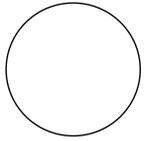






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PROJECT TITLE  
**Utilities and Building Separation**  
 429 Michigan St.  
 Toledo, Ohio

06.23.2015	BIDDING
06.23.2015	PERMIT
05.12.2015	FINAL OWNER REVIEW

CHECKED ARB  
 APPROVED ARB

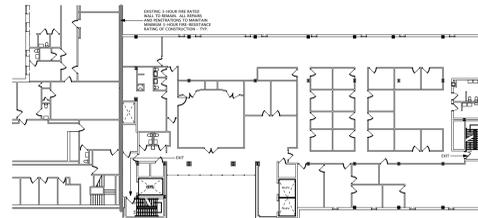
TCI JOB NO. 160278

SHEET TITLE  
**LIFE SAFETY FLOOR PLANS**

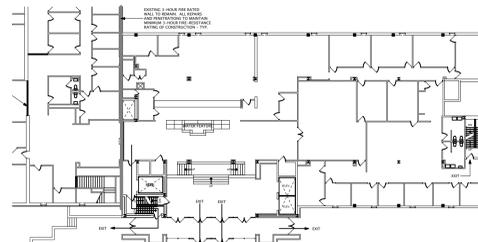
SHEET NO.

**A0.01**

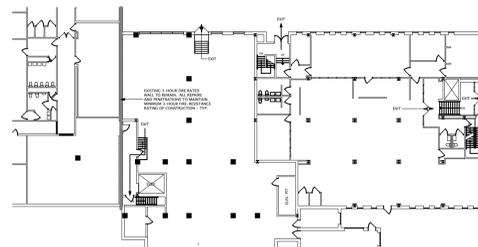
<b>BUILDING CODE:</b>	2011 OHIO BUILDING CODE
<b>TYPE OF PROJECT:</b>	UTILITY AND BUILDING SEPARATION (FAMILY COURT / CHLD STUDY INSTITUTE)
<b>EXISTING USE GROUP:</b>	B (NOTE: OHIO STUDY INSTITUTE BUILDING CURRENTLY UNOCCUPIED.) B, CIVIC ADMINISTRATION
<b>PRIMARY OCCUPANCY CLASSIFICATION:</b>	
<b>SECONDARY OCCUPANCY CLASSIFICATION:</b>	
<b>SPECIAL OCCUPANCY CLASSIFICATION:</b>	NONE
<b>MIXED USE GROUPS:</b>	NON SEPARATED
<b>REQUIRED SEPARATION OF OCCUPANCIES:</b>	NONE
<b>EXISTING CONSTRUCTION CLASSIFICATION:</b>	2A
<b>PROPOSED CONSTRUCTION CLASSIFICATION:</b>	2A (NO CHANGE)
<b>EXISTING BUILDING AREA:</b>	
BASEMENT	7,690 S.F.
GROUND FLOOR - MECHANICAL	6,917 S.F.
GROUND FLOOR - LIBRARY	7,651 S.F.
MAIN FLOOR	13,858 S.F.
SECOND FLOOR	12,297 S.F.
THIRD FLOOR	12,315 S.F.
FOURTH FLOOR	12,054 S.F.
FIFTH FLOOR	11,873 S.F.
TOTAL	85,955 S.F.
<b>EXISTING BUILDING HEIGHT:</b>	91'-0" 5 STORIES, ABOVE GRADE
<b>PROVIDED FIRE SEPARATION BETWEEN BUILDINGS:</b>	3 HOURS
<b>OCCUPANT LOAD (MAXIMUM):</b>	
BASEMENT	26 OCCUPANTS
GROUND FLOOR - MECHANICAL	23 OCCUPANTS
GROUND FLOOR - LIBRARY	77 OCCUPANTS
MAIN FLOOR	139 OCCUPANTS
SECOND FLOOR	123 OCCUPANTS
THIRD FLOOR	124 OCCUPANTS
FOURTH FLOOR	121 OCCUPANTS
FIFTH FLOOR	119 OCCUPANTS
TOTAL	752 OCCUPANTS
<b>NUMBER OF EXITS REQUIRED:</b>	2
<b>NUMBER OF EXITS PROVIDED:</b>	2 MINIMUM ALL FLOORS
<b>EXIT ACCESS TRAVEL DISTANCE:</b>	300'
<b>FIRE SPRINKLER SYSTEM:</b>	NFPA 13, EXISTING
<b>STANDPIPS:</b>	YES SEE FP DWGS.
<b>FIRE ALARM SYSTEM:</b>	YES, EXISTING
<b>FIRE DEPARTMENT CONNECTION:</b>	SEE FP DWG. FOR LOCATION
<b>FIRE PUMP:</b>	YES



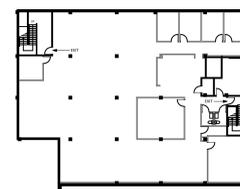
**D2**  
**A0.01** 2nd FLOOR LIFE SAFETY  
 SCALE: 1/32" = 1'-0"



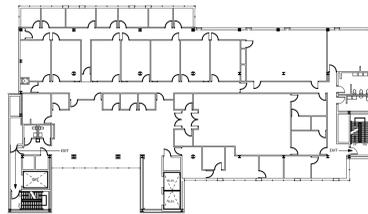
**C2**  
**A0.01** 1st FLOOR LIFE SAFETY  
 SCALE: 1/32" = 1'-0"



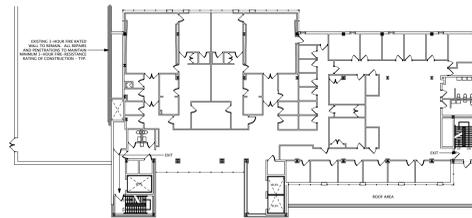
**B2**  
**A0.01** GROUND FLOOR  
 SCALE: 1/32" = 1'-0"



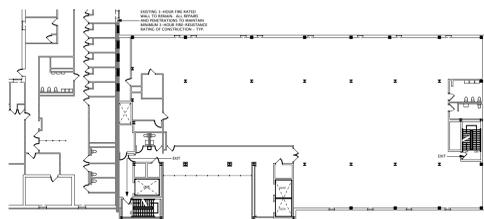
**A2**  
**A0.01** BASEMENT LIFE SAFETY  
 SCALE: 1/32" = 1'-0"



**C4**  
**A0.01** FIFTH FLOOR  
 SCALE: 1/32" = 1'-0"



**B4**  
**A0.01** FOURTH FLOOR  
 SCALE: 1/32" = 1'-0"



**A4**  
**A0.01** THIRD FLOOR  
 SCALE: 1/32" = 1'-0"

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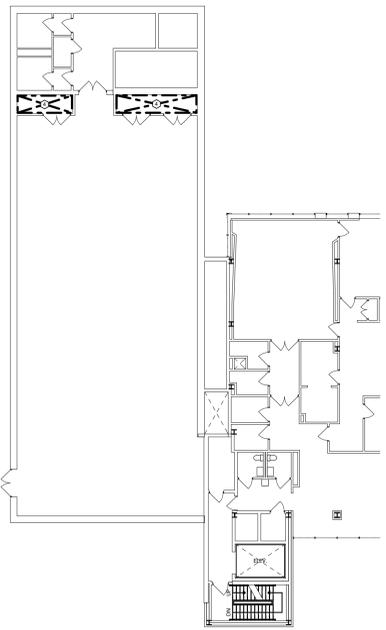
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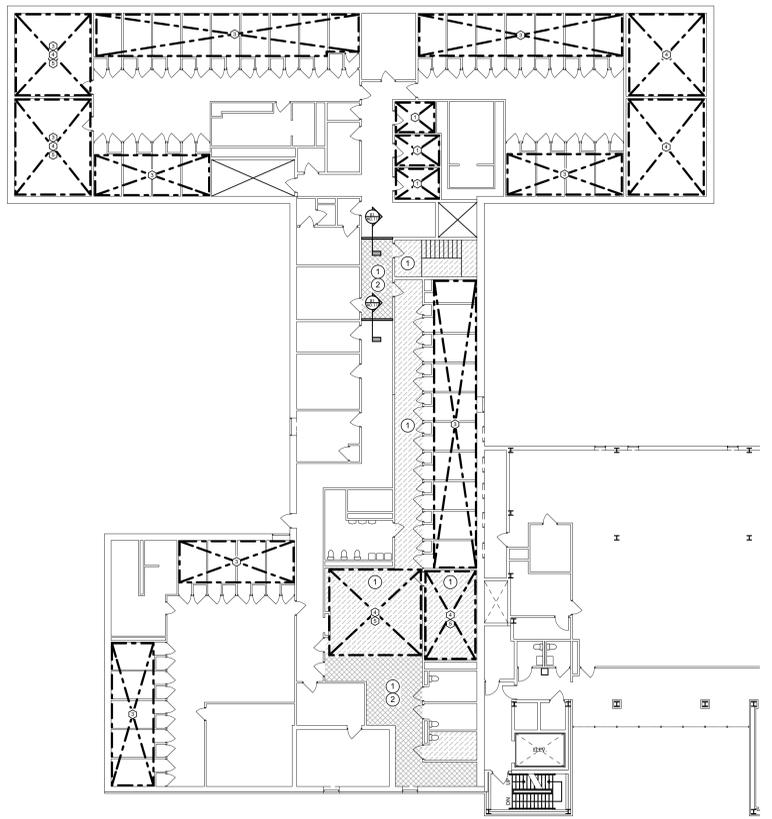
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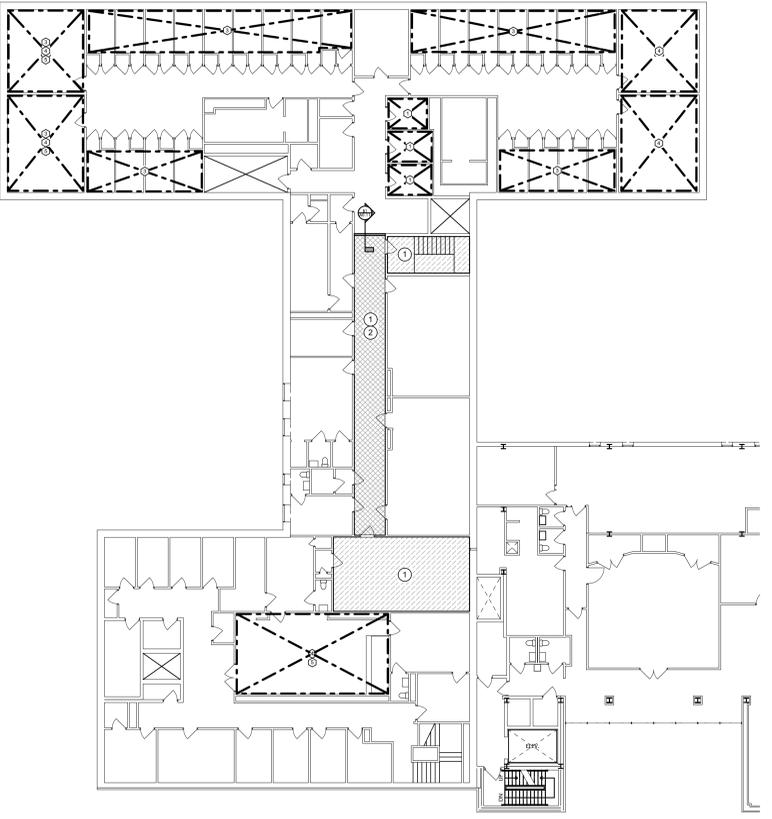
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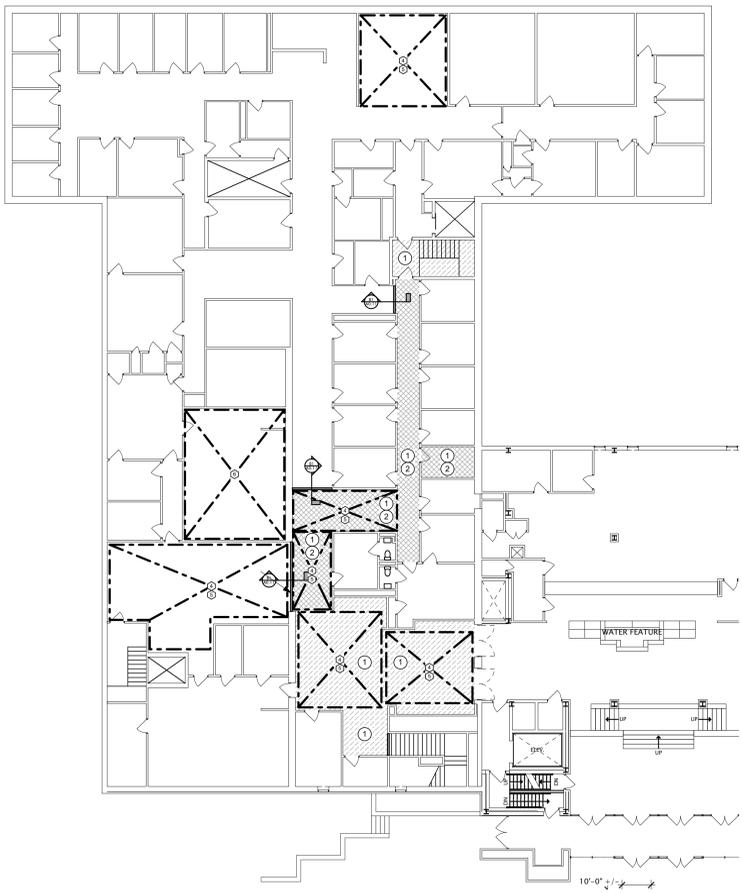
**D6**  
**A0.11** FOURTH FLOOR REMEDIATION PLAN  
SCALE: 1/16" = 1'-0"



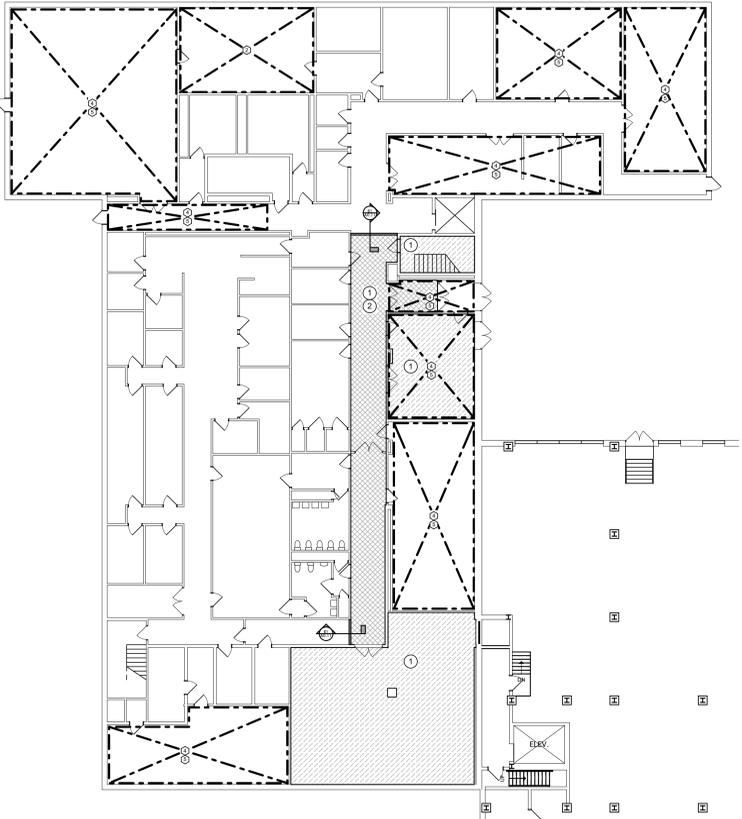
**D4**  
**A0.11** THIRD FLOOR REMEDIATION PLAN  
SCALE: 1/16" = 1'-0"



**A4**  
**A0.11** SECOND FLOOR REMEDIATION PLAN  
SCALE: 1/16" = 1'-0"



**D2**  
**A0.11** MAIN FLOOR REMEDIATION REMOVAL PLAN  
SCALE: 1/16" = 1'-0"



**A2**  
**A0.11** GROUND FLOOR REMEDIATION REMOVAL PLAN  
SCALE: 1/16" = 1'-0"

**GENERAL NOTES:**

- CHILD STUDY INSTITUTE BUILDING CONTAINS KNOWN FRAGILE ACM MATERIALS THAT REQUIRE CLEANING AND REMOVAL IN ALL PATHWAYS AND AREAS OF WORK FOR DESIGNATED FOR THE BUILDING UTILITY SEPARATION. REFER TO ACM REMEDIATION REQUIREMENTS THIS SHEET.
- REFER TO DEMOLITION DRAWINGS FOR ADDITIONAL CEILING AREAS WITHIN THE CHILD STUDY INSTITUTE TO BE REMOVED / REMEDIATED TO FACILITATE UTILITY SEPARATION PROJECT.
- REMOVE MISC. FURNITURE / COMBUSTIBLES FOUND IN ROOMS NOT LABELED WITH SPECIFIC REMOVAL INSTRUCTIONS THROUGHOUT THE CHILD STUDY INSTITUTE.
- OWNER RESERVES THE RIGHT TO REVIEW ALL MATERIALS INDICATED FOR REMOVAL AND DISPOSAL FROM THE CHILD STUDY INSTITUTE. OWNER MAY IDENTIFY ITEMS TO BE MOVED TO A DESIGNATED OFF-SITE LUCAS COUNTY FACILITY FOR STORAGE BY CONTRACTOR.

**ACM REMEDIATION REQUIREMENTS:**

REMOVAL OF ALL ASBESTOS CONTAINING MATERIALS / DEBRIS SHALL BE ACCOMPLISHED ACCORDING TO THE FOLLOWING REGULATIONS:

- THE OSHA ASBESTOS IN CONSTRUCTION STANDARD 29 CFR 1926.1101
- THE USEPA ASBESTOS NESHAP REGULATIONS 40 CFR PART 61 SECTIONS 61.141, 61.145, 61.150 AND 61.154
- THE OHIO DEPARTMENT OF HEALTH REGULATIONS AS FOUND IN THE OHIO ADMINISTRATIVE CODE, FINAL RULE 3701-34
- THE OHIO EPA REGULATIONS FOUND IN THE OHIO ADMINISTRATIVE CODE, FINAL RULE 3745-20

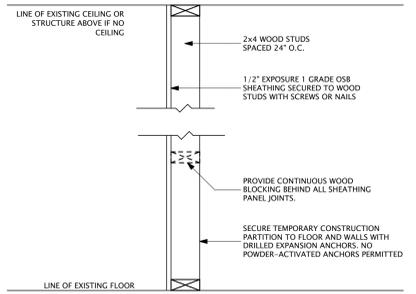
**ACM REMEDIATION:**

ALL ACM REMEDIATION AND CLEAN MUST BE PERFORMED BY A LICENSED ASBESTOS ABATEMENT CONTRACTOR.

- ① DESIGNATES AREA FOR ASBESTOS REMEDIATION, CLEANING AND ISOLATION FOR WORK TO BE COMPLETED AS PART OF THE UTILITY SEPARATION. MATERIALS FOR REMEDIATION ARE OUTLINED IN THE PRE-CONSTRUCTION ASBESTOS SURVEY. ALL WORK MUST CONFORM TO REQUIREMENTS FOR REMEDIATION OF ACM AS LISTED IN "REMEDICATION REQUIREMENTS" ON THIS SHEET.
- ② DESIGNATES AREA FOR ASBESTOS REMEDIATION, CLEANING AND ISOLATION WITH ACM PLASTER CEILING. REMOVE DAMAGED, LOOSE, DETERIORATED OR OTHERWISE UNSECURED ACM CEILING MATERIALS HANGING OR FALLEN TO FLOOR. ALL WORK MUST CONFORM TO REQUIREMENTS FOR REMEDIATION OF ACM AS LISTED IN "REMEDICATION REQUIREMENTS" ON THIS SHEET.

**LOOSE AND NON-BUILT-IN FURNITURE & CASEWORK REMOVAL:**

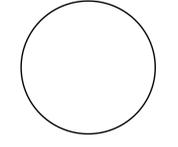
- ① REMOVE FILES AND RELATED MATERIALS FROM AREA INDICATED AND DISPOSE OF IN A LEGAL MANNER AS DESIGNATED BY REPRESENTATIVES OF LUCAS COUNTY.
- ② REMOVE KITCHEN EQUIPMENT AND RELATED MATERIALS FROM AREA INDICATED AND RELOCATE TO NEW STORAGE OFF-SITE AS DESIGNATED BY REPRESENTATIVES OF LUCAS COUNTY.
- ③ REMOVE AND DISPOSE OF BEDDING, PADS / MATTRESSES IN A LEGAL MANNER AS DIRECTED BY REPRESENTATIVES OF LUCAS COUNTY.
- ④ REMOVE LOOSE FURNITURE INCLUDING BUT NOT LIMITED TO WOOD OR METAL DESKS, CHAIRS, STORED CARPENTRY TOOLS, COMMERCIAL WASHERS AND DRYERS AND RELATED MATERIALS FROM AREA INDICATED AND DISPOSE OF IN A LEGAL MANNER AS DESIGNATED BY REPRESENTATIVES OF LUCAS COUNTY.
- ⑤ REMOVE AND DISPOSE OF ALL OTHER GARBAGE AND MISC. DEBRIS OTHER THAN ACM IN A LEGAL MANNER AS DIRECTED BY REPRESENTATIVES OF LUCAS COUNTY.



**B1**  
**A0.11** ASBESTOS PARTITION DETAIL  
SCALE: 1 1/2" = 1'-0"



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CHECKED ARB  
APPROVED ARB

TCI JOB NO. 160278

SHEET TITLE  
**CSI BUILDING REMEDIATION PLAN**

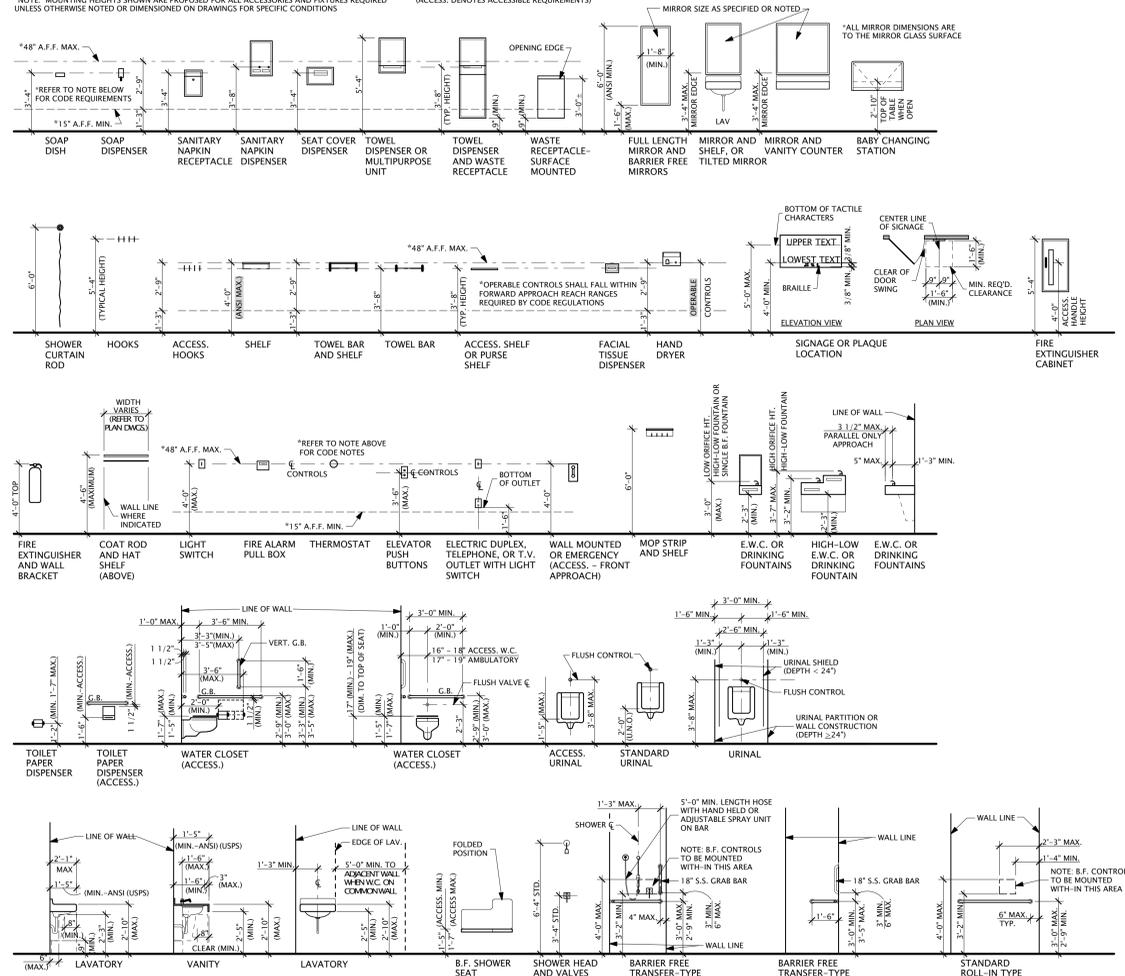
SHEET NO.

**A0.11**

REVISED 03.03.2015

TYPICAL MOUNTING HEIGHTS (BASED ON ICC - A117.1 - 2009) MISCELLANEOUS ACCESSORIES, TOILET ACCESSORIES AND FIXTURES

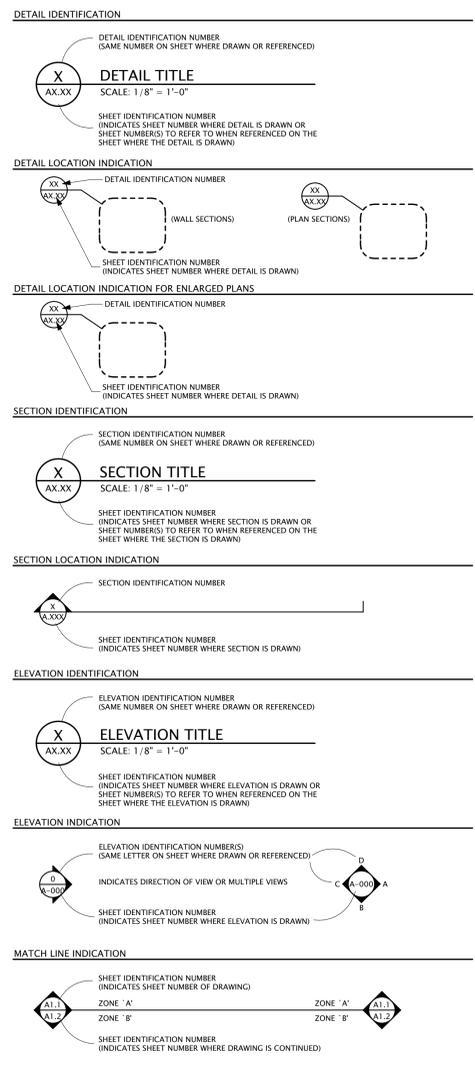
\*NOTE: MOUNTING HEIGHTS SHOWN ARE PROPOSED FOR ALL ACCESSORIES AND FIXTURES REQUIRED UNLESS OTHERWISE NOTED OR DIMENSIONED ON DRAWINGS FOR SPECIFIC CONDITIONS. (ACCESS: DENOTES ACCESSIBLE REQUIREMENTS)



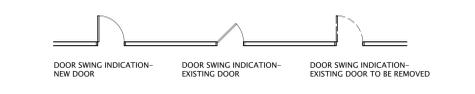
ABBREVIATIONS

Table of abbreviations for architectural symbols, organized in columns A through Z. Includes terms like CABINET, CLOSET, TOILET, and various material and finish codes.

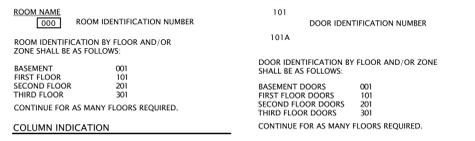
REFERENCE SYMBOLS



DOOR INDICATION



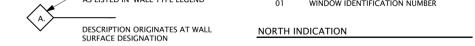
ROOM NAME AND NUMBER INDICATION



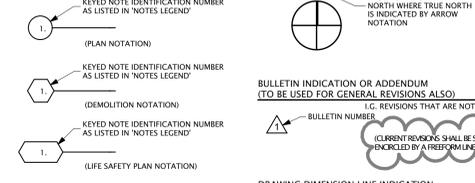
COLUMN INDICATION



WALL TYPE NOTATION



KEYED NOTE INDICATION



STAIR DIRECTION NOTATION



MATERIAL OR WORK DIVISION NOTATION



ELEVATION IDENTIFICATION

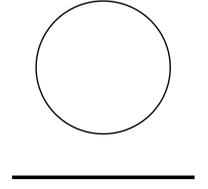


MATCH LINE INDICATION



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BULLETIN INDICATION OR ADDENDUM (TO BE USED FOR GENERAL REVISIONS ALSO) BULLETIN NUMBER

DRAWING DIMENSION LINE INDICATION NOTE: DO NOT SCALE DRAWINGS WITHOUT GRAPHIC SCALES WITH PROPORTIONS OTHER THAN 1:1



PROJECT TITLE Utilities and Building Separation 429 Michigan St. Toledo, Ohio

Table of revision history with columns for date, description, and initials. Includes entries for 06.23.2015 and 05.12.2015.

CHECKED ARB APPROVED ARB

TCl JOB NO. 160278

SHEET TITLE GENERAL INFORMATION

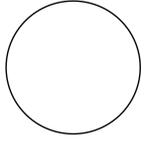
SHEET NO. A0.21

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F



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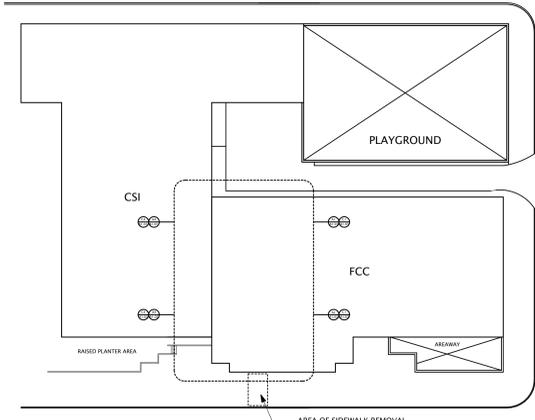
CHECKED ARB  
 APPROVED ARB

TCI JOB NO. 160278

SHEET TITLE  
**GROUND / MAIN FLOOR PLANS**

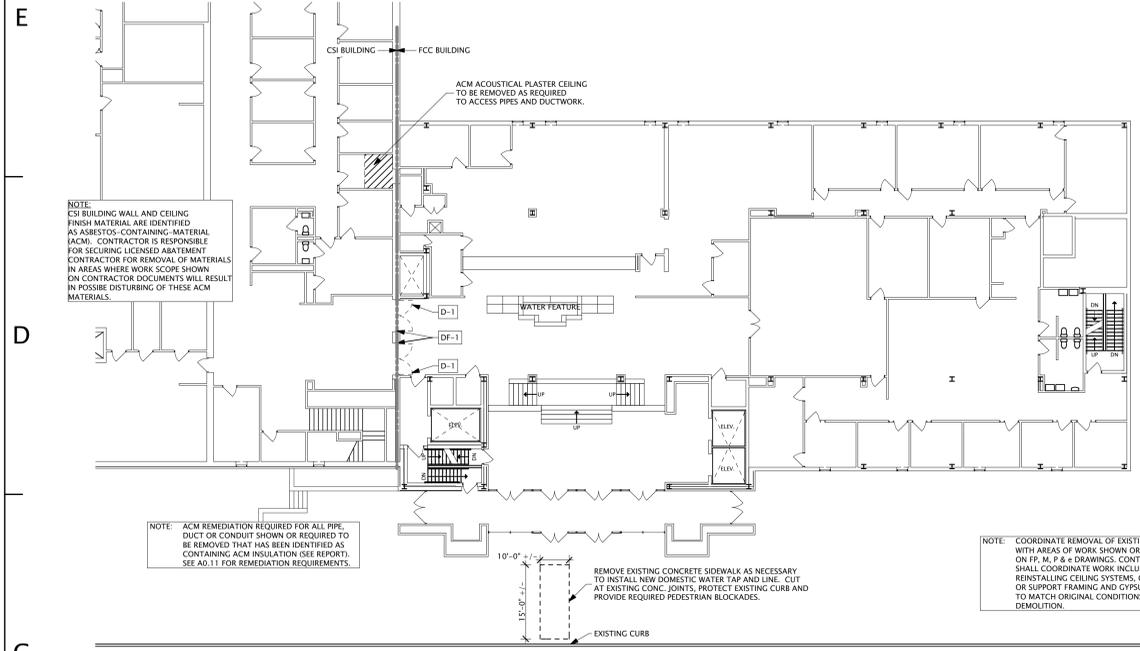
SHEET NO.

**A1.01**



- DOORS:**  
 D-1: REMOVE DOUBLE DOORS
- ADDITIONAL NOTES FOR DOORS:**  
 1. CONTRACTOR SHALL INCLUDE REMOVAL AND SALVAGE OF EXISTING DOOR HARDWARE AS FOLLOWS FROM ALL DOORS TO BE REMOVED:  
 A. LOCKSETS  
 B. PANIC HARDWARE  
 - ALL ABOVE HARDWARE ARE ITEMS TO BE DELIVERED TO OWNER, ANY OTHER HARDWARE ITEMS TO BE DISPOSED OF OFF-SITE BY THE CONTRACTOR.
- DOOR FRAMES:**  
 DF-1: REMOVE HOLLOW METAL OR STEEL DOOR FRAME
- ADDITIONAL NOTES FOR DOOR FRAMES:**  
 1. CONTRACTOR SHALL INCLUDE REMOVAL OR CUTTING OF EXISTING DOOR FRAME ANCHORS, SHIMS AND THRESHOLDS TO PROVIDE A CLEAN, CLEAR OPENING FOR NEW CONSTRUCTION.
- WALLS AND PARTITIONS:**  
 W-1: REMOVE CONCRETE MASONRY UNIT (CMU) WALL - 4" 6", 8", 10" AND/OR 12" THICK EXPOSE EXISTING SUBSTRATE. REMOVE GUE, MORTAR, ANCHORS, ETC. ASSOCIATED WITH WALL COVERING TO PROVIDE A SMOOTH SURFACE FOR NEW CONSTRUCTION.
- ADDITIONAL NOTES FOR WALLS AND PARTITIONS:**  
 1. SEE ARCHITECTURAL FLOOR PLANS FOR THICKNESS OF WALL WHERE APPLICABLE
- WINDOWS AND LOUVERS:**  
 WIN-1: REMOVE EXISTING ALUMINUM WINDOW INCLUDING FRAME, GLASS, ALL ASSOCIATED INTERIOR AND EXTERIOR ALUMINUM TRIM AND SEALANTS.
- L-1: REMOVE EXISTING MECHANICAL LOUVER INCLUDING FRAME, ALL ASSOCIATED INTERIOR AND EXTERIOR TRIM AND SEALANTS. EXISTING OPENING TO BE PREPARED FOR INSTALLATION OF NEW 3-HR RATED WALL INFILL. REMOVE ALL MATERIALS NECESSARY FOR INSTALLATION OF NEW 3-HR CMU INFILL.**
- ADDITIONAL NOTES FOR WINDOWS AND CURTAIN WALL:**  
 1. REMOVE OR CUT EXISTING WINDOW, WALL ANCHORS AND SHIMS TO PROVIDE A CLEAN, CLEAR OPENING FOR NEW CONSTRUCTION.

**E2 SITE PLAN**  
 SCALE: 1" = 40'



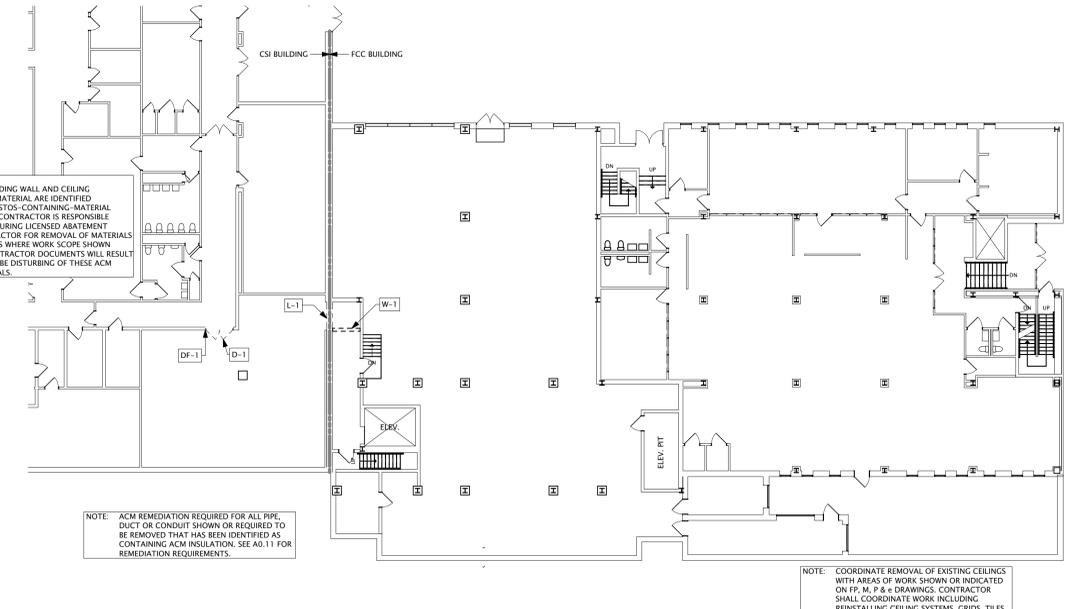
**NOTE:** CSI BUILDING WALL AND CEILING FINISH MATERIALS ARE IDENTIFIED AS ASBESTOS-CONTAINING MATERIAL (ACM). CONTRACTOR IS RESPONSIBLE FOR SECURING LICENSED ABATEMENT CONTRACTOR FOR REMOVAL OF MATERIALS IN AREAS WHERE WORK SCOPE SHOWN ON CONTRACTOR DOCUMENTS WILL RESULT IN POSSIBLE DISTURBING OF THESE ACM MATERIALS.

**NOTE:** ACM REMEDIATION REQUIRED FOR ALL PIPE, DUCT OR CONDUIT SHOWN OR REQUIRED TO BE REMOVED THAT HAS BEEN IDENTIFIED AS CONTAINING ACM INSULATION. SEE AD.11 FOR REMEDIATION REQUIREMENTS.

REMOVE EXISTING CONCRETE SIDEWALK AS NECESSARY TO INSTALL NEW DOMESTIC WATER TAP AND LINE. CLIP AT EXISTING CONC. JOINTS, PROTECT EXISTING CURB AND PROVIDE REQUIRED PEDESTRIAN BLOCKADES.

**NOTE:** COORDINATE REMOVAL OF EXISTING CEILING WITH AREAS OF WORK SHOWN OR INDICATED ON FF, M, P & E DRAWINGS. CONTRACTOR SHALL COORDINATE WORK INCLUDING REINSTALLING CEILING SYSTEMS, GRIDS, TILES OR SUPPORT FRAMING AND GYPSUM BOARD TO MATCH ORIGINAL CONDITIONS PRIOR TO DEMOLITION.

**C4 MAIN FLOOR DEMOLITION PLAN**  
 SCALE: 1/16" = 1'-0"

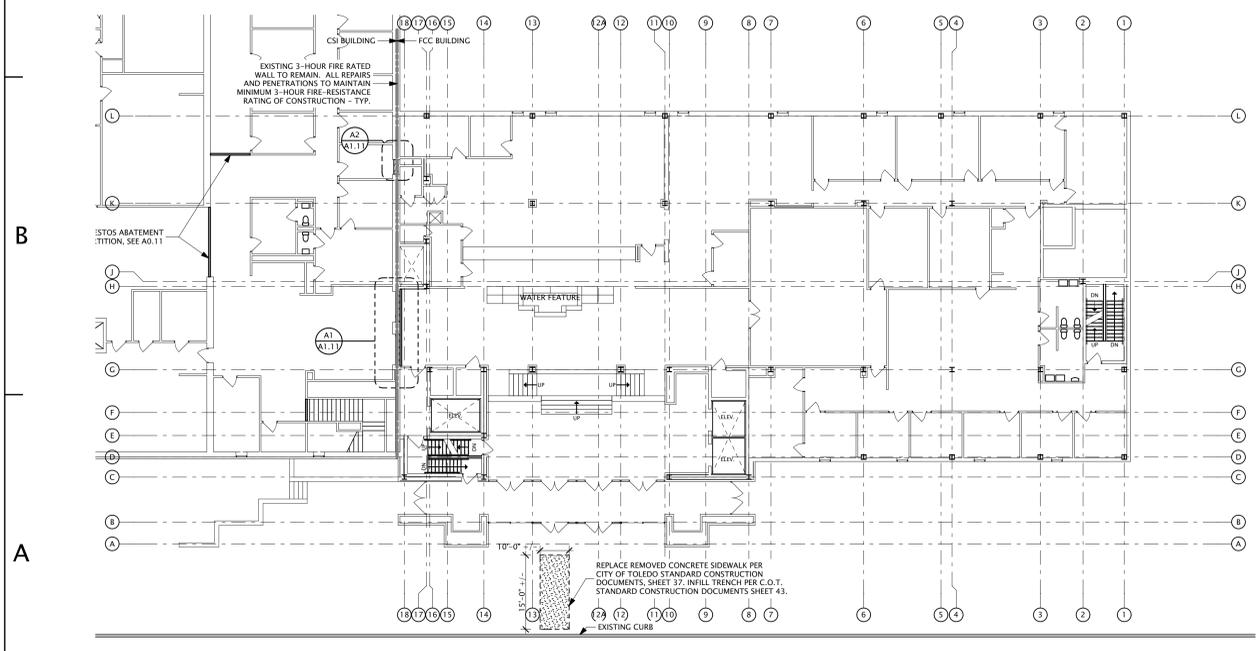


**NOTE:** CSI BUILDING WALL AND CEILING FINISH MATERIALS ARE IDENTIFIED AS ASBESTOS-CONTAINING MATERIAL (ACM). CONTRACTOR IS RESPONSIBLE FOR SECURING LICENSED ABATEMENT CONTRACTOR FOR REMOVAL OF MATERIALS IN AREAS WHERE WORK SCOPE SHOWN ON CONTRACTOR DOCUMENTS WILL RESULT IN POSSIBLE DISTURBING OF THESE ACM MATERIALS.

**NOTE:** ACM REMEDIATION REQUIRED FOR ALL PIPE, DUCT OR CONDUIT SHOWN OR REQUIRED TO BE REMOVED THAT HAS BEEN IDENTIFIED AS CONTAINING ACM INSULATION. SEE AD.11 FOR REMEDIATION REQUIREMENTS.

**NOTE:** COORDINATE REMOVAL OF EXISTING CEILING WITH AREAS OF WORK SHOWN OR INDICATED ON FF, M, P & E DRAWINGS. CONTRACTOR SHALL COORDINATE WORK INCLUDING REINSTALLING CEILING SYSTEMS, GRIDS, TILES OR SUPPORT FRAMING AND GYPSUM BOARD TO MATCH ORIGINAL CONDITIONS PRIOR TO DEMOLITION.

**C1 GROUND FLOOR DEMOLITION PLAN**  
 SCALE: 1/16" = 1'-0"

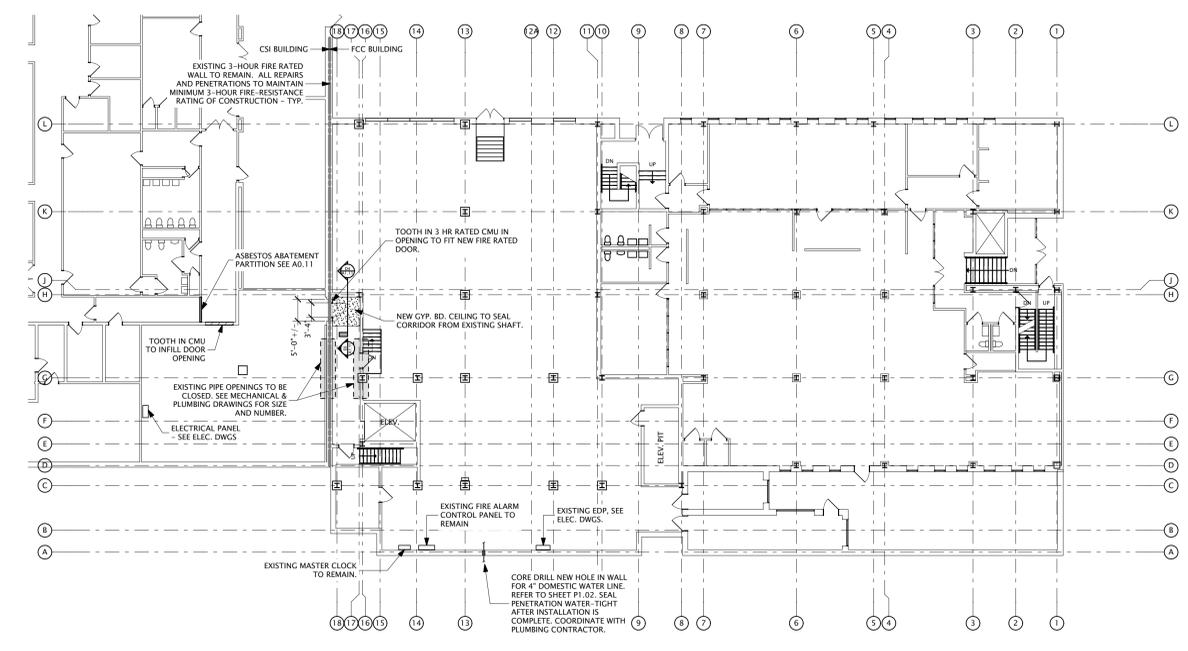


**ASBESTOS ABATEMENT:** ATTENTION, SEE AD.11

EXISTING 3-HOUR FIRE RATED WALL TO REMAIN. ALL REPAIRS AND PENETRATIONS TO MAINTAIN MINIMUM 3-HOUR FIRE-RESISTANCE RATING OF CONSTRUCTION - TYP.

REPLACE REMOVED CONCRETE SIDEWALK PER CITY OF TOLEDO STANDARD CONSTRUCTION DOCUMENTS, SHEET 37. INFILL TRENCH PER C.O.T. STANDARD CONSTRUCTION DOCUMENTS SHEET 43.

**A4 MAIN FLOOR PLAN**  
 SCALE: 1/16" = 1'-0"



EXISTING 3-HOUR FIRE RATED WALL TO REMAIN. ALL REPAIRS AND PENETRATIONS TO MAINTAIN MINIMUM 3-HOUR FIRE-RESISTANCE RATING OF CONSTRUCTION - TYP.

TOOTH IN 3 HR RATED CMU IN OPENING TO FIT NEW FIRE RATED DOOR.

NEW GYP. RD. CEILING TO SEAL CORRIDOR FROM EXISTING SHAFT.

EXISTING PIPE OPENINGS TO BE CLOSED. SEE MECHANICAL & PLUMBING DRAWINGS FOR SIZE AND NUMBER.

EXISTING FIRE ALARM CONTROL PANEL TO REMAIN.

CORE DRILL NEW HOLE IN WALL FOR 4" DOMESTIC WATER LINE. REFER TO SHEET P1.02. SEAL PENETRATION WATER-TIGHT AFTER INSTALLATION IS COMPLETE. COORDINATE WITH PLUMBING CONTRACTOR.

**A1 GROUND FLOOR PLAN**  
 SCALE: 1/16" = 1'-0"

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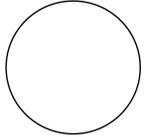
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A



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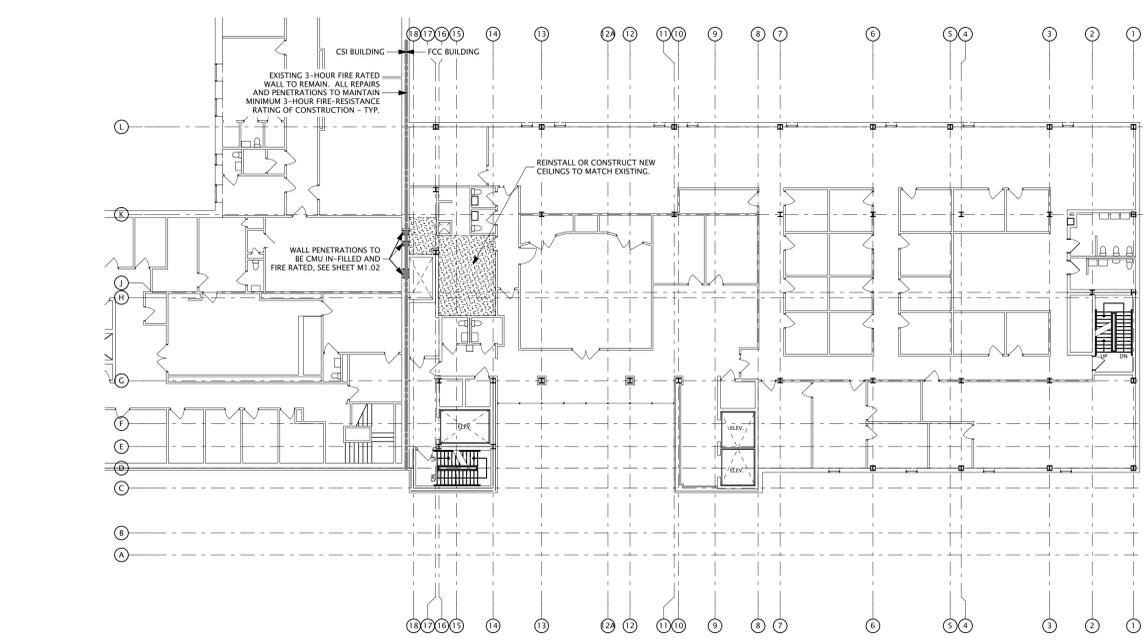
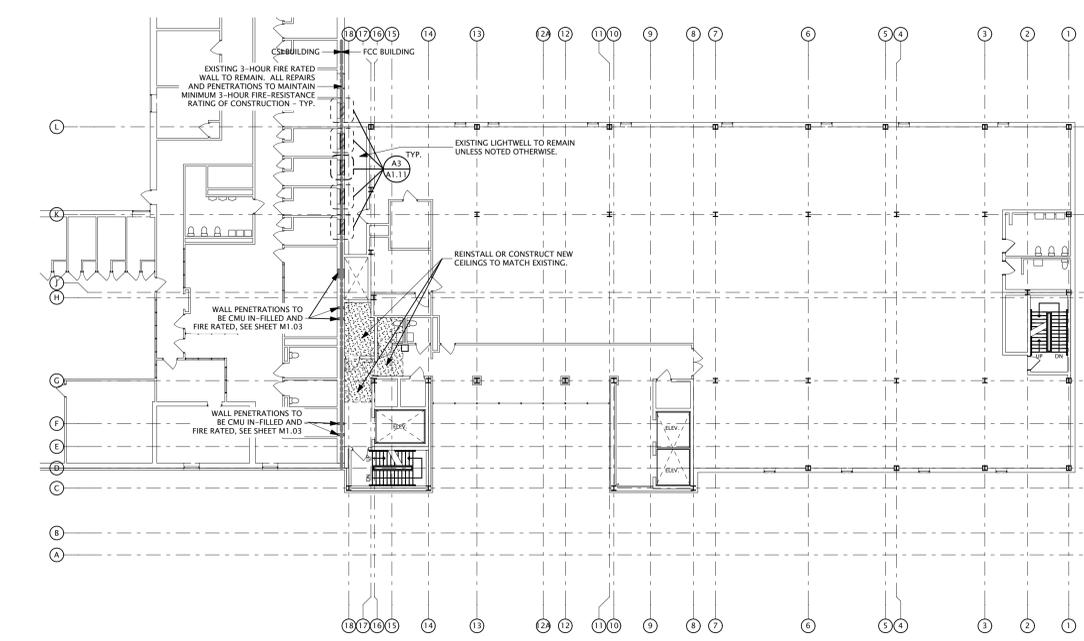
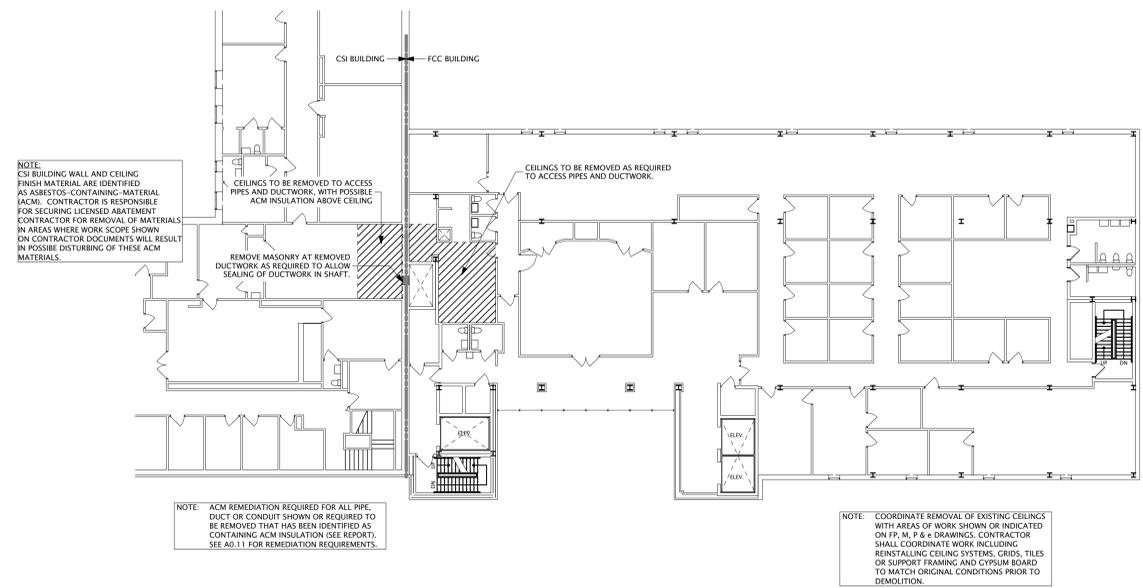
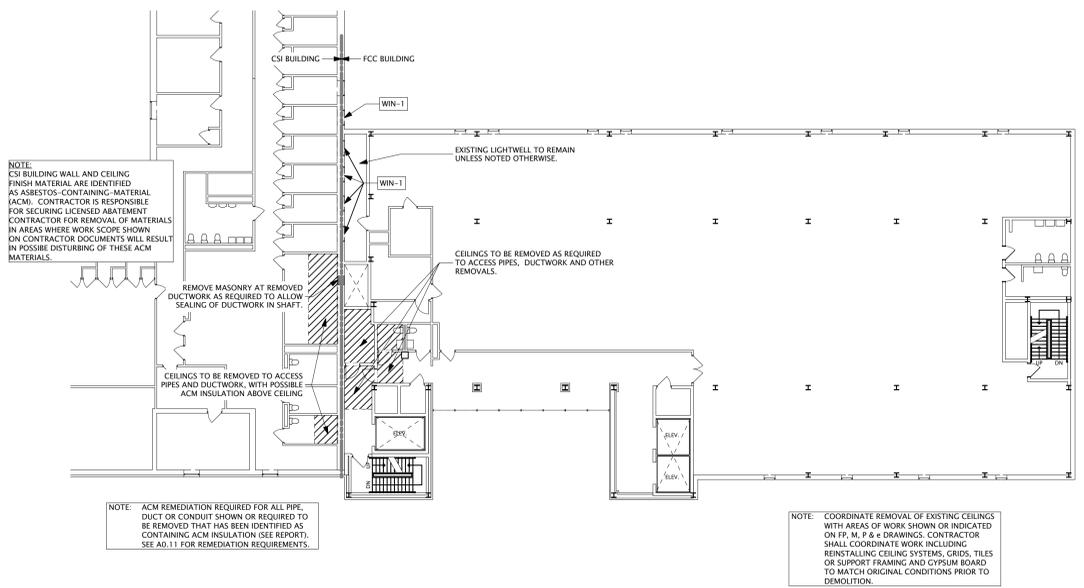
CHECKED ARB  
 APPROVED ARB

TCI JOB NO. 160278

SHEET TITLE  
**2ND / 3RD FLOOR PLANS**

SHEET NO.  
**A1.02**

**DOORS:**  
 D-1: REMOVE DOUBLE DOORS  
**ADDITIONAL NOTES FOR DOORS:**  
 1. CONTRACTOR SHALL INCLUDE REMOVAL AND SALVAGE OF EXISTING DOOR HARDWARE AS FOLLOWS FROM ALL DOORS TO BE REMOVED:  
 A. LOCKSETS  
 B. PANIC HARDWARE  
 - ALL ABOVE HARDWARE ARE ITEMS TO BE DELIVERED TO OWNER. ANY OTHER HARDWARE ITEMS TO BE DISPOSED OF OFF-SITE BY THE CONTRACTOR.  
**DOOR FRAMES**  
 DF-1: REMOVE HOLLOW METAL OR STEEL DOOR FRAME  
**ADDITIONAL NOTES FOR DOOR FRAMES:**  
 1. CONTRACTOR SHALL INCLUDE REMOVAL OR CUTTING OF EXISTING DOOR FRAME ANCHORS, SHIMS AND THRESHOLDS TO PROVIDE A CLEAN, CLEAR OPENING FOR NEW CONSTRUCTION.  
**WALLS AND PARTITIONS:**  
 W-1: REMOVE CONCRETE MASONRY UNIT (CMU) WALL - 4" 6", 8", 10" AND/OR 12" THICK EXPOSE EXISTING SUBSTRATE. REMOVE GLUE, MORTAR, ANCHORS, ETC. ASSOCIATED WITH WALL COVERING TO PROVIDE A SMOOTH SURFACE FOR NEW CONSTRUCTION.  
**ADDITIONAL NOTES FOR WALLS AND PARTITIONS:**  
 1. SEE ARCHITECTURAL FLOOR PLANS FOR THICKNESS OF WALL WHERE APPLICABLE  
**WINDOWS AND LOUVERS:**  
 WIN-1: REMOVE EXISTING ALUMINUM WINDOW INCLUDING FRAME, GLASS, ALL ASSOCIATED INTERIOR AND EXTERIOR ALUMINUM TRIM AND SEALANTS.  
 L-1: REMOVE EXISTING MECHANICAL LOUVER INCLUDING FRAME, ALL ASSOCIATED INTERIOR AND EXTERIOR TRIM AND SEALANTS. EXISTING OPENING TO BE PREPARED FOR INSTALLATION OF NEW 3-HR RATED WALL INFILL. REMOVE ALL MATERIALS NECESSARY FOR INSTALLATION OF NEW 3-HR CMU INFILL.  
**ADDITIONAL NOTES FOR WINDOWS AND CURTAIN WALL:**  
 1. REMOVE OR CUT EXISTING WINDOW, WALL ANCHORS AND SHIMS TO PROVIDE A CLEAN, CLEAR OPENING FOR NEW CONSTRUCTION.



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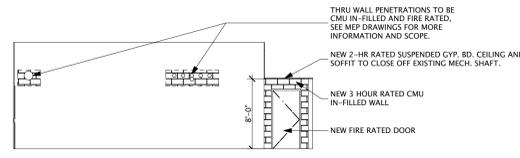
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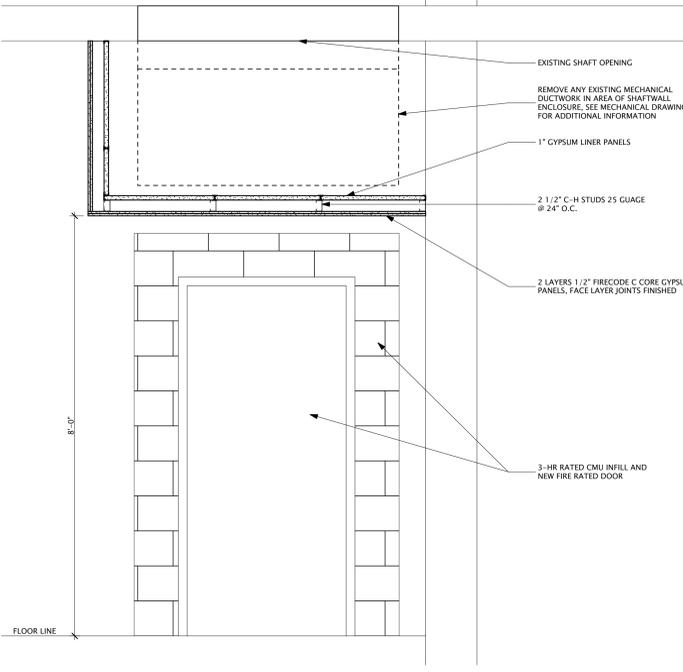
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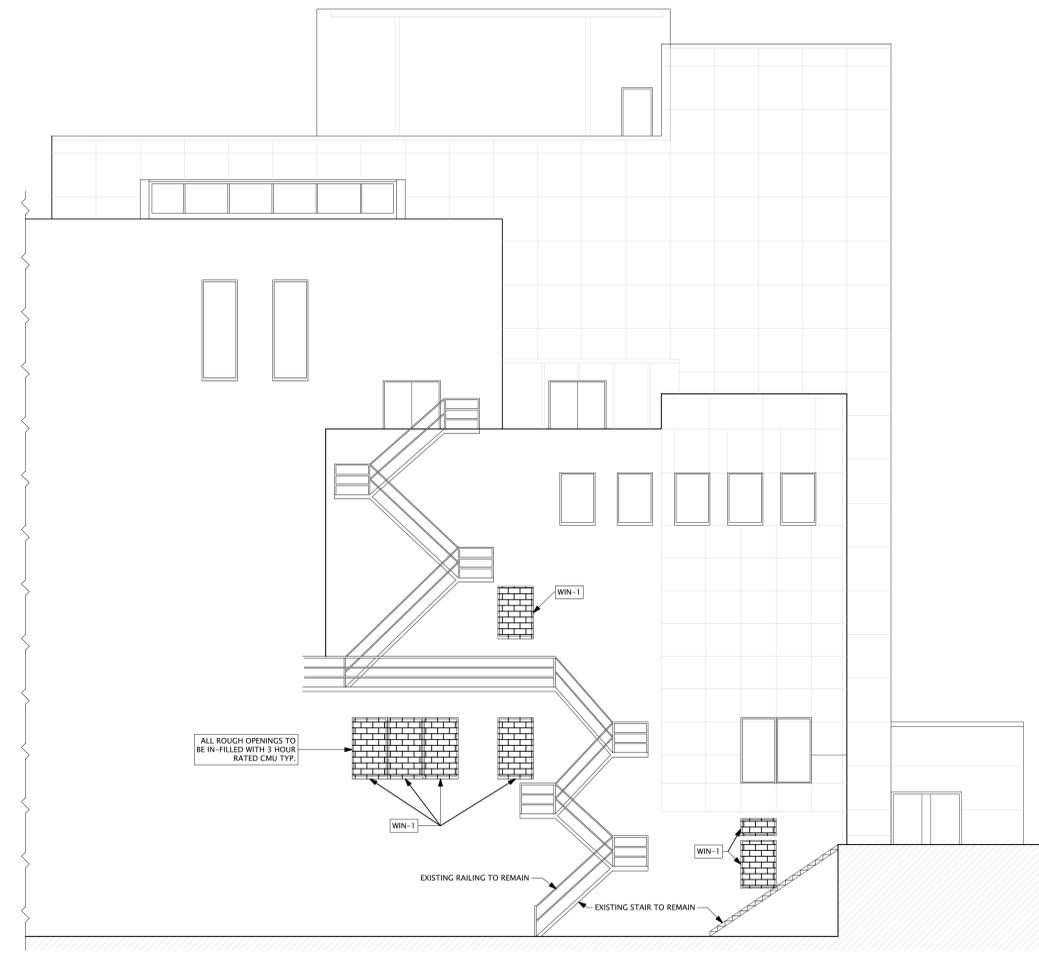
**E6**  
A1.11  
**GROUND FLOOR WEST INT. ELEV.**  
SCALE: 1/8" = 1'-0"



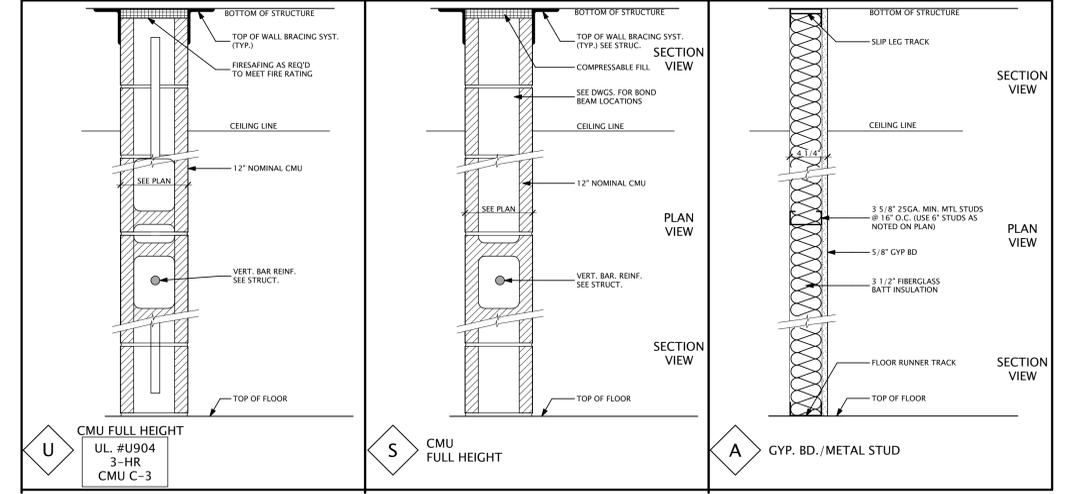
**D4**  
A1.11  
**WALL SECTION**  
SCALE: 3/4" = 1'-0"



**DOORS:**  
D-1: REMOVE DOUBLE DOORS  
INSTALLATION OF NEW 3-HR RATED WALL INFILL. REMOVE ALL MATERIALS NECESSARY FOR INSTALLATION OF NEW 3-HR CMU INFILL.  
ADDITIONAL NOTES FOR WINDOWS AND CURTAIN WALL:  
1. REMOVE OR CUT EXISTING WINDOW, WALL ANCHORS AND SHIMS TO PROVIDE A CLEAN, CLEAR OPENING FOR NEW CONSTRUCTION.



**A4**  
A1.11  
**Partial North (Jackson Street) Exterior Elevation**  
SCALE: 1/8" = 1'-0"

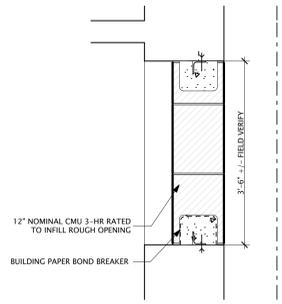


Design No. U904  
May 26, 2015  
Bearing Wall Rating — 3 HR.  
Nonbearing Wall Rating — 3 HR.

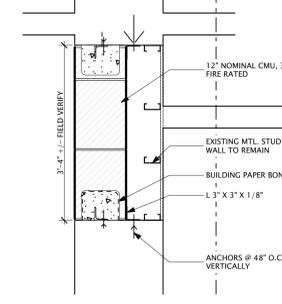
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load reduction factor shall be used — see Guide 0323 or 0323.2.  
\* Indicates such products shall bear the UL or eUL Certification Mark for jurisdictions employing the UL or eUL Certification (such as Canada), respectively.

- 1. Concrete Blocks\*** — Various designs, Classification C-3 (3 hrs)  
See **Concrete Blocks** category for list of eligible manufacturers.
- 2. Mortar** — Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.
- 3. Portland Cement Stucco or Gypsum Plaster** — Add 1/2 hr to Classification if used. Attached to concrete blocks (Item 1).
- 4. Loose Masonry Fill** — If all core spaces are filled with loose dry expanded clay, expanded clay or shale (Rotary Kilo Process), water repellent vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 1 hr to Classification.
- 5. Foamed Plastic\*** — (Optional-Not Shown) — 1-1/2 in. thick max. 4 lb wide sheathing attached to concrete blocks (Item 1).
- ATLAS ROOFING CORP** — "EnergyShield Pro Wall Insulation" and "EnergyShield Pro 2 Wall Insulation."
- CARLISE COATINGS & WATERPROOFING INC.** — Type R2+ Sheath
- HUNTER PANELS** — Type Xci-Class A, Xci 286
- RMAN OPERATING L.L.C.** — "TSS-8500", "TSS-8510", "ThermaSeal-XP", "TICOMASeal", "ThermaSeal-3", "ThermaSeal-3"
- THE BOW CHEMICAL CO.** — Type Therman Sheathing, Therman Light Duty Insulation, Therman Heavy Duty Insulation, Therman Metal Building Board, Therman White Finish Insulation, Therman Exterior Insulation, Therman XARMOR Exterior Insulation, Therman HI Insulation, Therman Plus Lamer Panel, Therman Heavy Duty Plus (HDP) and TUFF-R™ Insulation
- 5A. Building Units** — As an alternate to Item 5, min. 1 in. thick polystyrene composite foamed plastic insulation boards, nom. 48 by 48 or 96 sq., with a facer on one side and wood fiber board on the other.
- RMAN OPERATING L.L.C.** — "ThermaSeal-SP"
- \* Indicates such products shall bear the UL or eUL Certification Mark for jurisdictions employing the UL or eUL Certification (such as Canada), respectively.

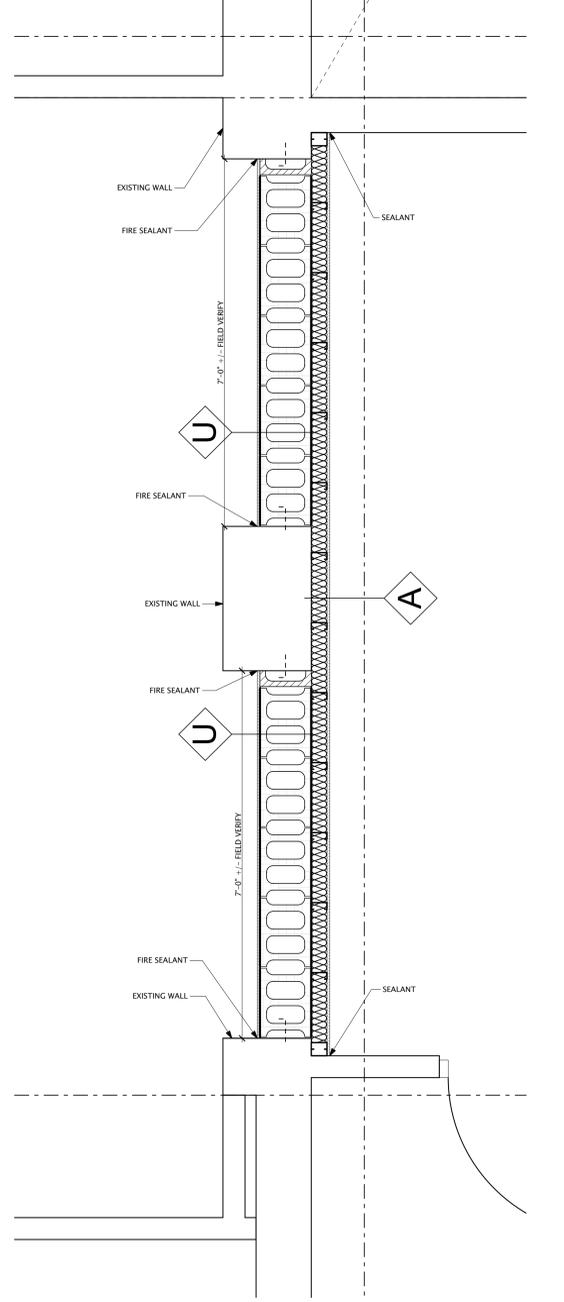
**C2**  
A1.11  
**UL. #U904 Fire Resistance Specs**  
SCALE: 1" = 1'-0"



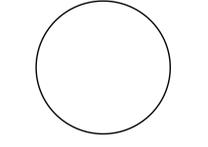
**A3**  
A1.11  
**PLAN DETAIL**  
SCALE: 3/4" = 1'-0"



**A2**  
A1.11  
**PLAN DETAIL**  
SCALE: 3/4" = 1'-0"



**A1**  
A1.11  
**PLAN DETAIL**  
SCALE: 3/4" = 1'-0"



PROJECT TITLE  
**Utilities and Building Separation**  
429 Michigan St.  
Toledo, Ohio

06.23.2015	BIDDING
06.23.2015	PERMIT
05.12.2015	FINAL OWNER REVIEW

CHECKED ARB  
APPROVED ARB

TCI JOB NO. 160278

SHEET TITLE  
**ENLARGED PLANS, ELEVATIONS & WALL TYPES**

SHEET NO.  
**A1.11**

Revised 03/23/2015

7

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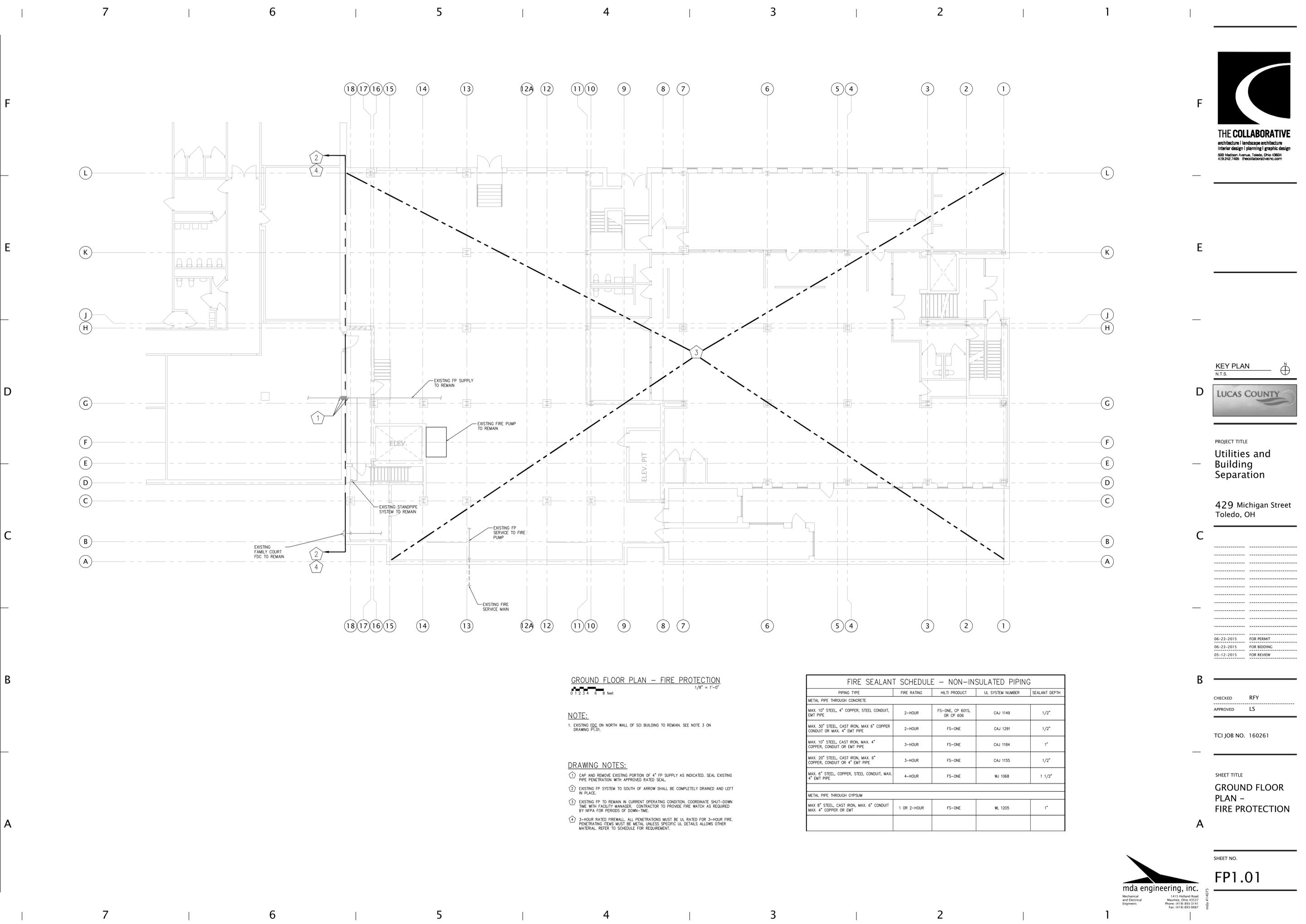
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**GROUND FLOOR PLAN – FIRE PROTECTION**  
 1/8" = 1'-0"

**NOTE:**  
 1. EXISTING FDC ON NORTH WALL OF SCI BUILDING TO REMAIN. SEE NOTE 3 ON DRAWING P1.01.

**DRAWING NOTES:**  
 ① CAP AND REMOVE EXISTING PORTION OF 4" FP SUPPLY AS INDICATED. SEAL EXISTING PIPE PENETRATION WITH APPROVED RATED SEAL.  
 ② EXISTING FP SYSTEM TO SOUTH OF ARROW SHALL BE COMPLETELY DRAINED AND LEFT IN PLACE.  
 ③ EXISTING FP TO REMAIN IN CURRENT OPERATING CONDITION. COORDINATE SHUT-DOWN TIME WITH FACILITY MANAGER. CONTRACTOR TO PROVIDE FIRE WATCH AS REQUIRED BY NFPA FOR PERIODS OF DOWN-TIME.  
 ④ 3-HOUR RATED FIREWALL. ALL PENETRATIONS MUST BE UL RATED FOR 3-HOUR FIRE. PENETRATING ITEMS MUST BE METAL UNLESS SPECIFIC UL DETAILS ALLOWS OTHER MATERIAL. REFER TO SCHEDULE FOR REQUIREMENT.

FIRE SEALANT SCHEDULE – NON-INSULATED PIPING				
PIPING TYPE	FIRE RATING	HLTI PRODUCT	UL SYSTEM NUMBER	SEALANT DEPTH
<b>METAL PIPE THROUGH CONCRETE</b>				
MAX. 10" STEEL, 4" COPPER, STEEL CONDUIT, EMT PIPE	2-HOUR	FS-ONE, CP 601S, OR CP 606	CAJ 1149	1/2"
MAX. 30" STEEL, CAST IRON, MAX. 6" COPPER CONDUIT OR MAX. 4" EMT PIPE	2-HOUR	FS-ONE	CAJ 1291	1/2"
MAX. 10" STEEL, CAST IRON, MAX. 4" COPPER, CONDUIT OR EMT PIPE	3-HOUR	FS-ONE	CAJ 1184	1"
MAX. 20" STEEL, CAST IRON, MAX. 6" COPPER, CONDUIT OR 4" EMT PIPE	3-HOUR	FS-ONE	CAJ 1155	1/2"
MAX. 6" STEEL, COPPER, STEEL CONDUIT, MAX. 4" EMT PIPE	4-HOUR	FS-ONE	WJ 1088	1 1/2"
<b>METAL PIPE THROUGH GYPSUM</b>				
MAX. 8" STEEL, CAST IRON, MAX. 6" CONDUIT MAX. 4" COPPER OR EMT	1 OR 2-HOUR	FS-ONE	WL 1205	1"



**KEY PLAN**  
 N.T.S.



**PROJECT TITLE**  
 Utilities and Building Separation

**429 Michigan Street  
 Toledo, OH**

06-23-2015 FOR PERMIT  
 06-23-2015 FOR BIDDING  
 05-12-2015 FOR REVIEW

CHECKED RFY  
 APPROVED LS

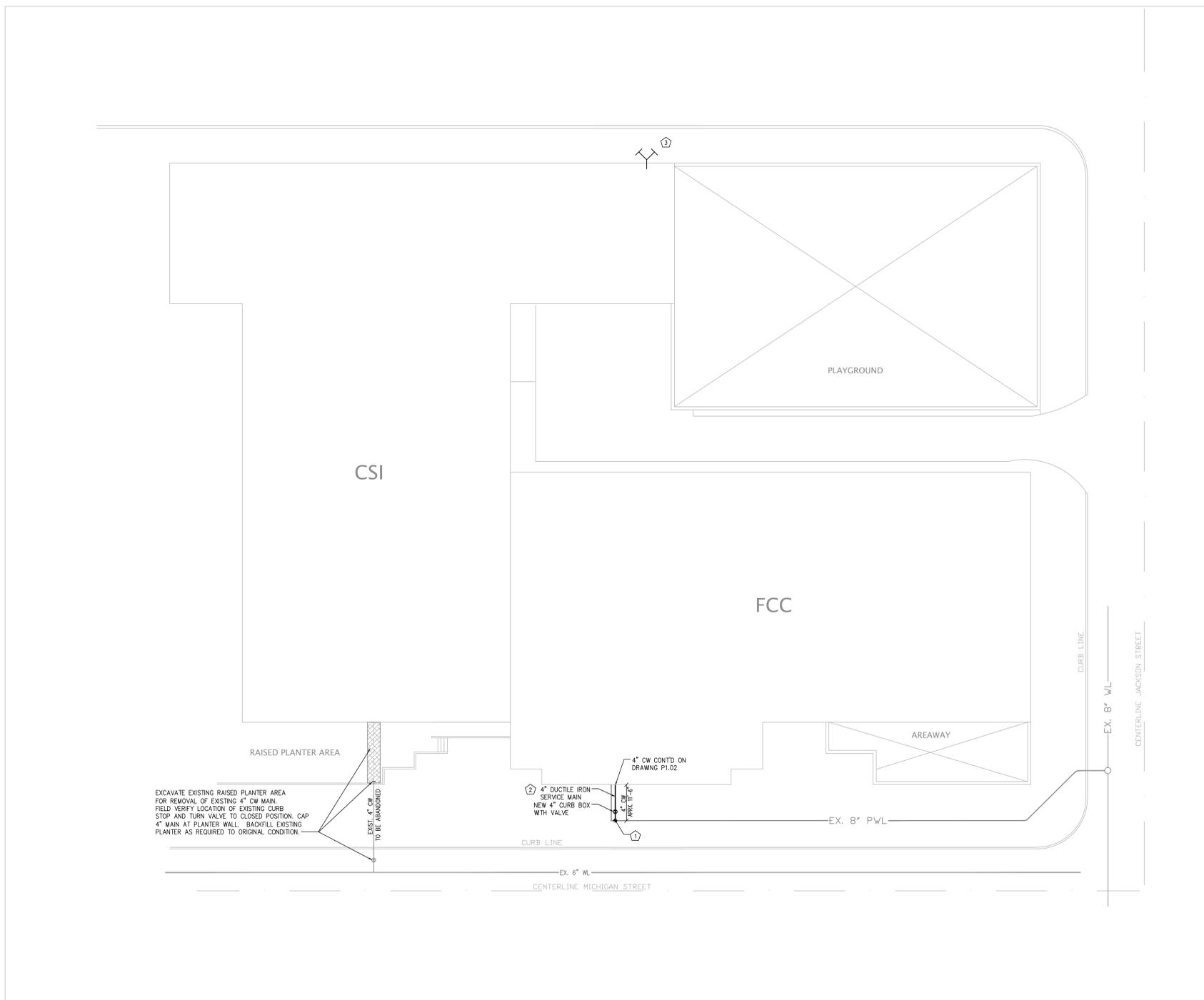
TCI JOB NO. 160261

**SHEET TITLE**  
 GROUND FLOOR PLAN – FIRE PROTECTION

SHEET NO.

**FP1.01**





PARTIAL SITE PLAN PLAN - PLUMBING  
1/16" = 1'-0"

DRAWING NOTES:

- ① NEW 4" COLD WATER TAP TO EXISTING 8" PWL. MAKE NEW TAP AND CONNECTS PER CITY OF TOLEDO STANDARDS.
- ② NEW 4" DCW MAIN TO BE INSTALLED A MINIMUM OF 60-INCHES BELOW GRADE. COORDINATE LOCATION AND ELEVATION WITH EXISTING CONDITIONS.
- ③ EXISTING EDG. SERVICE CSI BUILDING TO REMAIN.



**THE COLLABORATIVE**  
architecture | landscape architecture  
interior design | planning | graphic design  
200 Madison Avenue, Toledo, Ohio 43604  
419.242.1406 thecollaborativeinc.com

KEY PLAN  
N.T.S.



PROJECT TITLE  
**Utilities and Building Separation**

429 Michigan Street  
Toledo, OH

06-23-2015 FOR PERMIT  
06-23-2015 FOR BIDDING  
05-12-2015 FOR REVIEW

CHECKED RFY  
APPROVED LS

TCI JOB NO. 160261

SHEET TITLE  
**PARTIAL SITE PLAN - PLUMBING**

SHEET NO.

**P1.01**



1415 Holland Road  
Maumee, Ohio 43527  
Phone: (419) 893-3141  
Fax: (419) 893-0687  
mda #14075



FIRE SEALANT SCHEDULE -- NON-INSULATED PIPING				
PIPING TYPE	FIRE RATING	HILTI PRODUCT	UL SYSTEM NUMBER	SEALANT DEPTH
<b>METAL PIPE THROUGH CONCRETE</b>				
MAX. 10" STEEL, 4" COPPER, STEEL CONDUIT, EMT PIPE	2-HOUR	FS-ONE, CP 601S, OR CP 606	CAJ 1149	3/4"
MAX. 30" STEEL, CAST IRON, MAX. 6" COPPER CONDUIT OR MAX. 4" EMT PIPE	2-HOUR	FS-ONE	CAJ 1291	3/4"
MAX. 10" STEEL, CAST IRON, MAX. 4" COPPER, CONDUIT OR EMT PIPE	3-HOUR	FS-ONE	CAJ 1184	1"
MAX. 20" STEEL, CAST IRON, MAX. 6" COPPER, CONDUIT OR 4" EMT PIPE	3-HOUR	FS-ONE	CAJ 1155	3/4"
MAX. 6" STEEL, COPPER, STEEL CONDUIT, MAX. 4" EMT PIPE	4-HOUR	FS-ONE	WJ 1068	1 1/2"
<b>PLASTIC AND GLASS PIPE IN CONCRETE</b>				
MAX. 4" ABS, NOM. 6" FRPP	2-HOUR	CP 680	FA 2065	N/A
MAX. 2" PVC OR CPVC	2-HOUR	FS-ONE	CAJ 2167	2"
MAX. 4" ABS, NOM. 6" FRPP	3-HOUR	CP 680	FA 2066	N/A
MAX. 2" PVC, CPVC, FRPP, OR ABS	3-HOUR	FS-ONE	CAJ 2220	2 1/2"
MAX. 6" PVC, CPVC, FRPP, OR ABS	3-HOUR	CP 642/643	CAJ 2109	N/A
MAX. 6" GLASS PIPE	3-HOUR	FS-ONE	CAJ 2118	3/4"
<b>PLASTIC PIPE IN WOOD</b>				
MAX. 4" PVC, CPVC, ABS, OR FRPP	1 OR 2-HOUR	CP 643	FC 2025	N/A
<b>METAL PIPE THROUGH GYPSUM</b>				
MAX. 6" STEEL, CAST IRON, MAX. 6" CONDUIT MAX. 4" COPPER OR EMT	1 OR 2-HOUR	FS-ONE	WL 1205	1"
<b>PLASTIC PIPE IN GYPSUM</b>				
MAX. 6" PVC, CPVC, ABS OR FRPP	1 OR 2-HOUR	CP 642/643	WL 2078	N/A

**GROUND FLOOR PLAN -- PLUMBING**  
1/8" = 1'-0"

- DRAWING NOTES:**
- EXISTING TO REMAIN. FIELD VERIFY EXACT LOCATION.
  - CONNECT NEW 4" DCW SUPPLY TO EXISTING BOOSTER PUMP SYSTEM AS REQUIRED. FIELD VERIFY EXACT LOCATION.
  - NEW 4" CW TO EXTEND TO EXISTING FIRE MAIN AS REQ'D. PROVIDE NEW TAP AND CURB STOP. COORDINATE REQUIREMENTS WITH THE CITY OF TOLEDO WATER DEPARTMENT. REFER TO SITE PLAN FOR LOCATIONS.
  - REMOVE EXISTING DCW SUPPLY AS INDICATED TO FAMILY COURT FACILITY. SEAL PIPE PENETRATIONS THRU RATED WALL AS REQUIRED. FIELD VERIFY ROUTING AND LOCATION.
  - REMOVE EXISTING 4" CW SERVICE, METER AND BYPASS SYSTEM. CAP 4" SERVICE AT DIRECT ON SITE PLAN.
  - ALTERNATE P-1: EXISTING SUMP BASIN TO REMAIN. FIELD VERIFY DIAMETER AND DEPTH. REMOVE EXISTING COVER, DISCHARGE PIPING AND VALVES, PUMPS, FLOATS AND CONTROL PANEL. FIELD VERIFY REQUIREMENTS. COORDINATE ELECTRICAL DISCONNECT WITH ELECTRICAL CONTRACTOR. PROVIDE NEW DUPLEX PUMP SYSTEM, CONTROLS, FLOATS, DISCHARGE PIPE AND COVER. REFER TO DETAIL AND SCHEDULE FOR REQUIREMENTS.
  - ALTERNATE P-1: DISCONNECT AND REMOVE EXISTING 6" DISCHARGE PIPE AT EXISTING STACK. RECONNECT NEW 3" DISCHARGE PIPING AS REQUIRED. FIELD VERIFY REQUIREMENTS.
  - 3-HOUR RATED FIREWALL: ALL PENETRATIONS MUST BE UL RATED FOR 3-HOUR FIRE. PENETRATING ITEMS MUST BE METAL, UNLESS SPECIFIC UL DETAILS ALLOWS OTHER MATERIAL. REFER TO SCHEDULE FOR REQUIREMENT.

FIRE SEALANT SCHEDULE -- INSULATED PIPING				
PIPING TYPE	FIRE RATING	HILTI PRODUCT	UL SYSTEM NUMBER	SEALANT DEPTH
<b>INSULATED METAL PIPES THROUGH CONCRETE</b>				
MAX. 4" STEEL OR COPPER PIPE w/ MAX. 2" THICK GLASS FIBER INSULATION	2-HOUR	CP 680	FA 5017	N/A
MAX. 12" STEEL, MAX. 6" COPPER PIPE w/ MAX. 2" GLASS FIBER INSULATION	2-HOUR	FS-ONE	CAJ 5091	3/4"
MAX. 4" STEEL, COPPER, CONDUIT OR EMT PIPE w/ MAX. 3/4" ABS/PVC INSULATION	3-HOUR	FS-ONE	CAJ 5090	1/2"
MAX. 6" STEEL, COPPER, CONDUIT OR EMT PIPE w/ MAX. 1 1/2" GLASS FIBER INSULATION	4-HOUR	FS-ONE	WJ 5028	2"
<b>INSULATED METAL PIPES IN WOOD</b>				
MAX. 2" COPPER OR STEEL PIPE w/ MAX. 1 1/2" GLASS FIBER INSULATION	1-HOUR	FS-ONE	FC 5036	N/A
<b>INSULATED METAL PIPES IN GYPSUM</b>				
MAX. 12" STEEL, 6" COPPER, 4" CONDUIT OR EMT PIPE w/ MAX. 2" GLASS FIBER INSULATION	1 OR 2-HOUR	FS-ONE	WL 5029	3/4"



KEY PLAN  
N.T.S.



PROJECT TITLE  
**Utilities and Building Separation**

**429 Michigan Street  
Toledo, OH**

06-23-2015 FOR PERMIT  
06-23-2015 FOR BIDDING  
05-12-2015 FOR REVIEW

CHECKED RFY  
APPROVED LS

TCJ JOB NO. 160261

SHEET TITLE  
**GROUND FLOOR PLAN - PLUMBING**

SHEET NO.  
**P1.02**



PLUMBING SPECIFICATION

- 1.00 GENERAL
1.01 GENERAL SCOPE
A. THE WORK REQUIRED UNDER THIS SPECIFICATION SHALL CONSIST OF ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, POWER, TRANSPORTATION, HOISTING IMPLEMENTS, ETC. OF EVERY DESCRIPTION NECESSARY FOR THE ENTIRE COMPLETION OF THE PLUMBING WORK OF THE CONTRACT...

- 1.02 INSPECTION OF EXISTING AND GENERAL CONDITIONS
A. THE CONTRACTOR WILL BE HELD TO HAVE PERSONALLY INSPECTED THE SITE OF THE PROPOSED WORK TO ARRIVE AT A CLEAR UNDERSTANDING OF THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED...

- 1.03 CODES, PERMITS AND COMPLIANCE
A. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED BY LAWS OF GOVERNING BODIES. COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES AND ALL LEGAL REQUIREMENTS...

- 1.04 WORKMANSHIP
A. WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY CONFORMING TO THE BEST PLUMBING INSTALLATION PRACTICE. ANY WORK OR MATERIAL WHICH IS REJECTED MUST BE REMOVED IMMEDIATELY AND REPLACED. NO SUB-STANDARD WORK WILL BE ACCEPTED.

- 1.05 SUBMITTALS AND RECORD DRAWINGS
A. SUBMIT SHOP DRAWINGS AND CATALOG DATA FOR APPROVAL FOR ALL EQUIPMENT AND MATERIALS SPECIFIED FOR THIS PROJECT PRIOR TO ORDERING OR MANUFACTURE OF SUCH SHOP DRAWINGS NOT STAMPED WITH CONTRACTOR APPROVAL WILL BE REJECTED.

- 1.06 TESTS AND GUARANTEE
A. ALL TESTS FOR VARIOUS SYSTEMS SHALL BE PERFORMED AS REQUIRED, CONSISTENT WITH GOOD GENERAL PRACTICE, AND IN COMPLIANCE WITH CODES AND AUTHORITIES.

- 1.07 COORDINATION
A. FIELD VERIFY EXACT LOCATION OF ALL NEW EQUIPMENT WITH EXISTING CONDITIONS AND COORDINATE WITH THE GENERAL AND OTHER CONTRACTORS PRIOR TO ROUGH-IN AND/OR INSTALLING ANY OF THIS WORK.

- 1.08 IDENTIFICATION
A. INSTALL SNAP-ON PLASTIC OR ADHESIVE PIPE MARKERS WITH SYSTEM IDENTIFICATION AND DIRECTION OF FLOW ON ALL PIPING SYSTEMS.

- 1.09 DEMOLITION, REMOVALS, CLEAN-UP, PROTECTION AND TOUCH-UP
A. REMOVE ALL EXISTING PIPING, FIXTURES, EQUIPMENT, DEVICES, ETC. SCHEDULED FOR REMOVAL OR NOT REQUIRED TO REMAIN IN SERVICE. CONTRACTOR SHALL COORDINATE REMOVAL WITH OWNER AND ALL OTHER TRADES ON THE PROJECT...

- D. UPON COMPLETION OF WORK, THIS CONTRACTOR SHALL THOROUGHLY CLEAN ALL APPARATUS EQUIPPED BY THIS CONTRACTOR.
D. ALL EQUIPMENT, FIXTURES, ITEMS, DEVICES AND APPURTENANCES SHALL BE PROTECTED FROM DEBRIS AND DAMAGE WHILE STORED AT THE SITE, AND PURGED AND AFTER INSTALLATION.

- 2.03 PIPING
A. REGULATORY REQUIREMENTS: COMPLY WITH THE PROVISIONS OF THE FOLLOWING:
1. ASME B 31.9 'BUILDING SERVICES PIPING' FOR MATERIALS, PRODUCTS AND INSTALLATION.

- 2.04 DOMESTIC WATER SERVICE BELOW FLOOR
A. DUCTILE IRON PIPE, ASTM C115, CLASS 150 OR 300, IRON-ALLOY THREADED FLANGES, AWMA C 104 CEMENT-MORTAR LINING WITH FITTINGS AS FOLLOWS.

- 3.00 PRODUCTS AND EXECUTION
3.01 WATER METERS
A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING: AMES COMPANY; APOLLO; CONBRACO INDUSTRIES; WATTS REGULATOR COMPANY; WILKINS REGULATOR DIVISION.

- 3.02 BACKFLOW PREVENTERS
A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS PROVIDE PRODUCT BY ONE OF THE FOLLOWING: AMES COMPANY; APOLLO; CONBRACO INDUSTRIES; WATTS REGULATOR COMPANY; WILKINS REGULATOR DIVISION.

- 3.03 THERMOMETERS
A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING: HANSEN BELLOFRAU, TERREX, WELSER.

- 3.04 SUBMERSIBLE SANITARY PUMPS
A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING: WEIL PUMP, ZOELLER COMPANY, LIBERTY.

- MISCELLANEOUS FITTINGS
1. BRONZE FLANGES: ASME B16.24, CLASSES 150 AND 300.

- PIPE SUPPORT
1. INSTALL HANGERS WITH THE FOLLOWING MINIMUM ROD SIZES AND MAXIMUM SPACING OR WHERE MORE STRINGENT, COMPLY WITH LOCAL BUILDING CODE REQUIREMENTS.

Table with 3 columns: PIPE MATERIAL, HORIZONTAL IN FEET, VERTICAL IN FEET. Rows include CAST-IRON SOLI PIPE, PVC PLASTIC PIPE.

- J. LOCATIONS AND ARRANGEMENTS: DRAWINGS (PLANS, SCHEMATICS AND DIAGRAMS) INDICATE THE GENERAL LOCATION AND ARRANGEMENT OF PIPING SYSTEMS. LOCATIONS AND ARRANGEMENTS OF PIPING TAKE INTO CONSIDERATION PIPE SIZING AND FRICTION LOSS, EXPANSION, PUMP SIZING, AND OTHER DESIGN CONSIDERATIONS. SO FAR AS PRACTICAL, INSTALL PIPING AS INDICATED.

- K. CONCEAL ALL PIPE INSTALLATIONS IN WALLS, PIPE CHASES, UTILITY SPACES, ABOVE CEILING, BELOW GRADE OR FLOORS, UNLESS INDICATED TO BE EXPOSED TO VIEW.

- L. INSTALL DRAINS AT LOW POINTS IN MAINS, RISERS, AND BRANCH LINES CONSISTING OF A TEE FITTING, 3/4" BALL VALVE AND SHORT 3/4", THREADED NIPPLE AND CAP.

- M. SUBJECT PIPING SYSTEM TO HYDROSTATIC TEST PRESSURE THAT IS NOT LESS THAN 1.5 TIMES THE DESIGN PRESSURE. TEST PRESSURE SHALL NOT EXCEED MAXIMUM PRESSURE FOR ANY VESSEL, PUMP, VALVE, OR OTHER COMPONENT IN SYSTEM UNDER TEST.

- N. CLEANING
1. CLEAN AND DISINFECT WATER DISTRIBUTION PIPING AS FOLLOWS:
A. PURGE NEW POTABLE WATER DISTRIBUTION PIPING SYSTEMS AND PARTS OF EXISTING POTABLE WATER SYSTEMS THAT HAVE BEEN ALTERED, EXTENDED, OR REPAIRED PRIOR TO USE.

- O. FLUSH PIPING SYSTEM WITH CLEAN, POTABLE WATER UNTIL DIRTY WATER DOES NOT APPEAR AT OUTLETS.

- P. PREPARE AND SUBMIT REPORTS FOR PURGING AND DISINFECTING ACTIVITIES.

- Q. CLEAN INTERIOR OF PIPING SYSTEM. REMOVE DIRT AND DEBRIS AS WORK PROGRESSES.

GENERAL NOTES - PLUMBING:

- 1. PERFORM ALL WORK IN ACCORDANCE WITH THE OHIO PLUMBING CODE, LATEST EDITION AND ALL APPLICABLE LOCAL CODES AND ORDINANCES.
2. CONTRACTOR SHALL VISIT SITE TO VERIFY ALL EXISTING CONDITIONS THAT MAY AFFECT THE WORK.

- 3. CONTRACT SHALL INCLUDE ALL MATERIALS, LABOR, TOOLS, ETC. FOR A COMPLETE AND OPERABLE INSTALLATION. ALL MATERIALS SHALL BE NEW, SPECIFICATION GRADE, AND U.L. LISTED PRODUCTS, UNLESS NOTED OTHERWISE.
4. COORDINATE ALL WORK AND SCHEDULES WITH OWNER, ARCHITECT, OTHER CONTRACTORS AND APPROPRIATE UTILITY COMPANIES.

- 5. STORE MATERIALS WHERE DIRECTED, PROTECT STORED MATERIALS AND INSTALLED WORK FROM DAMAGE. REPLACE ALL DAMAGED ITEMS WITH NEW.
6. REMOVE DIRT, DEBRIS AND UNUSED MATERIALS FROM SITE REGULARLY AND DISPOSE OF BY PROPER AND LEGAL METHODS.

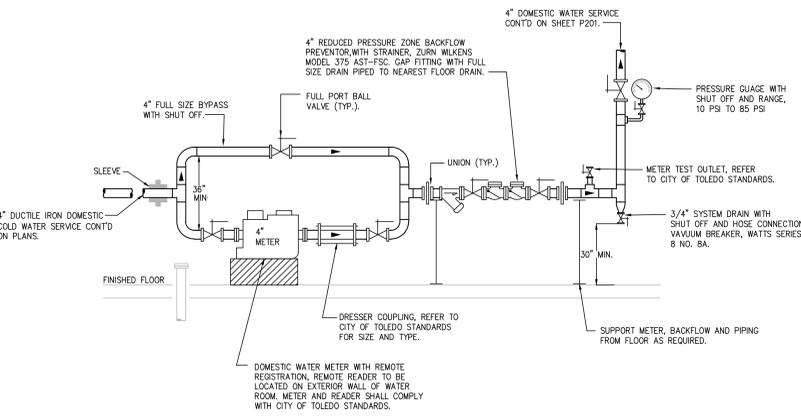
- 7. SCHEDULE ALL WATER, GAS SERVICE AND SEWER INTERRUPTIONS WITH OWNER AND OTHER CONTRACTORS 72 HOURS PRIOR TO INTERRUPTION.
8. PATCH AND FINISH CONSTRUCTION DAMAGED DURING THE COURSE OF PLUMBING INSTALLATIONS.

- 9. PROVIDE PROPER SEALS AND FIRE STOPPING AT ALL WALL, FLOOR AND CEILING PENETRATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS AND RATINGS FOR WALLS, FLOORS, AND CEILING.
10. PERFORMANCE TESTING AND MAKE FINAL ADJUSTMENTS TO VERIFY PROPER PERFORMANCE OF ALL SYSTEMS AND EQUIPMENT.

- 11. MAINTAIN "AS BUILT" RECORDS OF ALL INSTALLED ITEMS AND PROVIDE TO ARCHITECT AT PROJECT COMPLETION.
12. MOUNT ALL HANDICAP DEVICES AND EQUIPMENT PER FEDERAL ADA GUIDELINES INDICATED HEIGHTS ARE NOMINAL. WORK TO MASONRY COURSES, WAINSCOTS, COUNTERS, BACK SPLASHES, ETC. FOR ROUGH-IN.

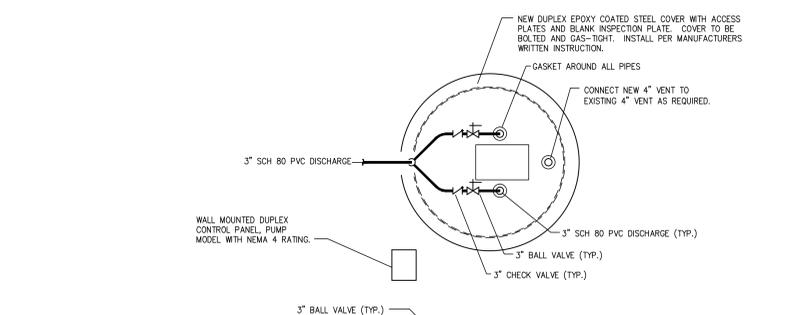
- 13. COORDINATE ALL SANITARY AND STORM INVERT ELEVATIONS WITH EXISTING CONDITIONS / OTHER CONTRACTORS PRIOR TO INSTALLING ANY PIPING.

NOTE: THESE NOTES ARE GENERAL IN NATURE. SPECIFIC MEANS, METHODS AND MATERIALS ARE DETAILED IN THE SPECIFICATIONS AND CONTRACTOR IS DIRECTED TO THOROUGHLY REVIEW THE FULL SPECIFICATION. CONTRACT SPECIFICATIONS SHALL GOVERN IN CASE OF CONFLICT.



DOMESTIC WATER METER SERVICE AND METER SETTING

- NOTES:
1. SUPPORT METER AND BACKFLOW PREVENTER FROM WALL OR FLOOR AS REQ'D.
2. BACKFLOW PREVENTER SHALL NOT BE MOUNTED ABOVE 60" FROM FINISHED FLOOR.



DUPLEX SANITARY SUMP PUMP DETAIL

ALTERNATE - DUPLEX SANITARY PUMP SCHEDULE - ALTERNATE

Table with columns: SYMBOL, MANUFACTURER, MODEL, SYSTEM TYPE, No. of Pumps, OPV, TDH, FLANGE SIZE, HP, AMPS, VOLTAGE, ALARM, BASIN, REMARKS.

PIPE FREEZE PROTECTION SCHEDULE

Table with columns: SYMBOL, POWER CONNECTION, MANUFACTURER, MODEL No., PIPE TEMP, JACKET, PIPE DIA., VOLTAGE, CIRCUIT BREAKER, CIRCUIT LENGTH, GROUND LENGTH, REMARKS.

LEGEND AND SYMBOLS

Table defining symbols for STORM PIPING, FORCED MAIN PIPING, SANITARY VENT PIPING, Y-TRAP, BALL VALVE, CHECK VALVE, GATE VALVE, FD, FLOOR DRAIN, RPBPF, REDUCED PRESSURE BACKFLOW PREVENTER, I.E., INVERT ELEVATION, G.C., GENERAL CONTRACTOR, E.C., ELECTRICAL CONTRACTOR, P.C., PLUMBING CONTRACTOR, F.F.E., FINISHED FLOOR ELEVATION.



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PROJECT TITLE
Utilities and Building Separation

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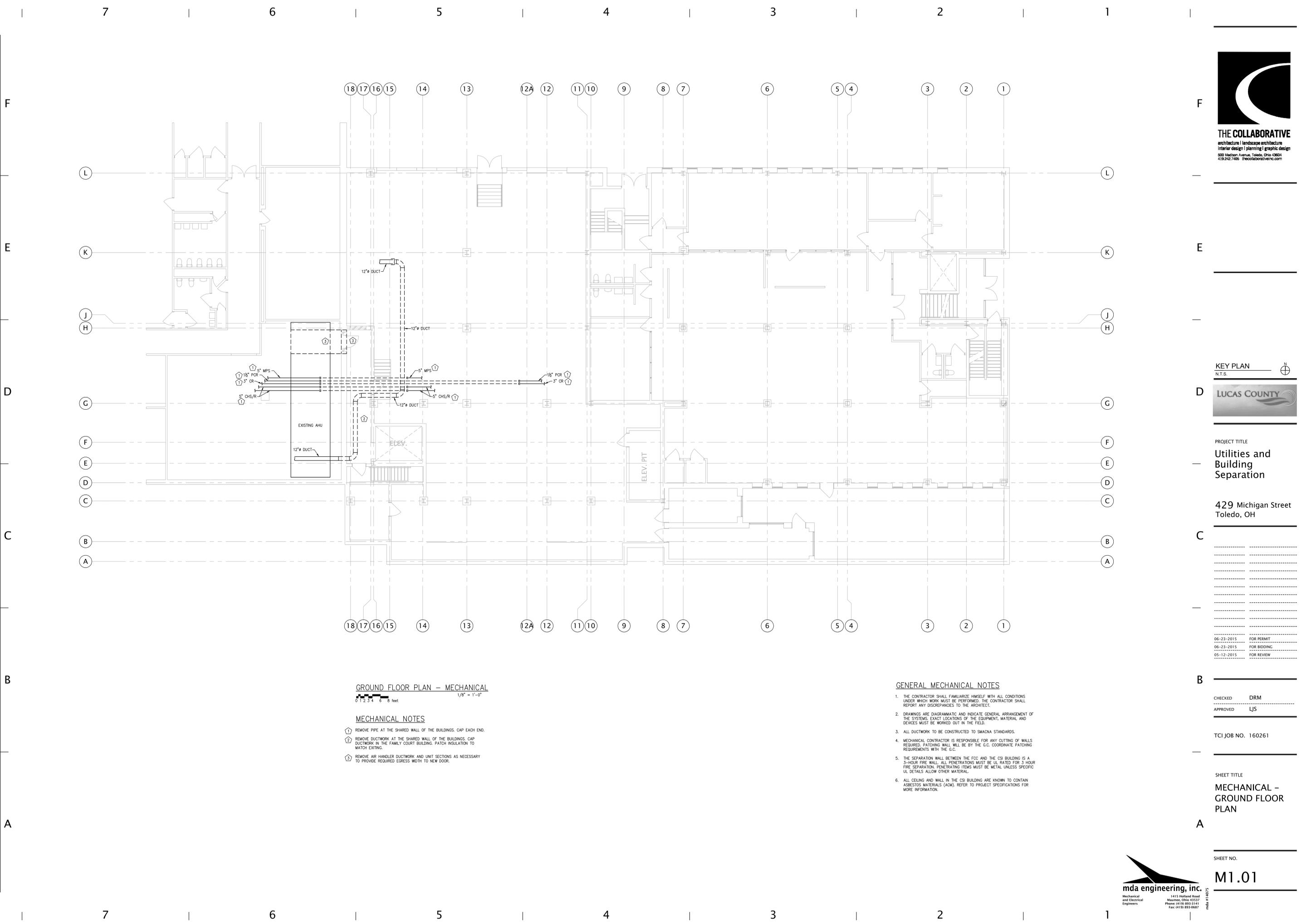
TCJ JOB NO. 160261

SHEET TITLE
NOTES AND DETAILS
PLUMBING

SHEET NO.

P2.01





**GROUND FLOOR PLAN – MECHANICAL**  
 1/8" = 1'-0"  
 0 1 2 3 4 6 8 feet

**MECHANICAL NOTES**

- ① REMOVE PIPE AT THE SHARED WALL OF THE BUILDINGS. CAP EACH END.
- ② REMOVE DUCTWORK AT THE SHARED WALL OF THE BUILDINGS. CAP DUCTWORK IN THE FAMILY COURT BUILDING. PATCH INSULATION TO MATCH EXISTING.
- ③ REMOVE AIR HANDLER DUCTWORK AND UNIT SECTIONS AS NECESSARY TO PROVIDE REQUIRED EGRESS WIDTH TO NEW DOOR.

**GENERAL MECHANICAL NOTES**

1. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS UNDER WHICH WORK MUST BE PERFORMED. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT.
2. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF THE SYSTEMS. EXACT LOCATIONS OF THE EQUIPMENT, MATERIAL AND DEVICES MUST BE WORKED OUT IN THE FIELD.
3. ALL DUCTWORK TO BE CONSTRUCTED TO SMACNA STANDARDS.
4. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ANY CUTTING OF WALLS REQUIRED. PATCHING WALL WILL BE BY THE G.C. COORDINATE PATCHING REQUIREMENTS WITH THE G.C.
5. THE SEPARATION WALL BETWEEN THE FCC AND THE CSI BUILDING IS A 3-HOUR FIRE WALL. ALL PENETRATIONS MUST BE UL RATED FOR 3 HOUR FIRE SEPARATION. PENETRATING ITEMS MUST BE METAL UNLESS SPECIFIC UL DETAILS ALLOW OTHER MATERIALS.
6. ALL CEILING AND WALL IN THE CSI BUILDING ARE KNOWN TO CONTAIN ASBESTOS MATERIALS (ACM). REFER TO PROJECT SPECIFICATIONS FOR MORE INFORMATION.



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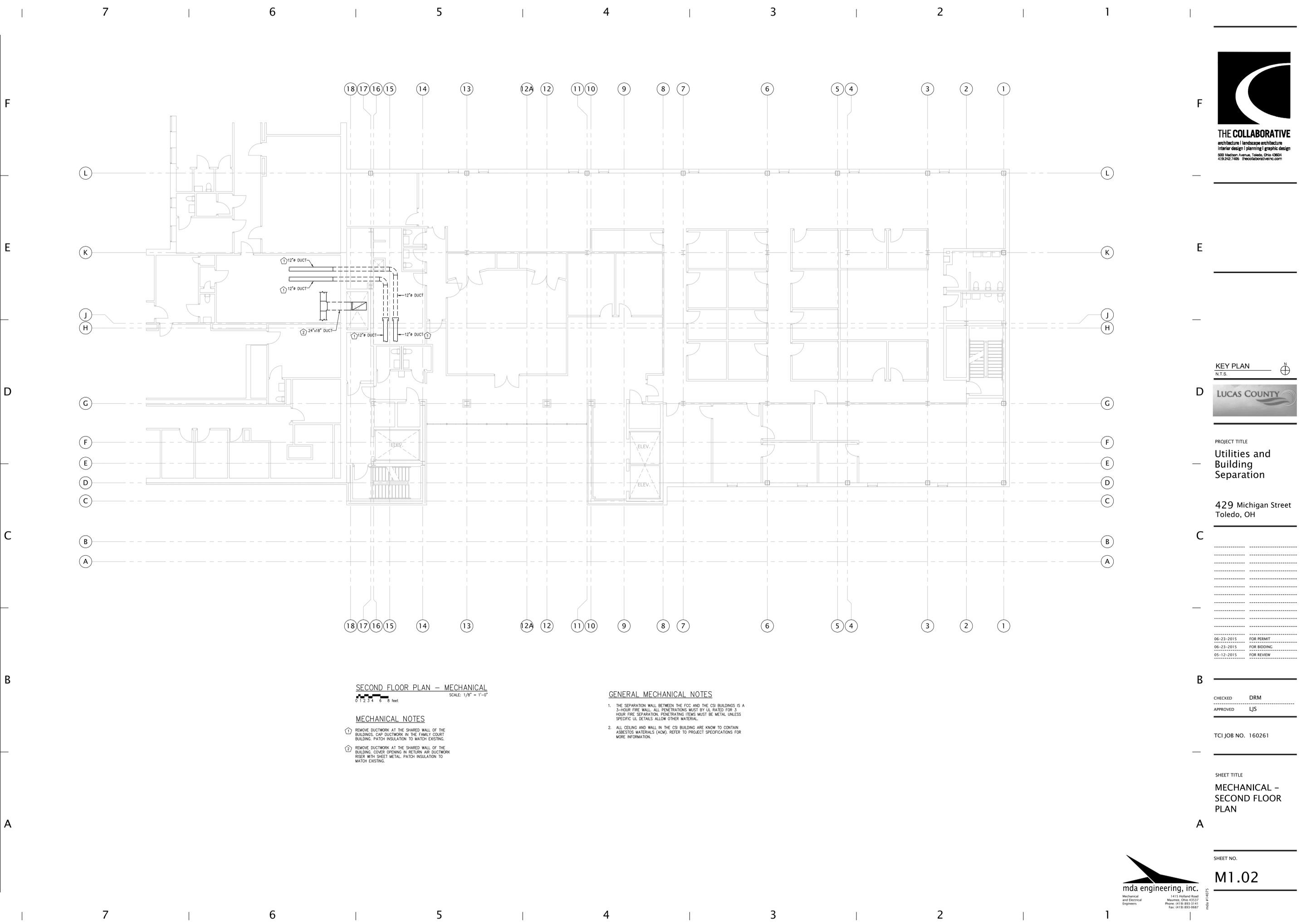
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**SHEET TITLE**  
**MECHANICAL – GROUND FLOOR PLAN**

SHEET NO.  
**M1.01**



**mda engineering, inc.**  
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 mda #15075



**SECOND FLOOR PLAN – MECHANICAL**  
 SCALE: 1/8" = 1'-0"

**MECHANICAL NOTES**

- ① REMOVE DUCTWORK AT THE SHARED WALL OF THE BUILDINGS. CAP DUCTWORK IN THE FAMILY COURT BUILDING. PATCH INSULATION TO MATCH EXISTING.
- ② REMOVE DUCTWORK AT THE SHARED WALL OF THE BUILDING. COVER OPENING IN RETURN AIR DUCTWORK RISER WITH SHEET METAL. PATCH INSULATION TO MATCH EXISTING.

**GENERAL MECHANICAL NOTES**

- 1. THE SEPARATION WALL BETWEEN THE FCC AND THE CSI BUILDINGS IS A 3-HOUR FIRE WALL. ALL PENETRATIONS MUST BE UL RATED FOR 3 HOUR FIRE SEPARATION. PENETRATING ITEMS MUST BE METAL UNLESS SPECIFIC UL DETAILS ALLOW OTHER MATERIAL.
- 2. ALL CEILING AND WALL IN THE CSI BUILDING ARE KNOWN TO CONTAIN ASBESTOS MATERIALS (ACM). REFER TO PROJECT SPECIFICATIONS FOR MORE INFORMATION.



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**PROJECT TITLE**  
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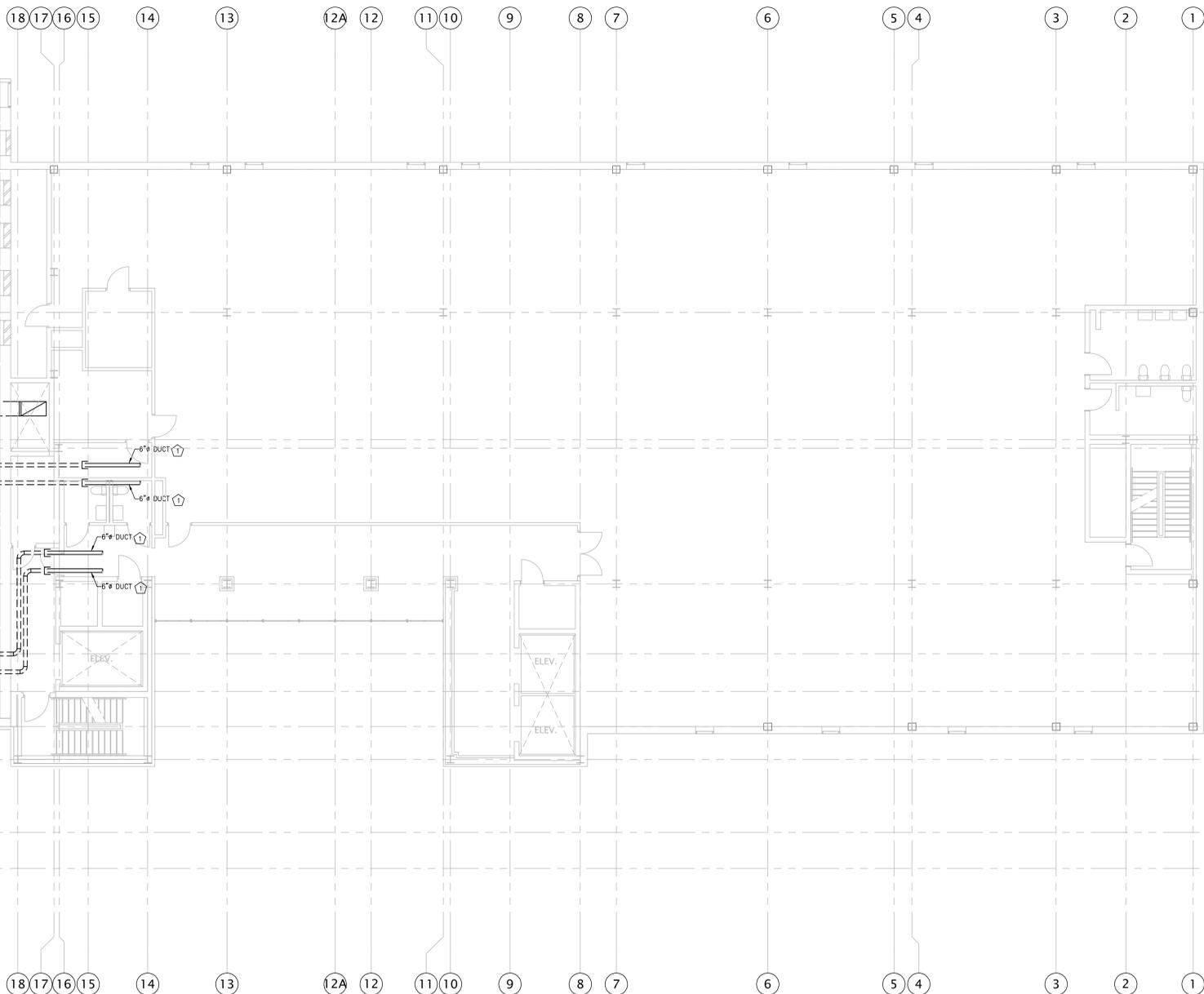
TCI JOB NO. 160261

**SHEET TITLE**  
**MECHANICAL – SECOND FLOOR PLAN**

**SHEET NO.**  
**M1.02**



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**GENERAL MECHANICAL NOTES**

1. THE SEPARATION WALL BETWEEN THE FCC AND THE CS BUILDINGS IS A 3-HOUR FIRE WALL. ALL PENETRATIONS MUST BE UL RATED FOR 3 HOUR FIRE SEPARATION. PENETRATING ITEMS MUST BE METAL UNLESS SPECIFIC UL DETAILS ALLOW OTHER MATERIAL.
2. ALL CEILINGS AND WALL IN THE CS BUILDING ARE KNOWN TO CONTAIN ASBESTOS MATERIALS (ACM). REFER TO PROJECT SPECIFICATIONS FOR MORE INFORMATION.

**THIRD FLOOR PLAN - MECHANICAL**

SCALE: 1/8" = 1'-0"  
0 1 2 3 4 6 8 feet

**MECHANICAL NOTES**

1. REMOVE DUCTWORK AT THE SHARED WALL OF THE BUILDINGS. CAP DUCTWORK IN THE FAMILY COURT BUILDING. PATCH INSULATION TO MATCH EXISTING.
2. REMOVE DUCTWORK AT THE SHARED WALL OF THE BUILDING. COVER OPENING IN RETURN AIR DUCTWORK RISER WITH SHEET METAL. PATCH INSULATION TO MATCH EXISTING.

**MECHANICAL SPECIFICATION**

**1.00 GENERAL**

**1.01 GENERAL SCOPE**

- A. THE WORK REQUIRED UNDER THIS SPECIFICATION SHALL CONSIST OF ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, POWER, TRANSPORTATION, HOISTING IMPLEMENTS, ETC. OF EVERY DESCRIPTION NECESSARY FOR THE ENTIRE COMPLETION OF THE MECHANICAL WORK OF THE CONTRACT, ALL AS SPECIFIED HEREIN, SHOWN ON THE DRAWINGS OR REASONABLY IMPLIED BY OTHER, COMPLETE IN EVERY RESPECT UNLESS SPECIFICALLY EXCLUDED HEREIN. THE WORK INCLUDED IN THIS CONTRACT SHALL CONSIST OF THE INSTALLATION, TEST AND GUARANTEE OF ALL WORK HEREIN SPECIFIED.

**1.02 INSPECTION OF EXISTING AND GENERAL CONDITIONS**

- A. THE CONTRACTOR WILL BE HELD TO HAVE PERSONALLY INSPECTED THE SITE OF THE PROPOSED WORK TO ARRIVE AT A CLEAR UNDERSTANDING OF THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE EXTENT OF OTHER CONTRACTOR'S ACTIVITIES IN THE AREA, AND TO BECOME FULLY ACQUAINTED WITH THE RECEIVING AND STORAGE SPACES AVAILABLE. THE CONTRACTOR SHALL BE HELD TO HAVE COMPARED THE PREMISES AND SITE WITH THE DRAWINGS AND SPECIFICATIONS, AND SHALL BE SATISFIED AS TO THE CONDITIONS OF THE PREMISES, THE ACTUAL ELEVATIONS, AND ANY OTHER CONDITIONS AFFECTING THE CARRYING OUT OF THE WORK, BEFORE THE DELIVERY OF THIS PROPOSAL.
- B. NO ALLOWANCES OR EXTRA CONSIDERATION ON BEHALF OF THE CONTRACTOR WILL SUBSEQUENTLY BE ALLOWED BY REASON OF THE CONTRACTOR'S FAILURE TO HAVE BECOME FAMILIAR WITH SITE CONDITIONS, ERROR OR OVERSIGHT ON THE PART OF THE CONTRACTOR OR DUE TO INTERFERENCES BY THE OWNER'S OR OTHER CONTRACTOR'S ACTIVITIES.
- C. CONTRACTOR IS DIRECTED TO INCLUDE ALL NECESSARY OVERTIME AND PREMIUM TIME (SATURDAY, SUNDAY, HOLIDAYS) REQUIRED FOR THE COMPLETION OF THE INTENDED WORK TO MEET SPECIFIED SCHEDULES.
- D. DO NOT SCALE MECHANICAL DRAWINGS. FOR EXACT DIMENSIONS USE DIMENSIONED DRAWINGS OR ACTUAL FIELD CONDITIONS.

**1.03 CODES, PERMITS AND COMPLIANCE**

- A. OWNER SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED BY LAWS OF GOVERNING BODIES. COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES AND ALL LEGAL REQUIREMENTS. NO EXTRA COMPENSATION WILL BE ALLOWED FOR ANY CHANGES NECESSARY FOR CODE COMPLIANCE REGARDLESS OF THE METHOD OF INSTALLATION SHOWN ON THE DRAWINGS OR SPECIFIED.
- B. ALL MECHANICAL WORK SHALL COMPLY WITH CURRENT EDITIONS OF ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES.
- C. ALL EQUIPMENT, DEVICES, AND MATERIALS SHALL BE THE LATEST PRODUCTS OF MANUFACTURER AND SHALL CONFORM TO THE REQUIREMENTS NOTED ON PLANS.

**1.04 WORKMANSHIP**

- A. WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY CONFORMING TO THE BEST MECHANICAL INSTALLATION PRACTICE. ANY WORK OR MATERIAL WHICH IS REJECTED MUST BE REMOVED IMMEDIATELY AND REPLACED. NO SUB-STANDARD WORK WILL BE ACCEPTED.
- B. THE BREVITY OF THIS SPECIFICATION SHALL NOT BE CONSTRUED AS RELIEVING THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM ALL WORK IN A FIRST CLASS WORKMAN LIKE MANNER.

**1.06 TESTS AND GUARANTEES**

- A. ALL TESTS FOR VARIOUS SYSTEMS SHALL BE PERFORMED AS REQUIRED, CONSISTENT WITH GOOD GENERAL PRACTICE, AND IN COMPLIANCE WITH CODES AND AUTHORITIES.
- B. AS A CONDITION PRECEDENT TO THE FINAL PAYMENT, THE CONTRACTOR SHALL EXECUTE TO THE OWNER A GUARANTEE IN A FORM APPROVED BY THE OWNER. GUARANTEE SHALL WARRANT THAT ALL WORK INCLUDED IN THIS DIVISION OF THE SPECIFICATIONS WILL REMAIN IN SERVICEABLE AND PERFECT CONDITION (ORDINARY WEAR AND TEAR, ABUSE AND CAUSES BEYOND THE CONTROL OF THE CONTRACTOR EXCLUDED) FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL COMPLETION AND ACCEPTANCE OF WORK, AND THAT THE CONTRACTOR WILL MAKE GOOD AT HIS OWN EXPENSE, WITHOUT COST TO THE OWNER, ANY IMPERFECTIONS IN WHOLE OR IN PART WHICH MAY DEVELOP IN THIS WORK DURING THE PERIOD ABOVE SPECIFIED, INCLUDING ANY DAMAGE TO OTHER WORK CAUSED BY SUCH IMPERFECTIONS OR REPAIRING OF SAME.

**1.09 DEMOLITION, REMOVALS, CLEAN-UP, PROTECTION AND TOUCH-UP**

- A. REMOVE ALL EXISTING PIPING, DUCTWORK, EQUIPMENT, DEVICES, ETC., SCHEDULED FOR REMOVAL OR NOT REQUIRED TO REMAIN IN SERVICE. CONTRACTOR SHALL COORDINATE REMOVAL WITH OWNER AND ALL OTHER TRADES ON THE PROJECT. ALL PIPING, DUCTWORK, ETC., SHALL BE REMOVED BACK TO THE POINT OF SERVICE. PROVIDE ADDITIONAL PIPING, DUCTWORK, ETC. TO MAINTAIN FUNCTIONAL SYSTEMS.
- B. THIS CONTRACTOR SHALL DISPOSE OF ALL MATERIALS GENERATED FROM REMOVAL AND INSTALLATION OF THIS WORK. DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE WEEKLY. THIS CONTRACTOR SHALL PROVIDE TO THE OWNER ANY SALVAGEABLE MATERIALS AS DIRECTED BY THE OWNER OR ENGINEER.
- C. UPON COMPLETION OF WORK THIS CONTRACTOR SHALL THOROUGHLY CLEAN ALL APPARATUS FURNISHED BY THIS CONTRACTOR.
- D. ALL EQUIPMENT, ITEMS, DEVICES AND APPURTENANCES SHALL BE PROTECTED FROM DEBRIS AND DAMAGE WHILE STORED AT THE SITE AND DURING AND AFTER INSTALLATION.
- E. PATCH FINISHED SURFACES BY GENERAL CONTRACTOR.
- F. ALL CUTTING AND PATCHING OF ROOF, WALLS, FLOORS, AND SLABS, ETC. IS THE RESPONSIBILITY OF THIS CONTRACTOR UNLESS SPECIFICALLY STATED OTHERWISE ON THE DRAWINGS.

**2.00 BASIC MATERIALS AND METHODS**

**2.01 DUCTWORK AND DUCT ACCESSORIES**

- A. CONSTRUCT RECTANGULAR DUCTWORK TO MEET ALL FUNCTIONAL CRITERIA DEFINED IN SECTION VII OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE 1985 EDITION. ALL DUCTWORK MUST COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODE REQUIREMENTS.
- B. EXCEPT AS OTHERWISE INDICATED, FABRICATE RECTANGULAR DUCTS WITH GALVANIZED SHEET STEEL, IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS, TABLES 1-3 THROUGH 1-19, INCLUDING THEIR ASSOCIATED DETAILS. CONFORM TO THE REQUIREMENTS IN THE REFERENCED STANDARD FOR METAL THICKNESS, REINFORCING TYPES AND INTERVALS, TIE ROD APPLICATIONS, AND JOINT TYPES AND INTERVALS.
- C. STATO PRESSURE CLASSIFICATIONS: UNLESS OTHERWISE INDICATED, CONSTRUCT DUCTS TO THE FOLLOWING:
  1. LOW PRESSURE SUPPLY DUCTS INCLUDING DOWN STREAM OF AIR TERMINALS: 2-INCH WG (500 PA).
  2. MEDIUM PRESSURE SUPPLY DUCTS BETWEEN AIR HANDLING UNIT AND AIR TERMINALS: 3-INCH WG (750 PA).
  3. RETURN DUCTS: 2-INCH WG (500 PA), NEGATIVE PRESSURE.
  4. EXHAUST DUCTS: 2-INCH WG (500 PA), NEGATIVE OR POSITIVE PRESSURE.
- D. FABRICATE ROUND DUCTS WITH SPIRAL LOCKSEAM CONSTRUCTION. COMPLY WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS, TABLE 3-2 FOR GALVANIZED STEEL GAGES.

**3.00 PRODUCTS AND EXECUTION**

**3.01 NONE**



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PROJECT TITLE

**Utilities and Building Separation**

**429 Michigan Street  
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TCI JOB NO. 160261

SHEET TITLE  
**MECHANICAL -  
THIRD FLOOR  
PLAN**

SHEET NO.

**M1.03**



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PLAN SYMBOL LEGEND

Table with 2 columns: SYMBOL and DESCRIPTION. Includes symbols for conduit, conductors, phase indicators, home runs, junction boxes, motor starters, breakers, switches, and receptacles.

MISCELLANEOUS SYMBOL LEGEND

Table with 2 columns: SYMBOL and DESCRIPTION. Includes symbols for equipment schedule items, feeder schedule items, plan note items, riser note items, and existing conductors/cables.

ABBREVIATIONS

Table with 2 columns: ABBREVIATION and DESCRIPTION. Lists abbreviations for electrical contractor, fire protection contractor, general contractor, mechanical contractor, and various electrical components.

LIGHTING FIXTURE SCHEDULE

Table with columns: SYMBOL, LAMP DATA, BALLAST DATA, HOUSING, REFLECTOR ASSEMBLY, LENS/REFRACTOR, USE LOCATION, MOUNTING, LINE VOLT., MANUFACTURER, and NOTES. Lists lighting fixtures like E1 and F1.

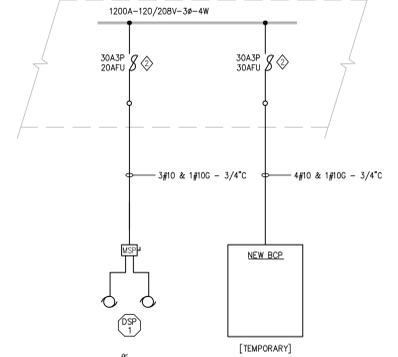
LIGHTING FIXTURE SCHEDULE NOTES - GENERAL

- 1. SPECIFICATION NUMBERS ARE MANUFACTURER'S SERIES NUMBERS ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR/EQUIPMENT SUPPLIER TO COMPLETE CATALOG NUMBERS TO MATCH THE FIXTURE DESCRIPTION, COMPLIANCE WITH SPECIFICATIONS AND INSTALLATION REQUIREMENTS.
2. ALL FLUORESCENT LIGHTING FIXTURES SHALL BE PROVIDED WITH INTERNAL BALLAST DISCONNECT.

LIGHTING FIXTURE SCHEDULE NOTES - SPECIFIC

- 1. PROVIDE 90-MINUTE EMERGENCY/EGRESS BATTERY PACK, WIRE ENTIRE FIXTURE TO AHEAD OF LOCAL SWITCHING FOR CONTINUOUS NIGHT LIGHT AND EMERGENCY OPERATION.
2. FIXTURE WIRE TO EMERGENCY SOURCE PANEL.

EXISTING EDP PANEL



PANEL SCHEDULE TABLE. Columns include: PANEL: BCP, LOCATION: CSI BOILER ROOM, WIRING, LOAD DESCRIPTION, CIRCUIT BREAKER, and NOTES. Lists loads like receptacle, LITG, heat trace, and spare.

PANEL SCHEDULE NOTES
◇ PROVIDE BREAKER LOCKING STRAP.
◇ INSTALL NEW FUSES IN EXISTING SWITCH; SEE PLAN DRAWINGS.

ELECTRICAL SPECIFICATIONS:

- 1.00 GENERAL
1.01 GENERAL SCOPE
A. THE WORK REQUIRED UNDER THIS SPECIFICATION SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, POWER, TRANSPORTATION, HOISTING IMPLEMENTS, ETC., NECESSARY FOR THE COMPLETION OF THE ELECTRICAL WORK OF THE CONTRACT.
1.02 INSPECTION OF EXISTING AND GENERAL CONDITIONS
A. THE CONTRACTOR WILL BE HELD TO HAVE PERSONALLY INSPECTED THE SITE OF THE PROPOSED WORK TO ARRIVE AT A CLEAR UNDERSTANDING OF THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED.
1.03 CODES, PERMITS, AND COMPLIANCE
A. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED BY LAWS OF GOVERNING BODIES.
1.04 WORKMANSHIP
A. WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY CONFORMING TO THE BEST ELECTRICAL INSTALLATION PRACTICE.
1.05 SUBMITTALS AND RECORD DRAWINGS
A. SUBMIT SHOP DRAWINGS AND CATALOG DATA FOR APPROVAL FOR ALL NEW EQUIPMENT AND MATERIALS SPECIFIED FOR THIS PROJECT.
1.06 TESTS AND GUARANTEE
A. ALL TESTS FOR VARIOUS SYSTEMS SHALL BE PERFORMED AS REQUIRED, CONSISTENT WITH GOOD GENERAL PRACTICE.
1.07 COORDINATION
A. FIELD VERIFY EXACT LOCATION OF ALL NEW EQUIPMENT WITH EXISTING CONDITIONS AND COORDINATE WITH THE GENERAL AND OTHER CONTRACTORS.
1.08 IDENTIFICATION/LABELING
A. FURNISH AND INSTALL PHENOLIC LAMINATE NAME PLATES WITH 1/2 INCH LETTERS INDICATING PANEL NAME AND VOLTAGE ON ALL PANELS AND CABINETS.
1.09 DEMOLITION, REMOVALS, CLEAN-UP, PROTECTION AND TOUCH-UP
A. REMOVE ALL EXISTING RACEWAY, WIRING, FIXTURES, DEVICES, CONTROLLERS, ETC., SCHEDULED FOR REMOVAL OR NOT REQUIRED TO REMAIN IN SERVICE.

2.00 BASIC MATERIALS AND METHODS

- 2.01 FASTENING AND SUPPORTS
A. ALL CONDUITS AND EQUIPMENT SHALL BE ADEQUATELY SUPPORTED, EITHER SUSPENDED FROM THE CONSTRUCTION ABOVE, OR BY MEANS OF STRUTS TO THE CONSTRUCTION BELOW.
2.02 RACEWAYS
A. ALL CONDUCTORS SHALL BE INSTALLED IN RACEWAY UNLESS SPECIFICALLY NOTED OTHERWISE.
2.03 CONDUCTORS (600V AND BELOW)
A. FEEDER AND BRANCH CIRCUIT CONDUCTORS SHALL BE STRANDED COPPER WITH 600V INSULATION.
2.04 OUTLET AND JUNCTION BOXES
A. OUTLET AND DEVICE BOXES FOR EXPOSED APPLICATIONS AND USE WITH E.M.T. CONDUIT SHALL BE GALVANIZED PRESSED STEEL.
2.05 GROUNDING
A. BOND EXPOSED STRUCTURAL STEEL PER NEC ARTICLE 250.104.
2.06 WIRING DEVICES
A. ALL WIRING DEVICES SHALL BE SPECIFICATION GRADE, HEAVY DUTY FOR SIDE AND BACK WIRING CONVENIENCE.
2.07 DISCONNECTS AND STARTERS
A. PROVIDE DISCONNECTS FOR ALL EQUIPMENT AS SHOWN ON THE PLANS AND STARTERS FOR ALL EQUIPMENT NOT PROVIDED WITH BUILT-IN CONTROL PANELS.
2.08 PRODUCTS AND EXECUTION
A. ALL NEW PANELBOARDS SHALL BE UL LISTED AND LABELED.
2.09 LIGHTING FIXTURES
A. ALL NEW LIGHTING FIXTURES SHALL BEAR THE LABEL OF APPROVAL OF THE UNDERWRITERS LABORATORIES, INC.



KEY PLAN



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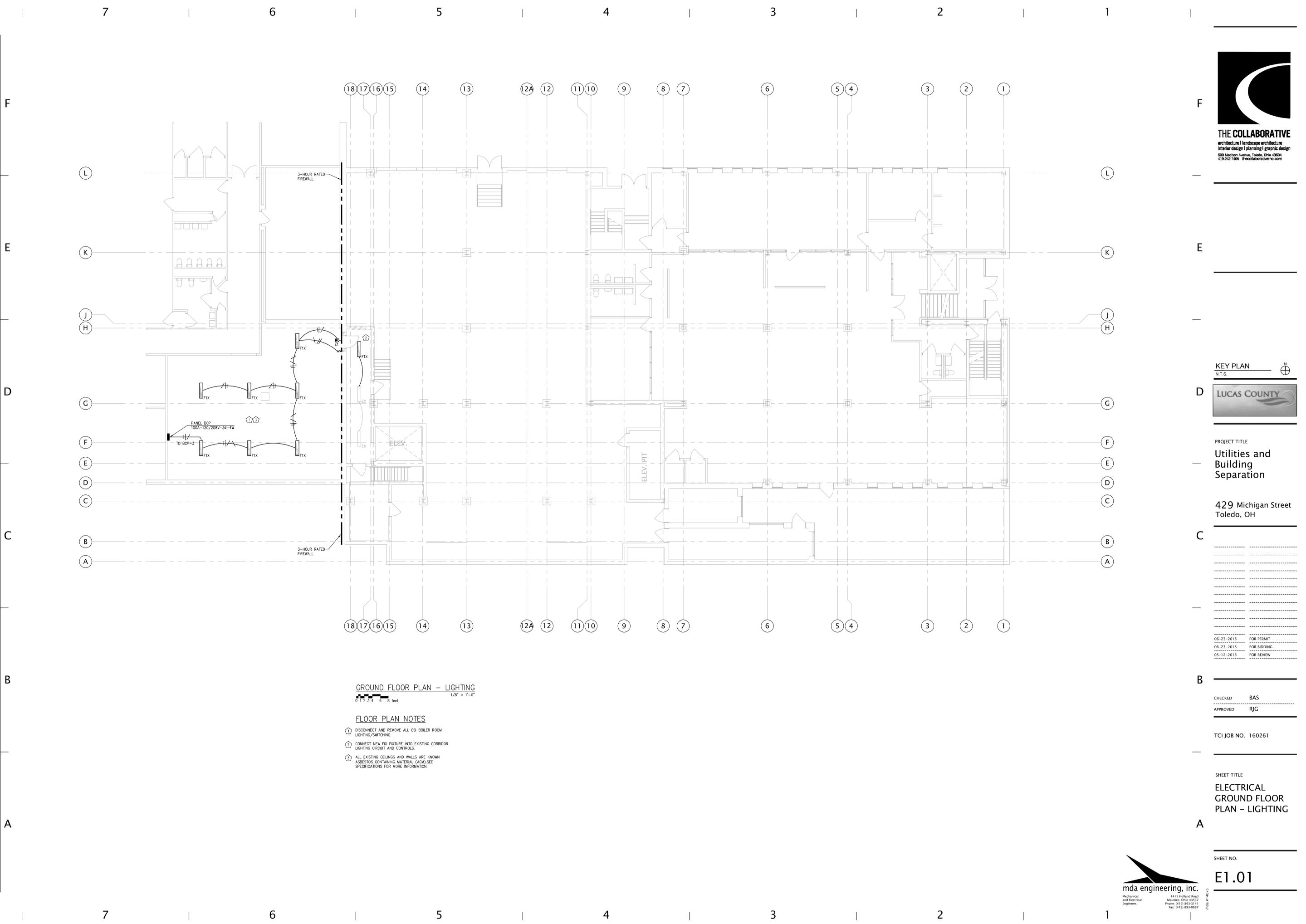
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SHEET TITLE
ELECTRICAL SCHEDULES, LEGEND SPECIFICATIONS & ONE-LINE

SHEET NO.

E0.01





GROUND FLOOR PLAN -- LIGHTING  
 1/8" = 1'-0"  
 0 1 2 3 4 6 8 feet

FLOOR PLAN NOTES

- ① DISCONNECT AND REMOVE ALL CSI BOILER ROOM LIGHTING/SWITCHING.
- ② CONNECT NEW FIX FIXTURE INTO EXISTING CORRIDOR LIGHTING CIRCUIT AND CONTROLS.
- ③ ALL EXISTING CEILINGS AND WALLS ARE KNOWN ASBESTOS CONTAINING MATERIAL (ACM). SEE SPECIFICATIONS FOR MORE INFORMATION.



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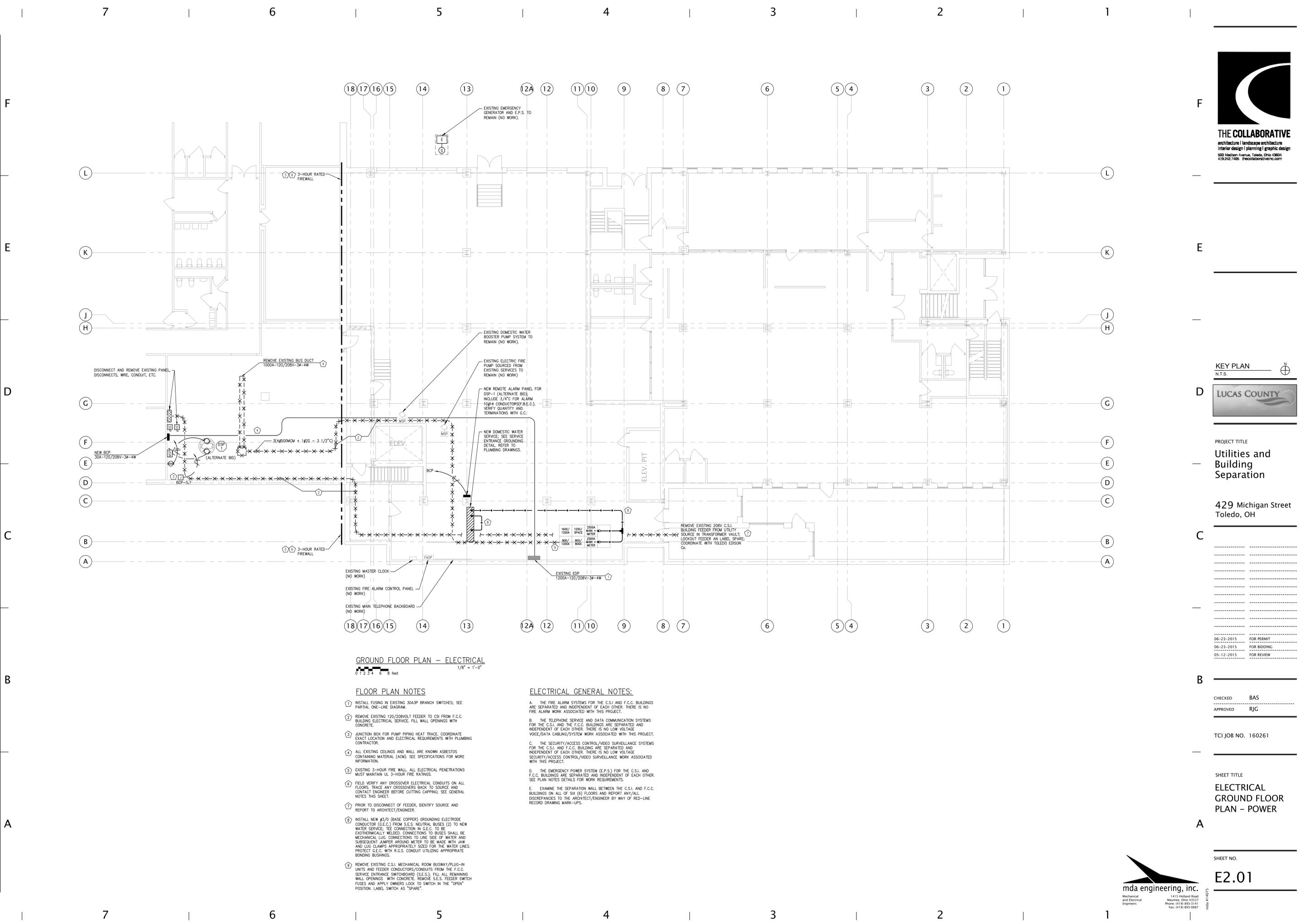
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SHEET TITLE  
**ELECTRICAL GROUND FLOOR PLAN - LIGHTING**

SHEET NO.  
**E1.01**



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 mda #14075



**GROUND FLOOR PLAN - ELECTRICAL**  
 1/8" = 1'-0"  
 0 1 2 3 4 6 8 feet

**FLOOR PLAN NOTES**

1. INSTALL FUSING IN EXISTING 30A/3P BRANCH SWITCHES; SEE PARTIAL ONE-LINE DIAGRAM.
2. REMOVE EXISTING 120/208VOLT FEEDER TO CSI FROM F.C.C. BUILDING ELECTRICAL SERVICE. FILL WALL OPENINGS WITH CONCRETE.
3. JUNCTION BOX FOR PUMP PIPING HEAT TRACE. COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS WITH PLUMBING CONTRACTOR.
4. ALL EXISTING CEILINGS AND WALL ARE KNOWN ASBESTOS CONTAINING MATERIAL (ACM). SEE SPECIFICATIONS FOR MORE INFORMATION.
5. EXISTING 3-HOUR FIRE WALL. ALL ELECTRICAL PENETRATIONS MUST MAINTAIN UL 3-HOUR FIRE RATINGS.
6. FIELD VERIFY ANY CROSSOVER ELECTRICAL CONDUITS ON ALL FLOORS. TRACE ANY CROSSOVERS BACK TO SOURCE AND CONTACT ENGINEER BEFORE CUTTING CAPPING; SEE GENERAL NOTES THIS SHEET.
7. PRIOR TO DISCONNECT OF FEEDER, IDENTIFY SOURCE AND REPORT TO ARCHITECT/ENGINEER.
8. INSTALL NEW #3/0 (BASE COPPER) GROUNDING ELECTRODE CONDUCTOR (G.E.C.) FROM S.E.S. NEUTRAL BUSES (2) TO NEW WATER SERVICE. TEE CONNECTION IN G.E.C. TO BE EXOTHERMICALLY WELDED. CONNECTIONS TO BUSES SHALL BE MECHANICAL LUG CONNECTIONS TO LINE SIDE OF WATER AND SUBSEQUENT JUMPER AROUND METER TO BE MADE WITH JAW AND LUG CLAMPS APPROPRIATELY SIZED FOR THE WATER LINES. PROTECT G.E.C. WITH R.G.S. CONDUIT UTILIZING APPROPRIATE BONDING BUSHINGS.
9. REMOVE EXISTING C.S.I. MECHANICAL ROOM BUSWAY/PLUG-IN UNITS AND FEEDER CONDUCTORS/CONDUITS FROM THE F.C.C. SERVICE ENTRANCE SWITCHBOARD (S.E.S.). FILL ALL REMAINING WALL OPENINGS WITH CONCRETE. REMOVE S.E.S. FEEDER SWITCH FUSES AND APPLY OWNERS LOCK TO SWITCH IN THE "OPEN" POSITION. LABEL SWITCH AS "SPARE".

**ELECTRICAL GENERAL NOTES:**

- A. THE FIRE ALARM SYSTEMS FOR THE C.S.I. AND F.C.C. BUILDINGS ARE SEPARATED AND INDEPENDENT OF EACH OTHER. THERE IS NO FIRE ALARM WORK ASSOCIATED WITH THIS PROJECT.
- B. THE TELEPHONE SERVICE AND DATA COMMUNICATION SYSTEMS FOR THE C.S.I. AND THE F.C.C. BUILDINGS ARE SEPARATED AND INDEPENDENT OF EACH OTHER. THERE IS NO LOW VOLTAGE VOICE/DATA CABLING/SYSTEM WORK ASSOCIATED WITH THIS PROJECT.
- C. THE SECURITY/ACCESS CONTROL/VIDEO SURVEILLANCE SYSTEMS FOR THE C.S.I. AND F.C.C. BUILDING ARE SEPARATED AND INDEPENDENT OF EACH OTHER. THERE IS NO LOW VOLTAGE SECURITY/ACCESS CONTROL/VIDEO SURVEILLANCE WORK ASSOCIATED WITH THIS PROJECT.
- D. THE EMERGENCY POWER SYSTEM (E.P.S.) FOR THE C.S.I. AND F.C.C. BUILDINGS ARE SEPARATED AND INDEPENDENT OF EACH OTHER. SEE PLAN NOTES DETAILS FOR WORK REQUIREMENTS.
- E. EXAMINE THE SEPARATION WALL BETWEEN THE C.S.I. AND F.C.C. BUILDINGS ON ALL OF SIX (6) FLOORS AND REPORT ANY/ALL DISCREPANCIES TO THE ARCHITECT/ENGINEER BY WAY OF RED-LINE RECORD DRAWING MARK-UPS.



KEY PLAN  
 N.T.S.



PROJECT TITLE  
**Utilities and Building Separation**

429 Michigan Street  
 Toledo, OH

06-23-2015	FOR PERMIT
06-23-2015	FOR BIDDING
05-12-2015	FOR REVIEW

CHECKED: BAS  
 APPROVED: RJG

TCI JOB NO. 160261

SHEET TITLE  
**ELECTRICAL GROUND FLOOR PLAN - POWER**

SHEET NO.  
**E2.01**

