DESIGN:

1. CODES, SPECIFICATION AND STANDARDS (LATEST EDITIONS, U.N.O.)

   ALL CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF THE FOLLOWING CODES, SPECIFICATIONS AND STANDRAD'S, EXCEPT WHERE NOTED TO THE CONTRARY ON THE DRAWINGS AND SPECIFICATIONS OR WHERE MORE STRINGENT REQUIREMENTS ARE SPECIFIED OR SHOWN

   MCIB "SPECIFICATIONS FOR CONCRETE WORK"

2. ALL DESIGN AND CONSTRUCTION SHALL CONFORM TO THE FOLLOWING

   - 2006 INTERNATIONAL BUILDING CODE (IBC)
   - 1997 UNIFORM CODE FOR BUILDING CONSERVATION (UCBC)
   - 2003 UNIFORM MECHANICAL CODE (UMC)
   - 2006 UNIFORM PLUMBING CODE (UPC)
   - 2005 NATIONAL ELECTRICAL CODE (NEC)

3. THE CITY OF EMPORIA TECHNICAL SPECIFICATIONS, LATEST EDITION SHALL GOVEREN CONSTRUCTION OF THIS PROJECT.

DESIGN LOADS:

- DEAD LOAD: ACTUAL MATERIAL WEIGHT
- FLOOR LIVE LOAD:

OFFICE	50 PSF
CORRIDOR	100 PSF

- ROOF LIVE LOAD: 20 PSF
- WIND LOADING

WIND SPEED	100 MPH
EXPOSURE	"C"
STRUCTURE TYPE	ENCLOSED
IMPORTANCE	1.00

- SEISMIC DESIGN CATEGORY: B-1

ROUGH CARPENTRY:

1. ALL STRUCTURAL LUMBER SHALL BE S4S #2 SOUTH PINE (SP) (OR BETTER) WITH A MAXIMUM MOISTURE CONTENT OF NINETEEN (19) PERCENT.
2. ALL NON-STRUCTURAL LUMBER SHALL BE SPF #2 (OR BETTER).
3. ALL MATERIAL IN CONTACT WITH THE EARTH OR CONCRETE SHALL BE ACQ TREATED OR EQUAL.
4. ALL WOOD STRUCTURAL PANELS SHALL BE IDENTIFIED WITH THE APPRORIATE GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION (APA) AND SHALL MEET THE REQUIREMENTS OF PS-1 OR PS-2, RESPECTIVELY, UNLESS NOTED OTHERWISE ON THE DRAWINGS. WALL PANELS TO BE USED ON THE EXTERIOR SHALL BE COMPATIBLE WITH THE ARCHITECTURAL EXTERIOR FINISH MATERIAL.
5. ALL ENGINEERED WOOD PRODUCTS (LAMINATED VENEER LUMBER (L.V.L), OR PARALLEL STRAND LUMBER (PSL)) SHALL BE MANUFACTURED TO THE FOLLOWING MINIMUM PROPERTIES:
   - ALLOWABLE BENDING STRESS: 2,950 PSI
   - ALLOWABLE SHEAR STRESS: 285 PSI
   - MODULUS OF ELASTICITY: 1,900,00 PSI
6. ALL BOLTS FOR CONSTRUCTION SHALL BE ASTM A307, GRADE A, OR ASTM A36.
7. ALL NAILS SHALL BE COMMON WIRE NAILS, UNLESS NOTED OTHERWISE ON THE DRAWINGS
8. ALL METAL FRAMING ACCESSORIES ARE STANDARDS OF SIMPSON STRONG-TIE AND ARE TO BE ATTACHED AS PER SIMPSON STRONG-TIE RECOMMENDATIONS.
9. HEADERS, BEAMS AND LINTELS SHALL BE CONSTRUCTED AS PER THE DRAWINGS WITH A MINIMUM OF (2) BEARING STUDS AND (1) FULL HEIGHT STUD AT ALL OPENINGS UNLESS OTHERWISE NOTED ON THE DRAWINGS.
10. STRUCTURAL PANELS SHALL BE PLACED WITH THE FACE GRAIN PERPENDICULAR TO THE SUPPORTING MEMBERS WITH THE END JOINTS STAGGERED FOUR (4) FEET, TYPICALLY.
11. THE QUALITY AND SIZE OF FASTENERS SHALL BE IN ACCORDANCE WITH THE CODE OF RECORD, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

FOUNDATION:

1. ALL FOOTING FOUNDATIONS HAVE A DESIGN ALLOWABLE PRESSURE OF 2,000 PSF.
2. ZONES OF SOIL ENCOUNTERED AT THE BOTTOM OF THE FOOTING EXCAVATIONS DEEMED INDEQUATE SHALL BE REPLACED OR REMEDIATED AS DIRECTED BY THE ENGINEER.
3. MOISTURE CONTENT OF THE SOIL SHALL NOT BE ALLOWED TO CHANGE AFTER EXCAVATION.
4. CONCRETE SHALL NOT BE PLACED ON FROZEN OR SATURATED GROUND.
5. THE BASE OF THE EXCAVATION SHALL BE FREE OF WATER AND LOOSE SOIL PRIOR TO PLACEMENT OF CONCRETE.
6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UNUSAL SOIL CONDITIONS THAT ARE IN VARIANCE WITH THE PLAN DRAWINGS OR WHEN DIFFERENT BEARING MATERIAL IS EVIDENT AND THERE IS A QUESTION OF BEARING CAPACITY.

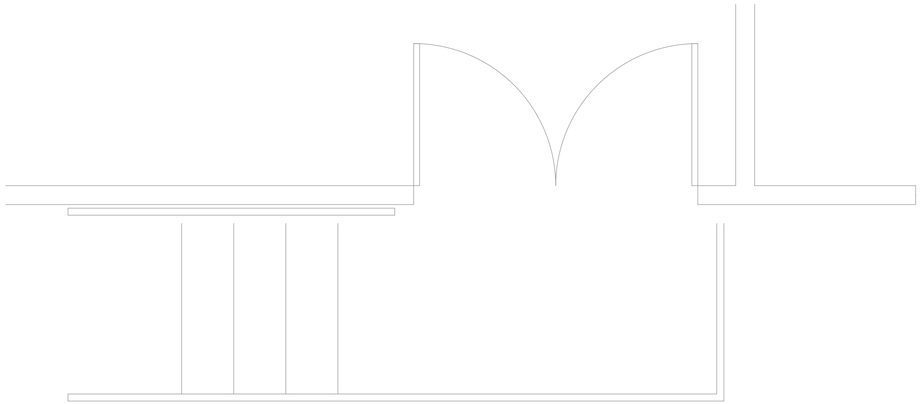
CONCRETE CONSTRUCTION:

1. CAST-IN-PLACE CONCRETE CONSTRUCTION SHALL CONFORM TO THE LASTEST AMERICAN CONCRETE INSTITUTE DOCUMENTS, ACI-301, 304, 305, 306, 315, 318, AND 347 AND CONCRETE REINFORCING STEEL INSTITUTE MANUAL OF STANDARD PRACTICE UNLESS OTHERWISE NOTED IN THESE CONTRACT DOCUMENTS.
2. CONCRETE FOR FOOTINGS: F'c = 3,000 psi (28 DAY)
3. CONCRETE FOR FLATWORK: F'c = 3,500 psi (28 DAY)
4. REINFORCING STEEL:
   A. ASTM A615 GRADE 40 STEEL.
   B. MINIMUM SPLICE LAP = 30 BAR DIAMETERS
   C. HORIZONTAL REINFORCING STEEL SHALL BE CONTINOUS AROUND THE CORNERS AND SHALL MEET THE REQUIREMENTS OF MINIMUM SPLICE LAP.
   D. WELDED WIRE REINFORCEMENT SHALL MEET ASTM A706, GRADE 60.
5. CONCRETE SLUMP SHALL BE A MAXIMUM OF 4" +/- (ASTM C-143) AS DELIVERED IN THE FIELD. THE CONTRACTOR MAY USE CHEMICAL ADMIXTURES TO ATTAIN A MAXIMUM SLUMP OF 8" FOR WORKABILITY.
6. AGGREGATE SIZE = ¾" (MAXIMUM)
7. THERE SHALL BE NO HORIZONTAL CONSTRUCTION JOINTS IN ANY CONCRETE POURS UNLESS SHOWN ON THE PLANS OR APPROVED IN WRITING BY THE ENGINEER.
8. REINFORCING STEEL COVERAGE SHALL BE IN ACCORDANCE WITH ACI 315 UNLESS NOTED OTHERWISE ON THE DRAWINGS.
9. MINIMUM CLEAR COVERAGE OF CONCRETE OVER REINFORCEING STEEL SHALL NOT BE LESS THAN THE FOLOOWING (UNLESS NOTED OTHERWISE).

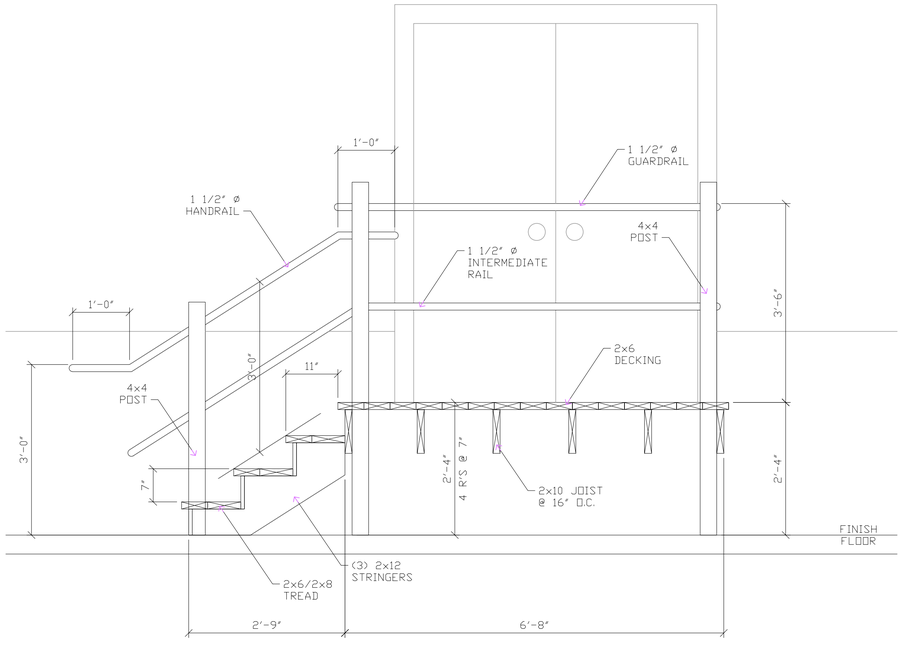
   A. CONCRETE PLACED AGAINST TRENCHED EARTH 3"
   B. CONCRETE PLACED AGAINST FORM IN EARTH 2"
   C. UN-TIED ELEMENTS (ELEVATED SLABS AND WALLS) 1"
   D. TIED ELEMENTS (COLUMNS AND ELEVATED BEAMS) 1½"

10. FLY ASH MAY BE USED AT A RATE NOT TO EXCEED 15% OF THE TOTAL CEMENT CONTENT.
11. CONCRETE EXPOSED TO WEATHER, PARKED VEHICLES, AND/OR DE-ICING CHEMICAL SHALL CONTAIN 6% (±1%) ENTRAINED AIR BY VOLUME.
12. STIRRUPS AND TIES SHALL COMPLY WITH CONCRETE REINFORCING STEEL INSTITUTE (CRSI) SUPPLEMNTARY REQUIREMENTS FOR IMPROVED BENDABILITY
13. MINIMUM LAP DISTANCE AND HOOK LENGTHS SHALL BE AS FOLLOWS:

BAR	MIN. LAP	90° HOOK
#3	15"	6"
#4	20"	8"
#5	24"	10"
#6	30"	12"
#7	42"	14"
#8	48"	16"
#9	54"	18"



1 STAIR PLAN VIEW
Scale: 3/4" = 1'-0"



NOTE:
ALL WOOD IN CONTACT WITH CONCRETE SHALL BE ACQ TREATED

2 STAIR SECTION
Scale: 3/4" = 1'-0"

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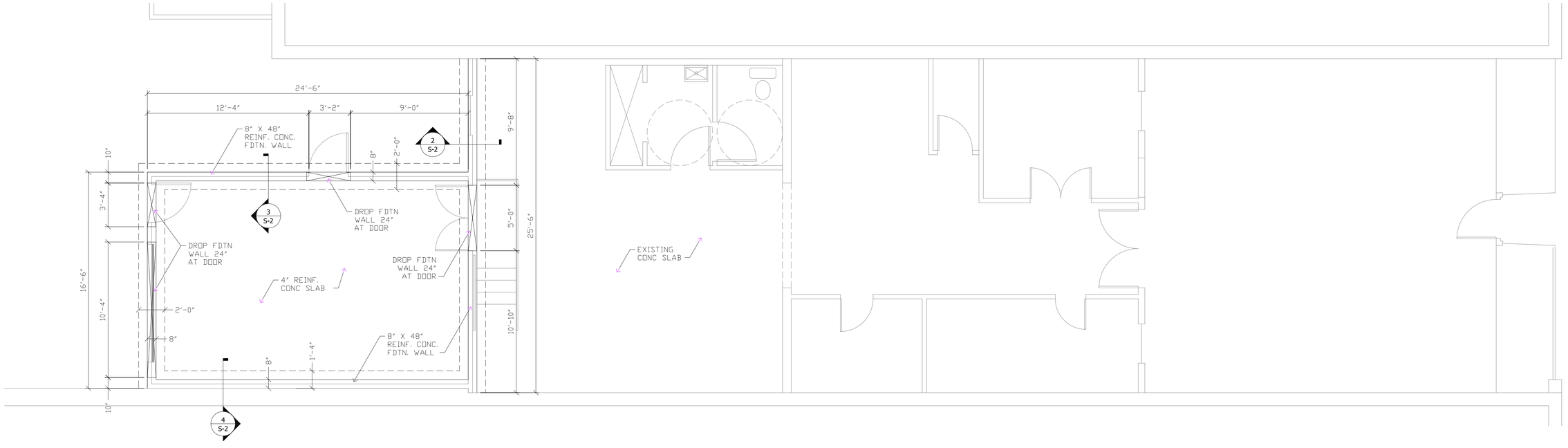
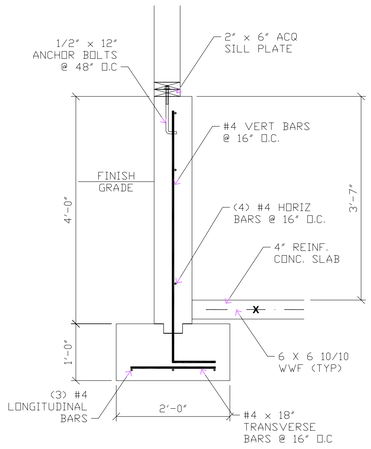
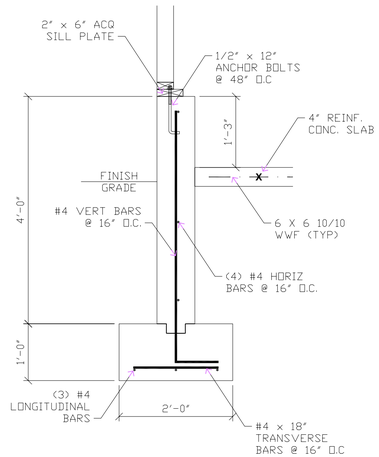
PROJECT: RIEDL RETAIL SHOP / 823 COMMERCIAL / EMPORIA
TITLE: STRUCTURAL NOTES
PROJECT No.: 2012-014 | DATE: 11-13-12 | SHEET No.: S-1
DWG. FILE: 2012/2012-014 | DRAWN BY: KHG/MLS



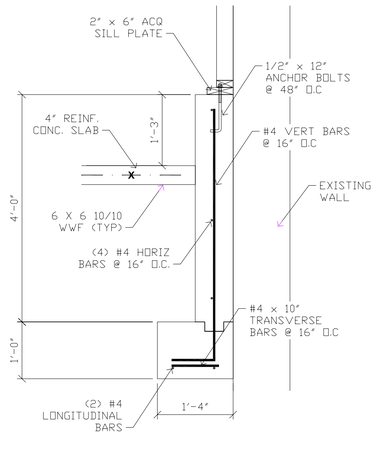
1 FOUNDATION PLAN
Scale: 1/4" = 1'-0"



2 FDTN WALL SECTION
Scale: 1/2" = 1'-0"



3 FDTN WALL SECTION
Scale: 1/2" = 1'-0"



4 FDTN WALL SECTION
Scale: 1/2" = 1'-0"

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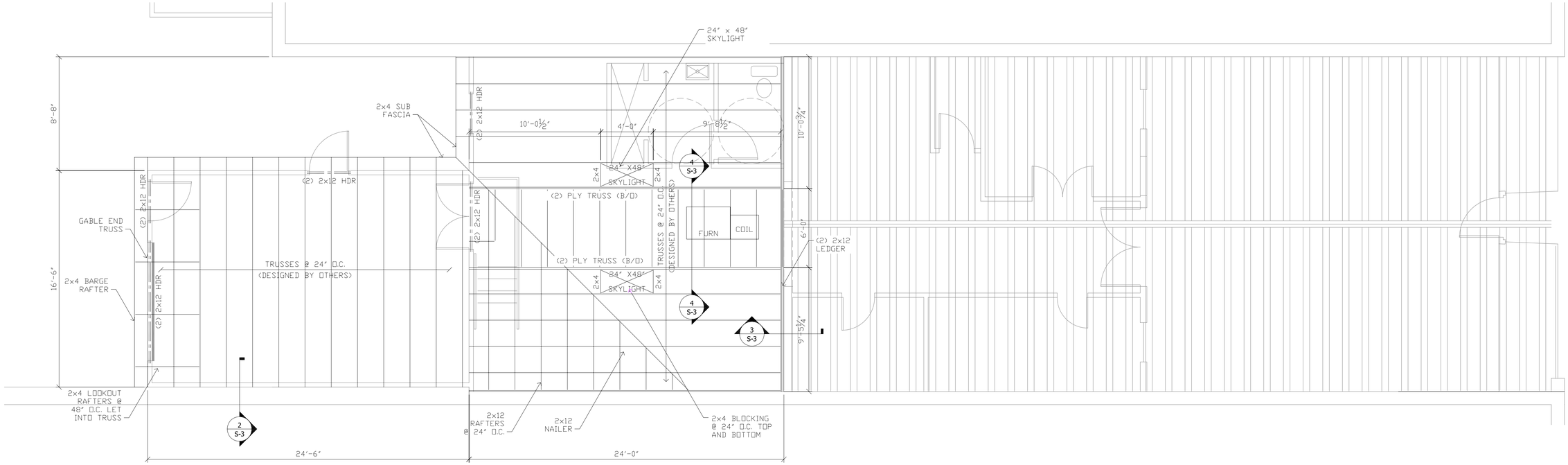
PROJECT: RIEDL RETAIL SHOP / 823 COMMERCIAL / EMPORIA
TITLE: FOUNDATION PLAN AND DETAILS

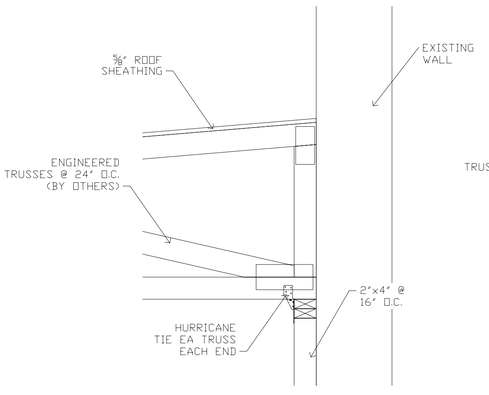
PROJECT No.: 2012-014	DATE: 11-13-12	SHEET No.: S-2
DWG. FILE: 2012/2012-014	DRAWN BY: KHG/MLS	



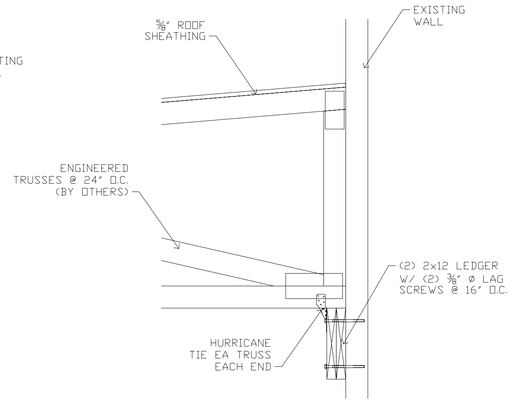
1 ROOF FRAMING PLAN
Scale: 1/4" = 1'-0"

NOTES:

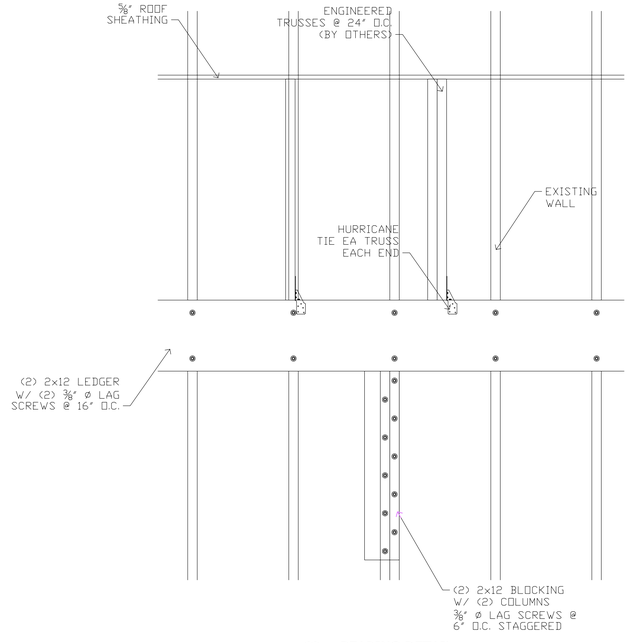
1. COORDINATE FURNACE LOCATION AND MAINTENANCE ACCESS WITH MECHANICAL CONTRACTOR (SPECIAL TRUSSES MAYBE REQUIRED).



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



3 WALL SECTION
Scale: 1/2" = 1'-0"



4 BEARING DETAIL
Scale: 1/2" = 1'-0"

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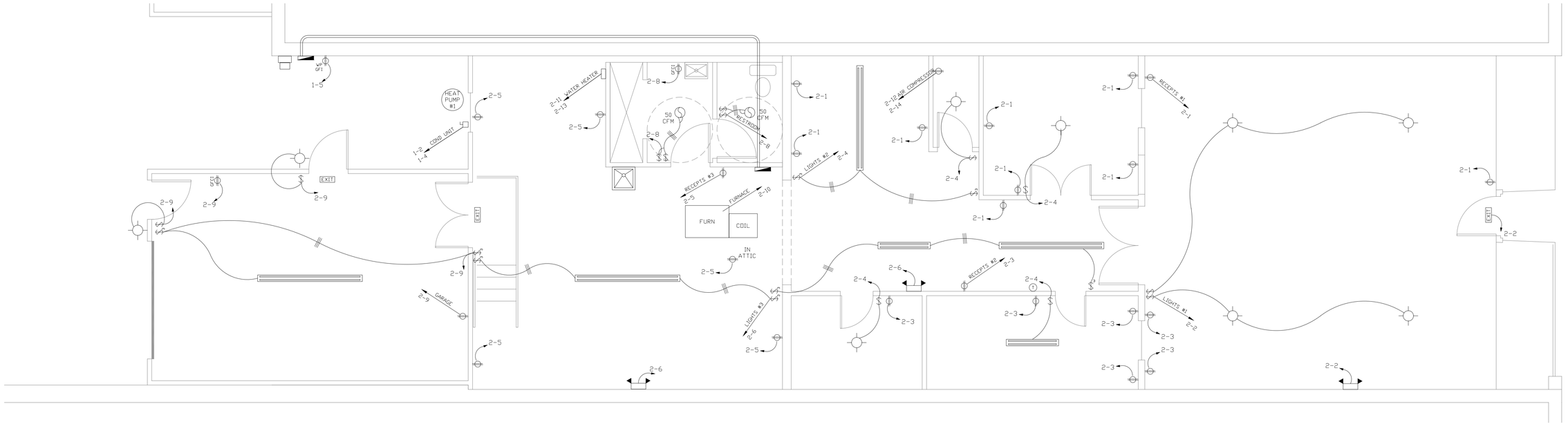
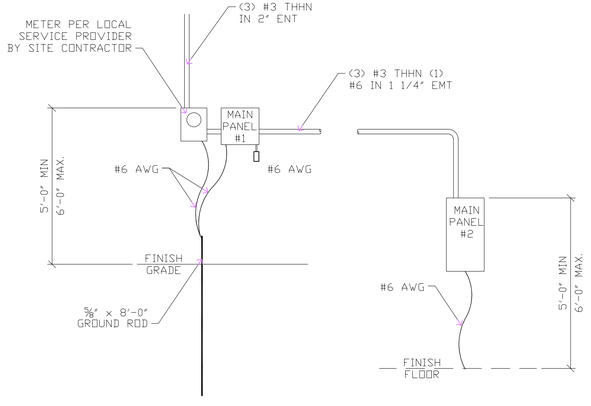
PROJECT: RIEDL RETAIL SHOP / 823 COMMERCIAL / EMPORIA			
TITLE: ROOF FRAMING PLAN AND DETAILS			
PROJECT No.: 2012-014	DATE: 11-13-12	SHEET No.:	S-3
DWG. FILE: 2012/2012-014	DRAWN BY: KHG/MLS		



1 ELECTRICAL PLAN

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



2 SERVICE RISER DETAIL

Scale: N.T.S.

ELECTRICAL:

GENERAL

1. ELECTRICAL SHALL BE DESIGNED AND INSTALLED PER THE 2005 NATIONAL ELECTRICAL CODE (NEC).

SERVICE ENTRANCE EQUIPMENT

1. LOAD CENTER: 1 PHASE (ϕ), 3 WIRE, 120/240V 10,000A INSULATED / BONDABLE NEUTRAL
2. MAIN BREAKER : 200 AMP
3. SERVICE FEEDER SHALL PROVIDED BY SITE CONTRACTOR PER NEC TABLE 310.16
4. EQUIPMENT GROUNDING SHALL BE PER NEC ARTICLE 250 BY SITE CONTRACTOR
5. TESTING PROCEEDURER PER NEC ARTICLE 550.17.

BRANCH CIRCUITS

1. OVERCURRENT PROTECTION; 120/240 V OR 240 V AC, PER PANEL SCHEDULE
2. WIRING METHOD:
   - NM CABLE W/ GROUND PER NEC ARTICLE 550.15
   - AC CABLE W/ GROUND PER NEC ARTICLE 517.16
   - CONDUCTOR TYPE: COPPER
3. WIRE SIZE
   - 12-2 GENERAL LIGHTING AND RECEPTACLES
   - 12-3 THREE (3) WAY SWITCHES
   - 10-2 WATER HEATER
   - HEATING, COOLING, AND SPECIALIZED EQUIPMENT SHALL BE PER MANUFACTURERS SPECIFICATIONS
4. RECESSED LIGHT FIXTURES SHALL BE MARKED IC RATED
5. ELECTRICAL BOXES SHALL BE SIZED PER NEC ARTICLE 314.16

PANEL #1 SCHEDULE
125 AMP L 120/240 v 1 PHASE (ϕ)

CIRCUIT	BREAKER	WIRE SIZE	DESCRIPTION	CIRCUIT	BREAKER	WIRE SIZE	DESCRIPTION
1	2P100A	(3) #3	PANEL #2	2	2P30A	10-2	COND. UNIT #1
3				4			COND. UNIT #1
5	1P20A	12-2	RECEPTS #3	6			SPARE
7			SPARE	8			SPARE
9			SPARE	10			SPARE
11			SPARE	12			SPARE

PANEL #2 SCHEDULE
100 AMP M 120/240 v 1 PHASE (ϕ)

CIRCUIT	BREAKER	WIRE SIZE	DESCRIPTION	CIRCUIT	BREAKER	WIRE SIZE	DESCRIPTION
1	1P20A	12-2	RECEPTS #1	2	1P20A	12-2	LIGHTS #1
3	1P20A	12-2	RECEPTS #2	4	1P20A	12-2	LIGHTS #2
5	1P20A	12-2	RECEPTS #3	6	1P20A	12-2	LIGHTS #3
7			SPARE	8	1P20A	12-2	RESTROOM
9	1P20A	12-2	GARAGE	10	1P20A	12-2	FURNACE #1
11	1P20A	12-2	SIGN	12	2P30A	10-2	AIR COMPRESSOR
13			SPARE	14			AIR COMPRESSOR
15			SPARE	16			SPARE
17			SPARE	18			SPARE
19			SPARE	20			SPARE
21			SPARE	22			SPARE
23			SPARE	24			SPARE

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PROJECT: RIEDL RETAIL SHOP / 823 COMMERCIAL / EMPORIA

TITLE: ELECTRICAL PLAN AND DETAILS

PROJECT No.: 2012-014 | DATE: 11-13-12 | SHEET No.: E-1

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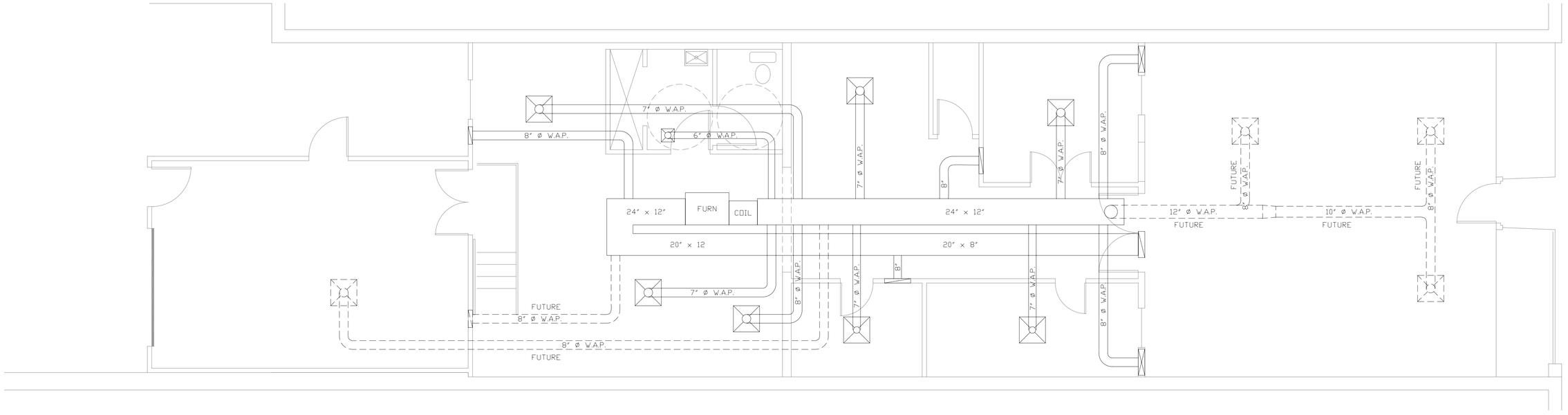

1 MECHANICAL PLAN
Scale: 1/4" = 1'-0"

MECHANICAL:

GENERAL

1. MECHANICAL SYSTEMS SHALL BE DESIGNED AND INSTALLED PER THE 2003 UNIFORM MECHANICAL CODE (UMC).
2. INSTALLATION OF APPLIANCES SHALL BE PER UMC SEC 304.1
3. APPLIANCES SHALL BE PROVIDED WITH ACCESS PER UMC SEC 305
4. APPLIANCES SHALL BE VENTED TO THE OUTSIDE
5. APPLIANCE VENT TERMINATION SHALL BE PER UMC SEC 804.
6. APPLIANCE VENTING SHALL BE SIZED PER UMC 802.6.3
7. VENT CONNECTORS SHALL BE PER UMC SEC 802.10
8. AUXILIARY DRAIN PAN SHALL BE PROVIDED PER UMC SEC 310.2

EXHAUST SYSTEMS

1. MECHANICAL VENTILATION SHALL BE PROVIDED PER IBC _____
2. RESTROOMS SHALL BE VENTILATED PER IBC TABLE ____

DUCT SYSTEMS

1. DUCT SYSTEMS SERVING HEATING, COOLING AND VENTILATION EQUIPMENT SHALL BE PER IMC SEC 602.0
2. SUPPLY AIR DUCTING
   - 26 GA. GALVINIZED RECTANGLE DUCT
   - ROUND GALVINIZED METAL DUCT
   - FACTORY MADE AIR DUCTS
3. GALVINIZED METAL DUCT SHALL BE SUPPORTED PER UMC SEC 604.1
4. GALVINIZED METAL DUCT SHALL BE INSULATED PER UMC SEC 605.
5. RETURN AIR DUCTING SHALL BE PER PER IMC SEC 602.10

COMBUSTION AIR

1. COMBUSTION AIR SHALL BE PROVIDED PER IMC SEC 701.
2. COMBUSTION AIR SHALL BE SUPPLIED PER IMC SEC 701.4

FUEL GAS

1. APPLIANCES SHALL BE CONNECTED TO THE FUEL GAS PIPING PER UMC 1312.1
2. THE FUEL GAS SYSTEM SHALL BE A DESIGN / BUILD BY THE SITE CONTRACTOR PER IMC CHAPTER 13

SYSTEM #1 MINIMUM CAPICITIES

DESCRIPTION	HEATING BTU / HR		COOLING BTU / HR	BLOWER CFM
	INPUT	OUTPUT		
GAS FURNACE		25,481		1,200
13 SEER HEAT PUMP			26,689	

EXHAUST FANS

	DESCRIPTION	MODEL	CFM
1	EXHAUST FAN	AIR KING AS50	50
2			

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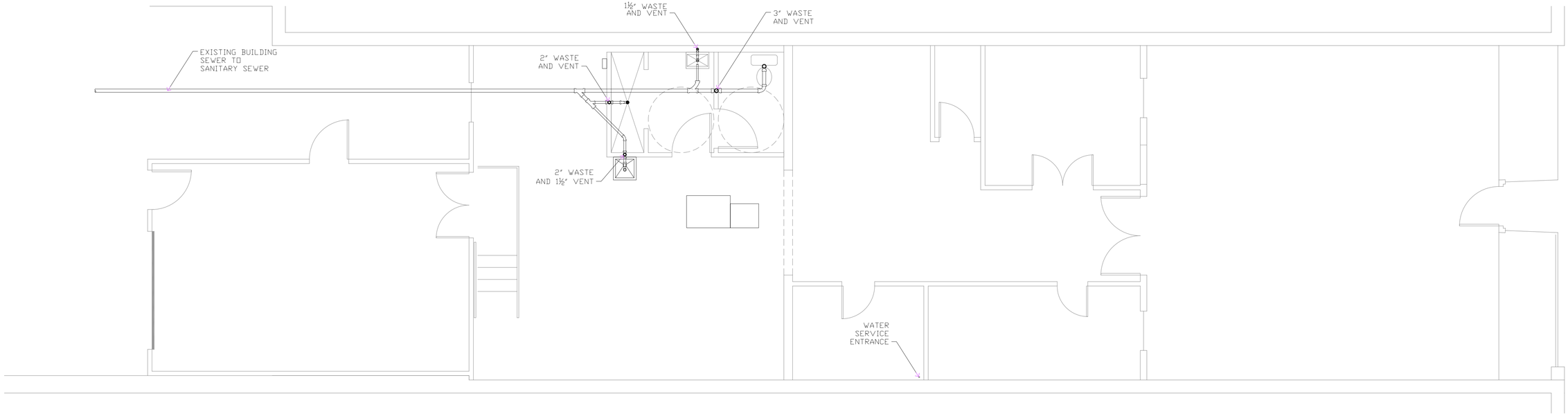
PROJECT: RIEDL RETAIL SHOP / 823 COMMERCIAL / EMPORIA
TITLE: MECHANICAL PLAN AND NOTES
PROJECT No.: 2012-014 | DATE: 11-13-12 | SHEET No.: M-1
DWG. FILE: 2012/2012-014 | DRAWN BY: KHG/MLS



NOTE:
CONTRACTOR SHALL PROVIDE A 30 GALLON GAS WATER. LOCATION SHALL BE COORDINATED WITH THE OWNER

1 PLUMBING PLAN
Scale: 1/4" = 1'-0"

PLUMBING:

GENERAL

1. PLUMBING SHALL BE DESIGNED AND INSTALLED PER THE 2006 UNIFORM PLUMBING CODE (UPC).
2. DWV SYSTEMS ROUGH IN AND FINISHED PLUMBING SHALL BE TESTED PER UPC 712.0.
3. WATER SUPPLY SYSTEM SHALL BE TESTED PER UPC 609.4.
4. PIPING IN CONCEALED LOCATIONS, INSTALLED THROUGH FRAMING MENBERS SHALL BE PROTECTED BY SHIELD PLATES WHEN LESS THAN 1½" FROM MEMBER EDGE.
5. PIPING SHALL BE SUPPORTED PER UPC 314.

WATER SUPPLY

1. WATER SUPPLY AND BRANCH PIPING SHALL BE COPPER PIPING UNLESS NOTED OTHERWISE.
2. THE WATER SUPPLY SHALL BE PROTECTED FROM CONTAMINATION PER UPC 602.
3. WATER SUPPLY MAINS, BRANCHS, AND RISERS SHALL BE SIZED PER UPC 610.0 (PRESSURE RANGE - 40 TO 49 PSI)
   - MINIMUM WATER SERVICE SHALL BE ¾"
   - MINIMUM BRANCH MAINS SHALL BE ¾"
   - BRANCH MAINS SHALL BE ½" WITH LESS THAN 3 FIXTURES UNITS
4. SHUT OFF VALVES SHALL BE PROVIDED AT EACH PLUMBING FIXTURE PER UPC 605.0.
5. EXTERIOR HOSE BIBBS SHALL BE FROST PROOF PER UPC SEC 603.3.8.
6. WATER HAMMER ARRESTORS SHALL BE INSTALLED ON QUICK CLOSING VALVES PER UPC 609.10.

DRAIN, WASTE, AND VENT

1. DRAIN, WASTE, AND VENT (DWV) PIPING SHALL BE SCHEDULE 40 PVC UNLESS NOTED OTHERWISE.
2. PVC PIPING SHALL BE SUPPORTED PER UPC 314.0 48" MAXIMUM HORIZONTAL SPACING.
3. CHANGE IN DIRECTION IN THE DRAINAGE PIPING SHALL BE PER UPC 706.
   - VERTICAL TO HORIZONTAL, LONG SWEEP FITTING
   - HORIZONTAL TO HORIZONTAL, LONG SWEEP FITTING
4. DRAINAGE PIPING CLEANOUTS SHALL BE PROVIDED PER UPC 707.
5. STAND PIPES SHALL BE A MINIMUM 18" AND A MAXIMUM OF 30" ABOVE THE TRAP PER UPC 804.1.
6. VENTS SHALL BE SIZED PER UPC 904 MINIMUM VENT THROUGH THE ROOF SHALL NOT BE LESS THAN THAT OF THE LARGEST REQUIRED BUILDING SEWER.
7. VENTS THROUGH THE ROOF SUBJECT TO FROST CLOSURE SHALL BE A MINIMUM OF 3", VENTS LESS THAN 3" SHALL BE INCREASED IN SIZE A MINIMUM OF 12" BELOW THE ROOF PER UPC SEC 906.7.
8. MAXIMUM DISTANCE OF FIXTURE TRAP FROM VENT SHALL BE PER UPC TABLE 10-1.
9. PVC PIPING SHALL BE PROTECTED FROM UV EXPOSURE.

TRAP ARM LENGTHS	
TRAP SIZE	DISTANCE FROM VENT (FEET)
1½"	5
2	6
3	10

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PROJECT: RIEDL RETAIL SHOP / 823 COMMERCIAL / EMPORIA
TITLE: PLUMBING PLAN AND DETAILS
PROJECT No.: 2012-014 | DATE: 11-13-12 | SHEET No.: P-1
DWG. FILE: 2012/2012-014 | DRAWN BY: KHG/MLS