMAGE. IMMEDIATELY REPLACE OR REPAIR, TO ORIGINAL CONDITION, DAMAGE CAUSED BY THE CONTRACTOR WHETHER EQUIPMENT APPEARS TO BE CURRENTLY IN USE OR NOT, UNLESS WRITTEN AUTHORIZATION FROM THE OWNER INDICATED OTHERWISE. PREPARE LISTING OF ALL EXISTING DAMAGED ITEMS AND SUBMIT TO OWNER PRIOR TO BEGINNING WORK.
- 3. INSTALL CONDUIT CONCEALED IN FINISHED AREAS UNLESS OTHERWISE NOTED. PAINT EXPOSED CONDUIT TO MATCH EXISTING FINISHES WITHIN THE SURROUNDING AREA.
- 4. ALL PENETRATIONS FOR RACEWAY AND CABLE THAT ARE BY THE CONTRACTOR, WHICH PENETRATE FLOORS, FIRE AND/OR SMOKE BARRIERS AND SEPERATIONS SHALL BE SEALED WITH A SYSTEM SPECIFICALLY U.L. APPROVED FOR THE APPLICATION. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE ASSEMBLIES AND RATINGS.
- 5. COORDINATE EXACT REQUIREMENTS AND LOCATIONS OF MECHANICAL EQUIPMENT WITH MECHANICAL DRAWINGS AND MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN AND ORDERING MATERIALS OR EQUIPMENT.
- 6. COORDINATE OUTAGES WITH OWNER TWO WEEKS IN ADVANCE. PROVIDE WRITTEN METHOD OF PROCEDURES WHEN OUTAGE AFFECTS LIFE SAFETY OR BUILDING SECURITY SYSTEMS.
- 7. EXISTING INFORMATION SHOWN ON THE DRAWINGS HAS BEEN TAKEN FROM OWNER FURNISHED DRAWINGS AND/OR LIMITED FIELD OBSERVATIONS. CATOR, RUMA & ASSOCIATES IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY INFORMATION OR THE ADEQUACY, SAFETY AND CONFORMANCE TO CURRENT PREVAILING CODES OF ANY WORK SHOWN AS EXISTING ON THESE
- 8. PROVIDE SEPARATE INSULATED GROUNDING CONDUCTOR IN ALL FEEDER, HOMERUN AND BRANCH CIRCUITS.

# **DEMOLITION NOTES:**

- 1. UNLESS NOTED OTHERWISE, BOLD ITEMS INDICATE EQUIPMENT, DEVICES, ETC. TO BE REMOVED WHILE EXISTING CONDITIONS TO REMAIN ARE DENOTED WITH A LIGHTER PEN WEIGHT. REFER TO SPECIFICATIONS FOR DETAILED REQUIREMENTS ON REMODEL/DEMOLITION RESPONSIBILITIES.
- 2. DEMOLITION DRAWINGS MAY NOT SHOW EVERY ITEM TO BE DEMOLISHED. CONTRACTOR SHALL VISIT SITE TO DETERMINE AND COORDINATE THE EXACT EXTENT OF DEMOLITION TO FACILITATE ALL WORK INDICATED BY THE CONTRACT DOCUMENTS PRIOR TO QUOTATION. NO EXTRAS WILL BE ALLOWED FOR WORK REQUIRED TO ACHIEVE THE END RESULT AS INDICATED BY THE CONTRACT DOCUMENTS. REWORK EXISTING TERMINATIONS, CONNECTIONS, CONDUIT, WIRING, ETC. TO ACCEPT NEW WORK. MAINTAIN CIRCUIT CONTINUITY TO EXISTING CIRCUITS AND DEVICES TO REMAIN OR REMODEL/DEMOLITION DETAILED REQUIREMENTS TO BE RELOCATED, PRIOR TO COMMENCEMENT OF ANY DEMO WORK, CONFIRM EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.
- 3. ALL ITEMS IDENTIFIED TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING ALL WIRING AND EXPOSED CONDUIT AND CONDUIT SUPPORTS BACK TO POINT OF ORIGIN OR NEXT DEVICE TO REMAIN. REMOVED ITEMS SHALL BE TURNED OVER TO THE OWNER, UNLESS NOTED OTHERWISE, AND STORED IN THE AREA DESIGNATED BY THE OWNER. REMOVE FROM SITE AND LEGALLY DISPOSE OF ALL ITEMS THE OWNER CHOOSES NOT TO ACCEPT.
- 4. WHERE EXISTING CONDUITS ARE SHOWN TO BE REMOVED AND HAVE BEEN ROUTED IN CONCRETE FLOOR SLABS, CONCRETE WALLS OR CONCRETE CEILINGS, THEY SHALL BE CUT BACK FLUSH WITH CONCRETE. FILL WITH GROUT TO ACHIEVE A SMOOTH AND EVEN FINISH FLUSH WITH CONCRETE SURFACE AFTER CONDUCTORS HAVE BEEN REMOVED.
- 5. REUSE EXISTING CONDUIT WHERE CURRENT NEC AND LOCAL CODE REQUIREMENTS ARE MAINTAINED. PROVIDE NEW CONDUIT AND WIRE FOR NEW INSTALLATIONS AND EXTENSION OF EXISTING INSTALLATIONS. REUSE EXISTING CONDUIT IN PLACE, DO NOT REINSTALL EXISTING CONDUIT. PROVIDE LABELING PER SPECIFICATIONS FOR REUSED CONDUIT.
- 6. RELOCATED EQUIPMENT AND DEVICES ARE TO BE CLEANED OF ALL FOREIGN MATERIAL. REPLACE EQUIPMENT OR DEVICES WHICH ARE DEFECTIVE OR DAMAGED DURING RELOCATION.
- 7. WHERE EXISTING DEVICES, SWITCHES, MOTOR CONNECTIONS, ETC. ARE TO BE REMOVED FROM WALLS WHICH ARE REMAINING, WALLS SHALL BE PATCHED TO MATCH ORIGINAL FINISH. BLANK COVERPLATES OVER EXISTING BOXES ARE NOT ACCEPTABLE, UNLESS NOTED OTHERWISE.

# LIGHTING PLAN NOTES:

- 1. REFER TO ARCHITECTURAL ELEVATIONS AND REFLECTED CEILING PLANS FOR EXACT MOUNTING LOCATIONS OF DEVICES AND LUMINAIRES.
- 2. COORDINATE LUMINAIRE LOCATIONS WITH MECHANICAL PIPING, DUCTWORK, ETC., TO AVOID CONFLICTS. SEE SPECIFICATIONS FOR COORDINATION REQUIREMENTS.
- 3. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH 120V AND 277V
- 4. CIRCUITS MAY BE COMBINED INTO HOMERUNS OF UP TO SIX (6) CURRENT CARRYING CONDUCTORS, INCLUDING NEUTRALS, UNLESS OTHERWISE INDICATED. WHERE CIRCUITS ARE COMBINED WITHIN A SINGLE CONDUIT, PROVIDE STRIPING FOR FULL LENGTH OF NEUTRAL CONDUCTOR INSULATION TO MATCH THE COLOR CODE OF THE ASSOCIATED PHASE CONDUCTOR. SEE SPECIFICATION FOR COLOR CODES.
- 5. FIELD COORDINATE EXACT LOCATION OF CEILING MOUNTED OCCUPANCY SENSORS PER MANUFACTURER'S INSTRUCTIONS. OCCUPANCY/VACANCY SENSING DEVICES ARE SHOWN FOR GENERAL DESIGN INTENT ONLY. CONTRACTOR SHALL PROVIDE THE TYPE AND QUANTITY OF OCCUPANCY/VACANCY SENSING DEVICES AS NECESSARY FOR PROPER COVERAGE AND CONTROL OF LUMINAIRES WHERE INDICATED ON THE LIGHTING PLANS. FIELD ADJUSTMENT TO DEVICE LOCATIONS SHALL BE MADE AS REQUIRED TO CAPTURE ALL OCCUPANTS. WHETHER SITTING AT A DESK OR MOVING AROUND THE SPACE. ADDTIONAL DEVICES SHALL BE PROVIDED AND FIELD ADJUSTMENTS SHALL BE MADE AS NECESSARY, AT NO ADDITIONAL COST TO OWNER. CONTRACTOR SHALL PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
- 3. ALL EXIT SIGNS AND EMERGENCY LIGHTING TO BE CONNECTED TO PANEL EM IN ADJACENT STUDENT SERVICES BUILDING TO THE EAST. CIRCUIT SHOWN ON LIGHTING PLANS MUST BE FIELD VERIFIED BY CONTRACTOR.

# POWER PLAN NOTES:

- 1. MAKE ALL FINAL ELECTRICAL CONNECTIONS TO EQUIPMENT REQUIRING ELECTRICAL CONNECTION. THIS SHALL INCLUDE BUT NOT BE LIMITED TO ALL MECHANICAL AND OTHER EQUIPMENT INCLUDED IN THIS PROJECT.
- 2. COORDINATE EXACT REQUIREMENTS AND LOCATIONS OF MECHANICAL EQUIPMENT WITH MECHANICAL DRAWINGS AND MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- 3. PROVIDE FUSES SIZED PER EQUIPMENT MANUFACTURER'S REQUIREMENTS.
- 4. DISCONNECT SWITCH LOCATIONS ARE SHOWN DIAGRAMMATICALLY AND SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS TO SUIT EQUIPMENT AND SPACE. DISCONNECT SWITCHES SHALL BE WITHIN SIGHT OF THE EQUIPMENT THEY SERVE AND MOUNTED AT 6'-3", MAXIMUM, TO TOP OF CABINET. MAINTAIN NEC WORK SPACE REQUIREMENTS.
- 5. RECEPTACLES INDICATED TO BE MOUNTED ABOVE COUNTER ARE TO BE MOUNTED HORIZONTALLY 6" ABOVE COUNTER UNLESS OTHERWISE NOTED. 6. PROVIDE 4-SQUARE, ELECTRICAL BOX, SINGLE GANG MUD RING AND BLANK
- SINGLE GANG COVER PLATE FOR ALL THERMOSTAT LOCATIONS. ROUTE 1" CONDUIT WITH PULL WIRE TO 6" ABOVE ACCESSIBLE CEILING. PROVIDE INSULATED THROAT CONNECTOR ON CONDUIT END.
- 7. COORDINATE AND VERIFY EXACT MOUNTING LOCATIONS OF WALL AND FLOOR DEVICES WITH ARCHITECTURAL ELEVATIONS, AND ANY FURNITURE OR SPECIALTY EQUIPMENT SUPPLIER DRAWINGS PRIOR TO ROUGH-IN.
- 8. NO RECEPTACLES SHALL BE MOUNTED BELOW +18" AFF.
- 9. PROVIDE ISOLATED GROUND FOR EACH CIRCUIT TO FURNITURE PARTITION AND POWER POLE LOCATIONS.
- 10. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH 120V CIRCUIT. 11. CIRCUITS MAY BE COMBINED INTO HOMERUNS OF UP TO SIX (6) CURRENT CARRYING CONDUCTORS, INCLUDING NEUTRALS, UNLESS OTHERWISE INDICATED. WHERE CIRCUITS ARE COMBINED WITHIN A SINGLE CONDUIT, PROVIDE STRIPING FOR FULL LENGTH OF NEUTRAL CONDUCTOR INSULATION TO MATCH THE COLOR CODE OF THE ASSOCIATED PHASE CONDUCTOR. SEE SPECIFICATION FOR COLOR CODES.
- 12. GFCI RECEPTACLES ARE NOT GENERALLY SHOWN ON DRAWINGS. ALL RECEPTACLE OUTLETS LOCATED IN TOILET ROOMS, OUTDOOR LOCATIONS. MECHANICAL ROOMS, WITHIN 6 FEET OF A SINK, OR OTHER WET LOCATIONS SHALL BE PROVIDED WITH GFI DEVICE AT PANEL BREAKER.

# FIRE ALARM PLAN NOTES:

- 1. FIRE ALARM EQUIPMENT AND DEVICES SHOWN ON THESE DRAWING INDICATE THE INTENT. PERFORMANCE, AND SCOPE OF THE SYSTEM. THE FULL DESIGN OF THE FIRE ALARM SYSTEM SHALL BE BE PROVIDED AS A DEFERRED SUBMITTAL BY THIS CONTACTOR. THE CONTRACTOR SHALL PROVIDE APPROPRIATE SHOP DRAWINGS AND DESIGN SUBMITTALS FOR APPROVAL BY THE LOCAL FIRE DEPARTMENT AND/OR THE AUTHORITY HAVING JURISDICTION. THE ELECTRICAL ENGINEER OF RECORD AT CATOR, RUMA & ASSOCIATES, CO. WILL NOT BE RESPONSIBLE FOR SEALING AND SIGNING THE FIRE ALARM SYSTEM SHOP DRAWING SUBMITTALS PROVIDED BY THE CONTRACTOR. CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS IN JURISDICTIONS WHERE THIS IS REQUIRED AND INCLUDE COSTS IN BID.
- 2. LOCATE SMOKE DETECTORS PER NFPA 72 AND MANUFACTURERS REQUIREMENTS. THE LOCATIONS OF SMOKE DETECTORS ON THE DRAWINGS ARE DIAGRAMMATIC ONLY. DETECTORS SHALL NOT BE PLACED WITHIN 3'-0" OF ANY CEILING MOUNTED HVAC SUPPLY AIR DEVICE.
- 3. NEW FIRE ALARM DEVICES SHALL MATCH EXISTING, UNLESS NOTED OTHERWISE. PROVIDE RE-PROGRAMMING OF SYSTEM AS REQUIRED TO ACCOMMODATE NEW DEVICES. REVISE EXISTING ANNUNCIATOR(S) AND GRAPHIC ZONE MAP(S) TO REFLECT PROJECT FIRE ALARM AND ARCHITECTURAL MODIFICATIONS. UPDATE GRAPHIC ZONE MAPS AS REQUIRED. SUBMIT TO ENGINEER AND BUILDING/FIRE DEPARTMENTS FOR REVIEW PRIOR TO INSTALLATION.

# hord | coplan | mach

1331 Nineteenth Street

CONSULTANT:

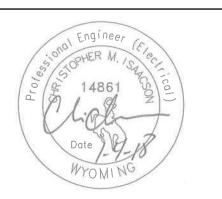
P 303.607.0977 www.hcm2.com

Denver, CO. 80202



896 Tabor Street 420 W. Lincolnway Lakewood, CO 80401 Cheyenne, WY 82001 303.232.6200 (P) 303.233.3701 (F) www.catorruma.com

307.274.3830 (P) 303.233.3701 (F)



PROJECT:

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

01.04.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION: PROJECT NO:

APPROVED BY:

11738.001 DRAWN BY: **CHECKED BY** 

SHEET TITLE: ELECTRICAL LEGENDS & NOTES

hord | coplan | mach

1331 Nineteenth Street Denver, CO. 80202

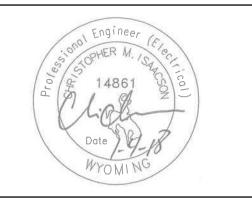
P 303.607.0977 www.hcm2.com

CONSULTANT:



420 W. Lincolnway Lakewood, CO 80401 Cheyenne, WY 82001 303.232.6200 (P) 303.233.3701 (F)

307.274.3830 (P) 303.233.3701 (F) www.catorruma.com



PROJECT:

CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

01.04.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION: 11738.001 PROJECT NO: DRAWN BY: CHECKED BY: APPROVED BY:

FIRST FLOOR LIGHTING DEMOLITION PLAN

SHEET TITLE:

ED-111



FIRST FLOOR POWER/FA DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

KEYNOTES

ED1 PANEL LA TO BE REPLACED. PULL BACK CIRCUITS AS NEEDED TO REMOVE PANEL AND INSTALL NEW EQUIPMENT.

ED2 NO POWER SCOPE IN AREA NOTED.

ED3 REMOVE ALL EXISTING FIRE ALARM DEVICES IN SCOPE AREA. RACEWAY AND CABLE MAY BE REUSED AS AVAILABLE. ED4 TRANSFORMER TO BE REPLACED.

hord | coplan | mach

1331 Nineteenth Street Denver, CO. 80202

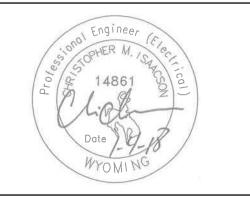
P 303.607.0977 www.hcm2.com

CONSULTANT:



896 Tabor Street 420 W. Lincolnway Lakewood, CO 80401 Cheyenne, WY 82001 303.232.6200 (P) 303.233.3701 (F)

307.274.3830 (P) 303.233.3701 (F) www.catorruma.com



PROJECT:

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

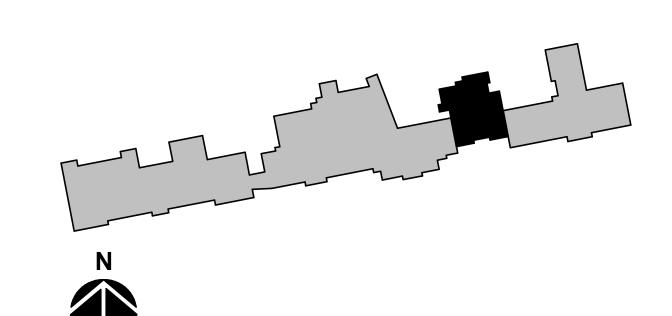
01.04.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION: 11738.001 PROJECT NO: DRAWN BY: APPROVED BY:

FIRST FLOOR POWER DEMOLITION PLAN

SHEET TITLE:

**ED-121** 



- L1 OCCUPANCY SENSORS AND TIMECLOCK SWITCHING SHALL BE PRICED AS ADD ALTERNATE #3.
- L2 IF ADD ALTERNATE #3 IS NOT SELECTED, CONTRACTOR SHALL PROVIDE LOCAL DIMMERS/SWITCHES AS SHOWN WITH A MINIMUM OF ONE CONTROL LOCATION PER SPACE.
- L3 FIXTURE TO REMAIN ON AS A SECURITY LIGHT. BYPASS LOCAL SWITCHES AND CONTACTORS.
- L4 AREA OUTSIDE OF PROJECT SCOPE. L5 SPECIALTY LIGHTING. REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS. PROVIDE A SEPARATE SWITCH AT A LOCATION DICTATED BY OWNER/ARCHITECT.
- L6 FIXTURE TO BE INSTALLED ABOVE CEILING. ADJUST PENDANT LENGTH SO FIXTURE IS JUST ABOVE OPEN GRATING.

hord | coplan | mach

1331 Nineteenth Street Denver, CO. 80202

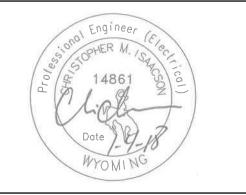
P 303.607.0977 www.hcm2.com

CONSULTANT:



896 Tabor Street 420 W. Lincolnway Lakewood, CO 80401 Cheyenne, WY 82001 303.232.6200 (P) 307.274.3830 (P) 303.233.3701 (F) 303.233.3701 (F)

www.catorruma.com



PROJECT:

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

01.04.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION: 11738.001 PROJECT NO: DRAWN BY:

SHEET TITLE: FIRST FLOOR

LIGHTING PLAN

CHECKED BY:

APPROVED BY:

- E1 RE-USE EXISTING RECEPTACLE BOX LOCATION TO TRANSITION TO NEW SURFACE RACEWAY.

  E2 LOW PROFILE SURFACE RACEWAY TO BE MOUNTED OVER FLOOR COVERING. SECURE PER MANUFACTURERS REQUIREMENTS. PROVIDE CONCEALED TRANSITIONS AT WALL. LEGRAND OFR SERIES OR EQUAL.
- E3 DEDICATED RECEPTACLE FOR PRINTER. COORDINATE ROUGH IN WITH CASEWORK AND EQUIPMENT CONNECTION POINT.
- E4 DEDICATED RECEPTACLE FOR FUTURE USE.
  E5 TIMBER POLE WITH WIRING CHANNEL. REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.
- E6 HORIZONTAL PLUGMOLD INSTALLED ALONG CASEWORK. PROVIDE DUPLEX RECEPTACLE AT EACH COMPUTER STATION. RACEWAY SHALL HAVE SEPARATE CHANNEL FOR DATA CABLING.
- E7 RECONNECT EXISTING CIRCUITS TO NEW PANELBOARD. REFER TO PANEL SCHEDULE FOR ADDITIONAL INFORMATION.

  E8 PROVIDE NEW K-RATED TRANSFORMER. INSTALL ON DOUBLE
- DEFLECTION NEOPRENE ISOLATORS.

  E9 PROVIDE DEVICE WITH INTEGRAL USB CHARGER. LEGRAND #TM8
- E10 PROVIDE FLOOR BOX FOR A/V CONNECTIONS. REFER TO TECHNOLOGY PLANS FOR DETAILS.
- E11 DOUBLE SIDED FLOOR BOX TO HAVE PLATES FOR DUPLEX RECEPTACLE ON FRONT AND SINGLE DATA JACK ON BACK.
- E12 PRICE EQUIPMENT AND CONNECTIONS WITH ADD ALTERNATE #1.
  E13 DEDICATED RECEPTACLE FOR MICROWAVE. COORDINATE ROUGH
- IN WITH CASEWORK AND EQUIPMENT CONNECTION POINT.

  E14 DEDICATED RECEPTACLE FOR VENDING MACHINE. COORDINATE ROUGH IN WITH CASEWORK AND EQUIPMENT CONNECTION POINT.
- E15 LINE VOLTAGE THERMOSTAT PROVIDED WITH EF-2. CONNECT IN PARALLEL WITH OTHER STAT NOTED TO ENERGIZE FAN WHEN ROOM TEMPERATURE EXCEEDS SET POINT. REFER TO MECHANICAL PLANS FOR FURTHER DETAILS.

# hord | coplan | mach

1331 Nineteenth Street

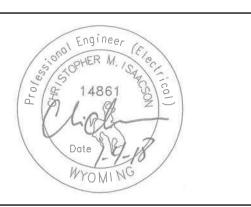
1331 Nineteenth Street P 303.607.0977 Denver, CO. 80202 P 309.607.0977

CONSULTANT:



896 Tabor Street 420 W. Lincolnway
Lakewood, C0 80401 Cheyenne, WY 82001
303.232.6200 (P) 307.274.3830 (P)
303.233.3701 (F) 303.233.3701 (F)

0 (P) 307.274.3830 (P) 1 (F) 303.233.3701 (F) www.catorruma.com



PROJECT:

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

01.04.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION:

PROJECT NO: 11738.001

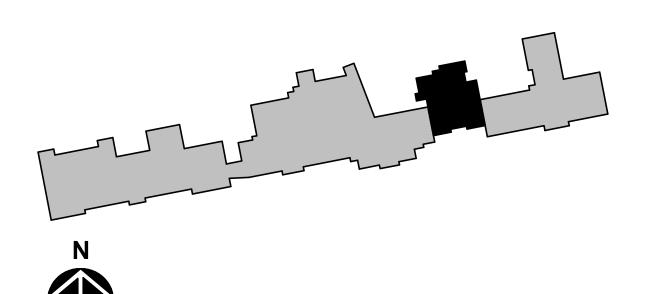
DRAWN BY: BJK

CHECKED BY: CMI

APPROVED BY: CMI

SHEET TITLE:

FIRST FLOOR POWER PLAN



- FA1 AREA IS UNDERSTOOD TO HAVE ADEQUATE VISUAL AND AUDIBLE COVERAGE AND IS OUTSIDE THE SCOPE OF THIS PROJECT. FA2 PROVIDE/EXTEND CIRCUITS FROM EXISTING FIRE CONTROL PANEL.
- FIELD VERIFY DISTANCES AND POSSIBLE ROUTING PRIOR TO SUBMITTING BID.
- FA3 EXISTING COMBINATION FIRE/SMOKE DAMPERS TO REMAIN. RECONNECT AND RECERTIFY AS REQUIRED.
- FA4 ANTICIPATED LOCATION OF FIRE ALARM CIRCUITS GOING BACK TO FACP. FIELD VERIFY PRIOR TO BID.

SMOKE DAMPERS.

FA5 PROVIDE SMOKE DETECTORS AS NEEDED FOR CONTROL OF FIRE



1331 Nineteenth Street

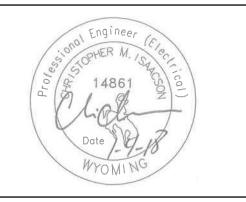
P 303.607.0977 www.hcm2.com Denver, CO. 80202

CONSULTANT:



896 Tabor Street 420 W. Lincolnway Lakewood, CO 80401 Cheyenne, WY 82001 303.232.6200 (P) 303.233.3701 (F)

307.274.3830 (P) 303.233.3701 (F) www.catorruma.com



PROJECT:

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

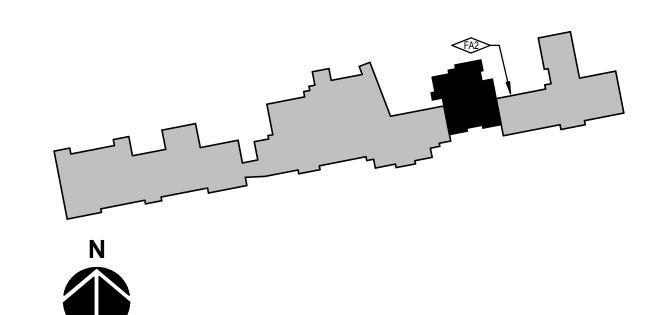
01.04.2018 CONTRACT DOCUMENTS

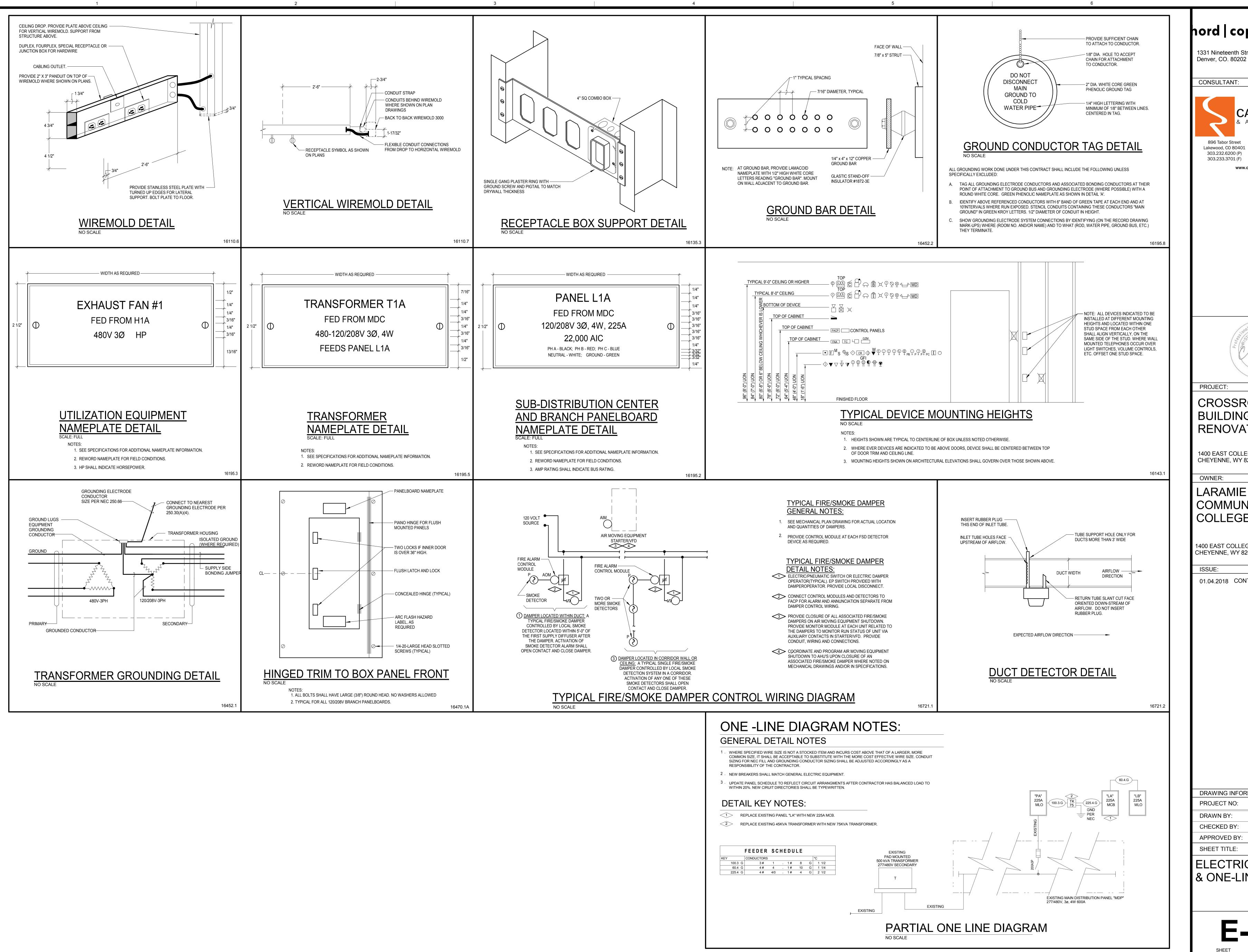
DRAWING INFORMATION: 11738.001 PROJECT NO: DRAWN BY: CHECKED BY:

FIRST FLOOR FIRE ALARM PLAN

APPROVED BY:

SHEET TITLE:





hord | coplan | mach

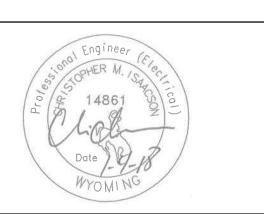
1331 Nineteenth Street

P 303.607.0977 www.hcm2.com



896 Tabor Street 420 W. Lincolnway Lakewood, CO 80401 303.232.6200 (P) 303.233.3701 (F) www.catorruma.com

Cheyenne, WY 82001 307.274.3830 (P) 303.233.3701 (F)



PROJECT:

CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE. WY 82007

OWNER:

LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

01.04.2018 CONTRACT DOCUMENTS

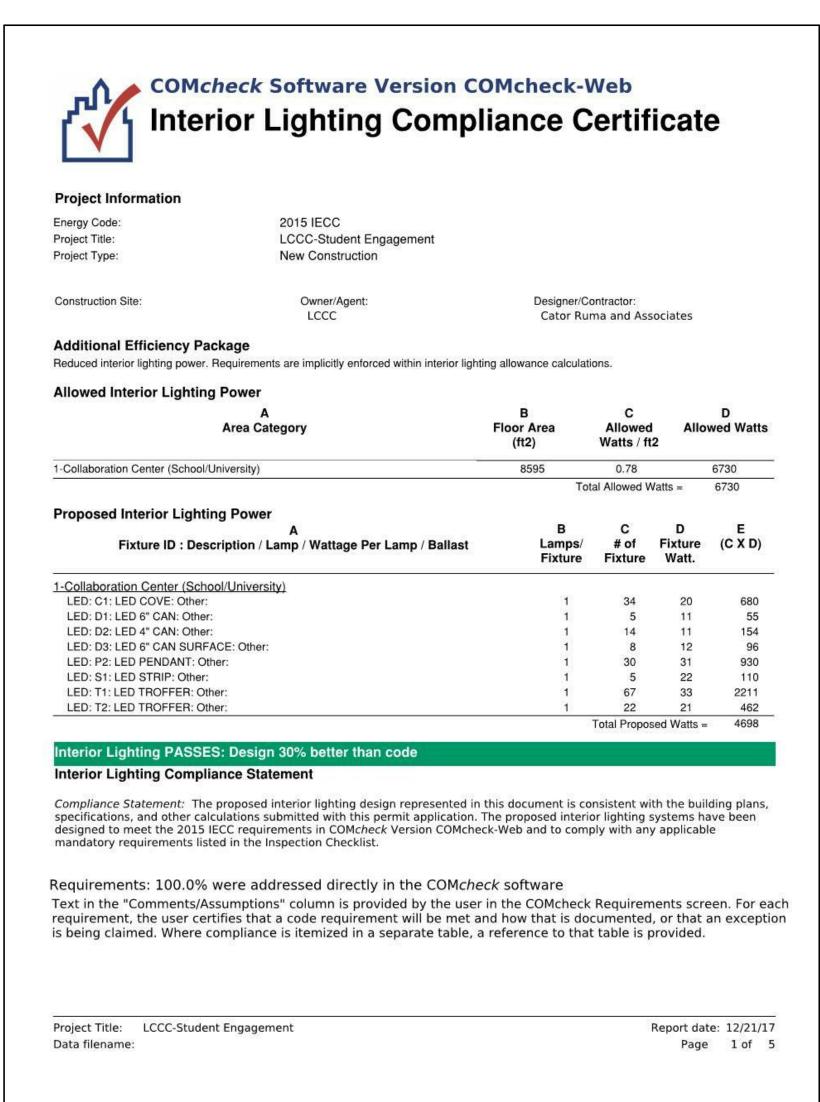
DRAWING INFORMATION: 11738.001

DRAWN BY: **CHECKED BY** APPROVED BY:

ELECTRICAL DETAILS & ONE-LINE DIAGRAM

		ОИ	NE	R EQ	UIPME	ENT SC	HEDU	LE						
A. F	B. Prior to work, verify exact location for each piece of equipment with Architect and/or owner.													
2. F	C NOTES: Connect equipment to emergency power Provide twist lock receptacle. Refer to pla Equipment furnished with integral discon	ans for con												
							Fe	eders			Protection			
											Disconnec		ļ Ī	
Key	Item	HP	FLA	Load	Eq Load (VA)	Voltage	Wire	Ground	Conduit	Breaker	t	Fuse	Notes	
1	TELE TERM BOARD (TTB)	0	12 A	0 VA	1440 VA	120V 1ph	2#10	#10G	3/4"	30 A			2	
2	RACK	0	0 A	2880 VA	2880 VA	120V 1ph	2#10	#10G	3/4"	30 A			2	
3	FIREPLACE	0	13 A	0 VA	1608 VA	120V 1ph	2#12	#12G	3/4"	20 A			3	

KEY	PRI FLA	SEC FLA	PRIMARY						SECON	DARY						GEC		DIMENSI	ONS		WEIGHT	BTUH	NOTE
	480 V	208 V	СВ	CONDUCTO	DRS			"C	СВ	CONDUCT	ORS				"C	CNDTRS	"C	HIGH	WIDE	DEEP		OTPT	
TK4-75	90.2	208.2	100 A 3 P	3#	3 ,	, 1 #	8 G	1-1/4	225 /	A3P 4#	4/0	, 1 #	4	G	2	1# 2	3/4	39.38	26.13	24.00	865	9696	
NOTES:	1.)	OVERCU	RRENT PROT	ECTION IS S	IZED PI	ER NE	2 450.3	5.		'						'							
	2.)	ALL CON	ONDUCTORS ARE COPPER. SEE PLANS FOR INCREASED CONDUCTOR SIZES DUE TO VOLTAGE DROP, ETC.																				
	3.)	SECONE	ARY BONDIN	G AND GROU	JNDING	COND	UCTO	RS ARE	SIZED PI	ER NEC 250.66 AM	ID 250	).102.											
	4.)	DIMENS	ONS, WEIGHT	S & BTUH O	UTPUT	SHOW	N ARE	FOR RE	EFERENC	E ONLY. ACTUA	L DIME	ENSION	S MA	Y VAF	RY FRO	M MANUFAC	TURER	TO MANU	JFACTUR	ER.			
	5.)	FOR K-R	ATED TRANSI	FORMERS, P	ROVIDE	E PARA	LLEL	NEUTRA	L CONDU	JCTORS LUGS A	TRAN	NSFORM	<b>IERS</b>	LOV	/ VOLT	AGE PANELE	OARD,	DISCONN	IECTS AN	ID/OR LO	AD.		
	6.)	CONDUI	T 40% FILL RA	TIO IS BASE	D ON E	MT.																	



**ENERGY CODE COMPLIANCE** 

# LUMINAIRE SCHEDULE

- A. Catalog number refers to first name listed under manufacturer per luminaire type. Remaining manufacturers listed are considered to be equivalent products for this project and shall meet all criteria listed including that called for by the specific luminaire catalog number. Catalog numbers do not necessarily represent complete catalog numbers. All items listed in the description shall be provided.
- Refer to lighting specifications for additional requirements. Provide unit pricing for all luminaires by type and submit with bid form.
- SPECIFIC NOTES:
- Verify exact mounting height with architect and provide appropriate suspension length. No equals will be considered. Contractor shall provide unit pricing for the quantity as shown on these plans.

			Annaront	Ballast						
Туре	Description	Lamp	Apparent Load	Voltage	Manufacturer	Catalog Series	Finish	Mounting	Recess	Note
C1	LINEAR COVE LIGHT; 4' ALUMINUM HOUSING; 2,200 LUMEN PACKAGE AT 110 LPW EFFICACY; 50,000 HR LIFE AT L70 DEPRECIATION; ELECTRONIC DRIVER; 0-10V DIMMING (TO 10% OUTPUT); UNIVERSAL INPUT; DAMP LOCATION LISTED; 5-YR WARRANTEE.	LED, 4000K, 85CRI	20 VA	277 V	SELF	CREST SERIES FP14 SERIES	SILVER	SURFACE MOUNT IN COVE	-	
D1	RECESSED DOWNLIGHT; 6" APERATURE STEEL HOUSING; SELF-FLANGED TRIM RING; 1,000 LUMEN PACKAGE AT 97 LPW EFFICACY; 50,000 HR LIFE AT L70 DEPRECIATION; LOW IRREDESCENT, SPECULAR REFLECTOR W/MEDIUM BEAM DISTRIBUTION; ELECTRONIC DRIVER; 0-10V DIMMING (TO 10% OUTPUT); UNIVERSAL INPUT; 26" C-CHANNEL BAR HANGERS; 5-YR WARRANTEE.	LED, 4000K, 80CRI	11 VA	277 V	PORTFOLIO CREE PRESCOLITE	LD6B SERIES S-DL6 SERIES LF6SL SERIES	WHITE TRIM RING	RECESSED IN GYP/ACT CEILING	0'-6"	
D2	RECESSED DOWNLIGHT; 4" APERATURE STEEL HOUSING; SELF-FLANGED TRIM RING; 1,000 LUMEN PACKAGE AT 97 LPW EFFICACY; 50,000 HR LIFE AT L70 DEPRECIATION; LOW IRREDESCENT, SPECULAR REFLECTOR W/MEDIUM BEAM DISTRIBUTION; ELECTRONIC DRIVER; 0-10V DIMMING (TO 10% OUTPUT); UNIVERSAL INPUT; 26" C-CHANNEL BAR HANGERS; 5-YR WARRANTEE.	LED, 4000K, 80CRI	11 VA	277 V	PORTFOLIO CREE PRESCOLITE	LD4B SERIES S-DL4 SERIES LF4SL SERIES	WHITE TRIM RING	RECESSED IN GYP/ACT CEILING	0'-4"	
D3	SURFACE DOWNLIGHT; ALUMINUM HOUSING WITH POLYCARBONATE LENS; 800 LUMEN PACKAGE AT 66 LPW EFFICACY; 50,000 HR LIFE AT L70 DEPRECIATION; ELECTRONIC DRIVER; 0-10v DIMMING (TO 10% OUTPUT); DAMP LOCATION LISTED; WET LOCATION LISTED; 5-YR WARRANTEE.	LED, 4000K, 80CRI	12 VA	277 V	HALO	SLD 600 SERIES	WHITE TRIM RING	SURFACE MOUNT	-	
ED	EXIT DISCHARGE LIGHT; WEATHERPROOF, REMOTE LAMP HEAD; GASKETED FOR OUTDOOR USE; THERMOPLASTIC MOUNTING PLATE; WET LOCATION RATED; POWERED BY 'X3'; 1-YR WARRANTEE.	LED INCLUDED	5 VA	7 V	CHLORIDE	CA-51400 SERIES	WHITE	WALL MOUNT +8'-0" A.F.F.	-	
P2	LINEAR PENDANT; EXTRUDED ALUMINUM HOUSING; 4,000 (2,000 DIRECT, 2,000 INDIRECT) LUMEN PACKAGE AT 129 LPW EFFICACY; 60,000 HR LIFE AT L80 DEPRECIATION; ELECTRONIC DRIVER, 0-10V DIMMING (TO 1% OUTPUT); UNIVERSAL INPUT; 5-YR WARRANTEE.	LED, 4000K, 80CRI	31 VA	277 V	LUMENWERX AXIS	VIA 4 SERIES BEAM 4 SERIES	WHITE	SOLID PENDANT MOUNT FROM STRUCTURE +8'-6" A.F.F.	-	1
S1	INDUSTRIAL STRIP; 4' STEEL HOUSING; 3,371 LUMEN PACKAGE AT 153 LPW EFFICACY; 170,000 HR LIFE AT L70 DEPRECIATION; ELECTRONIC DRIVER, UNIVERSAL INPUT; 0-10V DIMMING (TO 10% OUTPUT); DAMP LOCATION LISTED; 5-YR WARRANTEE.	LED, 4000K, 85CRI	22 VA	277 V	METALUX	SNLED SERIES	WHITE	SURFACE, PENDANT, OR CHAIN	-	
Т1	RECESSED TROFFER; 2'X2' STEEL HOUSING; CURVED FROSTED ACRYLIC DIFFUSER; 3,900 LUMEN PACKAGE AT 118 LPW EFFICACY; 50,000 HR LIFE AT L70 DEPRECIATION; ELECTRONIC DRIVER, UNIVERSAL INPUT; 0-10V DIMMING (TO 10% OUTPUT); DAMP LOCATION LISTED; 5-YR WARRANTEE.	LED, 4000K, 85CRI	33 VA	277 V	H.E. WILLIAMS	LT SERIES	WHITE	RECESSED IN GYP/ACT CEILING	0'-4"	2
Т2	RECESSED TROFFER; 2'X2' STEEL HOUSING; CURVED FROSTED ACRYLIC DIFFUSER; 2,700 LUMEN PACKAGE AT 129 LPW EFFICACY; 50,000 HR LIFE AT L70 DEPRECIATION; ELECTRONIC DRIVER, UNIVERSAL INPUT; 0-10V DIMMING (TO 10% OUTPUT); DAMP LOCATION LISTED; 5-YR WARRANTEE.	LED, 4000K, 85CRI	21 VA	277 V	H.E. WILLIAMS	LT SERIES	WHITE	RECESSED IN GYP/ACT CEILING	0'-4"	2
X1	EXIT SIGN; SINGLE FACE; SIX INCH LETTERS ON THERMOPLASTIC FACE; HIGH INTENSITY LED LIGHT SOURCE; SOLID STATE CHARGING CIRCUIT; SEALED NICKEL CADMIUM BATTERIES; ORIENT CHEVRONS TO COINCIDE WITH ARCHITECT'S EGRESS PLAN; 1-YR WARRANTEE.	LED INCLUDED	5 VA	277 V	SURE-LITES EMERGI-LITE DUAL-LITE	LPX SERIES PREMIER SERIES EVE SERIES	RED	CEILING OR WALL, +8'-0" A.F.F.,U.O.N.	-	
X2	EXIT SIGN; DOUBLE FACE; SIX INCH LETTERS ON THERMOPLASTIC FACE; HIGH INTENSITY LED LIGHT SOURCE; SOLID STATE CHARGING CIRCUIT; SEALED NICKEL CADMIUM BATTERIES; ORIENT CHEVRONS TO COINCIDE WITH ARCHITECT'S EGRESS PLAN; 1-YR WARRANTEE.	LED INCLUDED	5 VA	277 V	SURE-LITES EMERGI-LITE DUAL-LITE	LPX SERIES PREMIER SERIES EVE SERIES	RED	CEILING OR WALL, +8'-0" A.F.F.,U.O.N.	-	
Х3	EXIT SIGN; SINGLE FACE; SIX INCH LETTERS ON THERMOPLASTIC FACE; HIGH INTENSITY LED LIGHT SOURCE; SOLID STATE CHARGING CIRCUIT; SEALED, NICKEL CADMIUM BATTERIES; ORIENT CHEVRONS TO COINCIDE WITH ARCHITECT'S EGRESS PLAN; BATTERY CAPACITY FOR 90-MINUTE OPERATION OF REMOTE HEAD; 1-YR WARRANTEE.	LED INCLUDED	5 VA	277 V	SURE-LITES	LPXH SERIES	RED	CEILING OR WALL, +8'-0" A.F.F.,U.O.N.	-	

# LIGHTING CONTROL MATRIX

- Not all space names are listed for each lighting control type. Refer to plans for all spaces to be controlled. Spaces may contain multiple zones of control. Refer to plans for quantity of zones, switches, etc. Provide the quantity of sensors as required for full coverage of the space. Devices shown on plan are for design intent only and do not necessarily reflect the exact quantity required for full coverage.
- Where a single switch/dimmer is denoted with multiple switch legs, design intent is a single-gang device with multiple-mode control.

  All spaces with sensors shall be provided with manual 'off' means. All spaces with time schedule controls shall have means for manual 'on/off'.

# Utilize 'flick warning' prior to timed lighting shutoff.

- On / Off: M = Manual (switch), A = Automatic (sensor), T = Time schedule, P = Photocell, #% = Control to #% light level Dimming: 0-10V, ELV, DMX, DALI, 2L = Dual-level step-dim, 3L = Tri-level step-dim
- Sensor: C = Ceiling-mounted, W = Wall corner-mounted, S = Sensor integral to wall switch, PIR = PIR sensor, DT = Dual Technology sensor
- Daylight: INT = Interior dimming photocell, EXT = Central exterior photocell input, LUM = Photocell integral to luminaire(s) Emergency: ALCR = Provided automatic load control relays for luminaires on emergency circuit, provide test switch if not integral to relay

  Interface: N = Tie zone to central control network, RAS = Send sensor status to RAS. AV = Enable scene control through AV system (re: Sec. 26.09.23)

Interface:	N = Tie zone to central control network, BAS = Ser	nd sensor status to	BAS, AV = Enable	e scene control thro	ough AV system (re	: Sec. 26 09 23)	
Туре	Space	On	Off	Dimming	Sensor	Timing	Da
LC2	Office - Private	M	Δ	0-10\/	S PIR	10 min	

Туре	Space	On	Off	Dimming	Sensor	Timing	Daylight	Emergency	Interface	Notes
LC2	Office - Private	М	А	0-10V	S PIR	10 min				
LC3	Utility	М	M							
LC4	Meeting - Conference Room	Α	А	0-10V	C DT	20 min				
LC5	Circulation - Corridor	Т	Т			30 min				1
LC6	Workspace	Α	А	0-10V	C DT	30 min				
LC7	Utility - Small Storage	М	Α		S PIR	5 min				

# MECHANICAL EQUIPMENT SCHEDULE

- GENERAL NOTES: Prior to work, verify electrical requirements (voltage, amperage, recommended OCPD, conductors, and disconnect) for each piece of equipment.
- Prior to work, verify exact location for each piece of equipment. Coordinate and provide all field connections as required.
- Coordinate 120V power connections to dampers and other control circuits. Group equipment control circuits such that failure of one control circuit does not affect operation of other
- equipment. For example, do not connect a damper associated with one air handling unit to the same branch circuit as dampers associated with a different air handling unit. Feeders, breakers, disconnects, and fusing applies to field-installed and/or factory-installed equipment.
- SPECIFIC NOTES: Provide equipment with integral disconnect switch and fusing as indicated.

		1-1		5										
					,	,	'	Fe	eders			Protection		
	i '		1		1	Eq Load					Breake			
Key	#	Item	HP	FLA	Load	(VA)	Voltage	Wire	Ground	Conduit	ı r	Disconnect	Fuse	Notes
EF	2	EXHAUST FAN	0.25	0 A	0 VA	696 VA	120V 1ph	2#12	#12G	3/4"	20 A	S		
EWH	1	ELECTRIC WATER HEATER	0	0 A	20000 VA	20000 VA	480V 3ph	3#8	#10G	3/4"	35 A	60 A	35 A	
HWP	3	PUMP	0.5	0 A	0 VA	1123 VA	208V 1ph	2#12	#12G	3/4"	20 A	S		

# hord | coplan | mach

1331 Nineteenth Street

CONSULTANT:

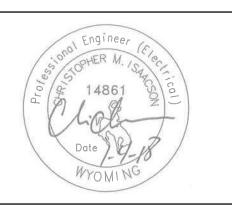
P 303.607.0977 www.hcm2.com

Denver, CO. 80202



896 Tabor Street 420 W. Lincolnway Lakewood, CO 80401 Cheyenne, WY 82001 303.232.6200 (P) 303.233.3701 (F)

307.274.3830 (P) 303.233.3701 (F) www.catorruma.com



PROJECT:

CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

01.04.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION: 11738.001 PROJECT NO: DRAWN BY: CHECKED BY:

SHEET TITLE: ELECTRICAL SCHEDULES

APPROVED BY:

		Panel I  Location: E  Supply From: T  Mounting: S  Enclosure: T	ELEC. 106 75 Surface					Voltage: Phase: Wire:	3	Wye			ĺ	Mains Ty <sub>l</sub> Bus Ratir	ng: 10,000 pe: MCB ng: 225 A ng: 225 A	
I. NEV 2. PRO	OVIDE	S: D ON EXISTING CIRCUIT I GFCI CIRCUIT BREAKER. EXISTING CIRCUIT BREA		NEW C	IDCI III	T DDEAK	ED									
	Circ	Load	Type	Trip			<u>4</u>		<u></u> В		С	Po	Trip	Туре	Load	Circ
AOLE	1	TELEPHONE	G	20 A	1		1260 VA		<u> </u>			1	20 A	R	REC- 104A,C,K	2
	3	REC-104J,105B	R	20 A	1	300 VA	1200 VA		1080 VA			1	20 A	R	REC-104F, 104G	4
	5	REC-105C,D	R	20 A	1			1440 VA	1000 VA		1080 VA		20 A	R	REC-105A	6
	7	REC-104E	R	20 A	1	720 VA	180 VA			1000 VA	1000 VA	1	20 A	R	REC-FUTURE USE	8
	9	REC-104E	R	20 A	1	720 VA	160 VA	1000 \/A	1440 VA			1	20 A	R	REC-104L,104M	10
								1080 VA	1440 VA		260 \/A	-			,	
	11	REC-104H	R	20 A	1	4000 \ / 4	540 \ /A			540 VA	360 VA	1	20 A	R	REC-103C WEST	12
	13	REC-COPIER 105C	R	20 A	1	1200 VA	540 VA	4000 \ / 4	4050 \ / 4			1	20 A	R	REC-112	14
	15	REC-COPIER 105C	R	20 A	1			1200 VA	1250 VA			1	20 A	R	REC- 110B,C	16
	17	REC-N. BOOKSTORE	R	20 A	1		1000			720 VA	900 VA	1	20 A	R	REC-110A	18
	19	REC-N. BOOKSTORE	R	20 A	1	720 VA	1080 VA					1	20 A	R	REC- CONF 104B	20
	21	REC-ADMISSIONS	R	20 A	1			1260 VA	1080 VA			1	20 A	R	R-COLLAB COMPUTER	22
	23	REC-RM 126 W/S WAL	R	20 A	1					720 VA	720 VA	1	20 A	R	REC-124-125	24
	25	ELECT. HAND DRYER	M	30 A	1	2400 VA	2400 VA					1	30 A	M	ELECT. HAND DRYER	26
	27	ELECT. HAND DRYER	M	30 A	1			2400 VA	2400 VA			1	30 A	М	ELECT. HAND DRYER	28
	29	ATM	G	20 A	1					1000 VA	1260 VA	1	20 A	R	REC-103,4,5	30
	31	ATM	G	20 A	1	1000 VA	1400 VA					1	20 A	R	REC-105,6,7	32
	33	R-COLLAB COMPUTER	R	20 A	1			1080 VA	336 VA			1	20 A	R	REC-PLG MOLD 110A	34
	35	REC-PWR POLE 103B	R	20 A	1					1440 VA	2400 VA	2	30 A	G	EQ - HOT WATER	36
	37					3130 VA	2400 VA					-	30 A	G	HEATER	38
	39	PANEL LB	R; M; L	60 A	3			2360 VA	1440 VA			1	20 A	R REC-CONFERENCE 10		40
	41	=								2160 VA	360 VA	1	20 A	R	REC-W WALL PHONE	42
	43	REC-103C SOUTH	R	20 A	1	720 VA	180 VA					1	20 A	R	REC-FUTURE USE	44
	45	REC-103A NORTH	R	20 A	1			900 VA	0 VA			1	20 A		SPARE	46
	47	REC-105D SOUTH	R	35 A	1					1440 VA	1608 VA	1	20 A	R	R-FIREPLACE	48
	49	REC-105D CLG	R	35 A	1	2880 VA	562 VA					_				50
	51	REC-CONFERENCE 109	R	20 A	1			1260 VA	562 VA			2	20 A	M	EQ-PUMP 1	52
	53	REC-PWR POLE 103B	R	20 A	1					720 VA	1440 VA	1	20 A	R	REC-MICROWAVE 117	54
	55	REC-COPIER 104K	R	20 A	1	540 VA	1440 VA					1	20 A	R	REC-MICROWAVE 117	56
	57	REC-VEND 117	R	20 A	1	0.10.17.1	1110 17		900 VA			1	20 A	R	REC-STUDY 110C	58
	59	REC-VEND 117	R	20 A	1			1000 171	000 171	1380 VA	780 VA	1	20 A	R	REC-CONF. 109	60
	61	REC-CONF. 109 FLOOR	R	20 A	1	1080 VA	0 VA			1000 770	700 77	1	20 A		SPARE	62
	63	REC-103 TV, 104B TV	R	20 A	1	1000 771	0 771	1000 VA	0 VA			1	20 A		SPARE	64
	65	REC- CONF 104B	R	20 A	1			1000 VA	UVA	900 \/A	696 VA	1	20 A	M	EQ-EF-2	66
	67	REC-109 TV,110A TV	R	20 A	1	1000 VA	0 VA			300 VA	555 VA	1	20 A		SPARE	68
	69	SPARE		20 A	1	1000 VA	JVA	0 VA	0 VA			1	20 A		SPARE	70
	71	SPARE		20 A	1			UVA	UVA	0 VA	0 VA	1	20 A		SPARE	70
	7.1	SFARE		Total I		2722	2 VA	2574	⊥ ŀ9 VA		)4 VA		20 A		SPARE	12
			Dh	Total A	-		0 A		7 A		8 A					
d '	T		Pn	ase Bal	ance:	_	% A-B		% B-C		% C-A				Danal Tatala	
_oad	•					Connect			d Factor		nd Load				Panel Totals	
	Lightin	<u> </u>					O VA		.00%		3 VA					
	Recep	racie					75 VA		51%		88 VA		T.,		1.11	
	Motor						9 VA		.91%		19 VA				cted Load: 76784 VA	
	Contin						VA		00%		VA		ı otal (	connecte	d Current: 213 A	
	Gener						O VA		.00%		0 VA					
	Kitche		0 VA 0.00% 0 VA <b>Total Demand Load:</b> 57269 VA													
	Existin	g					VA		00%		VA		Tota	al Deman	d Current: 159 A	
	Other					0 \	VA	0.0	0%	0 '	VA					
Gener	al Not	es:														
		BOARD.														

		Panel L	LEC. 106					•	120/208	Wye					<b>ng:</b> 10,000			
		Supply From: L Mounting: S Enclosure: T	urface					Phase: Wire:						Mains Typ Bus Ratir				
Circu	it Notes																	
Note	Circ	Load	Туре	Trip	Po		A	E	<u> </u>		C	Po	Trip	Туре		Load	Circ	No
	1	SPARE		20 A	1	0 VA	690 VA					1	20 A	L	LTS-LOE	BBY	2	
	3	SPARE		20 A	1			0 VA	500 VA			1	20 A	L	LTS-OVE	R SEAT AREA	4	
	5	SPARE		20 A	1					0 VA	200 VA	1	20 A	М	FAN CO	IL	6	
	7	LTS-OVER COUNTER	L	20 A	1	500 VA	500 VA					1	20 A	L	LTS-CEN	NTER AREA	8	
	9	LTS-E. OF BOOKSTORE	L	20 A	1			1000 VA	500 VA			1	20 A	L	LTS-FAN	ROOM	10	
	11	SPARE		20 A	1					0 VA	600 VA	1	20 A	М	EQ-EXH	AUST FAN	12	
	13	REC-PWR POLE STUD.S	R	20 A	1	360 VA	0 VA					1	20 A		SPARE		14	
	15	SPARE		20 A	1			0 VA	0 VA			1	20 A		SPARE		16	
	17	SPARE		20 A	2				0		1000 VA	1	20 A	L	LTS-REC	CEP. AREA	18	
	19	OI AILE		207		0 VA	360 VA					1	20 A	R	REC-N. I	RECEP. AREA	20	
	21	SPARE		20 A	1			0 VA	360 VA			1	20 A	R	REC-E. I	RECEP. AREA	22	
	23	SPARE		20 A	1					0 VA	360 VA	1	20 A	R		R POLE STUD.S		
	25	REC-PWR POLE STUD	R	20 A	1	360 VA	360 VA					1	20 A	R		'R POLE STUD.S		
	27	SPARE		20 A	1			0 VA	0 VA			1	20 A		SPARE		28	
	29	SPARE		20 A	1					0 VA	0 VA	1	20 A		SPARE		30	
				Total I			0 VA		O VA		0 VA							
				Total A	-		6 A	20			3 A							
			Ph	ase Bal	ance:		% A-B		% B-C		% C-A							
Load	Type						ted Load				d Load				Panel T	otals		
_ <u>L</u>	Lightin						0 VA		00%		3 VA							
R	Recept	tacle					0 VA	100.			0 VA							
M	Motor						) VA		75%		) VA				ted Load:			
С	Contin						VA		0%		VA		Total	Connecte	d Current:	21 A		
G	Genera						VA		0%		VA					2072.14		
K	Kitcher						VA		0%		VA				and Load:			
E	Existin	g					VA		0%		VA		Tota	ai Deman	d Current:	25 A		
0	Other					0	VA	0.0	0%	0	VA							

		Location: E Supply From: Mounting: S Enclosure: T	urface					Voltage: Phase: Wire:	3	Wye			,	A.I.C. Rating Mains Type Bus Rating	e: MLO			
1. NE\		<b>s:</b> D ON EXISTING CIRCUIT E EXISTING CIRCUIT BREAI			RCUI	T BREAK	ŒR.											
Note	Circ	Load	Туре	Trip	Ро		<u></u>		 3			Po	Trip	Туре		Load	Circ	Not
1010	1	SPARE		20 A	1	0 VA	1250 VA					1	20 A	L	LTS-WES	ST & 103C	2	1
	3	LTS -122-103	L	20 A	1				1427 VA			1	20 A	L	LTS-EAS		4	1
	5	SPARE		20 A	1						1320 VA		20 A	L	LTS-CEN		6	1
	7	LTS - BATH/STORE RM	L	20 A	1	2800 VA	2800 VA					1	20 A	L		LTG - TIME	8	
	9	LTS - BKSTORE RM 126	L	20 A	1			3200 VA	27332								10	
	11	LTS - BKSTORE RM 126	L	20 A	1					3600 VA	25749	3	100 A	R; G; M; L	PANEL L  XFMR	A VIA 75kVA	12	1
	13	SPARE		20 A	1	0 VA	23704					1			VI INIL		14	1
	15							5817 VA	0 VA								16	
	17	EQ- HVAC UNIT	M	50 A	3					5817 VA	0 VA	3	15 A		SPARE		18	
	19					5817 VA	0 VA										20	
	21							0 VA	6667 VA								22	
	23	SPARE		15 A	3					0 VA	6667 VA	3	35 A	M	EQ-EWH-1		24	2
	25					0 VA	6667 VA										26	
	27	SPACE						0 VA	0 VA						SPACE		28	_
	29	SPACE								0 VA	0 VA				SPACE		30	-
	31	SPACE				0 VA	0 VA								SPACE		32	-
	33	SPACE						0 VA	0 VA						SPACE		34	-
	35	SPACE								0 VA	0 VA				SPACE		36	-
	37	SPACE				0 VA	0 VA								SPACE		38	-
		SPACE						0 VA	0 VA						SPACE		40	-
	41	SPACE								0 VA	0 VA				SPACE		42	
				Total L			38 VA		2 VA		3 VA							
			_	Total A	-		55 A		5 A		6 A							
	T		Pi	nase Bala	ance:		% A-B		% B-C		% C-A				Daniel T	-4-1-		
	Type	α					ted Load 37 VA		d Factor 00%		d Load				Panel To	olais		
	Lightin						75 VA				34 VA							
	Recep Motor	lault					75 VA 70 VA		51% 07%		88 VA '0 VA		Tot	tal Connect	od Lood:	131022 \/^		
	Contin	HOUS					VA VA		07%		VA VA			Connected				
	Genera						0 VA		00%		VA D VA		i Ulai	Connected	Current.	IJ8 A		
	Kitche						VA VA		0%		VA VA		-	Total Dema	nd Load:	1212/11 \//		
	Existin						VA VA		0%	0 '				tal Demand				
	Other	9					VA VA		0%		vA VA		10	ai Demailu	Juli Elit.	170 /\		

LOAD REVISION SUMMARY										
DESCRIPTION	CONNECTED LOAD	NEC DEMAND	DEMAND KVA							
DEMOLISHED LIGHTS	11.2	125%	(14.0)							
DEMOLISHED RECEPTACLES	13.9	100%	(13.9)							
NEW LIGHTING	4.7	125%	5.9							
NEW RECEPTACLES	30.1	100%	30.1							
NEW MECHANICAL LOAD	21.1	100%	21.1							
LARGEST MOTOR	1.1	25%	0.3							
TOTAL CALCULATED KVA			29.5							
SERVICE VOLTAGE		480	V							
SERVICE CAPACITY		600	Α							
REVISED LOAD ON DISTRIBUTION			35 A							

# hord | coplan | mach

1331 Nineteenth Street Denver, CO. 80202

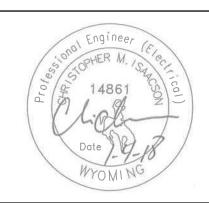
P 303.607.0977 www.hcm2.com

CONSULTANT:



420 W. Lincolnway Lakewood, CO 80401 303.232.6200 (P) 303.233.3701 (F) www.catorruma.com

Cheyenne, WY 82001 307.274.3830 (P) 303.233.3701 (F)



PROJECT:

# CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

# LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

01.04.2018 CONTRACT DOCUMENTS

DRAWING INFORMATION:	
PROJECT NO:	11738.001
DRAWN BY:	BJK
CHECKED BY:	СМ
APPROVED BV:	CM

ELECTRICAL PANEL SCHEDULES

SHEET TITLE:

							STRUCTURED CABLING LEGEND								
							BY CABLING CONTRACTOR			R	OUGH-IN	AND S	UPPORT	ΓBY EL	ECTRICAL CONTRACTOR
SYMBOL	DESCRIPTION	DETAIL	MOUNTING HEIGHT ABOVE FINISHED FLOOR, UNLESS NOTED OTHERWISE ON PLANS	# OF UTP CABLES	# OF UTP JACKS	# OF FACEPLATE OPENINGS	NOTES	PROVIDE 1-GANG BACKBOX	PROVIDE 2-GANG BACKBOX	PROVIDE 3-GANG BACKBOX	PROVIDE 1-GANG PLASTER RING	PROVIDE 2-GANG PLASTER RING	PROVIDE 3-GANG PLASTER RING	PROVIDE CONDUIT	NOTES
WALL MOUNTED DEVICES		<u> </u>	1												
•	DATA OUTLET - TYPICAL	1/T-810	+18"	(2)	(2)	(4)	# NEXT TO SYMBOL INDICATES QUANTITY OF CABLES OTHER THAN TYPICAL.							(1) 1"	PROVIDE CONDUIT FROM BOX UP INTO CLOSEST ACCESSIBLE CEILING SPACE AND CAP WITH NYLON BUSHING. PROVIDE PULL STRING.
<b>▲</b> AC	DATA OUTLET ABOVE COUNTER	1/T-810	ABOVE COUNTER	(2)	(2)	(4)	# NEXT TO SYMBOL INDICATES QUANTITY OF CABLES OTHER THAN TYPICAL.							(1) 1"	PROVIDE CONDUIT FROM BOX UP INTO CLOSEST ACCESSIBLE CEILING SPACE AND CAP WITH NYLON BUSHING. PROVIDE PULL STRING.
■™	TELEVISION OUTLET	2/T-810	+65"	(1) COAX, (1) UTP	(1) COAX, (1) UTP	(4)			4		1			(1) 1"	PROVIDE CONDUIT FROM BOX UP INTO CLOSEST ACCESSIBLE CEILING SPACE AND CAP WITH NYLON BUSHING. PROVIDE PULL STRING.
<b>■</b> PP	DATA OUTLET POWER POLE			(2)	(2)	(4)	MOUNT DATA OUTLETS IN POWER POLE. # NEXT TO SYMBOL INDICATES QUANTITY OF CABLES OTHER THAN TYPICAL.		1		1			(1) 1"	PROVIDE CONDUIT FROM BOX UP INTO CLOSEST ACCESSIBLE CEILING SPACE AND CAP WITH NYLON BUSHING. PROVIDE PULL STRING.
⋖w	WALL PHONE OUTLET	3/T-810	+46"	(1)	(1)	(1)			4		4			(1) 1"	LEAVE 6" CLEARANCE ON WALL FROM CENTER OF FINISHED BACKBOX. PROVIDE CONDUIT FROM BOX UP INTO CLOSEST ACCESSIBLE CEILING SPACE AND CAP WITH NYLON BUSHING. PROVIDE PULL STRING.
₩M	WIRELESS ACCESS POINT OUTLET WALL MOUNTED		AS NOTED ON PLANS	(2)	(2)	(4)	PROVIDE TYPICAL FACEPLATE FOR ACCESS POINT.		4		4			(1) 1"	PROVIDE CONDUIT FROM BOX UP INTO CLOSEST ACCESSIBLE CEILING SPACE AND CAP WITH NYLON BUSHING. PROVIDE PULL STRING.
—BP	AV BUTTON PANEL CONTROLLER		AS NOTED ON PLANS	(1)	(1)	(1)	PROVIDE SURFACE MOUNT "BISCUIT" JACK IN BOX.								REFER TO THE AUDIO VISUAL LEGEND FOR ROUGH-IN REQUIREMENTS.
UNDERFLOOR / IN FLOOR DE	EVICES	-													
	DATA/POWER FLOOR BOX WITH OUTLETS		IN FLOOR	(2)	(2)	(4)	PROVIDE OUTLET IN DATA SECTION OF FLOOR BOX. # NEXT TO SYMBOL INDICATES QUANTITY OF CABLES OTHER THAN TYPICAL.								PROVIDE FLOOR BOX DEVICE AND CONDUIT TO ACCESSIBLE CEILING OF THE ROOM IT SERVES PER THE DETAIL.
AV	AV/DATA/POWER FLOOR BOX WITH OUTLETS		IN FLOOR	(2)	(2)	(4)	PROVIDE OUTLET IN DATA SECTION OF FLOOR BOX. # NEXT TO SYMBOL INDICATES QUANTITY OF CABLES OTHER THAN TYPICAL.								PROVIDE FLOOR BOX DEVICE AND CONDUIT TO ACCESSIBLE CEILING OF THE ROOM IT SERVES PER THE DETAIL.
0	CONDUIT PENETRATING SLAB	4/T-810	IN FLOOR				ROUTE CABLING NEATLY THROUGH CORE. PROVIDE TEMP FIRESTOPPING DURING CONSTRUCTION AND FINAL FIRESTOPPING AFTER ALL CABLING IS PULLED.							4" U.N.O.	PROVIDE FLOOR CORE AND CONDUIT PER DRAWINGS AND CONDUIT RISER DIAGRAM. PROVIDE INNERDUCT PER NOTES BELOW.
CEILING/ABOVE CEILING MO	UNTED DEVICES														
	DATA OUTLET ABOVE CEILING	7/T-810	ABOVE CELING	(1)	(1)	(1)	PROVIDE SURFACE MOUNT "BISCUIT" JACKS ABOVE ACCESSIBLE CEILING. "CAM" INDICATES THE OUTLET IS FOR A SECURITY CAMERA.								
<b>*</b>	WIRELESS ACCESS POINT OUTLET	8/T-810	ABOVE ACCESSIBLE CEILING	(2)	(2)	(2)	PROVIDE SURFACE MOUNT "BISCUIT" JACKS ABOVE ACCESSIBLE CEILING.								
	HORIZONTAL CONDUIT SLEEVE FOR CABLE ROUTING	5/T-810	ABOVE CEILING											4	PROVIDE QUANTITY AND SIZE AS SHOWN ON PLANS. CONDUITS SHALL NOT PROJECT MORE THAN 3" BEYOND WALL. PROVIDE NYLON BUSHINGS ON EACH END. INSTALL AS LOW AS POSSIBLE ABOVE ACCESSIBLE CEILING TILE FOR EASY ACCESS TO EACH END.
	CABLE SUPPORT PATHWAY	10/T-810	ABOVE ACCESSIBLE CEILING				PROVIDE J-HOOKS AS NECESSARY FOR PROPER ROUTING OF CABLES FROM EACH DEVICE TO THE MAIN RUNS.								

				AUDIO VISUAL LEGEND								
				BY AUDIO VISUAL CONTRACTOR			R	DUGH-IN	AND SU	JPPORT	BY ELE	CTRICAL CONTRACTOR
SYMBOL	DESCRIPTION	DETAIL	MOUNTING HEIGHT ABOVE FINISHED FLOOR, UNLESS NOTED OTHERWISE ON PLANS	NOTES	PROVIDE 1-GANG BACKBOX	PROVIDE 2-GANG BACKBOX	PROVIDE 3-GANG BACKBOX	PROVIDE 1-GANG PLASTER RING	PROVIDE 2-GANG PLASTER RING	PROVIDE 3-GANG PLASTER RING	PROVIDE CONDUIT	NOTES
WALL MOUNTED DEVICES	<u> </u>				•							
—[AV] <sup>1</sup>	2-GANG AUDIO VISUAL ROUGH-IN BOX		AS NOTED ON PLANS	PROVIDE FACEPLATE, CABLING AND INSTALLATION PER WIRING DIAGRAMS AND DESCRIPTIONS ON DRAWINGS.							(1) 1-1/4"	PROVIDE CONDUIT FROM BOX UP INTO CLOSEST ACCESSIBLE CEILING SPACE AND CAP WITH NYLON BUSHING. PROVIDE PULL STRING.
—[AV] <sup>2</sup>	2-GANG AUDIO VISUAL ROUGH-IN BOX		AS NOTED ON PLANS	PROVIDE FACEPLATE, CABLING AND INSTALLATION PER WIRING DIAGRAMS AND DESCRIPTIONS ON DRAWINGS.					4		(1) 1-1/4"	PROVIDE CONDUIT FROM BOX UP INTO CLOSEST ACCESSIBLE CEILING SPACE AND CAP WITH NYLON BUSHING. PROVIDE PULL STRING.
—[AV] <sup>3</sup>	3-GANG AUDIO VISUAL ROUGH-IN BOX		AS NOTED ON PLANS	PROVIDE FACEPLATE, CABLING AND INSTALLATION PER WIRING DIAGRAMS AND DESCRIPTIONS ON DRAWINGS.						1	(2) 1-1/4"	PROVIDE CONDUIT FROM BOX UP INTO CLOSEST ACCESSIBLE CEILING SPACE AND CAP WITH NYLON BUSHING. PROVIDE PULL STRING.
—BP <sup>1</sup>	AV BUTTON PANEL CONTROLLER (1-GANG)		AS NOTED ON PLANS	PROVIDE SURFACE MOUNT "BISCUIT" JACK IN BOX.		1		4			(2) 1"	PROVIDE CONDUIT FROM BOX UP INTO CLOSEST ACCESSIBLE CEILING SPACE AND CAP WITH NYLON BUSHING. PROVIDE PULL STRING.
—BP <sup>2</sup>	AV BUTTON PANEL CONTROLLER (2-GANG)		AS NOTED ON PLANS	PROVIDE SURFACE MOUNT "BISCUIT" JACK IN BOX.		1			4		(2) 1"	PROVIDE CONDUIT FROM BOX UP INTO CLOSEST ACCESSIBLE CEILING SPACE AND CAP WITH NYLON BUSHING. PROVIDE PULL STRING.
# <u>"D</u> +#"	WALL MOUNTED FLAT PANEL DISPLAY. #"D = DISPLAY SIZE. +#" = MOUNTING HEIGHT TO CENTER OF DISPLAY.	1/T-830	+#" AS INDICATED WITH SYMBOL	PROVIDE DISPLAY, MOUNT AND INSTALLATION.								PROVIDE ROUGH-IN FOR AV, DATA AND POWER AS SHOWN ON DRAWING AND DETAIL. PROVIDE WALL BACKING.
UNDERFLOOR / IN FLOOR DE	VICES				<u>.</u>							
<b>▲</b> AV	AV/DATA/POWER FLOOR BOX WITH OUTLETS		IN FLOOR	PROVIDE FACEPLATES, CABLING AND TERMINATIONS FOR AV IN FLOOR BOX.							(1) 1-1/2"	PROVIDE FLOOR BOX DEVICE AND CONDUIT PER THE DETAIL. CONDUIT SHALL RUN TO CLOSEST ACCESSIBLE CEILING SPACE AND CAP WITH NYLON BUSHING.

# **ABBREVIATIONS**

A.F.F. - ABOVE FINISHED FLOOR
U.N.O. - UNLESS NOTED OTHERWISE
AC - ABOVE COUNTER
CLG - ABOVE CEILING
OFOI - OWNER FURNISHED, OWNER INSTALLED
OFCI - OWNER FURNISHED, CONTRACTOR INSTALLED CFCI - CONTRACTOR FURNISHED, CONTRACTOR INSTALLED

# hord | coplan | macht

1331 Nineteenth Street Denver, CO. 80202

P 303.607.0977 www.hcm2.com

CONSULTANT:

LOW VOLTAGE/ IT EDI LTD. 8821 E. Hampden Ave, Suite 212 Denver, CO 80231 (888)334-5831

PROJECT:

CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

12.22.2017 CONTRACT DOCUMENTS

DRAWING INFORMATION:

11738.001 PROJECT NO:

DRAWN BY: SMA ADP

CHECKED BY:

APPROVED BY: SHEET TITLE:

TECHNOLOGY SYSTEMS LEGEND

T-010

PROJECT:

CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE: 12.22.2017 CONTRACT DOCUMENTS

**KEYED NOTES:** 

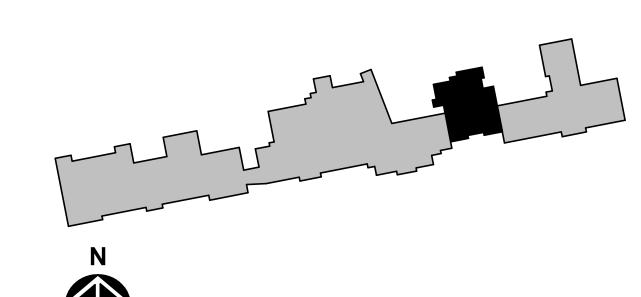
**GENERAL NOTES:** 

RELOCATE AND REUSE EXISTING DIGITAL SIGNAGE DISPLAYS IN NEW SPACE CONFOGURATION.

1. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

2. ROUTE ALL CABLING TO IDF RACK IN STORAGE 105C.

- 2 PROVIDE (2) 4" CONDUIT SLEEVES ABOVE CEILING.
- PROVIDE (2) 4" CONDUITS ABOVE HARD-LID TO ACCESSIBLE CEILING.
- PROVIDE (2) 2" CONDUIT SLEEVES ABOVE CEILING. LEAVE (1) EMPTY FOR FUTURE.
- REFER TO ELECTRICAL DRAWING SERIES FOR ADDITIONAL INFORMATION AND REQUIREMENTS FOR POWER POLE.
- REFER TO ELECTRICAL DRAWING SERIES FOR ADDITIONAL INFORMATION AND REQUIREMENTS FOR LOW PROFILE SURFACE RACEWAY AND FLOORBOX.
- DATA OUTLET MOUNTED ABOVE ACCESSIBLE CEILING FOR SECURITY CAMERA TO BE LOCATED IN HARD LID CEILING. PROVIDE (1) 1" CONDUIT PATHWAY FROM ACCESSIBLE CEILING TO 2-GANG BOX LOCATED IN HARD LID CEILING. COORDINATE FINAL CAMERA LOCATION WITH OWNER.



DRAWING INFORMATION: 11738.001 PROJECT NO: DRAWN BY:

APPROVED BY: SHEET TITLE:

TECHNOLOGY SYSTEMS FLOOR PLAN

T-101

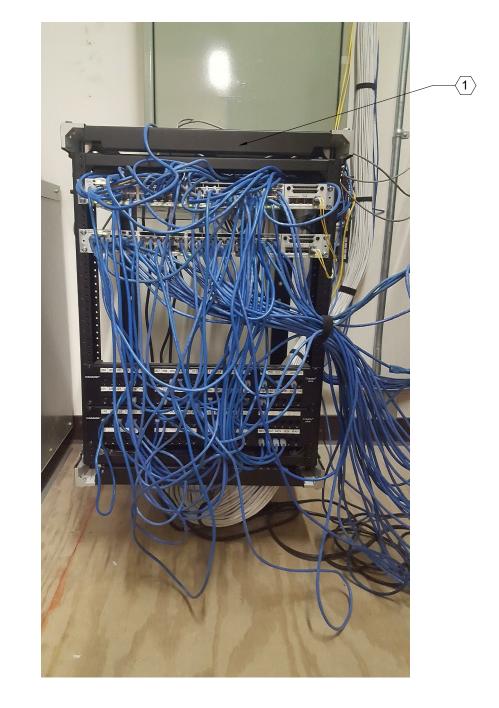
6 NEW IDF RACK ELEVATION - STORAGE 105C





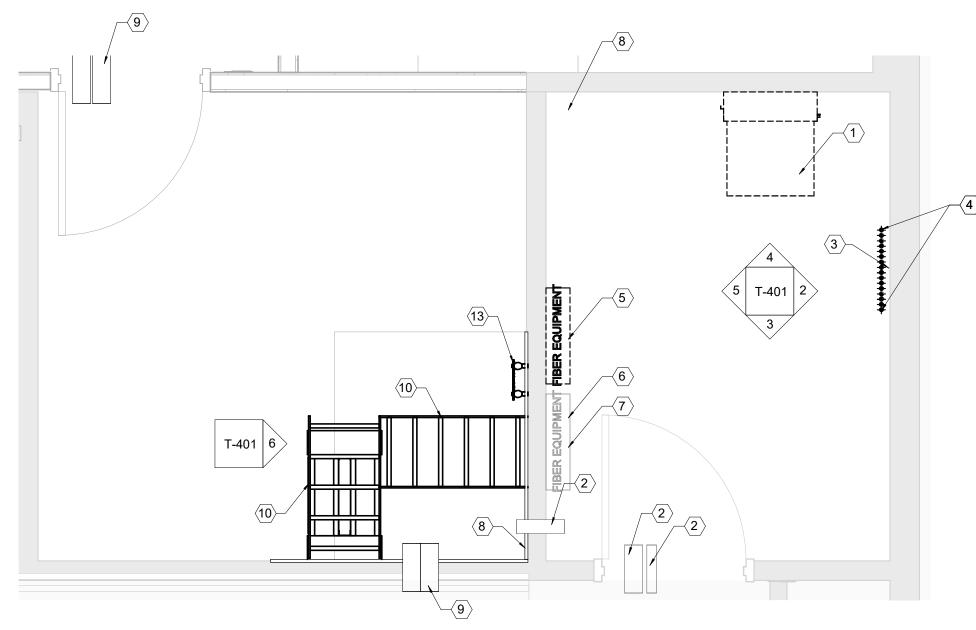
5 EXISTING IDF - WEST WALL

1/2" = 1'-0"



EXISTING IDF - NORTH WALL RACK

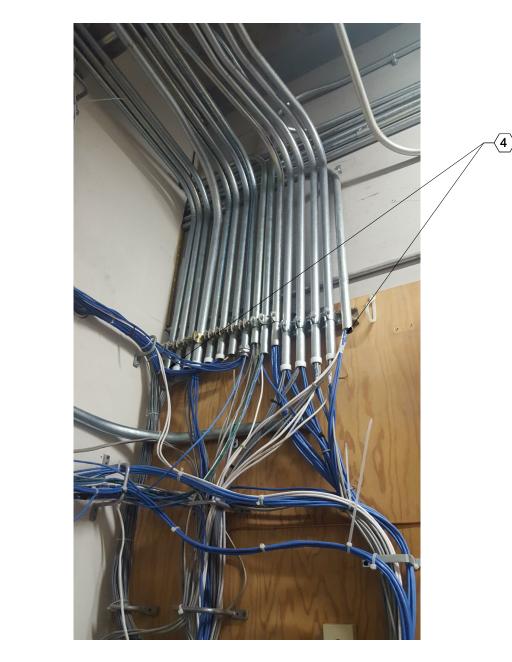
1/2" = 1'-0"



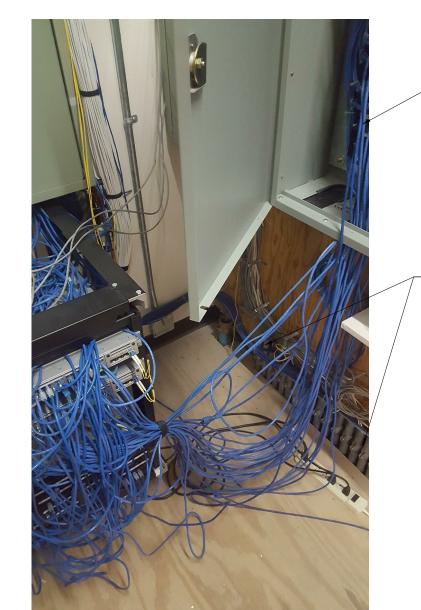
1 IDF ENLARGED FLOOR PLAN

1/2" = 1'-0"



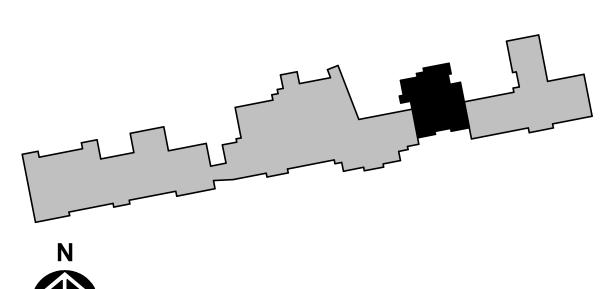






EXISTING IDF - EAST WALL

1/2" = 1'-0"



hord | coplan | macht

P 303.607.0977 www.hcm2.com 1331 Nineteenth Street Denver, CO. 80202

LOW VOLTAGE/ IT EDI LTD. 8821 E. Hampden Ave, Suite 212 Denver, CO 80231 (888)334-5831

PROJECT: CROSSROADS BUILDING RENOVATION

> 1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

LARAMIE COUNTY COMMUNITY COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

12.22.2017 CONTRACT DOCUMENTS

11738.001 PROJECT NO: DRAWN BY: CHECKED BY: APPROVED BY: SHEET TITLE: ENLARGED IDF

DRAWING INFORMATION:

FLOOR PLAN

# **GENERAL NOTES:**

1. PROVIDE 3/4" FIRE RATED PLYWOOD AS SHOWN ON DRAWINGS. MOUNT THE 8' FLYWOOD SHEET AT 6" ABOVE FINISHED FLOOR TO ALLOW FOR BASE COVERING. PAINT PLYWOOD AND WALLS ABOVE PLYWOOD WHITE. DO NOT PAINT OVER THE FIRE RATING STAMP ON THE PLYWOOD SHEETS.

# **KEYED NOTES:**

EXISTING RACK LOCATION. REMOVE EXISTING CABLES FROM EXISTING PATCH PANELS. EXISTING WHITE COLORED CABLING SHALL BE PULLED BACK AND RETERMINATED IN NEW RACK LOCATED IN STORAGE 105C ON RELOCATED PATCH PANELS. EXISTING BLUE COLORED CABLING IS ASSUMED TO BE RENOVATION. REFER TO KEYED NOTES ON THIS SHEET FOR MORE INFORMATION. PROVIDE TESTING AND RELABELING AS NECESSARY. RELOCATE EXISTING FIBER JUMPER
CONNECTIONS TO THE NEW ROOM. OWNER TO RELOCATE
EXISTING NETWORK SWITCHES TO NEW RACK LOCATION.

 $\langle 2 \rangle$  EXISTING CONDUIT SLEEVE. (3) EXISTING BLUE COLORED CABLING SHOWN IN DETAIL 2, EAST WALL PHOTOS TO BE REMOVED DURING RENOVATION. CABLING SHOWN IN WALL MOUNTED ENCLOSURE WITH PATCH PANELS AND PUNCH BLOCKS IS TO BE DEMOLISHED DURING RENOVATION. ENCLOSURE AND EQUIPMENT TO BE

ABANDONED. 4 EXISTING FLOOR AND CEILING CONDUITS SHOWN IN DETAIL 2, EAST WALL PHOTOS TO BE ABANDONED ONCE ALL CABLING HAS BEEN REMOVED OR RELOCATED TO NEW IDF RACK LOCATED IN STORAGE 105C. (5) EXISTING WALL MOUNTED FIBER EQUIPMENT. RELOCATE FIBER TO NEW 1RU FIBER OPTIC PATCH PANEL IN NEW IDF RACK LOCATED IN STORAGE 105C. RETERMINATE AND PROVIDE

FIBER JUMPER CONNECTIONS AS NECESSARY TO WALL

MOUNTED FIBER EQUIPMENT TO REMAIN IN ELEC ROOM. 6 EXISTING WALL MOUNTED FIBER EQUIPMENT TO REMAIN.

T EXISTING WALL MOUNTED FIBER EQUIPMENT FOR BAS EQUIPMENT TO REMAIN.

8 EXISTING COAX COILED IN CORNER OF ELEC ROOM SHALL BE PULLED BACK AND RELOCATED TO STORAGE 105C FOR CATV

9 PROVIDE (2) NEW 4" CONDUIT SLEEVES FOR CABLING ENTERING ROOM.

10 18" WIDE LADDER TRAY MOUNTED HORIZONTALLY AT 7'-6" A.F.F.

11 19" X 7' NEW 2-POST EQUIPMENT RACK. SECURE TO FLOOR.  $\langle 12 \rangle$  6" X 7' FRONT AND REAR VERTICAL CABLE MANAGEMENT UNIT.

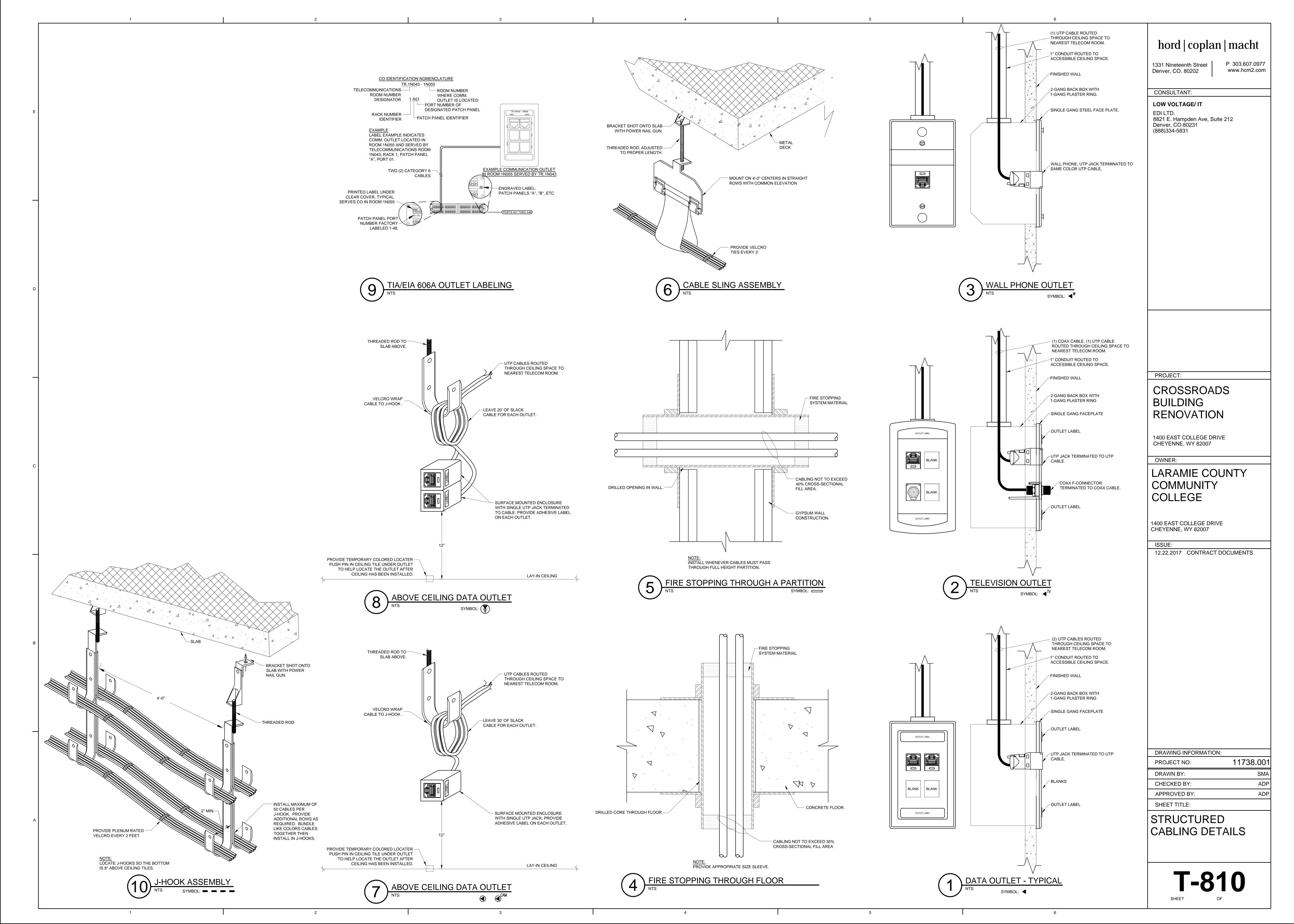
GROUNDING BUSBAR MOUNTED AT 7' A.F.F.

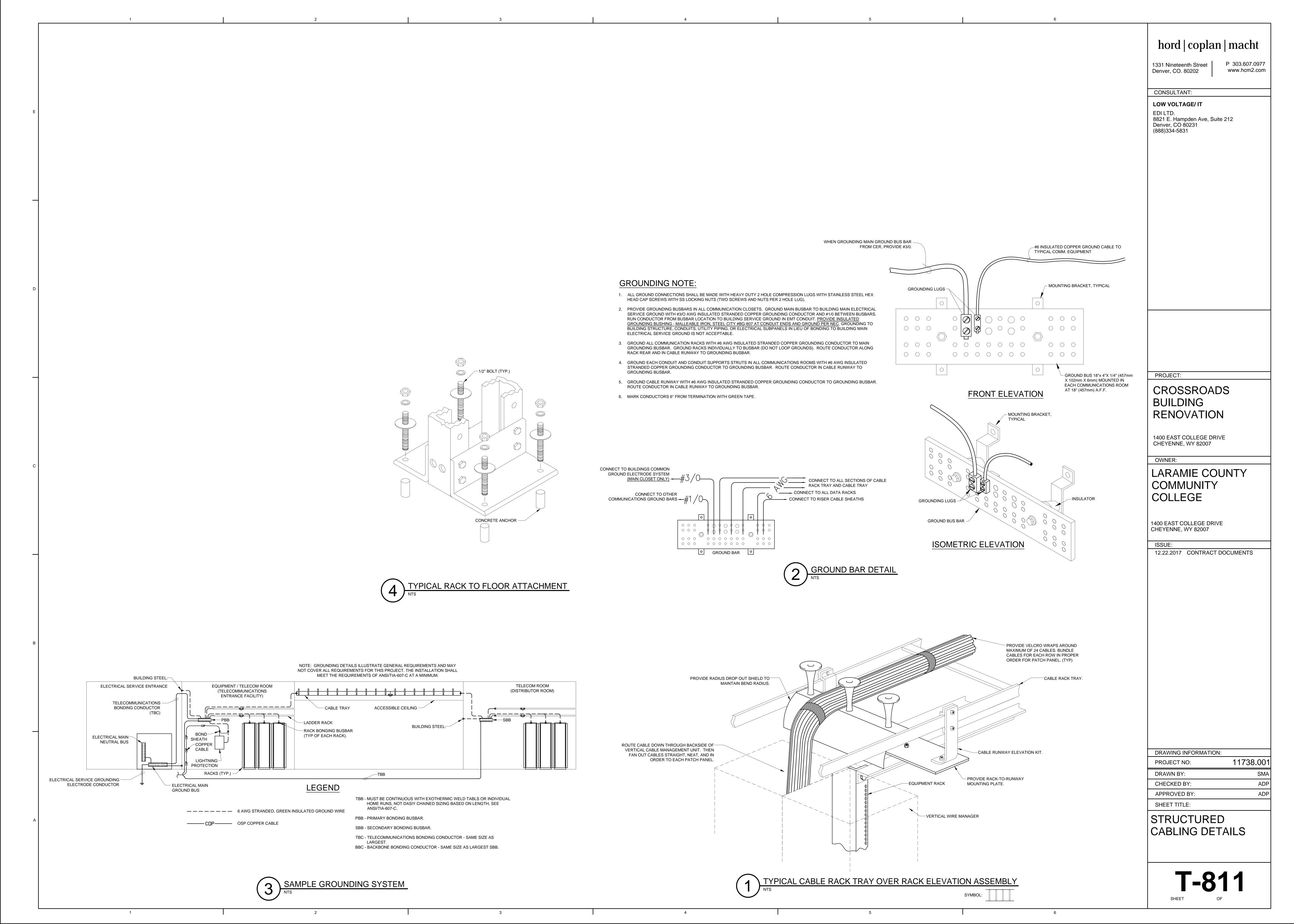
(14) 2RU HORIZONTAL CABLE MANAGEMENT UNIT.

15 NETWORK SWITCH. PROVIDED BY OWNER.

2RU 48 PORT FLAT PATCH PANEL FOR DATA CABLE TERMINATION. 17) 1RU HORIZONTAL OUTLET PLUGGING STRIP. MOUNT IN RACK SO PLUGS FACE REAR OF RACK.

(18) 2RU UPS. PROVIDED BY OWNER. 19 1RU FIBER OPTIC PATCH PANEL. 3 EXISTING IDF - SOUTH WALL





# hord | coplan | macht P 303.607.0977 1331 Nineteenth Street Denver, CO. 80202 www.hcm2.com CONSULTANT: LOW VOLTAGE/ IT EDI LTD. 8821 E. Hampden Ave, Suite 212 Denver, CO 80231 (888)334-5831 PROJECT: CROSSROADS BUILDING RENOVATION 1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007 OWNER: LARAMIE COUNTY COMMUNITY COLLEGE 1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007 ISSUE: 12.22.2017 CONTRACT DOCUMENTS LV POWER AND SIGNAL CABLES (BY AV CONTRACTOR) CONDUITS ROUTED TO ABOVE ACCESSIBLE CEILING OR AS INDICATED ON PLANS \_\_ BACK BOX. PROVIDE BLOCKING IN WALL TO SUPPORT 250 LBS ACROSS ENTIRE SPACING RANGE ELECTRICAL OUTLET — DATA OUTLET DRAWING INFORMATION: 11738.001 PROJECT NO: DRAWN BY: SMA 6.00 ADP CHECKED BY: APPROVED BY: SHEET TITLE: AUDIO-VISUAL DISTANCE AFF TO CENTERLINE AS SHOWN ON DRAWINGS \_ DISTANCE TO CENTERLINE AS SHOWN ON DRAWINGS DETAILS SIDE SECTION FLAT PANEL DISPLAY ASSEMBLY NTS SYMBOL: #"D #"AEE **T-830**

ROOM NAME	ROOM NUMBER	FLOOR PLAN	SCHEMATIC DIAGRAM	ROOM TYPE
COLLABORATION - EAST WALL	103C	1/T-101	1/T-851	TYPICAL RELOCATED DIGITAL SIGNAGE LOCATION
COLLABORATION - WEST WALL	103C	1/T-101	1/T-851	TYPICAL RELOCATED DIGITAL SIGNAGE LOCATION
CONF ROOM	109	1/T-101	2/T-851	CONFERENCE ROOM 109
STUDENT VETERANS LOUNGE	110A	1/T-101	3/T-851	STUDENT VETERANS LOUNGE
CONFERENCE ROOM	104B	1/T-101	4/T-852	CONFERENCE ROOM 104B
COLLABORATION	103	1/T-101	5/T-852	AV COLLABORATION

CABLE SCHEDULE							
CABLE	DESCRIPTION	MANUFACTURER	MODEL OR SERIES				
HDMI	PRE-TERMINATED HDMI HIGH SPEED CABLE FOR PATCHING	CRESTRON	AS REQUIRED BY PATCHING DISTANCE				
VGA-A	PRE-TERMINATED VGA CABLE WITH STEREO AUDIO	EXTRON	VGA-A M-M MD SERIES				
RGBHV	MINI HIGH RESOLUTION MULIT-CORE CABLE FOR RGBHV	EXTRON	MHR-5				
VID	SINGLE CORE COAXIAL CABLE FOR COMPOSITE VIDEO	SHEERWIRE	SVCC59R/SVCC59P				
AUDIO	CABLE FOR BALANCED AND UNBALANCED AUDIO CONNECTIONS	WEST PENN	77291/D25291				
AUDIO#	MULTI-PAIR CABLE FOR BALANCED AUDIO CONNECTIONS. # = NUMBER OF INDIVIDUALLY SHIELDED PAIRS	WEST PENN	D43-SERIES / D2543-SERIES				
SPEAKER	SPEAKER CABLE FOR CONSTANT VOLTAGE (70V, 25V) DISTRIBUTED SPEAKERS SYSTEMS	WEST PENN	224/5224B				
CAT5E/6/6A	CATEGORY 5E, 6 OR 6A RATED CABLE	MATCH STRUCTURED CABLING PATCH CABLE SPEC WHEN USED FOR DATA. BY CRESTRON WHEN USED FOR DIGITAL SIGNAL TRANSMISSION					
CAT5E/6-S	CATEGORY 5E OR 6 RATED CABLE, SHIELDED	CRESTRON					
CTL1	CONTROL CABLE FOR CRESNET AND RELAY CONNECTIONS	CRESTRON	CRESNET SERIES				
RS232	RS232 SERIAL CONTROL CABLE	WEST PENN	232 / 25232B				
LV PWR PWR	LV POWER CABLE POWER CABLE	- AS PROVIDED BY OF EQUIPMENT MANUF					
AUDIO-E	CABLE FOR EXPOSED AUDIO CABLE CONNECTIONS	CANARE	L-4E6S				
DM8G	CRESTRON DM8G CABLE	CRESTRON	DM 8G CABLE				
USB	PRE-TERMINATED USB 3.0 CABLE FOR PATCHING. PROVIDE WITH CONNECTORS AS REQUIRED.	EXTRON	USB CFG				
HDMI/DVI	PRE-TERMINATED HDMI TO DVI INTERFACE CABLE	CRESTRON	CBL-HD-DVI SERIES. LENGTH AS REQUIRED				
DVI	PRE-TERMINATED DVI INTERFACE CABLE	CRESTRON	CBL-DVI SERIES. LENGTH AS REQUIRED				
IR	CABLE FOR IR RECEIVER AND EMITTER CONNECTIONS	WEST PENN	230 / 252231B				

# GENERAL NOTES FOR AV SCHEMATICS SHEETS:

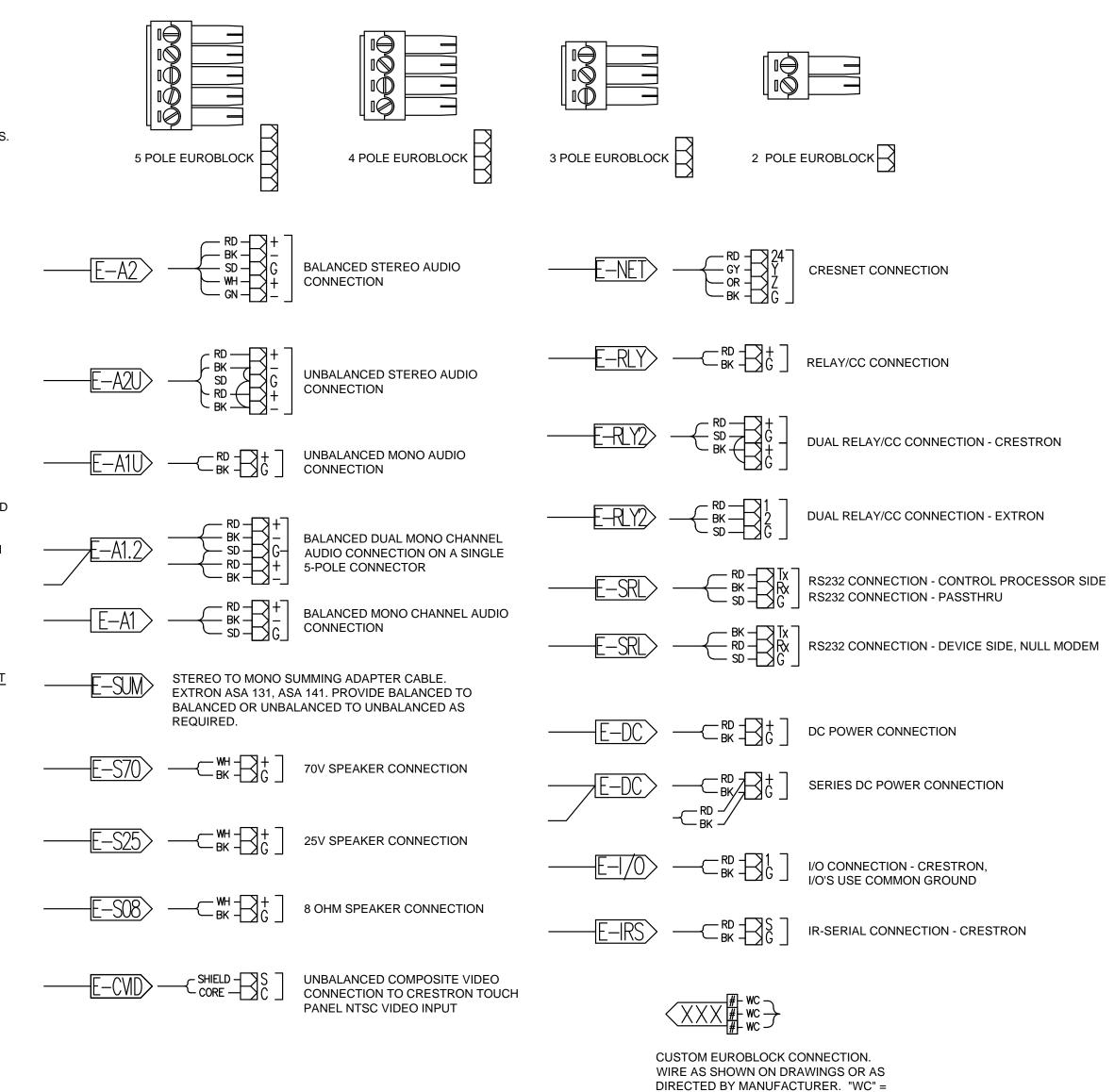
CONNECTORS, ADAPTERS AND WIRING FOR INTERFACING DEVICES.

SHEETS AND AS NOTED IN SPECIFICATIONS.

- MODELS SHOWN ARE BASED UPON MANUFACTURER'S PUBLISHED DATA AT TIME OF DRAWING. ACTUAL MODELS
  AVAILABLE MAY VARY. FOR ANY DEVIATIONS FROM THE SPECIFIED MANUFACTURER AND/OR MODEL, THE
  CONTRACTOR SHALL SECURE APPROVAL FROM THE APPROPRIATE PARTY.
- 2. COORDINATE ALL GROMMET HOLE AND TABLE BOX CUT-OUTS DIRECTLY WITH FURNITURE AND MILLWORK INSTALLERS. PROVIDE CUT-OUT DIMENSIONS, TEMPLATES AND OTHER REQUIREMENTS AS REQUESTED.
- 3. FOR RX/TX DEVICES: CONFIGURE FOR PoE OR REMOTE POWERING FROM OPPOSITE DEVICE (AS APPLICABLE) WHERE DIRECT POWERING IS NOT SHOWN.
- 4. DO NOT EXCEED MANUFACTURER'S PUBLISHED MAXIMUM DISTANCES FOR ALL CABLE BETWEEN TX/RX DEVICES. USE ONLY CABLE AND CONNECTORS APPROVED BY THE DEVICE MANUFACTURER.
- 5. CONNECTOR AND WIRING REQUIREMENTS ARE BASED UPON MANUFACTURER'S PUBLISHED DATA AT TIME OF DRAWING. ACTUAL REQUIREMENTS MAY VARY. CONTRACTOR IS RESPONSIBLE TO PROVIDE APPROPRIATE
- 6. "MFG" INDICATES CONNECTOR AND/OR WIRING CONFIGURATION AND ASSOCIATED CABLE PROVIDED BY OR AS DIRECTED BY MANUFACTURER.
- 7. SIGNAL FLOW IS GENERALLY FROM LEFT TO RIGHT UNLESS OTHERWISE INDICATED. BI-DIRECTIONAL SIGNAL CONNECTIONS AND POWER CONNECTIONS MAY APPEAR ON EITHER THE LEFT OR RIGHT SIDE OF DEVICES AND
- 8. COORDINATE ALL LAN REQUIREMENTS (IP ADDRESS ASSIGNMENT, NETWORK ACCESS, VLAN SET-UP) DIRECTLY WITH THE OWNER'S IT PERSONNEL.
- PROVIDE ALL ACCESSORIES AND MISCELLANEOUS EQUIPMENT REQUIRED TO FORM A COMPLETE AND OPERATIONAL SYSTEM.
- LABELING OF INPUTS, OUTPUTS AND OTHER CONNECTIONS ON DEVICES IS INTENDED TO CONVEY DESIGN INTENT, AND MAY NOT REFLECT ACTUAL DEVICE LABELING.
   PROVIDE ALL CONTROL SYSTEM PROGRAMMING REQUIRED TO PROVIDE FUNCTIONAL REQUIREMENTS DESCRIBED ON
- 12. ALL CABLE NOT INSTALLED INSIDE RATED CEILING ENCLOSURES, BACK BOXES OR CONDUIT SHALL BE CM PLENUM
- 13. ALL CABLE RUN IN WET LOCATIONS, INCLUDING BUT NOT LIMITED TO CONDUIT UNDER SLAB, SHALL BE
- INDOOR/OUTDOOR RATED. PROVIDE INDOOR/OUTDOOR CM RATED CABLE FOR ANY INSTANCES WHERE CABLE TRANSITIONS FROM WET LOCATIONS TO PLENUM SPACES.

  14. PROVIDE SECURE MOUNTING OF ALL DEVICES NOTED BEHIND DISPLAYS. DOUBLE BACK TAPE OR VELCRO TAPE IS NOT ACCEPTABLE.
- 15. CONNECTORS AND WIRING SHOWN ON DRAWINGS AND DETAILS ARE BASED UPON INDUSTRY STANDARD PRACTICES AND MANUFACTURER'S PUBLISHED DATA AT TIME OF DRAWING. ACTUAL CONNECTORS AND WIRING MAY VARY FROM WHAT IS SHOWN ON THESE DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING FINAL CONNECTOR AND WIRING REQUIREMENTS WITH INSTALLED DEVICE AND CABLING.
- 16. PIN-OUTS: REFER TO CONNECTING DEVICE MANUFACTURER'S LITERATURE FOR ACTUAL PIN-OUT WIRING.
- 17. ALL POWER CONNECTIONS TO DEVICES ARE TO BE USING EQUIPMENT MANUFACTURER'S POWER CORDS AND CONNECTORS. LICENSED ELECTRICAL CONTRACTOR TO PROVIDE SERVICE TO ALL POWER OUTLETS SHOWN ON DRAWINGS THAT ARE NOT POWERED BY A WHIP OR CORD.

(	CONNECTO	OR SCHE	DULE
CONNECTOR	DESCRIPTION	MANUFACTURER	MODEL OR SERIES
HDMI>	PRE-TERMINATED HDMI	SEE CABLE SCHEDULE	Ī
HDMI [] HDMI	HDMI PASS-THRU	RCI	BTXCD-HDMIFFP
RJ45>	RJ45 8P8C CRIMP-STYLE CONNECTOR. PROVIDE SHIELDED CONNECTOR WHERE CONNECTING CABLE IS SHIELDED	SPEC WHEN USED FO	CABLING PATCH CABLE R DATA BY CRESTRON TAL SIGNAL TRANSMISSION
E-XX>	EUROBLOCK. SEE CONNECTOR DETAILS FOR SPECIFIC TYPES AND CONFIGURATIONS	EXTRON/CRESTRON	3.5MM CAPTIVE SCREW
RGB >	BNC CONNECTORS. TERMINATE AS INDICATED BY CONNECTOR DETAILS	EXTRON/CRESTRON	BNC MALE MHR CRIMP OR COMPRESSION CONNECTORS
M3 >	3.5MM MINI-TRS	CANARE	F12
M3/		EXTRON	3.5MM MINI-STEREO-HQ
RCAX	RCA CONNECTOR. (X) IS (#) OF CONNECTORS	EXTRON	COMPRESSION RCA CONNECTOR
HD15>	15 PIN VGA/HD15	EXTRON	15HD
DB9	DB-9 (RS232)	EXTRON	9D
DC	DC POWER CONNECTOR	PROVIDED BY OR AS S MANUFACTURER	SPECIFIED BY EQUIPMENT
XLR#> XLR#I	#-PIN XLR	NEUTRIK	MALE - NC#MXX FEMALE PLATE - NC#FD-LX
P3	0.25" TRS	NEUTRIK	MALE - NP3X FEMALE PLATE - NJ3FP6C
USB >	PRE-TERMINATED USB	SEE CABLE SCHEDULE	
ST-X>	SCREW TERMINAL	TERMINATE PER DEVI	CE MFR INSTRUCTIONS
SP4	4-POLE SPEAKON CONNECTOR	NEUTRIK	NEUTRIK SPEAKON
DVI−D>	PRE-TERMINATED DVI-I/DVI-D	SEE CABLE SCHEDULE	<u> </u>
RJ45DB9	RJ45 TO DB9 INTERFACE CONNECTOR	TRIPP LITE	B090-A9M DB9M-RJ45
IRP >	STICK-ON IR PROBE WITH COVER		
SB2	SPEAKER TERMINAL-DUAL BINDING POST TYPE	NEUTRIK	NYS508
SVID	(1) SVID CONNECTOR	EXTRON	SVID MALE
DISP	DISPLAY PORT	EXTRON	DISPLAY PORT MALE
PHX#>	PHOENIX CONNECTOR	EXTRON/CRESTRON	CAPTIVE SCREW
<b>□</b> C →	F CONNECTOR	ANY	COMPRESSION TYPE





	AUDIO-VISUAL DRAWING LEGEND	,,
SYMBOL	DESCRIPTION	NOTES
<b>(#</b> )	AUDIO-VISUAL SYSTEM KEYNOTE TAG. INSTRUCTIONS FOR AUDIO/VISUAL CONTRACTOR	SEE SINGLE LINE DRAWINGS
DEVICE NAME «xx xxx	AUDIO-VISUAL SYSTEM DEVICE. XXX INDICATE DEVICE CONNECTIONS	SEE SINGLE LINE DRAWINGS
DEVICE NAME XXX XXX	AUDIO-VISUAL SYSTEM DEVICE. XXX INDICATE DEVICE CONNECTIONS. DASHED FRAME INDICATES DEVICE FURNISHED BY OWNER/OTHER	SEE SINGLE LINE DRAWINGS
WALL PLATE	AUDIO-VISUAL SYSTEM WALL PLATE. PLATES MAY INCORPORATE DEVICES AND/OR PLATE CONNECTORS AS INDICATED ON SINGLE LINE DRAWINGS	SEE SINGLE LINE DRAWINGS
XXX	CABLE CONNECTOR, MALE	SEE SINGLE LINE DRAWING AND CABLE/CONNECTOR SCHEDULES
XXX ]	CABLE CONNECTOR, FEMALE	SEE SINGLE LINE DRAWING AND CABLE/CONNECTOR SCHEDULES
DATA OUTLET D-1   5 SEE DATA/VOICE DRAWINGS	LAN OUTLET	
POWER OUTLET P-1 (=) SEE ELECTRICAL DRAWINGS	AC POWER OUTLET (INSIDE ANOTHER DEVICE SUCH AS A TABLE TOP BOX)	
LOCATION	DEMARCATION LINES IDENTIFYING RELATIVE LOCATION OF ROOMS, FURNITURE, WALLS, CEILING SPACE, CONDUIT AND BACK BOXES FOR THE PURPOSES OF DEVICE LOCATION AND CABLE ROUTING	SEE PLAN LEGEND AND APPLICABLE DETAILS

# hord | coplan | macht

1331 Nineteenth Street P 303.607.0977
Denver, CO. 80202 www.hcm2.com

CONSULTANT:

(888)334-5831

LOW VOLTAGE/ IT

EDI LTD.

8821 E. Hampden Ave, Suite 212
Denver, CO 80231

PROJECT:

CROSSROADS BUILDING RENOVATION

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

OWNER:

LARAMIE COUNTY
COMMUNITY
COLLEGE

1400 EAST COLLEGE DRIVE CHEYENNE, WY 82007

ISSUE:

ISSUE: 12.22.2017 CONTRACT DOCUMENTS

DRAWING INFORMATION:

11738.001 SMA

CHECKED BY:

APPROVED BY:

SHEET TITLE:

AUDIO VISUAL SCHEMATIC DIAGRAMS

DRAWN BY:

T-850

