



WAYNE STATE UNIVERSITY

WSU DINING HALL ADDITION

655 W. KIRBY ST.

WSU Project No.: 127-303256

NORR Project No.: JCDT18-0451-00

PROJECT DIRECTORY

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PROJECT SUMMARY

1. THE EXISTING WAYNE STATE UNIVERSITY DINING HALL WILL HAVE AN ONE STORY ADDITION WITH EXTERIOR SEATING AREA ADDED TO AN EXISTING COURTYARD.
2. EXPASION OF EXISTING TOILET ROOMS.

ALTERNATES

1. REPLACE ALL SOILD SURFACE COUNTERTOP IN TOILET ROOM.
2. SCREENING OF MECHANICAL UNIT ON NEW ROOF.

ARCHITECTURAL SHEET INDEX

SHEET No.	Sheet Name	Current Revision	Current Revision Date
A00-00	COVER SHEET	3	06/03/2019
A01-00	BUILDING CODE REVIEW & FIRE SEPARATION PLANS	3	06/03/2019
A01-01	GENERAL NOTES & GRAPHIC STANDARDS	3	06/03/2019
A01-03	WALL TYPES	3	06/03/2019
AD03-00	FLOOR PLAN AND SITE DEMOLITION	3	06/03/2019
AD03-01	TOILET ROOMS DEMOLITION PLAN	3	06/03/2019
A02-01	DOOR & WINDOW SCHEDULES, ELEVATIONS & DETAILS AND HARDWARE SCHEDULE	3	06/03/2019
A10-01	ARCHITECTURAL SITE PLAN	3	06/03/2019
A20-00	FLOOR PLANS	3	06/03/2019
A20-01	ROOF PLAN & DETAILS	3	06/03/2019
A30-00	ELEVATIONS	3	06/03/2019
A30-01	BUILDING SECTIONS	3	06/03/2019
A40-00	TOILET ENLARGED PLAN AND ELEVATIONS	3	06/03/2019
A40-01	ENLARGED PLAN DETAILS	3	06/03/2019
A51-01	WALL SECTIONS	3	06/03/2019
A51-02	WALL SECTIONS	3	06/03/2019
A53-00	ENLARGED SECTION DETAILS	3	06/03/2019
A53-01	ENLARGED SECTION DETAILS	3	06/03/2019
A53-02	MILLWORK DETAILS	3	06/03/2019
A60-00	REFLECTED CEILING PLAN	3	06/03/2019
A60-01	TOILET ROOMS REFLECTED CEILING PLAN	3	06/03/2019
A90-00	FINISH SCHEDULES	3	06/03/2019
A90-01	INTERIOR ELEVATIONS	3	06/03/2019
A90-02	FINISH PLAN	3	06/03/2019

CIVIL SHEET INDEX

SHEET No.	SHEET NAME		Current Revision Date
C100	NOTES AND LEGENDS	3	06/03/2019
C101	EXISTING CONDITIONS	3	06/03/2019
C140	DEMOLITION AND SITE PLAN	3	06/03/2019
C501	DETAILS	3	06/03/2019

STRUCTURAL SHEET INDEX

SHEET No.	SHEET NAME	Current Revision	Current Revision Date
S0-01	STRUCTURAL GENERAL NOTES	3	06/03/2019
S1-01	FOUNDATION PLAN	3	06/03/2019
S2-01	ROOF FRAMING PLAN	3	06/03/2019
S3-01	FOUNDATION SECTIONS & DETAILS	3	06/03/2019
S5-01	SECTIONS AND DETAILS	3	06/03/2019
S5-02	ROOF FRAMING SECTIONS AND DETAILS	3	06/03/2019

MECHANICAL SHEET INDEX

SHEET No.	SHEET NAME	Current Revision	Current Revision Date
M00-01	ABBR. & SYMBOLS	3	06-03-2019
M00-02	GENERAL NOTES	3	06-03-2019
M01-01	PLUMBING DETAILS	3	06-03-2019
M01-02	PLUMBING DETAILS	3	06-03-2019
M01-03	FIRE PROTECTION DETAILS	3	06-03-2019
M01-04	HVAC DETAILS	3	06-03-2019
M02-01	PLUMBING SCHEDULES	3	06-03-2019
M02-02	MECHANICAL SCHEDULES	3	06-03-2019
M02-03	MECHANICAL SCHEDULES	3	06-03-2019
M2D-01	FIRST FLOOR PLUMBING DEMOLITION PLAN	3	06-03-2019
M3D-01	FIRST FLOOR UNDERGROUND PLUMBING DEMOLITION PLAN	3	06-03-2019
M3D-02	FIRST FLOOR UNDERGROUND STORM DEMOLITION PLAN	3	06-03-2019
M4D-01	FIRST FLOOR FIRE PROTECTION DEMOLITION PLAN	3	06-03-2019
M20-01	FIRST FLOOR PLUMBING PLAN	3	06-03-2019
M20-02	FIRST FLOOR PLUMBING ENLARGED PLAN	3	06-03-2019
M20-03	ROOF PLAN	3	06-03-2019
M30-01	FIRST FLOOR UNDERGROUND PLUMBING PLAN	3	06-03-2019
M30-02	FIRST FLOOR UNDERGROUND PLUMBING ENLARGED PLAN	3	06-03-2019
M30-03	FIRST FLOOR UNDERGROUND STORM PLAN	3	06-03-2019
M40-01	FIRST FLOOR FIRE PROTECTION PLAN	3	06-03-2019
M50-01	FIRST FLOOR SHEET METAL PLAN	3	06-03-2019
M60-01	MECHANICAL SECTIONS	3	06-03-2019
M73-01	ERU-1 CONTROL DIAGRAM	3	06-03-2019
M73-02	ERU-1 SEQUENCE OF OPERATION	3	06-03-2019

ELECTRICAL SHEET INDEX

SHEET No.	SHEET NAME	Current Revision	Current Revision Date
E00-00	ELECTRICAL SYMBOLS AND ABBREVIATIONS	3	06-03-2019
E00-01	ELECTRICAL SCHEDULES AND RISER DIAGRAM	3	06-03-2019
E10-00	POWER & LOW-VOLTAGE PLANS	3	06-03-2019
E20-00	LIGHTING PLANS	3	06-03-2019
E80-00	ELECTRICAL DEMOLITION PLANS	3	06-03-2019



DATE	ISSUED FOR	REV
04/03/2019	OWNER REVIEW	1
05/14/2019	OWNER REVIEW	2
06/03/2019	Bid/Permit	3

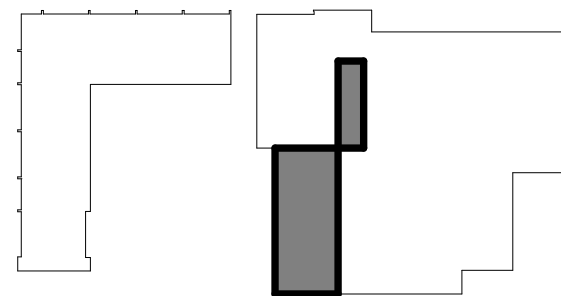
This drawing has been prepared solely for the use of the WAYNE STATE UNIVERSITY and there are no representations of any kind made by NORR to any party with whom NORR has not entered into a contract.

This drawing shall not be used for construction purposes until the seal appearing hereon is signed and dated by the Architect or Engineer.

Project Component

PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

giffels
webster

NORR
An Ingenium International Company

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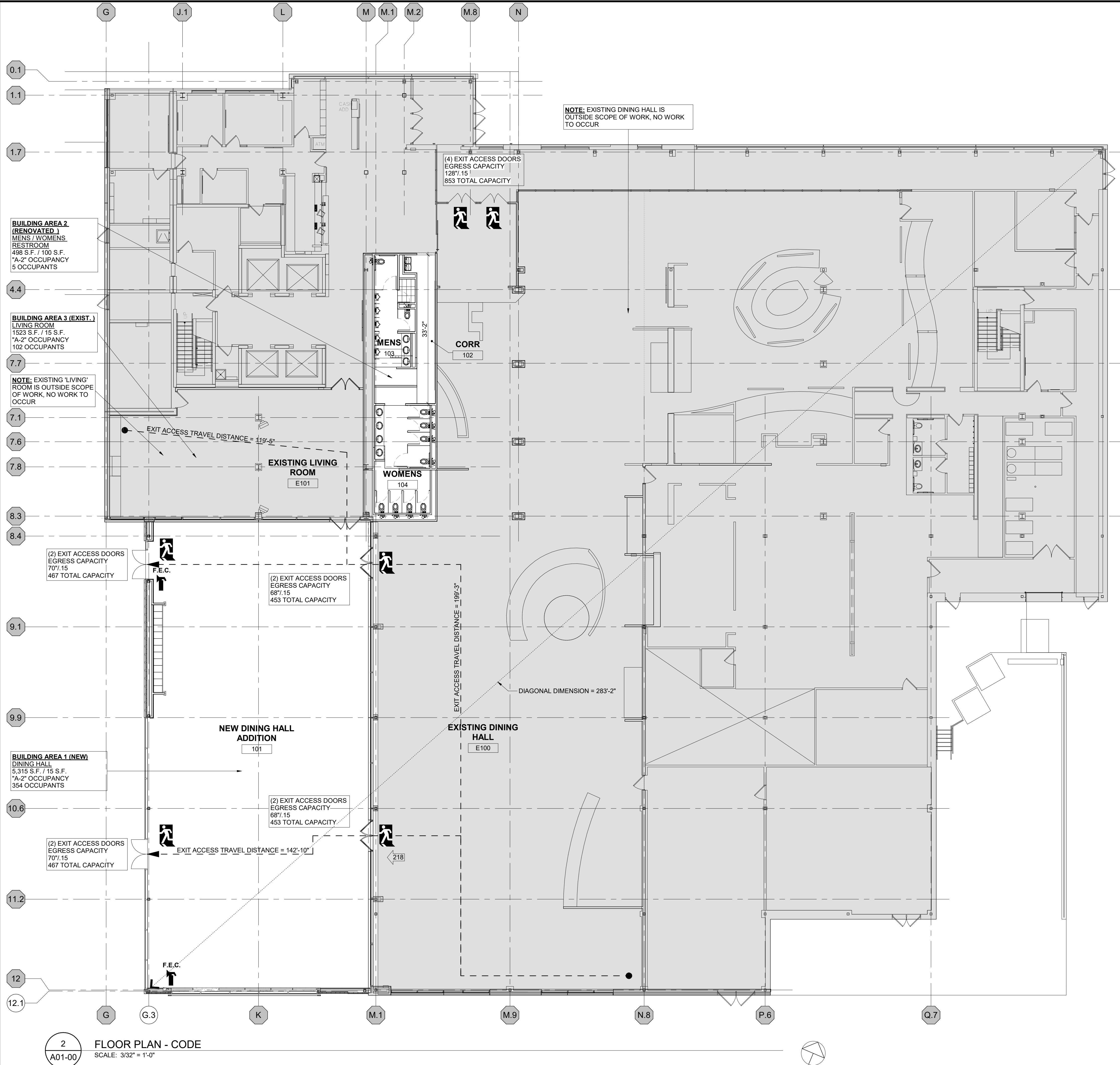
Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead	Drawn P. PERKINS
Project Leader	Checked G. KARANFILOVSKI

Client
WAYNE STATE UNIVERSITY
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
COVER SHEET

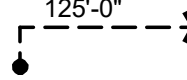
Scale:
Project No. JCDT18-0451

Drawing No.
A00-00



BUILDING CODE REVIEW																				
BUILDING REQUIREMENTS																				
CODES	2015 Michigan Rehabilitation Code for Existing Buildings 2012 NFPA 101 (Life Safety Code) MBC 2015 (Michigan Building Code, 2015) MPC 2015 (Michigan Plumbing Code, 2015) MMC 2015 (Michigan Mechanical Code, 2015) NEC 2017 (State of Michigan Electrical Code) IFC 2015 (International Fire Code, 2015, as referenced by MBC 2015 above) MEC 2015 (Michigan Energy Code, 2015, Ch. 4 & Part 10a.) APPROACH: 301.1.2 Work Area Compliance Method (Chapters 5-13) CLASSIFICATION OF WORK: Alteration Level 2 for defined Work Area and CH. 11 - Additions Note: Work Area represents less than 50 percent of the aggregate building area.																			
OCCUPANCY CLASSIFICATION (1st Floor)	Existing Building Area = A-2 Assembly Group Occupancy (No change in occupancy) New Building Area = A-2 Assembly Group Occupancy																			
TYPE OF CONSTRUCTION	Existing - 1A (Portion supporting High Rise) & 1B (One story Construction) New - 1B (One story Construction)																			
HEIGHT / AREA LIMITATIONS	Per MBC Table 504.3 & 504.4, A-2 Occupancy, 1B construction, Fully Sprinkled: Allowable Number of Stories / Feet Above Grade Plane = 12 Story / 160' Above Grade Per MBC Table 506.2, "Allowable Area Factor in Square Feet," A-2 Occupancy, 1B construction, Fully Sprinkled, S1 = Unlimited Max Allowable Area																			
BUILDING FLOORS	TOTAL BUILDING FLOORS: 10 PROJECT AREA FLOOR: 1																			
FIRE RATING	Per MBC Table 601, "Fire-Resistance Rating Requirements for Building Elements (Hours)": Construction Type 1-B <table><thead><tr><th>FIRE RATING</th><th>REQUIRED</th><th>PROVIDED</th></tr></thead><tbody><tr><td>PRIMARY STRUCTURAL FRAME</td><td>2"</td><td>1</td></tr><tr><td>BEARING WALLS</td><td>2</td><td>n/a</td></tr><tr><td>NON-BEARING INTERIOR WALLS</td><td>0</td><td>0</td></tr><tr><td>FLOOR CONSTRUCTION</td><td>2</td><td>n/a</td></tr><tr><td>ROOF CONSTRUCTION</td><td>1</td><td>1</td></tr></tbody></table> * - Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.		FIRE RATING	REQUIRED	PROVIDED	PRIMARY STRUCTURAL FRAME	2"	1	BEARING WALLS	2	n/a	NON-BEARING INTERIOR WALLS	0	0	FLOOR CONSTRUCTION	2	n/a	ROOF CONSTRUCTION	1	1
FIRE RATING	REQUIRED	PROVIDED																		
PRIMARY STRUCTURAL FRAME	2"	1																		
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NON-BEARING INTERIOR WALLS	0	0																		
FLOOR CONSTRUCTION	2	n/a																		
ROOF CONSTRUCTION	1	1																		
FIRE ALARM	Fire Alarm System Provided (Existing)																			
SMOKE ALARM	Smoke Alarm System Provided (Existing)																			
BUILDING AREAS	ALLOWABLE BUILDING AREA PER MBC T506.2: A-2 BUILDING AREA, FULLY SPRINKLED: UNLIMITED MAX ALLOWABLE AREA BUILDING AREA 1": 5,315 S.F. (ADDITION) BUILDING AREA 2": 921 S.F. (RENOVATED) BUILDING AREA 3": 32,600 S.F. (EXISTING) LEVEL 1 WORK AREA: 5,315 S.F. LEVEL 2 WORK AREA: 920 S.F. TOTAL WORK AREA = 6,236 S.F.																			
MEANS OF EGRESS																				
OCCUPANCY	Per MBC Table 1004.1.2, "Maximum Floor Area Allowances Per Occupant": <table><tbody><tr><td>Occupant Load (New):</td><td>5,315 sf / 15 p/sf =</td><td>355 persons</td></tr><tr><td>Occupant Load (EX. Living Rm.):</td><td>1,517 sf / 15 p/sf =</td><td>102 persons (divide by 2)</td></tr><tr><td>Occupant Load (Existing Cafe.):</td><td>13,041 sf / 15 p/sf =</td><td>870 persons</td></tr><tr><td>Total Occupant Load:</td><td></td><td>1,327 (Including Rooms N.I.C.)</td></tr><tr><td colspan="3">*Refer to Life Safety Plan for further information</td></tr></tbody></table>		Occupant Load (New):	5,315 sf / 15 p/sf =	355 persons	Occupant Load (EX. Living Rm.):	1,517 sf / 15 p/sf =	102 persons (divide by 2)	Occupant Load (Existing Cafe.):	13,041 sf / 15 p/sf =	870 persons	Total Occupant Load:		1,327 (Including Rooms N.I.C.)	*Refer to Life Safety Plan for further information					
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*Refer to Life Safety Plan for further information																				
EXITS	Per MBC 1005.3.2, "Other Egress Components" Means of Egress Component Capacity = 0.15' / Occupant (With Sprinkler System) 1,327 per. * 15"person = 199' of exit width 199' / 32" per exit = 6.22 REQUIRED: 8																			
MAX. COMMON PATH OF TRAVEL	Per MBC Table 1006.2.1 "Spaces with One Exit or Exit Access Doorway" ALLOWABLE: 75' With Sprinkler System																			
TRAVEL DISTANCE	Per MBC Table 1017.2, "Exit Access Travel Distance," ALLOWABLE: 250'-0" (With Sprinkler System) PROVIDED: 199'-3" (Max. Path of Travel)																			
DEAD END CORRIDORS	Per MRCEB 805.6 - Exception 4, "Dead End Corridors" ALLOWABLE: 50'-0" (With Sprinkler System)																			
CORRIDOR WIDTH	Per MBC Table 1020.2, "Minimum Corridor Width" A-2 Occupancy Required Corridor Width = 44" Any facilities not listed																			

SYMBOL LEGEND

	MAXIMUM TRAVEL DISTANCE FROM FARTHEST POINT
	ILLUMINATED EXIT SIGN ABOVE THE DOOR WITH TACTILE EXIT SIGNS WITHIN 12" OF LATCHSIDE JAMB AT DOOR @ LOCATION OF SYMBOL
	TACTILE EXIT SIGNAGE WITH 18"x18" CLEAR SPACE CENTERED ON TACTILE CHARACTERS, SEE DETAIL 3, THIS SHEET, FOR MOUNTING LOCATIONS
	OCCUPANT COUNT OF SPACE
	EXITING OCCUPANT COUNT
	PROVIDE LISTED AND LABELED DRY-CHEMICAL UL-RATED FIRE EXTINGUISHER - SURFACE MOUNTED ON RATED WALLS, SEMI-RECESSED OTHERWISE. SEE DETAIL THIS SHEET FOR MOUNTING HEIGHTS.
	INDICATES AREA NOT IN SCOPE OF WORK

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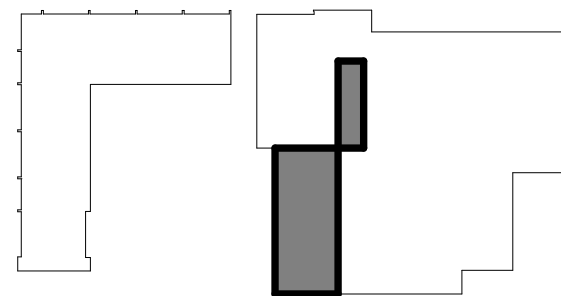
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Project Component

[illegible]

Key Plan



Consultants

Civil:
Landscape:
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Mechanical: NORR
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Seal(s)

giffels
webster

NORR

An Ingenium International Company

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Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead	Drawn P. PERKINS
Project Leader	Checked G. KARANFILOVSKI

Client
WAYNE STATE
UNIVERSITY

Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title

BUILDING CODE REVIEW & FIRE
SEPARATION PLANS

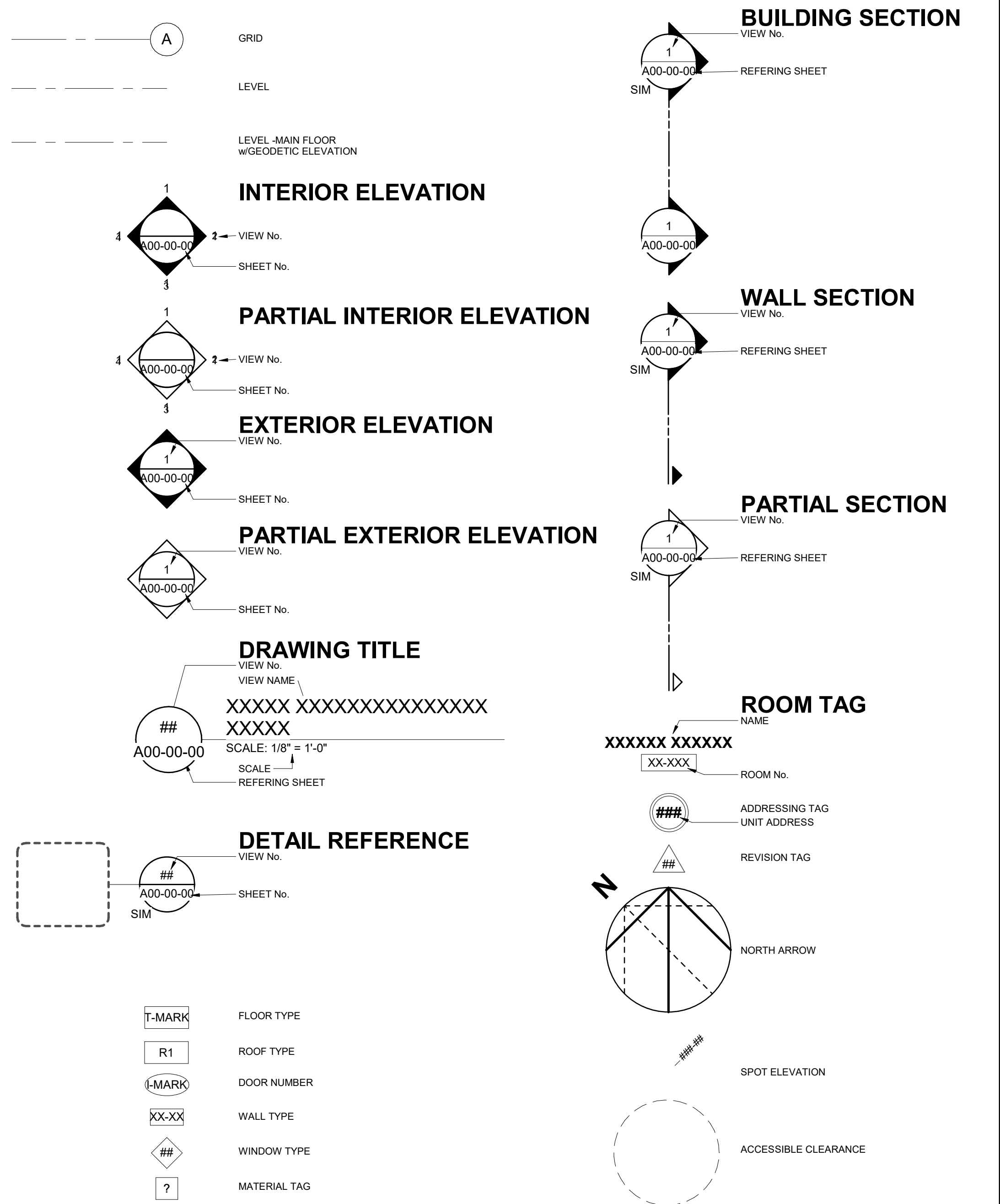
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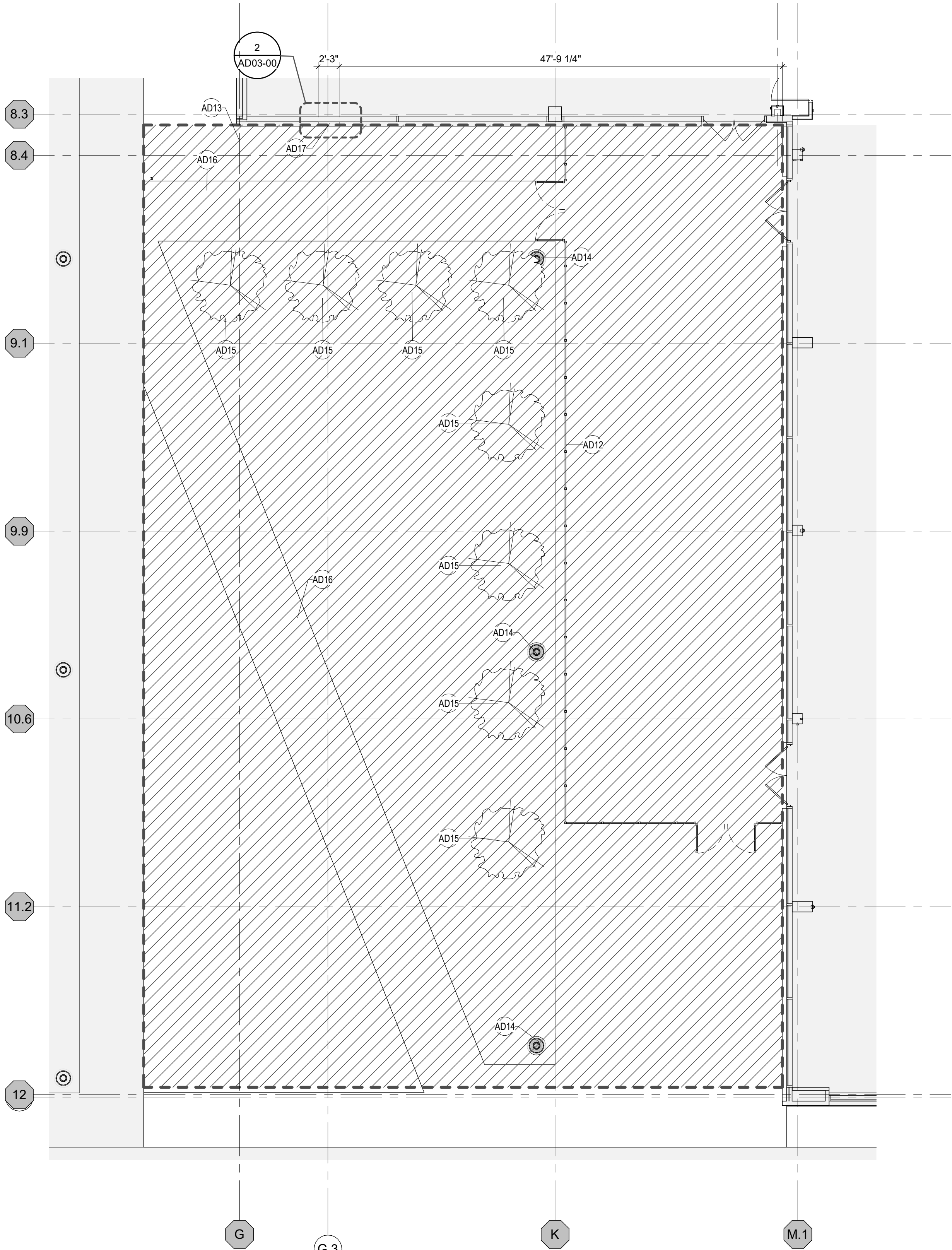
Project No.	JCDT18-0451
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Drawing No. A01-00

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GRAPHIC SYMBOLS





DEMOLITION PLAN KEY NOTES

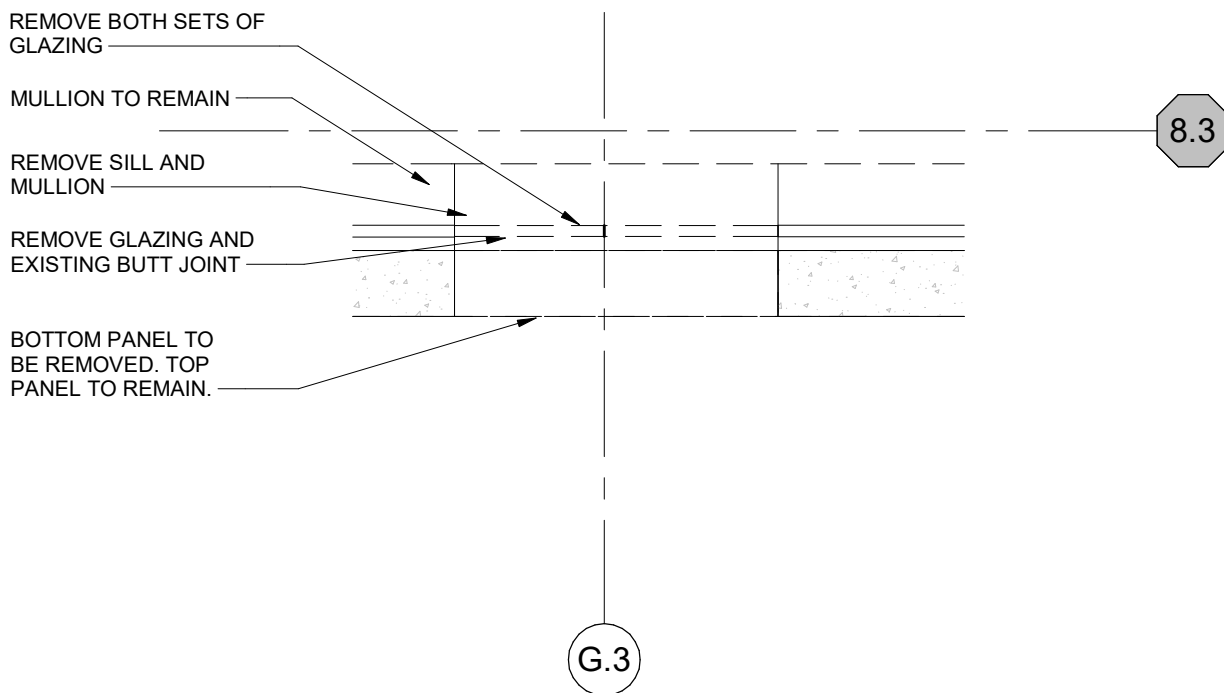
Key Value	Keynote Text
AD1	DEMOLISH EXISTING FRAMED WALLS, INCLUDING BUT NOT LIMITED TO ALL FRAMING, BRACING, WALL, BASE, TRIM, AND FINISHES. DEMOLISH FULL HEIGHT FROM FLOOR TO UNDERSIDE OF STRUCTURE ABOVE UON.
AD2	DEMOLISH PORTION OF EXISTING WALL AS INDICATED. PROVIDE CLEAN CUT AT END OF REMAINING PORTION OF WALL, PATCH AND REPAIR ADJACENT SURFACES TO ACCEPT NEW FINISH.
AD3	DEMOLISH PORTION OF EXISTING OVERHEAD SOFFIT. PATCH AND REPAIR ADJACENT SURFACES TO ACCEPT NEW FINISHES.
AD4	DEMOLISH EXISTING DOOR AND FRAME INCLUDING HARDWARE AND ANCHORS.
AD5	DEMOLISH PORTION OF GYPSUM BOARD CEILING IN PREPERATION FOR NEW CONSTRUCTION.
AD6	DEMOLISH PORTION OF EXISTING ACOUSTIC TILE CEILING IN PREPERATION FOR NEW CONSTRUCTION.
AD7	REMOVE AND RETAIN SODA VENDING MACHINES FOR RE-USE BY OWNER.
AD8	REMOVE AND RETAIN WATER COOLER FOR LATER REUSE IN PROJECT. CAP ALL ASSOCIATED EXISTING PLUMBING LINES AND DRAINS BEHIND WALL OR FLOOR.
AD9	REMOVE AND RETAIN PLUMBING FIXTURE FOR LATER REUSE IN PROJECT. CAP ALL ASSOCIATED EXISTING PLUMBING LINES AND DRAINS BEHIND WALL OR FLOOR.
AD10	REMOVE EXISTING PARTITION AND TOILET EQUIPMENT INCLUDING, BUT NOT LIMITED TO, TOILET PAPER HOLDERS, SANITARY NAPKIN RECEPCTABLES, AND TOILET SEAT COVER DISPENSERS.
AD11	DEMOLISH EXISTING FLOOR FINISH IN AREAS OF NEW CONSTRUCTION, ONLY TO EXTENTS OF NEW CONSTRUCTION. REMAINING FLOOR FINISH TO BE MADE GOOD AT NEW CONSTRUCTION.
AD12	REMOVE EXSINSTING EXTERIOR FENCING, INCLUDING BUT NOT LIMITED TO ANCHORS, DOORS, CONNECTION TO BUILDING FACADE, ETC. REF. TO CIVIL FOR ADDITIONAL INFORMATION.
AD13	EXISTING EMERGANCY CENTER TO REMAIN.
AD14	REMOVE EXISTING EXTERIOR LIGHTING AND CONCRETE BASE. RETURN TO OWNER.
AD15	REMOVE EXISTING TREES. CONFIRM WITH OWNER IF RELOCATED OR DISPOSED OF.
AD16	DEMOLISH EXISTING CONCRETE PAD AND WALKWAY. REFER TO CIVIL FOR ADDITIONAL INFORMATION.
AD17	CUT EXISTING GLAZING AND BOTTOM PLAN FOR CONSTRUCTION OF NEW EXTERIOR WALL AND EXPANSION JOINT. REFER TO DETAIL 1/A40-01 FOR ADDITIONAL INFORMATION.

DEMOLITION GENERAL NOTES

- OBTAIN DEMOLITION PERMITS AS REQUIRED.
- FURNISH ALL LABOR AND MATERIALS/EQUIPMENT AS REQUIRED TO COMPLETE DEMOLITION AND REMOVAL OF ALL ITEMS AS INDICATED.
- POLLUTION CONTROL - CONTRACTOR TO ERECT BARRIERS TO MINIMIZE THE SPREAD OF DUST, DEBRIS, AND DIRT FROM AREAS OF DEMOLITION TO AREAS OF OCCUPANCY AND ADJACENT PUBLIC SPACES AS BASED ON APPLICABLE GOVERNING REGULATIONS. CONTRACTOR TO PROVIDE POLLUTION CONTROL PLAN PRIOR TO START OF WORK WITH SATISFIED APPROVAL FROM OWNER. PREVENT DUST AND DEBRIS FROM EMANATING FROM DEMOLITION/CONSTRUCTION AREA. KEEP AREA CLEAN.
- IF ANY QUESTIONS ARISE AS TO THE REMOVAL OF ANY MATERIAL, CLARIFY QUESTION WITH THE OWNER/ARCHITECT BEFORE PROCEEDING.
- ALL DEBRIS REMOVAL SHALL BE PERFORMED IN ACCORDANCE WITH BUILDING MANAGEMENT REQUIREMENTS AND PROCEDURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL REMOVED ITEMS IN A SAFE AND ENVIRONMENTALLY ACCEPTABLE MANNER COMPLYING WITH FEDERAL, STATE AND LOCAL GUIDELINES FOR DISPOSING OF MATERIALS.
- WHERE PARTITIONS ARE TO BE REMOVED, REMOVE ALL OUTLETS, SWITCHES, WIRES, THERMOSTATS, ETC. TO PANELS AND TERMINATE IN COMPLIANCE WITH APPLICABLE BUILDING CODES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES RELATED TO THE ADJACENT AREAS WHICH ARE THE RESULT OF THE DEMOLITION PROCESS. IF DURING DEMOLITION ANY EXISTING CONSTRUCTION / FINISHES ARE DAMAGED CONTRACTOR IS RESPONSIBLE TO REPAIR AT NO COST TO OWNER.
- CUT, CAP AND REMOVE PLUMBING PIPES AND APPURTENANCES BACK TO VERTICAL STACK AND MAIN.
- REMOVAL OF ALL EQUIPMENT, CABLING, SWITCHES, AND CONDUIT PERTAINING TO DATA/COMMUNICATIONS AND TELEPHONE SHALL BE VERIFIED WITH TELEPHONE COMPANIES, SERVICE OWNER OR OWNERS REPRESENTATIVE AS REQUIRED TO PREVENT NEW CONSTRUCTION DELAYS.
- COORDINATE ALL WORK CONCERNING EXISTING EQUIPMENT AND SERVICES TO REMAIN. DE-ENERGIZE CIRCUITS AND MAKE THEM SAFE AS REQUIRED BY APPLICABLE CODES. RECONNECT CIRCUITS THAT ARE TO REMAIN AND ARE DISRUPTED DURING DEMOLITION.
- CONTRACTOR TO MAINTAIN ALL EGRESS DOORS, AND ACCESS TO ALL EGRESS EXIT DOORS THROUGHOUT ALL DEMOLITION/NEW CONSTRUCTION.
- CONTRACTOR TO PROVIDE SUPPLEMENTAL LIGHTING SUFFICIENT FOR SAFE WORKING CONDITIONS THROUGHOUT COURSE OF DEMOLITION/NEW CONSTRUCTION AS REQUIRED.
- PREP & PATCH WALLS, CEILINGS & FLOORS IF AFFECTED BY DEMOLITION. REPAIR AS REQUIRED TO MEET ORIGINAL FIRE PROTECTION AND STRUCTURAL REQUIREMENTS.
- CONTRACTOR TO VERIFY WITH OWNER ALL ITEMS / HARDWARE TO BE SALVAGED PRIOR TO DEMOLITION.
- DEMOLITION DRAWINGS INDICATES THE GENERAL EXISTING PARTITION LAYOUT. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS WITHIN THE DEMOLITION AREA AND REPORT ANY DISCREPANCIES TO THE ARCHITECT/DESIGNER FOR CLARIFICATION BEFORE PROCEEDING.
- WHERE IT BECOMES NECESSARY TO TEMPORARILY DISTURB SYSTEMS TO PERMIT EXECUTION OF THE DEMOLITION PROCESS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE OWNER AND CONSTRUCTION MANAGER TO SCHEDULE A SHUTDOWN. THE CONTRACTOR SHALL GIVE A MINIMUM OF 7 DAYS ADVANCED NOTICE FOR ANY SHUTDOWN.
- THE CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL, ELECTRICAL, AND PLUMBING DEMOLITION DRAWINGS FOR ITEMS TO REMAIN IN EXISTING PARTITIONS TO BE REMOVED. WHERE REQUIRED, CONTRACTOR WILL PROVIDE TEMPORARY SUPPORT OR REROUTING UNTIL NEW CONSTRUCTION IS IN PLACE.
- REFER TO LIFE SAFETY PLAN FOR LOCATIONS OF EXISTING RATED PARTITIONS AND SHAFTS.
- EXISTING CONSTRUCTION TO REMAIN SHALL BE PRESERVED AND PROTECTED DURING CONSTRUCTION. EXISTING CONSTRUCTION TO REMAIN SHALL BE PATCHED AND REPAIRED TO MATCH EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE OWNER, INCLUDING THE MAINTENANCE OF ALL FIRE RATINGS AT STRUCTURAL MEMBERS; SURFACES OF FLOORS, WALLS, CEILINGS, ETC.
- ANY ITEM NOT SPECIFICALLY IDENTIFIED BUT REQUIRED TO BE REMOVED OR REPAIRED TO PREPARE THE BUILDING FOR THE NEW WORK, OR TO OTHERWISE PRODUCE THE FINISHED PRODUCT SHOWN IN THE CONTRACT DOCUMENTS, IS THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR TO PROVIDE SAFE PASSAGE OF PERSONS AROUND AREA OF DEMOLITION.
- PROVIDE ADEQUATE BRACING AND SHORING AS REQUIRED.
- AREAS SHOWN FOR DEMOLITION ARE APPROXIMATE. ACCURATE EDGES TO BE SET BY THE CONTRACTOR IN THE FIELD.
- REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL DEMOLITION NOTES.
- FIELD VERIFY THAT THE EXISTING FIRE RATED PARTITIONS TO REMAIN MEET MINIMUM STANDARDS. REFER TO LIFE SAFETY PLAN FOR LOCATIONS. NOTIFY OWNER OF ANY QUESTIONABLE CONDITIONS.
- WHEN CORING FOR SCHEDULED PLUMBING PENETRATIONS CONFLICTS WITH EXISTING STRUCTURAL CONCRETE RISRS, BEAMS, GIRDERS, ETC., ADJUST CORING LOCATION TO AVOID THOSE STRUCTURAL ELEMENTS TO NEAREST ADJACENT CLEAR SLAB CONSTRUCTION. AVOID CUTTING REBAR TO GREATEST EXTENT POSSIBLE.
- DEMOLITION PLAN DOES NOT INCLUDE HAZARDOUS MATERIAL, ABATEMENT, AND REMEDIATION PROCEDURES. COVERED UNDER SEPARATE CONTRACT. REFER TO TECHNICAL SPECIFICATIONS; ABATEMENT OF ASBESTOS-CONTAINING MATERIALS AS PREPARED BY PERFORMANCE ENVIRONMENTAL SERVICE, INC FOR WAYNE STATE UNIVERSITY FOR MORE INFORMATION.

DEMOLITION PLAN LEGEND

	EXISTING DOOR TO BE REMOVED OR RELOCATED
	EXISTING PARTITION TO BE DEMOLISHED
	EXISTING MILLWORK TO BE DEMOLISHED
	EXISTING SLAB TO BE DEMOLISHED
	EXISTING SLAB OPENING TO RECEIVE STRUCTURAL INFILL
	CONCRETE VOID TO BE INFILLED
	SHEET NOTE
	DASHED LINES INDICATED ITEMS TO BE DEMOLISHED OR TEMPORARILY REMOVED.
	AREA OF SITE WORK DEMOLITION INCLUDING
	TREE TO BE REMOVED
	LIGHT POST



1 FLOOR PLAN AND SITE - DEMO
AD03-00
SCALE: 1/8" = 1'-0"

2 DEMOLITION PLAN DETAIL
AD03-00
SCALE: 3/4" = 1'-0"

DATE	ISSUED FOR	REV
04/03/2019	OWNER REVIEW	1
05/14/2019	OWNER REVIEW	2
06/03/2019	Bid/Permit	3

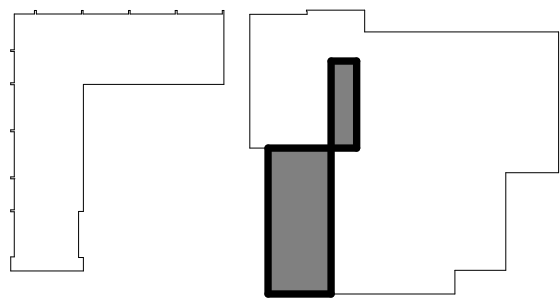
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

giffels webster

NORR
An Ingenium International Company

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Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead	Drawn P. PERKINS
Project Leader	Checked G. KARANFILOVSKI

Client
WAYNE STATE UNIVERSITY

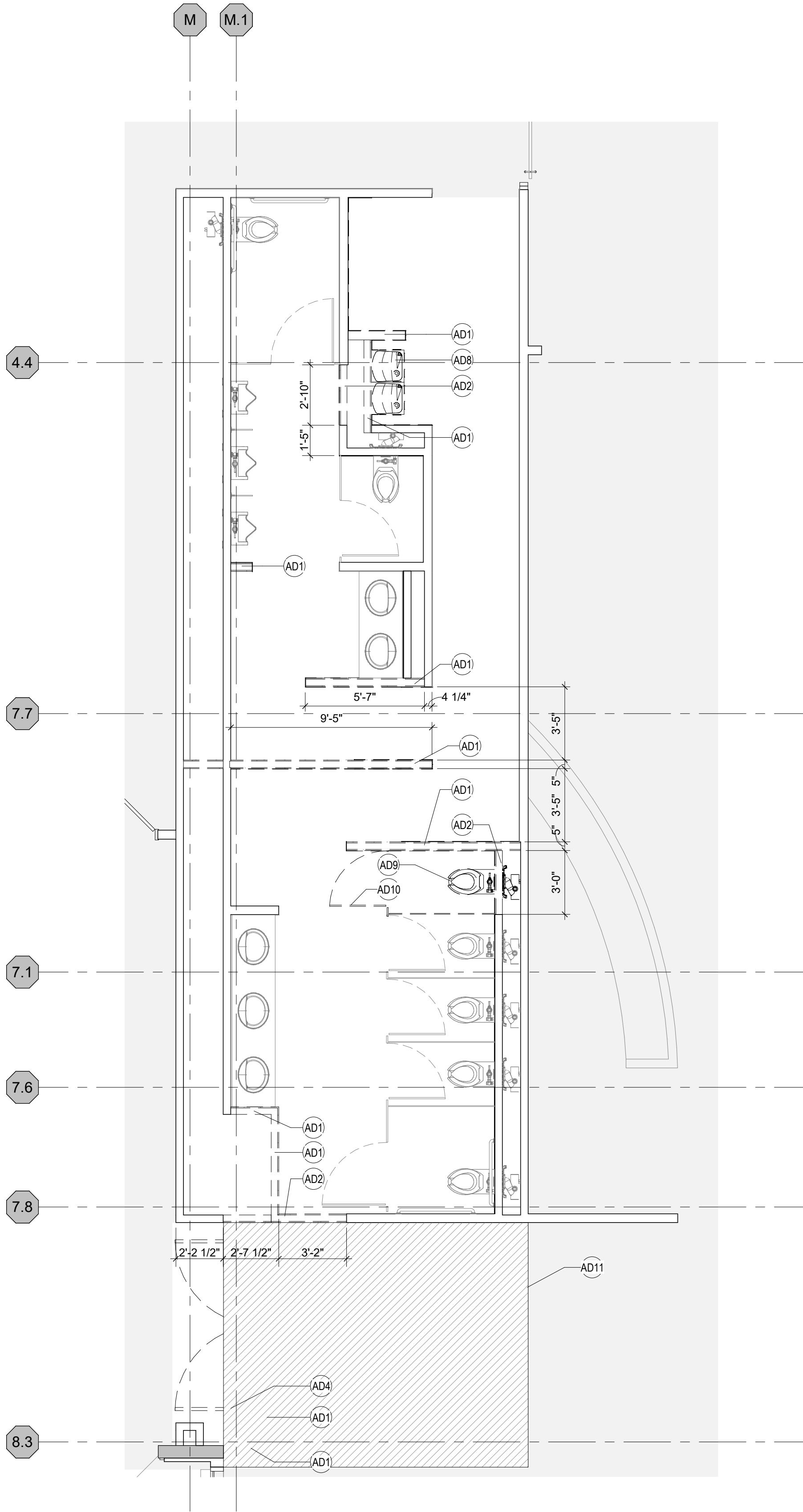
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
FLOOR PLAN AND SITE DEMOLITION

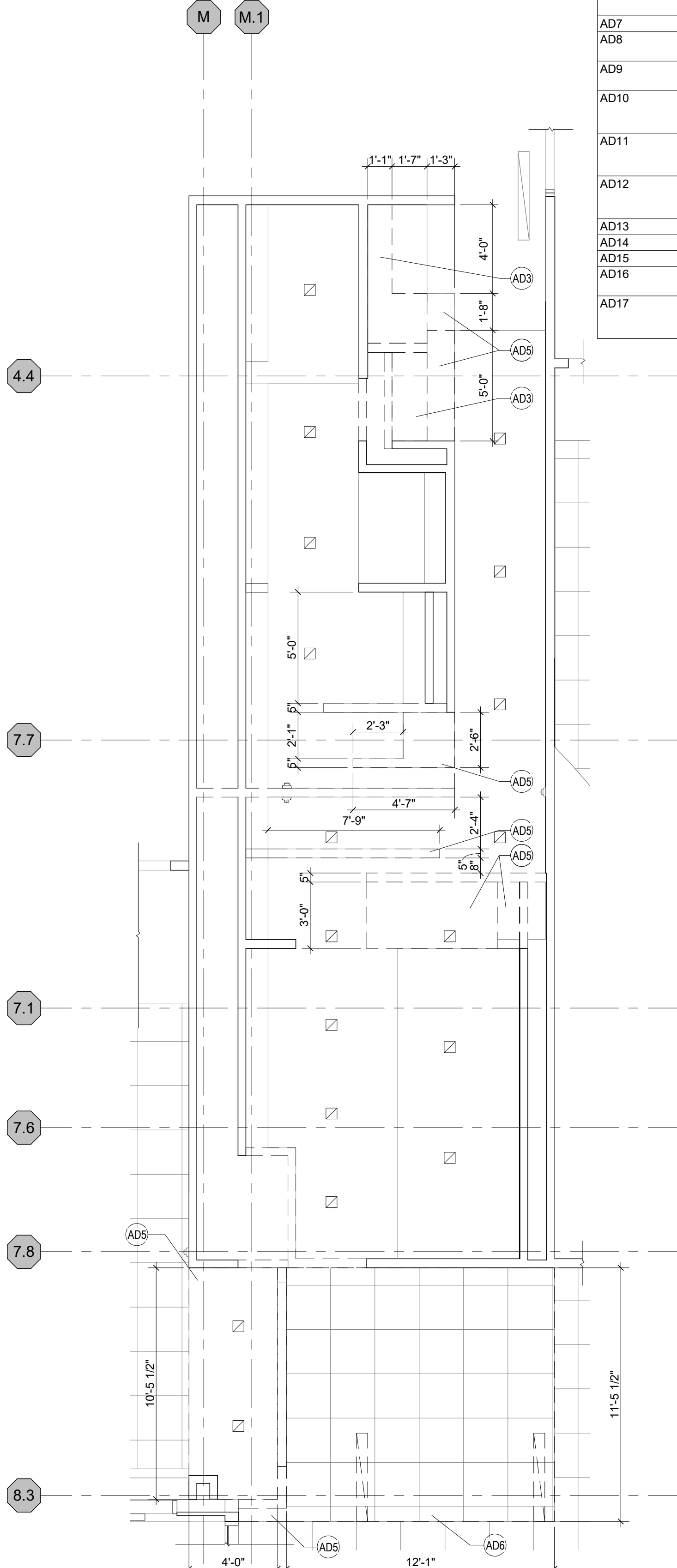
Scale: As indicated

Project No. JCDT18-0451

Drawing No.
AD03-00



1
WASHROOM ENLARGED
DEMO PLAN
SCALE: 1/4" = 1'-0"



2
WASHROOM REFLECTED
DEMO CEILING PLAN
SCALE: 1/4" = 1'-0"

DEMOLITION PLAN KEY NOTES

Key Value	Keynote Text
AD1	DEMOLISH EXISTING FRAMED WALLS, INCLUDING BUT NOT LIMITED TO ALL FRAMING, BRACING, WALL BASE, TRIM, AND FINISHES. DEMOLISH FULL HEIGHT FROM FLOOR TO UNDERSIDE OF STRUCTURE ABOVE JON.
AD2	DEMOLISH PORTION OF EXISTING WALL AS INDICATED. PROVIDE CLEAN CUT AT END OF REMAINING PORTION OF WALL. PATCH AND REPAIR ADJACENT SURFACES TO ACCEPT NEW FINISH.
AD3	DEMOLISH PORTION OF EXISTING OVERHEAD SOFFIT. PATCH AND REPAIR ADJACENT SURFACES TO ACCEPT NEW FINISHES.
AD4	DEMOLISH EXISTING DOOR AND FRAME INCLUDING HARDWARE AND ANCHORS.
AD5	DEMOLISH PORTION OF GYPSUM BOARD CEILING IN PREPERATION FOR NEW CONSTRUCTION.
AD6	DEMOLISH PORTION OF EXISTING ACOUSTIC TILE CEILING IN PREPERATION FOR NEW CONSTRUCTION.
AD7	REMOVE AND RETAIN SODA VENDING MACHINES FOR RE-USE BY OWNER.
AD8	REMOVE AND RETAIN WATER COOLER FOR LATER REUSE IN PROJECT. CAP ALL ASSOCIATED EXISTING PLUMBING LINES AND DRAINS BEHIND WALL OR FLOOR.
AD9	REMOVE AND RETAIN PLUMBING FIXTURE FOR LATER REUSE IN PROJECT. CAP ALL ASSOCIATED EXISTING PLUMBING LINES AND DRAINS BEHIND WALL OR FLOOR.
AD10	REMOVE EXISTING PARTITION AND TOILET EQUIPMENT INCLUDING, BUT NOT LIMITED TO, TOILET PAPER HOLDERS, SANITARY NAPKIN RECEPTACLES, AND TOILET SEAT COVER DISPENSERS.
AD11	DEMOLISH EXISTING FLOOR FINISH IN AREAS OF NEW CONSTRUCTION, ONLY TO EXTENTS OF NEW CONSTRUCTION. REMAINING FLOOR FINISH TO BE MADE GOOD AT NEW CONSTRUCTION.
AD12	REMOVE EXSINSTING EXTERIOR FENCING, INCLUDING BUT NOT LIMITED TO ANCHORS, DOORS, CONNECTION TO BUILDING FACADE, ETC. REF. TO CIVIL FOR ADDITIONAL INFORMATION.
AD13	EXISTING EMERAGNCY CENTER TO REMAIN.
AD14	REMOVE EXISTING EXTERIOR LIGHTING AND CONCRETE BASE. RETURN TO OWNER.
AD15	REMOVE EXISTING TREES. CONFIRM WITH OWNER IF RELOCATED OR DISPOSED OF.
AD16	DEMOLISH EXISTING CONCRETE PAD AND WALKWAY. REFER TO CIVIL FOR ADDITIONAL INFORMATION.
AD17	CUT EXISTING GLAZING AND BOTTOM PLAN FOR CONSTRUCTION OF NEW EXTERIOR WALL AND EXPANSION JOINT. REFER TO DETAIL 1/A40-01 FOR ADDITIONAL INFORMATION.

DEMOLITION GENERAL NOTES

- OBTAIN DEMOLITION PERMITS AS REQUIRED.
- FURNISH ALL LABOR AND MATERIALS/EQUIPMENT AS REQUIRED TO COMPLETE DEMOLITION AND REMOVAL OF ALL ITEMS AS INDICATED.
- POLLUTION CONTROL - CONTRACTOR TO ERECT BARRIERS TO MINIMIZE THE SPREAD OF DUST, DEBRIS, AND DIRT FROM AREAS OF DEMOLITION TO AREAS OF OCCUPANCY AND ADJACENT PUBLIC SPACES AS BASED ON APPLICABLE GOVERNING REGULATIONS. CONTRACTOR TO PROVIDE POLLUTION CONTROL PLAN PRIOR TO START OF WORK WITH SATISFIED APPROVAL FROM OWNER. PREVENT DUST AND DEBRIS FROM EMANATING FROM DEMOLITION/CONSTRUCTION AREA. KEEP AREA CLEAN.
- IF ANY QUESTIONS ARISE AS TO THE REMOVAL OF ANY MATERIAL, CLARIFY QUESTION WITH THE OWNER/ARCHITECT BEFORE PROCEEDING.
- ALL DEBRIS REMOVAL SHALL BE PERFORMED IN ACCORDANCE WITH BUILDING MANAGEMENT REQUIREMENTS AND PROCEDURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL REMOVED ITEMS IN A SAFE AND ENVIRONMENTALLY ACCEPTABLE MANNER COMPLYING WITH FEDERAL, STATE AND LOCAL GUIDELINES FOR DISPOSING OF MATERIALS.
- WHERE PARTITIONS ARE TO BE REMOVED, REMOVE ALL OUTLETS, SWITCHES, WIRES, THERMOSTATS, ETC. TO PANELS AND TERMINATE IN COMPLIANCE WITH APPLICABLE BUILDING CODES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES RELATED TO THE ADJACENT AREAS WHICH ARE THE RESULT OF THE DEMOLITION PROCESS. IF DURING DEMOLITION ANY EXISTING CONSTRUCTION / FINISHES ARE DAMAGED CONTRACTOR IS RESPONSIBLE TO REPAIR AT NO COST TO OWNER.
- CUT, CAP AND REMOVE PLUMBING PIPES AND APPURTENANCES BACK TO VERTICAL STACK AND MAIN.
- REMOVAL OF ALL EQUIPMENT, CABLING, SWITCHES, AND CONDUIT PERTAINING TO DATA/COMMUNICATIONS AND TELEPHONE SHALL BE VERIFIED WITH TELEPHONE COMPANIES. SERVICE OWNER OR OWNERS REPRESENTATIVE AS REQUIRED TO PREVENT NEW CONSTRUCTION DELAYS.
- COORDINATE ALL WORK CONCERNING EXISTING EQUIPMENT AND SERVICES TO REMAIN. DE-ENERGIZE CIRCUITS AND MAKE THEM SAFE AS REQUIRED BY APPLICABLE CODES. RECONNECT CIRCUITS THAT ARE TO REMAIN AND ARE DISRUPTED DURING DEMOLITION.
- CONTRACTOR TO MAINTAIN ALL EGRESS DOORS, AND ACCESS TO ALL EGRESS EXIT DOORS THROUGHOUT ALL DEMOLITION/NEW CONSTRUCTION.
- CONTRACTOR TO PROVIDE SUPPLEMENTAL LIGHTING SUFFICIENT FOR SAFE WORKING CONDITIONS THROUGHOUT COURSE OF DEMOLITION/NEW CONSTRUCTION AS REQUIRED.
- PREP & PATCH WALLS, CEILINGS & FLOORS IF AFFECTED BY DEMOLITION. REPAIR AS REQUIRED TO MEET ORIGINAL FIRE PROTECTION AND STRUCTURAL REQUIREMENTS.
- CONTRACTOR TO VERIFY WITH OWNER ALL ITEMS / HARDWARE TO BE SALVAGED PRIOR TO DEMOLITION.
- DEMOLITION DRAWINGS INDICATES THE GENERAL EXISTING PARTITION LAYOUT. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS WITHIN THE DEMOLITION AREA AND REPORT ANY DISCREPANCIES TO THE ARCHITECT/DESIGNER FOR CLARIFICATION BEFORE PROCEEDING.
- WHERE IT BECOMES NECESSARY TO TEMPORARILY DISTURB SYSTEMS TO PERMIT EXECUTION OF THE DEMOLITION PROCESS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE OWNER AND CONSTRUCTION MANAGER TO SCHEDULE A SHUTDOWN. THE CONTRACTOR SHALL GIVE A MINIMUM OF 7 DAYS ADVANCED NOTICE FOR ANY SHUTDOWN.
- THE CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL, ELECTRICAL, AND PLUMBING DEMOLITION DRAWINGS FOR ITEMS TO REMAIN IN EXISTING PARTITIONS TO BE REMOVED. WHERE REQUIRED, CONTRACTOR WILL PROVIDE TEMPORARY SUPPORT OR REROUTING UNTIL NEW CONSTRUCTION IS IN PLACE.
- REFER TO LIFE SAFETY PLAN FOR LOCATIONS OF EXISTING RATED PARTITIONS AND SHAFTS.
- EXISTING CONSTRUCTION TO REMAIN SHALL BE PRESERVED AND PROTECTED DURING CONSTRUCTION. EXISTING CONSTRUCTION TO REMAIN SHALL BE PATCHED AND REPAIRED TO MATCH EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE OWNER, INCLUDING THE MAINTENANCE OF ALL FIRE RATINGS AT STRUCTURAL MEMBERS; SURFACES OF FLOORS, WALLS, CEILINGS, ETC.
- ANY ITEM NOT SPECIFICALLY IDENTIFIED BUT REQUIRED TO BE REMOVED OR REPAIRED TO PREPARE THE BUILDING FOR THE NEW WORK, OR TO OTHERWISE PRODUCE THE FINISHED PRODUCT SHOWN IN THE CONTRACT DOCUMENTS, IS THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR TO PROVIDE SAFE PASSAGE OF PERSONS AROUND AREA OF DEMOLITION.
- PROVIDE ADEQUATE BRACING AND SHORING AS REQUIRED.
- AREAS SHOWN FOR DEMOLITION ARE APPROXIMATE. ACCURATE EDGES TO BE SET BY THE CONTRACTOR IN THE FIELD.
- REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL DEMOLITION NOTES.
- FIELD VERIFY THAT THE EXISTING FIRE RATED PARTITIONS TO REMAIN MEET MINIMUM STANDARDS. REFER TO LIFE SAFETY PLAN FOR LOCATIONS. NOTIFY OWNER OF ANY QUESTIONABLE CONDITIONS.
- WHEN CORING FOR SCHEDULED PLUMBING PENETRATIONS CONFLICTS WITH EXISTING STRUCTURAL CONCRETE RIBS, BEAMS, GIRDERS, ETC., ADJUST CORING LOCATION TO AVOID THOSE STRUCTURAL ELEMENTS TO NEAREST ADJACENT CLEAR SLAB CONSTRUCTION. AVOID CUTTING REBAR TO GREATEST EXTENT POSSIBLE.
- DEMOLITION PLAN DOES NOT INCLUDE HAZARDOUS MATERIAL, ABATEMENT, AND REMEDIATION PROCEDURES. COVERED UNDER SEPARATE CONTRACT. REFER TO TECHNICAL SPECIFICATIONS, ABATEMENT OF ASBESTOS-CONTAINING MATERIALS AS PREPARED BY PERFORMANCE ENVIRONMENTAL SERVICE, INC FOR WAYNE STATE UNIVERSITY FOR MORE INFORMATION.

DEMOLITION PLAN LEGEND

	EXISTING DOOR TO BE REMOVED OR RELOCATED
	EXISTING PARTITION TO BE DEMOLISHED
	EXISTING MILLWORK TO BE DEMOLISHED
	EXISTING SLAB TO BE DEMOLISHED
	EXISTING SLAB OPENING TO RECEIVE STRUCTURAL INFILL
	CONCRETE VOID TO BE INFILLED
	SHEET NOTE
	DASHED LINES INDICATED ITEMS TO BE DEMOLISHED OR TEMPORARILY REMOVED.
	AREA OF SITE WORK DEMOLITION INCLUDING
	TREE TO BE REMOVED
	LIGHT POST

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06/03/2019	Bid/Permit	3

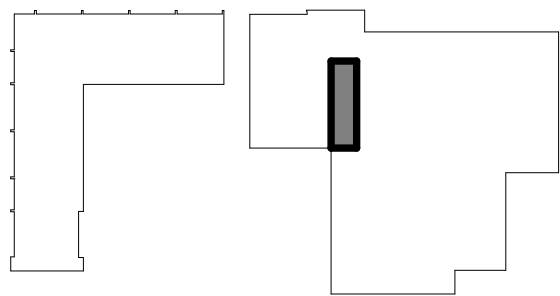
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Key Plan



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Mechanical: NORR
Electrical: NORR

Seal(s)

giffels webster

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Design Lead	Drawn P. PERKINS
Project Leader	Checked G. KARANFILOVSKI

Client
WAYNE STATE UNIVERSITY

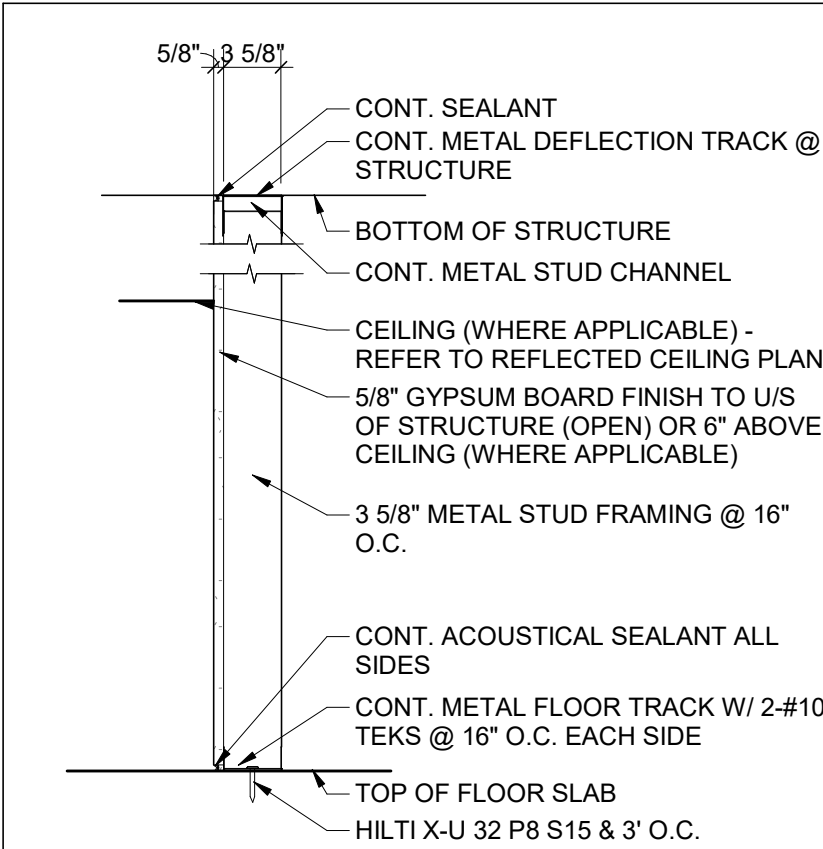
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
TOILET ROOMS DEMOLITION PLAN

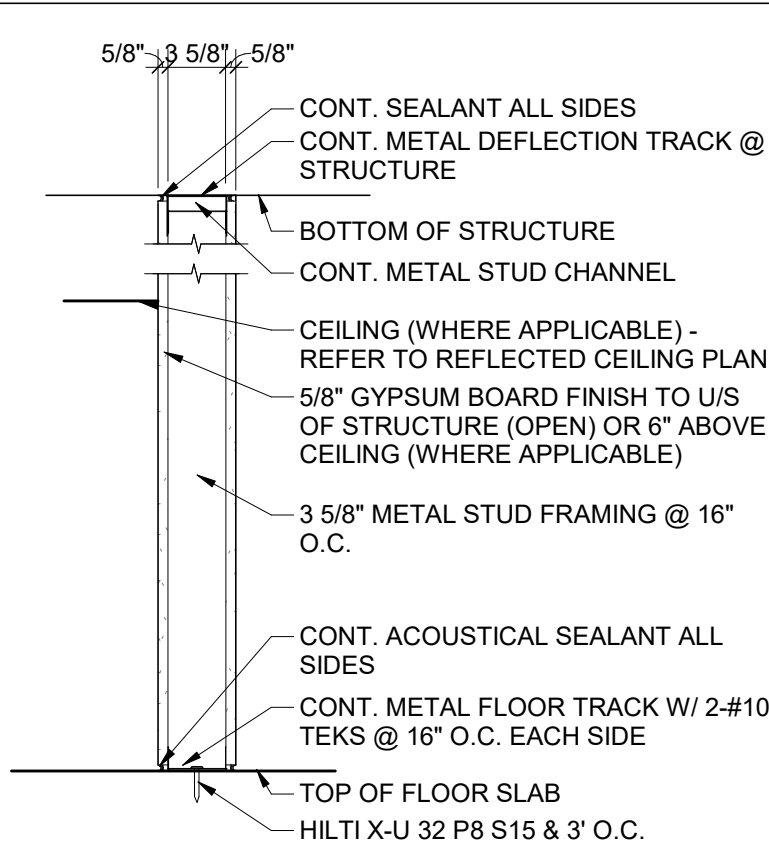
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Project No. JCDT18-0451

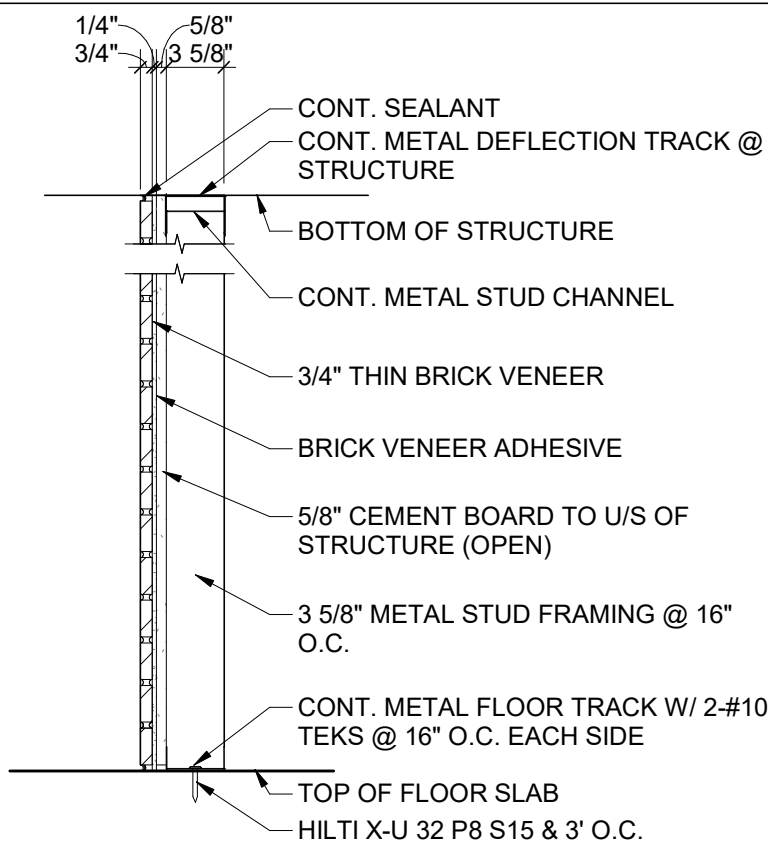
Drawing No.
AD03-01



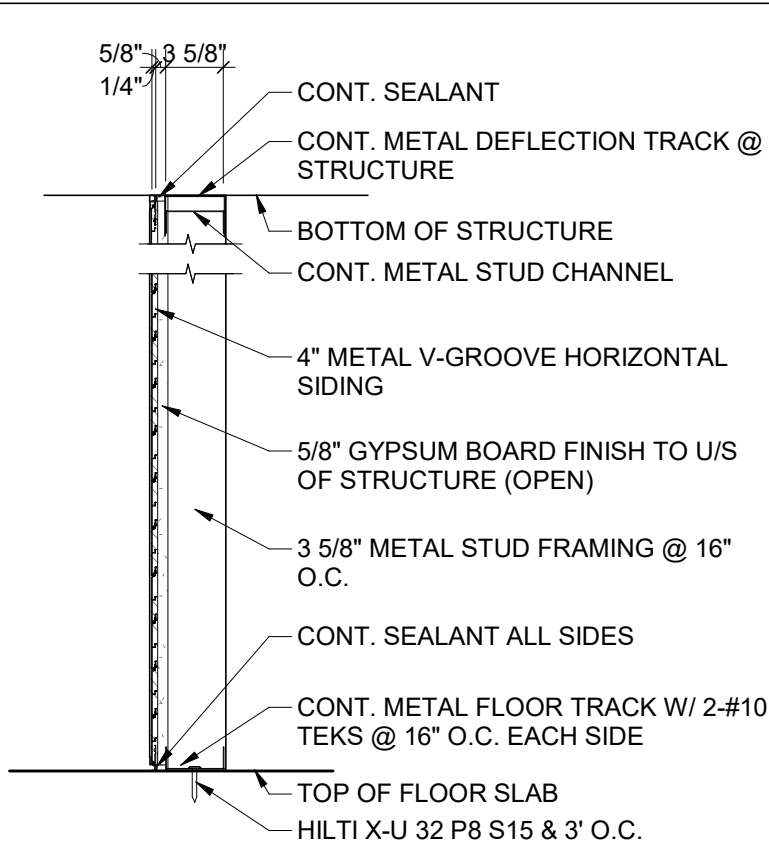
	WALL TYPE	REF./MAN.	F.R.	S.T.C.	R (RSI)
P01	3 5/8" METAL STUD FURRING				



	WALL TYPE	REF./MAN.	F.R.	S.T.C.	R (RSI)
P02	3 5/8" METAL STUD FURRING				



	WALL TYPE	REF./MAN.	F.R.	S.T.C.	R (RSI)
P03	3 5/8" METAL STUD FURRING W/ 3/4" BRICK VENEER				

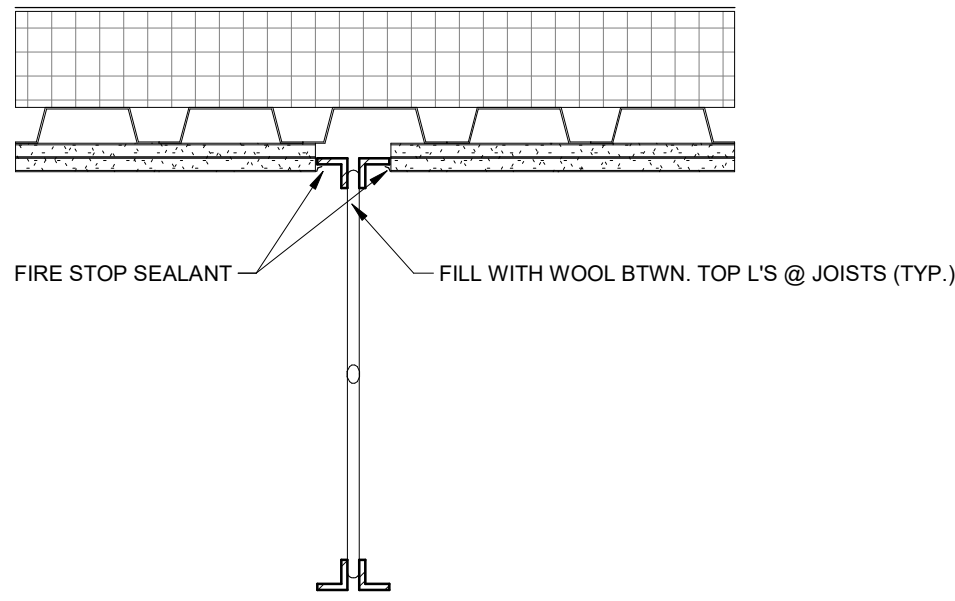


	WALL TYPE	REF./MAN.	F.R.	S.T.C.	R (RSI)
P04	3 5/8" METAL STUD FURRING W/ METAL SIDING				

PROPOSED FIRE RATING OF STRUCTURAL ELEMENTS

(PER FIRE RATING SECTION / CODE ANALYSIS ON A1-00)

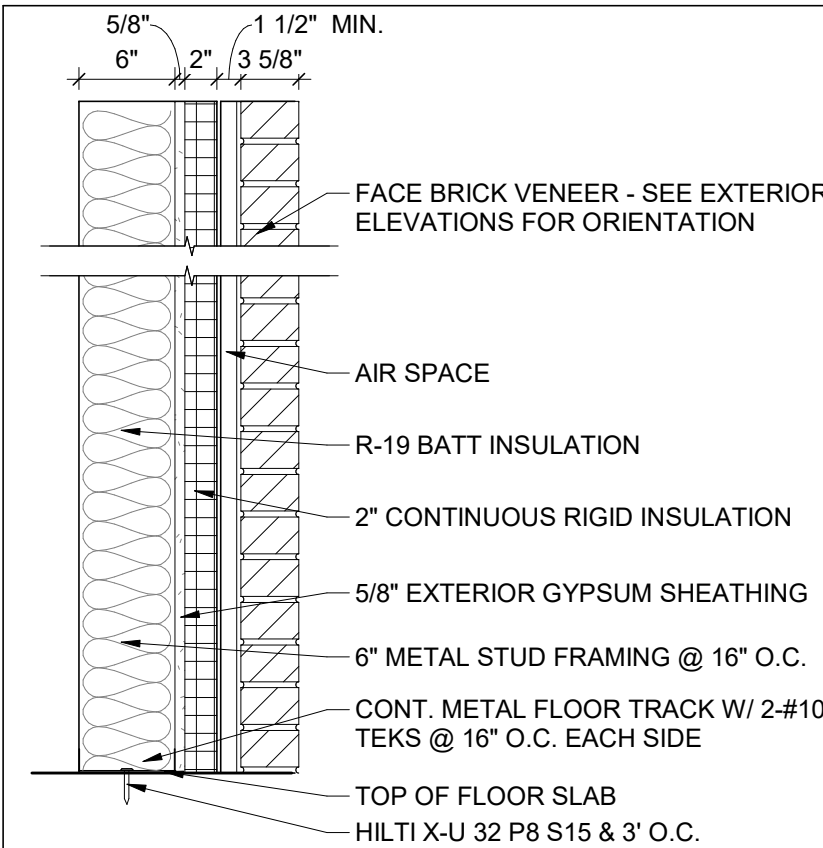
- HSS COLUMNS - 1 HR RATING INTUMESCENT COATING
UL DES. NO. X650
- STEEL BEAMS - 1 HR RATING INTUMESCENT COATING
UL DES. NO. N614
- OPEN WEB JOIST - 1 HR RATING
UL DES. NO. S736



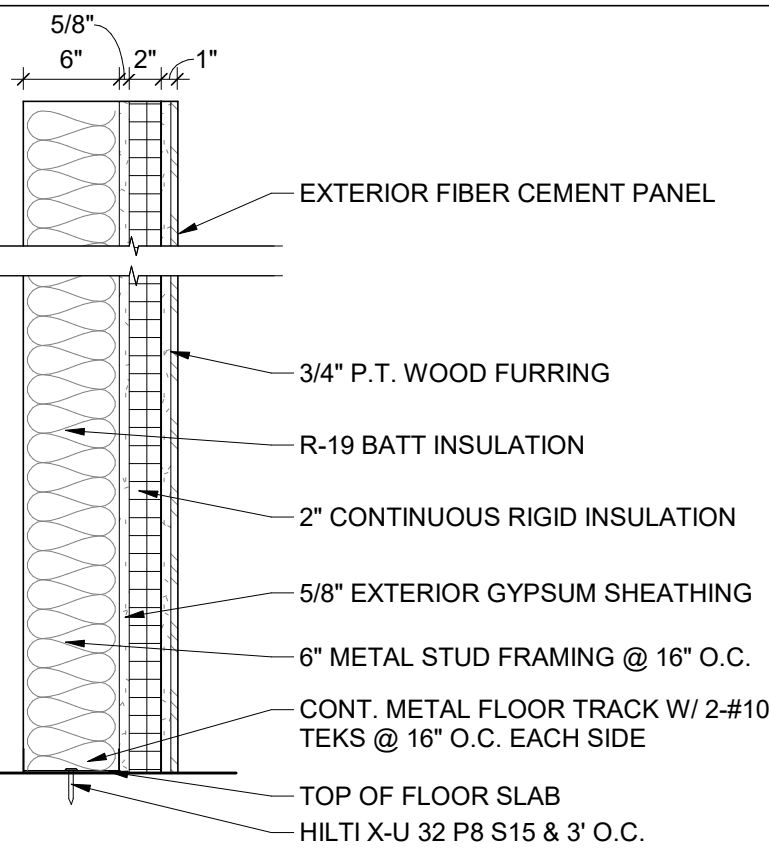
- METAL DECKING - (2) 5/8" TYPE 'X' GYPSUM BOARDS, STAGGERED, ON 7/8 HAT CHANNELS @ 24" O.C., SECURED TO MTL. DECK (USE 5/8" EXT. GRADE GYP. BD TYPE 'X' RATED ON EXTERIOR SOFFIT.

- STRUCTURAL CROSS BRACING - 1 HR RATING INTUMESCENT COATING

2015 MICH ENERGY CODE		
INSUL. REQUIRED		PROVIDED
ROOF	R30	R31
WALLS	R10	R23
CONC. SLAB (PERIM.)	R15	R15
GLAZING		
U-FACTOR	U 0.42	U 0.31
SHGC	U 0.40	U 0.25
DOOR	U 0.77	U 0.70



	WALL TYPE	REF./MAN.	F.R.	S.T.C.	R (RSI)
W01	6" METAL STUD WALL W/ 4" BRICK VENEER				18



	WALL TYPE	REF./MAN.	F.R.	S.T.C.	R (RSI)
W02	6" METAL STUD WALL FIBER CEMENT PANEL				18

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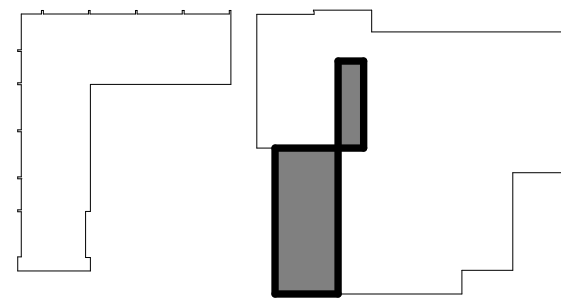
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Seal(s)

giffels
webster

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Design Lead	Drawn
	P. PERKINS
Project Leader	Checked
	G. KARANFILOVSKI

Client
WAYNE STATE
UNIVERSITY

Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
WALL TYPES

Scale: As indicated

Project No. JCDT18-0451

Drawing No.
A01-03

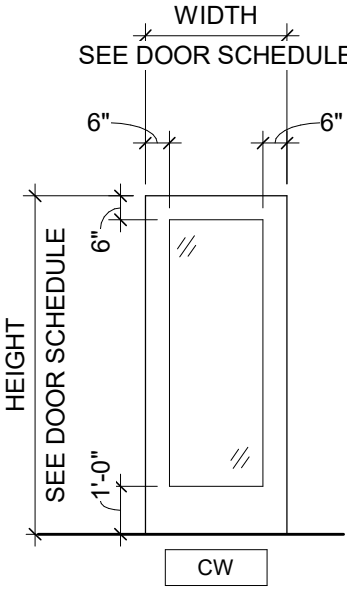
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DOOR SCHEDULE - NEW CONSTRUCTION

DOOR No	ROOM	PANEL						FRAME				HARDWARE GROUP	FIRE RATING	COMMENTS	
		WIDTH	HEIGHT	THICKNESS	TYPE	MATERIAL	FINISH	TYPE	DETAIL	MATERIAL	FINISH				
FINISHED FLOOR															
100A	NEW DINING HALL ADDITION	6'-4 1/4"	8'-0"	1 3/4"	CW	AL	ANNO	-	-	AL	ANNO	1		1	
101B	NEW DINING HALL ADDITION	6'-6 1/2"	8'-0"	1 3/4"	CW	AL	ANNO	-	-	AL	ANNO	1		1	
E100A	EXISTING DINING HALL	6'-4"	8'-0"	1 3/4"	EXIST	EXIST	--			EXIST	--	2		2,3	
E100B	EXISTING DINING HALL	6'-4"	8'-0"	1 3/4"	EXIST	EXIST	--			EXIST	--	2		2,3	

- NOTES:
1. ALUMINUM DOOR AND FRAME COLORS AND FINISHES CHOOSEN FROM MANUFACTURER'S STANDARDS BY ARCHITECT / DESIGNER.
 2. CONTRACTOR TO PROVIDE CUSTOM REMOVABLE METAL INSERT AT FLOOR OPENNING TO COVER DOOR MULLION OPENNING WHEN MULLION IS REMOVED.
 3. MODIFY CLOSER TO ALLOW FOR HOLD OPEN.

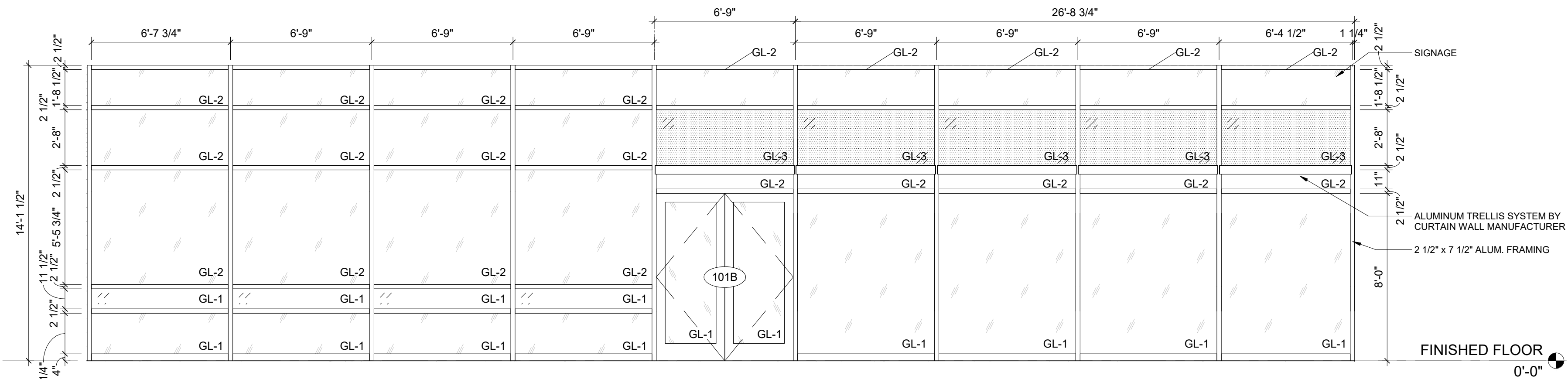
DOOR TYPES



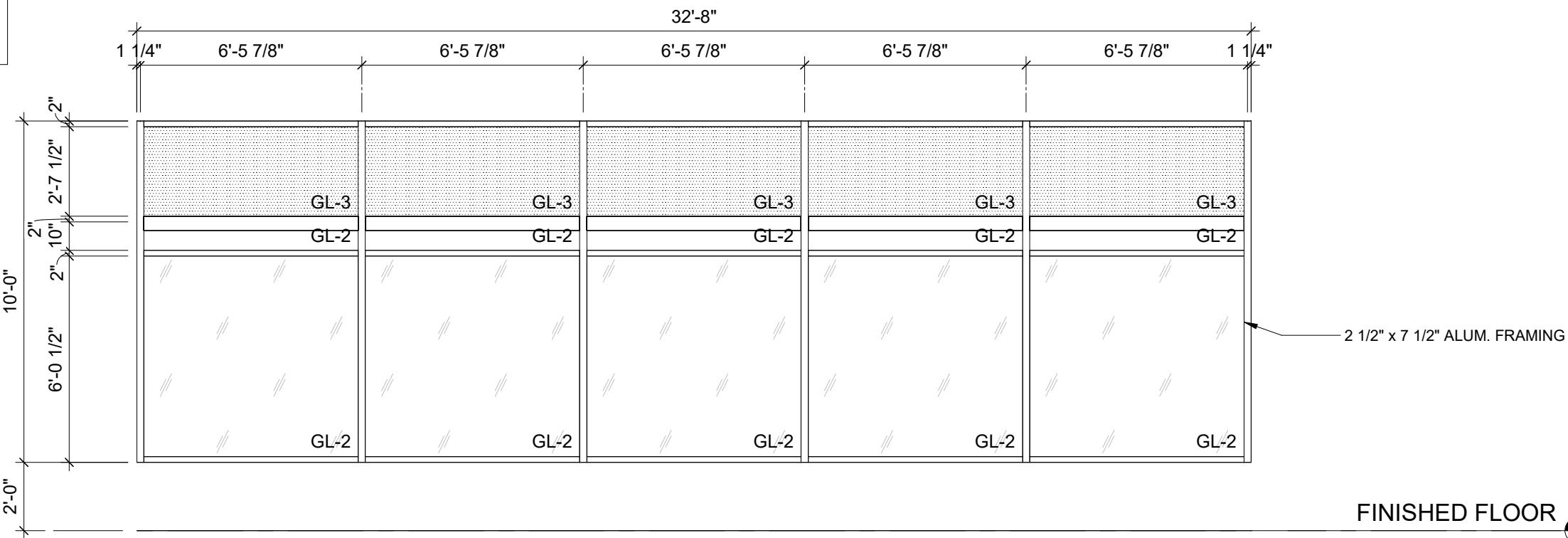
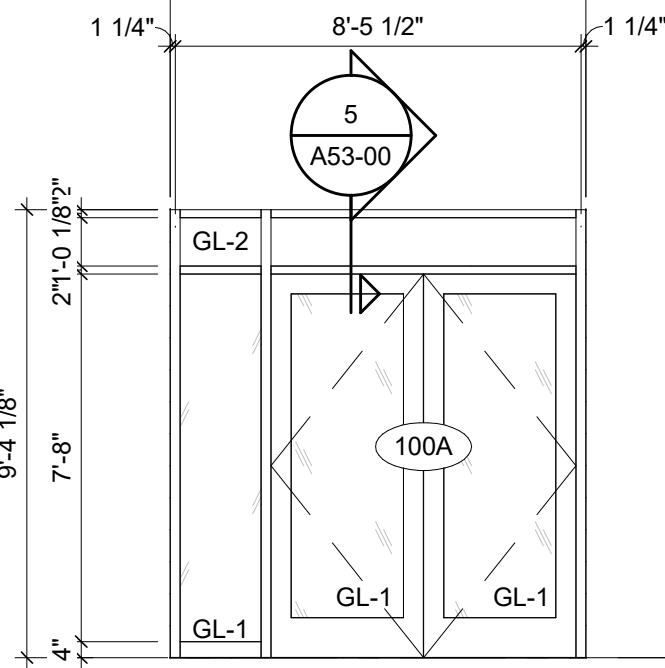
CW: STOREFRONT, WIDE STILE

- NOTE:
1. SEE DOOR SCHEDULE FOR MATERIALS AND FINISHES.
 2. SEE SPECIFICATION SECTION 084413 & 08800 FOR GLASS SCHEDULE.
 3. ALL GLASS IN DOORS TO BE TEMPERED, UNLESS NOTED OTHERWISE.
 4. SEE HARDWARE SCHEDULE FOR SPECIFIC DOOR HARDWARE.

WINDOW SCHEDULE



- NOTE:
1. FIELD VERIFY ALL WINDOW OPENINGS PRIOR TO MANUFACTURE.
 2. REFER TO SPECIFICATION SECTION 084413 FOR FRAME & GLAZING TYPES.
 3. ALL GLAZING BELOW 36" A.F.F. TO BE TEMPERED.
 4. ALL EXTERIOR WINDOWS ARE ALUMINUM CURTAIN WALL, U.N.O. - REFER TO SPECIFICATIONS AND DETAILS



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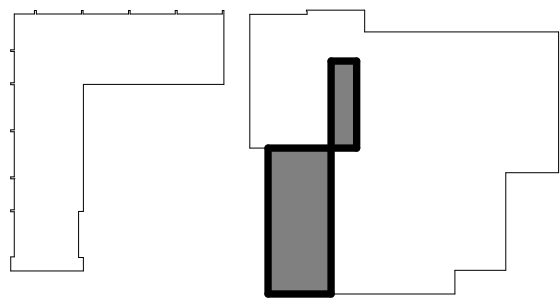
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Project Leader	Checked
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Client
WAYNE STATE UNIVERSITY

Project
WSU DINING HALL ADDITION

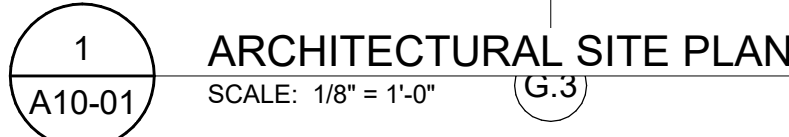
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
DOOR & WINDOW SCHEDULES, ELEVATIONS & DETAILS AND HARDWARE SCHEDULE

Scale: 1/4" = 1'-0"

Project No. JCDT18-0451

Drawing No.
A02-01



Key Value	Keynote Text
AS1	ADA COMPLIANT CONCRETE SIDEWALK W/ BROOM FINISH, REFERENCE CIVIL DRAWINGS.
AS2	ADA COMPLIANT CONCRETE SIDEWALK W/ STAMPED FINISH, REFERENCE CIVIL DRAWINGS.
AS3	AREA TO RECEIVE LANDSCAPING. FINAL LANDSCAPING SCOPE TBD. FINAL LANDSCAPING SCOPE NOT TO EXCEED AGREED UPON PROJECT BUDGET ALLOCATED FOR LANDSCAPING FEATURES.
AS4	HORIZONTAL "WOOD" SCREEN FENCE, REFER TO CIVIL DRAWINGS.
AS5	HORIZONTAL "WOOD" SCREEN FENCE GATE, REFER TO CIVIL DRAWINGS.
AS6	EXTERIOR POST LIGHTING FIXTURE, REFERENCE ELECTRICAL DRAWINGS.
AS7	OUTLINE OF TRELLIS ABOVE, REFERENCE FLOOR PLANS.
AS8	BLUE LIGHT PHONE TO REMAIN.

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Project WSU DINING HALL ADDITION 655 W. KIRBY ST. DETROIT, MI 48202

A10-01

GENERAL NOTES

1. ALL PLAN DIMENSIONS ARE TO FINISHED FACE OF FINISHED WALLS, FACE OF MASONRY, AND CENTERLINE OF COLUMNS, UNLESS NOTED OTHERWISE.
2. PARTITIONS ARE TO EXTEND AND SEAL AGAINST THE BOTTOM OF THE DECK ABOVE UNLESS OTHERWISE NOTED.
3. INSTALL METAL TRIM ON ALL GYPSUM BOARD EDGES ABUTTING OTHER MATERIALS OR WHERE GYP BD STOPS SHORT OF OTHER MATERIALS TO FORM A REVEAL OR RECESS. USE METAL CORNER BEAD ON ALL GYPSUM BOARD EXTERIOR CORNERS.
4. ADD SUFFICIENT BLOCKING IN STUD WALLS TO SUPPORT ALL ITEMS OR EQUIPMENT SHOWN OR SPECIFIED TO BE ATTACHED TO WALLS. PROVIDE ADDITIONAL STRUCTURAL SUPPORT (PLATES, ANGLES, CHANNELS, ETC.) WITHIN WALLS WHERE WEIGHT OF ATTACHED ITEMS EXCEED WALL CAPACITY. PROVIDE BACKING PLATES OR BLOCKING FOR ANY OWNER FURNISHED OR INSTALLED ITEMS.
5. PAINT ALL WALL SURFACES, DOOR FRAMES, BULKHEADS AND CEILINGS IN ROOMS WHERE INDICATED ON PLANS OR ROOM FINISH SCHEDULE. PAINT BEHIND ALL MOVEABLE ITEMS ADJACENT TO WALLS RECEIVING PAINT AND RELOCATE ITEMS AS NECESSARY.
6. THE AREA OF WORK SHALL BE MAINTAINED IN A SECURED CONDITION AT ALL TIMES. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO SECURE THE AREA OF WORK.
7. REFER TO FLOOR AND REFLECTED CEILING PLANS AND MECHANICAL AND ELECTRICAL DRAWINGS FOR SPACE ALLOCATIONS IN ROUTING OF ALL MECHANICAL AND ELECTRICAL WORK INCLUDING DIFFUSERS, REGISTERS, GRILLES, LIGHTS, ETC. THE REFLECTED CEILING PLAN LOCATIONS SHALL BE ADHERED TO UNLESS OTHERWISE NOTED ON DRAWINGS. EXCEPTIONS SHALL REQUIRE SPECIFIC WRITTEN APPROVAL BY THE OWNER'S REPRESENTATIVE OR ARCHITECT/ENGINEER. NOTE THAT ELECTRIC LIGHT FIXTURE LOCATIONS AND FIRE SPRINKLER HEADS SHALL TAKE PRECEDENCE OVER OTHER UTILITY ITEMS IN ANY AND ALL LOCATIONS FOR AREAS WITH OR WITHOUT CEILINGS; THE CONTRACTOR SHALL COORDINATE AS REQUIRED.
8. PROVIDE WALL AND CEILING ACCESS DOORS AS MAY BE REQUIRED BY CODE OR TO PROPERLY SERVICE OR ADJUST ALL VALVES, DAMPERS, CLEAN OUTS, ELECTRICAL JUNCTION BOXES AND OTHER DEVICES.
9. ALL WALLS, DOORS, AND WINDOWS WITHOUT A SYMBOL DESIGNATION ARE EXISTING TO REMAIN.

FLOOR PLAN KEY NOTES

Key Value	Keynote Text
A1	CONSTRUCT NEW WALLS AS SHOWN/SCHEDULED. ALIGN NEW GYP BD PARTITION WITH EXISTING CONSTRUCTION. REFER TO WALL TYPES.
A2	CONSTRUCT NEW WALLS AS SHOWN/SCHEDULED. VERIFY ALL MEASUREMENTS IN FIELD, NOTIFY ARCHITECT OF ANY DISCREPENCY.
A3	INFILL DOOR OPENING TO MATCH EXISTING WALL CONSTRUCTION
A4	PATCH AND REPAIR EXISTING WALL GYPSUM BOARD WALL AND PREPARE FOR PAINT.
A5	INSTALL NEW EXTERIOR CURTAIN WALL WINDOWS. SITE MEASURE OPENINGS.
A6	RELOCATED HIGH / LOW WATERFOUNTAIN - REFER TO MECHANICAL DRAWINGS
A7	NEW RECESSED FIRE EXTINGUISHER CABINET MOUNTING LOCATION. REFER TO FIRE SEPARATION PLANS FOR MOUNTING DETAILS.
A9	NEW EXTERIOR DECORATIVE WINDOW TRIM.
A10	NEW SOLID SURFACE WINDOW SILL AT THIS LOCATION.
A11	CONTRACTOR TO PROVIDE AND INSTALL ROLLER SHADES AT THESE WINDOW LOCATIONS. REFER TO SPECIFICATIONS.
A12	REFER TO MECH, ELECT AND PLUMBING SHEETS FOR MECHANICAL EQUIPMENT, HOUSEKEEPING PADS, CONDUIT, WIRING, ELECTRICAL PANELS, DUCTING, AND MISC ACCESSORY SCOPE
A14	CONCRETE SLAB AT ENTRY - REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
A15	INSTALL NEW TOILET PARTITIONS.
A16	INSTALL NEW TOILET FIXTURES. REFER TO PLUMBING.
AS1	ADA COMPLIANT CONCRETE SIDEWALK W/ BROOM FINISH, REFERENCE CIVIL DRAWINGS.
AS2	ADA COMPLIANT CONCRETE SIDEWALK W/ STAMPED FINISH, REFERENCE CIVIL DRAWINGS.
AS3	AREA TO RECEIVE LANDSCAPING. FINAL LANDSCAPING SCOPE TBD. FINAL LANDSCAPING SCOPE NOT TO EXCEED AGREED UPON PROJECT BUDGET ALLOCATED FOR LANDSCAPING FEATURES.
AS4	HORIZONTAL "WOOD" SCREEN FENCE, REFER TO CIVIL DRAWINGS.
AS5	HORIZONTAL "WOOD" SCREEN FENCE GATE, REFER TO CIVIL.
AS6	EXTERIOR POST LIGHTING FIXTURE, REFERENCE ELECTRICAL DRAWINGS.
AS7	OUTLINE OF TRELLIS ABOVE, REFERENCE FLOOR PLANS.
AS8	BLUE LIGHT PHONE TO REMAIN.

DATE	ISSUED FOR	REV
04/03/2019	OWNER REVIEW	1
05/14/2019	OWNER REVIEW	2
06/03/2019	Bid/Permit	3

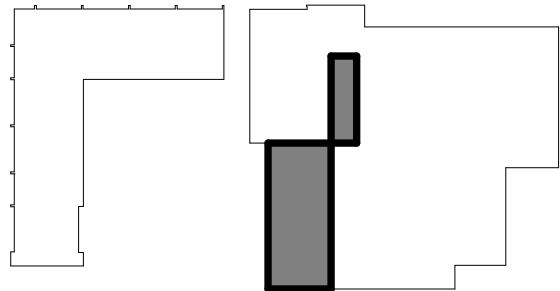
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)



Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead	Drawn P. PERKINS
Project Leader	Checked G. KARANFILOVSKI

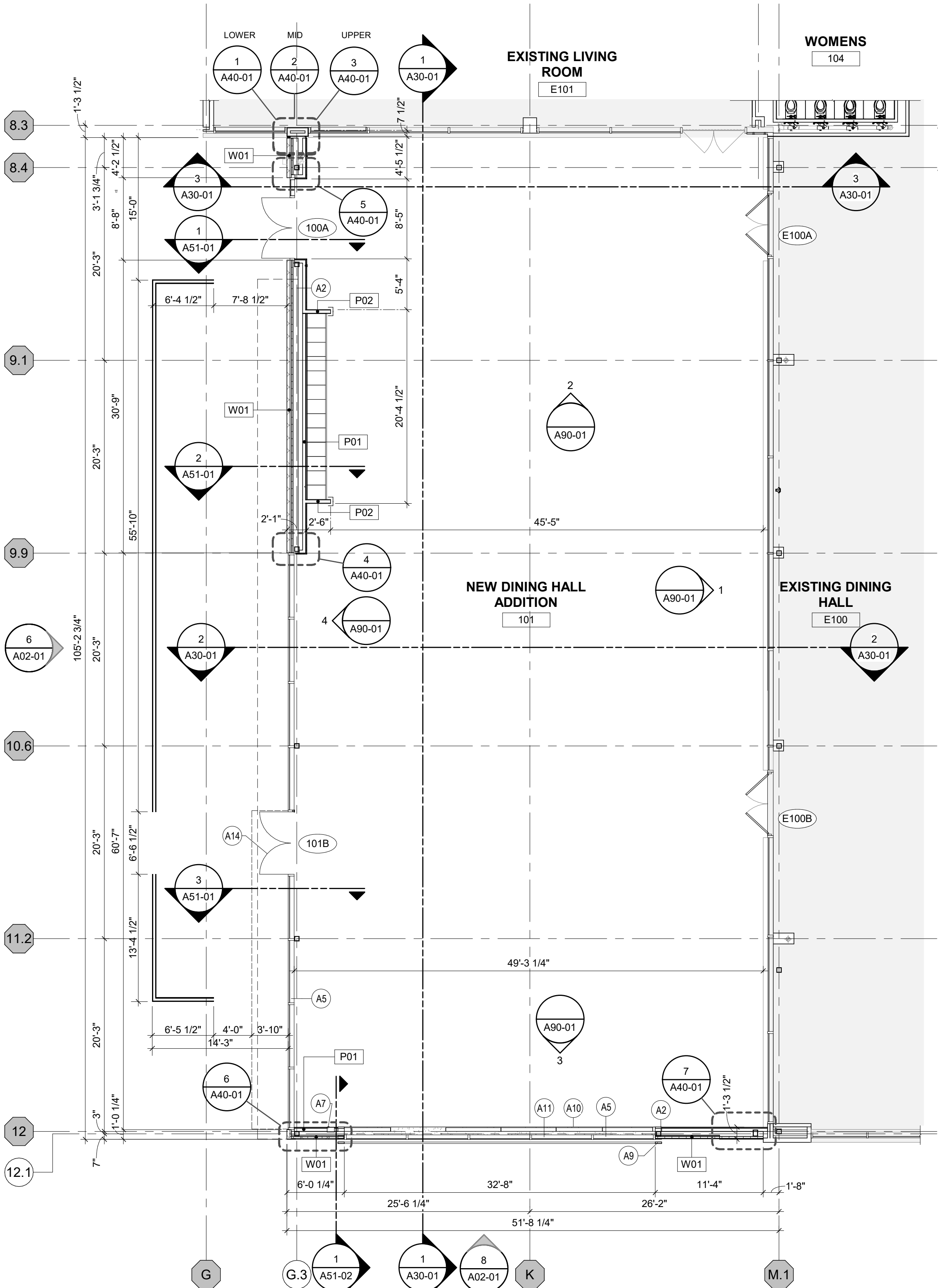
Client
WAYNE STATE UNIVERSITY
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
FLOOR PLANS

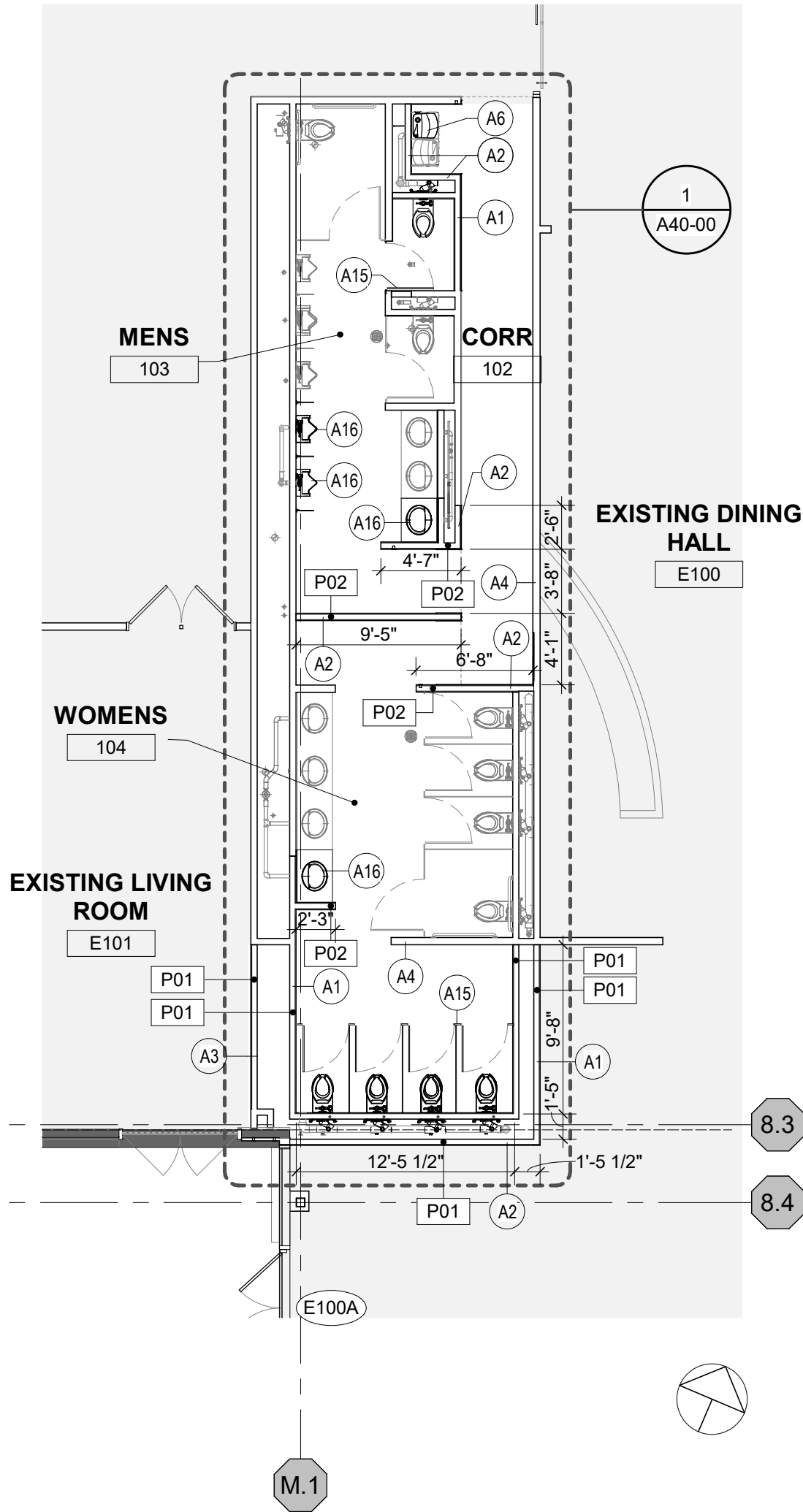
Scale: As indicated

Project No. JCDT18-0451

Drawing No.
A20-00



1
A20-00
FLOOR PLAN - ADDITION
SCALE: 1/8" = 1'-0"



2
A20-00
FLOOR PLAN - TOILET ROOMS
SCALE: 1/8" = 1'-0"

FLOOR PLAN LEGEND

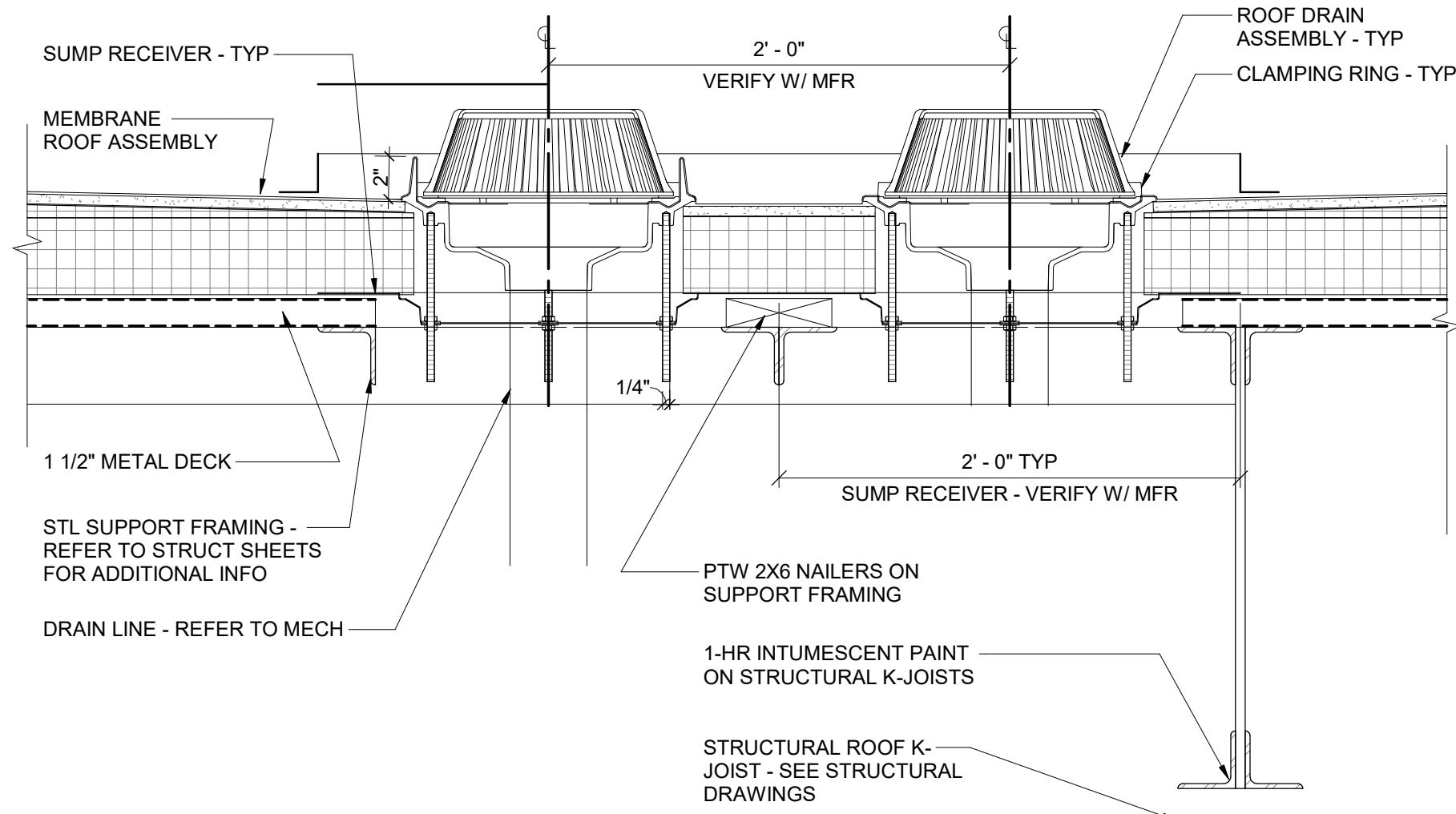
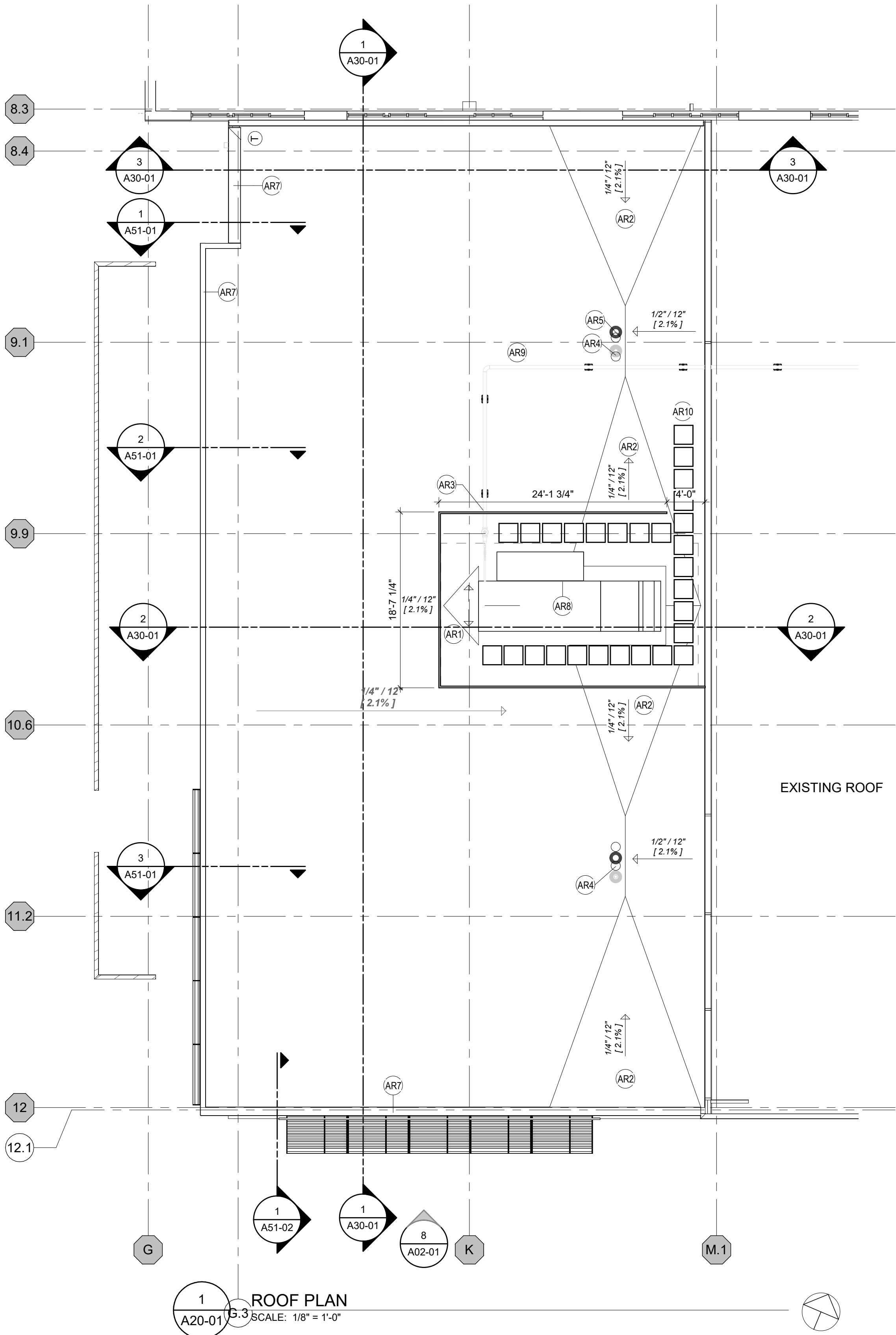
- EXISTING PARTITION TO REMAIN
- EXISTING DOOR TO REMAIN
- NEW PARTITION, SEE PARTITION TAGS & TYPES
- NEW DOOR & DOOR TAG WITH DOOR NUMBER
- NEW GLAZING & GLAZING TAG
- ROOM NAME
- ROOM TAG
- NEW CONCRETE REPAIR
- 1 HOUR PARTITION
- 2 HOUR PARTITION
- EXIST 2 HOUR PARTITION
- EQUIPMENT PROVIDED BY OWNER. INSTALLED BY OWNER

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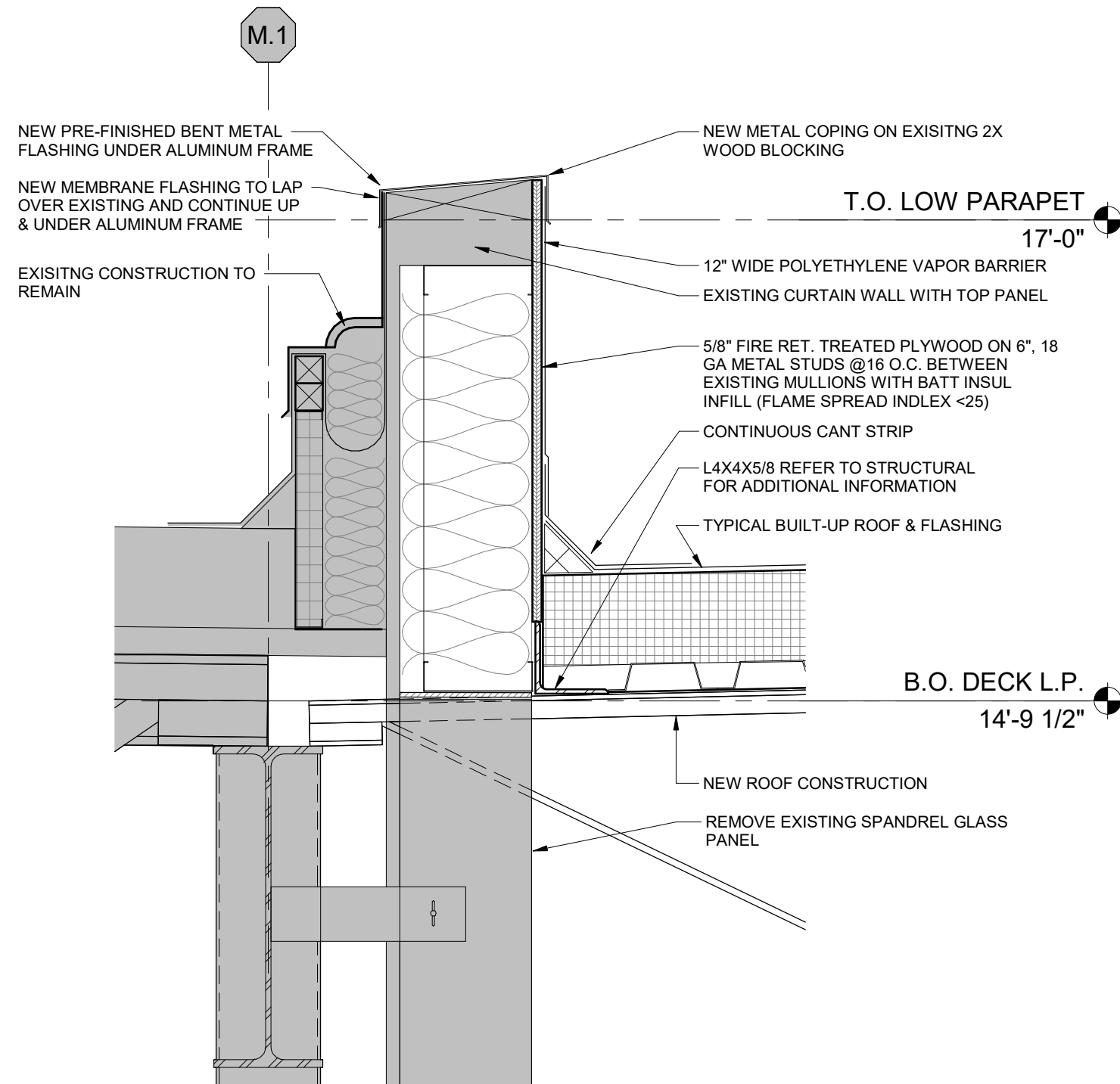
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ROOF PLAN KEY NOTES

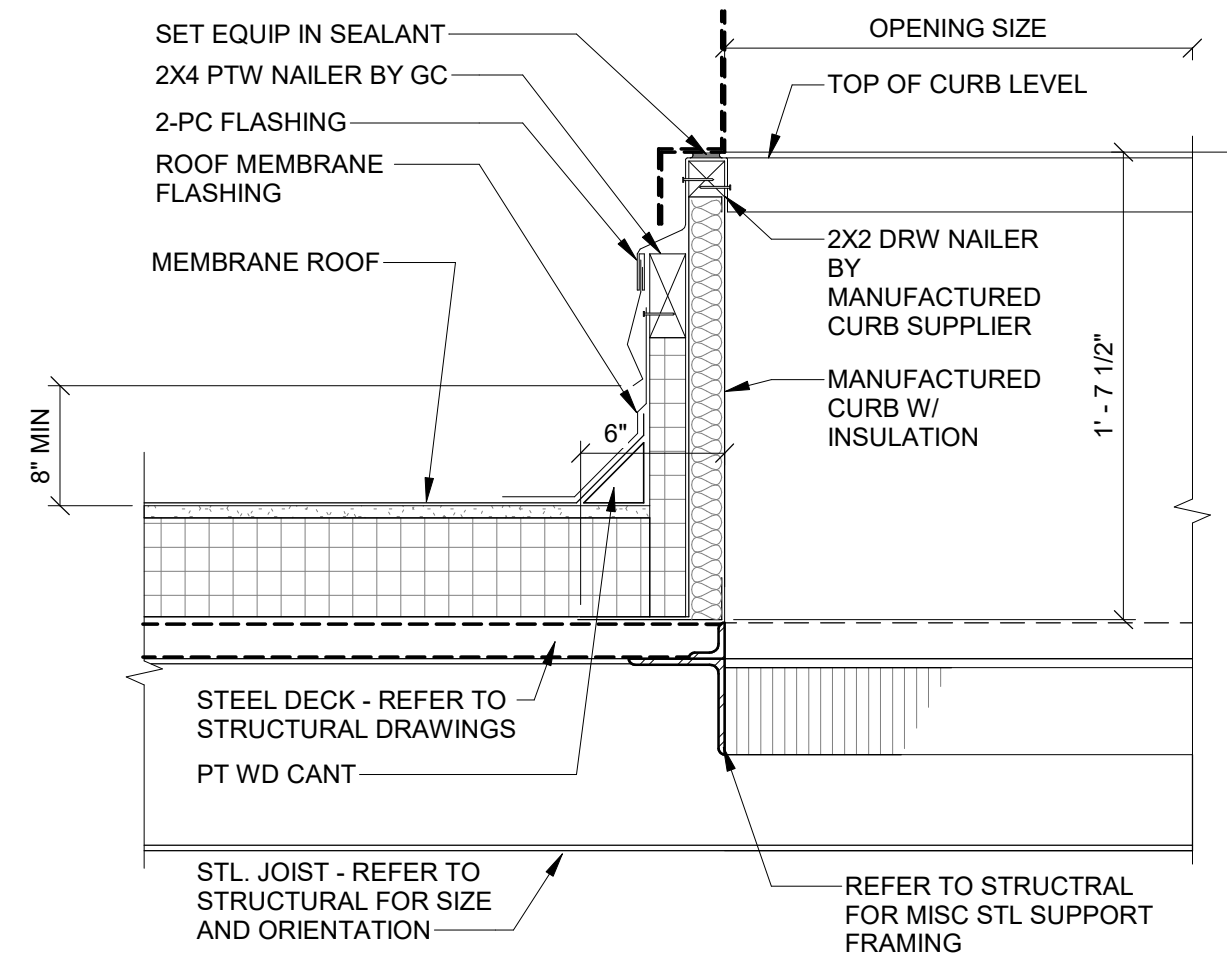
Key Value	Keynote Text
AR1	MAIN ROOF AREA - SLOPED STRUCTURE 1/4" PER FOOT.
AR2	TAPERED INSULATION - MIN. 1/4" PER FOOT SLOPE.
AR3	ALTERNATE 2: PROVIDE SCREEN WALL AROUND RTU. BASIC OF DESIGN: LINEA EQUIPMENT SCREEN BY MOODWERKS.
AR4	ROOF AREA DRAIN, REFERENCE MECHANICAL DRAWINGS.
AR5	OVERFLOW ROOF DRAIN, REFERENCE MECHANICAL DRAWINGS.
AR7	PRE-FINISHED METAL COPING, REFERENCE EXTERIOR ELEVATIONS.
AR8	MECHANICAL UNIT, REFERENCE MECHANICAL DRAWINGS.
AR9	ROOF PIPE PENETRATION HOUSING, COORDINATE EXACT LOCATION ONSITE, REFERENCE MECHANICAL SPEC.
AR10	WALKWAY PAD, COORDINATE EXACT LOCATION ONSITE.



2 ROOF DRAIN & OVERFLOW SUMP
SCALE: 1 1/2" = 1'-0"



4 ROOF EXPANSION JOINT @ COLUMN LINE M.1
SCALE: 1 1/2" = 1'-0"



3 TYPICAL ROOF CURB
SCALE: 1 1/2" = 1'-0"

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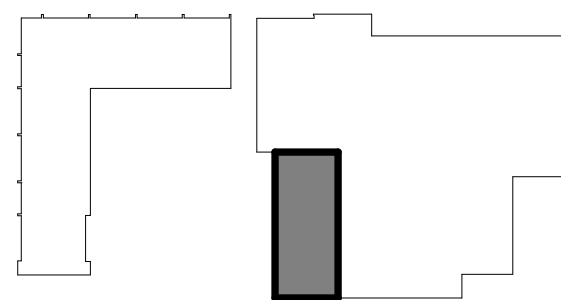
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

giffels
webster

NORR

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Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead	Drawn P. PERKINS
Project Leader	Checked G. KARANFILOVSKI

Client

WAYNE STATE
UNIVERSITY

Project

WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title

ROOF PLAN & DETAILS

Scale: As indicated

Project No. JCDT18-0451

Drawing No.

A20-01

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Key Plan

The Key Plan shows a large, irregular white shape representing a site or area. A dark grey rectangle is positioned on the left side of this shape, indicating the specific location of the site being discussed in the document.

Consultants

Civil:

Landscape:

Architecture: NORR

Structural: NORR

Mechanical: NORR

Electrical: NORR

Seal(s)



Client
**WAYNE STATE
UNIVERSITY**

Project
**WSU DINING HALL
ADDITION**

655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title	ELEVATIONS
---------------	------------

Scale:	As indicated
Project No.	ICDT18-0451

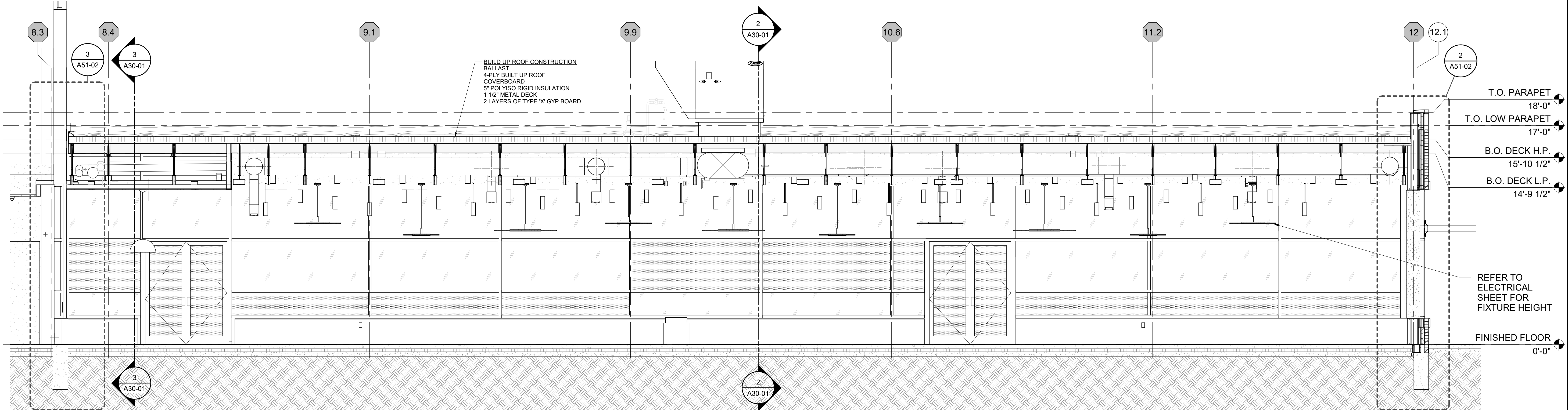
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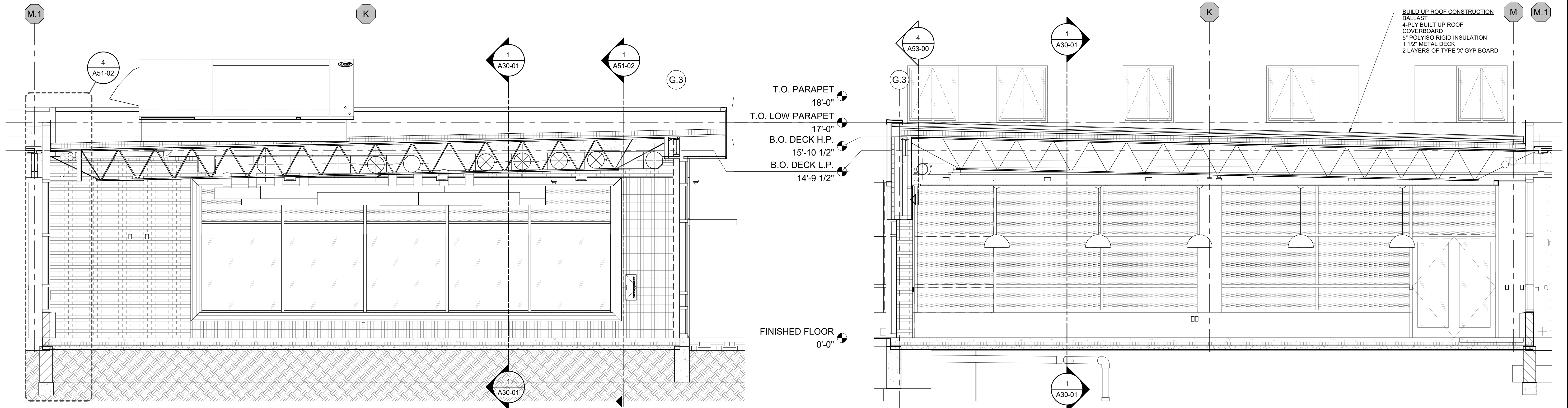
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A30-00

SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

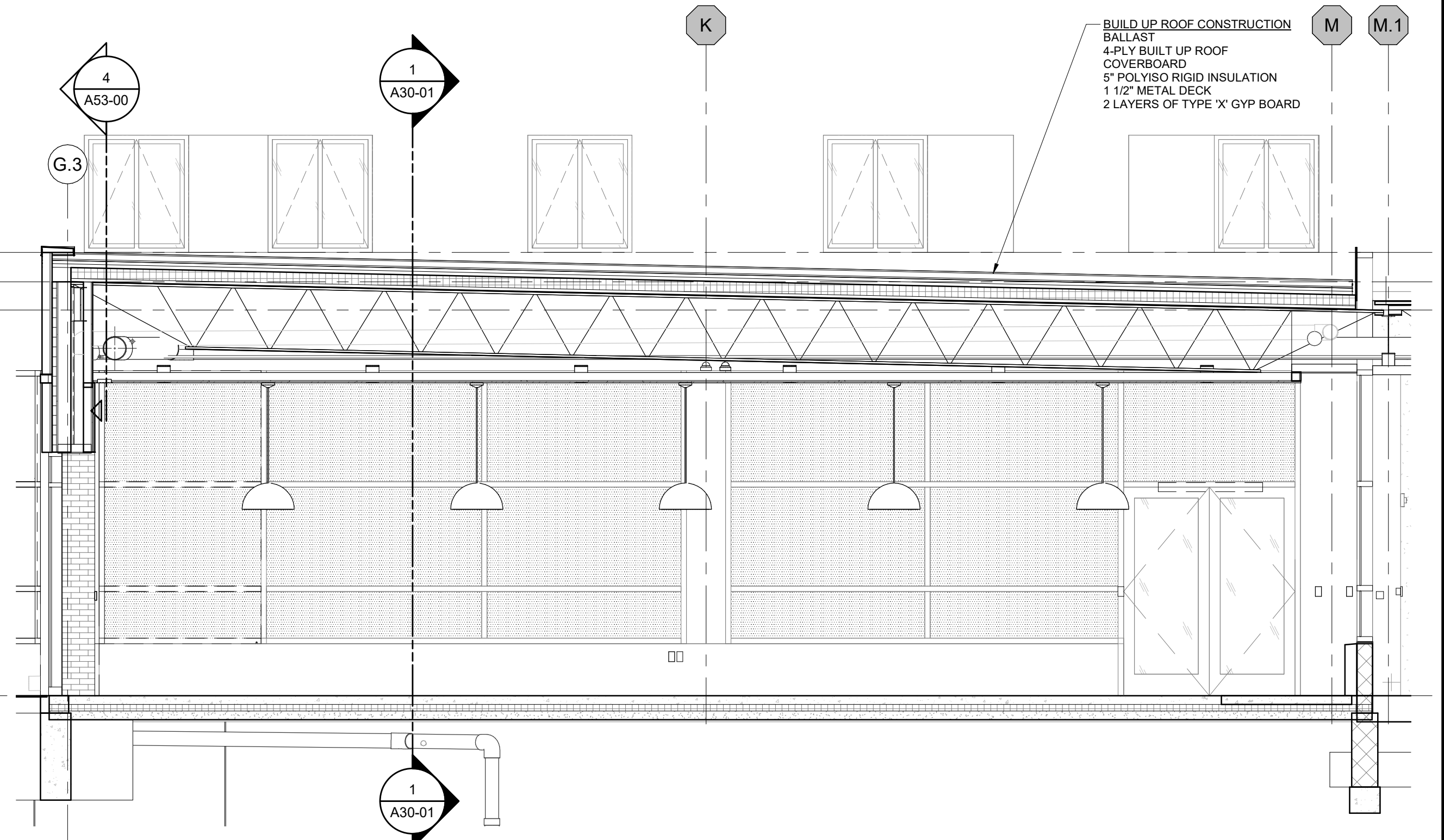
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1 NORTH-SOUTH BUILDING SECTION
SCALE: 1/4" = 1'-0"



2 EAST-WEST BUILDING SECTION
SCALE: 1/4" = 1'-0"



3 EAST-WEST BUILDING SECTION 2
SCALE: 1/4" = 1'-0"

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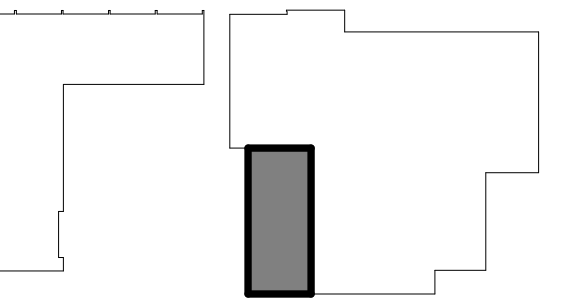
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Project Component

PHASE OF WORK

Key Plan



Consultants

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Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

giffels webster

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Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead	Drawn P. PERKINS
Project Leader	Checked G. KARANFILOVSKI

Client
WAYNE STATE UNIVERSITY
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
BUILDING SECTIONS

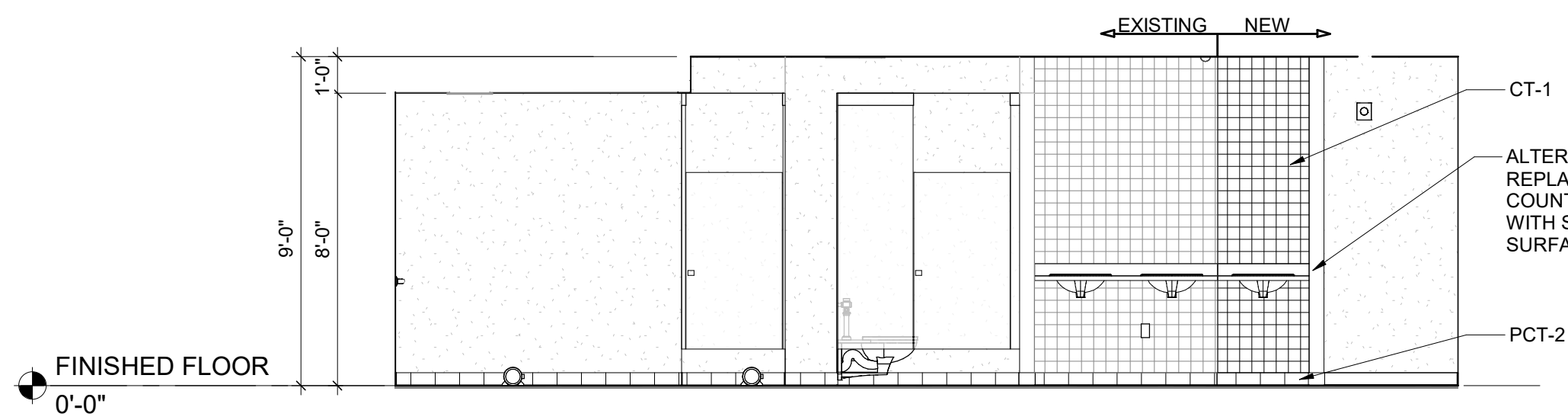
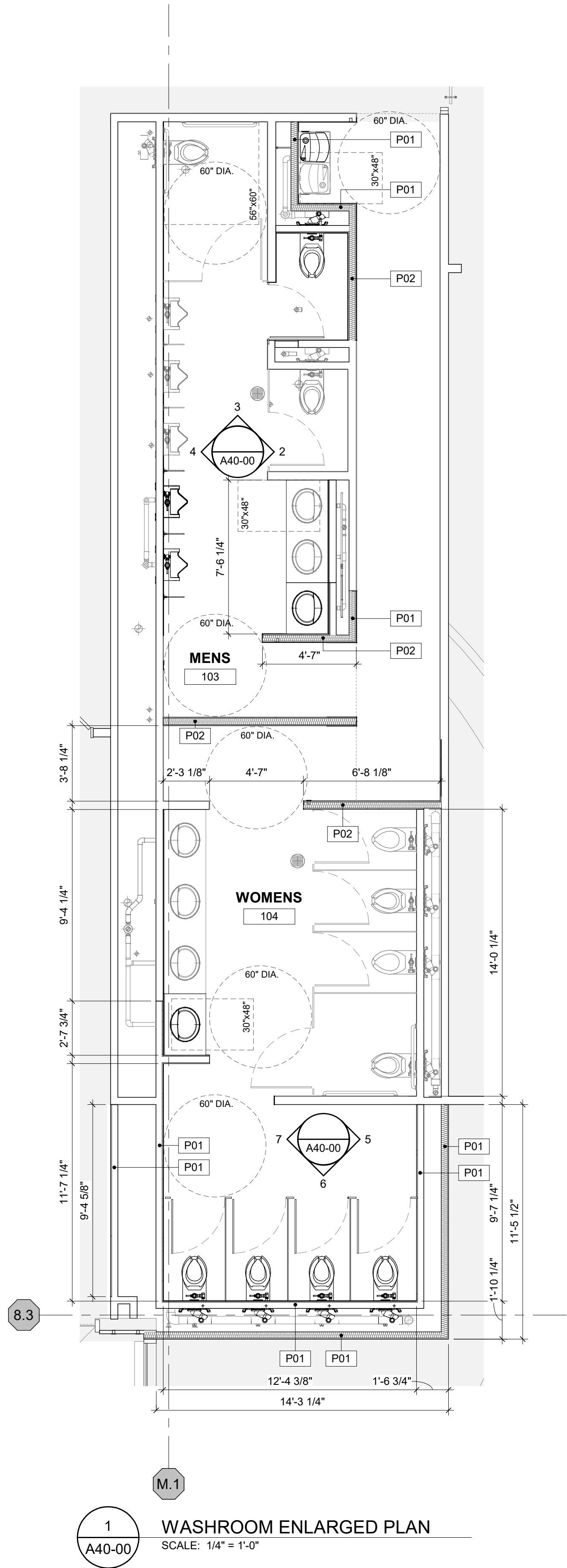
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Project No. JCDT18-0451

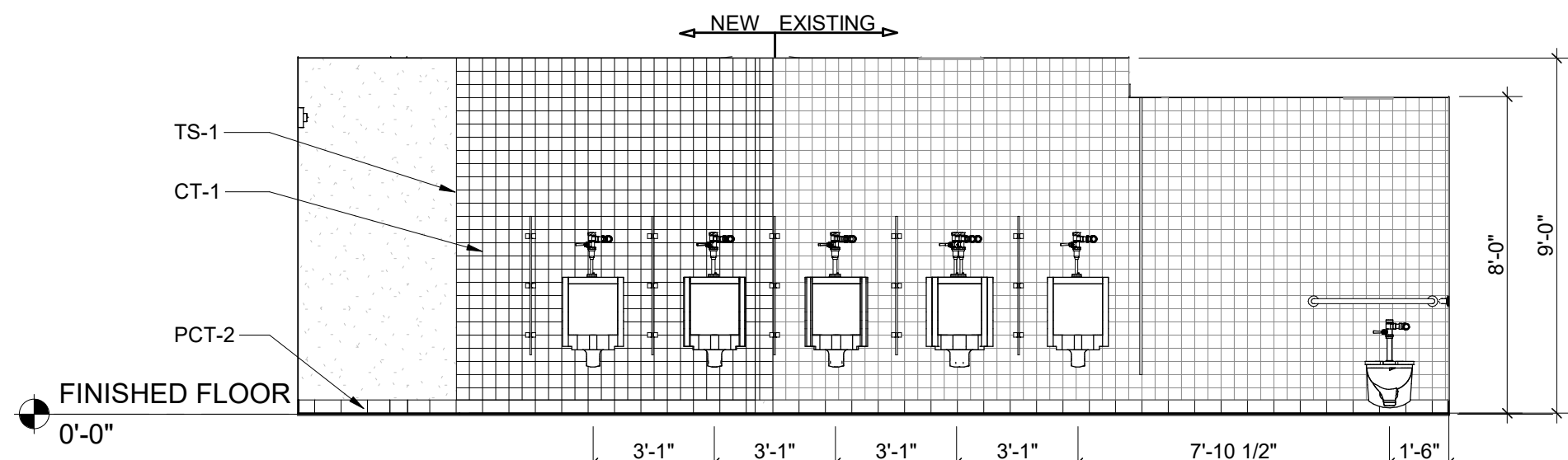
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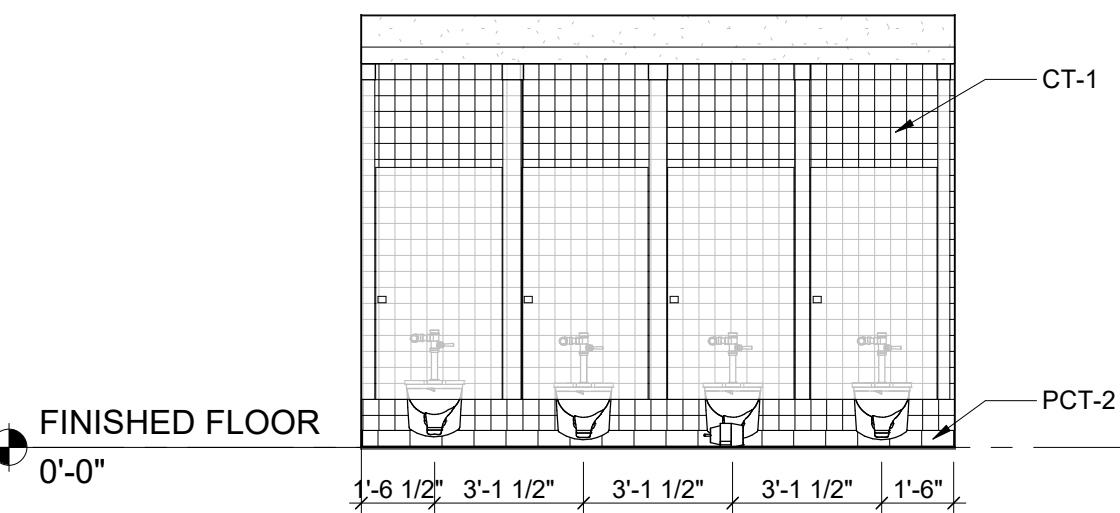
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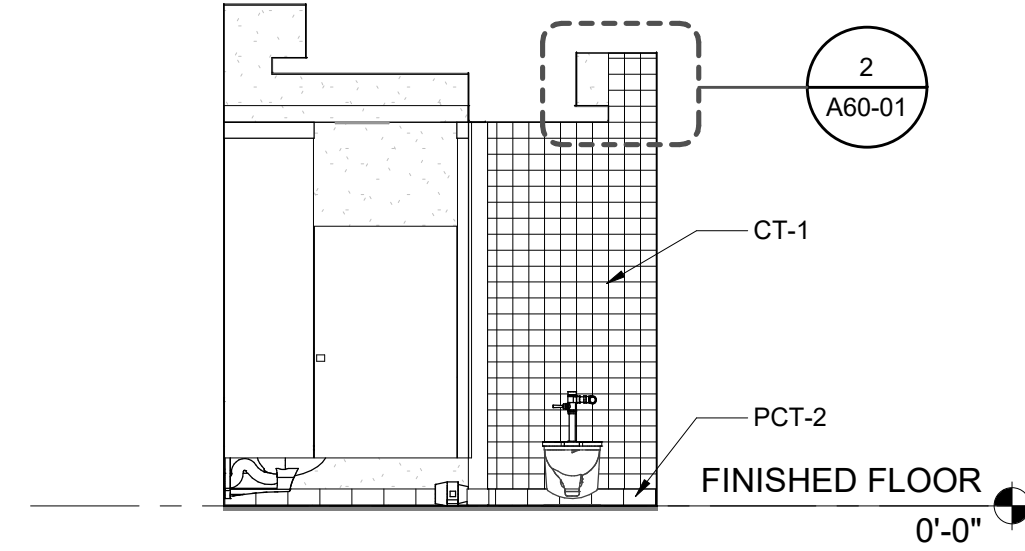
2 MEN'S INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



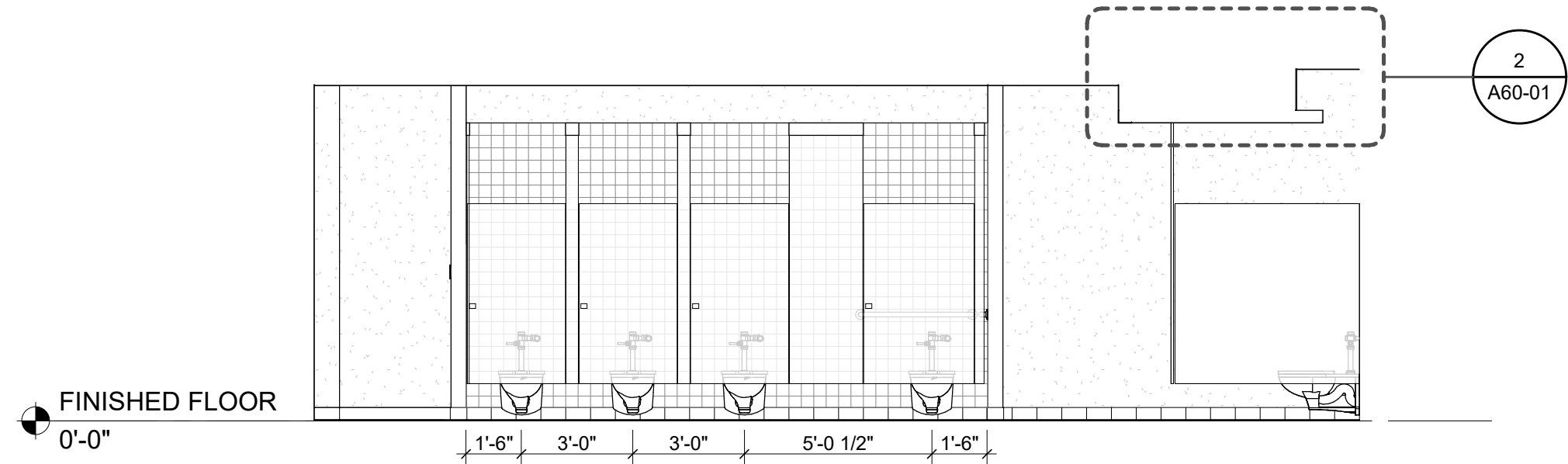
4 MEN'S INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



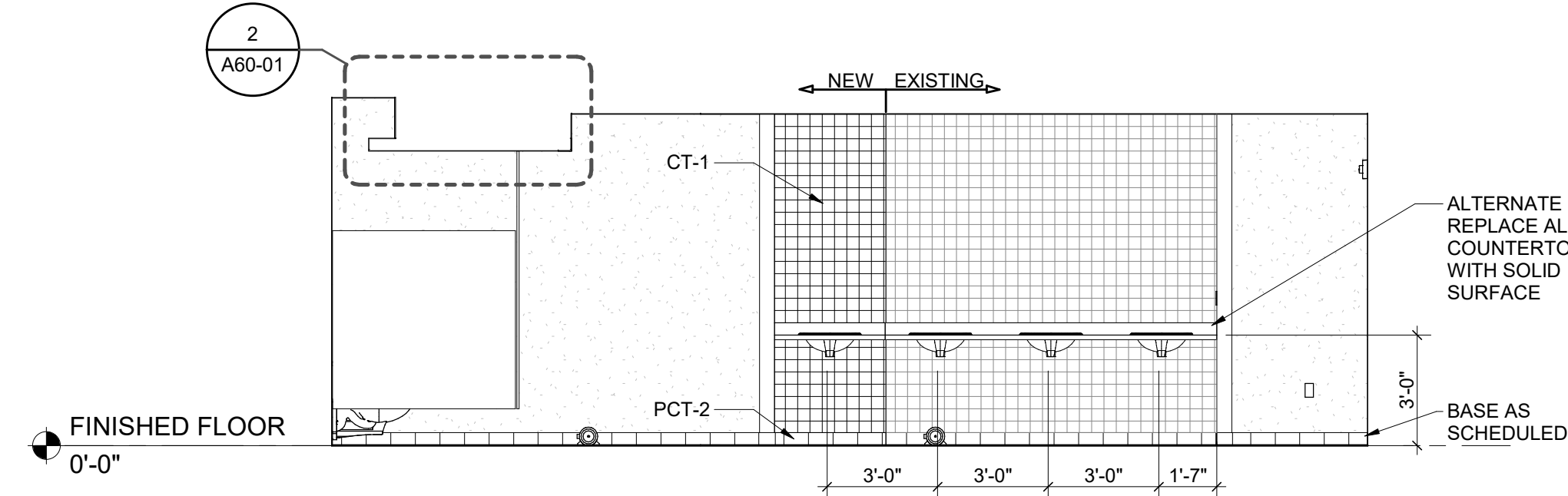
6 WOMEN'S INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



3 MEN'S INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



5 WOMEN'S INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"

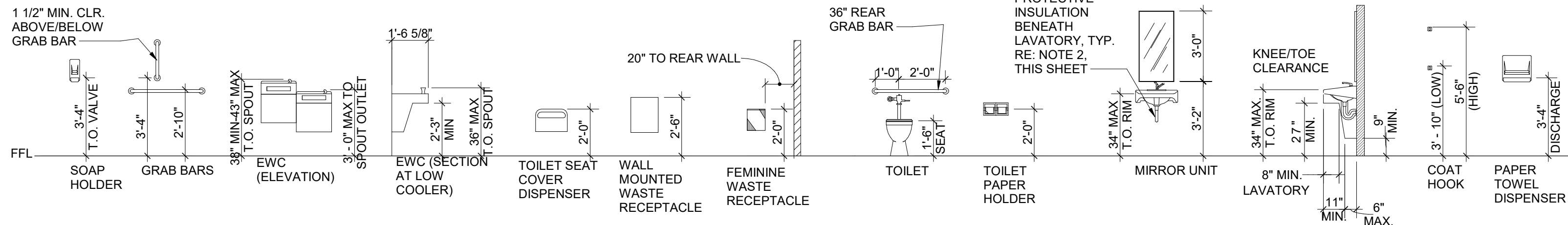


7 WOMEN'S INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"

TOILET ROOM ACCESSORY SCHEDULE

#	ITEM	DESCRIPTION
AT1	RECTANGULAR LAVATORY FIXTURE	REFER TO MECHANICAL DRAWINGS
AT2	TOILET FIXTURE	REFER TO MECHANICAL DRAWINGS
AT3	TOILET PARTITION	BOBRICK - DESIGNER SERIES 1040
AT4	URINAL FIXTURE	REFER TO MECHANICAL DRAWINGS
AT5	TOILET PAPER HOLDER	SAN JAMAR
AT6	PAPER TOWEL DISPENSER	SAN JAMAR
AT7	SOAP DISPENSER	DIAL
AT8	36" GRAB BAR	BOBRICK - B-5806
AT9	42" GRAB BAR	BOBRICK - B-5806
AT10	18" GRAB BAR	BOBRICK - B-5806
AT11	MIRROR	MATCH EXISTING
AT12	URINAL PARTITION	BOBRICK - DESIGNER SERIES 1040
AT13	WASTE RECEPTACLE	BOBRICK - MATCH EXISTING

NOTE
- ALL MOUNTING HEIGHT DIMENSIONS ARE TO TOP OR BOTTOM OF ACCESSORY, UNLESS OTHERWISE NOTED.
- INSTALL HARDWARE PER MANUFACTURER INSTRUCTIONS.
- GC TO PROVIDE APPROPRIATE BLOCKING WHERE REQ'D.



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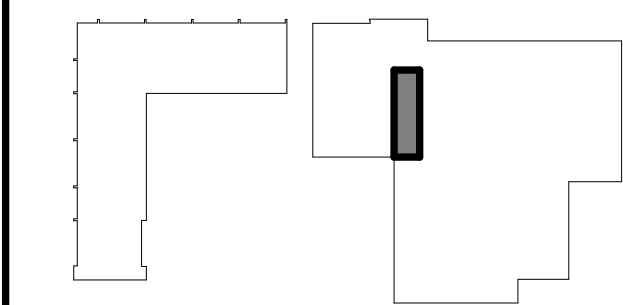
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

giffels webster
NORR
An Ingenium International Company
150 W. Jefferson Avenue, Suite 1300
Detroit, MI 48226 U.S.A
norr.com

Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead P. PERKINS	Drawn P. PERKINS
Project Leader G. KARANFILOVSKI	Checked G. KARANFILOVSKI

Client
WAYNE STATE UNIVERSITY
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
TOILET ENLARGED PLAN AND ELEVATIONS

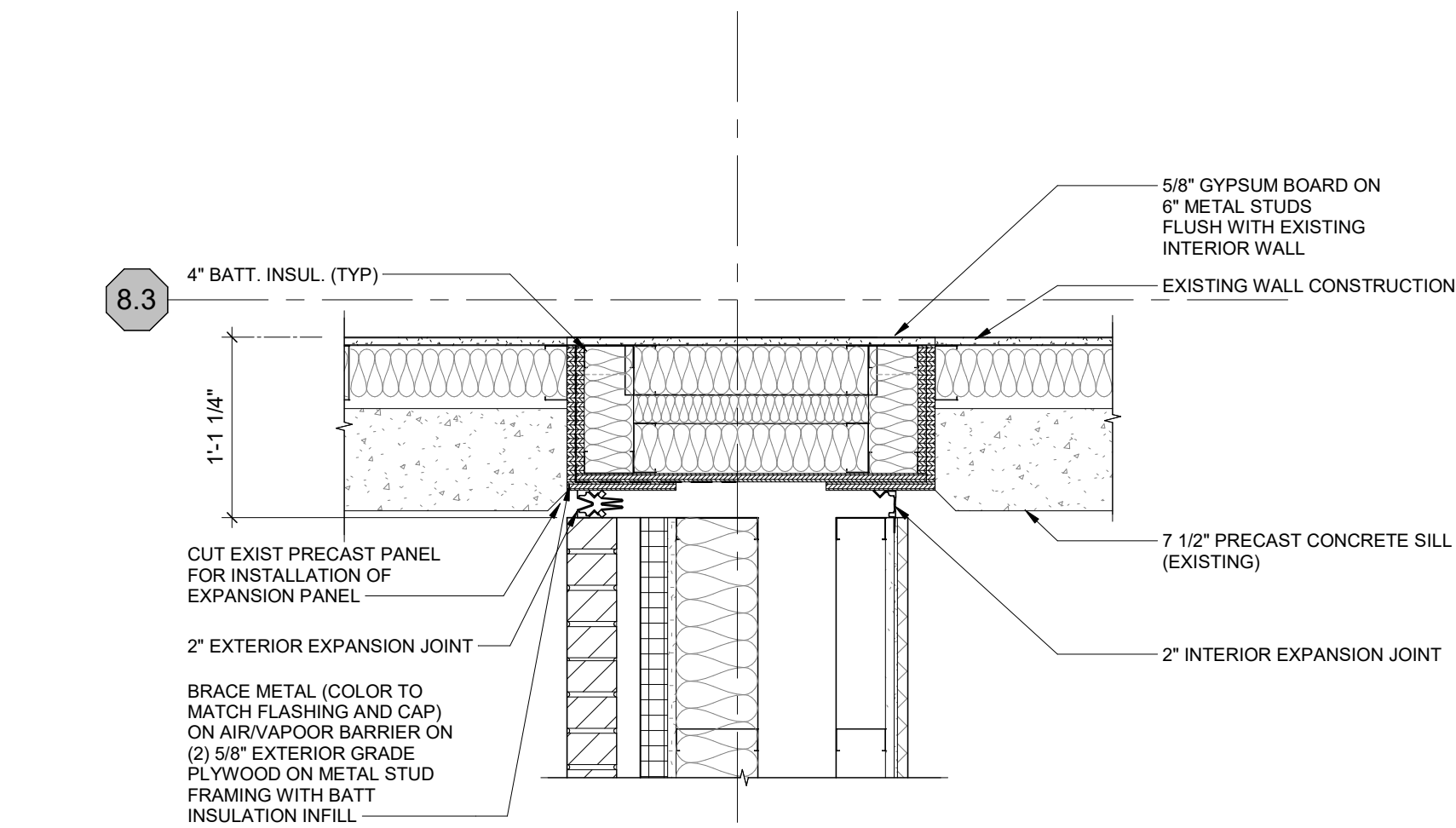
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Project No. JCDT18-0451

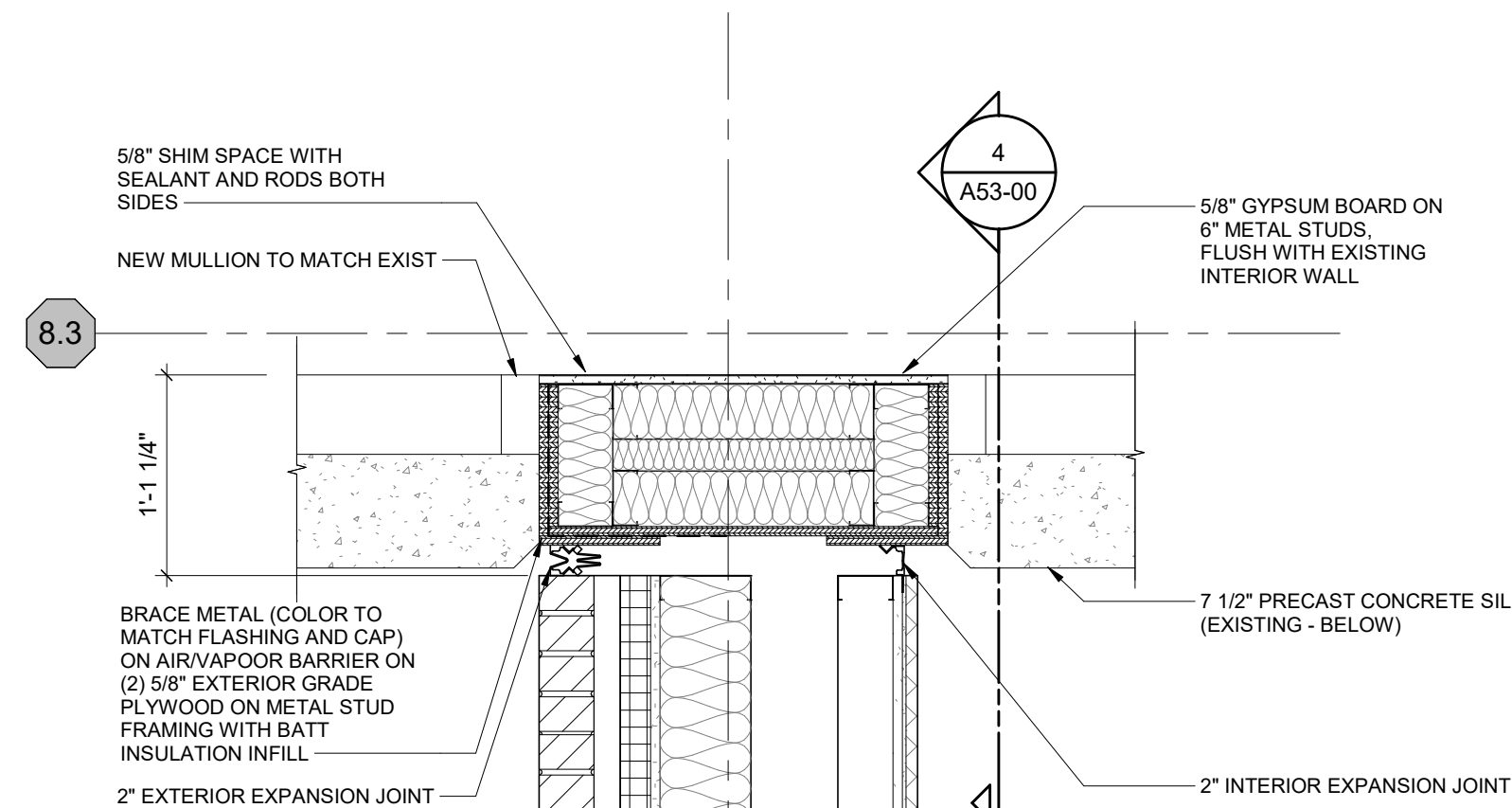
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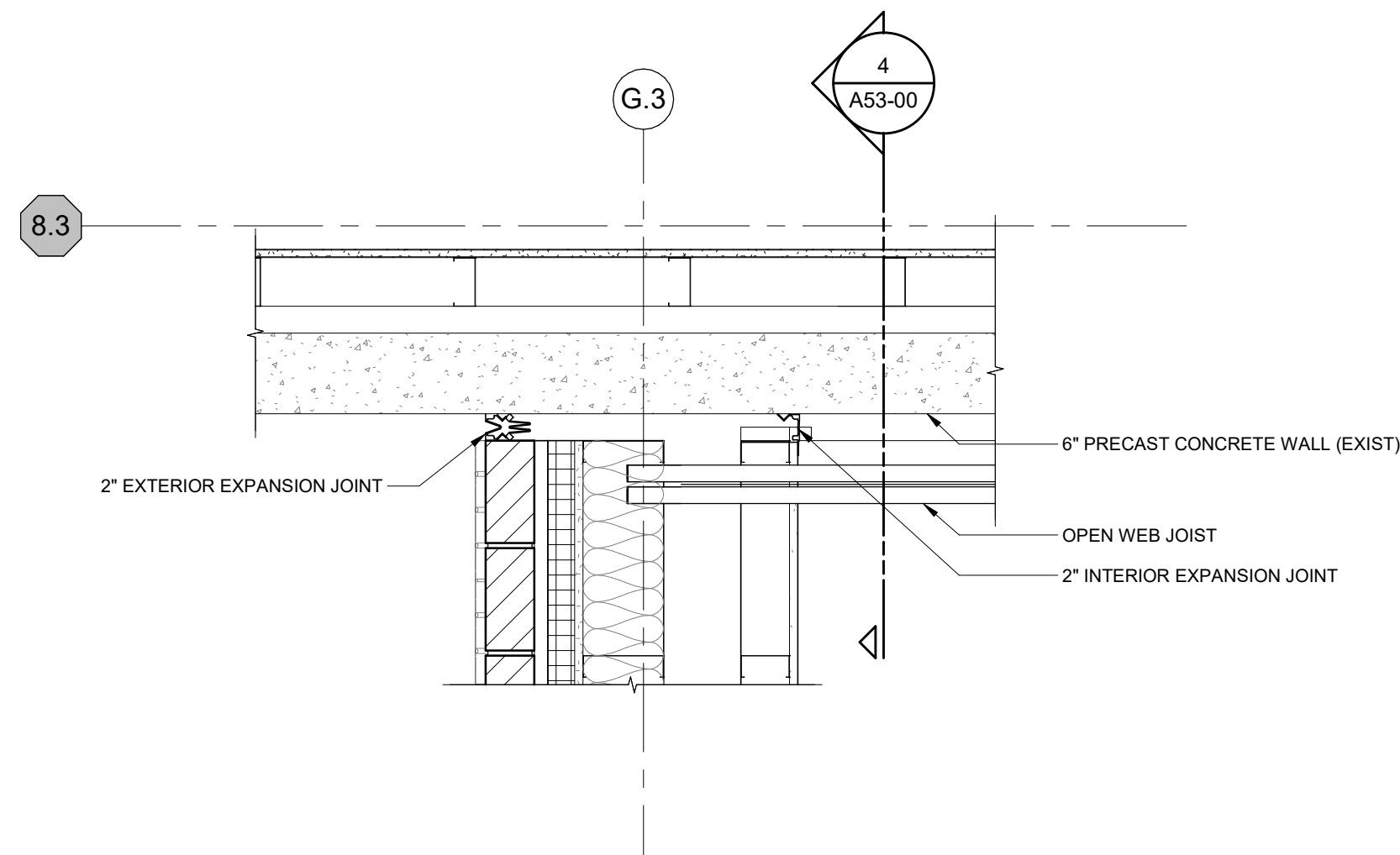
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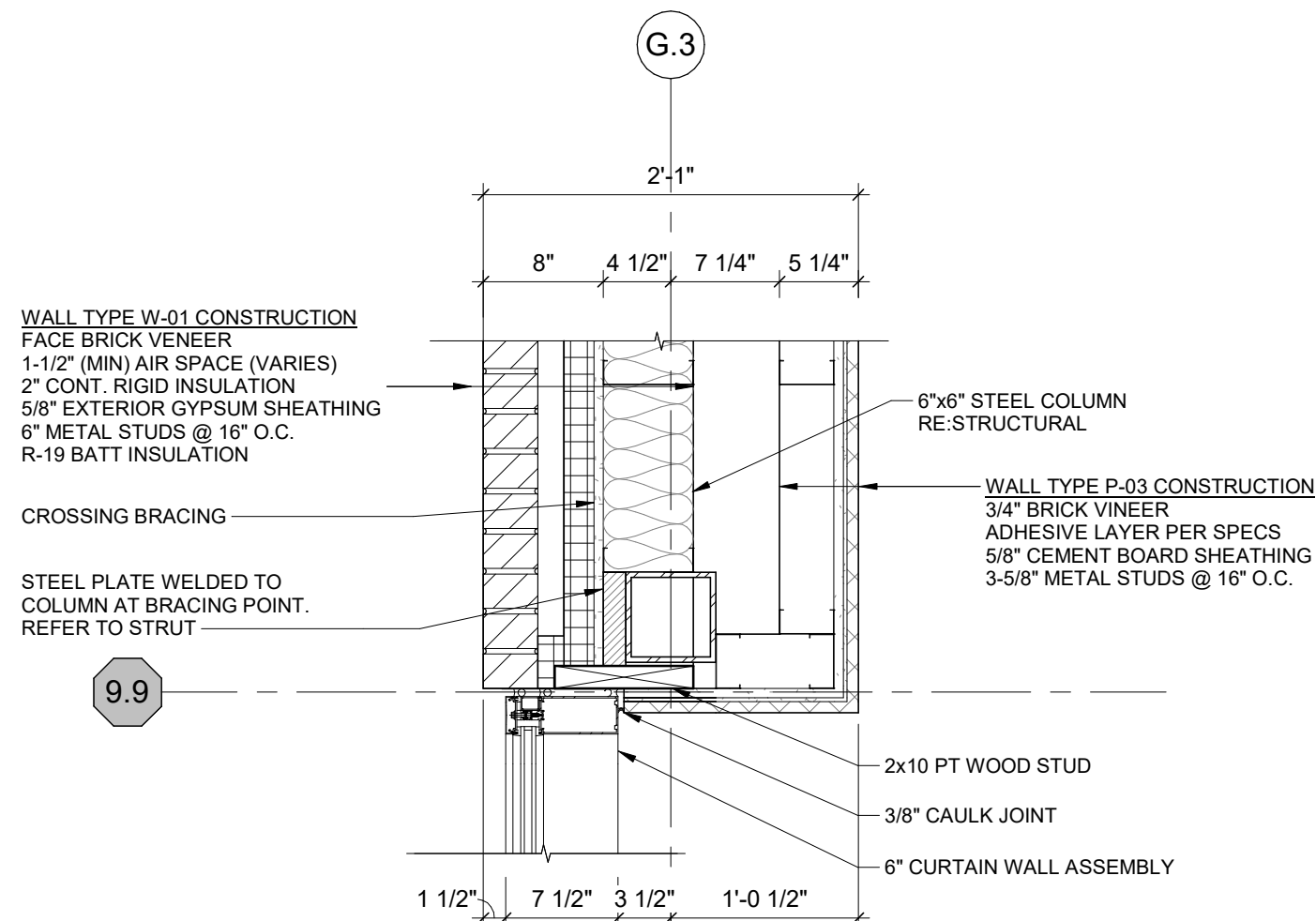
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A40-01
PLAN DETAIL - CONNECTION TO EXISTING (LOWER)
SCALE: 1" = 1'-0"



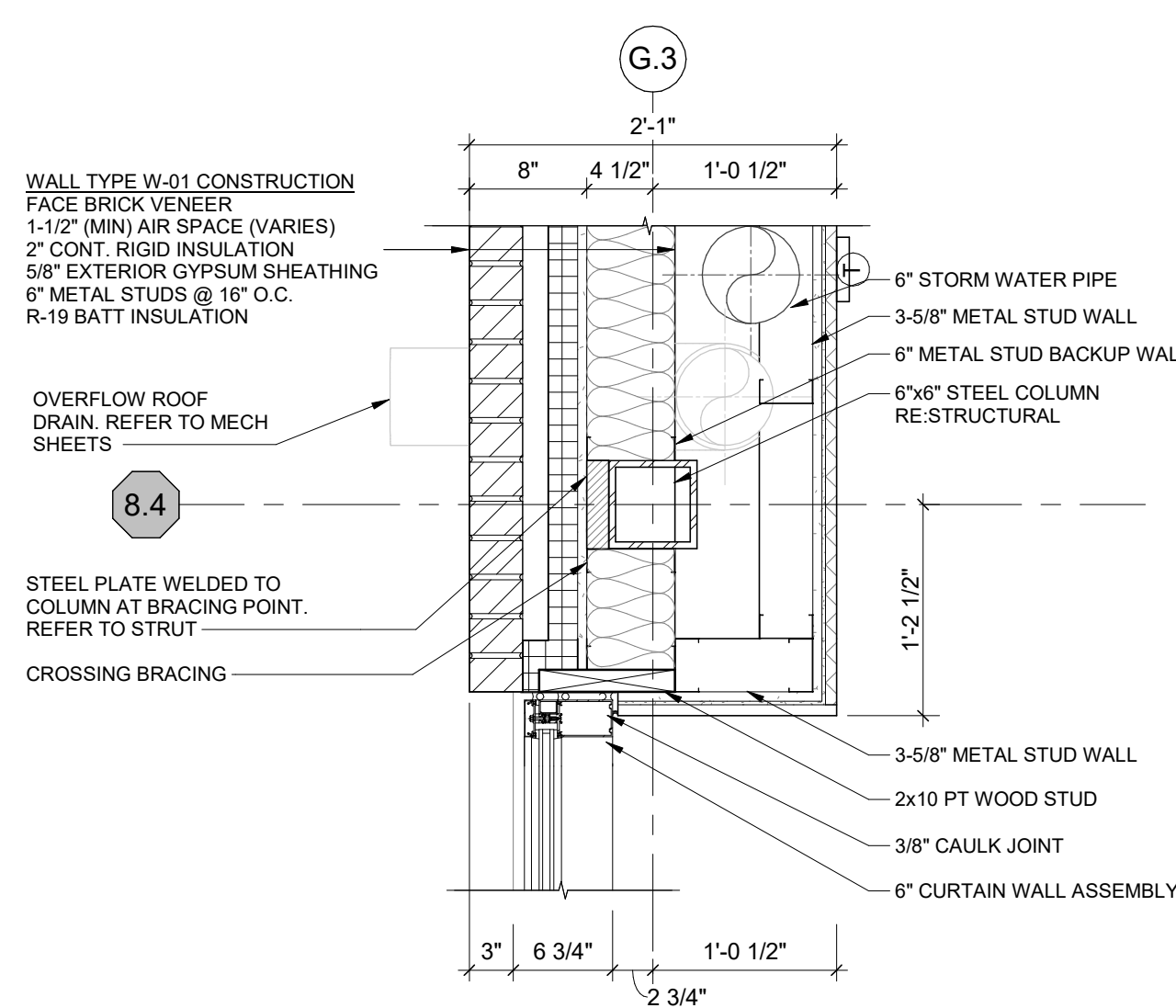
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A40-01
PLAN DETAIL - CONNECTION TO EXISTING (MID)
SCALE: 1" = 1'-0"



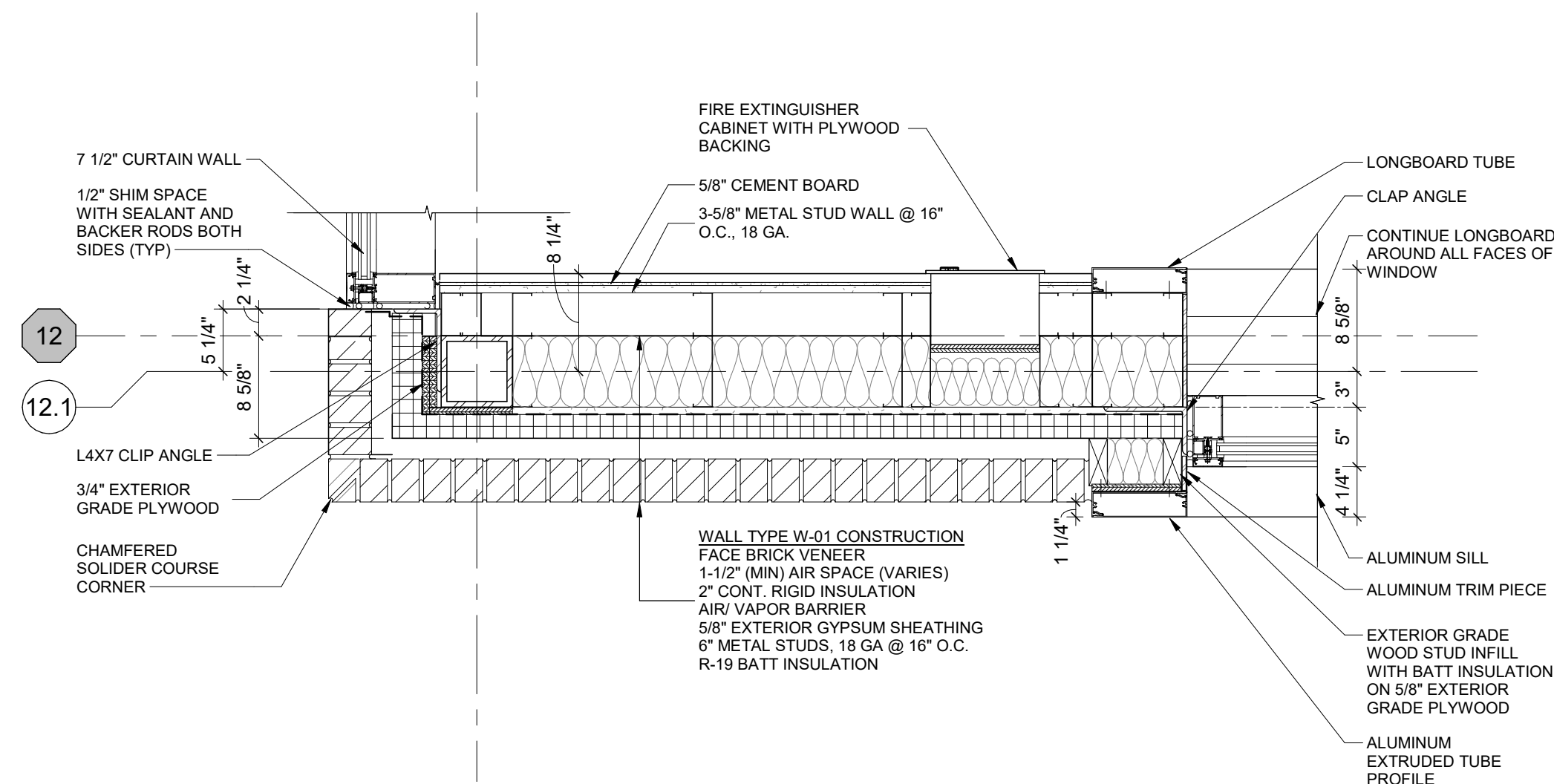
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A40-01
PLAN DETAIL - CONNECTION TO EXISTING (UPPER)
SCALE: 1" = 1'-0"



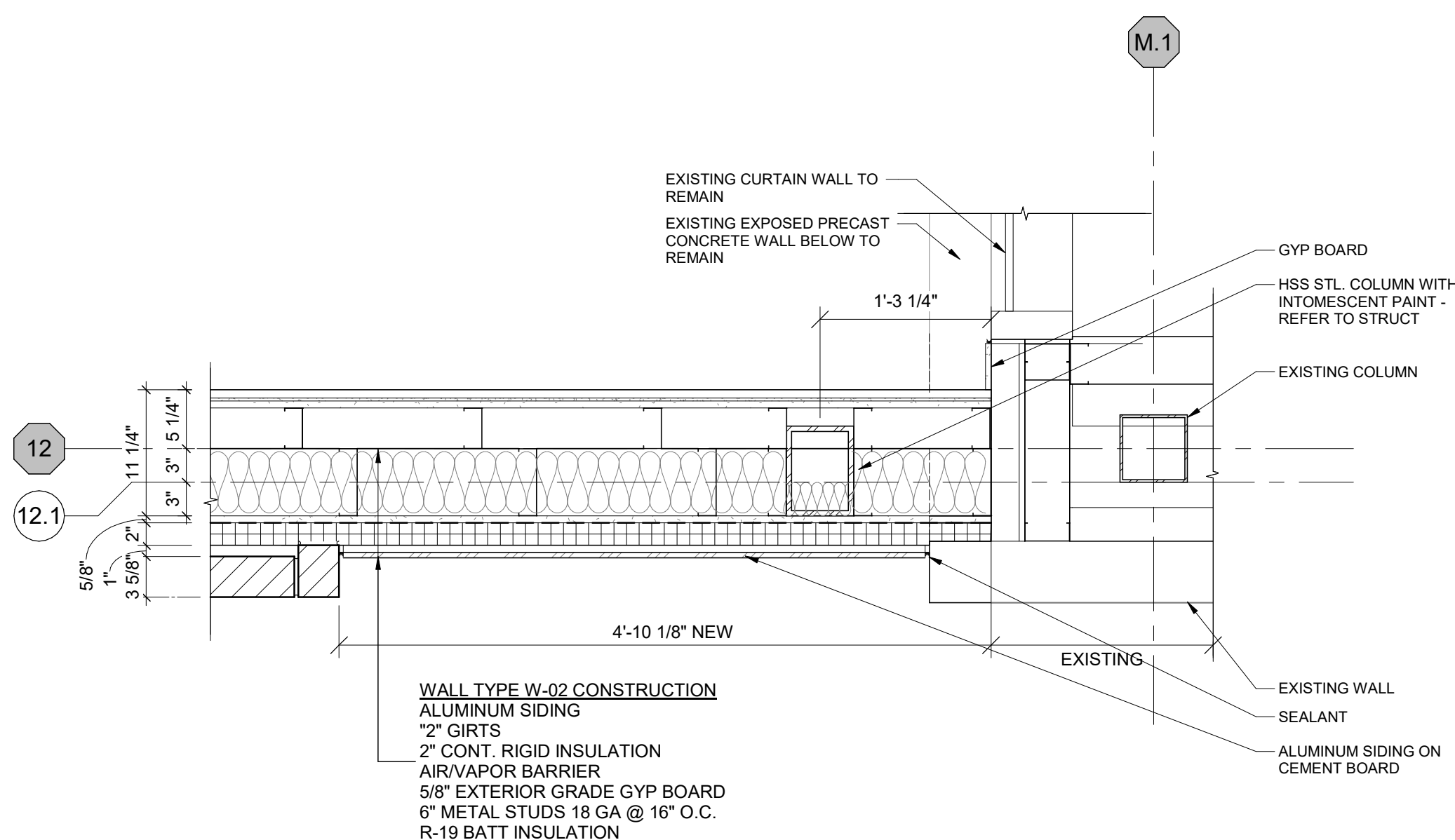
4
A40-01
PLAN DETAIL - CURTAIN WALL JAMB
SCALE: 1" = 1'-0"



5
A40-01
PLAN DETAIL - DOOR JAMB
SCALE: 1" = 1'-0"



6
A40-01
PLAN DETAIL - CORNER CONDITION
SCALE: 1" = 1'-0"



7
A40-01
PLAN DETAIL - CONNECTION TO EXISTING - EAST
SCALE: 1" = 1'-0"

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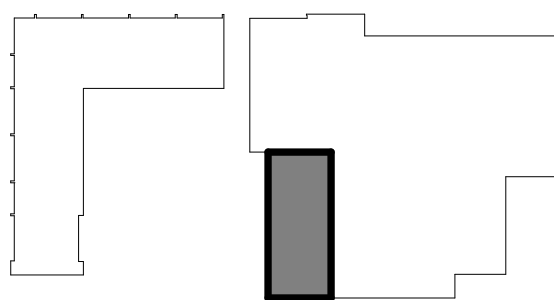
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Key Plan



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Electrical: NORR

Seal(s)

giffels
webster

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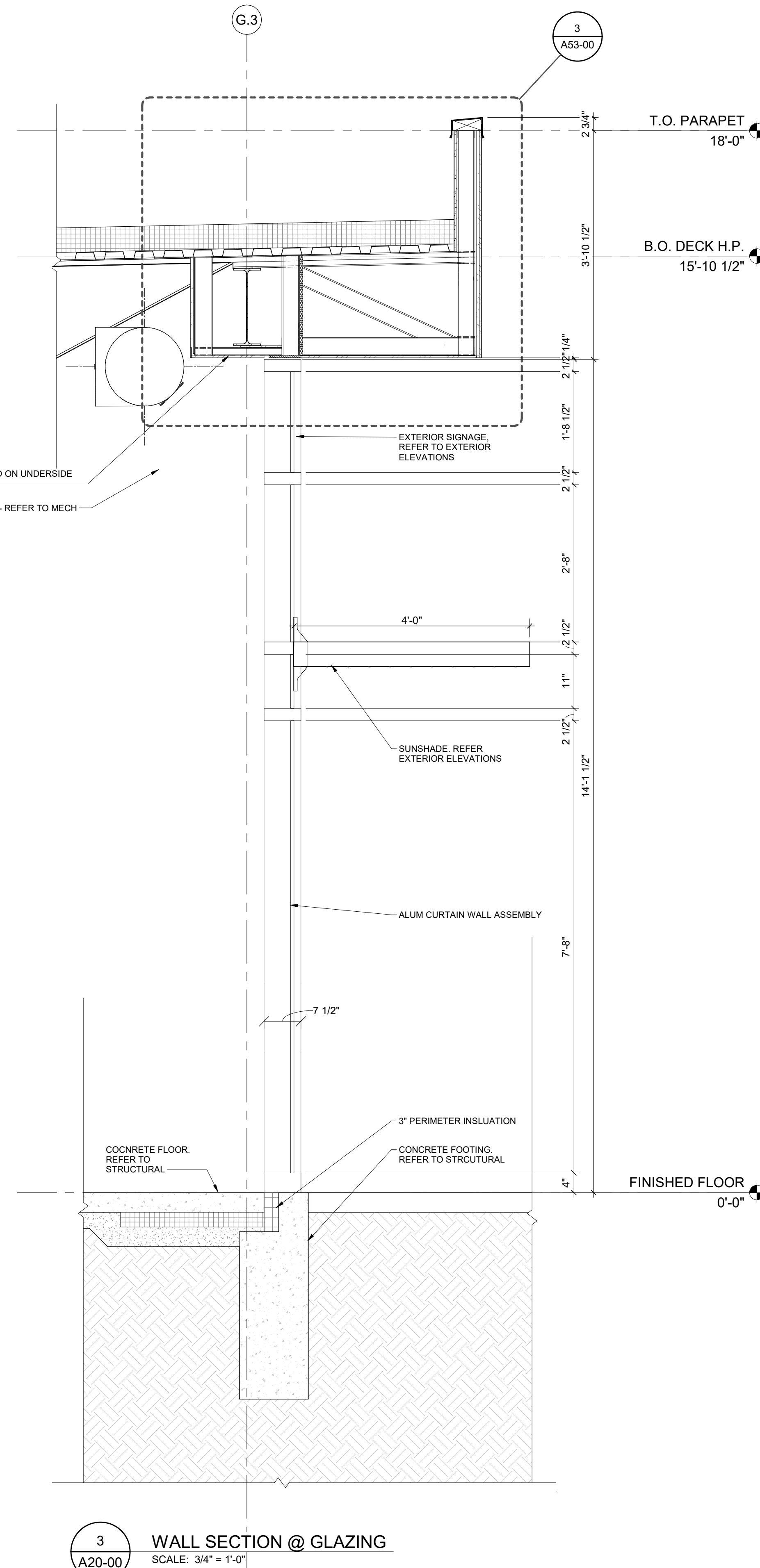
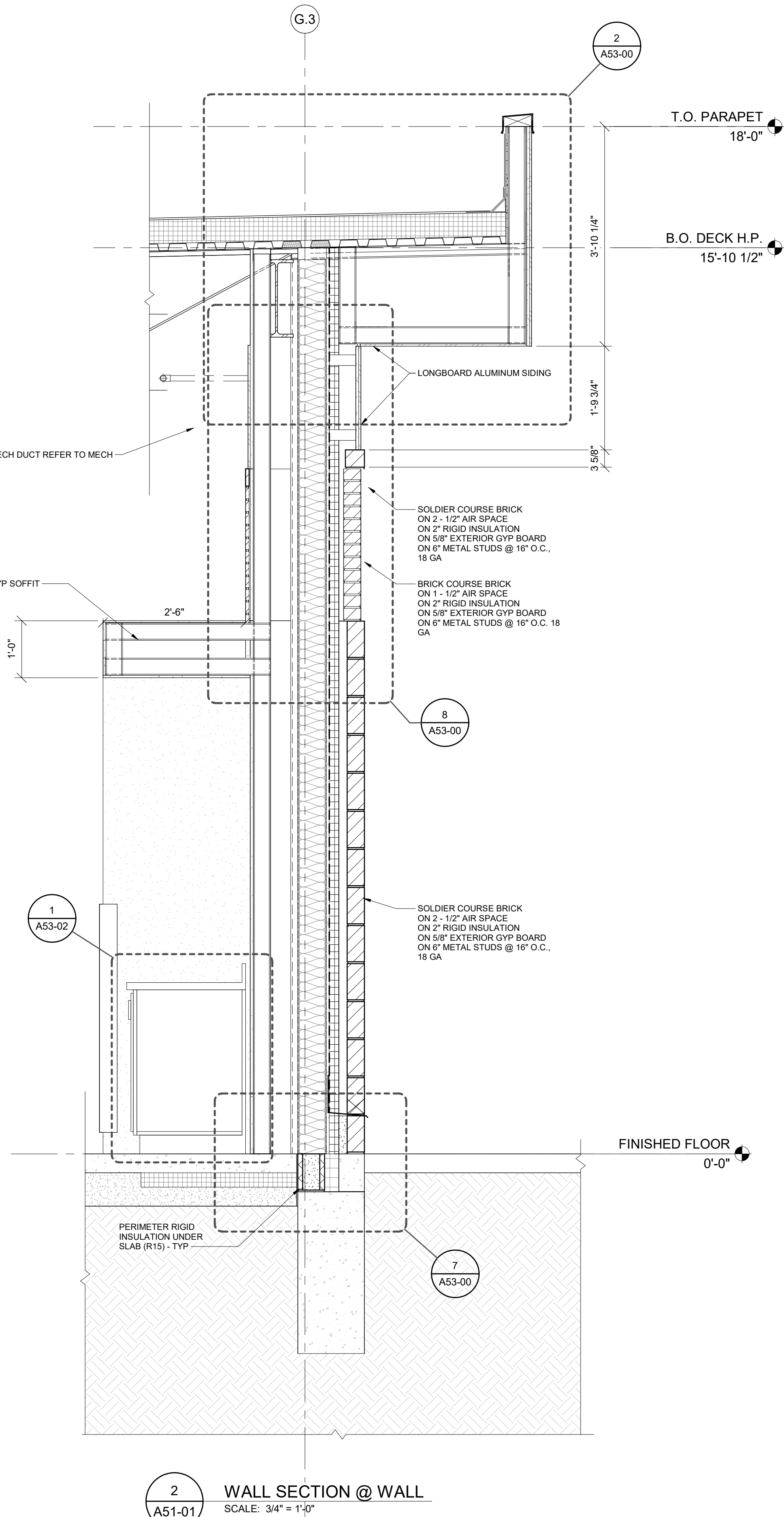
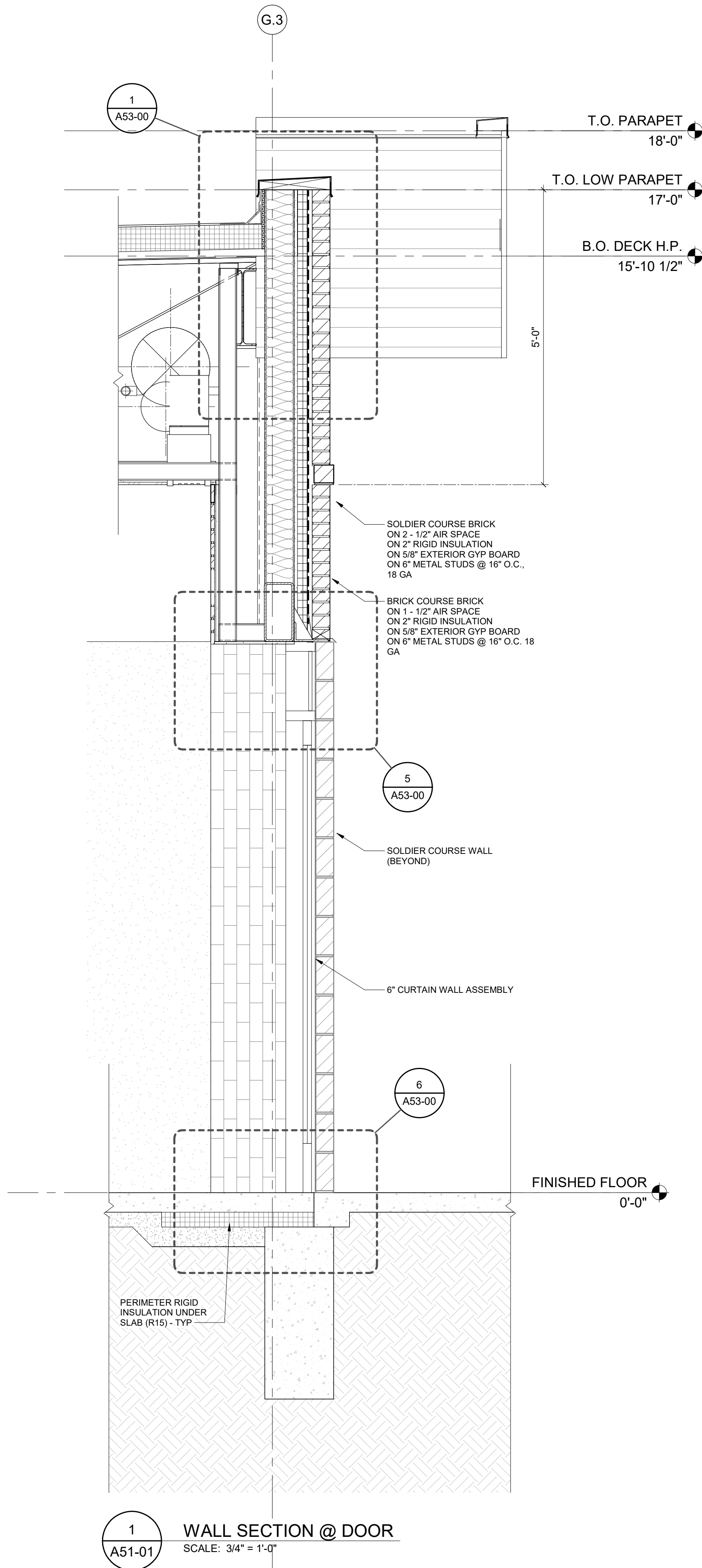
Client
WAYNE STATE
UNIVERSITY
Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
ENLARGED PLAN DETAILS

Scale: 1" = 1'-0"

Project No. JCDT18-0451

Drawing No.
A40-01



DATE	ISSUED FOR	REV
04/03/2019	OWNER REVIEW	1
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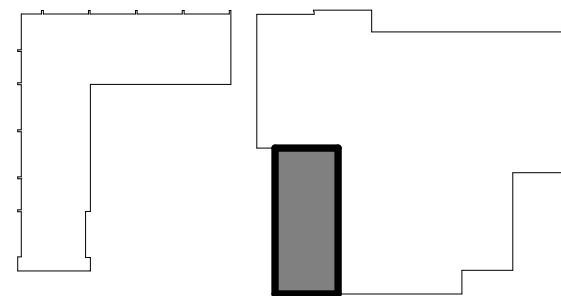
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giffels webster

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Client
WAYNE STATE UNIVERSITY

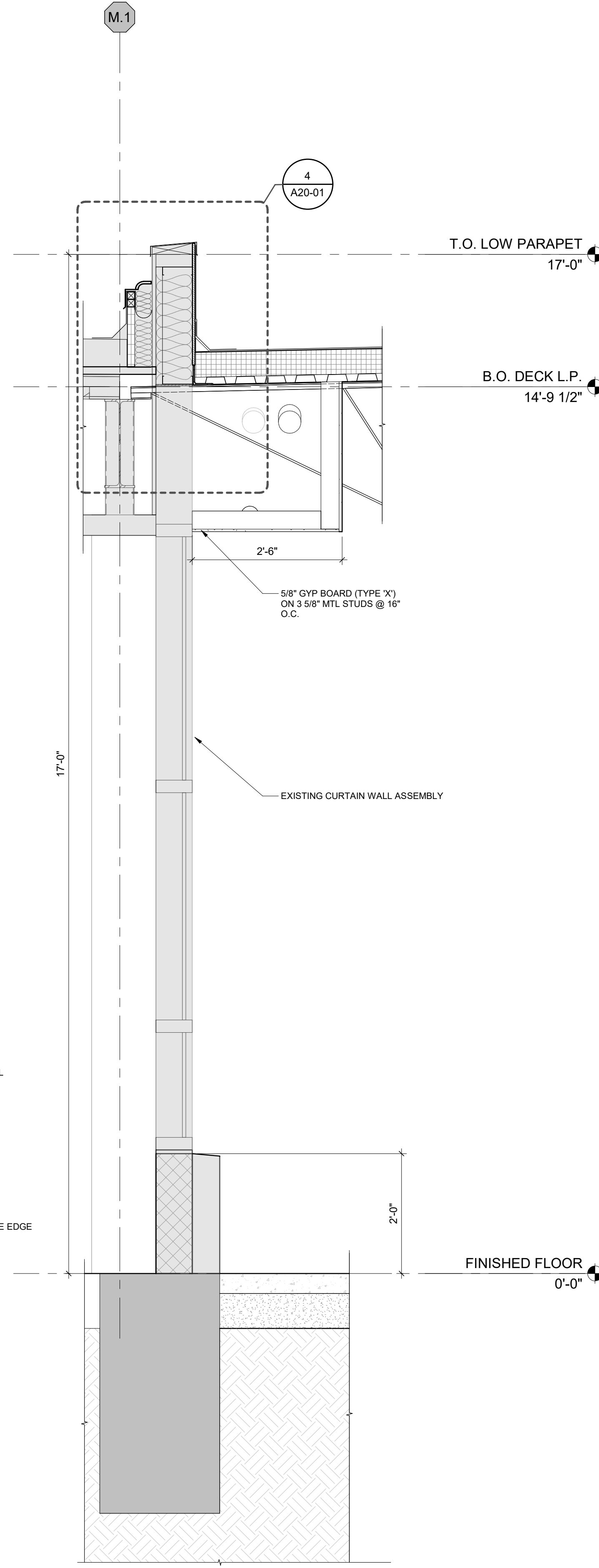
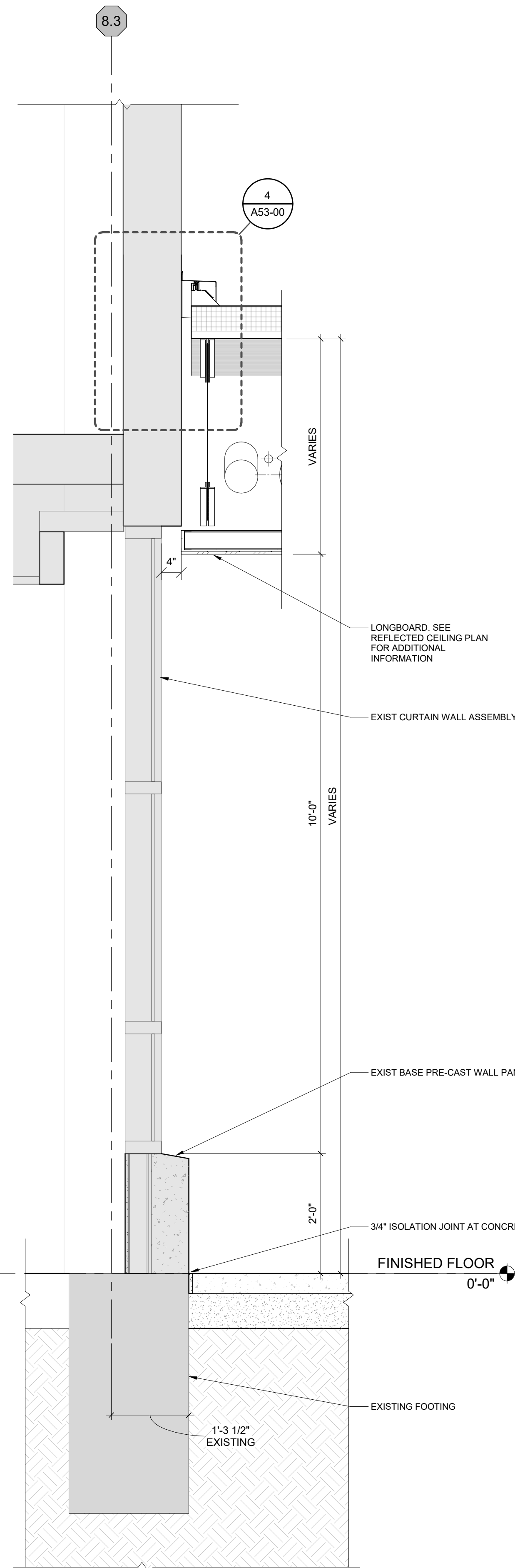
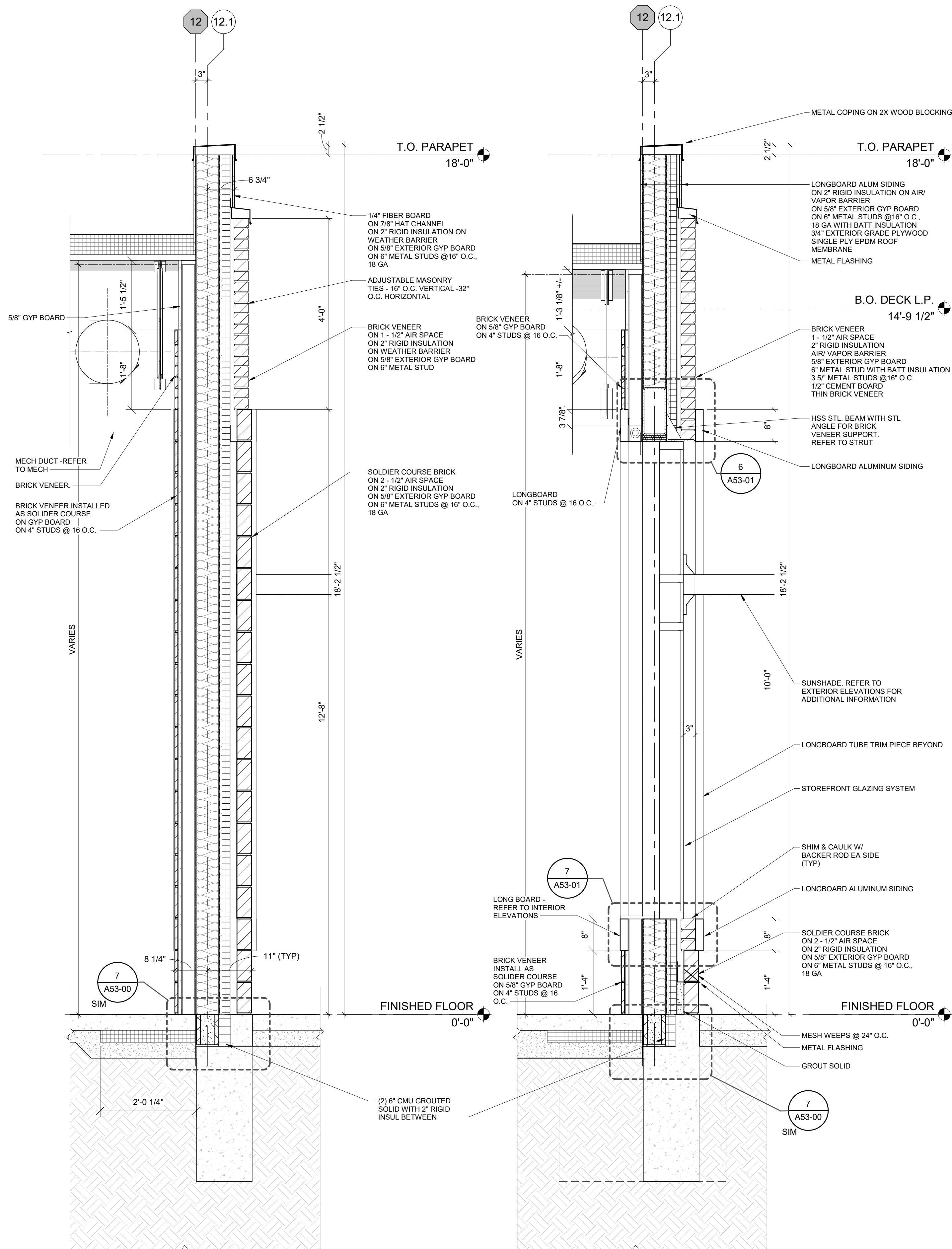
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
WALL SECTIONS

Scale: 3/4" = 1'-0"

Project No. JCDT18-0451

Drawing No.
A51-01



1 WALL SECTION @ WALL
A51-02 SCALE: 3/4" = 1'-0"

2 WALL SECTION @ GLAZING
A51-02 SCALE: 3/4" = 1'-0"

3 WALL SECTION @ EXISTING
A51-02 SCALE: 3/4" = 1'-0"

4 WALL SECTION @ EXISTING
A51-02 SCALE: 3/4" = 1'-0"

DATE	ISSUED FOR	REV
04/03/2019	OWNER REVIEW	1
05/14/2019	OWNER REVIEW	2
06/03/2019	Bid/Permit	3

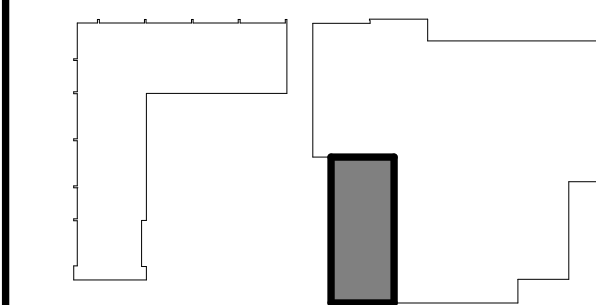
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

giffels webster

NORR
An Ingenium International Company

150 W. Jefferson Avenue, Suite 1300
Detroit, MI 48226 U.S.A
norr.com

Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead	Drawn P. PERKINS
Project Leader	Checked G. KARANFILOVSKI

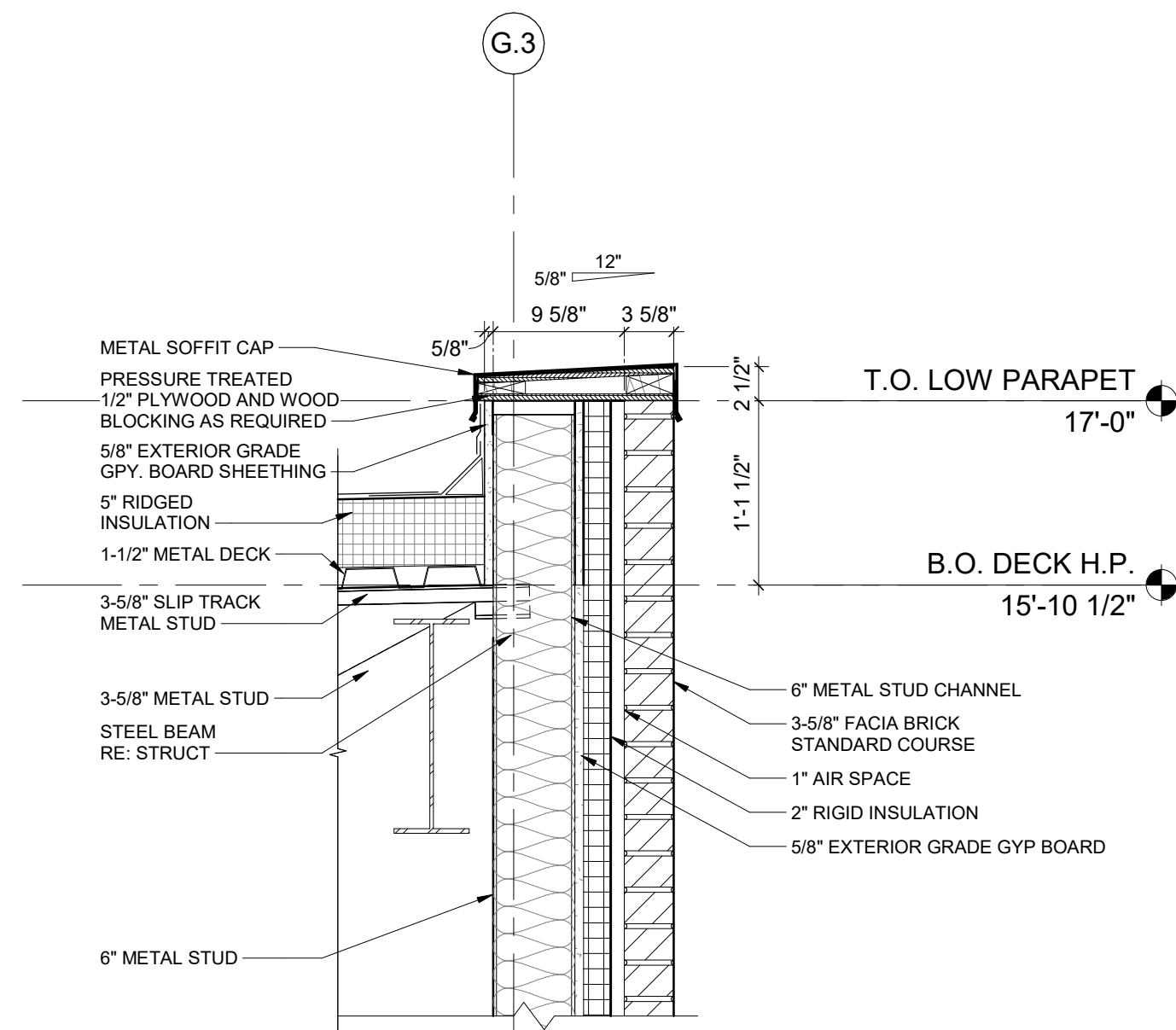
Client
WAYNE STATE UNIVERSITY
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
WALL SECTIONS

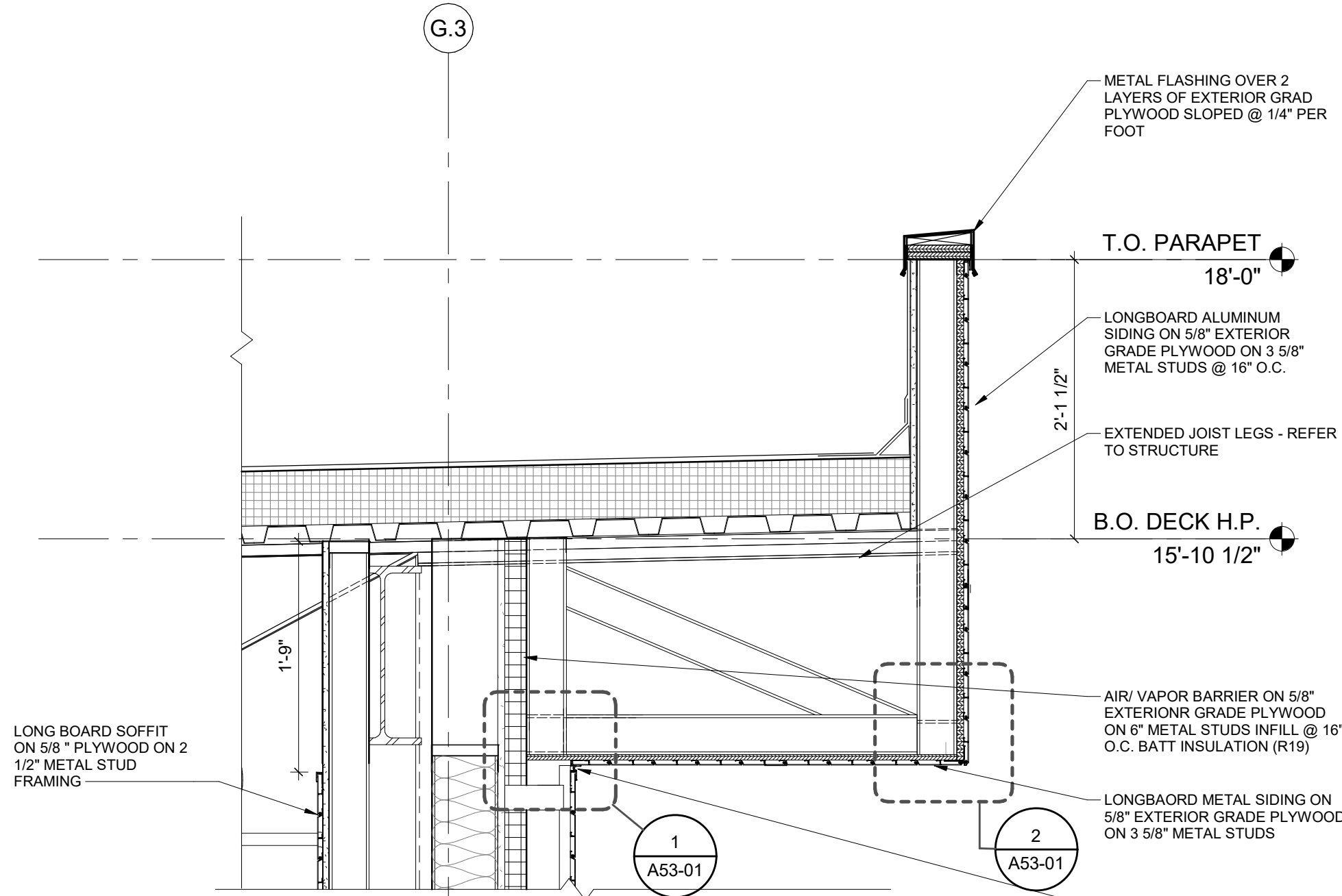
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Project No. JCDT16-0451

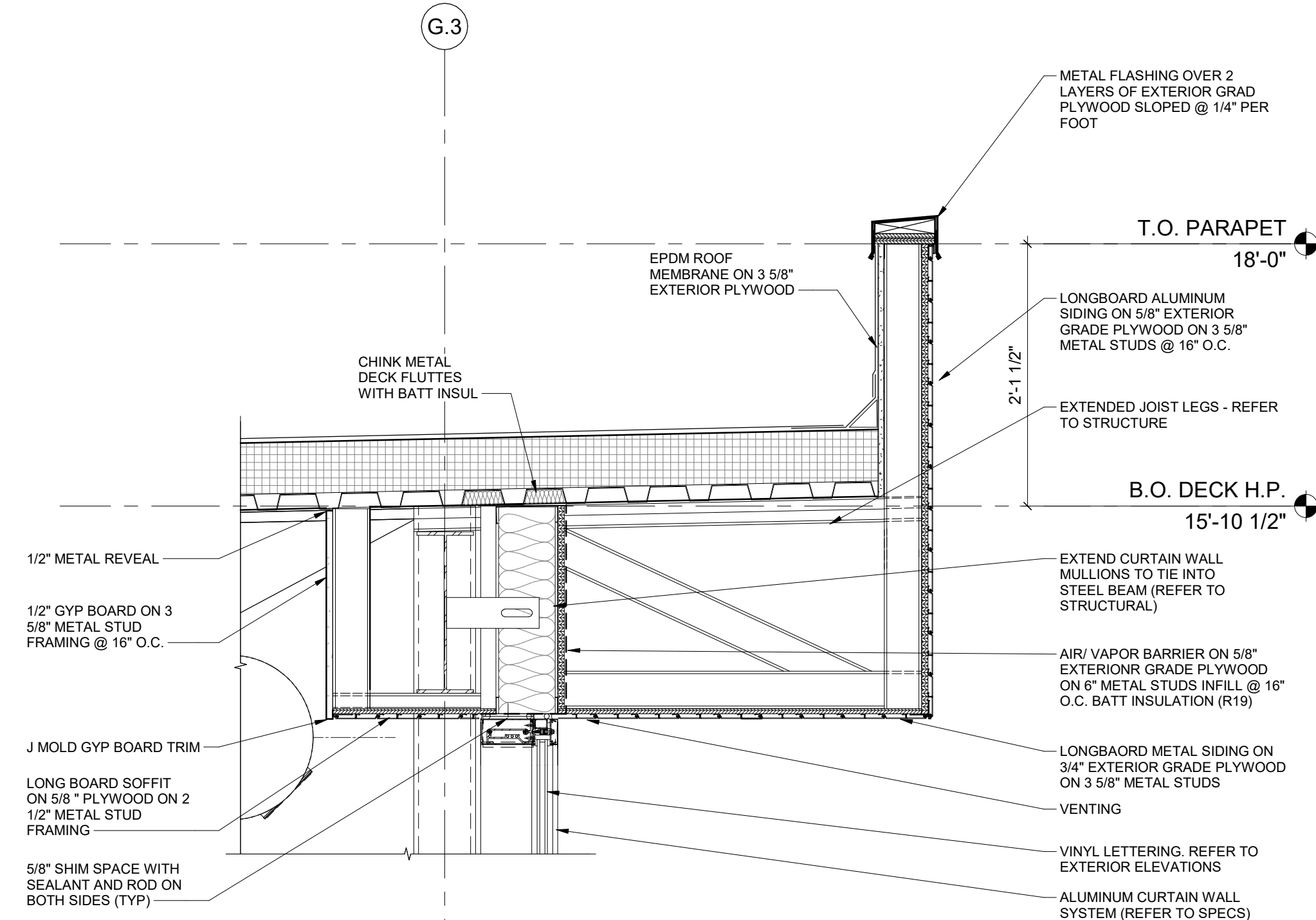
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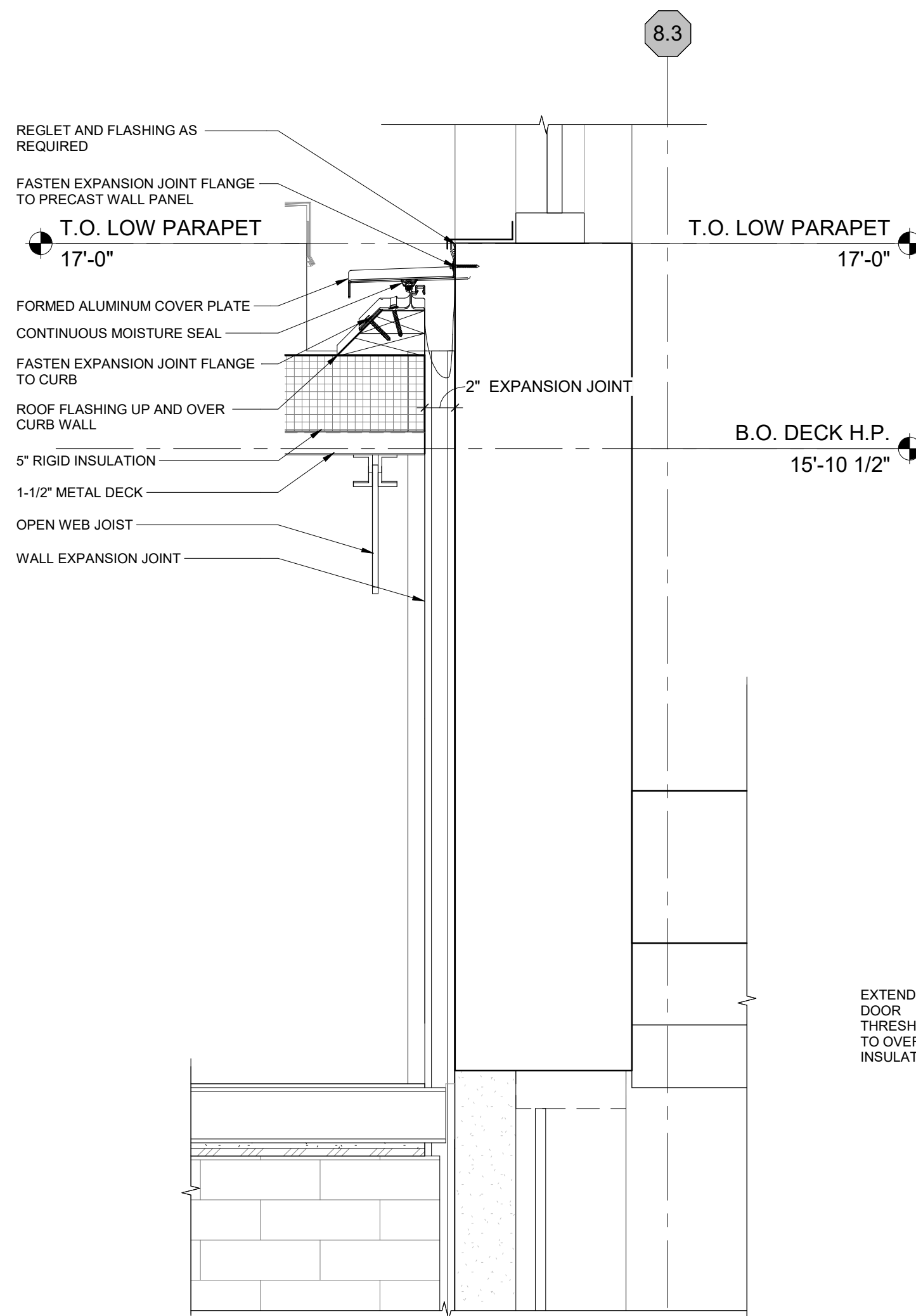
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A53-00
LOW PARAPET
SCALE: 1" = 1'-0"



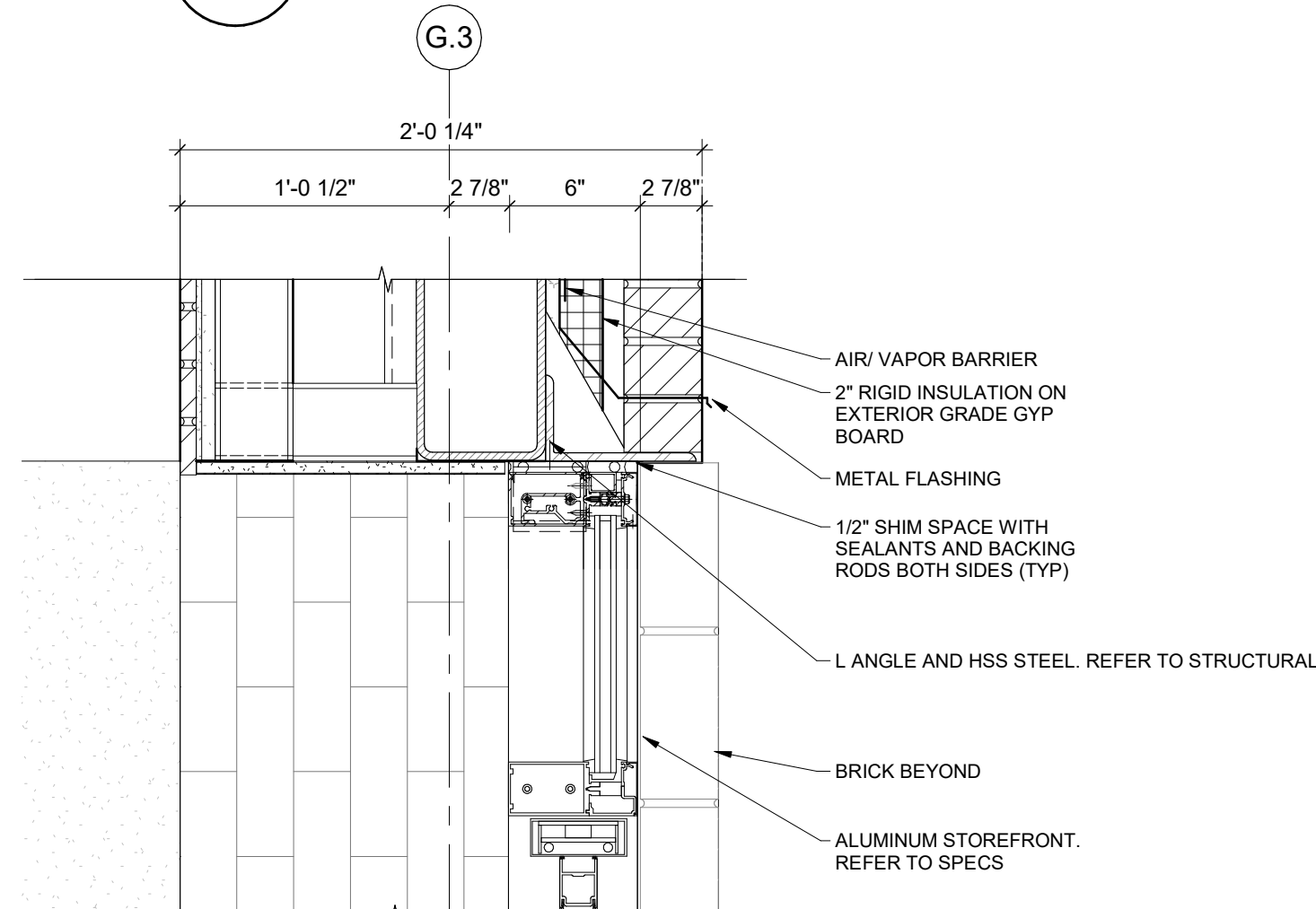
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A53-00
SOFFIT AND PARAPET @ WALL
SCALE: 1" = 1'-0"



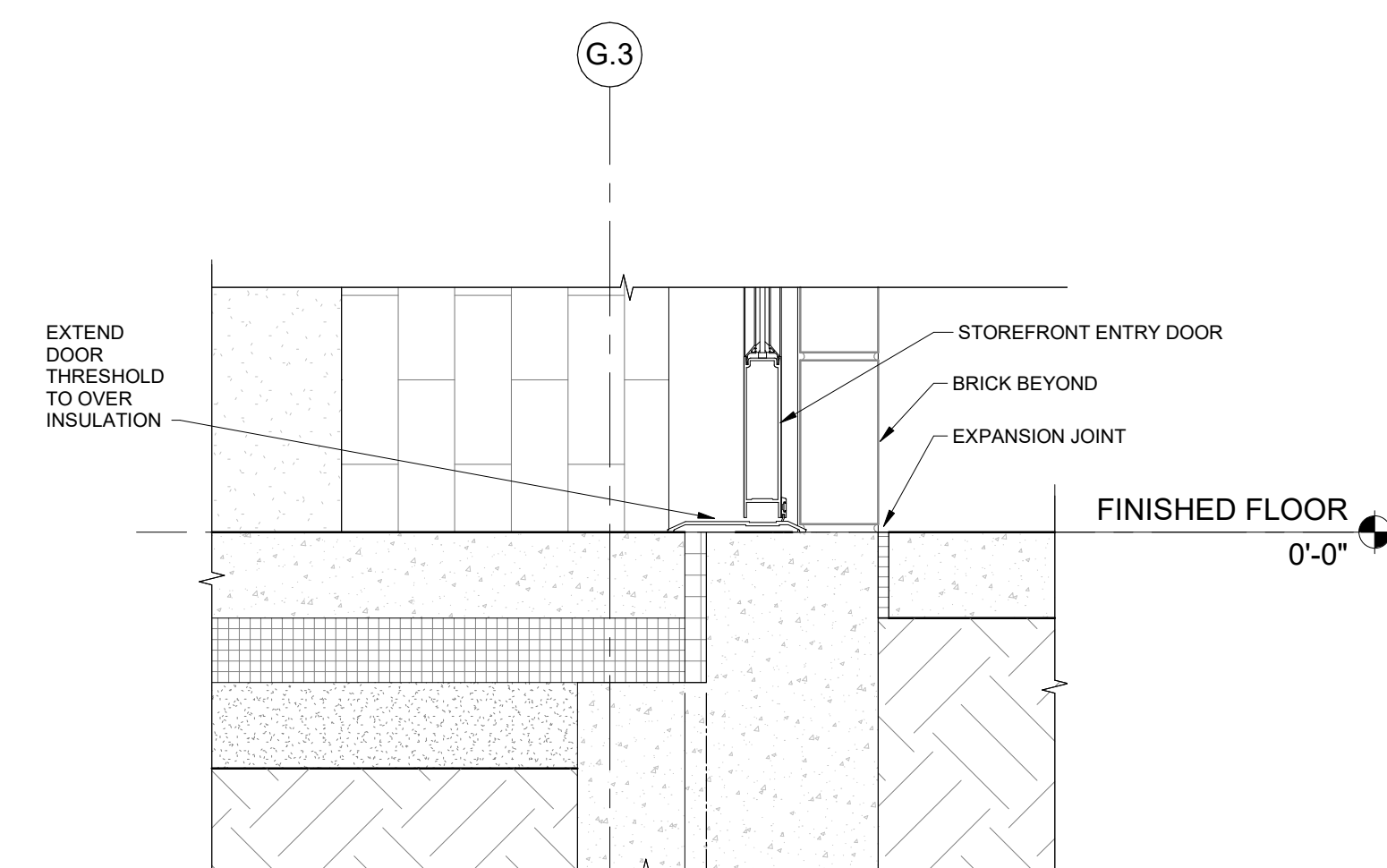
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A53-00
SOFFIT AND PARAPET @ GLAZING
SCALE: 1" = 1'-0"



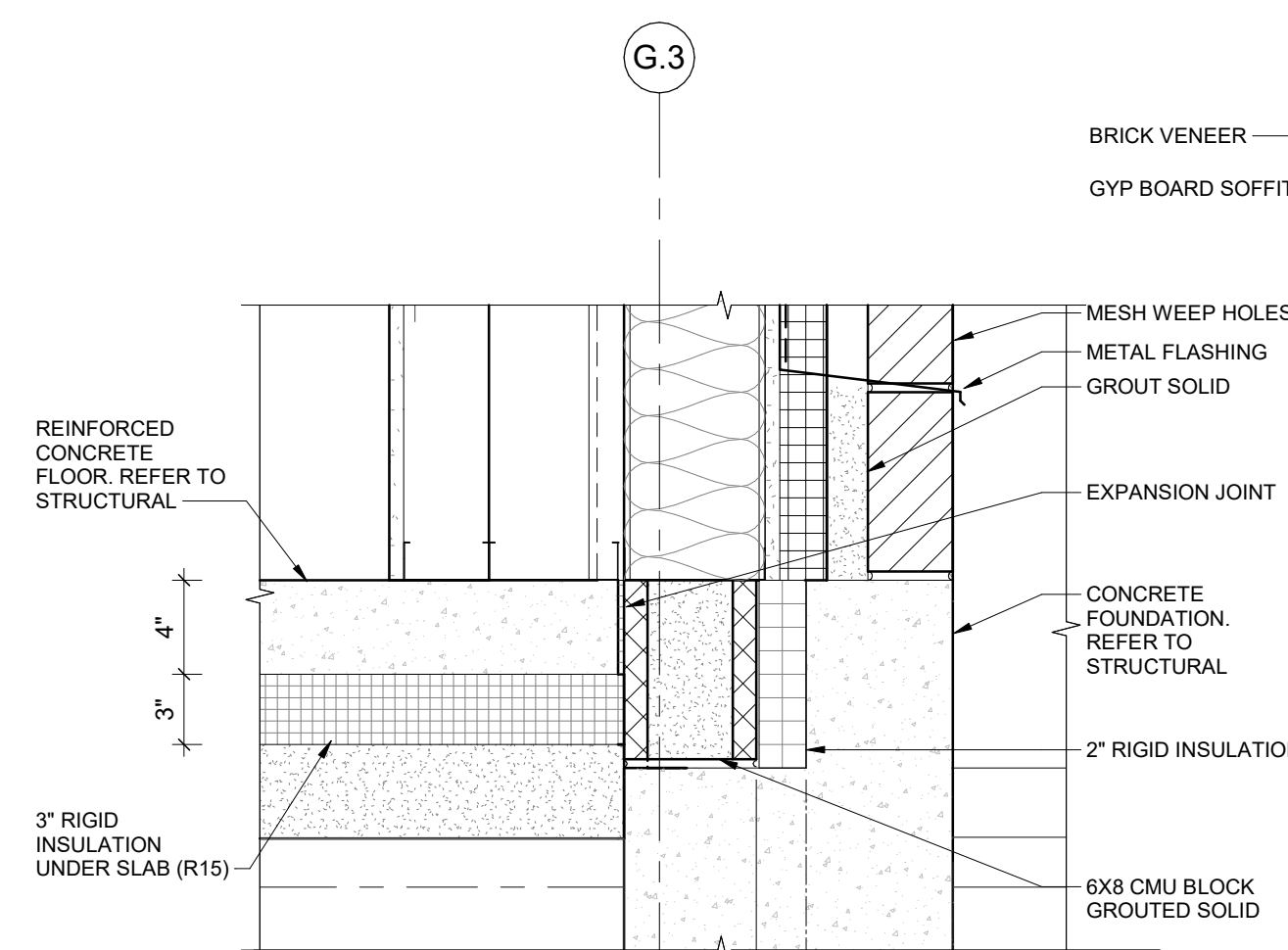
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A53-00
CONNECTION TO EXISTING
SCALE: 1 1/2" = 1'-0"



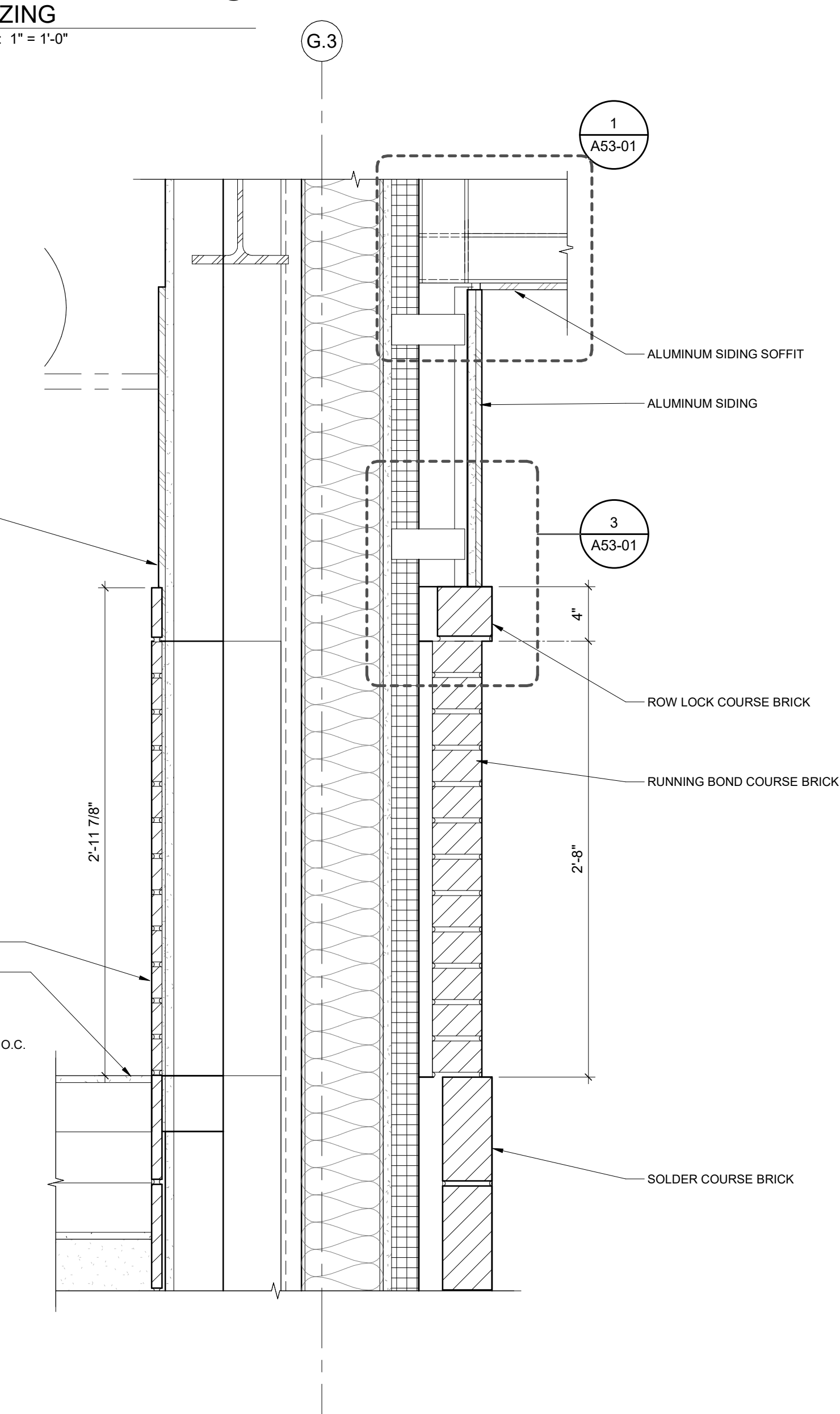
5
A53-00
EXTERIOR DOOR HEAD
SCALE: 1 1/2" = 1'-0"



6
A53-00
EXTERIOR DOOR SILL
SCALE: 1 1/2" = 1'-0"



7
A53-00
BASE OF WALL
SCALE: 1 1/2" = 1'-0"



8
A53-00
WALL SECTION DETAIL
SCALE: 1 1/2" = 1'-0"

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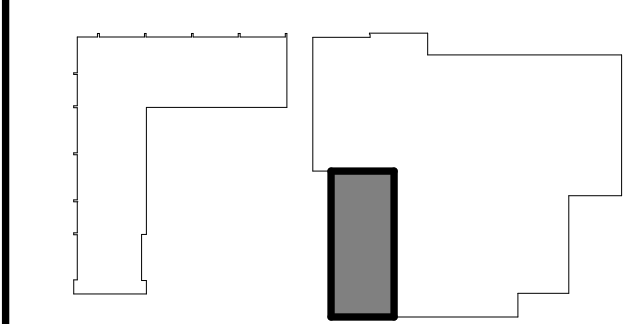
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Project Component

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Key Plan



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Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

giffels webster

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norrr.com

Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead	Drawn P. PERKINS
Project Leader	Checked G. KARANFILOVSKI

Client
WAYNE STATE UNIVERSITY
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
ENLARGED SECTION DETAILS

Scale: As indicated

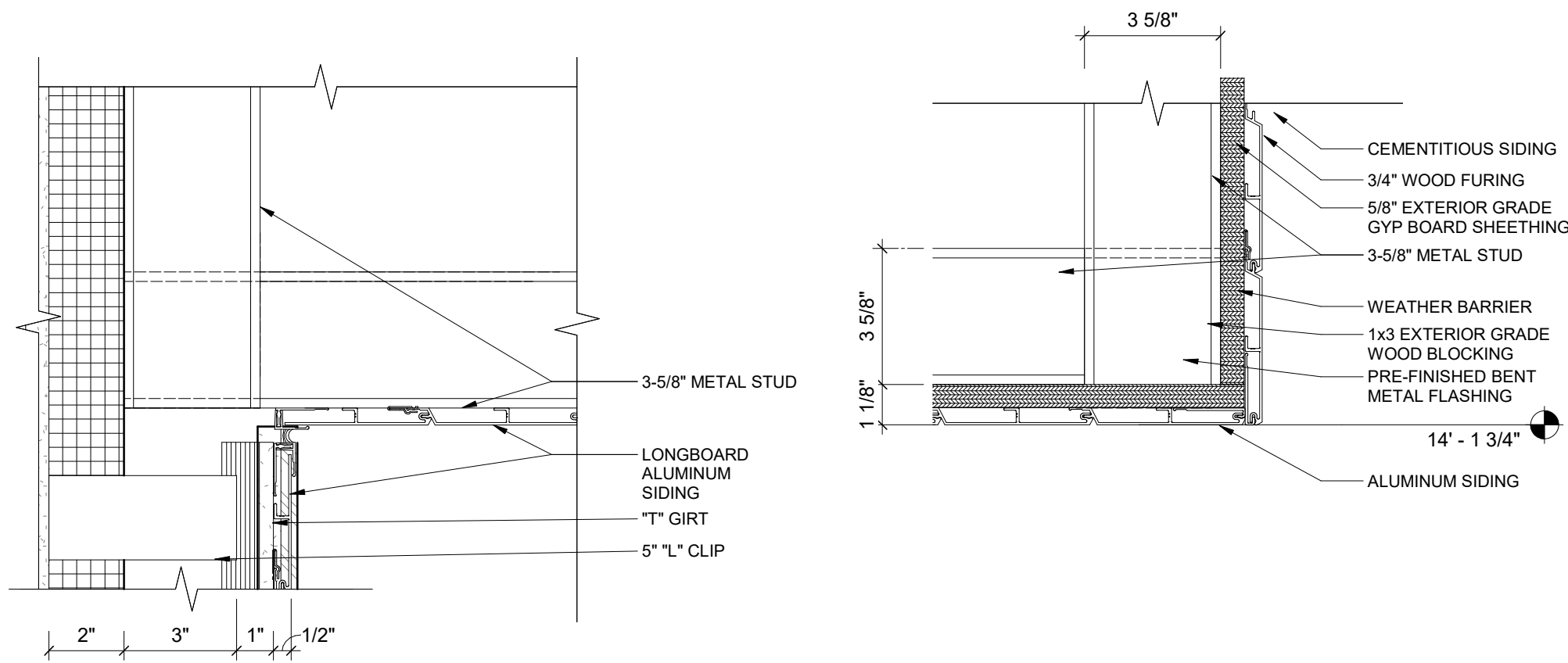
Project No. JCDT18-0451

Drawing No.

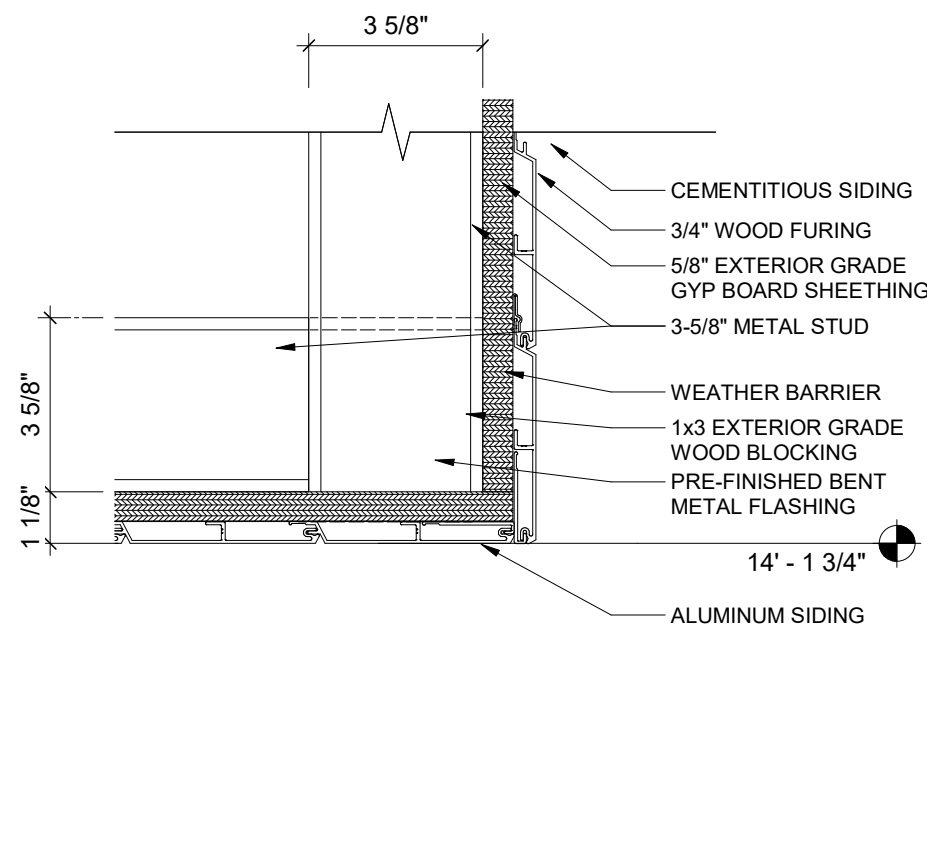
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6/3/2019 2:41:49 PM

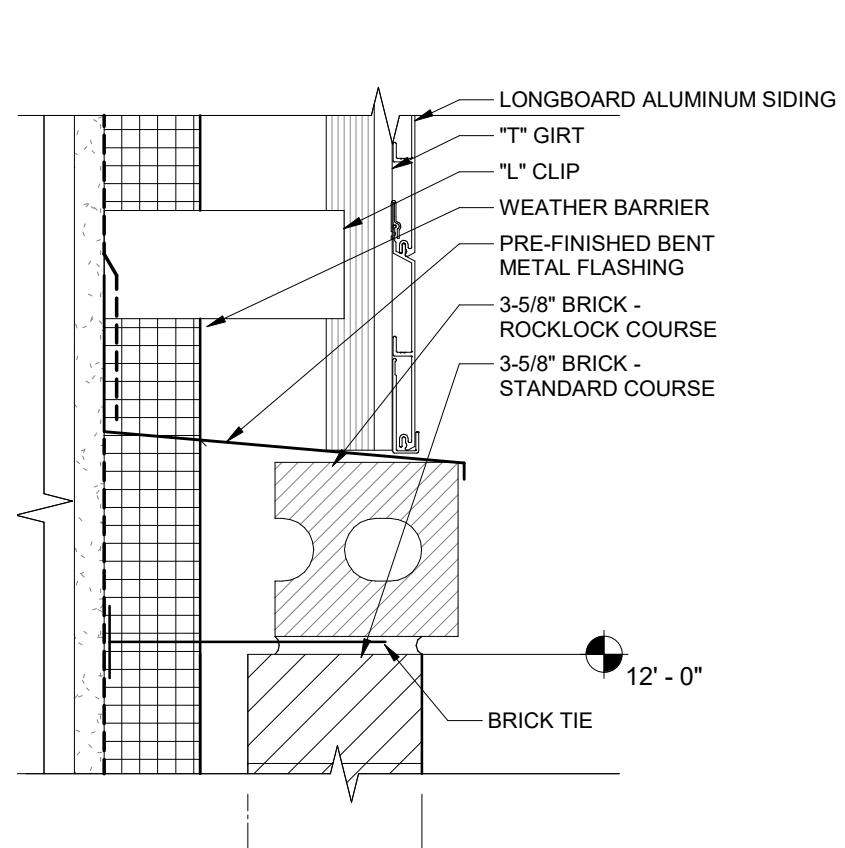
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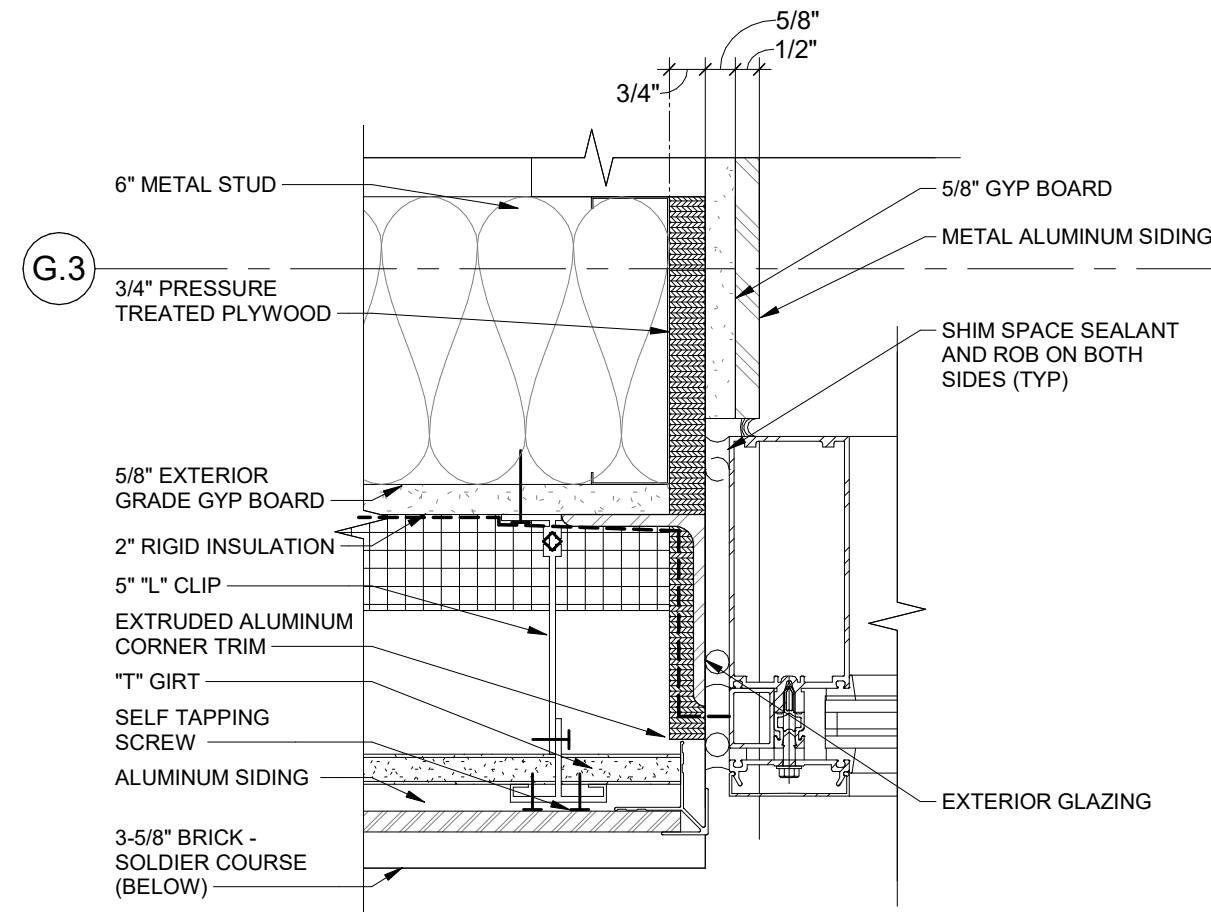
1
A53-01
ALUMINUM SIDING AT ALUMINUM
SOFFIT SECTION DETAIL
SCALE: 3" = 1'-0"



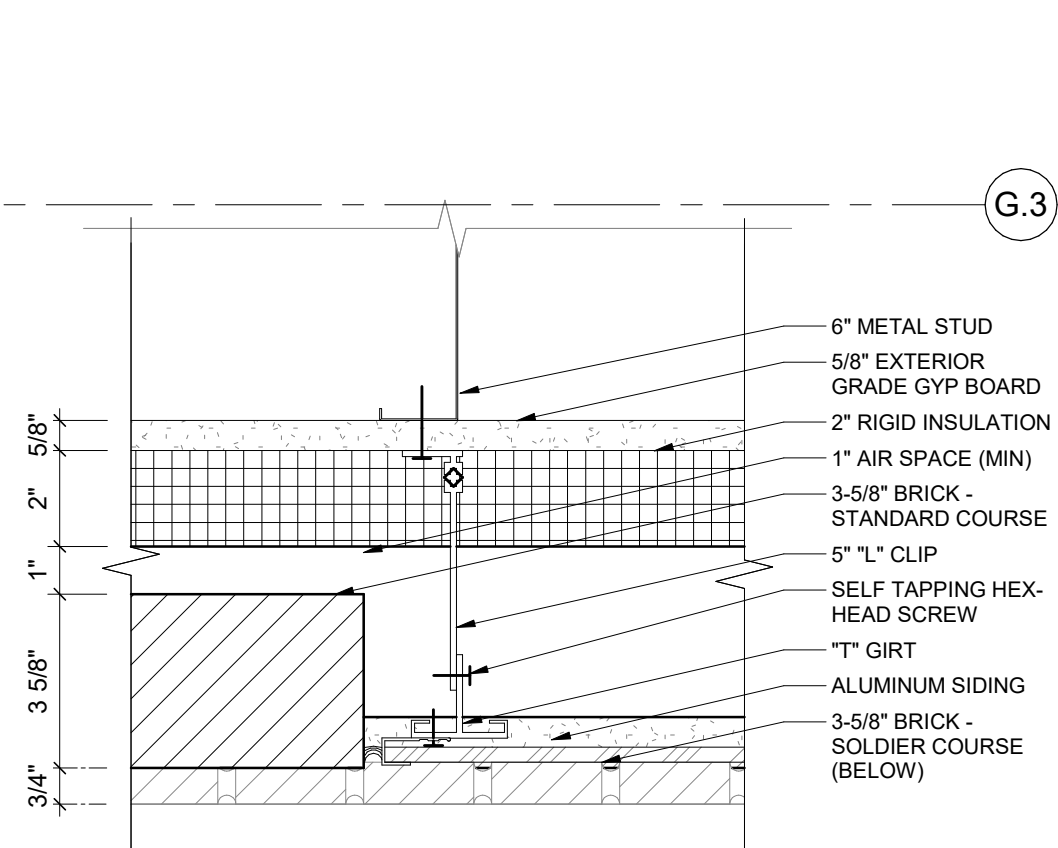
2
A53-01
ALUMINUM SOFFIT SIDING AT
CEMENT BOARD FACIA
SCALE: 3" = 1'-0"



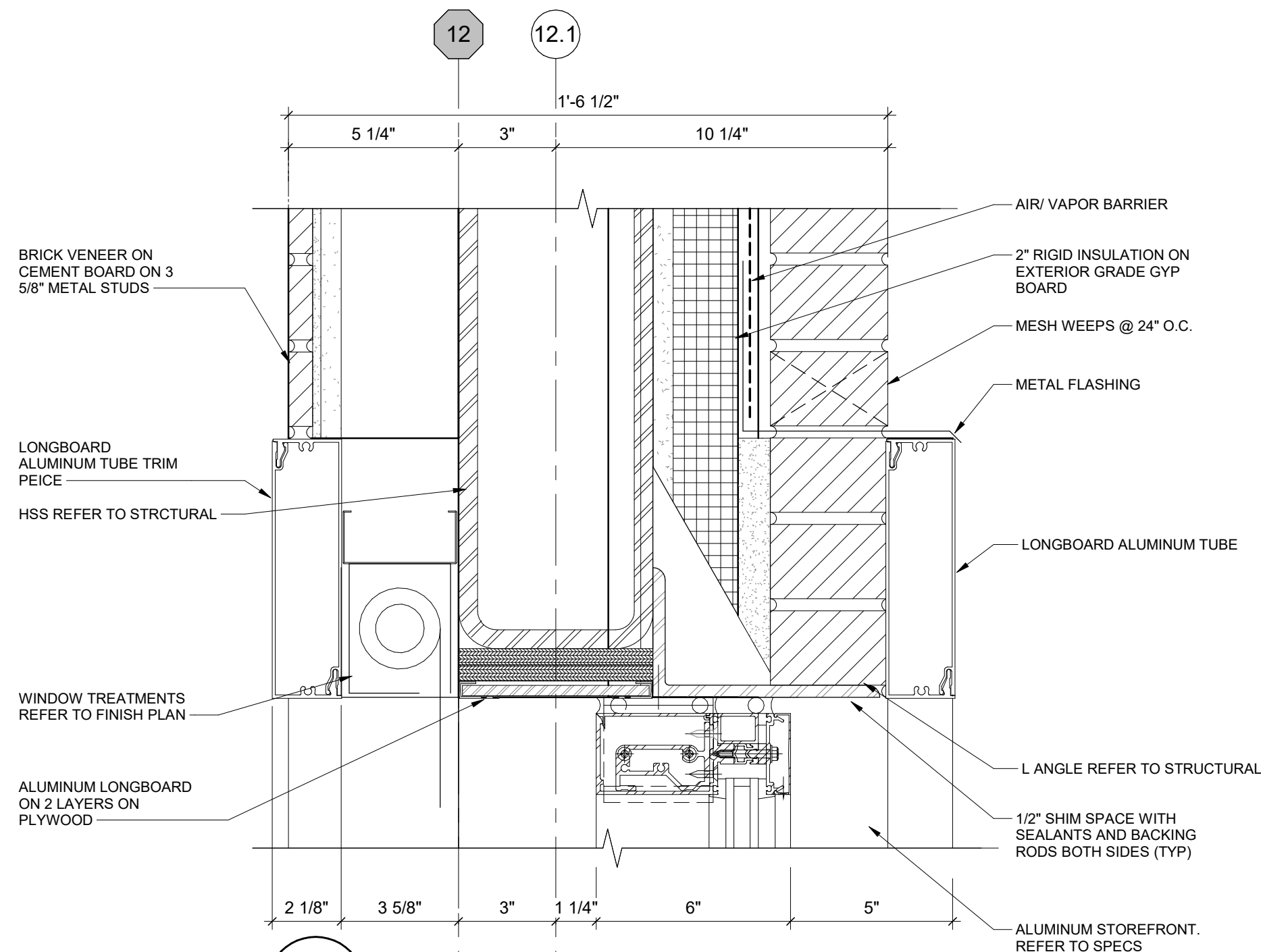
3
A53-01
ALUMINUM SIDING AT BRICK
SECTION DETAIL
SCALE: 3" = 1'-0"



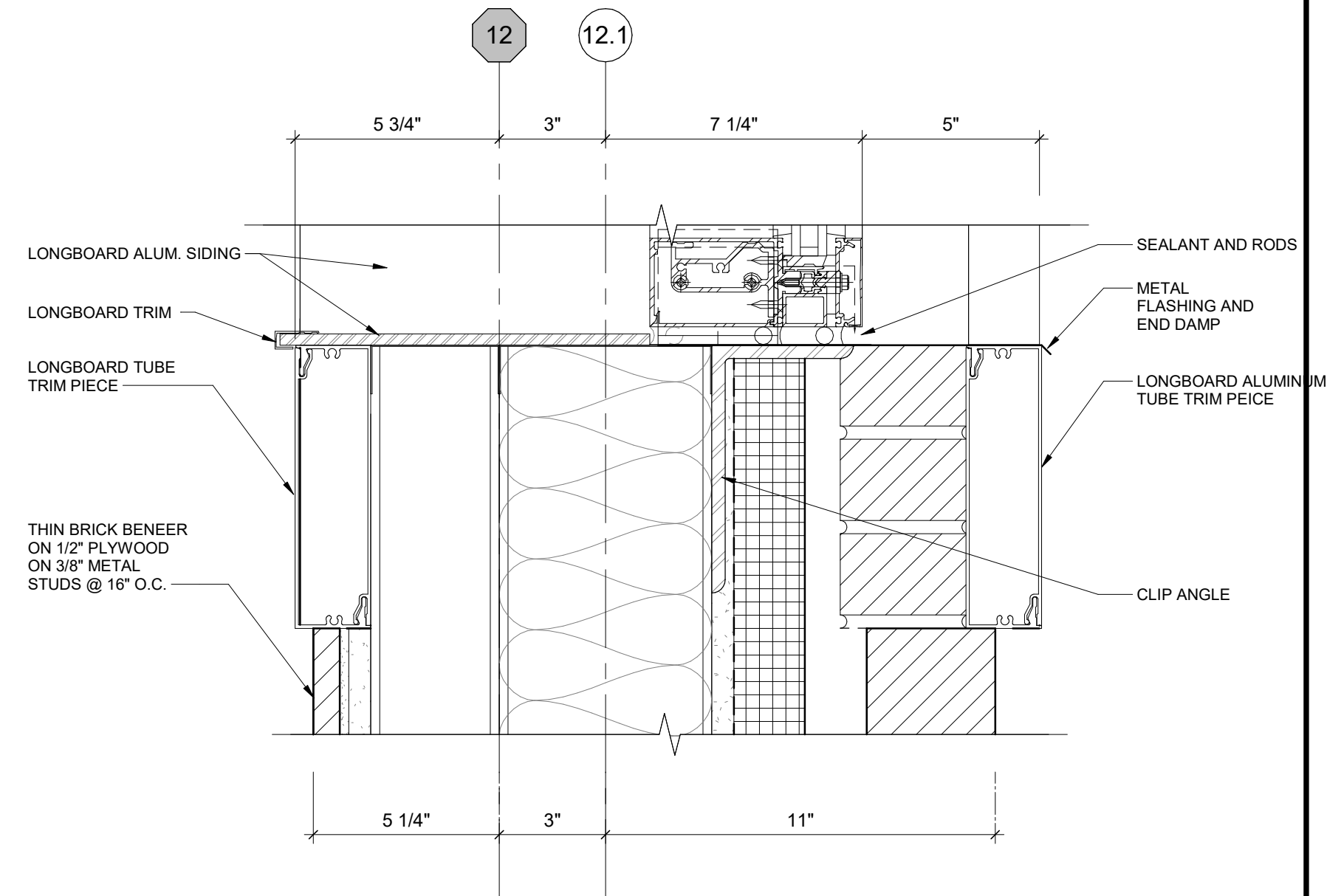
4
A90-01
ALUMINUM SIDING AT GLAZING
PLAN DETAIL
SCALE: 3" = 1'-0"



5
A53-01
ALUMINUM SIDING AT BRICK
PLAN DETAIL
SCALE: 3" = 1'-0"



6
A53-01
HEAD DETAIL
SCALE: 3" = 1'-0"



7
A53-01
SILL DETAIL
SCALE: 3" = 1'-0"

DATE	ISSUED FOR	REV
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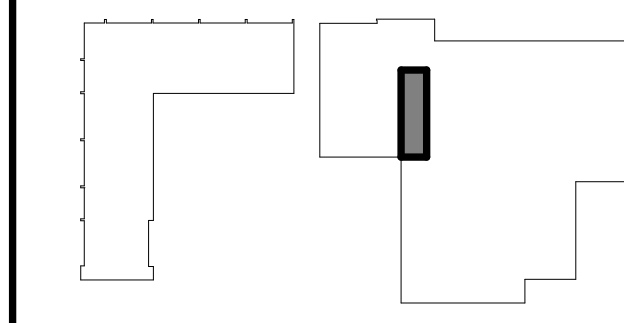
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Project Component

PHASE OF WORK

Key Plan



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Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

giffels
webster

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Design Lead	Drawn P. PERKINS
Project Leader	Checked G. KARANFILOVSKI

Client
**WAYNE STATE
UNIVERSITY**
Project
**WSU DINING HALL
ADDITION**
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
ENLARGED SECTION DETAILS

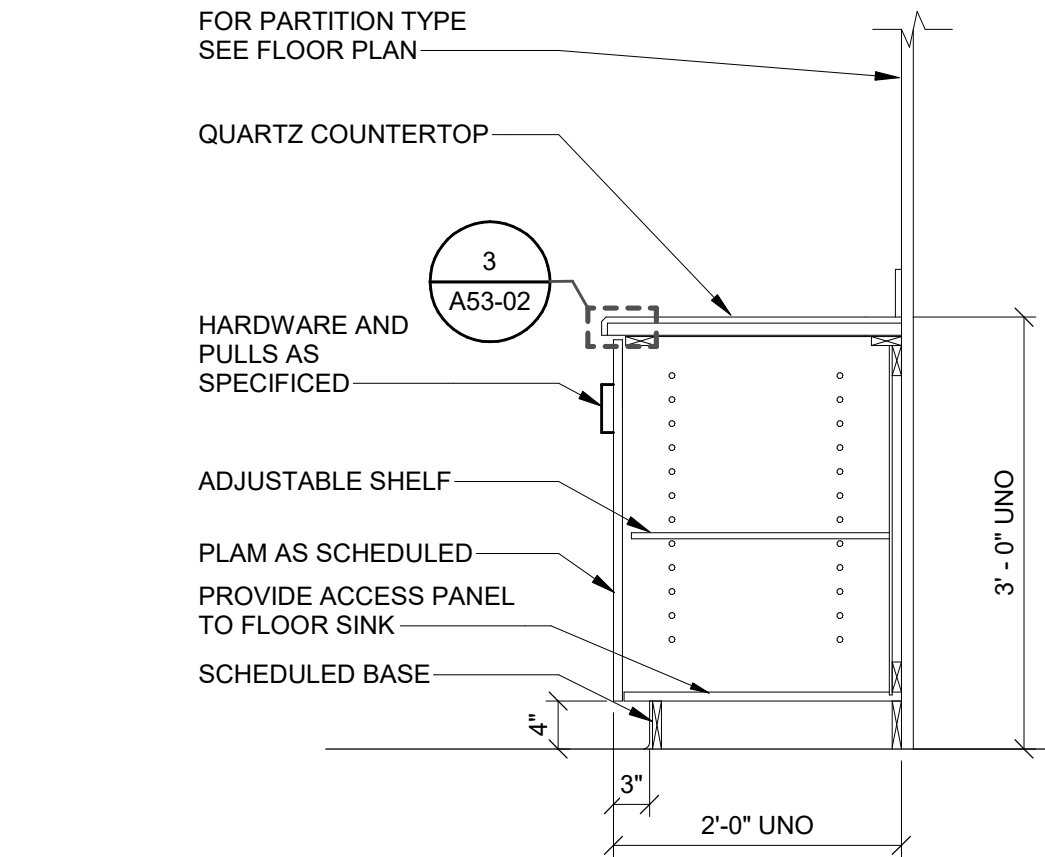
Scale: 3" = 1'-0"

Project No. JCDT18-0451

Drawing No.
A53-01

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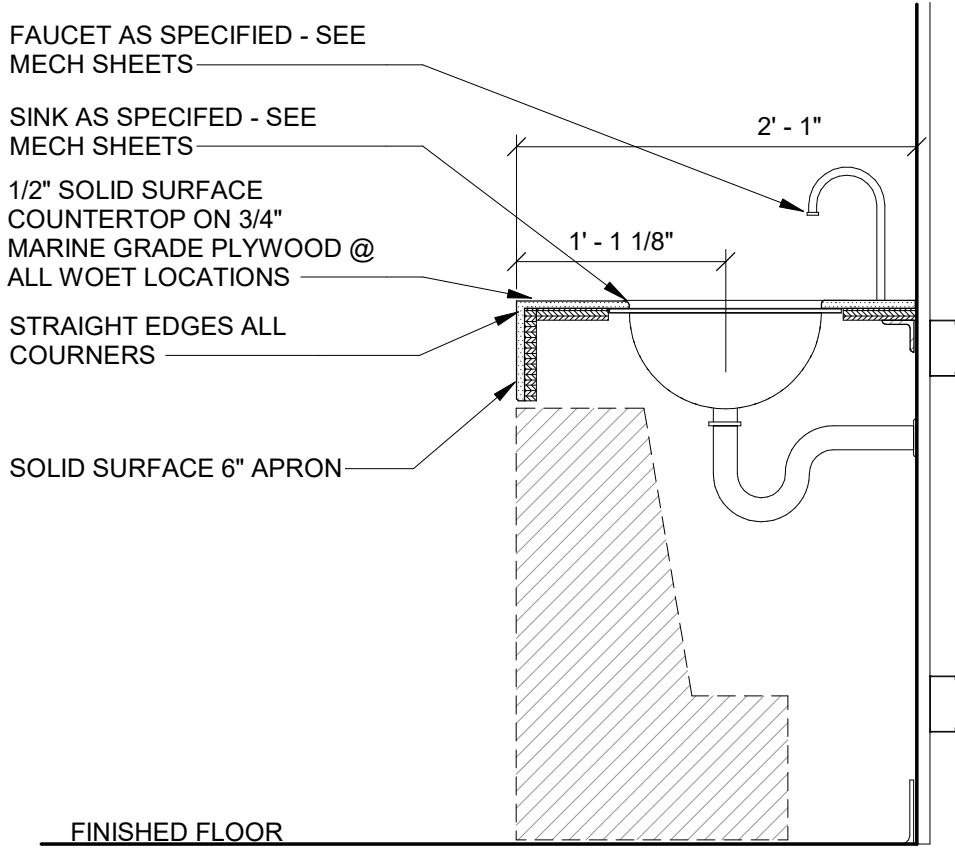
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1
A53-02

BASE CABINET

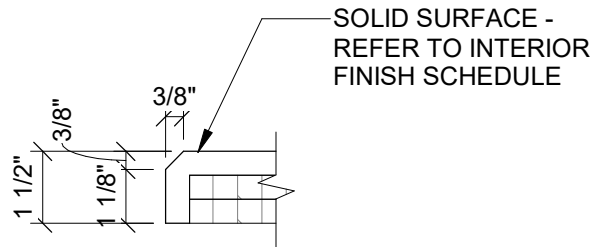
SCALE: 3/4" = 1'-0"



2
A53-02

TOILET ROOM COUNTER WITH
SINK ENCLOSURE

SCALE: 1" = 1'-0"



3
A53-02

CHAMFERED EDGE

SCALE: 3" = 1'-0"

DATE	ISSUED FOR	REV
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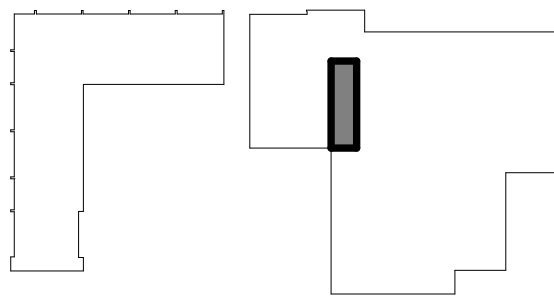
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Electrical: NORR

Seal(s)

giffels webster

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Client
WAYNE STATE
UNIVERSITY

Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
MILLWORK DETAILS

Scale: As indicated

Project No. JCDT18-0451

Drawing No.
A53-02



1. U/S CEILING INDICATED IS RELATIVE TO TOP OF FINISHED FLOOR.
2. CLEAR HEIGHT U/S CEILING IS INDICATED RELATIVE TO FINISHED FLOOR AT EACH FLOOR LEVEL
3. REFER TO REFLECTED CEILING PLANS (A60 & A61 SERIES) FOR CEILING FINISHES
4. REFER TO ELECTRICAL ENGINEER'S DRAWINGS FOR LIGHTING SCHEDULE
5. SITE VERIFY ALL MEASUREMENTS SO THAT WINDOW TREATMENTS ARE PROPERLY CENTERED WITH INTERIOR & EXTERIOR MULLIONS
6. CENTER ALL LIGHTING AND A/V EQUIPMENT WITHIN THE CEILING TILE IN WHICH THEY LOCATED WHENEVER POSSIBLE

Key Value	Keynote Text
AC1	EXPOSED METAL DECKING, STRUCTURAL STEEL JOISTS AND STRUCTURAL STEEL FRAMING TO RECEIVE 1-HR INTUMESCENT PAINT APPLIED FIRE PROOFING THROUGHOUT.
AC2	CEILING TYPE B TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS AND IS TO INCLUDE ALL REQUIRED END CAPS, SPLICES, AND ACCESSORIES AS NECESSARY. ALL FINISHES TO BE CONFIRMED BY THE DESIGNER.
AC4	GYPSUM BOARD CEILING ON METAL FRAMING.
AC5	COORDINATE DISTURBANCE PENETRATIONS WITH MECHANICAL DRAWINGS. PROVIDE CLEAN FINISH AT ALL PENETRATIONS.
AC6	GYPSUM BOARD SOFFIT, PAINT FACE AND UNDERSIDE OF SOFFIT AS SCHEDULED.
AC7	REFER TO ELECTRICAL DRAWINGS FOR LIGHT FIXTURE SPECIFICATIONS
AC8	ENSURE NO LOOSE EXPOSED WIRING IN OPEN CEILING AREA.
AC9	FIRE SUPPRESSION TO BE INSTALLED THROUGHOUT ADDITION. REFER TO MECH, ELECT, AND PLUMBING SHEETS TO AVOID CONFLICTS WITH HVAC, LIGHT FIXTURES, ETC.
AC10	REFER TO ELECTRICAL SHEETS FOR HEIGHT OF FIXTURES.

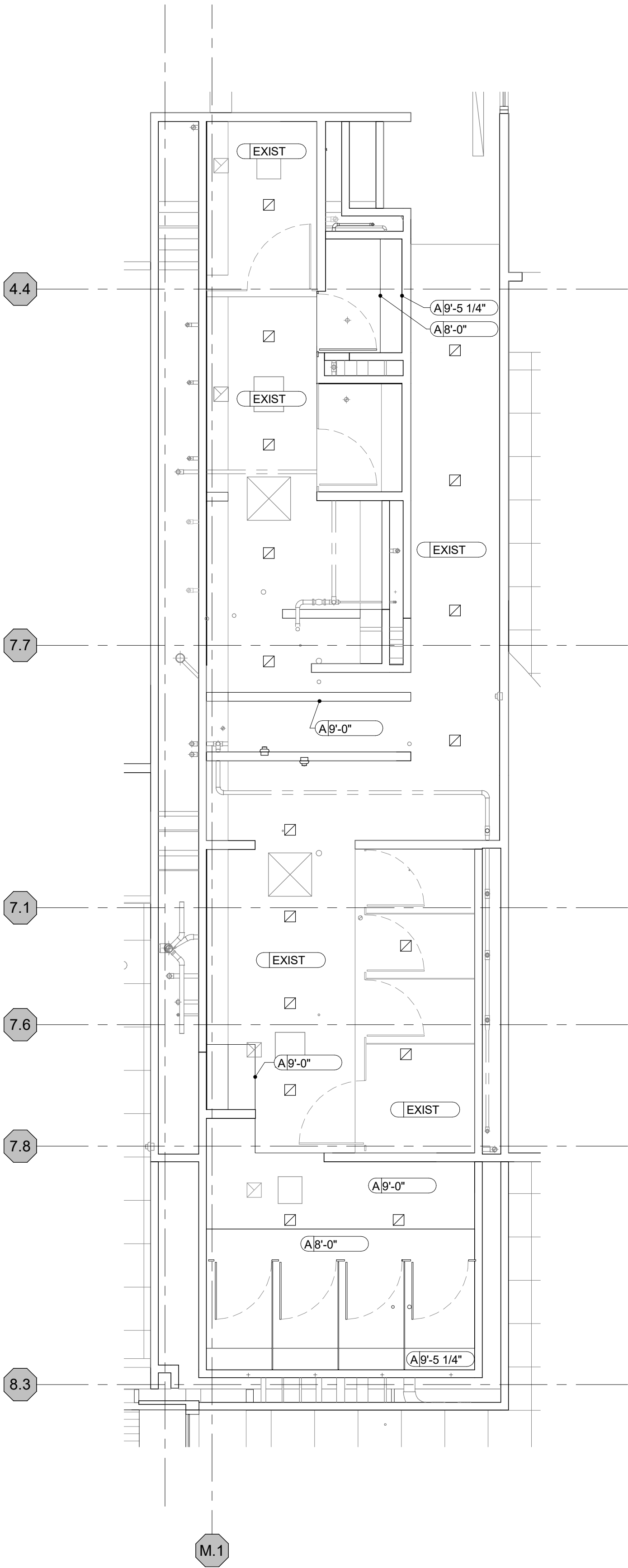
giffels 
webster

NORR

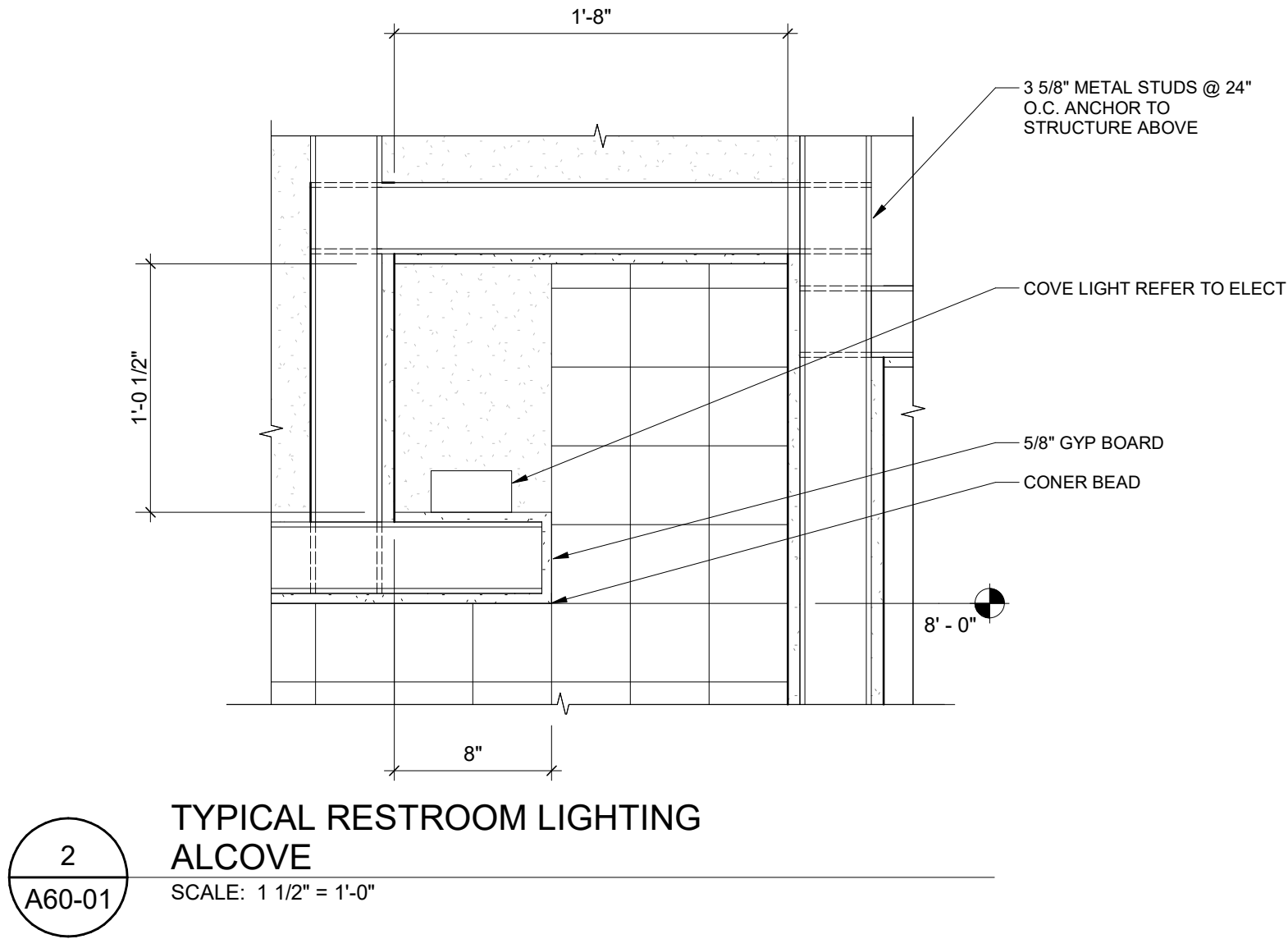
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Detroit, MI 48226 U.S.A
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Drawing No. A60-00



1
A60-01
WASHROOM REFLECTED
CEILING PLAN
SCALE: 1/4" = 1'-0"



2
A60-01
TYPICAL RESTROOM LIGHTING
ALCOVE
SCALE: 1 1/2" = 1'-0"

GENERAL NOTES

1. US CEILING INDICATED IS RELATIVE TO TOP OF FINISHED FLOOR.
2. CLEAR HEIGHT US CEILING IS INDICATED RELATIVE TO FINISHED FLOOR AT EACH FLOOR LEVEL.
3. REFER TO REFLECTED CEILING PLANS (A60 & A61 SERIES) FOR CEILING FINISHES.
4. REFER TO ELECTRICAL ENGINEER'S DRAWINGS FOR LIGHTING SCHEDULE.
5. SITE VERIFY ALL MEASUREMENTS SO THAT WINDOW TREATMENTS ARE PROPERLY CENTERED WITH INTERIOR & EXTERIOR MULLIONS.
6. CENTER ALL LIGHTING AND AVV EQUIPMENT WITHIN THE CEILING TILE IN WHICH THEY LOCATED WHENEVER POSSIBLE.

REFLECTED CEILING PLAN LEGEND

ARCHITECTURAL

- CEILING TAG
HEIGHT A.F.F.
CEILING TYPE
- CEILING TYPE A - GYPSUM BOARD
- CEILING TYPE B - SIMULATED WOOD METAL CEILING PANELS
- CEILING TYPE C - LONGBOARD ALUM SOFFIT
- CEILING TYPE D - TYPE 'X' GYP BOARD
- WT-X WINDOW TREATMENT

ELECTRICAL

- 2'x4' LED FIXTURE
- 9'x4' LED FIXTURE
- 9'x4' LED FIXTURE (EMERGENCY)
- 1 1/2'x4'-0" LED FIXTURE
- RECESSED POT LIGHT
- WALL MOUNTED LIGHT
- EXIT SIGN - CEILING MOUNTED, SINGLE-SIDED
- EXIT SIGN - CEILING MOUNTED, DOUBLE-SIDED
- EXIT SIGN - WALL MOUNTED, SINGLE-SIDED

MECHANICAL

- SUPPLY GRILLE
- EXHAUST GRILLE
- LINEAR DIFFUSER
- RADIANT PANEL

CEILING PLAN KEY NOTES

Key Value	Keynote Text
AC1	EXPOSED METAL DECKING, STRUCTURAL STEEL JOISTS AND STRUCTURAL STEEL FRAMING TO RECEIVE 1-HR INTUMESCENT PAINT APPLIED FIRE PROOFING THROUGHOUT.
AC2	CEILING TYPE B TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS AND IS TO INCLUDE ALL REQUIRED END CAPS, SPLICES, AND ACCESSORIES AS NECESSARY. ALL FINISHES TO BE CONFIRMED BY THE DESIGNER.
AC4	GYPSUM BOARD CEILING ON NEW METAL FRAMING.
AC5	COORDINATE DUCTWORK PENETRATIONS WITH MECHANICAL DRAWINGS. PROVIDE CLEAN FINISH AT ALL PENETRATIONS.
AC6	GYPSUM BOARD SOFFIT, PAINT FACE AND UNDERSIDE OF SOFFIT AS SCHEDULED.
AC7	REFER TO ELECTRICAL DRAWINGS FOR LIGHT FIXTURE SPECIFICATIONS
AC8	ENSURE NO LOOSE EXPOSED WIRING IN OPEN CEILING AREA.
AC9	FIRE SUPPRESSION TO BE INSTALLED THROUGHOUT ADDITION. REFER TO MECH, ELECT, AND PLUMBING SHEETS TO AVOID CONFLICTS WITH HVAC, LIGHT FIXTURES, ETC.
AC10	REFER TO ELECTRICAL SHEETS FOR HEIGHT OF FIXTURES.

DATE	ISSUED FOR	REV
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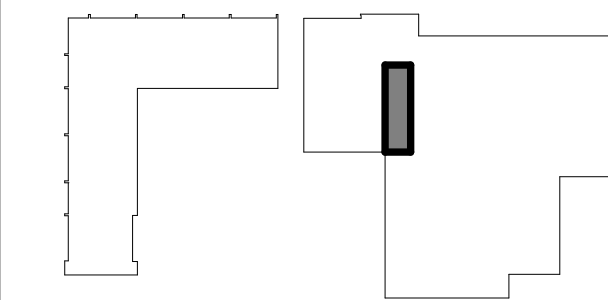
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Project Component

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Client
WAYNE STATE UNIVERSITY

Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
TOILET ROOMS REFLECTED CEILING PLAN

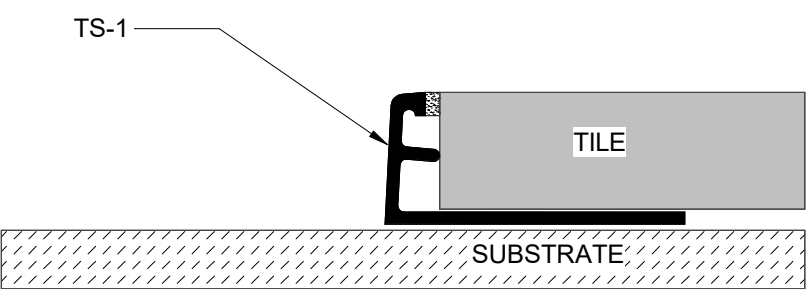
Scale: As indicated

Project No. JCDT18-0451

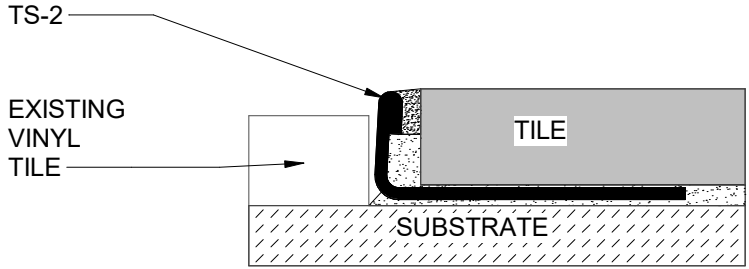
Drawing No.
A60-01

ROOM FINISH SCHEDULE										
ROOM		FLOOR		WALLS				CEILING		REMARKS
No	NAME	FINISH	BASE	NORTH FINISH	EAST FINISH	SOUTH FINISH	WEST FINISH	MAT'L	FINISH	
FINISHED FLOOR										
101	NEW DINING HALL ADDITION	PC-1	EXIST, RB-1, MB-1	EXIST, PT-1	EXIST, PT-1	BR-1, 2, SD-1	BR-1, 2, SD-1, PT-2, PCT-4	EXP, SD-2	PT-3	1, 2, 5, 6, 8
102	CORR	EXIST	EXIST, RB-1	PT-1	PT-1	PT-1	PT-1	EXIST	PT-3	3
103	MENS	PCT-1	PCT-2	PT-4, 5	CT-1, PT-4	PT-4	CT-1, PT-4, 5	EXIST	PT-3	1, 4, 7
104	WOMENS	PCT-1	PCT-2	PT-4	EX / PT-4, 5	PT-4, CT-1	PT-4, 5, CT-1	EXIST	PT-3	1, 4, 7
E100	EXISTING DINING HALL	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	
E101	EXISTING LIVING ROOM	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	8

MATERIAL SCHEDULE					
CODE	MATERIAL	MANUFACTURER	STYLE & COLOR NUMBER	SPEC SECTION	COMMENTS
BR-1	BRICK	BELDEN	STYLE: BRICK VENEER - RUNNING BOND COLOR: MOD. BLACK DIAMOND VELOUR		INTERIOR BRICK
BR-2	BRICK	BELDEN	STYLE: BRICK VENEER - SOLDIER CORSE COLOR: MOD. BLACK DIAMOND VELOUR		INTERIOR BRICK
CG-1	CORNER GUARD	C/S ACROVYN	STYLE: CO-8 - 90 DEGREE METAL SUFACE MOUNTED HEIGHT: 4"H TO MATCH EXISTING STAINLESS STEEL ALLOY #4 STAIN FINISH		
CT-1	CERAMIC TILE	AMERICAN OLEAN	STYLE: BRIGHT & MATTE A079144 COLOR: BISCUIT - 0091 FINISH: GLOSS SIZE: 4" X 4"		TOILET ROOM FIELD WALL TILE
GT-1	GROUT	LATICRETE	STYLE: PERMACOLOR SELECT COLOR: 23 ANTIQUE WHITE		TO BE USED WITH CT-1
GT-2	GROUT	LATICRETE	STYLE: SPECTRALOCK PRO COLOR: 23 ANTIQUE WHITE		TO BE USED WITH PCT-1, 2, 3
GT-3	GROUT	LATICRETE	STYLE: SPECTRALOCK PRO COLOR: 24 NATURAL GREY		TO BE USED WITH PCT-3
GT-4	GROUT	LATICRETE	STYLE: PERMACOLOR SELECT COLOR: 17 MARBLE BEIGE		TO BE USED WITH PCT-4
MB-1	METAL BASE	SCHLUTER	STYLE: DESIGNBASE-SL HEIGHT: 3 1/8" FINISH: ANODIZED ALUMINUM WITH BRUSHED STAINLESS STEEL APPERANCE (AEEB)		BEVERAGE COUNTER MILLWORK BASE
PC-1	POLISHED CONCRETE	TBD	STYLE: TBD FINISH: TBD		
PCT-1	PORCELAIN TILE	CROSSVILLE	STYLE: RETRO ACTIVE 2.0 COLOR: RET03 FEATHERSTONE FINISH: UPS (UNPOLISHED) SIZE: 12" X 12" (FIELD CUT TO 8" X 8" TO MATCH EXACT SIZE AND CALIBRATION OF EXISTING TILE)		TOILET ROOM FIELD FLOOR TILE
PCT-2	PORCELAIN TILE	CROSSVILLE	STYLE: RETRO ACTIVE 2.0 COLOR: RET03 FEATHERSTONE FINISH: UPS (UNPOLISHED) SIZE: 4" X 12" (FIELD CUT TO 4" X 8" TO MATCH EXACT SIZE AND CALIBRATION OF EXISTING TILE BASE - GROUT LINES TO ALIGN WITH 8"X 8" FLOOR TILE)		TOILET ROOM BULLNOSE BASE
PCT-3	PORCELAIN TILE	CROSSVILLE	STYLE: RETRO ACTIVE 2.0 COLOR: RET02 SEAL TAUPE FINISH: UPS (UNPOLISHED) SIZE: 12" X 24"		TOILET ROOM - ACCENT FLOOR TILE
PCT-4	PORCELAIN TILE	DALTILE	STYLE: SPARK COLOR: FIRELIGHT FLICKER SK50 FINISH: MATTE SIZE: 12" X 24"		BEVERAGE COUNTER
PL-1	PLASTIC LAMINATE	FORMICA	COLOR: 5884 CHESTNUT WOODLINE FINISH: MATTE		MILLWORK - VERTICAL SURFACES
PT-1	PAINT	BENJAMIN MOORE	COLOR: 2148-50 SANDY WHITE		FIELD PAINT
PT-2	PAINT	BENJAMIN MOORE	COLOR: 2040-30 VERY GREEN		GREEN ACCENT PAINT
PT-3	PAINT	SHERWIN WILLIAMS	COLOR: 967 CLOUD WHITE		CEILING PAINT
PT-4	PAINT	SHERWIN WILLIAMS	COLOR: 972 ALASKAN SKIES		TOILET ROOM PAINT
PT-5	PAINT	SHERWIN WILLIAMS	COLOR: 1543 PLYMOUTH ROCK		TOILET ROOM ACCENT PAINT
QZ-1	QUARTZ	CORIAN	STYLE: ZODIAC COLOR: PAPYRUS		BEVERAGE STATION - COUNTERTOP
RB-1	RUBBER BASE	JOHNSONITE	STYLE: 4" COVE BASE DC-40 COLOR: 40 BLACK		
SD-1	SIDING	LONGBOARD	SIZE: 4" COLOR: LIGHT CHERRY 1406/01-716		INTERIOR SIDING, INTERIOR SOFFIT
SS-1	SOLID SURFACE MATERIAL	AVONITE	COLOR: F1-9037 HIGH DESERT		TOILET ROOM - COUNTERTOPS
TS-1	TRANSITION STRIP	SCHLUTER	STYLE: SCHIENE COLOR: BRUSHED STAINLESS STEEL (EB)		WALL TILE TRIM
TS-2	TRANSITION STRIP	SCHLUTER	STYLE: SCHIENE COLOR: BRUSHED STAINLESS STEEL (EB)		TILE TO VINYL FLOOR TRIM
VF-1	VINYL FILM	SOLYX	STYLE: 8300 SERIES TRANSPARENT COLORED CALENDDERED FILMS COLOR: SXP-025UV BRIMSTONE YELLOW THICKNESS: 3MIL FINISH: GLOSS		EXTERIOR GLAZING VINYL FILM
VF-2	VINYL FILM	SOLYX	STYLE: 8SXP SERIES POLYESTER FILM COLOR: TBD THICKNESS: 3MIL		INTERIOR GLAZING VINYL FILM
VF-3	VINYL FILM	3M	STYLE: SCOTCHCAL ELECTROCUT GRAPHIC FILM 7725-10 COLOR: WHITE THICKNESS: 2MIL TRANSPARENCY: OPAQUE FONT STYLE: HELVETICA FONT HEIGHT: 1'-4"H		EXTERIOR VINYL LETTERS - TO BE CENTERED ON WINDOWS AS SHOWN ON DRAWINGS. LETTER SPACING BETWEEN MULLIONS AS SHOWN ON DRAWINGS.
WCB-1	WOOD CEILING BAFFLE	USG / CEILINGS PLUS	STYLE: BARZ SIZE: 4"W X 12"H X 16'-0"L COLOR: S-12N VALLEY MAPLE SARANTE PERFORATION: SD02 - 6.3% OPEN PROVIDE ACOUSTICAL BACKING		
WT-1	WINDOW TREATMENT	LEGRAND / SOLARFACTIVE	STYLE: MANUAL TELESHADES 300 SERIES COLOR: GREY/WHITE		



WALL TILE TRIM
N.T.S.



FLOOR TRANSITION
N.T.S.

GENERAL NOTES

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- D. DISCREPANCIES IN THE FINISH DESIGNATIONS SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR RESELECTIONS OR CLARIFICATION.
- E. WIREWAYS, ACCESS PANELS, MECHANICAL DEVICES, ETC. SHALL BE FINISHED TO MATCH ADJACENT SURFACE UNLESS NOTED OTHERWISE.
- F. PATCH AND REPAIR ALL EXISTING FINISHES/SURFACES THAT MAYBE AFFECTED BY NEW CONSTRUCTION.
- G. DIFFUSERS LOCATED IN ACT CEILING APPLICATIONS TO MATCH WHITE FINISH OF CEILING SUSPENSION SYSTEM.

FLOORING NOTES

- F1. REFER TO FINISH PLANS FOR FLOOR PATTERN PLANS.
- F2. EXTEND FLOORING INTO TOE SPACES AND KNEE SPACES AS NEEDED.
- F3. ALL GROUT JOINTS TO ALIGN UNLESS NOTED OTHERWISE. CONTRACTOR TO SUBMIT PROPOSED GROUT/TILE LAYOUT FOR ARCHITECT REVIEW/APPROVAL.
- F4. PREPARE ALL FLOORING SUBSTRATES TO RECEIVE NEW FLOORING MATERIAL. MAKE ALL TRANSITIONS FLUSH AND CLEAN AS REQUIRED TO RECEIVE NEW FLOORING MATERIAL.
- F5. INSTALL FLOORING UNDER ALL FLOOR MOUNTED EQUIPMENT.
- F6. FLOORING CONTRACTOR TO SUBMIT SEAMING PATTERN TO ARCHITECT FOR ACCEPTANCE PRIOR TO INSTALLATION.
- F7. TERMINATE FLOORING MATERIAL AT CENTER OF DOOR WHERE ADJACENT FLOOR FINISH AND/OR COLOR IS DISSIMILAR UNLESS OTHERWISE NOTED.
- F8. TRANSITION/REDUCER STRIPS SHALL BE USED AT MATERIAL HEIGHT DIFFERENCES AND DISSIMILAR MATERIALS, UNLESS OTHERWISE NOTED.

PAINT NOTES

- P1. CEILINGS SCHEDULED TO RECEIVE PAINT SHALL RECEIVE A FLAT FINISH UNLESS OTHERWISE NOTED.
- P2. WET AREA CEILINGS TO RECEIVE PAINT SHALL RECEIVE SEMI-GLOSS FINISH (E.G. TOILET ROOMS) UNLESS OTHERWISE NOTED.
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- P5. PROVIDE ACCENT PAINT COLOR MOCKUP FOR ARCHITECT APPROVAL OF ACCENT PAINT COLORS AND LOCATIONS.
- P6. REFER TO FINISH PLANS, FOR LOCATION OF ACCENT PAINT COLORS.
- P7. ALL EXPOSED CEILINGS TO BE PAINTED PT-3 UNLESS OTHERWISE NOTED. REFER TO CEILING PLANS AND ROOM FINISH SCHEDULE FOR ACCENT CEILING PAINT LOCATIONS.
- P8. SURFACES SCHEDULED TO RECEIVE PAINT SHALL RECEIVE PAINT BEHIND SCREENS, TACK BOARDS, MARKER BOARDS AND OTHER APPLIED SURFACES.
- P9. WSU STANDARDS REQUIRE 2 COATS OF PAINT.

REMARK NOTES

1. REFER TO FINISH PLANS (SERIES A9) FOR ACCENT WALL LOCATIONS.
2. REFER TO FINISH PLANS (SERIES A9) FOR CORNER GUARD LOCATIONS.
3. CORRIDOR TO RECEIVE NEW PAINT ON ALL WALLS. CORRIDOR TO RECEIVE NEW RUBBER BASE AT NEW WALLS.
4. COUNTERTOP TO BE SS-1.
5. COUNTERTOP TO BE QZ-1, VERTICAL MILLWORK TO BE PL-1, AND MILLWORK BASE TO BE MB-1.
6. REFER TO INTERIOR ELEVATIONS (SERIES A9) FOR VINYL FILM LOCATIONS.
7. REFER TO ENLARGED TOILET ROOM PLANS AND ELEVATIONS (SERIES A4) FOR WALL TILE LOCATIONS.
8. REFER TO REFLECTED CEILING PLANS (SERIES A6) FOR WINDOW TREATMENT LOCATIONS.

DATE	ISSUED FOR	REV
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05/14/2019	OWNER REVIEW	2
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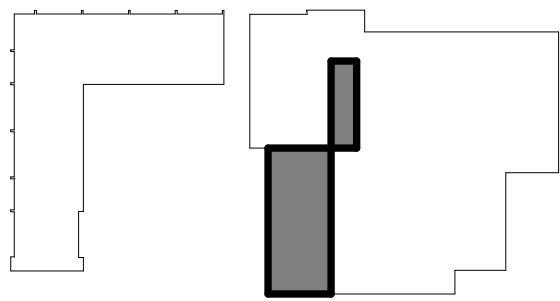
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

giffelswebster

NORR

An Ingenium International Company

150 W. Jefferson Avenue, Suite 1300
Detroit, MI 48226 U.S.A
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Project Manager	BIM Lead
AMY NOLFF	RANDY FRABOTTA
Design Lead	Drawn
	P. PERKINS
Project Leader	Checked
	G. KARANFILOVSKI

Client
WAYNE STATE UNIVERSITY
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
FINISH SCHEDULES

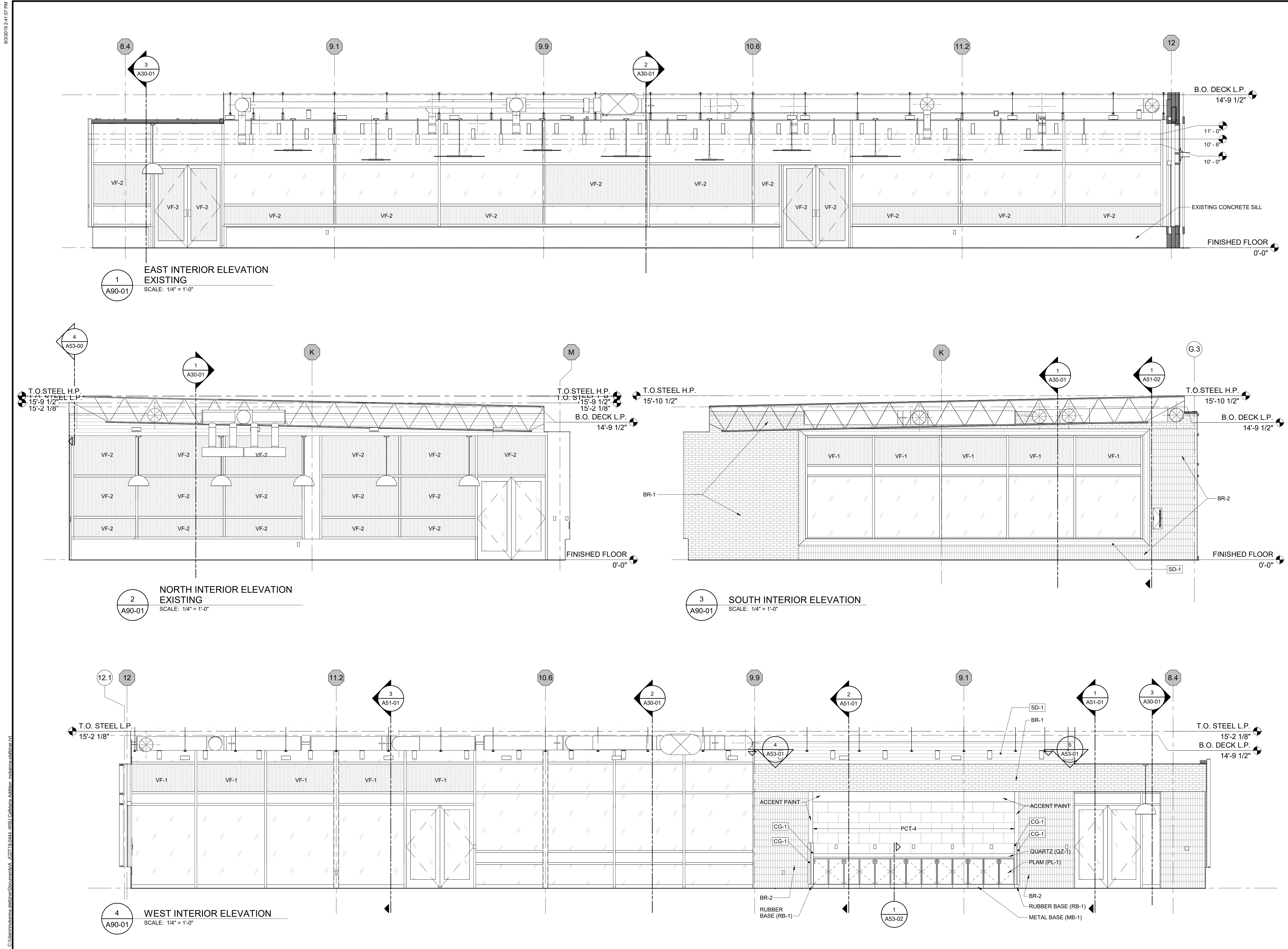
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Project No. JCDT18-0451

Drawing No.
A90-00

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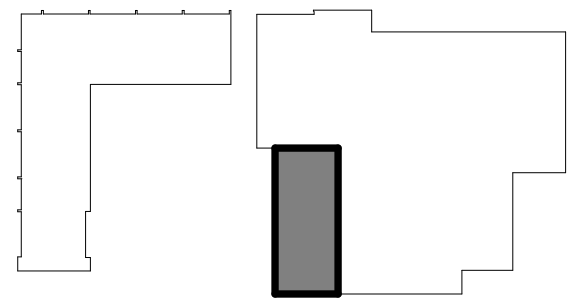
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Client
WAYNE STATE UNIVERSITY

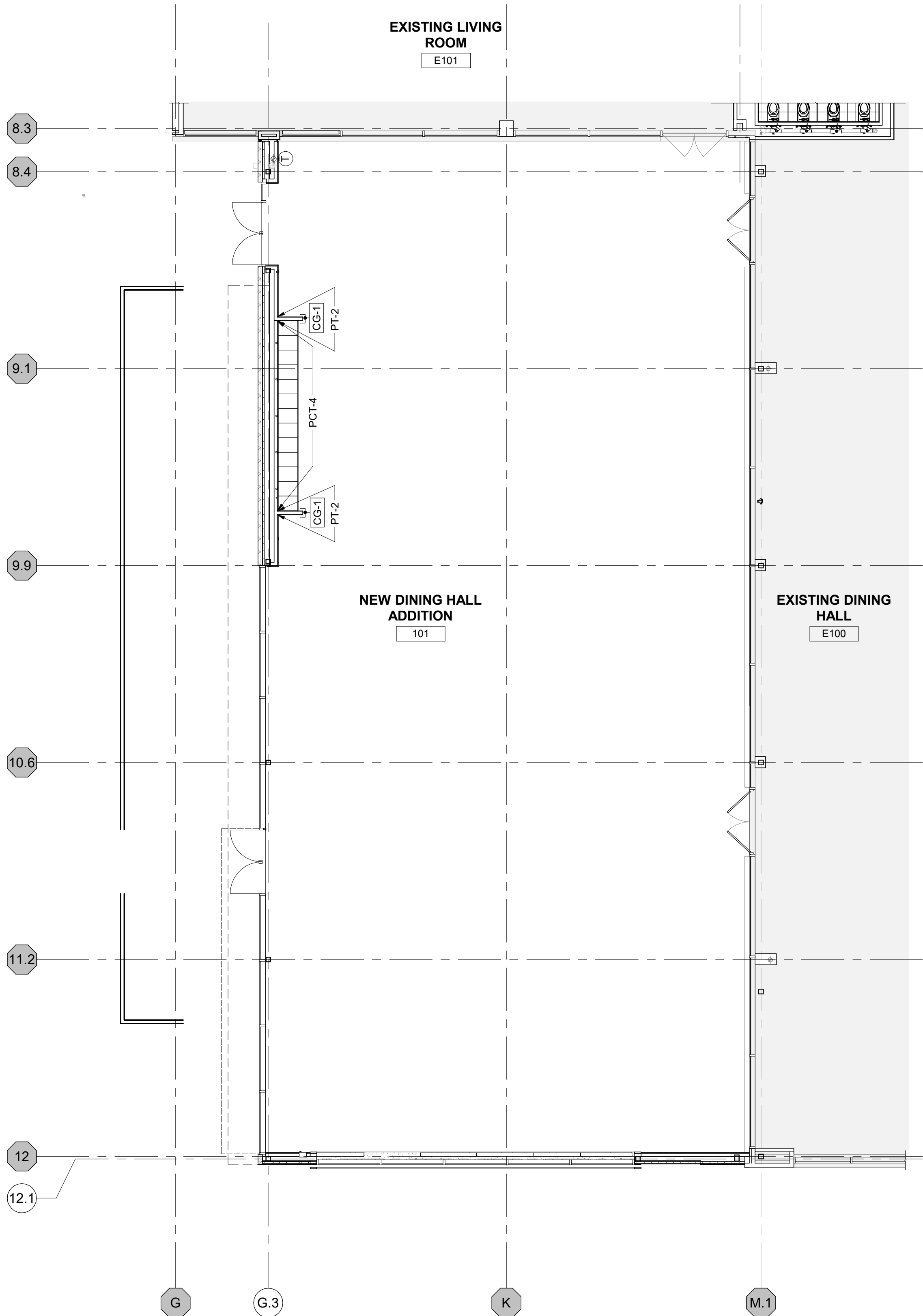
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
INTERIOR ELEVATIONS

Scale: 1/4" = 1'-0"

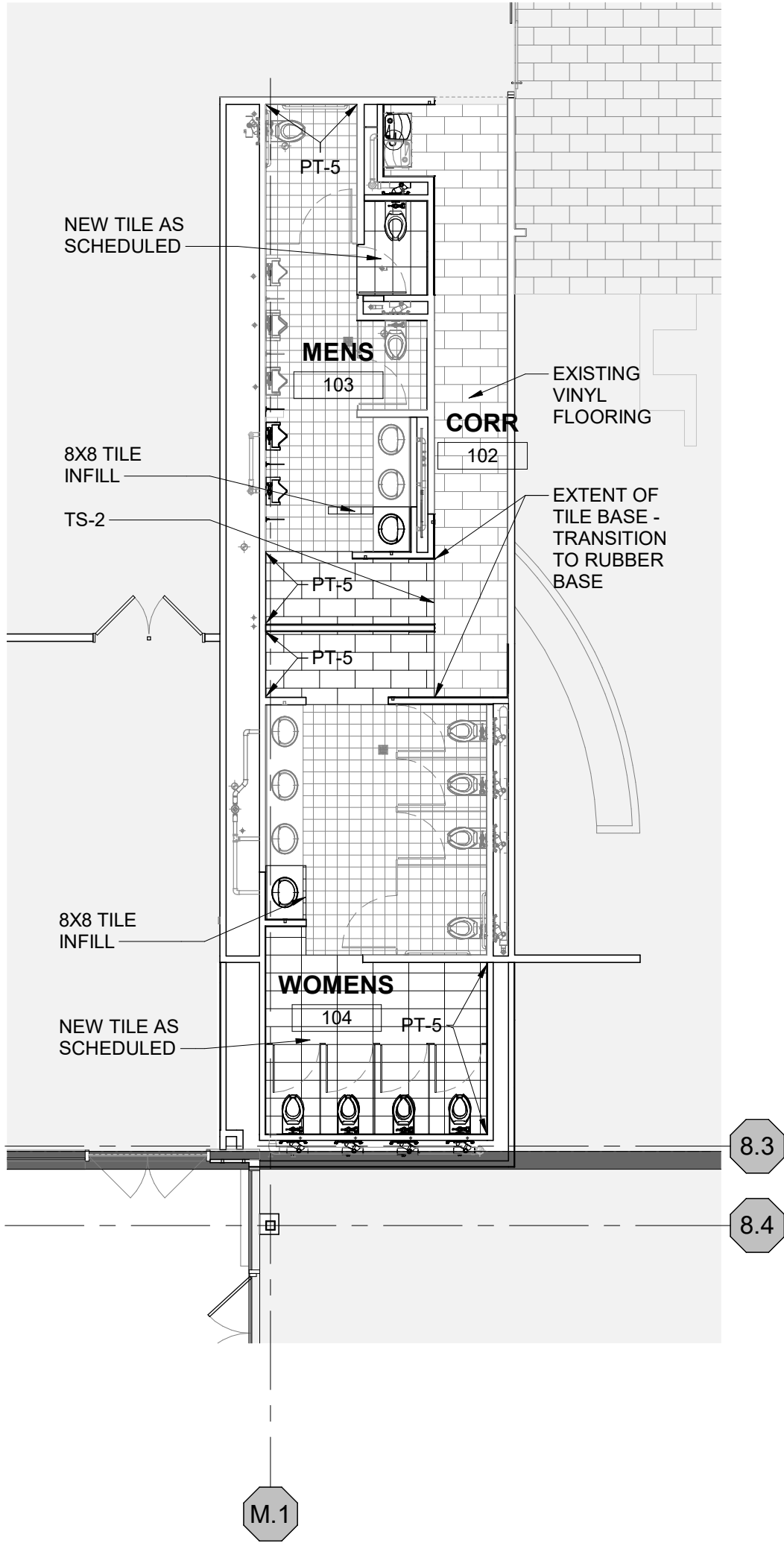
Project No. JCDT18-0451

Drawing No. A90-01



1
A90-02

FINISH PLAN - MAIN
SCALE: 1/8" = 1'-0"



2
A90-02

FINISH PLAN - TOILET ROOMS
SCALE: 1/8" = 1'-0"

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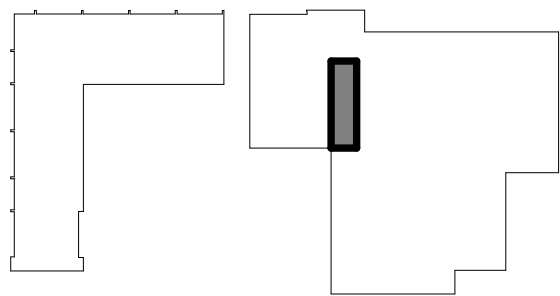
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)



Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead	Drawn P. PERKINS
Project Leader	Checked G. KARANFILOVSKI

Client
WAYNE STATE UNIVERSITY
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
FINISH PLAN

Scale: As indicated

Project No. JCDT18-0451

Drawing No.
A90-02

1. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT STANDARDS, SPECIFICATIONS AND GENERAL CONDITIONS OF THE CITY OF DETROIT, THE STATE OF MICHIGAN, AND ANY/OR OTHER AGENCIES HAVING JURISDICTION.
2. THE UTILITY INFORMATION SHOWN ON THESE PLANS IS OBTAINED FROM UTILITY OWNERS AND THEREFORE MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL VERIFY AND OBTAIN ANY INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES WHICH MIGHT HAVE AN IMPACT ON THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY PUBLIC OR PRIVATE UTILITIES WHETHER THEY ARE SHOWN OR NOT ON THE PLANS.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AT PROPOSED CONNECTIONS AND/OR CROSSINGS, AND TO NOTIFY THE ENGINEER OF ANY DISCREPANCIES TO THESE PLANS.
4. 72 HOURS PRIOR TO EXCAVATION, THE CONTRACTOR SHALL CONTACT MISS DIG AT (800) 482-7171 FOR THE LOCATION OF UNDERGROUND GAS AND CABLE FACILITIES, AND SHALL ALSO NOTIFY REPRESENTATIVES OF OTHER UTILITIES LOCATED IN THE VICINITY OF THE WORK.
5. ALL PERMITS REQUIRED SHALL BE OBTAINED BY THE CONTRACTOR. ALL PERMIT FEES, BONDS, AND INSURANCE REQUIRED BY THE ISSUING AGENCY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OTHER FEES, INSPECTION COSTS, ETC., AND SHALL ADHERE TO ALL REQUIREMENTS SET FORTH IN SAID PERMITS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL WORK AREAS TO ENSURE THE SAFETY OF ALL OCCUPANTS, VISITORS, PEDESTRIANS, AND OTHERS. THE CONTRACTOR SHALL PROVIDE ADEQUATE WARNING AND PROTECTIVE MEASURES TO MAINTAIN THE SAFETY OF ALL OCCUPANTS, VISITORS, ETC. THROUGHOUT CONSTRUCTION. THIS ACCESS MUST PROVIDE FOR THE REMOVAL OF MUD FROM VEHICLES TIRES, ROADWAYS AND DRIVEWAYS SHALL BE MAINTAINED OPEN FOR EMERGENCY VEHICLES AT ALL TIMES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CITY OF DETROIT DRIVEWAYS AND BUSINIS DRIVEWAYS WHOSE DRIVEWAYS ARE AFFECTED BY HIS SCHEDULE 24 HOURS IN ADVANCE. THE CONTRACTOR SHALL SCHEDULE CONSTRUCTION AT NON-PEAK USE HOURS AND SHALL MINIMIZE DRIVEWAY CLOSURE BY EXPEDITING CONSTRUCTION.
7. THE CONTRACTOR SHALL PROVIDE NECESSARY SIGNS, BARRICADES, AND LIGHTS TO PROTECT THE TRAFFIC AND THE WORK AS DIRECTED BY THE PLANNING AND TRAFFIC CONTROL DIVISION. ALL TRAFFIC CONTROLS SHALL BE IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
8. THE CONTRACTOR IS REQUIRED TO CONFINE CONSTRUCTION ACTIVITIES TO THE LIMITS OF THE SITE AS SHOWN ON THE CONSTRUCTION PLANS. ANY DAMAGE OR DISRUPTION TO ADJACENT SITES IS THE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT IMMEDIATELY. NO OFF-SITE WORK SHALL BE PERFORMED OUTSIDE OF PUBLIC RIGHTS-OF-WAY OR DEDICATED EASEMENTS WITHOUT PRIOR WRITTEN APPROVAL OF THE PROPERTY OWNER.
9. GREAT CARE SHALL BE TAKEN TO AVOID DAMAGE TO VEGETATION OUTSIDE THE CLEARING AND GRUBBING LIMITS. NO DRIVING OR PARKING OF VEHICLES AND/OR STORAGE OF MATERIALS AND SUPPLIES SHALL BE PERMITTED OUTSIDE THE LIMITS OF CONSTRUCTION.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL MATERIALS AND EQUIPMENT LOCATED OUTSIDE THE LIMITS OF CONSTRUCTION.
11. THE PROTECTION OF EXISTING TREES, AS REQUIRED, SHALL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY.
12. ALL CONSTRUCTION SHALL HAVE INSPECTION PROVIDED BY THE CITY OF DETROIT, THE STATE OF MICHIGAN, AND ANY/OR OTHER AGENCIES HAVING JURISDICTION. THE CONTRACTOR SHALL CONTACT THE CITY OF DETROIT, THE STATE OF MICHIGAN, AND ANY/OR OTHER AGENCIES HAVING JURISDICTION 48 HOURS BEFORE THE START OF CONSTRUCTION.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL MATERIALS AND EQUIPMENT TO BE USED ON THE PROJECT. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIAL AND EQUIPMENT TO KEEP DUST IN CHECK AT ALL TIMES. THE CONTRACTOR SHALL RESPOND IMMEDIATELY TO ANY AND ALL COMPLAINTS. DUST CONTROL SHALL BE INCIDENTAL TO THE PROJECT.
14. DURING CONSTRUCTION, THE CONTRACTOR MAY ENCOUNTER SPRINKLER HEADS, PIPING, LIGHTING AND BURIED ELECTRICAL CABLE, MAILBOXES, FENCES, SIGNS, ETC., THAT MAY OR MAY NOT BE INDICATED ON THESE PLANS. THE CONTRACTOR SHALL REPLACE AND/OR RESTORE ALL COMPONENTS OF SUCH SYSTEMS, ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION, MINIMUM STANDARD REQUIREMENTS, OR AS SPECIFIED HEREIN; WHICHEVER IS MORE STRINGENT.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL MATERIALS AND EQUIPMENT TO BE USED ON THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL EXISTING MATERIALS IN QUALITY AND THICKNESS, PER MINIMUM REQUIREMENTS, OR PER THE FOLLOWING; WHICHEVER IS MORE STRINGENT:
 - 16.1. ASPHALT ROADWAYS - 4" ASPHALT MODT 4C OVER 3C
 - 16.2. ASPHALT DRIVEWAYS - 3" ASPHALT MODT 4C OVER 3C
 - 16.3. GRAVEL ROAD AND DRIVEWAYS - 8" MODT 22A GRAVEL
 - 16.4. CONCRETE ROADS - 8" 4000 PSI CONCRETE
 - 16.5. CONCRETE DRIVEWAYS - 6" 4000 PSI CONCRETE
17. ALL LOT MARKERS AND MONUMENT POINTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A REGISTERED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL MATERIALS AND EQUIPMENT TO BE USED ON THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL EXISTING MATERIALS IN QUALITY AND THICKNESS, PER MINIMUM REQUIREMENTS, OR PER THE FOLLOWING; WHICHEVER IS MORE STRINGENT:
 - 18.1. ASPHALT ROADWAYS - 4" ASPHALT MODT 4C OVER 3C
 - 18.2. ASPHALT DRIVEWAYS - 3" ASPHALT MODT 4C OVER 3C
 - 18.3. GRAVEL ROAD AND DRIVEWAYS - 8" MODT 22A GRAVEL
 - 18.4. CONCRETE ROADS - 8" 4000 PSI CONCRETE
 - 18.5. CONCRETE DRIVEWAYS - 6" 4000 PSI CONCRETE
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL MATERIALS AND EQUIPMENT TO BE USED ON THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL EXISTING MATERIALS IN QUALITY AND THICKNESS, PER MINIMUM REQUIREMENTS, OR PER THE FOLLOWING; WHICHEVER IS MORE STRINGENT:
 - 19.1. ASPHALT ROADWAYS - 4" ASPHALT MODT 4C OVER 3C
 - 19.2. ASPHALT DRIVEWAYS - 3" ASPHALT MODT 4C OVER 3C
 - 19.3. GRAVEL ROAD AND DRIVEWAYS - 8" MODT 22A GRAVEL
 - 19.4. CONCRETE ROADS - 8" 4000 PSI CONCRETE
 - 19.5. CONCRETE DRIVEWAYS - 6" 4000 PSI CONCRETE
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL MATERIALS AND EQUIPMENT TO BE USED ON THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL EXISTING MATERIALS IN QUALITY AND THICKNESS, PER MINIMUM REQUIREMENTS, OR PER THE FOLLOWING; WHICHEVER IS MORE STRINGENT:
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 - 20.2. ASPHALT DRIVEWAYS - 3" ASPHALT MODT 4C OVER 3C
 - 20.3. GRAVEL ROAD AND DRIVEWAYS - 8" MODT 22A GRAVEL
 - 20.4. CONCRETE ROADS - 8" 4000 PSI CONCRETE
 - 20.5. CONCRETE DRIVEWAYS - 6" 4000 PSI CONCRETE

1. REFER TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES.
2. WITH THE EXCEPTION OF AN AMOUNT OF EXCAVATED MATERIALS SUFFICIENT FOR BACKFILLING AND CONSTRUCTION OF FILLS AS CALLED FOR ON THE PLANS, ALL EXCESS MATERIALS SHALL BE REMOVED FROM THE EXCAVATION AND DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR WILL BE REQUIRED TO OBTAIN THEIR OWN DISPOSAL GROUND, AND WILL RECEIVE NO ADDITIONAL COMPENSATION FOR DISPOSING OF ANY OF THE EXCESS MATERIALS. MATERIALS ACCEPTABLE TO THE ENGINEER MAY BE DISPOSED OF ON-SITE AT THE DISCRETION OF THE ENGINEER.
3. THE EDGE OF EXISTING PAVEMENT SHALL BE CLEANED OF EARTH AND OTHER FOREIGN MATERIAL BEFORE ADJACENT POURS ARE PLACED.
4. ALL BULKHEADING AND/OR SEWER PIPE REMOVAL NECESSITATED BY THE REMOVAL OF DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE STRUCTURE REMOVAL.
5. EXISTING EARTH SURFACES BROKEN UP BY THE REMOVAL OF STRUCTURES SHALL BE REPAIRED TO ORIGINAL FINISH.
6. THE WAY OF CONSTRUCTION WILL BE REMOVED AND RESET IMMEDIATELY IN A TEMPORARY LOCATION, AS APPROVED BY ENGINEER.
7. THE CONTRACTOR SHALL PROTECT ALL EXISTING SIGNS AND POSTS SCHEDULED TO REMAIN, AS DIRECTED BY THE ENGINEER.
8. ALL UNDERGROUND UTILITIES NOT INDICATED FOR REMOVAL SHALL BE PROTECTED THROUGHOUT CONSTRUCTION.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PRIVATE PROPERTY (INCLUDING BUILDINGS AND FOUNDATIONS) THROUGHOUT CONSTRUCTION AND SHALL MAINTAIN SAFE PEDESTRIAN ACCESS AT ALL TIMES.
10. REMOVAL OF PAVEMENT, CURBS AND WALKS SHALL INCLUDE ALL REQUIRED SAWCUTTING. CURB REMOVAL IS INCIDENTAL TO PAVEMENT REMOVAL.

STORM SEWER	_____	STW	_____	_____
SANITARY SEWER	_____	SAN	_____	_____
WATER MAIN	_____	W	_____	_____
GAS MAIN	_____	G	_____	G
UNDERGROUND ELECTRIC LINES	_____	UGE	_____	UGE
UNDERGROUND TELEPHONE LINES	_____	UGT	_____	UGT
UNDERGROUND CABLE TELEVISION LINES	_____	CTV	_____	CTV
OVERHEAD LINES	_____	OH	_____	_____
PUBLIC LIGHTING LINES	_____	PLD	_____	_____
STEAM LINES	_____	STEAM	_____	_____
FENCE LINE	_____	X	_____	X
PROJECT PHASE LIMIT LINE	_____		_____	_____
CONCRETE CURB AND GUTTER (STANDARD)	_____		_____	_____
CONCRETE CURB AND GUTTER (REVERSED)	_____		_____	_____
THICKENED SLAB CURB/WALK	_____		_____	_____
STORM MANHOLE		⊖		⊖
CATCH BASIN		□ ⊕		■
YARD BASIN				⊗
INLET BASIN				⊠
END SECTION		)		▲
ROOF/DOWN SPOUT		⊙		
OVERFLOW/OUTLET STRUCTURE		⊗		⊙
STORM CLEAN OUT		○-S		○
SANITARY MANHOLE		⊕		●
SANITARY CLEAN OUT		○-S		●
SANITARY RISER		△		
SANITARY PUMP STATION		⊞		

1. REFER TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES.
2. REFER TO ARCHITECTURAL PLANS TO COORDINATE ALL:
 - 2.1. WATER SUPPLY, METERING, SPRINKLER AND FDC CONNECTION, DESIGN AND COORDINATION
 - 2.2. BUILDING SEWER, BUILDING DRAIN DESIGN AND CONNECTIONS TO CLEAN OUTS AND FLOOR CONNECTORS
 - 2.3. GAS, ELECTRIC AND COMMUNICATION SERVICES, AND LIGHTING DETAILS
 - 2.4. BUILDING WALKS AND ENTRY DETAILS, INCLUDING SUPPORTED SLABS
 - 2.5. ALL WORK TO CONSTRUCT THE BUILDING AND ALL ITEMS CONNECTED TO IT
3. ALL TRENCHES WITHIN A ONE ON ONE SLOPE OF PAVEMENT SHALL BE BACKFILLED WITH SAND (MOOT CLASS II MINIMUM) AND MECHANICALLY COMPACTED IN NOT MORE THAN 9" LAYER TO 95% MAXIMUM DRY DENSITY PER MODIFIED PROCTOR COMPACTION TEST ASTM D-1557. COMPACTED SAND SHALL BE 10% OVER THE PAVED SURFACE TO ALLOW FOR SETTLEMENT.
4. THE COST OF ALL TREE, STUMP, FOUNDATION AND/OR STRUCTURE REMOVAL AND DISPOSAL NOT INCLUDED IN THE PROPOSAL SHALL BE CONSIDERED INCIDENTAL AND INCLUDED IN THE PRICE BID FOR WATER MAIN, SANITARY SEWER, STORM SEWER, AND PAVING WORK.
5. A MINIMUM VERTICAL CLEARANCE OF 18 INCHES IS REQUIRED AT UTILITY CROSSINGS (MEASURED FROM THE OUTSIDE OF PIPE TO THE OUTSIDE OF PIPE). BUILDING WALKS AND ENTRY DETAILS SHALL BE EXISTING OR NEW. PROVIDE FREE DRAINAGE AREAS THROUGH ALL PHASES OF CONSTRUCTION.
6. THE REQUIRED BEDDING FOR SEWER PIPE SHALL CONSIST OF A MAXIMUM 3/4 INCH DIAMETER CRUSHED STONE.
7. THE MINIMUM SLOPE FOR A BUILDING LEAD IS 1% LEADS SHALL ONLY BE CONNECTED TO THE MAIN LINE WITH DURNS.
8. ALL STORM SEWER PIPE SHALL BE CONSTRUCTED WITH RUBBER GASKET (PREMIUM) JOINTS.
9. THE CONTRACTOR SHALL COORDINATE THE REMOVAL OF ALL UTILITY LINES AND STRUCTURES, AS OUTLINED ON THE DEMOLITION PLAN, WITH THE INSTALLATION OF UTILITY IMPROVEMENTS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING GRADE MODIFICATIONS INDICATED ON THE FINISHED LANDSCAPE PLAN, AND COORDINATE THE ACTUAL FINISH GRADE OF FIRE HYDRANTS, GATE VALVE CASTINGS, MANHOLES, YARD DRAINS, CLEAN OUTS AND OTHER UTILITY STRUCTURES. INSURE ALL UTILITY AREAS ARE PROTECTED IN PLACE AND REMAIN IN PLACE THROUGHOUT THE PROJECT. REPORT ANY CHANGES DURING CONSTRUCTION FOR PROPER DRAINAGE OF ALL AREAS. ANY SUBSTANTIAL GRADE CHANGES WHICH MAY CAUSE FUNCTIONAL PROBLEMS SHALL BE REPORTED PROMPTLY TO THE ENGINEER WHO SHALL EVALUATE THE CONDITIONS AND PROVIDED CORRECTIONAL RECOMMENDATIONS TO THE OWNER FOR FINAL APPROVAL.
11. THE CONTRACTOR SHALL BE REQUIRED TO COORDINATE THE INSTALLATION OF GAS, ELECTRIC, PHONE, CABLE, SPRINKLERS ETC., IN SUCH A MANNER THAT WILL FACILITATE THEIR PROPER INSTALLATION PRIOR TO PLACING THE PAVING MATERIALS. ENSURE THAT ALL REQUIRED PIPES, CONDUITS, AND CABLES ARE SLEAVED TO THE PAVING SURFACE PRIOR TO PLACING THE PAVING MATERIALS.
12. THE CONTRACTOR SHALL REMOVE UTILITIES, WHICH HAVE BEEN ABANDONED IN PLACE, AS REQUIRED TO COMPLETE INSTALLATION OF NEW UTILITIES. WHENEVER ABANDONED UTILITIES ARE CUT, CONTRACTOR SHALL COMPLETELY CAP BOTH ENDS TO PREVENT THE INFILTRATION OF SOILS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING AND NEW UTILITIES THROUGHOUT THE PROJECT. PERFORM PRESSURE AND BACTERIOLOGICAL TESTING.
14. ROADWAY, DRIVEWAY AND PARKING AREA CROSSINGS SHALL BE TEMPORARILY CONDITIONED IMMEDIATELY AFTER CROSSING BY PLACING 8" OF MOOT 22A GRAVEL OR SLAG AGGREGATE, AND SHALL BE MAINTAINED IN GOOD, DUST FREE CONDITION UNTIL PAVEMENT RESTORATION IS MADE.

1. REFER TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES.
2. THE PAVING CONTRACTOR SHALL BE REQUIRED TO COORDINATE THE INSTALLATION OF GAS, ELECTRIC, PHONE, CABLE, SPRINKLERS, ETC. IN SUCH A MANNER THAT THE CONTRACTOR'S PROPER INSTALLATION PRIOR TO PLACING THE PAVEMENT MATERIALS, ENSURE THAT ALL REQUIRED PIPES, CONDUITS, CABLES AND SLEEVES ARE PROPERLY PLACED AND THAT THE TRENCHES ARE PROPERLY BACKFILLED AND COMPACTED.
3. BUTT JOINTS SHALL BE PLACED AT ALL LOCATIONS WHERE AN EXISTING ASPHALT PAVEMENT SURFACE IS BEING DISTURBED BY REMOVALS AND/OR THE INSTALLATION OF NEW ASPHALT PAVEMENT.
4. ALL PAVEMENT AREAS SHOULD BE CLEARED AND GRUBBED BY REMOVING SURFACE VEGETATION, TOPSOIL, DEBRIS AND OTHER DELETERIOUS MATERIALS.
5. THE PLACEMENT OF THE FINAL ASPHALT LIFT SHALL BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED, OR AS APPROVED BY THE OWNER. A BOND OF 55-H EMulsion SHALL BE APPLIED (AT A RATE OF 0.10 GALLONS/S.Y.D.) BETWEEN THE CURB, SIDEWALK AND WALKING COURSE WHEN 48 HOURS HAVE ELAPSED BEFORE THE PAVEMENT IS PLACED.
6. THE FINAL SUB-GRADE SHALL BE THOROUGHLY PROOF-ROLLED UNDER THE OBSERVATION OF THE SITE'S ENGINEER.
7. PROPOSED AGGREGATE BASE SHALL EXCEED A MINIMUM OF 1 FOOT BEYOND THE PAVEMENT EDGE/BACK OF CURB.
8. ALL TRENCHES WITHIN A ONE (1) INCH DEPTH OF PAVEMENT SHALL BE BACKFILLED WITH SAND (M.D. 5% MINIMUM) AND MECHANICALLY COMPACTED TO A MINIMUM OF 9" LAYER TO 95% MINIMUM DENSITY. PROVECT MODIFIED PROCTER COMPACTION TEST ASTM D-1557.
9. NO FROZEN MATERIAL SHALL BE PERMITTED AS BACKFILL UNDER ANY ROADWAY, DRIVEWAY OR PARKING AREA.
10. PRIOR TO THE START OF ANY FILLING, THE CONTRACTOR SHALL REMOVE ALL TOPSOIL AND ALL OTHER UNACCEPTABLE SOIL FROM THE FILL AREA. TOPSOIL, AND FILL, SHALL BE PROPERLY STOCKPILED.
11. BARRIER FREE SIGNAGE SHALL BE PLACED IN FRONT OF EVERY DESIGNATED BARRIER FREE STALL. THE CONTRACTOR SHALL COORDINATE STANDARD AND VAN ACCESSIBILITY SIGNAGE AS INDICATED ON THE PLANS.
12. ALL BARRIER FREE RAMPS TO BE A.D.A. COMPLIANT.
13. GENERAL GRADING REQUIREMENTS ARE AS FOLLOWS:
 - 13.1. FINISH GRADE AT EXISTING BUILDING SHALL MATCH BRICK LEDGES, DOORWAYS OR BASEMENT WINDOWS
 - 13.2. MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING (+ 2%)
 - 13.3. SIDEWALK CROSS SLOPE .52% UNLESS OTHERWISE NOTED (EXCLUDING RAMPS)
 - 13.4. PAVEMENT SLOPE 1.0% OR MINIMUM, 4.0% OR MAXIMUM UNIFORMLY BETWEEN FINISH GRADE ON PLANS
 - 13.5. LAWN AREAS ± 1% MINIMUM TO 25% (BERMS) MAXIMUM
14. ALL PROPOSED GRADES ARE AT THE GUTTER UNLESS OTHERWISE NOTED. SEE DETAILS FOR FACE OF CURB, TOP OF CURB AND ASPHALT ADJUSTMENTS.
15. REFER TO ARCHITECTURAL PLANS TO COORDINATE ALL:
 - 15.1. WATER SUPPLY, METERING, SPRINKLER AND FDC PIPING, DESIGN AND COORDINATION
 - 15.2. BUILDING SEWER, BUILDING DRAIN DESIGN AND CONNECTIONS TO CLEAN OUTS AND ROOF CONNECTORS
 - 15.3. GAS ELECTRIC AND COMMUNICATION SERVICES AND EXISTING UTILITIES AND COORDINATION.
 - 15.4. ALL BUILDING ACCESS, WALKS AND ENTRY DETAILS, INCLUDING SUPPORTED SLABS
 - 15.5. ALL WORK TO CONSTRUCT THE BUILDING AND ALL ITEMS CONNECTED TO IT
16. PRIOR TO THE PLACEMENT OF ANY BASE ASPHALT OR LEVELING COURSE, THE CURBS SHALL BE PARTIALLY BACKFILLED AND THE SUB-GRADE SHALL BE PROPERLY ROLLING UNDER THE SUPERVISION OF THE SITE ENGINEER.
17. ALL SIDEWALK AND PATHWAYS IN ANY PUBLIC R.O.W. SHALL BE INSPECTED BY THE AGENCY WITH JURISDICTION.



1. INSTALL SILT FENCE AND INLET FILTERS AT ALL EXISTING LOCATIONS AS SHOWN AND AS REQUIRED TO ACHIEVE ON-SITE CONTAINMENT.
2. INSTALL STORM SEWER AND ALL ASSOCIATED STORM WATER IMPROVEMENTS AS SHOWN ON PLANS. IMMEDIATELY INSTALL INLET FILTERS AT ALL CATCH BASINS.
3. ROUGH GRADE THE PROJECT "WORK AREA" AS NEEDED.
4. INSTALL WATER MAIN AS SHOWN ON PLANS.
5. INSTALL OTHER UTILITIES (GAS, ELECTRIC, PHONE, CABLE, ETC.) AND/OR ALL NEEDED CONDUITS AND SLEEVES.
6. INSTALL PAVEMENT BACKFILL AND SEED & MULCH ALL DISTURBED AREAS.
7. CLEAR ALL ACCUMULATED SILT AND REMOVE ALL EROSION CONTROL DEVICES.
8. INSTALL LANDSCAPING MATERIALS & RE-SEED, FERTILIZE AND MULCH ALL DISTURBED AREAS.

2. REFER TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES.
3. ALL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE WAYNE COUNTY DEPARTMENT OF PUBLIC WORKS.
4. ANY EROSION AND SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED WITHIN THE WORK AREA AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS. (WATERWAYS INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES, PONDS AND WETLANDS)
5. THE CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AS DIRECTED ON THESE PLANS AND WHENEVER OTHERWISE REQUIRED BY WORK. THE CONTRACTOR SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES, AND OTHER CHANGES HAVE BEEN ACCOMPLISHED.
6. SOIL EROSION CONTROL PRACTICES WILL BE ESTABLISHED IN EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENTATION CONTROL MEASURES WILL BE APPLIED BY A PERMANENT DEFENSE TO PREVENT ANY TRANSPORTING OF DIRT OUT OF THE WORK AREA.
7. THE CONTRACTOR SHALL PRESERVE NATURAL VEGETATION AS MUCH AS POSSIBLE.
8. PROTECT ALL EXISTING TREES, INCLUDING THEIR BRANCHES AND ROOTS, FROM DAMAGE DUE TO THIS WORK UNLESS SPECIFICALLY REQUIRED FOR REMOVAL.
9. EROSION STABILIZATION OF ALL DISTURBED AREAS SHALL BE ESTABLISHED WITHIN 15 DAYS OF COMPLETION OF FINAL GRADING.
10. THE CONTRACTOR SHALL SWEEP THE EXISTING STREETS SURROUNDING THE PROJECT SITE ONCE A WEEK, OR AS DIRECTED BY THE ENGINEER OR INSPECTOR. STREET SCRAPING SHALL BE PERFORMED IN CONJUNCTION WITH THIS SWEEPING ON AN AS NEEDED BASIS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE REQUIRED TO CONTAIN SEDIMENT.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING COMPLIANCE WITH ALL APPLICABLE NPDES REGULATIONS, INCLUDING: INSPECTION, RESTORATION, AND RECORD KEEPING REQUIREMENTS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ON-GOING MAINTENANCE OF ALL SOIL EROSION CONTROLS AS INDICATED BY THESE PLANS.
14. CONSTRUCTION ACTIVITIES (INCLUDING INSTALLATION OF PIPE AND ASSOCIATED VALVES, STRUCTURES, BACK FILLING, SURFACE RESTORATION, AND REMOVAL OF EXCESS EXCAVATED MATERIAL) SHALL BE ACCOMPLISHED IN ONE CONTINUOUS OPERATION.
15. PAVEMENT AND/OR VEGETATION SHALL NOT BE STRIPPED FROM AN AREA UNLESS CONSTRUCTION ACTIVITIES ARE TO COMMENCE IN THAT AREA.
16. IF FOR ANY REASON PERMANENT STABILIZATION CAN NOT BE PROVIDED WITHIN 15 DAYS OF THE COMPLETION OF PIPE LAYING OPERATIONS, TEMPORARY STABILIZATION SHALL BE PROVIDED AT ALL DISTURBED AREAS. TEMPORARY STABILIZATION SHALL FURTHERMORE BE PROVIDED DURING THE NON-GROWING SEASON (OCTOBER 1 THROUGH APRIL 20) FOR ALL AREAS TO BE SEED.
17. TEMPORARY STABILIZATION SHALL BE PROVIDED BY THE CONTRACTOR USING EITHER: A. MULCH AT THE RATE OF 1.5 TO 2 TONS PER ACRE, OR MULCH BLANKETS, WHICH SHALL BE ANCHORED IN PLACE TO PREVENT DISPLACEMENT FROM WIND AND RAIN. TEMPORARY STABILIZATION SHALL BE REPAIRED AS OFTEN AS NECESSARY, AS DETERMINED BY THE AGENCY WITH JURISDICTION.
18. ALL DOWATERING SHALL BE ACCOMPLISHED IN A MANNER THAT WILL NOT CONTRIBUTE TO DEPOSITION OF SEDIMENT IN DRAIN DITCHES OR OPEN AREAS.
19. THIS PROJECT SHALL BE CONSTRUCTED IN COMPLIANCE WITH PART 91 OF ACT 451 OF 1994, AS AMENDED.
20. SEDIMENT CONTROL FENCING SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND SEVERAL TIMES DURING PROLONGED STORM EVENTS. IF THE FENCING IS DAMAGED OR HAS REAGED OR BLOWN DOWN, THE FENCING SHALL BE IMMEDIATELY REPAIRED OR THE FABRIC SHALL BE REMOVED AND DISPOSED OF IN A STABLE AREA OF THE SITE. IF WATER IS SEEPING UNDER THE FENCE, OR THE FABRIC IS DECOMPOSED OR OTHERWISE INEFFECTIVE, THE FENCE SHALL BE REMOVED AND PROPERLY REINSTALLED AS INDICATED ON THESE PLANS.
21. MUD MAT ENTRANCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH STORM RAINFALL. THE SURROUNDING ROADS SHALL ALSO BE INSPECTED IMMEDIATELY AFTER EACH STORM RAINFALL THAT MUD IS BEING TRACKED ONTO THE ROAD. IF THE INSTALLATION OF ADDITIONAL LAYERS OF STONE WHEN THE ORIGINAL STONE BECOMES COVERED WITH MUD. ALL SEDIMENT DROPPED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAYS SHALL BE REMOVED IMMEDIATELY BY SWEEPING AND SCRAPING (AS MAY BE REQUIRED BY THE ENGINEER).
22. SEDIMENT INLET FILTERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND SEVERAL TIMES DURING PROLONGED STORM EVENTS. THE FILTERS SHALL BE PERIODICALLY THROUGHOUT CONSTRUCTION TO AVOID CLOGGING. FILTERS THAT CANNOT BE MAINTAINED BY CLEANING SHALL BE COMPLETELY REPLACED.

REMOVE UTILITY STRUCTURE	
REMOVE UTILITY PIPE	• X • X • X • X • X • X • X • X •
ABANDON UTILITY PIPE	• / • / • / • / • / • / • / • / • /
CUT AND BULKHEAD UTILITY PIPE	
REMOVE BUILDING	
REMOVE CONCRETE PAVEMENT	
REMOVE ASPHALT PAVEMENT	
REMOVE SIDEWALK	

COMPACTED SAND BACKFILL (CSB)	
AGGREGATE MATERIAL	
ASPHALT PAVEMENT	
CONCRETE PAVEMENT	

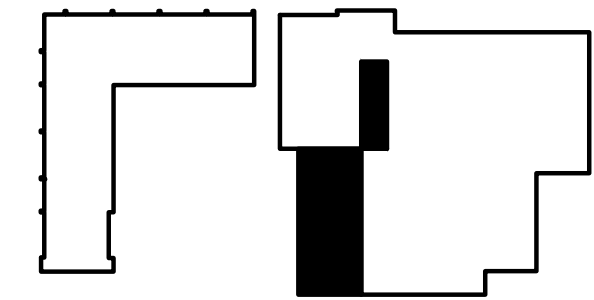
Legend for Figure 1:

- Drainage Area: A black arrow pointing right with the text "TO DC" above it.
- Sediment Inlet Filter: Two circular symbols with a stippled pattern.
- Mud Mat Entrance: A trapezoidal symbol with a stippled pattern.
- Check Dam: A rectangular symbol with a stippled pattern.
- Sediment Control Fence: A horizontal line with two small vertical tick marks.
- Drainage Area Line: A thick, dashed horizontal line.

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Key Plan



Civil: GIFFELS WEBSTER
 Landscape:
 Architecture: NORR
 Structural: NORR
 Mechanical: NORR
 Electrical: NORR

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Detroit, MI 48226 U.S.A
norr.com

client
WAYNE STATE
UNIVERSITY

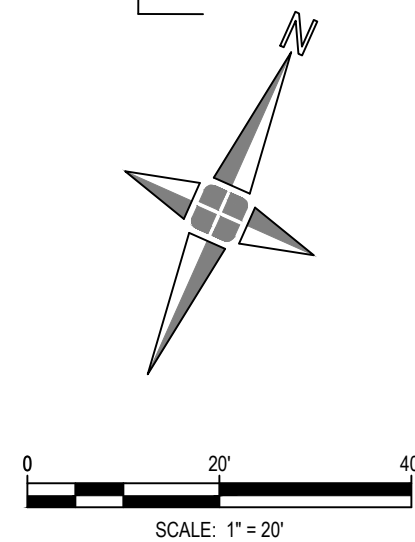
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DETROIT, MI 48202

NOTES AND LEGENDS

Project No. JCDT18-0444

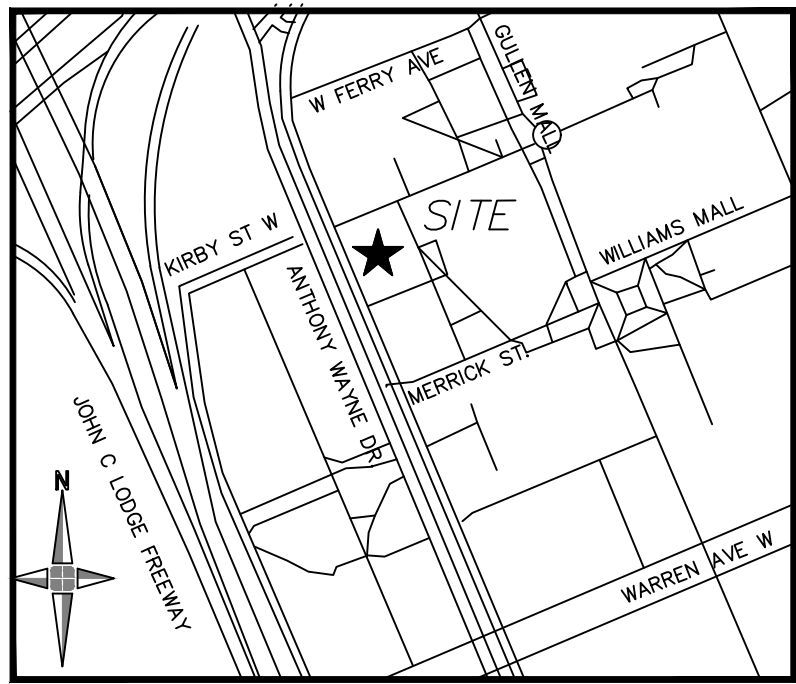
Drawing No.

ARCH D US Title Block - R15 Rev 0 (AUG 15/17) Copyright © 2017



SCHEDULE OF STRUCTURES

STRUCTURE	TYPE	SIZE OF PIPE	RIM	DROP	INVERT	DIRECTION	COMMENTS
195	ROUND CATCH BASIN	6"	149.05	-5.60	143.45	WEST	6" PVC PIPE CONNECTS TO NO. 212
196	COMBINATION MANHOLE	12"	149.20	-7.45	141.75	WEST-SOUTHWEST	
		8"	149.20	-5.50	143.70	NORTH	
		12"	149.20	-4.95	144.25	NORTH-NORTHEAST	
		6"	149.20	-4.85	144.35	EAST	6" PVC PIPE CONNECTS TO NO. 195
198	CATCH BASIN		148.39	-12.10	136.29		12" CLAY WELL, NO PIPES VISIBLE, MEASURED TO BOTTOM OF STRUCTURE
199	ELECTRIC MANHOLE		148.79	-7.00	141.79	CABLES EAST-NORTHEAST & WEST-SOUTHWEST	MEASURED TO BOTTOM OF STRUCTURE
200	COMBINATION MANHOLE		149.08	-14.10	134.98	EAST-NORTHEAST & WEST-SOUTHWEST	MEASURED TO CENTER OF CHANNEL, FLOWS TO THE WEST-SOUTHWEST
201	COMBINATION MANHOLE		149.36	-14.15	135.21	EAST-NORTHEAST & WEST-NORTHWEST	MEASURED TO CENTER OF CHANNEL, FLOWS TO THE WEST-SOUTHWEST
		12"	149.36	-7.55	141.81	EAST-NORTHEAST	
		12"	149.36	-13.60	135.76	NORTHWEST TO BUILDING	
		12"	149.36	-6.82	142.54	NORTHWEST TO BUILDING	
204	COMBINATION MANHOLE		149.48	-13.80	135.68	NORTHEAST - SOUTH - NORTHWEST	MEASURED TO CENTER OF CHANNEL, NO VISIBLE FLOW
205	ROUND CATCH BASIN	12"	149.53	-8.05	141.48	SOUTHWEST	
		12"	149.53	-8.00	141.53	SOUTHEAST	
206	TELEPHONE MANHOLE		149.68	-7.90	141.78	CABLES EAST-NORTHEAST & WEST-SOUTHWEST	
207	COMBINATION MANHOLE		149.83	-16.25	133.58	EAST-NORTHEAST & WEST-SOUTHWEST	MEASURED TO CENTER OF CHANNEL FLOWS WEST-SOUTHWEST
		15"	149.83	-9.35	140.48	NORTH	
208	ROUND CATCH BASIN	12"	149.28	-7.75	141.53	NORTHWEST	
		12"	149.28	-8.00	141.28	EAST-NORTHEAST	
		15"	149.28	-8.00	141.28	SOUTH	APPROXIMATE INVERT OF TRAP
			149.28	-10.20	139.08	SOUTH	MEASURED TO BOTTOM OF STRUCTURE
211	BEEHIVE CATCH BASIN	8"	149.94	-6.92	143.02	EAST-NORTHEAST	8" PVC EAST-NORTHEAST TO NO. 212
212	CATCH BASIN	15"	149.98	-7.90	142.08	SOUTH-SOUTHEAST	
		12"	149.98	-7.60	142.38	WEST-SOUTHWEST	12" PVC CONNECTS TO NO. 211
		4"	149.98	-6.60	143.38	EAST	
		6"	149.98	-3.30	146.68	NORTH	
294	STORM MANHOLE	8"	149.30	-8.60	140.70	SOUTH-SOUTHEAST	
		12"	149.30	-9.30	140.00	EAST-NORTHEAST	
295	GATE VALVE		149.42	-5.30	144.12	EAST-NORTHEAST & WEST-SOUTHWEST	MEASURED TO TOP OF PIPE
296	COMBINATION MANHOLE	24"	149.45	-15.45	134.00	EAST-NORTHEAST	MEASURED TO TOP OF PIPE
		8"	149.45	-18.00	131.45	WEST-SOUTHWEST	
			149.45	-20.15	129.30		MEASURED TO +/- BOTTOM, NO PIPE VISIBLE



LOCATION MAP
(NOT TO SCALE)

DATE	ISSUED FOR	REV
2019-04-01	OWNER REVIEW	1
2019-05-24	OWNER REVIEW	2
2019-06-03	BID/PERMIT	3

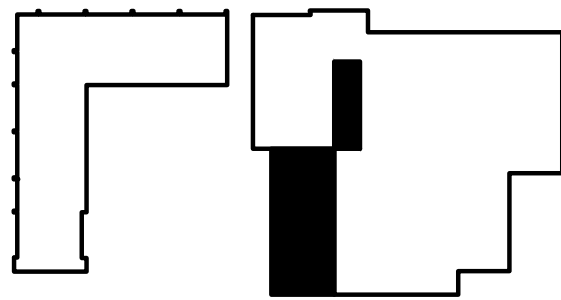
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil: GIFFELS WEBSTER
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)



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Project Manager AMY NOLFF	BIM Lead XXX
Design Lead XXX	Drawn XXX
Project Leader XXX	Checked XXX

Client
WAYNE STATE
UNIVERSITY

Project
**WSU DINING HALL
RENOVATIONS**

655 W. KIRBY ST.
DETROIT, MI 48202

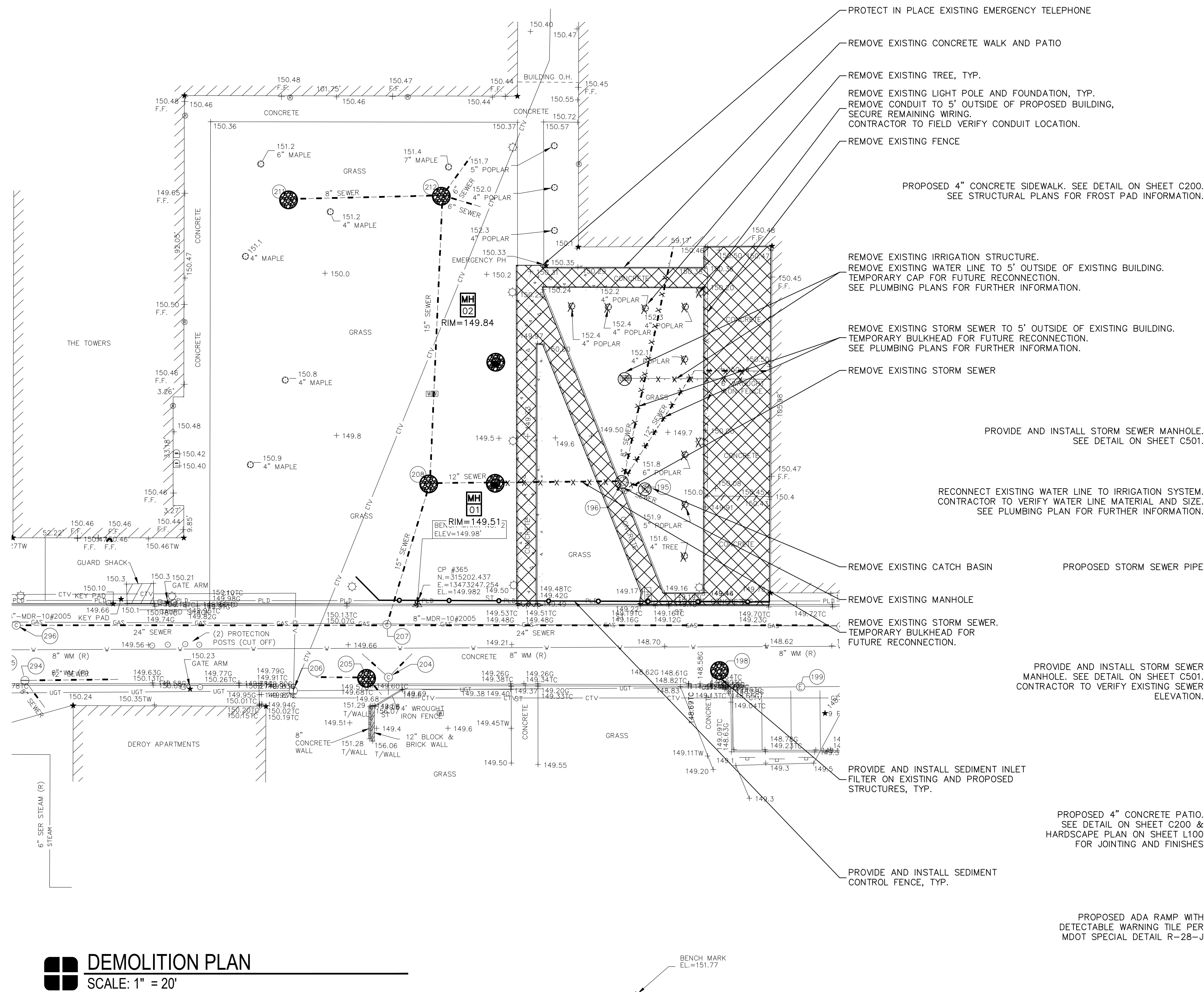
Drawing Title
EXISTING CONDITIONS

Scale: 1" = 20'

Project No. JCDT18-0444

Drawing No.

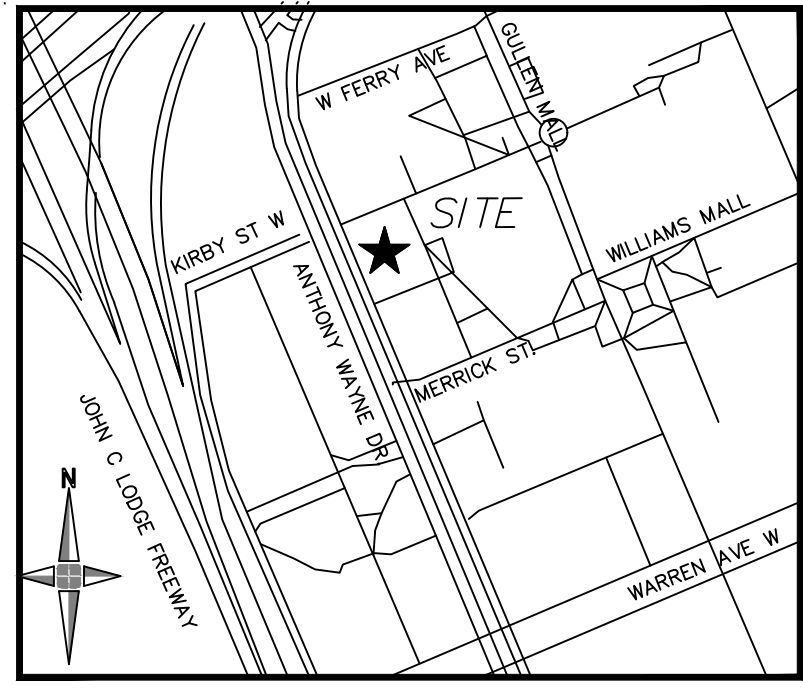
C110



DEMOLITION PLAN
SCALE: 1" = 20'

SITE PLAN
SCALE: 1" = 20'

NOTE:
ITALICIZED TEXT IS AN INTERPOLATION OF EXISTING GRADE. CONTRACTOR TO VERIFY EXISTING GRADE AND MATCH. WHERE EXISTING GRADE DIFFERS FROM INTERPOLATION IN SUCH A MANNER AS TO EXCEED MAXIMUM ALLOWABLE SLOPES, CONTRACTOR TO NOTIFY ENGINEER.



LOCATION MAP
(NOT TO SCALE)

DATE	ISSUED FOR	REV
2019-04-01	OWNER REVIEW	1
2019-05-24	OWNER REVIEW	2
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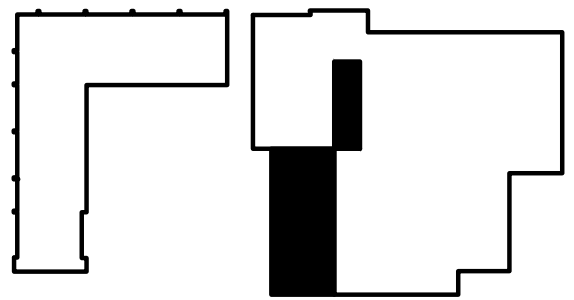
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PHASE OF WORK

Key Plan



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Mechanical: NORR
Electrical: NORR

Seal(s)



NORR

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Project Manager	BIM Lead
AMY NOLFF	XXX
Design Lead	Drawn
XXX	XXX
Project Leader	Checked
XXX	XXX

Client
WAYNE STATE UNIVERSITY

Project
WSU DINING HALL RENOVATIONS
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title

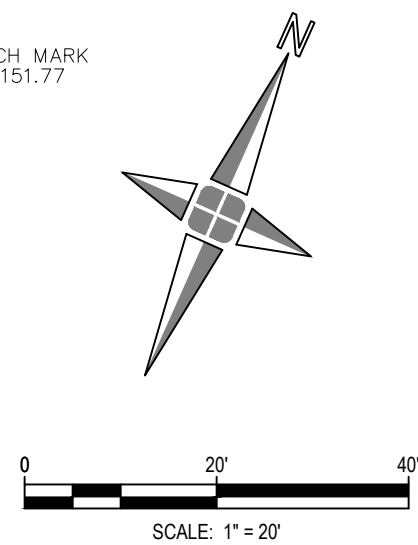
DEMOLITION AND SITE PLAN

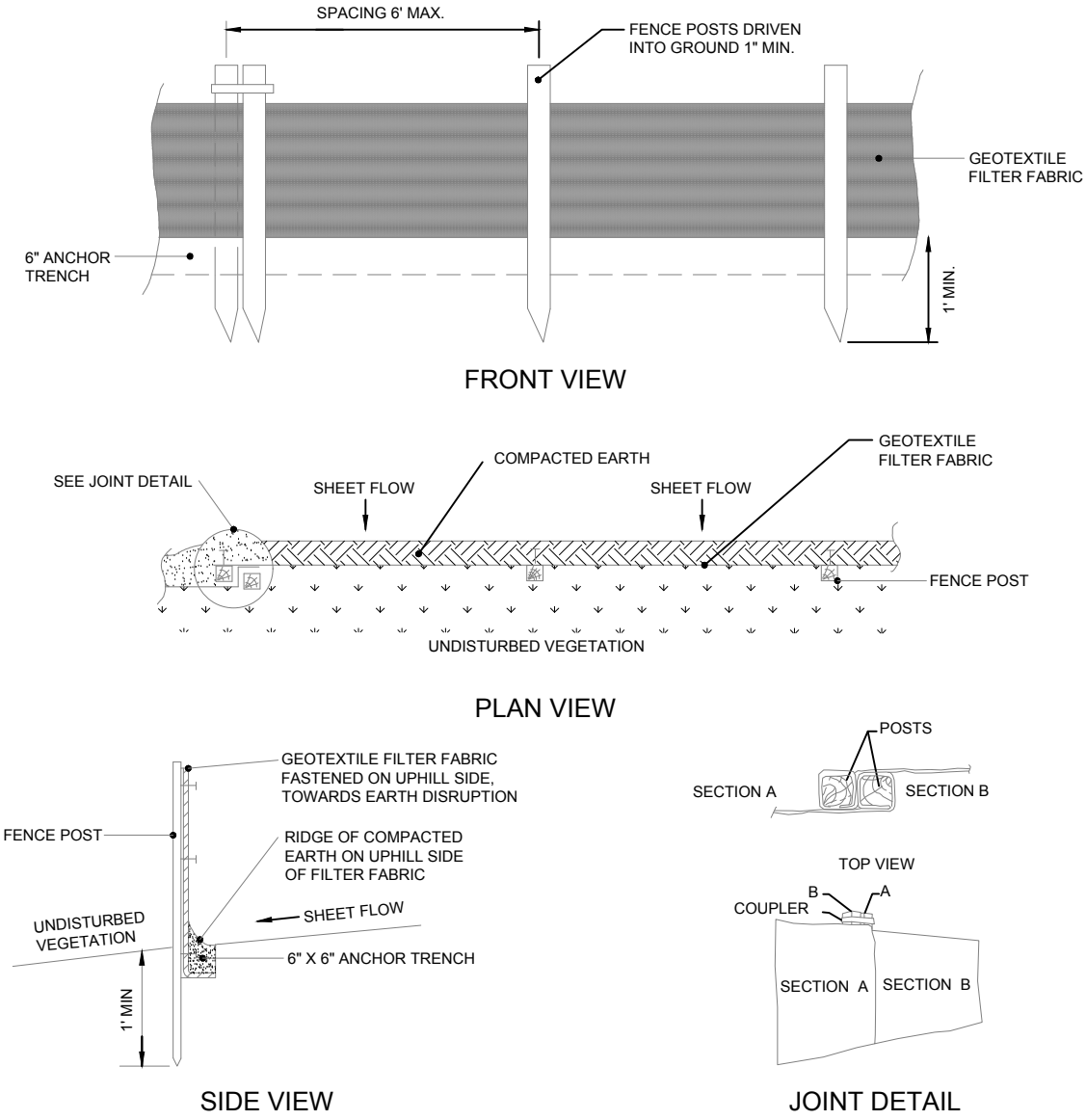
Scale: 1" = 20'

Project No. JC218-0444

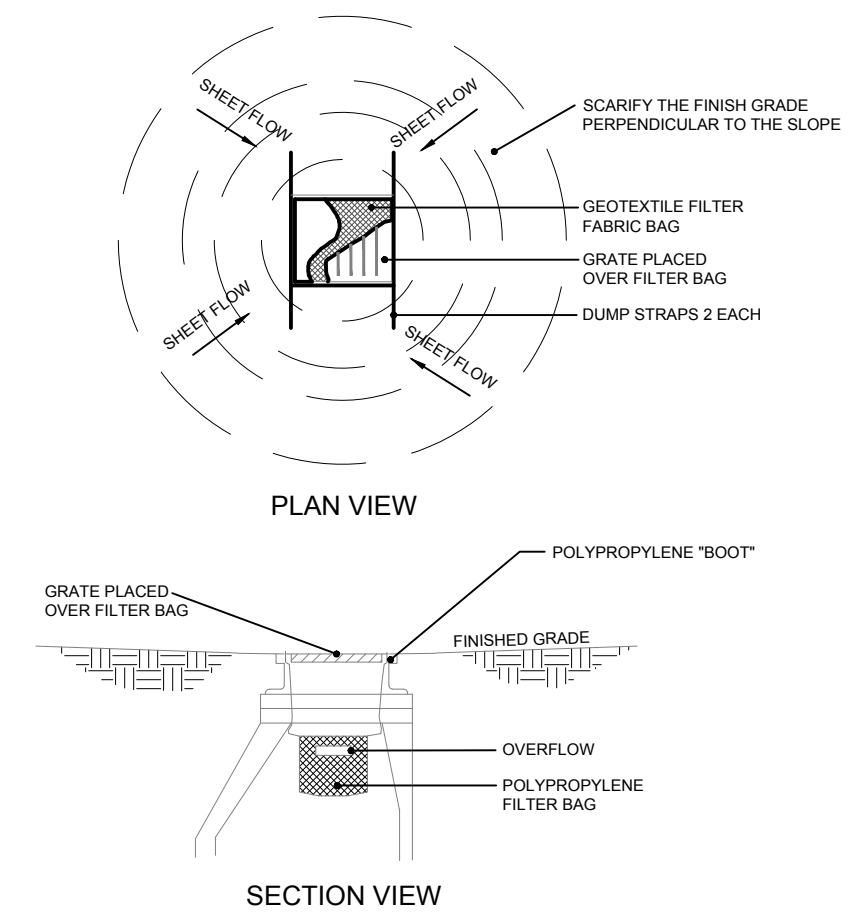
Drawing No.

C140



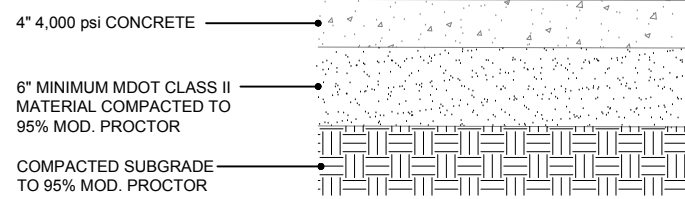


SEDIMENT CONTROL FENCE
N.T.S.



- NOTE:
1. TEMPORARY SEDIMENT INLET FILTER TO BE INSTALLED ON ALL PAVED CATCH BASINS OR STORM INLETS, OR AS SPECIFIED ON THE SOIL EROSION CONTROL PLAN.
 2. INLET FILTER TO BE SIMILAR TO "STEAMGUARD" AS MANUFACTURED BY STORMWATER SERVICES CORPORATION (208-767-5441) OR "SLT TACK" AS MANUFACTURED BY ATLANTIC CONSTRUCTION FABRICS, INC. (800-446-3636).
 3. CLEAN FILTER AS NEEDED, OR AS REQUIRED BY THE SOIL EROSION CONTROL PLAN.

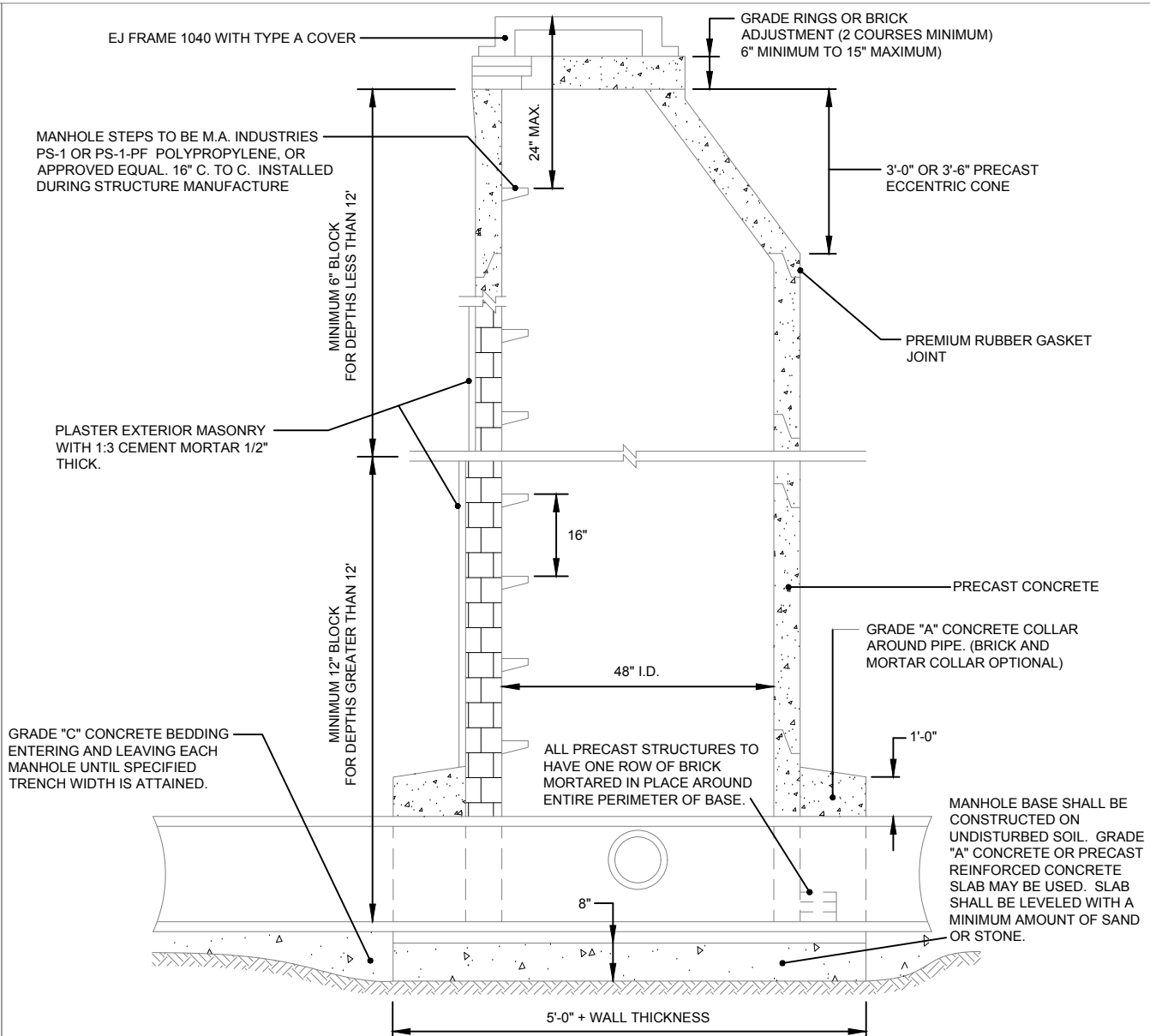
SEDIMENT INLET FILTER
N.T.S.



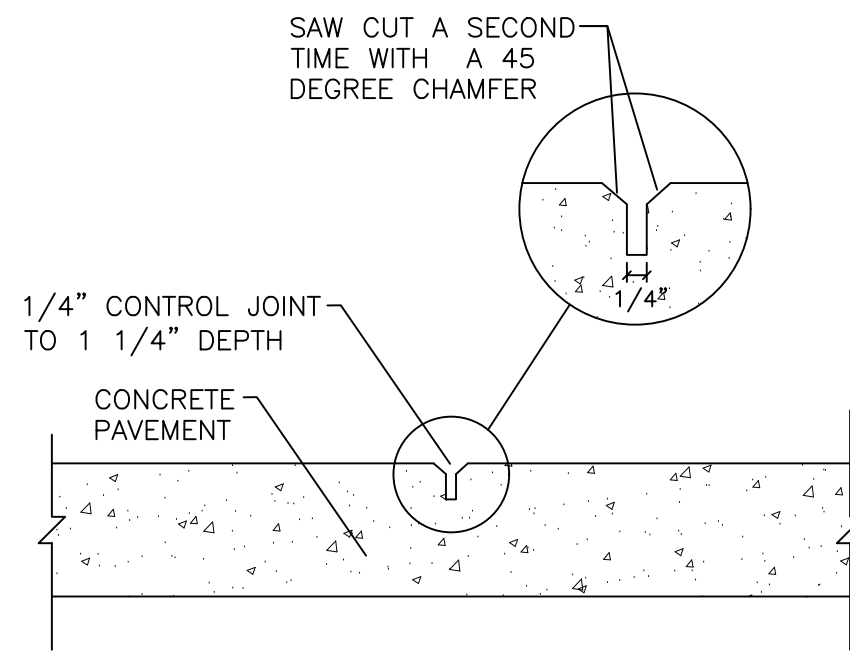
4" CONCRETE SIDEWALK

- NOTE:
1. IF ANY OF THE EXISTING BASE CANNOT BE UTILIZED, IT SHALL BE REMOVED AND REPLACED WITH MDOT CLASS II MATERIAL.
 2. BROOM FINISH SURFACE.
 3. IF NOT INDICATED ON THE PLANS THE CONTRACTOR SHALL SUBMIT A JOINTING PLAN PRIOR TO PLACEMENT OF CONCRETE PAVEMENT.
 4. JOINTS SHALL BE SAWCUT AS SOON AS PAVEMENT CAN SUPPORT MACHINE.
 5. AN EXPANSION JOINT SHALL BE PLACED BETWEEN NEW WALLS AND EXISTING PAVEMENT AND/OR BUILDINGS.

CONCRETE SIDEWALK
N.T.S.



STORM SEWER MANHOLE (PRIVATE)
N.T.S.



TOOLED CONTRACTION JOINT
N.T.S.

DATE	ISSUED FOR	REV
2019-04-01	OWNER REVIEW	1
2019-05-24	OWNER REVIEW	2
2019-06-03	BID/PERMIT	3

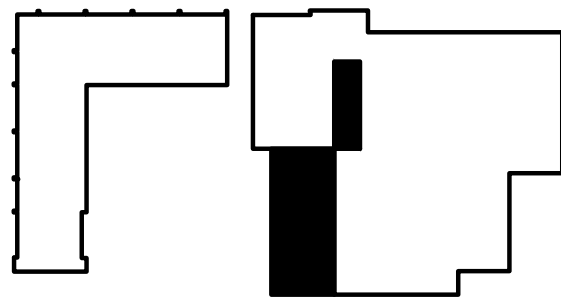
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil: GIFFELS WEBSTER
Landscape: GIFFELS WEBSTER
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)



NORR

An Ingenium International Company

150 W. Jefferson Avenue, Suite 1300
Detroit, MI 48226 U.S.A.
norr.com

Project Manager AMY NOLFF	BIM Lead XXX
Design Lead XXX	Drawn XXX
Project Leader XXX	Checked XXX

Client
WAYNE STATE UNIVERSITY

Project
WSU DINING HALL RENOVATIONS
855 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title

DETAILS

Scale: 1" = 20'

Project No. JCDT18-0444

Drawing No. C200

GENERAL NOTES:

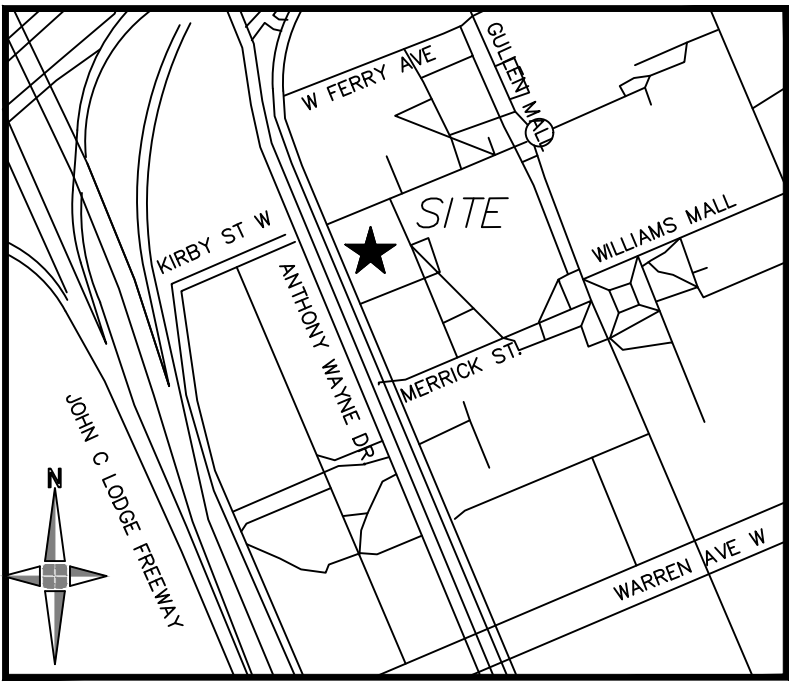
1. All Construction shall conform to the current standards and specifications of local ordinances.
2. All areas not built, landscaped, or paved upon shall receive seasoned double shredded hardwood bark mulch.
3. All plant bed areas shall be irrigated with an underground automatic irrigation system. Irrigation heads shall be placed such that water will not hit any hard surfaces or structures.
4. During installation and construction, the Contractor must provide a temporary watering method for all plant material until the automated irrigation system is in operation.
5. Two (2) year guarantee period begins at Final Acceptance of landscape material by the City's representative, a landscape architect, and prior to the authorization of the occupancy permit.
6. A minimum of one cultivation in each month of June, July, and August shall be performed within the 2-year warranty period.
7. The development of this site will not result in any increase in dust, odor, smoke, fumes, noise, lights, or other objectionable features.

LANDSCAPE CONTRACTOR'S
"TWO-YEAR IRRIGATION REQUIREMENT PERIOD"

It shall be the responsibility of the landscape contractor to program and periodically adjust the irrigation system (provided by others) as required to ensure delivery of proper and adequate water supply to all plant material, and seeded lawn areas serviced by the same irrigation system, to ensure the establishment of healthy plant material and lawn for their first year of growth. Following the landscape contractor's two-year irrigation requirement period, the contractor shall provide the owner with suggested irrigation maintenance schedule for their use.

PLANT NOTES:

1. Plant materials shall be sound, healthy, vigorous, free from plant diseases and insects or their eggs, and shall have normal, healthy root systems. Caliper measurements shall be taken 6" above the ground level. All other measurements shall be in accordance with the latest edition of "American Standard for Nursery Stock" (ANSI Z-60.1 + A3002004).
2. Planting bed soil shall be an equal mix of screened organic topsoil, sphagnum peat moss, and clean sand. To deter weed growth during establishment, apply a pre-emergent ('Preen' or equal) after planting, 2-3 times per growing season, at the rate recommended by product manufacturer.
3. Planting pockets shall be no deeper than twice the height of the root ball.
4. All tree wrap shall be removed upon planting.
5. Mulch shall be double shredded seasoned hardwood bark mulch. Application of mulch shall be per planting details. Contractor to submit sample for approval by landscape architect/civil engineer prior to placement.
6. Plants shall be guaranteed for two complete growing seasons (24 months). Dead material shall be replaced as needed prior to expiration of the guarantee period.
7. Remove the top 1/3 of burlap, twine and/or metal cage on root ball. If wrapped in plastic covering or nylon cording, all of these types of material should be removed.
8. Plant material shall be used in compliance with provisions of the local ordinance and shall be nursery grown, free of pests and diseases, hardy in this county, in conformance with the Standards of the American Association of Nurserymen, and shall pass inspections required under state regulations. In addition, plant materials shall be northern grown, No.1 Grade.
9. Plant material shall be planted within the annual planting window of March 15 through November 15.
10. All plant ID tags are to remain until all plants are accepted on site.
11. Grass seed shall be certified turf grass seed complying with A.S.P.A. Specifications, and free of weed seeds and undesirable native grasses. Seeded areas shall not be permitted to dry out. All lawn areas shall be fertilized and watered as required during the first growing season to maintain a dense and vigorous growing lawn.
12. Any plant substitutions must be submitted in writing and approved by the landscape architect prior to installation.



LOCATION MAP
(NOT TO SCALE)

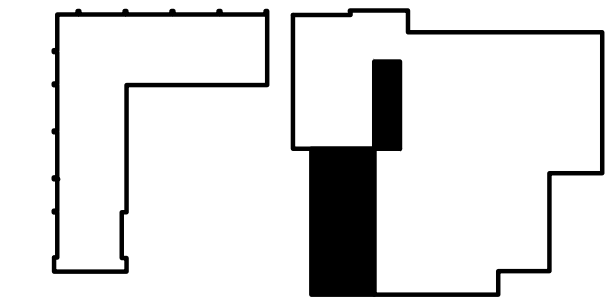
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Project Component
PHASE OF WORK

Key Plan



Consultants
Civil: GIFFELS WEBSTER
Landscape: NORR
Architecture: NORR
Structural: NORR
Mechanical: NORR
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Project Manager AMY NOLFF	BIM Lead XXX
Design Lead XXX	Drawn XXX
Project Leader XXX	Checked XXX

Client
WAYNE STATE UNIVERSITY
Project
WSU DINING HALL RENOVATIONS
855 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
**LANDSCAPE AND
HARDSCAPE PLAN**

Scale: 1" = 10'

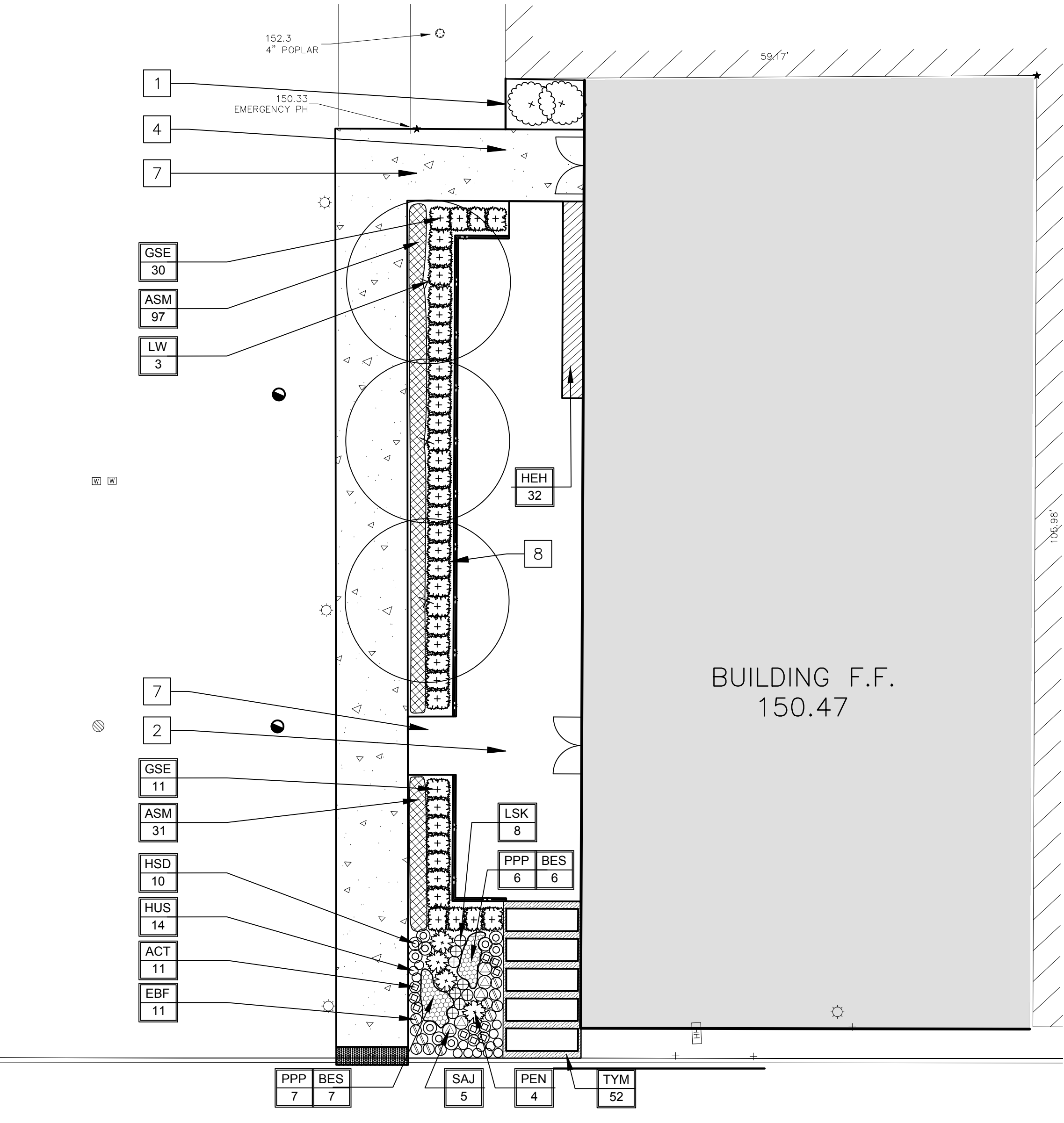
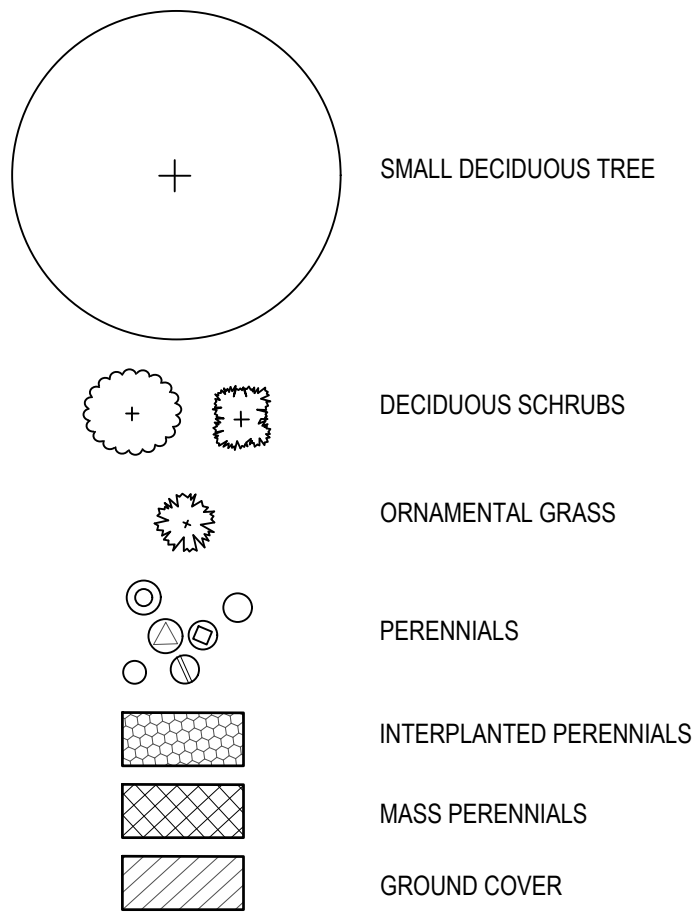
Project No. JCDT18-0444

Drawing No. **L100**

KEY NOTES

- 1 METAL EDGING, TYP.
- 2 CONCRETE PATIO. GRIT-BLAST FINISH. SEE CIVIL DRAWINGS.
- 3 CONCRETE PATIO SLABS, 2.5 FT X 8 FT., TYP. GRIT BLAST FINISH. REFER TO CONCRETE DETAILS FOR TYPICAL PROFILE. HOLD 4 INCHES FROM FACADE AND 10 INCHES BETWEEN SLABS. VOIDS SHOULD BE EQUAL.
- 4 CONCRETE PAVEMENT. LIGHT BROOM FINISH PARALLEL TO BUILDING FACADE.
- 5 CONTROL JOINTS, TYP. SEE DETAIL FOR TOOLING DIRECTION.
- 6 FROST-FREE PAD. HOLD PAD DOWN 4 INCHES BELOW FINISH GRADE TO RECEIVE PATIO SLAB ABOVE. SEE STRUCTURAL AND ARCHITECTURAL DETAILS.
- 7 CONTRACTOR TO PROVIDE PVC SLEEVE TO ACCOMMODATE IRRIGATION LINKAGE BETWEEN BEDS, TYP. COORDINATE AND INSTALL PRIOR TO INSTALLATION OF CONCRETE PAVEMENT.
- 8 WOOD FENCE. ALIGN POSTS WITH WINDOW MULLIONS WHEN APPLICABLE. SEE DETAILS SHEET L200.
- 9 CONTROL JOINTS TO ALIGN WITH MULLION SPACING

PLANT KEY

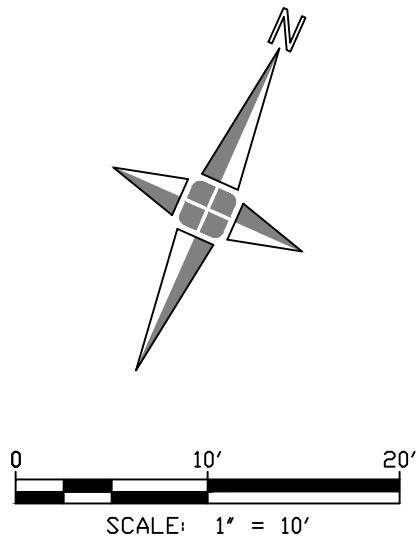
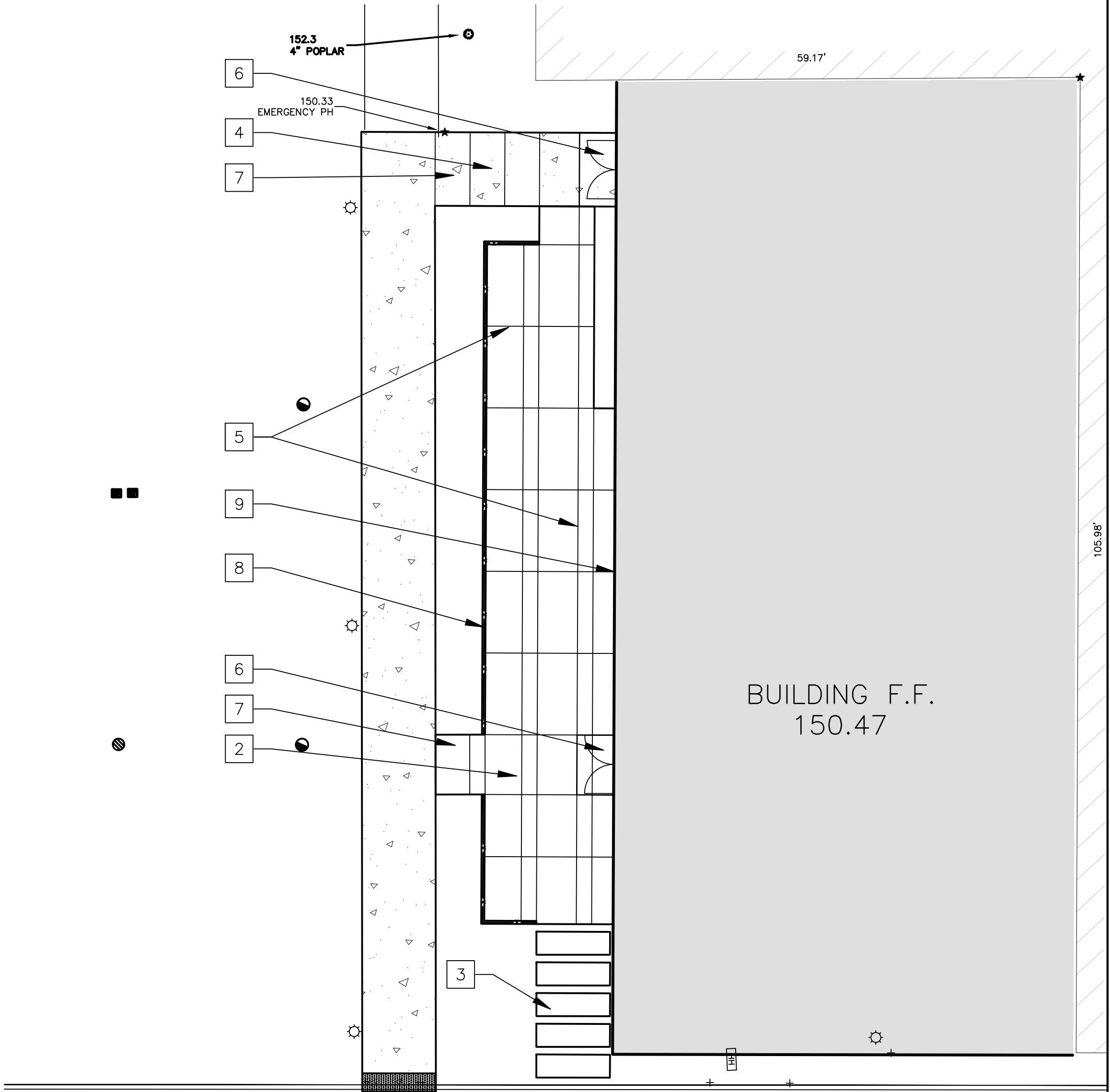


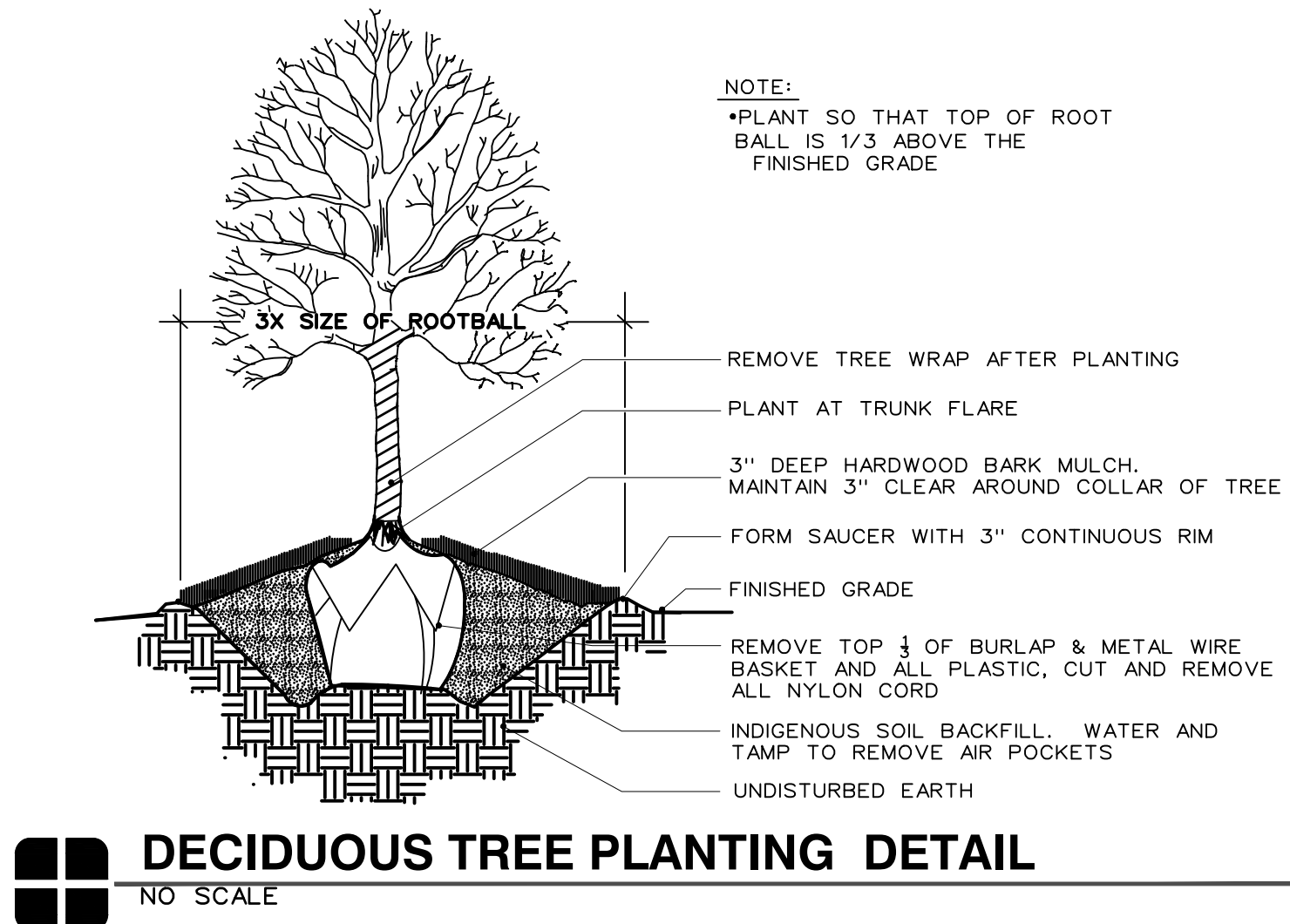
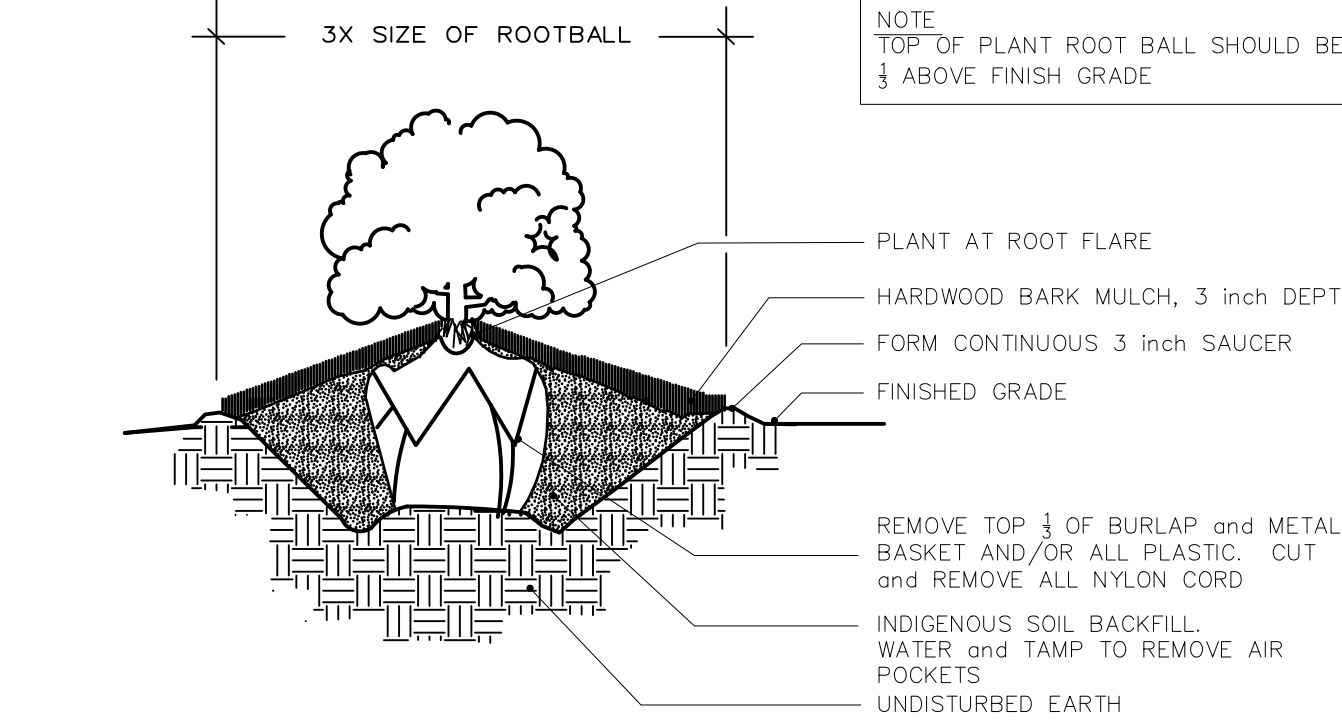
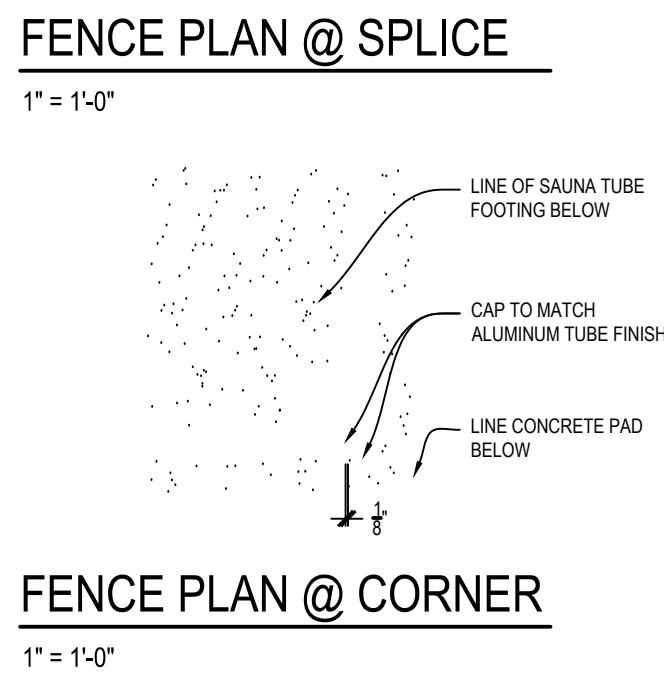
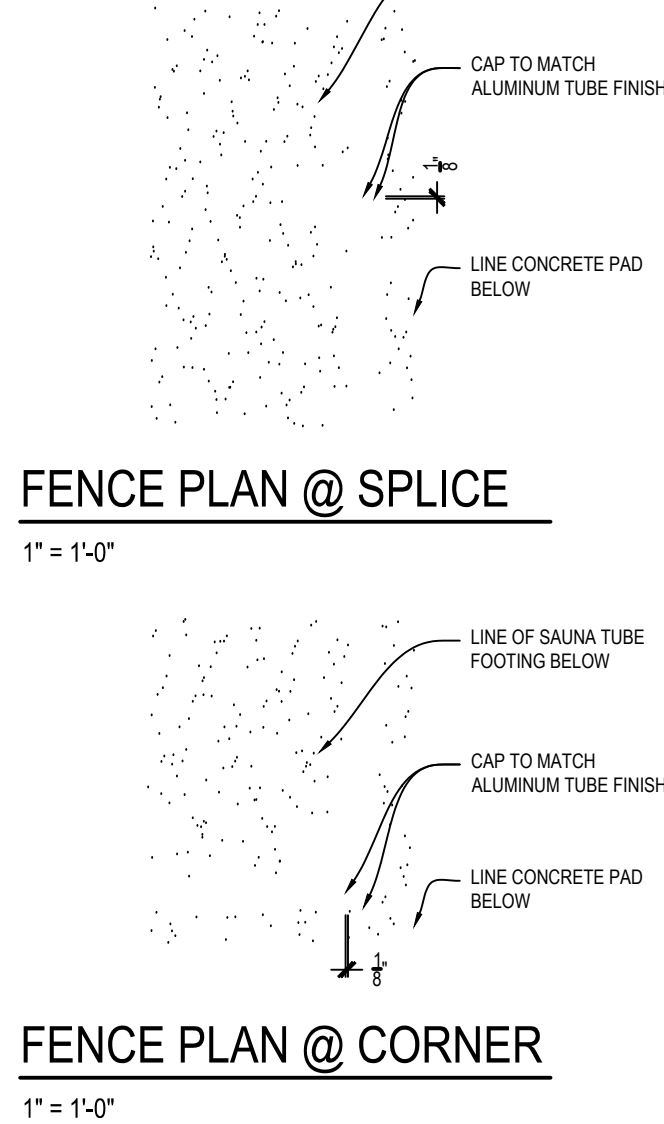
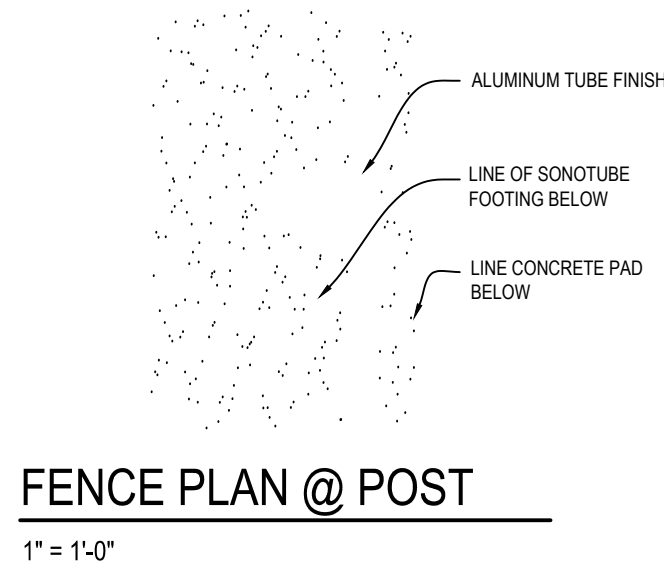
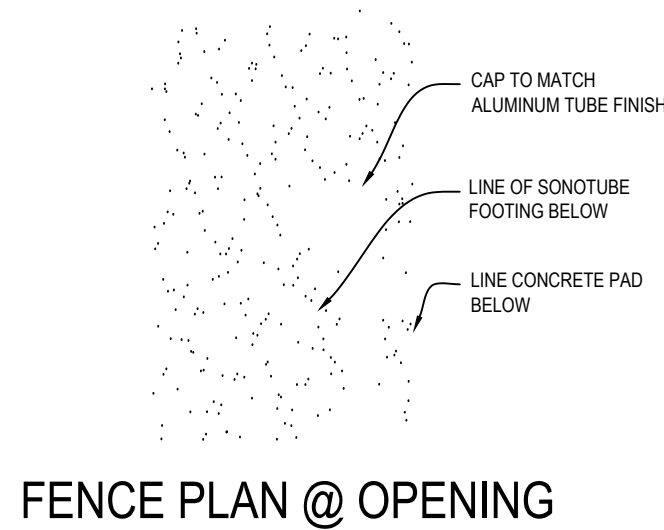
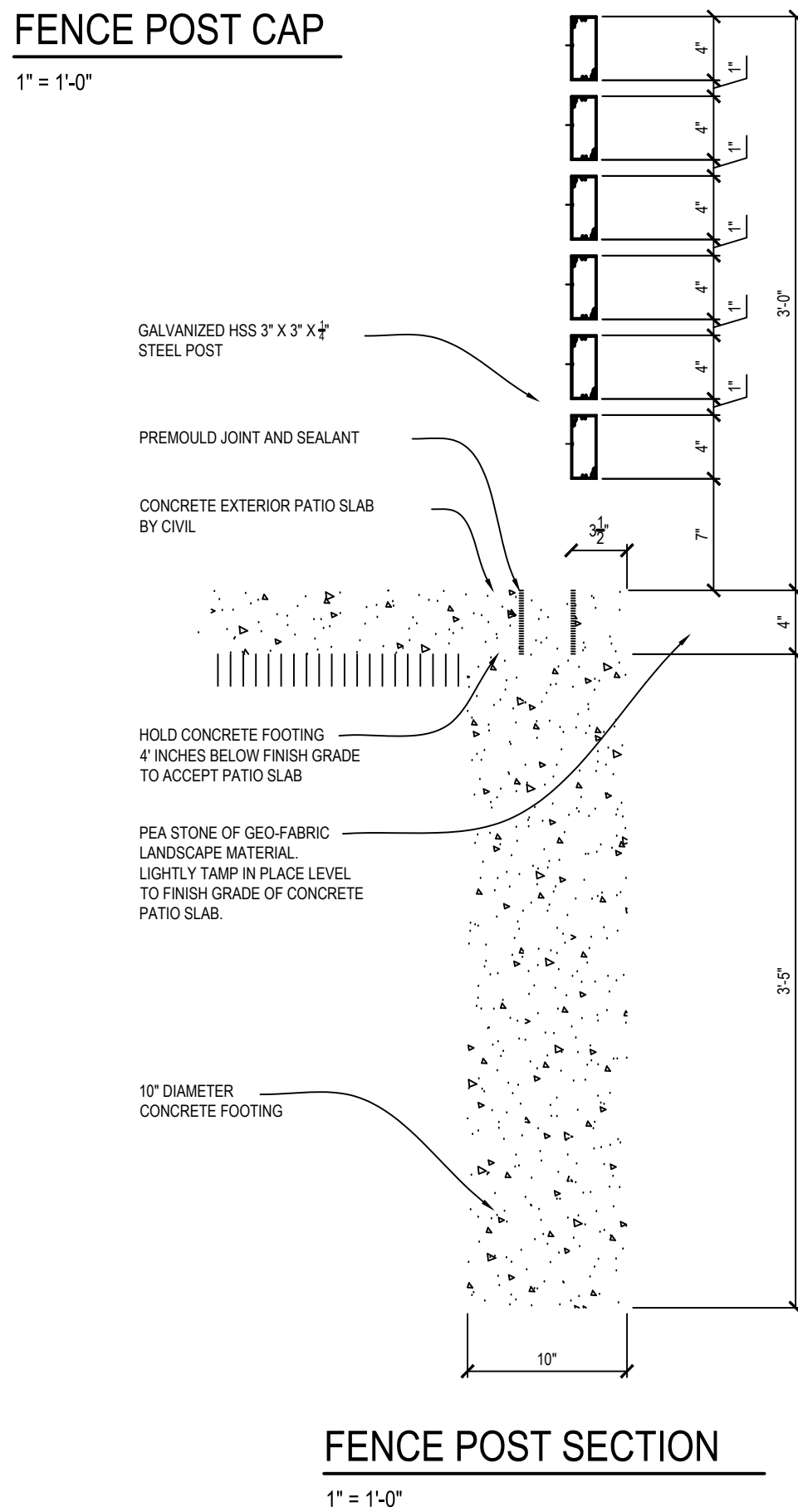
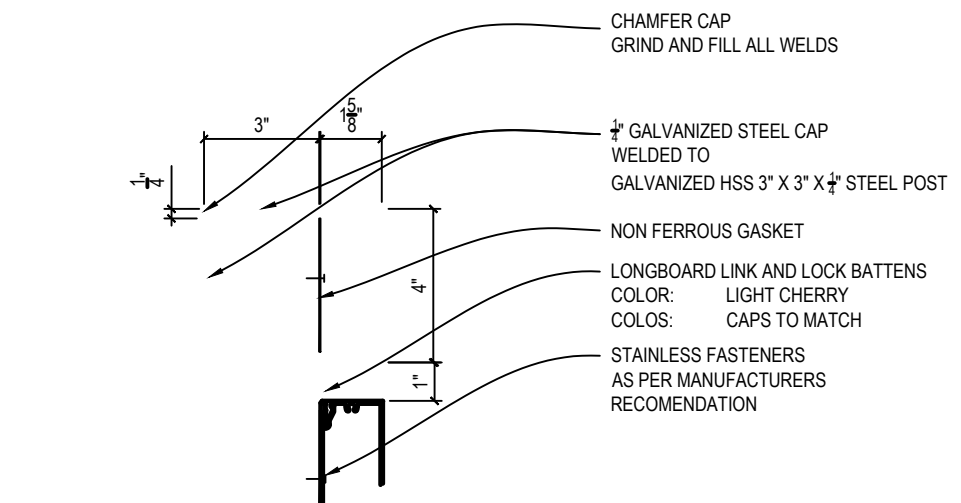
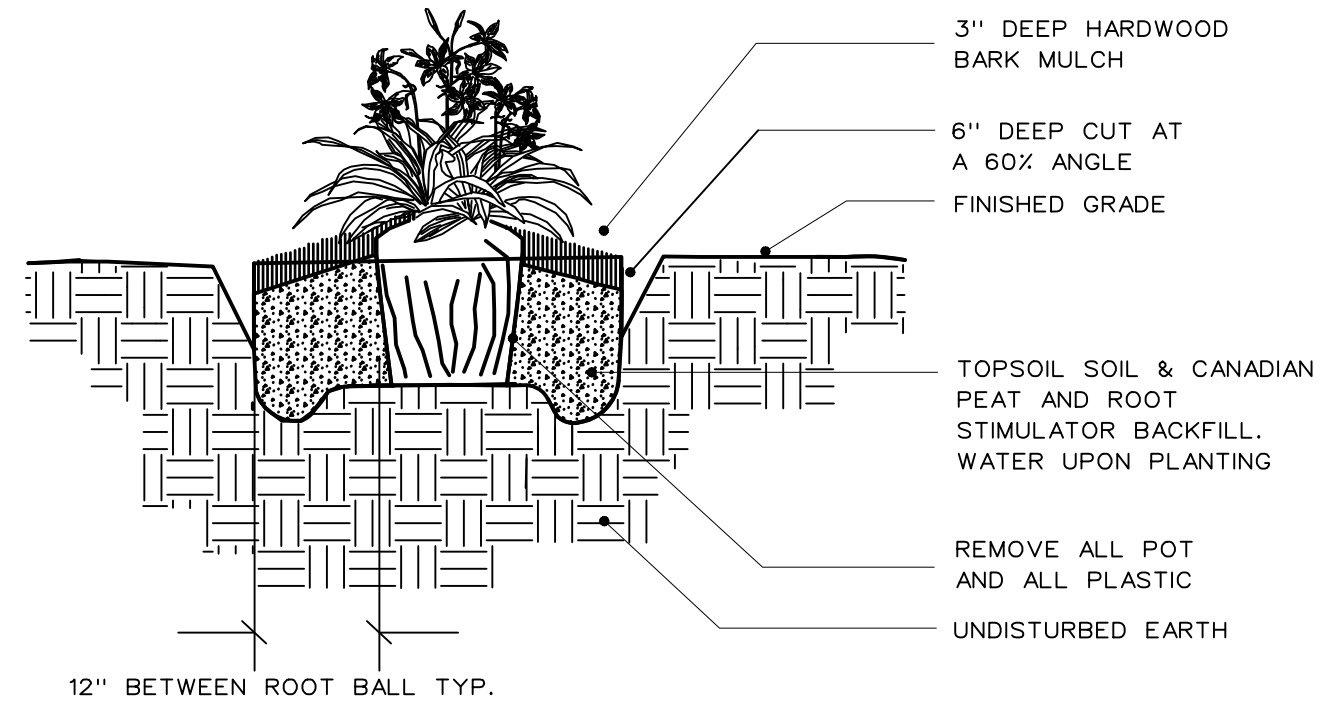
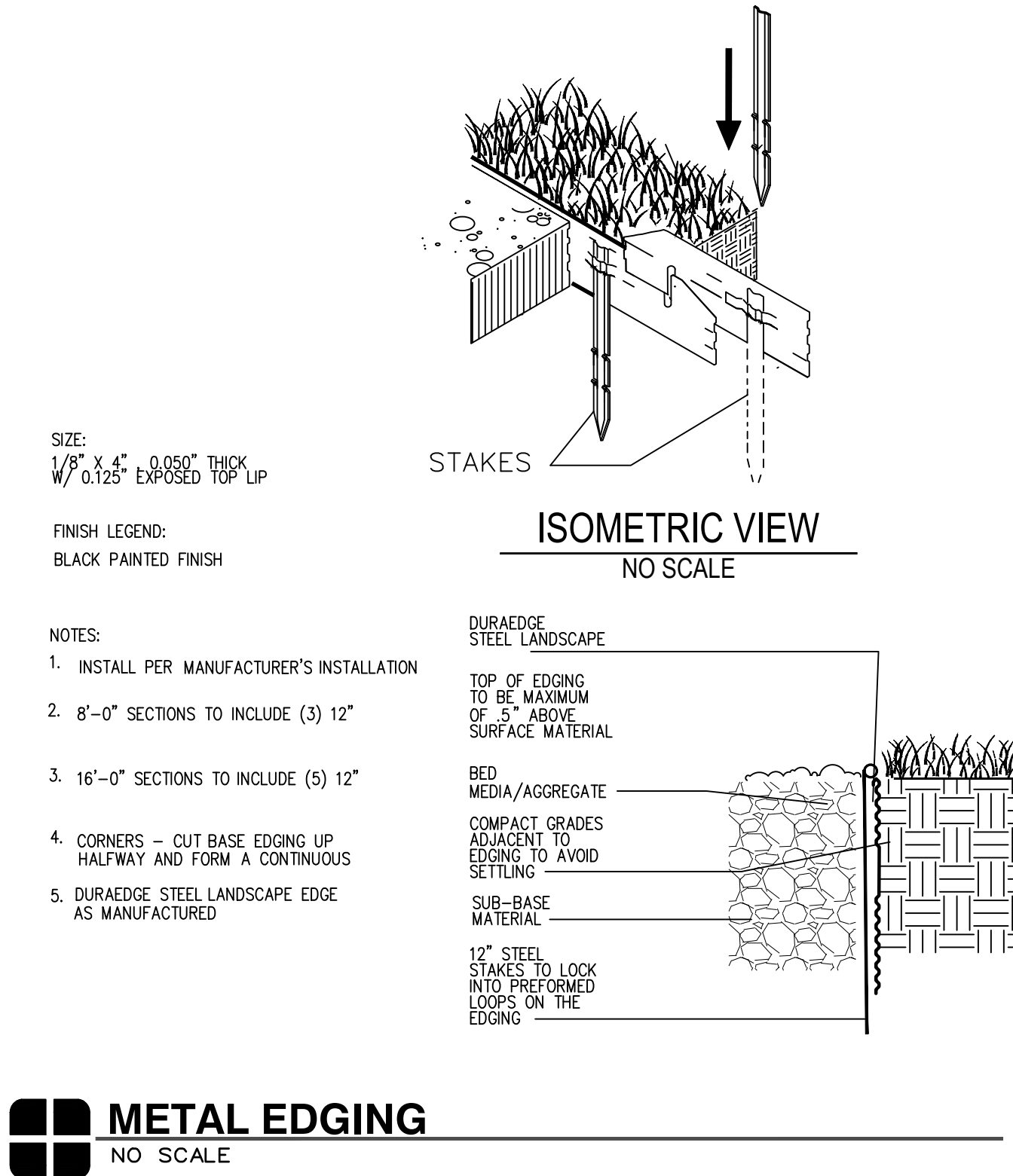
LANDSCAPE PLAN
SCALE: 1" = 10'

PLANT LIST

NO.	SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE
TREES				
3	CK	Chinese Kousa Dogwood	CORNUS KOUSA 'CHINENSIS'	2" CAL., B&B Single Stem, Matching Specimen
SHRUBS				
41	GSE	Green Spire Euonymus	EUONYMUS JAPONICUS GREEN SPIRE	#5 CONT., 24 in O.C., Staggered Rows
2	WEG	Wine & Roses Weigela	WEIGELA FLORIDA 'WINE & ROSES'	#3 CONT., 36 inch O.C.
ORNAMENTAL GRASSES / PERENNIALS / GROUND COVER				
144	ASM	Mini Mini Ornamental Chive	ALLIUM SENESCENS 'MINI MILLI'	#1 CONT., 12 in O.C.
11	ACT	Butterfly Weed	ASCLEPIAS TUBEROSA	#1 CONT., 12 inch O.C.
13	PPP	Purple Coneflower	ECHINAGIA PIXIE 'MEADOWWHITE'	#1 CONT., 12 inch O.C., Interplant with Rudbeckia
11	EBF	Elfin Blue Fescue	FESTUCA ELIJAH BLUE'	#1 CONT., 15 inch O.C.
32	HEH	English Ivy	HEDERA HELIX	3 1/2" pot, 15 inch O.C. Two Staggered Rows
10	HSD	Stella D'Oro Daylily	HEMEROCALLIS 'STELLA D'ORO'	#1 CONT., 18 inch O.C.
14	HUS	Forever Purple Coral Bells	HEUCHERA 'FOREVER PURPLE'	#1 CONT., 12 inch O.C.
4	LSK	Blazing Star	LIATRIS SPICATA 'KOBOLD ORIGINAL'	#1 CONT., 18 inch O.C.
4	PEN	Heinen Dwarf Fountain Grass	PENISTEMON ALPECUROIDES 'NANELN'	#5 CONT., 24 inch O.C.
13	BES	Black-eyed Susans	RUDBECKIA FULLGIDA var. 'SULLIVANTI' 'GOLDSTURM'	#1 CONT., 12 inch O.C., Interplant with Coneflower
5	SAJ	Autumn Joy Sedum	SEDUM 'AUTUMN JOY'	#2 CONT., 18 inch O.C.
64	TYM	Woolly Thyme	THYMUS LAMCINOSUS	Cell Per 32 FLAT, Plant between Concrete Slab Steps

HARDSCAPE PLAN
SCALE: 1" = 10'





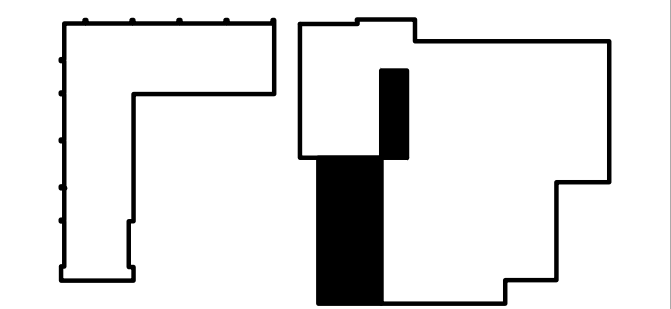
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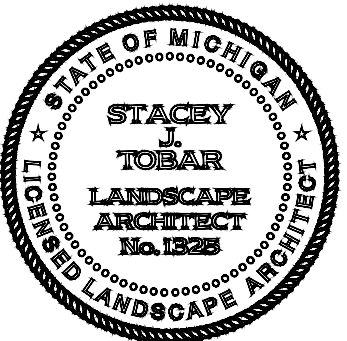
Project Component
PHASE OF WORK

Key Plan



Consultants
Civil: GIFFELS WEBSTER
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
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Seal(s)



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Project Manager AMY NOLFF	BIM Lead XXX
Design Lead XXX	Drawn XXX
Project Leader XXX	Checked XXX

Client
WAYNE STATE
UNIVERSITY

Project
WSU DINING HALL
RENOVATIONS
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
LANDSCAPE DETAILS

Scale: 1" = 20'

Project No. JCDT18-0444

Drawing No. L200

STRUCTURAL GENERAL NOTES

1. BUILDING AND DESIGN CODES:

A. 2015 MICHIGAN BUILDING CODE

B. AISC 360-05: SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (THE LATEST EDITION)

C. AISI NAS-01 INCLUDING 2004 SUPPLEMENT: NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS

D. AWS STRUCTURAL STEEL WELDING CODE, LATEST EDITION

E. ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, LATEST EDITION

F. ACI DETAILING MANUAL, LATEST EDITION

G. STRUCTURAL WELDED WIRE REINFORCEMENT MANUAL OF STANDARD PRACTICE, WIRE REINFORCEMENT INSTITUTE

H. ACI 530 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, LATEST EDITION

I. CRSI MANUAL OF STANDARD PRACTICE, LATEST EDITION

J. SDI CODE OF RECOMMENDED STANDARD PRACTICE FOR COMPOSITE DECK, FORM DECKS, AND ROOF DECK CONSTRUCTION, LATEST EDITION

K. SJI RECOMMENDED CODE OF STANDARD PRACTICE FOR STEEL JOISTS AND JOIST GIRDERS, LATEST EDITION
2. DESIGN LOADS:

UNIFORM

A. LIVE LOADS:

ROOF 20 PSF

SLAB ON GRADE 100 PSF

LIVE LOAD REDUCTION ON SUPPORTING ELEMENTS IN ACCORDANCE WITH BUILDING CODE

B. DEAD LOADS:

ROOF DEAD LOAD 20 PSF

C. WIND LOADS:

3 SECOND GUST WIND SPEED (ULTIMATE): Vult = 115 MPH, Vasd = 90 MPH

EXPOSURE: B

RISK CATEGORY: II

D. SEISMIC LOADS:

RISK CATEGORY: II

Ss: SPECTRAL ACC FOR SHORT PERIOD = 0.089

Si: SPECTRAL ACC FOR 1 SECOND PERIOD = 0.046

SITE CLASS: D

SDS: DESIGN SPECTRAL ACC FOR SHORT PERIOD= 0.096

SD1: DESIGN SPECTRAL ACC FOR 1 SECOND PERIOD= 0.073

SEISMIC DESIGN CATEGORY: B

Fa = 1.6

Fv = 2.4

BASIC SEISMIC FORCE RESISTING SYSTEM: STRUCTURAL STEEL NOT SPECIFICALLY DESIGNED FOR SEISMIC RESISTANCE

DESIGN BASE SHEAR = 20.15 KIPS

Cs = 0.05

R = 3.0

SEISMIC DESIGN PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

E. SNOW LOADS:

Ce: EXPOSURE FACTOR = 1.0

Ct: THERMAL FACTOR = 1.0

Pg = GROUND SNOW LOAD = 25 PSF

F. ADDITIONAL DESIGN LOADS INDICATED ON STRUCTURAL DRAWINGS SHALL BE IDENTIFIED AS FOLLOWS:

DL = DEAD LOAD

WL = WIND LOAD

EL = SEISMIC LOAD

3. GENERAL REQUIREMENTS

A. SPECIFICATIONS ARE PART OF THE CONSTRUCTION DOCUMENTS AND MUST BE USED IN CONJUNCTION WITH THE DRAWINGS.

B. VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO BEGINNING WORK OR FABRICATING MATERIALS. NOTIFY A/E OF DISCREPANCIES BEFORE PROCEEDING WITH ANY PHASE OF WORK.

C. VERIFY THE LOCATION OF CHASES, INSERTS, OPENINGS, SLEEVES, FINISHES, DEPRESSIONS, PADS, AND WALL OPENINGS.

D. DO NOT SCALE DRAWINGS FOR THE PURPOSE OF ESTABLISHING DIMENSIONS.

E. DETAILS LABELED "TYPICAL DETAILS" ON DRAWINGS APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH DETAILS APPLY WHETHER OR NOT DETAILS ARE REFERENCED AT EACH LOCATION. NOTIFY ENGINEER OF CONFLICT

F. DO NOT LOAD THE SLAB ON GRADE OR SUPPORTED SLAB WITH ERECTION CRANES OR ERECTION EQUIPMENT. THE SLABS HAVE NOT BEEN DESIGNED FOR CRANE LOADS AND WILL REQUIRE AN INCREASE IN THICKNESS AND WIRE REINFORCEMENT. OBTAIN A/E APPROVAL ON PROPOSED CRANE SUPPORT PLA

G. DO NOT STORE OR STACK CONSTRUCTION MATERIALS ON POURED OR ERECTED FLOORS/ROOFS IN EXCESS OF 80 PERCENT OF LIVE LOAD. GENERAL CONTRACTOR WILL ENSURE THAT ALL SUB-CONTRACTORS ARE INFORMED OF LOADING RESTRICTIONS. AVOID IMPACT WHEN PLACING MATERIALS ON POURED OR ERECTED FLOORS OR ROOF.

H. THE CONTRACT STRUCTURAL DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION. PROVIDE ALL MEASURES REQUIRED TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION; INCLUDING BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, FORMS AND SCAFFOLDING, SHORING OF RETAINING WALLS AND OTHER TEMPORARY SUPPORTS AS REQUIRED. COMPLY WITH APPLICABLE REQUIREMENTS OF OSHA AND OTHER GOVERNING BODIES HAVING JURISDICTION AT THE SITE.

I. PRINCIPAL OPENINGS THROUGH THE FRAMING ARE SHOWN ON DRAWINGS. EXAMINE THE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR THE REQUIRED OPENINGS AND PROVIDE FOR REQUIRED OPENINGS WHETHER SHOWN ON THE STRUCTURAL DRAWINGS OR NOT. VERIFY SIZE AND LOCATION OF OPENINGS WITH THE MECHANICAL CONTRACTOR. DEVIATIONS FROM THE OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE APPROVED PRIOR TO IMPLEMENTING THE CHANGES.

J. LOADINGS FOR MECHANICAL EQUIPMENT ARE BASED ON THE UNITS SHOWN ON THE MECHANICAL DRAWINGS. ANY CHANGES IN TYPE, SIZE, OR NUMBER OF PIECES OF EQUIPMENT SHALL BE REPORTED TO THE ARCHITECT FOR VERIFICATION OF THE ADEQUACY OF SUPPORTING MEMBERS PRIOR TO THE PLACEMENT OF SUCH EQUIPMENT.

K. SEE ARCHITECTURAL DRAWINGS FOR ELEVATIONS NOT SHOWN AND FOR EXACT LOCATIONS OF ALL SLAB DEPRESSIONS. THE CONTRACTOR SHALL COMPARE THE STRUCTURAL SECTIONS WITH ARCHITECTURAL SECTIONS AND REPORT ANY DISCREPANCY TO THE ARCHITECT PRIOR TO FABRICATING OR INSTALLING STRUCTURAL MEMBERS.

L. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:

1) SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS, EXCEPT AS NOTED.

2) SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NON-LOAD BEARING PARTITIONS.

3) SIZE AND LOCATION OF ALL CONCRETE CURBS, FLOOR DRAINS SLOPES, INSERTS, ETC. EXCEPT AS SHOWN.

4) FLOOR AND ROOF FINISHES.

5) WATERPROOFING AND DAMPPROOFING.

6) DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.

M. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:

1) PIPE AND DUCT RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS ETC. EXCEPT AS SHOWN OR NOTED

2) ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS.

3) CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL OR PLUMBING FIXTURES.

4) SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES, ANCHOR BOLTS FOR MOTOR MOUNTS, EXCEPT AS AS SHOWN OR NOTED.

N. ALL MECHANICAL SYSTEMS SUSPENDED LOADS EXCEEDING 100 # SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION UNLESS SPECIFICALLY DETAILED OR NOTED ON THE STRUCTURAL DRAWINGS.

FOUNDATION

1. FOUNDATION DESIGN IS BASED UPON THE GEOTECHNICAL ENGINEERING REPORT ENTITLED INVESTIGATION REPORT NEW CAFETERIA EXPANSION WAYNE STATE UNIVERSITY DETROIT, MICHIGAN 48202" PREPARED BY MANNIK AND SMITH GROUP, INC DATED JANUARY 9, 2019.

2. CONTRACTOR TO PROVIDE FOUNDATION & FOOTING AS REQUIRED FOR ALL EXTERIOR SIGNAGE IF REQUIRED SIGNAGE DESIGN BY SEPARATE PERMIT.

3. FOUNDATION DESIGN IS BASED ON A BEARING CAPACITY OF 2,500 PSF PER GEOTECHNICAL ENGINEERING REPORT LISTED ABOVE.

4. CONTRACTOR SHALL TREAT SOIL BELOW SLAB FOR TERMITES.

5. REFER TO THE GEOTECHNICAL REPORT AND SPECIFICATIONS FOR GENERAL REQUIREMENTS OF EARTHWORK, OVERCAVATION, SUBGRADE PREPARATION, FILL AND COMPACTION, WATERPROOFING AND OTHER PERTINENT REQUIREMENTS AND INFORMATION. IF THERE IS A CONFLICT BETWEEN GEOTECHNICAL REPORT AND STRUCTURAL PLANS THEN THE MORE STRINGENT CRITERIA SHALL APPLY UNLESS OTHERWISE DIRECTED BY AN RFI.

FOUNDATION

6. PROTECT PIPES AND CONDUITS RUNNING THROUGH WALLS AND SLABS WITH 1/2 INCH EXPANSION MATERIAL. LOWER CONTINUOUS FOOTINGS AND GRADE BEAMS PERPENDICULAR TO PIPE RUNS TO ALLOW PIPES TO PASS ABOVE THE FOOTINGS OR THROUGH THE GRADE BEAMS. ALTERNATIVELY, PROVIDE A CONCRETE JACKET IF PIPES ARE LOW ENOUGH TO BE PLACED BELOW THE FOOTINGS AND GRADE BEAMS. LOWER FOOTINGS AND GRADE BEAMS PARALLEL TO PIPE RUNS TO AVOID SURCHARGE ONTO ADJACENT TRENCH EXCAVATIONS.

7. MAINTAIN SUBGRADE AND FILL MOISTURE CONTENT UNTIL FOUNDATIONS ARE PLACED.

8. ARRANGE FOR OWNER'S INDEPENDENT TESTING AGENCY TO MONITOR CUT AND FILL OPERATIONS AND PERFORM FIELD DENSITY AND MOISTURE CONTENT TESTS TO VERIFY COMPLETION AND APPROVE FOOTING SUBGRADES PRIOR TO PLACING CONCRETE.

9. DO NOT PLACE FOOTINGS OR SLABS AGAINST SUBGRADE CONTAINING FREE WATER, FROST OR ICE.

10. MAINTAIN PROPER SITE DRAINAGE DURING CONSTRUCTION TO ENSURE SURFACE RUNOFF AWAY FROM STRUCTURES AND TO PREVENT PONDING OF SURFACE RUNOFF NEAR THE STRUCTURES.

PAD PREPARATION

REFERENCE GEOTECH REPORT

CONCRETE

1. PROVIDE BATCH MIXING, TRANSPORTATION, PLACING AND CURING OF CONCRETE IN ACCORDANCE WITH RECOMMENDATIONS OF ACI 301 AND ACI 318. USE ASTM C 150 CEMENT UNLESS NOTED OTHERWISE. PROVIDE ADMIXTURES AND SPECIAL REQUIREMENTS AS SPECIFIED.

A. ALL CONCRETE SHALL BE NORMAL WEIGHT (145 PCF) CONCRETE AND:

f'c=3,000 PSI AT 28 DAYS FOR SLAB ON GRADE, FOUNDATIONS, AND CONTINUOUS FTG

f'c=4,000 PSI AT 28 DAYS FOR ALL OTHER CONCRETE

2. PREPARE AND SUBMIT MIXTURES FOR EACH CLASS OF CONCRETE ON THE BASIS OF LABORATORY TRIAL MIXTURES OR FIELD TEST DATA FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER.

3. PROVIDE CONSTRUCTION AND CONTROL JOINTS AS INDICATED ON DRAWINGS. HORIZONTAL CONSTRUCTION JOINTS ARE NOT ALLOWED UNLESS SPECIFICALLY NOTED OR APPROVED BY STRUCTURAL ENGINEER. NOTIFY STRUCTURAL ENGINEER OF PROPOSED CONSTRUCTION JOINT OR CONTROL JOINT LOCATIONS THAT ARE DIFFERENT OR IN ADDITION TO JOINTS INDICATED ON DRAWINGS.

4. CHAMFER EXPOSED EDGES 3/4 INCH UNLESS OTHERWISE NOTED.

5. WIRE BRUSH AND CLEAN CONSTRUCTION JOINTS PRIOR TO POURING NEW CONCRETE.

6. REFERENCE THE APPROPRIATE DISCIPLINE DRAWINGS FOR SUBSLAB PIPING, FLOOR DRAINS AND SLAB AND WALL PENETRATIONS.

7. PROVIDE ADEQUATE STRUCTURAL FRAMING AS APPROVED BY STRUCTURAL ENGINEER FOR MECHANICAL OPENINGS THROUGH THE SLABS, WALLS AND FLOOR DECK. OPENINGS WILL NOT BE PERMITTED THROUGH BEAMS UNLESS SPECIFICALLY DETAILED.

8. ADMIXTURES:

A. AIR-ENTRAINING ADMIXTURE: ASTM C 260

B. WATER-REDUCING ADMIXTURE: ASTM C 494, TYPE A

C. RETARDING ADMIXTURE: ASTM C 494 TYPE B

D. ACCELERATING ADMIXTURE: ASTM C 494 TYPE C (NON CHLORIDE)

E. HIGH-RANGE, WATER REDUCING ADMIXTURE: ASTM C 494, TYPE F

F. WATER REDUCING AND ACCELERATING ADMIXTURE: ASTM C 494, TYPE E

G. WATER REDUCING AND RETARDING ADMIXTURE: ASTM C 494, TYPE D

H. OTHER ADMIXTURES FOR SPECIFIC USE WITH THE PERMISSION OF THE DESIGN PROFESSIONAL

9. COMPLY WITH RECOMMENDATIONS IN ACI 302.1R FOR SCREEDING, RES TRIGHTENING AND FINISHING OPERATIONS FOR CONCRETE SURFACES. DO NOT WET CONCRETE.

A. INTERIOR FLOOR SLABS: MACHINE TROWEL FINISH

B. EXTERIOR SLABS: LIGHT FLEXIBLE BRISTLE BROOM FINISH

10. PROVIDE ACI "CLASS A" TOLERANCE, 1/8 INCH VARIATION IN 10 FEET. MEASURED WITH A STRAIGHT EDGE LAID IN ANY DIRECTION.

REINFORCING STEEL

1. PROVIDE DETAILING, FABRICATION, AND INSTALLATION OF REINFORCING AND ACCESSORIES IN ACCORDANCE WITH ACI 315 AND ACI 318.

2. PROVIDE NEW BILLET STEEL REINFORCING BARS IN ACCORDANCE WITH ASTM A 615, GRADE 60 DEFORMED.

3. COORDINATE PLACEMENT OF CAST-IN-PLACE EMBEDS AND ANCHOR RODS. SET ANCHOR RODS WITH A TEMPLATE. SECURELY ATTACH EMBED ITEMS TO FORMWORK OR REINFORCING.

4. PROVIDE CLASS "B" REINFORCEMENT SPLICES FOR CONTINUOUS REINFORCEMENT. PROVIDE STANDARD 90-DEGREE HOOKS IN ACCORDANCE WITH ACI 318, UNLESS OTHERWISE NOTED.

5. MAINTAIN THE FOLLOWING CONCRETE COVERAGE FOR REINFORCING STEEL UNLESS OTHERWISE NOTED:

A. CONCRETE CAST AGAINST EARTH: 3 INCHES

B. CONCRETE EXPOSED TO WEATHER NO. 6 AND LARGER: 2 INCHES

C. 5 AND SMALLER: 1 1/2 INCHES

D. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND: SLABS AND WALLS NO. 14 AND NO. 18: 1 1/2 INCHES NO. 11 AND SMALLER: 3/4 INCHES

6. DO NOT WELD OR BEND REINFORCEMENT IN THE FIELD UNLESS SPECIFICALLY SHOWN AND APPROVED BY STRUCTURAL ENGINEER.

7. WHEN SPECIFICALLY APPROVED, PROVIDE WELD REINFORCEMENT IN ACCORDANCE WITH ASTM A 706 GRADE 60, USE LOW HYDROGEN ELECTRODES FOR WELDING OF REINFORCEMENT WHERE DETAILED BARS ARE TO BE WELDED TO A STEEL SECTION.

8. WHERE REQUIRED, PROVIDE DOWELS TO MATCH SIZE AND SPACING OF MAIN REINFORCING.

9. PROVIDE CONTINUOUS HORIZONTAL WALL REINFORCEMENT WITH 90-DEGREE BENDS AND EXTENSIONS AT CORNERS AND INTERSECTIONS AS SHOWN ON TYPICAL BAR PLACING DETAILS.

10. WHEN SHOWN ON DRAWINGS PROVIDE FIBRILLATED POLYPROPYLENE FIBERS ENGINEERED AND DESIGNED FOR USE IN CONCRETE COMPLYING WITH ASTM C1116, TYPE III, 1/2 TO 1 1/2 INCHES LONG.

MASONRY

1. REINFORCED MASONRY WORK AND MATERIALS TO BE IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES: ACI 530/ASCE 5/TMS 402

2. REINFORCED MASONRY TO CONFORM TO THE SPECIFICATIONS FOR MASONRY STRUCTURES: ACI 530.1/ASCE 6/TMS 602 (WITH THE EXCEPTIONS NOTED IN JOB SPECIFICATIONS).

PROVIDE CONCRETE MASONRY UNITS (CMU) OF NORMAL WEIGHT (125 PCF MINIMUM), GRADE N, TYPE I OR II, CONFORMING TO LATEST EDITION OF ASTM C 90.

4. PROVIDE MASONRY ASSEMBLAGES WITH MINIMUM PRISM STRENGTH (fm) OF 1,500 PSI. TESTED IN ACCORDANCE WITH ASTM C 140.

5. PROVIDE CONCRETE MASONRY UNITS IN ACCORDANCE ASTM C 426 LIMITS FOR DRYING SHRINKAGE OF CONCRETE BLOCKS.

6. PROVIDE VERTICAL REINFORCEMENT IN CMU WALLS AS SHOWN IN DRAWINGS. FILL THE REINFORCED CELLS SOLID WITH GROUT. MAXIMUM HEIGHT OF GROUT POURS TO BE AS PER THE SPECIFICATION FOR MASONRY STRUCTURES TABLE NO. 7, UNTIL WALL IS PERMANENTLY BRACED BY ROOF.

7. LAY HOLLOW UNITS WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. PROVIDE FULL MORTAR COVERAGE FOR WEBS WHEN ADJACENT TO GROUTED CELLS.

8. ALIGN VERTICAL CELLS TO BE FILLED WITH GROUT TO PROVIDE CONTINUOUS UNOBSTRUCTED VERTICAL CELLS. REMOVE OVERHANGING MORTAR OR OTHER OBSTRUCTION AND DEBRIS FROM THE INSIDES OF CELL WALLS. PROVIDE GROUT WITH 8 INCH SLUMP AND CONSOLIDATE BY MEANS OF HAND TAMPING TO ENSURE COMPLETE FILLING OF CELLS.

9. INSTALL ANCHORS, ACCESSORIES, AND OTHER ITEMS TO BE BUILT IN AS WORK PROGRESSES.

MASONRY

1. PERFORM CUTTING AND FITTING OF MASONRY WITH MASONRY SAWS PROVIDING CUT FINISHED UNITS.

11. CELLS AT OR BELOW FINISHED GRADE ARE TO BE GROUTED SOLID.

12. WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL CORE, DO NOT SLOPE DOWEL MORE THAN ONE HORIZONTAL TO SIX VERTICAL.

13. WALL SHALL RECEIVE TEMPORARY BRACING. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL WALL IS PERMANENTLY BRACED BY ROOF.

14. SPECIAL INSPECTION IS REQUIRED AS FOLLOWS:

A. DURING PREPARATION OF REQUIRED PRISMS OR TEST SPECIMENS.

B. DURING THE LAYING OF MASONRY UNITS.

C. DURING PLACEMENT OF REINFORCING STEEL.

D. FOR GROUT SPACES PRIOR TO CLOSING OF CLEANOUTS AND GROUTING.

E. DURING ALL GROUTING OPERATIONS.

FORWARD INSPECTION RESULTS TO THE ENGINEER OF RECORD.

15. GROUT FILL CORES SHALL CONFORM TO ASTM C476 WITH A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI IN 28 DAYS.

16. MORTAR SHALL COMFORM TO ASTM C270

A. MASONRY BELOW GRADE: TYPE M MORTAR

B. EXTERIOR ABOVE GRADE MASONRY: TYPE S MORTAR

17. GALVANIZED HORIZONTAL REINFORCEMENT SHALL HAVE 9 GAGE SIDE AND CROSS RODS SPACED 16" ON CENTER. LAP REINFORCEMENT 7".

STRUCTURAL STEEL

1. DESIGN, DETAIL AND ERECT STRUCTURAL STEEL ELEMENTS IN ACCORDANCE WITH THE FOLLOWING:

A. AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.

B. AISC MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN.

C. AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.

D. AWS STRUCTURAL WELDING CODE, D1.1.

2. PROVIDE STRUCTURAL STEEL OF THE FOLLOWING ASTM DESIGNATIONS UNLESS OTHERWISE NOTED:

A. STRUCTURAL STEEL WIDE FLANGE SHAPES: ASTM A 992

B. EDGE ANGLES, BENT PLATES, HANGERS AND BRACES: ASTM A 36

C. STRUCTURAL PIPE: ASTM A 53, GRADE B, TYPE E OR S

D. HOLLOW STRUCTURAL SHAPES: ASTM A 500, GRADE B

E. BASE PLATES AND MISCELLANEOUS STEEL PLATES: ASTM A 36

F. ANCHOR RODS: ASTM F 1554, GRADE 36

3. CONNECTION MATERIALS:

A. BEAM-COLUMN STIFFENER PLATES AND DOUBLER PLATES TO MATCH THE GRADE OF STEEL OF STRUCTURAL ELEMENT

B. HIGH STRENGTH BOLTS (SLIP CRITICAL JOINTS FOR ALL BRACES WHERE SPECIFIED): ASTM A 325

C. WELD MINIMUM SIZE AND STRENGTH:

A. PROVIDE MINIMUM SIZE OF FILLET WELDS AS SPECIFIED IN TABLE J2.4 OF THE AISC MANUAL.

B. PROVIDE MINIMUM EFFECTIVE THROAT THICKNESS OF PARTIAL PENETRATION GROOVE WELDS AS SPECIFIED IN TABLE J2.3 OF THE AISC MANUAL.

C. DEVELOP THE FULL TENSILE STRENGTH OF THE MEMBER ELEMENT JOINED ON ALL SHOP AND FIELD WELDS UNLESS OTHERWISE NOTED ON THE DRAWINGS.

D. WHERE CONNECTIONS ARE NOTED ON DRAWINGS AS MOMENT CONNECTIONS, PROVIDE WELDS TO DEVELOP FULL FLEXURAL CAPACITY OF THE LESSER MEMBER.

E. PROVIDE ELECTRODES FOR FIELD OR SHOP WELDING THAT CONFORM TO ASTM A 233 (CLASS 70).

F. ALL WELDS ARE CONTINUOUS FOR THE FULL LENGTH OF THE CONNECTION UNLESS OTHERWISE NOTED ON DRAWINGS.

5. PROVIDE MINIMUM OF TWO BOLTS PER CONNECTION. PROVIDE MINIMUM BOLT DIAMETER OF 3/8 INCH.

6. PROVIDE BOLTS, NUTS AND WASHERS THAT ARE HOT DIP GALVANIZED ACCORDING TO ASTM A 153, CLASS C WHEN USED TO CONNECT STEEL ELEMENTS THAT ARE HOT DIP GALVANIZED AFTER FABRICATION.

7. PROVIDE SIMPLE SHEAR CONNECTIONS FOR STEEL CONNECTIONS NOT SPECIFIED OTHERWISE UTILIZING HIGH STRENGTH BEARING BOLTS IN SINGLE OR DOUBLE SHEAR. PROVIDE DOUBLE ANGLE OR SINGLE PLATE SHEAR LAP BOLTED CONNECTIONS.

A. UNLESS LARGER REACTION IS SHOWN ON DRAWINGS, PROVIDE MINIMUM DESIGN FORCES AS FOLLOWS:

NONCOMPOSITE BEAMS: BEAM-TO-BEAM OR BEAM-TO-COLUMN CONNECTION TO DEVELOP THE REACTION OF CONNECTED BEAM. OBTAIN END REACTION FROM ALLOWABLE UNIFORM LOAD TABLES IN PART 2 OF THE AISC MANUAL OF STEEL CONSTRUCTION.

8. SUPPORT REACTIONS LISTED ABOVE, LOADS OR REACTIONS OF MEMBERS SUBMITTED BY BEAM WITHIN THREE FEET OF BEAM END AND VERTICAL COMPONENTS OF FORCES IN BRACE MEMBERS FRAMING INTO BEAM.

9. BRACE CONNECTIONS SHALL BE IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS. ANGLE SIZES, PLATE SIZES, AND SIZE AND LENGTHS OF WELDS SHALL BE DESIGNED IN ACCORDANCE WITH THE FOLLOWING:

A. DESIGN CONNECTIONS OF DIAGONAL MEMBERS TO DEVELOP THE LOADS SHOWN ON THE BRACE DETAILS.

B. WHERE FORCES ARE NOT INDICATED ON THE DETAILS, DESIGN CONNECTIONS OF DIAGONAL MEMBERS TO DEVELOP THE FULL TENSILE CAPACITY OF THE DIAGONAL MEMBER.

C. SIZE GUSSET PLATES AND ALL WELDS TO RESIST THE FORCE OF THE DIAGONAL MEMBERS. PLATES AND WELDS SHALL BE SIZED FOR TENSIONS, SHEARS, AND MOMENTS CAUSED BY CONCENTRIC AND ECCENTRIC FORCES.

D. ALL BRACE CONNECTIONS SHALL USE WELDS OR FULLY TENSIONED A325 CLASS A BOLT CRITICAL BOLTS.

10. STEEL FABRICATION:

A. FABRICATE AND ASSEMBLE STRUCTURAL MEMBERS/ASSEMBLIES IN SHOP TO GREATEST EXTENT POSSIBLE.

B. CAMBER OF STRUCTURAL STEEL MEMBERS IS INDICATED ON THE DRAWINGS. WHERE POSSIBLE, CAMBER OF BEAMS TO BE APPLIED BY COLD BEND PROCESS. CAMBER INDICATED ON DRAWINGS IS INTENDED TO BE FINAL CAMBER AT TIME OF FABRICATION AND SHALL COMPARE TO A TOLERANCE OF MINUS ZERO TO PLUS ONE-EIGHTH INCH FOR EACH TEN FEET OF MEMBER LENGTH.

C. SPLICING OF STRUCTURAL STEEL MEMBERS IS PROHIBITED WITHOUT PRIOR APPROVAL BY THE A/E.

D. BE RESPONSIBLE FOR ALL ERRORS OF DETAILING ON THE SHOP DRAWINGS, ERRORS IN FABRICATION, AND THE CORRECT FITTING OF STRUCTURAL STEEL MEMBERS.

E. CONFORM TO THE AISC CODE OF STANDARD PRACTICE, FOR ERECTION TOLERANCES. FIELD MODIFICATION TO STRUCTURAL STEEL IS PROHIBITED WITHOUT PRIOR APPROVAL BY THE A/E.

F. CLEAN STEEL OF RUST, LOOSE MILL SCALE AND OTHER FOREIGN MATERIALS WHERE REQUIRED FOR FABRICATION, FITTING UP, OR WELDING.

G. DO NOT CUT STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT PRIOR REVIEW AND APPROVAL OF THE A/E.

11. HOT DIP GALVANIZE AFTER FABRICATION ALL STRUCTURAL STEEL AND THEIR CONNECTIONS PERMANENTLY EXPOSED TO THE OUTSIDE. ITEMS INCLUDED BUT NOT LIMITED TO:

A. SHELF ANGLES

B. PARAPET WALL SUPPORTING MEMBERS

C. EMBEDDED PLATES IN CONCRETE

D. BUILDING CLADDING SUPPORT STEEL

E. EXAMINE THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR OTHER ITEMS THAT REQUIRE HOT DIPPED GALVANIZATION.

12. PROVIDE GROUT FOR BASE PLATES THAT IS NON-SHRINK, NON-METALLIC GROUT WITH MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 8000 PSI. COMPLETE GROUT WORK PRIOR TO PLACING ROOF CONCRETE OF A SINGLE STORY BUILDING OR PRIOR TO PLACING SECOND FLOOR CONCRETE OF A MULTIPLE STORY BUILDING.

13. SUBMIT CALCULATIONS FOR CONNECTION DESIGNS NOT DETAILED ON DRAWINGS. DESIGN CONNECTIONS UNDER SUPERVISION OF REGISTERED PROFESSIONAL ENGINEER, REGISTERED IN THE STATE WHERE PROJECT IS BEING CONSTRUCTED, EMPLOYED BY THE STEEL FABRICATOR. DESIGN CALCULATIONS TO BE SEALED BY STRUCTURAL ENGINEER OR REGISTERED PROFESSIONAL ENGINEER. SHOP DRAWINGS SUBMITTED WITHOUT COMPLETE DESIGN CALCULATIONS WILL NOT BE REVIEWED. WHERE PREDESIGNED CONNECTIONS ARE TAKEN DIRECTLY FROM TABLES IN AISC MANUAL, CALCULATIONS NEED NOT BE SUBMITTED PROVIDED JOB DESIGN CONDITIONS PRECISELY MATCH THOSE ASSUMED IN THE AISC MANUAL.

14. PROVIDE WASHERS FOR ALL CONNECTIONS WITH STANDARD, OVERSIZE AND SHORT-SLOTTED HOLES. FOR LONG-SLOTTED HOLES PROVIDE WASHERS OR A CONTINUOUS BAR OF SUFFICIENT SIZE TO COMPLETELY COVER THE SLOT. PLATE WASHERS OR BARS TO BE MINIMUM OF 5/16 INCH THICK FOR LONG-SLOTTED HOLES.

STRUCTURAL STEEL

15. WIDE FLANGE BEAM CONNECTIONS TO TUBE COLUMNS SHALL BE MADE WITH BOLTED SHEAR TAB PLATE TYPE CONNECTIONS UNLESS OTHERWISE NOTED ON PLAN. ONE-SIDED CONNECTIONS SHALL BE DESIGNED AS ECCENTRIC CONNECTIONS.

16. MILL STEEL COLUMN ENDS TO FIT FLUSH WITH BASE PLATE, CAP PLATE AND END PLATES. FIELD ASSEMBLY OF THE STEEL ELEMENTS TO THE COLUMNS IS PROHIBITED.

17. HEADED STUDS (SHEAR AND ANCHOR) AND DEFORMED ANCHORS:

A. PROVIDE HEADED STUDS (SHEAR AND ANCHOR) MADE OF MATERIAL CONFORMING TO ASTM A 108.

B. PROVIDE DEFORMED ANCHORS MADE OF MATERIAL CONFORMING TO ASTM A 496.

C. WELD STUDS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. MANUAL ARC (STICK) WELDING OF HEADED STUDS AND/OR DEFORMED ANCHORS IS NOT ALLOWED.

18. PRIOR TO DECK PLACEMENT, VERIFY THAT STEEL BEAMS BEARING ON MASONRY HAVE 8 INCH MINIMUM BEARING AND ARE ANCHORED AS SHOWN ON DRAWINGS.

19. PROVIDE TEMPORARY SHORING OR BRACING DURING CONSTRUCTION PHASE, PRIOR TO COMPLETING CONNECTIONS AND POURING OF FLOOR SLAB.

TEMPORARY CONSTRUCTION BRACING OF THE STRUCTURAL STEEL FRAME IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL REMAIN IN PLACE UNTIL AFTER THE PERMANENT BRACING SYSTEM HAS BEEN COMPLETED.

20. CLEAN STEEL TO BE PAINTED IN ACCORDANCE WITH STEEL STRUCTURES PAINTING COUNCIL POWER TOOL CLEANED SSPC-SP3.

22. ALL STRUCTURAL STEEL SHALL BE SHOP PRIMED WHITE OR LIGHT GREY TO PROVIDE DRY FILM THICKNESS NOT LESS THAN 1.0 MIL. ASPHALTIC PAINTS ARE NOT ACCEPTABLE.

JOISTS AND GIRDERS

1. JOISTS SLOPE UNIFORMLY BETWEEN ELEVATIONS NOTED.

2. BEAMS PARALLEL TO JOISTS SHALL BE 2 1/2" ABOVE BEAMS PERPENDICULAR TO JOISTS UNON.

3. ALL DIMENSIONS SHALL BE COORDINATED WITH ARCHITECTURAL DRAWINGS.

4. COORDINATE SIZE AND LOCATION OF OPENINGS FOR ROOF TOP UNITS (RTU) WITH MECHANICAL DRAWINGS.

5. JOIST BRIDGING SHALL BE DESIGNED AND INSTALLED PER SJI SPECIFICATIONS. BRIDGING INDICATED ON DRAWINGS IS IN ADDITION TO THAT REQUIRED BY THE SJI SPECIFICATIONS. JOIST BRIDGING SHALL BE DESIGNED TO RESIST A NET UPLIFT LOAD AS INDICATED IN THE "WIND NET UPLIFT TABLE".

6. PROVIDE OPEN WEB, UNDERSLING, PARALLEL CHORD JOISTS AND JOIST GIRDERS UNLESS OTHERWISE NOTED ON THE DRAWINGS.

7. DESIGN, FABRICATE, AND ERECT OPEN WEB STEEL JOISTS AND JOIST GIRDERS TO THE SPECIFICATIONS OF THE STEEL JOIST INSTITUTE, LATEST EDITION.

8. SHOP DRAWINGS FOR JOISTS, JOIST ACCESSORIES AND JOIST GIRDERS TO BE PREPARED BY THE JOIST MANUFACTURER'S DETAILERS.

9. PROVIDE BEARING LENGTHS PER STEEL JOIST INSTITUTE REQUIREMENTS UNLESS GREATER LENGTHS ARE SHOWN ON DRAWINGS.

10. ALL HANGERS SUPPORTING MECHANICAL EQUIPMENT, SPRINKLER LINES, ETC., FROM THE CHORD OF THE STEEL JOISTS SHALL BE LOCATED AT THE PANEL POINTS OF THE JOISTS OR THE JOIST CHORD SHALL BE REINFORCED TO SUPPORT THE ADDITIONAL LOAD. HANGERS SHALL NOT BE ATTACHED TO THE EDGE OF THE CHORD ANGLES. HANGERS SHALL BE CENTERED ON THE JOIST CHORD.

11. ALL K-SERIES JOISTS SHALL HAVE 2 1/2 INCH DEEP BEARING SEATS.

12. PROVIDE CAMBER FOR ALL JOISTS. DEPTH OF CAMBER TO BE IN ACCORDANCE THE STEEL JOIST INSTITUTE SPECIFICATIONS.

13. ALL JOIST-GIRDERS SHALL HAVE 7 1/2 INCH DEEP BEARING SEATS, UNLESS OTHERWISE NOTED.

14. JOIST-GIRDER SUPPLIER SHALL PROVIDE BOTTOM CHORD BRACING AS REQUIRED PER STEEL JOIST INSTITUTE FOR STABILITY AND AS REQUIRED BY DESIGN.

15. ALL JOISTS TO BEAR AT TOP CHORD PANEL POINTS OF THE JOIST GIRDER UNLESS OTHERWISE NOTED.

16. JOIST GIRDERS TO BE DESIGNED FOR A NET UPLIFT LOAD AS INDICATED ON TABLE "WIND NET UPLIFT" ON SHEET S3 APPLIED AS A POINT LOAD AT JOIST LOCATIONS.

17. PROVIDE CAMBER FOR ALL JOIST GIRDERS. DEPTH OF CAMBER TO BE IN ACCORDANCE WITH THE STEEL JOIST INSTITUTE SPECIFICATIONS.

LIGHT GAGE STEEL

1. PROVIDE ALL STUDS AND/OR JOISTS AND ACCESSORIES OF THE TYPE, SIZE, GAGE AND SPACING SHOWN ON THE DRAWINGS.

2. DESIGN ALL STRUCTURAL MEMBERS IN ACCORDANCE WITH AMERICAN IRON AND STEEL INSTITUTE (AISI) "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".

3. FORM ALL FRAMING MEMBERS FROM CORROSION RESISTANT STEEL, CORRESPONDING TO THE REQUIREMENTS OF ASTM A653 AND THE FOLLOWING STRENGTH REQUIREMENTS:

FRAMING MEMBER	GAGE	MINIMUM YIELD
STUDS, JOISTS	33 KSI	20.18
STUDS, JOISTS	50 KSI	10, 12, 14, 16
RUNNERS, JOIST BLOCKING	33 KSI	20

4. PLACE ALL COLD-FORMED STEEL STUD WALL BRIDGING HORIZONTALLY WITH A MAXIMUM VERTICAL SPACING OF FOUR FEET UNLESS OTHERWISE NOTED. AS AN OPTION, CONTINUOUS COLD-FORMED CHANNELS MAY BE POSITIONED THROUGH THE STUD PUNCH OUTS AS BRIDGING PROVIDED THE CHANNEL IS PROPERLY FASTENED TO EACH STUD.

5. INSTALL AXIALLY LOADED STUDS IN A MANNER WHICH WILL ASSURE THAT THEIR ENDS ARE POSITIONED AGAINST THE INSIDE OF RUNNER WEB PRIOR TO FASTENING.

6. FASTEN COMPONENTS WITH SELF-DRILLING SCREWS OR WELDING. PROVIDE SCREWS OF SUFFICIENT SIZE TO INSURE THE STRENGTH OF THE CONNECTION. WIRE TYING OF COMPONENTS IS NOT PERMITTED. TOUCH UP ALL WELOS WITH A ZINC-RICH PAINT.

7. WELDING OF COLD-FORMED STUDS MAY BE PERFORMED USING A MINIMUM ONE-EIGHTH INCH AWS TYPE 6013 WELDING ROD.

8. SECURELY ANCHOR RUNNERS TO THE SUPPORTING STRUCTURE. PROVIDE COMPLETE, UNIFORM, AND LEVEL BEARING SUPPORT FOR THE BOTTOM RUNNER.

9. SECURELY ANCHOR ABUTTING LENGTHS OF RUNNER TO A COMMON STRUCTURAL ELEMENT, BUTT-WELDED OR SPLICED.

10. PLUMB, ALIGN, AND SECURELY ATTACH STUDS TO THE FLANGES OF BOTH UPPER AND LOWER RUNNERS. SPLICES IN STUDS ARE NOT PERMITTED.

11. PROVIDE HEADERS AND SUPPORTING STUDS FOR FRAMING OF WALL OPENINGS.

12. STABILITY BRIDGING SHALL BE INSTALLED AT A MAXIMUM 4'-0" O.C. FOR SUSPENDED SOFFITS UNLESS OTHERWISE NOTED.

13. DESIGN OF METAL STUD FRAMING SHOWN IS BASED ON CEE TYPE (1 5/8" FLANGE) STUDS BY DALE INDUSTRIES.

14. SHOP DRAWINGS AND CALCULATIONS FOR COLD FORMED METAL FRAMING TO BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

METAL DECK

1. PROVIDE DESIGN, FABRICATION, AND ERECTION OF METAL DECK CONFORMING TO THE STEEL DECK INSTITUTE'S "CODE OF RECOMMENDED STANDARD PRACTICE AND BASIC DESIGN SPECIFICATIONS".

2. FORM ROOF AND FLOOR DECK FROM STEEL SHEETS CONFORMING TO ASTM A 611 GRADE C AND D OR A 653 OR HIGHER SPECIFICATIONS WITH A MINIMUM YIELD STRENGTH OF: 33 KSI.

3. ATTACH SHEETS TO STEEL SUPPORT MEMBERS AS INDICATED AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION. WHEN DECK IS SCHEDULED TO BE EXPOSED, DE-SLAG, CLEAN AND TOUCH UP WELDS WITH A ZINC-RICH PRIMER.

METAL DECK

4. LAP ROOF AND FLOOR DECK ENDS MINIMUM OF 2 INCHES. WHEN FASTENING DECK TO SUPPORT MEMBERS PROVIDE WELDING MATERIALS INSTALLATION PROCEDURES TO PREVENT BURNING OF HOLES IN DECK.

5. PROVIDE SIX INCH CLOSURE STRIP WHERE CHANGES IN DECK DIRECTION OCCUR. CLOSURE TO BE SAME GAGE AS DECK.

6. AT ENDS OF DECKS OR WHERE CHANGES OF DECK DIRECTION OCCUR, FASTEN TO SUPPORTS AT EACH FLUTE. PROVIDE ADEQUATE CLOSURES AND FASTENERS TO SIDES AT EIGHTEEN INCHES ON CENTER.

7. WHERE PARTIAL PANELS MAY BE REQUIRED TO COMPLETE DECK INSTALLATION AT PERIMETER OF STRUCTURE, PROVIDE WELDS IN EACH FLUTE TO STRUCTURAL MEMBERS. INSTALL DECK IN THREE CONTINUOUS SPAN LENGTHS.

8. AT PERIMETER OF DECK, SECURE DECK TO STRUCTURAL MEMBERS WITH SAME ATTACHMENT AND SPACING SUPPORT ATTACHMENT AS INDICATED ON PLANS.

9. TO COMPENSATE FOR DEFLECTION OF THE STRUCTURE UNDER THE LOAD OF FRESHLY PLACED CONCRETE, THE SLAB THICKNESS SHALL BE INCREASED ACCORDINGLY TO PROVIDE A LEVEL SURFACE WITHIN TOLERANCE INDICATED IN THE SPECIFICATIONS. ADDITIONAL CONCRETE SHALL BE PLACED AT NO ADDITIONAL COST TO THE OWNER.

10. SHOP DRAWINGS FOR METAL DECK TO BE PREPARED BY THE METAL DECK DETAILERS.

SPECIAL INSPECTION

SPECIAL INSPECTION SHALL MEET THE REQUIREMENTS OF MBC SECTION 1704. SPECIAL INSPECTOR(S) SHALL BE HIRED BY THE OWNER TO PERFORM THE REQUIRED SPECIAL INSPECTIONS. THE NAMES OF PERSONS OR FIRMS WHO ARE TO PERFORM THE SPECIAL INSPECTIONS SHALL BE FORWARDED TO THE BUILDING OFFICIAL FOR APPROVAL. THE SPECIAL INSPECTOR(S) SHALL COMPLETE AND SUBMIT ALL FORMS REQUIRED BY DETROIT, MI.

1. THE SPECIAL INSPECTOR(S) SHALL:

A. OBSERVE THE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED DRAWING AND SPECIFICATIONS.

B. FURNISH INSPECTION REPORTS TO THE ENGINEER OF RECORD AND BUILDING DEPARTMENT. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. THEN, IF NOT CORRECTED TO THE ENGINEER AND THE BUILDING DEPARTMENT.

C. SUBMIT TO THE ENGINEER OF RECORD AND THE BUILDING DEPARTMENT A SIGNED FINAL REPORT STATING THAT THE WORK WAS IN CONFORMANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE IBC.

2. SPECIAL INSPECTION NOTES:

A. CONTINUOUS SPECIAL INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF THE WORK UNLESS SPECIFICALLY NOTED BELOW.

B. WHERE FABRICATION OF STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES IS BEING PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP, CONTINUOUS SPECIAL INSPECTION IS REQUIRED DURING THE PERFORMANCE OF THE WORK EXCEPT AS ALLOWED IN MBC SECTION 1704.2.2 AND UNLESS SPECIFICALLY NOTED BELOW.

C. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE SPECIAL INSPECTOR(S) WITH ADVANCE NOTICE, NO LESS THAN ONE WORKING DAY, PRIOR TO THE INITIATION OF ANY WORK REQUIRED TO HAVE SPECIAL INSPECTIONS. ALL WORK PERFORMED WITHOUT REQUIRED SPECIAL INSPECTION WILL BE SUBJECT TO REMOVAL.

3. TYPES OF WORK REQUIRING SPECIAL INSPECTION ARE:

A. STRUCTURAL STEEL ELEMENTS OF BUILDINGS AND STRUCTURES AS REQUIRED BY IBC SECTION 1704.3 AND TABLE 1704.3, EXCEPT AS ALLOWED IN IBC SECTION 1704.3:

1. STRUCTURAL STEEL WELDING IN COMPLIANCE WITH AWS D1.1, MBC SECTION 1704.3.1, AND TABLE 1704.3:

a. DURING WELDING OF COMPLETE AND PARTIAL PENETRATION GROOVE WELDS, MULTI-PASS FILET WELDS, AND SINGLE PASS FILET WELDS GREATER THAN 5/16".

b. PERIODIC INSPECTION OF SINGLE PASS FILET WELDS LESS THAN OR EQUAL TO 5/16" AND FLOOR AND DECK WELDS.

2. REINFORCING STEEL WELDING IN COMPLIANCE WITH AWS D1.1, MBC SECTION 1704.3.1, AND TABLE 1704.3:

a. DURING WELDING OF REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT RESISTING FRAMES, BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS, AND SHEAR REINFORCEMENT.

b. PERIODIC VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706 AND PERIODIC INSPECTION OF ALL OTHER REINFORCING STEEL.

3. STRUCTURAL STEEL FRAME IN COMPLIANCE WITH DETAILS INDICATED ON APPROVED CONSTRUCTION DOCUMENTS INCLUDING BUT NOT LIMITED TO BRACING, STIFFENING, MEMBER LOCATIONS, AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION IN COMPLIANCE WITH MBC SECTION 1704.3.2 AND TABLE 1704.3.

4. INSTALLATION OF HIGH-STRENGTH BOLTING IN COMPLIANCE WITH AISC SPECIFICATIONS, MBC SECTION 1704.3.3, AND TABLE 1704.3:

a. DURING INSTALLATION OF SLIP CRITICAL CONNECTIONS

b. PERIODIC INSPECTION OF BEARING TYPE CONNECTIONS AND MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS, AND WASHERS.

B. CONCRETE CONSTRUCTION AS REQUIRED BY MBC SECTION 1704.4 AND TABLE 1704.4, EXCEPT AS ALLOWED IN MBC SECTION 1704.4:

1. PERIODIC INSPECTION OF REINFORCING STEEL MATERIAL AND PLACEMENT.

2. DURING SETTING OF BOLTS INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE.

3. PERIODIC INSPECTION FOR VERIFICATION OF PROPER USE OF REQUIRED MIX DESIGN, MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES

4. DURING PREPARATION OF REQUIRED STRENGTH TEST SPECIMENS AND PLACEMENT OF CONCRETE FOR PROPER APPLICATION OF TECHNIQUES.

C. MASONRY CONSTRUCTION AS REQUIRED BY MBC SECTION 1704.5 AND TABLE 1704.5.1, LEVEL 1 SPECIAL INSPECTION, EXCEPT AS ALLOWED IN IBC SECTION 1704.4:

1. AS MASONRY CONSTRUCTION BEGINS, PERIODIC INSPECTION OF PROPORTIONS OF SITE PREPARED MORTAR, COUFORMATION OF MORTAR JOINTS, AND LOCATION AND PLACEMENT OF REINFORCEMENT AND CONNECTORS.

2. PERIODIC INSPECTION DURING THE LAYING OF MASONRY UNITS AND PLACEMENT OF REINFORCING STEEL AS FOLLOWS:

a. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.

b. TYPE, SIZE, LOCATION OF ANCHORS, AND DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, AND OTHER CONSTRUCTION.

c. SPECIFIED SIZE, GRADE, AND TYPE OF REINFORCEMENT.

d. PROTECTION OF MASONRY DURING COLD OR HOT WEATHER.

3. WELDING OF REINFORCING BARS.

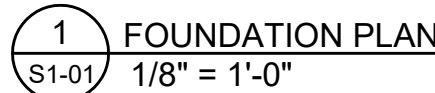
4. PRIOR TO GROUTING, PERIODIC INSPECTION TO ENSURE CLEAN GROUT SPACE, PLACEMENT OF REINFORCEMENT AND CONNECTIONS, PROPORTIONS OF SITE-PREPARED GROUT, AND CONSTRUCTION OF MORTAR JOINTS.

5. DURING GROUT PLACEMENT TO ENSURE COMPLIANCE WITH CODE PROVISIONS AND CONSTRUCTION DOCUMENTS.

6. DURING PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS.

7. PERIODIC INSPECTION TO VERIFY COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND APPROVED SUBMITTALS.

8. SPECIAL INSPECTION FOR EXISTING SITE SOIL CONDITIONS, DURING SITE REPAIR AND FILL PLACEMENT, TO ENSURE LOAD-BEARING REQUIREMENTS IN COMPLIANCE WITH IBC SECTION 1704.7 EXCEPT AS ALLOWED IN MBC SECTION 17



1. ALL DIMENSIONS SHALL BE COORDINATED WITH ARCHITECTURAL DRAWINGS.
2. SJ DESIGNATES SHRINKAGE CONTROL JOINT OR CONSTRUCTION UNIT RE: DETAIL 1/53-01
3. CONTRACTOR TO COORDINATE ALL CONDUIT AND PLUMBING SUB-UP LOCATIONS WITH ELECTRICAL AND PLUMBING PLANS
4. FTx INDICATES FOOTING MARK - RE: FOOTING SCHEDULE.
5. Cfx INDICATES CONTINUOUS FTG MARK - RE: FOOTING SCHEDULE.
6. Cx INDICATES COLUMN MARK - RE: COLUMN SCHEDULE.
7. SIDEWALKS ARE NOT SHOWN ON STRUCTURAL PLANS OR DETAILS. RE: ARCH AND OR CIVIL DRAWINGS FOR TYPICAL SIDEWALK INFO.
8. T/F/TG INDICATES TOP OF FOOTING ELEVATION.
9. FOOTINGS ARE CENTERED ON COLUMN LINES UCN
10. FROST DEPTH IS 3'-6"
11. ALL FOOTINGS AND GRADE BEAM CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.

STRUCTURAL FOOTING SCHEDULE			
TYPE	FOOTING SIZE	BOTTOM REINFORCEMENT	TOP REINFORCEMENT
CF1.2	1'-2"x3'-4" CONT	(2) #6 CONT	(2) #6 CONT
FT3	3'-6"x3'-6"x3'-4"	(4) #6	(4) #4
FT5	5'-0"x5'-0"x3'-4"	(6) #6	(6) #4
FT5A	5'-0"x5'-0"	SEE 11/S3-01	SEE 11/S3-01
FT23	2'-0"x3'-0"x3'-4"	(3) #6X2'-6" (4) #6X1'-6"	(3) #4X2'-6" (4) #4X1'-6"

RE: 8/S3-01 FOR BASEPLATE AND ANCHOR BOLT DETAILS

CONTRACTOR NOTE:
PRIOR TO COMMENCEMENT OF WORK OR FABRICATION OF COMPONENTS, CONTRACTOR SHALL INVESTIGATE AND VERIFY IN THE FIELD ALL CONDITIONS, SIZES, DIMENSIONS, AND ELEVATIONS OF THE EXISTING CONSTRUCTION. ALL DISCREPANCIES BETWEEN FIELD-VERIFIED CONDITIONS, DIMENSIONS AND ELEVATIONS AND THOSE INDICATED ON THE DRAWINGS SHALL BE IMMEDIATELY MADE KNOWN TO THE ARCHITECT IN WRITING. THE USE OF (V.I.F.) OR (+/-) OR OTHER SIMILAR NOTES AT CERTAIN LOCATIONS ON THE DRAWINGS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR VERIFYING ALL CONDITIONS DESCRIBED ABOVE.

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PHASE OF WORK

Civil:

Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

giffels
webster

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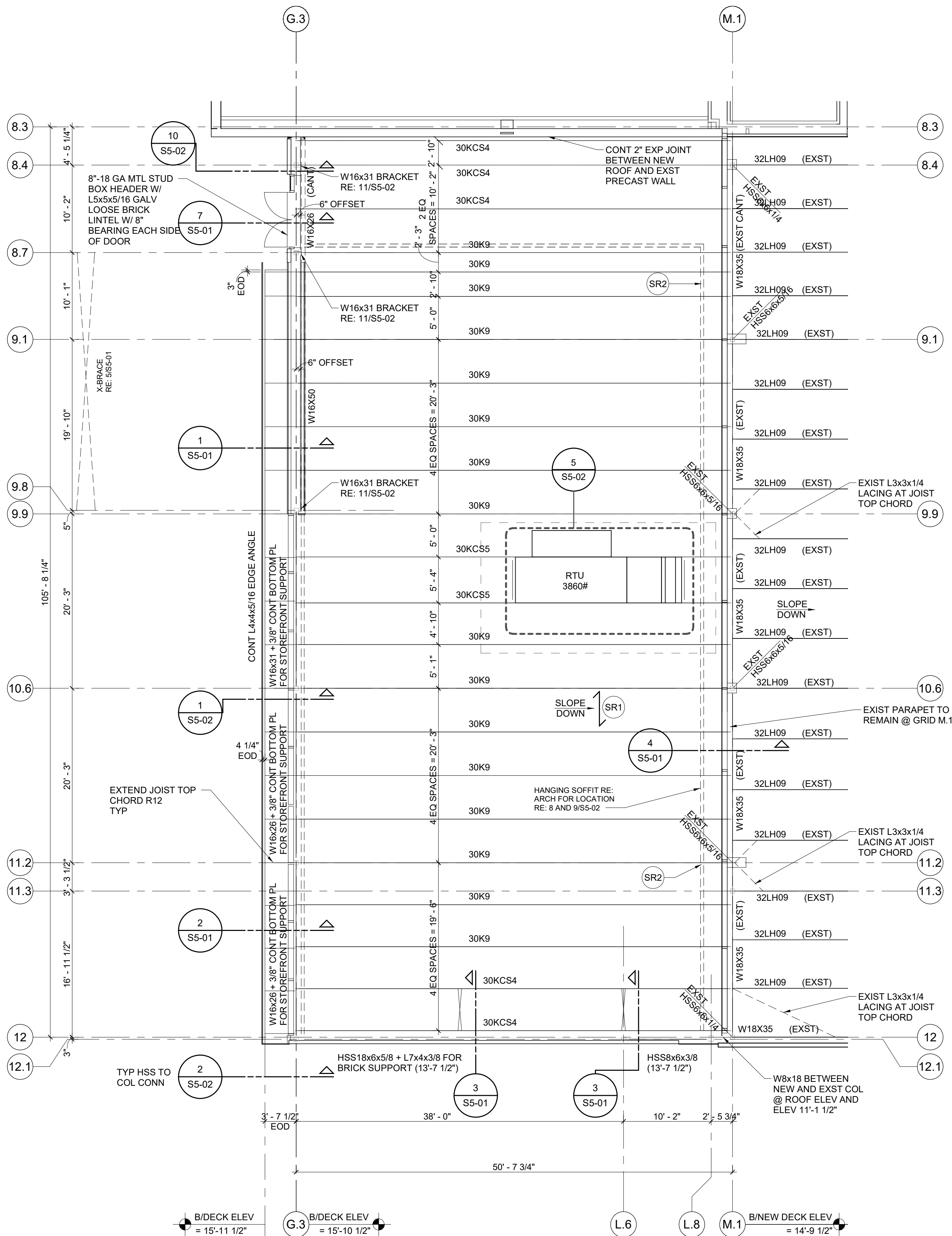
Drawing Title
FOUNDATION PLAN

Scale: As indicated

Project No. JCDT18-0444

Drawing No.

S1-01



ROOF FRAMING NOTES

1. THE DIMENSION LOCATING THE RTU IS APPROXIMATE (+/-). CONTRACTOR SHALL LOCATE ALL RTU CURBS AT NEAREST JOIST PANEL POINT. IF CURB CANNOT BE LOCATED WITHIN 3" OF JOIST PANEL POINT, REINFORCE JOIST AS REQUIRED BY DETAIL 3/S5-02.
2. TOP OF BEAM DESIGNATED (XX-X") ABOVE FINISHED FLOOR.
3. ALL DIMENSIONS SHALL BE COORDINATED WITH ARCH DWGS.
4. RE: 4/S5-02 FOR ANGLE SPLICE DETAIL.
5. --- INDICATES DIRECTION OF DECK SPAN.
6. JOIST BRIDGING SHALL BE DESIGNATED AND INSTALLED PER SJI SPECIFICATIONS RE: 3/S5-01 FOR ADDITIONAL BRIDGING. JOIST BRIDGING SHALL BE DESIGNATED TO RESIST A NET UPLIFT FROM NET UPLIFT TABLE.
7. --- INDICATES SUSPENDED SOFFIT RE: ARCH FOR LOCATION RE: 8 & 9 S5-02 FOR DETAILS.
8. --- INDICATES METAL STUD PARTITION WALL TO UNDERSIDE OF METAL DECK RE: ARCH FOR LOCATION RE: 6 & 7 S5-02 FOR DETAILS.
9. RE: SHEET S0-01 FOR GENERAL NOTES.
10. JOISTS SHALL BE DESIGNED FOR LOADS NOTED ON DRAWINGS.

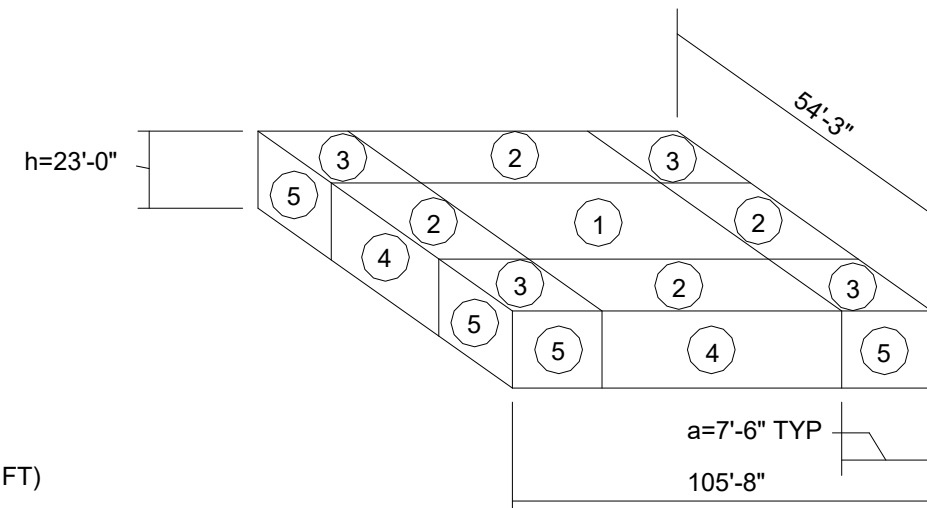
STRUCTURAL ROOF KEYNOTES

SR1	1 1/2"-22 GA PAINTED WIDE RIB ROOF DECK. FASTEN PER 2/S2-01.
SR2	K SERIES JOISTS SHALL BE DESIGNED FOR 50 pcf VERT DUE TO SOFFIT GRAVITY DEAD LOAD. RE: 8 AND 9/S5-02.
SR3	PARTITION WALL FRAMES TO BOTTOM OF DECK. RE: 6 AND 7/S5-02.

COMPONENTS AND CLADDING
DESIGN WINDLOAD PRESSURE (ASD):

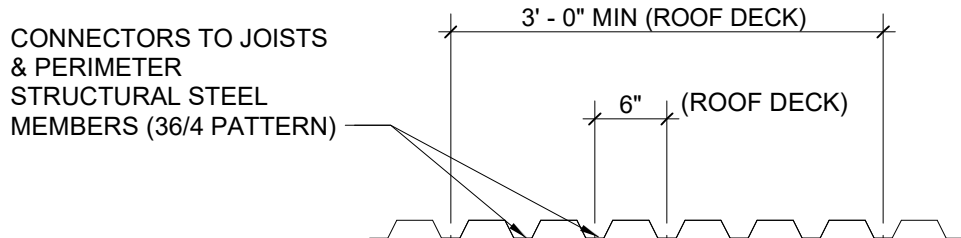
- ROOF
- 1 +7 psf
 - 2 -18 psf
 - 3 +7 psf
 - 4 -30 psf
 - 5 +7 psf
 - 6 -45 psf
- WALLS
- 1 +18 psf
 - 2 -19 psf
 - 3 +18 psf
 - 4 -24 psf
- OVERHANG
- 45 psf (UPLIFT)

* PLUS AND MINUS SIGNS INDICATE PRESSURES ACTING TOWARD AND AWAY FROM SURFACES, RESPECTIVELY



WALL PRESSURE (PER ASCE ANALYTICAL PROCEDURE)			
WINDWARD (ASD)		LEEWARD (ASD)	
0'-15'	6.8 PSF	6.4 PSF	
20'	7.4 PSF	6.4 PSF	

WIND NET UPLIFT (ASD) (PSF)			
ROOF DECK		ROOF JOISTS	
TYPICAL	WIN 6'-9" OF PERIMETER	TYPICAL	WIN 8'-0" OF PERIMETER
15	42	9.5	6



CONNECTOR PATTERN DIAGRAM

- NOTES:
1. POWDER ACTUATED FASTENERS SHALL NOT BE USED IF BASE MATERIAL (e.g. TOP CHORD OF JOIST) IS LESS THAN 1/4" THICK.
 2. AIR ACTUATED FASTENERS SHALL NOT BE USED IF BASE MATERIAL IS LESS THAN 1/8" THICK.

DIAPHRAGM SCHEDULE

AREA	DECK TO STEEL MEMBER CONNECTOR TYPE	NUMBER OF SIDE LAP CONNECTORS (#10-16 TEK SCREWS)
ROOF	POWDER ACTUATED HILTI X-HSN 24	4 CONNECTORS @ 5 EQUAL SPACES
ROOF	AIR ACTUATED PNEUTEK SDK63 SERIES	3 CONNECTORS @ 4 EQUAL SPACES
ROOF	SIMPSON STRONG - TIE XL SCREWS	2 CONNECTORS @ 3 EQUAL SPACES

2 DIAPHRAGM SCHEDULE
S2-01 3/4" = 1'-0"

KCS JOIST WEB CONFIGURATION TO MATCH WEB CONFIGURATION OF K-SERIES JOISTS SPECIFIED TO FACILITATE CLEAR DUCT RUNS

DATE	ISSUED FOR	REV
04/03/2019	OWNER REVIEW	1
05/14/2019	OWNER REVIEW	2
06/03/2019	PERMIT SET	3

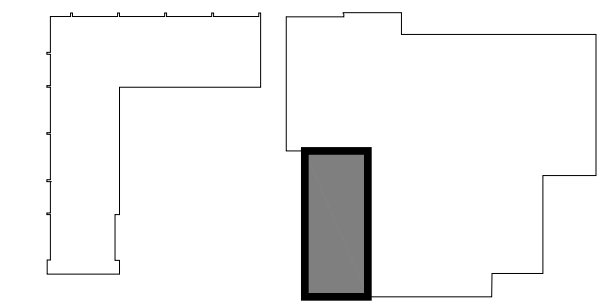
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
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Electrical: NORR

Seal(s)

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webster

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Project Manager AMY NOLFF	BIM Lead PROJECT BIM LEAD
Design Lead GM	Drawn MK
Project Leader GM	Checked GM

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655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
ROOF FRAMING PLAN

Scale: As indicated

Project No. JCDT18-0444

Drawing No. S2-01

1
S3-01

TYPICAL SLAB ON GRADE
DETAIL AND SCHEDULE
1/2" = 1'-0"

2 COLUMN ISOLATION JOINT
S3-01 1/2" = 1'-0"

3 TYPICAL FOOTING
CORNER REINFORCEMENT
S3-01 1/2" = 1'-0"

4 EXTERIOR COLUMN FOOTING
S3-01 1/2" = 1'-0"

SECTION AT EXTERIOR WALL
@ METAL STUD WALL

5
S3-01 $1/2" = 1'-0"$

SECTION AT EXTERIOR WALL AT
STOREFRONT

7
S3-01

TYPICAL SECTION AT
ENTRANCE WITH EXIT SIDEWALK

$1\frac{1}{2}" = 1'-0"$

8 BASE PLATE DETAIL
S3-01 1" = 1'-0"

9 EXTERIOR FNDN @ EXST BUILDING
S3-01 1/2" = 1'-0"

10 TYP STEP FOOTING DETAIL
S3-01 1/2" = 1'-0"

11 EXTERIOR FNDN @ EXST BUILDING
S3-01 1/2" = 1'-0"

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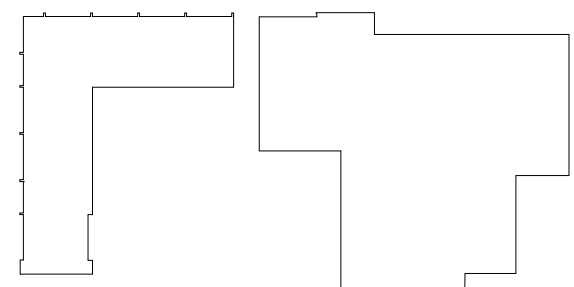
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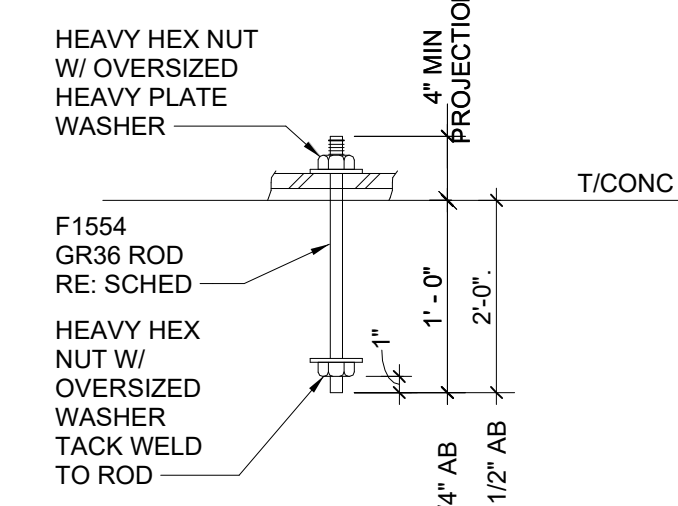
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Seal(s)



TYP ANCHOR ROD



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Project Manager AMY NOLFF	BIM Lead PROJECT BIM LEAD
Design Lead GM	Drawn MK
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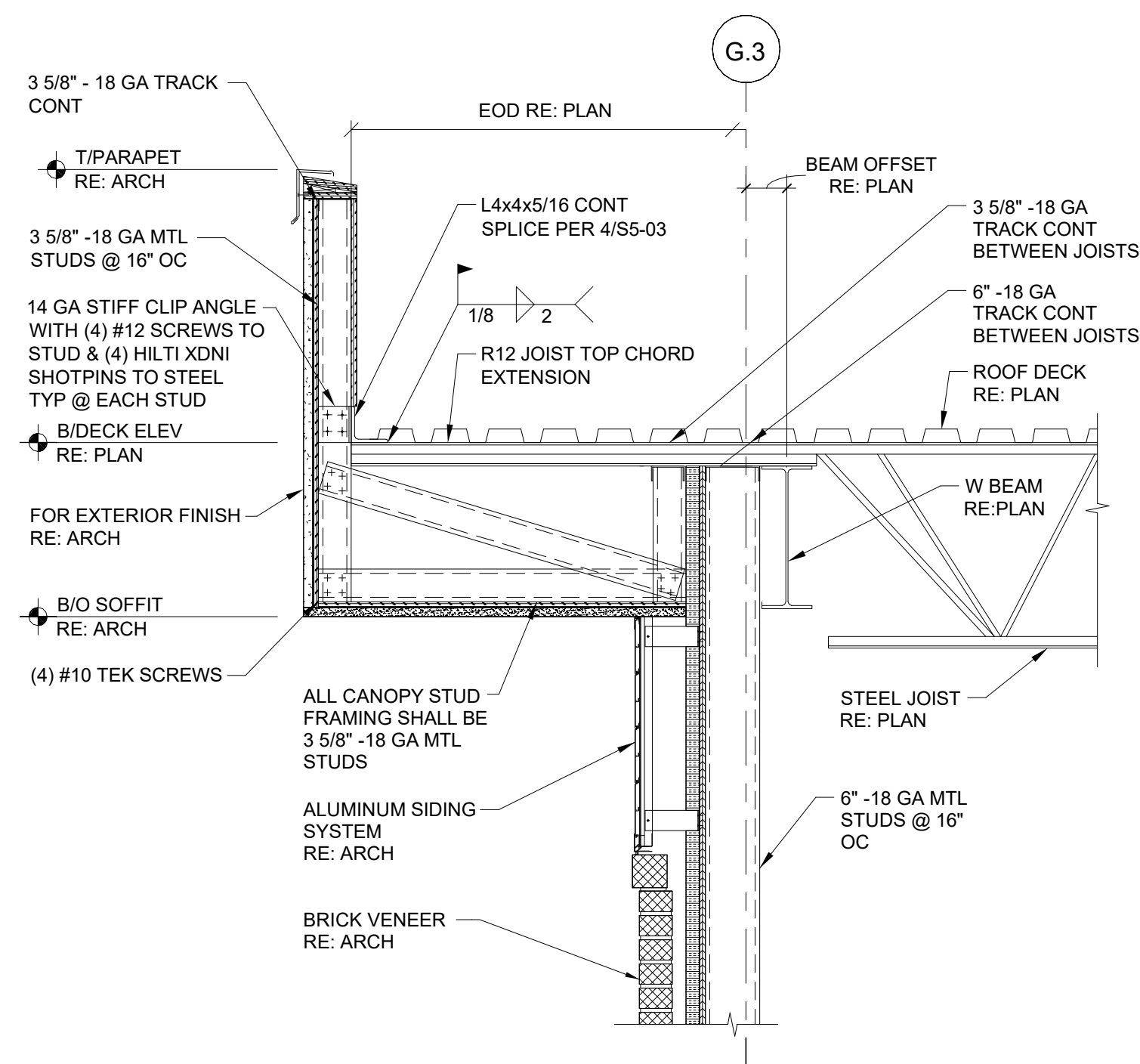
FOUNDATION SECTIONS & DETAILS

Scale: As indicated

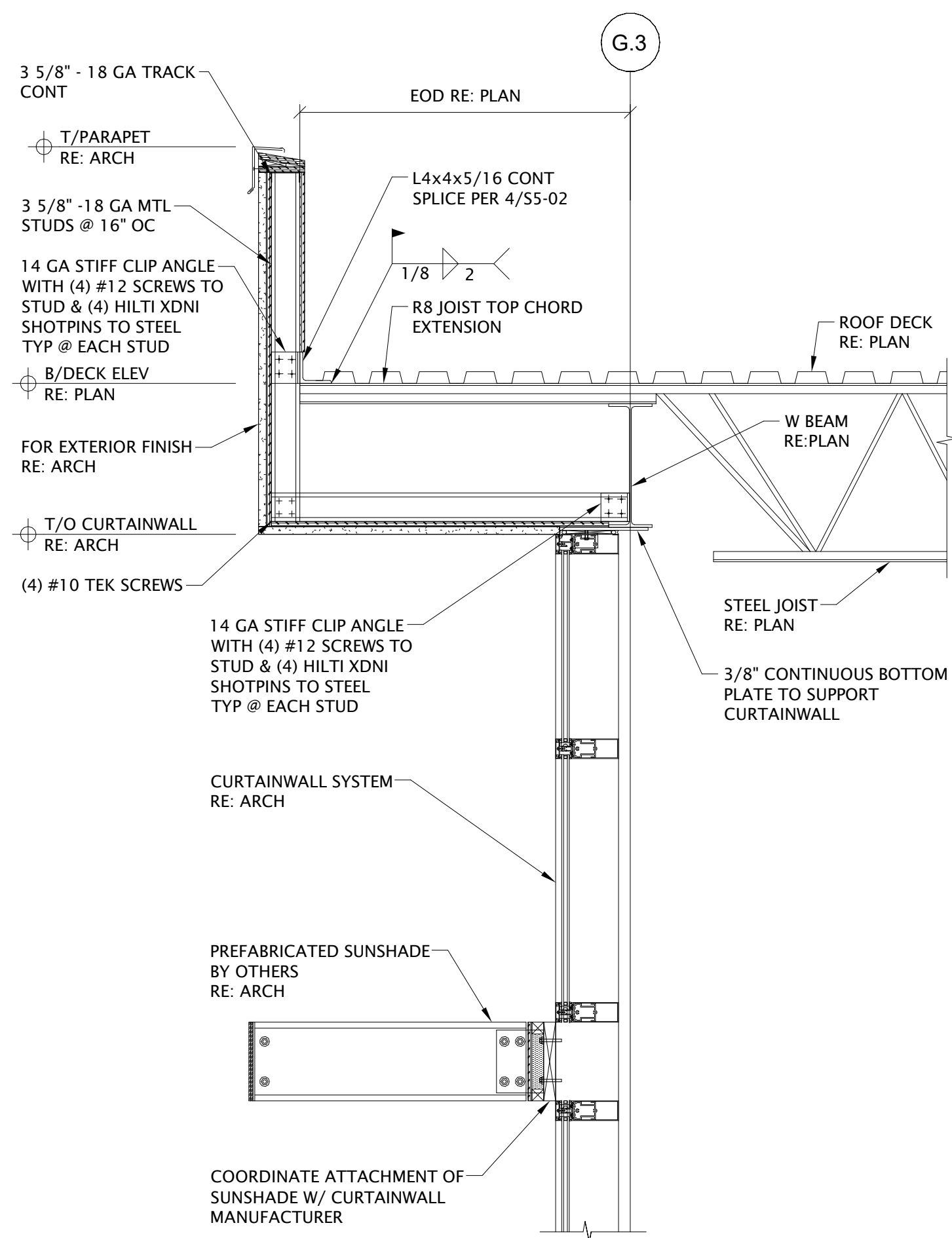
Project No. JCDT18-0444

Drawing No

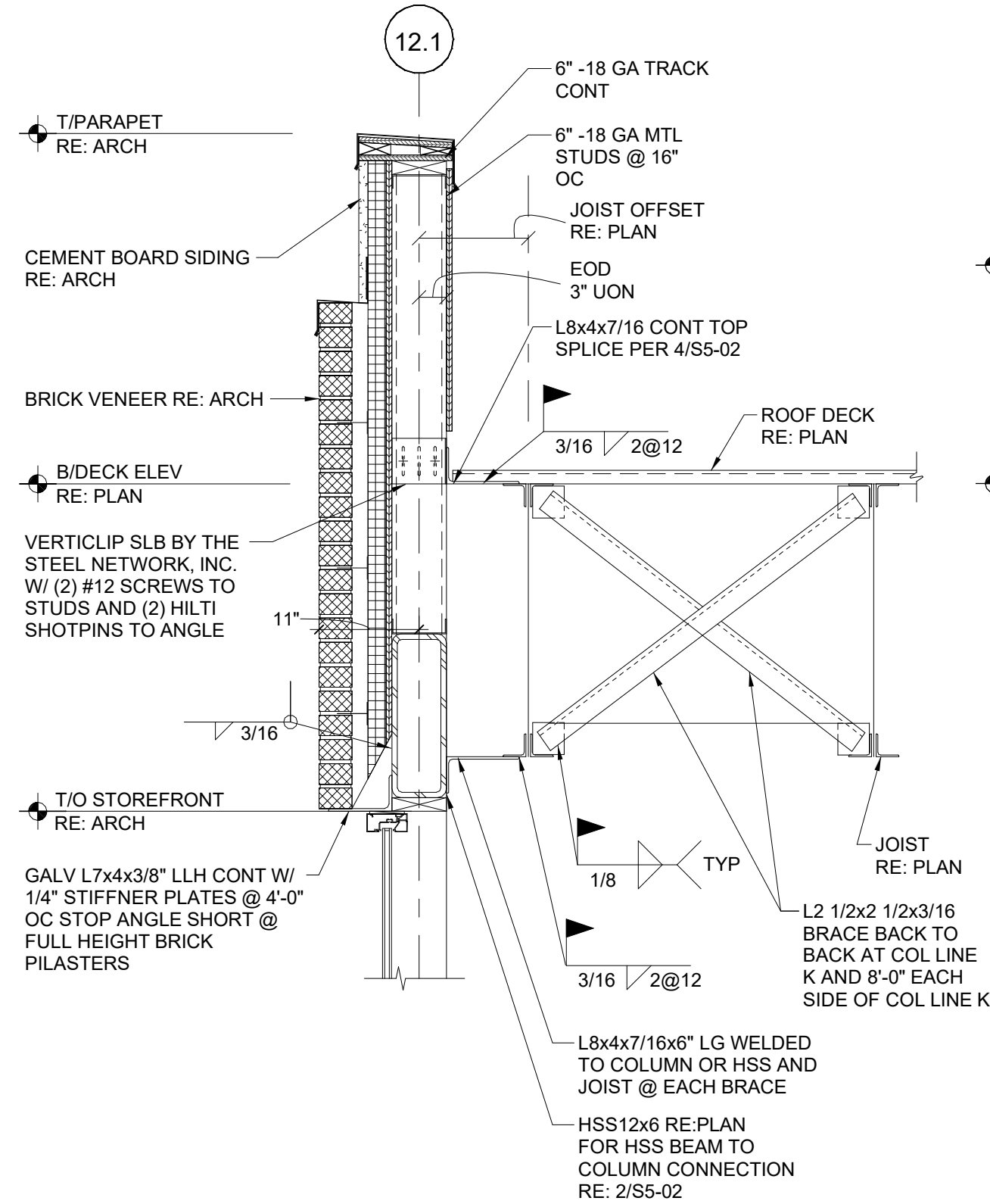
S3-01



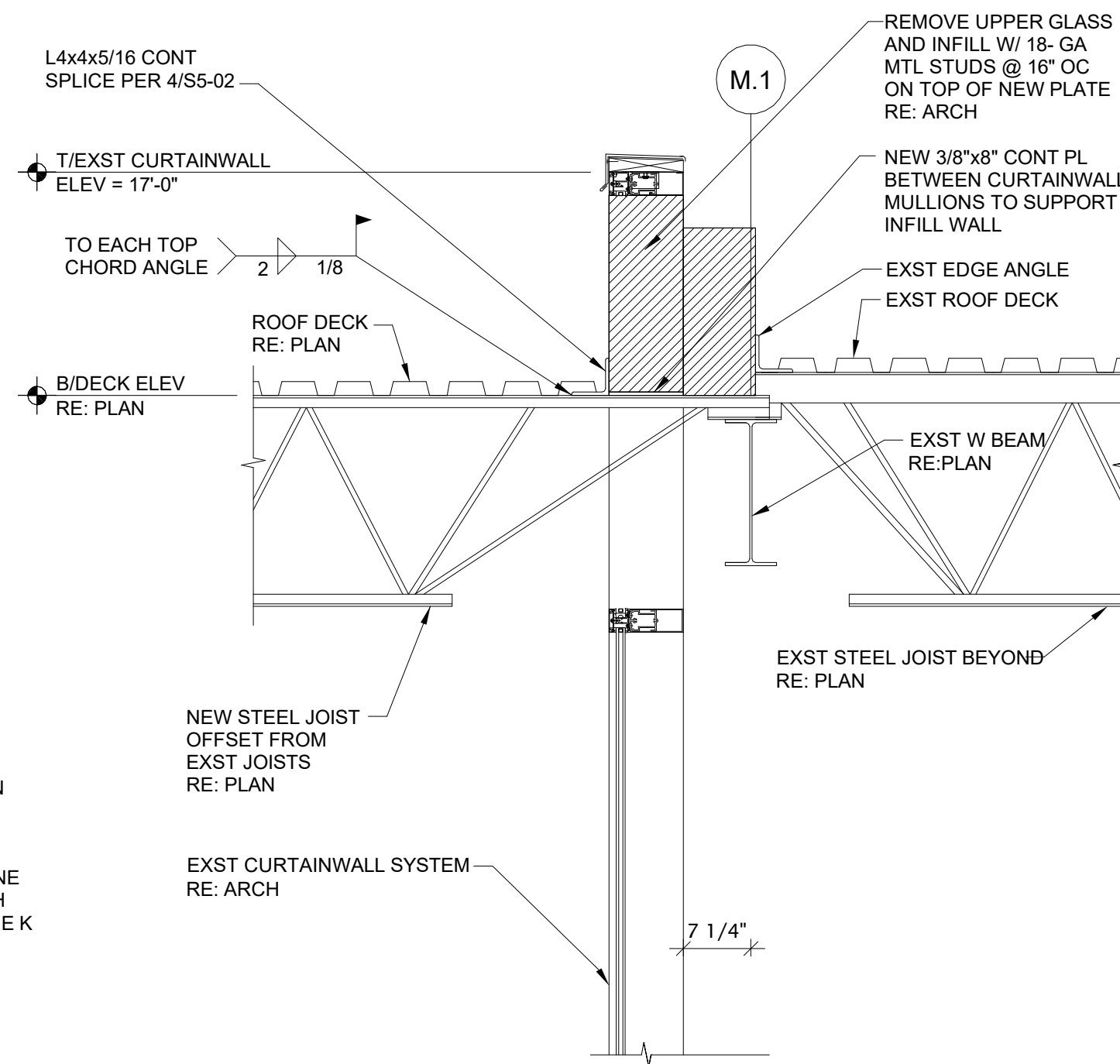
1 JOIST BEARING @ STEEL BEAM
S5-01 3/4" = 1'-0"



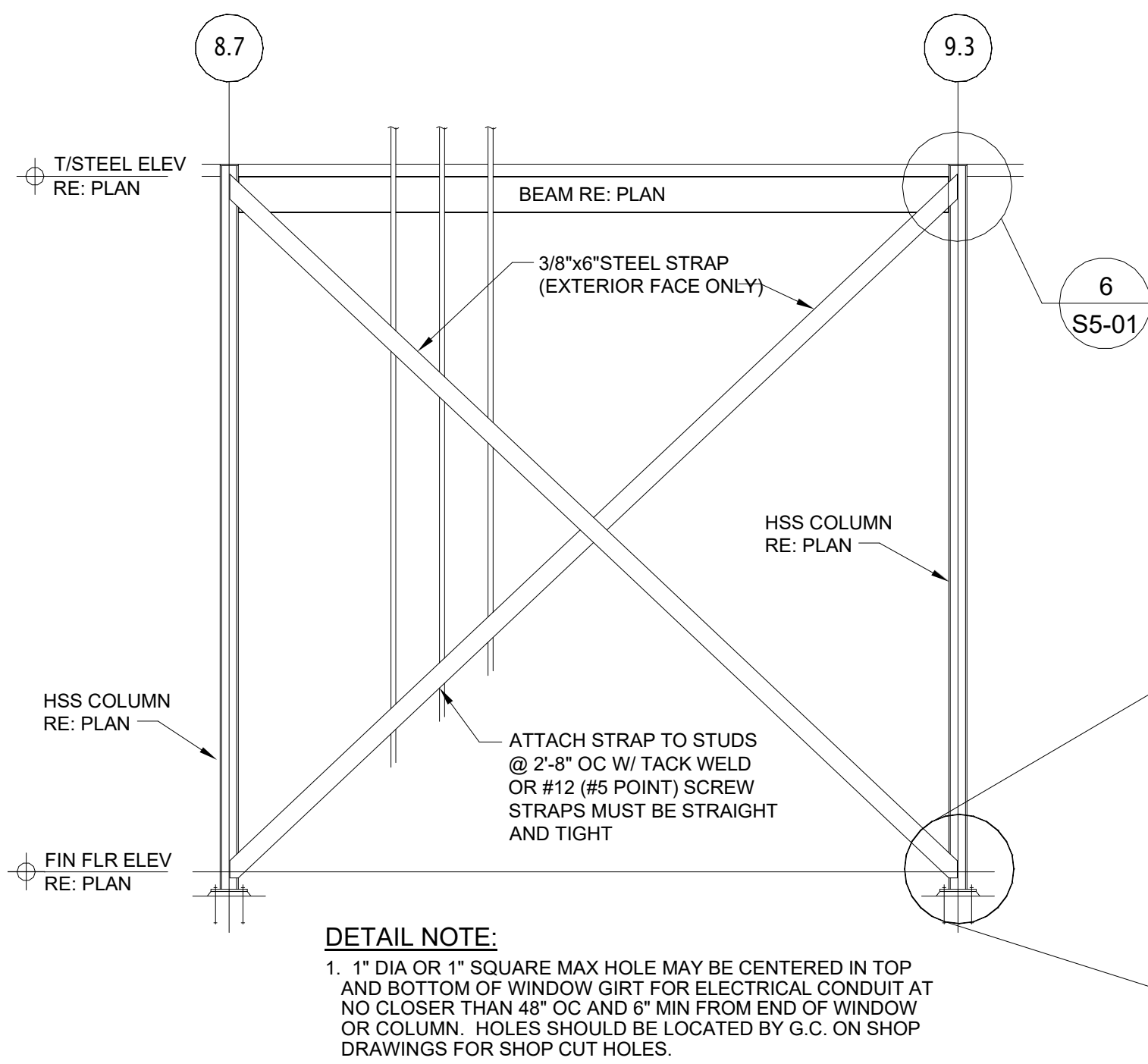
2 JOIST BEARING SECTION @ CURTAINWALL
S5-01 3/4" = 1'-0"



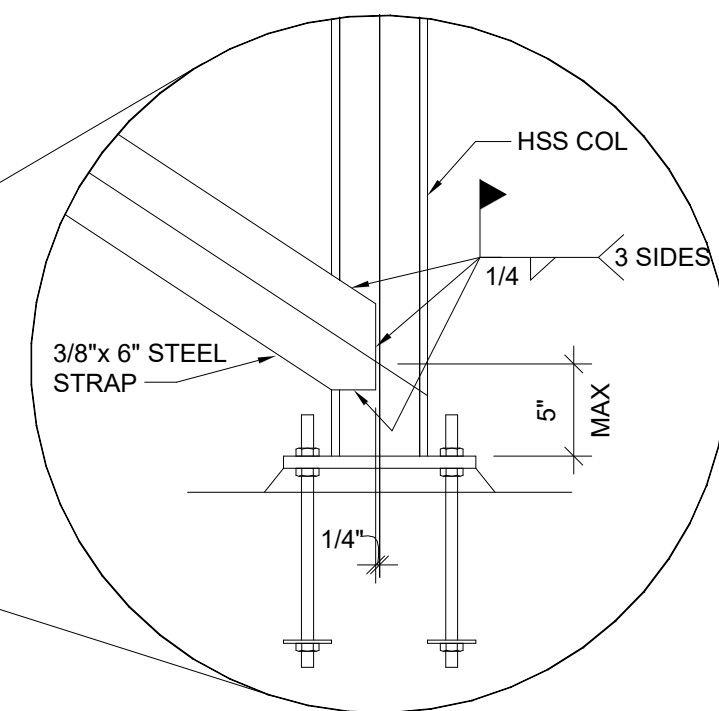
3 JOIST BRIDGING @ STOREFRONT
S5-01 3/4" = 1'-0"



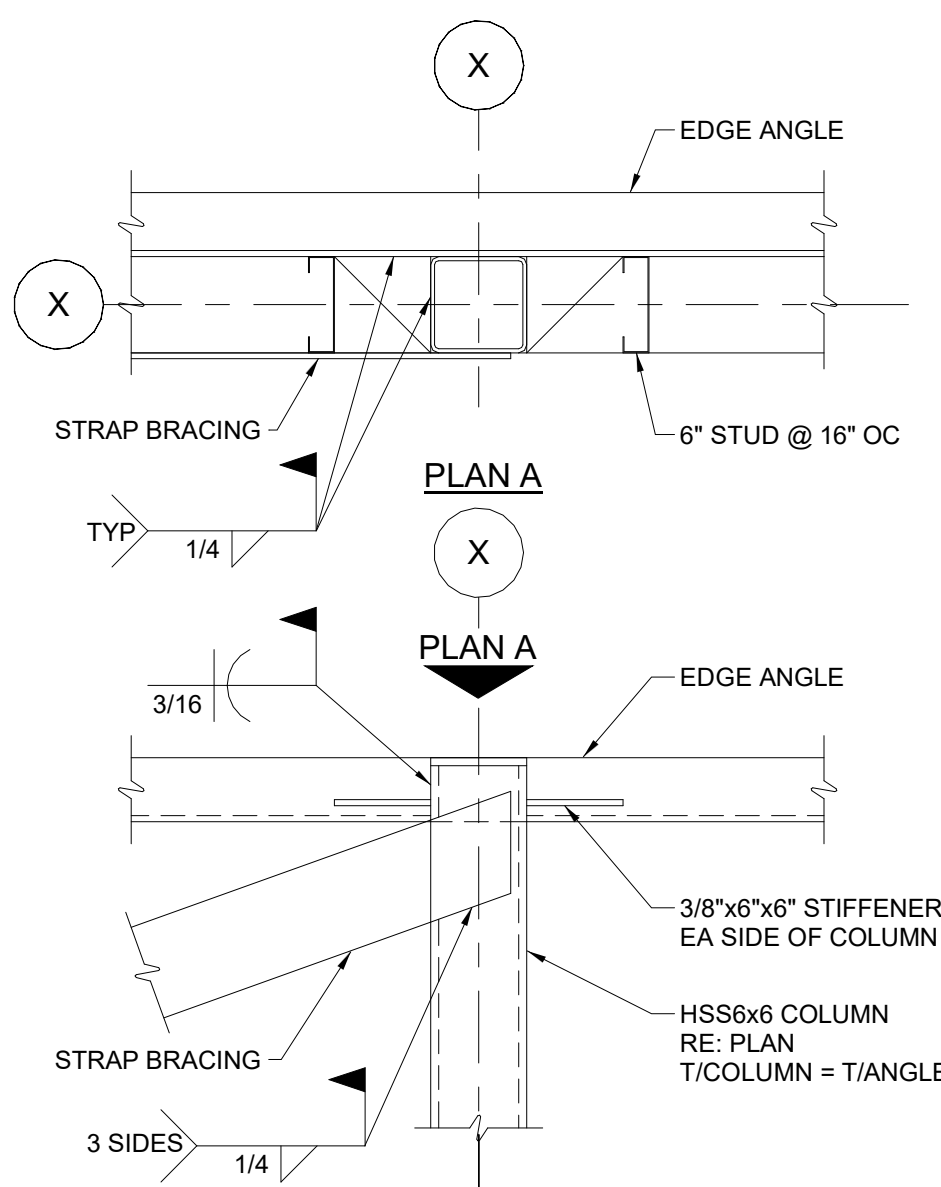
4 JOIST BEARING @ EXST STEEL BEAM
S5-01 3/4" = 1'-0"



5 ELEVATION AT X-BRACE
S5-01 1/4" = 1'-0"



6 X-BRACE TO COLUMN CONNECTION
S5-01 1" = 1'-0"



7 JOIST BEARING @ STEEL BEAM W/ STOREFRONT
S5-01 3/4" = 1'-0"

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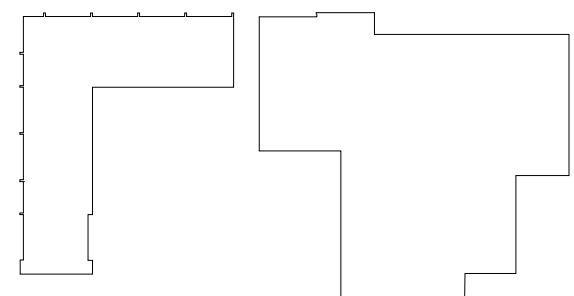
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Project
**WSU CAFETERIA
ADDITION**
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
SECTIONS AND DETAILS

Scale: As indicated

Project No. JCDT18-0444

Drawing No.

S5-01



M00-01

FIRE PROTECTION GENERAL NOTES

3. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL INTENT OF THE WORK. PROVIDE FIRE PROTECTION SYSTEMS COMPLETE, PER APPLICABLE CODES, PER NFPA, PER WAYNE STATE UNIVERSITY FACILITIES AND PLANNING MANAGEMENT DIVISION, AND PER REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION INCLUDING ALL PIPING, OFFSETS, FITTINGS, DRAINS, VALVES, SPRINKLER HEADS, ETC. AS REQUIRED FOR A COMPLETE OPERABLE SYSTEM.
2. FIRE PROTECTION CONTRACTOR SHALL COORDINATE WORK WITH THE WORK OF ALL OTHER TRADES.
3. MINIMUM RUN-OUT PIPE SIZE TO SPRINKLER HEADS SHALL BE 1".
4. FIRE PROTECTION WATER SUPPLY SOURCE SHALL BE PER NFPA 24.
5. CONTRACTOR SHALL MAKE APPLICATION AND PAY FOR ALL INSPECTION, PERMIT AND LICENSE REQUIRED BY THE LOCAL AUTHORITY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A COMPLETE TURN KEY INSTALLATION USING UNDERWRITER LABORATORIES UL LISTED PRODUCTS INCLUDING DESIGN, OBTAINING APPROVALS AND COORDINATION WITH OTHER TRADES.
7. INSTALL TO MEET NFPA 13 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS AND NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE. WAYNE STATE UNIVERSITY RISK AND MANAGEMENT DEPARTMENT, WAYNE STATE UNIVERSITY FIRE SAFETY MANUAL AND THE LOCAL AUTHORITY HAVING JURISDICTION REQUIREMENTS.
8. NORR DESIGN DOCUMENTS ARE FOR PERMIT PURPOSES.
9. THE DESIGN IS NOT INTENDED TO LIMIT THE CONTRACTOR FROM PROVIDING ANOTHER DESIGN THAT MAY BE MORE ECONOMICAL AND STILL MEET THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
10. HYDRAULIC CALCULATIONS:
 - A. SUBMIT WORKING PLANS PER NFPA 13 AND HYDRAULIC CALCULATIONS USING HYDRAULIC CALCULATION PROCEDURES IN ACCORDANCE WITH NFPA 13. SIGNED AND SEALED BY A REGISTERED PROFESSIONAL FIRE PROTECTION ENGINEER TO THE AUTHORITIES THAT HAVE JURISDICTION.
 - B. WORKING PLANS AND COMPUTERIZED HYDRAULIC CALCULATIONS SHALL BE PREPARED BY A MINIMUM LEVEL 3 N.I.C.E.T. CERTIFIED SPRINKLER LAYOUT DESIGNER. DRAWINGS SHALL BE SIGNED AND THE N.I.C.E.T. CERTIFICATE NUMBER INDICATED ON PLAN. ALL DRAWINGS, INCLUDING AS-BUILTS, SHALL BE SUBMITTED ON DISC USING AUTO CAD.
 - C. THE HYDRAULIC CALCULATIONS SHALL INCLUDE THE PRESSURE DROP THROUGH ALL PIPE, FITTINGS AND DEVICES, INCLUDING THE PRESSURE DROP THROUGH THE REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER, FROM THE MOST HYDRAULIC REMOTE POINT OF THE SPRINKLER SYSTEM TO THE LOCATION OF THE TEST HYDRANT.
 - D. THE HYDRAULIC CALCULATIONS SHALL BE BASED ON THE LATEST FLOW TEST DATA.
11. FIRE PROTECTION CONTRACTOR SHALL PROVIDE A GUARANTEE COVERING ALL DESIGN, INSTALLATION, MATERIAL AND WORKMANSHIP FOR ONE YEAR FOLLOWING DATE OF ACCEPTANCE.
12. PIPING SHALL BE SLOPED TO DRAIN BACK TO SPRINKLER RISER. AUXILIARY DRAINAGE IN ACCORDANCE WITH NFPA 13 SHALL BE PROVIDED FOR ALL TRAPPED SECTIONS OF PIPE.
13. SPRINKLER DESIGN SHALL BE IN CONFORMANCE WITH NFPA 13 AND THE AUTHORITY HAVING JURISDICTION.
14. SPRINKLER DESIGN:
 - A. PROVIDE AUTOMATIC SPRINKLER BELOW OBSTRUCTIONS 48 INCHES AND WIDER. (PLATFORMS, DUCTWORK, STAIRWAYS, UNIT HEATER, ETC).
 - B. THE SPRINKLER DESIGN SHALL BE BASED ON LISTED SPRINKLERS. AT THE CONTRACTOR'S OPTION, LISTED QUICK-RESPONSE SPRINKLERS MAY BE USED, IN CONFORMANCE WITH NFPA 13 AND THE AUTHORITY HAVING JURISDICTION.
 - C. SPRINKLERS WITH A TEMPERATURE RATING OF 135 F TO 170 F ARE CLASSIFIED AS ORDINARY TEMPERATURE RATED SPRINKLERS. SPRINKLERS WITH A RATING OF 175 F TO 225 F ARE CLASSIFIED AS INTERMEDIATE TEMPERATURE RATED SPRINKLERS.
15. CONTRACTOR SHALL MAKE PRESSURE AND FLOW TEST PRIOR TO SYSTEM DESIGN. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
16. THE FOLLOWING INFORMATION SHALL BE PROVIDED BY THE FIRE PROTECTION CONTRACTOR AT SUBMITTAL OF SHOP DRAWINGS AND CALCULATIONS:
 - A. STATIC PRESSURE PSI: XX
 - B. RESIDUAL PRESSURE PSI: XX
 - C. FLOW GPM: XXXX
 - D. FLOW TEST HYDRANT LOCATIONS: Hyd. #1-location, Hyd. #2_location
 - E. DATE OF TEST: XX-XX-XXXX
 - F. TIME OF TEST: XXXX
 - G. RESPONSIBLE PARTY CONDUCTING TEST: XXXX
 - H. HYDRANT OUTLET DISCHARGE COEFFICIENT: XXX
17. PIPE ALL DRAINS AND INSPECTOR'S TEST TO OUTSIDE, OR DISCHARGE TO A DRAIN APPROVED BY THE OWNER FOR SPRINKLER DISCHARGE.

FIRE PROTECTION DESIGN CRITERIA

SPACE TYPE	NFPA 13 HAZARD CLASSIFICATION	DESIGN DENSITY (GPM/SQ FT) (AREA)	SPRINKLER HEAD TEMPERATURE RATING (DEG °F)
DINING AREA	ORDINARY HAZARD GROUP 2	(0.20) (1500)	165
RESTROOMS	LIGHT HAZARD	(0.10) (1500)	165

HVAC GENERAL NOTES

3. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK.
2. PROVIDE SHEET METAL SYSTEMS COMPLETE PER SPECIFICATION, SMACNA STANDARDS, AND PER APPLICABLE CODES INCLUDING ALL NECESSARY OFFSETS, FITTINGS, SPECIAL RADIUS OR MITERED ELBOWS WHICH ARE REQUIRED DUE TO SPACE CONSTRAINTS OR OTHER CONDITIONS.
3. MECHANICAL CONTRACTOR SHALL COORDINATE WORK WITH THE WORK OF ALL OTHER TRADES. VERIFY ALL CLEARANCES PRIOR TO THE FABRICATION OF ANY WORK.
4. DUCTWORK SHALL NOT BE LOCATED OVER ELECTRICAL EQUIPMENT/PANELS. PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT. DUCTWORK SHALL NOT INTERFERE WITH ELECTRICAL EQUIPMENT CLEARANCE.
5. THE CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS SUPPORTING STEEL, ETC. FOR THE PROPER INSTALLATION OF ALL MECHANICAL SYSTEMS.
6. COORDINATE FLOOR, WALL, ROOF PENETRATIONS, LOUVER SIZES, PAD LOCATIONS ETC. WITH ARCHITECTURAL TRADES.
7. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF GRILLES, REGISTERS, AND DIFFUSERS.
8. COORDINATE AND PROVIDE ACCESS DOORS IN HARD CEILING AREAS FOR ACCESS TO BALANCING DAMPERS, ETC. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES. PROVIDE 4" DIAMETER CONCEALED CEILING BOX FOR CABLE OPERATED DAMPERS FROM ROUND CABLE DRIVE ZONE CONTROL DAMPER.
9. PAINT ALL VISIBLE INSIDE SURFACES OF GRILLES, REGISTERS AND DIFFUSERS FLAT BLACK.
10. BRANCH DUCTWORK TO GRILLES, REGISTERS AND DIFFUSERS SHALL BE THE SAME SIZE AS THE GRILLE, REGISTER OR DIFFUSER NECK SIZE WHERE NO DUCT SIZE IS INDICATED ON PLAN.
11. MAXIMUM LENGTH OF FLEXIBLE DUCT SHALL BE 5'-0".
12. ALL WIRING AND/OR TUBING TO THERMOSTATS SHALL BE ROUTED CONCEALED. WIREMOLD IS NOT ACCEPTABLE. COORDINATE THERMOSTAT LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO WALL CONSTRUCTION.
13. MOUNT THERMOSTATS AT 56" AFF UNLESS NOTED OTHERWISE.
14. COLORS OF EXPOSED UNITS SHALL BE SELECTED BY THE ARCHITECT. COLORS SHALL BE MANUFACTURERS STANDARD OR CUSTOM COLOR AS REQUESTED. SUBMIT COLOR CHARTS WITH SHOP DRAWINGS.
15. INSTALL FIRE DAMPER IN ALL FLOOR PENETRATIONS.
16. BRANCH DUCTS TO DIFFUSERS SHALL BE 45 DEGREE BOOT TAP FROM SIDE OF MAIN
17. PROVIDE VOLUME DAMPERS IN ALL BRANCH DUCTS TO DIFFUSERS, EXHAUST GRILLES, ETC.
18. ALL EXPOSED DUCT WORK SHALL BE INSULATED PER WAYNE STATE UNIVERSITY DESIGN AND CONSTRUCTION STANDARDS.

MECHANICAL GENERAL NOTES

1. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK.
2. CONTRACTOR TO FOLLOW WAYNE STATE UNIVERSITY DESIGN AND CONSTRUCTION STANDARDS.
3. CONTRACTOR SHALL COORDINATE WORK WITH THE WORK OF ALL OTHER TRADES. VERIFY ALL CLEARANCES PRIOR TO THE FABRICATION OF ANY WORK.
4. THE CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS SUPPORTING STEEL, ETC. FOR THE PROPER INSTALLATION OF ALL MECHANICAL SYSTEMS.
5. COORDINATE ROOF PENETRATION LOCATIONS WITH ARCHITECTURAL AND STRUCTURAL TRADES.
6. FOR EQUIPMENT VALVING, COMPONENT, AND PIPING ARRANGEMENT, REFER TO PIPING DIAGRAMS AND DETAILS.
7. PIPING SHALL NOT BE INSTALLED IN A LOCATION THAT RESTRICTS THE ACCESS TO MECHANICAL DEVICES REQUIRING ACCESS.
8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 36" IN FRONT OF ALL ELECTRICAL DISCONNECTS.
9. CONTRACTOR SHALL OBSERVE ALL MANUFACTURER CLEARANCE AND INSTALLATION GUIDELINES FOR MECHANICAL EQUIPMENT.
10. FALL PROTECTION BY OTHERS MAINTAIN 42" HIGH RAILING OR KEEP EQUIPMENT 10'-0" AWAY FROM EDGE OF BUILDING.
11. ALL MECHANICAL EQUIPMENT, PIPING AND DUCTWORK SHALL BE MOUNTED ON OR SUSPENDED FROM VIBRATION ISOLATORS TO REDUCE THE TRANSMISSION OF VIBRATION TO THE BUILDING STRUCTURE. VIBRATION ISOLATORS SHALL BE SELECTED IN ACCORDANCE WITH THE WEIGHT DISTRIBUTION SO AS TO PRODUCE REASONABLY UNIFORM DEFLECTIONS. REFER TO WAYNE STATE UNIVERSITY DESIGN AND CONSTRUCTION STANDARDS.
12. ALL DIRECT BURIAL MECHANICAL PIPING SHALL INCLUDE A CONTINUOUS CONDUCTIVE TAPE SUITABLY BURIED IN THE TRENCH ABOVE THE PIPING.

HVAC PIPING GENERAL NOTES

1. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK.
2. PROVIDE PIPING SYSTEMS COMPLETE PER SPECIFICATION, WAYNE STATE UNIVERSITY DESIGN AND CONSTRUCTION STANDARDS, AND PER APPLICABLE CODES INCLUDING ALL NECESSARY OFFSETS, AND FITTINGS WHICH ARE REQUIRED DUE TO SPACE CONSTRAINTS OR OTHER CONDITIONS.
3. MECHANICAL CONTRACTOR SHALL COORDINATE WORK WITH THE WORK OF ALL OTHER TRADES. VERIFY ALL CLEARANCES PRIOR TO THE FABRICATION OF ANY WORK.
4. PIPING SHALL NOT BE LOCATED OVER ELECTRICAL EQUIPMENT/PANELS. PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT. PIPING SHALL NOT INTERFERE WITH ELECTRICAL EQUIPMENT CLEARANCE.
5. PIPING SHALL NOT BE INSTALLED IN A LOCATION THAT RESTRICTS THE ACCESS TO MECHANICAL DEVICES REQUIRING ACCESS.
6. THE CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS SUPPORTING STEEL, ETC. FOR THE PROPER INSTALLATION OF ALL MECHANICAL SYSTEMS.
7. COORDINATE FLOOR, WALL, AND ROOF PENETRATIONS WITH ARCHITECTURAL TRADES.
8. FOR EQUIPMENT VALVING, COMPONENT, AND PIPING ARRANGEMENT, REFER TO PIPING DIAGRAMS AND DETAILS.
9. CONTRACTOR TO SUBMIT VALVE SCHEDULE PER WAYNE STATE UNIVERSITY DESIGN AND CONSTRUCTION STANDARDS.
10. CONTRACTOR TO APPLY MECHANICAL SYSTEMS AND EQUIPMENT IDENTIFICATION PER WAYNE STATE UNIVERSITY DESIGN AND CONSTRUCTION STANDARDS.

PLUMBING GENERAL NOTES

1. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. PROVIDE PIPING SYSTEMS COMPLETE PER SPECIFICATION, WAYNE STATE UNIVERSITY DESIGN AND CONSTRUCTION STANDARDS, AND PER APPLICABLE CODES INCLUDING REQUIRED COMPONENTS, OFFSETS REQUIRED TO AVOID THE STRUCTURE, ETC.
2. REFER TO ARCHITECTURAL PLANS FOR SPECIFICATIONS OF AND EXACT LOCATION OF FIXTURES (STANDARD AND BARRIER FREE), SINKS, ETC.
3. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF PLUMBING AND PIPING WITH THE WORK OF ALL OTHER TRADES.
4. PIPING SHALL NOT BE LOCATED OVER ELECTRICAL EQUIPMENT/PANELS. PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT. PIPING SHALL NOT INTERFERE WITH ELECTRICAL EQUIPMENT CLEARANCE.
5. PIPING SHALL NOT BE INSTALLED IN A LOCATION THAT RESTRICTS THE ACCESS TO MECHANICAL DEVICES REQUIRING ACCESS.
6. CONTRACTOR SHALL PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL MECHANICAL SYSTEMS.
7. HOT AND COLD WATER PIPING RUN-OUTS TO LAVS AND SINKS SHALL BE 3/4" UNLESS NOTED OTHERWISE. REFER TO PLUMBING SCHEDULE FOR FIXTURE CONNECTION SIZES.
8. PLUMBING VENT PIPING THRU THE ROOF SHALL BE LOCATED 10' FROM ANY FRESH AIR INTAKE LOCATION AND A MINIMUM OF 18" CLEAR FROM THE INSIDE FACE OF A PARAPET.
9. PROVIDE CODE REQUIRED CLEARANCE FOR ALL CLEAN OUTS INSTALLED IN SANITARY WASTE AND VENT PIPING.
10. MINIMUM UNDERGROUND PIPE SIZE SHALL BE 3".
11. FIELD VERIFY LOCATION AND SIZE OF EXISTING PIPING, THOROUGHLY CLEAN STORM AND SANITARY PIPING TO ENSURE PROPER FLOW. REPLACE CORDED PIPING AS INDICATED OR AS NECESSARY.
12. ALL WORK SHALL CONFORM TO ALL APPLICABLE BUILDING CODES AND ALL STATE AND LOCAL AMENDMENTS.
13. GENERAL NOTES, SYMBOLS LIST AND DETAILS ARE APPLICABLE TO ALL PLUMBING DRAWINGS.
14. REFER TO ARCHITECTURAL PLANS FOR GENERAL CONSTRUCTION NOTES.
15. DRAWINGS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL DETERMINE LOCATIONS OF SYSTEMS AND COMPONENTS IN FIELD, OFF OF ARCHITECTURAL AND STRUCTURAL PLANS.
16. THE PLUMBING CONTRACTOR SHALL DETERMINE EXACT LOCATIONS OF EXISTING UTILITIES IN FIELD, WHETHER OR NOT SHOWN ON THE DRAWINGS. EXERCISE CAUTION AND IDENTIFY LOCATIONS OF UNMARKED UTILITY LINES AS NECESSARY TO PERFORM THIS WORK.
17. THE PLUMBING CONTRACTOR SHALL PREPARE "SLEEVE AND INSERT" COORDINATION PLANS (LOCATING ALL ROOF, FLOOR AND WALL PENETRATIONS) AND SUBMIT TO ARCHITECT FOR REVIEW. EACH PENETRATION SHALL BE LOCATED WITH A MINIMUM OF (2) DIMENSIONS IN (2) DIRECTIONS.
18. THE PLUMBING CONTRACTOR SHALL PREPARE "COORDINATION" DRAWINGS THAT COORDINATE ALL PLUMBING WORK WITH OTHER TRADES INCLUDING, BUT NOT LIMITED TO, ELECTRICAL, HVAC, PROCESS PIPING, FIRE PROTECTION, STRUCTURAL AND ARCHITECTURE.
19. ANY INTERFERENCE BETWEEN TRADES SHALL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR/OWNERS REPRESENTATIVE, AND SHALL BE RESOLVED PRIOR TO THE INSTALLATION OF THE WORK.
20. ALL PIPE SLEEVES IN FLOORS SHALL EXTEND A MINIMUM OF TWO INCHES (2") ABOVE THE FINISHED FLOOR UNLESS NOTED OTHERWISE. FILL ANNUAL SPACE WITH WATERPROOF, FIRE RETARDANT CAULKING PENETRATIONS.
21. ALL PIPING PENETRATING CEILINGS AND WALLS SHALL BE INSTALLED WITH EICOUTCHONS AT THE PENETRATION. ALL PIPING PENETRATING EXTERIOR WALLS AND ROOFING CONDUCTORS SHALL BE FLASHED IN AN APPROVED MANNER AND SHALL BE SEALED WEATHERTIGHT. PIPING PENETRATING FIRE RATED ASSEMBLIES SHALL BE PROVIDED WITH FIRE RATED SEALS AS REQUIRED BY CODE OR THE AUTHORITY HAVING JURISDICTION.
22. TOPS OF ALL FLOOR DRAINS SHALL BE SET LEVEL AND FLUSH WITH FINISHED FLOOR.
23. ALL PIPING ABOVE GRADE SHALL BE PROPERLY SUPPORTED BY THE BUILDING STRUCTURE AND SHALL NOT REST ON CEILING STRUCTURE OR COMPONENTS.
24. ALL PLUMBING EQUIPMENT, PIPING, INSULATION, ETC., INSTALLED IN HVAC PLENUM SPACES SHALL MEET ALL CODE REQUIREMENTS FOR SMOKE AND COMBUSTION.
25. ALL DOMESTIC HOT AND COLD WATER PIPING AND HORIZONTAL SANITARY AND STORM CONDUCTORS ABOVE CEILINGS IN OCCUPIED AREAS AND ALL NONVERTICAL SECTIONS OF STORM CONDUCTORS SHALL BE INSULATED PER WAYNE STATE UNIVERSITY DESIGN AND CONSTRUCTION STANDARDS.
26. THE PLUMBING CONTRACTOR SHALL PROVIDE SHUT-OFF VALVES ON ALL BRANCH PIPING AND ON ALL SUPPLIES TO INDIVIDUAL FIXTURES AND EQUIPMENT. PROVIDE FULL PORT BALL VALVES ON ALL WATER MAIN BRANCHES IN CORRIDORS AND WHERE INDICATED ON DRAWINGS.
27. THE PLUMBING CONTRACTOR SHALL OBTAIN APPROVAL FROM THE STRUCTURAL ENGINEER PRIOR TO INSTALLING POWDER DRIVEN FASTENERS.
28. COORDINATE ALL POST TENSIONED SLAB PENETRATIONS WITH STRUCTURAL ENGINEER.
29. PROVIDE CLAMPS, OFFSETS, EXPANSION JOINTS, ANCHORS AND GUIDES AS NECESSARY TO PREVENT STRESS FROM EXCEEDING THOSE PERMITTED BY ASME B31.9 AND TO PREVENT TRANSFER OF LOADING AND STRESSES TO CONNECTED EQUIPMENT.
30. PROVIDE MANUFACTURED EXPANSION DEVICE OR FABRICATED EXPANSION LOOP ON ALL PIPING SYSTEMS CROSSING BUILDING EXPANSION JOINTS.
31. ALL PIPE HANGERS ON INSULATED PIPING SHALL BE PROVIDED WITH HANGER SHIELDS.
32. ALL VALVES, CLEANOUTS AND COMPONENTS REQUIRING ACCESS BEHIND WALLS OR INACCESSIBLE CEILINGS SHALL BE PROVIDED WITH ACCESS PANELS. COORDINATE WITH ARCHITECT FOR REQUIRED TYPE, LOCATION AND FINISH.
33. ALL P-TRAPS INSTALLED IN SPACES SUBJECT TO FREEZING SHALL BE INSULATED AND HEAT TRACED.
34. TRAP PRIMERS ARE TO BE PROVIDED ON ALL FLOOR DRAINS AND HUB DRAINS WHICH DO NOT RECEIVE A CONTINUOUS DISCHARGE. REFER TO PLUMBING FIXTURE SCHEDULE AND FLOOR PLANS.
35. PROVIDE VENTS AT HIGH POINTS IN PIPING SYSTEMS AND DRAIN VALVES AT LOW POINTS.
36. PROVIDE GAUGE FITTINGS AND THERMOMETER WELLS AT HOT WATER SUPPLY AND RETURN BRANCHES AND A PUMP INLETS AND OUTLETS.
37. SANITARY VENTS THROUGH THE ROOF MUST TERMINATE A MINIMUM OF 10 FEET FOR COMMERCIAL STRUCTURES AND 25 FEET OF HEALTH CARE STRUCTURES FROM OUTSIDE AIR INTAKES, WHICH PROVIDE VENTILATION OR MAKE-UP AIR TO THE BUILDING.
38. SANITARY AND DOMESTIC HOT AND COLD PIPING SHALL BE INSULATED AT BARRIER FREE LAVATORIES. INSULATION THICKNESS SHALL BE PER WAYNE STATE UNIVERSITY DESIGN AND CONSTRUCTION STANDARDS.

PLUMBING GENERAL NOTES CONT.

39. PLUMBING FIXTURES FOR ADA COMPLIANCE SHALL BE INSTALLED WITH THE HORIZONTAL AND VERTICAL CLEARANCES OUTLINED IN THE AMERICAN WITH DISABILITIES ACT. REFER TO ARCHITECTURAL PLANS FOR ELEVATIONS OF PLUMBING FIXTURES.
40. ALL WATER CLOSETS SHALL BE CENTERED BETWEEN RESPECTIVE TOILET PARTITIONS EXCEPT AS SPECIFICALLY NOTED OTHERWISE. THE CONTRACTOR SHALL COORDINATE ROUGHING IN WITH APPROVED TOILET PARTITION SHOP DRAWINGS.
41. NEATLY INSTALL MILDEW RESISTANT SILICONE SEALANT BEAD AROUND THE PERIPHERY OF ALL PLUMBING FIXTURES IN CONTACT WITH WALLS AND/OR FLOORS.
42. PLUMBING MANUFACTURERS AND MODEL NUMBERS ARE INDICATED TO ESTABLISH A STANDARD OF QUALITY FOR PERFORMANCE AND MATERIALS.
43. INSTALLATION SHALL ADHERE TO MANUFACTURERS RECOMMENDATIONS.
44. THE PLUMBING CONTRACTOR SHALL COORDINATE ALL NEW CORED OR CUT HOLES IN THE EXISTING CONCRETE STRUCTURE, INCLUDING FLOORS, WALLS AND ROOF, WITH THE STRUCTURAL ENGINEER, PRIOR TO ANY WORK.
45. ALL ABOVEGROUND AND BELOWGROUND PIPING SIZE AND MATERIAL SHALL BE IN ACCORDANCE TO WAYNE STATE UNIVERSITY DESIGN AND CONSTRUCTION STANDARDS.

DATE	ISSUED FOR	REV
04-03-2019	OWNER REVIEW	1
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06-03-2019	BID / PERMIT	3

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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)



NORR

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Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead BRENDA PESMARK	Drawn RACHEL GENDICH
Project Leader BRENDA PESMARK	Checked HENRY MONTAGUE

Client
WAYNE STATE
UNIVERSITY

Project
WSU DINING HALL
ADDITION

655 W. KIRBY ST.
DETROIT, MI 48202

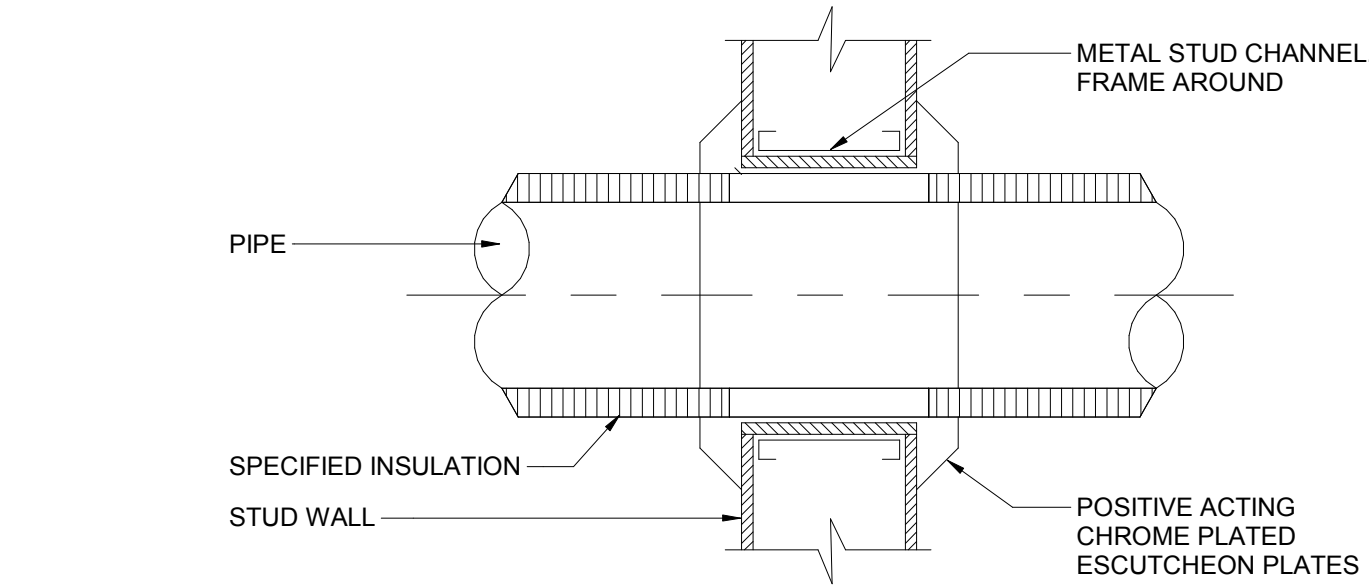
Drawing Title
GENERAL NOTES

Scale: 1/8" = 1'-0"

Project No. JCDT18-0451

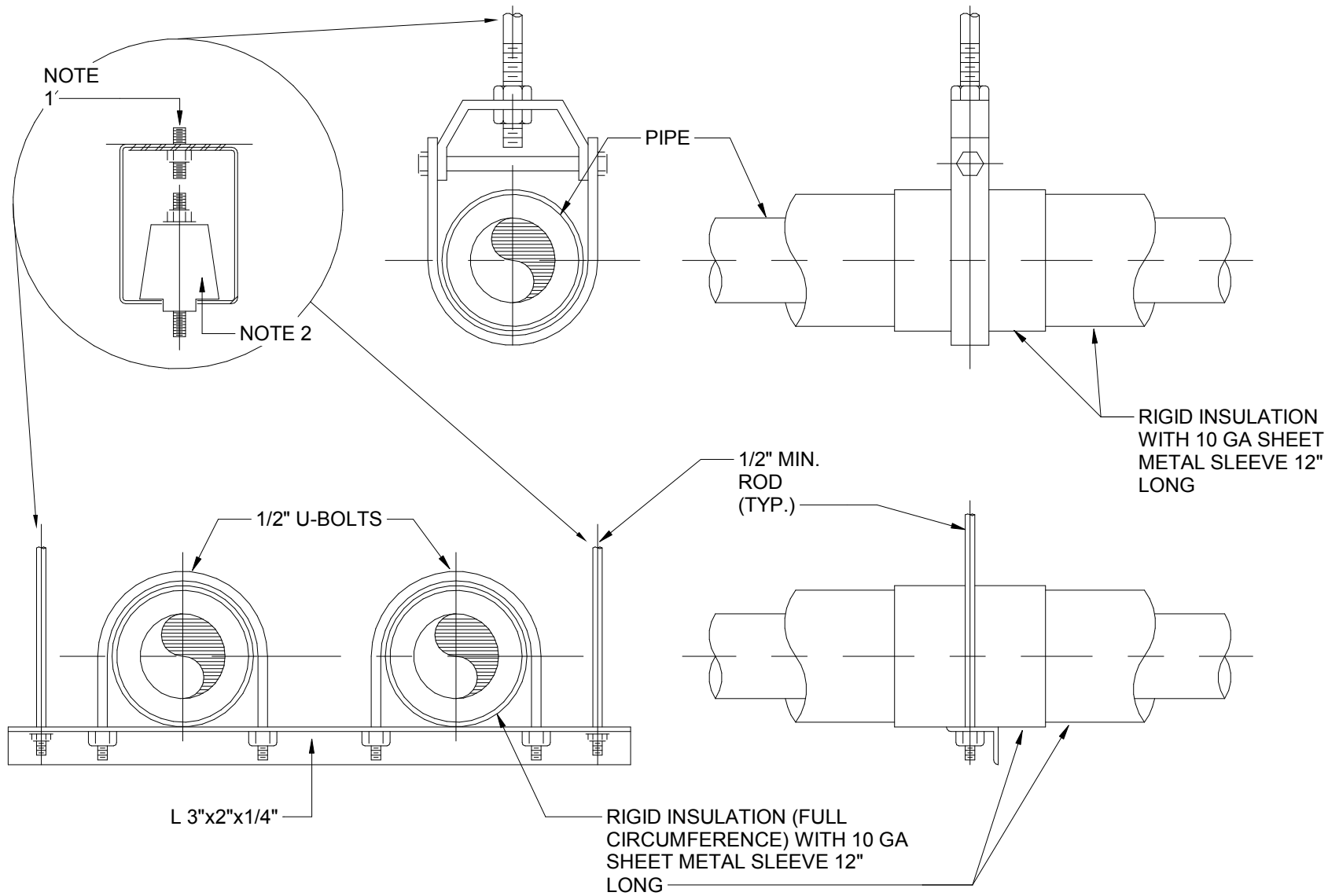
Drawing No.

M00-02



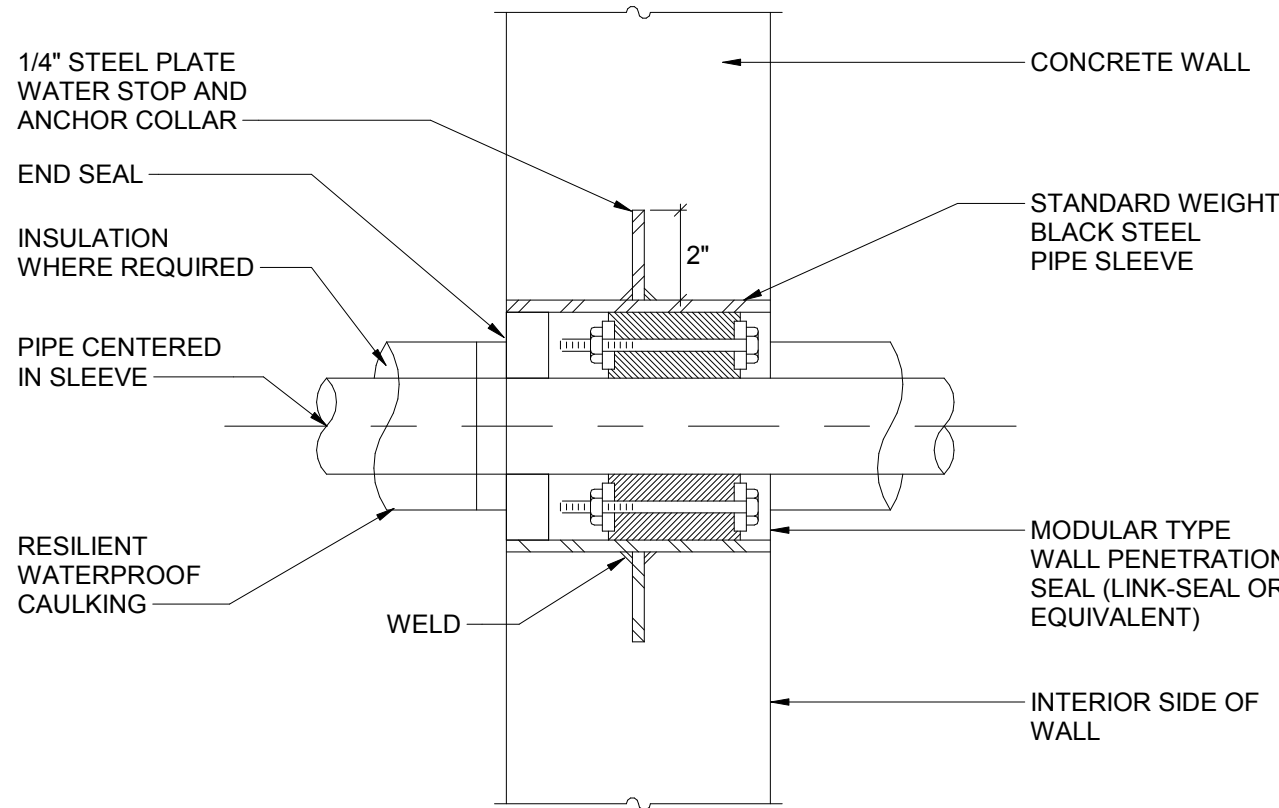
NOTE:
1. OMIT ESCUTCHEON PLATES FOR CONCEALED PIPES.

7
M01-01
PIPE THRU STUD WALL DETAIL
N.T.S.



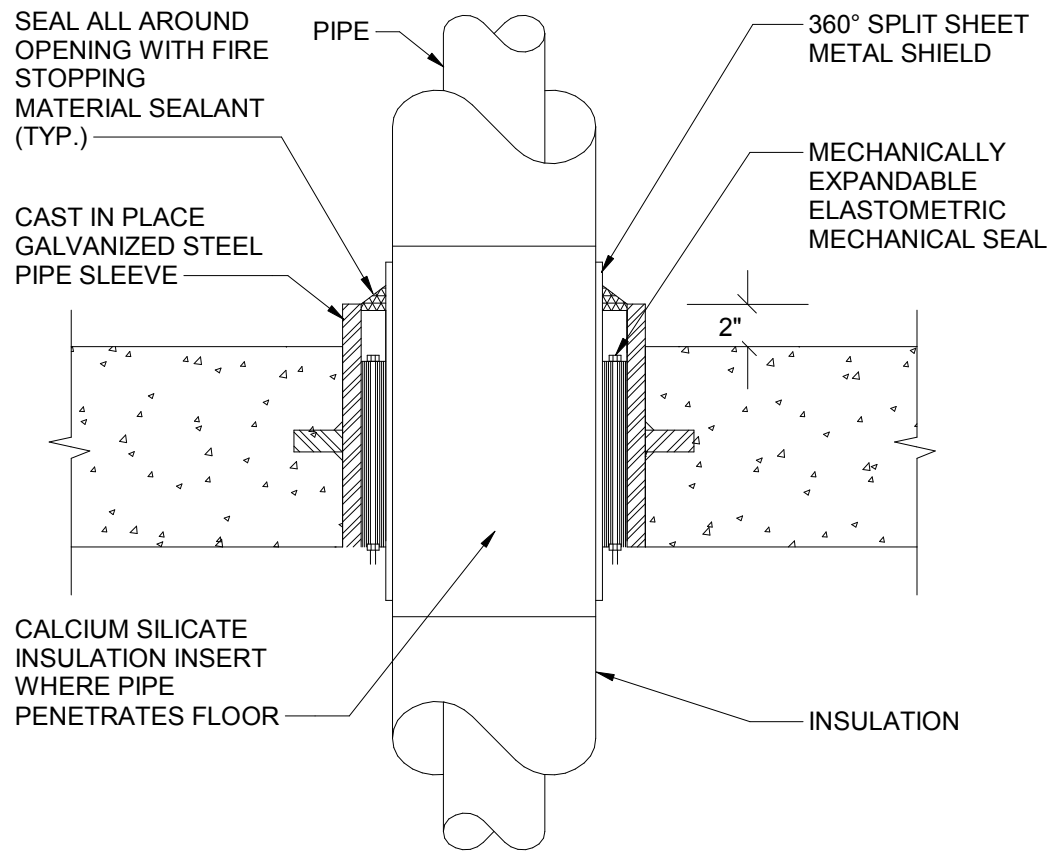
NOTE:
1. ANCHOR BOLT OR BOLT ATTACHED TO STRUCTURAL MEMBER. NEOPRENE ISOLATOR.

8
M01-01
TYPICAL PIPE HANGERS
N.T.S.

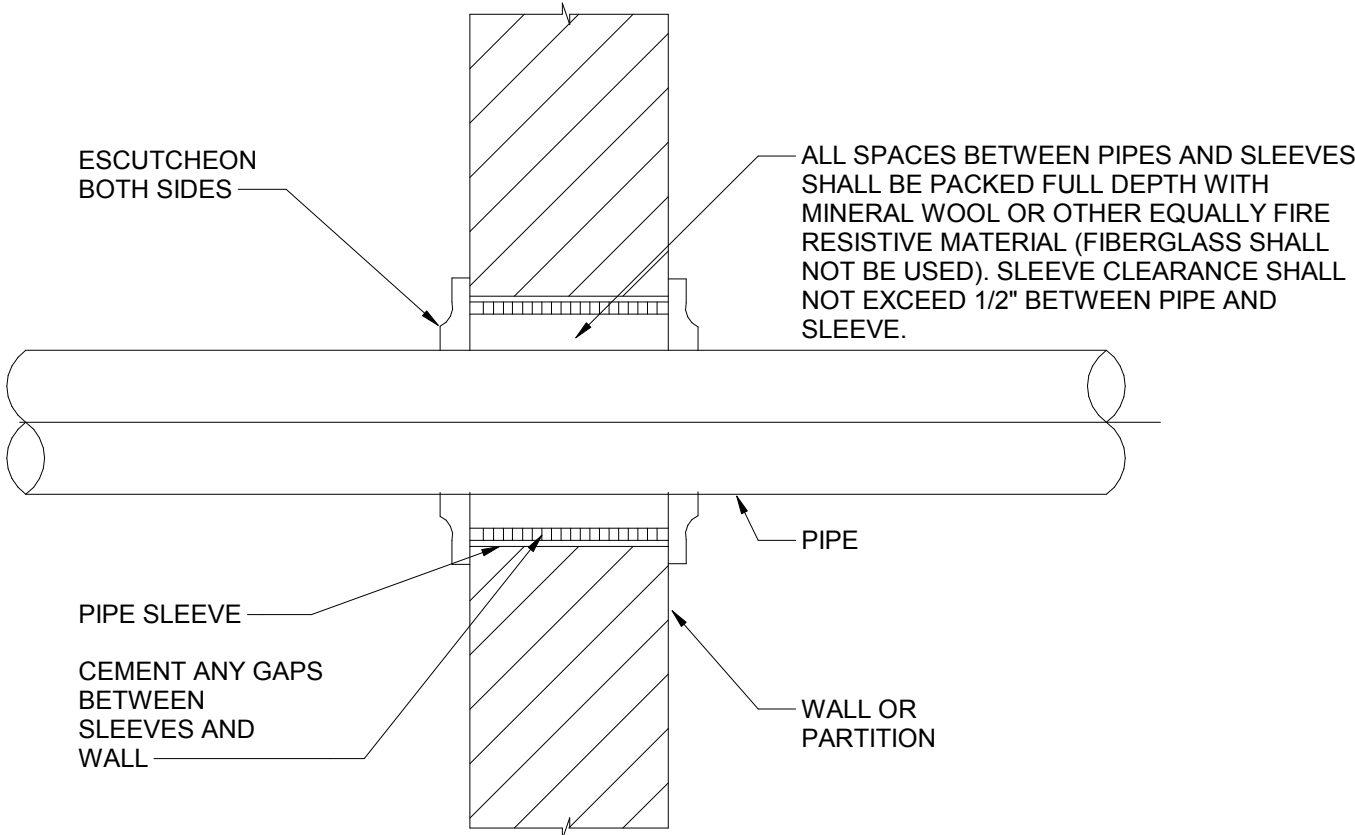


NOTE:
1. REFER TO SPECIFIC DETAILS FOR PRE-INSULATED PIPING.

4
M01-01
UNDERGROUND PIPE PENETRATION THRU EXTERIOR WALL OR SLAB
N.T.S.

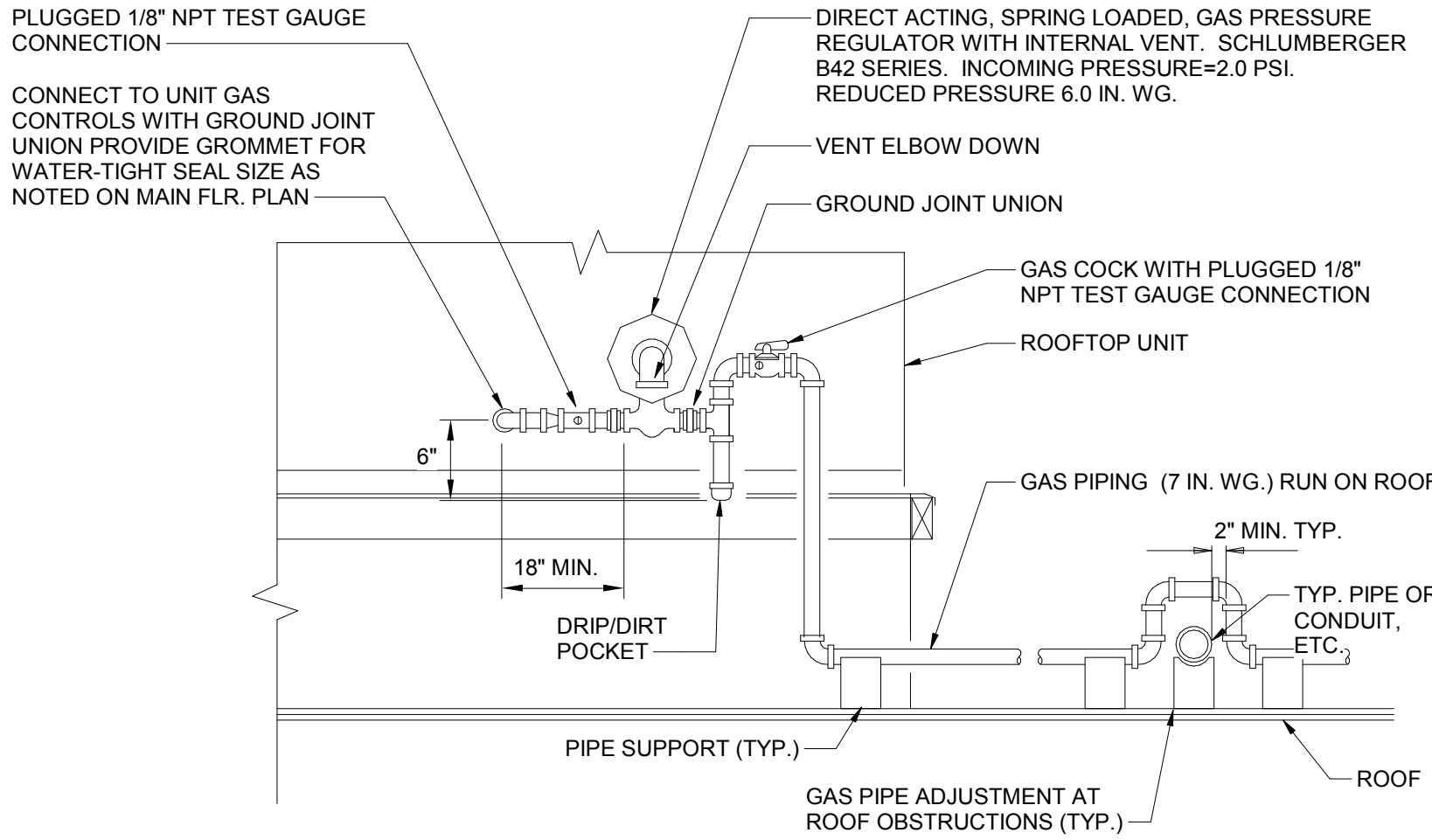


5
M01-01
NEW SLAB ON GRADE FLOOR PIPE PENETRATION DETAIL
N.T.S.

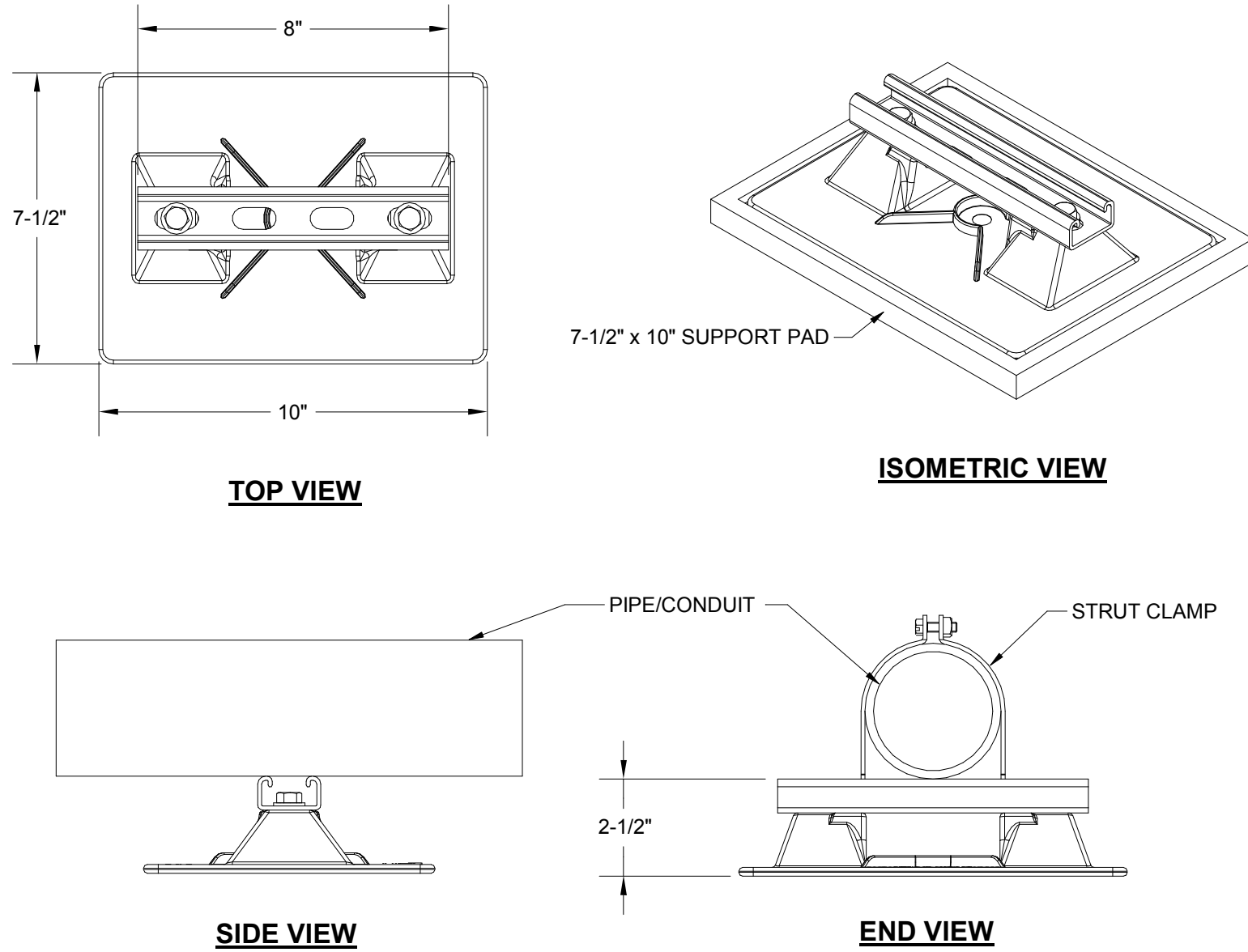


NOTE:
1. REFER TO SPECIFICATIONS: "SLEEVES AND ESCUTCHEONS FOR PIPING".
2. THIS DETAIL ALSO APPLICABLE TO INTERIOR NON-WATER PROOF FLOOR CONSTRUCTION. FOR WATER PROOF FLOOR CONSTRUCTION AND OTHER FLOOR CONSTRUCTION SEE SPECIFICATIONS.
3. FIRE RATED WALL PENETRATION DETAILS TO BE DETERMINED BY SUBMITTED AND APPROVED MANUFACTURER SPECIFIC DETAILS.

6
M01-01
PIPE THRU FIRE RATED PART. & WALL DETAIL
N.T.S.



1
M01-01
GAS PIPE CONNECTION DETAIL
N.T.S.



ACCESSORIES

- Strut Clamp - Order to Pipe O.D.
- 7-1/2" x 10" Support pad
- Eternabond 2-sided tape

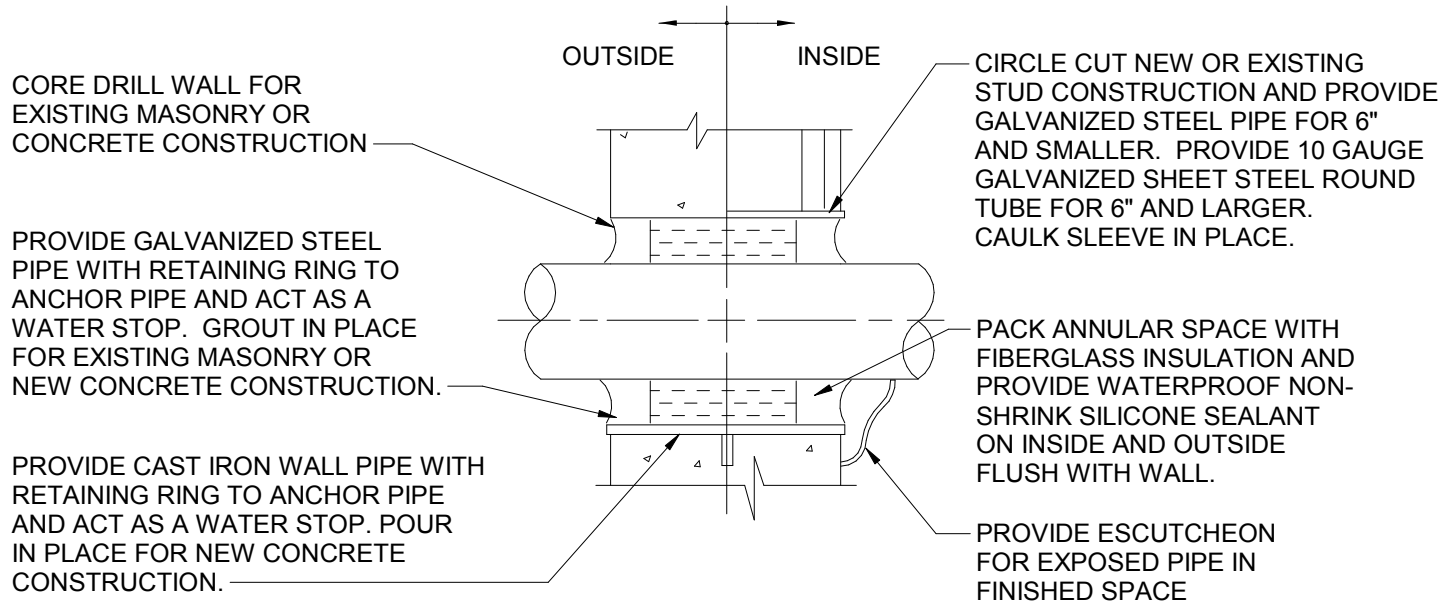
PRODUCT DESCRIPTION

A pipe support with "strut" used to support roof-mounted electrical conduit, solar piping, gas pipes and other mechanical piping. Pipes rest on a 8" length of strut which is mounted on the base. The pipes can be fastened by using the appropriate pipe clamp.

KEY INFORMATION

- Designed to support conduit (ganged) cable trays or other mechanical piping.
- Fixed height of 2-1/2", even load required, maximum load is 172 lbs. (Max load based on 3.0 psi to the roof deck)
- Unit weight: 1.78 lbs.
- 12 per case, 21 lbs. per case, (DW= 11 lbs.)
- Recommended spacing is not to exceed 10' centers depending upon the load. Make certain each support is properly elevated to evenly distribute weight at all support locations.
- Base Material: Polycarbonate
- All metal parts are either stainless steel or hot-dip galvanized.

2
M01-01
ROLLER PIPE SUPPORT BASE STRUT DETAIL
N.T.S.



DETAIL NOTE:
PIPING ARRANGEMENT SHOWN IN SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. REFER TO SPECIFICATIONS FOR MORE INFORMATION ON INSULATION AND SEALANT. COORDINATE SLEEVE INSTALLATION WITH GENERAL CONTRACTOR.

3
M01-01
WALL PENETRATION DETAIL
N.T.S.

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Electrical: NORR

Seal(s)

giffels
webster

NORR

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Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
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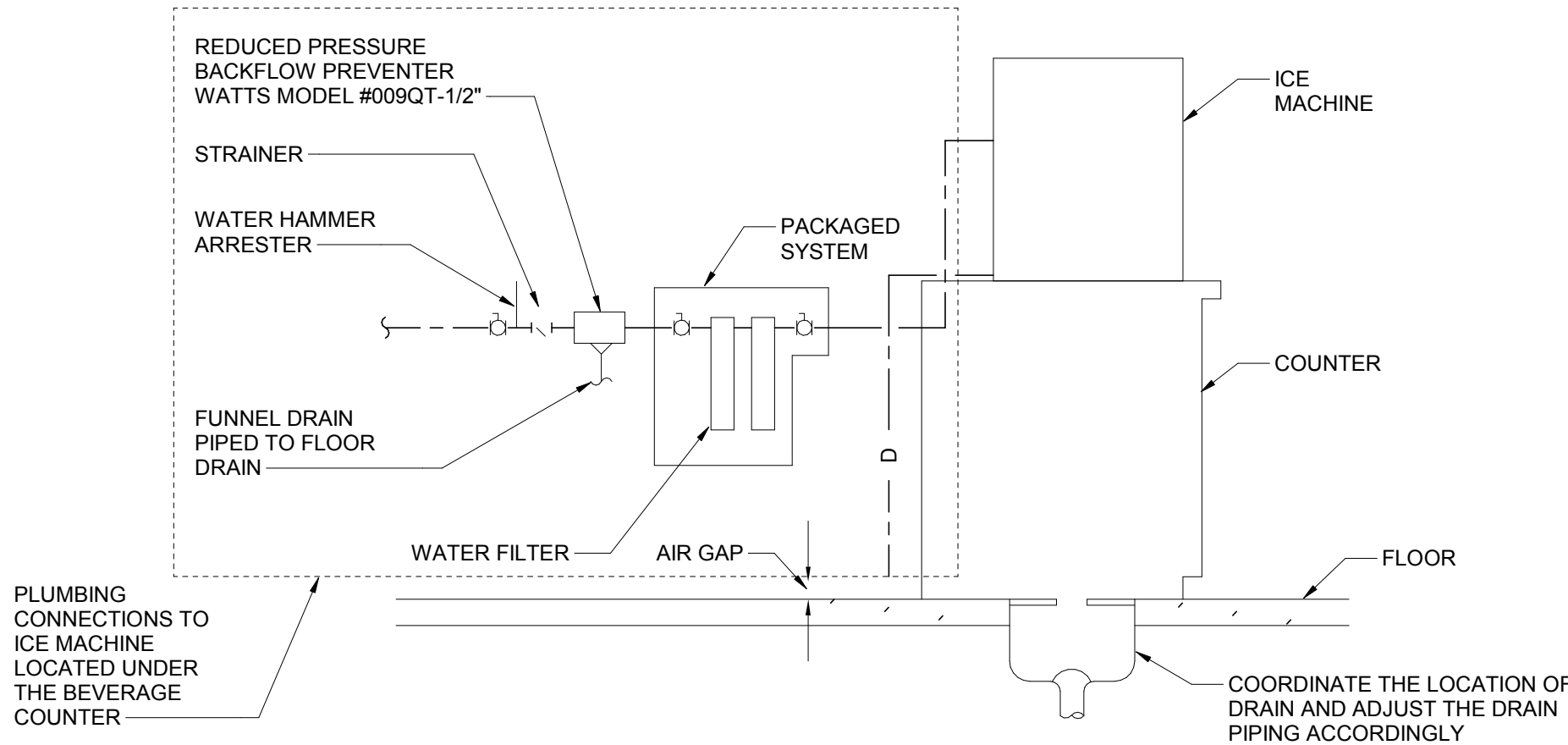
Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
PLUMBING DETAILS

Scale: As indicated

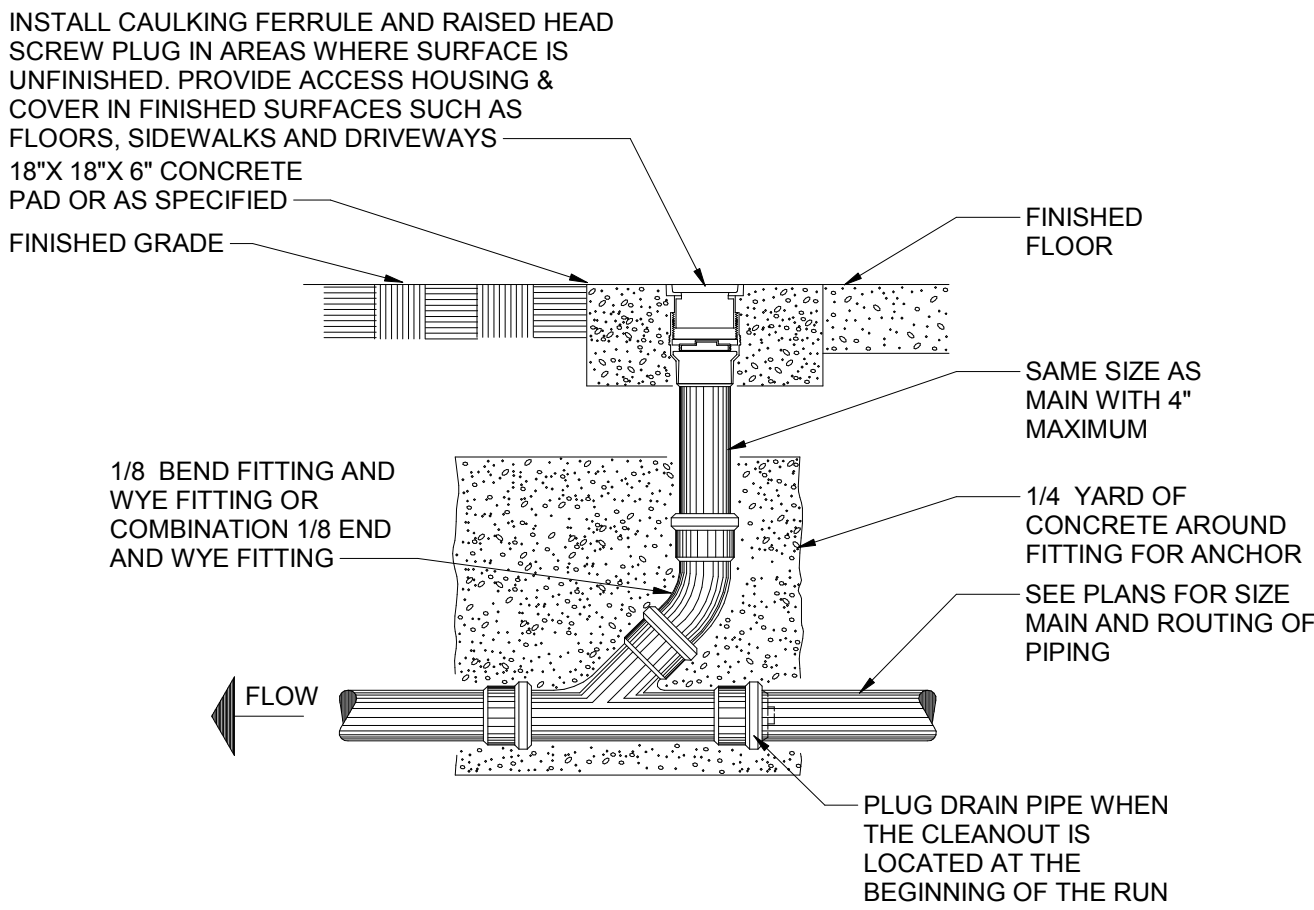
Project No. JCDT18-0451

Drawing No. M01-01

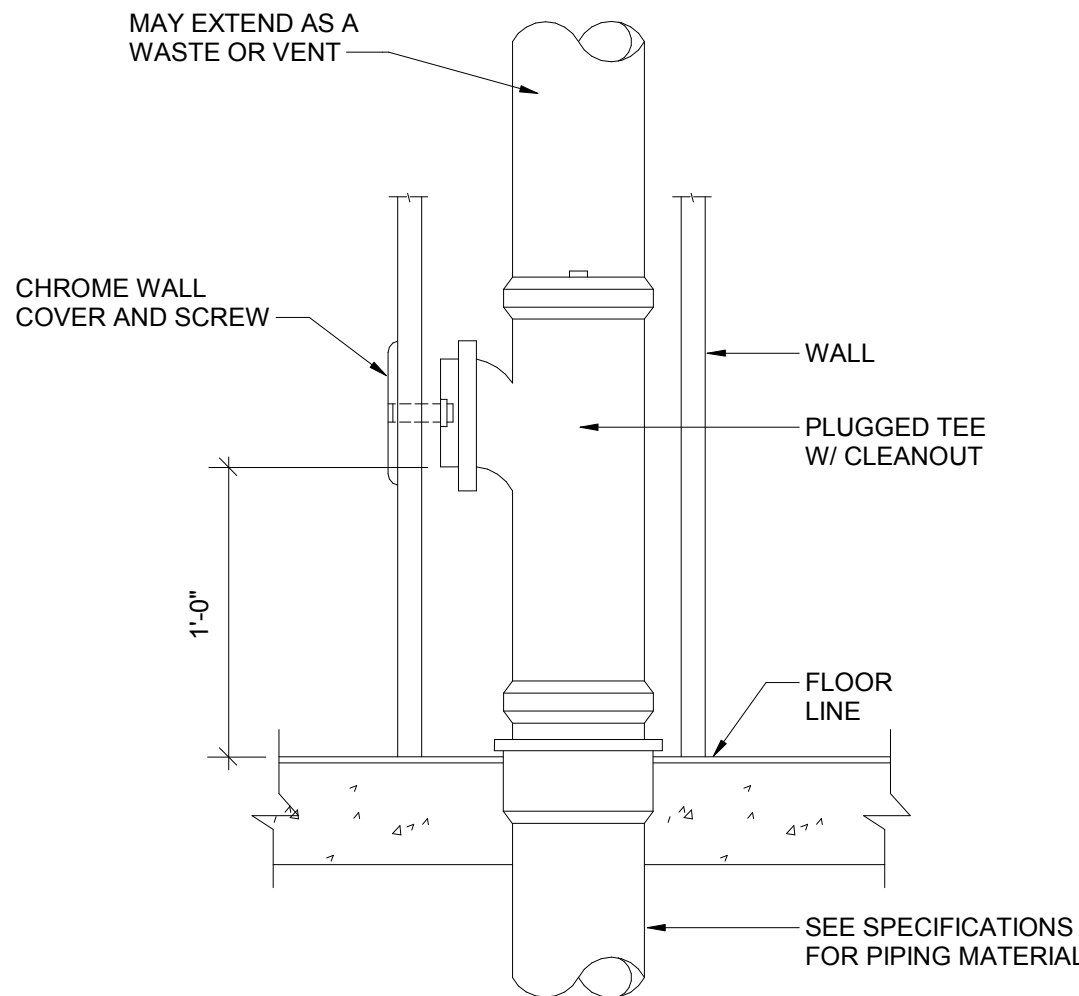


NOTE:
1. FOOD SERVICE DRAWINGS FOR EQUIPMENT PROVIDED BY FOOD SERVICE CONTRACTOR.

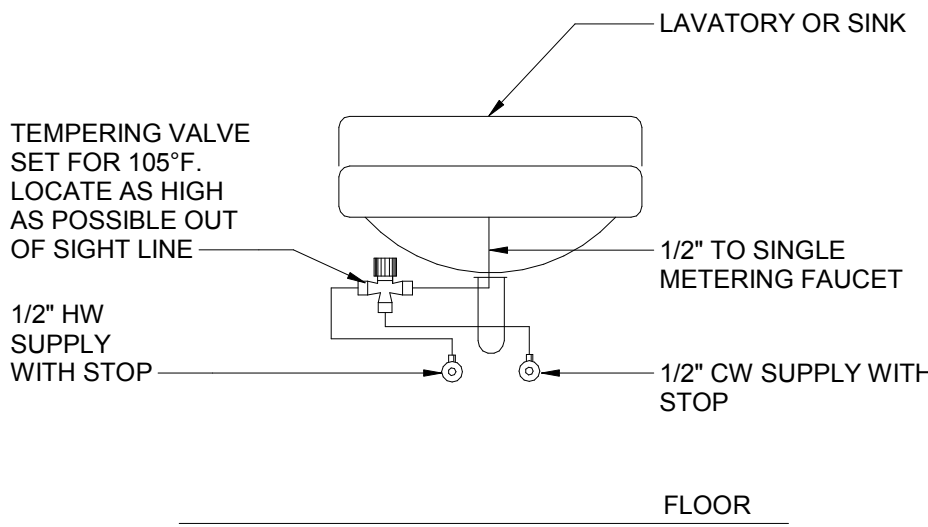
7
M01-02
TYPICAL ICE MACHINE CONN. DETAIL
N.T.S.



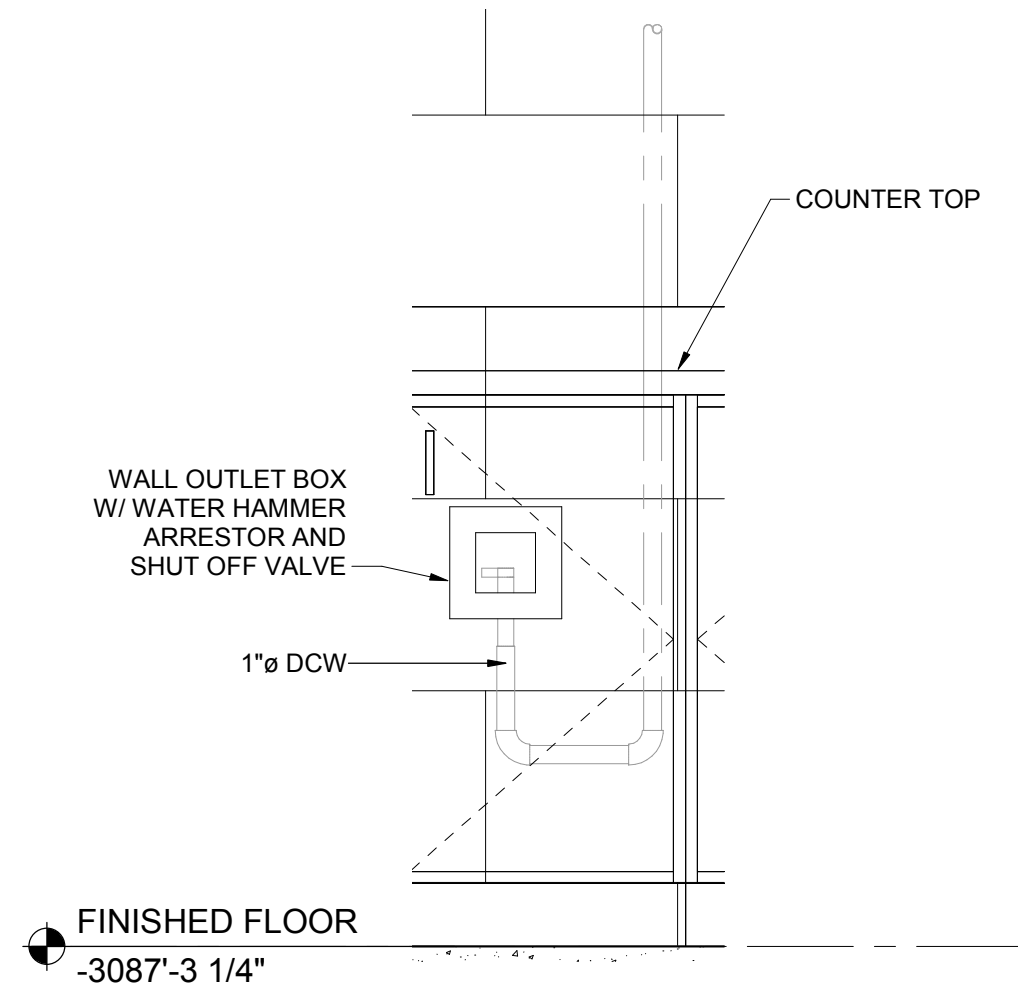
4
M01-02
FLOOR CLEANOUT
N.T.S.



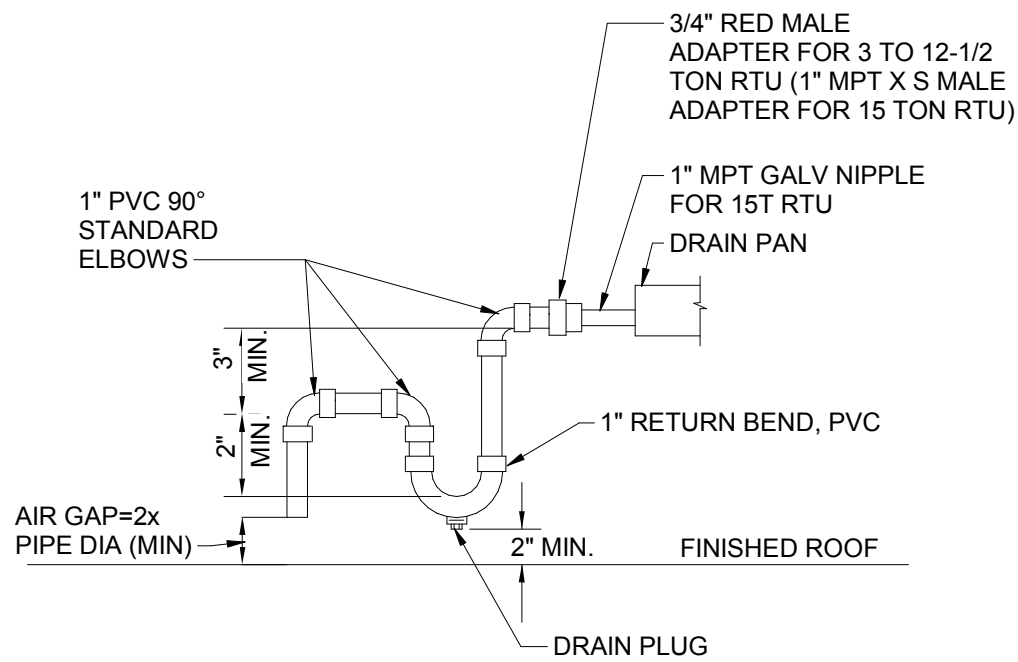
5
M01-02
WALL CLEAN-OUT DETAIL
N.T.S.



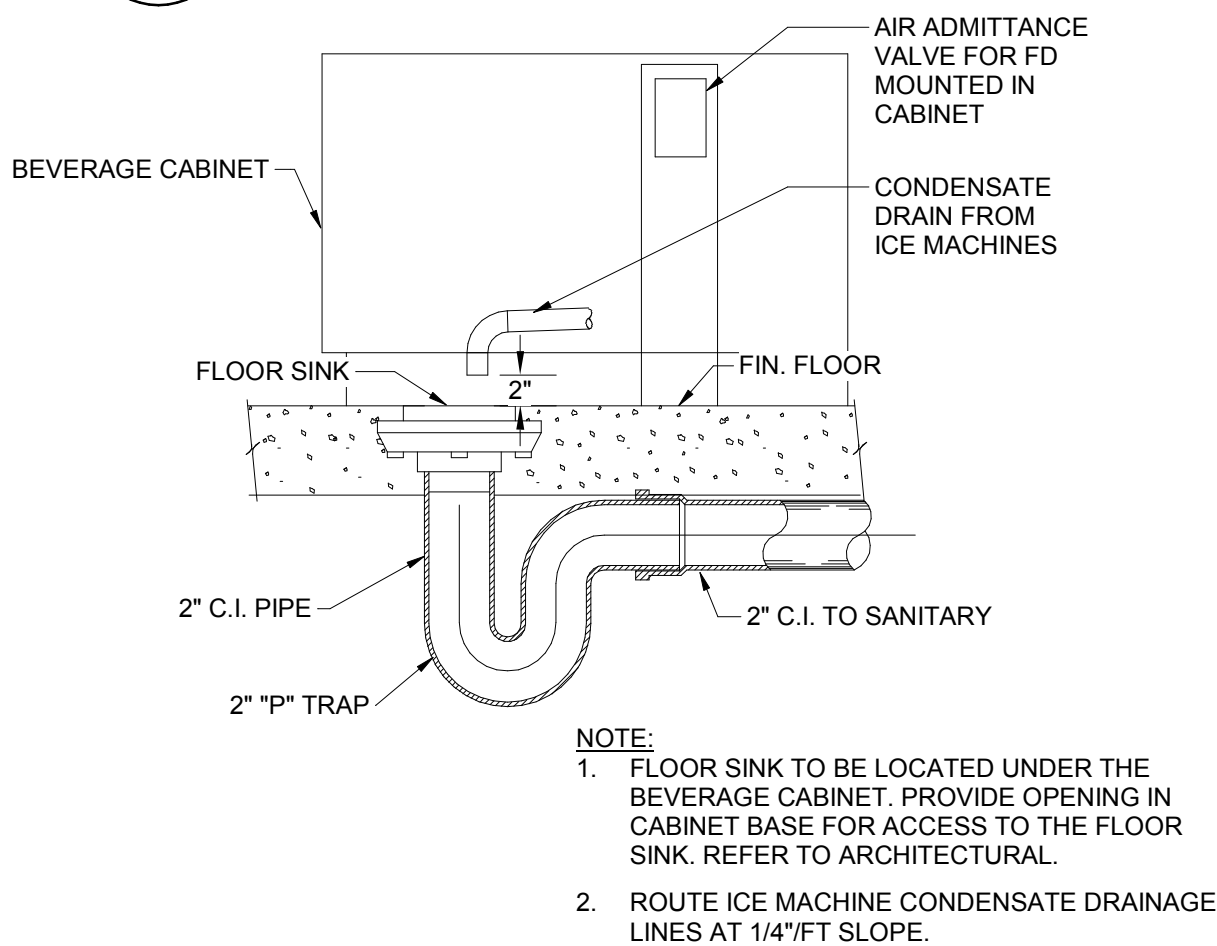
6
M01-02
TYPICAL SINGLE SINK TEMPERING VALVE DETAIL
N.T.S.



1
M01-02
WALL OUTLET BOX DETAIL
N.T.S.



2
M01-02
CONDENSATE PIPING CONNECTION DETAIL SPILL TO ROOF
N.T.S.



3
M01-02
ICE MACHINE DRAINAGE DETAIL
N.T.S.

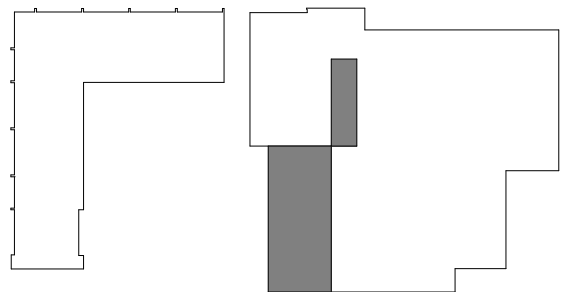
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Seal(s)

giffels
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NORR

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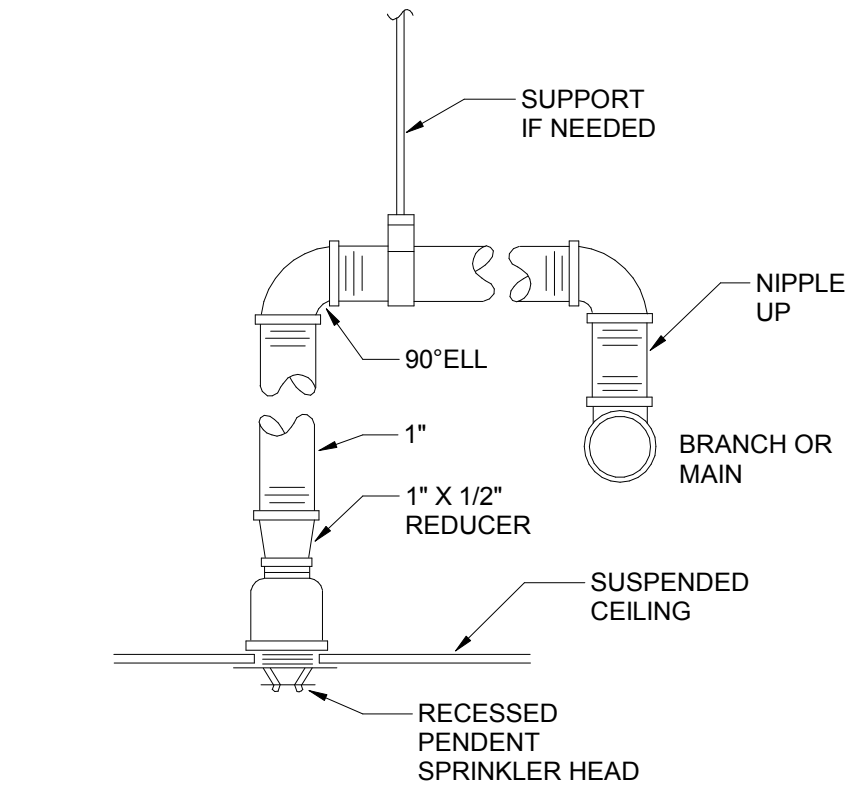
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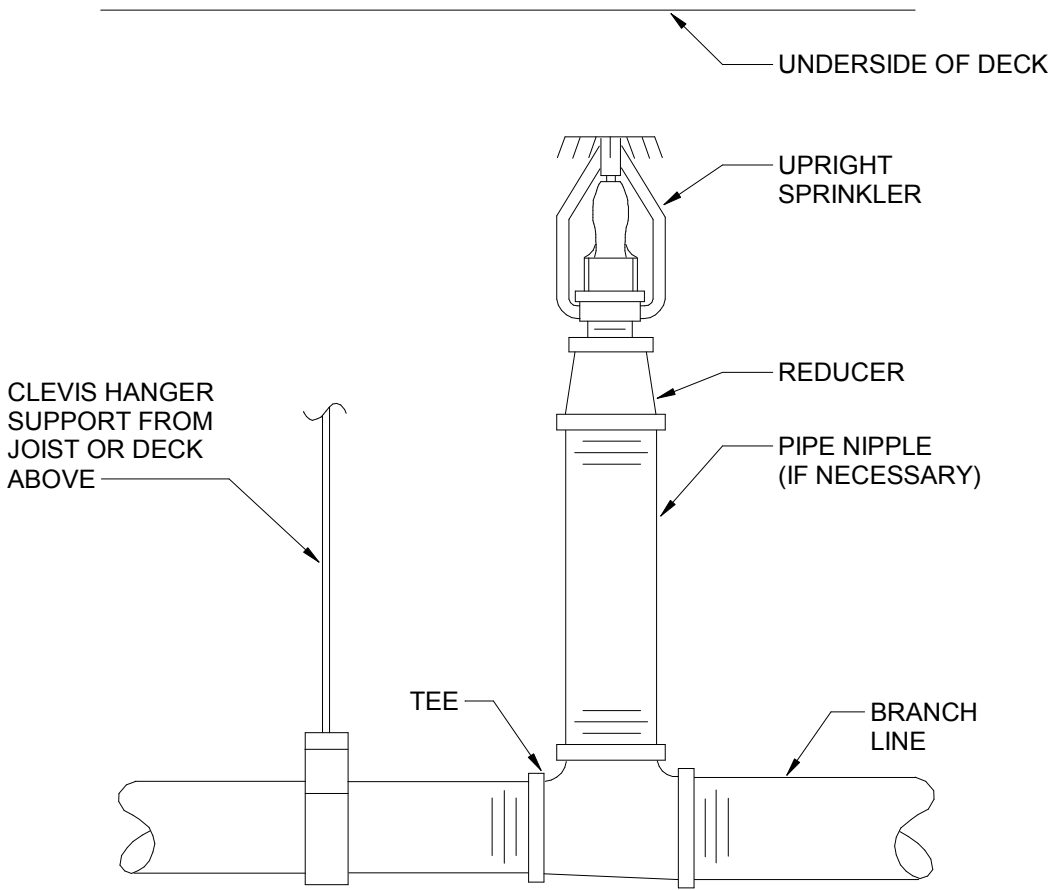
Scale: As indicated

Project No. JCDT18-0451

Drawing No. M01-02



1
M01-03
TYPICAL PENDENT SPRINKLER HEAD
DETAIL
N.T.S.



2
M01-03
TYPICAL UPRIGHT SPRINKLER HEAD
DETAIL
N.T.S.

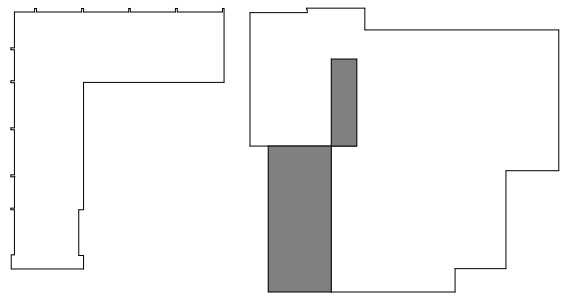
DATE	ISSUED FOR	REV
04-03-2019	OWNER REVIEW	1
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06-03-2019	BID / PERMIT	3

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Project Component
PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

giffels
webster

NORR

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Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead BRENDA PESMARK	Drawn RACHEL GENDICH
Project Leader BRENDA PESMARK	Checked HENRY MONTAGUE

Client
WAYNE STATE
UNIVERSITY

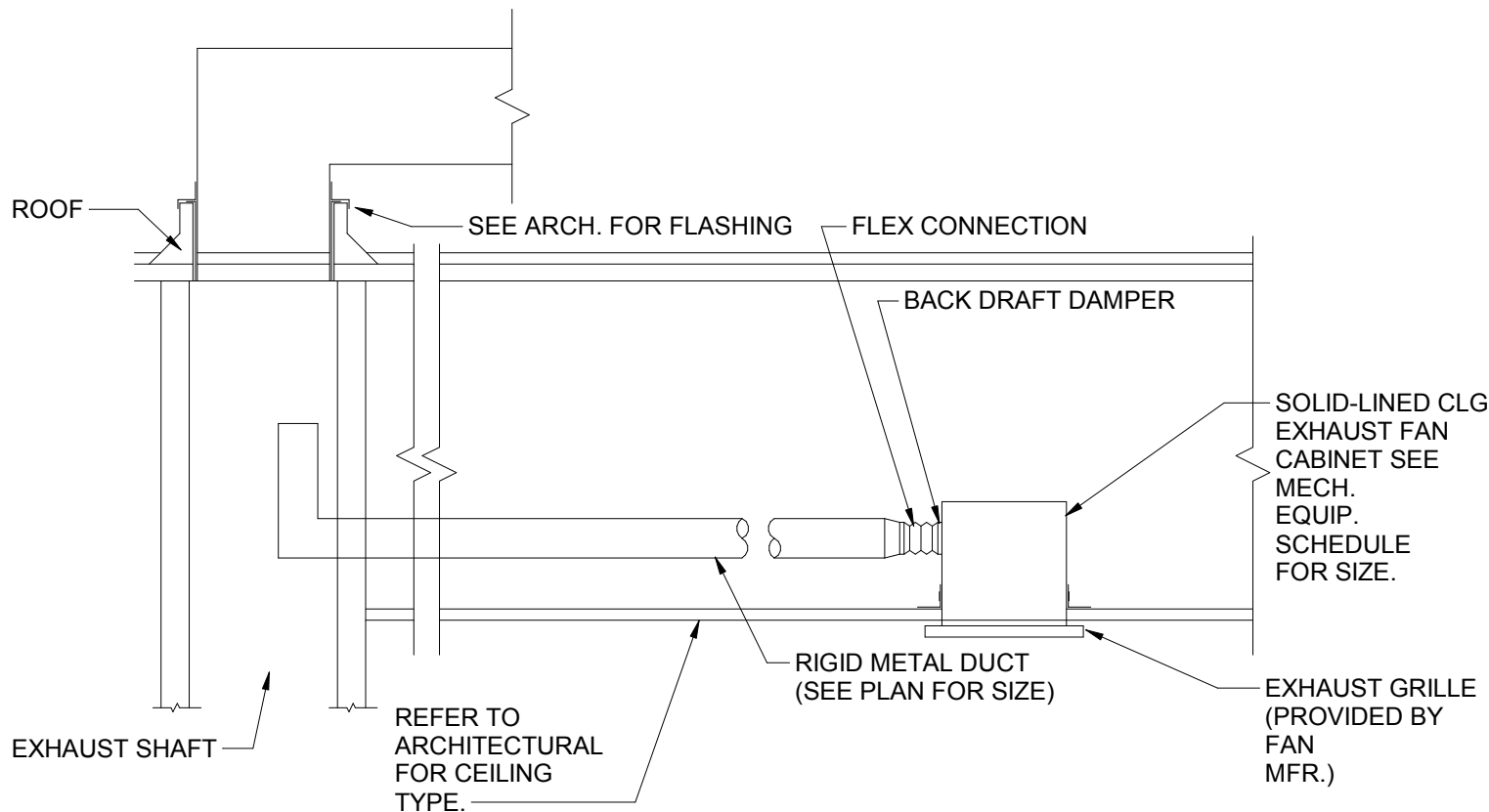
Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
FIRE PROTECTION DETAILS

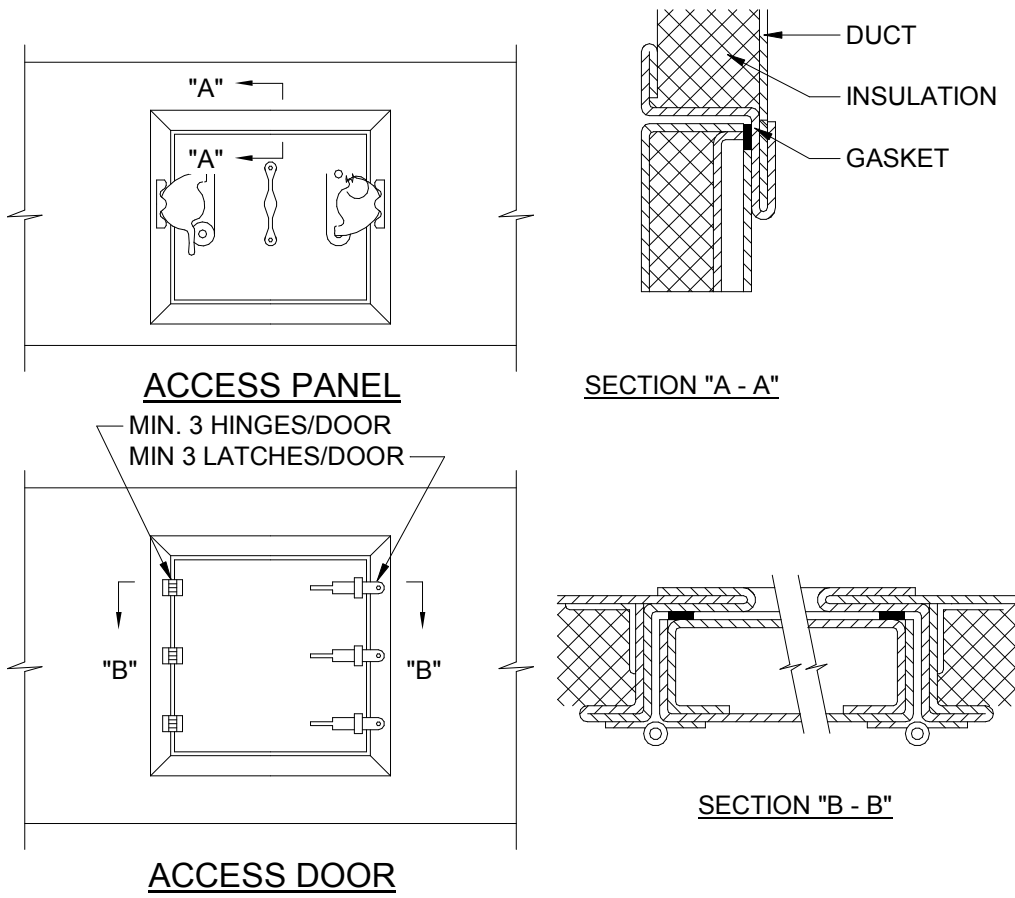
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Project No. JCDT18-0451

Drawing No.
M01-03

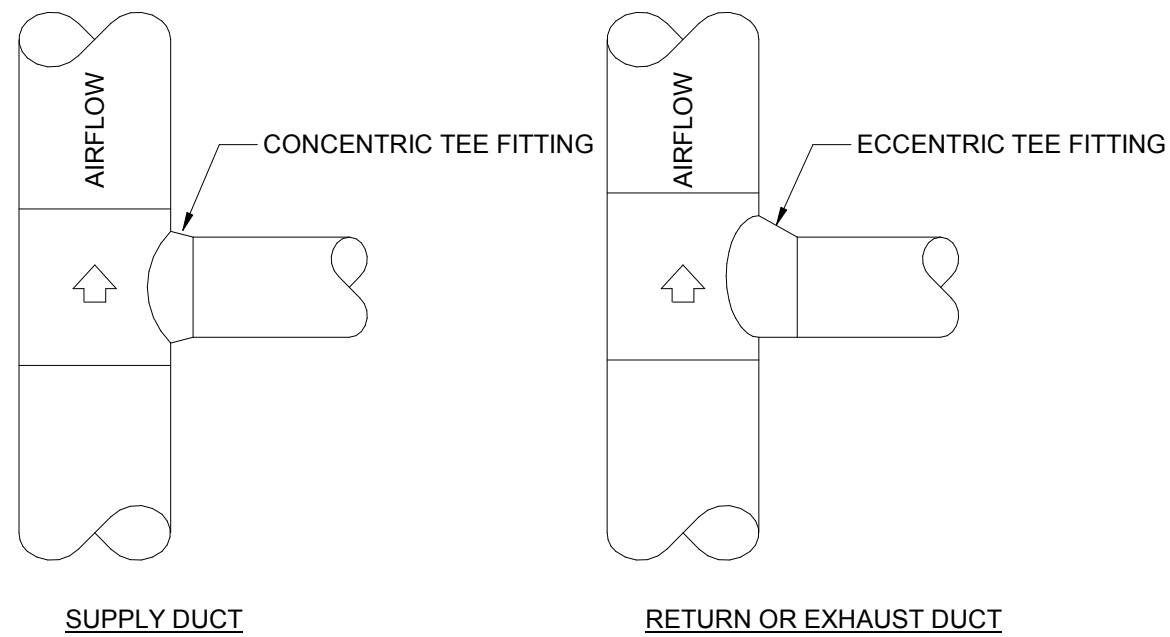


7
M01-04
TOILET ROOM EXHAUST FAN
N.T.S.

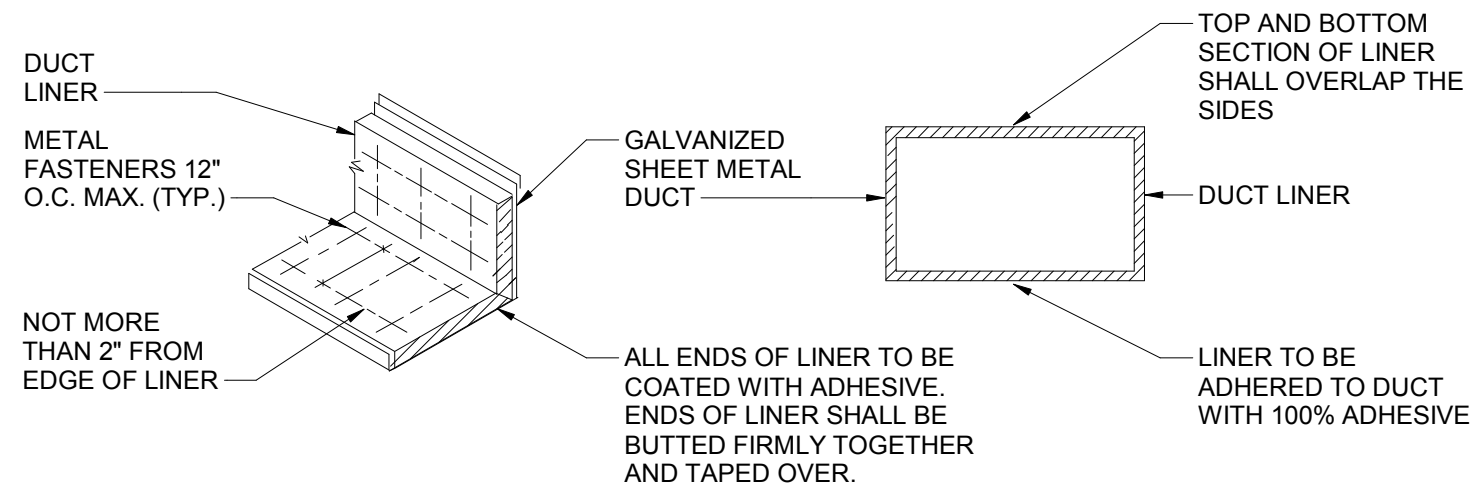


- NOTES:
1. LATCHES SHALL BE OF THE WEDGE TYPE TO CLOSE DOORS TIGHTLY.
 2. HINGES ON THE ACCESS DOORS SHALL HAVE NON-CORROSIVE PINS.
 3. PROVIDE ACCESS DOORS ON AIR HANDLING UNITS AND DUCTWORK INSTALLED IN EQUIPMENT ROOMS.
 4. PROVIDE ACCESS PANELS ON ALL EQUIPMENT AND DUCTWORK INSTALLED ABOVE FINISHED CEILINGS WHERE SPACE LIMITATIONS DO NOT ALLOW HINGED DOORS TO OPEN.

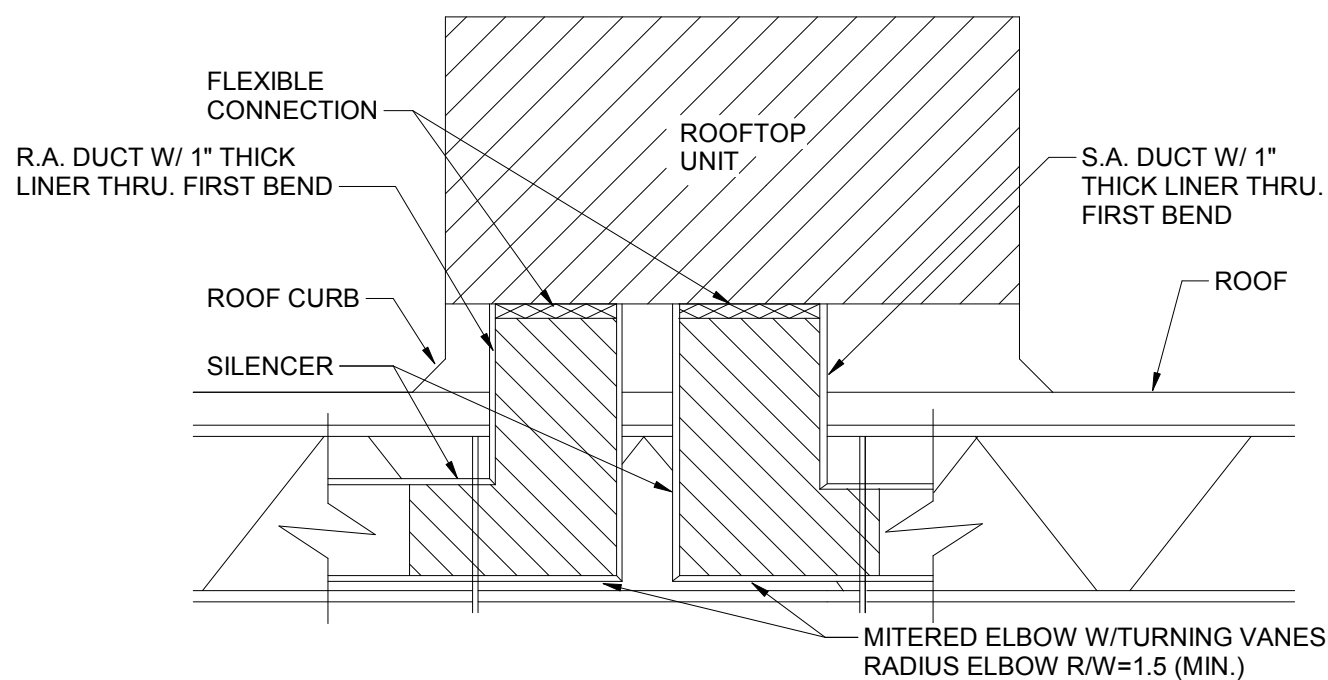
8
M01-04
ACCESS DOOR AND PANEL DETAILS
N.T.S.



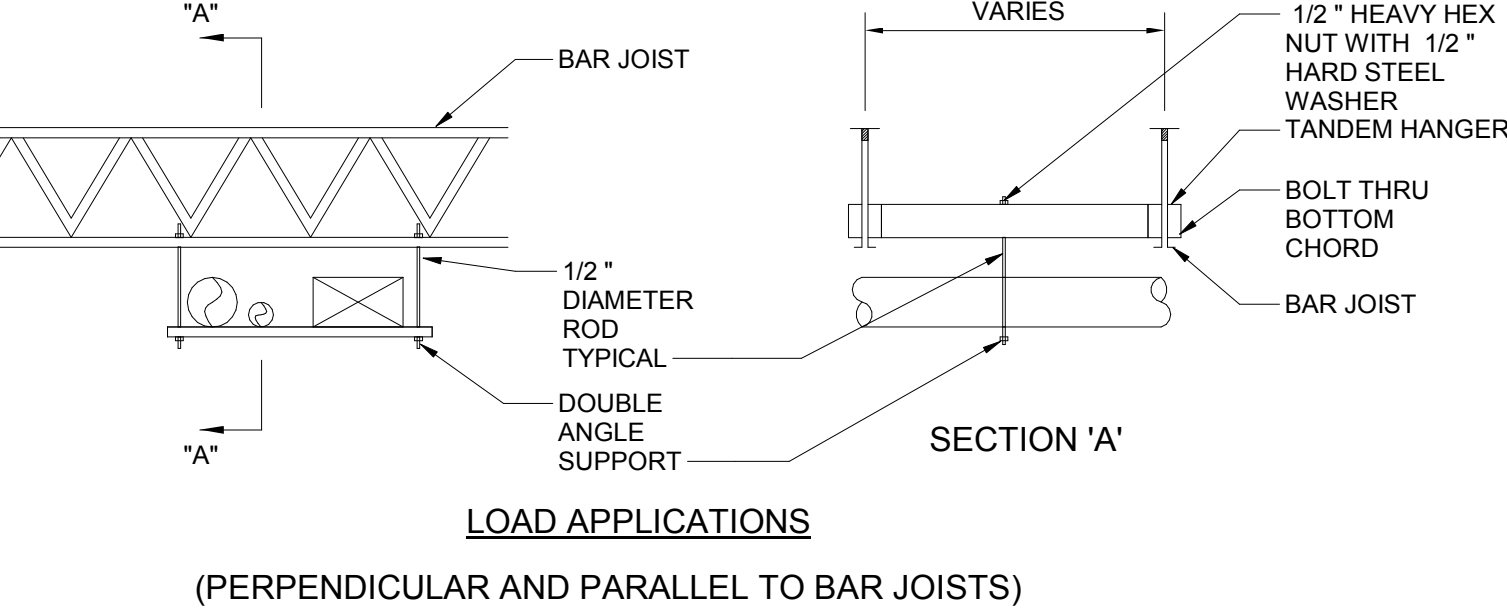
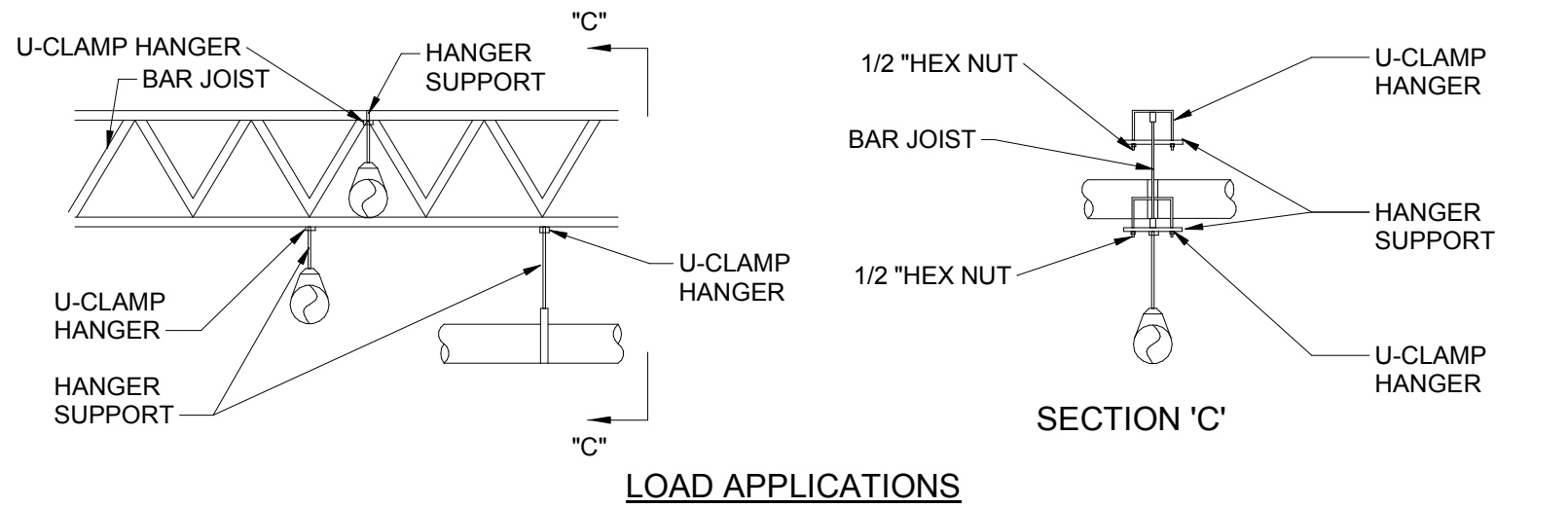
9
M01-04
ROUND DUCT BRANCH TAKE-OFF DETAILS
N.T.S.



4
M01-04
DUCT LINER DETAIL
N.T.S.

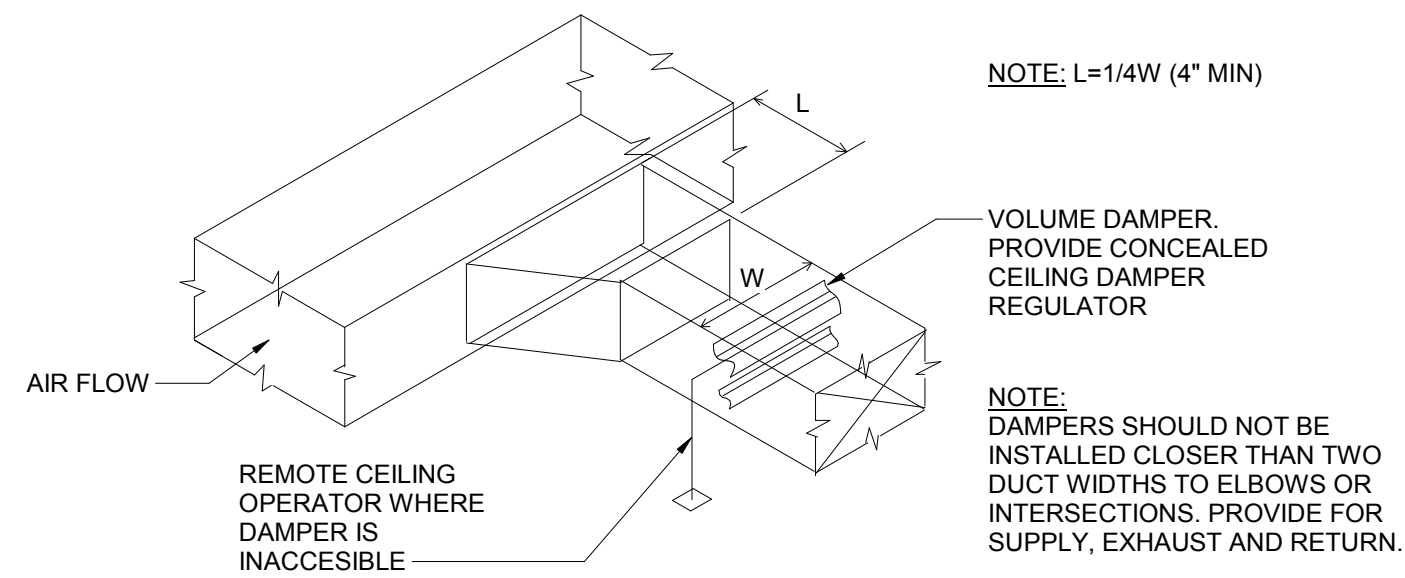


5
M01-04
RTU MOUNTING DETAIL
N.T.S.

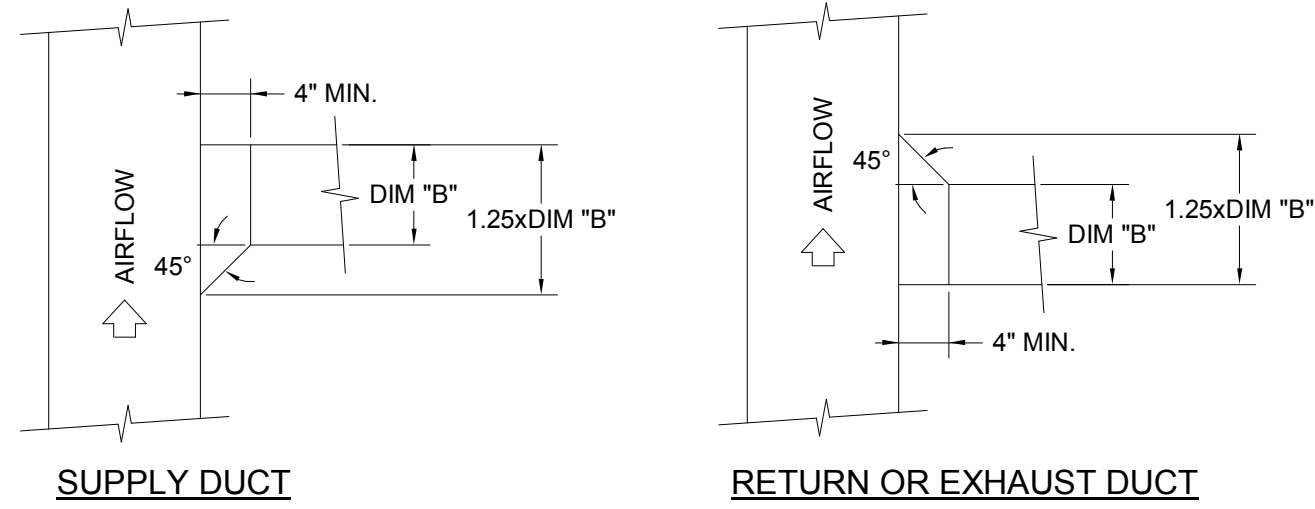
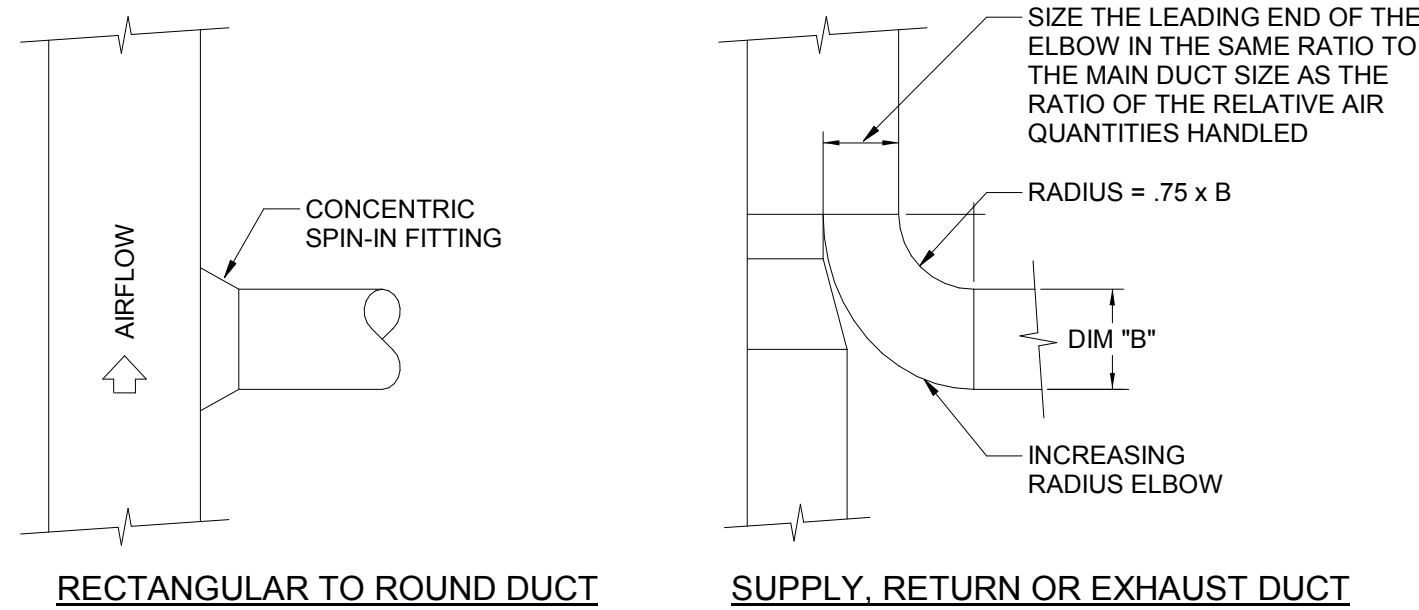


- HANGER DETAIL NOTES:
THE FOLLOWING GUIDELINES SHALL BE FOLLOWED WHEN ATTACHING ITEMS TO BAR JOISTS:
1. DO NOT HANG ANY TYPE OF CRANE OR HOIST FROM BAR JOISTS.
 2. OBTAIN CONCENTRATED LOADS FROM CERTIFIED EQUIPMENT DRAWINGS AND MANUFACTURER'S DATA.
 3. DO NOT HANG ANY LOAD OVER 50 POUNDS FROM JOIST BRACES.
 4. DO NOT HANG ANY LOADS OVER 50 POUNDS FROM THE TOP OR BOTTOM CHORD OF THE BAR JOIST BETWEEN JOISTS. ALWAYS HANG OVER A DIAGONAL-TO-CHORD JOINT.
 5. DO NOT DRILL OR WELD ANY PART OF THE BAR JOIST.
 6. DO NOT HANG ANY LOAD OVER 50 POUNDS FROM ONE SIDE OF THE BAR JOIST CHORD. THIS ECCENTRICITY CAN SERIOUSLY IMPAIR THE MEMBER'S STRUCTURAL PERFORMANCE.
 7. DO NOT HANG LOAD GREATER THAN 1000 POUNDS FROM ONLY ONE JOIST BECAUSE OF HANGER DEFICIENCY. HANG BETWEEN TWO JOISTS TO DISTRIBUTE THE LOAD AND GIVE A STRONGER, MORE STABLE HANGING SYSTEM.
 8. DO NOT HANG ANY LOAD OVER 10 POUNDS/LINEAR FOOT CONTINUOUSLY ALONG ONE BAR JOIST UNLESS THAT JOIST IS CAPABLE OF CARRYING THE APPLIED LOAD IN ADDITION TO THE REQUIRED BUILDING LIVE LOAD.
 9. COORDINATE HANGER LOADS WITH THE GENERAL CONTRACTOR CONSTRUCTION MANAGEMENT.
 10. LOCATION OF HANGER LOADS SHALL BE APPROVED BY GENERAL CONTRACTOR.
 11. ALL DUCTS & SUPPORTS PER SMACNA STANDARDS.

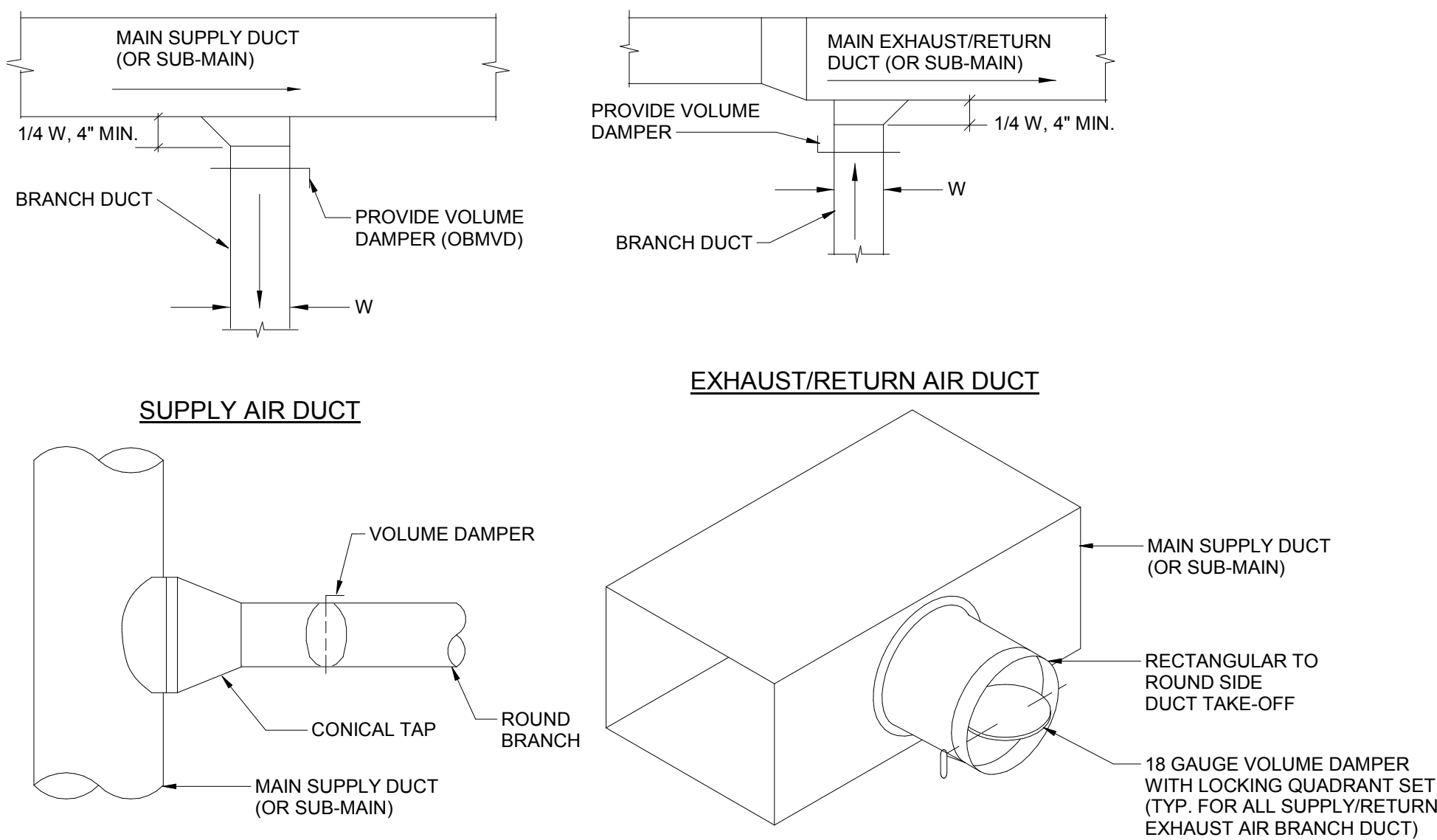
10
M01-04
HANGER DETAILS
N.T.S.



1
M01-04
BRANCH DUCT TAKE-OFF
N.T.S.



2
M01-04
RECTANGULAR DUCT BRANCH TAKE-OFF DETAILS
N.T.S.



- (DESIGNER NOTE)
1. REMOVE GAS FIRED UNIT HEATER DETAIL AND VENT FLASHING DETAIL FOR STORES NOT REQUIRING A GAS FIRED UNIT HEATER.
 2. STORES LOCATED IN CLIMATE ZONES 1,2, AND 3 AS DEFINED IN 2012 IECC, SECTION C 301 DO NOT REQUIRE UNIT HEATERS.

3
M01-04
BRANCH TAKE-OFF DETAIL
N.T.S.

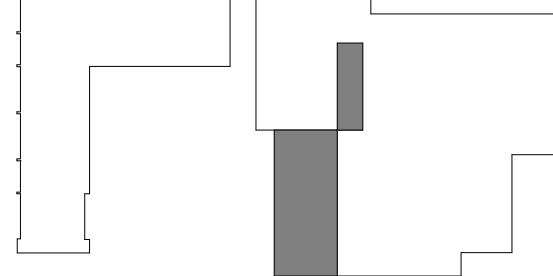
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PHASE OF WORK

Key Plan



Consultants

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Seal(s)

giffels webster

NORR

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Client
WAYNE STATE UNIVERSITY

Project
WSU DINING HALL ADDITION

655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
HVAC DETAILS

Scale: As indicated

Project No. JCDT18-0451

Drawing No. **M01-04**

PLUMBING FIXTURE SCHEDULE										
TAG	ADA	MANUFACTURER	MODEL	DESCRIPTION	ACCESSORIES	PIPE CONNECTION SIZE				NOTES
						CW	HW	SAN	VENT	
FS -1		WATTS	FS-782	12" SQUARE x 6" DEEP STAINLESS STEEL SANITARY FLOOR SINK	--	--	--	2"	1 1/4"	
LAV -1	Yes	CRANE	1580H	SELF-RIMMING OVAL SINK, VITREOUS CHINA, 17 3/8" x 20 3/8" x 7"	PROVIDE NEW SLOAN FAUCET: SLOAN EBF-615, MODEL S3315181, 4" CENTERSET SINK TRIM PLATE, BATTERY POWERED, SENSOR ACTIVATED, CHROME PLATED BRASS, 0.5 GPM VANDAL RESISTANT SPRAY HEAD, GRID STRAINER, 120 VAC/6 VDC PLUG-IN TRANSFORMER ASSE 1070 MIXING VALVE	3/8"	3/8"	1 1/4"	3/4"	
UR -1	Yes	CRANE	7399-05S100	VITREOUS CHINA, HIGH EFFICIENCY, LOW CONSUMPTION, ELONGATED RIM, INTRGRAL TRAP, 3/4" INLET SPUD, OUTLET CONNECTION THREADED 2" INSIDE (NPTF), CARRIER	SENSOR FLUSHOMETER: REGAL 186 SMO-0.5-OR, 0.5 GPF	3/4"	3/4"	2"	1 1/2"	
WB -1		IPS	MIB2HAAB	1/4 TURN LEAD FREE VALVE WITH 1" SWEAT CONNECTION / WATER HAMMER ARRESTER, CONNECTION TO BEVERAGE MACHINE SHALL BE PROVIDED WITH A BACKFLOW PREVENTER CONFORMING TO ASSE 1022 OR BY AN AIR GAP.	--	1"	--	--	--	
WC -1	Yes	CRANE	3446NS	VITREOUS CHINA, WALL-MOUNTED FLUSHOMETER VALVE TOILET, HIGH EFFICIENCY, ELONGATED BOWL, 1-1/2" INLET SPUD, FULLY-GLAZED 2-1/8" TRAPWAY	MANUAL FLUSHOMETER: WES 111, 1.6 GPF CARRIER	1"	1"	4"	2"	
WC -1	Yes	CRANE	3446NS	VITREOUS CHINA, WALL-MOUNTED FLUSHOMETER VALVE TOILET, HIGH EFFICIENCY, ELONGATED BOWL, 1-1/2" INLET SPUD, FULLY-GLAZED 2-1/8" TRAPWAY	RELOCATE EXIST MANUAL FLUSHOMETER VALVE AND CARRIER	-- 1"	-- 1"	-- 4"	-- 2"	
(E) FD		--	--	FLOOR DRAIN	--	--	--	--	--	
(E) LAV	Yes	CRANE	1580H	SELF-RIMMING OVAL SINK, VITREOUS CHINA, 17 3/8" x 20 3/8" x 7"	PROVIDE NEW SLOAN FAUCET: SLOAN EBF-615, MODEL S3315181, 4" CENTERSET SINK TRIM PLATE, BATTERY POWERED, SENSOR ACTIVATED, CHROME PLATED BRASS, 0.5 GPM VANDAL RESISTANT SPRAY HEAD, GRID STRAINER, 120 VAC/6 VDC PLUG-IN TRANSFORMER ASSE 1070 MIXING VALVE	--	--	--	--	
(E) UR	No	CRANE	--	--	--	--	--	--	--	
(E) WC	No	CRANE	--	--	--	--	--	--	--	
(R) EWC	Yes	ELKAY	EZSTL8LC	MECHANICAL PUSHBAR ACTUATED WATER COOLER, CARRIER	RELOCATED	3/8"	3/8"	1 1/4"	3/4"	
(R) WC	No	CRANE	3446NS	VITREOUS CHINA, WALL-MOUNTED FLUSHOMETER VALVE TOILET, HIGH EFFICIENCY, ELONGATED BOWL, 1-1/2" INLET SPUD, FULLY-GLAZED 2-1/8" TRAPWAY	RELOCATE EXIST MANUAL FLUSHOMETER VALVE AND CARRIER	1"	1"	4"	2"	

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Key Plan



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Structural: NORR
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Electrical: NORR

Seal(s)



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Client
WAYNE STATE
UNIVERSITY

Project
WSU DINING HALL
ADDITION

655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title

PLUMBING SCHEDULES

Scale:

Project No. JCDT18-0451

Drawing No.

M02-01

GRILLES, REGISTERS AND DIFFUSERS SCHEDULE																
TAG	SYSTEM	TYPE	MANUFACTURER	MODEL NUMBER	END BORDER	MOUNTING SYSTEM	SECTORED VANES COLOR	NUMBER OF SLOTS	SLOT WIDTH	LENGTH	FINISH	PLENUM	INSULATION	NECK SIZE	MATERIAL	NOTES
LD-1	SUPPLY AIR	78" 1 WAY	EFFECTIV HVAC	LSD-100	INT	DUCT MOUNTED	AB	4	1/2"	78"	M9016	-	AL	-	ALUMINUM	
LD-2	SUPPLY AIR	60" 1 WAY	EFFECTIV HVAC	PLSD-T	INT		PL	AN	4	1/2"	60"	AA	PLSD-T	AL	8"ø-8"ø	ALUMINUM
LD-3A	SUPPLY AIR	48" 2 WAY	EFFECTIV HVAC	PLSD-T	ARD	PL	AB	4	1/2"	48"	M9016	PLSD-T	AL	8"ø-8"ø	ALUMINUM	
LD-3B	SUPPLY AIR	48" 2 WAY	EFFECTIV HVAC	PLSD-T	ARI	PL	AB	4	1/2"	48"	M9016	PLSD-T	AL	8"ø-8"ø	ALUMINUM	
LD-4A	SUPPLY AIR	48" 1 WAY	EFFECTIV HVAC	PLSD-T	ARD	PL	AB	4	1/2"	48"	M9016	PLSD-T	AL	8"ø-8"ø	ALUMINUM	
LD-4B	SUPPLY AIR	48" 1 WAY	EFFECTIV HVAC	PLSD-T	ARI	PL	AB	4	1/2"	48"	M9016	PLSD-T	AL	8"ø-8"ø	ALUMINUM	
RG-1	RETURN AIR	630 L - 0.75	PRICE	635 SERIES	-	-	-	-	-	-	B12 WHITE	-	-	-	ALUMINUM	

NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR DIFFUSER/GRILLE FINISH COLOR.

EXHAUST FAN SCHEDULE								
TAG	AREA SERVED	FAN RPM	TSP	(E) EXHAUST AIR FLOW	MOTOR HP	MANUFACTURER	MODEL NO.	NOTES
(E)EF	103 MENS RESTROOM	1070	0.19	375 CFM	0.52	GREENHECK	SP-A410	
(E)EF	104 WOMENS RESTROOM	1070	0.19	375 CFM	0.52	GREENHECK	SP-A410	
EF - 1	104 WOMENS RESTROOM	619	0.19	400 CFM	0.01	GREENHECK	SP-A90	1,2,3,4
EF - 2	103 MENS RESTROOM	619	0.19	400 CFM	0.01	GREENHECK	SP-A90	1,2,3,4

NOTES:

1. FAN SHALL BE U.L. CERTIFIED..
2. SAFETY DISCONNECT SWITCH.
3. PROVIDE DUCT MOUNTED GRAVITY BACKDRAFT DAMPER.
4. SWITCH FOR NEW FAN SHALL BE CONNECTED TO EXISTING EF IN EACH RESTROOM.

SOUND ATTENUATOR SCHEDULE																					
TAG	FACE DIMENSION	TYPE	LENGTH	SYSTEM		CFM	FACE VELOCITY (FPM)	APD (IN W.G.)	APD W/ SYSTEM EFFECT (IN W.G.)	ATTENUATOR DATA								BASIS OF DESIGN	MODEL	CASING HTL EQUIVALENT GAUGE	NOTES
				UNIT SERVED	LOCATION					MIN INSERTION LOSS - dB OCTAVE BAND CENTER FREQUENCY (Hz)											
										63	125	250	500	1K	2K	4K	8K				
SIL-R	20"x50"-20"x50"	ELBOW	11' - 0"	ERU-1	DINING 101	9700 CFM	~776 FPM	0.12 in-wg	0.23 in-wg	12	21	30	40	46	38	25	17	VIBRO ACOUSTICS	RED-HV-A23581	18	1,2,3
SIL-S	24"x40"-24"x40"	ELBOW	7' - 0"	ERU-1	DINING 101	9700 CFM	776 FPM	0.29 in-wg	0.32 in-wg	10	15	25	35	38	28	22	18	VIBRO ACOUSTICS	RED-HV-A23581	12	1,2,3

NOTES:

1. NON BASIS OF DESIGN (SILENCER MANUFACTURER) SHALL PROVIDE ACOUSTICAL ANALYSIS WITH PE/P. ENG STAMP SHOWING SILENCER MEETS NC-40-45 LEVEL AS SCHEDULED DURING SUBMITTAL REVIEW.
2. NON BASIS OF DESIGN (SILENCER MANUFACTURER) SHALL PROVIDE PRESSURE DROP CALCULATIONS WITH PE/P. ENG STAMP TO DEMONSTRATE THE PRESSURE DROP INCLUDING SYSTEM EFFECT AS SCHEDULED DURING.
3. FOR NON-BASIS OF DESIGN PRODUCT SUPPLIED, CONTRACTOR IS FINANCIALLY RESPONSIBLE TO ENSURE NOISE CONTROL IS DELIVERED AS PER NC LEVELS IN SPACES OR DBA AT SPECIFIED DISTANCE.

OSA VENTILATION CALCULATION-MICHIGAN MECHANICAL CODE 2015						
AREA TYPE	TOTAL AREA (FT²)	OCCUPANCY DENSITY (PEOPLE/FT²)	TOTAL OCCUPANTS	OSA REQ'D PER SQ.FT. (CFM)	OSA REQ'D PER PERSON (CFM)	OSA REQ'D FOR THIS OCCUPANCY CLASSIFICATION (CFM)
DINING AREA	5108	65	333	0.18	7.5	3417 CFM
TOTAL	5108		333			3417 CFM

AIR BALANCE SCHEDULE			
ROOM NAME	SUPPLY AIR	RETURN AIR	EXHAUST AIR
NEW CAFETRIA ADDITION	9700 CFM	6250 CFM	3450 CFM
WOMENS	125 CFM	0 CFM	375 CFM
MENS	125 CFM	0 CFM	375 CFM

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WAYNE STATE UNIVERSITY

Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
MECHANICAL SCHEDULES

Scale:

Project No. JCDT18-0451

Drawing No. M02-02

ENERGY RECOVERY UNIT SCHEDULE

					SUPPLY AIR FAN								SOUND DATA														
MARK	AREA SERVED	MANUFACTURER	MODEL NUMBER	UNIT TYPE	SUPPLY FAN TYPE	FAN MOTOR	SUPPLY OUTSIDE AIRFLOW (CFM)	FAN ESP (IN WG)	FAN TSP (IN WG)	FAN RPM	FAN BHP	FAN HP	ELECTRICAL					63	125	250	500	1000	2000	4000	8000	dBA	SONES
													V	PH	Hz	FLA											
ERU-1	DINING ROOM	AAON	RN-025-3-0-BB02-3CB	LOW SOUND	BACKWARD CURVED PLENNUM	EC VFD	9700	1.0	4.39	1760	9.90	15	460	3	60	21	INLET	92	90	89	87	87	87	86	86	95	--
																	OUTLET	94	92	93	97	95	92	90	87	99	--

- NOTES:
1. PROVIDE NON-FUSED DISCONNECT.
 2. PROVIDE 24 VAC, 20 VA FOR EXTERNAL ACCESSORIES.
 3. PROVIDE ROOF MOUNTED VIBRATION ISOLATION ROOF CURB.
 4. UNIT SHALL BE DESIGNED FOR A SOUND POWER LEVEL OF 45 TO 55 dBA, 50 FT FROM THE UNIT TO THE ADJACENT RESIDENT TOWER. UNIT SHALL BE ACOUSTICALLY DESIGNED OR TREATED TO MEET THIS REQUIREMENT.

ENERGY RECOVERY UNIT SCHEDULE CONT.

					EXHAUST FAN								SOUND DATA														
MARK	AREA SERVED	MANUFACTURER	MODEL NUMBER	UNIT TYPE	EXHAUST FAN TYPE	FAN MOTOR	EXHAUST AIRFLOW (CFM)	FAN ESP (IN WG)	FAN TSP (IN WG)	FAN RPM	FAN BHP	FAN HP	ELECTRICAL					63	125	250	500	1000	2000	4000	8000	dBA	SONES
													V	PH	Hz	FLA											
ERU-1	DINING ROOM	AAON	RN-025-3-0-BB02-3CB	LOW SOUND	BACKWARD CURVED PLENNUM	EC VFD	3450	0.50	1.47	1760	1.20	2	460	3	60	3.4	INLET	83	84	83	77	73	71	67	61	84	--
																	OUTLET	83	84	83	77	73	71	67	61	84	--

ENERGY RECOVERY UNIT SCHEDULE CONT.

				ENERGY WHEEL COOLING PERFORMANCE								ENERGY WHEEL HEATING PERFORMANCE															
MARK	AREA SERVED	MANUF.	MODEL NUMBER	COOLING AIRFLOW (CFM)	EXHAUST AIRFLOW (CFM)	OUTDOOR AIR TEMP DB/WB (F)	ENERGY RECOVERY SUPPLY AIR TEMP DB/WB (F)	MIXED AIR TEMP DB/WB (F)	RETURN AIR TEMP DB/WB (F)	EXHAUST AIR TEMP DB/WB (F)	TOTAL COOLING CAPACITY (MBH)	OUTDOOR AIR TEMP (WB/DB) (F)	ENERGY RECOVERY SUPPLY AIR TEMP DB/WB (F)	MIXED AIR TEMP DB/WB (F)	RETURN AIR TEMP DB/WB (F)	EXHAUST AIR TEMP DB/WB (F)	TURN DOWN RATIO	TOTAL HEATING CAPACITY (MBH)	ELECTRICAL						PRE-FILTERS	FINAL FILTERS	
																			V	PH	Hz	FLA	MCA	MOP			
ERU-1	DINING ROOM	AAON	RN-025-3-0-BB02-3CB	9700	3450	95 / 75	78.70 / 66.20	76.32 / 63.54	75 / 62	86.16 / 71.52	112.67	3 / -11.90	49.48 / 38.43	62.70 / 46.84	70 / 51	10.52 / 10.09	18:1	256.81	460	3	60	79	84	100	(8) - 2" MERV 8, 30%	(8) - 4" MERV 13	

ENERGY RECOVERY UNIT SCHEDULE CONT.

CONDENSING UNIT COOLING SECTION											SOUND POWER LEVEL (dBA)										SOUND PRESSURE LEVEL (dBA)													
MARK	MANUF.	MODEL NUMBER	EQUIV. TOTAL COOLING CAPACITY (MBH)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	LATENT CAPACITY (MBH)	ENTERING AIR TEMP DB/WB (F)	COIL LEAVING AIR TEMP DB/WB (F)	UNIT LEAVING AIR TEMP DB/WB (F)	EVAPORATOR COIL				EER	IEER		FANS	63	125	250	500	1000	2000	4000	8000	DISTANCE FT	63	125	250	500	1000	2000	4000	8000
										AREA	ROWS	FPI	EVAPORATOR FACE VELOCITY																					
ERU-1	AAON	RN-025-3-0-BB02-3CB	425.25	312.59	245.56	67.03	76.32 / 63.54	52.57/ 52.10	55.13/ 53.18	19.9	6	12	19.9	11.7	12.7	INLET	3		80	78	76	75	72	67	62	15		80	78	76	75	72	67	62
																OUTLET	3		80	78	76	75	72	67	62	15		80	78	76	75	72	67	62
																TOTAL	3		80	78	76	75	72	67	62	15		80	78	76	75	72	67	62

ENERGY RECOVERY UNIT SCHEDULE CONT.

CONDENSING UNIT COOLING SECTION														SOUND POWER LEVEL (dBA)										SOUND PRESSURE LEVEL (dBA)										
MARK	MANUF.	MODEL NUMBER	EQUIV. TOTAL COOLING CAPACITY (MBH)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	LATENT CAPACITY (MBH)	ENTERING AIR TEMP DB/WB (F)	COIL LEAVING AIR TEMP DB/WB (F)	UNIT LEAVING AIR TEMP DB/WB (F)	EVAPORATOR COIL				EER	IEER		FANS	63	125	250	500	1000	2000	4000	8000	DISTANCE FT	63	125	250	500	1000	2000	4000	8000
										AREA	ROWS	FPI	EVAPORATOR FACE VELOCITY																					
ERU-1	AAON	RN-025-3-0-BB02-3CB	425.25	312.59	245.56	67.03	76.32 / 63.54	52.57/ 52.10	55.13/ 53.18	19.9	6	12	19.9	11.7	12.7	INLET	3		80	78	76	75	72	67	62	15		80	78	76	75	72	67	62
										OUTLET	3		80	78	76	75	72	67	62	15		80	78	76	75	72	67	62						
										TOTAL	3		80	78	76	75	72	67	62	15		80	78	76	75	72	67	62						

ENERGY RECOVERY UNIT SCHEDULE CONT.

NATURAL GAS HEATING SECTION																REHEAT COIL				DIMENSIONS HxWxL (IN)	WEIGHT (LBS)	FAN (HP)	TOTAL ELECTRICAL			
MARK	MANUFACTURER	MODEL NUMBER	HEATING TYPE	TOTAL HEATING CAPACITY (BTUH)	HEATING CAPACITY INPUT (BTUH)	ENTERING AIR TEMP DB/WB (F)	LEAVING AIR TEMP DB/WB (F)	TURNDOWN RATIO								CAPACITY (BTUH)	LAT DB (F)	LAT WB (F)	RH				VOLT	PHASE	MCA	MOP
ERU-1	AAON	RN-025-3-0-BB02-3CB	NAT. GAS HEAT	432,000	540,000	62.70 / 46.84	104.0/ 63.3	18:1								190,000	70.70	59.29	51%	57x64x157	3860	0.98	460	3	71	90

DATE	ISSUED FOR	REV
05-14-2019	OWNER REVIEW	2
06-03-2019	BID / PERMIT	3

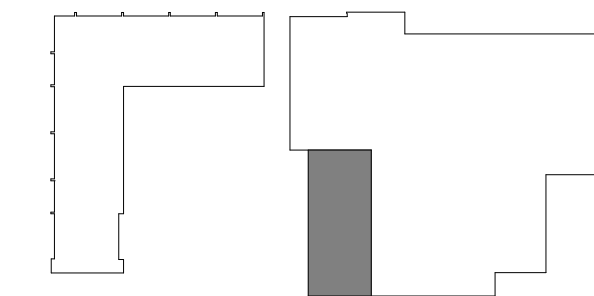
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil: Landscape: Architecture: NORR Structural: NORR Mechanical: NORR Electrical: NORR

Seal(s)



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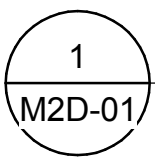
Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead BRENDA PESMARK	Drawn RACHEL GENDICH
Project Leader BRENDA PESMARK	Checked HENRY MONTAGUE

Client
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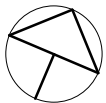
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
MECHANICAL SCHEDULES

Scale:	1 : 50
Project No.	JCDT18-0451
Drawing No.	M02-03



SCALE: 1/4" = 1'-0"



- 1 REMOVE (E) EWC, CLEAN AND SAVE FOR REINSTALLATION.
- 2 REMOVE (E) WC AND FLUSH VALVE, CLEAN AND SAVE FOR REINSTALLATION.
- 3 REROUTE SANITARY PIPE UNDER FLOOR TO AVOID NEW WALL. REFER TO 2/M20-02 AND 1/M3D-01.

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PHASE OF WORK

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

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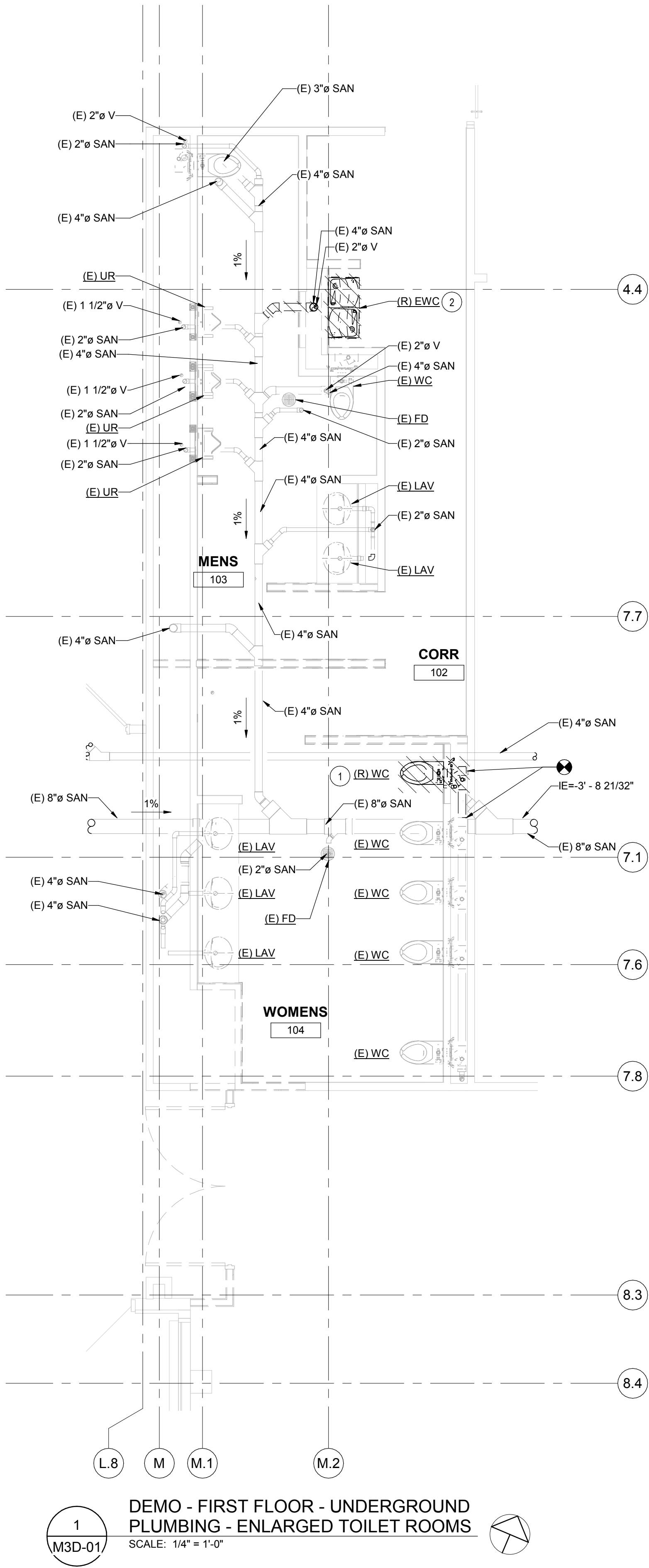
Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Scale: As indicated

Project No. JCDT18-0451

Drawing No.

M2D-01

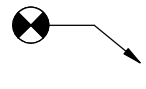


1
M3D-01

DEMO - FIRST FLOOR - UNDERGROUND
PLUMBING - ENLARGED TOILET ROOMS

SCALE: 1/4" = 1'-0"

LEGEND

- EXISTING TO REMAIN
- EXISTING TO BE DEMOLISHED
-  CONNECT NEW AT LOCATION SHOWN

UNDERGROUND PLUMBING KEY NOTES

1. DEMO PIPE BACK TO MAIN. RECONNECT SANITARY UNDERFLOOR TO MAIN TO AVOID NEW WALL PLACEMENT. REFER TO 2/M20-02 AND 2/M30-02.
2. DEMO PIPE BACK TO MAIN FROM REMOVED EWC. PREPARE FOR RECONNECTION.

GENERAL NOTES

1. ALL PLUMBING IS ACCESSIBLE IN A 6'-6" DEEP BASEMENT BELOW THE BATHROOMS.

DATE	ISSUED FOR	REV
04-03-2019	OWNER REVIEW	1
05-14-2019	OWNER REVIEW	2
06-03-2019	BID / PERMIT	3

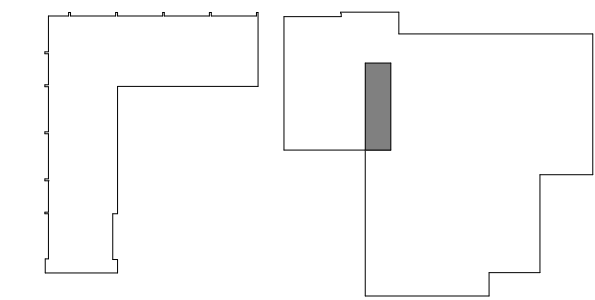
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
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Mechanical: NORR
Electrical: NORR

Seal(s)

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Project Leader BRENDA PESMARK	Checked HENRY MONTAGUE

Client
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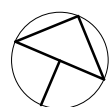
Project
**WSU DINING HALL
ADDITION**
655 W. KIRBY ST.
DETROIT, MI 48202

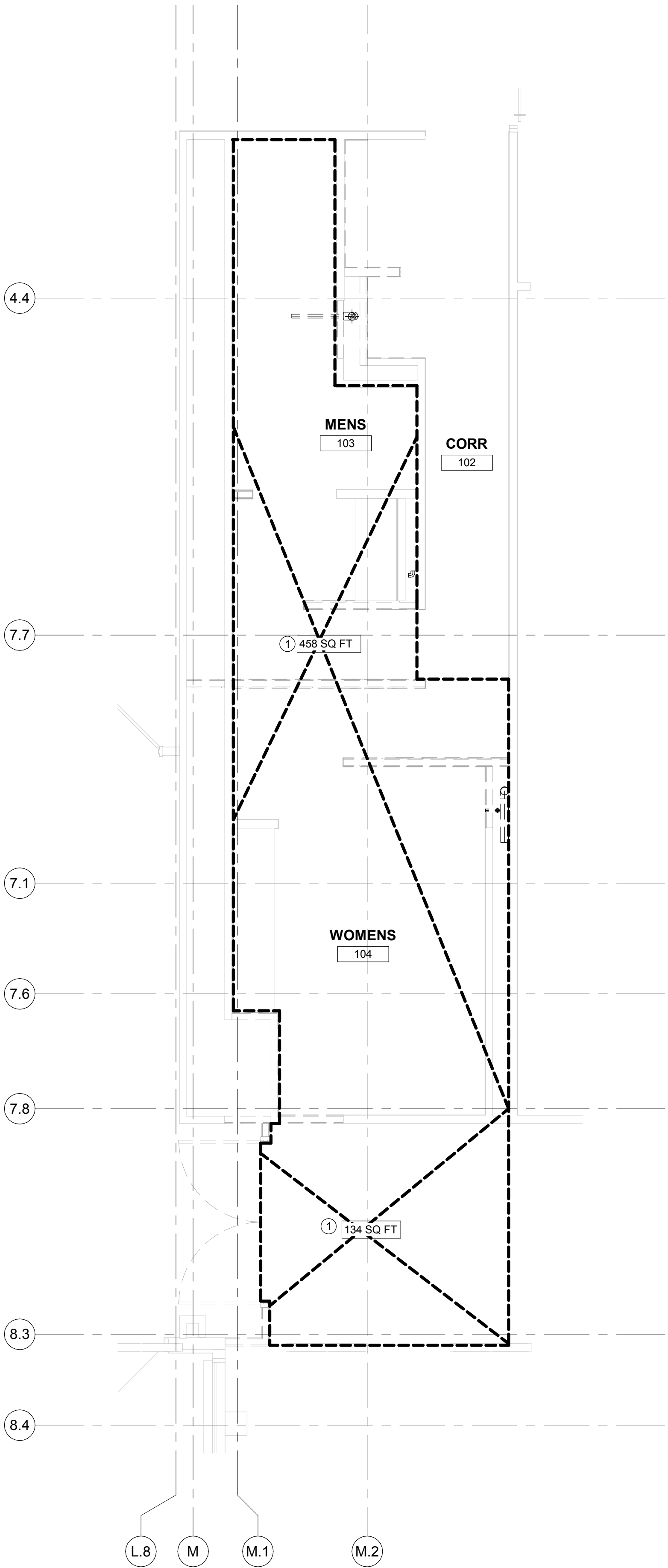
Drawing Title
**FIRST FLOOR UNDERGROUND
PLUMBING DEMOLITION PLAN**

Scale: As indicated

Project No. JCDT18-0451

Drawing No.
M3D-01

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1
M4D-01

DEMO - FIRST FLOOR - FIRE PROTECTION
- ENLARGED TOILET ROOMS

SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET M00-02 FOR FIRE PROTECTION GENERAL NOTES AND FIRE PROTECTION DESIGN CRITERIA.
2. REFER TO SHEET M04-01 FOR FIRE PROTECTION DETAILS.

KEY NOTES

- 1 EXISTING FIRE PROTECTION SPRINKLER HEADS IN THIS AREA. REWORK SPRINKLER HEADS FOR NEW CEILING AND FLOOR LAYOUT.

DATE	ISSUED FOR	REV
04-03-2019	OWNER REVIEW	1
05-14-2019	OWNER REVIEW	2
06-03-2019	BID / PERMIT	3

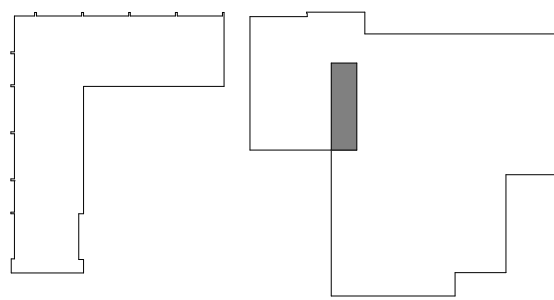
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

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Project Leader BRENDA PESMARK	Checked HENRY MONTAGUE

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Project
**WSU DINING HALL
ADDITION**
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title

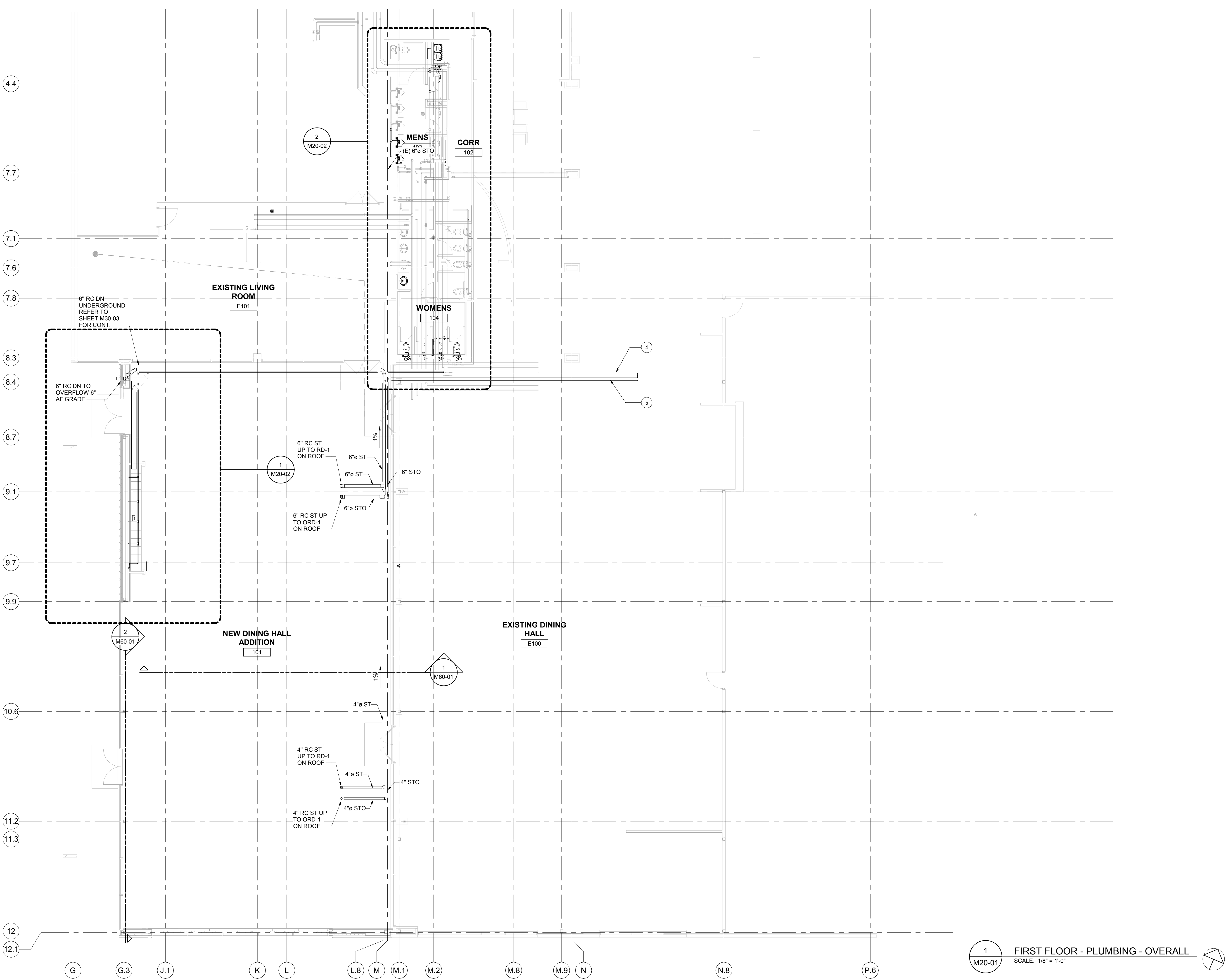
**FIRST FLOOR FIRE
PROTECTION DEMOLITION
PLAN**

Scale: 1/4" = 1'-0"

Project No. JCDT18-0451

Drawing No.

M4D-01



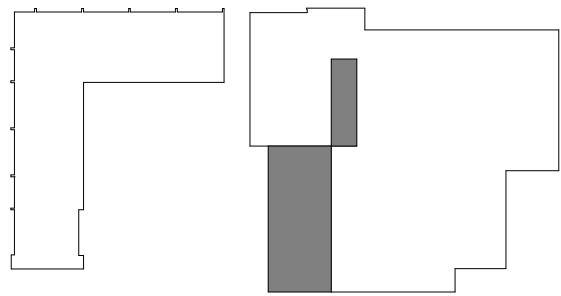
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Project Component
PHASE OF WORK

Key Plan



Consultants

Civil:
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Structural: NORR
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Electrical: NORR

Seal(s)

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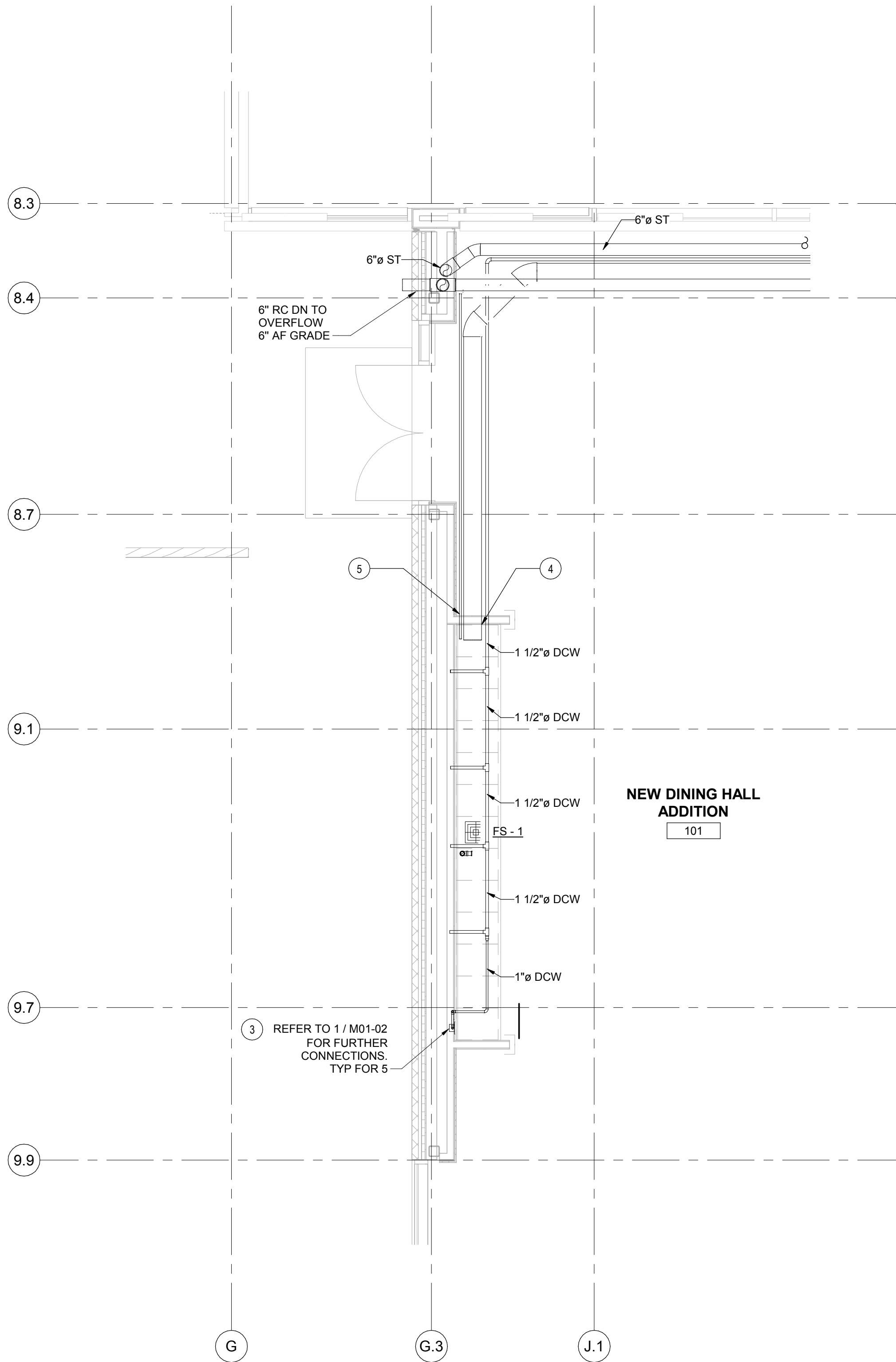
Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
FIRST FLOOR PLUMBING PLAN

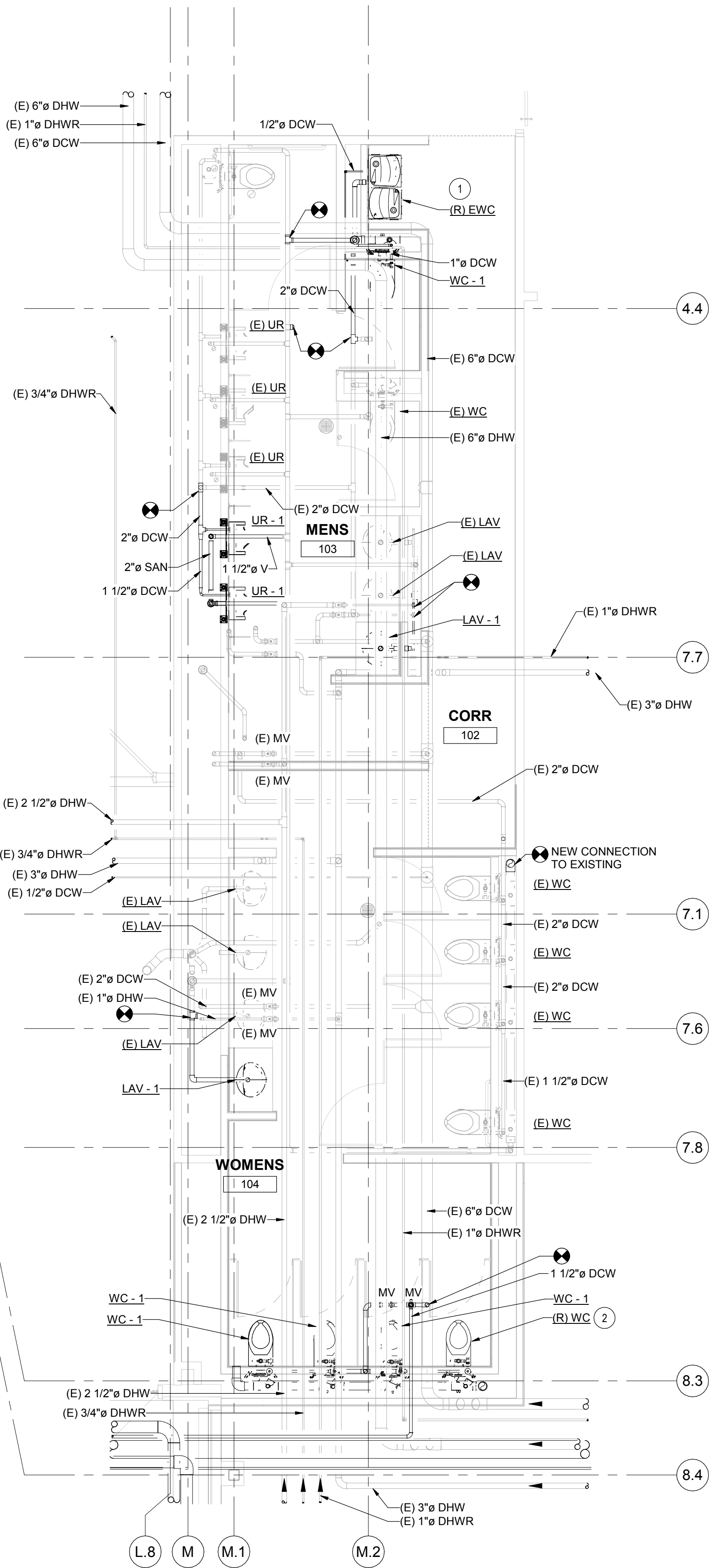
Scale: 1/8" = 1'-0"

Project No. JCDT18-0451

Drawing No. M20-01



1
M20-02
FIRST FLOOR - PLUMBING - ENLARGED BEVERAGE AREA
SCALE: 1/4" = 1'-0"

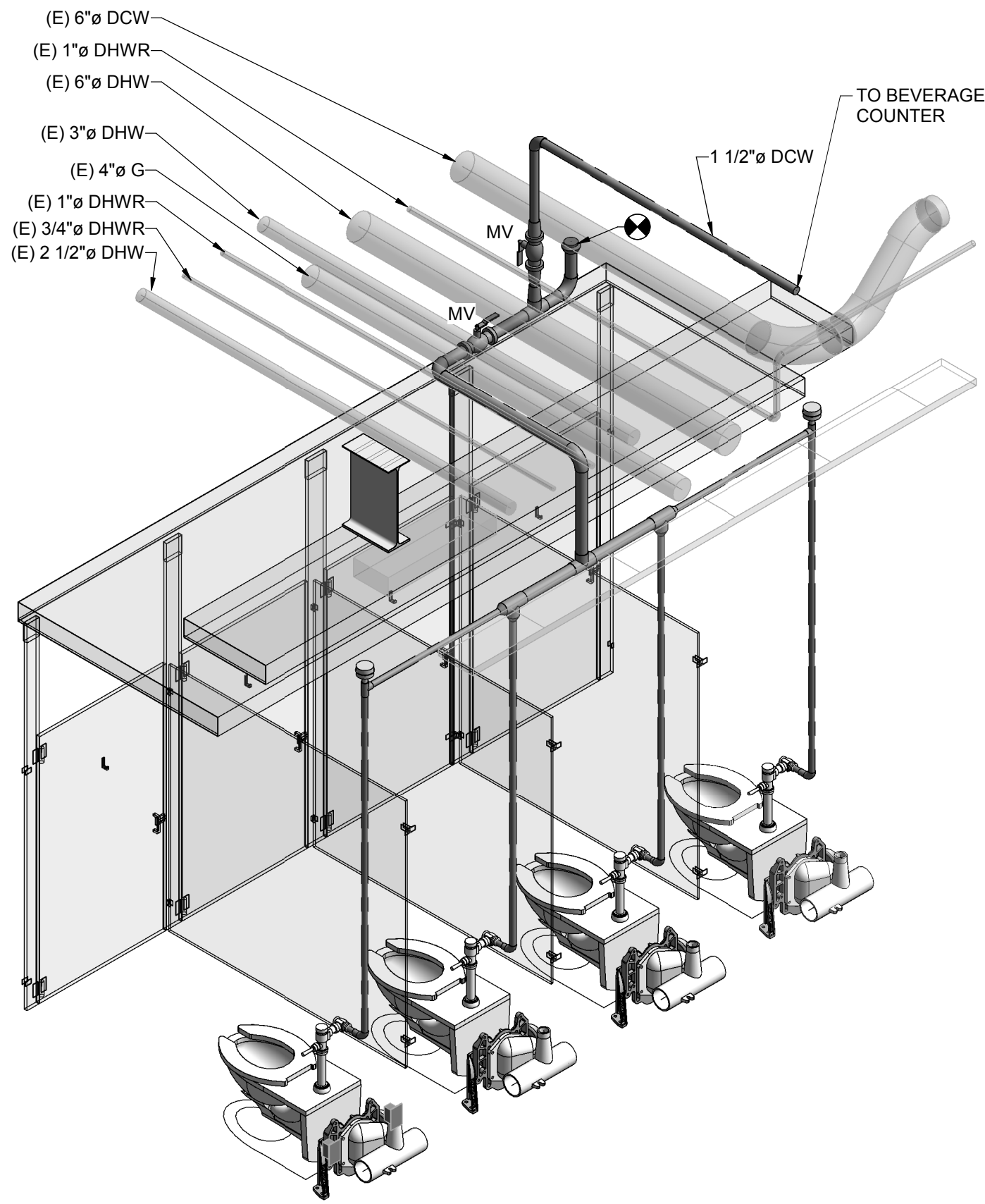


2
M20-02
FIRST FLOOR - PLUMBING - ENLARGED TOILET ROOMS
SCALE: 1/4" = 1'-0"

LEGEND		
	EXISTING TO REMAIN	
	EXISTING TO BE DEMOLISHED	
	CONNECT NEW AT LOCATION SHOWN	

PLUMBING KEY NOTES

- 1 REINSTALL (E) EWC IN NEW LOCATION SHOWN.
- 2 REINSTALL (E) WC AND FLUSH VALVE IN NEW LOCATION SHOWN.
- 3 CW DN TO WATER VALVE BOX WITH HAMMER ARRESTOR UNDER COUNTER FOR CONNECTIONS TO BEVERAGE MACHINES BY EQUIPMENT SUPPLIER. PROVIDE A BACKFLOW PREVENTER CONFORMING TO ASSE 1022 OR BY AN AIR GAP IN EACH MACHINE.
- 4 SYRUP LINES FROM PEPSICO. CONTACT PEPSICO FOR EXACT ROUTING OF SYRUP LINES FROM THE SYRUP ROOM ADJACENT TO THE KITCHEN.
- 5 CO2 LINE FROM CO2 BULK STORAGE TANK SYSTEM. CO2 LINE TO BE RUN BY BULK CO2 SUPPLIER.



3
M20-02
COLD WATER TAP DETAIL
N.T.S.

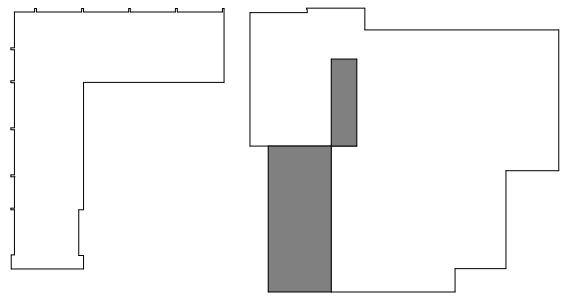
DATE	ISSUED FOR	REV
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Project Component
PHASE OF WORK

Key Plan



Consultants

Civil: Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

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Project Leader BRENDA PESMARK	Checked HENRY MONTAGUE

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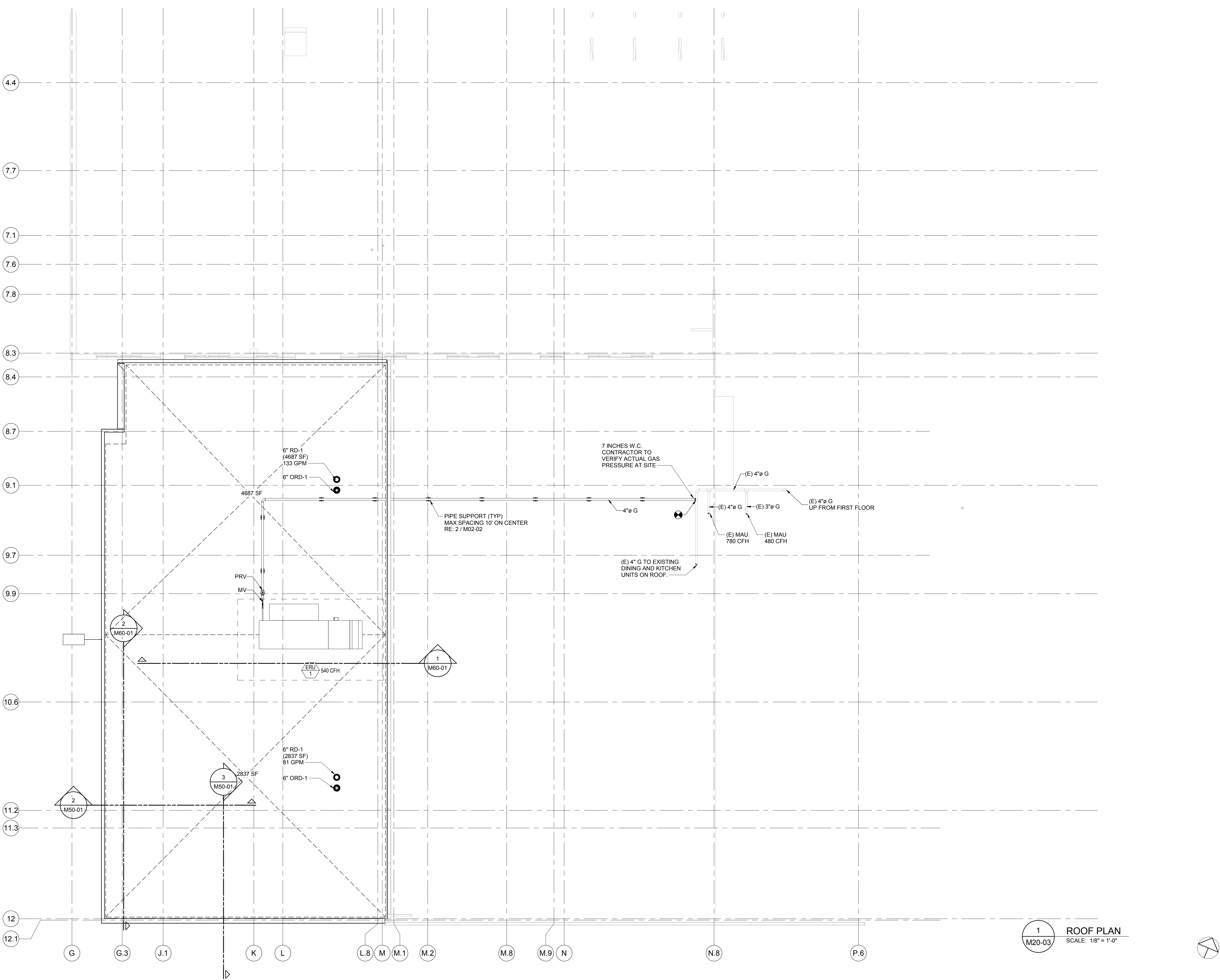
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
FIRST FLOOR PLUMBING ENLARGED PLAN

Scale: As indicated

Project No. JCDT18-0451

Drawing No.
M20-02



1 ROOF PLAN
M20-03 SCALE: 1/8" = 1'-0"

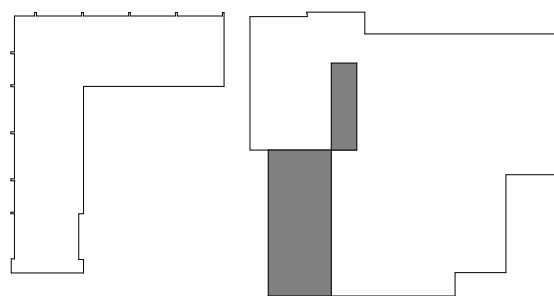
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Key Plan



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Structural: NORR
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Electrical: NORR

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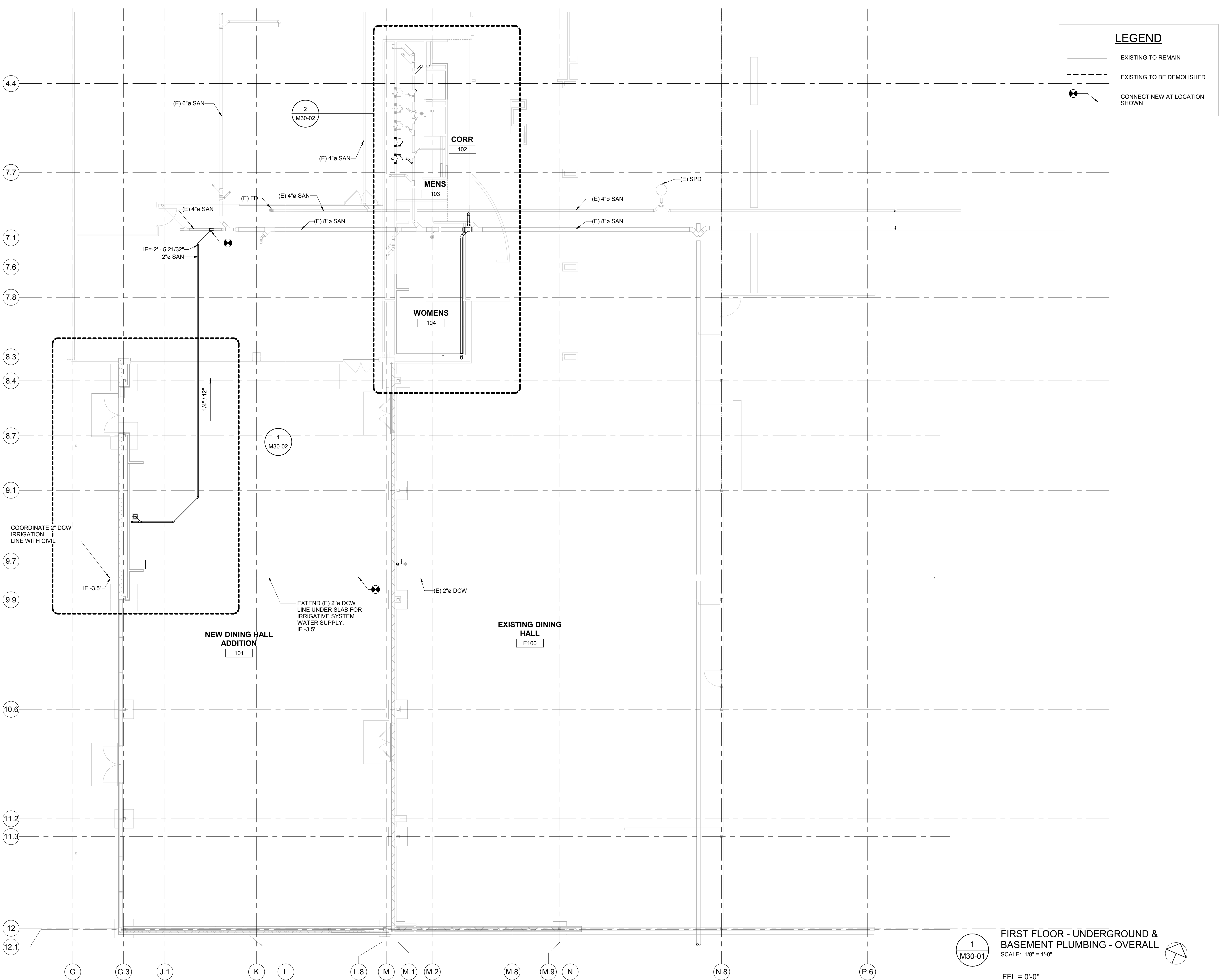
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
ROOF PLAN

Scale: 1/8" = 1'-0"

Project No. JCDT18-0451

Drawing No. **M20-03**



LEGEND

- EXISTING TO REMAIN
- EXISTING TO BE DEMOLISHED
- CONNECT NEW AT LOCATION SHOWN

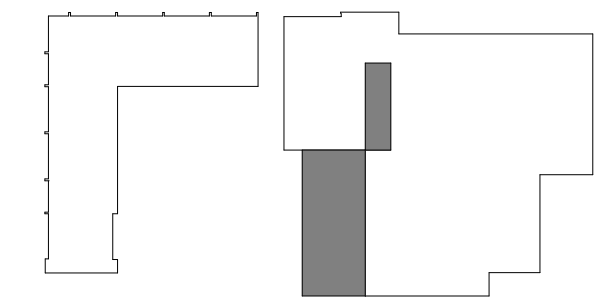
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Project Component
PHASE OF WORK

Key Plan



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Mechanical: NORR
Electrical: NORR

Seal(s)

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Project Leader BRENDA PESMARK	Checked HENRY MONTAGUE

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Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
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Drawing Title
FIRST FLOOR UNDERGROUND PLUMBING PLAN

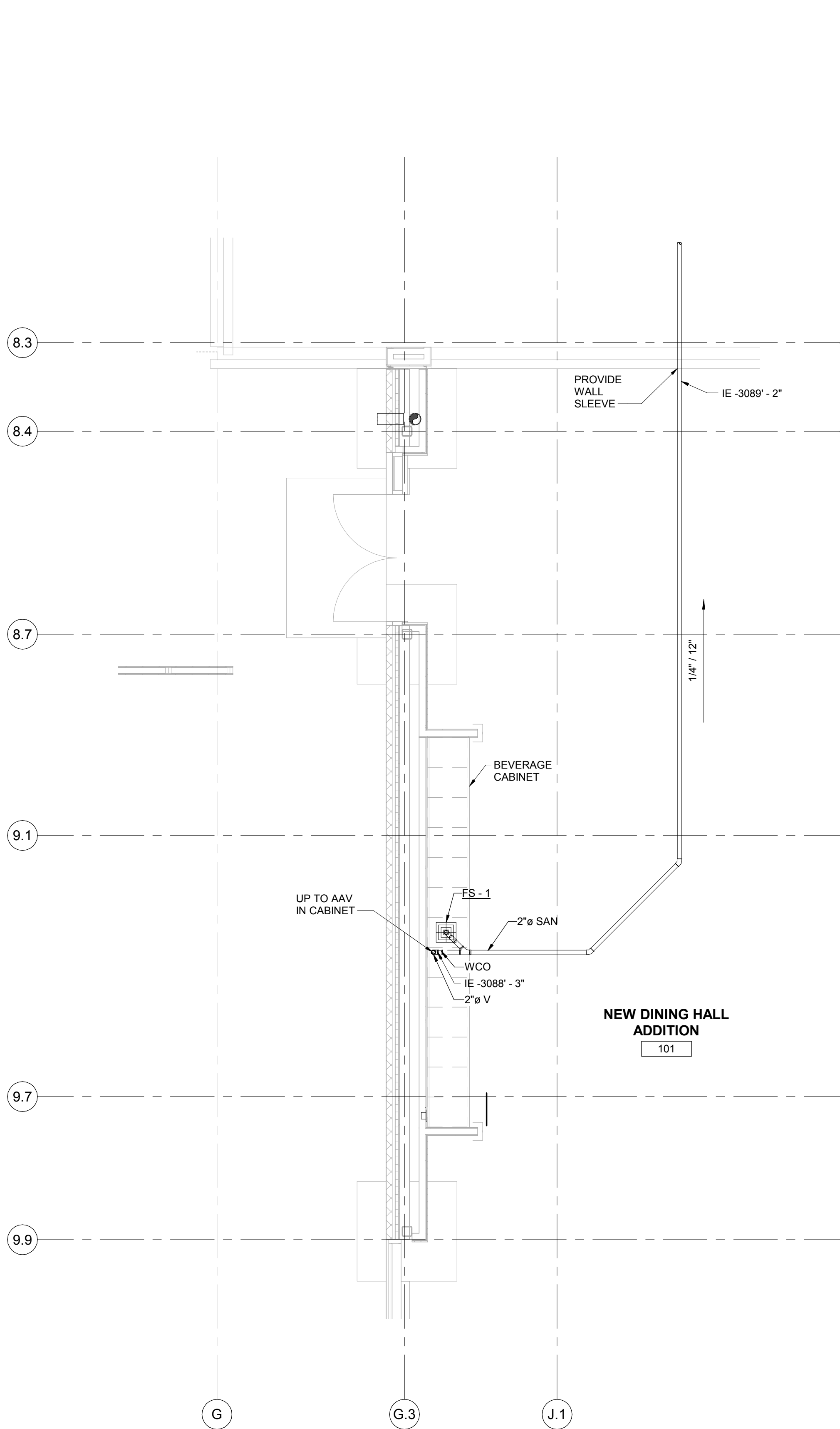
Scale: As indicated

Project No. JCDT18-0451

Drawing No. **M30-01**

FIRST FLOOR - UNDERGROUND & BASEMENT PLUMBING - OVERALL
SCALE: 1/8" = 1'-0"

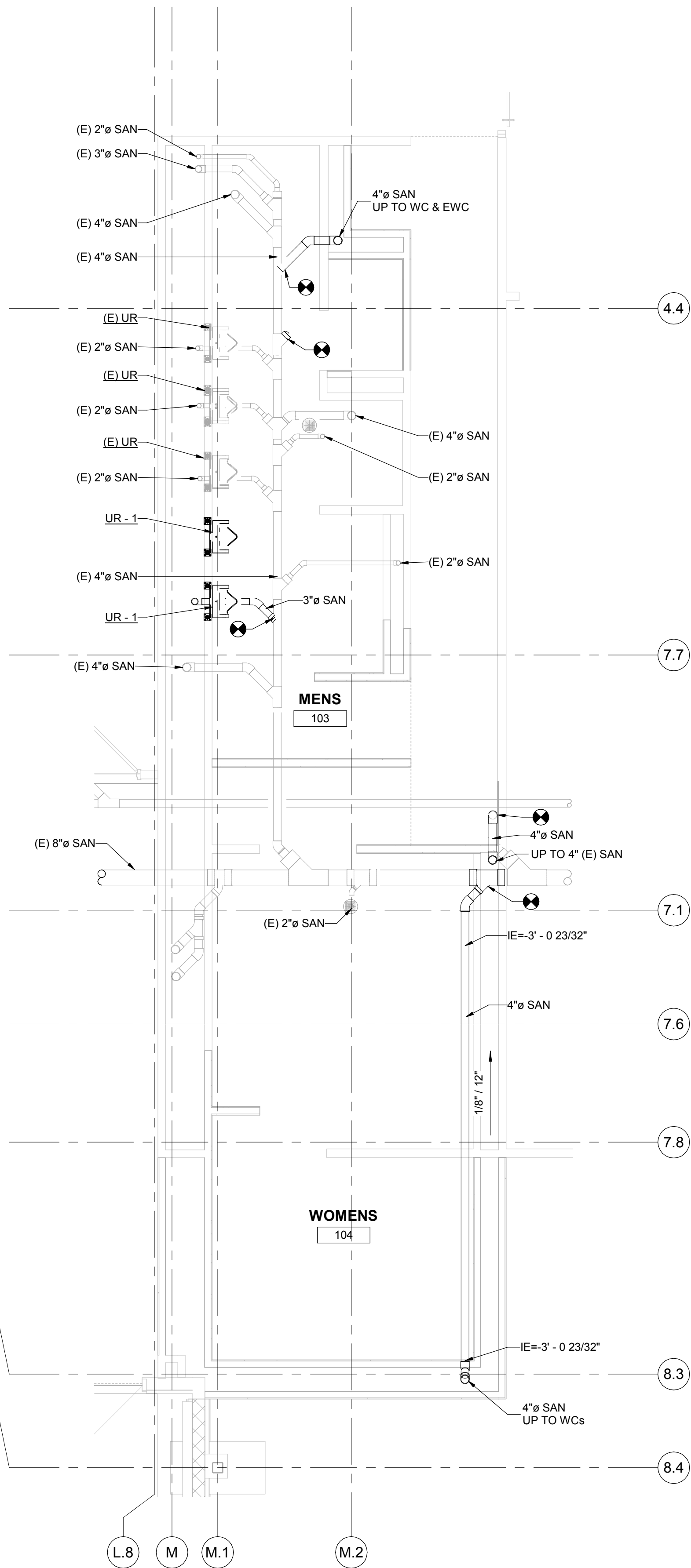
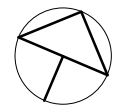
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1
M30-02

FIRST FLOOR - UNDERGROUND
PLUMBING - ENLARGED BEVERAGE AREA

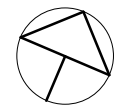
SCALE: 1/4" = 1'-0"



2
M30-02

FIRST FLOOR - BASEMENT PLUMBING -
ENLARGED TOILET ROOMS

SCALE: 1/4" = 1'-0"



LEGEND		
	EXISTING TO REMAIN	
	EXISTING TO BE DEMOLISHED	
	CONNECT NEW AT LOCATION SHOWN	

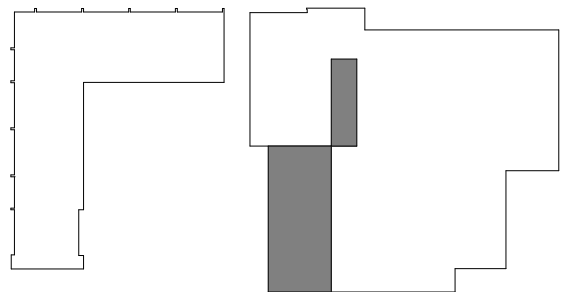
DATE	ISSUED FOR	REV
04-03-2019	OWNER REVIEW	1
05-14-2019	OWNER REVIEW	2
06-03-2019	BID / PERMIT	3

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Project Component
PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

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Project Leader BRENDA PESMARK	Checked HENRY MONTAGUE

Client
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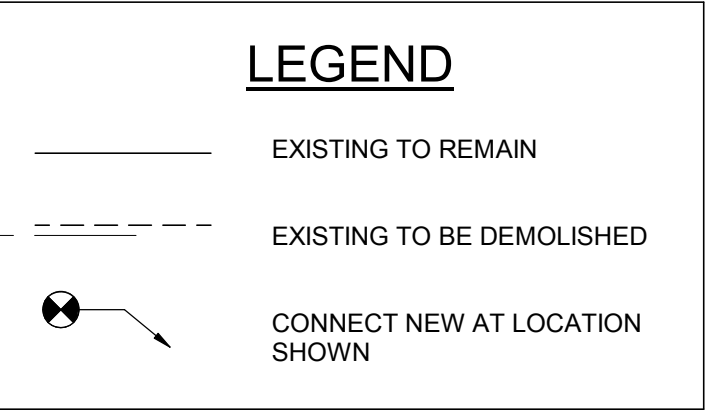
Project
**WSU DINING HALL
ADDITION**
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
**FIRST FLOOR UNDERGROUND
PLUMBING ENLARGED PLAN**

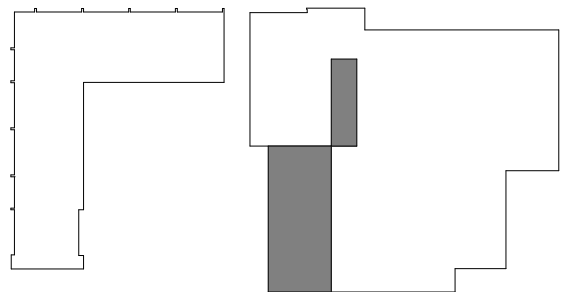
Scale: As indicated

Project No. JCDT18-0451

Drawing No.
M30-02



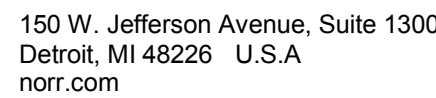
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Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)



Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

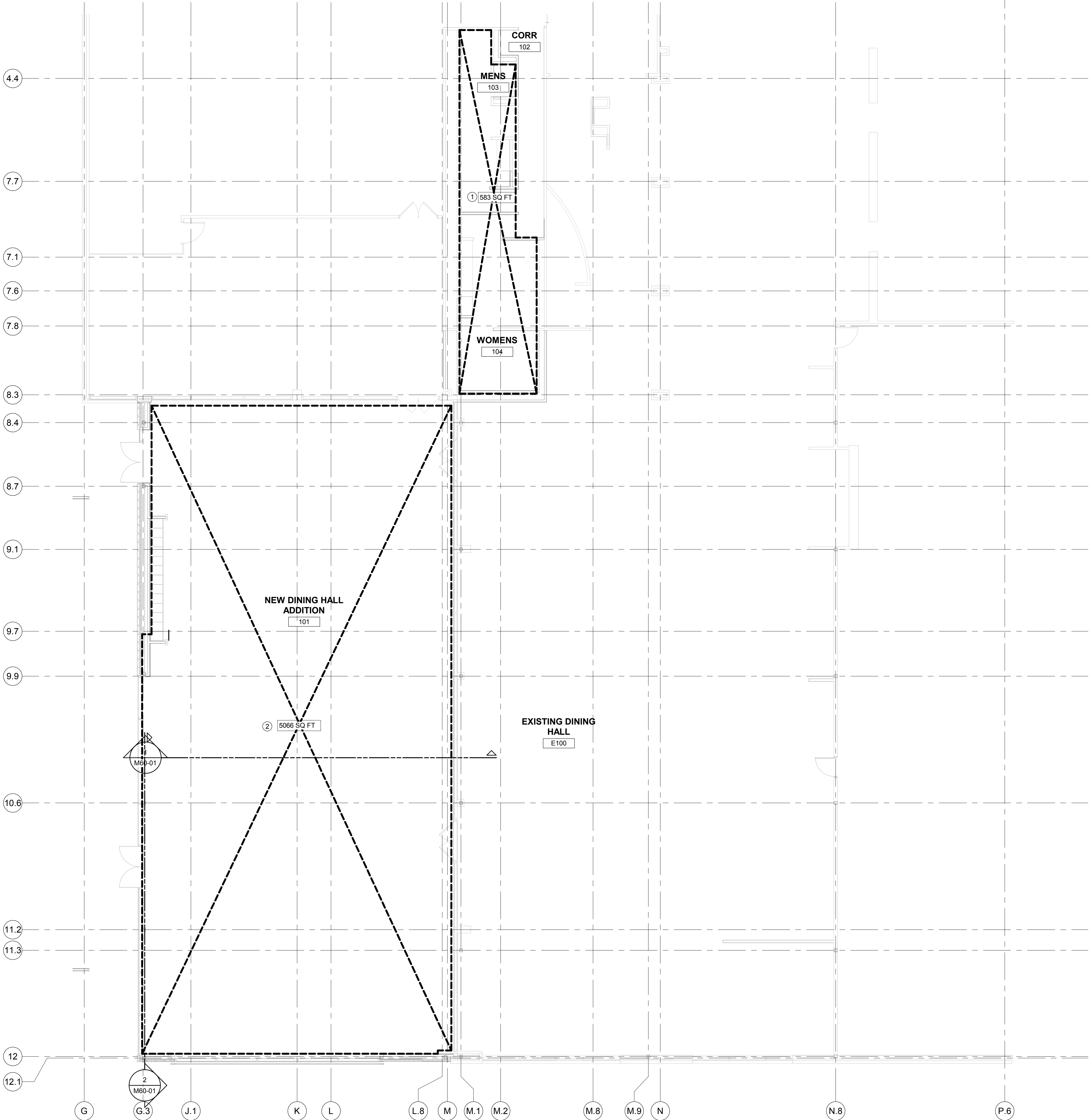
Drawing Title
FIRST FLOOR UNDERGROUND
STORM PLAN

Scale: As indicated

Project No. JCDT18-0451

Drawing No.

M30-03



GENERAL NOTES

1. REFER TO SHEET M00-02 FOR FIRE PROTECTION GENERAL NOTES AND FIRE PROTECTION DESIGN CRITERIA.
2. REFER TO SHEET M04-01 FOR FIRE PROTECTION DETAILS.

KEY NOTES

1. EXISTING FIRE PROTECTION SPRINKLER HEADS IN THIS AREA. REWORK SPRINKLER HEADS FOR NEW CEILING AND FLOOR LAYOUT.
2. NO FIRE PROTECTION SPRINKLER HEADS IN THIS LOCATION. EXTEND FIRE PROTECTION BRANCH FROM MAIN LINE TO SERVE THIS AREA. PROVIDE HYDRAULIC CALCULATIONS FOR THE ENTIRE AREA BEING SERVED.

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Project Component

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Key Plan



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Client
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Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
FIRST FLOOR FIRE PROTECTION PLAN

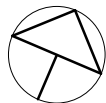
Scale: As indicated

Project No. JCDT18-0451

Drawing No. **M40-01**

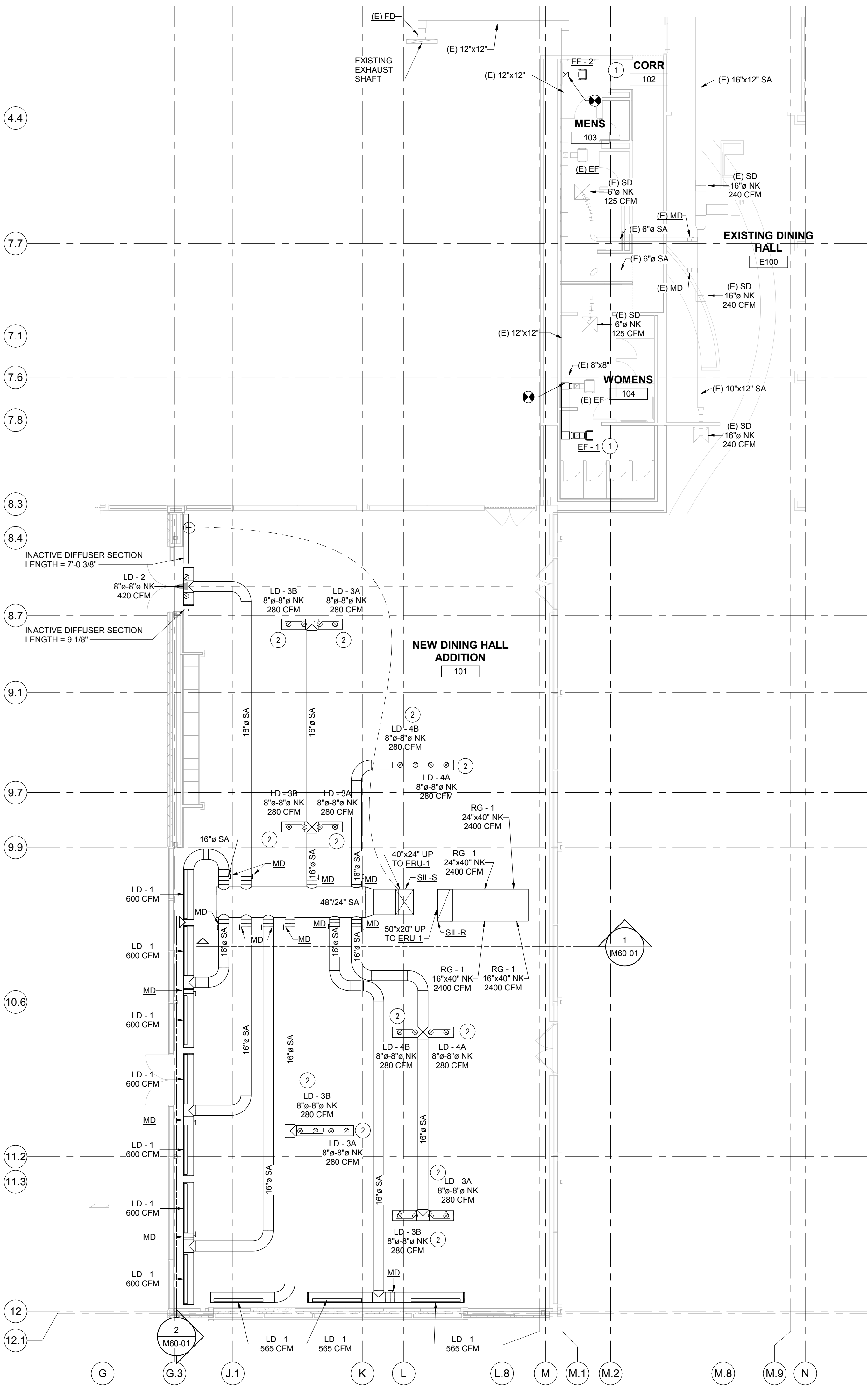
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M40-01

FIRST FLOOR - FIRE PROTECTION - OVERALL
SCALE: 1/8" = 1'-0"



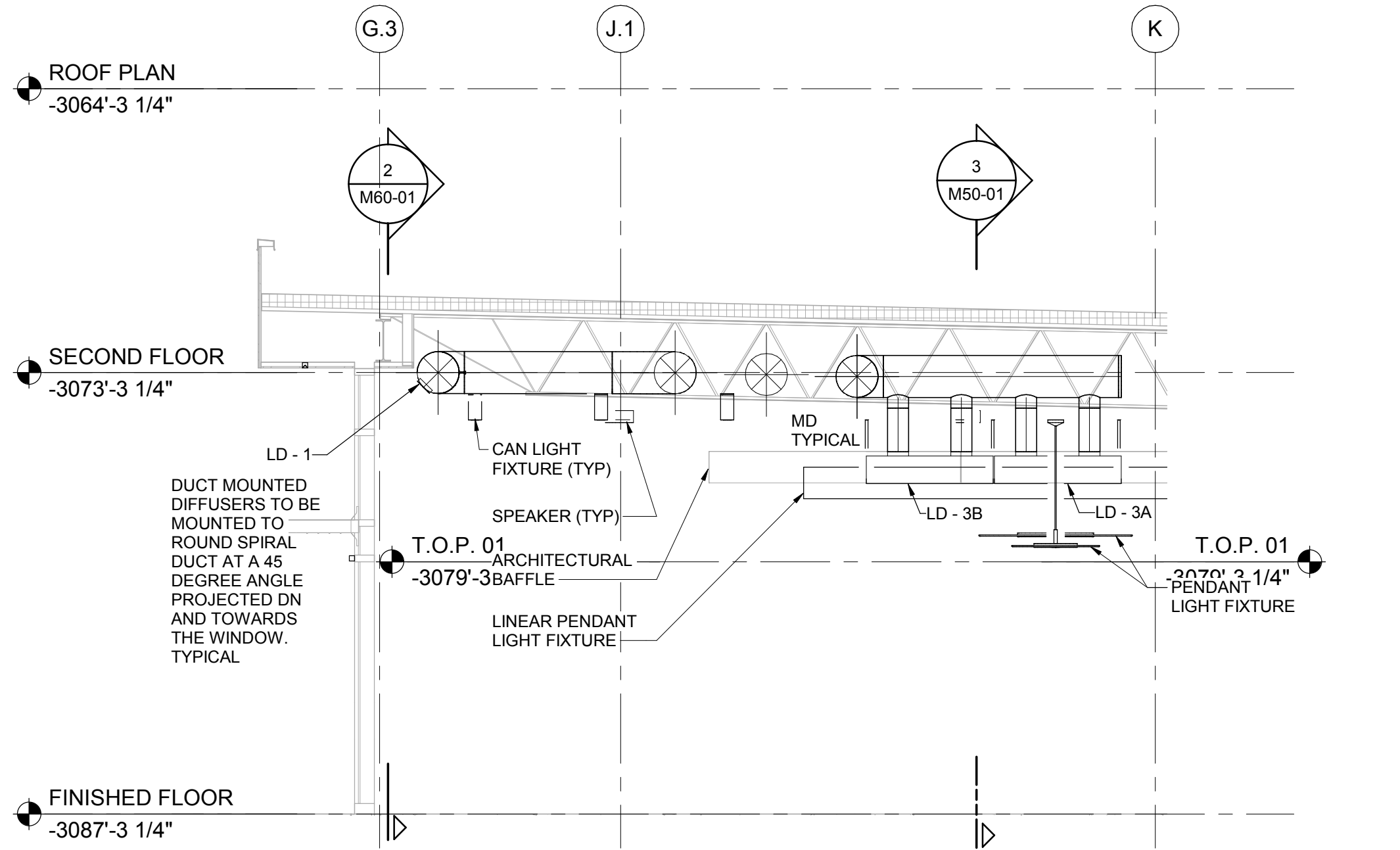
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C:\Users\rachel.gendich\Documents\M_JCDT18-0444 - WSU Cafeteria Addition - rachel.gendich.rvt

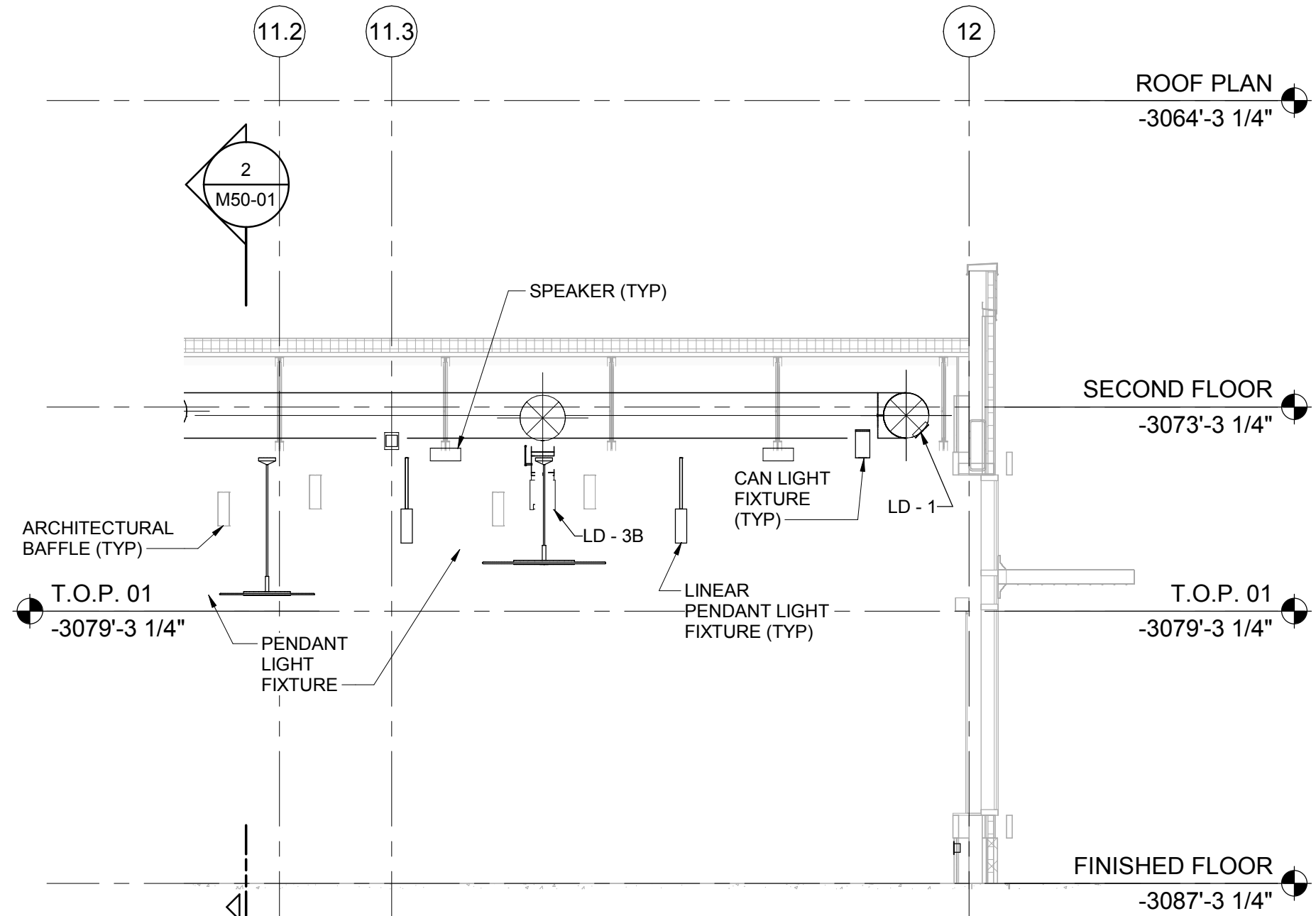


1
M50-01
FIRST FLOOR - SHEET METAL - OVERALL
SCALE: 1/8" = 1'-0"

- # HVAC KEY NOTES
1. PROVIDE NEW EXHAUST FAN TO MEET EXHAUST REQUIREMENTS FOR ADDITIONAL PLUMBING FIXTURES.
 2. ALIGN DIFFUSER HEIGHT TO ADJACENT ARCHITECTURAL BAFFLE.
- HVAC GENERAL NOTES
1. RECTANGULAR DUCTWORK FROM UNITS SHALL BE LINED DOWNSTREAM OF THE SILENCER.
 2. SPIRAL ROUND OR FLAT OVAL DUCTWORK SHALL BE DOUBLE WALL INSULATED DUCTWORK.
 3. DUCTWORK TO BE PAINTED. REFER TO ARCHITECTURAL FOR FINAL COLOR.



2
M50-01
WEST WINDOW DIFFUSER SECTION
N.T.S.



3
M50-01
SOUTH WINDOW DIFFUSER SECTION
N.T.S.

DATE	ISSUED FOR	REV
04-03-2019	OWNER REVIEW	1
05-14-2019	OWNER REVIEW	2
06-03-2019	BID / PERMIT	3

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Project Component
PHASE OF WORK



Consultants

Civil: Landscape: Architecture: NORR Structural: NORR Mechanical: NORR Electrical: NORR

Seal(s)

giffels webster

NORR

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Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead BRENDA PESMARK	Drawn RACHEL GENDICH
Project Leader BRENDA PESMARK	Checked HENRY MONTAGUE

Client
WAYNE STATE UNIVERSITY

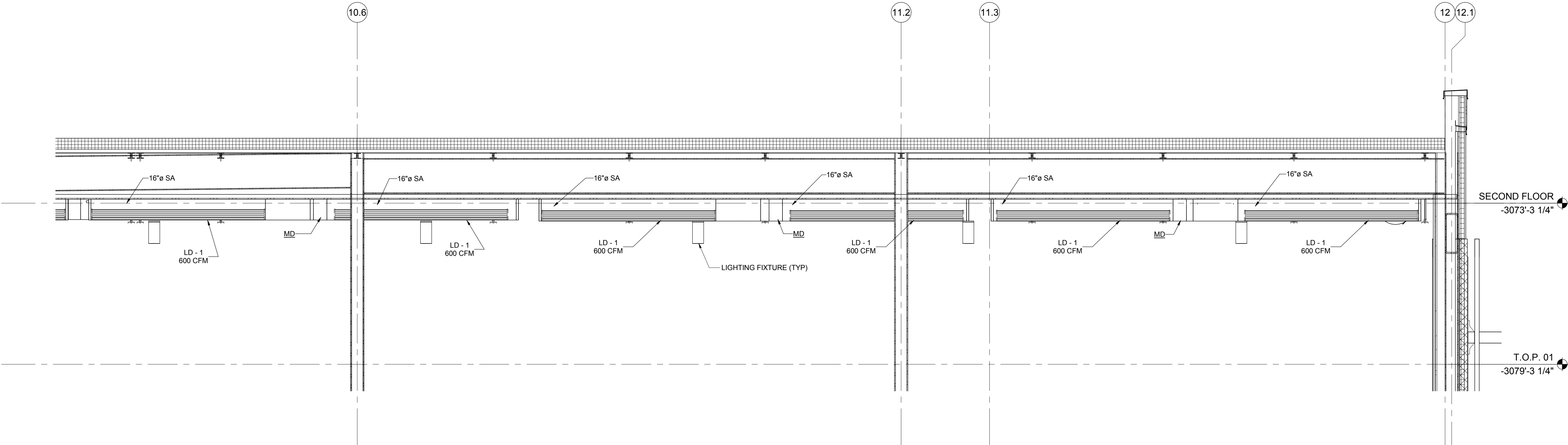
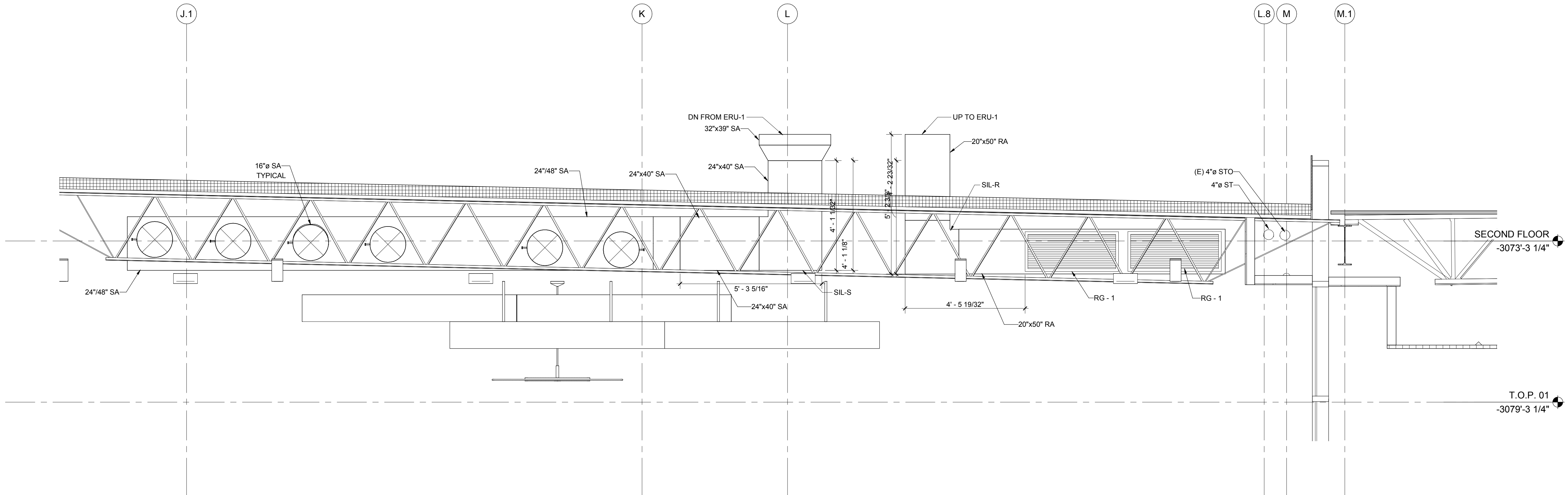
Project
WSU DINING HALL ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
FIRST FLOOR SHEET METAL PLAN

Scale:	As indicated
Project No.	JCDT18-0451
Drawing No.	M50-01

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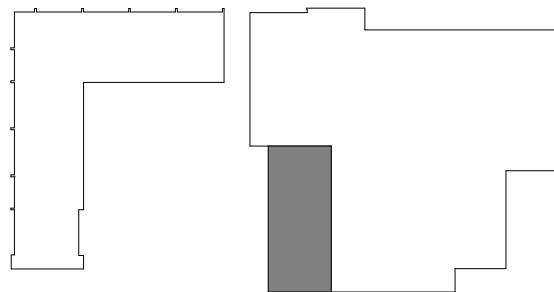
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Project Component
PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

giffels
webster

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Client
WAYNE STATE
UNIVERSITY

Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
MECHANICAL SECTIONS

Scale: 1/2" = 1'-0"

Project No. JCDT18-0451

Drawing No. M60-01



NO SCALE

	ERU-1 POINTS LIST		
ABBREVIATION	EQUIPMENT OR SENSOR	ASSIGNED CHANNEL	BACNET POINT
	ERU-1 CONTROLLER		
OA RH, OA TEMP	OSA TEMPERATURE/HUMIDITY SENSOR	EBUS2 COMMUNICATING SENSOR	AI:I6, AI:I7, AI:I8, AI:9
RA RH, RA TEMP	SPACE TEMPERATURE/HUMIDITY SENSOR	EBUS3 COMMUNICATING SENSOR	AI:I2, AI:I3
SA TEMP	SUPPLY TEMP SENSOR - FIELD INSTALLED	ERU-1 CONTROL POINT AI 3	AI:9
RA CO2	DUCT MOUNT CO2	EBUS4 COMMUNICATION SENSOR	AI:29
	BUILDING PRESSURE SENSOR	ERU-1 CONTROL POINT AI 5	AI:23
	SUPPLY FAN CONTROL SIGNAL 0-10 VDC	ERU-1 CONTROL POINT AO 1	AI:22
	ECONOMIZER	ERU-1 CONTROL POINT AO 2	AI:30
	BUILDING PRESSURE CONTROL SIGNAL	ERU-1 CONTROL POINT AO 4	AI:24
	PROOF OF AIRFLOW	ERU-1 CONTROL POINT BI 1	BI:6
	SAFETY SHUT DOWN	ERU-1 CONTROL POINT BI 8	BI:26
	SUPPLY FAN	CONFIGURED RELAY POINT	BI:63
	EXHAUST FAN	CONFIGURED RELAY POINT	BI:64
	ENERGY RECOVERY WHEEL	CONFIGURED RELAY POINT	BI:65
	DIGITAL REFRIGERATION MODULE		
	SUCTION PRESSURE A	RSMD POINT AI1	AI:48
	MODULATING HOT GAS REHEAT MODULE		
	REHEAT HGR VALVE	MHGRV-X	AI:42
	MODULATING GAS MODULE		
	MODGAS GAS VALVE SIGNAL	MODGAS-X	
	MODGAS HIGH SPEED ENABLE	MODGAS-X	
	MODGAS LOW SPEED ENABLE	MODGAS-X	AI:43
	MODGAS AUX HEAT VALVE ENABLE 1	MODGAS-X	

TEMPERATURE CONTROL SYMBOLS	
SYMBOL	DESCRIPTION
	MOTORIZED DAMPER
	AIR FILTER DIFFERENTIAL PRESSURE SENSOR
	TEMPERATURE SENSOR
	TWO WAY CONTROL VALVE
	LOW LIMIT SENSOR
	CARBON DIOXIDE SENSOR
	DIFFERENTIAL PRESSURE SENSOR
	DISCHARGE AIR TEMPERATURE SENSOR
	OUTSIDE AIR TEMPERATURE SENSOR
	DIGITAL INPUT
	DIGITAL OUTPUT
	ANALOG INPUT
	ANALOG OUTPUT
	HOT WATER HEATING COIL
	DX COOLING COIL
	GAS FIRED BURNER
	VARIABLE FREQUENCY DRIVE
	CURRENT SENSOR
	THERMOSTAT (WALL ADJUSTER)
	STATIC PRESSURE (PROBE)

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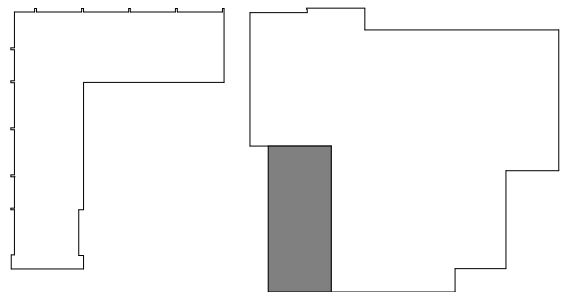
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WAYNE STATE
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Project
WSU DINING HALL
ADDITION

655 W. KIRBY ST.
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Drawing Title

ERU-1 CONTROL DIAGRAM

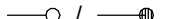
Scale: $3/32" = 1'-0"$

Project No. JCDT18-0451

Drawing No.

M73-01

ELECTRICAL SYMBOL LIST

CONDUIT SYSTEMS	
	CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING EXPOSED IN UNFINISHED AREAS
	CONDUIT CONCEALED IN FLOOR SLAB OR UNDERGROUND
	CONDUIT OR CABLE TURNED UP / DOWN
	BRANCH CIRCUIT HOMERUNS TO PANELS OR AS NOTED, OPTIONAL LINES INDICATE NUMBER OF WIRES IN CONDUIT SHORT LINE IS NEUTRAL, SLANTED SLASH IS GROUND
	JUNCTION BOX (SIZE PER NEC OR AS INDICATED)
	PULL BOX (SIZE PER NEC OR AS INDICATED)
POWER SYSTEMS	
	PANELBOARD OR SWITCHBOARD
	TRANSFORMER, 480V-208Y/120V DRY TYPE UNLESS NOTED OTHERWISE
	MOTOR CONTROL CENTER, NUMBER OF SECTIONS AS NOTED
	MOTOR - SIZE AS INDICATED
	UNFUSED / FUSED DISCONNECT SWITCH
	3 PHASE FUSIBLE COMBINATION STARTER
	MANUAL STARTER, WITH PILOT LIGHT
	PUSH BUTTON STATION
	20A, 125V, 3W, SINGLE GROUNDING RECEPTACLE, NEMA 5-20R 'C' - CEILING MOUNT, 'DF' - DRINKING FOUNTAIN
	20A, 125V, 3W, DUPLEX GROUNDING RECEPTACLE, NEMA 5-20R 'C' - CEILING MOUNT, 'G' - GROUND FAULT, 'E' - EMERGENCY
	20A, 125V, 3W, DUPLEX GROUNDING RECEPTACLE, NEMA 5-20R MOUNTED 6" ABOVE FINISHED COUNTER
	20A, 125V, 3W, DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R 'C' - CEILING MOUNT, 'G' - GROUND FAULT
	SPECIAL RECEPTACLE, NEMA CONFIGURATION AS NOTED
	MULTI-OUTLET ASSEMBLY W/ OUTLETS AS NOTED ON PLANS
	SPECIALTY OUTLET BOX 'FB' - FLOOR BOX (RECESSED OUTLETS AS NOTED) 'SFB' - SURFACE FLOOR BOX (OUTLETS AS NOTED) 'PT' - POKE THRU (FLUSH OUTLETS AS NOTED) 'FPT' - FURNITURE (FEED) POKE THRU 'FWB' - FURNITURE (FEED) WALL BOX
GROUNDING	
	GROUND ROD
	COPPER GROUND BAR, 2" X 1/4" OR AS NOTED
	DOT INDICATES EXOTHERMIC WELD OR CONNECTION

MOUNTING HEIGHTS

(ALL MOUNTING HEIGHTS ARE TO THE CENTER OF THE DEVICE, UNLESS OTHERWISE NOTED)

RECEPTACLES (GENERAL)	1'-6"(18") AFF
RECEPTACLES (ABOVE COUNTER)	3'-6"(42") AFF
RECEPTACLES (UTILITY AREAS)	4'-0"(48") AFF
LIGHT SWITCHES & PUSH BUTTONS	4'-0"(48") AFF
FIRE ALARM MANUAL PULL STATIONS	4'-0"(48") AFF
FIRE ALARM AUDIO/VISUAL WALL MOUNT	7'-6" AFF OR 6" BELOW CEILING (WHICHEVER IS LOWER)
CARD READERS	4'-0"(48") AFF
LIGHTING & RECEPTACLE PANELS (BOTTOM MINIMUM 12" ABOVE FLOOR)	6'-0" TO TOP
DISTRIBUTION PANELS	7'-0" TO TOP
MOTOR STARTERS & SAFETY SWITCHES	5'-0"(60") AFF
TELEPHONE & DATA OUTLETS (BOXES)	1'-6"(18") AFF
TELEVISION OUTLETS (POWER & CABLE)	7'-6" AFF (COORDINATE WITH BRACKET INSTALL)
CLOCK OUTLETS	7'-6" AFF OR 1'-6" BELOW CEILING (WHICHEVER IS HIGHER)

FIRE ALARM SYSTEM	
	MANUAL PULL STATION
	DETECTOR (TYPE AS INDICATED) 'S' - AREA SMOKE DETECTOR 'H' - HEAT DETECTOR 'F' - FLAME DETECTOR
	DEVICE (TYPE AS INDICATED) 'SD' - DUCT TYPE SMOKE DETECTOR 'IM' - ADDRESSABLE (INPUT) INTERFACE MODULE 'WP' - SPRINKLER RISER WATERFLOW SWITCH 'PS' - SPRINKLER RISER PRESSURE SWITCH 'TS' - SPRINKLER RISER VALVE TAMPER SWITCH 'FT' - FIREFIGHTER'S TELEPHONE OR JACK
	BEAM SMOKE DETECTOR - RECEIVER / TRANSMITTER
	AUDIO/VISUAL ALARM SIGNAL RECESSED MOUNTED 'C' - CEILING MOUNTED, 'S' - SURFACE MOUNTED
	VISUAL ALARM STROBE SIGNAL WALL/CEILING MOUNTED
	AUDIO ALARM SIGNAL 'C' - CEILING MOUNT, 'I' - INDUSTRIAL HORN
	FIRE ALARM SYSTEM CONTROL PANEL
	REMOTE FIRE ALARM SYSTEM (REMOTE) ANNUNCIATOR PANEL
	MAGNETIC DOOR HOLD OPEN
	DUCT SMOKE DETECTOR ALARM LIGHT
TELECOMMUNICATION SYSTEM	
	DATA OUTLET - EMPTY BOX, UNLESS SPEC'D OTHERWISE 'C' INDICATES CEILING MOUNT
	TELEPHONE OUTLET - EMPTY BOX, UNLESS SPEC'D OTHERWISE 'C' INDICATES CEILING MOUNT, 'W' - WALL MOUNT AT 48" AFF
	TELE/DATA OUTLET - EMPTY BOX, UNLESS SPEC'D OTHERWISE 'C' INDICATES CEILING MOUNT
	WIRELESS ACCESS POINT
	CCTV CAMERA
	CCTV MONITOR
	MOTION DETECTOR
	KEYPAD / KEY READER
	SIGNAL BELL
	INTERCOM STATION
	CARD READER

PAGING SYSTEM

	SPEAKER - WALL/CEILING MOUNTED
	PAGING SYSTEM AMPLIFIER & CONTROL PANEL
	MICROPHONE OUTLET - WALL/CEILING MOUNTED

CLOCK

	CLOCK - WALL/CEILING MOUNTED
	CLOCK- DOUBLE FACED - WALL/CEILING MOUNTED

LIGHTING SYSTEM	
	2'X4' FIXTURE, RECESSED OR SURFACE 'X' INDICATES TYPE
	2'X2' FIXTURE, RECESSED OR SURFACE 'X' INDICATES TYPE
	1'X4' FIXTURE, RECESSED OR SURFACE 'X' INDICATES TYPE
	STRIP OR SUSPENDED FIXTURE 'X' INDICATES TYPE
	WALL MOUNT OR BRACKET FIXTURE 'X' INDICATES TYPE
	DOWNLIGHT FIXTURE, RECESSED OR SURFACE 'X' INDICATES TYPE, CENTER DOT FOR SUSPENDED
	FIXTURE WITH NIGHT LIGHT/EMERGENCY CIRCUIT SPLIT CIRCUITS WHERE INDICATED
	EXIT LIGHT, DIRECTIONAL ARROWS WHERE INDICATED
	EXIT LIGHT WITH EMERGENCY BATTERY HEADS DIRECTIONAL ARROWS WHERE INDICATED
	EMERGENCY BATTERY UNIT (EBU) FIXTURE W/ NUMBER OF HEADS AS SHOWN
	EMERGENCY LIGHT HEAD MOUNTED REMOTE EBU
	POLE MOUNTED FIXTURE, SQUARE OR ROUND AND NUMBER OF HEADS AS INDICATED
	FLOODLIGHT

LIGHTING CONTROL SYSTEMS

	SWITCH, SINGLE POLE, 20A; '2' - TWO POLE
	SWITCH, THREE WAY, 20A; '4' - FOUR WAY
	SPECIALTY SWITCH (INCLUDING MULTIPLE OPTIONS) 'D' - DIMMER SWITCH 'O' - OCCUPANCY SENSOR 'L' - LOW VOLTAGE 'T' - TIMER
	OCCUPANCY SENSOR - WALL/CEILING MOUNTED
	DAYLIGHT SENSOR / PHOTOCELL
	LIGHTING CONTROL BOX/RELAY

ELECTRICAL ABBREVIATIONS

A	AMPERE	M	METER
AC	ALTERNATING CURRENT	MA	MILLIAMPERE
ADD	ADDENDUM	MAX	MAXIMUM
AF	AMPERES, FRAME (BREAKER RATING)	MCC	MOTOR CONTROL CENTER
AFF	ABOVE FINISHED FLOOR	MECH	MECHANICAL
AFG	ABOVE FINISHED GRADE	MEZZ	MEZZANINE
AG	ABOVE GROUND	MFG	MANUFACTURING
AL	ALUMINUM	MFR	MANUFACTURER
AM	AMMETER	MH	MANHOLE, METAL HALIDE, MOUNTING
APPROX	APPROXIMATE	HEIGHT	
ARCH	ARCHITECTURAL	MIC	MICROPHONE
AS	AMMETER SWITCH	MIN	MINIMUM
ASR	AUTOMATIC SPRINKLER RISER	MISC	MISCELLANEOUS
AT	AMPERE TRIP (BREAKER SETTING)	MLO	MAIN LUG ONLY
ATS	AUTOMATIC TRANSFER SWITCH	MO	MOTOR OPERATED
AUX	AUXILIARY	MTD	MOUNTED
AWG	AMERICAN WIRE GAUGE	MTG	MOUNTING
		MTS	MANUAL TRANSFER SWITCH
BC	BOTTOM CHORD	N	NEUTRAL, NORMAL
BD	BUS DUCT	(N)	NEW (DEVICE)
BLDG	BUILDING	NC	NORMALLY CLOSED
BRK	BREAKER	NEC	NATIONAL ELECTRICAL CODE
		NF	NOT FUSED
C	CONDUIT	NIC	NOT IN CONTRACT
CAS	CONTROLLED ACCESS SYSTEM	NL	NIGHT LIGHT
CB	CIRCUIT BREAKER	NO	NORMALLY OPEN, NUMBER
CCTV	CLOSED CIRCUIT TELEVISION	NTS	NOT TO SCALE
CLF	CURRENT LIMITING FUSE		
CLG	CEILING	OC	ON CENTER
CKT	CIRCUIT	OFF	OFFICE
COAX	COAXIAL CABLE	OL	OVERLOAD
COL	COLUMN	OPNG	OPENING
CONT	CONTINUATION (CONTINUOUS)		
CP	CONTROL PANEL	P	POLE
CT	CURRENT TRANSFORMER	PA	PUBLIC ADDRESS SYSTEM
CTB	CURRENT TEST BLOCK	PB	PULLBOX
CU	COPPER	PBS	PUSH BOX STATION
		PDP	POWER DISTRIBUTION PANEL
DC	DIRECT CURRENT	PF	POWER FACTOR
DEG	DEGREE	PH	PHASE
DEPT	DEPARTMENT	PV	POST INDICATOR VALVE
DET	DETAIL	PL	PILOT LIGHT
DIA	DIAMETER	PNL	PANEL
DISC	DISCONNECT	PP	POWER PANEL
DN	DOWN	PR	PAIR
DT	DOUBLE THROW	PRI	PRIMARY
DWG	DRAWING	PS	PULL SWITCH
		PT	POTENTIAL TRANSFORMER
EA	EACH	PVC	POLYVINYL CHLORIDE
EDP	EMERGENCY POWER DISTRIBUTION PANEL	PWR	POWER
EF	EXHAUST FAN		
EL	ELEVATION	(R)	RELOCATED (DEVICE)
ELEC	ELECTRIC (ELECTRICAL)	RC	REMOTE CONTROL
ELP	EMERGENCY LIGHTING PANEL	RECPT	RECEPTACLE
ELR	END-OF-LINE RESISTOR	REL	RELOCATE (PANELBOARD)
EM	EMERGENCY	REP	REPLACE (PANELBOARD)
EMCC	EMERGENCY MOTOR CONTROL CENTER	RSC	RIGID STEEL CONDUIT
EMT	ELECTRIC METALLIC TUBING		
EPO	EMERGENCY POWER OFF	SD	SMOKE DETECTOR
EQPT	EQUIPMENT	SEC	SECONDARY
ERP	EMERGENCY RECEPTACLE PANEL	SFB	SURFACE FLOOR BOX
EUH	ELECTRIC UNIT HEATER	SHLD	SHIELDED
EWG	ELECTRIC WATER COOLER	SHT	SHEET
EXIST,(E)	EXISTING, EXISTING TO REMAIN (DEVICE)	SIG	SIGNAL
		SP	SINGLE POLE
FA	FIRE ALARM	SPEC	SPECIFICATION
FAA	FIRE ALARM ANNUNCIATOR PANEL	SPKR	SPEAKER
FACP	FIRE ALARM CONTROL PANEL	SS	SELECTION SWITCH
FB	FLOOR BOX (AT JB)	ST	SINGLE THROW
FDR	FEEDER	STP	SHIELDED TWISTED PAIR
FIN	FINISH	STP/OS	SHIELDED TWISTED PAIR W/ OVERALL
FIXT	FIXTURE	SHIELD	
FL	FLOOR	STRUCT	STRUCTURAL
FPT	FURNITURE POKE-THRU (AT JB)	SUBST	SUBSTATION
FU	FUSE	SW	SWITCH
FUT	FUTURE	SWBD	SWITCHBOARD
FWB	FURNITURE WALL BOX (AT JB)	SWGR	SWITCHGEAR
		SYS	SYSTEM
G	GROUND		
GB	GROUND FAULT BREAKER	T	THERMOSTAT
GEN	GENERATOR	TB	THERMAL BREAKER
GFI/	GROUND FAULT CIRCUIT INTERRUPTER	TEL	TELEPHONE
GFCI		TOS	TOP OF STEEL
		TRP	POWER FACTOR TRANSDUCER
HID	HIGH INTENSITY DISCHARGE	TYP	TYPICAL
HGT	HEIGHT		
HORIZ	HORIZONTAL	UG	UNDERGROUND
HP	HORSEPOWER	UH	UNIT HEATER
HPS	HIGH PRESSURE SODIUM	UON	UNLESS OTHERWISE NOTED
HTR	HEATER	UTP	UNSHIELDED TWISTED PAIR
HV	HIGH VOLTAGE	UTP/OS	UNSHIELDED TWISTED PAIR W/ OVERALL
HVAC	HEATING VENTILATING AND AIR CONDITIONING	SHIELD	
		V	VOLT OR VOLTAGE
IAC	INTERLOCKING ARMOR CABLE	VM	VOLTMETER
IC	INTERCOM	VP	VAPOR PROOF
IE	INVERT ELEVATION	VS	VOLTMETER SWITCH
INC	INCANDESCENT, INCORPORATE	VTR	VOLTAGE TRANSDUCER
ISO	ISOLATED NEUTRAL		
		W	WATT
JB	JUNCTION BOX	WH	WATT-HOUR METER
KCMIL	THOUSAND CIRCULAR MIL(S)	WHD	WATT-HOUR DEMAND METER
KV	KILOVOLT	WP	WEATHER PROOF
KVA	KILOVOLT-AMPERES	WR	WELDING RECEPTACLE
KVAR	KILOVOLT-AMPERES REACTIVE	W/	WITH
KW	KILOWATT	W/O	WITHOUT
KWH	KILOWATT-HOUR		
		XFMR	TRANSFORMER
LA	LIGHTNING ARRESTOR	XP	EXPLOSION PROOF
LDP	LIGHTING DISTRIBUTION PANEL		
LP	LIGHTING PANEL		
LT	LIGHT		
LTG	LIGHTING		
LV	LOW VOLTAGE		

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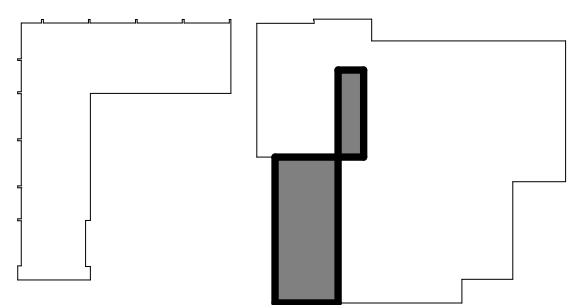
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giffels
webster

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Design Lead SEAN PIC-KELL	Drawn S. PIC-KELL
Project Leader SEAN PIC-KELL	Checked M. GOOD

Client
WAYNE STATE
UNIVERSITY

Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title

ELECTRICAL SYMBOLS AND
ABBREVIATIONS

Scale: As indicated

Project No. JCDT18-0444

Drawing No.

E00-00

Branch Panel: LP-1A

Location:
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 14kA
Mains Type: MLO
Mains Rating: 225 A
MCB Rating:

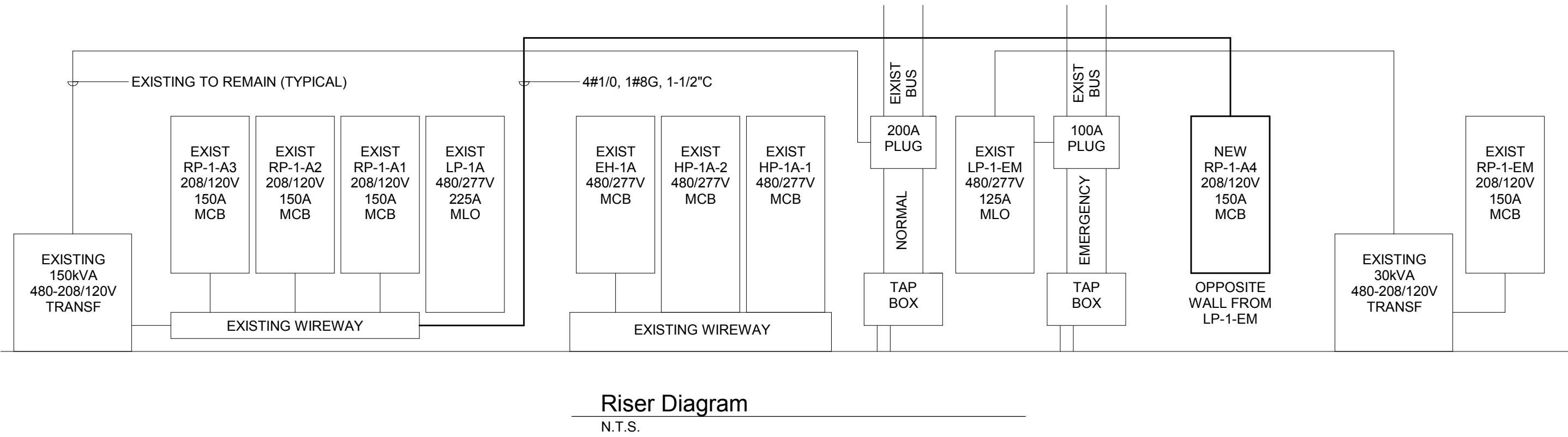
Notes:
EXISTING GE A SERIES PANELBOARD

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	LIGHTS	20 A	1	1000...	1000...		1	20 A	LIGHTS	2	
3	Spare	20 A	1				1	20 A	LIGHTS TRACK	4	
5	LIGHTS	20 A	1			1000...	1	20 A	CAFE ENTRANCE LIGHTS	6	
7	LIGHTS	20 A	1	1000...	1000...		1	20 A	LIGHTS	8	
9	OVAL LIGHTS	20 A	1		1000...	1000...	1	20 A	LIGHTS	10	
11	LIGHTS - CAFE ADDITION TYPES B, C, D & K	20 A	1			2850...	1	20 A	LIGHTS	12	
13	LIGHTS	20 A	1	1000...	1000...		1	20 A	LIGHTS	14	
15	LIGHTS	20 A	1		1000...	1000...	1	20 A	PUMP/MECHANICAL ROOM LIGHTS	16	
17	LIGHTS	20 A	1			0 VA	0 VA	1	20 A	Spare	18
19	LIGHTS - CAFE ADDITION TYPES A & E	20 A	1	2236...	0 VA			1	20 A	Spare	20
21	Spare	20 A	1		0 VA	0 VA		1	20 A	Spare	22
23	Spare	20 A	1			0 VA	1000...	1	20 A	LIGHTS	24
25	KS-4, KS-12	20 A	1	1000...	0 VA			1	20 A	Spare	26
27	Spare	20 A	1		0 VA	0 VA		1	20 A	Spare	28
29	Spare	20 A	1			0 VA	2000...	1	20 A	HEAT TAPE	30
31	HEAT TAPE	20 A	1	2000...	2000...			1	20 A	HEAT TAPE	32
33	HEAT TAPE	20 A	1		2000...	2000...		1	20 A	HEAT TAPE	34
35	HEAT TAPE	20 A	1			2000...	0 VA	1	20 A	Spare	36
37	Spare	20 A	1	0 VA	0 VA			1	20 A	Spare	38
39	Spare	20 A	1		0 VA	0 VA		1	20 A	Spare	40
41	Spare	20 A	1			0 VA	0 VA	1	20 A	Spare	42
Total Load:				13143 VA	9000 VA	10744 VA					
Total Amps:				48 A	32 A	40 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Lighting	5086 VA	125.00%	6358 VA	Total Conn. Load: 32870 VA
Spare	28000 VA	100.00%	28000 VA	Total Est. Demand: 34097 VA
				Total Conn.: 40 A
				Total Est. Demand: 41 A

Notes:



LIGHTING FIXTURE SCHEDULE						ALL LIGHTING FIXTURES ARE 277V UNLESS OTHERWISE NOTED
TYPE MARK	DESCRIPTION	LOAD	MANUFACTURER	MODEL NUMBER	ALTERNATES	COMMENTS
(E)	EXISTING FIXTURE		VARIES	VARIES	NOT APPLICABLE	
A1	8' LONG X 1' DEEP ACOUSTICAL BAFFLE WITH LED UP AND DOWN LIGHT, CITRINE FINISH AND MAPLE ENDCAP	72 VA	LIGHT ART	STATIC 92-12-CT-WM-PM-STD-ID-835-H E-HE-P01-SC-JB-WP-WH-277	ENGINEER APPROVED EQUAL	COORDINATE INSTALLATION WITH ACOUSTICAL BAFFLES
A2	8' LONG X 1' DEEP ACOUSTICAL BAFFLE WITH LED UP AND DOWN LIGHT, ARMOR FINISH AND MAPLE ENDCAP	72 VA	LIGHT ART	STATIC 92-12-AR-WM-PM-STD-ID-835-H E-HE-P01-SC-JB-WP-WH-277	ENGINEER APPROVED EQUAL	COORDINATE INSTALLATION WITH ACOUSTICAL BAFFLES
B	4.5" WIDE PENDANT MOUNT LED CYLINDER FIXTURE, WHITE FINISH, WIDE FLOOD DISTRIBUTION	36 VA	FOCAL POINT	FLCY4-RD-WHR-2500L-35K-1C-UNV-SC-L11-C72-DNT-WFL-CD-WH	SSL SSC4i-10i-CM-UNV-35K-CR93-25L-WH-50-LD, PATHWAY LIGHTING TD4-A-V-30-9-35-M-DA-MW-1 OR ENGINEER APPROVED EQUAL	
B-EM	4.5" WIDE PENDANT MOUNT LED CYLINDER FIXTURE, WHITE FINISH, SUPER WIDE FLOOD DISTRIBUTION	36 VA	FOCAL POINT	FLCY4-RD-WHR-2500L-35K-1C-UNV-SC-L11-C72-DNT-WFL-CD-BK	SSL SSC4i-10i-CM-UNV-35K-CR93-25L-WH-90-LD, PATHWAY LIGHTING TD4-A-V-30-9-35-M-DA-MW-1 OR ENGINEER APPROVED EQUAL	
C	3.5" WIDE ROUND LED DOWN LIGHT	20 VA	FOCAL POINT	FLC3D-RO-1500L-277V-L11-T-B H/LC3-1500L-DNT-WFL-CD-WP	VANTAGE A4VEFLED-U-15-35K-L401-6D-SCL, PATHWAY LIGHTING 4LB79VWLE-15-C9-35K-E2-D8-SCLPF OR ENGINEER APPROVED EQUAL	
D	24" WIDE PENDANT MOUNT LED HEMI-SPHERICAL DOME FIXTURE WITH SATIN NICKEL FINISH AND SUNRISE ORANGE	12 VA	TECH LIGHTING	700TDPSP24SOS LED835	BASELIGHT HD48-LWHC-58/OUT-79/IN OR ENGINEER APPROVED EQUAL	
E33	33" WIDE PENDANT MOUNT ILLUMINATED DISC FIXTURE WITH WHITE FINISH	58 VA	LIGHT ART	SLIM LINE RING - MEDIUM	CORONET RING-LED-3-35-LTG1-UNV-DB1%-W--AC OR ENGINEER APPROVED EQUAL	COORDINATE INSTALLATION WITH TYPE A1 & A2 FIXTURES AND ACOUSTICAL BAFFLES
E43	43" WIDE PENDANT MOUNT ILLUMINATED DISC FIXTURE WITH WHITE FINISH	82 VA	LIGHT ART	SLIM LINE RING - LARGE	CORONET RING-LED-4-35-LTG1-UNV-DB1%-W--AC OR ENGINEER APPROVED EQUAL	COORDINATE INSTALLATION WITH TYPE A1 & A2 FIXTURES AND ACOUSTICAL BAFFLES
E58	58" WIDE PENDANT MOUNT ILLUMINATED DISC FIXTURE WITH WHITE FINISH	116 VA	LIGHT ART	SLIM LINE RING - XL	CORONET RING-LED-5-35-LTG1-UNV-DB1%-W--AC OR ENGINEER APPROVED EQUAL	COORDINATE INSTALLATION WITH TYPE A1 & A2 FIXTURES AND ACOUSTICAL BAFFLES
EX	GREEN LED EXIT LIGHT	4 VA	Lithonia	LQMS-R-120/277V	ENGINEER APPROVED EQUAL	
F2	2' LED STRIP LIGHT	15 VA	LITHONIA	CLX-L24-2000LM-SEF-L/LENS-MVOLT-GZ10-35K-80CRI	HE WILLIAMS 75-2-L20/835-DRV-UNV, METALUX 2SL-LED-22SL OR ENGINEER APPROVED EQUAL	REPLACES EXISTING 2-32W T8 STRIP LIGHT
F4	4' LED STRIP LIGHT	28 VA	LITHONIA	CLX-L48-4000LM-SEF-L/LENS-MVOLT-GZ10-35K-80CRI	HE WILLIAMS 75-4-L40/835-DRV-UNV, METALUX 4SNLED-41SL OR ENGINEER APPROVED EQUAL	REPLACES EXISTING 2-32W T8 STRIP LIGHT
G	4" WIDE SQUARE LED DOWN LIGHT	24 VA	GOTHAM	EVO-SQ-35/20-4AR-LSS-MVOL T-GZ10	VANTAGE SQ44VEFLED-U-20-35K-L SQ441(X)-1FR-SCL, PORTFOLIO LDSQ4B-20-EU4B-80-35-4LBSQ-H OR ENGINEER APPROVED EQUAL	REPLACES EXISTING 42W CFL 4" SQ DOWNLIGHT
H	ARCHITECTURAL WALL PACK FIXTURE WITH BLACK FINISH	50 VA	LITHONIA	WST-LED-P3-40K-VF-MVOLT-D BLXD	HE WILLIAMS VWPV-L60/740-T3-BLK-SDGL-UNV, MCGRAW-EDISON IST OR ENGINEER APPROVED EQUAL	
J	2.5" SQUARE X 6" LONG LINEAR MULLION MOUNT FIXTURE WITH BLACK FINISH	27 VA	VISA	OW2484-L40K-L-MVOLT-FT-JB9 005	INSIGHT MWIWI-7-ASYD-FMSS-CONCEALED-48"-NO-TBL OR ENGINEER APPROVED EQUAL	
K	2" WIDE X 8" LONG RECESSED UNDERCANOPY FIXTURE WITH BLACK FINISH	66 VA	FOCAL POINT	FSM2LWL-FL-625LF-1C-UNV-X FN-BK-8FT	CORONET LS-WET-8-40-LTG3-UNV-BK-RC, AXIS BEAM2-LED-400-80-40-FL-8-BLACK-UNV OR ENGINEER APPROVED EQUAL	

Branch Panel: RP-1-A4

Location:
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10kA
Mains Type: MCB
Mains Rating: 255 A
MCB Rating: 150 A

Notes:
NEW PANELBOARD

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
A4-1	BEVERAGE RECEPTACLE	20 A	1	180 VA	180 VA		1	20 A	BEVERAGE RECEPTACLE	A4-2	
A4-3	BEVERAGE RECEPTACLE	20 A	1		180 VA	180 VA	1	20 A	BEVERAGE RECEPTACLE	A4-4	
A4-5	NEW RECEPTACLES	20 A	1			540 VA	180 VA	1	20 A	ROCK BOX RECEPTACLE	A4-6
A4-7	FUTURE PROJECTOR RECEPTACLE	20 A	1	180 VA	360 VA			1	20 A	NEW RECEPTACLES	A4-8
A4-9	RTU RECEPTACLE	20 A	1		180 VA	180 VA	1	20 A	BEVERAGE RECEPTACLE	A4-10	
A4-11	Spare	20 A	1			0 VA	0 VA	1	20 A	Spare	A4-12
A4-13	Spare	20 A	1	0 VA	0 VA			1	20 A	Spare	A4-14
A4-15	Spare	20 A	1		0 VA	0 VA		1	20 A	Spare	A4-16
A4-17	Spare	20 A	1			0 VA	0 VA	1	20 A	Spare	A4-18
A4-19	Spare	20 A	1	0 VA	0 VA			1	20 A	Spare	A4-20
A4-21	Spare	20 A	1		0 VA	0 VA		1	20 A	Spare	A4-22
A4-23	Spare	20 A	1			0 VA	0 VA	1	20 A	Spare	A4-24
A4-25	Spare	20 A	1	0 VA	0 VA			1	20 A	Spare	A4-26
A4-27	Spare	20 A	1		0 VA	0 VA		1	20 A	Spare	A4-28
A4-29	Spare	20 A	1			0 VA	0 VA	1	20 A	Spare	A4-30
A4-31	Space	--	--	0 VA	0 VA			--	--	Space	A4-32
A4-33	Space	--	--		0 VA	0 VA		--	--	Space	A4-34
A4-35	Space	--	--			0 VA	0 VA	--	--	Space	A4-36
A4-37	Space	--	--	0 VA	0 VA			--	--	Space	A4-38
A4-39	Space	--	--		0 VA	0 VA		--	--	Space	A4-40
A4-41	Space	--	--			0 VA	0 VA	--	--	Space	A4-42
Total Load:				900 VA	720 VA	720 VA					
Total Amps:				8 A	6 A	6 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Receptacle	2340 VA	100.00%	2340 VA	Total Conn. Load: 2340 VA
				Total Est. Demand: 2340 VA
				Total Conn.: 6 A
				Total Est. Demand: 6 A

Notes:

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06-03-2019	BID/PERMIT	3

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Project Component
PHASE OF WORK

Key Plan

Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)

giffels
webster

NORR

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norr.com

Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead SEAN PIC-KELL	Drawn S. PIC-KELL
Project Leader SEAN PIC-KELL	Checked M. GOOD

Client
WAYNE STATE
UNIVERSITY

Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
ELECTRICAL SCHEDULES AND
RISER DIAGRAM

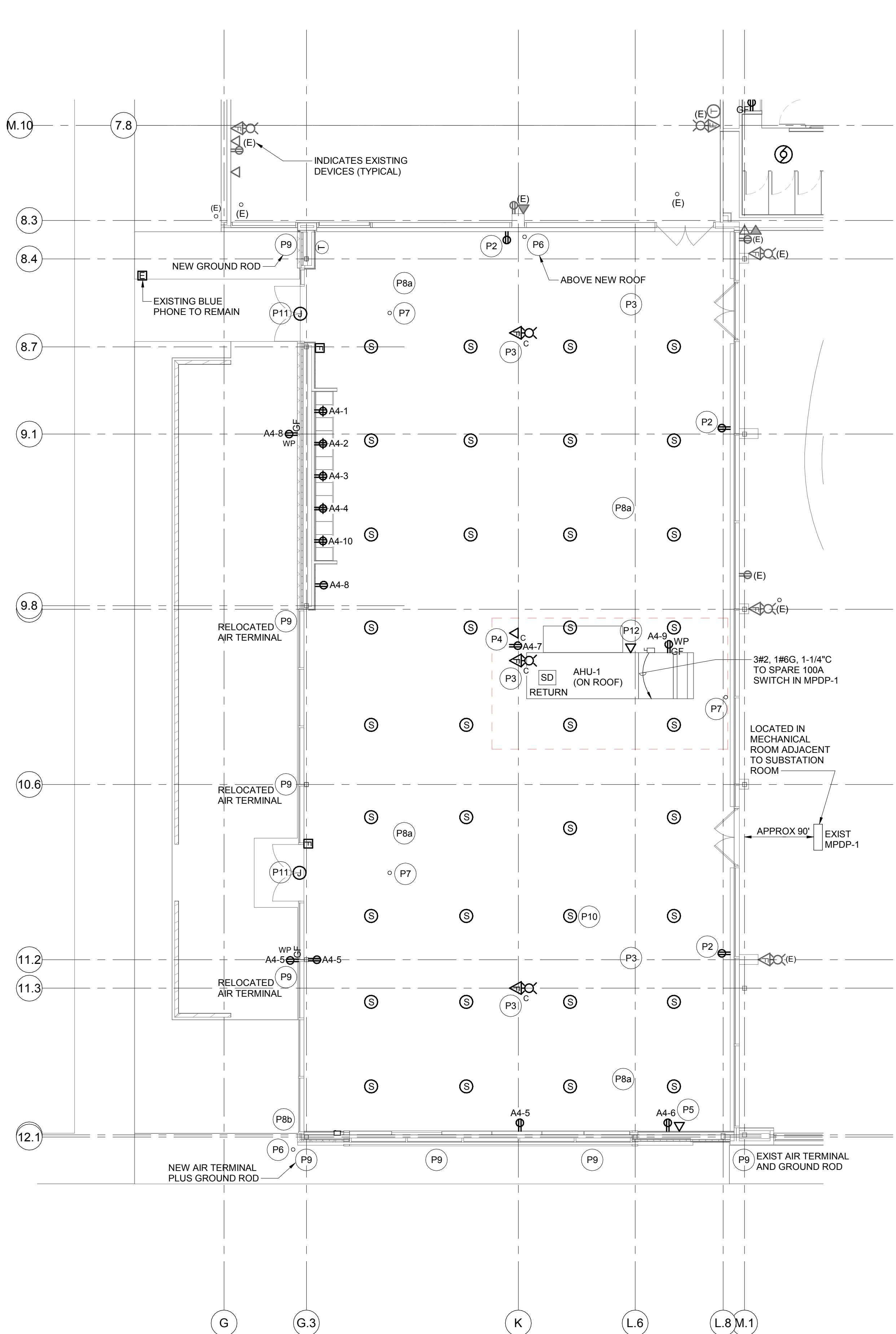
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JCDT18-0444

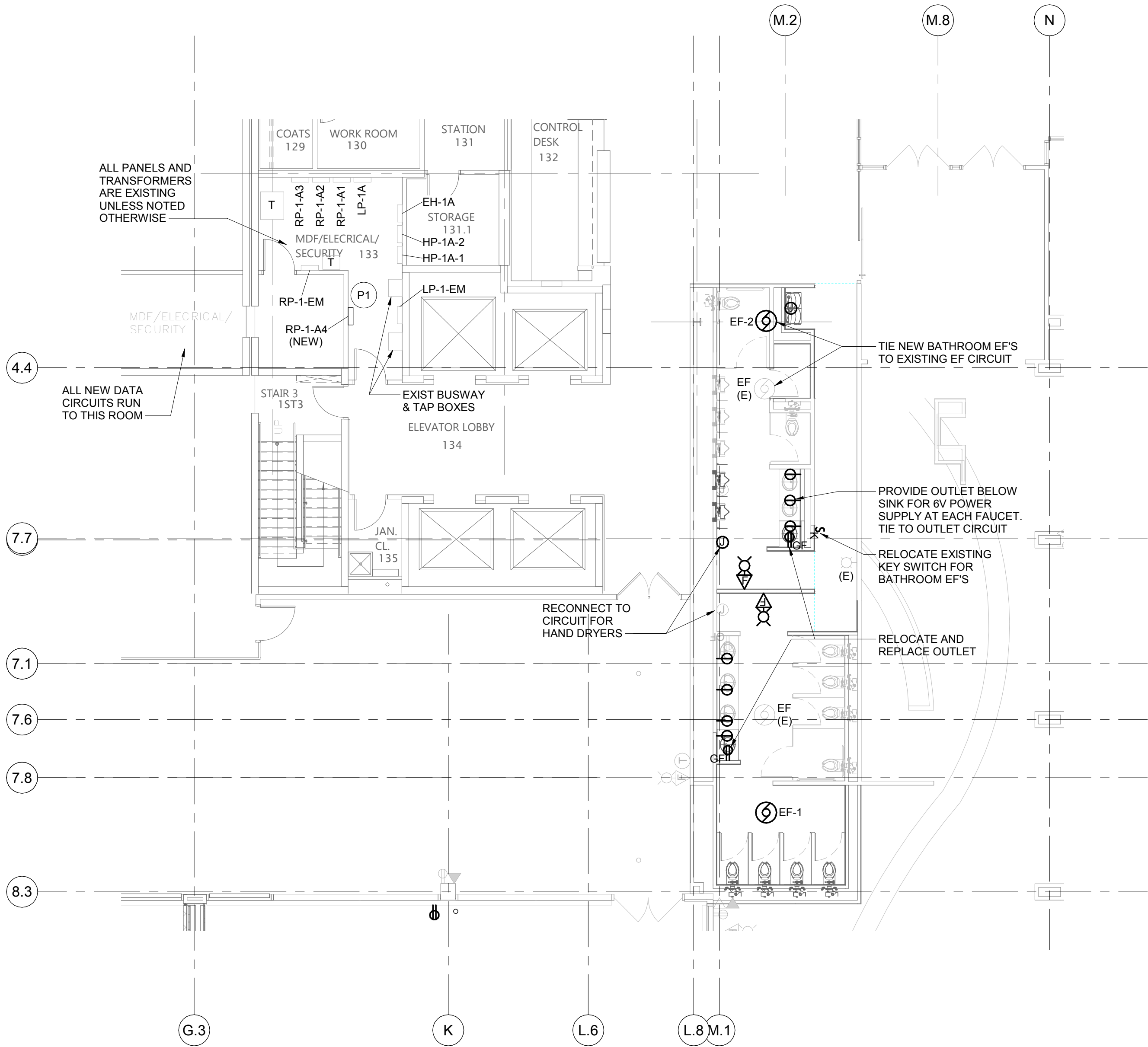
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1
POWER & LOW-VOLTAGE PLAN -
SOUTH
SCALE: 1/8" = 1'-0"



2
POWER & LOW-VOLTAGE PLAN -
NORTH
SCALE: 1/8" = 1'-0"

POWER KEY NOTES	
NOTE TAG	DESCRIPTION
P1	PROVIDE NEW RECEPTACLE PANEL RP-1-A4 ACROSS AISLE FROM EXISTING EMERGENCY PANEL LP-1-EM. DO NOT PLACE ACROSS FROM BUSWAYS.
P2	REPLACE EXISTING GFCI RECEPTACLE IN OUTDOOR WEATHER PROOF ENCLOSURE WITH STANDARD DUPLEX IN INDOOR SURFACE MOUNT BOX (WIEMOLD OR EQUAL). BOX COLOR TO MATCH EXISTING SURFACE.
P3	PENDANT MOUNT FIRE ALARM CEILING TYPE SPEAKER/STROBES TO BE AT OR BELOW HEIGHT OF LOWEST TYPE 'E' FIXTURE, APPROXIMATELY 8'-0".
P4	RECEPTACLE AND DATA JUNCTION BOX FOR FUTURE PROJECTOR. MOUNT APPROXIMATELY 12'-6" AFF IN CENTER OF SPACE. EXTEND EMPTY 3/4" WITH PULL STRING TO DATA CLOSET 133. CONFIRM HEIGHT AND LOCATION WITH OWNER PRIOR TO INSTALLATION.
P5	RECEPTACLE AND DATA OUTLET FOR FUTURE TELEVISION. CONFIRM FINAL LOCATION AND HEIGHT WITH OWNER PRIOR TO INSTALLATION. PROVIDE CAT 6 CABLE FROM DATA OUTLET TO DATA CLOSET 133 BY COLUMN LINES 4.4 & G.3.
P6	RELOCATED OUTDOOR DOME CAMERA. RECONNECT POE DATA TO EXISTING CIRCUIT AT ORIGINAL LOCATION. COORDINATE WITH CAMPUS C&IT GROUP.
P7	PENDANT MOUNT INDOOR DOME CAMERA AT (3) LOCATIONS. PROVIDE CAT6 CABLE FOR POE TO SPARE PORT IN DATA CLOSET 133. CONFIRM FINAL LOCATION AND HEIGHT WITH CAMPUS C&IT GROUP.
P8a	PENDANT MOUNT WIFI ACCESS POINT AT (4) LOCATIONS. PROVIDE CAT 6 CABLE FOR POE TO SPARE PORT IN DATA CLOSET 113. CONFIRM FINAL LOCATION AND HEIGHT WITH CAMPUS C&IT GROUP.
P8b	WALL MOUNT OUTDOOR WIFI ACCESS POINT AT (1) LOCATION. PROVIDE CAT 6 CABLE FOR POE TO SPARE PORT IN DATA CLOSET 113. CONFIRM FINAL LOCATION AND HEIGHT WITH CAMPUS C&IT GROUP.
P9	RELOCATE AND PROVIDE NEW LIGHTNING PROTECTION PARAPET AIR TERMINALS. TIE INTO EXISTING AND RELOCATED AIR TERMINALS TO MAKE COMPLETE SYSTEM. CONTRACT WITH LIGHTNING PROTECTION SPECIALIST FOR INSTALLATION DRAWINGS.
P10	8" PENDANT MOUNT 2-WAY SPEAKER WITH WHITE FINISH. SAROS PD8T-W-T-EACH. SPACED AT APPROXIMATELY 10' TO 12' ON CENTER. BOTTOM OF SPEAKER AT 10' ABOVE FLOOR.
P11	EXTEND POWER AND CONTROL WIRING FOR EMERGENCY EXIT DOOR ALARMS FROM EXISTING DOOR LOCATIONS. RELOCATE OVERRIDE KEY SWITCH.
P12	DATA OUTLET FOR AHU BMS SYSTEM. PROVIDE CAT 6 CABLE TO SPARE PORT IN DATA CLOSET 133.

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05-14-2019	OWNER REVIEW	2
06-03-2019	BID/PERMIT	3

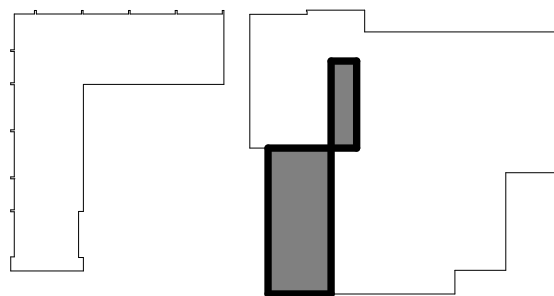
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Project Component

PHASE OF WORK

Key Plan



Consultants

Civil:
Landscape:
Architecture: NORR
Structural: NORR
Mechanical: NORR
Electrical: NORR

Seal(s)



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Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead SEAN PIC-KELL	Drawn S. PIC-KELL
Project Leader SEAN PIC-KELL	Checked M. GOOD

Client
WAYNE STATE
UNIVERSITY

Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
POWER & LOW-VOLTAGE
PLANS

Scale: As indicated

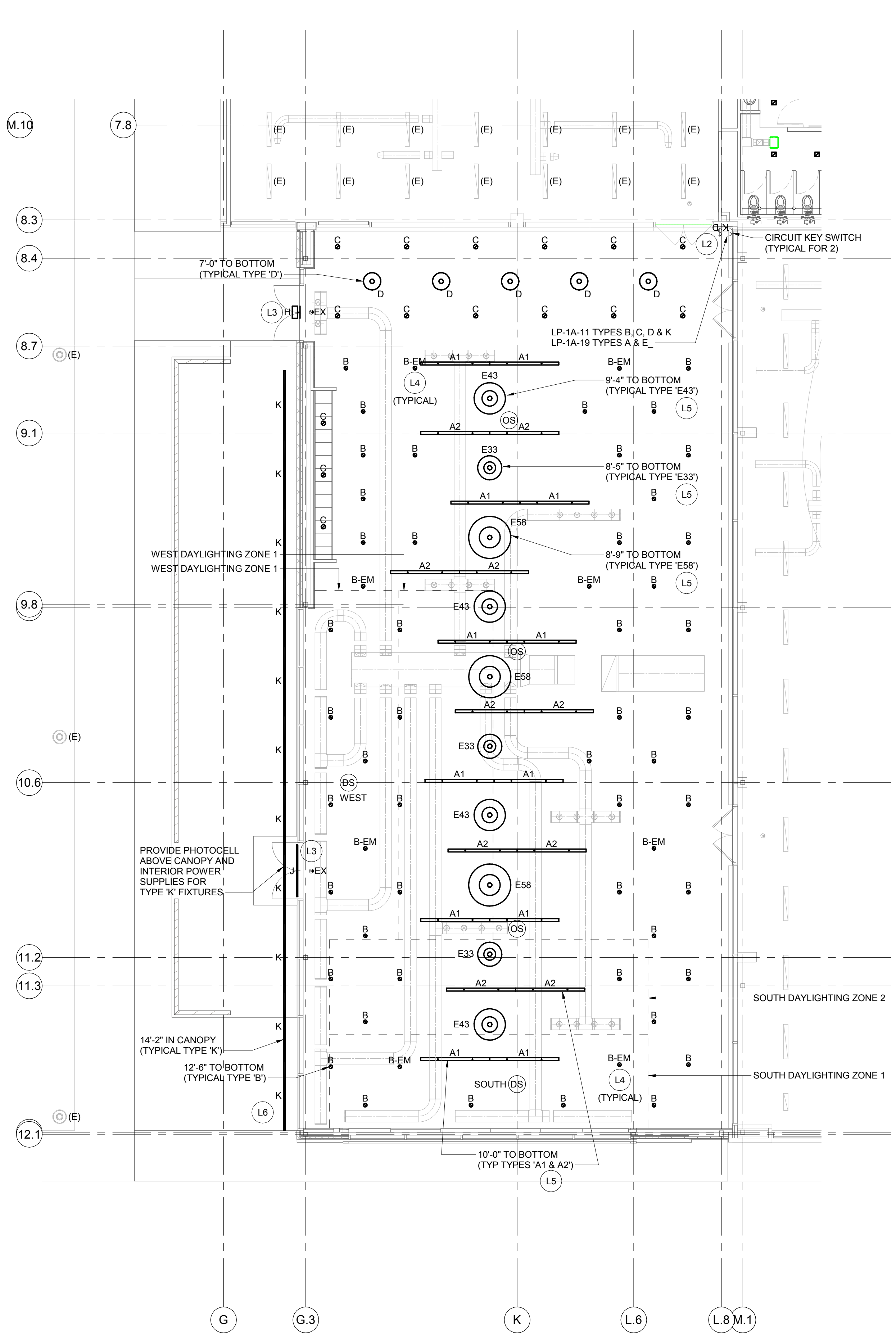
Project No. JCDT18-0444

Drawing No.

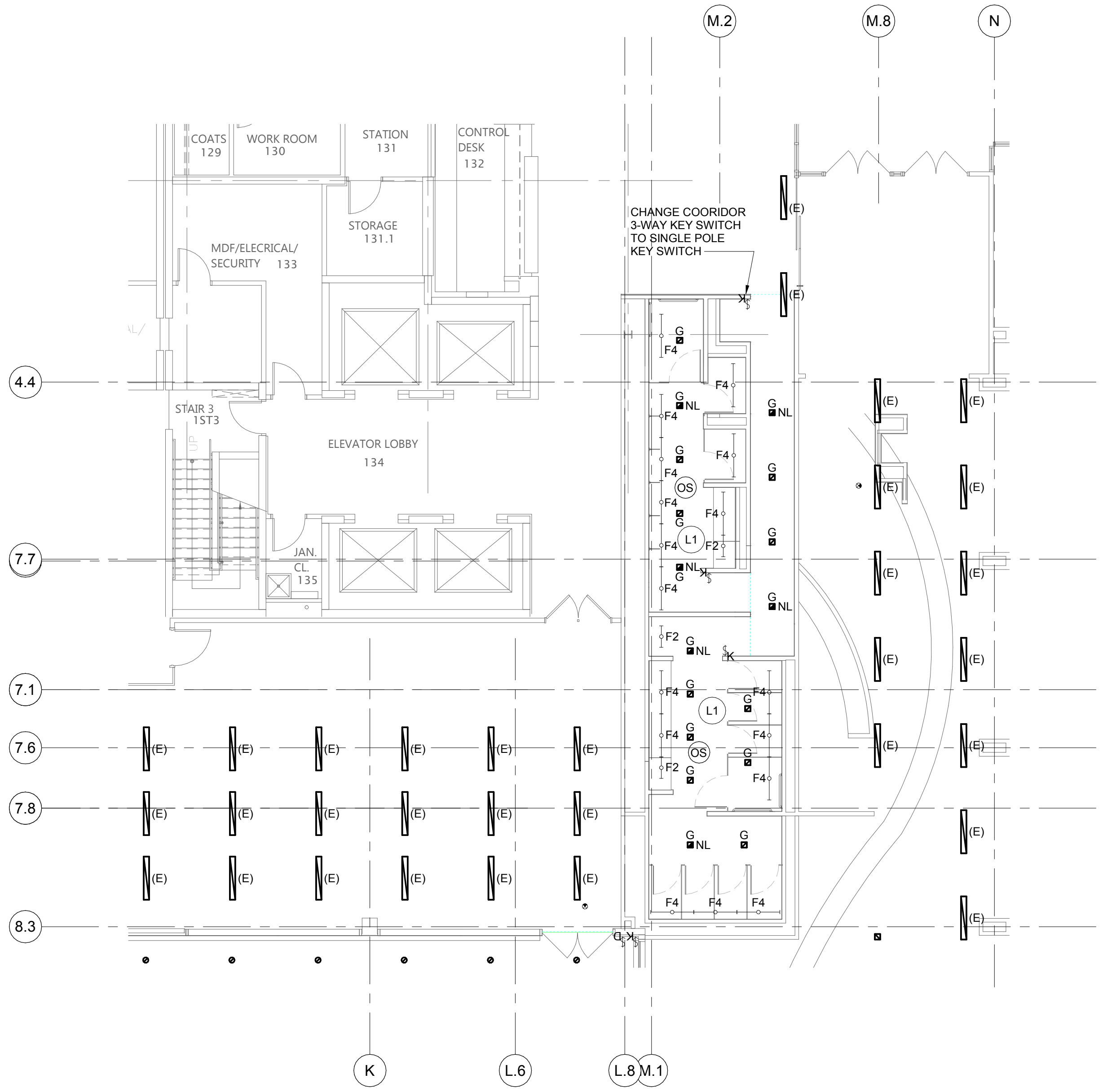
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1 LIGHTING PLAN - SOUTH
SCALE: 1/8" = 1'-0"



2 LIGHTING PLAN - NORTH
SCALE: 1/8" = 1'-0"

LIGHTING KEY NOTES	
NOTE TAG	DESCRIPTION
L1	INSTALL ALL NEW LIGHT FIXTURES FOR TOILET ROOMS. REPLACE EXISTING COMPACT FLUORESCENT SQUARE DOWNLIGHTS AND FLUORESCENT STRIPS AS SHOWN ON DRAWING E80-00. RECONNECT TO EXISTING LIGHTING CIRCUITS, LP-1A-5 AND LP-1-EM-7. VERIFY EXISTING CIRCUITS.
L2	PROVIDE KEY SWITCHES FOR EACH LIGHTING CIRCUIT. PROVIDE SEPARATE DIMMER SWITCHES FOR THE FOLLOWING: TYPES A1/A2, TYPE B, TYPES C/D IN SOFFIT, TYPES E. PROVIDE LOCABLE ENCLOSURE OVER DIMMER SWITCHES.
L3	TIE EXTERIOR DOOR LIGHTS (H & J) TO EXIST PHOTOCONTROLLED CIRCUIT FOR EXTERIOR DOORS, LP-EM-1-9. VERIFY EXIST CIRCUIT. PROVIDE INTERIOR POWER SUPPLY, PAINTED WHITE, IN CEILING SPACE FOR TYPE 'J' FIXTURE.
L4	TIE NIGHT LIGHTS AND EXIT LIGHTS TO EXISTING EMERGENCY CIRCUIT FOR DINING AREA, LP-EM-1-10. VERIFY EXIST CIRCUIT.
L5	SUSPEND FIXTURE TYPES 'A1', 'A2', 'E33', 'E43' AND 'E58' FROM OUTLET BOXES MOUNTED AT BOTTOM OF JOIST STEEL, APPROX 12'-9" TO 13'-0" AFF. CONTACT FIXTURE MANUFACTURER FOR COORDINATED CABLE LAYOUT BETWEEN FIXTURES AND ACOUSTICAL BAFFLES. SUSPEND TO ELEVATIONS INDICATED. PROVIDE MISCELLANEOUS STEEL SUPPORTS BETWEEN JOISTS AS REQUIRED. PAINT OUTLET BOXES, SUPPORT STEEL AND CONDUITS WHITE TO MATCH CEILING SPACE.
L6	SUSPEND FIXTURE TYPES 'B' AND 'B-EM' FROM OUTLET BOXES MOUNTED AT TOP OF JOIST STEEL, APPROX 12'-6" TO 13'-3". COORDINATE WITH DUCTWORK AND DIFFUSER LOCATIONS. SUSPEND TO ELEVATIONS INDICATED. PROVIDE MISCELLANEOUS STEEL SUPPORTS BETWEEN JOISTS AS REQUIRED. PAINT OUTLET BOXES, SUPPORT STEEL AND CONDUITS WHITE TO MATCH CEILING SPACE.

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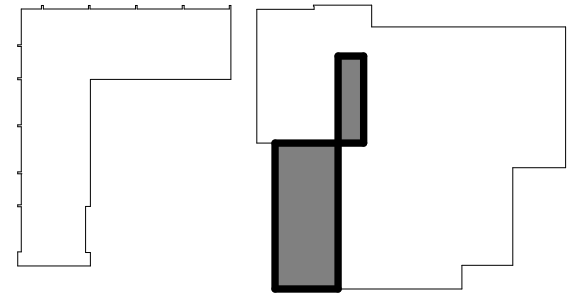
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Project Component

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Key Plan



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Mechanical: NORR
Electrical: NORR

Seal(s)

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Project Manager AMY NOLFF	BIM Lead RANDY FRABOTTA
Design Lead SEAN PIC-KELL	Drawn S. PIC-KELL
Project Leader SEAN PIC-KELL	Checked M. GOOD
Client WAYNE STATE UNIVERSITY	
Project WSU DINING HALL ADDITION 655 W. KIRBY ST. DETROIT, MI 48202	

Drawing Title
LIGHTING PLANS

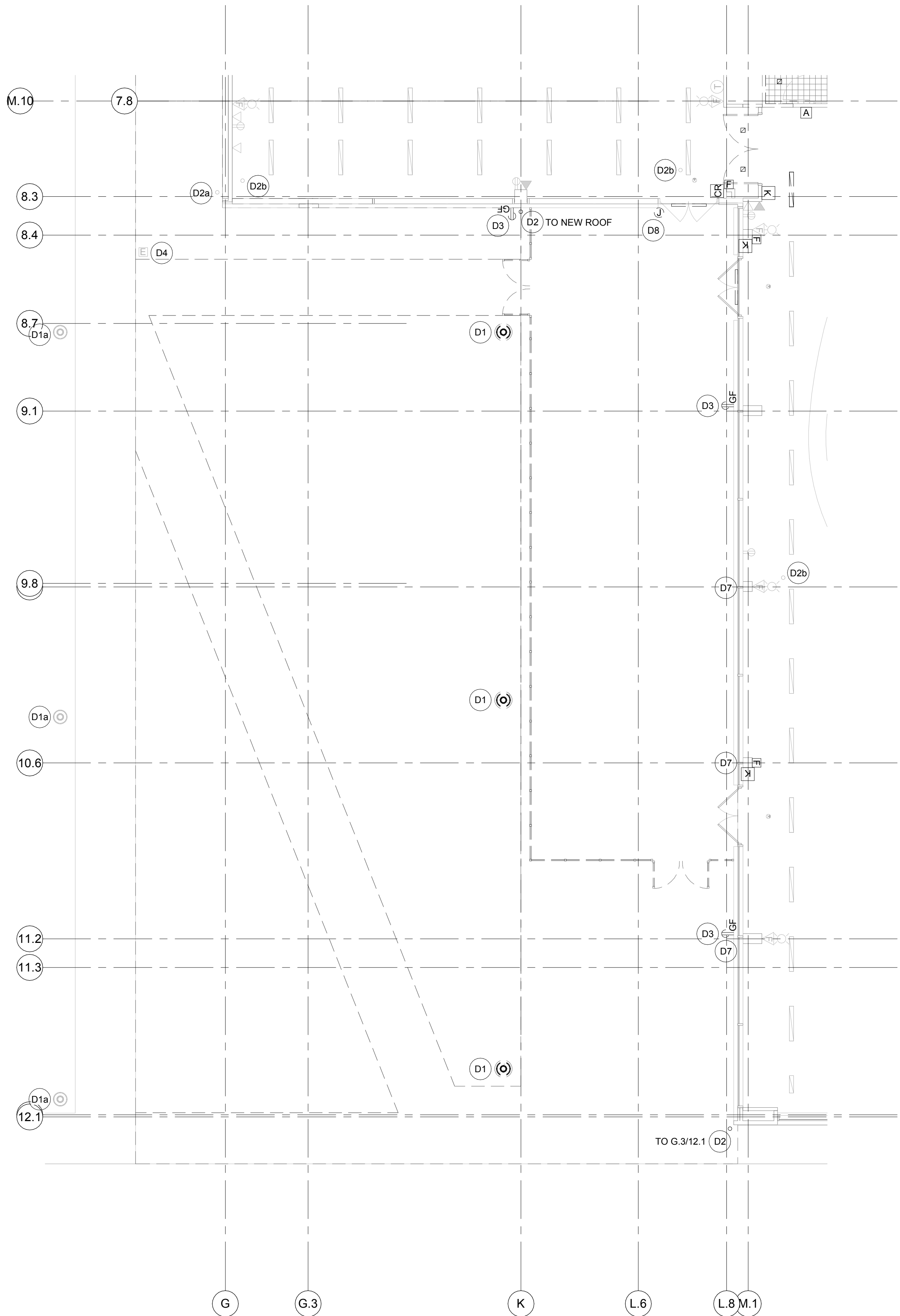
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Project No. JCDT18-0444

Drawing No.
E20-00

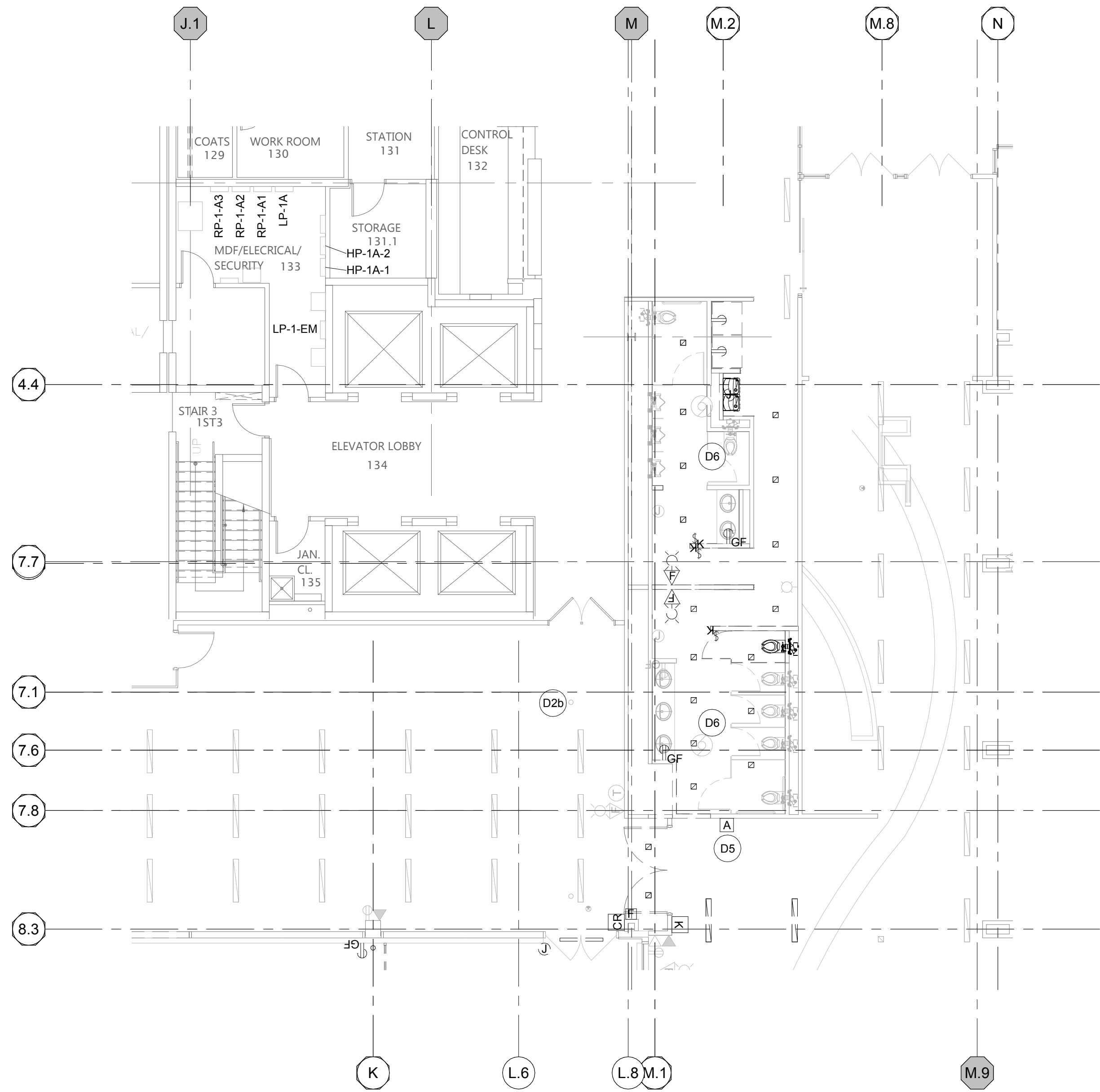
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1 ELECTRICAL DEMO PLAN - SOUTH
SCALE: 1/8" = 1'-0"

2 ELECTRICAL DEMO PLAN - NORTH
SCALE: 1/8" = 1'-0"



ELECTRICAL DEMO KEY NOTES	
NOTE TAG	DESCRIPTION
D1	EXISTING POLE LIGHT TO BE REMOVED AND TURNED OVER TO OWNER. REMOVE FOUNDATIONS AND ANY UNDERGROUND CONDUIT IN AREA OF CONSTRUCTION. REMOVE WIRING BACK TO FIRST FIXTURE(S) TO REMAIN.
D1a	EXISTING POLE LIGHT TO REMAIN. KEEP OPERATIONAL DURING CONSTRUCTION.
D2	EXISTING EXTERIOR SECURITY CAMERA TO BE RELOCATED. SEE E10-00 FOR NEW LOCATION. USE CAMERA K8.3 TO MONITOR NEW CONSTRUCTION WHEN RELOCATED ABOVE NEW ROOF.
D2a	EXISTING EXTERIOR SECURITY CAMERA TO REMAIN.
D2b	EXISTING INTERIOR SECURITY CAMERA TO REMAIN.
D3	EXISTING EXTERIOR WEATHERPROOF RECEPTACLE AND BOX TO BE REMOVED. EXISTING CIRCUIT TO REMAIN.
D4	EXISTING EMERGENCY BLUE PHONE TO REMAIN. KEEP OPERATIONAL DURING CONSTRUCTION.
D5	EXISTING AUDIO SYSTEM CONTROLS TO BE RELOCATED. SEE E10-00 FOR NEW LOCATION.
D6	EXISTING BATHROOM COMPACT FLOURESCENT SQUARE DOWNLIGHTS AND FLUORESCENT COVE STRIP LIGHTS TO BE REPLACED OR DEMOLISHED. SEE E20-00 FOR LOCATIONS AND QUANTITIES OF NEW LED FIXTURES. EXISTING OUTLETS, KEY SWITCHES AND FIRE ALARM DEVICES TO BE RELOCATED.
D7	EXISTING PARAPET LIGHTNING PROTECTION AIR TERMINAL TO BE RELOCATED TO NEW WEST PARAPET.
D8	REMOVE UNUSED SURFACE MOUNT JUNCTION BOX AT 30" ABOVE GRADE. PROVIDE FLUSH COVER PLATE, MATCHING EXISTING ABOVE, AS REQUIRED.

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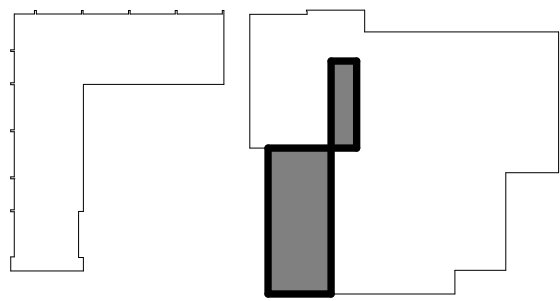
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Project Leader SEAN PIC-KELL	Checked M. GOOD

Client
WAYNE STATE
UNIVERSITY

Project
WSU DINING HALL
ADDITION
655 W. KIRBY ST.
DETROIT, MI 48202

Drawing Title
ELECTRICAL DEMOLITION
PLANS

Scale: As indicated

Project No. JCDDT18-0444

Drawing No.
E80-00