# Chagrin Falls Admin. Police & Fire Dept. Additions & Renovation

21 West Washington Street, Chagrin Falls, OH - PPN: 932-03-006 & 932-03-028



# RSA ARCHITECTS, LLC

10 NORTH MAIN STREET CHAGRIN FALLS. OHIO 44022 TELEPHONE: (440) 247-3990 FAX (440) 247-3285 www.rsaarchitects.com

## SCOPE OF PROJECT:

THE SCOPE OF THIS PROJECT IS THE RENOVATION OF AN EXISTING MUNICIPAL COMPLEX INCLUDING 1) ADDITION OF TWO SEPARATE VEHICLE BAYS 2) RENOVATION OF EXISTING POLICE DEPARTMENT FOR ADDITIONAL LOCKER ROOMS ACCESSIBLE BATHROOMS & A MORE SECURE EVIDENC ROOM, 3) A RESIDENTIAL ADDITION ON THE 2nd FLOOR ABOVE THE POLICE DEPT FOR THE FIRE DEPARTMENT, AND 4 UNDERGROUND/ GRADING CIVIL WORK RELATED TO THE ADDITIONS & RENOVATIONS

BIDS ARE TO BE SEPARATED INTO (2) PARTS PART #1 IS FOR WORK RELATED TO THE POLICE DEPARTMENT

RENOVATION, 2ND FLOOR FIRE DEPARTMENT ADDITION, & CIVIL WORK IN THE ALLEY. THIS BID SHOULD BE FURTHER SPLIT TO SHOW WORK AS IT RELATES TO THE 1) POLICE DEPARTMENT 2) THE FIRE DEPARTMENT & 3) ALLEY CIVIL WORK. REFER TO THE BID DOCUMENT FOR ADDITIONAL INFORMATION

PART #2 IS FOR WORK RELATED TO THE FIRE DEPARTMENT'S APPARATUS ROOM ADDITION AND UPDATES TO THEIR EXISTING DRIVEWAY.

## OWNER:

"Village of Chagrin Falls' Mayor William Tomko 21 West Washington St. Chagrin Falls, Ohio 44022 Phone: 440-247-5050 Fax: 440-247-3285

## Project Contacts:

VILLAGE HALL Rob Jamieson - Chief Administrative Office Email: rjamieson@rsaarchitects.com POLICE DEPARTMENT Lisa Mariola - Administrative Assistant Email: Imariola@chagrinfallspd.com FIRE DEPARTMENT Frank Zugan - Fire Department Chief Email - ZuganF@cffd.net

## ARCHITECT:

"RSA Architects, LLC 10 North Main Street Chagrin Falls, Ohio 44022 Phone: 440-247-3990 Fax: 440-247-3285 Richard Sieafried, AIA, NCARB - Principal Email: rsieafried@rsaarchitects.com Joseph Rakoczy, NCARB Email: jrakoczy@rsaarchitects.com

#### STRUCTURAL ENGINEER: "I.A. Lewin and Associates" 4110 Mayfield Road, Suite B South Euclid, Ohio 44121 Phone: 216-291-3131 Isaac Lewin, PE - Principa Email: ilewin@lewinandassociates.com

# GENERAL NOTES:

## DOCUMENT OWNERSHIP:

ALL DRAWINGS AND SPECIFICATIONS PREPARED AS PART OF THIS COMMISSION ARE THE PROPERTY OF RSA | ARCHITECTS, LLC AND WILL NOT BE TRANSFERRED OR USED ON ANY OTHER PROJECT WITHOUT WRITTEN AGREEMENT.

#### GENERAL REQUIREMENTS:

WORK PERFORMED SHALL COMPLY WITH THE FOLLOWING: (1) PACKAGE CONTAINING BOTH SPECIFICATIONS AND DRAWINGS. (2) APPLICABLE STATE CODES AND THE RULES AND REGULATIONS OF GOVERNMENTAL AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION OVER THE WORK.

## INTENT OF CONTRACT DOCUMENTS:

THE INTENT OF THE CONTRACT DOCUMENTS IS TO INCLUDE ALL ITEMS NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK BY THE CONTRACTOR AND SUBCONTRACTOR.

IT IS UNDERSTOOD AND AGREED THAT THE ARCHITECT'S BASIC SERVICES DO NOT INCLUDE CIVIL, STRUCTURE, MECHANICAL, PLUMBING OR ELECTRICAL ENGINEERING OR DESIGN AND THAT SUCH SERVICES IS PROVIDED FOR BY OTHERS.

## WORKMANSHIP:

ALL WORKMANSHIP SHALL CONFORM TO ALL APPLICABLE BUILDING CODES, ORDINANCES, AND ACCEPTABLE BUILDING STANDARDS. THE CONTRACTOR SHALL PAY FOR ALL PERMITS AND FEES.

## **ON-SITE & EXISTING CONDITIONS VERIFICATION:**

THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING HIS BID TO REVIEW THE PROJECT WITH THE OWNER AND TO BECOME FAMILIAR WITH EXISTING CONDITIONS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO COMMENCING THE WORK. NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.

## COORDINATION OF THE WORK:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE WORK AND METHODS OF CONSTRUCTION.

## INTERPRETATION OF CONTRACT DOCUMENTS:

SHOULD DISCREPANCIES OR AMBIGUITIES IN, OR OMISSIONS FROM THE DRAWINGS OR SPECIFICATIONS BE FOUND. OR INQUIRIES RELATIVE TO THE MEANING OR INTENT OF THE CONTRACT DOCUMENTS ARISE, THEY SHALL BE SUBMITTED TO THE ARCHITECT AND WILL BE ANSWERED BY ADDENDA. SUCH INSTRUCTIONS AND OTHER ADDENDA ISSUED PRIOR TO DATE OF THE SIGNING OF THE AGREEMENT WILL BE CONSIDERED AS PART OF THE CONTRACT DOCUMENTS AND BE BINDING TO THE CONTRACTOR AND SUBCONTRACTOR.

## MANUFACTURER'S PRODUCTS AND FABRICATIONS:

ALL MANUFACTURER'S AND FABRICATOR'S PRINTED WARNING FOR HANDLING OF THEIR PRODUCTS MUST BE STRICTLY OBSERVED. ALSO AS PER LOCAL CODES AND OTHER REQUIREMENTS.

ALL PRODUCTS AND MATERIALS MUST BE PROVIDED AND INSTALLED IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER. IN THE EVENT OF CONFLICT BETWEEN THE DRAWINGS OR THE SPECIFICATIONS AND THE MANUFACTURER'S RECOMMENDATIONS. NOTIFY THE ARCHITECT AND OBTAIN CLARIFICATION BEFORE PROCEEDING WITH THE WORK.

#### GUARANTEE:

CONTRACTOR SHALL GUARANTEE THAT ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FOLLOWING COMPLETION OF ALL WORK AND THAT ALL DEFECTS ARISING WITHIN THIS PERIOD OF TIME SHALL BE CORRECTED, REPAIRED OR REPLACED WITHIN 30 DAYS OF NOTIFICATION OF SUCH DEFECTS BY OWNER OR ARCHITECT.

## LIABILITY INSURANCE:

THE CONTRACTOR SHALL CARRY FOR THIS PROJECT CONTRACTORS PUBLIC LIABILITY INSURANCE (INCLUDING PRODUCT AND COMPLETED OPERATIONS) IN THE AMOUNT OF NOT LESS THAN \$1,000,000.00 PER OCCURRENCE OF BODILY INJURY AND THE SAME AMOUNT FOR PROPERTY DAMAGE. REFER TO BID DOCUMENT FOR ADDITIONAL INFORMATION

CONSTRUCTION MATERIALS: ALL MATERIALS SHALL BE STORED ON THE SITE AS DIRECTED BY THE OWNER.

## CONSTRUCTION DEBRIS:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EXCESS DIRT AND DEBRIS FROM THE EXCAVATION, DEMOLITION AND CONSTRUCTION AS REQUIRED.

#### MISCELLANEOUS NOTES:

THE BUILDING IS NOT STRUCTURALLY STABLE UNTIL ALL CONNECTIONS, FRAMING, SHEAR WALLS, 'X' BRACING, AND EXTERIOR LOAD BEARING WALLS ARE COMPLETE AND HAVE ACHIEVED DESIGN STRENGTH. THE CONTRACTOR IS SOLELY RESPONSIBLE TO MAINTAIN STRUCTURAL STABILITY DURING ERECTION AND CONSTRUCTION. TEMPORARY BRACING SYSTEMS ARE NOT TO BE REMOVED UNTIL STRUCTURAL WORK IS COMPLETE.

ALL ANGLED WALLS ON THE FLOOR PLANS ARE AT A 45 DEGREE ANGLE. UNLESS OTHERWISE NOTED.

IF USED, TRUSS MANUFACTURER AND CONTRACTOR TO COORDINATE ALL DIMENSIONAL RELATIONSHIPS. ALL ROOF AND FLOOR TRUSSES AND GIRDERS TO BE ENGINEERED BY TRUSS SUPPLIER AND MANUFACTURER. SEND TRUSS SHOP DRAWINGS TO ARCHITECT FOR REVIEW OF ARCHITECTURAL CONFIGURATION. ALL TRUSSES TO BE ENGINEERED BY TRUSS MANUFACTURER ACCORDING TO THE LOADING AS INDICATED IN THESE SPECIFICATIONS.

NOTE: ADJUST OVERHANGS TO PROVIDE CLEARANCE FOR WINDOWS TO OPEN, IF REQUIRED. ADJUST OVERHANGS TO MAINTAIN CONSTANT LEVEL WHEN THE PLANS CALL FOR (2) DIFFERENT PITCHES AT A HIP.

FINISHED SQUARE FOOTAGES ARE MEASURED TO THE OUTSIDE OF ALL WALLS. THEY INCLUDE INTERIOR FIREPLACES AND EVERY LOCATION IN WHICH THE FLOOR JOISTS PROJECT FROM THE FOUNDATION.

NOT INCLUDED IN SQUARE FOOTAGES: WINDOW BOXES WHERE THE FLOOR JOISTS DO NOT PROJECT FROM THE FOUNDATION, 2-STORY ENTRIES, GARAGE, DECKS, PORCHES, UNFINISHED STORAGE AREAS, BASEMENTS OR ANY OTHER UNFINISHED AREAS.

#### CIVIL ENGINEER: DESIGN PROFESSIONAL'S RESPONSIBILITY: "CT Consultants" WHERE MY STAMP AND SIGNATURE ARE AFFIXED, TO THE 8150 Sterling Court BEST OF MY KNOWLEDGE AND UNDERSTANDING, THE Mentor, OH 44060 EXISTING CONDITIONS PORTRAYED WITHIN THE CONSTRUCTION Phone: 440-951-9000 DOCUMENTS ARE TRUE AND ACCURATE AS BEST AS CAN BE 93203035 Fax: 440-951-7487 EXPLORED, INVESTIGATED, AND RESEARCHED WITHIN THE Tim Lannon, PE - Village Engineer CAPACITIES OF A DESIGN PROFESSIONAL ALLOWED BY THE Email: TLannon@ctconsultants.com STATE OF OHIO. Ser. New? John Lilash 93203030 Email: JLillash@ctconsultants.com MECH/PLUMB/ELEC ENGINEER: "M&H ENGINEERING LLC" 4393 Galaxy Dr. Stow, OH 44224 Phone:330.323.3065

SITE LOCATION PLAN NO SCALE

KEY	TO SYMB(	)
	EARTH/SOIL	F
	POROUS FILL	Ş
	CONCRETE	
	CONCRETE BLOCK (C.M.U.)	þ
	BRICK VENEER	ŀ
	CUT STONE VENEER	
$\ge$	DIMENSIONAL LUMBER	
	WOOD BLOCKING	

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## BETTERMENT

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thomasj.engineering@gmail.com

John Hird - elec

jdhird@gmail.com

IF, DUE TO DESIGN PROFESSIONAL'S ERROR, ANY REQUIRED ITEM OR COMPONENT OF THE PROJECT IS OMITTED FROM DESIGN PROFESSIONAL'S CONSTRUCTION DOCUMENTS, DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR PAYING THE COST TO ADD SUCH ITEM OR COMPONENT TO THE EXTENT THAT SUCH ITEM OR COMPONENT WOULD HAVE BEEN OTHERWISE NECESSARY TO THE PROJECT OR OTHERWISE ADDS VALUE OR BETTERMENT TO THE PROJECT. IN NO EVENT WILL DESIGN PROFESSIONAL BE RESPONSIBLE FOR ANY COST OR EXPENSE THAT PROVIDES BETTERMENT, UPGRADE OR ENHANCEMENT OF THE PROJECT.

**PROPERTY PROTECTION:** 

PRECAUTIONS SHALL BE TAKEN TO PROTECT THE GROUNDS, PLANTINGS, DRIVE, ETC. FROM ANY DAMAGE. DAMAGE INCURRED AS A RESULT OF CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED TO MATCH EXISTING AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DUST PROOF BARRIERS AT AREAS WHICH ARE UNDER CONSTRUCTION.

POST CONSTRUCTION NOTES:

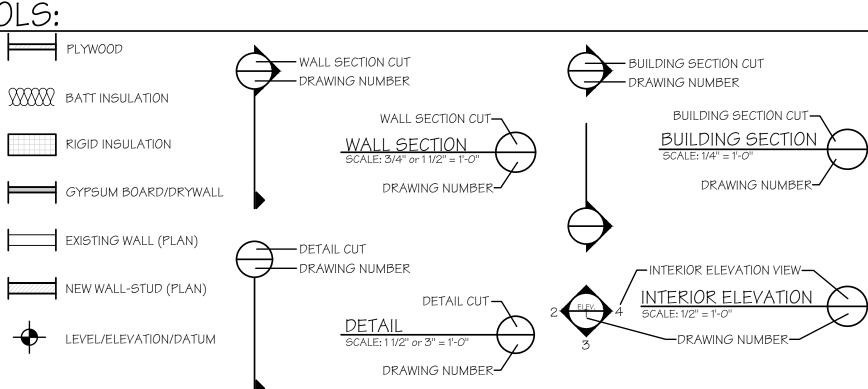
AT THE COMPLETION OF THE PROJECT AND DURING THE PROJECT AS NECESSARY, CONTRACTOR SHALL THOROUGHLY CLEAN ALL WORK, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

- REMOVAL OF MORTAR SPLATTERS OR STAINS FROM ALL INTERIOR AND EXTERIOR FINISHES
- REMOVAL OF MASONRY WATERPROOFING ABOVE FINISH GRADE
- REMOVAL OR ANY SPLATTERS OR STAINS FROM EXTERIOR SIDING, ROOFING, OR OTHER EXTERIOR MATERIALS
- REMOVAL OF ALL STAINS FROM ALL EXPOSED CONCRETE WORK, WITH EXCEPTION OF CRAWL SPACE CONCRETE.
- REMOVAL OF STAINS AND CLEANING OF ALL INTERIOR FINISHES (COUNTERTOPS, PLUMBING FIXTURES, FLOORING, ETC.)
- THOROUGH CLEANING OF FAUCET SCREENS AND PLUMBING TRAPS • VACUUMING OF ALL FLOORS, FOLLOWED BY WET MOPPING OF ALL HARD SURFACE FLOORS
- DUSTING OF ALL WALLS, CEILINGS, TRIMS, DOORS, WINDOWS, CABINETS, ETC., INCLUDING THE INTERIOR SURFACES OF ALL CABINETS
- REMOVAL OF ALL WINDOW AND DOOR STICKERS, INCLUDING GLUE RESIDUE, PAINT OR STAIN OVERLAPPING ON GLASS AND OTHER GLASS SPATTERS
- POLISHING OF ALL WINDOWS, MIRRORS OR SURFACES WITH REFLECTIVE OR TRANSPARENT QUALITIES.
- ADDITIONALLY, CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, INCLUDING VACUUMING, OF ALL CONSTRUCTION, OR OTHER DEBRIS, FROM JOIST, RAFTER, STUD, OR OTHER CAVITIES, PRIOR TO GYPSUM BOARD, INSULATION, FINISH FLOORING OR SURFACING

# 21 West Washington Street -



PER CUYAHOGA COUNTY G.I.S. WEBSITE



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# PROJECT DATA:

APPLICABLE CODES: 2017 OHIO BUILDING CODE 2017 OHIO PLUMBING CODE 2017 OHIO MECHANICAL CODE 2017 NATIONAL ELECTRIC CODE – (NFPA 70-17) 2015 INTERNATIONAL FUEL GAS CODE 2012 INTERNATIONAL ENERGY CONSERVATION CODE ASHRAE 90.1-2010 W/ 2013 ADDENDA 2017 OHIO FIRE CODE NATIONAL FIRE ALARM CODE (NFPA 72-16) INSTALLATION OF SPRINKLER SYSTEM (NFPA 13D-16) ACCESSIBILITY - CHAP. 11 OBC & ICC/ANSI A117.1-2009

\* REFER TO SHEETS A-031, A-101 & A-102 FOR CODE ANALYSIS



SEC1	ΓΙΟΝ Ο	07200 - GENERAL CONDITIONS
1.	GENER	AL CONDITIONS: AIA DOCUMENT A201-2007
		END OF SECTION
SEC1	10N 0	07300 - SUPPLEMENTARY CONDITIONS
FOR C	ONSTRL LEMENT	NG SUPPLEMENTS MODIFY AIA DOCUMENT A201-2007, GENERAL CONDITIONS OF THE CONT ICTION. WHERE A PORTION OF THE GENERAL CONDITIONS IS MODIFIED OR DELETED BY THE ARY CONDITIONS, THE UNALTERED PORTIONS OF THE GENERAL CONDITIONS SHALL REMAIN
		ENERAL CONDITIONS
ADD T	HE FOL	LOWING PARAGRAPH:
	A II	A CURRENT WORKERS' COMPENSATION CERTIFICATE FOR THE STATE OF OHIO
ARTIC	LE 3 - C	ONTRACTOR
3.5 W		Y: ADD THE FOLLOWING PARAGRAPH
	C 1 /	THE CONTRACTOR SHALL GUARANTEE HIS WORKMANSHIP AND MATERIALS FOR A PERIOD O DNE YEAR, OR FOR A LONGER PERIOD IF SO STIPULATED IN THE CONTRACT DOCUMENTS, FRO THE DATE OF ACCEPTANCE BY THE OWNER, AND SHALL LEAVE THE WORK IN PERFECT ORDEN AT COMPLETION. UPON WRITTEN NOTICE, HE SHALL REMEDY ANY DEFECTS DUE THERETO AN PAY ALL COSTS FOR ANY DAMAGE TO OTHER WORK RESULTING THEREFROM.
3.7 PE	ERMITS,	FEES, NOTICES AND COMPLIANCE WITH LAWS: ADD THE FOLLOWING TO PARAGRAPH 3.7.1
7 -	PERMIT SPECIF	ACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED BUILDING AND ALL OTHER REQUIRED S FROM THE CERTIFIED LOCAL MUNICIPAL AND/OR COUNTY BUILDING DEPARTMENTS UNLES ICALLY EXEMPTED FROM SECURING CERTAIN PERMITS BY THE CONTRACT DOCUMENTS.
<i>ə.9</i> Sl		ENDENT: ADD THE FOLLOWING PARAGRAPH NICE THE PROJECT HAS BEGUN, THE GENERAL CONTRACTOR AGREES THAT NO WORK OF A
	e F	SUBCONTRACTOR SHALL PROGRESS UNLESS THE GENERAL CONTRACTOR SUPERINTENDEN PRESENT AT THE JOB SITE OR UNLESS SPECIAL ARRANGEMENTS ARE MADE WITH THE ARCHITECT.
3.15 C		P: ADD THE FOLLOWING PARAGRAPH
	C A	HE PREMISES MUST BE CLEANED AFTER EACH DAY'S WORK BY THE CONTRACTOR, AND DEBRIS REMOVED FROM THE SITE EACH WEEK AND DISPOSED OF IN AN AREA DIRECTED AN APPROVED BY THE LOCAL GOVERNMENT AGENCY. EXISTING TRASH DISPOSAL SYSTEMS DUMPSTERS, ETC) SHALL NOT BE USED.
ARTIC	LE 7 - CI	HANGES IN THE WORK
7.2 CH	IANGE (	ORDERS: SUPPLEMENT THE FOLLOWING
	7.2.1 (	CHANGE ORDERS SHALL BE ISSUED ON AIA DOCUMENT G701 - CHANGE ORDER
ARTIC	LE 8 - T	IME
8.2 PF	ROGRES	S AND COMPLETION: ADD THE FOLLOWING PARAGRAPH
	T E C U V T C C C	I IS HEREBY UNDERSTOOD AND MUTUALLY AGREED, BY AND BETWEEN THE CONTRACTOR A THE OWNER, THE TIME FOR COMPLETION AS SPECIFIED IN THE CONTRACT OF THE WORK TO B DONE HEREUNDER IS AN ESSENTIAL CONDITION OF THIS CONTRACT; AND IT IS FURTHER AUTUALLY UNDERSTOOD AND AGREED THAT THE WORK EMBRACED IN THIS CONTRACT SHAL BE COMMENCED ON A DATE TO BE SPECIFIED IN THE LETTER OF INTENT AND CONTRACT. THE CONTRACTOR AGREES THAT SAID WORK SHALL BE PROSECUTED REGULARLY, DILIGENTLY, A UNINTERRUPTEDLY AT SUCH RATE OF PROGRESS AS WILL ENSURE FULL COMPLETION THERE WITHIN THE TIME SPECIFIED. IT IS EXPRESSLY UNDERSTOOD AND AGREED, BY AND BETWEE THE CONTRACTOR AND THE OWNER, THAT THE TIME FOR THE COMPLETION AS STATED IN THE CONTRACT DOCUMENTS IS A REASONABLE TIME FOR THE COMPLETION OF SAME, TAKING IN CONSIDERATION THE AVERAGE CLIMATIC RANGE AND USUAL INDUSTRIAL CONDITIONS PREVAILING IN THIS LOCALITY.
ARTIC	LE 9 - P	AYMENTS AND COMPLETION
9.3.1	SUPPLE	EMENT THE FOLLOWING
	F (	CONTRACTOR SHALL SUBMIT PAY APPLICATION ON AIA G702 AND G703. APPLICATION FOR 'AYMENT SHALL BE MADE NO LATER THAN THE 26TH DAY OF EACH MONTH. AFTER RECEIP OF CONTRACTOR'S PAY APPLICATION, OWNER WILL MAKE SUCH PAYMENT TO THE CONTRACTOR VITHIN 15 DAYS OR AS SOON AS PRACTICAL THEREAFTER.
9.10.2		EMENT THE FOLLOWING
	F 1	WITH EACH PAY APPLICATION, CONTRACTOR SHALL SUBMIT A PARTIAL WAIVER OF LIEN OR THE WORK. SUBMIT PARTIAL WAIVER OF LIEN FORMAT FOR OWNER APPROVAL PRIOR O FIRST APPLICATION FOR PAYMENT.
ARTIC 11.1		ISURANCE
11.1	11.1.1 1	THE CONTRACTOR SHALL PURCHASE INSURANCE IN FROM A COMPANY LICENSED TO DO
	11.1.2 1	BUSINESS IN THE STATE OF OHIO AND IN SUCH FORM AS ACCEPTABLE TO THE OWNER. THE INSURANCE REQUIRED BY SUBPARAGRAPH 11.1.1 SHALL BE IN TYPES AND AMOUNTS AS
11 1 7		COORDINATED BETWEEN THE OWNER AND CONTRACTOR.
п.1.Э	SUPPLE 11.1.3.1	EMENT THE FOLLOWING THE CONTRACTOR SHALL SUBMIT ONE COPY OF WORKER'S COMPENSATION CERTIFICA TO THE OWNER AND ONE COPY TO THE ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK
	11.1.3.2	THE CONTRACTOR SHALL SUBMIT CERTIFICATES OF CONTRACTOR'S LIABILITY INSURAN TO THE OWNER FOR APPROVAL AND OBTAIN APPROVAL PRIOR TO THE COMMENCEMEN OF THE WORK. THE OWNER SHALL BE AN ADDITIONAL NAMED INSURED ON THE REQUIRED POLICIES OF PUBLIC LIABILITY INSURANCE.
	11.1.3.3	THE CONTRACTOR SHALL SUBMIT COPIES OF CERTIFICATES OF CONTRACTOR'S LIABILITY INSURANCE THAT HAVE BEEN APPROVED BY THE OWNER, TO THE ARCHITECT FOR HIS FILES TOGETHER WITH A WRITTEN STATEMENT THAT THE CERTIFICATES OF INSURANCE HAVE BEEN APPROVED BY AND ARE ACCEPTABLE TO THE OWNER. CERTIFICATES OF INSURANCE SHALL BE SUBMITTED ON AIA DOCUMENT G705 - CERTIFICATE FOR INSURANCE.
	11.1.3.4	UNLESS OTHERWISE DIRECTED BY THE OWNER IN WRITING, THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR THE ADEQUACY OF THE INSURANCE CARRIED BY EACH OF HIS SUBCONTRACTORS AND SHALL, IF REQUESTED, FILE COPIES OF ALL SUBCONTRACTOR'S INSURANCE CERTIFICATES WITH THE OWNER AND THE ARCHITECT PRIOR TO THE RESPECTIVE SUBCONTRACTOR'S PARTICIPATION IN THE WORK.
	11.1.3.5	THE ARCHITECT SHALL NOT BE RESPONSIBLE FOR CHECKING AND/OR APPROVING THE CONTRACTOR AND SUBCONTRACTORS' LIABILITY INSURANCE CERTIFICATES. OWNER'S INSURANCE COUNSEL SHALL CHECK THE INSURANCE CERTIFICATES TO DETERMINE TH ADEQUACY IN COMPLYING WITH THE CONTRACT DOCUMENTS. IT IS THE OWNER'S RESPONSIBILITY TO DETERMINE IF THE INFORMATION CONTAINED IN THE CERTIFICATES

RESPONSIBILITY TO DETERMINE IF THE INFORMATION CONTAINED IN THE CERTIFICATES OF INSURANCE IS ADEQUATE AND ACCEPTABLE. 11.1.3.6 THE CONTRACTOR AND ALL SUBCONTRACTORS AGREE TO INDEMNIFY AND HOLD HARMLESS THE OWNER AND ARCHITECT FROM ANY LIABILITY, DAMAGES, PENALTIES OR EXPENSES ARISING OUT OF OR IN CONNECTION WITH THE VIOLATION OF OR NON-COMPLIANCE WITH THE FEDERAL CONSTRUCTION SAFETY ACT AND THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ANY OTHER APPLICABLE FEDERAL OR OHIO LAWS.

11.3 PROPERTY INSURANCE: MODIFY AND SUPPLEMENT THE FOLLOWING GENERAL THE CONTRACTOR IS REQUIRED TO PROVIDE THE BUILDER'S RISK POLICY. WHERE NECESSARY, SUBSTITUTE THE TEXT "CONTRACTOR" FOR "OWNER" TO REFLECT THIS INTENT.

GENERAL PROPERTY INSURANCE SHALL INCLUDE COVERAGE OF MACHINERY, TOOLS AND EQUIPMENT OWNED OR RENTED BY THE CONTRACTOR THAT ARE UTILIZED IN THE PERFORMANCE OF THE WORK, BUT NOT INCORPORATED INTO THE PERMANENT IMPROVEMENTS.

11.3.1 SUPPLEMENT THE FOLLOWING

11.3.1 IF THE OWNER IS DAMAGED BY THE FAILURE OF THE CONTRACTOR TO PURCHASE AND MAINTAIN SUCH INSURANCE, THEN THE CONTRACTOR SHALL SAVE, HOLD HARMLESS, AND INDEMNIFY OWNER FOR ANY SUCH DAMAGE.

END OF SECTION

11.3.1.2 DELETE THIS PARAGRAPH IN ITS ENTIRETY

## SECTION 011000 - SUMMARY

PROJEC-1.A. PROJECT NAME: CHAGRIN FALLS ADMIN. POLICE AND FIRE DEPT. ADDITIONS & RENOVATION

- 1.B. WORK GENERALLY INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING: 1.B.A. SELECTIVE DEMOLITION OF ITEMS INDICATED ON THE DRAWINGS, INCLUDING STRUCTURAL,
- WALLS, ROOF, CEILINGS AND FLOOR FINISHES. PATCHING OF EXISTING FINISHES AFTER SELECTIVE DEMOLITION TO MATCH EXISTING 1.B.B.
- AD JACENT FINISHES. 1.B.A. INSTALLATION OF NEW WALLS INSTALLATION OF NEW CABINETS, APPLIANCES, & FURNITURE 1.B.B.
- INSTALLATION OF FLOORING, WALL, & CEILING FINISHES 1.B.C. 1.B.D. MECHANICAL WORK
- 1.B.E. PLUMBING WORK 1.B.F. ELECTRICAL WORK
- 1.B.G. EXTERIOR SITE WORK
- 2. CONTRACT DESCRIPTION 2.A. CONTRACT TYPE: AIA DOCUMENT A101-2007 OWNER/CONTRACTOR AGREEMENT - STIPULATED SUM
- 3. CONTRACTOR USE OF SITE AND PREMISES 3.A. CONSTRUCTION OPERATIONS: LIMITED TO AREAS NOTED ON DRAWINGS.
- 3.B. PROVIDE ACCESS TO AND FROM SITE AS REQUIRED BY LAW AND BY OWNER.
- 3.B.A. PROVIDE EMERGENCY ACCESS THROUGH WORK AREAS AT ALL TIMES. 3.B.B. EMERGENCY BUILDING EXITS DURING CONSTRUCTION: KEEP ALL EXITS REQUIRED BY CODE OPEN DURING CONSTRUCTION PERIOD; PROVIDE TEMPORARY EXIT SIGNS IF EXIT ROUTES ARE TEMPORARILY ALTERED. 3.B.C. DO NOT OBSTRUCT ROADWAYS, SIDEWALKS, OR OTHER PUBLIC WAYS WITHOUT PERMIT.
- 3.B.D. UTILITY OUTAGES AND SHUTDOWN 3.B.D.A. PREVENT ACCIDENTAL DISRUPTION OF UTILITY SERVICES TO OTHER FACILITIES.

- 4. TIME RESTRICTIONS 4.A. CONTRACTOR SHALL COMPLY WITH VILLAGE OF CHAGRIN FALLS WORK I UNLESS OTHER ARRANGEMENTS ARE MADE WITH THE VILLAGE.
- 5. CONSTRUCTION COMPLETENESS 5.A. COMPLETENESS OF WORK: CONTRACTOR SHALL PROVIDE ALL ITEMS, M/
- EQUIPMENT NOT SPECIFICALLY MENTIONED HEREIN OR INDICATED ON D FOR COMPLETE INSTALLATIONS AND PROPER OPERATION OF ALL WORK DETAIL BY SPECIFICATIONS OR DRAWINGS. 6. VISITING THE SITE
- 6.A. BIDDERS SHALL VISIT THE SITE AND TAKE SUCH OTHER STEPS AS MAY ASCERTAIN THE NATURE AND LOCATION OF THE WORK, AND THE GENER WHICH CAN AFFECT THE WORK OR DOCUMENTS IN RELATION TO THE SI STRUCTURES AND CONDITIONS OF THE GROUND, THE OBSTACLES WHIC AND ALL OTHER CONDITIONS HAVING A BEARING UPON THE PERFORM COMPLETION AND ALL OTHER RELEVANT MATTERS. FAILURE TO TAKE RELIEVE BIDDERS FROM RESPONSIBILITY FOR ESTIMATING PROPERLY SUCCESSFULLY PERFORMING THE WORK. THE OWNER SHALL ASSURE N ANY UNDERSTANDING OR REPRESENTATIONS CONCERNING CONDITION AGENTS, REPRESENTATIVES OR EMPLOYEES PRIOR TO THE EXECUTION INCLUDED IN THE CONTRACT DOCUMENTS. 6.B. THE SUBMISSION OF A BID SHALL BE TAKEN AS PRIMA FACIE EVIDENC ABOVE PARAGRAPH.
- 7. BETTERMENT: IF, DUE TO DESIGN PROFESSIONAL'S ERROR, ANY REQUIRED PROJECT IS OMITTED FROM DESIGN PROFESSIONAL'S CONSTRUCTION DOCL PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR PAYING THE COST TO AD COMPONENT TO THE EXTENT THAT SUCH ITEM OR COMPONENT WOULD HAVE NECESSARY TO THE PROJECT OR OTHERWISE ADDS VALUE OR BETTERMENT EVENT WILL DESIGN PROFESSIONAL BE RESPONSIBLE FOR ANY COST OR EX BETTERMENT, UPGRADE OR ENHANCEMENT OF THE PROJECT.

END OF SECTION

- SECTION 013000 ADMINISTRATIVE REQUIREMENTS 1. SUBMITTALS FOR REVIEW 1.1. FOR ALL SPECIFIED PRODUCTS AND MATERIALS, SUBMIT THE FOLLOWIN 1.1.1. PRODUCT DATA 1.1.2. SHOP DRAWINGS 1.1.3. SAMPLES FOR SELECTION 1.1.4. SAMPLES FOR VERIFICATION 1.2. SUBMIT TO ARCHITECT FOR REVIEW FOR THE LIMITED PURPOSE OF CHEC WITH INFORMATION GIVEN AND THE DESIGN CONCEPT EXPRESSED IN T 1.3. SAMPLES WILL BE REVIEWED ONLY FOR AESTHETIC, COLOR, OR FINISH 1.4. AFTER REVIEW, PROVIDE COPIES AND DISTRIBUTE IN ACCORDANCE WITH ARTICLE BELOW. 2. SUBMITTALS FOR INFORMATION 2.1. FOR ALL SPECIFIED PRODUCTS AND MATERIALS, SUBMIT THE FOLLOWIN INFORMATION: 2.1.1. DESIGN DATA
- 2.1.2. CERTIFICATES 2.1.3. TEST REPORTS
- 2.1.4. INSPECTION REPORTS 2.1.5. MANUFACTURER'S INSTRUCTIONS
- 2.1.6. MANUFACTURER'S FIELD REPORTS
- 2.1.7. OTHER TYPES INDICATED 2.2. SUBMIT FOR ARCHITECT'S KNOWLEDGE AS CONTRACT ADMINISTRATOR
- WILL BE TAKEN.
- 3. SUBMITTALS FOR PROJECT CLOSEOUT 3.1. WHEN THE FOLLOWING ARE SPECIFIED IN INDIVIDUAL SECTIONS, SUBM
- CLOSEOUT: 3.1.1. PROJECT RECORD DOCUMENTS
- 3.1.2. OPERATION AND MAINTENANCE DATA
- 3.1.3. WARRANTIES 3.1.4. BONDS
- 3.1.5. OTHER TYPES AS INDICATED 3.2. SUBMIT FOR OWNER'S BENEFIT DURING AND AFTER PROJECT COMPLET
- 4. NUMBER OF COPIES OF SUBMITTALS 4.1. DOCUMENTS FOR REVIEW:
- 4.1.1. SMALL SIZE SHEETS, NOT LARGER THAN 8-1/2 X 11 INCHES: SUBM THAT CONTRACTOR REQUIRES, PLUS TWO COPIES THAT WILL BE RE 4.1.2. LARGER SHEETS, NOT LARGER THAN 30 X 42 INCHES: SUBMIT ON
- TRANSPARENCY AND ONE OPAQUE REPRODUCTION. 4.2. DOCUMENTS FOR INFORMATION: SUBMIT TWO COPIES.
- 4.3. SAMPLES: SUBMIT THE NUMBER SPECIFIED IN INDIVIDUAL SPECIFICATION WILL BE RETAINED BY ARCHITECT.
- 4.3.1. AFTER REVIEW, PRODUCE DUPLICATES. 4.3.2. RETAINED SAMPLES WILL NOT BE RETURNED TO CONTRACTOR UNLE STATED.
- 5. SUBMITTAL PROCEDURES
- 5.1. TRANSMIT EACH SUBMITTAL WITH APPROVED FORM 5.2. SEQUENTIALLY NUMBER THE TRANSMITTAL FORM. REVISE SUBMITTAL
- AND A SEQUENTIAL ALPHABETIC SUFFIX.
- 5.3. IDENTIFY PROJECT, CONTRACTOR, SUBCONTRACTOR OR SUPPLIER; PERT DETAIL NUMBER, AND SPECIFICATION SECTION NUMBER, AS APPROPRIA 5.4. APPLY CONTRACTOR'S STAMP, SIGNED OR INITIALED CERTIFYING THAT VERIFICATION OF PRODUCTS REQUIRED, FIELD DIMENSIONS, ADJACENT
- COORDINATION OF INFORMATION IS IN ACCORDANCE WITH THE REQUIRE CONTRACT DOCUMENTS. 5.4.1. ANY SUBMITTAL WITHOUT CONTRACTOR'S STAMP AS NOTED ABOVI
- THE CONTRACTOR WITHOUT REVIEW. 5.5. SCHEDULE SUBMITTALS TO EXPEDITE THE PROJECT, AND COORDINATE ITEMS.
- 5.6. FOR EACH SUBMITTAL FOR REVIEW, ALLOW 10 DAYS EXCLUDING DELIVE CONTRACTOR.
- 5.7. IDENTIFY VARIATIONS FROM CONTRACT DOCUMENTS AND PRODUCT OR MAY BE DETRIMENTAL TO SUCCESSFUL PERFORMANCE OF THE COMPL
- 5.8. PROVIDE SPACE FOR CONTRACTOR AND ARCHITECT REVIEW STAMPS. 5.9. WHEN REVISED FOR RESUBMISSION, IDENTIFY ALL CHANGES MADE SIN
- 5.10. DISTRIBUTE REVIEWED SUBMITTALS AS APPROPRIATE. INSTRUCT PART
- ANY INABILITY TO COMPLY WITH REQUIREMENTS. 5.11. SUBMITTALS NOT REQUESTED WILL NOT BE RECOGNIZED OR PROCESSE

END OF SECTION

#### SECTION 014000 - QUALITY REQUIREMENTS

- 1. SUBMITTALS 1.1. DESIGN DATA: SUBMIT FOR ARCHITECT'S KNOWLEDGE AS CONTRACT A LIMITED PURPOSE OF ASSESSING CONFORMANCE WITH INFORMATION CONCEPT EXPRESSED IN THE CONTRACT DOCUMENTS, OR FOR OWNER'S
- 1.2. CERTIFICATES: WHEN SPECIFIED IN INDIVIDUAL SPECIFICATION SECTION BY THE MANUFACTURER AND CONTRACTOR TO ARCHITECT, IN QUANTITI DATA. 1.2.1. INDICATE MATERIAL OR PRODUCT CONFORMS TO OR EXCEEDS SPE
- SUBMIT SUPPORTING REFERENCE DATA, AFFIDAVITS, AND CERTIF 1.3. MANUFACTURER'S INSTRUCTIONS: WHEN SPECIFIED IN INDIVIDUAL SPEC SUBMIT PRINTED INSTRUCTIONS FOR DELIVERY, STORAGE, ASSEMBLY, AND FINISHING, FOR THE OWNER'S INFORMATION. INDICATE SPECIAL PR CONDITIONS REQUIRING SPECIAL ATTENTION, AND SPECIAL ENVIRONME

## FOR APPLICATION OR INSTALLATION.

- 2. REFERENCES AND STANDARDS 2.1. FOR PRODUCTS AND WORKMANSHIP SPECIFIED BY REFERENCE TO A D NOT INCLUDED IN THE PROJECT MANUAL, ALSO REFERRED TO AS REFE COMPLY WITH REQUIREMENTS OF THE STANDARD. EXCEPT WHEN MORE SPECIFIED OR ARE REQUIRED BY APPLICABLE CODES.
- 2.2. CONFORM TO REFERENCE STANDARD OF DATE OF ISSUE CURRENT ON DOCUMENTS, EXCEPT WHERE A SPECIFIC DATE IS ESTABLISHED BY APP 2.3. OBTAIN COPIES OF STANDARDS WHERE REQUIRED BY PRODUCT SPECI
- 2.4. MAINTAIN COPY AT PROJECT SITE DURING SUBMITTALS, PLANNING, AN SPECIFIC WORK, UNTIL SUBSTANTIAL COMPLETION.
- 2.5. SHOULD SPECIFIED REFERENCE STANDARDS CONFLICT WITH CONTRACT CLARIFICATION FROM ARCHITECT BEFORE PROCEEDING. 2.6. NEITHER THE CONTRACTUAL RELATIONSHIPS, DUTIES, OR RESPONSIBIL
- CONTRACT NOR THOSE OF ARCHITECT SHALL BE ALTERED FROM THE C MENTION OR INFERENCE OTHERWISE IN ANY REFERENCE DOCUMENT.
- 3. CONTROL OF INSTALLATION 3.1. MONITOR QUALITY CONTROL OVER SUPPLIERS, MANUFACTURERS, PROD CONDITIONS, AND WORKMANSHIP, TO PRODUCE WORK OF SPECIFIED
- 3.2. COMPLY WITH MANUFACTURERS' INSTRUCTIONS, INCLUDING EACH STE 3.3. SHOULD MANUFACTURERS' INSTRUCTIONS CONFLICT WITH CONTRACT D CLARIFICATION FROM ARCHITECT BEFORE PROCEEDING.
- 3.4. COMPLY WITH SPECIFIED STANDARDS AS MINIMUM QUALITY FOR THE V STRINGENT TOLERANCES, CODES, OR SPECIFIED REQUIREMENTS INDIC/ OR MORE PRECISE WORKMANSHIP.
- 3.5. HAVE WORK PERFORMED BY PERSONS QUALIFIED TO PRODUCE REQUIR 3.6. VERIFY THAT FIELD MEASUREMENTS ARE AS INDICATED ON SHOP DRA
- BY THE MANUFACTURER. 3.7. SECURE PRODUCTS IN PLACE WITH POSITIVE ANCHORAGE DEVICES DES WITHSTAND STRESSES, VIBRATION, PHYSICAL DISTORTION, AND DISFIG
- 4. TOLERANCES 4.1. MONITOR FABRICATION AND INSTALLATION TOLERANCE CONTROL OF PR ACCEPTABLE WORK. DO NOT PERMIT TOLERANCES TO ACCUMULATE.
- 4.2. COMPLY WITH MANUFACTURERS' TOLERANCES. SHOULD MANUFACTURE WITH CONTRACT DOCUMENTS, REQUEST CLARIFICATION FROM ARCHITED 4.3. ADJUST PRODUCTS TO APPROPRIATE DIMENSIONS; POSITION BEFORE S
- PLACE.
- 5. DEFECT ASSESSMENT 5.1. REPLACE WORK OR PORTIONS OF THE WORK NOT CONFORMING TO SPECIFIED REQUIREMENTS. 5.2. IF, IN THE OPINION OF ARCHITECT, IT IS NOT PRACTICAL TO REMOVE AND REPLACE THE WORK, ARCHITECT WILL DIRECT AN APPROPRIATE REMEDY OR ADJUST PAYMENT.

	SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS	SECTION 016000 - PRODUCT REQUIREMENTS
RK HOUR RESTRICTIONS,	1. SAFETY	1. SUBSTITUTIONS
N, MATERIALS, LABOR AND N DRAWINGS, BUT REQUIRED	<ol> <li>GIVE STRICT ATTENTION TO AND FULLY COMPLY WITH THE WILLIAMS-STEIGER OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) OF 1970, U.S. DEPARTMENT OF LABOR.</li> <li>TEMPORARY UTILITIES - GENERAL</li> <li>MAINTAIN ALL TEMPORARY UTILITIES IN GOOD OPERATING CONDITION.</li> </ol>	<ul> <li>1.A. SUBSTITUTIONS FOR SPECIFIED PRODUCTS MAY BE SUBMITTED IN THE FOL</li> <li>1.A.A. DURING THE BID PERIOD, IN ACCORDANCE WITH INSTRUCTIONS TO BIDD</li> <li>PRODUCTS SUBMITTED IN THIS MANNER WILL BE APPROVED VIA ADDE</li> <li>1.A.B. ON THE BID FORM, IN ACCORDANCE WITH INSTRUCTIONS TO BIDDERS A</li> <li>INSTRUCTIONS TO BIDDERS. IF ACCEPTABLE, PRODUCTS SUBMITTED IN</li> </ul>
ORK AS IF CALLED FOR IN	<ol> <li>MAINTAIN ALL TEMPORARY UTILITIES IN GOOD OF ERATING CONDITION.</li> <li>TEMPORARY WATER SUPPLY</li> <li>CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR DISPENSING DRINKING WATER FOR HIS CONSTRUCTION PERSONNEL ON SITE. ON SITE DOMESTIC WATER PROCURED FROM EXISTING</li> </ol>	<ol> <li>APPROVED AFTER RECEIPT OF BIDS.</li> <li>SUBMITTALS</li> <li>2.1. PRODUCT DATA SUBMITTALS: SUBMIT MANUFACTURER'S STANDARD PUBL</li> </ol>
INAT DE NECESSART TO INERAL AND LOCAL CONDITIONS SITE, THE EXISTING IHICH MAY BE ENCOUNTERED SMANCE OF THE WORK.	DOMESTIC WATER SUPPLY MAY BE USED FOR THIS PURPOSE. 4. TEMPORARY HEAT/COOLING	EACH COPY TO IDENTIFY APPLICABLE PRODUCTS, MODELS, OPTIONS, AND C SUPPLEMENT MANUFACTURERS' STANDARD DATA TO PROVIDE INFORMATIC PROJECT. 2.2. SHOP DRAWING SUBMITTALS: PREPARED SPECIFICALLY FOR THIS PROJECT
E SUCH STEPS SHALL NOT LY THE DIFFICULTY OR COST OF RE NO RESPONSIBILITY FOR IONS MADE BY AND OF ITS ION OF THE CONTRACT, UNLESS	4.A. GENERAL TRADES CONTRACTOR SHALL PROVIDE ALL TEMPORARY HEAT AND COOLING UNTIL WEATHER TIGHT ENCLOSURE OF BUILDING, AS DETERMINED BY THE ARCHITECT. MEP CONTRACTOR SHALL PROVIDE ALL TEMPORARY HEAT AND COOLING AFTER WEATHER TIGHT ENCLOSURE OF THE BUILDING. IF USE OF NEW EQUIPMENT IS PERMITTED FOR TEMPORARY HEAT AND COOLING, THE MEP CONTRACTOR SHALL PROVIDE A COMPLETE CLEANING OF THE SYSTEM AND EQUIPMENT, INCLUDING NEW FILTERS AT PROJECT COMPLETION. THE SPECIFIED WARRANTY FOR EQUIPMENT WILL COMMENCE AT THAT TIME.	<ul> <li>ELECTRICAL CHARACTERISTICS, UTILITY CONNECTION REQUIREMENTS, AND OUTLETS FOR SERVICE FOR FUNCTIONAL EQUIPMENT AND APPLIANCES.</li> <li>2.3. SAMPLE SUBMITTALS: ILLUSTRATE FUNCTIONAL AND AESTHETIC CHARACT PRODUCT, WITH INTEGRAL PARTS AND ATTACHMENT DEVICES. COORDINATE FOR INTERFACING WORK.</li> <li>2.3.1. FOR SELECTION FROM STANDARD FINISHES, SUBMIT SAMPLES OF THE</li> </ul>
ENCE OF COMPLIANCE WITH THE	4.1. AS ASSIGNED, PROVIDE TEMPORARY HEATING AND COOLING REQUIRED BY CONSTRUCTION ACTIVITIES FOR CURING OR DRYING OF COMPLETED INSTALLATIONS, OR FOR PROTECTING INSTALLED CONSTRUCTION FROM ADVERSE EFFECTS OF LOW TEMPERATURES OR HIGH HUMIDITY.	3. NEW PRODUCTS: PROVIDE NEW PRODUCTS UNLESS SPECIFICALLY REQUIRED OR
ED ITEM OR COMPONENT OF THE DCUMENTS, DESIGN ADD SUCH ITEM OR AVE BEEN OTHERWISE	SELECT EQUIPMENT THAT WILL NOT HAVE A HARMFUL EFFECT ON COMPLETED INSTALLATIONS OR ELEMENTS BEING INSTALLED. 5. TEMPORARY LIGHT AND POWER	CONTRACT DOCUMENTS. 4. PRODUCT OPTIONS
ENT TO THE PROJECT. IN NO EXPENSE THAT PROVIDES	<ol> <li>TEMPORTAL LIGHT AND FOWER</li> <li>MEP CONTRACTOR SHALL PROVIDE LABOR, MATERIALS, SUPERVISION TO PROVIDE, CONNECT, DISTRIBUTE, DISCONNECT AND MAINTAIN ALL MEANS OF PROVIDING TEMPORARY LIGHTING AND POWER FOR THE WORK. MEP CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR, AND PROVIDE REQUIRED CAPACITY, DISTRIBUTION AND CONNECTION POINTS.</li> <li>OWNER WILL PAY FOR THE TEMPORARY ELECTRICAL POWER USED DURING THE WORK.</li> </ol>	<ul> <li>4.1. PRODUCTS SPECIFIED BY REFERENCE STANDARDS OR BY DESCRIPTION ON MEETING THOSE STANDARDS OR DESCRIPTION.</li> <li>4.2. PRODUCTS SPECIFIED BY NAMING ONE OR MORE MANUFACTURERS: USE A THE MANUFACTURERS NAMED AND MEETING SPECIFICATIONS, NO OPTIONS ALLOWED.</li> </ul>
	<ul> <li>6. TEMPORARY SANITARY FACILITIES</li> <li>6.1. PROVIDE AND MAINTAIN TEMPORARY TOILETS, WASH FACILITIES, AND DRINKING WATER FOR USE OF CONSTRUCTION PERSONNEL. COMPLY WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION FOR TYPE, NUMBER, LOCATION, OPERATION AND MAINTENANCE OF FIXTURES AND FACILITIES.</li> </ul>	<ol> <li>MAINTENANCE MATERIALS</li> <li>FURNISH EXTRA MATERIALS, SPARE PARTS, TOOLS, AND SOFTWARE OF TYPE SPECIFIED IN INDIVIDUAL SPECIFICATION SECTIONS.</li> <li>DELIVER TO PROJECT SITE; OBTAIN RECEIPT PRIOR TO FINAL PAYMENT.</li> <li>TRANSPORTATION AND HANDLING</li> </ol>
	<ol> <li>BARRIERS</li> <li>7.1. PROVIDE BARRIERS TO PREVENT UNAUTHORIZED ENTRY TO CONSTRUCTION AREAS, TO PREVENT ACCESS TO AREAS THAT COULD BE HAZARDOUS TO WORKERS OR THE PUBLIC, TO ALLOW FOR</li> </ol>	<ul> <li>6.1. COORDINATE SCHEDULE OF PRODUCT DELIVERY TO DESIGNATED PREPAREI MINIMIZE SITE STORAGE TIME AND POTENTIAL DAMAGE TO STORED MATER</li> <li>6.2. TRANSPORT AND HANDLE PRODUCTS IN ACCORDANCE WITH MANUFACTURE</li> </ul>
WING ITEMS FOR FOR REVIEW	<ul> <li>OWNER'S USE OF SITE AND TO PROTECT EXISTING FACILITIES AND ADJACENT PROPERTIES FROM DAMAGE FROM CONSTRUCTION OPERATIONS.</li> <li>7.2. PROTECT NON-OWNED VEHICULAR TRAFFIC, STORED MATERIALS, SITE, AND STRUCTURES FROM DAMAGE.</li> </ul>	<ul> <li>6.3. TRANSPORT MATERIALS IN COVERED TRUCKS TO PREVENT CONTAMINATION LITTERING OF SURROUNDING AREAS.</li> <li>6.4. PROMPTLY INSPECT SHIPMENTS TO ENSURE THAT PRODUCTS COMPLY WITH QUANTITIES ARE CORRECT, AND PRODUCTS ARE UNDAMAGED.</li> <li>6.5. PROVIDE EQUIPMENT AND PERSONNEL TO HANDLE PRODUCTS BY METHODS</li> </ul>
HECKING FOR CONFORMANCE	<ul> <li>8. EXTERIOR ENCLOSURES</li> <li>8.1. PROVIDE TEMPORARY INSULATED WEATHER TIGHT CLOSURE OF EXTERIOR OPENINGS TO ACCOMMODATE ACCEPTABLE WORKING CONDITIONS AND PROTECTION FOR PRODUCTS, TO ALLOW</li> </ul>	DISFIGUREMENT, OR DAMAGE. 6.6. ARRANGE FOR THE RETURN OF PACKING MATERIALS, SUCH AS WOOD PALL ECONOMICALLY FEASIBLE.
N THE CONTRACT DOCUMENTS. 3H SELECTION. VITH SUBMITTAL PROCEDURES	FOR TEMPORARY HEATING AND MAINTENANCE OF REQUIRED AMBIENT TEMPERATURES IDENTIFIED IN INDIVIDUAL SPECIFICATION SECTIONS, AND TO PREVENT ENTRY OF UNAUTHORIZED PERSONS. PROVIDE ACCESS DOORS WITH SELF-CLOSING HARDWARE AND LOCKS.	<ol> <li>STORAGE AND PROTECTION</li> <li>7.1. DESIGNATE RECEIVING/STORAGE AREAS FOR INCOMING PRODUCTS SO THE DELIVERED ACCORDING TO INSTALLATION SCHEDULE AND PLACED CONVEN ORDER TO MINIMIZE WASTE DUE TO EXCESSIVE MATERIALS HANDLING AND</li> </ol>
WING ITEMS FOR	<ol> <li>INTERIOR ENCLOSURES</li> <li>PROVIDE TEMPORARY PARTITIONS AS INDICATED TO SEPARATE WORK AREAS FROM OWNER-OCCUPIED AREAS, TO PREVENT PENETRATION OF DUST AND MOISTURE INTO OWNER-OCCUPIED AREAS, AND TO PREVENT DAMAGE TO EXISTING MATERIALS AND EQUIPMENT.</li> </ol>	<ul> <li>7.2. STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURERS' I</li> <li>7.3. STORE WITH SEALS AND LABELS INTACT AND LEGIBLE.</li> <li>7.4. STORE SENSITIVE PRODUCTS IN WEATHER TIGHT, CLIMATE CONTROLLED, EN</li> </ul>
	<ul> <li>9.2. CONSTRUCTION: FRAMING AND GYPSUM BOARD SHEET MATERIALS WITH CLOSED JOINTS AND SEALED EDGES AT INTERSECTIONS WITH EXISTING SURFACES.</li> <li>9.2.1. PROVIDE GYPSUM BOARD OVER FRAMING TO 8 FEET ABOVE FLOOR, WITH REINFORCED POLYETHYLENE FROM TOP OF GYPSUM BOARD TO CEILING OR DECK.</li> </ul>	ENVIRONMENT FAVORABLE TO PRODUCT. 7.5. FOR EXTERIOR STORAGE OF FABRICATED PRODUCTS, PLACE ON SLOPED SL GROUND. 7.6. COVER PRODUCTS SUBJECT TO DETERIORATION WITH IMPERVIOUS SHEET G
	<ul> <li>9.2.2. PROVIDE LOCKABLE DOOR ACCESS TO CONSTRUCTION AREA.</li> <li>9.2.3. PROVIDE WALK-OFF MATS AT EACH ENTRANCE THROUGH TEMPORARY PARTITION.</li> </ul>	VENTILATION TO PREVENT CONDENSATION AND DEGRADATION OF PRODUCT 7.7. PREVENT CONTACT WITH MATERIAL THAT MAY CAUSE CORROSION, DISCOLD 7.8. PROVIDE EQUIPMENT AND PERSONNEL TO STORE PRODUCTS BY METHODS
OR OR FOR OWNER. NO ACTION	<ol> <li>ISOLATION OF WORK AREAS IN OCCUPIED FACILITIES</li> <li>PREVENT DUST, FUMES AND ODORS FROM ENTERING OCCUPIED AREAS. PRIOR TO COMMENCING WORK, ISOLATE THE HVAC SYSTEM IN AREA WHERE WORK IS TO BE PERFORMED.</li> <li>DISCONNECT SUPPLY AND RETURN DUCTWORK IN WORK AREA FROM HVAC SYSTEMS SERVICING OCCUPIED AREAS.</li> </ol>	DISFIGUREMENT, OR DAMAGE. 7.9. ARRANGE STORAGE OF PRODUCTS TO PERMIT ACCESS FOR INSPECTION. P TO VERIFY PRODUCTS ARE UNDAMAGED AND ARE MAINTAINED IN ACCEPTA END OF SECTION
BMIT THEM AT PROJECT	10.1.2. MAINTAIN NEGATIVE AIR PRESSURE WITHIN WORK AREA, STARTING WITH COMMENCEMENT OF TEMPORARY PARTITION CONSTRUCTION, AND CONTINUING UNTIL REMOVAL OF TEMPORARY PARTITIONS IS COMPLETE. 10.2. MAINTAIN DUST PARTITIONS DURING THE WORK. USE VACUUM COLLECTION ATTACHMENTS ON	SECTION 017000 - EXECUTION AND CLOSEOUT REQUIREMENTS
LETION.	DUST-PRODUCING EQUIPMENT. ISOLATE LIMITED WORK WITHIN OCCUPIED AREAS USING PORTABLE DUST-CONTAINMENT DEVICES. 10.3. PERFORM DAILY CONSTRUCTION CLEANUP AND FINAL CLEANUP USING VACUUM EQUIPMENT.	<ol> <li>PROJECT CONDITIONS</li> <li>1.1. VENTILATE ENCLOSED AREAS TO ASSIST CURE OF MATERIALS, TO DISSIPA PREVENT ACCUMULATION OF DUST, FUMES, VAPORS, OR GASES.</li> </ol>
LE HUN.	<ol> <li>VENTILATION AND HUMIDITY CONTROL</li> <li>7.1. PROVIDE TEMPORARY VENTILATION REQUIRED BY CONSTRUCTION ACTIVITIES FOR CURING OR DRYING OF COMPLETED INSTALLATIONS OR FOR PROTECTING INSTALLED CONSTRUCTION FROM</li> </ol>	<ol> <li>COORDINATION</li> <li>COORDINATE SCHEDULING, SUBMITTALS, AND WORK OF THE VARIOUS SECT MANUAL TO ENSURE EFFICIENT AND ORDERLY SEQUENCE OF INSTALLATION CONSTRUCTION ELEMENTS.</li> </ol>
BMIT THE NUMBER OF COPIES RETAINED BY ARCHITECT. ONE REPRODUCIBLE	ADVERSE EFFECTS OF HIGH HUMIDITY. SELECT EQUIPMENT THAT WILL NOT HAVE A HARMFUL EFFECT ON COMPLETED INSTALLATIONS OR ELEMENTS BEING INSTALLED. COORDINATE VENTILATION REQUIREMENTS TO PRODUCE AMBIENT CONDITION REQUIRED AND MINIMIZE ENERGY CONSUMPTION.	<ul> <li>2.2. NOTIFY AFFECTED UTILITY COMPANIES AND COMPLY WITH THEIR REQUIREM</li> <li>2.3. VERIFY THAT UTILITY REQUIREMENTS AND CHARACTERISTICS OF NEW OPER COMPATIBLE WITH BUILDING UTILITIES. COORDINATE WORK OF VARIOUS SEC</li> </ul>
ATION SECTIONS; ONE OF WHICH	<ul> <li>7.2. PROVIDE DEHUMIDIFICATION SYSTEMS WHEN REQUIRED TO REDUCE SUBSTRATE MOISTURE LEVELS AS REQUIRED TO ALLOW INSTALLATION OR APPLICATION OF FINISHES.</li> <li>8. SECURITY AND PROTECTION</li> </ul>	INTERDEPENDENT RESPONSIBILITIES FOR INSTALLING, CONNECTING TO, AN SUCH EQUIPMENT. 2.4. COORDINATE SPACE REQUIREMENTS, SUPPORTS, AND INSTALLATION OF MI ELECTRICAL WORK THAT ARE INDICATED DIAGRAMMATICALLY ON DRAWING
JNLESS SPECIFICALLY SO	<ul> <li>8. SECURITY AND PROTECTION</li> <li>8.1. PROTECT EXISTING VEGETATION, EQUIPMENT, STRUCTURES, UTILITIES, AND OTHER IMPROVEMENTS AT SITE AND ON ADJACENT PROPERTIES. REPAIR DAMAGE TO EXISTING FACILITIES.</li> <li>8.2. TEMPORARY FIRE PROTECTION: INSTALL AND MAINTAIN TEMPORARY FIRE-PROTECTION FACILITIES OF TYPES NEEDED TO PROTECT AGAINST REASONABLE PREDICTABLE AND CONTROLLABLE FIRE</li> </ul>	<ul> <li>SHOWN FOR PIPES, DUCTS, AND CONDUIT, AS CLOSELY AS PRACTICABLE; P</li> <li>WITH LINES OF BUILDING. UTILIZE SPACES EFFICIENTLY TO MAXIMIZE ACCES</li> <li>INSTALLATIONS, FOR MAINTENANCE, AND FOR REPAIRS.</li> <li>2.5. IN FINISHED AREAS, CONCEAL PIPES, DUCTS, AND WIRING WITHIN THE CONS</li> <li>LOCATIONS OF FIXTURES AND OUTLETS WITH FINISH ELEMENTS.</li> </ul>
TALS WITH ORIGINAL NUMBER	LOSSES. COMPLY WITH NFPA 241; MANAGE FIRE PREVENTION PROGRAM. 8.3. SECURITY ENCLOSURE AND LOCKUP: INSTALL TEMPORARY ENCLOSURE AROUND PARTIALLY COMPLETED AREAS OF CONSTRUCTION. PROVIDE LOCKABLE ENTRANCES TO PREVENT UNAUTHORIZED ENTRANCE, VANDALISM, THEFT AND SIMILAR VIOLATIONS OF SECURITY.	<ul> <li>2.6. COORDINATE COMPLETION AND CLEAN-UP OF WORK OF SEPARATE SECTION</li> <li>2.7. AFTER OWNER OCCUPANCY OF PREMISES, COORDINATE ACCESS TO SITE FOR DEFECTIVE WORK AND WORK NOT IN ACCORDANCE WITH CONTRACT DOCUME</li> </ul>
ERTINENT DRAWING AND PRIATE ON EACH COPY. IAT REVIEW, APPROVAL, ENT CONSTRUCTION WORK, AND	<ul> <li>8.4. SITE ENCLOSURE FENCE: BEFORE CONSTRUCTION OPERATIONS BEGIN, FURNISH AND INSTALL SITE ENCLOSURE FENCE IN A MANNER THAT WILL PREVENT PEOPLE FROM EASILY ENTERING SITE EXCEPT BY ENTRANCE GATES.</li> <li>8.5. TEMPORARY EGRESS: MAINTAIN TEMPORARY EGRESS FROM EXISTING OCCUPIED FACILITIES.</li> </ul>	DISRUPTION OF OWNER'S ACTIVITIES. 3. PATCHING MATERIALS 3.1. NEW MATERIALS: AS SPECIFIED IN PRODUCT SECTIONS; MATCH EXISTING PI
JIREMENTS OF THE WORK AND 30VE SHALL BE RETURNED TO	9. VEHICULAR ACCESS AND PARKING 9.1. COMPLY WITH REGULATIONS RELATING TO USE OF STREETS AND SIDEWALKS, ACCESS TO	PATCHING AND EXTENDING WORK. 3.2. TYPE AND QUALITY OF EXISTING PRODUCTS: DETERMINE BY INSPECTING AN WHERE NECESSARY, REFERRING TO EXISTING WORK AS A STANDARD.
TE SUBMISSION OF RELATED	<ul> <li>EMERGENCY FACILITIES, AND ACCESS FOR EMERGENCY VEHICLES.</li> <li>9.2. COORDINATE ACCESS AND HAUL ROUTES WITH GOVERNING AUTHORITIES AND OWNER.</li> <li>9.3. PREVENT SPREAD OF SOIL AND DEBRIS FROM CONSTRUCTION SITE TO PUBLIC WAY.</li> <li>9.4. PROVIDE AND MAINTAIN ACCESS TO FIRE HYDRANTS, FREE OF OBSTRUCTIONS.</li> </ul>	<ul> <li>4. EXAMINATION</li> <li>4.1. VERIFY THAT EXISTING SITE CONDITIONS AND SUBSTRATE SURFACES ARE SUBSEQUENT WORK. START OF WORK MEANS ACCEPTANCE OF EXISTING C</li> </ul>
OR SYSTEM LIMITATIONS THAT IPLETED WORK.	<ol> <li>PARKING: COMPLY WITH OWNER'S PARKING REQUIREMENTS.</li> <li>10. TEMPORARY USE OF PERMANENT ROADS AND PAVED AREAS</li> </ol>	<ul> <li>4.2. VERIFY THAT EXISTING SUBSTRATE IS CAPABLE OF STRUCTURAL SUPPORT WORK BEING APPLIED OR ATTACHED.</li> <li>4.3. EXAMINE AND VERIFY SPECIFIC CONDITIONS DESCRIBED IN INDIVIDUAL SPECIFIC AND VERIFY SPECIFIC CONFIRMING PRODUCT ORDERS OR E</li> <li>4.4. TAKE FIELD MEASUREMENTS BEFORE CONFIRMING PRODUCT ORDERS OR E</li> </ul>
SINCE PREVIOUS SUBMISSION. RTIES TO PROMPTLY REPORT	10.1. LOCATE TEMPORARY ROADS AND PAVED AREAS IN SAME LOCATION AS PERMANENT ROADS AND PAVED AREAS. CONSTRUCT AND MAINTAIN TEMPORARY ROADS AND PAVED AREAS ADEQUATE FOR CONSTRUCTION OPERATIONS. EXTEND TEMPORARY ROADS AND PAVED AREAS, WITHIN CONSTRUCTION LIMITS INDICATED, AS NECESSARY FOR CONSTRUCTION OPERATIONS.	TO MINIMIZE WASTE DUE TO OVER-ORDERING OR MISFABRICATION. 4.5. VERIFY THAT UTILITY SERVICES ARE AVAILABLE, OF THE CORRECT CHARACT CORRECT LOCATIONS.
SSED.	<ul> <li>10.1.1. COORDINATE ELEVATIONS OF TEMPORARY ROADS AND PAVED AREAS WITH PERMANENT ROADS AND PAVED AREAS.</li> <li>10.1.2. PREPARE SUBGRADE AND INSTALL SUBBASE AND BASE FOR TEMPORARY ROADS AND PAVED AREAS ACCORDING TO CONTRACT DOCUMENTS.</li> <li>10.1.3. RECONDITION BASE AFTER TEMPORARY USE, INCLUDING REMOVING CONTAMINATED</li> </ul>	<ul> <li>4.6. PRIOR TO CUTTING: EXAMINE EXISTING CONDITIONS PRIOR TO COMMENCING ELEMENTS SUBJECT TO DAMAGE OR MOVEMENT DURING CUTTING AND PA UNCOVERING EXISTING WORK, ASSESS CONDITIONS AFFECTING PERFORMA BEGINNING OF CUTTING OR PATCHING MEANS ACCEPTANCE OF EXISTING C</li> <li>5. PREPARATION</li> </ul>
T ADMINISTRATOR FOR THE DN GIVEN AND THE DESIGN ER'S INFORMATION.	MATERIAL, REGRADING, PROOFROLLING, COMPACTING AND TESTING.	<ul> <li>5.1. CLEAN SUBSTRATE SURFACES PRIOR TO APPLYING NEXT MATERIAL OR SUI</li> <li>5.2. SEAL CRACKS OR OPENINGS OF SUBSTRATE PRIOR TO APPLYING NEXT MAT</li> <li>5.3. APPLY MANUFACTURER REQUIRED OR RECOMMENDED SUBSTRATE PRIMER</li> <li>6.4.10 APPLY MANUFACTURER REQUIRED OR RECOMMENDED SUBSTRATE PRIMER</li> </ul>
IONS, SUBMIT CERTIFICATION TITIES SPECIFIED FOR PRODUCT SPECIFIED REQUIREMENTS.	12. WASTE REMOVAL 12.1. PROVIDE WASTE REMOVAL FACILITIES AND SERVICES AS REQUIRED TO MAINTAIN THE SITE IN CLEAN AND ORDERLY CONDITION.	CONDITIONER PRIOR TO APPLYING ANY NEW MATERIAL OR SUBSTANCE IN C 6. PREINSTALLATION MEETINGS 6.1. WHEN REQUIRED IN INDIVIDUAL SPECIFICATION SECTIONS, CONVENE A PREI
TIFICATIONS AS APPROPRIATE. PECIFICATION SECTIONS, LY, INSTALLATION, ADJUSTING,	<ul> <li>12.2. PROVIDE CONTAINERS WITH LIDS. REMOVE TRASH FROM SITE PERIODICALLY.</li> <li>13. FIELD OFFICES</li> <li>13.1. CONTRACTOR SHALL MAINTAIN A CLEAN OFFICE AT THE SITE FOR HIS USE, HIS SUBCONTRACTOR'S</li> </ul>	AT THE SITE PRIOR TO COMMENCING WORK OF THE SECTION. 6.2. REQUIRE ATTENDANCE OF PARTIES DIRECTLY AFFECTING, OR AFFECTED BY SECTION.
- PROCEDURES, PERIMETER IMENTAL CRITERIA REQUIRED A DOCUMENT OR DOCUMENTS	<ul> <li>AGENTS AND THE ARCHITECT, AND AT WHICH LOCATION HE OR HIS AUTHORIZED AGENT SHALL BE PRESENT, OR TO WHICH EITHER MAY BE READILY CALLED AT ALL TIMES WHILE THE WORK IS IN PROGRESS.</li> <li>13.1.1. AN AREA FOR CONTRACTOR'S FIELD OFFICE SHALL BE DESIGNATED BY OWNER WITHIN EXISTING STRUCTURE. ALL EXPENSES IN CONNECTION WITH THE FIELD OFFICE, INCLUDING THE</li> </ul>	<ul> <li>6.3. NOTIFY ARCHITECT FOUR DAYS IN ADVANCE OF MEETING DATE.</li> <li>6.4. PREPARE AGENDA AND PRESIDE AT MEETING:</li> <li>6.4.1. REVIEW CONDITIONS OF EXAMINATION, PREPARATION AND INSTALLATION</li> <li>6.4.2. REVIEW COORDINATION WITH RELATED WORK.</li> <li>6.4.3. RECORD MINUTES AND DISTRIBUTE COPIES WITHIN TWO DAYS AFTER M PARTICIPANTS, WITH TWO COPIES TO ARCHITECT, OWNER, PARTICIPANTS</li> </ul>
EFERENCE STANDARDS, DRE RIGID REQUIREMENTS ARE DN DATE OF CONTRACT	INSTALLATION, COST AND USE OF TELEPHONES, HEAT, AIR CONDITIONING, LIGHT, WATER AND JANITORIAL SERVICE SHALL BE BORNE BY THE CONTRACTOR. 13.1.2. COPIES OF PERMITS, APPROVED SHOP DRAWINGS AND SPECIFICATIONS MARKED UP-TO-DATE WITH ALL REVISIONS AND ALL ADDENDA SHALL BE KEPT AT OFFICE READY FOR USE AT ALL	BY DECISIONS MADE. 7. GENERAL INSTALLATION REQUIREMENTS
APPLICABLE CODE. ECIFICATION SECTIONS. AND PROGRESS OF THE	TIMES. END OF SECTION	<ul> <li>7.1. IN ADDITION TO COMPLIANCE WITH REGULATORY REQUIREMENTS, CONDUCT OPERATIONS IN COMPLIANCE WITH NFPA 241, INCLUDING APPLICABLE RECO APPENDIX A.</li> <li>7.2. INSTALL PRODUCTS AS SPECIFIED IN INDIVIDUAL SECTIONS, IN ACCORDANCE</li> </ul>
ACT DOCUMENTS, REQUEST IBILITIES OF THE PARTIES IN		MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS, AND SO AS TO NECESSITY FOR REPLACEMENT. 7.3. MAKE VERTICAL ELEMENTS PLUMB AND HORIZONTAL ELEMENTS LEVEL, UN INDICATED.
E CONTRACT DOCUMENTS BY T.		<ul> <li>7.4. INSTALL EQUIPMENT AND FITTINGS PLUMB AND LEVEL, NEATLY ALIGNED W AND HORIZONTAL LINES, UNLESS OTHERWISE INDICATED.</li> <li>7.5. MAKE CONSISTENT TEXTURE ON SURFACES, WITH SEAMLESS TRANSITIONS</li> </ul>
RODUCTS, SERVICES, SITE QUALITY. STEP IN SEQUENCE. T DOCUMENTS, REQUEST		INDICATED. 7.6. MAKE NEAT TRANSITIONS BETWEEN DIFFERENT SURFACES, MAINTAINING APPEARANCE.
I DOCUMENTS, REQUEST IE WORK EXCEPT WHERE MORE DICATE HIGHER STANDARDS		<ul> <li>8. ALTERATIONS</li> <li>8.1. DRAWINGS SHOWING EXISTING CONSTRUCTION AND UTILITIES ARE BASED OBSERVATION AND EXISTING RECORD DOCUMENTS ONLY.</li> <li>8.1.1. VERIFY THAT CONSTRUCTION AND UTILITY ARRANGEMENTS ARE AS SHORE</li> </ul>
UIRED AND SPECIFIED QUALITY. DRAWINGS OR AS INSTRUCTED		<ul> <li>8.1.2. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING</li> <li>8.1.3. BEGINNING OF ALTERATIONS WORK CONSTITUTES ACCEPTANCE OF EXIS</li> <li>8.2. KEEP AREAS IN WHICH ALTERATIONS ARE BEING CONDUCTED SEPARATED</li> </ul>
DESIGNED AND SIZED TO SFIGUREMENT.		THAT ARE STILL OCCUPIED. 8.2.1. PROVIDE, ERECT, AND MAINTAIN TEMPORARY DUSTPROOF PARTITIONS SPECIFIED IN SECTION 015000 IN LOCATIONS INDICATED ON DRAWING MAINTAIN SEPARATION.
PRODUCTS TO PRODUCE URERS' TOLERANCES CONFLICT ITECT BEFORE PROCEEDING.		<ul> <li>8.3. MAINTAIN WEATHERPROOF EXTERIOR BUILDING ENCLOSURE EXCEPT FOR IN FOR REPLACEMENT OR MODIFICATIONS; TAKE CARE TO PREVENT WATER AN</li> <li>8.3.1. WHERE OPENINGS IN EXTERIOR ENCLOSURE EXIST, PROVIDE CONSTRUCT</li> </ul>
RE SECURING PRODUCTS IN		<ul> <li>8.3.1. WHERE OPENINGS IN EXTERIOR ENCLOSURE EXIST, PROVIDE CONSTRUCT ENCLOSURE WEATHERPROOF.</li> <li>8.3.2. INSULATE EXISTING DUCTS OR PIPES THAT ARE EXPOSED TO OUTDOOR TEMPERATURES BY ALTERATIONS WORK.</li> <li>8.4. REMOVE EXISTING WORK AS INDICATED AND AS REQUIRED TO ACCOMPLISE</li> </ul>

8.4.3. WHERE NEW SURFACE FINISHES ARE TO BE APPLIED TO EXISTING WORK, PERFORM REMOVALS. PATCH, AND PREPARE EXISTING SURFACES AS REQUIRED TO RECEIVE NEW FINISH; REMOVE EXISTING FINISH IF NECESSARY FOR SUCCESSFUL APPLICATION OF NEW FINISH.

SECTION DIDDDD - FRODDET REQUIREMENTS		<u>SECTION 01/200 - CLOSEOUT SC</u>
<ol> <li>SUBSTITUTIONS</li> <li>SUBSTITUTIONS FOR SPECIFIED PRODUCTS MAY BE SUBMITTED IN THE FOLLOWING MANNER:</li> <li>1.A.A. DURING THE BID PERIOD, IN ACCORDANCE WITH INSTRUCTIONS TO BIDDERS. IF ACCEPTABLE, PRODUCTS SUBMITTED IN THIS MANNER WILL BE APPROVED VIA ADDENDUM.</li> </ol>	<ul> <li>8.4.4. WHERE NEW SURFACE FINISHES ARE NOT SPECIFIED OR INDICATED, PATCH HOLES AND DAMAGED SURFACES TO MATCH ADJACENT FINISHED SURFACES AS CLOSELY AS POSSIBLE.</li> <li>8.5. SERVICES (INCLUDING BUT NOT LIMITED TO HVAC, PLUMBING, AND ELECTRICAL): REMOVE, RELOCATE, AND EXTEND EXISTING SYSTEMS TO ACCOMMODATE NEW CONSTRUCTION.</li> </ul>	<ol> <li>PROJECT RECORD DOCUMENTS</li> <li>MAINTAIN ON SITE ONE SET OF TO THE WORK:</li> <li>1.1.1. DRAWINGS</li> </ol>
1.A.B. ON THE BID FORM, IN ACCORDANCE WITH INSTRUCTIONS TO BIDDERS AND SUPPLEMENTARY INSTRUCTIONS TO BIDDERS. IF ACCEPTABLE, PRODUCTS SUBMITTED IN THIS MANNER WILL BE APPROVED AFTER RECEIPT OF BIDS.	<ul> <li>8.5.1. MAINTAIN EXISTING ACTIVE SYSTEMS THAT ARE TO REMAIN IN OPERATION; MAINTAIN ACCESS TO EQUIPMENT AND OPERATIONAL COMPONENTS; IF NECESSARY, MODIFY INSTALLATION TO ALLOW ACCESS OR PROVIDE ACCESS PANEL.</li> <li>8.5.2. WHERE EXISTING SYSTEMS OR EQUIPMENT ARE NOT ACTIVE AND CONTRACT DOCUMENTS</li> </ul>	1.1.2.SPECIFICATIONS1.1.3.ADDENDA1.1.4.CHANGE ORDERS AND OT1.1.5.REVIEWED SHOP DRAWING
<ol> <li>SUBMITTALS</li> <li>PRODUCT DATA SUBMITTALS: SUBMIT MANUFACTURER'S STANDARD PUBLISHED DATA. MARK EACH COPY TO IDENTIFY APPLICABLE PRODUCTS, MODELS, OPTIONS, AND OTHER DATA.</li> </ol>	<ul> <li>REQUIRE REACTIVATION, PUT BACK INTO OPERATIONAL CONDITION; REPAIR SUPPLY,</li> <li>DISTRIBUTION, AND EQUIPMENT AS REQUIRED.</li> <li>8.5.3. WHERE EXISTING ACTIVE SYSTEMS SERVE OCCUPIED FACILITIES BUT ARE TO BE REPLACED</li> </ul>	1.1.5.       REVIEWED SHOP DRAWIN         1.2.       ENSURE ENTRIES ARE COMPL         1.3.       STORE RECORD DOCUMENTS S         1.4.       RECORD INFORMATION CONCU
SUPPLEMENT MANUFACTURERS' STANDARD DATA TO PROVIDE INFORMATION SPECIFIC TO THIS PROJECT. 2.2. SHOP DRAWING SUBMITTALS: PREPARED SPECIFICALLY FOR THIS PROJECT; INDICATE UTILITY AND	WITH NEW SERVICES, MAINTAIN EXISTING SYSTEMS IN SERVICE UNTIL NEW SYSTEMS ARE COMPLETE AND READY FOR SERVICE. 8.5.3.1. DISABLE EXISTING SYSTEMS ONLY TO MAKE SWITCHOVERS AND CONNECTIONS; MINIMIZE DURATION OF OUTAGES.	1.5. SPECIFICATIONS: LEGIBLY MA ACTUAL PRODUCTS INSTALLEI 1.5.1. CHANGES MADE BY ADD
ELECTRICAL CHARACTERISTICS, UTILITY CONNECTION REQUIREMENTS, AND LOCATION OF UTILITY OUTLETS FOR SERVICE FOR FUNCTIONAL EQUIPMENT AND APPLIANCES. 2.3. SAMPLE SUBMITTALS: ILLUSTRATE FUNCTIONAL AND AESTHETIC CHARACTERISTICS OF THE PRODUCT, WITH INTEGRAL PARTS AND ATTACHMENT DEVICES. COORDINATE SAMPLE SUBMITTALS	8.5.3.2. SEE SECTION OF 00 FOR OTHER LIMITATIONS ON OUTAGES AND REQUIRED NOTIFICATIONS. 8.5.3.3. PROVIDE TEMPORARY CONNECTIONS AS REQUIRED TO MAINTAIN EXISTING SYSTEMS IN	1.6. RECORD DRAWINGS AND SHO CONSTRUCTION INCLUDING: 1.6.1. FIELD CHANGES OF DIME
FOR INTERFACING WORK. 2.3.1. FOR SELECTION FROM STANDARD FINISHES, SUBMIT SAMPLES OF THE FULL RANGE OF THE MANUFACTURER'S STANDARD COLORS, TEXTURES, AND PATTERNS.	8.5.4. VERIFY THAT ABANDONED SERVICES SERVE ONLY ABANDONED FACILITIES. 8.5.5. REMOVE ABANDONED PIPE, DUCTS, CONDUITS, AND EQUIPMENT, INCLUDING THOSE ABOVE	1.6.2. DETAILS NOT ON ORIGINA 2. OPERATION AND MAINTENANCE DA
3. NEW PRODUCTS: PROVIDE NEW PRODUCTS UNLESS SPECIFICALLY REQUIRED OR PERMITTED BY THE CONTRACT DOCUMENTS.	ACCESSIBLE CEILINGS; REMOVE BACK TO SOURCE OF SUPPLY WHERE POSSIBLE, OTHERWISE CAP STUB AND TAG WITH IDENTIFICATION; PATCH HOLES LEFT BY REMOVAL USING MATERIALS SPECIFIED FOR NEW CONSTRUCTION.	2.1. FOR EACH PRODUCT OR SYSTE SUBCONTRACTORS AND SUPP PARTS.
<ul> <li>4. PRODUCT OPTIONS</li> <li>4.1. PRODUCTS SPECIFIED BY REFERENCE STANDARDS OR BY DESCRIPTION ONLY: USE ANY PRODUCT</li> </ul>	<ul> <li>8.6. PROTECT EXISTING WORK TO REMAIN.</li> <li>8.6.1. PREVENT MOVEMENT MOVEMENT OF STRUCTURE; PROVIDE SHORING AND BRACING IF NECESSARY.</li> <li>8.6.2. PERFORM CUTTING TO ACCOMPLISH REMOVALS NEATLY AND AS SPECIFIED FOR CUTTING NEW</li> </ul>	<ol> <li>PRODUCT DATA: MARK EACH S PARTS, AND DATA APPLICABL</li> <li>DRAWINGS: SUPPLEMENT PRO EQUIPMENT AND SYSTEMS, TO</li> </ol>
MEETING THOSE STANDARDS OR DESCRIPTION. 4.2. PRODUCTS SPECIFIED BY NAMING ONE OR MORE MANUFACTURERS: USE A PRODUCT OF ONE OF THE MANUFACTURERS NAMED AND MEETING SPECIFICATIONS, NO OPTIONS OR SUBSTITUTIONS ALLOWED.	<ul> <li>8.6.3. REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING REMOVAL WORK.</li> <li>8.7. ADAPT EXISTING WORK TO FIT NEW WORK: MAKE AS NEAT AND SMOOTH TRANSITION AS POSSIBLE.</li> </ul>	2.4. TYPED TEXT: AS REQUIRED TO INSTRUCTIONS FOR EACH PRO
5. MAINTENANCE MATERIALS 5.1. FURNISH EXTRA MATERIALS, SPARE PARTS, TOOLS, AND SOFTWARE OF TYPES AND IN QUANTITIES	8.8. PATCHING: WHERE THE EXISTING SURFACE IS NOT INDICATED TO BE REFINISHED, PATCH TO MATCH THE SURFACE FINISH THAT EXISTED PRIOR TO CUTTING. WHERE THE SURFACE IS INDICATED TO BE REFINISHED, PATCH SO THAT THE SUBSTRATE IS READY FOR THE NEW FINISH.	<ol> <li>OPERATION AND MAINTENANCE DA</li> <li>FOR EACH PRODUCT, APPLIED</li> <li>3.2. INSTRUCTIONS FOR CARE AND</li> </ol>
SPECIFIED IN INDIVIDUAL SPECIFICATION SECTIONS. 5.2. DELIVER TO PROJECT SITE; OBTAIN RECEIPT PRIOR TO FINAL PAYMENT.	<ul> <li>8.9. REFINISH EXISTING SURFACES AS INDICATED:</li> <li>8.9.1. WHERE ROOMS OR SPACES ARE INDICATED TO BE REFINISHED, REFINISH ALL VISIBLE EXISTING SURFACES TO REMAIN TO THE SPECIFIED CONDITION FOR EACH MATERIAL, WITH A NEAT TRANSITION TO ADJACENT FINISHES.</li> </ul>	CLEANING AGENTS AND METH AND METHODS, AND RECOMM 4. OPERATION AND MAINTENANCE DA
<ol> <li>TRANSPORTATION AND HANDLING</li> <li>COORDINATE SCHEDULE OF PRODUCT DELIVERY TO DESIGNATED PREPARED AREAS IN ORDER TO MINIMIZE SITE STORAGE TIME AND POTENTIAL DAMAGE TO STORED MATERIALS.</li> <li>TRANSPORT AND HANDLE PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.</li> </ol>	<ul> <li>8.9.2. IF MECHANICAL OR ELECTRICAL WORK IS EXPOSED ACCIDENTALLY DURING THE WORK, RE-COVER AND REFINISH TO MATCH.</li> <li>8.10. CLEAN EXISTING SYSTEMS AND EQUIPMENT.</li> </ul>	4.1. FOR EACH ITEM OF EQUIPMEN 4.1.1. DESCRIPTION OF UNIT OR 4.1.2. IDENTIFY FUNCTION, NOR
<ul> <li>6.2. TRANSPORT AND HANDLE PRODUCTS IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.</li> <li>6.3. TRANSPORT MATERIALS IN COVERED TRUCKS TO PREVENT CONTAMINATION OF PRODUCT AND LITTERING OF SURROUNDING AREAS.</li> <li>6.4. PROMPTLY INSPECT SHIPMENTS TO ENSURE THAT PRODUCTS COMPLY WITH REQUIREMENTS.</li> </ul>	<ul> <li>8.11. REMOVE DEMOLITION DEBRIS AND ABANDONED ITEMS FROM ALTERATIONS AREAS AND DISPOSE</li> <li>OF OFF-SITE; DO NOT BURN OR BURY.</li> <li>8.12. DO NOT BEGIN NEW CONSTRUCTION IN ALTERATIONS AREAS BEFORE DEMOLITION IS COMPLETE.</li> </ul>	4.1.3. INCLUDE PERFORMANCE 4.1.4. COMPLETE NOMENCLATU 4.2. OPERATING PROCEDURES: INC
QUANTITIES ARE CORRECT, AND PRODUCTS ARE UNDAMAGED. 6.5. PROVIDE EQUIPMENT AND PERSONNEL TO HANDLE PRODUCTS BY METHODS TO PREVENT SOILING, DISFIGUREMENT, OR DAMAGE.	8.13. COMPLY WITH ALL OTHER APPLICABLE REQUIREMENTS OF THIS SECTION. 9. CUTTING AND PATCHING	INSTRUCTIONS AND SEQUENC EMERGENCY INSTRUCTIONS. II INSTRUCTIONS.
6.6. ARRANGE FOR THE RETURN OF PACKING MATERIALS, SUCH AS WOOD PALLETS, WHERE ECONOMICALLY FEASIBLE.	<ul> <li>9.1. WHENEVER POSSIBLE, EXECUTE THE WORK BY METHODS THAT AVOID CUTTING OR PATCHING.</li> <li>9.2. SEE ALTERATIONS ARTICLE ABOVE FOR ADDITIONAL REQUIREMENTS.</li> <li>9.3. PERFORM WHATEVER CUTTING AND PATCHING IS NECESSARY TO:</li> <li>9.7.4</li> </ul>	4.3. MAINTENANCE REQUIREMENT MAINTENANCE AND TROUBLE INSTRUCTIONS; AND ALIGNME 4.4. ADDITIONAL REQUIREMENTS:
<ol> <li>STORAGE AND PROTECTION</li> <li>DESIGNATE RECEIVING/STORAGE AREAS FOR INCOMING PRODUCTS SO THAT THEY ARE DELIVERED ACCORDING TO INSTALLATION SCHEDULE AND PLACED CONVENIENT TO WORK AREA IN ORDER TO MINIMIZE WASTE DUE TO EXCESSIVE MATERIALS HANDLING AND MISAPPLICATION.</li> </ol>	<ul> <li>9.3.1. COMPLETE THE WORK.</li> <li>9.3.2. FIT PRODUCTS TOGETHER TO INTEGRATE WITH OTHER WORK.</li> <li>9.3.3. PROVIDE OPENINGS FOR PENETRATION OF MECHANICAL, ELECTRICAL, AND OTHER SERVICES.</li> <li>9.3.4. MATCH WORK THAT HAS BEEN CUT TO ADJACENT WORK.</li> </ul>	5. OPERATION AND MAINTENANCE MA
<ul> <li>7.2. STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS.</li> <li>7.3. STORE WITH SEALS AND LABELS INTACT AND LEGIBLE.</li> <li>7.4. STORE SENSITIVE PRODUCTS IN WEATHER TIGHT, CLIMATE CONTROLLED, ENCLOSURES IN AN</li> </ul>	<ul> <li>9.3.4. MATCH WORK THAT HAS DEEN COT TO ADJACENT WORK.</li> <li>9.3.5. REPAIR AREAS ADJACENT TO CUTS TO REQUIRED CONDITION.</li> <li>9.3.6. REPAIR NEW WORK DAMAGED BY SUBSEQUENT WORK.</li> <li>9.3.7. REMOVE SAMPLES OF INSTALLED WORK FOR TESTING WHEN REQUESTED.</li> </ul>	OPERATION OF DESCRIBED PR 5.2. PREPARE DATA IN THE FORM
ENVIRONMENT FAVORABLE TO PRODUCT. 7.5. FOR EXTERIOR STORAGE OF FABRICATED PRODUCTS, PLACE ON SLOPED SUPPORTS ABOVE GROUND.	<ul> <li>9.3.8. REMOVE AND REPLACE DEFECTIVE AND NON-CONFORMING WORK.</li> <li>9.4. EXECUTE WORK BY METHODS THAT AVOID DAMAGE TO OTHER WORK AND THAT WILL PROVIDE APPROPRIATE SURFACES TO RECEIVE PATCHING AND FINISHING. IN EXISTING WORK, MINIMIZE</li> </ul>	<ol> <li>WARRANTIES AND BONDS</li> <li>OBTAIN WARRANTIES AND BO SUPPLIERS, AND MANUFACTU</li> </ol>
<ul> <li>7.6. COVER PRODUCTS SUBJECT TO DETERIORATION WITH IMPERVIOUS SHEET COVERING. PROVIDE VENTILATION TO PREVENT CONDENSATION AND DEGRADATION OF PRODUCTS.</li> <li>7.7. PREVENT CONTACT WITH MATERIAL THAT MAY CAUSE CORROSION, DISCOLORATION, OR STAINING.</li> <li>7.8. PROVIDE EQUIPMENT AND PERSONNEL TO STORE PRODUCTS BY METHODS TO PREVENT SOILING.</li> </ul>	DAMAGE AND RESTORE TO ORIGINAL CONDITION. 9.5. CUT RIGID MATERIALS USING MASONRY SAW OR CORE DRILL. PNEUMATIC TOOLS NOT ALLOWED WITHOUT PRIOR APPROVAL.	OF WORK. EXCEPT FOR ITEMS I BEGINNING OF TIME OF WARR DETERMINED. 6.2. VERIFY THAT DOCUMENTS ARI
<ul> <li>7.9. ARRANGE STORAGE OF PRODUCTS TO PERMIT ACCESS FOR INSPECTION. PERIODICALLY INSPECT TO VERIFY PRODUCTS ARE UNDAMAGED AND ARE MAINTAINED IN ACCEPTABLE CONDITION.</li> </ul>	<ul> <li>9.6. RESTORE WORK WITH NEW PRODUCTS IN ACCORDANCE WITH REQUIREMENTS OF CONTRACT DOCUMENTS.</li> <li>9.7. FIT WORK AIR TIGHT TO PIPES, SLEEVES, DUCTS, CONDUIT, AND OTHER PENETRATIONS THROUGH SURFACES.</li> </ul>	NOTARIZED. 6.3. CO-EXECUTE SUBMITTALS WHI 6.4. RETAIN WARRANTIES AND BOI
END OF SECTION	9.8. AT PENETRATIONS OF FIRE RATED WALLS, PARTITIONS, CEILING, OR FLOOR CONSTRUCTION, COMPLETELY SEAL VOIDS WITH FIRE RATED MATERIAL, TO FULL THICKNESS OF THE PENETRATED ELEMENT.	7. ADDITIONAL CLOSEOUT SUBMITTAL 7.1. CONTRACTOR SHALL ADDITION
SECTION 017000 - EXECUTION AND CLOSEOUT REQUIREMENTS 1. PROJECT CONDITIONS	9.9. PATCHING: 9.9.1. FINIGH PATCHED SURFACES TO MATCH FINISH THAT EXISTED PRIOR TO PATCHING. ON CONTINUOUS SURFACES, REFINISH TO NEAREST INTERSECTION OR NATURAL BREAK. FOR AN ASSEMBLY, REFINISH ENTIRE UNIT.	7.1.1.OCCUPANCY PERMIT/CER7.1.2.AFFIDAVIT OF WAIVER OF7.1.3.EQUIPMENT DEMONSTRA
1.1. VENTILATE ENCLOSED AREAS TO ASSIST CURE OF MATERIALS, TO DISSIPATE HUMIDITY, AND TO PREVENT ACCUMULATION OF DUST, FUMES, VAPORS, OR GASES.	<ul> <li>9.9.2. MATCH COLOR, TEXTURE, AND APPEARANCE.</li> <li>9.9.3. REPAIR PATCHED SURFACES THAT ARE DAMAGED, LIFTED, DISCOLORED, OR SHOWING OTHER IMPERFECTIONS DUE TO PATCHING WORK. IF DEFECTS ARE DUE TO CONDITION OF SUBSTRATE.</li> </ul>	7.1.4. AS-BUILT DRAWINGS AND FINAL REVIEW OF THE CLO TWO (2) CD VERSIONS.
<ol> <li>COORDINATION</li> <li>COORDINATE SCHEDULING, SUBMITTALS, AND WORK OF THE VARIOUS SECTIONS OF THE PROJECT MANUAL TO ENSURE EFFICIENT AND ORDERLY SEQUENCE OF INSTALLATION OF INTERDEPENDENT CONSTRUCTION ELEMENTS.</li> </ol>	REPAIR SUBSTRATE PRIOR TO REPAIRING FINISH.	SECTION 012300 - ALTERNATES
<ul> <li>2.2. NOTIFY AFFECTED UTILITY COMPANIES AND COMPLY WITH THEIR REQUIREMENTS.</li> <li>2.3. VERIFY THAT UTILITY REQUIREMENTS AND CHARACTERISTICS OF NEW OPERATING EQUIPMENT ARE COMPATIBLE WITH BUILDING UTILITIES. COORDINATE WORK OF VARIOUS SECTIONS HAVING</li> </ul>	<ul> <li>10.1. MAINTAIN AREAS FREE OF WASTE MATERIALS, DEBRIS, AND RUBBISH. MAINTAIN SITE IN A CLEAN AND ORDERLY CONDITION.</li> <li>10.2. REMOVE DEBRIS AND RUBBISH FROM PIPE CHASES, PLENUMS, ATTICS, CRAWL SPACES, AND OTHER CLOSED OR REMOTE SPACES, PRIOR TO ENCLOSING THE SPACE.</li> </ul>	1. ACCEPTANCE OF ALTERNATES 1.A. ALTERNATES QUOTED ON BID
INTERDEPENDENT RESPONSIBILITIES FOR INSTALLING, CONNECTING TO, AND PLACING IN SERVICE, SUCH EQUIPMENT. 2.4. COORDINATE SPACE REQUIREMENTS, SUPPORTS, AND INSTALLATION OF MECHANICAL AND ELECTRICAL WORK THAT ARE INDICATED DIAGRAMMATICALLY ON DRAWINGS. FOLLOW ROUTING	<ul> <li>10.3. BROOM AND VACUUM CLEAN INTERIOR AREAS PRIOR TO START OF SURFACE FINISHING, AND CONTINUE CLEANING TO ELIMINATE DUST.</li> <li>10.4. COLLECT AND REMOVE WASTE MATERIALS, DEBRIS, AND TRASH/RUBBISH FROM SITE PERIODICALLY</li> </ul>	OPTION. ACCEPTED ALTERNAT 2. REFER TO COVER SHEET & BID DOC
SHOWN FOR PIPES, DUCTS, AND CONDUIT, AS CLOSELY AS PRACTICABLE; PLACE RUNS PARALLEL WITH LINES OF BUILDING. UTILIZE SPACES EFFICIENTLY TO MAXIMIZE ACCESSIBILITY FOR OTHER INSTALLATIONS, FOR MAINTENANCE, AND FOR REPAIRS.	AND DISPOSE OFF-SITE; DO NOT BURN OR BURY. 10.5. CONDUCT DAILY INSPECTIONS TO VERIFY THAT PROGRESS CLEANING REQUIREMENTS ARE BEING MET.	
<ol> <li>IN FINISHED AREAS, CONCEAL PIPES, DUCTS, AND WIRING WITHIN THE CONSTRUCTION. COORDINATE LOCATIONS OF FIXTURES AND OUTLETS WITH FINISH ELEMENTS.</li> <li>COORDINATE COMPLETION AND CLEAN-UP OF WORK OF SEPARATE SECTIONS.</li> <li>AFTER OWNER OCCUPANCY OF PREMISES, COORDINATE ACCESS TO SITE FOR CORRECTION OF</li> </ol>	<ol> <li>PROTECTION OF INSTALLED WORK</li> <li>11.1. PROTECT INSTALLED WORK FROM DAMAGE BY CONSTRUCTION OPERATIONS.</li> <li>11.2. PROVIDE SPECIAL PROTECTION WHERE SPECIFIED IN INDIVIDUAL SPECIFICATION SECTIONS.</li> </ol>	
DEFECTIVE WORK AND WORK NOT IN ACCORDANCE WITH CONTRACT DOCUMENTS, TO MINIMIZE DISRUPTION OF OWNER'S ACTIVITIES.	<ol> <li>PROVIDE TEMPORARY AND REMOVABLE PROTECTION FOR INSTALLED PRODUCTS. CONTROL ACTIVITY IN IMMEDIATE WORK AREA TO PREVENT DAMAGE.</li> <li>PROVIDE PROTECTIVE COVERINGS AT WALLS, PROJECTIONS, JAMBS, SILLS, AND SOFFITS OF</li> </ol>	
<ol> <li>PATCHING MATERIALS</li> <li>NEW MATERIALS: AS SPECIFIED IN PRODUCT SECTIONS; MATCH EXISTING PRODUCTS AND WORK FOR PATCHING AND EXTENDING WORK.</li> </ol>	OPENINGS. 11.5. PROTECT FINISHED FLOORS, STAIRS, AND OTHER SURFACES FROM TRAFFIC, DIRT, WEAR, DAMAGE, OR MOVEMENT OF HEAVY OBJECTS, BY PROTECTING WITH DURABLE SHEET MATERIALS. 11.6. PROHIBIT TRAFFIC OR STORAGE UPON WATERPROOFED OR ROOFED SURFACES. IF TRAFFIC OR	
<ul> <li>3.2. TYPE AND QUALITY OF EXISTING PRODUCTS: DETERMINE BY INSPECTING AND TESTING PRODUCTS WHERE NECESSARY, REFERRING TO EXISTING WORK AS A STANDARD.</li> <li>4. EXAMINATION</li> </ul>	<ul> <li>ACTIVITY IS NECESSARY, OBTAIN RECOMMENDATIONS FOR PROTECTION FROM WATERPROOFING OR ROOFING MATERIAL MANUFACTURER.</li> <li>11.7. REMOVE PROTECTIVE COVERINGS WHEN NO LONGER NEEDED; REUSE OR RECYCLE PLASTIC</li> </ul>	<b>SECTION 024100 - DEMOLITION</b> 1. GENERAL PROCEDURES AND PROJ
<ul> <li>4.1. VERIFY THAT EXISTING SITE CONDITIONS AND SUBSTRATE SURFACES ARE ACCEPTABLE FOR SUBSEQUENT WORK. START OF WORK MEANS ACCEPTANCE OF EXISTING CONDITIONS.</li> <li>4.2. VERIFY THAT EXISTING SUBSTRATE IS CAPABLE OF STRUCTURAL SUPPORT OR ATTACHMENT OF NEW</li> </ul>	COVERINGS IF POSSIBLE.	<ol> <li>1.A. OBTAIN REQUIRED PERMITS.</li> <li>1.B. COMPLY WITH APPLICABLE RE</li> <li>1.C. PROVIDE, ERECT AND MAINTAI</li> </ol>
<ul> <li>WORK BEING APPLIED OR ATTACHED.</li> <li>4.3. EXAMINE AND VERIFY SPECIFIC CONDITIONS DESCRIBED IN INDIVIDUAL SPECIFICATION SECTIONS.</li> <li>4.4. TAKE FIELD MEASUREMENTS BEFORE CONFIRMING PRODUCT ORDERS OR BEGINNING FABRICATION,</li> </ul>	<ol> <li>ADJUST OPERATING PRODUCTS AND EQUIPMENT TO ENSURE SMOOTH AND UNHINDERED OPERATION.</li> <li>TEST, ADJUST AND BALANCE HVAC SYSTEMS IN ACCORDANCE WITH MECHANICAL DRAWINGS AND SPECIFICATIONS.</li> </ol>	<ol> <li>USE PHYSICAL BARRIERS TO F WORKERS OR THE PUBLIC.</li> <li>CONDUCT OPERATIONS TO MIN STRUCTURES AND OCCUPANTS</li> </ol>
<ul> <li>TO MINIMIZE WASTE DUE TO OVER-ORDERING OR MISFABRICATION.</li> <li>4.5. VERIFY THAT UTILITY SERVICES ARE AVAILABLE, OF THE CORRECT CHARACTERISTICS, AND IN THE CORRECT LOCATIONS.</li> <li>4.6. PRIOR TO CUTTING: EXAMINE EXISTING CONDITIONS PRIOR TO COMMENCING WORK, INCLUDING</li> </ul>	13. FINAL CLEANING 13.1. EXECUTE FINAL CLEANING PRIOR TO FINAL PROJECT ASSESSMENT.	1.F. DO NOT CLOSE OR OBSTRUCT 1.G. CONDUCT OPERATIONS TO MIN DO NOT OBSTRUCT REQUIRED
ELEMENTS SUBJECT TO DAMAGE OR MOVEMENT DURING CUTTING AND PATCHING. AFTER UNCOVERING EXISTING WORK, ASSESS CONDITIONS AFFECTING PERFORMANCE OF WORK. BEGINNING OF CUTTING OR PATCHING MEANS ACCEPTANCE OF EXISTING CONDITIONS.	<ul> <li>13.2. USE CLEANING MATERIALS THAT ARE NONHAZARDOUS.</li> <li>13.3. CLEAN INTERIOR AND EXTERIOR GLASS, SURFACES EXPOSED TO VIEW; REMOVE TEMPORARY LABELS, STAINS AND FOREIGN SUBSTANCES, POLISH TRANSPARENT AND GLOSSY SURFACES,</li> </ul>	EXITS FROM REMOVAL OPERA
<ol> <li>PREPARATION</li> <li>5.1. CLEAN SUBSTRATE SURFACES PRIOR TO APPLYING NEXT MATERIAL OR SUBSTANCE.</li> <li>5.2. SEAL CRACKS OR OPENINGS OF SUBSTRATE PRIOR TO APPLYING NEXT MATERIAL OR SUBSTANCE.</li> </ol>	<ul> <li>VACUUM CARPETED AND SOFT SURFACES.</li> <li>13.4. REMOVE ALL LABELS THAT ARE NOT PERMANENT. DO NOT PAINT OR OTHERWISE COVER FIRE TEST LABELS OR NAMEPLATES ON MECHANICAL AND ELECTRICAL EQUIPMENT.</li> <li>13.5. CLEAN EQUIPMENT AND FIXTURES TO A SANITARY CONDITION WITH CLEANING MATERIALS</li> </ul>	2.A. PROTECT EXISTING UTILITIES T 2.B. DO NOT CLOSE, SHUT OFF, OR WITHOUT AT LEAST 7 DAYS PR 2.C. DO NOT CLOSE, SHUT OFF. OR
<ul> <li>5.3. APPLY MANUFACTURER REQUIRED OR RECOMMENDED SUBSTRATE PRIMER, SEALER, OR CONDITIONER PRIOR TO APPLYING ANY NEW MATERIAL OR SUBSTANCE IN CONTACT OR BOND.</li> </ul>	APPROPRIATE TO THE SURFACE AND MATERIAL BEING CLEANED. 13.6. CLEAN FILTERS OF OPERATING EQUIPMENT. 13.7. CLEAN DEBRIS FROM ROOFS, GUTTERS, DOWNSPOUTS, AND DRAINAGE SYSTEMS.	2.D. REMOVE EXPOSED PIPING, VAL DISCONNECTED AND ABANDO
<ul> <li>6. PREINSTALLATION MEETINGS</li> <li>6.1. WHEN REQUIRED IN INDIVIDUAL SPECIFICATION SECTIONS, CONVENE A PREINSTALLATION MEETING AT THE SITE PRIOR TO COMMENCING WORK OF THE SECTION.</li> </ul>	<ul> <li>13.8. CLEAN SITE; SWEEP PAVED AREAS, RAKE CLEAN LANDSCAPED SURFACES.</li> <li>13.9. REMOVE WASTE, SURPLUS MATERIALS, TRASH/RUBBISH, AND CONSTRUCTION FACILITIES FROM THE SITE; DISPOSE OF IN LEGAL MANNER; DO NOT BURN OR BURY.</li> </ul>	3. SELECTIVE DEMOLITION FOR ALTER 3.A. DRAWINGS SHOWING EXISTING OBSERVATION AND EXISTING
<ul> <li>6.2. REQUIRE ATTENDANCE OF PARTIES DIRECTLY AFFECTING, OR AFFECTED BY, WORK OF THE SPECIFIC SECTION.</li> <li>6.3. NOTIFY ARCHITECT FOUR DAYS IN ADVANCE OF MEETING DATE.</li> <li>6.4. PREPARE AGENDA AND PRESIDE AT MEETING:</li> </ul>	<ul> <li>14. CLOSEOUT PROCEDURES</li> <li>14.1. MAKE SUBMITTALS THAT ARE REQUIRED BY GOVERNING OR OTHER AUTHORITIES.</li> <li>14.2. NOTIFY ARCHITECT WHEN WORK IS CONSIDERED READY FOR SUBSTANTIAL COMPLETION.</li> </ul>	3.A.A. VERIFY THAT CONSTRUCT 3.A.B. REPORT DISCREPANCIES 3.A.C. BEGINNING OF DEMOLITIC
<ul> <li>6.4.1. REVIEW CONDITIONS OF EXAMINATION, PREPARATION AND INSTALLATION PROCEDURES.</li> <li>6.4.2. REVIEW COORDINATION WITH RELATED WORK.</li> <li>6.4.3. RECORD MINUTES AND DISTRIBUTE COPIES WITHIN TWO DAYS AFTER MEETING TO</li> </ul>	14.3. SUBMIT WRITTEN CERTIFICATION THAT CONTRACT DOCUMENTS HAVE BEEN REVIEWED, WORK HAS BEEN INSPECTED, AND THAT WORK IS COMPLETE IN ACCORDANCE WITH CONTRACT DOCUMENTS AND READY FOR ARCHITECT'S REVIEW.	WOULD BE APPARENT UP 3.B. SEPARATE AREAS IN WHICH D STILL OCCUPIED.
PARTICIPANTS, WITH TWO COPIES TO ARCHITECT, OWNER, PARTICIPANTS, AND THOSE AFFECTED BY DECISIONS MADE.	<ol> <li>14.4. CORRECT ITEMS OF WORK LISTED IN EXECUTED CERTIFICATES OF SUBSTANTIAL COMPLETION AND COMPLY WITH REQUIREMENTS FOR ACCESS TO OWNER-OCCUPIED AREAS.</li> <li>14.5. NOTIFY ARCHITECT WHEN WORK IS CONSIDERED FINALLY COMPLETE.</li> <li>14.6. COMPLETE ITEMS OF WORK DETERMINED BY ARCHITECT'S FINAL INSPECTION.</li> </ol>	3.B.A. PROVIDE, ERECT, AND MA SPECIFIED IN SECTION 01 3.C. MAINTAIN WEATHERPROOF EX FOR REPLACEMENT OR MODIF
<ol> <li>GENERAL INSTALLATION REQUIREMENTS</li> <li>IN ADDITION TO COMPLIANCE WITH REGULATORY REQUIREMENTS, CONDUCT CONSTRUCTION OPERATIONS IN COMPLIANCE WITH NFPA 241, INCLUDING APPLICABLE RECOMMENDATIONS IN APPENDIX A.</li> </ol>	END OF SECTION	DAMAGE AND TEMPERATURE 3.D. REMOVE EXISTING WORK AS IN 3.D.A. REMOVE ITEMS INDICATE
7.2. INSTALL PRODUCTS AS SPECIFIED IN INDIVIDUAL SECTIONS, IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS, AND SO AS TO AVOID WASTE DUE TO NECESSITY FOR REPLACEMENT.		3.E. SERVICES (INCLUDING BUT NO REMOVE EXISTING SYSTEMS / 3.E.A. MAINTAIN EXISTING ACTIV TO EQUIPMENT AND OPER
<ul> <li>7.3. MAKE VERTICAL ELEMENTS PLUMB AND HORIZONTAL ELEMENTS LEVEL, UNLESS OTHERWISE INDICATED.</li> <li>7.4. INSTALL EQUIPMENT AND FITTINGS PLUMB AND LEVEL, NEATLY ALIGNED WITH ADJACENT VERTICAL AND HORIZONTAL LINES, UNLESS OTHERWISE INDICATED.</li> </ul>		3.E.B. WHERE EXISTING ACTIVE WITH NEW SERVICES, MAI COMPLETE AND READY F
<ul> <li>7.5. MAKE CONSISTENT TEXTURE ON SURFACES, WITH SEAMLESS TRANSITIONS, UNLESS OTHERWISE INDICATED.</li> <li>7.6. MAKE NEAT TRANSITIONS BETWEEN DIFFERENT SURFACES, MAINTAINING TEXTURE AND</li> </ul>		<ul> <li>3.E.C. SEE SECTION 011000 SUI NOTIFICATIONS.</li> <li>3.E.D. VERIFY THAT ABANDONE</li> <li>3.E.F. REMOVE ABANDONED BIT</li> </ul>
APPEARANCE. 8. ALTERATIONS 8.1. DRAWINGS SHOWING EXISTING CONSTRUCTION AND UTILITIES ARE BASED ON CASUAL FIELD		3.E.E. REMOVE ABANDONED PIF ACCESSIBLE CEILINGS; R CAP STUB AND TAG WITH 3.F. PROTECT EXISTING WORK TO R
<ul> <li>B.1. DRAWINGS SHOWING EXISTING CONSTRUCTION AND UTILITIES ARE BASED ON CASUAL FIELD OBSERVATION AND EXISTING RECORD DOCUMENTS ONLY.</li> <li>8.1.1. VERIFY THAT CONSTRUCTION AND UTILITY ARRANGEMENTS ARE AS SHOWN.</li> <li>8.1.2. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION.</li> </ul>		3.F.A. PREVENT MOVEMENT OF 3 3.F.B. PERFORM CUTTING TO AC WORK.
<ul> <li>8.1.3. BEGINNING OF ALTERATIONS WORK CONSTITUTES ACCEPTANCE OF EXISTING CONDITIONS.</li> <li>8.2. KEEP AREAS IN WHICH ALTERATIONS ARE BEING CONDUCTED SEPARATED FROM OTHER AREAS THAT ARE STILL OCCUPIED.</li> </ul>		3.F.C. REPAIR ADJACENT CONS 3.F.D. PATCH AS SPECIFIED FOR
<ul> <li>8.2.1. PROVIDE, ERECT, AND MAINTAIN TEMPORARY DUSTPROOF PARTITIONS OF CONSTRUCTION SPECIFIED IN SECTION 015000 IN LOCATIONS INDICATED ON DRAWINGS AND AS REQUIRED TO MAINTAIN SEPARATION.</li> <li>8.3. MAINTAIN WEATHERPROOF EXTERIOR BUILDING ENCLOSURE EXCEPT FOR INTERRUPTIONS REQUIRED</li> </ul>		<ol> <li>DEBRIS AND WASTE REMOVAL</li> <li>A.A. REMOVE DEBRIS, JUNK, AND T</li> <li>A.B. REMOVE FROM SITE ALL MATE</li> <li>4.C. LEAVE SITE IN CLEAN CONDITION</li> </ol>
FOR REPLACEMENT OR MODIFICATIONS; TAKE CARE TO PREVENT WATER AND HUMIDITY DAMAGE. 8.3.1. WHERE OPENINGS IN EXTERIOR ENCLOSURE EXIST, PROVIDE CONSTRUCTION TO MAKE EXTERIOR		4.C. LEAVE STEE IN CLEAN CONDITI 4.D. CLEAN UP SPILLAGE AND WIN
ENCLOSURE WEATHERPROOF. 8.3.2. INSULATE EXISTING DUCTS OR PIPES THAT ARE EXPOSED TO OUTDOOR AMBIENT TEMPERATURES BY ALTERATIONS WORK. 8.4. REMOVE EXISTING WORK AS INDICATED AND AS REQUIRED TO ACCOMPLISH NEW WORK.		SECTION 033000 - CAST-IN-PLA
<ul> <li>8.4.1. REMOVE ITEMS INDICATED ON DRAWINGS.</li> <li>8.4.2. RELOCATE ITEMS INDICATED ON DRAWINGS.</li> <li>8.4.3. WHERE NEW SURFACE FINISHES ARE TO BE APPLIED TO EXISTING WORK, PERFORM REMOVALS,</li> </ul>		1. CAST-IN-PLACE CONCRETE - GENE 1.A. PROVIDE IN ACCORDANCE WITH INDICATED.
PATCH, AND PREPARE EXISTING SURFACES AS REQUIRED TO RECEIVE NEW FINISH; REMOVE		

#### DRAWINGS SPECIFICATIONS ADDENDA CHANGE ORDERS AND OTHER MODIFICATIONS TO THE CONTRACT REVIEWED SHOP DRAWINGS, PRODUCT DATA AND SAMPLES ENSURE ENTRIES ARE COMPLETE AND ACCURATE, ENABLING FUTURE REFERENCE BY OWNER. STORE RECORD DOCUMENTS SEPARATE FROM DOCUMENTS USED FOR CONSTRUCTION. RECORD INFORMATION CONCURRENT WITH CONSTRUCTION PROGRESS. SPECIFICATIONS: LEGIBLY MARK AND RECORD AT EACH PRODUCT SECTION DESCRIPTION OF ACTUAL PRODUCTS INSTALLED, INCLUDING THE FOLLOWING: CHANGES MADE BY ADDENDA AND MODIFICATIONS. RECORD DRAWINGS AND SHOP DRAWINGS: LEGIBLY MARK EACH ITEM TO RECORD ACTUAL CONSTRUCTION INCLUDING: FIELD CHANGES OF DIMENSION AND DETAIL. DETAILS NOT ON ORIGINAL CONTRACT DRAWINGS. RATION AND MAINTENANCE DATA FOR EACH PRODUCT OR SYSTEM: LIST NAMES, ADDRESSES AND TELEPHONE NUMBERS OF SUBCONTRACTORS AND SUPPLIERS, INCLUDING LOCAL SOURCE OF SUPPLIES AND REPLACEMENT PRODUCT DATA: MARK EACH SHEET TO CLEARLY IDENTIFY SPECIFIC PRODUCTS AND COMPONENT PARTS, AND DATA APPLICABLE TO INSTALLATION. DELETE INAPPLICABLE INFORMATION. DRAWINGS: SUPPLEMENT PRODUCT DATA TO ILLUSTRATE RELATIONS OF COMPONENT PARTS OF EQUIPMENT AND SYSTEMS, TO SHOW CONTROL AND FLOW DIAGRAMS. TYPED TEXT: AS REQUIRED TO SUPPLEMENT PRODUCT DATA. PROVIDE LOGICAL SEQUENCE OF INSTRUCTIONS FOR EACH PROCEDURE, INCORPORATING MANUFACTURER'S INSTRUCTIONS. RATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES FOR EACH PRODUCT, APPLIED MATERIAL, AND FINISH INSTRUCTIONS FOR CARE AND MAINTENANCE: MANUFACTURER'S RECOMMENDATIONS FOR CLEANING AGENTS AND METHODS, PRECAUTIONS AGAINST DETRIMENTAL CLEANING AGENTS AND METHODS, AND RECOMMENDED SCHEDULE FOR CLEANING AND MAINTENANCE. RATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS FOR EACH ITEM OF EQUIPMENT AND EACH SYSTEM: DESCRIPTION OF UNIT OR SYSTEM, AND COMPONENT PARTS. IDENTIFY FUNCTION, NORMAL OPERATING CHARACTERISTICS, AND LIMITING CONDITIONS. INCLUDE PERFORMANCE CURVES, WITH ENGINEERING DATA AND TESTS. COMPLETE NOMENCLATURE AND MODEL NUMBER OF REPLACEABLE PARTS. OPERATING PROCEDURES: INCLUDE START-UP, BREAK-IN, AND ROUTINE NORMAL OPERATING NSTRUCTIONS AND SEQUENCES. INCLUDE REGULATION, CONTROL, STOPPING, SHUT-DOWN, AND EMERGENCY INSTRUCTIONS. INCLUDE SUMMER, WINTER, AND ANY SPECIAL OPERATING NSTRUCTIONS. MAINTENANCE REQUIREMENTS: INCLUDE ROUTINE PROCEDURES AND GUIDE FOR PREVENTATIVE MAINTENANCE AND TROUBLE SHOOTING; DISASSEMBLY, REPAIR, AND REASSEMBLY INSTRUCTIONS; AND ALIGNMENT, ADJUSTING, BALANCING, AND CHECKING INSTRUCTIONS. ADDITIONAL REQUIREMENTS: AS SPECIFIED IN INDIVIDUAL PRODUCT SPECIFICATION SECTIONS. RATION AND MAINTENANCE MANUALS PREPARE INSTRUCTIONS AND DATA BY PERSONNEL EXPERIENCED IN MAINTENANCE AND OPERATION OF DESCRIBED PRODUCTS. PREPARE DATA IN THE FORM OF AN INSTRUCTIONAL MANUAL. RANTIES AND BONDS OBTAIN WARRANTIES AND BONDS, EXECUTED IN DUPLICATE BY RESPONSIBLE SUBCONTRACTORS, SUPPLIERS, AND MANUFACTURERS, WITHIN 10 DAYS AFTER COMPLETION OF THE APPLICABLE ITEM OF WORK EXCEPT FOR ITEMS PUT INTO USE WITH OWNER'S PERMISSION I FAVE DATE OF BEGINNING OF TIME OF WARRANTY UNTIL THE DATE OF SUBSTANTIAL COMPLETION IS DETERMINED /ERIFY THAT DOCUMENTS ARE IN PROPER FORM, CONTAIN FULL INFORMATION, AND ARE NOTARIZED. CO-EXECUTE SUBMITTALS WHEN REQUIRED. RETAIN WARRANTIES AND BONDS UNTIL TIME SPECIFIED FOR SUBMITTAL. FIONAL CLOSEOUT SUBMITTALS CONTRACTOR SHALL ADDITIONALLY PROVIDE THE FOLLOWING CLOSEOUT SUBMITTALS: OCCUPANCY PERMIT/CERTIFICATE OF INSPECTIONS. AFFIDAVIT OF WAIVER OF LIEN. EQUIPMENT DEMONSTRATIONS TO OWNER.

SECTION 017800 - CLOSEOUT SUBMITTALS

AS-BUILT DRAWINGS AND SUBMITTAL LOG ARE TO BE SUBMITTED IN CAD FORMAT UPON FINAL REVIEW OF THE CLOSEOUT MATERIALS. ONE FULL SIZE PAPER SET IS REQUIRED AND TWO (2) CD VERSIONS.

END OF SECTION

#### D12300 - ALTERNATES

- PTANCE OF ALTERNATES ALTERNATES QUOTED ON BID FORM WILL BE REVIEWED AND ACCEPTED OR REJECTED AT OWNER'S OPTION. ACCEPTED ALTERNATES WILL BE IDENTIFIED IN THE OWNER-CONTRACTOR AGREEMENT. ER TO COVER SHEET & BID DOCUMENTS FOR ADDITIONAL INFORMATION REGARDING ALTERNATES
  - END OF SECTION

1. GEN	IERAL PROCEDURES AND PROJECT CONDITIONS
1.A.	OBTAIN REQUIRED PERMITS.
1.B.	COMPLY WITH APPLICABLE REQUIREMENTS OF NFPA 241.
1.C.	PROVIDE, ERECT AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVIC
1.D.	USE PHYSICAL BARRIERS TO PREVENT ACCESS TO AREAS THAT COULD BE H WORKERS OR THE PUBLIC.
1.E.	CONDUCT OPERATIONS TO MINIMIZE EFFECTS ON AND INTERFERENCE WITH A STRUCTURES AND OCCUPANTS.
1.F. 1.G.	DO NOT CLOSE OR OBSTRUCT ROADWAYS OR SIDEWALKS WITHOUT PERMIT. CONDUCT OPERATIONS TO MINIMIZE OBSTRUCTION OF PUBLIC AND PRIVATE E DO NOT OBSTRUCT REQUIRED EXITS AT ANY TIME. PROTECT PERSONS USING EXITS FROM REMOVAL OPERATIONS.
2. EXIS	TING UTILITIES
2.A.	PROTECT EXISTING UTILITIES TO REMAIN FROM DAMAGE.
2.B.	DO NOT CLOSE, SHUT OFF, OR DISRUPT EXISTING LIFE SAFETY SYSTEMS THA WITHOUT AT LEAST 7 DAYS PRIOR WRITTEN NOTIFICATION TO OWNER.
2.C.	DO NOT CLOSE, SHUT OFF, OR DISRUPT EXISTING UTILITY BRANCHES OR TAKE USE WITHOUT AT LEAST 7 DAYS PRIOR WRITTEN NOTIFICATION TO OWNER.
2.D.	REMOVE EXPOSED PIPING, VALVES, METERS, EQUIPMENT, SUPPORTS, AND FO DISCONNECTED AND ABANDONED UTILITIES.
3. SEL	ECTIVE DEMOLITION FOR ALTERATIONS
3.A.	DRAWINGS SHOWING EXISTING CONSTRUCTION AND UTILITIES ARE BASED ON OBSERVATION AND EXISTING RECORD DOCUMENTS ONLY.
3.A.A	
3.A.B	
3.A.C.	WOULD BE APPARENT UPON EXAMINATION PRIOR TO STARTING DEMOLIT
3.B.	SEPARATE AREAS IN WHICH DEMOLITION IS BEING CONDUCTED FROM OTHER STILL OCCUPIED.
3.B.A	SPECIFIED IN SECTION OI 50 00 IN LOCATIONS INDICATED ON DRAWINGS
3.C.	MAINTAIN WEATHERPROOF EXTERIOR BUILDING ENCLOSURE EXCEPT FOR INTE FOR REPLACEMENT OR MODIFICATIONS; TAKE CARE TO PREVENT WATER DAM DAMAGE AND TEMPERATURE FLUCTUATION.
3.D.	REMOVE EXISTING WORK AS INDICATED AND AS REQUIRED TO ACCOMPLISH N
3.D.A	. REMOVE ITEMS INDICATED ON DRAWINGS.
3.E.	SERVICES (INCLUDING BUT NOT LIMITED TO HVAC, PLUMBING, FIRE PROTECTIC REMOVE EXISTING SYSTEMS AND EQUIPMENT AS INDICATED.
3.E.A.	MAINTAIN EXISTING ACTIVE SYSTEMS THAT ARE TO REMAIN IN OPERATION TO EQUIPMENT AND OPERATIONAL COMPONENTS.
3.E.B.	WHERE EXISTING ACTIVE SYSTEMS SERVE OCCUPIED FACILITIES BUT AR WITH NEW SERVICES, MAINTAIN EXISTING SYSTEMS IN SERVICE UNTIL NE COMPLETE AND READY FOR SERVICE.
3.E.C.	
3.E.D.	VERIFY THAT ABANDONED SERVICES SERVE ONLY ABANDONED FACILITI
3.E.E.	REMOVE ABANDONED PIPE, DUCTS, CONDUITS, AND EQUIPMENT, INCLUD ACCESSIBLE CEILINGS; REMOVE BACK TO SOURCE OF SUPPLY WHERE PO CAP STUB AND TAG WITH IDENTIFICATION.
3.F.	PROTECT EXISTING WORK TO REMAIN.
3.F.A. 3.F.B.	PERFORM CUTTING TO ACCOMPLISH REMOVALS NEATLY AND AS SPECIF
<b>B F F</b>	WORK.
3.F.C. 3.F.D.	
4. DEB	RIS AND WASTE REMOVAL
4.A.	REMOVE DEBRIS, JUNK, AND TRASH FROM SITE.
4.B.	REMOVE FROM SITE ALL MATERIALS NOT TO BE REUSED ON SITE; DO NOT BU
4.C.	LEAVE SITE IN CLEAN CONDITION, READY FOR SUBSEQUENT WORK.

EAVE SITE IN CLEAN CONDITION, READY FOR SUBSEQUENT W CLEAN UP SPILLAGE AND WIND-BLOWN DEBRIS FROM PUBLIC AND PRIVATE LANDS.

# 033000 - CAST-IN-PLACE CONCRETE

-IN-PLACE CONCRETE - GENERAL PROVIDE IN ACCORDANCE WITH STRUCTURAL DRAWINGS AND CIVIL DRAWINGS UNLESS OTHERWISE

END OF SECTION

END OF SECTION

MAINTAIN ON SITE ONE SET OF THE FOLLOWING RECORD DOCUMENTS; RECORD ACTUAL REVISIONS

ICES. HAZARDOUS TO ADJACENT

ENTRANCES AND EXITS; G ENTRANCES AND

HAT ARE IN USE E-OFFS THAT ARE IN

OUNDATIONS OF

ON CASUAL FIELD IOWN. 9 INSTALLATION. ING CONDITIONS THAT

R AREAS THAT ARE OF CONSTRUCTION ERRUPTIONS REQUIRED MAGE, HUMIDITY

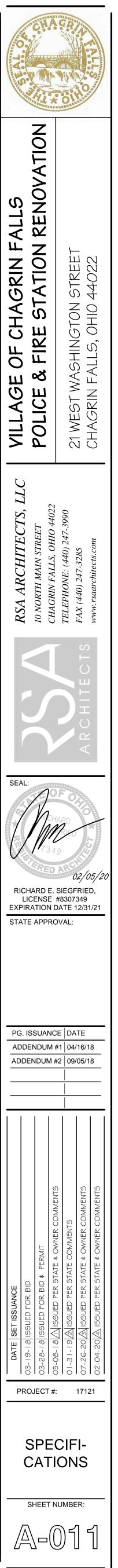
NEW WORK. TION, AND ELECTRICAL):

ION; MAINTAIN ACCESS RE TO BE REPLACED NEW SYSTEMS ARE

6 AND REQUIRED TIES BEFORE REMOVAL. NING THOSE ABOVE POSSIBLE, OTHERWISE

G IF NECESSARY. FIED FOR CUTTING NEW REMOVAL WORK.

URN OR BURY.



#### SECTION 042000 - UNIT MASONRY 1. SUBMITTALS 1.A. PRODUCT DATA 1.A.A. CONCRETE MASONRY UNITS 1.A.B. BRICK UNITS 1.A.C. REINFORCEMENT AND ANCHORAGE 1.A.D. MORTAR 1.A.E. ACCESSORIES 1.A.F. FLASHING 1.B. SAMPLES 1.B.A. BRICK 2. QUALITY ASSURANCE 2.A. COMPLY WITH PROVISIONS OF ACI 530/530.1/ERTA, EXCEPT WHERE EXCEEDED BY REQUIREMENTS OF THE CONTRACT DOCUMENTS 2.B. PROTECTION OF MASONRY: DURING ERECTION, COVER TOPS OF WALLS, PROJECTIONS AND SILLS WITH WATERPROOF SHEETING AT END OF EACH DAY'S WORK. COVER PARTIALLY COMPLETED MASONRY WHEN CONSTRUCTION IS NOT IN PROGRESS. CONCRETE MASONRY UNITS 3.A. SPECIAL SHAPES: PROVIDE BULLNOSE BLOCK AT ALL EXTERIOR CORNERS, MASONRY OPENINGS, AND WHERE INDICATED ON DRAWINGS. 3.B. LOAD-BEARING UNITS: ASTM C90, NORMAL WEIGHT 3.C. NON-LOADBEARING UNITS: ASTM C129 4. BRICK UNITS 4.A. FACING BRICK: ASTM C652, TYPE HBA 4.B. PRODUCT: GENERAL SHALE BRICK, BUCKINGHAM TUDOR MODULAR 5. MORTAR AND GROUT MATERIALS 5.A. MASONRY CEMENT: ASTM C91, TYPE S 5.B. PORTLAND CEMENT: ASTM C150, TYPE I 5.C. HYDRATED LIME: ASTM C207, TYPE S 5.D. MORTAR AGGREGATE: ASTM C144 5.E. GROUT AGGREGATE: ASTM C404 5.F. WATER: CLEAN AND POTABLE 5.G. MORTAR PIGMENTS: COMPOUNDED FOR USE IN MORTAR MIXES AND COMPLYING WITH ASTM C979. USE ONLY PIGMENTS WITH A RECORD OF SATISFACTORY PERFORMANCE IN MASONRY MORTAR. 5.H. COLORED CEMENT PRODUCT: PACKAGED BLEND MADE FROM PORTLAND CEMENT AND HYDRATED LIME AND MORTAR PIGMENTS, ALL COMPLYING WITH SPECIFIED REQUIREMENTS AND CONTAINING NO OTHER INGREDIENTS. 6. REINFORCEMENT AND ANCHORAGE 6.A. SINGLE WITHE JOINT REINFORCEMENT: LADDER TYPE; ASTM A82 STEEL WIRE, HOT DIP GALVANIZED AFTER FABRICATION TO ASTM A153. CLASS B 6.B. MULTIPLE WYTHE JOINT REINFORCEMENT: LADDER TYPE; FABRICATED WITH MOISTURE DRIP; ASTM A82 STEEL WIRE, HOT DIP GALVANIZED AFTER FABRICATION TO ASTM A153 CLASS B 6.C. TWO-PIECE WALL TIES: FORMED STEEL WIRE, ADJUSTABLE, EYE AND PINTLE TYPE, HOT DIP GALVANIZED TO ASTM A153, CLASS B 7 FLASHINGS 7.A. COPPER/KRAFT PAPER FLASHING: 3 0Z/SQ FT SHEET COPPER BONDED TO FIBER REINFORCED ASPHALT TREATED KRAFT PAPER 8. ACCESSORIES 8.A. PREFORMED CONTROL JOINTS: POLYVINYL CHLORIDE MATERIAL; PROVIDE WITH CORNER AND TEE ACCESSORIES, FUSED JOINTS 8.B. JOINT FILLER: CLOSED CELL NEOPRENE; OVERSIZED 50 PERCENT OF JOINT WIDTH; SELF EXPANDING: MAXIMUM LENGTHS AVAILABLE 8.C. CAVITY MORTAR CONTROL: SEMI-RIGID POLYETHYLENE OR POLYESTER MESH PANELS, SIZED TO THICKNESS OF WALL CAVITY, AND DESIGNED TO PREVENT MORTAR DROPPINGS FROM CLOGGING WEEPS AND CAVITY VENTS AND TO ALLOW PROPER CAVITY DRAINAGE 8.D. WEEPS: ROUND PLASTIC WITH COTTON WICK AND STAINLESS SCREEN INSERT 8.E. BITUMINOUS DAMPPROOFING: EMUSLIFIED ASPHALT; ASTM D1227; WITH FIBER REINFORCEMENT TYPF II 8.F. ASPHALT PRIMER: ASTM D41, COMPATIBLE WITH SUBSTRATE 8.G. SEALING MASTIC: ASPHALT ROOF CEMENT, ASTM D2822, TYPE I 8.H. CLEANING SOLUTION: NON-ACIDIC, NOT HARMFUL TO MASONRY WORK OR ADJACENT MATERIALS 9. MORTAR AND GROUT MIXES 9.A. MORTAR FOR UNIT MASONRY: ASTM C270 USING THE PROPERTY SPECIFICATION 9.A.A. EXTERIOR, LOADBEARING MASONRY: TYPE S 9.A.B. EXTERIOR, NON-LOADBEARING MASONRY: TYPE N 9.A.C. EXTERIOR, POINTING MORTAR: TYPE N 9.A.D. INTERIOR, LOADBEARING MASONRY: TYPE N 9.A.E. INTERIOR, NON-LOADBEARING MASONRY: TYPE N 9.B. PIGMENTED MORTAR: USE COLORED CEMENT PRODUCT OR SELECT AND PROPORTION PIGMENTS WITH OTHER INGREDIENTS TO PRODUCE COLOR REQUIRED. DO NOT ADD PIGMENTS TO COLORED CEMENT PRODUCTS 9.B.A. USE PIGMENTED MORTAR FOR EXPOSED MORTAR JOINTS UNLESS OTHERWISE NOTED. 9.C. GROUT: ASTM C476: CONSISTENCY REQUIRED TO FILL COMPLETELY VOLUMES INDICATED FOR GROUTING; FINE GROUT FOR SPACES WITH SMALLEST HORIZONTAL DIMENSION OF 2 INCHES OR LESS: COARSE GROUT FOR SPACES WITH SMALLEST HORIZONTAL DIMENSION GREATER THAN 2 INCHES 10. EXAMINATION 10.A. VERIFY THAT FIELD CONDITIONS ARE ACCEPTABLE AND ARE READY TO RECEIVE WORK. 10.B. VERIFY THAT BUILT-IN ITEMS ARE IN PROPER LOCATION, AND READY FOR ROUGHING INTO MASONRY WORK. 11. PREPARATION 11.A. PROVIDE TEMPORARY BRACING DURING INSTALLATION OF MASONRY WORK. MAINTAIN IN PLACE UNTIL BUILDING STRUCTURE PROVIDES PERMANENT BRACING. 11.B. HOT AND COLD WEATHER REQUIREMENTS: COMPLY WITH REQUIREMENTS OF ACI 530/530.1/ERTA OR APPLICABLE BUILDING CODE, WHICHEVER IS MORE STRINGENT. 12. COURSING 12.A. ESTABLISH LINES, LEVELS AND COURSING INDICATED. PROTECT FROM DISPLACEMENT 12.B. MAINTAIN MASONRY COURSES TO UNIFORM DIMENSION. FORM VERTICAL AND HORIZONTAL JOINTS OF UNIFORM THICKNESS. 13. PLACING AND BONDING 13.A. LAY SOLID MASONRY UNITS IN FULL BED OF MORTAR, WITH FULL HEAD JOINTS, UNIFORMLY JOINTED WITH OTHER WORK. 13.B. LAY HOLLOW MASONRY UNITS WITH FACE SHELL BEDDING ON HEAD AND BED JOINTS. 13.C. REMOVE EXCESS MORTAR AND MORTAR SMEARS AS WORK PROGRESSES. 13.D. INTERLOCK INTERSECTIONS AND EXTERNAL CORNERS. 13.E. CUT MORTAR JOINTS FLUSH WHERE WALL TILE IS SCHEDULED OR RESILIENT BASE IS SCHEDULES 13.F. ISOLATE MASONRY PARTITIONS FROM VERTICAL STRUCTURAL FRAMING MEMBERS WITH A CONTROL JOINT. 13.G. ISOLATE TOP JOINT OF MASONRY PARTITIONS FROM HORIZONTAL STRUCTURAL FRAMING MEMBERS AND SLABS OR DECKS WITH COMPRESSIBLE JOINT FILLER. 14. WEEPS/CAVITY VENTS 14.A. INSTALL WEEPS IN VENEER AND CAVITY WALLS AT 24 INCHES ON CENTER HORIZONTALLY ABOVETHROUGH-WALL FLASHING, ABOVE SHELF ANGLES AND LINTELS, AND AT BOTTOM OF WALLS. 15. CAVITY MORTAR CONTROL 15.A. DO NOT PERMIT MORTAR TO DROP OR ACCUMULATE INTO CAVITY AIR SPACE OR TO PLUG WEEP/CAVITY VENTS. 15.B. INSTALL CAVITY MORTAR NET AT BASE OF CAVITY AND AT OTHER FLASHING LOCATIONS AS RECOMMENDED BY MANUFACTURER. 16. REINFORCEMENT AND ANCHORAGE 16.A. UNLESS OTHERWISE INDICATED ON DRAWINGS OR SPECIFIED UNDER SPECIFIC WALL TYPE, INSTALL HORIZONTAL JOINT REINFORCEMENT 16 INCHES ON CENTER 16.B. PLACE MASONRY JOINT REINFORCEMENT IN FIRST AND SECOND HORIZONTAL JOINTS ABOVE AND BELOW OPENINGS. EXTEND MINIMUM 16 INCHES EACH SIDE OF OPENING. 16.C. PLACE CONTINUOUS JOINT REINFORCEMENT IN FIRST AND SECOND JOINT BELOW TOP OF WALLS. 16.D. LAP JOINT REINFORCEMENT ENDS MINIMUM 6 INCHES. 17. MASONRY FLASHINGS 17.A. WHETHER OR NOT SPECIFICALLY INDICATED, INSTALL MASONRY FLASHING TO DIVERT WATER TO EXTERIOR AT ALL LOCATIONS WHERE DOWNWARD FLOW OF WATER WILL BE INTERRUPTED. 17.A.A. EXTEND FLASHINGS FULL WIDTH AT SUCH INTERRUPTIONS AND AT LEAST 4 INCHES INTO ADJACENT MASONRY OR TURN UP AT LEAST 4 INCHES TO FORM WATERTIGHT PAN AT NON-MASONRY CONSTRUCTION 17.A.B. REMOVE OR COVER PROTRUSIONS OR SHARP EDGES THAT COULD PUNCTURE FLASHINGS. 17.A.C. SEAL LAPPED ENDS AND PENETRATIONS OF FLASHING BEFORE COVERING WITH MORTAR. 18. LINTELS 18.A. INSTALL LOOSE LINTELS OVER OPENINGS. SIZE AS INDICATED ON DRAWINGS. MAINTAIN MINIMUM 6 INCH BEARING ON EACH SIDE OF OPENING. 19. GROUTED COMPONENTS 19.A. SUPPORT AND SECURE REINFORCING BARS FROM DISPLACEMENT. MAINTAIN POSITION WITHIN 1/2 INCH OF DIMENSIONED POSITION. 19.B. PLACE AND CONSOLIDATE GROUT FILL WITHOUT DISPLACING REINFORCING. 19.C. AT BEARING LOCATIONS, FILL MASONRY CORES WITH GROUT FOR A MINIMUM 12 INCHES EITHER SIDE OF OPENING. 19.D. IN ADDITION TO STRUCTURAL LOCATIONS, PROVIDE FULLY GROUTED MASONRY CORES AT THE FOLLOWING 19.D.A. ATTACHMENT OF WALL-MOUNTED ITEMS IN TOILET ROOMS 19.D.B. MASONRY BELOW GRADE 19.D.C. MASONRY CORES WHERE REINFORCING OCCURS 19.D.D. OTHER LOCATIONS AS INDICATED ON DRAWINGS 20. CONTROL AND EXPANSION JOINTS 20.A. DO NOT CONTINUE HORIZONTAL JOINT REINFORCEMENT THROUGH CONTROL AND EXPANSION 20.B. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND AS INDICATED ON DRAWINGS. 21. BUILT-IN WORK 21.A. AS WORK PROGRESSES, INSTALL BUILT-IN METAL DOOR FRAMES AND OTHER ITEMS TO BE BUILT

NTO THE WORK AND FURNISHED UNDER OTHER SECTIONS. INSTALL BUILT-IN ITEMS PLUMB, LEVEL AND TRUE TO LINE. 21.B. BED ANCHORS OF METAL DOOR AND GLAZED FRAMES IN ADJACENT MORTAR JOINTS. FILL FRAME VOIDS SOLID WITH GROUT. 21.B.A. FILL ADJACENT MASONRY CORES WITH GROUT MINIMUM 12 INCHES FROM FRAMED OPENINGS. 22. PARGING 22.A. DAMPEN MASONRY WALLS PRIOR TO PARGING. 22.B. SCARIFY EACH PARGING COAT TO ENSURE FULL BOND TO SUBSEQUENT COAT. 22.C. PARGE MASONRY WALLS IN TWO UNIFORM COATS OF MORTAR TO A TOTAL THICKNESS OF 3/4 INCH.

22.D. STEEL TROWEL SURFACE SMOOTH AND FLAT WITH A MAXIMUM SURFACE VARIATION OF 1/8 INCH PER FOOT 22.E. STRIKE TOP EDGE OF PARGING AT 45 DEGREES.

23. DAMPPROOFING 23.A. PRIME SURFACES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

23.B. APPLY BITUMEN BY TROWEL. 23.C. APPLY BITUMEN IN ONE COAT, CONTINUOUS AND UNIFORM, AT A RATE OF 12.5 SQ FT PER GALLON

AT 1/8 INCH WET FILM THICKNESS. 23.D. APPLY FROM 2 INCHES BELOW FINISH GRADE ELEVATION DOWN TO TOP OF FOOTINGS.

23.E. SEAL ITEMS PROJECTING THROUGH DAMPPROOFING SURFACE WITH MASTIC. 24. CLEANING.

24.A. REMOVE EXCESS MORTAR AND MORTAR DROPPINGS. 24.B. REPLACE DEFECTIVE MORTAR. MATCH ADJACENT WORK. 24.C. CLEAN SOILED SURFACES WITH CLEANING SOLUTION.

END OF SECTION

#### SECTION 044300 - STONE MASONRY

#### 1. SUBMITTALS 1.A. PRODUCT DATA

- 1.A.A. EACH TYPE OF STONE, STONE ACCESSORY, AND MANUFACTURE 1.B. SHOP DRAWINGS 1.B.A. INDICATE PROPOSED LAYOUT AND LENGTHS OF ALL CAPS 1.C. SAMPLES
- 1.C.A. LIMESTONE
- 2. QUALITY ASSURANCE
- 2.A. COMPLY WITH PROVISIONS OF ACI 530/530.1/ERTA, EXCEPT WHERE E OF THE CONTRACT DOCUMENTS 2.B. PROTECTION OF MASONRY: DURING ERECTION, COVER TOPS OF WALL WITH WATERPROOF SHEETING AT END OF EACH DAY'S WORK. COVER MASONRY WHEN CONSTRUCTION IS NOT IN PROGRESS.
- LIMESTONE WALL CAPS 3.A. FABRICATE IN ACCORDANCE WITH RECOMMENDATIONS OF INDIANA L 3.A. FINISH: MATCH EXISTING WALL CAP COLOR AND FINISH
- 3.B. CAP SIZE: AS INDICATED ON DRAWINGS 4. MORTAR AND GROUT MATERIALS
- 4.A. MASONRY CEMENT: ASTM C91 4.B. PORTLAND CEMENT: ASTM C150, TYPE I
- 4.C. HYDRATED LIME: ASTM C207, TYPE S 4.D. MORTAR AGGREGATE: ASTM C144
- 4.E. WATER: CLEAN AND POTABLE 4.F. MORTAR PIGMENTS: COMPOUNDED FOR USE IN MORTAR MIXES AND
- USE ONLY PIGMENTS WITH A RECORD OF SATISFACTORY PERFORMA 5. ANCHORAGE: FABRICATED WITH TABS OR DOWELS DESIGNED TO ENGAG
- UNITS AND HOLES FOR FASTENERS OR POSTINGTALLED ANCHOR BOLTS F SUBSTRATES OR FRAMING AS INDICATED. 5.A. MATERIAL:
- 5.A.A. DOWELS: STAINLESS STEEL, ASTM A276 5.A.B. ANCHORS: STAINLESS STEEL, ASTM A240
- 6. FLASHINGS 6.A. COPPER-LAMINATED FLASHING: 5 OZ/SQ FT SHEET COPPER BONDED LAYERS OF GLASS-FIBER CLOTH

## 7. ACCESSORIES

7.A. COMPRESSIBLE FILLER: PREMOLDED FILLER STRIPS, ASTM D1056; N 7.B. CEMENTITIOUS DAMPPROOFING: FORMULATION RECOMMENDED BY AND NONSTAINING TO STONE, COMPATIBLE WITH JOINT SEALANTS, A ANCHORS AND ATTACHMENTS. 7.C. MASONRY CLEANER: APPROVED FOR INTENDED USE BY CLEANER MA PRODUCER.

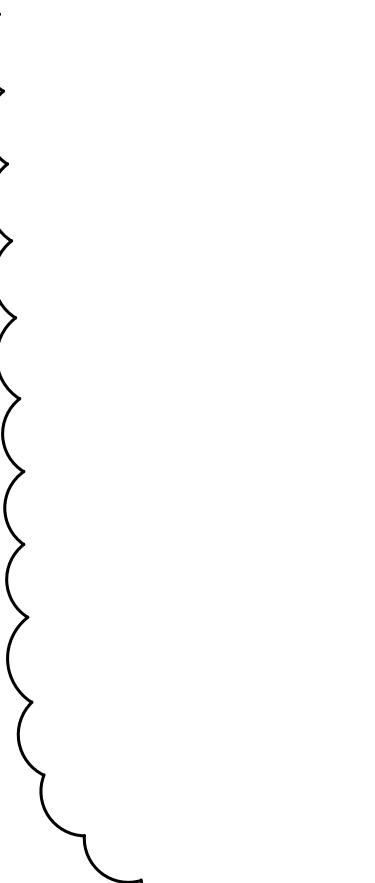
#### 8. MORTAR AND GROUT MIXES

- 8.A. MORTAR FOR SETTING STONE: TYPE N 8.B. MORTAR FOR POINTING STONE: TYPE O
- 8.C. PIGMENTED MORTAR: USE COLORED CEMENT PRODUCT OR SELECT A WITH OTHER INGREDIENTS TO PRODUCE COLOR REQUIRED. DO NOT / CEMENT PRODUCTS.

#### 9. EXAMINATION

- 9.A. VERIFY THAT FIELD CONDITIONS ARE ACCEPTABLE AND ARE READY 10. INSTALLATION - GENERAL 10.A. PREPARE, SET, ADJUST AND CLEAN STONE IN ACCORDANCE WITH REA
- LIMESTONE HANDBOOK. 11. PREPARATION
- 11.A. HOT AND COLD WEATHER REQUIREMENTS: COMPLY WITH REQUIREME OR APPLICABLE BUILDING CODE, WHICHEVER IS MORE STRINGENT. 11.B. CLEAN DIRTY OR STAINED STONE SURFACES BEFORE SETTING.
- 12. SETTING 12.A. PERFORM NECESSARY FIELD CUTTING AND TRIMMING AS STONE IS 12.B. SET STONE TO COMPLY WITH REQUIREMENTS INDICATED ON DRAWING FASTENERS AND OTHER ATTACHMENTS INDICATED OR NECESSARY
- SET STONE ACCURATELY IN LOCATIONS INDICATED WITH EDGES AND TO ESTABLISHED RELATIONSHIPS AND INDICATED TOLERANCES. 12.C. MAINTAIN UNIFORM JOINT WIDTHS. 12.D. PROVIDE SEALANT JOINTS OF WIDTHS AND AT LOCATIONS INDICATED
- 13. ADJUSTING AND CLEANING
- 13.A. REMOVE AND REPLACE BROKEN, CHIPPED, STAINED OR OTHERWISE I 13.B. PROVIDE IN-PROGRESS CLEANING AND FINAL CLEANING OF STONE

END OF SECTION



	SECTION 055000 - METAL FABRICATIONS	SECTION 064100 - ARCHITECTURAL WOOD CASEWORK
URED PRODUCT	<ol> <li>SUBMITTALS</li> <li>SHOP DRAWINGS</li> <li>A. PROFILES, SIZES, CONNECTION ATTACHMENTS, REINFORCING, ANCHORAGE, SIZE AND TYPE OF FASTENERS AND ACCESSORIES. INCLUDE ERECTION DRAWINGS, ELEVATIONS AND DETAILS WHERE APPLICABLE.</li> </ol>	<ol> <li>UNLESS OTHERWISE SPECIFIED OR INDICATED ON DRAWINGS, WORK OF THIS SECTION.</li> <li>CONTRACTOR SHALL COORDINATE AND PROVIDE ALL BLOCKING, UTILITIES AND REQUIRED FOR INSTALLATION.</li> <li>SUBMITTALS</li> </ol>
RE EXCEEDED BY REQUIREMENTS ALLS, PROJECTIONS AND SILLS IVER PARTIALLY COMPLETED	<ol> <li>MATERIALS - STEEL</li> <li>A. STEEL SECTIONS: ASTM A36</li> <li>B. STEEL TUBING: ASTM A500, GRADE B COLD-FORMED STRUCTURAL TUBING</li> <li>PLATES: ASTM A283</li> <li>PLOTES: ASTM A53</li> <li>PIPE: ASTM A53</li> <li>BOLTS, NUTS AND WASHERS: ASTM A325, TYPE 1, GALVANIZED TO ASTM A153 WHERE CONNECTING GALVANIZED COMPONENTS</li> <li>WELDING: MATERIALG, ANG D11 TYPE REQUIRED FOR MATERIAL GREING WELDED</li> </ol>	<ul> <li>2.A. SHOP DRAWINGS</li> <li>2.A.A. PLANS, ELEVATIONS, SECTIONS DETAILS AND ATTACHMENTS TO OTHER WORK FABRICATION DETAILS, INCLUDING TYPES AND LOCATIONS OF HARDWARE. INSTALLATION DETAILS, INCLUDING FIELD JOINTS AND FILLER PANELS. SH SUPPORT AND BLOCKING IN WALLS.</li> <li>2.B. PRODUCT DATA</li> <li>2.B.A. HARDWARE AND ACCESSORIES</li> </ul>
NA LIMESTONE HANDBOOK	<ul> <li>2.F. WELDING MATERIALS: AWS D1.1, TYPE REQUIRED FOR MATERIALS BEING WELDED</li> <li>2.G. SHOP AND TOUCH-UP PRIMER: SSPC-PAINT 15, COMPLYING WITH VOC LIMITATIONS OF AUTHORITIES HAVING JURISDICTION</li> <li>2.H. TOUGH-UP PRIMER FOR GALVANIZED SURFACES: SSPC-PAINT 20, TYPE I-INORGANIC, COMPLYING WITH VOC LIMITATIONS OF AUTHORITIES HAVING JURISDICTION</li> <li>3. MATERIALS - OTHER</li> </ul>	<ol> <li>ARCHITECTURAL WOOD CASEWORK - GENERAL</li> <li>A. QUALITY GRADE: UNLESS OTHERWISE INDICATED PROVIDE PRODUCTS OF QUALI AWI ARCHITECTURAL WOODWORK STANDARDS FOR CUSTOM GRADE.</li> <li>B. CABINETS</li> <li>B.A. EXPOSED INTERIOR SURFACES: PLASTIC LAMINATE</li> </ol>
ND COMPLYING WITH ASTM C979. RMANCE IN MASONRY MORTAR. GAGE KERFS OR HOLES IN STONE .TS FOR FASTENING TO	<ul> <li>3.A. GROUT: CRD-C 621 AND ASTM C1107. CEMENT BASED, NON SHRINK, NON-STAINING AND NON-METALLIC</li> <li>4. FABRICATED ITEMS</li> <li>4.A. LADDERS: STEEL, IN COMPLIANCE WITH ANSIA14.3; WITH MOUNTING BRACKETS AND ATTACHMENTS; PRIME PAINT FINISH</li> <li>4.A.A. SIDE RAILS: 1/2 X 2 INCHES MEMBERS SPACED AT 20 INCHES</li> <li>4.A.B. RUNGS: 3/4 INCH DIAMETER SOLID ROUND BAR SPACED 12 INCHES ON CENTER; NON-SLIP FINISH. PLUG WELD AND GRIND SMOOTH.</li> <li>4.A.C. SPACE RUNGS 7-1/2 INCHES FROM WALL SURFACE</li> <li>4.A.D. SUPPORT LADDER AT TOP AND BOTTOM AND NOT MORE THAN 60 INCHES 0.C. WITH WELDED</li> </ul>	<ul> <li>3.B.B. EXPOSED INTERIOR SURFACES: PLASTIC LAMINATE</li> <li>3.B.C. SEMI-EXPOSED SURFACES: MELAMINE</li> <li>3.B.D. CONCEALED SURFACES: MANUFACTURER'S OPTION</li> <li>3.B.E. DOOR AND DRAWER FRONT EDGE PROFILES: SQUARE EDGE WITH THIN APP</li> <li>3.B.F. DOOR AND DRAWER FRONT RETENTION PROFILES: FIXED PANEL</li> <li>3.B.G. CASEWORK CONSTRUCTION TYPE: TYPE A - FRAMELESS</li> <li>3.B.H. LAYOUT FOR CABINET AND DOOR FRONTS: FLUSH PANEL</li> <li>3.B.I. ADJUSTABLE SHELF LOADING: 50 LBS. PER SQ. FT.</li> <li>3.B.I.A. DEFLECTION: L/144</li> </ul>
DED WITH ASPHALT BETWEEN TWO	<ul> <li>OR BOLTED STEEL BRACKETS. SIZE BRACKETS TO SUPPORT DESIGN LOADS SPECIFIED IN ANSI A14.3.</li> <li>4.B. BOLLARDS: STEEL PIPE, CONCRETE FILLED, CROWNED CAP, AS DETAILED; GALVANIZED FINISH</li> <li>4.C. LINTELS: AS DETAILED; PRIME PAINT FINISH, GALVANIZED FINISH AT EXTERIOR</li> <li>4.C.A. LOCATION: ALL NEW OPENINGS IN EXISTING AND NEW MASONRY WALLS</li> <li>4.C.B. UNLESS OTHERWISE INDICATED, FOR EACH 4 INCH THICKNESS OF MASONRY PROVIDE (1) 4x3-1/2x3/8 STEEL ANGLE LLV</li> <li>4.C.C. MINIMUM BEARING 6 INCH EACH END</li> </ul>	<ul> <li>3.B.J. DRAWER SIDE CONSTRUCTION: MULTIPLE-DOVETAILED OR DOWELED</li> <li>4. PANEL MATERIALS</li> <li>4.A. PLYWOOD, SOFTWOOD: PS1; FIVE PLY CONSTRUCTION FROM 1/2 INCH TO 1-1/8 INC FOR 1-1/4 INCH THICK</li> <li>4.B. PLYWOOD, HARDWOOD FACE VENEER: HPVA HP-1, PREMIUM GRADE PLAIN SLICE</li> <li>4.C. MEDIUM DENSITY FIBERBOARD: ANSI A208.2</li> </ul>
6; NEOPRENE, URETHANE OR PVC BY INDIANA LIMESTONE INSTITUTE IS, AND NONCORROSIVE TO	<ul> <li>4.D. HANDRAILS AND GUARDRAILS: STEEL PIPE, MANUFACTURE TO DETAILS AND DIMENSIONS INDICATED; GRIND BENDS AND WELDS SMOOTH AND FLUSH</li> <li>4.D.A. PIPE: UNLESS OTHERWISE INDICATED, PROVIDE 1-1/4 INCH MINIMUM NOMINAL DIAMETER; 1.66 O.D.</li> <li>4.D.B. CLOSE PIPE ENDS WITH 3/16 INCH CONTINUOUSLY WELDED STEEL PLATE</li> <li>4.D.C. EXTERIOR HANDRAILS, GUARDRAILS AND BRACKETS SHALL BE HOT-DIPPED GALVANIZED.</li> </ul>	<ul> <li>4.D. PARTICLEBOARD: ANSI A208.1, GRADE M-2</li> <li>4.E. HARDBOARD: AHA A135.4, CLASS 1 TEMPERED</li> <li>5. PLASTIC LAMINATE: NEMA LD3</li> <li>5.A. HORIZONTAL SURFACES: HGS, 0.048 INCH</li> <li>5.B. VERTICAL SURFACES: VGS, 0.028 INCH</li> </ul>
R MANUFACTURER AND STONE	<ul> <li>4.E. COUNTERTOPS: STAINLESS STEEL. COORDINATE REQUIREMENTS WITH POLICE DEPARTMENT.</li> <li>5. FINISHES - STEEL</li> <li>5.A. PRIME PAINT ALL STEEL ITEMS</li> <li>5.A.A. EXCEPTIONS: GALVANIZE ALL EXTERIOR STEEL FABRICATIONS AND ACCESSORIES</li> <li>5.B. PREPARE SURFACES TO BE PRIMED IN ACCORDANCE WITH SSPC-SP2</li> <li>5.C. PRIME PAINTING: ONE COAT</li> </ul>	<ul> <li>5.C. POST-FORMED HORIZONTAL SURFACES: HGP, 0.039 INCH</li> <li>5.D. POST-FORMED VERTICAL SURFACES: VGP, 0.028 INCH</li> <li>5.E. DRAWER AND CABINET LINER: CLS, 0.020 INCH</li> <li>6. HARDWARE: BHMA A156.9, TYPES AS INDICATED FOR QUALITY GRADE SPECIFIED</li> <li>6.A. ADJUSTABLE SHELF SUPPORTS: STANDARD SIDE-MOUNTED SYSTEM USING M</li> </ul>
DT ADD PIGMENTS TO COLORED	<ul> <li>5.D. GALVANIZING: GALVANIZE AFTER FABRICATION TO ASTM A123 REQUIREMENTS.</li> <li>6. EXAMINATION</li> <li>6.A. VERIFY THAT FIELD CONDITIONS ARE ACCEPTABLE AND ARE READY TO RECEIVE WORK.</li> <li>7. PREPARATION</li> </ul>	<ul> <li>PIN SUPPORTS AND COORDINATED SELF RESTS, POLISHED CHROME FINISH, FO SPACING ADJUSTMENTS</li> <li>6.B. DOOR AND DRAWER PULLS: U-SHAPED WIRE PULL, 5/16 INCH DIAMETER MINIMU</li> <li>6.C. CABINET LOCKS: KEYED CYLINDER, TWO KEYS PER LOCK, MASTER KEYED, STEE FINISH</li> </ul>
H RECOMMENDATIONS OF INDIANA EMENTS OF ACI 530/530.1/ERTA T.	<ul> <li>7.A. CLEAN AND STRIP PRIMED STEEL ITEMS TO BARE METAL WHERE SITE WELDING IS REQUIRED.</li> <li>8. INSTALLATION</li> <li>8.A. INSTALL ITEMS PLUMB AND LEVEL, ACCURATELY FITTED, FREE FROM DISTORTION OR DEFECTS.</li> <li>8.B. FIELD WELD COMPONENTS INDICATED. PERFORM FIELD WELDING IN ACCORDANCE WITH AWS D1.1.</li> <li>8.C. AFTER ERECTION, PRIME WELDS, ABRASIONS AND SURFACES NOT SHOP PRIMED OR GALVANIZED.</li> <li>END OF SECTION</li> </ul>	<ul> <li>6.D. CATCHES: GRADE 1, MAGNETIC, HEAVY-DUTY</li> <li>6.E. DRAWER SLIDES</li> <li>6.E.A. TYPE: FULL EXTENSION</li> <li>6.E.B. BOX DRAWER SLIDES: GRADE 1 HD-100</li> <li>6.E.C. FILE DRAWER SLIDES: GRADE 1 HD-200</li> <li>6.E.D. PENCIL DRAWER SLIDES: GRADE 1</li> <li>6.E.E. MOUNTING: SIDE MOUNT</li> <li>6.E.F. STOPS: INTEGRAL TYPE</li> <li>6.E.G. FEATURES: PROVIDE SELF CLOSING, STAY CLOSED TYPE</li> </ul>
EIS SET. WINGS. INSTALL SUPPORTS, ARY TO SECURE STONE IN PLACE. AND FACES ALIGNED ACCORDING	SECTION OG1000 - ROUGH CARPENTRY	<ul> <li>6.F. HINGES: GRADE 1, EUROPEAN STYLE CONCEALED TYPE, STEEL WITH SATIN FINIS</li> <li>6.F.A. OPENING ANGLE: 120 DEGREES</li> <li>6.F.B. QUANTITY: PER MANUFACTURER'S RECOMMENDATIONS FOR WEIGHT OF DO</li> </ul>
ATED. SE DAMAGED STONE. NE SURFACES.	<ol> <li>SUBMITTALS</li> <li>1.A. PRODUCT DATA</li> <li>1.A.A. TECHNICAL DATA ON WOOD PRESERVATIVE MATERIALS</li> <li>DIMENSION LUMBER FOR CONCEALED APPLICATIONS</li> <li>2.A. COMPLY WITH PS 20 AND REQUIREMENTS OF SPECIFIED GRADING AGENCIES</li> </ol>	<ol> <li>ACCESSORIES</li> <li>ADHESIVE: TYPE RECOMMENDED BY FABRICATOR TO SUIT APPLICATION</li> <li>FASTENERS: SIZE AND TYPE TO SUIT APPLICATION</li> <li>BOLTS, NUTS, WASHERS, LAGS, PINS AND SCREWS: SIZE AND TYPE TO SUIT AP GALVANIZED OR CHROME-PLATED FINISH IN CONCEALED LOCATIONS; STAINLES CHROME-PLATED FINISH IN EXPOSED LOCATIONS</li> </ol>
	<ol> <li>2.A. COMINET WITTING 20 AND REQUIREMENTS OF SELECTIED OR ADINO ADENCES</li> <li>2.B. SIZES: NOMINAL SIZES AS INDICATED ON DRAWINGS, S4S</li> <li>2.C. MOISTURE CONTENT: S-DRY OR MC19</li> <li>3. CONSTRUCTION PANELS</li> <li>3.A. SHEATHING: PLYWOOD, PS1, GRADE C-C, EXTERIOR EXPOSURE.</li> </ol>	<ul> <li>7.D. GROMMETS: HIGH-IMPACT ABS CABLE HOLE COVER, 3 INCH INSIDE DIAMETER, TOP; COLOR AS SELECTED</li> <li>8. FABRICATION</li> <li>8.A. EDGING: FIT SHELVES, DOORS AND EXPOSED EDGES WITH SPECIFIED EDGING.</li> </ul>
$\frown$	<ul> <li>3.B. PLYWOOD CONCEALED FROM VIEW BUT LOCATED WITHIN EXTERIOR ENCLOSURE: PS1, A-D OR BETTER</li> <li>3.C. PLYWOOD AT BUILDING INTERIOR: CLASS C OR BETTER</li> <li>3.D. OTHER LOCATIONS: PS1, C-D PLUGGED OR BETTER</li> <li>4. ACCESSORIES</li> </ul>	THAN ONE PIECE FOR ANY SINGLE LENGTH. 8.A.A. PLASTIC LAMINATE SELF EDGE: TYPICAL UNLESS OTHERWISE NOTED 9. EXAMINATION 9.A. VERIFY ADEQUACY OF BACKING AND SUPPORT FRAMING.
	<ul> <li>4.A. FASTENERS AND ANCHORS</li> <li>4.A.A. METAL AND FINISH: HOT-DIPPED GALVANIZED STEEL PER ASTM A153 FOR HIGH HUMIDITY AND PRESERVATIVE TREATED WOOD LOCATIONS, UNFINISHED STEEL ELSEWHERE</li> <li>4.A.B. ANCHORS: TOGGLE BOLT TYPE FOR ANCHORAGE TO HOLLOW MASONRY</li> <li>5. FACTORY WOOD TREATMENT - GENERAL</li> <li>5.A. COMPLY WITH REQUIREMENTS OF AWPA U1 - USE CATEGORY SYSTEM FOR WOOD TREATMENTS DETERMINED BY USE CATEGORIES, EXPECTED SERVICE CONDITIONS, AND SPECIFIC APPLICATIONS.</li> </ul>	<ol> <li>INSTALLATION</li> <li>INSTALL WORK IN ACCORDANCE WITH AWI STANDARDS FOR CUSTOM GRADE.</li> <li>SET AND SECURE MATERIALS AND COMPONENTS IN PLACE, PLUMB AND LEVEL</li> <li>USE FIXTURE ATTACHMENTS IN CONCEALED LOCATIONS FOR WALL MOUNTED CO</li> <li>CAREFULLY SCRIBE CASEWORK ABUTTING OTHER COMPONENTS, WITH MAXIMULINCH. DO NOT USE ADDITIONAL OVERLAY TRIM FOR THIS PURPOSE.</li> <li>SECURE CABINETS TO FLOOR USING APPROPRIATE ANGLES AND ANCHORAGES</li> </ol>
$\left\{ \right\}$	<ol> <li>FIRE RETARDANT TREATMENT</li> <li>A. KILN DRY WOOD AFTER TREATMENT TO A MAXIMUM MOISTURE CONTENT OF 19 PERCENT FOR LUMBER AND 15 PERCENT FOR PLYWOOD.</li> <li>CAPABLE OF PROVIDING A MAXIMUM FLAME SPREAD RATING OF 25 WHEN TESTED IN ACCORDANCE WITH ASTM E84, WITH NO EVIDENCE OF SIGNIFICANT COMBUSTION WHEN TEST IS EXTENDED FOR AN ADDITIONAL 20 MINUTES, AND WITH THE FLAME FRONT NOT EXTENDING MORE THAN 10.5 FEET BEYOND THE CENTERLINE OF THE BURNERS AT ANY TIME DURING THE TEST, BOTH</li> </ol>	END OF SECTION SECTION OG6116 - SOLID SURFACING FABRICATIONS
	<ul> <li>BEFORE AND AFTER ACCELERATED WEATHERING TEST PERFORMED IN ACCORDANCE WITH ASTM D2898.</li> <li>6.C. EXTERIOR TYPE: AWPA U1, CATEGORY UCFB, COMMODITY SPECIFICATION H</li> <li>6.C.A. TREAT ALL EXTERIOR ROUGH CARPENTRY ITEMS</li> <li>6.C.B. DO NOT USE TREATED WOOD IN DIRECT CONTACT WITH THE GROUND</li> <li>6.C.C. USE TREATMENT THAT DOES NOT PROMOTE CORROSION OF METAL FASTENERS</li> <li>6.D. INTERIOR TYPE A: AWPA U1, USE CATEGORY UCFA, COMMODITY SPECIFICATION H</li> </ul>	<ol> <li>SUBMITTALS</li> <li>1.A. PRODUCT DATA</li> <li>1.A.A. CATALOG SHEETS, SPECIFICATIONS AND INSTALLATION INSTRUCTIONS</li> <li>1.B. SHOP DRAWINGS</li> <li>1.B.A. FABRICATION DETAILS AND CONNECTION TO ADJACENT WORK</li> <li>1.C. SAMPLES</li> <li>1.C.A. 2 INCH SQUARE, EACH COLOR, PATTERN AN D FINISH</li> </ol>
	<ul> <li>6.D.A. TREAT ALL ROUGH CARPENTRY ITEMS AND BLOCKING UNLESS OTHERWISE NOTED</li> <li>6.D.B. DO NOT USE FIRE RETARDANT TREATED WOOD IN APPLICATIONS EXPOSED TO WEATHER OR WHERE THE WOOD MAY BECOME WET.</li> <li>6.D.C. USE TREATMENT THAT DOES NOT PROMOTE CORROSION OF METAL FASTENERS</li> <li>7. PRESERVATIVE TREATMENT</li> <li>7.A. USE AWPA U1, USE CATEGORY UC2 FOR INTERIOR CONSTRUCTION NOT IN CONTACT WITH THE</li> </ul>	<ol> <li>SOLID SURFACING PANELS: CAST, NONPOROUS, FILLED POLYMER, NOT COATED, LAN COMPOSITE CONSTRUCTION, WITH THROUGH-BODY COLORS</li> <li>FLAME SPREAD INDEX, ASTM E84: LESS THAN 25</li> <li>SMOKE DEVELOPED INDEX, ASTM E84: LESS THAN 25</li> <li>STAIN RESISTANCE, ANSI Z124.3: PASS</li> <li>COLOR: AS SELECTED FROM COLOR GROUPS A OR B</li> <li>FINISH: MATTE</li> <li>PRODUCT: DUPONT CORIAN</li> </ol>
$\langle$	<ul> <li>GROUND, USE CATEGORY UC3B FOR EXTERIOR CONSTRUCTION NOT IN CONTACT WITH THE GROUND, AND USE CATEGORY UC4A FOR ITEMS IN CONTACT WITH THE GROUND.</li> <li>7.B. PRESERVATIVE CHEMICALS: ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION AND CONTAINING NO ARSENIC OR CHROMIUM. DO NOT USE INORGANIC BORON (SBX) FOR SILL PLATES.</li> </ul>	<ul> <li>ACCESSORIES</li> <li>3.A. ADHESIVES, FILLERS AND SEALANTS PER PANEL MANUFACTURER STANDARD MATERIALS</li> </ul>
$\left\{ \right\}$	<ol> <li>PREPARATION</li> <li>8.A. COORDINATE INSTALLATION OF ROUGH CARPENTRY MEMBERS SPECIFIED IN OTHER SECTIONS.</li> <li>9. INSTALLATION</li> <li>9.A. PROVIDE FRAMING AND BLOCKING MEMBERS AS INDICATED AND AS REQUIRED TO SUPPORT FINISHES, FIXTURES, SPECIALTY ITEMS AND TRIM.</li> </ol>	<ul> <li>4. INSTALLATION</li> <li>4.A. INSTALL WORK OF THIS SECTION IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND APPROVED SHOP DRAWINGS.</li> <li>END OF SECTION</li> </ul>
	<ul> <li>9.B. IN WALLS, PROVIDE SOLID WOOD BLOCKING ATTACHED TO STUDS AS BACKING AND SUPPORT FOR ALL WALL-MOUNTED AND WALL-ANCHORED ITEMS, UNLESS OTHER METHOD OF SUPPORT IS EXPLICITLY INDICATED.</li> <li>9.C. WHERE CEILING MOUNTING IS INDICATED, PROVIDE SOLID WOOD BLOCKING AND SUPPLEMENTARY SUPPORTS ABOVE CEILING, UNLESS OTHER METHOD OF SUPPORT IS EXPLICITLY INDICATED.</li> <li>END OF SECTION</li> </ul>	SECTION 072100 - THERMAL INSULATION 1. SUBMITTALS 1.A. PRODUCT DATA 1.A.A. INSULATION PRODUCT CHARACTERISTICS, PERFORMANCE CRITERIA AND PR
<	SECTION 062000 - FINISH CARPENTRY	LIMITATIONS 2. THERMAL INSULATION - GENERAL 2.A. THICKNESS AND R-VALUE AS INDICATED ON DRAWINGS WHEN TESTED IN ACCO C518. 2.B. SIZE: MAX. SIZES AVAILABLE TO AVOID JOINTING TO GREATEST EXTENT POSSIB
<	<ol> <li>SUBMITTALS</li> <li>SHOP DRAWINGS</li> <li>A. MATERIALS, COMPONENT PROFILES, FASTENING METHODS, JOINTING DETAILS AND ACCESSORIES. PROVIDE INFORMATION REQUIRED BY AWI ARCHITECTURAL WOODWORK</li> </ol>	<ol> <li>GLASS FIBER BLANKET INSULATION</li> <li>GLASS FIBER BLANKET INSULATION: ASTM C665, TYPE III, CLASS A; FSK VAPOR RI</li> <li>3.A.A. MAX. FLAME SPREAD: 75</li> <li>3.A.B. MAX. SMOKE DEVELOPED: 150</li> </ol>
<	STANDARDS. 1.B. SAMPLES 1.B.A. WOOD TRIM 2. FINISH CARPENTRY - GENERAL 2.A. QUALITY GRADE: UNLESS OTHERWISE INDICATED, PROVIDE PRODUCTS OF QUALITY SPECIFIED BY	<ol> <li>ACOUSTIC INSULATION: AS SPECIFIED IN SECTION 092116 GYPSUM BOARD ASSEMB</li> <li>EXAMINATION</li> <li>5.A. VERIFY THAT SURFACES AND SITE CONDITIONS ARE READY TO RECEIVE WORK.</li> </ol>
<	AWI ARCHITECTURAL WOODWORK STANDARDS FOR CUSTOM GRADE. 3. LUMBER MATERIALS 3.A. SOFTWOOD LUMBER: PINE, MAXIMUM MOISTURE CONTENT OF 6 PERCENT; QUALITY SUITABLE FOR PAINTED FINISH.	<ol> <li>PREPARATION</li> <li>6.A. CLEAN SUBSTRATES OF SUBSTANCES HARMFUL TO INSULATION OR VAPOR REINCLUDING REMOVING PROJECTIONS CAPABLE OF PUNCTURING VAPOR RETARD INTERFERING WITH INSULATION ATTACHMENT.</li> </ol>
<	<ul> <li>3.B. HARDWOOD LUMBER: RED OAK, PLAIN SAWN, MAXIMUM MOISTURE CONTENT OF 6 PERCENT; WITH VERTICAL GRAIN, QUALITY SUITABLE FOR TRANSPARENT FINISH.</li> <li>4. FIRE RETARDANT TREATMENT (FR-S TYPE): CHEMICALLY TREATED AND PRESSURE IMPREGNATED; CAPABLE OF PROVIDING FLAME SPREAD INDEX OF 25 MAXIMUM, AND SMOKE DEVELOPED INDEX OF 450 MAXIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM E84.</li> </ul>	<ol> <li>INSTALLATION - GENERAL</li> <li>COMPLY WITH INSULATION MANUFACTURER'S INSTRUCTIONS APPLICABLE TO PR APPLICATION INDICATED.</li> <li>EXTEND INSULATION IN THICKNESS INDICATED TO ENVELOP ENTIRE AREA TO BE AND FIT TIGHTLY AROUND OBSTRUCTIONS AND FILL VOIDS WITH INSULATION.</li> <li>APPLY INSULATION TO SUBSTRATES BY METHOD INDICATED, COMPLYING WITH</li> </ol>
<	<ol> <li>5. EXAMINATION</li> <li>5.A. VERIFY ADEQUACY OF BACKING AND SUPPORT FRAMING.</li> <li>6. INSTALLATION</li> </ol>	<ul> <li>7.C. APPLY INSULATION TO SUBSTRATES BY METHOD INDICATED, COMPLYING WITH INSTRUCTIONS. IF NO SPECIFIC METHOD IS INDICATED, BOND UNITS TO SUBSTR OR USE MECHANICAL ANCHORAGE TO PROVIDE PERMANENT PLACEMENT AND S</li> <li>7.D. INSTALL INSULATION WITH VAPOR BARRIER FACING THE HEATED SIDE UNLESS</li> <li>8. INSTALLATION - GLASS FIBER BLANKET INSULATION</li> </ul>
$\int$	<ul> <li>6.A. INSTALL WORK IN ACCORDANCE WITH AWI STANDARDS FOR CUSTOM GRADE.</li> <li>6.B. SET AND SECURE MATERIALS AND COMPONENTS IN PLACE, PLUMB AND LEVEL.</li> <li>6.C. ALL FINISH NAILS TO BE COUNTER SUNK INTO MATERIAL, PUTTY AND SAND SMOOTH TO MATCH MATERIAL BEING INSTALLED. AFTER FINISH STAIN/PAINT IS APPLIED, THERE IS TO BE NO EVIDENCE OF WHERE NAILS ARE INSTALLED.</li> <li>6.D. ALL SCREWS ARE TO BE COUNTERSUNK AND PLUGGED WITH MATERIAL MATCHING THE ITEM BEING</li> </ul>	<ol> <li>INSTALLATION - GLASS FIBER BLANKET INSULATION</li> <li>INSTALL IN ACCORDANCE WITH NAIMA "RECOMMENDATIONS FOR INSTALLING IN RESIDENTIAL AND OTHER LIGHT-FRAME CONSTRUCTION" AND MANUFACTURER"</li> <li>8.A. PACK INSULATION AROUND OPENINGS, IN EXPANSION JOINTS AND OTHER VOIDS OUTLETS, AROUND PIPES, DUCTS AND SERVICES ENCASED IN WALLS. OPEN VO PERMITTED.</li> <li>8.B. FACED INSULATION WITH METAL STUDS: TAPE ATTACHMENT FLANGES TO FACE FRAMING PRIOR TO APPLYING INTERIOR FINISH.</li> </ol>
. )	INSTALLED. SAND SMOOTH. 6.E. SITE FINISHING PER SECTION 099000 PAINTING AND COATING.	FRAMING PRIOR TO APPLYING INTERIOR FINISH.

	SECTION 076200 - SHEET METAL FLASHING AND TRIM	SECTION 079005 - JOINT SEALERS
BECTION IS BY OWNER. AND ROUGH-INS	<ol> <li>SUBMITTALS</li> <li>1.A. SHOP DRAWINGS</li> <li>1.A.A. INDICATE MATERIAL PROFILE, JOINTING PATTERN, JOINTING DETAILS, FASTENING METHODS, FLASHINGS, TERMINATIONS AND INSTALLATION DETAILS.</li> <li>1.B. SAMPLES</li> </ol>	<ol> <li>SUBMITTALS</li> <li>1.A. PRODUCT DATA</li> <li>1.A.A. DATA INDICATING SEALANT CH</li> <li>1.B. SAMPLES</li> <li>1.B. SAMPLES</li> </ol>
IER WORK. SHOW NARE. SHOW .S. SHOW LOCATIONS FOR	1.B.A. METAL FINISH COLOR 2. SHEET MATERIALS	<ol> <li>1.B.A. SEALANT COLORS</li> <li>2. SEALANTS</li> <li>2.A. SEALANT TYPE 1: ONE COMPONENT,</li> </ol>
	<ul> <li>2.A. STAINLESS STEEL: ASTM A167, TYPE 302B, DEAD SOFT TEMPER</li> <li>2.B. COPPER: ASTM B370, COLD-ROLLED TEMPER</li> <li>2.C. BITUMINOUS COATED COPPER: MIN. COPPER ASTM B370, WEIGHT NOT LESS THAN 3 0Z/SF. BITUMINOUS COATING SHALL WEIGH NOT LESS THAN 6 0Z/SF. ALTERNATELY, COPPER SHEETS MAY BE BONDED BETWEEN TWO LAYERS OF COARSELY WOVEN BITUMEN-SATURATED COTTON</li> </ul>	2.A.A. PRODUCT: SONNEBORN "SONO 2.B. SEALANT TYPE 2: ONE COMPONENT EXTERIOR CONCEALED MOVING JOIN 2.A.A. PRODUCT: SONNEBORN "NP1" C 2.B. SEALANT TYPE 3: MULTI-COMPONE
QUALITY SPECIFIED BY	<ul> <li>FABRIC ASTM D173. EXPOSED FABRIC SURFACE SHALL BE CRIMPED.</li> <li>2.D. POLYETHYLENE-COATED COPPER: COPPER SHEET ASTM B370, WEIGHING 3 0Z/SF BONDED BETWEEN TWO LAYERS OF THICK POLYETHYLENE SHEET.</li> <li>2.E. ALUMINUM SHEET: ASTM B209, ALLOY 3003-H14, EXCEPT ALLOY USED FOR COLOR ANODIZED ALUMINUM SHALL BE AS REQUIRED TO PRODUCE SPECIFIED COLOR.</li> <li>2.F. GALVANIZED SHEET: ASTM A653.</li> </ul>	EXTERIOR EXPOSED MOVING JOINTS OTHER WEATHERTIGHT LOCATIONS 2.A.A. PRODUCT: SONNEBORN "NP2" ( 2.B. SEALANT TYPE 4: ONE COMPONENT INTERIOR OR EXTERIOR HORIZONTAL 2.A.A. PRODUCT: SONNEBORN "SONA
IN APPLIED BAND	<ul> <li>3. SHEET MATERIAL THICKNESS: MIN. THICKNESS UNLESS OTHERWISE NOTED</li> <li>3.A. CONCEALED LOCATIONS</li> <li>3.A.A. COPPER: 10 0Z MINIMUM 0.013 INCH</li> <li>3.A.B. STAINLESS STEEL: 0.010 INCH</li> </ul>	<ol> <li>ACCESSORIES</li> <li>ACCESSORIES</li> <li>A. PRIMER: NON-STAINING TYPE, RECOUNT UNPAINTED, POROUS SURFACES SH</li> <li>JOINT CLEANER: NON-CORROSIVE A</li> </ol>
	<ul> <li>3.A.C. COPPER CLAD STAINLESS STEEL: 0.010 INCH</li> <li>3.A.D. GALVANIZED STEEL: 0.021 INCH</li> <li>3.B. EXPOSED LOCATIONS</li> <li>3.B.A. ALUMINUM: .050 INCH</li> <li>3.B.B. PRE-FINISHED ALUMINUM: .040 INCH</li> </ul>	<ul> <li>MANUFACTURER; COMPATIBLE WITH</li> <li>3.C. JOINT FILLER: ASTM D1056, ROUND</li> <li>50 PERCENT. POLYSTYRENE IS UNA</li> <li>3.D. BOND BREAKER TAPE: PRESSURE S</li> <li>MANUFACTURER TO SUIT APPLICAT</li> </ul>
/8 INCH THICK; SEVEN PLY SLICED RED OAK.	<ul> <li>3.B.C. COPPER: 16 OZ</li> <li>3.B.D. STAINLESS STEEL: 0.015 INCH</li> <li>3.B.E. COPPER CLAD STAINLESS STEEL: 0.015 INCH</li> <li>4. ACCESSORIES</li> </ul>	4. EXAMINATION 4.A. VERIFY THAT SUBSTRATE SURFACE AND BOND BREAKER TAPE ARE CO
	<ul> <li>4.A. SOLDER: ASTM B32; FLUX TYPE AND ALLOY COMPOSITION AS REQUIRED FOR USE WITH METALS TO BE SOLDERED.</li> <li>4.B. BITUMINOUS PAINT: ASTM D1187, TYPE I</li> <li>4.C. SEALANT: AS SPECIFIED IN SECTION 079005 JOINT SEALERS</li> </ul>	5. PREPARATION 5.A. CLEAN, PREPARE AND SIZE JOINTS REMOVE ANY LOOSE MATERIALS A OF SEALANT. METAL SURFACES SH
	4.D. ROOF CEMENT: ASTM D4586 5. PREFABRICATED ROOF EDGE AND COPING: AS SPECIFIED IN SECTION 077200 ROOF ACCESSORIES.	<ul> <li>6. INSTALLATION</li> <li>6.A. INSTALL IN ACCORDANCE WITH AST</li> <li>6.A. INSTALL JOINT FILLER ROD TO PROP LENGTHWISE STRETCHING OR TWIS</li> </ul>
IED ING MULTIPLE HOLES FOR 3H, FOR NOMINAL 1 INCH	<ol> <li>6. FABRICATION</li> <li>6.A. FABRICATE SHEET METAL ITEMS TO COMPLY WITH RECOMMENDATIONS IN SMACNA ARCHITECTURAL SHEET METAL MANUAL THAT APPLY TO DESIGN, DIMENSIONS, METAL AND OTHER CHARACTERISTICS OF ITEM INDICATED. WHERE ARCHITECTURAL DRAWINGS EXCEED SMACNA REQUIREMENTS, THE ARCHITECTURAL DRAWINGS OR SPECIFICATIONS SHALL BE USED.</li> <li>6.B. HEM EXPOSED EDGES ON UNDERSIDE 1/2 INCH; MITER AND SEAM CORNERS.</li> <li>6.C. FORM MATERIAL WITH FLAT LOCK SEAMS, EXCEPT WHERE OTHERWISE INDICATED. AT MOVING</li> </ol>	<ul> <li>6.B. SEALANT APPLICATIONS SHALL BE WRITTEN SPECIFICATIONS BY TRAD ADJACENT SURFACES AS NECESS</li> <li>6.C. ALL SEALING SHALL BE DONE WITH FOREIGN EMBEDDED MATTER, RIDC</li> <li>6.D. WORK ADJACENT TO JOINTS SHALL</li> </ul>
IINIMUM, 4 INCH CENTERS STEEL WITH CHROME	<ul> <li>JOINTS, USED SEALED LAPPED, BAYONET-TYPE OR INTERLOCKING HOOKED SEAMS.</li> <li>6.D. FABRICATE CORNERS FROM ONE PIECE WITH MINIMUM 18 INCH LONG LEGS; SEAM FOR RIGIDITY, SEAL WITH SEALANT.</li> <li>6.E. FABRICATE VERTICAL FACES WITH BOTTOM EDGE FORMED OUTWARD 1/4 INCH AND HEMMED TO FORM DRIP.</li> </ul>	WORK PROGRESSES. END SECTION OB1113 - HOLLOW METAL DO
	<ol> <li>EXAMINATION</li> <li>7.A. VERIFY OPENINGS, CURBS, PIPES, SLEEVES, DUCTS AND VENTS THROUGH ROOF ARE SOLIDLY SET, REGLETS IN PLACE, AND NAILING STRIPS LOCATED.</li> <li>7.B. VERIFY ROOFING TERMINATION AND BASE FLASHINGS ARE IN PLACE, SEALED AND SECURE.</li> </ol>	<ol> <li>PRODUCT DATA</li> <li>MATERIALS AND DETAILS OF D REINFORCEMENT TYPE AND LC</li> <li>SHOP DRAWINGS</li> <li>I.B.A. DETAILS OF EACH OPENING, S</li> </ol>
N FINISH OF DOOR	<ul> <li>8. PREPARATION</li> <li>8.A. INSTALL STARTER AND EDGE STRIPS AND CLEATS BEFORE STARTING INSTALLATION.</li> <li>9. INSTALLATION</li> </ul>	IDENTIFYING LOCATION OF DIFI 2. DOORS AND FRAMES - GENERAL 2.A. ACCESSIBILITY: COMPLY WITH ANSI 2.B. DOOR TOP CLOSURES: FLUSH WITH 2.C. DOOR EDGE PROFILE: BEVELED ON
JIT APPLICATION;	9.A. CONFORM TO DRAWING DETAILS. SECURE FLASHINGS IN PLACE USING CONCEALED FASTENERS. USE EXPOSED FASTENERS ONLY WHERE PERMITTED. END OF SECTION	<ul> <li>2.D. DOOR TEXTURE: SMOOTH FACES</li> <li>2.E. GLAZED LITES: NON-REMOVABLE S INDICATED ON DRAWINGS.</li> <li>2.F. HARDWARE PREPARATION: IN ACCO PLACE, IN ADDITION TO OTHER REQU</li> </ul>
NINLESS STEEL OR ETER, WITH CLOSURE ON	SECTION 078400 - FIRESTOPPING	<ul> <li>2.G. GALVANIZING FOR UNITS IN WET AR (GALVANNEALED), MANUFACTURER</li> <li>2.H. FINISH: FACTORY PRIMED, FOR FIEL</li> <li>3. STEEL DOORS</li> <li>3.A. INTERIOR DOORS, NON-FIRE-RATED</li> </ul>
GING. DO NOT USE MORE	1. SUBMITTALS 1.A. PRODUCT DATA 1.A.A. DATA SHEETS ON EACH PRODUCT TO BE USED 1.B. SHOP DRAWINGS	<ul> <li>3.A.A. GRADE: ANGI A250.8 LEVEL 3</li> <li>3.A.B. THICKNESG: 1-3/4 INCH</li> <li>3.B. INTERIOR DOORS, FIRE RATED:</li> <li>3.B.A. GRADE: ANGI A250.8 LEVEL 3</li> <li>3.B.B. FIRE RATING: AS INDICATED 01</li> </ul>
	<ol> <li>1.B.A. DIMENSIONS, ANCHORING DETAILS, TRIM AND ACCESSORIES</li> <li>2. FIRESTOPPING - GENERAL</li> <li>2.A. PROVIDE FIRESTOPPING OF ALL JOINTS AND PENETRATIONS IN FIRE-RESISTANCE RATED AND</li> </ol>	UL 10C 3.B.B.A. PROVIDE UNITS LISTED AN 3.B.B.B. ATTACH FIRE RATING LAB 3.C. EXTERIOR DOORS, NON-FIRE-RATED 3.C.A. GRADE: ANSI A250.8 LEVEL 3
DE. LEVEL. TED COMPONENTS. AXIMUM GAPS OF 1/32	<ul> <li>SMOKE-REGISTANT ASSEMBLIES, WHETHER INDICATED ON DRAWINGS OR NOT, AND OTHER OPENINGS INDICATED.</li> <li>2.B. USE EITHER FACTORY BUILT OR FIELD ERECTED FIRESTOPPING TO FORM A SPECIFIC BUILDING SYSTEM MAINTAINING REQUIRED INTEGRITY OF THE FIRE BARRIER AND STOP THE PASSAGE OF GASES OR SMOKE.</li> </ul>	3.C.B. THICKNESS: 1-3/4 INCH 3.C.C. CORE: MANUFACTURER'S STAN 4. STEEL FRAMES 4.A. (WELDED) 4.A.A. GENERAL
RAGES.	<ol> <li>FIRESTOP SYSTEMS AND FIRESTOP DEVICES SHALL BE TESTED IN ACCORDANCE WITH ASTM E814 OR UL1479 USING THE F- OR T-RATING TO MAINTAIN THE SAME RATING AND INTEGRITY AS THE ASSEMBLY BEING SEALED.</li> <li>FOR FIRESTOP SYSTEMS EXPOSED TO VIEW, TRAFFIC, MOISTURE AND PHYSICAL DAMAGE, PROVIDE PRODUCTS THAT AFTER CURING DO NOT DETERIORATE WHEN EXPOSED TO THESE CONDITIONS BOTH DURING AND AFTER CONSTRUCTION.</li> </ol>	4.A.A.A. 4.A.A.B. 4.A.A.B. 4.A.A.C. 4.A.A.C. 4.A.A.C. 4.A.B. 4.A.B. 4.A.B. 4.A.B. 4.A.B. 4.A.B. 4.A.C. 1NTERIOR AND EXTERIOR DOOR 4.A.C. 1NTERIOR DOOR FRAMES, FIRE LABELED.
NG	<ol> <li>ACCESSORIES</li> <li>3.A. PROVIDE AS REQUIRED TO INSTALL FILL MATERIALS THAT COMPLY WITH REQUIREMENTS OF TESTED ASSEMBLIES, ARE APPROVED BY QUALIFIED TESTING, AND ARE SPECIFIED BY MANUFACTURER OF TESTED ASSEMBLIES.</li> </ol>	4.B. STEEL FRAMES (KNOCKED-DOWN) 4.A.A. GENERAL: KNOCKED-DOWN, SI SIDELIGHTS AND INTERIOR WIN 4.A.A.A. MATERIAL: COLD ROLLED INCLUDING BUT NOT LIMIT
	<ul> <li>4. EXAMINATION</li> <li>4.A. VERIFY THAT SUBSTRATE SURFACES AND OPENINGS ARE READY TO RECEIVE WORK.</li> <li>5. PREPARATION</li> </ul>	KITCHEN, LAUNDRY. 4.A.A.B. THICKNESS: 18 GAGE 4.A.A.C. FIRE RATING: CONFORM T 4.A.A.D. FRAME THROAT OPENING 4.A.A.E. FIRE RATED FRAMES TO H
D, LAMINATED OR OF	<ul> <li>5.A. REMOVE ALL MATERIALS WHICH COULD INTERFERE WITH ADHESION OF FIRESTOP SYSTEMS.</li> <li>6. INSTALLATION</li> <li>6.A. FIRESTOP THROUGH-PENETRATION OF PARTITIONS IDENTIFIED ON THE DRAWINGS AS SMOKE PARTITIONS AND FIRE RATED ASSEMBLIES.</li> </ul>	4.A.A.E. FIRE KATED FRAMES TO F SMOKE GASKET. 4.A.A.F. CASINGS: STEEL, STYLE / 4.A.A.G. FRAME REINFORCEMENT GASKETING, SILENCERS, REQUIRED FOR INDICATED
	<ul> <li>6.B. FIRESTOP THROUGH-PENETRATIONS OF FLOORS, WALLS, PARTITIONS, CEILINGS AND ROOFS IN ACCORDANCE WITH THE FIRE RESISTANCE RATING ASSIGNED TO THE WALLS, PARTITIONS, FLOOR, CEILINGS AND ROOFS ON THE DRAWINGS.</li> <li>6.C. FIRESTOP JUNCTURES, CONTROL JOINTS, AND EXPANSION JOINTS ASSOCIATED WITH SMOKE PARTITIONS AND FIRE RATED CONSTRUCTION.</li> </ul>	<ul> <li>4.A.A.H. FINISH: PREFINISH WITH F ENAMELFINISH</li> <li>4.A.A.A.A. COLOR: AS SELECTED</li> <li>5. PRODUCT: TIMELY INDUSTRIES PREFINISH</li> </ul>
DARD OR RECOMMENDED RER'S PRINTED	<ul> <li>6.D. INSTALL MATERIALS IN MANNER DESCRIBED IN FIRE TEST REPORT AND IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.</li> <li>6.E. DO NOT COVER INSTALLED FIRESTOPPING UNTIL INSPECTED BY AUTHORITY HAVING JURISDICTION.</li> <li>6.F. INSTALL LABELING REQUIRED BY CODE.</li> </ul>	<ol> <li>ACCESSORIES</li> <li>G.A. GROUT FOR FRAMES: PORTLAND CE</li> <li>G.B. SILENCERS: RESILIENT RUBBER, 3 ( PAIRS, AND 2 ON HEAD OF PAIRS W</li> <li>G.C. PROVIDE TEMPORARY FRAME HEAD</li> </ol>
	END OF SECTION	<ol> <li>FINISH MATERIALS</li> <li>7.A. PRIMER: ANGI A250.10; RUST-INHIB</li> <li>7.B. BITUMINOUS COATING: ASPHALT EN</li> </ol>
		<ul> <li>8. EXAMINATION</li> <li>8.A. VERIFY THAT OPENINGS FOR DOORS</li> <li>9. PREPARATION</li> <li>9.A. COAT INSIDE OF FRAMES TO BE INSIDE</li> </ul>
AND PRODUCT		COATING. 10. INSTALLATION 10.A. INSTALL IN ACCORDANCE WITH REQ HMMA 840.
ACCORDANCE WITH ASTM OSSIBLE.		10.B. INSTALL FIRE-RATED UNITS PER NF 10.C. GROUT FRAMES IN MASONRY CONS 10.D. ADJUST DOORS FOR SMOOTH OPER END
20R RETARDER FACED		SECTION OB3323 - OVERHEAD COILIN 1. SUBMITTALS 1.A. PRODUCT DATA
SEMBLIES. /ORK.		1.A.A. MANUFACTURER'S DATA SHEE 1.B. SHOP DRAWINGS 1.B.A. PLANS, ELEVATIONS, DETAILS CLEARANCES, HARDWARE ANI 1.C. SAMPLES
OR RETARDERS, ETARDERS OR		<ol> <li>1.C.A. COLOR CHIPS FOR FULL RANGE</li> <li>2. OVERHEAD COILING DOORS AND ROLLIN</li> <li>2.A. CONSTRUCTION: INTERLOCKING ROL</li> </ol>
TO PRODUCTS AND		ALTERNATE SLATS TO PREVENT LA 2.A.A. SLATS: CURVED PROFILE, 20 G 2.A.B. GUIDES: STRUCTURAL STEEL A 2.A.C. BRACKETS: GALVANIZED STEE 2.A.D. COUNTERBALANCE: HELICAL TO SUPPORTING CURTAIN WITH DE
TO BE INSULATED. CUT ON. WITH MANUFACTURER'S JBSTRATE WITH ADHESIVE AND SUPPORT OF UNITS.		COUNTERBALANCE ADJUSTAB 2.A.E. HOOD: 24 GA. GALVANIZED ST 2.B. FIRE RATING: PROVIDE AS INDICATE 2.C. SMOKE RATING: PROVIDE AS INDIC/ SMOKE RATED PARTITION.
LESS OTHERWISE NOTED. ING INSULATION IN 'URER'S INSTRUCTIONS.		<ul> <li>2.D. ACCESSORIES:</li> <li>2.D.A. PROVIDE WITH FIRE SENTINEL / SYSTEM.</li> <li>2.E. FINISH: SLATS AND HOOD GALVAN PAINT, WITH POWDER COAT FINISH. COLORS</li> </ul>
E VOIDS. PACK BEHIND EN VOIDS ARE NOT DFACE OF METAL		COLORS. 2.F. PRODUCT: 2.F.A. OVERHEAD DOOR CORPORATIO 2.F.B. OVERHEAD DOOR CORPORATIO 3. EXAMINATION
		<ol> <li>EXAMINATION</li> <li>3.A. VERIFY THAT OPENINGS FOR COILIN</li> <li>INSTALLATION</li> <li>INSTALL DOORS IN ACCORDANCE W</li> </ol>

#### ITTALS PRODUCT DATA DATA INDICATING SEALANT CHEMICAL CHARACTERISTICS SAMPLES SEALANT COLORS BEALANT TYPE 1: ONE COMPONENT, ACRYLIC LATEX, FOR INTERIOR NON-MOVING JOINTS PRODUCT: SONNEBORN "SONOLAC" OR EQUAL. SEALANT TYPE 2: ONE COMPONENT URETHANE, GUN-GRADE, NON-SAG, FOR INTERIOR OR EXTERIOR CONCEALED MOVING JOINTS, THRESHOLDS END ARCHITECTURAL SHEET METAL. PRODUCT: SONNEBORN "NP1" OR EQUAL. BEALANT TYPE 3: MULTI-COMPONENT URETHANE, GUN-GRADE NON-SAG, FOR INTERIOR OR EXTERIOR EXPOSED MOVING JOINTS (OTHER THAN PAVEMENTS), DOOR AND WINDOW FRAMES, AND THER WEATHERTIGHT LOCATIONS. PRODUCT: SONNEBORN "NP2" OR EQUAL. BEALANT TYPE 4: ONE COMPONENT, URETHANE, GUN-GRADES OR POURABLE, SELF-LEVELING FOR NTERIOR OR EXTERIOR HORIZONTAL JOINTS. PRODUCT: SONNEBORN "SONALASTIC SL1" OR EQUAL. PRIMER: NON-STAINING TYPE, RECOMMENDED BY SEALANT MANUFACTURER TO SUIT APPLICATION. JNPAINTED, POROUS SURFACES SHALL BE PRIMED. JOINT CLEANER: NON-CORROSIVE AND NON-STAINING TYPE, RECOMMENDED BY SEALANT MANUFACTURER; COMPATIBLE WITH JOINT FILLING MATERIALS. JOINT FILLER: ASTM D1056, ROUND, CLOSED CELL POLYETHYLENE FOAM ROD, OVERSIZED 30 TO 50 PERCENT. POLYSTYRENE IS UNACCEPTABLE. 30ND BREAKER TAPE: PRESSURE SENSITIVE POLYETHYLENE TAPE RECOMMENDED BY SEALANT MANUFACTURER TO SUIT APPLICATION. NATION /ERIFY THAT SUBSTRATE SURFACES ARE READY TO RECEIVE WORK. VERIFY THAT JOINT BACKING AND BOND BREAKER TAPE ARE COMPATIBLE WITH SEALANT. ARATION CLEAN, PREPARE AND SIZE JOINTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REMOVE ANY LOOSE MATERIALS AND OTHER FOREIGN MATTER WHICH MIGHT IMPAIR ADHESION OF SEALANT. METAL SURFACES SHALL BE FREE OF CORROSION. LLATION NSTALL IN ACCORDANCE WITH ASTM C1193. NSTALL JOINT FILLER ROD TO PROPER DEPTH BY ROLLING MATERIAL INTO JOINT WITHOUT ENGTHWISE STRETCHING OR TWISTING. DO NOT PUNCTURE OR PRIME FILLER ROD. SEALANT APPLICATIONS SHALL BE PERFORMED IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN SPECIFICATIONS BY TRADESMEN SKILLED IN THE WORK. USE MASKING TAPE TO PROTECT ADJACENT SURFACES AS NECESSARY. ALL SEALING SHALL BE DONE WITH NEAT, SMOOTH TOOLED BEADS, FREE OF ALT POCKETS, FOREIGN EMBEDDED MATTER, RIDGES AND SAGS, IN FIRM FULL CONTACT WITH INTERFACES. NORK ADJACENT TO JOINTS SHALL BE CLEANED FREE OF SMEARS OF SEALANT COMPOUND AS NORK PROGRESSES. END OF SECTION 081113 - HOLLOW METAL DOORS AND FRAMES RODUCT DATA MATERIALS AND DETAILS OF DESIGN AND CONSTRUCTION, HARDWARE LOCATIONS, REINFORCEMENT TYPE AND LOCATIONS, ANCHORAGE AND FASTENING METHODS, FINISHES HOP DRAWINGS DETAILS OF EACH OPENING, SHOWING ELEVATIONS, GLAZING, FRAME PROFILES AND IDENTIFYING LOCATION OF DIFFERENT FINISHES AND FRAMES - GENERAL CCESSIBILITY: COMPLY WITH ANSI/ICC A117.1 DOOR TOP CLOSURES: FLUSH WITH TOP OF FACES AND EDGES OOR EDGE PROFILE: BEVELED ON BOTH EDGES DOOR TEXTURE: SMOOTH FACES BLAZED LITES: NON-REMOVABLE STOPS ON NON-SECURE SIDE; SIZES AND CONFIGURATIONS AS NDICATED ON DRAWINGS. HARDWARE PREPARATION: IN ACCORDANCE WITH BHMA A156.115, WITH REINFORCEMENT WELDED IN LACE. IN ADDITION TO OTHER REQUIREMENTS SPECIFIED IN DOOR GRADE STANDA GALVANIZING FOR UNITS IN WET AREAS AND EXTERIOR: ALL COMPONENTS HOT-DIPPED ZINC-IRON GALVANNEALED), MANUFACTURER'S STANDARD COATING THICKNESS INISH: FACTORY PRIMED, FOR FIELD FINISHING ITERIOR DOORS, NON-FIRE-RATED GRADE: ANSI A250.8 LEVEL 3, PHYSICAL PERFORMANCE LEVEL A, MODEL 2, SEAMLESS THICKNESS: 1-3/4 INCH ITERIOR DOORS, FIRE RATED: GRADE: ANSI A250.8 LEVEL 3, PHYSICAL PERFORMANCE LEVEL A, MODEL 2, SEAMLESS FIRE RATING: AS INDICATED ON DOOR AND FRAME SCHEDULE, TESTED IN ACCORDANCE WITH UL 10C . PROVIDE UNITS LISTED AND LABELED BY UL ATTACH FIRE RATING LABEL TO EACH FIRE RATED UNIT XTERIOR DOORS, NON-FIRE-RATED GRADE: ANSI A250.8 LEVEL 3, PHYSICAL PERFORMANCE LEVEL A, MODEL 2, SEAMLESS THICKNESS: 1-3/4 INCH CORE: MANUFACTURER'S STANDARD INSULATION MATERIAL FRAMES WFIDFD) GENERAL COMPLY WITH REQUIREMENTS OF GRADE SPECIFIED FOR CORRESPONDING DOOR. FINISH: SAME AS DOOR. PROVIDE MORTAR GUARD BOXES FOR HARDWARE CUTOUTS IN FRAMES TO BE INSTALLED IN MASONRY OR TO BE GROUTED. INTERIOR AND EXTERIOR DOOR FRAMES, NON-FIRE-RATED: FULLY WELDED TYPE. INTERIOR DOOR FRAMES, FIRE RATED: FULLY WELDED TYPE. FIRE RATING SAME AS DOOR; LABELED. TEEL FRAMES (KNOCKED-DOWN) GENERAL: KNOCKED-DOWN, SITE ASSEMBLED PRE-FINISHED STEEL FRAMES FOR DOORS, SIDELIGHTS AND INTERIOR WINDOWS. MATERIAL: COLD ROLLED STEEL; ELECTRO GALVANIZED STEEL IN ALL WET AREAS INCLUDING BUT NOT LIMITED TO TOILET ROOMS, BATHROOMS, JANITOR CLOSETS, KITCHEN, LAUNDRY THICKNESS: 18 GAGE FIRE RATING: CONFORM TO ASTM E152, NFPA 252, UL 10B AND UL 10C FRAME THROAT OPENING: TO SUIT FINISHED WALL THICKNESS. FIRE RATED FRAMES TO HAVE KERF FORMED INTO FRAME PROFILE FOR INSTALLATION OF SMOKE GASKET. CASINGS: STEEL, STYLE AS SELECTED BY OWNER FRAME REINFORCEMENT AND ACCESSORIES: PROVIDE REINFORCEMENT, SMOKE GASKETING, SILENCERS, GLASS STOPS, STRIKES AND OTHER ACCESSORIES AS REQUIRED FOR INDICATED HARDWARE, FIRE RATING AND FOR COMPLETE INSTALLATION. FINISH: PREFINISH WITH FACTORY-APPLIED IMPACT RESISTANT POLYESTER BAKED FNAMFI FINISH A.A.A. COLOR: AS SELECTED FROM MANUFACTURER'S STANDARD COLORS. UCT: TIMELY INDUSTRIES PREFINISHED STEEL DOOR FRAME GROUT FOR FRAMES: PORTLAND CEMENT GROUT, MAX. 4 INCH SLUMP FOR HAND TROWELING. BILENCERS: RESILIENT RUBBER, 3 ON STRIKE SIDE OF SINGLE DOOR, 3 ON CENTER MULLION OF PAIRS, AND 2 ON HEAD OF PAIRS WITHOUT CENTER MULLION PROVIDE TEMPORARY FRAME HEADERS FOR ALL FRAMES MATERIALS RIMER: ANSI A250.10; RUST-INHIBITING. ITUMINOUS COATING: ASPHALT EMULSION OR EQUAL ERIFY THAT OPENINGS FOR DOORS AND FRAMES ARE CORRECTLY SIZED AND WITHIN TOLERANCE. COAT INSIDE OF FRAMES TO BE INSTALLED IN MASONRY OR TO BE GROUT, WITH BITUMINOUS OATING. NSTALL IN ACCORDANCE WITH REQUIREMENTS OF SPECIFIED DOOR GRADE STANDARD AND NAAM NSTALL FIRE-RATED UNITS PER NFPA 80. GROUT FRAMES IN MASONRY CONSTRUCTION, USING HAND TROWEL METHODS. DJUST DOORS FOR SMOOTH OPERATION AFTER INSTALLATION. END OF SECTION 083323 - OVERHEAD COILING DOORS RODUCT DATA MANUFACTURER'S DATA SHEETS ON EACH PRODUCT TO BE USED HOP DRAWINGS PLANS, ELEVATIONS, DETAILS OF FRAMING MEMBERS, ANCHORING METHODS, REQUIRED CLEARANCES, HARDWARE AND ACCESSORIES COLOR CHIPS FOR FULL RANGE OF AVAILABLE COLORS

HEAD COILING DOORS AND ROLLING COUNTER DOORS NSTRUCTION: INTERLOCKING ROLL-FORMED SLATS. ENDLOCKS ATTACHED TO EACH END OF LTERNATE SLATS TO PREVENT LATERAL MOVEMENT. SLATS: CURVED PROFILE, 20 GA. GALVANIZED STEEL

GUIDES: STRUCTURAL STEEL ANGLES BRACKETS: GALVANIZED STEEL TO SUPPORT COUNTERBALANCE, CURTAIN AND HOOD COUNTERBALANCE: HELICAL TORSION SPRING HOUSED IN STEEL TUBE OR PIPE BARREL, SUPPORTING CURTAIN WITH DEFLECTION LIMITED TO 0.03 INCH PER FOOT OF SPAN. COUNTERBALANCE ADJUSTABLE BY MEANS OF ADJUSTING TENSION WHEEL. HOOD: 24 GA. GALVANIZED STEEL WITH INTERMEDIATE SUPPORTS AS REQUIRED. FIRE RATING: PROVIDE AS INDICATED ON DRAWINGS.

MOKE RATING: PROVIDE AS INDICATED ON DRAWINGS, AND WHERE DOOR OCCURS WITHIN A SMOKE RATED PARTITION. ACCESSORIES:

PROVIDE WITH FIRE SENTINEL AND ALL OPTIONS REQUIRED TO TIE-IN DOORS TO FIRE ALARM SYSTEM. FINISH: SLATS AND HOOD GALVANIZED PER ASTM A653, WITH 0.2 MILS THICK BAKED-ON PRIME PAINT, WITH POWDER COAT FINISH. COLOR AS SELECTED FROM MANUFACTURER'S STANDARD COLORS.

PRODUCT: OVERHEAD DOOR CORPORATION 610 ROLLING SERVICE FIRE DOOR

OVERHEAD DOOR CORPORATION 640 COUNTER FIRE DOOR

IINATION /ERIFY THAT OPENINGS FOR COILING DOORS ARE CORRECTLY SIZED AND WITHIN TOLERANCE.

4. INSTALLATION 4.A. INSTALL DOORS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

END OF SECTION

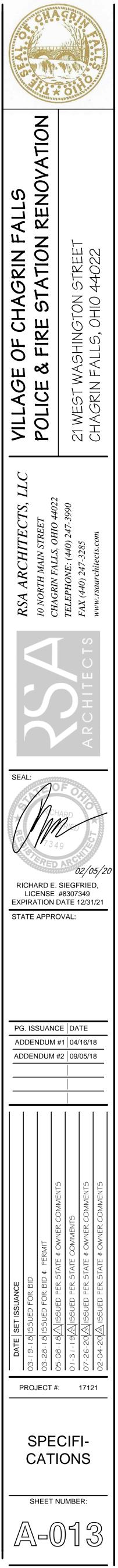


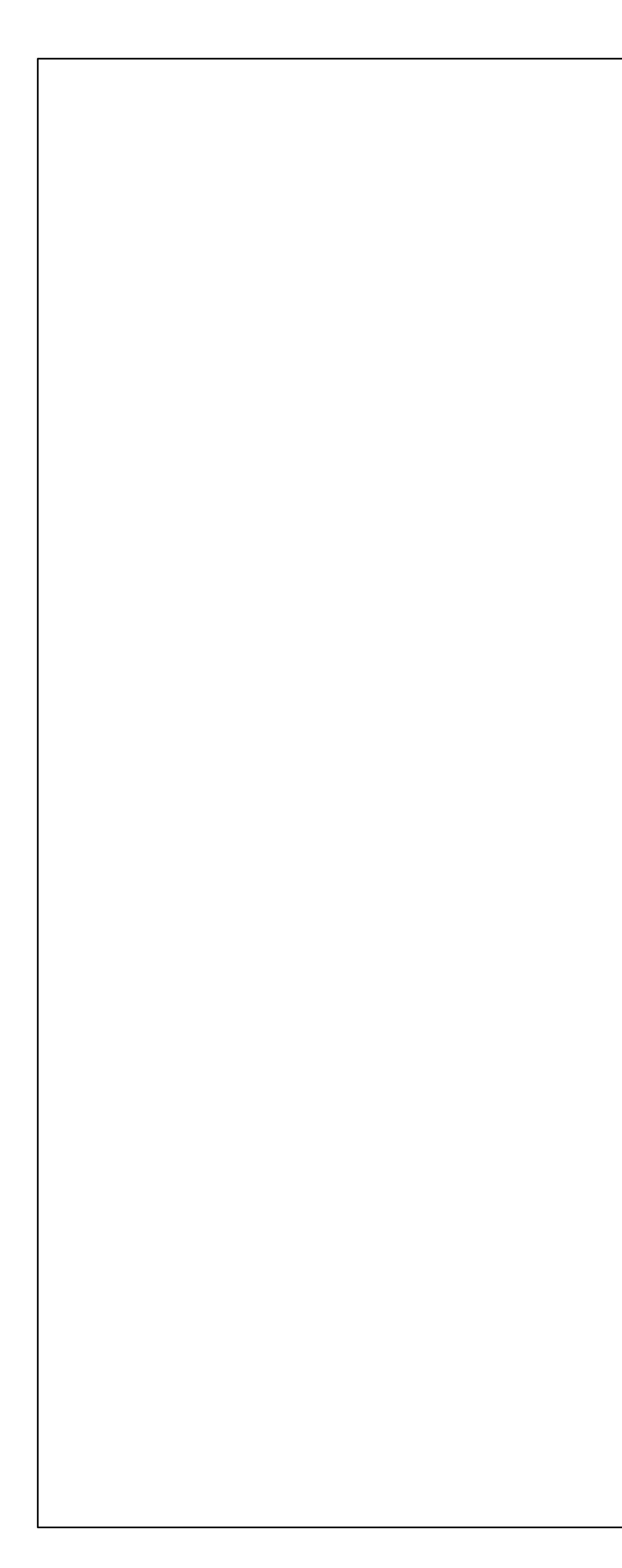
SECTION 081416 - FLUSH WOOD DOORS	SECTION 087100 - DOOR HARDWARE
1. SUBMITTALS 1.A. PRODUCT DATA	1. SUBMITTALS 1.A. DOOR HARDWARE SCHEDULE
1.A.A.       DOOR CORE MATERIALS AND CONSTRUCTION         1.A.B.       VENEER SPECIES, TYPE AND CHARACTERISTICS         1.B.       CHOR DRAWINGS	<ol> <li>A.A. DOOR HARDWARE SCHEDULE SHALL BE PREPARED BY OR UNDER CERTIFIED ARCHITECTURAL HARDWARE CONSULTANT (AHC)</li> <li>A.B. COMPLY WITH DHI SEQUENCE AND FORMAT FOR THE HARDWARE S</li> </ol>
1.B. SHOP DRAWINGS 1.B.A. DOORS AND FRAMES, ELEVATIONS, SIZES, TYPES, SWINGS, UNDERCUTS, BEVELING, BLOCKING FOR HARDWARE, FACTORY MACHINING, FACTORY FINISHING, CUTOUTS FOR GLAZING AND	FORMAT. 1.A.C. SCHEDULE SHALL INCLUDE THE FOLLOWING INFORMATION:
OTHER DETAILS 1.C. SAMPLES 1.C.A. DOOR CONSTRUCTION	1.A.C.A.       TYPES, STYLE, FUNCTION, SIZE AND FINISH OF EACH HARDWA         1.A.C.B.       NAME AND MANUFACTURER OF EACH ITEM         1.A.C.C.       FASTENINGS AND OTHER PERTINENT INFORMATION
<ol> <li>VENEER ILLUSTRATING WOOD GRAIN, STAIN COLOR AND SHEEN</li> <li>WOOD DOORS: 5-PLY, WOOD VENEER FACES, CUSTOM GRADE, HEAVY DUTY PERFORMANCE IN</li> </ol>	1.A.C.D.LOCATION OF EACH HARDWARE SET CROSS REFERENCED TO I1.A.C.E.EXPLANATION OF ALL ABBREVIATIONS, SYMBOLS AND CODES SCHEDULE
ACCORDANCE WITH WDMA I.S. 1-A 2.A. CORE	1.A.C.F.MOUNTING LOCATIONS FOR HARDWARE1.A.C.G.DOOR AND FRAME SIZES AND MATERIALS
<ul><li>2.A.A. NON-RATED AND 20-MINUTE RATED DOORS: PARTICLEBOARD CORE; ANSI A208.1</li><li>2.A.B. FIRE RATED DOORS: MINERAL CORE; WITH BLOCKING REQUIRED FOR ANCHORAGE OF HARDWARE</li></ul>	<ul> <li>1.B. PRODUCT DATA</li> <li>1.B.A. MANUFACTURER'S TECHNICAL PRODUCT FACT SHEETS DESCRIBING TO BE PROVIDED, INCLUDING MATERIAL DESCRIPTIONS, DIMENSION</li> </ul>
<ul> <li>2.B. THICKNESS: 1-3/4 INCH</li> <li>2.A. FIRE RATED DOORS: TESTED TO RATINGS INDICATED ON DRAWINGS; UL OR WH LABELED</li> <li>2.B. FACINGS: RED OAK, GRADE A, PLAIN SLICED, BOOK VENEER MATCH, RUNNING ASSEMBLY MATCH.</li> </ul>	COMPONENTS AND PROFILES, AND FINISHES 1.C. MANUFACTURER'S INSTALLATION INSTRUCTIONS 1.C.A. INDICATE SPECIAL PROCEDURES, PERIMETER CONDITIONS REQUIRI
VERTICAL EDGES: SAME SPECIES AS FACE VENEER. 2.C. FINISH: WDMA TR-6 CATALYZED POLYURETHANE.	1.D. MAINTENANCE DATA 1.D.A. INCLUDE DATA ON OPERATING HARDWARE, LUBRICATION REQUIRED PROCEDURES RELATED TO PREVENTATIVE MAINTENANCE.
3. EXAMINATION 3.A. VERIFY THAT OPENINGS FOR WOOD DOORS ARE CORRECTLY SIZED AND WITHIN TOLERANCE.	1.E. WARRANTY 1.E.A. SUBMIT MANUFACTURER'S WARRANTY AND ENSURE THAT FORMS
4. INSTALLATION 4.A. INSTALL DOORS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND SPECIFIED QUALITY	OWNER'S NAME AND REGISTERED WITH MANUFACTURER. 1.F. SHOP DRAWINGS 1.F.A. SUBMIT FOR FABRICATION AND INSTALLATION OF HARDWARE. INC
STANDARD. 4.B. INSTALL FIRE-RATED DOORS IN ACCORDANCE WITH NFPA 80 REQUIREMENTS. 4.C. ADJUST DOORS FOR SMOOTH OPERATION AFTER INSTALLATION.	AND INSTALLATION REQUIREMENTS OF FINISH HARDWARE.
END OF SECTION	<ul><li>2.A. CLOSERS: MECHANICAL, 10 YEARS</li><li>2.B. EXIT DEVICES: MECHANICAL, 3 YEARS; ELECTRIFIED, 1 YEAR</li></ul>
	<ul><li>2.C. LOCKSETS: MECHANICAL, 3 YEARS; ELECTRIFIED, 1 YEAR</li><li>2.D. CONTINUOUS HINGES: LIFETIME</li><li>2.E. KEY BLANKS: LIFETIME</li></ul>
	2.F. ALL OTHER HARDWARE: ONE YEAR 3. GENERAL REQUIREMENTS FOR ALL DOOR HARDWARE PRODUCTS
	3.A. DOOR HARDWARE MANUFACTURERS AND PRODUCTS ARE IDENTIFIED O PRODUCTS FORM THE BASIS OF DESIGN.
	<ul> <li>3.A. PROVIDE PRODUCTS THAT COMPLY WITH THE FOLLOWING</li> <li>3.A.A. APPLICABLE PROVISIONS OF FEDERAL, STATE AND LOCAL CODES</li> <li>3.A.B. ANSI/ICC A117.1, AMERICAN NATIONAL STANDARD FOR ACCESSIBLE</li> </ul>
SECTION 084113 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS	AND FACILITIES 3.A.C. APPLICABLE PROVISIONS OF NFPA 101, LIFE SAFETY CODE 3.B. ELECTRICALLY OPERATED AND/OR CONTROLLED HARDWARE: PROVIDE A
1. SUBMITTALS 1.A. PRODUCT DATA 1.A. MANUFACTURER'S PRODUCT DATA	3.B. ELECTRICALLY OPERATED AND/OR CONTROLLED HARDWARE: PROVIDE A POWER TRANSFER HINGES, RELAYS AND INTERFACES REQUIRED FOR P PROVIDE WIRING BETWEEN HARDWARE AND CONTROL COMPONENTS AN CONNECTION.
<ol> <li>1.A.A. MANUFACTURER'S PRODUCT DATA</li> <li>1.B. SHOP DRAWINGS</li> <li>1.B.A. DETAILED PLANS, ELEVATIONS, SECTIONS, HARDWARE, ACCESSORIES AND OPERATIONAL</li> </ol>	4. EXAMINATION
CLEARANCES 1.B.B. DETAILS OF INSTALLATION INCLUDING ANCHORAGE, FLASHINGS AND SEALANTS 1.C. SAMPLES 1.C. FACTORY EINIGLED ERANG COLORG	4.A. VERIFY THAT DOORS AND FRAMES ARE READY TO RECEIVE WORK, AND INDICATED ON SHOP DRAWINGS.
<ol> <li>1.C.A. FACTORY FINISHED FRAME COLORS</li> <li>2. HORIZONTAL SLIDING WALL: THERMALLY BROKEN</li> <li>2.4 DEGIGN CRITERIA</li> </ol>	<ol> <li>INSTALLATION</li> <li>5.A. INSTALL HARDWARE IN ACCORDANCE WITH MANUFACTURER'S INSTRUC' CODES.</li> </ol>
<ul> <li>2.A. DESIGN CRITERIA</li> <li>2.A.A. COMPLY WITH RECOMMENDATIONS OF THE GANA GLAZING MANUAL</li> <li>2.A.B. THERMAL MOVEMENT: ALLOW FOR THERMAL MOVEMENT OF MATERIALS BASED ON 120</li> </ul>	5.B. MOUNTING HEIGHTS FOR HARDWARE FROM FINISHED FLOOR TO CENTER 5.B.A. FOR STEEL FRAMES: COMPLY WITH DHI RECOMMENDED LOCATIONS
DEGREES F AMBIENT AND SURFACE TEMPERATURE OF 180 DEGREES F. 2.B. PERFORMANCE CRITERIA 2.B.A. CONDENSATION RESISTANCE FACTOR (CRF) AAMA 1503/NFRC 500: NOT LESS THAN 45 TUEDUAL RESISTANCE (ULEASTOR) AAMA 1507 (ACTIVATION FACTOR)	HARDWARE FOR STEEL DOORS AND FRAMES. 5.B.B. FOR WOOD DOORS: COMPLY WITH DHI RECOMMENDED LOCATIONS F HARDWARE FOR WOOD FLUSH DOORS.
2.B.B. THERMAL RESISTANCE (U-FACTOR) AAMA 1503/ASTM ASTM E1423: 2.B.C. SOLAR HEAT GAIN COEFFICIENT (SHGC) NFRC 200: 2.C. CONFIGURATIONS: AS INDICATED ON DRAWINGS	6. ADJUSTING 6.A. ADJUST WORK FOR SMOOTH OPERATION.
2.D. PANEL WEIGHT: 8 LB/S.F. 2.E. COMPONENTS 2.E.A. TRACK: TRACKLESS	7. HARDWARE SETS - AS INDICATED ON DRAWINGS
2.E.B. HARDWARE 2.E.B.A. WHEEL CARRIAGE: SYNTHETIC NYLON COVERED WHEELS WITH ENCASED STAINLESS STEEL BALL BEARINGS AND DOUBLE SLIDING ROLLERS	END OF SECTION
<ul> <li>2.E.B.B. OPERATING MECHANISM: PIN LOCKING SYSTEM</li> <li>2.E.B.C. HANDLES: MANUFACTURER'S STANDARD</li> <li>2.E.B.D. WEATHERSTRIPPING: EPDM, DOUBLE GASKET AND DENSE FELT BRUSHES AROUND</li> </ul>	
ENTIRE SYSTEM 2.F. MATERIALS 2.F.A. EXTRUDED ALUMINUM: ASTM B221, 6063-T5	
<ul> <li>2.F.B. GLASS: COMPLY WITH SAFETY GLAZING REQUIREMENTS OF ANSI Z97.1 AND CPSC 16CFR 1201 AND INSULATING GLASS UNIT REQUIREMENTS OF ASTM E2190; FACTORY GLAZED</li> <li>2.F.B.A. LOW-E COATED, CLEAR INSULATING GLASS UNIT</li> </ul>	
2.F.B.A.A.OVERALL THICKNESS: 1 INCH2.F.B.A.B.THICKNESS OF EACH GLASS LITE: 6 MM2.F.B.A.C.OUTDOOR LITE: FULLY TEMPERED FLOAT GLASS0.F.B.A.C.NUTERCRAFT SOUTTAIL AIR	
2.F.B.A.D. INTERSPACE CONTENT: AIR 2.F.B.A.E. INDOOR LITE: FULLY TEMPERED FLOAT GLASS 2.G. FINISH: POWDER COAT AAMA 2604; COLOR SELECTED FROM MANUFACTURER'S STANDARDS	
<ol> <li>EXAMINATION</li> <li>3.A. VERIFY THAT CONDITIONS OF SUBSTRATES ARE ACCEPTABLE FOR PRODUCT INSTALLATION IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS PRIOR TO HORIZONTAL SLIDING WALL</li> </ol>	SUBMITTALS
INSTALLATION. 4. PREPARATION	1.A. PRODUCT DATA 1.A.A. GLASS TYPES AND GLASS UNITS: PROVIDE STRUCTURAL, PHYSICA CHARACTERISTICS, SIZE LIMITATIONS, SPECIAL HANDLING OR INST
4.A. ENSURE STRUCTURE OR SUBSTRATE IS ADEQUATE TO SUPPORT HORIZONTAL SLIDING WALL INSTALLATION.	1.B.       SAMPLES         1.B.A.       12 INCH SQUARE SAMPLE OF EACH GLASS TYPES AND GLASS UNI
5. INSTALLATION 5.A. INSTALL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. INSTALL PLUMB AND LEVEL; ACCURATELY FIT, ALIGN, SECURELY FASTEN AND INSTALL FREE FROM DISTORTION OR	<ol> <li>2. GLASS MATERIALS - FLOAT GLASS</li> <li>2.A. ANNEALED: ASTM C1036, TYPE I, TRANSPARENT FLAT, CLASS 1 CLEAR, SELECT)</li> <li>2.B. HEAT-STRENGTHENED AND FULLY TEMPERED: ASTM C1048</li> </ol>
DEFECTS. END OF SECTION	2.D. HEAT-STRENGTHENED AND FULL TEMPERED: ASTM CIO42 2.C. THICKNESS: AS INDICATED; FOR EXTERIOR GLAZING COMPLY WITH SPEC WIND LOAD DESIGN REGARDLESS OF SPECIFIED THICKNESS.
$\bigwedge$	<ol> <li>SINGLE SAFETY GLAZING: NON-FIRE-RATED</li> <li>3.A. APPLICATION: PROVIDE IN THE FOLLOWING LOCATIONS:</li> <li>3.A.A. GLAZED LITES IN DOORS, EXCEPT FIRE DOORS</li> </ol>
	<ul> <li>3.A.A. GLAZED LITES IN DOORS, EXCEPT FIRE DOORS</li> <li>3.A.B. GLAZED SIDELIGHTS TO DOORS, EXCEPT IN FIRE-RATED WALLS AN</li> <li>3.A.C. OTHER LOCATIONS REQUIRED BY APPLICABLE FEDERAL, STATE AN REGULATIONS</li> </ul>
SECTION 08572 - FIBERGLASS DOUBLE HUNG - WINDOWS	3.A.D. OTHER LOCATIONS INDICATED ON DRAWINGS 3.B. TYPE: FULLY TEMPERED FLOAT GLASS 3.C. TINT: CLEAR
<ol> <li>SUBMITTALS</li> <li>1.1. PRODUCT DATA</li> <li>1.1.1. SUBMIT MANUFACTURER'S PRODUCT DATA, INCLUDING INSTALLATION INSTRUCTIONS.</li> </ol>	3.C. THICH CLEAR 3.D. THICKNESS: 1/4 INCH 4. FIRE-PROTECTIVE GLAZING
<ul> <li>1.1.1. SUBMIT MANUFACTURER'S PRODUCT DATA, INCLUDING INSTALLATION INSTRUCTIONS.</li> <li>1.2. SHOP DRAWINGS</li> <li>1.2.1. SUBMIT MANUFACTURER'S SHOP DRAWINGS, INDICATING DIMENSIONS, CONSTRUCTION COMPONENT CONNECTIONS AND LOCATIONS, ANCHORAGE METHODS AND LOCATIONS.</li> </ul>	<ol> <li>PIRE-FROTECTIVE GLAZING</li> <li>A.A. APPLICATION: PROVIDE IN THE FOLLOWING LOCATIONS:</li> <li>4.A.A. ALL GLAZING IN FIRE-RATED WALLS AND PARTITIONS</li> <li>4.A.B. OTHER LOCATIONS REQUIRED BY APPLICABLE FEDERAL, STATE AN</li> </ol>
HARDWARE LOCATIONS, AND INSTALLATION DETAILS. 1.3. SAMPLES	4.A.B. OTHER LOCATIONS REQUIRED BY APPLICABLE FEDERAL, STATE AN REGULATIONS 4.A.C. OTHER LOCATIONS INDICATED ON DRAWINGS 4.B. TYPE: FIRE-PROTECTIVE GLAZING
<ol> <li>SUBMIT FINISH SAMPLES FOR OWNER SELECTION</li> <li>FIBERGLASS WINDOWS</li> <li>PRODUCT: PELLA IMPERVIA SERIES</li> </ol>	4.C. THICKNESS: 4.C.A. 3/16 INCH TYPICAL
<ul> <li>2.1. PRODUCT: PELLA IMPERVIA SERIES</li> <li>2.2. FRAME</li> <li>2.2.1. INTERIOR &amp; EXTERIOR FRAME: PULTRUDED, FIBERGLASS COMPOSITE W/ FOAM INSERTS</li> <li>2.2.2. EXTERIOR SURFACES: COLOR TO MATCH EXISTING WINDOWS</li> </ul>	<ul> <li>4.C.B. 5/16 INCH WHERE SAFETY GLAZING IS REQUIRED</li> <li>4.D. FIRE RATING: AS INDICATED ON DRAWINGS</li> <li>4.E. SURFACE FINISH: STANDARD</li> <li>4.F. PRODUCT:</li> </ul>
<ul> <li>2.2.2. EXTERIOR SURFACES: COLOR TO MATCH EXISTING WINDOWS</li> <li>2.2.3. OVERALL FRAME DEPTH: 3 INCHES</li> <li>2.2.4. NOMINAL WALL THICKNESS: 0.050in TO 0.070in</li> <li>2.3. SASH - UPPER &amp; LOWER</li> </ul>	4.F. PRODUCT: 4.F.A. TECHNICAL GLASS PRODUCTS FIRELITE 4.F.B. TECHNCIAL GLASS PRODUCTS FIRELITE PLUS WHERE SAFETY GLA
<ul><li>2.3.1. INTERIOR &amp; EXTERIOR FRAME: PULTRUDED, FIBERGLASS COMPOSITE W/ FOAM INSERTS.</li><li>2.3.2. LOWER &amp; UPPER SASHES W/ VENTS &amp; TILTS FOR</li></ul>	5. EXAMINATION 5.A. VERIFY THAT OPENINGS FOR GLAZING ARE CORRECTLY SIZED AND WITH
2.3.4. CORNERS: MITERED - BONDED AND SEALED W/ INJECTED THERMOSET POLYURETHANE ADHESIVE	<ul> <li>6. PREPARATION</li> <li>6.A. SHOP FABRICATE AND CUT GLASS WITH SMOOTH, STRAIGHT EDGES OF</li> <li>OPENINGS TO PROVIDE GANA RECOMMENDED EDGE CLEARANCES.</li> </ul>
2.3.5. OPERABLE SASH TILT TO INTERIOR FOR CLEANING OR REMOVAL 2.3.6. PROVIDE EMERGENCY WINDOW EGRESS OPTION WHERE APPLICABLE 2.4. WEATHERSTRIPPING	7. INSTALLATION
2.4.1. VENT UPPER SASH: F IN-TYPE PILE ON JAMBS, TOP RAIL AND STILE 2.4.2. VENT LOWER SASH: VINYL-WRAPPED FOAM AT SILL ON FRAME AND BOTTOM RAIL 2.4.3.	<ul> <li>7.A. INSTALL IN ACCORDANCE WITH GANA-01 GLAZING MANUAL AND GANA- UNLESS SPECIFIED OTHERWISE.</li> <li>7.B. GLAZE IN ACCORDANCE WITH RECOMMENDATIONS OF GLAZING AND FR</li> </ul>
<ul> <li>2.5. GLAZING</li> <li>2.5.1. FLOAT GLASS: ASTM C1036, QUALITY 1</li> <li>2.5.2. TEMPERED GLASS: ASTM C1048</li> <li>2.5.3. TYPE TARE CLAZED INCLUSIONE CLAZED LOW E CONTED WITH ARCON</li> </ul>	END OF SECTION
<ul> <li>2.5.3. TYPE: TAPE GLAZED INSULATING GLASS, SILICONE GLAZED LOW-E COATED WITH ARGON</li> <li>2.6. FINISH</li> <li>2.6.1. EXTERIOR &amp; INTERIOR DURACAST FINISH; AAMA 623; COLOR TO MATCH EXISTING WINDOWS</li> <li>2.6.2 INTERIOR ENACH DUAL SOLOR OF ESTIMATED</li> </ul>	
<ul> <li>2.6.2. INTERIOR FINISH: DUAL COLOR - SELECTION BY OWNER</li> <li>3. HARDWARE</li> </ul>	
3.1.       LOCK: SELF-ALIGNING CAM ACTION LOCK         3.1.1.       WINDOWS 37in OR GREATER: 2 LOCKS         3.1.2.       FINISH: SELECTION BY OWNER.	
3.2.TILT LATCHES: GLASS REINFORCED NYLON 63.2.1.INTEGRATED INTO SASH CORNER3.2.2.FINISH: SELECTION BY OWNER	
<ul> <li>4. INSTALLATION ACCESSORIES</li> <li>4.1. FLASHING/SEALANG TAPE: PELLA SMARTFLASH</li> </ul>	
<ul> <li>4.2. INTERIOR INSULATING FOAM SEALANT: LOW EXPANSION, LOW PRESSURE POLYURETHANE INSULATING WINDOW AND DOOR FOAM SEALANT</li> <li>4.3. EXTERIOR PERIMETER SEALANT: SEE SECTION 079005 JOINT SEALERS</li> </ul>	
<ol> <li>EXAMINATION</li> <li>5.1. EXAMINE AREAS TO RECEIVE WINDOWS. DO NOT PROCEED WITH INSTALLATION UNTIL</li> </ol>	
UNSATISFACTORY CONDITIONS ARE CORRECTED. 6. INSTALLATION	
<ul> <li>6.1. INSTALL WINDOWS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPROVED SHOP DRAWINGS</li> <li>6.2. INSTALL WINDOWS TO BE WEATHERTIGHT AND FREELY OPERATING</li> </ul>	
<ul> <li>6.3. MAINTAIN ALIGNMENT WITH ADJACENT WORK</li> <li>6.4. SECURE ASSEMBLY TO FRAMED OPENINGS, PLUMB AND SQUARE, WITHOUT DISTORTION</li> <li>6.5. INTEGRATE WINDOW SYSTEM INSTALLATION WITH EXTERIOR WEATHER RESISTANT BARRIER</li> </ul>	
<ul> <li>6.6. PLACE INTERIOR SEAL AROUND WINDOW PERIMETER TO MAINTAIN CONTINUITY OF BUILDING THERMAL AND AIR BARRIER USING INSULATING FOAM SEALANT</li> <li>6.7. SEAL WINDOW TO EXTERIOR WALL CLADDING WITH SEALANT AND RELATED BACKING MATERIALS</li> </ul>	
AT PERIMETER OF ASSEMBLY END OF SECTION	

1.B. SAMPLES         1.B. ACOUSTICAL UNITS         1.B. ACO	AND FINISH AS GRID ALVANIZED STEEL; SIZE AND TYPE TO SUI M C636 AND MANUFACTURER'S INSTRUC MUM DEFLECTION OF L/360. ENDENT OF WALLS, COLUMNS, DUCTS, PI PPLEMENTARY HANGERS LOCATED WITH D INDEPENDENTLY.
HE TEM INSTANT ONE OF DESIGNATION OF THE ADVECTOR OF DESIGNATION OF THE ADVECTOR OF OPERATION OF THE ADVECTOR	AND FINISH AS GRID ALVANIZED STEEL; SIZE AND TYPE TO SUI M C636 AND MANUFACTURER'S INSTRUC MUM DEFLECTION OF L/360. ENDENT OF WALLS, COLUMNS, DUCTS, PI PPLEMENTARY HANGERS LOCATED WITH 5 INDEPENDENTLY.
Location and the second s	ALVANIZED STEEL; SIZE AND TYPE TO SUI M C636 AND MANUFACTURER'S INSTRUC MUM DEFLECTION OF L/360. ENDENT OF WALLS, COLUMNS, DUCTS, PI PPLEMENTARY HANGERS LOCATED WITH DINDEPENDENTLY.
Se A NUMBER DURING AND	MUM DEFLECTION OF L/360. ENDENT OF WALLS, COLUMNS, DUCTS, PI PPLEMENTARY HANGERS LOCATED WITH DINDEPENDENTLY. UFACTURER'S INSTRUCTIONS.
NB SHEAD, ANTINION     1. SUBMITALS     7. INSTALLATON - ACQUERTCALUNTE       NENTS, AND INSPECTION     1. SUBMITALS     7. INSTALLATON - ACQUERTCALUNTE       HAVE SEEN COMPLETED N     2. OVTOUM PARELSI ASTM CISSIS. TATERED EDGES LIDIN FINISHING SYSTEM     7. INSTALLATON - ACQUERTCALUNTE       1. UDDE DETAILS, ELEVATIONS     2. OVTOUM PARELSI ASTM CISSIS. TATERED EDGES LIDINS SOLARE CUT.     2. A. FEGULAR EDARS.       2. OVTOUM PARELSI ASTM CISSIS. TATERED EDGES LIDINS OF HERMORE NOTED     2. A. FEGULAR EDARS.     INSTALLIN ACCORDING: WITH ASTM CISSIS.       2. OVTOUM PARELSI ASTM CISSIS. TATERED EDGES LIDINS OF HERMORE NOTED     2. A. FEGULAR EDARS.     INSTALLIN ACCORDING: WITH ASTM CISSIS.       2. OVTOUM PARELSI ASTM CISSIS. TATERED EDGES LIDING FLUXES NOTED     2. A. FEGULAR EDARS.     INSTALLIN ACCORDING: WITH ASTM CISSIS.       2. OVTOUM PARELSI ASTM CISSIS. TATERED EDGES LIDING FLUXES NOTED     2. A. FEGULAR EDARS.     INSTALLIN ACCORDING: WITH ASTM CISSIS.       2. OVTOUM PARELSING DISCUSS. TO UNIT WITH ASTM CISSIS. AND VERSE NOTED     2. A. FEGULAR EDARS.     INSTALLIN ACCORDING: WITH ASTM CISSIS.       2. OVTOUM PARELSING DISCUSS. DE NOTED     2. A. FEGULAR EDARS.     INSTALLIN ACCORDING: WITH ASTM CISSIS.     INSTALLIN ASTM CISSIS.       2. OVTOUM PARELSING DISCUSS. DE NOTED     2. A. FEGULAR EDARS.     INSTALLIN ACCORDING: WITH ASTM CISSIS.     INSTALLIN ACCORDING: WITH ASTM CISSIS.       3. OVTOUM PARELSING DISCUSS. DE NOTED     2. A. FEGULAR EDARS.     INSTALLIN ASTM CISSIS.     INSTALLIN ASTM CISSIS. <td>UFACTURER'S INSTRUCTIONS.</td>	UFACTURER'S INSTRUCTIONS.
LA PRODUCTION     LOC PRODU	
<ul> <li>C. OYPELMERVELS, SELEVATIONS</li> <li>A. REGULAS AGARD</li> <li>C. OYPELMERVELS, SELEVATIONS</li> <li>C. A. REGISTANT CARGE SIGN INCH</li> <li>C. A. THICKNESSE SIGN INCH</li> <li>C. A. THICKNESSE SIGN INCH</li> <li>C. A. THICKNESSE SIGN INCH</li> <li>C. MOLE REGISTANT CARGE NOTION</li> <li>C. MOLE REGISTANT CARGE NOTION EXCELLINGS UNLESS OTHERWISE NOTED</li> <li>C. MOLE REGISTANT CARGE NOTION EXCELLINGS OF ID WHERE NOTED</li> <li>C. C. MOLE REGISTANT CARGE NOTION EXCELLINGS AT TOLLET ROOMS, JANITOR</li> <li>C. C. C. L. C. C. TOLICKNESSE SIGN INCH</li> <li>C. C. C. L. C. C. TOLICKNESSE SIGN INCH</li> <li>C. C. C. L. C. C. TOLICKNESSE SIGN INCH</li> <li>C. C. C. L. C. C. TOLICKNESSE SIGN INCH</li> <li>C. C. C. L. C. C. TOLICKNESSE SIGN INCH</li> <li>C. C. C. TOLICKNESSE SIGN INCH</li> <li>C. D. THE BACKER BOARD:</li> <li>C. D. THE BACKER BOARD:</li> <li>C. D. THE BACKER BOARD:</li> <li>C. D. THE CARCES BEHIND THE INCLUDING THE BACKER AT ALL AREAS AND WHERE NOTED</li> <li>D. D. THE BACKER BOARD:</li> <li>C. THICKNESSE SIGN INCH</li> <li>C. THICKNESSE SIGN INCH</li> <li>C. THICKNESSE SIGN INCH</li> <li>S. METAL FRAMING MATERIALS</li> <li>S. METAL FRAMING MATERIALS</li> <li>A. METAL FRAMING MATERIALS</li> <li>A. MILL MADDEARING FRAMING SYSTEM COMPONENTS, ASTM CORS, GAUNANIZED SHEET STEEL, OF SIGN IN MARKING PREMISES DAGA THE INHORE DAGA COLVANIZED SHEET STEEL, OF SIGN IN MARKING PREMISED CORD ON MULL REAL COMPLY WITH ASTM CORS. CAUSING IN CALLERS, WITH MADDEAR MADDEARCON ON MULL REAL COMPLY WITH ASTM CORS. GAUNANIZED SHEET STEEL, OF SIGN IN MARKEN AND DELECON ON WILL REAL COMPLY WITH ASTM CORS. GAUNANIZED SHEET STEEL, OF SIGN IN MARKEN AND DELECON ON WILL REAL COMPLY WITH ASTM CORS. GAUNANIZED SHEET STEEL, OF SIGN IN MARKEN AND DELECON ON WILL REAL COMPLEXANDE DAGA COMPLEXANDED AND CATER ACCESSIONES AND COMPLEXANDED AND CATER ACCESSIONES AND COMPLEXANDED AND CATER ACCESSIONES AND COMPLEXANDED</li></ul>	
2.A.B.     LOCATION: TYPE AL WALLE AND CELINGS UNLESS OTHERWISE NOTED       2.B.A.     THICKNESS KIN INCH       2.D.A.     THICKNESS KIN INCH	
2.8.8       LOCATION EREE EATED ASSEMBLIES AND WHERE NOTED         2.C.       MOLD RESIGNATIONAL BLANCH WILLSCORE OF 10 WHENE TEGTED IN ACCORDANCE WITH ASTM 03278.         2.C.A.       THICKNESSE Sig INCH         2.C.A.       THICKNESSE Sig INCH         2.C.A.       THICKNESSE Sig INCH         2.D.A.       THICKNESSE Sig INCH         2.D.C.       PROPUCT: GEORGIA PACIFIC DENS-SHELP THE BACKER AT ALL AREAS AND WHERE         3.A.       THICKNESSE Sig INCH         2.D.C.       THICKNESSE SIG INCH </td <td></td>	
2.0.8.       LOCATION: EXPOSED OVPOUN BOARD WALLS AND CEILINGS AT TOILET ROOMS, JANITOR         2.0.9       TILE BACKER BOARD;         2.0.0.       TILE BACKER BOARD;         2.0.0.1       THE KACKER BOARD;         2.0.0.2       THICKNESS-50/9 INCH         2.0.0.2       PRODUCT GEORGIA PACIFIC DENS-SHIELD TILE BACKER.         2.0.0.2       PRODUCT GEORGIA PACIFIC DENS-SHIELD TILE BACKER.         2.0.0.2       PRODUCT GEORGIA PACIFIC DENS-SHIELD TILE BACKER.         2.0.0.1       PRODUCT GEORGIA PACIFIC DENS-SHIELD TILE BACKER.         2.0.1       NONL-CADBEARING FRAMING SYSTEM COMPONENTS: ASTM GGAS; GALVANIZED SHEET STEEL, OF SIZE AND PROPERTIES HECEGESARY TO COMPLY WITH ASTM CF34 FOR SPACING INDICATED, WITH MAXIMUM DEFLECTION OF WALL FRAMING OF LIZAD AT IS PSF.         3.0.1       POWER SUPPLIES, SAA.       MAINUM DEFLECTION OF WALL FRAMING OF LIZAD AT IS PSF.         3.0.1       POWER SUPPLIES, SAA.       MAINUM DEFLECTION OF WALL FRAMING OF LIZAD AT IS PSF.         3.0.1       POWER SUPPLIES, SAA.       MAINUM DEFLECTION OF WALL FRAMING OF LIZAD AT IS PSF.         3.1.1       OWER SUPPLIES, SAA.       MAINUM DEFLECTION OF WALL FRAMING OF LIZAD AT IS PSF.         3.1.1       OWER SUPPLIES, SAA.       MAINUM DEFLECTION OF WALL FRAMING OF LIZAD AT IS PSF.         0.1.1       OWER SUPPLIES, SAA.       MAINUM DEFLECTION OF WALL FRAMING OF LIZAD AT IS PSF.         0.1.1.1	
2.D.A.       THICKNESS: 5/3 INCH         2.D.S.       LOCATION: SUFFACES BEHIND TILE INCLUDING TILE BACKER AT ALL AREAS AND WHERE NOTED         2.D.C.       PRODUCT: GEDRGIA PACIFIC DENS-SHIELD TILE BACKER.         3.A.       NON-LODDBEAKING SYSTEM COMPONENTS: ASTM C645; GALVANIZED SHEET STEEL, OF SIZE AND PROPERTIES INECESSARY TO COMPLY WITH ASTM C754 FOR SPACING INDICATED, WITH MAXIMUM DEFLECTION OF WALL FRAMING OF L240 AT 5PS;         VILL POWER SUPPLIES,       3.A.         PROFER OPERATION.       3.A.         SA.A.       MAXIMUM DEFLECTION OT ILL FINISHER: USED GAR Y TO COMPLY WITH ASTM C754 FOR SPACING INDICATED, WITH MAXIMUM DEFLECTION OF WALL FRAMING OF L240 AT 5PS;         VILL POWER SUPPLIES,       3.A.A.         PROFER OPERATION.       3.A.B.         SA.A.       MAXIMUM DEFLECTION OT ILL ENDINES; USED GA         SA.A.       MAXIMUM DEFLECTION AT TILE FINISHER; USED OR ILESS.         BID DUILING POWER       3.A.C.         PROFECTIVE COATING AT INTERIOR APPLICATIONS: ASTM A653; G40 HOT-DIP GALVANIZED         DIMENSIONS ARE AS       4.B.         4.B.       GYPSUM BOARD CEILING SUBSPENSION SYSTEM         4.A.       GENERAL: COMMERCIAL QUALITY; COLP-ROLLED STEEL, HOT-DIPPED GALVANIZED FINISH         4.B.       GYPSUM BOARD CEILING SUBSPENSION SYSTEM         4.A.       GENERAL: COMMERCIAL QUALITY; COLP-ROLLED STEEL NOT FACE         4.D.       CROSS MEMBERSES;	
N DRAWINGS. LISTED       2.D.C.       PRODUCT; GEORGIA PACIFIC DENS-SHIELD TILE BACKER.         S. METAL FRAMING MATERIALS       3.A.       NON-LOADBEARING STRAMING GYSTEM COMPONENTS: ASTM C645; GALVANIZED SHEET STEEL, OF MAXIMUM DEFLECTION OF WALL FRAMING OF L/240 AT 5 PSF.         S.A.       NON-LOADBEARING STRAMING GYSTEM COMPONENTS: ASTM C645; GALVANIZED SHEET STEEL, OF MAXIMUM DEFLECTION OF WALL FRAMING OF L/240 AT 5 PSF.         S.A.A.       MAXIMUM DEFLECTION AT TILE FINISHES: L360 C0. LESS.         S.D.G.       PROTECTIVE COATING AT INTERIOR APPLICATIONS: ASTM A653, G40 H0T-DIP GALVANIZED.         A.G.       PROTECTIVE COATING AT INTERIOR APPLICATIONS: ASTM A653, G40 H0T-DIP GALVANIZED.         A.G.       GENERAL: COMMERCIAL QUALITY, COLD-ROLLED STEEL, H0T-DIPPED GALVANIZED FINISH         MAIN TEES: FIRE RATED HER ANTED HEAVY DUTY: 1-1/2 INCH HIGH X 1-1/2 INCH FACE       4.G.         GROSS TEES: FIRE RATED MEMBERS; 1-1/2 INCH HIGH X 1-1/2 INCH FACE       4.G.         MAIN TEES: INFE RATED MEMBERS; 1-1/2 INCH HIGH X 1-1/2 INCH FACE       4.G.         RULL 0G INDGS: 1-1/2 XI INCH       4.G.         RULL 0G INGS: 1-1/2 XI INCH       4.G.         R LINE OF HARDWARE ITEM       4.G.         FOR ARCHITECTURAL       5.A.         ACCUESSORIES: ASTM C1047         S.A.       S.A.         S.A.       ACOUSTIC INGULATION: ASTM C665; MINERAL WOOL BATTS WITHOUT MEMBRANE         S.A. <t< td=""><td></td></t<>	
AND UGABLE BUILDINGG       3.A.       NON-LOADBEARING FRAMING SYSTEM COMPONENTS: ASTM C645; GALVANIZED SHEET STEEL, OF SIZE AND PROPERTIES NECESSARY TO COMPLY WITH ASTM C754 FOR SPACING INDICATED, WITH MAXIMUM DEFLECTION OF WALL FRAMING OF L/240 AT 5 PSF.         ALL POWER SUPPLIES, RECEPTION AT ILLE FINISHES: L/260 OR LESS.       3.A.A.       MAXIMUM DEFLECTION AT ILLE FINISHES: L/260 OR LESS.         ALL POWER SUPPLIES, RECEPTION AT ILLE FINISHES: L/260 OR LESS.       3.A.B.       MINIMUM BAGE METAL THICKNEGS: 20 GA.         JD TO BUILDING POWER       3.A.C.       PROTECTIVE COATING AT INTERIOR APPLICATIONS: ASTM A663, G40 H0T-DIP GALVANIZED.         DIMENSIONS ARE AS       4.GYPSUM BOARD CELLING SUBFENSION SYSTEM         A.A.       GENERAL: COMMERCIAL QUALITY, COLD-ROLLED STEEL, HOT-DIPPED GALVANIZED FINISH         DIMENSIONS ARE AS       4.B.       MAIN TEES: FIRE RATED MEMORES; 1/12 INCH HIGH X 1-1/2 INCH FACE         4.C.       CROSS MEMBERS; FIRE RATED MEMORES; 1/12 INCH HIGH X 1-1/2 INCH FACE       4.C.         4.E.       WALL MOLDINGS: 1-1/2 X 1 INCH       4.F.         4.G.       PRODUCT: USG DRYWALL GUBPENGION SYSTEM       5.         5. FOR ARCHITECTURAL       5.       ACCUESGORIES: ASTM C0665; MINERAL WOOL BATTS WITHOUT MEMBRANE         5.A.       THICKNESS: 2 INCH MINN.       5.A.       THICKNESS: 2 INC         6.B.       CONTROL LATION: ASTM C6665; MINERAL WOOL BATTS WITHOUT MEMBRANE       5.A.         5.A.	
ALL POWER GUPPLIEG, REOPER OPERATION. B) TO BUILDING POWER 3.A.B. MINIMUM BAGE METAL THICKNEGG: 20 GA. 3.A.C. PROTECTIVE COATING AT INTERIOR APPLICATIONG: ASTM A663, G40 HOT-DIP GALVANIZED. 4. GYPSUM BOARD CEILING SUBPENSION SYSTEM 4.A. GENERAL: COMMERCIAL QUALITY, COLD-ROLLED STEEL, HOT-DIPPED GALVANIZED FINISH 4.A. GENERAL: COMMERCIAL QUALITY, COLD-ROLLED STEEL, HOT-DIPPED GALVANIZED FINISH 4.C. CROSS MEMBERS: FIRE RATED MEMBERS; 1-1/2 INCH HIGH X 1-1/2 INCH FACE 4.C. CROSS MEMBERS: FIRE RATED MEMBERS; 1-1/2 INCH HIGH X 1-1/2 INCH FACE 4.E. WALL MOLDINGS: 1-1/2 X I INCH TIONS AND APPLICABLE 4.F. ACCESSORIES: HANGERS, SPLICE CLIPS AND OTHER ACCESSORIES REQUIRED FOR COMPLETE INSTALLATION 8. LINE OF HARDWARE ITEM 5. ACCESSORIES: ASTM CIO47 5. A. COUSTIC INSULATION: ASTM C665; MINERAL WOOL BATTS WITHOUT MEMBRANE 5.A. THICKNESS: 2 INCH MIN. 5.A.B. PRODUCT: THERMAFIBER SAFB 2.5 PCF 5.B. CORNER BEADS: USG SHEETROCK #103 DUR-A-BEAD 5.C. CONTROL JOINTS: USG SHEETROCK #200	
A. GYPSUM BOARD CEILING SUSPENSION SYSTEM         A.A. GENERAL: COMMERCIAL QUALITY, COLD-ROLLED STEEL, HOT-DIPPED GALVANIZED FINISH         A.A. GENERAL: COMMERCIAL QUALITY, COLD-ROLLED STEEL, HOT-DIPPED GALVANIZED FINISH         A.B. MAIN TEES: FIRE RATED HEAVY DUTY; 1-1/2 INCH HIGH X 1-1/2 INCH FACE         4.C. CROSS MEMBERS: FIRE RATED MEMBERS; 1-1/2 INCH HIGH X 1-1/2 INCH FACE         4.D. CROSS TEES: FIRE RATED MEMBERS; 1-1/2 INCH HIGH X 1-1/2 INCH FACE         4.E. WALL MOLDING: 1-1/2 X 1 INCH         TIONS AND APPLICABLE         4.F. ACCESSORIES; ASTIC CLIPS AND OTHER ACCESSORIES REQUIRED FOR COMPLETE INSTALLATION         R LINE OF HARDWARE ITEM         5. ACCESSORIES; ASTM CI047         5. ACCESSORIES; ASTM CI047         5. ACCESSORIES; ASTM CI047         5. A. COUSTIC INSULATION: ASTM C665; MINERAL WOOL BATTS WITHOUT MEMBRANE         5.A.A. THICKNESS: 2 INCH MIN.         S.A.B. PRODUCT: THERMARIBER SAFB 2.5 PCF         5.B. CORNER BEADS; USG SHEETROCK #103 DUR-A-BEAD         5.C. CONTROL JOINTS: USG SHEETROCK #200	
DIMENSIONS ARE AS       4.B. MAIN TEES: FIRE RATED HEAVY DUTY: 1-1/2 INCH HIGH X 1-1/2 INCH FACE         4.C. CROSS MEMBERS: FIRE RATED MEMBERS: 1-1/2 INCH HIGH X 1-1/2 INCH FACE         4.D. CROSS TEES: FIRE RATED MEMBERS: 1-1/2 INCH HIGH X 1-1/2 INCH FACE         4.E. WALL MOLDINGS: 1-1/2 X1 INCH         4.F. ACCESSORIES: HANGERS, SPLICE CLIPS AND OTHER ACCESSORIES REQUIRED FOR COMPLETE         INSTALLATION         R LINE OF HARDWARE ITEM         5 FOR ARCHITECTURAL         FOR ARCHITECTURAL         5. ACCESSORIES: ASTM CIO47         5.A. COUSTIC INSULATION: ASTM C665; MINERAL WOOL BATTS WITHOUT MEMBRANE         5.A.A. THICKNESS: 2 INCH MIN.         5.A.B. PRODUCT: THERMAFIBER SAFB 2.5 PCF         5.B. CORNER BEADS: 19.6 SHEETROCK #103 DUR-A-BEAD         5.C. CONTROL JOINTS: USG SHEETROCK #103 DUR-A-BEAD         5.D. EDGE TRIM: USG SHEETROCK #200	
4.D. CROSS TEES: FIRE RATED MEMBERS; 1-1/2 INCH HIGH X 1-1/2 INCH FACE 4.E. WALL MOLDINGS: 1-1/2 X 1 INCH TIONS AND APPLICABLE 4.F. ACCESSORIES: HANGERS, SPLICE CLIPS AND OTHER ACCESSORIES REQUIRED FOR COMPLETE INSTALLATION 4.G. PRODUCT: USG DRYWALL SUSPENSION SYSTEM 5. ACCESSORIES: ASTM C1047 5. ACCESSORIES: ASTM C1047 5. ACCESSORIES: ASTM C1047 5. ACCESSORIES: ASTM C1047 5. ACCUSTIC INSULATION: ASTM C665; MINERAL WOOL BATTS WITHOUT MEMBRANE 5.A.A. THICKNESS: 2 INCH MIN. 5.A.B. PRODUCT: THERMAFIBER SAFB 2.5 PCF 5.B. CORNER BEADS: USG SHEETROCK #103 DUR-A-BEAD 5.C. CONTROL JOINTS: USG SHEETROCK #103 DUR-A-BEAD 5.D. EDGE TRIM: USG SHEETROCK #200	
INSTALLATION R LINE OF HARDWARE ITEM 5 FOR ARCHITECTURAL FOR ARCHITECTURAL FOR ARCHITECTURAL 5. ACCESSORIES: ASTM CIO47 5.A. ACOUSTIC INSULATION: ASTM C665; MINERAL WOOL BATTS WITHOUT MEMBRANE 5.A.A. THICKNESS: 2 INCH MIN. 5.A.B. PRODUCT: THERMAFIBER SAFB 2.5 PCF 5.B. CORNER BEADS: USG SHEETROCK #103 DUR-A-BEAD 5.C. CONTROL JOINTS: USG SHEETROCK ZINC #093 5.D. EDGE TRIM: USG SHEETROCK #200	
5.       ACCESSORIES: ASTM C1047         5.A.       ACOUSTIC INSULATION: ASTM C665; MINERAL WOOL BATTS WITHOUT MEMBRANE         5.A.A.       THICKNESS: 2 INCH MIN.         5.A.B.       PRODUCT: THERMAFIBER SAFB 2.5 PCF         5.B.       CORNER BEADS: USG SHEETROCK #103 DUR-A-BEAD         5.C.       CONTROL JOINTS: USG SHEETROCK ZINC #093         5.D.       EDGE TRIM: USG SHEETROCK #200	
5.A.B.PRODUCT: THERMAFIBER SAFB 2.5 PCF5.B.CORNER BEADS: USG SHEETROCK #103 DUR-A-BEAD5.C.CONTROL JOINTS: USG SHEETROCK ZINC #0935.D.EDGE TRIM: USG SHEETROCK #200	
5.D. EDGE TRIM: USG SHEETROCK #200	
THE REPEAL AND THE AND THE AND	
INCH WIDE X 5/8 INCH DEPTH, WITH PREMANUFACTURED CORNERS AND INTERSECTIONS; PITTCON SWR SERIES 5.F. FASTENERS: SCREWS; ASTM C1002	$\sim$
<ul> <li>5.F.A. WOOD FRAMING: 1-1/4 INCH TYPE 'W' BUGLE HEAD</li> <li>5.F.B. STEEL FRAMING: 1-1/8 INCH TYPE 'S'' BUGLE HEAD</li> <li>5.F.C. STEEL TO STEEL FRAMING CONNECTIONS: 3/8 INCH TYPE 'S-12'' PAN (OR LOW PROFILE) HEAD SECTION 096500 - RESILIENT FLOORI</li> </ul>	ING
5.G.       JOINT TREATMENT MATERIALS: ASTM C475         5.G.A.       JOINT TAPE: MESHED-REINFORCING TAPE         5.G.B.       JOINT COMPOUND: CHEMICAL HARDENING TYPE FOR BEDDING AND FILLING, AND         1.A.       PRODUCT DATA	
READY-MIXED VINYL TYPE FOR TOPPING CHARACTERISTICS, SIZES, PATT G. GYRGUM PANEL INSTALLATION: PER ASTM CB40, GA-216 AND MANUEACTUPER'S INSTRUCTIONS 1.B. SHOP DRAWINGS	JCTS, DESCRIBING PHYSICAL AND PERFO TERNS AND COLORS AVAILABLE, INSTALI
<ul> <li>6.4. EXTEND ALL LAYERS OF GYPSUM BOARD FROM FLOOR TO UNDERSIDE OF STRUCTURE OVERHEAD</li> <li>6.4. EXTEND ALL LAYERS OF GYPSUM BOARD FROM FLOOR TO UNDERSIDE OF STRUCTURE OVERHEAD</li> <li>1.5.4. LAYOUT, PATTERNS, COLOR ARR</li> <li>1.6.4. LAYOUT, PATTERNS, COLOR ARR</li> <li>1.6.5. SAMPLES</li> <li>1.6.4. COMPLETE SET OF COLOR SAMPLES</li> </ul>	RANGEMENT, AND JUNCTIONS WITH DISS PLES
6.A.A.FIRE RATED PARTITIONS2. VINYL COMPOSITION TILE: ASTM F10666.A.B.SMOKE PARTITIONS2.A.SEE INTERIOR DESIGN DRAWINGS FC6.A.C.SOUND RATED PARTITIONS2.A.SEE INTERIOR DESIGN DRAWINGS FC	OR SELECTION
6.A.D.       OTHER PARTITIONS AS INDICATED ON DRAWINGS       3.       RESILIENT BASE: SEE INTERIOR DESIGN D         6.B.       IN LOCATIONS OTHER THAN THOSE SPECIFIED, EXTEND GYPSUM BOARD FROM FLOOR TO NOT LESS       4.       ACCESSORIES	DRAWINGS FOR SELECTION
AL AND ENVIRONMENTAL       THAN 6 INCHES ABOVE SUSPENDED ACOUSTICAL CEILINGS.       4.1. ACOUSTICAL SUSPENDED ACOUSTICAL CEILINGS.         FALLATION REQUIREMENTS       6.C. INSTALLATION ON METAL FRAMING: USE SCREWS FOR ATTACHMENT OF ALL GYPSUM BOARD.       4.A. VCT ADHESIVE: AS RECOMMENDED E         IT       6.D. INSTALL WALL/PARTITION BOARD VERTICALLY.       4.B. MOLDINGS, TRANSITION AND EDGE S	IENDED BY MANUFACTURER.
6.E. CEILINGS: INSTALL BOARDS IN DIRECTION AND MANNER WHICH WILL AVOID END JOINTS IN THE ARCHITECT. CENTRAL AREA OF EACH CEILING. STAGGER END JOINTS AT LEAST 4 FEET. 4.B.A. LOCATION: ALL TRANSITIONS BE QUALITY Q3 (GLAZING	ETWEEN VCT AND ADJACENT FLOOR MAT
DIFIED REQUIREMENTS FOR SHOWN TO TERMINATE ADOVE SUSPENDED CEILINGS, I ROVIDE DRACING OR EXTEND STODS TO	TO TOLERANCES ACCEPTABLE TO FLOORI FREE OF CURING COMPOUNDS, SURFACE ERFERE WITH BONDING OF FLOORING TO
UNDERSIDE OF STRUCTURE OVERHEAD. PROVIDE HORIZONTAL BRACING AT 4 FOUT O.C. MEASURED VERTICALLY 5.B. CEMENTITIOUS SUB-FLOOR SURFACE	
ID PARTITIONS ID LOCAL CODES AND 7.C. BLOCKING: INSTALL WOOD BLOCKING AT ALL FRAMED OPENINGS, WALL-MOUNTED ITEMS AND OTHER ITEMS AS INDICATED ON DRAWINGS OR AS SPECIFIED. 0. PREPARATION 6. REMOVE EXISTING FLOORING AND FL RECOMMENDED WORK PRACTICES FO	OR REMOVAL OF RESILIENT FLOOR COVER
6.B. REMOVE SUBFLOOR RIDGES AND BU 8. ACCESSORY INSTALLATION 8.A. CONTROL JOINTS: NOT MORE THAN 30 FEET APART ON WALLS AND CEILINGS OVER 50 FEET LONG. 6.C. CLEAN SUBSTRATE.	IMP5. FILL LOW SPOTS, CRACKS, JOINTE
<ul> <li>8.B. CORNER BEADS: INSTALL AT EXTERNAL CORNERS.</li> <li>8.C. EDGE TRIM: INSTALL AT LOCATIONS WHERE GYPSUM BOARD ABUTS DISSIMILAR MATERIALS AND</li> <li>7. INSTALLATION - GENERAL</li> <li>7.A. STARTING INSTALLATION CONSTITUT</li> </ul>	ES ACCEPTANCE OF SUBSURFACE CONI
9. GYPSUM BOARD FINISH: PER ASTM C840 AND AS FOLLOWS: 9. A. LEVEL 5: ALL GYPSUM BOARD UNLESS OTHERWISE NOTED 10 LOCAL CODES AND 10 LOCAL CODES AND	NCE WITH RFCI RECOMMENDED INSTALLA
9.B. LEVEL 2: TILE-FINISHED WALL 9.C. LEVEL 1: WALLS ABOVE FINISHED CEILINGS, WHETHER OR NOT ACCESSIBLE IN THE COMPLETED 9. INSTALLATION - VINYL WALL BASE CONSTRUCTION. 9.A. INSTALL FULL SPREAD PER MANUFA	CTURER'S RECOMMENDATIONS.
END OF SECTION END OF	OF SECTION
SECTION 096813 - TILE CARPETING 1. SUBMITTALS	
ZING IS REQUIRED 1. SUBMITTALS 1. SUBMITTALS	RODUCTS, DESCRIBING PHYSICAL AND P TERNS, COLORS AVAILABLE AND METHOI
HIN TOLERANCE. 1.A.A. DATA SHEETS ON TILE, MORTAR, GROUT AND ACCESSORIES; INSTRUCTIONS FOR USING 1.B. SAMPLES GROUTS AND ADHESIVES 1.B.A. TWO CARPET TILES ILLUSTRATIN	NG COLOR AND PATTERN DESIGN FOR EA
FFULL SIZE REQUIRED BY 1.D. SHOF DRAWINGS 1.B.A. TILE LAYOUT, PATTERNS, COLOR ARRANGEMENT, PERIMETER CONDITIONS, JUNCTIONS WITH DISSIMILAR MATERIALS, CONTROL AND EXPANSION JOINTS, THRESHOLDS AND SETTING DETAILS 2. MAINTENANCE MATERIALS: FURNISH THE 2.A. PROVIDE TEN PERCENT OF EACH TYP 2.B. STORE MATERIAL WHERE DIRECTED I	PE, PATTERN AND COLOR OF CARPET TILE
-O2 SEALANT MANUAL 1.C. SAMPLES 1.C.A. SAMPLE OF EACH TYPE OF TILE FOR EACH COLOR AND TEXTURE REQUIRED; FULL-SIZE SAMPLE CAMING MANUFACTURERS. 3. CARPET TILE 3. CONSTRUCTION: TUFTED TEXTURED LO	
3.2. YARN SYSTEM: POST-CONSUMER CO	
3. TILE BASE: SEE INTERIOR DESIGN DRAWINGS FOR SELECTION3.4. TUFTED YARN WEIGHT: 10 0Z/SQ YD3.5. MACHINE GAUGE: 1/12 IN	
4. WALL TILE: SEE INTERIOR DESIGN DRAWINGS FOR SELECTION       3.6. PILE HEIGHT: 0.16 IN         3.7. PILE THICKNESS: 0.102 IN         5. MORTAR AND GROUT MATERIALS       3.8. STITCHES: 8.5/IN	
5.A.MORTAR: THIN-GET; LATEX-PORTLAND CEMENT TYPE: ANGI A118.43.9.PILE DENGITY: 6,353 0Z/C.Y.5.B.GROUT: ANGI A118.63.10.TOTAL THICKNEGS: 0.28 IN5.B.A.GEE INTERIOR DEGIGN DRAWINGS FOR SELECTION3.11.GIZE: 19.69 IN X 19.69 IN	
3.12. PERFORMANCE: 6. EXAMINATION 6.A. VERIFY THAT SUB-FLOOR AND WALL SURFACES ARE SMOOTH AND FLAT WITHIN THE TOLERANCES 3.12.2. SMOKE DENSITY PER ASTM EGG	
SPECIFIED, AND ARE READY TO RECEIVE TILE. 6.B. VERIFY THAT SUB-FLOOR SURFACES ARE FREE OF SUBSTRATES THAT COULD IMPAIR BONDING OF SETTING MATERIALS. 3.13.1 LOCATION: REFER TO DRAWING F	
7. PREPARATION       4. ACCESSORIES         7.A. MECHANICALLY SCARIFY EXISTING CONCRETE SURFACES TO REMOVE BOND BREAKERS AND       4.A. SUB-FLOOR FILLER: WHITE PREMIX LA         ONLY AN UNANT C	ATEX; TYPE RECOMMENDED BY FLOORIN
CONTAMINANTS. 7.B. SEAL SUBSTRATE SURFACE CRACKS WITH FILLER. LEVEL EXISTING SUBSTRATE SURFACES TO ACCEPTABLE FLATNESS TOLERANCES. 4.B. EDGE STRIPS: AS INDICATED ON DRA 4.C. RELEASABLE ADHESIVES: ACCEPTAB MATERIALS BEING ADHERED.	
8. INSTALLATION - GENERAL       5. EXAMINATION         8.A. STARTING INSTALLATION CONSTITUTES ACCEPTANCE OF SUBSURFACE CONDITIONS.       5.A. VERIFY THAT SUBFLOOR SURFACES	ARE SMOOTH, DUST-FREE AND FREF OF
	VE MATERIALS TO SUBFLOOR SURFACES
9. INSTALLATION AT FLOORS - THIN-SET METHOD       6.A.       REMOVE SUBFLOOR RIDGES AND BU         9.A.       INTERIOR FLOORS OVER CONCRETE: TCNA F113-13       HOLES, AND OTHER DEFECTS WITH S	
9.A.A. LOCATION: FLOOR TILE UNLESS OTHERWISE NOTED 7. INSTALLATION 7.A. INSTALL CARPET TILE IN ACCORDANC 10. INSTALLATION AT WALLS INSTALLATION STANDARD.	CE WITH MANUFACTURER'S INSTRUCTION
10.A.INTERIOR WALLS OVER GYPSUM WALLBOARD/TILE BACKER ON METAL STUDS: TCNA W243-137.B.FULLY ADHERE CARPET TILE TO SUBS10.A.A.LOCATION: WALL TILE AT METAL FRAMING UNLESS OTHERWISE NOTED7.C.TRIM CARPET TILE NEATLY AT WALLS	
END OF SECTION END OF	OF SECTION

. UNITS		<ol> <li>INTERIOR STAIN AND NATURAL FINISH WOODWORK SYSTEMS</li> <li>STAINED WOODWORK: PROVIDE THE FOLLOWING STAINED WOODWORK:</li> <li>A.A. WATERBORNE SATIN-VARNISH FINISH OVER STAIN: T CLEAR SATIN VARNISH OVER A SEALER COAT AND IN BEFORE APPLYING STAIN.</li> <li>A.A.A. FILLER COAT: OPEN-GRAIN WOOD FILLER.</li> <li>A.A.B. STAIN COAT: OLYMPIC; 44500 LOW VOC INTERIOR WATER</li> <li>A.A.D. FINISH COATS: OLYMPIC; 42786 INTERIOR WATER</li> </ol>
TO SUIT APPLICATION		<ol> <li>INTERIOR CONCRETE FLOORS</li> <li>CONCRETE FLOORS: PROVIDE THE FOLLOWING FLOOR FINIS NEW AND EXISTING.</li> <li>A.A. PENETRATING EPOXY PRIMER SEALER: TWO FINISH CO 7.A.A.A. FINISH COATS: PPG AMERLOCK SEALER</li> <li>EXAMINATION</li> <li>A. DO NOT BEGIN APPLICATION OF COATINGS UNTIL SUBSTRA</li> <li>PREPARATION</li> <li>A. PREPARE NEW AND EXISTING SURFACES USING THE METH MANUFACTURER FOR ACHIEVING THE BEST RESULT FOR T CONDITIONS. DO NOT BEGIN APPLICATION OF COATINGS U PROPERLY PREPARED.</li> <li>B. CLEAN NEW AND EXISTING SURFACES THOROUGHLY AND APPLICATION.</li> <li>C. PREPARATION AND CLEANING TECHNIQUES MAY INCLUDE OF EMULSIFYING DETERGENTS, ABRASIVE BLAST CLEANIN BRUSHING, IMPACT TOOLS, AND ACID ETCHING.</li> <li>VERIFY SURFACES ARE READY TO RECEIVE WORK AS INST</li> </ol>
	<ul> <li>SUBMITTALS</li> <li>1. SUBMITTALS</li> <li>1. A. PRODUCT DATA</li> <li>1. A. EACH TYPE OF WALL COVERING, ADHESIVE AND PRIMER/SEALER</li> <li>1. B.A. EACH TYPE OF WALL COVERING, ADHESIVE AND PRIMER/SEALER</li> <li>1. B.A. EACH TYPE, PATTERN AND COLOR SPECIFIED</li> <li>2. VINYL-COATED FABRIC WALL COVERING</li> <li>2. MEIGHT: TYPE II, 20 02. PER LINEAL YARD</li> <li>2. BACKING: OSNABURG</li> <li>3. FIRE CLASSIFICATION: CLASS A</li> <li>3. ADHESIVE, PRIMER/SEALER: TYPE RECOMMENDED BY WALL COVERING MANUFACTURER TO SUIT APPLICATION. PROVIDE MATERIALS WHICH ARE MILDEW RESISTANT AND NON-STAINING TO THE WALL COVERING.</li> <li>4. EXAMINE SURFACES TO RECEIVE WALL COVERING FOR DEFECTS THAT WILL ADVERSELY AFFECT THE EXECUTION AND QUALITY OF THE WORK. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED.</li> <li>5. PREPARATION</li> <li>6. PREPARATION</li> </ul>	<ol> <li>INSTALLATION - GENERAL</li> <li>I.A. ENSURE SURFACE TEMPERATURES AND THE SURROUNDIN DEGREES F. BEFORE APPLYING PAINT MATERIALS.</li> <li>I.B. PROVIDE ADEQUATE CONTINUOUS VENTILATION AND SUFF TEMPERATURE ABOVE 45 DEGREES F. FOR 24 HOURS BEI APPLICATION OF PAINT AND MATERIALS.</li> <li>I.C. PROVIDE MINIMUM 25-FOOT CANDLES OF LIGHTING ON SU USD. REMOVE HARDWARE AND ACCESSORIES, FITTINGS, AND F LIGHTING FIXTURE AND SIMILAR ITEMS. REINSTALL REMO PAINTING.</li> <li>I.E. DO NOT PAINT OVER DIRT, DUST, STAINS, RUST, SCALE, OIL SURFACES, OR OTHER CONTAMINATION OR CONDITIONS DE DURABLE PAINT FILM.</li> <li>A.PPLY PAINT IN ACCORDANCE WITH PAINT MANUFACTUREI SPECIFIED.</li> <li>G. APPLY EACH COAT OF PAINT AT NO LESS THAN SPREADIN INSTRUCTIONS.</li> <li>I.H. SAND LIGHTLY BETWEEN ENAMEL COATS.</li> <li>I.G. COMPLETELY COVER ITEMS/SURFACES SCHEDULED TO BE SURFACE OF UNIFORM FINISH, COLOR, APPEARANCE AND CLOUDINESS, SPOTTING, HOLIDAYS, LAPS, BRUSH MARKS OTHER SURFACE IMPERFECTIONS.</li> <li>I.G.J. TENTATIVE PAINT LIST: WHERE ANY PARTICULAR APPLICATION APPLICATION WHICH IS CONSISTENT WITH TYPES AND QUA</li> </ol>
	<ul> <li>WALL PLATES, SURFACE-MOUNTED FIXTURES AND ALL OTHER SIMILAR ITEMS.</li> <li>5.B. PERFORM PREPARATION AND CLEANING PROCEDURES IN ACCORDANCE WITH WALL COVERING MANUFACTURER'S INSTRUCTIONS AND AS SPECIFIED.</li> <li>5.C. REMOVE DIRT, GREASE, OLD ADHESIVE, LOOSE PAINT AND PLASTER FROM WALL. FILL CRACKS, CREVICES AND HOLES, AND SAND ROUGH SPOTS SMOOTH.</li> <li>6. INSTALLATION</li> <li>6.A. HANDLE AND APPLY WALL COVERING IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.</li> <li>END OF SECTION</li> </ul>	<ul> <li>SUBMITTALS</li> <li>1. SUBMITTALS</li> <li>1.A. PRODUCT DATA</li> <li>1.A.A. DATA ON ACCESSORIES DESCRIBING SIZE, FINISH, DE METHODS</li> <li>2. TOILET ACCESSORIES - BOOKING TOILET ROOM (VERIFY FINAL S &amp; OWNER)</li> </ul>
P PERFORMANCE NSTALLATION INSTRUCTIONS TH DISSIMILAR MATERIALS	SECTION OP9000 - PAINTING AND COATING 1. SUBMITTALS 1.A. PRODUCT DATA 1.A.A. DATA ON ALL FINISHING PRODUCTS, INCLUDING VOC CONTENT 1.B. SAMPLES 1.B.A. STANDARD COLOR RANGE FOR EACH PAINT SYSTEM REQUIRED	<ol> <li>TOILET PAPER DISPENSER: BRADLEY 5107-52; SINGLE ROI STAINLESS STEEL, HINGED HOOD, ANTI-THEFT SPINDLE</li> <li>PAPER TOWEL DISPENSER: BRADLEY 2441-11; C-FOLD/MULT SATIN STAINLESS</li> <li>SOAP DISPENSER: BRADLEY 6562; VERTICAL, SURFACE-M</li> <li>SANITARY NAPKIN DISPOSAL: BRADLEY 4721-15; SURFACE</li> <li>MIRROR: BRADLEY 747; FRAMELESS WITH CLIP FASTENERS</li> <li>GRAB BARS: BRADLEY 812; 1-1/2 INCH O.D. HEAVY-DUTY, C CONFIGURATION AS INDICATED ON DRAWINGS</li> <li>TOILET ACCESSORIES - STAFF TOILET ROOMS (VERIFY FINAL SE</li> </ol>
ATE LE AS DIRECTED BY DR MATERIAL. FLOORING MANUFACTURER, JRFACE HARDENERS AND	<ol> <li>SCOPE</li> <li>A. FINISH ALL NEW AND EXISTING INTERIOR AND EXTERIOR SURFACES EXPOSED TO VIEW, UNLESS FULLY FACTORY-FINISHED OR OTHERWISE INDICATED. WORK INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:</li> <li>A.A. CONCRETE BLOCK</li> <li>A.B. GYPSUM BOARD</li> <li>A.C. STEEL</li> <li>A.D. ALUMINUM</li> <li>A.E. MECHANICAL AND ELECTRICAL ITEMS: PIPING, INSULATION, SUPPORTS, CONDUIT, BOXES, PANELS</li> <li>PAINT MATERIALS - GENERAL</li> <li>A. COMPATIBILITY: PROVIDE BLOCK FILLERS, PRIMERS, AND FINISH COAT MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH THE SUBSTRATES INDICATED UNDER CONDITIONS OF SERVICE AND APPLICATION.</li> </ol>	<ul> <li>OWNER)</li> <li>2.1. TOILET PAPER DISPENSER: BRADLEY 5103; SINGLE ROLL, STEEL, HINGED HOOD (WOMEN'S RESTROOM)</li> <li>2.2. TOILET PAPER DISPENSER: BRADLEY 5107; SINGLE ROLL, STEEL, HINGED HOOD (MEN'S RESTROOM)</li> <li>2.3. PAPER TOWEL DISPENSER: BRADLEY 2441; C-FOLD/MULTI-STAINLESS</li> <li>2.3. SOAP DISPENSER: BRADLEY 6562; VERTICAL, SURFACE-N</li> <li>2.4. SANITARY NAPKIN DISPOSAL: BRADLEY 4721-15; SURFACE</li> <li>2.5. MIRROR: BRADLEY 747; FRAMELESS WITH CLIP FASTENERS</li> <li>2.6. GRAB BARS: BRADLEY 812; 1-1/2 INCH O.D. HEAVY-DUTY, C CONFIGURATION AS INDICATED ON DRAWINGS</li> <li>3. BATHROOM ACCESSORIES - RESIDENT UNITS (VERIFY FINAL SE OWNER)</li> <li>3.A. TOILET PAPER DISPENSER: BRADLEY 5104; SINGLE ROLL, 1</li> </ul>
ING TO SUBSTRATE. RE DRY AND READY FOR pH. COMMENDATIONS OF RFCI R COVERINGS. JOINTS, HOLES AND OTHER	<ul> <li>3.B. COMPLY WITH VOC LIMITS FOR STATE OF OHIO.</li> <li>3.C. COLORS AND SHEEN: AS SELECTED BY OWNER.</li> <li>4. EXTERIOR PAINT SYSTEMS</li> <li>4.A. CONCRETE UNIT MASONRY: PROVIDE THE FOLLOWING FINISH SYSTEMS OVER EXTERIOR CONCRETE UNIT MASONRY:</li> <li>4.A.A. ACRYLIC FINISH: TWO FINISH COATS OVER A BLOCK FILLER.</li> </ul>	<ul> <li>STEEL</li> <li>3.B. MIRROR: TO BE SELECTED. COORDINATE WITH VANITY LIGH</li> <li>3.C. TOWEL BAR: BRADLEY 908; 30 INCH LENGTH, 1 INCH 0.D. H CHROME-PLATED WITH SATIN FINISH</li> <li>3.D. ROBE HOOK: BRADLEY 9124; SURFACE MOUNTED, SATIN S</li> <li>4. UTILITY ROOM ACCESSORIES - PROVIDE (1) AT EACH JANITOR CL LOCATION W/ ARCHITECT &amp; OWNER)</li> </ul>
CE CONDITIONS. STALLATION PRACTICE FOR 5.	<ul> <li>4.A.A.A. BLOCK FILLER: PPG; 6-15 SPEEDHIDE INTERIOR/EXTERIOR ACRYLIC MASONRY BLOCK FILLER: APPLIED AT A DRY FILM THICKNESS OF NOT LESS THAN 7.2 MILS (0.183 MM).</li> <li>4.A.A.B. EXTERIOR LOW-LUSTER ACRYLIC FINISH: PPG; 6-2045XI SERIES SPEEDHIDE EXTERIOR HOUSE AND TRIM SATIN-ACRYLIC LATEX: APPLIED AT A DRY FILM THICKNESS OF NOT LESS THAN 1.0 MIL (0.025 MM).</li> <li>4.B. UNPAINTED BRICK</li> <li>4.B.A. ACRYLIC FINISH: TWO FINISH COATS OVER A MASONRY PRIMER</li> <li>4.B.A.B. FINISH: PPG PAINTS 4-809 MASONRY SEALER</li> <li>4.B.A.B. FINISH: PPG PAINTS 6-2045 XI SPEEDHIDE EXTERIOR ACRYLIC SATIN</li> <li>4.C. PAINTED STUCCO</li> <li>4.C.A. ACRYLIC FINISH: TWO FINISH COATS OVER A MASONRY SEALER</li> <li>4.C.A.B. FINISH: PPG PAINTS 4-809 MASONRY SEALER</li> <li>4.C.A.B. FINISH: TWO FINISH COATS OVER A MASONRY SEALER</li> <li>4.C.A.B. FINISH: TWO FINISH COATS OVER A MASONRY SEALER</li> <li>4.C.A.B. FINISH: TWO FINISH COATS OVER A MASONRY SEALER</li> <li>4.C.A.B. FINISH: TWO FINISH COATS OVER A MASONRY SEALER</li> <li>4.C.A.B. FINISH: TWO FINISH COATS OVER A MASONRY SEALER</li> <li>4.C.A.B. FINISH: TWO FINISH COATS OVER A MASONRY SEALER</li> <li>4.C.A.B. FINISH: TWO FINISH COATS OVER A MASONRY SEALER</li> <li>4.C.A.B. FINISH: TWO FINISH COATS OVER A MASONRY SEALER</li> </ul>	<ul> <li>4.1. MOP AND BROOM HOLDER: BRADLEY 9953; 3 HOLDERS, 2</li> <li>5. EXAMINATION</li> <li>5.1. VERIFY EXACT LOCATION OF ACCESSORIES FOR INSTALLAT MEASUREMENTS ARE AS INDICATED ON DRAWINGS.</li> <li>5.2. AT WALL-MOUNTED ITEMS, VERIFY THAT WOOD BLOCKING SOLID OR GROUTED MASONRY OCCURS AT MASONRY WAL</li> <li>6. PREPARATION</li> <li>6.1. PROVIDE ROUGH OPENINGS IN NEW AND EXISTING WALLS INSTALLATIONS.</li> <li>7. INSTALLATION</li> <li>7. INSTALLATION</li> <li>7. INSTALL ACCESSORIES IN ACCORDANCE WITH MANUFACTULEVEL AND SECURELY AND RIGIDLY ANCHORED TO SUBST</li> </ul>
. AND PERFORMANCE METHOD OF INSTALLATION. FOR EACH COLOR SELECTED N MAINTENANCE OF PROJECT. PET TILE.	<ul> <li>4.D. ALUMINUM</li> <li>4.D.A. ACRYLIC FINISH: TWO FINISH COATS OVER A DTM METAL PRIMER</li> <li>4.D.A.A. PRIMER: PPG PAINTS 90-712 PITT TECH DTM METAL PRIMER</li> <li>4.D.A.B. FINISH: PPG PAINTS 6-900 XI SPEEDHIDE EXTERIOR ACRYLIC SEMI-GLOSS</li> <li>4.E. FERROUS METAL: PROVIDE THE FOLLOWING FINISH SYSTEMS OVER EXTERIOR FERROUS METAL. PRIMER IS REQUIRED ON SHOP-PRIMED ITEMS.</li> <li>4.E.A. ACRYLIC-ENAMEL FINISH: TWO FINISH COATS OVER A RUST-INHIBITIVE PRIMER</li> <li>4.E.A.A. PRIMER: PPG; 6-208 SPEEDHIDE ALKYD METAL PRIMER: APPLIED AT A DRY FILM THICKNESS OF NOT LESS THAN 2.3 MILS (0.059 MM).</li> <li>4.E.A.B. EXTERIOR FULL-GLOSS ACRYLIC ENAMEL FINISH FOR STEEL BOLLARDS IN SAFETY YELLOW: PPG; 90-374 SERIES PITT-TECH INTERIOR/EXTERIOR HIGH GLOSS DTM</li> </ul>	7.2. MOUNTING HEIGHTS AND LOCATIONS: AS REQUIRED BY A INDICATED ON DRAWINGS. END OF SECTION
CTION AND PRESERVATIVE	<ul> <li>INDUSTRIAL ENAMELS: APPLIED AT A DRY FILM THICKNESS OF NOT LESS THAN 3.0 MILS (0.076 MM).</li> <li>4.E.B. ALKYD-ENAMEL FINISH: TWO FINISH COATS OVER A RUST-INHIBITIVE PRIMER (PRIMER REQUIRED FOR ITEMS NOT SHOP-PRIMED).</li> <li>4.E.B.A. PRIMER: PPG; 6-208 SPEEDHIDE ALKYD METAL PRIMER: APPLIED AT A DRY FILM THICKNESS OF NOT LESS THAN 2.3 MILS (0.059 MM).</li> <li>4.E.B.B. EXTERIOR SEMI-GLOSS ALKYD ENAMEL FINISH FOR STEEL DOORS: PPG; SPEEDHIDE G-1510 SEMI-GLOSS ALKYD WB INTERIOR/EXTERIOR ENAMEL: APPLIED AT A DRY FILM THICKNESS OF NOT LESS THAN 1.8 MILS DFT).</li> <li>5. INTERIOR PAINT SYSTEMS</li> <li>5.A. GYPSUM BOARD: PROVIDE THE FOLLOWING FINISH SYSTEMS OVER INTERIOR GYPSUM BOARD SURFACES:</li> <li>5.A.A. ACRYLIC FINISH: TWO EGGSHELL FINISH COATS OVER A PRIMER.</li> </ul>	
OORING MATERIAL	<ul> <li>5.A.A. ACRYLIC FINISH: TWO EGGSHELL FINISH COATS OVER A PRIMER.</li> <li>5.A.A.A. PRIMER: PPG; 6-2 SPEEDHIDE INTERIOR QUICK-DRYING LATEX SEALER: APPLIED AT A DRY FILM THICKNESS OF NOT LESS THAN 1.0 MIL (0.025 MM).</li> <li>5.A.A.B. INTERIOR LOW-LUSTER ACRYLIC ENAMEL FINISH: PPG; 6-411 SERIES SPEEDHIDE EGGSHELL ACRYLIC LATEX ENAMEL: APPLIED AT A DRY FILM THICKNESS OF NOT LESS THAN 1.25 MILS (0.032 MM).</li> <li>5.B. FERROUS METAL: PROVIDE THE FOLLOWING FINISH SYSTEMS OVER FERROUS METAL:</li> <li>5.B.A. ALKYD DRY FALL FINISH: TWO FINISH COATS OVER A PRIMER. FOR OVERHEAD STEEL, DECKING AND OVERHEAD SUPPORT STRUCTURE.</li> </ul>	
REE OS SUBSTANCES THAT RFACES. SPOTS, CRACKS, JOINTS,	<ul> <li>5.B.A.A. PRIMER: PPG; 6-208 SPEEDHIDE ALKYD METAL PRIMER: APPLIED AT A DRY FILM THICKNESS OF NOT LESS THAN 2.3 MILS (0.059 MM).</li> <li>5.B.A.B. INTERIOR ALKYD DRY FALL FINISH: PPG; SPEEDHIDE ALKYD 6-714XI SEMI GLOSS</li> <li>5.B.B. ALKYD WB ENAMEL FINISH: TWO FINISH COATS OVER A PRIMER FOR STEEL SURFACES, DOORS AND OTHER FERROUS METAL NOT INCLUDED IN OTHER SECTIONS.</li> <li>5.B.B.A. PRIMER: PPG; 6-208 SPEEDHIDE ALKYD METAL PRIMER: APPLIED AT A DRY FILM THICKNESS OF NOT LESS THAN 2.3 MILS (0.059 MM).</li> </ul>	
UCTIONS AND CRI CARPET	<ul> <li>5.B.B.B. INTERIOR SEMIGLOSS ALKYD ENAMEL FINISH: PPG; 6-1510 SERIES SPEEDHIDE ALKYD WB INTERIOR ENAMEL SEMI-GLOSS. APPLIED AT A DRY FILM THICKNESS OF NOT LESS THAN 1.8 MILS.</li> <li>5.B.B.C. INTERIOR FULL-GLOSS ALKYD ENAMEL: PPG; 6-1610 SERIES PPG SPEEDHIDE ALKYD WB INTERIOR ENAMEL SEMI-GLOSS. APPLIED AT A DRY FILM THICKNESS OF NOT LESS THAN 1.8 MILS.</li> </ul>	

#### STAINED WOODWORK: PROVIDE THE FOLLOWING STAINED FINISHES OVER NEW INTERIOR NOODWORK: WATERBORNE SATIN-VARNISH FINISH OVER STAIN: TWO FINISH COATS OF WATERBORNE CLEAR SATIN VARNISH OVER A SEALER COAT AND INTERIOR WOOD STAIN. WIPE WOOD FILLER BEFORE APPLYING STAIN. A.A. FILLER COAT: OPEN-GRAIN WOOD FILLER. A.B. STAIN COAT: OLYMPIC; 44500 LOW VOC INTERIOR WOOD STAIN OIL BASED. SEALER COAT : OLYMPIC; 41061 INTERIOR WATER BASED SANDING SEALER. .D. FINISH COATS: OLYMPIC; 42786 INTERIOR WATER BASED SATIN POLYURETHANE. RIOR CONCRETE FLOORS CONCRETE FLOORS: PROVIDE THE FOLLOWING FLOOR FINISH AT EXPOSED CONCRETE FLOORS, BOTH NEW AND EXISTING. PENETRATING EPOXY PRIMER SEALER: TWO FINISH COATS OVER CONCRETE SUBSTRATE. A. FINISH COATS: PPG AMERLOCK SEALER AINATION DO NOT BEGIN APPLICATION OF COATINGS UNTIL SUBSTRATES HAVE BEEN PROPERLY PREPARED. PARATION PREPARE NEW AND EXISTING SURFACES USING THE METHODS RECOMMENDED BY THE MANUFACTURER FOR ACHIEVING THE BEST RESULT FOR THE SUBSTRATE UNDER THE PROJECT CONDITIONS. DO NOT BEGIN APPLICATION OF COATINGS UNTIL SUBSTRATES HAVE BEEN PROPERLY PREPARED. CLEAN NEW AND EXISTING SURFACES THOROUGHLY AND CORRECT DEFECTS PRIOR TO COATING APPLICATION. PREPARATION AND CLEANING TECHNIQUES MAY INCLUDE BUT ARE NOT LIMITED TO: APPLICATION OF EMULGIFYING DETERGENTS, ABRASIVE BLAST CLEANING, SCARIFYING, POWER GRINDING, WIRE BRUSHING, IMPACT TOOLS, AND ACID ETCHING. VERIFY SURFACES ARE READY TO RECEIVE WORK AS INSTRUCTED BY THE PRODUCT MANUFACTURER. ALLATION - GENERAL ENSURE SURFACE TEMPERATURES AND THE SURROUNDING AIR TEMPERATURE ARE ABOVE 50 DEGREES F. BEFORE APPLYING PAINT MATERIALS. PROVIDE ADEQUATE CONTINUOUS VENTILATION AND SUFFICIENT HEATING FACILITIES TO MAINTAIN TEMPERATURE ABOVE 45 DEGREES F. FOR 24 HOURS BEFORE, DURING AND 48 HOURS AFTER APPLICATION OF PAINT AND MATERIALS. PROVIDE MINIMUM 25-FOOT CANDLES OF LIGHTING ON SURFACES TO BE PAINTED. REMOVE HARDWARE AND ACCESSORIES, FITTINGS, AND FASTENINGS, ELECTRICAL PLATES, IGHTING FIXTURE AND SIMILAR ITEMS. REINSTALL REMOVED ITEMS AFTER COMPLETION OF PAINTING. DO NOT PAINT OVER DIRT, DUST, STAINS, RUST, SCALE, OIL, GREASE, MOISTURE, SCUFFED SURFACES, OR OTHER CONTAMINATION OR CONDITIONS DETRIMENTAL TO FORMATION OF A DURABLE PAINT FILM. APPLY PAINT IN ACCORDANCE WITH PAINT MANUFACTURERS INSTRUCTIONS AND AS HEREIN SPECIFIED. APPLY EACH COAT OF PAINT AT NO LESS THAN SPREADING RATE INDICATED IN MANUFACTURER'S INSTRUCTIONS. SAND LIGHTLY BETWEEN ENAMEL COATS. COMPLETELY COVER ITEMS/SURFACES SCHEDULED TO BE PAINTED, TO PROVIDE A SMOOTH SURFACE OF UNIFORM FINISH, COLOR, APPEARANCE AND PAINT MATERIAL COVERAGE FREE FROM CLOUDINESS, SPOTTING, HOLIDAYS, LAPS, BRUSH MARKS, RUNS, STREAKS, SAGS, ROPINESS AND OTHER SURFACE IMPERFECTIONS. TENTATIVE PAINT LIST: WHERE ANY PARTICULAR APPLICATION IS NOT MENTIONED IN THIS LIST, CONTRACTOR SHALL FIGURE ON APPLICATION OF MANUFACTURER'S SPECIFICATION FOR APPLICATION WHICH IS CONSISTENT WITH TYPES AND QUALITIES LISTED HEREIN. END OF SECTION 02800 - TOILET ACCESSORIES AITTALS PRODUCT DATA DATA ON ACCESSORIES DESCRIBING SIZE, FINISH, DETAILS OF FUNCTION, ATTACHMENT METHODS T ACCESSORIES - BOOKING TOILET ROOM (VERIFY FINAL SELECTIONS & LOCATIONS W/ ARCHITECT TOILET PAPER DISPENSER: BRADLEY 5107-52; SINGLE ROLL, SURFACE-MOUNTED, SATIN STAINLESS STEEL, HINGED HOOD, ANTI-THEFT SPINDLE PAPER TOWEL DISPENSER: BRADLEY 2441-11; C-FOLD/MULTI-FOLD TOWELS, SURFACE-MOUNTED, SATIN STAINLESS SOAP DISPENSER: BRADLEY 6562; VERTICAL, SURFACE-MOUNTED, SATIN STAINLESS STEEL SANITARY NAPKIN DISPOSAL: BRADLEY 4721-15; SURFACE-MOUNTED, SATIN STAINLESS STEEL MIRROR: BRADLEY 747; FRAMELESS WITH CLIP FASTENERS, SIZE TO BE SELECTED GRAB BARS: BRADLEY 812; 1-1/2 INCH O.D. HEAVY-DUTY, CONCEALED MOUNTING, SIZE AND CONFIGURATION AS INDICATED ON DRAWINGS T ACCESSORIES - STAFF TOILET ROOMS (VERIFY FINAL SELECTIONS & LOCATIONS W/ ARCHITECT & TOILET PAPER DISPENSER: BRADLEY 5103; SINGLE ROLL, SURFACE MOUNTED, BRIGHT STAINLESS STEEL, HINGED HOOD (WOMEN'S RESTROOM) TOILET PAPER DISPENSER: BRADLEY 5107; SINGLE ROLL, SURFACE-MOUNTED, SATIN STAINLESS STEEL, HINGED HOOD (MEN'S RESTROOM) PAPER TOWEL DISPENSER: BRADLEY 2441; C-FOLD/MULTI-FOLD TOWELS, RECESS MOUNTED, SATIN STAINLESS SOAP DISPENSER: BRADLEY 6562; VERTICAL, SURFACE-MOUNTED, SATIN STAINLESS STEEL SANITARY NAPKIN DISPOSAL: BRADLEY 4721-15; SURFACE-MOUNTED, SATIN STAINLESS STEEL MIRROR: BRADLEY 747; FRAMELESS WITH CLIP FASTENERS, SIZE TO BE SELECTED GRAB BARS: BRADLEY 812; 1-1/2 INCH O.D. HEAVY-DUTY, CONCEALED MOUNTING, SIZE AND CONFIGURATION AS INDICATED ON DRAWINGS ROOM ACCESSORIES - RESIDENT UNITS (VERIFY FINAL SELECTIONS & LOCATIONS w/ ARCHITECT & TOILET PAPER DISPENSER: BRADLEY 5104; SINGLE ROLL, RECESS MOUNTED, SATIN STAINLESS MIRROR: TO BE SELECTED. COORDINATE WITH VANITY LIGHTING TOWEL BAR: BRADLEY 908; 30 INCH LENGTH, 1 INCH O.D. HEAVY-DUTY, CAST BRASS, CHROME-PLATED WITH SATIN FINISH ROBE HOOK: BRADLEY 9124; SURFACE MOUNTED, SATIN STAINLESS STEEL TY ROOM ACCESSORIES - PROVIDE (1) AT EACH JANITOR CLOSET (VERIFY FINAL SELECTION & TION w/ ARCHITECT & OWNER) MOP AND BROOM HOLDER: BRADLEY 9953; 3 HOLDERS, 22 GAUGE STAINLESS STEEL AINATION VERIFY EXACT LOCATION OF ACCESSORIES FOR INSTALLATION. VERIFY THAT FIELD MEASUREMENTS ARE AS INDICATED ON DRAWINGS. AT WALL-MOUNTED ITEMS, VERIFY THAT WOOD BLOCKING OCCURS AT STUD WALLS, AND THAT SOLID OR GROUTED MASONRY OCCURS AT MASONRY WALLS. PARATION PROVIDE ROUGH OPENINGS IN NEW AND EXISTING WALLS AS REQUIRED FOR RECESSED INSTALLATIONS. ALLATION INSTALL ACCESSORIES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. INSTALL PLUMB, LEVEL AND SECURELY AND RIGIDLY ANCHORED TO SUBSTRATE. MOUNTING HEIGHTS AND LOCATIONS: AS REQUIRED BY ACCESSIBILITY REGULATIONS AND AS INDICATED ON DRAWINGS. END OF SECTION





## SECTION 104400 - FIRE PROTECTION SPECIALTIES

#### 1. SUBMITTALS 1.A. PRODUCT DATA

- 1.A.A. EXTINGUISHER OPERATIONAL FEATURES
- 1.B. SHOP DRAWINGS 1.B.A. CABINET PHYSICAL DIMENSIONS, ROUGH-IN MEASUREMENTS FOR RECESSED ( WALL BRACKET MOUNTED MEASUREMENTS, AND LOCATION
- 2. FIRE EXTINGUISHERS 2.1. COMPLY WITH PRODUCT REQUIREMENTS OF NFPA 10 AND APPLICABLE CODES, WHICH
- STRINGENT. 2.2. DRY CHEMICAL TYPE FIRE EXTINGUISHERS: STEEL TANK, WITH PRESSURE GAGE
- 2.2.1. CLASS: ABC 2.2.2. SIZE: 10 POUND
- 2.2.3. FINISH: BAKED ENAMEL, RED COLOR
- 2.3. WET CHEMICAL TYPE FIRE EXTINGUISHERS 2.3.1. CLASS: K
- 2.3.2. SIZE: 2-1/2 GAL
- 2.3.3. FINISH: 66
- 3. FIRE EXTINGUISHER CABINETS: SAME MANUFACTURER AS FIRE EXTINGUISHER 3.1. PROVIDE FIRE RATED CABINET WHERE CABINET OCCURS WITHIN RATED PARTITION.
- 3.2. CABINET STYLE: SEMI-RECESSED 3.3. METAL BOX/TUB: COLD ROLLED STEEL
- 3.4. METAL DOOR AND TRIM: STEEL, WITH RECESSED DOOR HANDLE
- 3.5. CABINET CONFIGURATION: SEMI-RECESSED, SIZED TO ACCOMMODATE ACCESSORIE ROLLED EDGE TRIM
- 3.6. DOOR GLAZING: TEMPERED GLASS, CLEAR 3.7. FINISH OF CABINET EXTERIOR TRIM AND DOOR: BAKED ENAMEL, COLOR AS SELECTED
- 3.8. FINISH OF CABINET INTERIOR: WHITE ENAMEL 3.9. PRODUCT: LARSEN'S ARCHITECTURAL SERIES WITH VERTICAL DUO DOOR
- 4. PREPARATION 4.1. PROVIDE ROUGH OPENINGS IN NEW AND EXISTING WALLS AS REQUIRED FOR RECESS
- INSTALLATIONS.
- 5. INSTALLATION 5.1. INSTALL FIRE PROTECTION SPECIALTIES IN ACCORDANCE WITH MANUFACTURER'S IN INSTALL PLUMB, LEVEL AND SECURELY AND RIGIDLY ANCHORED TO SUBSTRATE.
- 5.2. INSTALL WITH NON-CORROSIVE ANCHORS AS REQUIRED BY WALL CONDITIONS. 5.3. FIRE EXTINGUISHER LOCATIONS SHALL BE AS DIRECTED BY LOCAL FIRE MARSHAL. 5.4. MOUNTING HEIGHTS AND LOCATIONS: AS REQUIRED BY ACCESSIBILITY REGULATION
  - END OF SECTION

SECTION 105116 - WOOD LOCKERS

INDICATED ON DRAWINGS.

- 1. SUBMITTALS 1.A. PRODUCT DATA
- 1.A.A. LOCKER DATA SPECIFIC TO MATERIALS USED IN CONSTRUCTION OF LOCKER 1.B. SHOP DRAWINGS 1.B.A. LOCKER PLAN LAYOUT, COMPONENT PROFILES, ELEVATIONS, FINISH SCHEDULE PLAN AND ACCESSORIES
- 2. WOOD LOCKERS
- 2.A. FRAME (TOPS, SIDES AND BACK): 5/8 INCH HIGH DENSITY THERMO-FUSED MELAMIN 2.B. VISIBLE EDGES: 1.5 MM PVC EDGE BANDING TO MATCH LOCKER DOORS
- 2.C. LOCKER DOORS
- 2.C.A. TYPE: RAISED PANEL 2.C.B. EDGES: WOOD EDGE BANDING TO MATCH DOOR FACE
- 2.C.C. STILES AND RAILS: A-1 PLAIN SLICED VENEER ON 3/4 INCH MDF CORE; JOINTS D
- GLUED 2.C.D. CENTER PANELS: A-1 PLAIN SLICED VENEER ON PROFILE PANELS ON MDF CORE 2.D. VENEER FINISH: 100 PERCENT SOLID UV CURE SEALER OVER STAIN 2.E. HARDWARE
- 2.E.A. NUMBER DISK
- 2.E.B. COAT ROD: 1 INCH DIAMETER
- 2.E.C. COAT HOOKS 2.E.D. HINGES: NICKEL FINISHED, CONCEALED, HEAVY-DUTY EUROPEAN STEEL ALLOW DEGREE DOOR OPENING WITH LIFETIME WARRANTY. QUANTITY OF HINGES PER MANUFACTURER'S RECOMMENDATIONS.
- 2.E.E. PULL KNOB 2.E.F. NAMEPLATE
- 3. EXAMINATION
- 3.1. DO NOT BEGIN INSTALLATION UNTIL ADJACENT SUBSTRATES HAVE BEEN PROPERL 3.2. VERIFY PREPARED BASES ARE IN CORRECT POSITION AND CONFIGURATION.
- 4. PREPARATION
- 4.1. PREPARE SURFACES USING METHODS RECOMMENDED BY THE MANUFACTURER FC THE BEST RESULT FOR THE SUBSTRATE UNDER THE PROJECT CONDITIONS. 4.2. VERIFY ADEQUACY OF BACKING AND SUPPORT FRAMING.
- 5. INSTALLATION 5.1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 5.2. SET AND SECURE LOCKERS IN PLACE; RIGID, PLUMB AND LEVEL. 5.3. USE CONCEALED JOINT FASTENERS TO ALIGN AND SECURE ADJOINING CABINET UNITS.
- 5.4. CONCEAL SCREW HEADS TO MATCH LOCKER INTERIOR. 5.5. SECURE LOCKERS WITH ANCHOR DEVICES TO SUIT SUBSTRATE MATERIALS, MINIMUM PULLOUT
- FORCE OF 100 LB. 5.6. INSTALL END PANELS, FILLER PANELS, TOPS, BASES AND ACCESSORIES AS INDICATED ON THE APPROVED SHOP DRAWINGS.

END OF SECTION

#### SECTION 123262 - QUARTZ SURFACING COUNTERTOPS

- 1. NOTE: QUARTZ SURFACING COUNTERTOPS TO BE PROVIDED AT FIRE STATION ONLY.
- 2. SUBMITTALS 2.A. SHOP DRAWINGS
- 2.A.A. INCLUDE LAYOUT, DIMENSIONS, MATERIALS, FINISHES, CUTOUTS, EDGE PROFILES AND ATTACHMENTS.
- 2.B. PRODUCT DATA 2.B.A. DATA ON QUARTZ SURFACING COUNTERTOP
- 2.C. SAMPLES 2.C.A. QUARTZ SURFACING

## 3. QUARTZ SURFACING COUNTERTOP

- 3.A. COMPOSITION: QUARTZ AGGREGATE, POLYESTER RESIN AND COLOR PIGMENTS FORMED INTO FLAT SLABS
- 3.B. COLOR: AS INDICATED ON DRAWINGS
- 3.C. SURFACE FINISH: POLISHED
- 3.D. THICKNESS: AS INDICATED ON DRAWINGS 3.E. PRODUCT: QUARTZ
- 3.E.A. LOCATION: REFER TO DRAWING FINISH LEGEND
- 4. ACCESSORIES 4.A. ADHESIVE: AS RECOMMENDED BY QUARTZ SURFACING MANUFACTURER 4.B. JOINT SEALER: TILE AND JOINT SEALER AS RECOMMENDED BY MANUFACTURER
- 5. PREPARATION

## INTERFERE WITH ADHESION.

- 6. INSTALLATION 6.A. INSTALL FABRICATIONS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPROVED SHOP DRAWINGS.
- 6.B. ADHERE FABRICATIONS WITH CONTINUOUS BEADS OF ADHESIVE. 6.C. SET PLUMB AND LEVEL; ALIGN ADJACENT PIECES IN SAME PLANE
- 6.D. INSTALL WITH HAIRLINE JOINTS
- 6.E. FILL JOINTS BETWEEN FABRICATIONS AND ADJACENT CONSTRUCTION WITH JOINT SEALER; FINISH SMOOTH AND FLUSH.
- 6.F. AFTER INSTALLATION, CLEAN FABRICATIONS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 6.G. PROTECT INSTALLED FABRICATIONS WITH NONSTAINING SHEET COVERINGS. END OF SECTION

- SECTION 123600 COUNTERTOPS 1. QUARTZ SURFACING COUNTERTOPS
- 1.A. SEE SECTION 123262 "QUARTZ SURFACING COUNTERTOPS" 2. PLASTIC-LAMINATE COUNTERTOPS
- 2.A. SEE SECTION 064100 "ARCHITECTURAL WOOD CASEWORK" 3. STAINLESS STEEL
- 3.A. SEE SECTION 055000 "METAL FABRICATIONS"
  - END OF SECTION

#### SECTION 312200 - GRADING

	SECTION 312200 - GRADING	SECTION 312323 - FILL
	1. MATERIALS 1.A. TOPSOIL: FRIABLE LOAM; IMPORTED BORROW. GRADED, FREE OF ROOTS, ROCKS LARGER THAN 1/2 INCH, SUBSOIL, DEBRIS, LARGE WEEDS AND FOREIGN MATTER.	<ol> <li>FILL MATERIALS</li> <li>1.A. GENERAL FILL: IMPORTED BORROW.</li> <li>1.A.A. LOCATION: TYPICAL UNLESS OTHERV</li> </ol>
ED CABINETS,	<ol> <li>EXAMINATION</li> <li>2.A. VERIFY THAT SURVEY BENCH MARKS AND INTENDED ELEVATIONS FOR THE WORK ARE AS INDICATED.</li> </ol>	<ol> <li>B. GRADED.</li> <li>GREE OF LUMPS LARGER THAN 2 IN</li> <li>CONFORMING TO ASTM D2487 GRO COMBINATION OF THESE GROUPS.</li> </ol>
HICHEVER IS MORE	<ol> <li>PREPARATION</li> <li>J.A. IDENTIFY REQUIRED LINES, LEVELS, CONTOURS AND DATUM.</li> <li>B. STAKE AND FLAG LOCATIONS OF KNOWN UTILITIES.</li> <li>C. LOCATE, IDENTIFY AND PROTECT FROM DAMAGE ABOVE- AND BELOW-GRADE UTILITIES TO REMAIN.</li> </ol>	<ul> <li>1.B. SUBBASE COURSE - PAVING: NATURALL' CRUSHED GRAVEL, CRUSHED STONE, AN LEAST 90 PERCENT PASSING A 1-1/2 INC 200 SIEVE.</li> <li>1.B.A. LOCATION: BASE COURSE AT ASPHA</li> <li>1.C. SUBBASE COURSE - INTERIOR:</li> </ul>
	<ul> <li>3.D. PROTECT SITE FEATURES TO REMAIN, INCLUDING BUT NOT LIMITED TO EXISTING STRUCTURES, FENCES, SIDEWALKS, PAVING AND CURBS FROM DAMAGE BY GRADING EQUIPMENT AND VEHICULAR TRAFFIC.</li> <li>3.E. PROTECT TREES TO REMAIN BY PROVIDING SUBSTANTIAL FENCING AROUND ENTIRE TREE AT THE OUTER TIPS OF ITS BRANCHES; NO GRADING IS TO BE PERFORMED INSIDE THIS LINE.</li> <li>3.F. PROTECT PLANTS AND LAWNS TO REMAIN AS A PORTION OF FINAL LANDSCAPING.</li> </ul>	1.C.A.       LOCATION: BASE COURSE AT INTERIO         1.C.B.       COMPOSITION: #10 STONE; OVER 3 IN         1.C.C.       THICKNESS: AS INDICATED ON DRAW         1.D.       SUBBASE COURSE - UNIT PAYING:         1.D.A.       LOCATION: BASE COURSE AT PRECA
	4. ROUGH GRADING	1.D.B. COMPOSITION: #8 OR #9 STONE; OV
Ν.	<ul><li>4.A. REMOVE SUBSOIL FROM AREAS TO BE FURTHER EXCAVATED, RE-LANDSCAPED, OR RE-GRADED.</li><li>4.B. DO NOT REMOVE WET SUBSOIL, UNLESS IT IS SUBSEQUENTLY PROCESSED TO OBTAIN OPTIMUM MOISTURE CONTENT.</li></ul>	1.D.C. THICKNESS: AS INDICATED ON DRAV 1.E. SAND: NATURAL RIVER OR BANK SAND, V MATERIALS, AND ORGANIC MATTER.
RIES; 2-1/2 INCH	<ul> <li>4.C. WHEN EXCAVATING THROUGH ROOTS, PERFORM WORK BY HAND AND CUT ROOTS WITH SHARP AXE.</li> <li>4.D. STABILITY: REPLACE DAMAGED OR DISPLACED SUBSOIL TO SAME REQUIREMENTS AS FOR SPECIFIED FILL.</li> </ul>	<ol> <li>2. FILLING</li> <li>2.A. GENERAL:</li> <li>2.A.A. BACKFILL AS SOON AS PERMANENT</li> <li>2.A.B. BACKFILLING SHALL BE DONE WITH</li> </ol>
CTED	<ol> <li>FINISH GRADING</li> <li>5.A. BEFORE FINISH GRADING:</li> <li>5.A.A. VERIFY BUILDING AND TRENCH BACKFILLING HAVE BEEN INSPECTED.</li> <li>5.A.B. VERIFY SUBGRADE HAS BEEN CONTOURED AND COMPACTED.</li> </ol>	PROTECT THE UTILITY FROM FROST. 2.A.C. BACKFILLING MATERIALS SHALL BI MATERIALS, OR FROZEN MATERIALS MECHANICAL COMPACTOR TO THE R
CESSED	<ul> <li>5.B. REMOVE DEBRIS, ROOTS, BRANCHES, STONES, IN EXCESS OF 1/2 INCH IN SIZE. REMOVE SOIL CONTAMINATED WITH PETROLEUM PRODUCTS.</li> <li>5.C. IN AREAS WHERE VEHICLES OR EQUIPMENT HAVE COMPACTED SOIL, SCARIFY SURFACE TO DEPTH OF 3 INCHES.</li> </ul>	LAYERS. WHEN SHEETING, BRACING 2.A.D. COMPACT FILL AS INDICATED ABOV 2.A.E. PLACE A POROUS FILL (FREE DRAIN FILL TO 95 PERCENT OPTIMUM DENS BE FINISHED TO THE FINISH FLOOR I
6 INSTRUCTIONS.	<ul> <li>5.D. PLACE TOPSOIL IN AREAS WHERE SEEDING AND PLANTING ARE INDICATED.</li> <li>5.E. PLACE TOPSOIL DURING DRY WEATHER.</li> <li>5.F. REMOVE ROOTS, WEEDS, ROCKS, AND FOREIGN MATERIAL WHILE SPREADING.</li> <li>5.G. NEAR PLANTS SPREAD TOPSOIL MANUALLY TO PREVENT DAMAGE.</li> </ul>	2.A.F. ANY TRENCHES OR EMBEDMENTS ( THOSE TRADES TO THE LEVEL AND S 2.B. FILL TO CONTOURS AND ELEVATIONS IND 2.C. EMPLOY A PLACEMENT METHOD THAT DO
AL. TIONS AND AS	<ul> <li>5.H. FINE GRADE TOPSOIL TO ELIMINATE UNEVEN AREAS AND LOW SPOTS. MAINTAIN PROFILES AND CONTOUR OF SUBGRADE.</li> <li>5.I. LIGHTLY COMPACT PLACED TOPSOIL.</li> </ul>	2.D. SYSTEMATICALLY FILL TO ALLOW MAXIMI POROUS, WET, FROZEN OR SPONGY SUBO 2.E. MAINTAIN OPTIMUM MOISTURE CONTENT
	<ol> <li>REPAIR AND RESTORATION</li> <li>6.A. EXISTING FACILITIES, UTILITIES, AND SITE FEATURES TO REMAIN: IF DAMAGED DUE TO THIS WORK, REPAIR OR REPLACE TO ORIGINAL CONDITION.</li> </ol>	DENSITY. 2.F. SLOPE GRADE AWAY FROM BUILDING M MAKE GRADUAL GRADE CHANGES. BLEI 2.G. CORRECT AREAS THAT ARE OVER-EXCAN
	6.B. TREES TO REMAIN: IF DAMAGED DUE TO THIS WORK, TRIM BROKEN BRANCHES AND REPAIR BARK WOUNDS; IF ROOT DAMAGE HAS OCCURRED, OBTAIN INSTRUCTIONS FROM ARCHITECT AS TO REMEDY.	2.G.A. OTHER AREAS: USE GENERAL FILL, 97 PERCENT OF MAXIMUM DRY DEN: 2.H. RESHAPE AND RE-COMPACT FILLS SUBJ
	6.C. OTHER EXISTING VEGETATION TO REMAIN: IF DAMAGED DUE TO THIS WORK, REPLACE WITH VEGETATION OF EQUIVALENT SPECIES AND SIZE.	2.1. PLACEMENT AND RECOMMANDANCE OF TRENC TRENCH BACKFILL SHALL CONFORM TO T BACKFILL:
	<ol> <li>CLEANING</li> <li>7.A. LEAVE SITE CLEAN AND RAKED, READY TO RECEIVE LANDSCAPING.</li> </ol>	2.I.A. MECHANICALLY COMPACT BACKFILL ROLLERS, PNEUMATIC TIRE ROLLERS
JLE, NUMBERING	END OF SECTION	2.I.B. ALL SUCH EQUIPMENT SHALL BE OF MANAGER. IMPACT-TYPE PAVEMENT CLAY, CAST IRON, OR NON-REINFORG
AMINE.	SECTION 312316 - EXCAVATION	2.I.C. PERMISSION TO USE SPECIFIC COMP GUARANTEEING OR IMPLYING THAT DAMAGE TO ADJACENT GROUND, EX
	<ol> <li>CONTRACTOR RESPONSIBILITY</li> <li>1.A. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL UNSUITABLE AND SURPLUS EXCAVATED MATERIAL. IN THE EVENT THE CONTRACTOR DISPOSES OF TOO MUCH</li> </ol>	UNDER THE CONTRACT. THE CONTRA REGARD. 2.J. COMPACTION REQUIREMENTS:
TS DOWELED AND DRE	EXCAVATED MATERIAL, HE SHALL REPLACE THIS MATERIAL AS NECESSARY AND AT NO ADDITIONAL COST. 1.B. BEFORE EXCAVATION AND GRADING, CONTRACTOR SHALL ESTABLISH THE LOCATION AND EXTENT	2.J.A.PAVED PEDESTRIAN WALKS AND CC TO 100 PERCENT OF MAXIMUM DRY2.J.B.FOUNDATION BACKFILL UNDER PAVE
	OF UNDERGROUND UTILITIES IN THE WORK AREA. EXERCISE CARE TO PROTECT EXISTING UTILITIES DURING EARTHWORK OPERATIONS. PERFORM EXCAVATION WORK NEAR UTILITIES BY HAND AND PROVIDE NECESSARY SHORING, SHEETING AND SUPPORTS AS THE WORK PROGRESSES.	2.J.C. PLANTING BEDS AND SOD ADJACEN 2.J.C.A. UPPER 2 FEET OF SOIL BELOW N 2.J.C.B. REMAINDER - 95 PERCENT TO 1 DEPTH.
LOWING 110 PER DOOR PER	<ol> <li>EXCAVATING</li> <li>EXCAVATE TO ACCOMMODATE NEW STRUCTURES AND CONSTRUCTION OPERATIONS.</li> <li>NOTIFY ARCHITECT OF UNEXPECTED SUBSURFACE CONDITIONS AND DISCONTINUE AFFECTED WORK IN AREA UNTIL NOTIFIED TO RESUME WORK.</li> <li>SLOPE BANKS OF EXCAVATIONS DEEPER THAN 4 FEET TO ANGLE OF REPOSE OR LESS UNTIL</li> </ol>	2.J.D. PLANTING BEDS AND SOD IN OPEN 2.J.D.A. UPPER 1 FOOT OF SOIL BELOW F 2.J.D.B. REMAINDER - 95 PERCENT.
	SHORED. 2.D. DO NOT INTERFERE WITH 45 DEGREE BEARING SPLAY OF FOUNDATIONS. 2.E. CUT UTILITY TRENCHES WIDE ENOUGH TO ALLOW INSPECTION OF INSTALLED UTILITIES.	END
RLY PREPARED.	<ul> <li>2.F. HAND TRIM EXCAVATIONS. REMOVE LOOSE MATTER.</li> <li>2.G. CORRECT AREAS THAT ARE OVER-EXCAVATED AND LOAD-BEARING SURFACES THAT ARE DISTURBED</li> <li>CRADE TOR REPUTETER OF EXCAVATION TO REPUTE CURRACE WATER FROM DRAINING INTO</li> </ul>	SECTION 321300 - CONCRETE WALKS
FOR ACHIEVING	2.H. GRADE TOP PERIMETER OF EXCAVATION TO PREVENT SURFACE WATER FROM DRAINING INTO EXCAVATION.	1. SUBMITTALS 1.A. PRODUCT DATA
	<ul> <li>2.I. REMOVE EXCAVATED MATERIAL THAT IS UNSUITABLE FOR RE-USE FROM SITE.</li> <li>2.J. REMOVE EXCESS EXCAVATED MATERIAL FROM SITE.</li> <li>3. DEWATERING</li> </ul>	1.A.A. CONCRETE DESIGN MIX 1.A.B. INFORMATION ON PORTLAND CEMEN ANTI-SPALLING COMPOUND, WATER
TUNITS.	<ol> <li>DEWATENING</li> <li>ALL EXCAVATION, CONSTRUCTION, AND BACKFILL OF PIPES, OR OTHER FACILITIES TO BE CONSTRUCTED UNDER THIS CONTRACT SHALL BE CONSTRUCTED UNDER DRY CONDITIONS. CONSTANTLY MAINTAIN ALL EXCAVATIONS IN A DE-WATERED, WORKABLE CONDITION, AND INSTALL, OPERATE, MAINTAIN, AND REMOVE SUCH DE-WATERING SYSTEMS AS REQUIRED.</li> </ol>	ADMIXTURES 2. MATERIALS 2.A. CAST-IN-PLACE CONCRETE: NORMAL WEI

4. PROTECTION 4.A. PREVENT DISPLACEMENT OF BANKS AND KEEP LOOSE SOIL FROM FALLING INTO EXCAVATION; MAINTAIN SOIL STABILITY. 4.B. PROTECT BOTTOM OF EXCAVATIONS AND SOIL ADJACENT TO AND BENEATH FOUNDATION FROM FREEZING.

END OF SECTION

OPERATE, MAINTAIN, AND REMOVE SUCH DE-WATERING SYSTEMS AS REQUIRED.

AL FILL: IMPORTED BORROW. CATION: TYPICAL UNLESS OTHERWISE NOTED. ADFD EE OF LUMPS LARGER THAN 2 INCHES, ROCKS LARGER THAN 2 INCHES, AND DEBRIS. IFORMING TO ASTM D2487 GROUP SYMBOL GW, GP, GM, SW, SP AND SM OR A MBINATION OF THESE GROUPS. E COURSE - PAVING: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR D GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND; ASTM D 2940; WITH AT O PERCENT PASSING A 1-1/2 INCH SIEVE AND NOT MORE THAN 12 PERCENT PASSING A NO. CATION: BASE COURSE AT ASPHALT PAVING AND CONCRETE PAVING. E COURSE - INTERIOR:

CATION: BASE COURSE AT INTERIOR SLAB-ON-GRADE. MPOSITION: #10 STONE; OVER 3 INCH #10, #57 OR #467 STONE. CKNESS: AS INDICATED ON DRAWINGS. E COURSE - UNIT PAVING: CATION: BASE COURSE AT PRECAST CONCRETE UNIT PAVING.

IPOSITION: #8 OR #9 STONE; OVER #57 STONE; OVER #1 STONE. CKNESS: AS INDICATED ON DRAWINGS. IATURAL RIVER OR BANK SAND, WASHED, FREE OF SILT, CLAY, LOAM, FRIABLE OR SOLUBLE

2. FILLI	NG
2.A.	GENERAL:
2.A.A.	BACKFILL AS SOON AS PERMANENT WORK HAS BEEN COMPLETED.
2.A.B.	BACKFILLING SHALL BE DONE WITH ACCEPTABLE MATERIALS AND DONE PROMPTLY SO / PROTECT THE UTILITY FROM FROST.
2.A.C.	BACKFILLING MATERIALS SHALL BE FREE FROM TRASH, LUMBER, OTHER FOREIGN MATERIALS, OR FROZEN MATERIALS. PLACE BACKFILL IN 6 INCH LAYERS. COMPACT USIN MECHANICAL COMPACTOR TO THE REQUIRED DENSITY BEFORE PLACING SUCCEEDING LAYERS. WHEN SHEETING, BRACING, SHORING IS REMOVED, FILL VOIDS.
2.A.D.	
2.A.E.	PLACE A POROUS FILL (FREE DRAINING AGGREGATE) OVER COMPACTED FILL AND COMI FILL TO 95 PERCENT OPTIMUM DENSITY UNLESS OTHERWISE INDICATED. POROUS FILL SH BE FINISHED TO THE FINISH FLOOR ELEVATION MINUS SLAB THICKNESS.
2.A.F.	ANY TRENCHES OR EMBEDMENTS CAUSED BY OTHER TRADES SHALL BE RESTORED BY THOSE TRADES TO THE LEVEL AND STATE OF COMPACTION SPECIFIED HEREIN.
2.B.	FILL TO CONTOURS AND ELEVATIONS INDICATED USING UNFROZEN MATERIALS.
2.C.	EMPLOY A PLACEMENT METHOD THAT DOES NOT DISTURB OR DAMAGE OTHER WORK.
2.D.	SYSTEMATICALLY FILL TO ALLOW MAXIMUM TIME FOR NATURAL SETTLEMENT. DO NOT FILL OV POROUS, WET, FROZEN OR SPONGY SUBGRADE SURFACES.
2.E.	MAINTAIN OPTIMUM MOISTURE CONTENT OF FILL MATERIALS TO ATTAIN REQUIRED COMPACT DENSITY.
2.F.	SLOPE GRADE AWAY FROM BUILDING MINIMUM 2 INCHES IN 10 FT, UNLESS NOTED OTHERWIS MAKE GRADUAL GRADE CHANGES. BLEND SLOPE INTO LEVEL AREAS.
2.G.	CORRECT AREAS THAT ARE OVER-EXCAVATED.
2.G.A.	OTHER AREAS: USE GENERAL FILL, FLUSH TO REQUIRED ELEVATION, COMPACTED TO MII 97 PERCENT OF MAXIMUM DRY DENSITY.
2.H.	RESHAPE AND RE-COMPACT FILLS SUBJECTED TO VEHICULAR TRAFFIC.
2.I.	PLACEMENT AND COMPACTION OF TRENCH BACKFILL: THE PLACEMENT AND COMPACTION OF , TRENCH BACKFILL SHALL CONFORM TO THE FOLLOWING METHOD: MECHANICALLY COMPACTE BACKFILL:
2.I.A.	MECHANICALLY COMPACT BACKFILL BY MEANS OF TAMPING ROLLERS, SHEEPSFOOT ROLLERS, PNEUMATIC TIRE ROLLERS, VIBRATING ROLLERS, OR OTHER MECHANICAL TAM TO 95 PERCENT RELATIVE COMPACTION.
2.I.B.	ALL SUCH EQUIPMENT SHALL BE OF SIZE AND TYPE APPROVED BY THE CONSTRUCTION MANAGER. IMPACT-TYPE PAVEMENT BREAKERS (STOMPERS) WILL NOT BE PERMITTED O CLAY, CAST IRON, OR NON-REINFORCED CONCRETE PIPE.
2.I.C.	PERMISSION TO USE SPECIFIC COMPACTION EQUIPMENT SHALL NOT BE CONSTRUED AS GUARANTEEING OR IMPLYING THAT THE USE OF SUCH EQUIPMENT WILL NOT RESULT IN DAMAGE TO ADJACENT GROUND, EXISTING IMPROVEMENTS, OR IMPROVEMENTS INSTALI UNDER THE CONTRACT. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION IN THIS REGARD.
2.J.	COMPACTION REQUIREMENTS:
2.J.A.	PAVED PEDESTRIAN WALKS AND COURTS: TOP 1 FOOT OF SUBGRADE SHALL BE COMPAC TO 100 PERCENT OF MAXIMUM DRY DENSITY
2.J.B.	FOUNDATION BACKFILL UNDER PAVEMENTS: 100 PERCENT.
2.J.C.	PLANTING BEDS AND SOD ADJACENT TO BUILDING:
2.J.0 2.J.0	
2.J.D.	
2.J.C	
2.0.1	

REMAINDER - 95 PERCENT. END OF SECTION

1.A.A. 1.A.B.	CONCRETE DESIGN MIX INFORMATION ON PORTLAND CEMENT, AIR-ENTRAINING ADMIXTURE, CURINC ANTI-SPALLING COMPOUND, WATER-REDUCING ADMIXTURE, HIGH-RANGE W ADMIXTURES
2. MAT	ERIALS
2.A.	CAST-IN-PLACE CONCRETE: NORMAL WEIGHT, AIR ENTRAINED CONCRETE WITH A COMPRESSIVE STRENGTH OF 4,000 PSI
2.A.A. 2.A.B.	
2.A.C.	WATER: POTABLE
2.A.D.	SLUMP: MAXIMUM 4 INCHES; MINIMUM 2 INCHES BEFORE THE ADDITION OF WATER-REDUCING ADMIXTURES OR HIGH-RANTE WATER-REDUCING ADMIXT
2.A.E.	WATER-REDUCING ADMIXTURE: ASTM C494, TYPE A
2.A.F.	HIGH RANGE WATER-REDUCING ADMIXTURE: ASTM C494, TYPE F
2.A.G.	RETARDING ADMIXTURE: ASTM C494, TYPE D
2.A.H.	CURING AND ANTI-SPALLING COMPOUND: ASTM C309, TYPE 1D, CLASS B
2.A.I.	TYPE 1 EXPANSION JOINT FILLER: PERFORMED, RESILIENT, NONEXTRUDING C COMPLYING WITH ASTM D1752, TYPE II
3. PREI	PARATION
3.A.	DO NOT USE ITEMS OF ALUMINUM FOR MIXING, CHUTING, CONVEYING, FORMING

CONCRETE. 3.B. SET FORMS TRUE TO LINE AND GRADE AND ANCHOR RIGIDLY IN POSITION.

4. PLACING CONCRETE 4.A. CONSOLIDATE CONCRETE BY SPADING, RODDING, FORKING OR USING AN APPROVED VIBRATOR ELIMINATING ALL AIR POCKETS, STONE POCKETS AND HONEYCOMBING. WORK AND FLOAT CONCRETE SURFACE TO PRODUCE UNIFORM TEXTURE.

4.B. LOCATE CONSTRUCTION JOINTS, IF ANY, AT EXPANSION JOINTS. 5. FINISHING AND CURING 5.A. KEEP SURFACE DAMP BUT NOT WET BETWEEN INITIAL STRIKE OFF AND FINAL FINISH.

5.B. USE MINIMAL WORKING OF THE SURFACE DURING FINISHING. 5.C. FINISH EDGES OF WALK AND EXPANSION AND CONTROL JOINTS WITH A 1/4 INCH RADIUS EDGING

5.D. PROVIDE BROOM FINISH FOR WALK SURFACES.

5.E. APPLY CURING AND ANTI-SPALLING COMPOUND IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.

5.F. HOT WEATHER CONCRETING: COMPLY WITH ACI 305R. 5.G. PROVIDE TOOLED CONTROL JOINTS ONE INCH DEEP. SPACE CONTROL JOINTS EQUALLY BETWEEN EXPANSION JOINTS APPROXIMATELY 5 FEET ON CENTER, EXCEPT WHERE A DIFFERENT SPACING IS INDICATED ON DRAWINGS.

END OF SECTION

5.A. CLEAN SURFACES TO RECEIVE FABRICATIONS; REMOVE LOOSE AND FOREIGN MATTER THAT COULD

IE PROMPTLY SO AS TO ER FOREIGN . COMPACT USING

D FILL AND COMPACT POROUS FILL SHALL E RESTORED BY HEREIN.

ER WORK. T. DO NOT FILL OVER UIRED COMPACTION NOTED OTHERWISE.

OMPACTED TO MINIMUM

COMPACTION OF ALL CALLY COMPACTED HEEPSFOOT ECHANICAL TAMPERS

CONSTRUCTION BE PERMITTED OVER ONSTRUED AS

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HALL BE COMPACTED

YOND 10 FEET OF

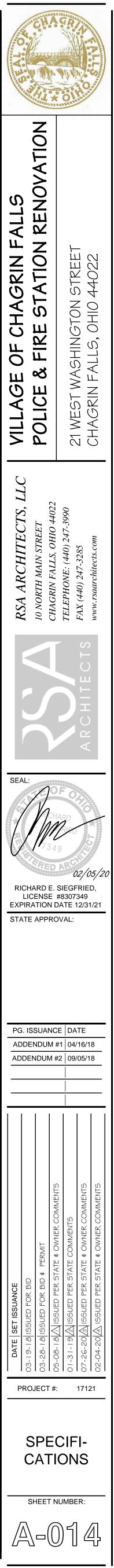
NG AND E WATER-REDUCING

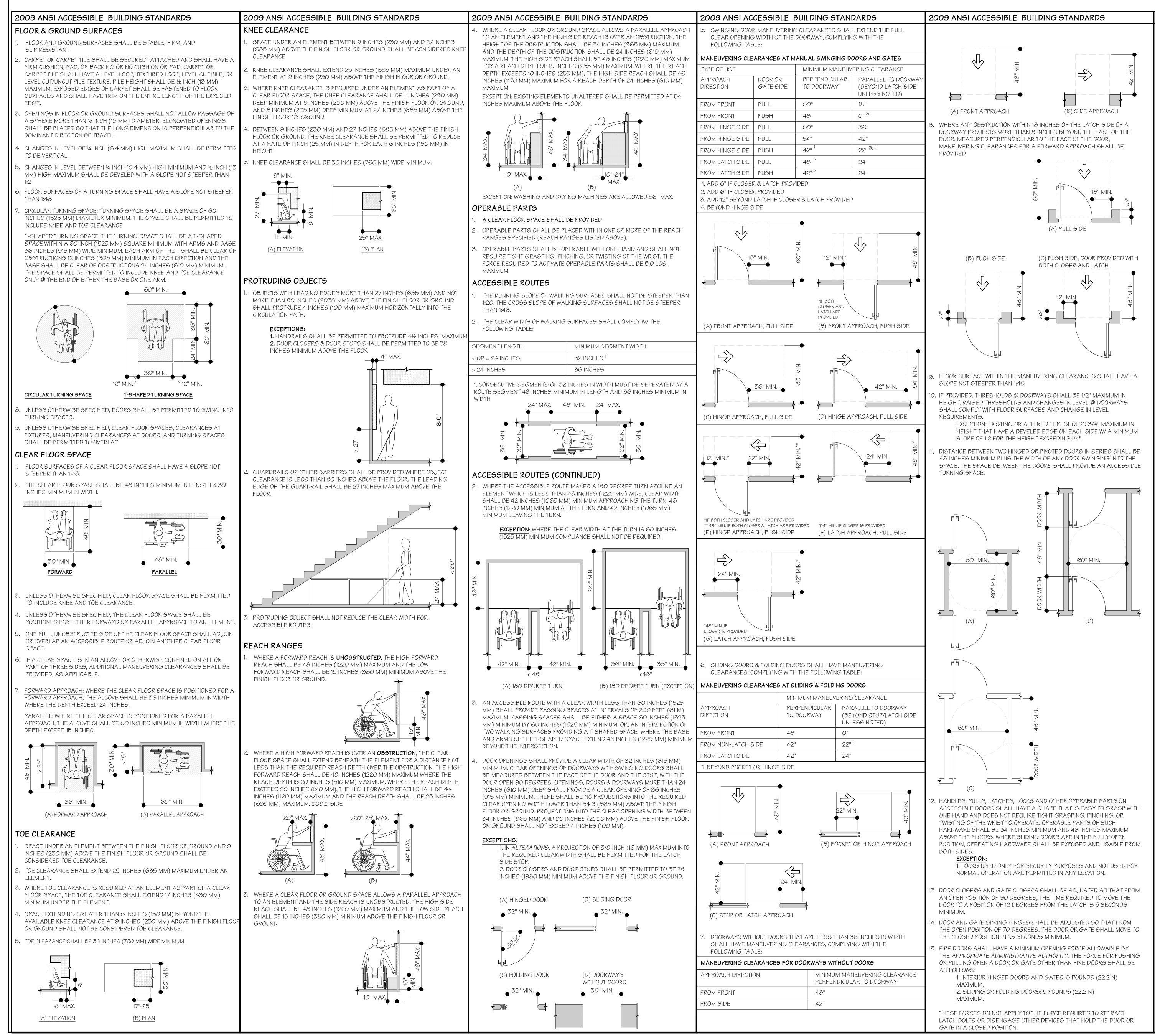
A MINIMUM NUS 1.5 PERCENT

F ANY IXTURES AT THE SITE

G CORK UNITS

G OR FINISHING





## ACCESSIBLE ROUTES (CONTINUED)

6. SWINGING DOOR AND GATE SURFACES WITHIN 10 INCHES (255 MM) OF THE FINISH FLOOR OR GROUND MEASURED VERTICALLY SHALL HAVE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR. PARTS CREATING HORIZONTAL OR VERTICAL JOINTS IN THESE SURFACES SHALL BE WITHIN 1/16 INCH (1.6 MM) OF THE SAME PLANE AS THE OTHER. CAVITIES CREATED BY ADDED KICK PLATES SHALL BE CAPPED.

- EXCEPTIONS: 1. SLIDING DOORS SHALL NOT BE REQUIRED TO COMPLY. 2. TEMPERED GLASS DOORS WITHOUT STILES AND HAVING A BOTTOM RAIL OR SHOE WITH THE TOP LEADING EDGE TAPERED AT 60 DEGREES MINIMUM FROM THE HORIZONTAL SHALL NOT BE REQUIRED TO MEET THE 10 INCH (255 MM) BOTTOM RAIL HEIGHT REQUIREMENT.
- 3. DOORS THAT DO NOT EXTEND TO WITHIN 10 INCHES (255 MM) OF THE FLOOR SHALL NOT BE REQUIRED TO COMPLY.
- . DOORS AND SIDE LIGHTS ADJACENT TO DOORS, CONTAINING ONE OR MORE GLAZING PANELS THAT PERMIT VIEWING THROUGH THE PANELS SHALL HAVE THE BOTTOM OF AT LEAST ONE PANEL, ON EITHER THE DOOR OR AN ADJACENT SIDELIGHT, 43 INCHES (1090 MM) MAXIMUM ABOVE THE
- **EXCEPTION:** VISION LIGHTS WITH THE LOWEST PART MORE THAN 66 INCHES (1675 MM) FROM THE FINISH FLOOR OR GROUND SHALL NOT BE REQUIRED TO COMPLY
- B. FULL-POWERED AUTOMATIC DOORS SHALL COMPLY WITH ANSI/BHMA A156.10. LOW-ENERGY AND POWER-ASSISTED DOORS SHALL COMPLY WITH
- ANSI/BHMA A156.19 (1997 OR 2002 EDITION). 9. DOORWAYS SHALL PROVIDE A CLEAR OPENING OF 32 INCHES (815 MM) MINIMUM IN POWER-ON AND POWER-OFF MODE. THE MINIMUM CLEAR OPENING WIDTH FOR AUTOMATIC DOOR SYSTEMS SHALL BE BASED ON THE CLEAR OPENING PROVIDED WITH ALL LEAVES IN THE OPEN POSITION.

#### BUILT-IN FURNISHINGS AND EQUIPMENT

BUILT-IN FURNISHINGS AND EQUIPMENT REQUIRED TO BE ACCESSIBLE BY TH SCOPING PROVISIONS ADOPTED BY THE ADMINISTRATIVE AUTHORITY SHALL COMPLY WITH THE APPLICABLE PROVISIONS AS FOLLOWS.

#### DINING SURFACES AND WORK SURFACES

- A CLEAR FLOOR SPACE, POSITIONED FOR A FORWARD APPROACH, SHALL BE PROVIDED. KNEE AND TOE CLEARANCE SHALL BE PROVIDED.
- THE TOPS OF DINING SURFACES AND WORK SURFACES SHALL BE 28 INCHES (710 MM) MINIMUM AND 34 INCHES (865 MM) MAXIMUM IN HEIGHT ABOVE THE FLOOR.

#### BENCHES / BOOTHS

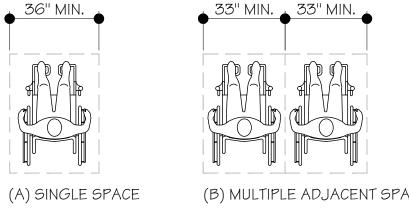
- A CLEAR FLOOR SPACE, POSITIONED FOR PARALLEL APPROACH TO AN END OF THE BENCH SEAT, SHALL BE PROVIDED.
- 2. BENCHES SHALL HAVE SEATS 42 INCHES (1065 MM) MINIMUM IN LENGTH, AND 20 INCHES (510 MM) MINIMUM AND 24 INCHES (610 MM) MAXIMUM IN DEPTH.
- 3. THE BENCH SHALL PROVIDE FOR BACK SUPPORT OR SHALL BE AFFIXED TO A WALL. BACK SUPPORT SHALL BE 42 INCHES (1065 MM) MINIMUM IN LENGTH AND SHALL EXTEND FROM A POINT 2 INCHES (51 MM) MAXIMUM ABOVE THE SEAT SURFACE TO A POINT 18 INCHES (455 MM) MINIMUM ABOVE THE SEAT SURFACE. BACK SUPPORT SHALL BE 21/2 INCHES (64 MM) MAXIMUM FROM THE REAR EDGE OF THE SEAT MEASURED HORIZONTALLY.
- 4. THE TOP OF THE BENCH SEAT SHALL BE 17 INCHES (430 MM) MINIMUM AND 19 INCHES (485 MM) MAXIMUM ABOVE THE FLOOR, MEASURED TO THE TOP OF THE SEAT.
- 5. ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHERE A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS (1112 N) IS APPLIED AT ANY POINT ON THE SEAT, FASTENER MOUNTING DEVICE, OR SUPPORTING STRUCTURE.
- 5. WHERE PROVIDED IN WET LOCATIONS THE SURFACE OF THE SEAT SHALL BE SLIP RESISTANT AND SHALL NOT ACCUMULATE WATER.

## SALES AND SERVICE COUNTERS

- ALL PORTIONS OF COUNTERS REQUIRED TO BE ACCESSIBLE SHALL BE LOCATED ADJACENT TO AN ACCESSIBLE WALKING SURFACE.
- . THE ACCESSIBLE PORTION OF THE COUNTERTOP SHALL EXTEND THE SAME DEPTH AS THE SALES AND SERVICE COUNTERTOP AND MEET ONE OF THE FOLLOWING:
- 3. A PORTION OF THE COUNTER SURFACE 36 INCHES (915 MM) MINIMUM IN LENGTH AND 36 INCHES (915 MM) MAXIMUM IN HEIGHT ABOVE THE FLOOR SHALL BE PROVIDED. WHERE THE COUNTER SURFACE IS LESS THAN 36 INCHES (915 MM) IN LENGTH, THE ENTIRE COUNTER SURFACE SHALL BE 36 INCHES (915 MM) MAXIMUM IN HEIGHT ABOVE THE FLOOR. A CLEAR FLOOR SPACE (30" X 42") POSITIONED FOR A PARALLEL APPROACH ADJACENT TO THE ACCESSIBLE COUNTER, SHALL BE PROVIDED.
- 4. A PORTION OF THE COUNTER SURFACE 30 INCHES (760 MM) MINIMUM IN LENGTH AND 36 INCHES (915 MM) MAXIMUM IN HEIGHT ABOVE THE FLOOR SHALL BE PROVIDED. A CLEAR FLOOR SPACE (30" X 42", POSITIONED FOR A FORWARD APPROACH TO THE ACCESSIBLE COUNTER, SHALL BE PROVIDED. KNEE AND TOE CLEARANCE SHALL BE PROVIDED UNDER THE ACCESSIBLE COUNTER.

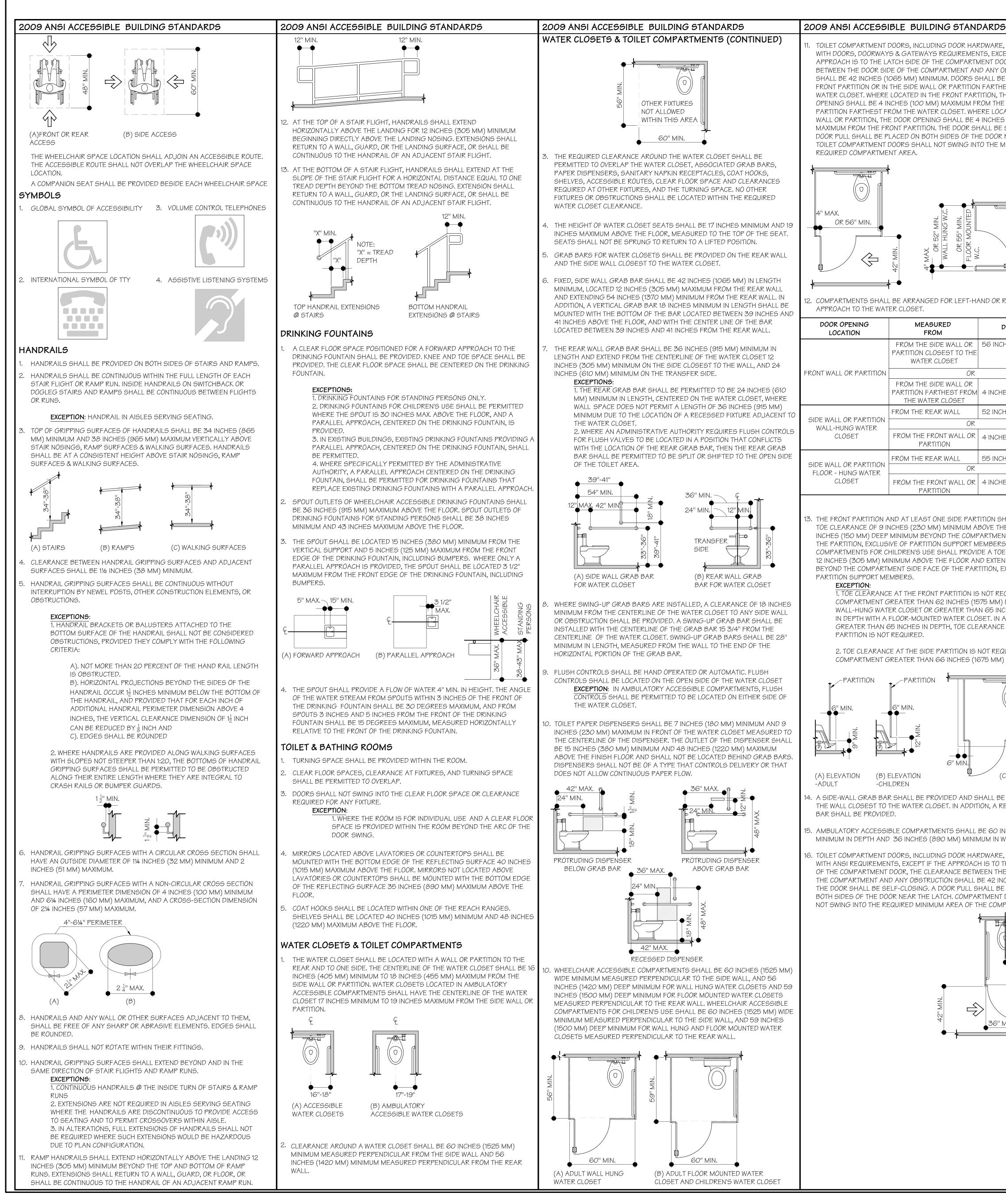
#### WHEELCHAIR SPACES

WIDTH: A SINGLE WHEELCHAIR SPACE SHALL BE 36 INCHES (915 MM) WIDE MINIMUM WHERE TWO ADJACENT WHEELCHAIR SPACES ARE PROVIDED, EACH WHEELCHAIR SPACE SHALL BE 33 INCHES (840 MM) MINIMUM IN WIDTH.

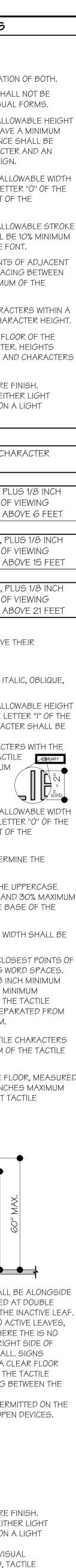


(B) MULTIPLE ADJACENT SPACES (A) SINGLE SPACE DEPTH: WHERE A WHEELCHAIR SPACE CAN BE ENTERED FROM THE FRONT OR REAR, THE WHEELCHAIR SPACE SHALL BE 48 INCHES (1220 MM) MINIMUM IN DEPTH. WHERE A WHEELCHAIR SPACE CAN BE ENTERED ONLY FROM THE SIDE, THE WHEELCHAIR SPACE SHALL BE 60 INCHES (1525 MM) MINIMUM IN DEPTH.

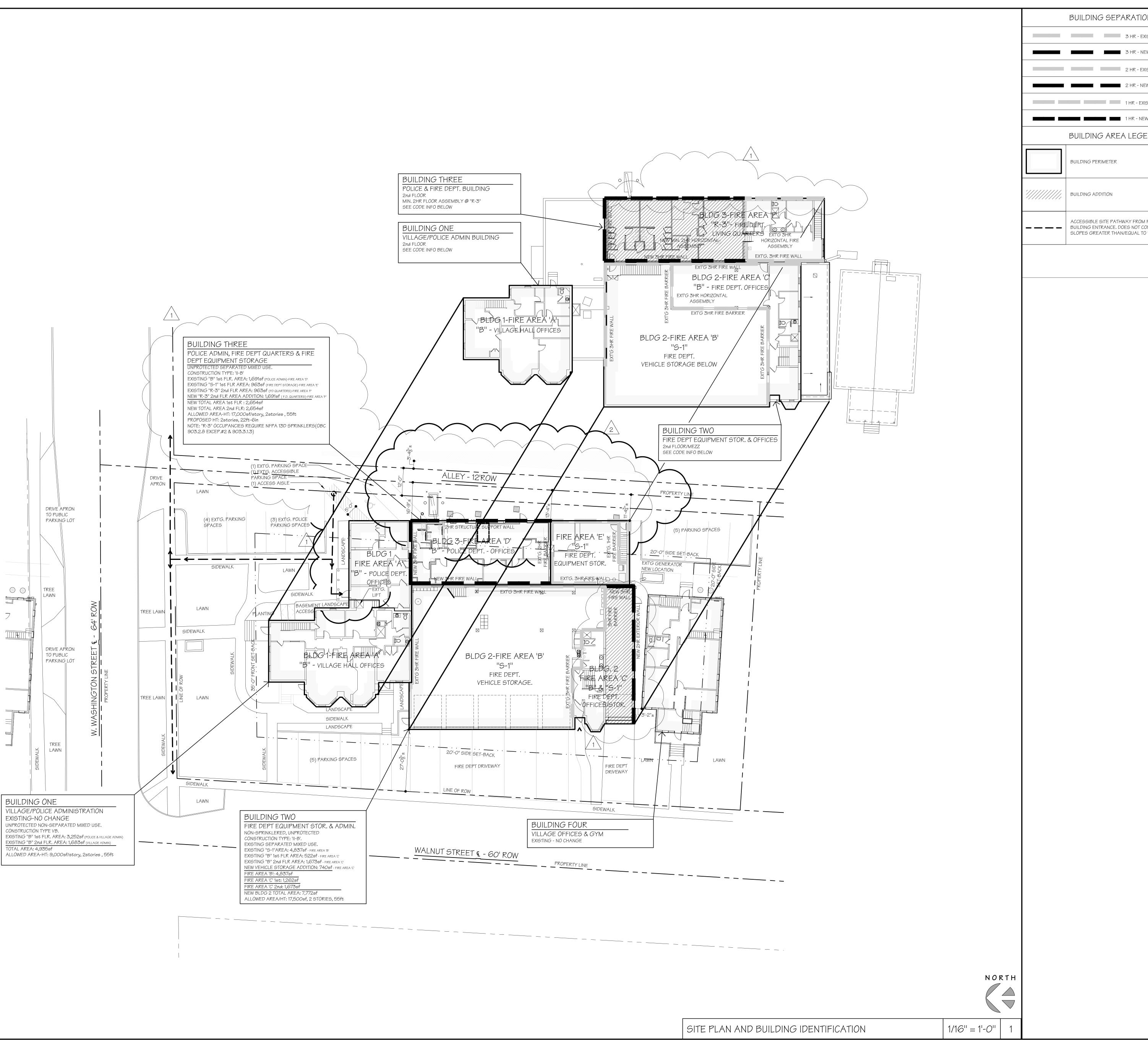




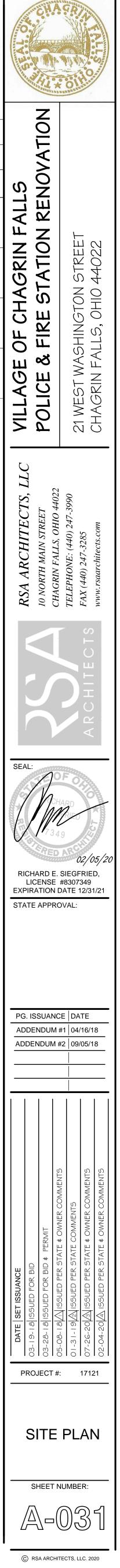
Э	2009 ANSI ACCESSIBLE BUILDING STANDARDS	2009 ANSI ACCESSIBLE BUILDING STANDARDS
E, SHALL COMPLY CEPT THAT IF THE DOR, CLEARANCE DBSTRUCTION E LOCATED IN THE IEST FROM THE THE DOOR E SIDE WALL OR CATED IN THE SIDE 6 (100 MM) CELF-CLOSING. A NEAR THE LATCH. MINIMUM	<ul> <li>URINALS SHALL BE THE STALL-TYPE OR THE WALL-HUNG TYPE WITH THE RIM 17 INCHES (430 MM) MAXIMUM ABOVE THE FLOOR.</li> <li>Image: A clear floor or ground space positioned for forward approach shall be provided.</li> <li>Flush controls shall be hand operated or automatic, hand operated shall comply with the operable parts requirements</li> </ul>	<ul> <li>SIGNS</li> <li>VISUAL CHARACTERS:</li> <li>CHARACTERS SHALL BE UPPERCASE, LOWERCASE, OR A COMBINATION OF BO C. CHARACTERS SHALL BE CONVENTIONAL IN FORM. CHARACTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS</li> <li>THE UPPERCASE LETTER "I" SHALL BE USED TO DETERMINE THE ALLOWABLE OF CHARACTERS OF A FONT. THE UPPERCASE LETTER "I" SHALL HAVE A MININ HEIGHT COMPLYING WITH THE FOLLOWING TABLE. VIEWING DISTANCE SHALL MEASURED AS THE HORIZONTAL DISTANCE BETWEEN THE CHARACTER AND A OBSTRUCTION PREVENTING FURTHER APPROACH TOWARDS THE SIGN.</li> <li>THE UPPERCASE LETTER "O" SHALL BE USED TO DETERMINE THE ALLOWABLE OF ALL CHARACTERS OF A FONT. THE WIDTH OF THE UPPERCASE LETTER "O" O FONT SHALL BE 55% MINIMUM AND 110% MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I" SHALL BE USED TO DETERMINE THE ALLOWABLE WIDTH OF ALL CHARACTERS OF A FONT. THE STROKE WIDTH SHALL BE 10% MININUM</li> </ul>
RIGHT-HAND	<ul> <li><b>LAVATORIES &amp; SINKS</b></li> <li>A CLEAR FLOOR SPACE COMPLYING WITH ANSI REQUIREMENTS, POSITIONED FOR FORWARD APPROACH SHALL BE PROVIDED. KNEE AND TOE CLEARANCE COMPLYING WITH ANSI REQUIREMENTS SHALL BE PROVIDED. THE DIP OF THE OVERFLOW SHALL NOT BE CONSIDERED IN DETERMINING KNEE AND TOE CLEARANCE.</li> <li><b>EXCEPTIONS</b></li> <li>THE REQUIREMENT FOR KNEE AND TOE CLEARANCE SHALL NOT APPLY TO MORE THAN ONE BOWL OF A MULTI-BOWL SINK.</li> <li>A PARALLEL APPROACH SHALL BE PERMITTED AT WET BARS.</li> </ul>	<ul> <li>AND 30% MAXIMUM OF THE HEIGHT OF THE UPPERCASE "!" OF THE FONT.</li> <li>6. SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJ CHARACTERS WITHIN A MESSAGE, EXCLUDING WORD SPACES. SPACING BETM INDIVIDUAL CHARACTERS SHALL BE 10% MINIMUM AND 35% MAXIMUM OF THE CHARACTER HEIGHT.</li> <li>7. SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF CHARACTERS W MESSAGE SHALL BE 135% MINIMUM TO 170% MAXIMUM OF THE CHARACTER HEIGHT.</li> <li>8. VISUAL CHARACTERS SHALL BE 40 INCHES MINIMUM ABOVE THE FLOOR OF 1 VIEWING POSITION, MEASURED TO THE BASELINE OF THE CHARACTER. HEIGH SHALL COMPLY WITH THE FOLLOWING TABLE, BASED ON THE SIZE AND CHAR ON THE SIGN.</li> <li>9. CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS ON A DARK BACKGROUND, OR DARK CHARACTERS ON A LIGHT BACKGROUND.</li> </ul>
IES MAXIMUM	<ol> <li>FAUCETS SHALL COMPLY WITH ANSI "OPERABLE PARTS" REQUIREMENTS. HAND-OPERATED METERING FAUCETS SHALL REMAIN OPEN FOR 10 SECONDS MINIMUM.</li> <li>WHERE ENHANCED REACH RANGE IS REQUIRED AT LAVATORIES, FAUCETS AND SOAP DISPENSER CONTROLS SHALL HAVE A REACH DEPTH OF 11 INCHES MAXIMUM OR, IF AUTOMATIC, SHALL BE ACTIVATED WITHIN A REACH DEPTH OF 11 INCHES MAXIMUM. WATER AND SOAP FLOW SHALL BE PROVIDED WITH A REACH DEPTH OF 11 INCHES MAXIMUM.</li> <li>WATER SUPPLY AND DRAINPIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES AND SINKS.</li> </ol>	VISUAL CHARACTER HEIGHTHEIGHT ABOVE FLOOR TO BASELINE OF CHARACTERHORIZONTAL VIEWING DISTANCEMINUMUM CHARACTER HEIGHT40 INCHES TO LESS THAN OR EQUAL TO 70 INCHESLESS THAN 6 FEET5/8 INCH, PLUS 1/8 I PER FOOT OF VIEWING DISTANCE ABOVE 6GREATER THAN 70 INCHES TO LESS THAN OR EQUAL TO 120 INCHESLESS THAN 15 FEET2 INCHES, PLUS 1/8 PER FOOT OF VIEWING DISTANCE ABOVE 15GREATER THAN 120 INCHESLESS THAN 21 FEET3 INCHES, PLUS 1/8 21 FEET AND GREATERGREATER THAN 120 INCHESLESS THAN 21 FEET3 INCHES, PLUS 1/8 3 INCHES, PLUS 1/8
HES MINIMUM HALL PROVIDE A E FLOOR AND 6 NT-SIDE FACE OF S. E CLEARANCE OF NDING 6 INCHES EXCLUSIVE OF	6. OPERABLE PARTS ON TOWEL DISPENSERS AND HAND DRYERS SHALL COMPLY WITH THE FOLLOWING TABLE:         7. COVER WATER SUPPLY AND DRAIN PIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES AND SINKS.         MAXIMUM REACH DEPTH AND HEIGHT FOR TOWEL DISPENSERS AND HAND DRYERS         MAXIMUM REACH DEPTH       1 INCH       2       5       6       9       11         MAXIMUM REACH DEPTH       1 INCH       2       5       10       10       10         MAXIMUM REACH DEPTH       1 INCH       2       5       10       10       10         MAXIMUM REACH DEPTH       1 INCHES       10       10       10       10       10         MAXIMUM REACH DEPTH       14       10       10       10       10       10       10         MAXIMUM REACH DEPTH       11       10       2       5       10       10       10         MAXIMUM REACH HEIGHT       48       46       42       40       36       34         INCHES       10       10       10       10       10       10       10       10	<ul> <li>PER FOOT OF VIEWING DISTANCE ABOVE 21</li> <li>TACTILE CHARACTERS:</li> <li>1. TACTILE CHARACTERS SHALL BE RAISED 1/32 INCH MINIMUM ABOVE THEIR BACKGROUND</li> <li>2. CHARACTERS SHALL BE UPPERCASE</li> <li>3. CHARACTERS SHALL BE SAN SERIF. CHARACTERS SHALL NOT BE ITALIC, OBL SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.</li> <li>4. THE UPPERCASE LETTER "I" SHALL BE USED TO DETERMINE THE ALLOWABLE OF ALL CHARACTERS OF A FONT. THE HEIGHT OF THE UPPERCASE LETTER "I" FONT, MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER SHA 5/8 INCH MINIMUM AND 2 INCHES MAXIMUM.</li> <li>EXCEPTION: WHERE SEPARATE TACTILE AND VISUAL CHARACTERS WITH SAME INFORMATION ARE PROVIDED, THE HEIGHT OF THE TACTILE</li> </ul>
EQUIRED IN A DEEP WITH A CHES (1650 MM) A COMPARTMENT E AT THE FRONT QUIRED IN A ) IN WIDTH. CUIRED IN A ) IN WIDTH. C) PLAN E LOCATED ON CEAR-WALL GRAB	Image: state stat	<ol> <li>UPPERCASE "I" SHALL BE PERMITTED TO BE 1/2 INCH MINIMUM</li> <li>THE UPPERCASE LETTER "O" SHALL BE USED TO DETERMINE THE ALLOWABLE OF ALL CHARACTERS OF A FONT. THE WIDTH OF THE UPPERCASE LETTER "O" ( FONT SHALL BE 55% MINIMUM AND 110% MAXIMUM OF THE HEIGHT OF THE UPPERCASE "I" OF THE FONT.</li> <li>THE UPPERCASE LETTER "I" OF THE FONT SHALL BE USED TO DETERMINE THE ALLOWABLE STROKE WIDTH OF ALL CHARACTERS OF A FONT.</li> <li>THE STROKE WIDTH SHALL BE 15% MAXIMUM OF THE HEIGHT OF THE UPPERCA LETTER "I" MEASURED AT THE TOP SURFACE OF THE CHARACTER, AND 30% M OF THE HEIGHT OF THE UPPERCASE LETTER "I" MEASURED AT THE BASE OF T CHARACTER.</li> <li>WHEN CHARACTERS ARE BOTH VISUAL AND TACTILE, THE STROKE WIDTH SHALL 10% MINIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I"</li> <li>CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST PC ADJACENT TACTILE CHARACTERS WITHIN A MESSAGE, EXCLUDING WORD SP/ 9. SPACING BETWEEN INDIVIDUAL TACTILE CHARACTERS SHALL BE 1/8 INCH MINIMUM MEASURED AT THE TOP SURFACE OF THE CHARACTERS, 1/16 INCH MINIMUM MEASURED AT THE BASE OF THE CHARACTERS, AND FOUR TIMES THE TACTIL CHARACTER STROKE WIDTH MAXIMUM. CHARACTERS SHALL BE SEPARATED I RAISED BORDERS AND DECORATIVE ELEMENTS 3/8 INCH MINIMUM.</li> <li>SPACING BETWEEN THE BASE OF THE CHARACTERS SHALL BE SEPARATED I RAISED BORDERS AND DECORATIVE ELEMENTS 3/8 INCH MINIMUM.</li> <li>SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF TACTILE CHARACTER THE BASE SHALL BE 135% MINIMUM AND 170% MAXIMUM OF THE TA CHARACTER HEIGHT.</li> <li>TACTILE CHARACTERS SHALL BE 48 INCHES MINIMUM ABOVE THE FLOOR, ME TO THE BASELINE OF THE LOWEST TACTILE CHARACTER AND 60 INCHES MAX ABOVE THE FLOOR, MEASURED TO THE BASELINE OF THE HIGHEST TACTILE CHARACTER.</li> </ol>
WIDTH.	1. I I I I I I I I I I I I I I I I I I I	12. WHERE A TACTILE SIGN IS PROVIDED AT THE DOOR, THE SIGN SHALL BE ADART THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT THE LOCATED ON THE INACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE HERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE HERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE HERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE HERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS, WHERE THE IS NOTADING TACTILE CHARACTERS SHALL BE ON THE NEAREST ADJACENT WHALL, SIGNS ONTAINING TACTILE CHARACTERS SHALL BE COCATED SO THAT A CLEAR FLAFA TA SIGNS WITH TWO ACTIVE LEAF, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN LOCATERS AND ANY DOOR SWING BETWEEN LO
	WHERE MIRRORS ARE LOCATED ABOVE LAVATORIES, A MIRROR SHALL BE LOCATED OVER THE ACCESSIBLE LAVATORY AND SHALL BE MOUNTED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 40 INCHES (1015 MM) MAXIMUM ABOVE THE FLOOR. WHERE MIRRORS ARE LOCATED ABOVE COUNTERS THAT DO NOT CONTAIN LAVATORIES, THE MIRROR SHALL BE MOUNTED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 40 INCHES (1015) MAXIMUM ABOVE THE FLOOR. <u>EXCEPTION: OTHER THAN WITHIN ACCESSIBLE DWELLING OR SLEEPING UNITS, MIRRORS ARE NOT REQUIRED OVER THE LAVATORIES OR COUNTERS IF A MIRROR IS LOCATED WITHIN THE SAME TOILET OR BATHING ROOM AND MOUNTED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 35 INCHES (890 MM) MAXIMUM ABOVE THE FLOOR.</u>	<ul> <li>PUSH SIDE OF DOORS WITH CLOSERS AND WITHOUT HOLD-OPEN DEVICE</li> <li>Image: Push Side of Doors with Closers and Without Hold-Open Device</li> <li>Image: Push Side of Doors with Closers and Without Hold-Open Device</li> <li>Image: Push Side of Doors with Closers and Without Hold-Open Device</li> <li>Image: Push Side of Doors With Side of Centered on Tactile Characters and their Background Shall have a non-glare finish. Characters on a Dark Background, or Dark Characters on a Light Background.</li> <li>Image: Push Side of Contrast with the Same Information are provided, tactile Characters are not required to have non-glare finish or to Contrast with their Background.</li> </ul>



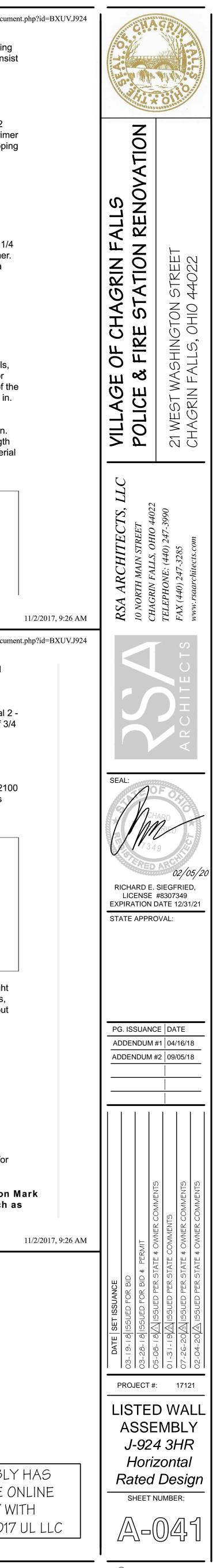


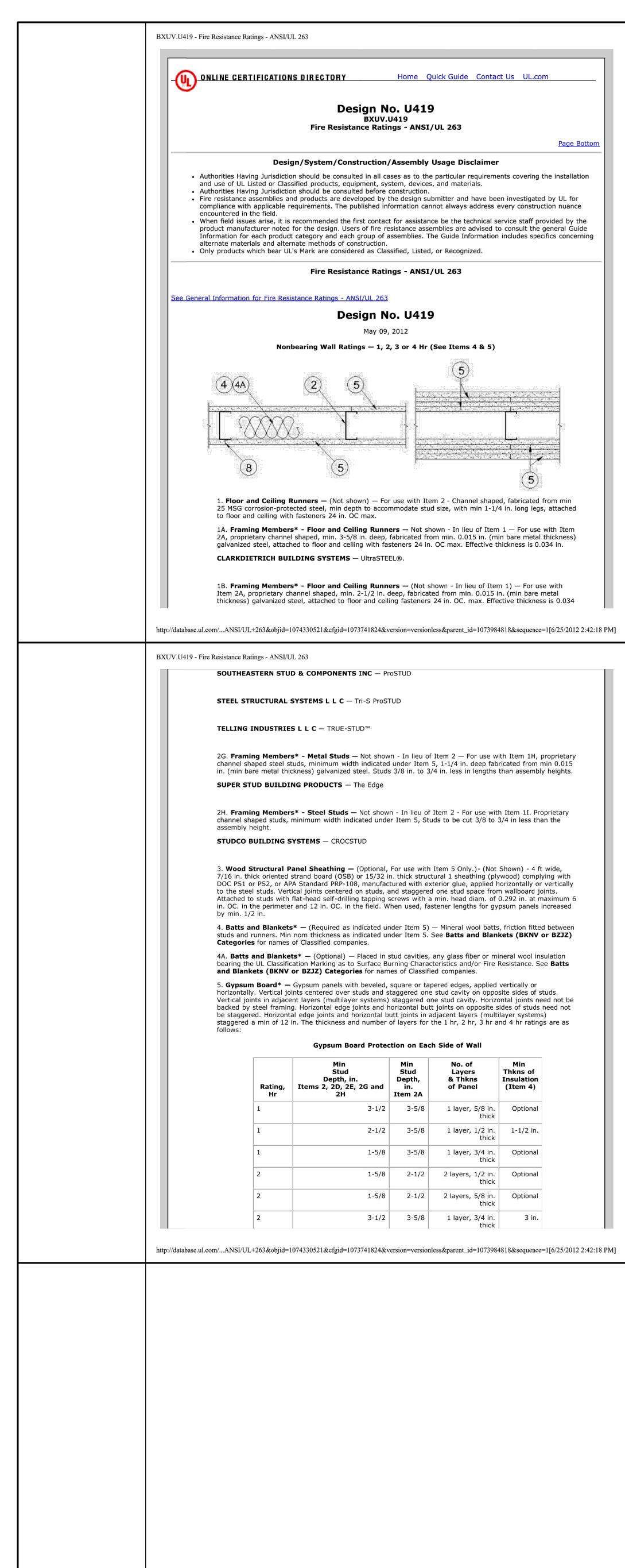


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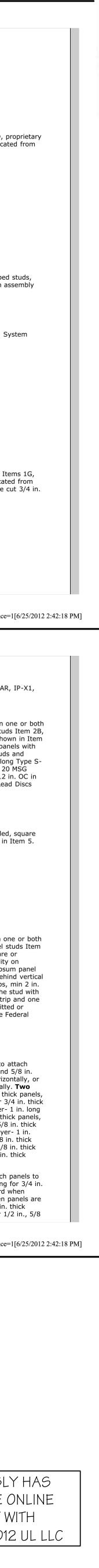
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	Autokly find, specify, or verify UL Certified products for your projects.         1. HOW DO YOU WANT TO SEARCH?       2. RESULTS         JERE-RESISTANCE DESIGN       JERE-RESISTANCE DESIGN         Assembly Usage Disclaimer       BXUV - Fire Resistance Ratings - ANSI/UL 263         BXUV - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada       See General Information for Fire-resistance Ratings - CAN/ULC-S101 Certified for Canada         See General Information for Fire-resistance Ratings - CAN/ULC-S101 Certified for Canada       Design No. J924         Restrained Assembly Ratings - 2, 3 and 4 Hr.       (See item 1 and 2)         Unrestrained Assembly Rating - 1 Hr.       This design was evaluated using a load design method other than the Limit States Design Method). For Jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used - See Guide BXUV or BXUVT         * Indicates such products shall be ar the UL or cUL Certification Mark for jurisdictions employing the Limit Cart bull or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada, such asuch restruction states bas canada, such asuch restrict	Image: state stat	Unit       Topping         HACKER INDUSTRIES INC Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Gyp-Span Radiant         Floor Mat Materials — (Optional) — Floor mat material nom 1/8 in. (3 mm) thick loose laid over the precast concrete unit. Floor topping thickness shall be a min of 3/4 in. (19 mm).         HACKER INDUSTRIES INC FIRM-FILL SCM 125         Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick loose laid over the precast concrete unit. Floor topping thickness shall be a min of 1 in. (25 mm).         HACKER INDUSTRIES INC Type FIRM-FILL SCM 250         Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/8 in. (10 mm) thick loose laid over the precast concrete unit. Floor topping thickness shall be a min of 1.1/4 in. (32 mm).         HACKER INDUSTRIES INC FIRM-FILL SCM 400         Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/4 in. (19 mm) thick loose laid over the precast concrete unit. Floor topping thickness shall be a min of 1.1/2 in. (38 mm).         HACKER INDUSTRIES INC FIRM-FILL SCM 400         Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/4 in. (19 mm) thick loose laid over the precast concrete unit. Floor topping thickness shall be a min of 1.1/2 in. (38 mm).         HACKER INDUSTRIES INC Type FIRM-FILL SCM 750         Metal Lath (Optional) — For use with 3/8 in. (10 mm), or greater, floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness	<ul> <li>1B. Floor Topping Mixture* — Alternate to Items 1 and 1A - Floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consi of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand. Thickness per table.</li> <li>HACKER INDUSTRIES INC Firm-Fill Gypsum Concrete, Firm-Fill High Strength, Gyp-Span Radiant</li> <li>Floor Mat Materials* — (Optional) — Floor mat material nom 5/64 in. (2 mm) thick adhered to precast concrete unit with Hacker Floor Primer. Prim to be applied to the surface of the mat prior to the placement of floor-topping mixture. Floor topping thickness a min 1 in. over the floor mat.</li> <li>ECORE INTERNATIONAL INC — Type QTscu 4002</li> <li>HACKER INDUSTRIES INC — Type Hacker Sound-Mat</li> <li>Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick adhered to precast concrete unit with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32 mm) of floor-topping mixture.</li> <li>ECORE INTERNATIONAL INC — Type QTrbm 3006-3</li> <li>HACKER INDUSTRIES INC — Type Hacker Sound-Mat II</li> <li>Metal Lath (Optional) — For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Tymer and estimation to be applied prior to the placement of the material that. When metal lath is used, floor topping Mixture* — Min. 3/4 in. thickness of floor topping mixture is required for the following units or the floor mat.</li> <li>C. Alternate Finish Flooring — Floor Topping Mixture* — Min. 3/4 in. Thickness of floor topping mixture is required for the following units only:</li> </ul>
	1 of 9 11/2/2017, 9:26 AM 2 of 9	11/2/2017, 9:26 AM 3 of 9	11/2/2017, 9:26 AM 4 of 9	
$\frac{1}{2 e^{2}}  1 \\ \frac{1}{2 e^{2}}  1 \\ \frac{1}$	3       10       0         4       10       1/2         MAXXON CORP — Type D-C, GC, GC 2000, L-R, T-F, CT, SS         RAPID FLOOR SYSTEMS — Types RF, RFP, RFU, RFR, Ortecrete         Floor Mat Materials* (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.         MAXXON CORP — Type Acousti-Mat I, Acousti-Mat II, Acousti-Mat II HP, Enkasonic 9110, Enkasonic 9110 HP, Acousti-Mat II, Acousti-Mat J, HP, Acousti-Mat LP, Cousti-Mat LP, Cousti-Mat LP, Acousti-Mat SD.         Floor Mat Reinforcement(Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping over each floor mat material, primers, and use of crack suppression reinforcement.         MAXXON CORP — Crack Suppression Mat (CSM) or Maxxon Reinforcement (MR)         MAXXON CORP — Crack Suppression Mat (CSM) or Maxxon Reinforcement (MR)         Maxxon Reinforcement (MR)) — 3/8 in. expanded galvanized steel diamond mesh, 3.4 lb/s/g of loose laid over the floor mat material. Floor topping thickness shall be min 1-1/2 in.         10. Alternate Floor Topping Mixture' — Compressive strength to be 1800 psi minimum. Refer to manufacturer's instructions accompanying the material for specific mix design.         Floor Topping Mixture is required for the following units only:         Unit       Topping	UNITED STATES GYPSUM CO — Type CSD, LRK, HRLRK USG MEXICO S A DE C V — Types LRK, HSLRK, CSD Floor Mat Materials* — (Optional) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material. UNITED STATES GYPSUM CO — Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25 Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness a min 3/4 in. over the floor mat.	1E. Alternate Floor Topping Mixture* — Compressive strength to be 1000 psi min. Thickness to be 3/4 in. min. Refer to manufacturer's instructions accompanying the material for specific mix design.         Floor Topping Mixture is required for the following units only:         Image: The start of the start of the following units only:         Image: The start of the start of the following units only:         Image: The start of the start of the following units only:         Image: The start of the start of the following units only:         Image: The start of the start of the start of the following units only:         Image: The start of the star	FORMULATED MATERIALS LLC — Types FR-25, FR-30, SiteMix, and SiteMix SL         Alternate Floor Mat Material* — (Optional) - Floor mat material nominal 2 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/ in.         FORMULATED MATERIALS LLC — Types M1, M2, M3, R1, and R2         1G. Alternate Floor Topping Mixture* — Compressive strength to be 210 psi min. Thickness to be 3/4 in. min. Refer to manufacturer's instructions accompanying the material for specific mix design.         Floor Topping Mixture is required for the following units only:         To Topping Mixture is required for the following units only:         Rating Hr Thk in. Thins in.         2       10         3       8         3       10         4       10         4       10         4       10         5/8       10         3       10         4       10         4       10         5/8       10         6       10         7       9,10 and 12 in. thick units. Normal weight aggregate. Cross-section similar to the above illustration. For 12 in. units, the Rating is 4 hrs with or without a topping. When units are made without core holes, the Rating is 4 hrs with or without a topping. When units are made without core holes, the Rating is 4 hrs with or without a topping. Conserved BUILDING SYSTEMS L L C         KERKSTRA PRECAST INC       SPANCRETE INDUSTRIES INC
interm	3  10  0  1/2		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Clocket Spectra Control       Clocket Spectra Control       Note::::::::::::::::::::::::::::::::::::				for jurisdictions employing the UL or cUL Certification (such
Canada), respectively.       Last Updated on 2017-09-29         Design/System/Construction/Respectively.       Design/System/Construction/Respectively.         Output       Design/System/Construction/Respectively.       Design/System/Construction/Respectively.         Output       Design/System/Construction/Respectively.       Design/System/Construction/Respectively.       Design/System/Construction/Respectively.       Design/System/Construction/Respectively.       Design/System/Construction/Respectively.       Design/System/Construction/Respectively.       Design/System/Construction/Respectively.	5 of 9 11/2/2017, 9:26 AM 6 of 9	11/2/2017, 9:26 AM 7 of 9	11/2/2017, 9:26 AM 8 of 9	
7 01 7	UL Product	<ul> <li>Canada), respectively.</li> <li>Last Updated on 2017-09-29</li> <li>Design/System/Construction/Assembly Usage Disclaimer</li> <li>Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.</li> <li>Authorities Having Jurisdiction should be consulted before construction.</li> <li>Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.</li> <li>When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.</li> </ul>	that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product. UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2017 UL LLC". UL and the UL logo are trademarks of UL LLC © 2017 All Rights Reserved. Request a Field Evaluation	NOTE: THIS LISTED ASSEMBL BEEN REPRINTED FROM THE ( CERTIFICATIONS DIRECTORY W PERMISSION FROM UL. © 201

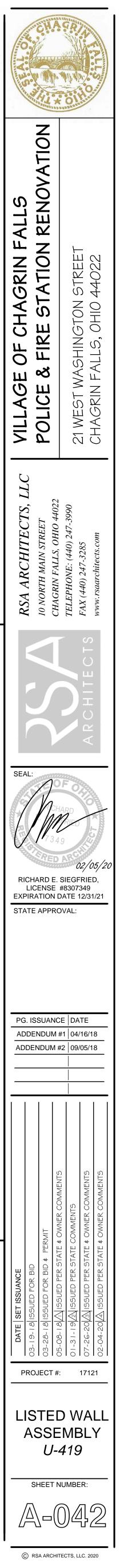




	BXUV.U419 - Fire Resistance Ratings - ANSI/UL 263	BXUV.U419 - Fire Resistance Ratings - ANSI/UL 263
in. CLARKDIETRICH BUILDING SYSTEMS — UltraSTEEL®.	1G. <b>Framing Members*— Floor and Ceiling Runners —</b> (Not shown, As an alternate to Item 1) — For use with Items 2F, 5F or 5G or 5I only, channel shaped, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC. max.	MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper25™
1C. Framing Members* - Floor and Ceiling Runner — Not shown - In lieu of Item 1 — For use with Item 2C, proprietary channel shaped runners, 3-5/8 in. deep attached to floor and ceiling with fasteners 24 in. OC max.		PHILLIPS MFG CO L L C — Viper25™
CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper25™ Track	DMFCWBS L L C — ProTRAK	TELLING INDUSTRIES L L C — Viper25™
CRACO MFG INC — SmartTrack™	MBA BUILDING SUPPLIES — ProTRAK	2D. Framing Members* - Metal Studs — Not shown - In lieu of Item 2 — For use with Item 1D, propr
MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper25™ Track	SOUTHEASTERN STUD & COMPONENTS INC - ProTRAK	channel shaped steel studs, min depth as indicated under Item 5, spaced a max if 24 in. OC, fabricated fr min 0.020 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights. CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™
<b>PHILLIPS MFG CO L L C</b> — Viper25™ Track	STEEL STRUCTURAL SYSTEMS L L C — Tri-S ProTRAK	
TELLING INDUSTRIES L L C — Viper25™ Track	TELLING INDUSTRIES L L C — TRUE-TRACK™	MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™
	1H. Framing Members* - Floor and Ceiling Runner — Not shown - In lieu of Item 1 — For use with Item 2G, proprietary channel shaped runners, minimum width to accommodate stud size, with 1- 1/8 in. long legs	PHILLIPS MFG CO L L C — Viper20™
1D. <b>Framing Members* - Floor and Ceiling Runner</b> — Not shown - In lieu of Item 1 — For use with Item 2D, proprietary channel shaped runners, 1-1/4 in. wide by 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.	fabricated from min 0.015 in. (min bare metal thickness) galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.	TELLING INDUSTRIES L L C — Viper20™
CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20 <sup>™</sup> Track	SUPER STUD BUILDING PRODUCTS — The Edge	2E. Framing Members*— Steel Studs — In lieu of Item 2 - For Use with Item 1E- Channel shaped stud min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assem height.
MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20 <sup>™</sup> Track	1I. <b>Framing Members* - Floor and Ceiling Runner</b> — For use with Item 2H, proprietary channel shaped runners, minimum width to accommodate stud size attached to floor and ceiling with fasteners 24 in. OC max. <b>STUDCO BUILDING SYSTEMS</b> — CROCSTUD Track	ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME Framing System
<b>PHILLIPS MFG CO L L C</b> — Viper20 <sup>™</sup> Track		CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — Type SUPREME Framing System
TELLING INDUSTRIES L L C — Viper20™ Track	1J. <b>Floor and Ceiling Runners</b> — (Not shown) — Channel shaped, fabricated from min 0.02 in. galv steel, min width to accommodate stud size, with min 1 in. long legs, for use with studs specified below and fabricated from min 0.02 in. galv steel or thicker, attached to floor and ceiling with fasteners spaced max 24 in. OC.	QUAIL RUN BUILDING MATERIALS INC — Type SUPREME Framing System
1E. Framing Members*— Floor and Ceiling Runners — (Not shown) — In lieu of Item 1 - Channel shaped, attached to floor and ceiling with fasteners 24 in. OC. max.	MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track VT100.	SCAFCO STEEL STUD MANUFACTURING CO — Type SUPREME Framing System
ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME Framing System	2. <b>Steel Studs</b> – Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.	STEEL CONSTRUCTION SYSTEMS INC — Type SUPREME Framing System
CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — Type SUPREME Framing System	2A. Framing Members* - Steel Studs — In lieu of Item 2 - Proprietary channel shaped studs, min. depth as indicated under Item 5, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, spaced a	
QUAIL RUN BUILDING MATERIALS INC — Type SUPREME Framing System	max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height. Allowable use of studs is shown in the table below. For direct attachment of gypsum board only. Effective thickness is 0.034 in. <b>CLARKDIETRICH BUILDING SYSTEMS</b> — UltraSTEEL®.	UNITED METAL PRODUCTS INC — Type SUPREME Framing System
SCAFCO STEEL STUD MANUFACTURING CO — Type SUPREME Framing System		2F. <b>Framing Members*— Steel Studs</b> — (Not shown, As an alternate to Item 2) —For use with Items 3 5F or 5G or 5I only, channel shaped studs, min depth as indicated under Item 5F, 5G or 5I, fabricated fro min. 0.015 in. (min bare metal thickness) galvanized steel, spaced a max of 24 in. OC. Studs to be cut 3, less than assembly height.
STEEL CONSTRUCTION SYSTEMS INC — Type SUPREME Framing System	2B. <b>Steel Studs</b> — (As an alternate to Item 2, For use with Items 5B & 5E) Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, 3-1/2 in. min depth, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling runners. Studs to be cut 5/8 to 3/4 in. less than assembly height.	CLARKDIETRICH BUILDING SYSTEMS — CD ProSTUD
UNITED METAL PRODUCTS INC — Type SUPREME Framing System	2C. <b>Framing Members* - Steel Studs</b> — (As an alternate to Item 2, For use with Items 5C or 5I) - Proprietary channel shaped studs, 3-5/8 in. deep spaced a max of 24 in. OC. Studs to be cut 3/4 in less than the assembly height and installed with a ½ in. gap between the end of the stud and track at the bottom of the wall. For direct attachment of gyncym board only.	DMFCWBS L L C — ProSTUD
1F. Floor and Ceiling Runners — (Not shown)—For use with Item 2B- Channel shaped, fabricated from min	wall. For direct attachment of gypsum board only. CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper25™	MBA BUILDING SUPPLIES — ProSTUD
20 MSG corrosion-protected or galv steel, min depth to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners spaced max 24 in. OC.	CRACO MFG INC — SmartStud™	
ase.ul.com/ANSI/UL+263&objid=1074330521&cfgid=1073741824&version=versionless&parent_id=1073984818&sequence=1[6/25/2012 2:42:18 PM]	http://database.ul.com/ANSI/UL+263&objid=1074330521&cfgid=1073741824&version=versionless&parent_id=1073984818&sequence=1[6/25/2012 2:42:18 PM	1] http://database.ul.com/ANSI/UL+263&objid=1074330521&cfgid=1073741824&version=versionless&parent_id=1073984818&sequence=1[6/2
9 - Fire Resistance Ratings - ANSI/UL 263	BXUV.U419 - Fire Resistance Ratings - ANSI/UL 263	BXUV.U419 - Fire Resistance Ratings - ANSI/UL 263
3     1-5/8     2-1/2     3 layers, 1/2 in. thick     Optional	boards are to be secured to the top and bottom track with screws spaced 8 in. OC starting 4 in. from the board edge. Fasteners shall not penetrate through both the stud and the track at the same time. All horizontal joints are to be backed as outlined under section VI of Volume 1 in the Fire Resistive Directory.	IP-X1, AR, C, , FRX-G, IP-AR, IP-X2, IPC-AR ; 3/4 in. thick Types IP-X3 or ULTRACODE
31-5/82-1/22 layers, 3/4 in. thickOptional	CGC INC — Type SCX.	<b>USG MEXICO S A DE C V</b> — 1/2 in. thick Type C, IP-X2, IPC-AR or; 5/8 in. thick Type AR, C, IP-AR, IP- IP-X2, IPC-AR, SCX, SHX, or; 3/4 in. thick Types IP-X3 or ULTRACODE
3 1-5/8 2-1/2 3 layers, 5/8 in. thick Optional	UNITED STATES GYPSUM CO — Type SCX, SGX.	5H. <b>Gypsum Board*</b> – (Not Shown) - (As an alternate to Item 5 when used as the base layer on one o
4     1-5/8     2-1/2     4 layers, 5/8 in. thick     Optional       4     1.5/8     2-1/2     4 layers, 1/2 in     Optional	<b>USG MEXICO S A DE C V</b> — Type SCX.	sides of wall when 5/8 or 3/4 in thick products are specified. For direct attachment only to steel studs Ite (not to be used with Item 3) - Nom 5/8 or 3/4 in. may be used as alternate to all 5/8 or 3/4 in. shown in 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 or 3/4 in. thick lead backed gypsum panels w
4         1-5/8         2-1/2         4 layers, 1/2 in. thick         Optional           4         2-1/2         2-1/2         2 layers, 3/4 in.         2 in.	5D. <b>Gypsum Board*</b> — (As an alternate to Item 5) — 5/8 in. thick, 48 in. wide, applied vertically or	beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Ty 12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Gypsum board secured to 20 MSC steel studs Item 2B with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC
4       2-1/2       2-1/2       2 layers, 3/4 in. thick       2 in.         CGC INC — 1/2 in. thick Type C, IP-X2 or IPC-AR; WRC, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-       10 and	horizontally. Secured as described in Item 6. For use with Items 1 and 2 only.	the field. For Joint Compound see Item 5. To be used with Lead Batten Strips (see Item 11A) or Lead Dis (see Item 12A).
CGC INC – 1/2 in. thick Type C, IP-X2 or IPC-AR; WRC, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC- AR, SCX, SHX, WRX or WRC; 3/4 in. thick Types IP-X3 or ULTRACODE	5E. <b>Gypsum Board</b> * — (Not Shown) - (As an alternate to Item 5 when used as the base layer on one or both	MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum
<b>UNITED STATES GYPSUM CO</b> — 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type SCX, SGX, SHX, WRX, IP-X1, AR, C, WRC, FRX-G, IP-AR, IP-X2, IPC-AR ; 3/4 in. thick Types IP-X3 or ULTRACODE	sides of wall when 1/2 in. or 5/8 in thick products are specified, For direct attachment only to steel studs Item 2B, not to be used with Item 3). Nominal 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 (or No. 6 by 1-1/4 in. long	5I. <b>Gypsum Board*</b> — (As an alternate to Item 5) - Nom. 5/8 in. thick gypsum panels with beveled, squ or tapered edges installed as described in Item 5. Steel stud minimum depth shall be as indicated in Item
<b>USG MEXICO S A DE C V</b> $- 1/2$ in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type AR, C, IP-AR, IP-	opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 (or No. 6 by 1-1/4 in. long bugle head fine driller) steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field.  NEW ENGLAND LEAD BURNING CO INC, DBA NELCO — Nelco	CGC INC — Type ULX
X1, IP-X2, IPC-AR, SCX, SHX, WRX, WRC or; 3/4 in. thick Types IP-X3 or ULTRACODE	5F. <b>Gypsum Board*</b> – (As an alternate to Item 5) – For use with Items 1G and 2F and limited to 1 Hour	UNITED STATES GYPSUM CO — Type ULX
When Item 7B, Steel Framing Members*, is used, Nonbearing Wall Rating is limited to 1 Hr. Min. stud depth is 3-1/2 in., min. thickness of insulation (Item 4) is 3 in., and two layers of gypsum board panels (1/2 in. or 5/8 in. thick) shall be attached to furring channels as described in Item 6. One layer of gypsum board panels (1/2	Rating only, Gypsum panels with beveled, square or tapered edges, applied vertically, and fastened to the steel studs with 1 in. long Type S screws spaced 8 in. OC along vertical and bottom edges and 12 in. OC in the field. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Steel stud	USG MEXICO S A DE C V — Type ULX
<ul> <li>in. or 5/8 in. thick) attached to opposite side of stud without furring channels as described in Item 6.</li> <li>5A. <b>Gypsum Board*</b> – (As an alternate to Item 5) – 5/8 in. thick, 24 to 54 in. wide, applied horizontally as the outer layer to one side of the assembly. Secured as described in Item 6.</li> </ul>	depth shall be a minimum 3-5/8 in. <b>UNITED STATES GYPSUM CO</b> — 5/8 in. thick Type SCX, SGX.	5J. <b>Gypsum Board*</b> — (Not Shown) - (As an alternate to Item 5 when used as the base layer on one or sides of wall when 1/2 in. or 5/8 in thick products are specified, For direct attachment only to steel studs 2B, not to be used with Item 3). Nom 5/8 in. thick lead backed gypsum panels with beveled, square or
CGC INC — Type SHX.	5G. <b>Gypsum Board*</b> — (As an alternate to Item 5) — For use with Items 1G and 2F only, Gypsum panels	tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws gypsum pasteel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behind vertical screws spaced 8 in. OC at perimeter and 12 in. OC in the field.
UNITED STATES GYPSUM CO — Type FRX-G, SHX.	with beveled, square or tapered edges, applied vertically or horizontally, as specified in the table below and fastened to the steel studs as described in Item 6. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud	joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and
USG MEXICO S A DE C V — Type SHX.	cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers for the 2 hr, 3 hr and 4 hr ratings are as follows:	at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federa specification QQ-L-201f, Grade "C".
	Gypsum Board Protection on Each Side of Wall	<b>RADIATION PROTECTION PRODUCTS INC</b> — Type RPP-LBG
5B. <b>Gypsum Board*</b> – (Not Shown) - As an alternate to Item 5 when used as the base layer on one or both		
5B. <b>Gypsum Board*</b> — (Not Shown) - As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 in or <sup>3</sup> / <sub>4</sub> in. thick products are specified. For direct attachment only to steel studs Item 2B, (not to be used with Item 3) - Nom 5/8 in. or <sup>3</sup> / <sub>4</sub> in. may be used as alternate to all 5/8 in. or <sup>3</sup> / <sub>4</sub> in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 in. or <sup>3</sup> / <sub>4</sub> in. thick lead backed gypsum	Min Stud     No. of Layers     Min Thkns of       Rating,     Depth, in.     & Thickness     Insulation       Hr     Item 2F     of Panel     (Item 4)	6. <b>Fasteners</b> — (Not shown) — For use with Items 2 and 2F - Type S or S-12 steel screws used to attack panels to studs (Item 2) or furring channels (Item 7). <b>Single layer systems:</b> 1 in. long for 1/2 and 5/8 thick panels or 1-1/4 in long for 3/4 in thick panels, spaced 8 in OC when panels are applied horizontally
5B. <b>Gypsum Board*</b> — (Not Shown) - As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 in or <sup>3</sup> / <sub>4</sub> in. thick products are specified. For direct attachment only to steel studs Item 2B, (not to be used with Item 3) - Nom 5/8 in. or <sup>3</sup> / <sub>4</sub> in. may be used as alternate to all 5/8 in. or <sup>3</sup> / <sub>4</sub> in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 in. or <sup>3</sup> / <sub>4</sub> in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to 20 MSG steel studs Item 2B with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used	Rating, HrDepth, in. Item 2F& Thickness of PanelInsulation (Item 4)21-5/82 layers, 1/2 in. thickOptional	
5B. <b>Gypsum Board*</b> — (Not Shown) - As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 in or ¾ in. thick products are specified. For direct attachment only to steel studs Item 2B, (not to be used with Item 3) - Nom 5/8 in. or ¾ in. may be used as alternate to all 5/8 in. or ¾ in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 in. or ¾ in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to 20 MSG steel studs Item 2B	Rating, Hr     Depth, in. Item 2F     & Thickness of Panel     Insulation (Item 4)	panels to studs (İtem 2) or furring channels (Item 7). <b>Single layer systems:</b> 1 in. long for 1/2 and 5/8 thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontall 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. <b>Tw layer systems:</b> First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick p spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in panels, spaced 16 in. OC with screws offset 8 in. from first layer. <b>Three-layer systems:</b> First layer- 1 in. for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 2-1/4 in. long for 1/2 in., 5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. thick panels or 2-5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick
<ul> <li>5B. Gypsum Board* — (Not Shown) - As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 in or ¾ in. thick products are specified. For direct attachment only to steel studs Item 2B, (not to be used with Item 3) - Nom 5/8 in. or ¾ in. may be used as alternate to all 5/8 in. or ¾ in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 in. or ¾ in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to 20 MSG steel studs Item 2B with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used with Lead Batten Strips (see Item 11) or Lead Discs or Tabs (see Item 12).</li> <li>RAY-BAR ENGINEERING CORP — Type RB-LBG</li> <li>5C. Gypsum Board* — (For Use With Item 2C) Rating Limited to 1 Hour. 5/8 in. thick, 48 in. wide, Gypsum</li> </ul>	Rating, HrDepth, in. Item 2F& Thickness of PanelInsulation (Item 4)21-5/82 layers, 1/2 in. thickOptional21-5/82 layers, 5/8 in. thickOptional	panels to studs (Item 2) or furring channels (Item 7). <b>Single layer systems:</b> 1 in. long for 1/2 and 5/8 thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontall 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. <b>Tw layer systems:</b> First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. With screws offset 8 in. from first layer. <b>Three-layer systems:</b> First layer- 1 in. for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. <b>Four-layer systems:</b> First layer- 1 i long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Screws offset min 6 in. from layer below. <b>Four-layer systems:</b> First layer- 1 i long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Screws offset min 6 in. from layer below. <b>Four-layer systems:</b> First layer- 1 i long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels o
<ul> <li>5B. Gypsum Board* — (Not Shown) - As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 in or ¾ in. thick products are specified. For direct attachment only to steel studs Item 2B, (not to be used with Item 3) - Nom 5/8 in. or ¾ in. may be used as alternate to all 5/8 in. or ¾ in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 in. or ¾ in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to 20 MSG steel studs Item 2B with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used with Lead Batten Strips (see Item 11) or Lead Discs or Tabs (see Item 12).</li> <li>RAY-BAR ENGINEERING CORP — Type RB-LBG</li> <li>5C. Gypsum Board* — (For Use With Item 2C) Rating Limited to 1 Hour. 5/8 in. thick, 48 in. wide, Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. (Vertical Application) - The gypsum board is to be installed on each side of the studs with 1 in. long Type S coated steel screws spaced 8 in. OC starting 4 in. from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board at the center of each board. Gypsum boards are to be secured to the top and bottom track with</li> </ul>	Rating, HrDepth, in. Item 2F& Thickness of PanelInsulation (Item 4)21-5/82 layers, 1/2 in. thickOptional21-5/82 layers, 5/8 in. thickOptional31-5/83 layers, 1/2 in. thickOptional31-5/83 layers, 5/8 in. thickOptional41-5/84 layers, 5/8 in. thickOptional41-5/84 layers, 1/2 in. thickOptional	<ul> <li>panels to studs (Item 2) or furring channels (Item 7). Single layer systems: 1 in. long for 1/2 and 5/8 thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontally 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. Two layer systems: First layer-1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer. Three-layer systems: First layer-1 in. for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Screws offset min 6 in. from layer below. Four-layer systems: First layer-1 i long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thi panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thi panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thi panels, spaced 24 in. OC. Third layer- 2-5/8 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thi panels, spaced 24 in. OC. Screws offset min 6 in. from layer below.</li> <li>6A. Fasteners – (Not shown) –For use with Item 2A - Type S or S-12 steel screws used to attach panels</li> </ul>
<ul> <li>5B. Gypsum Board* — (Not Shown) - As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 in or ¾ in. thick products are specified. For direct attachment only to steel studs Item 2B, (not to be used with Item 3) - Nom 5/8 in. or ¾ in. may be used as alternate to all 5/8 in. or ¾ in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 in. or ¾ in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to 20 MSG steel studs Item 2B with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used with Lead Batten Strips (see Item 11) or Lead Discs or Tabs (see Item 12).</li> <li>RAY-BAR ENGINEERING CORP — Type RB-LBG</li> <li>5C. Gypsum Board* — (For Use With Item 2C) Rating Limited to 1 Hour. 5/8 in. thick, 48 in. wide, Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. (Vertical Application) - The gypsum board is to be installed on each side of the studs with 1 in. long Type S coated steel screws spaced 8 in. OC starting 4 in. from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board at the center of each board. Gypsum boards are to be secured to the top and bottom track with screws spaced 8 in. OC starting 4 in. from the board edge. Fasteners shall not penetrate through both the stud and the track at the same time. Vertical joints are to be centered over studs and staggered one stud cavity on opposite sides of studs. (Horizontal Application) - The gypsum board is to be installed on each side of the studs</li> </ul>	Rating, HrDepth, in. Item 2F& Thickness of PanelInsulation (Item 4)21-5/82 layers, 1/2 in. thickOptional21-5/82 layers, 5/8 in. thickOptional31-5/83 layers, 1/2 in. thickOptional31-5/83 layers, 5/8 in. thickOptional41-5/84 layers, 5/8 in. thickOptional	<ul> <li>panels to studs (İtem 2) or furring channels (Item 7). Single layer systems: 1 in. long for 1/2 and 5/8 thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontally. Tw layer systems: First layer-1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels, spaced 16 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-5/8 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below.</li> <li>6A. Fasteners — (Not shown) —For use with Item 2A - Type S or S-12 steel screws used to attach pane studs (Item 2A). Single layer systems: 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. long for 3/2 in. from edges of the board when panels are horizontally. or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels</li> </ul>
<ul> <li>5B. Gypsum Board* — (Not Shown) - As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 in or ¾ in. thick products are specified. For direct attachment only to steel studs Item 2B, (not to be used with Item 3) - Nom 5/8 in. or ¾ in. may be used as alternate to all 5/8 in. or ¾ in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 in. or ¾ in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to 20 MSG steel studs Item 2B with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used with Lead Batten Strips (see Item 11) or Lead Discs or Tabs (see Item 12).</li> <li>RAY-BAR ENGINEERING CORP — Type RB-LBG</li> <li>5C. Gypsum Board* — (For Use With Item 2C) Rating Limited to 1 Hour. 5/8 in. thick, 48 in. wide, Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. (Vertical Application) - The gypsum board is to be installed on each side of the studs with 1 in. long Type S coated steel screws spaced 8 in. OC starting 4 in. from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board edge. Fasteners shall not penetrate through both the stud and the track at the same time. Vertical joints are to be centered over studs and staggered one stud cavity on</li> </ul>	Rating, HrDepth, in. Item 2F& Thickness of PanelInsulation (Item 4)21-5/82 layers, 1/2 in. thickOptional21-5/82 layers, 5/8 in. thickOptional31-5/83 layers, 1/2 in. thickOptional31-5/83 layers, 5/8 in. thickOptional41-5/84 layers, 5/8 in. thickOptional41-5/84 layers, 1/2 in. thickOptional41-5/87/8 in. thickOptional41-5/84 layers, 1/2 in. thickOptional41-5/87/8 in. thickOptional41-5/84 layers, 1/2 in. thickOptional41-5/84 layers, 1/2 in. thickNotional41-5/84 layers, 1/2 in. thickNotional	<ul> <li>panels to studs (Item 2) or furring channels (Item 7). Single layer systems: 1 in. long for 1/2 and 5/8 thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontally 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. Tw layer systems: First layer-1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. panels, spaced 16 in. OC with screws offset 8 in. from first layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below.</li> <li>6A. Fasteners — (Not shown) —For use with Item 2A - Type S or S-12 steel screws used to attach pane studs (Item 2A). Single layer systems: 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/2 in. thick panels, spaced 8-1/2 in. OC with additional screws 1 in. and 2-1/2 in. from edges of the board when</li> </ul>

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	in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer. <b>Two layer systems applied horizontally:</b> First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC starting 8 in. from each edge of the board with an additional screw placed 1-1/4 in. from each edge of the board. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in.	PLITEQ INC — Type GENIECLIP	UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2012 UL LLC".
	thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC starting 8 in. from each edge of the board with an additional screw placed 1-1/4 in. from each edge of the board with screws offset 8 in. from first layer. <b>Three-layer systems:</b> First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second	8. <b>Joint Tape and Compound</b> — Vinyl or casein, dry or premixed joint compound applied in two coats to joints and screw heads of outer layers. Paper tape, nom 2 in. wide, embedded in first layer of compound over all joints of outer layer panels. Paper tape and joint compound may be omitted when gypsum panels are	
	layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. For all layers, an additional screw shall be placed 1-1/4 in. from each edge of the board. <b>Four-</b>	supplied with a square edge. 9. <b>Siding, Brick or Stucco —</b> (Optional, not shown) — Aluminum, vinyl or steel siding, brick veneer or	
	layer systems: First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Fourth layer- 2-5/8 in. long for 1/2 in. thick panels or	stucco, meeting the requirements of local code agencies, installed over gypsum panels. Brick veneer attached to studs with corrugated metal wall ties attached to each stud with steel screws, not more than each sixth course of brick.	
	3 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. For all layers, an additional screw shall be placed 1-1/4 in. from each edge of the board.	10. <b>Caulking and Sealants*</b> — (Optional, not shown) — A bead of acoustical sealant applied around the partition perimeter for sound control.	
	7. Furring Channels — (Optional, not shown, for single or double layer systems) — Resilient furring channels fabricated from min 25 MSG corrosion-protected steel, spaced vertically a max of 24 in. OC. Flange portion attached to each intersecting stud with 1/2 in. long Type S-12 steel screws. Not for use with Item 5A and 5E.	UNITED STATES GYPSUM CO — Type AS	
	7A. Framing Members* — (Not Shown) — (Optional on one or both sides, not shown, for single or double layer systems) — As an alternate to Item 7, furring channels and Steel Framing Members as described below:	11. <b>Lead Batten Strips</b> — (Not Shown, For Use With Item 5B) - Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. Strips placed on the interior face of studs and attached from the	
	a. <b>Furring Channels</b> — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to furring channels as described in Item 6. Not for use	exterior face of the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard	
	b. Steel Framing Members* — Used to attach furring channels (Item 7Aa) to studs	(Item 5B) and optional at remaining stud locations. Required behind vertical joints. 11A. Lead Batten Strips — (Not Shown, For Use With Item 5H) Lead batten strips, 2 in. wide, max 10 ft long	
	(Item 2). Clips spaced max. 48 in. OC. RSIC-1 clips secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. RSIC-V clips secured to studs with No. 8 x 9/16 in. minimum self-drilling, S-12 steel screw through	with a max thickness of 0.140 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grades "A, B, C or D". Lead batten strips	
	the center hole. Furring channels are friction fitted into clips. PAC INTERNATIONAL INC — Types RSIC-1, RSIC-V.	required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. 12. Lead Discs or Tabs — (Not Shown, For Use With Item 5B) - Used in lieu of or in addition to the lead	
	7B. Framing Members* — (Optional, Not Shown) — As an alternate to Item 7, for single or double layer	batten strips (Item 11) or optional at other locations - Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards (Item 5B) underneath screw locations prior to the installation of the screws.	
	a. <b>Furring Channels</b> — Formed of No. 25 MSG galv steel, spaced 24 in. OC	Lead discs or tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". 12A. <b>Lead Discs</b> — (Not Shown, for use with Item 5H) Max 5/16 in. diam by max 0.140 in. thick lead discs	
	perpendicular to studs. Channels secured to studs as described in Item b. Batts and Blankets placed in stud cavity as described in Item 5. Two layers of gypsum board attached to furring channels as described in Item 5. Not for use with Item 5A and 5E.	compression fitted or adhered over steel screw heads. Lead discs to have a purity of 99.9% meeting the Federal Specification QQ-L-201f, Grades "A, B, C or D".	
	b. <b>Steel Framing Members*</b> — Used to attach furring channels (Item 7Ba) to one side of studs (Item 2) only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-	13. <b>Lead Batten Strips</b> — (Not Shown, For Use With Item 5E) Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.142 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have	
	1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips. <b>KINETICS NOISE CONTROL INC</b> — Type Isomax	a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 5E) and optional at remaining stud locations.	
		14. <b>Lead Tabs</b> — (Not Shown, For Use With Item 5E) 2 in. wide, 5 in. long with a max thickness of 0.142 in. Tabs friction-fit around front face of stud, the stud folded back flange, and the back face of the stud. Tabs required at each location where a screw (that secures the gypsum boards, Item 5E) will penetrate the steel	
	7C. Framing Members* — Optional - Not Shown - Used as an alternate method to attach resilient channels (Item 7). Clips attached at each intersection of the resilient channel and the steel studs (Item 2). Resilient channels are friction fitted into clips, and then clips are secured to the steel stud with min. 1 in. long Type S-	stud. Lead tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead tabs may be held in place with standard adhesive tape if necessary.	
	12 steel screws through the center hole of the clip and the resilient channel flange. <b>KEENE BUILDING PRODUCTS CO INC</b> — Type RC Assurance.	*Bearing the UL Classification Mark <u>Last Updated</u> on 2012-05-09	
	7D. Framing Members* — (Not Shown) — (Optional on one or both sides, not shown, for single or double	Questions?     Print this page     Terms of Use     Page Top	
	layer systems) — As an alternate to Item 7, furring channels and Steel Framing Members as described below: a. <b>Furring Channels</b> — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep,	© 2012 UL LLC	
	spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to furring channels as described in Item 6. Not for use with Item 5A and 5E.	When the UL Leaf Mark is on the product, or when the word "Environment" is included in the UL Mark, please search the UL         Environment database         for additional information regarding this product's certification.         The appearance of a company's name or product in this database does not in itself assure that products so identified have been	
	b. Steel Framing Members* — Used to attach furring channels (Item 7Aa) to studs (Item 2). Clips spaced max. 48 in. OC. GENIECLIPS secured to studs with No. 8 x 1-1/2	manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Listed and covered under UL's Follow-Up Service. Always look for the Mark on the product.	
	in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into clips.	UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Designs and/or Listings (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from	
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	UL Product Spec       http://productspec.ul.com/document.php?id=BXUV.U90		
		Thermax XARMOR ci Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel, Thermax Heavy Duty Plus (HDP) and TUFF-R™ ci	notice in the following format: "© 2017 UL LLC".
		Insulation	Print New Search
	The second with the second sec	5A. Building Units — As an alternate to Item 5, min. 1-in thick	
	3 Contraction Section	polyisocyanurate composite foamed plastic insulation boards, nom. 48 by 48 or 96 in.	
	2 4 Horizontal Section	<b>RMAX OPERATING L L C</b> — "Thermasheath-SI", "ECOBASEci", "ThermaBase-CI"	Other helpful UL resources
	<ol> <li>Concrete Blocks* — Various designs. Classification C-3 (3 hr).</li> <li>See Concrete Blocks category for list of eligible manufacturers.</li> </ol>		UL and the UL logo are trademarks of UL LLC © 2017 All Rights Reserved.
FIRE-RESISTANCE DESIGN	2. <b>Mortar</b> — Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less	* Indicates such products shall bear the UL or cUL Certification Mark	Online Policies. About Cookies.
Assembly Usage Disclaimer	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	for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.	
BXUV - Fire Resistance Ratings - ANSI/UL 263	hydrated lime (by cement volume). Vertical joints staggered. 3. <b>Portland Cement Stucco or Gypsum Plaster</b> — Add 1/2 hr to	Last Updated on 2016-03-11	
BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada	Classification if used. Attached to concrete bolcks (Item 1).		
See General Information for Fire-resistance Ratings - ANSI/UL 263	<ol> <li>Loose Masonry Fill — If all core spaces are filled with loose dry expanded slag, expanded clay or shale (Rotary Kiln Process), water</li> </ol>	Design/System/Construction/Assembly Usage Disclaimer	
See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada	repellant vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 1 hr to Classification.	<ul> <li>Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment,</li> </ul>	
Design No. U904	5. <b>Foamed Plastic*</b> — (Optional-Not Shown) — 1-1/2 in. thick max, 4 ft	<ul> <li>system, devices, and materials.</li> <li>Authorities Having Jurisdiction should be consulted before construction.</li> </ul>	
March 11, 2016	wide sheathing attached to concrete blocks (Item 1). <b>ATLAS ROOFING CORP</b> — "EnergyShield Pro Wall Insulation" and "EnergyShield Pro 2 Wall Insulation."	<ul> <li>Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information connect always address every construction puepee approximation.</li> </ul>	
		<ul> <li>published information cannot always address every construction nuance encountered</li> <li>in the field.</li> <li>When field issues arise, it is recommended the first contact for assistance be the</li> </ul>	
Bearing Wall Rating — 3 HR. Nonbearing Wall Rating — 3 HR.	CARLISLE COATINGS & WATERPROOFING INC — Type R2+ Sheath	technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for	
This design was evaluated using a load design method other than the Limit	FIRESTONE BUILDING PRODUCTS CO L L C — "Enverge™ CI Foil	each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.	
States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a	Exterior Wall Insulation" and "Enverge™ CI Glass Exterior Wall Insulation"	Only products which bear UL's Mark are considered Certified.	
load restriction factor shall be used — See Guide BXUV or BXUV7	HUNTER PANELS — Type Xci-Class A, Xci 286	The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only	
* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada),	RMAX OPERATING L L C — "TSX-8500", "TSX-8510", "Thermasheath-	those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.	
respectively.	XP", "ECOMAXci", "Thermasheath-3", "Durasheath-3"	UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions,	
	THE DOW CHEMICAL CO — Type Thermax Sheathing, Thermax Light	Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement	
	Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation, Thermax ci Exterior Insulation,	"Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright	
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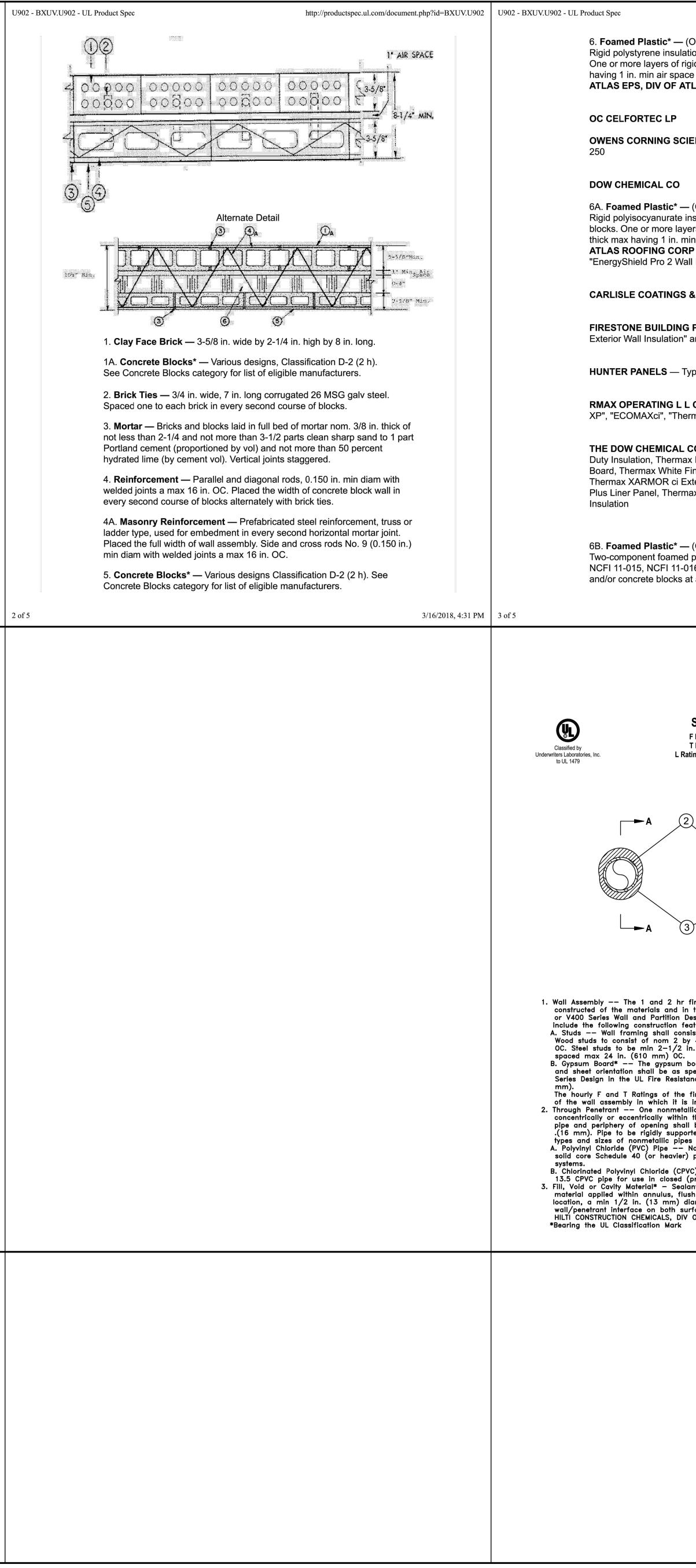
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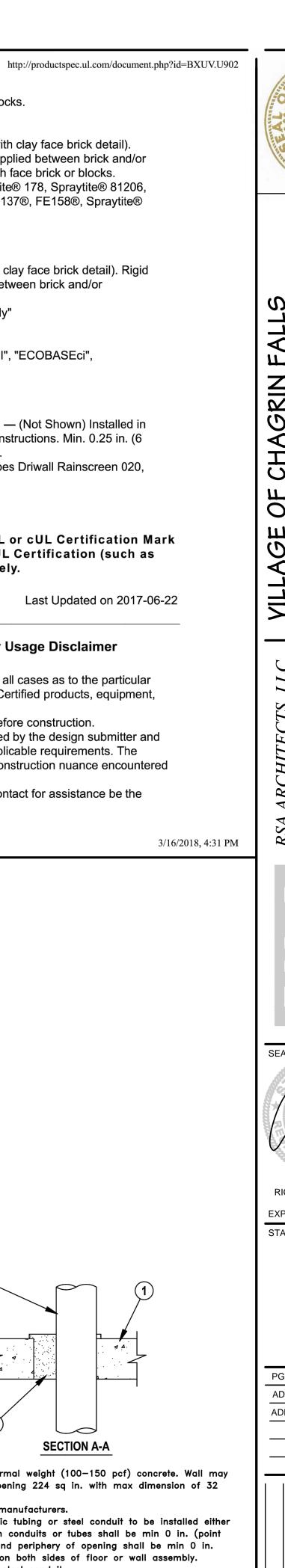


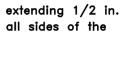
U902 - BXUV.U902 - UL Product Spec	http://productspe	c.ul.com/document.php?id=BXUV.U9
	Quickly find, specify, or verify UL	Certified products for your projects.
1. HOW DO YOU WANT	TO SEARCH? 2. RESU	LTS
FIRE-RESISTANCE DES	IGN	
Assembly Usage Disclaimer		
	e Resistance Ratings - ANSI/UL 263 e Ratings - CAN/ULC-S101 Certifie	
See General Information for Fire	e-resistance Ratings - ANSI/UL 263 e Resistance Ratings - CAN/ULC-S101 Ce	
See General mormation for the	Design No. U902	
	June 22, 2017	
Be	earing Wall Rating — 4 HR.	
States Design Metho jurisdictions employing th	d using a load design method othe od (e.g., Working Stress Design Me ne Limit States Design Method, su or shall be used — See Guide BXU	ethod). For ch as Canada, a
-	ts shall bear the UL or cUL Certific g the UL or cUL Certification (such respectively.	
1 of 5 U902 - BXUV.U902 - UL Product Spec	http://productspa	3/16/2018, 4:31 P c.ul.com/document.php?id=BXUV.U9
	vided by the product manufacturer noted for	
each product category and specifics concerning alterr	es are advised to consult the general Guid d each group of assemblies. The Guide Inf nate materials and alternate methods of co UL's Mark are considered Certified.	ormation includes
that products so identified have those products bearing the UL N	s name or product in this database does no been manufactured under UL's Follow-Up Mark should be considered to be Certified a	Service. Only
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	Other	helpful UL resources
UL and the UL logo are trademarks of UL I Online Policies. About Cookies.	LC © 2018 All Rights Reserved.	uest a Field Evaluation
5 of 5		3/16/2018, 4:31 P



http://productspec.ul.com/document.php?id=BXUV.U902	U902 - BXUV.U902 - UL Product Spec http://productspec.ul.com/document
(Optional — Not shown with clay face brick detail) ation for use between brick and/or concrete blocks. rigid extruded polystyrene insulation, 4 in. thick max	having a 1 in. min air space with face brick or blocks. NCFI POLYURETHANES
ace with face brick or blocks. ATLAS ROOFING CORP — Type ThermalStar	6C. Foamed Plastic* — (Optional-Not shown with clay face brick detail). Spray applied, foamed plastic insulation spray applied between brick and/or concrete blocks, having a 1 in. min air space with face brick or blocks. BASF CORP — Enertite® NM, FE178®, Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, FE137®, FE158®, Spraytite®
CIENCE AND TECHNOLOGY, LLC — Types 150 or	158, Spraytite® SP and Spraytite® 81205. 6D. <b>Building Unit*</b> — (Optional-Not shown with clay face brick detail). Rigid
– (Optional-Not shown with clay face brick detail). insulation for use between brick and/or concrete yers of rigid extruded polystyrene insulation, 4 in.	<pre>polyisocyanurate composite insulation for use between brick and/or concrete blocks. HUNTER PANELS — Type "Xci NB" and "Xci Ply" RMAX OPERATING L L C — "Thermasheath-SI", "ECOBASEci",</pre>
min air space with face brick or blocks. <b>RP</b> — "EnergyShield Pro Wall Insulation" and all Insulation."	"ThermaBase-CI"
<b>S &amp; WATERPROOFING INC</b> — Type R2+ Sheath <b>G PRODUCTS CO L L C</b> — "Enverge™ CI Foil	<ul> <li>7. Wall and Partition Facing and Accessories — (Not Shown) Installed in accordance with the manufacturers installation instructions. Min. 0.25 in. (6 mm) thick panel fastened to the exterior surface.</li> <li>KEENE BUILDING PRODUCTS CO INC — Types Driwall Rainscreen 020,</li> </ul>
" and "Enverge™ CI Glass Exterior Wall Insulation" Type Xci-Class A, Xci 286, "Xci CG", "Xci Foil"	Driwall Rainscreen 10 and CAV-AIR-ATOR
<b>L C</b> — "TSX-8500", "TSX-8510", "Thermasheath- ermasheath-3", "Durasheath-3"	* Indicates such products shall bear the UL or cUL Certification M for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.
<b>. CO</b> — Type Thermax Sheathing, Thermax Light	Last Updated on 2017-0
ax Heavy Duty Insulation, Thermax Metal Building Finish Insulation, Thermax ci Exterior Insulation, Exterior Insulation, Thermax IH Insulation, Thermax max Heavy Duty Plus (HDP) and TUFF-R™ ci	Design/System/Construction/Assembly Usage Disclaimer     Authorities Having Jurisdiction should be consulted in all cases as to the particular
	<ul> <li>requirements covering the installation and use of UL Certified products, equipment system, devices, and materials.</li> <li>Authorities Having Jurisdiction should be consulted before construction.</li> </ul>
– (Optional-Not shown with clay face brick detail). d plastic formed from NCFI 11-001, NCFI 11-002,	<ul> <li>Fire resistance assemblies and products are developed by the design submitter an have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encounter</li> </ul>
016 or NCFI11-017 spray applied between brick at a nominal density of 2.1 pcf, 4 in. thick max,	<ul> <li>in the field.</li> <li>When field issues arise, it is recommended the first contact for assistance be the</li> </ul>
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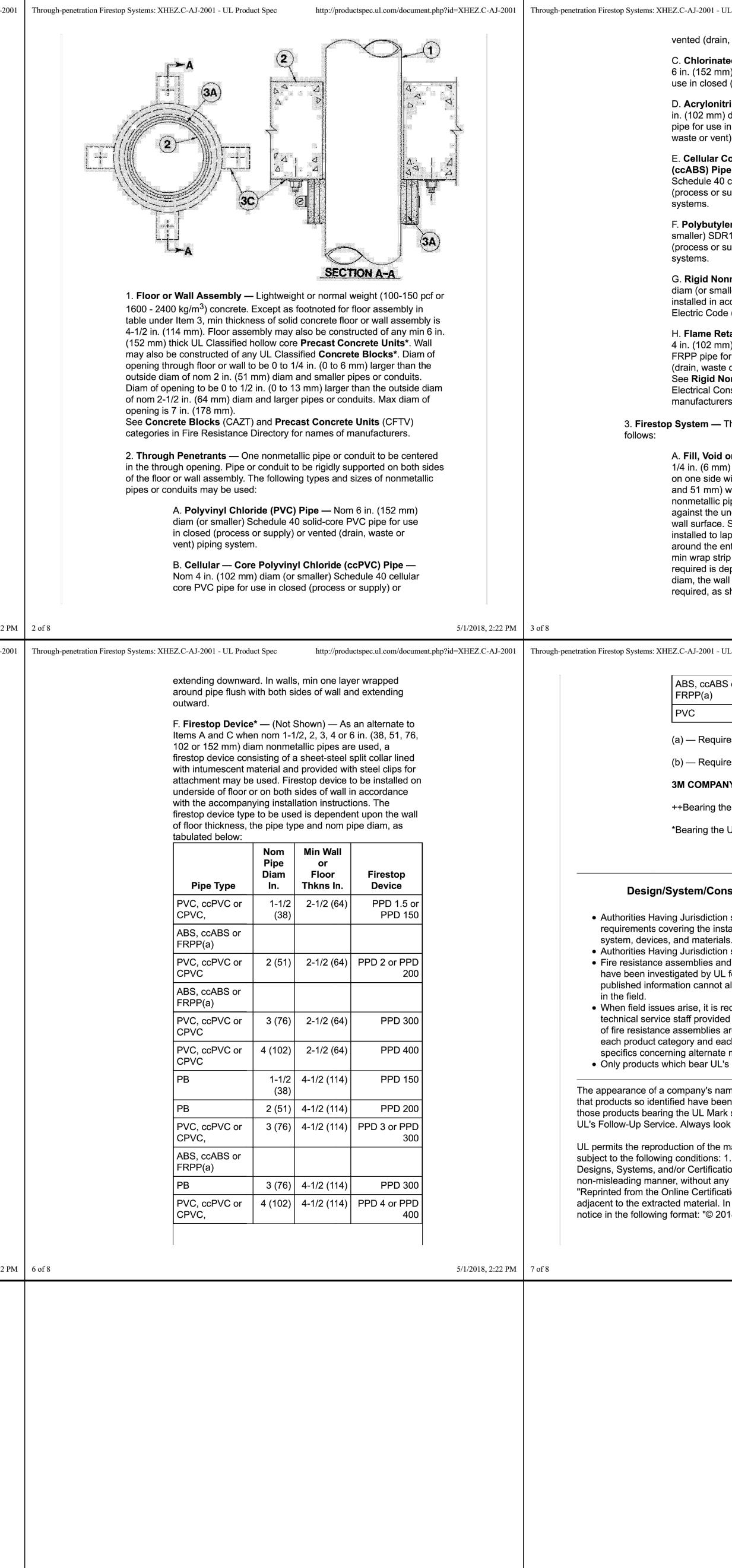
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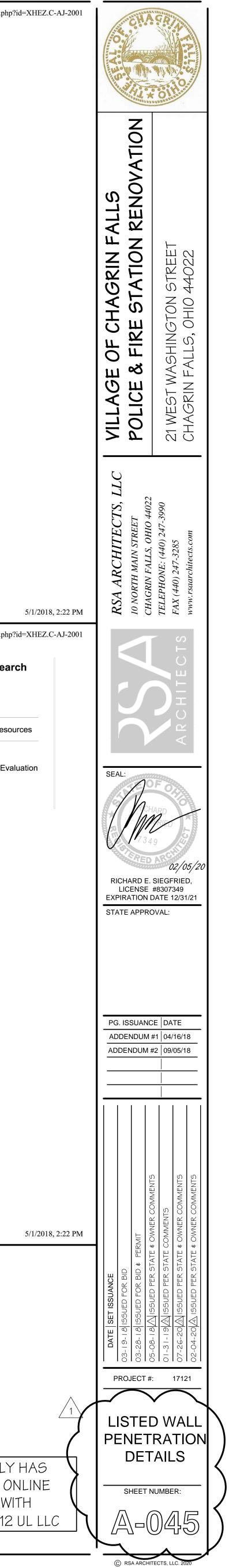


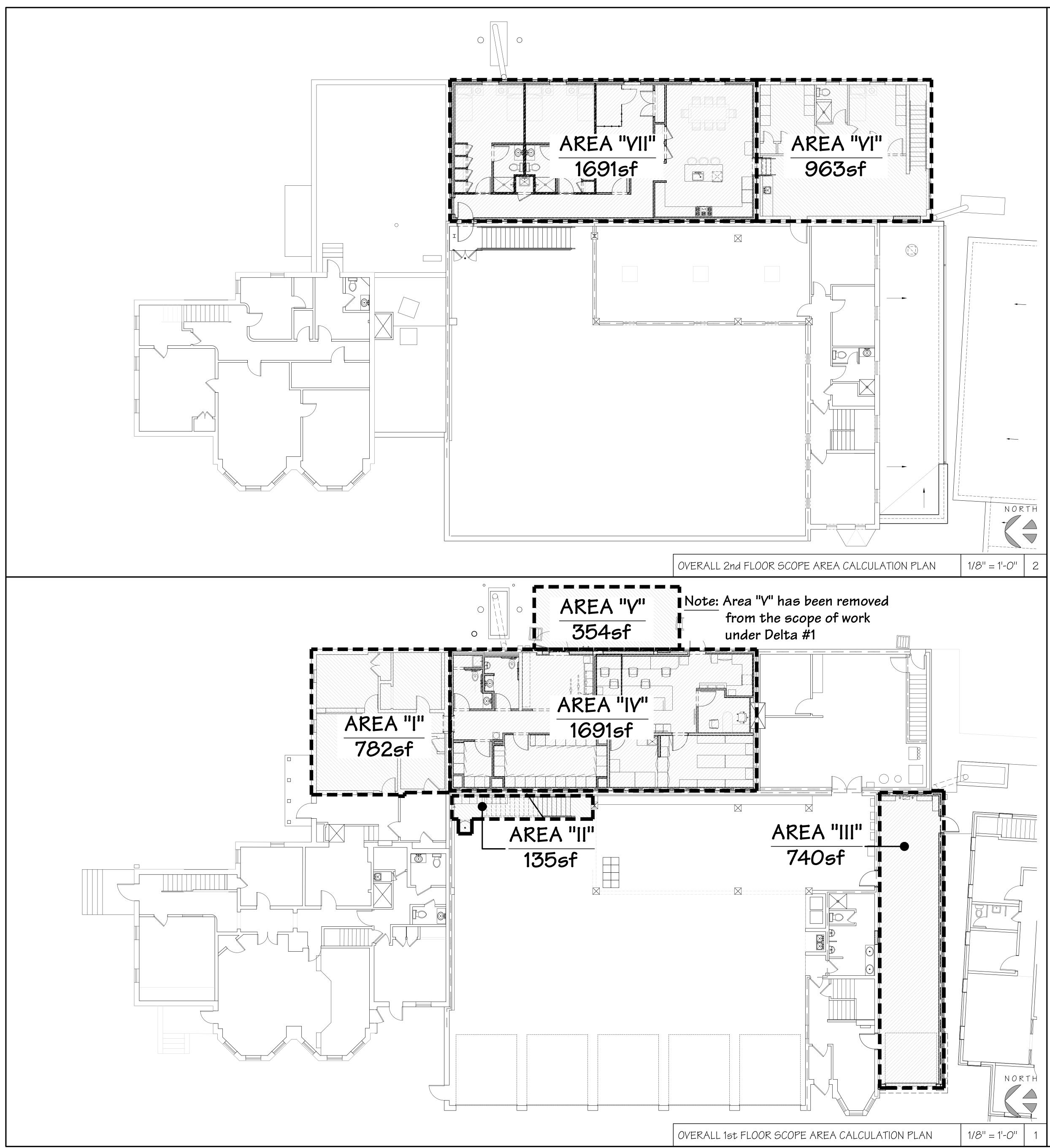


Three	bugh-penetration Firestop Systems: XHEZ.C-AJ-2001 - UL Product Spec http://productspec.ul.com/document.php?id=XHEZ.C-AJ-2001
	Quickly find, specify, or verify UL Certified products for your projects.
	1. HOW DO YOU WANT TO SEARCH? 2. RESULTS
	THROUGH-PENETRATION FIRESTOP SYSTEM
	Assembly Usage Disclaimer Search Parameters
	Assembly type Penetrating item
	Concrete or masonry walls > 8 in. thick Nonmetallic pipe, conduit or tubing
	Rating F and T Rating ≥ 2 hr and < 3 hr
	XHEZ - Through-penetration Firestop Systems
	See General Information for Through-penetration Firestop Systems
	System No. C-AJ-2001
	May 18, 2005
	F Rating — 2 Hr
	T Ratings — 0, 1-1/2 and 2 Hr (See Item 3)
	L Rating at Ambient — 7 CFM/sq ft (See Item 3B)
	L Rating at 400 F — 1 CFM/sq ft (See Item 3B)
1 of Three	8 5/1/2018, 2:22 PM bugh-penetration Firestop Systems: XHEZ.C-AJ-2001 - UL Product Spec http://productspec.ul.com/document.php?id=XHEZ.C-AJ-2001
	mm) overlap at seam. Anchor tabs to be pressed tightly
	compressed around wrap strip layers using a min 1/2 in. (13 mm) wide by 0.028 in. (0.71 mm) thick stainless steel band clamp at the collar midheight. Two band clamps are required for 3 in. (76 mm) high collar on nom 6 in. (152 mm) diam pipe. As an alternate to the band clamps, 1 in. and 2 in. (25 and 51 mm) deep collars may be secured by a means No. 10 by 1/2 in. (13 mm) long sheet metal screws installed in the vertical axis at the center of the 1 in. (25 mm) overlap along the perimeter joint of the collar. A min of two and three screws are required for 1 and 2 in. (25 and 51 mm) deep collars, respectively. Collar to be secured to floor or wall surface(s) with 1/4 in. (6 mm) diam by min 1-1/2 in. (38 mm) long steel expansion bolts, or equivalent, in conjunction with steel nuts and min 1-1/4 in. (32 mm) diam steel fender washers. Anchor bolts to be used with every other anchor tab or as described in the following which ever is greater. Two anchor bolts, symmetrically located, required for nom 1/2 in. (13 mm) to nom 2 in. (51 mm) diam pipes. Three anchor bolts, symmetrically located, required for nom 2-1/2 to 3 in. (64 to 76 mm) diam pipes. Four anchor bolts, symmetrically located, required for nom 3-1/2 and 4 in. (89 to 102 mm) diam pipes. For 6 in. (152 mm) diam pipes, anchor bolts to be used with each anchor tab. Retainer tabs to be bent 90 deg toward pipe to lock wrap strip layers in position. D. <b>Pipe Covering*</b> — Nom 1 in. (25 mm) thick hollow cylindrical heavy density glass fiber units jacketed on the outside with an all service jacket. When required (see table), min 6 in. (152 mm) length of pipe covering installed around pipe at its egress from the steel collar (Item C) on the underside of floor or on both sides of wall. Pipe covering secured to pipe with steel wire ties spaced max 4
	<ul> <li>in. (102 mm) OC. Edge of pipe covering abutting steel collar to be sealed with a min 1/4 in. (6 mm) diam bead of caulk or putty (Item B).</li> <li>See Pipe and Equipment Covering — Materials (BRGU) category in Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.</li> <li>E. Foil Tape — When required (see tables), nom 4 in. (102 mm) wide, 3 mil thick aluminum tape installed around pipe prior to installation of wrap strip (Item 3A) or Firestop Device (Item 3F). Min one layer wrapped around pipe with top edge of tape flush with bottom surface of floor and</li> </ul>
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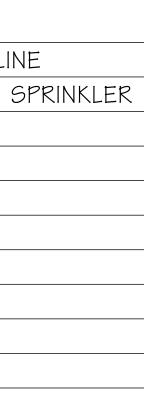


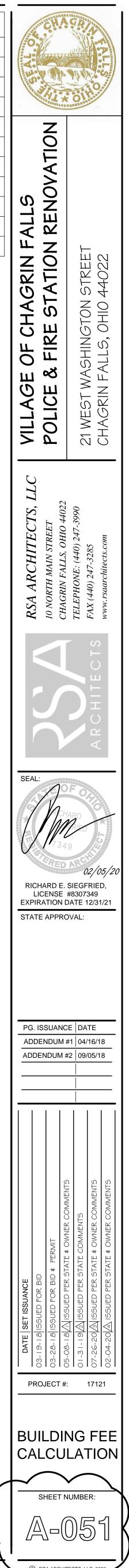
L Product Spec http://productspec.ul.com/document.php?id=XHEZ.C-A	AJ-2001 Th	rough-p	enetration Firestop Systems: XHEZ.C-AJ-2001 - UL Product Spec http://pu	oductspec.ul.com/document.pl
, waste or vent) piping system. ed Polyvinyl Chloride (CPVC) Pipe — Nom			Nom Min Wrap	Min
n) diam (or smaller) SDR13.5 CPVC pipe for (process or supply) piping systems.				
<b>Tile Butadiene Styrene (ABS) Pipe</b> — Nom 4 diam (or smaller) Schedule 40 solid-core ABS n closed (process or supply) or vented (drain, t) piping systems.			(a) — Requires use of aluminum tape d	
<b>ore Acrylonitrile Butadiene Styrene</b> e — Nom 4 in. (102 mm) diam (or smaller) cellular core ABS pipe for use in closed upply) or vented (drain, waste or vent) piping			(b) — Requires use of pipe covering det (c) — For nom 6 in. (152 mm) diam pipe (25 and 51 mm) wide wrap strips are "S nom 3 in. (76 mm) wrap strip width.	e, 1 in. and 2 in.,
ene (PB) Pipe — Nom 3 in. (76 mm) diam (or 11 (or heavier) PB pipe for use in closed upply) or vented (drain, waste or vent) piping			Each layer of wrap strip to be installed w with butted seams in successive layers strip layers temporarily held in position u tape, steel wire tie, or equivalent. In wal wrap strip is to be installed in the same	staggered. Wrap using aluminum foil l assemblies, the manner used for
<b>Imetallic Conduit++</b> — Nom 4 in. (102 mm) Iler) (Schedule 40 or 80) PVC conduit ccordance with Article 347 of the National (NFPA No. 70).			floor assemblies, but it shall be installed both sides of the wall assembly. <b>3M COMPANY</b> — FS-195+	symmetrically on
tardant Polypropylene (FRPP) Pipe — Nom n) diam (or smaller) Schedule 40 (or heavier) or use in closed (process or supply) or vented or vent) piping systems. conmetallic Conduit (DZKT) category in UL nstruction Materials Directory for names of rs.			B. Fill, Void or Cavity Materials* — Ca Putty — (Not Shown) — Generous bea to be applied to outer perimeter of wrap with floor or wall surface(s). <b>3M COMPANY</b> — CP 25WB+ caulk; FB Type MP+ Stix putty or IC 15WB+ caulk	d of caulk or putty strip at its interface -3000 WT sealant;
he details of the firestop system shall be as			apply only when Type CP 25WB+ caulk sealant is used. CP 25WB+ not suitable pipes. )	or FB-3000 WT
br Cavity Materials* — Wrap Strip — Nom ) thick intumescent elastomeric material faced with aluminum foil, supplied in 1 and 2 in. (25 wide strips. Strips tightly wrapped around ipe (foil side exposed) with the edges butted inderside of the concrete floor or both sides of Sufficient layers of wrap strip shall be p a min of 3/16 in. (5 mm) on the concrete intre perimeter of the through opening. The b width and the min number of layers of wrap ependent upon the pipe type, the nom pipe I of floor thickness and the hourly T Rating shown in the following table.			C. <b>Steel Collar</b> — Nom 1, 2 or 3 in. (25 deep collar, dependent upon wrap strip (32 mm) wide by 2 in. (51 mm) long and 1/2 in. (13 mm) long tabs to retain wrap of precut 0.016 in. (0.41 mm) thick (28 g steel available from wrap strip manufact alternate, collar may be field-fabricated (0.41 mm) thick (28 gauge) galv sheet s with instruction sheet supplied by wrap Steel collar, with anchor tabs bent outwa wrapped tightly around wrap strip layers	width, with 1-1/4 in. hor tabs and min strip layers. Coils jauge) galv sheet urer. As an from min 0.016 in. teel in accordance strip manufacturer. ard 90 deg,
5/1/2018, 2 L Product Spec http://productspec.ul.com/document.php?id=XHEZ.C-A		of 8 nrough-p	enetration Firestop Systems: XHEZ.C-AJ-2001 - UL Product Spec http://pr	oductspec.ul.com/document.pl
or 4 (102) 4-1/2 (114) PPD 400			Print	New Se
6 (152) 4-1/2 (114) PPD 6				
es use of aluminum tape detailed in Item 3E. es use of pipe covering detailed in Item 3D.				Other helpful UL res
IY			UL and the UL logo are trademarks of UL LLC © 2018 All Rights Reserved.	Request a Field E
e UL Listing Mark UL Classification Mark			Online Policies. About Cookies.	
Last Updated on 2005-05-18				
struction/Assembly Usage Disclaimer				
should be consulted in all cases as to the particular allation and use of UL Certified products, equipment,				
s. should be consulted before construction. d products are developed by the design submitter and for compliance with applicable requirements. The always address every construction nuance encountered				
ecommended the first contact for assistance be the d by the product manufacturer noted for the design. Users are advised to consult the general Guide Information for ch group of assemblies. The Guide Information includes materials and alternate methods of construction.				
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		APEA DECORPTION	ARE	A CALCULATIO	NS PER DISCIP	LII				
l	AREA DESIGNATION	AREA DESCRIPTION	BUILDING	MECHANICAL	ELECTRICAL					
l	AREA "I"	BLDG 1-POLICE-EXTG		782						
l	AREA "II"	BLDG 2-FIRE-STAIR	135							
l	AREA "III"	BLDG 2-FIRE-ADD.	740	740	740					
l	AREA "IV"	BLDG 3-POLICE-EXTG	1691	1691	1691					
l	AREA "V"	BLDG 3-POLICE-ADD	354	354	354					
l	AREA "VI"	BLDG 3-FIRE-EXTG	963		963					
l	AREA "VII"	BLDG 3-FIRE-ADD	1691	1691	1691					
		TOTAL	5574	5258	5439					

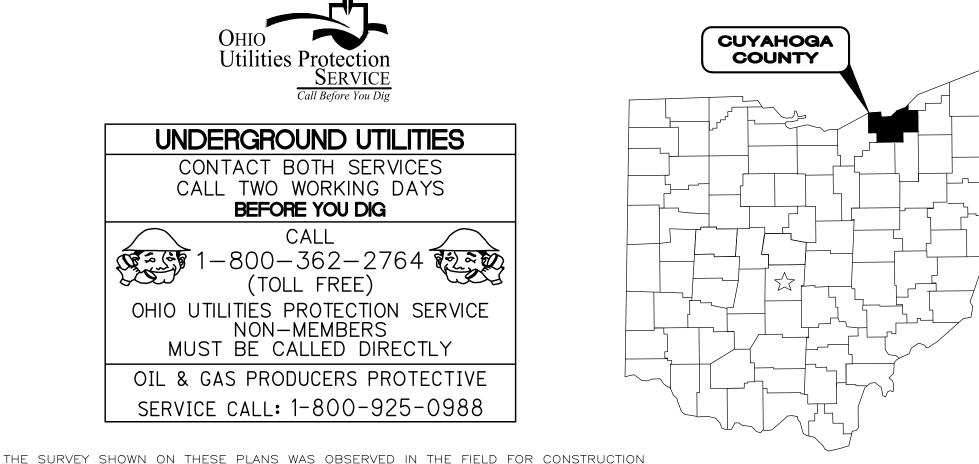




# VILLAGE OF CHAGRIN FALLS POLICE AND FIRE IMPROVEMENTS CUYAHOGA COUNTY, OHIO

# INDEX OF SHEETS

SHEET NUMBER
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4
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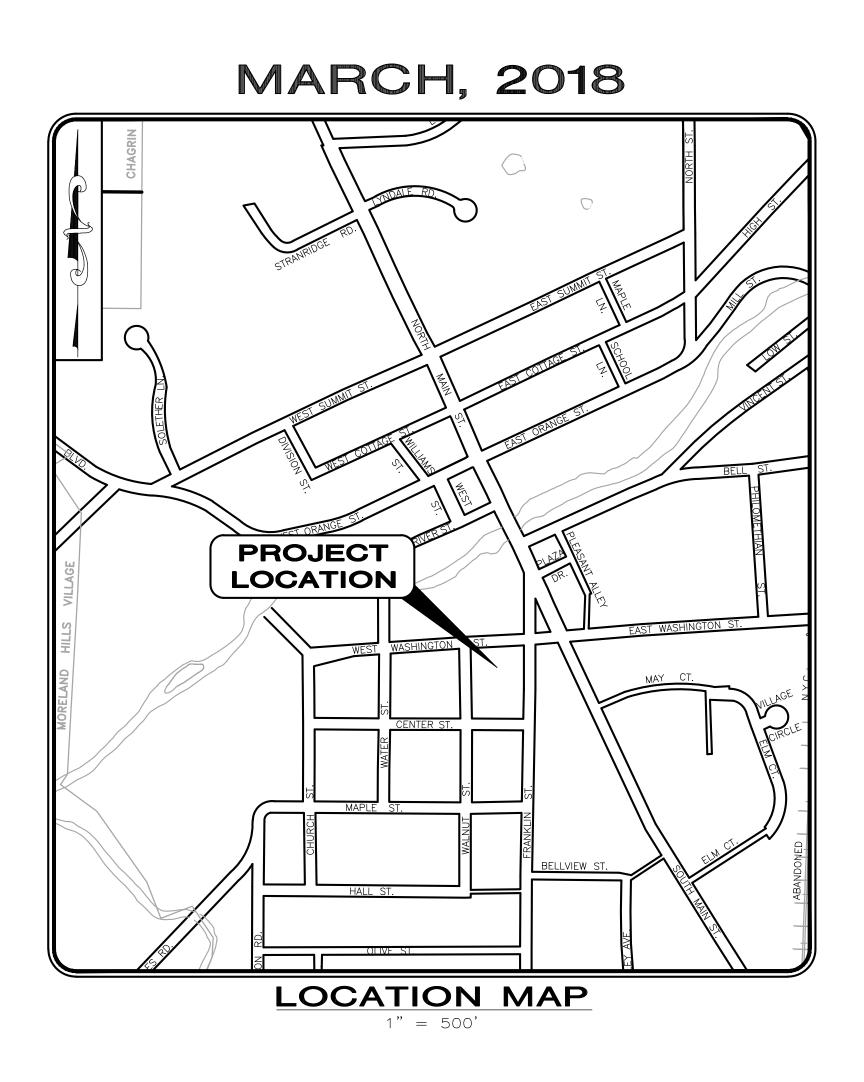


1. THE SURVEY SHOWN ON THESE PLANS WAS OBSERVED IN THE FIELD FOR CONSTRUCTION PURPOSES ONLY AND MAY NOT BE SUITABLE FOR PROPERTY LINE SURVEYS OR ANY OTHER PURPOSE.

2. UNDERGROUND BUILDING SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE TO BUILDINGS.

3. THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.

DATE



# MEMBERS OF COUNCIL

COUNCIL PRESIDENT
PRESIDENT PRO-TEM
COUNCIL REPRESENTATIVE
COUNCIL REPRESENTATIVE
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# OFFICIALS

MAYOR
CHEIF ADMINISTRATIVE OFFICER
DIRECTOR OF FINANCE / CLERK OF COURTS DAVID B. BLOOM
LAW DIRECTOR
UTILITIES SUPERINTENDENT



ENGINEER'S PROJECT No. 17000602

05/01/2018

KARL MAERSCH NANCY ROGOFF JANIS EVANS ANGELA DEBARNARDO ERINN GRUBE JULIA LIPP JIM NEWELL



<u>GENERAL</u>

A PRE-CONSTRUCTION CONFERENCE SCHEDULED BY THE ENGINEER SHALL BE HELD PRIOR TO ANY WORK STARTING. IN ADDITION, THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO THE ENGINEER, WATER SUPERINTENDENT, THE SANITARY SEWER DEPARTMENT AND THE VILLAGE ENGINEER PRIOR TO BEGINNING WORK TO ARRANGE FOR INSPECTION.

THE STANDARD SPECIFICATIONS OF THE OHIO DEPARTMENT OF TRANSPORTATION, LATEST EDITION, INCLUDING ALL SUPPLEMENTAL SPECIFICATIONS AND STANDARD DRAWINGS, SHALL GOVERN ALL WORK NOT COVERED BY THE SPECIFICATIONS. ALL WORK CONTEMPLATED SHALL BE GOVERNED BY THE RULES, REGULATIONS AND SPECIFICATIONS OF THE VILLAGE OF CHAGRIN FALLS.

ALL WORK COMPLETED UNDER THIS CONTRACT SHALL COMPLY WITH THE U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

ANY DEFECT IN MATERIAL OR WORKMANSHIP REVEALED BY INSPECTION MUST BE CORRECTED BY THE CONTRACTOR AT NO COST TO THE VILLAGE AND TO THE FULL SATISFACTION OF THE VILLAGE AND ENGINEER BEFORE ACCEPTANCE OF THE WORK AND RELEASE OF FINAL ESTIMATE AND PAYMENT THEREOF.

THE CONTRACTOR SHALL PROVIDE A PRE-CONSTRUCTION VIDEO TAPE SURVEY OF THE ENTIRE PROJECT AREA. ANY DAMAGE DEEMED TO BE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT HIS OWN EXPENSE. ALL COSTS ASSOCIATED FOR THIS WORK, INCLUDING THE VIDEO TAPE SURVEY, SHALL BE INCLUDED IN THE UNIT PRICES STIPULATED FOR THE VARIOUS ITEMS IN THE BID PROPOSAL.

MANHOLES, CATCH BASINS, MONUMENT BOXES, WATER VALVE BOXES AND OTHER CASTINGS WILL BE RAISED OR LOWERED FLUSH WITH THE NEW SURFACE. ANY METER OR VALVE BOX ENCOUNTERED WITHIN THE WORK SITE SHALL BE EXPOSED. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS OF WORK EXCEPT WHEN BID AS A SEPARATE ITEM.

BEFORE THE VILLAGE WILL APPROVE AND ACCEPT THE WORK AND RELEASE THE GUARANTY RETAINER, THE CONTRACTOR SHALL FURNISH THE VILLAGE A WRITTEN REPORT INDICATING THE RESOLUTION OF ANY AND ALL PROPERTY DAMAGE CLAIMS FILED WITH THE CONTRACTOR BY ANY PARTY DURING THE CONSTRUCTION PERIOD. THE INFORMATION TO BE SUPPLIED SHALL INCLUDE, BUT NOT BE LIMITED TO, NAME OF CLAIMANT, DATE FILED WITH CONTRACTOR, NAME OF INSURANCE COMPANY AND/OR ADJUSTER HANDLING CLAIM, HOW CLAIM WAS RESOLVED AND IF CLAIM WAS NOT RESOLVED FOR THE FULL AMOUNT, A STATEMENT INDICATING THE REASON FOR SUCH ACTION.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ALONG WITH APPROVAL FROM THE ENGINEER TO REMOVE AND REPLACE EXISTING FENCE LINES WHICH WILL INTERFERE WITH THE PROGRESS OF CONSTRUCTION. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPLACE THE EXISTING FENCE TO THE ORIGINAL CONDITION. IF THE FENCE IS DAMAGED DURING REMOVAL, CONSTRUCTION OR REPLACEMENT, THE FENCE SHALL BE REPLACED IN- KIND AND NO ADDITIONAL COMPENSATION WILL BE PAID FOR THE ABOVE WORK.

MATERIAL SPECIFICATIONS CALLED FOR ON THE PLANS REPRESENT THE MINIMUM REQUIRED FOR EACH APPLICATION. THE OWNER MAY REQUEST OR THE CONTRACTOR MAY DESIRE TO SUBSTITUTE ALTERNATE MATERIALS. ANY SUCH SUBSTITUTIONS MUST BE EQUIVALENT IN QUALITY TO THE MATERIAL CALLED FOR AND MUST BE APPROVED IN WRITING BY THE ENGINEER.

THE CONTRACTOR SHALL REMOVE AND REPLACE ALL MAILBOXES, TRAFFIC SIGNS, ETC. AS REQUIRED FOR CONSTRUCTION.

#### SEWER CONSTRUCTION

SANITARY/STORM SEWER SHALL BE PVC SDR 35 - ASTM 3034 WITH ASTM D3212, F477 WATER-TIGHT, FLEXIBLE GASKET JOINTS. SEWER PIPE BEDDING SHALL BE AS PER THE TRENCHING, EMBEDMENT, AND BACKFILL DETAIL. PVC SEWER DEFLECTION TESTING SHALL NOT EXCEED 5% ACCORDING TO PLAN SPECIFICATIONS.

MANHOLE SECTION JOINTS MUST MEET ASTM C-443.

BACKFILL SHALL BE AS PER THE TRENCHING, EMBEDMENT, AND BACKFILL DETAIL. WHEN A SEWER AND WATERLINE CROSS AND IT IS NOT POSSIBLE TO MAINTAIN AN 18 INCH VERTICAL CLEARANCE BY WATERMAIN LOWERING, EITHER THE WATERMAIN OR THE SEWER SHALL BE ENCASED IN A WATERTIGHT CARRIER PIPE WHICH EXTENDS 10 FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATERMAIN. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE O.E.P.A. FOR USE IN WATERMAIN CONSTRUCTION. STORM SEWER PIPE SHALL BE PVC SDR 35 WITH PREMIUM GASKET JOINTS.

#### EXCAVATION, BACKFILL, AND SEWER REPLACEMENT

NO SLAG PRODUCTS WILL BE PERMITTED FOR BEDDING OR BACKFILL MATERIAL. BACKFILL FOR ALL UNDERGROUND UTILITIES INSTALLED UNDER PAVEMENT, SIDEWALK, AND STRUCTURES OR WITHIN A 1:1 ZONE OF INFLUENCE PARALLEL OR TRANSVERSE TO PAVEMENT, SIDEWALK OR STRUCTURES SHALL BE "COMPACTED GRANULAR BACKFILL" AS DESCRIBED IN SPECIFICATION SECTION 02235 AND IN ACCORDANCE WITH THE PLANS. BACKFILL IN OTHER AREAS SHALL BE AS DESCRIBED IN SPECIFICATION SECTION 02234 - "COMPACTED BACKFILL" OR SECTION 02235 – "COMPACTED GRANULAR BACKFILL".

BACKFILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 9" IN DEPTH. BACKFILL MATERIAL SHALL BE PLACED WITH 2% OF THE OPTIMUM MOISTURE. THE ENGINFER MAY ORDER THE REMOVAL, REFILLING, RE-COMPACTION AND RETESTING OF ALL BACKFILL NOT MEETING THE REQUIREMENTS OF THE CONTRACT.

BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED USING MACHINE MOUNTED COMPACTION EQUIPMENT IN LAYERS SUFFICIENT TO MEET THE COMPACTION REQUIREMENT ODOT 203.

NO BACKFILLING OF ANY TRENCHES OR EXCAVATIONS WILL BE PERMITTED WITHOUT TAMPING EQUIPMENT BEING USED. FLOODING, JETTING OR PUDDLING OF BACKFILL WILL NOT BE PERMITTED.

ALL EXCAVATION SHALL BE CONSIDERED UNCLASSIFIED. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ROCK OR SHALE EXCAVATION. THE OWNER AND THE ENGINEER DO NOT GUARANTEE THE SUITABILITY OR SUGGEST THAT THE EXISTING EXCAVATED MATERIAL IN ITS PRESENT STATE WILL CONSIST OF THE PROPER MOISTURE CONTENT TO ACHIEVE THE REQUIRED COMPACTION WITHOUT DRYING OR ADDING WATER TO THE MATERIAL. UPON REQUEST, THE OWNER WILL PROVIDE ACCESS TO THE SITE FOR THE CONTRACTOR TO CONDUCT SUCH INVESTIGATIONS AND TESTS DEEMED NECESSARY TO MAKE HIS DETERMINATION.

THE CONTRACTOR SHALL REPLACE ANY PAVEMENT MARKINGS, SUCH AS CROSS WALKS, STOP LINES, EDGE LINES, CENTER LINES, ETC. ANY PAVEMENT REMOVED CONTAINING BRICKS SHALL BE TRUCKED TO THE VILLAGE SERVICE DEPARTMENT.

#### SERVICE CONNECTIONS

ALL SANITARY AND WATER SERVICE CONNECTIONS SHOWN ON THE PLAN WERE DERIVED FROM VILLAGE RECORDS. THE CONTRACTOR SHALL LOCATE AND VERIFY ALL CONNECTIONS PRIOR TO REPLACEMENT. SANITARY LATERAL REPLACEMENT AND WATER SERVICE CONNECTION REPLACEMENT SHALL DISTURB NO MORE THAN 50 S.F. OF SIDEWALK AND 10 L.F. OF CURB PER LATERAL OR CONNECTION REPLACED. ALL ACTIVE CONNECTIONS AND HOUSE LATERALS ENCOUNTERED SHALL BE RECONNECTED TO EXISTING FACILITIES OR CONNECTED TO THE NEW FACILITIES, EVEN IF NOT SHOWN ON THE PLANS. ALL EXISTING UTILITY SERVICE CONNECTIONS (SANITARY, STORM, WATER, GAS, ELECTRIC, TELEPHONE, ETC.) WHICH ARE DAMAGED DURING THE INSTALLATION OF PIPE SHALL BE REPAIRED WITH LIKE MATERIALS OR REPLACED, AS REQUIRED. THE COST OF UTILITY SERVICE CONNECTION REPAIR/REPLACEMENT SHALL BE INCLUDED IN THE UNIT PRICES FOR ALL ITEMS IN THE PROPOSAL

CONSTRUCTION, THEY SHALL BE REPLACED IN-KIND. HOUSE UTILITY CONNECTIONS DURING CONSTRUCTION.

PROJECT LENGTH.

THE CONTRACTOR SHALL SUPPLY ALL PIPE AND ADAPTERS TO CONNECT TO EXISTING PIPING. THE ADAPTERS MUST BE SUBMITTED TO AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.

#### UTILITIES

THEIR ACCURACY OR COMPLETENESS. CONTRACTOR.

DELAYS TO THE CONTRACTOR AS A RESULT OF TIMING OF POLE RELOCATION, SUPPORT OR PROTECTION SHALL NOT BE CONSIDERED COMPENSABLE DELAYS, AS IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS WORK IN CONFORMANCE TO THE UTILITY COMPANY'S SCHEDULE.

THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITIES AFFECTED BY THE PROPOSED CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF THE EXISTING UTILITY OWNERS LISTED BELOW AND THE UTILITY PROTECTION SERVICE IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE AND OUTLINED IN PROJECT SPECIFICATIONS. THE UTILITY OWNERSHIPS ARE AS FOLLOWS:

VILLAGE OF CHAGRIN FALLS DOMINION EAST OHIO AT&T 21 W. WASHINGTON STREET 320 SPRINGSIDE DRIVE, STE. 320 13630 LORAIN AVE., 2ND FLOOR CHAGRIN FALLS, OHIO 44022 AKRON, OH 44333 CLEVELAND, OH 44111 ATTN .: SCOTT KLEBE ATTN.: BRIAN D. DAYTON (440) 247-5051 (330) 664–2409 (216) 476-6057

THE ILLUMINATING COMPANY CHARTER COMMUNICATIONS 7 SEVERANCE CIRCLE 7755 AUBURN RD. PAINESVILLE, OH 44077 CLEVELAND HEIGHTS, OH 44118 ATTN.: TIM DENZLER ATTN .: PAT SANTOIEMMO (440) 358-4991 (216) 575-8016

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ALL UTILITY LINES CROSSING THE NEW TRENCH SHALL BE PROTECTED AND SUPPORTED WITH HARDWOOD PLANKS; OR REMOVED, REPLACED, RECONNECTED AND SUPPORTED ACROSS THE ENTIRE WIDTH OF THE TRENCH. IF ANY OF THESE LINES ARE DAMAGED DURING

THE CONTRACTOR SHALL BE REQUIRED TO BYPASS AND MAINTAIN THE FLOW TO/FROM ALL

THE CONTRACTOR SHALL EXPECT ONE UNDERGROUND GAS AND WATER CONNECTION FOR EACH LOT (INCLUDING VACANT LOTS) ON BOTH SIDES OF THE STREET FOR THE ENTIRE

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE BEEN OBTAINED BY DILIGENT FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT THE VILLAGE OF CHAGRIN FALLS DOES NOT GUARANTEE

BEFORE ANY WORK IS STARTED THAT WILL INTERFERE WITH THE EXISTING UTILITIES, THE

CONTRACTOR SHALL CALL THE "OHIO UTILITIES PROTECTION SERVICE" AT 1-800-362-2764, FORTY-EIGHT (48) HOURS IN ADVANCE OF THE WORK IN ACCORDANCE WITH SECTION

153.64 OF THE OHIO REVISED CODE. NON-MEMBER UTILITIES MUST BE CONTACTED DIRECTLY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS, AT NO ADDITIONAL EXPENSE TO THE VILLAGE OF CHAGRIN FALLS, TO AVOID DAMAGE TO EXISTING

UNDERGROUND AND OVERHEAD UTILITIES DURING THE ENTIRE PROJECT. IN THE EVENT OF DAMAGE TO EXISTING PUBLIC AND/OR PRIVATE UTILITIES, THE AGENCY CONCERNED SHALL BE NOTIFIED IMMEDIATELY AND ALL REPAIR WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE AGENCY AT NO ADDITIONAL COST TO THE VILLAGE, INCLUDING ANY INSPECTION OR MAINTENANCE FEES.

WHERE EXISTING POWER OR TELEPHONE POLES ARE IN CLOSE PROXIMITY TO WORK, THE CONTRACTOR SHALL COORDINATE HIS WORK EFFORTS WITH THOSE OF THE UTILITY COMPANIES SUCH THAT THEIR EXISTING FACILITIES CAN BE MAINTAINED AND PROTECTED DURING THE TIME THAT WORK IS GOING ON ADJACENT TO THE POLE(S)

THE COST AND COORDINATION FOR ANY REQUIRED PROTECTION, SUPPORT OR RELOCATION OF EXISTING POWER OR TELEPHONE POLES SHALL BE THE RESPONSIBILITY OF THE

			SCALE: AS SHOWN	NO	DATE		
зне 2	17			01 REMOVAL OF SALLY PORT		(	PROFK
	70 Rav	SITE PLAN	<b>DATE:</b> 05/01/2018		•		\$
		VILLAGE OF CHAGRIN FALLS, OHIO	DESIGNED BY: TRI		•	your trusted advisor	
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#### <u>NOTES:</u>

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HORIZONTAL DATUM IS NAD83 (2011 ADJ.) & ALL UNITS ARE US SURVEY FEET.

VERTICAL DATUM IS NAVD 29 (GEOID 12B).

THIS PLAN HAS BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND MAY BE SUBJECT TO EASEMENTS AND OTHER RESTRICTIONS, EITHER RECORDED OR OTHERWISE. THE SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS, RECORD ENCUMBRANCES, RESTRICTIVE COVENANTS OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.

THESE PLANS MAY HAVE BEEN ALTERED IN SIZE BY REPRODUCTION. THIS SHOULD BE CONSIDERED WHEN OBTAINING SCALED DATA.

644232.72 2272129.77 IRON PIN SET

PROJECT CONTROL COORDINATES:

1001 922.25 644194.82 2272261.48 MAG NAIL SET 2272070.33 1002 918.02 644036.41 IRON PIN SET 1003 644038.26 2272214.18 MAG NAIL SET 920.18 2272251.13 MAG NAIL SET 1004 921.10 644040.74 1005 2272119.25 IRON PIN FOUND 917.69 643989.96 2272060.60 IRON PIPE FOUND 1006 917.91 644031.74 1122 913.29 644220.65 2271749.50 IRON PIN FOUND

POINT TABLE

POINT # ELEVATION NORTHING EASTING DESCRIPTION

BASELINE REFERENCE COORDINATES (MASONIC ALLEY):

NORTH 644047.46 644147.46 644247.45	EAST 2272254.70 2272253.95 2272253.20
644277.64	2272252.97
	644047.46 644147.46 644247.45

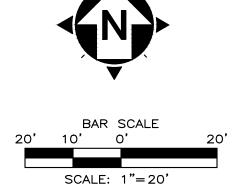
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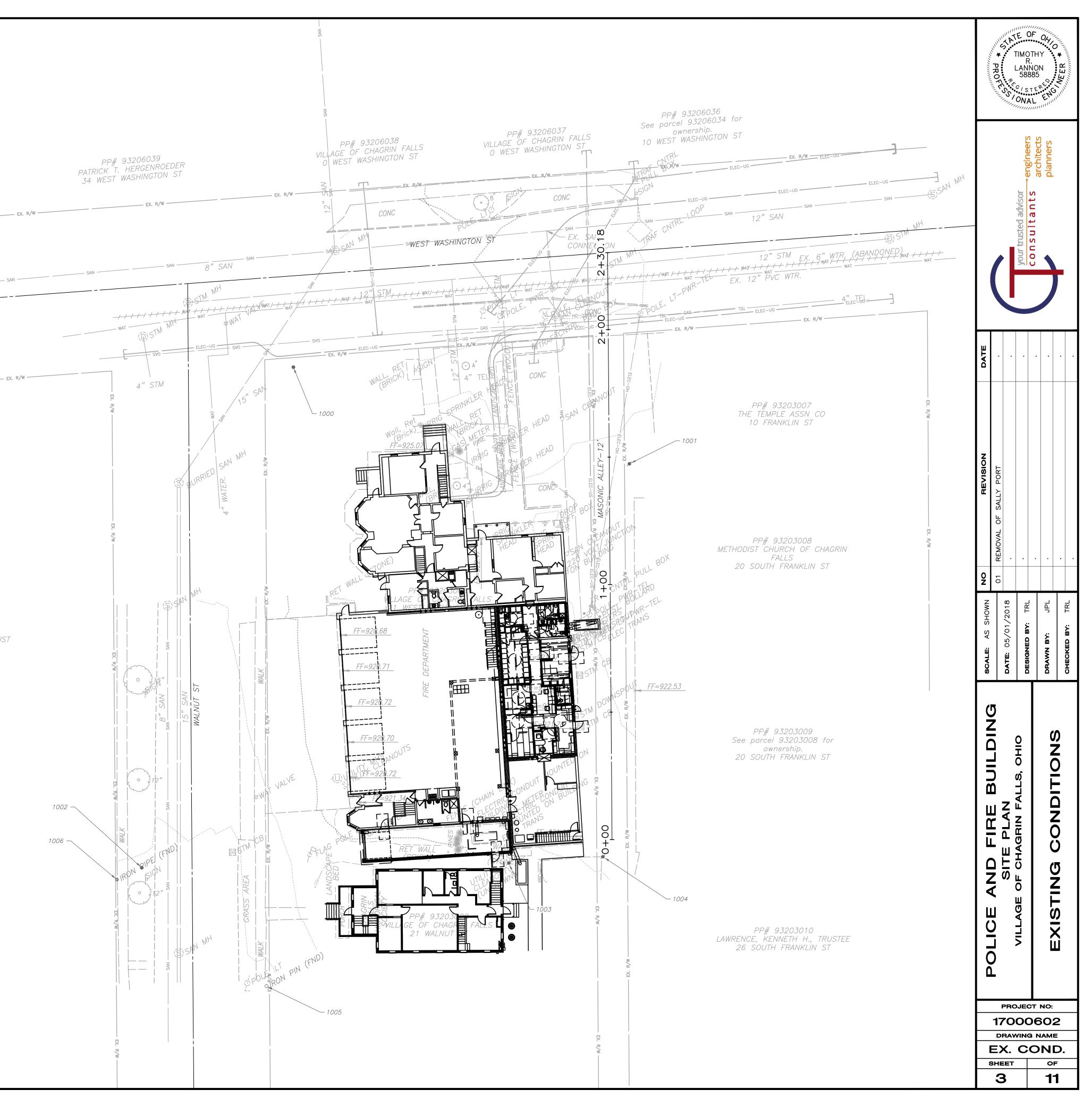
## LEGEND:

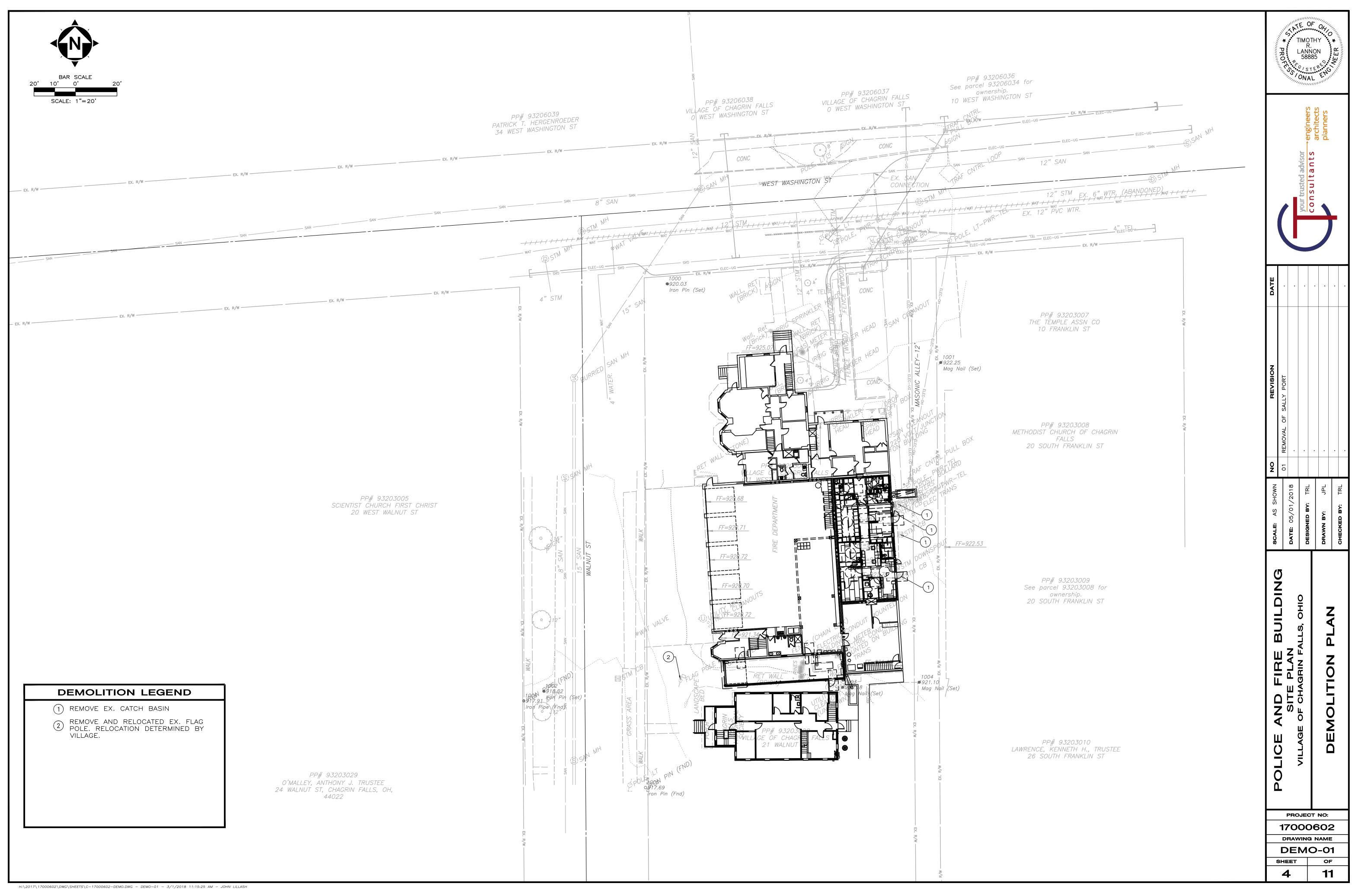
- 5/8 " REBAR SET W/RED CAP INSCRIBED WITH CT "REFERENCE"
- IRON PIN FOUND
- # MAG NAIL SET
- IRON PIPE FOUND

PP# 93203029 O'MALLEY, ANTHONY J. TRUSTEE 24 WALNUT ST, CHAGRIN FALLS, OH, 44022

PP# 93203005 SCIENTIST CHURCH FIRST CHRIST 20 WEST WALNUT ST



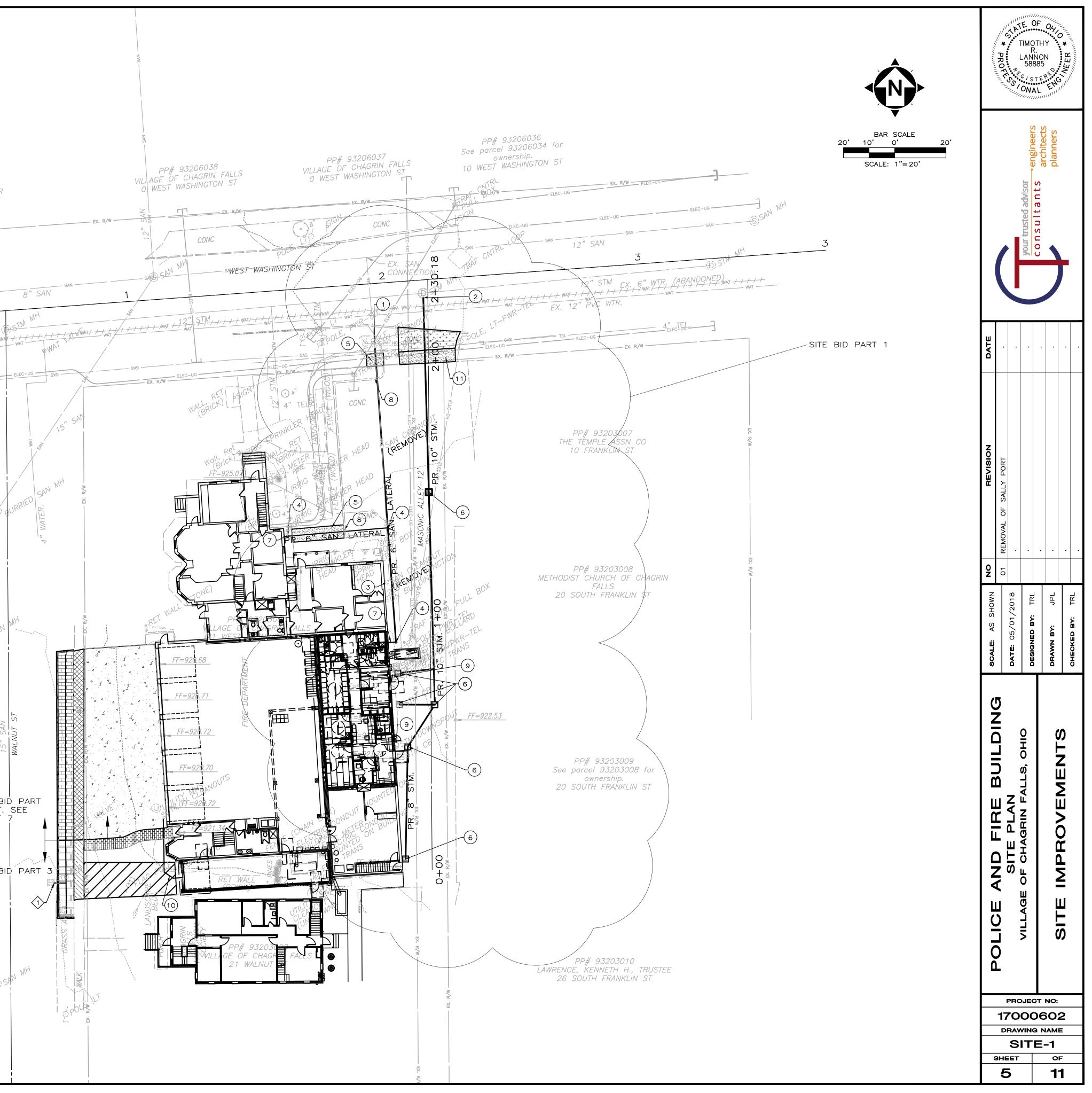


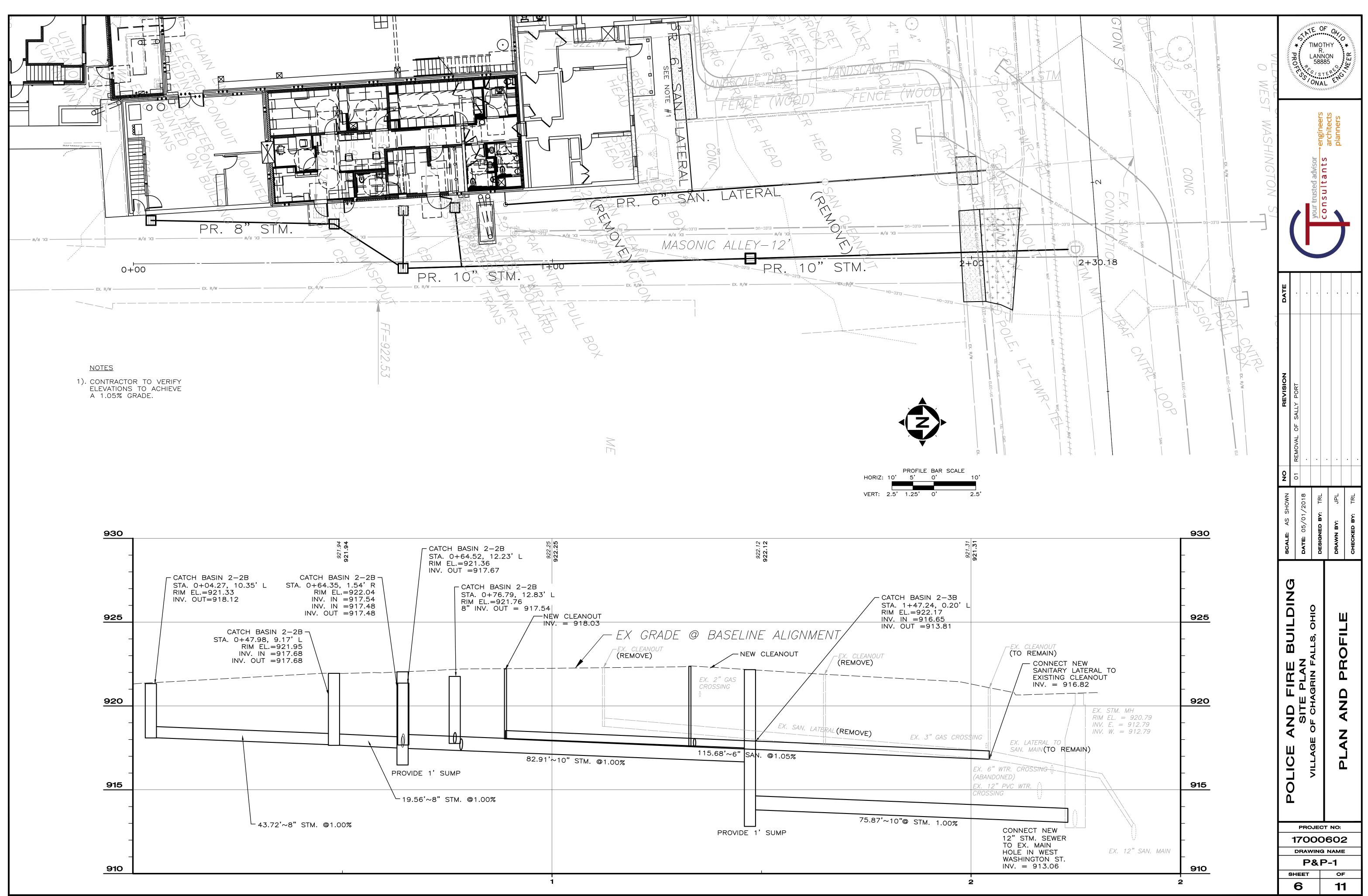


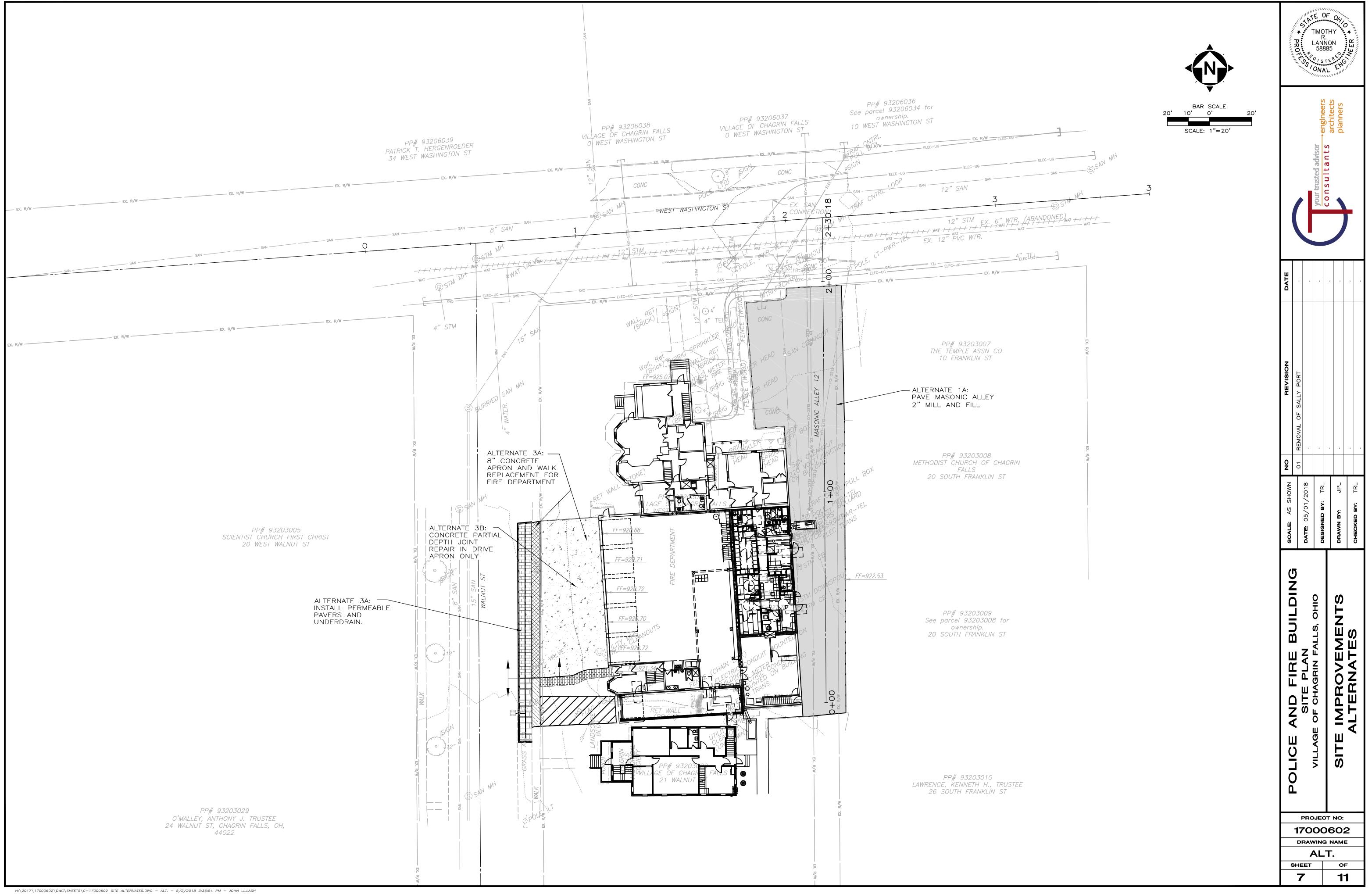
## NOTES

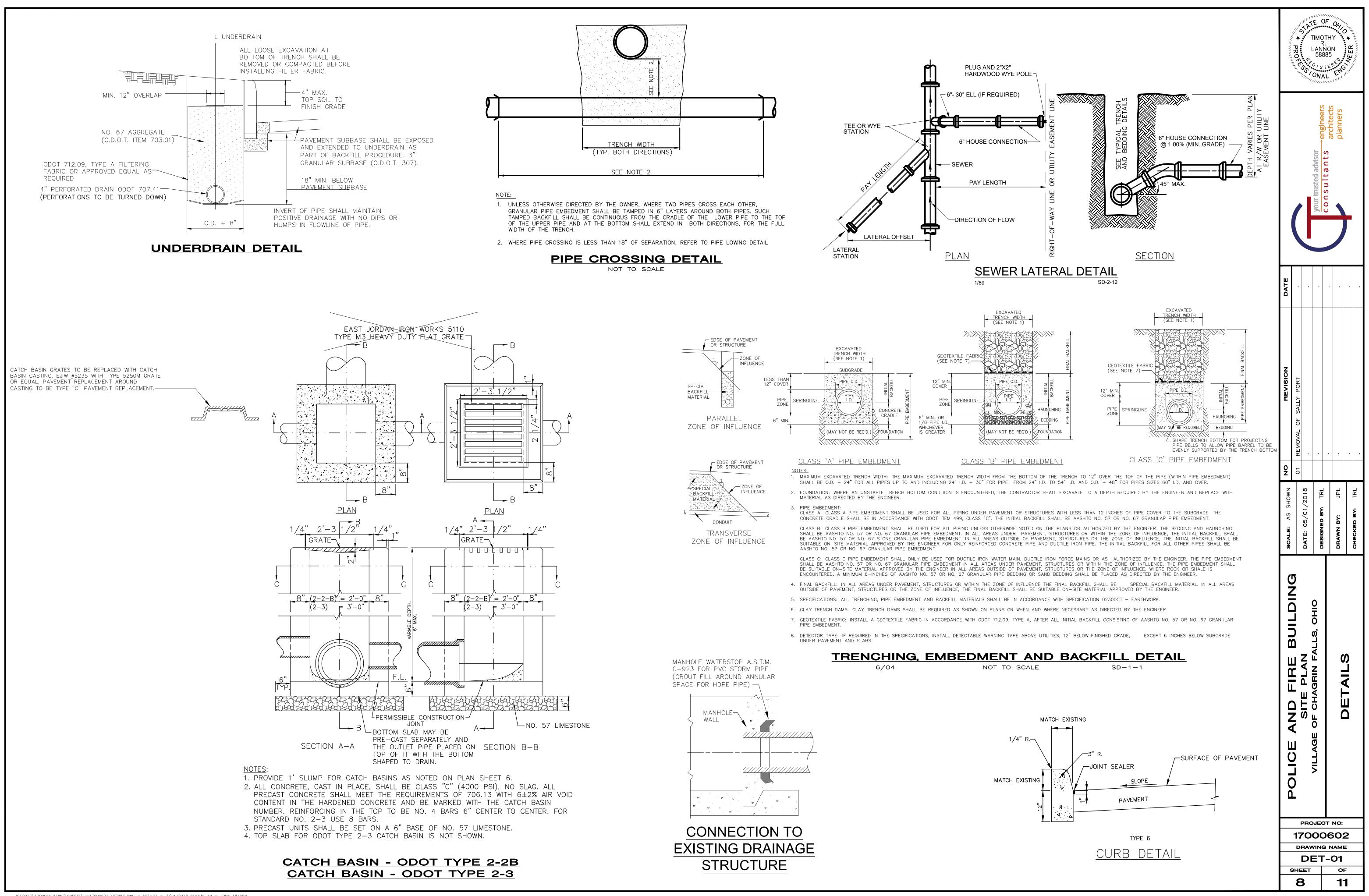
- SEE EXISTING CONDITION PLAN SHEET 02 FOR SURVEY CONTROL COORDINATES AND BENCH MARKS.
- EXISTING CONDITIONS ARE GRAPHICALLY SHOWN IN LIGHT GRAY ON THIS SHEET FOR CLARITY PURPOSES.
- CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY CONNECTIONS AND CROSSINGS PRIOR TO START OF CONSTRUCTION.

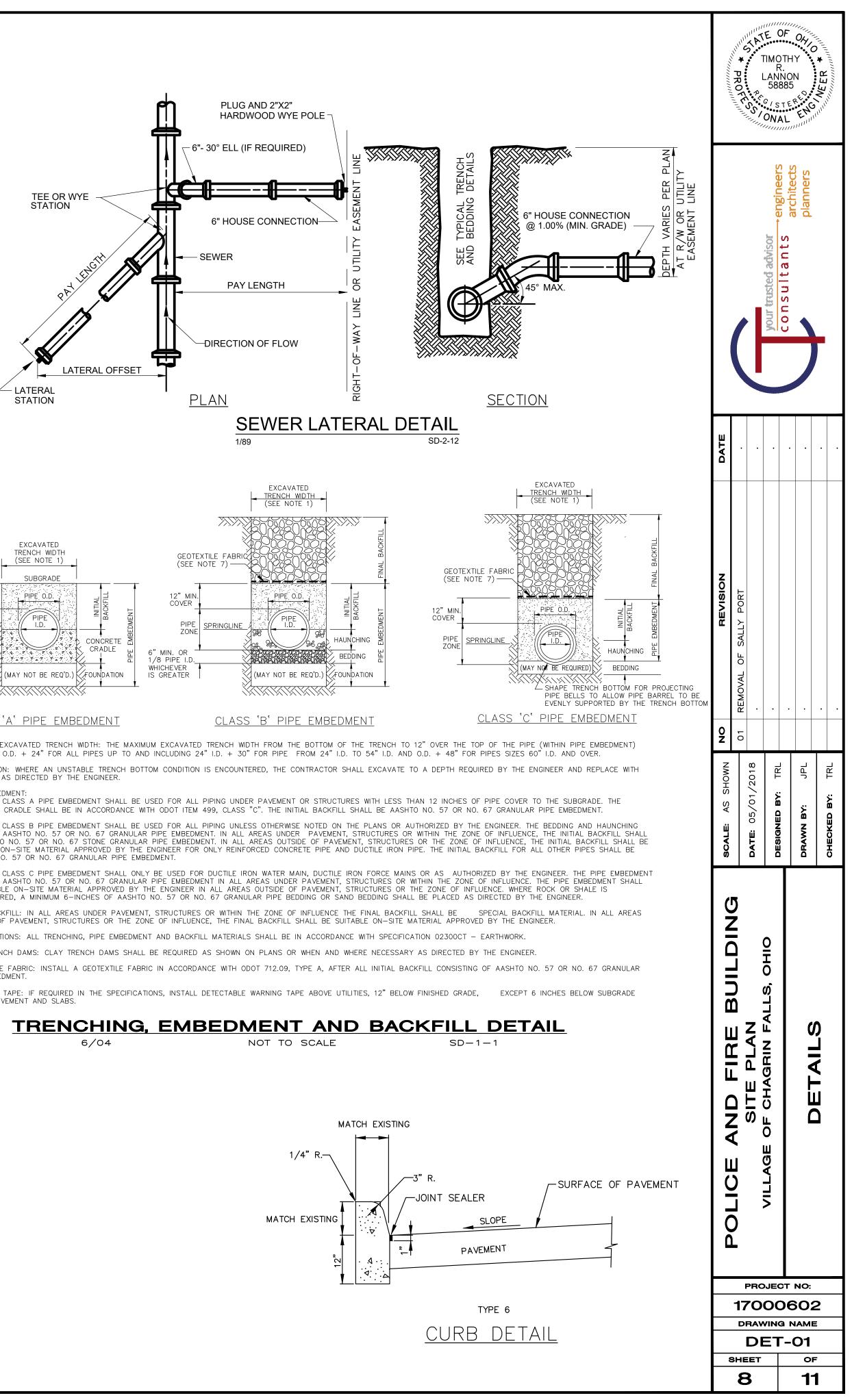
		PP# 93206039 CK T. HERGENROEDER EST WASHINGTON ST
LEGEND		ex, R/W
SITE BID PART 1 O CONNECT NEW SANITARY LATERAL TO EXISTING CLEANOUT	ex. R/W EX. R/W	EX. IV W
<ul> <li>CONNECT NEW 10" STORM SEWER TO EXISTING MANHOLE IN WEST WASHINGTON STREET.</li> </ul>	SAN -	SAN
3 ABANDON SANITARY LEAD TO BUILDING	san san O	
(4) NEW SANITARY CLEANOUT		(D) 
5 REPLACE 4" SIDEWALK AFTER SANITARY LATERAL INSTALLATION.		(P) STM MAT
6 NEW CATCH BASIN	-	SA9
7 PROVIDE SANITARY LATERAL LEAD TO BUILDING	;/W EX. R/W	4" STM
8 REPLACE CURB AFTER SANITARY LATERAL INSTALLATION.		R/W
RE-CONNECT DOWNSPOUT CONNECTIONS TO PROPOSED CATCH BASIN		
<ul><li>(10) SANITARY CONNECTION BY OTHERS.</li><li>(11) 6" SIDEWALK REPLACEMENT</li></ul>		
6" CONCRETE APRON REPLACEMENT		EX. R/
		W
		(\$) \$AN
SITE BID PART 3	PP# 93203005 NENTIST CHURCH FIRST CHRIST	
PROPOSED 8" CONCRETE WALK AS A PART OF SITE BID PART 3	20 WEST WALNUT ST	EX. R/W
PROPOSED PERMEABLE PAVERS W/ UNDERDRAIN AS A PART OF SITE BID PART 3		SAN 22 AN
PROPOSED BRICK WALK AS A PART OF SITE BID		SAN 8"
PROPOSED 8" CONCRETE DRIVE AS A PART OF SITE BID PART 3		
CONNECT PROPOSED UNDERDRAIN TO EXISTING		SITE BID
		84N
		SITE BID
SITE BID PART 3-ALTERNATES		
AS A PART OF SITE BID PART 3-ALTERNATE.		0 212"
PROPOSED PERMEABLE PAVERS W/ UNDERDRAIN AS A PART OF SITE BID PART 3-ALTERNATE.		
PROPOSED 8" CONCRETE WALK REPLACEMENT AS A PART OF SITE BID PART 3-ALTERNATE.		at sh
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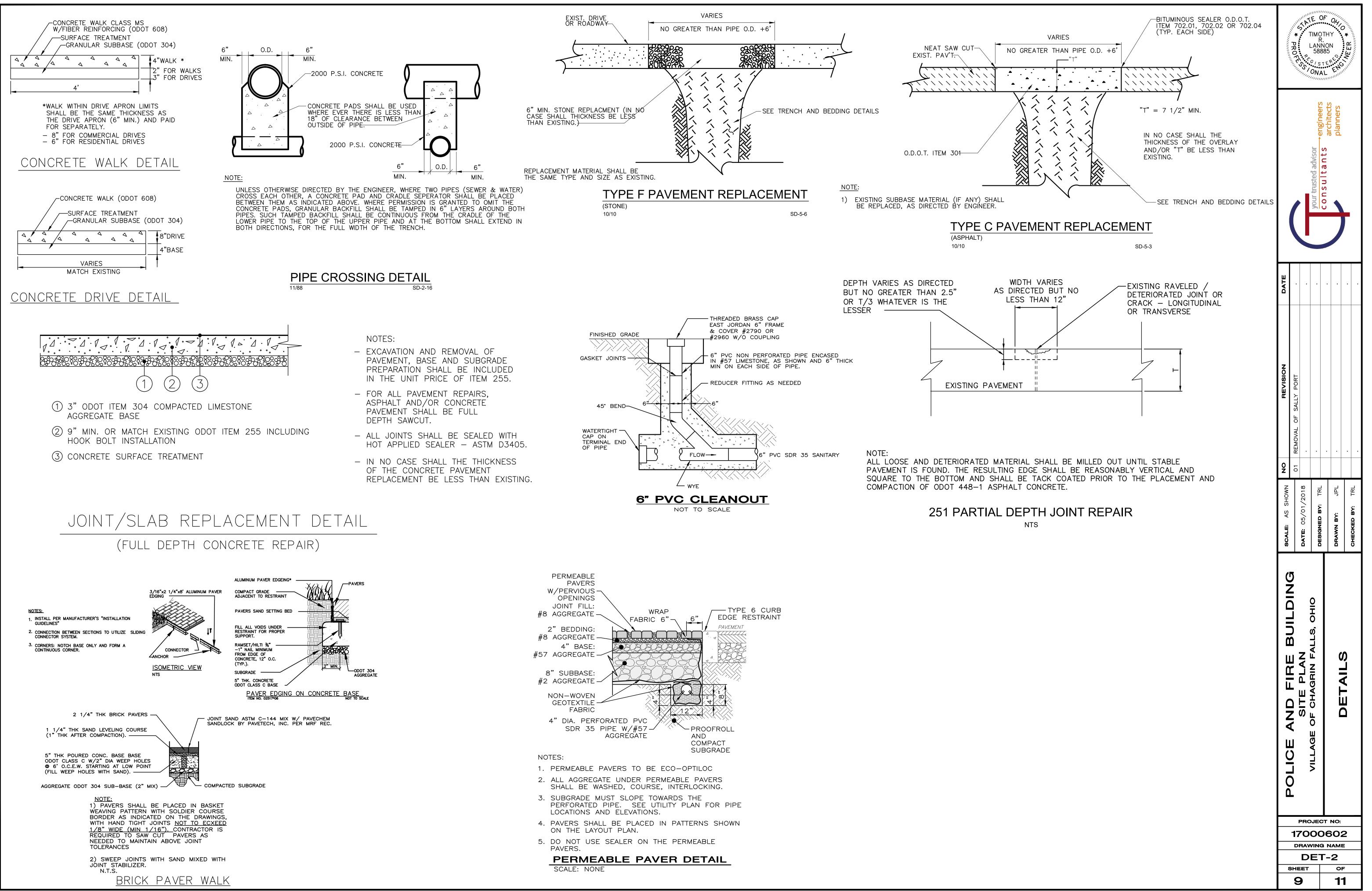




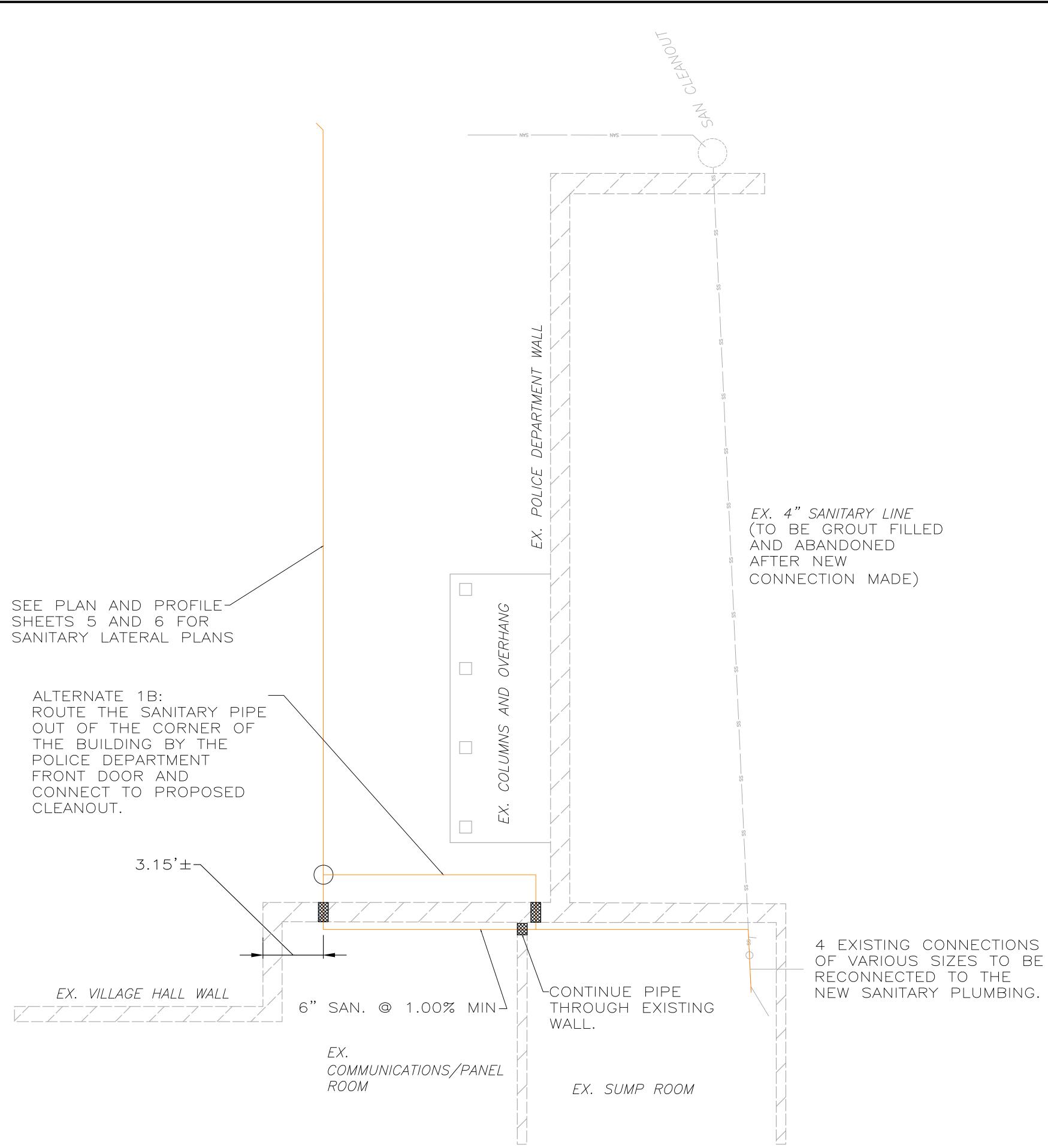








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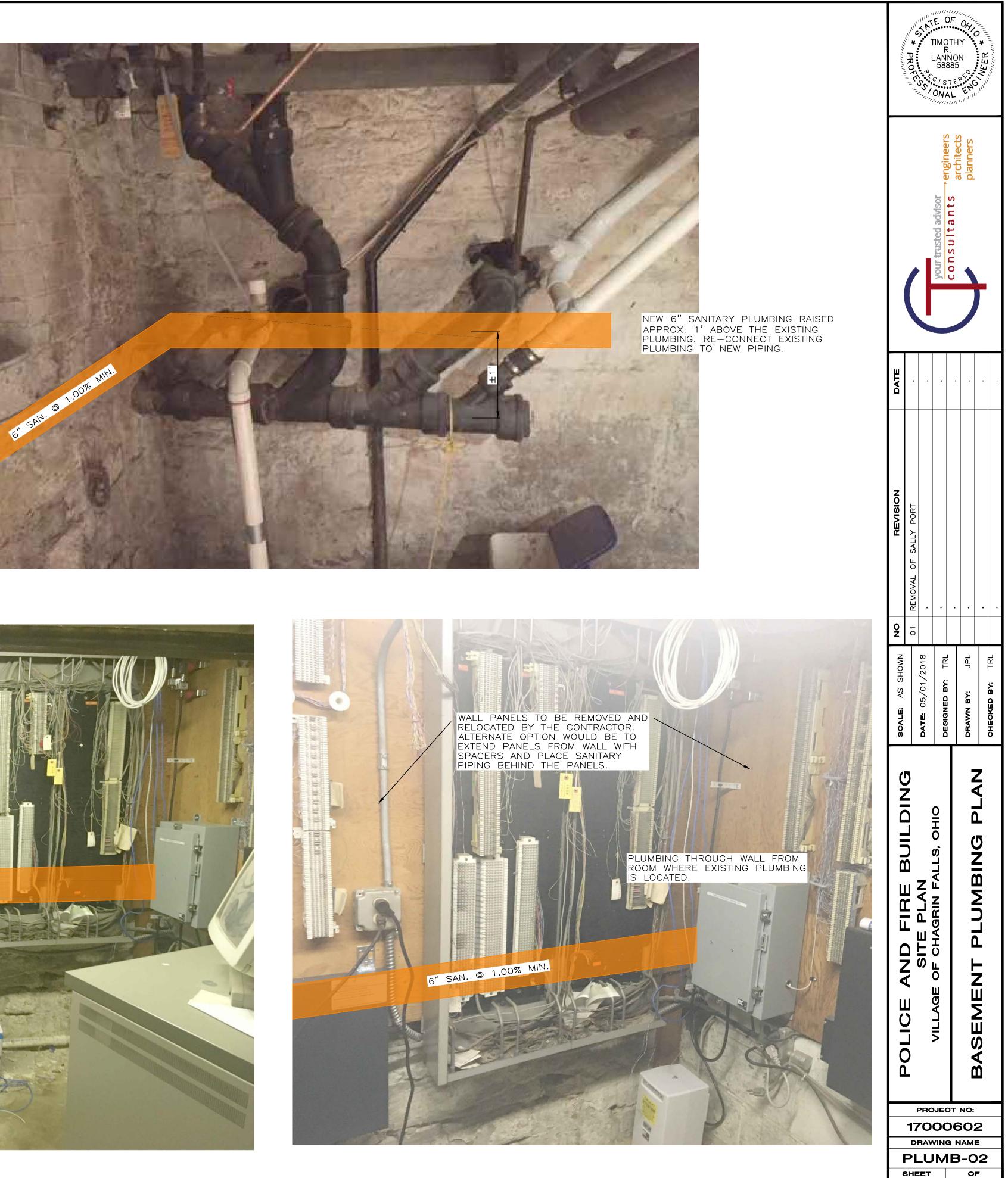
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DI			01 REMOVAL OF SALLY PORT	•	(	PROFE
		<b>DATE:</b> 05/01/2018	•	•		
VIN	VILLAGE OF CHAGRIN FALLS, OHIO	DESIGNED BY: TRI	•	•	your trusted advisor	E FIMC FIMC F S8 S S S S S S S S S S S S S S S S S
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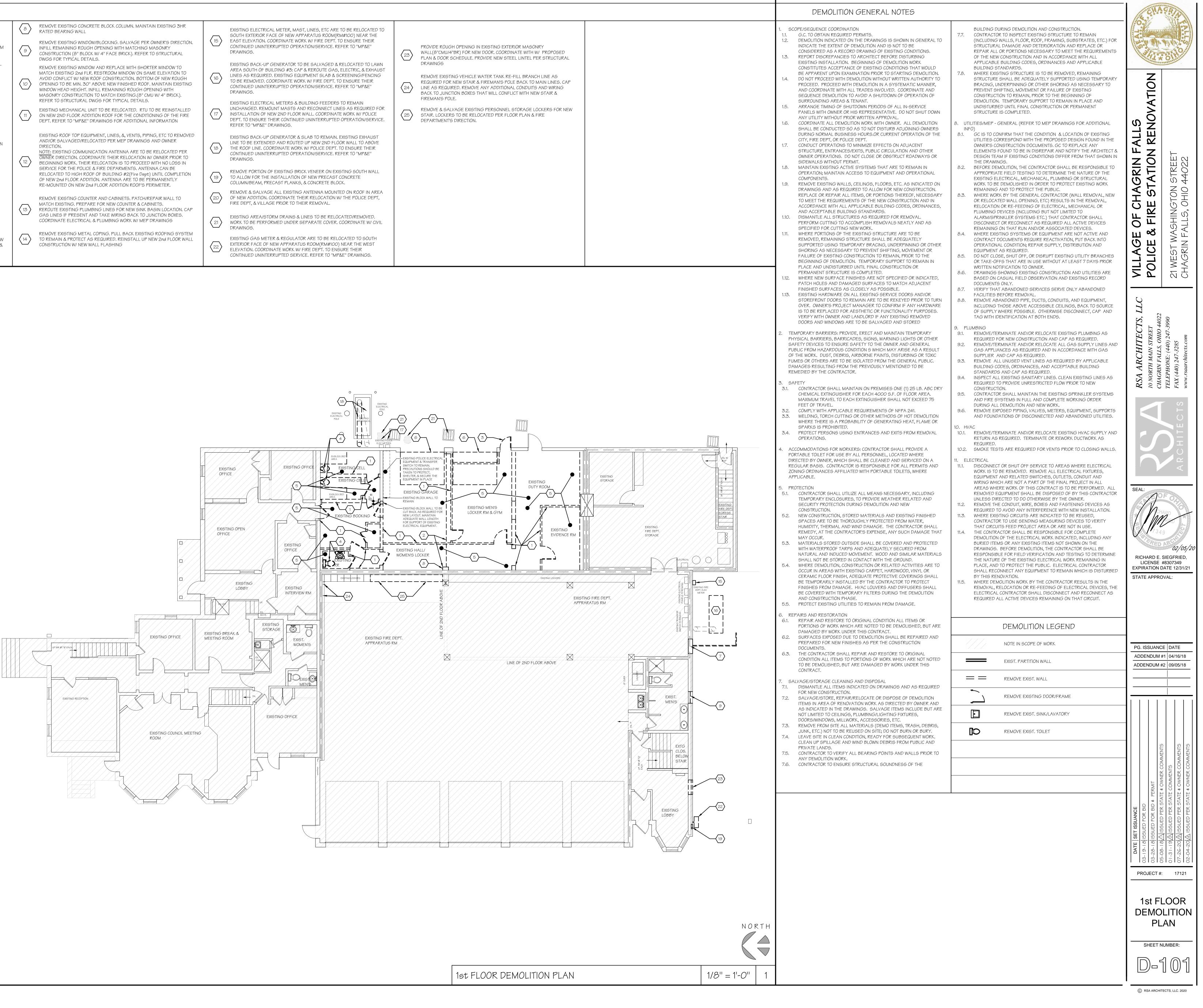
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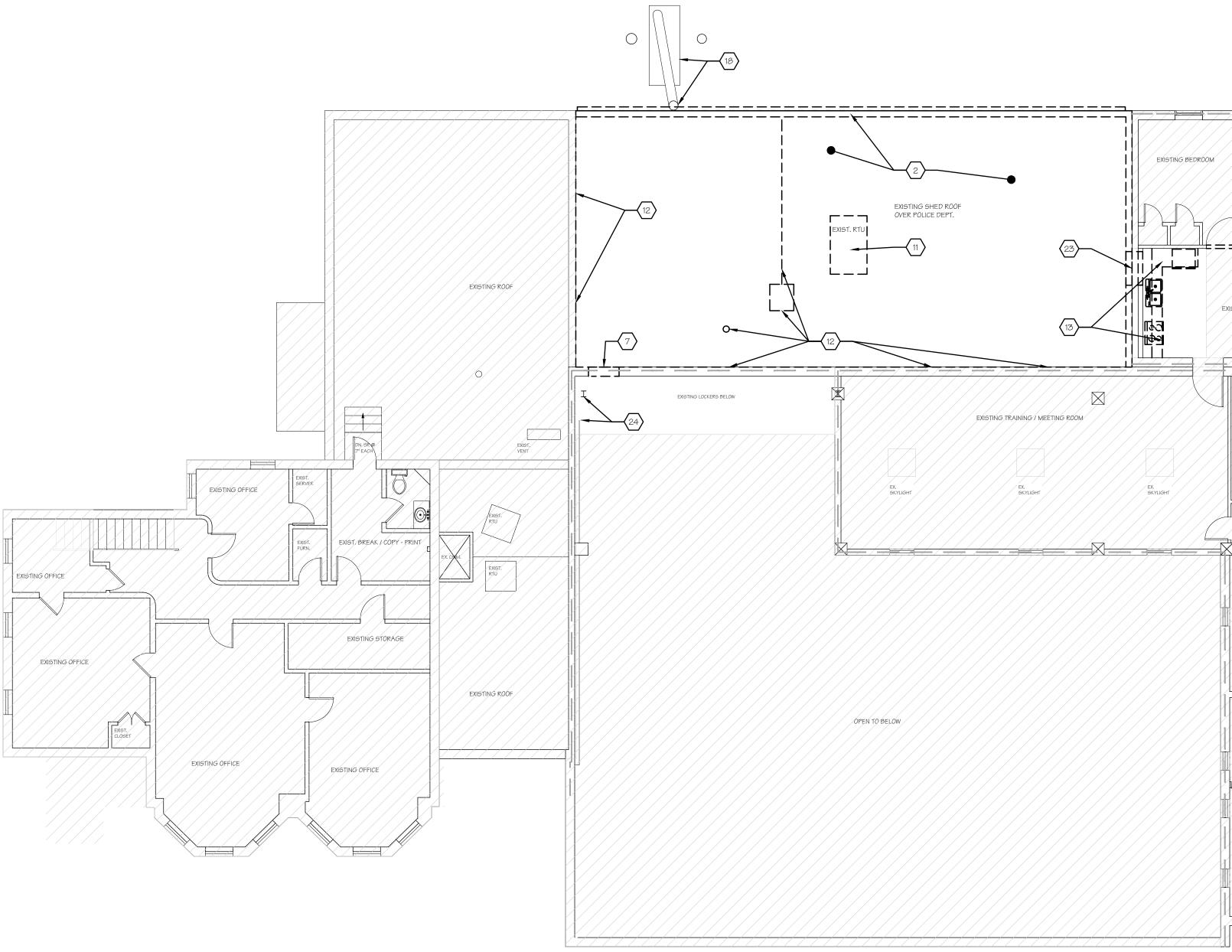


REMOVE EXISTING WALL WITH ITS DOORS/FRAMES, ELECTRICAL, AND ATTACHED ACCESSORIES FROM SLAB TO ROOF DECKING ABOVE. PATCH	8       REMOVE EXISTING CONCRETE BLOCK COLUMN. MAINTAIN EXISTING 3HR         8       RATED BEARING WALL	EXISTING ELECTRICAL METER, MAST, LINES, ETC ARE TO BE RELOCATED TO SOUTH EXTERIOR FACE OF NEW APPARATUS ROOM(RM#100) NEAR THE	
EXISTING SLABS/WALLS TO REMAIN AND PREPARE FOR NEW FINISHES. EXISTING ELECTRICAL PANELS AND/OR EQUIPMENT(THERMOSTATS/ALARM DEVICES ETC.) ARE TO BE SALVAGED AND RELOCATED AS REQUIRED. EXISTING DOORS AND THEIR FRAMES ARE TO BE SALVAGED AND	REMOVE EXISTING WINDOW/BLOCKING. SALVAGE PER OWNER'S DIRECTION. INFILL REMAINING ROUGH OPENING WITH MATCHING MASONRY CONSTRUCTION (8" BLOCK W/ 4" FACE BRICK). REFER TO STRUCTURAL DWGS FOR TYPICAL DETAILS.	(15) EAST ELEVATION. COORDINATE WORK W/ FIRE DEPT. TO ENSURE THEIR CONTINUED UNINTERRUPTED OPERATION/SERVICE. REFER TO "MP&E" DRAWINGS.	PROVIDE ROUGH OPENING IN EXISTING EXTERIOR MASONRY WALL(8"CMU/4"BR) FOR NEW DOOR. COORDINATE WITH W/ PROPOSED PLAN & DOOR SCHEDULE. PROVIDE NEW STEEL LINTEL PER STRUCTURAL
RELOCATED AS REQUIRED. REMOVE WIRING BACK TO JUNCTION BOX, WALL PANEL, OR ELECTRICAL ROOM PANELS. ANY PLUMBING IN WALL IS TO BE REMOVED AND CAPPED. COORDINATE WORK WITH NEW LAYOUT.	REMOVE EXISTING WINDOW AND REPLACE WITH SHORTER WINDOW TO MATCH EXISTING 2nd FLR. RESTROOM WINDOW ON SAME ELEVATION TO	EXISTING BACK-UP GENERATOR TO BE SALVAGED & RELOCATED TO LAWN AREA SOUTH OF BUILDING #3: CAP & REROUTE GAS, ELECTRIC, & EXHAUST LINES AS REQUIRED. EXISTING EQUIPMENT SLAB & SCREENING/FENCING	REMOVE EXISTING VEHICLE WATER TANK RE-FILL BRANCH LINE AS
2 REMOVE EXISTING SHED ROOF INCLUDING STRUCTURE, SHEATHING, MEMBRANE, FLASHING, GUTTERS, ETC AS WELL AS THE STEEL BEAM SUPPORT. PATCH/REPAIR EXISTING MASONRY WALLS TO REMAIN AND	AVOID CONFLICT W/ NEW ROOF CONSTRUCTION. BOTTOM OF NEW ROUGH OPENING TO BE MIN. 30" ABOVE NEW FINISHED ROOF. MAINTAIN EXISTING WINDOW HEAD HEIGHT. INFILL REMAINING ROUGH OPENING WITH MASONRY CONSTRUCTION TO MATCH EXISTING.(8" CMU W/ 4" BRICK). REFER TO STRUCTURAL DWGS FOR TYPICAL DETAILS.	(16) LINES AS REQUIRED. EXISTING EQUITMENT SLAD & SCREENING/FENCING TO BE REMOVED. COORDINATE WORK W/ FIRE DEPT. TO ENSURE THEIR CONTINUED UNINTERRUPTED OPERATION/SERVICE. REFER TO "MP&E" DRAWINGS.	REQUIRED FOR NEW STAIR & FIREMAN'S POLE BACK TO MAIN LINES. CAP LINE AS REQUIRED. REMOVE ANY ADDITIONAL CONDUITS AND WIRING BACK TO JUNCTION BOXES THAT WILL CONFLICT WITH NEW STAIR & FIREMAN'S POLE.
PREPARE FOR NEW CONSTRUCTION REMOVE EXISTING DOOR/WINDOW AND FRAME. SALVAGE PER OWNER'S	EXISTING MECHANICAL UNIT TO BE RELOCATED. RTU TO BE REINSTALLED ON NEW 2ND FLOOR ADDITION ROOF FOR THE CONDITIONING OF THE FIRE	EXISTING ELECTRICAL METERS & BUILDING FEEDERS TO REMAIN         UNCHANGED. REMOUNT MASTS AND RECONNECT LINES AS REQUIRED FOR         INSTALLATION OF NEW 2ND FLOOR WALL. COORDINATE WORK W/ POLICE	REMOVE & SALVAGE EXISTING PERSONNEL STORAGE LOCKERS FOR NEW STAIR. LOCKERS TO BE RELOCATED PER FLOOR PLAN & FIRE
3 DIRECTION. INFILL REMAINING ROUGH OPENING WITH MASONRY CONSTRUCTION TO MATCH EXISTING WALL. REFER TO STRUCTURAL DWGS FOR TYPICAL DETAILS.	DEPT. REFER TO "MP&E" DRAWINGS FOR ADDITIONAL INFORMATION EXISTING ROOF TOP EQUIPMENT, LINES, &, VENTS, PIPING, ETC TO REMOVED	DEPT. TO ENSURE THEIR CONTINUED UNINTERRUPTED OPERATION/SERVICE. REFER TO "MP&E" DRAWINGS.	DEPARTMENT'S DIRECTION.
4 REMOVE EXISTING PLUMBING FIXTURES. CAP EXISTING PLUMBING LINES IN FLOOR OR WALL. FINISH WALL/FLOOR TO MATCH EXISTING. VERIFY REMOVAL W/ OWNER. REMOVE BALANCE OF EXISTING RESTROOM PLUMBING FIXTURES ACCESSORIES TO BE REPLACED WITH NEW FIXTURE/ACCESSORIES. FINAL SELECTION BY OWNER	AND/OR SALVAGED/RELOCATED PER MEP DRAWINGS AND OWNER DIRECTION. NOTE: EXISTING COMMUNICATION ANTENNA ARE TO BE RELOCATED PER OWNER DIRECTION. COORDINATE THEIR RELOCATION W/ OWNER PRIOR TO BEGINNING WORK. THEIR RELOCATION IS TO PROCEED WITH NO LOSS IN	EXISTING BACK-UP GENERATOR & SLAB TO REMAIN. EXISTING EXHAUST LINE TO BE EXTENDED AND ROUTED UP NEW 2ND FLOOR WALL TO ABOVE THE ROOF LINE. COORDINATE WORK W/ POLICE DEPT. TO ENGURE THEIR CONTINUED UNINTERRUPTED OPERATION/SERVICE. REFER TO "MP&E" DRAWINGS.	
5 REMOVE EXISTING FLOOR SLAB & FINISHES. PREPARE FOR NEW FLOOR SLAB PER STRUCTURAL DWGS. VERIFY EXISTING SLAB/CONCRETE BLOCK WALL CONDITION AT EXISTING MASONRY WALLS TO REMAIN.	SERVICE FOR THE POLICE & FIRE DEPARMENTS. ANTENNA CAN BE RELOCATED TO HIGH ROOF OF BUILDING #2(Fire Dept) UNTIL COMPLETION OF NEW 2nd FLOOR ADDITION. ANTENNA ARE TO BE PERMANENTLY RE-MOUNTED ON NEW 2nd FLOOR ADDITION ROOF'S PERIMETER.	(19) REMOVE PORTION OF EXISTING BRICK VENEER ON EXISTING SOUTH WALL TO ALLOW FOR THE INSTALLATION OF NEW PRECAST CONCRETE COLUMN/BEAM, PRECAST PLANKS, & CONCRETE BLOCK.	
EXISTING OVERHEAD DOORS & HARDWARE TO BE REMOVED. INFILL REMAINING ROUGH OPENING WITH MASONRY CONSTRUCTION TO MATCH	REMOVE EXISTING COUNTER AND CABINETS. PATCH/REPAIR WALL TO MATCH EXISTING. PREPARE FOR NEW COUNTER & CABINETS. REROUTE EXISTING PLUMBING LINES FOR NEW SINK BASIN LOCATION. CAP	(20) REMOVE & SALVAGE ALL EXISTING ANTENNA MOUNTED ON ROOF IN AREA OF NEW ADDITION. COORDINATE THEIR RELOCATION W/ THE POLICE DEPT, FIRE DEPT, & VILLAGE PRIOR TO THEIR REMOVAL.	
6 EXISTING WALL AND FRAME IN NEW ROUGH OPENING FOR MAN-DOOR WHERE SHOWN ON CONSTRUCTION PLANS. REFER TO STRUCTURAL DWGS FOR TYPICAL MASONRY DETAILS.	GAS LINES IF PRESENT AND TAKE WIRING BACK TO JUNCTION BOXES. COORDINATE ELECTRICAL & PLUMBING WORK W/ MEP DRAWINGS	EXISTING AREA/STORM DRAINS & LINES TO BE RELOCATED/REMOVED. WORK TO BE PERFORMED UNDER SEPARATE COVER. COORDINATE W/ CIVIL DRAWINGS.	
7 PROVIDE ROUGH OPENING IN EXISTING EXTERIOR MASONRY WALL FOR NEW DOORS & VENTS. COORDINATE WITH PROPOSED PLANS, DOOR SCHEDULE & MECHANICAL DRAWINGS. PROVIDE NEW STEEL LINTEL PER STRUCTURAL DRAWINGS AS REQUIRED	REMOVE EXISTING METAL COPING. PULL BACK EXISTING ROOFING SYSTEM TO REMAIN & PROTECT AS REQUIRED. REINSTALL UP NEW 2nd FLOOR WALL CONSTRUCTION W/ NEW WALL FLASHING	EXISTING GAS METER & REGULATOR ARE TO BE RELOCATED TO SOUTH EXTERIOR FACE OF NEW APPARATUS ROOM(RM#100) NEAR THE WEST ELEVATION. COORDINATE WORK W/ FIRE DEPT. TO ENSURE THEIR CONTINUED UNINTERRUPTED SERVICE. REFER TO "MP&E" DRAWINGS.	

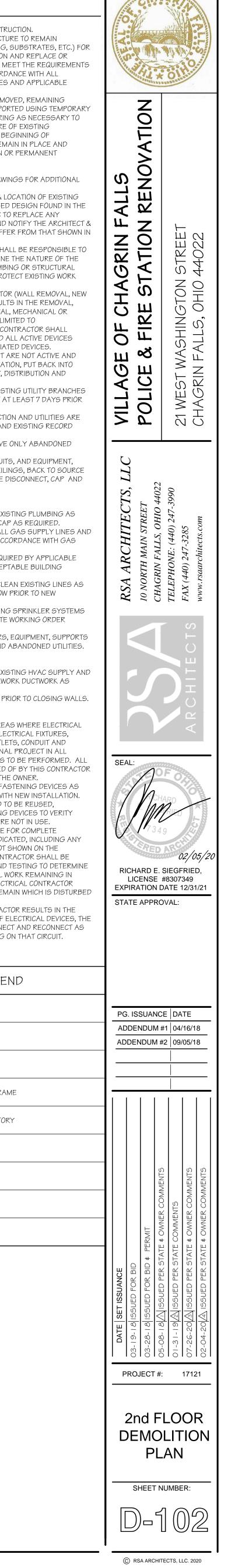


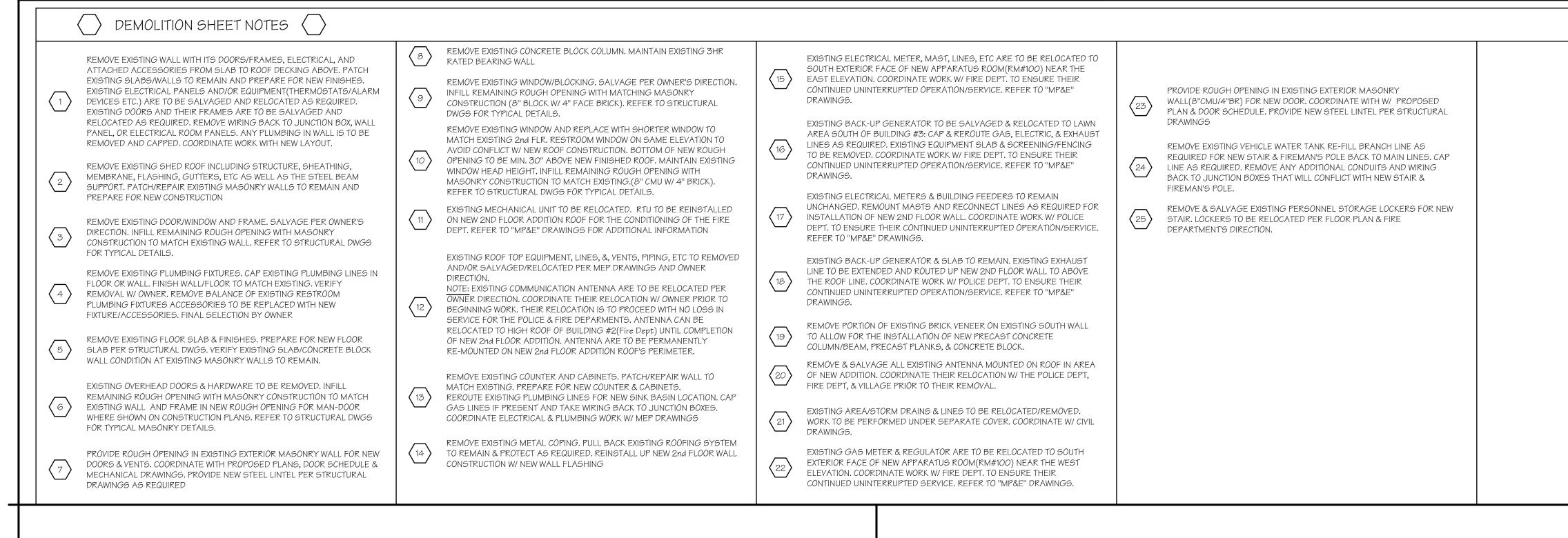


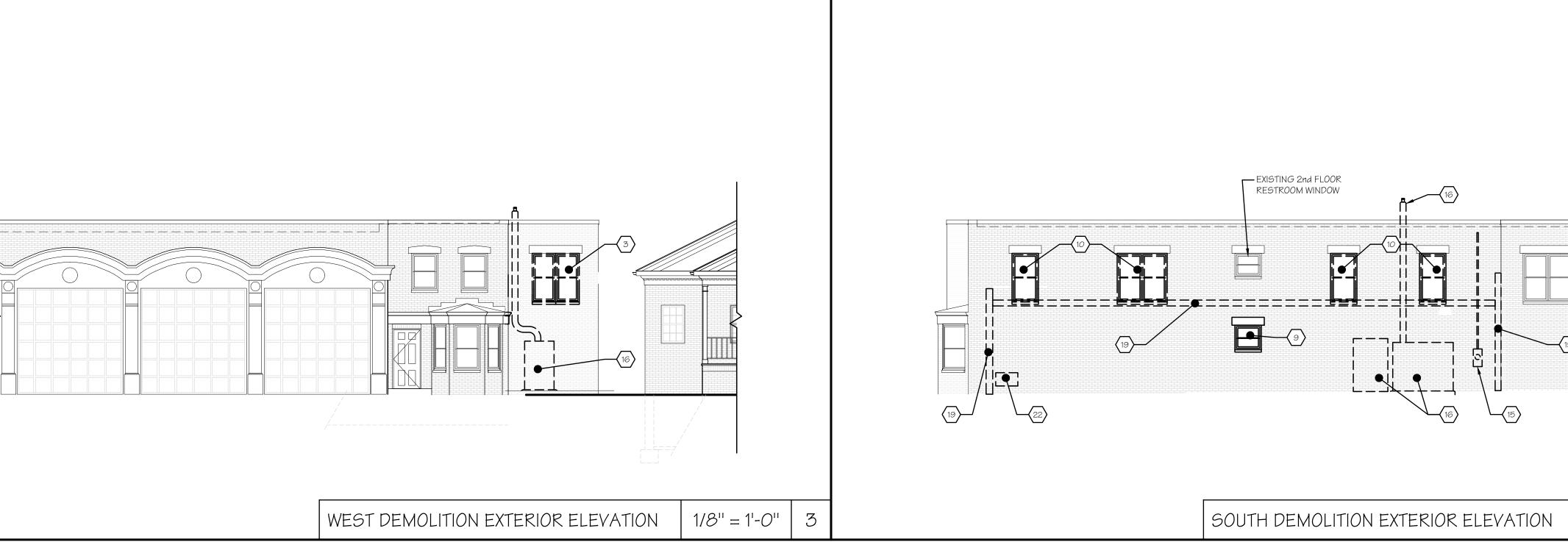
REMOVE EXISTING WALL WITH ITS DOORS/FRAMES, ELECTRICAL, AND	8       REMOVE EXISTING CONCRETE BLOCK COLUMN. MAINTAIN EXISTING 3HR         8       RATED BEARING WALL	EXISTING ELECTRICAL METER, MAST, LINES, ETC ARE TO BE RELOCATED TO	
ATTACHED ACCESSORIES FROM SLAB TO ROOF DECKING ABOVE. PATCH	RATED BEARING WALL	SOUTH EXTERIOR FACE OF NEW APPARATUS ROOM(RM#100) NEAR THE	
EXISTING SLABS/WALLS TO REMAIN AND PREPARE FOR NEW FINISHES. EXISTING ELECTRICAL PANELS AND/OR EQUIPMENT(THERMOSTATS/ALARM	REMOVE EXISTING WINDOW/BLOCKING. SALVAGE PER OWNER'S DIRECTION.	(15) EAST ELEVATION. COORDINATE WORK W/ FIRE DEPT. TO ENSURE THEIR CONTINUED UNINTERRUPTED OPERATION/SERVICE. REFER TO "MP&E"	PROVIDE ROUGH OPENING IN EXISTING EXTERIOR MASONRY
DEVICES ETC.) ARE TO BE SALVAGED AND RELOCATED AS REQUIRED.	(9) INFILL REMAINING ROUGH OF ENING WITH MATCHING MASONRY CONSTRUCTION (8" BLOCK W/ 4" FACE BRICK). REFER TO STRUCTURAL DWGS FOR TYPICAL DETAILS.	DRAWINGS.	WALL(8"CMU/4"BR) FOR NEW DOOR. COORDINATE WITH W/ PROPOSED PLAN & DOOR SCHEDULE. PROVIDE NEW STEEL LINTEL PER STRUCTURAL
RELOCATED AS REQUIRED. REMOVE WIRING BACK TO JUNCTION BOX, WALL	REMOVE EXISTING WINDOW AND REPLACE WITH SHORTER WINDOW TO	EXISTING BACK-UP GENERATOR TO BE SALVAGED & RELOCATED TO LAWN	DRAWINGS
PANEL, OR ELECTRICAL ROOM PANELS. ANY PLUMBING IN WALL IS TO BE REMOVED AND CAPPED. COORDINATE WORK WITH NEW LAYOUT.	MATCH EXISTING 2nd FLR. RESTROOM WINDOW ON SAME ELEVATION TO AVOID CONFLICT W/ NEW ROOF CONSTRUCTION. BOTTOM OF NEW ROUGH	AREA SOUTH OF BUILDING #3: CAP & REROUTE GAS, ELECTRIC, & EXHAUST LINES AS REQUIRED. EXISTING EQUIPMENT SLAB & SCREENING/FENCING	REMOVE EXISTING VEHICLE WATER TANK RE-FILL BRANCH LINE AS
REMOVE EXISTING SHED ROOF INCLUDING STRUCTURE, SHEATHING,	$\langle 10 \rangle$ OPENING TO BE MIN. 30" ABOVE NEW FINISHED ROOF. MAINTAIN EXISTING	16 LINES AS REQUIRED. EASTING EQUIPMENT SLAD & SCREENING/FENCING TO BE REMOVED. COORDINATE WORK W/ FIRE DEPT. TO ENSURE THEIR CONTINUED UNINTERRUPTED OPERATION/SERVICE. REFER TO "MP&E"	REQUIRED FOR NEW STAIR & FIREMAN'S POLE BACK TO MAIN LINES. CAP LINE AS REQUIRED. REMOVE ANY ADDITIONAL CONDUITS AND WIRING BACK TO JUNCTION BOYES THAT WILL CONFLICT WITH NEW STAIR &
MEMBRANE, FLASHING, GUTTERS, ETC AS WELL AS THE STEEL BEAM SUPPORT. PATCH/REPAIR EXISTING MASONRY WALLS TO REMAIN AND	MASONRY CONSTRUCTION TO MATCH EXISTING.(8" CMU W/ 4" BRICK).	DRAWINGS.	BACK TO JUNCTION BOXES THAT WILL CONFLICT WITH NEW STAIR & FIREMAN'S POLE.
PREPARE FOR NEW CONSTRUCTION	REFER TO STRUCTURAL DWGS FOR TYPICAL DETAILS.	EXISTING ELECTRICAL METERS & BUILDING FEEDERS TO REMAIN UNCHANGED. REMOUNT MASTS AND RECONNECT LINES AS REQUIRED FOR	
REMOVE EXISTING DOOR/WINDOW AND FRAME. SALVAGE PER OWNER'S	EXISTING MECHANICAL UNIT TO BE RELOCATED. RTU TO BE REINSTALLED ON NEW 2ND FLOOR ADDITION ROOF FOR THE CONDITIONING OF THE FIRE	$\langle 17 \rangle$ INSTALLATION OF NEW 2ND FLOOR WALL. COORDINATE WORK W/ POLICE	REMOVE & SALVAGE EXISTING PERSONNEL STORAGE LOCKERS FOR NEW STAIR. LOCKERS TO BE RELOCATED PER FLOOR PLAN & FIRE DEPARTMENT'S DIRECTION
DIRECTION. INFILL REMAINING ROUGH OPENING WITH MASONRY CONSTRUCTION TO MATCH EXISTING WALL. REFER TO STRUCTURAL DWGS	DEPT. REFER TO "MP&E" DRAWINGS FOR ADDITIONAL INFORMATION	DEPT. TO ENSURE THEIR CONTINUED UNINTERRUPTED OPERATION/SERVICE. REFER TO "MP&E" DRAWINGS.	DEPARTMENT'S DIRECTION.
FOR TYPICAL DETAILS.	EXISTING ROOF TOP EQUIPMENT, LINES, &, VENTS, PIPING, ETC TO REMOVED	EXISTING BACK-UP GENERATOR & SLAB TO REMAIN. EXISTING EXHAUST	
REMOVE EXISTING PLUMBING FIXTURES. CAP EXISTING PLUMBING LINES IN FLOOR OR WALL. FINISH WALL/FLOOR TO MATCH EXISTING. VERIFY	AND/OR SALVAGED/RELOCATED PER MEP DRAWINGS AND OWNER DIRECTION.	LINE TO BE EXTENDED AND ROUTED UP NEW 2ND FLOOR WALL TO ABOVE THE ROOF LINE. COORDINATE WORK W/ POLICE DEPT. TO ENSURE THEIR	
REMOVAL W/ OWNER. REMOVE BALANCE OF EXISTING RESTROOM	NOTE: EXISTING COMMUNICATION ANTENNA ARE TO BE RELOCATED PER	(18) THE ROOF LINE. COORDINATE WORK W/ POLICE DEPT. TO ENSURE THEIR CONTINUED UNINTERRUPTED OPERATION/SERVICE. REFER TO "MP&E" DRAWINGS.	
PLUMBING FIXTURES ACCESSORIES TO BE REPLACED WITH NEW FIXTURE/ACCESSORIES. FINAL SELECTION BY OWNER	BEGINNING WORK. THEIR RELOCATION IS TO PROCEED WITH NO LOSS IN SERVICE FOR THE POLICE & FIRE DEPARMENTS. ANTENNA CAN BE		
REMOVE EXISTING FLOOR SLAB & FINISHES. PREPARE FOR NEW FLOOR	RELOCATED TO HIGH ROOF OF BUILDING #2(Fire Dept) UNTIL COMPLETION OF NEW 2nd FLOOR ADDITION. ANTENNA ARE TO BE PERMANENTLY	19       REMOVE PORTION OF EXISTING BRICK VENEER ON EXISTING SOUTH WALL         19       TO ALLOW FOR THE INSTALLATION OF NEW PRECAST CONCRETE         01       UMAN/BEAM PRECAST PLANKS & CONCRETE         02       UMAN/BEAM PRECAST PLANKS & CONCRETE	
SLAB PER STRUCTURAL DWGS. VERIFY EXISTING SLAB/CONCRETE BLOCK WALL CONDITION AT EXISTING MASONRY WALLS TO REMAIN.	RE-MOUNTED ON NEW 2nd FLOOR ADDITION ROOF'S PERIMETER.	COLUMIN/DEAM, TREASTTEAMRO, & CONCRETE DEOCR.	
WALL CONDITION AT EXISTING MASONET WALLS TO REMAIN.	REMOVE EXISTING COUNTER AND CABINETS. PATCH/REPAIR WALL TO	REMOVE & SALVAGE ALL EXISTING ANTENNA MOUNTED ON ROOF IN AREA OF NEW ADDITION. COORDINATE THEIR RELOCATION W/ THE POLICE DEPT,	
EXISTING OVERHEAD DOORS & HARDWARE TO BE REMOVED. INFILL REMAINING ROUGH OPENING WITH MASONRY CONSTRUCTION TO MATCH	MATCH EXISTING. PREPARE FOR NEW COUNTER & CABINETS.	FIRE DEPT, & VILLAGE PRIOR TO THEIR REMOVAL.	
EXISTING WALL AND FRAME IN NEW ROUGH OPENING FOR MAN-DOOR	GAS LINES IF PRESENT AND TAKE WIRING BACK TO JUNCTION BOXES.	EXISTING AREA/STORM DRAINS & LINES TO BE RELOCATED/REMOVED.	
WHERE SHOWN ON CONSTRUCTION PLANS. REFER TO STRUCTURAL DWGS FOR TYPICAL MASONRY DETAILS.	COORDINATE ELECTRICAL & PLUMBING WORK W/ MEP DRAWINGS	(21) WORK TO BE PERFORMED UNDER SEPARATE COVER. COORDINATE W/ CIVIL DRAWINGS.	
PROVIDE ROUGH OPENING IN EXISTING EXTERIOR MASONRY WALL FOR NEW	REMOVE EXISTING METAL COPING. PULL BACK EXISTING ROOFING SYSTEM TO REMAIN & PROTECT AS REQUIRED. REINSTALL UP NEW 2nd FLOOR WALL	EXISTING GAS METER & REGULATOR ARE TO BE RELOCATED TO SOUTH	
$\lambda$ DOORS & VENTS. COORDINATE WITH PROPOSED PLANS, DOOR SCHEDULE &	14TO REMAIN & PROTECT AS REQUIRED. REINSTALL UP NEW 2nd FLOOR WALL CONSTRUCTION W/ NEW WALL FLASHING	EXTERIOR FACE OF NEW APPARATUS ROOM(RM#100) NEAR THE WEST ELEVATION. COORDINATE WORK W/ FIRE DEPT. TO ENSURE THEIR	
MECHANICAL DRAWINGS. PROVIDE NEW STEEL LINTEL PER STRUCTURAL DRAWINGS AS REQUIRED		CONTINUED UNINTERRUPTED SERVICE. REFER TO "MP&E" DRAWINGS.	

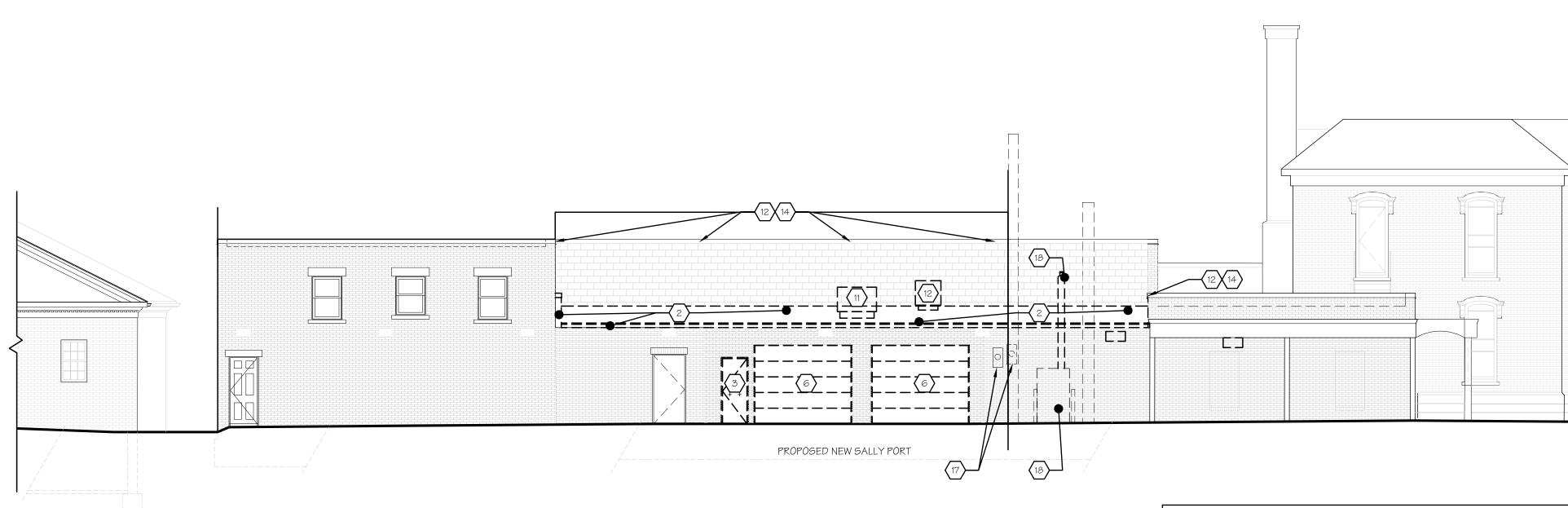


	DEMOLITION GENERAL NOTES	
	<ul> <li>BOOMPRIADURING ENDERSING</li> <li>BOOMPRIADURING AND DE ENVIRO</li> <li>DENDURATE THE EXERTI OF DEMOLITION AND IS NOT TO SE CONDERSE AS A RECORD CARANUSCE OF BOUND CONTINUE THAT WOULD BE APPARENT UNDERSE TO ARCINET CENTRE SOFTWARE OF DEMOLITION AND ENDERSING ADMINISCIP ENDERSING CONTINUES CONTINUES AND ENDERSING ADMINISCIP ENDERSING CONTINUES CONTINUES AND ENDERSING ADMINISCIP ENDERSING CONTINUES ADMINISCIP CONTINUES AND ENDERSING ADMINISCIP ENDERSING CONTINUES THAT WOULD BE APPARENT UNDERSTAND AND ADDITION THAT WOULD BE APPARENT DWILL DEVICITION WITH DEVICITION IN A SYNTTEXALL MARKET PROFELENCE PRESENTED WITH DEVICITION IN A SYNTEMALINE MARKET AND ADDITION AND ADDITION AND ADDITIONAL TO ADDITIONAL ADMINISCIP PROFELENCE PRESENTED WITH DEVICITION IN A SYNTEMALINE MARKET PROFELENCE PRESENTED WITH DEVICITION IN A SYNTEMALINE MARKET PROFELENCE PRESENTED WITH DEVICITION IN A SYNTEMALINE MARKET PROFELENCE PRESENTED WITH DEVICITION IN A SYNTEMALINE GAMPLES BERRICA DEVICE DAMINISCIP PROFELENCE IN WITH DEVICITION OF THE PROFELENCE AND DEVICE DEVICE PROFELENCE IN A MARKET AND ADDITION IN ADDITION OF DUCLEUR PROFELENCE IN A MARKET AND ADDITION IN ADDITION OF DUCLEUR PROFELENCE IN A MARKET ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION ADDITION IN ADDITION OF DUCLEUR PROFELENCE IN A MARKET ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION OF ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION OF ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION OF ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION OF ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION OF ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION OF ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION OF ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION OF ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION OF ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION OF ADDITION OF TRACTORY DEVICE ADDITION OF ADDITION OF ADDIT</li></ul>	<ul> <li>CONTRACTOR TO INSPECT DURING STRUCTURE (INCUTURAL DAWAGE AND DETENDERATION AND STRUCTURE ALL DRY ROTING STORES ANAING, SUI STRUCTURE ALL DRY ROTING SCORES, ARAING, SUI OF THE NEW CONSTRUCTION SCREES AND BULLIONG STRUCTURE IS TO BE REMOVED STRUCTURE BURINNEG CODES, CROINNAGES AN BULLIONG STRUCTURE IS TO BE REMOVED STRUCTURE BURINNEG ROTHER SCHEMANNE BRANCIN, UNDERTMINING OR OTHER SCHEMANNE DEMOLITION, TEMPORARY SUPPORT TO REMAIN UNDISTREED UNIT, INAI, CONSTRUCTION OR PT STRUCTURE IS COMPLETED.</li> <li>UTILITES/MEP - GENERAL (REFER TO MEP DRAWING BENDLITION, TEMPORARY SUPPORT TO REMAIN UNDISTREED UNIT, INAI, CONSTRUCTION RELOCATING STRUCTURE IS COMPLETED.</li> <li>UTILITES/MEP - GENERAL (REFER TO MEP DRAWING BENDLITION, TEMPORARY SUPPORT TO REMAIN UNDISTREED UNIT, INAI, CONSTRUCTION A LOCA UNITIES CORRESPOND WITH THE PROVIDED STRUCTURE IS CONSTRUCTION DOLONGENT, ALON DESIGN TEAM IF EXISTING CONTRACTOR SHALL APPROVENTS FUELD STRUCTURE AND NOT DESIGN TEAM IF EXISTING CONTRACTOR SHALL APPROVINGS.</li> <li>BER DER REMAINS AND TO PROTECT THE FUDULE.</li> <li>WHERE WORK BY THE GENTRAL CONTRACTOR IN PLUMENNO DIVERS (INCLUMEND BUT NOT IMITE ALARMANNG ON THATE REDUKE THE FUDULE.</li> <li>WHERE WORK BY THE GENTRAL CONTRACTOR SHALL APPROVED THE REDUKE SECONTRACTOR SHALL APPROVED AND THE DESTING CONTRACTOR SHALL APPROVED AND CONTRACTOR SHALL APPROVED AND CONTRACTOR SHALL APPROVED AND CONTRACTOR SHALL APPROVED AND CONTRACTOR SHALL APPROVED AND CARACTERISTICS CONDUCTS. A NUMBER WORK BY THE DESTING CONTRACTOR SHALL APPROVED AND CARACTERISTICS CONTRACTOR APPLIANCE AND CARACTERISTICS CONTRACTOR APPLIANCE AND CARACTERISTICS CONTRACTOR AND CARACTER ADARDED SHALL AND CONTRACTOR AND CARACTER ADARDED SHALL AND CONTRACTOR AND CARACTER ADARDED SHALL AND CONTRACTOR SHALL AND CONTRACTOR SHALL AND CARACTER ADARDE ADARDED SHALL AND CONTRACTOR SHALL ADARDED SHALL AND CON</li></ul>

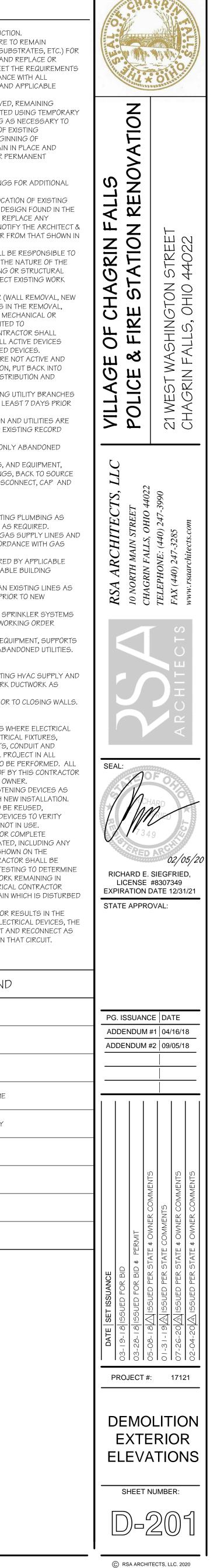


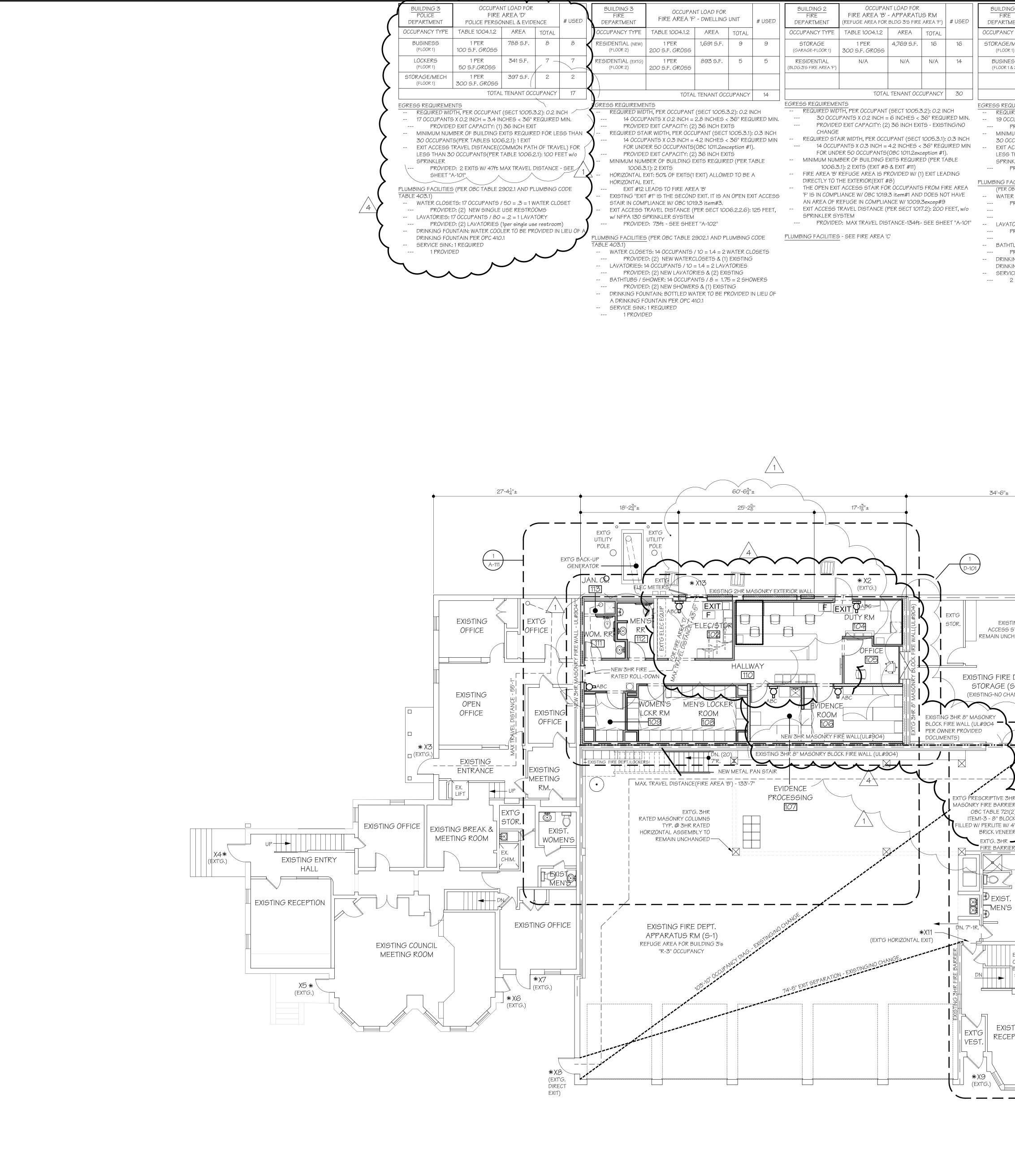






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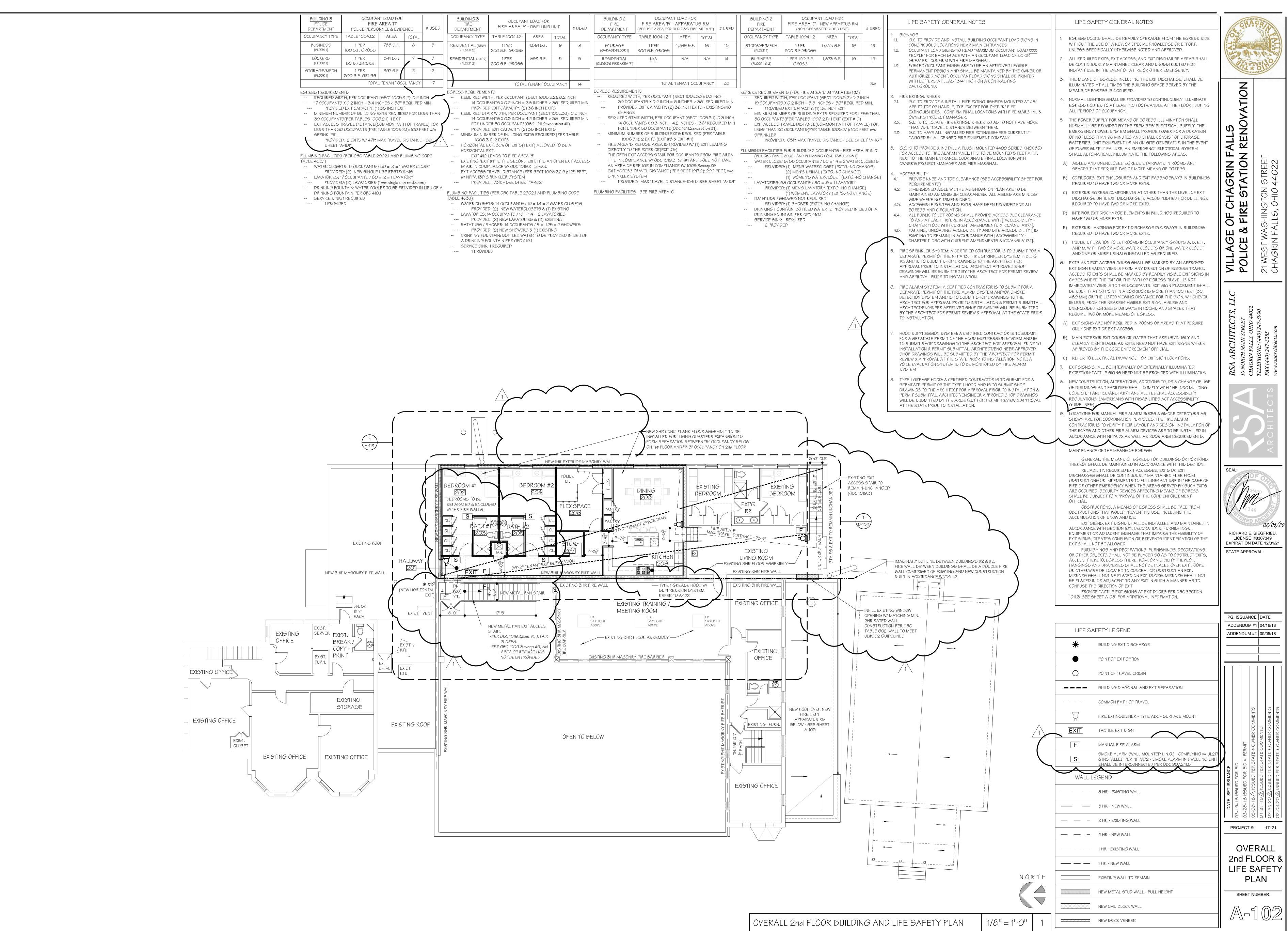




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	NT LOAD FOR AREA 'D' NNEL & EVIDE	ENCE	# USED	BUILDING 3 FIRE DEPARTMENT	OCCUPAN FIRE AREA 'F	NT LOAD FOR ' - DWELLING		# USED	BUILDING 2 FIRE DEPARTMENT	OCCUPA FIRE AREA 'B' (REFUGE AREA FOR			# USED	
TABLE 1004.1.2	AREA	TOTAL		OCCUPANCY TYPE	TABLE 1004.1.2	AREA	TOTAL		OCCUPANCY TYPE	TABLE 1004.1.2	AREA	TOTAL		
1 PER 100 S.F. GR0SS	788 S.F.	8	8	RESIDENTIAL (NEW) (FLOOR 2)	1 PER 200 S.F. GR055	1,691 S.F.	9	9	STORAGE (GARAGE-FLOOR 1)	1 PER 300 S.F. GR0SS	4,769 S.F.	16	16	
1 PER 50 S.F.GROSS	341 S.F.	7 —	7	RESIDENTIAL (EXTG) (FLOOR 2)	1 PER 200 S.F. GROSS	893 S.F.	5	5	RESIDENTIAL (BLDG.3'S FIRE AREA 'F')	N/A	N/A	N/A	14	
1 PER 300 S.F. GROSS	397 S.F. (	2	2											
TOTAL	. TENANT OCC	CUPANCY	17		TOTAI	_ TENANT OCC	CUPANCY	14		TOTA	L TENANT OCC	CUPANCY	30	
( 0.2 INCH = 3.4 IN EXIT CAPACITY: (1) ER OF BUILDING E (PER TABLES 1000 AVEL DISTANCE(C DCCUPANTS(PER 1	UPANT (SECT 1005.3.2): 0.2 INCH				EC - -									
PER OBC TABLE 2	.902.1 AND PL	UMBING	CODE	HORIZONTAL E	LEADS TO FIRE ARE	A 'B'			THE OPEN EXIT	ACCESS STAIR FC	R OCCUPANTS			PL

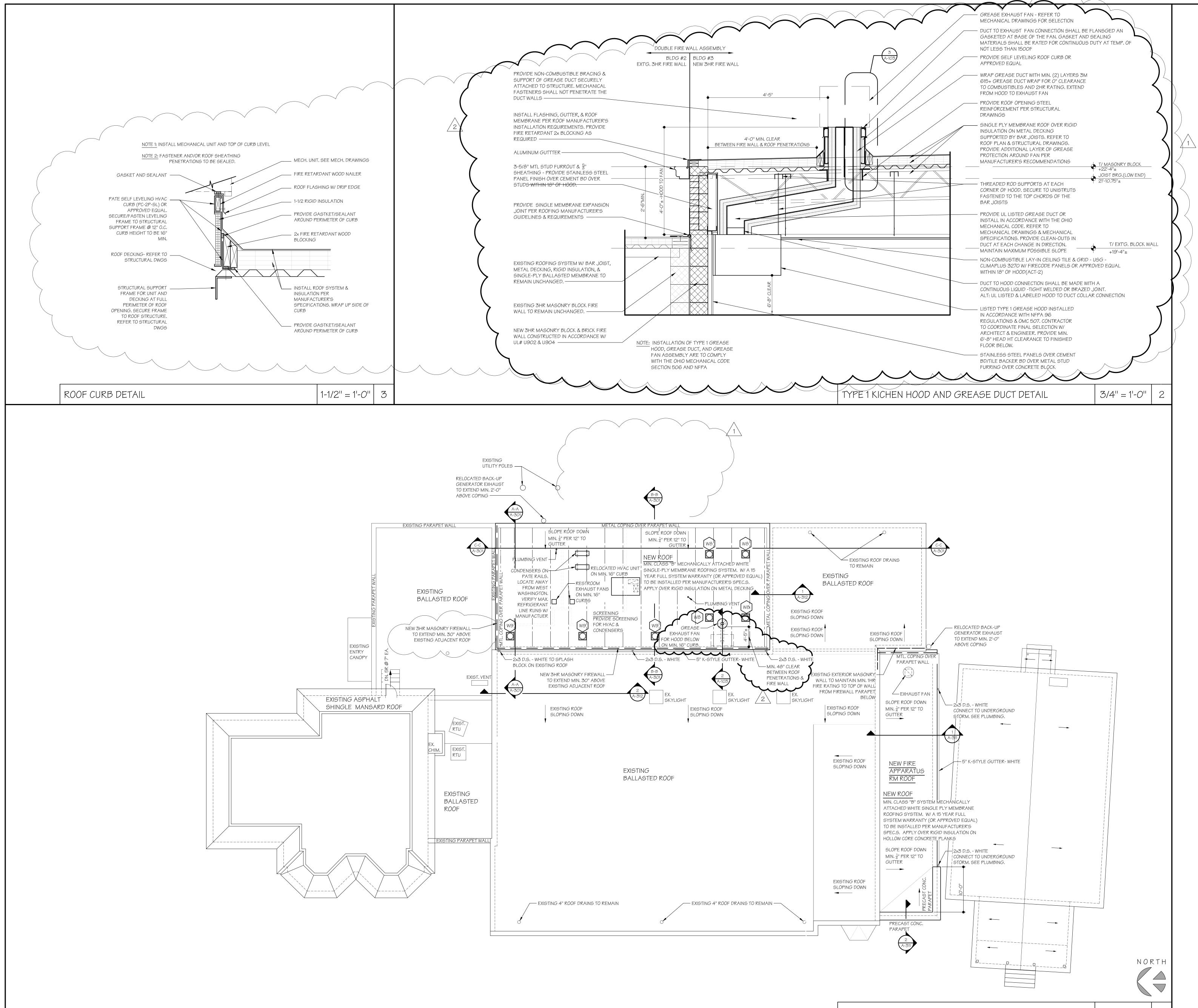
BUILDING 2 FIRE F DEPARTMENT	OCCUPANT LOAD FOR FIRE AREA 'C' - NEW APPAR (NON-SEPARATED MIXED L	RTUS RM	LIFE SAFETY GENERAL NOTES		IFE SAFETY GENERAL NOTES
STORAGE/MECH	ABLE 1004.1.2 AREA 1 PER 5,575 S.F.	TOTAL . 19 19	1. SIGNAGE         1.1. G.C. TO PROVIDE AND INSTALL BUILDING OCCUPANT LOAD SIGNS IN CONSPICUOUS LOCATIONS NEAR MAIN ENTRANCES	WITH	ESS DOORS SHALL BE READILY OPERABLE FROM HOUT THE USE OF A KEY, OR SPECIAL KNOWLEDG
	DO S.F.GROSS PER 100 S.F. 1,873 S.F. GROSS	19 19	1.2.       OCCUPANT LOAD SIGNS TO READ "MAXIMUM OCCUPANT LOAD XXXX         PEOPLE" FOR EACH SPACE WITH AN OCCUPANT LOAD OF 50 OR         GREATER.       CONFIRM WITH FIRE MARSHAL.         1.3.       POSTED OCCUPANT SIGNS ARE TO BE AN APPROVED LEGIBLE	2. ALL	ESS SPECIFICALLY OTHERWISE NOTED AND APPR REQUIRED EXITS, EXIT ACCESS, AND EXIT DISCHA CONTINUOUSLY MAINTAINED CLEAR AND UNOBST
			1.3. POSTED OCCUPANT SIGNS ARE TO BE AN APPROVED LEGIBLE PERMANENT DESIGN AND SHALL BE MAINTAINED BY THE OWNER OR AUTHORIZED AGENT. OCCUPANT LOAD SIGNS SHALL BE PRINTED WITH LETTERS AT LEAST 3/4" HIGH ON A CONTRASTING	INST	MEANS OF EGRESS, INCLUDING THE EXIT DISCH
	(FOR FIRE AREA 'C' APPAR/ PER OCCUPANT (SECT 1005	,	BACKGROUND.	MEA	MINATED AT ALL TIMES THE BUILDING SPACE SE
19 OCCUPANTS X C PROVIDED EX	2.2 INCH = 3.8 INCHES < 36 (IT CAPACITY: (1) 36 INCH EX OF BUILDING EXITS REQUIR	" REQUIRED MIN. (IT	2.1. G.C. TO PROVIDE & INSTALL FIRE EXTINGUISHERS MOUNTED AT 48" AFF TO TOP OF HANDLE, TYP. EXCEPT FOR TYPE "K" FIRE	EGR	MAL LIGHTING SHALL BE PROVIDED TO CONTINUC ESS ROUTES TO AT LEAST 1.0 FOOT-CANDLE AT " PERIODS OF OCCUPANCY.
30 OCCUPANTS(PI EXIT ACCESS TRAV	ER TABLES 1006.2.1): 1 EXIT VEL DISTANCE(COMMON PA CCUPANTS(PER TABLE 1006	(EXIT #10) TH OF TRAVEL) FOR	OWNER'S PROJECT MANAGER. 2.2. G.C. IS TO LOCATE FIRE EXTINGUISHERS SO AS TO NOT HAVE MORE THAN 75ft TRAVEL DISTANCE BETWEEN THEM.	NOR	POWER SUPPLY FOR MEANS OF EGRESS ILLUMII MALLY BE PROVIDED BY THE PREMISES' ELECTRI
SPRINKLER	65ft MAX TRAVEL DISTANCE			OF N BAT	RGENCY POWER SYSTEM SHALL PROVIDE POWER NOT LESS THAN 90 MINUTES AND SHALL CONSIS TERIES, UNIT EQUIPMENT OR AN ON-SITE GENER/
(PER OBC TABLE 290	R BUILDING 2 OCCUPANTS - 02.1 AND PLUMBING CODE TAB 68 OCCUPANTS / 50 = 1.4 =	LE 403.1)	<ol> <li>G.C. IS TO PROVIDE &amp; INSTALL A FLUSH MOUNTED 4400 SERIES KNOX BOX FOR ACCESS TO FIRE ALARM PANEL. IT IS TO BE MOUNTED 5 FEET A.F.F. NEXT TO THE MAIN ENTRANCE. COORDINATE FINAL LOCATION WITH OWNER'S PROJECT MANAGER AND FIRE MARSHAL.</li> </ol>	SHA	OWER SUPPLY FAILURE, AN EMERGENCY ELECTR ALL AUTOMATICALLY ILLUMINATE THE FOLLOWING BLES AND UNENCLOSED EGRESS STAIRWAYS IN
(2	) MENS WATERCLOSET (EX 2) MEN'S URINAL (EXT'GNO ) WOMEN'S WATERCLOSET	CHANGE) (EXT'GNO CHANGE	4. ACCESSIBILITY	SP	PACES THAT REQUIRE TWO OR MORE MEANS OF E
PROVIDED: (1 (1)	DCCUPANTS / 80 = .9 = 1 LAY ) MEN'S LAVATORY (EXT'G1 ) WOMEN'S LAVATORY (EXT'G	NO CHANGE)	REQUIREMENTS) 4.2. DIMENSIONED AISLE WIDTHS AS SHOWN ON PLAN ARE TO BE MAINTAINED AS MINIMUM CLEARANCES. ALL AISLES ARE MIN. 36"	C) EX	QUIRED TO HAVE TWO OR MORE EXITS. TERIOR EGRESS COMPONENTS AT OTHER THAN 1
PROVIDED: (1	VER: NOT REQUIRED ) SHOWER (EXT'GNO CHAN AIN: BOTTLED WATER IS PRO'		WIDE WHERE NOT DIMENSIONED. 4.3. ACCESSIBLE ROUTES AND EXITS HAVE BEEN PROVIDED FOR ALL EGRESS AND CIRCULATION.	RE	BCHARGE UNTIL EXIT DISCHARGE IS ACCOMPLISH QUIRED TO HAVE TWO OR MORE EXITS. FERIOR EXIT DISCHARGE ELEMENTS IN BUILDINGS
SERVICE SINK: 1 RI 2 PROVIDED			<ul> <li>4.4. ALL PUBLIC TOILET ROOMS SHALL PROVIDE ACCESSIBLE CLEARANCE TO AND AT EACH FIXTURE IN ACCORDANCE WITH [ ACCESSIBILTY - CHAPTER 11 OBC WITH CURRENT AMENDMENTS &amp; ICC/ANSI A117.1].</li> <li>4.5. PARKING, UNLOADING ACCESSIBILITY AND SITE ACCESSIBILITY [ IS</li> </ul>	,́нА	VE TWO OR MORE EXITS. TERIOR LANDINGS FOR EXIT DISCHARGE DOORWA
			EXISTING TO REMAIN] IN ACCORDANCE WITH [ACCESSIBILITY - CHAPTER 11 OBC WITH CURRENT AMENDMENTS & ICC/ANSI A117.1].	F) PU	QUIRED TO HAVE TWO OR MORE EXITS. BLIC UTILIZATION TOILET ROOMS IN OCCUPANCY (
			5. FIRE SPRINKLER SYSTEM: A CERTIFIED CONTRACTOR IS TO SUBMIT FOR A SEPARATE PERMIT OF THE NFPA 13D FIRE SPRINKLER SYSTEM IN BLDG #3 AND IS TO SUBMIT SHOP DRAWINGS TO THE ARCHITECT FOR	AN	ID M, WITH TWO OR MORE WATER CLOSETS OR ON ID ONE OR MORE URINALS INSTALLED AS REQUIR S AND EXIT ACCESS DOORS SHALL BE MARKED E
			APPROVAL PRIOR TO INSTALLATION. ARCHITECT APPROVED SHOP DRAWINGS WILL BE SUBMITTED BY THE ARCHITECT FOR PERMIT REVIEW AND APPROVAL PRIOR TO INSTALLATION.	EXIT ACCI	SIGN READILY VISIBLE FROM ANY DIRECTION OF ESS TO EXITS SHALL BE MARKED BY READILY VIS ES WHERE THE EXIT OR THE PATH OF EGRESS TR
			6. FIRE ALARM SYSTEM: A CERTIFIED CONTRACTOR IS TO SUBMIT FOR A SEPARATE PERMIT OF THE FIRE ALARM SYSTEM AND/OR SMOKE DETECTION SYSTEM AND IS TO SUBMIT SHOP DRAWINGS TO THE	IMMI BE S	EDIATELY VISIBLE TO THE OCCUPANTS. EXIT SIGN GUCH THAT NO POINT IN A CORRIDOR IS MORE THA MM) OR THE LISTED VIEWING DISTANCE FOR THE
			ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION & PERMIT SUBMITTAL. ARCHITECT/ENGINEER APPROVED SHOP DRAWINGS WILL BE SUBMITTED BY THE ARCHITECT FOR PERMIT REVIEW & APPROVAL AT THE STATE PRIOR	IS LE UNEI	USTANCE FOR THE SS, FROM THE NEAREST VISIBLE EXIT SIGN. AIS NCLOSED EGRESS STAIRWAYS IN ROOMS AND S UIRE TWO OR MORE MEANS OF EGRESS.
			TO INSTALLATION.	A) EXI	UIRE TWO OR MORE MEANS OF EGRESS. IT SIGNS ARE NOT REQUIRED IN ROOMS OR AREA ILY ONE EXIT OR EXIT ACCESS.
			7. HOOD SUPPRESSION SYSTEM: A CERTIFIED CONTRACTOR IS TO SUBMIT FOR A SEPARATE PERMIT OF THE HOOD SUPPRESSION SYSTEM AND IS TO SUBMIT SHOP DRAWINGS TO THE ARCHITECT FOR APPROVAL PRIOR TO	B) MA CLI	AIN EXTERIOR EXIT DOORS OR GATES THAT ARE O EARLY IDENTIFIABLE AS EXITS NEED NOT HAVE E
			INSTALLATION & PERMIT SUBMITTAL. ARCHITECT/ENGINEER APPROVED SHOP DRAWINGS WILL BE SUBMITTED BY THE ARCHITECT FOR PERMIT REVIEW & APPROVAL AT THE STATE PRIOR TO INSTALLATION. NOTE: A		PROVED BY THE CODE ENFORCEMENT OFFICIAL. FER TO ELECTRICAL DRAWINGS FOR EXIT SIGN LO
			VOICE EVACUATION SYSTEM IS TO BE MONITORED BY FIRE ALARM SYSTEM 8. TYPE 1 GREASE HOOD: A CERTIFIED CONTRACTOR IS TO SUBMIT FOR A	EXCE	SIGNS SHALL BE INTERNALLY OR EXTERNALLY II EPTION: TACTILE SIGNS NEED NOT BE PROVIDED V
34'-6"±	•		SEPARATE PERMIT OF THE TYPE 1 HOOD AND IS TO SUBMIT SHOP DRAWINGS TO THE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION & PERMIT SUBMITTAL. ARCHITECT/ENGINEER APPROVED SHOP DRAWINGS	OF B COD	V CONSTRUCTION, ALTERATIONS, ADDITIONS TO, O BUILDINGS AND FACILITIES SHALL COMPLY WITH E CH. 11 AND ICC/ANSI A117.1 AND ALL FEDERAL A
			WILL BE SUBMITTED BY THE ARCHITECT FOR PERMIT REVIEW & APPROVAL AT THE STATE PRIOR TO INSTALLATION.	GUIL	EULATIONS. (AMERICANS WITH DISABILITIES ACT A DELINES) ATIONS FOR MANUAL FIRE ALARM BOXES & SMO
				SHO CON	WN ARE FOR COORDINATION PURPOSES. THE FIR TRACTOR IS TO VERIFY THEIR LAYOUT AND DESIG BOXES AND OTHER FIRE ALARM DEVICES ARE TO
)				ACCO	ORDANCE WITH NFPA 72 AS WELL AS 2009 ANSI
	EXT G.) 1R	<b>+</b>			NTENANCE OF THE MEANS OF EGRESS GENERAL. THE MEANS OF EGRESS FOR BUILD REOF SHALL BE MAINTAINED IN ACCORDANCE WI
					RELIABILITY. REQUIRED EXIT ACCESSES, EXITS CHARGES SHALL BE CONTINUOUSLY MAINTAINED TRUCTIONS OR IMPEDIMENTS TO FULL INSTANT L
EXISTING EXIT — ACCESS STAIR TO REMAIN UNCHANGED				ARE SHA	OR OTHER EMERGENCY WHEN THE AREAS SERV OCCUPIED. SECURITY DEVICES AFFECTING MEAN ALL BE SUBJECT TO APPROVAL OF THE CODE ENFO
		+1	RELOCATED BACK-UP GENERATOR ON NEW	OBS	ICIAL. OBSTRUCTIONS. A MEANS OF EGRESS SHALL TRUCTIONS THAT WOULD PREVENT ITS USE, INCLU UMULATION OF SNOW AND ICE.
TING FIRE DEPT. TORAGE (S-1)		27-11	CORNER OF EXISTING SIDEWALK INTERSECTION. REFER TO ELECTRICAL DWGS FOR SLAB SPECS/DETAILS	ACC	EXIT SIGNS. EXIT SIGNS SHALL BE INSTALLED ORDANCE WITH SECTION 1011. DECORATIONS, FUR IPMENT OR ADJACENT SIGNAGE THAT IMPAIRS 1
STING-NO CHANGE)				EXIT	SIGNS, CREATES CONFUSION OR PREVENTS IDEN SHALL NOT BE ALLOWED. FURNISHINGS AND DECORATIONS. FURNISHING
ASONRY			IMAGINARY LOT LINE BETWEEN BUILDING'S #2 & #3. FIRE WALL BETWEEN BUILDINGS SHALL BE A DOUBLE FIRE	ACCI	OTHER OBJECTS SHALL NOT BE PLACED SO AS TO ESS THERETO, EGRESS THEREFROM, OR VISIBILI IGINGS AND DRAPERIES SHALL NOT BE PLACED
		*X10	WALL COMPRISED OF EXISTING AND NEW CONSTRUCTION BUILT IN ACCORDANCE W 706.1.2	MIRF BE P	OTHERWISE BE LOCATED TO CONCEAL OR OBSTRL RORS SHALL NOT BE PLACED ON EXIT DOORS. MIR PLACED IN OR ADJACENT TO ANY EXIT IN SUCH A
		(NEW)			FUSE THE DIRECTION OF EXIT PROVIDE TACTILE EXIT SIGNS AT EXIT DOORS P 3. SEE SHEET A-031 FOR ADDITIONAL INFORMAT
SCRIPTIVE 3HR	FIRE WALL (UL#904)		ELEC. PANEL		
Y FIRE BARRIER 3C TABLE 721(2) M1-3 - 8" BLOCK				L	IFE SAFETY LEGEND
// PERLITE W/ 4" BRICK VENEER EXT'G. 3HR	TRAVEL			*	BUILDING EXIT DISCHARGE
	65-4"	I F			POINT OF EXIT OPTION
	-1" OCCUPANCY MAX = TRAVEL) - 65'-4" :IOR WALL			C	
					BUILDING DIAGONAL AND EXIT SEPAR     COMMON PATH OF TRAVEL
	(FIRE AREA 'D'') " (COMMON PATH ( (COMMON PATH C				
	(FIR (CO) W 2HR M/			EXI	
EXTG CLOS. BELOW	Ŭ N	I		F	
2N STAIR	FIRE DEPT APPARTUS	I		S	SMOKE ALARM (WALL MOUNTED U.N.C & INSTALLED PER NFPA72 - SMOKE A SHALL BE INTERCONNECTED PER OBC
				V	VALL LEGEND
	<b>Ъ</b> АВС				
X9 X7G.)		∎     ]			— — 2 HR - EXISTING WALL — — 2 HR - NEW WALL
	/				1 HR - EXISTING WALL
		(1 (A-112)			— — 1 HR - NEW WALL
			NORTH		EXISTING WALL TO REMAIN
					NEW METAL STUD WALL - FULL HEIGH
N/ED ALL	1ct EI AAD DII				NEW CMU BLOCK WALL
UVERALL	IUUR DU		D LIFE SAFETY PLAN   1/8" = 1'-0"   1		

ROM THE EGRESS SIDE EDGE OR EFFORT, PPROVED. CHARGE AREAS SHALL BSTRUCTED FOR EMERGENCY. SCHARGE, SHALL BE NO E SERVED BY THE Ē INUOUSLY ILLUMINATE AT THE FLOOR . DURING JMINATION SHALL ENO CTRICAL SUPPLY. THE U) OWER FOR A DURATION ISIST OF STORAGE NERATOR. IN THE EVENT Ŕ ECTRICAL SYSTEM 'ING AREAS: エフ RIN  $\square$   $\square$ 5 IN ROOMS AND шċ F EGRESS. AGEWAYS IN BUILDINGS Q S d AN THE LEVEL OF EXIT LISHED FOR BUILDINGS С Ш  $(n \ O)$  $\mathbf{N}$ NGS REQUIRED TO \_ വ ОĽ RWAYS IN BUILDINGS প্য Ш ОШ CY GROUPS A, B, E, F, S ONE WATER CLOSET n M QUIRED. \_ VIL POI  $\leq \leq$ ED BY AN APPROVED N OF EGRESS TRAVEL. C 5 Y VISIBLE EXIT SIGNS IN SS TRAVEL IS NOT SIGN PLACEMENT SHALL E THAN 100 FEET (30 R THE SIGN, WHICHEVER AISLES AND D SPACES THAT REAS THAT REQUIRE E OBVIOUSLY AND E EXIT SIGNS WHERE ۱L. N LOCATIONS. Y ILLUMINATED. ED WITH ILLUMINATION. O, OR A CHANGE OF USE TH THE OBC BUILDING L ACCESSIBILITY CT ACCESSIBILITY MOKE DETECTORS AS FIRE ALARM ESIGN. INSTALLATION OF E TO BE INSTALLED IN NSI REQUIREMENTS. JILDINGS OR PORTIONS E WITH THIS SECTION. ITS OR EXIT SEAL NED FREE FROM T USE IN THE CASE OF ERVED BY SUCH EXITS EANS OF EGRESS ENFORCEMENT ALL BE FREE FROM NCLUDING THE ED AND MAINTAINED IN FURNISHINGS, RICHARD E. SIEGFRIED, RS THE VISIBILITY OF LICENSE #8307349 IDENTIFICATION OF THE EXPIRATION DATE 12/31/21 HINGS, DECORATIONS STATE APPROVAL: S TO OBSTRUCT EXITS, BILITY THEREOF. ED OVER EXIT DOORS STRUCT AN EXIT. MIRRORS SHALL NOT H A MANNER AS TO S PER OBC SECTION MATION. PG. ISSUANCE DATE ADDENDUM #1 04/16/18 ADDENDUM #2 09/05/18 PARATION SURFACE MOUNT J.N.O.) - COMPLYING w/ UL2 E ALÂRM IN DWELLING UNI 3C 907.2.11.5 003 03 03 03 PROJECT #: 17121 OVERALL 1st FLOOR & LIFE SAFETY PLAN SHEET NUMBER: -101 



FIRE	CUPANT LOAD FOR FIRE AREA 'D' PERSONNEL & EVIDENCE # USED		BUILDING 3 FIREOCCUPANT LOAD FOR FIRE AREA 'F' - DWELLING UNITBUILDING 2 # USEDOCCUPANT LOAD FOR FIREBUILDING 3 FIREOCCUPANT LOAD FOR FIREFIREOCCUPANT LOAD FOR 				# USED							
BLE 1004.1.2	AREA	TOTAL		OCCUPANCY TYPE	TABLE 1004.1.2	AREA	TOTAL		OCCUPANCY TYPE	TABLE 1004.1.2	AREA	TOTAL		00
1 PER D S.F. GROSS	788 S.F.	8	8	RESIDENTIAL (NEW) (FLOOR 2)	1 PER 200 S.F. GR055	1,691 S.F.	9	9	STORAGE (GARAGE-FLOOR 1)	1 PER 300 S.F. GROSS	4,769 S.F.	16	16	5
1 PER D S.F.GROSS	341 S.F.	7 -	7	RESIDENTIAL (EXTG) (FLOOR 2)	1 PER 200 S.F. GROSS	893 S.F.	5	5	RESIDENTIAL (BLDG.3'S FIRE AREA 'F')	N/A	N/A	N/A	14	
1 PER 0 S.F. GR0SS	397 S.F.	2	2	$\mathbf{)}$										
TOTA	L TENANT OCC	UPANCY	17		TOTAL	_ TENANT OCC	CUPANCY	14		TOTAI	L TENANT OCO	CUPANCY	30	
ER OCCUPANT (SECT 1005.3.2): 0.2 INCH       FREQUIRED WIDTH, PER OCCUPANT (SECT 1005.3.2): 0.2 INCH         2 INCH = 3.4 INCHES < 36" REQUIRED MIN.							EGR     PLU							
R OBC TABLE 2902.1 AND PLUMBING CODE        EXIT #12 LEADS TO FIRE AREA 'B'        THE OPEN EXIT ACCESS STAIR FOR OCCUPANTS FROM FI         THE OPEN EXIT ACCESS STAIR FOR OCCUPANTS FROM FI        EXISTING "EXIT #1" IS THE SECOND EXIT. IT IS AN OPEN EXIT ACCESS        THE OPEN EXIT ACCESS STAIR FOR OCCUPANTS FROM FI         TOCCUPANTS / 50 = .3 = 1 WATER CLOSET       STAIR IN COMPLIANCE W/ OBC 1019.3 item#3.        STAIR IN COMPLIANCE W/ OBC 1019.3 item#3.						T HAVE	<u>r LU</u> 							
	$J \cup U = J \cup U =  W$	IN LN ULU			LINNUL WY UDU IUN	$\mathcal{O}_{\mathcal{O}} \cup \mathcal{O}_{\mathcal{O}} \cup \mathcal{O}_{\mathcal{O}} \cup \mathcal{O}_{\mathcal{O}}$								

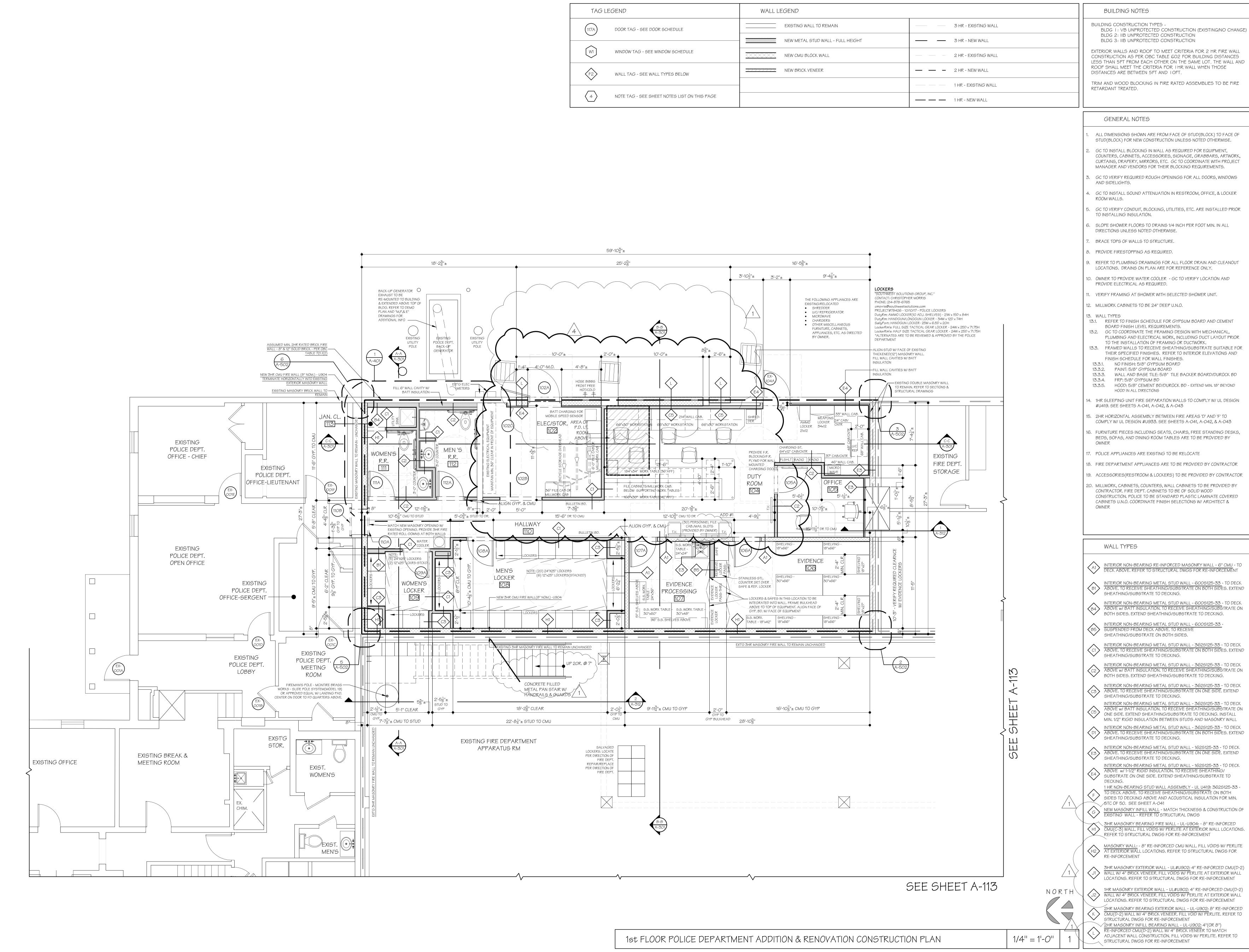
	(P
	W
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OVERALL BUILDING ROOF PLAN

1/8'' = 1' - O''

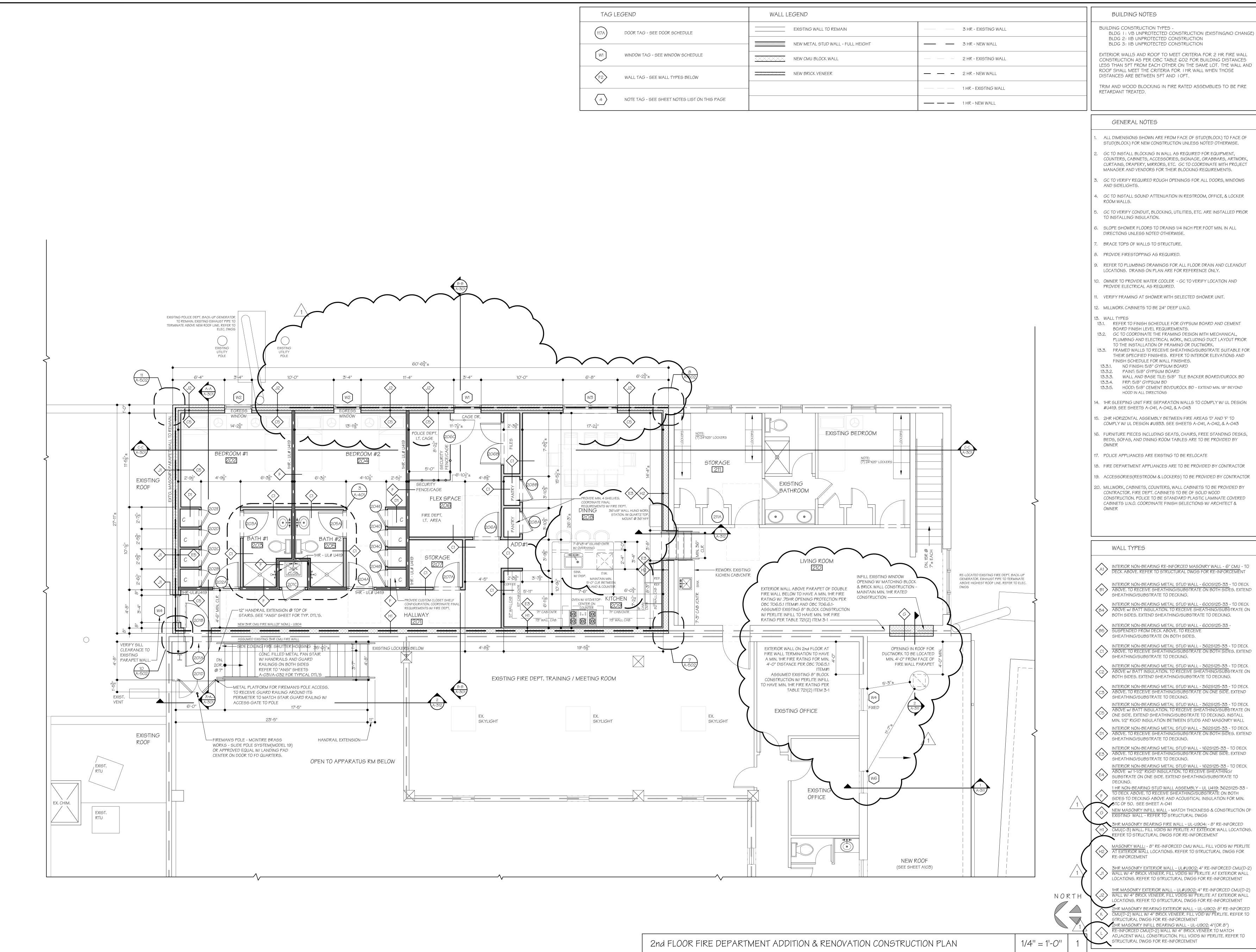




TAG LE	WALL LE	
(117A)	DOOR TAG - SEE DOOR SCHEDULE	
W1	WINDOW TAG - SEE WINDOW SCHEDULE	
F2	WALL TAG - SEE WALL TYPES BELOW	
$\langle 4 \rangle$	NOTE TAG - SEE SHEET NOTES LIST ON THIS PAGE	

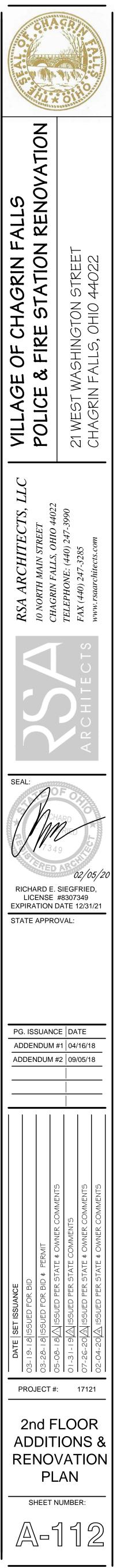
26125-33 - TO DECK BOTH SIDES. EXTEND
25125-33 - TO DECK HING/SUBSTRATE ON O DECKING.
26125-33 - TO DECK ONE SIDE, EXTEND
26125-33 - TO DECK HING/SUBSTRATE ON DECKING. INSTALL D MASONRY WALL 26125-33 - TO DECK BOTH SIDES. EXTEND
25125-33 - TO DECK ONE SIDE, EXTEND
25125-33 - TO DECK BHEATHING/ BUBSTRATE TO
<u>U419</u> : 3629125-33 - RATE ON BOTH ULATION FOR MIN.
& CONSTRUCTION OF
· 8" RE-INFORCED IOR WALL LOCATIONS IENT
ILL VOIDS W/ PERLITE TURAL DWGS FOR
E-INFORCED CMU(D-2) E AT EXTERIOR WALL RE-INFORCEMENT
-INFORCED CMU(D-2) E AT EXTERIOR WALL RE-INFORCEMENT
002: 8" RE-INFORCED 7 PERLITE. REFER TO
4"(OR 8") R TO MATCH PERLITE. REFER TO

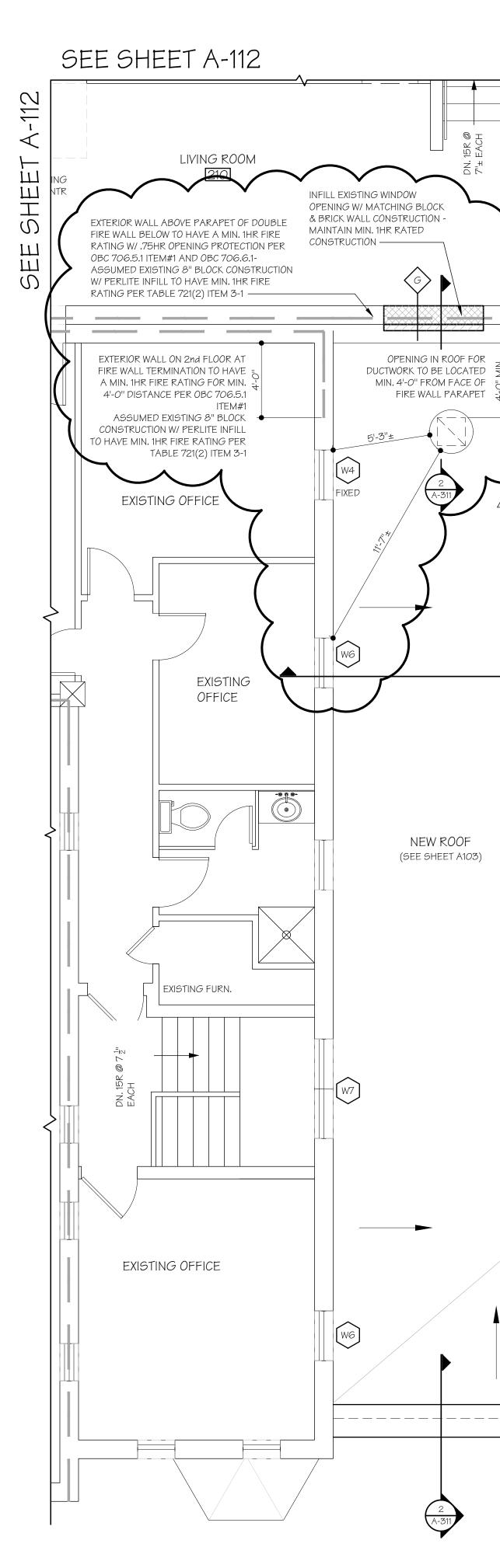




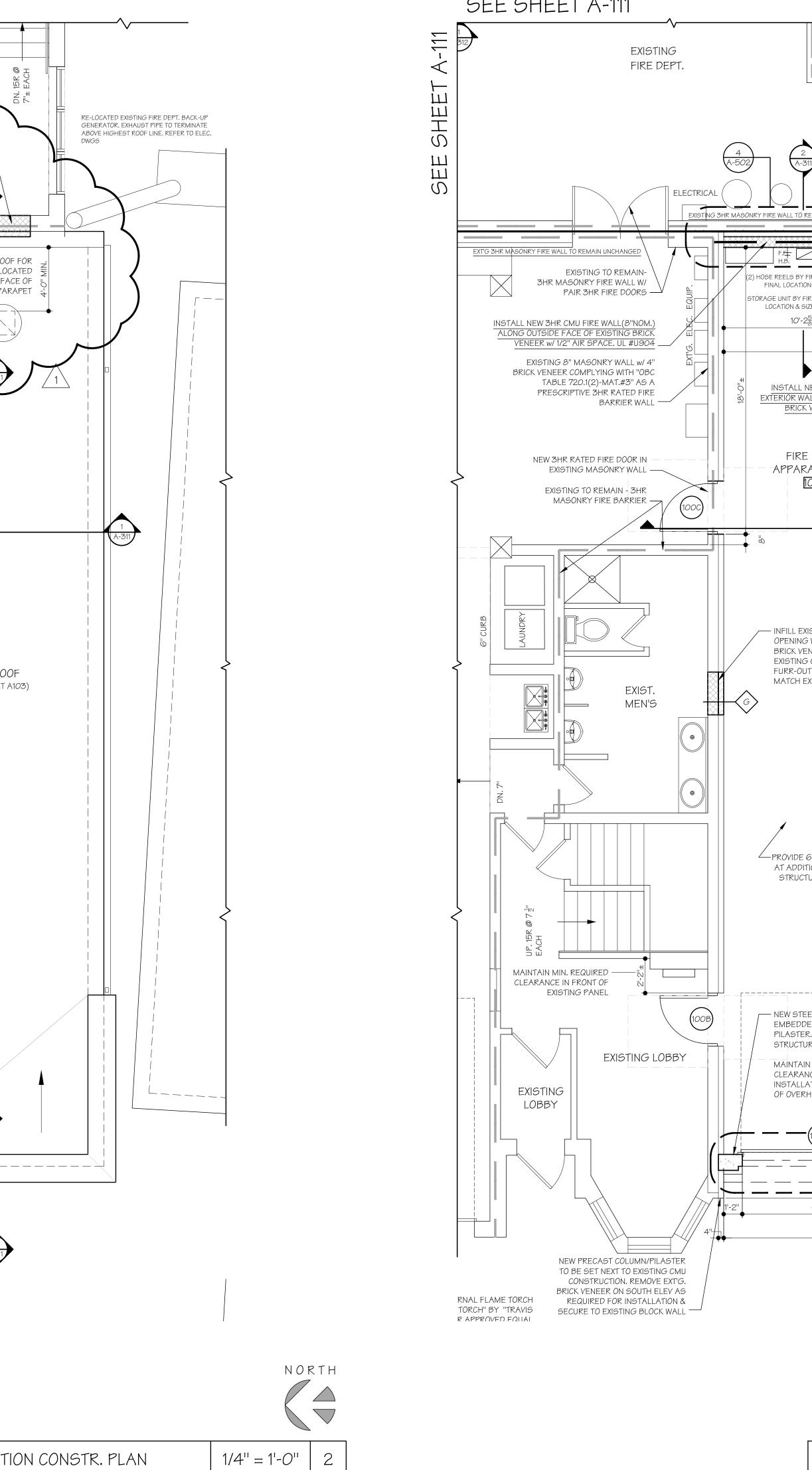
TAG LE	WALL LI	
(117A)	DOOR TAG - SEE DOOR SCHEDULE	
W1	WINDOW TAG - SEE WINDOW SCHEDULE	
F2	WALL TAG - SEE WALL TYPES BELOW	
$\langle 4 \rangle$	NOTE TAG - SEE SHEET NOTES LIST ON THIS PAGE	

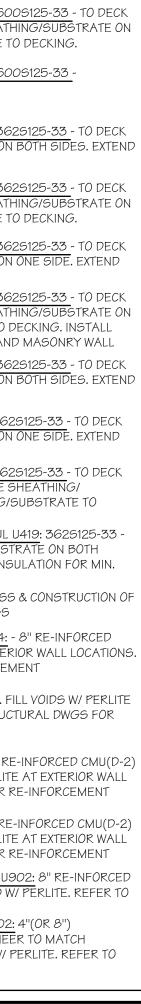
06125-33 -
25125-33 - TO DECK BOTH SIDES. EXTEND
25125-33 - TO DECK HNG/SUBSTRATE ON D DECKING.
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9125-33 - TO DECK ONE SIDE, EXTEND
<u>9125-33</u> - TO DECK HEATHING/ GUBSTRATE TO
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02: 8" RE-INFORCED 7 PERLITE. REFER TO
4"(OR 8") R TO MATCH PERLITE. REFER TO

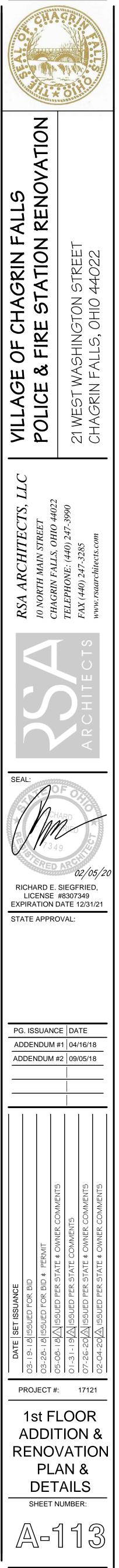


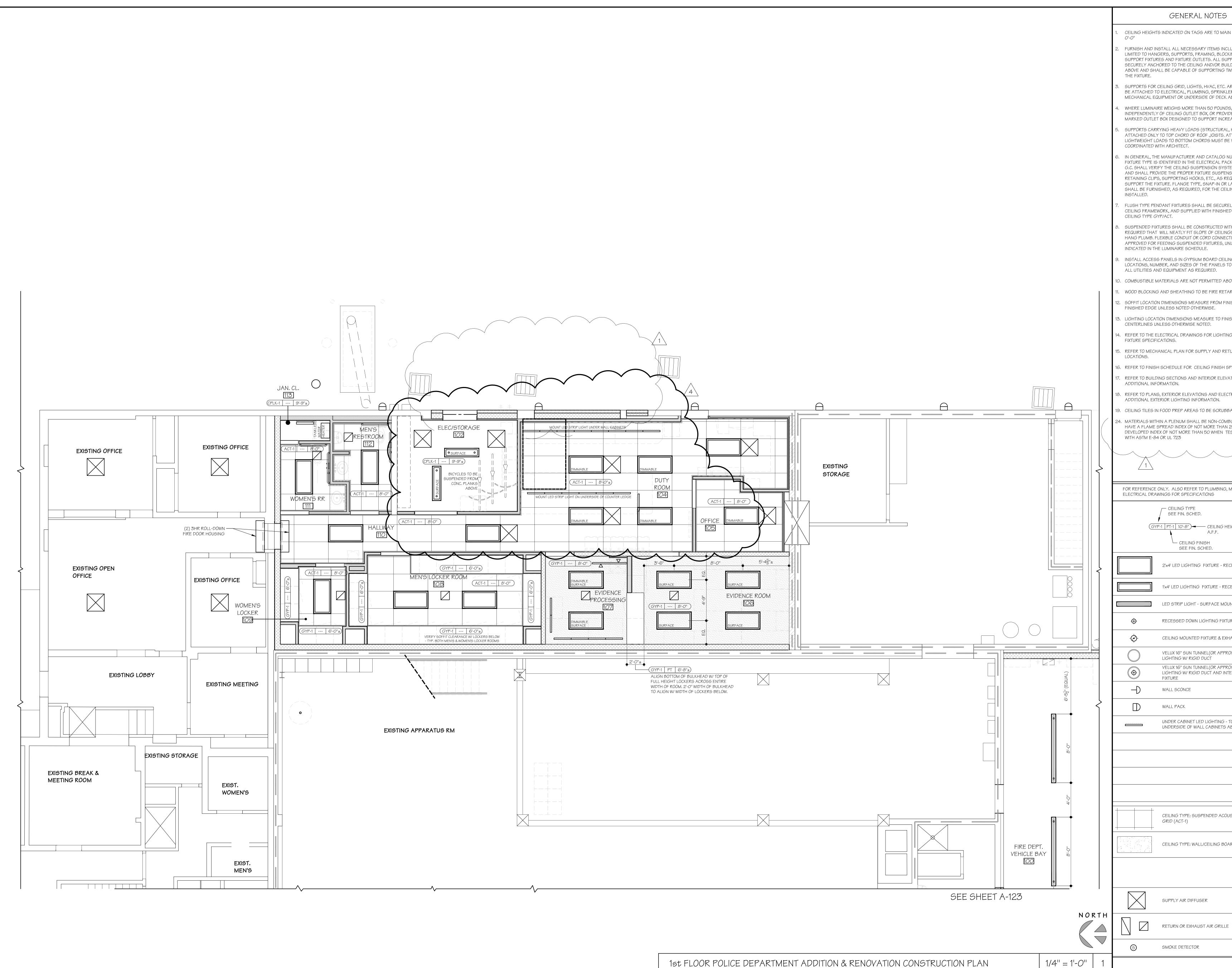


TAG LEGEND WALL LEG	END		BUILDING NOTES
	KISTING WALL TO REMAIN	3 HR - EXISTING WALL	BUILDING CONSTRUCTION TYPES - BLDG I: VB UNPROTECTED CONSTRUCTION (EXISTING/NO CHANGE)
	EW METAL STUD WALL - FULL HEIGHT	3 HR - NEW WALL	BLDG 2: IIB UNPROTECTED CONSTRUCTION BLDG 3: IIB UNPROTECTED CONSTRUCTION EXTERIOR WALLS AND ROOF TO MEET CRITERIA FOR 2 HR FIRE WALL
	EW CMU BLOCK WALL	— — 2 HR - EXISTING WALL	EXTERIOR WALLS AND ROOF TO MEET CRITERIA FOR 2 HR FIRE WALL CONSTRUCTION AS PER OBC TABLE GO2 FOR BUILDING DISTANCES LESS THAN 5FT FROM EACH OTHER ON THE SAME LOT. THE WALL AND ROOF SHALL MEET THE CRITERIA FOR THR WALL WHEN THOSE
F2     WALL TAG - SEE WALL TYPES BELOW	EW BRICK VENEER	— — — 2 HR - NEW WALL — — — — 1 HR - EXISTING WALL	TRIM AND WOOD BLOCKING IN FIRE RATED ASSEMBLIES TO BE FIRE
4 NOTE TAG - SEE SHEET NOTES LIST ON THIS PAGE			RETARDANT TREATED.
			GENERAL NOTES
NEW 3HR RATED FIRE DOOR IN EXISTING TO REMAIN - 3HR MASORRY FIRE BARRER BOD BOD BOD BOD BOD BOD BOD BOD BOD BO	CR SLAB CR	EPT. BACK-UP	<list-item><ul> <li>A. LANDENDRICH DAY ALL TOXY ALL CLOUNDER CLARK (A PARAMETER ALL PROCESSING AND ALL CLARK ALL CLUUNDER CLARK (A PARAMETER ALL CLUUNDER CLARK (A PARAM</li></ul></list-item>
1e	t FLOOR FIRE DEPT. ADDITION	CONSTR. PLAN 1/4" = 1	-O'' 1 RE-INFORCED CMU(D-2) WALL W/ 4" BRICK VENEER TO MATCH ADJACENT WALL CONSTRUCTION. FILL VOIDS W/ PERLITE. REFER TO STRUCTURAL DWGS FOR RE-INFORCEMENT





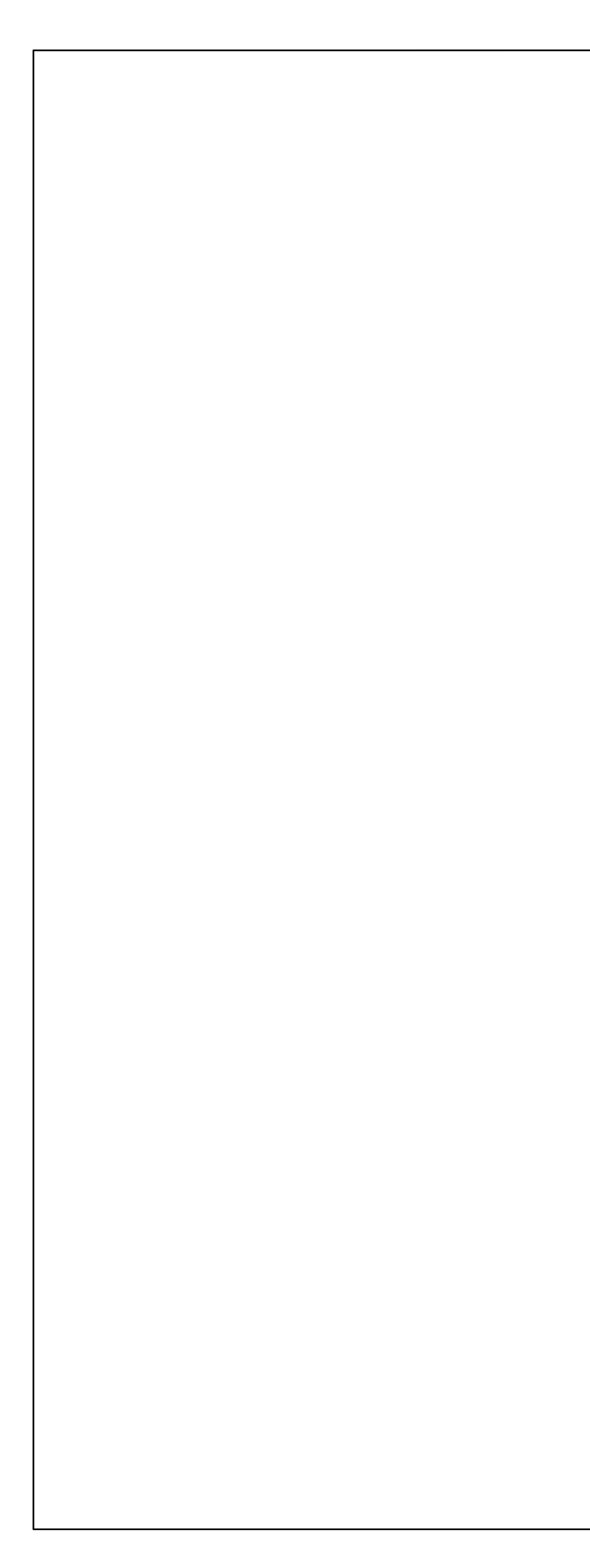


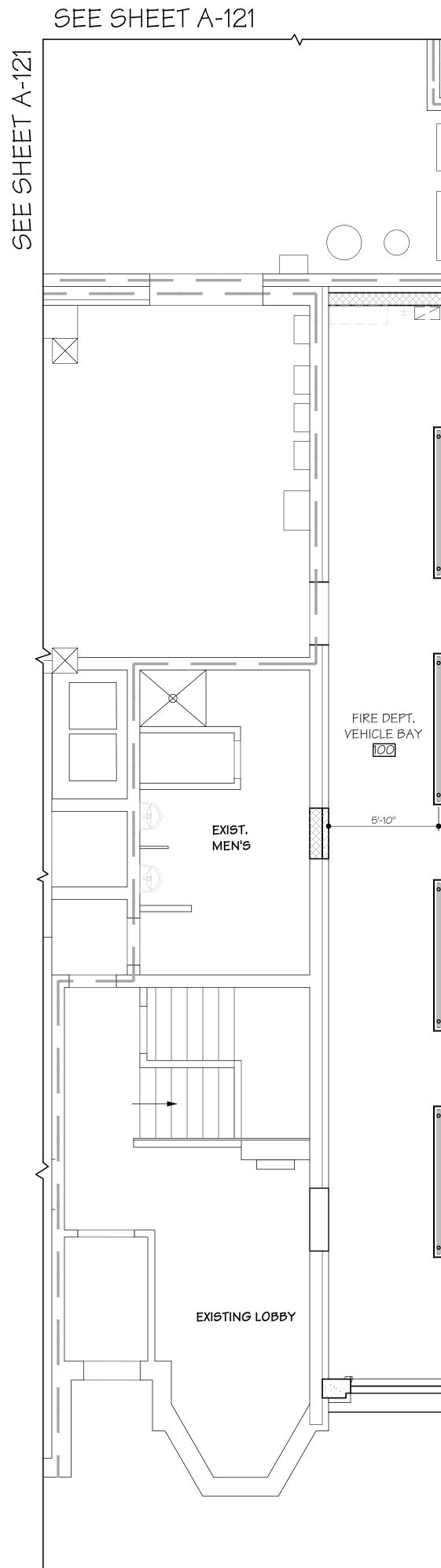


		_							
IN FINISH FLOOR LEVEL	ALL REAL		CH.	AC	R		C.A.		
CLUDING BUT NOT CKING, AND FITTINGS TO IPPORTS SHALL BE ILDING CONSTRUCTION TWICE THE WEIGHT OF	ALAIN					· · · · · · · · · · · · · · · · · · ·	LLS		
ARE NOT PERMITTED TO ER LINE PIPING, ABOVE.			ION						
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L, HVAC, ETC) TO BE ATTACHMENTS OF VE VERIFIED AND			X E N C						
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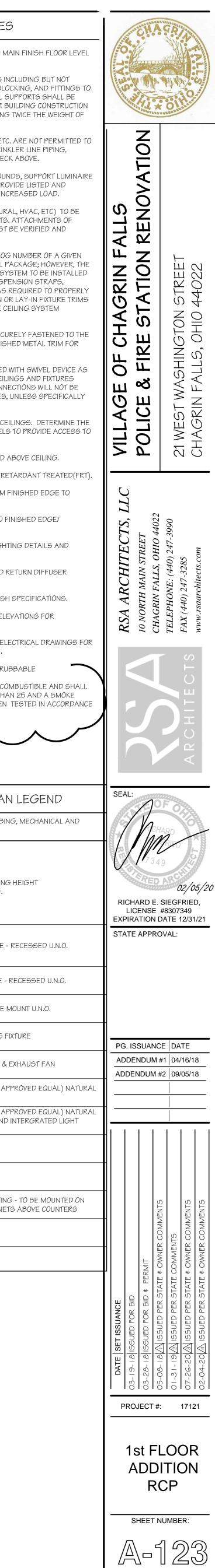


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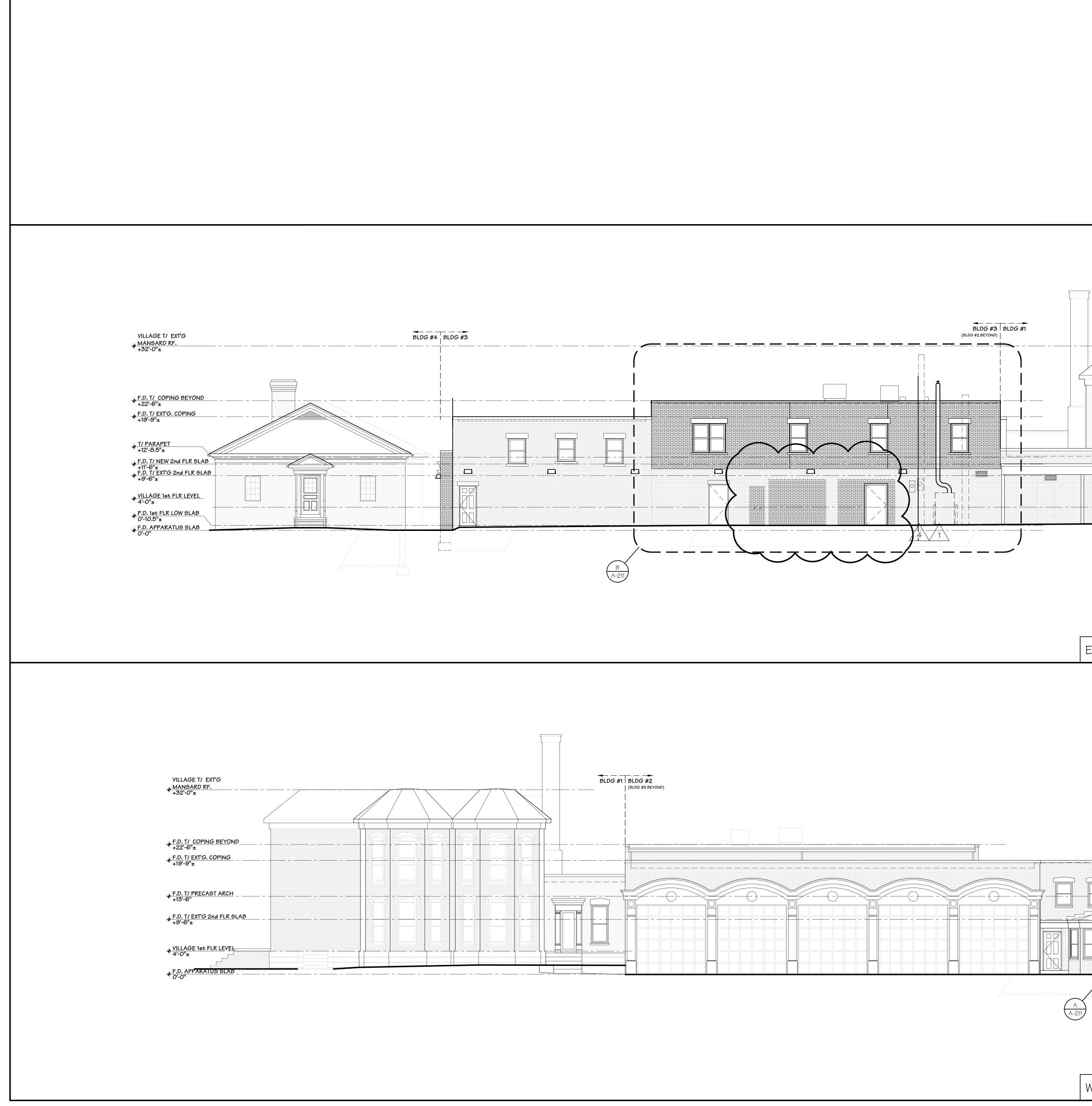




	GENERAL NOTES
	1. CEILING HEIGHTS INDICATED ON TAGS ARE TO MAIN F O'-O''
	2. FURNISH AND INSTALL ALL NECESSARY ITEMS INCLUD LIMITED TO HANGERS, SUPPORTS, FRAMING, BLOCKING SUPPORT FIXTURES AND FIXTURE OUTLETS. ALL SUPPO SECURELY ANCHORED TO THE CEILING AND/OR BUILDI ABOVE AND SHALL BE CAPABLE OF SUPPORTING TWO
	<ul> <li>THE FIXTURE.</li> <li>3. SUPPORTS FOR CEILING GRID, LIGHTS, HVAC, ETC. ARE BE ATTACHED TO ELECTRICAL, PLUMBING, SPRINKLER MECHANICAL EQUIPMENT OR UNDERSIDE OF DECK ABO</li> </ul>
	4. WHERE LUMINAIRE WEIGHS MORE THAN 50 POUNDS, S INDEPENDENTLY OF CEILING OUTLET BOX, OR PROVIDE MARKED OUTLET BOX DESIGNED TO SUPPORT INCREAS
	5. SUPPORTS CARRYING HEAVY LOADS (STRUCTURAL, HY ATTACHED ONLY TO TOP CHORD OF ROOF JOISTS. ATT/ LIGHTWEIGHT LOADS TO BOTTOM CHORDS MUST BE VE COORDINATED WITH ARCHITECT.
	6. IN GENERAL, THE MANUFACTURER AND CATALOG NUM FIXTURE TYPE IS IDENTIFIED IN THE ELECTRICAL PACKA G.C. SHALL VERIFY THE CEILING SUSPENSION SYSTEM AND SHALL PROVIDE THE PROPER FIXTURE SUSPENSIO RETAINING CLIPS, SUPPORTING HOOKS, ETC., AS REQU SUPPORT THE FIXTURE. FLANGE TYPE, SNAP-IN OR LAY SHALL BE FURNISHED, AS REQUIRED, FOR THE CEILING INSTALLED.
	7. FLUSH TYPE PENDANT FIXTURES SHALL BE SECURELY CEILING FRAMEWORK, AND SUPPLIED WITH FINISHED N
	<ul> <li>CEILING TYPE GYP/ACT.</li> <li>8. SUSPENDED FIXTURES SHALL BE CONSTRUCTED WITH REQUIRED THAT WILL NEATLY FIT SLOPE OF CEILINGS HANG PLUMB. FLEXIBLE CONDUIT OR CORD CONNECTIO APPROVED FOR FEEDING SUGPENDED FIXTURES. UNIT</li> </ul>
	<ul> <li>APPROVED FOR FEEDING SUSPENDED FIXTURES, UNLE INDICATED IN THE LUMINAIRE SCHEDULE.</li> <li>9. INSTALL ACCESS PANELS IN GYPSUM BOARD CEILING LOCATIONS, NUMBER, AND SIZES OF THE PANELS TO P</li> </ul>
	ALL UTILITIES AND EQUIPMENT AS REQUIRED. 10. COMBUSTIBLE MATERIALS ARE NOT PERMITTED ABOV 11. WOOD BLOCKING AND SHEATHING TO BE FIRE RETARD
	<ol> <li>SOFFIT LOCATION DIMENSIONS MEASURE FROM FINISH FINISHED EDGE UNLESS NOTED OTHERWISE.</li> <li>LIGHTING LOCATION DIMENSIONS MEASURE TO FINISH</li> </ol>
	<ol> <li>IOTTING LOCATION DIMENSIONS MEASURE TO THNST CENTERLINES UNLESS OTHERWISE NOTED.</li> <li>REFER TO THE ELECTRICAL DRAWINGS FOR LIGHTING I FIXTURE SPECIFICATIONS.</li> </ol>
	15. REFER TO MECHANICAL PLAN FOR SUPPLY AND RETUR LOCATIONS.
	<ol> <li>REFER TO FINISH SCHEDULE FOR CEILING FINISH SPE</li> <li>REFER TO BUILDING SECTIONS AND INTERIOR ELEVATION</li> </ol>
	ADDITIONAL INFORMATION. 18. REFER TO PLANS, EXTERIOR ELEVATIONS AND ELECTRI ADDITIONAL EXTERIOR LIGHTING INFORMATION.
	19. CEILING TILES IN FOOD PREP AREAS TO BE SCRUBBAE 24. MATERIALS WITHIN A PLENUM SHALL BE NON-COMBUS
	HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TEST WITH ASTM E-84 OR UL 723
	REFLECTED CEILING PLAN LE
	FOR REFERENCE ONLY. ALSO REFER TO PLUMBING, M ELECTRICAL DRAWINGS FOR SPECIFICATIONS C CEILING TYPE
	GYP-1 PT-1 10'-8" CEILING HEIC
-4- 0-14	CEILING FINISH SEE FIN. SCHED.
	2'x4' LED LIGHTING FIXTURE - RECE
	1'x4' LED LIGHTING FIXTURE - RECE
	LED STRIP LIGHT - SURFACE MOUN
	CEILING MOUNTED FIXTURE & EXHA
	LIGHTING W/ RIGID DUCT VELUX 16" SUN TUNNEL(OR APPROV LIGHTING W/ RIGID DUCT AND INTER
	FIXTURE WALL SCONCE
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1st FLOOR FIRE DEPT. ADDITION CONSTR. PLAN $1/4" = 1'-0"$ 1	



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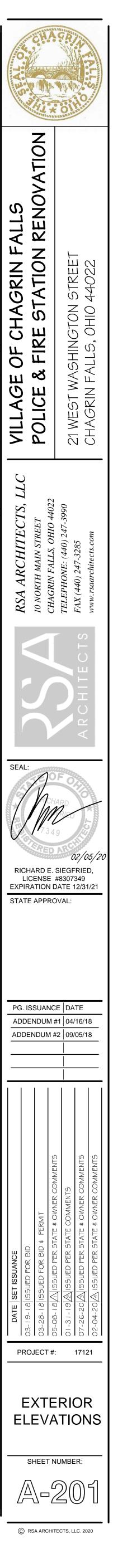


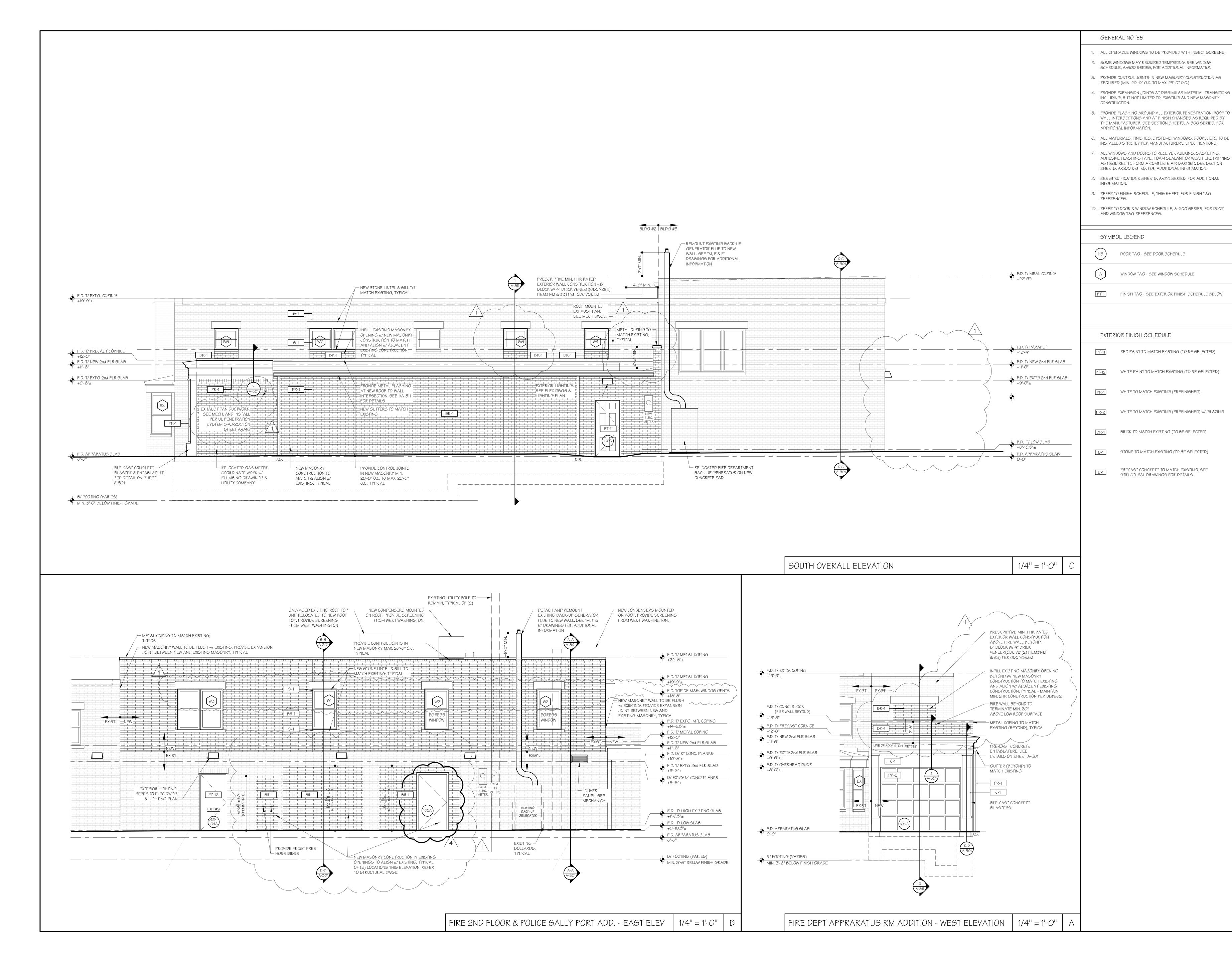
		G	ENERAL NOTES
		2. SO SC 3. PRO REA 4. PRO INC CO 5. PRO WA THI AD 6. ALL	L OPERABLE WINDOWS TO BE PROVIDED WITH INSECT SCREENS ME WINDOWS MAY REQUIRED TEMPERING. SEE WINDOW HEDULE, A-600 SERIES, FOR ADDITIONAL INFORMATION. OVIDE CONTROL JOINTS IN NEW MASONRY CONSTRUCTION AS QUIRED (MIN. 20'-0" O.C. TO MAX. 25'-0" O.C.) OVIDE EXPANSION JOINTS AT DISSIMILAR MATERIAL TRANSITIO CLUDING, BUT NOT LIMITED TO, EXISTING AND NEW MASONRY NSTRUCTION. OVIDE FLASHING AROUND ALL EXTERIOR FENESTRATION, ROOF ALL INTERSECTIONS AND AT FINISH CHANGES AS REQUIRED BY E MANUFACTURER. SEE SECTION SHEETS, A-300 SERIES, FOR DITIONAL INFORMATION.
		7. ALI AD AS SH 8. SE INF 9. REI REI 10. REI	L WINDOWS AND DOORS TO RECEIVE CAULKING, GASKETING, HESIVE FLASHING TAPE, FOAM SEALANT OR WEATHERSTRIPPII REQUIRED TO FORM A COMPLETE AIR BARRIER. SEE SECTION EETS, A-300 SERIES, FOR ADDITIONAL INFORMATION. E SPECIFICATIONS SHEETS, A-010 SERIES, FOR ADDITIONAL FORMATION. FER TO FINISH SCHEDULE, THIS SHEET, FOR FINISH TAG FERENCES. FER TO DOOR & WINDOW SCHEDULE, A-600 SERIES, FOR DOOR D WINDOW TAG REFERENCES.
		Sì	IMBOL LEGEND
			DOOR TAG - SEE DOOR SCHEDULE
		Â	WINDOW TAG - SEE WINDOW SCHEDULE
		PT-1	FINISH TAG - SEE EXTERIOR FINISH SCHEDULE BELOW
		EX	TERIOR FINISH SCHEDULE
		PT-11	RED PAINT TO MATCH EXISTING (TO BE SELECTED)
		PT-12	WHITE PAINT TO MATCH EXISTING (TO BE SELECTED)
		PR-1	WHITE TO MATCH EXISTING (PREFINISHED)
		PR-2	WHITE TO MATCH EXISTING (PREFINISHED) w/ GLAZING
		BR-1	BRICK TO MATCH EXISTING (TO BE SELECTED)
		5-1	STONE TO MATCH EXISTING (TO BE SELECTED)
		C-1	PRECAST CONCRETE TO MATCH EXISTING. SEE STRUCTURAL DRAWINGS FOR DETAILS
		2	
EAST OVERALL ELEVATION	1/8" = 1'-0"	В	
BLDG #2 (BLDG #3 BEYOND)			
WEST OVERALL ELEVATION	1/8" = 1'-0"	A	

AR MATERIAL TRANSITIONS 3 AND NEW MASONRY

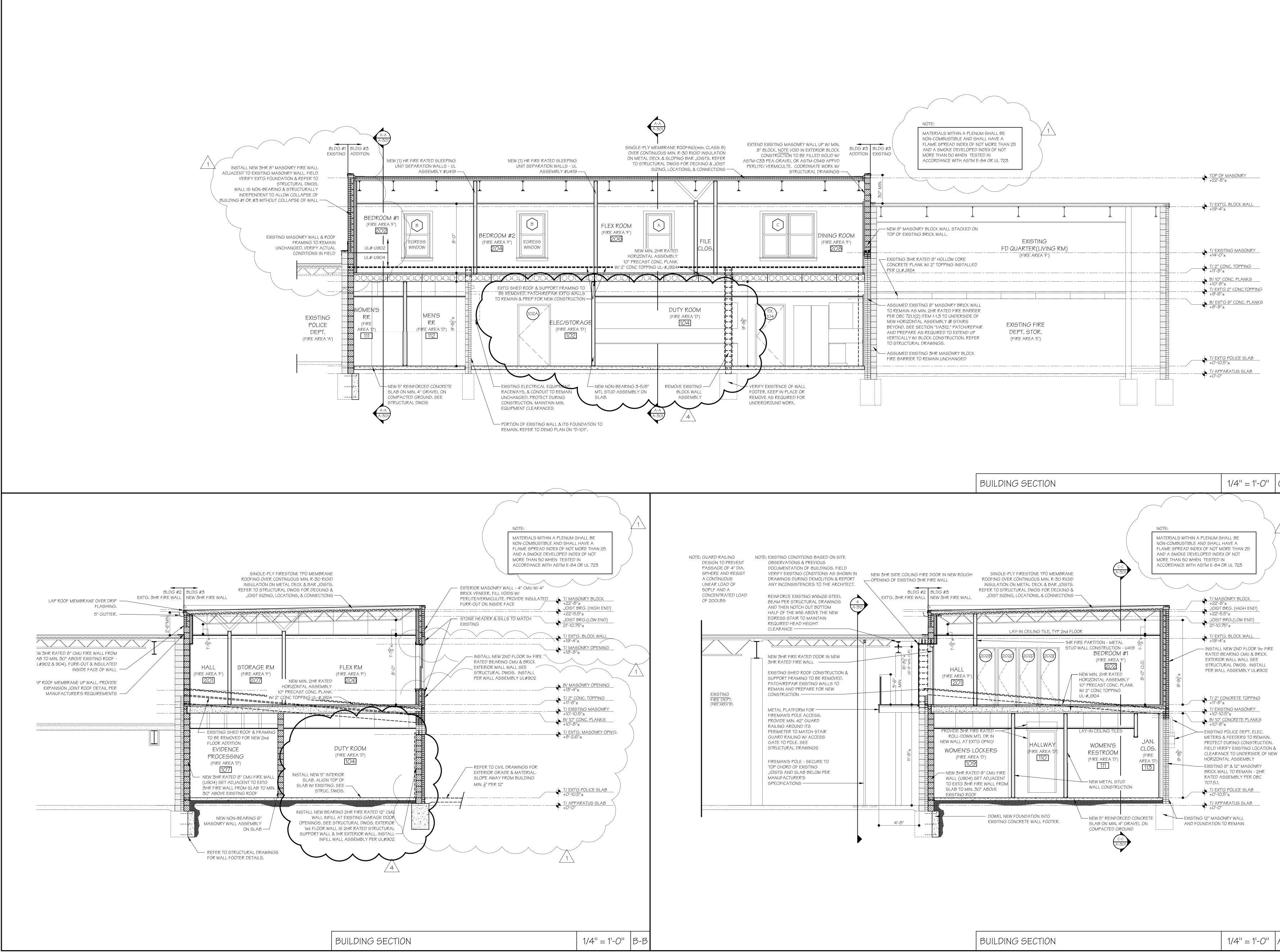
OR FENESTRATION, ROOF TO ANGES AS REQUIRED BY ETS, A-300 SERIES, FOR

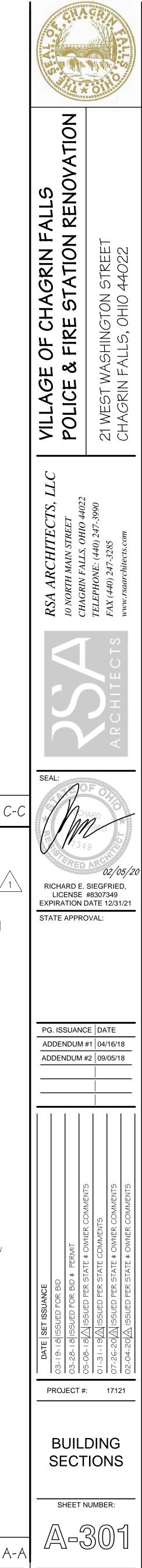
NDOWS, DOORS, ETC. TO BE R'S SPECIFICATIONS. AULKING, GASKETING, ANT OR WEATHERSTRIPPING BARRIER. SEE SECTION L INFORMATION.





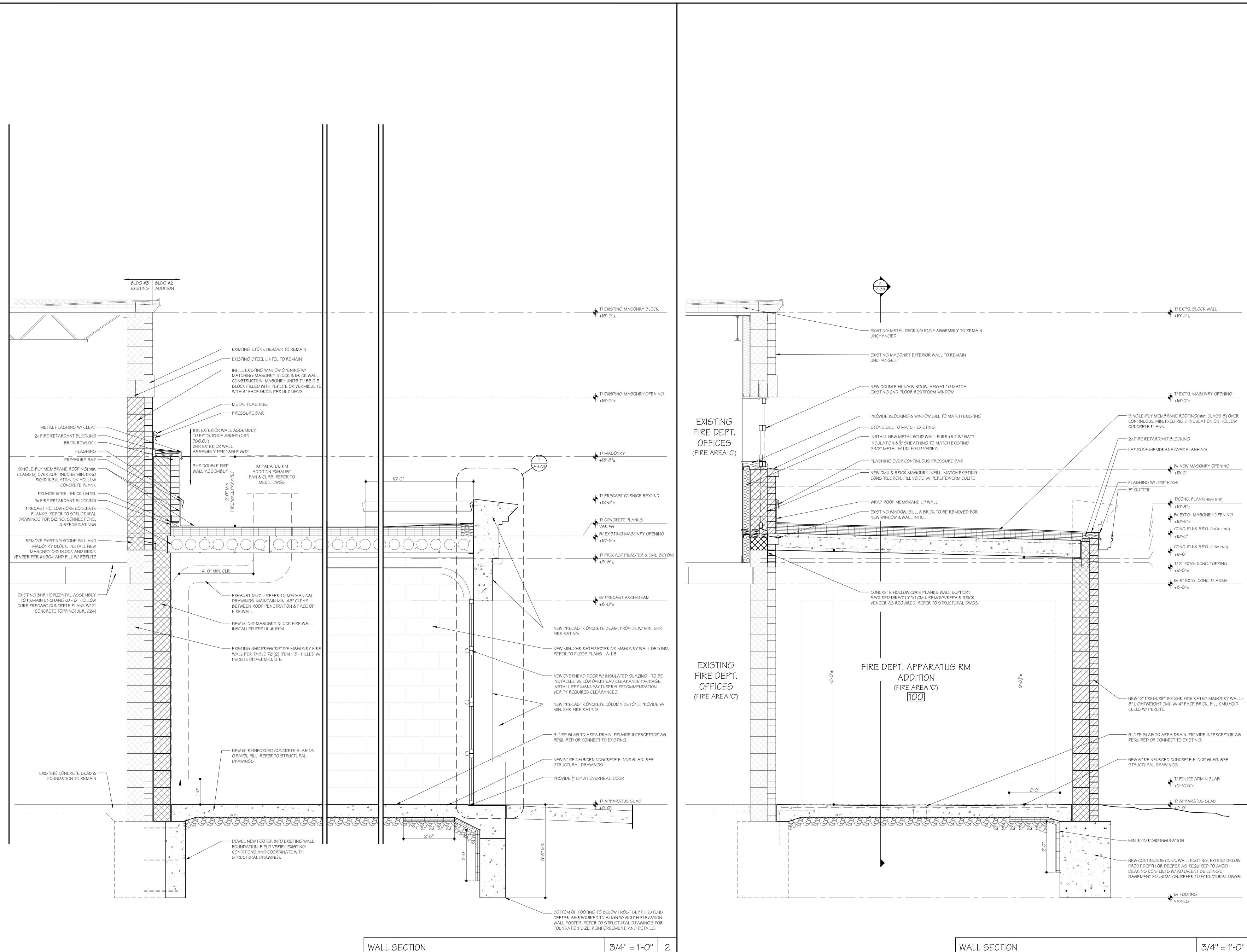






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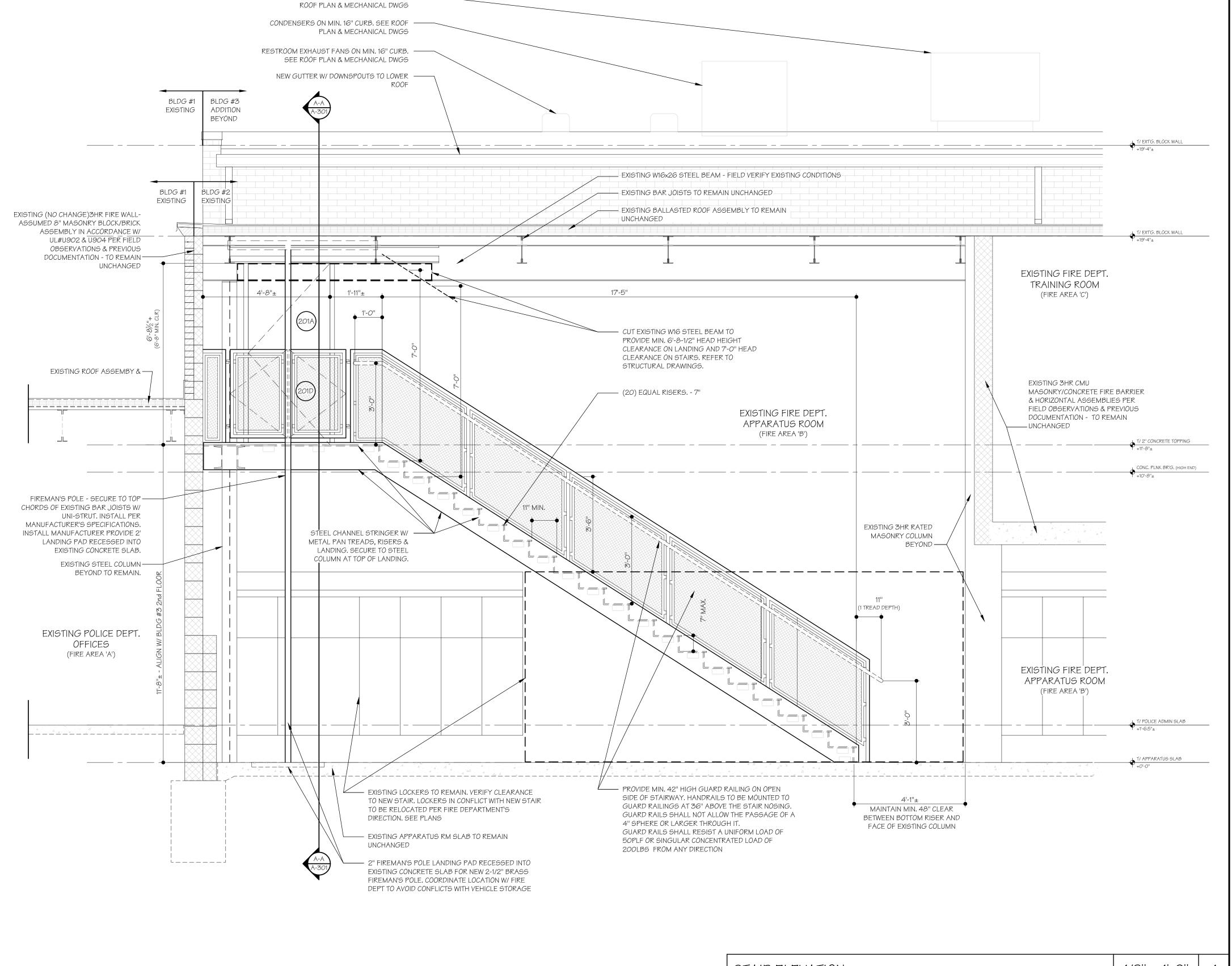
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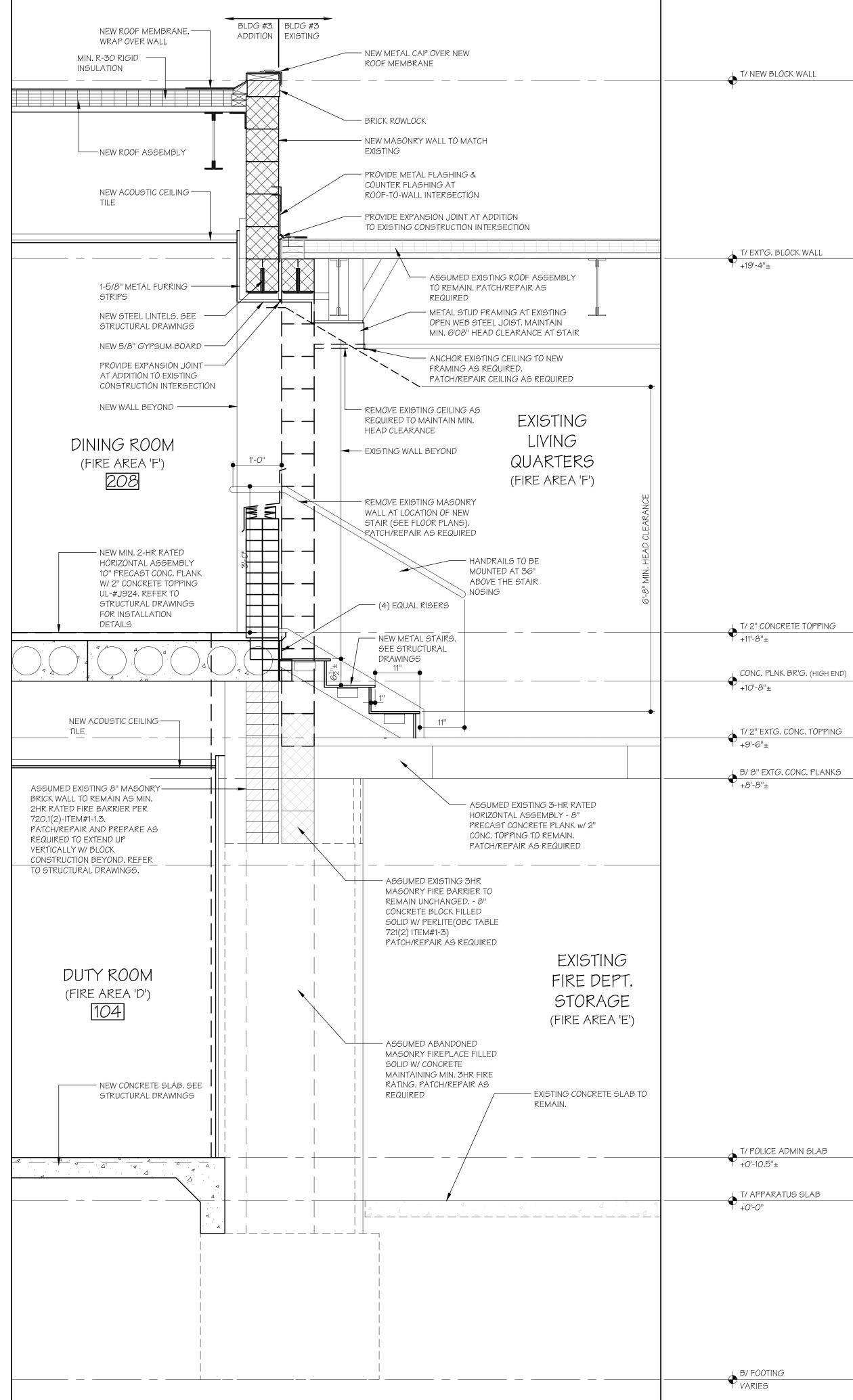


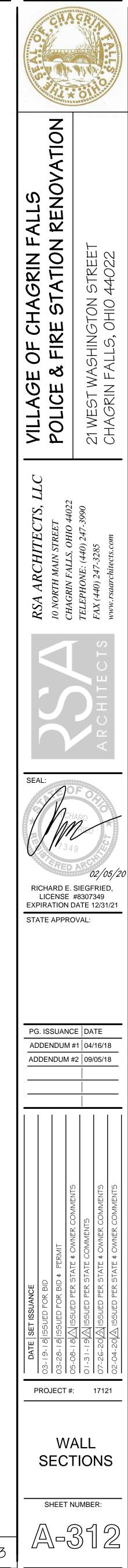
RELOCATED HVAC UNIT ON MIN. 16" CURB. SEE -----

STAIR ELEVATION

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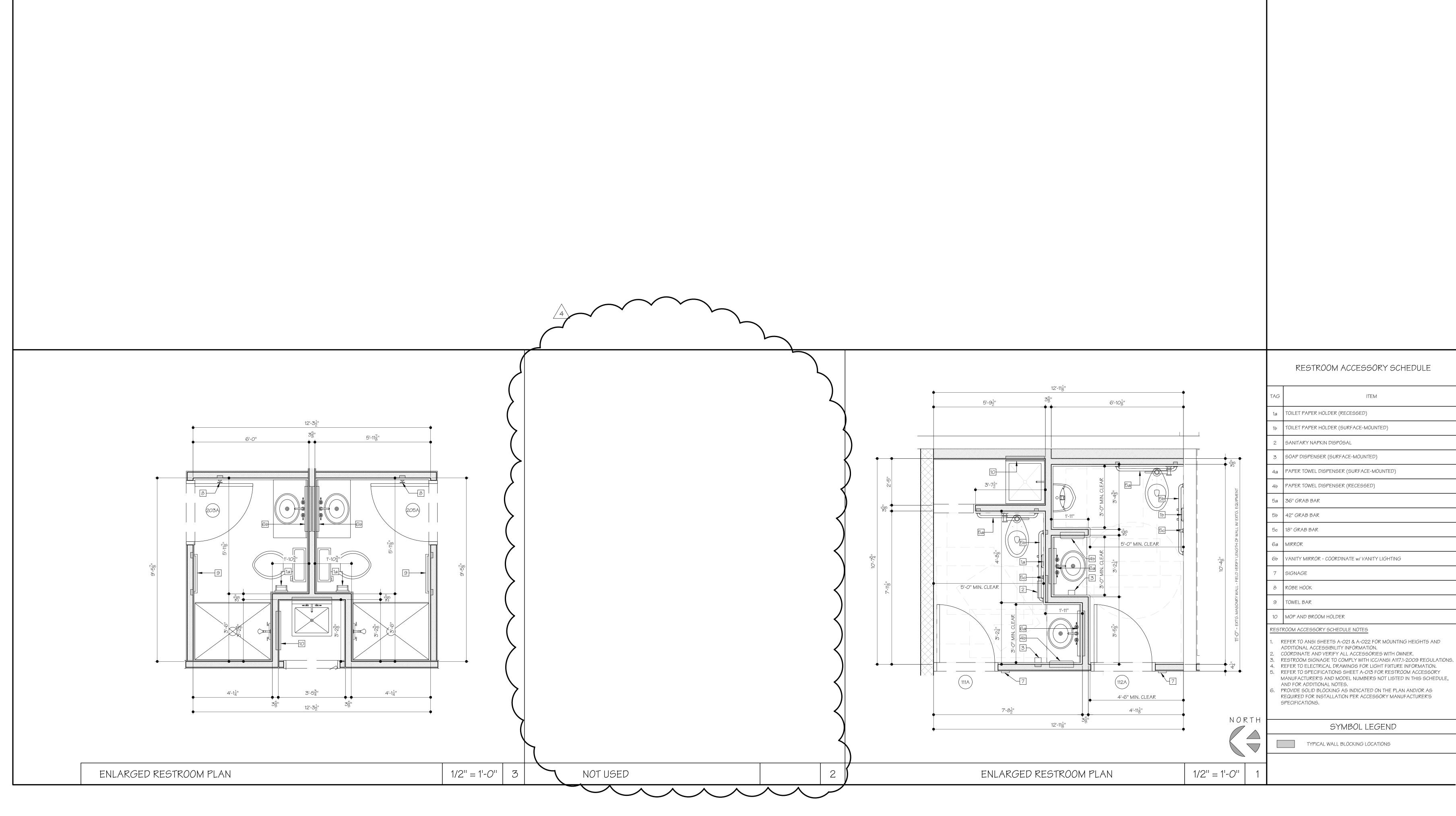
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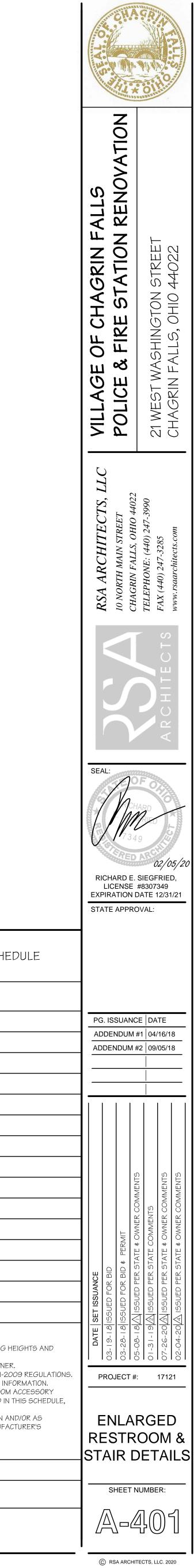


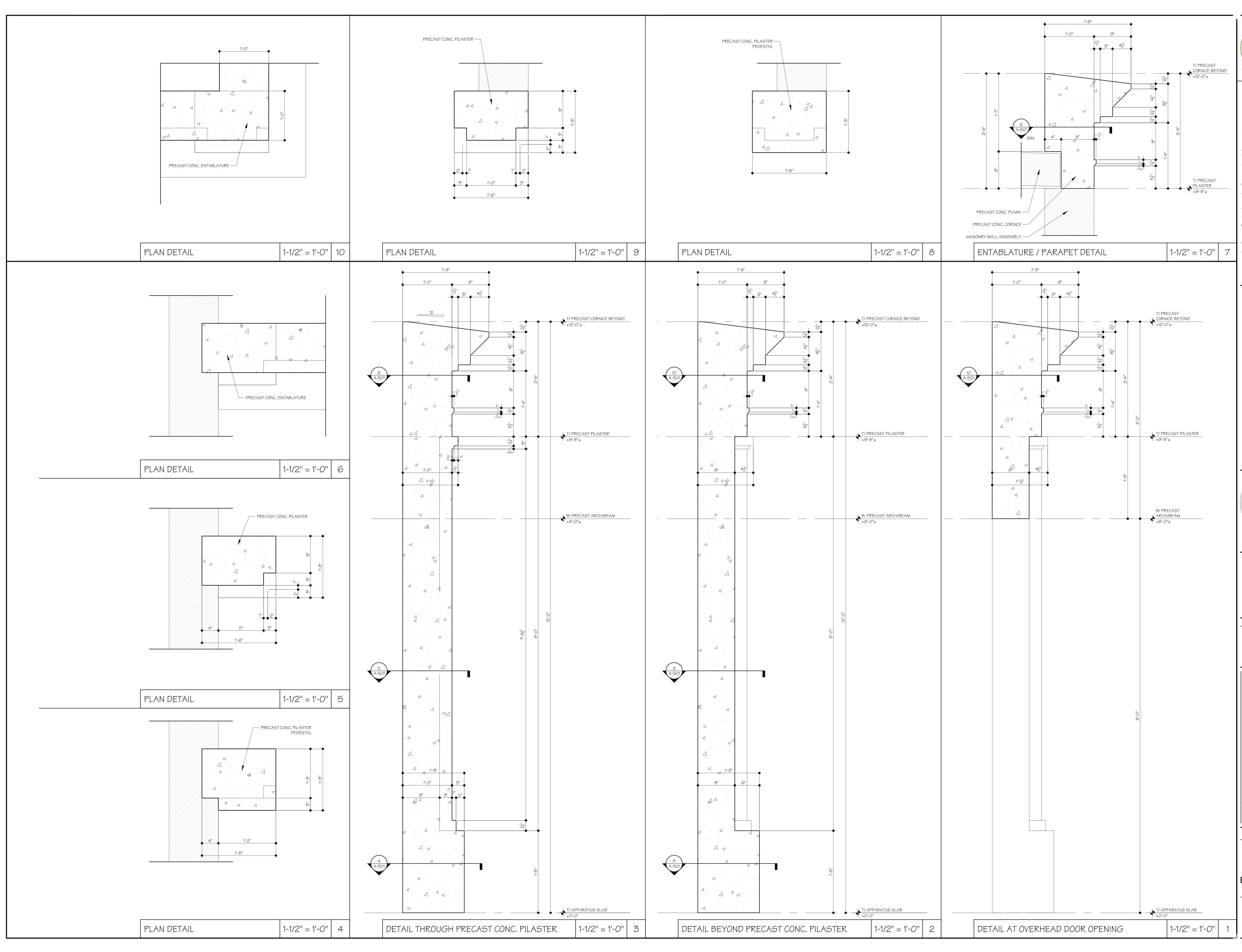


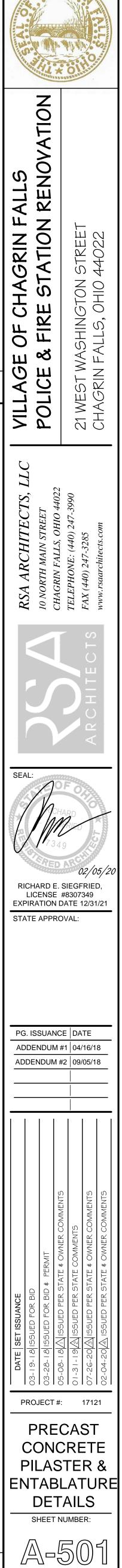
3/4" = 1'-0"

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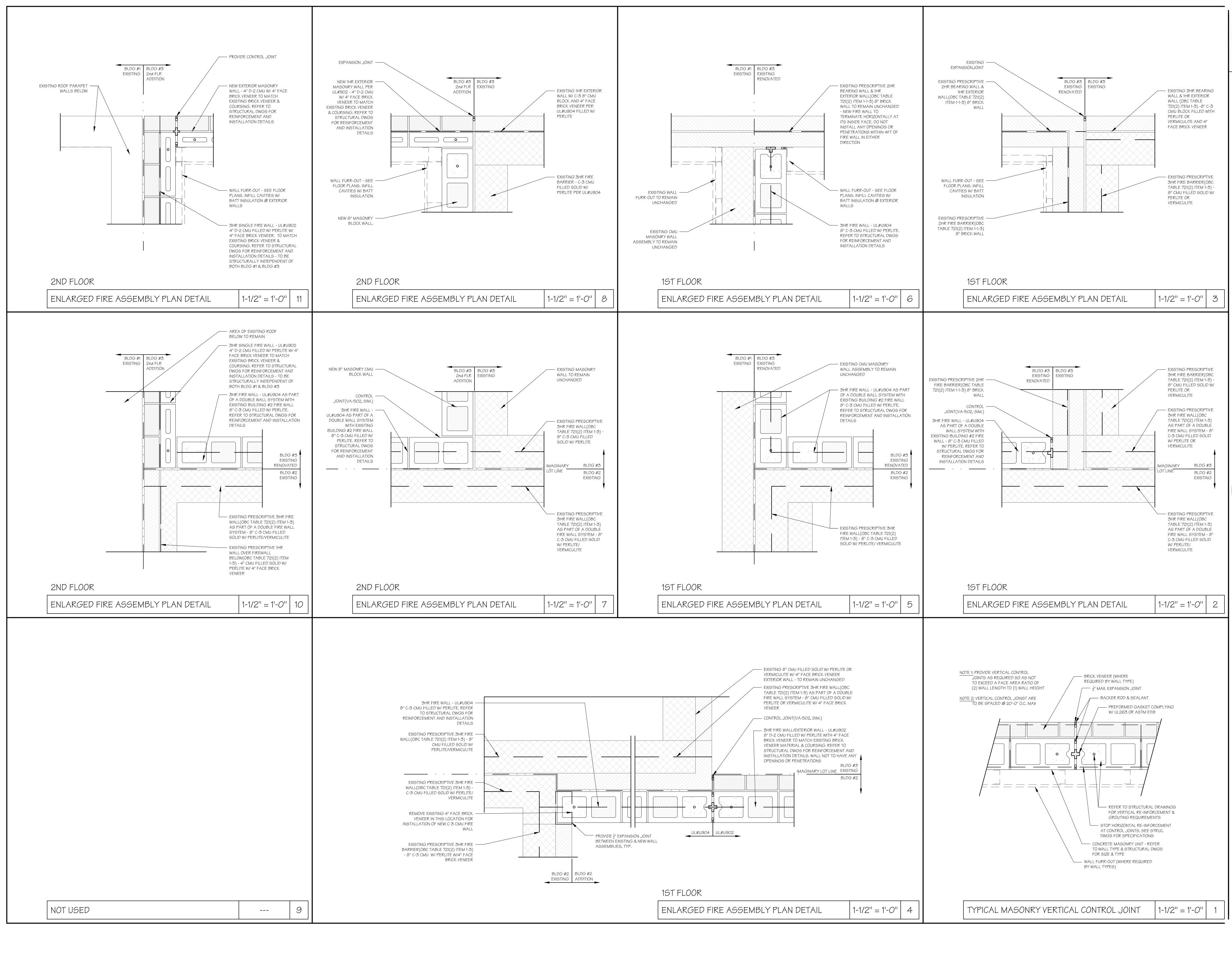


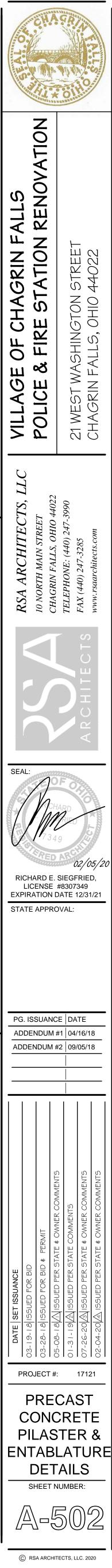






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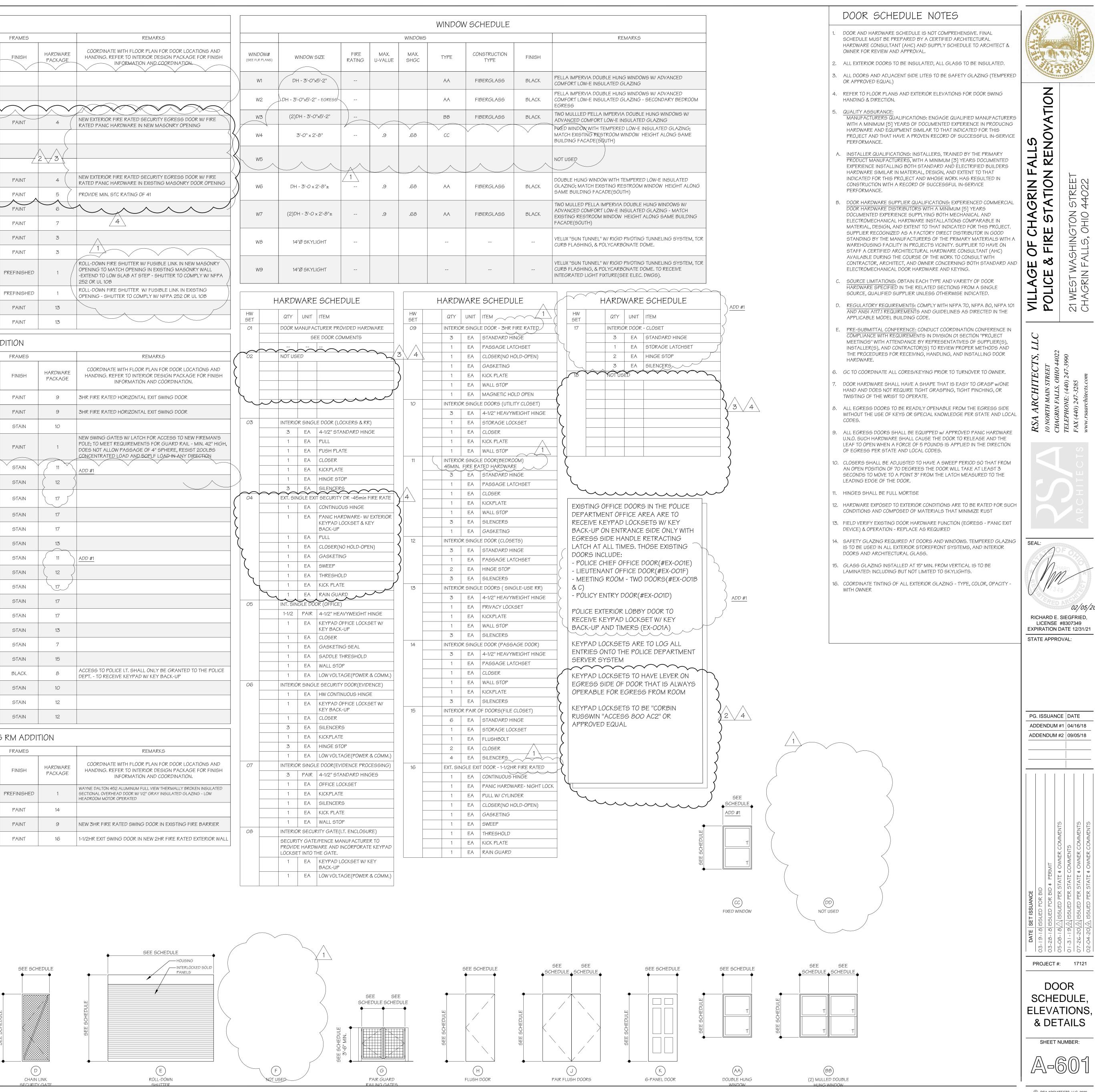




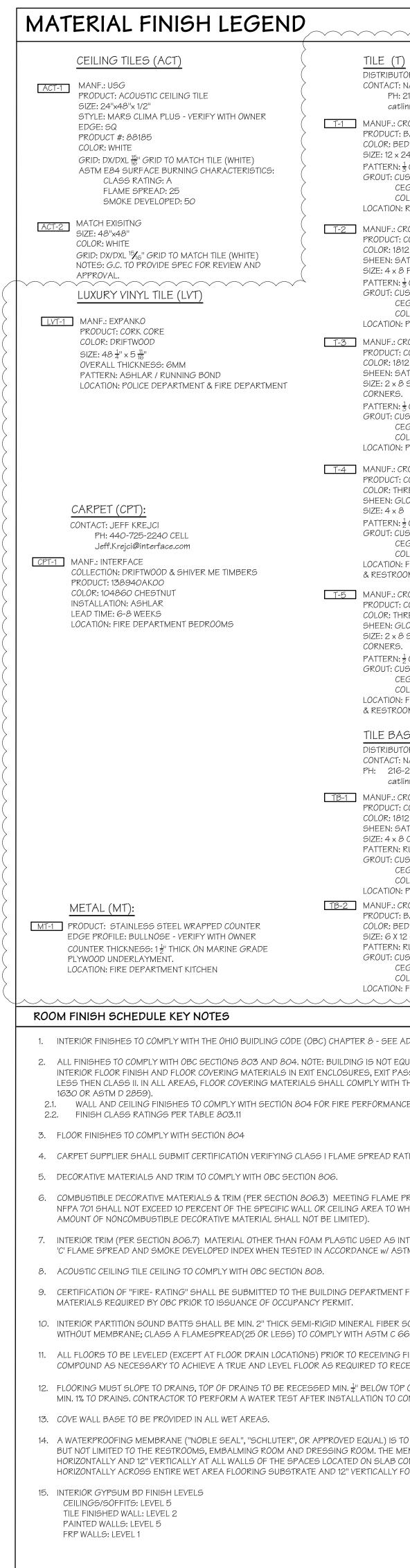
PANEL SIZE $3'-O'' \times 7'-O'' \times 1^{3}/4''$ $3'-O'' \times 7'-O'' \times 1^{3}/4''$ ROLL-UP - $3'-O'' \pm \times 7'-O'' \pm$ ROLL-UP - $3'-O'' \pm \times 7'-O'' \pm$ PAIR $3'-O'' \times 7'-O'' \times 1^{3}/4''$	ROOM LOCATION	DR/FRAME RATING 45min 45min 45MIN.    3HR	TYPE H H H H H H H	CONSTRUCTION TYPE RE-INFORCED HOLLOW METAL RE-INFORCED HOLLOW METAL HOLLOW METAL HOLLOW METAL HOLLOW METAL HOLLOW METAL	FINISH PAINT PAINT PAINT PAINT PAINT PAINT	MATERIAL REINFORCED HOLLOW METAL HOLLOW METAL HOLLOW METAL REINFORCED HOLLOW METAL HOLLOW METAL	FINISH PAINT PAINT PAINT PAINT	HARDWARE PACKAGE 4 4 2 3 4 5 6	COORDINATE WITH FLOOR PLAN FOR DOOR LOCATIONS AND HANDING. REFER TO INTERIOR DESIGN PACKAGE FOR FINISH INFORMATION AND COORDINATION. NEW EXTERIOR FIRE RATED SECURITY EGRESS DOOR W/ FIRE RATED PANIC HARDWARE IN NEW MASONRY OPENING NEW EXTERIOR FIRE RATED SECURITY EGRESS DOOR W/ FIRE RATED PANIC HARDWARE IN EXISTING MASONRY DOOR OPENING PROVIDE MIN. STC RATING OF 41		WINDOW# GEE FLR PLANG) W1 W2 W3 W4 W4 W5 W6	WINDOW 512 DH - 3'-0"x5 DH - 3'-0"x5'-2" - (2)DH - 3'-0"x 3'-0" x 2'-8 DH - 3'-0 x 2'-	EGRESS	NG U-VALUE	MAX. SHGC .68 .68	TYPE AA AA BB CC AA
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$3'-O'' \times 7'-O'' \times 1\frac{3}{4}''$ $3'-O'' \times 7'-O'' \times 1\frac{3}{4}''$ $3'-O'' \times 7'-O'' \times 1\frac{3}{4}''$ $3'-O'' \times 7'-O'' \times 1\frac{3}{4}''$ $3'-O'' \times 7'-O'' \times 1\frac{3}{4}''$ $3'-O'' \times 7'-O'' \times 1\frac{3}{4}''$ $ROLL-UP - 3'-O'' \pm \sqrt{7}-O'' \pm $	104 DUTY ROOM 105 OFFICE 106 EVIDENCE ROOM 107 EVIDENCE PROCESSING 108 MEN'S LOCKER ROOM 109 WOMEN'S LOCKER ROOM 109 WOMEN'S LOCKER ROOM	45MIN.	H H H H H H H	HOLLOW METAL RE-INFORCED HOLLOW METAL HOLLOW METAL HOLLOW METAL HOLLOW METAL HOLLOW METAL	PAINT PAINT PAINT PAINT PAINT	HOLLOW METAL RE-INFORCED HOLLOW METAL HOLLOW METAL REINFORCED HOLLOW METAL HOLLOW	PAINT PAINT PAINT PAINT	4 $4$ $2$ $3$ $4$ $5$ $6$	RATED PANIC HARDWARE IN NEW MASONRY OPENING         NEW EXTERIOR FIRE RATED SECURITY EGRESS DOOR W/ FIRE         RATED PANIC HARDWARE IN EXISTING MASONRY DOOR OPENING		W3 W4 W5	(2)DH - 3'-0"x 3'-0" x 2'-8	5'-2"	.9	.68	BB CC
$3'-O'' \times 7'-O'' \times 1\frac{3}{4}''$ $3'-O'' \times 7'-O'' \times 1\frac{3}{4}''$ $3'-O'' \times 7'-O'' \times 1\frac{3}{4}''$ $3'-O'' \times 7'-O'' \times 1\frac{3}{4}''$ $3'-O'' \times 7'-O'' \times 1\frac{3}{4}''$ $3'-O'' \times 7'-O'' \times 1\frac{3}{4}''$ $ROLL-UP - 3'-O'' \pm \sqrt{7}-O'' \pm $	104 DUTY ROOM 105 OFFICE 106 EVIDENCE ROOM 107 EVIDENCE PROCESSING 108 MEN'S LOCKER ROOM 109 WOMEN'S LOCKER ROOM 109 WOMEN'S LOCKER ROOM	45MIN.	H H H H H H H	HOLLOW METAL RE-INFORCED HOLLOW METAL HOLLOW METAL HOLLOW METAL HOLLOW METAL HOLLOW METAL	PAINT PAINT PAINT PAINT PAINT	HOLLOW METAL RE-INFORCED HOLLOW METAL HOLLOW METAL REINFORCED HOLLOW METAL HOLLOW	PAINT PAINT PAINT PAINT	$\begin{array}{c} 4 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \end{array}$	RATED PANIC HARDWARE IN NEW MASONRY OPENING         NEW EXTERIOR FIRE RATED SECURITY EGRESS DOOR W/ FIRE         RATED PANIC HARDWARE IN EXISTING MASONRY DOOR OPENING		W5				.68	
$3'-O'' \times 7'-O'' \times 13/4''$ $3'-O'' \times 7'-O'' \times 1^{3}/4''$ $3'-O'' \times 7'-O'' \times 1^{3}/4''$ $3'-O'' \times 7'-O'' \times 1^{3}/4''$ $ROLL-UP - 3'-O'' \pm \times 7'-O'' \pm$ $ROLL-UP - 3'-O'' \pm \times 7'-O'' \pm$ $PAIR 3'-O'' \times 7'-O'' \times 1^{3}/4''$	DUTY ROOM 105 OFFICE 106 EVIDENCE ROOM 107 EVIDENCE PROCESSING 108 MEN'S LOCKER ROOM 109 WOMEN'S LOCKER ROOM 110 HALL EXISTING POLICE HALL 112		H H H H H	HOLLOW METAL HOLLOW METAL REINFORCED HOLLOW METAL HOLLOW METAL HOLLOW METAL	PAINT PAINT PAINT	HOLLOW METAL HOLLOW METAL REINFORCED HOLLOW METAL HOLLOW	PAINT	2 3 4 4 5 6	RATED PANIC HARDWARE IN EXISTING MASONRY DOOR OPENING			DH - 3'-0 x 2'	-8"±	.9	.68	AA
$3'-O'' \times 7'-O'' \times 13/4''$ $3'-O'' \times 7'-O'' \times 1^{3}/4''$ $3'-O'' \times 7'-O'' \times 1^{3}/4''$ $3'-O'' \times 7'-O'' \times 1^{3}/4''$ $ROLL-UP - 3'-O'' \pm \times 7'-O'' \pm$ $ROLL-UP - 3'-O'' \pm \times 7'-O'' \pm$ $PAIR 3'-O'' \times 7'-O'' \times 1^{3}/4''$	DUTY ROOM 105 OFFICE 106 EVIDENCE ROOM 107 EVIDENCE PROCESSING 108 MEN'S LOCKER ROOM 109 WOMEN'S LOCKER ROOM 110 HALL EXISTING POLICE HALL 112		H H H H H	HOLLOW METAL HOLLOW METAL REINFORCED HOLLOW METAL HOLLOW METAL HOLLOW METAL	PAINT PAINT PAINT	HOLLOW METAL HOLLOW METAL REINFORCED HOLLOW METAL HOLLOW	PAINT		RATED PANIC HARDWARE IN EXISTING MASONRY DOOR OPENING			DH - 3'-0 × 2'	-8"±	.9	.68	AA
$3'-O'' \times 7'-O'' \times 13/4''$ $3'-O'' \times 7'-O'' \times 1^{3}/4''$ $3'-O'' \times 7'-O'' \times 1^{3}/4''$ $3'-O'' \times 7'-O'' \times 1^{3}/4''$ $ROLL-UP - 3'-O'' \pm \times 7'-O'' \pm$ $ROLL-UP - 3'-O'' \pm \times 7'-O'' \pm$ $PAIR 3'-O'' \times 7'-O'' \times 1^{3}/4''$	DUTY ROOM 105 OFFICE 106 EVIDENCE ROOM 107 EVIDENCE PROCESSING 108 MEN'S LOCKER ROOM 109 WOMEN'S LOCKER ROOM 110 HALL EXISTING POLICE HALL 112		H H H H H	HOLLOW METAL HOLLOW METAL REINFORCED HOLLOW METAL HOLLOW METAL HOLLOW METAL	PAINT PAINT PAINT	HOLLOW METAL HOLLOW METAL REINFORCED HOLLOW METAL HOLLOW	PAINT	4	RATED PANIC HARDWARE IN EXISTING MASONRY DOOR OPENING		WG	DH - 3'-0 x 2'-	-8"±	.9	.68	AA
3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "         3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "         3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "         3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "         ROLL-UP - 3'-0" ± × 7'-0" ±         ROLL-UP - 3'-0" ± × 7'-0" ±         PAIR 3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "	106 EVIDENCE ROOM 107 EVIDENCE PROCESSING 108 MEN'S LOCKER ROOM 109 WOMEN'S LOCKER ROOM 110 HALL EXISTING POLICE HALL 112		H H H H	REINFORCED HOLLOW METAL HOLLOW METAL HOLLOW METAL	PAINT	REINFORCED HOLLOW METAL HOLLOW	PAINT		PROVIDE MIN. STC RATING OF 41							ļ
3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "         3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "         ROLL-UP - 3'-0"± × 7'-0"±         ROLL-UP - 3'-0"± × 7'-0"±         PAIR 3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "	107 EVIDENCE PROCESSING 108 MEN'S LOCKER ROOM 109 WOMEN'S LOCKER ROOM 110 HALL EXISTING POLICE HALL 112		H H H	HOLLOW METAL		HOLLOW				-						
3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "         ROLL-UP - 3'-0"± × 7'-0"±         ROLL-UP - 3'-0"± × 7'-0"±         PAIR 3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "	MEN'S LOCKER ROOM 109 WOMEN'S LOCKER ROOM 110 HALL EXISTING POLICE HALL 112		н		24.000		PAINT	7			W7	(2)DH - 3'-0 × 2	2'-8''±	.9	.68	AA
ROLL-UP - 3'-0"± × 7'-0"± ROLL-UP - 3'-0"± × 7'-0"± PAIR 3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "	WOMEN'S LOCKER ROOM 110 HALL EXISTING POLICE HALL 112		Н		PAINT	HOLLOW METAL	PAINT	3			WB	14"Ø SKYLIG	iht			
ROLL-UP - 3'-0"± × 7'-0"± PAIR 3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "	HALL EXISTING POLICE HALL 112	3HR		HOLLOW METAL	PAINT	HOLLOW METAL	PAINT	3	ROLL-DOWN FIRE SHUTTER W/ FUSIBLE LINK IN NEW MASONRY							
PAIR 3'-0" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "	112		D	STEEL	PREFINISHED	STEEL	PREFINISHED	1	OPENING TO MATCH OPENING IN EXISTING MASONRY WALL -EXTEND TO LOW SLAB AT STEP - SHUTTER TO COMPLY W/ NFPA 252 OR UL 10B		W9	14''Ø SKYLIG	θHT			
		3HR	D	STEEL	PREFINISHED	STEEL	PREFINISHED	1	ROLL-DOWN FIRE SHUTTER W/ FUSIBLE LINK IN EXISTING OPENING - SHUTTER TO COMPLY W/ NFPA 252 OR UL 10B		1	HARDWARE	SCHEDUU	-		HAR
PAIR 3'-0" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "	113		Н	HOLLOW METAL	PAINT	HOLLOW METAL HOLLOW	PAINT	13			IW IET	QTY UNIT I		-	HW SET	QT
	MEN'S RESTROOM		H	HOLLOW METAL	PAINT	METAL	PAINT	13			01	DOOR MANUFACT			09	INTE
	D		IEDULE F	FIRE DEPARTN	VENT 2nd	FLOOR AD			1					$\sim$		1
		DRIERAME		CONCEPTION			FRAMES		REMARKS COORDINATE WITH FLOOR PLAN FOR DOOR LOCATIONS AND	$ \langle  $		NOT USED			) 4	1
PANEL SIZE	ROOM LOCATION	DR/FRAME RATING	TYPE	CONSTRUCTION TYPE	FINISH	MATERIAL	FINISH	HARDWARE PACKAGE	HANDING. REFER TO INTERIOR DESIGN PACKAGE FOR FINISH INFORMATION AND COORDINATION.	ζ					)	
3'-0" x 6'-8"x 1 <sup>3</sup> / <sub>4</sub> "	FIRE DEPT. APPARATUS RM	3HR	Н	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINT	9	3HR FIRE RATED HORIZONTAL EXIT SWING DOOR				$\sim$	لرب	10	INT
3'-0" x 6'-8"x 1 <sup>3</sup> / <sub>4</sub> "	HALLWAY	3HR	Н	HOLLOW METAL	PAINTED	METAL	PAINT	9	3HR FIRE RATED HORIZONTAL EXIT SWING DOOR		03	INTERIOR SINGLE	DOOR (LOCKERS	) & RR)		2
2'-8" x 7'-0" x 1 %4"	HALLWAY		Н	WOOD	51AIN	WOOD	STAIN	10	NEW SWING GATES W/ LATCH FOR ACCESS TO NEW FIREMAN'S	_				D HINGE		·
PAIR 2'-3" x 3'-6" GATES	2 <i>0</i> 1 HALLWAY		G	STEEL	PAINT	STEEL	PAINT	1	POLE; TO MEET REQUIREMENTS FOR GUARD RAIL - MIN. 42" HIGH DOES NOT ALLOW PASSAGE OF 4" SPHERE, RESIST 200LBS CONCENTRATED LOAD AND SOPLF LOAD IN ANY DIRECTION	1,		1 EA 1	PUSH PLATE		11	( INT
3'-0" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "	202 BEDROOM	45MIN	H	SØLID CORE WOOD	STAIN	WOOD	STAIN		ADD #1			1 EA H	KICKPLATE			45
2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "	BEDROOM		Н	WOOD	STAIN	METAL	STAIN					3 EA (	BILENCERS	$\sim$		
· · · · · · · · · · · · · · · · · · ·	BEDROOM		Н	WOOD		METAL					04	EXT. SINGLE EXIT	SECURITY DR -4	DMIN FIRE RATE	$\left\{ \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \end{array} \right\}$	
	BEDROOM 202		н	WOOD SOLID CORE	STAIN	METAL HOLLOW	STAIN	17					KEYPAD LOCKSE		}	5
3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "	203 BATHROOM		Н	SOLID CORE WOOD	STAIN	HOLLOW METAL	STAIN	13				_		D-OPEN)	12	INT
3'-0" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "	204 BEDROOM	45MIN	н	SOLID CORE WOOD	STAIN	HOLLOW METAL	STAIN	11	ADD #1			1 EA (	GASKETING		$\left  \right\rangle$	
2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "	BEDROOM		Н	WOOD	STAIN	METAL	STAIN				لر 📃	1 EA <sup>-</sup>	THRESHOLD		<i>}</i>	5
	BEDROOM 204		н	WOOD SOLID CORE		METAL HOLLOW									13	INT
2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "	204 BEDROOM		н	SOLID CORE WOOD	STAIN	HOLLOW METAL	STAIN	17				1-1/2 PAIR -	4-1/2" HEAVYWEI	GHT HINGE		
3'-0" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "	205 BATHROOM		н	SOLID CORE WOOD	STAIN	HOLLOW METAL	STAIN	13				ł	KEY BACK-UP	_OCKSET W/		
3'-0" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "	FLEX ROOM		Н	WOOD	STAIN	METAL	STAIN	7				1 EA (	GASKETING SEA		14	INT
	FLEX ROOM		J D	WOOD METAL SECURITY		METAL						1 EA 1	WALL STOP			
3'-0" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "	207		Н	SOLID CORE	STAIN	HOLLOW	STAIN	10	DEPT TO RECEIVE KEYPAD W/ KEY BACK-UP		06	INTERIOR SINGLE	SECURITY DOOR	(EVIDENCE)		
2'-6" x 7'-0" x 1 <sup>3</sup> /4"	208 DINING ROOM		н	SOLID CORE WOOD	STAIN	HOLLOW	STAIN	12				1 EA I	KEYPAD OFFICE			14.17
2'-6" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "	208 DINING ROOM		Н	SOLID CORE WOOD	STAIN	HOLLOW METAL	STAIN	12				1 EA (	CLOSER			INT (
	DOOR SC	HEDULE ·	FIRE DEF	'ARTMENT 1st	t FLOOR /	APPARATU	S RM ADD	ITION				1 EA H	KICKPLATE			
		DOORS	1				FRAMES		REMARKS			1 EA I	_OW VOLTAGE(PO	,		
PANEL SIZE	ROOM LOCATION	FIRE	TYPE	CONSTRUCTION TYPE	FINISH	MATERIAL	FINISH	HARDWARE PACKAGE	HANDING. REFER TO INTERIOR DESIGN PACKAGE FOR FINISH INFORMATION AND COORDINATION.			3 PAIR ·	4-1/2" STANDARI	) HINGES	16	EX1
0.H 10'-2"x8'-2"x2"	100 APPARATUS RM		В	ALUM-INSULATED	BLACK	STEEL	PREFINISHED	1	WAYNE DALTON 452 ALUMINUM FULL VIEW THERMALLY BROKEN INSULATED SECTIONAL OVERHEAD DOOR W/ 1/2" GRAY INSULATED GLAZING - LOW HEADROOM MOTOR OPERATED			1 EA H	KICKPLATE			
3'-0" x 6'-8"x 1 <sup>3</sup> / <sub>4</sub> "	100 APPARATUS RM		J	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINT	14				1 EA H	KICK PLATE			
3'-0" × 7'-0" × 1 <sup>3</sup> / <sub>4</sub> "	APPARATUS RM	3HR	J	HOLLOW METAL	PAINT	METAL	PAINT	9	NEW 3HR FIRE RATED SWING DOOR IN EXISTING FIRE BARRIER		08			LOGURE)		· · · · ·
3'-0" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "	APPARATUS RM	1-1/2HR	K	HOLLOW METAL	PAINT	METAL	PAINT	16	1-1/2HR EXIT SWING DOOR IN NEW 2HR FIRE RATED EXTERIOR WAL	-L		PROVIDE HARDWA	RE AND INCORP			
												1 EA I		T W/ KEY		
	2'-8" x 7'-0" x 1 <sup>3</sup> /4"         PAIR 2'-3" x 3'-6" GATES         3'-0" x 7'-0" x 1 <sup>3</sup> /4"         2'-0" x 6'-8" x 1 <sup>3</sup> /4"         3'-0" x 7'-0" x 1 <sup>3</sup> /4"         3'-0" x 7'-0" x 1 <sup>3</sup> /4"         2'-0" x 6'-8" x 1 <sup>3</sup> /4"         3'-0" x 7'-0" x 1 <sup>3</sup> /4"         3'-0" x 7'-0" x 1 <sup>3</sup> /4"         3'-0" x 7'-0" x 1 <sup>3</sup> /4"         2'-6" x 7'-0" x 1 <sup>3</sup> /4"	HALLWAY         HALLWAY           2-6" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "         201 HALLWAY           PAIR 2'-3" x 3'-6" GATES         201 HALLWAY           3'-0" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "         202 BEDROOM           2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "         202 BEDROOM           2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "         202 BEDROOM           2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "         202 BEDROOM           2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "         202 BEDROOM           2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "         202 BEDROOM           2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "         204 BEDROOM           3'-0" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "         204 BEDROOM           2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "         204 BEDROOM           2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "         204 BEDROOM           2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "         204 BEDROOM           2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "         204 BEDROOM           2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "         204 BEDROOM           2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "         204 BEDROOM           2'-0" x 6'-8" x 1 <sup>3</sup> / <sub>4</sub> "         204 BEDROOM           3'-0" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "         205 FLEX ROOM           3'-0" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "         206 FLEX ROOM           3'-0" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "         206 FLEX ROOM           2'-6" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "         206 DINING ROOM           2'-6" x 7'-0" x 1 <sup>3</sup> / <sub>4</sub> "	3-0 x 5-8 x 1 %         HALLWAY         DTK           2'-8' x 7-0' x 1 %."         201 HALLWAY            PAIR 2'-3'' x 3'-6' GATES         201 HALLWAY            3'-0'' x 7-0'' x 1 %."         BEDROOM         45MIN           2'-0'' x 6'-8'' x 1 %."         BEDROOM            3'-0'' x 7'-0'' x 1 %."         204 BEDROOM            2'-0'' x 6'-8'' x 1 %."         BEDROOM            2'-0'' x 6'-8'' x 1 %."         206 Y.            3'-0'' x 7-0'' x 1 %."<	3-0 x 8-3 x 1 %         HALLWAY         DRK         H           2'-8' x 7-0''x 1 %''         201 HALLWAY          H           PAR 2'-3'' x 3'-6'' GATES         201 HALLWAY          G           3'-0'' x 7-0'' x 1 %''         802 BEDROOM         45MIN         H           2'-0'' x 6-8'' x 1 %''         802 BEDROOM          H           3'-0'' x 7-0'' x 1 %''         804 BEDROOM          H           2'-0'' x 6-8'' x 1 %''         8020 BEDROOM          H           2'-0'' x 7-0'' x 1 %''         8020 BEDROOM          H <td>3-10         X + 50         HALLWAY         SHK         H         PRULUW MILL           2-8" x 7-0" x 1 34"         HALLWAY          H         SOUD CORE WOOD           PAR 2'-3" x 3' 6" GATES         201 HALLWAY          G         STEEL           3-0" x 7-0" x 1 34"         PERROOM         46MN         H         Soup core           3-0" x 7-0" x 1 34"         PERROOM          H         Soup core           2-0" x 6" 8" x 1 34"         PERROOM          H         Soup core           2-0" x 6" 8" x 1 34"         PERROOM          H         Soup core           2-0" x 6" 8" x 1 34"         PERROOM          H         Soup core           2-0" x 6" 8" x 1 34"         PERROOM          H         Soup core           3-0" x 7-0" x 1 34"         PERROOM          H         Soup core           3-0" x 7-0" x 1 34"         PERROOM          H         Soup core           3-0" x 7-0" x 1 34"         PERROOM          H         Soup core           2-0" x 6"-8" x 1 34"         PERROOM          H         Soup core           2-0" x 6"-8" x 1 34"         PERROOM          H</td> <td>3.0.0.0.000000000000000000000000000000</td> <td>W-17 &amp; R-8V-1 3(*)         BD HALLMAY         SH         II         IOLLOW METAL         PAINT         HOLDAY           2.8* 47 0* 132*         HALLMAY         -         H         SMU020E         STAN         SM0120EE         STAN         SM0120EEE         STAN         SM0120EEE         STAN         SM0120EEEEEEE         SM0120EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE</td> <td>900* 09-06 x 100*         HUMAN*         PI         FOLDON MEAL         PMINTD         POLICION         PMINTD         PMINTD         PMINTD         PMINTD         PMINTD         PMINTD         PMINT         PMINT</td> <td>3-47 (4-49-15)         320 (4-1) (4-49)         200 (4-1) (4-1) (4-1)         201 (4-1) (4-1)         20</td> <td>防ビサタム、シー ・メージィング・シー ・シージョング・シージー クリージィング・シー ・シージョング・シージー クリージョング・シー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング クリージー クリージョング クリージー クリー クリージー クリー クリー クリー クリー クリー クリー クリー クリー クリー クリ</td> <td>Set 42 Public         Max         Set         -</td> <td>2 0         0 0<td>and understrift         gamma         a.b.         B.         B.         G. GLANDERLA         Volto         Baseling         Souther Determination of the souther Souther Determination of the souther Souther Determination of the souther Souther Determination of the souther Souther Determination of the souther Determination of</td><td>So or other with manual parts         part         part</td><td>2         2         2         0</td><td>2 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -</td></td>	3-10         X + 50         HALLWAY         SHK         H         PRULUW MILL           2-8" x 7-0" x 1 34"         HALLWAY          H         SOUD CORE WOOD           PAR 2'-3" x 3' 6" GATES         201 HALLWAY          G         STEEL           3-0" x 7-0" x 1 34"         PERROOM         46MN         H         Soup core           3-0" x 7-0" x 1 34"         PERROOM          H         Soup core           2-0" x 6" 8" x 1 34"         PERROOM          H         Soup core           2-0" x 6" 8" x 1 34"         PERROOM          H         Soup core           2-0" x 6" 8" x 1 34"         PERROOM          H         Soup core           2-0" x 6" 8" x 1 34"         PERROOM          H         Soup core           3-0" x 7-0" x 1 34"         PERROOM          H         Soup core           3-0" x 7-0" x 1 34"         PERROOM          H         Soup core           3-0" x 7-0" x 1 34"         PERROOM          H         Soup core           2-0" x 6"-8" x 1 34"         PERROOM          H         Soup core           2-0" x 6"-8" x 1 34"         PERROOM          H	3.0.0.0.000000000000000000000000000000	W-17 & R-8V-1 3(*)         BD HALLMAY         SH         II         IOLLOW METAL         PAINT         HOLDAY           2.8* 47 0* 132*         HALLMAY         -         H         SMU020E         STAN         SM0120EE         STAN         SM0120EEE         STAN         SM0120EEE         STAN         SM0120EEEEEEE         SM0120EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE	900* 09-06 x 100*         HUMAN*         PI         FOLDON MEAL         PMINTD         POLICION         PMINTD         PMINTD         PMINTD         PMINTD         PMINTD         PMINTD         PMINT         PMINT	3-47 (4-49-15)         320 (4-1) (4-49)         200 (4-1) (4-1) (4-1)         201 (4-1) (4-1)         20	防ビサタム、シー ・メージィング・シー ・シージョング・シージー クリージィング・シー ・シージョング・シージー クリージョング・シー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング・シージー クリージョング クリージー クリージョング クリージー クリー クリージー クリー クリー クリー クリー クリー クリー クリー クリー クリー クリ	Set 42 Public         Max         Set         -	2 0         0 0 <td>and understrift         gamma         a.b.         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ALUM OVERHEAD

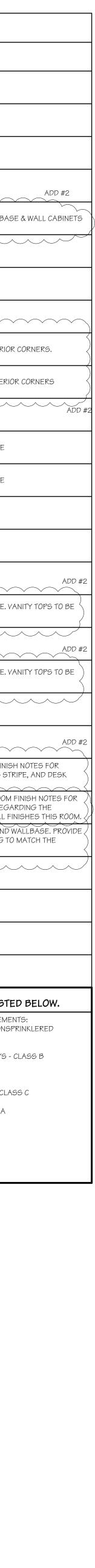
DOOR



L	
R FLUSH DOORS	



			ADD #2		ERIOR FINISH S	SCHE		•						
· (T)	SOLID SURFACE (SF)		PAINT (PT)	RM. #			ORS	BASE		WA	ALLS		CEILINGS	REMARKS
- ( ' ) RIBUTOR: VIRGINIA TILE COMPANY ACT: NATASHA CATLIN PH: 216-276-0117 CELL	<u>SF-1</u> MANF.: CORIAN COLOR: CANVAS	PT-1	MANF.: SHERWIN WILLIAMS COLOR: 7005 PURE WHITE	) 100	FIRE DEPT. APPARATUS ROOM	SEALED			NORTH PT-10	EAST PT-10	SOUTH PT-10	WEST PT-10		
catlinn@virginiatile.com JF.: CROSSVILLE PUCT: BASALT AV293	SIZE: 6mm THICK WITH BULLNOISE EDGE PROFILE on <sup>3</sup> / <sup>4</sup> " BIRCH PLY WOOD UNDERLAMENT		FINISH: EGG-SHELL  LOCATION: FIRE DEPARTMENT CEILINGS (DRY AREAS)		NOT USED	SEALED	CONCRETE		PT-10	PT-10	PT-10	PT-10	CONCRETE PLANK (PT-6)	ADD #2
R: BEDROCK 12 x 24 ERN: <del>3</del> OFFSET RUNNING BOND	LOCATION: POLICE DEPT. RESTROOM COUNTERS AND DUTY ROOM COUNTERS SF-1 MANF.: CORIAN	PT-2	COLOR: 7005 PURE WHITE	102	STORAGE/ELEC	<u> </u>	/T-1	ADD #2	PT-7	PT-7	PT-7	PT-7	CONCRETE PLANK (PT-6)	
JT: CUSTOM BUILDING PRODUCTS CEG-LITE COMMERCIAL EPOXY GROUT COLOR: 540 TRUFFLE TION: RESTROOM FLOORS	COLOR: PEARL GRAY SIZE: 6mm THICK WITH BULLNOISE EDGE PROFILE on <sup>3</sup> BIRCH PLY WOOD UNDERLAMENT	PT-3	LOCATION: FIRE DEPARTMENT RESTROOM CEILINGS	103	NOT USED	> > 	/T-1	У ) WB-3	PT-10	PT-10	PT-10	PT-10	CONCRETE PLANK (PT-6)	ADD #2
JF.: CROSSVILLE DUCT: COLOR BY NUMBERS	LOCATION: FIRE DEPARTMENT RESTROOM VANITY		COLOR: 6141 SOFTER TAN FINISH: EGG-SHELL LOCATION: FIRE DEPARTMENT WALLS -			>	/T-1	WB-3	PT-7	PT-7	PT-7	PT-7	ACT-1	COUNTERTOPS TO BE SF-1 WITH L-2 BASE 8
R: 1812 OVERTURE EN: SATIN $4 \times 8$ FIELD TILE	$\frac{\text{QUARTZ} - (\text{Q})}{\text{Q-1}}$	PT-4		) 105	OFFICE	> >	/T-1	WB-3	PT-7	PT-7	PT-7	ADD #2	ACT-1	
ERN: <sup>1</sup> 3 OFFSET RUNNING BOND JT: CUSTOM BUILDING PRODUCTS CEG-LITE COMMERCIAL EPOXY GROUT COLOR: #543 DRIFTWOOD	PRODUCT: CORIAN QUARTZ (FORMALLY ZODIAQ) COLOR: INDUS RED SIZE: 2 CM EDGE PROFILE: WITH BULLNOISE EDGE PROFILE on $\frac{3}{4}$ "		COLOR: 7019 GAUNLET GRAY FINISH: GLOSSY LOCATION: FIRE DEPARTMENT ACCENT PAINT - VARIES REFER TO FINISH SCHEDULE			> >			PT-7	(				$\overline{\mathbf{n}}$
TION: POLICE DEPARTMENT RESTROOM WALLS JF.: CROSSVILLE	BIRCH PLY WOOD UNDERLAMENT - VERIFY EDGE PROFILE WITH OWNER PRIOR TO FABRICATION. LOCATION: FIRE DEPARTMENT KITCHEN COUNTER & DESK	PT-5		)	EVIDENCE	,	ſ-1	TB-1 COVE		PT-7	PT-7	PT-7 (	GYP-BD (PT-6)	
DUCT: COLOR BY NUMBERS R: 1812 OVERTURE EN: SATIN 2 x 8 SINGLE BULLNOISE & 2 x 2 BULLNOISE			FINISH: GLOSS LOCATION: FIRE DEPARTMENT RESTROOM WALLS	) 107	EVIDENCE PROCESSING	> >	ſ-1	TB-1 COVE	) PT-7	PT-7	PT-7	PT-7	GYP-BD (PT-6)	
IERS. ERN: <del>1</del> OFFSET RUNNING BOND IT: CUSTOM BUILDING PRODUCTS		PT-6	MANF.: SHERWIN WILLIAMS COLOR: SW 7103 WHITETAIL FINISH: SEMI-GLOSS	) 108	MEN'S LOCKER ROOM	ـــــــــــــــــــــــــــــــــــــ	/T-1	Х WB-3	PT-7	PT-7	PT-7	PT-7	ACT-1 / GYP-BD (PT-6)	2 - INSTALL FA-1 ON ALL TILED EXTERIOR CO
CEG-LITE COMMERCIAL EPOXY GROUT COLOR: #543 DRIFTWOOD TION: POLICE DEPARTMENT RESTROOM WALLS		PT-7	LOCATION: POLICE DEPARTMENT PAINTED CEILINGS	) 109	WOMEN'S LOCKER ROOM	> LV	/T-1	WB-3	PT-7	PT-7	PT-7	) PT-7	ACT-1 / GYP-BD (PT-6)	1,2 - INSTALL FA-1 ON ALL TILED EXTERIOR O
JF.: CROSSVILLE PUCT: COLOR BY NUMBERS R: THREE HOUR TOUR WTO3			COLOR: 9165 GOSSAMER VEIL FINISH: SEMI-GLOSS LOCATION: POLICE DEPARTMENT WALLS	) 110	HALLWAY		/T-1	¥ WB-3	PT-7	PT-7	PT-7	PT-7	ACT-1	
EN: GLOSS $4 \times 8$ ERN: $\frac{1}{2}$ OFFSET RUNNING BOND		PT-8	MANF.: SHERWIN WILLIAMS COLOR: 7044 AMAZING GRAY FINISH: GLOSS - VERIFY SHEEN WITH OWNER	) 111	WOMEN'S RESTROOM		F-1	TB-1 COVE	T-2 ,T-3 & PT-9	T-2 ,T-3 & PT-9	T-2 ,T-3 & PT-9	T-2,T-3& PT-9	ACT-1	1 - TILE @ 48" HIGH WITH PT-9 ABOVE
JT: CUSTOM BUILDING PRODUCTS CEG-LITE COMMERCIAL EPOXY GROUT COLOR: #333 ALABASTER	LAMINATE (L) L-1 MANF.: WILSONART		LOCATION: POLICE DEPARTMENT DOORS AND	112	MEN'S RESTROOM	1	ſ-1	TB-1 COVE	T-2 ,T-3 & PT-9	T-2 ,T-3 & PT-9	T-2 ,T-3 & PT-9	T-2,T-3& PT-9	ACT-1	1 - TILE @ 48" HIGH WITH PT-9 ABOVE
TION: FIRE DEPARTMENT KITCHEN BACKSPLASH STROOM WALLS JF.: CROSSVILLE	COLOR: BLACK RIFTWOOD 6414-NG FINISH: NATURAL GRAIN LOCATION: FIRE DEPARTMENT RESTROOM	PT-9	MANF.: SHERWIN WILLIAMS COLOR: 7015 REPOSE GRAY FINISH: SEMI-GLOSS LOCATION: POLICE DEPARTMENT RESTROOM	) 113	JANITORS CLOSET	1	ſ-1 /	TB-1 COVE	PT-9	PT-9	PT-9	PT-9	CONCRETE PLANK (PT-6)	ADD #2
DUCT: COLOR BY NUMBERS R: THREE HOUR TOUR WTO3 EN: GLOSSY	CABINETS & POLICE DEPARTMENT RESTROOM VANITY SHROUD	PT-10	PAINT  MANF.: SHERWIN WILLIAMS	201	HALLWAY	LV	/T-1	WB-1	PT-3	PT-3	PT-3	PT-3	ADD #2	
2 x 8 SINGLE BULLNOISE & 2 x 2 BULLNOISE IERS. ERN: $\frac{1}{2}$ OFFSET RUNNING BOND	L-2 MANF.: FORMICA DECO METAL COLLECTION COLOR: BRUSHED BRONETONED ALUMINUM LOCATION: POLICE DEPARTMENT BASE AND		COLOR: 7016 MINDFUL GRAY - VERIFY WITH OWNER FINISH: EXTERIOR GRADE SEMI-GLOSS LOCATION: SALLY PORT, BOOKING RESTROOM, FIRE DEPARTMENT APPARATUS	202	BEDROOM #1	CF	PT-1	WB-1	PT-3	PT-4	PT-3	PT-3	ACT-1 / GYP. BD. (PT-1)	1,2
JT: CUSTOM BUILDING PRODUCTS CEG-LITE COMMERCIAL EPOXY GROUT COLOR: #333 ALABASTER TION: FIRE DEPARTMENT KITCHEN BACKSPLASH	WALL CABINET FRONTS		STAIN ST-1	203	BATHROOM #1	1	r-1	TB-2 COVE	T-4, T-5 & PT-5	T-4, T-5 & PT-5	T-4, T-5 & PT-5	PT-5	GYP-BD (PT-2)	1 - TILE @ 48" HIGH WITH PT-5 ABOVE. VANI SF-2 AND BASE CABINETS L-1.
BTROOM WALLS	WALL BASE (WB): MANF.: JOHNSONITE COLOR: 29 MOON ROCK WG	ST-1	COLOR: PECAN SW 3124-K WITH CLEAR POLYURETHANE COLOR: PECAN SW 3124-K WITH CLEAR POLYURETHANE COLOR:	204	BEDROOM #2	CF	T-1	WB-1	PT-3	PT-4	PT-3	PT-3	ACT-1 / GYP. BD (PT-1)	1,2
RIBUTOR: VIRGINIA TILE COMPANY ACT: NATASHA CATLIN 216-276-0117 CELL	SIZE: 4" COVE BASE LOCATION: FIRE DEPARTMENT LVT AND CARPETED AREAS	ST-2	LOCATION: KITCHEN CABINETS, DOORS & FRAMES  MANF.: SHERWIN WILLIAMS COLOR: CLEAR GLOSS POLYUREATHANE	205	BATHROOM #2		-1 -1	TB-2 COVE	T-4, T-5 & PT-5	T-4, T-5 & PT-5	T-4, T-5 & PT-5	PT-5	GYP-BD (PT-2)	1 - TILE @ 48" HIGH WITH PT-5 ABOVE. VANI SF-2 AND BASE CABINETS L-1.
catlinn@virginiatile.com JF.: CROSSVILLE DUCT: COLOR BY NUMBER - COVE BASE			FINISH: <pre> COLOR: CLEAR GLOSS FOLTOREATHANE FINISH: </pre> COLOR: KITCHEN CABINETS, DOORS & FRAMES	206	FLEX SPACE	LV	/T-1	WB-1	PT-3	PT-3	PT-3	PT-3	ACT-1	
R: 1812 OVERTURE $4 \times 8$ COVE BASE + CORNERS	WB-3 MANF.: JOHNSONITE PRODUCT: TRADITIONAL WALL BASE	FA-1	FINISH ACCESSORIES (FA):	207	STORAGE		/T-1	WB-1	PT-3	PT-3	PT-3	PT-3	ACT-1	
ERN: RUNNING BOND JT: CUSTOM BUILDING PRODUCTS CEG-LITE EPOXY GROUT COLOR: #543 DRIFTWOOD	COLOR: TA2 SADDLEBROOK SIZE: 4" COVE BASE LOCATION: POLICE DEPARTMENT		PRODUCT: RONDEC COLOR: ANODIZED ALUMINUM - NICKEL LOCATION: OUTSIDE VERTICAL TILE CORNERS	) 208	DINING		/T-1	WB-1	PT-3/ PT-4	PT-3/ PT-4	PT-3/ PT-4	PT-3 / PT-4	ADD #2	SEE NOTES #24B & #25 IN ROOM FINISH N ADDITIONAL INFORMATION FOR PT-4 STRIPT
JF.: CROSSVILLE DUCT: BASALT - COVE BASE	WOOD (WD): WD-1 SPECIES: RED OAK		IN RESTROOMS.	209	KITCHEN		/T-1	WB-1	(STRIPE) PT-3	(STRIPE) PT-3	(STRIPE) PT-3	(STRIPE)	ACT-1	FINISH INFORMATION. SEE NOTE #24, 24A & 26 UNDER ROOM FIN ADDITIONAL FINISH INFORMATION REGARD
R: BEDROCK 6 X 12 COVE ERN: RUNNING BOND	COLOR: ST-1 APPLICATION: KITCHEN CABINETS												EXISTING TO REMAIN PATCH	COUNTERS AND CABINETS AND WALL FINIS PATCH TO MATCH EXISTING PAINT AND WAL
JT: CUSTOM BUILDING PRODUCTS CEG-LITE COMMERCIAL EPOXY GROUT COLOR: #540 TRUFFLE	WD-2 SPECIES: RED OAK COLOR: ST-2 APPLICATION: KITCHEN CABINETS			210	LIVING ROOM		LVT-1	MATCH EXISING	SEE NOTE	SEE NOTE	SEE NOTE	SEE NOTE	AND REPAIR AS REQUIRED ( (ACT-2) EXISTING TO REMAIN PATCH	ALTERNATE BID TO PATCH FLOORING TO MA
TION: FIRE DEPARTMENT RESTROOMS		<u> </u>			STORAGE ROOM		/T-1	WB-1	PT-3	PT-3	PT-3	PT-3	AND REPAIR AS REQUIRED	ADD #2
GEE ADDITIONAL NOTES BELOW 1	16. TYPICAL TILE INSTALLATION TO USE CUSTOM BUILDING PRODUCTS (	EG-LITE COM	MERCIAL EPOXY GROUT.		JANITORS CLOSET	SEALED	CONCRETE	WB-1 EXISTING PATCH	PT-3	PT-3	PT-3	PT-3	OPEN TO STRUCTURE - PT-5	
IT PASSAGEWAYS AND CORRIDORS SHALL NOT BE VITH THE DOC FF-1 "PILL TEST" (CPSC 16 CFR, PART	17. APPLY SEALANTS AS REQUIRED AND RECOMMENDED BY MANUFAC AND SEALANT COLOR SAMPLE TO ARCHITECT FOR APPROVAL.				EXISTING BATHROOM (FIRE DEPARTMENT SECOND FLOOR)	PATCH AND	D REPAIR AS UIRED		PT-6	PT-6	PT-6	PT-6	AND REPAIR AS REQUIRED. NEW PAINT (PT-1)	
MANCE & SMOKE DEVELOPMENT.	<ul> <li>ALL MATERIAL COLOR SELECTIONS TO BE SUBMITTED TO ARCHITEC</li> <li>ALL CEILING DEVICES TO BE PAINTED TO MATCH CEILING(DIFFUSER OTHERWISE, VERIFY WITH OWNER. EXTERIOR EMERGENCY LIGHTS A</li> </ul>	6, EXIT SIGNS-	BODY ONLY NOT LENS, ETC.) UNLESS NOTED		EXISTING BEDROOM (FIRE DEPARTMENT SECOND FLOOR)	CF	°T-1	WB-1	PT-3	PT-3	PT-5	PT-3	EXISTING TO REMAIN PATCH AND REPAIR AS REQUIRED. NEW PAINT (PT-1)	1
D RATING AND DOC-FF-1 "PILL TEST".	UNLESS NOTED OTHERWISE. VERIFY WITH OWNER. 20. COORDINATE PLANS, DETAILS, WORK BY OTHER TRADES, AND SPEC			ROOM	FINISH SCHEDULE KEY NOT	· · · · · · · · · · · · · · · · · · ·	-	FINISH CLASS R					OF THE BUILDING RECE	WING NEW FINISHES ARE LISTED
	DISCREPANCIES OCCUR, NOTIFY THE ARCHITECT AT ONCE 21. DETAILS SHOWN ARE TYPICAL AND MAY VARY PER SURFACE FINISH				LE WALL FINISHES LOCATED IN THIS AN PLE CEILING FINISHES LOCATED IN THIS	REA. BL		CCUPANCY: B, S-1: NO		ED B	UILDING #3 (		-3 - NONSPRINKLERED	BUILDING #3 OCCUPANCY: S-1 - NONSPRIN FIRE DEPARTMENT STORAGE
AME PROPAGATION PERFORMANCE CRITERIA OF TO WHICH IT IS ATTACHED. (THE PERMISSIBLE	MANUFACTURER'S/VENDOR'S RECOMMENDED TERMINATION AND TR DOOR/WINDOW FRAMES, AT FINISH MATERIAL CHANGES, AT CORNE APPROVAL			3. MULTIP	LE FLOOR FINISHES LOCATED IN THIS A	AREA.	IT ENCLOSUR DRRIDORS - C	RES & PASSAGEWAYS	6 - CLASS A		XIT ENCLOSUI ORRIDORS - (		GEWAYS - CLASS C	EXIT ENCLOSURES & PASSAGEWAYS - CLA CORRIDORS - CLASS B
v/ ASTM E 84	22. RETOUCH OR REFINISH SURFACES DAMAGED BY SUBSEQUENT WO RESTORATION WORK SHALL BE BORNE BY THE CONTRACTOR			CLASS A:	FLAME SPREAD INDEX 0-25; EVELOPED INDEX 0-450			NCLOSED SPACES - C EILING TILE - CLASS A				NCLOSED SP. EILING TILE -	ACES - CLASS C CLASS A	ROOMS AND ENCLOSED SPACES - CLASS ACOUSTICAL CEILING TILE - CLASS A
MENT FOR CARPETING AND OTHER INTERIOR FINIS	23. AT COMPLETION OF INSTALLATION OF FINISHES, SPOTS AND LABEL ANY DIRT OR DEBRIS CAUSED BY WORK OF THIS CONTRACTOR IS RE	SPONSIBLE FO	OR KEEPING AREA CLEAN AS WORK PROGRESSES		FLAME SPREAD INDEX 26-75; DEVELOPED INDEX 0-450						00001107120			
BER SOUND ATTENUATION BLANKET INSULATION	24. KITCHEN TO HAVE SOLID RED OAK CABINETS(WD-1) AND DOORS(WD INTEGRATED 4" HIGH BACKSLASH. WALL ABOVE STAINLESS BACKS CABINET DOOR STYLE AND TOP COAT SHEENS WITH OWNER.				FLAME SPREAD INDEX 76-200; DEVELOPED INDEX 0-450									
VING FINISH MATERIAL. PROVIDE A SELF-LEVELING D RECEIVE FLOOR FINISH.	24A. KITCHEN ISLAND TO HAVE SOLID RED OAK CABINETS (WD-2) A 24.B DESK IN DINING ROOM TO BE MATCHING QUARTZ COUNTER (Q-		AINED ST-2 WITH QUARTZ COUNTER (Q-1).											1
V TOP OF SLAB/SUBSTRATE AND FLOORING SLOPED 2 TO CONFIRM POSITIVE DRAINAGE.	25. DECORATIVE PAINTED STRIPE DESCRIPTION FOR DINING ROOM 208 (P-4) THAT IS 5'-4" ABOVE FINISH FLOOR TO TOP OF STRIPE WITH OF	STRIPE TO BE	10". VERIFY WIDTH OF STRIPE AND HEIGHT ON WALL											
) IS TO BE USED IN ALL WET LOCATIONS INCLUDING	WITH OWNER PRIOR TO APPLICATION. STRIPE TO END AT PANTRY DO OF HALLWAY 201 TO DOOR #208B TO BE PAINTED PT-5 (LOCATION O 26. PROVIDE STAINLESS STEEL PANEL FINISH OVER CEMENT BD SHEAT	PF STRIPE). SE	E FLOORPLAN SHEET A-112.											
HE MEMBRANE IS TO BE INSTALLED A MIN. OF 12" AB CONSTRUCTION. MEMBRANE TO EXTEND LLY FOR ALL OTHER FRAMED FLOOR SYSTEMS	ASSEMBLY AT TYPE I GREASE HOOD. STAINLESS STEEL PANELS & IN ALL DIRECTIONS IN ACCORDANCE WTIH OMC 507.2.6 EXCEPTION.	CEMENT BD S	CHEATHING TO EXTEND A MIN. 18" BEYOND THE HOOD											





C RSA ARCHITECTS, LLC. 2020

#### STRUCTURAL DESIGN CRITERIA

CODE BUILDING CONSTRUCTION TYPE: USAGE:

LIVE LOAD DATA: ROOF LIVE LOAD: ROOF RAIN LOAD: 2ND FLOOR LIVE LOAD: 1ST FLOOR LIVE LOAD:

STAIR LOADS: GUARDRAIL LOADS:

ROOF SNOW LOAD DATA: FLAT-ROOF SNOW LOAD, P<sub>f</sub>: SNOW EXPOSURE FACTOR, Ce: SNOW IMPORTANCE FACTOR, Is: THERMAL FACTOR, Ct: DRIFT SURCHARGE LOADS, P<sub>d</sub>: 67 PSF

WIND DESIGN DATA: ULTIMATE WIND SPEED, V<sub>ult</sub>: RISK CATEGORY: EXPOSURE: INTERNAL PRESSURE COEFFICIENT, GPC<sub>i</sub>: DESIGN PRESSURE:

EARTHQUAKE DESIGN DATA: RISK CATEGORY: SEISMIC IMPORTANCE FACTOR I SPECTRAL RESPONSE ACCELERATION PARAMETERS:  $S_s = 0.193$   $S_1 = 0.060$ SITE CLASS:

DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS: SEISMIC DESIGN CATEGORY: BASIC SEISMIC FORCE-RESISTING 2 STORY POLICE BLDG:

DESIGN BASE SHEAR: RESPONSE MODIFICATION COEFFICIENT, C<sub>S</sub>:

RESPONSE MODIFICATION COEFFICIENT, R: ANALYSIS PROCEDURE:

DESIGN BASIS:

#### GENERAL 1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO

- STARTING CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES. IN CASE OF CONFLICT, MORE COSTLY REQUIREMENTS GOVERN FOR BIDDING. SUBMIT CLARIFICATION REQUEST PRIOR TO PROCEEDING WITH WORK. 2. ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OF
- ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE. 3. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK. UNLESS NOTED OTHERWISE, DETAILS IN STRUCTURAL DRAWINGS ARE TYPICAL AS INDICATED BY CUTS, REFERENCES, OR
- 4. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODES: OHIO BLDG CODE AND LATEST REVISIONS REFERRED TO HERE AS "THE CODE", AND ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE
- 5. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING: SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS, EXCEPT AS NOTED. SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NON-BEARING PARTITIONS. SIZE AND LOCATION OF ALL CONCRETE CURBS, EQUIPMENT PADS, PITS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHANGE IN LEVEL, CHAMFERS, GROOVES INSERTS, ETC, SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS EXCEPT AS SHOWN. FLOOR AND ROOF FINISHES.
- DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS. 6. SEE MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR THE FOLLOWING: PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS. CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL, OR PLUMBING FIXTURES. SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES. ANCHOR BOLTS FOR MOTOR MOUNTS.
- 7. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
- 8. ASTM SPECIFICATIONS ON THE DRAWINGS SHALL BE OF THE I ATEST REVISION 9. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND FARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED
- STRUCTURES, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, ENGINEER SHALL BE NOTIFIED IMMEDIATELY. 10. CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD

PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/OR

- BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN 11. UNLESS NOTED OTHERWISE, EXPANSION BOLTS IN CONCRETE SHALL BE 1/2" DIAMETER X 3 1/2" EMBEDMENT HILTI KWIK BOLTS II (ICBO 4627) OR APPROVED ALTERNATE WITH ALLOWABLE VALUES EQUAL TO OR EXCEEDING THOSE FOR HILTI, PER CURRENT ICBO RESEARCH REPORT LINIESS NOTED OTHERWISE ALL EPOXY ANCHORS SHALL BE 1/2" DIAMETER WITH 4 1/4" EMBEDMENT HILTI HIT SYSTEM (ICBO 4016) OR APPROVED ALTERNATE WITH ALLOWABLE VALUES EQUAL TO OR EXCEEDING THOSE FOR HILTI
- PER CURRENT ICBO RESEARCH REPORT. INSTALL EXPANSION AND EPOXY ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. 12. GROUT OTHER THAN FOR MASONRY CELLS SHALL BE NON-SHRINK, NON-METALLIC, MEETING ASTM C-827, C-191, AND C-109, MIXED AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS. MINIMUM

#### SPECIAL INSPECTION

THE FOLLOWING ELEMENTS OF CONSTRUCTION SHAL REQUIRE SPECIAL INSPECTION PER OBC SECTION 1701. BUILDING OWNER TO FURNISH INSPECTION UNLESS INSTRUCTED OTHERWISE BY THE CONSTRUCTION CONTRACT.

Des		Design value
Soil	s Soil Bearing Capacity	3000 PSF
	Soil Compaction, at $\pm 2\%$ optimum moisture	(PER ORIGINAL DWGS 98% ASTM D-698
Con	crete	ASTM C-31 and C-39
	Compressive strength at 7 and 28 days Footings	3000 PSI
	Topping Slabs	4000 PSI
	Slabs on Grade	4000 PSI
	Concrete Density, ASTM C-138	145 PCF normal
	Concrete Density, ACTIN 0-100	115 PCF lightweight
	Concrete Slump (1 per 50 CY or fraction)	4" max_ASTM C-143
	Percentage Entrained Air for exterior concrete	6% ± 1 ASTM C-231
	Verify reinforcing sizes and placement	ASTM A-615, Grade 60
Mas	onry	
	Mortar Typ, ASTM C-109 and C-270	Per Spec's
	Grout Strength at 28 days, ASTM C-1019 and C-476	2500 PSI
	Prism Strength at 28 days, ASTM C-1314	2000 PSI
Stru	ctural Steel	
	High Strength Bolts, 10% of all bolts	AISC Spec's
	Fillet welds, 5/16" or less, AWS D1.1	Visual
	Fillet welds, 3/8" or greater, AWS D1.1	Dye Penetrant
	Partial or Full Penetration Welds, AWS D1.1	Ultra-Sonic or
		Magnetic Particle
a.	THE CONSTRUCTION INSPECTIONS LISTED ARE IN ADI	DITION TO THE CALLED
	INSPECTIONS REQUIRED BY OBC, AS AMENDED. SPEC	
	SUBSTITUTE FOR INSPECTION BY LOCAL BUILDING DE	
	INSPECTED WORK WHICH IS INSTALLED OR COVERED	
	THE LOCAL BUILDING INSPECTOR IS SUBJECT TO REM	IOVAL OR EXPOSURE AT
	CONTRACTOR'S EXPENSE.	
b.	CONTINUOUS INSPECTION IS ALWAYS REQUIRED DUR	Ring the Performance (
	THE WORK UNLESS OTHERWISE SPECIFIED.	

Design Value

- c. THE SPECIAL INSPECTORS MUST BE CERTIFIED BY THE LOCAL BUILDING DEPARTMENT TO PERFORM THE TYPES OF INSPECTION SPECIFIED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE SPECIAL INSPECTOR OR INSPECTION AGENCY AT LEAST ONE WORKING DAY PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION. ALL WORK PERFORMED WITHOUT REQUIRED SPECIAL INSPECTION IS SUBJECT TO REMOVAL
- SUBMIT WRITTEN REPORTS WITHIN TWO DAYS OF TESTING TO ENGINEER OF RECORD f. G.C. TO NOTIFY BUILDING DEPT. OF SPECIAL INSPECTORS NAME AND CONTACT

#### CONSTRUCTION SUBMITTALS

INFORMATION

g. STAIRS & RAILINGS

- 1. THE STRUCTURAL SUBMITTAL REVIEW IS INTENDED TO HELP THE ENGINEER VERIFY HIS DESIGN CONCEPT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK HIS OWN SUBMITTALS. THE ENGINEER WILL REVIEW THE SUBMITTALS FOR CONFORMANCE WITH CONSTRUCTION DOCUMENTS, GENERAL DIMENSIONS, MEMBERS, ELEVATIONS AND CONNECTIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL DIMENSIONS IN SUBMITTALS AND COORDINATION WITH OTHER TRADES.
- SHOP DRAWINGS ARE THE CONTRACTOR'S AND FABRICATOR'S WORK PRODUCT THE CONTRACTOR AND FABRICATOR ARE SOLELY RESPONSIBLE FOR ANY ERRORS IN THEIR SHOP DRAWINGS. THE ENGINEER IS NOT ENGAGED TO PERFORM DETAIL CHECKING OF THE SHOP DRAWINGS NOR WILL BE RESPONSIBLE FOR ANY ERRORS IN OR MISSING MATERIALS FROM THE SHOP DRAWINGS. FOR PRINT COPIES CONTRACTOR IS TO SUBMIT ONLY 3 SETS OF SHOP DRAWINGS TO
- ENGINEER FOR REVIEW. ANY ADDITIONAL SETS WILL BE RETURNED UNMARKED. FOR ELECTRONIC SUBMITTALS, CONTRACTOR WILL BE RESPONSIBLE FOR PRINTING CHARGES FOR ONE SET OF EACH SUBMITTAL. CORRECTIONS WILL BE RETURNED ELECTRONICALLY. ALL SUBMITTALS ARE TO BE REVIEWED AND APPROVED BY THE GENERAL CONTRACTOR AND CHECKED BY THE FABRICATOR OR VENDOR PRIOR TO
- SUBMITTAL FOR REVIEW BY ENGINEER 5. THE STRUCTURAL SUBMITTALS WILL BE RETURNED FOR RESUBMITTAL IF A CURSORY REVIEW SHOWS MAJOR ERRORS WHICH SHOULD HAVE BEEN FOUND BY THE GENERAL CONTRACTOR'S CHECKING. THE FOLLOWING SUBMITTALS, WHEN APPLICABLE, ARE REQUIRED FOR SUBMITTAL FOR STRUCTURAL REVIEW:
- a. SPLICED REINFORCING b. CONCRETE MIX DESIGNS c. STRUCTURAL STEEL d. STEEL JOISTS/GIRDERS e. ROOF & FLOOR DECK f. PRECAST CONCRETE
- 6. ANY SUBMITTAL OF A DETAIL SHEET WITH ADDED INFORMATION SHALL BE ACCOMPANIED BY LOCATION PLAN IDENTIFYING THE MEMBERS INVOLVED AND CLOUDING AROUND ADDED INFORMATION
- 7. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BE BY A REGISTERED STRUCTURAL ENGINEER, AND SUBMITTAL SHALL BE SEALED BY THE ENGINEER. SAID ENGINEER MUST BE REGISTERED WITH THE STATE
- THE PROJECT IS LOCATED WITHIN. 8. THE CONTRACT DOCUMENTS MAY NOT BE USED BY THE DETAILER AS USE IN ERECTION OR DETAIL DRAWINGS WITH OUT PRIOR WRITTEN PERMISSION FROM THE STRUCTURAL ENGINEER.
- 9. SUBMITTALS ARE TO BE RECEIVED BY THE STRUCTURAL ENGINEER A MINIMUM OF 10 WORKING DAYS PRIOR TO CONSTRUCTION SCHEDULING. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION DELAYS DUE TO INADEQUATE SCHEDULING OF SUBMITTAL REVIEW. SUBMITTALS TO BE SUBMITTED TO ARCHITECT PRIOR TO ENGINEERS REVIEW. 10. ANY ALTERNATE PRODUCTS ARE TO BE SUBMITTED IN ADVANCE OF PRODUCT'S
- INSTALLATION FOR APPROVAL BY ENGINEER OF RECORD. PRODUCT MUST FOUAL OR EXCEED SPECIFICATIONS AND QUALITY OF PRODUCTS SPECIFIED BY ENGINEER OF RECORD. ENGINEER OF RECORD RESERVES THE RIGHT TO ACCEPT OR REJECT ANY PRODUCT SUBSTITUTION WITHOUT CAUSE.

# OHIO BLDG CODE, ADOPTED NOVEMBER 1, 2017

30 PSF MIN

100 PSF

23 PSF

120 MPH

+/- 0.18

D (ASSUMED)

50 PSF DWELLINGS

100 PSF POLICE STATION

50 PLF ANY DIRECTION

200 LBS ANY DIRECTION

NOT APPLIED SIMULTANEOUSLY

SEE BELOW LOADING DIAGRAM

 $S_{DS} = 0.206$   $S_{D1} = 0.095$ 

62 KIPS - 2 STORY POLICE BLDG

11 KIPS - APPARATUS BLDG

0.1544 - APPARATUS BLDG

1.5 - 2-STORY POLICE BLDG

EQUIVALENT LATERAL FORCE

REINFORCED CONCRETE MEMBERS

2.0 - APPARATUS BLDG

0.2059 - 2 STORY POLICE BLDG

APPARATUS BLDG:

REINFORCED MASONRY SHEAR WALLS AND

UNREINFORCED MASONRY SHEAR WALLS

ALLOWABLE STRESS DESIGN (ASD) FOR ALL MEMBERS EXCEP

CONCRETE ULTIMATE STRENGTH DESIGN (USD) FOR

REINFORCED MASONRY SHEAR WALLS

5 PSF

(REFERENCE 2015 IBC & ASCE 7-10)

125 PSF APPARATUS ROOM AND SALLY PORT

MIXED USE SEE ARCH DWGS

# GENERAL STRUCTURAL NOTES (GSN)

#### FOUNDATION

- 1. GENERAL CONTRACTOR TO RETAIN GEOTECHNICAL ENGINEER TO VERIFY SOIL BEARING CAPACITY AND ADEQUACY OF SOILS FOR PROJECT. SUBMIT WRITTEN REPORT TO BOTH ENGINEER OF RECORD
- AND LOCAL BUILDING AUTHORITY FOOTINGS ARE DESIGNED BASED ON THE FOLLOWING INFORMATION:
- ALLOWABLE BEARING = 3000 PSF FOOTINGS SHALL BEAR ON COMPACTED FILL OR NATIVE SOILS TESTED. CONTRACTOR TO PROVIDE FOR DE-WATERING OF EXCAVATIONS FROM
- EITHER SURFACE WATER, GROUND WATER, OR SEEPAGE, IF 4. CONTRACTOR SHALL PROVIDE FOR DESIGN AND INSTALLATION OF ALL CRIBBING, SHEATHING, AND SHORING REQUIRED AND SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY,
- STRUCTURES, STREETS, AND UTILITIES IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL SAFETY ORDINANCES. . EXCAVATION FOR FOOTINGS SHALL BE APPROVED BY THE INSPECTOR OR SOILS ENGINEER PRIOR TO PLACING THE CONCRETE AND REINFORCING. CONTRACTOR TO NOTIFY THE INSPECTOR WHEN INSPECTION OF EXCAVATION IS READY. INSPECTOR TO SUBMIT A
- LETTER OF COMPLIANCE. 6. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED. DO NOT PLACE BACKFILL BEHIND RETAINING WALLS BEFORE CONCRETE OR GROUT HAS ATTAINED FULL DESIGN STRENGTH FOUNDATIONS SHALL BE PLACED AND ESTIMATED ACCORDING TO DEPTHS SHOWN ON DRAWINGS. SHOULD SOIL ENCOUNTERED AT
- THESE DEPTHS NOT BE APPROVED BY THE INSPECTOR OR SOILS ENGINEER, FOUNDATION ELEVATIONS WILL BE ALTERED BY CHANGE FOOTING BACKFILL AND UTILITY TRENCH BACKFILL WITHIN BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN LAYERS IN
- ACCORDANCE WITH THE SOILS REPORT AND APPROVED BY THE INSPECTOR. ALL FILLS USED TO SUPPORT FOUNDATIONS SHALL BE INSPECTED BY THE SOILS ENGINEER REPRESENTATIVE PER CODE SECTION 1704
- 9. ALL ABANDONED FOOTINGS, UTILITIES, ETC. WHICH INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED. NEW FOOTINGS SHALL EXTEND INTO UNDISTURBED SOILS. 10. SLABS ON GRADE SHALL BE SUPPORTED ON NATURAL GRADE OR COMPACTED FILL AS PER THE RECOMMENDATIONS OF THE SOILS
- REPORT. PROOF ROLL PRIOR TO PLACING BASE. REPLACE SOFT AREAS WITH COMPACTED FILL 11. PLACE FILLS TO BE COMPACTED IN MAX 8" LOOSE LIFTS. COMPACT TO MINIMUM 98% OF MAXIMUM DENSITY AT +/-2% OPTIMUM MOISTURE WHEN TESTED IN ACCORDANCE WITH ASTM D-698.
- 12. WHEN REQUIRED OR DIRECTED BY THE GEOTECHNICAL ENGINEER COMPACT ALL AREAS WITH IN 5'-0" OUTSIDE OF BUILDING FOOTPRINT TO DENSITY SPECIFIED IN GEOTECHNICAL REPORT
- 13. COMPACT UNDERSLAB GRANULAR FILL TO 98% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D-698. 14. DO NOT BACKFILL AGAINST BASEMENT WALLS UNTIL FLOOR STRUCTURE IS COMPLETE OR WALL IS ADEQUATELY BRACED. USE STRUCTURAL PIPE BRACING. CONTRACTOR IS RESPONSIBLE FOR THE

#### CONCRET

DESIGN OF BRACING.

- ALL CONCRETE CONSTRUCTION SHALL CONFORM WITH CHAPTER 19 OF THE CODE AND WITH THE PROVISIONS OF ACI 318, LATEST EDITION. REINFORCED CONCRETE IS DESIGNED BY THE "ULTIMATE STRENGTH
- DESIGN METHOD" 3. CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY AND APPROVED BY THE STRUCTURAL ENGINEER. MIX DESIGN METHODS (TEST HISTORY OR TRIAL BATCH METHOD) PER ACL SECTION 5.3 SHALL BE USED TO PROPORTION CONCRETE. SUBMIT MIX DESIGN METHOD DATA. IF 3-POINT CURVES ARE USED, GC TO CLEARLY IDENTIFY WHICH POINT ON CURVE IS USED AND MIX DESIGN ON 3-POINT CURVE
- 4. SCHEDULE OF STRUCTURAL CONCRETE 28-DAY STRENGTH AND TYPES (SLUMP LISTED IS MAX) LOCATION IN STRUCTURE STRENGTH W/C RATIO SLUMP DENSIT 145 PCF FOUNDATIONS 3000 PSI 0.55 4" TOPPING SLABS 4000 PSI 0.50 4" 145 PCF SLABS ON GRADE 4000 PSI 0.45 4" 145 PCF
- CONTRACTOR AT HIS OPTION MAY INCREASE SLUMP WITH USE OF HRWR ADMIXTURE. LIMIT SLUMP INCREASE TO 2" GREATER THAN THAT ALLOWED WITHOUT HRWRA. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE I OR II.
- AGGREGATE FOR CONCRETE SHALL CONFORM TO ALL REQUIREMENTS AND TESTS OF ASTM C-33 AND PROJECT SPECIFICATIONS. CONCRETE MIXING OPERATION, ETC. SHALL CONFORM TO ASTM C-94.
- PLACEMENT OF CONCRETE SHALL CONFORM TO ACI CODE CHAPTER 5 AND PROJECT SPECIFICATIONS. 9. CLEAN AND ROUGHEN TO 1/4" AMPLITUDE ALL CONCRETE SURFACES
- AGAINST WHICH NEW CONCRETE IS TO BE PLACED. ALL REINFORCING BARS, ANCHOR BOLTS, AND OTHER CONCRETE
- INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CORING CONCRETE IS NOT PERMITTED. NOTIFY THE ENGINEER IN ADVANCE OF CONDITIONS NOT SHOWN ON THE DRAWINGS.
- SEE THESE DRAWINGS FOR ADDITIONAL RESTRICTIONS ON THE PLACEMENT OF OPENINGS IN SLABS AND WALLS 12. PIPES LARGER THAN 1-1/2" DIAMETER SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED BY
- ENGINEER. PIPES SHALL NOT DISPLACE OR INTERRUPT REINFORCING BARS. SPACE EMBEDDED PIPES AT A MINIMUM OF 3 DIAMETERS. 13. CUT JOINTS FOR SLABS ON GRADE A MAXIMUM OF 12'-0" O.C., UNLESS
- NOTED OTHERWISE ON THE CONTRACT DOCUMENTS. CUT JOINTS WITHIN 8 (EIGHT) HOURS AFTER PLACING CONCRETE. 14. CONCRETE EXPOSED TO THE WEATHER. FREEZE-THAW. DEICING CHEMICALS, AND OR PARKED VEHICLES SHALL CONTAIN 6% (+/-1%) ENTRAINED AIR EITHER BY USING TYPE "A" PORTLAND CEMENTS OR
- ADMIXTURES CONFORMING TO ASTM C-260. 15. CURE CONCRETE BY WET CURING OR LIQUID SPRAY CONFORMING TO ASTM C-309. CONTRACTOR TO VERIFY CURING AGENT IS COMPATIBLE WITH ANY FLOOR ADHESIVES SPECIFIED WITHIN THE CONTRACT DOCUMENTS
- 16. ALL ADMIXTURES SHALL BE COMPATIBLE WITH ONE ANOTHER. PREFERABLY ONE MANUFACTURER SHALL BE USED FOR ALL
- ADMIXTURES. 17. CALCIUM CHLORIDE OR CHLORIDE CONTAINING ADMIXTURES WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES. 18. FLYASH CONTENT, IF APPROVED IN ADVANCE BY ENGINEER, SHALL BE LIMITED TO 20% OF TOTAL CEMENTITIOUS MATERIAL OR 25% OF PORTLAND CEMENT CONTENT. IF FLYASH IS USED, CONTRACTOR SHALL
- TAKE ADDITIONAL CONCRETE TEST CYLINDERS FOR 56 DAY BREAKS. DURING HOT WEATHER PLACE CONCRETE IN ACCORDANCE WITH ACI 305. DURING COLD WEATHER PLACE CONCRETE IN ACCORDANCE WITH ACI
- 20. EXPOSED FINISHED CONCRETE SURFACES, EXCEPT TOP OF SLABS SHALL MEET THE REQUIREMENTS OF ACI-303.1, "STD SPEC FOR C.I.P. ARCHITECTURAL CONCRETE". CONTRACTOR SHALL MAINTAIN COPY ON JOBSITE. REPAIR ALL AIRHOLES PER ACI-303.1 SUBJECT TO APPROVAL OF ENGINEER OF RECORD. IF SURFACE DEFECTS ARE EXCESSIVE OR
- AFFECT THE INTEGRITY OF THE WALL THE CONTRACTOR SHALL REPLACE THE DEFECTIVE SECTIONS AS DIRECTED BY THE ENGINEER OF RECORD. 21. FOR WAREHOUSE SLAB CONSTRUCTION ARCHITECT AND OWNER TO SPECIFY PRODUCT STORAGE SYSTEMS AND ATMOSPHERE CONTROL METHODS PRIOR TO FINAL VAPOR BARRIER SELECTION & SLAB DESIGN.
- 22. G.C. TO SCHEDULE AND COORDINATE CONSTRUCTION MEETING WITH ALL DISCIPLINES, TRADES, SUB-TRADES AND VENDORS INVOLVED IN SLAB ON GRADE DESIGN AND CONSTRUCTION. PRIOR TO STARTING SLAB ON GRADE PLACEMENT. MEETING SHALL BE HELD TO DISCUSS SLAB PLACEMENT TECHNIQUES TO AVOID FUTURE MOISTURE - RELATED ISSUES AFTER SLAB IS CONSTRUCTED.

#### REINFORCING STEEL

- 1. REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 12 OF THE ACI CODE, ASTM A615, GRADE 60 U.N.O.. EPOXY COATED REINFORCING STEEL BARS SHALL
- CONFORM TO ASTM A775. BARS SHALL BE CLEAN OF RUST, GREASE, OR OTHER MATERIALS LIKELY TO IMPAIR BOND. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
- 3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 (MATS ONLY). EPOXY COATED WELDED WIRE FABRIC SHALL CONFORM TO ASTM A884. PROVIDE LAPS PER THE ACI CODE SECTION 12.8, 9" MINIMUM. WWF SHALL BE SUPPORTED ON APPROVED CHAIRS.
- 4. REINFORCING BAR SPLICES SHALL BE MADE AS INDICATED ON THE DRAWINGS. MINIMUM SPLICE LENGTH FOR REINFORCING STEEL BARS IN MASONRY SHALL BE 40 BAR DIAMETERS, 24" MINIMUM. MINIMUM SPLICE LENGTH FOR REINFORCING STEEL BARS IN CONCRETE SHALL BE PER THE ACI CODE SECTION 12. LAP ALL HORIZONTAL BARS AT CORNERS AND INTERSECTIONS, DOWEL ALL VERTICAL REBAR TO FOUNDATIONS. ALL SPLICE LOCATIONS ARE SUBJECT TO APPROVAL BY STRUCTURAL ENGINEER. PROVIDE REQUIRED
- SHOP DRAWINGS AND FABRICATE AFTER ENGINEER'S APPROVAL 5. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE
- MADE WHEN THE FINAL IN-PLACE INSPECTION IS MADE. BARS IN SLABS SHALL BE SECURELY SUPPORTED ON WELL-CURED CONCRETE BLOCKS (MAX 2" HIGH) OR METAL
- CHAIRS, PRIOR TO PLACING CONCRETE. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE "A.C.I. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", LATEST
- EDITION. 8. REBAR SPACINGS GIVEN ARE MAXIMUM ON CENTER WHETHER
- STATED AS "O.C." OR NOT. ALL REBAR IS CONTINUOUS WHETHER STATED AS "CONT." OR NOT. WHERE REINFORCING IS SHOWN CONTINUOUS THROUGH CONSTRUCTION JOINTS, MECHANICAL BAR SPLICE DEVICES MAY BE USED. SIZES AND TYPES SHALL BE SELECTED TO DEVELOP THE FULL TENSION STRENGTH OF THE BAR PER ICBO RESEARCH REPORT. SUBMIT FOR APPROVAL BY STRUCTURAL
- FNGINFFR 10. CONTINUOUS INSPECTION OF CONCRETE SHALL INCLUDE INSPECTION DURING INSTALLATION OF REINFORCING STEEL INSPECTION SHALL BE SCHEDULED SO THAT PLACEMENT OF REINFORCING STEEL, CONDUIT, SLEEVES, AND EMBEDDED
- ITEMS MAY BE CORRECTED PRIOR TO PLACEMENT OF OVERLYING GRIDS OF REINFORCING STEEL. 11. CONCRETE PROTECTION FOR REINFORCEMENT CAST-IN-PLACE CONCRETE (NON-PRESTRESSED)
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT UNLESS NOTED OTHERWISE:
- A. CONCRETE CAST AGAINST AND PERMANENTLY 3" EXPOSED TO EARTH: B. CONCRETE EXPOSED TO EARTH OR WEATHER:
- NO. 6 THROUGH NO. 18 BAR 1 1/2" NO. 5 BAR, W31 OR D31 WIRE AND SMALLER
- C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
- D. SLABS, WALLS, JOISTS: NO. 11 BAR AND SMALLEF 12. REPAIR ANY DAMAGED EPOXY COATINGS AS REQUIRED BY ACI
- AND ASTM REQUIREMENTS. 13. MILL TEST REPORTS FOR GRADE 60 BARS SHALL BE SUBMITTED PRIOR TO PLACEMENT OF CONCRETE.

#### STRUCTURAL STEEL

- 1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED BY AN APPROVED AND LICENSED FABRICATOR IN ACCORDANCE WITH THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS LATEST EDITION (EXCLUDING SECTION
- 2. ALL STRUCTURAL STEEL SHALL CONFORM TO THE ASTM DESIGNATION AS INDICATED BELOW (U.N.O.): ALL WF SHAPES, U.N.O. ASTM A992 (ASTM A572, GR50) BASE PLATES, CONNECTION PLATES, ASTM A-36 ANGLES, CHANNELS, AND MISCELLANEOUS ASTM A-36 PIPE COLUMNS A-53. GRADE B TUBE SECTIONS A-500, GRADE B H.S. BOLTS A-325, S.C. U.N.O.
- NON-STRUCTURAL BOLTS A-307 THE STRUCTURAL STEEL FABRICATOR SHALL FURNISH SHOP DRAWINGS TO THE ENGINEER OF ALL STEEL FOR ARCHITECT'S AND STRUCTURAL ENGINEER'S
- REVIEW AND APPROVAL BEFORE FABRICATION. 4. HOLES IN STEEL SHALL BE 1/16" LARGER DIAMETER THAN NOMINAL SIZE OF
- BOLT USED, EXCEPT AS NOTED. 5. ALL STRUCTURAL STEEL SURFACES THAT ARE ENCASED IN CONCRETE, MASONRY, OR SPRAY ON FIREPROOFING, OR ARE ENCASED BY BUILDING
- FINISH, SHALL BE LEFT UNPAINTED 6. ALL WELDING IS TO BE DONE BY CERTIFIED WELDERS USING E70XX
- ELECTRODES (U.N.O.). ALL WELDS SHALL BE IN CONFORMITY WITH THE PROJECT SPECIFICATIONS AND THE CODE FOR WELDING IN BUILDING CONSTRUCTION (AWS D1.1 LATEST REVISION) OF THE AMERICAN WELDING SOCIETY. SEE SPECIAL INSPECTION SECTION AND STEEL DETAIL DRAWINGS
- FOR WELDING INSPECTION REQUIREMENTS. WELD LENGTHS CALLED FOR ON PLANS ARE THE NET EFFECTIVE LENGTH
- REQUIRED. WHERE FILLET WELD SYMBOL IS GIVEN WITHOUT INDICATION OF SIZE, USE MINIMUM SIZE WELDS AS SPECIFIED IN AISC MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.
- PAINT STRUCTURAL STEEL WITH FABRICATOR'S STANDARD LIGHT GRAY RUST INHIBITIVE OXIDE PRIME PAINT UNLESS DIRECTED OTHERWISE BY ENGINEER

#### STEEL JOISTS AND JOIST GIRDERS

- 1. STEEL JOISTS AND GIRDERS SHALL BE DESIGNED. FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST STEEL JOIST INSTITUTE SPECIFICATIONS
- 2. ALL JOIST AND JOIST GIRDERS TO BE DESIGNED WITH A MINIMUM NET UPLIFT OF PSF UNLESS NOTED OTHERWISE ON DRAWINGS. 3. JOIST HAVE BEEN SELECTED FOR DEFLECTIONS LIMITED TO SPAN/360 FOR
- OTAL LOAD ON FLOOR JOISTS AND SPAN/360 FOR TOTAL LOAD ON ROOF JOISTS UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. BAR JOISTS SUPPLIED SHALL CONFORM TO THESE DEFLECTION CRITERIA 4. SUBMIT SHOP DRAWINGS FOR APPROVAL SHOWING MARK NUMBERS, BRIDGING,
- SPECIAL CONDITIONS, ETC. PRIOR TO FABRICATION. PROVIDE BRIDGING AS CALLED FOR ON THE DESIGN DRAWINGS, AND IN
- ACCORDANCE WITH SJI STANDARDS. ENDS OF BRIDGING LINES SHALL BE ANCHORED TO MASONRY WALLS OR STEEL BEAMS. 6. WELD ALL STEEL JOISTS TO SUPPORTING STEEL MEMBERS, EXCEPT AT
- EXPANSION JOINTS. CONTRACTOR TO COORDINATE LOCATION AND MAGNITUDE OF ALL
- CONCENTRATED LOADS ON JOISTS AND JOIST GIRDERS WITH JOIST SUPPLIER PRIOR TO THE FABRICATION OF JOISTS AND JOIST GIRDERS.
- 8. PAINT ALL JOISTS, JOIST GIRDERS, AND COMPONENTS WITH FABRICATOR'S STANDARD LIGHT GRAY RUST INHIBITIVE OXIDE PRIME PAINT UNLESS DIRECTED OTHERWISE BY ENGINEER.

## STEEL DECK

- 1. ROOF AND FLOOR DECKS SHALL BE AS NOTED ON THE DRAWINGS PROPERTIES ARE AS FOLLOWS: DECK SIZE AND GAUGE 1 1/2" X 20 GA WIDE RIB ROOF DECK
- DECK SHOP DRAWINGS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW PRIOR TO FABRICATION AND SHALL INDICATE STUD LAYOUT.
- 3. THE AMERICAN IRON AND STEEL INSTITUTE "SPECIFICATIONS FOR THE DESIGN OF LIGHT GAUGE STEEL STRUCTURAL MEMBERS" SHALL GOVERN THE DESIGN OF ALL DECK UNITS
- STEEL DECK AND ALL OF ITS CLOSURES AND FLASHINGS SHAL CONFORM TO ASTM A653 FOR GALVANIZED DECK AND A1008 FOR PAINTED DECK, Fy = 33,000 psi MINIMUM 4. ROOF DECK IS TO BE INSTALLED IN ACCORDANCE WITH FM I-28
- FOR I-90 WIND VELOCITIES WITH ADJUSTMENTS FOR PERIMETER AND CORNERS ACCEPTABLE STEEL DECK MANUFACTURERS ARE AS

#### FOLLOWS: VUI CRAFT NEW MILLENNIUM

- USD DFCK UNITS SHALL BE CONTINUOUS OVER THREE OR MORE SPANS EXCEPT WHERE THE FRAMING DOES NOT PERMIT. SHORING MAY BE REQUIRED AT NON-CONTINUOUS SPANS. DECK SHOP DRAWINGS SHALL INDICATE WHERE SHORING WILL BE
- REQUIRED. DECK SHALL BEAR 2" MINIMUM AT ALL SUPPORTS FORMDECK SHALL BE WELDED TO SUPPORTS @ 12" O.C. THRU WELD WASHERS USING 3/8" DIA WELDS. 7. ALL WELDING OF STEEL DECK SHALL BE DONE BY CERTIFIED
- LIGHT GRADE WELDERS IN ACCORDANCE WITH AWS "SPECIFICATIONS FOR WELDING SHEET STEEL IN STRUCTURES", AWS D1.3.
- ROOF DECK SHALL BE FASTENED TO STEEL SUPPORTS AT THE END OF UNITS AND AT INTERMEDIATE SUPPORTS WITH 5/8" DIAMETER WELDS @ 12" O.C. WELD ROOF DECK WITHIN 5' OF PERIMETER AND CORNERS 5/8" DIA PUDDLE WELDS AT 6" O.C
- 9. AT ROOF DECK, THE SIDE LAPS OF ADJACENT UNITS SHALL BE FASTENED BY SCREWS AT THIRD POINTS.
- 10. PROVIDE FLASHING AND CLOSURE PLATES AT ENDS OF ALL UNITS, AROUND COLUMNS, AND ALL PERIMETER LOCATIONS REQUIRING CONCRETE. 11. SUMP PANS SHALL BE PROVIDED AT ALL INTERIOR
- DOWNSPOUT LOCATIONS. SUMP PAN TO BE FABRICATED FROM MINIMUM 14 GA GALVANIZED STEEL. 12. REINFORCE ALL OPENINGS 18" OR LESS WITH L2x2x12GA x 3'-0"
- LONG SCREWED TO EACH FLUTE EACH SIDE OF OPENING. 13. WELD WASHERS ARE TO BE USED FOR WELDS IN DECK WHICH IS 24 GAUGE OR THINNER
- 14. DECK TO BE PAINTED SHALL BE PAINTED WITH MANUFACTURER'S 14. STANDARD LIGHT GRAY PRIME PAINT

### MASONRY

- 1. CONSTRUCT ALL MASONRY WALLS IN ACCORDANCE WITH ACI 530 AND ACI 530.1 UNLESS OTHERWISE SHOWN OR NOTED. MATERIALS: LOAD BEARING UNITS: ASTM C-90 ASTM C-55 ASTM C-216, TYPE FBS, GRADE SW CONCRETE BRICK: ASTM C-216, TYPE FBS, GRADE SW FACING BRICK NON LOAD BEARING UNITS ASTM C-129 ASTM C-270 (PROPORTION METHOD) MORTAR (TYPE M, S, N, or O): ASTM C-476 (2000 PSI, PROPORTION METHOD) GROUT ASTM REINFORCING STEEL BARS: A-615 GRADE 60 MASONRY PRISM STRENGTH (fm) = 2,000 PSI AT 28 DAYS, UNLESS NOTED
- MORTAR USAGE FOR ABOVE AND BELOW GRADE WALLS: REINFORCED MASONRY: LOAD BEARING (INTERIOR AND EXTERIOR): TYPE S NON-LOAD BEARING (EXTERIOR): NON-LOAD BEARING PARTITIONS (INTERIOR): TYPE N
- ACCELERATING ADMIXTURES MAY BE USED IN MORTAR FOR COLD WEATHER CONST, EXCEPT ADMIXTURES SHALL NOT CONTAIN CALCIUM CHLORIDE OR CHLORIDE IONS. EUCLID CHEMICAL "ACCELGARD 80" OR EQUAL WILL BE ACCEPTABLE.
- 6. CONCRETE MASONRY UNITS AND MORTAR ARE TO CONTAIN AN INTEGRAL WATER REPELLENT ADMIXTURE, GRACE "DRY-BLOCK', DEGUSSA 'RHEOPEL WR" OR EQUAL. ADD DOSAGES TO BLOCK MIX AND MORTAR MIX PER MANUFACTURER'S WRITTEN RECOMMENDATIONS IN MASONRY WALLS, NO CHASES, RISERS, CONDUITS OR TOOTHING OF MASONRY
- SHALL OCCUR WITHIN 17" OF CENTERLINE OF BEAM BEARING OR CONCENTRATED DO NOT INSTALL ANY BEAM, LINTEL, JOIST, BEARING PL OR CONT ANGLE ACROSS CONTROL OR EXPANSION JOINT. SHIFT BEAM, JOIST OR BRG PL TO ONE SIDE, ADJUST SPACING AS NEEDED. CUT CONT ANGLES AT JOINTS. GC TO COORD
- JOINT LOCATIONS WITH BEAM/JOIST BEARING. CUT WIRES OF JOINT REINFORCING AT CONTROL JOINTS AND CLEAN JOINTS OF ALL MORTAR. USE TWO COURSES (16") OF SOLID OR GROUTED SOLID MASONRY BELOW EACH
- BEAM BEARING MINIMUM UNLESS NOTED OTHERWISE. 10. PROVIDE HORIZONTAL JOINT REINFORCING IN ALL MASONRY WALLS AT 16" O.C. VERTICALLY. JOINT REINFORCING SHALL BE DUR-O-WAL LADDER TYPE, 9 GA.
- GALVANIZED WIRE, OR EQUAL. LAP SPLICES MINIMUM 6" 11. VENEER ANCHORS TO BE TWO PIECE, PINTEL AND EYE RECTANGULAR TYPE OR ADJUSTABLE WITH TRIANGULAR TIES. TIES ARE TO BE MIN 3/16" GALVANIZED
- WIRE. SPACE TIES AT 16" O.C. VERT AND 24" O.C. HORZ STAGGER ROWS. CORRUGATED TIES WILL NOT BE PERMITTED 12. PROVIDE UNITS APPROPRIATE FOR THE USE, I.E., SASH, BULLNOSE, BOND, ETC..
- 13. PROVIDE FIRE RATED OR EQUIVALENT MASONRY UNITS AT FIREWALLS, STAIRWELLS AND ELEVATOR SHAFT. CERTIFICATES OF COMPLIANCE SHALL BE FURNISHED UPON REQUEST.
- 14. DURING CONSTRUCTION, BRACE MASONRY WALLS IN ACCORDANCE WITH "STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION" BY THE COUNCIL FOR MASONRY WALL BRACING. CONTRACTOR IS SOLELY RESPONSIBLE TO MEET THESE REQUIREMENTS . CONSTRUCT MASONRY IN ACCORDANCE WITH ACI 530.1 SECTION 1.8 DURING
- COLD OR HOT WEATHER. USE OF 100% CHLORIDE FREE ACCELERATING ADMIXTURE IS SUBJECT TO APPROVAL BY ENGINEER. SUBMIT PRODUCT DATA PRIOR TO APPLICATION.

CASES 1&2

## STEEL LINTEL SCHEDULE

- 1. PROVIDE STEEL LINTELS AS PER THE FOLLOWING SCHEDULE IN ALL MASONRY WALL OPENINGS WHEN NOT SHOWN ON DRAWINGS, OR IN OPENINGS REQUIRED BY THE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. FOR OPENINGS UP TO 4'-0" | 3 1/2x3 1/2x1
- FOR OPENINGS FROM 4'-1" TO 6'-0" : L5x3 1/2x5/16 FOR OPENINGS FROM 6'-1" TO 7'-0" : L6x3 1/2x5/16 FOR OPENINGS FROM 7'-1" TO 10'-0": W8x18 with 5/16" Plate
- FOR OPENINGS GREATER THAN 10'-0" AND NOT SHOWN ON PLANS ALLOW FOR A MINIMUM BEAM WEIGHT OF 36 PLF PLUS A 5/16" BOT PLATE 1" LESS THAN TOTAL WALL THICKNESS
- 2. ALL LINTELS SHALL BEAR ON 8" OF SOLID MASONRY, U.N.O. 3. USE ONE ANGLE FOR EACH 4" WYTHE OF MASONRY. PLATES ARE TO BE 1" LESS THAN NOMINAL WALL THICKNESS.
- 4. MINIMUM THICKNESS OF LINTELS IN EXTERIOR WALLS TO BE 5/16". 5. ANGLES OR PLATES IN EXTERIOR WIDTHS OF MASONRY WALLS ARE TO BE HOT DIPPED GALVANIZED. 6. FOR MULTI WYTHE WALLS WITH AIR SPACES, CONTRACTOR IS TO INCLUDE
- ADDITIONAL ANGLES, PLATES, AND CHANNELS TO CLOSE OFF AIRSPACE AT LINTEL LOCATIONS. SEE DETAILS ON DRAWINGS. IF NO DETAILS ARE SHOWN, CONTACT ENGINEER FOR FURTHER INFORMATION AND DETAILS

#### CONCRETE FLOOR FINISH AND FLOOR FLATNESS/LEVELNESS REQUIREMENTS

	PLACE AND FINISH CONCRETE 302.1R (LATEST EDITION) "GUID				
	CONSTRUCTION" AND TO ACI 3				
	CONCRETE SLABS THAT RECE	IVE MOISTURE	E-SENSITI	VE FLOORIN	G
	MATERIALS."				
	REFER TO ARCHITECTURAL DF	KAWINGS FOR	FINISH SC	HEDULE.	
J.	FLOOR FLATNESS/LEVELNESS	SCHEDULE:			
		FLATNES	S	LEVELNES	SS
		SPECIFIED	MIN.	SPECIFIED	MIN
		OVERALL	LOCAL	OVERALL	LOCAL
	• MECH ROOMS, MORTAR SET	TILE			
	FLOORS	20	15	15	10
	• CARPETED FLOORS, RETAIL				

25

TILE/SHEET FLOORS 35 24 25 1

17 20 15

## PRE-CAST CONCRETI

LIGHT STORAGE

THINSET TILE FLOORS, VINYL

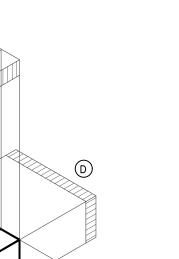
1.	DESIGN, FABRICATE AND ERECT PRE-CAST CONCRETE HOLLOW CORE PLANK
	IN ACCORDANCE WITH PCI MANUALS "DESIGN HANDBOOK AND DESIGN OF
	HOLLOW CORE SLABS".
2.	CONTRACTOR TO PROVIDE MINIMUM REINFORCING AND ALL EMBEDDED
	ITEMS SHOWN IN THE CONTRACT DOCUMENTS.
3.	CONTRACTOR TO PROVIDE ADDITIONAL REINFORCING AND EMBEDDED
	ITEMS WHICH ARE REQUIRED FOR HANDLING AND ERECTION OF PLANKS.
4.	SPECIAL FINISHES, WHERE REQUIRED, ARE SHOWN IN THE ARCHITECTURAL

SECTION OF THE CONTRACT DOCUMENTS. 5. CONTRACTOR TO PROVIDE BRACING AND TEMPORARY SUPPORTS AS REQUIRED DURING ERECTION OF PRE-CAST PLANKS.

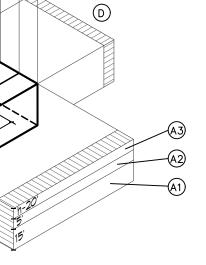
MATERIALS:	
MINIMUM DESIGN STRENGTH OF CONCRETE: 5	5000 PSI
PRE-STRESSING STRANDS:	ASTM A-416, GRADE 270
REINFORCING BARS:	ASTM A-615, GRADE 60
WELDED WIRE FABRIC:	ASTM A-185
EMBEDDED STEEL:	ASTM A36

### **ABBREVIATIONS**

@	
ACI AFF	AMERICAN CONCRETE INSTITUTE ABOVE FINISHED FLOOR
AISC	AMERICAN INSTITUTE FOR STEEL CONSTRUCTION
AL	ALUMINUM
APA ARCH	AMERICAN PLYWOOD ASSOCIATION ARCHITECT OR ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
B P B/FTG	BASE PLATE BOTTOM OF FOOTING
BFF	BELOW FINISHED FLOOR
BIA	BRICK INSTITUTE OF AMERICA
BLDG BM	BUILDING BEAM
BOT	BOTTOM
	BEARING
BSMI BTM	BASEMENT BOTTOM
CJ	CONTROL JOINT
C-C CF	CENTER TO CENTER CUBIC FOOT
CF	CENTERLINE
CMU	CONCRETE MASONRY UNITS
COL CONC	COLUMN CONCRETE
CONC	CONTINUOUS
COORD	
CRS CY	COURSES CUBIC YARD
DBL	DOUBLE
DIA	DIAMETER
DTL DWG	DETAIL DRAWING
EF	EACH FACE
E J ELEV	EXPANSION JOINT ELEVATION
ES	EACH SIDE
ΕW	EACH WAY
EA ENG	EACH ENGINEERED
ENG EQ	EQUAL
	EXISTING
EXP EXT	EXPANSION EXTERIOR
FS	FAR SIDE
FIN FLR	FINISH
FLR FND	FLOOR FOUNDATION
FRT	FIRE RETARDANT TREATED
FT FTG	FEET FOOTING
GA	GAGE
GALV	
GR H D G	GRADE HOT DIPPED GALVANIZED
HGT	HEIGHT
нъв I F	HIGH STRENGTH BOLT (ASTM A325 BOLT) INSIDE FACE
IN	INCHES
INS INT	INSIDE INTERIOR
JST	JOIST
JT	JOINT
K-FT KIP	KIP-FEET ONE THOUSAND POUNDS
L	STRUCTURAL STEEL ANGLE
L W LF	LONG WAY LINEAL FEET
LF LG	LONG
LVL	LAMINATED VENEER LUMBER
MAS MB	MASONRY MACHINE BOLT (ASTM A307 BOLT OR EQUAL)
ML	MICROLAM LUMBER
MTL	METAL
N S N T S	NEAR SIDE NOT TO SCALE
NCMA	
NO NOM	NUMBER NOMINAL
	ON CENTER
OF	OUTSIDE FACE
ODOT O-O	OHIO DEPARTMENT OF TRANSPORTATION OUT TO OUT
OSB	ORIENTATED STRAND BOARD
PPT	PRESERVATIVE PRESSURE TREATED
PL PLYWD	PLATE PLYWOOD
PSF	POUNDS PER SQUARE FOOT
PSI PT	POUNDS PER SQUARE INCH PRESSURE TREATED
PTD	PAINTED
REINF	REINFORCED OR REINFORCING
S O G S R	SLAB ON GRADE SAG ROD
SW	SHORT WAY
SPA	SPACED OR SPACING
SS STL	STAINLESS STEEL STEEL
ТJ	TIE JOIST
T/FTG T/STI	
T/STL THR'D	TOP OF STRUCTURAL STEEL THREAD
TJI	TRUSS JOIST
TPL TYP	TRIPLE TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT WD	VERTICAL WOOD
WD W R	WIDE RIB
W/	WITH
WWF 2x	WELDED WIRE FABRIC WOOD MEMBER WITH 2 INCH NOMINAL DIMENSION



TYPF N



CASE 1

9.96

-12.06 -15.44

-15.44

-16.90

-13.99

-13.99

-20.74

SURFACE ZONE

building, respectively.

CASE 2

17.14

-4.88

-8.27

0.54

At a minimum, wind pressures of 16 psf and 8 psf must be applied simultaneously to the vertical plane normal to the assumed wind direction over the wall and roof area of the

CASE 3

9.96

-8.52

-15.44

-15.44

-18.83

-18.8

CASE 4

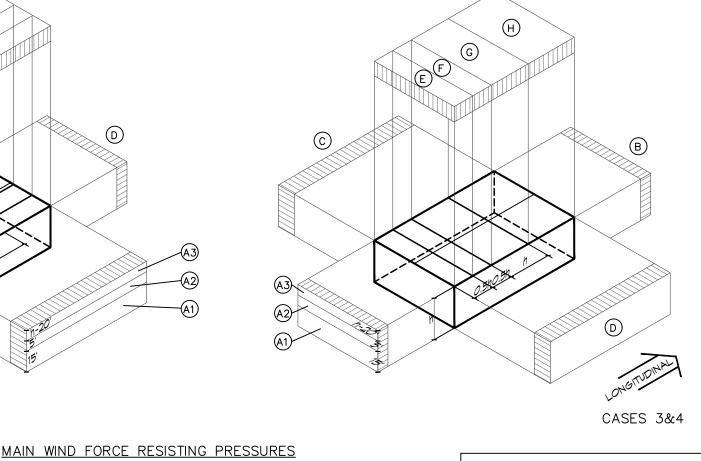
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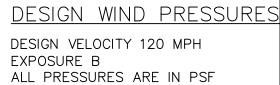
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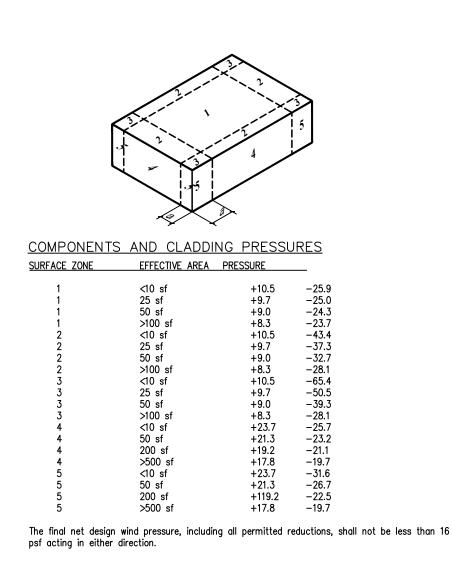
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-8.2

0.54

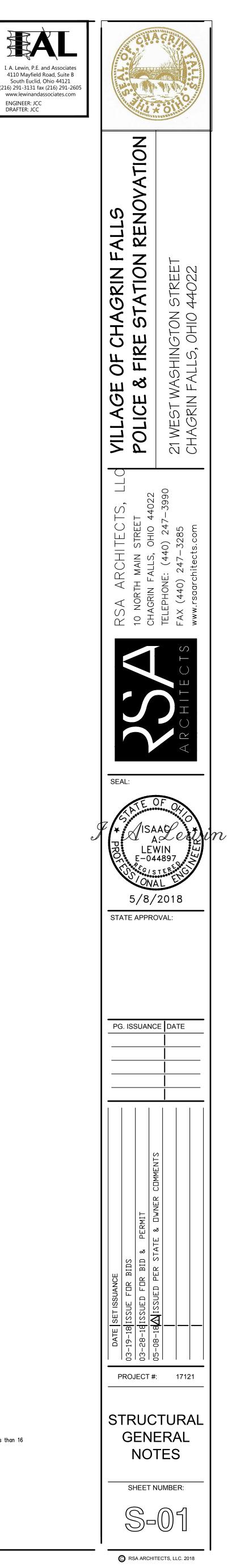






ABBREVIATIONS MAY BE SHOWN WITH PERIODS OR WITHOUT PERIOD, WITH

SPACES OR WITHOUT SPACES.



#### Statement of Special Inspections (Section 1704 Ohio Building Code)

Application No.: Project name: VILLAGE OF CHAGRIN FALLS POLICE AND FIRE STATION Project location: 21 WEST WASHINGTON STREET, CHAGRIN FALLS, OHIO 44022

Per section 1704.2 of the Ohio Building Code, where application is made to the building official for construction as specified in section 105, the owner or the owner's representative, shall employ one or more special inspectors to provide special inspections and tests during construction on the types of work specified in section 1705 and identify the approved agencies to the building official. These special inspections and tests are in addition to the inspections by the building official that are identified in section 108. Per section 1704.2.3 of the Ohio Building Code, the applicant shall submit a statement of special inspections as a condition for the issuance of a plan approval. This statement shall be in accordance with section 1704.3. The

statement of special inspections shall identify the following per OBC 1704.3.1: 1. The materials, systems, components and work required to have special inspections or tests by the registered design professional responsible for each portion of the work. 2. The type and extent of each special inspection. 3. The type and extent of each test. 4. Additional requirements for special inspections or tests for seismic or wind resistance as specified in

sections 1705.11, 1705.12 and 1705.13. 5. For each type of inspection, identification as to whether it will be continuous special inspection, periodic special inspection or performed in accordance with the notation used in the referenced standard where the inspections are defined. Contractor responsibility - OBC 1704.4:

seismic system or a wind or seismic force-resisting component listed in the statement of special inspections shall submit a written statement of responsibility to the building official and the owner or the owner's representative prior to the commencement of work on the system or component. The contractor's statement of responsibility shall contain acknowledgement of awareness of the special requirements contained in the statement of special inspections. Special inspector qualifications - OBC 1704.2.1:

Each contractor responsible for the construction of a main wind or seismic force-resisting system, designated

Prior to the start of the construction, the special inspectors shall provide written documentation to the building official demonstrating the competence and relevant experience or training of the special inspectors who will perform the special inspections and tests during construction. Experience or training shall be considered relevant where the documented experience or training is related in complexity to the same type of special inspection or testing activities for projects of similar complexity and material qualities. These qualifications are in addition to qualifications specified in other sections of this code.

The registered design professionals involved in the design of the project are permitted to act as special inspectors and their personnel are permitted to act as special inspectors for the work designed by them, provided they qualify as special inspectors.

Access for special inspection - OBC 1704.2.2: The construction or work for which special inspection or testing is required shall remain accessible and exposed for special inspection or testing purposes until completion of the required special inspections or tests.

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<ul> <li>Manufacturer certifications for welding consumables available</li> </ul>			x
Material identification (type/grade)			x
Check welding equipment			X
<ul> <li>Use of qualified welders</li> </ul>			x
<ul> <li>Control and handling of welding consumables</li> </ul>			x
Environmental conditions			x
WPS followed			X
Verify size and location of welds		Х	
Welds meet visual acceptance criteria		х	
Verify repair activities of welds		х	
<ul> <li>Document acceptance/rejection of welds</li> </ul>		x	
<ul> <li>Manufacturer installation instructions for mechanical fasteners available</li> </ul>			x
Proper tools			X
Proper storage of mechanical fasteners			x
Fastener position			х
<ul> <li>Fastener installation in accordance with manufacturer's instructions</li> </ul>			x
Spacing, type, and installation of support fasteners		x	
Spacing, type, and installation of sidelap fasteners		x	
<ul> <li>Spacing, type, and installation of perimeter fasteners</li> </ul>		х	
Verify repair activities for mechanical fasteners		х	
<ul> <li>Document acceptance/rejection of mechanical fasteners</li> </ul>		x	
Open-Web Steel Joists and Joist Girders (OBC 1705.2.3)	Х		
<ul> <li>End connections - welding and bolted</li> </ul>			Х
Standard bridging			Х
Bridging that differs from SJI specifications			Х

<ul> <li>Placement and plumbness, confirm diameters, bell diameters, lengths, embedment into bedrock, end-bearing strata capacity, record concrete/grout volumes</li> </ul>		
Concrete elements - refer to 1705.3		
Helical Pile Foundations (OBC 1705.9)		
<ul> <li>Record installation equipment, pile dimensions, tip elevations, final depth, final installation torque</li> </ul>		
Wind Resistance (OBC 1705.11) - Exp B + Vasd=120mph or more; Exp C or D + Vasd = 110mph or more		
Structural wood		
Cold-formed steel light frame construction		
Seismic Resistance (OBC 1705.12, 1705.13)	Х	
<ul> <li>Structural steel force-resisting systems &amp; elements - excludes SDC's B and C with R=3 or less, except for cantilever column systems</li> </ul>		
• Structural wood - SDC's of C, D, E or F		
<ul> <li>Cold-formed steel light frame construction - SDC's of C, D, E or F</li> </ul>		
• Designated seismic systems - SDC's of C, D, E or F		Х
Architectural components - SDC's of D, E or F		
<ul> <li>Plumbing, mechanical and electrical components - SDC's of C, D, E or F</li> </ul>		Х
Storage racks - SDC's of D, E or F		
• Seismic isolation systems - SDC's of B, C, D, E or F		Х
<ul> <li>Cold-formed steel special bolted moment frames - SDC's of D, E or F</li> </ul>		
Sprayed Fire-Resistant Materials (OBC 1705.14)		

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### SPECIAL INSPECTIONS

ITEM	Required	Continuous Inspection	Periodic Inspection	
Fabricated Items (OBC 1704.2.5, 1705.10)	Х			
<ul> <li>Structural load-bearing members/assemblies</li> </ul>		X		
Structural lateral load-resisting members/assemblies				
Structural Steel - Inspection Prior to Welding (OBC 1705.2/AISC 360 Table N5.4-1)	x			
Welding procedure specifications (WPSs) available		Х		
<ul> <li>Manufacturer certifications for welding consumables available</li> </ul>		х		
Material identification (type/grade)			Х	
Welder identification system			Х	
Fit-up of groove welds (including joint geometry)			Х	
<ul> <li>Configuration and finish of access holes</li> </ul>			Х	
Fit-up of fillet welds			х	
Check welding equipment	-	-	-	
Structural Steel - Inspection During Welding (OBC 1705.2/AISC 360 Table N5.4-2)	х			
Use of qualified welders			Х	
Control and handling of welding consumables			Х	
No welding over cracked tack welds			х	
Environmental conditions			х	
WPS followed			х	
Welding techniques			Х	
Structural Steel - Inspection After Welding (OBC 1705.2/AISC 360 Table N5.4-3)	Х			

Cold-Formed Steel Trusses (OBC 1705.2.4) • For spans of 60 feet or more, verify restraint/bracing Concrete Construction (OBC 1705.3) Х Reinforcing steel inspection and placement Х Reinforcing steel welding Cast-in-place anchors Х • Post-installed anchors - mechanical and adhesive Х Required mix design Х On-site concrete testing Х Concrete and shotcrete application techniques Х Maintenance of curing temperature and techniques Х • Prestressed concrete - application forces • Prestressed concrete - grouting of tendons Precast concrete members Х • Post-tensioned concrete - in-situ strength prior to stressing and removal of shores and forms Concrete formwork Х Masonry Construction (OBC 1705.4/TMS 402/ACI 530/ASCE 5) - Level A - Risk Categories I, II, III -Prescriptive Design • Verify certificates of compliance Masonry Construction (OBC 1705.4/TMS 402/ACI 530/ASCE 5) - Level B - Risk Categories I, II, III -Engineered Design; Risk Category IV - Prescriptive Design Compliance with approved submittals • Proportions of mortar & construction of mortar joints

Mastic and Intumescent Fire-Resitant Coatings (OBC 1705.15) Exterior Insulation and Finish Systems EIFS (OBC 1705.16) Fire-Resistant Penetrations and Joints (OBC 1705.17) Smoke Control (OBC 1706.18)

Welds cleaned			x
<ul> <li>Size, length and location of welds</li> </ul>		x	
Welds meet visual acceptance criteria		х	
Arc strikes		х	
• k-area		х	
<ul> <li>Backing removed and weld tabs removed</li> </ul>		х	
Repair activities		х	
<ul> <li>Document acceptance or rejection of welded joint/member</li> </ul>		x	
Structural Steel - NDT of Welded Joints (OBC 1705.2/AISC 360 N5.5b, N5.5c)	х		
• CJP groove welds - Risk Categories III and IV		х	
CJP groove welds - Risk Category II			
Access holes thermally cut		Х	
Structural Steel - Welded Joints Subjected to Fatigue (OBC 1705.2/AISC 360 N5.5d)			
<ul> <li>Radiographic or ultrasonic testing - App. 3, Table A-3.1</li> </ul>			
Structural Steel - Inspection Prior to Bolting (OBC 1705.2/AISC 360 Table N5.6-1)	Х		
<ul> <li>Manufacturer's certifications available for fastener materials</li> </ul>		х	
<ul> <li>Fasteners marked in accordance with ASTM requirements</li> </ul>			x
<ul> <li>Proper fastener selection for the joint detail</li> </ul>			Х
Proper bolting procedure selected for joint detail			Х
Connecting elements			Х
Pre-installation verification testing			х
Proper storage			x

<ul> <li>Grade and size of prestressing tendons, anchorages, &amp; prestressing techniques</li> </ul>			
<ul> <li>Location and placement of reinforcement, anchorage, and prestressing tendons</li> </ul>			
<ul> <li>Grout space &amp; proportions of site-prepared grout and prestressing grout</li> </ul>			
<ul> <li>Size and location of structural elements</li> </ul>			
<ul> <li>Type, size, and location of anchors</li> </ul>			
Reinforcement welding			
Cold weather & hot weather techniques			
Application and measurement of prestressing force			
Grout placement			
<ul> <li>Preparation of grout specimens, mortar specimens, prisms</li> </ul>			
Masonry Construction (OBC 1705.4/TMS 402/ACI 530/ASCE 5) - Level C - Risk Category IV - Engineered Design	х		
<ul> <li>Compliance with approved submittals</li> </ul>			х
<ul> <li>Proportions of mortar, grout, &amp; prestressing grout</li> </ul>			х
• Grade, type, and size of reinforcement, anchor bolts			x
<ul> <li>Placement of masonry units and construction of mortar joints</li> </ul>			x
<ul> <li>Reinforcement/anchorage/placement</li> </ul>		Х	
Grout space & placement of grout		Х	
Size and location of structural elements			х
Type, size, and location of anchors		Х	
Reinforcement welding			
Cold weather & hot weather techniques			х
Application and measurement of prestressing force			

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Final Report of Special Inspections and Tests

Application No. Project name: VILLAGE OF CHAGRIN FALLS POLICE AND FIRE STATION Project location: 21 WEST WASHINGTON STREET, CHAGRIN FALLS, OHIO 44022 Pursuant to section 1704.2.4 of the Ohio Building Code, special inspectors shall keep records of special inspections and tests. The special inspectors shall submit reports of special inspections and tests to the building official and to the registered design professional in responsible charge. Reports shall indicate that work inspected or tested was or was not completed in conformance to approved construction documents. Discrepancies shall be brought to the immediate attention of the contractor for correction. If they are not corrected, the discrepancies shall be brought to the attention of the building official and to the registered design professional in responsible charge prior to the completion of that phase of the work. A final report documenting required special inspections and tests, and correction of any discrepancies noted in the inspections or tests, shall be submitted at a point in time agreed upon prior to the start of work by the owner or the owner's

representative to the building official prior to the issuance of the certificate of occupancy.

FINAL REPORT OF SPECIAL INSPECTIONS AND TESTS

ITEM	Date	Corrections		
Fabricated Items (OBC 1704.2.5, 1705.10)				
Structural Steel - Inspection Prior to Welding (OBC 1705.2/AISC 360 Table N5.4-1)				
Structural Steel - Inspection During Welding (OBC 1705.2/AISC 360 Table N5.4-2)				
Structural Steel - Inspection After Welding (OBC 1705.2/AISC 360 Table N5.4-3)				
Structural Steel - NDT of Welded Joints (OBC 1705.2/AISC 360 N5.5b, N5.5c)				
Structural Steel - Welded Joints Subjected to Fatigue (OBC 1705.2/AISC 360 N5.5d)				
Structural Steel - Inspection Prior to Bolting (OBC 1705.2/AISC 360 Table N5.6-1)				
Structural Steel - Inspection During Bolting (OBC 1705.2/AISC 360 Table N5.6-2)				
Structural Steel - Inspection After Bolting (OBC 1705.2/AISC 360 Table N5.6-3)				
Structural Steel - Other Inspections (OBC 1705.2/AISC 360 N5.7)				

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Structural Steel - Inspection During Bolting (OBC 1705.2/AISC 360 Table N5.6-2)	Х		
Fastener assemblies			x
Joint brought to snug-tight before pretensioning			X
Fastener component rotation prevention			X
Fastener pretensioning			x
Structural Steel - Inspection After Bolting (OBC 1705.2/AISC 360 Table N5.6-3)	Х		
Document acceptance/rejection of bolted     connections		X	
Structural Steel - Other Inspections (OBC 1705.2/AISC 360 N5.7)	Х		
Anchor bolt installation/verification		X	
Compliance of fabricated steel & erected steel frame			
Structural Steel for Composite Construction (OBC 1705.2/AISC 360 Table N6.1)			
Placement and installation of steel deck			
Placement and installation of steel headed stud anchors			
Document acceptance/rejection of steel elements			
Steel Deck (OBC 1705.2.2 - ANSI/SDI QA/QC-2017)	Х		
Verify compliance of deck and accessories with construction documents		x	
Document acceptance/rejection of deck and accessories		х	
Verify compliance of deck and accessory installation		x	
Verify deck materials with mill certifications		X	
Document acceptance/rejection of installation of deck and accessories		x	
Welding procedure specifications (WPS) available		x	

• Preparation of grout specimens, mortar specimens,

Prefabricated structural elements and assemblies

Metal-plate-connected wood trusses spanning 60

Wood Construction (OBC 1705.5)

Site-built assemblies

High-load diaphragms

feet or greater

Soils (OBC 1705.6)

prisms

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 Bearing capacity of soils Х Excavations Х Compacted fill materials - classification and testing Х Verify use of compacted fill materials, densities and X lift thicknesses Subgrade and site preparation Х Driven Deep Foundations (OBC 1705.7) • Verify element materials, sizes and lengths Capacities of test elements & additional load tests Driving operations and records Placement and plumbness, hammers, record #'s of blows per foot, required penetrations, tip and butt elevations, document damage • Steel elements - refer to 1705.2 • Concrete elements - refer to 1705.3 Cast-In-Place Deep Foundations (OBC 1705.8) • Drilling operations and records Structural Steel for Composite Construction (OBC 1705.2/AISC 360 Table N6.1) Steel Deck (OBC 1705.2.2 - ANSI/SDI QA/QC-2017) Open-Web Steel Joists and Joist Girders (OBC 1705.2.3) Concrete Construction (OBC 1705.3) Masonry Construction (OBC 1705.4/TMS 402/ACI 530/ASCE 5) - Level A - Risk Categories I, II, III -

Prescriptive Design Masonry Construction (OBC 1705.4/TMS 402/ACI 530/ASCE 5) - Level B - Risk Categories I, II, III -Engineered Design; Risk Category IV - Prescriptive Design Masonry Construction (OBC 1705.4/TMS 402/ACI 530/ASCE 5) - Level C - Risk Category IV -Engineered Design Wood Construction (OBC 1705.5) Soils (OBC 1705.6) Driven Deep Foundations (OBC 1705.7) Cast-In-Place Deep Foundations (OBC 1705.8) Helical Pile Foundations (OBC 1705.9) Wind Resistance (OBC 1705.11) - Exp B + Vasd=120mph or more; Exp C or D + Vasd = 110mph or more Seismic Resistance (OBC 1705.12, 1705.13) Sprayed Fire-Resistant Materials (OBC 1705.14) Mastic and Intumescent Fire-Resitant Coatings (OBC 1705.15) Exterior Insulation and Finish Systems EIFS (OBC 1705.16) Fire-Resistant Penetrations and Joints (OBC 1705.17) Smoke Control (OBC 1706.18)

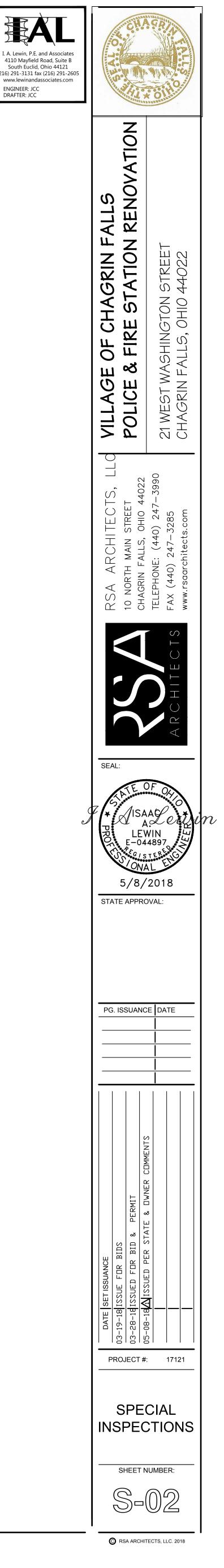
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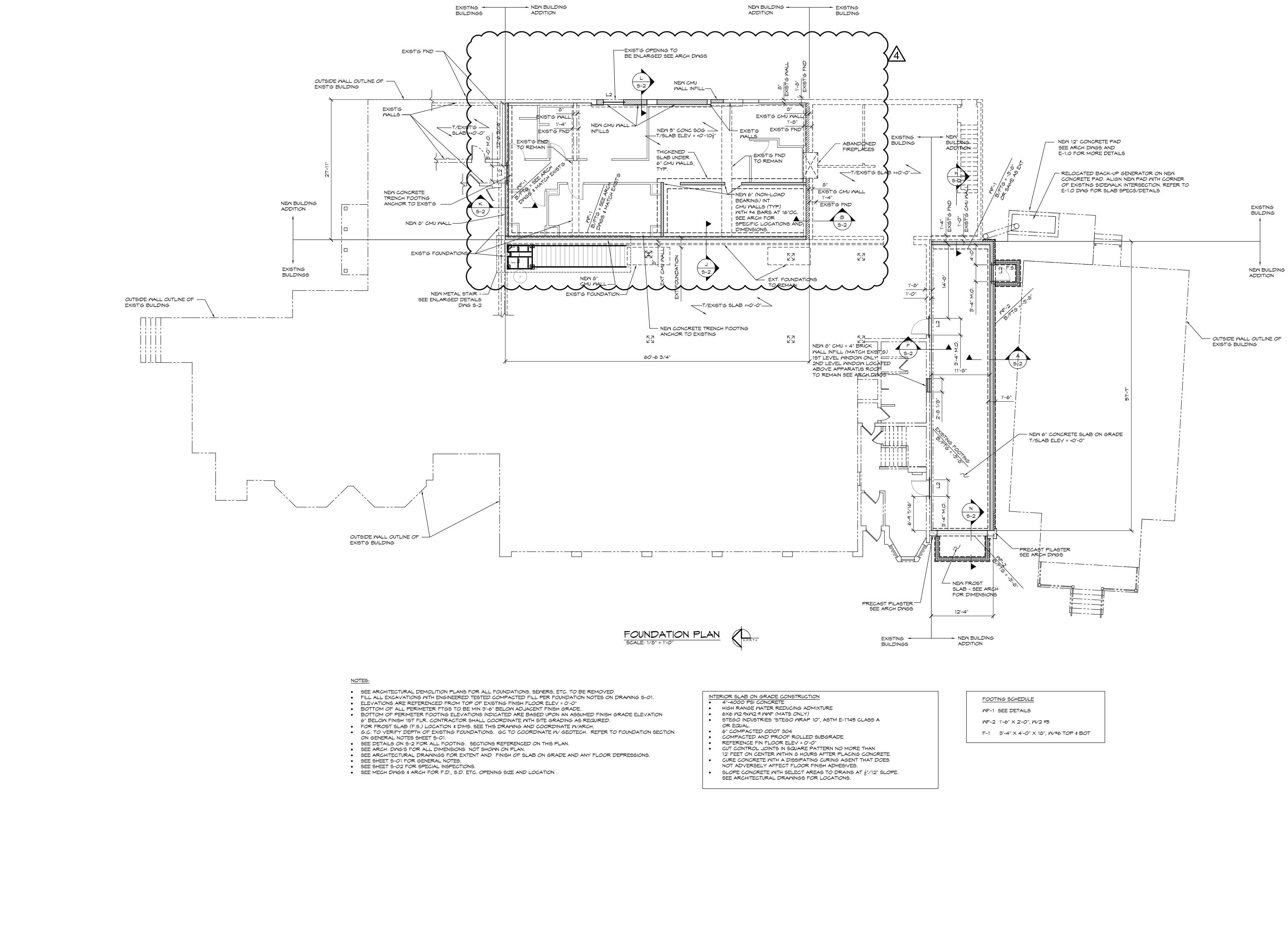
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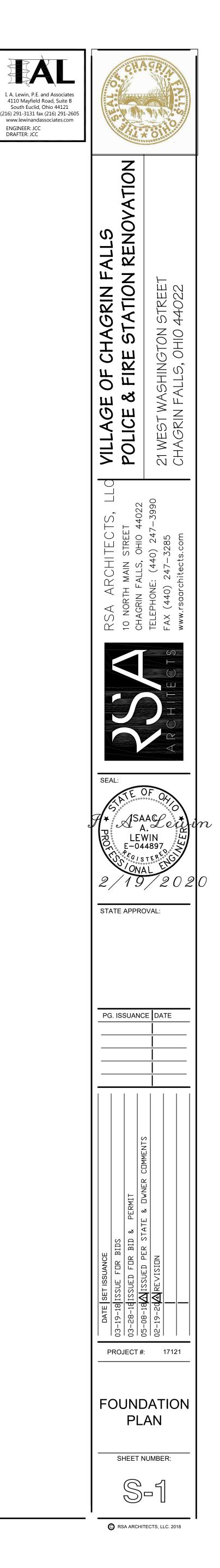
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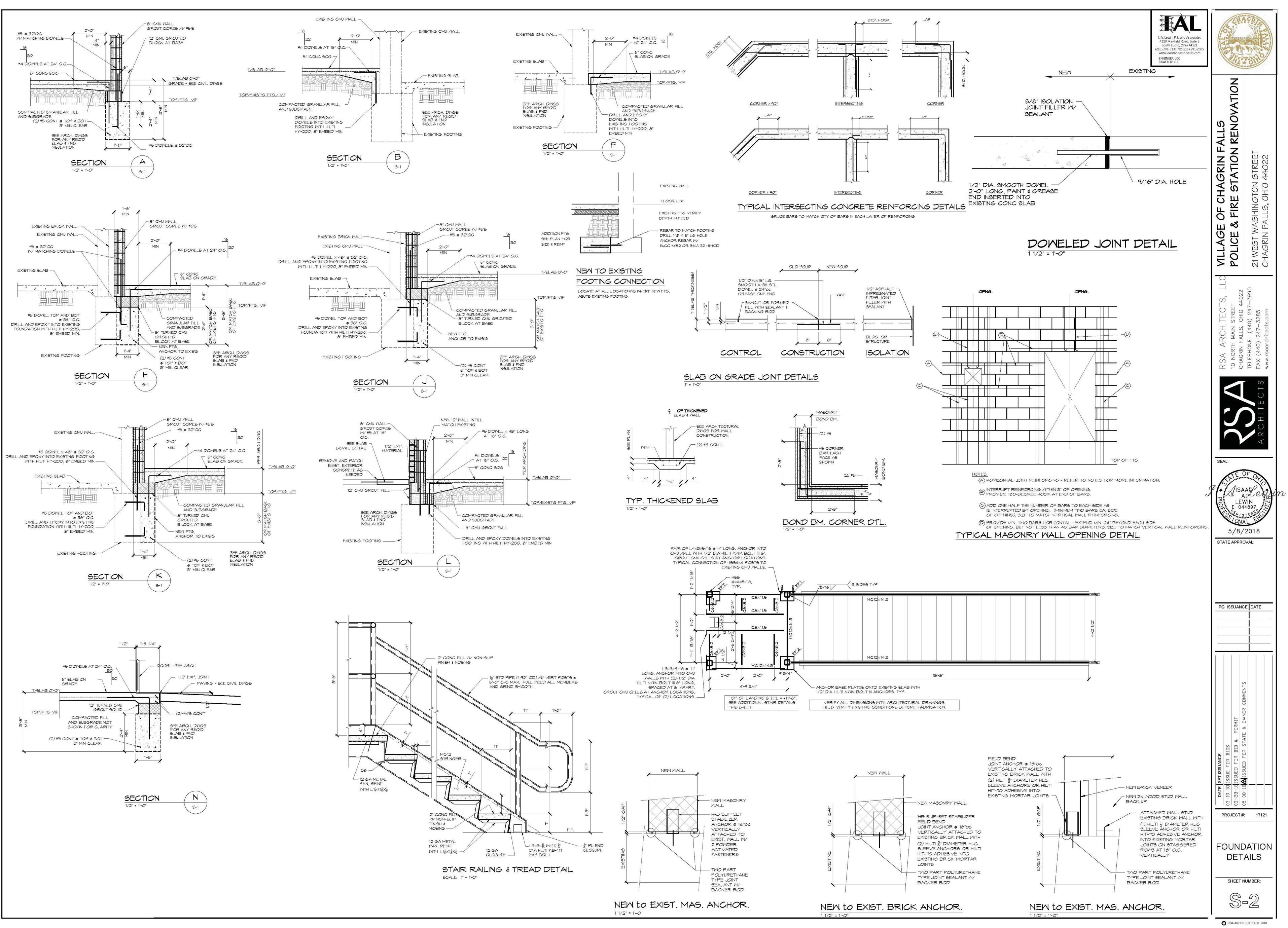
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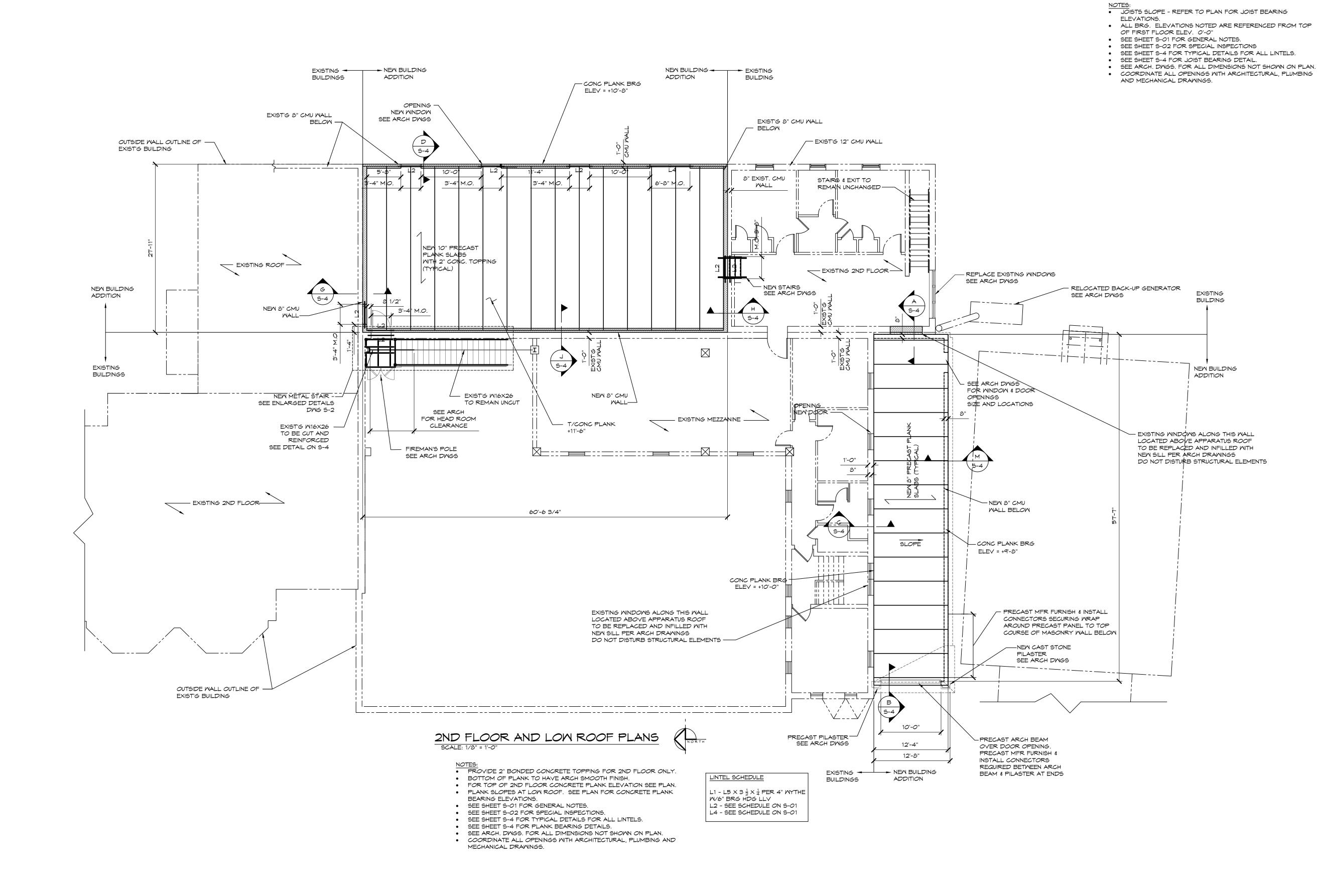


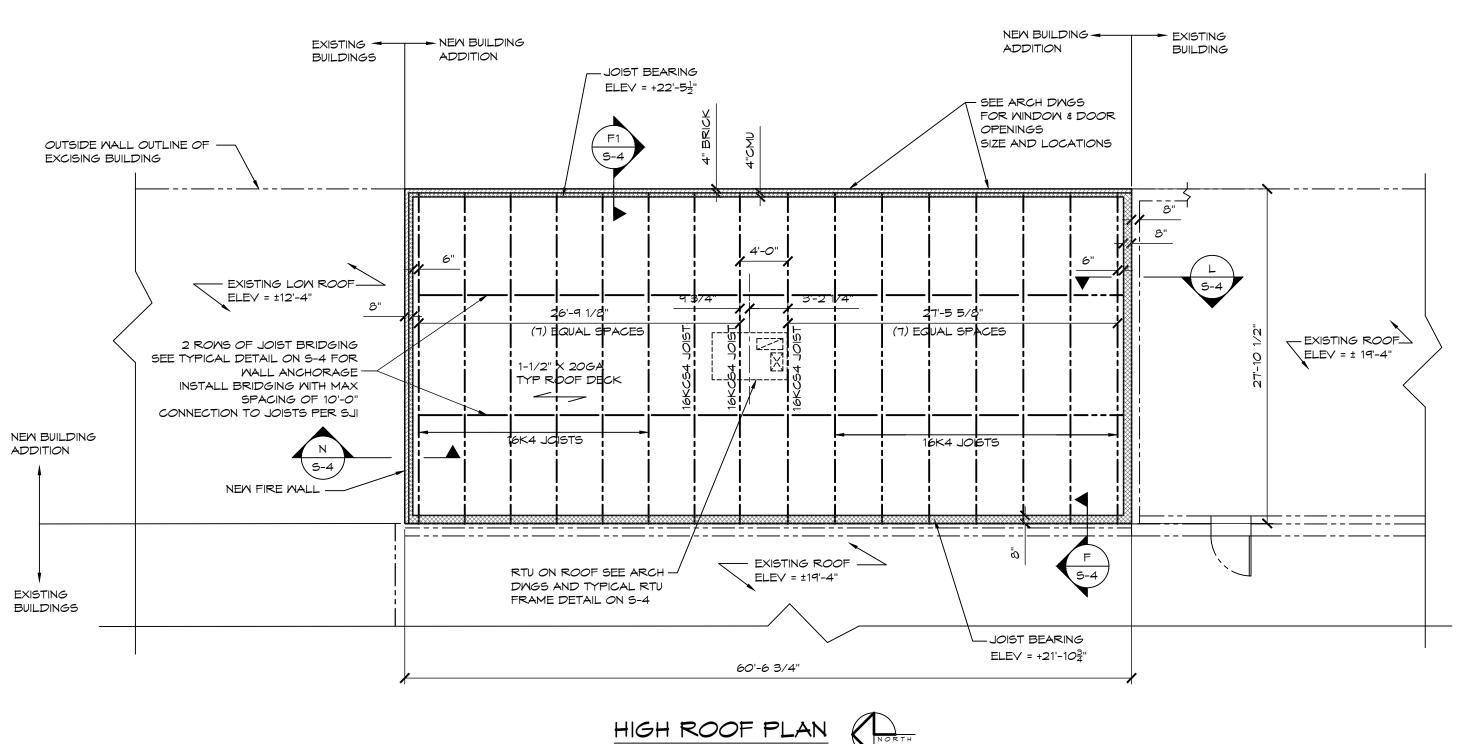


ENGINEER: JCC DRAFTER: JCC





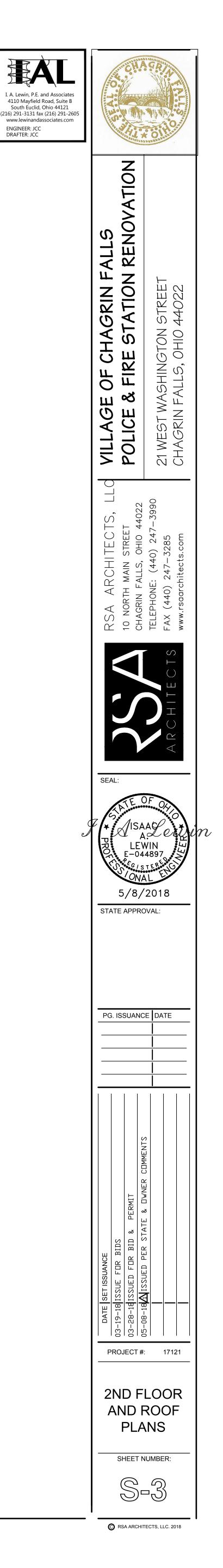


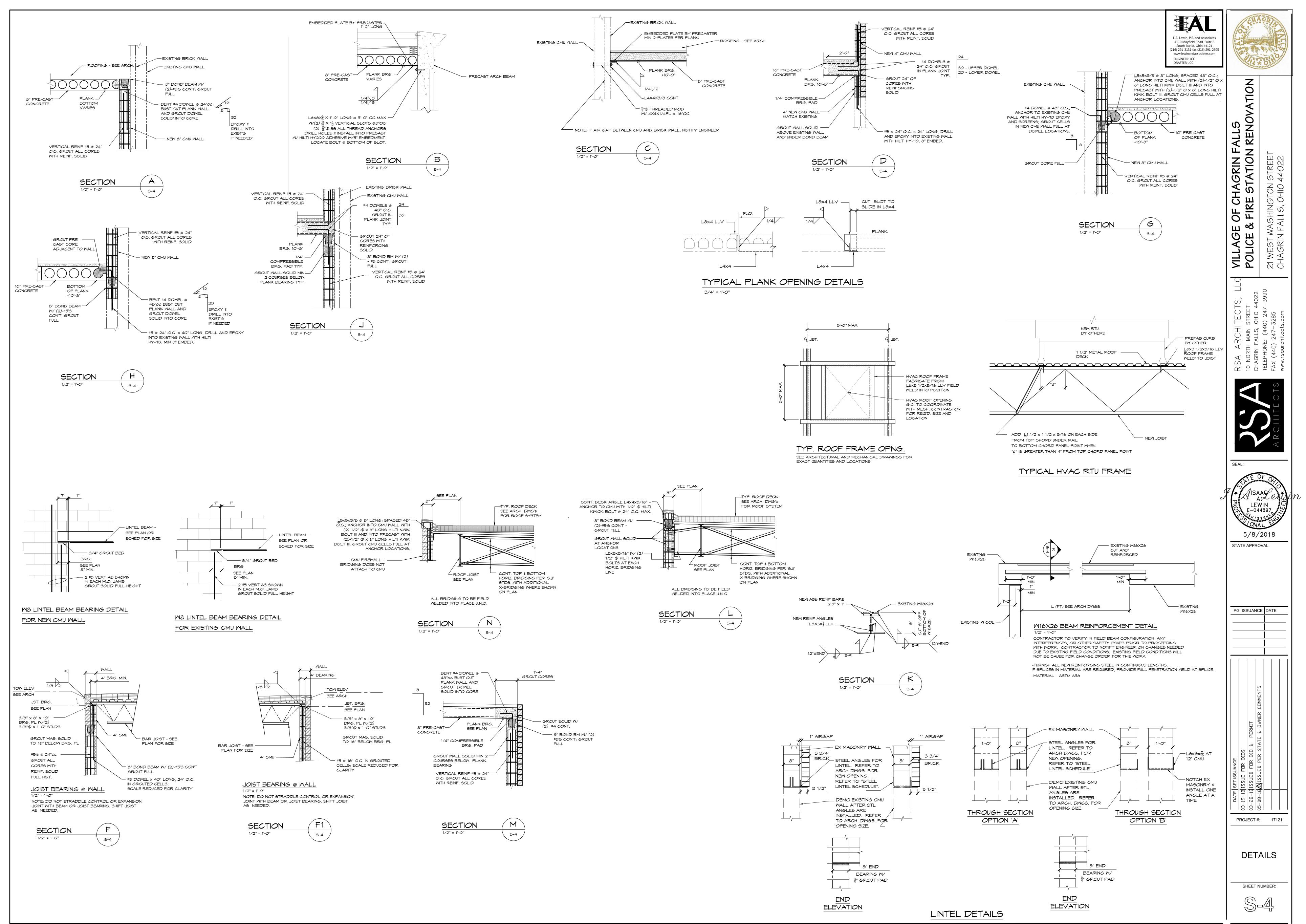


SCALE: 1/8" = 1'-0"

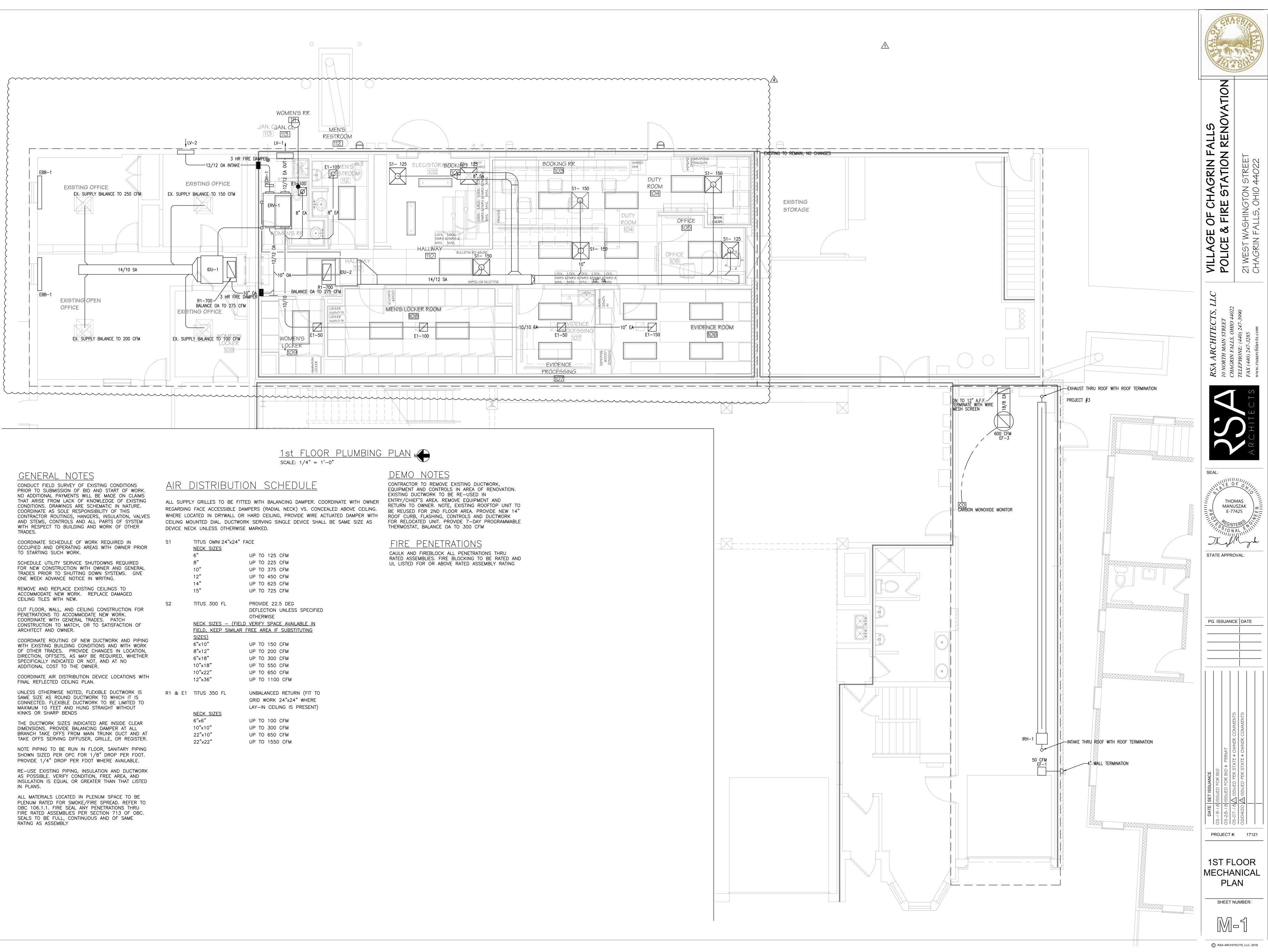
• SEE ARCH. DWGS. FOR ALL DIMENSIONS NOT SHOWN ON PLAN. • COORDINATE ALL OPENINGS WITH ARCHITECTURAL, PLUMBING

TYPICAL ROOF DECK CONSTRUCTION 1 1/2"X20 GA. TYPE 'B' PTD. MTL. DECK (MIMIMUM (3) SPAN CONDITION U.N.O.) WELDED TO SUPPORTS @ 6"0C WITH 5/8" PUDDLE WELDS PROVIDE SCREWED SIDE LAPS AT THIRD POINTS SPAN OF DECK VARIES, SPAN DIRECTION OF DECK INDICATED THUS: D.S.  $\leftarrow \rightarrow$ 



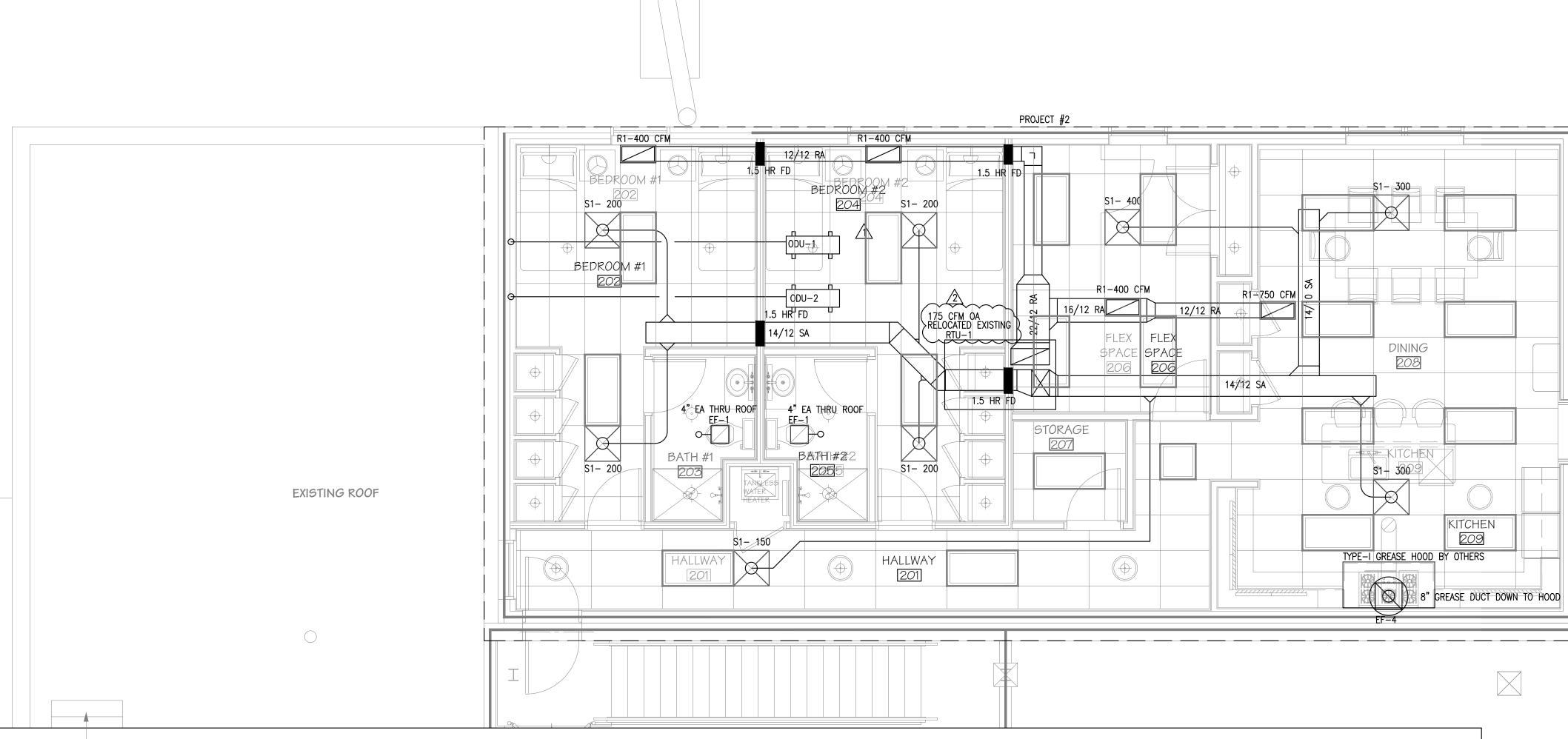


C RSA ARCHITECTS, LLC. 2018



ТІТ	US (	OMNI 24"x24"	FACE
	<b></b>		

51	NECK SIZES	
	6"	UP TO 125 CFM
	8"	UP TO 225 CFM
	10"	UP TO 375 CFM
	12"	UP TO 450 CFM
	14"	UP TO 625 CFM
	15"	UP TO 725 CFM
S2	TITUS 300 FL	PROVIDE 22.5 DEG
		DEFLECTION UNLESS SPECIFIED
		OTHERWISE
	<u>NECK SIZES – (FIELD</u>	VERIFY SPACE AVAILABLE IN
	<u>FIELD, KEEP SIMILAR I</u>	FREE AREA IF SUBSTITUTING
	<u>SIZES)</u>	
	6"x10"	UP TO 150 CFM
	8"x12"	UP TO 200 CFM
	6"x18"	UP TO 300 CFM
	10"x18"	UP TO 550 CFM
	10"x22"	UP TO 650 CFM
	12"x36"	UP TO 1100 CFM
R1 & E1	TITUS 350 FL	UNBALANCED RETURN (FIT TO GRID WORK 24"x24" WHERE
		LAY-IN CEILING IS PRESENT)
	NECK SIZES	
	6"x6"	UP TO 100 CFM
	10"×10"	UP TO 300 CFM
	22"v10"	LIP TO 650 CEM



#### GENERAL NOTES

CONDUCT FIELD SURVEY OF EXISTING CONDITIONS PRIOR TO SUBMISSION OF BID AND START OF WORK. NO ADDITIONAL PAYMENTS WILL BE MADE ON CLAIMS THAT ARISE FROM LACK OF KNOWLEDGE OF EXISTING CONDITIONS. DRAWINGS ARE SCHEMATIC IN NATURE. COORDINATE AS SOLE RESPONSIBILITY OF THIS CONTRACTOR ROUTINGS, HANGERS, INSULATION, VALVES AND STEMS, CONTROLS AND ALL PARTS OF SYSTEM WITH RESPECT TO BUILDING AND WORK OF OTHER TRADES.

COORDINATE SCHEDULE OF WORK REQUIRED IN OCCUPIED AND OPERATING AREAS WITH OWNER PRIOR TO STARTING SUCH WORK.

SCHEDULE UTILITY SERVICE SHUTDOWNS REQUIRED FOR NEW CONSTRUCTION WITH OWNER AND GENERAL TRADES PRIOR TO SHUTTING DOWN SYSTEMS. GIVE ONE WEEK ADVANCE NOTICE IN WRITING.

REMOVE AND REPLACE EXISTING CEILINGS TO ACCOMMODATE NEW WORK. REPLACE DAMAGED CEILING TILES WITH NEW.

CUT FLOOR, WALL, AND CEILING CONSTRUCTION FOR PENETRATIONS TO ACCOMMODATE NEW WORK. COORDINATE WITH GENERAL TRADES. PATCH CONSTRUCTION TO MATCH, OR TO SATISFACTION OF ARCHITECT AND OWNER.

COORDINATE ROUTING OF NEW DUCTWORK AND PIPING WITH EXISTING BUILDING CONDITIONS AND WITH WORK OF OTHER TRADES. PROVIDE CHANGES IN LOCATION, DIRECTION, OFFSETS, AS MAY BE REQUIRED, WHETHER SPECIFICALLY INDICATED OR NOT, AND AT NO ADDITIONAL COST TO THE OWNER.

COORDINATE AIR DISTRIBUTION DEVICE LOCATIONS WITH FINAL REFLECTED CEILING PLAN.

UNLESS OTHERWISE NOTED, FLEXIBLE DUCTWORK IS SAME SIZE AS ROUND DUCTWORK TO WHICH IT IS CONNECTED. FLEXIBLE DUCTWORK TO BE LIMITED TO MAXIMUM 10 FEET AND HUNG STRAIGHT WITHOUT KINKS OR SHARP BENDS

THE DUCTWORK SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS. PROVIDE BALANCING DAMPER AT ALL BRANCH TAKE OFFS FROM MAIN TRUNK DUCT AND AT TAKE OFFS SERVING DIFFUSER, GRILLE, OR REGISTER.

NOTE PIPING TO BE RUN IN FLOOR, SANITARY PIPING SHOWN SIZED PER OPC FOR 1/8" DROP PER FOOT. PROVIDE 1/4" DROP PER FOOT WHERE AVAILABLE.

RE-USE EXISTING PIPING, INSULATION AND DUCTWORK AS POSSIBLE. VERIFY CONDITION, FREE AREA, AND INSULATION IS EQUAL OR GREATER THAN THAT LISTED IN PLANS.

ALL MATERIALS LOCATED IN PLENUM SPACE TO BE PLENUM RATED FOR SMOKE/FIRE SPREAD. REFER TO OBC 106.1.1. FIRE SEAL ANY PENETRATIONS THRU FIRE RATED ASSEMBLIES PER SECTION 713 OF OBC. SEALS TO BE FULL, CONTINUOUS AND OF SAME RATING AS ASSEMBLY

### 2nd FLOOR PLUMBING PLAN SCALE: 1/4" = 1'-0"

### AIR DISTRIBUTION SCHEDULE

ALL SUPPLY GRILLES TO BE FITTED WITH BALANCING DAMPER. COORDINATE WITH OWNER REGARDING FACE ACCESSIBLE DAMPERS (RADIAL NECK) VS. CONCEALED ABOVE CEILING. WHERE LOCATED IN DRYWALL OR HARD CEILING, PROVIDE WIRE ACTUATED DAMPER WITH CEILING MOUNTED DIAL. DUCTWORK SERVING SINGLE DEVICE SHALL BE SAME SIZE AS DEVICE NECK UNLESS OTHERWISE MARKED.

S1	TITUS OMNI 24"x24" FA <u>NECK SIZES</u>	
	6"	UP TO 125 CFM
	8"	UP TO 225 CFM
	10"	UP TO 375 CFM
	12"	UP TO 450 CFM
	14"	UP TO 625 CFM
	15"	UP TO 725 CFM
S2	TITUS 300 FL	PROVIDE 22.5 DEG
		DEFLECTION UNLESS SPECIFIED OTHERWISE
	NECK SIZES - (FIELD	VERIFY SPACE AVAILABLE IN
		REE AREA IF SUBSTITUTING
	<u>SIZES)</u>	
	6"×10"	UP TO 150 CFM
	8"x12"	UP TO 200 CFM
	6"x18"	UP TO 300 CFM
	10"x18"	UP TO 550 CFM
	10"x22"	UP TO 650 CFM
	12"x36"	UP TO 1100 CFM
R1 & E1	TITUS 350 FL	UNBALANCED RETURN (FIT TO
		GRID WORK 24"x24" WHERE
		LAY-IN CEILING IS PRESENT)
	<u>NECK SIZES</u> 6"x6"	
		UP TO 100 CFM
	10"x10"	UP TO 300 CFM
	22"x10"	UP TO 650 CFM
	22"×22"	UP TO 1550 CFM

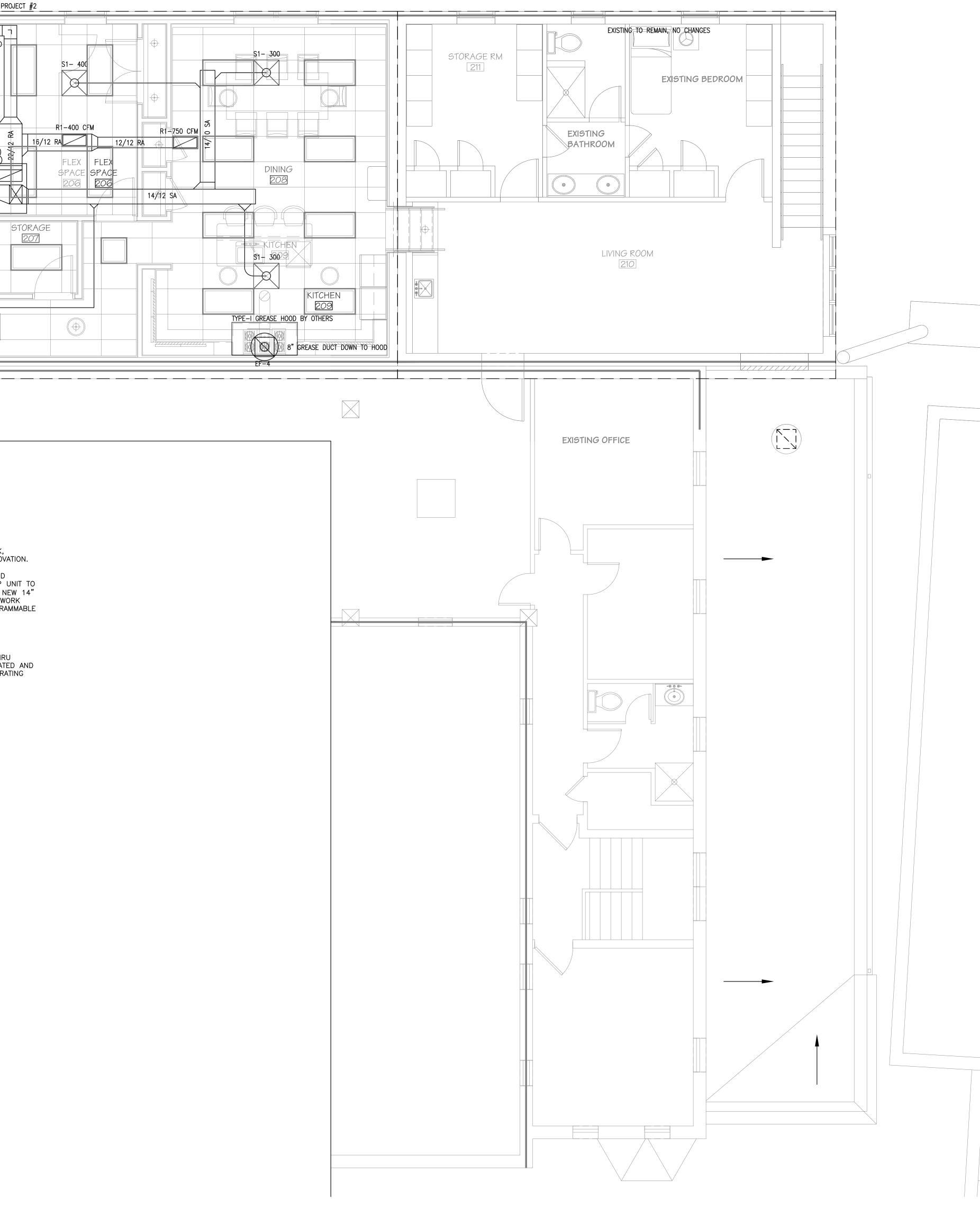
EQUIPMENT AND CONTROLS IN AREA OF RENOVATION. ENTRY/CHIEF'S AREA. REMOVE EQUIPMENT AND RETURN TO OWNER. NOTE, EXISTING ROOFTOP UNIT TO BE REUSED FOR 2ND FLOOR AREA. PROVIDE NEW 14" ROOF CURB, FLASHING, CONTROLS AND DUCTWORK FOR RELOCATED UNIT. PROVIDE 7-DAY PROGRAMMABLE

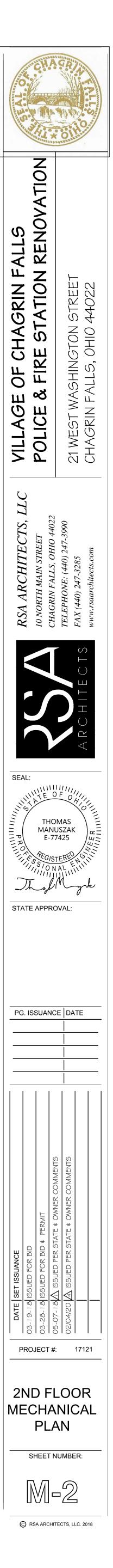
FIRE PENETRATIONS CAULK AND FIREBLOCK ALL PENETRATIONS THRU RATED ASSEMBLIES. FIRE BLOCKING TO BE RATED AND UL LISTED FOR OR ABOVE RATED ASSEMBLY RATING

FD

EXISTING DUCTWORK TO BE RE-USED IN THERMOSTAT, BALANCE OA TO 300 CFM

DEMO NOTES CONTRACTOR TO REMOVE EXISTING DUCTWORK.





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FAN SCHEDULE							
MARK	MODEL	MFG.	AIRFLOW	E.S.P.	VOLTAGE-PH	POWER	
EF-1	GN-148	COOK	100 CFM	0.5 INCH	115V-1PH	43 WATTS	
EF-3	101C15D	СООК	600 CFM	0.3 INCH	115V–1PH	1/10 HP	
EF-4	100ACSC	COOK	700 CFM	0.5 INCH	115V-1PH	1/6 HP	
ACCESSORIES AND NOTES:							

1) INTEGRAL THERMOSTAT

2) RECESSED MOUNTING KIT 3) NON-FUSED DISCONNECT

4) EF-1,2 TO RUN CONTINUOUSLY

5) EF-3 TO BE PROVIDED WITH CARBON MONOXIDE MONITORING CONTROLS (BY HVAC CONTRACTOR), FAN TO ACTIVATE ON HIGH CO LIMIT ALARM 6) EF-4 TO BE INTERLOCKED WITH EXHAUST HOOD LOUVER SCHEDULE

MARK	MODEL	MFG.	AIRFLOW	AIR SPEED	FREE AREA	DIMENSIONS	ACCESSORIES
LV-1	EME220DD-24/12	RUSKIN	550 CFM	860 FPM	0.64	24?X12?	SPRING BDD
LV-2	EME220DD-24/12	RUSKIN	550 CFM	860 FPM	0.64	24?X12?	SPRING BDD
ACCESSORIES AND NOTES:							

1) INTEGRAL BACKDRAFT DAMPER 2) PROVIDE WITH FRAME, COORDINATE CUTTING AND PATCHING WITH G.C.

	INFRARED HEATER SCHEDULE										
MARK	MODEL	MFG.	GAS INPUT	VOLTAGE-PH	MCA	MOCP	WEIGHT	LENGTH			
IRH-1	IPT-75-40	MODINE	75 CFH	115V-1PH	1A	15	175 LBS.	40 FT			

ACCESSORIES AND NOTES:

1) 7-DAY PROGRAMMABLE REMOTE THERMOSTAT 2) FLUE AND INTAKE AIR THRU ROOF, SEALED COMBUSTION

3) NON-FUSED DISCONNECT 4) MTD. @ MAX HEIGHT BELOW DECK, PER MFG. CLEARANCES

	SPLIT SYSTEM SCHEDULE												
MARK	MODEL	MFG.	SUPPLY AIR	MIN. VENT. AIR	NOMINAL TONS	COOLING (TOTAL)	COOLING (SENS.)	SEER	HEATING	HEATING OUTPUT	ELI	ECTRICAL	
MARK	MODEL		SUPPLI AIR	MIIN. VENT. AIR	NUMINAL TUNS	COOLING (TOTAL)	COOLING (SENS.)	SEER	SOURCE	HEATING OUTPUT	VOLTAGE-PH	MCA	MOCP
IDU-1	LUU247HV	LG	700	275 (THRU ERV)	2 TONS				HP		208V-1PH	N/A	N/A
ODU-1	LHN247HV	LG				22.0	17.6	20.0	HEAT PUMP	27.6 @ 47	208V-1PH	19.0	25.0
IDU-2	LUU247HV	LG	700	275 (THRU ERV)	2 TONS				HP		208V-1PH	N/A	N/A
ODU-2	LHN247HV	LG				22.0	17.6	20.0	HEAT PUMP	27.6 © 47	208V-1PH	19.0	25.0

ACCESSORIES AND NOTES: 1) NON-FUSED DISCONNECT

2) PROVIDE VENTILATION AIR TO KNOCK OUT, REFER TO INSTALLATION MANUAL FOR FINAL CONNECTION SIZE. PROVIDE TRANSITION 3) EXTEND REFRIGERANT PIPING TO HEAT PUMP 4) PROVIDE REMOTE THERMOSTATS (FINAL LOCATION BY OWNER)

5) WASH FILTERS AT CONCLUSION OF CONSTRUCTION.

6) CONDENSATE WASTE TO LOCAL DRAIN \*\*\*\*OR/AND\*\*\*\* PROVIDE LITTLE GIANT CONDENSATE WASTE PUMP VCC-20 SERIES LOW PROFILE, DISCHARGE TO LOCAL DRAIN

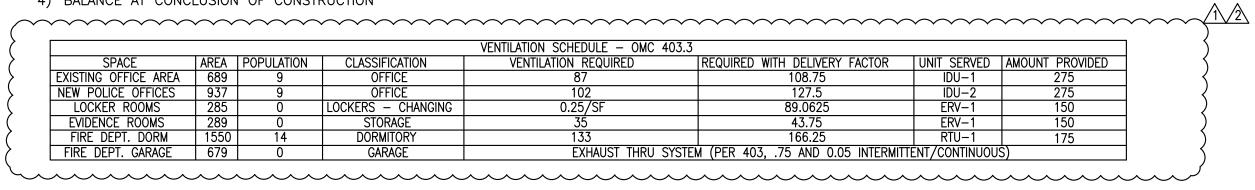
ENERGY RECOVERY VENTILATOR SCHEDULE MARK MODEL MFG. AIRFLOW E.S.P. VOLT-PH-A MOCP ERV-1 MINICORE-5 GREENHECK 550 CFM 0.5 INCH 115V-1PH-17.6A 25A ACCESSORIES AND NOTES:

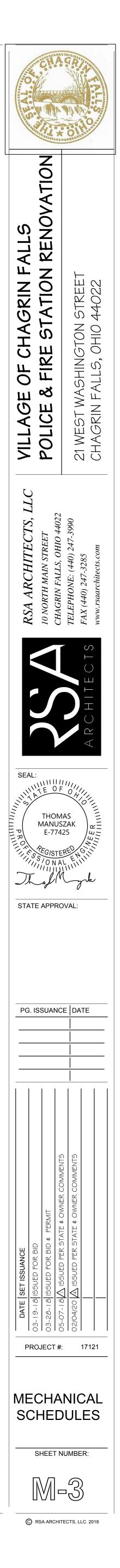
1) FREEZE CONTROL SYSTEM 2) CEILING MOUNTING HANGERS

3) NON-FUSED DISCONNECT

4) BALANCE AT CONCLUSION OF CONSTRUCTION

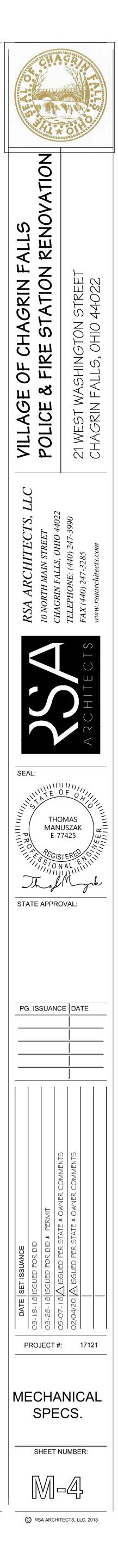
SPACE	AREA	POPULATION	CLASSIFICATION	VENTILATION REQUIRED	REQUIRED WITH DELIVERY FACTOR	UNIT SERVED	AMOUNT PROVIDED
EXISTING OFFICE AREA	689	9	OFFICE	87	108.75	IDU-1	275
NEW POLICE OFFICES	937	9	OFFICE	102	127.5	IDU-2	275
LOCKER ROOMS	285	0	LOCKERS - CHANGING	0.25/SF	89.0625	ERV-1	150
EVIDENCE ROOMS	289	0	STORAGE	35	43.75	ERV-1	150
FIRE DEPT. DORM	1550	14	DORMITORY	133	166.25	RTU-1	175
FIRE DEPT. GARAGE	679	0	GARAGE	EXHAUST THRU SYSTEM	M (PER 403, .75 AND 0.05 INTERMITT	ENT/CONTINUOU	Ś)

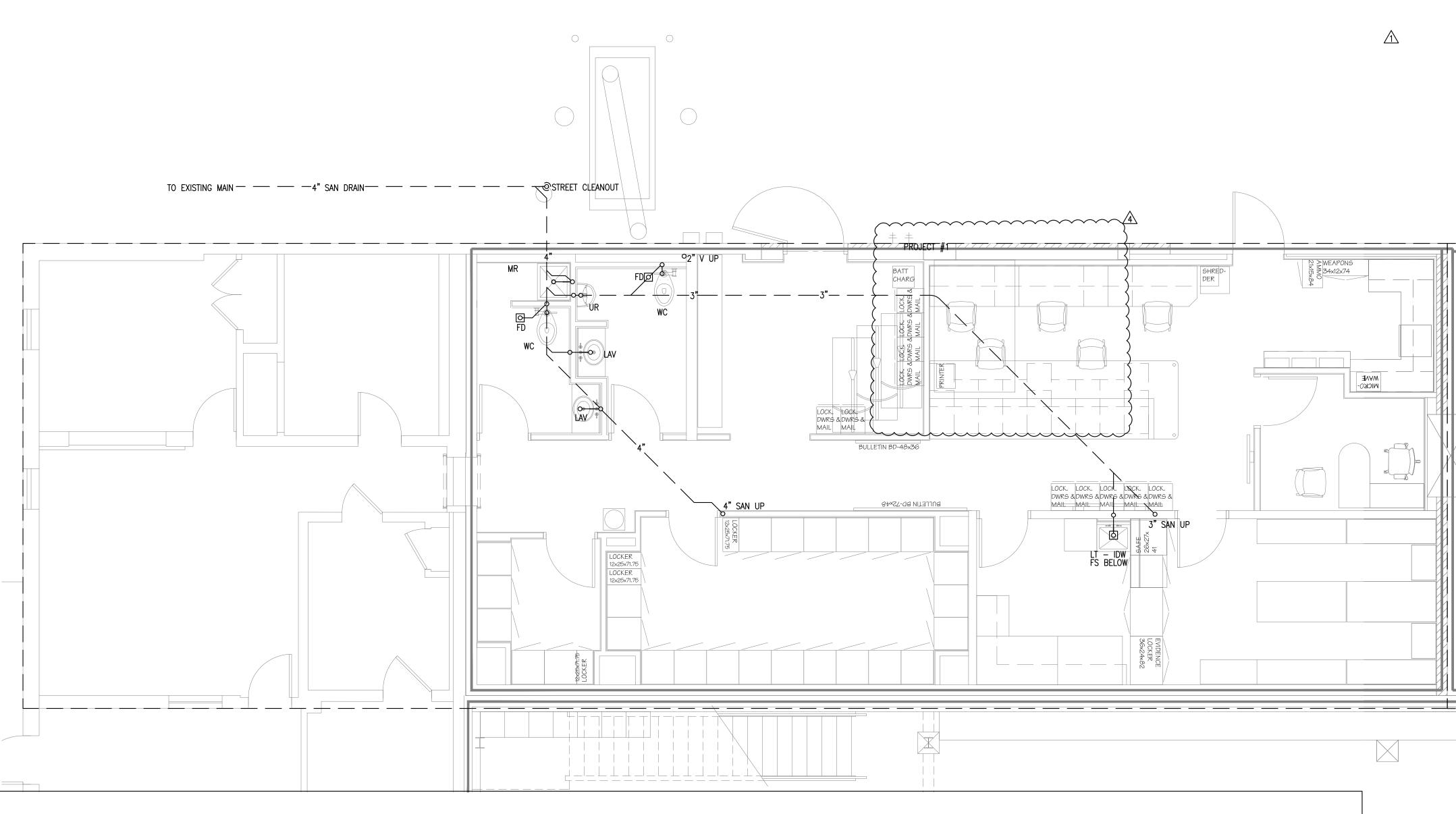




	-HVAC GENERAL CONDITIONS			SECTION 23 10 00 - HVAC MATERIALS AND	INSULATION	
	ALL WORK COMPLETED BY THIS CONTRACTOR, FOR PURPOSES OF PROVIDING A COMPLETE AND WORKING SYSTEM, TO BE PROVIDED IN COMPLIANCE WITH:		TYPE/LOCATION IN PLENUM SPACE	MATERIAL	INSULATION	NOTES
	OHIO MECHANICAL CODE		SUPPLY	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	MINIMUM R-3.5 FIBERGLASS INSULATION WITH VAPOR BARRIER JACKET. PLENUM RATED MATERIALS	UP TO 16" TO BE 22 GA. UP TO 30" TO BE 16 GA. BEYO
	OHIO PLUMBING CODE OHIO BUILDING CODE		RETURN TRANSFER	G-60 GALVANIZED STEEL PER ASTM A653 AND A924 G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION NO INSULATION	
	OHIO RESIDENTIAL CODE (IF APPLICABLE) INTERNATIONAL FUEL GAS CODE		EXHAUST IN ATTIC SPACE – ABOVE	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION	
1 – CODE COMPLIANCE STATEMENT	INTERNATIONAL ENERGY CONSERVATION CODE ALL LOCAL CITY ORDINANCES APPLICABLE		INSULATION LAYER SUPPLY	G—60 GALVANIZED STEEL PER ASTM A653 AND A924		
	ALL PROFESSIONAL BEST PRACTICES INCLUDING ASHRAE, ASPE, AND NEC REQUIREMENTS		RETURN TRANSFER	G-60 GALVANIZED STEEL PER ASTM A653 AND A924 G-60 GALVANIZED STEEL PER ASTM A653 AND A924	R—6 FIBERGLASS INSULATION WITH VAPOR BARRIER JACKET AND FOIL FACE	UP TO 16" TO BE 22 GA. UP TO 30" TO BE 16 GA. BEYO 30" TO BE 22 GA. WITH REINFORCING.
	GREEN BUILDING, LEED, OR OTHER SIMILAR GREEN RATINGS AS APPLICABLE AND REQUIRED BY OWNER		EXHAUST	G-60 GALVANIZED STEEL PER ASTM A033 AND A924 G-60 GALVANIZED STEEL PER ASTM A653 AND A924		
	CONTRACTOR SHALL HAVE KNOWLEDGE AND UNDERSTANDING OF THE BASICS OF THE APPLICABLE CODES PRIOR TO BID OF		IN ATTIC/CEILING SPACE - BELOW INSULATION LAYER			
	PROJECT. NO ADDITIONAL PAYMENT IS TO BE RENDERED DUE TO A LACK OF KNOWLEDGE OF THE APPLICABLE CODES OR RATINGS. COORDINATE ANY REQUIREMENTS FOR GREEN		SUPPLY	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	MINIMUM R-3.5 FIBERGLASS INSULATION WITH VAPOR BARRIER JACKET.	UP TO 16" TO BE 22 GA. UP TO 30" TO BE 16 GA. BEYO
	TECHNOLOGIES PRIOR TO BID.		RETURN TRANSFER	G-60 GALVANIZED STEEL PER ASTM A653 AND A924 G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION NO INSULATION	30" TO BE 22 GA. WITH REINFORCING.
	PROVIDE ALL LABOR, MATERIALS, ACCESSORIES, CONTROLS (PER CONTRACT), FLASHING, OPENINGS, CLEANING AND		EXHAUST BELOW GRADE/BELOW SLAB	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION	
	PATCHING, BALAŃCING AND TESTING, AND EQUIPMENT INDICATED ON DRAWINGS, REQUIRED FOR A PROPER WORKING AND BALANCED SYSTEM, AND AS REASONABLY IMPLIED. ALL WORK		SUPPLY	HDPE CONFORMING TO ASTM-D2412, UL 181B, AND BSS 7239088		
	TO BE TESTED, CLEANED AND READY FOR USE BY OWNER AT CONCLUSION OF CONSTRUCTION. ALL WORK TO BE PURCHASED,	1 – DUCTWORK	RETURN	HDPE CONFORMING TO ASTM-D2412, UL 181B, AND BSS 7239088	MINIMUM R-3,5 FIBERGLASS LINER WITH FOIL FACE. $\sim$ C	
	INSTALLED, COMMISSIONED, AND STARTED IN ACCORDANCE WITH AND COMPLIANCE WITH ALL LOCAL, CITY, STATE, FEDERAL AND		TRANSFER	HDPE CONFORMING TO ASTM-D2412, UL 181B, AND BSS 7239088	R-5 EXTEROR INSULATION WITH HDPE JACKET	STRUCTURAL ENGINEERS. CONSTRUCT PER SMACNA +10" W.G. STANDARDS.
	INDUSTRY CODES AND STANDARDS APPLICABLE. PROTECT ALL EQUIPMENT, PIPING AND DUCTWORK DURING CONSTRUCTION		EXHAUST	HDPE CONFORMING TO ASTM-D2412, UL 181B, AND BSS 7239088		
	FROM DAMAGE AND DEBRIS. PROVIDE LABOR AND MATERIAL WARRANTY ON ALL ITEMS IN		THRU RATED ASSEMBLY	SIMILAR TO ADJACENT	SIMILAR TO ADJACENT	PROVIDE WITH FIRE DAMPER OR SLEEVE AS REQUIRED BY OHIO BUILDING CODE TO MAINTAIN FIRE RATING
	SCOPE FOR A PERIOD NOT LESS THAN 1 YEAR FROM START UP DATE (OR AGREED UPON DATE BY OWNER, G.C. AND		EXPOSED IN SPACE			
	CONTRACTOR). PROTECT ALL INSTALLED EQUIPMENT FROM CONSTRUCTION DAMAGE DURING DURATION OF CONSTRUCTION. REPLACE OR REPAIR DAMAGED ITEMS AT NO COST TO OWNER		SUPPLY	G—60 GALVANIZED STEEL PER ASTM A653 AND A924	INTERNALLY LINED WITH R-6.5 DUCT LINER FOIL FACE NOTE DUCTWORK TO BE SIZED FOR TOTAL FREE AREA	
	AS NEEDED DUE TO NEGLECT TO PROTECT ITEMS. CONTRACTOR IS SOLELY RESPONSIBLE FOR ACCURATE AND CODE COMPLIANT		RETURN	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	WITH LINER PER DRAWINGS NO INSULATION	
	INSTALLATION INCLUDING BUT NOT LIMITED TO VENTILATION RATES, GAS PRESSURE, ELECTRICAL REQUIREMENTS AND		TRANSFER EXHAUST	G-60 GALVANIZED STEEL PER ASTM A653 AND A924 G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION NO INSULATION	
	BALANCING.		EXPOSED TO ELEMENTS SUPPLY	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	R-6 INSULATION WITH WEATHER PROOF JACKET SIMILAF	
	REFER TO ALL DRAWINGS INCLUDING ARCHITECTURAL, SITE, CIVIL, ELECTRICAL, PLUMBING, AND STRUCTURAL FOR SCOPE OF		RETURN TRANSFER	G-60 GALVANIZED STEEL PER ASTM A653 AND A924 G-60 GALVANIZED STEEL PER ASTM A653 AND A924	TO VENTURE CLAD. ANY DUCTWORK EXPOSED TO FOOT TRAFFIC TO BE PROVIDED WITH STAIRWAY AND	UP TO 16" TO BE 22 GA. UP TO 30" TO BE 16 GA. BEYO 30" TO BE 22 GA. WITH REINFORCING.
	PROJECT. COORDINATE MECHANICAL WORK WITH WORK OF ALL OTHER TRADES. NO ADDITIONAL FEES WILL BE PAID FOR CHANGES DUE TO LACK OF KNOWLEGE OF PROJECT OR SPACE		EXHAUST	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	PLATFORM TO PREVENT WALKING ON DUCT	ALL TRANSITIONS OVER 45 DEG AND HORIZONTAL RUNS
	REQUIREMENTS. SHOULD DISCREPANCIES BE FOUND BETWEEN DRAWINGS, SPECIFICATIONS, SCHEDULES, OR SCOPES OF		GREASE EXHAUST	STAINLESS STEEL FULLY WELDED GRASE DUCT 0.036 OR 0.047 THICK. NFPA-96 RATED	2 LAYERS OF 3M 615+ GREASE WRAP INSTALLED FOR ZERO INCH CLEARANCE TO COMBUSTIBLES.	LONGER TAHN 10 FT TO BE PROVIDED WITH CLEANOUT. HOOD AND HINGED FAN TO BE COUNTED AS CLEANOUT
	TRADES, THEY ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING PRIOR TO BID. MECHANICAL		CORROSIVE EXHAUST	MATERIAL TO BE SPECIFIC TO CORROSIVE MATERIALS.	NO INSULATION	AS NEEDED. COORDINATE FINAL REQUIREMENTS WITH OWNER PER
	SCOPE OF WORK INCLUDES BUT IS NOT LIMITED TO: MECHANICAL DUCTWORK, SERVICE PIPING, AIR DISTRIBUTION, EQUIPMENT,		CONTRACTOR TO INSTALL AND FAB	_I BRICATE ALL DUCTWORK PER SMACNA, NFPA, AND ASME STAND/	l Ards Applicable. Substitution of Aluminum Ductwor	
	TESTING AND BALANCING, FANS, ROOF CURBS AND PENETRATIONS, MECHANICAL DUCTWORK AND PIPING	2 – STANDARD AND SUBSTITUTIONS	TURNING VANES. WHERE REQUIRED	AGE, ETC. IS MAINTAINED. PROVIDE CONSTNUOUS TRANSTIONS / D BY OWNER, PROVIDE SOUND LINING IN RETURN, TRANSER AN	D EXHAUST DUCTWORK (FOR SOUND SENSITIVE AREAS).	DRAWINGS AND SCHEMATIC, PROVIDE TRANSITIONS,
	INSULATION, HANGERS AND VIBRATION CONTROL, CONTROLS (PER CONTRACT), AND GENERAL TRADES ITEMS PERTAINING TO THE INSTALLATION OF MECHANICAL EQUIPMENT (PER CONTRACT).		DISTRIBUTION DEVICES. (AND RETU	RIES AS NEEDED FOR A COMPLETE AND BALANCED SYSTEM. NO		
	THE SCOPE OF WORK OF THE CONTRACTOR OF THESE PLANS	5 - DUCTWORK INSTALLATION STATEMENT	IN LENGTH, INSTALLED TIGHT WITH	T AND PROFESSIONAL MANNER. PROVIDE HANGERS AS REQUIRE NO HARSH BENDS OR OBSTRUCTIONS, AND TO BE INSULATED	SIMILAR TO DUCTWORK SERVED.	
	(UNLESS OTHERWISE AGREED UPON BY CONTRACTOR, G.C. AND OWNRE) INCLUDES EQUIPMENT, DUCTWORK, MECHANICAL PIPING	4 – DUCTWORK CONSTRUCTION 5– INSULATION INSTALLATION STATEMENT	PROVIDE INSULATION CONTINUOUS	E, SMACNA, OBC, OMC AND NFPA STANDARDS. PROVIDE CONNECTION FROM EQUIPMENT TO OUTLET. INSULATION TO BE PROVIDED W		
	(NON-SEWER, NON-DOMESTIC, NON-GAS), FLUES AND INTAKES, LOUVERS, CUTTING AND PATCHING FOR MECHANICAL ITEMS,	6 – STANDARDS OF CARE	PROTECT ALL MATERIALS ON SITE	RATING, WEATHER PROOF, ETC. AS REQUIRED BY APPLICATION. FROM CONSTRUCTION DAMAGE. ALL MATERIALS TO BE NEW AN	FREE FROM DEFECT. SEAL ALL UN-USED HOLES PRIOR	TO INSTALLATION OF INSULATION. PROVIDE AIR TIGHT
	HANGERS, INSULATION, BALANCING AND TESTING, START-UP AND TRAINING FOR EQUIPMENT IN SCOPE, CONTROLS AND CONTROL WIRING, LOW-VOLTAGE WIRING FOR MECHANICAL ITEMS, SMOKE		MASTIC CAPABLE OF PRESSURE DI TYPE/LOCATION	MATERIAL	INSULATION	NOTES
	DETECTORS FOR ITEMS ABOVE 2000 CFM (OR COMMON RETURNS ABOVE 2000 CFM), AND ALL ITEMS REQUIRED FOR A FULL,		CHILLED WATER	STANDARDS REQUIRED AND CAPABLE OF	PLENUM RATED (AS REQUIRED) FIBER GLASS INSULATION WITH VAPOR BARRIER JACKET. K-0.26 OR LOWER VALU	PROVIDE HANGERS, FIRE CAULKING AND ACCESSORIES
	OPERATIONAL, BALANCED AND USEABLE SYSTEM.			APPLICATION.	1" THICK (1.5" THICK ABOVE 8 INCH PIPING)	SYSTEM.
	COORDINATE ALL WORK WITH GENERAL TRADES CONTRACTOR, ELECTRICAL CONTRACTOR, STRUCTURAL CONTRACTOR,		HEATING WATER UP TO 200F	BLACK IRON, PVC OR CPVC PIPING CONFORMING TO STANDARDS REQUIRED AND CAPABLE OF TEMPERATURES DEVELOPED IN APPLICATION.	PLENUM RATED (AS REQUIRED) FIBER GLASS INSULATION WITH VAPOR BARRIER JACKET. K-0.270R LOWER VALU 2" THICK	
	PLUMBING CONTRACTOR, SPRINKLER CONTRACTOR, FIRE ALARM CONTRACTOR, ARCHITECT AND ENGINEER, AND OWNER. ANY INTERFERENCES BETWEEN TRADES ARE TO BE RAISED TO G.C. AND ARCHITECT AS SOON AS POSSIBLE, IN WRITTING, FIELD COORDINATION OF INTERFERING ITEMS IS APPROPRIATE WHERE ACCEPTABLE TO G.C. AND SIMILAR ITEMS CAN BE INSTALLED IN NEW LOCATION (I.E. DUCTWORK HAS SAME FREE AREA AND	7 — MECHANICAL PIPING	CONDENSER LOOP WATER	BLACK IRON, PVC OR CPVC PIPING CONFORMING TO	PLENUM RATED (AS REQUIRED) FIBER GLASS INSULATION WITH VAPOR BARRIER JACKET. K-0.27 OR LOWER VALU	PROVIDE HANGERS, FIRE CAULKING AND ACCESSORIES
			(WATER SOURCE HEAT PUMP)	TEMPERATURES DEVELOPED IN APPLICATION.	1" THICK PLENUM RATED (AS REQUIRED) FIBER GLASS INSULATION	SYSTEM.
			CONDENSATE WASTE PIPING	STANDARDS REQUIRED AND CAPABLE OF TEMPERATURES DEVELOPED IN APPLICATION.	WITH VAPOR BARRIER JACKET. K-0.27 OR LOWER VALU 1" THICK	E, REQUIRED FOR A FULL, CODE COMPLIANT AND BALANCED SYSTEM.
	SIMILAR STATIC PRESSURE, PIPING COMPLIES WITH MANUFACTURER'S INSTRUCTIONS, ETC. )				PLENUM RATED (AS REQUIRED) CLOSED CELL INSULATIO	N PROVIDE HANGERS, FIRE CAULKING AND ACCESSORIES
	CONTRACTOR TO PROVIDE SUBMIITALS FOR THE FOLLOWING ITEMS:		REFRIGERANT PIPING	MANUFACTURER'S RECOMMENDATIONS FOR SIZING AND APPLICAITON.	WITH VAPOR BARRIER JACKET. K-0.27 OR LOWER VALU 1" THICK	IE, REQUIRED FOR A FULL, CODE COMPLIANT AND BALANCED SYSTEM.
	EQUIPMENT OF THIS CONTRACTOR'S SCOPE PIPING AND DUCTWORK MATERIALS AS APPLICABLE TO THE		STEAM PIPING UP TO 350F	BLACK IRON PIPING CAPABLE OF TEMPERATURES DEVELOPED IN APPLICATION	PLENUM RATED (AS REQUIRED) FIBER GLASS INSULATION WITH VAPOR BARRIER JACKET. K-0.34 OR LOWER	REQUIRED FOR A FULL, CODE COMPLIANT AND BALANCED
	PROJECT INSULATION AND JACKETS AS APPLICABLE TO THE PROJECT		PERFORM ALL WORK IN ACCORDA		VALUE,5" THICK AL TO BE NEW AND FREE OF DEFECTS. PROVIDE ALL PI	SYSTEM. PING AND MATERIALS IN FIELD FROM CONSTRUCTION
	TESTING AND BALANCING REPORT –AIR, WATER, STEAM AND REFRIGERANT CHARGE AS APPLICABLE START-UP SHEETS INCLUDING DATE, TIME AND CONTRACTOR	8 – PIPING INSTALLATION STATEMENT	PROVIDE ALL RIGGING AND HAI	EACH LENTH OF PIPNIG TO PREVENT DEBRIS FROM ENTERING. NDLING FOR MATERIALS AND ACCESSORIES. PROVIDE HANGERS	PER OPC, OMC, OBC AND ALL APLLICABLE STANDARDS.	VHERE 3 OR MORE PIPING IS RUN TOGETHER AND
	DOING START-UP			HANGERS MAY BE USED. PROVIDE EXIPANSION JOINTS, THRUST STRUCTURAL ENGINEER. COORDINATE ROUTING AND HANGERS W	ITH ALL TRADES. PROVIDE BALANCE VALVES, FLOW CONTI	
	CONTRACTOR TO PROVIDE ANY CHANGES, UPDATES, AND FIELD COORDINATION ITEMS THRU A RED-LINE DRAWING (AS-BUILT		HANGER SPACING	PER OBC, REFER TO TAB	INSTALLATION REGARDLESS OF DETAILS OR DRAWINGS. LE 308.5 (SHOWN BELOW) FOR HANGER SPACING	
	DRAWING) PROVIDED AT NO SMALLER THAN 1/8TH INCH TO 1 FOOT SCALE. CHANGES PROPOSED PRIOR TO CONSTRUCTION TO BE		PIPING MATERIAL		MAXIMUM HORIZONTAL SPACING (FEET)	MAXIMUM VERTICAL SPACING (FEET)
	REVIEWED BY ARCHITECT AND ENGINEER. CHANGES DUE TO FIELD COORDINATION ARE THE SOLE		ACRYLONITR	I RILE BUTADIENE STYRENE (ABS) PIPE ALUMINUM TUBING	4 10	10B 15
	RESPONSIBILITY OF THIS CONTRACTOR (FOR THE SCOPE OF THIS CONTRACTOR'S WORK). ALL CHANGES TO SYSTEMS TO EB COORDINATED WITH ALL OTHER TRADES AS APPLICABLE,			BRASS PIPE	10 10 5A	15 10 15
9 -FIELD CHANGE STATEMENT	INCLUDING BUT NOT LIMITED TO G.C., STRUCTURAL CONTRACTOR, ELECTRICAL CONTRACTOR AND PLUMBING CONTRACTOR.		CAST-IRON PIPE CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE AND TUBING, 1 INCH AND SMALLER CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE AND TUBING, 1¼ INCHES AND LARGER		3 4	15 10B 10B
	CHANGES INITIATED BY THIS CONTRACTOR SHALL BE THE FINANCIAL RESPONSIBILITY OF THIS CONTRACTOR UNLESS		COF	PPER OR COPPER-ALLOY PIPE ALLOY TUBING, 1¼-INCH DIAMETER AND SMALLER	12	<u> </u>
	OTHERWISE AGREED UPON BY G.C. OWNER AND ALL INVOLVED PARTIES.		COPPER OR COPPER-A	ALLOY TUBING, 11/4-2-INCH DIAMETER AND LARGER		10
	CONTRACTOR TO SECURE, PAY AND MAINTAIN ALL PERMITS	9 – HANGER SPACING		LINKED POLYETHYLENE (PEX) PIPE _UMINUM/CROSS-LINKED POLYETHYLENE (PEX-ALPEX) PIPE	2.67 (32 INCHES) 2.67 (32 INCHES)	10B 4
	RELATED TO SCOPE OF WORK. COORDIATE PERMIT REQUIREMENTS WITH G.C., ENGINEER AND OWNER. CONTRACTOR SHALL SECURE, PAY AND COORDINATE ALL INSPECTIONS			LEAD PIPE UMINUM/ POLYETHYLENE (PE-AL-PE) PIPE	CONTINUOUS 2.67 (32 INCHES) 2.67 (32 INCHES)	4 4 10B
	RELATED TO SCOPE OF WORK. COORDINATE ALL INSPECTIONS OF THIS SCOPE AND SCOPE OF OTHERS WITH RESPECT TO		POLYPROPYLENE (	OF RAISED TEMPERATURE (PE-RT) PIPE (PP) PIPE OR TUBING 1 INCH AND SMALLER P) PIPE OR TUBING, 1¼ INCHES AND LARGER	2.67 (32 INCHES) 2.67 (32 INCHES)	10B
	CONSTRUCTION ACTIVITIES OF ALL PARTIES ON SITE.		POI	P) PIPE OR TUBING, T¼ INCHES AND LARGER LYVINYL CHLORIDE (PVC) PIPE .ESS STEEL DRAINAGE SYSTEMS	4 10	10B 10B 10B
	CONTRACTOR SHALL PROVIDE INDUSTRY STANDARD TESTING (NEBB OR ABC CERTIFIED FOR AIRFLOW) FOR AIRFLOW, WATER	500		STEEL PIPE	10 12	10B 15
	FLOW, STEAM, REFRIGERANT CHARGE, AND ANY OTHER ITEMS REQUIRED IN SCOPE. PROVIDE TESTING AND BALANCE REPORT	FOR		MAXIMUM HORIZONTAL SPACING OF CAST-IRON PIPE HANGERS		
	TO G.C., OWNER, ARCHITECT AND ENGINEER. PROVIDE MANUFACTURER'S RECOMMENDED START-UP FOR ALL EQUIPMENT, PROVIDE START UP REPORT TO G.C. OWNER,		B. FUR SIZES 2 INCHES AND SM	IALLER, A GUIDE SHALL BE INSTALLED MIDWAY BETWEEN REQUI	RED VERTICAL SUPPORTS. SUCH GUIDES SHALL PREVENT THE AXIS OF THE PIPE.	FIFE MOVEMENT IN A DIRECTION PERPENDICULAR TO
11 -START-UP, TESTING AND CLEAN UP	ARCHITECT AND ENGINEER. CLEAN UP ALL MATERIALS AND DEBRIS RELATED TO SCOPE OF WORK. COORDINATE DISPOSAL					
	OF DEBRIS AND EXCESS MATERIAL WITH G.C./OWNER. IF NO DUMPSTER IS PROVIDED, CONTRACTOR SHALL SECURE AND PAY					
	FOR REMOVAL OF REFUSE FROM CONSTRUCTION ACTIVITIES OF THIS SCOPE. PROVIDE OWNER OR OWNER'S REP A STARTUP,					
	OPERATIONS AND MAINTENANCE MANUAL INCLUDING IOM MANUAL FOR EACH PIECE OF EQUIPMENT UNDER SCOPE.					
	PROVIDE 1-HR (OR ADDITIONAL AS REQUIRED UNDER CONTRACT)					
	TRAINING TO OWNER OR REP. REGARDING THE OPERATION OF					
	EQUIPMENT IN SCOPE DRAWINGS ARE TO BE CONSIDERED SCHEMATIC IN NATURE.					
	EQUIPMENT IN SCOPE DRAWINGS ARE TO BE CONSIDERED SCHEMATIC IN NATURE. INTENT AND SCOPE MAY INCLUDE ITEMS IN ARCHITECTURAL, ELECTRICAL AND PLUMBING PLANS. FINAL INSTALLED ITEMS MAY					
12 -DRAWINGS	EQUIPMENT IN SCOPE DRAWINGS ARE TO BE CONSIDERED SCHEMATIC IN NATURE. INTENT AND SCOPE MAY INCLUDE ITEMS IN ARCHITECTURAL,					

SECTION 23 10 00 - HVAC EQUIPMENT										
1 – GENERAL NOTE	CONTRACTOR TO PROVIDE EQUI TRAIN AND DIRT LEG, INSUL COMPLIANT, AND USEABLE I	PMENT, CONTROLS, VALVES, F AITON AND BALANCING ITEMS NSTALLATION. DRAWINGS ARE	FITTINGS, TRANSITIONS, FILTERS AND BOX, GAS FOR A COMPLETE, CODE COMPLIANT, ENERGY SCHEMATIC, IT IS THE CONTRACTOR'S SOLE AND AN ACCURATE PRICE FOR SAID SYSTEM.							
	ALL QUESTIO	NS IN WRITTING TO ARCHITECT	ND MAY NOT COVER ALL POSSIBILITIES. PROVIDE							
2 – COMMON SYSTEMS AND ACCESSORIES	SYSTEM TYPE PACKAGED ROOF MOUNTED UNIT	ENERGY REQUIREMENTS IECC 2015 COMPLIANT SEER VALUE (14 SEER), INSULATED CABINET AND HOUSING, MINIMUM 80% EFFICIENT GAS TRAIN, SINGLE ENTHALPY ECONOMIZER (AIR SIDE)	ACCESSORY REQUIREMENTS 14? ROOF CURB (VERTICAL OR HORIZONTAL AS NEEDED FOR PLANS, GAS TRAIN WITH SHUT-OFF AND DIRT LEG, THRU BASE UTILITY CONNECTION KIT (IF POSSIBLE), 1? PLEATED FILTER (REPLACE AT CONCLUSION OF CONSTRUCTION), REFRIGERANT CHARGE, CONDENSATE WASTE TO ABOVE ROOF DRAIN OR AS INIDICATED ON PLAN. 7-DAY PROGRAMMABLE THERMOSTAT. NON-FUSED DISCONNECT.							
	SPLIT SYSTEM (FURNACE AND CONDENSING UNIT)	IECC 2015 COMPLIANT SEER VALUE (14 SEER), INSULATED CABINET AND HOUSING, MINIMUM 80% EFFICIENT GAS TRAIN, SINGLE ENTHALPY ECONOMIZER (AIR SIDE)	NONCOMBUSTIBLE BASE (FURNACE) AND 4? CONCNRETE CURB (CONDENSING UNIT), GAS TRAIN WITH SHUT-OFF AND DIRT LEG, FIELD FABRICATED FILTER RACK AND 1? PLEATED FILTER (REPLACE AT CONCLUSION OF CONSTRUCTION), REFRIGERANT CHARGE AND REFRIGERANT PIPING AND REQUIRED ACCESSORIES (OIL TRAP, ETC), CONDENSATE WASTE TO ABOVE LOCAL DRAIN OR AS INIDICATED ON PLAN. 7-DAY PROGRAMMABLE THERMOSTAT. NON-FUSED DISCONNECT.							
	WATER SOURCE HEAT PUMP	E HEAT PUMP IECC 2015 COMPLIANT COP MINIMUM 3.02, EER MINIMUM 11.9. VFD OR ECM DRIVEN PUMPING SYSTEM VALVES, FLEX CONNECTIONS A PUMP FOR EACH HEAT P MANIFOLD, PUMPS AND C FABRICATED FILTER RACK AND (REPLACE AT CONCLUSION O REFRIGERANT CHARGE AND RI AND REQUIRED ACCESSORIES CONDENSATE WASTE TO ABOV AS INIDICATED ON PLAN. 7–1 THERMOSTAT. NON–FUSI								
	VARIABLE REFRIGERANT FLOW (VRF)	IECC 2015 COMPLIANT COP MINIMUM 3.02, EER MINIMUM 11.9.	VALVES, FLEX CONNECTIONS AND LINESETS FOR EACH TERMINAL AND OUTDOOR UNIT, DUCTED SYSTEMS TO HAVE FIELD FABRICATED FILTER RACK AND 1? PLEATED FILTER (REPLACE AT CONCLUSION OF CONSTRUCTION), REFRIGERANT CHARGE AND REFRIGERANT PIPING AND REQUIRED ACCESSORIES (OIL TRAP, ETC), CONDENSATE WASTE TO ABOVE LOCAL DRAIN OR AS INIDICATED ON PLAN. 7–DAY PROGRAMMABLE THERMOSTAT. NON-FUSED DISCONNECT.							
	Fan coil – hydronic/steam	IECC 2015 COMPLIANT COP MINIMUM 3.02, EER MINIMUM 11.9. ~OR~ 80% MINIMUM EFFICIENT BOILER	VALVES, FLEX CONNECTIONS AND CONTROL VALVES FOR EACH FAN COIL, MAIN LOOP, PUMPS AND CONTROLS,, FIELD FABRICATED FILTER RACK AND 1? PLEATED FILTER (REPLACE AT CONCLUSION OF CONSTRUCTION), WATER TREATMENT ACCESSORIES, GLYCOL, AIR/DIRT SEPARATOR, CONDENSATE WASTE TO ABOVE LOCAL DRAIN OR AS INIDICATED ON PLAN. 7-DAY PROGRAMMABLE THERMOSTAT. NON-FUSED DISCONNECT.							
	GAS FIRED MAKE-UP AIR UNIT	IECC 2015 COMPLIANT SEER VALUE (14 SEER), INSULATED CABINET AND HOUSING, MINIMUM 80% EFFICIENT GAS TRAIN,	14? ROOF CURB (VERTICAL OR HORIZONTAL AS NEEDED FOR PLANS, GAS TRAIN WITH SHUT-OFF AND DIRT LEG, THRU BASE UTILITY CONNECTION KIT (IF POSSIBLE), 1? PLEATED FILTER (REPLACE AT CONCLUSION OF CONSTRUCTION), REFRIGERANT CHARGE, CONDENSATE WASTE TO ABOVE ROOF DRAIN OR AS INIDICATED ON PLAN. 7-DAY PROGRAMMABLE THERMOSTAT. NON-FUSED DISCONNECT.							
	EXHAUST, SUPPLY AND TRANSFER FANS	IECC 2015 MAXIMUM HORSE POWER ALLOWANCE	PROVIDE FAN SPEED CONTROLLER ON HOUSING FOR BALANCING, FLEXIBLE CONNECTIONS AT SUPPLY AND OUTLET, VIBRATION ISOLATION HANGERS (OR INTERNALLY VIBRATION ISOLATED MOTOR), PREMIUM EFFICIENCY TEFC MOTOR UNLESS OTHERWISE SPECIFIED. NON-FUSED DISCONNECT.							
	UNIT HEATER/INFRARED TUBE HEATERS	IECC 2015 80% EFFICIENT MINIMUM	PROVIDE WITH SEALED COMBUSTION AND INTAKE, NON-FUSED DISCONNECT, 7-DAY PROGRAMMABLE THERMOSTAT, GAS TRAIN WITH DIRTLEG AND SHUTOFF, REFLECTOR PANELS (TUBE HEATERS) MOUNT PER MFG AND PLANS.							
	CABINET HEATERS, ELECTRIC UNIT HEATERS	IECC 2015 ELECTRICAL EFFICIENCIES	PROVIDE RECESSED MOUNTING FRAME UNLESS OTHERWISE SPECIFIED, NON-FUSED DISCONNECT, 7-DAY PROGRAMMABLE THERMOSTAT,							
	GREASE EXHAUST FAN AND HOOD	POWER ALLOWANCE	PROVIDE HIGH TEMPERATURE MOTOR OUT OF AIRSTREAM TYPE FAN, HOOD TO BE MANUFACTURERED FOR ZERO INCH CLEARANCE TO COMBUSTIBLES, GREASE DUCT, FAN AND OUTLET TO BE FULL INSULATED FOR ZERO INCH CLEARANCE TO COMBUSTIBLES. PIPING AND INSTALLAITON OF EQUIPMENT WITH							
3 – COORDINATION	GENERAL TRADES, OWNER, ARCH	HITECT, AND OTHER TRADES. I ERATIONS AS NEEDED FOR A	PROVIDE TRANSITIONS, FLEXIBLE CONNECTIONS							





#### <u>GENERAL NOTES</u>

CONDUCT FIELD SURVEY OF EXISTING CONDITIONS PRIOR TO SUBMISSION OF BID AND START OF WORK. NO ADDITIONAL PAYMENTS WILL BE MADE ON CLAIMS THAT ARISE FROM LACK OF KNOWLEDGE OF EXISTING CONDITIONS. DRAWINGS ARE SCHEMATIC IN NATURE. COORDINATE AS SOLE RESPONSIBILITY OF THIS CONTRACTOR ROUTINGS, HANGERS, INSULATION, VALVES AND STEMS, CONTROLS AND ALL PARTS OF SYSTEM WITH RESPECT TO BUILDING AND WORK OF OTHER TRADES.

COORDINATE SCHEDULE OF WORK REQUIRED IN OCCUPIED AND OPERATING AREAS WITH OWNER PRIOR TO STARTING SUCH WORK.

SCHEDULE UTILITY SERVICE SHUTDOWNS REQUIRED FOR NEW CONSTRUCTION WITH OWNER AND GENERAL TRADES PRIOR TO SHUTTING DOWN SYSTEMS. GIVE ONE WEEK ADVANCE NOTICE IN WRITING.

REMOVE AND REPLACE EXISTING CEILINGS TO ACCOMMODATE NEW WORK. REPLACE DAMAGED CEILING TILES WITH NEW.

CUT FLOOR, WALL, AND CEILING CONSTRUCTION FOR PENETRATIONS TO ACCOMMODATE NEW WORK. COORDINATE WITH GENERAL TRADES. PATCH CONSTRUCTION TO MATCH, OR TO SATISFACTION OF ARCHITECT AND OWNER.

COORDINATE ROUTING OF NEW DUCTWORK AND PIPING WITH EXISTING BUILDING CONDITIONS AND WITH WORK OF OTHER TRADES. PROVIDE CHANGES IN LOCATION, DIRECTION, OFFSETS, AS MAY BE REQUIRED, WHETHER SPECIFICALLY INDICATED OR NOT, AND AT NO ADDITIONAL COST TO THE OWNER.

COORDINATE AIR DISTRIBUTION DEVICE LOCATIONS WITH FINAL REFLECTED CEILING PLAN.

UNLESS OTHERWISE NOTED, FLEXIBLE DUCTWORK IS SAME SIZE AS ROUND DUCTWORK TO WHICH IT IS CONNECTED. FLEXIBLE DUCTWORK TO BE LIMITED TO MAXIMUM 10 FEET AND HUNG STRAIGHT WITHOUT KINKS OR SHARP BENDS

THE DUCTWORK SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS. PROVIDE BALANCING DAMPER AT ALL BRANCH TAKE OFFS FROM MAIN TRUNK DUCT AND AT TAKE OFFS SERVING DIFFUSER, GRILLE, OR REGISTER. NOTE PIPING TO BE RUN IN FLOOR, SANITARY PIPING

SHOWN SIZED PER OPC FOR 1/8" DROP PER FOOT. PROVIDE 1/4" DROP PER FOOT WHERE AVAILABLE. RE-USE EXISTING PIPING, INSULATION AND DUCTWORK

AS POSSIBLE. VERIFY CONDITION, FREE AREA, AND INSULATION IS EQUAL OR GREATER THAN THAT LISTED IN PLANS.

ALL MATERIALS LOCATED IN PLENUM SPACE TO BE PLENUM RATED FOR SMOKE/FIRE SPREAD. REFER TO OBC 106.1.1. FIRE SEAL ANY PENETRATIONS THRU FIRE RATED ASSEMBLIES PER SECTION 713 OF OBC. SEALS TO BE FULL, CONTINUOUS AND OF SAME RATING AS ASSEMBLY

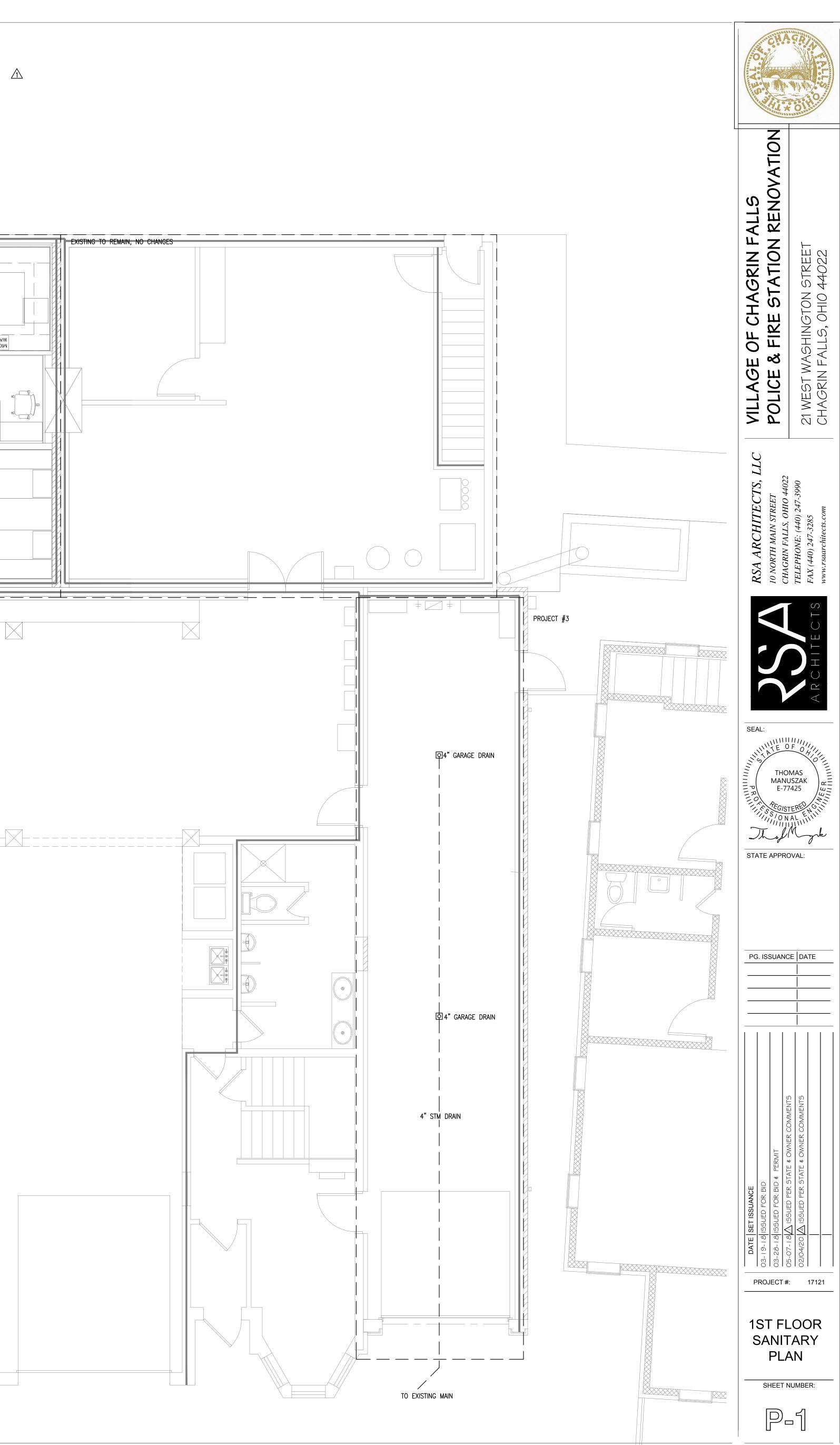
<u>1st Floor Sanitary Plan</u> N SCALE: 1/4" = 1'-0"

DEMO NOTES CONTRACTOR TO REMOVE EXISTING PIPING, FIXTURES, AND ACCESSORIES IN AREA OF WORK. REMOVE ALL MATERIALS FROM SITE. MAINTAIN EXISTING WATER METER AND BACKFLOW PREVENTER. VERIFY SIZE.

REMOVE SANITARY AND VENT PIPING BACK TO SANITARY MAINS. SCOPE SANITARY MAIN AND REPAIR AS NEEDED. MAINTAIN MAIN WHERE IT SERVES FIXTURES IN ADJACENT VILLAGE HALL SPACE.

FIRE PENETRATIONS

CAULK AND FIREBLOCK ALL PENETRATIONS THRU RATED ASSEMBLIES. FIRE BLOCKING TO BE RATED AND UL LISTED FOR OR ABOVE RATED ASSEMBLY RATING



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GENERAL NOTES

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CONDUCT FIELD SURVEY OF EXISTING CONDITIONS

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COORDINATE ROUTING OF NEW DUCTWORK AND PIPING WITH EXISTING BUILDING CONDITIONS AND WITH WORK OF OTHER TRADES. PROVIDE CHANGES IN LOCATION, DIRECTION, OFFSETS, AS MAY BE REQUIRED, WHETHER SPECIFICALLY INDICATED OR NOT, AND AT NO ADDITIONAL COST TO THE OWNER.

COORDINATE AIR DISTRIBUTION DEVICE LOCATIONS WITH FINAL REFLECTED CEILING PLAN. UNLESS OTHERWISE NOTED, FLEXIBLE DUCTWORK IS

SAME SIZE AS ROUND DUCTWORK TO WHICH IT IS CONNECTED. FLEXIBLE DUCTWORK TO BE LIMITED TO MAXIMUM 10 FEET AND HUNG STRAIGHT WITHOUT KINKS OR SHARP BENDS

THE DUCTWORK SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS. PROVIDE BALANCING DAMPER AT ALL BRANCH TAKE OFFS FROM MAIN TRUNK DUCT AND AT TAKE OFFS SERVING DIFFUSER, GRILLE, OR REGISTER. NOTE PIPING TO BE RUN IN FLOOR, SANITARY PIPING SHOWN SIZED PER OPC FOR 1/8" DROP PER FOOT.

RE-USE EXISTING PIPING, INSULATION AND DUCTWORK AS POSSIBLE. VERIFY CONDITION, FREE AREA, AND INSULATION IS EQUAL OR GREATER THAN THAT LISTED IN PLANS.

PROVIDE 1/4" DROP PER FOOT WHERE AVAILABLE.

ALL MATERIALS LOCATED IN PLENUM SPACE TO BE PLENUM RATED FOR SMOKE/FIRE SPREAD. REFER TO OBC 106.1.1. FIRE SEAL ANY PENETRATIONS THRU FIRE RATED ASSEMBLIES PER SECTION 713 OF OBC. SEALS TO BE FULL, CONTINUOUS AND OF SAME RATING AS ASSEMBLY

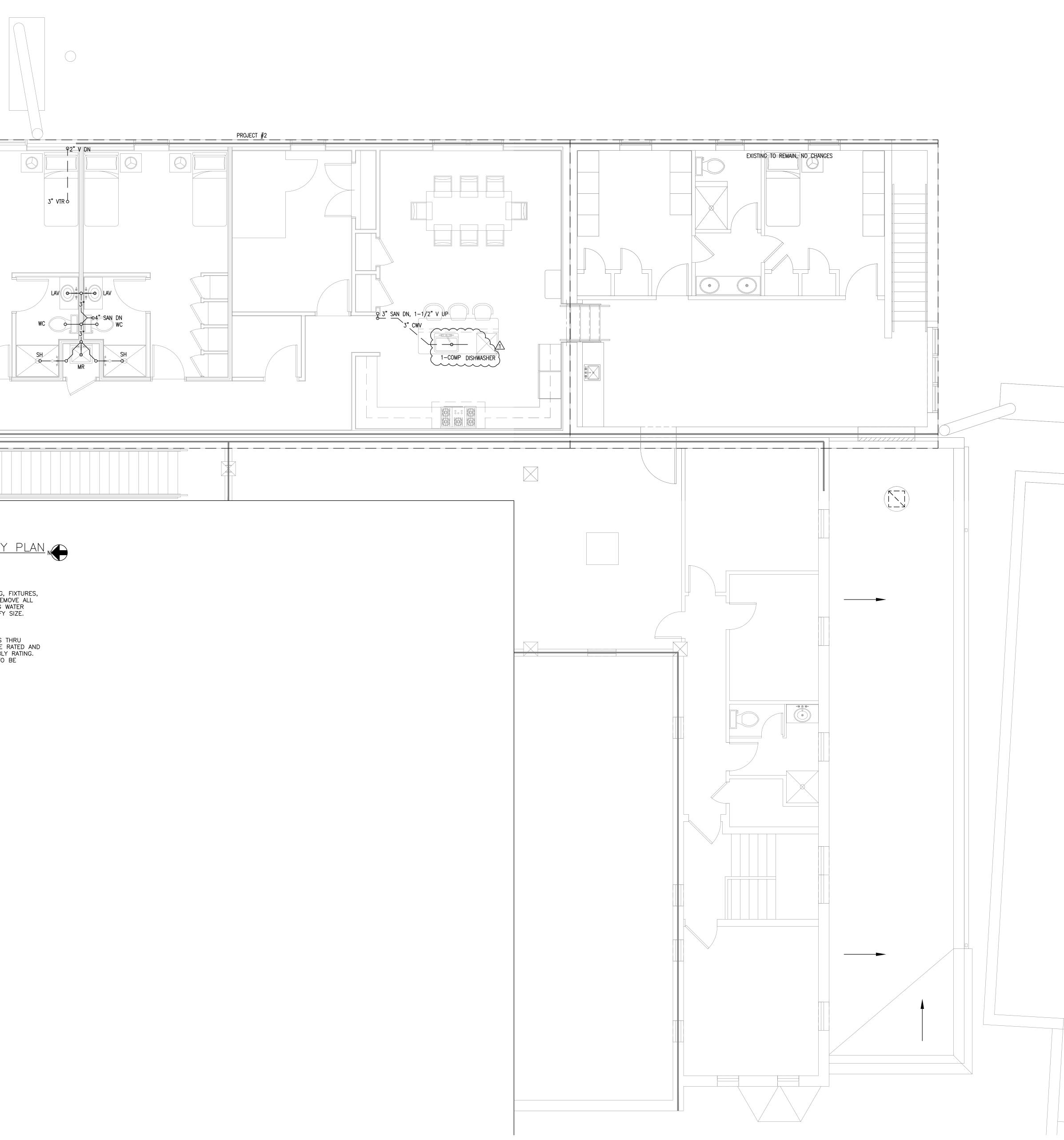
# $\frac{2nd FLOOR SANITARY PLAN}{SCALE: 1/4" = 1'-0"}$

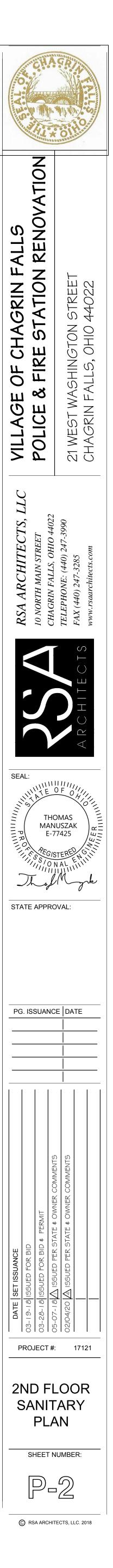
DEMO NOTES

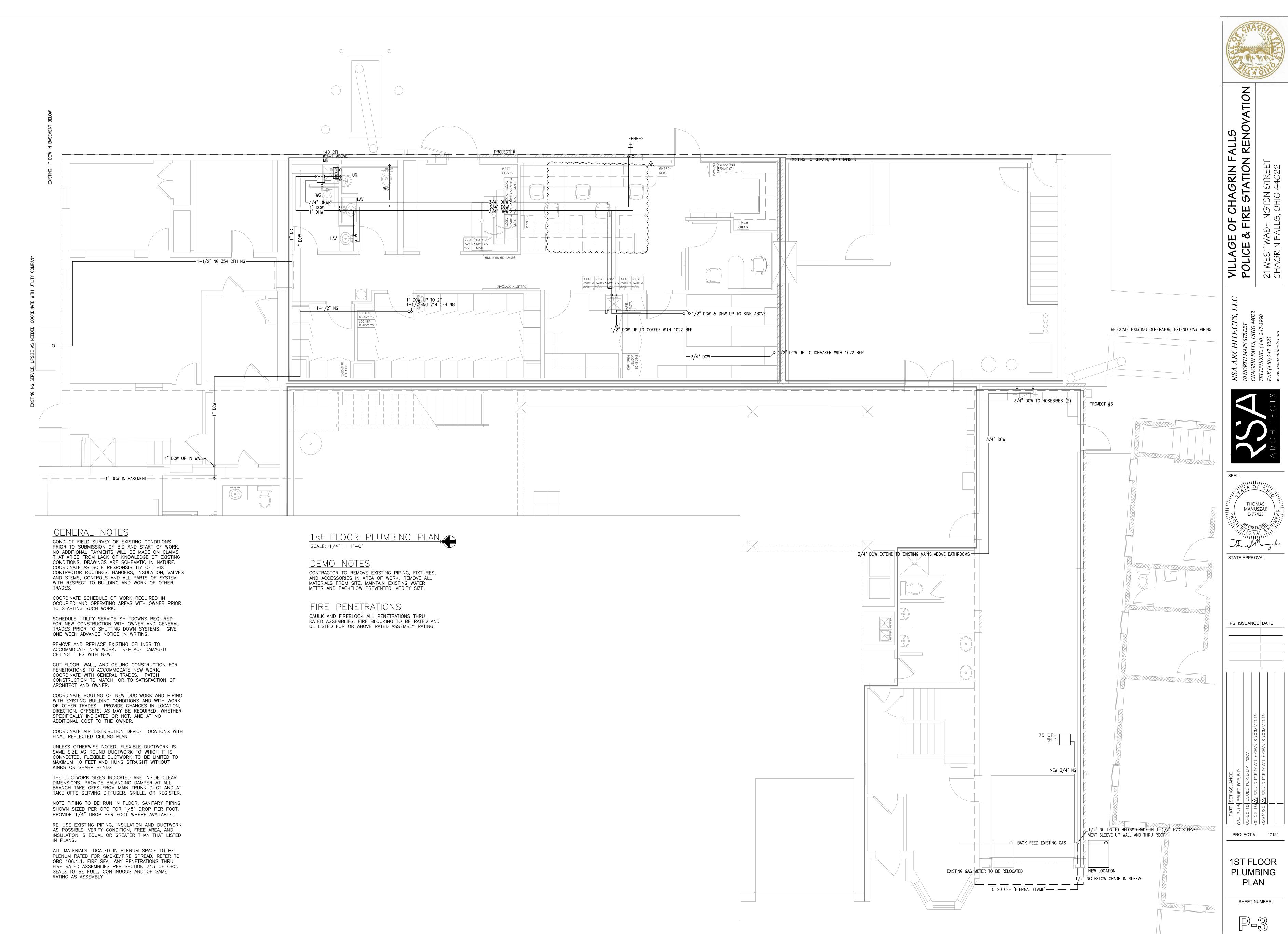
FIREBLOCKED AS WELL

CONTRACTOR TO REMOVE EXISTING PIPING, FIXTURES, AND ACCESSORIES IN AREA OF WORK. REMOVE ALL MATERIALS FROM SITE. MAINTAIN EXISTING WATER METER AND BACKFLOW PREVENTER. VERIFY SIZE.

FIRE PENETRATIONS CAULK AND FIREBLOCK ALL PENETRATIONS THRU RATED ASSEMBLIES. FIRE BLOCKING TO BE RATED AND UL LISTED FOR OR ABOVE RATED ASSEMBLY RATING. NOTE FLOORING IS RATED, TRAPS NEED TO BE







C RSA ARCHITECTS, LLC. 2018

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#### <u>GENERAL NOTES</u>

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SCHEDULE UTILITY SERVICE SHUTDOWNS REQUIRED FOR NEW CONSTRUCTION WITH OWNER AND GENERAL TRADES PRIOR TO SHUTTING DOWN SYSTEMS. GIVE ONE WEEK ADVANCE NOTICE IN WRITING.

REMOVE AND REPLACE EXISTING CEILINGS TO ACCOMMODATE NEW WORK. REPLACE DAMAGED

ARCHITECT AND OWNER.

CEILING TILES WITH NEW. CUT FLOOR, WALL, AND CEILING CONSTRUCTION FOR PENETRATIONS TO ACCOMMODATE NEW WORK. COORDINATE WITH GENERAL TRADES. PATCH CONSTRUCTION TO MATCH, OR TO SATISFACTION OF

COORDINATE ROUTING OF NEW DUCTWORK AND PIPING WITH EXISTING BUILDING CONDITIONS AND WITH WORK OF OTHER TRADES. PROVIDE CHANGES IN LOCATION, DIRECTION, OFFSETS, AS MAY BE REQUIRED, WHETHER SPECIFICALLY INDICATED OR NOT, AND AT NO ADDITIONAL COST TO THE OWNER.

COORDINATE AIR DISTRIBUTION DEVICE LOCATIONS WITH FINAL REFLECTED CEILING PLAN.

UNLESS OTHERWISE NOTED, FLEXIBLE DUCTWORK IS SAME SIZE AS ROUND DUCTWORK TO WHICH IT IS CONNECTED. FLEXIBLE DUCTWORK TO BE LIMITED TO MAXIMUM 10 FEET AND HUNG STRAIGHT WITHOUT KINKS OR SHARP BENDS

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NOTE PIPING TO BE RUN IN FLOOR, SANITARY PIPING SHOWN SIZED PER OPC FOR 1/8" DROP PER FOOT. PROVIDE 1/4" DROP PER FOOT WHERE AVAILABLE.

RE-USE EXISTING PIPING, INSULATION AND DUCTWORK AS POSSIBLE. VERIFY CONDITION, FREE AREA, AND INSULATION IS EQUAL OR GREATER THAN THAT LISTED IN PLANS.

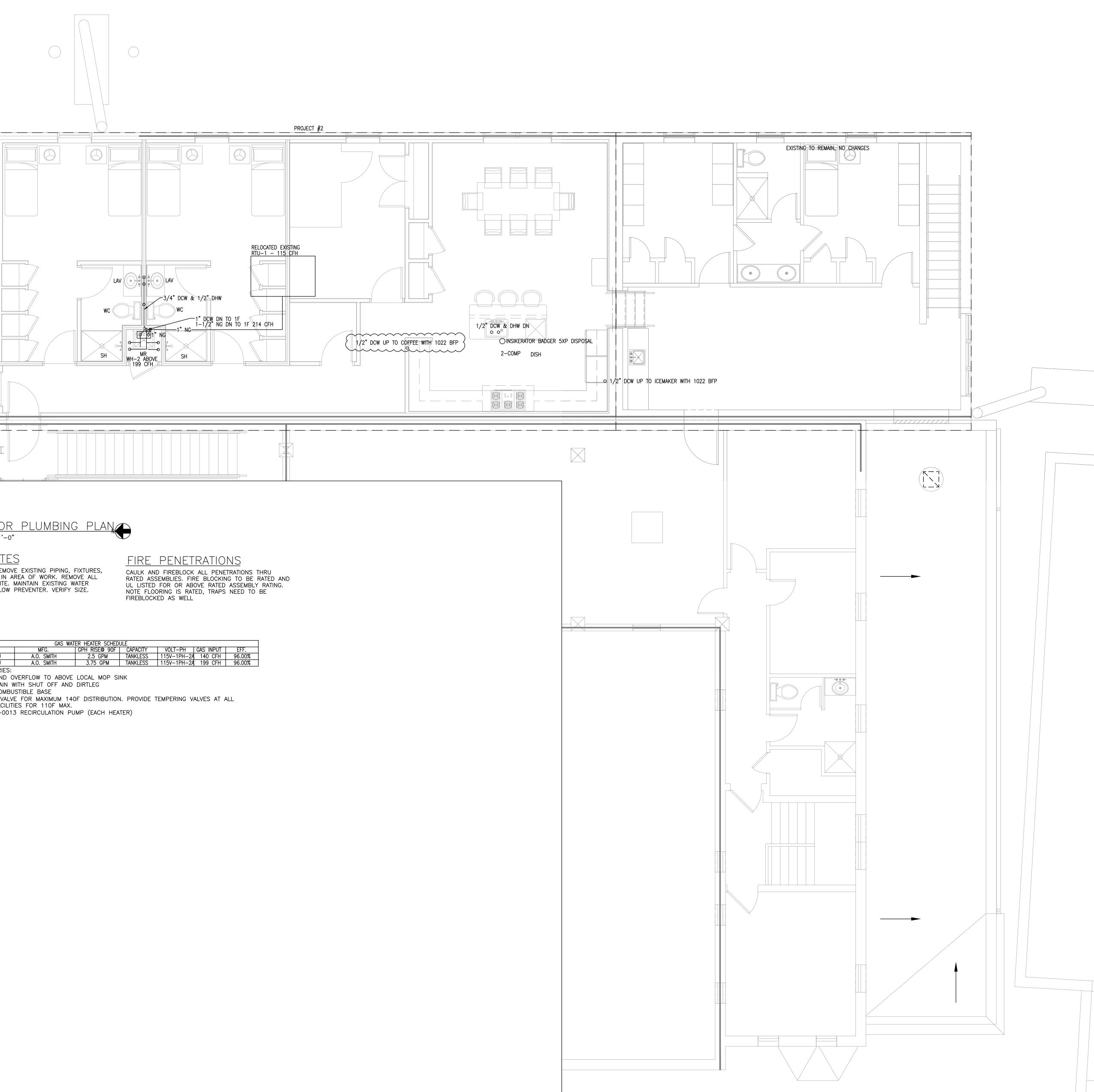
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#### 2nd FLOOR PLUMBING PLAN SCALE: 1/4" = 1'-0"

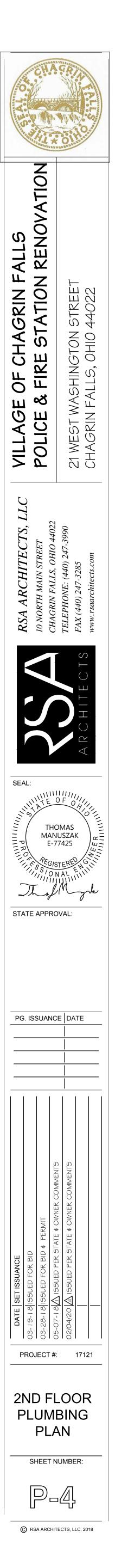
DEMO NOTES CONTRACTOR TO REMOVE EXISTING PIPIN

AND ACCESSORIES IN AREA OF WORK. MATERIALS FROM SITE. MAINTAIN EXISTIN METER AND BACKFLOW PREVENTER. VERI

GAS WATER HEATER SCHEDULE										
MARK	MODEL MFG. GPH RISE@ 90F   CAPACITY   VOLT-PH   GAS INPUT									
WH-1	ATI-110U	A.O. SMITH	2.5 GPM	TANKLESS	115V-1PH-2A	140 CFH	96.00%			
WH-2	2 ATI-510U A.O. SMITH 3.75 GPM TANKLESS 115V-1PH-2A 199 CFH 96.00%									
NOTES AN	D ACCESSORIES:									
1) PIPE	SAFETIES AND O	VERFLOW TO ABOVE	LOCAL MOP SI	NK						
		/ITH SHUT OFF AND								
· · · · · · · · · · · · · · · · · · ·	IDE NON-COMBU									
		E FOR MAXIMUM 140	F DISTRIBUTION	N. PROVIDE T	EMPERING V	ALVES AT A				
,	HANDWASHING FACILITIES FOR 110F MAX.									
5) PROV	IDE TACO I-001	3 RECIRCULATION PU	MP (EACH HEA	TER)						



ING, FIXTURES, REMOVE ALL NG WATER RIFY SIZE.	FIRE PENETRATIONS CAULK AND FIREBLOCK ALL PENETRATIONS THRU RATED ASSEMBLIES. FIRE BLOCKING TO BE RATE UL LISTED FOR OR ABOVE RATED ASSEMBLY RAT NOTE FLOORING IS RATED, TRAPS NEED TO BE FIREBLOCKED AS WELL



SECTION 22 00 00 ? PLUMBI	ALL WORK COMPLETED BY THIS CONTRACTOR, FOR PURPOSES OF PROVIDING A COMPLETE AND WORKING SYSTEM, TO BE PROVIDED IN COMPLIANCE WITH: OHIO MECHANICAL CODE	PART 1 – GENERAL 1 QUALITY ASSURAN 1.1 PERFORM ALL WO
	OHIO PLUMBING CODE OHIO BUILDING CODE OHIO RESIDENTIAL CODE (IF APPLICABLE)	ALL MATERIAL TO 1.2 PROVIDE END CAF
	INTERNATIONAL FUEL GAS CODE INTERNATIONAL ENERGY CONSERVATION CODE	PIPING DURING S 1.3 PROVIDE VALVES ARE CLEAN, DRY
1 – CODE COMPLIANCE STATEMENT	ALL LOCAL CITY ORDINANCES APPLICABLE ALL PROFESSIONAL BEST PRACTICES INCLUDING ASHRAE, ASPE, AND NEC REQUIREMENTS	1.4 RIG ALL LARGER 1.5 PROVIDE HANGERS
	GREEN BUILDING, LEED, OR OTHER SIMILAR GREEN RATINGS AS APPLICABLE AND REQUIRED BY OWNER	1.6 PROVIDE EXPANSIO PREVENT DAMAGE 2 PROVIDE FLEXIBLE
	CONTRACTOR SHALL HAVE KNOWLEDGE AND UNDERSTANDING OF THE BASICS OF THE APPLICABLE CODES PRIOR TO BID OF PROJECT. NO ADDITIONAL PAYMENT IS TO BE RENDERED DUE TO	DRIVEN EQUIPMENT. (EX 3 PROVIDE BALANCE
	A LACK OF KNOWLEDGE OF THE APPLICABLE CODES OR RATINGS. COORDINATE ANY REQUIREMENTS FOR GREEN TECHNOLOGIES PRIOR TO BID.	RELIEF VALVES AS REQU FOR A COMPLETE AND V 4 COORDINATE ROUT
	PROVIDE ALL LABOR, MATERIALS, ACCESSORIES, CONTROLS (PER CONTRACT), FLASHING, OPENINGS, CLEANING AND	5 SUBMIT PIPING M
	PATCHING, BALANCING AND TESTING, AND EQUIPMENT INDICATED ON DRAWINGS, REQUIRED FOR A PROPER WORKING AND BALANCED SYSTEM, AND AS REASONABLY IMPLIED. ALL WORK	PART 2 – MATERIALS AND A
2 ? QUALITY ASSURANCE	TO BE TESTED, CLEANED AND READY FOR USE BY OWNER AT CONCLUSION OF CONSTRUCTION. ALL WORK TO BE PURCHASED, INSTALLED, COMMISSIONED, AND STARTED IN ACCORDANCE WITH	APPLICATIONS. NOT ALL WHEN REQUESTED (PER REFER TO MANUFACTURE
	AND COMPLIANCE WITH ALL LOCAL, CITY, STATE, FEDERAL AND INDUSTRY CODES AND STANDARDS APPLICABLE. PROTECT ALL	
	EQUIPMENT, PIPING AND DUCTWORK DURING CONSTRUCTION FROM DAMAGE AND DEBRIS. PROVIDE LABOR AND MATERIAL WARRANTY ON ALL ITEMS IN	SANITARY PIPING – ABOVE GRADE
	SCOPE FOR A PERIOD NOT LESS THAN 1 YEAR FROM START UP DATE (OR AGREED UPON DATE BY OWNER, G.C. AND	BASE
3 ? CONTRACTOR LIABILITY STATEMENT	CONTRÀCTOR). PROTECT ALL INSTALLED EQUIPMENT FROM CONSTRUCTION DAMAGE DURING DURATION OF CONSTRUCTION. REPLACE OR REPAIR DAMAGED ITEMS AT NO COST TO OWNER	
	AS NEEDED DUE TO NEGLECT TO PROTECT ITEMS. CONTRACTOR IS SOLELY RESPONSIBLE FOR ACCURATE AND CODE COMPLIANT INSTALLATION INCLUDING BUT NOT LIMITED TO VENTILATION	ALT #1 SANITARY PIPING - BELOW
	RATES, GAS PRESSURE, ELECTRICAL REQUIREMENTS AND BALANCING.	BASE
	REFER TO ALL DRAWINGS INCLUDING ARCHITECTURAL, SITE, CIVIL, ELECTRICAL, PLUMBING, AND STRUCTURAL FOR SCOPE OF PROJECT. COORDINATE MECHANICAL WORK WITH WORK OF ALL	
	OTHER TRADES. NO ADDITIONAL FEES WILL BE PAID FOR CHANGES DUE TO LACK OF KNOWLEGE OF PROJECT OR SPACE	ALT #1
4 ? CONTRACT DOCUMENT STATEMENT	REQUIREMENTS. SHOULD DISCREPANCIES BE FOUND BETWEEN DRAWINGS, SPECIFICATIONS, SCHEDULES, OR SCOPES OF TRADES, THEY ARE TO BE BROUGHT TO THE ATTENTION OF THE	WATER SERVICE BASE
	OWNER AND ENGINEER IN WRITING PRIOR TO BID. MECHANICAL SCOPE OF WORK INCLUDES BUT IS NOT LIMITED TO: MECHANICAL DUCTWORK, SERVICE PIPING, AIR DISTRIBUTION, EQUIPMENT,	ALT #1
	TESTING AND BALANCING, FANS, ROOF CURBS AND PENETRATIONS, MECHANICAL DUCTWORK AND PIPING INSULATION, HANGERS AND VIBRATION CONTROL, CONTROLS	ALT #2 WATER DISTRIBUTION - COLD
	(PER CONTRACT), AND GENERAL TRADES ITEMS PERTAINING TO THE INSTALLATION OF MECHANICAL EQUIPMENT (PER CONTRACT).	
	THE SCOPE OF WORK OF THE CONTRACTOR OF THESE PLANS (UNLESS OTHERWISE AGREED UPON BY CONTRACTOR, G.C. AND OWNRE) INCLUDES EQUIPMENT, DUCTWORK, MECHANICAL PIPING	BASE
5 ? SCOPE OF WORK STATEMENT	(NON-SEWER, NON-DOMESTIC, NON-GAS), FLUES AND INTAKES, LOUVERS, CUTTING AND PATCHING FOR MECHANICAL ITEMS,	ALT #1
	HANGERS, INSULATION, BALANCING AND TESTING, START-UP AND TRAINING FOR EQUIPMENT IN SCOPE, CONTROLS AND CONTROL WIRING, LOW-VOLTAGE WIRING FOR MECHANICAL ITEMS, SMOKE	
	DETECTORS FOR ITEMS ABOVE 2000 CFM (OR COMMON RETURNS ABOVE 2000 CFM), AND ALL ITEMS REQUIRED FOR A FULL, OPERATIONAL, BALANCED AND USEABLE SYSTEM.	ALT #2
	COORDINATE ALL WORK WITH GENERAL TRADES CONTRACTOR, ELECTRICAL CONTRACTOR, STRUCTURAL CONTRACTOR,	WATER DISTRIBUTION - HOT <14
	PLUMBING CONTRACTOR, SPRINKLER CONTRACTOR, FIRE ALARM CONTRACTOR, ARCHITECT AND ENGINEER, AND OWNER. ANY INTERFERENCES BETWEEN TRADES ARE TO BE RAISED TO G.C.	Duor
6 ? COORDINATION OF TRADES STATEMENT	AND ARCHITECT AS SOON AS POSSIBLE, IN WRITTING, FIELD COORDINATION OF INTERFERING ITEMS IS APPROPRIATE WHERE ACCEPTABLE TO G.C. AND SIMILAR ITEMS CAN BE INSTALLED IN	BASE
	NEW LOCATION (I.E. DUCTWORK HAS SAME FREE AREA AND SIMILAR STATIC PRESSURE, PIPING COMPLIES WITH	ALT #1
	MANUFACTURER'S INSTRUCTIONS, ETC. ) CONTRACTOR TO PROVIDE SUBMIITALS FOR THE FOLLOWING ITEMS:	
7 ? SUBMITTALS	EQUIPMENT OF THIS CONTRACTOR'S SCOPE PIPING AND MATERIALS AS APPLICABLE TO THE PROJECT INSULATION AND JACKETS AS APPLICABLE TO THE PROJECT	ALT #2
	TESTING AND BALANCING REPORT ? AIR, WATER, STEAM AND REFRIGERANT CHARGE AS APPLICABLE	WATER DISTRIBUTION - HOT >14
	START-UP SHEETS INCLUDING DATE, TIME AND CONTRACTOR DOING START-UP	
8 ? RED-LINE AND AS-BUILT DRAWINGS	CONTRACTOR TO PROVIDE ANY CHANGES, UPDATES, AND FIELD COORDINATION ITEMS THRU A RED-LINE DRAWING (AS-BUILT DRAWING) PROVIDED AT NO SMALLER THAN 1/8TH INCH TO 1 FOOT	BASE
	SCALE. CHANGES PROPOSED PRIOR TO CONSTRUCTION TO BE REVIEWED BY ARCHITECT AND ENGINEER. CHANGES DUE TO FIELD COORDINATION ARE THE SOLE	
	RESPONSIBILITY OF THIS CONTRACTOR (FOR THE SCOPE OF THIS CONTRACTOR'S WORK). ALL CHANGES TO SYSTEMS TO EB	ALT #1
9 ? FIELD CHANGE STATEMENT	COORDINATED WITH ALL OTHER TRADES AS APPLICABLE, INCLUDING BUT NOT LIMITED TO G.C., STRUCTURAL CONTRACTOR, ELECTRICAL CONTRACTOR AND PLUMBING CONTRACTOR.	
	CHANGES INITIATED BY THIS CONTRACTOR SHALL BE THE FINANCIAL RESPONSIBILITY OF THIS CONTRACTOR UNLESS OTHERWISE AGREED UPON BY G.C. OWNER AND ALL INVOLVED	ALT #2 NATURAL GAS
	PARTIES. CONTRACTOR TO SECURE, PAY AND MAINTAIN ALL PERMITS	BASE
10 ? PERMITS	RELATED TO SCOPE OF WORK. COORDIATE PERMIT REQUIREMENTS WITH G.C., ENGINEER AND OWNER. CONTRACTOR SHALL SECURE, PAY AND COORDINATE ALL INSPECTIONS	
	RELATED TO SCOPE OF WORK. COORDINATE INSPECTIONS OF THIS SCOPE AND SCOPE OF OTHERS WITH RESPECT TO CONSTRUCTION ACTIVITIES OF ALL PARTIES ON SITE.	SERVICE PIPING FIRE STOPPING
	CONTRACTOR SHALL PROVIDE INDUSTRY STANDARD TESTING	
	WATER FLOW, STEAM, REFRIGERANT CHARGE, AND ANY OTHER ITEMS REQUIRED IN SCOPE. PROVIDE TESTING AND BALANCE REPORT TO G.C., OWNER, ARCHITECT AND ENGINEER. PROVIDE	
	MANUFACTURER'S RECOMMENDED START-UP FOR ALL EQUIPMENT, PROVIDE START UP REPORT TO G.C. OWNER, ARCHITECT AND ENGINEER. CLEAN UP ALL MATERIALS AND	
11 ? START-UP, TESTING AND CLEAN UP	DEBRIS RELATED TO SCOPE OF WORK. COORDINATE DISPOSAL OF DEBRIS AND EXCESS MATERIAL WITH G.C./OWNER. IF NO DUMPSTER IS PROVIDED, CONTRACTOR SHALL SECURE AND PAY	
	FOR REMOVAL OF REFUSE FROM CONSTRUCTION ACTIVITIES OF THIS SCOPE. PROVIDE OWNER OR OWNER'S REP A STARTUP,	
	OPERATIONS AND MAINTENANCE MANUAL INCLUDING IOM MANUAL FOR EACH PIECE OF EQUIPMENT UNDER SCOPE. PROVIDE 1-HR (OR ADDITIONAL AS REQUIRED UNDER CONTRACT)	
	TRAINING TO OWNER OR REP. REGARDING THE OPERATION OF EQUIPMENT IN SCOPE DRAWINGS ARE TO BE CONSIDERED SCHEMATIC IN NATURE.	
	INTENT AND SCOPE MAY INCLUDE ITEMS IN ARCHITECTURAL, ELECTRICAL AND PLUMBING PLANS. FINAL INSTALLED ITEMS MAY	
12 ? DRAWINGS	REQUIRE OFFSETS, ELBOWS, AND CHANGES. CONTRACTOR	

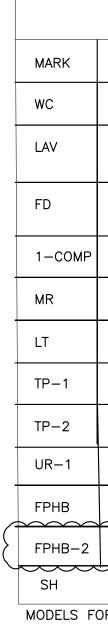
### PLUMBING PIPING AND INSULATION

SURANCE AL WORK IN ACCORDANCE WITH ASME AND WELDING STANDARDS. AL TO BE NEW AND FREE OF DEFECT. AD CAPS ON EACH LENGTH OF PIPING AND PREVENT DAMAGE TO PING STORAGE AND INSTALLATION. ALVES AND FITTINGS FOR A COMPLETE SYSTEM, ENSURE VALVES , DRY AND FREE OF DEBRIS. RGER PIPING WITH APPROPRIATE HANGERS TO PREVENT DAMAGE. ANGERS ON PIPING PER OPC, OMC, AND OBC. (PANSION JOINTS AND THRUST BEARINGS AS REQUIRED TO AMAGE TO PIPING OR BUILDING. .EXIBLE CONNECTIONS WHERE PIPING CONNECTS TO MOTOR T. (EXCEPTION - REFRIGERANT PIPING) ALANCE VALVES, FLOW CONTROL DEVICES, SHUT OFF VALVES AND

AND APPLICATION

IE BELOW DESCRIBES PIPING MATERIALS ACCEPTABLE TO T ALL APPLICATIONS MAY APPLY. PROVIDE ALTERNATE PRICING (PER CONTRACT) WHERE MULTIPLE MATERIALS ARE LISTED. ACTURER'S INSTRUCTIONS FOR ADDITIONAL MATERIAL

	MATERIAL, II MATERIAL	NSULATION AND APPROVAL SCHEDULE APPROVAL	INSULATION	NOTES
'E GRADE				
	CAST-IRON PIPE	ASTM A 74; ASTM A 888; CISPI 301	N/A	PROVIDE CATHODIC PROTECTION AS NEEDED
	POLYVINYL CHLORIDE (PVC) PLASTIC PIPE IN IPS DIAMETERS, INCLUDING		,	
	SCHEDULE 40, DR 22 (PS 200), AND DR 24			
	(PS 140); WITH A SOLID, CELLULAR CORE OR COMPOSITE WALL	ASTM D 2665; ASTM F 891; ASTM F 1488; CSA B 181.2	N/A	NOT ALLOWABLE IN RETURN AIR PLENUMS (UNLESS RATED AND LISTED)
BELOW				PROVIDE CATHODIC PROTECTION AS
	CAST-IRON PIPE POLYVINYL CHLORIDE (PVC) PLASTIC	ASTM A 74; ASTM A 888; CISPI 301	N/A	NEEDED
	PIPE IN IPS DIAMETERS, INCLUDING SCHEDULE 40, DR 22 (PS 200) AND DR 24			
	(PS 140); WITH A SOLID, CELLULAR	ASTM D 2665; ASTM F 891; ASTM F		NOT ALLOWABLE IN RETURN AIR PLENUMS
	CORE, OR COMPOSITE WALL	1488; CSA B 181.2	N/A	(UNLESS RATED AND LISTED)
	CHLORINATED POLYVINYL CHLORIDE (CPVC) PLASTIC PIPE	ASTM D 2846; ASTM F 441; ASTM F 442; CSA B137.6	N/A	
	COPPER OR COPPER-ALLOY PIPE	ASTM B 42; ASTM B 302	N/A	
	POLYVINYL CHLORIDE (PVC) PLASTIC PIPE	ASTM D 1785; ASTM D 2241; ASTM D 2672; CSA B137.3	N/A	NOT ALLOWABLE IN RETURN AIR PLENUMS (UNLESS RATED AND LISTED)
· COLD			0.5 INCH MAXIMUM 0.27	
			BTU*IN/(H*FT^2*f)	
	CHLORINATED POLYVINYL CHLORIDE (CPVC) PLASTIC PIPE AND TUBING	ASTM D 2846; ASTM F 441; ASTM F 442; CSA B137.6	RATED, WITH VAOPR BARRIER	NOT ALLOWABLE IN RETURN AIR PLENUMS (UNLESS RATED AND LISTED)
			0.5 INCH MAXIMUM 0.27	
	COPPER OR COPPER-ALLOY TUBING	ASTM B 75; ASTM B 88; ASTM B	BTU*IN/(H*FT^2*f) RATED, WITH VAOPR	
	(TYPE K, WK, L, WL, M OR WM)	251; ASTM B 447	BARRIER 0.5 INCH MAXIMUM 0.27	
			BTU*IN/(H*FT^2*f)	
	CROSS-LINKED POLYETHYLENE (PEX) PLASTIC TUBING	ASTM F 876; ASTM F 877; CSA B 137.5	RATED, WITH VAOPR BARRIER	NOT ALLOWABLE IN RETURN AIR PLENUMS (UNLESS RATED AND LISTED)
10T <140F			1 (1.5 INCH FOR 2" AND	
			`LARGER) INCH MAXIMUM_0.27_BTU*IN/	
	CHLORINATED POLYVINYL CHLORIDE	ASTM D 2846; ASTM F 441; ASTM F	(H*FT^2*f) RATED, WITH	NOT ALLOWABLE IN RETURN AIR PLENUMS
	(CPVC) PLASTIC PIPE AND TUBING	442; CSA B137.6	VAOPR BARRIER	(UNLESS RATED AND LISTED)
			LARGER) INCH	
	COPPER OR COPPER-ALLOY TUBING	ASTM B 75; ASTM B 88; ASTM B	MAXIMUM 0.27 BTU*IN/ (H*FT^2*f) RATED, WITH	
	(TYPE K, WK, L, WL, M OR WM)	251; ASTM B 447	VAOPR BARRIER	
			LARGER) INCH	
	CROSS—LINKED POLYETHYLENE (PEX)	ASTM F 876; ASTM F 877; CSA B	MAXIMUM 0.27 BTU*IN/ (H*FT^2*f) RATED, WITH	NOT ALLOWABLE IN RETURN AIR PLENUMS
	PLASTIC TUBING	137.5	VAOPR BARRIER	(UNLESS RATED AND LISTED)
IOT >140F				
			1.5 (2 INCH FOR 2" AND	
			LARGER) INCH MAXIMUM 0.27 BTU*IN/	
	CHLORINATED POLYVINYL CHLORIDE (CPVC) PLASTIC PIPE AND TUBING	ASTM D 2846; ASTM F 441; ASTM F 442; CSA B137.6	(H*FT^2*f) RATED, WITH VAOPR BARRIER	NOT ALLOWABLE IN RETURN AIR PLENUMS (UNLESS RATED AND LISTED)
			1.5 (2 INCH FOR 2" AND	
			LARGER) INCH MAXIMUM 0.27 BTU*IN/	
	COPPER OR COPPER-ALLOY TUBING (TYPE K, WK, L, WL, M OR WM)	ASTM B 75; ASTM B 88; ASTM B 251; ASTM B 447	(H*FT^2*f) RATED, WITH VAOPR BARRIER	
	(111 - 10, WK, L, WL, WOK WM)	201, AJINI D 44/	1.5 (2 INCH FOR 2" AND	
			LARGER) INCH MAXIMUM 0.27 BTU*IN/	
	CROSS-LINKED POLYETHYLENE (PEX)	ASTM F 876; ASTM F 877; CSA B	(H*FT^2*f) RATED, WITH	NOT ALLOWABLE IN RETURN AIR PLENUMS
	PLASTIC TUBING	137.5	VAOPR BARRIER	(UNLESS RATED AND LISTED)
				PAINT EXTERIOR PIPING WITH UV RESISTANT
		ASME B 36.10,10M ASTM A 53/A52,		PAINT. EXTERIOR PIPING ON MINIMUM 6"
	STEEL AND WROUGHT IRON (UNDERGROUND SERVICE PIPING ONLY)	ASTM A106		BLOCKS ON ROOF
	CHLORINATED POLYVINYL CHLORIDE			EXTERIOR PIPING ON MINIMUM 6" BLOCKS
	(CPVC) PLASTIC PIPE AND TUBING	ASTM D 2513		ON ROOF
	3M FIRE BARRIER 1003SL OR APPROVED EQUAL.	ASTM E1966 OR UL 2079 ASTM E 814 OR UL 1479 (3 HR)		INSTALL PER OBC-713

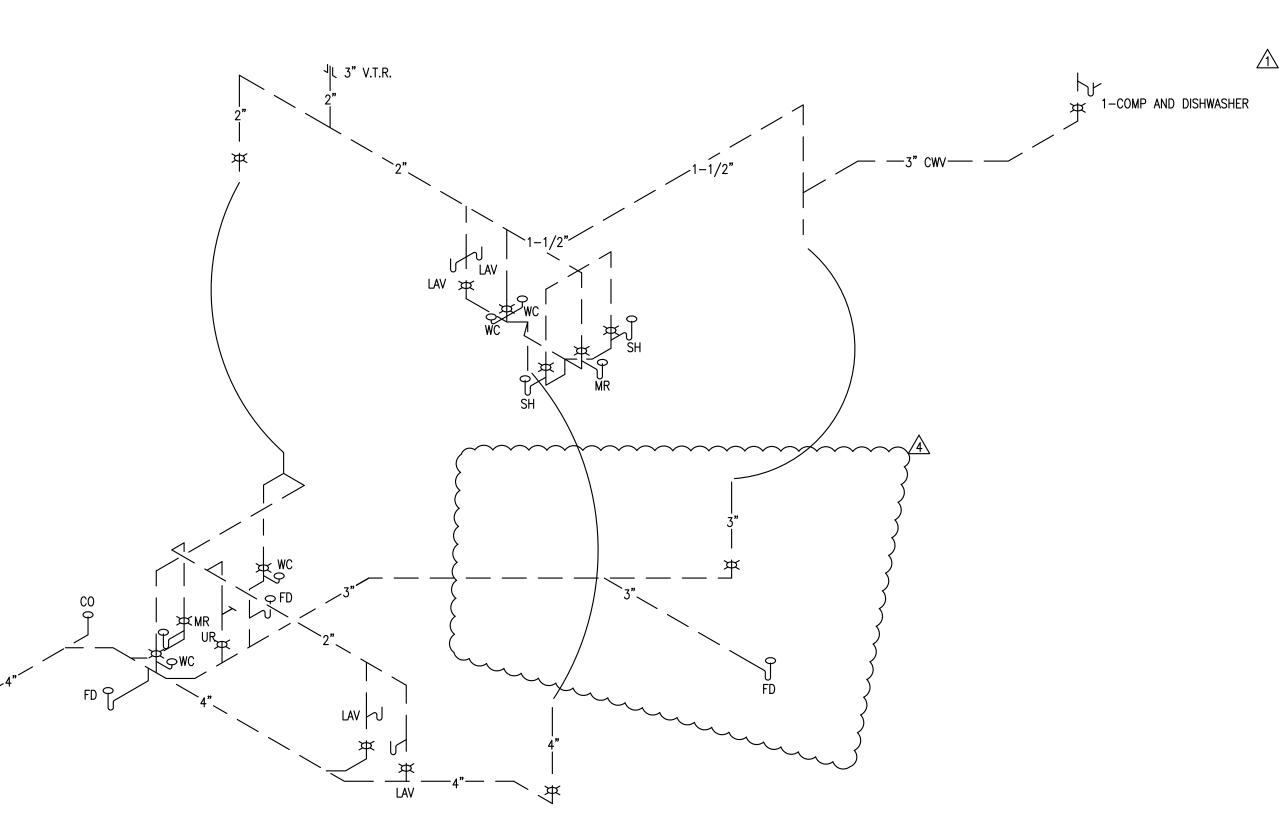


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						one conedole
FIXTURE	SAN	VENT	105 DHW	140 DHW	DCW	MANUFACTURER, MODEL NUMBER, AND DESCRIPTION
FLR. MTD. TANK WC	3"	1-1/2"			1/2"	AMERICAN STANDARD CADET 2467.016 ADA COMPLIANT ELONGATED SEAT
LAVATORY	1-1/2"	1-1/4"	1/2"		1/2"	AMERICAN STANDARD 9482.000.020 UNDERMOUNT BOWL 4" O.C. AMERICAN STANDARD 7385.000 SATIN NICKEL SINGLE LEVER FAUCET WITH GRID STRAINER. PROVIDE WITH ASSE 1070 MIXING VALVE
ROUND FLOOR DRAIN	3"	CWV				WATTS FD-100-A OR APPROVED EQUAL, PROVIDE TRAP PRIMER AS REQUIRED. WHERE APPROVED PROVIDE A WATERLESS TRAP SEAL AND BACKWATER VALVE IN LIEU OF PRIMER
1-COMP SINK	1-1/2"	1-1/4"	3/4"		3/4"	AMERICAN STANDARD 20SB.332211C.075.075 SINGLE BOWL RALEIGH SINK KINGSTON BRASS KB72.AL GOOSENECK FAUCET CENTER SET 4" O.C. GRID STRAINER. PROVIDE WITH ASSE 1070 MIXING VALVE
SERVICE SINK	3"	1-1/2"	1/2"		1/2"	MUSTEE 63M 24"x24" MOP BASIN AND 63.600A FAUCET WALL MOUNTED
LAUNDRY TRAY	3"	1-1/2"	1/2"		1/2"	MUSTEE 17W 23"x24" UTILITY TUB AND 63.600A FAUCET FLOOR MOUNTED
TRAP PRIMER (FIXTURE DOWNSTREAM)					1/2"	WATTS LFTP300 OR APPROVED EQUAL
TRAP PRIMER (TIMER W/O FIXTURES)					1/2"	PRECISION PLUMBING PRODUCTS MP-500-24V OR APPROVED EQUAL. PROVIDE ALL CONTROL AND POWER WIRING.
WALL MTD. URINAL	2"	1-1/4"			3/4"	AMERICAN STANDARD 6501.610 WASHBROOK 1.0 GPF URINAL. MOUNTED PER ADA REQUIREMENTS. PROVIDE WITH SELECTRONIC FLUSHVALVE
FROST PROOF HOSE BIBB					3/4"	WOODFORD MFG. MODEL RB-65 6" DIAMETER HOLE WITH FLUSH MOUNTED BOX.
FROST PROOF HOSE BIBB				3/4"	3/4"	WOODFORD MFG. MODEL 22 HOT AND COLD HOSE BIBB
SHOWER AND ENCLOSURE	2"	1-1/2"	1/2"		1/2"	72320106–96 STERLING SHOWER ENCLOSURE 35"x48" MOEN 3869EPBN HAND HELD SLIDE BAR SHOWER KIT. PROVIDE WITH ASSE 1016 VALVE. COORDINATE GRAB BARS WITH ARCHITECTURAL PLANS
OR PRICING ONLY FINAL	SELECTION TO	BE BY OW	NFR PRIOR 1	O CONST	RUCTION	

#### PLUMBING FIXTURE SCHEDULE

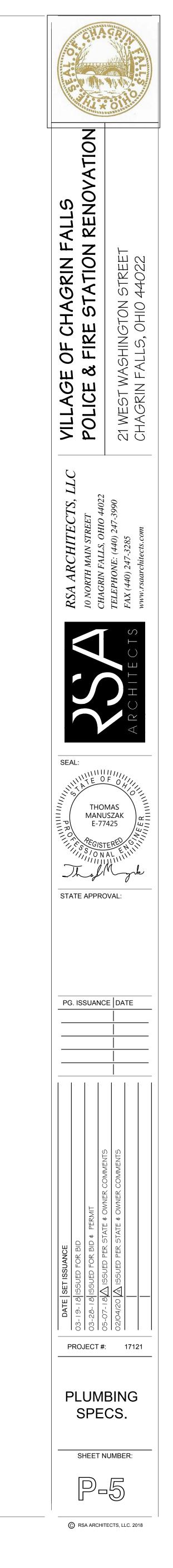
MODELS FOR PRICING ONLY, FINAL SELECTION TO BE BY OWNER PRIOR TO CONSTRUCTION

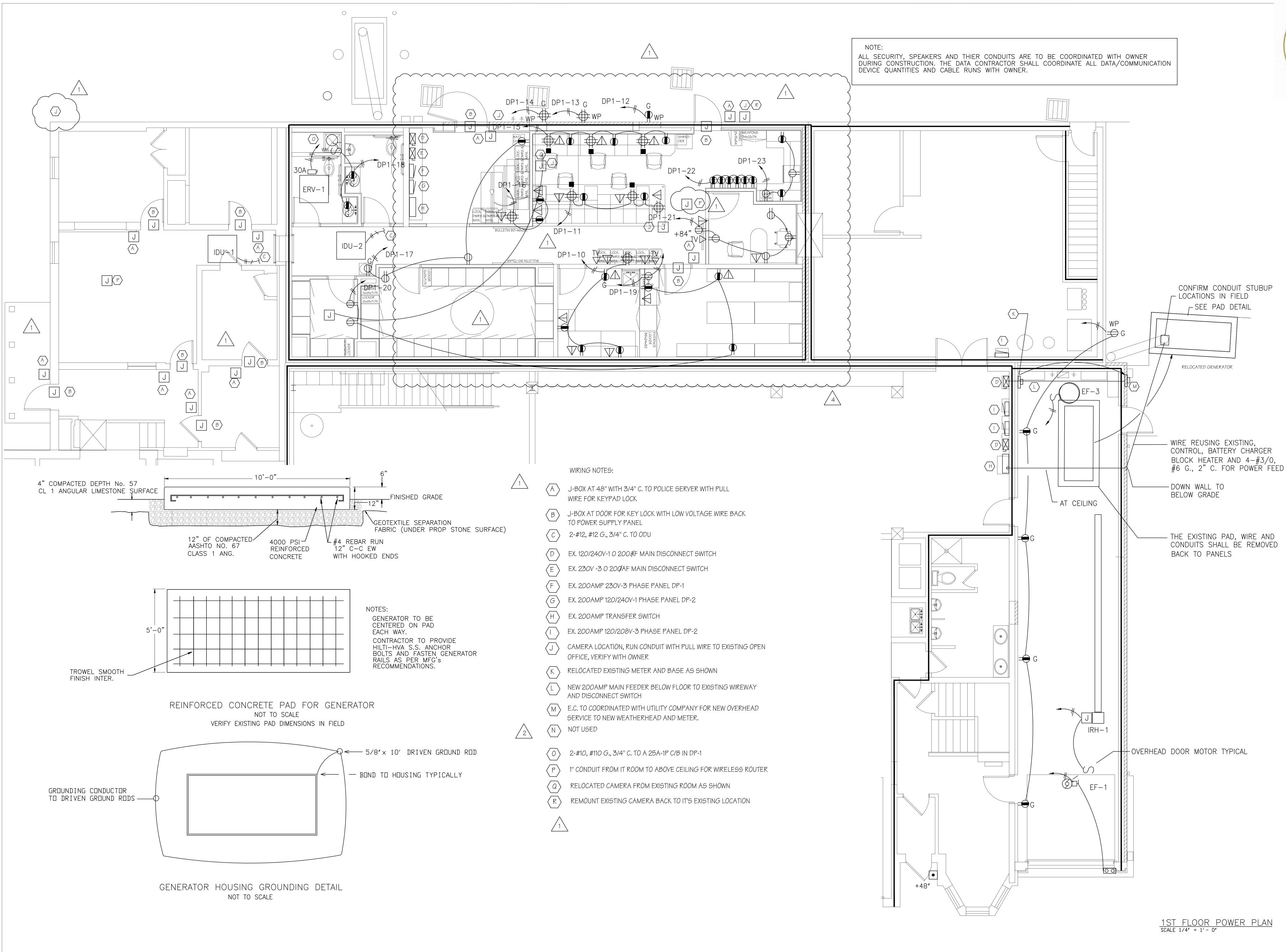


SANITARY ISOMETRIC PLAN no scale

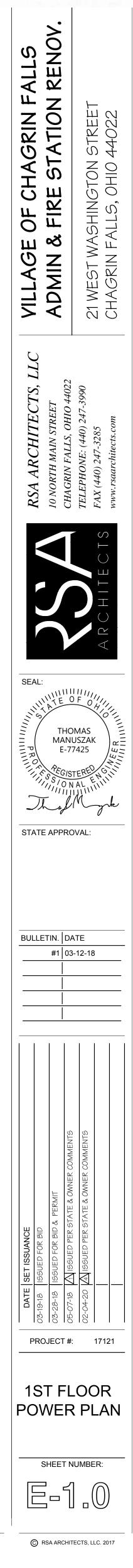
VENT AND SANITARY PIPING IN PLUMBING ISOMETRIC IS SCHEMATIC ONLY. SANITARY PIPING SIZED BASED ON TABLE 710.1 FOR 1/8" PER FOOT DROP (PROVIDE 1/4" PER FOOT WHERE POSSIBLE).

VENT PIPING SHOWN PROVIDES SINGLE FIXTURE VENTS. CONTRACTOR MAY SUBMIT MARKUPS FOR USE OF COMMON VENTS, GROUP VENTS, COMBINATION VENT/SANITARY, ETC. ENGINEER WILL REVIEW AND APPROVE OR DENY CHANGES. CUT ALL VENT PIPING THRU ROOF AND PROVIDE FLASHING AND COUNTER FLASHING. VENTS TO BE TERMINATED IN CODE COMPLIANT LOCATION/HEIGHT. VERIFY EXISTING CONDITIONS PRIOR TO INSTALLATION.

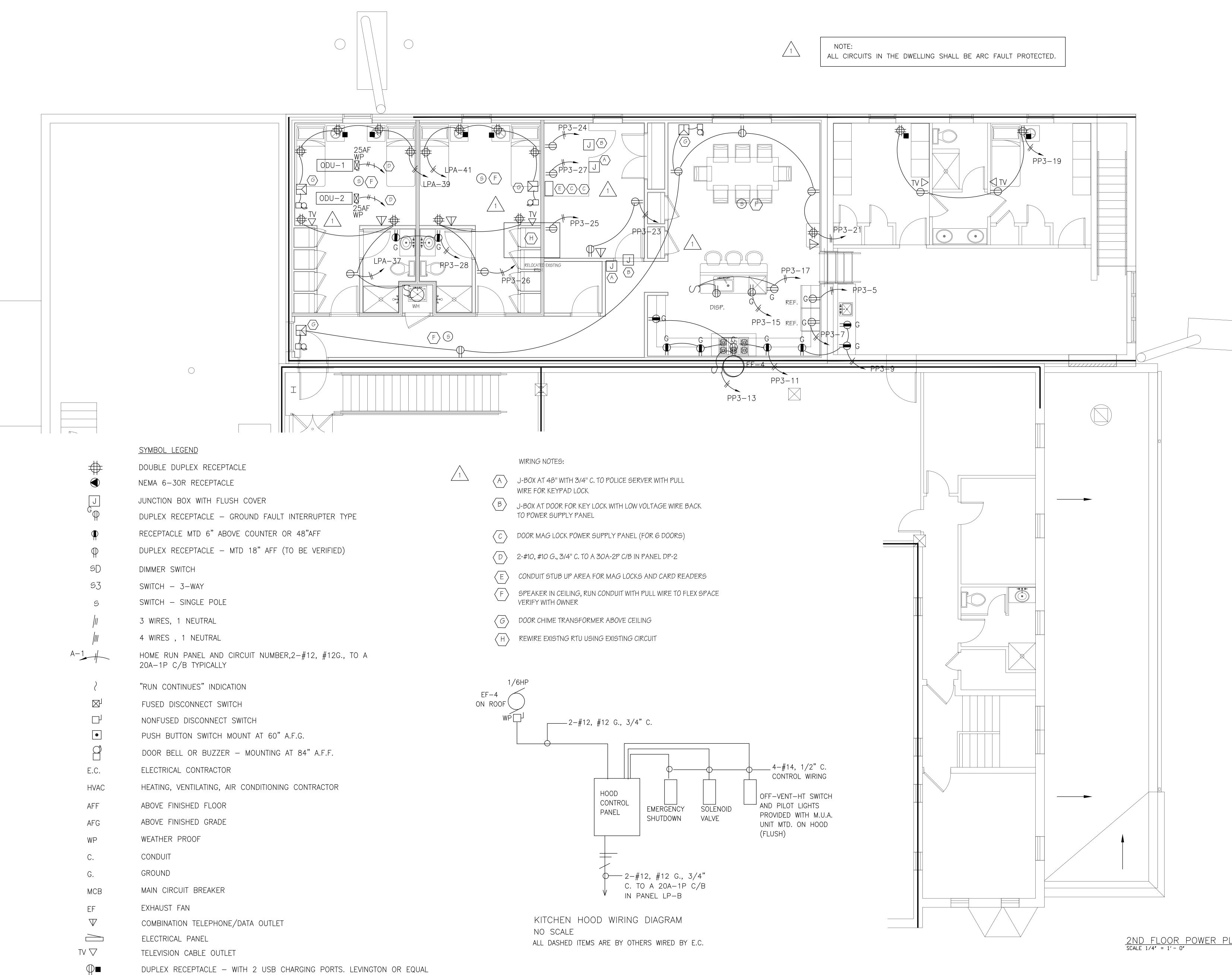






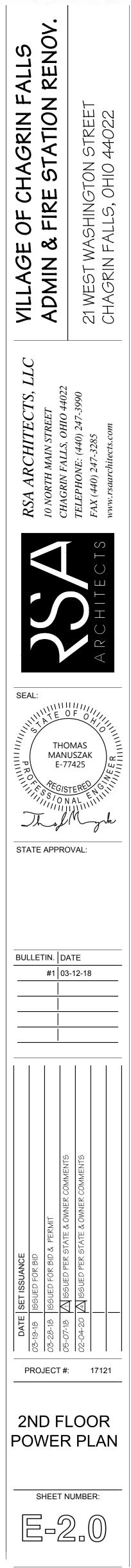


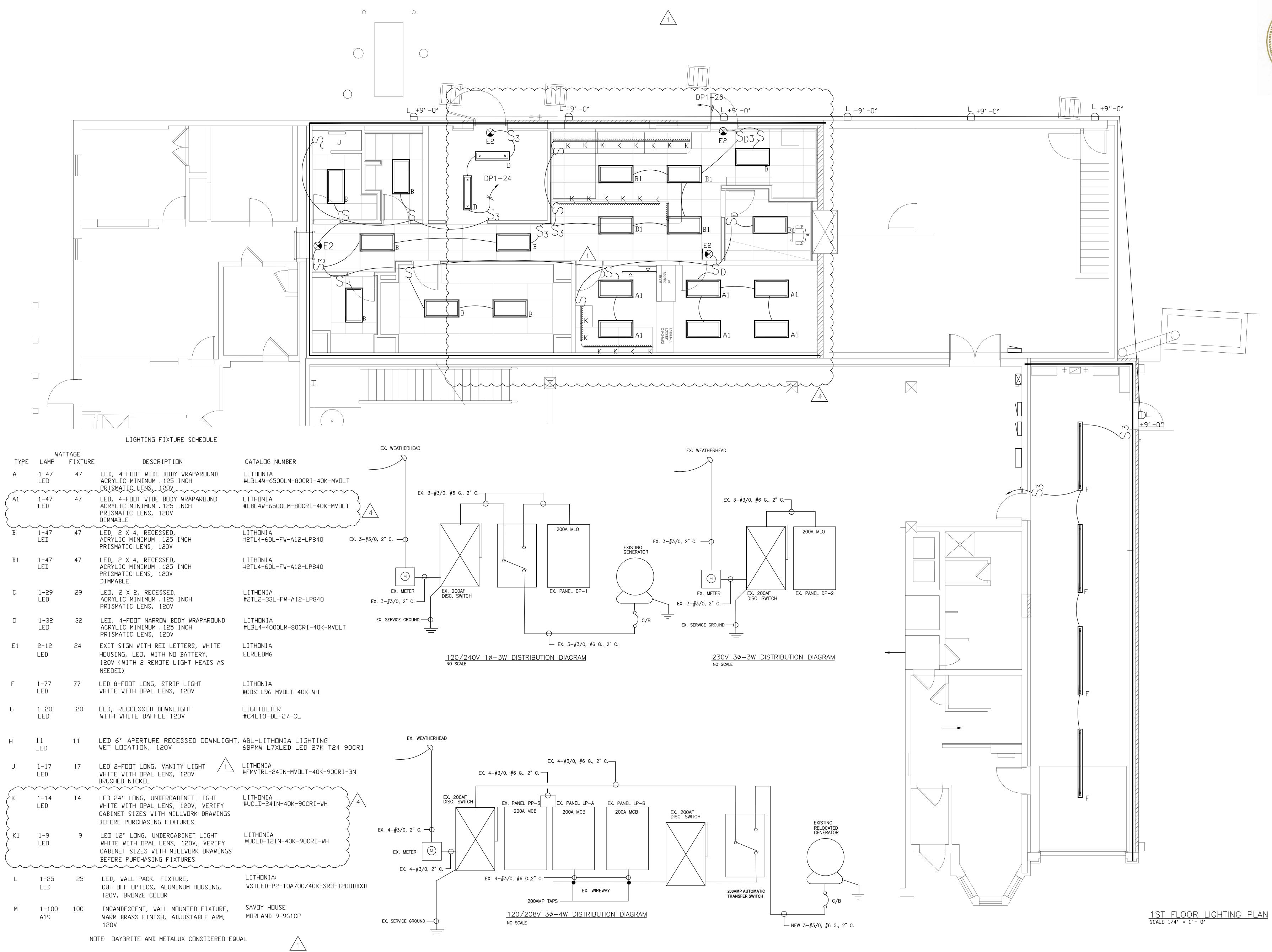




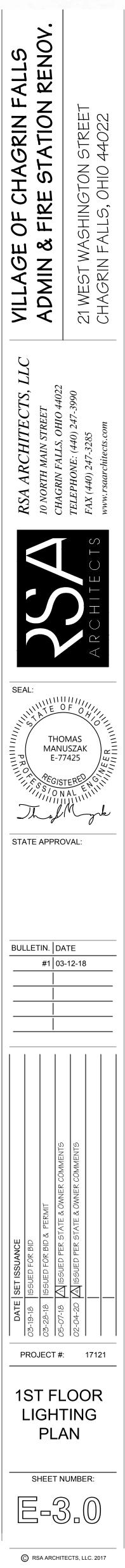
2ND FLOOR POWER PLAN scale 1/4" = 1' - 0"

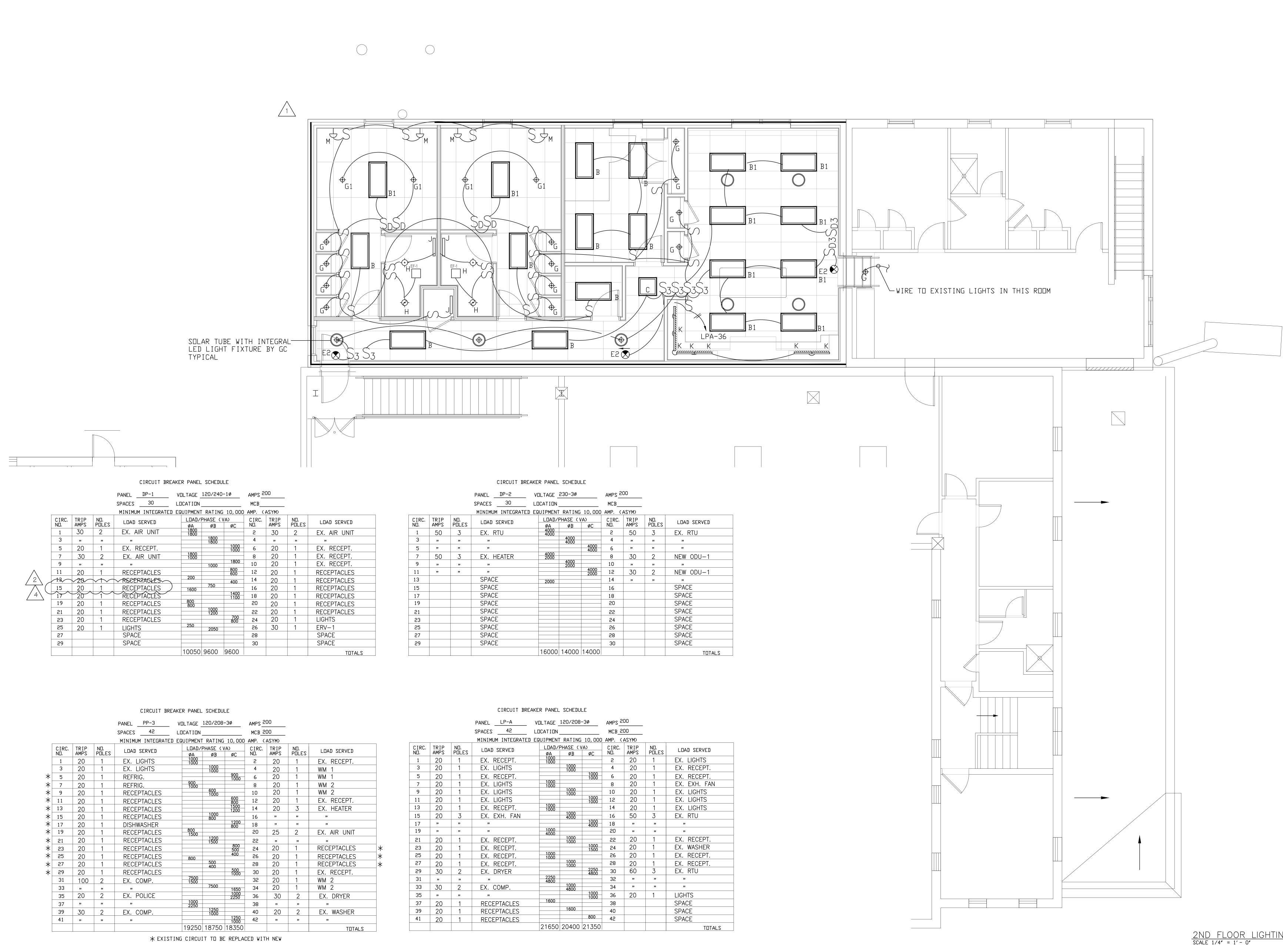












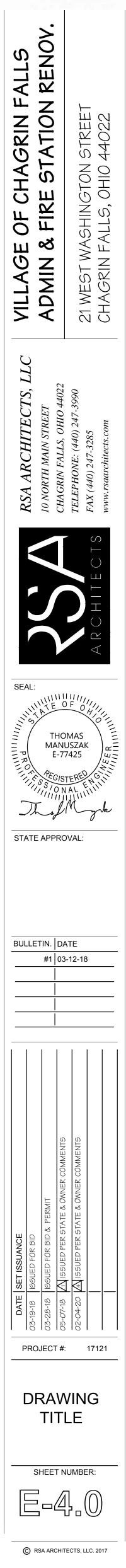


			PANEL <u>DP-2</u> VOLTAGE <u>230-30</u>				AMPS -			
			SPACES 30	LOCATION			MCB			
	1	1	MINIMUM INTEGRATEI	D EQUIPMENT	RATING	10,000	AMP. (	ASYM)		
CIRC. ND.	TRIP AMPS	ND. PDLES	LOAD SERVED		PHASE (V ØB	/A) ØC	CIRC. ND.	TRIP AMPS	ND. POLES	LDAD SERVED
1	50	3	EX. RTU	ØA 4000 4000			2	50	3	EX. RTU
3	"	"	>>		4000 4000		4	"	"	"
5	"	"	"			4000 4000	6	"	"	"
7	50	3	EX. HEATER	4000 2000			8	30	2	NEW ODU-1
9	"	"	"		4000 2000		10	"	"	"
11	"	"	>>			4000 2000	12	30	2	NEW ODU-1
13			SPACE	2000			14	"	"	"
15			SPACE				16			SPACE
17			SPACE				18			SPACE
19			SPACE				20			SPACE
21			SPACE				22			SPACE
23			SPACE				24			SPACE
25			SPACE				26			SPACE
27			SPACE				28			SPACE
29			SPACE				30			SPACE
				16000	14000	14000				TOTALS

CIRCUIT BREAKER PANEL SCHEDULE										
			PANEL LP-A	VOLTAGE 120/208-30			AMPS 2	00		
			SPACES 42	LOCATION	DCATION		MCB 200			
MINIMUM INTEGRATED EQUIPMENT RATING 10,000 AMP. (ASYM)										
CIRC. ND.	TRIP AMPS	ND. POLES	LOAD SERVED	øΔ	PHASE () ØB	VA) ØC	CIRC. ND.	TRIP AMPS	ND. POLES	LOAD SERVED
1	20	1	EX. RECEPT.	1000 1000			2	20	1	EX. LIGHTS
3	20	1	EX. LIGHTS		1000 1000		4	20	1	EX. RECEPT.
5	20	1	EX. RECEPT.			1000 1000	6	20	1	EX. RECEPT.
7	20	1	EX. LIGHTS	1000 1000			8	20	1	EX. EXH. FAN
9	20	1	EX. LIGHTS		1000 1000		10	20	1	EX. LIGHTS
11	20	1	EX. LIGHTS			1000 1000	12	20	1	EX. LIGHTS
13	20	1	EX. RECEPT.	1000 1000			14	20	1	EX. LIGHTS
15	20	3	EX. EXH. FAN		1000 4000		16	50	3	EX. RTU
17	"	"	"			1000 4000	18	"	"	"
19	"	"	"	1000 4000			20	"	>>	"
21	20	1	EX. RECEPT.		1000 1000		22	20	1	EX. RECEPT.
23	20	1	EX. RECEPT.			1000 1500	24	20	1	EX. WASHER
25	20	1	EX. RECEPT.	1000 1000			26	20	1	EX. RECEPT.
27	20	1	EX. RECEPT.		1000 1000		28	20	1	EX. RECEPT.
29	30	2	EX. DRYER			2250 4800	30	60	3	EX. RTU
31	"	"	>>	2250 4800			32	"	"	"
33	30	2	EX. COMP.		1000 4800		34	"	"	"
35	"	"	27			1000 1000	36	20	1	LIGHTS
37	20	1	RECEPTACLES	1600			38			SPACE
39	20	1	RECEPTACLES		1600		40			SPACE
41	20	1	RECEPTACLES			800	42			SPACE
				21650	20400	21350				TOTALS

2ND FLOOR LIGHTING PLAN scale 1/4" = 1' - 0"





PART 1 – GENERAL

- 1.1 RELATED DOCUMENTS
  - A. REFER TO DIVISION 0, "BIDDING AND CONTRACT REQUIREMENTS", DIVISION 1, "GENERAL REQUIREMENTS", AND ALL ADDENDA WHICH ARE HEREBY MADE A PART OF THIS SPECIFICATION.
  - THIS CONTRACTOR IS TO READ ALL SPECIFICATIONS OF ALL PARTS OF THE WORK AND INCLUDING WIRING FOR THEIR EQUIPMENT UNLESS SPECIFICALLY EXCEPTED HEREIN.
  - THE WORK REQUIRED UNDER DIVISION 16 OF THE SPECIFICATIONS INCLUDES ALL REQUIREMENTS OF ALL SECTIONS OF THIS DIVISION. IN GENERAL, THE WORK CONSISTS OF FURNISHING AND INSTALLING THE EQUIPMENT. SERVICE AND ALL OTHER MATERIALS NECESSARY TO PROVIDE THE COMPLETE ELECTRICAL SYSTEM AND ALL WORK IN CONNECTION WITH SUCH SYSTEMS INCLUDING LABOR, TRANSPORTATION, ETC., COMPLETE IN EVERY RESPECT AS SHOWN ON THE PLANS, HEREIN SPECIFIED, OR REASONABLE IMPLIED AS READY FOR USE UNLESS OTHERWISE SPECIFIED.
  - D. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL ELECTRICAL WORK AS HEREIN DESCRIBED OR AS INDICATED ON THE DRAWINGS. MATERIAL AND/OR LABOR WHICH IS NOT INDICATED ON THE DRAWINGS OR SPECIFICATIONS, BUT NECESSARY TO COMPLETE THE WORK (AND USUALLY INCLUDED IN SIMILAR WORK), SHALL BE PROVIDED.
- 1.2 DESCRIPTION OF WORK
  - A. PROVIDE A COMPLETE WORKING ELECTRICAL SYSTEM READY FOR USE.
  - B. ELECTRICAL SYSTEM INCLUDES THE DISTRIBUTION, LIGHTING, POWER OUTLETS, AND RACEWAYS
  - PROVIDE ALL COORDINATION AND ADMINISTRATION NECESSARY TO INSTALL ELECTRICAL SYSTEM AND UTILITY SERVICES.
- 1.3 WORK INCLUDED
  - A. WIRE, RACEWAYS AND BOXES.
  - SWITCHES AND PANELBOARDS.
  - C. MAINTAIN EXISTING ELECTRIC SERVICE
  - D. ELECTRICAL DISTRIBUTION.
  - E. LIGHTING.
  - F. GROUNDING AND BONDING.
  - G. POWER WIRING.
  - H. CONNECTIONS TO ELECTRICAL EQUIPMENT.
- 1.4 GENERAL
  - A. IT IS THE PURPOSE OF THE DRAWINGS TO INDICATE THE APPROXIMATE LOCATIONS OF ALL EQUIPMENT, OUTLETS, ETC. THE EXACT LOCATION OF APPARATUS AND OUTLETS MAY BE GIVEN AS THE WORK PROGRESSES.
  - B. THIS CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY FOR THIS WORK AND SHALL ASSUME RESPONSIBILITY FOR THEIR ACCURACY. DO NOT SCALE DRAWINGS. ANY INTERFERENCES OR FIELD PROBLEMS SHALL BE REPORTED TO THE OWNER FOR RESOLUTION.
  - C. THE WORK COVERED BY THIS SPECIFICATION CONSISTS OF PROVIDING ALL LABOR, EQUIPMENT, SUPPLIES, MATERIALS, PERMITS, AND SERVICES REQUIRED FOR THE COMPLETE INSTALLATION OF THE ELECTRICAL WORK. READY FOR USE.
  - D. THE DESIGN DESCRIBED HEREIN IS INTENDED TO COMPLY WITH APPLICABLE CODES AND STANDARDS, AND WITH SAFEGUARDS IN EXCESS OF CODE REQUIREMENTS WHERE NECESSARY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THESE STANDARDS FOR ACHIEVING A COMPLETE AND SAFE INSTALLATION AND TO OBSERVE AND REPORT TO THE OWNER ANY ITEMS WHICH, IN HIS OPINION, DO NOT CONFORM TO THE CODES AND STANDARDS, OR WHICH WOULD IMPROVE THE SAFETY AND/OR SERVICEABILITY OF THE INSTALLATION.
- 1.5 EQUIPMENT MANUFACTURER'S DIRECTIONS, DIAGRAMS, AND MANUALS
  - A. EXCEPT WHERE SPECIFICALLY PERMITTED OTHERWISE, ALL MATERIALS, EQUIPMENT, AND DEVICES FURNISHED BY THE CONTRACTOR SHALL BE NEW AND SHALL CONFORM TO NECA, NEMA. IEEE. ANSI. AND UNDERWRITERS' LABORATORIES STANDARDS AND SHALL BEAR THE U.L. LISTING OR LABEL MARK.
  - B. ALL MANUFACTURED ARTICLES AND ALL OTHER MATERIALS AND EQUIPMENT FURNISHED BY THE CONTRACTOR SHALL BE APPLIED. CONNECTED, ERECTED, USED, CLEANED, AND CONDITIONED AS DIRECTED IN THE MANUFACTURER'S LATEST PRINTED INSTRUCTIONS.
  - C. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONSULT THE MANUFACTURER'S DRAWINGS, INSTALLATION MANUALS, AND INSTRUCTIONS FOR ALL EQUIPMENT. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THESE MANUALS AND INSTRUCTIONS.

#### 1.6 INSPECTION

- A. THE OWNER AND HIS AUTHORIZED REPRESENTATIVES SHALL HAVE ACCESS TO AND THE PRIVILEGE OF INSPECTING ALL WORK AND MATERIALS AS THE WORK PROGRESSES. THESE REPRESENTATIVES WILL HAVE AUTHORITY TO APPROVE OR REJECT ANY WORK OR MATERIALS, WITH THE DRAWINGS, SPECIFICATIONS, CODES, AND GOOD ENGINEERING PRACTICES AS A BASIS FOR ANY ACTION TAKEN.
- ANY WORK FOUND NOT IN COMPLIANCE WITH THE DRAWINGS SPECIFICATIONS, OR APPLICABLE STANDARDS AS LISTED HEREIN SHALL BE REPAIRED OR REPLACED AS DEEMED NECESSARY BY THE OWNER OR HIS REPRESENTATIVES. ANY SUCH ADDITIONAL WORK BY THE CONTRACTOR AS CONSIDERED NECESSARY BY THE OWNER FOR THE CONTRACTOR'S WORK TO COMPLY WITH THE CONTRACT DOCUMENTS AS DESCRIBED HEREIN SHALL NOT BE JUSTIFICATION FOR ADDITIONAL COMPENSATION BY THE CONTRACTOR.
- 1.7 COORDINATION OF WORK
  - A. THIS CONTRACTOR SHALL BE IN A POSITION TO MEET ALL COMPLETION DATES SET BY THE OWNER, AND SHALL BE ABLE TO FURNISH ALL LABOR OF VARIOUS CLASSES REQUIRED TO MEET SCHEDULES AND COMPLETION DATES. THIS CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE VARIOUS MANUFACTURERS ON DELIVERY AND ARRANGE FOR DELIVERY OF EQUIPMENT AND MATERIALS SO AS NOT TO HINDER OR DELAY ANY COMPLETION DATES FOR ELECTRICAL WORK OR OTHER TRADES WHICH ARE AFFECTED BY THE ELECTRICAL WORK.
- 1.8 SAFETY AND CLEAN-UP
  - A. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN A CLEAN, SAFE WORK PLACE WHILE PERFORMING HIS WORK AND UPON LEAVING EACH EVENING. LIVE ELECTRICAL PARTS OF FIXTURES, DEVICES, AND EQUIPMENT SHALL BE COMPLETELY PROTECTED TO PREVENT ACCIDENTAL INJURY TO OTHERS IN THE BUILDING. ALL STAIRWAYS, HALLS, AND EXITS SHALL BE LEFT WITH FREE ACCESS. TOOLS, TOOL BOXES, LADDERS, MATERIALS, ETC., SHALL BE KEPT IN A CONFINED AREA AWAY FROM NORMALLY OCCUPIED AREAS WHEN NOT IS USE.
  - THIS CONTRACTOR WILL BE HELD RESPONSIBLE FOR DAMAGE TO OTHER WORK CAUSED BY HIS WORK OR THROUGH THE NEGLIGENCE OF HIS WORKMEN. ALL PATCHING OR REPAIRING OF DAMAGED WORK SHALL BE DONE BY PERSONS OR CONTRACTORS NORMALLY EXPERIENCED IN THE WORK TO BE PERFORMED. SUCH CONTRACTORS OR SUBCONTRACTORS SHALL BE SUBJECT TO PRIOR APPROVAL OF THE OWNER. THE COST OF SUCH WORK SHALL BE PAID BY THE CONTRACTOR.
- 1.9 INTERFERENCES, CUTTING AND PATCHING
  - A. THE CONTRACTOR SHALL PREDETERMINE THE LOCATION, SIZE, ETC., OF ALL CHASES AND OPENINGS NECESSARY IN NEW AND EXISTING CONSTRUCTION FOR THE INSTALLATION OF HIS WORK AND SHALL BE RESPONSIBLE TO PROVIDE ALL SUCH OPENINGS HE SHALL SET ALL SLEEVES, INSERTS, LINTELS AND HANGERS AND BE RESPONSIBLE FOR THEIR PROPER LOCATION AND FOR FINAL PATCHING. CUTTING AND PATCHING SHALL SATISFY DIVISIONS 4, 5, 6, 7 AND 9. SHOULD HE FAIL TO COMPLY WITH THIS CLAUSE AND CUTTING OF NEW CONSTRUCTION IS REQUIRED BECAUSE THE OTHER TRADES WERE NOT PROPERLY NOTIFIED AND INSTRUCTED, THIS CONTRACTOR SHALL, AT HIS OWN EXPENSE, HAVE ANY NECESSARY CUTTING AND PATCHING DONE BY THE CONTRACTOR WHO FIRST INSTALLED THE WORK.
  - B. ALL PENETRATIONS SHALL BE FINISHED BY THE ELECTRICAL CONTRACTOR WITH APPROPRIATE AND ACCEPTABLE TRIMS.
- 1.10 RECEIPT OF PORTABLE OR DETACHABLE PARTS
  - A. THE CONTRACTOR SHALL RETAIN IN HIS POSSESSION AND SHALL BE RESPONSIBLE FOR ALL PORTABLE OR DETACHABLE PORTIONS OF THE INSTALLATION SUCH AS FUSES, KEYS, LOCKS, ETC., UNTIL THE COMPLETION OF THE WORK, AND SHALL TURN THEM OVER TO THE OWNER AND OBTAIN AN ITEMIZED RECEIPT. THIS RECEIPT. TOGETHER WITH A CERTIFICATE OF APPROVAL. SHALL BE ATTACHED TO THE CONTRACTOR'S REQUEST FOR FINAL PAYMENT.
- 1.11 CODES. PERMITS AND INSPECTIONS
  - A. ALL WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE AND THE STATE CODE, IN ADDITION TO ANY LOCAL, CITY OR COUNTY CODES IN EFFECT AT THE TIME OF CONSTRUCTION.
  - B. AT ALL TIMES DURING WHICH THE CONTRACTOR OR ANY SUBCONTRACTOR ARE ENGAGED IN WORK COVERED BY THESE DOCUMENTS, ALL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT SHALL BE OBSERVED.
  - C. THE INSTALLATION COVERED BY THESE DOCUMENTS SHALL COMPLY WITH ALL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT.
  - D. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS FROM ALL AGENCIES AND OBTAIN ALL INSPECTIONS REQUIRED FOR THE PROSECUTION OF THE ELECTRICAL WORK. ALL PERMITS AND CERTIFICATES OF INSPECTION AND APPROVAL SIGNED BY THE BUILDING DEPARTMENT SHALL BE FURNISHED IN DUPLICATE TO THE OWNER AND SHALL BECOME THE PROPERTY OF THE OWNER.

- E. ALL ELECTRICAL WORK SHALL BE INSPECTED BY THE LOCAL AUTHORITIES HAVING JURISDICTION.
- 1.12 WORKMANSHIP
  - A. ALL ELECTRICAL WORK SHALL BE INSTALLED UNDER THE DIRECTION OF A SKILLED ELECTRICAL FOREMAN ACCEPTABLE TO THE OWNER. ALL WORK SHALL BE TESTED, INSPECTED AND CERTIFIED APPROVED AS TO MATERIALS AND WORKMANSHIP BY THE PROPER AUTHORITY PRIOR TO ACCEPTANCE.
  - B. ALL TESTS SHALL BE MADE BEFORE ANY CIRCUIT OR MAIN SWITCH IS MADE HOT. CIRCUITS SHALL BE PHASED OUT AND CONNECTED TO THE PANEL OR MAIN SWITCH IN A PROPER MANNER. LOADS SHALL BE DISTRIBUTED AS EVENLY AS POSSIBLE ON ALL PHASES. ALL WIRES SHALL BE ENTIRELY FREE FROM GROUNDS AND SHORT CIRCUITS. ALL PANELBOARDS SHALL HAVE LOADS DISTRIBUTED BETWEEN THE VARIOUS PHASES SO THAT MAXIMUM VARIATION IN CURRENT READINGS OF THE DIFFERENT PHASES SHALL NOT EXCEED 5% WHEN ALL THE LOAD IS IN OPERATION.
  - AFTER COMPLETION OF THE WORK, THE ENTIRE ELECTRICAL SYSTEM, BOTH POWER AND LIGHTING, SHALL BE THOROUGHLY TESTED FOR THEIR PROPER FUNCTIONING. THE TESTING OF ALL ELECTRICAL EQUIPMENT AND CIRCUITS SHALL BE SCHEDULED AND PERFORMED TO THE SATISFACTION OF THE OWNER AND A RECORD OF ALL TEST RESULTS SHALL BE SUPPLIED IN TRIPLICATE AND SUBMITTED TO THE OWNER PRIOR TO REQUEST FOR FINAL PAYMENT
  - THE WORKMANSHIP OF ALL INSTALLED ELECTRICAL EQUIPMENT SHALL BE SUBJECT TO FINAL APPROVAL OF THE OWNER. ANY INSTALLATION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THE OWNER'S DISCRETION. THE COST OF ANY REPAIR AND/OR REPLACEMENTS NECESSARY DUE TO FAULTY WORKMANSHIP SHALL NOT BE JUSTIFICATION FOR ADDITIONAL COMPENSATION BY THE CONTRACTOR.
- 1.13 GUARANTEE
  - A. THIS CONTRACTOR SHALL GUARANTEE HIS WORKMANSHIP AND COMPLETION. SHOULD ANY DEFECTS DEVELOP WITHIN THE OF CORRECTING SAME, REPAIRED AND/OR REPLACED AT HIS OF THE OWNER ON THE FINAL PAYMENT OF THE CONTRACT.
  - B. THIS GUARANTEE SHALL BE SUPPLIED IN WRITING AND SHALL BE ATTACHED TO THE CONTRACTOR'S REQUEST FOR FINAL PAYMENT.
- PART 2 PRODUCTS AND SYSTEMS
- 2.1 MATERIALS
  - A. ELECTRICAL MATERIALS SHALL BE NEW, SHALL MEET N.E.C. STANDARDS, SHALL BEAR THE U.L. LABEL, AND SHALL BE PROTECTED FROM INJURY UNTIL FINAL ACCEPTANCE.
  - INTERIOR CONDUIT SHALL BE ELECTRICAL METALLIC TUBING OR P.V.C. (WHERE ACCEOTABLE BY CODE) UNDER THE GROUND FLOOR. BURIED EXTERIOR CONDUITS SHALL BE CONDUIT.
  - C. WIRE AND CABLE SHALL BE COPPER WITH 600 VOLT TYPE "THW", "THWN", OR "THHN" INSULATION. WIRE SMALLER THAN #12 AWG SHALL NOT BE USED. 150 DEGREES C TYPE "AF" WIRING IS REQUIRED FOR INCANDESCENT FIXTURE WIRING #8 AWG.
  - D. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS AND CAST ALLOY WITH THREADED HUBS IN WET AND DAMP LOCATIONS.
  - PANELBOARDS SHALL HAVE A HINGED DOOR WITH TYPEWRITTEN PANEL LEGEND INDICATING ALL CIRCUITS SUPPLIED INCLUDING SPARES.
- 2.2 LIGHTING SYSTEMS
  - A. PROVIDE ALL LIGHTING FIXTURES AND LAMPS AS SHOWN IN THE FIXTURE SCHEDULE AND/OR DESCRIBED IN THESE LOCATING OF LIGHTING OUTLETS.
    - 1. INCANDESCENT LAMPS: 130 VOLTS
    - GENERAL ELECTRIC, PHILIPS, OR SYLVANIA.

WORK WHICH DOES NOT MEET RECOGNIZED STANDARDS OF PROPER

MATERIAL FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE AND LEAVE HIS WORK IN PERFECT ORDER AT GUARANTEE PERIOD, THIS CONTRACTOR SHALL, UPON NOTICE OF SAME, REMEDY THE DEFECTS AND HAVE ALL DAMAGES TO OTHER WORK OR FURNISHINGS CAUSED BY THE DEFECTS OR THE WORK EXPENSE, TO THE CONDITION BEFORE SUCH DAMAGE. THE DATE OF FINAL ACCEPTANCE IS DEFINED AS THE DATE OF SIGNATURE

SCHEDULE 40 P.V.C. RUN A GROUND CONDUCTOR IN EACH PVC

HOMERUNS SHALL BE #10 AWG AND ABOVE 150 FEET SHALL BE

SPECIFICATIONS. COORDINATE WITH ALL OTHER TRADES IN THE

2. LAMPS SHALL BE OF THE SAME MANUFACTURER THROUGHOUT THE PROJECT AND SHALL BE AS MANUFACTURED BY

PART 3 – EXECUTION

3.1 INSTALLATION

- ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE N.E.C., ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, AND THE OWNER'S DESIGN CRITERIA. DURING CONSTRUCTION, OBSERVE ALL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT.
- THIS DESIGN IS ADDRESSED TO A CONTRACTOR WHICH IS LICENSED IN HIS WORK AND UNDERSTANDS THE NATIONAL STATE, AND LOCAL CODES. IT IS NOT POSSIBLE TO REPRODUCE THE ENTIRE CODE WITHIN THESE DRAWINGS AND SPECIFICATIONS: THEREFORE, IT IS THE RESPONSIBILITY OF THE INSTALLER TO USE APPROVED MATERIALS, METHODS, AND LOCATIONS ACCEPTABLE TO THE FEDERAL, STATE, AND LOCAL CODES AND AUTHORITIES.
- EXTERIOR OUTLETS SHALL BE GFI (GROUND FAULT INTERRUPTED). PROVIDE OUTDOOR OUTLET COVER
- D. PROVIDE A COMPLETE GROUNDING SYSTEM PER N.E.C. PROVIDE SEPARATE GROUND CONDUCTOR FOR ALL POWER CIRCUITS.
- CODE REQUIREMENTS SHALL BE INCLUDED AN INSTALLED EVEN IF NOT SHOWN. DRAWINGS ARE SCHEMATIC AND MAY NOT SHOW CODE REQUIREMENTS.
- F. MOUNT ALL RECEPTACLES VERTICALLY UNLESS OTHERWISE NOTED.
- PERMANENTLY MARK BACK OF DEVICE PLATES WITH PANEL AND CIRCUIT NUMBER. PROVIDE NAMEPLATES FOR ALL EQUIPMENT.
- H. ALL WIRING SHALL BE INSTALLED IN CONDUIT.
- SURFACE-MOUNTED FIXTURES, FLUORESCENT AND INCANDESCENT, SHALL BE MOUNTED SECURELY TO THE CEILING. PROVIDE AIR GAP TO CEILING IF REQUIRED.
- J. EXTERIOR EQUIPMENT SHALL BE NEMA 3R
- K. LIGHT FIXTURES SHALL BE SUPPORTED FROM BUILDING STRUCTURE.
- L. CLEAN LAMPS AFTER CONSTRUCTION IS FINISHED.
- M. PROVIDE ALL CUTTING. PATCHING. AND OPENINGS IN FLOORS
- WIRING DEVICES SHALL BE INSTALLED IN OUTLET BOXES. Ν. BOXES SHALL BE 4-INCH SQUARE MINIMUM WITH DEVICE COVERS TO SUIT.



