

MEMPHIS INTERNATIONAL AIRPORT ID OFFICE EA & WA AREA SANITARY SEWER REPAIR

2491 Winchester Rd, Memphis, TN 38116

BID SET April 9, 2021



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PROJECT NOTES

- CONTRACTOR'S FIELD SUPERINTENDENT MUST BE PRESENT AND RESPONSIBLE FOR OVERSEEING THE WORK PROGRESS WHEN ANY REPAIR WORK IS PERFORMED. FOR THE DURATION OF THE REPAIR PROJECT, CONTRACTOR MUST MAINTAIN AND FURNISH ELECTRONIC DAILY LOG TO PROJECT TEAM AND OWNER DESIGNATED PERSONNEL. DAILY LOG DOCUMENTATION SHALL INCLUDE INFORMATION SUCH AS WEATHER CONDITION, WORK COMPLETED, PROGRESS PICTURES, FIELD CHANGES, CONCEALED CONDITIONS, TRANSITION OF MATERIAL, UNFORESEEN DAMAGES, INCIDENTS ETC. THIS INFORMATION SHALL BE INCLUDED AS PART OF THE CLOSEOUT DOCUMENT AT THE END OF THE PROJECT.
- THE GC SHALL PLAN AND SCHEDULE THE PROGRESSION OF THE WORK SO THAT FINISHED AREAS DO NOT HAVE TO BE OPERATED ON OR OTHERWISE USED AS ROUTES FOR MATERIAL TRANSPORTATION IN ORDER TO REACH REMAINING WORK. SCHEDULE ANY PREPARATION WORK TO MINIMIZE THE RISK OF DAMAGE, COORDINATE WITH OWNER THE SEQUENCE OF DEMOLITION AND CONSTRUCTION PRIOR TO STARTING OF WORK.
- CONTRACTOR SHALL SCHEDULE THE WORK PER MANUFACTURER RECOMMENDATION AND SPECIFICATION. CONTRACTOR WILL BE FULLY RESPONSIBLE FOR WATER DAMAGE TO THE PROPERTY DUE TO UNFINISHED OPEN WORK.
- COORDINATE THE COMPATIBILITY OF THE PREPARATION WORK WITH THE REQUIREMENTS OF THE MATERIALS AND PROCEDURES SPECIFIED FOR THE NEW WORK. SCHEDULE ALL PREPARATION WORK TO COINCIDE AS CLOSELY AS PRACTICABLE WITH THE INSTALLATION OF NEW MATERIALS.
- ANY DAMAGE TO EXISTING SITE, INCLUDING BUT NOT LIMITED TO PAVEMENT SIDEWALK, ETC., USED AS HAUL ROUTES OR ACCESS ROUTES SHALL BE CONSIDERED THE RESPONSIBILITY OF THE CONTRACTOR AND HE/SHE SHALL PROMPTLY REPAIR ANY DAMAGED PAVEMENT TO ITS ORIGINAL CONDITION, TO THE SATISFACTION OF THE OWNER AND ARCHITECT, AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR MUST FOLLOW THE OWNER REQUIREMENTS OF ID BADGING AND ACCESS TO WORK AREA THAT REQUIRE SECURITY CREDENTIALS.
- VERIFY JOB CONDITIONS PRIOR TO BEGINNING WORK. REPORT TO ENGINEER ANY DISCREPANCIES OR OMISSIONS WHICH MAY INTERFERE WITH SATISFACTORY COMPLETION OF WORK. RESOLVE ANY DISCREPANCIES PRIOR TO BEGINNING WORK. VERIFY ALL FIELD MEASUREMENTS, FIELD CONSTRUCTION, INSTALLATION CRITERIA, COORDINATE ALL TRADES AND THE METHODS OF CONSTRUCTION. ALL WORK IS TO CONFORM WITH DRAWINGS AND SPECS. DRAWINGS ARE NOT TO BE SCALED FOR INFORMATION. CONTRACTOR TO VERIFY THE ACTUAL SIZE FOR PROPER INSTALLATION.
- NOT USED.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, APPROVALS, LICENSES, ETC., FOR ALL TRADES. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL LOCAL CODES, ORDINANCES, AND REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR FILING AND SECURING ALL NECESSARY PERMITS, APPROVALS, ETC., FOR ALL TRADES.
- ENSURE THE PREMISES ARE MAINTAINED CLEAN AND FREE OF DEBRIS DURING REPAIR. COORDINATE THE FREQUENCY OF REMOVAL WITH OWNER. FINAL CLEANUP IS THE RESPONSIBILITY OF THE CONTRACTOR. REPAIR, PATCH, TOUCH-UP AND MAINTAIN CLEANING THROUGHOUT THE PROJECT. REMOVE AND DISPOSE OF ALL DEMOLISHED MATERIAL AND OTHER CONSTRUCTION DEBRIS. OWNER'S DUMPSTER(S) OR TRASH CAN(S) SHALL NOT BE FOR DISPOSAL OF ANY CONSTRUCTION WASTE. REPAIR GROUND DAMAGE CAUSED BY TRUCK TRAFFIC.
- CONTRACTOR TO OVERSEE CLEANING AND ENSURE THAT THE PREMISES ARE MAINTAINED AND SECURED DURING CONSTRUCTION. DAILY CLEANUP AND FINAL CLEANUP IS THE RESPONSIBILITY OF THE CONTRACTOR. REPAIR, PATCH TOUCH-UP AND MAINTAIN CLEANING UNTIL ACCEPTANCE. BY OWNER **OWNER RESERVES THE RIGHT TO REJECT ANY COMPLETED WORK THAT HAS NOT BEEN PROPERLY PROTECTED FROM CONSTRUCTION MATERIAL, UNPROTECTED FOOT TRAFFIC OR ANY CONSTRUCTION ACTIVITY HAS POTENTIALLY COMPROMISED THE INTEGRITY OF THE NEW INSTALLATION.**
- NOT USED.
- COORDINATE AND OBTAIN APPROVAL FROM OWNER FOR LOCATION OF DUMPSTER, MATERIAL STAGING, ETC.
- ALL MATERIAL STORED ON SITE SHALL BE PROPERLY STACKED AND PROTECTED TO PREVENT DAMAGE AND DETERIORATION UNTIL USE. FAILURE TO PROTECT MATERIAL MAY BE CAUSE FOR REJECTION OF WORK.
- REMOVE CONSTRUCTION AND GENERAL DEBRIS FROM THE WORK AREA. DISCARD ANY SCREWS, METAL SCRAPS, FOOD, WATER BOTTLES AND MISCELLANEOUS GARBAGE.
- ALL WORK IS TO CONFORM WITH DRAWINGS AND SPECS. DRAWINGS ARE APPROXIMATE ONLY AND NOT TO BE SCALED FOR INFORMATION. PAYMENT WILL NOT BE MADE TO GENERAL CONTRACTOR ON CHANGES OR EXTRAS UNLESS THEY ARE VERIFIED AND APPROVED BY OWNER.
- SHOULD CONFLICT OCCUR IN OR BETWEEN DRAWINGS AND SPECIFICATIONS OR WHERE DETAIL REFERENCES OR CONTRACT DRAWINGS HAVE BEEN OMITTED, CONTRACTOR IS DEEMED TO HAVE ESTIMATED THE MOST EXPENSIVE MATERIALS AND CONSTRUCTION INVOLVED UNLESS THEY HAVE ASKED FOR AND OBTAINED WRITTEN PERMISSION FROM ARCHITECT AS TO WHICH MATERIAL OR METHOD WILL BE REQUIRED.
- SHOULD AN ERROR APPEAR IN THE SPECIFICATIONS OR DRAWINGS NOTIFY THE ARCHITECT AT ONCE FOR INSTRUCTIONS AS TO PROCEDURE. IF CONTRACTOR PROCEEDS WITH WORK AFFECTED WITHOUT INSTRUCTIONS FROM THE ARCHITECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY RESULTING DAMAGE OR DEFECT.
- NO PORTION OF THE WORK REQUIRING A SHOP DRAWING OR SAMPLE SUBMISSION SHALL BE COMMENCED UNTIL THE SUBMISSION HAS BEEN APPROVED BY THE ARCHITECT. ALL SUCH PORTIONS OF THE WORK SHALL BE IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS AND SAMPLES.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING JOB CONDITIONS AND SHALL REPORT TO ENGINEER ANY DISCREPANCIES OR OMISSIONS WHICH WOULD INTERFERE WITH SATISFACTORY COMPLETION OF WORK. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL FIELD MEASUREMENTS, FIELD CONSTRUCTION, INSTALLATION CRITERIA, COORDINATION OF ALL TRADES AND THE METHODS OF CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE A SCHEDULE OF SHOP DRAWINGS, SAMPLES AND CUT SHEETS TO ENGINEER FOR APPROVAL PRIOR TO ORDERING OR FABRICATION. CONTRACTOR'S RESPONSIBILITY FOR ERROR OR OMISSIONS IN SUBMITTAL IS NOT RELIEVED BY A/E REVIEW OF SUBMITTAL. DISRUPTION SHALL BE MINIMAL OUTSIDE PROJECT LIMIT AT ALL TIMES DURING CONSTRUCTION.
- THE EXACT LIMITS OF THE CONTRACTOR'S STAGING AND STORAGE AREA SHALL BE ESTABLISHED BY THE CONTRACTOR WITH THE APPROVAL OF MSCAA.
- CONTRACTOR SHALL EXERCISE ALL SAFETY PRECAUTION DURING SEWER REPAIR WORK. DO NOT ALLOW WASTE MATERIAL TO COLLECT IN CONCENTRATED BUILDUPS AROUND THE WORK AREA. FURNISH PROTECTION OF THE BUILDINGS CONTENTS AND PERSONNEL AT ALL TIMES. COLLECT AND REMOVE DEMOLITION AND WASTE MATERIAL FROM THE WORK AREA IN AN ORDERLY MANNER.
- THE AREAS AROUND THE SEWER REPAIR WORK WILL BE OCCUPIED DURING SEWER REPAIR, THEREFORE, IT IS OF UTMOST IMPORTANCE THAT NO LEAKING OR FLOODING OCCURS DURING THE WORK. COORDINATE ALL MATERIAL, WORKMAN ACCESS, WITH THE OWNER'S REPRESENTATIVE TO MINIMIZE DISRUPTION OF THE OWNER'S USE OF THE FACILITY AND TO MINIMIZE THE THREAT OF LOSS OR DAMAGE TO THE EXISTING FACILITY, ITS CONTENTS, AND OCCUPANTS.
- THE CONSTRUCTION SHALL NOT COMPROMISE SECURITY, LIFE SAFETY OR FIRE SAFETY REQUIREMENTS. ANY WORK AFFECTING CODE REQUIREMENTS SHALL BE COMPLETED IN THE SAME WORK DAY OR TEMPORARY MEASURES SHALL BE TAKEN TO ASSURE SAFETY COMPLIANCE AT ALL TIMES.
- ALL INFILL MATERIAL TO BE CODE APPROVED ONLY. MSCAA WILL ALLOW A TEMPORARY SOLUTION (AT CONTRACTOR EXPENSE) IF ISSUES ARISE ON MATERIAL, BUT ONLY WITH PRIOR APPROVAL ON THE MSCAA PM.
- UNLESS NOTED OTHERWISE, CONTRACT TIME FOR THE SEWER REPAIR PROJECT SHALL BE 45 DAYS. SEE TERMS AND CONDITIONS IN PROCUREMENT REQUIREMENT FOR INFORMATION ABOUT LIQUIDATED DAMAGES.
- ALL WORK THAT WOULD GENERATE EXCESSIVE NOISE SUCH AS DEMOLITION JACK HAMMERING, SAW CUTTING ETC MUST OCCUR AT NIGHT FROM 2200-0500 TO AVOID DISTURBANCE OF THE DAY TIME OPERATION OF THE AIRPORT.
- EMERGENCY CONTACTS - SEE INFO ON DRAWING C-PV2 TO C-PV4.



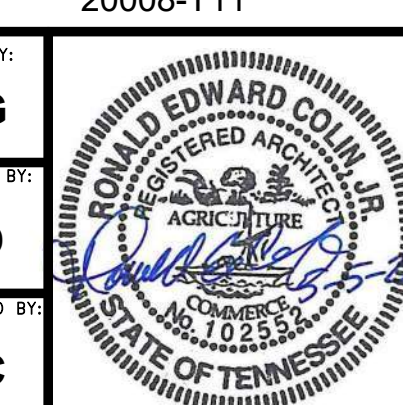
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NO.	DESCRIPTION	DATE

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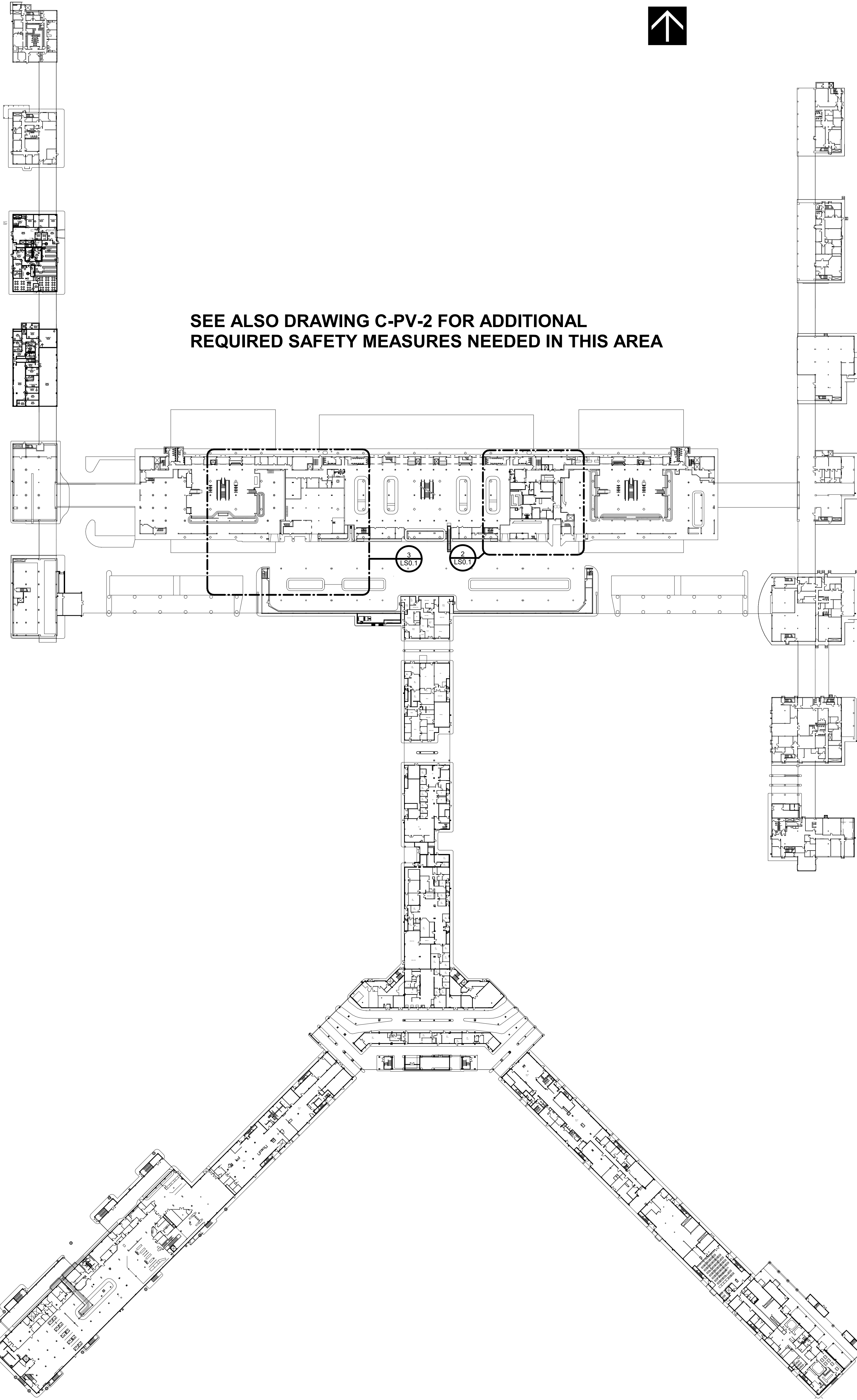
PROJECT:
ID OFFICE AND WA AREA SANITARY SEWER REPAIR

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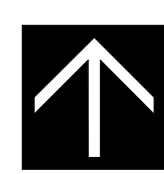
SHEET TITLE:
COVER SHEET

REV. FILE NAME

DATE	DWG NO.
04.09.2021	G0.0
SCALE	



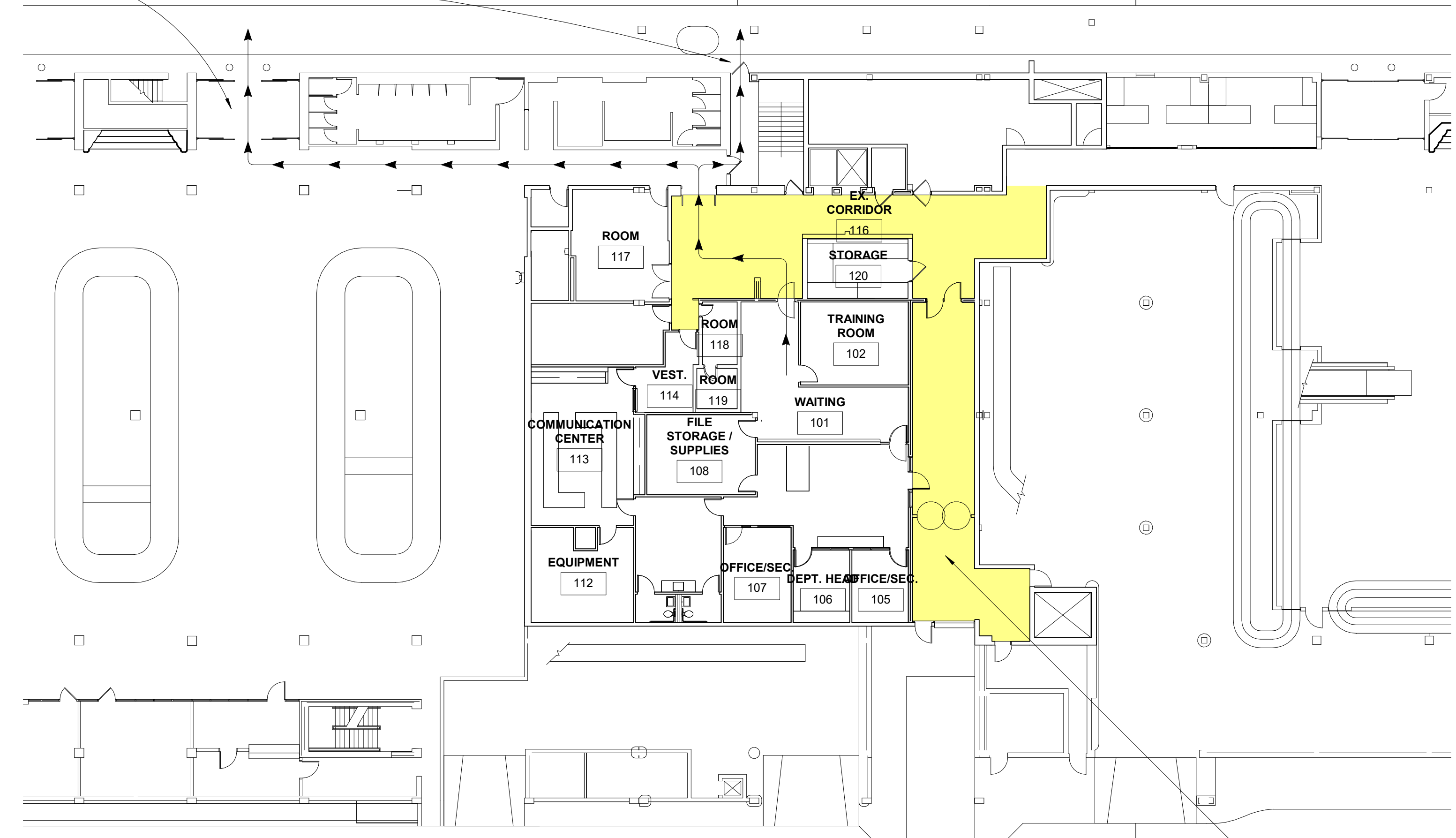
SEE ALSO DRAWING C-PV-2 FOR ADDITIONAL
REQUIRED SAFETY MEASURES NEEDED IN THIS AREA



DO NOT OBSTRUCT
ACCESS TO EXISTING
EGRESS DOOR OR STAIR
DURING WORK

TERMINAL B

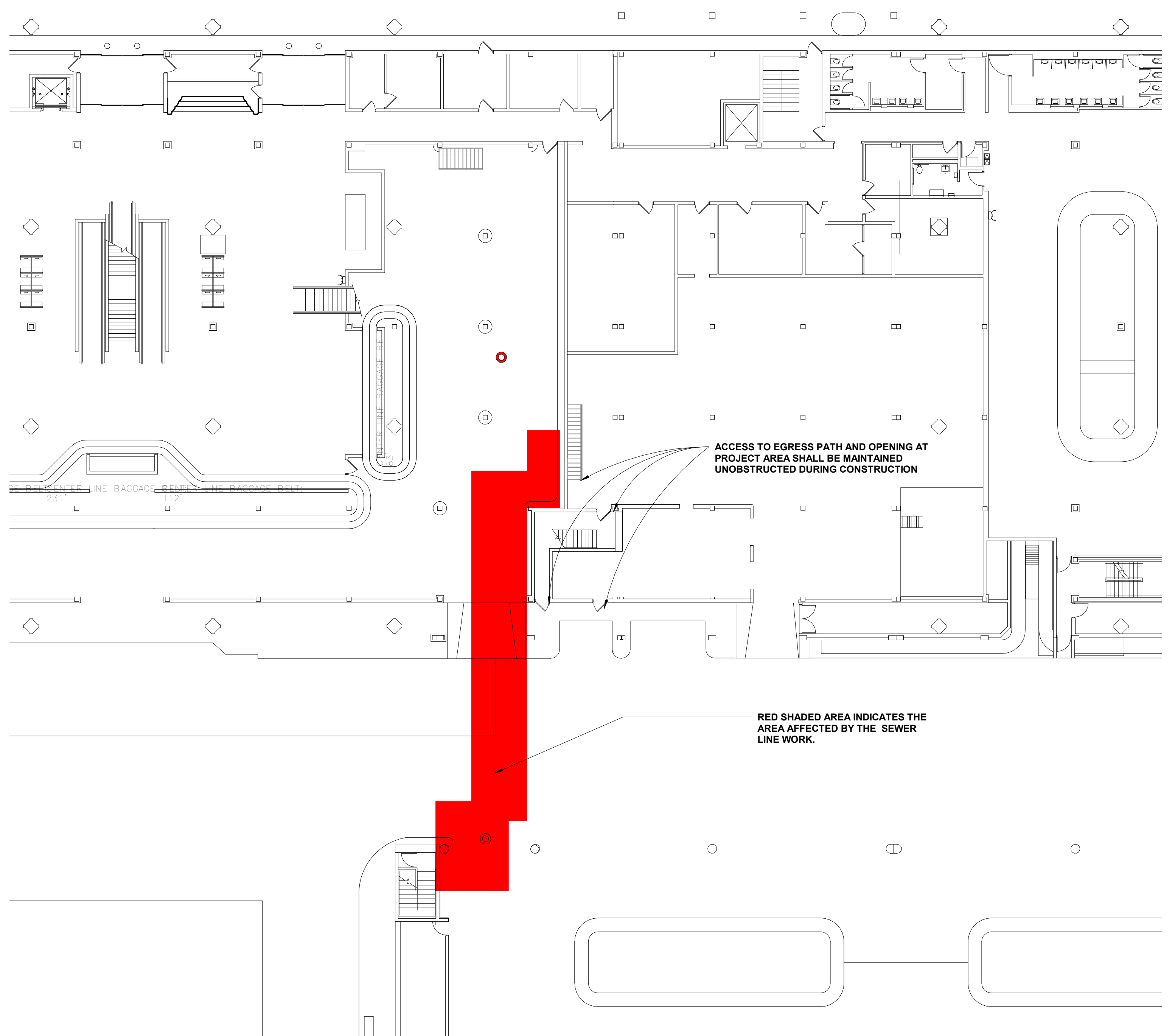
TERMINAL C



2 AREA EA ID
1/16" = 1'-0"

SEE ALSO DRAWING C-PV-3 FOR ADDITIONAL
REQUIRED SAFETY MEASURES NEEDED IN THIS AREA

YELLOW SHADED AREA ABOVE
INDICATES THE PROJECT LIMITS
OF SEWER REPLACEMENT. IT IS
ALSO THE AREA OF TOTAL VCT
FLOORING REPLACEMENT



3 AREA WA
1/16" = 1'-0"

SEE ALSO DRAWING C-PV-4 FOR ADDITIONAL
REQUIRED SAFETY MEASURES NEEDED IN THIS AREA

ACCESS TO EGRESS PATH AND OPENING AT
PROJECT AREA SHALL BE MAINTAINED
UNOBSTRUCTED DURING CONSTRUCTION

RED SHADED AREA INDICATES THE
AREA AFFECTED BY THE SEWER
LINE WORK.

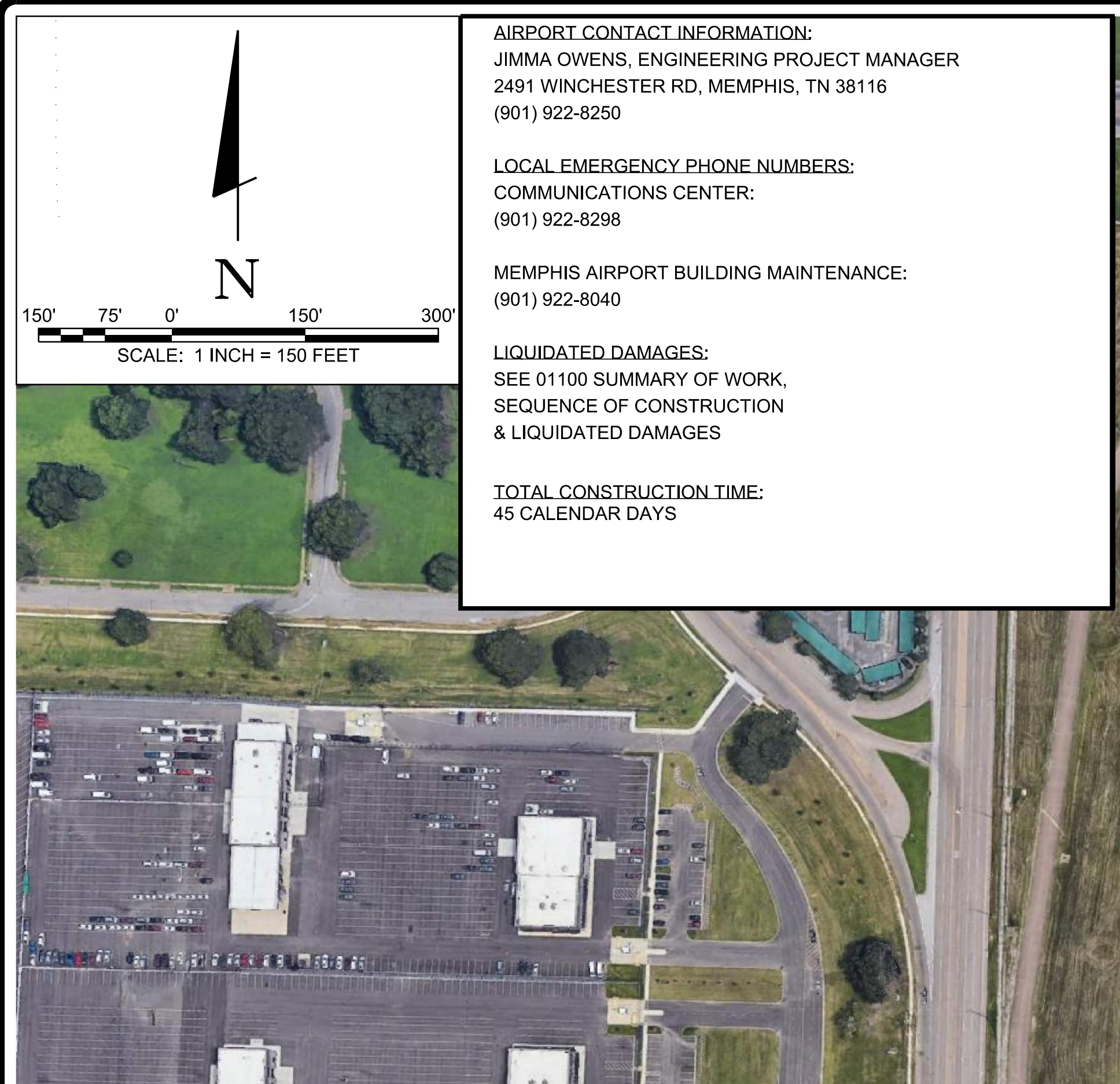
REVISIONS		
NO.	DESCRIPTION	DATE

MSCAA NO.
19-1423-00 (19-1423-11)

PROJECT:
**ID OFFICE AND WA
AREA SANITARY
SEWER REPAIR**

SET:

SHEET TITLE:
LIFE SAFETY PLAN



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 (901) 922-8040

LIQUIDATED DAMAGES:
 SEE 01100 SUMMARY OF WORK,
 SEQUENCE OF CONSTRUCTION
 & LIQUIDATED DAMAGES

TOTAL CONSTRUCTION TIME:
 45 CALENDAR DAYS

CONSTRUCTION SAFETY NOTES

- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND THE OWNER NOT LESS THAN TWO (2) DAYS PRIOR TO ENTERING THE CONSTRUCTION SITE.
- SUFFICIENT SWEEPERS AND CLEAN UP EQUIPMENT SHALL BE PROVIDED IN ORDER THAT ALL LOOSE MATERIAL, DEBRIS AND MUD CAN BE REMOVED FROM ALL AIRPORT PAVEMENT ON A CONTINUOUS BASIS.
- NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR MAINTENANCE OF HAUL ROUTES, ETC. AS INCLUDED IN THESE NOTES. ALL COSTS ASSOCIATED WITH THESE ITEMS MUST BE INCLUDED IN THE CONTRACT BID PRICES WHICH WOULD MOST LIKELY INCLUDE THEM.
- THE CONTRACTOR AND PERSONNEL SHALL NOT, AT ANY TIME, BE ON THE RUNWAY OR TAXIWAYS.
- THE CONTRACTOR SHALL TAKE EXTREME CAUTION AROUND ALL EXISTING AIRPORT EQUIPMENT.
- THE CONSTRUCTION ENTRANCE, STAGING AREA, EMPLOYEE PARKING, STOCKPILE AREA, WASTE AREA SHALL BE COORDINATED WITH THE AIRPORT.
- THE CONTRACTOR SHALL HAVE A MAN ON 24-HOUR CALL FOR EMERGENCY MAINTENANCE OF AIRPORT HAZARD LIGHTING AND BARRICADES AND OTHER EMERGENCIES WHICH MAY ARISE AS A RESULT OF THIS WORK.
- THE CONTRACTOR'S PERSONNEL AND EQUIPMENT SHALL NOT BE PERMITTED OUTSIDE THE CONSTRUCTION WORK LIMITS WITHOUT BEING ESCORTED BY THE OWNER APPROVED ESCORT.
- THE CONTRACTOR SHALL BE REQUIRED TO MINIMIZE DUST CREATED BY CONSTRUCTION ACTIVITIES USING WATER OR OTHER DEVICES. ANY COST ASSOCIATED WITH DUST CONTROL SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. IN THE EVENT DUST WHICH IS CREATED BY CONSTRUCTION ACTIVITIES BECOMES A HAZARD TO AIRPORT OPERATIONS ACTIVITIES WILL BE SHUT DOWN. THIS SHUTDOWN TIME WILL NOT BE A BASIS FOR CLAIMS FOR ADDITIONAL CONTRACT TIME OR COMPENSATION.
- AIRPORT OPERATIONS SHALL AT ALL TIMES HAVE PRIORITY OVER ALL CONTRACTOR VEHICLES, EQUIPMENT AND PERSONNEL. THE CONTRACTOR SHALL EMPLOY STRICT MEASURES TO PREVENT ANY CONFLICT BETWEEN HIS PERSONNEL AND AIRCRAFT. THE CONTRACTOR SHALL REMAIN CLEAR OF RUNWAYS AND TAXIWAYS.
- ALL CONTRACTOR VEHICLES, INCLUDING HAULING VEHICLES, THAT ARE AUTHORIZED TO OPERATE ON THE AIRPORT WITHIN THE DESIGNATED LIMITS OF CONSTRUCTION OR HAUL ROUTES AS DEFINED HEREIN, SHALL DISPLAY IN FULL VIEW ABOVE THE VEHICLE A 3'X3' OR LARGER ORANGE AND WHITE CHECKERBOARD FLAG, EACH CHECKERBOARD COLOR BEING 1' SQUARE. WHEN OPERATING DURING PERIODS OF DARKNESS OR LIMITED VISIBILITY, CONTRACTOR'S VEHICLE SHALL BE EQUIPPED WITH ROTATING OR FLASHING AMBER LIGHTS. DURING SUCH PERIODS, HAULING VEHICLES NOT SO EQUIPPED SHALL BE ESCORTED BY A VEHICLE SO EQUIPPED.
- CONTRACTOR SHALL CONTROL THE ON-AIRPORT MOVEMENT AND ACTIVITIES OF ITS EMPLOYEES AND SUBCONTRACTORS.
- OPEN-FLAME WELDING OR TORCH-CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN APPROVED BY THE OWNER.
- OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIALS AT THE CONSTRUCTION SITE SHALL BE PROMINENTLY MARKED WITH ORANGE FLAGS AND LIGHTED WITH FLASHING AMBER LIGHT UNITS (ACCEPTABLE TO THE OWNER) DURING HOURS OF RESTRICTED VISIBILITY OR DARKNESS.
- STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT AS A RESULT OF AIRCRAFT OR WIND.
- DEBRIS, WASTE AND LOOSE MATERIAL CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR, PROPELLERS AND ROTORS, OR OF BEING INGESTED BY JET ENGINES SHALL NOT BE LEFT ON IN WORK AREAS. MATERIAL DROPPED SHALL BE REMOVED CONTINUOUSLY DURING WORKING HOURS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMING ALL PERSONS UNDER THEIR CONTROL THAT UNAUTHORIZED CONSTRUCTION PERSONNEL FOUND IN RESTRICTED AREAS OF THE AIRPORT SHOWN ON THE SAFETY PLAN ARE SUBJECT TO ARREST FOR A PUNISHABLE FEDERAL OFFENSE AND WILL PROMPTLY AND PERMANENTLY BE REMOVED FROM THE JOB.
- THE CONTRACTOR SHALL PROVIDE APPROVED FLAGMAN TO CONTROL ALL CONSTRUCTION TRAFFIC TO CONTROL ALL CONSTRUCTION TRAFFIC.
- CONTRACTOR SHALL CONTROL AND ESCORT ALL CONSTRUCTION TRAFFIC ENTERING AIRPORT TO PREVENT CONFLICTS WITH AIRCRAFT OPERATIONS.
- SPECIAL ACCESS REQUIREMENTS AND OPERATING LIMITATIONS ARE REQUIRED INSIDE THE SECURITY FENCE. THE CONTRACTOR SHALL DELINEATE WORK LIMITS WITHIN THESE AREAS, CONFINE ALL CONTRACTOR'S PERSONNEL, EQUIPMENT AND MATERIALS INSIDE THE OWNER'S APPROVED WORK LIMITS.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN FLASHING LIGHTS AND BARRICADES. BARRICADES SHALL BE SPACED END TO END OR AS NOTED. THE CONTRACTOR SHALL DAILY MAINTAIN THE LIGHTS AND BARRICADES IN AN OPERABLE CONDITION FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL FURNISH THE OWNER A CONTACT NUMBER FOR 24-HOUR MAINTENANCE OF LIGHTS AND BARRICADES. THE COST FOR BARRICADES AND LIGHTS SHALL BE INCIDENTAL TO THE PROJECT.
- NO CONSTRUCTION TRAFFIC SHALL ENTER OR CROSS ANY ACTIVE AIRPORT OPERATIONAL AREA.
- REFER TO THE GENERAL NOTES FOR REQUIREMENTS PERTAINING TO STORAGE OF CONSTRUCTION EQUIPMENT AND MATERIALS WHEN NOT IN USE.
- THE CONTRACTOR SHALL COMPLY WITH ALL SECURITY REQUIREMENTS SPECIFIED HEREIN. THE CONTRACTOR SHALL DESIGNATE IN WRITING TO THE OWNER THE NAME OF ITS "CONTRACTOR SECURITY OFFICER". THE CONTRACTOR SECURITY OFFICER SHALL REPRESENT THE CONTRACTOR ON THE SECURITY REQUIREMENTS OF THE CONTRACT.
- THE CONTRACTOR'S SECURITY OFFICER SHALL BE RESPONSIBLE FOR BRIEFING ALL CONTRACTOR PERSONNEL ON THESE REQUIREMENTS. CONTRACTOR EMPLOYEES SHALL ATTEND THE OWNER'S SECURITY TRAINING SESSION AND SHALL BE BRIEFED ON THESE REQUIREMENTS PRIOR TO WORKING IN THE CONSTRUCTION AREAS.
- THE CONTRACTOR SHALL ACQUAINT THEIR SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITIES AND OPERATIONS THAT ARE INHERENT AT THIS AIRPORT AND SHALL CONDUCT THEIR CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND TO THE GUIDELINES ON SAFETY.
- CONTRACTOR TO FIELD VERIFY AND PROTECT ALL EXISTING UTILITIES BEFORE CONSTRUCTION WORK BEGINS.
- ALL LOCATIONS USED FOR HAUL ROUTES, STAGING AREAS, EMPLOYEE PARKING AND MATERIAL STORAGE SHALL BE CLEANED UP WHEN ALL CONSTRUCTION IS COMPLETED.
- THE CONTRACTOR IS ENCOURAGED TO DOCUMENT VIA PICTURES AND/OR VIDEO THE PRE-CONSTRUCTION CONDITION OF ALL PAVEMENTS AND STRUCTURES. ANY DAMAGE NOTICED AFTER THE CONTRACTOR'S MOBILIZATION WILL BE ASSUMED TO BE CAUSED BY THE CONTRACTOR AND SHALL BE FULLY REPAIRED AT THE CONTRACTOR'S EXPENSE.
- ALL OF THE CONTRACTOR'S VEHICLES WILL BE SURROUNDED BY CONES AT EACH CORNER WHEN PARKED ON THE AIRPORT.
- THE CONTRACTOR SHALL FOLLOW CONFINED SPACE, SILICA DUST CONTROL, AND FALL PROTECTION SAFETY MEASURES.

PROPOSED CONSTRUCTION HAUL ROUTE 1
 (FOR ACCESS TO THE BACK DRIVE)

PROPOSED CONSTRUCTION HAUL ROUTE 2
 (FOR ACCESS TO THE FRONT DRIVE)

C-PV-4 C-PV-3

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REVISIONS	
NO.	DESCRIPTION

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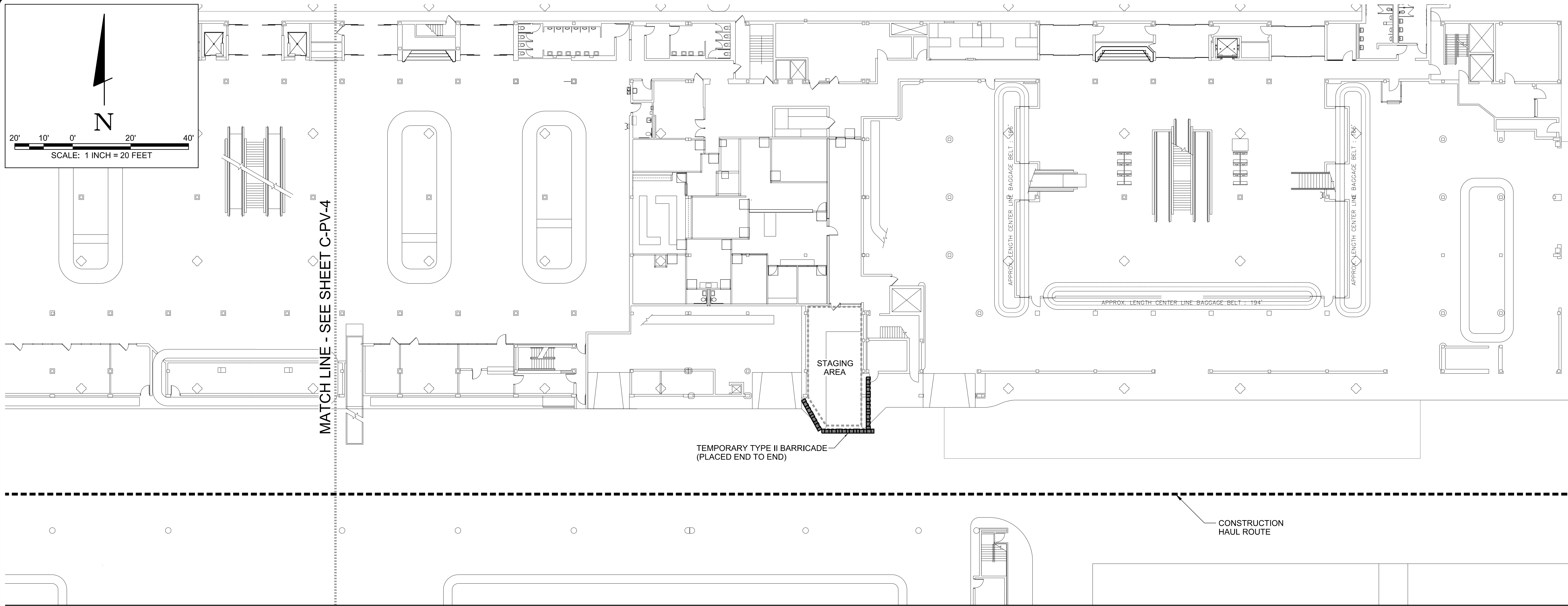
PROJECT:
**ID OFFICE & WA AREA
 SANITARY
 SEWER REPAIR**

SET:
ISSUED FOR BID

SHEET TITLE:
**CONSTRUCTION
 SAFETY & PHASING
 PLAN**

REV. FILE NAME

DATE	4.9.2021	REV. NO.	C-PV-2
SCALE	1" = 150'-0"		



MATCH LINE - SEE SHEET C-PV-4

STAGING AREA

TEMPORARY TYPE II BARRICADE (PLACED END TO END)

CONSTRUCTION HAUL ROUTE

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- THE CONTRACTOR SHALL BE REQUIRED TO MINIMIZE DUST CREATED BY CONSTRUCTION ACTIVITIES USING WATER OR OTHER DEVICES. ANY COST ASSOCIATED WITH DUST CONTROL SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. IN THE EVENT DUST WHICH IS CREATED BY CONSTRUCTION ACTIVITIES BECOMES A HAZARD TO AIRPORT OPERATIONS ACTIVITIES WILL BE SHUT DOWN. THIS SHUTDOWN TIME WILL NOT BE A BASIS FOR CLAIMS FOR ADDITIONAL CONTRACT TIME OR COMPENSATION.
- AIRPORT OPERATIONS SHALL AT ALL TIMES HAVE PRIORITY OVER ALL CONTRACTOR VEHICLES, EQUIPMENT AND PERSONNEL. THE CONTRACTOR SHALL EMPLOY STRICT MEASURES TO PREVENT ANY CONFLICT BETWEEN HIS PERSONNEL AND AIRCRAFT. THE CONTRACTOR SHALL REMAIN CLEAR OF RUNWAYS AND TAXIWAYS.
- ALL CONTRACTOR VEHICLES, INCLUDING HAULING VEHICLES, THAT ARE AUTHORIZED TO OPERATE ON THE AIRPORT WITHIN THE DESIGNATED LIMITS OF CONSTRUCTION OR HAUL ROUTES AS DEFINED HEREIN, SHALL DISPLAY IN FULL VIEW ABOVE THE VEHICLE A 3'X3' OR LARGER ORANGE AND WHITE CHECKERBOARD FLAG. EACH CHECKERBOARD COLOR BEING 1' SQUARE. WHEN OPERATING DURING PERIODS OF DARKNESS OR LIMITED VISIBILITY, CONTRACTOR'S VEHICLE SHALL BE EQUIPPED WITH ROTATING OR FLASHING AMBER LIGHTS. DURING SUCH PERIODS, HAULING VEHICLES NOT SO EQUIPPED SHALL BE ESCORTED BY A VEHICLE SO EQUIPPED.
- CONTRACTOR SHALL CONTROL THE ON-AIRPORT MOVEMENT AND ACTIVITIES OF ITS EMPLOYEES AND SUBCONTRACTORS.
- OPEN-FLAME WELDING OR TORCH-CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN APPROVED BY THE OWNER.
- OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIALS AT THE CONSTRUCTION SITE SHALL BE PROMINENTLY MARKED WITH ORANGE FLAGS AND LIGHTED WITH FLASHING AMBER LIGHT UNITS (ACCEPTABLE TO THE OWNER) DURING HOURS OF RESTRICTED VISIBILITY OR DARKNESS.
- STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT AS A RESULT OF AIRCRAFT OR WIND.
- DEBRIS, WASTE AND LOOSE MATERIAL CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR, PROPELLERS AND ROTORS, OR OF BEING INGESTED BY JET ENGINES SHALL NOT BE LEFT ON IN WORK AREAS. MATERIAL DROPPED SHALL BE REMOVED CONTINUOUSLY DURING WORKING HOURS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMING ALL PERSONS UNDER THEIR CONTROL THAT UNAUTHORIZED CONSTRUCTION PERSONNEL FOUND IN RESTRICTED AREAS OF THE AIRPORT SHOWN ON THE SAFETY PLAN ARE SUBJECT TO ARREST FOR A PUNISHABLE FEDERAL OFFENSE AND WILL PROMPTLY AND PERMANENTLY BE REMOVED FROM THE JOB.
- THE CONTRACTOR SHALL PROVIDE APPROVED FLAGMAN TO CONTROL ALL CONSTRUCTION TRAFFIC TO CONTROL ALL CONSTRUCTION TRAFFIC.
- CONTRACTOR SHALL CONTROL AND ESCORT ALL CONSTRUCTION TRAFFIC ENTERING AIRPORT TO PREVENT CONFLICTS WITH AIRCRAFT OPERATIONS.
- SPECIAL ACCESS REQUIREMENTS AND OPERATING LIMITATIONS ARE REQUIRED INSIDE THE SECURITY FENCE. THE CONTRACTOR SHALL DELINEATE WORK LIMITS WITHIN THESE AREAS. CONFINE ALL CONTRACTOR'S PERSONNEL, EQUIPMENT AND MATERIALS INSIDE THE OWNER'S APPROVED WORK LIMITS.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN FLASHING LIGHTS AND BARRICADES. BARRICADES SHALL BE SPACED END TO END OR AS NOTED. THE CONTRACTOR SHALL DAILY MAINTAIN THE LIGHTS AND BARRICADES IN AN OPERABLE CONDITION FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL FURNISH THE OWNER A CONTACT NUMBER FOR 24-HOUR MAINTENANCE OF LIGHTS AND BARRICADES. THE COST FOR BARRICADES AND LIGHTS SHALL BE INCIDENTAL TO THE PROJECT.
- NO CONSTRUCTION TRAFFIC SHALL ENTER OR CROSS ANY ACTIVE AIRPORT OPERATIONAL AREA.
- REFER TO THE GENERAL NOTES FOR REQUIREMENTS PERTAINING TO STORAGE OF CONSTRUCTION EQUIPMENT AND MATERIALS WHEN NOT IN USE.
- THE CONTRACTOR SHALL COMPLY WITH ALL SECURITY REQUIREMENTS SPECIFIED HEREIN. THE CONTRACTOR SHALL DESIGNATE IN WRITING TO THE OWNER THE NAME OF ITS "CONTRACTOR SECURITY OFFICER". THE CONTRACTOR SECURITY OFFICER SHALL REPRESENT THE CONTRACTOR ON THE SECURITY REQUIREMENTS OF THE CONTRACT.
- THE CONTRACTOR'S SECURITY OFFICER SHALL BE RESPONSIBLE FOR BRIEFING ALL CONTRACTOR PERSONNEL ON THESE REQUIREMENTS. CONTRACTOR EMPLOYEES SHALL ATTEND THE OWNER'S SECURITY TRAINING SESSION AND SHALL BE BRIEFED ON THESE REQUIREMENTS PRIOR TO WORKING IN THE CONSTRUCTION AREAS.
- THE CONTRACTOR SHALL ACQUAINT THEIR SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITIES AND OPERATIONS THAT ARE INHERENT AT THIS AIRPORT AND SHALL CONDUCT THEIR CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND TO THE GUIDELINES ON SAFETY.
- CONTRACTOR TO FIELD VERIFY AND PROTECT ALL EXISTING UTILITIES BEFORE CONSTRUCTION WORK BEGINS.
- ALL LOCATIONS USED FOR HAUL ROUTES, STAGING AREAS, EMPLOYEE PARKING AND MATERIAL STORAGE SHALL BE CLEANED UP WHEN ALL CONSTRUCTION IS COMPLETED.
- THE CONTRACTOR IS ENCOURAGED TO DOCUMENT VIA PICTURES AND/OR VIDEO THE PRE-CONSTRUCTION CONDITION OF ALL PAVEMENTS AND STRUCTURES. ANY DAMAGE NOTICED AFTER THE CONTRACTOR'S MOBILIZATION WILL BE ASSUMED TO BE CAUSED BY THE CONTRACTOR AND SHALL BE FULLY REPAIRED AT THE CONTRACTOR'S EXPENSE.
- ALL OF THE CONTRACTOR'S VEHICLES WILL BE SURROUNDED BY CONES AT EACH CORNER WHEN PARKED ON THE AIRPORT.
- THE CONTRACTOR SHALL FOLLOW CONFINED SPACE, SILICA DUST CONTROL, AND FALL PROTECTION SAFETY MEASURES.

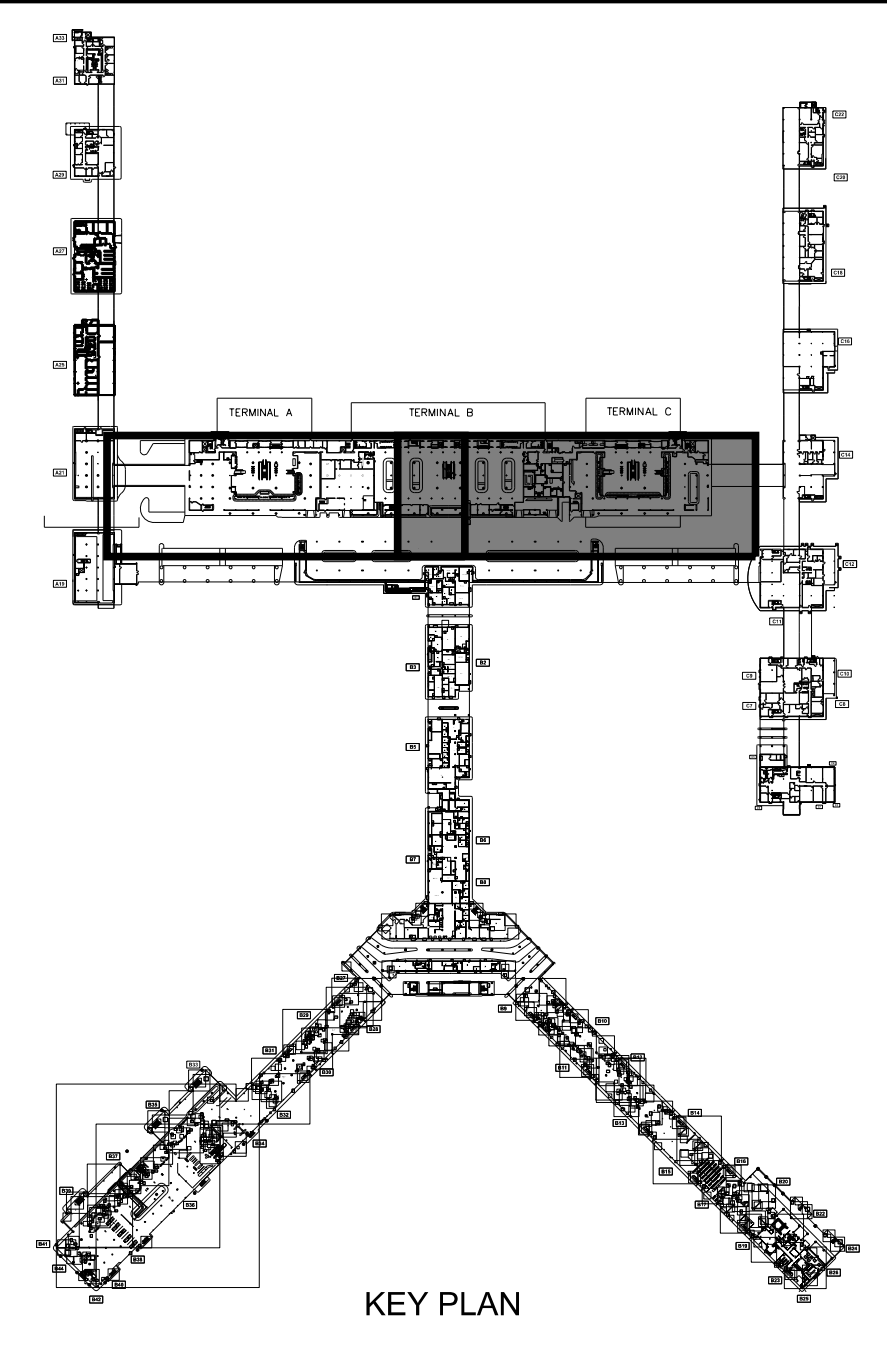
AIRPORT CONTACT INFORMATION:
JIMMA OWENS, ENGINEERING PROJECT MANAGER
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(901) 922-8250

LOCAL EMERGENCY PHONE NUMBERS:
COMMUNICATIONS CENTER:
(901) 922-8298

MEMPHIS AIRPORT BUILDING MAINTENANCE:
(901) 922-8040

LIQUIDATED DAMAGES:
SEE 01100 SUMMARY OF WORK,
SEQUENCE OF CONSTRUCTION
& LIQUIDATED DAMAGES

TOTAL CONSTRUCTION TIME:
45 CALENDAR DAYS

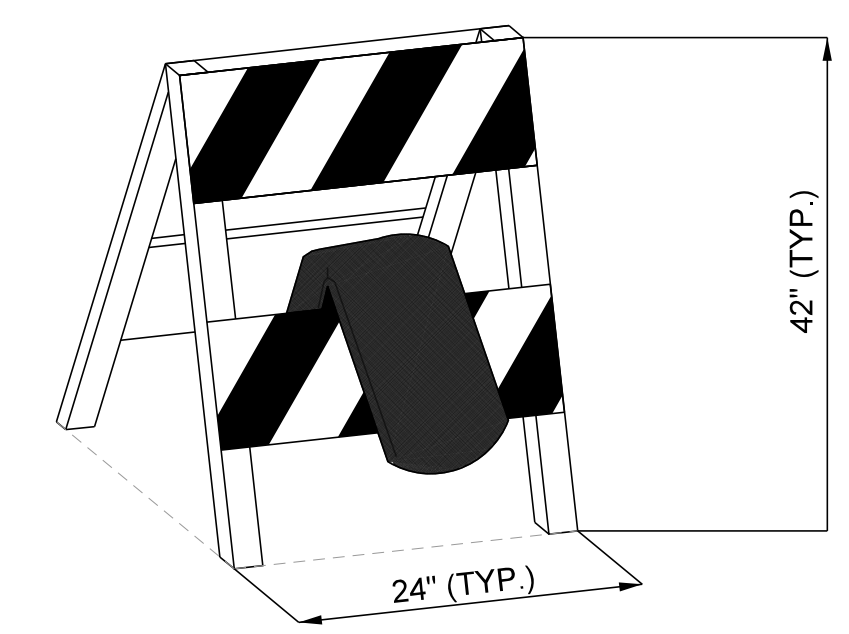


KEY PLAN

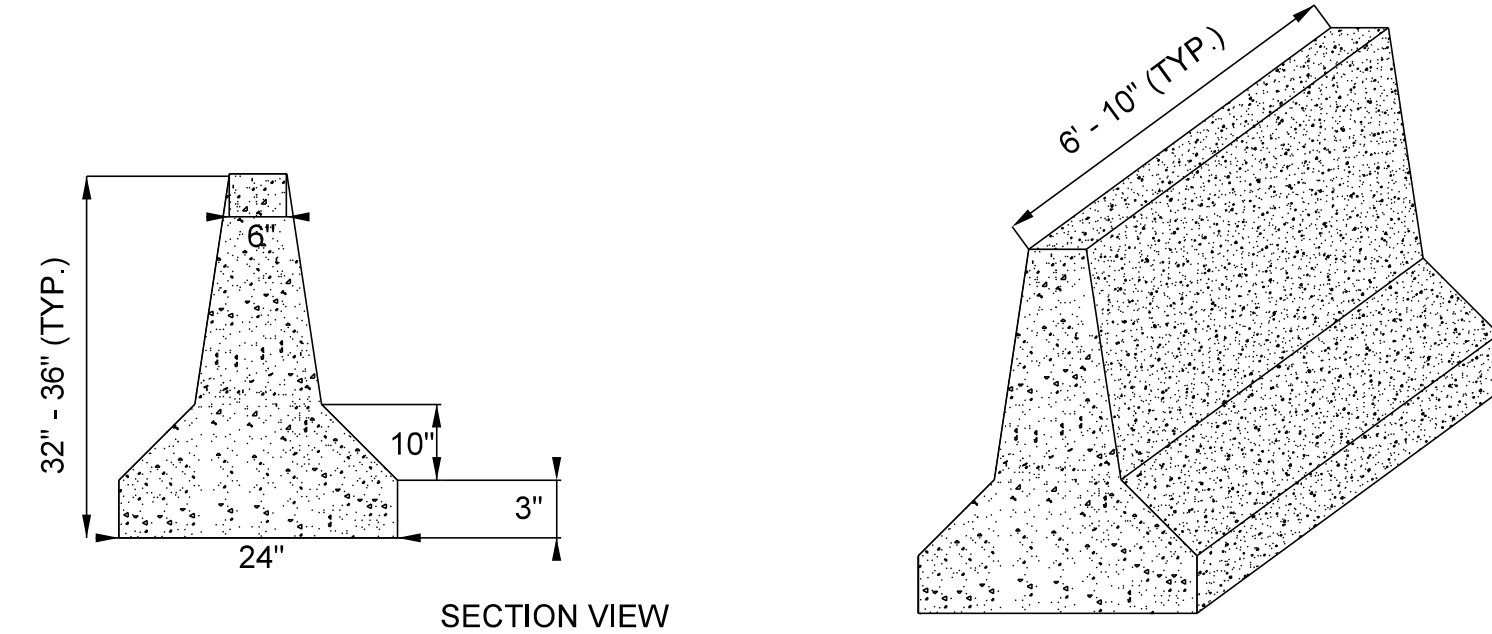


NOTES:

- BARRICADES SHALL BE TYPE II PLASTIC, HIGH-INTENSITY REFLECTION ORANGE/WHITE.
- ALL BARRICADES SHALL DELINEATE THE AREA TO BE PROTECTED.
- BARRICADES SHALL BE PLACED END TO END & SHALL BE REFLECTIVE ON BOTH SIDES.
- WEIGHTED SANDBAGS SHALL BE REQUIRED.



1 TYPE II BARRICADE DETAIL
SCALE: N.T.S.



2 CONCRETE JERSEY BARRICADE
SCALE: N.T.S.

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PARSONS TRANSPORTATION GROUP INC.
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ARCHITECT JOB NO. 20008-T11

DESIGNED BY: JAC
PROJECT BY: JDG
CHECKED BY: JEG

CONSULTANT JOB NO. 37139-11

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NO.	DESCRIPTION	DATE

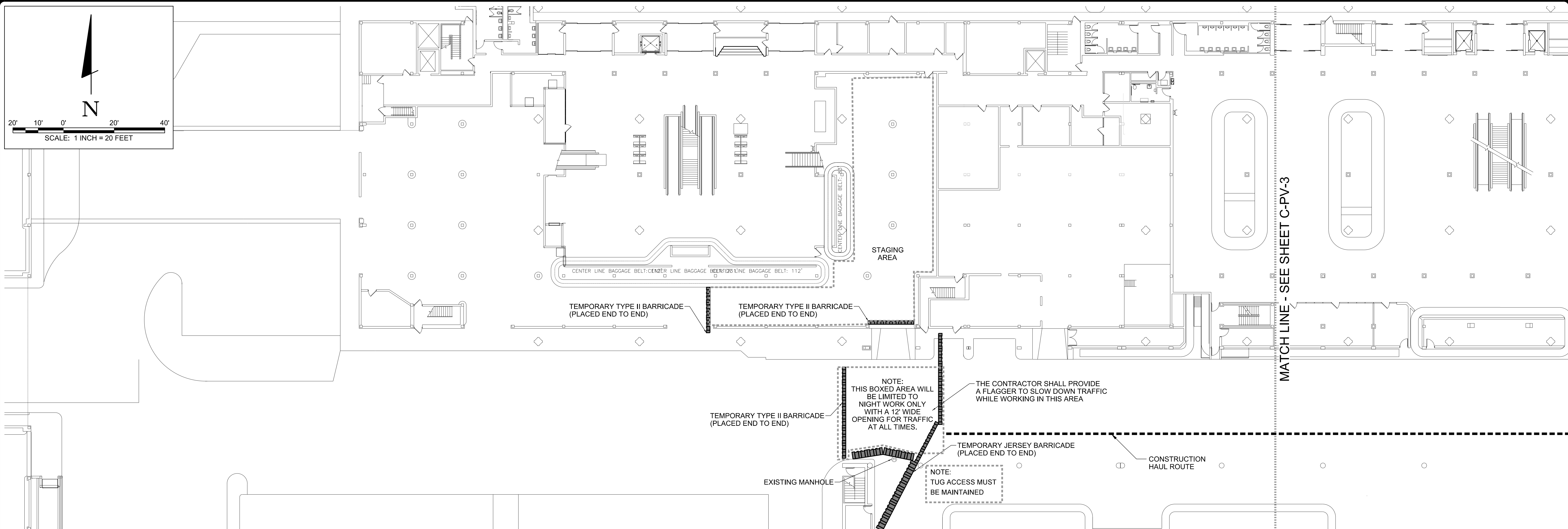
MSCAA TRG 19-1423-00 (19-1423-11)

PROJECT:
ID OFFICE & WA AREA
SANITARY
SEWER REPAIR

SET:
ISSUED FOR BID

SHEET TITLE:
CONSTRUCTION
SAFETY & PHASING
PLAN

DATE: 4.9.2021
SCALE: 1" = 20'-0"
SHEET NO.: C-PV-3



CONSTRUCTION SAFETY NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND THE OWNER NOT LESS THAN TWO (2) DAYS PRIOR TO ENTERING THE CONSTRUCTION SITE.
2. SUFFICIENT SWEEPERS AND CLEAN UP EQUIPMENT SHALL BE PROVIDED IN ORDER THAT ALL LOOSE MATERIAL, DEBRIS AND MUD CAN BE REMOVED FROM ALL AIRPORT PAVEMENT ON A CONTINUOUS BASIS.
3. NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR MAINTENANCE OF HAUL ROUTES, ETC. AS INCLUDED IN THESE NOTES. ALL COSTS ASSOCIATED WITH THESE ITEMS MUST BE INCLUDED IN THE CONTRACT BID PRICES WHICH WOULD MOST LIKELY INCLUDE THEM.
4. THE CONTRACTOR AND PERSONNEL SHALL NOT, AT ANY TIME, BE ON THE RUNWAY OR TAXIWAYS.
5. THE CONTRACTOR SHALL TAKE EXTREME CAUTION AROUND ALL EXISTING AIRPORT EQUIPMENT.
6. THE CONSTRUCTION ENTRANCE, STAGING AREA, EMPLOYEE PARKING, STOCKPILE AREA, WASTE AREA SHALL BE COORDINATED WITH THE AIRPORT.
7. THE CONTRACTOR SHALL HAVE A MAN ON 24-HOUR CALL FOR EMERGENCY MAINTENANCE OF AIRPORT HAZARD LIGHTING AND BARRICADES AND OTHER EMERGENCIES WHICH MAY ARISE AS A RESULT OF THIS WORK.
8. THE CONTRACTOR'S PERSONNEL AND EQUIPMENT SHALL NOT BE PERMITTED OUTSIDE THE CONSTRUCTION WORK LIMITS WITHOUT BEING ESCORTED BY THE OWNER APPROVED ESCORT.
9. THE CONTRACTOR SHALL BE REQUIRED TO MINIMIZE DUST CREATED BY CONSTRUCTION ACTIVITIES USING WATER OR OTHER DEVICES. ANY COST ASSOCIATED WITH DUST CONTROL SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. IN THE EVENT DUST WHICH IS CREATED BY CONSTRUCTION ACTIVITIES BECOMES A HAZARD TO AIRPORT OPERATIONS ACTIVITIES WILL BE SHUT DOWN. THIS SHUTDOWN TIME WILL NOT BE A BASIS FOR CLAIMS FOR ADDITIONAL CONTRACT TIME OR COMPENSATION.
10. AIRPORT OPERATIONS SHALL AT ALL TIMES HAVE PRIORITY OVER ALL CONTRACTOR VEHICLES, EQUIPMENT AND PERSONNEL. THE CONTRACTOR SHALL EMPLOY STRICT MEASURES TO PREVENT ANY CONFLICT BETWEEN HIS PERSONNEL AND AIRCRAFT. THE CONTRACTOR SHALL REMAIN CLEAR OF RUNWAYS AND TAXIWAYS.
11. ALL CONTRACTOR VEHICLES, INCLUDING HAULING VEHICLES, THAT ARE AUTHORIZED TO OPERATE ON THE AIRPORT WITHIN THE DESIGNATED LIMITS OF CONSTRUCTION OR HAUL ROUTES AS DEFINED HEREIN, SHALL DISPLAY IN FULL VIEW ABOVE THE VEHICLE A 3'X3' OR LARGER ORANGE AND WHITE CHECKERBOARD FLAG. EACH CHECKERBOARD COLOR BEING 1' SQUARE. WHEN OPERATING DURING PERIODS OF DARKNESS OR LIMITED VISIBILITY, CONTRACTOR'S VEHICLE SHALL BE EQUIPPED WITH ROTATING OR FLASHING AMBER LIGHTS. DURING SUCH PERIODS, HAULING VEHICLES NOT SO EQUIPPED SHALL BE ESCORTED BY A VEHICLE SO EQUIPPED.
12. CONTRACTOR SHALL CONTROL THE ON-AIRPORT MOVEMENT AND ACTIVITIES OF ITS EMPLOYEES AND SUBCONTRACTORS.
13. OPEN-FLAME WELDING OR TORCH-CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN APPROVED BY THE OWNER.
14. OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIALS AT THE CONSTRUCTION SITE SHALL BE PROMINENTLY MARKED WITH ORANGE FLAGS AND LIGHTED WITH FLASHING AMBER LIGHT UNITS (ACCEPTABLE TO THE OWNER) DURING HOURS OF RESTRICTED VISIBILITY OR DARKNESS.
15. STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT AS A RESULT OF AIRCRAFT OR WIND.
16. DEBRIS, WASTE AND LOOSE MATERIAL CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR, PROPELLERS AND ROTORS, OR OF BEING INGESTED BY JET ENGINES SHALL NOT BE LEFT ON IN WORK AREAS. MATERIAL DROPPED SHALL BE REMOVED CONTINUOUSLY DURING WORKING HOURS.
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22. NO CONSTRUCTION TRAFFIC SHALL ENTER OR CROSS ANY ACTIVE AIRPORT OPERATIONAL AREA.
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24. THE CONTRACTOR SHALL COMPLY WITH ALL SECURITY REQUIREMENTS SPECIFIED HEREIN. THE CONTRACTOR SHALL DESIGNATE IN WRITING TO THE OWNER THE NAME OF ITS "CONTRACTOR SECURITY OFFICER". THE CONTRACTOR SECURITY OFFICER SHALL REPRESENT THE CONTRACTOR ON THE SECURITY REQUIREMENTS OF THE CONTRACT.
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27. CONTRACTOR TO FIELD VERIFY AND PROTECT ALL EXISTING UTILITIES BEFORE CONSTRUCTION WORK BEGINS.
28. ALL LOCATIONS USED FOR HAUL ROUTES, STAGING AREAS, EMPLOYEE PARKING AND MATERIAL STORAGE SHALL BE CLEANED UP WHEN ALL CONSTRUCTION IS COMPLETED.
29. THE CONTRACTOR IS ENCOURAGED TO DOCUMENT VIA PICTURES AND/OR VIDEO THE PRE-CONSTRUCTION CONDITION OF ALL PAVEMENTS AND STRUCTURES. ANY DAMAGE NOTICED AFTER THE CONTRACTOR'S MOBILIZATION WILL BE ASSUMED TO BE CAUSED BY THE CONTRACTOR AND SHALL BE FULLY REPAIRED AT THE CONTRACTOR'S EXPENSE.
30. ALL OF THE CONTRACTOR'S VEHICLES WILL BE SURROUNDED BY CONES AT EACH CORNER WHEN PARKED ON THE AIRPORT.
31. THE CONTRACTOR SHALL FOLLOW CONFINED SPACE, SILICA DUST CONTROL, AND FALL PROTECTION SAFETY MEASURES.

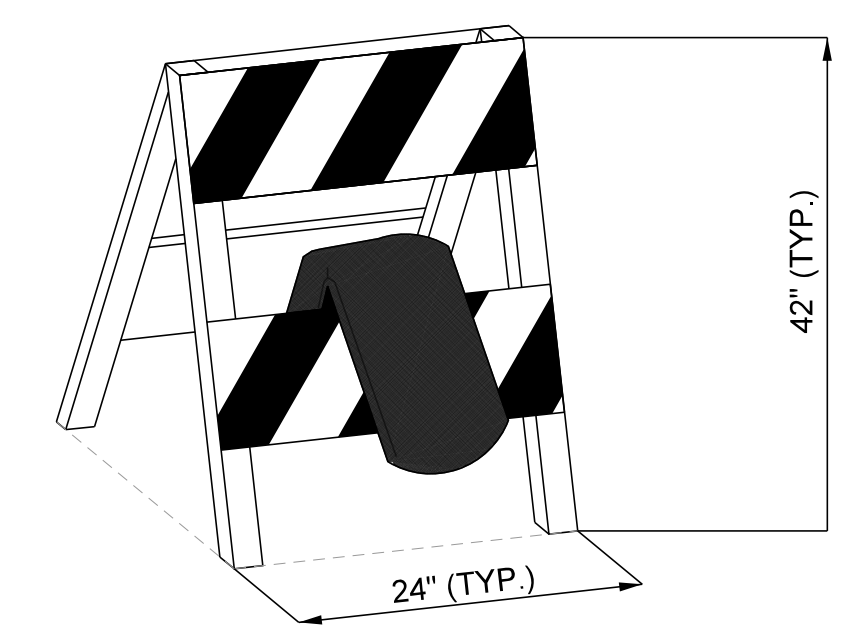
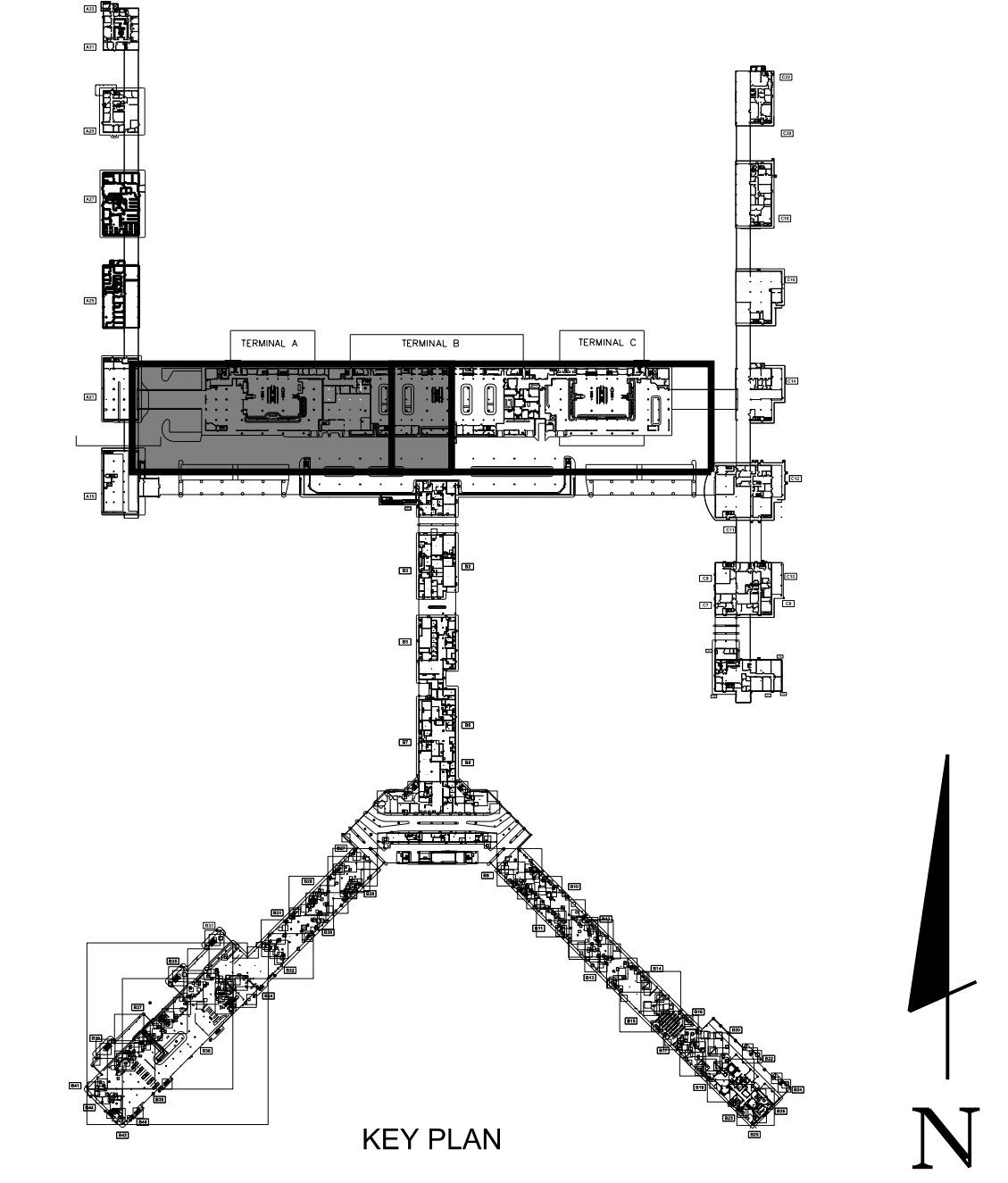
AIRPORT CONTACT INFORMATION:
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 2491 WINCHESTER RD, MEMPHIS, TN 38116
 (901) 922-8250

LOCAL EMERGENCY PHONE NUMBERS:
 COMMUNICATIONS CENTER:
 (901) 922-8298

MEMPHIS AIRPORT BUILDING MAINTENANCE:
 (901) 922-8040

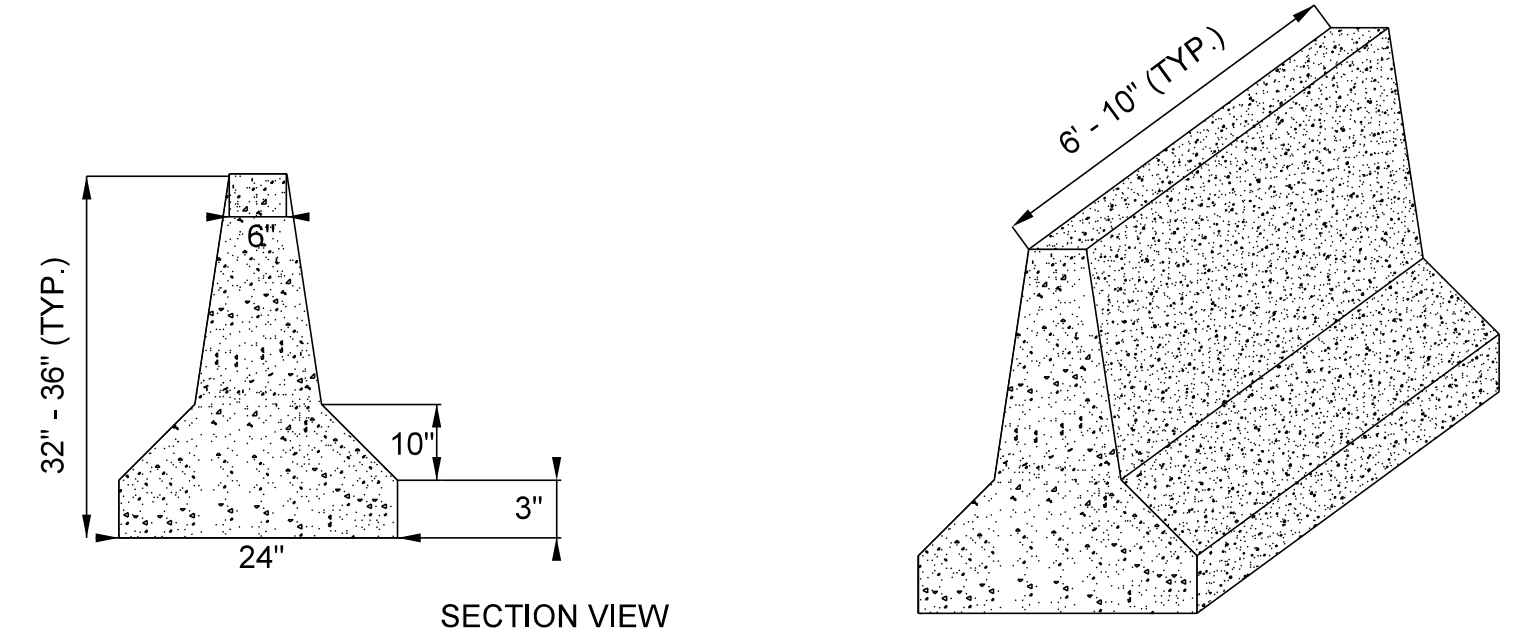
LIQUIDATED DAMAGES:
 SEE 01100 SUMMARY OF WORK,
 SEQUENCE OF CONSTRUCTION
 & LIQUIDATED DAMAGES

TOTAL CONSTRUCTION TIME:
 45 CALENDAR DAYS



1 TYPE II BARRICADE DETAIL
 C0.02 SCALE: N.T.S.

- NOTES:**
1. BARRICADES SHALL BE TYPE II PLASTIC, HIGH-INTENSITY REFLECTION ORANGE/WHITE.
 2. ALL BARRICADES SHALL DELINEATE THE AREA TO BE PROTECTED.
 3. BARRICADES SHALL BE PLACED END TO END & SHALL BE REFLECTIVE ON BOTH SIDES.
 4. WEIGHTED SANDBAGS SHALL BE REQUIRED.



2 CONCRETE JERSEY BARRICADE
 C0.02 SCALE: N.T.S.

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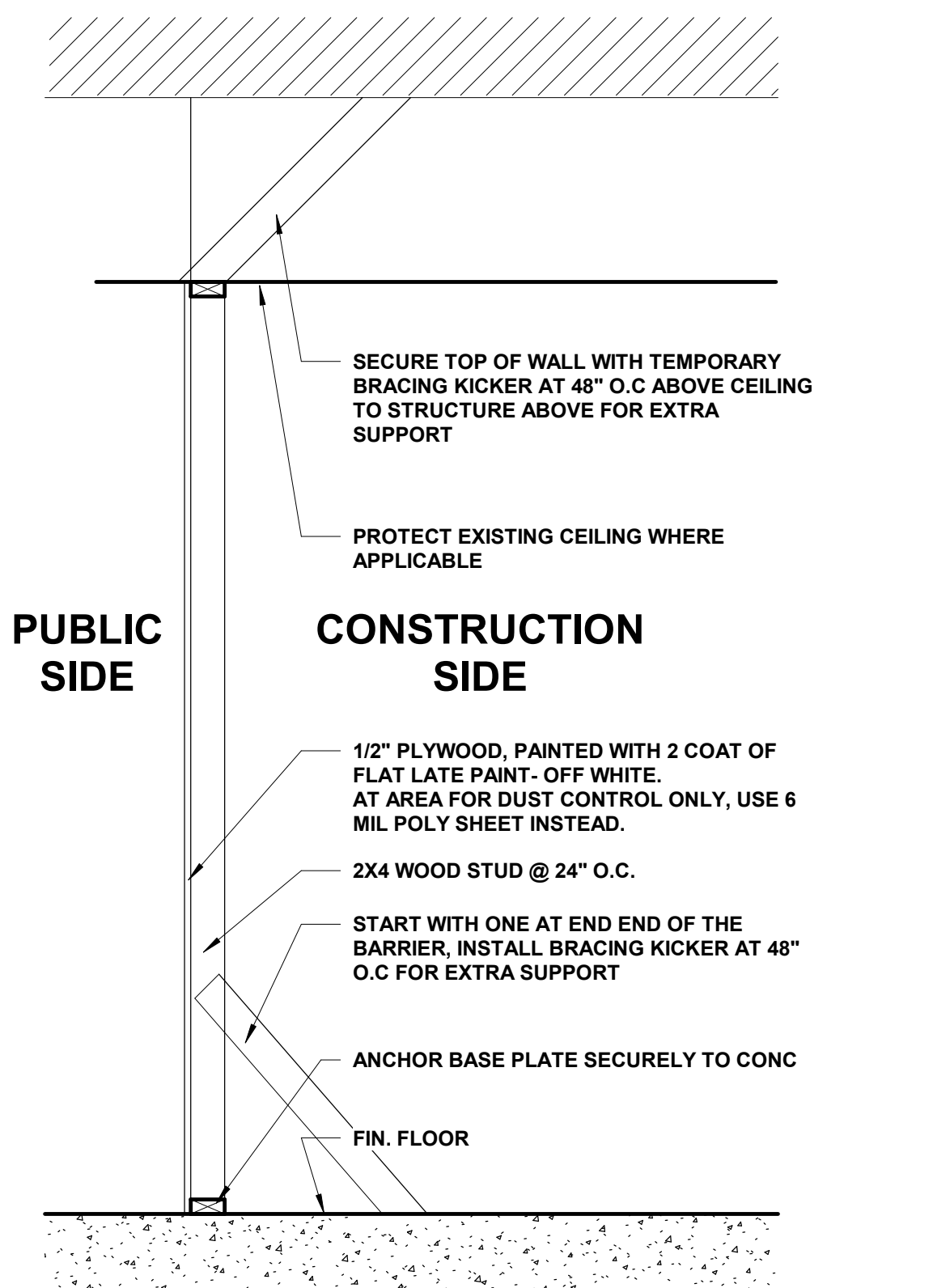
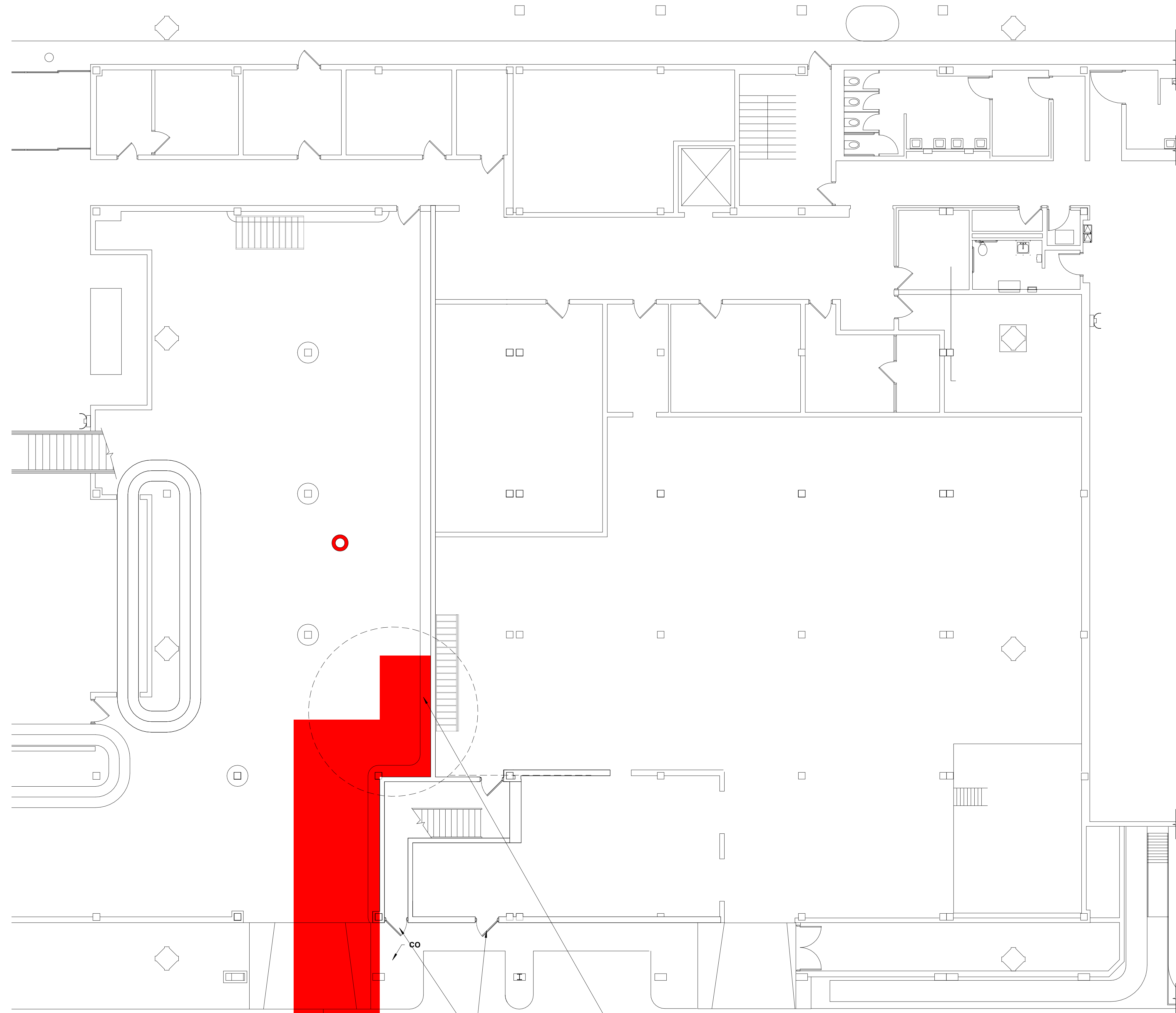
REVISIONS		
NO.	DESCRIPTION	DATE

USCAA TRG:
 19-1423-00 (19-1423-11)

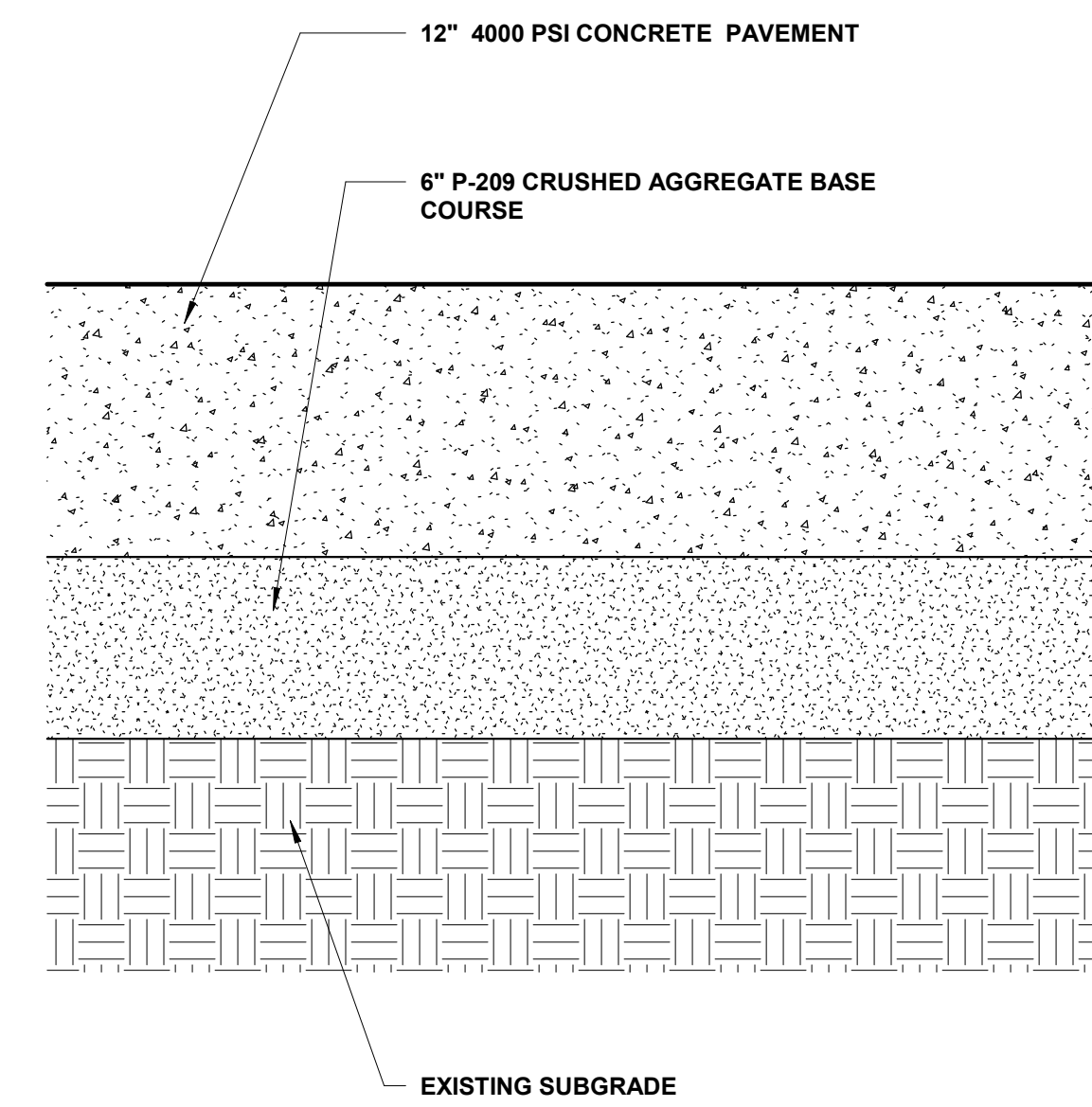
PROJECT:
**ID OFFICE & WA AREA
 SANITARY
 SEWER REPAIR**

SET:
ISSUED FOR BID

SHEET TITLE:
**CONSTRUCTION
 SAFETY & PHASING
 PLAN**



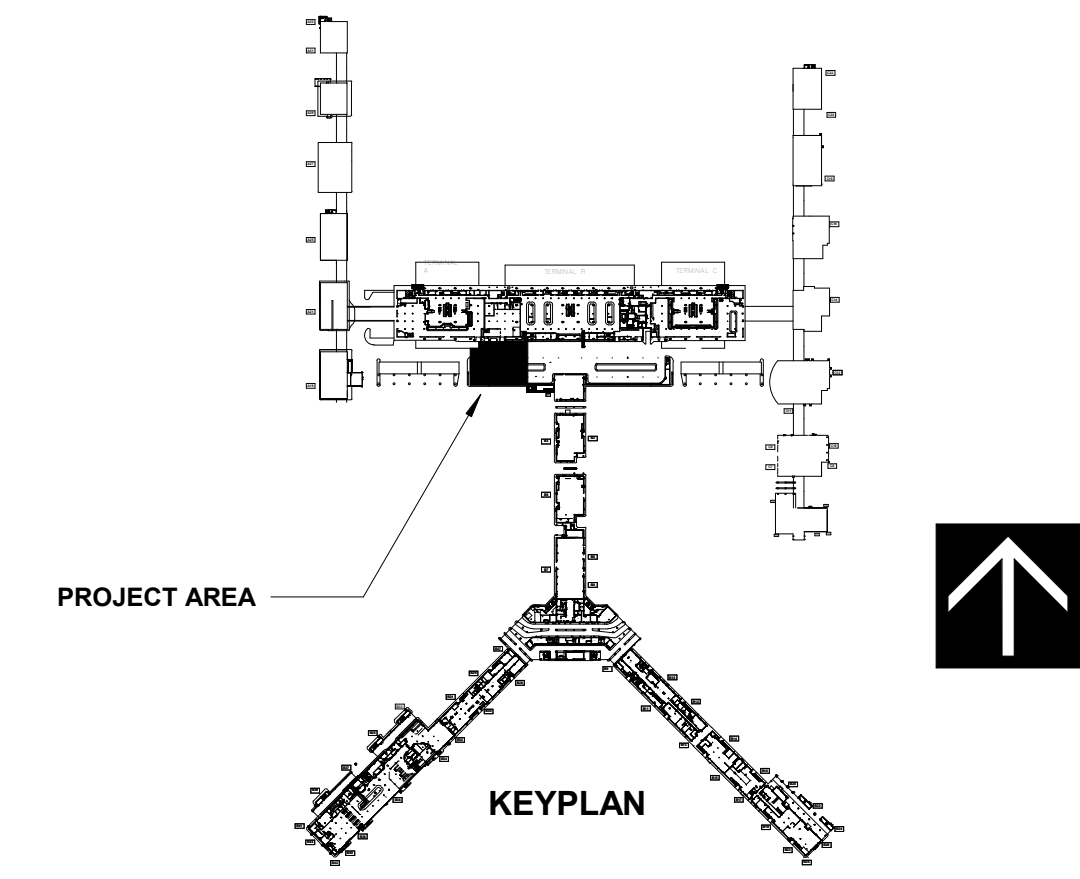
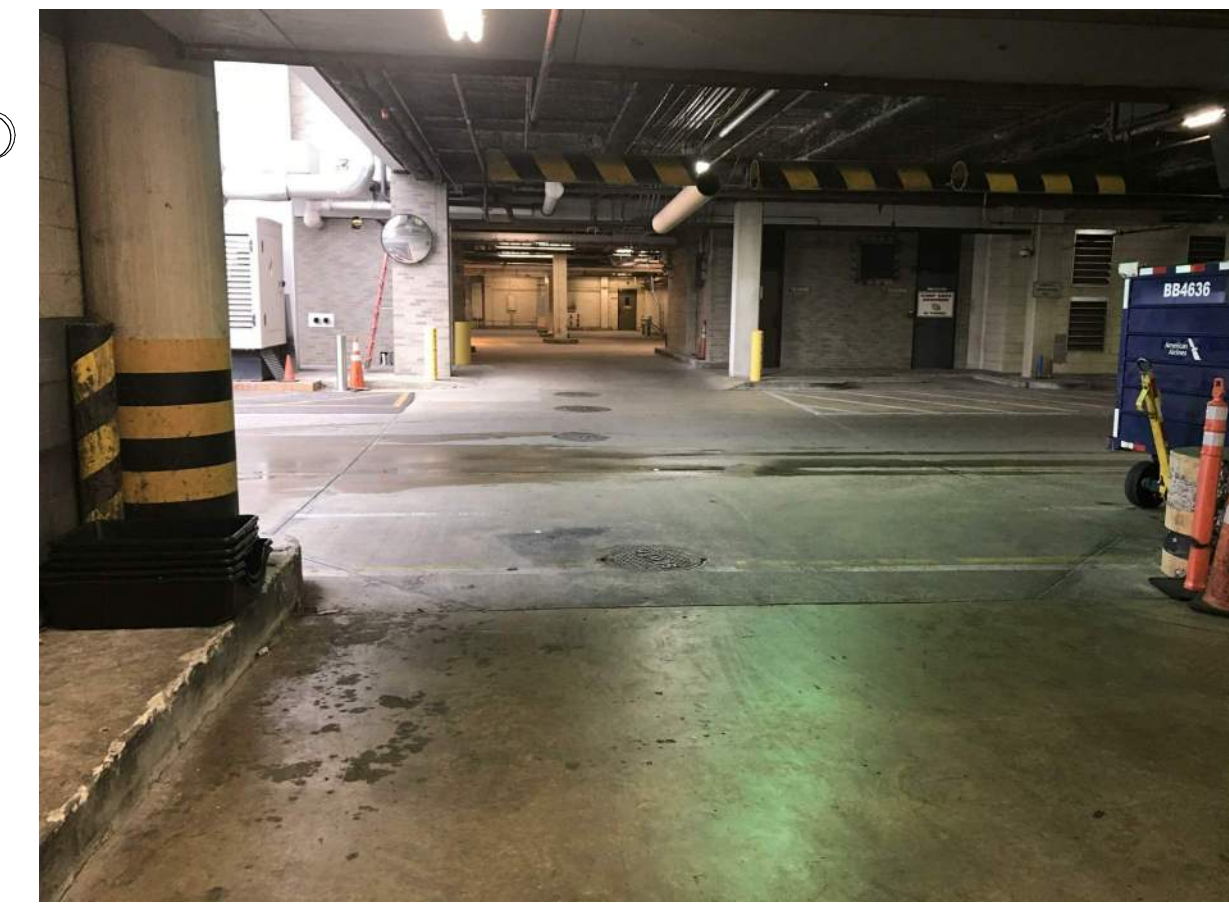
3 TYP. CONSTRUCTION BARRIER
3/4" = 1'-0"



2 TYP. CONC PAVING REPAIR
1 1/2" = 1'-0"



1 ENLARGED PLAN @ AREA WA
1/8" = 1'-0"



DEMOLITION GENERAL NOTES

- DEMOLISH AS REQUIRED TO ACCOMPLISH THE WORK INDICATED IN THESE DOCUMENTS. ALL REQUIRED DEMOLITION WORK SHALL BE INCLUDED IN THE BASE BID PACKAGE SUBMITTED BY THE CONTRACTOR.
- DO NOT ALLOW MATERIALS AND DEBRIS GENERATED BY DEMOLITION TO ACCUMULATE ON THE JOB SITE. REMOVE DAILY AND DISPOSE OF IN A LEGAL MANNER.
- THIS PLAN IS TO BE USED IN CONJUNCTION WITH THE ENTIRE SET OF CONSTRUCTION DRAWINGS. DO NOT REMOVE ANY ITEMS WITHOUT VERIFYING AND COORDINATING WITH ALL GENERAL TRADES AS TO HOW THEY RELATE TO THE OVERALL PROJECT.
- THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE PUBLIC AND/OR WORKMEN ON THE SITE TO PREVENT ACCIDENTS OR INJURY TO ANY PERSON ON, ABOUT, OR ADJACENT TO THE PREMISES. THE CONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES, CODES, AND REGULATIONS PERTAINING TO SAFETY AND THE PREVENTION OF ACCIDENTS.
- THE CONTRACTOR MUST MAINTAIN ADEQUATE SUPPORT, INSULATION, WATERPROOFING, EMERGENCY LIGHTING, SECURITY, ALARMS, ETC. FOR ALL OR PART OF THE ITEMS WHICH ARE TO REMAIN.
- LIMITED VIDEO FILES OF THE UNDERGROUND PIPING INSPECTION ARE AVAILABLE FROM MSCAA.
- PLUMBING LINE LOCATION INDICATED ON DRAWINGS IS FOR REFERENCE ONLY. CONTRACTOR TO CONFIRM EXACT LOCATION OF EXISTING PLUMBING LINE PRIOR TO COMMENCEMENT OF DEMOLITION WORK.
- BEFORE CORE DRILLING OR CUTTING ANY FLOOR SLAB, CONTRACTOR MUST SCAN THE AFFECTED AREA WITH GROUND PENETRATING RADAR TO DETERMINE THE APPROPRIATE LOCATION OF CUTTING. OBTAIN APPROVAL FROM OWNER BEFORE CUTTING TO AVOID UNNECESSARY DAMAGE OF INFRASTRUCTURE.

WA REPAIR PHASE

- PRIMARY AREA OF PLUMBING AND CONCRETE CUTTING AND PATCHING AND OVERHEAD WORK
 - DASHED LINES INDICATE THE APPROXIMATE LOCATION OF TEMPORARY CONSTRUCTION DUST BARRIER DURING SEWER REPAIR. THE TEMPORARY DUST BARRIER SHALL ALLOW THROUGH ACCESS FOR THE AIRPORT MAINTENANCE STAFF TO THIS AREA AWELL AS SWITCH GEAR ROOM.
- SEE DETAIL 3/A5.2 FOR DETAILS

GENERAL NOTES:

- COORDINATE WITH MSCAA FOR ALTERNATE ROUTE INTO THE BAGGAGE HANDLING AREA WHERE TRAFFIC IS TYPICALLY DIRECTED THROUGH AREAS OF SEWER REPAIR.
- NEW PIPES TO BE PROPERLY IDENTIFIED.
- ANY NEW CONCRETE REPAIR WORK TO MATCH EXISTING ADJACENT.
- CONFIRM PHASE OF REPAIR IN ORDER TO MINIMIZE REQUIRED DEMOLITION AND PREVENT UNNECESSARY DAMAGE.
- NOT USED.
- REFER TO PLUMBING DRAWINGS FOR LOCATION AND ROUTING OF NEW LINES.
- ALL NEW REPAIR PATCHWORK TO BE PAINTED TO MATCH EXISTING PIPES (TYP.)
- INSTALL NEW CONCRETE SLAB TO MATCH EXISTING AT THE AFFECTED AREA.
- DOWEL CONCRETE REPAIR AS NEEDED.
- DEBRIS MUST BE CLEANED UP DAILY.
- CONSTRUCTION TRAFFIC MUST BE APPROVED BY MSCAA.
- AREA OUTSIDE PROJECT LIMITS MUST BE PROTECTED.
- COORDINATE WITH THE AIRPORT 48 HOURS IN ADVANCE IF ANY UTILITIES WILL BE INTERRUPTED DURING REPAIR.
- SMOKE ALARM MUST BE PROTECTED.
- IF APPLICABLE, AIR RETURN MAY NEED TO BE TEMPORARY CLOSED FOR PROPER VENTILATION.
- FIRE AND LIFE SAFETY MUST NOT BE COMPROMISED DURING REPAIR.
- COORDINATE WITH AIRPORT FOR LOCATION OF DUMPSTER AS WELL AS MATERIAL STAGING AREA IF NEEDED.
- COORDINATE WITH AIRPORT IF TEMPORARY SHUT OFF OF RESTROOM SERVICES IS REQUIRED TO PERFORM THE REPAIR WORK.
- PROTECT ALL EXISTING FINISH OUTSIDE PROJECT LIMIT
- PROTECT ALL EXISTING EGRESS ACCESS UNLESS NOTED OTHERWISE
- TEMP CONSTRUCTION BARRIER, TO BE CONSTRUCTED AT WORK AREA FOR SAFETY
- CONTRACTOR TO CONFIRM EXACT LOCATION OF EXISTING PLUMBING LINE PRIOR TO COMMENCEMENT OF DEMOLITION WORK. SEE PLUMBING DRAWING FOR ADDITIONAL DETAILS OF OVERHEAD PIPING WORK.

TAKE OFF WITH US

MEMPHIS INTERNATIONAL AIRPORT
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PROGRAM MANAGER

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ENGINEER

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ARCHITECT JOB NO.
20008-T11

DRAWN BY:
CG

CHECKED BY:
TD

APPROVED BY:
RC

CONSULTANT JOB NO.

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REVISIONS		
NO.	DESCRIPTION	DATE

MSCAA No.
19-1423-00 (19-1423-11)

PROJECT:
ID OFFICE AND WA AREA SANITARY SEWER REPAIR

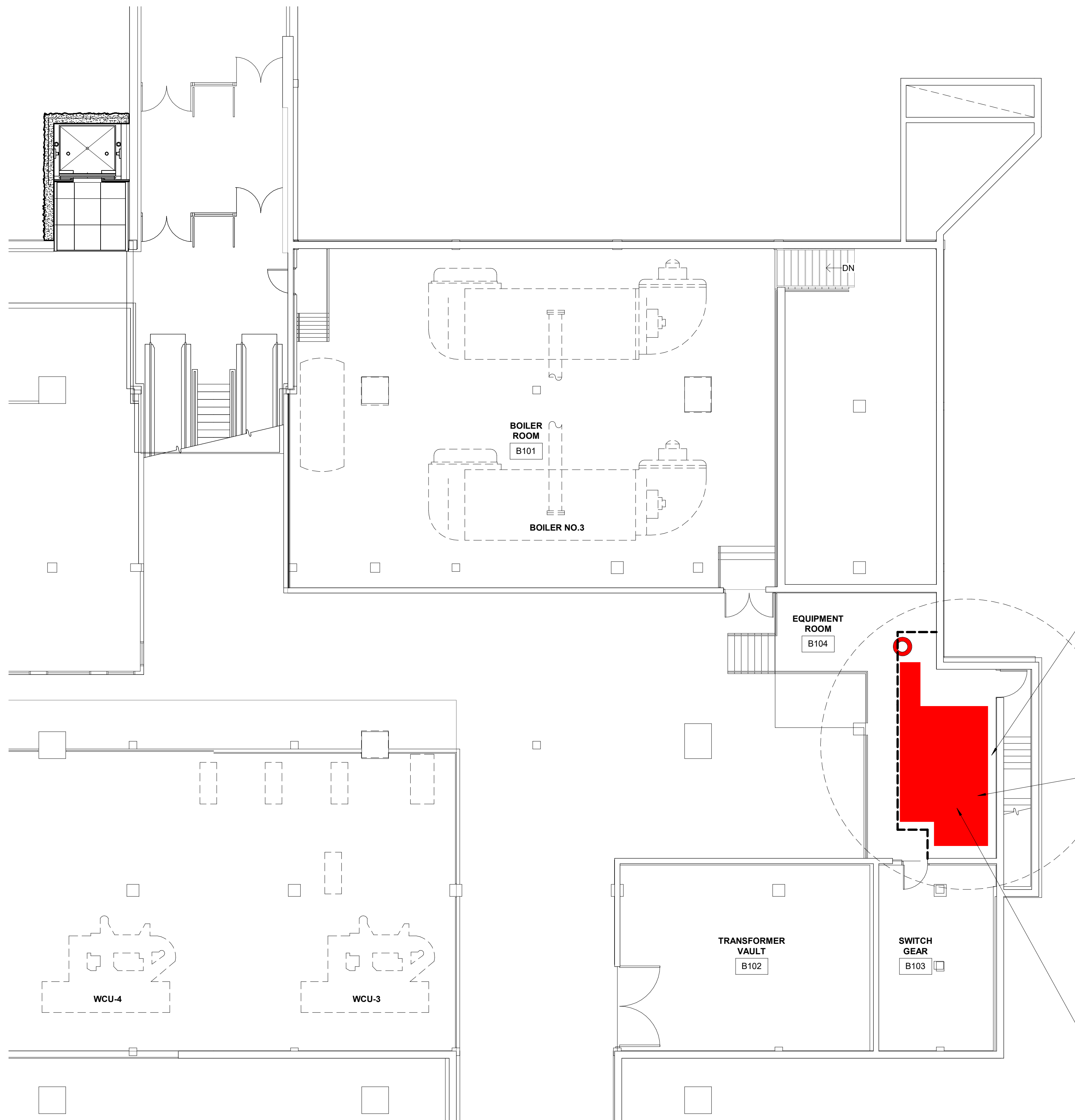
SET:

SHEET TITLE:
ENLARGED PLAN @ AREA WA

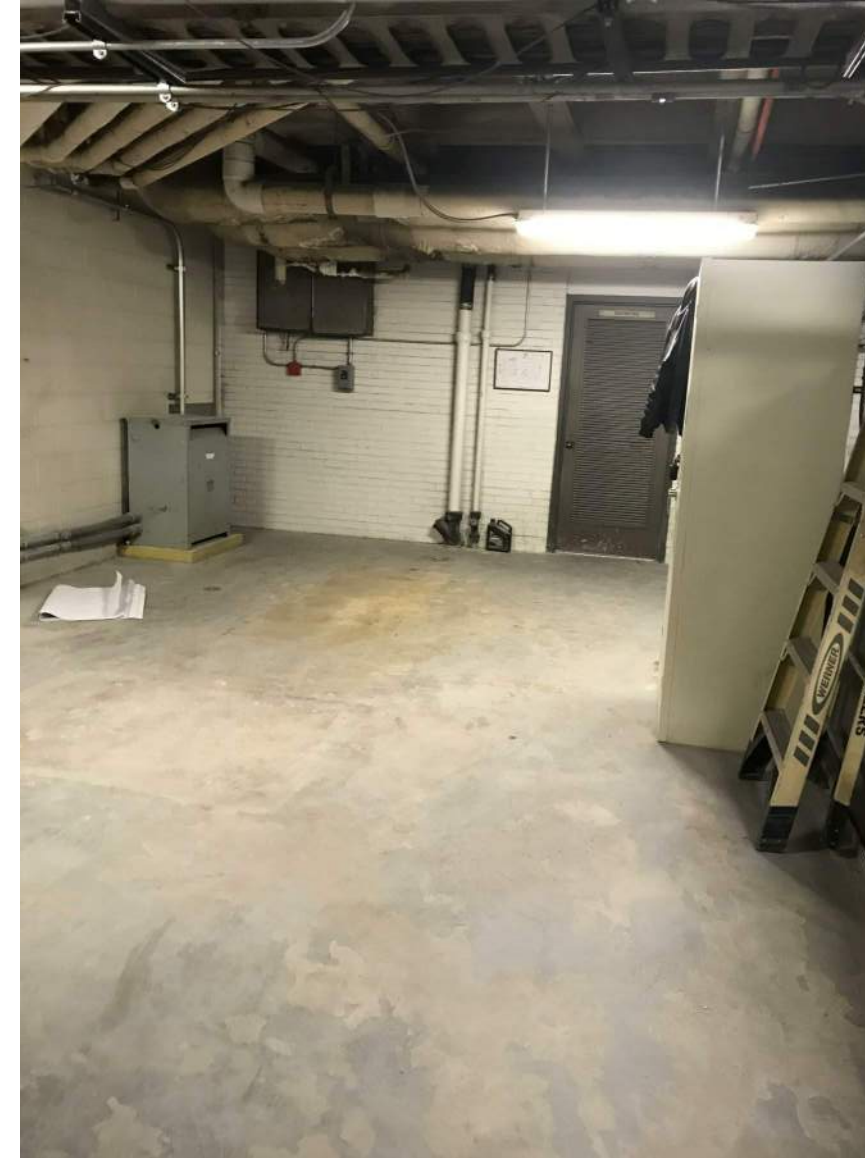
REV. FILE NAME

DATE: **04.09.2021** DWG NO.: **A5.2**

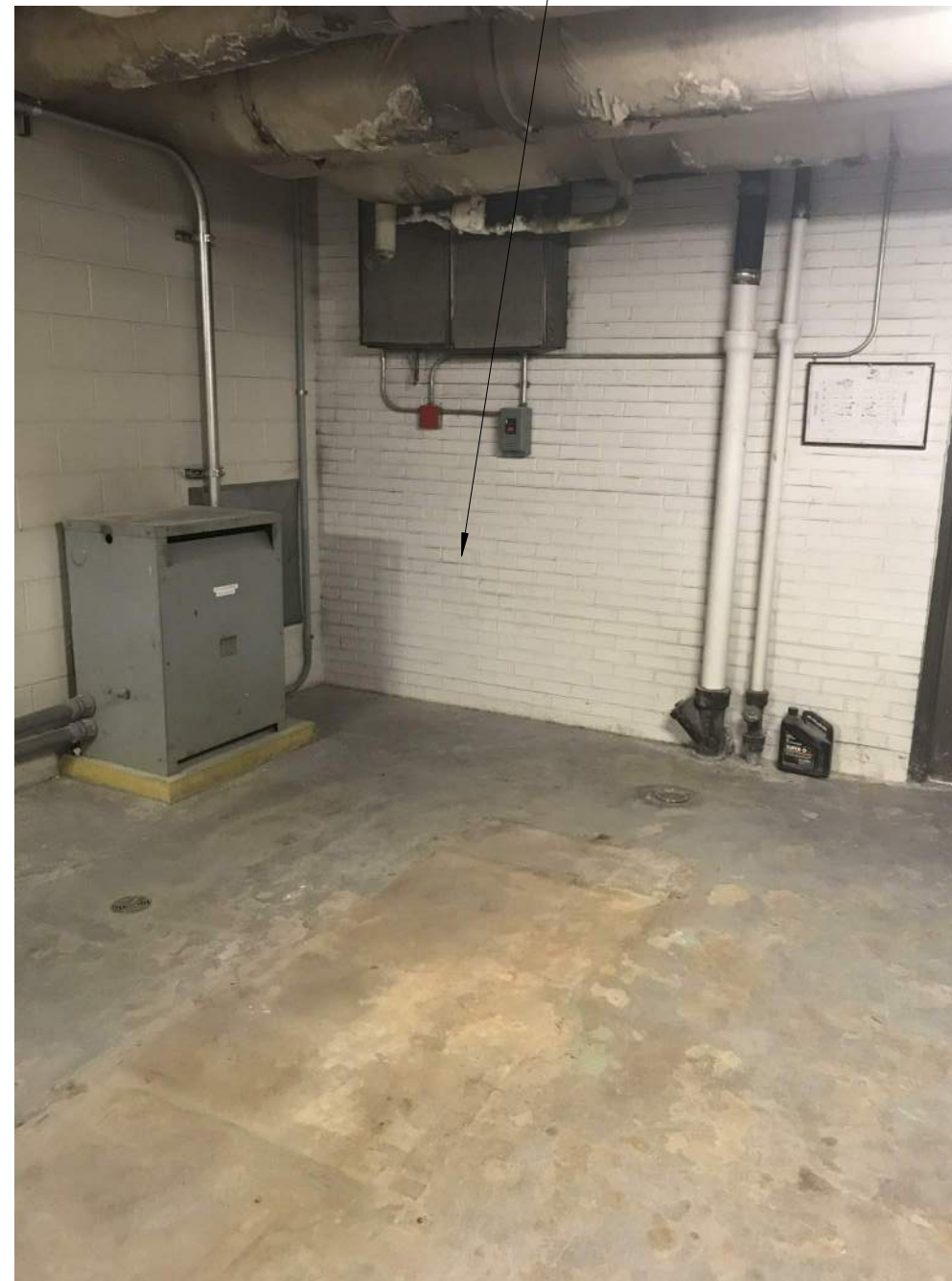
SCALE: **As Indicated**



EXISTING SLEEVE THRU CONC CEILING/FLOOR FOR NEW SANITARY LINE ROUTING. FILL ANNULAR SPACE AFTER PLUMBING WORK IS COMPLETED WITH FIRE CAULKING MATERIAL.



MAINTAIN AT LEAST 48" WIDE UNOBSTRUCTED ACCESS TO SWITCH GEAR ROOM AND THE STAIRWELL AT ALL ALL TIME DURING SEWER REPAIR WORK. INSTALL TEMP DUST CONTROL DURING SAW CUTTING TO PROTECT THE NEARBY ELECTRICAL SWITCH GEAR.



THIS WALL HAS BEEN REMOVED AND RESULT BY OTHER FOR THE SWITCH GEAR REPLACEMENT WORK

SEE PLUMBING FOR LOCATION OF NEW LIFT STATION AND ACCESS BOX. SAWCUT CONCRETE AS NEEDED FOR PLACING OF NEW PUMP. REPAIR CONCRETE IMMEDIATELY AFTER PLUMBING WORK IS COMPLETED. COMPACT FILL AND REPAIR CONCRETE TO MATCH EXISTING. SEE PLUMBING FOR DETAIL OF PUMP, ROUTING AS WELL ELECTRICAL CONNECTION.

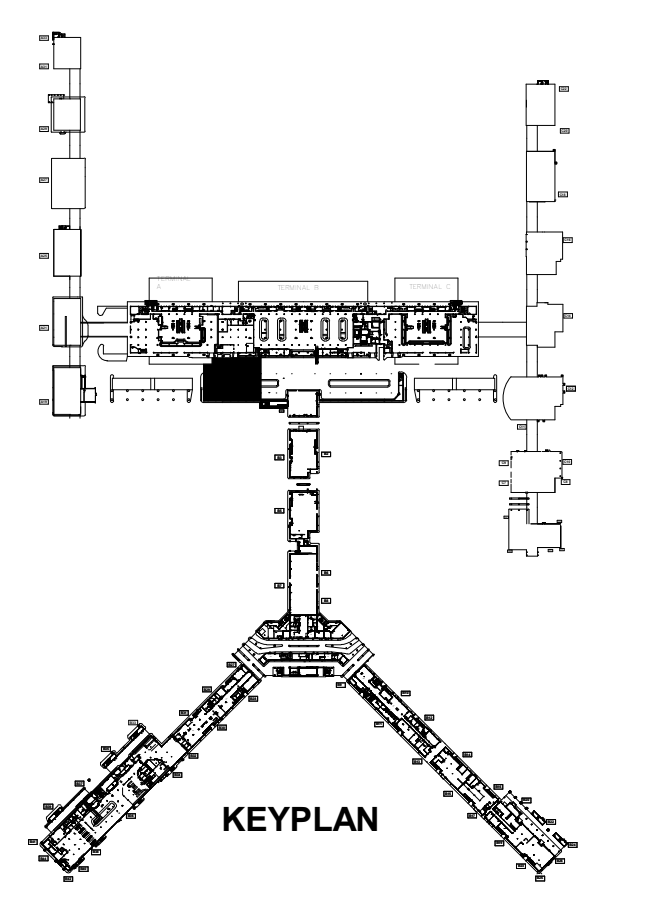
DEMOLITION GENERAL NOTES

- DEMOLISH AS REQUIRED TO ACCOMPLISH THE WORK INDICATED IN THESE DOCUMENTS. ALL REQUIRED DEMOLITION WORK SHALL BE INCLUDED IN THE BASE BID PACKAGE SUBMITTED BY THE CONTRACTOR.
- DO NOT ALLOW MATERIALS AND DEBRIS GENERATED BY DEMOLITION TO ACCUMULATE ON THE JOB SITE. REMOVE DAILY AND DISPOSE OF IN A LEGAL MANNER. THIS PLAN IS TO BE USED IN CONJUNCTION WITH THE ENTIRE SET OF CONSTRUCTION DRAWINGS. DO NOT REMOVE ANY ITEMS WITHOUT VERIFYING AND COORDINATING WITH ALL GENERAL TRADES AS TO HOW THEY RELATE TO THE OVERALL PROJECT.
- THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE PUBLIC AND/OR WORKMEN ON THE SITE TO PREVENT ACCIDENTS OR INJURY TO ANY PERSON ON, ABOUT, OR ADJACENT TO THE PREMISES. THE CONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES, CODES, AND REGULATIONS PERTAINING TO SAFETY AND THE PREVENTION OF ACCIDENTS.
- THE CONTRACTOR MUST MAINTAIN ADEQUATE SUPPORT, INSULATION, WATERPROOFING, EMERGENCY LIGHTING, SECURITY, ALARMS, ETC. FOR ALL OR PART OF THE ITEMS WHICH ARE TO REMAIN.
- LIMITED VIDEO FILES OF THE UNDERGROUND PIPING INSPECTION ARE AVAILABLE FROM MSCAA.
- PLUMBING LINE LOCATION INDICATED ON DRAWINGS IS FOR REFERENCE ONLY. CONTRACTOR TO CONFIRM EXACT LOCATION OF EXISTING PLUMBING LINE PRIOR TO COMMENCEMENT OF DEMOLITION WORK.
- BEFORE CORE DRILLING OR CUTTING ANY FLOOR SLAB, CONTRACTOR MUST SCAN THE AFFECTED AREA WITH GROUND PENETRATING RADAR TO DETERMINE THE APPROPRIATE LOCATION OF CUTTING. OBTAIN APPROVAL FROM OWNER BEFORE CUTTING TO AVOID UNNECESSARY DAMAGE OF INFRASTRUCTURE.

WA REPAIR PHASE

- PRIMARY AREA OF PLUMBING AND CONCRETE CUTTING AND PATCHING AND OVERHEAD WORK
- DASHED LINES INDICATE THE APPROXIMATE LOCATION OF TEMPORARY CONSTRUCTION DUST BARRIER DURING SEWER REPAIR. THE TEMPORARY DUST BARRIER SHALL ALLOW THROUGH ACCESS FOR THE AIRPORT MAINTENANCE STAFF TO THIS AREA AS WELL AS SWITCH GEAR ROOM.
- SEE DETAIL 31A.2 FOR DETAILS

- GENERAL NOTES:**
- COORDINATE WITH MSCAA FOR ALTERNATE ROUTE INTO THE BAGGAGE HANDLING AREA WHERE TRAFFIC IS TYPICALLY DIRECTED THROUGH AREAS OF SEWER REPAIR.
 - NEW PIPES TO BE PROPERLY IDENTIFIED.
 - ANY NEW CONCRETE REPAIR WORK TO MATCH EXISTING ADJACENT.
 - CONFIRM PHASE OF REPAIR IN ORDER TO MINIMIZE REQUIRED DEMOLITION AND PREVENT UNNECESSARY DAMAGE.
 - NOT USED.
 - REFER TO PLUMBING DRAWINGS FOR LOCATION AND ROUTING OF NEW LINES.
 - ALL NEW REPAIR PATCHWORK TO BE PAINTED TO MATCH EXISTING PIPES (TYP.)
 - INSTALL NEW CONCRETE SLAB TO MATCH EXISTING AT THE AFFECTED AREA.
 - DOWEL CONCRETE REPAIR AS NEEDED.
 - DEBRIS MUST BE CLEANED UP DAILY.
 - CONSTRUCTION TRAFFIC MUST BE APPROVED BY MSCAA.
 - AREA OUTSIDE PROJECT LIMITS MUST BE PROTECTED.
 - COORDINATE WITH AIRPORT 48 HOURS IN ADVANCE IF ANY UTILITIES WILL BE INTERRUPTED DURING REPAIR
 - SMOKE ALARM MUST BE PROTECTED.
 - IF APPLICABLE, AIR RETURN MAY NEED TO BE TEMPORARY CLOSED FOR PROPER VENTILATION.
 - FIRE AND LIFE SAFETY MUST NOT BE COMPROMISED DURING REPAIR.
 - COORDINATE WITH AIRPORT FOR LOCATION OF DUMPSTER AS WELL AS MATERIAL STAGING AREA IF NEEDED.
 - COORDINATE WITH AIRPORT IF TEMPORARY SHUT OFF OF RESTROOM SERVICES IS REQUIRED TO PERFORM THE REPAIR WORK.
 - PROTECT ALL EXISTING FINISH OUTSIDE PROJECT LIMIT
 - PROTECT ALL EXISTING EGRESS ACCESS UNLESS NOTED OTHERWISE
 - TEMP CONSTRUCTION BARRIER, TO BE CONSTRUCTED AT WORK AREA FOR SAFETY
 - CONTRACTOR TO CONFIRM EXACT LOCATION OF EXISTING PLUMBING LINE PRIOR TO COMMENCEMENT OF DEMOLITION WORK. SEE PLUMBING DRAWING FOR ADDITIONAL DETAILS OF OVERHEAD PIPING WORK.



- WA AREA PROJECT NOTES**
- LIFT STATION SHOULD BE INSTALLED FLUSH WITH THE CONCRETE FLOOR. PATCH AND REPAIR CONCRETE TO MATCH EXISTING ADJACENT FINISH
 - CONTRACTOR IS RESPONSIBLE TO INSTALL A 8 1/2"x11" FRAMED SIGN THAT READS THE FOLLOWING:

"PLEASE CALL 8040 IF THIS ALARM SOUNDS, WA LIFT STATION".

 SEE ELECTRICAL SHEET E1.0 FOR DETAIL REGARDING THE AUDIBLE AND VISUAL ALARM ON THE BAGGAGE LEVEL. COORDINATE FINAL LOCATION OF SIGN WITH AIRPORT AUTHORITY.
 - COORDINATE THE ALARM SETUP WITH AIRPORT MAINTENANCE AND JOHNSON CONTROL FOR PUMPS FAILURE NOTIFICATION. THE EVENT SHOULD SEND NOTIFICATION TO THE JOHNSON CONTROL BUILDING AUTOMATION SYSTEM.

1 MECHANICAL LOWER LEVEL
1/8" = 1'-0"

Memphis International Airport
MEMPHIS INTERNATIONAL AIRPORT
2491 WINCHESTER RD. SUITE 113
MEMPHIS, TENNESSEE 38116-3866

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ARCHITECT JOB NO. 20008-T11
DRAWN BY: CG
CHECKED BY: TD
APPROVED BY: RC
CONSULTANT JOB NO. ---
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NO.	DESCRIPTION	DATE

MSCAA NO. 19-1423-00 (19-1423-11)
PROJECT:
ID OFFICE AND WA AREA SANITARY SEWER REPAIR

SET:

SHEET TITLE:
ENLARGED BASEMENT PLAN @ AREA WA

RVT. FILE NAME

DATE 04.09.2021 DWG NO. A5.3
SCALE As indicated

SYMBOL	DESCRIPTION
WATER	
	COLD WATER PIPING
	HOT WATER PIPING
	HOT WATER RETURN PIPING
DRAINAGE	
	SANITARY OR WASTE PIPING
	VENT PIPING
VALVES	
	CAPPED & VALVED
	GATE VALVE
	HOSE BIBB
	ISOLATION VALVE
	REDUCED PRESSURE BACKFLOW PREVENTER
	STRAINER
	CAPPED & VALVED
DRAINS	
	AREA DRAIN
	FLOOR DRAIN
PIPING	
	CAPPED
	CLEANOUT
	DOWN THROUGH FLOOR
	DROP (OR RISE)
	FLOW ARROW
	FLUSH FLOOR CLEANOUT
	UNION
	UP (THROUGH SLAB ABOVE)
	UP & DOWN (THROUGH FLOOR SLAB)
	UP & TRAP
	TEMPERATURE GAGE
	WASTE & TRAP
	PIPING BRANCH TAKEOFF
	UP (THROUGH SLAB ABOVE)
	DROP DOWN
	DROP (OR RISE)

SYMBOLS LEGEND	
	WC-1
	PLUMBING FIXTURE DESIGNATION
	ELEVATION DETAIL DESIGNATION
	REVISION DESIGNATION
	DRAWING NUMBER
	SHEET NUMBER
	DETAIL DESIGNATION
	COLUMN LINE DESIGNATION
	POINT OF CONNECTION/REMOVAL

CODE ANALYSIS - INTERNATIONAL BUILDING CODE 2015	
CODE COMMENTS	
JURISDICTION	Memphis and Shelby County Construction Code Enforcement
APPLICABLE CODES	2015 International Building Code with Local Amendments 2015 International Existing Building Code with Local Amendments 2015 International Residential Code with Local Amendments 2014 National Electrical Code 2018 Joint Electrical Code 2015 International Mechanical Code with Local Amendments 2015 International Fuel Gas Code with Local Amendments 2015 International Plumbing Code with Local Amendments 2015 International Energy Conservation Code with Local Amendments 2009 ICC A117.1 Accessibility and Usable Buildings and Facilities (by reference) 2013 ASME 17.1 Safety Code for Elevators and Escalators (by reference)

GENERAL PROJECT NOTES

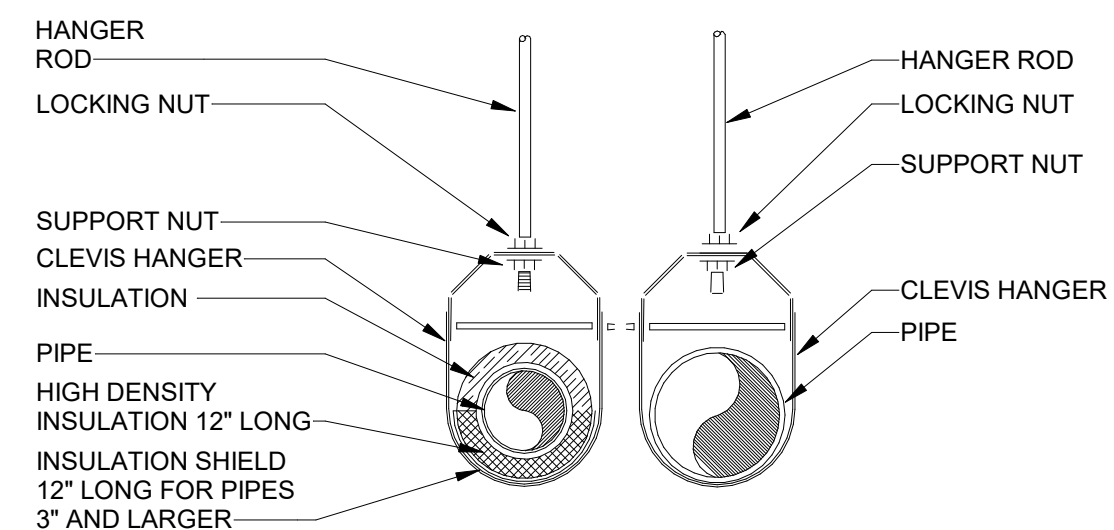
- CONTRACTOR SHALL COORDINATE ALL PLUMBING SYSTEMS WITH ALL OTHER TRADES, SO NOT TO CAUSE INTERFERENCES.
- CONTRACTOR SHALL FIELD VERIFY ALL SITE UTILITY CONNECTIONS OR SIZE, LOCATION, AND DEPTH AND INSTALL ALL SYSTEMS IN ACCORDANCE WITH CONDITIONS FOUND (PRIOR TO BEGINNING INSTALLATION). ANY PART OF PLUMBING SYSTEMS INSTALLED INCORRECTLY DUE TO NOT VERIFYING SAME SHALL BE REMOVED AND CORRECTED AT THE EXPENSE OF THE CONTRACTOR.
- CONTRACTOR SHALL GUARANTEE ENTIRE SYSTEM FOR A PERIOD OF ONE YEAR AFTER FINAL DATE OF ACCEPTANCE.
- PROVIDE RATED SEALANT FOR ALL PENETRATIONS THROUGH WALLS, FLOORS, CEILING AND ROOFS. PROVIDE FIRE STOP SEALANT AROUND ALL PENETRATIONS THROUGH FIRE RATED WALLS, SO AS TO MAINTAIN FIRE INTEGRITY IN THE EVENT OF A FIRE.
- CONTRACTOR SHALL INSTALL ALL PLUMBING SYSTEMS IN A GOOD WORKMANSHIP MANNER. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES AND AUTHORITIES.
- CONTRACTOR SHALL REVIEW ENTIRE SET OF DOCUMENTS INCLUDING PLUMBING PLANS AND ADVISE ARCHITECT IN WRITING PRIOR TO BEGINNING CONSTRUCTION IF THERE ARE ANY CODE VIOLATIONS, SPACE CONFLICTS AND/OR OTHER COORDINATION CONFLICTS WITH OTHER TRADES. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A COMPLETE PLUMBING SYSTEM IN ACCORDANCE WITH CODES, ETC.
- SEE ARCHITECTURAL DRAWINGS FOR ALL BUILDING DIMENSIONS, DETAILS, ELEVATIONS, AND EXACT LOCATIONS OF ALL FIXTURES.
- THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW GENERAL PLUMBING LAYOUTS AND PIPE ROUTING ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PREPARE DETAILED SHOP DRAWINGS WHERE SPACE AND/OR COORDINATION ISSUES ARISE AND TO CONFIRM ALL SPACE ALLOCATIONS.
- CONTRACTOR SHALL PROVIDE TAMPER-PROOF, LOCKABLE ACCESS PANELS FOR ALL CONCEALED VALVES, WATER HAMMER ARRESTORS, ETC.
- CONTRACTOR SHALL COORDINATE ALL ELECTRICAL CHARACTERISTICS OF ELECTRICAL OPERATED EQUIPMENT WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING SAME. THIS APPLIES TO VOLTAGE, PHASE, RATED CAPACITIES, ETC.
- CONTRACTOR SHALL OFFSET ALL PIPING IN BUILDING AS REQUIRED TO PROPERLY INSTALL PLUMBING SYSTEMS.
- CONTRACTOR SHALL PROVIDE SHUTOFF VALVES ON ALL BRANCH RUNOUTS TO FIXTURES. NO EXCEPTIONS!
- AT COMPLETION OF PROJECT, THE CONTRACTOR SHALL REMOVE ALL AERATORS, FILTERS, ETC. AND FLUSH SYSTEM OUT THOROUGHLY.
- CONTRACTOR SHALL VERIFY ALL CONNECTIONS OF MISC. EQUIPMENT FURNISHED BY OTHERS PRIOR TO INSTALLING THE SAME AND MAKE ALL CONNECTIONS FOR THE SAME.
- SLEEVES SHALL BE INSTALLED WHERE PIPING PASSES THROUGH STRUCTURE. ALL HOLES THROUGH CONCRETE SHALL BE CORE-DRILLED. VERIFY LOCATION WITH ARCHITECT BEFORE COMMENCING WORK.
- ALL PIPING SHALL BE TESTED AND PROVEN TIGHT BEFORE PIPE IS CONCEALED.
- ALL SANITARY PIPING SHALL BE INSTALLED WITH A MINIMUM SLOPE OF 1/8" PER FOOT, UNLESS NOTED OTHERWISE ON THE PLANS.
- PRIOR TO SUBMITTING BID, VISIT THE SITE OF THE PROPOSED CONSTRUCTION AND THOROUGHLY INVESTIGATE EXISTING UTILITIES, WORKING CONDITIONS TO BE ENCOUNTERED ETC. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR CONDITIONS INCREASING COST WHICH WERE NOT KNOWN WHEN SUBMITTING PROPOSAL IF THE CONDITION WAS OBVIOUS AND COULD HAVE BEEN DISCOVERED DURING A SITE VISIT.
- DISCONNECT AND DISMANTLE EXISTING PLUMBING SYSTEMS AND EQUIPMENT TO BE DEMOLISHED AND LEAVE DEBRIS AND DISCONNECTED EQUIPMENT ON THE FLOOR FOR REMOVAL UNDER SECTION 02070 - SELECTIVE DEMOLITION.
- REMOVE EXISTING PLUMBING STACKS, MAINS AND BRANCHES WHEN SERVING FIXTURES TO BE DEMOLISHED. REMOVE PIPING BACK TO WITHIN 24" OF THE ACTIVE MAIN AND PROVIDE CAP OR PLUGS TO SUIT SYSTEM. OBTAIN EXISTING RECORD DRAWINGS FROM THE OWNER. MAINTAIN EXISTING PLUMBING RISERS AND STACKS SERVING FIXTURES TO REMAIN.
- AFTER WALLS AND CEILING ARE REMOVED AND PIPING IS EXPOSED, VERIFY PIPING SERVES ONLY PLUMBING FIXTURES & EQUIPMENT INDICATED FOR DEMOLITION BEFORE SHUTDOWN FOR DISCONNECTION. IDENTIFY EXISTING PIPING WHICH SERVES FIXTURES & EQUIPMENT TO REMAIN. PROMPTLY NOTIFY ARCHITECT OF ACTIVE PIPING TO BE MAINTAINED WHEN LOCATED IN PARTITIONS TO BE DEMOLISHED.
- REMOVE EXISTING STACKS AND RISERS LOCATED IN EXISTING PARTITIONS TO BE DEMOLISHED AND PROVIDE NEW OFFSET AT CEILING AND DROP THROUGH THE FLOOR AND RECONNECT TO THE EXISTING SERVICES AT THE FLOOR BELOW.

MISC. CODE NOTES

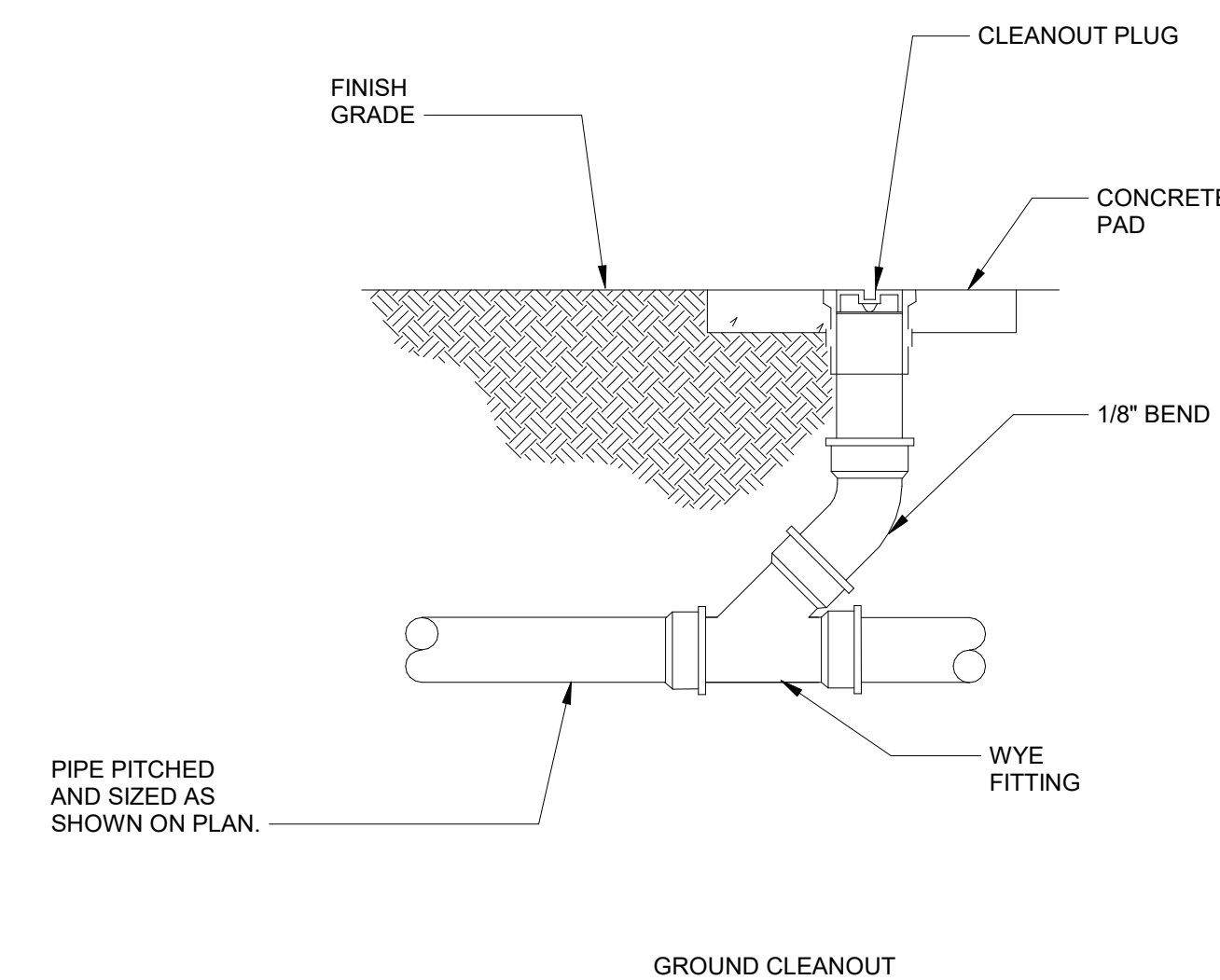
- PERMITS SHALL BE APPLIED FOR BY LICENSED CONTRACTOR.
- ANY CONTRACTOR WHO DESIRES TO INSTALL, ENLARGE, ALTER, REPAIR, MOVE OR REPLACE A PLUMBING SYSTEM, WHICH IS TO BE REGULATED BY THE CODE SHALL FIRST MAKE APPLICATION AND OBTAIN THE REQUIRED PERMIT FOR THE WORK.
- PLUMBING PLANS & INSTALLATION SUBJECT TO PLUMBING INSPECTOR'S COMMENTS & FIELD APPROVAL.
- ALL OF PLUMBING SYSTEM SHALL BE INSTALLED IN STRICT ACCORDANCE WITH CURRENT COUNTY PLUMBING CODE AND LOCAL AMENDMENTS, PLUMBING INSPECTORS & PLANS EXAMINERS REVIEW.
- SEWER SHALL BE PERMITTED & INSPECTED THROUGH PLUMBING DEPARTMENT.

DRAWING LIST - PLUMBING

- P0.0 PLUMBING - LEGEND, GENERAL PROJECT NOTES, SCHEDULES, & DETAILS
- P1.0 PLUMBING - ENLARGED FIRST FLOOR PLAN @ AREA EA (ID) - UNDERGROUND
- P1.1 PLUMBING - LOWER LEVEL DEMO PLAN @ AREA WA - UNDERGROUND
- P1.2 PLUMBING - LOWER LEVEL PLAN @ AREA WA - UNDERGROUND
- P1.3 PLUMBING - FIRST FLOOR PLAN @ AREA WA - UNDERGROUND
- Grand total: 5



HANGER ROD SCHEDULE		HANGER ROD SPACING	
PIPE SIZE	ROD SIZE	PIPE SIZE	MAX. ALLOWABLE SPACING
UP TO 2"	3/8" DIA	1"	7'
2 1/2" THRU 3"	1/2" DIA	1-1/4"	8'
4" AND 5"	5/8"	1-1/2"	9'
6" THRU 8"	3/4"	2"	10'
12"	7/8"	2-1/2"	11'
		3" THRU 8"	12'
		10' & 12"	15'

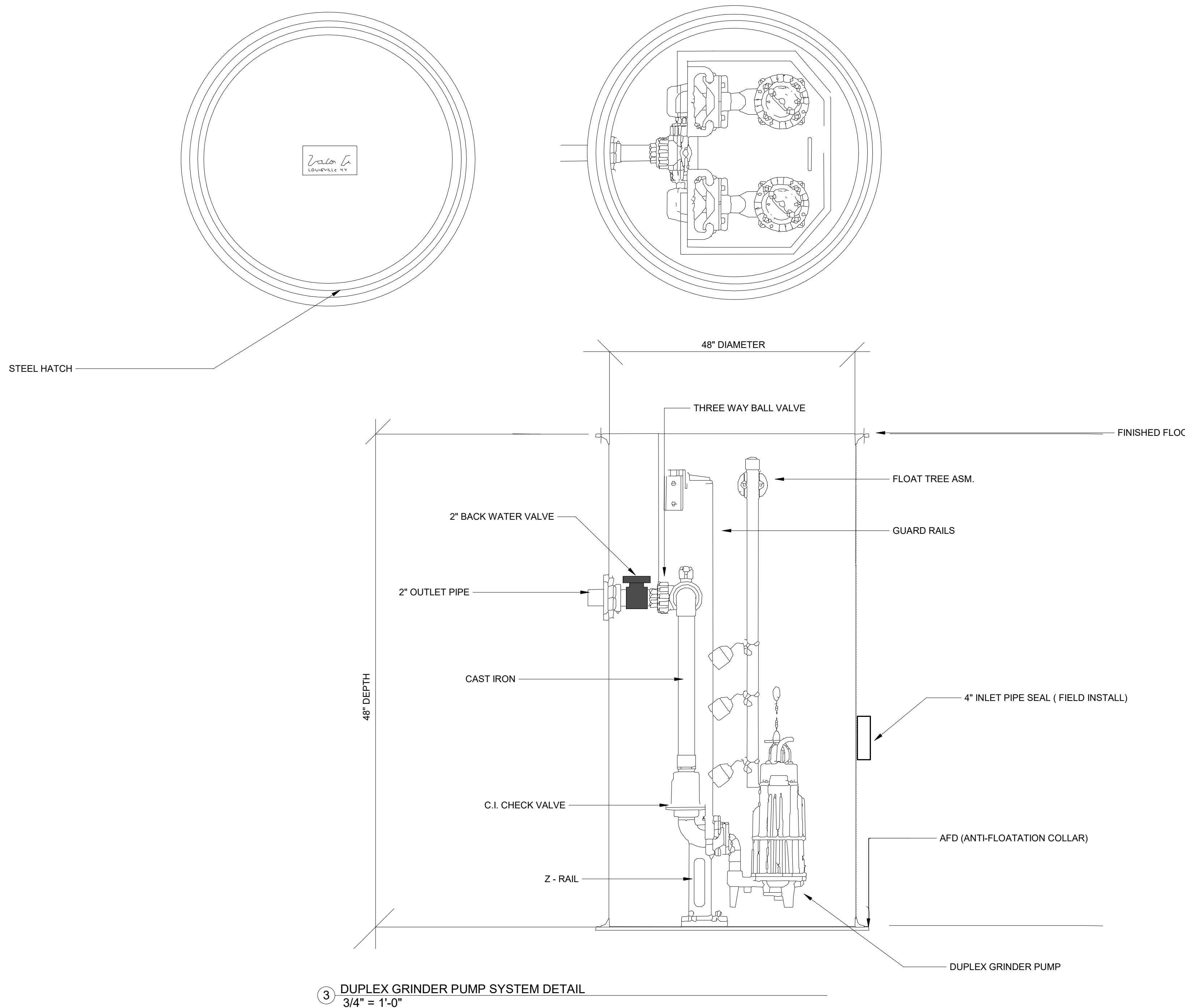


1 PIPE HANGER INSTALLATION NTS

2 TYPICAL GROUND CLEANOUT NTS

PUMP SCHEDULE							
SYMBOL	TYPE	ELECTRICAL (V/PH/Hz)	POWER (HP)	FLOW RATE (GPM)	PRESSURE CAPACITY (FT)	INLET/ OUTLET SIZE (IN)	BASIS OF DESIGN (OR APPROVED EQUAL)
SP-1	DUPLIX SUMP PUMP (GRINDER)	115/1/60	1	30	21	4\"/>	

- NOTES:
- COORDINATE INSTALLATION OF SUMP PUMP WITH EXISTING STRUCTURAL AND ELECTRICAL CONDITIONS.
 - EACH SUMP PUMP SHALL BE 15 AMPS AND HAVE CAPACITY INDICATED IN THIS SCHEDULE.



3 DUPLIX GRINDER PUMP SYSTEM DETAIL 3/4\"/>



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20008-T11

DRAWN BY:
RJM

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REVISIONS		
NO.	DESCRIPTION	DATE

MSCAA NO.
19-1423-00 (19-1423-11)

PROJECT:
ID OFFICE AND WA AREA SANITARY SEWER REPAIR

SET:
ISSUED FOR BID

SHEET TITLE:
PLUMBING - LEGEND, GENERAL PROJECT NOTES, SCHEDULES, & DETAILS

DATE: **4.9.2021** DWG NO.: **P0.0**

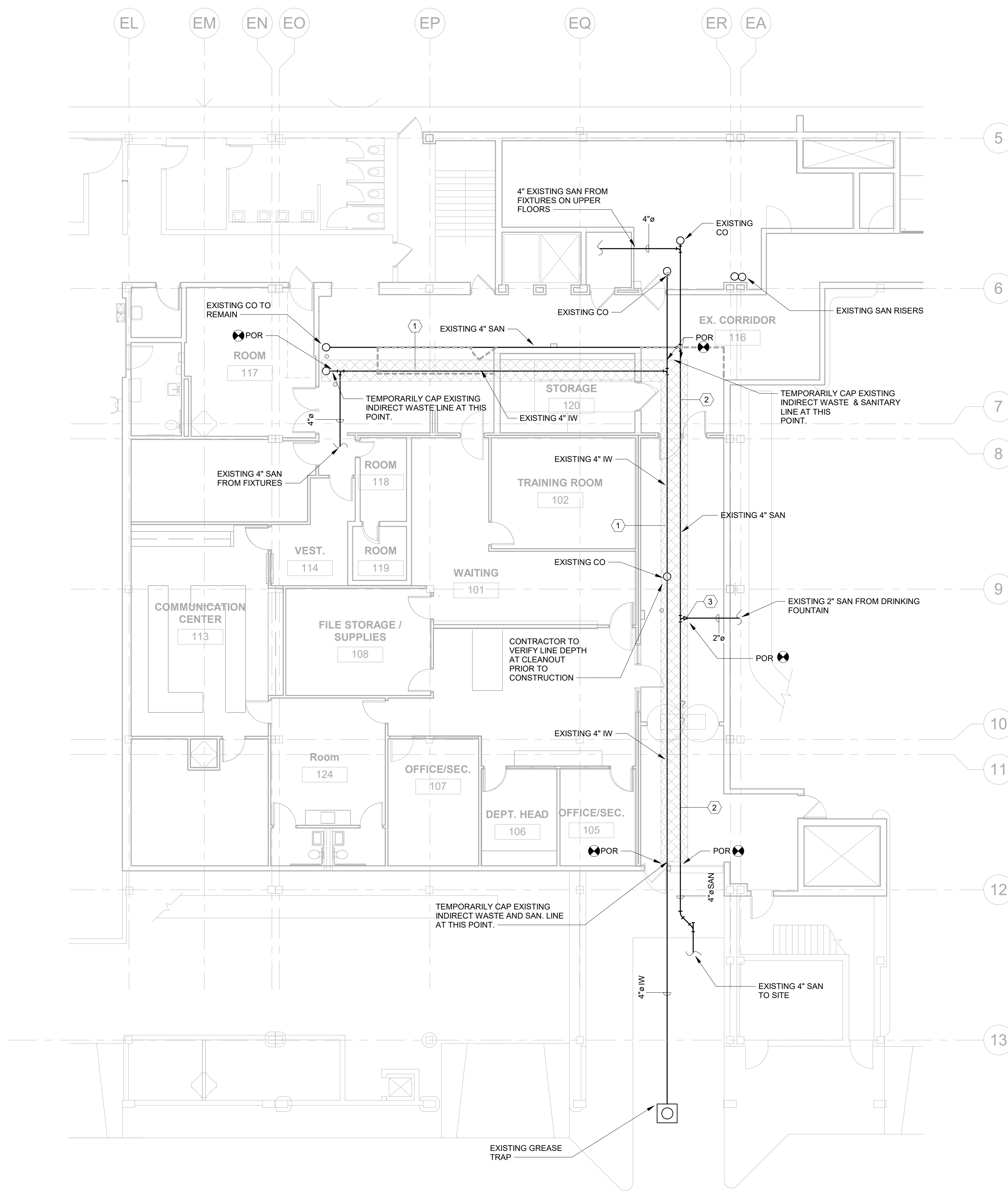
SCALE: **As indicated**

KEY NOTES

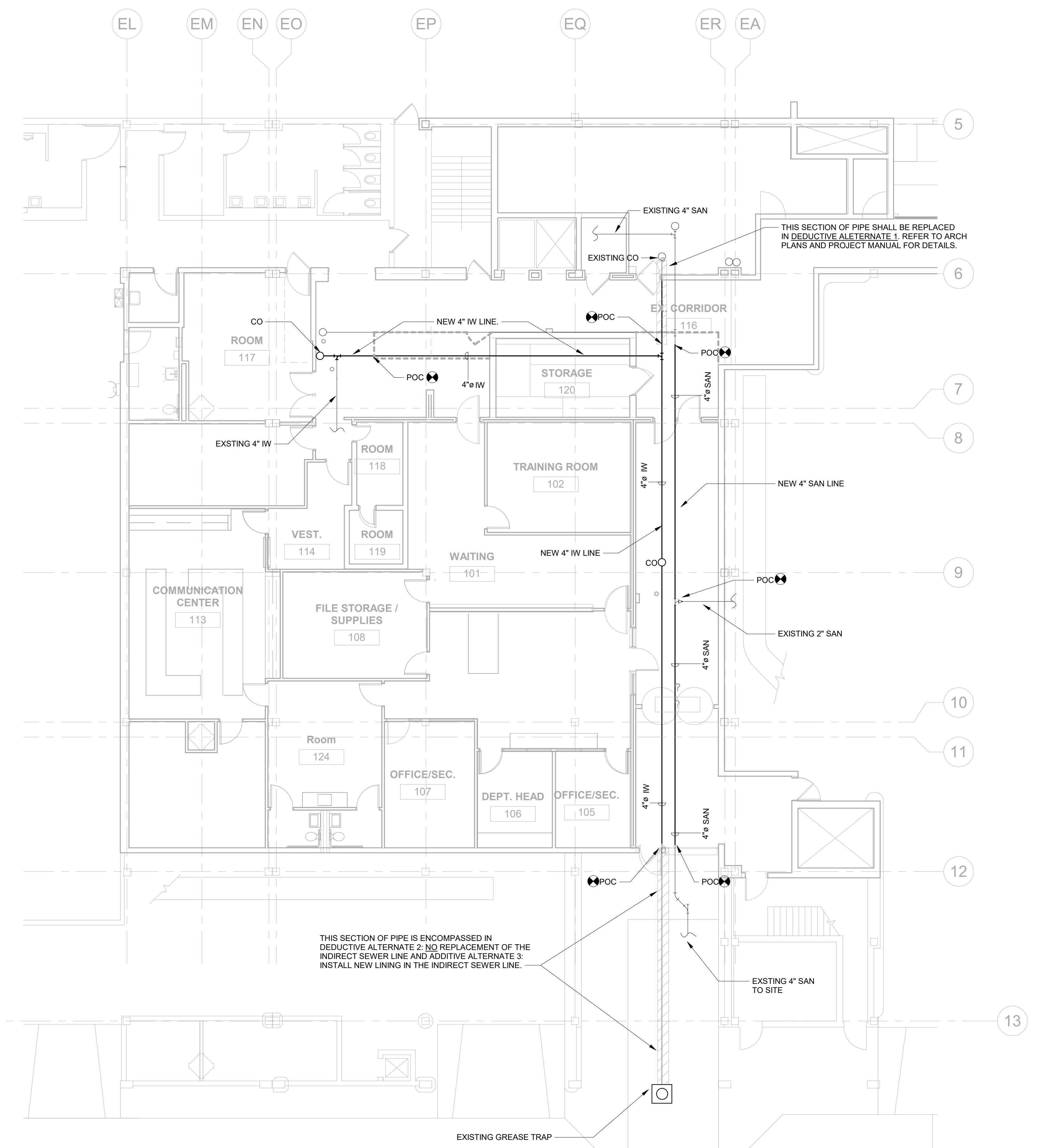
- 1 REMOVE EXISTING INDIRECT WASTE PIPE OUTLINED IN HATCHED AREA. CONTRACTOR TO VERIFY EXACT LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- 2 REMOVE EXISTING SANITARY WASTE PIPE OUTLINED IN HATCHED AREA. CONTRACTOR TO VERIFY EXACT LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- 3 TEMPORARILY CAP EXISTING BRANCH LINE AT THIS LOCATION FOR CONNECTION TO NEW MAIN.

GENERAL DRAWING NOTES

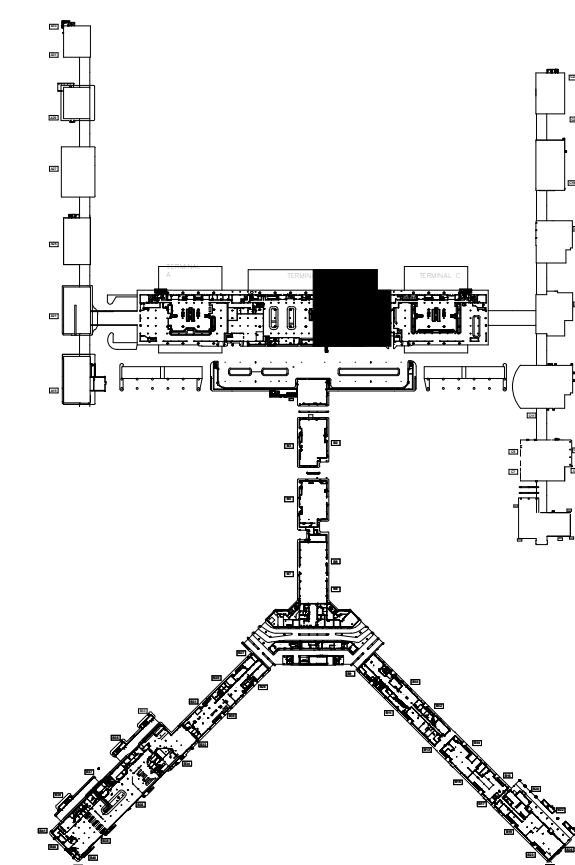
- A. PLEASE REFER TO SHEET P0.0 FOR PROJECT NOTES, LEGEND, SCHEDULES, & DETAILS
- B. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE EXACT LOCATION OF UTILITIES PRIOR TO CONSTRUCTION



1 PLUMBING - DEMO FLOOR PLAN @ AREA EA ID OFFICE - UNDERGROUND
1/8" = 1'-0"



2 PLUMBING - FLOOR PLAN @ AREA EA ID OFFICE - UNDERGROUND
1/8" = 1'-0"



KEYPLAN

REVISIONS		
NO.	DESCRIPTION	DATE

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 PROGRAM MANAGEMENT CONSULTANT

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 4225 AIRWAYS BLVD.
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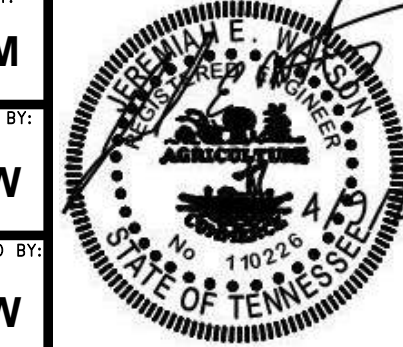
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DRAWN BY: **RJM**
 CHECKED BY: **JEW**
 APPROVED BY: **JEW**



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MSCAA NO.
 19-1423-00 (19-1423-11)

PROJECT:
ID OFFICE AND WA AREA SANITARY SEWER REPAIR

SET:
ISSUED FOR BID

SHEET TITLE:
PLUMBING - LOWER LEVEL DEMO PLAN @ AREA WA - UNDERGROUND

RVT. FILE NAME -
 DATE **4.9.2021** DWG NO. **P1.1**
 SCALE **1/8" = 1'-0"**

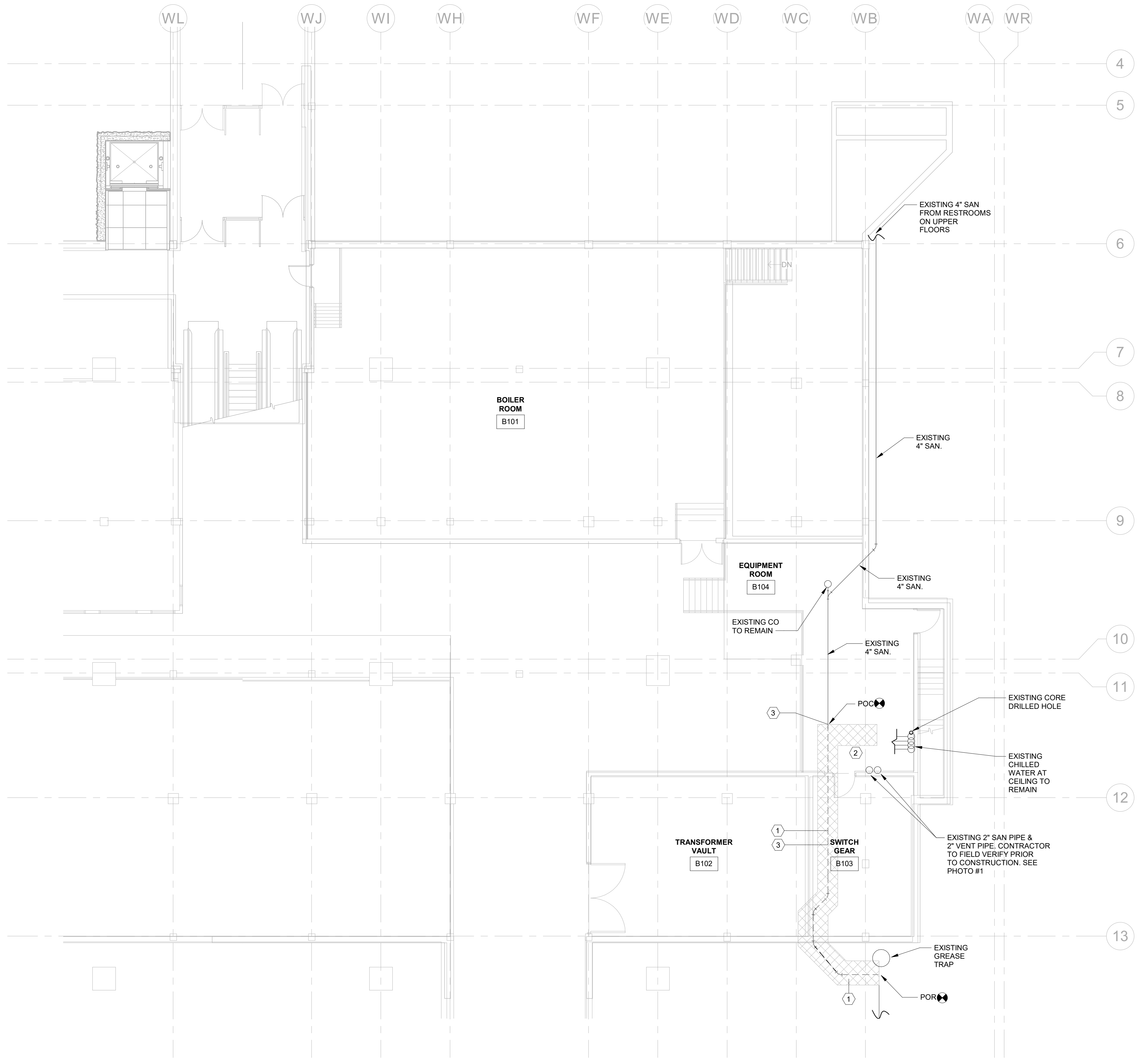
KEY NOTES

- 1
- 2
- 3

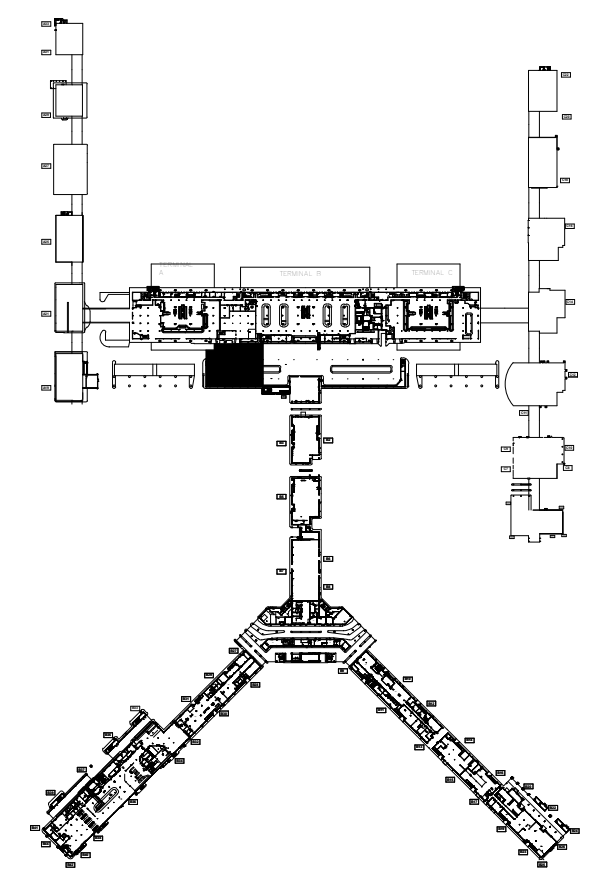
CAP AND ABANDON EXISTING SANITARY LINE IN PLACE. CONTRACTOR TO VERIFY EXACT LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 PROVIDE TRENCH ROUTING FOR NEW FORCED MAIN LINE TO SUMP PUMP.
 CONTRACTOR SHALL PHASE DEMOLITION AND NEW WORK SO THAT SUMP PUMP AND FORCED MAIN PIPING IS INSTALLED FIRST PRIOR TO ABANDONMENT OF EXISTING SAN LINE. EXISTING LINE SHALL BE VALVED AT NEW CONNECTION AND READY FOR QUICK SWITCH OVER ONCE SUMP IS READY FOR OPERATION.

GENERAL DRAWING NOTES

- A. PLEASE REFER TO SHEET P0.0 FOR PROJECT NOTES, LEGEND, SCHEDULES, & DETAILS
- B. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE EXACT LOCATION OF UTILITIES PRIOR TO CONSTRUCTION



REFERENCE PHOTO #1



KEYPLAN

1 PLUMBING - LOWER LEVEL DEMO FLOOR PLAN @ AREA WA
 1/8" = 1'-0"

REVISIONS		
NO.	DESCRIPTION	DATE

MSCAA NO.
 19-1423-00 (19-1423-11)
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ID OFFICE AND WA AREA SANITARY SEWER REPAIR

SET:
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SHEET TITLE:
PLUMBING - LOWER LEVEL PLAN @ AREA WA - UNDERGROUND

RVT. FILE NAME
 DATE
4.9.2021
 SCALE
1/8" = 1'-0"
 DWG NO.
P.1.2

KEY NOTES

- 1 COORDINATE LOCATION OF NEW FORCED MAIN LINE WITH EXISTING PIPES. ROUTE NEW 2" SANITARY UP THROUGH EXISTING CORE DRILLED HOLE.
- 2 CONTRACTOR SHALL PHASE DEMOLITION AND NEW WORK SO THAT SUMP PUMP AND FORCED MAIN PIPING IS INSTALLED FIRST PRIOR TO ABANDONEMENT OF EXISTING SAN LINE. EXISTING LINE SHALL BE VALVED AT NEW CONNECTION AND READY FOR QUICK SWITCH OVER ONCE SUMP IS READY FOR OPERATION.
- 3 PROVIDE SHUT-OFF VALVE AT FORCED MAIN PIPE RISER FOR EMERGENCY PUMP CONNECTION.

GENERAL DRAWING NOTES

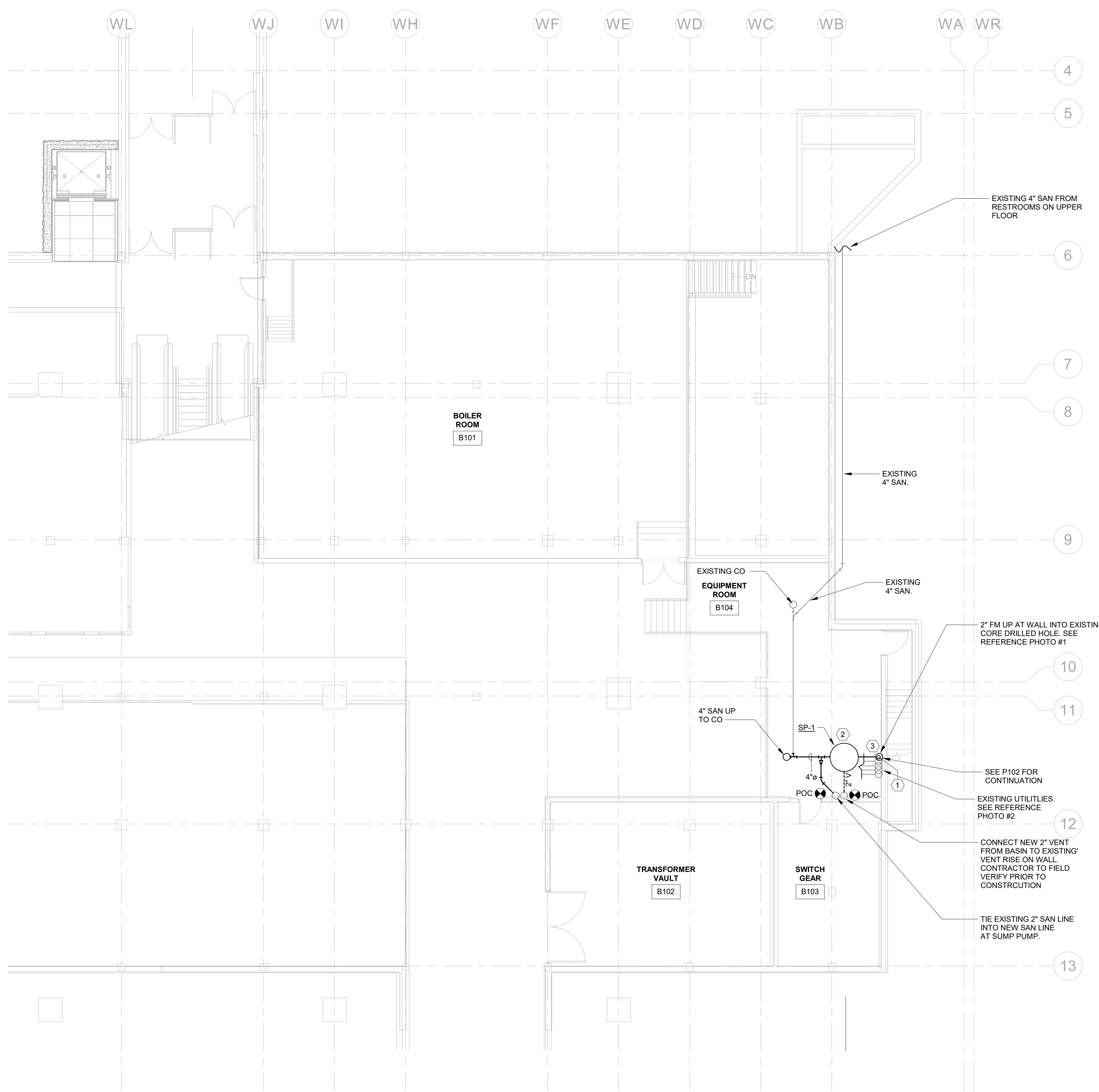
- A. PLEASE REFER TO SHEET P0.0 FOR PROJECT NOTES, LEGEND, SCHEDULES, & DETAILS
- B. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE EXACT LOCATION OF UTILITIES PRIOR TO CONSTRUCTION



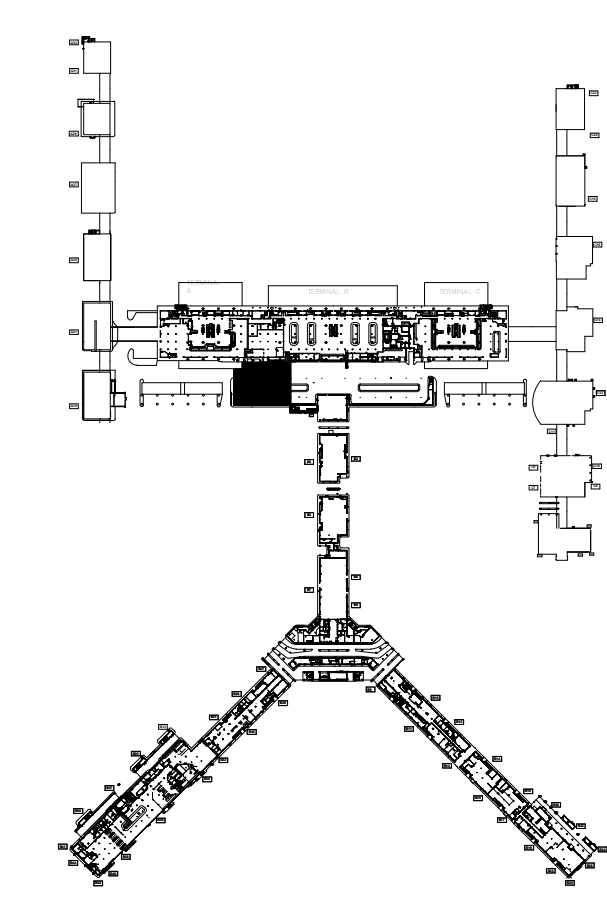
REFERENCE PHOTO 1



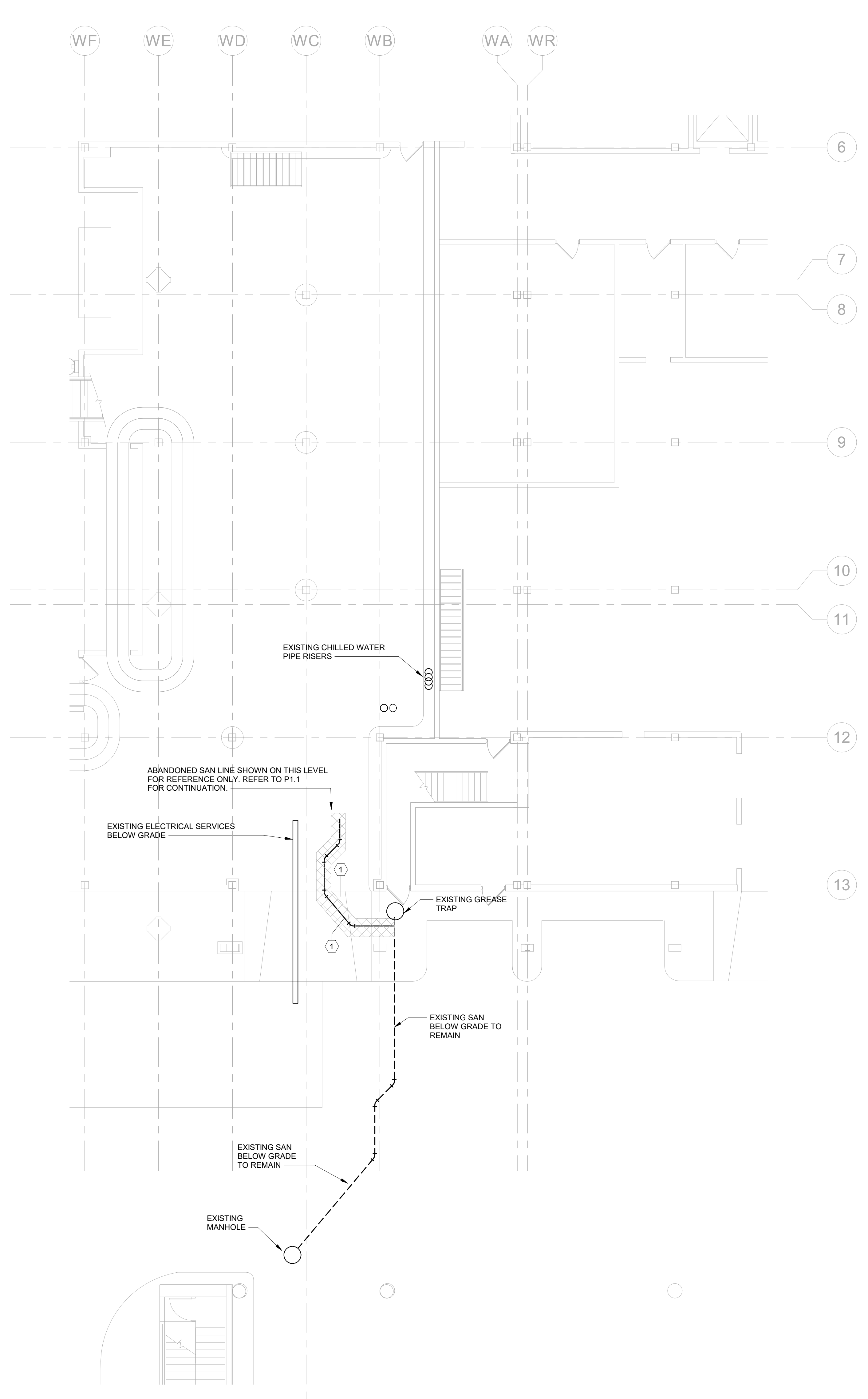
REFERENCE PHOTO 2



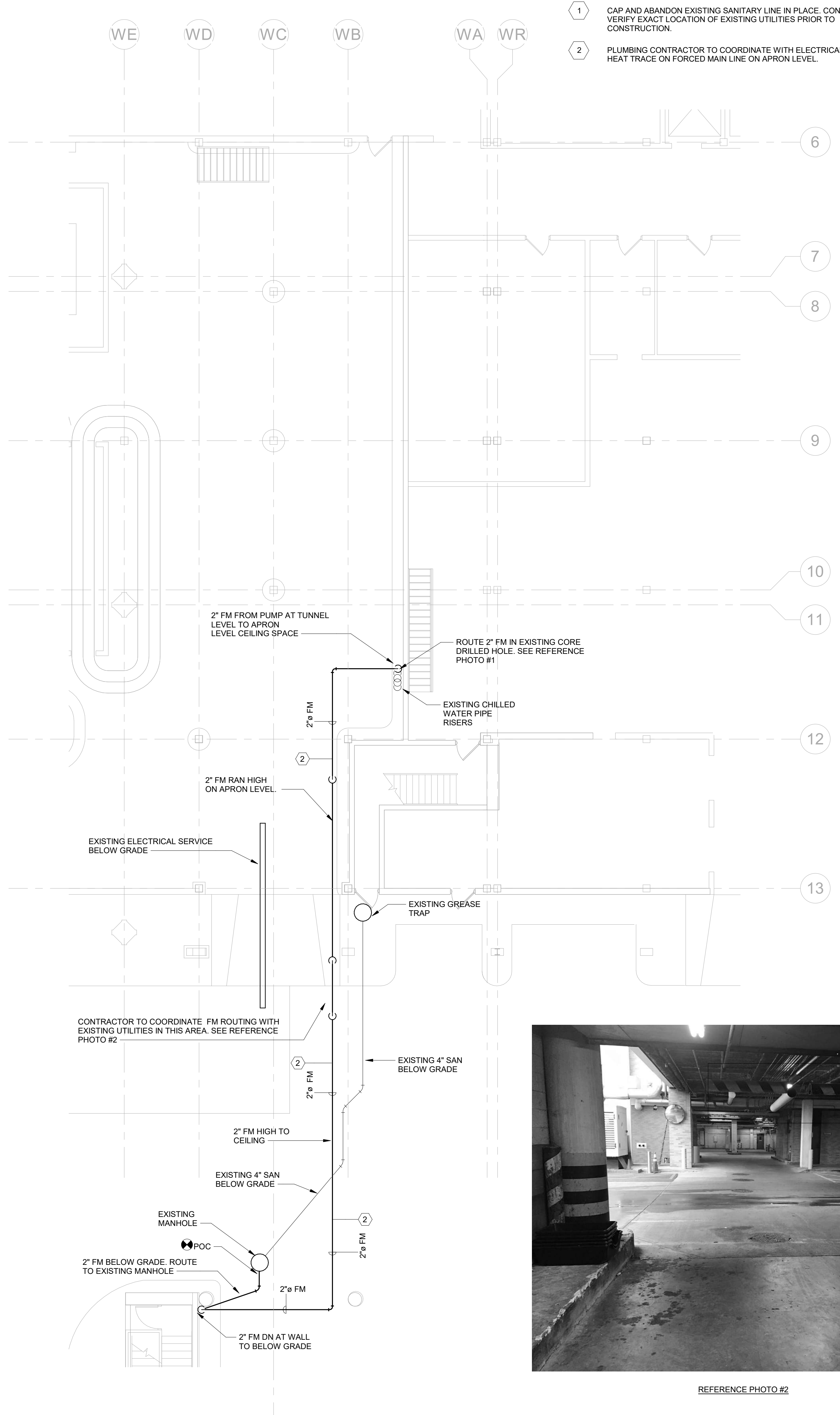
↑ 1 PLUMBING - LOWER LEVEL FLOOR PLAN @ AREA WA
 1/8" = 1'-0"



KEYPLAN



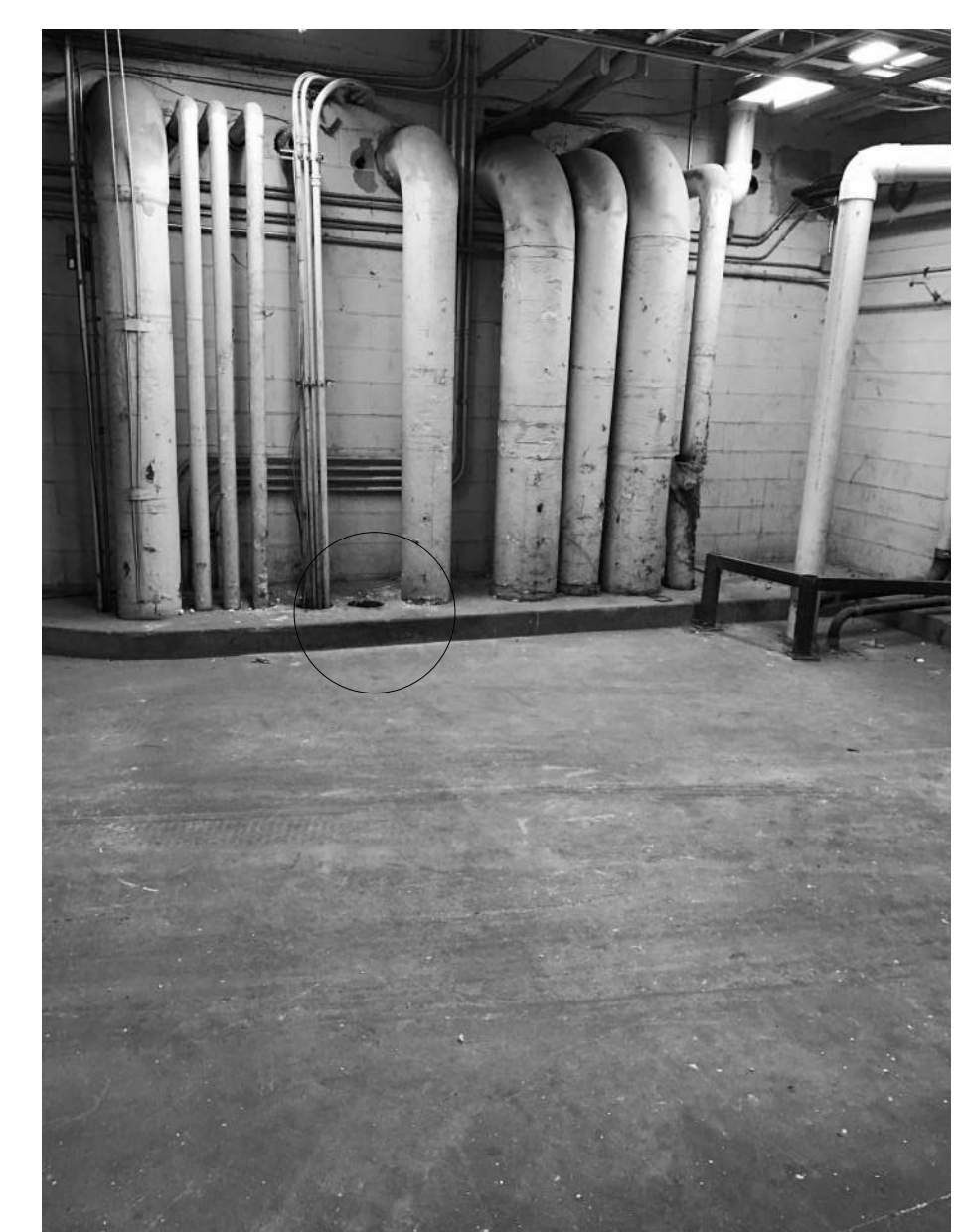
1 PLUMBING - DEMO FLOOR PLAN @ AREA WA - UNDERGROUND
 1/8" = 1'-0"



2 PLUMBING - FLOOR PLAN @ AREA WA - UNDERGROUND
 1/8" = 1'-0"

- KEY NOTES**
- 1** CAP AND ABANDON EXISTING SANITARY LINE IN PLACE. CONTRACTOR TO VERIFY EXACT LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - 2** PLUMBING CONTRACTOR TO COORDINATE WITH ELECTRICAL AND PROVIDE HEAT TRACE ON FORCED MAIN LINE ON APRON LEVEL.

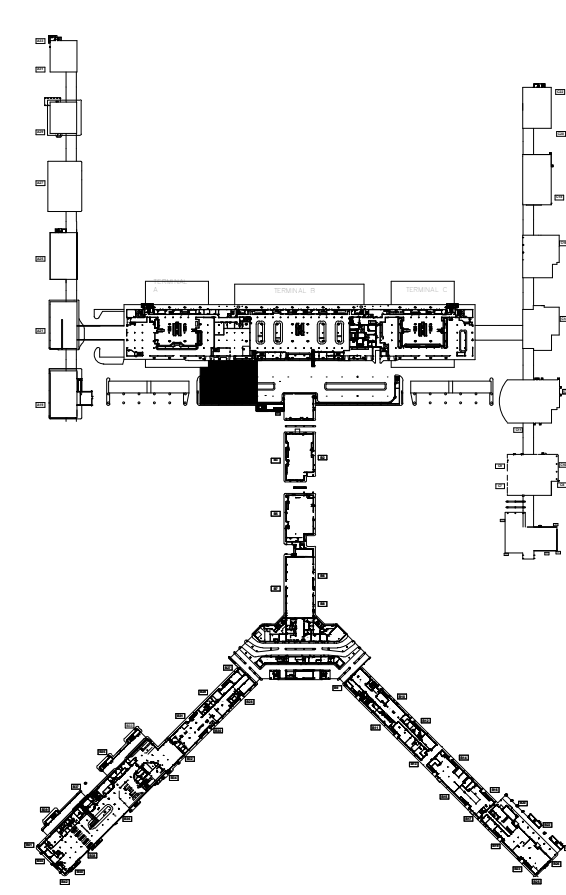
- GENERAL DRAWING NOTES**
- A. PLEASE REFER TO SHEET P0.0 FOR PROJECT NOTES, LEGEND, SCHEDULES, & DETAILS
 - B. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE EXACT LOCATION OF UTILITIES PRIOR TO CONSTRUCTION



REFERENCE PHOTO #1



REFERENCE PHOTO #2



KEYPLAN

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ARCHITECT JOB NO.
 20008-T11
 DRAWN BY: **RJM**
 CHECKED BY: **JEW**
 APPROVED BY: **JEW**

CONSULTANT JOB NO.

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NO.	DESCRIPTION	DATE

MSCAA NO.
 19-1423-00 (19-1423-11)
 PROJECT:
ID OFFICE AND WA AREA SANITARY SEWER REPAIR

SET:
ISSUED FOR BID

SHEET TITLE:
PLUMBING - FIRST FLOOR PLAN @ AREA WA - UNDERGROUND

DATE: 4.9.2021
 SCALE: 1/8" = 1'-0"
 DWG NO: P1.3

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
SERVICE AND DISTRIBUTION	
	SWITCHBOARD
	DISTRIBUTION PANEL
	BRANCH CIRCUIT PANEL
	TRANSFORMER
	MOTOR CONNECTION
	GENERATOR CONNECTION
	DISCONNECT SWITCH (FUSED AS REQUIRED)
	MOTOR CONTROLLER (SPECIFIED IN OTHER THAN DIV. 26)
	COMBINATION MOTOR CONTROLLER & DISCONNECT SWITCH (SPECIFIED IN OTHER THAN DIV. 26)
	EQUIPMENT NOT FURNISHED UNDER DIV. 26 (SPECIFIED IN OTHER THAN DIV. 26)
	ELECTRIC METER
BASIC MATERIALS	
	BRANCH CIRCUIT WIRE & CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING. HOME RUN TO PANELBOARD. A NUMERAL, IF PRESENT AT ARROW HEAD, INDICATES CIRCUIT NUMBER. ANY BRANCH CIRCUIT SHOWN WITHOUT SLASH MARKS INDICATES A CONDUIT CONTAINING (3) #12 AWG CONDUCTORS (HOT, NEUTRAL & GROUND). SLASH MARKS, IF PRESENT, INDICATE THE FOLLOWING: HOT (ENERGIZED) CONDUCTOR, NEUTRAL CONDUCTOR, & GROUND CONDUCTOR
	WIRE & CONDUIT RUN EXPOSED
	WIRE & CONDUIT RUN IN OR UNDER FLOOR
	EXISTING LIGHT FIXTURE OR ELECTRICAL DEVICE MAY BE REMOVED AND/OR RELOCATED AND CIRCUITRY MADE CONTINUOUS WHERE REQUIRED. UNO, LINE TYPE TYPICAL FOR ALL DEVICES TO BE REMOVED AND/OR RELOCATED.
	DISCONNECT SWITCH
	JUNCTION BOX
	MANUAL MOTOR STARTER SWITCH
	DUPLEX RECEPTACLE IN WALL (NEMA 5-20R)
	G.F.I. TYPE DUPLEX RECEPTACLE IN WALL (NEMA 5-20R)
	G.F.I. TYPE DUPLEX RECEPTACLE OUTDOORS (WEATHERPROOF)
	SINGLE 240V RECEPTACLE FOR APPLIANCE OR EQUIPMENT (PER APPLIANCE RATING)
	POINT OF CONNECTION

GENERAL PROJECT NOTES:

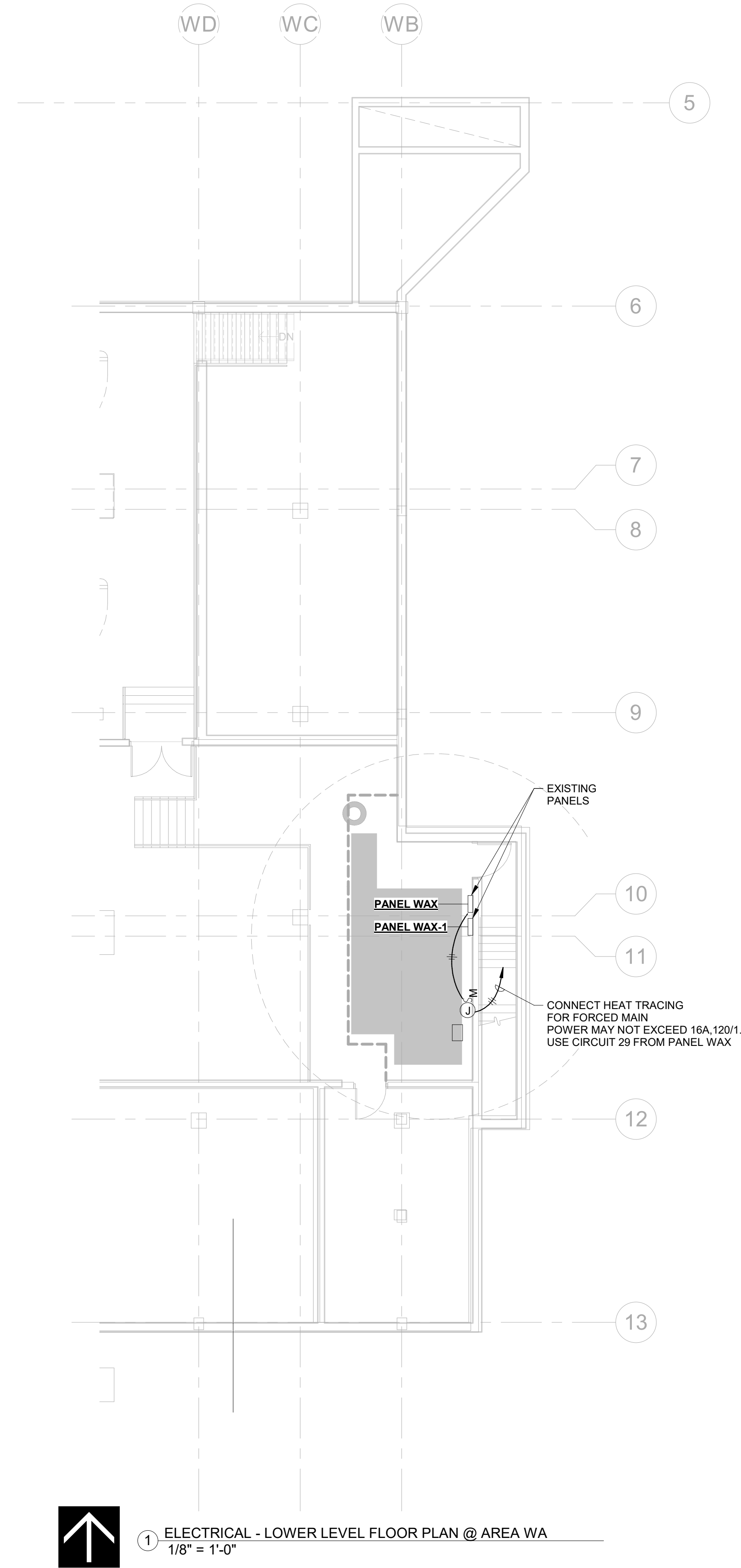
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH DIVISION 26 SPECIFICATIONS, NATIONAL ELECTRICAL CODE, AND ALL OTHER APPLICABLE STANDARDS AND REGULATIONS ENFORCED BY THE AUTHORITY HAVING JURISDICTION.
- ALL ABOVE GROUND EXTERIOR CONDUIT SHALL BE GALVANIZED RIGID STEEL CONDUIT WITH CORROSION RESISTANT FITTINGS, CLAMPS AND SUPPORT. INTERIOR EXPOSED CONDUIT ABOVE GROUND SHALL BE EMT.
- IN THE EVENT OF CONFLICTS BETWEEN THE DRAWINGS, SPECIFICATIONS, CODES AND REGULATIONS, NOTIFY THE ARCHITECT IN WRITING FOR ENGINEER OF RECORD'S OPINION PRIOR TO INSTALLATION.
- SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL AND TO THE ENGINEER FOR REVIEW.
- SMACNA SEISMIC RESTRAINT MANUAL, THIRD EDITION 2008, OR LATEST REVISION MAY BE USED AS A GUIDE FOR GENERAL SEISMIC SUPPORT DETAIL AND SUPPORT SPACING RECOMMENDATIONS.
- COORDINATE LOCATION OF ALL LIGHTING FIXTURES, MECHANICAL EQUIPMENT AND ACCESS PANELS WITH OTHER DISCIPLINES PRIOR TO ROUGH-IN.
- WHILE GREAT EFFORT HAS BEEN MADE TO IDENTIFY EXISTING CIRCUITS THAT ARE TO BE REMOVED OR REPLACED, THE INFORMATION MAY NOT BE ACCURATE.
- ELECTRICAL CONTRACTOR SHALL VERIFY VOLTAGE AND AMP DRAW FOR ALL NEW EQUIPMENT.

GENERAL DRAWING NOTES:

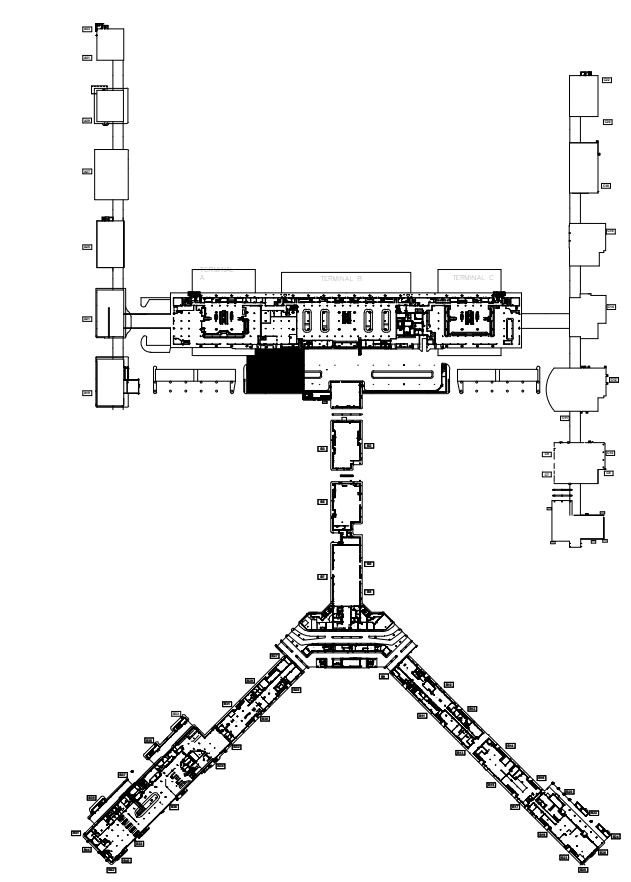
- PROVIDE NEW ALARM POINT FROM JCI BAS PANELS TO ALERT MAINTENANCE THAT THE PUMP IS NOT WORKING. PROVIDE AUDIBLE AND VISUAL NOTIFICATION ON APRON LEVEL FOR LIFT STATION FAILURE.
- PROVIDE NEW CIRCUIT FROM SPARE 201 BREAKER IN PANEL WAX. USE SPARE CIRCUIT 21 FOR THE NEW SUMP PUMP. PROVIDE NEW 301 BREAKER FOR CIRCUIT 29 FOR THE HEAT TRACE CIRCUIT.
- ELECTRICAL CONTRACTOR TO COORDINATE WITH PLUMBING AND PROVIDE HEAT TRACE ON FORCED MAIN LINE ON APRON LEVEL.

SYMBOL	DESCRIPTION
A	AMPERE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERES INTERRUPTING CURRENT
ANN	ANNUNCIATOR
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLP	CURRENT LIMITING PANEL
CT	CURRENT TRANSFORMER
CU	COPPER
DISC	DISCONNECT
EDF	ELECTRIC DRINKING FOUNTAIN
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPS
G	GROUND
GFI	GROUND FAULT CURRENT INTERRUPTER
HP	HORSEPOWER
HZ	HERTZ
KCMIL	THOUSAND CIRCULAR MILS
KVA	KILOVOLT-AMPERE
KW	KILOWATT
LED	LIGHT EMITTING DIODE
MCC	MOTOR CONTROL CENTER
MLO	MAIN LUGS ONLY
N	NEUTRAL
NEC	NATIONAL ELECTRICAL CODE
PF	POWER FACTOR
SOWB	SPACE ONLY WITH BUS
UGW	UNDERGROUND ELECTRICAL
V	VOLT
VA	VOLT-AMPERE
VFD	VARIABLE FREQUENCY DRIVE
WP	WEATHER PROOF
XFMR	TRANSFORMER
3P	THREE POLE
3PH	THREE PHASE
4W	FOUR WIRE
30/3	30 AMPERE, 3-POLE

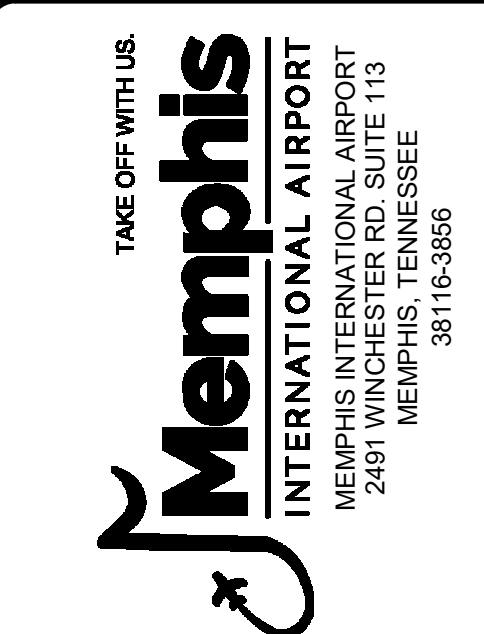
CODE ANALYSIS - INTERNATIONAL BUILDING CODE 2015	
CODE COMMENTS	
JURISDICTION Memphis and Shelby County Construction Code Enforcement	
APPLICABLE CODES 2015 International Building Code with Local Amendments 2015 International Existing Building Code with Local Amendments 2015 International Residential Code with Local Amendments 2014 National Electrical Code 2018 Joint Electrical Code 2015 International Mechanical Code with Local Amendments 2015 International Fuel Gas Code with Local Amendments 2015 International Plumbing Code with Local Amendments 2015 International Energy Conservation Code with Local Amendments 2009 ICC A117.1 Accessibility and Useable Buildings and Facilities (by reference) 2013 ASME 17.1 Safety Code for Elevators and Escalators (by reference)	



1 ELECTRICAL - LOWER LEVEL FLOOR PLAN @ AREA WA
1/8" = 1'-0"



KEYPLAN



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ARCHITECT JOB NO.
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DRAWN BY: **PTH**
CHECKED BY: **RJH**
APPROVED BY: **RJH**

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REVISIONS		
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19-1423-00 (19-1423-11)

PROJECT:
ID OFFICE AND WA AREA SANITARY SEWER REPAIR

SET:
ISSUED FOR BID

SHEET TITLE:
ELECTRICAL - LOWER LEVEL PLAN @ AREA WA - POWER

RVT. FILE NAME
DATE: **4.9.2021** DWG NO.: **E1.0**
SCALE: As indicated