BUILDING 1 - EHRM INFRASTRUCTURE UPGRADES

St. Cloud VA Health Care System Main Campus, St. Cloud, Minnesota



PROPOSED ADDITION



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ARCHITECT:

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ANDERSON ENGINEERING OF MN, LLC

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CONTACT: ZACHARY CRAIG

E TELECOMMUNICATIONS ENGINEER:

NAME: SPECIALIZED ENGINEERING SOLUTIONS

ADDRESS: 10360 ELLISON CIRCLE OMAHA, NE 68134

CONTACT: KRIS BURNHAM

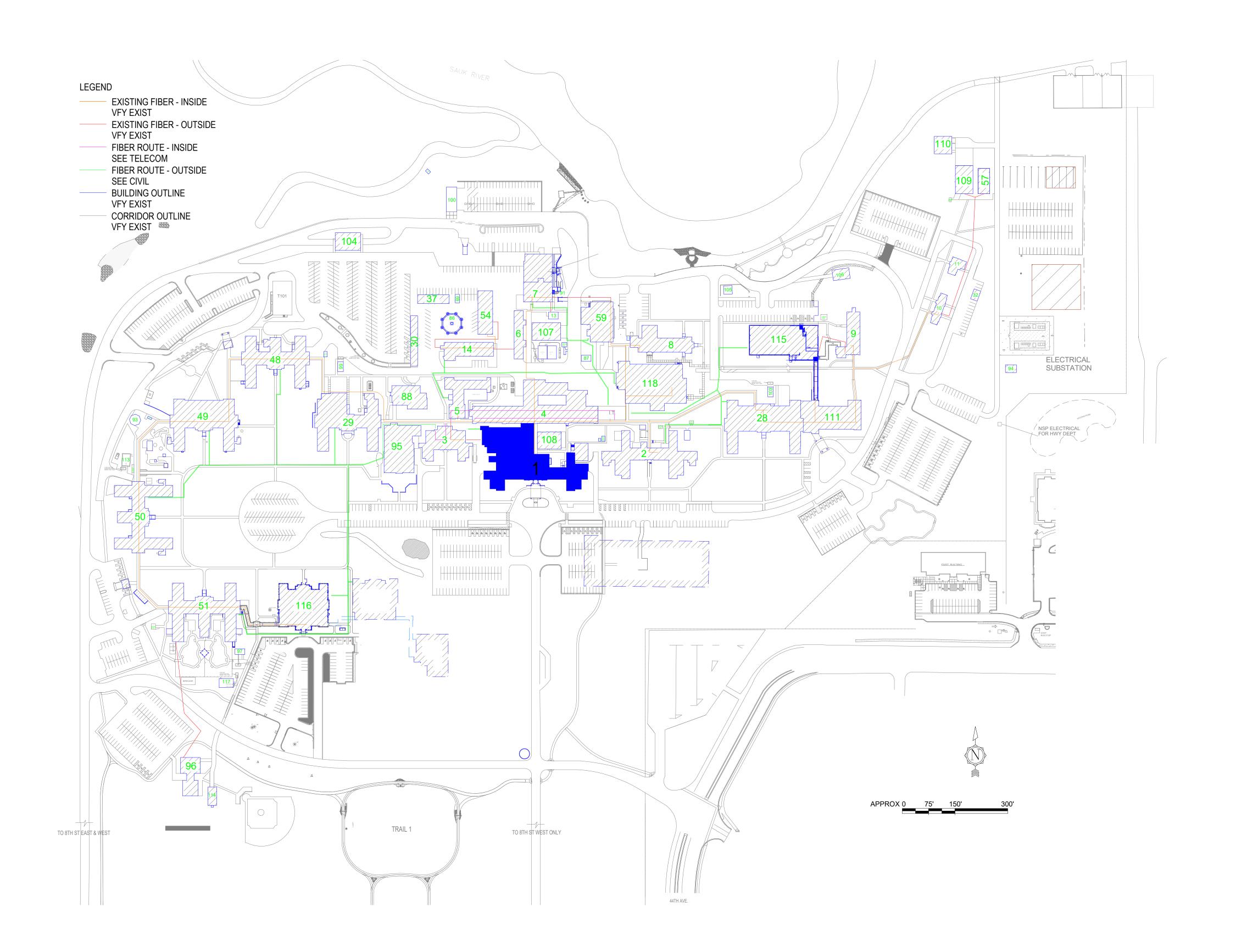
PHONE: 402-991-5520

MECH/ELEC/PLUMB/FIRE ENGINEER:

NAME: SPECIALIZED ENGINEERING SOLUTIONS

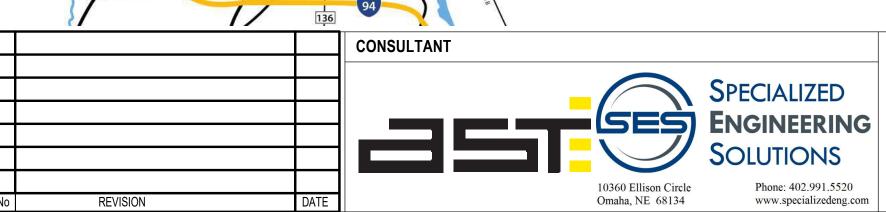
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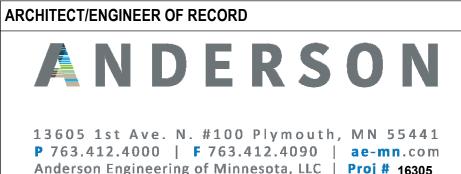


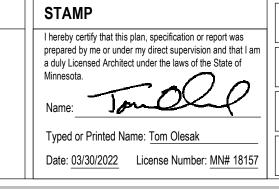


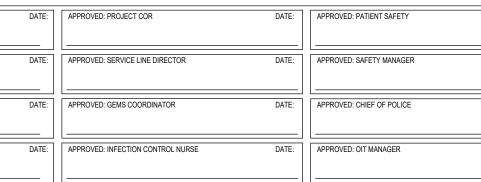
SHEET NO.	SHEET TITLE
1-GI000	BUILDING 1 COVER SHEET & SHEET INDEX
1-GI101	BASEMENT FLOOR - INFECTION CONTROL & PHASING PLAN
1-GI111	FIRST FLOOR - INFECTION CONTROL & PHASING PLAN
1-GI120	SECOND FLOOR LIFE SAFETY PLAN
1-GI121	SECOND FLOOR - INFECTION CONTROL & PHASING PLAN
1-HA-1A	REFERENCE - BASEMENT FLOOR ASBESTOS RE-SURVEY
1-HA-2A	REFERENCE - FIRST FLOOR ASBESTOS RE-SURVEY
1-HA-3A	REFERENCE - SECOND FLOOR ASBESTOS RE-SURVEY
1-HA-4A	REFERENCE - THIRD / ATTIC FLOOR ASBESOTS RE-SURVEY
1-AS100	BASEMENT FLOOR - OVERALL PLAN
1-AS110	FIRST FLOOR - OVERALL PLAN
1-AS120	SECOND FLOOR - OVERALL PLAN
1-AS130	ATTIC FLOOR - OVERALL PLAN
1-AS400	LARGE SCALE PLANS
1-AS430	BUILDING ADDITION AND ROOF PLAN
1-AS600	ELEVATIONS, DETAILS, SCHEDULES
1-AS601	INTERIOR PARTITION TYPES AND DETAILS
1-AS602	SECTION DETAILS
1-S120	SECOND FLOOR PLAN - OVERALL
1-S130	ATTIC FLOOR PLAN - OVERALL
1-S400	LARGE SCALE PLANS
01-E100	BASEMENT DEMOLITION - ELECTRICAL
01-E101	FIRST FLOOR DEMOLITION - ELECTRICAL
01-E200	BASEMENT - ELECTRICAL
01-E201	FIRST FLOOR - ELECTRICAL
01-E202	SECOND FLOOR - ELECTRICAL
01-E204	ROOF - ELECTRICAL
01-M000	MECHANICAL COVERSHEET
01-M100	BASEMENT DEMOLITION - MECHANICAL
01-M101	FIRST FLOOR DEMOLITION - MECHANICAL
01-M102	SECOND FLOOR DEMOLITION - MECHANICAL
01-M200	BASEMENT REMODEL - MECHANICAL
01-M201	FIRST FLOOR REMODEL - MECHANICAL
01-M202	SECOND FLOOR REMODEL - MECHANICAL
01-M400	MECHANICAL DETAILS AND DIAGRAMS
01-M600	MECHANICAL SCHEDULES

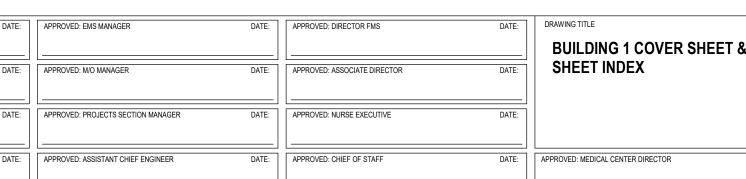
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1-TD100	BASEMENT FLOOR PLAN - TELECOM - DEMOLITION
1-TD110	FIRST FLOOR PLAN - TELECOM - DEMOLITION
1-TD120	SECOND FLOOR PLAN - TELECOM - DEMOLITION
1-TD130	THIRD FLOOR PLAN - TELECOM - DEMOLITION
1-TN100	BASEMENT FLOOR PLAN - TELECOMMUNICATIONS
1-TN110	FIRST FLOOR PLAN - TELECOMMUNICATIONS
1-TN120	SECOND FLOOR PLAN - TELECOMMUNICATIONS
1-TN130	THIRD FLOOR PLAN - TELECOMMUNICATIONS
1-TN200	BASEMENT FLOOR PLAN - TELECOM - CABLE DISTANCE
1-TN210	FIRST FLOOR PLAN - TELECOM - CABLE DISTANCE
1-TN220	SECOND FLOOR PLAN - TELECOM - CABLE DISTANCE
1-TN230	THIRD FLOOR PLAN - TELECOM - CABLE DISTANCE
1-TN300	ENLARGED PLANS - TELECOMMUNICATIONS - DEMO
1-TN400	ENLARGED PLANS - TELECOMMUNICATIONS
1-TN401	ENLARGED PLANS - TELECOMMUNICATIONS
1-TN402	ENLARGED PLANS - TELECOMMUNICATIONS
1-TN403	ENLARGED PLANS - TELECOMMUNICATIONS

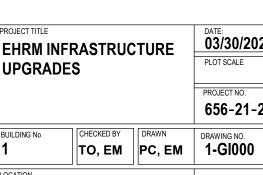


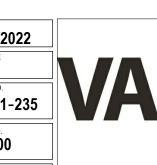




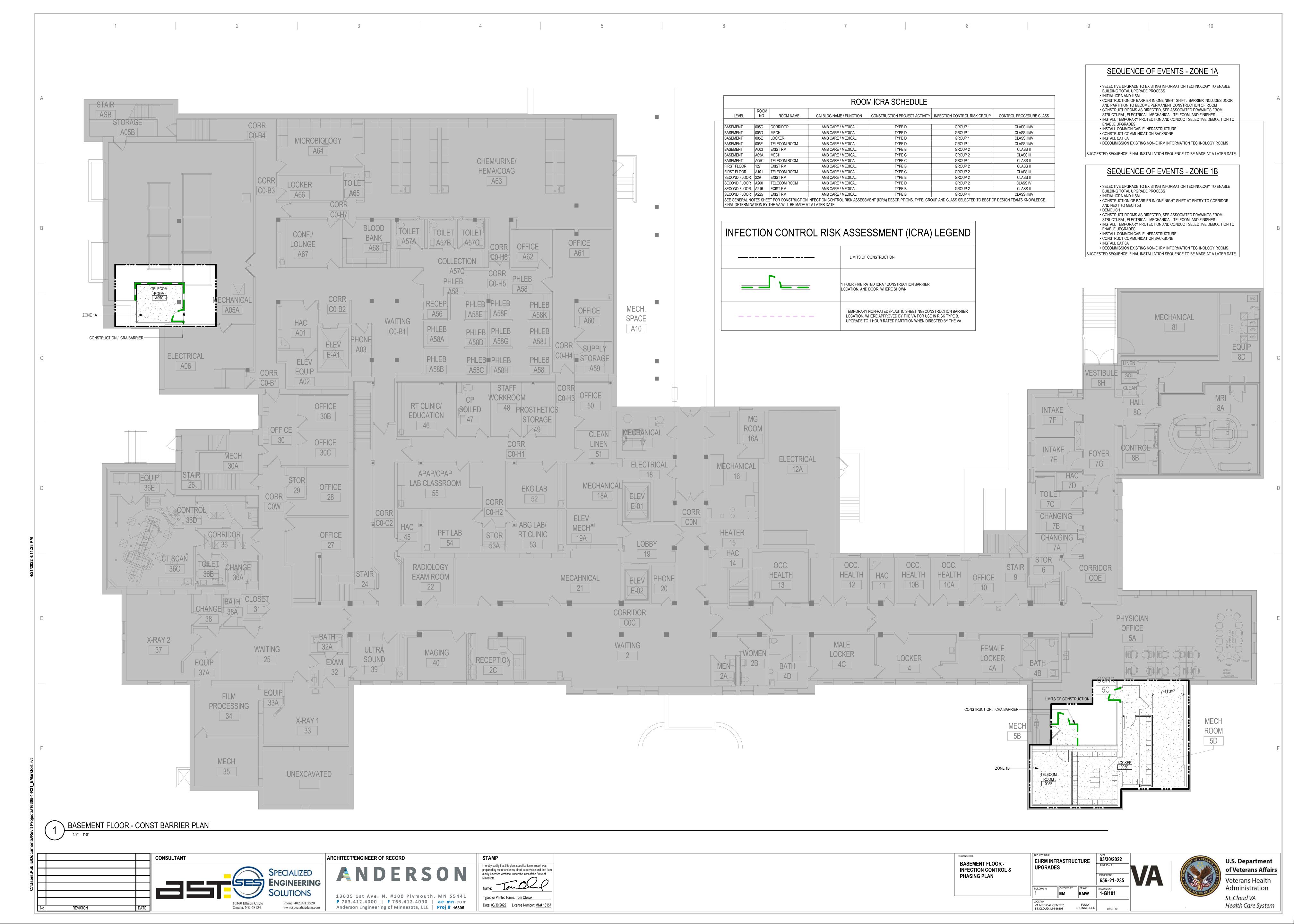


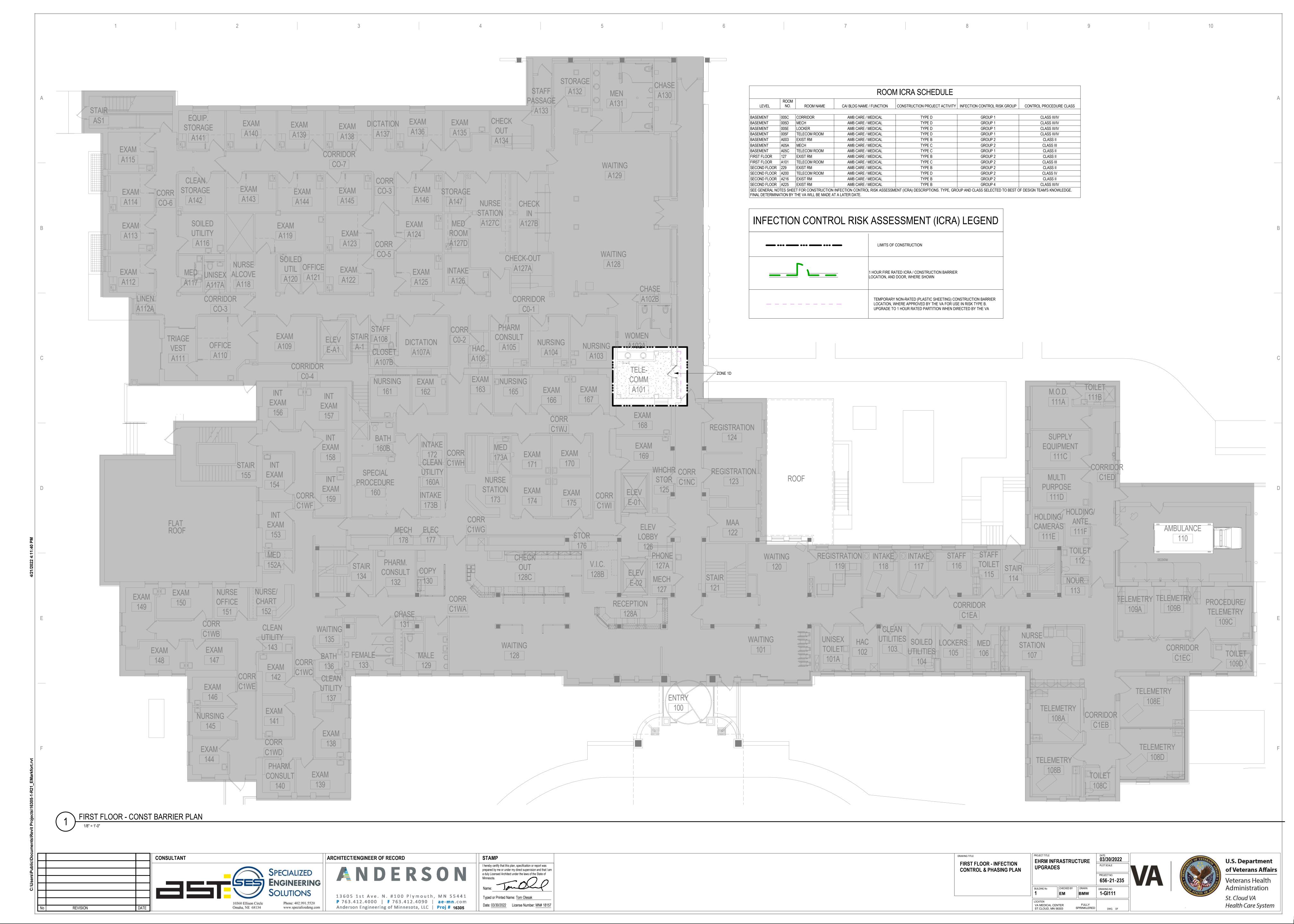


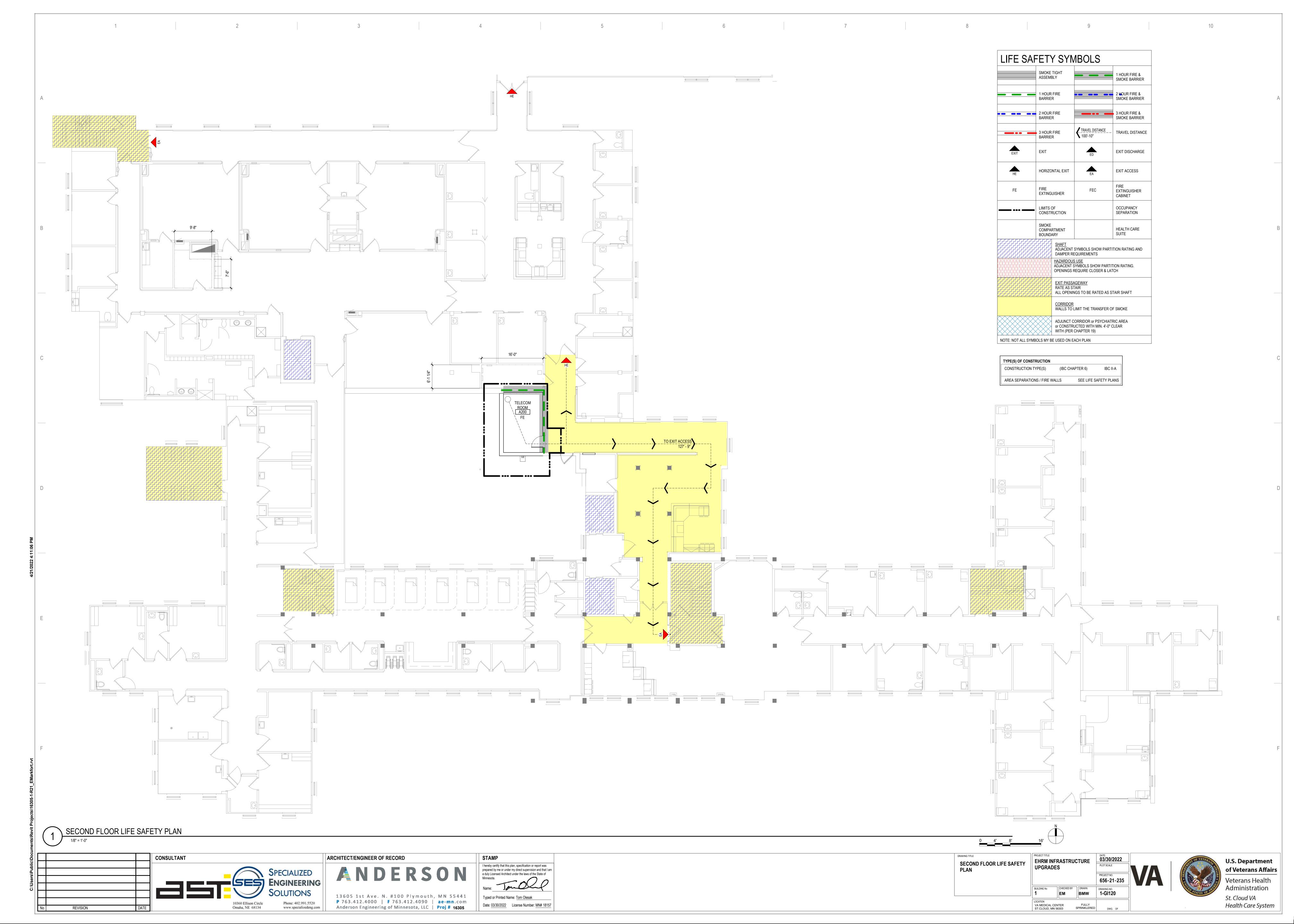


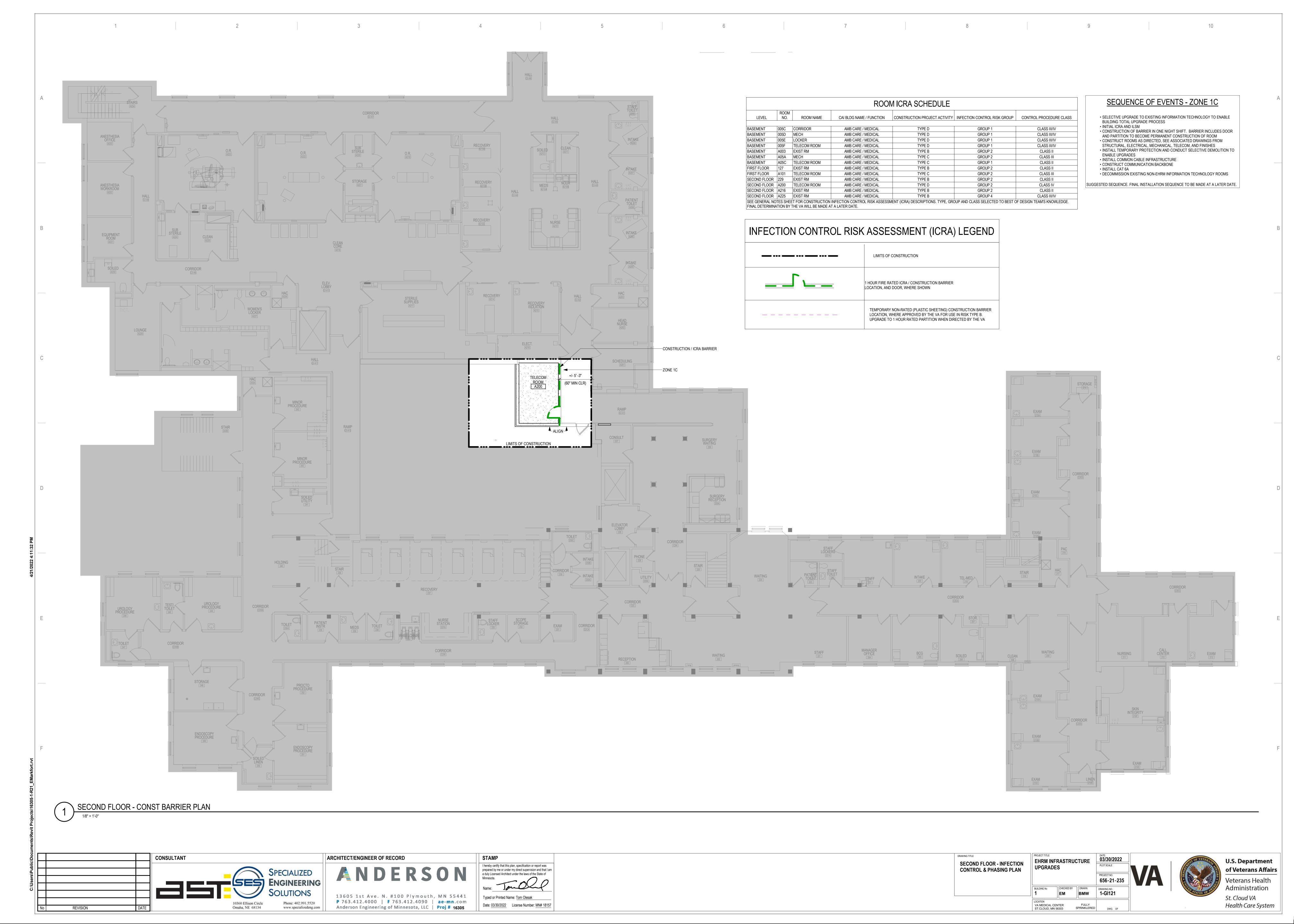


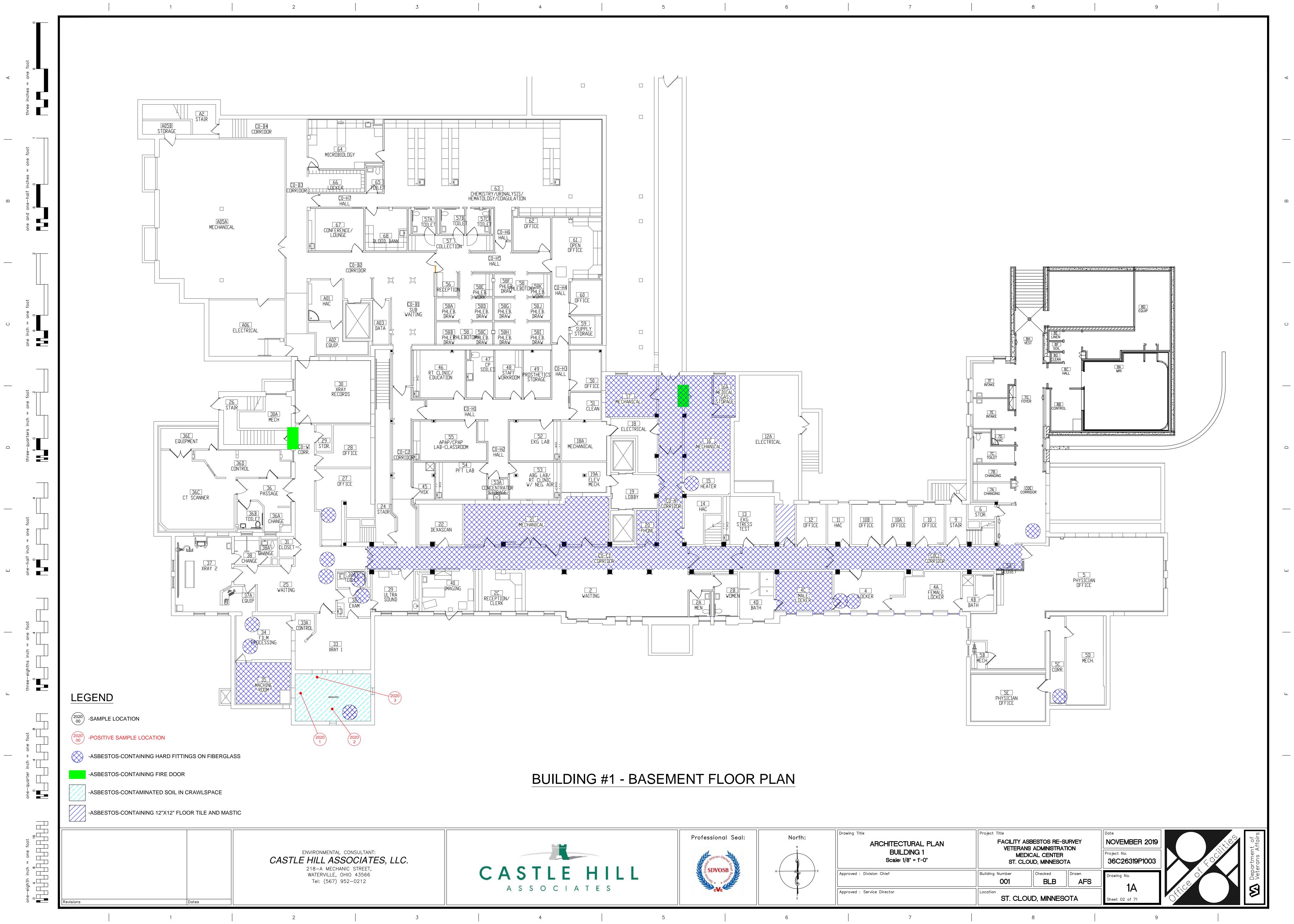


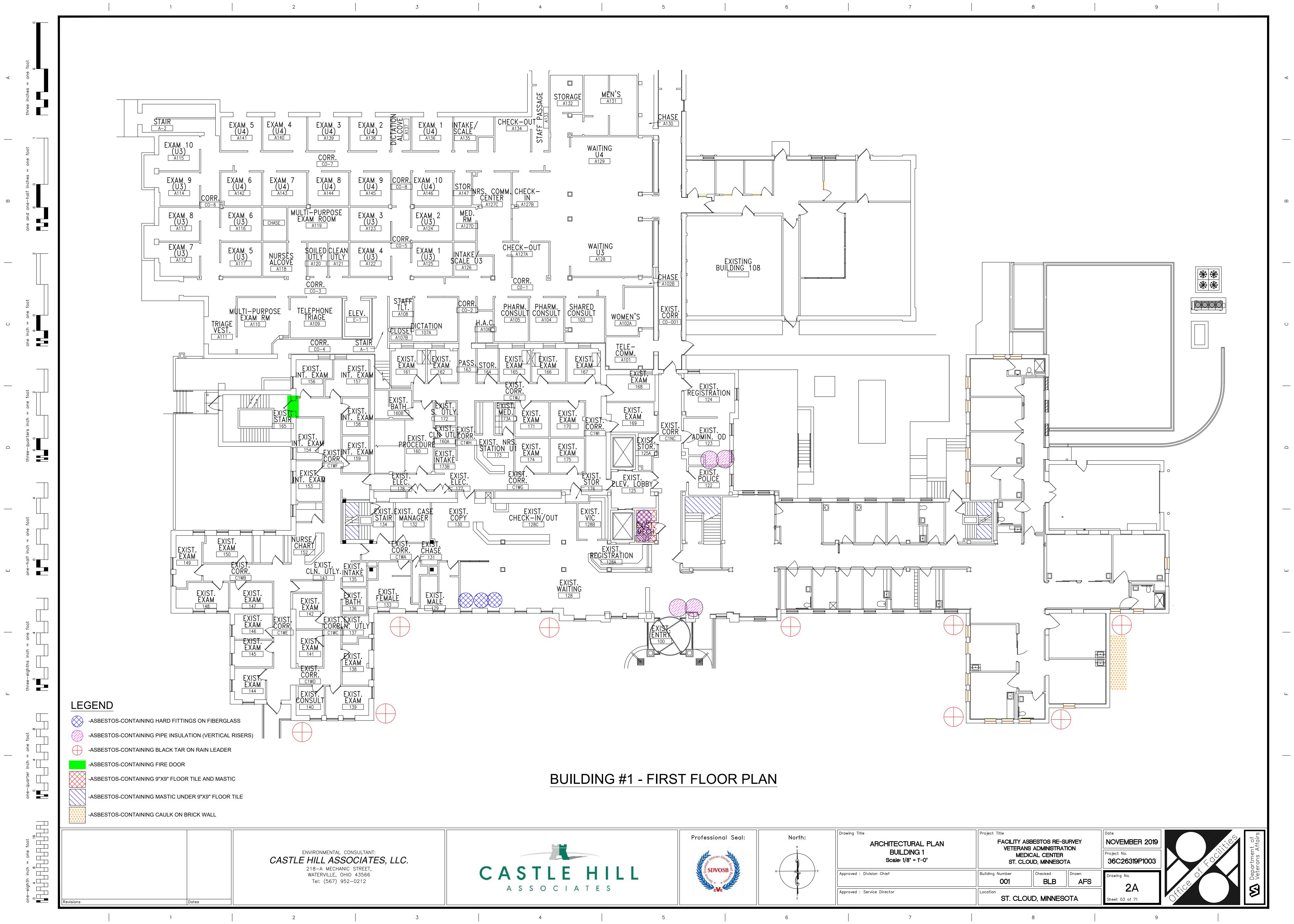


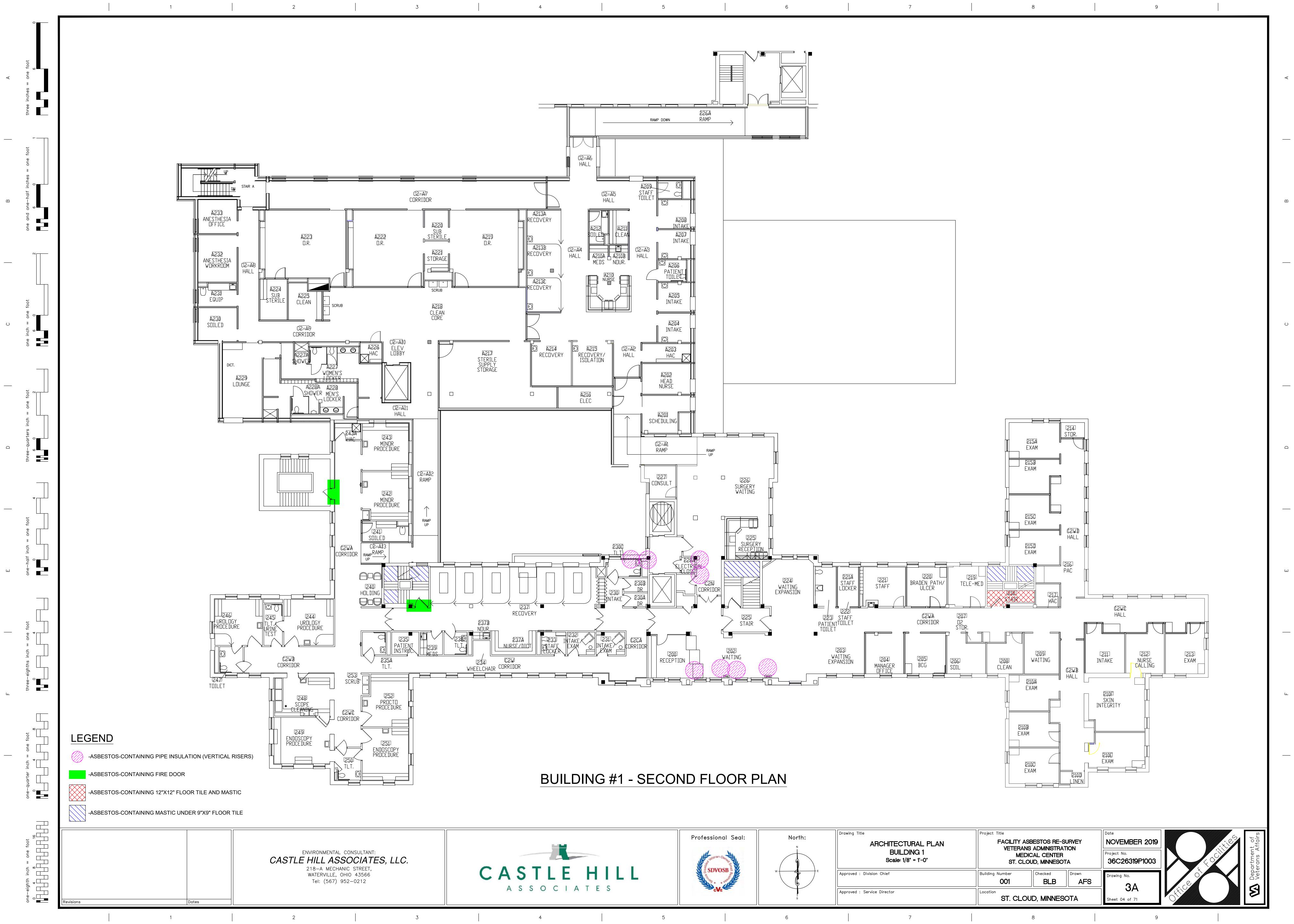


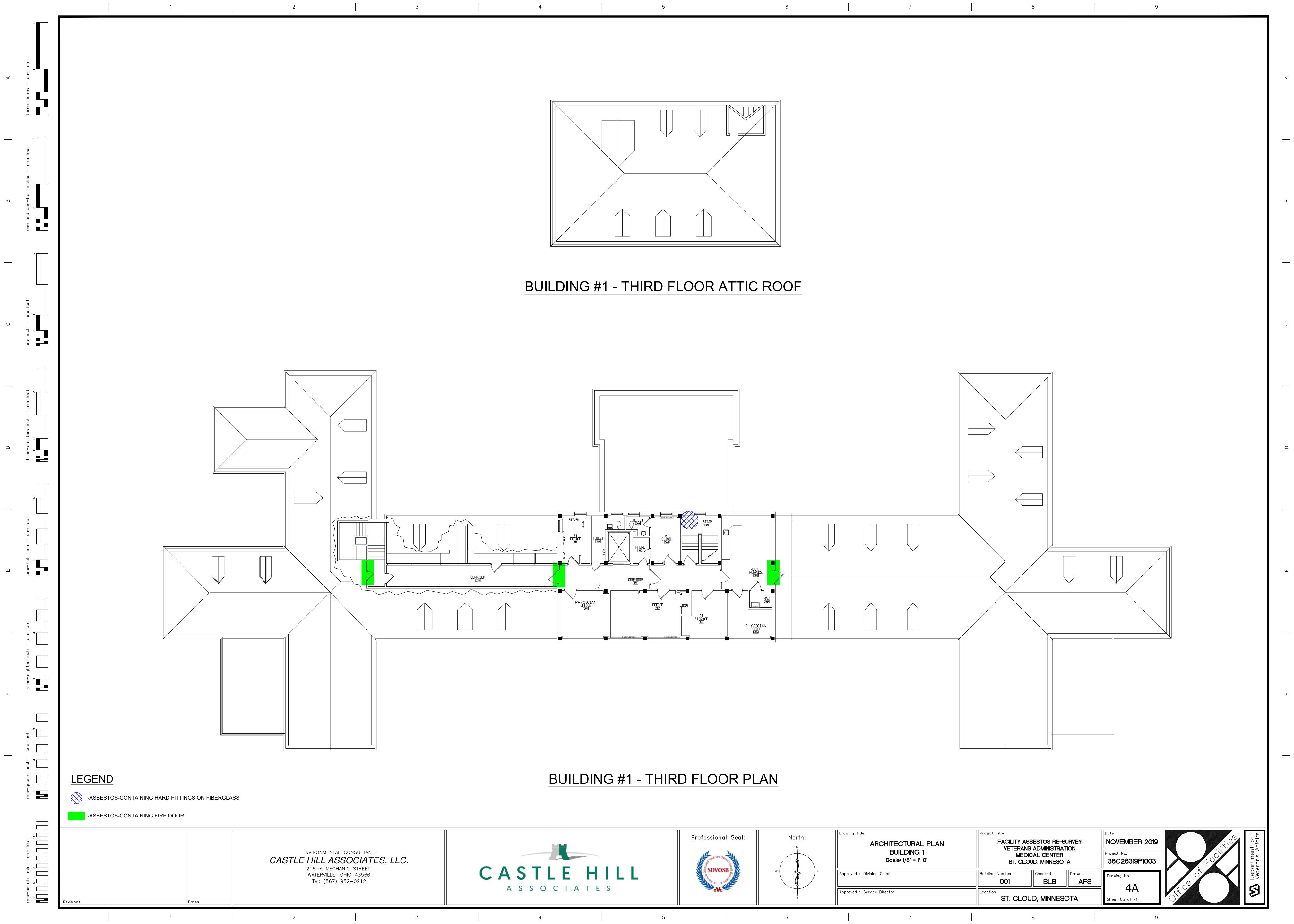


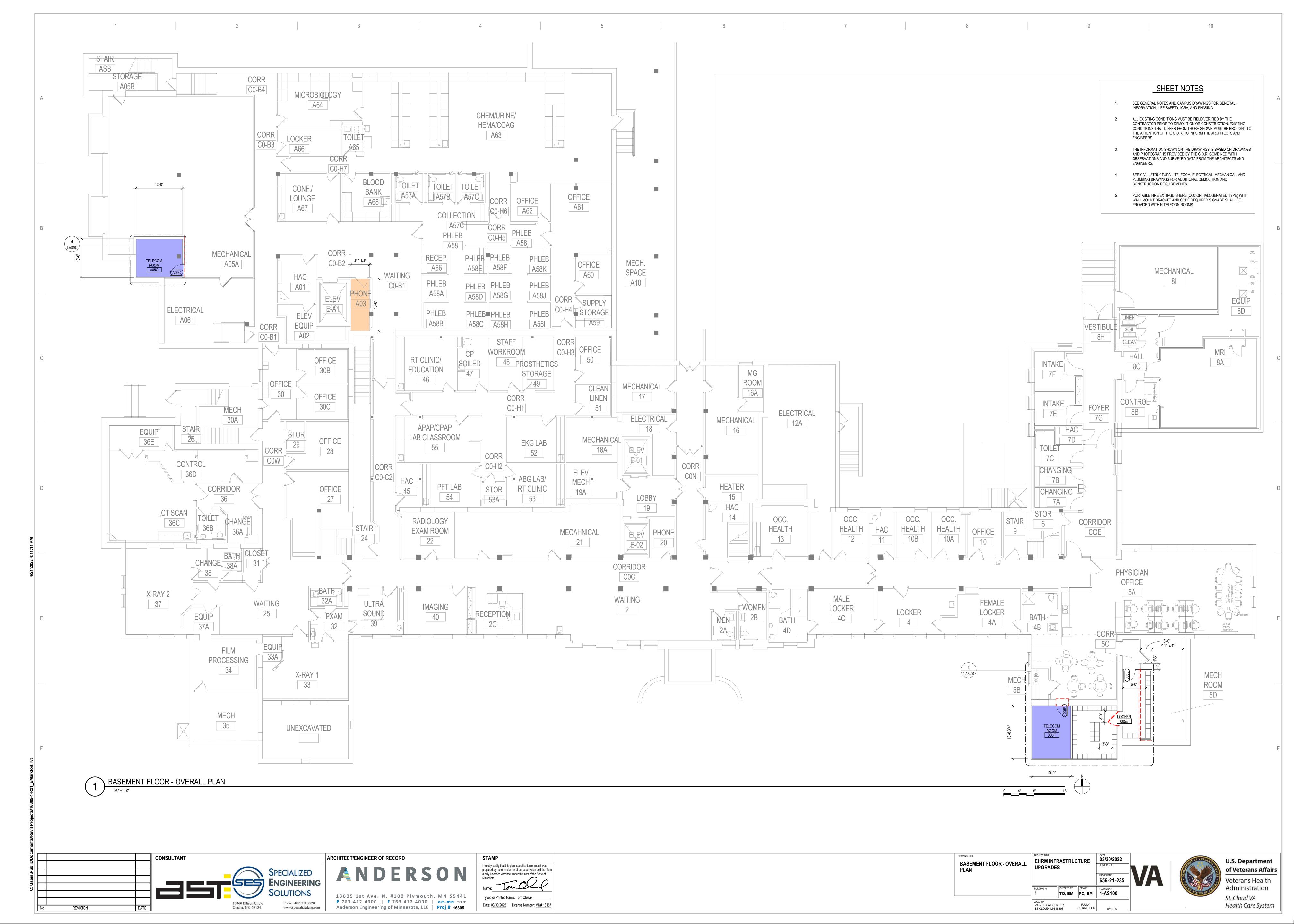


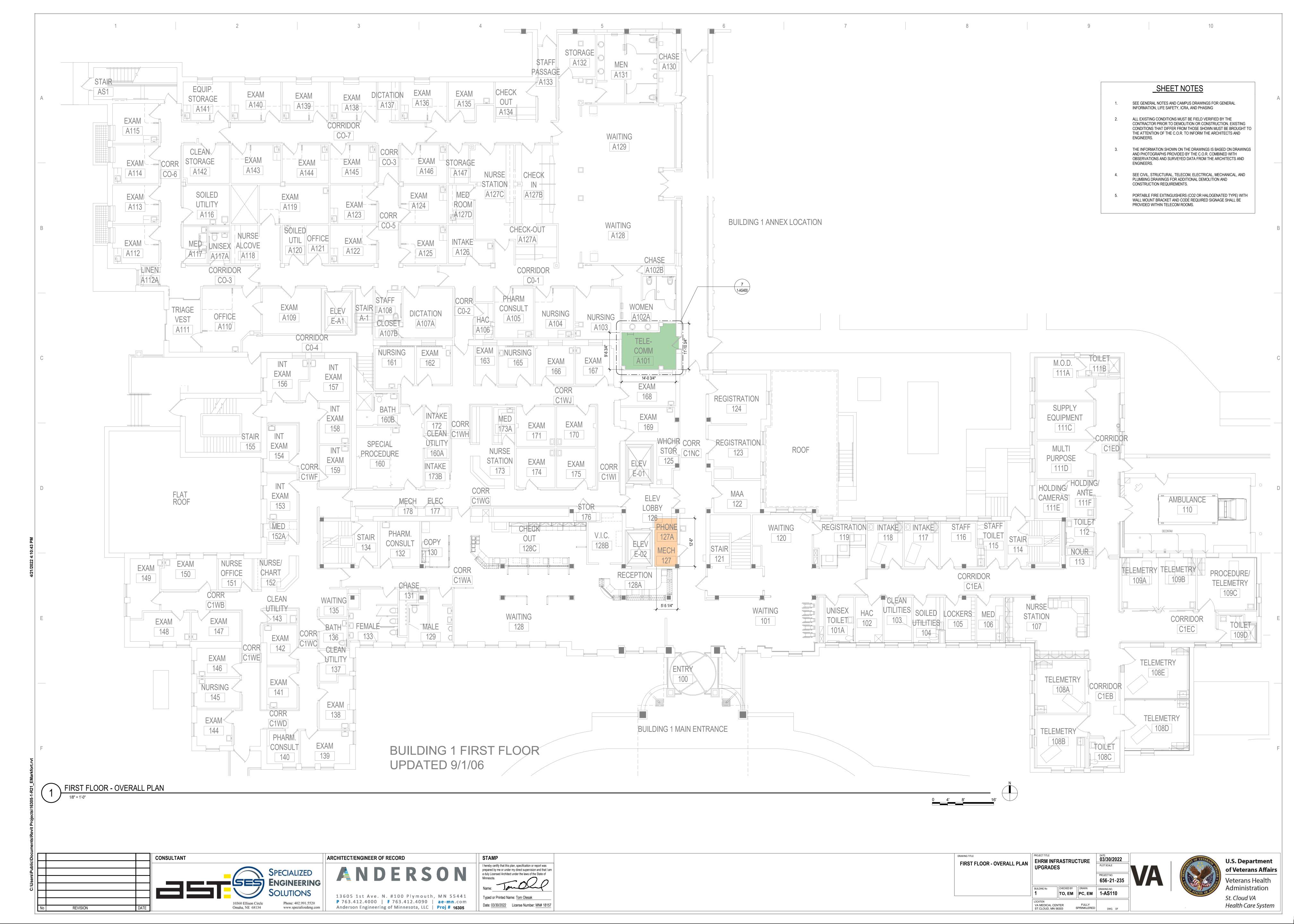


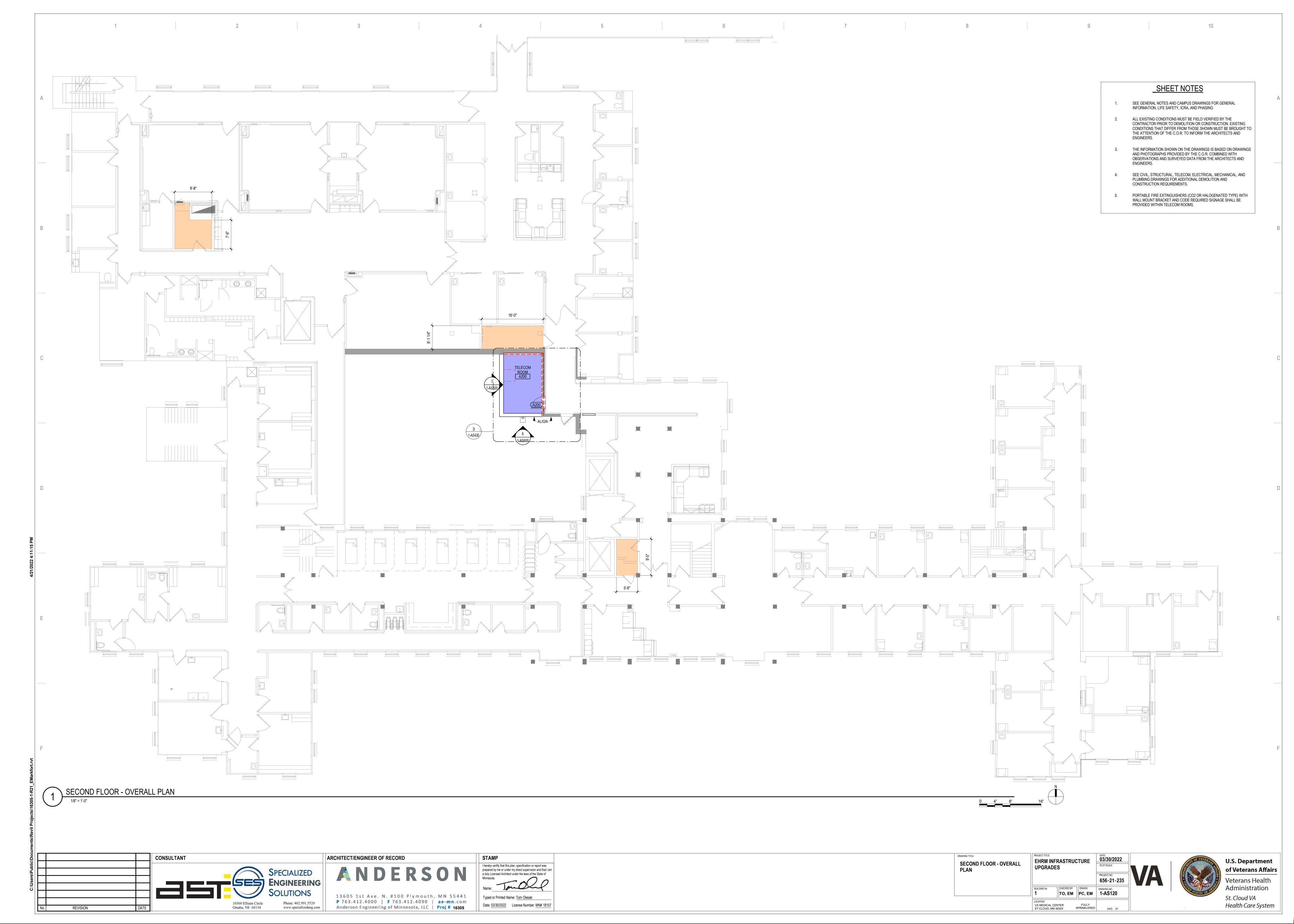


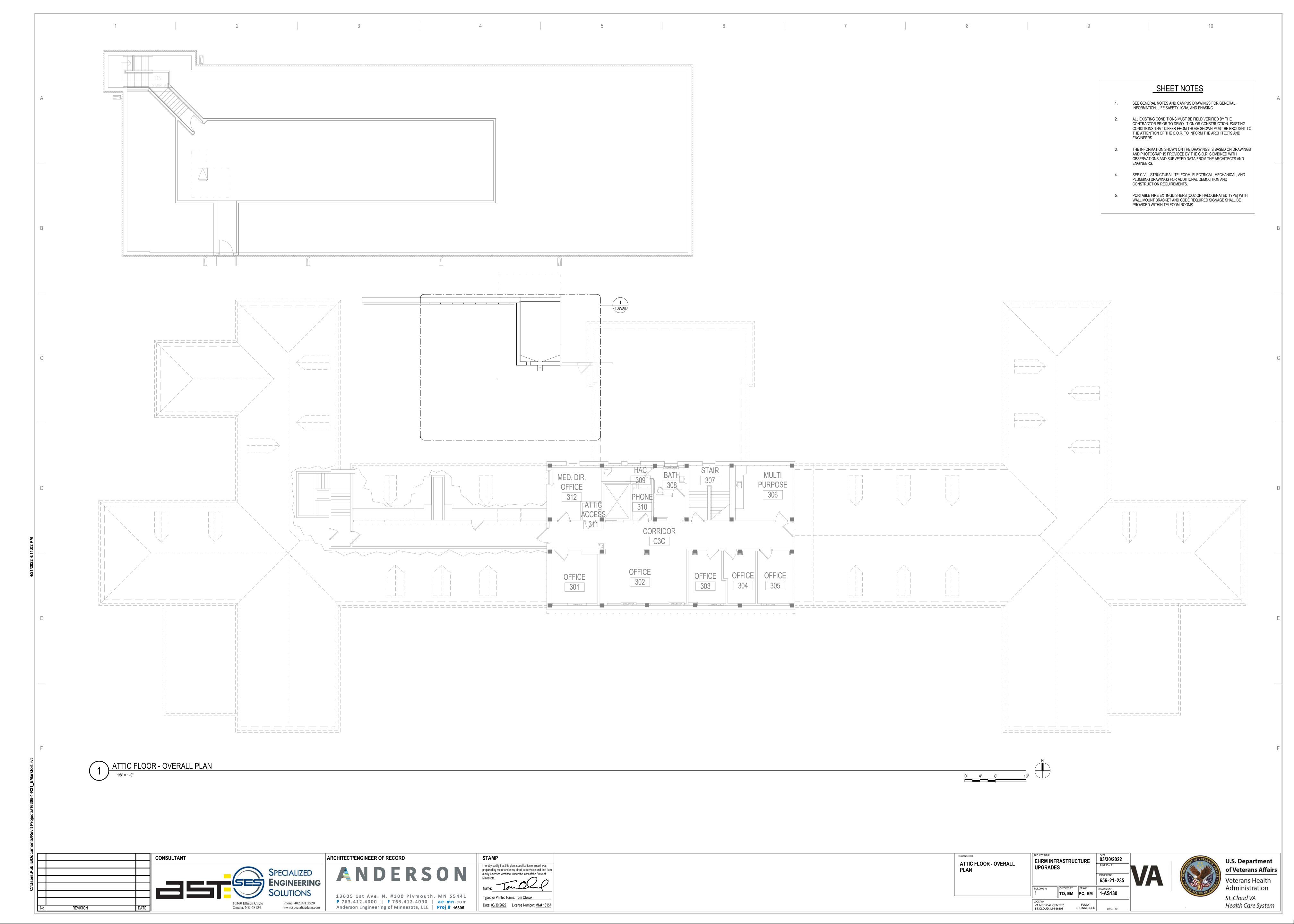


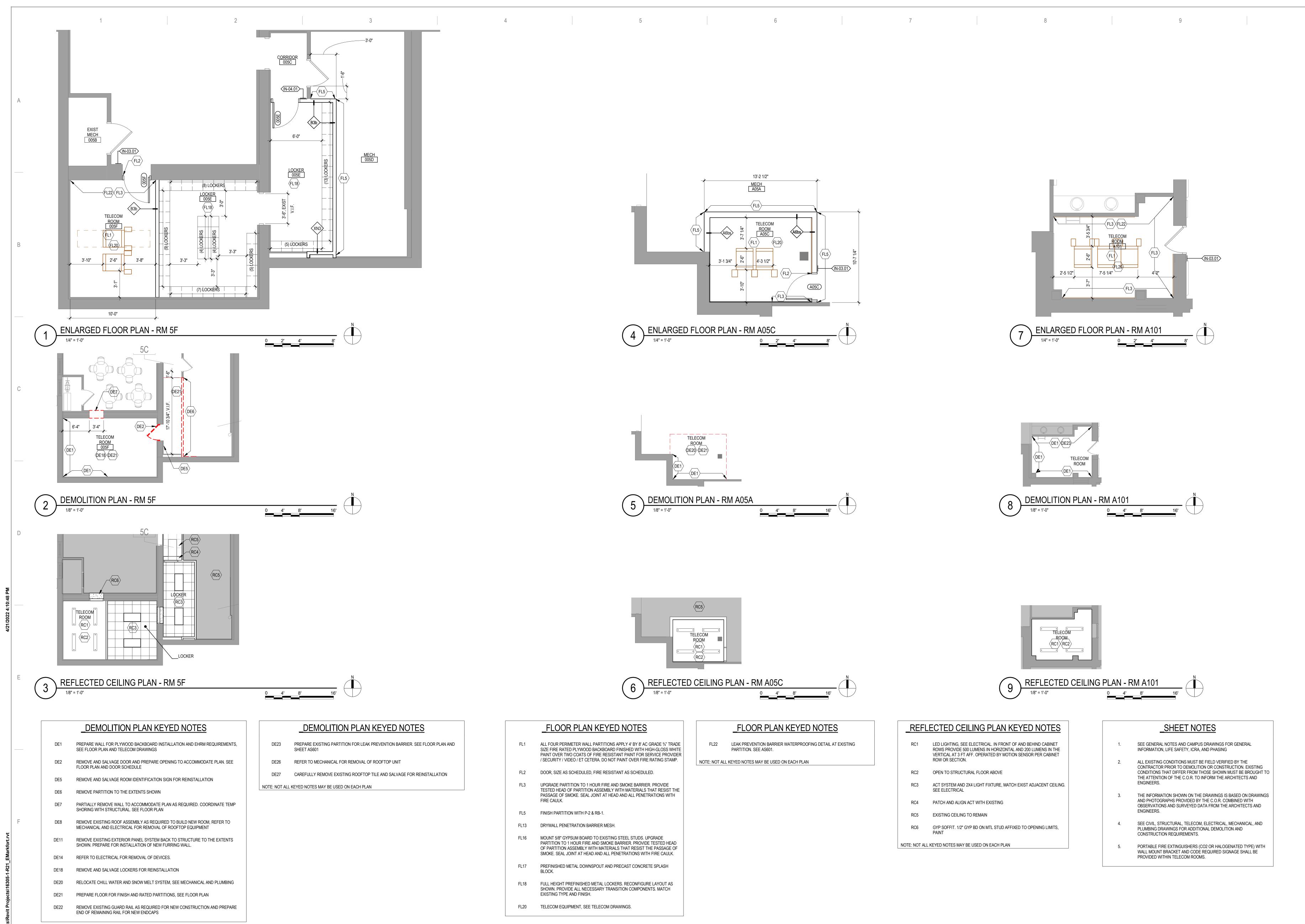


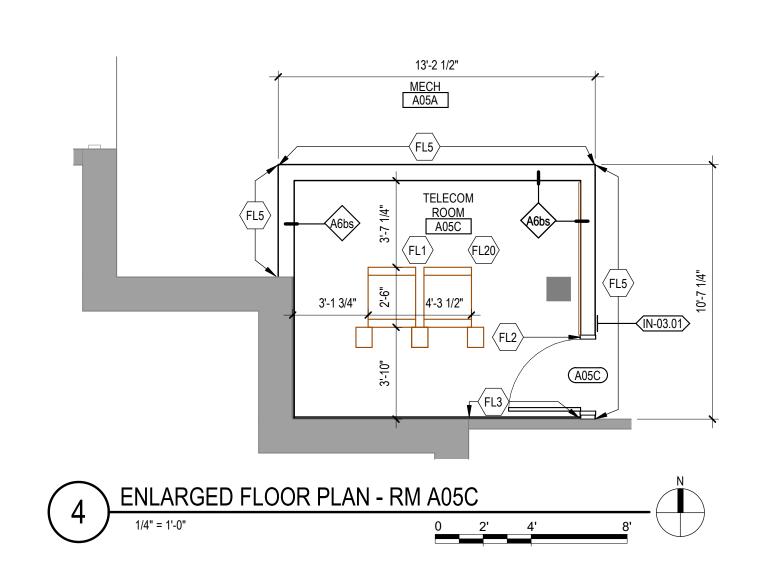


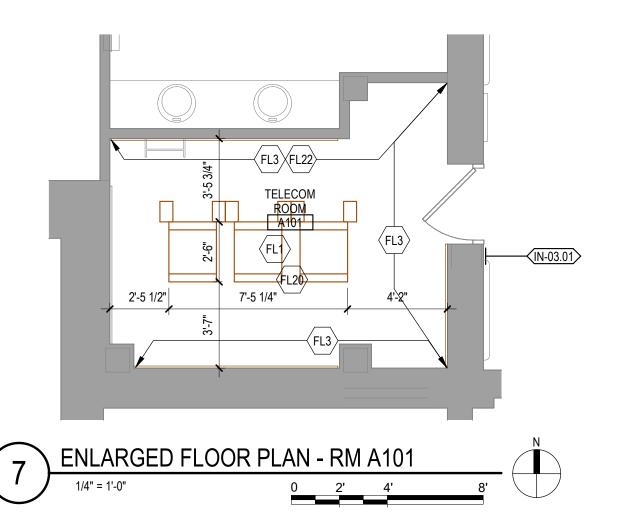


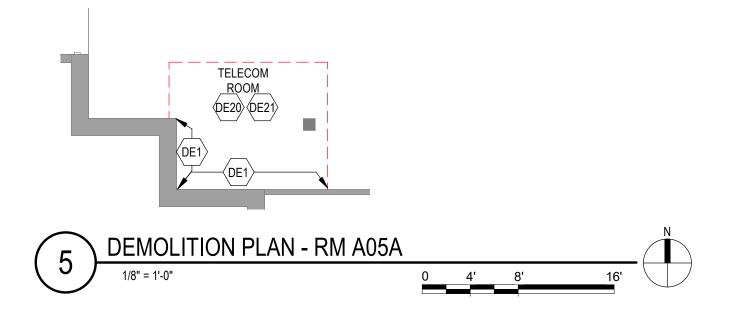


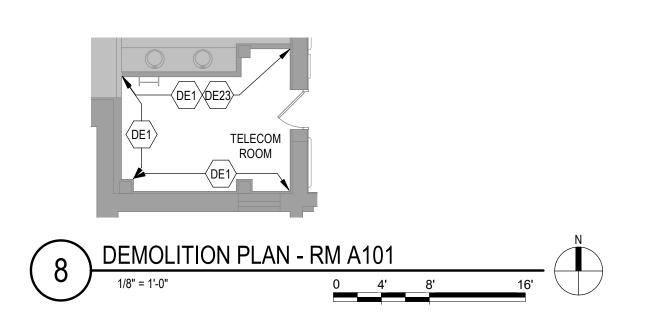


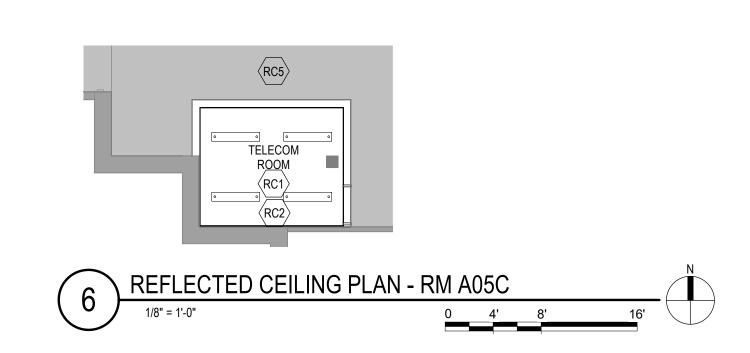


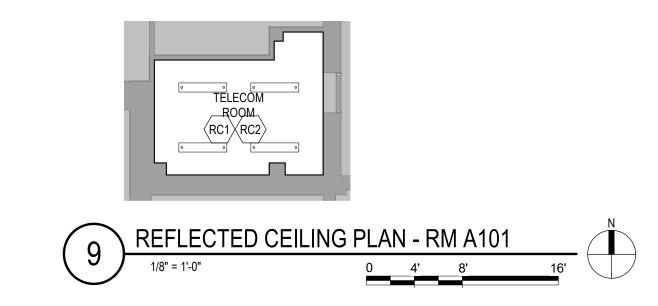














- ALL FOUR PERIMETER WALL PARTITIONS APPLY 4' BY 8' AC GRADE 3/4" TRADE SIZE FIRE RATED PLYWOOD BACKBOARD FINISHED WITH HIGH-GLOSS WHITE PAINT OVER TWO COATS OF FIRE RESISTANT PAINT FOR SERVICE PROVIDER / SECURITY / VIDEO / ET CETERA. DO NOT PAINT OVER FIRE RATING STAMP.
- DOOR, SIZE AS SCHEDULED, FIRE RESISTANT AS SCHEDULED.
- UPGRADE PARTITION TO 1 HOUR FIRE AND SMOKE BARRIER. PROVIDE TESTED HEAD OF PARTITION ASSEMBLY WITH MATERIALS THAT RESIST THE PASSAGE OF SMOKE. SEAL JOINT AT HEAD AND ALL PENETRATIONS WITH
- FINISH PARTITION WITH P-2 & RB-1.
- DRYWALL PENETRATION BARRIER MESH.
- MOUNT 5/8" GYPSUM BOARD TO EXISTING STEEL STUDS. UPGRADE PARTITION TO 1 HOUR FIRE AND SMOKE BARRIER. PROVIDE TESTED HEAD OF PARTITION ASSEMBLY WITH MATERIALS THAT RESIST THE PASSAGE OF
- FL17 PREFINISHED METAL DOWNSPOUT AND PRECAST CONCRETE SPLASH

SMOKE. SEAL JOINT AT HEAD AND ALL PENETRATIONS WITH FIRE CAULK.

- FULL HEIGHT PREFINISHED METAL LOCKERS. RECONFIGURE LAYOUT AS SHOWN. PROVIDE ALL NECESSARY TRANSITION COMPONENTS. MATCH
- FL20 TELECOM EQUIPMENT, SEE TELECOM DRAWINGS.

EXISTING TYPE AND FINISH.

_FLOOR PLAN KEYED NOTES

LEAK PREVENTION BARRIER WATERPROOFING DETAIL AT EXISTING PARTITION. SEE AS601.

NOTE: NOT ALL KEYED NOTES MAY BE USED ON EACH PLAN

REFLECTED CEILING PLAN KEYED NOTES

- RC1 LED LIGHTING, SEE ELECTRICAL. IN FRONT OF AND BEHIND CABINET ROWS PROVIDE 500 LUMENS IN HORIZONTAL AND 200 LUMENS IN THE VERTICAL AT 3 FT AFF. OPERATED BY MOTION SENSOR PER CABINET ROW OR SECTION.
- RC2 OPEN TO STRUCTURAL FLOOR ABOVE
- ACT SYSTEM AND 2X4 LIGHT FIXTURE, MATCH EXIST ADJACENT CEILING. SEE ELECTRICAL
- RC4 PATCH AND ALIGN ACT WITH EXISTING RC5 EXISTING CEILING TO REMAIN
- GYP SOFFIT. 1/2" GYP BD ON MTL STUD AFFIXED TO OPENING LIMITS,
- NOTE: NOT ALL KEYED NOTES MAY BE USED ON EACH PLAN

SHEET NOTES

- SEE GENERAL NOTES AND CAMPUS DRAWINGS FOR GENERAL INFORMATION, LIFE SAFETY, ICRA, AND PHASING
- ALL EXISTING CONDITIONS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO DEMOLITION OR CONSTRUCTION. EXISTING CONDITIONS THAT DIFFER FROM THOSE SHOWN MUST BE BROUGHT TO THE ATTENTION OF THE C.O.R. TO INFORM THE ARCHITECTS AND
- THE INFORMATION SHOWN ON THE DRAWINGS IS BASED ON DRAWINGS AND PHOTOGRAPHS PROVIDED BY THE C.O.R. COMBINED WITH OBSERVATIONS AND SURVEYED DATA FROM THE ARCHITECTS AND
- SEE CIVIL, STRUCTURAL, TELECOM, ELECTRICAL, MECHANICAL, AND
- PLUMBING DRAWINGS FOR ADDITIONAL DEMOLITION AND CONSTRUCTION REQUIREMENTS.
- PORTABLE FIRE EXTINGUISHERS (CO2 OR HALOGENATED TYPE) WITH WALL MOUNT BRACKET AND CODE REQUIRED SIGNAGE SHALL BE PROVIDED WITHIN TELECOM ROOMS.

CONSULTANT

DATE

REVISION

ARCHITECT/ENGINEER OF RECORD ANDERSON 13605 1st Ave. N. #100 Plymouth, MN 55441

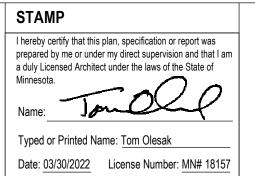
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Anderson Engineering of Minnesota, LLC | Proj # 16305

Phone: 402.991.5520

www.specializedeng.com

Omaha, NE 68134



LARGE SCALE PLANS

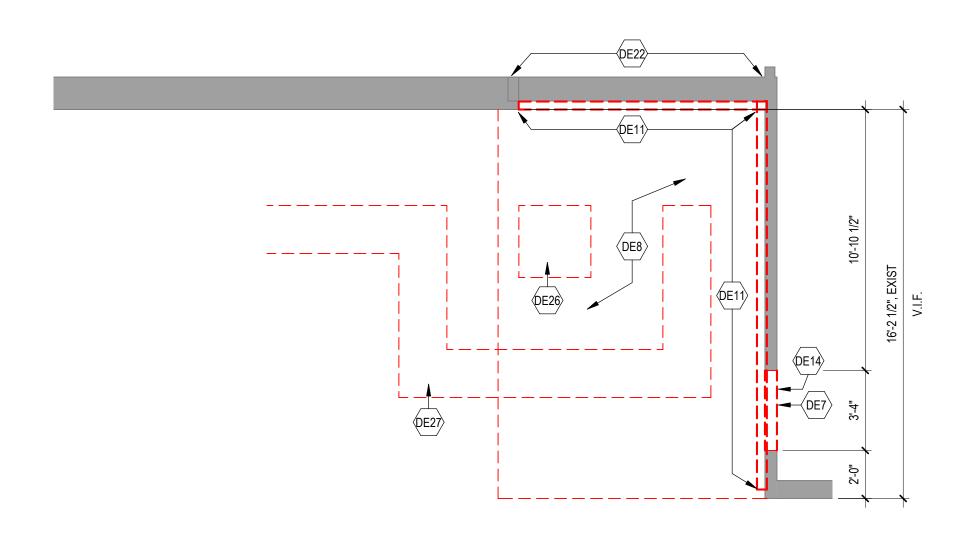
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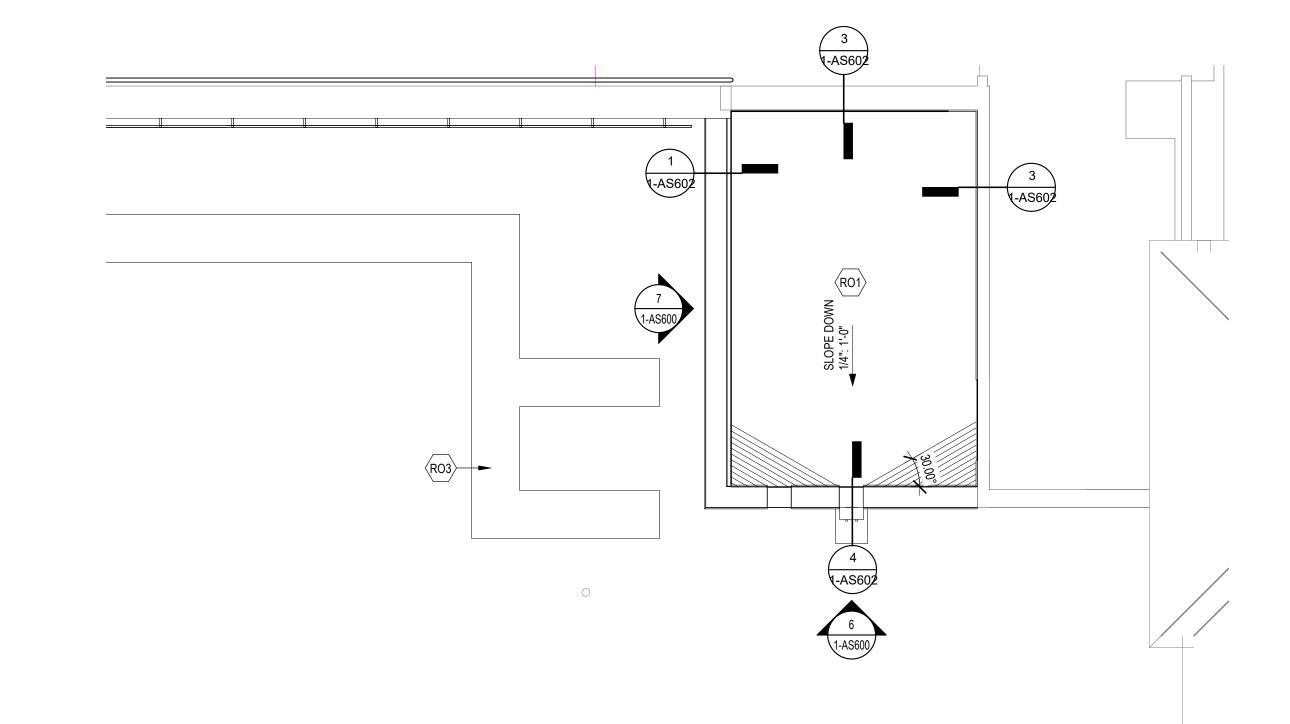
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VA MEDICAL CENTER

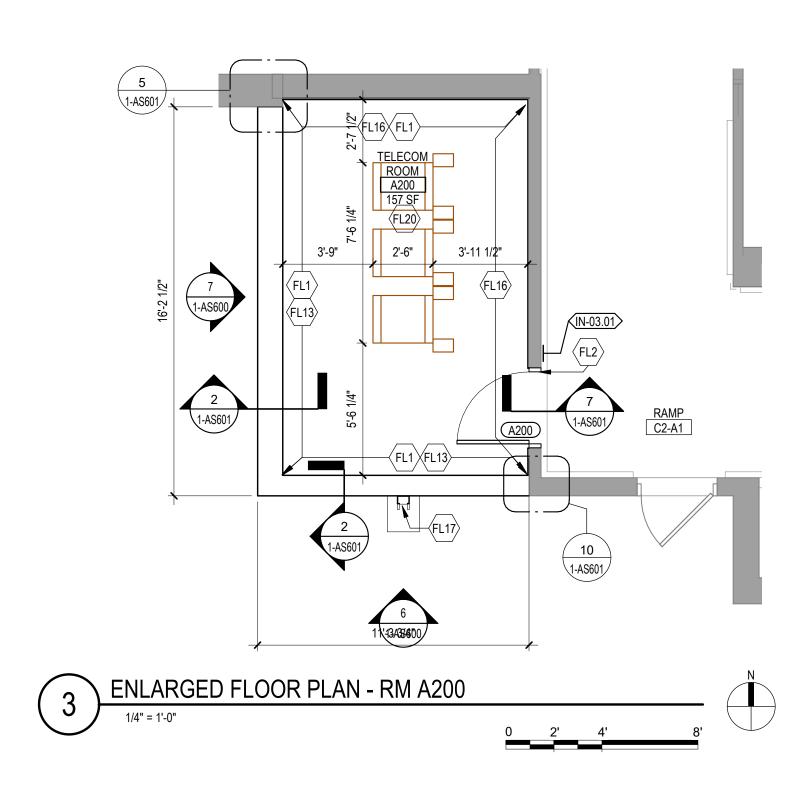
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TELECOM ROOM

DEMOLITION PLAN - RM A200

1 ROOF PLAN - RM A200

1/4" = 1'-0"

DEMOLITION PLAN KEYED NOTES

- 1 PREPARE WALL FOR PLYWOOD BACKBOARD INSTALLATION AND EHRM REQUIREMENTS, SEE FLOOR PLAN AND TELECOM DRAWINGS
- REMOVE AND SALVAGE DOOR AND PREPARE OPENING TO ACCOMMODATE PLAN. SEE FLOOR PLAN AND DOOR SCHEDULE
- DE5 REMOVE AND SALVAGE ROOM IDENTIFICATION SIGN FOR REINSTALLATION
- E6 REMOVE PARTITION TO THE EXTENTS SHOWN
- DE7 PARTIALLY REMOVE WALL TO ACCOMMODATE PLAN AS REQUIRED. COORDINATE TEMP SHORING WITH STRUCTURAL. SEE FLOOR PLAN
- DE8 REMOVE EXISTING ROOF ASSEMBLY AS REQUIRED TO BUILD NEW ROOM, REFER TO MECHANICAL AND ELECTRICAL FOR REMOVAL OF ROOFTOP EQUIPMENT
- DE11 REMOVE EXISTING EXTERIOR PANEL SYSTEM BACK TO STRUCTURE TO THE EXTENTS
- SHOWN. PREPARE FOR INSTALLATION OF NEW FURRING WALL.

 DE14 REFER TO ELECTRICAL FOR REMOVAL OF DEVICES.
- DE 14 RELECTIO ELLO MINORE I CONTENO POR DE INOTALIATION
- DE18 REMOVE AND SALVAGE LOCKERS FOR REINSTALLATION
- DE21 PREPARE FLOOR FOR FINISH AND RATED PARTITIONS, SEE FLOOR PLAN
- DE22 REMOVE EXISTING GUARD RAIL AS REQUIRED FOR NEW CONSTRUCTION AND PREPARE

DE20 RELOCATE CHILL WATER AND SNOW MELT SYSTEM, SEE MECHANICAL AND PLUMBING

- END OF REMAINING RAIL FOR NEW ENDCAPS
- DE23 PREPARE EXISTING PARTITION FOR LEAK PREVENTION BARRIER. SEE FLOOR PLAN AND SHEET AS601
- DE26 REFER TO MECHANICAL FOR REMOVAL OF ROOFTOP UNIT

NOTE: NOT ALL KEYED NOTES MAY BE USED ON EACH PLAN

REVISION

DE27 CAREFULLY REMOVE EXISTING ROOFTOP TILE AND SALVAGE FOR REINSTALLATION

FLOOR PLAN KEYED NOTES

- FL1 ALL FOUR PERIMETER WALL PARTITIONS APPLY 4' BY 8' AC GRADE 3/4"
 TRADE SIZE FIRE RATED PLYWOOD BACKBOARD FINISHED WITH
 HIGH-GLOSS WHITE PAINT OVER TWO COATS OF FIRE RESISTANT PAINT
 FOR SERVICE PROVIDER / SECURITY / VIDEO / ET CETERA. DO NOT PAINT
 OVER FIRE RATING STAMP.
- FL2 DOOR, SIZE AS SCHEDULED, FIRE RESISTANT AS SCHEDULED.
- FL3 UPGRADE PARTITION TO 1 HOUR FIRE AND SMOKE BARRIER. PROVIDE TESTED HEAD OF PARTITION ASSEMBLY WITH MATERIALS THAT RESIST THE PASSAGE OF SMOKE. SEAL JOINT AT HEAD AND ALL PENETRATIONS WITH FIRE CAULK.
- FL5 FINISH PARTITION WITH P-2 & RB-1.
- FL13 DRYWALL PENETRATION BARRIER MESH.
- MOUNT 5/8" GYPSUM BOARD TO EXISTING STEEL STUDS. UPGRADE PARTITION TO 1 HOUR FIRE AND SMOKE BARRIER. PROVIDE TESTED HEAD OF PARTITION ASSEMBLY WITH MATERIALS THAT RESIST THE PASSAGE OF SMOKE. SEAL JOINT AT HEAD AND ALL PENETRATIONS WITH
- FL17 PREFINISHED METAL DOWNSPOUT AND PRECAST CONCRETE SPLASH
- FL18 FULL HEIGHT PREFINISHED METAL LOCKERS. RECONFIGURE LAYOUT AS SHOWN. PROVIDE ALL NECESSARY TRANSITION COMPONENTS. MATCH EXISTING TYPE AND FINISH.
- FL20 TELECOM EQUIPMENT, SEE TELECOM DRAWINGS.
- FL22 LEAK PREVENTION BARRIER WATERPROOFING DETAIL AT EXISTING PARTITION. SEE AS601.

NOTE: NOT ALL KEYED NOTES MAY BE USED ON EACH PLAN

REFLECTED CEILING PLAN KEYED NOTES

- RC1 LED LIGHTING, SEE ELECTRICAL. IN FRONT OF AND BEHIND CABINET ROWS PROVIDE 500 LUMENS IN HORIZONTAL AND 200 LUMENS IN THE VERTICAL AT 3 FT AFF. OPERATED BY MOTION SENSOR PER CABINET ROW OR SECTION.
 - RC2 OPEN TO STRUCTURAL FLOOR ABOVE
 - RC3 ACT SYSTEM AND 2X4 LIGHT FIXTURE, MATCH EXIST ADJACENT CEILING. SEE ELECTRICAL
 - RC4 PATCH AND ALIGN ACT WITH EXISTING
 - RC5 EXISTING CEILING TO REMAIN

 RC6 GYP SOFFIT. 1/2" GYP BD ON MTL STUD AFFIXED TO OPENING LIMITS,

NOTE: NOT ALL KEYED NOTES MAY BE USED ON EACH PLAN

SHEET NOTES

- SEE GENERAL NOTES AND CAMPUS DRAWINGS FOR GENERAL INFORMATION, LIFE SAFETY, ICRA, AND PHASING
- 2. ALL EXISTING CONDITIONS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO DEMOLITION OR CONSTRUCTION. EXISTING CONDITIONS THAT DIFFER FROM THOSE SHOWN MUST BE BROUGHT TO THE ATTENTION OF THE C.O.R. TO INFORM THE ARCHITECTS AND
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- 4. SEE CIVIL, STRUCTURAL, TELECOM, ELECTRICAL, MECHANICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL DEMOLITION AND CONSTRUCTION REQUIREMENTS.
- 5. PORTABLE FIRE EXTINGUISHERS (CO2 OR HALOGENATED TYPE) WITH WALL MOUNT BRACKET AND CODE REQUIRED SIGNAGE SHALL BE

PROVIDED WITHIN TELECOM ROOMS.

ROOF PLAN KEYED NOTES

RO1 SLOPE ROOF TO DRAIN MINIMUM 1/4" PER FOOT

NOTE: NOT ALL KEYED NOTES MAY BE USED ON EACH PLAN

RO3 RELOCATE EXISTING ROOF TILES AROUND RELOCATED ROOFTOP UNIT.

200

REFLECTED CEILING PLAN - RM A200

CONSULTANT

DATE



ARCHITECT/ENGINEER OF RECORD

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Anderson Engineering of Minnesota, LLC | Proj # 16305

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

Name:

Typed or Printed Name: Tom Olesak

Date: 03/30/2022 License Number: MN# 18157

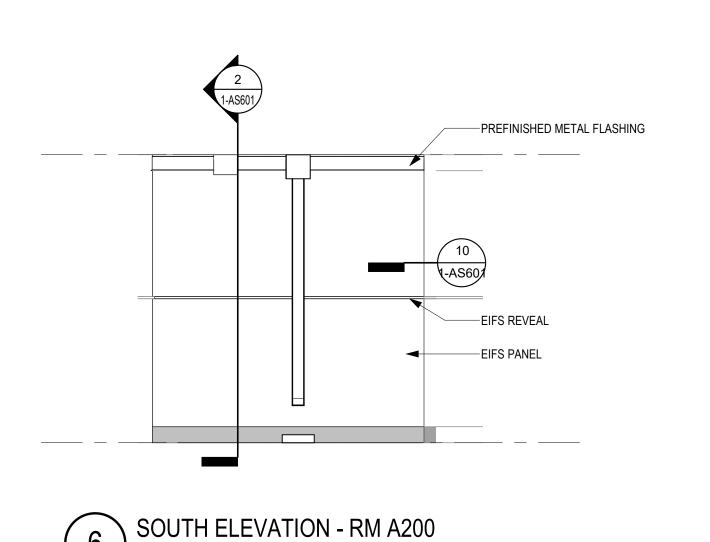
BUILDING ADDITION AND ROOF PLAN

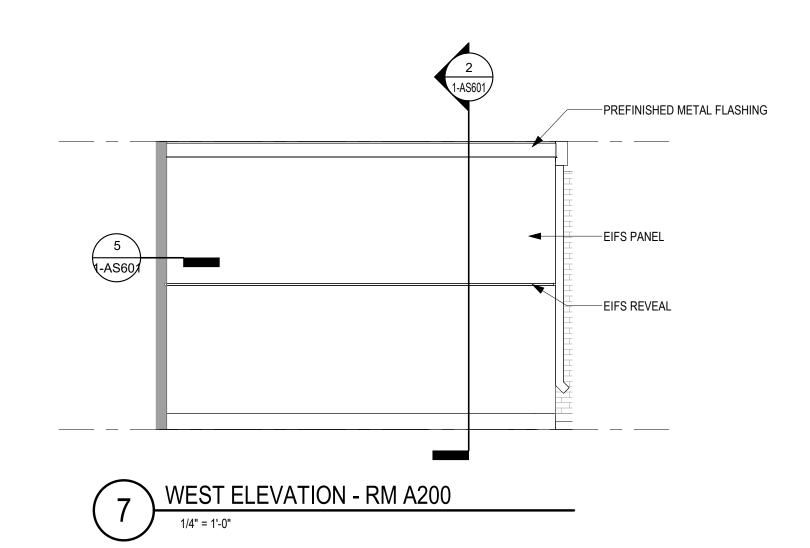
EHRM INFRASTRUCTURE UPGRADES

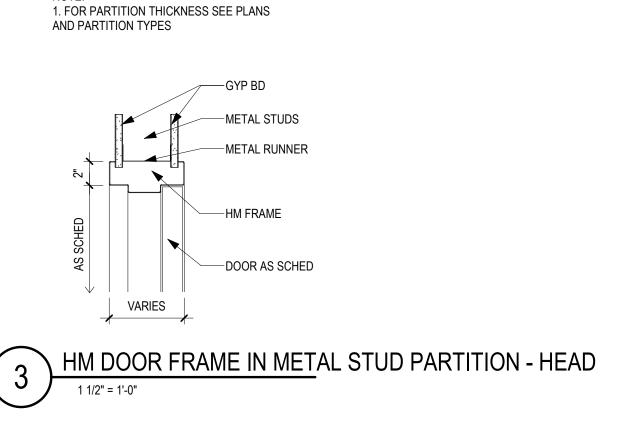
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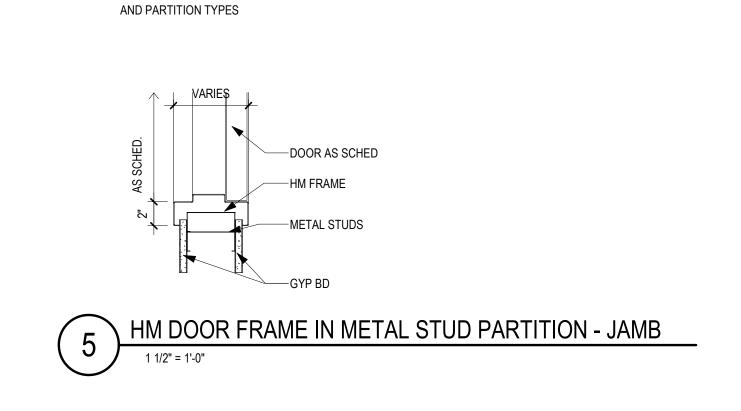
FULLY SPRINKLERED -235 30



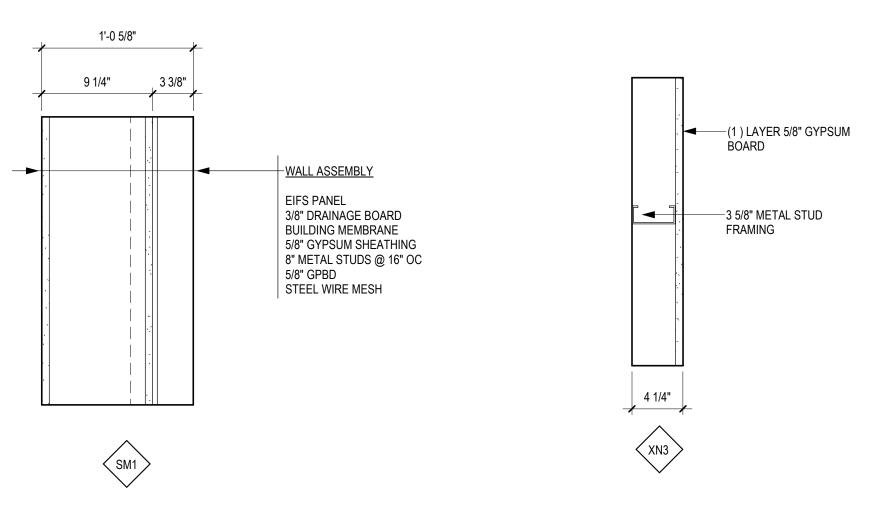


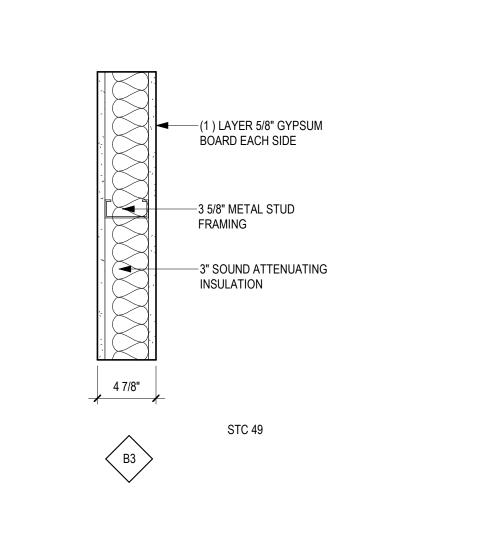


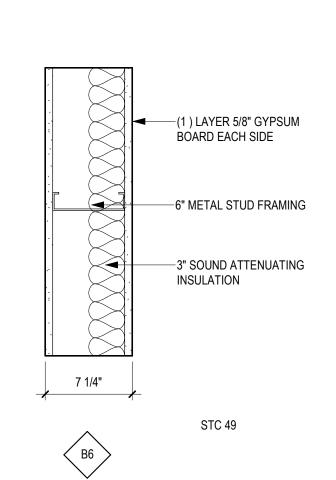




NOTE: 1. FOR PARTITION THICKNESS SEE PLANS





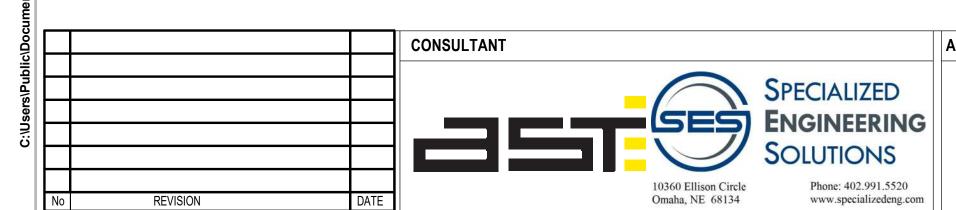


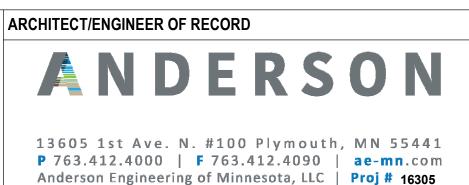
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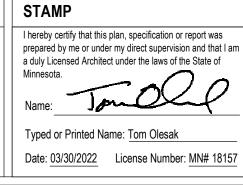
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TYPES - WALL / PARTITIONS







				0	PENIN	IG SCH	IEDULI	E							
	ASSOCIA	ATED ROOMS		OPENING		PAN	EL INFORMA	ATION	FRAME INFO	RMATION		<u> </u>			
VA Building Number	FROM ROOM NAME	TO ROOM NAME	NUMBER	WIDTH	HEIGHT	PANEL TYPE	2ND PANEL TYPE	PANEL GLAZING	FRAME TYPE	FRAME GLAZING	HDW GROUP	FIRE LABEL (N	GASKET	ELECTRICAL	TABEL COMMENTS
1	CORRIDOR	LOCKER	005E	3'-0"	7'-0"	WD-F		NONE	HMS-1	NONE	HW-5				LOCKER ROOM DOOR
1		TELECOM ROOM	005F	3'-0"	7'-0"	WD-F		NONE	HMM-1	NONE	HW-3.2B	45	Υ	Υ	Y
1	MECH	TELECOM ROOM	A05C	3'-0"	7'-0"	HM-F		NONE	HMS-1	NONE	HW-3.2B	45	Υ	Υ	Y
1		TELECOM ROOM	Δ200	3'-0"	7'-0"	WD-F		NONE	HMM-1	NONE	HW-3 2B	45	γ	Υ	Y

									RC	ON	SC	HE	DULE	•			
NO.	NAME	CABLING	PATCH PANEL	FIBER	POWER	BONDING	UPS	DEDICATED COOLING	TEMPERATURE	HUMIDITY	RACK SENSOR	SPACE	AREA	WIDTH (FT)	LENGTH (FT)	HT TO CLG STRUCT	REMARKS
BASEM	ENT																
005C	CORRIDOR												34 SF			7.17	MODIFIED FOR LOCKER ROOM EXPANSION, MATCH EXIST
005D	MECH												236 SF			9.17	MODIFIED FOR LOCKER ROOM EXPANSION, SEE MECH DRAWINGS FOR ADDITIONAL REMARKS
005E	LOCKER												291 SF			7.17	MATCH EXIST LOCKER ROOM FINISHES, PROVIDE 54 LOCKERS IN AREA ADJACENT TO TR.
005F	TELECOM ROOM	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	137 SF	10.0	13.7	9.17	CONSTRUCT TO EHRM TELECOM ROOM STANDARDS. SEE TELECOM DRAWINGS
A003	EXIST RM												64 SF	4.8	13.5	9.00	DECOMMISSION EXIST IT/DATA ROOM. SEE TELECOM DRAWINGS
A05A	MECH												1677 SF			9.58	MODIFIED FOR TELECOM ROOM, SEE MECH DRAWINGS FOR ADDITIONAL REMARKS
A05C	TELECOM ROOM	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	118 SF	12.0	10.0	9.58	CONSTRUCT TO EHRM TELECOM ROOM STANDARDS. SEE TELECOM DRAWINGS. RELOCATE CHILLED WATER PUMPS AND SNOW MELT SYSTEM. SEE MECH DRAWINGS
FIRST F	LOOR																
127	EXIST RM												74 SF	5.4	12.5		DECOMMISSION EXIST IT/DATA ROOM. SEE TELECOM DRAWINGS
A101	TELECOM ROOM			Х	Х		Х	Х	Х	Х	Х		142 SF	9.6	14.1	8.17	UPDATE EXIST IT/DATA ROOM TO EHRM TELECOM ROOM STANDARDS. SEE TELECOM DRAWINGS
SECONI	D FLOOR		•		1								'				
229	EXIST RM												52 SF	5.5	9.4		DECOMMISSION EXIST IT/DATA ROOM. SEE TELECOM DRAWINGS
A200	TELECOM ROOM	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	157 SF	10.0	15.4	10.00	CONSTRUCT ADDITION. CONSTRUCT TO EHRM TELECOM ROOM STANDARDS. SEE TELECOM DRAWINGS. TELECOM ROOM ON ROOF FOR FIRST FLOOR, TR SERVES 2ND AND 3RD FLOORS
A216	EXIST RM												98 SF	6.1	16.0		DECOMMISSION EXIST IT/DATA ROOM. SEE TELECOM DRAWINGS
A225	EXIST RM												90 SF	9.7	7.5		DECOMMISSION EXIST IT/DATA ROOM. SEE TELECOM DRAWINGS

			HAZANDO	JS MATERIAL SCHEDULE
	ROOM		QUESTIONABLE HAZARDOUS	
LEVEL	NO.	ROOM NAME	ELEMENT	POSSIBLE ABATEMENT ACTION
	0050	CODDIDOD	NONE OFF 4 HA 4A	NONE AOM TO DEMAIN LINDIGTUDDED
BASEMENT	005C	CORRIDOR	NONE. SEE 1-HA-1A	NONE. ACM TO REMAIN UNDISTURBED
BASEMENT	005D	MECH	ASBESTOS CONTAINING HARD FITTINGS. SEE 1-HA-1A	REMOVE HAZARDOUS MATERIAL UNDER FULL CONTAINMENT
BASEMENT	005E	LOCKER	ASBESTOS CONTAINING HARD FITTINGS. SEE 1-HA-1A	REMOVE HAZARDOUS MATERIAL UNDER FULL CONTAINMENT
BASEMENT	005F	TELECOM ROOM	NONE. SEE 1-HA-1A	NONE. ACM TO REMAIN UNDISTURBED
BASEMENT	A003	EXIST RM	NONE. SEE 1-HA-1A	NONE. ACM TO REMAIN UNDISTURBED
BASEMENT	A05A	MECH	NONE. SEE 1-HA-1A	NONE. ACM TO REMAIN UNDISTURBED
BASEMENT	A05C	TELECOM ROOM	NONE. SEE 1-HA-1A	NONE. ACM TO REMAIN UNDISTURBED
FIRST FLOOR	127	EXIST RM	ACM. SEE 1-HA-2A	NONE. ACM TO REMAIN UNDISTURBED
FIRST FLOOR	A101	TELECOM ROOM	NONE. SEE 1-HA-2A	NONE. ACM TO REMAIN UNDISTURBED
SECOND FLOOR	229	EXIST RM	ACM. SEE 1-HA-3A	NONE. ACM TO REMAIN UNDISTURBED
SECOND FLOOR	A200	TELECOM ROOM	NONE	NONE, BUILDING ADDITION
SECOND FLOOR	A216	EXIST RM	NONE. SEE 1-HA-3A	NONE. ACM TO REMAIN UNDISTURBED
SECOND FLOOR	A225	EXIST RM	NONE. SEE 1-HA-3A	NONE. ACM TO REMAIN UNDISTURBED

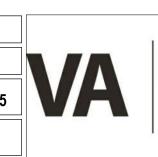
	ROOM		CAI BLDG NAME /	CONSTRUCTION	INFECTION CONTROL	CONTROL		CONSTRUCTION ZONE /	DAY /
LEVEL	NO.	ROOM NAME	FUNCTION	PROJECT ACTIVITY	RISK GROUP	PROCEDURE CLASS	SECTION	OCCUPIED CONSTR	NIGHT
BASEMENT	005C	CORRIDOR	AMB CARE / MEDICAL	TYPE D	GROUP 1	CLASS III/IV	CENTER	ZONE1B	NIGHT
BASEMENT	005D	MECH	AMB CARE / MEDICAL	TYPE D	GROUP 1	CLASS III/IV	CENTER	ZONE1B	NIGHT
BASEMENT	005E	LOCKER	AMB CARE / MEDICAL	TYPE D	GROUP 1	CLASS III/IV	CENTER	ZONE1B	NIGHT
BASEMENT	005F	TELECOM ROOM	AMB CARE / MEDICAL	TYPE D	GROUP 1	CLASS III/IV	CENTER	ZONE1B	NIGHT
BASEMENT	A003	EXIST RM	AMB CARE / MEDICAL	TYPE B	GROUP 2	CLASS II	CENTER	OCCUPIED CONSTRUCTION	NIGHT
BASEMENT	A05A	MECH	AMB CARE / MEDICAL	TYPE C	GROUP 2	CLASS III	CENTER	ZONE1A	NIGHT
BASEMENT	A05C	TELECOM ROOM	AMB CARE / MEDICAL	TYPE C	GROUP 1	CLASS II	CENTER	ZONE1A	NIGHT
FIRST FLOOR	127	EXIST RM	AMB CARE / MEDICAL	TYPE B	GROUP 2	CLASS II	CENTER	OCCUPIED CONSTRUCTION	NIGHT
FIRST FLOOR	A101	TELECOM ROOM	AMB CARE / MEDICAL	TYPE C	GROUP 2	CLASS III	CENTER	OCCUPIED CONSTRUCTION	NIGHT
SECOND FLOOR	229	EXIST RM	AMB CARE / MEDICAL	TYPE B	GROUP 2	CLASS II	CENTER	OCCUPIED CONSTRUCTION	NIGHT
SECOND FLOOR	A200	TELECOM ROOM	AMB CARE / MEDICAL	TYPE D	GROUP 2	CLASS IV	CENTER	ZONE1C	NIGHT
SECOND FLOOR	A216	EXIST RM	AMB CARE / MEDICAL	TYPE B	GROUP 2	CLASS II	CENTER	OCCUPIED CONSTRUCTION	NIGHT
SECOND FLOOR	A225	EXIST RM	AMB CARE / MEDICAL	TYPE B	GROUP 4	CLASS III/IV	CENTER	OCCUPIED CONSTRUCTION	NIGHT

			LEAK PREVENTION / DIVERTER SC	CHEDULE
	DOOM			1
LEVEL	ROOM NO.	ROOM NAME	OVERHEAD LEAK DIVERTER AND DRAIN PIPING	LEAK PREVENTION BARRIER WATERPROOFING
	1			
BASEMENT	005C	CORRIDOR		
BASEMENT	005D	MECH		
BASEMENT	005E	LOCKER		
BASEMENT	005F	TELECOM ROOM		MWP INT: NORTH
BASEMENT	A003	EXIST RM		
BASEMENT	A05A	MECH		
BASEMENT	A05C	TELECOM ROOM		
FIRST FLOOR	127	EXIST RM		
IRST FLOOR	A101	TELECOM ROOM		
SECOND FLOOR	229	EXIST RM		
SECOND FLOOR	A200	TELECOM ROOM		
SECOND FLOOR	A216	EXIST RM		
SECOND FLOOR	A225	EXIST RM		
SEE GENERAL NO	TES SHEE	T FOR DETAIL. MWP = N	MEMBRANE WATERPROOFING. MASONRY = FLUID-APPLIED WATERPROOFIN	IG. INT = INTERIOR. EXT = EXTERIOR

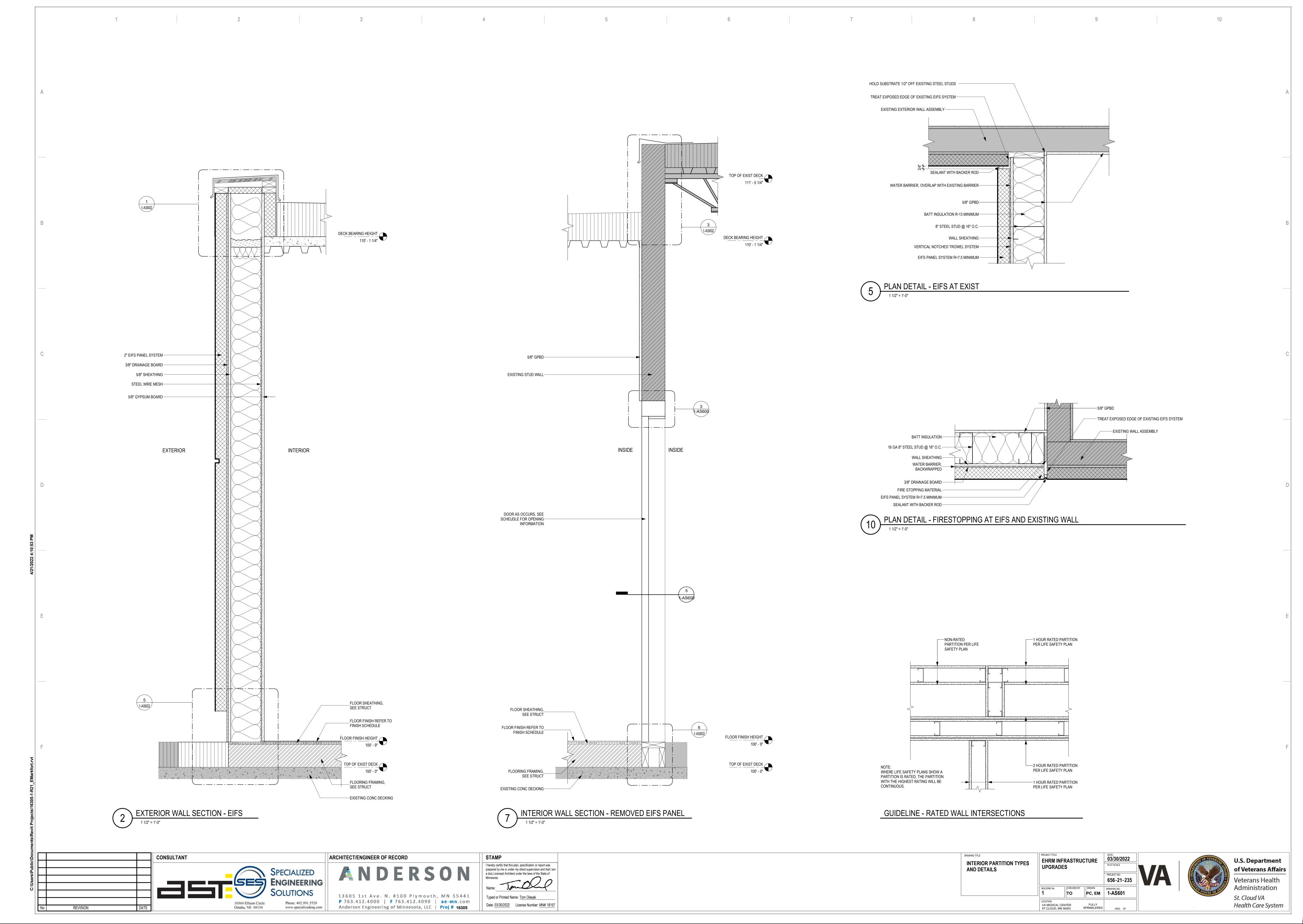
ELEVATIONS, DETAILS,
SCHEDULES

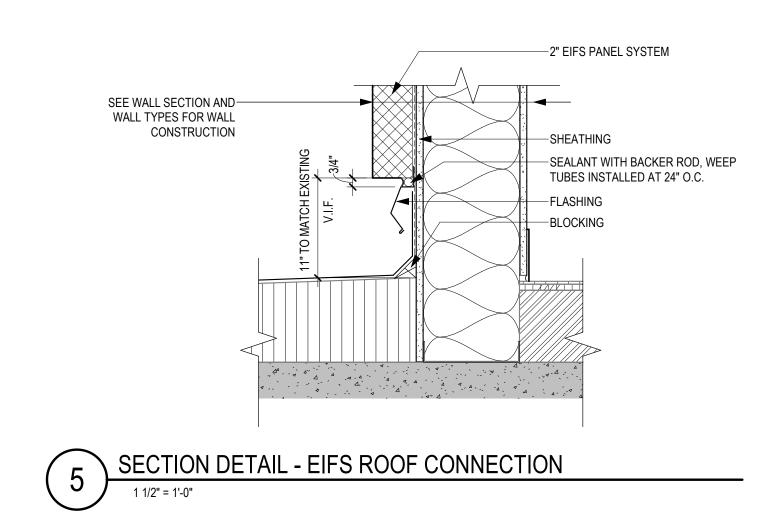
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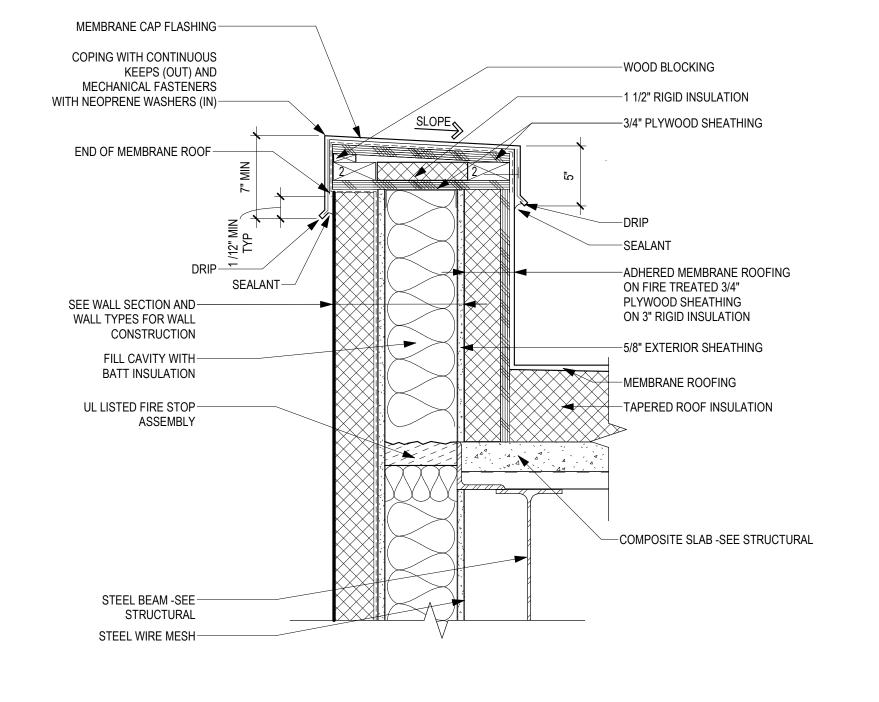
VA MEDICAL CENTER ST.CLOUD, MN 56303







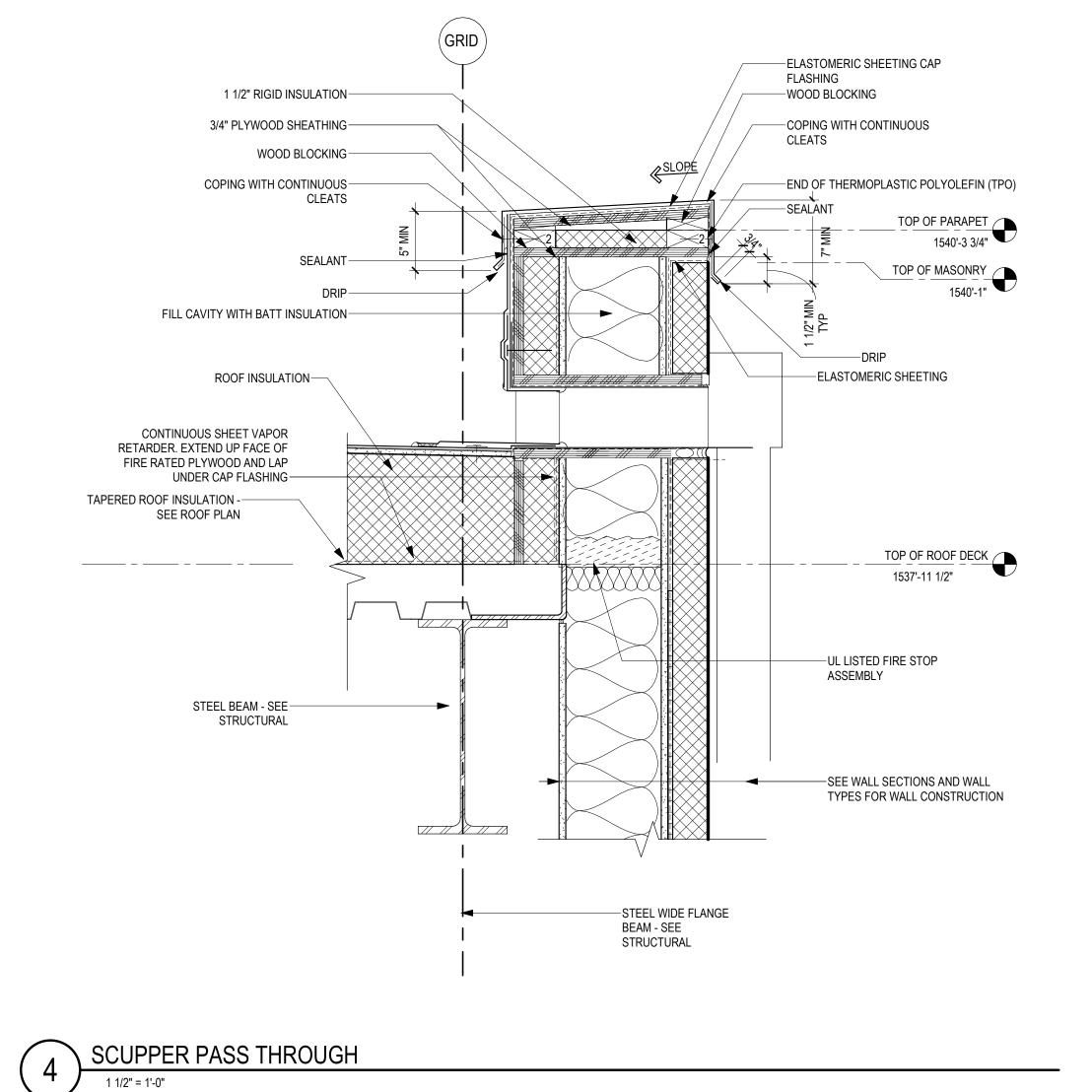


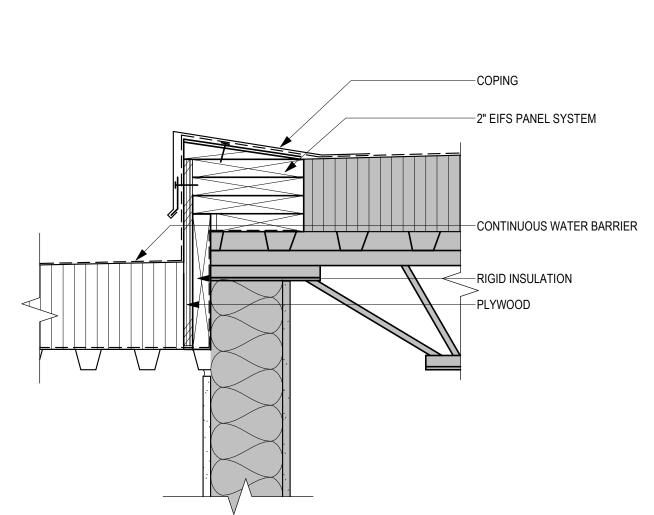


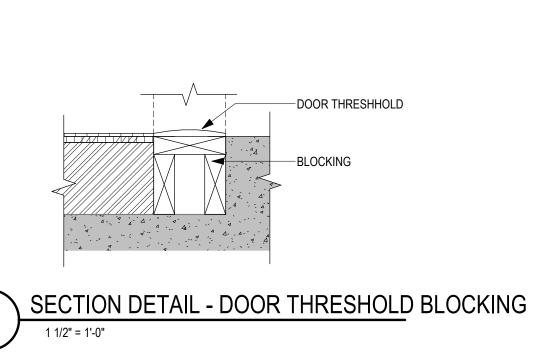
EXTERIOR EIFS PANEL PARAPET

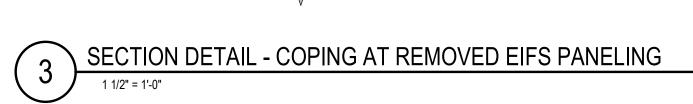
1 1/2" = 1'-0"

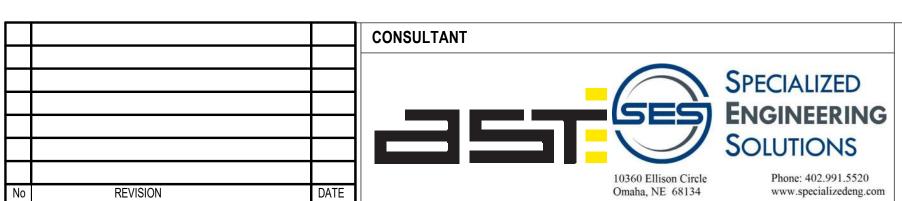
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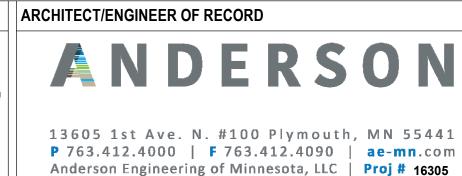


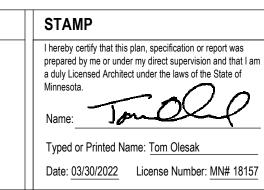






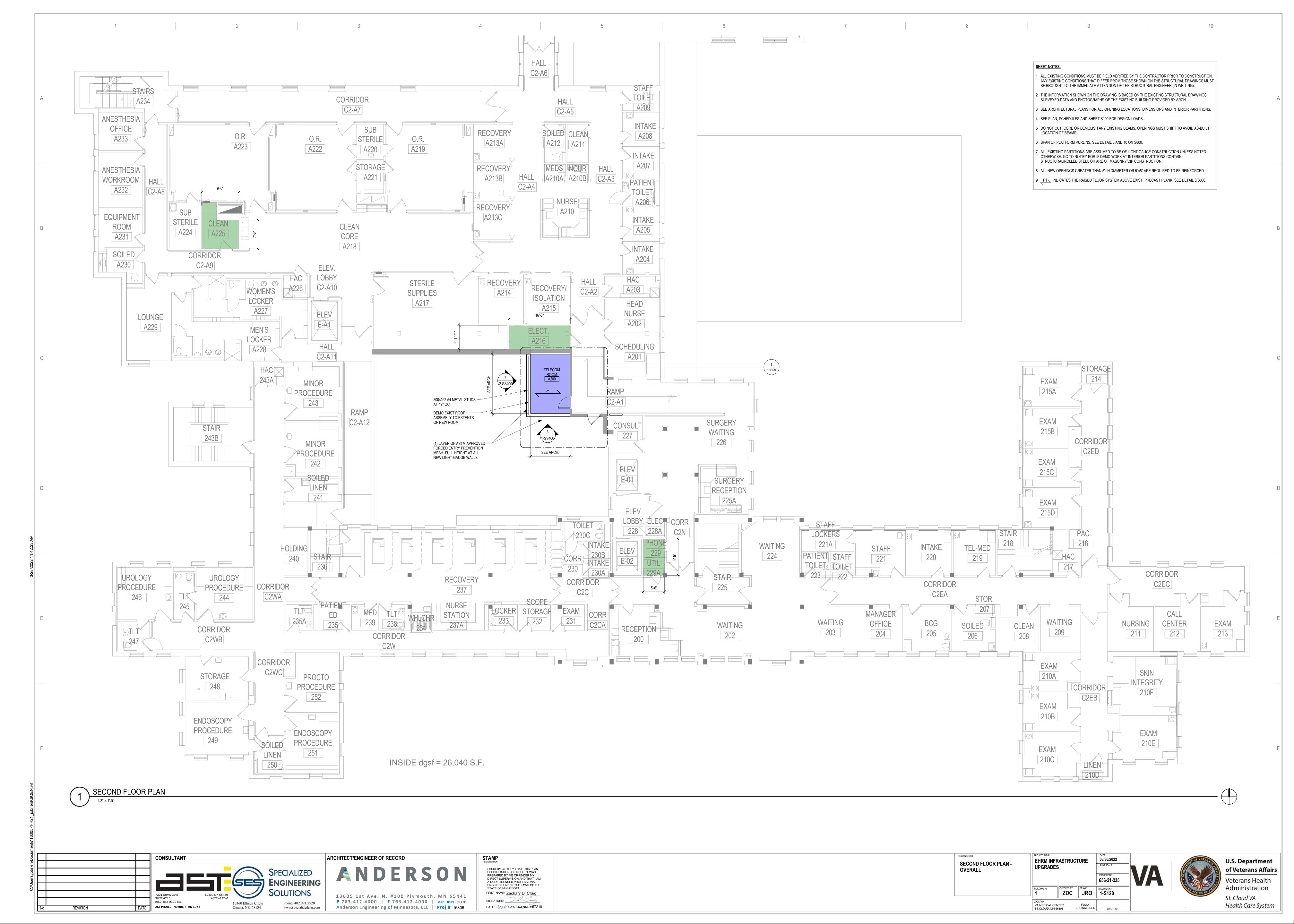


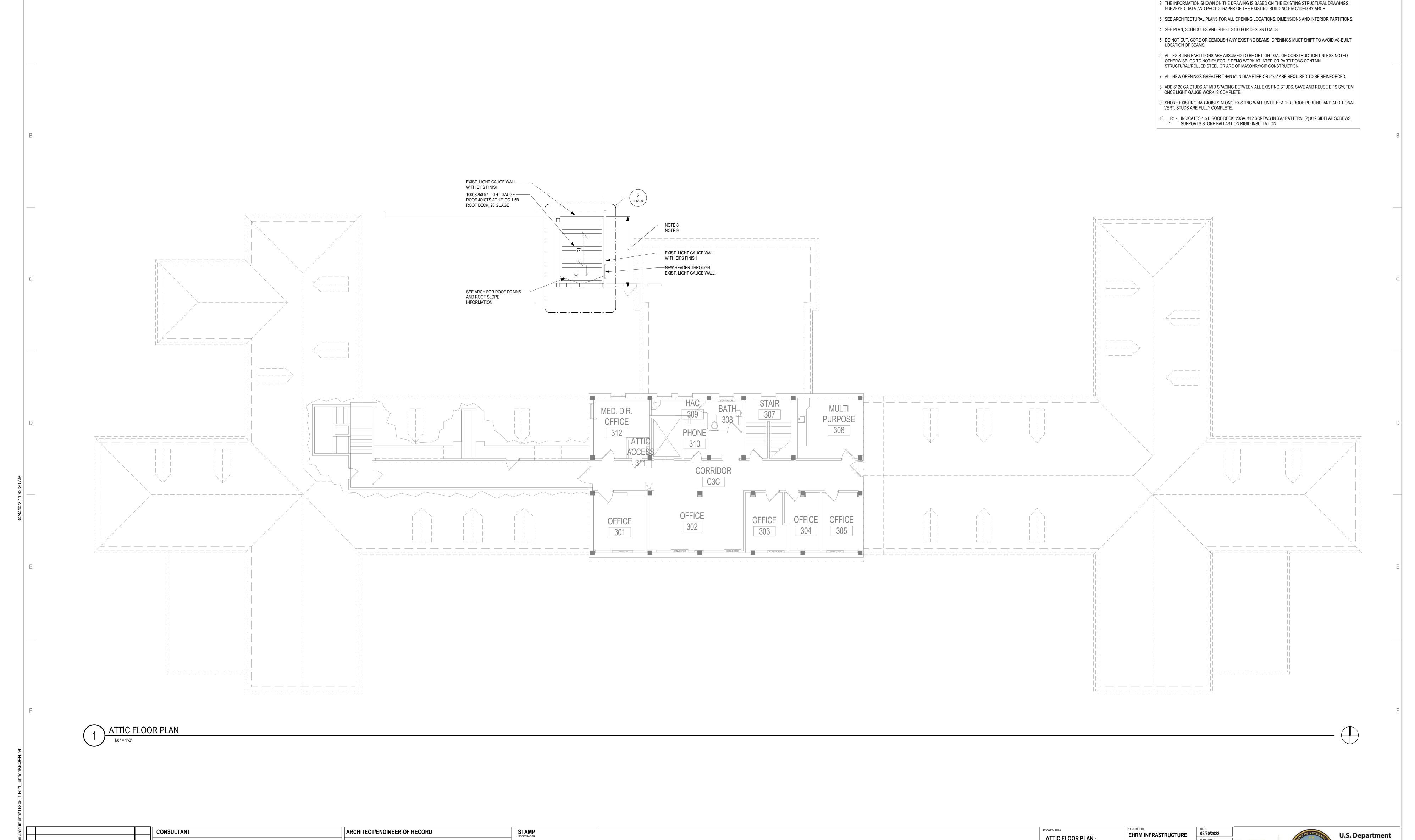












ANDERSON

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Phone: 402.991.5520

www.specializedeng.com

Omaha, NE 68134

SUITE #215

DATE

REVISION

(952) 854-9302 TEL.

AST PROJECT NUMBER: MN 1964

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY

DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: Zachary D. Craig

SIGNATURE:

DATE: 7/30/2022 LICENSE #:57219

1 2 8

SHEET NOTES:

ATTIC FLOOR PLAN -

ZDC DRAWN DRAWING NO. 1-S130

FULLY SPRINKLERED

VA MEDICAL CENTER ST.CLOUD, MN 56303

1. ALL EXISTING CONDITIONS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY EXISTING CONDITIONS THAT DIFFER FROM THOSE SHOWN ON THE STRUCTURAL DRAWINGS MUST

of Veterans Affairs

Veterans Health Administration

Health Care System

St. Cloud VA

BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE STRUCTURAL ENGINEER (IN WRITING).

SECOLO PI SECOLO CONNETS

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BROWDE (1) ANCHOR AT JOIST
BLEATHOUSE VALL
REF. DETAIL 105800

TYP AT
ROOM
CONNERS

BROWDE (1) ANCHOR AT JOIST
BLEAVENDAM TYPER, STUDIS IN
CONTACT WITH EIS BRICK WALL
REF. DETAIL 105800

1 ENLARGED FLOOR PLAN - RM A200

ROOF PLAN - RM A200

CONSULTANT

SPECIALIZED
ENGINEERING
SOLUTIONS
SUITE #215
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No REVISION

DATE

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ARCHITECT/ENGINEER OF RECORD

ARCHITECT/ENGINEER OF RECORD

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Anderson Engineering of Minnesota, LLC | Proj # 16305

STAMP
REGISTRATION

I HEREBY CERTIFY THAT THIS PLAN,
SPECIFICATION, OR REPORT WAS
PREPARED BY ME OR UNDER MY
DIRECT SUPERVISION AND THAT I AM
A DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE
STATE OF MINNESOTA.
PRINT NAME: Zachary D. Craig

SIGNATURE:

DATE: 7/30/row LICENSE #:57219

LARGE SCALE PLANS

EHRM INFRASTRUCTURE UPGRADES

FULLY SPRINKLERED

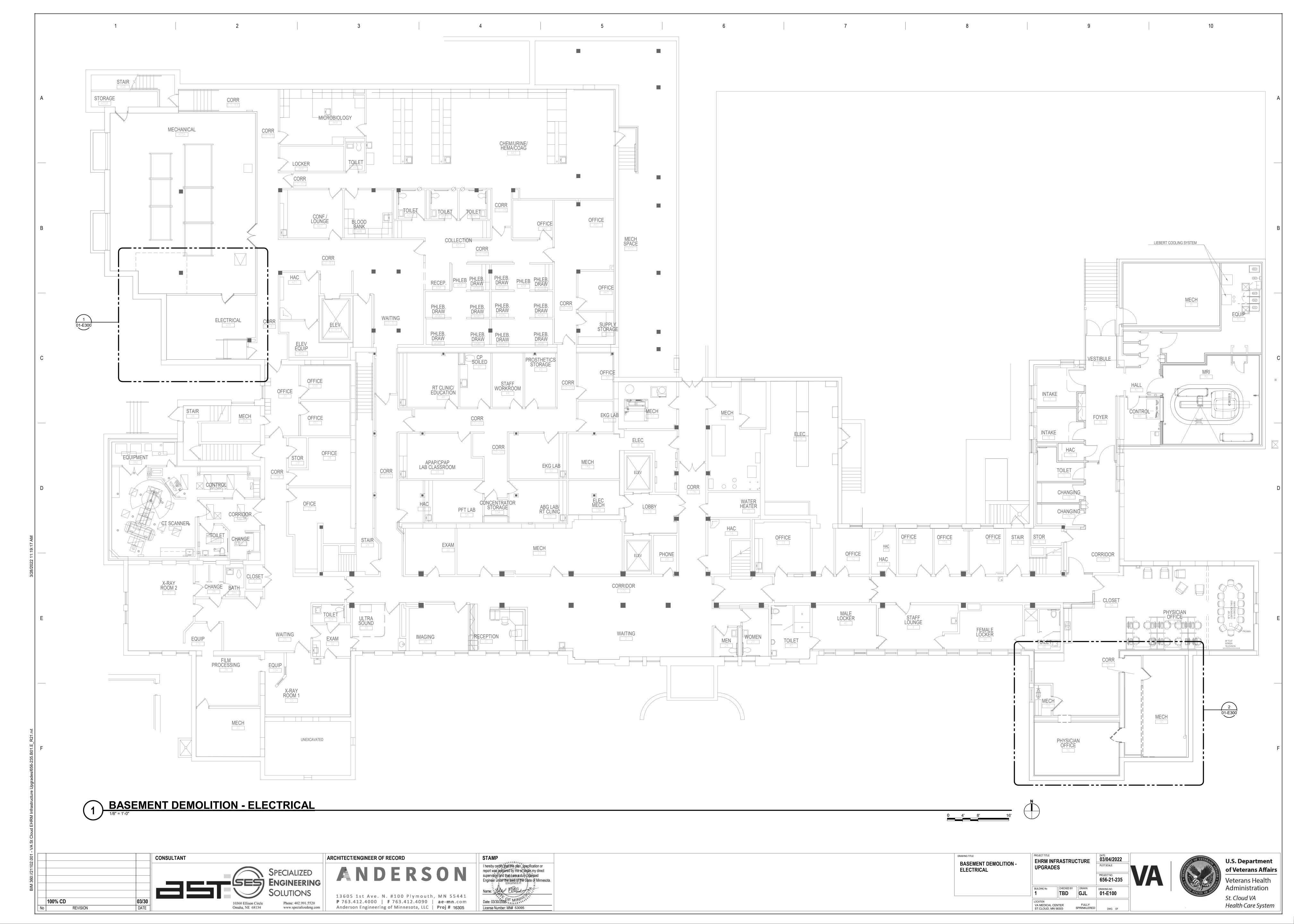
BUILDING No

LOCATION

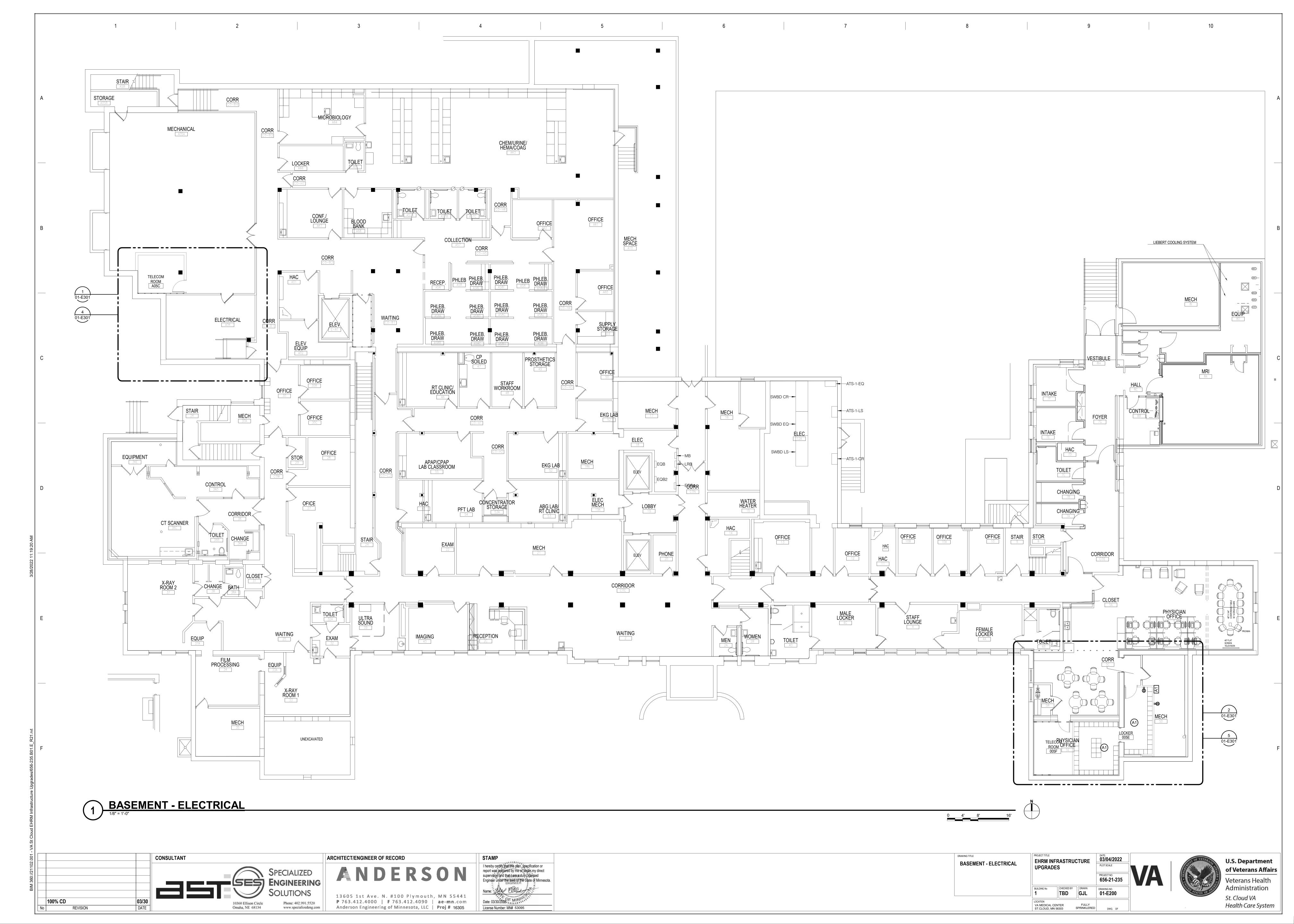
VA MEDICAL CENTER
ST.CLOUD, MN 56303

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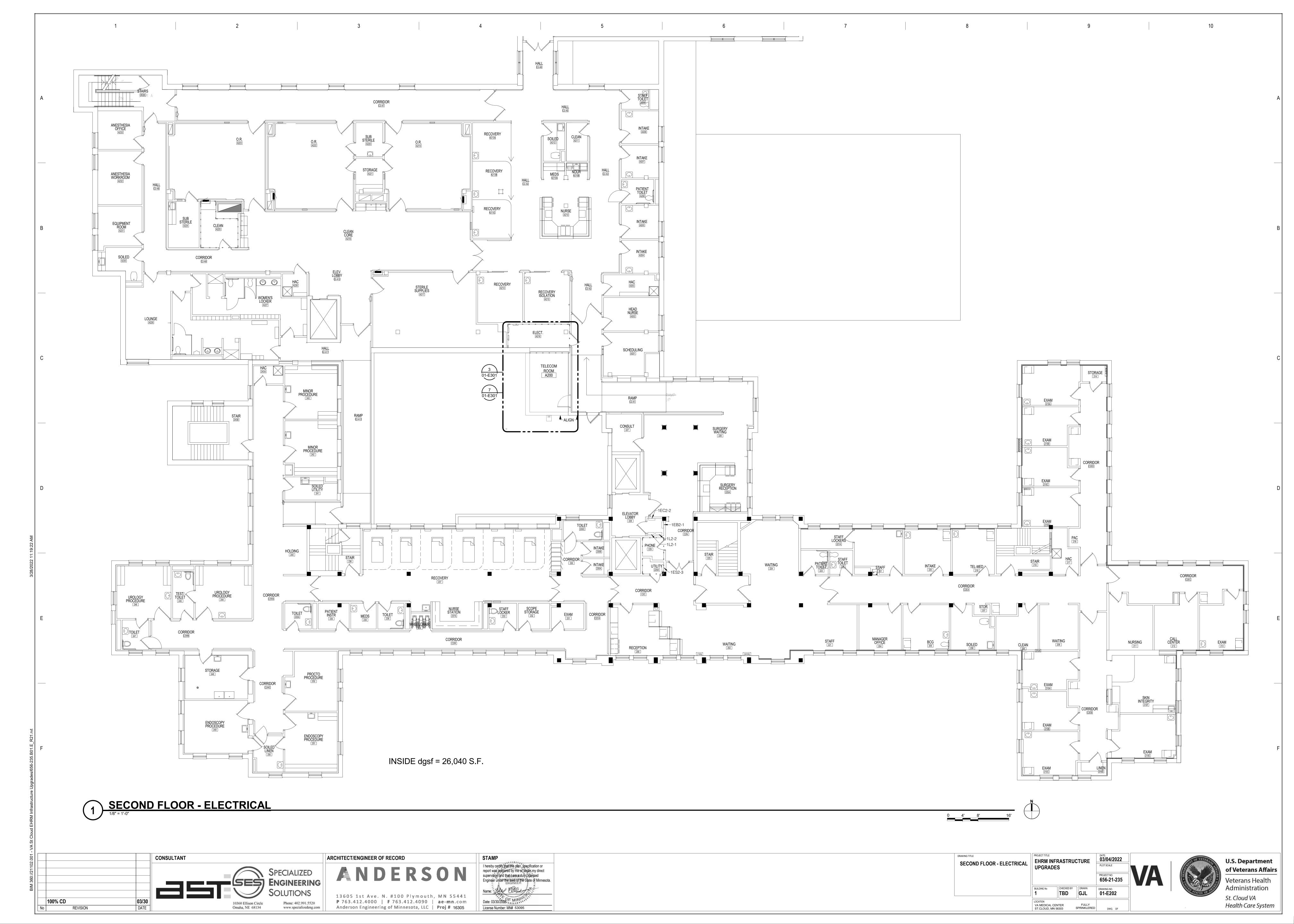


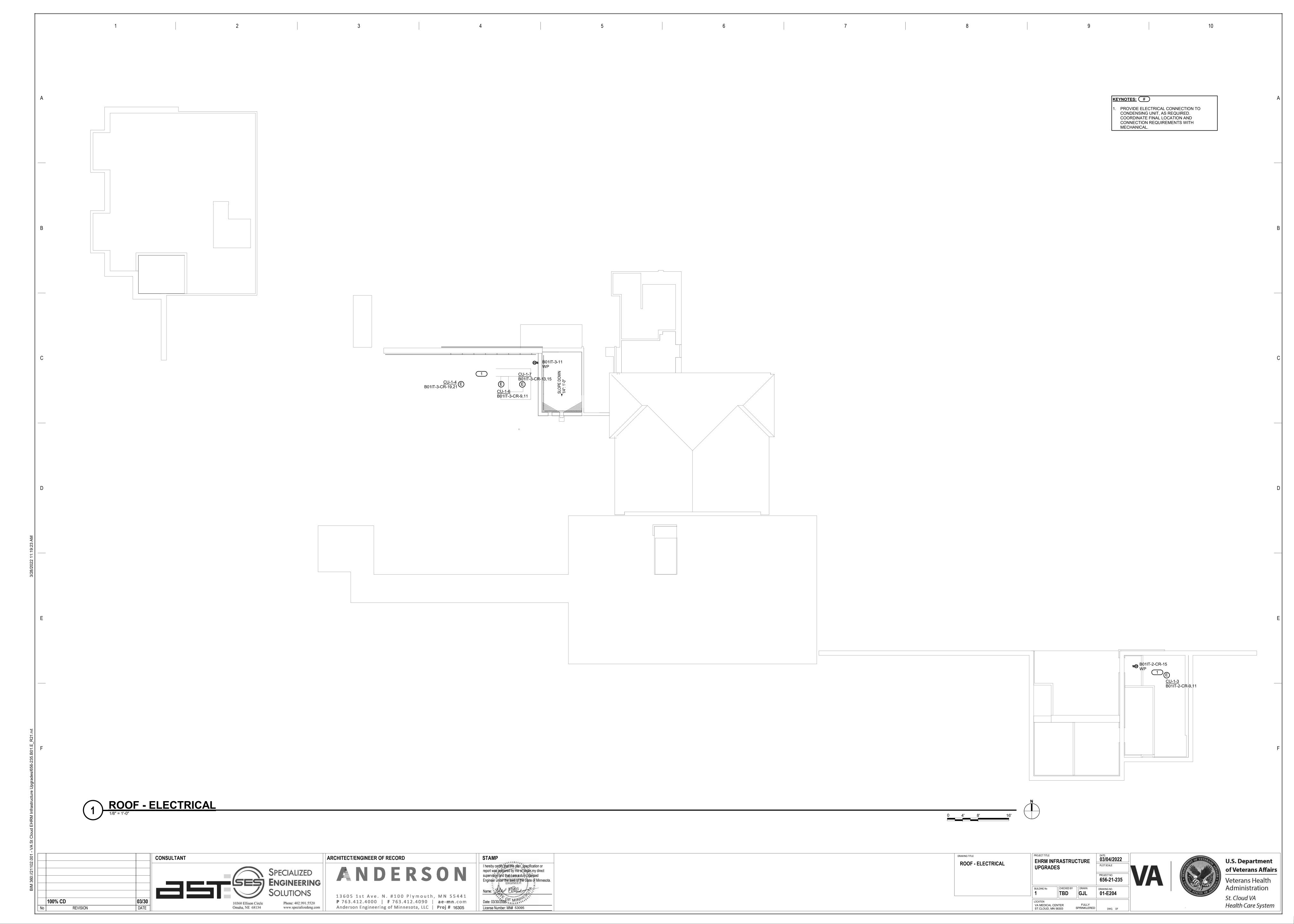












PROJECT GENERAL NOTES - MECHANICAI

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO. FIRE PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL.

- 1. THIS CONTRACTOR SHALL REVIEW ENTIRE SET OF CONTRACT DOCUMENTS: INCLUDING BUT NOT NECESSARILY LIMITED TO ALL ARCHITECTURAL, ALL STRUCTURAL, ALL MECHANICAL, ALL ELECTRICAL DRAWINGS AND ENTIRE PROJECT MANUAL. THIS CONTRACTOR SHALL ACKNOWLEDGE AND INCLUDE IN THE SCOPE OF WORK (CONTRACT) ALL CONDITIONS PERTINENT TO THE COMPLETION OF HIS WORK. THIS CONTRACTOR SHALL FULLY COORDINATE HIS WORK WITH THE INSTALLATION OF WORK BY OTHER TRADES AND MAKE NECESSARY FIELD ADJUSTMENTS AS REQUIRED TO ACCOMMODATE THE INSTALLATION. ALL OF THE ABOVE SHALL BE INCLUDED IN THE SCOPE OF WORK AT NO ADDITIONAL CHARGE TO THE VA.
- THIS CONTRACTOR SHALL CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS, VISIT THE SITE OF THE WORK AND FULLY INFORM THEMSELVES AS TO ALL CONDITIONS AND MATTERS THAT CAN, IN ANY WAY, AFFECT THE WORK OR THE COST THEREOF. SHOULD THIS CONTRACTOR FIND DISCREPANCIES IN, OR OMISSIONS FROM THE DRAWINGS, SPECIFICATIONS OR OTHER DOCUMENTS, OR BE IN DOUBT AS TO THEIR MEANING, NOTIFY THE VA/CO AT ONCE, IN WRITING, OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND WORK, OR BETWEEN THEIR WORK AND THE WORK OF THEIR TRADES AND OBTAIN CLARIFICATION PRIOR TO SUBMITTING ANY BID. LACK OF SUCH NOTIFICATION SHALL BE CONSTRUED AS TO INDICATE NO DISCREPANCIES OR CONFLICTING CONDITIONS EXIST. ADDITIONAL COMPENSATION WILL NOT BE GRANTED AFTER AWARD OF CONTRACT FOR ANY WORK REQUIRED TO COMPLY WITH THESE REQUIREMENTS.
- DRAWINGS ARE GENERALLY DIAGRAMMATIC. ROUTING OF PIPING. CONDUITS, RACEWAYS, ETC., AS SHOWN ON DRAWINGS, DOES NOT INTEND TO SHOW EVERY RISE, DROP, OFFSET, FITTING NOR EVERY STRUCTURAL ELEMENT THAT MAY BE ENCOUNTERED DURING THE INSTALLATION OF THIS WORK. EACH CONTRACTOR SHALL MAKE ANY REQUIRED CHANGES FROM THE GENERAL ROUTING SHOWN ON THESE DRAWINGS. SUCH AS OFFSETS. BENDS OR CHANGES IN ELEVATION DUE TO COORDINATION WITH THE WORK OF OTHER TRADES AND BUILDING CONSTRUCTION. ALL CHANGES SHALL BE MADE WITHOUT ADDITIONAL COST TO THE VA OR DELAY IN COMPLETION DATE OF THE
- 4. IT IS THE INTENT OF THESE DOCUMENTS THAT THE MECHANICAL CONTRACTOR PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND TOOLS FOR THE COMPLETE INSTALLATION OF ALL WORK SHOWN ON THE PLANS AND/OR DESCRIBED HEREIN, INCLUDING ALL DEVICES, CONTROLS AND APPURTENANCES REQUIRED TO SET SYSTEMS INTO OPERATION.
- 5. SHOULD CONDITIONS NECESSITATE ANY REARRANGEMENTS, OR IF PIPING CAN BE RUN TO BETTER ADVANTAGE, PREPARE AND SUBMIT SHOP DRAWINGS SHOWING THE CHANGES BEFORE PROCEEDING WITH THE WORK. IF SUCH CHANGES ARE APPROVED BY THE VA/COR, THEY SHALL BECOME A PART OF THE CONTRACT AFTER THEIR APPROVAL.
- 6. THIS CONTRACTOR SHALL VERIFY ALL MOUNTING, ALL ARRANGEMENTS, HEIGHTS AND LOCATIONS PRIOR TO ROUGH-IN. ANY MENTION OF A SPECIFIC MOUNTING ARRANGEMENT, WEIGHT OR LOCATION SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO VERIFY THE SPECIFIC REQUIREMENT FURNISHED OR THE OTHER TRADES WORKING IN THE SAME AREA. NO ADDITIONS TO THE CONTRACT SUM WILL BE PERMITTED FOR ITEMS INSTALLED IMPROPERLY, IN WRONG LOCATIONS, IN CONFLICT WITH OTHER WORK, ETC.
- 7. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL CURRENT FEDERAL BUILDING CODES, REGULATIONS, AND REQUIREMENTS, LOCAL UTILITY COMPANY REQUIREMENTS, AND ASHRAE

STANDARDS

- 8. THIS CONTRACTOR SHALL PAY ALL PERMIT FEES, PLAN REVIEW FEES, LICENSE FEES, INSPECTIONS. AND TAXES APPLICABLE TO THEIR DIVISION AND SHALL BE INCLUDED IN THE BASE BID AS PART OF
- 9. THIS CONTRACTOR SHALL BE LICENSED, BONDED, INSURED AND CAPABLE OF PERFORMING QUALITY WORKMANSHIP. THIS CONTRACTOR GUARANTEES ALL OF HIS WORK AND MATERIALS FOR THE PERIOD AS REQUIRED IN THE SPECIFICATIONS. FROM FINAL ACCEPTANCE BY THE VA/COR.
- 10. THIS CONTRACTOR SHALL ESTABLISH SAFE WORKING PROCEDURES FOR THE PROTECTION OF THE WORKMEN IN ALL PHASES OF WORK, COMPLYING WITH ALL APPLICABLE PROVISIONS OF CITY, STATE, AND FEDERAL SAFETY LAWS (OSHA) AND AS RECOMMENDED IN THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" AS ISSUED BY THE ASSOCIATION OF GENERAL CONTRACTORS OF AMERICA, IN., 20TH AND E. STREETS, N.W. WASHINGTON, D.C.
- 11. CONTRACTOR SHALL CHECK DRAWINGS OF OTHER TRADES TO VERIFY THAT SPACES IN WHICH THEIR WORK WILL BE INSTALLED ARE CLEAR OF OBSTRUCTIONS. WORK SHALL BE INSTALLED TO MAINTAIN MAXIMUM HEADROOM AND SPACE CONDITIONS AT ALL POINTS IN THE BUILDING. WHERE HEADROOM OR SPACE CONDITIONS APPEAR INADEQUATE, CONTRACTOR SHALL NOTIFY VA/COR BEFORE PROCEEDING WITH THE INSTALLATION OF THEIR WORK.
- 12. THE SEQUENCE FOR THE INSTALLATION OF ALL WORK SHALL BE COORDINATED BETWEEN ALL CONTRACTORS ON THE PROJECT AND IN STRICT ACCORDANCE WITH VA STIPULATIONS AS DIRECTED
- 13. CONTRACTOR SHALL BE RESPONSIBLE AND PAY FOR ALL CORING, CUTTING, PATCHING, REPAIRING, REFINISHING AND REMOVAL/REPLACEMENT OF NEW OR EXISTING BUILDING CONSTRUCTION REQUIRED TO ACCOMMODATE THE INSTALLATION OR REMOVAL OF THEIR WORK. CONTRACTOR SHALL XRAY ALL SLABS PRIOR TO CORING. ALL PATCHING, REPAIRING AND REFINISHING WORK SHALL BE PERFORMED BY THOSE REGULARLY INVOLVED IN THAT TRADE AND SHALL MATCH THE ADJACENT CONSTRUCTION AS CLOSELY AS POSSIBLE. CARE SHALL BE TAKEN SO AS NOT TO DAMAGE ANY EXISTING BUILDING CONSTRUCTION OR ITEMS THAT ARE TO REMAIN. ANY EXISTING FINISHES THAT ARE DAMAGED DURING THE INSTALLATION OF NEW WORK OR REMOVAL OF EXISTING WORK SHALL BE REPAIRED, REPLACED AND PAID FOR BY THE INSTALLING CONTRACTOR, TO THE SATISFACTION OF THE VA/COR. REFER TO ARCHITECTURAL DRAWINGS FOR EXISTING BUILDING CONSTRUCTION THAT IS TO REMAIN AND, THEREFORE, SUBJECT TO PATCHING, REPAIRING. REFINISHING, AND REMOVAL/REPLACEMENT. WHERE THERE IS EVIDENCE THAT WORK OF ONE TRADE WILL INTERFERE WITH WORK OF OTHER TRADES, ALL TRADES SHALL MEET ON JOB SITE TO WORK OUT SPACE CONDITIONS AND MAKE SATISFACTORY ADJUSTMENTS TO INSTALLATION OF THE NEW WORK. CONTRACTORS SHALL VERIFY EXACT LOCATIONS OF ALL DEVICES AND EQUIPMENT WITH FIELD CONDITIONS. SHOP DRAWINGS, AND WORK OF OTHER TRADES PRIOR TO ROUGH-IN. EACH CONTRACTOR SHALL BE RESPONSIBLE, AT THEIR OWN EXPENSE, FOR THE REMOVAL AND REINSTALLATION OF ANY PART OF THEIR WORK IF SAME WAS INSTALLED WITHOUT CONSULTING
- 14. CONTRACTOR SHALL STORE ALL MATERIALS AND EQUIPMENT SHIPPED TO THE SITE IN A PROTECTED AREA. IF MATERIAL IS STORED OUTSIDE OF THE BUILDING, IT MUST BE STORED OFF THE GROUND A MINIMUM OF SIX INCHES (6") SET ON 6 X 6 PLANKS AND/OR WOOD PALLETS. ALL MATERIAL AND EQUIPMENT MUST BE COMPLETELY COVERED WITH WATERPROOF TARPS OR VISQUIN. ALL PIPING AND DUCTWORK WILL HAVE THE ENDS CLOSED TO KEEP OUT DIRT AND OTHER DEBRIS. NO EQUIPMENT WILL BE ALLOWED TO BE STORED OUTSIDE THE BUILDING ON THE SITE UNLESS IT IS SUPPORTED OFF THE GROUND AND COMPLETELY PROTECTED WITH WEATHERPROOF COVERS.

WITH OTHER TRADES BEFORE INSTALLING THEIR WORK.

- 15. THIS CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS REQUIRED IN THE SPECIFICATIONS PRIOR TO THE START OF INSTALLATION FOR VA/COR APPROVAL AND THE SUCCESSFUL REVIEW BY THE ARCHITECT/ENGINEER.
- 16. THIS CONTRACTOR SHALL FURNISH AS-BUILT DRAWINGS TO THE VA BEFORE FINAL PAYMENT WILL BE ISSUED. THE AS-BUILT DRAWINGS SHALL BE SUBMITTED IN ELECTRONIC REPRODUCIBLE FORM.
- 17. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE STARTUP AND TESTING OF ALL EQUIPMENT.
- 18. THIS CONTRACTOR SHALL PROVIDE A COMPETENT OPERATING TECHNICIAN TO INSTRUCT THE VA IN THE OPERATION AND MAINTENANCE OF THE EQUIPMENT.
- 19. UPON COMPLETION OF THE WORK, THIS CONTRACTOR SHALL REVIEW AND CHECK THE ENTIRE PORTION OF WORK, CLEAN EQUIPMENT AND DEVICES. REMOVE SURPLUS MATERIALS AND RUBBISH FROM THE PROPERTY AND LEAVE THE WORK IN NEAT AND CLEAN ORDER AND IN COMPLETE WORKING CONDITION. EACH RESPECTIVE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ANY CARTONS, DEBRIS, EQUIPMENT, ETC., INSTALLED BY THIS CONTRACTOR INCLUDING EQUIPMENT FURNISHED BY OTHERS AND UNPACKED OR REMOVED FROM CARTONS BY THIS CONTRACTOR.
- 20. ALL ITEMS THAT REQUIRE ACCESS, SUCH AS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE BY PERSONS STANDING AT FLOOR LEVEL, OR STANDING ON PERMANENT PLATFORMS, WITHOUT THE USE OF PORTABLE LADDERS. EXAMPLES OF THESE ITEMS INCLUDE BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS AND STRAINERS, TRANSMITTERS CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS TO THE VA/COR FOR RESOLUTION. FAILURE OF THE CONTRACTOR TO RESOLVE, OR POINT OUT ANY ISSUES WILL RESULT IN THE CONTRACTOR CORRECTING AT NO ADDITIONAL COST TO THE VA.
- 21. UNLESS INDICATED OTHERWISE, THE ARCHITECT/ENGINEER MAKES NO REPRESENTATION AS TO WHETHER OR NOT ANY HAZARDOUS OR CONTAMINATED MATERIALS (INCLUDING BUT NOT LIMITED TO ASBESTOS, PCB'S, LEAD, CONTAMINATED SOILS, ETC.) ARE PRESENT WITHIN THE EXISTING BUILDING OR ON THE SITE. WORK SHOWN ON THE DRAWINGS AND/OR INDICATED IN THE SPECIFICATIONS SHALL NOT BE CONSTRUED TO CALL FOR CONTACT WITH ANY OF THESE MATERIALS. IF THESE MATERIALS ARE ENCOUNTERED OR SUSPECTED, THE CONTRACTOR SHALL NOT DISTURB THEM AND SHALL CONTACT THE VA/COR IMMEDIATELY.
- 22. IT IS MANDATORY THAT THE COMPLETE EXISTING BUILDING REMAIN IN CONTINUOUS AND NON-INTERRUPTED OPERATION DURING REMODELING/ALTERING OF SAID EXISTING BUILDING. THE SPECIFIC AREA(S) BEING REMODELED/ALTERED AT ANY SCHEDULED TIME ARE OBVIOUSLY EXCLUSIVE OF THIS STATEMENT. SERVICES TO EXISTING BUILDING SHALL BE KEPT IN CONTINUOUS OPERATION INCLUDING POWER, SIGNAL SYSTEMS, LIGHTING, TELEPHONE, HEATING, COOLING, VENTILATING, TEMPERATURE CONTROL, SEWERS AND HOT AND COLD WATER. ANY ABSOLUTELY NECESSARY INTERRUPTION OF THESE SERVICES TO ACCOMPLISH CONTRACT WORK SHALL BE ARRANGED WITH THE VA/COR A MINIMUM OF TEN (10) WORKING DAYS IN ADVANCE. SUCH INTERRUPTIONS SHALL BE KEPT TO AN ABSOLUTE MINIMUM AS FAR AS TIME INTERVAL IS INVOLVED AND TEMPORARY SERVICES SHALL BE FURNISHED AND INSTALLED UNDER THIS CONTRACT WHERE NECESSARY TO ACCOMPLISH THIS PURPOSE. TEMPORARIES SHALL BE REMOVED BY TH CONTRACTOR ONLY AFTER NEW PERMANENT SERVICES ARE INSTALLED AND FULLY OPERATIONAL
- 23. IN CASE OF CONFLICTS OR DISCREPANCIES WITHIN OR AMONG THE CONTRACT DRAWINGS, THE BETTER QUALITY, MORE STRINGENT REQUIREMENTS, OR GREATER QUANTITY OF WORK, AS DETERMINED BY THE GOVERNMENT/CONTRACTING OFFICER, SHALL BE PROVIDED.

CONSULTANT

PROJECT GENERAL NOTES - MECHANICAL - CONTD.

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL.

MECHANICAL EQUIPMENT NOTES

- 1. ALL EQUIPMENT/DEVICES SHALL BE AND OF FIRST RATE QUALITY (UNLESS OTHERWISE SPECIFIED) AND IS TO BEAR THE APPROPRIATE AGA, CSA OR UL APPROVED LABELS, LISTINGS, AND CERTIFICATIONS FOR THE SPECIFIC DESIGN PURPOSE
- 2. ALL EQUIPMENT SOUND LEVELS SHALL NOT EXCEED 50 DB AT PROPERTY LINE.
- 3. ALL INTERCONNECTING WIRING AT UNIT SHALL BE FACTORY PRE-WIRED AND REQUIRE ONLY ONE (1) POWER CONNECTION TO THE UNIT BY THE ELECTRICAL CONTRACTOR. DISCONNECT SWITCH SHALL BE BY THE ELECTRICAL CONTRACTOR.
- 4. SUBMIT THE REQUIRED NUMBER OF COPIES OF EACH CATALOG CUT, FOR THE EQUIPMENT SPECIFIED, TO THE VA/COR FOR APPROVAL AND TO THE ARCHITECT /ENGINEER FOR HIS/HER SUCCESSFUL REVIEW PRIOR TO THE BEGINNING OF CONSTRUCTION. THIS CONTRACTOR SHALL ALSO ASSEMBLE PRINTED INSTRUCTIONS FOR THE OPERATION AND MAINTENANCE OF EACH ITEM INSTALLED AND BIND TOGETHER WITH EQUIPMENT CUTS AND CONTROL WIRING DIAGRAMS. SUBMIT THE REQUIRED NUMBER OF COPIES TO THE VA/COR FOR HIS/HER SUCCESSFUL REVIEW.
- 5. THE DRAWINGS, SCHEDULES AND SPECIFICATIONS HAVE BEEN PREPARED USING ONE MANUFACTURER FOR EACH PIECE OF EQUIPMENT AS THE BASIS OF DESIGN INCLUDING ALL DIMENSIONAL DESIGN. IF THE CONTRACTOR PURCHASES EQUIPMENT FROM A SPECIFIED ACCEPTABLE MANUFACTURER, BUT NOT THE SCHEDULED MANUFACTURER USED FOR THE BASE DESIGN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING ALL THE DIMENSIONS OF THE EQUIPMENT TO VERIFY THAT IT WILL FIT IN THE SPACE SHOWN ON THE DRAWINGS. MINOR DEVIATIONS IN DIMENSIONS WILL BE PERMITTED. PROVIDED THE RATINGS MEET THOSE SHOWN ON THE DRAWINGS AND EQUIPMENT WILL PHYSICALLY FIT INTO THE SPACE ALLOCATED WITH SUITABLE ACCESS AROUND EQUIPMENT FOR OPERATION AND MAINTENANCE OF THE EQUIPMENT. WHEN EQUIPMENT SUBMITTED FOR REVIEW DOES NOT MEET THE $\,$ PHYSICAL SIZE OR ARRANGEMENT OF THAT SCHEDULED AND SPECIFIED, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ALTERATIONS REQUIRED TO ACCOMMODATE SUCH EQUIPMENT AT NO ADDITIONAL COST TO THE VA. CONTRACTOR WILL ALSO PAY ALL COSTS FOR ADDITIONAL WORK REQUIRED BY OTHER CONTRACTORS AND THE VA TO MAKE CHANGES WHICH WOULD ALLOW THE EQUIPMENT TO FIT IN THE SPACE AND TO FUNCTION
- 6. CONTRACTOR AND/OR MANUFACTURER SHALL VERIFY THAT THE CHARACTERISTICS OF THE EQUIPMENT HE SUBMITS FOR REVIEW MEET THE CAPACITY AND DUTY SPECIFIED. WHEN EQUIPMENT SUBMITTED FOR REVIEW REQUIRES MODIFICATIONS TO THE WORK OF OTHER CONTRACTORS, SUBMITTING CONTRACTOR SHALL PAY FOR ALL COSTS FOR ADDITIONAL WORK REQUIRED BY OTHER CONTRACTORS, VA, ARCHITECT OR ENGINEER TO MAKE CHANGES WHICH WOULD ALLOW THE EQUIPMENT FUNCTION SAFELY AND PROPERLY.
- 7. CONTRACTOR MUST FIELD VERIFY SIZES, CAPACITIES, WEIGHTS, HORSE POWERS, ETC. ON ALL EQUIPMENT. NOTIFY THE VA/COR IF ANY DISCREPANCIES EXIST BETWEEN THE ACTUAL FIELD CONDITIONS AND THE DRAWINGS.

MECHANICAL ABBREVIATION KEY **DESCRIPTION:** ABBR: AFF ABOVE FINISHED FLOOR MIXING VALVE NOT IN CONTRACT EXHAUST AIR RETURN AIR SUPPLY AIR SHORT CIRCUIT CURRENT RATING SCCR TYP **TYPICAL UNLESS OTHERWISE NOTED** UON

	CONTRACTOR ABBREVIATION KE
ABBR:	DESCRIPTION:
A.C.	ASBESTOS ABATEMENT CONTRACTOR
A.V.C.	AUDIO/VISUAL CONTRACTOR
C.C.	CIVIL CONTRACTOR
C.M.	CONSTRUCTION MANAGER
E.C.	ELECTRICAL CONTRACTOR
F.P.C.	FIRE PROTECTION CONTRACTOR
F.S.C.	FOOD SERVICE CONTRACTOR
G.C.	GENERAL CONTRACTOR
H.C.	HEATING CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
N.C.C.	NURSE CALL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
S.C.	SECURITY CONTRACTOR
T.C.	TECHNOLOGY CONTRACTOR
T.C.C.	TEMPERATURE CONTROLS CONTRACTOR
V.C.	VENTILATION CONTRACTOR

Y WITH APPLICABLE CODES AND LOCAL AMENDMENTS.
IBC 20** EDITION
NFPA: 1 2012 EDITION WITH MINNESOTA AMENDMENTS
2020 MINNESOTA PLUMBING CODE
2015 MINNESOTA MECHANICAL AND FUEL GAS CODE
NFPA 70 (NEC) 2014 EDITION
CURRENT EDITION
CURRENT EDITION

PROJECT MANAGER KRISTOPHER BURNHAM, PE, FPE, CHC, LEED AP MECHANICAL ROBERT D. LOWE, PE, FPE	CONTACT PERSONS:									
MECHANICAL ROBERT D. LOWE, PE, FPE	DESCRIPTION:	PERSON:								
	PROJECT MANAGER	KRISTOPHER BURNHAM, PE, FPE, CHC, LEED AP								
ELECTRICAL THOMAS J. HEINZ, PE, AET	MECHANICAL	ROBERT D. LOWE, PE, FPE								
	ELECTRICAL	THOMAS J. HEINZ, PE, AET								

MECHANICAL SYMBOL LIST MECHANICAL SYMBOL LIST NOT ALL SYMBOLS MAY APPLY. NOT ALL SYMBOLS MAY APPLY. SYMBOL: DESCRIPTION: SYMBOL: | DESCRIPTION: —COND— CONDENSATE DRAIN ├ ----- ├ DIRECTION OF AIR FLOW ——DPP—— DRAIN |├_||||||| | FLEXIBLE DUCT —HCR—— | HEATING/CHILLED WATER RETURN —HCS—— | HEATING/CHILLED WATER SUPPLY MANUAL VOLUME DAMPER —HG— REFRIGERANT HOT GAS —HPC—— HIGH PRESSURE CONDENSATE R RISE IN DIRECTION OF AIR FLOW —HPS—— HIGH PRESSURE STEAM → D ∤ DROP IN DIRECTION OF AIR FLOW —HWR——│ HEATING WATER RETURN —HWS—— | HEATING WATER SUPPLY DUCT CAP —LCS— LOW PRESSURE CLEAN STEAM **DUCT DOWN** —LIQ—— REFRIGERANT LIQUID —LPC—— LOW PRESSURE CONDENSATE —LPS—— LOW PRESSURE STEAM SUPPLY/OUTSIDE AIR DUCT SECTION —LWR—— LOOP WATER RETURN —LWS—— LOOP WATER SUPPLY RETURN AIR DUCT SECTION ——PC—— PUMPED CONDENSATE —RWR—— REHEAT WATER RETURN EXHAUST/RELIEF AIR DUCT SECTION

—RWS—— REHEAT WATER SUPPLY

—SUC—— REFRIGERANT SUCTION

——SV—— | SAFETY RELIEF VENT

PIPE CAP

PIPE DOWN

____ PITCH PIPE IN DIRECTION

DIRECTION OF FLOW IN PIPE

AUTOMATIC BALANCING VALVE

CONTROL VALVE (THREE-WAY)

CONTROL VALVE (TWO-WAY)

PRESSURE REDUCING VALVE (LIQUID/GAS)

PRESSURE REDUCING VALVE (STEAM)

TRIPLE DUTY VALVE (ANGLE TYPE)

TRIPLE DUTY VALVE (IN-LINE TYPE)

────── "WYE" - STRAINER W/SHUTOFF VALVE AND HOSE CONNECTION WITH CAP

SHUTOFF VALVE NORMALLY CLOSED

BALANCING VALVE (NUMBER INDICATES GPM)

——II—— │ DIELECTRIC CONNECTION

——| UNION/FLANGE

THROTTLING VALVE

──IĞ── | MIXING VALVE

—₩—PI

--×-(P)

SP

PUMP

WYE" - STRAINER

BASKET STRAINER

FLEXIBLE CONNECTION

PRESSURE/TEMPERATURE TEST PLUG

SUCTION DIFFUSER WITH SUPPORT FOOT

AUTOMATIC AIR VENT

MANUAL AIR VENT

STATIC SWITCH

FLOW METER

FLOW SWITCH

NAME — LEVEL NAME

10'-0" HEIGHT ABOVE

PROJECT 0'-0"

FS FLOW SENSOR

LINE TYPE AND TAG KEY

_____ NFW

NEW WORK BY THIS CONTRACTOR (WIDE LINE)

FXISTING

HALFTONING DOES NOT MODIFY SCOPE.

REDUCER - REFERENCE SPECIFICATION

FOR CONCENTRIC/ECCENTRIC AND FOT/FOB

DRAIN VALVE WITH HOSE CONNECTION AND CAP

PRESSURE SENSOR (FURNISHED WITH BALL VALVE)

PRESSURE GAUGE (FURNISHED WITH BALL VALVE)

VIEW KEY

1 INDICATES NOTE USED TO DESCRIBE

SHEET AND/OR DETAIL

INDICATES DIRECTION OF TRUE NORTH

- PLAN OR DETAIL NUMBER

— PLAN OR DETAIL NAME

- PLAN OR DETAIL SCALE

- INDICATES SIMILAR DETAIL REFERENCED -

- DETAIL REFERRED TO BY SECTION CUT -

IN MULTIPLE LOCATIONS

---- EXISTING TO BE REMOVED (SHORT DASHED PATTERN)

EXISTING TO REMAIN OR WORK BY OTHERS (NARROW LINE)

— — NEW UNDERFLOOR OR UNDERGROUND (LONG DASHED PATTERN)

----- EXISTING TO BE REMOVED BY OTHERS (SHORT DASHED PATTERN)

— — EXISTING UNDERFLOOR OR UNDERGROUND (LONG DASHED PATTERN)

'TAG'-E TAGS WITH DASH 'E' INDICATES THE REFERENCED OBJECT IS EXISTING

UNDERLINED TAG INDICATES OBJECT IS IN-SCOPE. IF NEW, ADDITIONAL

INDICATES AN EXISTING SYSTEM'S POINT OF CONNECTION/REMOVAL

INFORMATION IS AVAILABLE IN A SCHEDULE, MATERIAL LIST, OR SYMBOL LIST

ADDITIONAL INFORMATION ABOUT

WORK REQUIRED, SPECIFIC TO THE

DIFFERENTIAL PRESSURE SENSOR

PIPE UP OR UP/DOWN

MECHANICAL RENOVATION NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL.

4-WAY DIFFUSER WITH BLANKOFF IN ONE DIRECTION

THERMOSTAT/SENSOR

- EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD SURVEYS, EXISTING BUILDING DOCUMENTS, AND STAFF. VERIFY EXISTING CONDITIONS AND REPORT ANY CONFLICTS BEFORE PROCEEDING.
- NOT ALL EXISTING DUCTWORK AND PIPING IS SHOWN. VERIFY EXISTING CONDITIONS BEFORE STARTING WORK. NOTIFY COR AND ENGINEER OF ANY CONFLICTS WITH NEW WORK.
- FIELD VERIFY THE AVAILABLE CLEARANCES FOR DUCTWORK AND PIPING BEFORE FABRICATION. RISES AND DROPS MAY BE NECESSARY BECAUSE OF EXISTING FIELD CONDITIONS.
- EACH CONTRACTOR SHALL FIELD VERIFY ACCESSIBILITY TO THE AREA OF HIS/HER WORK AND SHALL NOTIFY THE GENERAL COR AND ENGINEER PRIOR TO BIDDING IF OTHER UTILITIES ARE REQUIRED TO BE REMOVED OR RELOCATED TO ALLOW ACCESS TO HIS/HER AREA OF WORK.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CUTTING, REMOVAL AND PATCHING OF ROOFS, WALLS, AND FLOORS ASSOCIATED WITH WORK BY ALL CONTRACTORS. CONTRACTORS SHALL NOTIFY THE COR AND ENGINEER OF AFFECTED AREAS PRIOR TO BIDDING.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF CEILINGS CEILING TILES, AND CEILING GRIDS ASSOCIATED WITH AREAS OF WORK BY ALL CONTRACTORS. NOTIFY THE GENERAL CONTRACTOR OF AFFECTED AREAS PRIOR TO BIDDING
- WHERE EXISTING MECHANICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, PIPING, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING SYSTEMS TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK.
- PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING CONSTRUCTION. MAINTAIN ACCESS TO EXISTING MECHANICAL INSTALLATIONS THAT REMAIN ACTIVE.
- OBTAIN PERMISSION FROM OWNER BEFORE SHUTTING DOWN ANY SYSTEM FOR ANY REASON. MAINTAIN SERVICE TO ALL COMPONENTS THAT ARE TO REMAIN UNTIL NEW SYSTEMS ARE
- 0. MAINTAIN EXISTING SYSTEM IN SERVICE UNTIL NEW SYSTEM IS COMPLETE AND READY FOR TIE IN AND SWITCHOVER, DRAIN SYSTEM ONLY TO MAKE SWITCHOVERS AND CONNECTIONS, OBTAIN PERMISSION FROM OWNER BEFORE PARTIALLY OR COMPLETELY DRAINING SYSTEM. MAKE CHANGEOVER TO NEW SYSTEMS WITH MINIMUM OUTAGE.

PIPING GENERAL NOTES:

- THE SIZE OF BRANCH PIPING TO TERMINAL HEATING DEVICES AND COILS SHALL BE 3/4" UNLESS NOTED OTHERWISE
- 2. PIPE DRAIN LINES FROM EQUIPMENT TO NEAREST FLOOR DRAIN.
- INSTALL ALL REFRIGERANT LIQUID AND SUCTION PIPING SIZED PER EQUIPMENT MANUFACTURER RECOMMENDATIONS.

TAB PRE-DEMOLITION NOTES:

- BEFORE ANY DEMOLITION WORK IS BEGUN A COMPLETE AIR BALANCE TEST SHALL BE PERFORMED BY THE TESTING, ADJUSTING AND BALANCING (TAB) CONTRACTOR ON EXISTING AIR HANDLERS AND EXHAUST FANS SERVING THE AREAS AFFECTED BY CONSTRUCTION. EQUIPMENT TO BE DEMOLISHED DOES NOT REQUIRE TESTING. PROVIDE AIR BALANCE TESTING ONLY ON EQUIPMENT THAT WILL CONTINUE TO BE USED TO SERVE RENOVATED AREAS AFTER THE CONSTRUCTION PHASE IS COMPLETED.
- TAKE A DUCT STATIC PRESSURE READING AT EACH LOCATION WHERE A DUCT TRAVERSE READING IS TAKEN AND INCLUDE IN THE FINAL PRE-DEMOLITION TAB REPORT.
- TAB CONTRACTOR SHALL COMPILE AND SUBMIT FOUR COPIES OF THE FINAL PRE-DEMOLITION REPORT WITHIN 10 WORKING DAYS AFTER THE FIELD MEASUREMENTS ARE COMPLETED. FINAL TAB REPORT SHALL BE SUBMITTED FOR REVIEW TO THE ARCHITECT/ENGINEER. TESTING SHALL INCLUDE ALL ITEMS REQUIRED IN THE SPECIFICATIONS.
- BALANCING CONTRACTOR SHALL PRE-BALANCE ALL EXISTING SYSTEMS TO REMAIN PER SPECIFICATION SECTION 23 05 93. BALANCE READINGS WILL BE REQUIRED AT AIR OUTLETS AND DUCT TRAVERSES TO VERIFY EXISTING AIRFLOW TO UNAFFECTED SPACES.

TAB POST-CONSTRUCTION NOTES:

- AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE, TESTING, ADJUSTING (TAB) AND BALANCING CONTRACTOR SHALL REBALANCE AIR HANDLING UNITS AND EXHAUST FANS AS REQUIRED TO ACHIEVE THE NEW AIRFLOW VALUES SHOWN ON THE CONSTRUCTION
- TAB CONTRACTOR SHALL COMPILE AND SUBMIT COPIES OF THE FINAL POST-CONSTRUCTION TAB REPORT AS REQUIRED BY SECTION 23 05 93.
- THE FINAL POST CONSTRUCTION REPORT SHALL INCLUDE ALL ITEMS REQUIRED IN THE SPECIFICATIONS.

MECHANICAL GENERAL NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL.

- 1. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, DUCTWORK, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT ALWAYS REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT.
- 2. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL. STRUCTURAL, SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY AT SITE. REVIEW
 - 3. COORDINATE ALL WORK WITH ALL OTHER TRADES AND COR PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES FOR ALL TRADES. BRING ANY INTERFERENCES OR CONFLICTS TO THE ATTENTION OF THE COR AND THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OR EQUIPMENT
- 4. REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER ACCESS. FINAL LOCATIONS TO BE ACCURATELY DESCRIBED IN AS-BUILTS.
- 5. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST, TIME OR EXPENSE
- 6. EACH CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ELECTRICAL CHANGES REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF DESIGN.
- 7. REFER TO CONTRACT DOCUMENTS, TO INCLUDE, BUT TO LIMITED TO, THE ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL, TECHNOLOGY AUDIO/VISUAL, AND OTHER MECHANICAL

ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES.

- PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES, OTHER THAN SPRINKLERS. 8. EACH CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY THEIR ACTIONS TO WALLS, FLOORS
- CEILINGS. AND ROOFS. THE CONTRACTOR WHOSE WORK CAUSES DAMAGE IS RESPONSIBLE FOR PATCHING TO THE SATISFACTION OF THE COR TO MATCH ORIGINAL CONSTRUCTION, FIRE RATING,

10. SEAL ALL FLOOR AND WALL, PENETRATIONS AIRTIGHT WHERE CONDUITS, PIPING, AND DUCTS

11. CAULK ALL PIPE AND DUCT PENETRATIONS OF FULL HEIGHT NON-FIRE RATED WALL, PARTITION,

- 9. IN AREAS WITH DRYWALL CEILINGS COORDINATE LOCATIONS OF ACCESS PANELS WITH THE COR FOR ACCESS TO VALVES, DUCTWORK ACCESSORIES, DAMPERS, ETC. COORDINATE PANEL TYPE AND COLOR WITH ARCHITECT. NOTIFY THE COR OF THE REQUIRED ACCESS PANELS PRIOR TO BIDDING.
- PENETRATE, BOTH NEW AND EXISTING. PENETRATIONS THROUGH EXTERIOR WALLS AND ROOF SHALL BE SEALED AIRTIGHT WITH WATERPROOFING MATERIALS RECOMMENDED BY MANUFACTURER
- FLOOR, AND ROOF ASSEMBLIES, BOTH NEW AND EXISTING. THIS IS ESSENTIAL TO PREVENT NOISE TRANSMISSION FROM ONE ROOM TO ANOTHER AND TO PROVIDE THE DESIRED NC LEVELS WITHIN 12. WHERE PIPES AND DUCTS ARE SHOWN TO PENETRATE FLOORS, PROVIDE SLEEVED OPENINGS WITH
- THE TOP EDGE RAISED ABOVE FLOOR SURFACE IN ACCORDANCE WITH ALL RELEVANT SPEC SECTIONS. SEAL SLEEVE PERIMETER TO BE WATERTIGHT 13. EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY AMONG DIFFERENT
- MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PADS, PIPING, DUCTWORK, ETC.
- 15. MAINTAIN MINIMUM 3'-6" CLEARANCE IN FRONT OF ALL ELECTRICAL PANELS, MOTOR STARTERS, SWITCHES, AND DISCONNECTS.

14. DO NOT BLOCK TUBE PULL OR EQUIPMENT SERVICE CLEARANCES.

CONCRETE APPROVED IN ACCORDANCE WITH SPECIFICATIONS.

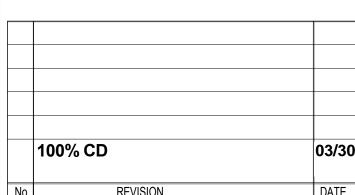
- 16. PROVIDE CONCRETE EQUIPMENT PAD FOR ALL FLOOR MOUNTED EQUIPMENT. PAD SHALL EXTEND MINIMUM 6" BEYOND ALL SIDES OF EQUIPMENT
- 17. DO NOT SUPPORT EQUIPMENT, PIPING, OR DUCTWORK FROM METAL DECKING OR OTHER NON-STRUCTURAL BUILDING ELEMENTS. ANCHORS EMBEDDED IN CONCRETE SHALL BE CRACKEL
- 18. CONTRACTOR TO COORDINATE SCHEDULE OF ANY NOISE-PRODUCING WORK SCOPE WITH COR NOT LESS THAN 10 DAYS PRIOR TO COMMENCING THIS WORK.
- 19. ALL CARTS, EQUIPMENT, MATERIALS AND TOOLS AS WELL AS ALL TOOL BAGS/BOXES AND LADDERS ARE TO BE LABELED CLEARLY IDENTIFYING, THE CONTRACTOR/ SUBCONTRACTOR NAME AND
- 20. STORAGE OF ALL TOOLS, EQUIPMENT, AND MATERIALS IS ONLY AUTHORIZED IN APPROVED

VENTILATION GENERAL NOTES:

1. CONTRACTOR MAY REUSE PORTIONS OF EXISTING DUCT PROVIDED SIZES AND PRESSURE CLASSES ARE CORRECT, DUCT IS THOROUGHLY CLEANED AND FREE OF DEFECTS, AND ALL TRANSVERSE JOINTS, LONGITUDINAL SEAMS, AND DUCT WALL PENETRATIONS ARE SEALED AS SPECIFIED FOR NEW DUCTWORK.

MECHANICAL SHEET INDEX MECHANICAL COVER SHEET **BASEMENT DEMOLITION - MECHANICAL** FIRST FLOOR DEMOLITION - MECHANICAL









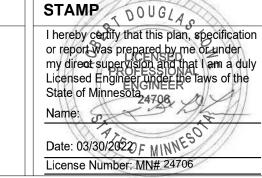
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ARCHITECT/ENGINEER OF RECORD



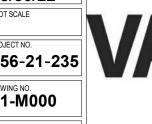


EHRM INFRASTRUCTURE 03/30/22 **UPGRADES**

RDL JCL

SPRINKLERED

BUILDING No





- 1. THE HVAC CONTRACTOR SHOULD VISIT THE SITE **PRIOR TO BID** TO FIELD VERIFY ALL EXISTING CONDITIONS WHICH MAY AFFECT THEIR BID. THE FOLLOWING ITEMS SHALL BE VERIFIED:
- A. EXACT PLACEMENT, SIZE, CAPACITY, MANUFACTURER, AND CONDITION OF ALL EXISTING HVAC EQUIPMENT WITHIN SCOPE OF WORK, WHETHER EXPLICITY SHOWN OR NOT.
- SIZE AND LOCATION OF ALL EXISTING DUCTWORK.
- SIZE AND LOCATION OF ALL EXISTING GRILLES, REGISTERS AND DIFFUSERS.
- SIZE AND LOCATION OF ALL EXISTING THERMOSTATIC CONTROL DEVICES.
- E. SIZE AND LOCATION OF ALL EXISTING PLUMBING AND HYRONIC PIPING.
- ALL REFERENCES ON THESE DRAWINGS TO EXISTING EQUIPMENT, DUCTWORK, DIFFUSERS, THERMOSTATS AND PIPING ARE FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL THESE ITEMS PRIOR TO BID AND INCLUDE IN THEIR BID ANY AND ALL AMOUNTS REQUIRED TO ACCOMMODATE EXISTING CONDITIONS.
- 3. NO ADDITIONAL COMPENSATION WILL BE MADE AFTER THE PROJECT HAS BEEN AWARDED FOR FAILURE TO VERIFY EXISTING
- 4. ANY DISCREPANCIES WHICH MAY AFFECT THE CONTRACTORS BID SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND ARCHITECT FOR DIRECTION.

 $\gamma \gamma \gamma \gamma \gamma | \gamma \gamma$ COMPRESSOR (E) AIR DRYER (E) ___HWS-E<u>'</u> HWR-E ——HWS-E⊸ HWR-E-⊒ ['] 4"GCHWS-E\ ≀ 4"CW-FP RISER-E-──4"GCHWR-E—**?** SNOW MELT MANIFOLD (E) HWS-E UP-POT FEEDER (E)-10 **ELECTRICAL**

BASEMENT DEMOLITION -MECHANICAL - TELECOM A05C

KEYED NOTES 1/01-M100: # 1. EXISTING SNOW MELT MANIFOLD TO BE RELOCATED.

2. EXISTING 4" GLYCOL CHILLED WATER

3. EXISTING 4" FIRE SPRINKLER MAIN PIPING TO BE REROUTED.

4. EXISTING AIR SEPARATOR TO BE RELOCATED.

5. EXISTING SNOW MELT PIPING TO BE REROUTED.

6. EXISTING 1" COND WATER TO BE REROUTED.

7. EXISTING EXPANSION TANK TO BE RELOCATED.

8. EXISTING CHILLED WATER PUMPS TO BE RELOCATED.

EXISTING PRESSURE SWITCHES 10. EXISTING CHEMICAL POT FEEDER TO BE RELOCATED.

11. EXISTING 1" DOM WATER

12. EXISTING 1" COND DRAIN

13. EXISTING FIRE SPRINKLER 14. EXISTING 1" EXPANSION LINE

15. EXISTING 4" DOM WATER

16. EXISTING 2-1/2" FIRE SPRINKLER LINE UP.

17. EXISTING HWS & HWR BRANCH LINES.

KEYED NOTES 2/01-M100: #

. EXISTING FIN-TUBE RADIATION TO BE REMOVED AND PIPING CAPPED IN MECHANICAL ROOM.

2. EXISTING SUPPLY DIFFUSERS TO BE RECONFIGURED. REMOVE SUPPLY AIR BRANCH DUCT AS SHOWN.

3. EXISTING SUPPLY DUCT MAIN TO REMAIN.

4. EXISTING SPRINKLERS AND BRANCH PIPING IN THIS AREA TO REMAIN.

5. EXISTING FIRE PROTECTION SPRINKLER HEADS AND PIPING TO BE RECONFIGURED.

6. REFER TO SHEET 01-M200 FOR REMODEL WORK IN THIS AREA.

6 MECH 5D

BASEMENT DEMOLITION - MECHANICAL - TELECOM 005F

MECHANICAL GENERAL NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL.

1. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, DUCTWORK, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT ALWAYS REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT.

2. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES.

3. COORDINATE ALL WORK WITH ALL OTHER TRADES AND COR PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES FOR ALL TRADES. BRING ANY INTERFERENCES OR CONFLICTS TO THE ATTENTION OF THE COR AND THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OR EQUIPMENT

4. REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER ACCESS. FINAL LOCATIONS TO BE ACCURATELY DESCRIBED IN AS-BUILTS.

5. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST, TIME OR EXPENSE

6. EACH CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ELECTRICAL CHANGES REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF DESIGN.

7. REFER TO CONTRACT DOCUMENTS, TO INCLUDE, BUT TO LIMITED TO, THE ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL, TECHNOLOGY AUDIO/VISUAL, AND OTHER MECHANICAL PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES, OTHER THAN SPRINKLERS.

8. EACH CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY THEIR ACTIONS TO WALLS, FLOORS, CEILINGS, AND ROOFS. THE CONTRACTOR WHOSE WORK CAUSES DAMAGE IS RESPONSIBLE FOR PATCHING TO THE SATISFACTION OF THE COR TO MATCH ORIGINAL CONSTRUCTION, FIRE RATING,

9. IN AREAS WITH DRYWALL CEILINGS COORDINATE LOCATIONS OF ACCESS PANELS WITH THE COR FOR ACCESS TO VALVES, DUCTWORK ACCESSORIES, DAMPERS, ETC. COORDINATE PANEL TYPE AND COLOR WITH ARCHITECT. NOTIFY THE COR OF THE REQUIRED ACCESS PANELS PRIOR TO BIDDING.

10. SEAL ALL FLOOR AND WALL, PENETRATIONS AIRTIGHT WHERE CONDUITS, PIPING, AND DUCTS PENETRATE, BOTH NEW AND EXISTING. PENETRATIONS THROUGH EXTERIOR WALLS AND ROOF SHALL BE SEALED AIRTIGHT WITH WATERPROOFING MATERIALS RECOMMENDED BY MANUFACTURER FOR OUTDOOR USE.

11. CAULK ALL PIPE AND DUCT PENETRATIONS OF FULL HEIGHT NON-FIRE RATED WALL, PARTITION, FLOOR, AND ROOF ASSEMBLIES, BOTH NEW AND EXISTING. THIS IS ESSENTIAL TO PREVENT NOISE TRANSMISSION FROM ONE ROOM TO ANOTHER AND TO PROVIDE THE DESIRED NC LEVELS WITHIN

THE TOP EDGE RAISED ABOVE FLOOR SURFACE IN ACCORDANCE WITH ALL RELEVANT SPEC SECTIONS. SEAL SLEEVE PERIMETER TO BE WATERTIGHT.

12. WHERE PIPES AND DUCTS ARE SHOWN TO PENETRATE FLOORS, PROVIDE SLEEVED OPENINGS WITH

13. EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY AMONG DIFFERENT MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PADS, PIPING, DUCTWORK, ETC.

14. DO NOT BLOCK TUBE PULL OR EQUIPMENT SERVICE CLEARANCES.

15. MAINTAIN MINIMUM 3'-6" CLEARANCE IN FRONT OF ALL ELECTRICAL PANELS, MOTOR STARTERS, SWITCHES, AND DISCONNECTS.

17. DO NOT SUPPORT EQUIPMENT, PIPING, OR DUCTWORK FROM METAL DECKING OR OTHER NON-

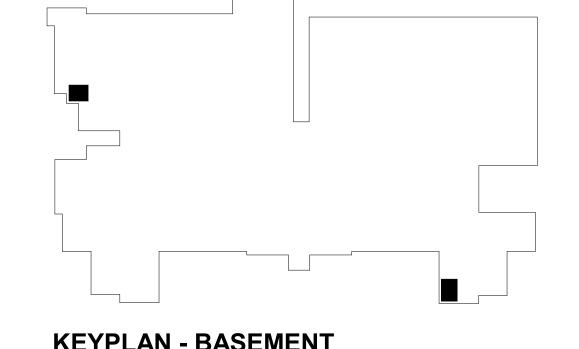
16. PROVIDE CONCRETE EQUIPMENT PAD FOR ALL FLOOR MOUNTED EQUIPMENT. PAD SHALL EXTEND MINIMUM 6" BEYOND ALL SIDES OF EQUIPMENT.

STRUCTURAL BUILDING ELEMENTS. ANCHORS EMBEDDED IN CONCRETE SHALL BE CRACKED CONCRETE APPROVED IN ACCORDANCE WITH SPECIFICATIONS. 18. CONTRACTOR TO COORDINATE SCHEDULE OF ANY NOISE-PRODUCING WORK SCOPE WITH COR NOT

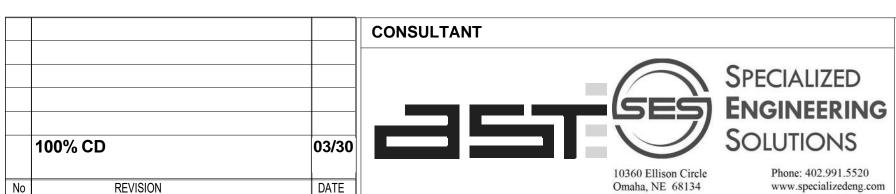
LESS THAN 10 DAYS PRIOR TO COMMENCING THIS WORK. 19. ALL CARTS, EQUIPMENT, MATERIALS AND TOOLS AS WELL AS ALL TOOL BAGS/BOXES AND LADDERS,

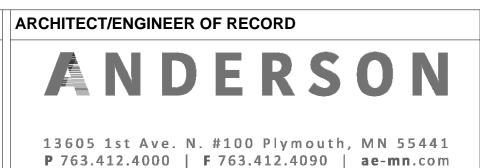
ARE TO BE LABELED CLEARLY IDENTIFYING, THE CONTRACTOR/ SUBCONTRACTOR NAME AND

20. STORAGE OF ALL TOOLS, EQUIPMENT, AND MATERIALS IS ONLY AUTHORIZED IN APPROVED

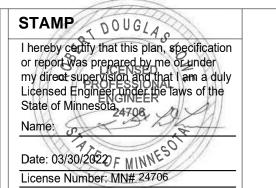


KEYPLAN - BASEMENT





Anderson Engineering of Minnesota, LLC | Proj # 16305







RDL JCL

SPRINKLERED

BUILDING No





- 1. THE HVAC CONTRACTOR SHOULD VISIT THE SITE **PRIOR TO BID** TO FIELD VERIFY ALL EXISTING CONDITIONS WHICH MAY AFFECT THEIR BID. THE FOLLOWING ITEMS SHALL BE VERIFIED:
- A. EXACT PLACEMENT, SIZE, CAPACITY MANUFACTURER AND CONDITION OF ALL EXISTING HVAC EQUIPMENT WITHIN SCOPE OF WORK, WHETHER EXPLICITY SHOWN OR NOT.
- SIZE AND LOCATION OF ALL EXISTING DUCTWORK.
- SIZE AND LOCATION OF ALL EXISTING GRILLES, REGISTERS AND DIFFUSERS.
- SIZE AND LOCATION OF ALL EXISTING THERMOSTATIC CONTROL DEVICES.
- E. SIZE AND LOCATION OF ALL EXISTING PLUMBING AND HYRONIC PIPING.
- ALL REFERENCES ON THESE DRAWINGS TO EXISTING EQUIPMENT, DUCTWORK, DIFFUSERS, THERMOSTATS AND PIPING ARE FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL THESE ITEMS PRIOR TO BID AND INCLUDE IN THEIR BID ANY AND ALL AMOUNTS REQUIRED TO ACCOMMODATE EXISTING CONDITIONS.
- 3. NO ALLOWANCES WILL BE MADE AFTER THE PROJECT HAS BEEN AWARDED FOR FAILURE TO VERIFY EXISTING CONDITIONS.
- ANY DISCREPANCIES WHICH MAY AFFECT THE CONTRACTORS BID SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND

KEYED NOTES 1/01-M101:

- # 1. EXISTING 4" DRAIN PIPE UP & DN TO REMAIN.
- EXISTING 22X12 EXHAUST DUCT UP & DN TO REMAIN.
- EXISTING 20X20 SUPPLY AIR DUCT UP & DN TO REMAIN. EXISTING 14X8 RETURN DUCT UP & DN TO REMAIN.
- EXISTING 8X8 RETURN AIR DUCT UP TO REMAIN.
- EXISTING THERMOSTAT TO BE REMOVED.
- EXISTING DIFFUSER AND ASSOCIATED DUCTWORK TO BE REMOVED. CAP DUCT WHERE SHOWN ON DRAWINGS.
- EXISTING FIRE SPRINKLER HEAD TO REMAIN.
- EXISTING RETURN AIR GRILLE TO BE REMOVED.
- 10. REFER TO SHEET 01-M201 FOR REMODEL WORK IN THIS AREA.

SHARED CONSULT WOMEN'S $\frac{2}{2}$ **EXAM** 167 REGISTER **EXAM**

FIRST FLOOR DEMOLITION - MECHANICAL - TELECOM A101

MECHANICAL GENERAL NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL.

- 1. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, DUCTWORK, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT ALWAYS REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT.
- 2. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES.
- 3. COORDINATE ALL WORK WITH ALL OTHER TRADES AND COR PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES FOR ALL TRADES. BRING ANY INTERFERENCES OR CONFLICTS TO THE ATTENTION OF THE COR AND THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OR EQUIPMENT
- 4. REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER ACCESS. FINAL LOCATIONS TO BE ACCURATELY DESCRIBED IN AS-BUILTS.
- 5. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST, TIME OR EXPENSE
- 6. EACH CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ELECTRICAL CHANGES REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF DESIGN.
- 7. REFER TO CONTRACT DOCUMENTS, TO INCLUDE, BUT TO LIMITED TO, THE ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL, TECHNOLOGY AUDIO/VISUAL, AND OTHER MECHANICAL
- 8. EACH CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY THEIR ACTIONS TO WALLS, FLOORS, CEILINGS, AND ROOFS. THE CONTRACTOR WHOSE WORK CAUSES DAMAGE IS RESPONSIBLE FOR PATCHING TO THE SATISFACTION OF THE COR TO MATCH ORIGINAL CONSTRUCTION, FIRE RATING,

PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES, OTHER THAN SPRINKLERS.

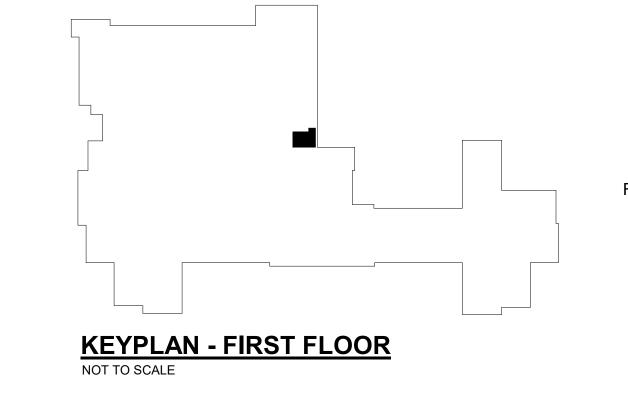
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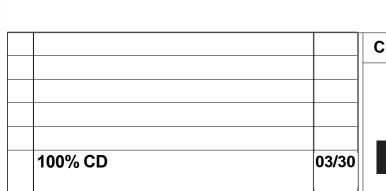
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AND FINISH.

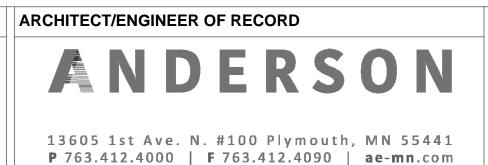
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- 18. CONTRACTOR TO COORDINATE SCHEDULE OF ANY NOISE-PRODUCING WORK SCOPE WITH COR NOT LESS THAN 10 DAYS PRIOR TO COMMENCING THIS WORK.
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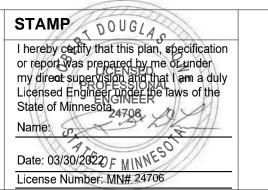


REVISION





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BUILDING No

VA MEDICAL CENTER

RDL JCL

SPRINKLERED





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1. EXISTING HEATCRAFT MODEL FCB55M ACCU AND ASSOCIATED REFRIGERANT PIPING TO BE RELOCATED. SEE SHEET 01-M202 FOR UNIT'S NEW LOCATION.

ELECT.

A216

SCHEDULING

ROOM

ROOM

C2A1

CONSULT

227

SECOND FLOOR DEMOLITION - MECHANICAL - TELECOM A200

MECHANICAL GENERAL NOTES:

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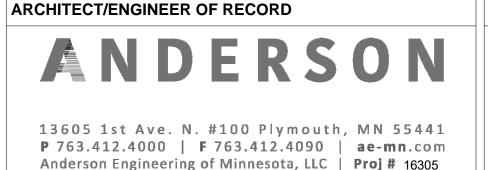
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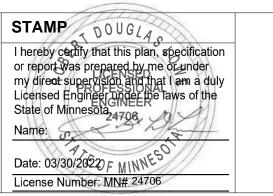
KEYPLAN - SECOND FLOOR
NOT TO SCALE

100% CD 03/30

REVISION











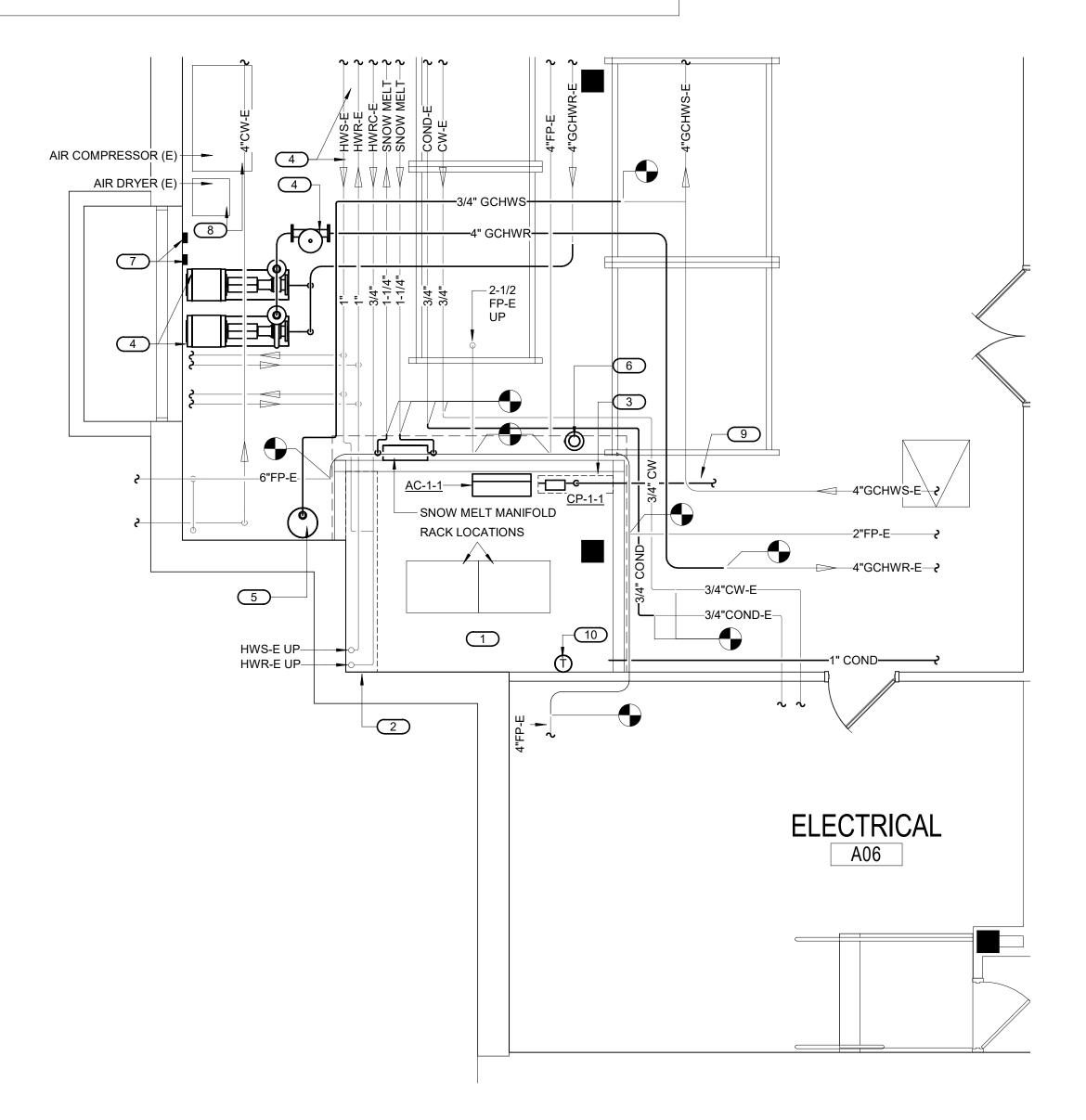
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SPRINKLERED





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BASEMENT FLOOR - MECHANICAL - TELECOM A05C



- REFERE TO SHEET PHOTOS FOR EXISTING CONDITIONS FIELD COORDINATE DEMOLITION WORK AS REQUIRED.
- 2. PAN EXISTING HEATING WATER PIPING TO REMAIN IN THIS AREA.
- 3. PAN COOLING UNIT CONDENSATE PIPING IN THIS AREA.
- 4. RELCOCATED CHILLED WATER PUMPS
- 5. RELOCATED EXPANSION TANK
- 6. RELOCATED POT FEEDER
- 7. RELOCATED PRESSURE SWITCHES
- 8. RELOCATED AIR COMPRESSOR AND AIR DRYER
- 9. ROUTE CP-1 PIPING TO NEAREST FLOOR DRAIN.
- 10. NEW THERMOSTAT. INTERFACT TO SERVE AC1-1.

KEYED NOTES 2/01-M200:

1. CAP DUCT IN THIS LOCATION

MECH

- 2. NEW WALL MOUNTED DUCTLESS COOLING UNIT AC-1-3.
- 3. ROUTE NEW REFRIGERANT PIPE UP TO NEW CU LOCATED ON ROOF. SEE SHEET 01-M204 FOR CONTINUATION.

#

- 4. NEW HYDRONIC CABINET UNIT HEATER CUH-1.
- 5. CONNECT NEW 3/4" HWS & HWR TO EXISTING.
- 6. NEW THERMOSTAT. INTERFACE TO SERVE BOTH AC-1-3 AND CUH-1.
- 7. ROUTE NEW CONDENSATE PIPING FOR AC 1-3 TO NEAREST FLOOR DRAIN IN MECHANICAL ROOM 50 - FIELD COORDINATE EXACT ROUTING.
- 8. PROVIDE CONDENSATE PAN FOR ALL CONDENSATE PIPING.
- 9. EXTEND FIRE SPRINKLER BRANCH LINES AND PROVIDE NEW SPRINKLER HEADS.
- 10. PAN COOLING UNIT CONDENSATE PIPING IN THIS AREA.

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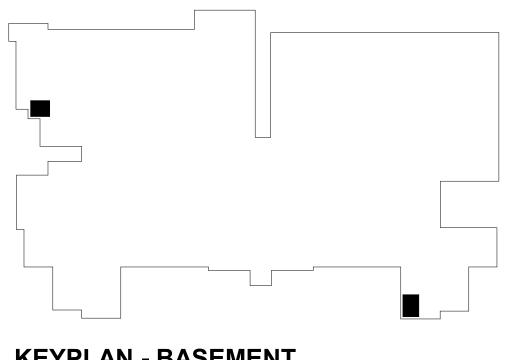
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- 13. EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY AMONG DIFFERENT MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PADS, PIPING, DUCTWORK, ETC.
- 14. DO NOT BLOCK TUBE PULL OR EQUIPMENT SERVICE CLEARANCES.
- 15. MAINTAIN MINIMUM 3'-6" CLEARANCE IN FRONT OF ALL ELECTRICAL PANELS, MOTOR STARTERS, SWITCHES, AND DISCONNECTS.
- 16. PROVIDE CONCRETE EQUIPMENT PAD FOR ALL FLOOR MOUNTED EQUIPMENT. PAD SHALL EXTEND MINIMUM 6" BEYOND ALL SIDES OF EQUIPMENT.
- 17. DO NOT SUPPORT EQUIPMENT, PIPING, OR DUCTWORK FROM METAL DECKING OR OTHER NON-STRUCTURAL BUILDING ELEMENTS. ANCHORS EMBEDDED IN CONCRETE SHALL BE CRACKED CONCRETE APPROVED IN ACCORDANCE WITH SPECIFICATIONS.
- 18. CONTRACTOR TO COORDINATE SCHEDULE OF ANY NOISE-PRODUCING WORK SCOPE WITH COR NOT LESS THAN 10 DAYS PRIOR TO COMMENCING THIS WORK.
- 19. ALL CARTS, EQUIPMENT, MATERIALS AND TOOLS AS WELL AS ALL TOOL BAGS/BOXES AND LADDERS, ARE TO BE LABELED CLEARLY IDENTIFYING, THE CONTRACTOR/ SUBCONTRACTOR NAME AND
- 20. STORAGE OF ALL TOOLS, EQUIPMENT, AND MATERIALS IS ONLY AUTHORIZED IN APPROVED

MECHANICAL RENOVATION NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE

PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL.

- 1. EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD SURVEYS, EXISTING BUILDING DOCUMENTS, AND STAFF. VERIFY EXISTING CONDITIONS AND REPORT ANY CONFLICTS BEFORE PROCEEDING.
- 2. NOT ALL EXISTING DUCTWORK AND PIPING IS SHOWN. VERIFY EXISTING CONDITIONS BEFORE STARTING WORK. NOTIFY COR AND ENGINEER OF ANY CONFLICTS WITH NEW WORK.
- 3. FIELD VERIFY THE AVAILABLE CLEARANCES FOR DUCTWORK AND PIPING BEFORE FABRICATION. RISES AND DROPS MAY BE NECESSARY BECAUSE OF EXISTING FIELD CONDITIONS.
- 4. EACH CONTRACTOR SHALL FIELD VERIFY ACCESSIBILITY TO THE AREA OF HIS/HER WORK AND SHALL NOTIFY THE GENERAL COR AND ENGINEER PRIOR TO BIDDING IF OTHER UTILITIES ARE REQUIRED TO BE REMOVED OR RELOCATED TO ALLOW ACCESS TO HIS/HER AREA OF WORK.
- 5. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CUTTING, REMOVAL AND PATCHING OF ROOFS, WALLS, AND FLOORS ASSOCIATED WITH WORK BY ALL CONTRACTORS. CONTRACTORS SHALL NOTIFY THE COR AND ENGINEER OF AFFECTED AREAS PRIOR TO BIDDING.
- 6. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF CEILINGS, CEILING TILES, AND CEILING GRIDS ASSOCIATED WITH AREAS OF WORK BY ALL CONTRACTORS. NOTIFY THE GENERAL CONTRACTOR OF AFFECTED AREAS PRIOR TO BIDDING.
- 7. WHERE EXISTING MECHANICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, PIPING, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING SYSTEMS TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK.
- 8. PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING CONSTRUCTION. MAINTAIN ACCESS TO EXISTING MECHANICAL INSTALLATIONS THAT REMAIN ACTIVE.
- 9. OBTAIN PERMISSION FROM OWNER BEFORE SHUTTING DOWN ANY SYSTEM FOR ANY REASON. MAINTAIN SERVICE TO ALL COMPONENTS THAT ARE TO REMAIN UNTIL NEW SYSTEMS ARE
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KEYPLAN - BASEMENT

BASEMENT FLOOR - MECHANICAL - TELECOM 005F

PROPOSED RACK

LOCATIONS





SNOW MELT MANIFOLD

www.specializedeng.com



CHEMICAL FEED PIPING



GLYCOL CHILLED WATER PIPING (LOOKING SOUTH)



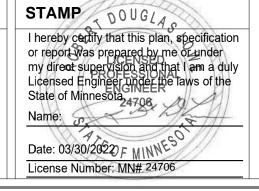


Omaha, NE 68134

100% CD

REVISION

ARCHITECT/ENGINEER OF RECORD ANDERSON 13605 1st Ave. N. #100 Plymouth, MN 55441 P 763.412.4000 | F 763.412.4090 | ae-mn.com Anderson Engineering of Minnesota, LLC | Proj # 16305







RDL JCL

SPRINKLERED

BUILDING No



- . THE HVAC CONTRACTOR SHOULD VISIT THE SITE **PRIOR TO BID** TO FIELD VERIFY ALL EXISTING CONDITIONS WHICH MAY AFFECT THEIR BID. THE FOLLOWING ITEMS SHALL BE VERIFIED:
- A. EXACT PLACEMENT, SIZE, CAPACITY MANUFACTURER AND CONDITION OF ALL EXISTING HVAC EQUIPMENT WITHIN SCOPE OF
- B. SIZE AND LOCATION OF ALL EXISTING DUCTWORK.
- C. SIZE AND LOCATION OF ALL EXISTING GRILLES, REGISTERS AND DIFFUSERS.
- D. SIZE AND LOCATION OF ALL EXISTING THERMOSTATIC CONTROL DEVICES.
- E. SIZE AND LOCATION OF ALL EXISTING PLUMBING AND HYRONIC PIPING.
- 2. ALL REFERENCES ON THESE DRAWINGS TO EXISTING EQUIPMENT, DUCTWORK, DIFFUSERS, THERMOSTATS AND PIPING ARE FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL THESE ITEMS PRIOR TO BID AND INCLUDE IN THEIR BID ANY AND ALL AMOUNTS REQUIRED TO ACCOMMODATE EXISTING CONDITIONS.
- . NO ALLOWANCES WILL BE MADE AFTER THE PROJECT HAS BEEN AWARDED FOR FAILURE TO VERIFY EXISTING CONDITIONS.
- 4. ANY DISCREPANCIES WHICH MAY AFFECT THE CONTRACTORS BID SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND ARCHITECT FOR DIRECTION.

FUSERS.

TWO PLANTS AND PIPMS ARE FOR REPORT TO BIOLOGICAL FOR REPORT TO BIOLOGICAL FOR THE PROPERTY OF THE PR

KEYED NOTES 201-M202:

1. ROUTE NEW REFRIGERANT PPPMG FROM CONDENSING UNIT DOWN TO UNIT APPROXIMATELY 70 FEET OF RUN.

1. ROUTE NEW REFRIGERANT PPPMG FROM CONDENSING UNIT DOWN TO UNIT APPROXIMATELY 70 FEET OF RUN.

2. ROUTE REFRIGERANT PPPMG UP TO ROOF, APPROXIMATELY 45 FEET OF RUN.

3. ROUTE REFRIGERANT PPPMG UP TO ROOF, APPROXIMATELY 45 FEET OF RUN.

4. NEW THERMOSTAL AS COMMON TO BOTH AC UNITS.

5. ROUTE NEW CONDENSATE PPMG OF DRIVAC-4. TO MOS SHIK IN HAC A KIB APPROXIMATELY 45 FEET WEST. RIELD COORDINATE EXACT ROUTING.

6. PROVIDE CONDENSATE PAN FOR ALL CONDENSATE PIPMG IN TR ROOM.

STAIR
AS1

EXAM
A115

EXAM
CORRIDOR
C0-6

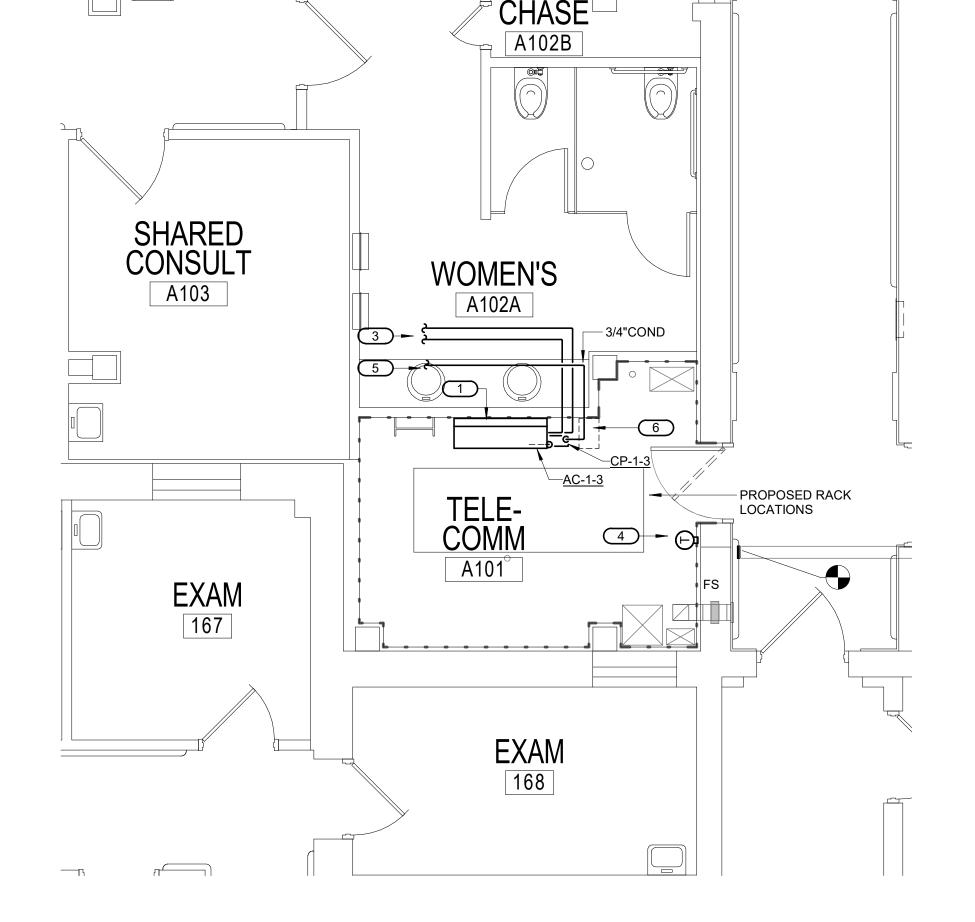
C1-1

CORRIDOR
C1-1

FIRST FLOOR - MECHANICAL - TELECOM A05C - CONDENSING UNITS

1/4" = 1'-0"

0 2' 4' 8'



FIRST FLOOR - MECHANICAL - TELECOM A101

0 2' 4' 8'

MECHANICAL GENERAL NOTES:

- THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL.
- 1. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, DUCTWORK, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT ALWAYS REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT.
- 2. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES.
- 3. COORDINATE ALL WORK WITH ALL OTHER TRADES AND COR PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES FOR ALL TRADES. BRING ANY INTERFERENCES OR CONFLICTS TO THE ATTENTION OF THE COR AND THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OR EQUIPMENT ORDERS.
- 4. REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER ACCESS. FINAL LOCATIONS TO BE ACCURATELY DESCRIBED IN AS-BUILTS.
- 5. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST, TIME OR EXPENSE
- 6. EACH CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ELECTRICAL CHANGES
- REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF DESIGN.

 7. REFER TO CONTRACT DOCUMENTS, TO INCLUDE, BUT TO LIMITED TO, THE ARCHITECTURAL
- REFLECTED CEILING PLAN, ELECTRICAL, TECHNOLOGY AUDIO/VISUAL, AND OTHER MECHANICAL PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES, OTHER THAN SPRINKLERS.
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- 9. IN AREAS WITH DRYWALL CEILINGS COORDINATE LOCATIONS OF ACCESS PANELS WITH THE COR FOR ACCESS TO VALVES, DUCTWORK ACCESSORIES, DAMPERS, ETC. COORDINATE PANEL TYPE AND COLOR WITH ARCHITECT. NOTIFY THE COR OF THE REQUIRED ACCESS PANELS PRIOR TO BIDDING.
- FOR OUTDOOR USE.

 11. CAULK ALL PIPE AND DUCT PENETRATIONS OF FULL HEIGHT NON-FIRE RATED WALL, PARTITION, FLOOR, AND ROOF ASSEMBLIES, BOTH NEW AND EXISTING. THIS IS ESSENTIAL TO PREVENT NOISE

10. SEAL ALL FLOOR AND WALL, PENETRATIONS AIRTIGHT WHERE CONDUITS, PIPING, AND DUCTS PENETRATE, BOTH NEW AND EXISTING. PENETRATIONS THROUGH EXTERIOR WALLS AND ROOF SHALL BE SEALED AIRTIGHT WITH WATERPROOFING MATERIALS RECOMMENDED BY MANUFACTURER

- TRANSMISSION FROM ONE ROOM TO ANOTHER AND TO PROVIDE THE DESIRED NC LEVELS WITHIN ROOMS.

 12. WHERE PIPES AND DUCTS ARE SHOWN TO PENETRATE FLOORS, PROVIDE SLEEVED OPENINGS WITH
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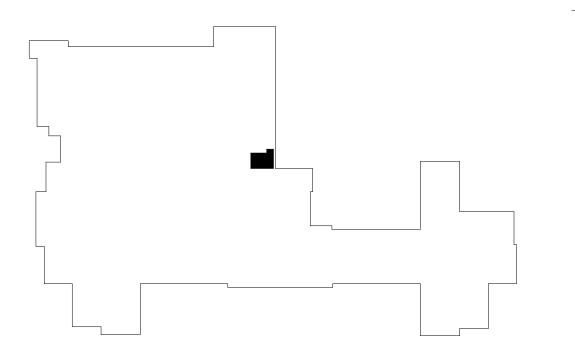
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- 7. WHERE EXISTING MECHANICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, PIPING, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING SYSTEMS TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK.
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KEYPLAN - FIRST FLOOR

100% CD 03/30

REVISION

SPECIALIZED ENGINEERING SOLUTIONS

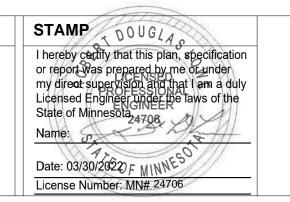
10360 Ellison Circle Omaha, NE 68134

Phone: 402,991.5520 www.specializedeng.com

ARCHITECT/ENGINEER OF RECORD

AND ERSON

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Anderson Engineering of Minnesota, LLC | Proj # 16305



FIRST FLOOR REMODEL -MECHANICAL EHRM INFRASTRUCTUR 03/30/2022
UPGRADES

RDL JCL

SPRINKLERED

BUILDING No

VA MEDICAL CENTER

1-235 **A**



- A. EXACT PLACEMENT, SIZE, CAPACITY MANUFACTURER AND CONDITION OF ALL EXISTING HVAC EQUIPMENT WITHIN SCOPE OF WORK, WHETHER EXPLICITY SHOWN OR NOT.
- SIZE AND LOCATION OF ALL EXISTING DUCTWORK.
- SIZE AND LOCATION OF ALL EXISTING GRILLES, REGISTERS AND DIFFUSERS.
- D. SIZE AND LOCATION OF ALL EXISTING THERMOSTATIC CONTROL DEVICES.
- E. SIZE AND LOCATION OF ALL EXISTING PLUMBING AND HYRONIC PIPING.
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- 4. ANY DISCREPANCIES WHICH MAY AFFECT THE CONTRACTORS BID SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND ARCHITECT FOR DIRECTION.

KEYED NOTES 1/01-M202:

- # 1. RELOCATED EXISTING ROOF MOUNTED ACCU.
- 2. NEW WALL-MOUNTED DUCTLESS COOLING UNIT AC-1-6
- 3. NEW WALL-MOUNTED DUCTLESS COOLING UNIT AC-1-7
- 4. ROUTE REFRIGERANT PIPING UP TO ROOF SEE SHEET 01-M204 FOR CONTINUATION.
- 5. NEW CABINET UNIT HEATER CUH-2.

SECOND FLOOR - MECHANICAL - TELECOM A200

<u>СР-1-5</u>

__ 3/4" COND

PROPOSED RACK

LOCATIONS

- 6. NEW 3/4" HWS/R PIPING. ROUTE PIPING APPROXIMATELY 75 FEET NORTH AND CONNECT TO EXISTING HWS AND HWR MAINS. PROVIDE BRANCH LINE ISOLATION VALVES AND BALANCING VALVES. FIELD VERIFY EXACT LOCATION.

SCHEDULING

CONSULT

- 8. NEW FIRE PROTECTION SPRINKLER HEAD. EXTEND NEW BRANCH LINE OFF EXISTING MAIN. FIELD VERIFY EXACT LOCATION.
- 9. ROUTE NEW CONDENSATE PIPING FOR AC-1-6 AND AC-1-7 TO NEAREST FLOOR DRAIN. FIELD COORDINATE EXACT ROUTING.
- 10. PROVIDE CONDENSATE PAN FOR ALL CONDENSATE PIPING.

FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT. 2. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES. 3. COORDINATE ALL WORK WITH ALL OTHER TRADES AND COR PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-7. NEW THERMOSTAT. WIRE AS COMMON TO BOTH AC UNITS AND CUH-2. INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES FOR ALL TRADES. BRING ANY INTERFERENCES OR CONFLICTS TO THE ATTENTION OF THE COR AND THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OR EQUIPMENT 4. REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER ACCESS. FINAL LOCATIONS TO BE ACCURATELY DESCRIBED IN AS-BUILTS.

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COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST, TIME OR EXPENSE

- 9. IN AREAS WITH DRYWALL CEILINGS COORDINATE LOCATIONS OF ACCESS PANELS WITH THE COR FOR ACCESS TO VALVES, DUCTWORK ACCESSORIES, DAMPERS, ETC. COORDINATE PANEL TYPE AND COLOR WITH ARCHITECT. NOTIFY THE COR OF THE REQUIRED ACCESS PANELS PRIOR TO BIDDING.
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- 11. CAULK ALL PIPE AND DUCT PENETRATIONS OF FULL HEIGHT NON-FIRE RATED WALL, PARTITION, FLOOR, AND ROOF ASSEMBLIES, BOTH NEW AND EXISTING. THIS IS ESSENTIAL TO PREVENT NOISE TRANSMISSION FROM ONE ROOM TO ANOTHER AND TO PROVIDE THE DESIRED NC LEVELS WITHIN
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15. MAINTAIN MINIMUM 3'-6" CLEARANCE IN FRONT OF ALL ELECTRICAL PANELS, MOTOR STARTERS,

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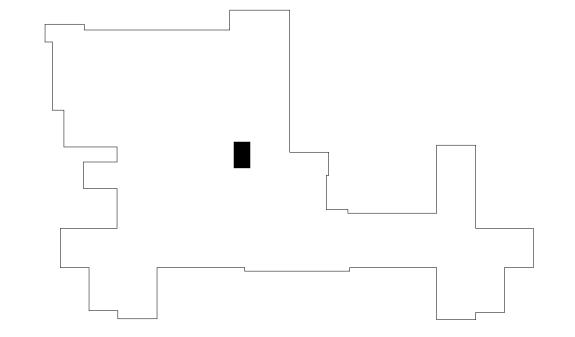
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- SWITCHES, AND DISCONNECTS. 16. PROVIDE CONCRETE EQUIPMENT PAD FOR ALL FLOOR MOUNTED EQUIPMENT. PAD SHALL EXTEND
- 17. DO NOT SUPPORT EQUIPMENT, PIPING, OR DUCTWORK FROM METAL DECKING OR OTHER NON-STRUCTURAL BUILDING ELEMENTS. ANCHORS EMBEDDED IN CONCRETE SHALL BE CRACKED CONCRETE APPROVED IN ACCORDANCE WITH SPECIFICATIONS.
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- 5. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CUTTING, REMOVAL AND PATCHING OF ROOFS. WALLS, AND FLOORS ASSOCIATED WITH WORK BY ALL CONTRACTORS. CONTRACTORS SHALL NOTIFY THE COR AND ENGINEER OF AFFECTED AREAS PRIOR TO BIDDING.
- 6. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF CEILINGS, CEILING TILES, AND CEILING GRIDS ASSOCIATED WITH AREAS OF WORK BY ALL CONTRACTORS. NOTIFY THE GENERAL CONTRACTOR OF AFFECTED AREAS PRIOR TO BIDDING.
- 7. WHERE EXISTING MECHANICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, PIPING, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING SYSTEMS TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK.
- 8. PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING CONSTRUCTION. MAINTAIN ACCESS TO EXISTING MECHANICAL INSTALLATIONS THAT REMAIN ACTIVE.
- 9. OBTAIN PERMISSION FROM OWNER BEFORE SHUTTING DOWN ANY SYSTEM FOR ANY REASON. MAINTAIN SERVICE TO ALL COMPONENTS THAT ARE TO REMAIN UNTIL NEW SYSTEMS ARE
- 10. MAINTAIN EXISTING SYSTEM IN SERVICE UNTIL NEW SYSTEM IS COMPLETE AND READY FOR TIE IN AND SWITCHOVER. DRAIN SYSTEM ONLY TO MAKE SWITCHOVERS AND CONNECTIONS. OBTAIN PERMISSION FROM OWNER BEFORE PARTIALLY OR COMPLETELY DRAINING SYSTEM. MAKE CHANGEOVER TO NEW SYSTEMS WITH MINIMUM OUTAGE.

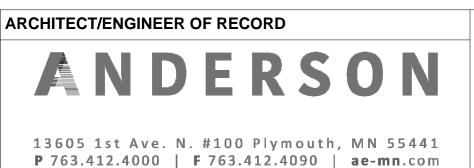


KEYPLAN - SECOND FLOOR

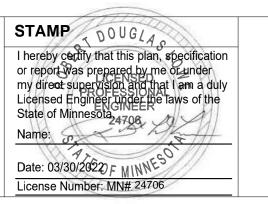
CONSULTANT 100% CD

REVISION





Anderson Engineering of Minnesota, LLC | Proj # 16305

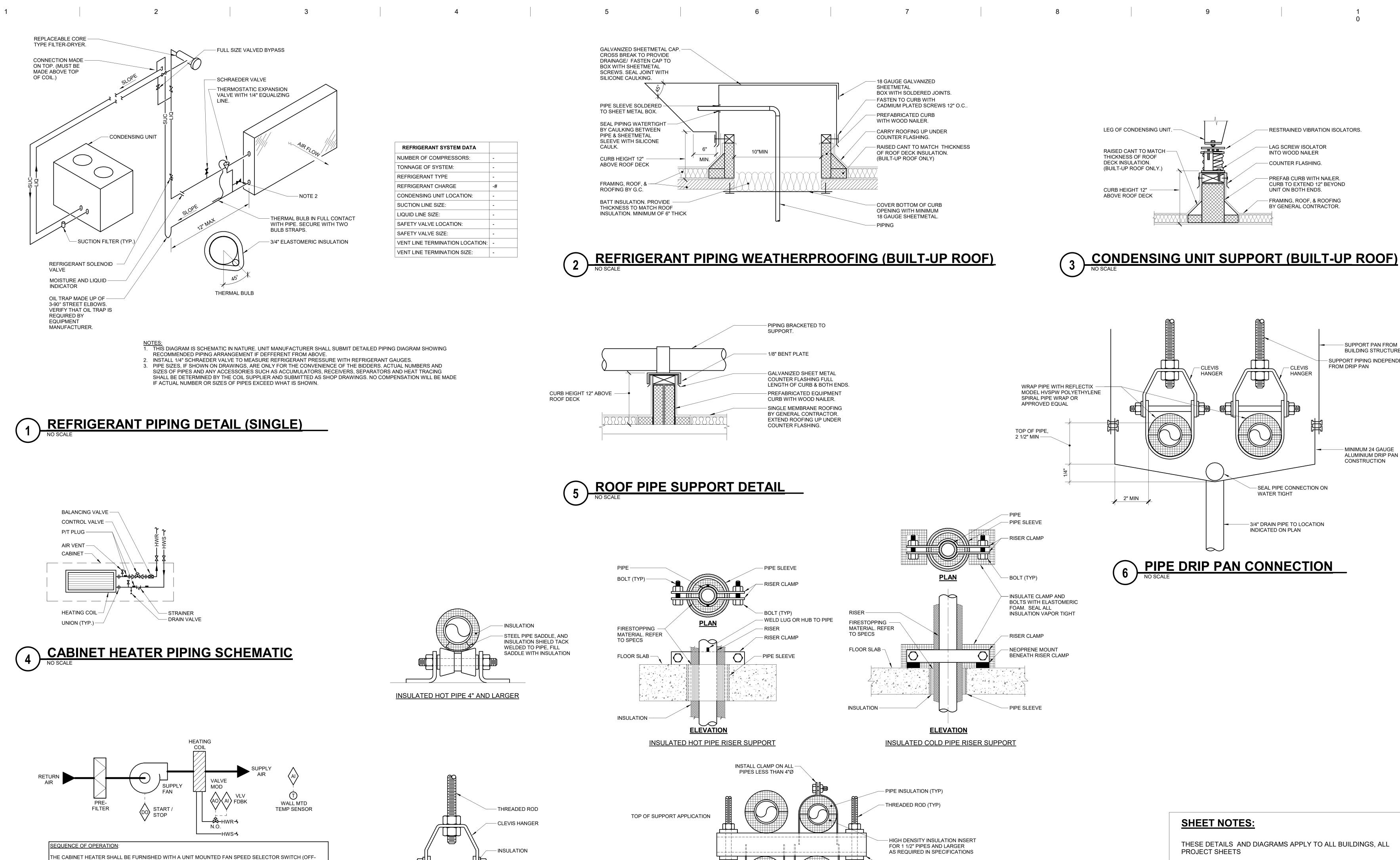


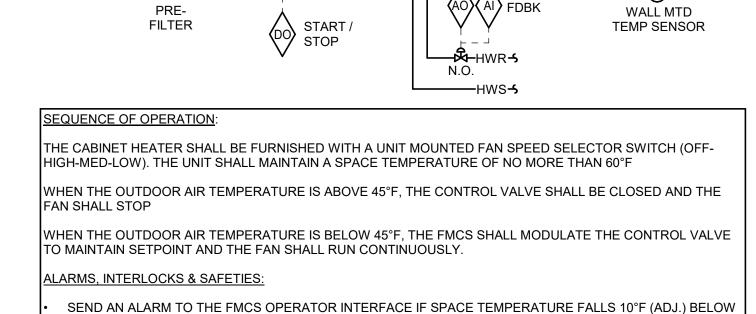


EHRM INFRASTRUCTURE 03/30/2022

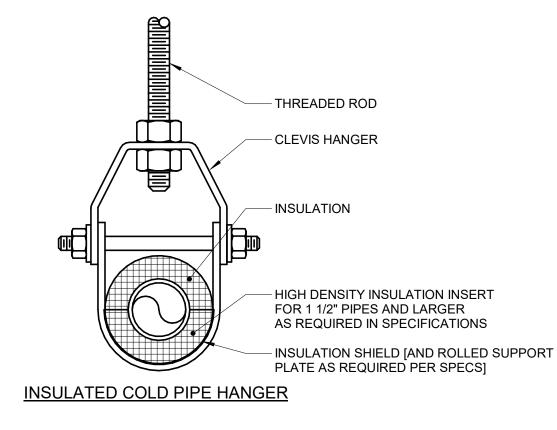


BUILDING No RDL JCL VA MEDICAL CENTER SPRINKLERED

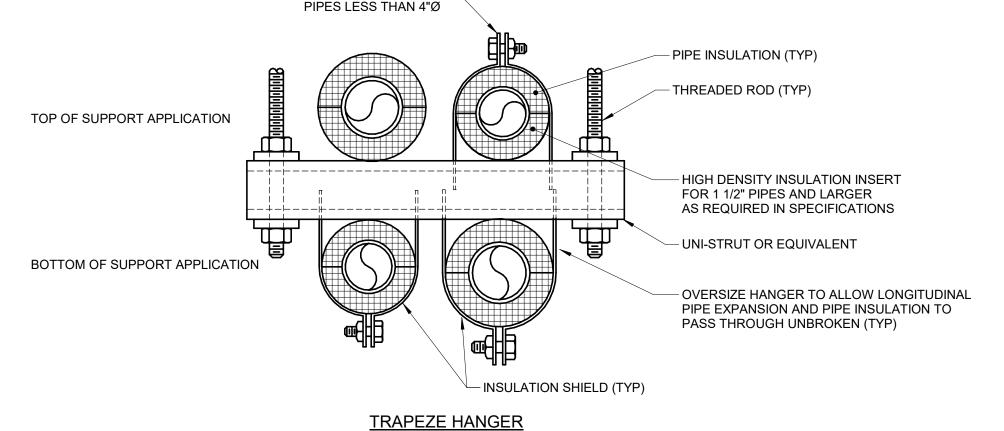




CABINET HEATER CONTROL - HYDRONIC

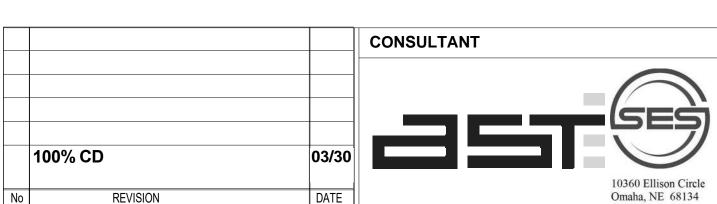


NOTES: 1. REFER TO SPECIFICATION SECTIONS (SECTION 22 05 29-PLUMBING, SECTION 23 05 29-HVAC) & (SECTION 22 07 19-PLUMBING, SECTION 23 07 19-HVAC).



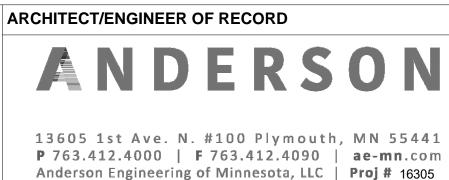
THESE DETAILS AND DIAGRAMS APPLY TO ALL BUILDINGS, ALL

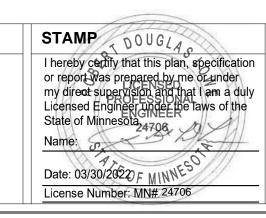




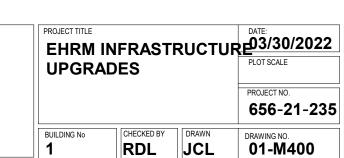


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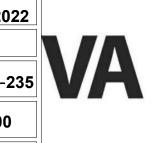






SPRINKLERED

VA MEDICAL CENTER





- SUPPORT PAN FROM

SUPPORT PIPING INDEPENDENT

- MINIMUM 24 GAUGE ALUMINIUM DRIP PAN CONSTRUCTION

FROM DRIP PAN

BUILDING STRUCTURE

5 9

PKA-A18LA

PKA-A18LA

PKA-A18LA

19.8

CABIN	IET HEATER SC	CHEDULE - HO	OT WAT	ER																					
OTES: .COORDIN.	ATE COLOR SELECTION WITH	I ARCHITECT.																							
										CA	BINET (NOTE 1)					ELECTRICAL	ı			٧	VEIGHT			
													FAN				DISC	ONNECT	CONTROLL	ER/ STARTER					
			NOMINAL					MAX W.P.D.					POWER												
TAG NAME	AREA SERVED	CONFIGURATION	CFM	MBH	GPM	EWT °	F LWT °F	FT. HD	TYPE	HEIGHT	WIDTH	DEPTH	(WATTS)	RPM	VOLTAGE	PHASES	BY	TYPE	BY	SCCR (AMPS)	DRY	OPERATING	MANUFACTURER	MODEL	NOTES
CUH-1	TELECOM 005F (BLDG -1)	VERTICAL SLOPE TOP	150	10.5	0.5	180	135	1.59	CS - T-STAT	29"	33"	10"	31	787	115	1	Е	FUSED	М	5000	84	97	TRANE	FFJB020	
CUH-2	TELECOM A200 (BLDG -1)	VERTICAL SLOPE TOP	150	10.5	0.5	180	135	1.59	CS - T-STAT	29"	33"	10"	31	787	115	1	Е	FUSED	М	5000	84	97	TRANE	FFJB020	
CUH-3	TELECOM 114B (BLDG -5)	VERTICAL SLOPE TOP	150	10.5	0.5	180	135	1.59	CS - T-STAT	29"	33"	10"	31	787	115	1	E	FUSED	М	5000	84	97	TRANE	FFJB020	
CUH-4	TELECOM 116 (BLDG -8)	VERTICAL SLOPE TOP	150	10.5	0.5	180	135	1.59	CS - T-STAT	29"	33"	10"	31	787	115	1	Е	FUSED	М	5000	84	97	TRANE	FFJB020	
CUH-5	TELECOM 100B (BLDG -8)	VERTICAL SLOPE TOP	150	10.5	0.5	180	135	1 59	CS - T-STAT	29"	33"	10"	31	787	115	1	F	FUSED	M	5000	84	97	TRANE	FFJB020	

.PROVID	SHAFT GROUNDING AS REQUIRED IN	THE MOTO	R SPECIFICATIO	ON[151	170] [22 05 13] [[23 05 13].												
							E	LECTRICAL (N				M	IAX. DIMENSION	IS				
			PUMP FT.					DISCO	NNECT	CONTROLL	ER/ STARTER							
TAG NAME	AREA SERVED / UNIT SERVED	GPH	HEAD AT DESIGN	INLET SIZE	HP (NOTE E)	VOLTAGE	PHASES	BY (NOTE A)	TYPE (NOTE B)	BY (NOTE A)	TYPE (NOTE C)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	WEIGHT(LB)	MANUFACTURER	MODEL	NOTES
CP-1-1	TELECOM A05C (BLDG -1) / AC-1-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-1-2	TELECOM 005F (BLDG -1) / AC-1-3	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-1-3	TELECOM A101 (BLDG -1) / AC-1-4	60.0	10.00	1"	0.04	120	1	E	FUSED	М	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-1-3	TELECOM 005F (BLDG -1) / AC-1-3	60.0	10.00	1"	0.04	120	1	E	FUSED	М	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-1-4	TELECOM A200 (BLDG -1) / AC-1-6	60.0	10.00	1"	0.04	120	1	E	FUSED	М	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-1-5	TELECOM A200 (BLDG -1) / AC-1-7	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-2-1	TELECOM 001A (BLDG -2) / AC-2-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-3-1	IT 109 (BLDG -3) / AC-3-1	60.0	10.00	1"	0.04	120	1	Е	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-3-2	TELECOM 205E (BLDG -3) / AC-3-2	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-4-1	TELECOM 123B (BLDG -4) / AC-4-1	60.0	10.00	1"	0.04	120	1	E	FUSED	М	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-5-1	TELECOM 116 (BLDG -5) / AC-5-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-7-1	TELECOM 102A (BLDG -7) / AC-7-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-8-1	TELECOM 116 (BLDG -8) / AC-8-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-9-1	TELECOM 100B (BLDG -9) / AC-9-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-10-1	TELECOM 012B (BLDG -10) / AC-10-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-11-1	TELECOM C00A (BLDG -11) / AC-11-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-14-1	IT 101A (BLDG -14) / AC-14-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-28-1	TELECOM 066A (BLDG -28) / AC-28-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-28-2	TELECOM 003A (BLDG -28) / AC-28-2	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
P-29-1	TELECOM 015 (BLDG -29) / AC-29-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
P-29-2	TELECOM 144 (BLDG -29) / AC-29-2	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-48-1	TELECOM 123 (BLDG -48) / AC-48-1	60.0	10.00	1"	0.04	120	1	E	FUSED	М	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-48-2	TELECOM 221 (BLDG -48) / AC-48-2	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-49-1	TELECOM 001 (BLDG -49) / AC-49-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-50-1	TELECOM 020 (BLDG -50) / AC-50-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-51-1	TELECOM 001 (BLDG -51) / AC-51-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
P-109-1	TELECO 101 (BLDG -109) / AC-109-1	60.0	10.00	1"	0.04	120	1	Е	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
P-115-1	TELECOM 107 (BLDG -115) / AC-115-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-116-1	TELECOM 111 (BLDG -116) / AC-116-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
CP-118-1	TELECOM 005 (BLDG-118) / AC-118-1	60.0	10.00	1"	0.04	120	1	E	FUSED	M	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	
P-118-2	TELECOM 115 (BLDG -118) / AC-118-2	60.0	10.00	1"	0.04	120	1	E	FUSED	М	AUTO	10.2	5.1	6.8	5	LITTLE GIANT	VCMX-20ULS-C	

SHEET NOTES:

FUSED

FUSED

FUSED

PUY-A18NKA7

PUY-A18NKA7

PUY-A18NKA7

5000

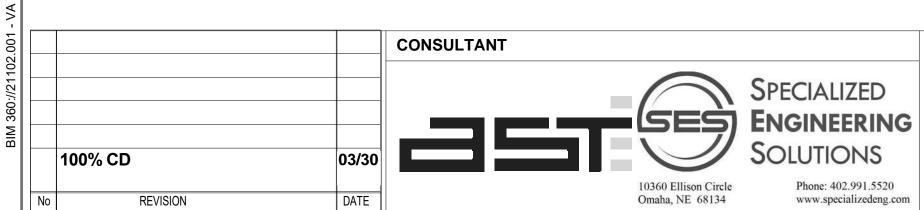
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THESE SCHEDULES APPLY TO ALL BUILDINGS, ALL PROJECT SHEETS



AC-116-1

AC-118-1

TELECOM 111 (BLDG -116)

TELECOM 005 (BLDG -118)

TELECOM 115 (BLDG -118)

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215 1.0 15

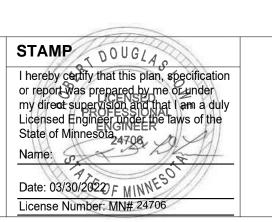
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ARCHITECT/ENGINEER OF RECORD

ANDERSON

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P 763.412.4000 | F 763.412.4090 | ae-mn.com

Anderson Engineering of Minnesota, LLC | Proj # 16305





PROJECT TITLE

EHRM INFRASTRUCTURE 03/30/2022

PLOT SCALE

PROJECT NO. 656 21, 235

RDL JCL

FULLY SPRINKLERED

BUILDING No

VA MEDICAL CENTER ST.CLOUD, MN 56303 1-235 00

