RENOVATIONS TO SECOND FLOOR TOILET ROOMS AT NJM WEST TRENTON BUILDING A-NORTH

301 SULLIVAN WAY, WEST TRENTON, MERCER COUNTY, NEW JERSEY 08628 NJM PROJECT #WT.C. 2024.009

NEW JERSEY MANUFACTURERS INSURANCE COMPANY
301 SULLIVAN WAY, WEST TRENTON, MERCER COUNTY, NEW JERSEY 08628



KELTER & GILLIGO CONSULTING ENGINEERS

CONSULTING ENGINEERS | PRINCETON JUNCTION NEW JERSEY, 08550

APPLICABLE CODES:

THIS PROJECT WAS DESIGNED UNDER THE FOLLOWING CODES:

CONSTRUCTION CODE (ALTERATIONS) BUILDING SUBCODE BARRIER-FREE SUBCODE PLUMBING SUBCODE MECHANICAL SUBCODE MECHANICAL SUBCODE ELECTRICAL SUBCODE NATIONAL STANDARD PLUMBING SUBCODE 2021
NATIONAL STANDARD PLUMBING SUBCODE 2021
NATIONAL MECHANICAL CODE 2021
NATIONAL ELECTRICAL CODE 2020
ASHRAE 90.1 2019

BUILDING ANALYSIS

(FROM INTERNATIONAL BUILDING CODE 2021 NEW JERSEY EDITION)

THE FLOOR PLAN AREA AND HEIGHT OF THE BUILDING IS <u>NOT CHANGED</u> UNDER THIS PROJECT, THEREFORE NO ANALYSIS OF THE EXISTING BUILDING HAS BEEN PROVIDED.

EGRESS ANALYSIS

(FROM NEW JERSEY REHABILITATION SUBCODE 5:23-6)

THE OCCUPANT LOAD IS <u>NOT CHANGED</u> UNDER THIS PROJECT, THEREFORE NO ANALYSIS OF EGRESS HAS BEEN PROVIDED.

FIRE EXTINGUISHER SCHEDULE

(FROM NATIONAL FIRE PROTECTION ASSOCIATION CODES)

THE FLOOR PLAN AREA OF THE BUILDING IS <u>NOT CHANGED</u> UNDER THIS PROJECT, THEREFORE NO ANALYSIS OF FIRE EXTINGUISHERS HAS BEEN PROVIDED.

TABULATION OF PLUMBING FIXTURES

(FROM 2021 NATIONAL STANDARD PLUMBING CODE)

USE GROUP 'B' (BUSINESS) - OFFICE CONSTRUCTION CLASSIFICATION: IB

THE FUNCTIONAL CAPACITY OF THE BUILDING IS <u>NOT CHANGED</u> UNDER THIS PROJECT. NO PLUMBING FIXTURES ARE ADDED OR REMOVED. THEREFORE NO ANALYSIS OF PLUMBING FIXTURES HAS BEEN PROVIDED.

FIXTURES PROVIDED (MENS) - 2ND FLOOR

WATER CLOSETS (2 EXISTING, 2 REPLACED)
LAVATORIES (3 EXISTING, 3 REPLACED)
URINALS (2 EXISTING, 2 REPLACED)
FIXTURES PROVIDED (WOMENS) - 2ND FLOOR

WATER CLOSETS (7EXISTING, 7 REPLACED)
LAVATORIES (4 EXISTING, 4 REPLACED)

LOWING CODES: W JERSEY REHABILITATION SUBCODE 5:23-6

GENERAL

G001 Title Sheet, Drawing Index & Codes
G002 Abbreviation List, General Notes, Legends & Typical Project Details
ARCHITECTURAL

DRAWING INDEX

Second Floor Demolition Notes, Plans, Legends & Wall Partition Types Second Floor RCP Plans, Notes, & Legend

A102 Second Floor RCP Plans, Notes, & Legend

A401 Second Floor Toilet Rooms Layouts, Schedules, Notes & Details

A402 Second Floor Toilet Rooms Elevations, Finishes & Elevation Key Plan

A601 Door Hardware and Schedule, Notes & Details

MECHANICAL

H101 Second Floor Part Plans - HVAC
H201 Abbreviation, Details, Symbols Schedules & Specifications - HVAC

ELECTRICAL

E101 Floor Plans, Symbol List, & Lighting Schedule - Electrical
E102 Floor Plan & Fire Alarm Riser - Power
E103 Specifications - Electrical

PLUMBING

PD100	Second Floor Part Plan Plumbing Demolition
P101	First and Second Floor Part Plans Plumbing
P201	Second Floor Part Plans Plumbing
P301	Waste and Vent Riser Diagrams
P302	Waste and Vent Riser Diagrams
P401	Notes, Schedules and Details Plumbing
P501	Specifications Plumbing

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Renovations to Second Floor Toilet Rooms at NJM West Trenton Building A - North

Project Owner Name

New Jersey

Manufacturers

Insurance Company

NJM Project #

WT.C.2024.009

Project Location
301 Sullivan Way,
West Trenton, NJ
08628

Project Number

5578

Project Date

11.08.2024

Checked By

GRD

Drawn By

SB

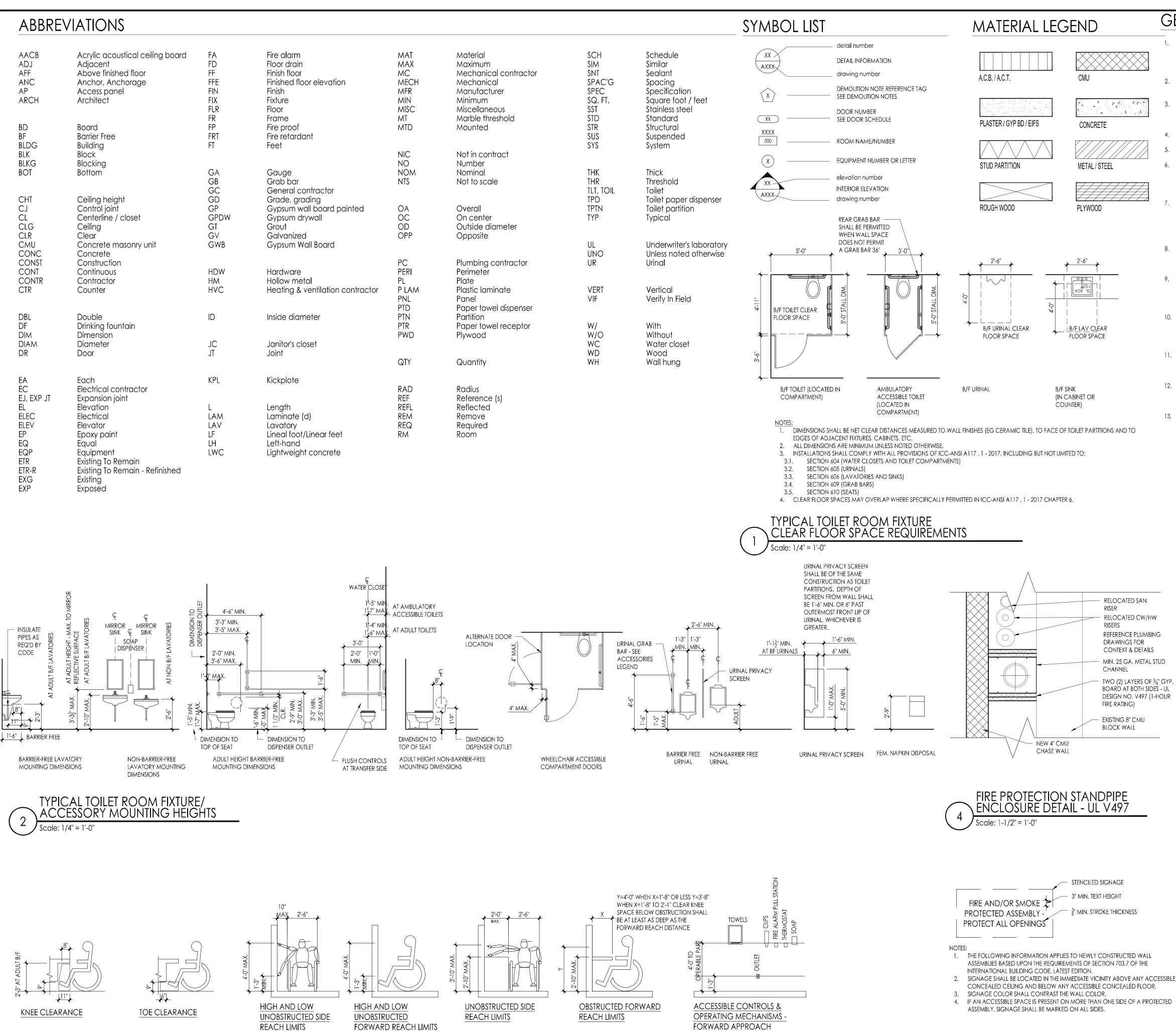
Title Sheet, Drawing Index & Codes

AS SHOWN

Revisions

No. Date Description

Drawing Number



GENERAL NOTES

ALL CONTRACTORS SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS BEFORE SUBMITTING A BID. DISCREPANCIES OR OMISSIONS MUST BE REPORTED TO THE ARCHITECT IN WRITING (7) DAYS PRIOR TO BID OPENING. IF HE OR SHE DOES NOT, CONTRACTOR SHALL CORRECT SAME AT NO CHANGE IN CONTRACT PRICE.

2. CONTRACTOR SHALL PROVIDE ALL REQUIRED SAFETY PROTECTION DURING CONSTRUCTION.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE A SUFFICIENT WORK FORCE TO MEET COMPLETION DATES AS OUTLINED IN THE SPECIFICATIONS. NO EXCEPTIONS WILL BE ALLOWED.

4. DO NOT SCALE THE DRAWINGS.

DETAILS NOTED "TYPICAL" IMPLY ALL SUCH CONDITIONS BE TREATED SIMILARLY.

6. MATERIALS LISTED ON THE FINISH SCHEDULE REFER TO THE MAJORITY OF WALLS, FLOOR AND CEILING OF ROOMS SCHEDULED, REFER TO PLANS, DETAILS, INTERIOR ELEVATION, CEILING PLANS, AND NOTES FOR THOSE MATERIALS NOT INDICATED ON THE SCHEDULE BUT ARE STILL REQUIRED IN THE ROOM.

UNLESS OTHERWISE NOTED AND UNLESS FACTORY FINISHED, ALL EXPOSED SURFACES OF CMU, CONCRETE, PLASTER, WOOD, GYPSUM BOARD, HOLLOW METAL, HARDWOODS, MISC. METALS ETC., ARE TO RECEIVE PRIME AND FINISH COATS OF PAINT OR CLEAR FINISH AS SPECIFIED AND IN COLORS AS SELECTED BY ARCHITECT. EXCLUDED FROM THIS

8. ALL WORK PERTAINING TO THESE DRAWINGS SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES AND IN AGREEMENT WITH ALL AGENCIES HAVING JURISDICTION.

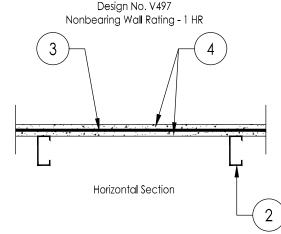
THE CONTRACTOR IS RESPONSIBLE TO SECURE ALL PERMITS, TO OBTAIN APPROVALS AS REQUIRED AND COORDINATE INSPECTION WITH LOCAL BUILDING INSPECTOR. ALL PERMIT AND APPLICATION FEES WILL BE PAID BY THE OWNER AND DELIVERED BY THE CONTRACTOR.

10. DRAWINGS AND SPECIFICATIONS COMPLEMENT EACH OTHER. WORK NOT SHOWN ON DRAWING BUT CALLED FOR IN THE SPECIFICATIONS IS STILL REQUIRED, AND ALL WORK NOT CALLED FOR IN SPECIFICATIONS, BUT CALLED OUT OR SHOWN IN DRAWINGS IS STILL REQUIRED.

11. THE OWNER WILL REMOVE AND RE-INSTALL ALL MOVEABLE EQUIPMENT. EACH CONTRACTOR IS RESPONSIBLE TO REMOVE, STORE AND RE-INSTALL EXISTING BUILT-IN EQUIPMENT REQUIRED TO PERFORM THEIR WORK UNLESS NOTED OTHERWISE.

12. IN ACCORDANCE WITH NJAC 5:23-6.6(i), ALL MATERIALS AND METHODS USED SHALL COMPLY WITH THE REQUIREMENTS SPECIFIED IN N.J.A.C. 5:23-6.8, MATERIALS AND METHODS.

13. WHERE THERE IS AN ACCESSIBLE CONCEALED FLOOR, FLOOR-CEILING OR ATTIC SPACE, FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED IN ACCORDANCE WITH THE FIRE AND/OR SMOKE PROTECTED ASSEMBLY MARKING DETAIL. REFER TO 4/G002 FOR DETAIL.



1. Floor and Ceiling Runners — (Not Shown) — Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min width to accommodate stud size, with min 1-1/4 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max.

2. Steel Studs — Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min 3-5/8 in. wide, min 1-1/4 in. flanges, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.

3. <u>Laminating Compound</u> — For use with Item 4 - Used to bond outer layer wallboard to inner layer wallboard. Powder type mixed with water in accordance with instructions shown on bags. Applied to entire surface of base layer wallboard. Applied with notched trowel producing continuous beads about 1/4 in. wide and 1/4 in. high.

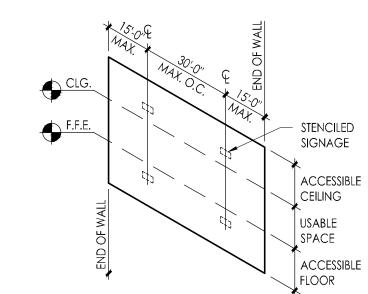
4. Gypsum Board* — 1 Hr Rating - Applied to one side of steel studs (Item 2). Two layers of 5/8 in. gypsum panels with beveled, square or tapered edges. Gypsum panels applied vertically with joints centered over studs. Base layer applied with 1 in. Type S screws spaced 24 in. oc. Face layer applied vertically with joints centered over studs and offset from base layer joints by one stud cavity. Face layer applied with 1-5/8 in. Type S screws spaced 12 in. oc starting with a 6 in. offset from the bottom of the gypsum

5. <u>Joint Tape and Compound</u> — (Not Shown) - Joints covered with joint compound and paper tape. embedded in first layer of compound over all joints of outer panels.

* Indicates such products shall bear the UL Certification Mark for jurisdictions employing the UL.

UL DESIGN V497 DETAI

Scale: N.T.S.



FIRE AND/OR SMOKE PROTECTED ASSEMBLY MARKING DETAIL

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Renovations to Second Floor Toilet Rooms at NJM West Trenton Building A - North

New Jersey Manufacturers Insurance Company NJM Project # WT.C.2024.009

301 Sullivan Way, West Trenton, NJ 08628

Project Date 11.08.2024 Checked By GRD Drawn By AS SHOWN

Abbreviation List, General Notes, Legends & Typical Project Details

Date Description

GENERAL NOTES ON DEMOLITION:

- A. ALL CONTRACTORS ARE ADVISED TO VISIT THE SITE AND VERIFY ALL AREAS AND CONDITIONS PRIOR TO SUBMITTING THEIR BIDS. THE CONTRACTOR MUST NOTIFY THE ARCHITECT OF ANY DISCREPANCIES AND/OR OMISSIONS IN WRITING AT LEAST SEVEN DAYS PRIOR TO THE RECEIPT OF BIDS. FAILURE TO SO NOTIFY THE ARCHITECT INDICATES THAT ANY ADDITIONAL COSTS ASSOCIATED WITH THE DISCREPANCIES AND / OR OMISSIONS ARE INCLUDED IN THE CONTRACTOR'S BID AND THAT NO CHANGE TO THE CONTRACT AMOUNT WILL BE MADE AFTER THE RECEIPT OF BIDS OR THE AWARD OF
- B. ALL PLUMBING, MECHANICAL OR ELECTRICAL DISCONNECTS SHALL BE MADE BY THE RESPECTIVE TRADE SUBCONTRACTOR. <u>ALL EQUIPMENT</u>, DEVICES, FIXTURES, ETC. SHALL BE REMOVED FROM THE SITE BY THE RESPECTIVE SUBCONTRACTOR. <u>NOTE</u>: THE EXISTING FIRE ALARM SYSTEM SHALL NOT BE DIMINISHED NOR SHALL EXISTING FIRE ALARM DEVICES BE REMOVED UNTIL NEW DEVICES ARE READY FOR SWITCHOVER.
- C. UNLESS NOTED OTHERWISE ALL DEMOLITION MATERIAL SHALL BE REMOVED OFF SITE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- D. THERE ARE SOME SPECIFIC ITEMS DESIGNATED BY THE ARCHITECT FOR SALVAGE. THESE ITEMS ARE INTENDED FOR REUSE IN THE NEW CONSTRUCTION. THE CONTRACTOR MUST TAKE CARE IN THE REMOVAL AND STORAGE OF THESE ITEMS UNTIL THEY ARE NEEDED IN THE NEW CONSTRUCTION.
- E. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT PORTIONS OF THE EXISTING CONSTRUCTION WHICH ARE ADJACENT TO AREAS TO BE DEMOLISHED. MAKE ALL CUTS AS NEATLY AS POSSIBLE. REFER TO FLOOR PLAN DRAWINGS FOR FINISHING OF THESE
- F. IF NOT OTHERWISE NOTED OR DETAILED, ALL SURFACES LEFT ROUGH OR UNFINISHED BY DEMOLITION AND WHICH ARE EXPOSED TO VIEW, SHALL BE PATCHED TO MATCH ADJACENT SURFACES AND FINISHED TO PROVIDE A UNIFORM APPEARANCE WITH REGARD TO SIZE, SHAPE, COLOR, TEXTURE AND MATERIAL.
- G. THE CONTRACTOR SHALL PROVIDE A PHYSICAL BARRIER TO CONTAIN DUST AND DIRT AROUND THE DEMOLITION AREA AND SHALL MAKE EVERY EFFORT TO KEEP THE DEMOLITION SITE AND SURROUNDING AREAS AS CLEAN AS POSSIBLE. ALL TEMPORARY PARTITIONS SHALL BE 1 HOUR RATED CONSTRUCTION AND INCLUDE A DOOR.
- H. NO DEMOLITION SHALL BEGIN UNTIL PROPER PROTECTION IS IN PLACE AND APPROVED BY ARCHITECT & OWNER TO ENSURE THE SAFETY OF THE PUBLIC, THE BUILDING OCCUPANTS, CONSTRUCTION WORKERS AND TO CONTAIN DUST AND DIRT WITHIN THE AREA OF DEMOLITION.
- I. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS REGARDING THE REMOVAL AND DISPOSAL OF ALL MATERIALS & EQUIPMENT.
- J. THE CONTRACTORS SHALL TAKE INTO ACCOUNT THEIR METHODS OF CONSTRUCTION FOR THE NEW WORK AND INCLUDE IN THEIR BID THE COST OF ADDITIONAL DEMOLITION WORK NECESSARY TO FACILITATE THE CONSTRUCTION. THIS WORK INCLUDES, BUT IS NOT LIMITED TO THE PARTIAL DEMOLITION OF WALLS AT THE POINTS WHERE NEW STEEL CONNECTS TO EXISTING BEAMS OR COLUMNS, THE AREA AROUND JOINTS BETWEEN NEW AND EXISTING CONSTRUCTION IN WALLS, FLOORS AND CEILINGS, ETC. MUCH OF THIS WORK IS INDICATED IN SECTIONS AND DETAILS RELATING TO THE NEW CONSTRUCTION.
- K. THE DEMOLITION WORK SHOWN ON THIS PLAN IS INTENDED TO BE A GENERAL OVERVIEW OF MAJOR DEMOLITION WORK REQUIRED. IT IS NOT A COMPLETE AND EXCLUSIVE REPRESENTATION OF ALL DEMOLITION WORK NEEDED FOR EXECUTION OF THE PROJECT. WHEN PREPARING THEIR BIDS, CONTRACTORS MUST REFER TO THE FULL SET OF CONSTRUCTION DOCUMENTS FOR VARIOUS MISCELLANEOUS ITEMS WHICH MUST BE REMOVED AND/OR RELOCATED AS PART OF THE WORK.
- L. ALL PRIME CONTRACTORS ARE RESPONSIBLE FOR THEIR OWN CUTTING AND PATCHING SEE SPECIFICATION.
- M. IN ROOMS WHERE EXISTING FLOOR FINISH AND BASE ARE INDICATED TO BE REMOVED, IF ASBESTOS TILE IS ENCOUNTERED, STOP REMOVAL AND NOTIFY OWNER IMMEDIATELY.
 ASBESTOS TILE SHALL BE REMOVED DOWN TO THE EXISTING CONCRETE SLAB AND THE SURFACE PREPARED FOR NEW FINISH BY OTHERS PRIOR TO CONTINUING WITH RENOVATION WORK. AFTER ASBESTOS ABATEMENT, THE GENERAL CONTRACTOR SHALL CLEAN SLAB TO REMOVE ADHESIVES AND INFILL WITH SELF-DRYING FINISHING UNDERLAYMENT (COMPATIBLE WITH NEW FLOOR FINISHES) OVER ENTIRE SURFACE OF EXISTING FLOOR TO MAKE FLOOR LEVEL AND FLUSH. APPLY NEW FINISH AND BASE SEE ROOM FINISH SCHEDULE.
- N. IF DURING THE DEMOLITION, RENOVATION AND ALTERATION WORK IN THE EXISTING BUILDING, STRUCTURAL ELEMENTS ARE UNCOVERED AND ARE FOUND TO BE UNSOUND OR OTHERWISE STRUCTURALLY DEFICIENT, THE GENERAL CONTRACTOR SHALL IMMEDIATELY ADVISE THE ARCHITECT AND THE STRUCTURAL ENGINEER OF RECORD OF THE CONDITION SO THAT APPROPRIATE MEASURES TO REINFORCE, SUPPORT OR REPLACE THE UNSOUND ELEMENTS CAN BE DESIGNED AND IMPLEMENTED.
- O. CONTRACTOR SHALL MAINTAIN ALL EXISTING FIRE-RATED CONSTRUCTION ASSEMBLIES, INCLUDING PROTECTED OPENINGS (DOORS, ETC.) DURING DEMOLITION AND ALTERATION WORK IN ORDER TO MAINTAIN EXISTING LIFE SAFETY AND EGRESS. CONTRACTOR IS RESPONSIBLE FOR ALL SEQUENCING AND SHALL NOT REMOVE ANY EXISTING FIRE-RATED ASSEMBLIES UNTIL NEW WORK IS READY FOR INSTALLATION. CONTRACTOR SHALL NOT REMOVE ANY EXISTING FIRE-RATED ASSEMBLIES BEYOND THAT WHICH CAN BE REPLACED IN A SINGLE DAY.

EXISTING FIRE ALARM SYSTEM NOTE

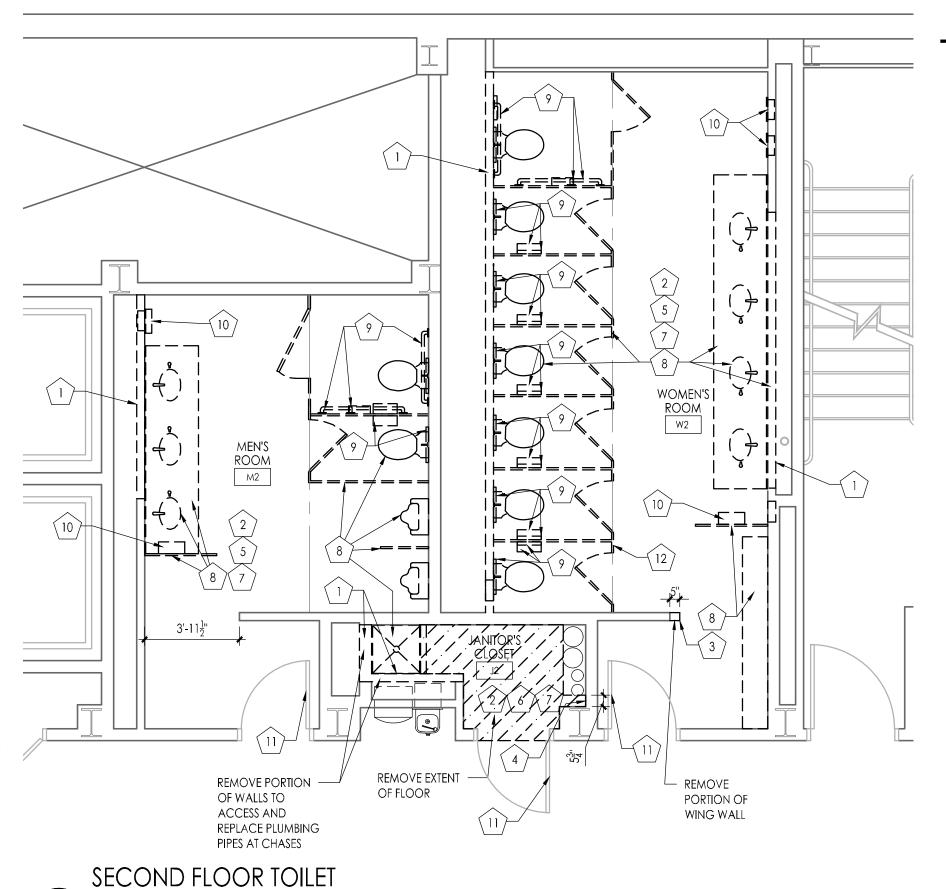
IF ANY PORTION OF THE EXISTING FIRE ALARM SYSTEM MUST BE TAKEN OUT OF SERVICE FOR ANY LENGTH OF TIME, THE LOCAL FIRE MARSHAL MUST BE CONTACTED AND MUST APPROVE SHUTDOWN PLANS, PROCEDURES AND FIRE WATCH PLANS THAT WILL BE IMPLEMENTED.

CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE LOCAL FIRE MARSHAL CONCERNING THE EXISTING FIRE ALARM SYSTEM AND SPRINKLER SYSTEM SHUTDOWN PLANS, PROCEDURES AND FIRE WATCH PLANS THAT WILL BE IMPLEMENTED FOR SYSTEM INTERRUPTIONS DURING CONSTRUCTION.

NOTE THAT TEMPORARILY COVERING EXISTING DETECTION DEVICES TO PREVENT ACCIDENTAL ALARM ACTIVATIONS DUE TO DUST AND DIRT CONSTITUTES A PARTIAL SHUTDOWN OF THE EXISTING FIRE ALARM SYSTEM.

SPRAY FIRE PROOFING DEMOLITION NOTE

THE EXISTING BUILDING PRIMARY STRUCTURAL FRAME, SECONDARY STRUCTURAL FRAME, AND UNDERSIDE OF METAL DECK (I.E. SECOND FLOOR AND ROOF) ARE PROTECTED BY SPRAY APPLIED FIRE PROOFING. ALL CONTRACTORS ARE TO TAKE THE NECESSARY PRECAUTIONS TO AVOID DAMAGE TO THE EXISTING FIRE PROOFING. WORK PERFORMED THAT REQUIRES CONNECTIONS TO THE EXISTING BUILDING COMPONENTS INDICATED ABOVE AND CAUSES ANY DAMAGE TO THE EXISTING FIRE PROOFING SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE BUILDING OWNER. THE REPAIRS SHALL MATCH THE EXISTING FIRE RATING ESTABLISHED.



DEMOLITION PLAN SYMBOL LEGEND

WALL & EQUIPMENT DEMOLITION OR REMOVAL

EXTENT OF DEMOLITION REMOVAL

TYPICAL OR SPECIFIC DEMO SELECTION TAG



NEW CONSTRUCTION SYMBOL LEGEND

MASONRY WALL TYPE

B/F BARRIER-FREE

NEW FLOOR DRAIN

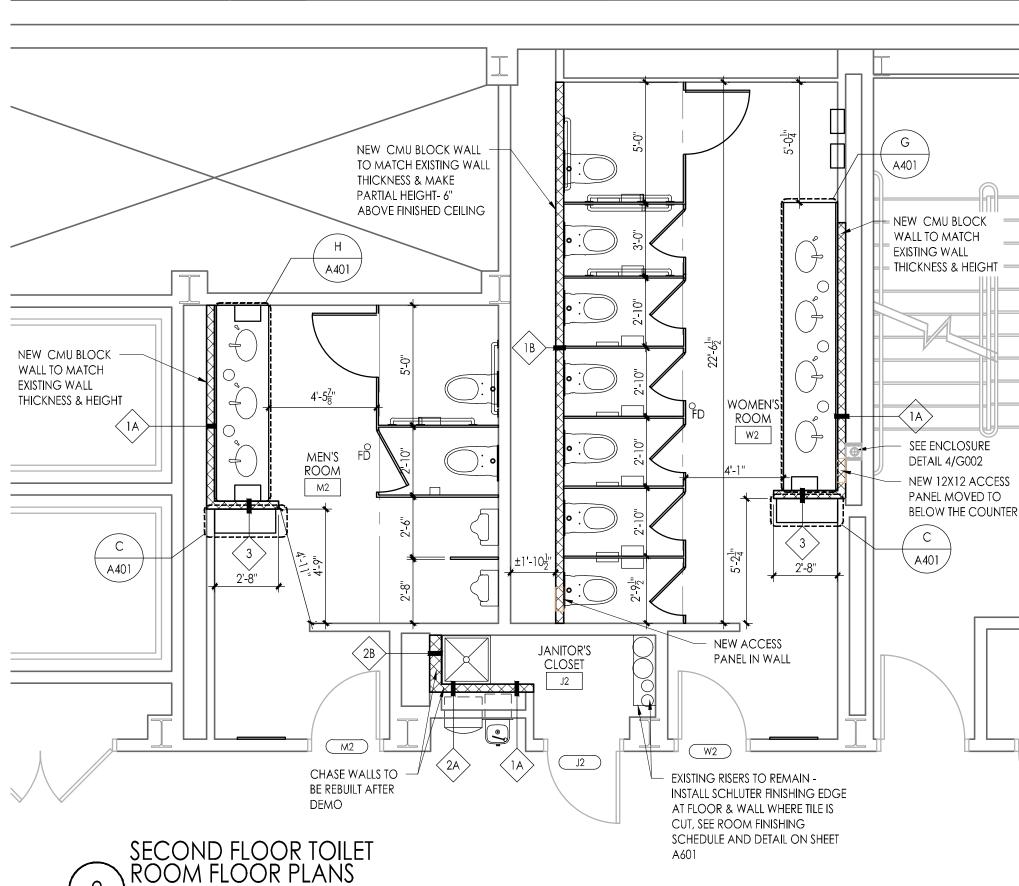
REFERENCE SHEET G002 FOR ADDITIONAL PLAN SYMBOLS

TYPICAL CONSTRUCTION NOTES:

- EXISTING RISERS IN JANITOR'S CLOSET (J2) ARE TO REMAIN AS IS.
 AFTER THE REMOVAL OF ANY MATERIAL, THE GC AND RESPECTIVE TRADE ARE TO REPAIR ANY DAMAGES CAUSED BY THE DEMOLITION. PATCH, PLUG, AND INFILL ANY OPENINGS IN THE EXISTING WALLS TO REMAIN. SMOOTH SURFACES AND PREP FOR NEW FINISHES.
- 3. ANY THRU HOLES ROUND IN A FIRE-RATED WALL ARE TO BE FILLED WITH A FIRE-RATED PENETRATION MATERIAL OR SEALANT. REFERENCE FIRE-RATED PENETRATION CHART ON SHEET A 102.
- DIMENSIONS SHOWN ARE FROM FINISHED WALL TILE TO FINISHED WALL TILE.

 IF ANY DISCREPANCIES ARE FOUND PRIOR TO THE INSTALLATION OF THE

 NEW FINISHED WALL, INFORM THE ARCHITECT IMMEDIATELY.



Renovations to
Second Floor
Toilet Rooms at
NJM West Trenton
Building A - North

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Project Owner Name

New Jersey

Manufacturers

Insurance Compani

NJM Project #

WT.C.2024.009

Project Location

301 Sullivan Way,
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08628

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5578

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Checked By

GRD

Drawn By

SB

Scale

AS SHOWN

Second
Floor Demolition
Notes, Plans,
Legends & Wall
Partition Types

Revisions

No. Date Description

A 101



ROOM DEMOLITION PLANS

GENERAL DEMOLITION OWNER'S NOTE: THE OWNER HAS THE RIGHT OF FIRST REFUSAL FOR ALL EQUIPMENT AND FIXTURES (CABINETS, SHELVING, PLUMBING FIXTURES, TOILET ACCESSORIES ETC.) REMOVED UNDER CONTRACT. IF THE OWNER DOES NOT EXERCISE THIS RIGHT FOR AN INDIVIDUAL PIECE OF EQUIPMENT, THE CONTRACTOR SHALL REMOVE SAID EQUIPMENT FROM THE SITE.

WALL

- 1. BRACE AND SHORE UP EXISTING ADJACENT WALL CONSTRUCTION TO REMAIN. DEMOLISH AND REMOVE INDICATED EXISTING WALLS IN THEIR ENTIRETY FULL HEIGHT. NOTE: IT WILL BE UP TO GC'S DISCRETION ON WHETHER THE ENTIRE LENGTH OF THE WALL WILL NEED TO BE DEMOLISHED IN ITS ENTIRETY TO FACILITATE THE WORK. ANY EXISTING STRUCTURAL COLUMNS ENCOUNTERED SHALL REMAIN.
- 2. WITH EXISTING WALLS TO REMAIN, REMOVE WALL TILE IN ITS ENTIRETY DOWN TO ITS SUBSTRATE. INSPECT EXISTING BLOCK FOR CRACKS AND JOINTS AND REPAIR ACCORDINGLY. REMOVE ANY LOOSE MORTAR OR GROUT AND SAND WALLS TO A LEVELED FINISHED, THEN VACUUM ALL DUST AND PARTICLES PRIOR TO CLEANING THE WALLS AND ALLOWING TO DRY COMPLETELY. PRIME AND PREP WALLS FOR NEW THINSET, GROUT AND WALL FINISH. SEE ROOM FINISH SCHEDULE.
- 3. SAWCUT AND DEMOLISH EXISTING WALL CONSTRUCTION TO WIDTH INDICATED ON DEMOLITION PLAN AND FROM FLOOR TO ABOVE CEILING FULL HEIGHT. NOTE: ANY EXISTING STRUCTURAL COLUMNS ENCOUNTERED SHALL REMAIN UNLESS NOTED OTHERWISE. PATCH AND REPAIR ALL DAMAGE CAUSED BY DEMOLITION AND PREPARE END OF WALL TO RECEIVE NEW TILE FINISH.
- 4. SAWCUT AND REMOVE EXISTING WALL TILE TO THE EXTENT SHOWN DOWN TO ITS SUBSTRATE. REMOVE ANY LOOSE MORTAR OR GROUT AND SAND WALLS TO A LEVELED FINISHED, THEN VACUUM ALL DUST AND PARTICLES PRIOR TO CLEANING THE WALLS AND ALLOWING TO DRY COMPLETELY. PRIME AND PREP WALLS FOR NEW THINSET, GROUT AND WALL FINISH. SEE ROOM FINISH SCHEDULE.

FLOORS

- 5. REMOVE EXISTING FLOOR FINISH DOWN TO CONCRETE SLAB, INCLUDING ALL ADHESIVES. CLEAN, PREPARE & LEVEL EXISTING FLOOR SLAB WITH SELF-DRYING UNDERLAYMENT (COMPATIBLE WITH NEW FLOOR FINISHES)
 OVER ENTIRE SURFACE OF EXISTING FLOOR TO MEET SLOPE OF THE NEW FLOOR DRAIN. REFERENCE PLUMBING DRAWINGS FOR LOCATION. PREP EXISTING FLOOR FOR NEW FINISH AS NOTED BY MANUFACTURER AND SEE ROOM FINISH SCHEDULE AND SPECIFICATION SECTION FOR ADDITIONAL NOTES.
- 6. DEMOLISH EXISTING FLOOR FINISH DOWN TO EXISTING CONCRETE SLAB, TO EXTENT INDICATED BY HATCH ON DEMOLITION PLAN. CLEAN, PREPARE & LEVEL EXISTING FLOOR SLAB WITH SELF-DRYING UNDERLAYMENT (COMPATIBLE WITH NEW FLOOR FINISHES) OVER ENTIRE SURFACE OF EXISTING FLOOR. PATCH AND REPAIR ALL DAMAGE CAUSED BY DEMOLITION AND MATCH EXISTING ADJACENT FINISH.

CEILINGS

7. REMOVE EXISTING CEILING CONSTRUCTION IN ITS ENTIRETY. PATCH, PLUG AND FILL ALL OPENINGS IN ADJACENT WALL, ETC. TO REPAIR ANY DAMAGE CAUSED BY REMOVAL. MATCH EXISTING ADJACENT FINISH.

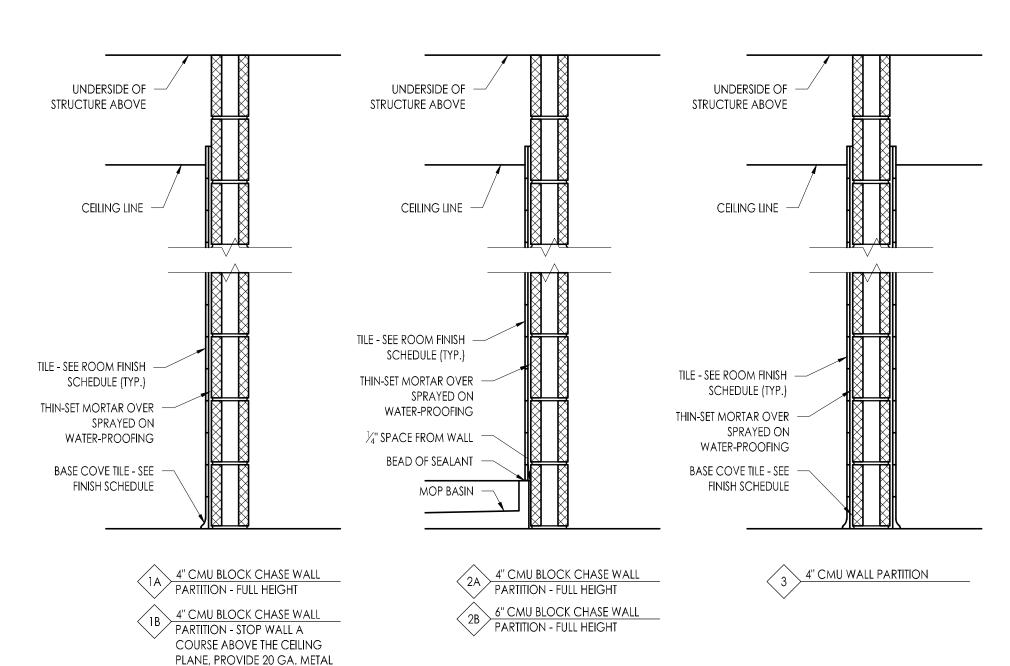
REFERENCE ALL PLUMBING / HVAC / ELECTRICAL WORK, INCLUDING DEMOLITION WORK ON RESPECTIVE DRAWINGS.

EQUIPMENT

- 8. REMOVE EXISTING COUNTERTOP(S) AND MILLWORK, TOILET EQUIPMENT, TOILET PARTITIONS, MOPSINK, MIRRORS, SHELVING, AND ANY ASSOCIATED APPURTENANCES IN THEIR ENTIRETY. SEE GENERAL DEMOLITION OWNER'S NOTE PERTAINING TO OWNER'S RIGHT TO REFUSAL.
- 9. REMOVE EXISTING TYPICAL TOILET ACCESSORIES (GRAB BAR, PAPER TOWEL DISPENSERS, ETC.) AND ANY ASSOCIATED APPURTENANCES, U.N.O. FROM WALLS TO REMAIN. SEE GENERAL DEMOLITION OWNER'S NOTE PERTAINING TO OWNER'S RIGHT TO REFUSAL.
- 10. REMOVE AND STORE EXISTING EQUIPMENT AND ANY ASSOCIATED APPURTENANCES WITH CARE. ITEMS ARE TO BE SALVAGED AND REINSTALLED AT THE DISCRETION OF THE OWNER. IF NOTED ITEMS ARE DAMAGED OR CANNOT BE REMOVED WITHOUT BEING DAMAGED DURING THE DEMOLITION PROCESS, NOTIFY THE OWNER AND ARCHITECT FOR DIFFERENT COURSE OF ACTION IMMEDIATELY.

MISCELLANEOUS

- 11. REMOVE ALL EXISTING HARDWARE AND ANY ASSOCIATED APPURTENANCES. PATCH AND REPAIR ANY EXISTING HOLES OR DAMAGE AFTER THE REMOVAL OF THE EXISTING HARDWARE. CLEAN, PRIME AND PAINT THE EXISTING HOLLOW METAL DOOR AND FRAME TO MATCH EXISTING COLOR. INSTALL NEW DOOR HARDWARE. SEE DOOR SCHEDULE AND SPECIFICATIONS FOR HARDWARE SET.
- 12. DETACH CEILING ANCHORED TOILET PARTITIONS FROM STRUCTURAL STEEL BEAM ABOVE CEILING. STEEL BEAM TO REMAIN.



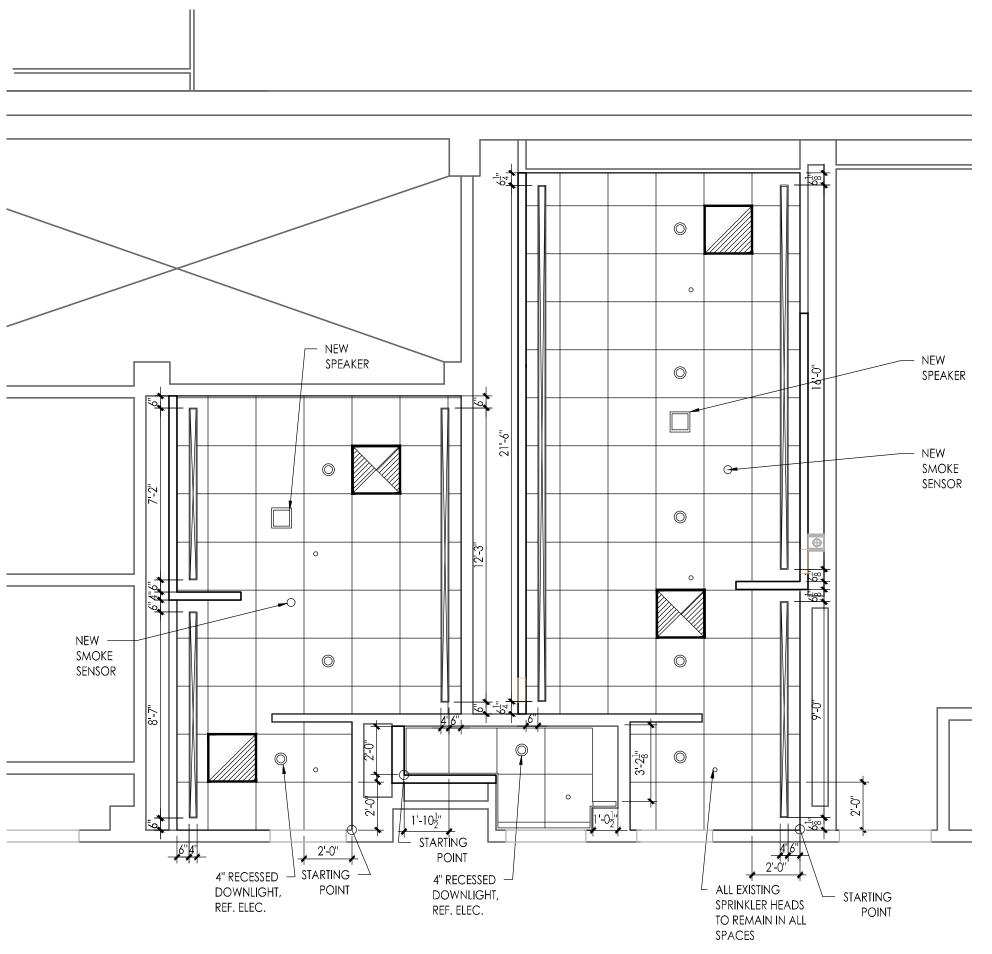
WALL PARTITION TYPES

STUD KICK BACKS AT 32 O.C.

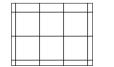
CONCRETE OR BLOCK WA	T	T		
YPE OF PENETRATE	FIRE RATING	UL CLASSIFIED SYSTEM		
CIRCULAR BLANK DPENINGS	1	CAJ 0055, CAJ 0070		
ST EITH (OU	2	CAJ 0055, CAJ 0070		
	3	CAJ 0055		
SINGLE METAL PIPES OR CONDUIT	1	CAJ 1226, WJ 1021		
CONDOIL	2	CAJ 1226, WJ 1021		
	3	CAJ 1226, WJ 1041, WJ 1042		
SINGLE NON-METALLIC	1	CAJ 2109, CAJ 2098, CAJ 2167		
PIPE OR CONDUIT (I.E. PVC, CPVC, ABS, FRP,	2	CAJ 2109, CAJ 2098, CAJ 2167		
ENT)	3	CAJ 2109, CAJ 2098		
SINGLE OR BUNDLED	1	WJ 3036, CAJ 3095, CAJ 3096		
CABLES	2	WJ 3036, CAJ 3095, CAJ 3096		
	3	CAJ 3095, CAJ 3096		
CABLE TRAY	1	WJ 4016, CAJ 4034, CAJ 4035		
	2	WJ 4016, CAJ 4034, CAJ 4035		
	3	CAJ 4034, CAJ 4035		
SINGLE INSULATED PIPES	1	CAJ 5090, CAJ 5091, CAJ 5061		
	2	CAJ 5090, CAJ 5091, CAJ 5061		
	3	CAJ 5090, CAJ 5061		
ELECTRICAL BUSWAY	1	CAJ 6006, CAJ 6017		
	2	CAJ 6006, CAJ 6017		
	3	CAJ 6006, CAJ 6017		
NON-INSULATED	1	CAJ 7046, CAJ 7051, WJ 7021, WJ 7022		
MECHANICAL DUCTWORK WITHOUT	2	CAJ 7046, CAJ 7051, WJ 7021, WJ 7022		
DAMPERS	3	CAJ 7046, CAJ 7051		
MIXED PENETRANTS	1	CAJ 8041, CAJ 8056, WJ 8007		
	2	CAJ 8041, CAJ 8056, WJ 8007		
	3	CAJ 8041, CAJ 8056, WJ 8007		

U.L. ASSEMBLIES AT CONCRETE OR BLOCK WALL PENETRATIONS

N.T.S.



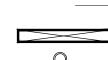
REFLECTED CEILING PLAN LEGEND



AACB - 2'x2' ACRYLIC ACOUSTICAL CEILING BOARD -SEE FINISH SCHEDULE FOR LOCATION



SUPPLY / RETURN / EXHAUST DIFFUSER (SEE HVAC DRAWINGS)

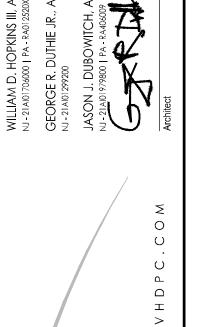


LIGHTS (SEE ELECTRICAL DRAWINGS)

SPRINKLER HEADS TO REMAIN

TYPICAL RCP NOTES:

- 1. SEE HVAC, PLUMBING AND ELECTRICAL DRAWINGS FOR TYPE, SIZE AND ADDITIONAL INFORMATION OF OTHER ELEMENTS LOCATED IN SPACE.
- 2. ALL DIFFUSERS AND LIGHTS TO BE CENTERED IN THE ACB CEILING UNLESS NOTED OTHERWISE.
- 3. ALL EXISTING SPRINKLER HEADS TO REMAIN AS IS.
- 4. GENERAL, HVAC, PLUMBING AND ELECTRICAL CONTRACTORS TO COORDINATE LOCATION
- OF SPRINKLER HEADS DIFFUSERS AND LIGHTS. 5. SEE ROOM FINISH SCHEDULE FOR CEILING HEIGHTS THAT ARE TO MATCH EXISTING.
- 6. A.F.F. = ABOVE FINISH FLOOR (MAIN DATUM ELEVATION)





Renovations to Second Floor Toilet Rooms at NJM West Trenton Building A - North

New Jersey Manufacturers
Insurance Company
NJM Project #
WT.C.2024.009

301 Sullivan Way, West Trenton, NJ

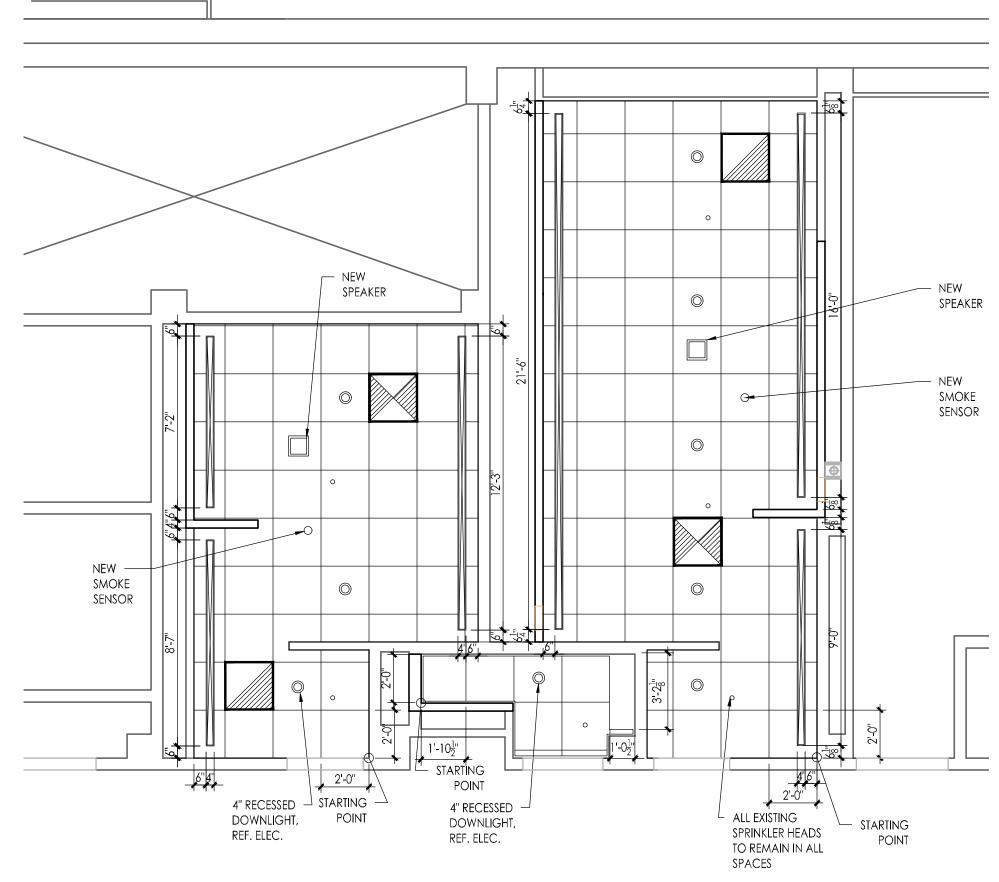
5578
Project Date 11.08.2024 GRD Drawn By

as shown

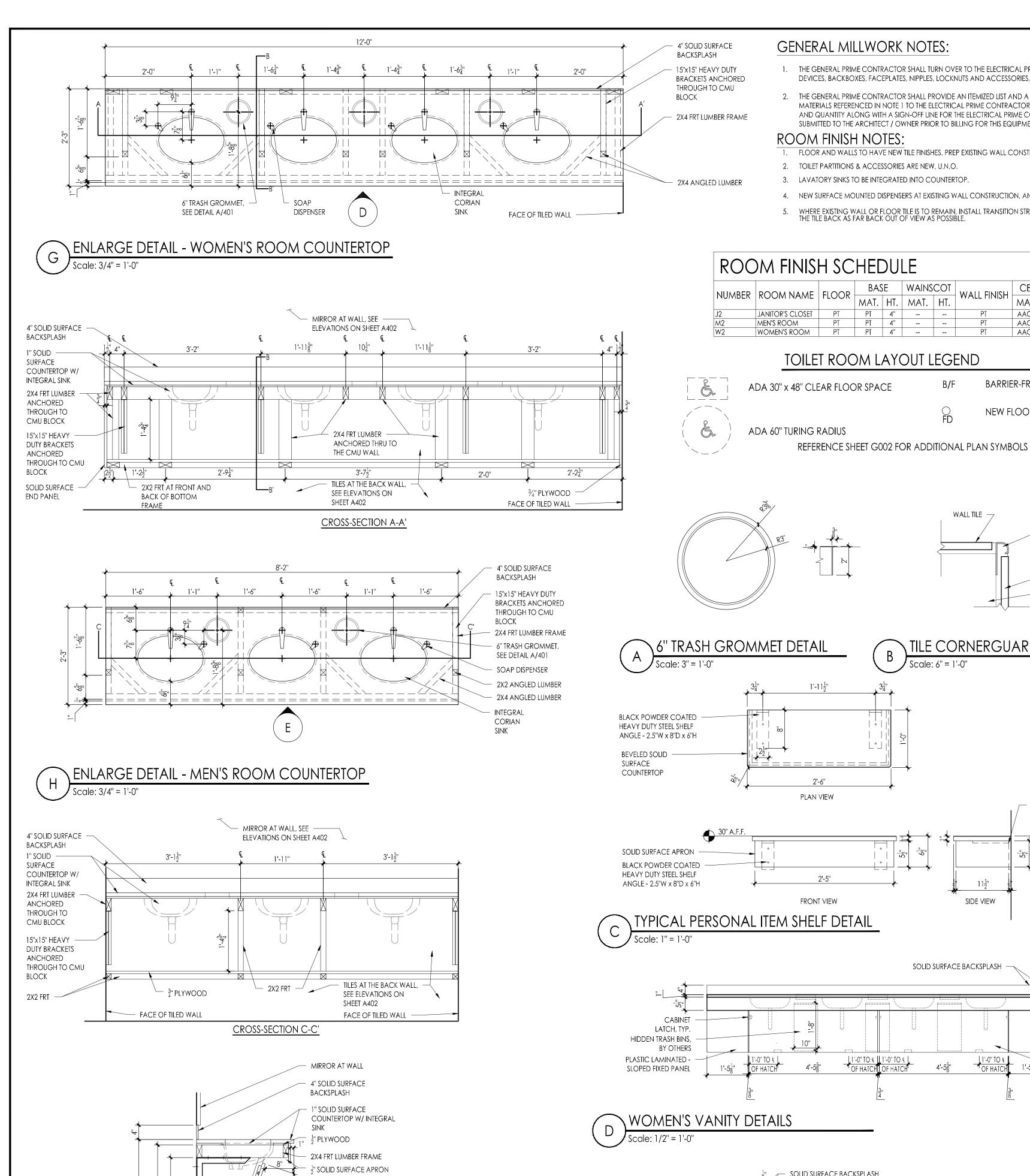
Second Floor RCP Plans, Notes, & Legend

Revisions

No. Date Description



SECOND FLOOR TOILET ROOMS REFLECTED CEILING PLAN



15"x15" HEAVY DUTY

THROUGH TO CMU

BLOCK

LAVATORY COUNTER LAYOUT & ADA BASE SECTION DETAIL B-B'

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

BRACKETS ANCHORED

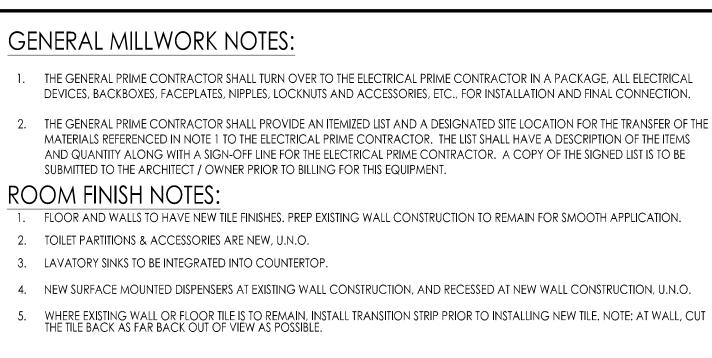
2X4 ANGLED LUMBER

BLACK VENEER PLASTIC

LAMINATE DOOR W/ HINGE

& DOUBLE ROLLER LATCH,

SEE DETAIL F/A401



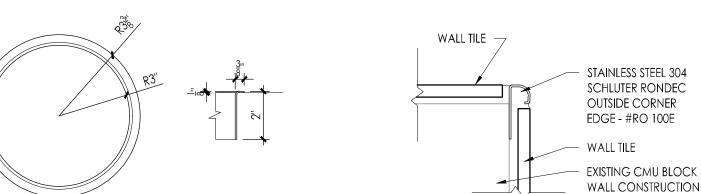
NOTES

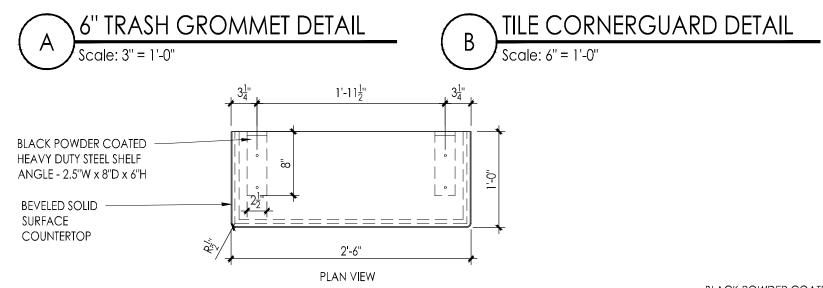
AACB 8'-2" SEE ROOM FINISH SCHEDULE NOTES: #1 & 5

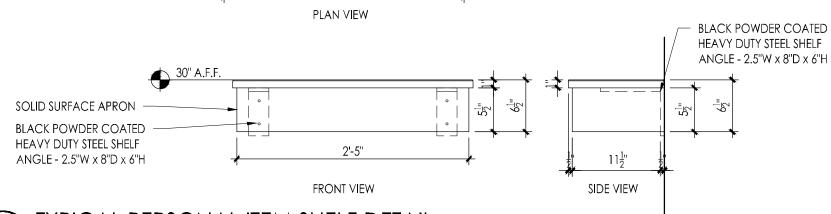
ROOM FINISH SCHEDULE BASE WAINSCOT CEILING NUMBER ROOM NAME | FLOOR | MAT. HT.

TOILET ROOM LAYOUT LEGEND

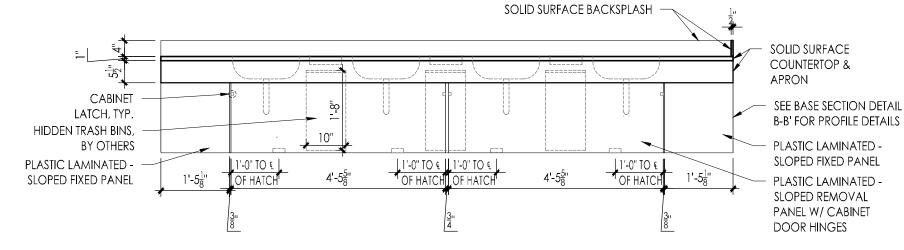
BARRIER-FREE ADA 30" x 48" CLEAR FLOOR SPACE NEW FLOOR DRAIN ADA 60" TURING RADIUS

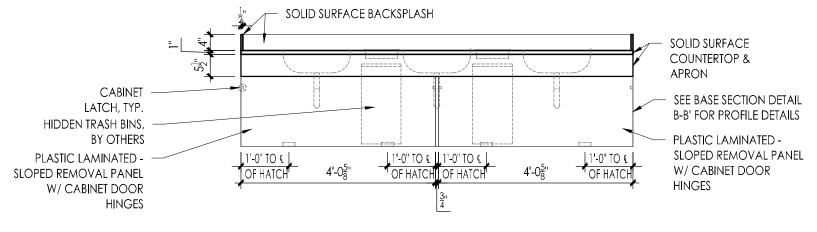




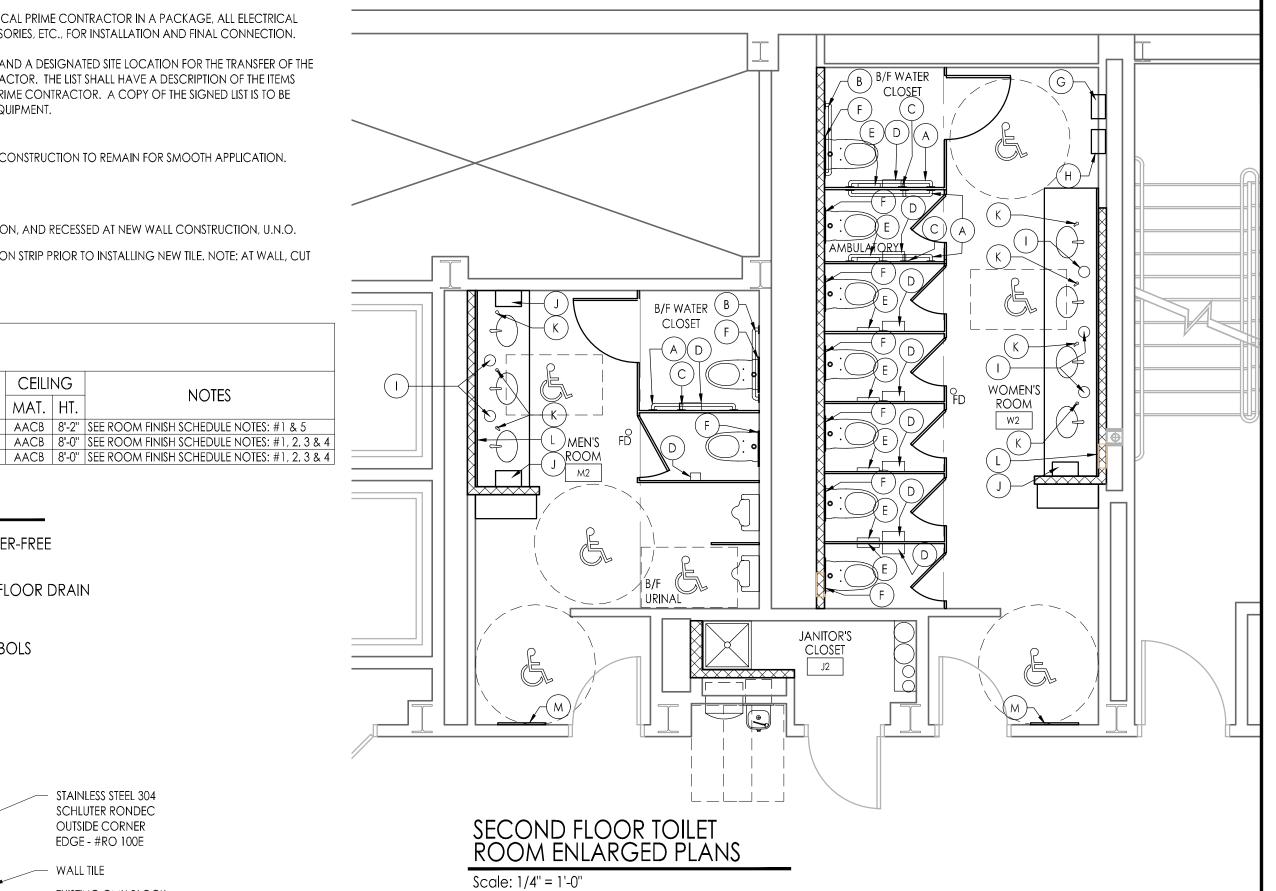


TYPICAL PERSONAL ITEM SHELF DETAIL









	TOILET ROOM ACCESSORIES								
	CAT NO	DESCRIPTION		SIZE		DEL LA DIVO			
NO.	CAT. NO.	DESCRIPTION	H. D. W.		W.	- REMARKS			
Α	#3801-42P	GRAB BAR		1 1/2" D.	42"	SAFETY GRIP FINISH; PEENED			
В	#3801-36P	GRAB BAR		1 1/2" D.	36"	SAFETY GRIP FINISH; PEENED			
С	#3801-18P	GRAB BAR	18"	1 1/2" D.		SAFETY GRIP FINISH, MOUNT VERTICAL PEENED			
D	#5674KB	TOILET PAPER DISPENSER	15-1/16"	8-1/8"	11-15/16"	BY OWNER			
Е	#0852	NAPKIN DISPOSAL	9-11/16"	4"	7-7/8"	SURFACE MOUNTED; SATIN STAINLESS			
F	#0477-SM	TOILET SEAT COVER DISPENSER	12-3/4"	2-3/8"	17-1/4"	SURFACE MOUNTED			
G		FEMININE HYGIENE DISPENSER	27-1/4"	6-1/2"	17-1/4"	REUSE			
Н	59471	PAPER TOWEL DISPENSER & WASTE RECEPTACLE	60"	7.88"	17-1/4"	BY OWNER			
	TM1B	TRASH GROMMET	2"		6" D.	SATIN STAINLESS STEEL			
J		TOWEL DISPENSER				BY OWNER			
K		SOAP DISPENSER				BY OWNER			
L		WALL MIRROR	V.I.F.	1"	VARIES	STAINLESS STEEL MITERED CORNER WELDED FRAME			
М	#0600	BODY WALL MIRROR	60"	1"	24"	STAINLESS STEEL MITERED CORNER WELDED FRAME			
			1						

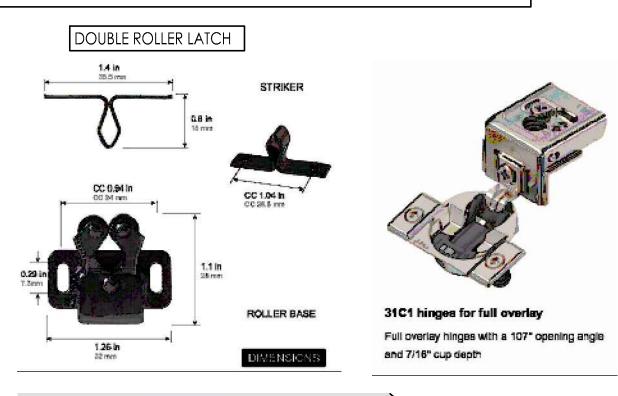
TOILET ROOM ACCESSORIES NOTES: - SALVAGE & REINSTALL EQUIPMENT NOTED "BY OWNER"

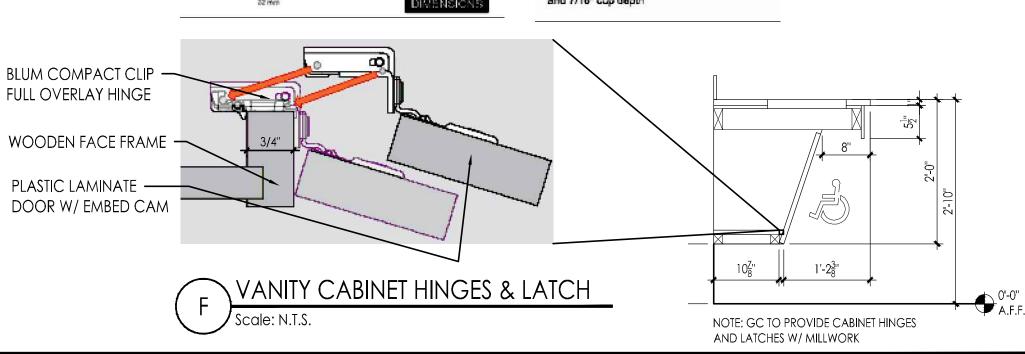
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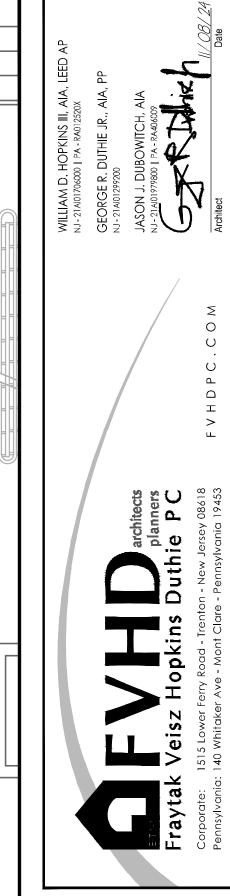
BLUM COMPACT CLIP

FULL OVERLAY HINGE

PLASTIC LAMINATE -







Renovations to Second Floor Toilet Rooms at NJM West Trenton Building A - North

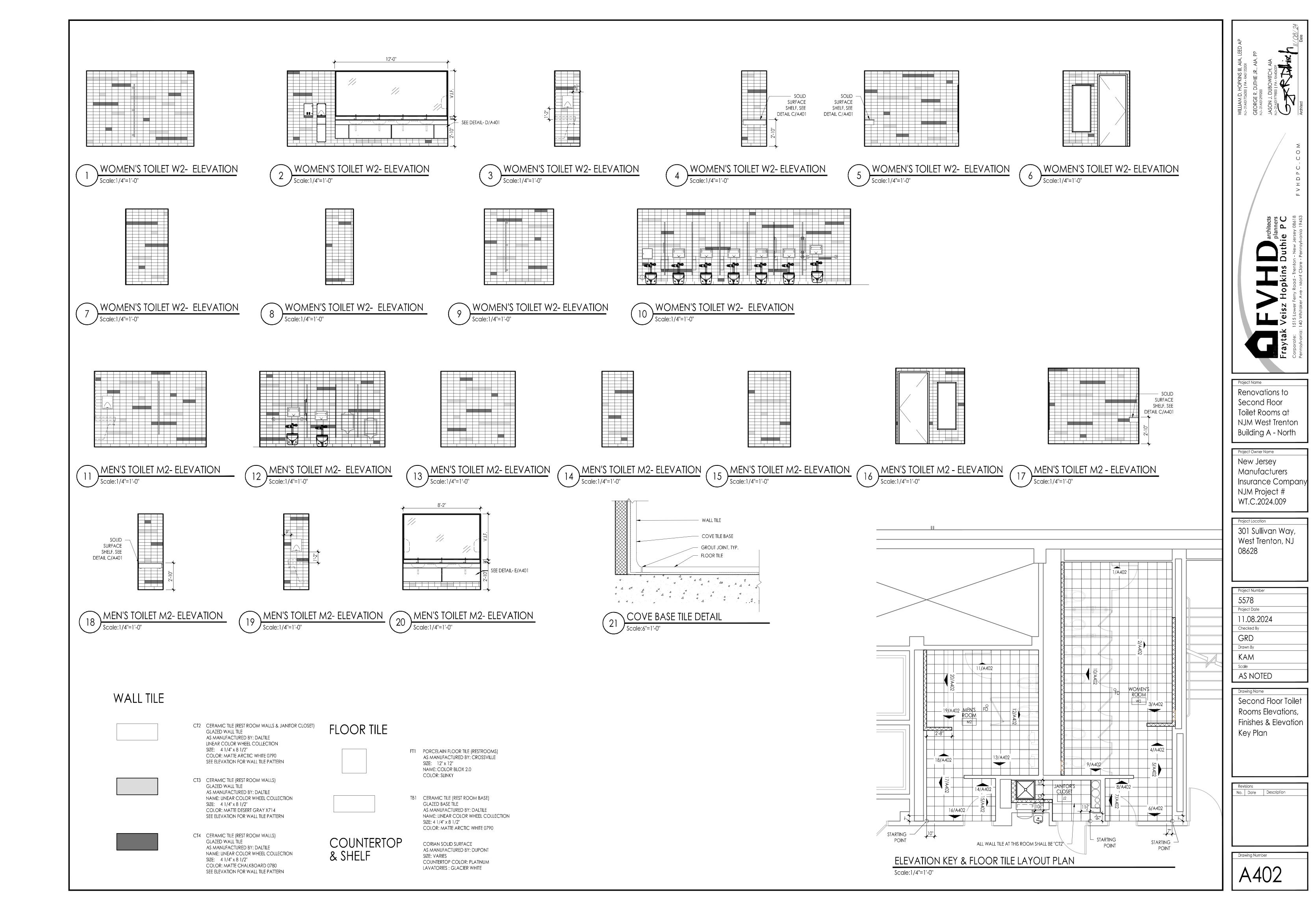
New Jersey Manufacturers Insurance Company NJM Project # WT.C.2024.009

301 Sullivan Way, West Trenton, NJ 08628

,	
	Project Number
	5578
	Project Date
	11.08.2024
	Checked By
	GRD
	Drawn By
	SB
	Scale
	as shown

Second Floor Toilet Rooms Layouts, Schedules, Notes & Details

No. Date Description



DOOR AND FRAME SCHEDULE															
		DOOR				FRAME									
DR NO	DOOR LOCATION			JOK		TYPE MATL		DETAIL		HARDWARE	RATING	SIGN TYPE	NOTES		
		SIZE	TYPE	MATL	GLAZING	1176	III	111 🗠	ITE MAIL	L MATL HEAD JAMB SADI	SADDLE				
J2	JANITOR'S CLOSET J2	3'-0" x 7'-0"	ETR	ETR		ETR	ETR							SEE DOOR SCHEDULE NOTES #: 1 & 3	
M2	MEN'S ROOM M2	2'-10" x 7'-0"	ETR	ETR		ETR	ETR				1.0			SEE DOOR SCHEDULE NOTES #: 1 & 2	
W2	WOMEN'S ROOM W2	2'-10" x 7'-0"	ETR	ETR		ETR	ETR				1.0		2	SEE DOOR SCHEDULE NOTES #: 1 & 2	

MANUFACTURER'S ABBREVIATIONS:

ALLEGION - LCN ROCKWOOD - RO

HARDWARE SET #1.0

(1) KICKPLATE K1050 10" HIGH CSK BEV US32D	RC
(1) DOOR PULL(ADA) - 110 - RKW US32DMS	RC
(1) PUSH PLATE - 71C 4"x16" US32D	RC
(1) DOOR CLOSER - 4040XP SERIES	LC
(1) WALL STOP - 406 US32D	RC
(3) SILENCER - 608-RKW/609 US32D/630	RC

GENERAL DOOR NOTES

- 1. ALL DOORS AND FRAMES ARE EXISTING TO REMAIN.
- SEE SADDLE DETAILS ON SHEET.
 DOORS AND FRAMES SHALL BE PATCHED FROM REMOVAL OF HARDWARE AND PREPPED TO RECEIVE NEW HARDWARE
- 4. AT BARRIER-FREE STALL DOORS -PROVIDE
 VANDAL-RESISTANT SIGN AS MANUFACTURED BY
 AMERICRAFT INC. SIGN SHALL BE INJECTION MOLDED
 PROCESS, 1/8" THICK ACRYLIC WITH NON-GLARE CLEAR
 FRONT SURFACE, GRAPHICS AND COLORS ON SECOND
 SURFACE (BACK SURFACE), WITH RADIUS CORNERS AND
 STEPPED EDGING. PROVIDE TACTILE PLASTIC SIGNS
 DISPLAYING INTERNATIONAL SYMBOL OF ACCESSIBILITY IN
 TACTILE FORM AND ACCOMPANIED BY GRADE II BRAILLE. SEE SIGNAGE DETAIL ON SHEET.

DOOR SCHEDULE NOTES

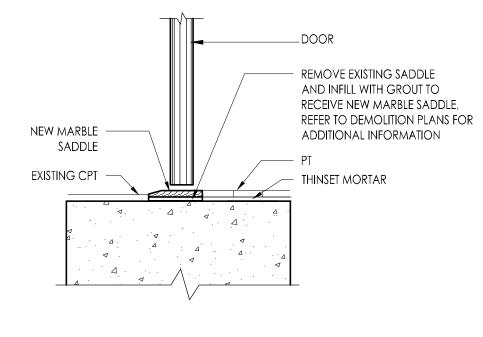
PAINT EXISTING DOOR AND FRAME.
 DOOR TO RECEIVE HARDWARE #1.0
 REMOVE EXISTING DOOR HARDWARE AND STORE. REPLACE EXISTING HARDWARE AFTER DOOR AND FRAME HAS BEEN PAINTED.



CORNERS: 3/8" RADIUS

SIGNAGE DETAIL

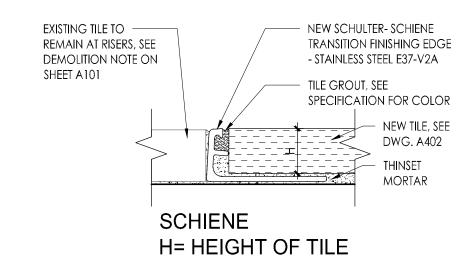
Scale: 1-1/2" = 1'-0"



SI

SADDLE DETAIL

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



TRANSITIONAL FINISH EDGE AT JANITOR'S CLOSET ON 2ND FLOOR

Scale: N.T.S.

GEORGE R. DUTHIE JR., AIA, PP

NJ-21AI01299200

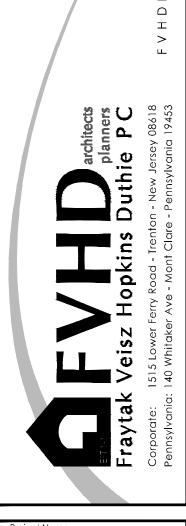
JASON J. DUBOWITCH, AIA

NJ-21AI01979800 I PA-RA406009

Architect

Architect

Date



Renovations to
Second Floor
Toilet Rooms at
NJM West Trenton
Building A - North

Project Owner Name

New Jersey

Manufacturers

Insurance Company

NJM Project #

WT.C.2024.009

301 Sullivan Way, West Trenton, NJ 08628

Project Number

5578

Project Date

11.08.2024

Checked By

GRD

Drawn By

SB

Scale

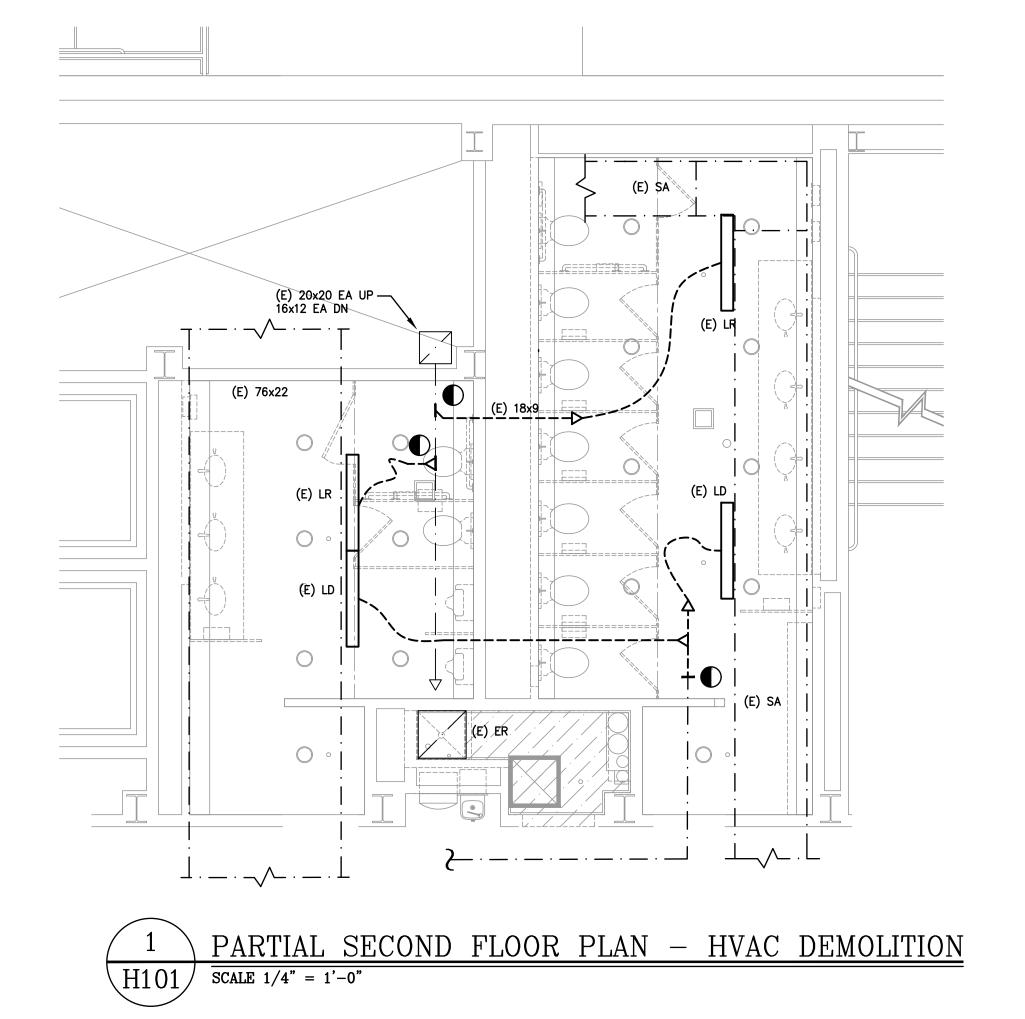
AS SHOWN

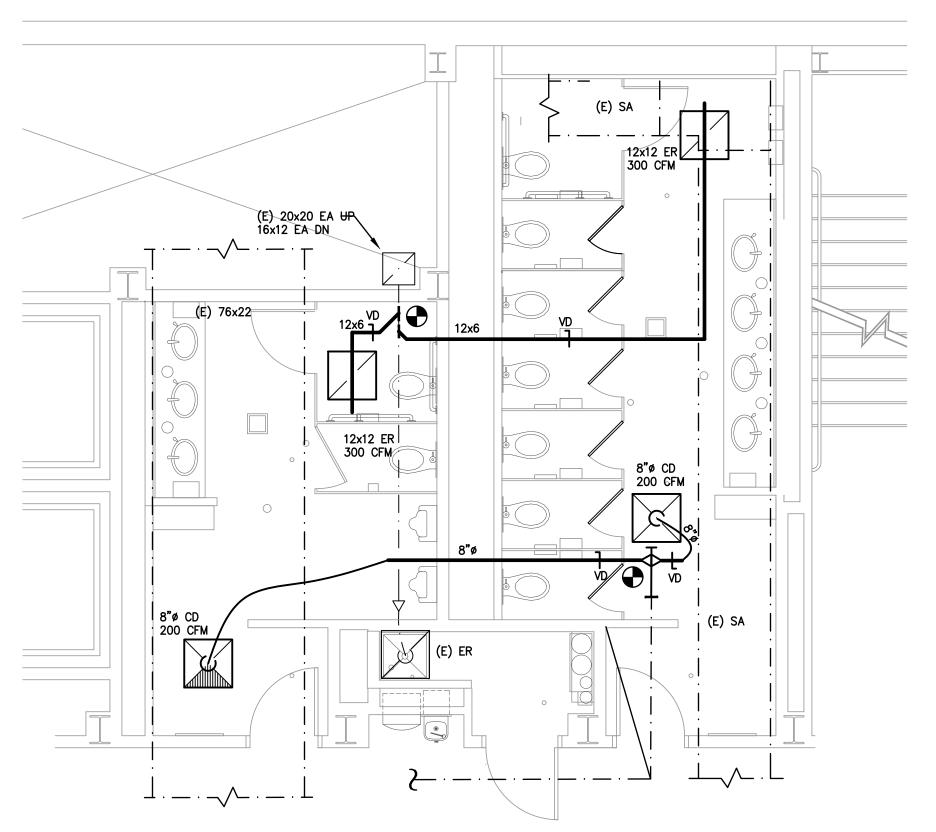
Door Hardware
Schedule, Details &
Notes

Revisions

No. Date Description

A601





PARTIAL SECOND FLOOR PLAN - HVAC

GENERAL DEMOLITION NOTES

- CONTRACTOR SHALL HAVE NEBB CERTIFIED TESTING, ADJUSTING AND BALANCING SPECIALIST PERFORM AN PRE-DEMOLITION FLOW REPORT AIR READING OF EXISTING EXHAUST AND MAKE UP AIR SYSTEMS IN THEIR ENTIRETY, INCLUDING PORTIONS OF SYSTEM NOT BEING MODIFIED BY THIS SCOPE. CONTRACTOR SHALL GENERATE A CLEAR REPORT CORRELATING AIR MEASUREMENTS WITH THE FLOOR PLAN LOCATIONS. EXISTING DRAWINGS ARE AVAILABLE UPON REQUEST.
- ALL EXISTING CEILING DIFFUSERS, REGISTERS AND GRILLES THAT ARE WITHIN THE SCOPE OF WORK SHALL BE REPLACED WITH NEW.
- 3. REMOVE PORTIONS OF EXISTING SUPPLY & EXHAUST DUCTWORK AS REQUIRED TO FACILITATE THE INSTALLATION OF NEW VOLUME DAMPERS. SEE NEW WORK PLANS FOR LOCATIONS.
- 4. PATCH ALL UNUSED DUCT OPENINGS AIR TIGHT.

GENERAL NEW WORK NOTES

- THESE DRAWINGS DO NOT DEPICT THE ENTIRETY OF THE (E) EXHAUST AND OUTSIDE AIR SYSTEM. REFERENCE DRAWINGS ARE AVAILABLE FROM OWNER. EACH BIDDER SHALL BE FULLY FAMILIAR WITH BALANCING SCOPE PRIOR TO SUBMITTING BID.
- 2. RE-BALANCE EXISTING EXHAUST AND OUTSIDE AIR SYSTEM IN THEIR ENTIRETIES TO MATCH INITIAL AIR MEASUREMENTS.
- 3. INTERNALLY CLEAN EXISTING EXHAUST, AND OUTSIDE AIR DUCTWORK AND AIR HANDLING

5. CONTRACTOR SHALL COORDINATE EXISTING DUCTWORK AND EQUIPMENT ABOVE HUNG CEILING PRIOR TO INSTALLATION OF NEW WORK.

4. RUN NEW DUCTWORK AHC TO CLEAR (E) DUCTWORK, PIPING, CONDUITS, STRUCTURE, ETC. PROVIDE SMOOTH OFFSETS AS REQUIRED.

Building A - North New Jersey

Renovations to

Toilet Rooms at

NJM West Trenton

Second Floor

Manufacturers Insurance Company NJM Project # WT.C.2024.009

301 Sullivan Way, West Trenton, NJ 08628

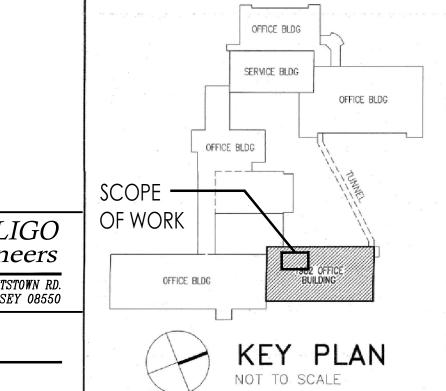
5578 11.08.2024

AS NOTED

SECOND FLOOR PART PLANS - HVAC

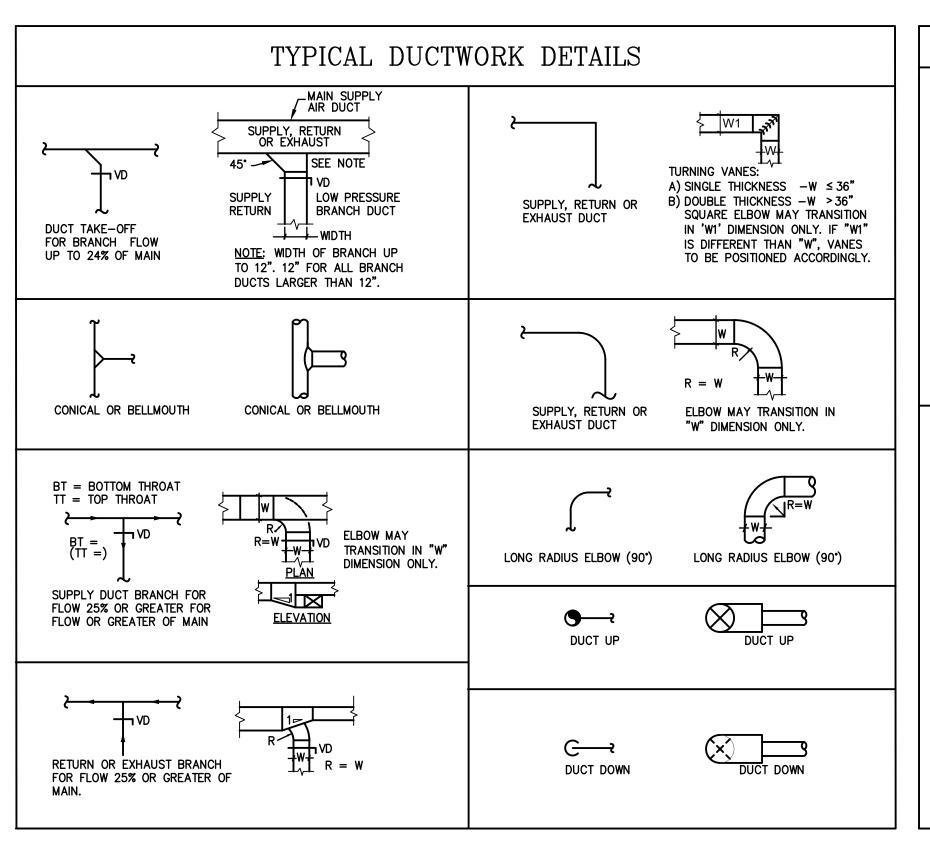
Revisions

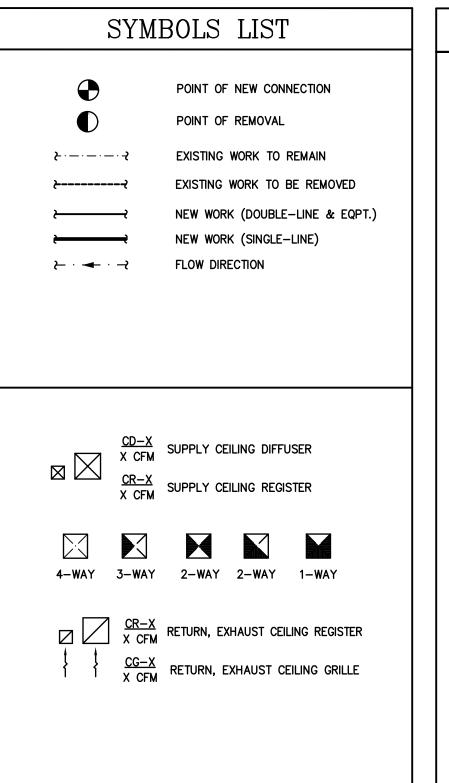
No. Date Description

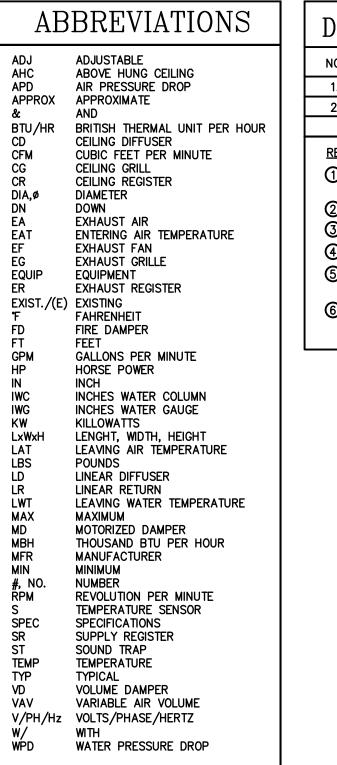


KELTER & GILLIGO consulting engineers P.O. BOX 777, 196 PRINCETON-HIGHTSTOWN RD. PRINCETON JUNCTION NEW JERSEY 08550

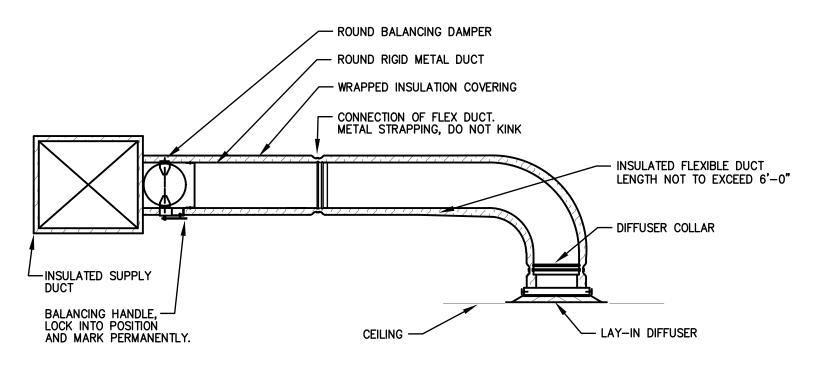
Frank Tindall, P.E. Professional Engineer NJ 38656







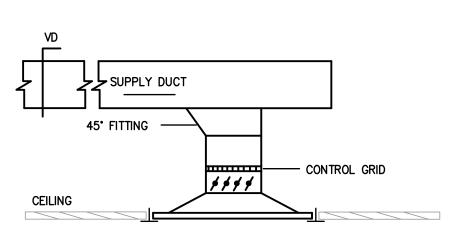
NO.	MARK	REMARKS						
1.	CD SHALL BE TITUS MODEL TMS-AA OR APPROVED "EQUAL".							
2. ER SHALL BE TITUS MODEL 350-FL OR APPROVED "EQUAL".								
DI	DUVERED FACE, HIGH CAPACITY, ALUMINUM DIFFUSER WITH ROUND NECK AND A SCHARGE PATTERN.	ADJUSTABLE						
① LC DI CO PF	DUVERED FACE, HIGH CAPACITY, ALUMINUM DIFFUSER WITH ROUND NECK AND A SCHARGE PATTERN. ROVIDE OPPOSED BLADE VOLUME DAMPER. ROVIDE EQUALIZING GRID.	ADJUSTABLE						
① LC DI O PF	DUVERED FACE, HIGH CAPACITY, ALUMINUM DIFFUSER WITH ROUND NECK AND A SCHARGE PATTERN. ROVIDE OPPOSED BLADE VOLUME DAMPER.	ADJUSTABLE						
1 LO DI	DUVERED FACE, HIGH CAPACITY, ALUMINUM DIFFUSER WITH ROUND NECK AND A SCHARGE PATTERN. ROVIDE OPPOSED BLADE VOLUME DAMPER. ROVIDE EQUALIZING GRID.							



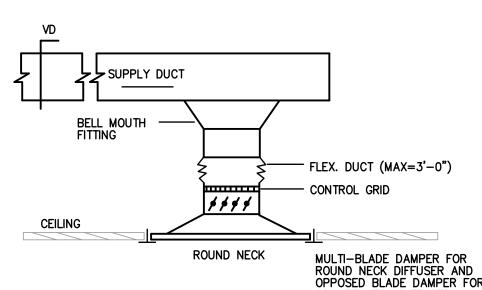
- PROVIDE AT FLEXIBLE DUCT CONNECTION METAL OR "PANDUIT" DRAWBAND ON THE INTERIOR FLEXIBLE DUCT HELIX. SECURE THE INSULATION OVER THE DRAWBAND WITH AN ADDITIONAL DRAWBAND.
- PROVIDE BEADING ON ROUND METAL DUCT 12" OR LARGER IN DIAMETER. PROVIDE MINIMUM 2" COLLARS FOR ATTACHMENT OF THE FLEX DUCT TO ROUND DUCT, DAMPERS AND DIFFUSERS. BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP.

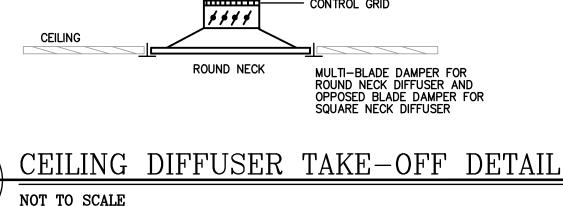






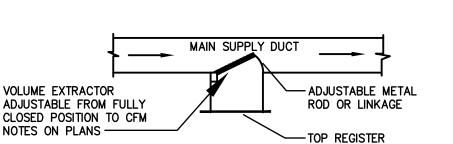
SQUARE NECK



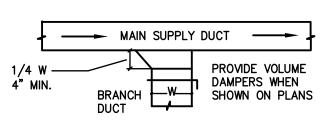


NOT TO SCALE

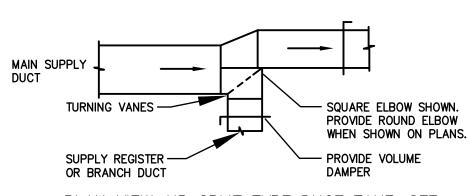
1. SIMILAR FOR RETURN & EXHAUST AIR OUTLET. FLEX DUCT IS NOT ACCEPTABLE FOR RETURN OR EXHAUST.



PLAN VIEW SUPPLY REGISTER TAKE-OFF



PLAN VIEW BRANCH DUCT TAKE-OFF

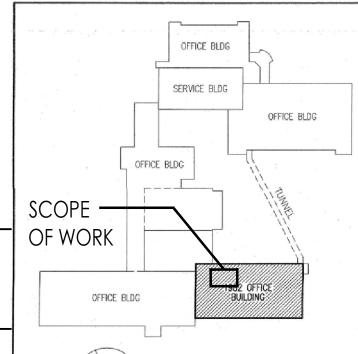


PLAN VIEW AIR SPLIT TYPE DUCT TAKE-OFF

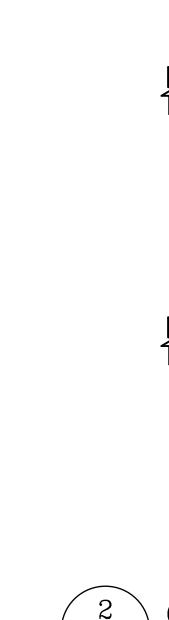
SUPPLY DUCT TAKE-OFF DETAIL H201 NOT TO SCALE

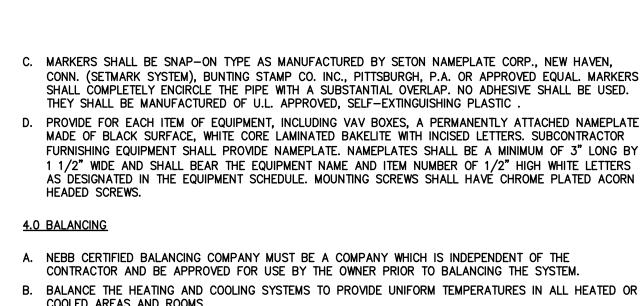
Frank Tindall, P.E.

Professional Engineer NJ 38656



NOT TO SCALE





A. NEBB CERTIFIED BALANCING COMPANY MUST BE A COMPANY WHICH IS INDEPENDENT OF THE

B. BALANCE THE HEATING AND COOLING SYSTEMS TO PROVIDE UNIFORM TEMPERATURES IN ALL HEATED OR

COOLED AREAS AND ROOMS. C. BALANCE AIR SYSTEMS TO QUANTITIES INDICATED AND FURNISH A REPORT INDICATING DIFFUSER, REGISTER SIZES, LOCATIONS AND CFM VALUES INCLUDING ROOF TOP UNIT CFM ACTUAL FAN

D. THE CONTRACTOR SHALL SUBMIT AN AIR BALANCE REPORT PRIOR TO FINAL ACCEPTANCE. E. MAKE PRELIMINARY OUTLET READINGS AND BALANCE THE OUTLETS TO DESIGN CFM AND RECORD ALL

5.0 SHEET METAL WORK

- A. FURNISH AND INSTALL ALL SHEET METAL DUCTWORK, PLENUMS, AND ITEMS OF METAL WORK AS NECESSARY TO COMPLETE THE VARIOUS AIR CONDITIONING, VENTILATING AND HEATING SYSTEMS OF THE BUILDING SO THEY ARE READY FOR SATISFACTORY OPERATION. WHILE THE INSTALLATION SHOULD ADHERE TO THE PLANS AND SPECIFICATIONS AS MUCH AS POSSIBLE, THE CONTRACTOR SHALL BE ENTITLED TO MODIFY THE RUNS AND SIZES OF THE DUCTWORK AND TO MAKE OFFSETS, WHERE NECESSARY TO ACCOMMODATE BUILDING CONDITIONS, ONLY AFTER RECEIPT OF WRITTEN APPROVAL FROM THE ENGINEER. ALL SUCH CHANGES OR OFFSETS SHALL BE INDICATED IN THE "AS-BUILT" DRAWINGS SUBMITTED AT THE
- B. DUCTWORK SHALL BE CONSTRUCTED ACCORDING TO THE "EQUIPMENT HANDBOOK" PUBLISHED BY ASHRAE AND "HVAC DUCT CONSTRUCTION STANDARDS" PUBLISHED BY SMACNA.
- C. SHEET METAL GAUGES, TRANSVERSE JOINTS, LONGITUDINAL SEAMS AND INTERMEDIATE REINFORCING MUST BE IN CONFORMANCE WITH SMACNA STANDARDS FOR 6" W.G. AND SEAL CLASS A.
- D. ALL SUPPLY DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED STEEL OF U.S. D. STANDARD SHEET METAL GAUGE UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL JOINTS SHALL BE SEALED AIRTIGHT WITH 3MEC-800. CONNECTIONS TO FAN SHALL BE THRU ACID RESISTANT RUBBER NOT LESS THAN 4" LONG, FUME TIGHT AND SECURELY FASTENED WITH COPPER METAL BANDS.
- E. ALL CHANGES IN DIRECTION, HORIZONTAL OR VERTICAL, SHALL BE SHAPED TO PERMIT THE EASIEST POSSIBLE AIR FLOW, USING CENTERLINE RADIUS OF 1-1/2 X WIDTH. FOR ALL CASES WHERE 90 DEGREE SQUARE ELBOWS ARE USED, APPROVED DOUBLE THICKNESS TURNING VANES SHALL BE USED. HVAC CONTRACTOR SHALL SUBMIT DETAILS FOR APPROVAL.
- F. ALL DUCTWORK SHALL BE BUILT WITH APPROVED JOINTS AND SEAMS SMOOTH ON THE INSIDE WITH LAPS MADE IN THE DIRECTION OF THE AIR FLOW AND NO FLANGES PROJECTING INTO THE AIR STREAM. OUTSIDE SEAMS AND JOINTS SHALL BE AS NEAR TO AIR TIGHT AS POSSIBLE WITH A NEAT FINISH. THE CONTRACTOR SHALL CAULK ALL JOINTS WHICH ARE NOT MECHANICALLY TIGHT.
- G. LONGITUDINAL JOINTS SHALL BE PITTSBURGH LOCK AT CORNERS OR ACME LOCK ON FLAT SURFACES DOUBLE SEAMS HAMMERED TIGHT AND SHALL BE LOCATED ABOVE THE HORIZONTAL AXIS OF THE DUCT. A SNAP LOCK SEAM SHALL NOT BE PERMITTED AS A SUBSTITUTE FOR THE PITTSBURGH LOCK AT CORNERS OF DUCTS.
- H. TRAVERSE JOINTS SHALL BE MADE AIRTIGHT WITH ALL LAPS IN THE DIRECTIONS OF AIR FLOW.
- VOLUME DAMPERS AS SHOWN ON DRAWINGS AND AS REQUIRED FOR PROPER OPERATION SHALL BE INSTALLED IN THE VARIOUS BRANCHES FOR USE IN BALANCING THE SYSTEM. VOLUME DAMPERS SHALL BE OF MULTI-OPPOSED BLADE CONSTRUCTION WITH LOCKING QUADRANTS FOR ALL DUCTS OVER 12" IN DEPTH. MOUNTED OUTSIDE OF THE DUCT IN AN ACCESSIBLE PLACE. VOLUME DAMPERS SHALL BE RUSKIN MODEL MD35 OR APPROVED EQUAL WITH END BEARINGS, STAND OFF FOR INSULATED DUCTWORK AND CONTINUOUS AXLE & LOCKING QUADRANT.
- J. ALL DUCTWORK SHALL BE INSTALLED AS HIGH AS POSSIBLE TO MAXIMIZE HEADROOM.
- K. ALL DUCTWORK SHALL BE HUNG FROM THE BUILDING STRUCTURE.
- L. ALL SUPPLY AND RETURN DUCTWORK SHALL BE INSULATED WITH FIBERGLASS INSULATION WRAP AND VAPOR BARRIER. INSULATION WRAP SHALL MEET THE REQUIREMENTS OF NFPA 90A, WITH FLAME SPREAD, SMOKE DEVELOPMENT, AND FUEL CONTRIBUTED NOT EXCEEDING 25, 50, AND 50 RESPECTIVELY AS TESTED BY PROCEDURE ASTM-84, NFPA 255, AND UL 723 UNLESS OTHERWISE NOTED. INSULATION WRAP SHALL PROVIDE MINIMUM R VALUE OF 6.0 WHEN INSTALLED.

6.0 SUPPORTS

- A. ALL SUPPORTS AND HANGERS FOR DUCTWORK UNDER THIS CONTRACT SHALL BE FURNISHED AND
- B. ALL HANGERS, SUPPORTS, & HARDWARE SHALL BE GALVANIZED UNLESS OTHERWISE INDICATED.
- C. WHERE EXCESSIVE LOADING REQUIRES PROPER DISTRIBUTION OF THE WEIGHT, PROPER SUPPORTS MUST BE PROVIDED, SUBJECT TO THE ARCHITECT'S APPROVAL. ALL SUPPORTS SHALL BE OF STRUCTURAL

RESUBMIT RECORD COPY SHALL RENDER ALL APPROVAL NULL AND VOID. 3.0 IDENTIFICATION

HVAC SPECIFICATIONS:

a. NJ UNIFORM CONSTRUCTION CODE

c. INTERNATIONAL MECHANICAL CODE

e. ALL APPLICABLE ASHRAE STANDARDS

f. ALL APPLICABLE SMACNA STANDARDS

h. UL (ALL EQUIPMENT MUST BE LABELED)

B. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH RECOGNIZED INDUSTRY STANDARDS, GOVERNING

C. PERMITS: OWNER SHALL ACQUIRE ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE EXECUTION OF

D. WARRANTY: THE EQUIPMENT SHALL HAVE A FULL COVERAGE WARRANTY FOR A PERIOD OF TWO (2) YEAR

FROM DATE OF FINAL ACCEPTANCE BY OWNER. IF DURING THIS PERIOD, ANY PART SHOULD FAIL TO FUNCTION PROPERLY DUE TO DEFECTS IN WORKMANSHIP OR MATERIAL, IT SHALL BE REPLACED OR

REPAIRED AT THE DISCRETION OF THE MANUFACTURER. MANUFACTURER SHALL HAVE FIFTEEN YEARS

E. BEFORE SUBMITTING BIDS, CONTRACTOR SHALL VISIT THE SITE OF THE WORK AND BECOME THOROUGHLY

F. SUBMIT COMPOSITE COORDINATION SHOP DRAWINGS THAT SHOW ALL EXISTING AND NEW DUCTWORK, HVAC

G. CONTRACTOR SHALL SUBMIT AS-BUILT HVAC DRAWINGS TO ARCHITECT AFTER SATISFACTORY COMPLETION

H. CONTRACTOR SHALL PROVIDE OWNER WITH FIVE (5) COPIES OF OPERATION AND MAINTENANCE MANUALS

A. SHOP DRAWINGS SHALL BE REQUIRED FOR: ALL EQUIPMENT, MATERIALS, MEANS & METHODS INTENDED

B. PRIOR TO DELIVERY TO THE JOB SITE, BUT SUFFICIENTLY IN ADVANCE OF REQUIREMENTS NECESSARY TO

ALLOW ARCHITECT AMPLE TIME FOR REVIEW, SUBMIT SHOP DRAWINGS OF ALL EQUIPMENT, FIXTURES,

MATERIAL, PIPING, DUCTWORK, SLEEVES, WIRING DIAGRAMS, ETC. AND FURTHER OBTAIN WRITTEN

COMMENTS OF "APPROVED" OR "APPROVED AS NOTED" FOR THE SAME FROM ARCHITECT BEFORE

CATALOGUES, INCLUDING DESCRIPTIVE LITERATURE AND COMPLETE CERTIFIED CHARACTERISTICS OF

D. CERTIFIED PERFORMANCE CURVES FOR ALL MECHANICAL EQUIPMENT SHALL BE SUBMITTED FOR REVIEW.

E. SAMPLES, DRAWINGS, SPECIFICATIONS, CATALOGUES, ETC., SUBMITTED FOR REVIEW SHALL BE PROPERLY

F. FAILURE TO SUBMIT SHOP DRAWINGS IN AMPLE TIME FOR CHECKING SHALL NOT ENTITLE AN EXTENSION

& WRITTEN DECLARATION THAT THE SHOP DRAWINGS SUBMITTED MEET CONTRACT REQUIREMENTS.

REVIEWED, SAID REVIEW DOES NOT IN ANY WAY RELIEVE THE RESPONSIBILITY, OR NECESSITY, OF

CONSTRUCTION, FABRICATION, AND/OR MANUFACTURE SUBJECT TO THE PROVISION THAT THE WORK

1. WHERE THE COMMENT "APPROVED AS NOTED" INCLUDES DIRECTION TO THE CONTRACTOR TO

RESUBMIT CORRECTED SHOP DRAWINGS FOR RECORD; FAILURE TO COMPLY WITH THE INSTRUCTION TO

SHALL BE CARRIED OUT IN COMPLIANCE WITH ALL ANNOTATIONS AND/OR CORRECTIONS INDICATED ON THE SHOP DRAWINGS AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

FURNISHING MATERIAL OR PERFORMING WORK AS REQUIRED BY THE CONTRACT DRAWINGS AND

I. "APPROVED AS NOTED" MEANS, UNLESS OTHERWISE NOTED ON THE DRAWINGS, TO APPROVE FOR

H. THE COMMENT "APPROVED" OR "APPROVED AS NOTED" RENDERED ON SHOP DRAWINGS SHALL NOT BE

CONSIDERED AS A GUARANTEE OF MEASUREMENTS OR BUILDING CONDITIONS. WHERE DRAWINGS ARE

G. PRIOR TO SUBMISSION OF SHOP DRAWINGS CONTRACTOR SHALL THOROUGHLY CHECK EACH SHOP

EQUIPMENT, FIXTURES, ETC. SHOWING DIMENSIONS, CAPACITY, CODE REQUIREMENTS, MOTOR AND DRIVE

LABELED INDICATED PROJECT NAME, AND SPECIFIC SERVICE FOR WHICH MATERIAL OR EQUIPMENT IS TO

OF CONTRACT TIME, AND NO CLAIM FOR EXTENSION BY REASON OF SUCH DEFAULT SHALL BE ALLOWED.

DRAWING, REJECT THOSE NOT CONFORMING TO THE SPECIFICATIONS, AND INDICATE BY SIGNED, STAMPED,

C. SHOP DRAWINGS SHALL CONSIST OF MANUFACTURER'S CERTIFIED SCALE DRAWINGS, CUTS, OR

PIPING, PLUMBING PIPING, CONDUITS, LIGHTING FIXTURES, BUILDING STRUCTURE, CEILING MOUNTED

FAMILIAR WITH THE OBSERVABLE EXISTING CONDITIONS AFFECTING HIS WORK. NO ADDITIONAL

COMPENSATION WILL BE GRANTED ON ACCOUNT OF EXTRA WORK MADE NECESSARY BY THE

EQUIPMENT, ETC. EXACT ELEVATION OF ALL COMPONENTS SHALL BE INDICATED

CODES, APPROVED SHOP DRAWINGS AND MANUFACTURER'S INSTRUCTIONS.

CONTRACTOR'S FAILURE TO INVESTIGATE EXISTING CONDITIONS.

I. LABEL ALL DUCTS, PROVIDE NAMEPLATES ON ALL EQUIPMENT.

TESTING, AS INDICATED IN THE CONTRACT DOCUMENTS.

g. NATIONAL ELECTRICAL CODE

b. INTERNATIONAL BUILDING CODE, NJ EDITION

A. GOVERNING CODES AND STANDARDS

d. NFPA STANDARDS 90A

EXPERIENCE IN THE U.S. MARKET.

PRIOR TO ACCEPTANCE OF FINAL PAYMENT.

J. OPERATION & MAINTENANCE MANUALS

FOR USE UNDER THIS CONTRACT.

INSTALLING ANY OF THESE ITEMS.

2.0 SUBMITTALS

THIS CONTRACT.

1.0 GENERAL

A. PROVIDE IDENTIFICATION FOR DUCTWORK AND EQUIPMENT.

B. IDENTIFICATION SHALL BE IN ACCORDANCE WITH "SCHEME FOR IDENTIFICATION OF PIPING SYSTEM ANSI A13.1" AND OSHA SAFETY COLOR REGULATION.

INSTALLED BY THE CONTRACTOR.

KELTER & GILLIGO consulting engineers P.O. BOX 777, 196 PRINCETON-HIGHTSTOWN RD. PRINCETON JUNCTION NEW JERSEY 08550

Renovations to

Toilet Rooms at

NJM West Trenton

Building A - North

New Jersey

Manufacturers

NJM Project #

WT.C.2024.009

301 Sullivan Way,

West Trenton, NJ

11.08.2024

AS NOTED

ABBREVIATION

SCHEDULES &

DETAILS, SYMBOLS

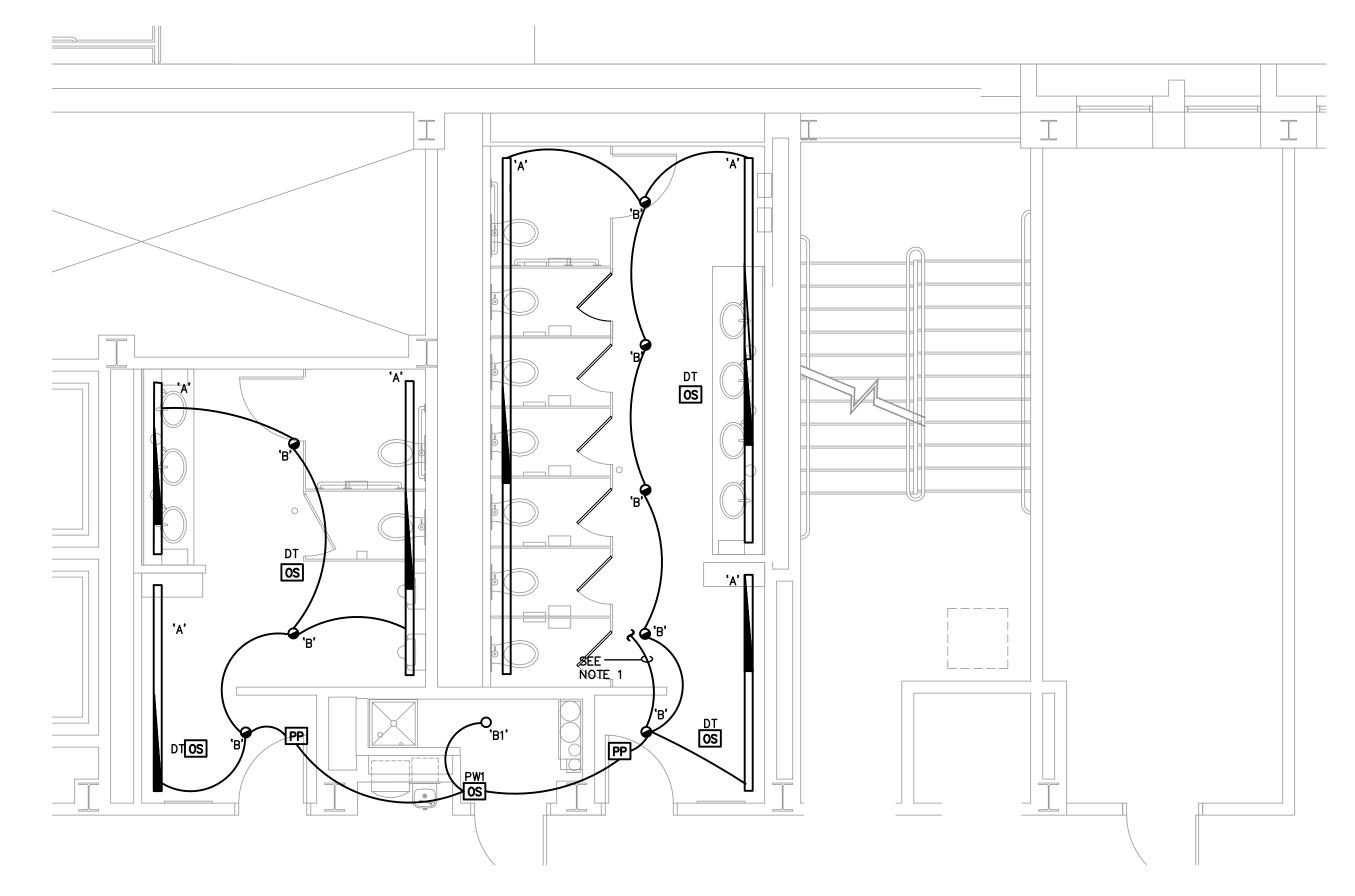
SPECIFICATIONS

Insurance Company

Second Floor

SCALE 1/4" = 1'-0"

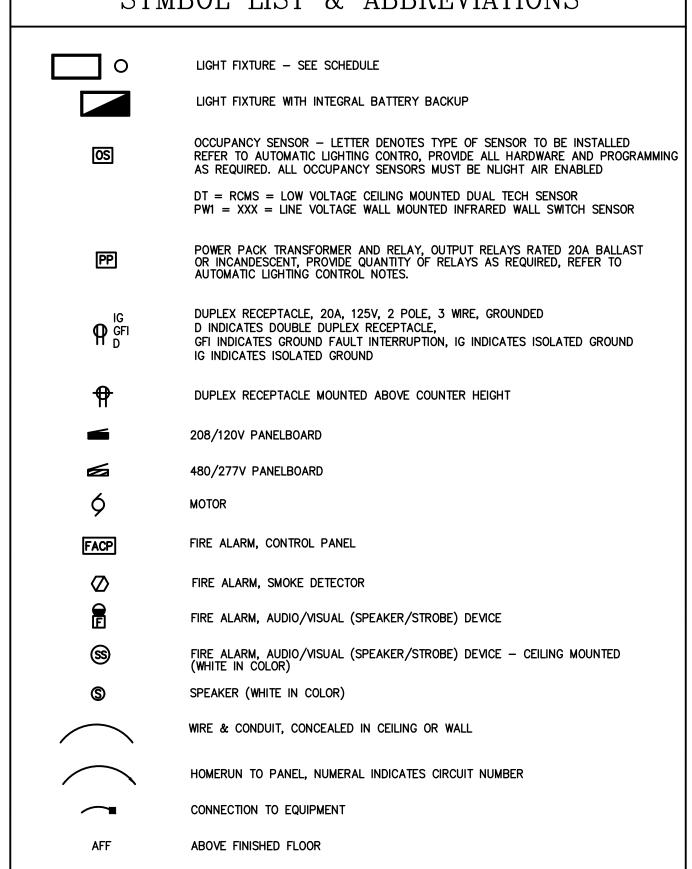
1. EXISTING SPEAKER TO BE REMOVED. PROVIDE TEMPORARY SUPPORT OF EXISTING WIRES ABOVE CEILING, A NEW SPEAKER SAME AS EXISTING BUT WHITE IN COLOR, WILL BE PLACED BACK IN THE NEW CEILING.



DEMOLITION NOTES:

- 1. THESE DEMOLITION PLANS ARE INTENDED TO BE USED AS A GUIDE TO THE CONTRACTOR. ALL DEMOLITION WORK REQUIRED, OR NECESSARY FOR THE INSTALLATION OF NEW WORK OR THE REMOVAL OF EXISTING EQUIPMENT, IS HEREBY INCLUDED, WHETHER SHOWN ON THESE PLANS OR NOT. REFER TO DRAWINGS OF ALL TRADES FOR ADDITIONAL WORK, AND COORDINATE IN
- 2. THE CONTRACTOR SHALL VERIFY ACTUAL SITE CONDITIONS PRIOR TO SUBMITTING HIS BID. THE CONTRACTOR SHALL INCLUDE ALL DEMOLITION WORK NECESSARY FOR THE EFFECTIVE INSTALLATION AND PERFORMANCE OF NEW SYSTEMS. THE CONTRACTOR SHALL ALSO INCLUDE TEMPORARY REMOVAL AND REINSTALLATION OF EXISTING WORK WHEREVER NECESSARY. THE OWNER SHALL NOT ACCEPT EXTRA COSTS ASSOCIATED WITH THE DEMOLITION AND/OR TEMPORARY REMOVAL/REINSTALLATION WORK FROM THE CONTRACTOR.
- 3. THIS CONTRACTOR SHALL REMOVE ALL LIGHTING FIXTURES AND ELECTRICAL DEVICES AS INDICATED ON THE DEMOLITION PLANS, OR THAT ARE NO LONGER NEEDED BY THE OWNER. ALL EXISTING WIRING AND CONDUIT WHERE NO LONGER REQUIRED SHALL BE REMOVED BACK TO EXISTING PANEL. ALL EXISTING DISCONNECTED CIRCUITS NOT BEING REUSED SHALL BE TURNED OFF AND LABELED "SPARE". WHERE CONDUITS ARE INACCESSIBLE, REMOVE WIRE AND ABANDON CONDUITS.
- 4. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY POWER IS BEING PROVIDED TO ALL EXISTING EQUIPMENT REQUIRED TO REMAIN IN SERVICE. RECONNECT ALL DISTURBED FACILITIES WHICH ARE EXISTING TO REMAIN AND PLACE THEM IN OPERATIONAL CONDITION.
- 5. REMOVE ALL WIRING DEVICES FROM WALLS TO BE DEMOLISHED. REMOVE EXISTING LIGHT SWITCHES WHERE NO LONGER REQUIRED. REUSE ALL EXISTING CONCEALED CONDUIT AND RECESSED DEVICE BOXES WHERE POSSIBLE. ABANDON BOXES IF THEY ARE IN EXISTING WALLS TO REMAIN PATCH WALLS OVER ABANDONED BOXES TO MATCH ADJACENT SURFACES.
- 6. REMOVE ABANDONED OUTLET BOXES, SURFACE METAL RACEWAY AND CONDUIT THAT WOULD BE EXPOSED, AND REPAIR DISTURBED SURFACES TO MATCH ADJACENT AREAS.
- 7. MAJOR PIECES OF EQUIPMENT ARE TO BE TURNED OVER TO THE OWNER FOR HIS USE, OR AT THE OWNER'S DISCRETION, REMOVED FROM THE SITE AND DISPOSED OF, IF NO LONGER REQUIRED.
- 8. PATCH ALL WALLS TIGHT AT REMOVALS. MAINTAIN FIRE RATINGS AS REQUIRED.
- 9. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXTENT OF WALL FINISHES AND CEILINGS TO BE REPLACED. ALL EXISTING DEVICES TO REMAIN SHALL BE TEMPORARILY DISCONNECTED AND REINSTALLED. WHERE TEMPORARY REMOVAL IS NOT POSSIBLE THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT OF EXISTING EQUIPMENT IN PLACE.
- 10. THE EXISTING FIRE ALARM SYSTEM SHALL BE MAINTAINED THROUGHOUT DEMOLITION AND CONSTRUCTION. PROVIDE TEMPORARY SUPPORT OF EXISTING DEVICES AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE FIRE MARSHAL UPON ANY MODIFICATIONS TO OR ANY NECESSARY INTERRUPTION IN SYSTEM OPERATION. NOTE THAT COVERING DEVICES DURING CONSTRUCTION IS AN INTERRUPTION TO COVERAGE.

SYMBOL LIST & ABBREVIATIONS



LIGHTING FIXTURE SCHEDULE								
ID	LAMPS	MANUFACTURER	CATALOG NUMBER	MOUNTING	DESCRIPTION			
A	6W/FT LED 600 LUMEN/FT SPX 35	MARK (OR APPROVED EQUAL)	SL4L-LOP-XFT-FLP-TG-80CRI- 35K-600LMF-MIN1-277-E10WLCP -NLTAIR2	RECESSED	4" WIDE FLUSH FIXTURE X LENGTH AS SHOWN ON DRAWINGS, FLUSH LENS, CONSTANT CURRENT DIMMING TO 1%, 277V INPUT, PROVIDE 90 MINUTE BATTERY BACKUP FOR EACH 4' SHADED SECTION AS SHOWN. NLIGHT AIR WIRELESS ENABLED			
В	19.5W LED 2000 LUMENS SPX 35	LITHONIA (OR APPROVED EQUAL)	EVO4 35/20 WR MWD MVOLT EZ1 -NLTAIR2-EL	RECESSED	4" DIAMETER DOWNLIGHT, DIMMING TO 1%, UNIVERSAL 120-277V INPUT, INTEGRAL 90 MINUTE BATTERY BACKUP, NLIGHT AIR WIRELESS ENABLED			
B1	19.5W LED 2000 LUMENS SPX 35	LITHONIA (OR APPROVED EQUAL)	EV04 35/20 WR MWD MVOLT EZ1 -NLTAIR2	RECESSED	4" DIAMETER DOWNLIGHT, DIMMING TO 1%, UNIVERSAL 120-277V INPUT, NLIGHT AIR WIRELESS ENABLED			

EXISTING

EXHAUST FAN

EXISTING TO BE REMOVED

WIRING TYPE AND SIZE

LIGHTING FIXTURE NOTES:

- 1. ALL FIXTURES SHALL COMPLY WITH ASHRAE/IESNA 90.1 2016 LIGHTING EFFICACY STANDARDS FOR NEW COMMERCIAL BUILDINGS.
- 2. CONNECT ALL EXIT SIGNS AHEAD OF ALL SWITCHING AND CONTROLS.
- 3. PROVIDE ALL EMERGENCY LIGHTING CONTROL RELAYS AND LIGHT FIXTURES SPECIFIED WITH EMERGENCY BATTERY BACKUP WITH AN UNSWITCHED PHASE LEG TO MONITOR FOR NORMAL POWER FAILURE.
- 4. VERIFY EXACT LOCATION OF FIXTURES IN FIELD WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.

AUTOMATIC LIGHTING CONTROL NOTES:

- 1. FURNISH AND INSTALL ALL WIRING AND DEVICES AS RECOMMENDED BY THE MANUFACTURER'S WRITTEN INSTRUCTION FOR THE INSTALLATION OF OCCUPANCY SENSORS.
- 2. PROVIDE ALL RELAYS, POWER PACKS AND LOW VOLTAGE WIRING AS REQUIRED.

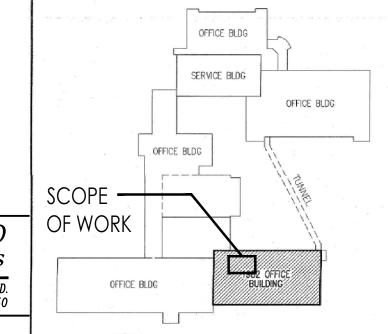
EXISTING TO BE RELOCATED, CAREFULLY REMOVE AND STORE ON SITE. DISCONNECT

RELOCATE EXISTING TO THIS LOCATION, COORDINATE EXACT LOCATION IN FIELD,

PROVIDE NEW WIRING TO EXTEND EXISTING WIRING AS REQUIRED, MATCH EXISTING

AND SAFE-OFF ALL WIRING FOR FUTURE EXTENSION TO NEW LOCATION

- 3. VERIFY ALL OCCUPANCY SENSORS TO BE FURNISHED AND INSTALLED WITH LOW VOLTAGE OR LINE VOLTAGE INPUTS.
- 4. THE CONTRACTOR SHALL SET ALL PROGRAMMABLE TIME DELAYS TO A MINIMUM OF 15 MINUTES UNLESS OTHERWISE NOTED. ALL OCCUPANCY SENSORS WITH AN AUTOMATIC SENSITITY SETTING SHALL BE SET TO AUTOMATIC UNLESS A REDUCED SENSITIVITY SETTING IS RECOMMENDED BY THE MANUFACTURER OR REQUESTED BY THE OWNER. ALL OCCUPANCY SENSORS WITH A SELECTABLE WALK-THROUGH MODE SHALL BE SET TO THIS MODE.



KELTER & GILLIGO consulting engineers P.O. BOX 777, 196 PRINCETON-HIGHTSTOWN RD. PRINCETON JUNCTION NEW JERSEY 08550

Frank Tindall, P.E. Professional Engineer NOT TO SCALE

Renovations to Second Floor Toilet Rooms at NJM West Trenton Building A - North

Project Owner Name New Jersey Manufacturers Insurance Company NJM Project # WT.C.2024.009

301 Sullivan Way, West Trenton, NJ 08628

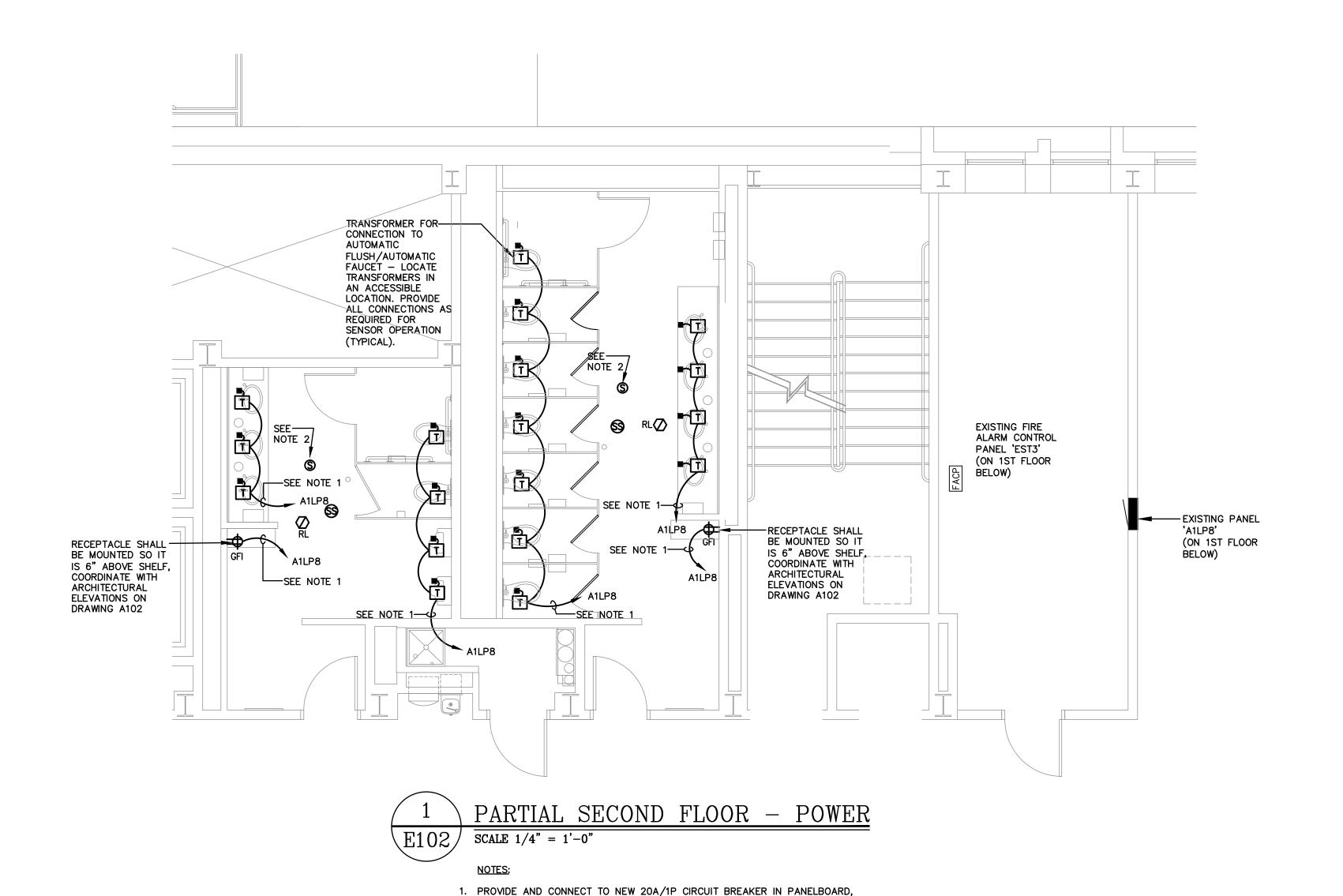
11.08.2024 AS NOTED

FLOOR PLANS SYMBOL LIST & LIGHTING SCHEDULE -ELECTRICAL

No. Date Description

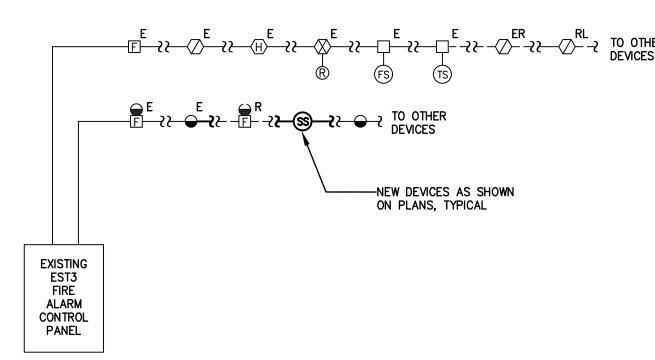
PARTIAL SECOND FLOOR - LIGHTING SCALE 1/4" = 1'-0"

1. PROVIDE AND CONNECT TO EXISTING LIGHTING CIRCUIT IN AREA, VIA 2 #12 & 1 #12 GRD - 3/4"C.



CIRCUIT VIA 2 #12 & 1 #12 GRD - 3/4"C.

2. EXTEND EXISTING WIRING IN KIND TO NEW SPEAKER.

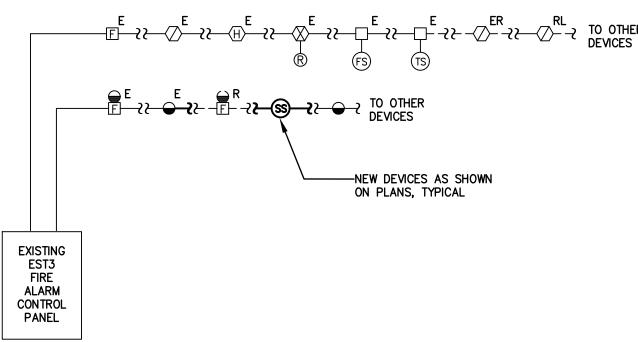


FIRE ALARM SYSTEM RISER DIAGRAM

SCHEMATIC

FIRE ALARM SYSTEM NOTES:

- 1. PROVIDE ALL WIRING AS RECOMMENDED BY MANUFACTURER. ALL WIRING SHALL BE IN CONDUIT. FIRE ALARM LABELED MC CABLE MAY BE USED IN CONCEALED LOCATIONS WHERE PERMITTED BY CODE.
- 2. CONTRACTOR IS RESPONSIBLE FOR INSURING THAT FIRE ALARM SYSTEM MODIFICATIONS MEET ALL APPLICABLE CODES AND FOR OBTAINING FINAL APPROVAL FROM LOCAL FIRE INSPECTOR(S).
- 3. PRIOR TO STARTING WORK, PREPARE SHOP DRAWINGS INCLUDING ALL INFORMATION REQUIRED UNDER IBC, SECTION 907.1.2. SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW AND APPROVAL. ONCE APPROVED, SUBMIT SHOP DRAWINGS TO CODE REVIEWER/INSPECTOR(S) FOR APPROVAL.
- 4. EXPAND EXISTING FIRE ALARM SYSTEM AS REQUIRED TO CONNECT NEW DEVICES. PROVIDE ALL NEW HARDWARE, RELAYS, MODULES, WIRING, BATTERIES, ECT., AS NECESSARY FOR COMPLETE INSTALLATION.
- 5. PROVIDE ALL PROGRAMMING BY A FACTORY CERTIFIED VENDOR AS REQUIRED TO MAKE THE NECESSARY MODIFICATION TO THE SYSTEM. INCLUDE ANY HARDWARE, WIRING, OF COMPONENTS NECESSARY FOR CONTINUED REUSE.
- 6. PROVIDE AT EACH LOCATION SHOWN, AUDIO/VISUAL DEVICES WITH OUTPUT LEVELS AS RECOMMENDED BY MANUFACTURER FOR THE SPACE TO COMPLY WITH ADA & CODE REQUIREMENTS. PROVIDE ADDITIONAL DEVICES TO THOSE SHOWN IF/AS REQUIRED TO MEET LEVELS AT NO ADDITIONAL COST.
- 7. ALL FIRE ALARM CONTROL PANELS, REMOTE ANNUNICIATORS, AND BOOSTER PANELS SHALL HAVE SMOKE DETECTORS COVERAGE ABOVE. PROVIDE DEVICES WHETHER SHOWN ON PLANS OR NOT.
- 8. UPON COMPLETION OF FIRE ALARM WORK, PROVIDE A RE-ACCEPTANCE TEST OF THE ENTIRE SYSTEM PER NFPA 72.



Second Floor Toilet Rooms at NJM West Trenton Building A - North

Renovations to

New Jersey Manufacturers Insurance Company NJM Project # WT.C.2024.009

301 Sullivan Way, West Trenton, NJ 08628

5578 11.08.2024 AS NOTED

FLOOR PLAN & FIRE ALARM RISER -POWER

No. Date Description

Drawing Number

OFFICE BLDG

SERVICE BLDG OFFICE BLDG OFFICE BLDG OF WORK KELTER & GILLIGO consulting engineers P.O. BOX 777, 196 PRINCETON-HIGHTSTOWN RD. OFFICE BLDG PRINCETON JUNCTION NEW JERSEY 08550 Frank Tindall, P.E. NOT TO SCALE Professional Engineer

Drawings are diagrammatic. Sizes and locations of equipment are shown to scale where possible, but may be distorted for clarity on the Drawings. Final locations shall be as required or directed.

Light and power and system riser diagrams and schematic diagrams generally indicate equipment and connections to be used for various systems. System conduit and wiring shall be as required. Provide all work shown on diagrams whether or not it is duplicated on the plans.

SCOPE OF WORK In general the work includes, but is not limited to the following:

1. Raceways and installation components.

Wire and Cable.

3. Panelboards (modifications)

5. Lighting fixtures.

4. Grounding.

6. Fire alarm system (modifications).

7. Testing.

8. Furnishing of access doors

9. Furnishing and setting of all sleeves through the floors, roof, and walls where required, including waterproofing, and fireproof sealing, and cap flashing.

10. Cutting, drilling and boring associated with electrical work.

11. Prime painting, where required for electrical equipment and installation.

12. Provisions for temporary light and power.

13. Final connection of all equipment unless otherwise noted.

QUALITY ASSURANCE AND STANDARDS

The complete installation shall be in accordance with NJUCC (The State Building Code).

Contractor to be responsible for securing all necessary permits and obtaining all necessary approvals. He shall complete all necessary forms and pay all necessary fees.

The Contractor shall submit shop drawings for all systems and components with such promptness as to cause no delay in his own work or that of another contractor.

EXAMINATION OF EXISTING CONDITIONS ON PREMISES

Before submitting his bid, this Contractor shall visit the site of the work and shall thoroughly familiarize himself with the existing conditions affecting the work. By the act of submitting a bid, the Contractor shall be deemed to have made such an examination, to have accepted such conditions, and to have made allowance therefore in preparing his bid. No additional compensation will be granted on account of extra work made necessary by the Contractor's failure to investigate such existing conditions. Verify all grades, elevations, dimensions, and clearances at the site.f

COORDINATION OF WORK WITH OTHER TRADES

The contractor shall coordinate the work of this Section with the work of all other Contracts and all the Utility Companies. It shall be so arranged that there will be no delay in the proper installation and completion of all work.

The entire wiring system must test free from short and open circuits. Every ground shall be tested for compliance with standards listed below.

PROTECTION, MAINTENANCE AND PRODUCT HANDLING OF ELECTRICAL EQUIPMENT

Electrical equipment shall be delivered and stored at the site, properly packed and crated until finally

Provide effective protection against damage for all material and equipment during shipment and storage at

This Contractor shall be responsible for the maintenance of all installed equipment and systems until final acceptance by the Owner.

<u>GUARANTEE</u>

This Contractor shall guarantee in writing to the Owner that all work installed by him shall be free of defects in workmanship and materials and that all apparatus will develop the capacities and characteristics as indicated, and that, if during a period of one year from date of final approval of work by the Architect, any defects in workmanship, materials or performance appear, he will remedy them without any cost to the

ACCESSIBILITY AND MEASUREMENTS

All work shall be installed so as to be readily accessible for operation, maintenance, and repair. Minor deviations from the plans may be made to accomplish this, subject to approval.

Before ordering any material or doing any work, the Contractor shall verify all measurements at the Building, and shall be responsible for the correctness of same as related to the work under this Contract.

Electric services for temporary light and power shall be obtained from existing and extended as

The Electrical Contractor shall furnish, install, and maintain the temporary lighting and power system for all Contractors. Provide temporary power for all construction trailers or as directed. The use of electricity

The General Contractor will pay for all energy required by the temporary lighting and power system.

Provide all wiring, supports, lamp sockets, receptacle sockets and any other materials, supplies or equipment necessary for temporary light and power system.

Ground fault protection required by OSHA.

Install separate stringer circuits for lighting and receptacles. Provide one lamp socket and one duplex receptacle for every 400 square feet of general construction area. (Approximately 20 feet on

Provide sufficient supplementary temporary lighting to permit proper execution of the work.

Keep the temporary lighting and power system operational commencing fifteen (15) minutes before the established starting time of that trade which starts work earliest in the morning and ending fifteen (15) minutes after the established quitting time of that trade which stops work latest in the evening.

IDENTIFICATION NAMEPLATES Identify and mark all electrical equipment to meet OSHA standards and as specified herein.

Unless otherwise noted, nameplates shall be black laminate with white letters of uniform size consisting of reasonably large capital letters, 3/16 inch minimum.

RACEWAYS AND INSTALLATION COMPONENTS

required for a complete system.

minimum 3/4 inch.

The requirements of this Section apply to raceway work specified elsewhere in these specifications. The work includes the providing of completely coordinated grounded raceway systems complete with boxes, fittings, flexible connections to vibrating equipment and accessories, as specified and as

The work permits the use of metal-clad cable in conjunction with conduit. See below.

Raceways and fittings shall be manufactured by Triangle or approved equal by Allied or Republic. Rigid steel conduit shall be full weight steel pipe, hot dip galvanized inside and outside, threaded,

Intermediate metal conduit (IMC) shall be intermediate steel pipe, hot dip galvanized, threaded, minimum 3/4 inch.

Electric metallic tubing (EMT) shall be steel thin wall pipe, galvanized, threadless, minimum 3/4 inch, maximum 2 inch

Flexible steel conduit (Greenfield) shall be continuous single strip, galvanized, minimum 3/4 inch.

Liquid-tight flexible steel conduit (Seal-tite) shall be zinc coated, consist of flexible galvanized steel tubing over which is extruded a liquid—tight sheathing of polyvinyl chloride (PVC). Conduit shall be provided with a continuous copper bonding conductor would spirally between the convolutions.

Rigid steel and IMC conduit fittings shall be standard threaded couplings, locknuts, bushings, and elbows. Material shall be steel or malleable iron only.

Electrical metallic tubing fittings shall be compression waterproof connection type. Set screw or indent type connectors are not permitted.

Flexible steel conduit (Greenfield) fittings shall be multiple point type, threading into the internal wall of the conduit convolutions, and shall have insulated throat.

Liquid—tight flexible metal conduit fittings shall incorporate a threaded grounding cone, a steel or plastic compression ring, and a gland for tightening. Connectors shall have insulated throats.

Expansion and deflection couplings shall be manufactured by O-Z/Gedney, Crouse-Hinds, Appleton or approved equal.

Individual conduit hangers, shall be designed for the purpose, and have pre-assembled closure bolt and nut, and provisions for receiving hanger rod.

Multiple conduit (trapeze) hangers shall be not less than 1-1/2 by 1-1/2 inch, 12 gauge steel, cold formed, lipped channels. Hanger rods shall be not less than 3/8-inch diameter steel.

Solid masonry and concrete anchors shall be a type approved for the purpose. Provide and assume responsibility for locating and maintaining in proper position all sleeves required

Openings through floors and walls in which cables, conduits, or pipe pass shall be sealed by U.L classified smoke and fire stop fittings, and have an hourly rating equal to the fire rating of the floor or wall. Fittings shall be similar to 0—Z/Gedney Type "CFS" or "CAFS".

Penetrations through fire-rated floors in which wiring for floor service outlets are routed shall be sealed by U.L. classified smoke and fire—stop fittings, and shall have an hourly rating equal to the floor rating. Fittings shall be similar to 0-Z/Gedney Type "PTFS".

Outlet boxes shall be manufactured by Raco, RussellStoll, Steel City, Thomas & Betts or Crouse

Outlet boxes for concealed work shall be galvanized steel, 4 in. square or octagon (except as otherwise required by construction, devices or wiring). Provide sufficient depth for application.

Outlet boxes located outdoors and in damp locations shall be weatherproof.

Offset back-to-back outlets shall have minimum 6 in. separation between them. In rated walls, they are to be separated by a stud Junction, splice and pull boxes shall be made of code gauge sheet steel with removable covers fastened with brass or stainless steel screws, except as noted, and will include insulated supports

Provide junction, splice and/or pull boxes as noted or as required to facilitate pulling of conductors or in raceway runs that have more than three (3) 90—degree bends.

For indoor applications, boxes shall have a gray enamel finish. For outdoor and damp locations,

Install raceway and installation components as indicated, in accordance with manufacturer's written instructions, applicable requirements of NEC and in accordance with the recognized industry practices, to ensure that products serve intended function.

Raceway supports shall be provided by means of ceiling trapeze, strap hangers, or wall brackets. Use structural steel angles or channels, or manufactured steel support system. Spacing of supports shall be as per NEC and per manufacturer's recommendations but in no case shall exceed 8'-0" on centers. Provide U-bolts at each floor level for riser raceways and anchor to acceptable supports. Secure raceways to supports with pipe straps or U-bolts.

Mechanically join all metal raceways, enclosures and junction boxes to assure continuity.

Branch circuit conduits shall be supported by the building structure.

for cables. Box dimensions shall conform to N.E.C. requirements.

Conduits located underground beyond the building for branch wiring shall be installed with a minimum of 30 in. top cover as shown on the drawings.

Provide expansion-deflection fittings at expansion joints in accordance with manufacturer's recommendations. Expansion-deflection fittings shall be used for all trade sizes 1-1/4" or larger For trade sizes up to 1" in size, a suitable length of flexible conduit (or liquid-tight flexible conduit) with sufficient slack for movement and grounding conductor fastened on each side of joint

Rigid steel conduit shall be used for underground installation; in wet, damp or wash down locations; for exposed runs on the exterior of the building; embedded in concrete or masonry or below concrete that is in contact with earth.

Intermediate metal conduit (IMC) may be used in place of rigid steel in dry locations only. EMT is to be used for feeders and branch circuits in dry locations such as hung ceilings, interior hollow block walls and furred spaces.

Flexible steel conduit shall be used in dry locations for short connections where rigid conduits or tubing is impracticable, and for final connections to lights and equipment other than motors and

Liquid—tight flexible steel conduit shall be used in damp locations for final connections to motor terminal boxes, transformers, and other vibrating equipment in damp and dry locations.

In general, cutting and core drilling is to be avoided. Where it becomes necessary, locations are to be coordinated with other trades, the Owner and the structural engineer. There is to be no cutting or core drilling without prior approval.

Provide an outlet box for each lighting fixture and device shown, or required, in the wiring system. Provide galvanized steel extension rings (depth as required) and raised cover plates in plaster, dry wall, masonry and tile walls.

Mount outlet boxes for similar equipment at uniform height within same or similar areas.

Outlet boxes for fixtures recessed in non-accessible ceilings shall be accessible through the opening created by the removal of the fixture or through access doors provided by this contractor.

All outlet boxes in finished areas for convenience receptacles or local switches shall be 4" square and 1-5/8" deep minimum. Provide with regular deep switch extension cover.

Boxes for use with surface mounted raceways shall be of the same construction and manufacture as the raceway.

Provide junction, splice and pull boxes where required to facilitate installation of wiring, whether or not shown on Drawings. Size boxes according to code, and provide interior partitions, insulated supports, hot dip galvanized angle iron braces, screw-on one-piece or split covers, ground connectors, and other accessories as required.

All outdoor installations shall be weatherproof.

Support all material from the building structure in an approved manner.

Where electrical equipment is mounted in suspended ceiling panels, provide support members to span between runners of ceiling suspension system. Do not support electrical equipment from acoustical panels or other ceiling material; attach to this material for alignment only.

Where electrical outlet boxes, lighting fixtures, and other equipment is installed on tee bars of suspended ceilings, use independent support clips with threaded studs. Do not attach to tee bar except for alignment; use clip similar to Caddy "IDS" that snaps around tee bar and has provisions for independent support wire. Attach a suitable anchor in the structure above ceiling, and suspend a minimum No. 12 support wire to engage the clip.

Do not exceed manufacturer' load rating for mounting devices.

At drywall partitions, provide support members to carry weight of equipment; do not use drywall material to carry any weight.

WIRE AND CABLE

The work includes providing wire and cable complete with all accessories in accordance with Drawings and Specifications and as required for a complete system. Wiring size referenced in this Section shall be AWG, except as noted

This project has been designed for copper conductors. Aluminum conductors are not acceptable and shall not be used. Cable shall be manufactured by Triangle or approved equal by Carol or

No. 10 and smaller conductors shall be ASTM Standard, solid, copper; and, No. 8 and larger conductors shall be ASTM standard, stranded copper.

Minimum conductor size shall be No. 12 for lighting and power and No. 14 for control and alarm. Increase wire sizes as required for long runs to overcome voltage drop.

Communications and signal wiring shall conform to the recommendations of the manufacturer's communication and signal systems and shall be specified in respective Sections of these

"THWN" or "XHHW" insulation shall be used for interior branch circuit and feeder wiring. Rating shall be 90°C in dry locations and 75°C in wet locations.

Green colored insulated wire shall be used for all grounding applications.

Yellow for B phase

Orange for C phase

Phase wires shall be color-coded as follows:

approved equal by Guardian Products.

every outlet box, junction box, or fitting.

1. 120/208 volt system: Black for A phase Red for B Phase Blue for C Phase

2. 277/480 volt system: Brown for A phase

Neutral conductors shall be white for 120/208 volts and white with gray stripe for 277/480 volts. Provide 0-Z/Gedney Type "CSB" series or approved equal seal fittings between the wire and conduit

for all cable and wire entering the building from underground, including service cables. Not more than 3 current carrying conductors shall be in one (1) conduit unless otherwise indicated. Provide one neutral conductor for each 3 phase 4 wire homerum to a panelboard unless otherwise

Provide separate raceways for conductors of 120/208 and 277/480 volt systems, except 480 volt motor branch circuit wiring and related 120 volt control wiring may be installed in common raceway. MC cable shall comply with the NEC article 330. MC cable shall be as manufactured by AFC or

MC cable shall include a green insulated ground wire of the same size as the other conductors.

Run MC cable in dry hollow metal partitions and above suspended ceilings. Install cable as slack span; do not pull tight. Maintain at least 6" clearance between parallel runs of light and power wiring to avoid inductive coupling. Maintain at least 24" clearance from hot water and steam piping. Provide conduit sleeves through walls and partitions that obstruct horizontal passage of viring, and seal sleeves after installation of cables. Cable shall be secured by approved staples, hangers or similar fittings independent of ceiling grids or supports.

MC cable shall be used in conjunction with conduit. Cable shall only be permitted for single phase circuits in hollow metal walls and above accessible ceilings. Single phase cable runs shall be gathered into three phase conduit homeruns. In no case shall cable enter directly into panelboards. Secure MC cable to ceiling structure at intervals not to exceed 6 feet and within 12 inches of

Make wire splices electrically and mechanically secure. Install small wire connectors so that no bare conductor is exposed. Tighten bolts on large conductor connectors so that conductor is deformed, but do not break strands of wire. Use compression tool with proper die for compression connectors in accordance with manufacturer's recommendations, so that conductors are deformed but not broken. Apply insulation over splice so that insulation thickness is at least 1-1/2 times that on conductor. Lap applied insulation at least 1" over conductor insulation so that no bare conductor is exposed.

In general, all feeders No. 8 and larger shall be continuous from point of origin to equipment being served. Splices shall only be used where necessary and with prior written approval of the Engineer. Terminate conductors on terminal strips in equipment where terminal strips are used. Provide

Provide encapsulated splice kits (3-M type 85 series or approved equal) for all splices in areas subject to moisture, including wet locations inside buildings and underground handholes, manholes, and buried junction boxes. Install splice kit in accordance with manufacturer's recommendations, and make splice waterproof. Apply sealing putty to surround each cable. Install mold body so that resin covers each cable sheath by a minimum of one inch.

All copper conductors No. 8 & larger shall be terminated, spliced, and tapped with color—keyed compression connectors, as manufactured by Thomas & Betts Co., Series 54000, Ideal Industries Series 87000, or approved equal. The manufacturer's recommended tooling shall be used. Mechanical type connectors shall not be used.

All copper conductors No. 10 AWG & smaller shall be terminated and spliced with Ideal Industries wing-nut wire connectors or approved equal compression connectors. The flame-retardant thermoplastic insulated type shall be used to isolate the terminal from other metal parts and

Use insulating boots supplied for compression connectors or fill joint with "Scotchfill" insulatina putty and serve (3) 1/2 lap layers of "Scotch" #33 electrical tape.

PANELBOARDS (modifications)

The interior distribution system, in general, shall consist of 3-phase, 4-wire mains at 277/480 volts and 120/208 volts. The contractor shall balance the load on all feeders as nearly as possible on the three phases after the system is fully energized and all components are functioning

Panelboards and distribution panels shall be General Electric "A" Series and CCB or approved equal by Square D, Cutler Hammer, or Siemens.

Panel circuit breaker overcurrent protective devices shall be as scheduled on the Drawings and as specified. All breakers shall be bolted—on thermal magnetic type

Panel circuit breakers shall be rated for 10,000 RMS symmetrical amperes minimum interrupting rating at 120/208 volts and for 14,000 RMS symmetrical amperes minimum interrupting rating at 277/480 volts. Provide higher ratings as required or as scheduled on the Drawings.

Provide handle-locking attachments for all circuit breakers serving emergency lights, exit lights, clocks, and other functions indicated. Furnish and install a typewritten circuit directory. Hand written will not be accepted.

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KELTER & GILLIGO consulting engineers P.O. BOX 777, 196 PRINCETON-HIGHTSTOWN RD. PRINCETON JUNCTION NEW JERSEY 08550

Frank Tindall, P.E.

Professional Engineer

Renovations to Second Floor Toilet Rooms at NJM West Trenton Building A - North

Project Owner Name New Jersey Manufacturers Insurance Company NJM Project # WT.C.2024.009

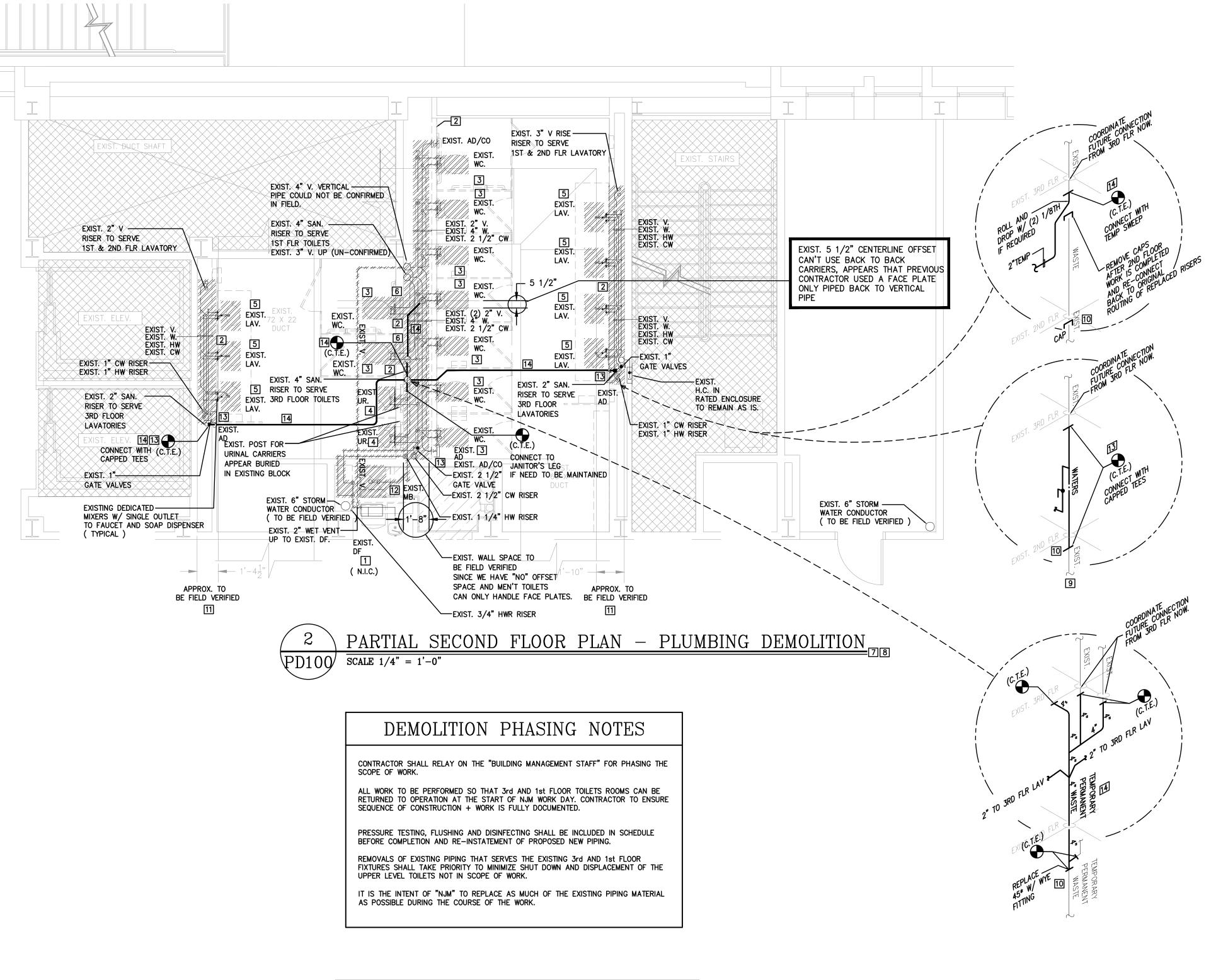
301 Sullivan Way, West Trenton, NJ

11.08.2024 **AS NOTED**

SPECIFICATIONS -ELECTRICAL

lo. Date Description

Drawing Number NOT TO SCALE



KEY DEMOLITION NOTES:

1 EXISTING FIXTURE TO REMAIN AS IS

- REMOVE EXISTING CARRIER/EXISTING WASTE, EXISTING VENT AND EXISTING WATER PIPING IN EXISTING PIPE SPACE AFTER EXISTING WALL DEMOLITION IS COMPLETE. PHASING OF THE VERTICAL WASTE, VENT AND WATERS TO BE COORDINATED WITH BUILDING STAFF FOR REMOVAL AND\ REPLACEMENT IN
- DISCONNECT AND REMOVE EXISTING WALL HUNG URINAL , CAP EXISTING WASTE AND EXISTING WATER FLUSH WITH EXISTING

DISCONNECT AND REMOVE EXISTING COUNTER MOUNTED

- EMOVE EXISTING WASTE, EXISTING VENT AND EXISTING WATER PIPING IN EXISTING PIPE SPACE AFTER EXISTING WALL DEMOLITION IS COMPLETE. PHASED REMOVAL OF THE EXISTING VERTICAL WASTE, VENT AND WATERS TO BE COORDINATED WITH BUILDING STAFF FOR REMOVAL AND\ REPLACEMENT IN
- FIELD INVESTIGATE AND LOCATE ALL EXISITING 2ND FLOOR PIPING
- FIELD INVESTIGATE AND LOCATE EXACT ROUTING OF HOT WATER RETURN
- 10 CONNECT AND/OR CAP PIPING IN 1ST FLR CEILING AS REQUIRED.
- EXISTING WATER FLUSH WITH EXISTING BLOCK WALL.

 REMOVE EXISTING WASTE, EXISTING VENT AND EXISTING WATER PIPING IN EXISTING PIPE
- PROVIDE AND INSTALL REPLACEMENT OF EXISTING COLD AND HOT WATER FEED & VALVES TO KEEP THE EXISTING 3RD FLOOR WATERS OPERATIONAL DURING THE SCOPE OF WORK, PERFORM FLUSHING AND DESINFECTING, PRESSURE TESTING AND ROUGHING INSPECTION IN A SINGLE NIGH SCHEDULE TO MAINTAIN THE REST OF THE BUILDING OPERATIONAL DURING THE
- PROVIDE AND INSTALL TEMPORARY SANITARY PIPING TO KEEP THE

AFTER REMOVAL OF EXISTING BLOCK WALLS, CAREFULLY

DOCUMENT THE EXISTING FACE PLATE INSTALLATION TO BE MIMICKED IN PROPOSED NEW LAYOUT.

DISCONNECT AND REMOVE EXISTING WALL HUNG WATER CLOSET, CAP EXISTING WASTE AND EXISTING WATER FLUSH WITH EXISTING BLOCK WALL.

- BLOCK WALL. (EXISTING POST FOR WALL HANGERS IN BURIED IN THE EXISTING BLOCK WALL AND WILL NEED TO REMAIN IN PLACE, NEW FIXTURE SHALL BE HUNG FROM EXISTING HANGERS)

LAVATORY, CAP EXISTING WASTE AND EXISTING WATER FLUSH WITH EXISTING BLOCK WALL.

- EXIST. FACEPLATE W/ ADAPTOR TO BE FIELD VERIFIED PRIOR TO ORDERING NEW PIPING & FIXTURES TO MIMIC EXISTING INSTALLATION.
- SERVING THE THIRD FLOOR DURING DEMOLITION PHASE.
- TO SERVE 3RD FLOOR END OF RUN.
- SHUT OFF EXISTING WATER VALVES IN ORDER TO REPLACE THE EXISTING VERTICAL 3" COLD WATER FEED SERVING THE 1ST, 2ND & 3RD FLOOR
- FIELD INVESTIGATE AND LOCATE ALL EXISITNG 2ND FLOOR HVAC DUCT WORK DURING DEMOLITION PHASE.
- DISCONNECT AND REMOVE EXISTING FLOOR MOUNTED MOP BASIN, CAP EXISTING WASTE AND SPACE AFTER EXISTING WALL DEMOLITION IS COMPLETE.
- EXISTING 3RD FLOOR WATERS OPERATIONAL DURING THE SCOPE OF WORK. REMOVE AND CAP AFTER THE 1ST. FLOOR ARE COMPLETED. (APPROX MOUNTING HEIGHT TO BE 7'-0" BELOW PROPOSED NEW CEILING W/ SUPPORTS AND/OR POST)

KELTER & GILLIGO consulting engineers

P.O. BOX 777, 196 PRINCETON-HIGHTSTOWN RD. PRINCETON JUNCTION NEW JERSEY 08550

Frank Tindall, P.E.

Professional Engineer

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Renovations to

Toilet Rooms at

NJM West Trenton

Building A - North

New Jersey

Manufacturers

NJM Project #

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11.08.2024

AS NOTED

PART PLAN

PLUMBING

DEMOLITION

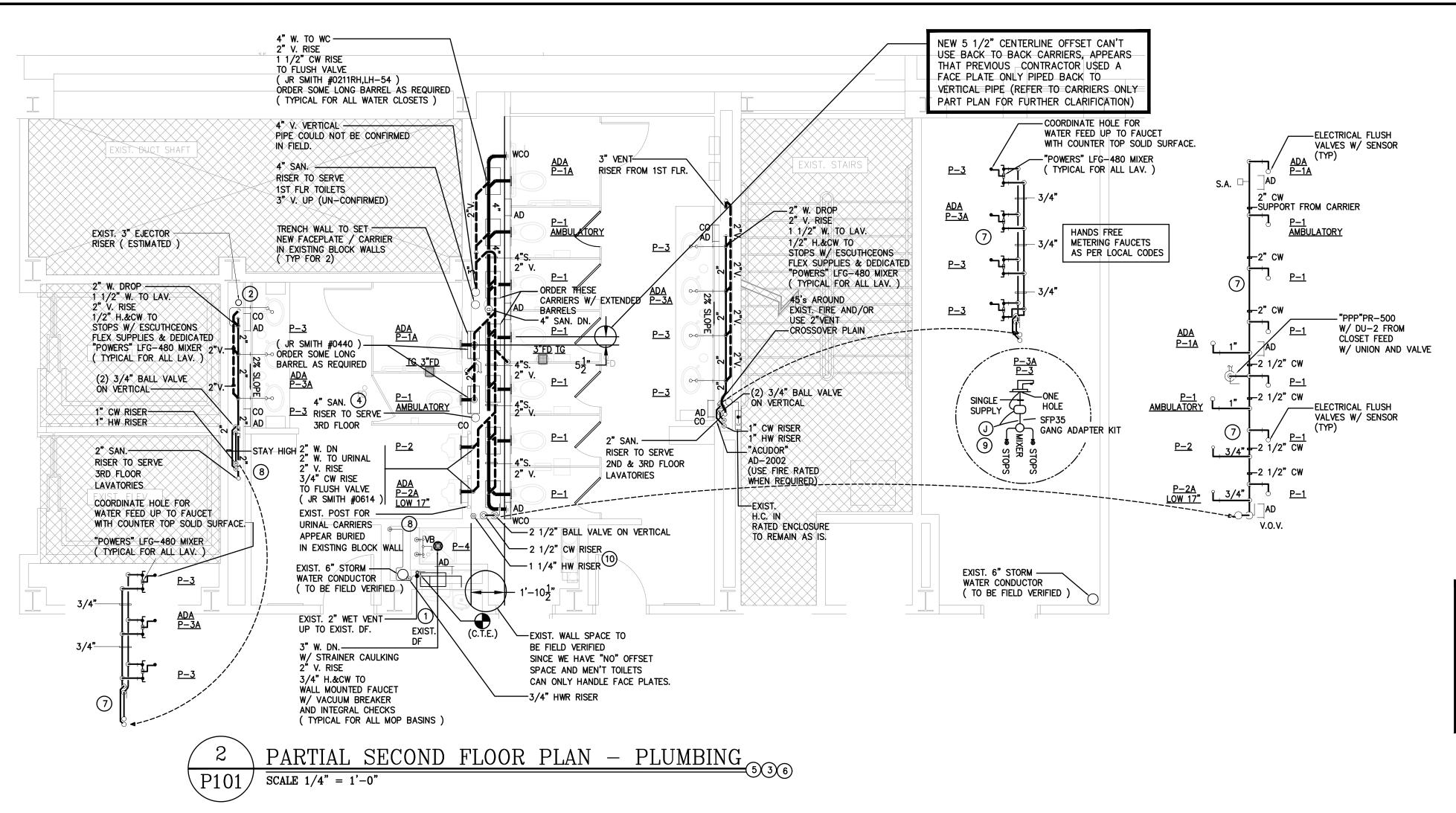
SECOND FLOOR

Insurance Company

Second Floor

DEMOLITION NOTES

- REMOVE EXISTING FIXTURES AND PLUMBING ACCESSORIES AS INDICATED. CLEAN FIXTURES RETURN REUSABLE FIXTURES TO OWNER. (NJM TO DETERMINE WHAT IS TO BE SALVAGED AND REUSED)
- INFORMATION CONCERNING EXISTING SYSTEMS OR EQUIPMENT HAS BEEN TAKEN FROM EXISTING DESIGN DRAWINGS, NO SHOPS DRAWINGS ARE AVAILABLE.
- 3. THE CONTRACTOR SHALL VISIT AND VERIFY ACTUAL SITE CONDITIONS PRIOR TO SUBMITTING HIS BID, ANY DISCREPANCIES SHALL BE OUTLINED IN WRITING FOR RESOLUTION.
- CUTTING EXISTING PIPES GOING INTO EXISTING 3rD FLR SLAB, LEAVE ENOUGH EXCESS TO ALLOW FOR A PHYSICAL CONNECTION. (CONSIDERATION TO GO INTO THE EXISTING 3rd FLR SPACE WITH NEW PIPES TO AVOID CEILING WORK IN THE FUTURE SHALL BE ENTERTAINED)
- CONTRACTOR SHALL DOCUMENT ALL EXISTING CONDITIONS FOR THE OWNER IN A REPORT/PICTURES AND SUBMIT IT FOR REVIEW PRIOR TO ALL DEMOLITION COMMENCING .
- REFER TO BUILDING MANAGEMENT STAFF AND ARCHITECTURAL SCHEDULE FOR PHASING OF DEMOLITION AND REMOVALS.
- SEAL ALL PENETRATION NOT TO BE RE-USED AFTER PIPE REMOVAL AS REQUIRED BY THE LOCAL BUILDING CODES PERTAINING TO HOURS IN RATING AND/OR SEPARATION.



KEY NOTES:

- (1) EXISTING FIXTURES TO REMAIN AS IS (N.I.C.)
- 2) EXISTING PUMP VENT TO REMAIN AS IS.
- WHEN REPLACING THE EXISTING PIPING IN KIND WITH NEW PIPES, CONTRACTOR SHALL FOLLOW EXISTING ROUTING TO MINIMIZE COORDINATION ISSUES, MIMIC OLD SUPPORTS ORIENTATION AS REQUIRED BUT IN COMPLIANCE WITH LOCAL PLUMBING CODE.
- FIELD LOCATE EXACT LOCATION OF VERTICAL PIPE 4) AND OFFSET AWAY FROM PROPOSED NEW CARRIER.
- (5) REFER TO CARRIER PLAN FOR ADDITIONAL INFORMATION ON PROPOSED NEW CARRIERS.
- RE-SEAL AND SUPPORT ALL EXISTING OPENINGS THRU EXISTING SLABS WITH NEW FIRE STOPPING AND RISER CLAMPS COORDINATED WITH WALL DIMENSIONS AND BUILDING ENVELOPE.
- 3 SUPPORT WATER PIPING IN CHASE AS REQUIRED W/ POST, STRAPS, CLAMPS AND SHIELDS.
- TRENCH THE EXISTING WALL TO SET PROPOSED NEW PIPES AS REQUIRED, COORDINATE PATCHING WITH GC AND ARCHITECT'S GENERALS CONDITION SPECIFICATION FOR PAINTING AND FINISHES.
- COORDINATE ACCESS TO JUNCTION BOXES AND FEEDER WITH ELECTRICAL CONTRACTOR FOR LOCATION AND ORIENTATION BEHIND THE BLOCK WALLS AND FEEDER THRU BLOCK WALL BACK TO SOLENOID FLUSH VALVE MOUNTED.
- RE-BALANCE EXISTING HOT WATER RETURN AND PROVIDE FULL WRITTEN REPORT FOR REVIEW TO THE BUILDING STAFF AND BUILDING ENGINEER FOR COMPLIANCE.

COORDINATION NOTES:

CONTRACTOR SHALL PROVIDE A COORDINATION DRAWING ILLUSTRATING ALL THE EXISTING/NEW STEEL FRAMING, HVAC DUCT WORK AND UNITS, CEILING HEIGHTS, LIGHTS AND EXIT SIGNS ACKNOWLEDGE AND ENDORSED BEFORE PROCEED AND PRIOR TO INSTALLATION.

ADA NOTES:

REFER TO ARCHITECTURAL DETAIL FOR ALL ADA REQUIREMENT, MOUNTING HEIGHTS AND CLEARANCES. PROVIDE SHIELDS AND COVERS FOR ALL LAVATORIES AND SINKS AS PER LOCAL CODES.

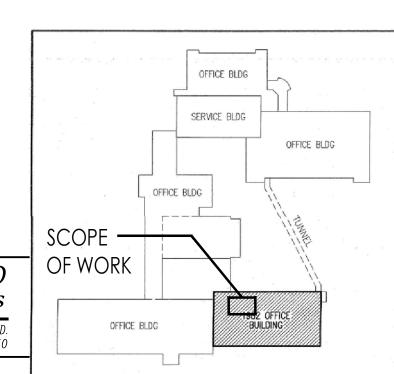
PHASING NOTES

CONTRACTOR SHALL RELAY ON THE "BUILDING MANAGEMENT STAFF" FOR PHASING THE SCOPE OF WORK.

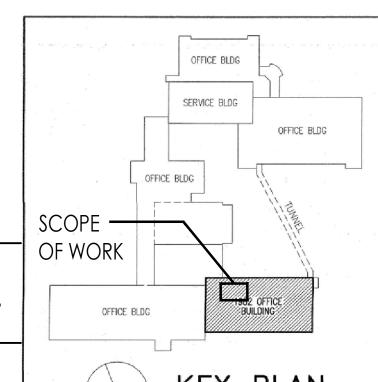
ALL WORK TO BE PERFORMED SO THAT 3rd AND 1st FLOOR TOILETS ROOMS CAN BE RETURNED TO OPERATION AT THE START OF NJM WORK DAY. CONTRACTOR TO ENSURE SEQUENCE OF CONSTRUCTION + WORK IS FULLY DOCUMENTED.

PRESSURE TESTING, FLUSHING AND DISINFECTING SHALL BE INCLUDED IN SCHEDULE BEFORE COMPLETION AND RE-INSTATEMENT OF PROPOSED NEW PIPING. REMOVALS OF EXISTING PIPING THAT SERVES THE EXISTING 3rd AND 1st FLOOR FIXTURES SHALL TAKE PRIORITY TO MINIMIZE SHUT DOWN AND DISPLACEMENT OF THE UPPER LEVEL TOILETS NOT IN SCOPE OF WORK.

IT IS THE INTENT OF "NJM" TO REPLACE AS MUCH OF THE EXISTING PIPING MATERIAL AS POSSIBLE DURING THE COURSE OF THE WORK.



NOT TO SCALE



Frank Tindall, P.E. Professional Engineer

2" VENT— RISER FROM 1ST FLR. 3" VENT-RISER FROM 1ST FLR. 4" V. VERTICAL -PIPÉ COULD NOT BE CONFIRMED HN FIELD. **:4".\`\$AN**.\`) EXIST. 3" EJECTOR RISER TO SERVE RISER (ESTIMATED) FROM 1ST FLR TOILETS 3" V. UP (UN-CONFIRMED) 4" SAN. UP TO 2ND PLR TOILETS 4" SAN. UP TO 2ND FLR TOILET (C.T.E.) 3" W. UP TO -FLOOR DRAIN W/ DEEP SEAL TRAP FLEX 3"FD TG AND PRIMER CONNECTION 2" V. RISE <u>TG</u> <u>3"FD</u> 3" 4" SAN. UP TO 2ND FLR TOILET FLOOR DRAIN W/ 1" CW RISER DEEP SEAL TRAP FROM UP-RIGHT WYE FITTING 1" HW RISER AND PRIMER CONNECTION, OR WYE AND AND 1/8TH _1" CW RISER 2" V. RISE 1" HW RISER RISER TO SERVE -2" SAN. — 2">\$AN.------ 2ND & 3RD FLOOR RISER TO SERVE RISER TO SERVE TOILETS (NO CO.) -EXIST. 3" WASTE 2ND & 3RD FLOOR 2ND & 3RD FLOOR LAVATORIES LAVATORIES Z' SAN. UP
TO 2ND FLR URINALS
(CONSIDER 3"X3"X2" WYE+1/8TH
TO EXIST. 3" WASTE) TEMPORARY PIPING SET IN PLACE DURING 1ST FLOOR WORK. — 2 1/2" CW RISER EXIST. 6" STORM — EXIST. 6" STORM —— WATER CONDUCTOR WATER CONDUCTOR (TO BE FIELD VERIFIED) (TO BE FIELD VERIFIED)

> -EXIST. WALL SPACE TO BE FIELD VERIFIED

─_3/4" HWR RISER

SCALE 1/4" = 1'-0"

PARTIAL FIRST FLOOR PLAN - OVERHEAD PIPING 536

SINCE WE HAVE "NO" OFFSET

SPACE AND MEN'T TOILETS CAN ONLY HANDLE FACE PLATES.

KELTER & GILLIGO consulting engineers P.O. BOX 777, 196 PRINCETON-HIGHTSTOWN RD. PRINCETON JUNCTION NEW JERSEY 08550

5578 11.08.2024

Renovations to

Toilet Rooms at NJM West Trenton

Building A - North

New Jersey

Manufacturers

NJM Project #

WT.C.2024.009

301 Sullivan Way,

West Trenton, NJ

08628

Insurance Company

Second Floor

AS NOTED

FIRST AND SECOND FLOOR PART PLANS PLUMBING

SCALE 1/4" = 1'-0"

 $P201 \int \overline{\text{SCALE } 1/4" = 1'-0"}$

KEY NOTES:

- 1) EXISTING FIXTURES TO REMAIN AS IS (N.I.C.)
- MAKE CONNECTION TO EXISTING PIPES TIGHT TO THE UNDERSIDE OF THE EXISTING 3rD FLOOR SLAB, WHEN CUTTING EXISTING PIPES LEAVE ENOUGH EXCESS TO ALLOW FOR A PHYSICAL CONNECTION
- FIELD LOCATE EXACT LOCATION OF VERTICAL PIPE AND OFFSET AWAY FROM PROPOSED NEW CARRIER.
- COORDINATE ACCESS TO JUNCTION BOXES AND FEEDER WITH ELECTRICAL CONTRACTOR FOR LOCATION AND ORIENTATION BEHIND THE BLOCK WALLS AND FEEDER THRU BLOCK WALL BACK TO SOLENOID FLUSH VALVE MOUNTED.
- REMOVE AND CAP TEMPORARY WATER AFTER ALL 2nd FLOOR TOILET REMOVE AND CAP TEMPURANT WATER AFTER ALL 2119 TEODY TOTAL.

 WATER PIPING HAS BEEN PERFORMED AND PRESSURE TESTED AS PER LOCAL CODES.

COORDINATION NOTES:

CONTRACTOR SHALL PROVIDE A COORDINATION DRAWING ILLUSTRATING ALL THE EXISTING/NEW STEEL FRAMING, HVAC DUCT WORK AND UNITS, CEILING HEIGHTS, LIGHTS AND EXIT SIGNS ACKNOWLEDGE AND ENDORSED BEFORE PROCEED AND PRIOR TO INSTALLATION.

ADA NOTES:

REFER TO ARCHITECTURAL DETAIL FOR ALL ADA REQUIREMENT, MOUNTING HEIGHTS AND CLEARANCES. PROVIDE SHIELDS AND COVERS FOR ALL LAVATORIES AND SINKS AS PER LOCAL CODES,

PHASING NOTES

CONTRACTOR SHALL RELAY ON THE "BUILDING MANAGEMENT STAFF" FOR PHASING THE SCOPE OF WORK.

ALL WORK TO BE PERFORMED SO THAT 3rd AND 1st FLOOR TOILETS ROOMS CAN BE RETURNED TO OPERATION AT THE START OF NJM WORK DAY. CONTRACTOR TO ENSURE SEQUENCE OF CONSTRUCTION + WORK IS FULLY DOCUMENTED.

PRESSURE TESTING, FLUSHING AND DISINFECTING SHALL BE INCLUDED IN SCHEDULE BEFORE COMPLETION AND RE-INSTATEMENT OF PROPOSED NEW PIPING.

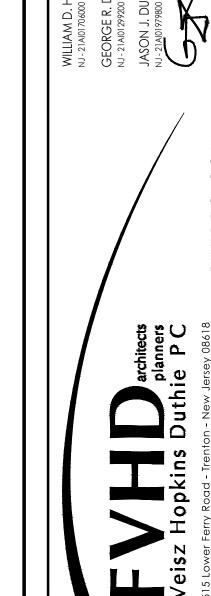
IT IS THE INTENT OF "NJM" TO REPLACE AS MUCH OF THE EXISTING PIPING MATERIAL

AS POSSIBLE DURING THE COURSE OF THE WORK.

REMOVALS OF EXISTING PIPING THAT SERVES THE EXISTING 3rd AND 1st FLOOR FIXTURES SHALL TAKE PRIORITY TO MINIMIZE SHUT DOWN AND DISPLACEMENT OF THE UPPER LEVEL TOILETS NOT IN SCOPE OF WORK.

PLUMBING GENERAL NOTES

- 1. THE CONTRACTOR FOR THIS WORK SHALL CAREFULLY INSPECT AND ACQUAINT HIMSELF WITH ALL THE EXISTING CONDITIONS IN ORDER THAT HE FULLY UNDERSTANDS THE SCOPE OF WORK REQUIRED. HE SHALL FIELD MEASURE AND VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS BEFORE PROCEEDING WITH THE WORK. HE SHALL REPORT ANY CONDITION THAT, IN HIS OPINION, PREVENTS THE PROPER INSTALLATION OF THE PLUMBING WORK.
- 2. THE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE STATE AND LOCAL BUILDING AND PLUMBING CODES, SUBSEQUENT AMENDMENTS, DEPARTMENT OF HEALTH REQUIREMENTS AND AUTHORITIES HAVING JURISDICTION.
- 3. THE CONTRACTOR SHALL VERIFY ALL LOCATIONS, ELEVATIONS AND PIPE SIZES OF EXISTING SERVICES AND UTILITIES BEFORE STARTING ANY WORK. REPORT ANY DISCREPANCIES TO THE ARCHITECT AND ENGINEER FOR RESOLUTION.
- 4. PIPING LAYOUTS ARE DIAGRAMMATIC AND INTENDED TO SHOW GENERAL ARRANGEMENT, SIZE, AND CAPACITY. ALL OFFSETS ARE NOT NECESSARILY SHOWN. THE CONTRACTOR SHALL ARRANGE AND COORDINATE THE WORK, FURNISH NECESSARY OFFSETS, VALVES AND FITTINGS TO AVOID CONFLICTS WITH EXISTING MECHANICAL, ELECTRICAL SYSTEMS, STRUCTURAL AND ARCHITECTURAL ELEMENTS.
- 5. THE CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING. PATCH ALL WALL OPENINGS AS NECESSARY TO MATCH EXISTING
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING ALL WALL PENETRATIONS WITH FIRE RATED SEALANT.
- 7. THE CONTRACTOR SHALL RUN ALL PIPING TO AVOID REINFORCING AT ALL COLUMN LINES.
- 8. THE CONTRACTOR SHALL INSTALL PIPING SO AS NOT TO ENCROACH ON REQUIRED CLEARANCES ABOVE ANY ELECTRIC PANEL. NO PIPING SHALL BE INSTALLED DIRECTLY OVER ELECTRICAL PANELS AND NO PIPING SHALL BE INSTALLED WITH THE BOTTOM AT LESS THAN 66" ABOVE THE 4'-0" SPACE DIRECTLY IN FRONT OF ANY ELECTRIC PANELS.
- 9. ALL ABANDONED PIPING SHALL BE PROPERLY TERMINATED IN WALL, OR IN CEILING.
- 10. OWNER SHALL APPLY FOR, OBTAIN AND PAY FOR ALL PERMITS, CERTIFICATES, INSPECTIONS AND APPROVALS REQUIRED IN CONNECTION WITH ALL PLUMBING WORK.
- 11. THE CONTRACTOR SHALL UNCONDITIONALLY WARRANT ALL WORK TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY OWNER AND WILL REPAIR OR REPLACE ANY DEFECTIVE WORK PROMPTLY AND WITHOUT CHARGE AND RESTORE ANY OTHER EXISTING WORK DAMAGED IN THE COURSE OF REPAIRING DEFECTIVE MATERIALS AND WORKMANSHIP.
- 12. ALL PIPING AND INSTALLATION SHALL BE IN COMPLIANCE WITH INTERNATIONAL BUILDING CODE 2021 NEW JERSEY EDITION, NATIONAL STANDARD PLUMBING CODE 2021 AND ANY APPLICABLE LOCAL CODES AND STANDARDS.



Renovations to Second Floor Toilet Rooms at NJM West Trenton Building A - North

New Jersey Manufacturers Insurance Company NJM Project # WT.C.2024.009

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SECOND FLOOR PART PLANS PLUMBING

P201

4" W. TO WC - 2" V. RISE 1 1/2" CW RISE TO FLUSH VALVE -POST FOR (JR SMITH #0211RH,LH-54) WATERS OR ORDER SOME LONG BARREL AS REQUIRED (TYPICAL FOR ALL WATER CLOSETS) UNI-STRUT FROM CARRIER MAKE AN 8" HOLE TO SET THE FITTING AND ACCOMMODATE THE 4 /- USE LONG BARREL SLOPING WASTES.X AND SHAVE TO FIT. 4" SAN/DN. (USE DOUBLE 1/4 BEND OR SANITARY CROSS W/ BRASS PLUG ADAPTOR TRENCH WALL TO SET (CHARLOTTE # NH-25 DOUBLE FIXTURE FITTING) NEW FACEPLATE / CARRIER IN EXISTING BLOCK WALLS - (TYP FOR 2) (JR SMITH #0440) — ORDER SOME LONG AND SHAVE TO FIT. —ORDER COUPLING BARREL THRU SLAB AS REQUIRED TO FLANGE AT THE REQUIRED LENGTH. NEW 5 1/2" CENTERLINE OFFSET CAN'T USE BACK TO BACK CARRIERS, APPEARS THAT PREVIOUS FIELD VERIFY EXACT CONTRACTOR USED A FACE PLATE (5'-9") DIMENSION BEFORE ONLY PIPED BACK TO VERTICAL SETTING CARRIERS. EXIST. POST FOR URINAL CARRIERS 4 APPEAR BURIED IN EXISTING BLOCK WALL CARRY (2) NEW URINAL CARRIERS IN THE EVENT THAT THE CONDITION AND ORIENTATION OF THE EXISTING CARRIERS DON'T FIT WITH NEW FIXTURES. → CHILLER/CONDENSER

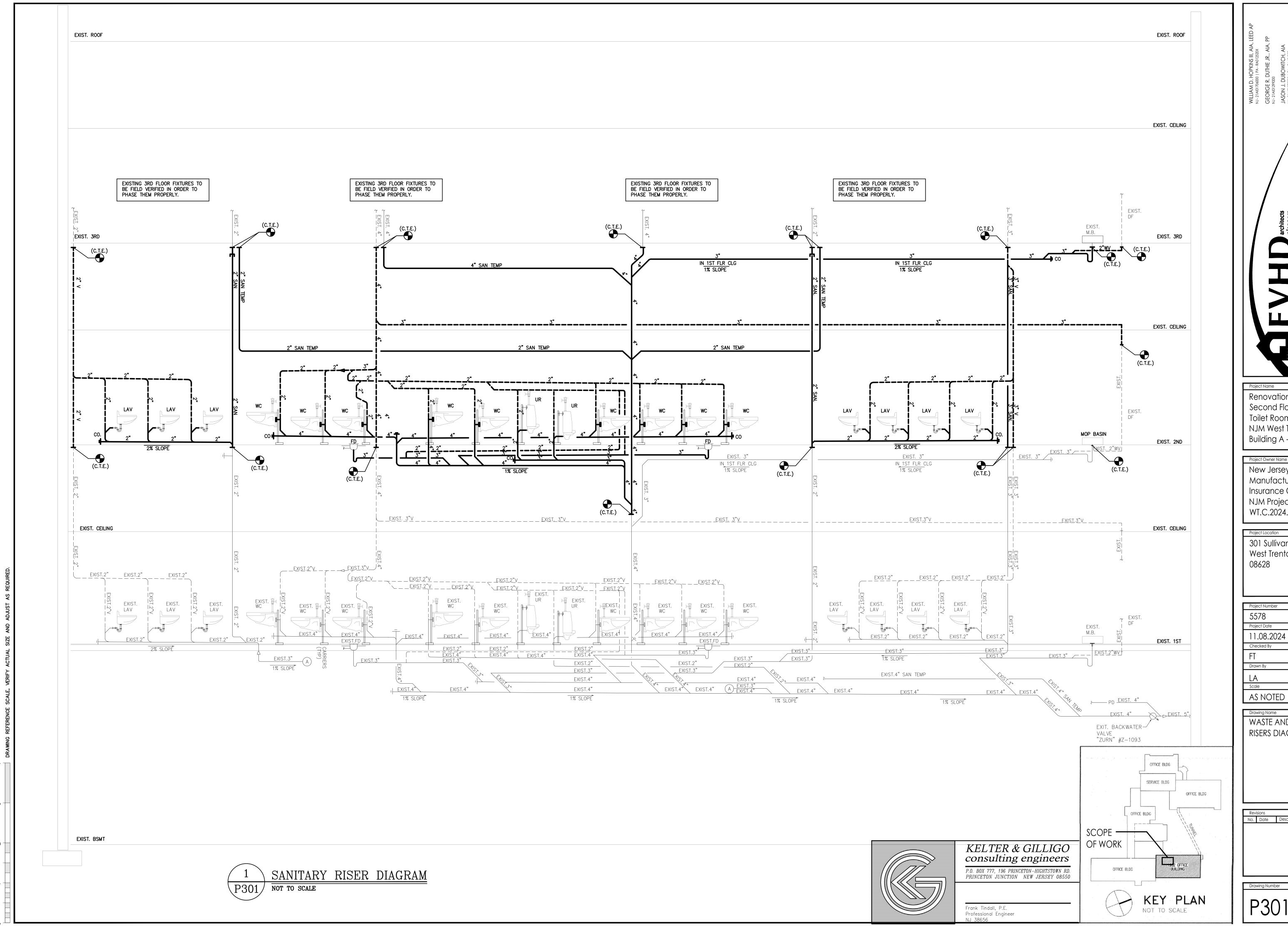
PARTIAL SECOND FLOOR PLAN - PLUMBING PROPOSED NEW CARRIERS ONLY

KELTER & GILLIGO consulting engineers P.O. BOX 777, 196 PRINCETON-HIGHTSTOWN RD. PRINCETON JUNCTION NEW JERSEY 08550

Frank Tindall, P.E. Professional Engineer

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Renovations to Second Floor Toilet Rooms at NJM West Trenton Building A - North

New Jersey Manufacturers Insurance Company NJM Project # WT.C.2024.009

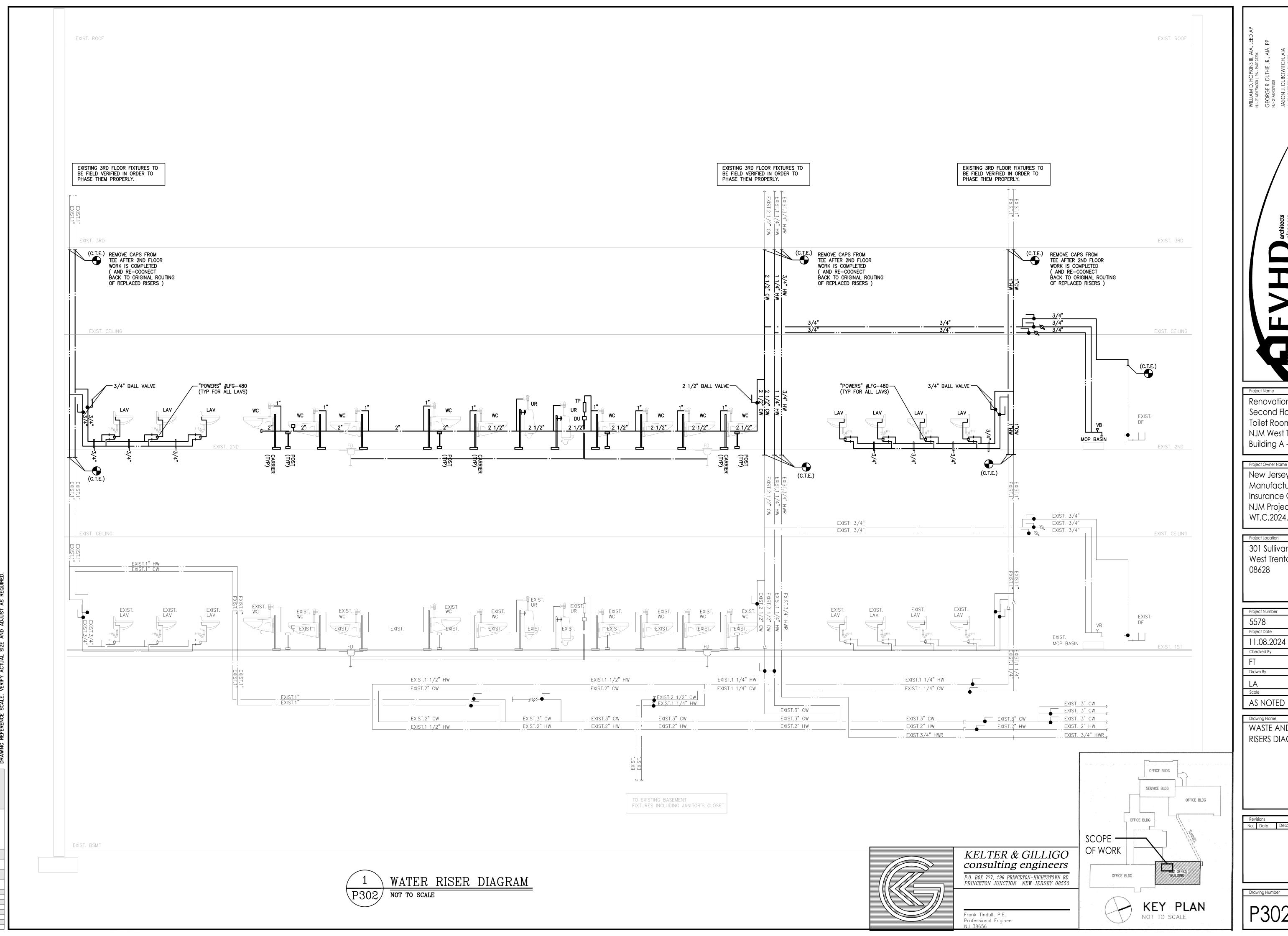
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WASTE AND VENT RISERS DIAGRAMS

Revisions

No. Date Description



Renovations to Second Floor Toilet Rooms at NJM West Trenton Building A - North

New Jersey Manufacturers
Insurance Company
NJM Project # WT.C.2024.009

301 Sullivan Way, West Trenton, NJ 08628

5578 11.08.2024

Drawing Name
WASTE AND VENT RISERS DIAGRAMS

Revisions

No. Date Description

P302

PLUMBING SYMBOL LIST									
ABBREVIATION	SYMBOL	DESCRIPTION	ABBREVIATION	SYMBOL	DESCRIPTION				
CW		COLD WATER PIPING	0.S.&Y.		OUTSIDE STEM & YOKE VALVE				
HW		HOT WATER PIPING	AV		ANGLE VALVE				
HWR		HOT WATER RETURN PIPING		!					
(E) CW	·	(E) COLD WATER PIPING			BRANCH - TOP CONNECTION				
(E) HW		(E) HOT WATER PIPING			BRANCH - BOTTOM CONNECTION				
(E) HWR		(E) HOT WATER RETURN PIPING		•	NEW CONNECTION TO EXISTING				
X-T	-000000000000000000000000000000000000	PIPING WITH HEAT TRACE (EXPOSED)							
w	w	SITE WATER SUPPLY	WHA		WATER HAMMER ARRESTOR				
(E) F	——— (E) F———	(E) FIRE PROTECTION WATER SUPPLY	НВ	$\frac{1}{2}$	HOSE BIBB W/VACUUM BREAKER				
(E)	·/////////////////////////////////////	EXISTING PIPING TO BE REMOVED	WH	—∋ ∎	NON-FREEZE WALL HYDRANT				
V		VENT		l I					
(E) V		(E) VENT	TV	업	HOT WATER TEMPERING VALVE				
SAN	s	SOIL, WASTE, OR SANITARY SEWER		$-\!$	HOT WATER RETURN BALANCING VALVE ASSEMBLY				
SAN	——s——	UNDERGROUND/BELOW SLAB SOIL, WASTE, OR SANITARY SEWER	PV		GAS PLUG VALVE				
(E) SAN	s	(E) SOIL, WASTE OR SANITARY SEWER							
(E) ST/(E) L	ST	(E) STORM WATER LEADER OR SEWER		X	GAS PRESSURE REGULATOR				
G	G	NATURAL GAS		∞ —	TRAP				
(E) G	——— (E) G———	(E) NATURAL GAS	со	 1	CLEANOUT				
		REDUCER	T&P	*	TEMPERATURE & PRESSURE				
		CAPPED OUTLET	Ιατ	<u> </u>	RELIEF VALVE				
		VALVED & CAPPED OUTLET	FD	0	FLOOR/ROOF DRAIN				
		VALVE ON VERTICAL	CODP	CODP ⊚	CLEAN OUT DECK PLATE				
	 _	UNION	М	M	WATER METER & VALVE ASSEMBL				
		PIPING DROP							
	 0	PIPING RISE	М	М	GAS METER AND PRESSURE REDUCING VALVE ASSEMBLY				
BV		BALL VALVE	BFP	BFP	BACKFLOW PREVENTOR				
GV		GATE VALVE	RPZ	RPZ	REDUCED PRESSURE ZONE				
GV		GLOBE VALVE			VALVE ASSEMBLY				
CV		CHECK VALVE							

	PLUMBING	ABBRE	CVIATIONS				
A AFF AP BFP CFH CIP CO CODP CV CW	COMPRESSED AIR ABOVE FINISHED FLOOR ACCESS PANEL BACKFLOW PREVENTOR CUBIC FEET PER HOUR CAST IRON PIPE CLEAN OUT CLEAN OUT CLEAN OUT DECK PLATE CHECK VALVE COLD WATER	GPF GPH GPM HW HWR I.E. INV LDR LS NC	GALLONS PER FLUSH GALLONS PER HOUR GALLONS PER MINUTE HOT WATER SUPPLY HOT WATER RETURN INVERT ELEVATION INVERT LEADER LAB SINK NORMALLY CLOSED	DI DIP DFU DN DP. DWG (E)/EXIST. (F) FD G	DEIONIZED WATER DUCTILE IRON PIPE DRAINAGE FIXTURE UNITS DOWN DROP DRAWING EXISTING FAHRENHEIT FLOOR DRAIN NATURAL GAS	OD (R) S SAN. ST TB V VTR •	OVERFLOW DRAIN REUTILIZED SANITARY SANITARY STORM THRUST BLOCK VENT VENT THROUGH ROOF DEGREES TEMPERATURE CHANGE
DCV	DOUBLE CHECK VALVE	NO	NORMALLY OPEN				

PLUMBING SPECIALTIES SCHEDULE							
MARK DESCRIPTION MANUFACTURER MODEL REMARKS							
<u>S.A.</u>	WATER HAMMER ARRESTOR	ZURN Z-1700	STAINLESS STEEL CONSTRUCTION, SIZE 600 & 1" OUTLET				
<u>TG</u>	WATERLESS TRAP GUARD	PROVENT TRAP GUARD	ELASTOMERIC, NORMALLY CLOSED TRAP GUARD DEVICE WHICH OPENS WIN CONTACT WITH LIQUID, COMPLIES WITH WITH ANSI/ASME A112.6.3				
<u>IP</u>	TRAP PRIMER	ZURN Z-1022	ALL BRONZE BODY INLINE TRAP PRIMER W/INTEGRAL VACUUM BREAKER & NON-LIMING INTERNAL OPERATING ASSEMBLY				

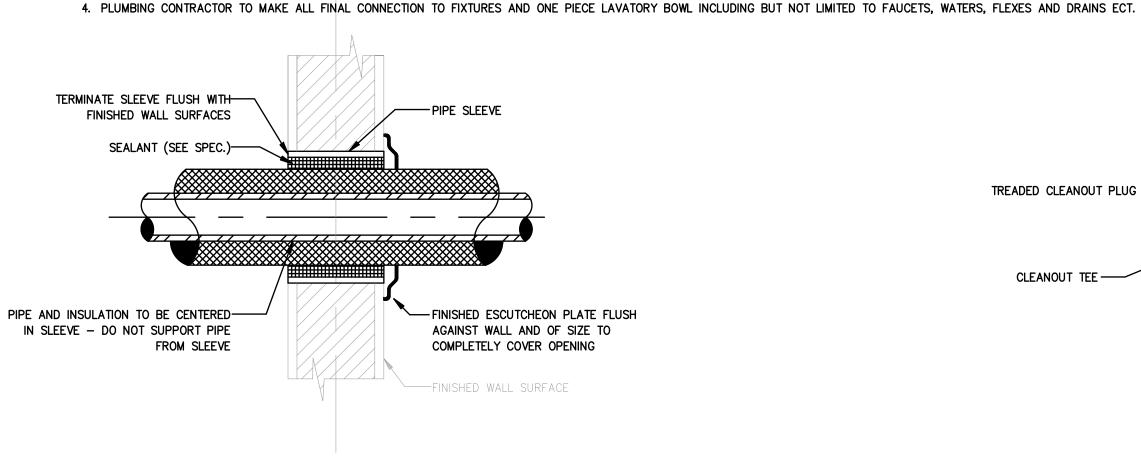
	PLUMBING DRAIN SCHEDULE								
MARK		GENERA	REMARKS						
WIZKK	DESCRIPTION	MANUFACTURER	MODEL NUMBER	LOCATION	NEWANNS				
<u>FD</u>	FLOOR DRAIN	JAY R SMITH	#2005Y-CP W/ PRIMER ADAPTOR ON TAILPIECE #2697C	TOILET ROOMS	C.I. BODY, 3" OUTLET SIZE NO-HUB, 6" ROUND TYPE POLISHED CHROME STRAINER, PROVIDE TG ELASTOMETRIC WATERLESS TRAP GUARD AND PRIMER CONNECTION WITH ADAPTOR TO AVOID TRENCHING THE SLAB.				

NOTES:

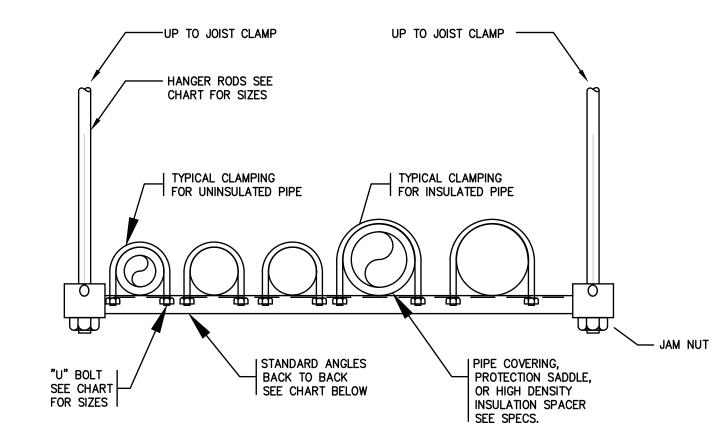
- 1. COORDINATE FLOOR DRAIN LOCATIONS WITH BATHROOM PARTITION AND ADA RADIUS.
- 2. COORDINATE FLOOR DRAIN AND BATHROOM TILE AND MORTAR COMPOSITION OPTION ON DRAWINGS PRIOR TO SHOP DWG. SUBMISSION. (IF THERE'S A WATER PROOFING MEMBRANE THAT NEEDS TO BE FLASHED WITH FLOOR DRAIN COLLAR TRENCH ACCORDINGLY)

	PLUMBING FIXTURE & CONNECTION SCHEDULE											
MARK	FIXTURE	MOUNTING	MANUFACTURER	MODEL NO.	TRIM NO.	SUPPORT NO.	TRAP	WASTE	VENT MIN.	CW	HW	REMARKS
<u>P–1</u>	WATER CLOSET	WALL HUNG	"SLOAN"	#ST-2459	#GEM-1 111 SFSM-1.28-HW (W/TRANSFORMER)	JR SMITH #0211-RH-LH-M54	INTEGRAL	4"	2"	1"	-	ADA COMPLIANT VITREOUS CHINA FIXTURE WITH ANTI-MICROBIAL FINISH; 1.28 GPF, SENSOR OPERATED FLUSH VALVE, HARDWIRED, PISTON TYPE, PROVIDE TRANSFORMER. PROVIDE CENTOCO #500STSCC-001 OPEN FRONT SEAT LESS COVER WITH ANTI-MICROBIAL FINISH AND CHECK HINGE.
<u>P–1A</u>	WATER CLOSET ADA	WALL HUNG	"SLOAN"	#ST-2459	#GEM-1 111 SFSM-1.28-HW (W/TRANSFORMER)	JR SMITH #0211-RH-LH-M54	INTEGRAL	4"	2"	1"	-	ADA COMPLIANT VITREOUS CHINA FIXTURE WITH ANTI-MICROBIAL FINISH; 1.28 GPF, SENSOR OPERATED FLUSH VALVE, HARDWIRED, PISTON TYPE, PROVIDE TRANSFORMER. PROVIDE CENTOCO #500STSCC-001 OPEN FRONT SEAT LESS COVER WITH ANTI-MICROBIAL FINISH AND CHECK HINGE.
<u>P-2</u>	URINAL	WALL HUNG	"SLOAN"	#SU-1009	#GEM-2 186 SFSM-1.0-XL-HW (W/TRANSFORMER)	JR SMITH #0614	INTEGRAL	2"	2"	3/4"	-	.125 GPF, SENSOR OPERATED FLUSH VALVE, HARDWIRED, PISTON TYPE, PROVIDE TRANSFORMER. (COORDINATE EXISTING CARRIER FOR COMPLIANCE CARRY THE PRICE OF A NEW CARRIER AND BLOCK WALL DEMOLITION SHOULD IT REQUIRE REPLACEMENT).
<u>P-2A</u>	URINAL ADA	WALL HUNG	"SLOAN"	#SU-1009	#GEM-2 186 SFSM-1.0-XL-HW (W/TRANSFORMER)	JR SMITH #0614	INTEGRAL	2"	2"	3/4"	-	.125 GPF, SENSOR OPERATED FLUSH VALVE, HARDWIRED, PISTON TYPE, PROVIDE TRANSFORMER. (COORDINATE EXISTING CARRIER FOR COMPLIANCE CARRY THE PRICE OF A NEW CARRIER AND BLOCK WALL DEMOLITION SHOULD IT REQUIRE REPLACEMENT).
<u>P-3</u>	LAVATORY	COUNTER TOP	REFER TO ARCHITECTURAL SCHEDULES FOR BOWLS	-	#ETF-80-4-BOX- TEE-CP5GPM- MLM-IR-FCT W/ HARDWIRED AND PIGGYBACK	N/A	1-1/2"x 1-1/2"	1-1/2"	1-1/2"	3/4"	3/4"	ADA COMPLIANT FIXTURE; PROVIDE DRAIN BODY, CHROME PLATED P-TRAP, TAILPIECE, GRID DRAIN STRAINER, ANGLE STOPS, ESCUTCHEONS AND BRAIDED STEEL SUPPLIES WITH ADA COVER AND/OR WRAPS, PROVIDE TAILPIECE, TRAP, "J" BEND AND OFFSET BASED ON ARCHITECTURAL DETAILS. (PROVIDE DEDICATED MIXERS SIMILAR TO "POWERS" LFG-480 DOWN TO .25 GPC)
<u>P–3A</u>	LAVATORY ADA	COUNTER TOP	REFER TO ARCHITECTURAL SCHEDULES FOR BOWLS	-	#ETF-80-4-BOX- TEE-CP5GPM- MLM-IR-FCT W/ HARDWIRED AND PIGGYBACK	N/A	1-1/2"x 1-1/2"	1-1/2"	1-1/2"	3/4"	3/4"	ADA COMPLIANT FIXTURE; PROVIDE DRAIN BODY, CHROME PLATED P-TRAP, TAILPIECE, GRID DRAIN STRAINER, ANGLE STOPS, ESCUTCHEONS AND BRAIDED STEEL SUPPLIES WITH ADA COVER AND/OR WRAPS, PROVIDE TAILPIECE, TRAP, "J" BEND AND OFFSET BASED ON ARCHITECTURAL DETAILS. (PROVIDE DEDICATED MIXERS SIMILAR TO "POWERS" LFG-480 DOWN TO .25 GPC)
<u>P-4</u>	MOP BASIN	FLOOR MOUNTED	"STERN WILLIAMS"	#EB-54	#T-15-VB #T-35 #T-40 #T-BP	N/A	3"x 3"	1-1/2"	1-1/2"	3/4"	3/4"	COORDINATE ACTUAL DIMENSION OF BASIN WITH AVAILABLE WALL DIMENSIONS BEFORE ORDERING, COORDINATE ANY TILE FINISH REQUIRED BYT LOCAL CODE. PROVIDE WITH STEEL STRAINER #1453BB; INSTALLATION REQUIRES 1/2" LAYER OF MORTAR AND 1/4" CLEARANCE BETWEEN BASIN AND WALL

- 1. PLUMBING CONTRACTOR SHALL COORDINATE SPECIFIED COUNTER LAVATORY WITH MILLWORK CONSTRUCTION DRAWINGS PRIOR TO PURCHASE OF ANY PLUMBING FIXTURES, AND SUBMIT MILLWORK DRAWINGS WITH FIXTURE SHOP DRAWINGS FOR REVIEW AND APPROVAL.
- 2. MOUNTING HEIGHTS FOR ALL FIXTURES SHALL BE AS INDICATED AND DIRECTED BY ARCHITECT.
- 3. ALL EXPOSED TRAP ASSEMBLIES AND WATER SUPPLIES TO BE INSULATED COORDINATE WITH ARCHITECTURAL DETAILS BEFORE ORDERING COVERS, SHIELDS, TRAP ASSEMBLIES ECT..

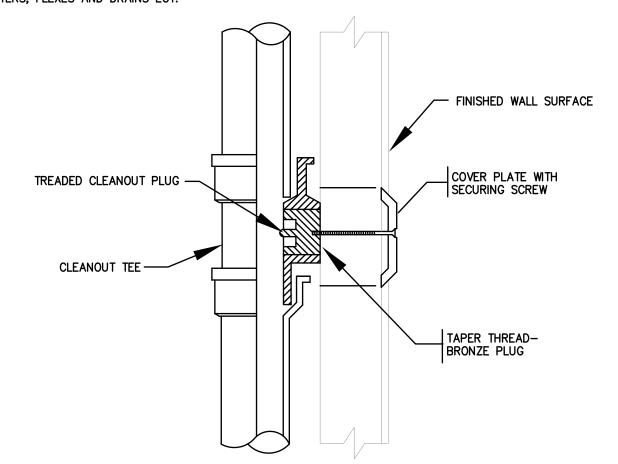






	SIZING FOR SPANS UP TO OAD EQUALLY DISTRIBUTED		PIPE SIZE	"U" BOLT
LOAD ON TRAPEZE	ANGLE SIZE BACK TO BACK	HANGER ROD SIZE		SIZE
LB.	BACK TO BACK	NOD SIZE	UP TO 1"	1/4"
0 - 500	1 1/2" x 1 1/2" x 1/4"	3/8"	1 1/4" TO 4"	3/8"
600 - 1200	2" × 2" × 1/4"	1/2"	6" TO 10"	5/8"
1300 - 2000	2 1/2" x 2 1/2" x 1/4"	5/8"	12"	3/4"

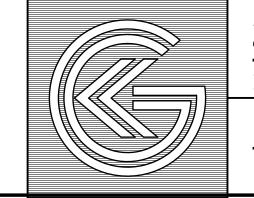




CLEANOUT FOR DRAINAGE PIPING CONCEALED BEHIND WALLS NOT TO SCALE

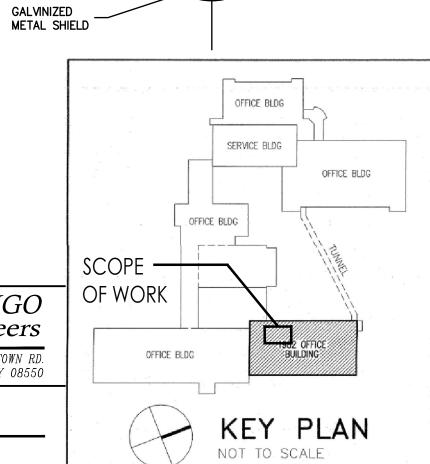
PIPE HANGER SCHEDULE							
PIPE	SHI	ELD	ROD	MAX. PIPE SUPPORT SPAN			
DIA.	LENGTH	THICKNESS	DIA.	STEEL	COPPER	CAST IRON	
1/2"	12"	.048"	3/8"	8'-0"	6 ' -0 "	_	
3/4"	12"	.048"	3/8"	8'-0"	6 ' -0 "	_	
1"	12"	.048"	3/8"	8'-0"	6 ' -0 "	_	
1-1/4"	12"	.048"	3/8"	8' - 0"	6 ' -0 "	_	
1-1/2"	12"	.048"	1/2"	10'-0"	8'-0"	5'-0"	
2"	12"	.048"	1/2"	10'-0"	8'-0"	5'-0"	
2-1/2"	12"	.048"	1/2"	10'-0"	8 ' -0 "	_	
3"	12"	.048"	1/2"	12'-0"	10'-0"	5'-0"	
4"	12"	.060"	5/8"	12'-0"	10'-0"	5'-0"	
* SHIELD NOT REQUIRED ON INSULATED PIPE							





consulting	en	ıgi	ine	<i>ee1</i>	S
	аптом	N–HIG	GHTST		RD. 550

Frank Tindall, P.E. Professional Engineer NJ 38656



DOUBLE NUT

----- CLEVIS HANGER

THREADED ROD —

Renovations to Second Floor Toilet Rooms at NJM West Trenton Building A - North

New Jersey Manufacturers Insurance Company NJM Project # WT.C.2024.009

301 Sullivan Way, West Trenton, NJ 08628

Draig at Number
Project Number
5578
Project Date
11.08.2024
Checked By
FT
Drawn By
LA
Scale
AS NOTED

NOTES, SCHEDULES AND DETAILS PLUMBING

Revisions

No. Date Description

P401

NATURAL GAS PIPING. STORM WATER PIPING

HANGERS AND SUPPORTS. G. VALVES. H. CUTTING AND ROUGH PATCHING.

REMOVALS. EQUIPMENT

INSULATION.

K. SUBMITTALS PERMITS M. WARRANTY

N. SUPERVISION

RIGGING P. EXCAVATION AND BACKFILL Q. SITE RESTORATION

2. STANDARDS AND CODES

A. NEW JERSEY UNIFORM CONSTRUCTION CODE INTERNATIONAL BUILDING CODE 2021, NEW JERSEY EDITION

NATIONAL STANDARD PLUMBING CODE 2021 INTERNATIONAL FUEL GAS CODE 2021 LOCAL MUNICIPAL UTILITY AUTHORITY

LOCAL WATER COMPANY RULES AND REGULATIONS G. OTHER STATE AND LOCAL AUTHORITIES HAVING JURISDICTION

3. MATERIALS:

A. PIPE AND FITTINGS

1. PIPE

<u>SERVICE</u>	MATERIAL	SCHEDULE	DESIGNATION
SOIL, WASTE & VENT ABOVE GROUND	NO-HUB CAST IRON	STANDARD WEIGHT	CISPI-30-7B
SOIL, WASTE & VENT BELOW GROUND	CAST IRON HUB & SPIGOT	STANDARD WEIGHT	ASTM A-74
COLD & HOT WATER ABOVE GROUND	COPPER	TYPE "L"	ASTM B-88

2. FITTIN	GS			
<u>SERVICE</u>	<u>SIZE</u>	MATERIAL	<u>WEIGHT</u>	TYPE
SOIL, WASTE & VENT ABOVE GROUND	ALL	CAST IRON	STANDARD WEIGHT	NO-HUB ASTM A-48 MG COUPLING ASSEMBLY OR STAINLESS STEEL EQUAL TO CLAMP-ALL
COLD AND HOT WATER ABOVE GROUND	ALL	WROUGHT COPPER	STANDARD	SOLDERED 95/5 TIN & ANTIMONY
STORM WATER	ALL	CAST IRON	STANDARD WEIGHT	NO-HUB ASTM A-48 MG COUPLING ASSEMBLY OR STAINLESS STEEL EQUAL TO CLAMP-ALL
STORM WATER	ALL	CAST IRON	STANDARD WEIGHT	ASTM C-565 65T COMPRESSION

DISSIMILAR METALS: PIPE, FITTINGS, HANGERS, ETC. DISSIMILAR METALS SHALL BE INSULATED AGAINST DIRECT CONTACT WITH EACH OTHER, BY USING A HIGH QUALIT OR GRADE OF DIELECTRIC MATERIAL.

ADHESIVE PRIMER FOR PVC PIPE SHALL CONFORM TO ASTM F656 AND SHALL HAVE A VOC CONTENT OF 550 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).

5. SOLVENT CEMENT FOR PVC PIPE SHALL CONFORM TO ASTM D 2564 AND SHALL HAVE A VOC CONTENT OF 510 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).

B. <u>VALVES</u>

1. BALL VALVES SHALL BE APOLLO, 77-200 SERIES, FULL PORT, SOLDER END WITH TFE TEFLON SEATS AND SEALS WITH STEEL LEVER HANDLES WITH STOPS.

2. LUBRICATED PLUG VALVES SHALL BE NORDSTROM FIGURE 142; TWO BOLT COVER TYPE VALVE, WITH BUNA-N SEALS, OPERATING LEVER, AND STOPS.

C. INSULATION

1. INSULATE ALL DOMESTIC WATER PIPING, FITTINGS AND VALVES.

2. PIPE INSULATION

a. 0.4 LB DENSITY FIBROUS GLASS, ONE-PIECE MOLDED SECTIONAL PIPE COVERING, MAXIMUM K FACTOR 0.26 AT 75°F MEAN TEMPERATURE. OWENS-CORNING CORP. OR APPROVED EQUAL.

REPLACE NORMAL INSULATION INSIDE HANGER SHIELDS WITH INCOMPRESSIBLE INSULATING BLOCK INSIDE JACKET, OR USE LONGER SHIELDS AT HANGER.

JACKETS: FIRE RETARDANT ALL SERVICE OR PURPOSE TYPE. LAMINATE OF VINYL COATED WHITE KRAFT FACING, GLASS REINFORCING AND ALUMINUM FOIL.

d. ADHESIVES AND COATINGS: FOSTER OR APPROVED EQUAL AS FOLLOWS:

ADHESIVES: LAPS, 85-75; SELF SEALING LAPS MAY BE USED.

FITTING, VALVE AND EQUIPMENT COATINGS: COLD WATER, 30-35; HOT WATER, 30-36.

e. FASTENING DEVICES

WIRE: MINIMUM 16 GAUGE COPPER CLAD ANNEALED

2. TAPE: PRESSURE SENSITIVE.

f. INSULATION AND JACKETS

HOT & COLD WATER: 1" THICK WITH VAPOR BARRIER

g. FLAME & SMOKE SPREAD

1. FLAME SPREAD INDEX OF 20 OR LESS

SMOKE DEVELOPED INDEX OF 50 OR LESS

A. HANGERS AND SUPPORTS

4. HANGERS AND SUPPORTS

1. SHALL CONFORM TO NATIONAL STANDARD PLUMBING CODE 2021, WITH SEISMIC RESTRAINTS AS REQUIRED FOR NEW CONSTRUCTION UNDER 2021 INTERNATIONAL BUILDING CODE

NATURAL GAS PIPING SYSTEM SHALL CONFORM TO THE INTERNATIONAL FUEL GAS CODE 2021. REFER TO TABLE 415.1

3. PIPE HANGERS SHALL BE SPACED NOT GREATER THAN 10'-0" O.C. WITH 1/2" MINIMUM ROD SIZE.

4. ALL PIPE HANGERS, SUPPORTS, & HARDWARE SHALL BE GALVANIZED. 5. PIPE SUPPORTS SHALL BE OF THE FOLLOWING TYPE AND FIGURE NUMBER,

MANUFACTURED BY C&P, F&M, GRINNELL, MIRO INDUSTRIES OR APPROVED

a. BEAM CLAMP:

b. CLEVIS HANGER:

1. C&P - FIGURE 268

2. F&M - FIGURE 282

1. C&P - FIGURE 100

2. F&M - FIGURE 239

3. GRINNELL – FIGURE 260

c. RIGID TRAPEZE:

1. C&P - FIGURE 371

2. GRINNELL – STD. 45

d. U-BOLT:

1. C&P - FIGURE 283 2. F&M - FIGURE 176

3. GRINNELL – FIGURE 137

e. RISER CLAMP:

1. C&P - FIGURE 89 OR 126

2. F&M - FIGURE 241

GRINNELL – FIGURE 261

C&P - FIGURE 304

f. DOUBLE-BOLT PIPE CLAMP:

2. F&M - FIGURE 261

3. GRINNELL – FIGURE 295

B. PIPE INSERTS

INSERTS SHALL BE PRESET CONCRETE INSERTS WITH STEEL REINFORCED RODS THROUGH THE INSERT AND BOTH ENDS HOOKED OVER THE REINFORCED MESH. INSERTS SHALL BE OF INDIVIDUAL TYPE OF MALLEABLE IRON CONSTRUCTION WITH ACCOMMODATION FOR REMOVABLE NUTS AND THREADED RODS UP TO 3/4" DIAMETER. PERMITTING LATERAL ADJUSTMENT, EXCEPT AS OTHERWISE NOTED. INDIVIDUAL INSERTS SHALL BE GRINNELL FIG. 282 UP TO 5" PIPE AND CONDUIT, FIG. 282, 6" AND UP TO 8" PIPE AND CONDUIT, FIG. 152 ABOVE 8" AND UP TO 12" PIPE AND CONDUIT. FOR FIGURES 282 AND 152, THEY SHALL COME WITH AN OPENING AT THE TIP TO ALLOW REINFORCING RODS UP TO 1/2" DIAMETER TO BE PASSED THROUGH THE INSERT BODY. RODS SHALL EXTEND A MINIMUM OF 4" ON EITHER SIDE OF THE INSERT. PIPES LARGER THAN 12" SHALL BE SUSPENDED FROM STEEL MEMBERS ONLY.

1. FOR ALL INSULATED PIPE FURNISH CLEVIS HANGERS WITH WELDED SHIELDS AND EQUAL TO C&P, INC., FIG. 100 SH.

A. SHOP DRAWINGS SHALL BE REQUIRED FOR:

ALL EQUIPMENT, MATERIALS, MEANS & METHODS INTENDED FOR USE UNDER THIS CONTRACT.

B. PRIOR TO DELIVERY TO JOB SITE, BUT SUFFICIENTLY IN ADVANCE OF REQUIREMENTS

OF ALL EQUIPMENT, FIXTURES, MATERIALS, PIPING, SLEEVES, WIRING DIAGRAMS, ETC. AND FURTHER OBTAIN WRITTEN COMMENTS OF "APPROVED" OR "APPROVED AS NOTED" FOR SAME FROM ARCHITECT BEFORE INSTALLING ANY OF THESE ITEMS.

C. SHOP DRAWINGS SHALL CONSIST OF MANUFACTURER'S CERTIFIED SCALE DRAWINGS. CUTS, OR CATALOGS, INCLUDING DESCRIPTIVE LITERATURE AND COMPLETE CERTIFIED CHARACTERISTICS OF EQUIPMENT, FIXTURES, ETC. SHOWING DIMENSIONS, CAPACITY, CODE REQUIREMENTS, MOTOR AND DRIVE TESTING, AS INDICATED IN NECESSARY TO ALLOW ARCHITECT AMPLE TIME FOR REVIEW, SUBMIT SHOP DRAWINGS THE CONTRACT DOCUMENTS.

D. CERTIFIED PERFORMANCE CURVES FOR ALL PUMPING EQUIPMENT SHALL BE

SUBMITTED FOR REVIEW. E. SAMPLES, DRAWINGS, SPECIFICATIONS, CATALOGS, ETC., SUBMITTED FOR REVIEW SHALL BE PROPERLY LABELED INDICATING PROJECT NAME, AND SPECIFIC SERVICE FOR WHICH MATERIAL OR EQUIPMENT IS TO BE USED.

FAILURE TO SUBMIT SHOP DRAWINGS IN AMPLE TIME FOR CHECKING SHALL NOT ENTITLE AN EXTENSION OF CONTRACT TIME, AND NO CLAIM FOR EXTENSION BY REASON OF SUCH DEFAULT SHALL BE ALLOWED.

G. PRIOR TO SUBMISSION OF SHOP DRAWINGS CONTRACTOR SHALL THOROUGHLY CHECK EACH SHOP DRAWING, REJECT THOSE NOT CONFORMING TO THE SPECIFICATIONS, AND INDICATE BY SIGNED, WRITTEN DECLARATION THAT THE SHOP DRAWINGS SUBMITTED MEET CONTRACT REQUIREMENTS.

H. THE COMMENT "APPROVED" OR "APPROVED AS NOTED" RENDERED ON SHOP DRAWINGS SHALL NOT BE CONSIDERED AS A GUARANTEE OF MEASUREMENTS OR BUILDING CONDITIONS. WHERE DRAWINGS ARE REVIEWED, SAID REVIEW DOES NOT IN ANY WAY RELIEVE THE RESPONSIBILITY, OR NECESSITY, OF FURNISHING MATERIAL OR PERFORMING WORK AS REQUIRED BY THE CONTRACT DRAWINGS AND SPECIFICATIONS.

"APPROVED AS NOTED" MEANS, UNLESS OTHERWISE NOTED ON THE DRAWINGS, TO APPROVE FOR CONSTRUCTION, FABRICATION, AND/OR MANUFACTURE SUBJECT TO THE PROVISION THAT THE WORK SHALL BE CARRIED OUT IN COMPLIANCE WITH ALL ANNOTATIONS AND/OR CORRECTIONS INDICATED ON THE SHOP DRAWINGS AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

WHERE THE COMMENT "APPROVED AS NOTED" INCLUDES DIRECTION TO THE CONTRACTOR TO RESUBMIT CORRECTED SHOP DRAWING FOR RECORD, FAILURE TO COMPLY WITH THE INSTRUCTION TO RESUBMIT RECORD COPY SHALL RENDER THE APPROVAL NULL AND VOID.

6. PERMITS & FEES:

A. OWNER SHALL ACQUIRE ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE EXECUTION OF THIS CONTRACT.

7. WARRANTY:

A. CONTRACTOR SHALL:

UNCONDITIONALLY WARRANTY HIS WORK TO BE FREE OF DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER.

a. ANY DEFECTS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE OWNER AT NO ADDITIONAL COST.

ALL EQUIPMENT SHALL CARRY THE ORIGINAL MANUFACTURER'S WARRANTY AS SPECIFIED IN THE MANUFACTURER'S WARRANTY DOCUMENTATION PROVIDED WITH THE EQUIPMENT. WARRANTY PERIOD SHALL BE CALCULATED FROM THE DATE OF FINAL

a. ANY DEFECTS SHALL BE REPAIRED OR REPLACED AT THE DISCRETION OF THE MANUFACTURER.

EXECUTION:

A. CONCEALED PIPING

ACCEPTANCE BY THE OWNER.

ALL PIPING INSTALLED IN FINISHED AREAS SHALL BE COMPLETELY CONCEALED WITHIN HUNG CEILINGS, FURRING, SOFFITS, PIPE SPACES, ETC.

WHERE COMPLETE CONCEALMENT IS IMPOSSIBLE BECAUSE OF OBSTRUCTIONS SUCH AS BEAMS, DUCTS, LIGHTS, PIPING, ETC., DO NOT INSTALL ANY WORK BEFORE FIRST CONSULTING WITH THE ARCHITECT, AND HIS INSTRUCTIONS (WRITTEN OR ON REVISED DRAWINGS) SHALL BE FOLLOWED.

ALL PIPING, ETC. SHALL BE COMPLETELY TESTED AND APPROVED BY ALL AUTHORITIES HAVING JURISDICTION BEFORE ANY CONCEALMENT BEGINS.

4. ALL VENT PIPING SHALL BE SLOPED BACK TO DRAINAGE SYSTEM.

ALL BACKFLOW PREVENTION DEVICES SHALL INCLUDE STRAINER AND AND ISOLATION VALVES UNLESS OTHERWISE INDICATED. ALL BACKFLOW PREVENTION DEVICES SHALL BE TESTED IN ACCORDANCE WITH CODE UPON INSTALLATION.

PROVIDE ACCESS PANELS IN NON ACCESSIBLE CEILINGS AND WALLS FOR ALL VALVES, SHOCK ABSORBERS, CLEAN OUTS, AND ALL OTHER ITEMS THAT REQUIRE ACCESS TO PROPERLY MAINTAIN OR SERVICE. ACCESS PANEL TYPE AND LOCATION SHALL BE APPROVED BY ARCHITECT PRIOR TO INSTALLATION.

11. ALTERATION WORK

A. ALL EQUIPMENT, PIPING, PLUMBING FIXTURES. ETC. TO BE REMOVED SHALL BE DISPOSED OF, TURNED OVER TO OWNER OR SALVAGED AS DIRECTED. THEY SHALL NOT BE REMOVED FROM THE PREMISES WITHOUT APPROVAL.

B. ALL PIPING TO BE REMOVED SHALL BE PROPERLY PLUGGED OR CAPPED SO THAT, UPON COMPLETION OF ALL NEW WORK, ALL ABANDONED PIPING SHALL BE CONCEALED IN FINISHED AREAS.

NO DEAD ENDS SHALL BE LEFT ON ANY PIPING UPON COMPLETION

D. EXISTING EXPOSED PIPING NOT REUSED AND NOT SPECIFICALLY NOTED OR SHOWN ON DRAWING TO BE ABANDONED SHALL BE COMPLETELY REMOVED.

E. THE EXISTING SYSTEM SHALL BE LEFT IN PERFECT WORKING ORDER UNTIL COMPLETION OF ALL NEW WORK.

F. LOCATIONS AND SIZES OF EXISTING PIPING ARE APPROXIMATE. EXACT SIZES AND LOCATIONS OF ALL EXISTING PIPING SHALL BE VERIFIED ON THE JOB.

G. NO REMOVED EXISTING PIPING, ETC. SHALL BE REUSED.

H. DO NOT INTERRUPT ANY OF THE SERVICES OF THE EXISTING BUILDING, NOR INTERFERE WITH THE SERVICES IN ANY WAY WITHOUT EXPRESS PERMISSION OF THE OWNER. SUCH INTERRUPTIONS AND INTERFERENCES SHALL BE MADE AS BRIEF AS POSSIBLE AND ONLY AT THE DESIGNATED TIMES.

UNDER NO CIRCUMSTANCES SHALL WORKMEN BE PERMITTED TO USE ANY PART OF THE BUILDING AS A SHOP, EXCEPT PARTS DESIGNATED FOR SUCH PURPOSES.

REROUTE OR REMOVE ALL EXISTING PIPING EXPOSED TO VIEW WHERE NECESSARY TO AVOID NEW EQUIPMENT, STRUCTURAL OR MASONRY WORK AS REQUIRED BY THE PROPOSED ALTERATIONS.

12. TESTING

FURNISH ALL TESTING INSTRUMENTS, GAUGES, PUMPS, AND ALL OTHER EQUIPMENT NECESSARY TO PERFORM TESTS.

B. ALL TESTS SHALL BE MADE IN THE PRESENCE OF THE REPRESENTATIVES OF THE ARCHITECT, THE OWNER AND THE PLUMBING INSPECTOR. GIVE NOT LESS THAN 5 DAYS NOTICE.

C. PRESSURE TEST

DRAINAGE AND VENT PIPING: TEST WITH WATER AT 10

2. DOMESTIC WATER: TEST WITH WATER AT 125 PSI.

D. WATER QUALITY TEST

1. UPON COMPLETION OF WORK CONTRACTOR SHALL TEST WATER IN NEW

PIPING SYSTEM FOR LEAD CONTENT.

a. TESTING SHALL CONFORM TO ASTM D3559-15 AND "TECHNICAL NOTES ON DRINKING WATER METHODS" (EPA/600/R-94/173). b. COPIES OF TEST REPORT SHALL BE PROVIDED TO A/E FOR REVIEW

PRIOR TO CLOSE-OUT. c. IF LEAD LEVEL IS DETERMINED TO BE 15 PPB OR HIGHER, CONTRACTOR

IMMEDIATELY INFORM A/E OF LEAD LEVEL AND PROVIDE COPY OF

WRITTEN REPORT. COLLECT SAMPLE IMMEDIATELY DOWNSTREAM OF WATER SERVICE ENTRY FOR COMPARATIVE TESTING.

INFORM A/E OF TEST RESULTS OF COMPARATIVE SAMPLE. d. LEAD LEVEL MUST BE LESS THAN 15 PPB FOR FINAL ACCEPTANCE BY

13. DISINFECTION OF DOMESTIC WATER PIPING

NJM TO DESIGNATE CLEANING PROCEDURES IN COMPLIANCE WITH LOCAL CODES.

14. PIPE INSTALLATION

MODIFY PIPING INSTALLATION TO SUIT BUILDING CONDITIONS AND TO AVOID INTERFERENCES WITH OTHER TRADES, MAINTAINING ACCESS TO ALL PARTS OF THE PIPING SYSTEMS AND DUCTWORK AND TO MAINTAIN PROPER PITCH.

B. RUN PIPING GENERALLY PARALLEL TO THE AXIS OF THE BUILDING. ARRANGED TO CONFORM TO THE BUILDING REQUIREMENTS AND TO SUIT THE NECESSITIES OF CLEARANCE OF DUCTS, FLUES, CONDUITS AND WORK OF OTHER TRADES AND CLOSE TO CEILING OR OTHER CONSTRUCTION AS PRACTICAL, FREE OF TRAPS OR BENDS.

PROVIDE ADDITIONAL OFFSETS, FITTINGS, VALVES, DRAINS, ETC. WHERE REQUIRED BY CONSTRUCTION AND WORK OF OTHER

RUN IN CHASES, RECESSES, SHAFTS, HUNG CEILINGS AND BEAM CUTS WHERE APPLICABLE. DO NOT COVER BEFORE EXAMINATION AND TESTING. NO PIPING IN FLOOR FILL UNLESS NOTED OR APPROVED.

RUN PARALLEL WITH OR AT RIGHT ANGLES TO WALLS AND OTHER PIPING, NEATLY SPACED AND WITH PLUMB RISERS. MAINTAIN MAXIMUM HEADROOM.

PROVIDE REDUCING FITTINGS FOR CHANGES IN PIPE SIZE. NO

BUSHINGS ARE PERMITTED. G. RUN WATER PIPING FREE OF TRAPS. GRADE AND VALVE FOR

COMPLETE CONTROL AND DRAINAGE OF SYSTEM. VALVES SHALL NOT BE INSTALLED WITH THE OPERATING HANDLE POINTING DOWNWARD.

MANUFACTURER'S NAMEPLATE, NAME OR TRADEMARK, SHALL BE PERMANENTLY AFFIXED TO ALL EQUIPMENT AND MATERIAL FURNISHED UNDER THIS SPECIFICATION. WHERE SUCH EQUIPMENT IS IN A FINISHED OCCUPIED SPACE, THE NAMEPLATE SHALL BE IN A CONCEALED BUT ACCESSIBLE LOCATION. THE NAMEPLATE OF A SUBCONTRACTOR OR DISTRIBUTOR WILL NOT BE ACCEPTABLE.

PROVIDE FOR EACH ITEM OF EQUIPMENT, INCLUDING PANELBOARDS, DISCONNECTS, BREAKERS, STARTERS, SWITCHES, AND ALL CONTROL DEVICES, PUMPS, FANS, COMPRESSORS, BOILERS, ETC., A PERMANENTLY ATTACHED NAMEPLATE MADE OF BLACK SURFACE. WHITE CORE FURNISHING EQUIPMENT SHALL PROVIDE NAMEPLATE. PNEUMATIC ELECTRIC AND MECHANICALLY ACTUATED GAUGES SHALL HAVE A BRIEF, BUT COMPLETE DESCRIPTION OF THEIR FUNCTION. STATING THE AIR PRESSURE OR VOLTAGE RANGE ALONE IS NOT ACCEPTABLE. NAMEPLATES SHALL BE A MINIMUM OF 3" LONG BY 1-1/2" WIDE AND SHALL BEAR THE EQUIPMENT NAME AND ITEM NUMBER OF 1/2" HIGH WHITE LETTERS AS DESIGNATED IN THE EQUIPMENT SCHEDULE. MOUNTING SCREWS SHALL HAVE CHROME PLATED ACORN HEADED SCREWS.

FURNISH AND ATTACH TO EACH VALVE AS HEREINAFTER SPECIFIED, A 1-1/2" DIAMETER BRASS TAG WITH 1/2" INDENTED NUMERALS FILLED WITH DURABLE BLACK COMPOUND. TAGS SHALL BE SECURELY ATTACHED TO STEMS OF VALVES WITH COPPER WIRE AND "S" HOOKS.

VALVE TAG SCHEDULE

<u>SERVICE</u> TAG DESIGNATION COLD WATER CW HOT WATER HW _ DEG. F NATURAL GAS SANITARY SEWER <NONE> SOIL PIPING <NONE> WASTE PIPING <NONE> VENT PIPING <NONE> SAFETY VALVE S.V.D. DISCHARGE

VALVE CHARTS SHALL CONSIST OF SCHEMATIC DRAWINGS OF PIPING LAYOUTS, SHOWING AND IDENTIFYING EACH VALVE AND DESCRIBING THE FUNCTION. UPON COMPLETION OF THE WORK, ONE (1) COPY OF EACH CHART, SEALED TO RIGID BACKBOARD WITH CLEAR LACQUER PLACED UNDER GLASS AND FRAMED, SHALL BE HUNG IN A CONSPICUOUS LOCATION IN THE MAIN EQUIPMENT ROOM, UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. TWO (2) ADDITIONAL UNMOUNTED COPIES IN 8-1/2" X 11" LEATHER RING BINDERS SHALL BE DELIVERED TO THE ARCHITECT. ALSO FURNISH THREE (3) COPIES OF SCHEMATIC FLOW CHART WITH CORRESPONDING VALVE NUMBERS NOTED

<NONE>

ON CHART.

RELIEF VENT

M. PROVIDE TAGS FOR THE FOLLOWING VALVES: 1. ZONE CONTROL, BYPASS, SHUT OFF, CHECK AND BALANCING VALVES.

2. BUILDING AND AREA SHUT OFF AND BALANCING VALVES.

CONTROL, BY PASS, SHUT OFF, BALANCING AND DRAIN VALVES FOR MAJOR PIECES OF EQUIPMENT SUCH AS BOILERS, DOMESTIC HOT WATER HEATERS, HEAT EXCHANGERS, REFRIGERATION MACHINES, PUMPS, HEATING, VENTILATING AND AIR CONDITIONING UNITS, COOLING TOWERS, ETC.

4. SYSTEM DRAIN VALVES, SAFETY AND RELIEF VALVES.

IDENTIFICATION SHALL BE IN ACCORDANCE WITH "SCHEME FOR IDENTIFICATION OF PIPING SYSTEM ANSI A13.1" AND OSHA SAFETY COLOR REGULATION.

MARKERS SHALL BE SNAP ON TYPE AS MANUFACTURED BY SETON NAMEPLATE CORP., NEW HAVEN, CONN. (SETMARK SYSTEM), BUNTING STAMP CO. INC., PITTSBURGH, P.A. OR APPROVED EQUAL. MARKERS SHALL COMPLETELY ENCIRCLE THE PIPE WITH A SUBSTANTIAL OVERLAP. NO ADHESIVE SHALL BE USED. THEY SHALL BE MANUFACTURED OF U.L. APPROVED, SELF EXTINGUISHING PLASTIC. WHEN THE PIPE INCLUDING INSULATION (IF ANY) IS LARGER THAN 6" DIAMETER AND LARGER, MARKERS SHALL BE STRAP ON TYPE.

WHERE PIPE IS TO BE LEFT BARE IT SHALL BE PAINTED WITH TWO (2) COATS OF SELF-PRIMING, MARINE-GRADE SILOXANE EPOXY PAINT IN GLOSS COLORS AS REQUIRED BY ITEM Q, BELOW, AND STENCIL AND VALVE TAG SCHEDULE.

COLOR	NAME	FEDERAL STANDARD NUMB
WHITE	INSIGNIA WHITE	17875
BLACK	OSHA SAFETY BLACK	17038
RED	OSHA SAFETY RED	11120
YELLOW	OSHA SAFETY YELLOW	13591
GREEN	OSHA SAFETY GREEN	14120
BLUE	OSHA SAFETY BLUE	15102
ORANGE	OSHA SAFETY ORANGE	12300
PURPLE	OSHA SAFETY PURPLE	17142
BROWN	NASA SAFETY BROWN	10080
GRFY	MECHANIC GREY	16187

THE SCHEDULE BELOW. LETTERING SHALL BE LOCATED NEAR EACH 40' (10' ON FIRE LINES) ON STRAIGHT RUNS OF PIPE. PROVIDE FLOW ARROWS FOR ALL PIPING AT EACH MARKER. ADJACENT TO THE LEGEND, STENCIL THE SIZE OF THE PIPE. LETTER COLORS ARE AS FOLLOWS:

RED WITH WHITE LETTERING

4. YELLOW WITH BLACK LETTERING

BLUE WITH WHITE LETTERING

8. PURPLE WITH WHITE LETTERING

STENCIL DESIGNATION DOMESTIC COLD WATER DOMESTIC COLD WATER DOMESTIC HOT WATER _ DEG. F DOMESTIC HOT WATER

NATURAL GAS

SAN. SEWER SANITARY SEWER STORM SEWER STORM SEWER <u>SERVICE</u>

STORM SEWER

KELTER & GILLIGO

consulting engineers

P.O. BOX 777, 196 PRINCETON-HIGHTSTOWN RD.

PRINCETON JUNCTION NEW JERSEY 08550

Frank Tindall, P.E.

Professional Engineer

DOMESTIC COLD WATER GREEN DOMESTIC HOT WATER GREEN DOMESTIC HOT WATER RETURN GREEN HWR _ DEG. F NATURAL GAS SANITARY SEWER GREEN <NONE>

PURPLE <NONE>

 COLOR SPECIFICATIONS: <u>MBER</u>

PIPE SHALL BE LETTERED AND VALVES TAGGED IN ACCORDANCE WITH VALVE AND BRANCH CONNECTION AND AT INTERVALS OF NOT OVER

1. WHITE WITH BLACK LETTERING

2. BLACK WITH WHITE LETTERING

5. GREEN WITH WHITE LETTERING

7. ORANGE WITH BLACK LETTERING

BROWN WITH WHITE LETTERING

10. GREY WITH WHITE LETTERING

R. STENCIL AND VALVE TAG SCHEDULE

DOMESTIC HOT WATER RETURN DOMESTIC HOT WATER RETURN _ DEG. F NATURAL GAS

TAG DESIGNATION HWS _ DEG. F

> OFFICE BLDG SERVICE BLDG OFFICE BLDG OFFICE BLDG OFFICE BLDG

> > NOT TO SCALE

Renovations to Second Floor

Toilet Rooms at NJM West Trenton Building A - North New Jersey Manufacturers

WT.C.2024.009 301 Sullivan Way, West Trenton, NJ

NJM Project #

Insurance Company

11.08.2024

SPECIFICATIONS PLUMBING

AS NOTED