

BLUEWATER TECHNOLOGIES

37900 INTERCHANGE DR FARMINGTON HILLS, MI

DEMOLITION NOTES:

REMOVE WALL, DOORS, FRAMES, & ELECTRICAL AS INDICATED ON PLAN. SALVAGE FOR REUSE

TELEPHONE OUTLETS & ELECTRICAL WITH-IN WALLS TO BE DEMOLISHED SHALL BE REMOVED AND/ OR CAFFED. REMOVE WIRE, CONDUIT AND/ OR CABLE BACK TO SOURCE (PHONE BOARD OR ELECTRICAL PANEL).

ALL MATERIALS FROM DEMOLITION SHALL BE DISPOSED OF IN ACCORDANCE WITH CITY, STATE, & FEDERAL REGULATION, UNLESS INDICATED TO BE SALVAGED.

CAP ALL EXISTING PLUMBING LINES BELOW SLAB AS REQUIRED

ALL CARPETING AND BASE TO BE REMOVED

REMOVE LIGHTING, CEILING, & CEILING OUTLETS PER REFLECTED CEILING PLAN NOTES

ELECTRICAL / LIGHTING NOTES:

CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS.

CONTRACTOR TO PROVIDE ALL ITEMS, ARTICLES, MATERIALS, AND OPERATIONS SCHEDULED INCLUDING ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED FOR COMPLETION (IE: DESIGN/BUILD).

ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND LAMS.

CONTRACTOR SHALL INSTALL NEW EMERGENCY LIGHTS W/ BATTERY BACK-UP, AND EXIT SIGNS W/ BATTERY BACK-UP THROUGHOUT AS REQUIRED BY ALL CODES AND THE LOCAL FIRE MARSHAL. CONTRACTOR SHALL FIELD INSPECT EXISTING FIXTURES AND REPLACE IF FIXTURES ARE NON-FUNCTIONING OR NEED NEW BATTERY BACK-UP.

ANY ENGINEERED DRAWINGS REQUIRED BY CITY SHALL BE PREPARED AND SUBMITTED BY SUBCONTRACTOR. ARCHITECT SHALL RECEIVE RECORD COPY.

LOCATE POWER AND COMMUNICATION RECEPTACLES TO NEAREST STUD IN APPROXIMATE POSITION INDICATED ON PLANS. PROVIDE BRIDGING BETWEEN STUDS AS REQUIRED FOR ALL DIMENSIONED RECEPTACLE LOCATIONS. DO NOT LOCATE BOXES BACK-TO-BACK WITHIN PARTITIONS- STAGGER AS REQUIRED TO MINIMIZE SOUND TRANSMISSION.

ELECTRICAL CONTRACTOR TO VERIFY WORKING CONDITION OF ALL SWITCHES, LIGHT FIXTURES, BALLASTS, EXIT AND EMERGENCY LIGHT AND OUTLETS. REPLACE IF NECESSARY (TYPICAL THROUGHOUT, AND IN ACCORDANCE WITH SPECIFICATIONS).

GENERAL PLUMBING NOTES:

- ALL PLUMBING WORK SHALL BE GOVERNED BY THE STANDARD AND SPECIFIED REQUIREMENTS OF THE LOCAL INSPECTIONS BUREAU, STATE PLUMBING CODE AND I.B.C. LATEST EDITION WITH THE MOST STRINGENT REQUIREMENTS TO GOVERN.
- ALL PLUMBING FIXTURES AND APPLIANCES INDICATED ON THE PLANS SHALL BE PIPED AND VENTED IN ACCORDANCE WITH THE PLUMBING FIXTURE SCHEDULE OR AS OTHERWISE REQUIRED TO MEET CODE REQUIREMENTS.
- ALL WATER CONNECTIONS SHALL BE MADE TO THE MUNICIPAL WATER SYSTEM, AND SHALL BE DONE IN ACCORDANCE WITH LOCAL DPW PRACTICE.
- ALL SERVICE METERING, SHUT-OFF VALVES, BRANCH PIPE VALVES, CO'S, VENTING AND REVENTING SHALL MEET LOCAL CODE. A CLEANOUT SHALL BE REQUIRED PER SECTION 1008 OF 2009 M.P.C. CODE OR SHALL BE REQUIRED AT 50' IN HORIZONTAL DRAINAGE LINES OF 4" DIAMETER OR LESS, AND NOT MORE THAN 100' APART FOR LARGER PIPES.
- SHOULD ANY CONFLICT OCCUR BETWEEN LOCAL CODE AND MFG'S SPEC, THEN THE MOST STRINGENT REQUIREMENTS SHALL GOVERN. AT ALL TIMES THE USE OF THE BEST STANDARDS OF PRACTICE AND QUALITY OF MATERIALS AND WORKMANSHIP SHALL BE PROVIDED.
- ALL DOMESTIC HOT AND COLD WATER LINES WITHIN THE BUILDING SHALL BE INSULATED WITH 1/2" THICK ONE-PIECE FIBERGLASS AND FINISHED FACTORY SELF-SEALING, PRE-SIZED 'ASJ' ALL SERVICE VAPOR BARRIER JACKETS.
- DRAINS SHALL BE SLOPED AT 1/4" PER FOOT U.N.O.
- MATERIALS SHALL BE AS FOLLOWS:
 - WATER PIPING TO BE TYPE "1" HARD DRAWN COPPER
 - VENTS TO BE COPPER (CEILING PLENUM AREA)
 - Gas PIPING TO BE SCHEDULE 40, BLACK STEEL PIPE.
- PROVIDE A FIXTURE STOP IN ALL WATER SUPPLY LINES TO PLUMBING FIXTURES.
- PROVIDE ALL FIXTURES, FITTINGS AND ACCESSORIES FOR A COMPLETE INSTALLATION
- PHYSICALLY HANDICAPPED FIXTURES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE STATE OF MICHIGAN AND /OR THE AMERICANS DISABILITIES ACT REQUIREMENTS.
- PLUMBING CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING
- MAXIMUM WATER TEMPERATURE TO BE 120 DEGREES F.
- WRAP PIPES OF LAV, WITH VINYL PLASTISOL MATERIAL AS APPROVED BY MI B.F. CODE. INSTALL TEMPERING VALVE AT LAV.
- ALL WALL CLEAN OUTS TO HAVE CHROME OPENING COVER.

GENERAL MECHANICAL NOTES:

- PROVIDE ALL EQUIPMENT, MATERIAL, HARDWARE, INCIDENTALS AND LABOR FOR COMPLETE HVAC SYSTEM
- OBTAIN REQUIRED PERMITS AND PAY FEES.
- COMPLY WITH ALL LOCAL, COUNTY AND STATE GOVERNMENTAL CODES, ORDINANCES AND REGULATIONS AND UTILITY COMPANY STANDARDS, INCLUDE COMPLIANCE WITH LOCAL FIRE MARSHALL REQUIREMENTS AND N.F.P.A. STANDARDS.
- OBTAIN INSURANCE AND PROVIDE SAFE WORKING CONDITIONS.
- FIELD INSPECT ALL EXISTING EQUIPMENT FOR PROPER MAINTENANCE AND OPERATION. REPAIR OR REPLACE DAMAGED EQUIPMENT TO ASSURE PROPER OPERATION TO SPACE.
- ALL CEILING DIFFUSER LOCATIONS SHALL COORDINATE WITH THE REFLECTED CEILING PLAN AND ELECTRICAL FIXTURE LOCATIONS.
- SUPPLY DUCTWORK TO BE ROUND/SQUARE INSUL. SHEET METAL, 24GA. PAINT GRADE FINISH. EXHAUST DUCT TO BE 22 GA. BARE GALVANIZED. TEST FAN PERFORMANCE AND BALANCE AIR SYSTEMS AND INSTALLATION.
- EXHAUST FANS SHALL BE DUCTED TO OUTSIDE OF BUILDING AND TERMINATE AT A VENT CAP
- SPECIAL DIFFUSER NOTES:
 - ALL DUCT AND DIFFUSER SIZING AIR VELOCITY REQUIREMENTS SHALL MEET THE LATEST STANDARDS AND RECOMMENDATIONS OF ASHRAE, SUBJECT TO THE ADDITIONAL REQUIREMENTS BELOW.
 - IN-DUCT VELOCITIES SHALL NOT EXCEED 1200 FPM FOR MAIN DUCTS AND SHALL NOT EXCEED 600 FPM IN BRANCH DUCTS, FEEDING DIFFUSERS AND REGISTERS. ALL DUCT SIZING AND AIR VELOCITIES SHALL BE DESIGNED TO PREVENT NOISE, RATTLING AND CHATTERING OF DUCTS AND DIFFUSERS.
 - ALL DUCTS, DIFFUSERS AND REGISTERS, SHALL HAVE INTERNAL TWO-WAY VOLUME CONTROLS DAMPERS. ADDITIONALLY, PROVIDE VOLUME CONTROL DAMPERS IN ALL MAIN DUCTS AND AT DUCT LOCATIONS SHOWN ON DRAWINGS FOR FULLY INTRNAL REGULATION OF THE SYSTEM.
- THE PLANS AS PRESENTED ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT AND SCOPE FOR THE PROJECT AND SHOULD NOT BE SCALED. ALL DIMENSIONS REQUIREMENTS TO BE CONFIRMED IN THE FIELD.
- ALL DUCTWORK TO COMPLY WITH ASHRAE CONSTRUCTION STANDARDS AND STATE OF MICHIGAN VENTILATION STANDARDS.
- ROUND FLEXIBLE DUCT MAY BE USED FOR DIFFUSER BRANCH CONNECTIONS, PROVIDED FLEXIBLE CONNECTIONS DO NOT EXCEED 6 FEET IN LENGTH
- MOUNT THERMOSTAT AT 48" ABOVE FINISH FLOOR PROVIDE ELECTRONIC THERMOSTAT WITH AN AUTOMATIC CONVERSION FROM DAY/NIGHT MODE AND 7 DAY ADJUSTMENT (OR 5 DAY WEEK AND 2 DAY WEEKEND MODE) VERIFY EXISTING LOCATIONS AND REPLACE NON-DIGITAL THERMOSTATS. COORDINATE LOCATIONS W/ M&M&A
- ALL LOW VOTAGE CONTROL WIRING TO BE BY THE MECHANICAL CONTRACTOR.
- PROVIDE ONE YEAR WRITTEN GUARANTEE TO OWNER, INCLUDING 24 HOUR SERVICE.
- HVAC - SPECIFIC REQUIREMENTS
 - PROVIDE 24" X 24" SUPPLY DIFFUSER (TITUS PAR)
 - PROVIDE 24" X 24" RETURN AIR GRILLE (UNLESS NOTED OTHERWISE)
 - PROVIDE SMOKE DETECTORS AS REQUIRED BY CODE.
- CONFIRM ALL POWER CHARACTERISTICS WITH THE ELECTRICAL CONTRACTOR PRIOR TO ORDERING EQUIPMENT.
- REMOVE ALL EXISTING DUCT WORK AS REQUIRED FOR NEW LAYOUT. REUSE DUCTS WHERE POSSIBLE FOR NEW LAYOUT. ALL RTU'S ARE TO BE REUSED.
- PROVIDE NEW DIFFUSERS AS REQUIRED.
- RELOCATE ALL EXISTING UNIT ALARM PANELS TO CEILING OR ADJACENT WALLS. VERIFY.
- MECHANICAL DESIGN AND REWORK SHALL BE VERIFIED IN FIELD AND PROPOSED AS DESIGN/BUILD. SCHEMATICS SHALL BE PROVIDED.

GENERAL CONCRETE NOTES:

- ALL REINFORCING SHALL BE HIGH STRENGTH NEW BILLET STEEL CONFORMING TO ASTM A 615-68 (FY=60,000 PSI) ALL TIES SHALL BE NEW INTERMEDIATE GRADE STEEL CONFORMING TO ASTM 615-68 (FY=40,000 PSI) ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI'S "MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES" (ACI 315)
- PROVIDE CONCRETE PROTECTION FOR REINFORCING AS FOLLOWS:
FOOTING - 3"
WALLS - 3"
PIERS - 3"
- ALL FORM WORK SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE "FORMWORK FOR CONCRETE", SPECIAL PUBLICATION #4 AND ACI'S STANDARD RECOMMENDED PRACTICE FOR CONCRETE FORMWORK (ACI-347- LATEST EDITION)
- LAP ALL CONTINUOUS BARS 40 DIAMETERS
- THE FIELD SUPERVISOR MUST NOTIFY ARCHITECT OR ENGINEER OF ANY DEVIATION FROM THESE PLANS BY ANY SUBCONTRACTOR. APPROVAL BY THE ARCHITECT OR ENGINEER MUST BE OBTAINED BEFORE SUCH WORK CAN CONTINUE.
- HOT WEATHER CONCRETE WORK SHALL BE DONE IN CONFORMITY WITH THE PROCEDURES GIVEN IN ACI 305-82 "RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING"
- PROTECTION AGAINST DRYING AND EXCESSIVE CONCRETE TEMPERATURE SHALL BE PROVIDED FOR THE FIRST 7 DAYS FOLLOWING PLACEMENT

GENERAL INTERIOR CONC. NOTES:

- ALL INTERIOR CONC. SLABS ON GRADE WILL BE PLACED ON A 4" THICK COMPACTED SAND BASE W/ 95% DENSITY
- CONCRETE STRENGTH SHALL BE 3500 PSI AT 28 DAYS AND SHALL BE AIR ENTRAINED + OR - 6%.
- ALL CONCRETE SHALL RECEIVE A STEEL TROWELED FINISH. VERIFY EXACT WITH OWNER.
- INCLUDE CONTROL JOINTS OR EXPANSION JOINTS AS REQUIRED. AREAS NOT TO EXCEED 400 SQ. FT.

GENERAL EXTERIOR CONC. NOTES:

- ALL EXTERIOR CONCRETE SLAB ON GRADE WILL BE PLACED ON A COMPACTED BASE AT 95% DENSITY, AND RECEIVE A BROOM FINISH FOR ANTI-SKID CHARACTERISTICS.
- INCLUDE CONTROL JOINTS AND EXPANSION JOINTS AS REQUIRED.
- CONCRETE STRENGTH SHALL BE 3500 PSI AT 28 DAYS AND SHALL BE AIR ENTRAINED + OR - 6%. PER 2009 BOCA SECTION 1907.1.2(1)

FIRE ALARM NOTES:

FIRE ALARM CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS.

FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR REVISED AND UPDATED DRAWINGS TO BE SUBMITTED TO CITY PRIOR TO BEGINNING WORK.

FIRE ALARM CONTRACTOR TO PROVIDE ALL ITEMS, ARTICLES, MATERIALS, & LABOR REQUIRED TO REVISE EXISTING SYSTEM AS REQUIRED (IE: DESIGN/BUILD).

MILLWORK NOTES:

ALL WOODWORK /MILLWORK SHALL CONFORM TO THE QUALITY STANDARDS OF ARCHITECTURAL WOODWORK INSTITUTE (AWI) PREMIUM GRADE FOR ALL APPLICABLE SECTIONS. FABRICATOR SHALL BE FAMILIAR WITH AWI STANDARDS.

FABRICATE WOODWORK /MILLWORK ITEMS TO ACTUAL FIELD DIMENSIONS. CONTRACTOR TO FIELD VERIFY EXISTING DIMENSIONS. CONTRACTOR(S) SHALL SUBMIT SHOP DRAWINGS, SAMPLES OR MANUFACTURERS LITERATURE OF ALL ITEMS. SHOP DRAWINGS SHALL SHOW SUFFICIENT DETAIL TO DETERMINE COMPLIANCE WITH QUALITY STANDARDS AND DESIGN INTENT.

PROVIDE ALL NECESSARY FURRING AND GROUNDS FOR WOODWORK AND FINSH ITEMS. COORDINATE LOCATION OF BLOCKING WITHIN PARTITIONS FOR ITEMS TO BE SECURED TO SURFACE.

CABINET INTERIORS TO BE CONSTRUCTED OF MELAMINE-FUSED FINISH HIGH DENSITY PARTICLE BOARD. CABINET DOORS TO BE FULLY FINISHED IN SPECIFIED PLASTIC LAMINATE.

ALL FASTENERS SHALL BE CONCEALED. ALL HINGES SHALL BE CONCEALED, 3-WAY ADJUSTABLE, SELF-CLOSING TYPE BY "STANLEY", "BLUM", "GRASS" OR "HAFELE". ALL DRAWER SLIDES SHALL BE BALL-BEARING, FULL EXTENSION TYPE BY "ACURATE", OR "GRANT". USE LOAD RATING FOR APPLICATIONS AS RECOMMENDED BY MANUFACTURER.

SPRINKLER NOTES:

SPRINKLER CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS.

SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR REVISED AND UPDATED DRAWINGS TO BE SUBMITTED TO CITY PRIOR TO BEGINNING WORK.

SPRINKLER CONTRACTOR TO PROVIDE ALL ITEMS, ARTICLES, MATERIALS, & LABOR REQUIRED TO REVISE EXISTING SYSTEM AS REQUIRED (IE: DESIGN/BUILD).

LIST OF DRAWINGS

- T1 TITLE SHEET
- 1 FLOOR PLAN
- 2 INTERIOR DETAILS
- 3 REFLECTED CEILING PLAN
- M1 MECHANICAL PLAN
- E1 ELECTRICAL PLAN

CODE CONFORMANCE:

REVIEW CODE	2012 MBC CODE 2012 MICH. ENERGY CODE 2012 MICH. MECHANICAL CODE 2012 MICH. PLUMBING CODE 2014 NEC CODE WITH PART 8 MICHIGAN AMENDMENT 2009 ICC/ANCI A117.1
USE GROUP	B
TYPE OF CONSTRUCTION	TYPE II-B
BUILDING AREA:	25,658.61 SQ.FT.
OFFICE AREAS:	6,208 SQ.FT./100=62
CONFERENCE AREAS:	294 SQ.FT./15=20
STORAGE AREAS:	161 SQ.FT./500=.3
WAREHOUSE:	18,995.61 SQ.FT./500=38
OCCUPANCY LOAD	120 CALCULATED (100 ACTUAL)
EXIT ACCESS	3 EXITS REQUIRED 9 EXITS PROVIDED
SPRINKLER SYSTEM	SPRINKLER SYSTEM IS PROVIDED

LOCATION FOR:

BLUEWATER TECHNOLOGIES
 37900 INTERCHANGE DR. FARMINGTON HILLS, MI

DATE:

PERMIT
7/21/16

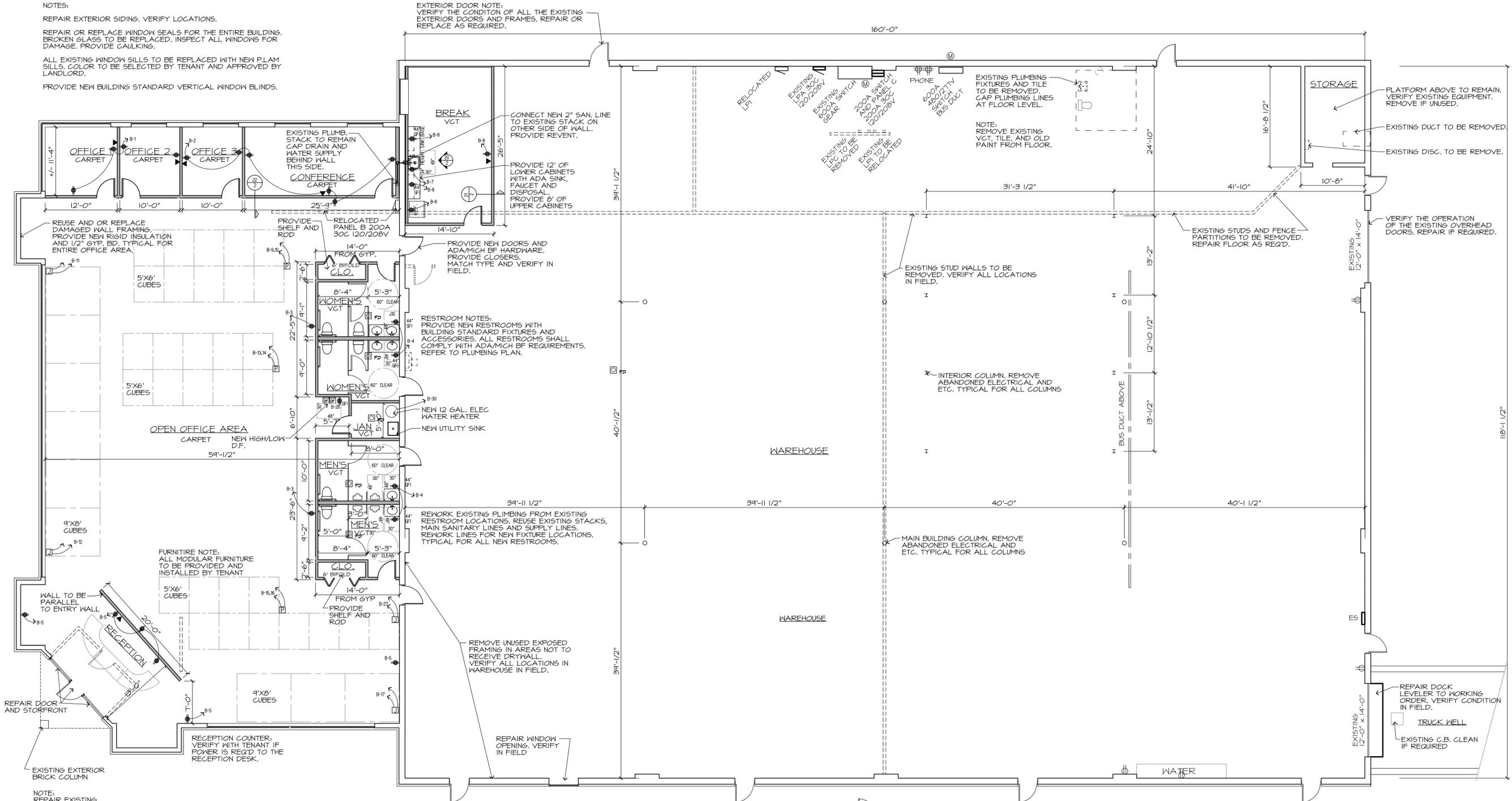
SHEET NO.

T1

NOTES:

- REPAIR EXTERIOR SIDING. VERIFY LOCATIONS.
- REPAIR OR REPLACE WINDOW SEALS FOR THE ENTIRE BUILDING. BROKEN GLASS TO BE REPLACED. INSPECT ALL WINDOWS FOR DAMAGE. PROVIDE CAULKING.
- ALL EXISTING WINDOW SILLS TO BE REPLACED WITH NEW PLAM SILLS. COLOR TO BE SELECTED BY TENANT AND APPROVED BY LANDLORD.
- PROVIDE NEW BUILDING STANDARD VERTICAL WINDOW BLINDS.

EXTERIOR DOOR NOTE:
 VERIFY THE CONDITION OF ALL THE EXISTING EXTERIOR DOORS AND FRAMES. REPAIR OR REPLACE AS REQUIRED.



NOTE:
 REPAIR EXISTING CONCRETE AT ENTRY AND WALK

PLUMBING FIXTURES						
OCCUPANTS	MALE	FEMALE	50% OF FIXTURES TO BE MALE / FEMALE			
			REQUIRED	PROVIDED	SECTION	
120CALC. (100 ACTUAL)	60	60				
FIXTURE	REQUIRED	MALE	FEMALE	MALE	FEMALE	
WATER CLOSETS	1 PER 25	3	3	6	4	
LAVATORIES	1 PER 40	2	2	2	4	
BATHTUBS / SHOWERS	NONE					
DRINKING FOUNTAINS	1 PER 100	1		1 (HIGH & LOW HC)		
SERVICE SINK	1		1		1	

- FINISH NOTES:**
- ENTIRE OFFICE AREA SHALL BE PAINTED 3 COLORS. 75% SINGLE COLOR. SHERWIN WILLIAMS OR BENJAMIN MOORE OR EQUAL.
 - PROVIDE BLINDS AT ALL INTERIOR WINDOWS.
 - VERIFY ALL FINISHES AND LOCATIONS PRIOR TO ORDERING.
 - CEILING TILE SHALL BE BUILDING STANDARD 2X4 LAY IN TILE 'ARMSTRONG SECOND LOOK' OR EQUAL.
 - CARPET OFFICE AREA UNLESS NOTED OTHERWISE. SHAW SCOREBOARD 54811 OR EQUAL APPROVED BY LANDLORD. \$12.50/YRD INSTALLED.
 - VGT SHALL BE 'ARMSTRONG' EXCELON OR EQUAL. LOCATIONS INDICATED ON FLOOR PLAN. BREAK RM, MAIL AREA, WORK ROOM, VESTIBULE.
 - VINYL BASE SHALL BE 'ROPPE' OR EQUAL.
 - WAREHOUSE DECK, TRUSSES, WALLS AND FLOOR SHALL BE CLEANED.

- EXIST. DOOR LOCATIONS**
- NEW 3'X7' DOORS AND FRAMES PROVIDE ADAMICH B.F. HARDWARE. WHERE DOORS ARE REPLACED EXISTING HEIGHT SHALL REMAIN. NEW OFFICE DOORS TO BE BUILDING STANDARD PREFINISHED WOOD DOORS IN METAL FRAMES U.L.D. VERIFY ALL DOORS AND FRAMES PRIOR TO ORDERING.

FLOOR PLAN
 SCALE: 1/8" = 1'-0"
 25,650.61 SQ. FT.

NEW OUTLET LEGEND	
	NEW DUPLEX ELECTRICAL OUTLET • 1'-6" AFF. TO < UNLESS NOTED OTHERWISE
	NEW GFCI DUPLEX ELECTRICAL OUTLET • 4' AFF. TO < UNLESS NOTED OTHERWISE
	NEW QUAD ELECTRICAL OUTLET • 1'-6" AFF. TO < UNLESS NOTED OTHERWISE
	NEW PHONE / DATA OUTLET • 1'-6" AFF. TO < UNLESS NOTED OTHERWISE (BY TENANT)
	J-BOX VERIFY THE REQUIRED CIRCUITS AND DATA REQUIRED

PARTITION LEGEND	
	EXISTING PARTITION OR PERIMETER WALL TO REMAIN
	NEW PARTITION TO UNDERSIDE OF CEILING GRID. CONSTRUCT WITH 1/2" GYP. BD. ON EACH SIDE OF 25 GA. 3" 5/8" METAL STUDS AT 16" O.C. (MATCH WALL THICKNESS WHERE ALIGNING W/ EXISTING WALL)
	NEW PARTITION TO UNDERSIDE OF CEILING GRID. CONSTRUCT WITH 1/2" GYP. BD. ON EACH SIDE OF 25 GA. 6" METAL STUDS AT 16" O.C.

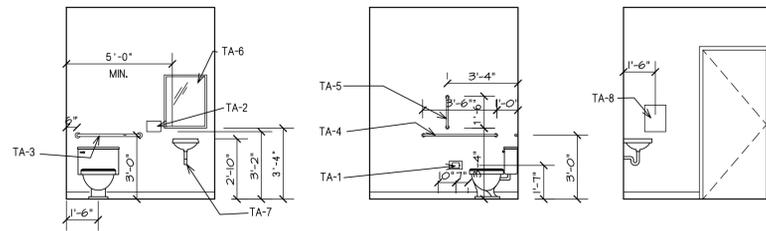
NEW LOCATION FOR:
BLUEWATER TECHNOLOGIES
 37900 INTERCHANGE DRIVE, FARMINGTON HILLS, MI

DATE:

PERMIT
 1/21/16

SHEET NO.

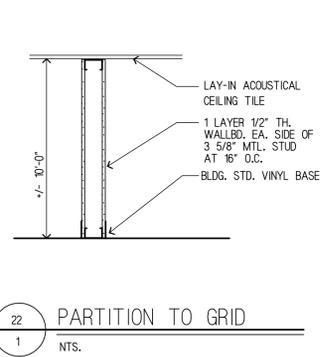
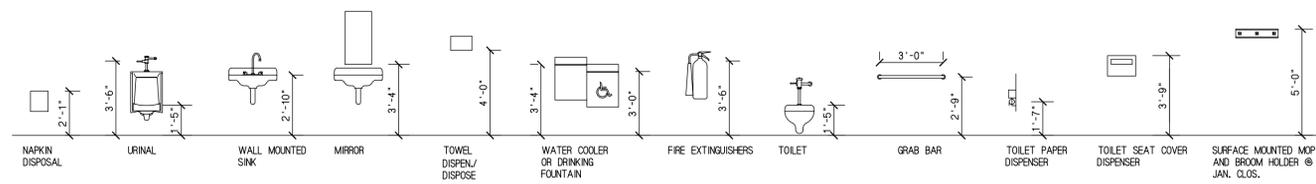




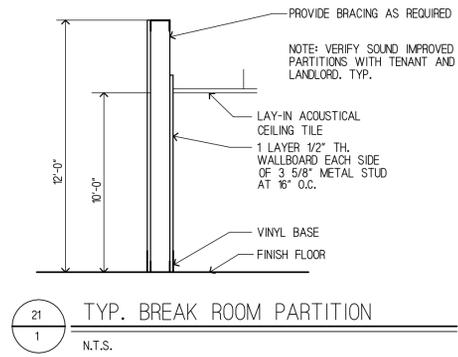
TYPICAL BARRIER FREE RESTROOM ELEVATIONS (SIMILAR)
 SCALE: 1/4" = 1'-0"

- RESTROOM GENERAL NOTES:**
- ELEVATIONS TYPICAL FOR EACH RESTROOM
 - PROVIDE SOLID WOOD BLOCKING FOR ALL TOILET ACCESSORIES
 - CONTRACTOR TO PROVIDE ITEMS AS SPECIFIED, OR AN APPROVED ALTERNATE

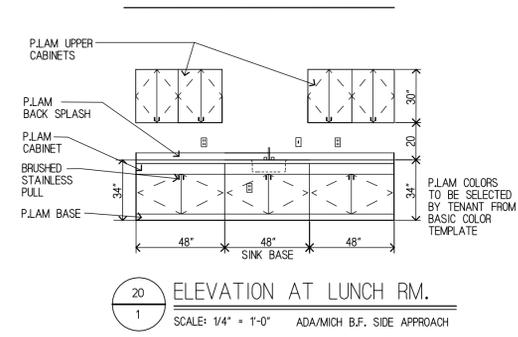
RESTROOM ACCESSORIES				
SYMBOL	ITEM	MANUFACTURER	MODEL NO.	REMARKS
TA-1	TOILET PAPER DISPENSER	CONTR. TO MATCH BLDG. STD.		
TA-2	SOAP DISPENSER	CONTR. TO MATCH BLDG. STD.		
TA-3	GRAB BAR	CONTR. TO MATCH BLDG. STD.		
TA-4	GRAB BAR	CONTR. TO MATCH BLDG. STD.		
TA-5	GRAB BAR	CONTR. TO MATCH BLDG. STD.		
TA-6	MIRROR	CONTR. TO MATCH BLDG. STD.		
TA-7	PROTECTIVE PLUMBING COVERS	CONTR. TO MATCH BLDG. STD.		
TA-8	PAPER TOWEL DISPENSER	CONTR. TO MATCH BLDG. STD.		



22 PARTITION TO GRID
 1 N.T.S.



21 TYP. BREAK ROOM PARTITION
 1 N.T.S.

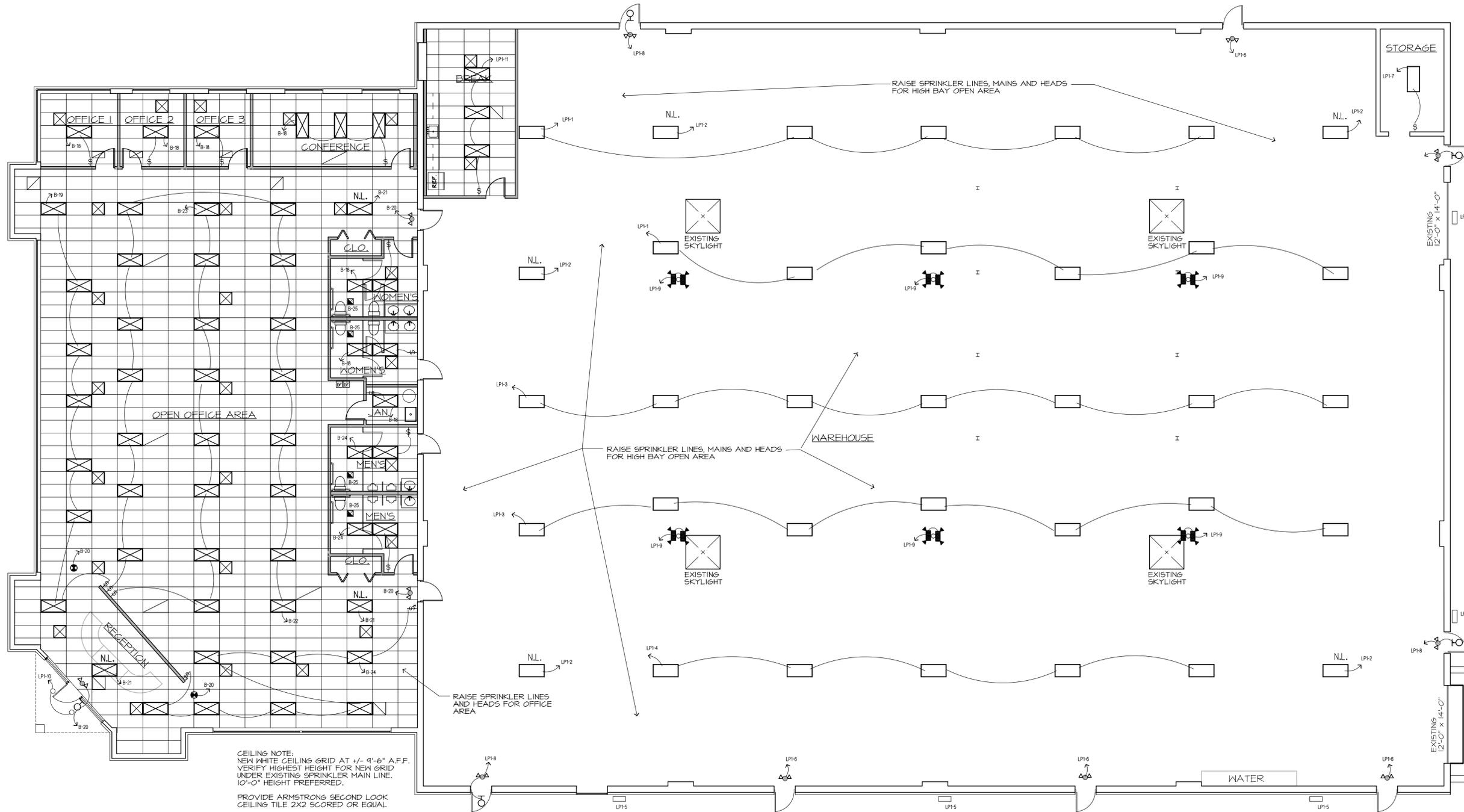


20 ELEVATION AT LUNCH RM.
 1 SCALE: 1/4" = 1'-0" ADA/MICH B.F. SIDE APPROACH

NEW LOCATION FOR:
BLUEWATER TECHNOLOGIES
 37900 INTERCHANGE DRIVE, FARMINGTON HILLS, MI

DATE:
 PERMIT
 7/2/16

SHEET NO.
 2



CEILING NOTE:
 NEW WHITE CEILING GRID AT +/- 9'-6" A.F.F.
 VERIFY HIGHEST HEIGHT FOR NEW GRID
 UNDER EXISTING SPRINKLER MAIN LINE.
 10'-0" HEIGHT PREFERRED.
 PROVIDE ARMSTRONG SECOND LOOK
 CEILING TILE 2X2 SCORED OR EQUAL

- LEGEND:**
- NEW 2X4 LAY-IN FLUORESCENT LIGHT
3 TUBE T5 LITHONIA SP5 OR
EQUAL
 - ALL EXISTING HIGH BAY LIGHT
FIXTURES TO BE REMOVED. VERIFY
LOCATIONS IN FIELD.
 - NEW HIGH BAY LIGHT
FIXTURE, LITHONIA 9' 3/4" X 92 1/8" LONG
MSH-BST-3-54WT5H0-SBL-WD-MVOLT-
GEBIOPS90
 - NEW SWITCH
 - THREE-WAY SWITCH
 - NEW EXIT SIGN
 - EXISTING EXIT SIGN
 - NEW EXIT AND EMERG. LIGHT
COMBO FIXTURE
 - NEW EMERGENCY LIGHT
 - EXISTING EMERGENCY LIGHT
 - EXTERIOR EMERGENCY LIGHT
- NOTE:
 PROVIDE OUT SHEETS FOR ALL FIXTURES
 TO LANDLORD FOR APPROVAL.

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

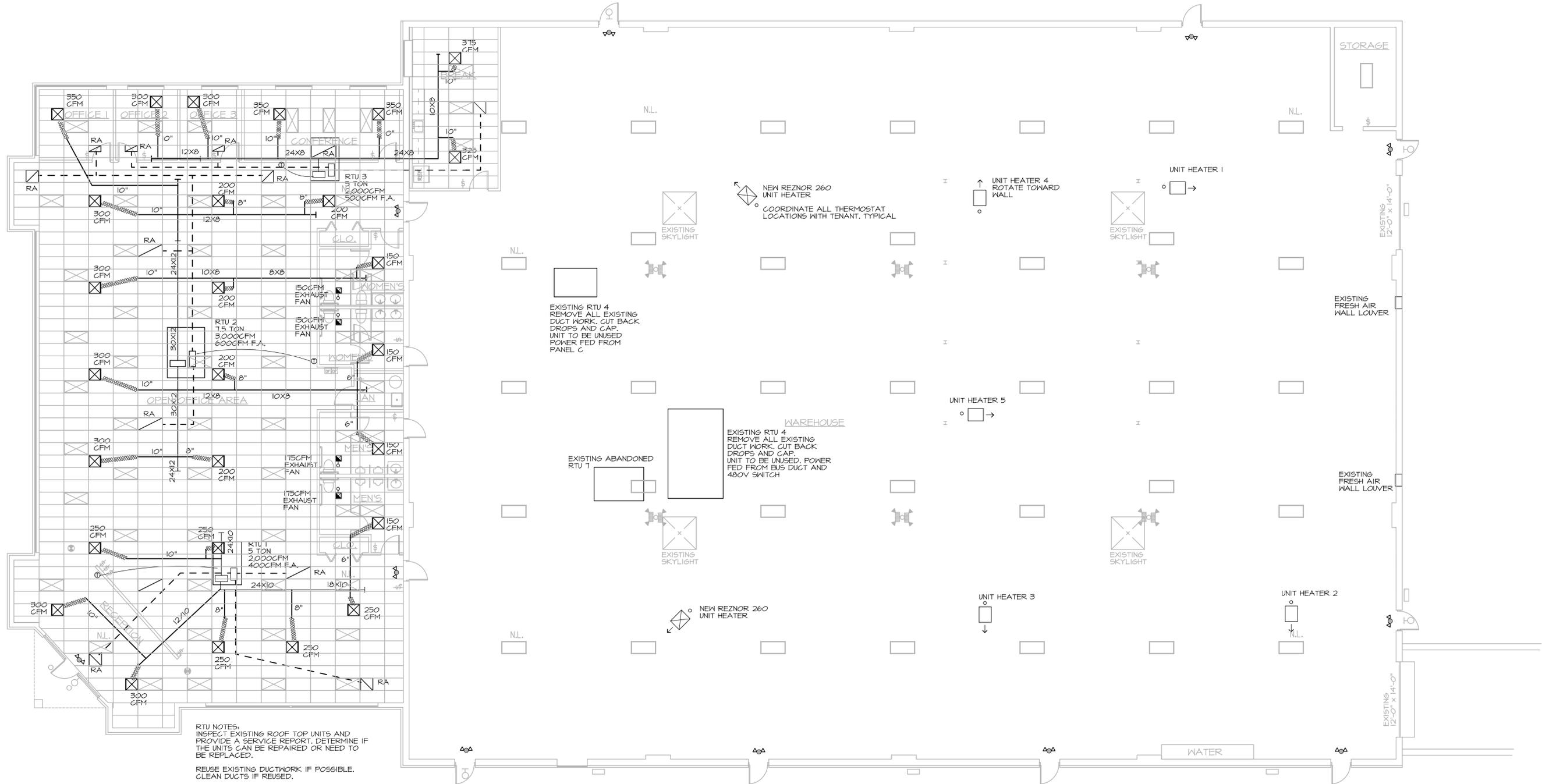
NEW LOCATION FOR:
BLUEWATER TECHNOLOGIES
 37900 INTERCHANGE DRIVE, FARMINGTON HILLS, MI

DATE:

REVIEW
 7/1/16

SHEET NO.

3



RTU NOTES:
 INSPECT EXISTING ROOF TOP UNITS AND
 PROVIDE A SERVICE REPORT, DETERMINE IF
 THE UNITS CAN BE REPAIRED OR NEED TO
 BE REPLACED.
 REUSE EXISTING DUCTWORK IF POSSIBLE.
 CLEAN DUCTS IF REUSED.
 PROVIDE AS-BUILT PLAN WHEN COMPLETED

NEW REZNOR 260
 UNIT HEATER
 COORDINATE ALL THERMOSTAT
 LOCATIONS WITH TENANT, TYPICAL

EXISTING RTU 4
 REMOVE ALL EXISTING
 DUCT WORK, CUT BACK
 DROPS AND CAP.
 UNIT TO BE UNUSED
 POWER FED FROM
 PANEL C

EXISTING ABANDONED
 RTU 7

EXISTING RTU 4
 REMOVE ALL EXISTING
 DUCT WORK, CUT BACK
 DROPS AND CAP.
 UNIT TO BE UNUSED, POWER
 FED FROM BUS DUCT AND
 480V SWITCH

NEW REZNOR 260
 UNIT HEATER

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

- LEGEND:**
- ☒ 24"x24" SUPPLY AIR DIFFUSERS, WHITE
 - ☒ 24"x48" RETURN AIR GRILLE, WHITE
 - ☒ 24"x24" RETURN AIR GRILLE, WHITE
 - EXHAUST FAN
 - ⊙ THERMOSTAT PROGRAMMABLE

NEW LOCATION FOR:
BLUEWATER TECHNOLOGIES
 37900 INTERCHANGE DRIVE, FARMINGTON HILLS, MI

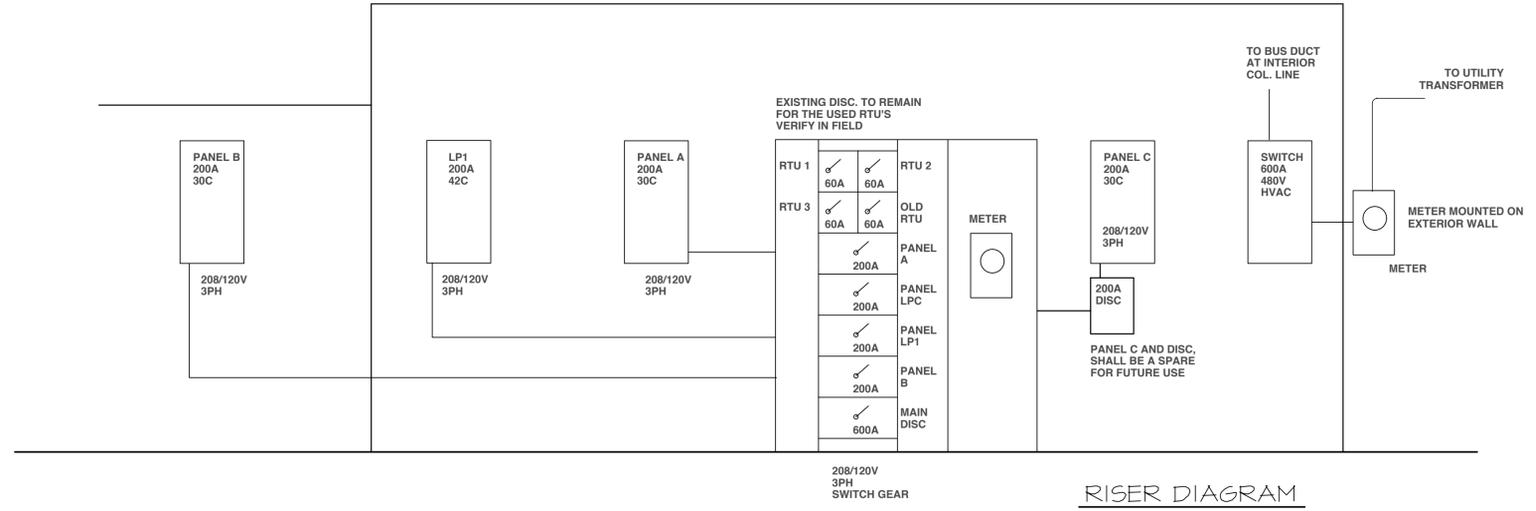
DATE:
 PERMIT
 7/21/16

SHEET NO.
M1

Panelboard: B															
Location: OFFICE AREA				Volts: 120/208				A.I.C. Rating: 200 A							
Supply From: PANEL B				Phases: 3				Mains Type: MCB							
Mounting: Surface				Wires: 4				Mains Rating: XXX							
Enclosure: Type 1								MCB Rating: XXX							
RMK	CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT	RMK
	1	RECEPT	20 A	1	1.0 kVA			1.5 kVA			1	20 A	RECEPT	2	
	3	RECEPT	20 A	1		0.5 kVA			1.5 kVA		1	20 A	RECEPT	4	
	5	RECEPT	20 A	1			2.0 kVA			1.5 kVA	1	20 A	RECEPT REF	6	
	7	DISP.	20 A	1		2.0 kVA		2.5 kVA			1	20 A	RECEPT BREAK	8	
	9	CUBES	20 A	1			3.0 kVA		3.0 kVA		1	20 A	CUBES	10	
	11	CUBES	20 A	1				3.0 kVA		3.0 kVA	1	20 A	CUBES	12	
	13	CUBES	20 A	1		3.0 kVA			3.0 kVA		1	20 A	CUBES	14	
	15	CUBES	20 A	1			3.0 kVA			3.0 kVA	1	20 A	CUBES	16	
	17	CUBES	20 A	1				3.0 kVA			1	20 A	LIGHTS	18	
	19	LIGHTS	20 A	1	1.2 kVA			0.5 kVA		2.5 kVA	1	20 A	EXIT LIGHTS	20	
	21	N.L.	20 A	1		0.5 kVA			2.5 kVA		1	20 A	LIGHTS	22	
	23	LIGHTS	20 A	1			1.5 kVA			2.0 kVA	1	20 A	LIGHTS	24	
	25	EXHAUST FANS	20 A	1	4.0 kVA			2.0 kVA			1	20 A	FOUNTAIN	26	
	27	CUBES	20 A	1		3.0 kVA			0.0 kVA	4.0 kVA	1	20 A	SPARE	28	
	29	SPARE	20 A	1			0.0 kVA				1	20 A	WATER HTR	30	
Total Load:					21000 VA		19000 VA		23000 VA						
Load Classification		Connected Load	Demand Factor	Estimated Demand	Panel Totals										
HVAC		0 VA	0.00%	0 VA	Total Conn. Load: 63000 VA										
Lighting		10700 VA	100.00%	10700 VA	Total Est. Demand: 57311 VA										
Power		10000 VA	100.00%	10000 VA	Total Conn. Current: 175 A										
Receptacle		42300 VA	86.55%	36611 VA	Total Est. Demand: 159 A										

L = BREAKER WITH LOCK ON DEVICE
R# = CIRCUIT CONTROLLED BY RELAY
* = DEDICATED CIRCUIT WITH AN ISOLATED GROUND
CIRCUIT BREAKER RATINGS:
ALL CIRCUIT BREAKERS ARE 1P/20A SWITCHING DUTY BOLT-ON, UNLESS NOTED OTHERWISE
ALL CIRCUIT BREAKERS FOR HVAC EQUIPMENT SHALL BE "HACR" TYPE

WP = A NEMA 3R RATED...
GFI = GROUND FAULT



Panelboard: LP1															
Location: WAREHOUSE				Volts: 120/208				A.I.C. Rating: 225 A							
Supply From: MAIN SWITCH				Phases: 3				Mains Type: MCB							
Mounting: Surface				Wires: 4				Mains Rating: XXX							
Enclosure: Type 1								MCB Rating: XXX							
RMK	CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT	RMK
	1	LIGHTS	20 A	1	2.0 kVA			1.0 kVA			1	20 A	N.L.	2	
	3	LIGHTS	20 A	1		3.0 kVA			1.0 kVA		1	20 A	LIGHTS	4	
	5	EXTER LIGHTS	20 A	1			2.5 kVA			0.5 kVA	1	20 A	EXIT LIGHTS	6	
	7	LIGHTS	20 A	1	2.5 kVA			1.0 kVA			1	20 A	EMERG. LIGHTS	8	
	9	EMERG. LIGHTS	20 A	1		1.5 kVA			0.5 kVA		1	20 A	EXTER LIGHTS OFFICE	10	
	11	BREAK LIGHTS	20 A	1			1.5 kVA			0.0 kVA	1	20 A	SPARE	12	
	13	SPARE	20 A	1	0.0 kVA			0.0 kVA			1	20 A	SPARE	14	
	15	SPARE	20 A	1		0.0 kVA			0.0 kVA		1	20 A	SPARE	16	
	17	SPARE	20 A	1			0.0 kVA			0.0 kVA	1	20 A	SPARE	18	
	19	SPARE	20 A	1	0.0 kVA			0.0 kVA			1	20 A	SPARE	20	
	21	SPARE	20 A	1		0.0 kVA			0.0 kVA		1	20 A	SPARE	22	
	23	SPARE	20 A	1			0.0 kVA			0.0 kVA	1	20 A	SPARE	24	
	25	SPARE	20 A	1	0.0 kVA			0.0 kVA			1	20 A	SPARE	26	
	27	SPARE	20 A	1		0.0 kVA			0.0 kVA		1	20 A	SPARE	28	
	29	SPARE	20 A	1			0.0 kVA			0.0 kVA	1	20 A	SPARE	30	
	31	SPARE	20 A	1	0.0 kVA			0.0 kVA			1	20 A	SPARE	32	
	33	SPARE	20 A	1		0.0 kVA			0.0 kVA		1	20 A	SPARE	34	
	35	SPARE	20 A	1			0.0 kVA			0.0 kVA	1	20 A	SPARE	36	
	37	SPARE	20 A	1	0.0 kVA			0.0 kVA			1	20 A	SPARE	38	
	39	SPARE	20 A	1		0.0 kVA			0.0 kVA		1	20 A	SPARE	40	
	41	SPARE	20 A	1			0.0 kVA			0.0 kVA	1	20 A	SPARE	42	
Total Load:					9000 VA		6000 VA		2000 VA						
Load Classification		Connected Load	Demand Factor	Estimated Demand	Panel Totals										
Lighting		17000 VA	100.00%	17000 VA	Total Conn. Load: 17000 VA										
Power		0 VA	100.00%	0 VA	Total Est. Demand: 17000 VA										
Receptacle		0 VA	86.55%	0 VA	Total Conn. Current: 47.2 A										
					Total Est. Demand: 47.2 A										

L = BREAKER WITH LOCK ON DEVICE
R# = CIRCUIT CONTROLLED BY RELAY
* = DEDICATED CIRCUIT WITH AN ISOLATED GROUND
CIRCUIT BREAKER RATINGS:
ALL CIRCUIT BREAKERS ARE 1P/20A SWITCHING DUTY BOLT-ON, UNLESS NOTED OTHERWISE
ALL CIRCUIT BREAKERS FOR HVAC EQUIPMENT SHALL BE "HACR" TYPE

WP = A NEMA 3R RATED...
GFI = GROUND FAULT

Panelboard: A															
Location: WAREHOUSE				Volts: 120/208				A.I.C. Rating: 225 A							
Supply From: MAIN SWITCH				Phases: 3				Mains Type: MCB							
Mounting: Surface				Wires: 4				Mains Rating: XXX							
Enclosure: Type 1								MCB Rating: XXX							
RMK	CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT	RMK
	1	SPARE	20 A	1	0.0 kVA			0.0 kVA			1	20 A	SPARE	2	
	3	SPARE	20 A	1		0.0 kVA			0.0 kVA		1	20 A	SPARE	4	
	5	SPARE	20 A	1			0.0 kVA			0.0 kVA	1	20 A	SPARE	6	
	7	SPARE	20 A	1	0.0 kVA			0.0 kVA			1	20 A	SPARE	8	
	9	SPARE	20 A	1		0.0 kVA			0.0 kVA		1	20 A	SPARE	10	
	11	SPARE	20 A	1			0.0 kVA			0.0 kVA	1	20 A	SPARE	12	
	13	SPARE	20 A	1	0.0 kVA			0.0 kVA			1	20 A	SPARE	14	
	15	UNIT HEATER	20 A	1		3.0 kVA			0.0 kVA		1	20 A	SPARE	16	
	17	SPARE	20 A	1			0.0 kVA			0.0 kVA	1	20 A	SPARE	18	
	19	SPARE	20 A	1	0.0 kVA			0.0 kVA			1	20 A	SPARE	20	
	21	UNIT HEATER	20 A	1		3.0 kVA			0.0 kVA		1	20 A	SPARE	22	
	23	IRRIGATION	20 A	1			2.0 kVA			0.0 kVA	1	20 A	SPARE	24	
	25	RECEPT	20 A	1	2.0 kVA			0.0 kVA			1	20 A	SPARE	26	
	27	SPARE	20 A	1		0.0 kVA			0.0 kVA		1	20 A	SPARE	28	
	29	SPARE	20 A	1			0.0 kVA			0.0 kVA	1	20 A	SPARE	30	
	31	SPARE	20 A	1	0.0 kVA			0.0 kVA			1	20 A	SPARE	32	
	33	SPARE	20 A	1		0.0 kVA			0.0 kVA		1	20 A	SPARE	34	
	35	SPARE	20 A	1			0.0 kVA			0.0 kVA	1	20 A	SPARE	36	
	37	SPARE	20 A	1	0.0 kVA			0.0 kVA			1	20 A	SPARE	38	
	39	SPARE	20 A	1		0.0 kVA			0.0 kVA		1	20 A	SPARE	40	
	41	SPARE	20 A	1			0.0 kVA			0.0 kVA	1	20 A	SPARE	42	
Total Load:					8000 VA		2000 VA		0 VA						
Load Classification		Connected Load	Demand Factor	Estimated Demand	Panel Totals										
HVAC		6000 VA	60.00%	3600 VA	Total Conn. Load: 8000 VA										
Power		2000 VA	100.00%	2000 VA	Total Est. Demand: 7331 VA										
Receptacle		2000 VA	86.55%	1731 VA	Total Conn. Current: 22.2 A										
					Total Est. Demand: 21 A										

L = BREAKER WITH LOCK ON DEVICE
R# = CIRCUIT CONTROLLED BY RELAY
* = DEDICATED CIRCUIT WITH AN ISOLATED GROUND
CIRCUIT BREAKER RATINGS:
ALL CIRCUIT BREAKERS ARE 1P/20A SWITCHING DUTY BOLT-ON, UNLESS NOTED OTHERWISE
ALL CIRCUIT BREAKERS FOR HVAC EQUIPMENT SHALL BE "HACR" TYPE

WP = A NEMA 3R RATED...
GFI = GROUND FAULT

NEW LOCATION FOR:
BLUEWATER TECHNOLOGIES
37900 INTERCHANGE DRIVE, FARMINGTON HILLS, MI

DATE:

PERMIT
7/21/16

SHEET NO.
E1