

THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

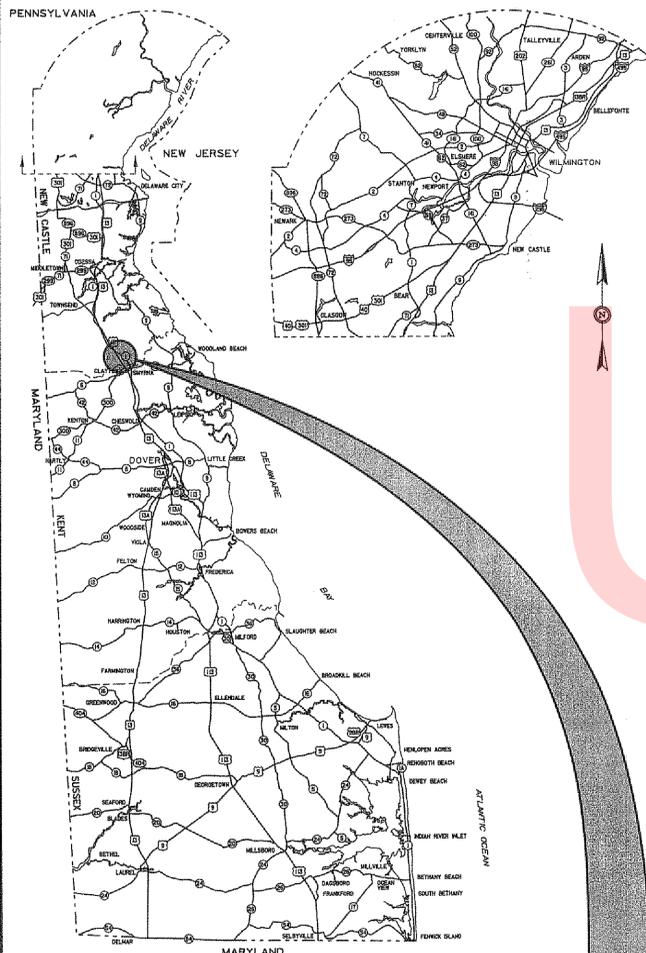
U.S. CUSTOMARY
UNITS



CONSTRUCTION PLANS FOR:
**SMYRNA REST AREA
BATHROOM RENOVATIONS**

CONTRACT NUMBER: T201680108
FEDERAL AID PROJECT NUMBER: N/A

COUNTY: NEW CASTLE M.R. #: NA



GENERAL LOCATION OF CONTRACT



PREPARED BY
THE CONSULTING FIRM OF



Whitman, Reardon & Associates, LLP
801 South Caroline Street, Baltimore, Maryland 21231



Paul Edwards
RECOMMENDED DATE: 3/23/2016

Dylan Fu
RECOMMENDED DATE: 3/23/2016

RECOMMENDED

S. Torrey
MAINTENANCE ENGINEER DATE: 7/15/16

[Signature]
DISTRICT ENGINEER DATE: 7/6/16

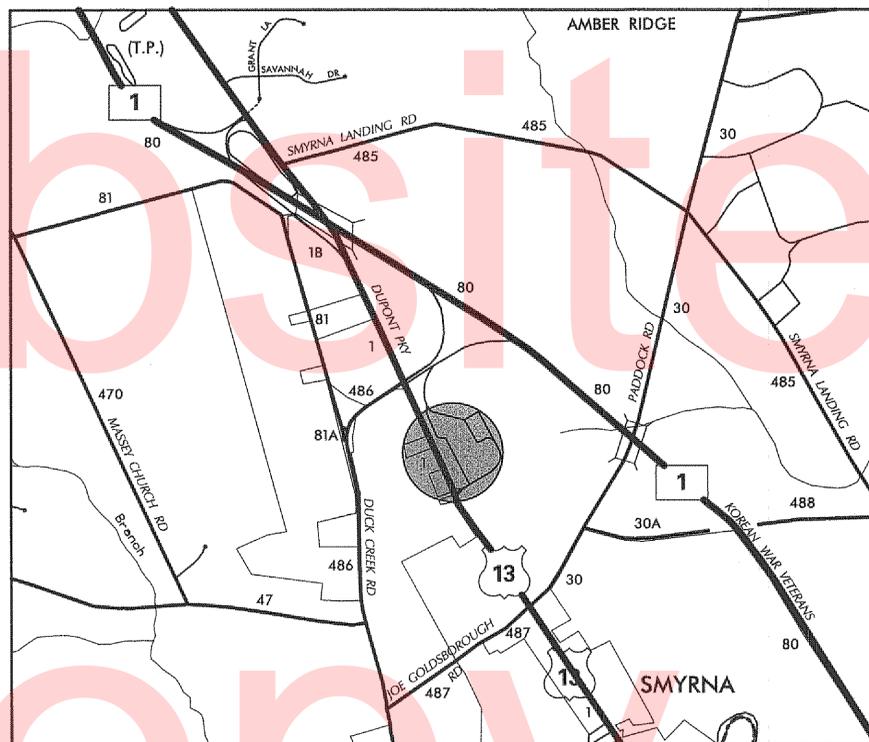
Edwin [Signature]
STATEWIDE SUPPORT SERVICES ENGINEER DATE: 7/6/16

[Signature]
ASSISTANT DIRECTOR STATEWIDE SUPPORT SERVICES DATE: 7/6/16

[Signature]
DIRECTOR, MAINTENANCE & OPERATIONS DATE: 7/7/17

PROJECT NOTES

- NO UTILITY RELOCATION INVOLVEMENT IS ANTICIPATED. SHOULD ANY CONFLICTS BE ENCOUNTERED DURING CONSTRUCTION REQUIRING ADJUSTMENT AND/OR RELOCATION OF THE AGENCIES' EXISTING FACILITIES, THE NECESSARY RELOCATION WORK SHALL BE ACCOMPLISHED BY THE RESPECTIVE AGENCIES' FORCES, AS DIRECTED BY THE DISTRICT ENGINEER. ANY ADJUSTMENT AND/OR RELOCATIONS OF MUNICIPALLY OWNED FACILITIES SHALL BE DONE BY THE STATE'S CONTRACTOR IN ACCORDANCE WITH THE RESPECTIVE AGENCIES STANDARD SPECIFICATIONS AS DIRECTED BY THE DISTRICT ENGINEER.
- NO ENVIRONMENTAL PERMITS ARE REQUIRED FOR THIS WORK PROVIDED NO JURISDICTIONAL WETLANDS OR WATERS ARE IMPACTED. IF THERE IS ANY QUESTION AS TO WHETHER OR NOT A WATER OR WETLAND IS JURISDICTIONAL, CONTACT THE DEL DOT ENVIRONMENTAL SECTION AT 302-760-2264.
- IT IS ANTICIPATED THAT ALL WORK WILL OCCUR WITHIN DELDOT'S EXISTING RIGHT OF WAY OR EASEMENT AREAS. SHOULD THE NEED OCCUR TO TRESPASS ONTO PRIVATE PROPERTY, IT WILL BE THE RESPONSIBILITY OF THE PROJECT MANAGER TO SECURE SUCH TRESPASS NEEDS.
- IT IS ANTICIPATED THAT ALL WILL OCCUR WITHIN DELDOT'S RIGHT OF WAY. SHOULD THE NEED OCCUR TO TRESPASS ONTO RAILROAD PROPERTY, INCLUDING THE HIGHWAY-RAIL CROSSING, IT WILL BE THE RESPONSIBILITY OF THE PROJECT MANAGER TO CONTACT THE RAILROAD CHIEF ENGINEER AND OBTAIN WRITTEN AUTHORIZATION BEFORE ENTERING.
- THE PROJECT MANAGER SHALL BE RESPONSIBLE FOR COORDINATION WITH THE TRAFFIC SECTION RELATING TO ANY IMPACTS TO TRAFFIC SECTION FACILITIES (INCLUDING BUT NOT LIMITED TO TRAFFIC LOOPS, JUNCTION WELLS, ETC.) AT LEAST 4 WEEKS IN ADVANCE OF THE START OF THE ACTIVITY. PRIOR TO INITIATING ANY WORK ON THIS CONTRACT (OR SITES), THE PROJECT MANAGER SHALL BE RESPONSIBLE FOR PREPARING AND SUBMITTING A MAINTENANCE OF TRAFFIC PLAN FOR APPROVAL OF THE SAFETY SECTION. SUFFICIENT TIME SHALL BE PROVIDED FOR THE REVIEW AND APPROVAL OF THE PLAN. THE MAINTENANCE OF TRAFFIC PLAN SHALL INCLUDE PROPOSED TIME RESTRICTIONS ON THE CLOSURE OF TRAVEL LANES SUBJECT TO THE APPROVAL OF THE SAFETY SECTION.
- THE PROJECT MANAGER IS RESPONSIBLE FOR ENSURING ANY REQUIRED DOCUMENTS AND ANALYSIS AS PART OF THE ADOPTED WORK ZONE SAFETY AND MOBILITY PROCEDURES AND GUIDELINES HAS BEEN COMPLETED PRIOR TO ANY WORK STARTING ON THIS CONTRACT.

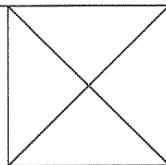


LOCATION MAP
SCALE : N.T.S.

RECOMMENDED
AS TO PROCESS

[Signature]
CHIEF ENGINEER

DATE: 7/7/16



SEAL

DESIGN DESIGNATION

FUNCTIONAL CLASS: N/A	D.H.V. PROJECTED: N/A	YEAR: N/A
TYPE OF CONSTRUCTION: MAINTENANCE	DESIGN SPEED: N/A	
A.A.D.T. CURRENT: N/A	YEAR: N/A	TRUCKS: N/A
A.A.D.T. PROJECTED: N/A	YEAR: N/A	DIRECTION OF DISTRIBUTION: N/A

INDEX OF SHEETS

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3	AD101 - R-113 & R-114 TOILET ROOM FLOOR PLAN - DEMOLITION
4	AD102 - R-105 & R-106 TOILET ROOM FLOOR PLAN - DEMOLITION
5	AD201 - REFLECTED CEILING PLAN - DEMOLITION
6	A101 - R-113 & R-114 TOILET ROOM FLOOR PLAN - NEW WORK
7	A102 - R-105 & R-106 TOILET ROOM FLOOR PLAN - NEW WORK
8	A201 - REFLECTED CEILING PLAN - NEW WORK
9	A801 - SCHEDULES & DETAILS
10	M001 - MECHANICAL LEGEND, ABBREVIATIONS & NOTES
11	MD101 - PARTIAL FIRST FLOOR NORTH WING DEMOLITION
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19	PD101 - PLUMBING PARTIAL FIRST FLOOR DEMOLITION
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27	E-102 - PARTIAL 1ST FLOOR NORTH ELECTRICAL PLAN - DEMOLITION & NEW WORK
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29	E-104 - ELECTRICAL DETAILS

TOTAL SHEETS: 29

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
88-110-09	SMYRNA REST AREA
88-110-17	SMYRNA REST AREA
23-019-02	SMYRNA REST AREA PARKING EXPANSION
24-500-49	SMYRNA REST AREA CONDENSATION REMEDIATION

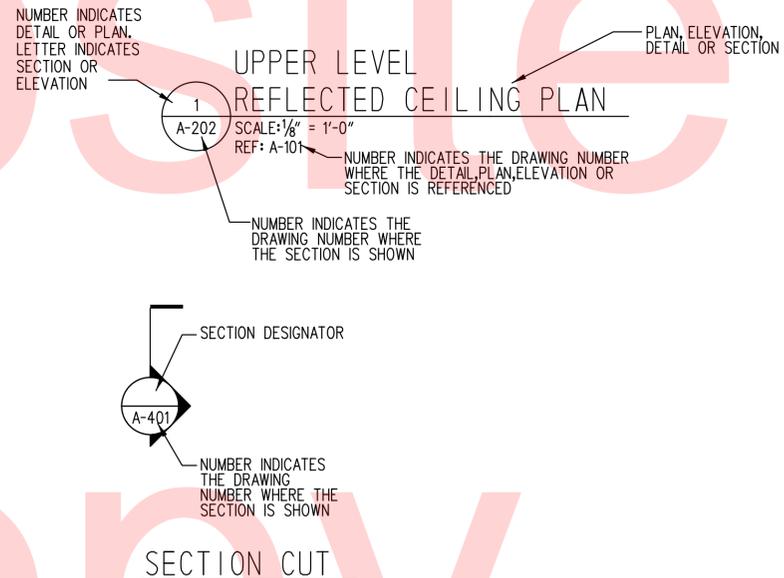
NOTE: CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR THIS PROJECT.

ARCHITECTURAL ABBREVIATIONS

ABV	ABOVE	FE	FIRE EXTINGUISHER ON BRACKET	PAV	PAVER TILE
AC	AIR CONDITIONING (CONDITIONER)	FEC	FIRE EXTINGUISHER CABINET	PC	PIECE/PRECAST CONCRETE
AD	ACCESS DOOR (OR PANEL)	FH	FLAT HEAD	PF	PLASTIC FABRICATION
ADA	AMERICAN WITH DISABILITIES ACT	FIRE T	FIRE TREATED	PL	PLATE
ADD	ADDENDUM	FIN	FINISH OR FINISHED	PLAM	PLASTIC LAMINATE
ADJ	ADJACENT	FIX	FIXTURE	PLAS	PLASTER
AES	ABOVE EXISTING SLAB	FL	FLASHING	PREFAB	PREFABRICATED
AF	ACCESS FLOOR	FLM	FULL LENGTH MIRROR	PRES T	PRESSURE TREATED
AFF	ABOVE FINISHED FLOOR	FLR	FLOOR	PT	PAINT
AHU	AIR HANDLING UNIT	FR	FIRE RATED	PTD	PAPER TOWEL DISPENSER
ALT	ALTERNATE	FRC	FIBER-REINFORCED COATING	PTN	PARTITION
ALUM	ALUMINUM	FS	FOLDING SHELF	PVC	POLYVINYL CHLORIDE
APC	ACOUSTICAL PANEL CEILING (LAY-IN)	FSS	FOLDING SHOWER SEAT	QT	QUARRY TILE
APPROX	APPROXIMATE	FT	FOOT OR FEET	QTY	QUANTITY
ARCH	ARCHITECTURAL	FTG	FOOTING	R	RISER OR RADIUS
ASB	ASBESTOS	FWP	FABRIC-WRAPPED PANEL (FABRICATED; TACKABLE; ACOUSTICAL PANEL)	RB	RESILIENT WALL BASE AND ACCESSORIES (VINYL BASE; RUBBER BASE; TREADS; NOSINGS; EDGINGS)
ASP	ASPHALT	GA	GAUGE	REF	REFERENCE
ATC	ACOUSTICAL TILE CEILING (CONCEALED SUSPENSION)	GALV	GALVANIZED	RD	ROOF DRAIN OR ROUND
AWP	ACOUSTICAL WALL PANEL	GB	GENERAL	REQ'D	REQUIRED
		GL	GLASS	RF	RESILIENT FLOORING (VINYL; RUBBER; VINYL COMPOSITION; SHEET FLOORING)
BB	BULLETIN BOARD (GLASS COVERED)	GLM	GLASS UNIT MASONRY (GLASS BLOCK)	REBAR	REINFORCING BAR
BC	BOTTOM OF CURB	GMU	GLAZED MASONRY UNIT	REINF	REINFORCED OR REINFORCING
BD	BOARD	GRD	GROUND	RESF	RESINOUS FLOORING
BEN	BENCH	GP	GYP SUM PLASTER	REQ	REQUIRED
BETW	BETWEEN	GRT	GROUT	RET	RETURN
BLDG	BUILDING	GVP	GYP SUM VENEER PLASTER	REV	REVISION
BLKG	BLOCKING	GYPBD	GYP SUM BOARD (WALL OR CEILING)	RH	ROBE HOOK
BM	BEAM	GYPBS	GYP SUM BOARD SHAFT-WALL ASSEMBLY	RM	ROOM
BOT	BOTTOM			RO	ROUGH OPENING
BR	BRICK	H	HEAD	RWR	RECESSED WASTE RECEPTACLE
BR/S	BACKER ROD AND SEALANT	HB	HORIZONTAL BLIND	RV	ROOF VENT
		HDW	HARDWARE	RX	REMOVE EXISTING
C	CONDUIT	HM	HOLLOW METAL	S	SILL, SOUTH OR SINGLE
C/C	CENTER TO CENTER	HOR	HORIZONTAL	SC	SPECIAL COATING (OTHER THAN PAINT SYSTEMS)
CB	CHALK BOARD	HP	HIGH POINT	SCH	SCHEDULE OR SCHEDULED
CAB	CABINET	HR	HOUR	SCR	SHOWER CURTAIN ROD
CARP	CARPET	HT	HEIGHT	SD	SOAP DISPENSER OR STORM DRAIN
CARP T	CARPET TILE	HTR	HEATER	SECT	SECTION
CEM	CEMENT	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	SF	SQUARE FOOT
CER	CERAMIC	HW	HOT WATER	SFT	STRUCTURAL FACING TILE
CI	CAST IRON	ID	INSIDE DIAMETER	SH	SHOWER
CG	CORNER GUARD	IN	INCH	SHT	SHEET
CH	CEILING HEIGHT	INSUL	INSULATION	SIM	SIMILAR
CJ	CONTROL JOINT	INT	INTERIOR	SJ	STEEL JOIST
CL	CENTERLINE	INV	INVERT	SND	SANITARY NAPKIN DISPOSAL
CLOS	CLOSET	J	JAMB	SECTIONAL	SECTIONAL OVERHEAD DOOR (STEEL; ALUMINUM; PLASTIC PANEL)
CLG	CEILING	JC	JANITOR'S CLOSET	SP	SPECIFICATION
CLR	CLEAR	JT	JOINT	STAND	STAND PIPE
CMP	CORRUGATED METAL PIPE	KIT	KITCHEN	SQ	SQUARE
CMU	CONCRETE MASONRY UNIT	L	LINTEL	SS	STAINLESS STEEL OR SERVICE SINK
CO	CLEAR OPENING	LAB	LABORATORY	SSM	SOLID SURFACING MATERIAL
COL	COLUMN	LAV	LAVATORY	STAT	STATIONARY
COMP	COMPACTED	LAV T	LAVATORY FLOOR COVERING	STL	STEEL
CONC	CONCRETE	LG	LONG	STRUCT	STRUCTURAL OR STRUCTURE
CONSTR	CONSTRUCTION	LIN	LINOLEUM	SUSP	SUSPENDED
CONT	CONTINUOUS	LLV	LONG LEG VERTICAL	SWR	SURFACE-MOUNTED WASTE RECEPTACLE
CONV	CONVECTOR	LOC	LOCATION	SYS	SYSTEM
CR	COLD ROLLED	LOCK	LOCKER	T	TILE
CSK	COUNTERSUNK	LP	LOW POINT	TOB	TOWEL BAR
CSPE	CHLOROSULFONATED POLYETHYLENE ELASTOMER	LT	LIGHT	T&B	TOP & BOTTOM
CT	CERAMIC TILE	LTG	LIGHTING	T&G	TONGUE & GROOVE
CTR	COUNTER	LV	LOUVER	TC	TOP OF CURB
CW	COLD WATER	M	MIRROR OR MEN	TC D	TOILET SEAT COVER DISPENSER
CX	CONNECT TO EXISTING	MACH	MACHINE	TEL	TELEPHONE
		DEMO	DEMOLITION/DEMOLISH	TER	TERRAZZO
D	DOUBLE	DET	DETAIL	TH	THICK
DEG	DEGREE	DF	DRINKING FOUNTAIN	TO	TOP OF
DIA	DIAMETER	DIA	DIAMETER	TOS	TOP OF STEEL
DIR	DIRECTORY	DN	DOWN	TOW	TOP OF WALL
DN	DOWN	DO	DOOR OPENING	TP	TOILET PARTITION (WATER CLOSET; URINAL; SHOWER; SCREEN)
DO	DOOR OPENING	DR	DOOR	TPD	TOILET PAPER DISPENSER
DR	DOOR	DS	DOWNSPOUT	TR	TREAD
DS	DOWNSPOUT	DWG	DRAWING	TYP	TYPICAL
DWG	DRAWING	E	EAST	U	UNIT
E	EAST	EA	EACH	UNO	UNLESS NOTED OTHERWISE
EA	EACH	EF	EACH FACE	UR	URINAL
EF	EACH FACE	EFS	EXTERIOR FINISH SYSTEM	V	VENT
EFS	EXTERIOR FINISH SYSTEM	EIFS	EXTERIOR INSULATION AND FINISH SYSTEM	VB	VERTICAL BLIND
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM	EJ	EXPANSION JOINT	VDB	VISUAL DISPLAY BOARD (HINGED CONFERENCE UNIT)
EJ	EXPANSION JOINT	EL	ELEVATION	VERT	VERTICAL
EL	ELEVATION	ELEC	ELECTRIC OR ELECTRICAL	VEST	VESTIBULE
ELEC	ELECTRIC OR ELECTRICAL	ELEV	ELEVATOR	VIF	VERIFY IN FIELD
ELEV	ELEVATOR	EM	ENTRY MAT	VP	VAPOR BARRIER
EM	ENTRY MAT	EP	ETHYLENE PROPYLENE-BASED (SINGLE PLY ROOFING)	VS	VERTICAL STANDPIPE
EP	ETHYLENE PROPYLENE-BASED (SINGLE PLY ROOFING)	EPB	ELECTRIC PANEL BOX	W	WOMEN, WIDTH, WEST OR WOVEN
EPB	ELECTRIC PANEL BOX	EPDM	ETHYLENE-PROPYLENE-DIENE MEMBRANE	W/	WITH
EPDM	ETHYLENE-PROPYLENE-DIENE MEMBRANE	EPS	EXPANDED POLYSTYRENE	WC	WATER CLOSET OR WALL COVERING (VINYL OR TEXTILE WALL COVERING; WALL PAPER)
EPS	EXPANDED POLYSTYRENE	EPX	EPOXY	WD	WOOD
EPX	EPOXY	EQ	EQUAL	WH	WEEP HOLE
EQ	EQUAL	EQUIP	EQUIPMENT	WHT	WHITE
EQUIP	EQUIPMENT	EST	ESTIMATE	WO	WINDOW OPENING
EST	ESTIMATE	EUH	ELECTRIC UNIT HEATER	WP	WATERPROOF OR WORKING POINT
EUH	ELECTRIC UNIT HEATER	EW	EACH WAY	WR	WATER RESISTANT OR WASTE RECEPTACLE
EW	EACH WAY	EWCA	ELECTRIC WATER COOLER	WT	WEIGHT
EWCA	ELECTRIC WATER COOLER	EXIST	EXISTING	WWF	WOVEN WIRE FABRIC
EXIST	EXISTING	EXP	EXPANSION OR EXPOSED	YD	YARD
EXP	EXPANSION OR EXPOSED	EXT	EXTERIOR	YR	YEAR
EXT	EXTERIOR	F	FILLER		
F	FILLER	FC	FAN COIL UNIT		
FC	FAN COIL UNIT	FD	FLOOR DRAIN OR FIRE DAMPER		
FD	FLOOR DRAIN OR FIRE DAMPER	FDR	FOLDING DOOR (WOOD OR FABRIC)		
FDR	FOLDING DOOR (WOOD OR FABRIC)				

ARCHITECTURAL LEGEND

	BRICK		DOOR NUMBER SYMBOL
	CONCRETE MASONRY UNITS		LOUVER NUMBER SYMBOL
	STRUCTURAL CLAY UNITS		WINDOW NUMBER SYMBOL
	GYP SUM BOARD PARTITIONS		ROOM NUMBER SYMBOL
	WOOD-FINISH GRADE		WALL/BUILDING SECTION SYMBOL
	WOOD BLOCKING		TITLE AND DETAIL REFERENCE SYMBOL
	RIGID WALL/PERIMETER INSULATION		NUMBER-DRAWING NOTE
	RIGID ROOF INSULATION		REVISION
	BATT INSULATION		NORTH ARROW (CONSTRUCTION NORTH)
	CONCRETE		PARTITION TYPE
	POROUS FILL		
	EARTH		
	METAL PATTERN		



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ADDENDUMS / REVISIONS	

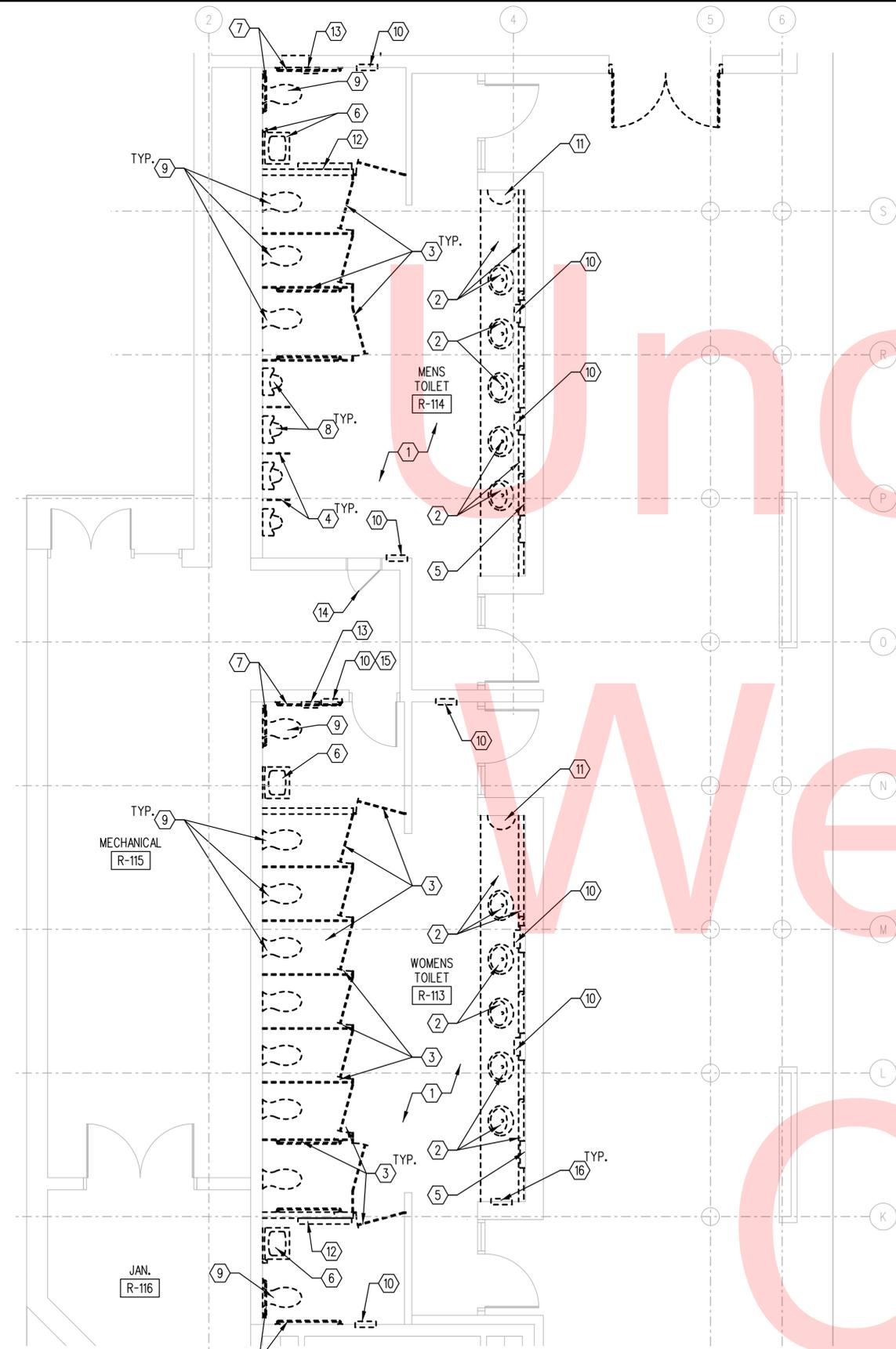
CONTRACT	BRIDGE NO.
T201680108	DESIGNED BY: KM
COUNTY	CHECKED BY: MH
NEW CASTLE	

GENERAL NOTES

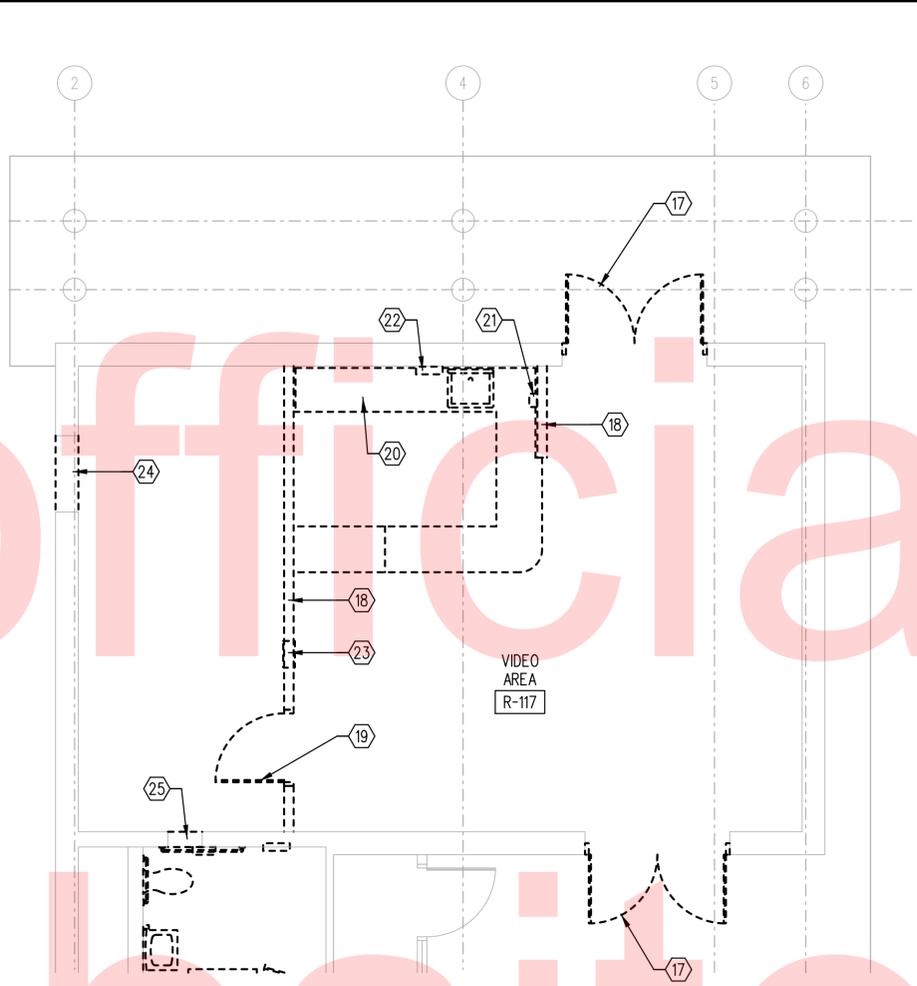
- A. CONTRACTOR SHALL MAINTAIN BUILDING EGRESS THROUGHOUT CONSTRUCTION.
- B. REF. MECH. & ELEC. DEMOLITION DRAWINGS FOR REMOVAL & DISCONNECT OF ELEC. & MECH. DEVICES
- B. REF. PLUMBING DRAWINGS FOR NEW PIPING ROUGH-IN LOCATIONS FROM CMU PIPE CHASE TO RESTROOM

DEMOLITION NOTES

- ① EXISTING TILE FLOORING & WALL BASE TO REMAIN.
- ② REMOVE EXISTING SOLID SURFACE COUNTERTOP, INTEGRAL BOWLS, BACKSPASH, COUNTER SUPPORTS, SENSOR FAUCETS AND SYSTEM COMPONENTS IN ITS ENTIRETY. EXIST. 1-1/2" HORIZ. VENT PIPE, SUPPORT BRACKET & WD BLOCKING TO REMAIN, REF. PLUMBING DEMOLITION DRAWINGS.
- ③ REMOVE EXISTING FLOOR TO CEILING TOILET PARTITION IN ITS ENTIRETY
- ④ REMOVE EXISTING URINAL PARTITIONS
- ⑤ REMOVE EXISTING MIRRORS, SOAP DISPENSERS & ACRYLIC POLYMER PANELS
- ⑥ REMOVE EXISTING WALL MOUNTED SINK, VANITY MIRROR AND SOAP DISPENSER
- ⑦ REMOVE EXISTING GRAB BARS
- ⑧ REMOVE EXISTING URINAL
- ⑨ REMOVE EXISTING WALL MOUNTED AUTO FLUSH TOILET, WALL SENSOR AND SYSTEM COMPONENTS IN ITS ENTIRETY
- ⑩ REMOVE EXIST. ELECTRIC HAND DRYER
- ⑪ REMOVE EXIST. SHELF ABOVE COUNTERTOP
- ⑫ REMOVE EXIST. BABY CHANGING STATION
- ⑬ REMOVE EXIST. JUMBO ROLL TISSUE PAPER DISPENSER
- ⑭ EXIST. ACCESS PANEL TO REMAIN
- ⑮ REMOVE EXIST. SEMI-RECESSED TRASH RECEPTACLE
- ⑯ REMOVE EXIST. SEMI-RECESSED TAMPON DISPENSER
- ⑰ REMOVE EXIST. EXTERIOR ALUM. STOREFRONT FRAME, DOOR & HARDWARE



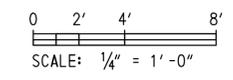
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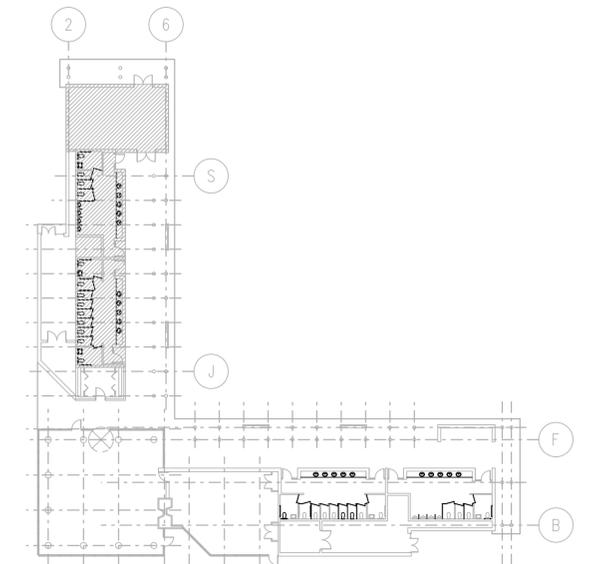
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AD101 SCALE: 1/4" = 1'-0"
REF:

DEMOLITION NOTES CONT'D

- ⑱ REMOVE EXIST GYPBD/METAL STUD PARTITION & VINYL BASE
- ⑲ REMOVE EXIST. WOOD DOOR, FRAME & HARDWARE
- ⑳ REMOVE EXIST. PLAM COUNTERTOP, BASE CABINET, SINK & ASSOCIATED PIPING IN ITS ENTIRETY.
- ㉑ REMOVE WALL MOUNTED PHONE, RETURN TO OWNER
- ㉒ REMOVE WALL MOUNTED PAPER TOWEL DISPENSER & WOOD BLOCK, RETURN TO OWNER
- ㉓ REMOVE RECESSED MAILBOX, RETURN TO OWNER
- ㉔ REMOVE MASONRY VENEER AND CMU BACK-UP WALL. PROVIDE NEW 40"X32" LOUVER OPENING @ 7'-0" AFF./ (TO UNDERSIDE OF EXIST. BOND BEAM) REF. WALL SECTION 4/A801
- ㉕ REMOVE CMU TO PROVIDE NEW DUCT OPENING ABOVE FINISH CEILING REF. MECHANICAL DRAWINGS



KEY PLAN

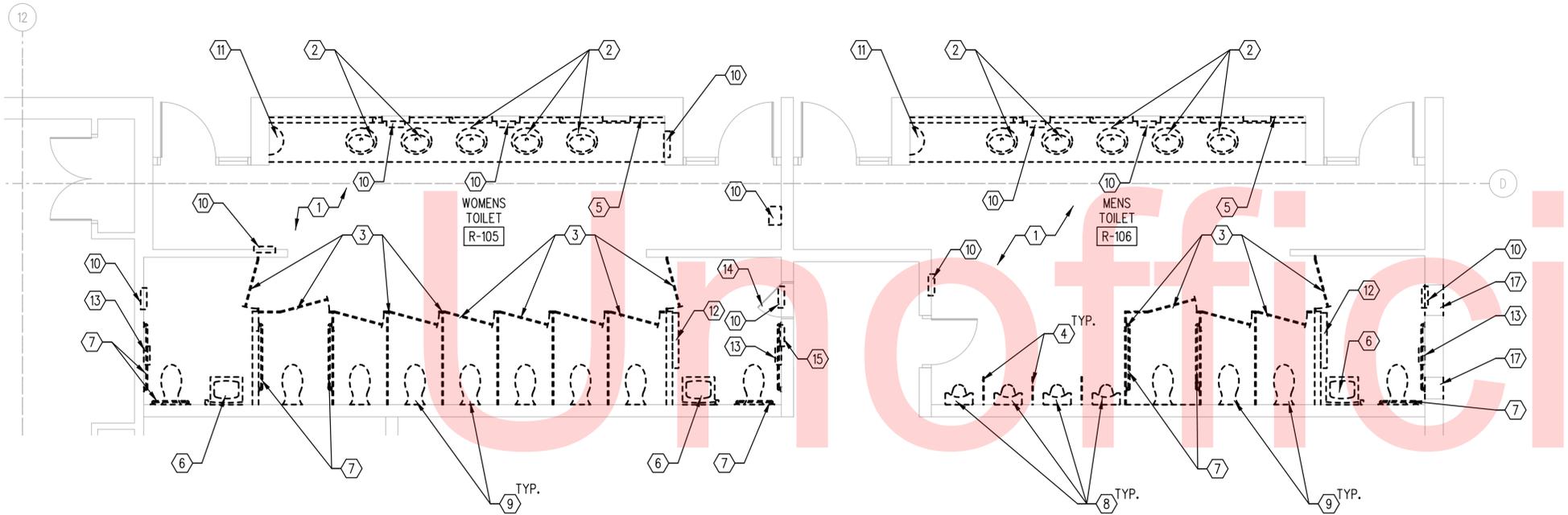


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ADDENDUMS / REVISIONS	

CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: KM
	CHECKED BY: MH

AD101
SHEET NO. 3
TOTAL SHTS. 29



GENERAL NOTES

- A. CONTRACTOR SHALL MAINTAIN BUILDING EGRESS THROUGHOUT CONSTRUCTION.
- B. REF. MECH. & ELEC. DEMOLITION DRAWINGS FOR REMOVAL & DISCONNECT OF ELEC. & MECH. DEVICES

DEMOLITION NOTES

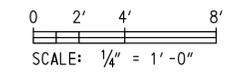
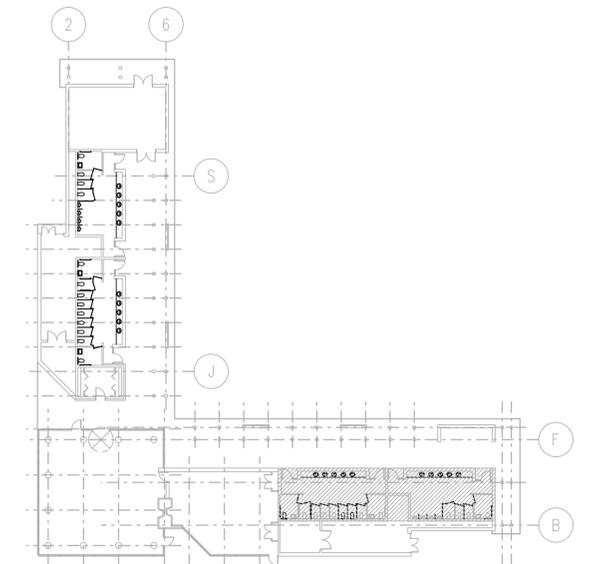
- ① EXISTING TILE FLOORING & WALL BASE TO REMAIN.
- ② REMOVE EXISTING SOLID SURFACE COUNTERTOP, INTEGRAL BOWLS, WD BLOCKING AND COUNTER SUPPORTS, SENSOR FAUCETS AND SYSTEM COMPONENTS IN ITS ENTIRETY
- ③ REMOVE EXISTING FLOOR TO CEILING TOILET PARTITION IN ITS ENTIRETY
- ④ REMOVE EXISTING URINAL PARTITIONS
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- ⑯ REMOVE EXIST. SEMI-RECESSED TAMPON DISPENSER
- ⑰ REMOVE MASONRY VENEER AND CMU BACK-UP WALL. PROVIDE NEW DUCT OPENING ABOVE FINISH CEILING REF. MECHANICAL DRAWINGS

1
AD102
SCALE: 1/4" = 1'-0"
REF:

Website

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KEY PLAN



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ADDENDUMS / REVISIONS	

CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: KM
	CHECKED BY: MH

AD102
SHEET NO. 4
TOTAL SHTS. 29

RCP LEGEND

-  EXIST. 2x2 ACOUSTICAL PANEL CEILING
-  EXIST. GYPSUM BOARD CEILING
-  DEMO EXIST. LIGHTING FIXTURES. SEE ELECTRICAL DRAWINGS
-  DIFFUSERS OR HVAC EQUIPMENT. SEE MECHANICAL DRAWINGS

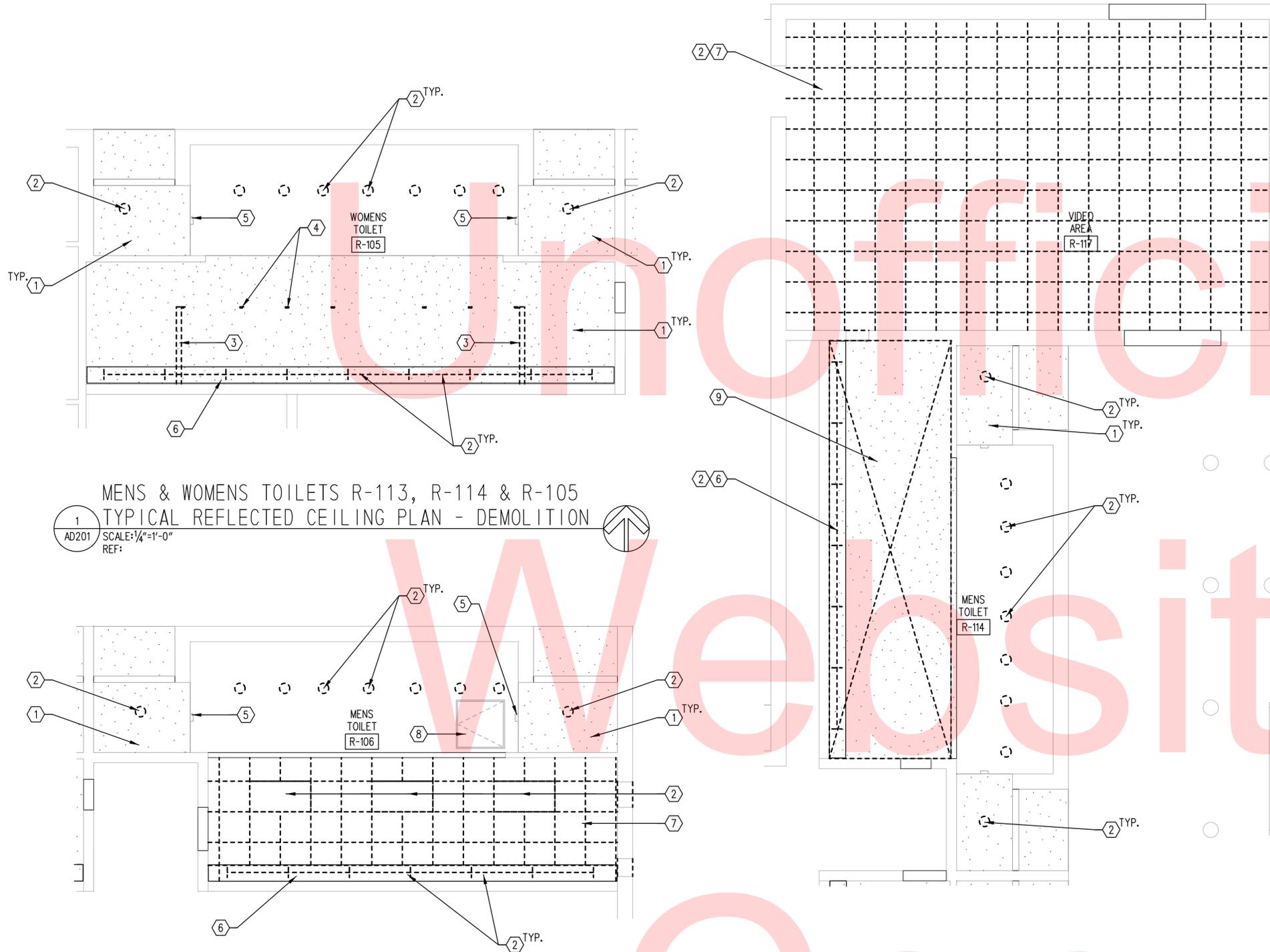
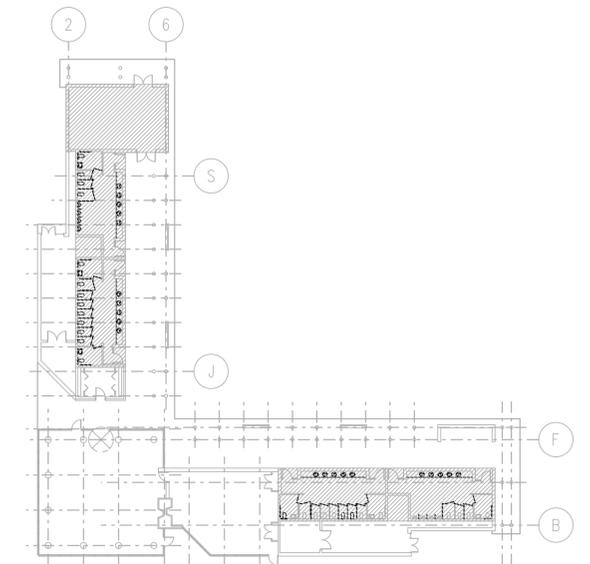
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- B. REF. MECH. & ELEC. DEMOLITION DRAWINGS FOR REMOVAL & DISCONNECT OF ELEC. & MECH. DEVICES

DEMOLITION NOTES

- ① EXISTING GYPSUM BOARD CEILING TO REMAIN
- ② REMOVE EXISTING LIGHT FIXTURES, REF. ELECTRICAL DRAWINGS
- ③ REMOVE EXISTING CMU TOILET PARTITION
- ④ REMOVE EXISTING CEILING MOUNTED TOILET PARTITION PILASTERS
- ⑤ EXISTING FIRE ALARM & EMERGENCY/EXIT LIGHTING TO REMAIN
- ⑥ REMOVE & SALVAGE EXIST. LIGHTING STRIP COVER FOR RE-INSTALLATION
- ⑦ REMOVE EXISTING LAY-IN CEILING GRID & ACOUSTICAL CEILING PANELS
- ⑧ EXISTING CEILING MOUNTED ACCESS PANEL TO REMAIN
- ⑨ REMOVE EXISTING SUSPENDED GYPSUM BOARD CEILING, SALVAGE EXISTING STEEL CHANNELS, HANGERS AND METAL FURRING FOR REUSE.

KEY PLAN



1 MENS & WOMENS TOILETS R-113, R-114 & R-105
TYPICAL REFLECTED CEILING PLAN - DEMOLITION
AD201 SCALE: 1/4" = 1'-0"
REF:

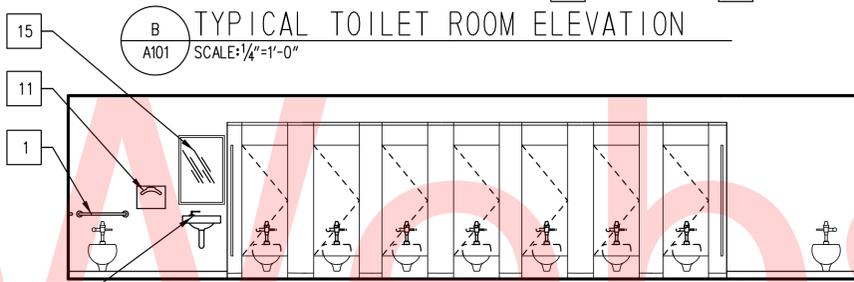
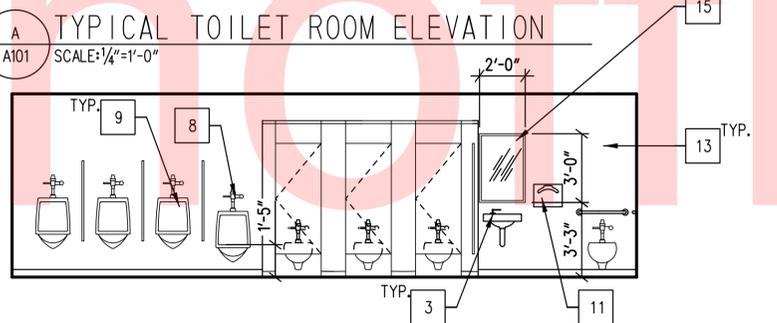
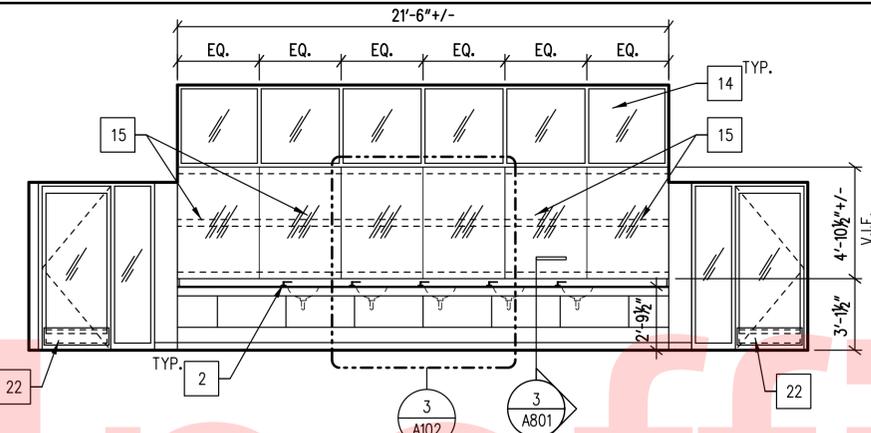
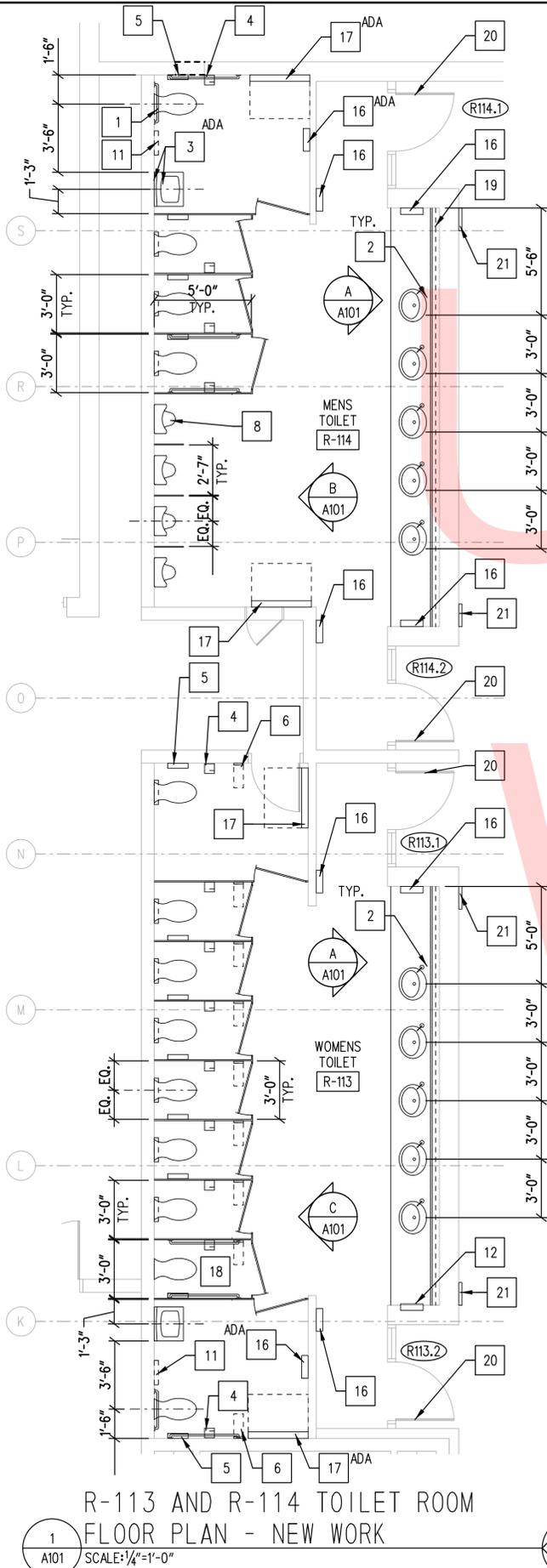
2 MENS TOILET R-106
REFLECTED CEILING PLAN - DEMOLITION
AD201 SCALE: 1/4" = 1'-0"
REF:

3 VIDEO AREA R-117 & MENS TOILET R-114
REFLECTED CEILING PLAN - DEMOLITION
AD201 SCALE: 1/4" = 1'-0"
REF:

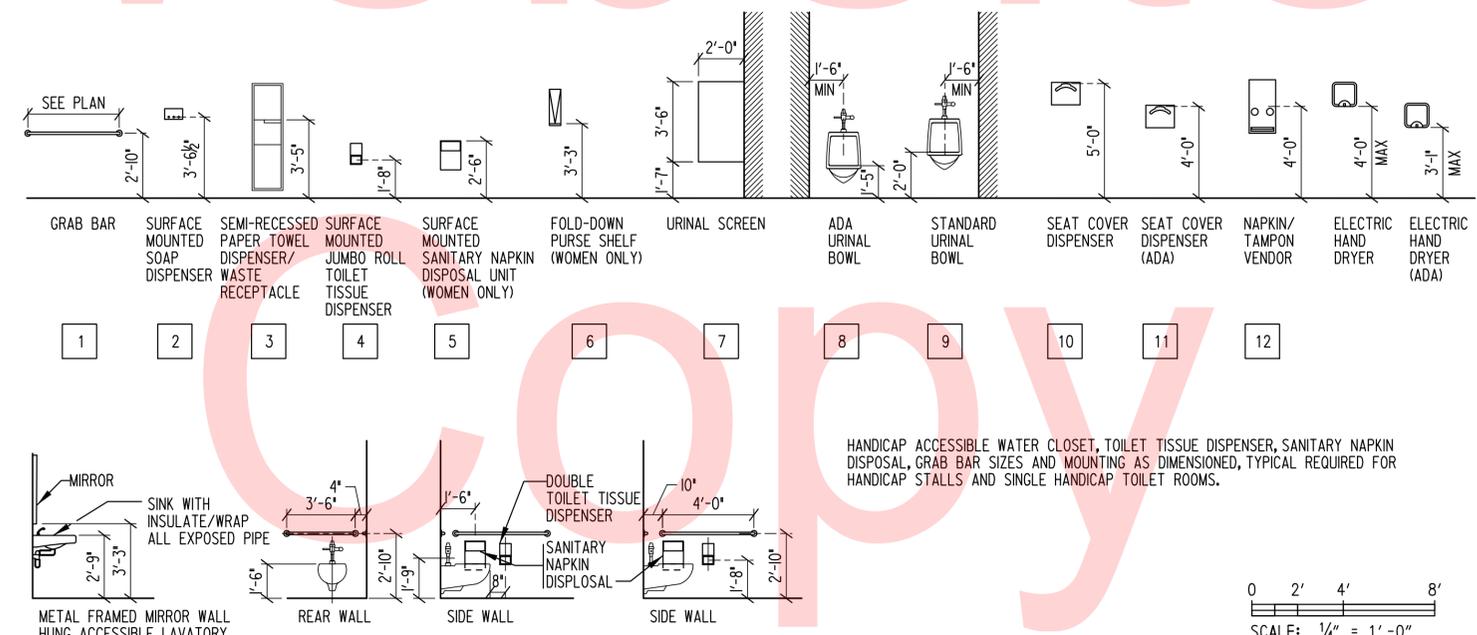
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ADDENDUMS / REVISIONS	

CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: KM
	CHECKED BY: MH



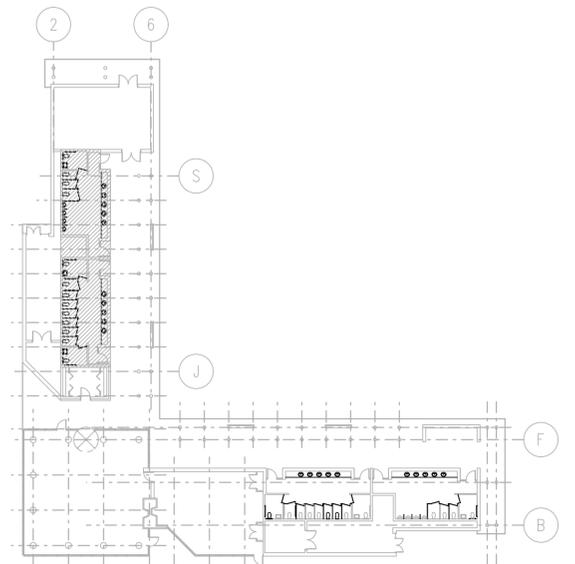
TOILET ACCESSORY MOUNTING HEIGHTS



HANDICAP ACCESSIBLE WATER CLOSET, TOILET TISSUE DISPENSER, SANITARY NAPKIN DISPOSAL, GRAB BAR SIZES AND MOUNTING AS DIMENSIONED, TYPICAL REQUIRED FOR HANDICAP STALLS AND SINGLE HANDICAP TOILET ROOMS.



KEY PLAN



- GENERAL NOTES**
- CONTRACTOR SHALL MAINTAIN BUILDING EGRESS THROUGHOUT CONSTRUCTION.
 - REF. MECH. & ELEC. DEMOLITION DRAWINGS FOR REMOVAL & DISCONNECT OF ELEC. & MECH. DEVICES INFILL & PATCH CMU WHERE ELEC., MECH. & ARCH DEVICES, FIXTURES & PIPING HAVE BEEN REMOVED FROM EXISTING CMU WALLS

- CONSTRUCTION NOTES**
- GRAB BAR
 - SOAP DISPENSER
 - WALL MOUNTED SINK W/DECK MOUNTED SOAP DISPENSER
 - SURFACE MOUNTED JUMBO ROLL TOILET TISSUE DISPENSER
 - SURFACE MOUNTED SANITARY NAPKIN DISPOSAL UNIT (WOMEN ONLY)
 - FOLD-DOWN PURSE SHELF (WOMEN ONLY)
 - URINAL SCREEN
 - URINAL BOWL (ADA)
 - URINAL BOWL
 - SEAT COVER DISPENSER
 - SEAT COVER DISPENSER (ADA)
 - EXISTING NAPKIN/TAMPON VENDOR
 - EXISTING CERAMIC TILE WALL & BASE TO REMAIN. PATCH ABANDONED PIPE ROUGH-INS AND NEW THRU WALL PENETRATIONS. MATCH EXIST. 2"X2" CERAMIC TILE. REF. PLUMBING DRAWINGS.
 - EXISTING TRANSLUCENT GLAZING
 - MIRROR

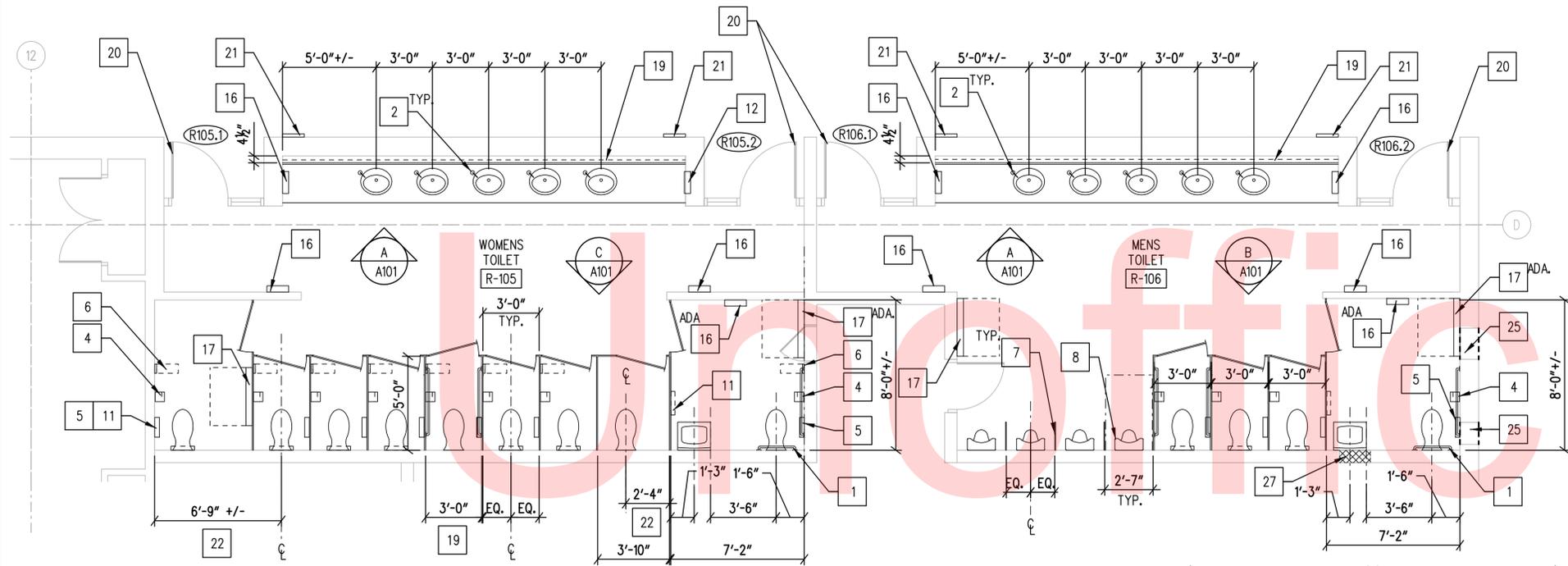
- ELECTRIC HAND DRYER
- BABY CHANGING STATION
- AMBULATORY ADA STALL
- EXIST. 1-1/2" HORIZ. VENT PIPE, SUPPORT BRACKET & WD BLOCKING TO REMAIN
- ADJUST EXTERIOR DOOR CLOSER SUCH THAT THE MAX. DOOR OPENING FORCE FOR OPENING A DOOR IS 8 - IOLBF
- NEW ROOM IDENTIFICATION SIGNAGE, REF. DETAILS 3 & 4 ON DRAWING A201
- RETROFIT KICKPLATE, REF. DOOR SCHEDULE ON A801

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ADDENDUMS / REVISIONS	

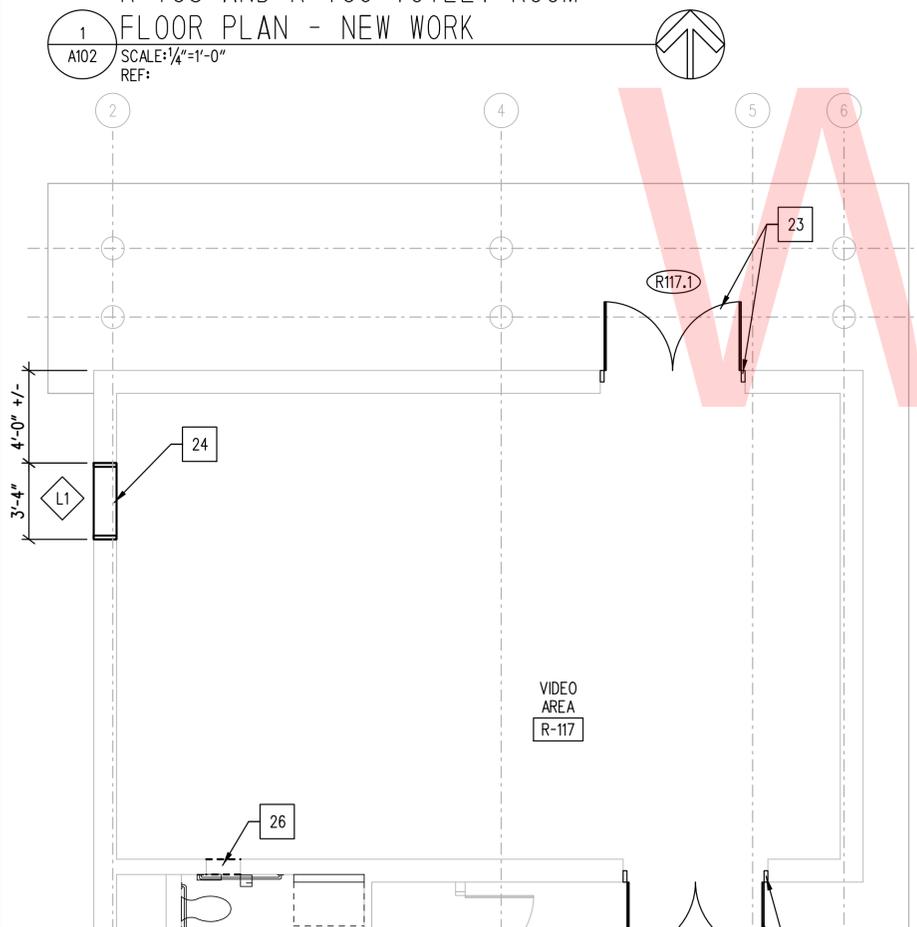
CONTRACT	T201680108	BRIDGE NO.	
COUNTY	NEW CASTLE	DESIGNED BY:	MH
		CHECKED BY:	KM

A101	SHEET NO.	6
	TOTAL SHTS.	29

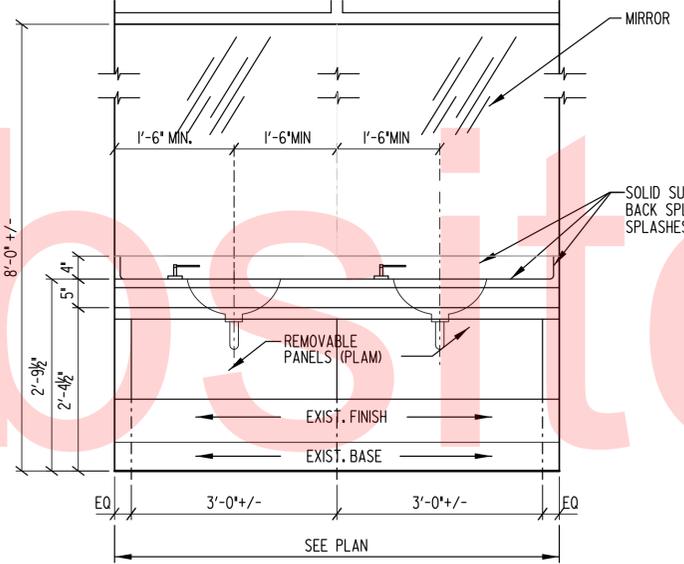


- ### GENERAL NOTES
- A. CONTRACTOR SHALL MAINTAIN BUILDING EGRESS THROUGHOUT CONSTRUCTION.
 - B. REF. MECH. & ELEC. DEMOLITION DRAWINGS FOR REMOVAL & DISCONNECT OF ELEC. & MECH. DEVICES
- ### CONSTRUCTION NOTES
- 1 GRAB BAR
 - 2 SOAP DISPENSER
 - 3 SEMI-RECESSED PAPER TOWEL DISPENSER/WASTE RECEPTACLE (NOT USED)
 - 4 SURFACE MOUNTED JUMBO ROLL TOILET TISSUE DISPENSER
 - 5 SURFACE MOUNTED SANITARY NAPKIN DISPOSAL UNIT (WOMEN ONLY)
 - 6 FOLD-DOWN PURSE SHELF (WOMEN ONLY)
 - 7 URINAL SCREEN
 - 8 URINAL BOWL (ADA)
 - 9 URINAL BOWL
 - 10 SEAT COVER DISPENSER
 - 11 SEAT COVER DISPENSER (ADA)
 - 12 EXISTING NAPKIN/TAMPON VENDOR
 - 13 EXISTING CERAMIC TILE WALL
 - 14 EXISTING TRANSLUCENT GLAZING
 - 15 MIRROR
 - 16 ELECTRIC HAND DRYER
 - 17 BABY CHANGING STATION
 - 18 AMBULATORY ADA STALL
 - 19 EXIST. 1-1/2" HORIZ. VENT PIPE, SUPPORT BRACKET & WD BLOCKING TO REMAIN
 - 20 ADJUST EXTERIOR DOOR CLOSER SUCH THAT THE MAX. DOOR OPENING FORCE FOR OPENING A DOOR IS 8 - IOLBF
 - 21 ROOM IDENTIFICATION SIGNAGE, REF. DETAILS 1 & 2 ON DRAWING A801
 - 22 V.I.F. EXIST. SANITARY LINE LOCATION W/ NEW TOILET CARRIER DIMENSIONS.
 - 23 HM DOOR AND FRAME, REF. DOOR SCHEDULE
 - 24 METAL LOUVER, REF. WALL SECTION 4/A801 & COORDINATE WITH MECHANICAL DRAWINGS
 - 25 PROVIDE 5"x3.5"x5/16" STL ANGLE LINTEL ABOVE THRU WALL DUCT OPENING, ATTACH LINTEL TO CMU BACK-UP WALL, EXTEND LINTEL 8" MIN. ON BOTH SIDES OF OPENING, REF. MECH DWGS FOR DUCT SIZE (INSTALL DUCT 9'-0" MIN. A.F.F) PROVIDE WEATHER-TIGHT SEAL
 - 26 PROVIDE CONC. LINTEL ABOVE THRU WALL DUCT OPENING. EXTEND LINTEL 8" MIN. ON EITHER SIDE OF OPENING, REF. MECH DWGS FOR DUCT SIZE & LOCATION
 - 27 IN-FILL WALL OPENING WITH 8" CMU / MATCH EXIST. CONSTRUCTION REF. MECH DEMO DRAWING MD102 FOR DUCT SIZE

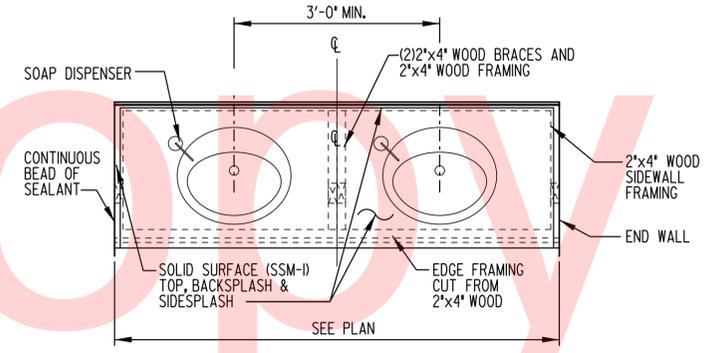
1
A102
R-105 AND R-106 TOILET ROOM
FLOOR PLAN - NEW WORK
SCALE: 1/4" = 1'-0"
REF:



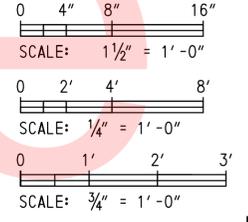
2
A102
VIDEO AREA R-117
PART. FLOOR PLAN - NEW WORK
SCALE: 1-1/2" = 1'-0"
REF:



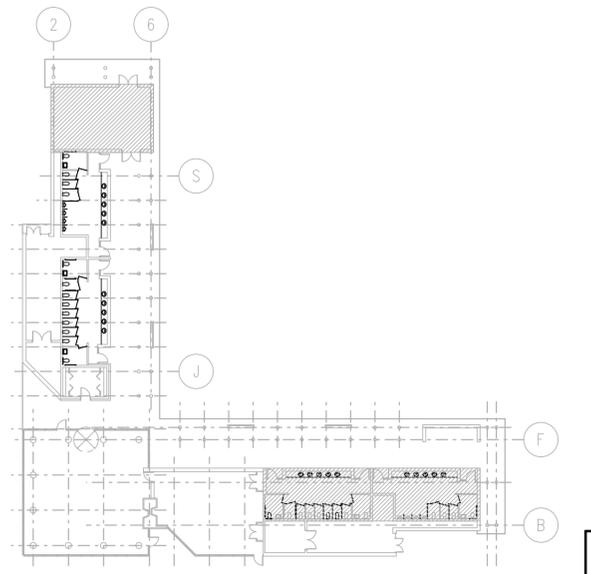
3
A102
ELEVATION
SCALE: 3/4" = 1'-0"



4
A102
ENLARGED PLAN DETAIL
SCALE: 3/4" = 1'-0"



KEY PLAN



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ADDENDUMS / REVISIONS	

CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: KM
	CHECKED BY: MH

A102	SHEET NO. 7
	TOTAL SHTS. 29

RCP LEGEND

-  EXIST. 2x2 ACOUSTICAL PANEL CEILING
-  EXIST. GYPSUM BOARD CEILING
-   NEW LIGHTING FIXTURES. SEE ELECTRICAL DRAWINGS
-  DIFFUSERS OR HVAC EQUIPMENT. SEE MECHANICAL DRAWINGS

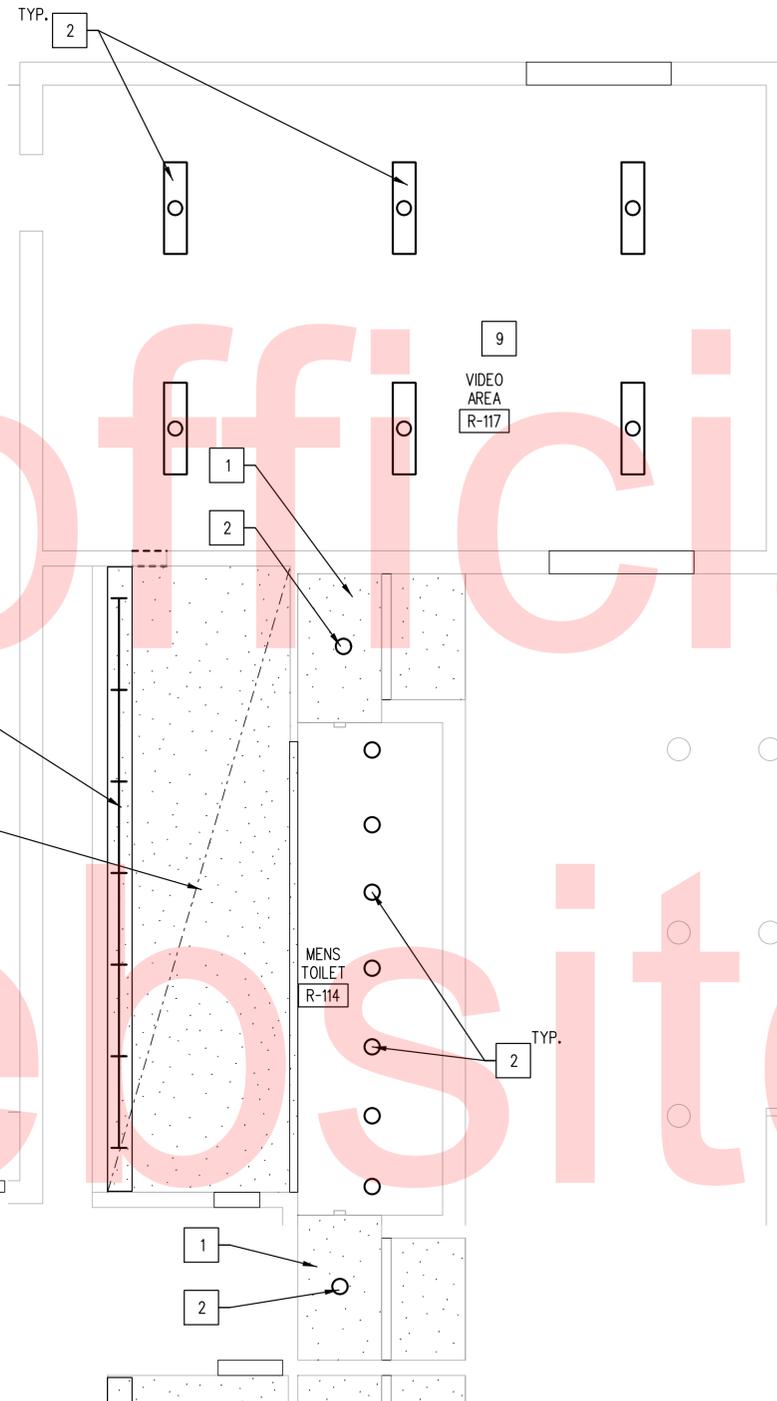
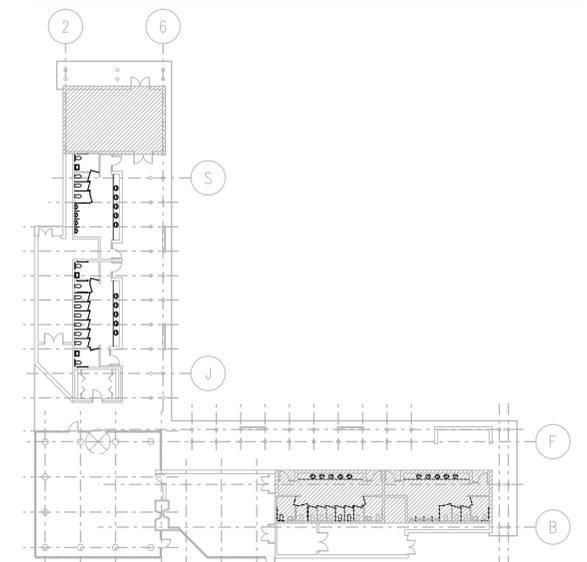
GENERAL NOTES

- A. CONTRACTOR SHALL MAINTAIN BUILDING EGRESS THROUGHOUT CONSTRUCTION.
- B. REF. MECH. & ELEC. DEMOLITION DRAWINGS FOR REMOVAL & DISCONNECT OF ELEC. & MECH. DEVICES
- C. CONTRACTOR TO REPLACE/REPAIR EXISTING WALL, FLOOR & CEILING FINISHES DAMAGED DURING CONSTRUCTION

CONSTRUCTION NOTES

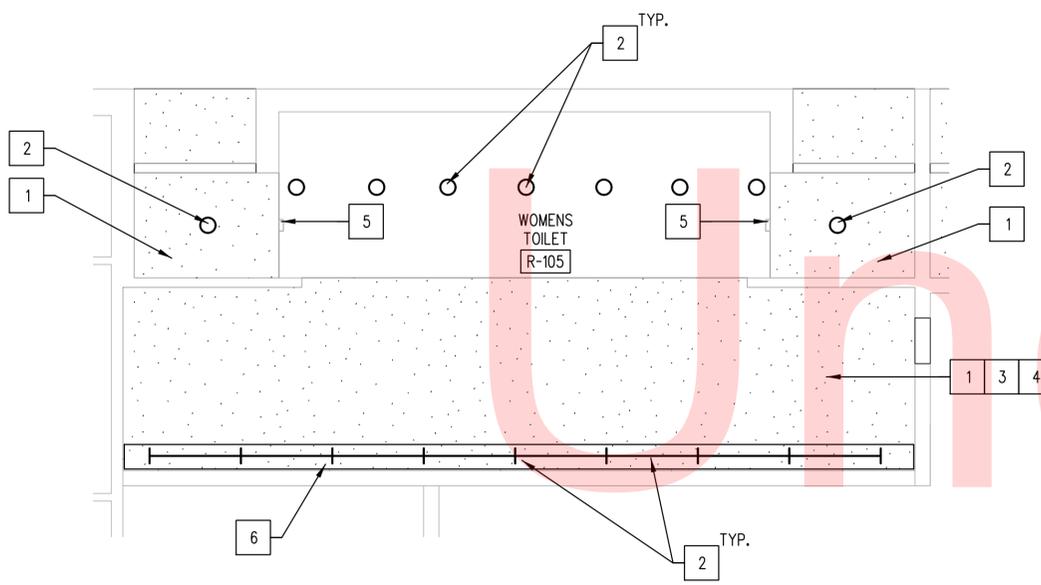
- 1 EXISTING GYPSUM BOARD CEILING - PAINT EGGSHELL WHITE
- 2 NEW LIGHT FIXTURES, REF. ELECTRICAL DRAWINGS
- 3 PATCH EXISTING GYPSUM BOARD CEILING/SOFFIT AT DEMOLISHED CMU TOILET PARTITION - PAINT EGGSHELL WHITE
- 4 PATCH EXISTING GYPSUM BOARD CEILING/SOFFIT AT DEMOLISHED FLOOR TO CEILING TOILET PARTITIONS UPON REMOVAL OF CEILING ANCHORED PILASTERS
- 5 EXISTING FIRE ALARM & EMERGENCY/EXIT LIGHTING TO REMAIN
- 6 REINSTALL SALVAGED EXIST. LIGHTING STRIP COVER
- 7 INSTALL NEW ACOUSTICAL PANEL CEILING OVER EXISTING LAY-IN CEILING GRID
- 8 EXISTING CEILING MOUNTED ACCESS PANEL TO REMAIN
- 9 EXPOSED TO STRUCTURE ABOVE
- 10 NEW SUSPENDED GYPSUM BOARD CEILING - PAINT EGGSHELL WHITE RE-INSTALL SALVAGED 1-1/2" STL CHANNELS, HANGERS & 7/8" METAL FURRING @ 16" O.C.

KEY PLAN



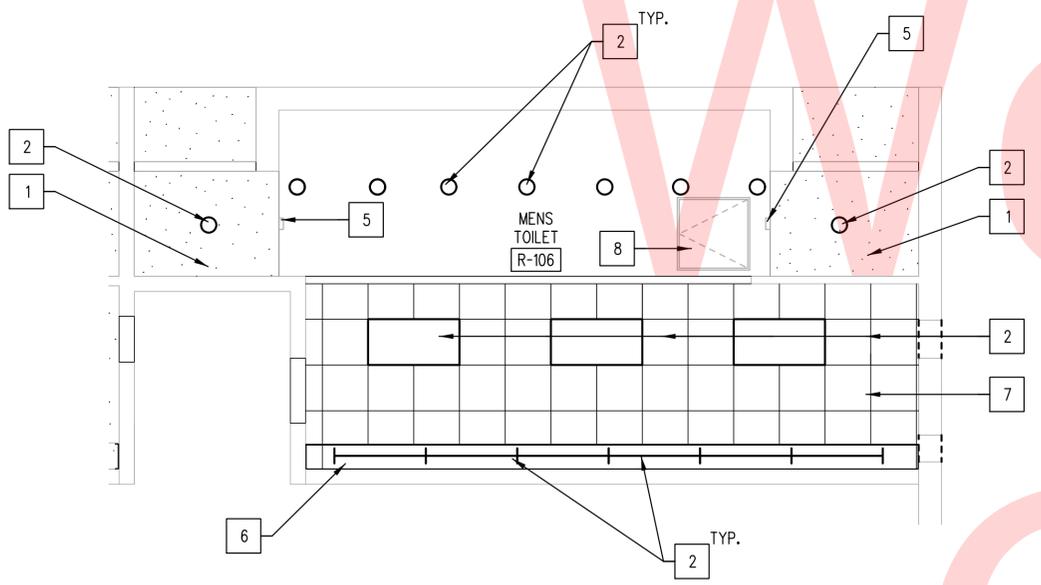
3
A201
SCALE: 1/4" = 1'-0"
REF:

VIDEO AREA R-117 & MENS TOILET R-114 REFLECTED CEILING PLAN - NEW WORK



1
A201
SCALE: 1/4" = 1'-0"
REF:

MENS & WOMENS TOILETS R-113, R-114 & R-105 TYPICAL REFLECTED CEILING PLAN - NEW WORK



2
A201
SCALE: 1/4" = 1'-0"
REF:

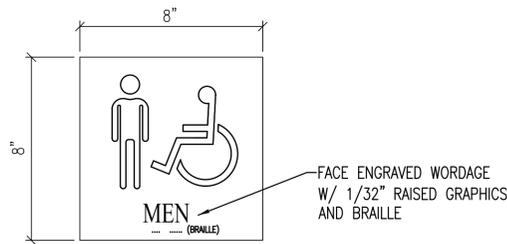
MENS TOILET R-106 REFLECTED CEILING PLAN - NEW WORK

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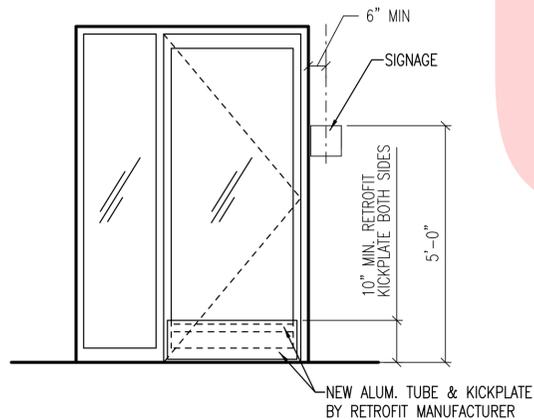
ADDENDUMS / REVISIONS	

CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: KM
	CHECKED BY: MH

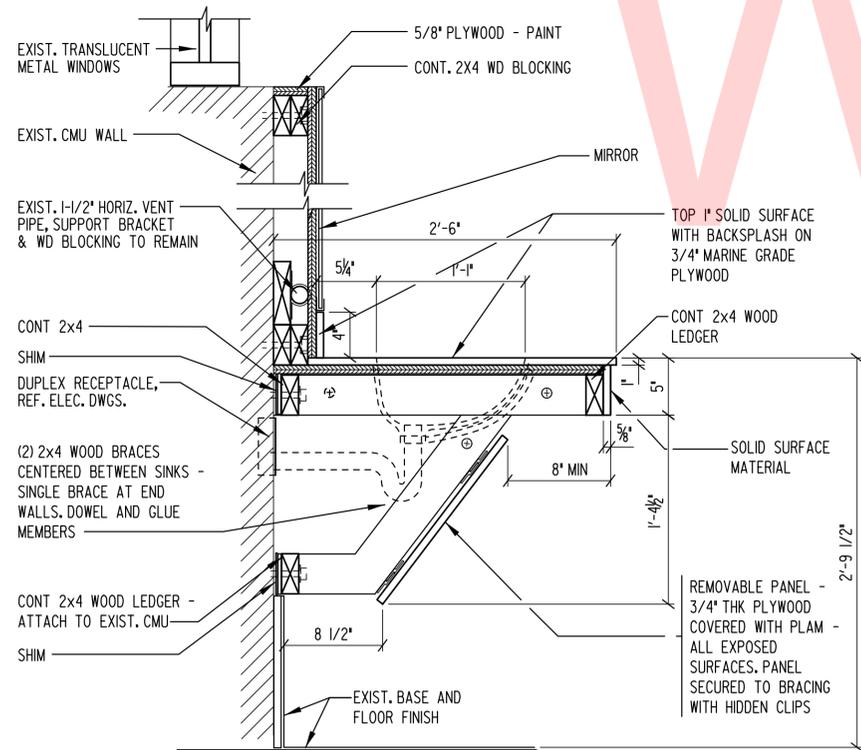
A201
SHEET NO. 8
TOTAL SHTS. 29



1 SIGN TYPE A
A801 SCALE: NTS



2 SIGNAGE DOOR MOUNTING HEIGHT
A801 SCALE: NTS

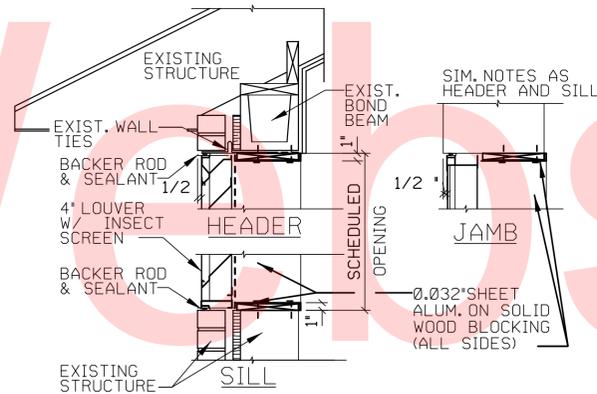


3 VANITY SECTION DETAIL
A801 SCALE: 1-1/2\"/>

DOOR SCHEDULE												HARDWARE SCHEDULE																
DOOR NO.	LOCATION (ROOM No)	OPENING DETAILS	FIRE RATING	DOOR					FRAMES			REMARKS	HINGES			DOOR CLOSERS		LOCKSETS			DOOR STOP		KICK PLATES	FLUSH BOLTS	COORD-INATOR	WEATHER STRIP (SET)	THRESHOLD	
				TYPE	SIZE	THICK-NESS	MATERIAL	FINISH	TYPE	MATERIAL	FINISH		CONT	HEAVY	NRP	PAR.	REG.	PASS	CLASS	CARD	PUSH / PULL SET	WALL						FLOOR
R117.1	VIDEO AREA	4/A801	NOT RATED	D1	6070	1 3/4"	HM	PT-2	F1	HM	PT-2		0	3 PR.	Y	1	0	0	1	0	0	0	2	2	1 SET	1	2	1
R117.2	VIDEO AREA	4/A801	NOT RATED	D1	6070	1 3/4"	HM	PT-2	F1	HM	PT-2		0	3 PR.	Y	1	0	0	1	0	0	0	2	2	1 SET	1	2	1
R105.1	WOMENS TOILET	N/A	NOT RATED	2/801	-	-	ALUM.	-	EXISTING	ALUM.	-	SEE NOTE 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
R105.2	WOMENS TOILET	N/A	NOT RATED	2/801	-	-	ALUM.	-	EXISTING	ALUM.	-	SEE NOTE 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
R106.1	MENS TOILET	N/A	NOT RATED	2/801	-	-	ALUM.	-	EXISTING	ALUM.	-	SEE NOTE 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
R106.2	MENS TOILET	N/A	NOT RATED	2/801	-	-	ALUM.	-	EXISTING	ALUM.	-	SEE NOTE 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
R113.1	WOMENS TOILET	N/A	NOT RATED	2/801	-	-	ALUM.	-	EXISTING	ALUM.	-	SEE NOTE 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
R113.2	WOMENS TOILET	N/A	NOT RATED	2/801	-	-	ALUM.	-	EXISTING	ALUM.	-	SEE NOTE 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
R114.1	MENS TOILET	N/A	NOT RATED	2/801	-	-	ALUM.	-	EXISTING	ALUM.	-	SEE NOTE 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
R114.2	MENS TOILET	N/A	NOT RATED	2/801	-	-	ALUM.	-	EXISTING	ALUM.	-	SEE NOTE 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

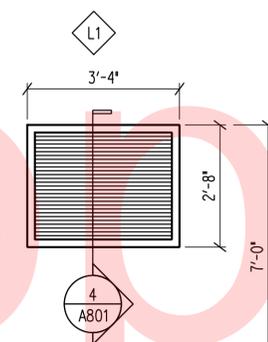
NOTE 1: PROVIDE COMMERCIAL INTERIORS MANUFACTURING (CIM) 706-253-4755 KICKPLATE RETROFIT KIT OR EQUIVALENT PRODUCT TO ADJUST EXIST STOREFRONT ENTRY DOOR KICKPLATE TO 10" TO COMPLY WITH CURRENT ADA CODES. HARDWARE TO INCLUDE: (2) 10"X34" KICKPLATES AND (2) ADAPTER BARS POWDERCOATED TO MATCH EXISTING STOREFRONT DOOR.

SIGNAGE SCHEDULE			
SIGN REFERENCES		SIGN COPY	
ROOM NO.	LOCATION (ROOM No)	TYPE	TEXT / MESSAGE
R-106	MENS TOILET	A	"MEN" - ADA RESTROOM PICTOGRAM
R-114	MENS TOILET	A	"MEN" - ADA RESTROOM PICTOGRAM
R-105	WOMENS TOILET	A	"WOMEN" - ADA RESTROOM PICTOGRAM
R-113	WOMENS TOILET	A	"WOMEN" - ADA RESTROOM PICTOGRAM



4 LOUVER DETAIL
A801 SCALE: 1-1/2\"/>

LOUVER SCHEDULE



HARDWARE LIST					
DESIGNATION	MANUFACTURER	DESCRIPTION	FINISH	BHMA NUMBER	
HINGES	CONT.	MCKINNEY	GEARED CONTINUOUS HINGE; MCK-12HD	US28	A31021G
	HEAVY	HAGER	HEAVY DUTY BALL BEARING HINGES, 4-1/2" X 4-1/2"; BB1199	US32D	A5111
	NRP	N/A	NON-REMOVEABLE PINS	--	--
DOOR CLOSER	PAR.	CORBIN RUSSWIN	PARALLEL ARM CLOSER; DC3210	SILVER ALUM. PAINTED	C02021
	REG.	CORBIN RUSSWIN	REGULAR ARM CLOSER; DC3200	SILVER ALUM. PAINTED	C02011
LOCKSET	PASS	SARGENT	MORTISE LOCKSET, PASSAGE FUNCTION; 8200 SERIES "L" LEVER	US32D	F01
	CLASS		MORTISE LOCKSET, CLASSROOM FUNCTION; 8200 SERIES "L" LEVER	US32D	F05
PUSH / PULL SET	BY DOOR MANUF.	SINGLE STRAIGHT PUSH AND PULL BAR SET	MATCH DOORS	J504	
KICK PLATES	ROCKWOOD	METAL KICK PLATE, .062" THICK STAINLESS STEEL, 12" HIGH	US32D	J102	
FLUSH BOLTS	ROCKWOOD	SELF LATCHING FLUSH BOLT SET (TOP AND BOTTOM); 1845	US32D	TYPE 27	
COORDINATOR	ROCKWOOD	BAR TYPE HEAD STOP MOUNTED COORDINATOR; 1600 SERIES	PAINT TO MATCH FRAME	TYPE 21	
WEATHERSTRIP (SET)	NATIONAL GUARD	HEAD AND JAMBS - SILICONE BULB FIRE AND SMOKE SEAL; SERIES 5050	FROM MFR. STANDARD	ROE195	
	NATIONAL GUARD	DOOR BOTTOM SWEEP, SILICONE WITH STAINLESS RETAINER; 200SSS	US32D	R5E435	
	NATIONAL GUARD	OVERLAPPING ASTRAGAL, SILICONE WITH STAINLESS RETAINER, 114SA	US32D	R5E635	
THRESHOLD	NATIONAL GUARD	THERMALLY BROKEN SADDLE TYPE	US32D	J52290	

IN ACCORDANCE WITH THE SPECIFICATIONS OTHER PRODUCTS BY OTHER MANUFACTURERS EQUAL TO THOSE LISTED WILL BE CONSIDERED.

SCHEDULED DOOR TYPES	SCHEDULED FRAME TYPES	FRAME PROFILE
<p>TYPE D1</p>	<p>TYPE F1</p>	<p>TYPE X.1</p>

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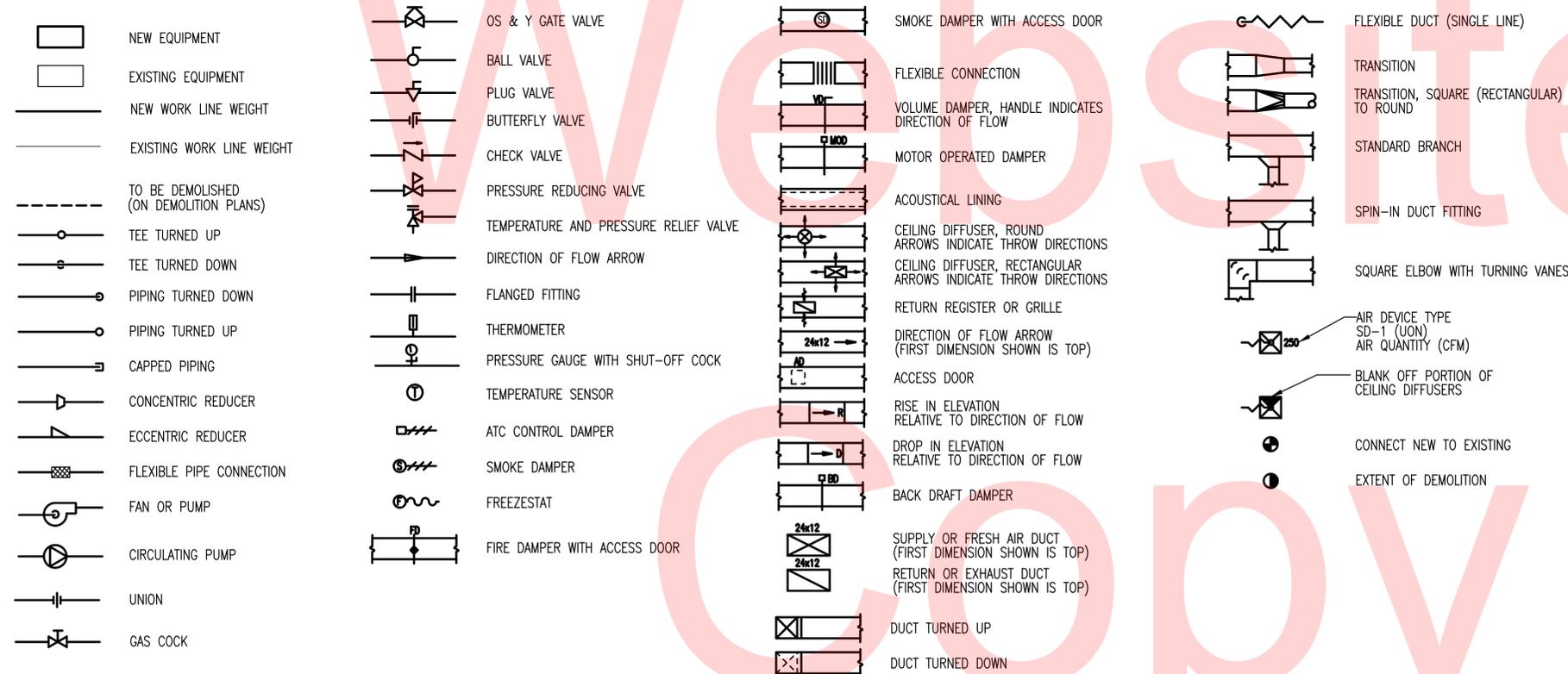
MECHANICAL ABBREVIATIONS

©	AT	D	DAMPER	FD	FLOOR DRAIN	MOD	MOTOR OPERATED DAMPER	SA	SUPPLY AIR
&	AND	D	DEPTH	FLA	FULL LOAD AMPERES	N	NORTH	SD	SUPPLY AIR DIFFUSER
ACU	AIR CONDITIONING UNIT	DB	DRY BULB	FM	FACTORY MUTUAL	NC	NOISE CRITERIA	SF	SUPPLY AIR FAN
AD	ACCESS DOOR	dB	DECIBLES	FPM	FEET PER MINUTE	NC	NORMALLY CLOSED	SENS	SENSIBLE COOLING
ADJ	ADJUSTABLE	DDC	DIRECT DIGITAL CONTROLS	FS	FLOW SWITCH	NIC	NOT IN CONTRACT	SENS	SENSOR
AFF	ABOVE FINISHED FLOOR	DEG F, °F	DEGREE FAHRENHEIT	FT	FEET	NO	NORMALLY OPEN	S/M	SHEET METAL
AG	ABOVE GRADE	DIA	DIAMETER	GAL	GALLONS	No	NUMBER	SP	STATIC PRESSURE
AHU	AIR HANDLING UNIT	DIP	DUCTILE IRON PIPE	GPM	GALLONS PER MINUTE	NTS	NOT TO SCALE	SW	STORM WATER
ATC	AUTOMATIC TEMPERATURE CONTROL	DN	DOWN	HB	HOSE BIBB	OA	OUTSIDE AIR	TG	TRANSFER GRILLE
AP	ACCESS PANEL	DWG	DRAWING	HC	HEATING COIL	OED	OPEN ENDED DUCT	TEMP	TEMPERATURE
APD	AIR PRESSURE DROP	DWH	DOMESTIC WATER HEATER	HP	HORSEPOWER	OS&Y	OUTSIDE SCREW & YOKE	TOD	TOP OF DUCT
B	BOILER	DX	DIRECT EXPANSION	HWR, HWS	HEATING WATER RETURN, SUPPLY	P	PUMP	TSP	TOTAL STATIC PRESSURE
BD	BACK DRAFT DAMPER	EAT, LAT	ENTERING/LEAVING AIR TEMPERATURE	HW	HOT WATER, POTABLE	PC	PUMPED CONDENSATE	TYP	TYPICAL
BOD	BOTTOM OF DUCT	EDH	ELECTRIC DUCT HEATER	HWC	HOT WATER CIRCULATING, POTABLE	PD	PRESSURE DROP	UH	UNIT HEATER
BTUH	BRITISH THERMAL UNIT PER HOUR	EF	EXHAUST FAN	HZ	HERTZ	PH	PHASE	UG	UNDERGROUND
CAP	CAPACITY	EFF	EFFICIENCY	IN	INCH	PRV	PRESSURE REDUCING VALVE	UON	UNLESS OTHERWISE NOTED
CAV	CONSTANT AIR VOLUME	EG	EXHAUST GRILLE	INV	INVERT	PS	PRESSURE SWITCH	V	VENT
CD	CONDENSATE DRAIN	EL	ELEVATION	KW	KILOWATT	PSI	POUNDS PER SQUARE INCH	VEL	VELOCITY
CFH	CUBIC FEET PER HOUR	ER	EXHAUST REGISTER	MAX	MAXIMUM	PSIG	POUNDS PER SQUARE INCH (GAGE)	VTR	VENT THROUGH ROOF
CFM	CUBIC FEET PER MINUTE	ESP, TSP	EXTERNAL/TOTAL STATIC PRESSURE	MBH	1,000 BRITISH THERMAL UNITS (BTU) PER HOUR	RA	RETURN AIR	WB	WET BULB
CLG	CEILING	ETR	EXISTING TO REMAIN	MIN	MINIMUM	RF	RETURN AIR FAN	W.C.	WATER COLUMN
CO	CLEANOUT	EWT, LWT	ENTERING/LEAVING WATER TEMPERATURE			RAR	RETURN AIR REGISTER	WG	WATER GAUGE
CUH	CABINET UNIT HEATER	EX, EXIST	EXISTING			RPM	REVOLUTIONS PER MINUTE	WH	WALL HYDRANT
CW	COLD WATER, POTABLE	EXH	EXHAUST			RX	REMOVE EXISTING	WPD	WATER PRESSURE DROP
								LBS/HR	POUNDS PER HOUR

GENERAL NOTES:

- GENERAL NOTES ARE DISCIPLINE SPECIFIC, AND APPLY TO EVERY DRAWING IN THAT DISCIPLINE. DRAWING NOTES APPLY TO ALL WORK SHOWN ON A DRAWING. CONSTRUCTION/DEMOLITION NOTES APPLY TO INDIVIDUAL SITUATIONS AND EQUIPMENT.
- SLOPES AND INVERT ELEVATIONS SHALL BE ESTABLISHED BEFORE ANY PIPING IS INSTALLED IN ORDER TO MAINTAIN PROPER SLOPES.
- MAKE PROPER CONNECTION TO FIXTURES AND EQUIPMENT. DRAWINGS ARE SCHEMATIC AND ALL BRANCH MAINS, ELBOWS, AND CONNECTIONS ARE NOT SHOWN.
- COORDINATE LOCATION OF PIPING AND DUCTWORK WITH LIGHTING FIXTURES, OTHER PIPING AND DUCTWORK, EQUIPMENT AND BUILDING STRUCTURE. PIPING AND DUCTWORK SHALL BE RUN TO AVOID CONFLICTS WITH OTHER TRADES.
- DO NOT RUN HYDRONIC PIPING OR LOCATE MECHANICAL EQUIPMENT DIRECTLY ABOVE ELECTRICAL SUBSTATIONS, CABLE TRAYS, TRANSFORMERS, PANEL BOARDS, OR SWITCHGEAR.
- DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.
- INSTALL PIPING AND DUCTWORK SO THAT VALVES AND DAMPERS ARE ACCESSIBLE.
- CERTAIN ITEMS SUCH AS ACCESS DOORS, RISE AND DROPS IN DUCTWORK AND PIPING, ETC., ARE INDICATED ON THE DRAWINGS FOR CLARITY OR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE ITEMS AS REQUIRED IN THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- SCHEMATIC AND RISER DIAGRAMS INDICATE FLOW AND OPERATIONAL CONCEPT AS WELL AS GENERAL ARRANGEMENT OF EQUIPMENT. VALVES, PRESSURE GAUGES, ETC. ADDITIONAL VALVES PRESSURE GAUGES, ETC. SHALL BE PROVIDED AS SHOWN ON DETAILS AND AS INDICATED IN SPECIFICATIONS.
- DETAILS WITHOUT SPECIFIC REFERENCE TO A LOCATION SHALL BE APPLIED TO THE GENERAL INSTALLATION OF PIPES, DUCTS, ETC.

MECHANICAL LEGEND



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ADDENDUMS / REVISIONS	

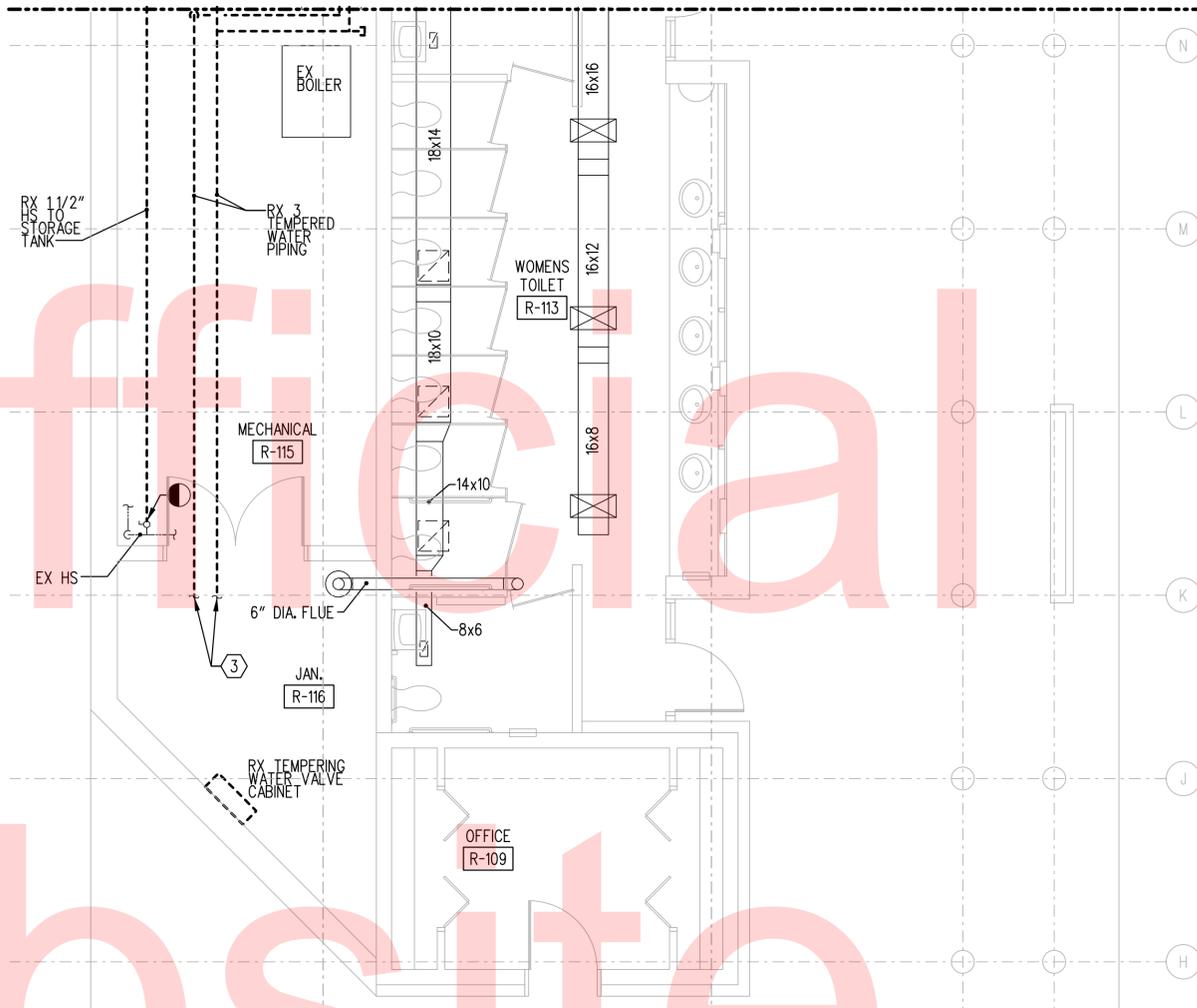
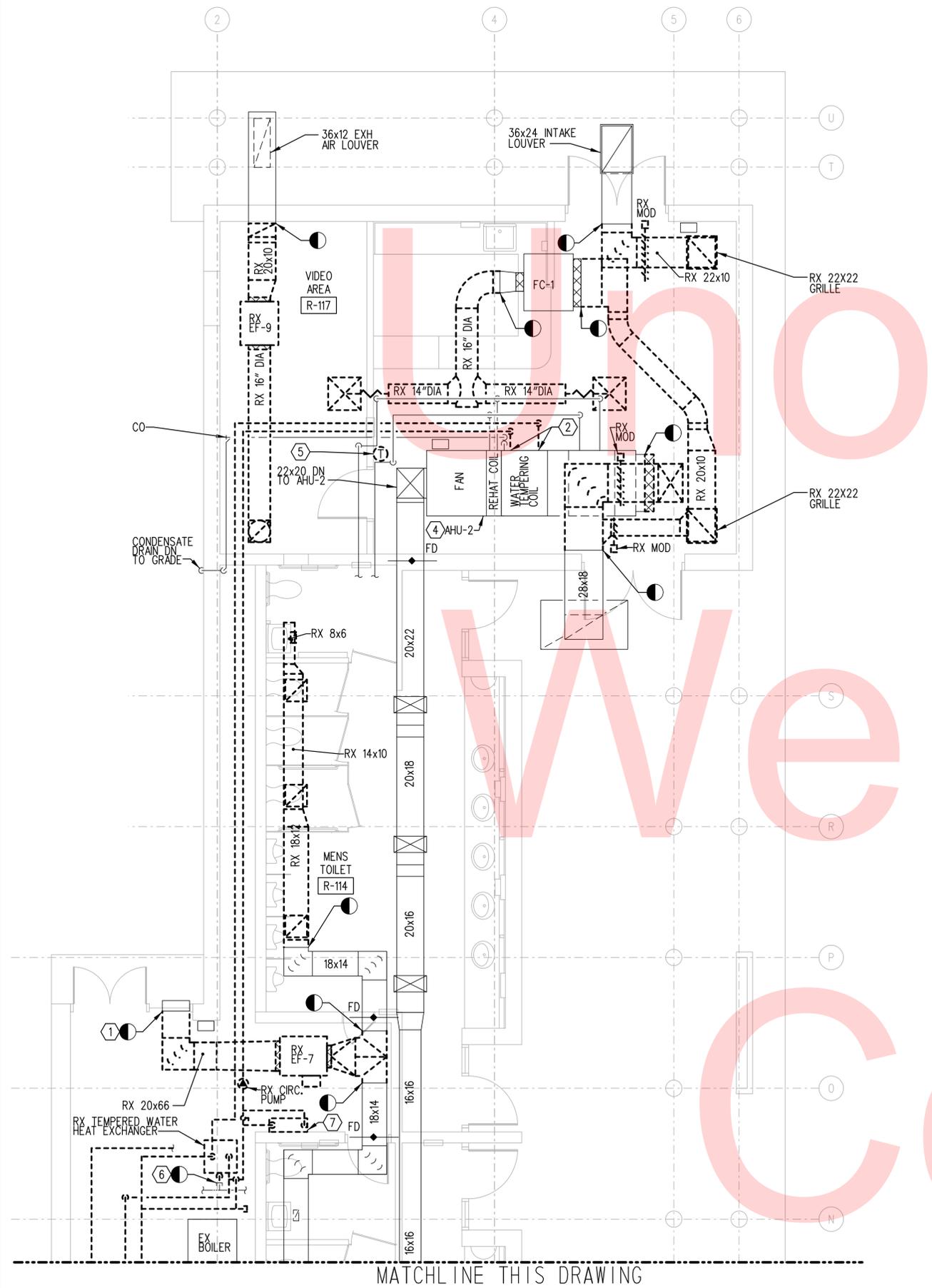
SMYRNA REST AREA BATHROOM RENOVATIONS

CONTRACT	BRIDGE NO.
T201680108	
COUNTY	DESIGNED BY: GG
NEW CASTLE	CHECKED BY: CEH

MECHANICAL LEGEND, ABBREVIATIONS, & GENERAL NOTES

M001
SHEET NO.
10
TOTAL SHTS.
29

MATCHLINE THIS DRAWING



PARTIAL FIRST FLOOR
NORTH WING - DEMOLITION

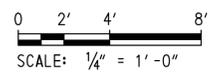
1
MD101

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

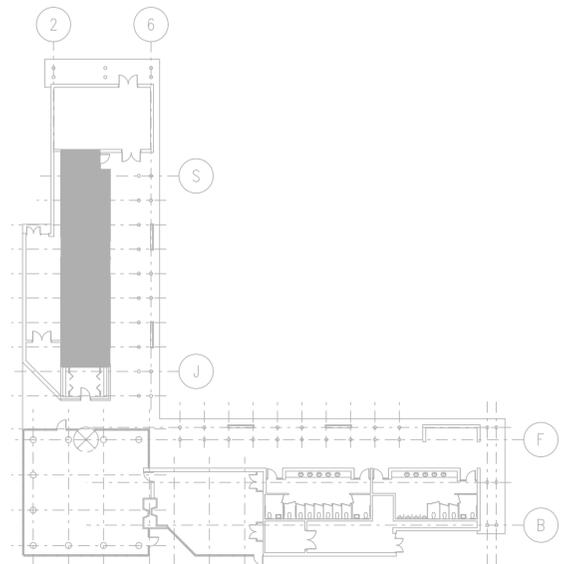


DEMOLITION KEYNOTES:

- ① PROVIDE INSULATED SHEET METAL BLANKOFF BEHIND 20x66 LOUVER.
- ② REMOVE EXISTING DOMESTIC WATER COOLING COIL. REMOVE EXISTING DOMESTIC WATER PIPES AND ACCESSORIES AT CONNECTION TO COIL AS REQUIRED TO ALLOW ACCESS TO DX COIL INSTALLED AS SHOWN ON DRAWING M101.
- ③ REMOVE DOMESTIC WATER TEMPERING SYSTEM IN ENTIRETY BACK TO TEMPERING VALVE CABINET. PATCH WALL PENETRATIONS TO MATCH EXISTING. REFER TO PLUMBING DRAWINGS FOR CONTINUATION OF DEMOLITION WORK.
- ④ AHU-2 LOCATED ABOVE CEILING. CEILING WILL BE DEMOLISHED AND NOT REPLACED. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- ⑤ REMOVE THERMOSTAT SERVING FC-1 TO BE RELOCATED AS SHOWN ON DRAWING M101.
- ⑥ REMOVE EXISTING HR TO STRAGE TANK.
- ⑦ REMOVE EXISTING UV STERILIZER AND CENTRIFUGAL SOLIDS SEPARATOR.



KEY PLAN



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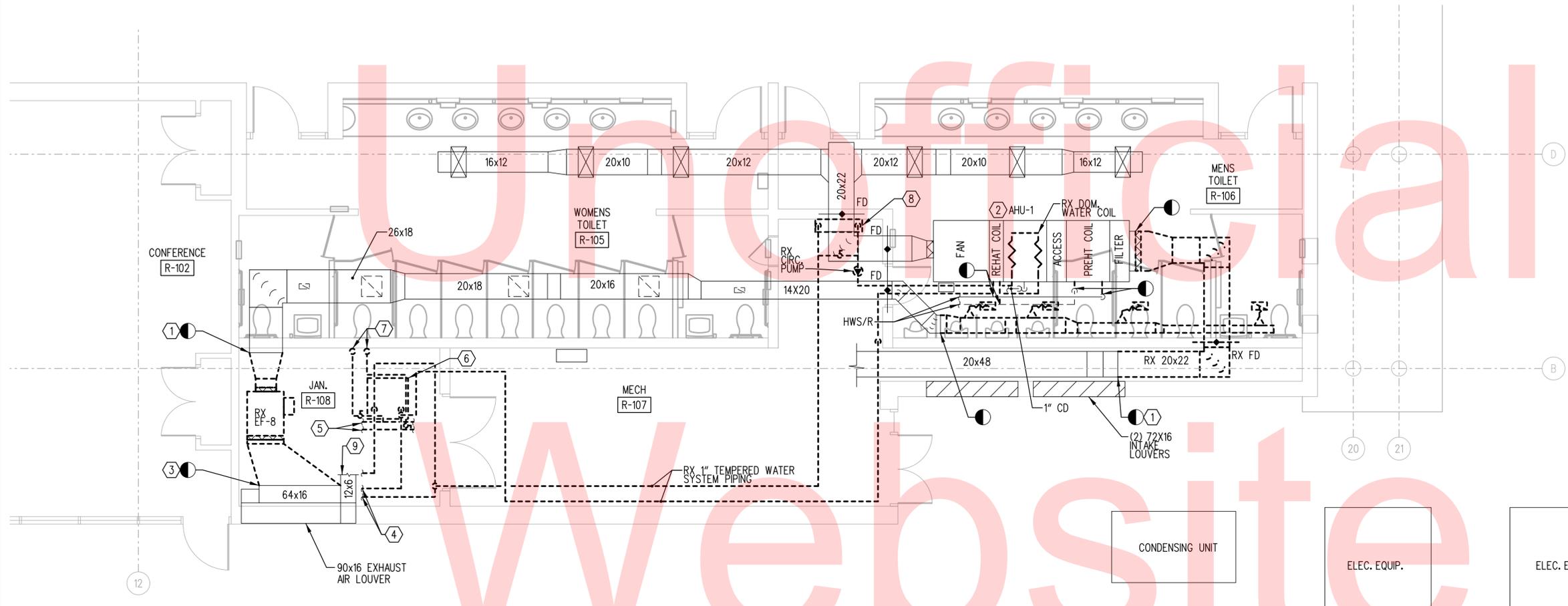
ADDENDUMS / REVISIONS

CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: GG
	CHECKED BY: CEH

MD101
SHEET NO. 11
TOTAL SHTS. 29

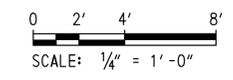
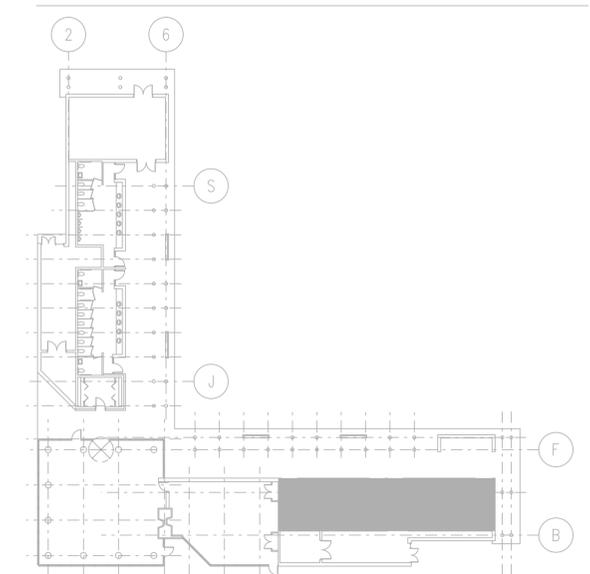
DEMOLITION KEYNOTES:

- ① CAP DUCT AND SEAL DUCT IN THIS LOCATION.
- ② AHU-1 LOCATED ABOVE CEILING. LOWER UNIT AS REQUIRED TO PERFORM DEMOLITION OF DOMESTIC WATER COIL AND INSTALLATION OF DX COIL SHOWN ON DRAWING M102.
- ③ PROVIDE INSULATED SHEET METAL BLANKOFF FOR UNUSED PORTION OF 64X16 PLENUM.
- ④ REMOVE DOMESTIC WATER TEMPERING SYSTEM IN ENTIRETY BACK TO TEMPERING VALVE CABINET LOCATED BELOW 64X16 PLENUM. PATCH WALL PENETRATIONS TO MATCH EXISTING. REFER TO PLUMBING DRAWINGS FOR CONTINUATION OF DEMOLITION WORK.
- ⑤ REMOVE EXISTING TEMPERED WATER SYSTEM PIPING.
- ⑥ REMOVE EXISTING TEMPERED WATER STORAGE TANK.
- ⑦ REMOVE EXISTING 1 1/2" HWS/R BACK TO MAIN AND CAP.
- ⑧ REMOVE EXISTING UV STERILIZER AND CENTRIFUGAL SOLIDS SEPARATOR.
- ⑨ EXHAUST DUCTWORK NOT SHOWN FOR CLARITY. REFER TO DRAWING M102 FOR CONTINUATION.



1
MD102 PARTIAL FIRST FLOOR EAST WING - DEMOLITION
SCALE: 1/4" = 1'-0"

KEY PLAN



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ADDENDUMS / REVISIONS	

CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: GG
	CHECKED BY: CEH

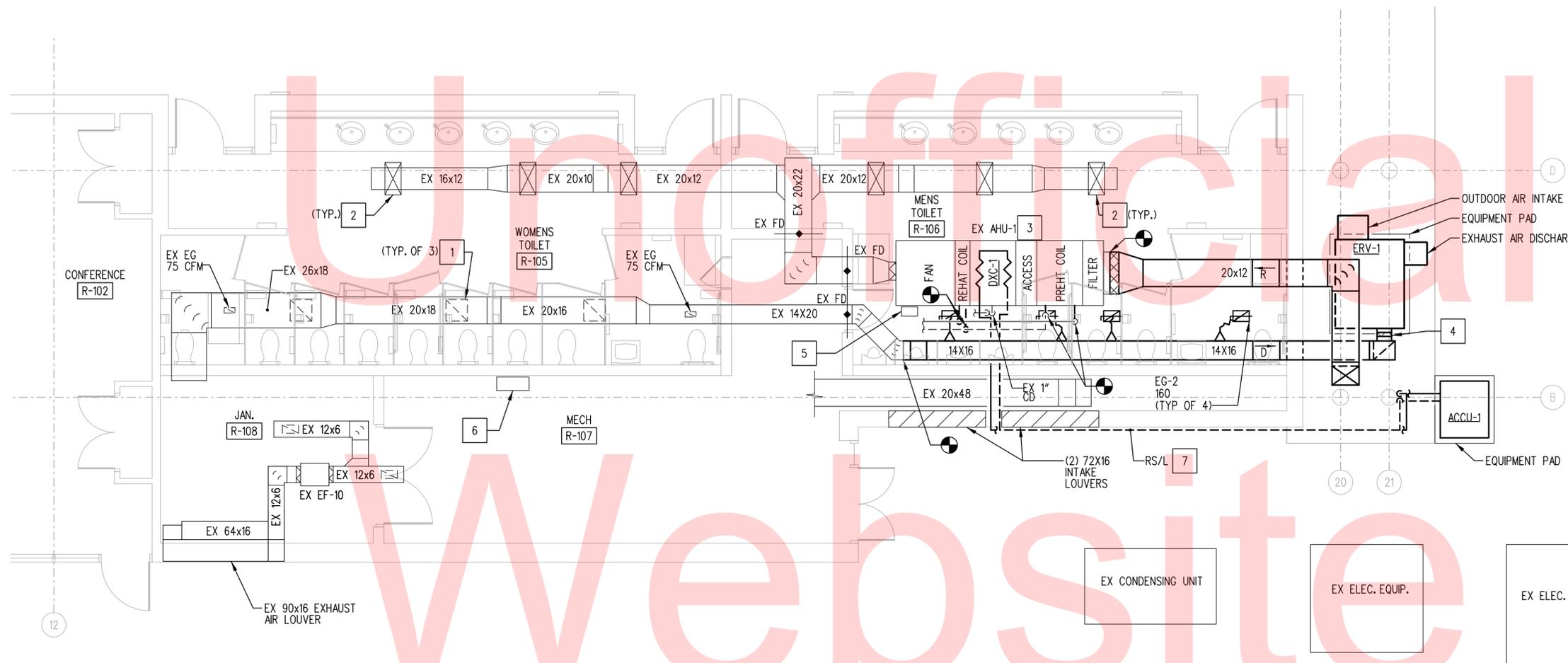
MD102
SHEET NO. 12
TOTAL SHTS. 29

GENERAL NOTES:

1. PROVIDE REFRIGERANT COMPONENTS AND SIZE PIPING IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

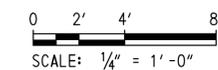
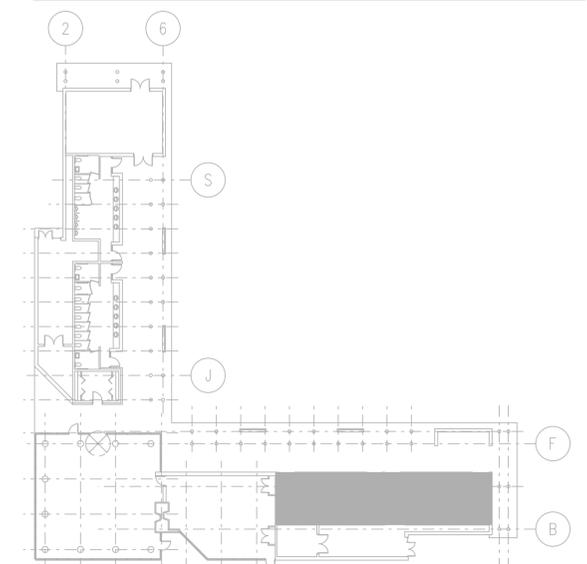
CONSTRUCTION NOTES:

1. BALANCE EXHAUST GRILLE TO 165 CFM.
2. BALANCE SUPPLY DIFFUSER TO 265 CFM.
3. LOWER UNIT AS REQUIRED TO PERFORM COIL REPLACEMENT WORK.
4. FLEX CONNECTION (TYPICAL).
5. EXISTING UNIT MOUNTED CABINET WITH EXISTING AHU CONTROLLER.
6. EXISTING WALL MOUNTED CABINET WITH EXISTING CONTROLLER FOR MECH ROOM AND WEB BASED SUPERVISORY CONTROLLER.
7. RACK PIPING HIGH ON WALL WITH ONE PIPE OVER TOP OF THE OTHER.



1
M102
PARTIAL FIRST FLOOR
EAST WING - NEW WORK
SCALE: 1/4" = 1'-0"

KEY PLAN



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ADDENDUMS / REVISIONS

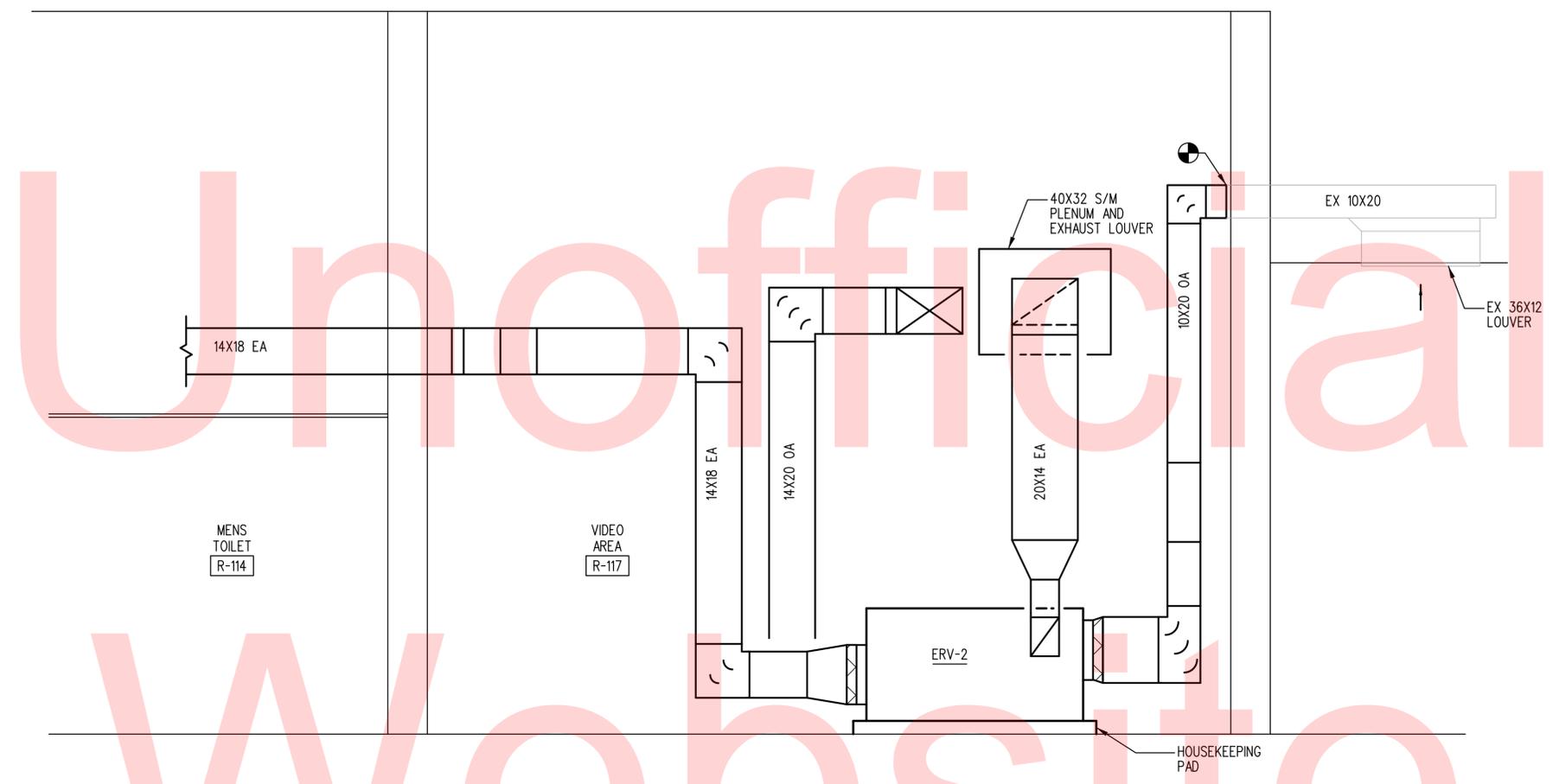
NO.	DATE	DESCRIPTION

**SMYRNA REST AREA
BATHROOM RENOVATIONS**

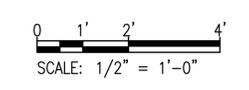
CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: GG
	CHECKED BY: CEH

**PARTIAL FIRST FLOOR
EAST WING NEW WORK**

M102
SHEET NO. 14
TOTAL SHTS. 29



1 VIDEO AREA SECTION
M401 SCALE: 1/2" = 1'-0"



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ADDENDUMS / REVISIONS	

SMYRNA REST AREA
BATHROOM RENOVATIONS

CONTRACT	BRIDGE NO.
T201680108	
COUNTY	DESIGNED BY: GG
NEW CASTLE	CHECKED BY: CEH

MECHANICAL
SECTIONS

M401
SHEET NO.
15
TOTAL SHTS.
29

AHU-1 & ERV-1 SEQUENCE OF OPERATIONS (AHU-2 & ERV-2 SIMILAR)

GENERAL:

1. SYSTEM DESCRIPTION: MODIFICATIONS TO THE EXISTING SYSTEM SEQUENCE OF OPERATIONS ARE LIMITED TO THE EXTENT INDICATED BELOW. THE ENERGY RECOVERY UNIT (ERV-1) SHALL BE INTERLOCKED WITH THE AIR HANDLING UNIT (AHU-1). AHU-1 AND ERV-1 SHALL RUN CONTINUOUSLY WHEN IN OCCUPIED MODE. AHU-1 AND ERV-1 SHALL DE-ENERGIZE AND ALL MOTOR OPERATED DAMPERS SHALL CLOSE WHEN IN UNOCCUPIED MODE.
2. SYSTEM TYPE: CONSTANT 100% OUTDOOR AIR VOLUME SYSTEM WITH HYDRONIC PRE-HEAT, HYDRONIC REHEAT, DIRECT EXPANSION (DX) COOLING, AND ENERGY RECOVERY.
3. METHOD OF CONTROL: EXISTING RETURN AIR COMBINATION TEMPERATURE AND HUMIDITY SENSOR SHALL CONTROL AHU LEAVING SUPPLY TEMPERATURE.
4. AHU-1 DESCRIPTION: THE EXISTING AHU-1 IS A CONSTANT VOLUME, 100% OUTDOOR AIR UNIT. THE UNIT INCLUDES EXISTING PRE-HEAT COIL, REHEAT COIL, FACE AND BYPASS DAMPER, SUPPLY FAN, AND ASSOCIATED TEMPERATURE AND DIFFERENTIAL PRESSURE SENSORS. AS PART OF THIS PROJECT, A DX COOLING COIL AND ASSOCIATED CONDENSING UNIT WILL BE ADDED.
5. ERV-1 DESCRIPTION: ERV-1 IS A CROSS FLOW ENERGY RECOVERY DEVICE WHICH INCLUDES A TOTAL ENERGY WHEEL, SUPPLY FAN, EXHAUST FAN, FILTERS, DIFFERENTIAL PRESSURE SENSORS, AND TEMPERATURE SENSORS.
6. SPACE TEMPERATURE AND HUMIDITY SETPOINTS:
COOLING: 75 DEG. F (ADJ.)
HEATING: 70 DEG. F (ADJ.)
MAX RELATIVE HUMIDITY: 50% RH (ADJ.)
7. AHU OPERATING STATUS AND SCHEDULES, TEMPERATURE SETPOINTS, STATIC PRESSURE SETPOINTS AND EQUIPMENT ALARM CONDITIONS SHALL BE MONITORED AND ADJUSTED THROUGH THE DDC SYSTEM GRAPHICAL USER INTERFACE (GUI). OPERATOR SHALL ALSO BE ABLE TO PERFORM ALL MONITORING AND CONTROL DIRECTLY FROM THE DDC PANEL AND THE OPERATORS WORKSTATION LOCATED AT FACILITIES MAINTENANCE.

OCCUPIED MODE:

1. OPEN ERV-1 DAMPERS TO FULL OPEN. ONCE DAMPERS ARE PROVEN OPEN, ENERGIZE ERV-1 SUPPLY AND RETURN FANS.
2. ENERGIZE AHU-1 SUPPLY FAN.
3. COOLING OPERATION: MODULATE PRE-HEAT BYPASS DAMPER TO FULL BYPASS POSITION. UPON CALL FOR COOLING FROM TEH-1, ENERGIZE DXC-1 IN COOLING MODE AND MODULATE COMPRESSOR TO MAINTAIN LEAVING AIR TEMPERATURE OF 55 DEG. F (ADJ.) AS SENSED BY TS-8. IF RETURN AIR RELATIVE HUMIDITY IS BELOW SETPOINT AS SENSED BY TEH-1, RESET SUPPLY AIR TEMPERATURE (SAT) AS SENSED BY TS-8 BASED ON THE RETURN AIR TEMPERATURE (RAT) AS SENSED BY TEH-1:

RAT IS ABOVE 78 DEG. F	55 DEG. F SAT
RAT BETWEEN 74 AND 72 DEG. F	INTERPOLATE
RAT LESS THAN 72 DEG. F	70 DEG. SAT
4. WHEN IN COOLING MODE AND THE UNIT RETURN AIR ENTHALPY AS SENSED BY TEH-1 IS LESS THAN THE OUTSIDE AIR ENTHALPY AS SENSED BY ES-1, OPERATE ENERGY RECOVERY WHEEL AT FULL SPEED.
5. WHEN IN HEATING MODE AND THE UNIT RETURN AIR ENTHALPY AS SENSED BY TEH-1 IS GREATER THAN THE OUTSIDE AIR ENTHALPY AS SENSED BY ES-1, OPERATE ENERGY RECOVERY WHEEL AT FULL SPEED.
6. DEHUMIDIFICATION OPERATION: IF RETURN AIR RELATIVE HUMIDITY IS ABOVE SET POINT AS SENSED BY TEH-1 AND OUTSIDE AIR TEMPERATURE IS ABOVE 60 DEG F, MODULATE BYPASS DAMPER TO FULL BYPASS POSITION. UPON CALL FOR DEHUMIDICATION FROM TEH-1, ENERGIZE DXC-1 IN COOLING MODE. RESET SUPPLY AIR TEMPERATURE DOWNWARD TO A MINIMUM OF 55 DEG. F TO MAINTAIN RELATIVE HUMIDITY AT TEH-1. IF RETURN AIR TEMPERATURE IS BELOW HEATING SETPOINT, ACTIVATE HEATING/BOILER SYSTEM AND MODULATE REHEAT COIL VALVE TO MAINTAIN RETURN AIR TEMPERATURE HEATING SETPOINT.
7. HEATING OPERATION: TS-4 SHALL BE THE SOURCE OF THE OUTDOOR AIR TEMPERATURE FOR ALL HEATING COMPONENTS. NO OTHER CHANGES TO THE EXISTING UNIT SEQUENCE OF OPERATIONS ARE REQUIRED.

EXISTING TO REMAIN SEQUENCE OF OPERATIONS:

1. PREHEAT COIL AND FACE & BYPASS DAMPER: WHEN OUTDOOR AIR TEMPERATURE IS ABOVE 40 DEG. F (ADJ.), THE PREHEAT COIL VALVE SHALL MODULATE TO MAINTAIN PREHEAT COIL DISCHARGE AIR TEMPERATURE AT 55 DEG. F (ADJ.) SETPOINT. THE FACE AND BYPASS DAMPER WILL BE IN THE FACE FULL OPEN POSITION. UPON A FALL IN OUTDOOR AIR TEMPERATURE BELOW 40 DEG. F (ADJ.), THE HEATING, THE HEATING VALVE SHALL OPEN FULLY, AND THE FACE AND BYPASS DAMPER SHALL MODULATE TO MAINTAIN PREHEAT COIL DISCHARGE AIR TEMPERATURE AT SETPOINT. THE HEATING VALVE WILL BE CLOSED AND THE COIL FACE DAMPER WILL BE FULLY OPEN IF THE OUTDOOR AIR TEMPERATURE RISES ABOVE 53 DEG. F (ADJ.). WHEN THE UNIT SUPPLY FAN IS OFF, THE FACE DAMPER SHALL BE IN THE FULLY CLOSED POSITION AND THE HEATING VALVE SHALL MODULATE TO MAINTAIN AN INTERNAL UNIT TEMPERATURE OF 50 DEG. F (ADJ.).
2. REHEAT: UPON A DROP IN EXHAUST AIR TEMPERATURE BELOW 70 DEG. F (ADJ.) AS SENSED BY THE EXHAUST AIR TEMPERATURE SENSOR, THE REHEAT COIL VALVE SHALL MODULATE TO MAINTAIN SETPOINT.
3. SMOKE SHUTDOWN: A SMOKE DETECTOR MOUNTED IN THE SUPPLY DUCT SHALL, THROUGH A HARDWIRED INTERLOCK, DE-ENERGIZE THE SUPPLY FAN, CLOSE THE OUTSIDE AIR DAMPER, AND AN ALARM MESSAGE SHALL BE GENERATED AT THE AHU CONTROLLER DISPLAY.
4. LOW LIMIT SHUTDOWN: UPON A DROP IN AIR TEMPERATURE LEAVING THE REHEAT COIL BELOW 35 DEG. F (MANUALLY ADJ.), AS SENSED BY A LOW LIMIT THERMOSTAT (FREEZESTAT), THE CONTROLLER SHALL DE-ENERGIZE THE SUPPLY AND EXHAUST FANS, CLOSE THE OUTSIDE AIR DAMPER, AND OPEN THE REHEAT COIL VALVE. AN ALARM MESSAGE SHALL BE GENERATED AT THE AHU CONTROLLER DISPLAY.
5. AHU FILTER STATUS: UPON A RISE IN DIFFERENTIAL PRESSURE ABOVE SETPOINT ACROSS FILTER, AS SENSED BY A DIFFERENTIAL PRESSURE SWITCH, AN ALARM MESSAGE SHALL BE GENERATED AT THE AHU CONTROLLER DISPLAY.

UNOCCUPIED MODE:

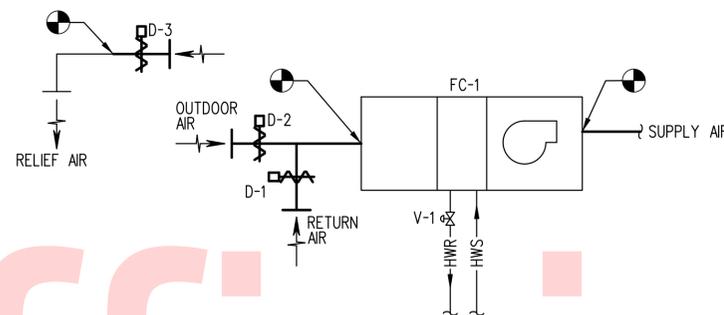
1. AHU-1 AND ERV-1 SHALL DE-ENERGIZE.
2. ALL MOTOR OPERATED DAMPERS SHALL FULLY CLOSE.

SAFETIES:

1. ENERGY RECOVERY WHEEL PACKAGED CONTROLS SHALL SIGNAL TIMED EXHAUST TO PREVENT THE ENERGY RECOVERY WHEEL FROM FREEZING.

INPUT/OUTPUT POINTS:

1. ERV-1 ENTERING OUTDOOR AIR TEMPERATURE - ANALOG INPUT
2. ERV-1 LEAVING OUTDOOR AIR TEMPERATURE - ANALOG INPUT
3. ERV-1 ENTERING EXHAUST AIR TEMPERATURE - ANALOG INPUT
4. ERV-1 DISCHARGE EXHAUST AIR TEMPERATURE - ANALOG INPUT
5. ERV-1 ENTERING OUTDOOR AIR ENTHALPY - ANALOG INPUT
6. AHU-1 COOLING COIL LEAVING AIR TEMPERATURE (TS-8) - ANALOG INPUT
7. ACCU-1 STATUS - DIGITAL INPUT
8. ERV-1 STATUS - DIGITAL INPUT
9. ERV-1 OUTDOOR AIR DIRTY FILTER ALARM - DIGITAL INPUT
10. ERV-1 EXHAUST AIR DIRTY FILTER ALARM - DIGITAL INPUT
11. ACCU-1 START/STOP - DIGITAL OUTPUT
12. ERV-1 START/STOP - DIGITAL OUTPUT
13. ALL EXISTING POINTS TO REMAIN

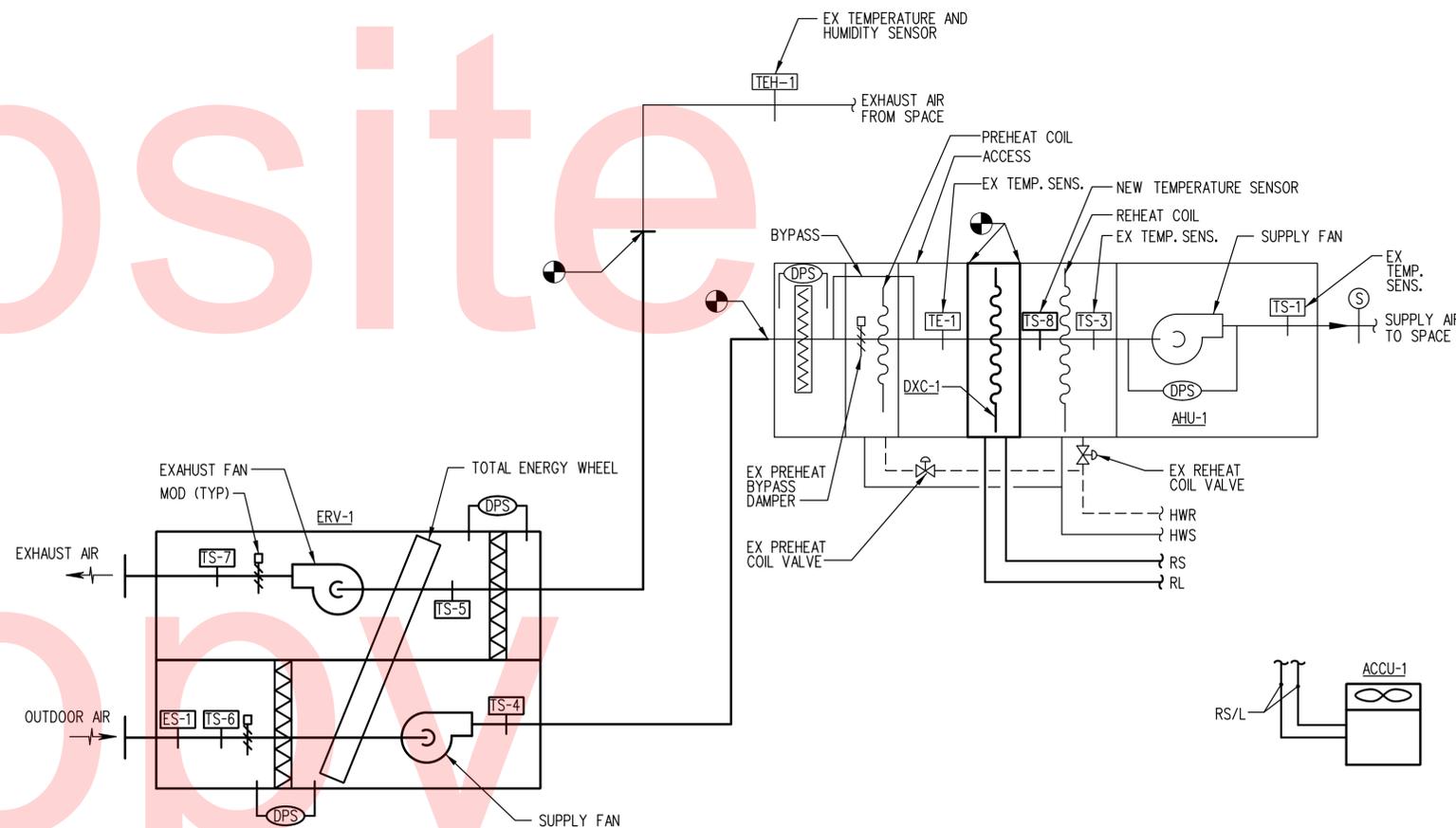


2 EX FC-1 CONTROL SCHEMATIC

M501 NOT TO SCALE

FC-1 SEQUENCE OF OPERATIONS

1. ON A RISE IN SPACE TEMPERATURE AS SENSED BY ROOM THERMOSTAT (ZN-T), MODULATE HEATING COIL VALVE (V-1) CLOSED. CLOSE D-1 AND OPEN OUTDOOR AIR DAMPER (D-2) AND RELIEF DAMPER (D-3) TO MAINTAIN SPACE TEMPERATURE SETPOINT INDICATED AT ZN-T.
2. ON A DROP IN SPACE TEMPERATURE AS SENSED BY ZN-T, OPEN D-1 AND CLOSE D-2 AND D-3. MODULATE V-1 TO MAINTAIN SPACE TEMPERATURE SETPOINT INDICATED AT ZN-T.



1 AHU-1 & ERV-1 CONTROL SCHEMATIC (AHU-2 & ERV-2 SIMILAR)

M501 NOT TO SCALE

BMS SYSTEM GENERAL NOTES

1. THE EXISTING CONTROL SYSTEM IS JOHNSON CONTROLS FACILITY EXPLORER. THE EXISTING CONTROLLERS SHOWN ON THE DRAWINGS ARE MODEL PCG2611. THE WEB ENABLED SUPERVISORY CONTROLLER IS A MODEL FX60. MODIFY EX SYSTEM AS REQUIRED TO ACHIEVE THE INDICATED SEQUENCES.
2. CONTRACTOR SHALL UPDATE THE CENTRAL WORKSTATION GRAPHIC USER INTERFACE (GUI) WITH CONTROL POINTS AND GRAPHICS INDICATED ON THE CONTROL SCHEMATICS AND THE POINTS LISTS AND THEIR ASSOCIATED VALUES.
3. PROVIDE DDC PANELS ADJACENT TO EXISTING PANELS AS REQUIRED TO IMPLEMENT THE SEQUENCE OF OPERATIONS AND PROVIDE REQUIRED CONTROL POINTS. EXTEND POWER WIRING TO PANELS FROM NEAREST 120 VOLT PANEL WITH SUITABLE SPARE BREAKERS. EXTEND SIGNAL AND POWER WIRING (24 OR 120 VOLT) FOR CONTROL COMPONENTS FROM DDC PANELS IN ACCORDANCE WITH SPEC SECTION 23090. ALL DDC PANELS SHALL BE EQUIPPED WITH A PORT TO ALLOW LAPTOP CONNECTION.
4. ALARMS INDICATED ON THE CENTRAL WORKSTATION STATION COMPUTER SHALL BE IN PLAN ENGLISH AND SHALL CLEARLY DESCRIBE ALARM CONDITION AS NOTED ON THE CONSTRUCTION DOCUMENTS TO AN OPERATOR WITH NO TRAINING ON THE BMS SYSTEM. FOR EXAMPLE, THE ALARM FOR AN AHU FAN FAILURE SHALL BE "AHU FAN FAILURE," NUMERICAL OR CRYPTIC CODE ALARMS ARE NOT ACCEPTABLE. FOR EXAMPLE, ERROR MESSAGES SUCH AS "CRIT 4 ALARM" OR "ERROR 12" ARE NOT ACCEPTABLE.

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ENERGY RECOVERY WHEEL SCHEDULE

UNIT ID	LOCATION	WINTER						SUMMER						MAX. APD (IN W.C)	ELECTRIC			FILTERS		BASIS OF DESIGN				
		SUPPLY AIR			RETURN AIR			SUPPLY AIR			RETURN AIR				SUPPLY FAN HP	EXHAUST FAN HP	VOLTS/PH	OUTDOOR AIR FILTER EFFICIENCY	RETURN AIR FILTER EFFICIENCY					
		CFM	EAT (DB)	LAT (DB)	CFM	EAT (DB)	LAT (DB)	CFM	EAT (DB)	EAT (WB)	LAT (DB)	LAT (WB)	CFM								EAT (DB)	EAT (WB)	LAT (DB)	LAT (WB)
ERV-1	OUTSIDE	1,580	0.0	47.3	1,280	68.6	10.2	1,580	90.0	75.0	80.7	67.8	1,280	76.5	63.8	88.0	73.6	0.20	3/4	1/2	208/3	MERV 8	MERV 8	GREENHECK ERV-45-15L
ERV-2	COFFEE ROOM R-117	1,580	0.0	47.3	1,280	68.6	10.2	1,580	90.0	75.0	80.7	67.8	1,280	76.5	63.8	88.0	73.6	0.20	3/4	1/2	208/3	MERV 8	MERV 8	GREENHECK ERV-45-15L

DX COOLING COIL SCHEDULE

UNIT ID	AREA SERVED	LOCATION	SUPPLY FAN		DX COOLING COIL								APPROX. EXISTING COIL MODULE SIZE (NOTE 3)	BASIS OF DESIGN (NOTE 2)
			CFM	MIN OA CFM	TOTAL (MBH)	SENSIBLE (MBH)	EAT DB (F) (NOTE 1)	EAT WB (F) (NOTE 1)	LAT DB (F) (NOTE 1)	LAT WB (F) (NOTE 1)	MAX. APD (IN.)	MAX. FACE VEL.		
DXC-1	EAST BATHROOMS	MENS TOILET R-106	1,580	1,580	64.8	43.9	80.7	67.8	55.0	54.7	0.25	500	34"L x 34"H x 48"W	TRANE DUFB27
DXC-2	NORTH BATHROOMS	VIDEO AREA R-117	1,580	1,580	64.8	43.9	80.7	67.8	55.0	54.7	0.25	500	34"L x 34"H x 48"W	TRANE DUFB27

- NOTES:
 1. ENTERING AND LEAVING AIR TEMPERATURES ARE THE COIL ENTERING AND LEAVING AIR TEMPERATURES.
 2. COORDINATE DX COIL SIZE WITH EXISTING AIR HANDLER. EXISTING AIR HANDLER IS A TRANE MODEL MCCB008 INSTALLED IN 2005.
 3. FIELD VERIFY.

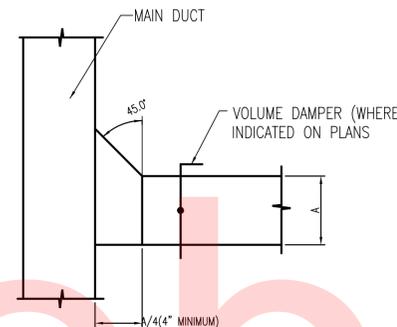
AIR COOLED CONDENSING UNIT SCHEDULE

UNIT ID	AREA SERVED	LOCATION	CAPACITY (MBH)	REFRIG.	NO. OF COMPR.	NO. OF FANS	ELECTRICAL DATA		BASIS OF DESIGN
							MCA	VOLTS/PH	
ACCU-1	EAST WING	OUTSIDE	64.8	R-410A	2	1	24.0	208/3	TRANE TTA073 (NOTE 1)
ACCU-2	NORTH WING	OUTSIDE	64.8	R-410A	2	1	24.0	208/3	TRANE TTA073 (NOTE 1)

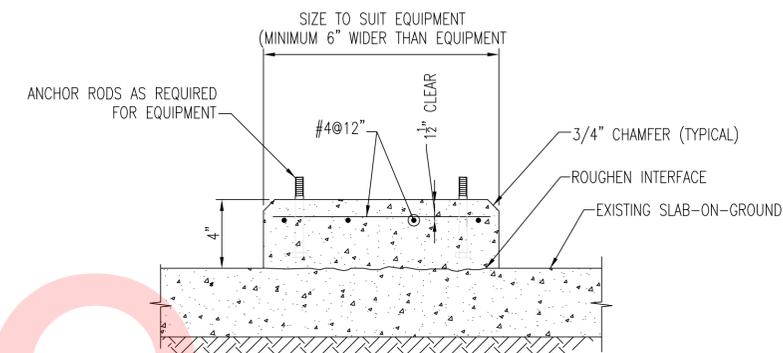
- NOTES:
 1. PROVIDE CONDENSING UNIT WITH AT LEAST ONE DIGITAL SCROLL COMPRESSOR FOR CAPACITY MODULATION.

AIR DEVICE SCHEDULE

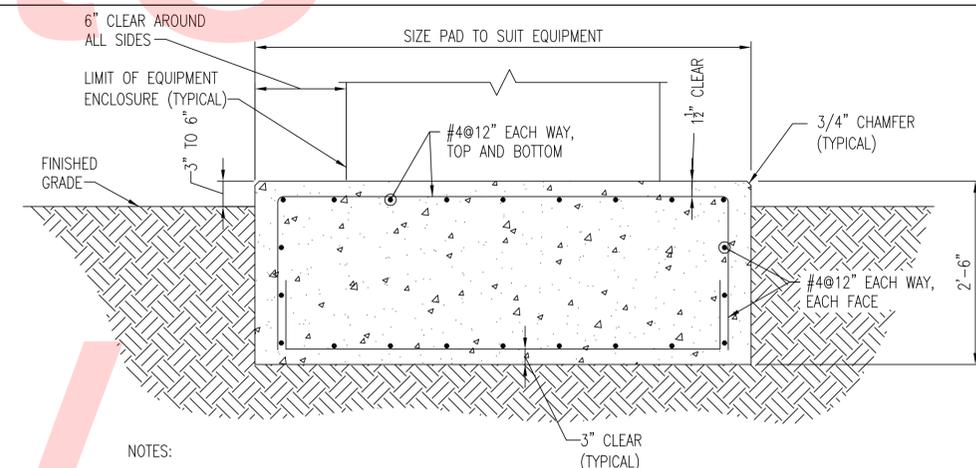
UNIT ID	SERVICE	MOUNTING	NECK SIZE (IN)	FACE SIZE (IN)	CFM RANGE	MAX. APD (IN. WG)	MAX. NC	BASIS OF DESIGN	DESCRIPTION
SR-1	SUPPLY REGISTER	DUCT	18x6	20x8	300	0.05	<15	TITUS 272 RL	3/4" SPACING, LONG FRONT BLADES AT 45 DEGREES
EG-1	EXHAUST GRILLE	SURFACE	8	24x24	0 - 160	0.05	<15	TITUS PAR	PERFORATED FACE
EG-2	EXHAUST GRILLE	LAY-IN	8	24x24	0 - 160	0.05	<15	TITUS PAR	PERFORATED FACE



1 DUCT BRANCH
M601 NOT TO SCALE



2 INTERIOR/EXTERIOR HOUSEKEEPING PAD
M601 NOT TO SCALE



- NOTES:
 1. CONCRETE SHALL BE PLACED ON THE SAME DAY EXCAVATION TO THE SUBGRADE IS ACHIEVED IN ORDER TO MINIMIZE DISTURBANCE TO THE FOUNDATION SUBGRADE, AND ONLY AFTER THE ENGINEER APPROVES THE SUITABILITY OF THE SUBGRADE.
 2. FOUNDATION SUBGRADES SHALL BE DRY AND UNYIELDING STATE AS DETERMINED BY THE ENGINEER.

3 EXTERIOR EQUIPMENT PAD
M601 NOT TO SCALE

GENERAL NOTES

- CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301 AND ACI 318.
- CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
- REINFORCING STEEL BARS SHALL MEET ASTM A615, GRADE 60 DEFORMED.
- SUBMIT REINFORCING STEEL SHOP DRAWINGS FOR REVIEW AND APPROVAL.

ADDENDUMS / REVISIONS

PLUMBING LEGEND

	CONNECT TO EXISTING
	EXTENT OF DEMOLITION
	EXISTING
	DEMOLITION WORK SHOWN DARK AND HEAVY ON DEMOLITION DRAWINGS
	NEW WORK SHOWN DARK AND HEAVY ON NEW WORK DRAWINGS
	COLD WATER
	HOT WATER
	HOT WATER CIRCULATING
	SANITARY
	STORM WATER
	RAIN LEADER
	VENT
	TEE TURNED DOWN
	TEE TURNED UP
	PIPING TURNED DOWN
	PIPING TURNED UP
	CAPPED PIPING
	BALL VALVE
	2-WAY MOTORIZED VALVE
	PRESSURE REDUCING VALVE
	GATE VALVE
	UNION
	BACKWATER VALVE

	BALANCING VALVE
	BUTTERFLY VALVE
	PLUG VALVE
	BALL VALVE IN RISE
	GATE VALVE IN RISE
	THERMOMETER
	TEMPERATURE GAUGE
	PRESSURE GAUGE
	FLOW SWITCH, FREEZE STAT
	PRESSURE SWITCH
	METER
	PUMP
	CIRCULATING PUMP
	GLOBE VALVE
	STRAINER WITH BLOW DOWN VALVE
	HOSE BIBB
	FLEXIBLE PIPE CONNECTION
	DRAIN VALVE WITH HOSE-END CONNECTION
	CHECK VALVE
	WALL HYDRANT
	AUTOMATIC AIR VENT
	MANUAL AIR VENT
	BACKFLOW PREVENTER WITH ISOLATION VALVES

	FLOOR CLEANOUT
	FLOOR DRAIN
	FLOOR DRAIN
	FLOOR SINK
	FLOOR CLEANOUT
	WALL CLEANOUT
	TRENCH DRAIN
	OPEN SITE DRAIN
	VENT THROUGH ROOF
	ROOF DRAIN
	EMERGENCY OVERFLOW ROOF DRAIN
	TEST PLUG
	PIPE SLEEVE
	FLOOR DRAIN WITH TRAP PRIMER
	PLUG VALVE-SHUTOFF COCK
	TEMPERATURE AND PRESSURE RELIEF VALVE
	PIPE ANCHOR
	ALIGNMENT GUIDE
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	DIRECTION OF FLOW ARROW

GENERAL NOTES:

- GENERAL NOTES ARE DISCIPLINE SPECIFIC AND APPLY TO EVERY DRAWING IN THAT DISCIPLINE. DRAWING NOTES APPLY TO ALL WORK SHOWN ON THIS DRAWING. SPECIAL NOTES APPLY TO INDIVIDUAL SITUATIONS AND EQUIPMENT.
- SLOPES AND INVERT ELEVATIONS SHALL BE ESTABLISHED BEFORE ANY PIPING IS INSTALLED IN ORDER TO MAINTAIN PROPER SLOPES.
- MAKE PROPER CONNECTION TO FIXTURES AND EQUIPMENT. DRAWINGS ARE SCHEMATIC AND ALL BRANCH MAINS, ELBOWS, AND CONNECTIONS ARE NOT SHOWN.
- COORDINATE LOCATION OF PIPING WITH BUILDING STRUCTURE.
- PIPING SHALL BE RUN TO AVOID CONFLICTS WITH OTHER TRADES.
- DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.
- DETAILS WITHOUT SPECIFIC REFERENCE TO A LOCATION SHALL BE APPLIED TO THE GENERAL INSTALLATION OF PIPES.

PLUMBING ABBREVIATIONS

&	AND	EFF	EFFICIENCY	L/M	LITERS/PER MINUTE	RD	ROOF DRAIN
@	AT	EL	ELEVATION	L/S	LITERS/PER SECOND	RL	RAIN LEADER
2-POS	TWO POSITION	ET	EXPANSION TANK	LAV	LAVATORY	RO	REVERSE OSMOSIS WATER
ABV	ABOVE	ETR	EXISTING TO REMAIN	LBS/HR	POUNDS/PER HOUR	ROS	REVERSE OSMOSIS STEAM
AC	AIR COMPRESSOR	EWC	ELECTRIC WATER COOLER	LF	LINEAR FEET	RPBFP	REDUCED PRESSURE BACK FLOW PREVENTER
AD	ACCESS DOOR, AREA DRAIN	EWH	ELECTRIC WATER TEMPERATURE	LS	LIMIT SWITCH	RPM	REVOLUTIONS PER MINUTE
ADJ	ADJUSTABLE	EWT	ENTERING WATER TEMPERATURE	LWT	LEAVING WATER TEMPERATURE	RX	REMOVE EXISTING
AFF	ABOVE FINISHED FLOOR	EX, EXIST	EXISTING	M	METERS	SAN	SANITARY
AG	ABOVE GRADE	FCO	FLOOR CLEAN OUT	M/S	METERS/PER SECOND	SG	STEAM GENERATOR
AHU	AIR HANDLING UNIT	FCU	FAN COIL UNIT	MAX	MAXIMUM	SM	SQUARE METER
BEL	BELOW	FIN	FINISHED	MBH	1,000 BRITISH THERMAL UNITS -BTU- PER HOUR	SP	SUMP PUMP
BTUH	BRITISH THERMAL UNIT PER HOUR	FM	FACTORY MUTUAL	MCA	MINIMUM CIRCUIT	SP	SPRINKLER
CA	COMPRESSED AIR	FLR	FLOOR	MER	MECHANICAL EQUIPMENT ROOM	SPKR	SPRINKLER
CAP	CAPACITY	FOP	FUEL OIL PUMP	MIN	MINIMUM	SQ	SQUARE
CD	CONDENSATE DRAIN	FOR	FUEL OIL RETURN	MISC	MISCELLANEOUS	S/S	STAINLESS/STEEL
CDP	PUMPED CONDENSATE DRAIN	FOS	FUEL OIL SUPPLY	mm	MILLIMETER	STM	STEAM
CFH	CUBIC FEET PER HOUR	FPM	FEET PER MINUTE	MOCPP	MAXIMUM OVERCURRENT PROTECTION	SW	STORM WATER
CLG	CEILING	FS	FLOW SWITCH	MTD	MOUNTED	SWC	STEAM WATER CONVERTER
CO	CLEANOUT	FT	FEET	MV	MANUAL AIR VENT	SZA	SPRINKLER ZONE ASSEMBLY
CP	CIRCULATING PUMP	G	NATURAL GAS	N	NORTH	TEMP	TEMPERATURE
CP	CONDENSATE PUMP	GAL	GALLONS	NC	NOISE CRITERIA	TS	TAMPER SWITCH, TEMPERATURE SENSOR
CRU	COMPUTER ROOM UNIT	GPH	GALLONS PER HOUR	NC	NORMALLY CLOSED	TW	THERMOMETER WELL
CS	CURRENT SENSING RELAY	GPM	GALLONS PER MINUTE	NIC	NOT IN CONTRACT	TYP	TYPICAL
CV	FLOW COEFFICIENT	H	HUMIDIFIER	NO	NORMALLY OPEN	UNO	UNLESS NOTED OTHERWISE
CW	COLD WATER, POTABLE	HB	HOSE BIB	No	NUMBER	V	VENT
CX	CONNECT TO EXISTING	HCO	HORIZONTAL CLEANOUT	NRS	NON-RISING STEM	V	VOLTS
DB	DRY BULB	HD	HEAD	NTS	NOT TO SCALE	V-1	VALVE IDENTIFICATION
dB	DECIBELS	HP	HORSEPOWER	OA	OUTSIDE AIR	VB	VACUUM BREAKER
DEG C, °C	DEGREE CELSIUS	HW	HOT WATER, POTABLE	OC	ON CENTER	VEL	VELOCITY
DEG F, °F	DEGREE FAHRENHEIT	HWR	HEATING WATER RETURN	OSD	OPEN SITE DRAIN	VFD	VARIABLE FREQUENCY DRIVE
DF	DRINKING FOUNTAIN	HWS	HEATING WATER SUPPLY	OS&Y	OUTSIDE SCREW & YOKE	VTR	VENT THROUGH ROOF
DFU	DRAINAGE FIXTURE UNITS	HWC	HOT WARE CIRCULATING, POTABLE	P	PUMP	WC	WATER CLOSET
DIA	DIAMETER	HWR	HOT WATER RE-CIRCULATING	PD	PRESSURE DROP	WH	WALL HYDRANT
DN	DOWN	HZ	HERTZ	PH	PHASE	WHA	WATER HAMMER ARRESTER
DWG	DRAWING	IND	IDENTIFICATION	PRV	PRESSURE REDUCING VALVE	WPD	WATER PRESSURE DROP
DWH	DOMESTIC WATER HEATER	IN	INCH	PS	PRESSURE SWITCH	WSFU	WATER SUPPLY FIXTURE UNIT
		INV	INVERT	PSIG	POUNDS PER SQUARE INCH -GAGE-	WT	WEIGHT
		KG	KILOGRAM				
		KW	KILOWATT				

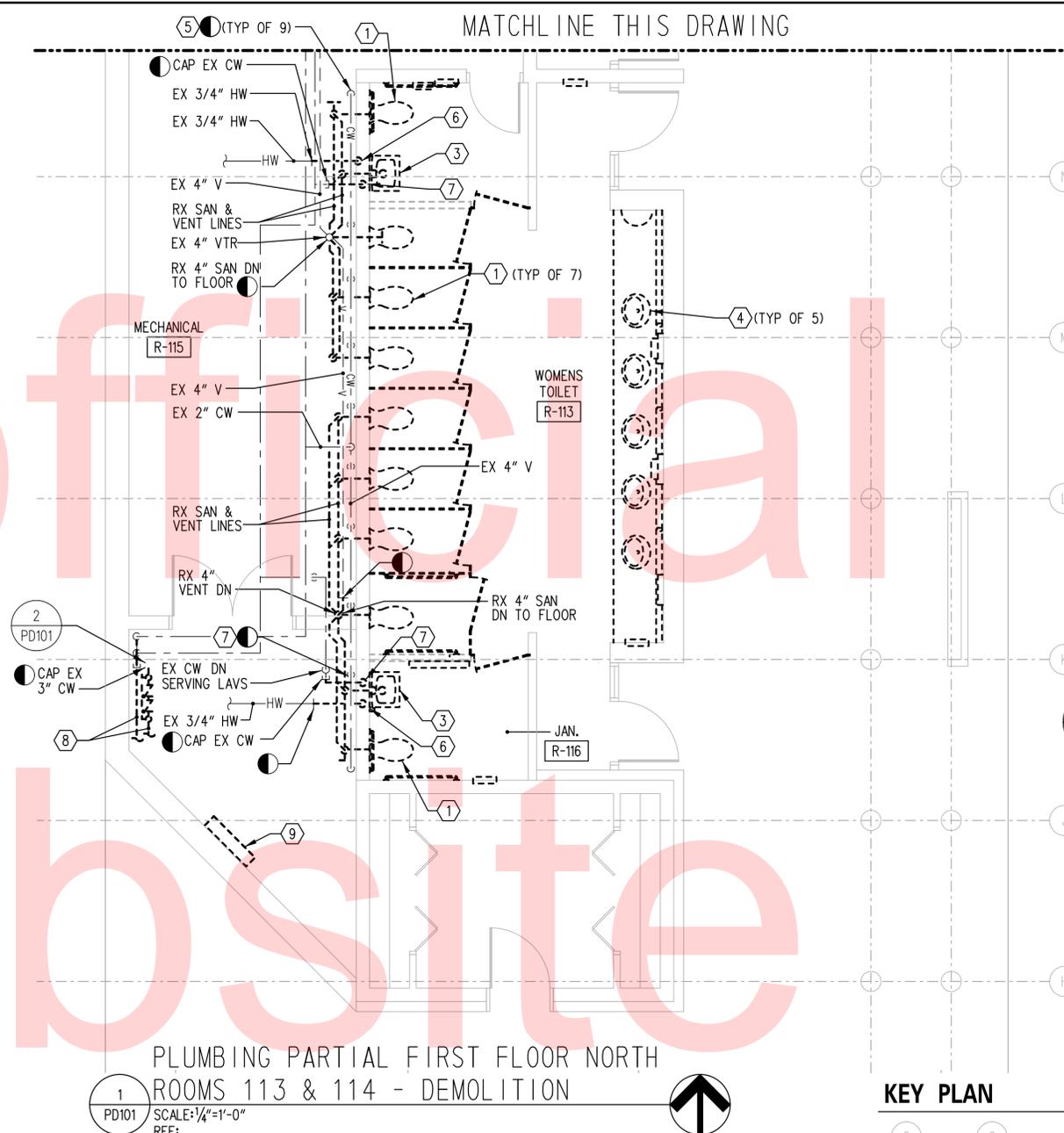
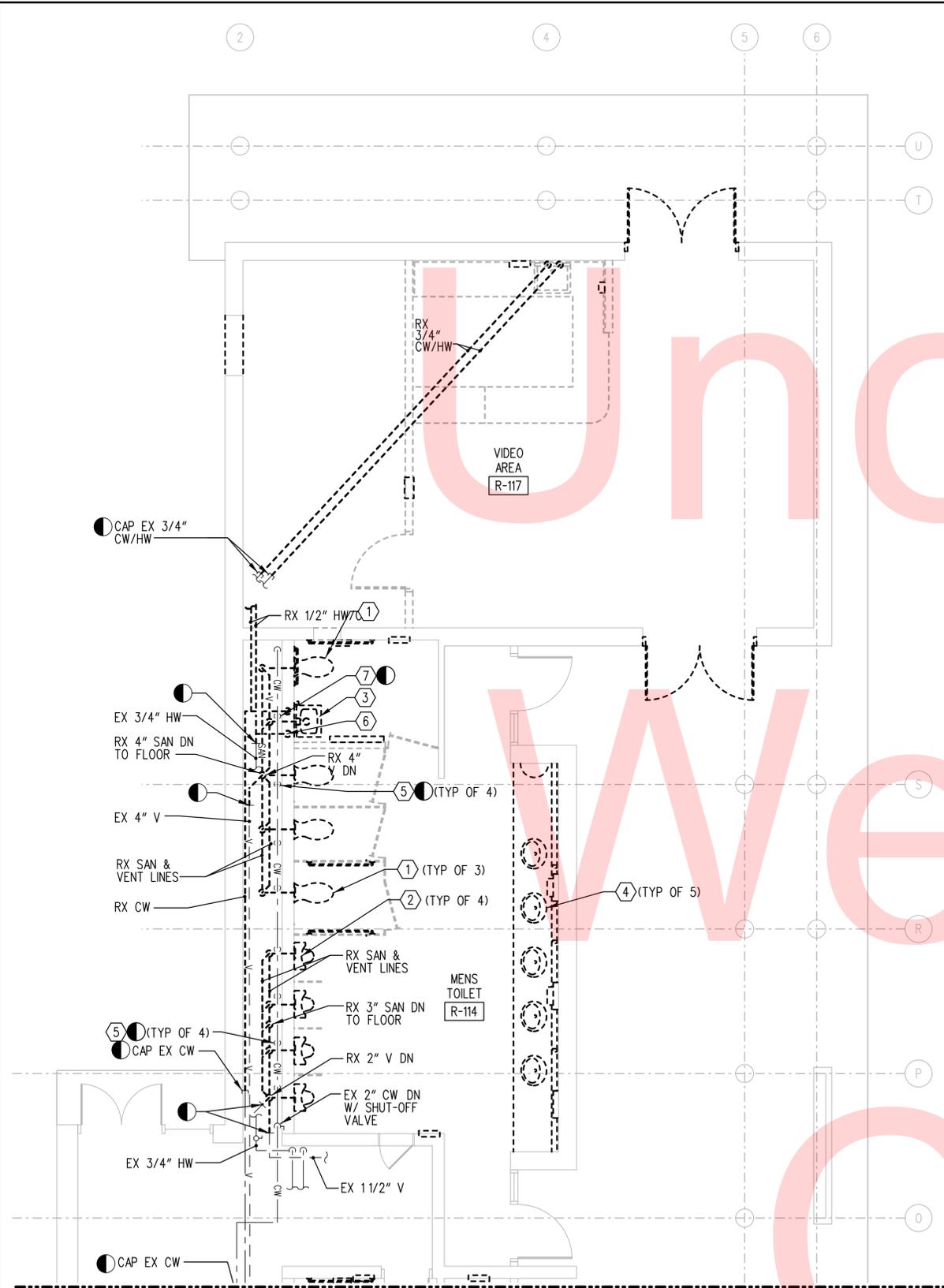
ADDENDUMS / REVISIONS

SMYRNA REST AREA BATHROOM RENOVATIONS

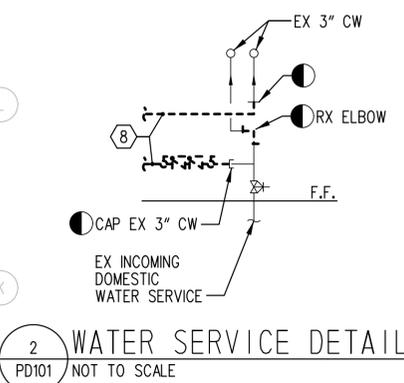
CONTRACT	BRIDGE NO.
T201680108	
COUNTY	DESIGNED BY: ALM
NEW CASTLE	CHECKED BY: CEH

PLUMBING LEGEND, ABBREVIATIONS & NOTES

P001
SHEET NO.
18
TOTAL SHTS.
29



- DEMOLITION KEYNOTES:**
- 1 REMOVE EXISTING WALL MOUNTED WATER CLOSET AND SENSOR OPERATED FLUSH VALVE. REMOVE FLUSH VALVE SENSOR PLATE IN WALL AND ALL ASSOCIATED INTERCONNECTING WIRING TO TRANSFORMER.
 - 2 REMOVE EXISTING WALL MOUNTED URINAL AND SENSOR OPERATED FLUSH VALVE. REMOVE FLUSH VALVE SENSOR PLATE IN WALL AND ALL ASSOCIATED INTERCONNECTING WIRING TO TRANSFORMER.
 - 3 REMOVE EXISTING WALL MOUNTED LAVATORY AND SENSOR OPERATED FAUCET, MIXING VALVE, AND TRANSFORMER.
 - 4 REMOVE EXISTING COUNTER MOUNTED LAVATORY AND SENSOR OPERATED FAUCET, MIXING VALVE, AND TRANSFORMER.
 - 5 REMOVE EXISTING 1 1/4" CW FROM FLUSH VALVE UP TO 5'-0" AFF.
 - 6 REMOVE EXISTING 3/4" HW DN TO LAVATORY.
 - 7 REMOVE EXISTING 3/4" CW DN TO LAVATORY.
 - 8 REMOVE EXISTING 3" CW AND DOUBLE CHECK BACKFLOW PREVENTER TO TEMPERING SYSTEM.
 - 9 REMOVE EXISTING TEMPERING VALVES, ASSOCIATED CABINET, EXPANSION TANK, PIPING AND VALVES.

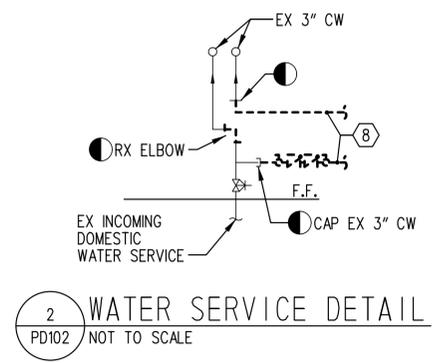
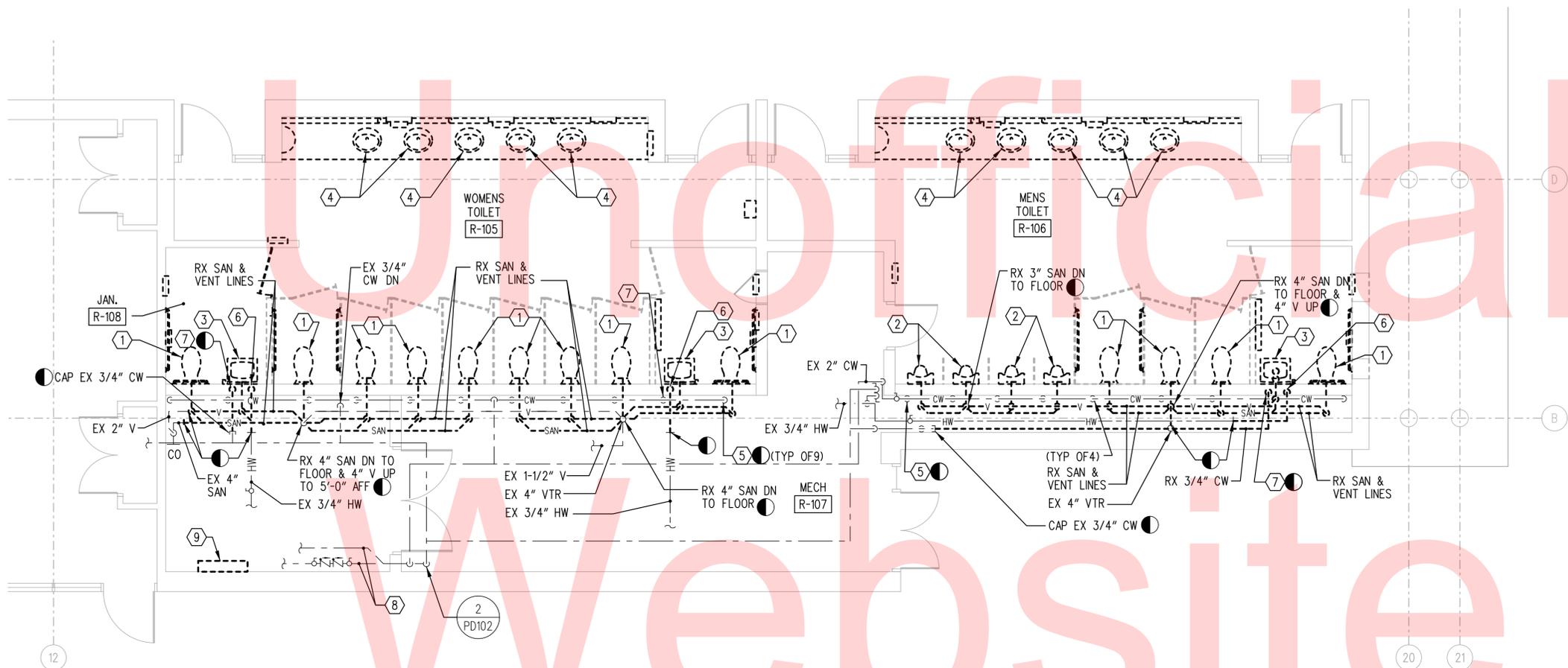


ADDENDUMS / REVISIONS	

CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: ALM
	CHECKED BY: CEH

PLUMBING PARTIAL FIRST FLOOR DEMOLITION		SHEET NO. 19
		TOTAL SHTS. 29

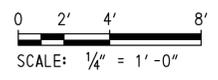
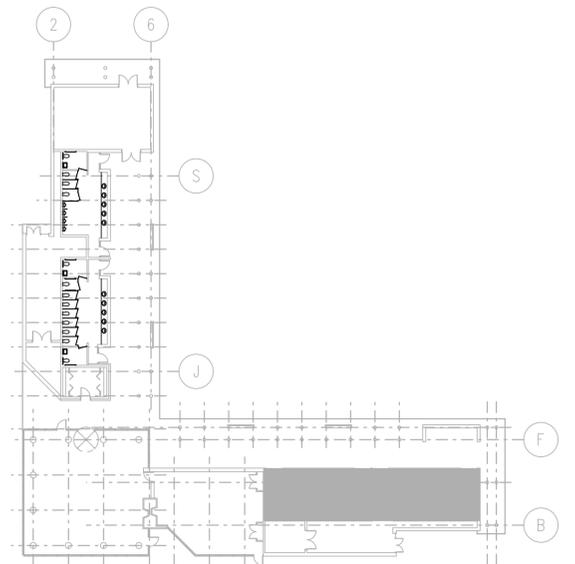
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1 PLUMBING PARTIAL FIRST FLOOR SOUTH DEMOLITION
 PD102 SCALE: 1/4" = 1'-0"
 REF:

- DEMOLITION KEYNOTES:**
- ① REMOVE EXISTING WALL MOUNTED WATER CLOSET AND SENSOR OPERATED FLUSH VALVE. REMOVE FLUSH VALVE SENSOR PLATE IN WALL AND ALL ASSOCIATED INTERCONNECTING WIRING TO TRANSFORMER.
 - ② REMOVE EXISTING WALL MOUNTED URINAL AND SENSOR OPERATED FLUSH VALVE. REMOVE FLUSH VALVE SENSOR PLATE IN WALL AND ALL ASSOCIATED INTERCONNECTING WIRING TO TRANSFORMER.
 - ③ REMOVE EXISTING WALL MOUNTED LAVATORY AND SENSOR OPERATED FAUCET, MIXING VALVE, AND TRANSFORMER.
 - ④ REMOVE EXISTING COUNTER MOUNTED LAVATORY AND SENSOR OPERATED FAUCET, MIXING VALVE, AND TRANSFORMER.
 - ⑤ REMOVE EXISTING 1 1/4" CW FROM FLUSH VALVE UP TO 5'-0" AFF.
 - ⑥ REMOVE EXISTING 3/4" HW DN TO LAVATORY.
 - ⑦ REMOVE EXISTING 3/4" CW DN TO LAVATORY.
 - ⑧ REMOVE EXISTING 3" CW AND DOUBLE CHECK BACKFLOW PREVENTER TO TEMPERING SYSTEM.
 - ⑨ REMOVE EXISTING TEMPERING VALVES, ASSOCIATED CABINET, EXPANSION TANK, PIPING AND VALVES.

KEY PLAN

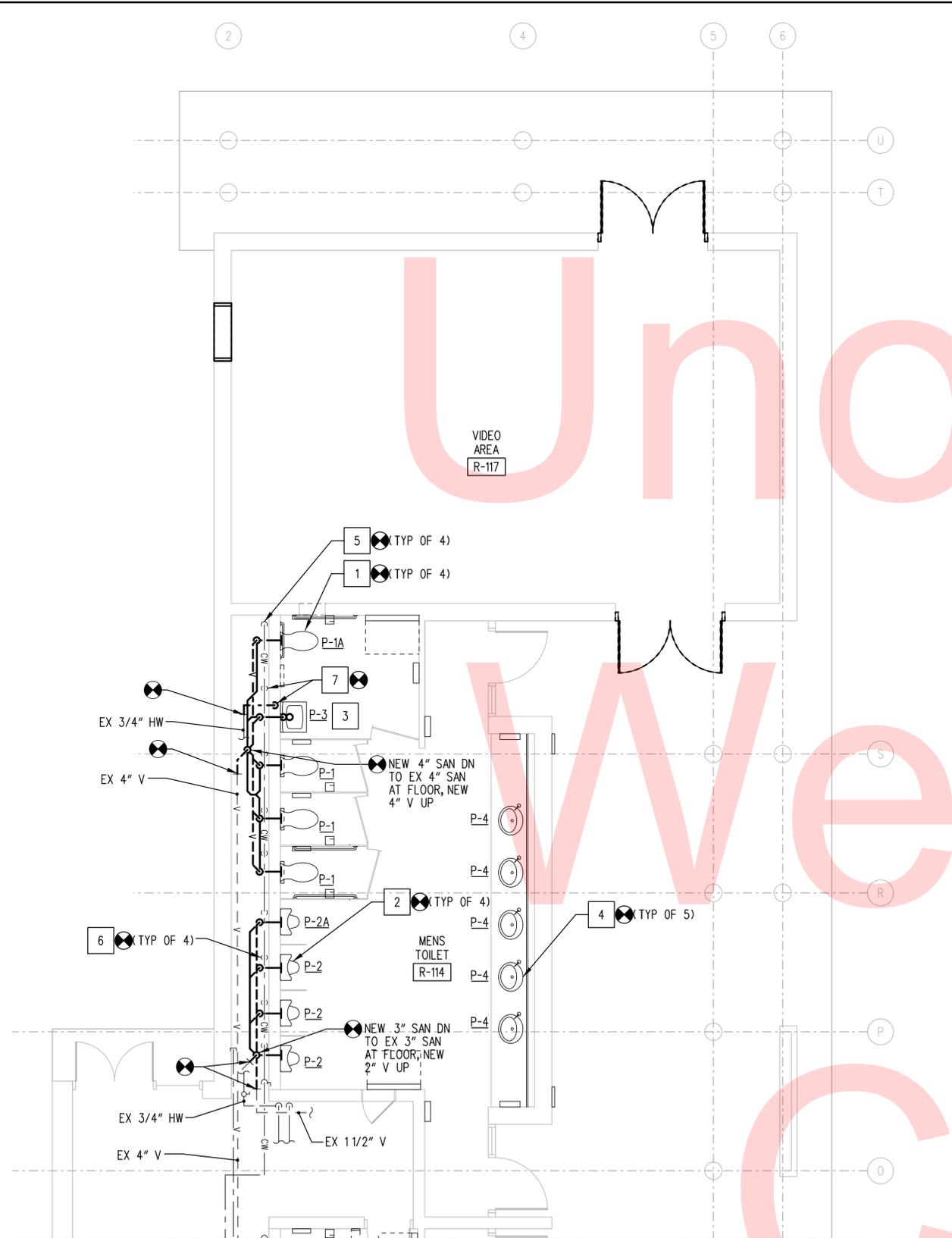


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ADDENDUMS / REVISIONS	

CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: GG
	CHECKED BY: CEH

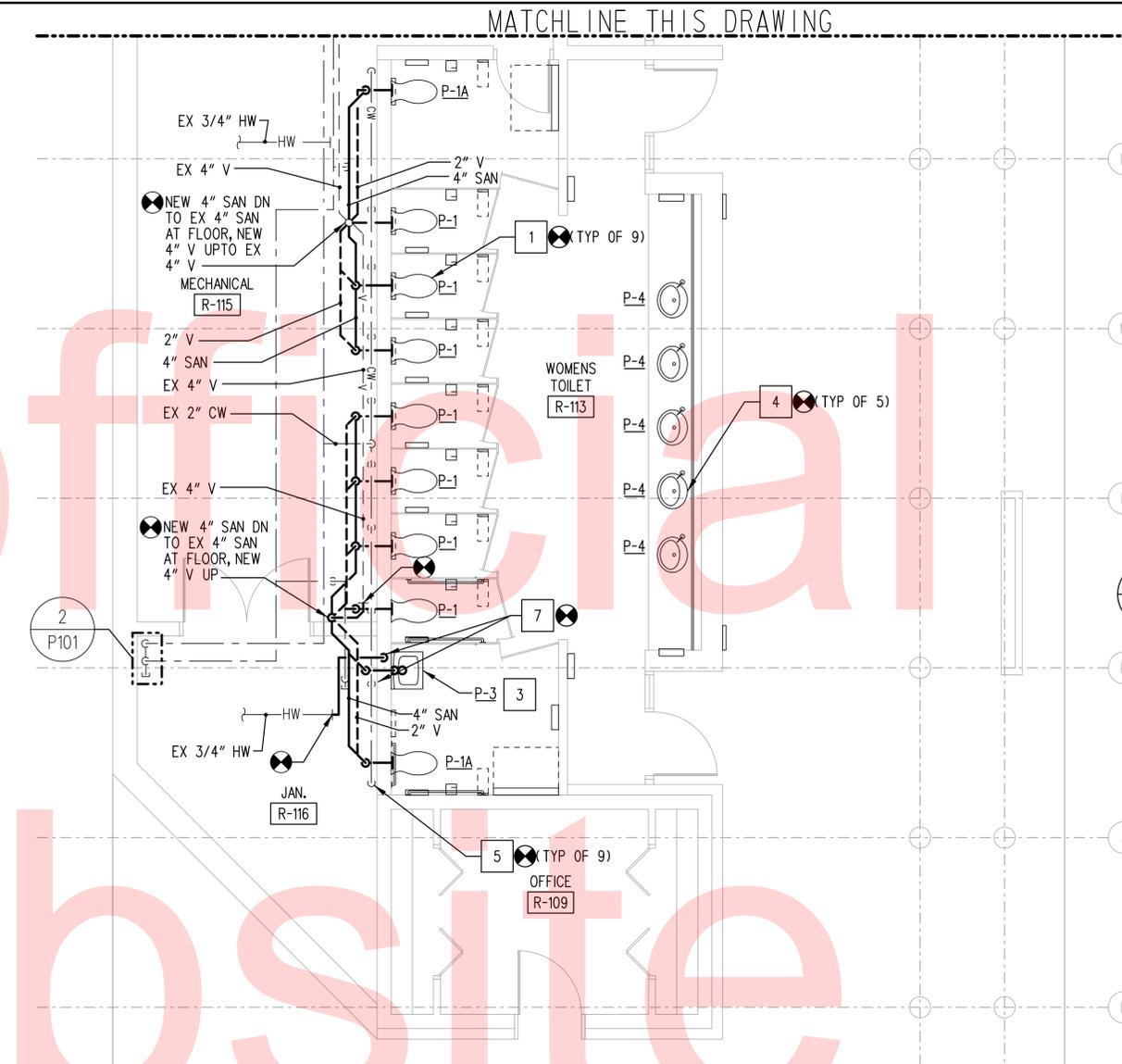
PD102
SHEET NO. 20
TOTAL SHTS. 29



MATCHLINE THIS DRAWING

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ADDENDUMS / REVISIONS



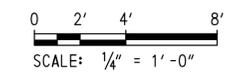
1 PLUMBING PARTIAL FIRST FLOOR NORTH
 ROOMS 113 & 114 - NEW WORK
 P101 SCALE: 1/4" = 1'-0"
 REF:

DRAWING NOTES:

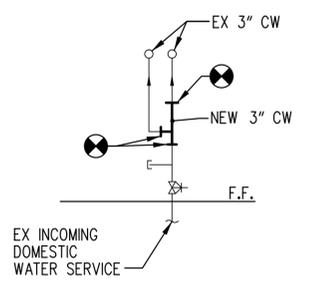
1. REFER TO DRAWING P102 FOR PLUMBING FIXTURE SCHEDULE.

SHEET KEYNOTES:

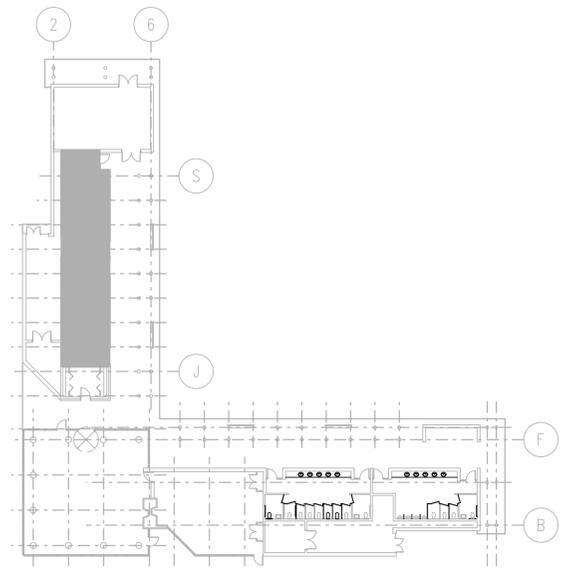
- 1 PROVIDE NEW WALL MOUNTED WATER CLOSET, WALL CARRIER, NEW SENSOR OPERATED FLUSH VALVE, SENSOR WALL PANEL AND TRANSFORMER.
- 2 PROVIDE NEW WALL MOUNTED URINAL, WALL CARRIER, NEW SENSOR OPERATED FLUSH VALVE, SENSOR WALL PANEL AND TRANSFORMER.
- 3 PROVIDE NEW WALL MOUNTED LAVATORY WALL CARRIER, NEW SENSOR OPERATED FAUCET WITH MIXING VALVE, TRANSFORMER, P-TRAP AND TAILPIECE.
- 4 PROVIDE NEW DECK MOUNTED SENSOR FAUCET FOR INTEGRAL COUNTER MOUNTED LAVATORY WITH MIXING VALVE, TRANSFORMER, P-TRAP AND TAILPIECE. CONNECT TO EXISTING HW & CW SUPPLIES, AND WASTE.
- 5 CONNECT NEW 1" CW SUPPLY TO EXISTING 1 1/4" CW AND EXTEND DN TO NEW WATER CLOSET SENSOR OPERATED FLUSH VALVE MOUNTED INSIDE PIPE CHASE.
- 6 CONNECT NEW 3/4" CW SUPPLY TO EXISTING 1 1/4" CW AND EXTEND DN TO NEW URINAL SENSOR OPERATED FLUSH VALVE MOUNTED INSIDE PIPE CHASE.
- 7 CONNECT NEW 3/4" HW & CW TO EX 3/4" CW & HW AND EXTEND DN TO FAUCET MIXING VALVE LOCATED IN PIPE CHASE. EXTEND 3/8" TEMPERED WATER FROM MIXING VALVE TO SENSOR OPERATED FAUCET.



2 WATER SERVICE DETAIL
 P101 NOT TO SCALE



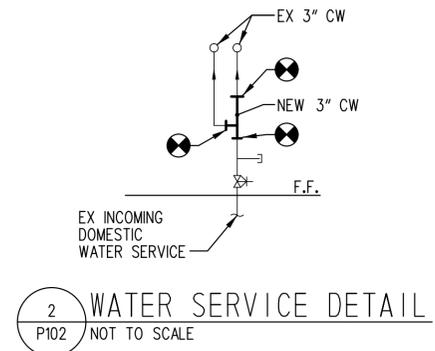
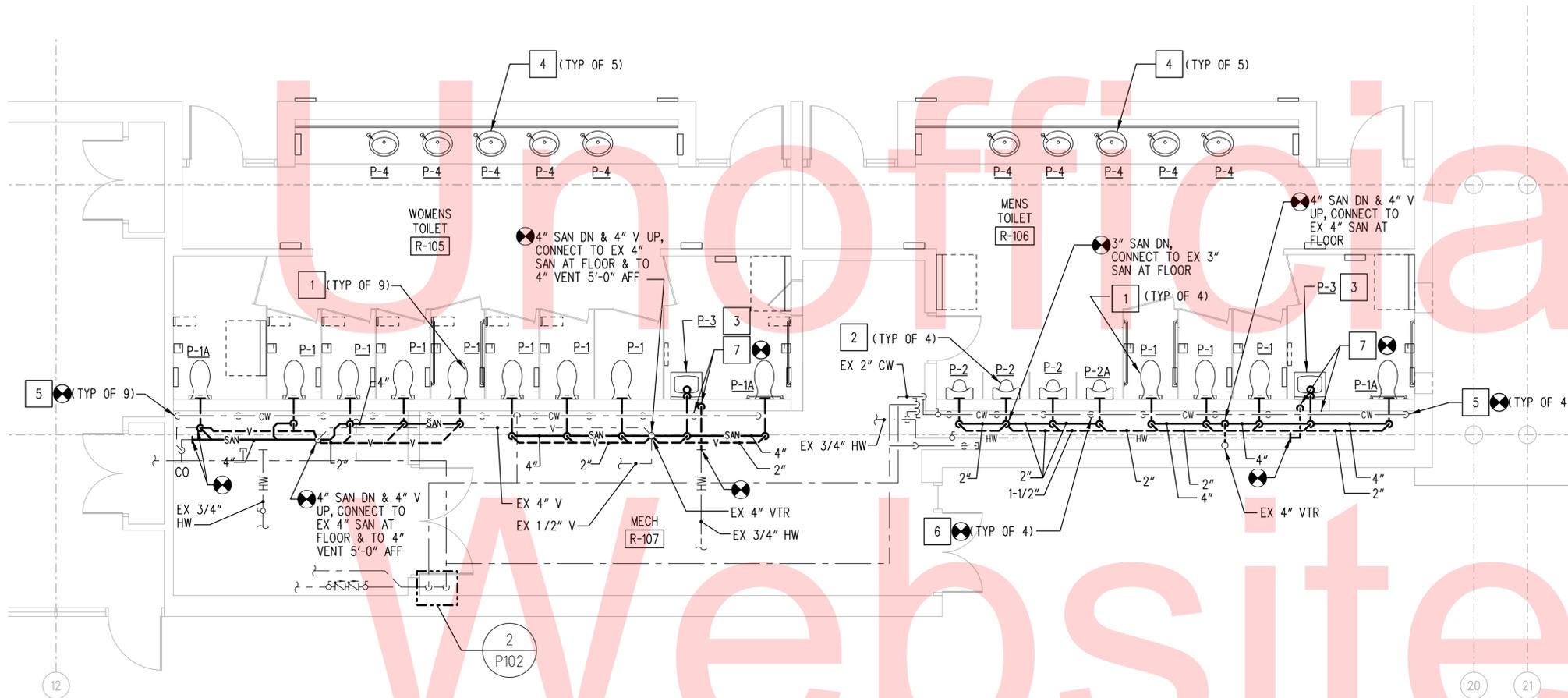
KEY PLAN



CONTRACT	BRIDGE NO.
T201680108	DESIGNED BY: ALM
COUNTY	CHECKED BY: CEH
NEW CASTLE	

SHEET KEYNOTES:

- 1 PROVIDE NEW WALL MOUNTED WATER CLOSET, WALL CARRIER, NEW SENSOR OPERATED FLUSH VALVE, SENSOR WALL PANEL AND TRANSFORMER.
- 2 PROVIDE NEW WALL MOUNTED URINAL, WALL CARRIER, NEW SENSOR OPERATED FLUSH VALVE, SENSOR WALL PANEL AND TRANSFORMER.
- 3 PROVIDE NEW WALL MOUNTED LAVATORY WALL CARRIER, NEW SENSOR OPERATED FAUCET WITH MIXING VALVE, TRANSFORMER, P-TRAP AND TAILPIECE.
- 4 PROVIDE NEW DECK MOUNTED SENSOR FAUCET FOR INTEGRAL COUNTER MOUNTED LAVATORY WITH MIXING VALVE, TRANSFORMER, P-TRAP AND TAILPIECE. CONNECT TO EXISTING HW & CW SUPPLIES, AND WASTE.
- 5 CONNECT NEW 1" CW SUPPLY TO EXISTING 1 1/4" CW AND EXTEND DN TO NEW WATER CLOSET SENSOR OPERATED FLUSH VALVE MOUNTED INSIDE PIPE CHASE.
- 6 CONNECT NEW 3/4" CW SUPPLY TO EXISTING 1 1/4" CW AND EXTEND DN TO NEW URINAL SENSOR OPERATED FLUSH VALVE MOUNTED INSIDE PIPE CHASE.
- 7 CONNECT NEW 3/4" HW & CW TO EX 3/4" CW & HW AND EXTEND DN TO FAUCET MIXING VALVE LOCATED IN PIPE CHASE. EXTEND 3/8" TEMPERED WATER FROM MIXING VALVE TO SENSOR OPERATED FAUCET.

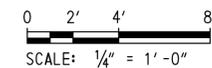


1 PLUMBING PARTIAL FIRST FLOOR SOUTH NEW WORK
 P102 SCALE: 1/4" = 1'-0"
 REF:

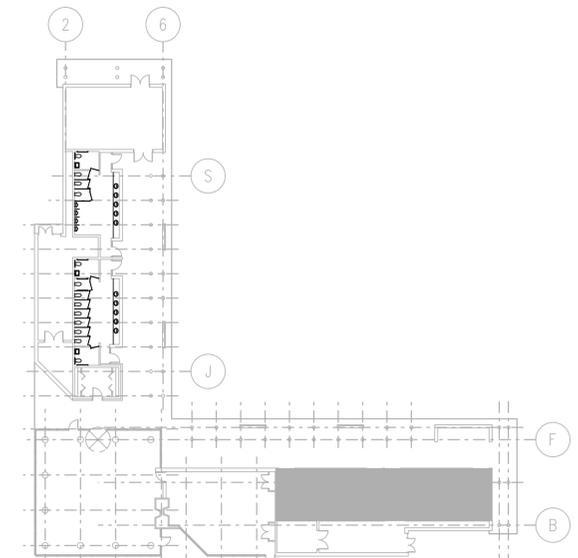
PLUMBING FIXTURE SCHEDULE

UNIT ID	DESCRIPTION	CW (IN)	HW (IN)	SAN (IN)	VENT (IN)	WSFU	DFU	REMARKS	BASIS OF DESIGN
P-1	WATER CLOSET WALL MOUNTED	1	-	4	2	10	4	NOTE 1	KOHLER KINGSTON, K-4323
P-1A	WATER CLOSET WALL MOUNTED BARRIER FREE	1	-	4	2	10	4	NOTE 1	KOHLER KINGSTON, K-4323
P-2	URINAL	3/4	-	2	1 1/2	5	2	NOTE 2	KOHLER BARDON, K-4904-ER
P-2A	URINAL BARRIER FREE	3/4	-	2	1 1/2	5	2	NOTE 2	KOHLER BARDON, K-4904-ER
P-3	LAVATORY WALL MOUNTED BARRIER FREE	1/2	1/2	1 1/2	1 1/2	2	2	NOTE 3	KOHLER KINGSTON, K-2007
P-4	FAUCET FOR INTEGRAL COUNTER TOP LAVATORY BARRIER FREE	1/2	1/2	1 1/2	1 1/2	2	2	NOTE 3	CHICAGO HYTRONIC, 116.103.AB.1

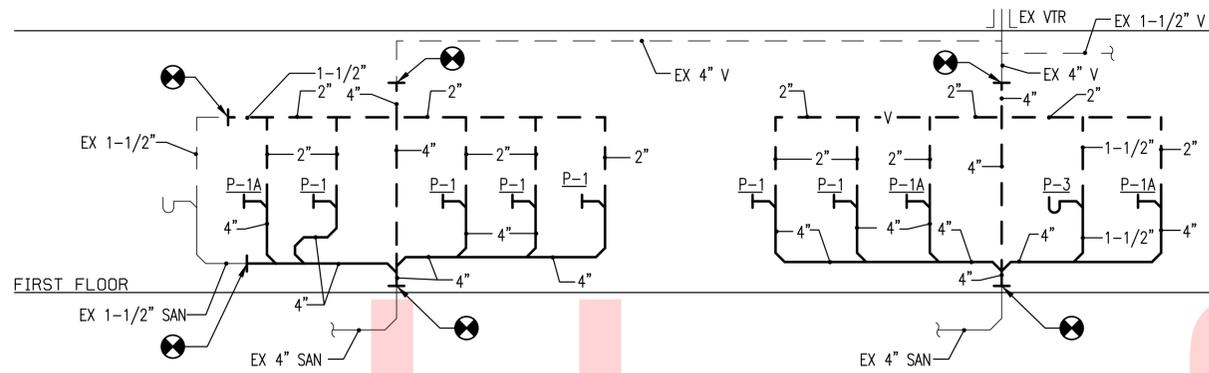
- NOTES:
 1. CONCEALED HARD WIRED SENSOR OPERATED FLUSH VALVE (1.28 GPF).
 2. CONCEALED HARD WIRED SENSOR OPERATED FLUSH VALVE (0.125 GPF).
 3. HARD WIRED SENSOR OPERATED FAUCET (0.5 GPM) W/ MIXING VALVE. EXTEND 3/8" TEMPERED WATER SUPPLY FROM MIXING VALVE TO FAUCET.



KEY PLAN

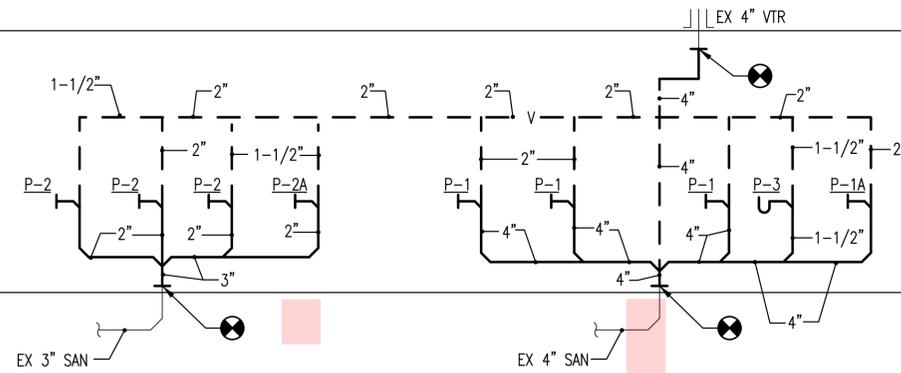


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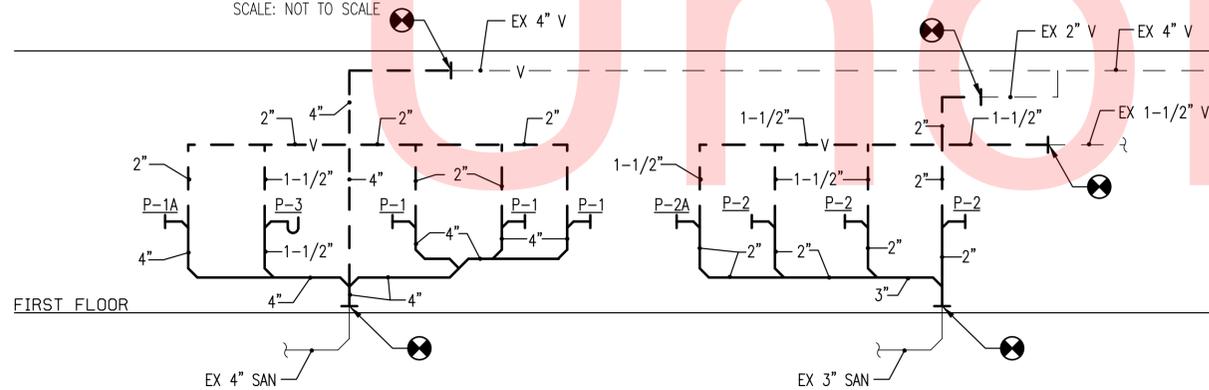
WOMENS TOILET RM-105 SANITARY & VENT RISER DIAGRAM

SCALE: NOT TO SCALE



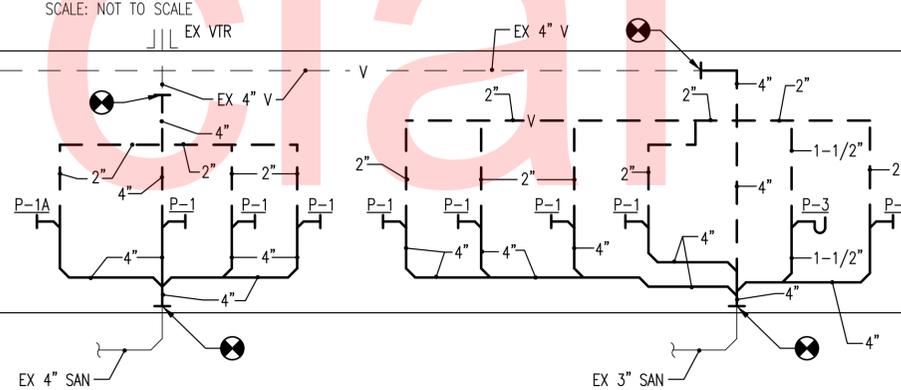
MENS TOILET RM-106 SANITARY & VENT RISER DIAGRAM

SCALE: NOT TO SCALE



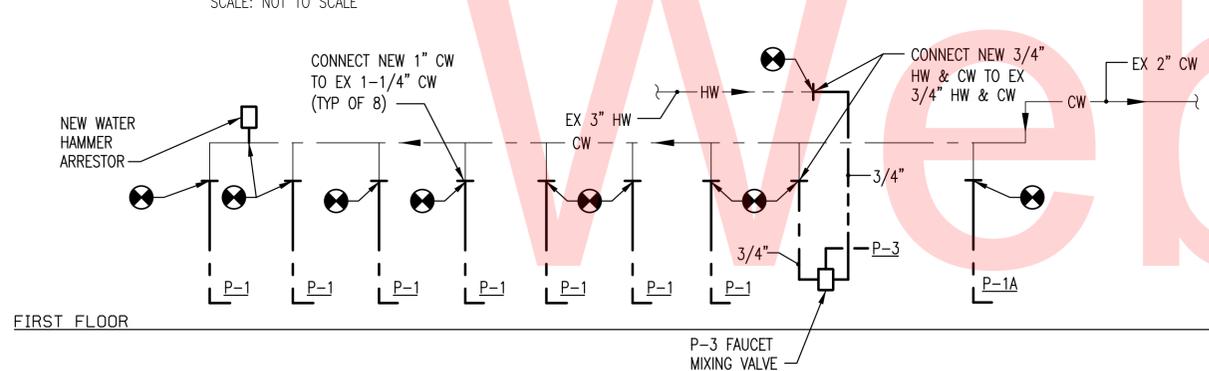
MENS TOILET RM-114 SANITARY & VENT RISER DIAGRAM

SCALE: NOT TO SCALE



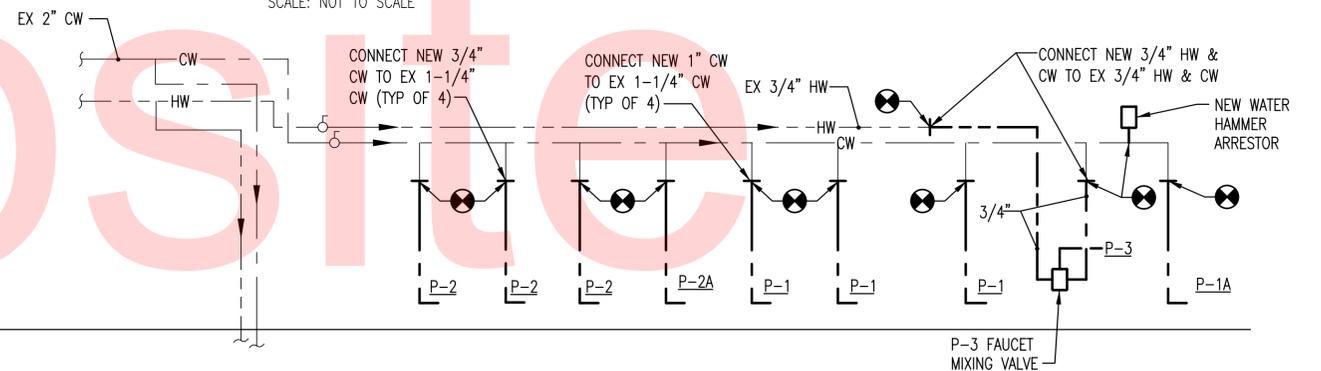
WOMENS TOILET RM-113 SANITARY & VENT RISER DIAGRAM

SCALE: NOT TO SCALE



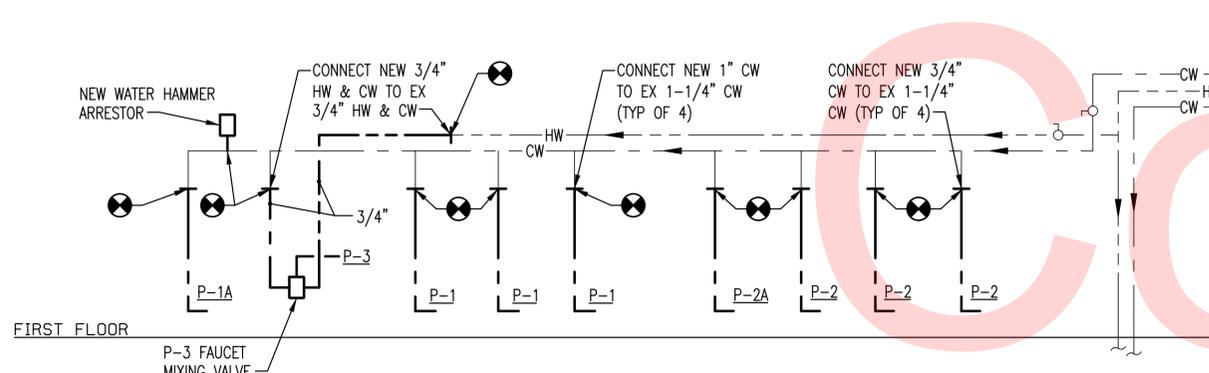
WOMENS TOILET RM-105 DOMESTIC HOT & COLD WATER RISER DIAGRAM

SCALE: NOT TO SCALE



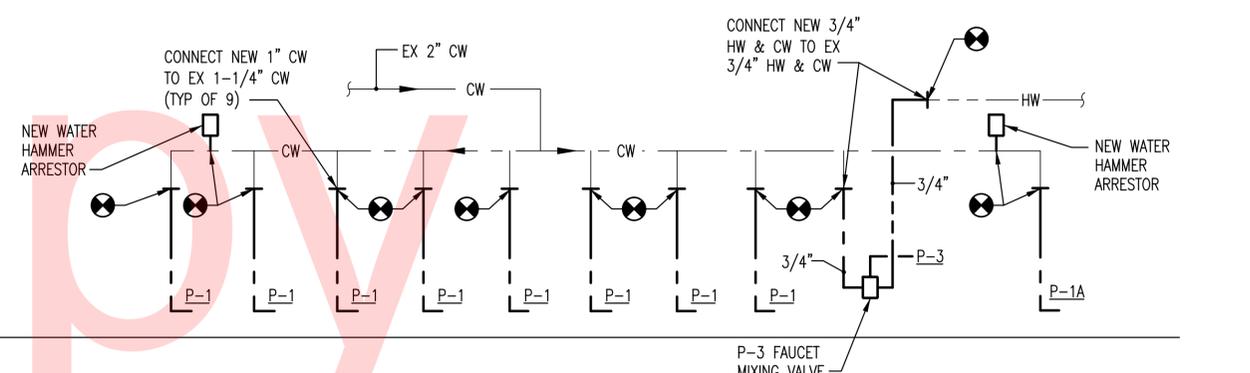
MENS TOILET RM-106 DOMESTIC HOT & COLD WATER RISER DIAGRAM

SCALE: NOT TO SCALE



MENS TOILET RM-114 DOMESTIC HOT & COLD WATER RISER DIAGRAM

SCALE: NOT TO SCALE



WOMENS TOILET RM-113 DOMESTIC HOT & COLD WATER RISER DIAGRAM

SCALE: NOT TO SCALE

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ELECTRICAL LEGEND

ABBREVIATIONS

LIGHTING

- LIGHTING FIXTURE
- STRIP TYPE LIGHTING FIXTURE,
- DOWN LIGHTING FIXTURE
- EXIT LIGHTING FIXTURE, ARROW, INDICATES DIRECTION
- EMERGENCY BATTERY POWERED LIGHTING UNIT

SWITCHES

- S SINGLE POLE SWITCH, 20A, 120-277V
- S₃ THREE WAY SWITCH, 20A, 120-277V
- S₄ FOUR WAY SWITCH, 20A, 120-277V
- OCCUPANCY SENSOR PROVIDE POWER PACK AS REQUIRED.
- C SUBSCRIPT INDICATES MOUNTING TYPE, C = CEILING, W = WALL

RECEPTACLES

- SINGLE RECEPTACLE, 20A, 125V AC, MOUNTED 1'-6" AFF (UON)
- TRACK LIGHTING RECEPTACLE, 15A, 125V AC, MOUNT 8'-0" AFF (UON)
- DUPLEX CONVENIENCE RECEPTACLE, 20A, 125V AC, MOUNT 1'-6" AFF (UON)
- DUPLEX CONVENIENCE RECEPTACLE 20A, 125V AC, SUBSCRIPT "G" INDICATES GFI TYPE, MOUNT 18" AFF (UON)
- DUPLEX CONVENIENCE RECEPTACLE 20A, 125V AC, SUBSCRIPT "G" INDICATES GFI TYPE, MOUNT 12" ABOVE COUNTER (UON)
- DOUBLE DUPLEX CONVENIENCE RECEPTACLE 20A, 125V AC. MOUNT 18" AFF (UON)
- SPECIAL PURPOSE RECEPTACLE 20A OR 30A OR 50A, 3P, 4W, 480V AC MOUNT 48" AFF (UON)
- SPECIAL PURPOSE RECEPTACLE 20A OR 30A OR 50A, 3P, 4W, 208V AC MOUNT 48" AFF (UON)
- WP PROVIDE DEVICE WITH IN USE COVER

SAFETY SWITCHED/BREAKERS/STARTERS

- NON-FUSED DISCONNECT SWITCH, SUBSCRIPT INDICATES AMPACITY AND NUMBER OF POLES
- FUSED DISCONNECT SWITCH, SUBSCRIPT INDICATES FUSED SIZE 2, NEMA SIZE 1 STARTER UON
- 2 MAGNETIC MOTOR STARTER, SUBSCRIPT INDICATES NEMA SIZE 2, NEMA SIZE 1 STARTER UON
- 2 MAGNETIC MOTOR STARTER, SUBSCRIPT INDICATES NEMA SIZE 2, NEMA SIZE 1 STARTER UON. 60 = SWITCH SIZE AND 3 = NO. OF POLES. 30 AMPS, 3 POLES UON.
- MANUAL MOTOR STARTER SWITCH WITH OVERLOAD. PROVIDE HOA AS REQUIRED.
- VARIABLE FREQUENCY DRIVE, INDIVIDUALLY MOUNTED.
- VARIABLE FREQUENCY DRIVE WITH BYPASS STARTER
- SOLID STATE STARTER, INDIVIDUALLY MOUNTED
- ENCLOSED CIRCUIT BREAKER, SIZE AS INDICATED

EQUIPMENT CONNECTION

- MOTOR
- ELECTRIC UNIT HEATER
- JUNCTION BOX
- EQUIPMENT CONNECTION AS NOTED

DUCTBANK

- EXISTING HANDHOLE
- GROUND CONDUCTOR
- UNDERGROUND DUCTBANK
- EXISTING DUCT BANK TO BE REMOVED
- SPECIFIC DUCTBANK SECTION DETAIL - SECTION SHOWN DASHED DENOTES EXISTING TO BE REMOVED U.N.O.
- NEW CABLE DESIGNATION (TYPICAL) SEE CABLE SCHEDULE
- DUCTBANK SECTION, LOOKING IN DIRECTION OF ARROWS
- SPARE DUCT (TYPICAL)
- HEAVY LINE INDICATES BOTTOM OF DUCTBANK
- EXISTING CABLE DESIGNATION (TYPICAL). DESCRIPTION PER CABLE SCHEDULE

WIRING

- HPA-1,3,5 BRANCH CIRCUIT HOMERUN TO PANELBOARD. HPA DENOTES TO PANEL HPA AND NUMERALS IDENTIFY CIRCUIT NUMBERS. ARROWS DENOTE NO. OF CIRCUITS.
- CONDUIT WITH WIRES, #12 AWG IN 3/4" C. UNLESS OTHERWISE NOTED. NUMBER OF CONDUCTORS AS REQUIRED. PROVIDE SEPARATE NEUTRALS FOR ALL SINGLE PHASE CIRCUITS.
- OR
- BRANCH CIRCUIT OR FEEDER WIRING IN CONDUIT. NO TICK MARKS INDICATES 2#12 CONDUCTORS AND 1#12 GROUND IN A 3/4"C (UON)
- EXPOSED CONDUIT RUN AS INDICATED.
- CONDUIT TURNED UP
- CONDUIT TURNED DOWN
- GROUNDING CONDUCTOR (BCSD)

CONTROL DEVICES

- SOLENOID VALVE
- LIMIT SWITCH
- THERMOSTAT
- FLOW SWITCH
- DAMPER MOTOR
- FLOW TRANSMITTER

PANELBOARDS

- ELECTRICAL PANELBOARD - 208Y/120, 3PH, 4 WIRE

MISCELLANEOUS

- 1 SPECIFIC NOTE NUMBER
- 1 SPECIFIC DEMO NOTE
- 1 FEEDER SIZE
- SECTION NUMBER
- XXX DRAWING NUMBER
- A DETAIL NUMBER
- A6.1 DRAWING NUMBER WHERE SHOWN

- A AMPERES
- AC ALTERNATING CURRENT
- AFF ABOVE FINISHED FLOOR
- AFG ABOVE FINISHED GRADE
- AHU AIR HANDLING UNIT
- AIC AMPERES INTERRUPTING CAPACITY, (SYM, RMS AMPS)
- AL ALUMINUM
- ANNUN ANNUNCIATOR
- AS AMMETER SWITCH
- ATC AUTOMATIC TEMPERATURE CONTROL
- ATS AUTOMATIC TRANSFER SWITCH
- AUTO AUTOMATIC
- AUX AUXILIARY
- AWG AMERICAN WIRE GAUGE
- BCSD BARE COPPER SOFT DRAWN BELOW FINISHED CEILING
- BFC BLOWN FUSE INDICATOR
- BFI BELOW FINISHED FLOOR
- BFF BELOW FINISHED GRADE
- BLDG BUILDING
- BKR BREAKER
- C CONDUIT
- CB CIRCUIT BREAKER
- CC1 POWER/CONTROL/INSTRUMENTATION CABLE RUN NUMBER AS INDICATED.
- CKT CIRCUIT
- COMB COMBINATION
- CLG CEILING
- CP CONTROL PANEL
- CPT CONTROL POWER TRANSFORMER
- CT CURRENT TRANSFORMER
- CU COPPER
- CX CONNECT TO EXISTING
- CCTV CLOSED CIRCUIT TELEVISION
- DAS DATA ACQUISITION SYSTEM
- DC DIRECT CURRENT
- O/D OUTDOOR
- DISC DISCONNECT
- DN DOWN
- DP DISTRIBUTION PANEL
- DPC DISTRIBUTED PROCESS CONTROLLER
- DWG DRAWING
- EA EACH
- EG EMPTY CONDUIT
- ECD ELEMENTARY CONTROL DIAGRAM
- EF EXHAUST FAN
- EH ELECTRIC HEATER
- ELEV ELEVATION
- EMERG. EMERGENCY
- EMH ELECTRIC MANHOLE
- EMT ELECTRIC METALLIC TUBING
- ENCL ENCLOSURE
- E/O ELECTRICALLY/OPERATED
- EQUIP EQUIPMENT
- ETM ELAPSED TIME METER
- ER EXISTING RELOCATED
- ETR EXISTING TO REMAIN
- EUH ELECTRIC UNIT HEATER
- EWC ELECTRIC WATER COOLER
- EWH ELECTRIC WATER HEATER
- EX,EXIST EXISTING
- EXP EXPLOSION PROOF
- F FUSE
- FA FRAME AMPS
- FA FIRE ALARM
- FAAP FIRE ALARM ANNUNCIATOR PANEL
- FACP FIRE ALARM CONTROL PANEL
- FBO FURNISHED BY OTHERS UNDER SEPARATE CONTRACT
- FC FAN COIL UNIT
- FDR FEEDER
- FL FLOOR
- FLEX FLEXIBLE
- FMC FLEXIBLE METAL CONDUIT
- FS FLOW SWITCH
- FSS FUSED SAFETY SWITCH
- FT FOOT OR FEET
- FVNR FULL VOLTAGE NON-REVERSING
- FVR FULL VOLTAGE REVERSING
- G GROUND
- HID HIGH INTENSITY DISCHARGE
- HH HANDHOLE
- HOA HAND OFF AUTOMATIC
- HP HORSEPOWER
- HPS HIGH PRESSURE SODIUM
- HTR HEATER
- HV HIGH VOLTAGE
- HZ HERTZ

- ICCB INSULATED CASE CIRCUIT BREAKER
- IDS INTRUSION DETECTION SYSTEM
- IMC INTERMEDIATE METALLIC CONDUIT
- JB JUNCTION BOX
- KAIC THOUSAND AMPERES INTERRUPTING CAPACITY
- KV KILOVOLT
- KVA KILOVOLT AMPERE
- LTG LIGHTING
- LO LOCKOUT
- LP LIGHTING AND APPLIANCE PANEL
- LT/FMC LIQUID TIGHT/FLEXIBLE METAL CONDUIT
- LS LIMIT SWITCH
- LSH LEVEL SWITCH HIGH
- MAFC MAKE ALL FINAL CONNECTIONS
- M/C MULTI/CONDUCTOR
- MCB MAIN CIRCUIT BREAKER
- MCCB MOLDED CASE CIRCUIT BREAKER
- MCC MOTOR CONTROL CENTER
- MCP MOTOR CIRCUIT PROTECTOR
- MH MOUNTING HEIGHT
- MHR MOTORIZED HOSE REEL
- MIN MINIMUM
- MLO MAIN LUGS ONLY
- MOD MOTOR OPERATED DAMPER
- MO METAL OXIDE
- MSP MOTOR STARTER PANEL
- MTD MOUNTED
- MTG MOUNTING
- N NEUTRAL
- NEC NATIONAL ELECTRICAL CODE
- NEMA NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
- NFSS NON FUSED SAFETY SWITCH
- NO NORMALLY OPEN
- NO NUMBER
- NC NORMALLY CLOSED
- NIC NOT IN CONTRACT
- NL NIGHT LIGHT
- NTS NOT TO SCALE
- OL OVERLOAD
- P POLE OR POLES
- PB PUSH BUTTON
- PH PHASE
- PL PILOT LIGHT
- PLC PROGRAMMABLE LOGIC CONTROLLER
- PNL PANELBOARD
- PS PRESSURE SWITCH
- PSH PRESSURE SWITCH HIGH
- PT POTENTIAL TRANSFORMER
- PVC POLYVINYL CHLORIDE
- RC REMOTE CONTROL
- RE RELOCATED EXISTING
- RECEPT RECEPTACLE
- REQ'D REQUIRED
- RGS RIGID GALVANIZED STEEL
- RM ROOM
- RMS ROOT MEAN SQUARE
- RTD RESISTANCE TEMPERATURE DETECTOR
- RTU REMOTE TERMINAL UNIT
- RVAT REDUCED VOLTAGE AUTOTRANSFORMER
- RX REMOVE EXISTING
- SER. SERVICE
- SF SUPPLY FAN
- SG1-1A/P SWGR POWER WIRE RUN NUMBER - SWGR NUMBER AND UNIT NUMBER AS INDICATED
- SIC SYMMETRICAL INTERRUPTING CURRENT
- SOPN SPACE OR POLE NUMBER
- SPPS SOUND POWERED PHONE SYSTEM
- SS STAINLESS STEEL
- SS SAFETY SWITCH
- ST SHUNT TRIP
- STA STATION
- STP SHIELDED TWISTED PAIR
- STPS SHIELDED TWISTED PAIR OVER ALL SHIELD
- STR STARTER
- STT SHIELDED TWISTED TRIPLE
- S/N SOLID NEUTRAL
- SW SWITCH
- SWBD SWITCHBOARD
- SWGR SWITCHGEAR
- SYM SYMMETRICAL
- SYS SYSTEM

- TA TRIP AMPS
- TC TIME CLOCK
- TDD TIME DELAY DE-ENERGIZED (OFF)
- TDE TIME DELAY ENERGIZED (ON)
- TDC TIME DELAY CLOSE
- TDO TIME DELAY OPEN
- TMH TELEPHONE MANHOLE
- TP TWISTED PAIR
- TPS TWISTED PAIR SHIELDED
- TST THERMOSTAT SWITCH IN AUTO-TRANSFORMER
- STARTER STARTER
- TELEPHONE TELEPHONE TERMINAL BOARD/CABINET
- TYP TYPICAL
- UH UNIT HEATER
- UG UNDERGROUND
- UON UNLESS OTHERWISE NOTED
- UPS UNINTERRUPTIBLE POWER SUPPLY
- V VOLTS OR VOLTAGE
- VFD VARIABLE FREQUENCY DRIVE
- W WATTS
- W WIRE
- W/ WITH
- WP WEATHERPROOF
- XFMR TRANSFORMER
- Ⓢ CENTER LINE
- Ⓣ PHASE
- Ⓤ AT
- * NUMBER

ADDENDUMS / REVISIONS

SMYRNA REST AREA BATHROOM RENOVATIONS

CONTRACT	BRIDGE NO.
T201680108	
COUNTY	DESIGNED BY: MSM
NEW CASTLE	CHECKED BY: IK

ELECTRICAL LEGEND

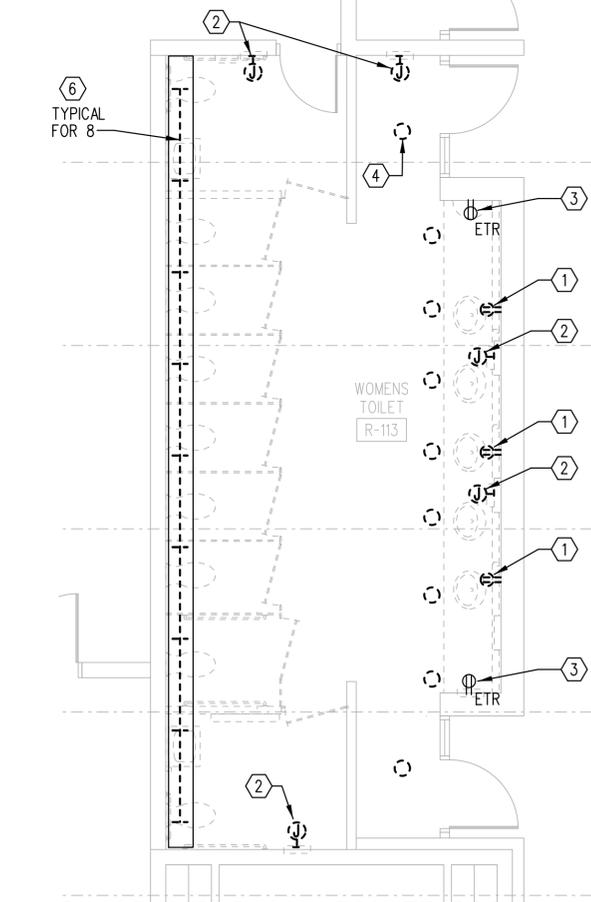
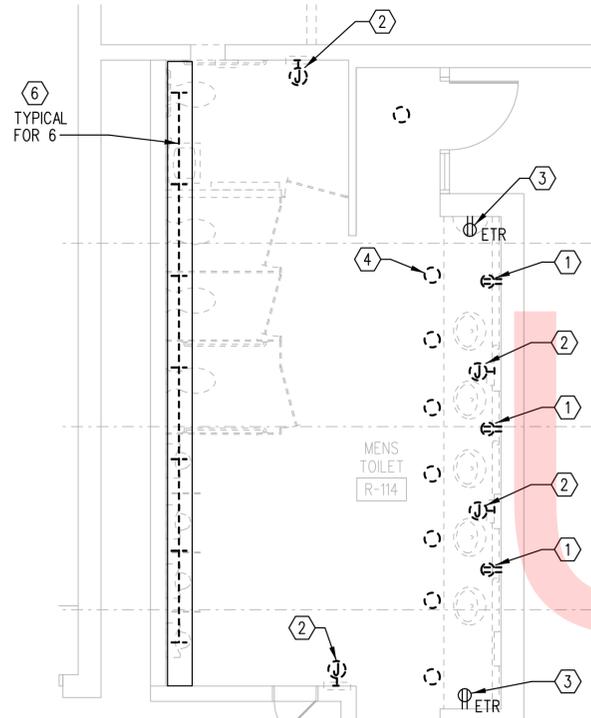
E-001

SHEET NO.

24

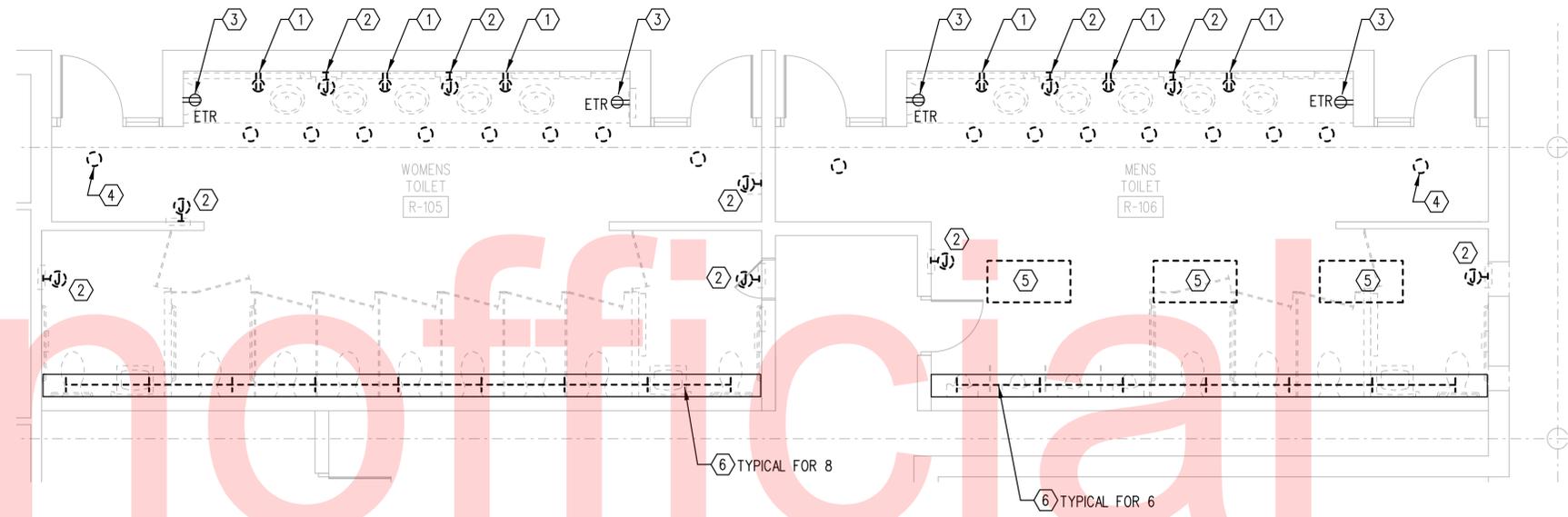
TOTAL SHTS.

29



1
ED101 SCALE: 1/4" = 1'-0"
REF: ↑

R-113 AND R-114 TOILET ROOM
ELECTRICAL FLOOR PLAN - DEMOLITION



2
ED101 SCALE: 1/4" = 1'-0"
REF: ↑

R-105 AND R-106 TOILET ROOM
ELECTRICAL FLOOR PLAN - DEMOLITION

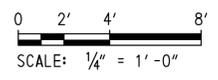
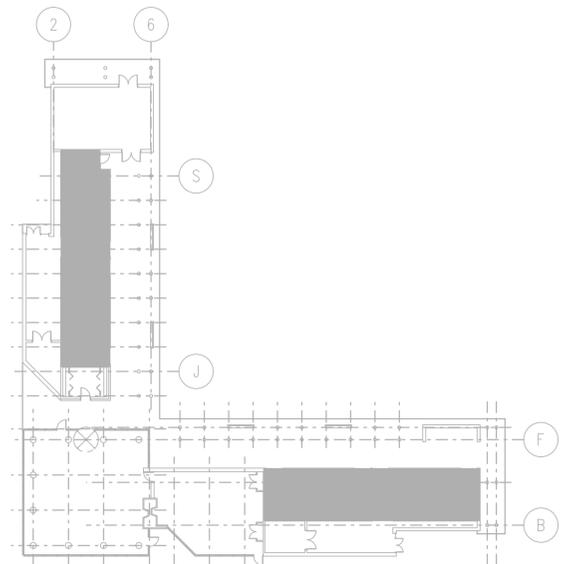
DEMOLITION NOTES:

1. REFER TO DRAWING E-001 FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES.
2. ALL EXIT SIGNS, FIRE ALARM STROBES, HEAT DETECTORS ETC. NOT SHOWN SHALL BE CONSIDERED EXISTING TO REMAIN.
3. COORDINATE DEMOLITION WORK WITH OTHER TRADES AND UTILITIES IN THE BUILDING.
4. DEMOLISH ALL EQUIPMENT AND DEVICES INDICATED WITH DASHED LINES, UON. ALL DISCONNECTED CIRCUITS SHALL BE DEMOLISHED BACK TO THEIR SOURCE INCLUDING ALL ASSOCIATED WIRING AND BOXES, UON.
5. ELECTRICAL EQUIPMENT LABELED WITH "ETR" ARE EXISTING TO REMAIN.
6. ALL DISCONNECTED CIRCUITS SHALL BE REMOVED BACK TO THEIR SOURCE INCLUDING ALL ASSOCIATED WIRING AND BOXES, UON.
7. ALL CIRCUITS SERVING EQUIPMENT TO REMAIN IN SERVICE SHALL BE RELOCATED AND DEVICES TO REMAIN OPERATIONAL AT ALL TIMES.
8. CIRCUIT TRACE EXISTING RECEPTACLES PRIOR TO DEMOLITION TO PREVENT INTERRUPTION TO EXISTING RECEPTACLE/CIRCUITS.
9. FIELD VERIFY AND CIRCUIT TRACE ALL EXISTING EQUIPMENT AND RECEPTACLE CONNECTIONS PRIOR TO DEMOLITION.
10. FIELD VERIFY EXISTING ELECTRICAL LIGHTING FIXTURES AND CONTROL DEVICES PRIOR TO DEMOLITION.
11. ALL LIGHTING FIXTURES, CIRCUITS AND WIRING INDICATED "ETR" ARE EXISTING TO REMAIN.
12. ALL EXISTING LIGHTING FIXTURES AND CIRCUITING TO REMAIN, UON.
13. ALL EXISTING LIGHTING FIXTURES REMAIN ON LIFE CIRCUIT ARE UNSWITCHED AND REMAIN ON.
14. DEMOLISH ALL LIGHTING FIXTURES INDICATED WITH DASHED LINES, UON. ALL DISCONNECTED CIRCUITS SHALL REMAIN FOR CONNECTION TO NEW FIXTURES OR WIRING DEVICES INSTALLED AT SAME LOCATION.
15. ALL DEMOLISHED ELECTRICAL FIXTURES, EQUIPMENT, DEVICES AND WIRES SHALL BE DISPOSED OF AS DIRECTED BY THE OWNER, UON.
16. PROVIDE TEMPORARY CONSTRUCTION LIGHTS THROUGHOUT THE PROJECT PER OSHA STANDARD, ONCE THE DEMOLITION OF LIGHTING IS COMPLETED.

DEMOLITION KEYNOTES:

- 1 EXISTING RECEPTACLE TO BE REMOVED. RETAIN EXISTING BRANCH CIRCUIT AND BACK BOX FOR NEW WORK.
- 2 HAND DRYER TO BE REMOVED. REMOVE EXISTING BRANCH CIRCUIT AND RACEWAY BACK TO SOURCE.
- 3 EXISTING GFCI RECEPTACLE, MOTOR RATED SWITCH AND FAN TO REMAIN.
- 4 EXISTING DOWNLIGHT FIXTURE TO BE REMOVED; TYPICAL FOR 9. RETAIN SWITCHED BRANCH CIRCUIT FOR INSTALLATION OF NEW FIXTURE AT SAME LOCATION.
- 5 EXISTING 2x4' FIXTURE TO BE REMOVED. TYPICAL FOR 3. RETAIN SWITCHED BRANCH CIRCUIT FOR INSTALLATION OF NEW FIXTURE AT SAME LOCATION.
- 6 EXISTING 4 FOOT STRIP LIGHT TO BE REMOVED RETAIN BOTH NORMAL POWER SWITCHED BRANCH CIRCUIT AND ENERGY POWER UNSWITCHED BRANCH CIRCUIT FOR INSTALLATION OF NEW FIXTURES AT SAME LOCATION.

KEY PLAN

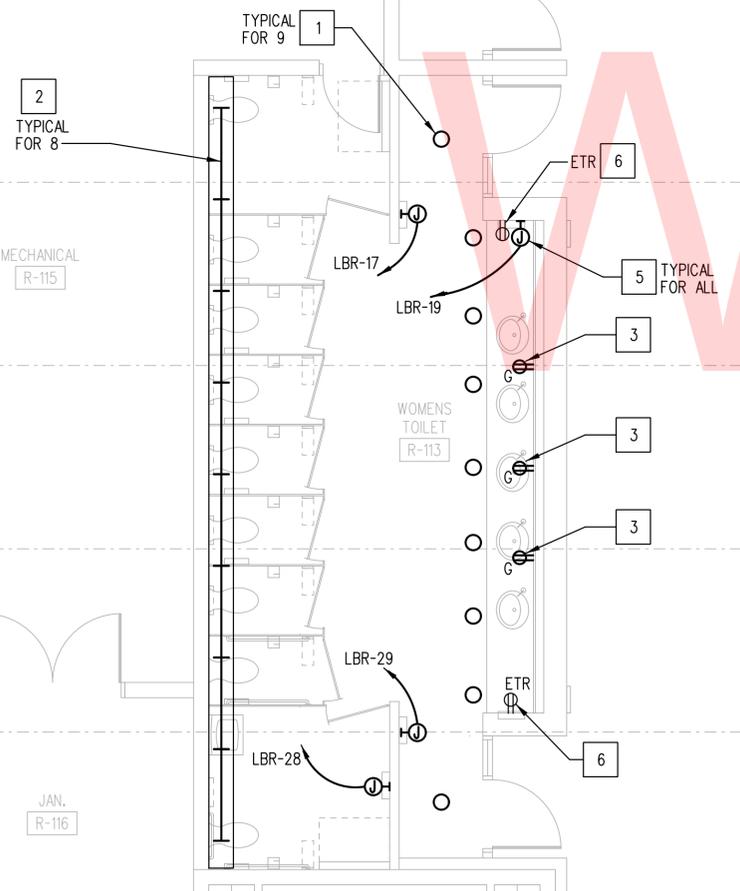
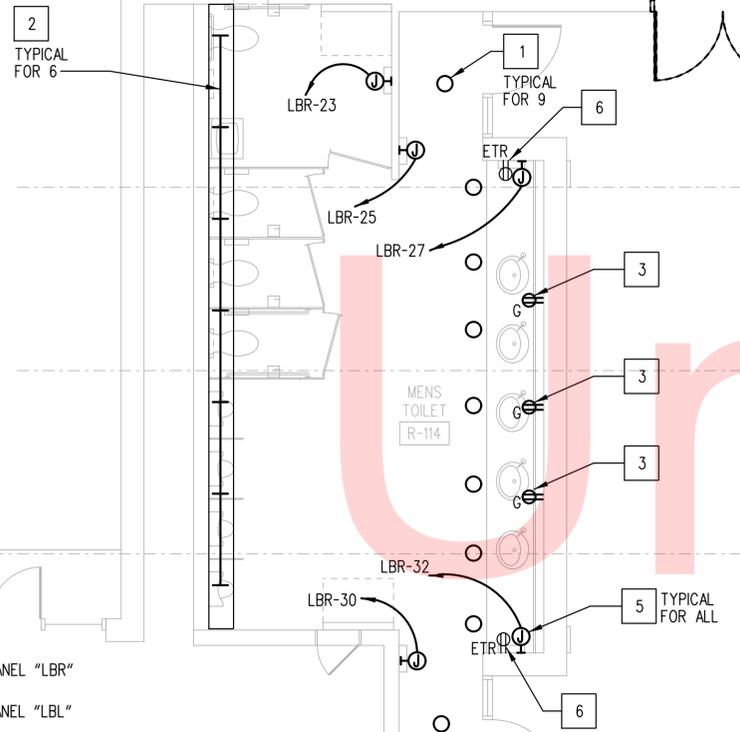


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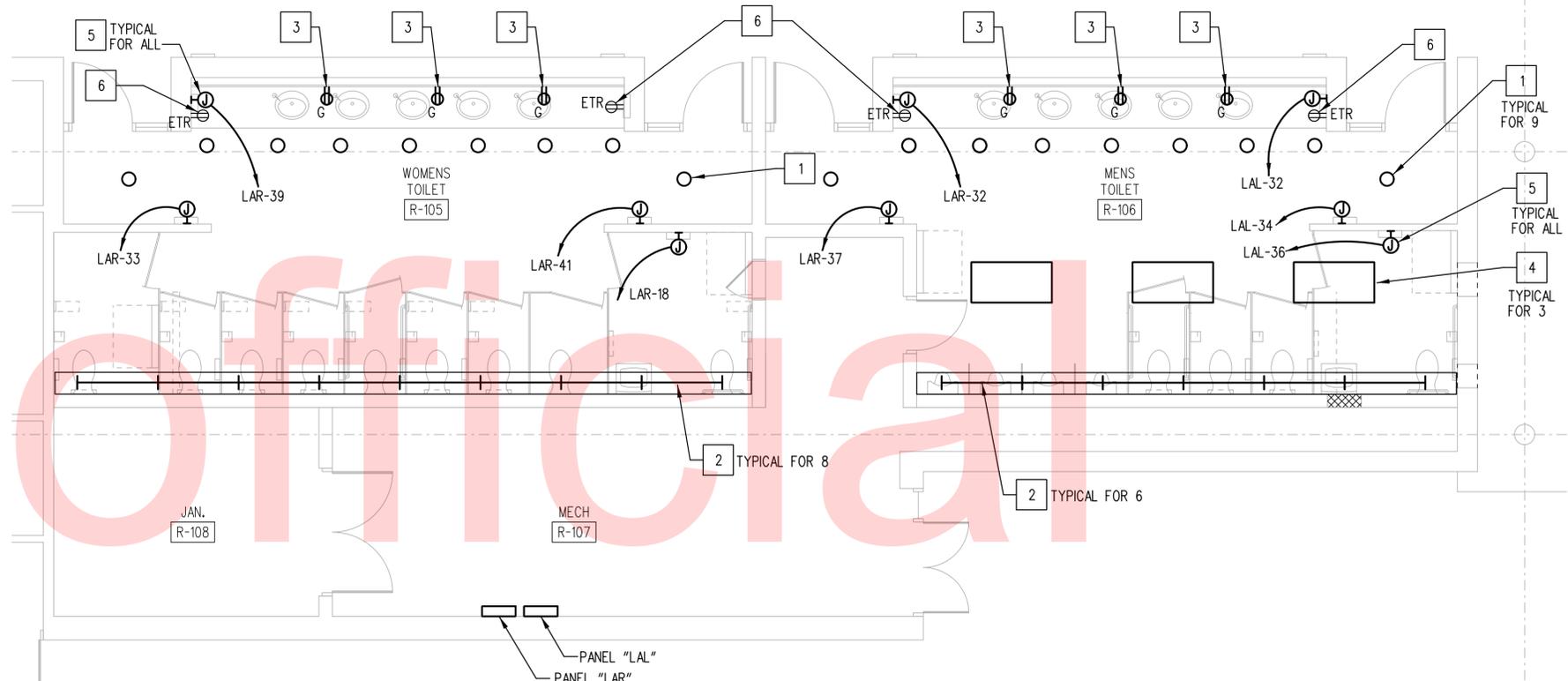
ADDENDUMS / REVISIONS

CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: MSM
	CHECKED BY: IK

ED101
SHEET NO. 25
TOTAL SHTS. 29



1
E101 SCALE: 1/4" = 1'-0"



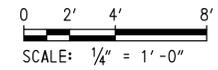
1
E101 SCALE: 1/4" = 1'-0"

GENERAL NOTES

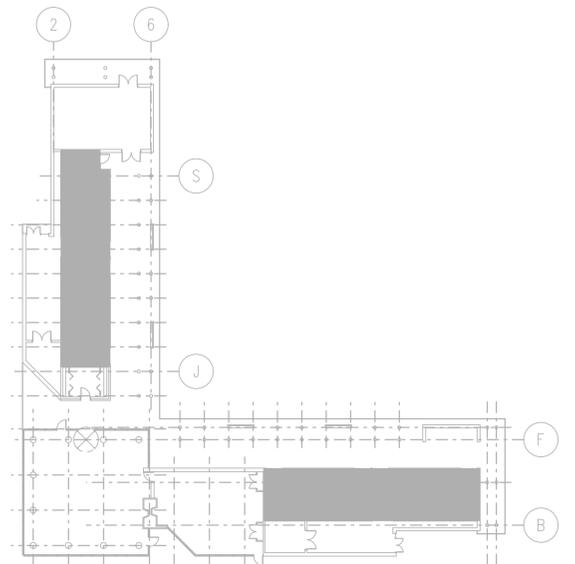
1. REFER TO DRAWING E-001 FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES.
2. SEE PLANS E102 AND E103 FOR PANEL LOCATIONS.
3. CONTRACTOR SHALL UTILIZE SURFACE MOUNTED RACEWAY IN THE BATHROOMS FOR NEW CIRCUITS MOUNTED EXPOSED ON EXISTING BLOCKWALL. WIREMOLD: 700 SERIES METALLIC OR APPROVED EQUAL. PAINT TO MATCH EXISTING WALL COLOR.
4. ALL BRANCH WIRING SHALL BE 2*12, 1*12G IN 3/4" C. UON.
5. COORDINATE LIGHTING FIXTURE LOCATION WITH ARCHITECTURAL REFLECTED CEILING PLANS.
6. ALL EXISTING LIGHTING CIRCUITS ARE TO REMAIN UNLESS INDICATED OTHERWISE. EXTEND AS REQUIRED FOR CONNECTION TO NEW FIXTURES.
7. ALL EQUIPMENT INDICATED "ETR" IS EXISTING TO REMAIN.
8. ALL EXTERIOR ELECTRICAL EQUIPMENT SHALL BE IN NEMA 3R ENCLOSURE. RECEPTACLE SHALL BE GFCI IN-USE TYPE WEATHER PROOF ENCLOSURE.
9. FIELD VERIFY THE VOLTAGE AND PLUG CONFIGURATION OF EQUIPMENT TO BE RELOCATED PRIOR TO THE INSTALLATION OF RACEWAYS AND EQUIPMENT RECEPTACLES.
10. ALL SINGLE POLE BREAKERS IN EXISTING PANELS FOR HAND DRYERS CIRCUITS ARE EXISTING.

CONSTRUCTION NOTES

- 1 NEW LED DOWNLIGHT 8" OPEN LED RETROFIT DOWNLIGHT LITHONIA: RV8 40/30 R08 AR 120 OR APPROVED EQUAL. PROVIDE ROUGH-IN FRAME AS REQUIRED FOR THE INSTALLATION. CONNECT TO EXISTING BRANCH CIRCUIT.
- 2 NEW 4' LED STRIP LIGHT. MOUNT IN EXISTING COVE LITHONIA: ZL1N L48 5000LM L/LENS MVOLT 40K 90CRI/WH OR APPROVED EQUAL. CONNECT TO EXISTING BRANCH CIRCUIT AT EACH LOCATION.
- 3 NEW RECEPTACLE INSTALLED IN EXISTING BACK BOX. EXTEND EXISTING BRANCH WIRING AS REQUIRED.
- 4 NEW 2'x4' LED RECESSED TROFFER FIXTURE LITHONIA: 2TL4 40L FW A12LP840 OR APPROVED EQUAL. CONNECT TO EXISTING BRANCH CIRCUIT AT EACH LOCATION.
- 5 NEW HAND DRYER.
- 6 EXISTING GFCI RECEPTACLE, MOTOR RATED SWITCH AND FAN TO REMAIN.



KEY PLAN



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ADDENDUMS / REVISIONS	

CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: MSM
	CHECKED BY: IK

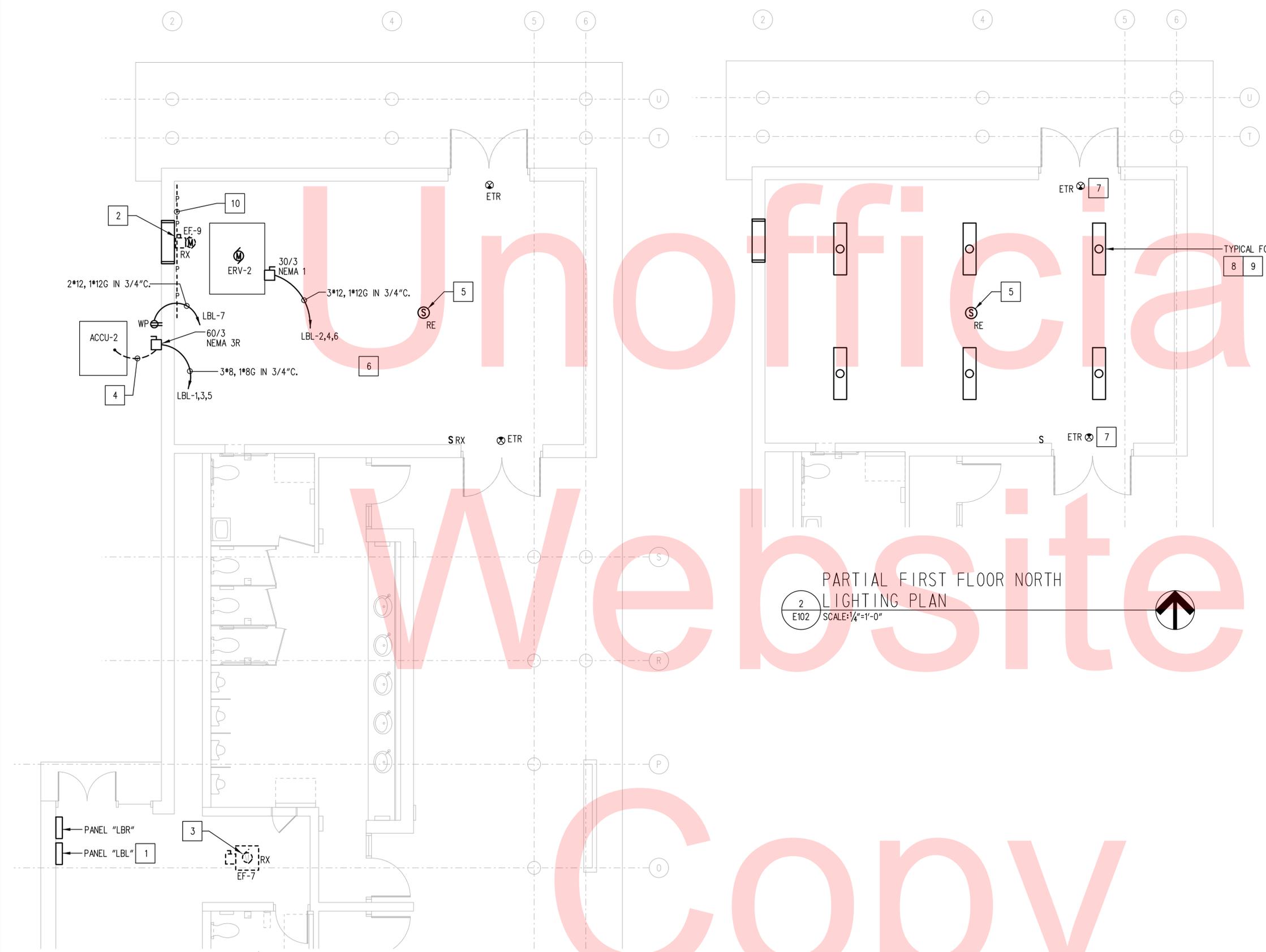
E101
SHEET NO. 26
TOTAL SHTS. 29

GENERAL NOTES

1. REVISED EXISTING PANELBOARD SCHEDULE AS REQUIRED TO REFLECT CHANGES MADE ON THIS AND OTHER PLANS.
2. ALL SINGLE POLE BREAKERS FOR MAINTENANCE RECEPTACLES ARE EXISTING.

CONSTRUCTION NOTES

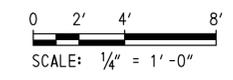
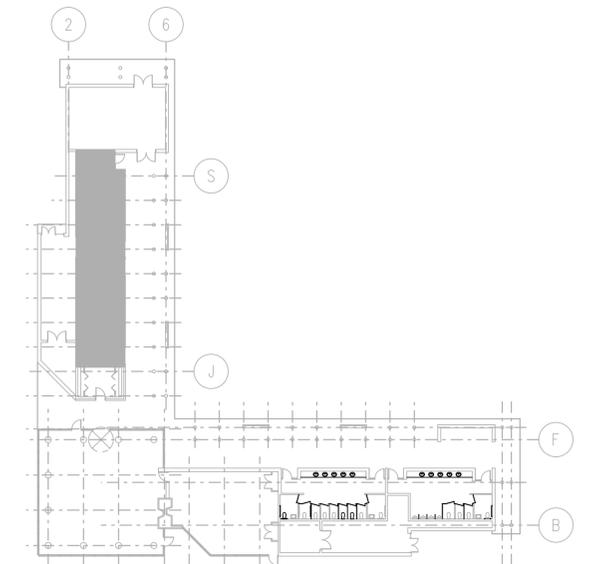
1. PROVIDE (1) NEW 20 AMP, 3 POLE BREAKER IN EXISTING PANEL FOR ERV-2 AND (1) NEW 50 AMP, 3 POLE BREAKER IN EXISTING PANEL FOR ACCU-2. NEW BREAKERS SHALL MATCH EXISTING BREAKERS TYPE AND AIC RATING. EXISTING PANEL SQUARE D TYPE NOOD.
2. DISCONNECT AND REMOVE EXISTING FAN EF-9. REMOVE ALL BRANCH CIRCUIT WIRING BACK TO SOURCE MARK SOURCE BREAKER AS SPARE.
3. DISCONNECT AND REMOVE EXISTING FAN EF-7. REMOVE ALL BRANCH CIRCUIT WIRING BACK TO SOURCE MARK SOURCE BREAKER AS SPARE.
4. SEE DETAIL 1/E-103 FOR DUCTBANK INSTALLATION.
5. RETAIN EXISTING FIRE ALARM PULL STATION AND STROBE. REMOVE AND RELOCATE EXISTING SMOKE DETECTOR TO CENTER OF SPACE. MOUNT TO UNDER SIDE OF STRUCTURE. PROVIDE ADDITIONAL CABLING AND SUPPORTS FOR RELOCATION.
6. REMOVE ALL RECESSED LIGHTING FIXTURES AND SWITCH. RETAIN EXISTING LIGHTING CIRCUIT AND SWITCH BACKBOX FOR NEW WORK.
7. MODIFY EXISTING EXIT SIGN BRACKET TO BE WALL MOUNTED.
8. NEW (2) LAMP INDUSTRIAL FIXTURE CHAIN MOUNTED TO 10 FEET AFF. LITHONIA CAT # AF10 232 120 GEB101S HC36 WGAPPV OR EQUAL.
9. EXTEND EXISTING LIGHTING CIRCUIT AND CONNECT TO NEW FIXTURE SHOWN.
10. DISCONNECT AND REMOVE EXISTING SECTION OF PLUGMOLD SHOWN. REMOVE BRANCH CIRCUIT AND RACEWAY BACK TO PANEL OF ORIGIN.



2
E102
SCALE: 1/4" = 1'-0"
PARTIAL FIRST FLOOR NORTH
LIGHTING PLAN

1
E102
SCALE: 1/4" = 1'-0"
PARTIAL FIRST FLOOR NORTH
ELECTRICAL PLAN

KEY PLAN



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ADDENDUMS / REVISIONS	

CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: MSM
	CHECKED BY: IK

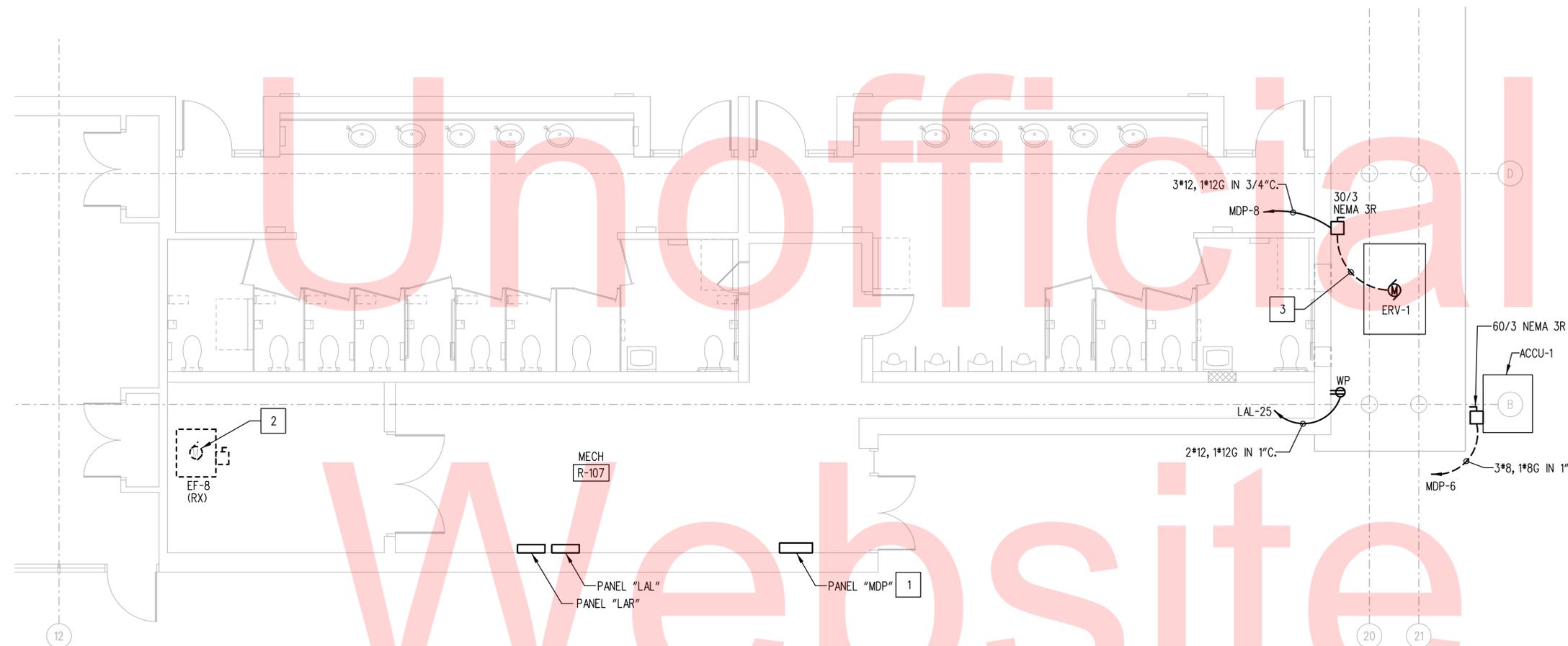
E102
SHEET NO. 27
TOTAL SHTS. 29

GENERAL NOTES

1. REVISED EXISTING PANELBOARD SCHEDULE AS REQUIRED TO REFLECT CHANGES MADE ON THIS AND OTHER PLANS.
2. ALL SINGLE POLE BREAKERS FOR MAINTENANCE RECEPTACLES AND HAND DRYERS ARE EXISTING.

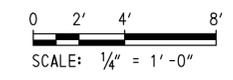
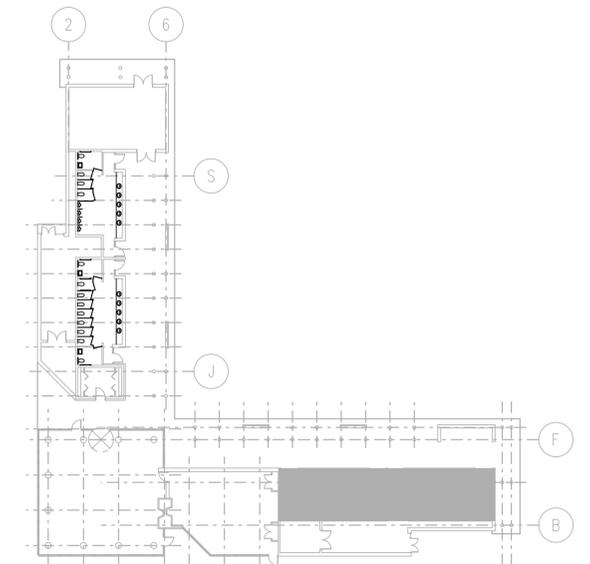
CONSTRUCTION NOTES

1. PROVIDE (1) NEW 20 AMP, 3 POLE BREAKER IN EXISTING PANEL FOR ERV-1 AND (1) NEW 50 AMP, 3 POLE BREAKER IN EXISTING PANEL FOR ACCU-1. NEW BREAKERS SHALL MATCH EXISTING BREAKERS TYPE AND AIC RATING. EXISTING PANEL SQUARE D I-LINE CLASS TYPE HCWM.
2. DISCONNECT AND REMOVE EXISTING FAN EF-8. REMOVE ALL BRANCH CIRCUIT WIRING BACK TO SOURCE MARK SOURCE BREAKER AS SPARE.
3. SEE DETAIL 1/E-103 FOR DUCTBANK INSTALLATION.



1
E102
SCALE: 1/4" = 1'-0"
REF: ↑

KEY PLAN

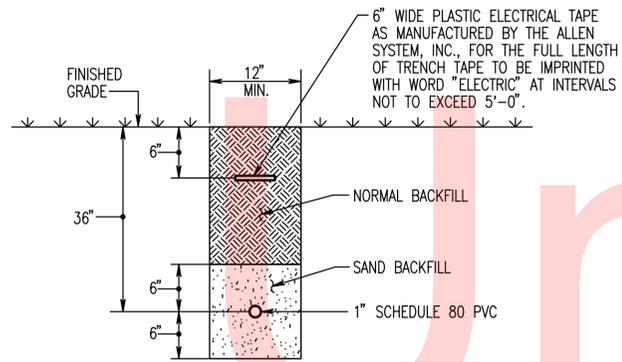


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ADDENDUMS / REVISIONS	

CONTRACT T201680108	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: MSM
	CHECKED BY: IK

E103
SHEET NO. 28
TOTAL SHTS. 29



1
E-104

SINGLE DIRECT BURIED CONDUIT
INSTALLATION DETAIL
NOT TO SCALE

Unofficial
Website
Copy

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ADDENDUMS / REVISIONS	

CONTRACT	BRIDGE NO.
T201680108	
COUNTY	DESIGNED BY: MSM
NEW CASTLE	CHECKED BY: IK

E-104
SHEET NO.
29
TOTAL SHTS.
29