# INTERIOR FIT-OUT

# Dr. Sadek

479 ROUTE 520, SUITE A203 MARLBORO TOWNSHIP, NEW JERSEY 07746

#### GENERAL CONDITIONS & SPECIFICATIONS

#### GENERAL NOTES

- THE CONTRACT DRAWINGS AND SPECIFICATIONS HAVE BEEN CAREFULLY CHECKED BY THE ARCHITECT TO PROVIDE CONTRACT DOCUMENTS WHICH CLEARLY DEFINE THE RESULTS THE CONTRACTOR IS EXPECTED TO ACHIEVE. PRIOR TO COMMENCEMENT OF CONTRACTED WORK, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY CONFLICTS, OMISSIONS, OR LACK OF DEFINITION BETWEEN THE DRAWINGS AND THE SPECIFICATIONS OR BETWEEN THE CONTRACT DOCUMENT AND EXISTING SITE CONDITIONS IN ORDER TO RESOLVE ANY PROBLEM. THE COMMENCEMENT OF CONTRACTED WORK BY THE CONTRACTOR WILL BE DEEMED AS ACCEPTANCE OF THE CONTRACT DOCUMENTS AS BEING TRUE AND CORRECT AND NO REQUESTS FOR ADDITIONAL PAYMENT DUE TO CONFLICTS, OMISSIONS, OR LACK OF DEFINITION WILL BE ACCEPTED. ANY REVISED DRAWING OR OTHER DOCUMENT ISSUED TO THE CONTRACTOR SHALL NOT BE EXECUTED UNLESS ACCOMPANIED BY A LETTER OF AUTHORIZATION TO PROCEED. IN CASES WHERE COST ESTIMATES ARE REQUESTED FOR REVISIONS, THEY WILL BE PREPARED AND SUBMITTED PROMPTLY IN ORDER THAT THEY DO NOT UNDULY AFFECT THE PROGRESS OF WORK.
- 2. THE GENERAL CONTRACTOR HEREBY INDEMNIFIES AND AGREES TO DEFEND AND HOLD THE OWNER HARMLESS FROM AND AGAINST ANY AND ALL SUITS, CLAIMS, ACTIONS, LOSS, COST OR EXPENSE (INCLUDING CLAIMS FOR WORKMEN'S COMPENSATION BASED ON PERSONAL INJURY OR PROPERTY DAMAGE CAUSED IN THE PERFORMANCE OF THIS WORK BY THE GENERAL CONTRACTOR, HIS EMPLOYEES, AGENTS, SERVANTS, OR SUBCONTRACTORS ENGAGED BY HIM,
- FOLLOWS: COMPREHENSIVE GENERAL LIABILITY (BI AND PD COMBINED) LIMIT \$1,000,000.00 PER OCCURRENCE. EXCESS LIABILITY (BI AND PD COMBINED) LIMIT
- AMOUNT OF \$3,000,000.00 WITH COMPANIES AND FORMS AGGREGATE.

3. INSURANCE BY GENERAL CONTRACTOR SHALL BE AS

WORKER'S COMPENSATION AND LIABILITY STATUTORY. BEFORE COMMENCEMENT OF WORK, CERTIFICATES OF INSURANCE SHALL BE FURNISHED TO THE OWNER, AND IF REQUESTED, THE ORIGINAL POLICIES. THE GENERAL CONTRACTOR AND HIS SUBCONTRACTORS MAINTAIN INSURANCE AT ALL TIMES WITH COMPANIES AND ON FORMS SATISFACTORY TO ARCHITECTS. TEN DAY ADVANCE WRITTEN NOTICE SHALL BE GIVEN TO THE OWNER BY THE INSURANCE CARRIER OF ANY

CHANCE OR CANCELLATION OF COVERAGE SET FORTH

- 4. THE CONTRACTOR SHALL COMPLY WITH THE LOCAL BUILDING CODE AND REGULATIONS, LATEST EDITIONS, ALONG WITH ALL APPROPRIATE MUNICIPAL AND REGULATORY AGENCIES CODES AND REQUIREMENTS AND LANDLORD REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR THE PREPARATION DEPARTMENT FORMS, DOCUMENTS, FEES AND THE SUBSEQUENT FILING THERE OF, INCLUDING OBTAINING ALL APPROVALS REQUIRED PERMITS, EQUIPMENT USE PERMITS, CONTROLLED INSPECTIONS & FINAL SIGN
- 5. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL JOB CONDITIONS, DIMENSIONS, AND DETAILS PRIOR TO SUBMITTING ANY BIDS. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR OMISSIONS WHICH WOULD INTERFERE WITH THE SATISFACTORY COMPLETION OF THE WORK, PRIOR TO THE SUBMISSION OF BIDS.
- DRAWINGS ARE NOT TO BE SCALED; DIMENSIONS
- . ALL DIMENSIONS ARE FROM FINISH SURFACE TO FINISH SURFACE, OR FROM FACE OF CONVECTOR TO FINISH SURFACE.

SMALL SCALE PLANS

- 8. THE GENERAL CONTRACTOR SHALL COMPLY WITH THE LOCAL RULES AS TO THE HOURS OF OPERATION AVAILABILITY OF HANDLING MATERIALS, EQUIPMENT AND DEBRIS TO AVOID CONFLICT AND INTERFERENCE WITH BUILDING OPERATIONS. DEMOLITION MUST BE PERFORMED DURING HOURS SPECIFIED BY THE OWNER. THE DELIVERY OF MATERIALS EQUIPMENT AND DEBRIS MUST BE ARRANGED TO AVOID ANY INCONVENIENCE AND ANNOYANCE.
- 9. THE GENERAL CONTRACTOR SHALL MAKE AVAILABLE A MINIMUM OF THREE (3) FIRE EXTINGUISHES PER FLOOR OR MORE, IF REQUIRED BY THE LOCAL ORDINANCE. SAID FIRE EXTINGUISHES SHALL BE KEPT AND MAINTAINED ON THE PREMISES BY OWNER'S CONTRACTOR FOR THE DURATION OF THE ALTERATION.
- IO. ALL MATERIALS AS WELL AS METHODS AND PROCESSES USED IN THE PERFORMANCE OF THE WORK SHALL CONFORM TO THE STANDARD OF THE LOCAL CODE AND THE GENERAL CONTRACTOR SHALL BECOME FAMILIAR WITH SUCH REQUIREMENTS.
- . CONTRACTOR TO CONTROL CLEANING TO PREVENT DIRT OF DUST FROM LEAVING THE JOB SITE AND INFILTRATING AREAS NOT INVOLVED IN THE PROJECT.

- 12. NO MATERIAL SUBSTITUTIONS SHALL BE MADE WITHOUT FIRST INFORMING THE ARCHITECT. SUBMIT SUBSTITUTE MATERIAL SPECIFICATIONS AND SAMPLES FOR APPROVAL, IN WRITING, PRIOR TO COMMENCEMENT OF WORK.
- 13. THE GENERAL CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS, COMPLETE WITH MANUFACTURER'S EQUIPMENT CUTS, FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK. SUBMITTAL SHALL BE IN THE FORM OF: (A) REPRODUCIBLE SEPIA TRANSPARENCY (POSITIVE SIDE UP); AND (B) 3 BLACK AND WHITE PRINTS OF EACH DRAWING. THE CONTRACTOR WILL NOT COMMENCE FABRICATION BEFORE RECEIVING THE APPROVAL OF THE ARCHITECT THE FOLLOWING SUBMITTALS ARE REQUIRED:
- I. CABINETRY A. FINISH SAMPLES (2 REQUIRED)
- 2. FINISHES A. PAINT SAMPLES (2 REQUIRED, EACH COLORED)
- B. WALL COVERING (2 REQUIRED) 3. MECHANICAL A. SHOP DRAWINGS-AC UNITS
- GRILLES, LOUVERS DUCTWORK PLUMBING
- FIRE PROTECTION B. SUPPLEMENTAL EQUIPMENT CATALOG CUTS WITH DATA SPECIFIC TO THIS PROJECT FLAGGED IN AN APPROPRIATE
- 4. ELECTRICAL A. FIXTURE CUTS
- B. ELECTRICAL CONTROLS AND DEVICES WITH DATA SPECIFIC TO THIS PROJEC FLAGGED IN AN APPROPRIATE MANNER.
- 14. APPROVAL OF SHOP DRAWINGS SHALL INDICATE ONLY THAT SUCH DRAWINGS GENERALLY EXPRESS THE INTENT OF THE CONTRACT DOCUMENTS AND SHALL NEITHER BE CONSTRUED AS A COMPLETE CHECK NOR RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN NOTE ABOVE.
- 15. THE GENERAL CONTRACTOR SHALL MAKE GOOD, AT HIS OWN EXPENSE, ANY DAMAGE TO EXISTING AREAS NOT DESIGNATED FOR REFURBISHMENT.
- 16. GENERAL CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS, WHETHER HIS OWN, OR THOSE ON SEPARATE CONTRACT LET BY THE OWNER. PRIOR TO COMMENCING WORK, THE GENERAL CONTRACTOR SHALL PROVIDE A WORK SCHEDULE TO ARCHITECT SHOWING ESTIMATED COMMENCEMENT AND COMPLETION DATES OF EACH TRADE. THE CONTRACTOR SHALL BE RESPONSIBLE TO INDICATE ANY CONFLICTS OR OMISSIONS.
- 17. UNLESS SPECIFICALLY NOTED OTHERWISE, ALL WORK SHOWN ON THESE DRAWINGS SHALL BE PERFORMED BY THE GENERAL CONTRACTOR.
- . THE AIA GENERAL CONDITIONS, LATEST EDITION, (DOCUMENT A201) SHALL BE BINDING ON THIS CONTRACT.
- 19. THE WORK REQUIRED UNDER THIS CONTRACT SHALL BE PERFORMED ON STRAIGHT TIME UNLESS OTHERWISE REQUIRED BY OTHER CLAUSES OF THIS CONTRACT OR AS DIRECTED BY THE CLIENT, ENGINEER, OR ARCHITECT. SHUTDOWN COORDINATION AS REQUIRED BY THE BUILDING LANDLORD.
- SUBMITTED IN WRITING BY THE CONTRACTOR AND APPROVED BY THE TENANT AND THE ARCHITECT. 21. A COPY OF THE LATEST SET OF CONSTRUCTION

20. NO EXTRAS WILL BE PERMITTED UNLESS

- DRAWINGS SHALL BE KEPT AT THE JOB SITE FOR REVIEW BY THE ARCHITECT.
- GOVERN. LARGE SCALE DETAILS SHALL GOVERN OVER 22. ALL REQUISITIONS FOR PAYMENTS FROM THE CONTRACTOR TO THE TENANT SHALL BE SUBMITTED TO THE ARCHITECT ON AIA FORM 6722, LATEST EDITION, FOR PRIOR APPROVAL.
  - 23. ALL WORK SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR, UNLESS OTHERWISE NOTED. ALL CONTRACTORS SHALL SUBMIT IN WRITING THIS GUARANTEE TO THE CLIENT. THE GUARANTEE PERIOD IS TO BEGIN WHEN THE CLIENT OCCUPIES THE PREMISES.
  - 24. THE CLIENT'S ARCHITECT (MSA) OR HIS REPRESENTATIVES SHALL HAVE ACCESS TO THE PREMISES AT ALL TIMES, AND TO THE FACTORY OR SHOP OF ANY OF THE SUBCONTRACTORS. ANY INFERIOR MATERIAL OR WORKMANSHIP SHALL BE RECONSTRUCTED AS APPROVED BY THE ARCHITECT \$ THE TENANT AT THE CONTRACTOR'S SOLE EXPENSE.
  - 25. WHATEVER WORK IS DONE WHERE NO DEFINITE DETAILS OR INSTRUCTIONS ARE GIVEN, THE CONTRACTOR OR SUBCONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH THE HIGHEST STANDARDS OF WORKMANSHIP AND MATERIALS AS DEFINED BY THE GOVERNING TRADE ORGANIZATION.
  - 26. UPON COMPLETION OF WORK, THE CONTRACTOR WILL PROVIDE REPRODUCIBLE "AS-BUILT" TO SHOW ALL MODIFICATIONS OF THE CONTRACT DOCUMENTS AS WELL AS ALL LIGHTING AND POWER CIRCUITRY (INCLUDING BREAKER NUMBERS) AS ACTUALLY

- 27. ALL MATERIALS SHALL, WHEN APPLICABLE AND REQUIRED, COMPLY WITH THE DIRECTIVES OF THE LOCAL BOARD OF STANDARDS AND APPEALS (B.S.A.). AND THE MANUFACTURER SHALL BE ABLE TO PRODUCE A LOCAL B.S.A. NUMBER ON DEMAND.
  - 28. ALL MATERIALS SHALL BE NEW AND SHALL BE DELIVERED TO THE SITE IN THEIR ORIGINAL PACKAGING.
  - 29. NO MATERIAL SUBSTITUTIONS SHALL BE MADE WITHOUT FIRST INFORMING THE ARCHITECT. SUBMIT SUBSTITUTE MATERIAL SPECIFICATIONS AND SAMPLES FOR APPROVAL, IN WRITING, PRIOR TO COMMENCEMENT OF WORK.
- 30. G.C. TO OBTAIN ALL PERMITS, SIGN-OFFS AND EQUIPMENT USE PERMITS.
- 31. ALL WORK SHALL BE ON STRAIGHT TIME, WORK WHICH IS REQUIRED BY THE BUILDING OWNER/LANDLORD TO BE PERFORMED AFTER HOURS SHALL BE COORDINATED WITH TENANTS. ELECTRICAL TIE IN'S AND DRILLING TO BE COORDINATED WITH OWNER AND DONE AFTER HOURS
- 32. PREMISES TO BE FINE CLEANED PRIOR TO TURNING OVER TO OWNER.
- 34. G.C. TO BE RESPONSIBLE FOR SECURITY ALARM AND DEVICE WIRING, G.C. TO BE RESPONSIBLE FOR COORDINATION WITH OWNER'S SECURITY VENDOR. ANY DOOR CONTACTS, CAMERAS, AND OTHER SECURITY DEVICES TO BE

### LIST OF DRAWINGS

#### <u>ARCHITECTURAL</u>

FLOOR: 2ND FL

T-100 TITLE SHEET AS-100 ARCHITECTURAL SPECIFICATIONS A-100 CONSTRUCTION PLAN REFLECTED CEILING PLAN A-102 FINISH PLAN A-200 INTERIOR ELEVATIONS & DETAILS A-201 INTERIOR ELEVATIONS & DETAILS A-202 SCHEDULES & DETAILS MECHANICAL PLAN MECHANICAL DETAILS & SCHEDULES MECHANICAL SPECS P-100 PLUMBING PLAN & DETAILS SP-100 SPRINKLER PLAN & DETAILS E-100 ELECTRICAL PLAN FA-100 FIRE ALARM PLAN A-400 ADA PLANS & DETAILS

#### BUILDING INFORMATION

479 ROUTE 520, SUITE A203 MARLBORO TOWNSHIP, NJ 07746 BLOCK 213 LOTS ZONE OPT 2

### BUILDING CODE COMPLIANCE

- OCCUPANCY CLASSIFICATION: "B" BUSINESS (NO CHANGE)
- 2. OCCUPANCY LOAD PER TABLE 1004.1.1 | PERSON / 100 SF = 1,963 SF / 100 = 19 PERSONS MINIMUM EGRESS WIDTH PER SECTION 1005.1: 0.2 INCHES PER OCCUPANT; 0.2 INCHES X 19 OCCUPANTS = TOTAL INCHES PROVIDED WITH 2 EXITS: 72 INCHES = OK

#### BUILDING DEPARTMENT NOTES

- I. EXISTING USE GROUP "B" BUSINESS (NO CHANGE TO EXISTING)
- 2. DESIGN USE GROUP "B"
- 3. EXISTING RATED DEMISING WALLS TO REMAIN BETWEEN TENANTS & FIRE SEPARATION AREA. NO CHANGE TO EXISTING.

4. CONSTRUCTION IN ACCORDANCE WITH REGULATIONS OF BUILDING CODE:

NEW JERSEY UNIFORM CONSTRUCTION CODE (NJAC 5:23-3:14) 2015 IBC NJ EDITION ICC/ANSI AII7.I-2009 2015 NATIONAL STANDARD PLUMBING CODE (N.J.A.C. 5:23-3.15) 2014 NATIONAL ELECTRICAL CODE (N.J.A.C. 5:23-3.16) (NFPA 70)/2014 2015 INTERNATIONAL ENERGY CONSERVATION CODE (N.J.A.C. 5:23-3.18)

2015 INTERNATIONAL MECHANICAL CODE (IMC) (N.J.A.C. 5:23-3.20)

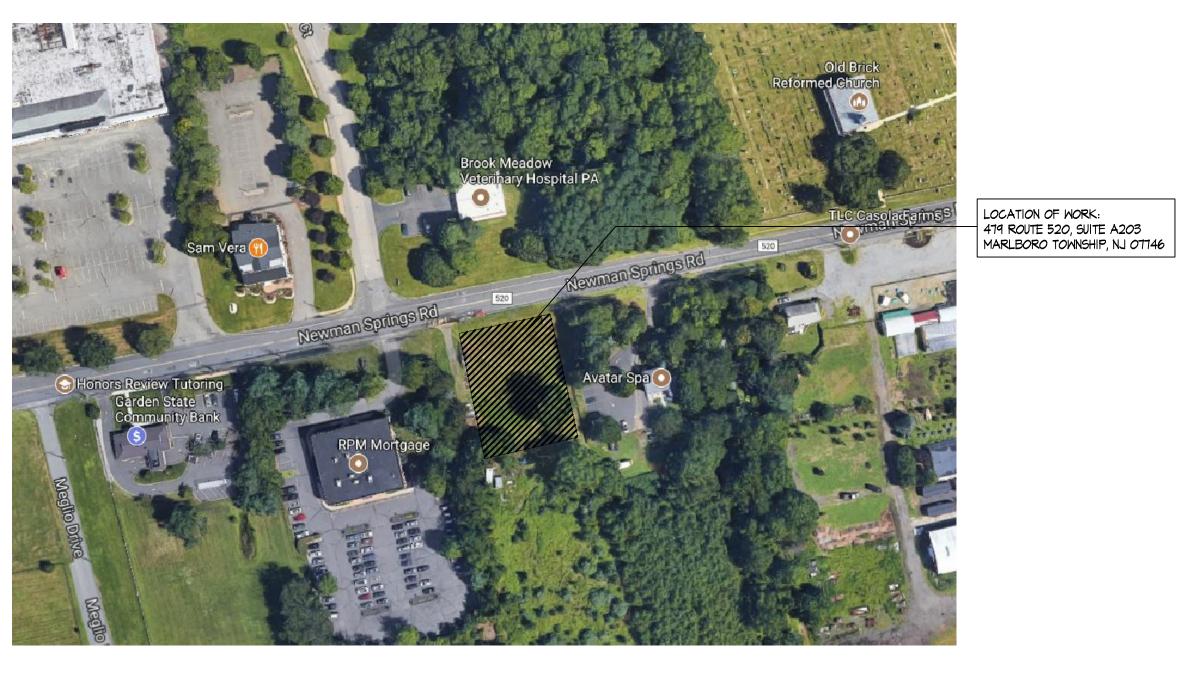
- 2015 INTERNATIONAL FUEL GAS CODE (IFGC) (N.J.A.C. 5:23-3.22) 5. EXISTING EXITS ARE PLAINLY MARKED WITH LIGHTED AND PHOSPHORESCENT SIGNS IN ACCORDANCE WITH THE
- REQUIREMENTS OF THE 2015 IBC. 6. DOORS AND DOORWAYS SHALL MEET THE
- REQUIREMENTS OF SECTIONS 1007 \$ 1008 OF THE 2015 IBC. 7. ENTIRE EXISTING SPACE IS MECHANICALLY VENTILATED IN
- ACCORDANCE WITH THE STANDARDS OF ASHRAE AND ASME. 8. MODIFIED SUSPENDED CEILINGS WILL COMPLY WITH REQUIREMENTS OF THE 2015 IBC.
- I-500 PERSIONS = 2 EXITS 2 EXISTING EXITS PROVIDED, OK

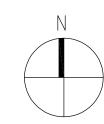
9. MIN. NUMBER OF EXITS PER TABLE 1006.3.1

10. FIRE RATINGS OF BUILDING ELEMENTS WILL COMPLY WITH TABLE 601

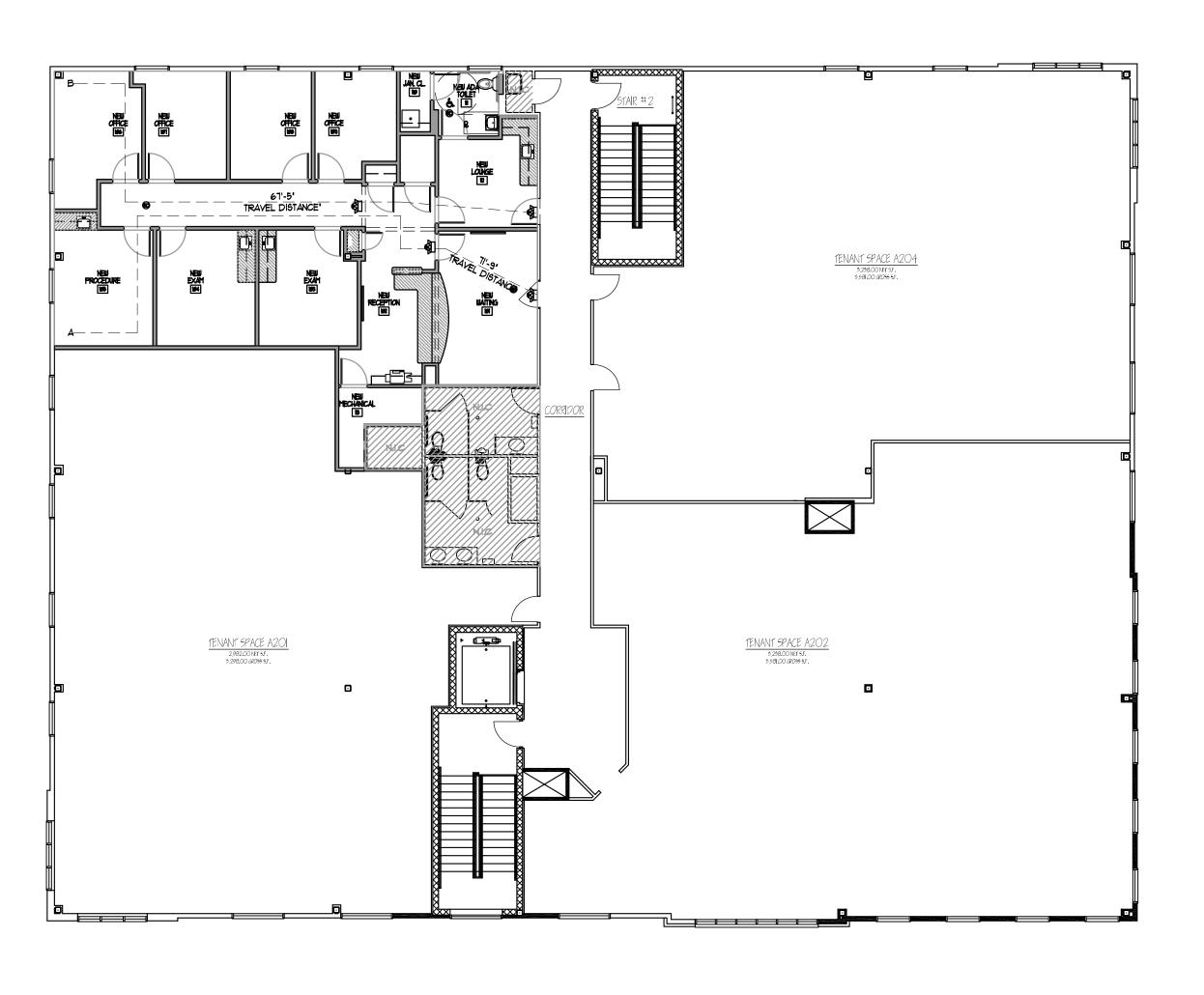
- II. ALL DUCTS, PIPES AND CONDUITS THROUGH RATED CONSTRUCTION SHALL MEET THE REQUIREMENTS OF SECTION 712
- 12. IF REQ'D, FIRESTOPPING TO BE INSTALLED AS REQUIRED UNDER SECTION 706.
- 13. EMERGENCY POWER SHALL MEET THE REQUIREMENTS FOR EXIT SIGNS AS REQUIRED BY SECTION 1013.6.3
- 14. EXIT TRAVEL DISTANCE PER TABLE 1016.1: USE GROUP B (with SPRINKLER SYSTEM) 300 FT. 100'-0" FT < 300 FT,. OK \*\* SEE DIAGRAM, THIS DRAWING A) 71'-9" < 300'-0" B) 67'-5" < 300'-0"

#### SITE LOCATION PLAN





SCALE: 3/32"=1'-Ø EXISTING





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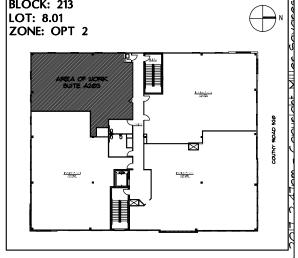
114 WEST 26TH STREET, 6TH FLOOR NEW YORK, NY 10001 P: (646) 957-6031 email msassc@msassc.com

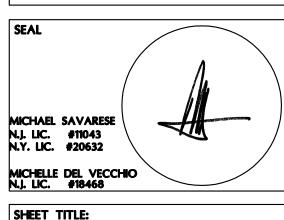
ISSUES DESCRIPTION FOR BID 11/16/2017 **REVISIONS** DESCRIPTION

DR. SADEK

PROJECT

479 ROUTE 520, SUITE A203 MARLBORO TOWNSHIP, NJ 07746

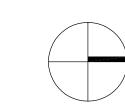




TITLE SHEET PLAN

DRAWN BY 890-1701 SPK 11/1/2017 AS NOTED

**BSCAN/ APPLICATION NO.:** 



### CONSTRUCTION NOTES

- BEFORE COMMENCING WORK, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY AREAS WITHOUT FIREPROOFING. ALL EXPOSED STRUCTURAL STEEL AND CHIPPED-OFF FIREPROOFING SHALL BE PATCHED OR TOUCHED-UP WITH CAFCO TYPE "D", OR APPROVED EQUAL AS DIRECTED BY THE ARCHITECT.
- 2. ALL WOOD SHALL BE FIRE RETARDANT TREATED PER LOCAL BUILDING CODE.
- 3. GENERAL CONTRACTOR TO COORDINATE AND INSTALL ALL WOOD GROUNDS AND STEEL SUPPORTS IN CEILING AND PARTITIONS WHERE NECESSARY, FOR THE COMPLETION OF LATER INSTALLATION WORK.
- 4. GENERAL CONTRACTOR SHALL CAP ALL EXISTING PIPING NOT BEING USED, TO I" BEHIND FINISH SURFACES.
- 5. ANY NEW WATER SUPPLY PIPES SHALL BE CONCEALED IN CEILINGS OR WALLS EXCEPT AT TERMINATION. PROVIDE SHUT-OFF VALVES AT ALL TERMINATION POINTS.
- 6. ALL DOORS IN DRYWALL OR MASONRY PARTITION SHALL BE SET 4" FROM HINGED EDGE OF DOOR TO IMMEDIATE ADJACENT WALL UNLESS OTHERWISE
- . ALL FREE STANDING COLUMNS ARE TO BE MADE TRUE WITH GYPSUM BOARD IF NECESSARY.
- 8. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR TAPING AND SPACKLING OF GYPSUM BOARD AS WELL AS PATCHING AND REPAIRING ALL EXISTING WALLS, CEILINGS, AND COLUMNS TO REMAIN TO THE SATISFACTION OF THE ARCHITECT AND APPROPRIATE FINISH CONTRACTORS.
- 1. ALL OUTSIDE CORNERS AT DRYWALL PARTITIONS SHALL HAVE METAL CORNER BEADS, TAPED AND SPACKLED.
- IO. ALL GYPSUM WALLBOARD PARTITION JOINTS SHALL BE LOCATED SO THAT PANEL EDGES FALL ON ALTERNATE STUDS.
- . ALL SHEETROCK WALLS SHALL BE PROPERLY TAPED, SPACKLED, AND SANDED SMOOTH TO RECEIVE PAINT OR WALL-COVERING. A MINIMUM OF 3 COATS OF SPACKLE ARE REQUIRED.
- 2. THE ARCHITECT SHALL REVIEW FIELD LAYOUT OF PARTITIONS PRIOR TO ERECTION OF STUDS.
- 3. WHERE NEW WALLS ARE TO ALIGN WITH COLUMNS OR WALLS AT AN EXISTING OUTSIDE CORNER:
- REMOVE EXISTING CORNER BEAD, TAPE AND SPACKLE JOINT (THREE COATS MINIMUM).
- B. AT COLUMN, THE OUTSIDE SHEET OF GYPSUM BOARD WILL PASS OVER THE COLUMN FACE AND BE FINISHED OFF WITH A CORNER BEAD AT THE FAR CORNER.
- C. PLASTER TO PLASTER: REMOVE EXISTING CORNER BEAD. REINFORCE JOINT WITH WIRE MESH OVERLAPPING NEW AND OLD WALL A MINIMUM OF 6" EACH SIDE OF JOINT AND PLASTER TO FORM A SMOOTH AND PLUMB CONTINUOUS SURFACE.
- 4. WHERE NEW UNRATED PARTITIONS MEET WINDOW MULLIONS A SOUNDPROOF FILLER PANEL OF 2 INCHES, 3 LBS. DENSITY SEMI-RIGID FIBERGLASS BOARD SHALL BE USED INSIDE THE CONVECTOR ENCLOSURE AND BETWEEN CEILING FACIA AND WINDOW MULLION TO PREVENT SOUND TRANSMISSION BETWEEN ROOMS.
- 5. WHERE NEW, RATED PARTITIONS MEET WINDOW MULLIONS, INSTALL A RATED FIRE STOP WITHIN THE ENCLOSURE, EQUAL TO THE RATING OF THE WALL.
- 6. CENTERLINES OF PARTITIONS ABUTTING WINDOW MULLIONS SHALL BE CENTERED ON THE MULLIONS UNLESS OTHERWISE NOTED.
- . METAL STUDS SHALL BE ROLL FORMED CHANNEL TYPE SECTIONS FABRICATED OF U.S.S. NO. 25 GAUGE, GALVANIZED SHEET STEEL, 2 1/2 INCHES WIDE (OR AS NOTED ON DRAWINGS) IN THE LONGEST ONE PIECE LENGTHS AVAILABLE, UNLESS OTHERWISE NOTED
- TYPICAL LIMITING HEIGHTS: II'-O" & UNDER = 2 1/2" @ 24" O.C. - 25 GA. ||'-0" - |2'-0" = 2 |/2" @ 24" 0.0.-22 GA. |2'-0" - |3'-0" = 2 |/2" @ |6" 0.0.-22 GA. |3'-0" - |5'-0" = 2 |/2" @ 24" 0.0.-20 GA. 15'-0" - 20'-0" = 4" @ 24" O.C.-20 GA.
- 8. GYPSUM WALLBOARD SHALL BE 48 INCHES WIDE AND OF THICKNESS INDICATED ON THE CONTRACT DRAWINGS AND SHALL BE OF UNIFORM QUALITY CONFORMING TO FEDERAL SPECIFICATION SS-L 30 AND TO ASTM C36.
- . WALLBOARD SHALL BE FURNISHED AND INSTALLED IN THE LONGEST AVAILABLE LENGTHS SO THAT WALLBOARD PANELS EXTEND VERTICALLY IN ONE PIECE FROM FLOOR TO CEILING IS NOT MORE THAN TWO PIECES FROM FLOOR TO SLAB, BEAM, OR DECK ABOVE AS REQUIRED WITH ANY HORIZONTAL JOINTS ABOVE THE FINISHED CEILING.
- 20. WALLBOARD USED IN FIRE RATED PARTITIONS SHALL BE FIRE RETARDANT, TYPE "X", AND DELIVERED TO THE CONSTRUCTION SITE BEARING UNDERWRITERS LABORATORY CERTIFICATE AND LOCAL BOARD OF STANDARDS AND APPEALS CALENDAR NUMBERS IF APPLICABLE.
- I. CEILING AND FLOOR RUNNERS SHALL BE ROLL FORMED CHANNEL TYPE SECTIONS FABRICATED OF U.S.S. NO. 25 GAUGE, GALVANIZED STEEL. RUNNERS SHALL BE IN 10' - 0" LENGTHS.
- 22. TRIM MEMBERS SHALL BE FABRICATED OF U.S.S. NO. 25 GAUGE, GALVANIZED STEEL AND SHALL INCLUDE CORNER REINFORCEMENT AND CASING TYPE EDGE TRIM.

- 23. CORNER REINFORCEMENT SHALL BE COMPLETE WITH PERFORATED TAPE WINGS, AND SHALL BE TYPE NO. | PERF-A-BEAD" AS MANUFACTURED BY U.S. GYPSUM CO., OR AN APPROVED EQUAL. CORNER AND EDGE TRIM MEMBERS SHALL BE IN SINGLE LENGTHS. WALLBOARD EDGE TRIM TO BE USG 801 BEAD OR
- 24. SCREWS FOR FASTENING WALLBOARD TO STUDS SHALL BE BUGLE TYPE PHILLIPS HEAD SCREWS SPECIFICALLY MANUFACTURED FOR POWER TOOL INSTALLATION.
- 25. JOINT TREATMENT MATERIALS SHALL BE EXPRESSLY MANUFACTURED BY THE WALLBOARD MANUFACTURER FOR USE WITH THE MANUFACTURER'S WALLBOARD MATERIALS. JOINT COMPOUND SHALL BE THE READY MIXED TYPE CONFORMING TO ASTM C475. TAPING AND SPACKLING SHALL BE A THREE (3) COAT APPLICATION.
- 26. AT PATCHING AT PARTITIONS, WHERE EXISTING SURFACES DO NOT ALIGN IN THE SAME PLANE, THE GENERAL CONTRACTOR SHALL PATCH OUT ENTIRE SURFACE REQUIRED FOR AN EVEN, FLUSH SURFACE ON THE ENTIRE WALL.
- 27. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF CHOPPING AND PATCHING FOR ALL TRADES. WHERE DRYWALLS ARE IN CONFLICT WITH DUCTWORK, PLUMBING LINES, ETC., THIS CONTRACTOR SHALL PROVIDE ALL NECESSARY BRIDGING AND BRACING REQUIRED TO SECURE DRYWALL AND TO MAINTAIN FIRE OR SOUND RATING WHERE REQUIRED.
- 28. THE GENERAL CONTRACTOR SHALL PROVIDE SUFFICIENT FRAMING FOR ALL WALL OPENINGS FOR DUCT WORK, RETURN AIR OPENINGS, ACCESS PANELS AND GRILLE OPENINGS ABOVE AND BELOW HUNG CEILINGS. THESE ARE TO BE COORDINATED WITH H.V.A.C. ENGINEERING DRAWINGS AND THE GENERAL CONTRACTORS MECHANICAL CONTRACTOR'S SHOP DRAWINGS. ALL SPACES OR GAPS SHALL BE PROPERLY SEALED FOR SOUNDPROOFING AND VIBRATION
- 29. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY CUT-OUTS FOR THE INSTALLATION OF ELECTRICAL OUTLETS, SWITCHES AND OTHER ELECTRICAL AND/OR MECHANICAL DEVICES.
- 30. WHERE DUCT OR PART OF DUCT IS RUNNING PARALLEL OVER FIRE RATED PARTITIONS, EXTEND RATED PARTITION AROUND DUCT TO EFFECT A COMPLETE MAINTENANCE OF FIRE RATING BY PROVIDING AN APPROPRIATELY RATED SOFFIT ABOVE THE CEILING LINE TO OFFSET THE PARTITION TO ONE SIDE OF THE DUCT. FINAL METHOD AND LOCATION TO BE APPROVED BY MSA.
- 31. THE CONTRACTOR SHALL PROVIDE CENTRALLY LOCATED BENCH MARKS FOR USE BY ALL TRADES. SHOULD ANY FLOOR VARY BY MORE THAN 1/2", MSA SHALL BE NOTIFIED PRIOR TO ANY CEILING LINE BEING ESTABLISHED.
- 32. WHERE CEILING PATCHES OCCUR, ENTIRE CEILING SHALL BE PAINTED IN OFFICES AND ENCLOSED AREAS ONLY. AREAS WHERE TILE PATCHING OCCURS ARE TO BE PAINTED U.O.N., AS INDICATED ON PLAN.
- 33. EXCEPT AS CALLED FOR ON THE DRAWINGS. SHOULD JOB CONDITIONS REQUIRE RELOCATION OF EXISTING TELEPHONE OR ELECTRICAL OUTLETS FOR ANY REASON, THE CONTRACTOR SHALL NOTIFY THE MSA FIELD REPRESENTATIVE FOR APPROVAL OF ALTERNATE LOCATION PRIOR TO THE START OF ANY
- 34. THE CONTRACTOR SHALL NOT DRILL HOLES INTO EXISTING SLABS OR STRUCTURAL MEMBERS FOR THE PURPOSE OF SUPPORTING ANY LOADS, UNLESS WRITTEN APPROVAL IS OBTAINED FROM THE ARCHITECT.
- 35. THE CONTRACTOR SHALL PROTECT THE PUBLIC OR TENANT SPACE BELOW FROM ANY DAMAGE RESULTING FROM FLOOR DRILLING OPERATION.
- 36. THE CONTRACTOR SHALL REPAIR OR REPLACE EXISTING CONSTRUCTION DAMAGE IN THE PERFORMANCE OF THIS CONTRACT AT NO COST TO THE
- 37. THE SPACE AROUND PIPES, DUCTS ETC., PENETRATING RATED WALLS, SHALL NOT EXCEED 1/2" AND SHALL BE PACKED SOLID WITH MINERAL WOOL OR APPROVED EQUAL AND BE CLOSED OFF BY LOSE FITTING METAL ESCUTCHEONS ON BOTH SIDES OF THE PARTITION AS REQUIRED BY LOCAL BUILDING CODE.
- 38. FIRESTOPPING SHALL BE AS REQUIRED BY LOCAL BUILDING CODE.
- 39. THE GENERAL CONTRACTOR SHALL LEVEL AND PATCH ALL FLOOR SLABS AS REQUIRED, TO THE SATISFACTION OF MSA AND FLOOR CONTRACTORS (I.E., TILE AND CARPET).
- 40. ALL H.M. FRAMES TO BE WELDED, ONE PIECE 16 GAUGE HOLLOW METAL FRAMES WITH SHOP PRIME FINISH AS PER BUILDING WORK LETTER. FRAMES TO BE FULL HEIGHT, OF THE CLEAR OPENING DIMENSION REQUIRED ON THE DOOR SCHEDULE.
- 41. H.M. DOORS TO BE FLUSH, 18 GAUGE, FULL
- 42. FRAMES SHALL BE INSTALLED PLUMB, STRAIGHT, AND TRUE WITH HORIZONTAL LINES LEVEL AND ALL VERTICAL LINES PLUMB. FRAMES SHALL BE SECURED RIGIDLY IN PLACE AND SHALL BE ANCHORED TO THE FLOORS, JAMBS AND HEADS IN AN APPROVED MANNER. ALL FRAMES SHALL BE BRACED UNTIL ADJACENT CONSTRUCTION HAS BEEN COMPLETED AND HAS ATTAINED SUFFICIENT STRENGTH TO MAINTAIN THE FRAMES IN POSITION.
- 43. FLUSH HOLLOW METAL DOORS SHALL BE MORTISED, REINFORCED, DRILLED AND TAPPED IN THE SHOP AS REQUIRED TO INSTALL THE FINISHED HARDWARE.
- 44. DOORS WHICH REQUIRE FIRE RESISTIVE RATING SHALL BE LABELED WITH THE SPECIFIED LABEL AS PER THE DOOR SCHEDULE.

- 45. THE GENERAL CONTRACTOR SHALL PROVIDE PROTECTION FOR ALL DOORS AND BUCKS TO PREVENT DENTING SCRATCHING OR MARRING OF THE FINISHED SURFACES DURING CONSTRUCTION PERIOD. SHOULD SUCH DAMAGE OCCUR, THE GENERAL CONTRACTOR SHALL BE REQUIRED TO REPLACE AT HIS SOLE COST AND EXPENSE ANY AND ALL DAMAGED DOORS AND BUCKS.
- 46. WALLBOARD USED IN SHOWERS AND BEHIND ALL SINK LOCATIONS SHALL BE "WONDERBOARD" OR
- 47. ALL WOOD DOORS SHOWN ON THE DOOR SCHEDULE SHALL BE FURNISHED AND INSTALLED BY THE GENERAL CONTRACTOR, OR AS SPECIFIED. HARDWARE FOR WOOD DOORS INSTALLED BY GENERAL CONTRACTOR, UNLESS OTHERWISE NOTED.

#### REFLECTED CEILING SPECIFICATIONS

- SUBCONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR ALL WORK AFFECTING CEILING (INCLUDING, BUT NOT LIMITED TO: DEMOLITION, MECHANICAL, ELECTRICAL, AND PLUMBING WORK).
- 2. ALL HVAC RETURN AIR GRILLES SHALL BE LOCATED IN THE CEILINGS. LOCATION SUBJECT TO MSA APPROVAL.
- 3. HVAC DIFFUSERS AND GRILLS ARE TO BE LOCATED TO CONFORM TO LIGHTING PLANS. KEEP SUCH EQUIPMENT CENTERED ON LIGHT PATTERN. ARCHITECT TO REVIEW HVAC SHOP DRAWINGS FOR DIFFUSER LOCATIONS. COLOR OF ALL METAL FINISHES TO MATCH CEILING COLOR.
- 4. CONTRACTOR SHALL PROVIDE ALL NECESSARY CUTTING, FRAME, OR BRIDGING FOR LIGHTING FIXTURES, AIR DIFFUSERS, RETURN GRILLES, ETC.
- 5. BLACK IRON CARRYING CHANNELS SHALL BE SECURELY SUPPORTED BY APPROVED HANGERS FASTENED TO THE OVERHEAD STRUCTURAL MEMBERS CHANNELS SHALL BE SPACED AS REQUIRED TO ADEQUATELY SUPPORT LIGHT FIXTURE AND THE CEILING ASSEMBLY AS PER LOCAL BUILDING CODE.
- 6. NEW CEILING TILES AS DETAILED ON DRAWINGS SHALL BE INSTALLED IN A TRUE AND EVEN PLANE, BUTT JOINTS TIGHTLY TOGETHER. INSTALL METAL EDGE MOLDINGS (CONTINUOUS) AS REQUIRED. COLOR FINISH TO MATCH TILE FINISH. SUBMIT TWO (2) SAMPLES EACH OF TILES AND EDGE MOLDING FOR ARCHITECT'S APPROVAL.
- CEILING IN CLOSETS SHALL BE OF THE SAME HEIGHTS AND CONSTRUCTION AS THAT OF ADJOINING SPACE, EXCEPT AS OTHERWISE NOTED
- 3. NEW CEILING HEIGHT SHALL BE AS NOTED ON

REFLECTED CEILING PLAN.

- 9. CEILING GRIDS SHOULD BE CENTERED IN EACH ROOM UNLESS NOTED OTHERWISE ON DRAWINGS.
- 10. DO NOT INSTALL FINISHED CEILING UNTIL ELECTRICAL WORK AND HVAC HAS BEEN COMPLETED. PRIOR TO CLOSING UP ANY CEILING, ALL PLENUM SYSTEM (HVAC PLUMBING AND ELECTRIC)
- SHALL BE INSPECTED AND WHERE REQUIRED, TESTED BY THE CONTRACTOR'S ENGINEERS, AND BY THE AUTHORITIES HAVING JURISDICTION TO INSURE THEIR PROPER INSTALLATION AND FUNCTION.
- 12. THE ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH WORK OF ALL OTHER TRADES. 13. THE GENERAL CONTRACTOR SHALL REPAIR AND/OR
- REPLACE ANY AND ALL CEILING TILES WHICH ARE REMOVED TO FACILITATE TELEPHONE INSTALLATION. 14. THE GENERAL CONTRACTOR WILL NOT BE ENTITLED TO EXTRAS FOR OPENING AND CLOSING ANY

CEILINGS BECAUSE OF TELEPHONE COMPANY AND/OR

15. ALL FLOORS SHALL BE EQUIPPED WITH LOCAL

SECURITY SYSTEMS INSTALLATION.

- BUILDING CODE APPROVED LIGHTED EXIT SIGNS. 16. ALL SWITCHES SHALL BE MOUNTED AT BUILDING STANDARD HEIGHT AND PROVIDED WITH COVER PLATES TO BE INSTALLED AFTER FINAL PAINTING AND WALL COVERING. SWITCHES SHALL BE MULTIPLE-GANGED WHERE MORE THAN ONE IS LOCATED.
- ELECTRICAL CONTRACTOR TO BE RESPONSIBLE FOR SWITCHING TO COMPLY WITH BUILDING STANDARD RESTRICTIONS.
- 18. THE GENERAL CONTRACTOR SHALL CHECK ALL CEILING HEIGHTS AND CEILING PLENUM CONDITIONS FOR CLEARANCE OF DUCTWORK, AND OTHER OBSTRUCTIONS TO ASSURE THE LOCATIONS OF THE FIXTURES AS SHOWN ON MSA'S DRAWINGS. ANY DISCREPANCIES WILL BE BROUGHT TO MSA'S ATTENTION IMMEDIATELY.
- 9. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL TEMPORARY LIGHTING AND POWER FOR ALL TRADES, AS REQUIRED DURING NORMAL WORK DAY.
- 20. WHERE BEAMS, PIPES AND/OR DUCTS OR OTHER CONSTRUCTION DETAILS PREVENT THE USE OF STANDARD RECESSED FLUORESCENT FIXTURES TO MATCH ADJACENT FIXTURE(S) SHALL BE USED. FIXTURE CUTS TO BE SUBMITTED TO MSA FOR APPROVAL PRIOR TO INSTALLATION.
- 21. ALL RECESSED FIXTURES SHALL BE SET FLUSH INTO ACOUSTIC TILE CEILINGS.
- 22. WHERE ELECTRICAL WORK IS SPECIFIED IN CABINETS, LAMPS AND FIXTURES ARE TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR AND ARE TO BE COORDINATED WITH ELECTRICAL CONTRACTOR.
- 23. FASCIAS OR ANY BREAK IN THE CEILING HEIGHTS CREATED BY THE INSTALLATION AND/OR ALTERATION OF HEATING, VENTILATION, AIR CONDITIONING OR MECHANICAL DUCTS, PIPING OR OTHER EQUIPMENT SHALL BE ERECTED WITH GYPSUM WALLBOARD ON FURRING CHANNEL. SEE REFLECTED CEILING PLAN FOR DETAIL DESIGNATION.
- 24. THE ELECTRICAL CONTRACTOR SHALL SUBMIT CUTS OF ALL FIXTURES BEFORE PROCEEDING WITH
- 25. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL TEMPORARY LIGHTING AND POWER FOR ALL TRADES, AS REQUIRED, DURING NORMAL WORK DAY.

### ELECTRIC, TELEPHONE & DATA SPECIFICATIONS

ARCHITECTURAL SPECIFICATIONS

- ALL ELECTRICAL AND TELEPHONE WORK SHALL CONFORM TO ALL APPLICABLE BUILDING CODES
- . THE ELECTRICAL CONTRACTOR SHALL INCLUDE AND COORDINATE ELECTRICAL WORK (INCLUDING, BUT NOT LIMITED TO, HVAC, FURNITURE, FURNITURE SYSTEMS, PARTITIONS AND DOOR).
- 3. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL WORK SHOWN ON THE ARCHITECTURAL DRAWINGS UNDER THIS CONTRACT. HE SHALL PROVIDE AND INSTALL ALL NECESSARY PARTS AND EQUIPMENT AS SPECIFIED, IMPLIED OR LEGALLY REQUIRED TO PRODUCE A PROPER AND GUARANTEED INSTALLATION.
- . THE GENERAL CONTRACTOR SHALL COORDINATE ALL WORK SHOWN ON ENGINEERING AND MSA DRAWINGS AND SHALL BE RESPONSIBLE FOR POINTING OUT ANY CONFLICTS OR OMISSIONS.
- . ALL BACK TO BACK OUTLETS IN ADJOINING ROOMS TO BE STAGGERED
- BE LOCATED AS DIMENSIONED ON MSA ELECTRICAL/TELEPHONE PLAN. SPECIAL ATTENTION SHOULD BE PAID TO ALL VISIBLE ELECTRICAL EQUIPMENT SUCH AS SWITCHES,

6. ALL ELECTRICAL, TELEPHONE RECEPTACLES SHALL

MECHANICS IN A FIRST CLASS MANNER. 8. WHERE MORE THAN ONE SWITCH OCCURS IN THE SAME LOCATION, THEY SHALL BE INSTALLED IN

GANG TYPE BOX UNDER ONE COMMON COVERPLATE.

OUTLETS, WHICH MUST BE INSTALLED BY COMPETENT

DUPLEX OUTLETS, COVERPLATES, AND FLOOR MOUNTED

- PROVIDE TELEPHONE OUTLETS (WHERE SHOWN ON "ELECTRICAL/TELEPHONE PLAN"), AND ALL NECESSARY CONDUIT RUNS TO TELEPHONE EQUIPMENT AS REQUIRED.
- IO. ALL OUTLETS ON COLUMNS WILL BE CENTERED ON FACE SHOWN, AS PER TYPICAL DETAIL, UNLESS OTHERWISE NOTED.

FOR TENANT'S FUTURE USE.

- ALL ELECTRICAL AND TELEPHONE WIRING CONDUIT SHALL BE CONCEALED IN DRYWALL, MASONRY
- PARTITION, AND/OR CEILING. 2. ELECTRICAL CONTRACTOR SHALL LABEL AND IDENTIFY ALL CIRCUITS ON THE ELECTRICAL PANELS
- 3. MAINTAIN CONTINUOUS SERVICES ON FEEDERS, CIRCUITS, AND OUTLETS AFFECTED BY THE CHANGES, EXCEPT WHERE THE OWNER WILL PERMIT OUTAGE FOR A SPECIFIED TIME. WHEN A SHUTDOWN OF ANY OPERATION SYSTEM IS REQUIRED, CONTRACTOR SHALL DO SO ONLY AFTER NOTIFICATION OF, AND APPROVAL OF, THE OWNER, COORDINATE ACTIVITIES SO THAT THE SHUTDOWN OF FACILITIES IS KEPT TO A MINIMUM.
- ELECTRICAL CONTRACTOR SHALL CONFIRM TELEPHONE INSTALLATION REQUIREMENTS AS REQUIRED BY LOCAL TELEPHONE COMPANY, AS WELL AS BY THE TENANTS COMMUNICATION SYSTEM.
- 5. WHERE ELECTRICAL WORK IS SPECIFIED IN CABINETS, LAMPS AND FIXTURES ARE TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR. CUTOUTS FOR SWITCHES, OUTLETS AND WIRING DEVICES FOR SAME, AS REQUIRED, ARE BY THE CABINET CONTRACTORS AND ARE TO BE COORDINATED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
- 6. NO FLOOR OR WALL OUTLETS SHALL BE CONNECTED TO LIGHTING CIRCUITS.
- CERTAIN REMOVALS AND RELOCATIONS OF EXISTING ELECTRICAL WORK WILL BE NECESSARY FOR THE SATISFACTORY PERFORMANCE OF THE GENERAL WORK. ALL EXISTING CONDITIONS CANNOT BE COMPLETELY DETAILED ON THE DRAWINGS. SURVEY THE SIGHT AND INCLUDE ALL CHANGES IN MAKING UP THE WORK PROPOSAL.
- 3. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL TEMPORARY LIGHTING FOR ALL TRADES AS
- I. ALL SLEEVE INSTALLATION SHALL BE PACKED TIGHTLY WITH FIRE-RETARDANT ROPE TO THE SLAB. WHERE SLEEVES ENTER INTO A RATED SPACE OR THROUGH RATED CONSTRUCTION THE SPACE AROUND THE SLEEVE SHALL BE TIGHTLY PACKED WITH FIRE-RETARDANT ROPE AND FITTED TIGHTLY MENTAL ESCUTCHEON PLATES.
- 20. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL TEMPORARY LIGHTING FOR ALL TRADES, AS REQUIRED.

### FINISH SPECIFICATIONS

#### PAINTING & WALL COVERING

- THE CONTRACTOR SHALL REMOVE ALL WALLCOVERING IF EXISTING, AND PREPARE WALLS FOR PAINTING AND NEW WALLCOVERING UNLESS OTHERWISE NOTED.
- 2. ALL WALLS SHALL BE PROPERLY PREPARED WITH 4 COATS OF SPACKLING AND SANDED FOR PAINTING WITH EGGSHELL FINISH PAINT.
- 3. PAINT AND W/C CONTRACTOR TO VERIFY ALL WALLS AS FULLY PREPARED TO RECEIVE APPROPRIATE WALL TREATMENT BEFORE THE COMMENCEMENT OF ALL WALL FINISHING WORK.
- 4. ALL PAINTS SHALL BE APPLIED IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS FOR THE PARTICULAR SURFACE. PAINTS SHALL BE OF THE TYPE SPECIFICALLY MANUFACTURED FOR APPLICATION TO THE SURFACE TO WHICH IT IS TO BE APPLIED.
- 5. PAINTS SHALL BE MANUFACTURED BY SHERWIN WILLIAMS, OR AN APPROVED EQUAL.
- 6. ALL PAINT SHALL BE APPLIED WITH GOOD, CLEAN BRUSHES, OR APPROVED ROLLERS. (SHORT NAP FOR LOW TEXTURE. PAINT SHALL BE EVENLY SPREAD, AND WHEN BRUSHES ARE USED THEY SHALL BE THOROUGHLY BRUSHED OUT. THE WORK SHALL BE SO PERFORMED AS TO AVOID DAMAGE TO OTHER SURFACES. ANY DAMAGE TO ADJACENT SURFACES SHALL BE REPAIRED IN MANNER SATISFACTORY TO THE ARCHITECT. FINISH COATS SHALL BE SMOOTH AND FREE FROM RUNS, SAGS, HOLIDAYS, OR OTHER DEFECTS. FINISH SURFACES SHALL BE UNIFORM IN SHEEN, COLOR AND TEXTURE. EACH COAT OF PAINT SHALL BE OF SUFFICIENT THICKNESS TO COMPLETELY COVER THE PREVIOUS COAT OR SURFACE.
- . WALLS SHALL INCLUDE SURFACES FROM FLOOR TO CEILING, INCLUDING PILASTERS, FASCIAS, JAMBS, BUCKS, REVEALS, RETURN LIGHT COVERS, AND ALL OTHER VERTICAL SURFACES.
- 8. ALL WINDOW POCKETS SHALL BE PAINTED TO MATCH ROOM COLOR.
- 1. PRIOR TO PAINTING, THE CONTRACTOR SHALL REMOVE OR PROTECT ALL FINISHED SURFACES, HARDWARE, SWITCH AND OUTLET PLATES, ETC., REPLACING AND UNCOVERING THE SAME WHEN PAINTING HAS BEEN COMPLETED.
- IO. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE PROPER PROTECTION AGAINST DAMAGE TO EXISTING FURNITURE, ADJACENT FINISHED WORK, AND FLOORING. PARTICULAR ATTENTION SHALL BE GIVEN TO AREAS WHERE CARPET IS INSTALLED AND CONSTRUCTION WORK IS INVOLVED OR NOT COMPLETED.
- . ALL PAINT SURFACES SHALL RECEIVE I PRIME COAT AND 2 FINISH COATS AS INDICATED ON PLAN.
- 12. ALL METAL SURFACES, EXCEPT PARTITIONS, SHALL HAVE I PRIME COAT AND 2 FINISH COATS OF SEMI-GLOSS ENAMEL OF COLOR INDICATED.
- 13. WHERE DOORS OR BUCKS ARE INDICATED TO BE PAINTED, IT SHALL BE WITH 2 COATS OF SEMI-GLOSS ENAMEL, BOTH SIDES, UNLESS OTHERWISE
- 14. THE PAINTING CONTRACTOR SHALL REPAIR AND RETOUCH ALL PAINTED SURFACES AS REQUIRED UPON COMPLETION OF THE FURNITURE, FURNITURE SYSTEMS, EQUIPMENT INSTALLATION AND FLOOR COVERING INSTALLATION.
- 5. THE CONTRACTOR SHALL, UPON COMPLETION, REMOVE ALL ADHESIVE AND PAINT FROM WHERE IT WAS SPILLED, SPLASHED OR SPLATTERED ON SURFACES INCLUDING LIGHT FIXTURES, DIFFUSERS, REGISTERS, SLAB FITTINGS, ETC., AND SHALL LEAVE ALL SURFACES FREE OF DAUBS, SPOTS AND/OR SPLATTERS. ANY WORK WHICH CANNOT BE CLEANED SHALL BE REPLACED AT THIS CONTRACTOR'S
- 16. THE CONTRACTOR SHALL EXAMINE ALL AREAS OF CONSTRUCTION AFTER COMPLETION OF WORK BY ALL TRADES (INCLUDING TELEPHONE INSTALLATION, FLOORING, ETC.), AND SHALL TOUCH UP ALL NECESSARY PAINTING AND/OR PATCHING WHICH IS APPROVED BY MSA.
- 7. WHERE WOOD SURFACES ARE TO BE PAINTED, WOOD IS TO BE PROPERLY SEALED, SANDED, AND PRIMED BEFORE FINISH COATS OF SEMI-GLOSS PAINT
- 18. THE GENERAL CONTRACTOR SHALL FURNISH ALL WALLCOVERING AS NOTED ON DRAWINGS.
- 19. THE GENERAL CONTRACTOR SHALL FURNISH ALL WALLCOVERING IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION. HE SHALL ASSUME TOTAL RESPONSIBILITY FOR A SATISFACTORY INSTALLATION. ALL SEAMS MUST BE CLOSELY AND NEATLY BUTTED AND ALIGNED TO THE WALLCOVERING PATTERN AND ALL AIR POCKETS AND BUBBLES ELIMINATED. THERE MUST BE A FIRM BOND ON OF THE WALLCOVERING TO THE UNDERLYING WALL SURFACE. EXCEPT WHERE INDICATED, ALL SEAMS MUST BE A MINIMUM OF 4" FROM ALL INSIDE AND OUTSIDE CORNERS AND NO HORIZONTAL SEAMS WILL BE ACCEPTED. ALL FINISHED SURFACES MUST BE CLEANED AS THE WORK PROGRESSES AND ALL EXCESS PASTE AND ADHESIVE MUST BE REMOVED UPON COMPLETION OF THE WORK.
- 20. ALL WORKMANSHIP WHICH IS NOT JUDGED TO BE FIRST QUALITY BY ARCHITECT WILL NOT BE ACCEPTED AND WILL BE REDONE AT THIS CONTRACTOR'S EXPENSE.

#### FLOOR TILE

- ALL CARPET, BASE AND ALL SADDLES SHALL BE BY CARPET CONTRACTOR EXCEPT AS OTHERWISE
- 2. ALL 4" VINYL/RUBBER BASE IS AS PER SPECIFICATIONS. PROVIDE STRAIGHT BASE IN CARPETED AREAS AND COVE IN ALL TILE AREAS UNLESS OTHERWISE NOTED.
- 3. SPACES BEING SURFACED SHALL BE CLOSED TO TRAFFIC AND OTHER WORK DURING THE LAYING OF RESILIENT FLOORING AND MARBLE FLOOR.

#### 4. TILE SHALL BE LAID IN SQUARE PATTERN WITH COURSES PARALLEL TO WALLS, UNLESS OTHERWISE INDICATED ON DRAWINGS. THE TILE SHALL BE SECURELY CEMENTED AND SHALL BE LAID WITH TIGHT BUTT JOINTS. THE ADHESIVE SHALL BE INSTALLED

IN STRICT ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. 5. ALL NEW FLOOR TILE IS TO BE INSTALLED BY THE CARPET CONTRACTOR AND SHALL BE 1/8" THICK

VCT. UNLESS OTHERWISE INDICATED.

- 6. ALL WORKMANSHIP SHALL BE OF THE BEST QUALITY AND WHEN THE WORK IS COMPLETED, IT SHALL BE FREE FROM BUCKLES, BUBBLES, OPEN JOINTS, OR OTHER IMPERFECTIONS. SEAMS SHALL BE KEPT IN ACCURATE ALIGNMENT ALONG BOTH COORDINATES. TILE HAVING CHIPPED OR ROUNDED CORNERS WILL BE REJECTED, AND IF LAID, SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE TILE. (ALL WORKMANSHIP THAT IS NOT JUDGED TO BE FIRST QUALITY BY ARCHITECT WILL NOT BE
- . BASE SHALL BE INSTALLED STRAIGHT AND TRUE, ON SURFACES THAT ARE PROPERLY CLEANED, DRY AND FREE FROM ALL FOREIGN MATTER. BASE SHALL NOT BE INSTALLED UNTIL WALLCOVERING AND PAINTING ARE COMPLETED.

ACCEPTED AND WILL BE REPLACED AT THIS

CONTRACTOR'S EXPENSE.

- 8. JOINTS IN VINYL BASE SHALL NOT OCCUR CLOSER THAN 6" FROM CORNERS AND SHALL BE BUTTED TIGHTLY TOGETHER AND LEVEL ALONG TOPS. CORNERS SHALL BE HEATED TO OBTAIN TIGHT BENDS WITHOUT WHITENING OF MATERIAL.
- . THE GENERAL CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE PROTECTION FOR ALL RESILIENT FLOORING WORK FOR THE DURATION OF THE CONTRACT AND REMOVE ALL PROTECTION WHEN DIRECTED BY THE ARCHITECT.
- IO. CARPET CONTRACTORS MUST REMOVE HIS DEBRISAT THE END OF EACH DAY SO AS NOT TO INTERFERE WITH OTHER WORKERS.
- . CARPET CONTRACTOR SHALL CLEAN NEW BASE AFTER INSTALLATION WHERE REQUIRED. 12. THE GENERAL CONTRACTOR IS RESPONSIBLE TO VACUUM CARPETED AREAS AFTER COMPLETION OF CARPET INSTALLATION AND TO MAINTAIN AND PROTECT ALL FINISHED FLOORCOVERING UNTIL THE JOB IS COMPLETED.

#### GENERAL FLOOR FINISH NOTES

- THE CONTRACTOR SHALL FLASH PATCH ALL CRACKS, HOLES OR OTHER IMPERFECTIONS (PROJECTIONS SHALL BE REMOVED AND PATCHED) TO PROVIDE A CONTINUOUS SMOOTH SURFACE FOR HIS
- 2. WHERE A CHANGE OF FLOORING OCCURS AT DOOR, THE LINE OF TRANSITION SHALL BE THE CENTER LINE OF THE DOOR AND A RUBBER REDUCER STRIP TO MATCH THE BASE SHALL BE PROVIDED AS REQUIRED BY ANY CHANGE IN FLOOR ELEVATION UNLESS OTHERWISE NOTED.
- 3. ALL CLOSETS RECEIVE THE SAME FLOORING AS THE ADJACENT AREA UNLESS OTHERWISE NOTED.
- 4. UPON COMPLETION, ALL WORK SHALL BE CLEANED Y THE CONTRACTOR RESPONSIBLE FOR THE INSTALLATION, REMOVING ALL SPOTS OF ADHESIVE AND SURFACE STAINS AND ALL SCRAPS. CARTONS AND CONTAINERS SHALL BE REMOVED FROM THE
- BUILDING. 5. THE GENERAL CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING CARPET, PADDING, ETC., AS REQUIRED TO CONFORM WITH NEW PLANS.

- MARBLE/CERAMIC TILE MARBLE CONTRACTOR TO FURNISH AND INSTALL MARBLE IN AREAS AS INDICATED ON THE FINISH PLAN. SEE THIS PLAN FOR MARBLE AND GROUT SPECIFICATIONS.
- 2. MARBLE FLOOR TILE TO BE SET AS PER THE COUNCIL OF AMERICA METHOD P143-89 CEMENT MORTAR BOND. CONTRACTOR TO MAKE FINAL DETERMINATION AS TO THE PROPER METHOD OF INSTALLATION ONCE THE AREA HAS BEEN UNCOVERED.
- 3. ALL MARBLE TO BE SAW CUT.
- 4. MARBLE CONTRACTOR TO TAKE PROPER PROTECTIVE MEASURES UNTIL TILED AREA IS TURNED OVER TO OWNER.

# MILLWORK SPECIFICATIONS

- ALL WORK TO BE DONE IN FULL ACCORDANCE WITH A.W.I. GUIDELINES AND SPECIFICATIONS (LATEST ISSUE) FOR PREMIUM QUALITY WORK.
- 2. CONTRACTOR TO COORDINATE AND WORK WITH CABINET WORKER IN COORDINATING ALL INSTALLATION OF CABINETS. CONTRACTOR TO SUPPLY ELECTRIC AND PLUMBING HOOK-UPS TO ALL CABINETS AS REQUIRED AND COORDINATE WIRING WITH ELECTRICIAN AND CABINETMAKER.
- 3. MILLWORK SUBCONTRACTOR IS RESPONSIBLE FOR FIELD MEASUREMENT AND VERIFICATION OF ALL DIMENSIONS. ANY DISCREPANCIES OR ADJUSTMENTS SHOULD BE DISCUSSED WITH ARCHITECTS BEFORE FABRICATION.

CABINETRY INTERIORS TO BE PLASTIC LAMINATE.

OTHERWISE. ARCHITECT TO SPECIFY COLOR, UNLESS

DEGREES BREAKAWAY HINGES, SELBY OR APPROVED

ARCHITECT TO SPECIFY COLOR, UNLESS NOTED

- OTHERWISE NOTED-SEE CONTRACT DOCUMENTS. 5. CABINETRY HINGES TO BE CONCEALED BREAKAWAY HINGES (UNLESS OTHERWISE NOTED). MINIMUM OF TWO PER DOOR. CABINET DOORS TO HAVE 180
- 5. ALL DRAWERS SLIDES TO FULL EXTENSION HEAVY DUTY SLIDES BY GRACE, GRANT SELBY OR APPROVED
- MILLWORK CABINETRY CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL BEFORE FABRICATION.

RECEIVE PLYWOOD SUBSTRATE.

3. ALL HORIZONTAL MILLWORK SURFACES SHALL

EQUAL.

- 9. CABINETRY CONTRACTORS TO VERIFY WITH OWNER AND ARCHITECT THE SIZE AND TYPE OF ALL EQUIPMENT BEING BUILT INTO CABINETRY. CONTRACTOR TO APPROVE ACCESS TO ALL EQUIPMENT. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR AND AUDIO CONSULTANT WHEN NECESSARY FOR RUNNING OF ALL WIRE THROUGH CABINETS
- BEFORE COMPLETION. O. REVIEW PLASTIC LAMINATE JOINING WITH ARCHITECT. JOINTS TO LINE UP WITH DOORS AND/OR OPENINGS, NOT RANDOMLY.
- THE CABINETMAKER IS RESPONSIBLE TO PROVIDE TEMPLATES OF COUNTER TOP WHETHER IT IS MIRROR. GLASS MARBLE, GRANITE, ETC., BY OTHERS.

### **ABBREVIATIONS**

CURTN. CLOS./CL CAB.

DEPT.
DET
DIM
DN
DR
DR
DWG/DRW
D.F.

E.A.
ELEC.
EL/ELEV.
ENCL.
EQUIP.
EQ.
EXH.
EXIST.
EXP.
EXT.
E.J.
E.M.C.

FIN. FL. FTNG FT. F.D. F.E.C. F.F./FIN.FL.

GALV. GA.

DEPARTMENT DETAIL DIMENSION

ENCLOSURE EQUIPMENT

EQUAL
EQUAL
EXHAUST
EXISTING
EXPANSION
EXTERIOR
EXPANSION JOINT
ELECTRIC WATER COOLER

FLOOR
FOOTING
FOOT / FEET
FLOOR DRAIN
FIRE EXTINGUISHER CABINET
FINISHED FLOOR
FIRE HOSE CABINET
FIREPROOF

FIRE RATED FIREPROOF SELF-CLOSING

GENERAL CONTRACTOR

HIGH
HOLLOW METAL
HIGH POINT
HANDRAIL
HOT WATER HEATER
HEATING VENTILATION
AIR CONDITIONING

INTERMEDIATE INSULATION INTERIOR

JOINT JANITOR

LABORATOR'

POUND LEADER LINEAR FEET

LIGHT LOUVER LOW POINT LAVATORY LIGHT

GALVANIZED GAUGE/GAGE

HARDWARE HEXAGONAL HORIZONTAL HOURS HEIGHT HIGH

GL. GLASS GYP. BD. GYPSUM BOARD

STREET SUB-CONTRACTOR SUSPENDED

THICK THICKNESS TYPICAL TREADS TOP OF TOP OF CONCRETE TOP OF SLAB TUBULAR STEEL

UNDERWRITER'S LABORATORY UNLESS OTHERWISE NOTED

VERTICAL VERIFY IN FIELD VISION PANEL VINYL WALL COVERING

WIDE FLANGE

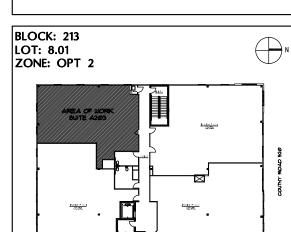
WOOD
WATERPROOFING
WEIGHT
WEST
WIDTH
WROUGHT IRON

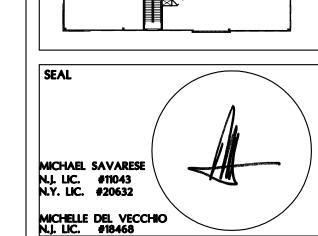
WORK POINT
WITH
WITHOUT
WELDED WIRE MESH
WATER CLOSET

**TERRAZZO** 



PARTITION
PIECES
PACKAGE
PLATFORM
PLATE
PANEL
PRESSURE
PROJECTION
POINT
PROPERTY LINE
PRESSURE REATED LUMBER
PRESSED METAL
POUNDS PER SQ. INCH
POLYVINYL CHLORIDE
PLASTIC LAMINATE **ISSUES** DATE: DESCRIPTION QUARRY TILE FOR BID 11/16/2017 RADIUS ROAD REINFORCED REQUIRED REVISION **REVISIONS** DESCRIPTION SCHEDULE SECTION SECTION
SERVICE SINK
SHEET
SIMILAR
SPECIFICATIONS
SQUARE
STATION STEEL STORAGE STRUCTURAL





DRAWN BY 890-1701 SPK

ARCHITECTURAL

**SPECIFICATIONS** 

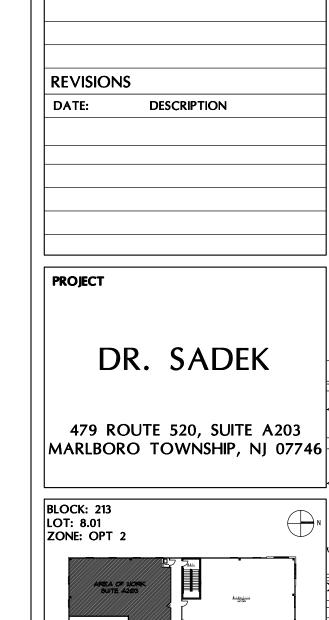
11/1/2017

SHEET TITLE:

**BSCAN/ APPLICATION NO.:** 

AS NOTED

AS-100.00 | 2 of X



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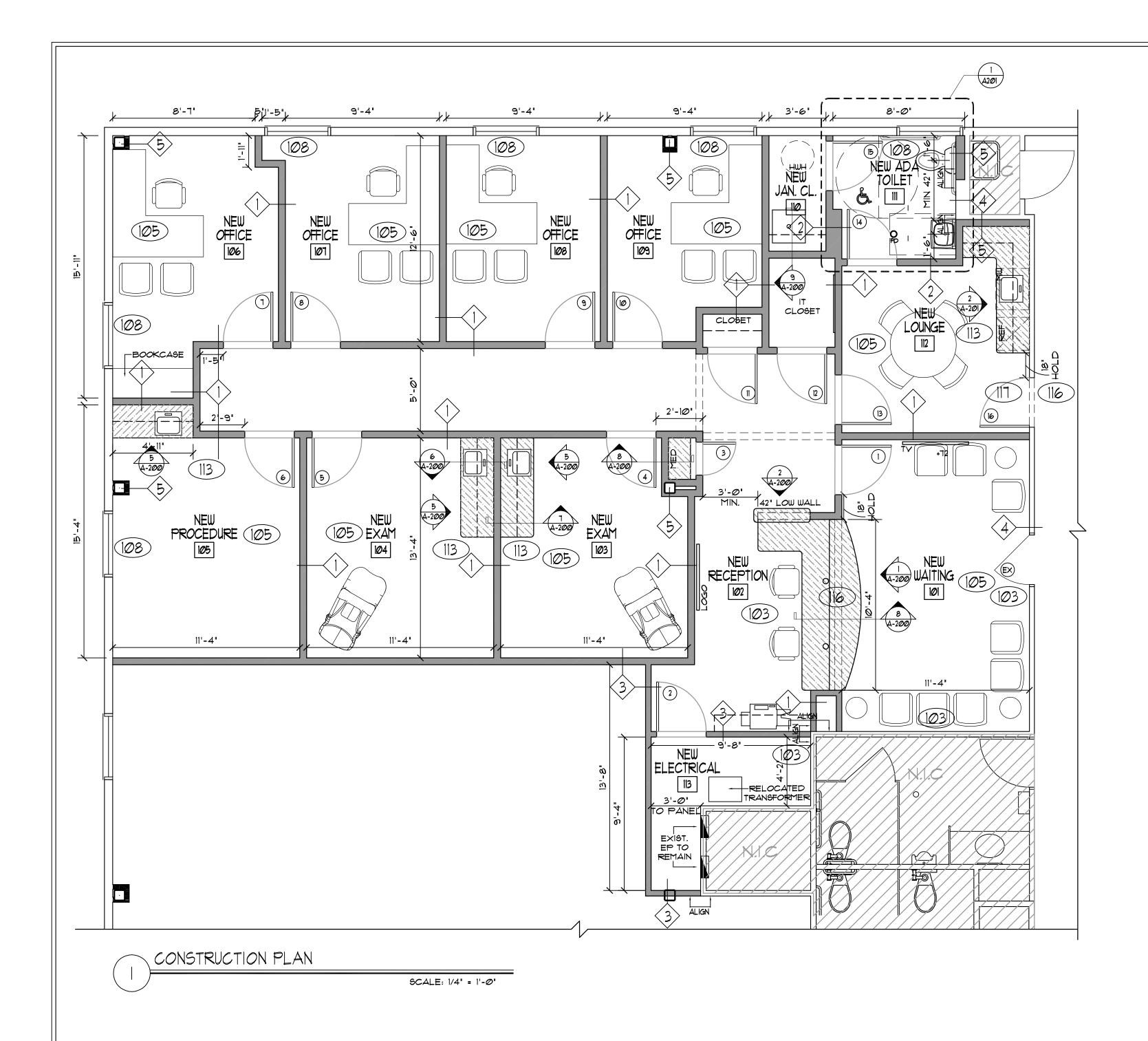
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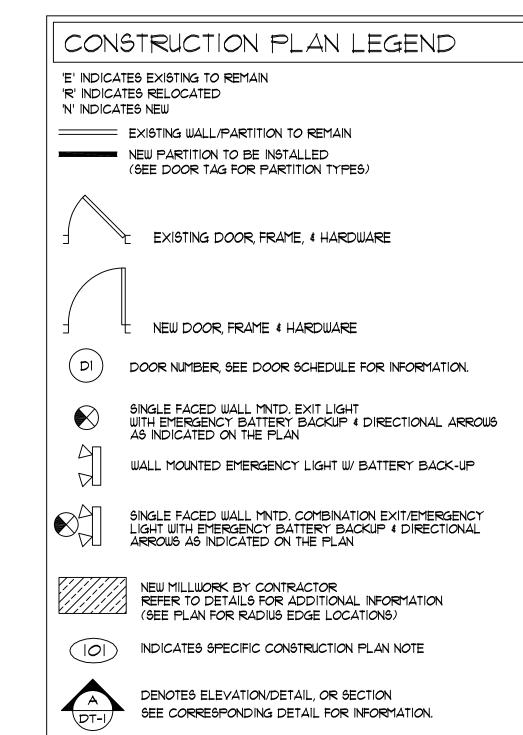
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DETAIL SYMBOL, SEE CORRESPONDING DRAWING

- DRAWING \*

### CONSTRUCTION PLAN NOTES

- 100 SEE GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL INFO.
- 101 CONTRACTOR TO BRING TO ARCHITECT'S ATTENTION ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, AND FIELD CONDITIONS, PRIOR TO COMMENCEMENT OF WORK.
- 102 SEE A-200 FOR PARTITIONS DETAIL.
- (103) ALL DIMENSIONS FOR EXISTING CONDITIONS TO BE VERIFIED IN FIELD.
- EXISTING LIFE SAFETY DEVICES TO REMAIN, PROTECT FOR DURATION OF CONSTRUCTION
- (105) ALL NEW FURNITURE TO BE PROVIDED BY OWNER GC TO COORDINATE DELIVERY AND INSTALLATION
- 106 G.C. SHALL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING FIRE-RATINGS AT EXISTING DEMISING WALLS AND COLUMNS. G.C. SHALL ALSO RESTORE ALL RATINGS IF COMPROMISED BY DEMOLITION/CONSTRUCTION ACTIVITY.
- 107 G.C. SHALL PROVIDE A DETAILED POST-CONSTRUCTION CLEANING.
- ALL EXISTING EXTERIOR WINDOWS SHALL REMAIN. PATCH EXISTING SILLS, JAMBS & FINISHED DRYWALL AT SILLS, HEADERS AND JAMBS AS REQUIRED
- PROVIDE NEW WHITE ACROYYN @ NEW JANITORS CLOSET TO 42" AFF. PROVIDE (2) LAMINATE SHELVES,
- 110 G.C. SHALL BE RESPONSIBILE FOR PROVIDING & INSTALLING BATHROOM DOOR SIGNAGE. REFER TO DETAILS FOR ADDITIONAL INFORMATION.

MECHANICAL/ PLUMBING PIPES UNLESS OTHERWISE NOTED IN DRAWING.

- 111 ALL EXPOSED MILLWORK CORNERS SHALL RECEIVE RADIUS EDGE TREATMENT
- 112 INSTALL ANY REQUIRED FURRING TIGHT TO ALL COLUMNS, WALLS &
- (113) CONTRACTOR TO PROVIDE BLOCKING IN WALL (OR CLG) FOR MILLWORK, TELEVISIONS, WRITING SURFACES, ETC.
- 114 PROVIDE NEW WATERPROOF MEMBRANE BELOW NEW FINISHED FLOOR AT WET AREA. SEE A-200
- 115 PROVIDE ACCESS PANEL AS REQUIRED FOR NEW PLUMBING AND RISER FIELD LOCATE PANEL TO ALLOW ACCESS PER EXISTING
- AND NEW PLUMBING. PANEL FINISH TO MATCH ADJACENT. PROTECT FINISHED WALL SURFACE. PEEL BACK AND RE-USE
- NEW FLOOR SADLE TO MATCH BUILDING STANDARD



MICHAEL SAVARESE ASSOCIATES ARCHITECTS

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email msassc@msassc.com

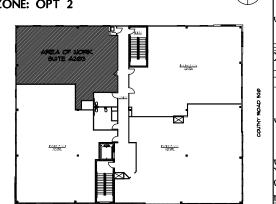
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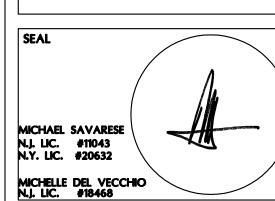
PROJECT

DR. SADEK

479 ROUTE 520, SUITE A203 MARLBORO TOWNSHIP, NJ 07746

BLOCK: 213 LOT: 8.01 ZONE: OPT 2





SHEET TITLE:

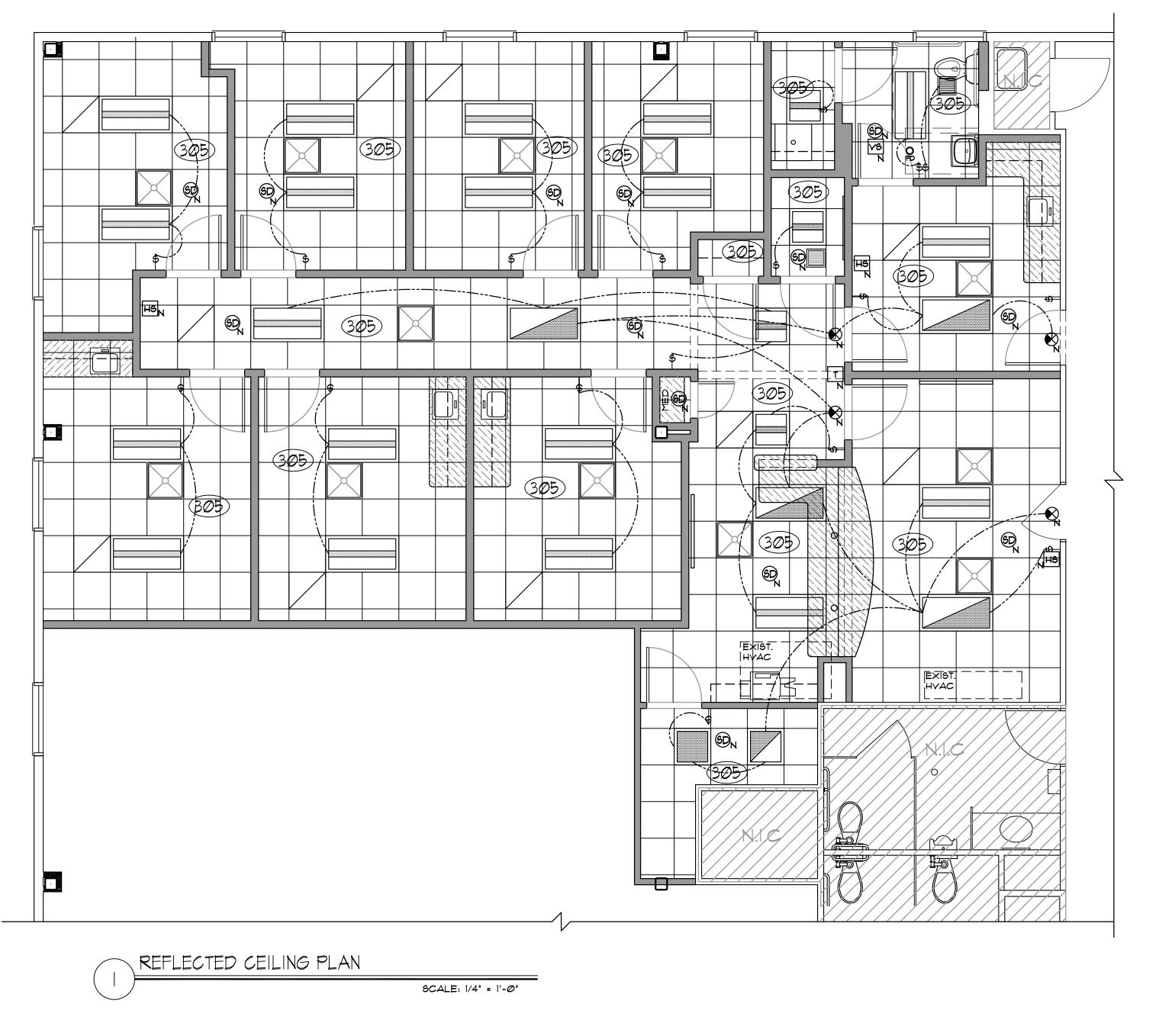
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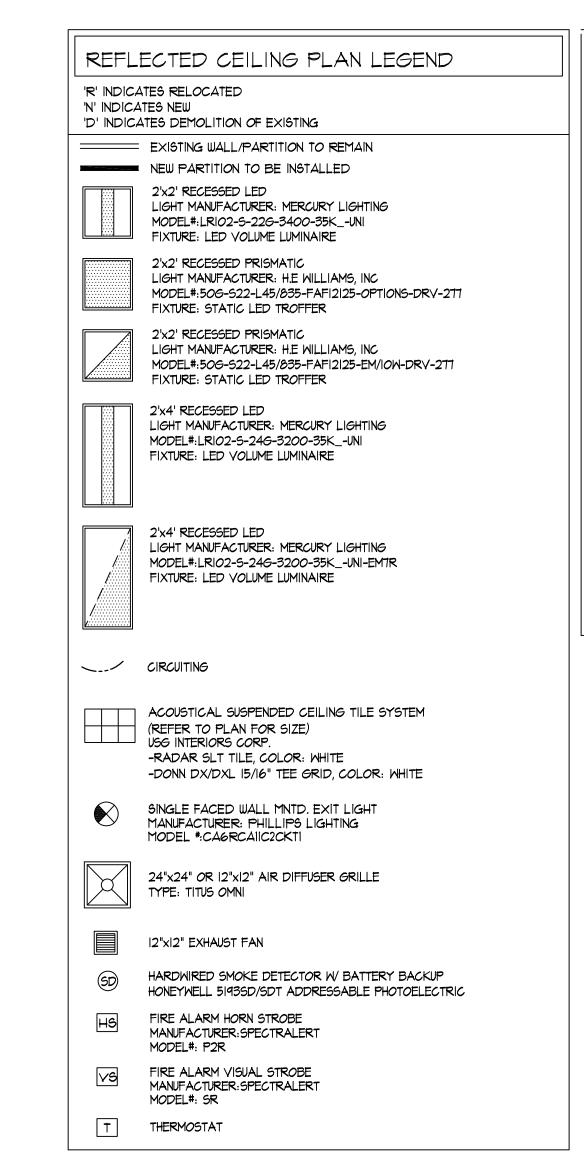
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BSCAN/ APPLICATION NO.:

A-100.00

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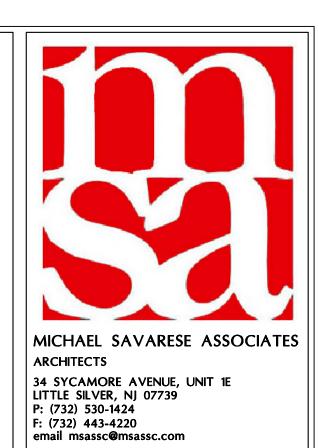






- 300. REFER TO GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 301. CONTRACTOR TO BRING TO ARCHITECT'S ATTENTION ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS AND FIELD
- CONDITIONS PRIOR TO COMMENCEMENT OF WORK.

  302 ARCHITECTURAL PLANS TAKE PRECEDENCE IN REGARDS
- TO LIGHT FIXTURE LOCATION & QUANTITY.
- 303. NEW LIGHTING FIXTURE AND ASSOCIATED WIRING THROUGH OUT, SEE LEGEND FOR SPECIFICATION
- ALL CEILING HEIGHTS SHALL BE 8'-0" A.F.F.
- GOS CEILING GRID TO BE CENTERED IN ROOM UNLESS OTHERWISE NOTED ON THE PLAN
- SWITCHES TO BE LEVITON DECORA. FACE PLATES FOR SWITCHES AND OUTLETS TO BE WHITE
- (30) REFER BACK TO A-300 FOR ADDITIONAL MEP INFORMATION
- 308 G.C. TO BE RESPONSIBLE FOR HVAC BALANCING, OWNER & ARCH TO BE PROVIDED W/ REPORT.
- 309 GC TO COORDINATE THE ROUGH INSTALL OF MUSIC SPEAKER SYSTEM BY TENANT'S VENDOR WHILE CEILING IS STILL OPEN. MUSIC VENDOR TO MOUNT CENTRAL STATION IN RECEPTION
- 310 ALL NEW ELECTRICAL WIRING THROUGHOUT SHALL BE MEDICAL
- G.C. TO BE RESPONSIBLE FOR TURN KEY SPRINKLER SYSTEM, INCLUDING INSTALLATION, INSPECTIONS, SIGN-OFFS AND SYSTEM CALCULATION



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email msassc@msassc.com

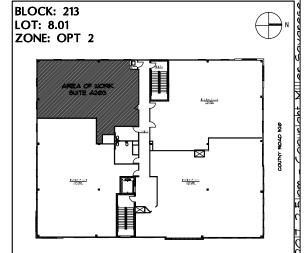
P: (646) 957-6031

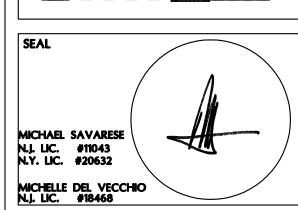
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11/16/2017	FOR BID	OR BID
REVISIONS	;	
DATE:	DESCRIPTION	DESCRIPTION
DATE:	DESCRIPTION	DESCRIPTION
DATE:	DESCRIPTION	DESCRIPTION

DR. SADEK

PROJECT

479 ROUTE 520, SUITE A203 MARLBORO TOWNSHIP, NJ 07746



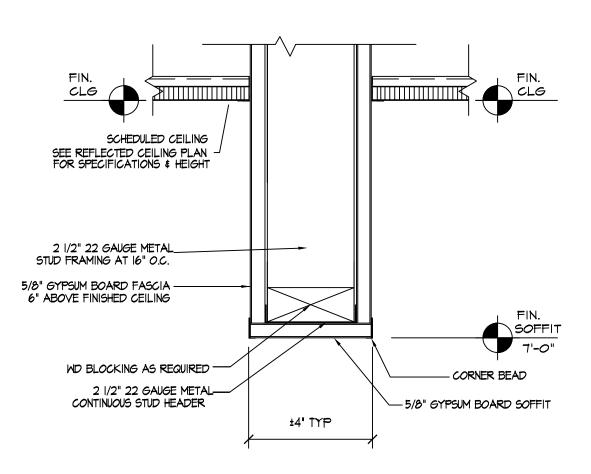


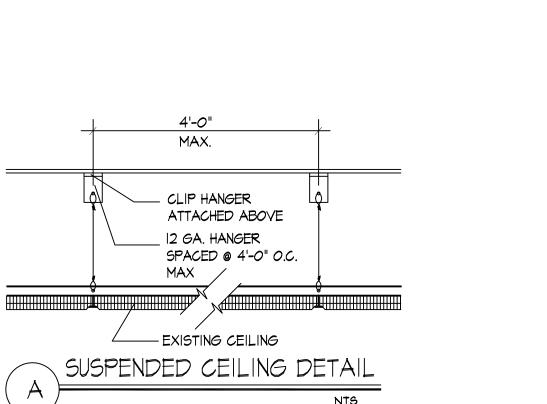
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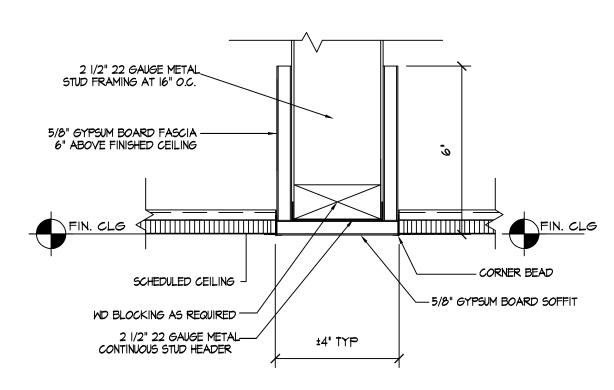
JOB NO.:	DRAWN BY
890-1701	SPK
SCALE AS NOTED	11/1/2017

BSCAN/ APPLICATION NO.:

SHEET NO. A - 101.00 PAGE 4 of X

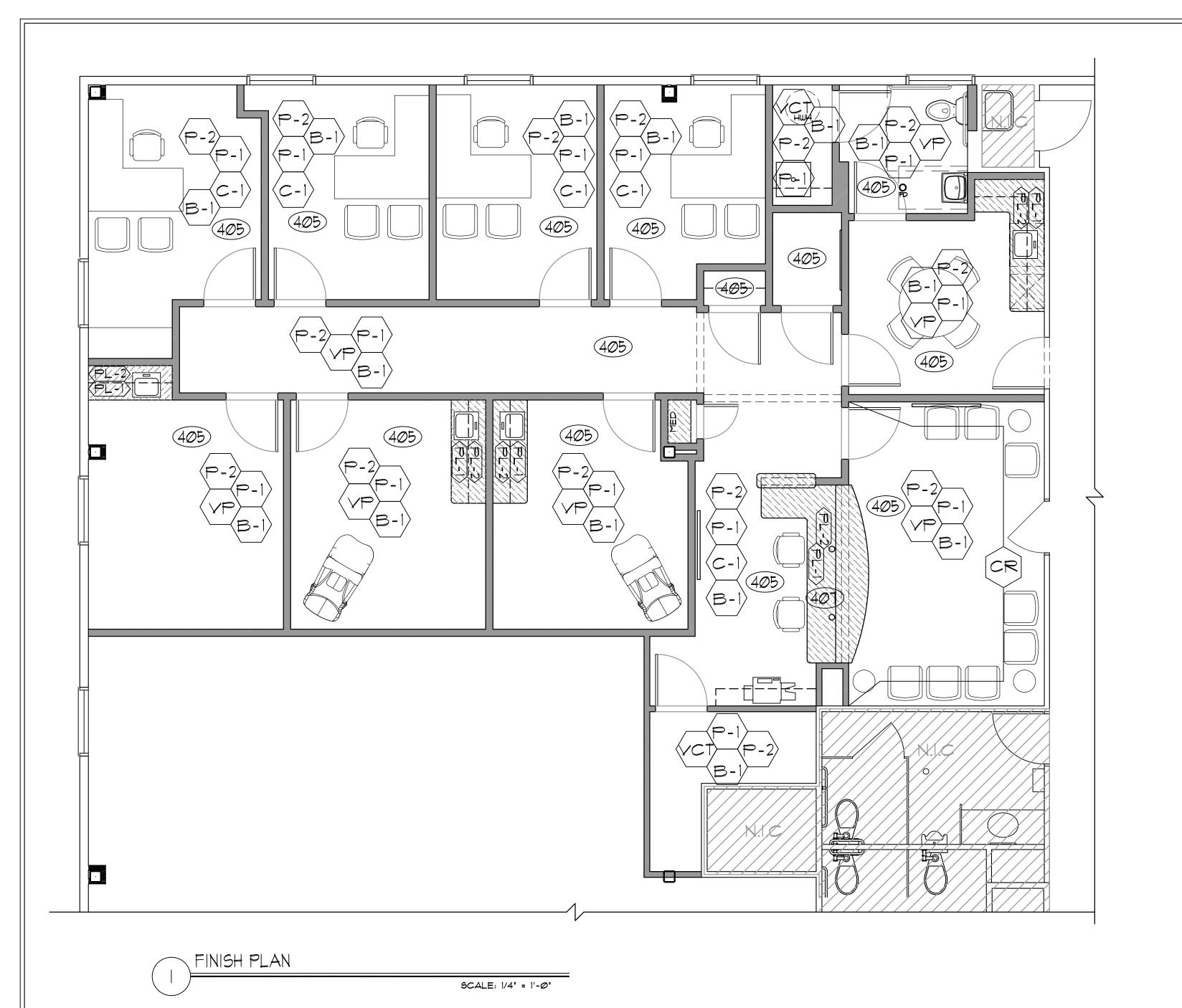






B TYP. CEILING BREAK DETAIL

C TYP. TRIMMED OPENING DETAIL



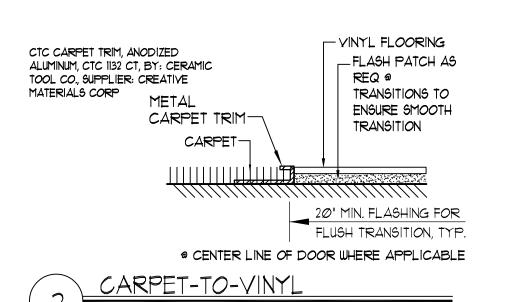
#### FINISH NOTES

- 401. SEE GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 402. CONTRACTOR TO BRING TO ARCHITECT'S ATTENTION ANY
- DISCREPANCIES BETWEEN DRAWINGS SPECIFICATIONS AND FIELD CONDITIONS, PRIOR TO COMMENCEMENT OF WORK.
- 403 G. C. SHALL FLASH PATCH SUBFLOOR TO PROVIDE LEVEL SURFACE WITHIN 1/8" VARIATION PER FOOT PRIOR TO INSTALLATION OF FLOOR FINISHES.
- 404. ALL FLASH PATCH LESS THAN 1/8" BY CARPET CONTRACTOR. ALL OTHER FLOOR PATCHING AS CAUSED BY REMOVALS OR EXISTING CONDITIONS BY GENERAL CONTRACTOR.
- 405. G.C. TO PREPARE FLOORS AND PROVIDE UNDERLAYMENT TO RECEIVE NEW FINISH AS REQUIRED BY MANUFACTURER. ALL FLOORS SHALL BE LEVELED AS REQ'D. PRIOR TO INSTALLATION OF NEW DECORATIVE FINISHES AS FOLLOWS: CONCRETE FLOORS SHALL RECEIVE ARDEX SELF LEVELING. WOOD FLOORS SHALL RECEIVE REVOLUTION PLY (MANUFACTURED BY PATRIOT TIMBER)
- 406 PROVIDE SCHLUTER TRANSITION STRIPS OR MARBLE SADDLES AS REQUIRED
- 407. PROVIDE 3" BLACK GROMMETS AT ALL COUNTERTOPS TO ALIGN W/POWER AND DATA LOCATIONS BELOW.
- 408. WHERE VINYL FLOORING MEETS ANOTHER VINYL FLOORING PRODUCT, NO TRANSITION STRIP WILL BE REQUIRED. SMOOTH TRANSITION IS REQUIRED, AND TRANSITIONS SHOULD OCCUR AT CENTERLINE OF DOOR WHERE APPLICABLE. WHERE VINYL MEETS CARPET TILE, PROVIDE TRANSITION
- AS SHOWN BELOW TRANSITION MUST BE LEVEL. 409. ALL WINDOW TREATMENT IS N.I.C.
- 410. PROVIDE WHITE METAL SUPPORT BRACKETS AT ALL COUNTERTOPS.

  CONFIRM LOCATION AND SPACING W/ FURN. VENDOR/ARCHITECT (MIN.
  3'-0" SPACING.)
- 411. PROVIDE COAT HOOKS (TOTAL 15) @ INTERIOR SIDE OF DOOR AT EXAM, OFFICE & RESTROOM. REFER TO DWG A-300 FOR SPEC.
- 412 G.C. SHALL PROVIDE A DETAILED POST-CONSTRUCTION CLEANING.
  G.C. SHALL PROVIDE INITIAL WAX AND SEAL AT ALL VCT FLOORING
  (4 COATS ARE REQUIRED.)
- 413 ALL FLOORING SHALL BE SUPPLIED & INSTALLED BY THE G.C.
- 414 ALL DOORS & TRIM SHALL BE SEMI-GLOSS FINISH
- 415 MAINTAIN 29' CLEARANCE BELOW COUNTERTOPS FOR PEDESTAL FILES TO BE PROVIDED BY THE OWNER.
- 417 CARPET INSTALLED PRIOR TO OTHER TRADES BEING COMPLETE SHALL PROVIDE ADEQUATE PROTECTION FOR INSTALLED GOODS. THE SUB SHALL HAVE THE EDGES TRIMMED AND SEALED ACCORDING TO THE

416 ALL DOORS SHALL BE SOLID BIRCH WOOD AND CLEAR LAQUERED

MANUFACTURER'S SPECIFICATIONS.
418 EXISTING WALL TILE TO BE PAINTED



SCALE: N.T.S.





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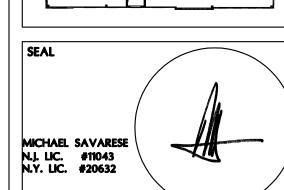
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PROJECT

DR. SADEK

479 ROUTE 520, SUITE A203
MARLBORO TOWNSHIP, NJ 07746

LOT: 8.01
ZONE: OPT 2



MICHAEL SAVARESE
N.J. LIC. #11043
N.Y. LIC. #20632
MICHELLE DEL VECCHIO
N.J. LIC. #18468

SHEET TITLE:

FINISH PLAN

OB NO.: DRAWN BY SPK

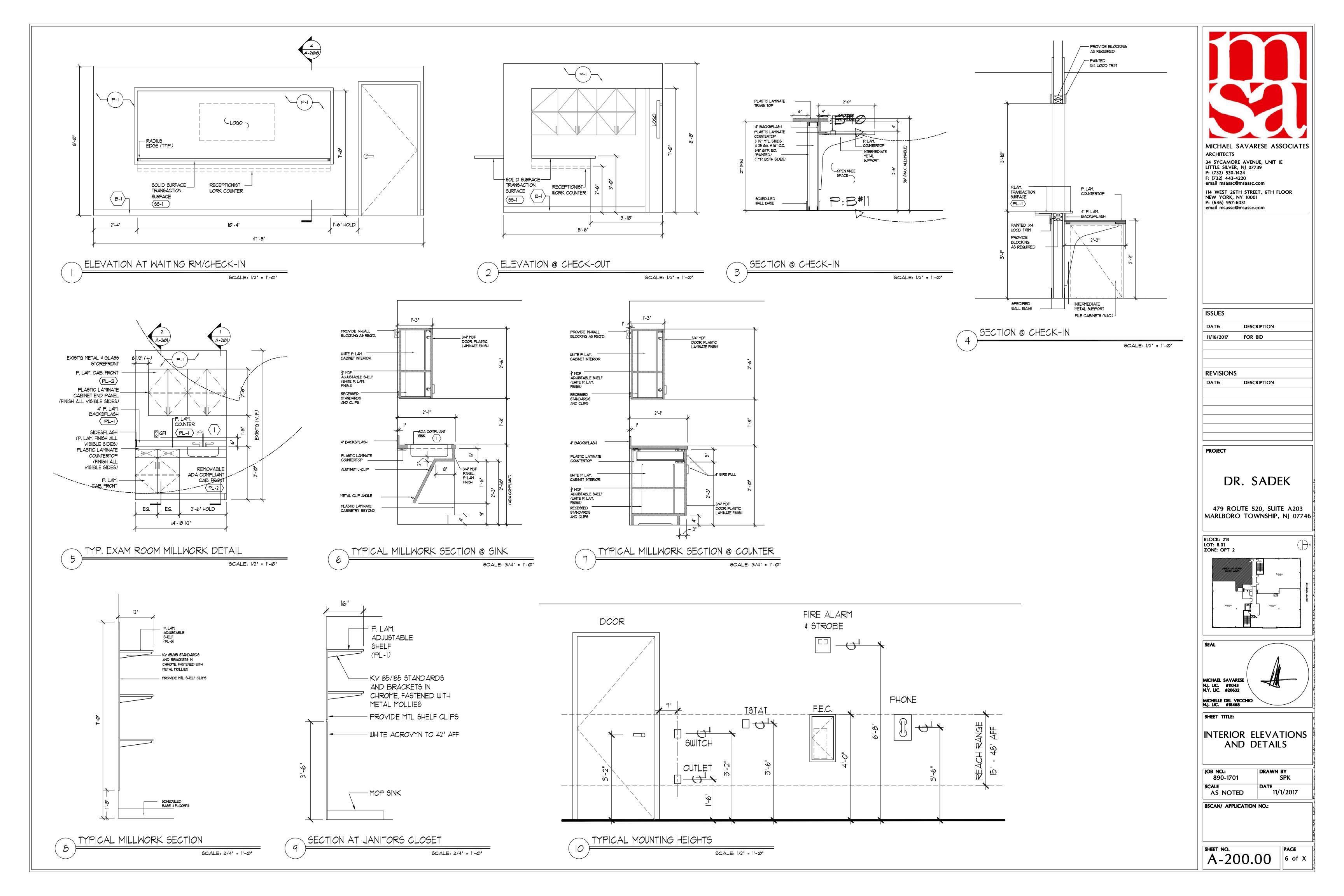
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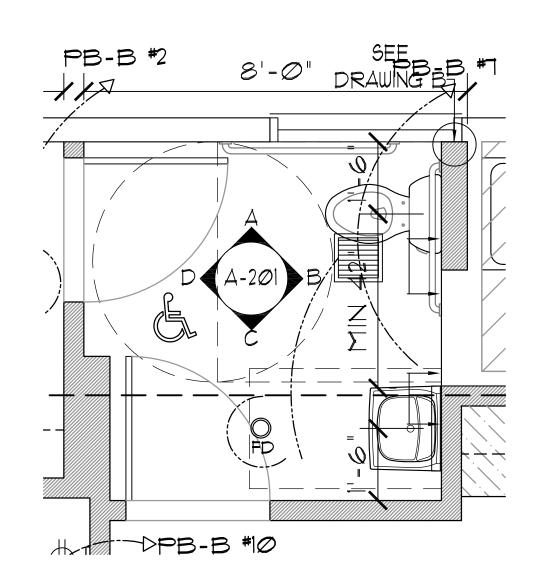
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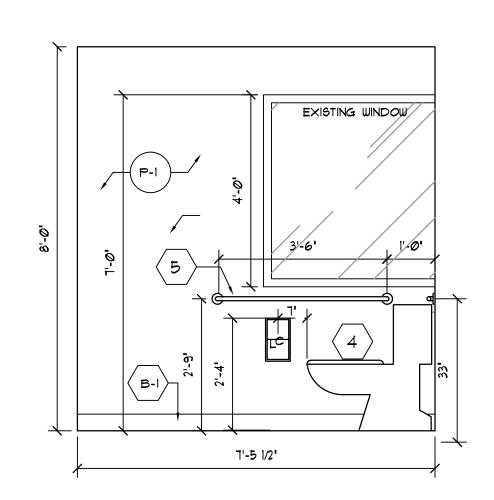
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11/1/2017

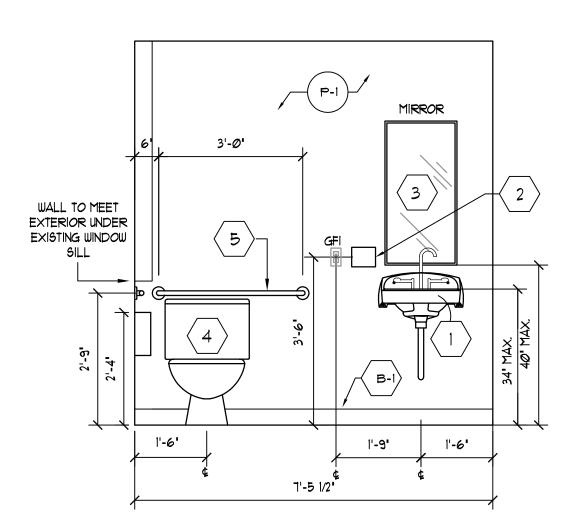




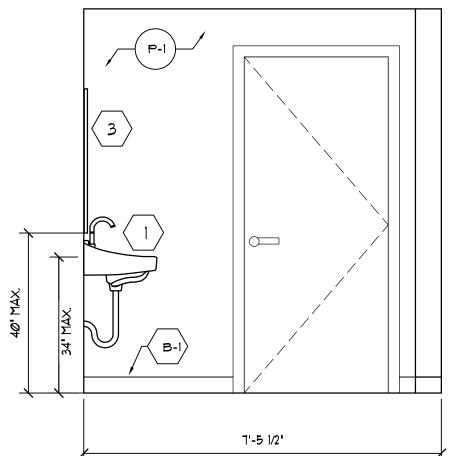




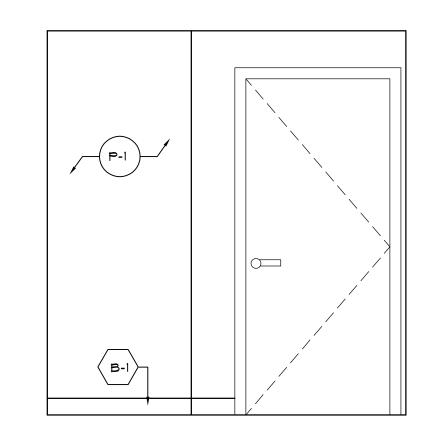


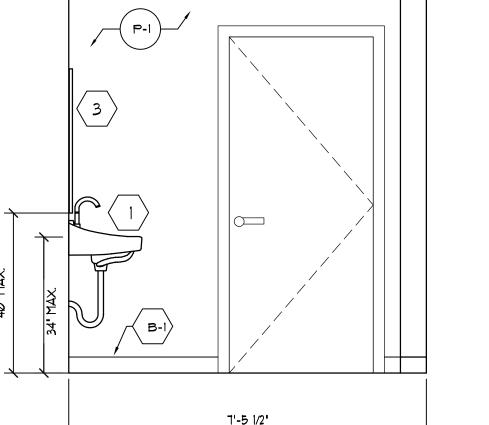




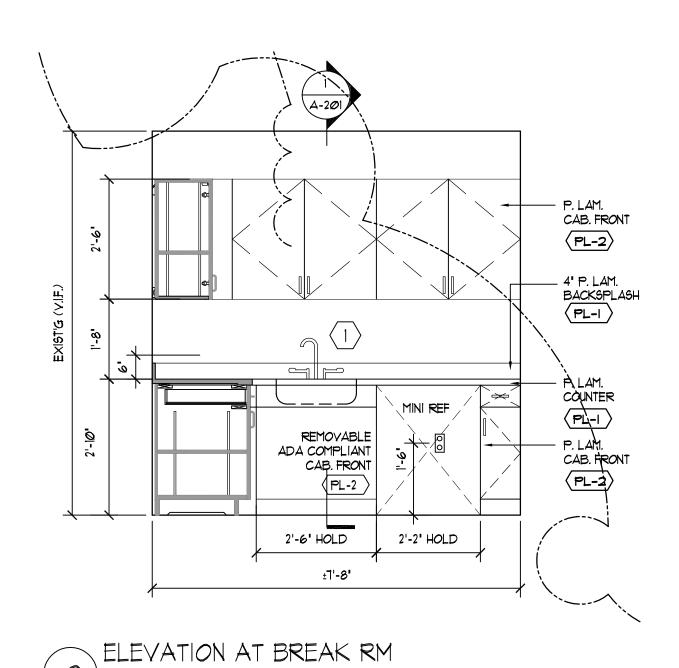








ENLARGED PLAN AT LAVATORY 1/2" = 1'-0"



SCALE: 1/2" = 1'-0"

LAVATORY FIXTURE & ACCESSORY SCHEDULE

AMERICAN STANDARD "MISSOURI" WALL-HUNG LAVATORY Ø436.004US, (3) FAUCET HOLES @ 4" O.C., COLOR: WHITE WITH ELKAY DECK MOUNT GOOSENECK FAUCET #LK810GN04T4 (4" WRIST BLADE HANDLES,) POLISHED CHROME FINISH

SURFACE MOUNTED SOAP DISPENSER PROVIDED BY OWNER INSTALLED BY GC ADA COMPLIANT HEIGHT AND LOCATION FINAL LOCATION TO BE FIELD IDENTIFIED WITH CLIENT

BOBRICK CHANNEL FRAME MIRROR

AMERICAN STANDARD CADET FLOWISE RIGHT HEIGHT PRESSURE-ASSISTED ELONGATED TOILET WITH #5321.110 EVERCLEAN SEAT- COLOR: WHITE \* PROVIDE CAULK AT BASE

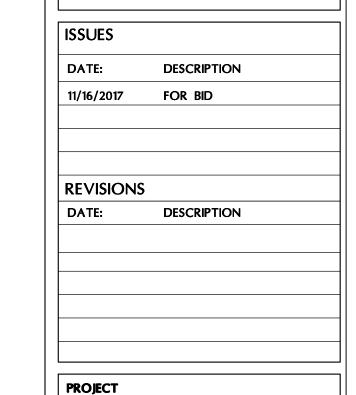
BOBRICK B-6806 SERIES, SATIN FINISH STAINLESS STEEL WITH PEENED GRIPPING SURFACE, LENGTHS AS SHOWN ON PLANS AND ELEVATIONS, PROVIDE BLOCKING AS REQUIRED

PREFABRICATED SPECIMEN PASS-THROUGH MANUFACTURER: AMERICAN SPECIALTIES, INC. MODEL NUMBER: Ø515

POLYETHYLENE WALL-MOUNT DIAPER CHANGING STATION, HORIZONTAL, COLOR: WHITE, MODEL: FDT-100-EH, BY FOUNDATIONS INSTALL AT ADA COMPLIANT HEIGHT AND PER MANUFACTURER'S INSTRUCTIONS. PROVIDE IN-WALL BLOCKING AS REQUIRED FOR MOUNTING

SURFACE MOUNTED MULTI-ROLL TOILET TISSUE DISPENSER PROVIDED INSTALLED BY G.C. INSTALLATION TO BE ADA COMPLIANT FINAL LOCATION TO BE FIELD IDENTIFIED WITH CLIENT

SURFACE MOUNTED PAPER TOWEL DISPENSER AND WASTE RECEPTACLE PROVIDED BY OWNER (INSTALLED BY G.C.) INSTALLATION TO BE ADA COMPLIANT FINAL LOCATION TO BE FIELD IDENTIFIED WITH CLIENT



MICHAEL SAVARESE ASSOCIATES

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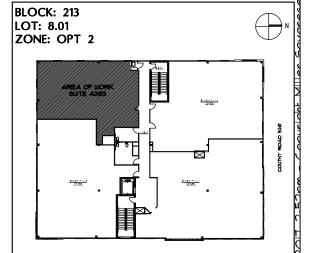
F: (732) 443-4220 email msassc@msassc.com

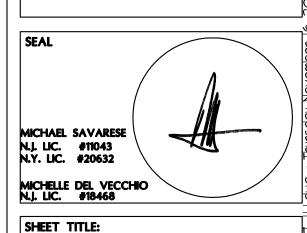
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ARCHITECTS

DR. SADEK

479 ROUTE 520, SUITE A203 MARLBORO TOWNSHIP, NJ 07746





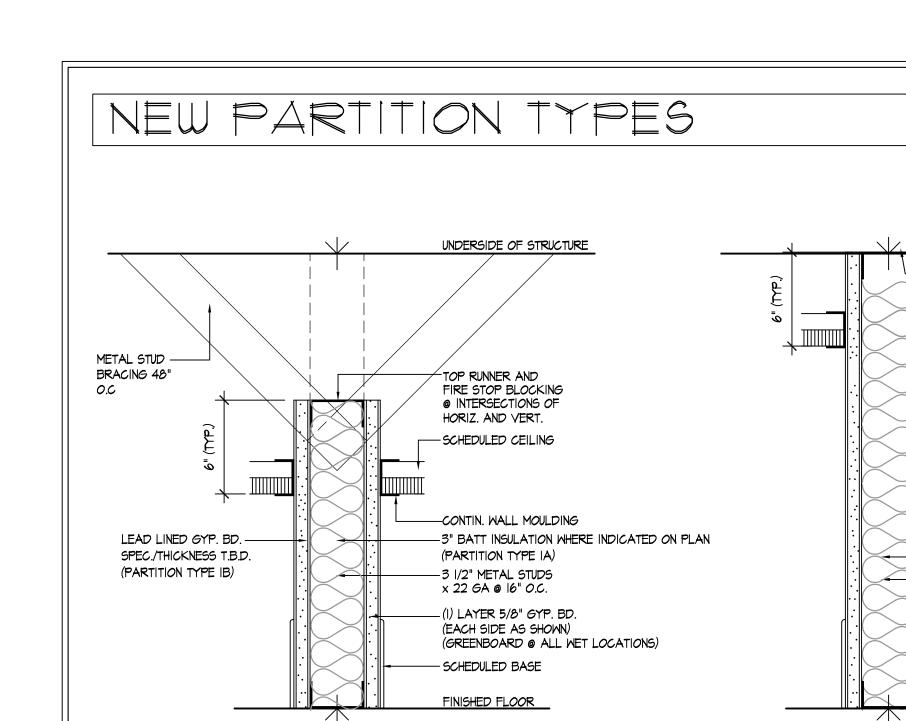
INTERIOR ELEVATIONS AND DETAILS

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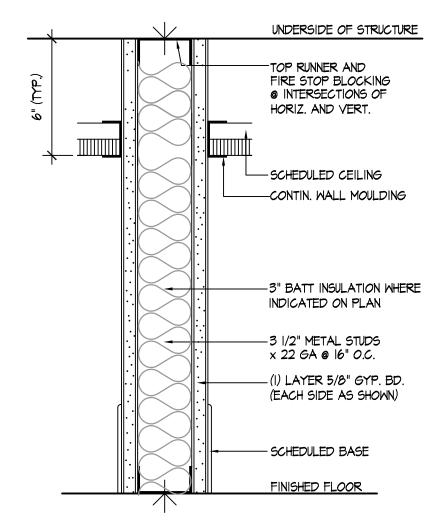
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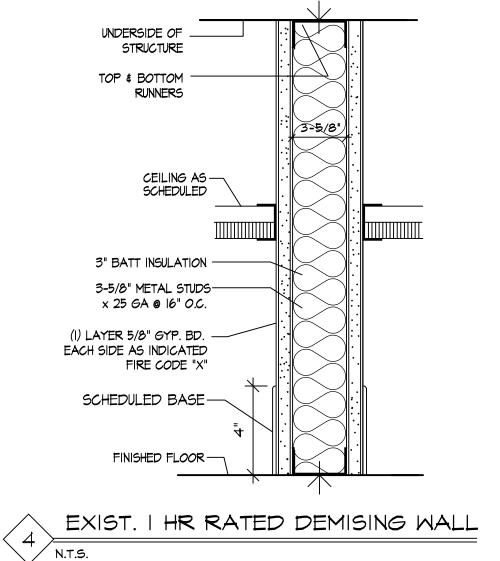
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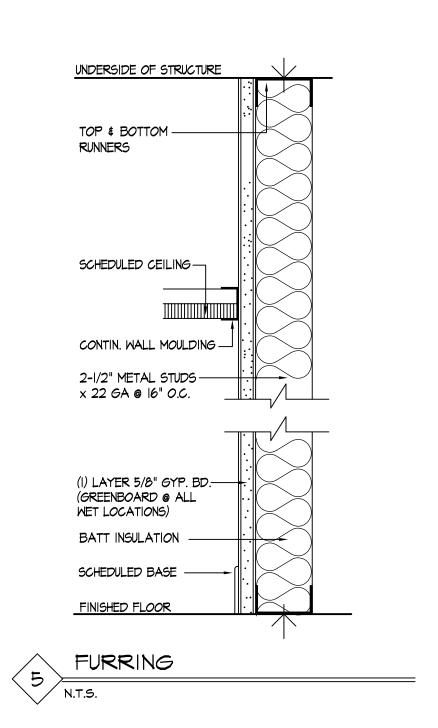
16 | 3'-0" × 7'-0"

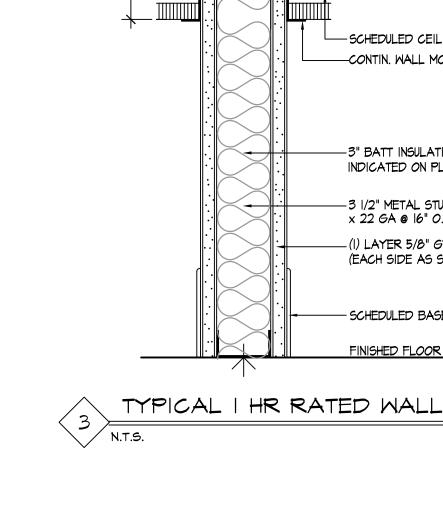
TYP. INSULATED PARTITION

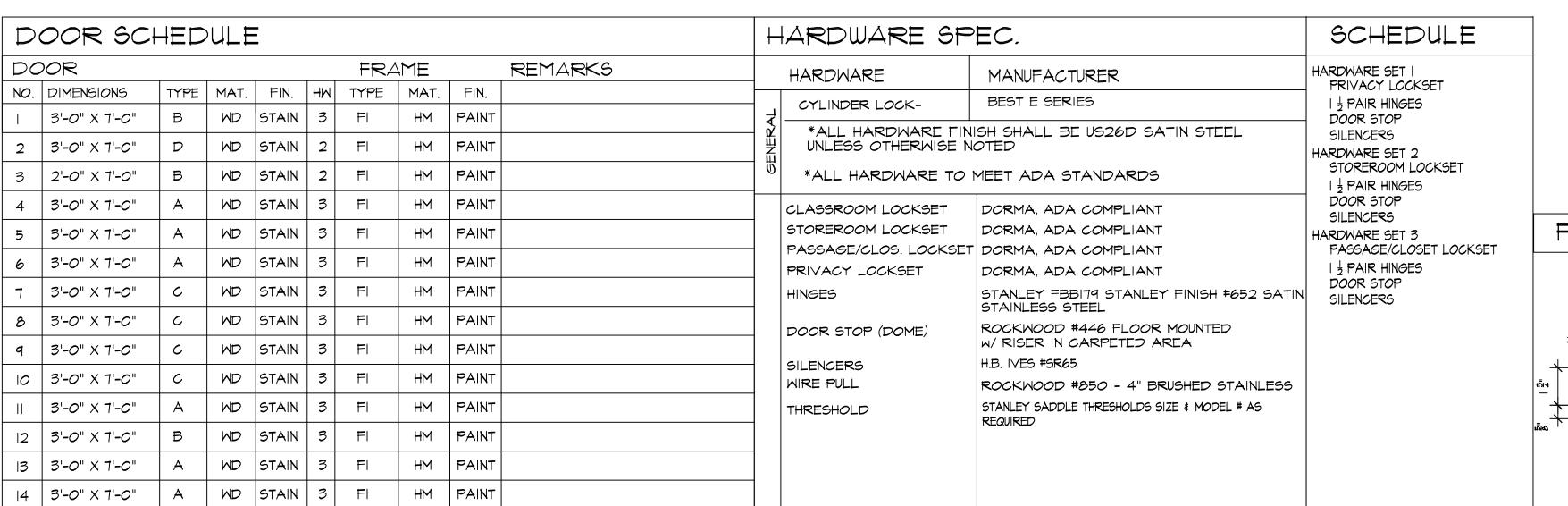
NOTE: \* ALL G.W.B. ASSEMBLIES TO BE GYPSUM ASSOCIATION (G.A.) APPROVED CONTRACTOR TO MAINTAIN EXIST'S FIRE RATING AT ALL EXTERIOR WALLS AND I-HOUR RATING AT TENANT SPACE DEMISING WALLS DURING CONSTRUCTION. CONTRACTOR TO PERFORM ANY WORK REQUIRED TO RESTORE RATING WHICH MAY BE DISRUPTED DURING CONSTRUCTION. CONTRACTOR TO ENSURE ALL DEMISING WALLS ARE FURRED AS SHOWN.











UNDERSIDE OF STRUCTURE

FIRE STOP BLOCKING

INTERSECTIONS OF

HORIZ. AND VERT.

- SCHEDULED CEILING

3 I/2" METAL STUDS

-x 22 GA @ 16" O.C.

-3" BATT INSULATION

SCHEDULED BASE

FINISHED FLOOR

-5/8" GYPSUM

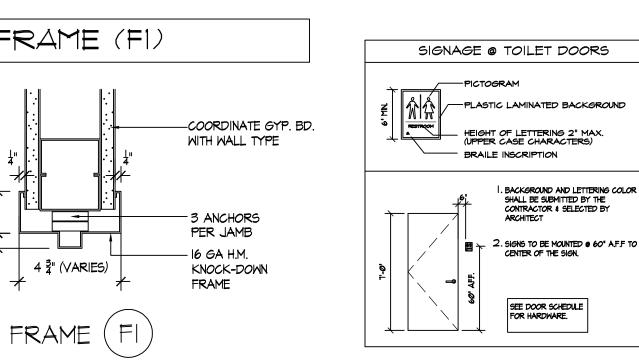
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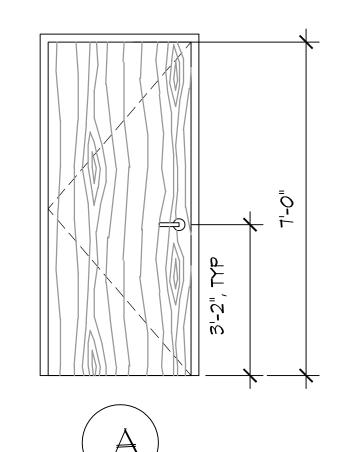
PARTITION @ WET LOCATIONS

N.T.S.

GREENBOARD EACH SIDE AS

—CONTIN. WALL MOULDING





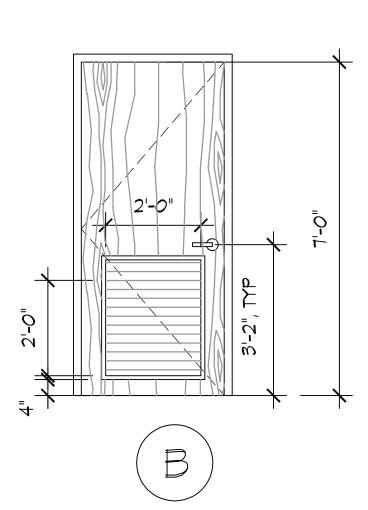
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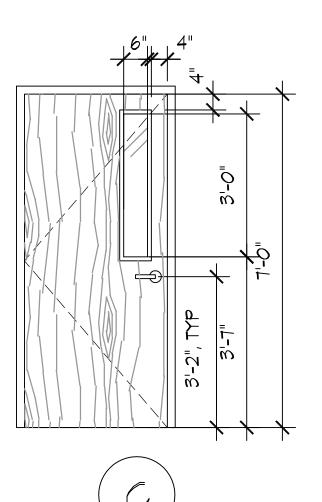
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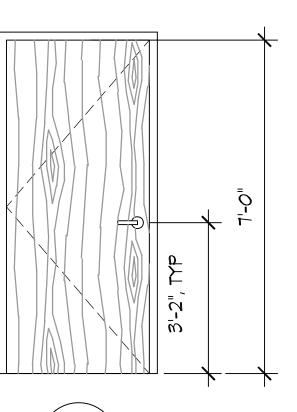
NEW INTERIOR DOOR SOLID, PRE-FINISHED WOOD (WHITE BIRCH, CLEAR FINISH)



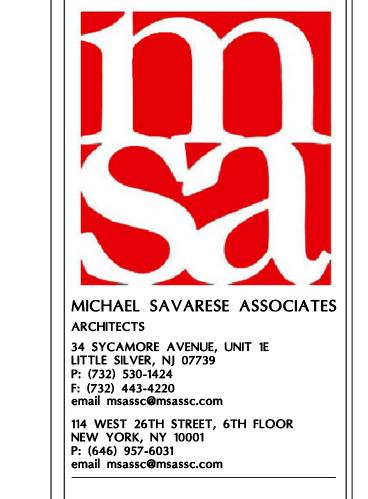
NEW INTERIOR DOOR SOLID, PRE-FINISHED WOOD W/ PAINTED METAL LOUVER AS SHOWN (WHITE BIRCH, CLEAR FINISH)



NEW INTERIOR DOOR SOLID, PRE-FINISHED WOOD W/ 1/4" TEMPERED GLASS VISION PANEL AS SHOWN (WHITE BIRCH, CLEAR FINISH)



NEW INTERIOR  $\frac{3}{4}$  RATED SOLID, PRE-FINISHED WOOD (WHITE BIRCH, CLEAR FINISH)

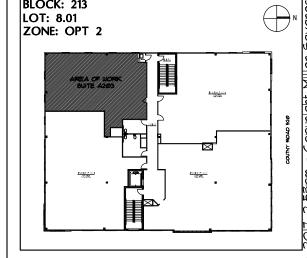


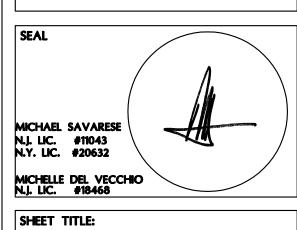
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DATE:	DESCRIPTION
1/16/2017	FOR BID
REVISIONS	;
DATE:	DESCRIPTION

DR.	SADEK

PROJECT

479 ROUTE 520, SUITE A203 MARLBORO TOWNSHIP, NJ 07746





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	SCH	EDULES	
	ANID	DETAILS	
	AND	DETAILS	

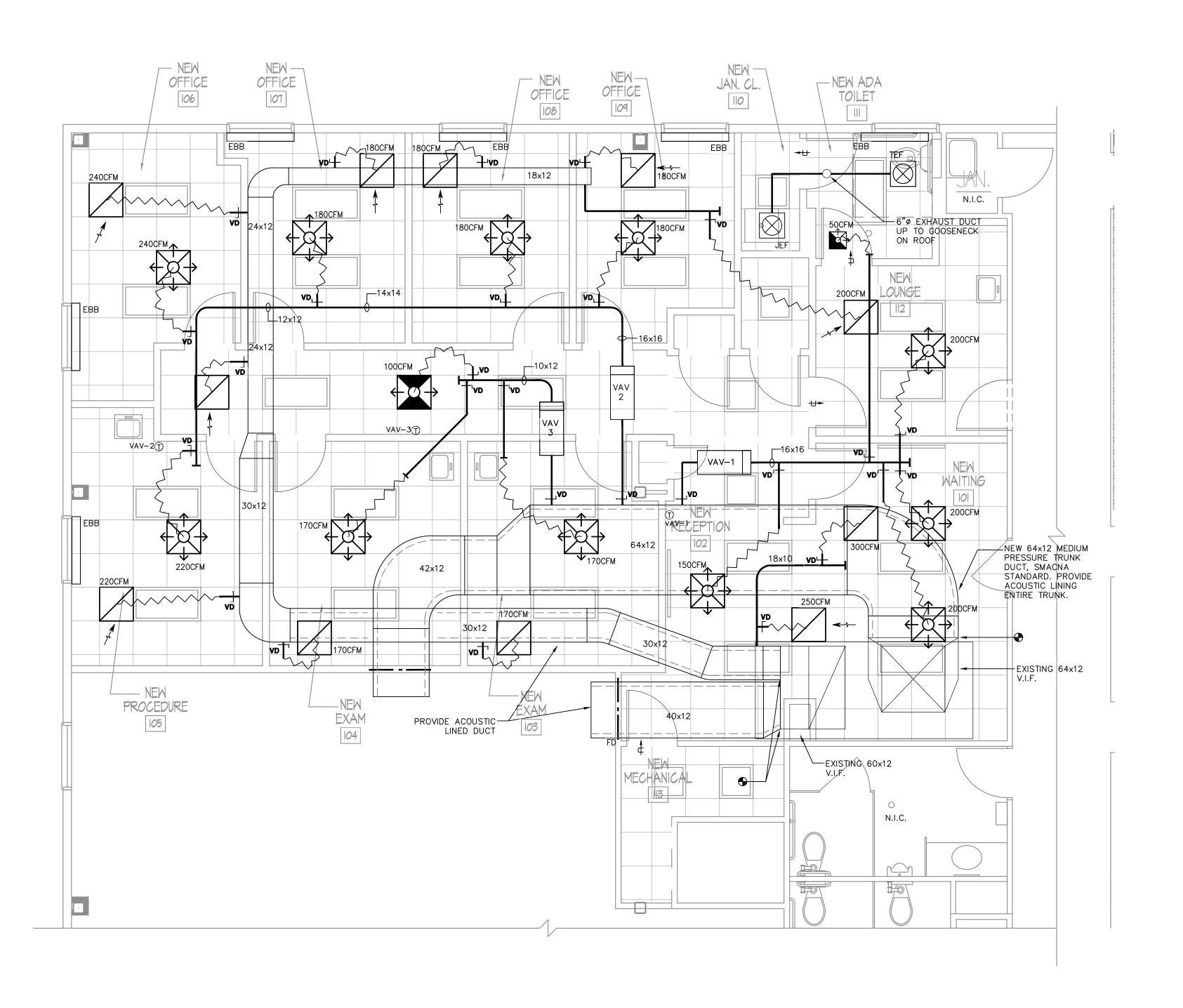
AS NOTED DATE	SPK
	11/1/2017

**BSCAN/ APPLICATION NO.:** 

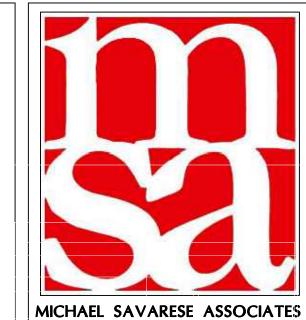
A-202.00



SCALE: 1/2" = 1'-0"



PARTIAL FLOOR PLAN SCALE: 1/4"=1'-0"



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NJ #26166 NY #57012 Va #016807 De #11776

ISSUES DATE: DESCRIPTION

REVISIONS

DATE: DESCRIPTION

PROJECT

DR. SADEK

479 ROUTE 520, SUITE A203 MARLBORO TOWNSHIP, NJ 07746

BLOCK: 213 LOT: 8.01 ZONE: OPT 2

BRIAN PASECHNICK, PE N.J. LIC. #48111

MECHANICAL PLAN

DRAWN BY
GB/LN JOB NO.: 890-1701 DATE 11/14/2017

BSCAN/ APPLICATION NO.:

M-1

PAGE

	FAN SCHEDULE													
UNIT No.	SERVICE	LOCATION	TOTAL AIR CAP. CFM	EXTERNAL S.P. IN INCHES OF W.G.	FAN RPM	MOTOR HP / WATT	ВНР	TYPE OF FAN	TYPE OF DRIVE	INTERLOCK WITH	VOLTS/PH/HZ	MANUFACTURER	MODEL No.	SEE NOTES
TEF/JEF	TOILET/JANITOR CLOS.	IN CEILING	75	0.25	950	80W	_	CEILING	DIRECT	LT. SWITCH	120/1/60	GREENHECK	SP-B110	1,2,3

 MULTIPLE FANS. 2. VIBRATION HANGERS.

	SCHEDULE OF SINGLE DUCT VAV BOXES  ENVIROTEC AS STANDARD												
TAG	MODEL/ SIZE	TOTAL SPD IN WG	MAX COOL CFM	MIN SET POINT CFM	HTG. SET POINT CFM	EH CAP KW	STEPS	HTR VOLT	PHASE	MCA	MOCP		
VAV-1	VAV-1 SDR EH/08 0.10 800 260 400 5.0 SCR 208 1 26 30								30				
VAV-2	SDR EH/08	0.10	1000	300	1000	6.0	SCR	208	1	31	40		
VAV-3	SDR EH/08	0.10	440	100	440	3.0	SCR	208	1	16	20		

1. ALL DUCTWORK 15 FEET DOWNSTREAM OF VAV'S TO BE ACOUSTICALLY LINED.

2. PROVIDE ALL BOXES WITH THE FOLLOWING OPTIONS:

A. FACTORY INSTALLED MOUNTING BRACKETS

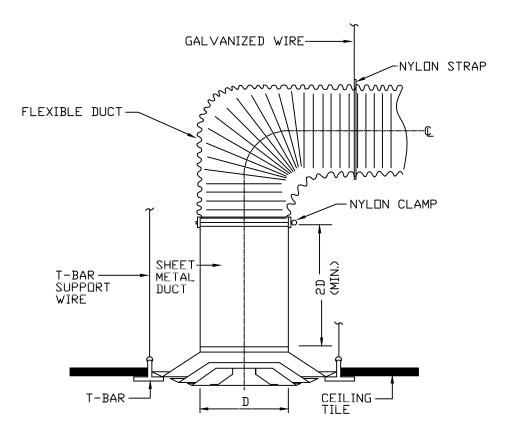
B. SCRIM REINFORCED FOR FACED INSULATION C. CONTROL CONTRACTOR SHALL FURNISH VAV BOXES MFR. WITH ACUATORS AND CONTROLS TO BE FACTORY MOUNTED

D. FACTORY MTD. 208/24V. TRANSFORMER 3. SHEETMETAL CONTRACTOR TO PROVIDE ACCESS DOOR IN DUCTWORK DOWNSTREAM OF ELEC. COIL FOR CLEANING

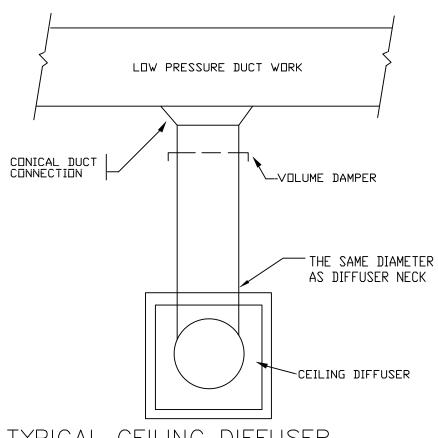
	SCHEDULE FOR DUCT SYSTEM RETURN AIR GRILLES										
CFM RANGE	NECK SIZE ø INCHES	MAXIMUM NECK VELOCITY FPM	OVERALL SIZE W X H INCHES	MANUFACTURER	MODEL No.						
0-300	10"	550	24" x 24"	TITUS	PAR						
301-800	16"	550	24" x 24"	TITUS	PAR						

SCHEDULE FOR CEILING MOUNTED SUPPLY AIR DIFFUSERS											
CFM RANGE	NECK SIZE INCHES	MAXIMUI VELO FF	CITY	Si	RALL ZE HES	MANUFA	ACTURER	MODE	_ No.		
0-75	6"ø	700 12"X12		X12"	TITUS		OMNI				
76–135	6 <b>"</b> ø			24"	X24"						
136-250	8"ø										
251-380	10 <b>"</b> ø										
381-550	12 <b>"</b> ø	,		1	/	١	1	١	1		

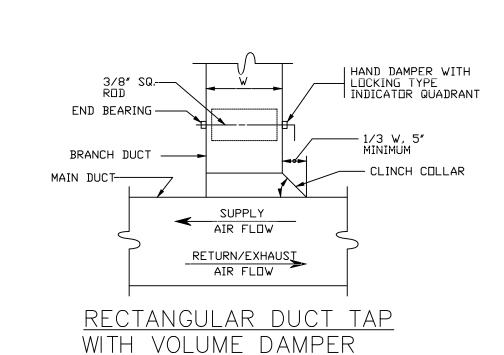
ALL DIFFUSERS TO HAVE EQUALIZING GRID; NO DAMPER FRAMES AND BORDERS TO BE COMPATIBLE WITH CEILING TYPES.

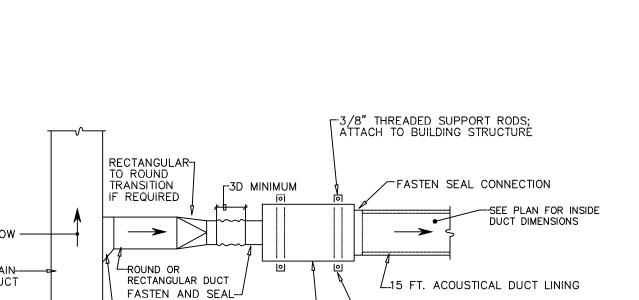


FLEXIBLE DUCT CONNECTION TO DIFFUSER



TYPICAL CEILING DIFFUSER
TAKE-OFF DETAIL NOT TO SCALE





SUPPORTING CHANNEL; FASTEN ROD WITH LOCKING NUT AND LEVELING NUT.

<u>PLAIN VIEW</u>

V.A.V. UNIT-J

1. THE OPERATION OF VARIABLE VOLUME TERMINAL UNITS ARE AFFECTED BY EXCESSIVE TURBULENCE ON THE ENTERING SIDE OF EACH TERMINAL UNIT THEREFORE, TERMINAL UNITS MUST NOT BE INSTALLED TOO CLOSE TO MAIN DUCTS, ELBOWS AND FITTINGS.

2. WHEN MINIMUM UPSTREAM STRAIGHT DUCT CONNECTION TO TERMINAL AS INDICATED ABOVE CANNOT BE MAINTAINED, PROVIDE ORIFICE PLATE, STRAIGHTENING VANES OR OTHER DEVICE AS RECOMMENDED BY TERMINAL UNIT MANUFACTURER AND SUBMIT TO ENGINEER FOR REVIEW PRIOR TO INSTALLATION.

3. MANUFACTURER OF TERMINAL UNIT SHALL PROVIDE CONTROLS ON LEFT OR RIGHT SIDE AS REQUIRED BY FIELD CONDITIONS.

4. ARRANGE ACCESS TO PERMIT EASY FIELD BALANCE AND MAINTENACE OF TERMINAL UNIT.

TERMINAL UNIT INSTALLATION

NOT TO SCALE:

CONNECTIONS

- CLINCH CONNECTION

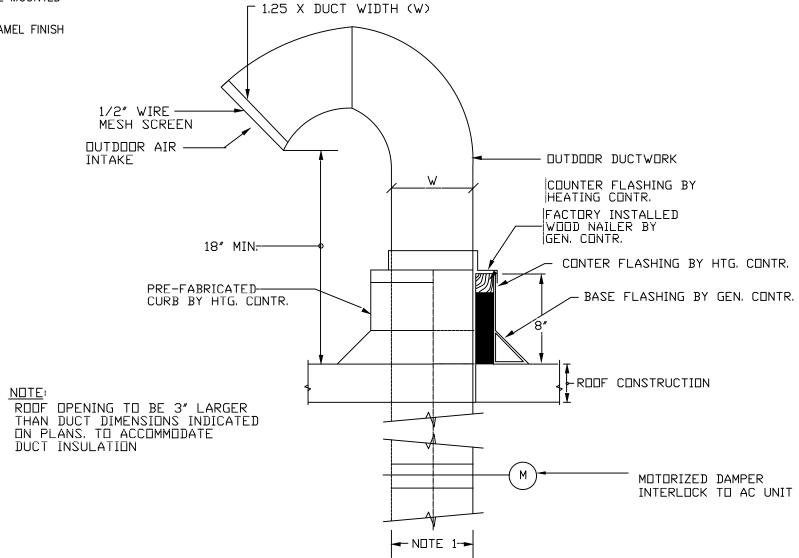
NOT TO SCALE:

	ELECTRIC BASEBOARD HEATER SCHEDULE											
ID. No.	WATTS/ LIN. FT.	LENGTH	TOTAL WATTS						REFER TO NOTES			
EBB	250	4'-0"	1000	3413	277/1ø	QMKC	Q-MARK	2574W	1,2,3			

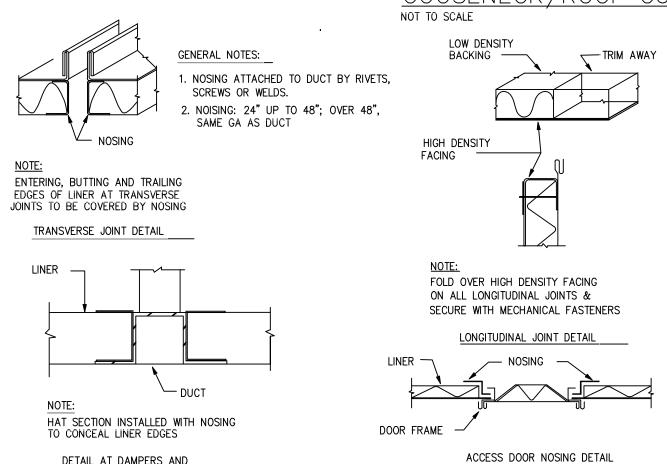
1. BASEBOARD HEATERS SHALL BE FURNISHED WITH END ENCLOSURE MOUNTED

2. ALL BASEBOARD HEATERS SHALL BE FURNISHED IN A BAKED ENAMEL FINISH COLOR AS SELECTED BY ARCHITECT.

3. MULTIPLE UNITS, SEE PLANS.

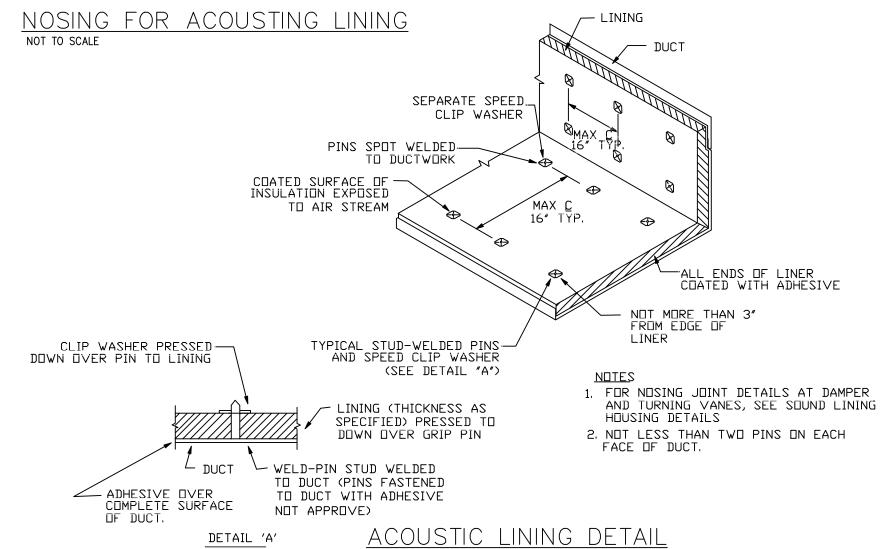


GOOSENECK/ROOF CURB DETAIL

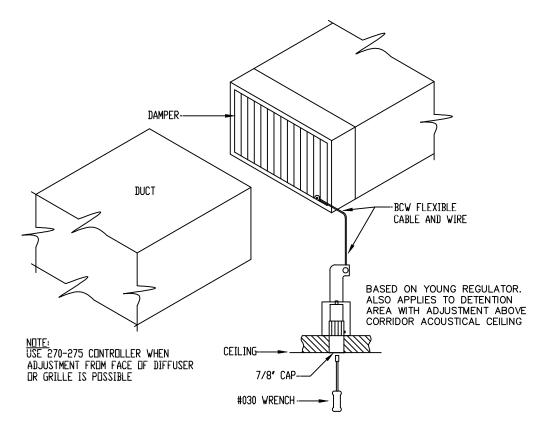


DETAIL AT DAMPERS AND

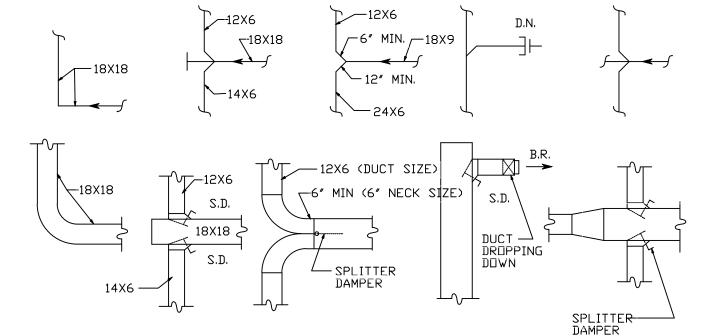
TURNING VANES



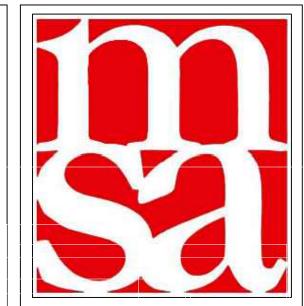
		SYMBOL LIST AND A	BBREVIATION	S	
ABBREVIATION	SYMBOL	DESCRIPTION	ABBREVIATION	SYMBOL	DESCRIPTION
	~~	FLEXIBLE DUCTWORK	TR		TOP REGISTER
	<del>_</del>	NEW DUCTWORK	RTU		ROOFTOP UNIT
		DUCTWORK WITH INTERNAL ACOUSTIC LINING	EF		EXHAUST FAN
		SUPPLY AIR DUCTWORK	CU		CONDENSING UNIT
	<u> </u>	RETURN AIR DUCTW□RK	SP		STATIC PRESSURE
		SPLITTER DAMPER	D.D.		DUCT OPENING
		90 DEGREES DUCT ELBOW WITH	ESP		EXTERNAL STATIC PRESSURE
		DOUBLE TURNING VANES  SUPPLY DUCT RISER UP	ΠA		DUTSIDE AIR
		SUPPLY DUCT RISER DOWN	FF		FINISH FLOOR
			, ,		
		RETURN/EXHAUST DUCT RISER UP	AFF		ABOVE FINISH FLOOR
		RETURN/EXHAUST DUCT RISER DOWN FOUR WAY BLOW CEILING	HC NTC		HUNG CEILING
CD		DIFFUSER	NIC		NOT IN CONTRACT
CD		THREE WAY BLOW CEILING DIFFUSER	FPM		FEET PER MINUTE
CD		TWO WAY BLOW CEILING DIFFUSER	NTS		NOT TO SCALE
CD		TWO WAY BLOW CEILING DIFFUSER	CFM	\$	CUBIC FEET PER MINUTE
CR		CEILING REGISTER		$\left  \left\langle \mathbf{z} \right\rangle \right $	DUCT MOUNTED SMOKE DETECTOR
VD	<i>‡</i>	MANUAL VOLUME DAMPER	AD		ACCESS DOOR
FC	₩FC	FLEXIBLE CONNECTION	FD		FIRE DAMPER
BG		BOTTOM GRILLE		©	CARBON MONOXIDE SENSOR
DO	出	DUCT OPENING ABOVE HUNG CLG.		T	THERMOSTAT
SQ.FT.		RETURN AIR PATH MIN. SQ. FT. OPEN IF WALL GOES UP TO SLAB	PEF		POWER EXHAUST FAN
	_ <del>L</del> _	DOOR LOUVER	CFM		CUBIC FEET PER MINUTE
	-4->	1" DOOR UNDERCUT	GPM		GALLONS PER MINUTE
TD		TRANSFER DUCT	SD	<u></u>	SMOKE DAMPER
<u>TD</u>		TRANSFER OPENING	MD EWT		MOTORIZED DAMPER ENTERING WATER
	FM	FLOW MEASURING STATION			TEMPERATURE  LEAVING WATER
<u>¼</u>		PRESSURE REDUCING VALVE	LWT		TEMPERATURE
D		CONDENSATE DRAIN	EAT		ENTERING AIR TEMPERATURE
—— нw	s ——	HOT WATER SUPPLY	LAT		LEAVING AIR TEMPERATURE
—— HW	R ——	HOT WATER RETURN		(11)	CARBON MONOXIDE SENSOR
	<del></del>	CHECK VALVE			
	<u></u>	BALANCING VALVES	<u> </u>		THERMOMETER
<u> </u>		CIRCUIT SETTER	l É	×	
<u></u> -Г	<u> </u>	BUTTERFLY VALVE			PRESSURE GAUGE
	1	CONTROL VALVE	<u> </u>		UNION
	<del>,</del>	STRAINER			GATE VALVE
		PIPE DOWN/DROP	<u> </u>		GLOBE VALVE
	<u> </u>	PIPE UP/RISE	<u> </u>		PLUG VALVE
•		CONNECT NEW TO EXISTING			



VOLUME DAMPER CONTROL



TYPICAL SINGLE LINE DUCT DETAILS NOT TO SCALE



MICHAEL SAVARESE ASSOCIATES ARCHITECTS 34 SYCAMORE AVENUE, UNIT 1E LITTLE SILVER, NJ 07739 P: (732) 530-1424 F: (732) 443-4220 email msassc@msassc.com 114 WEST 26TH STREET, 6TH FLOOR

NEW YORK, NY 10001 P: (646) 957-6031 email msassc@msassc.com

Omdex incorporated Consulting Engineers

21 Cross Avenue Midland Park, NJ 07432-1811 (201) 444-0753 FAX (201) 444-0839 Brian W. Pasechnick, PE NJ #48111 PA #PE078527 Milton A. Azous, PE NJ #21057 NY #48388 PA #PE021148E Edward J. Galto, PE NJ #26166 NY #57012 Va #016807 De #11776

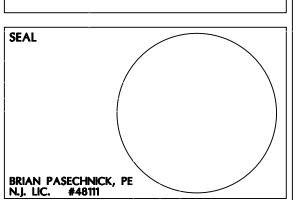
ISSUES DESCRIPTION DATE: REVISIONS DATE: DESCRIPTION

PROJECT

DR. SADEK

479 ROUTE 520, SUITE A203 MARLBORO TOWNSHIP, NJ 07746

BLOCK: 213 LOT: 8.01 ZONE: OPT 2



SHEET TITLE:

**MECHANICAL DETAILS AND SCHEDULES** 

JOB NO.: DRAWN BY 890-1701 GB/LN 11/14/2017 BSCAN/ APPLICATION NO.:

PAGE

SHEET NO.

SPECIAL REQUIREMENTS FOR SECTIONS 15000 MECHANICAL WORK

1.1 GENERAL CONDITIONS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections apply to work specified in these Sections; consult them in detail for applicable instructions.

B. Manufacturers referenced in the technical specifications are for the purpose of establishing a standard of quality. Alternate manufacturers providing the same quality equipment will be given consideration by the Engineer and Architect if they are notified in writing at the time of bid.

#### 1.2 CODES AND STANDARDS

A. All workmanship and material shall conform to the rules and regulations of the current editions of the regulating agencies listed below and regulations of the local utility companies. These rules, regulations and codes shall govern as a minimum standard. In the event of conflict with the Contract drawings or specifications requiring workmanship or material of a higher quality than required by the above mentioned rules, regulations and codes, the most stringent shall apply.

2015 International Building Code

2015 International Fuel Gos Code 2015 International Mechanical Code

2015 National Standard Plumbing Code NFPA — National Fire Protection Association

AMCA — Air Movement and Control Association, Inc. SMACNA - Sheet Metal and Air Conditioning Contractors National Association, Inc.

ASHRAE — American Society of Heating, Refrigerating, and Air—Conditioning Engineers, Inc. IPCFA - Insulated Power Cables Engineers Association

NFC — National Flectrical Code of the NFPA NFMA — National Flectric Manufacturers Association

National Board of Fire Underwriters AABC — Associated Air Balance Council

ARI - Air Conditioning and Refrigeration Institute UL — Underwriter's Labs.

Local Utility Requirements

Plumbing and Drainage Institute ASSE American Society of Sanitary Engineering

ASTM American Society for Testing Materials The Owner's Insurance Underwriter

During this work, this Contractor shall be responsible for maintaining safety among persons in his employ in accordance with the standards set by the OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970. The Engineer shall be held harmless for any accident, injury, or any other incident resulting from non conformance with these or any other standards.

#### 1.3 QUALITY ASSURANCE

A. The Contractor shall use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of these Sections.

B. Without additional cost to the Owner, the Contractor shall provide such other labor and materials as are required to complete the work of this Section in accordance with the requirements of governmental agencies having jurisdiction, regardless of whether such materials and associated labor are called for elsewhere in these Contract Documents.

C. Engineering Drawings are symbolic and diagrammatic in nature and are intended to show only the general scheme, equipment involved, and the approximate locations and dimensions of the equipment. For exact locations and dimensions, the Contractor shall review all Drawings provided: including. Architectural and Structural Drawings, Reflected Ceiling Plans, Plumbing, Fire Protection, Electrical and HVAC Drawings to confirm all requirements. It is the Contractor's responsibility to confirm that all equipment will fit. Any discrepancies or inconsistencies are to be reported immediately to the Architect and the Engineer for clarification. No extras or allowances will be made for such items

D. Prior to bid, an examination of the site shall be made by the Contractor, who shall compare it with the Drawings and Specifications and who shall satisfy himself as to the conditions under which the Work is to be performed. No allowance shall subsequently be made for any extra expense incurred due to failure or neglect to make such examination.

E. During the execution of work under this Contract, the Contractor shall be responsible for protecting any equipment or structures in the work areas.

F. All Work shall be augranteed to be free from leaks or defects. Any defective materials or workmanship as well as damage to the work of all trades resulting from the same shall be replaced or repaired as directed for the duration of stipulated guarantee periods.

#### 1.4 SUBMITTALS

A. Comply with pertinent provisions of General Documents.

B. PRODUCT DATA: Within the designated time period after the Contractor has received the Owner's Notice to Proceed, submit: Materials list of items proposed to be provided under this Section with sources of supply and manufacture.

Manufacturer's specifications, catalog cuts, and other data needed to prove compliance with the Product substitutions are to be requested in writing, and only in conformance with General Conditions procedures. At the time of submission of cuts for review for all substitutions, clearly indicate Specification Section, provide complete information on the original product and the proposed product for review, and all deviations.

a. Any substitutions requested by a contractor are to include all costs for related changes by other contractors. It is the responsibility of the contractor requesting the change to coordinate with any other trade impacted by the substitution.

When so requested by the Engineer, promptly provide samples of items scheduled to be exposed in the final structure. 2. When specifically so requested by the Contractor and authorized by the Engineer, authorized samples will be returned to the Contractor for installation on the Work.

applicable codes.

D. SHOP DRAWINGS Prepare and submit Shop Drawings, showing at a scale not smaller than 3/8" = 1' 0" all details of items to be shop fabricated, field coordinated or which interface with existing conditions, under this

2. Clearly identify by circle and by note "DEVIATION" and by note "INTERFERENCE", in large, bold lettering, any deviations from Drawings and Specifications and any potential or unresolved interference condition and assume full responsibility for failure to do so. Submittal shall confirm fabrication and installation is in accordance with recommendations and

Corrections or comments made on shop drawings and submittals during review do not relieve the Contractor from compliance with requirements of the drawings and specifications. This check will only be for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The Contractor shall be responsible for; confirming and correlating all quantities and dimensions, selecting fabrication process and techniques of construction, coordinating his work with that of all other trades, and performing his work in a safe and satisfactory manner.

MANUALS: Upon completion of the work of this Section, the Contractor shall deliver to the Architect four copies of an operation and maintenance manual compiled in accordance with the provisions of General Conditions, and these Specifications. Include within each manual a copy of the Project Record Documents showing all work of the

2. Include detailed operating and maintenance instructions. G. AS-BUILT DRAWINGS: concurrent with the progress of the work, the Contractor shall maintain a set of as built record sepia drawings noting in red all changes in the work. Upon completion of the work this sepia set is to be turned over to the Owner for his records.

H. All required permits, fees and inspections shall be arranged and paid for by the Contractor. The Contractor shall present to the Owner, properly signed, all required certificates of final inspection and approval before the work will be accepted as complete.

COORDINATION: Each Contractor shall be responsible for coordinating their work with that of all other trades. No installation shall take place without approval of onsite entity (General Contractor, Construction Manager, etc.) responsible for coordination. Any work installed without approval and which interferes with the work of other trades that have been approved shall be removed and replaced at the Contractor's expense.

#### 1.5 INSTRUCTION

A. After all work is completed, the Contractor shall instruct employees designated by the Owner in the proper operation and maintenance of the equipment and systems installed under this Contract.

#### 1.6 GUARANTEE

A. The Contractor shall guarantee his work for a period of one year after date of completion as witnessed by receipt of final payment. The Contractor shall promptly repair and make good any damage to the work of any other Contractor, during that period, that may be caused by defective materials or workmanship. Any defects in materials and workmanship shall be corrected by the Contractor without further expense to the Owner. He shall deliver to the Architect or Owner said written guarantee upon receipt of final payment.

#### 1.7 DEBRIS REMOVAL

A. Routinely remove, in an orderly and efficient manner (and cart away and dispose of, by legal means, off the site and premises), all debris related to work of this Section; work site and staging areas shall be kept clear of all debris on a daily basis; permit no debris accumulation which poses any threat to life, safety or property. Non-conformance with the foregoing Contract requirements will be subject to all remedies established by the Owner and Architect.

#### SECTIONS 15600 HVAC SPECIFICATIONS

#### GENERAL

A. It is not intended that the plans or specifications show or state every detailed requirement of the work, but rather that they furnish adequate information for the Contractor to make a completely approved installation. The Architectural General Conditions and Special Requirements for Mechanical work (Section 15000) form a part of these specifications whether attached hereto or not and shall be carefully examined before submitting proposal. Where General Conditions clauses are repeated in this section, it shall be understood as calling special attention to them, or as a further qualification and shall not be assumed as omitting any other clauses. No General Conditions referring to work included herein shall be considered as waived unless specifically stated herein.

Before submitting proposal, examine all plans relating to this work. verify all governing conditions at the site, become fully informed as to the extent and character of the work required and its relation to existing conditions and work of others. No consideration or additional payments will be granted for any alleged misunderstanding of the náterials to be furnished or work to be done, it being understood that the submission of a proposal is an agreement to all conditions referred to herein or indicated on the plans. All work shall be carefully coordinated and scheduled to prevent undue inconveniences. All work which will not be permitted during normal working hours due to scheduling, etc., shall be scheduled to be performed on overtime at no

Proposal must include everything required to provide a complete installation as contemplated in the specifications and plans, whether specifically shown and specified or not. Included are all labor, equipment, materials, light, tools, scaffolding, transportation, nsurance, sales tax, permits, certificates, inspections, testin equipment, etc., necessary for the complete installation of every-thing described, shown or reasonably implied.

D. Review all plans and specifications relative to this work, and become amiliar with work called for therein. At the conclusion of the work, be responsible for the proper mechanical installation furnished and/o installed under this contract. It is the intention of these pecifications and plans to furnish enough information for the Contractor to provide and place in service a complete HVAC system and

E. Bidders, before submitting proposals, shall visit and carefully examine those portions of the site and/or present buildings affected by this work so as to familiarize themselves with existing conditions and ifficulties that will attend the execution of the work. These difficulties include availability of the equipment and materials.

F. Submission of a proposal will be construed as evidence that such examination has been made and later claims for labor, equipment or materials required because of difficulties encountered, which could have been foreseen had such examination been made, will not be recognized.

#### 2. SCOPE OF WORK

The work shall include but not be limited to the following —

1. Furnish and install all variable volume variable temperature terminal units

with supplimentary electric heating coils. 2. Furnish and install all ductwork, duct insulation and air outlets as shown on the drawings or as specified.

3. Furnish & install Fire Dampers in all fire rated walls whether or not as shown on drawings 4. Furnish and install volume dampers as shown on the drawings and/or as

required to balance system. 5. Provide shop drawings for all ductwork, controls, mechanical

equipment and accessories being installed.

6. Furnish and install all necessary sleeves, inserts, hangers and supports. 7. Furnish & install all exhaust fans.

8. Furnish and install a complete electric/electronic automatic temperature control system including all wiring as specified.

9. Engage the services of an approved air balancing company to balance

#### he systems and issue an dir balancing report.

10. Cutting and rough patching. 11. Obtaining and paying for all necessary permits, inspections and certificates required in connection with this work.

12. Guarantee all work for a period of one year from the final date of

13. As built drawings.

#### 3. WORK NOT INCLUDED

A. The following items of work shall be provided under other contracts: 1. Finished patching and painting.

#### 4. SHOP DRAWINGS

A. Submit shop drawings covering the following items:

1. Air outlets.

2. Hangers and supports. 3. Sheetmetal ductwork, dampers, fire dampers.

4. Air balancing report. 5. All HVAC equipment specified in the schedules.

6. Automatic Temperature Controls

7. Insulation 8. Vibration Isolation and Seismic Restraints.

### 5. INSTALLATION

Filters

A. All work and materials shall be provided as shown and herein specified and shall be in accordance with the latest applicable edition. New Jersey Uniform Construction Code, the 2009 International Building Code, The 2009 International Mechanical Code and all authorities having jurisdiction.

B. This Contractor shall provide proof of adequate insurance to hold Owner, Architect, and Engineer harmless for any liability claims arising from performance of his work.

C. This Contractor shall take all necessary precautions to prevent unnecessary damage to building structure and protect building contents

D. For exact location of partitions, soffits, etc., refer

to the architectural drawings.

E. The work under this contract shall be performed simultaneously with work of other trades, so as not to delay the overall progress of work. The work of all trades shall be phased in accordance with phasing notes

F. The systems shall be left in perfect working order upon completion of work.

G. All ductwork gauges, and installation shall conform to the latest edition of SMACNA standards.

H. This Contractor shall not interrupt any of the services of the existing building nor interfere with the services in any way without the expressed permission of the Owner. Such interruptions and

interferences shall be made as brief as possible and only at the time

Unnecessary noise shall be avoided at all times and necessary noise shall be reduced to a minimum.

J. This Contractor shall arrange the work continuously including over time, if required, to assure that service will be shut—down only during the time actually required to make the necessary connections to

K. This Contractor shall give ample written notice in advance to the Owner of any requested shutdowns.

L. The breaking into existing work shall be done only after approval has

#### 6. TESTS AND BALANCING

A. The work of this Contractor shall include the furnishing of all testing instruments, gauges, and other equipment required for necessary tests,

required by law, rules and regulations and as specified. B. Hotwater piping shall be tested hydrostatically at 100 psi for 4 hours.

No visible leaks shall occur during test period

Provide all other test required by Building Department, Fire Department and all other public agencies having jurisdiction

Tests shall be performed in the presence and to the satisfaction of the Operate the installation after completion for period necessary to make

until all performance characteristics are met. F. Engage the services of approved air balancing company to balance all existing & new systems and issue an air balancing report for engineer's approval. The

all required adjustments for automatic controls, air outlets and fans,

report should be certified by a New Jersey registered professional engineer and the test should be performed by a person having a minimum of 5 years experience in testing and balancing air systems. G. Upon completion of the installation, the air balance and testing

subcontractor shall make the necessary adjustments to balance the system. Provide any extra manual volume damper required for proper air H. At the completion of the test, the Contractor shall furnish the Architect seven copies of the final test report, these copies shall be complete with single line

A. Furnish and install sound absorptive lining in ductwork for locations and lengths as indicated and/or hereinafter specified. All soundproof material, installation and arrangement, shall be as authorized. Where ducts are acoustically lined, insulation shall be omitted for extend of acoustic lining. Dimensions noted for lined ducts are inside clear dimensions. Duct sizes shall be

diagrams and all required traverse airflow readings at main ducts and branches.

increased for liner. Sound Absorbent Duct Lining for low pressure ductwork — Furnish and install as herein specified and/or shown on the drawings (except where otherwise noted) 2" or 1" thick as indicated herein or on the drawings 1-1/2 lb. density, fibrous glass duct lining meeting the

requirements of NFPA 90A. Liner shall be adhered to all interior sides of duct with minimum 100% coverage of fire-retardant adhesive similar to Benjamin Foster 4 and with weld pins and washers or equivalent mechanical fastening starting 3" from edges and sides, 12" on center all sides. Minimum one row per side for duct size of 12" or less. Mechanical fasteners shall be toward air stream. Before installing liner, seal all butting edges and final edges with heavy coat of adhesive to seal off air between lining and duct. All exposed edges of lining shall be installed with sheet metal nosing 1-1/2" wide, two gauges heavier than duct. Installation shall be suitable for duct velocities up to 3,500 fpm. Low pressure duct lining shall be provided where specified and/or where shown and noted on the drawings.

D. Duct sizes indicated on drawings are clear inside dimensions. Increase sheet metal sizes

as required to accomodate thickness of acoustic lining. E. The following ductwork shall be acoustically lined whether or not shown on drawings.

1. All supply ductwork from all VAV terminal units to air outlets. 2. All ductwork downstream of RTU's not less than 25 feet from unit discharge and 25 feet from unit intake.

#### 8. SHEET METAL WORK

A. All ductwork, unless otherwise noted, shall be built from galvanized sheet steel and thoroughly braced and stiffened. All ductwork shall be constructed as low pressure ductwork (2" w.g.).

B. The construction for sheet metal ducts shall be made in accordance with recommendations of ASHRAE Guide, Latest Edition, or as per SMACNA Manual. All branches and take—offs shall have volume dampers.

C. Contractor shall seal all the ductwork at joints with 3M EC-800.

detectors and other equipment mounted in ducts.

D. Provide volume dampers at all branch take offs. Round ducts shall be galvanized steel spiral construction only, as manufactured by Semco, United McGill or authorized equal, and shall be constructed in accordance with Section III and Tables 3-2 and 3-3 of SMACNA manual 15d for minimum of 2" W.G. static pressure positive, and 2" W.G. negative; and shall include metal gauges, reinforcing fittings, connections, access doors and other accessories.

Fittings shall be SMACNA construction.

Provide access doors in ductwork to facilitate access to smoke

H. Flexible ductwork may be used for connections to supply diffusers only and shall be as manufactured by Thermoflex, Wiremold, Genflex, or authorized equal. Duct shall be continuous and insulated with 1" thick fibrous glass insulation having an outer moisture barrier consisting of a reinforced metallized Mylar/Neoprene laminate with integral attaching devices. Minimum pressure rating shall be 6" W.G. positive and 1" W.G. negative. Operating temperature range shall be -20 to  $+250^{\circ}$  F. Thermal conductance: 0.23BTU/hr/SF/°F at 75° F.

### 9. DUCTWORK INSULATION

A. Insulation for Concealed Duct

1. The following ductwork shall be insulated (except where acoustically lined) THICKNESS SERVICE

1-1/2" with vapor barrier Supply air 2. Except where otherwise noted, all concealed rectangular and round ductwork shall be covered with flexible duct insulation with

vapor barrier and of the thickness indicated below. Flexible duct insulation with vapor barrier shall be 1 lb. per cu. ft. density glass fiber with a maximum K factor of 0.29 at 75 Deg. F. mean temperature, with reinforced foil—faced, flame resistant kraft vapor barrier.

4. Insulation with vapor barrier shall be duct wrap insulation FRK-25, type 100 as made by Owens-Corning or Manville Microlite with FRK vapor barrier facing or standard duct insulation as made by CGG with FRM 5. Adhere insulation to duct with Foster fire resistant vapor barrier adhesive

or approved equal and joints without tabs shall be firmly sealed with

aluminum foil tape adhered with same adhesive. Secure insulation with 18 gauge corrosion resistant wire spaced not more than 18 inches on

6. Additionally, secure insulation to bottom of rectangular ducts over 24" wide with welded pins or stick clips on 18" centers.

7. All ductwork exposed to the weather shall be insulated and weather proofed with .016 smooth aluminum facing by Childers with baked enamel finish.

#### 10. AUTOMATIC TEMPERATURE CONTROLS

A. This contractor shall provide a control system compatible with the existing Daikin rooftop unit, all terminal devices and building system standard. Coordinate with building

control vendor B. The ATC contractor shall provide:

a. Field coordination with the provided equipment for proper operation. b. Field installation & wiring of all necessary hardware in compliance with this specification

the control system as designed and specified and provide any such deviations to the engineer for review/comment d. Provide programming, interface design, startup services by competent technicians that regularly employed by the ATC contractor with full responsibility for proper operation of the control system including debugging & proper calibration of each

c. Field analysis of the conditions to which would prohibit the functional operation of

component in the entire system e. Provide power supply wiring to all external DDC control panels, actuators (valves, dampers, etc.), including low voltage transformers.

C. The ATC system shall consist of a programmable, multiple zone communicating Monitor thermostat: multiple Zone Controllers. The system shall also include a complete array of input and output devices. The system shall provide full control of HVAC heating and cooling equipment in a multiple zone application. The System shall be capable of operating as a stand-alone system or networked with multiple systems connected on a

D. The control system shall be available as a complete package with the required input sensors and devices readily available. The system shall be capable of providing complete control of HVAC functions; variable air zone control, bypass air control in both pressure dependent and pressure independent applications. Airside controls shall be capable of operating VAV terminal boxes with supplemental heat sources at the zone. Unit control relay packs shall be available factory mounted with direct connection to field installed Monitor thermostats.

E. Mode Enable Sensor

• In a standard VAV application the Supply Air Temperature (SAT) sensor is configured as the Mode Enable Sensor during the Occupied Mode.

• In this configuration, upon entering the Occupied Mode (after a Morning Warm-Up/Cool-Down cycle) the unit operates in the Cooling Mode and controls to

F. Occupied Operation

To initiate the Occupied Mode of Operation for the VCB-X:

• Internal Week Schedule.

the SAT Cooling Setpoint.

Has an internal 7 day schedule with up to 2 start/stops events per day.

• Allows scheduling of up to 14 holiday periods per year.

H. HVAC Modes of Operation There are 7 possible HVAC Modes of Operation:

Cooling Mode

• Heating Mode

Vent Mode

• Dehumidification Mode

Cooling Setpoint.

Morning Warm—Up

Off Mode

I. Cooling Mode with Digital Scroll Compressor and Optional Fixed Compressor (s)

• In the Cooling mode, as the Supply Air Temperature (SAT) rises above the Active SAT Cooling Setpoint (see Supply Air Temperature Setpoint Reset section for explanation), the Digital Compressor will stage on and modulate to control to the Active SAT

• If additional cooling is required, fixed compressor stages can be staged on while the Digital Compressor continues to modulate.

• To stage up the extra compressor(s), the SAT needs to be above the Active SAT Cooling Setpoint and the Digital Compressor needs to be at 100% for a period of time equal to the Stage Up Delay. Once a fixed compressor is enabled the digital compressor signal will go to 50% and modulate as needed. This will repeat as additional fixed compressors are staged up.

• For compressors to stage on, Minimum Off Times (adj.) must be satisfied as well as Stage Up Delays (adj.).

• To stage down the extra compressor(s), the SAT needs to be below the Active SAT Cooling Setpoint minus the Cooling Stage Control Window and the Digital Compressor needs to be at 30% for a period of time equal to the Stage Down Delay. Once a fixed compressor stages off the digital compressor will go to 50% and modulate down as needed. This will repeat as additional fixed compressors stage off.

• For compressors to stage down, Minimum Run Times (adj.) must be satisfied as well as Stage Down Delays (adj.). The digital compressor is always the last compressor to be deactivated.

• Mechanical cooling is disabled if the outdoor air temperature (OAT) falls 1' below the Cooling Lockout Setpoint and will remain disabled until the OAT rises 1° above the Cooling Lockout Setpoint. If the OAT disables mechanical cooling while it is currently operating, mechanical cooling will stage off as minimum run times and stage down delays are satisfied.

• If the Economizer is enabled it will function as the first stage of cooling (see Economizer section).

#### J. Heating Mode

 Heating via Modulating Gas • For normal VAV applications the Heating Mode can be initiated during Morning Warm-Up or Unoccupied (Night Setback) Heating. For a VAV applications where Occupied Heating is needed see section "VAV Operation with Outdoor Air Temperature

• Once in the Heating Mode, the unit will stage or modulate heating to maintain the appropriate Heating Supply Air Temperature (SAT) Setpoint. Each stage must meet its Minimum Off Time (adj.) before it is allowed to energize and successive stages are

Control". See each of those sections to see how Heating Mode is initiated in those

Active SAT Setpoint plus the Heating Stage Control Window at which point the heating will begin to stage off. Each stage must meet its Minimum Run Time (adj.) before it is allowed to stage off and successive stages are subject to a Heating Stage Down Delay (adj.). • Mechanical heating is disabled if the outdoor air temperature (OAT) rises 1° above the

Heating Lockout Setpoint. If the OAT disables mechanical heating while it is currently

• Heating stages will continue to run until the supply air temperature rises above the

operating, mechanical heating will stage off as minimum run times and stage down delays are satisfied.

subject to a Heating Stage Up Delay (adj).

K. Morning Warm-Up Mode • Morning Warm—Up can be configured for any application but should not be used on

Heating Lockout Setpoint and will remain disabled until the OAT falls 1° below the

100% Outdoor Air Units, since the Outdoor Air Damper remains closed during • This mode occurs when the unit goes from the Unoccupied to the Occupied Mode and

the Return Air Temperature is below the Morning Warm-up Target Setpoint. • In this mode the unit operates in the Heating Mode as described above.

• During Morning Warm—Up, Heating is controlled to a Warm—Up Supply Air Setpoint. Otherwise, it operates in the Heating Mode as described above. • This mode remains in effect until the Return Air Temperature rises above the Morning

Warm-Up Target Temperature or until a user adjustable Time Period elapses.

• If there are VAV boxes with Orion controls communicating to this VAV unit controller, those VAV boxes are driven either to full open or to a fixed position.

• The Outdoor Air Damper remains closed during this mode.

• This mode is only available in the Occupied Mode of operation on units configured for continuous Supply Fan operation and is generated anytime there is no demand for heating or cooling. The fan will operate at the configured Minimum Vent speed.

### • Off Mode occurs in the Unoccupied Mode when there is no heating, cooling or

dehumidification demand.

N. Economizer Operation • Available when Outdoor Air (OA) drybulb, wetbulb, or dewpoint temperature is below the Economizer Enable Setpoint by 1° and the OA temperature is at least 5° below the

• Economizer acts as 1st stage of cooling and controls to the Active Supply Air Cooling

above setpoint, mechanical cooling is allowed to stage up while the economizer is held

Setpoint. If the economizer reaches 100% and the supply air temperature is still

return air temperature. • Economizer operation is disabled when the OA temperature rises 1° above the Economizer Enable Setpoint

• Wetbulb or dewpoint operation requires an Outdoor Humidity Sensor.

• The Supply Fan is off and the Outside Air Damper is closed.

at the full open position An Economizer Minimum Position can be programmed into the controller. Closed during Unoccupied Mode, except when Unoccupied free cooling is required. O. Supply Fan Operation

• Occupied Mode — the Supply Fan can be configured to run continuously or to cycle with Heating, Cooling, or Dehumidification.

• Unoccupied Mode — the Supply Fan will cycle on a call for Heating, Cooling, or Dehumidification.

• Anytime the Supply Fan is requested to start, a 1 minute minimum off timer must be satisfied. If the timer is satisfied, the Supply Fan relay is activated while all other

output are held off until their minimum off timers have been met. • When going into Occupied Mode, an optional "Purge Mode" is initiated. The fan runs with the Economizer closed, and all Cooling and Heating is de-energized. The length

of the Purge Mode is user—adjustable. • In fan cycle mode or when going unoccupied the supply fan is held on for 2 minutes after the last stage of heating or cooling stages off.

P. Duct Static Pressure Control

• The VCB—X Controller can be used to control a Supply Fan VFD or an actuator to maintain a Duct Static Pressure Setpoint.

• The Duct Static Pressure Setpoint, the Setpoint Deadband, the Static Pressure Control Signal, and the Static Control Rate are all user—adjustable.

Q. Proof of Flow Interlock

• A Proof of Flow switch (by others) provides a 24 VAC wet contact closure when the supply fan is operating.

• If this contact opens while the fan is being called to run, all heating and cooling is disabled and a Fan Proving Alarm is generated.

#### R. Dirty Filter Status

• A differential pressure switch (by others) is used to provide a 24 VAC wet contact closure to indicate a dirty filter status. A Dirty Filter Alarm is then generated.

S. Emergency Shutdown • A 24 VAC wet contact input is available to be used with a N.C. Smoke Detector,

Firestat, or other shutdown condition (all by others). • If this contact opens it will initiate shutdown of the VCB—X and will generate an

alarm condition. This contact closure does not produce an instantaneous shutdown.

• For instantaneous shutdown the device initiating the open condition on this contact should also be wired to cut the 24 V common to the VCB—X relay outputs. T Outdoor Air Lockouts

• Mechanical cooling is disabled when the Outdoor Air Temperature is below the Cooling • Mechanical heating is disabled when the Outdoor Air Temperature is above the Heating

Lockout.

Lockout Setpoint.

Expansion Boards.

Condenser

Aux Heat

Emergency Heat

U. VAV Box Compatibility When the system Controller is configured for VAV operation and is used in conjunction

• Broadcasts the Supply Air Temperature to the boxes so they can use that information

Morning Warm-Up/Cool-Down (VAV Boxes)

Controls VAV/Zone Controllers the following features are available: • Can respond to Unoccupied overrides and Unoccupied heating and cooling calls from box controllers.

• There are 22 relay outputs that are configurable for the VCB—X Controller and

to determine Warm-Up Mode or Heating/Cooling/Vent Mode of operation. V. Relay Outputs

• Relay #1 is reserved for the Supply Fan and is not configurable. The configuration options are as follows, Digital Compressor Pre-Heat Cooling Stage Low Ambient

Economizer (Outdoor Air Damper Relay)

W. Alarm Detection and Reporting

Heating Stage Occupied Active Heat Pump Compressor Reversing Valve

Economizer Active

Mod Heat Enable Exhaust Fan Heat Wheel Mod Cool Enable

Reheat

This Relay energizes when the unit is in Economizer Mode. Occupied, Alarm, Override Relays

• Occupied Relay — enabled anytime the unit goes into the Occupied Mode • Alarm Relay — enabled anytime a VCB—X alarm is active • Override Relay — enabled anytime a space sensor pushbutton override is active

• Continuously performs self diagnostics during normal operation.

Tool, or to a computer running Prism 2 software.

• Diagnostic LEDs generate "blink codes" for certain alarm conditions. X. The following are the available alarms, Bad SAT Sensor Mechanical Cooling Failure Bad OAT Sensor Mechanical Heating Failure Bad Space Sensor Fan Proving Alarm Dirty Filter Alarm Missing Main Expansion Board Missing CO2 Sensor Emergency Shutdown High Supply Air Temperature Cutoff Bad Compressor Discharge Sensor Low Supply Air Temperature Cutoff Missing Suction Pressure Sensor Missing Outdoor Airflow Sensor High Control Temperature Missing Exhaust Airflow Sensor Low Control Temperature Missing Supply Air Airflow Sensor Digital Compressor Cutoff

Digital Compressor Lockout

Unsafe Suction Pressure

WSHP Low Water Temperature

WSHP Low Leaving Water Temperature

High Head Pressure

WSHP Proof of Flow

Low Suction Pressure

Unsafe Suction Pressure

NOISE CONTROL

Missing Return Air Airflow Sensor

Missing MHGRV-X Board

Missing 12 RLY Board

Missing ModGas Board

Missing 12 Relay Board

Missing MODGAS—X Board

acceptable and should be corrected by this Contractor at no expense to the owner. 12. RECORD DRAWINGS

A. All installation shall be in a manner that the N.C. level in the space

shall not exceed 35 dBA. Noise levels above this limit will not be

A. Maintain a careful and complete record of all items installed and upon completion of work, deliver to the owner a complete set of (producible) "as—built" drawings.

13. GUARANTEE

A. The Contractor augrantees by his acceptance of the contract that all work installed will be free from any and all defects for a period of one year from date of completion and acceptance of work.

MICHAEL SAVARESE ASSOCIATES

34 SYCAMORE AVENUE, UNIT 1E LITTLE SILVER, NJ 07739 P: (732) 530-1424 F: (732) 443-4220

P: (646) 957-6031 email msassc@msassc.com



(201) 444-0753 FAX (201) 444-083 Brian W. Pasechnick, PE NJ #48111 PA #PE078527 <u>Milton A. Azous, PE</u> NJ #21057 NY #48388 PA #PE021148E Edward J. Gaito, PE NJ #26166 NY #57012 Va #016807 De #11776

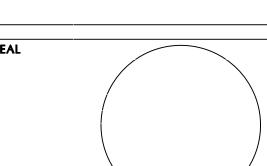
DESCRIPTION

REVISIONS

DATE:

BLOCK: 213 LOT: 8.01

ZONE: OPT 2



MECHANICAL

M-3

email msassc@msassc.com 114 WEST 26TH STREET, 6TH FLOOR NEW YORK, NY 10001

> Omdex Incorporated Consulting Engineers

21 Cross Avenue Midland Park, NJ 07432-1811

ISSUES • For Air to Air Heat Pumps, compressor Heating will be disabled below the Heat Pump

DR. SADEK

DESCRIPTION

SHEET TITLE:

IOB NO.: DRAWN BY 890-1701 GB/LN

PROJECT

479 ROUTE 520, SUITE A203 MARLBORO TOWNSHIP, NJ 07746

• Failures are reported to a Touch Screen System Manager, a Hand Held Modular Service

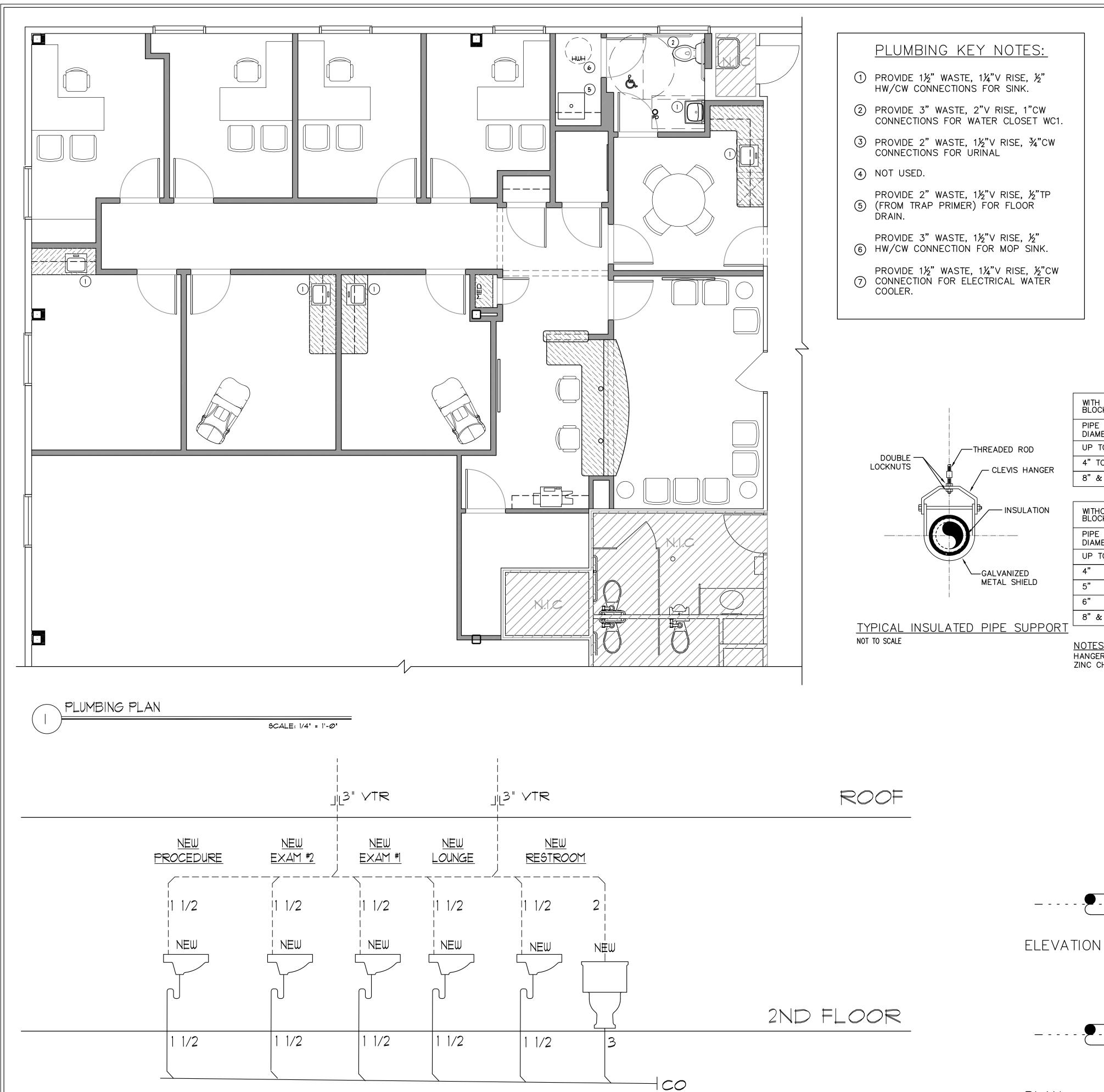
BRIAN PASECHNICK, F N.J. LIC. #48111

**SPECIFICATIONS** 

11/14/2017 BSCAN/ APPLICATION NO.:

SHEET NO.

PAGE



PLUMBING RISER

SCALE: 1/2" = 1'-0"

- 1) PROVIDE 1½" WASTE, 1¼"V RISE, ½"
- (2) PROVIDE 3" WASTE, 2"V RISE, 1"CW CONNECTIONS FOR WATER CLOSET WC1.
- 3 PROVIDE 2" WASTE, 1½"V RISE, ¾"CW
- PROVIDE 2" WASTE, 11/2"V RISE, 1/2"TP
- PROVIDE 3" WASTE, 1½"V RISE, ½"
- PROVIDE 1½" WASTE, 1¼"V RISE, ½"CW (7) CONNECTION FOR ELECTRICAL WATER

### PLUMBING GENERAL NOTES:

WITH INCOMPRESSIBLE INSULATING BLOCK AT HANGER

DIAMETER

UP TO 3"

4" TO 6"

DIAMETER

UP TO 3"

8" & LARGER | 12"

8" & LARGER 24"

SHIELD

LENGTH

8"

WITHOUT INCOMPRESSIBLE INSULATING BLOCK AT HANGER

LENGTH

12**"** 

15**"** 

18"

HANGER, ROD & INSERT SHALL BE DIPPED IN ZINC CHROMATE PRIMER PRIOR TO INSTALLATION

SHIELD THICKNESS USSG

16

18

16

16

16

14

NIPPLES (TYPICAL)

THREADED CLEANOUT

SHIELD SHIELD THICKNESS

USSG

- RUN HOT AND COLD WATER LINES DOWN IN WALLS OR CHASES BRANCH TO FIXTURES AS
- 2. INSULATE ALL HOT AND COLD WATER LINES ABOVE GROUND AND CEILINGS WITH 1" THICK GLASS
- FIBER INSULATION WITH A FACTORY APPLIED VAPOR BARRIER UNLESS NOTED OTHERWISE. INSTALL STOPS ON EACH WATER LINE AT EACH FIXTURE.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH THE LOCAL CODE OFFICIAL PRIOR TO EXECUTION OF ANY WORK OR PURCHASE OF ANY EQUIPMENT.
  - INSTALL PIPING AFTER DUCTWORK HAS BEEN PLACED.
  - COORDINATE ALL WORK WITH THAT OF OTHER TRADES; ELECTRICAL, ETC.
- DRAWINGS ARE DIAGRAMMATIC AND SHOW GENERAL ARRANGEMENT OF PIPING AND EQUIPMENT. PROVIDE PRESSURE REDUCING VALVES ON DOMESTIC WATER LINES AS REQUIRED COORDINATE WITH
- LOCAL UTILITIES. PROVIDE WATER HAMMER ARRESTORS. NO SITE BUILT ARRESTORS ARE ALLOWED.
- 10. PROVIDE ALL REQUIRED CUTTING AND TRENCHING OF FLOOR. BACKFILL AND PATCH FLOOR TO MATCH EXISTING.
- 11. MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER CONSTRUCTION OF ANY PART OF THE WORK SHALL BE INCLUDED AS IF THEY WERE INDICATED ON THE DRAWINGS.

INSULATED PIPING AND TUBING

ADJUSTABLE CLEVIS PIPE SUPPORT

45 ELBOW (TYPICAL)

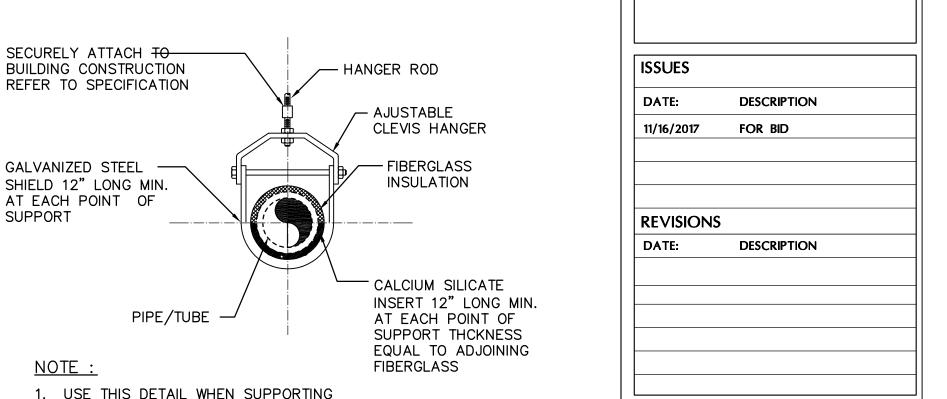
45 ELBOW (FOR DEAD END) OR

45 WYE (FOR CONTINUOUS RUN)

LARGER THAN ONE (1) INCH.

NOT TO SCALE

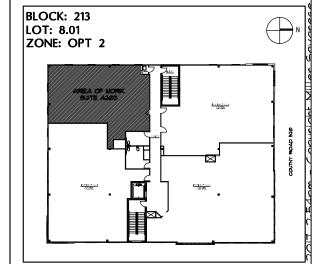


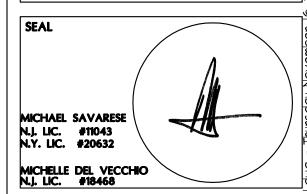


PROJECT

DR. SADEK

479 ROUTE 520, SUITE A203 MARLBORO TOWNSHIP, NJ 07746





SHEET TITLE: PLUMBING PLAN AND DETAILS

<b>JOB NO.:</b> 890-1701	DRAWN BY SPK		
SCALE	DATE		
AS NOTED	11/1/2017		

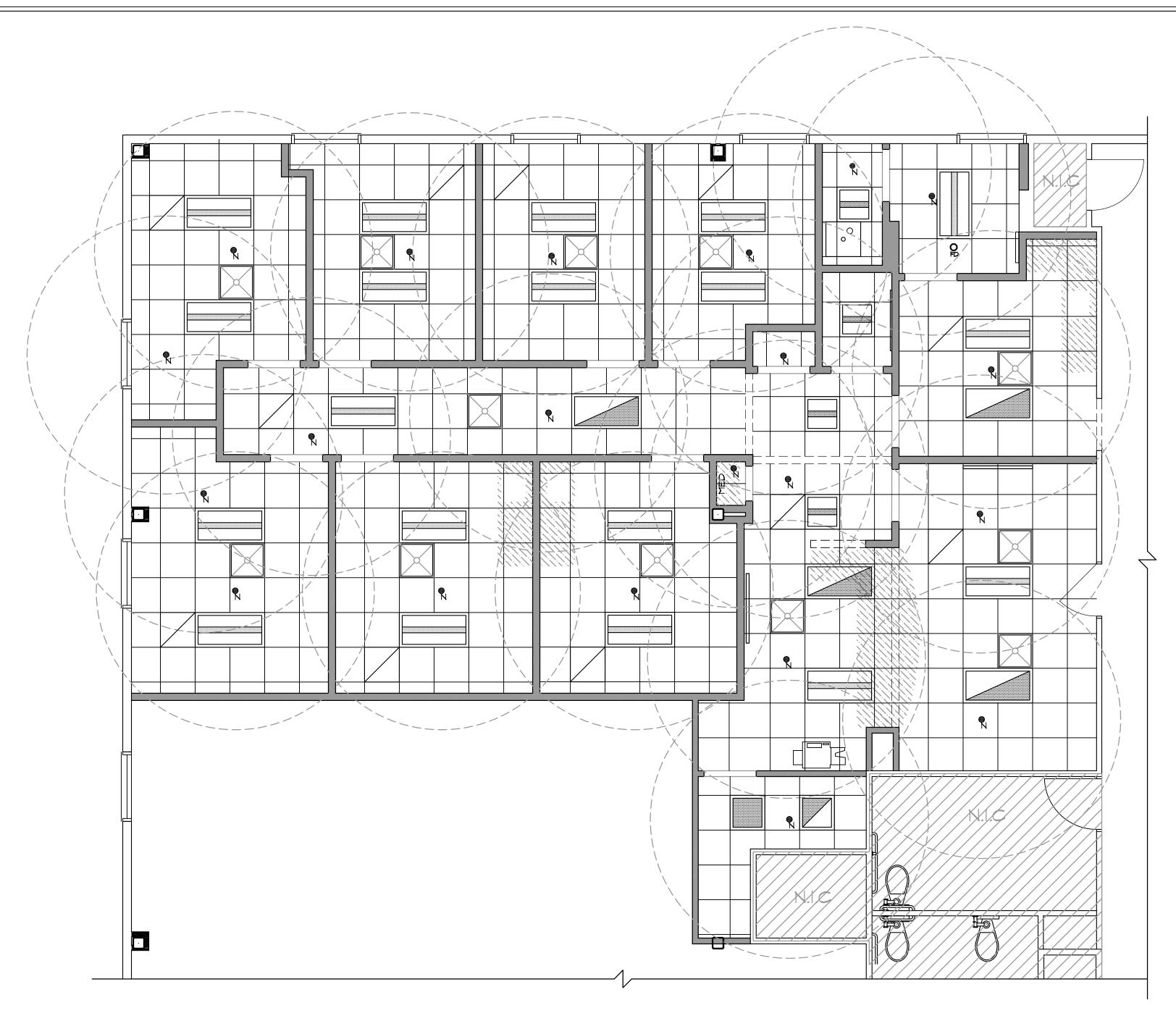
12 OF X

BSCAN/ APPLICATION NO.:

P-100.00

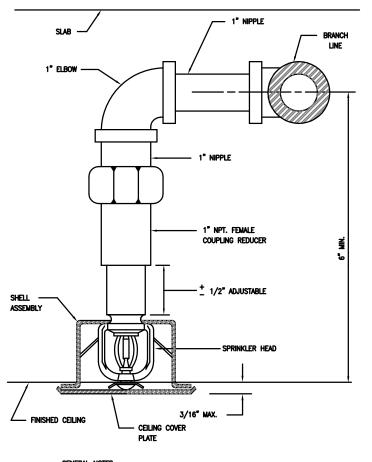
SEWER AND ROOF DRAIN CLEANOUT SCALE: NTS

PLAN



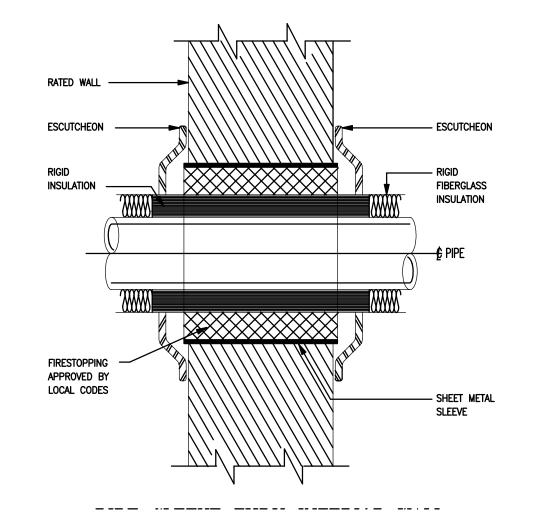
SPRINKLER PLAN

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



1. INSTALL SPRINKLER HEAD ARMS PARALLEL TO BRANCH LINES (TYPICAL)

CONCEALED SPRINKLER HEAD BRANCHLINE CONNECTION



PIPE SLEEVE THRU INTERIOR WALL

SCALE: NTS

SPRINKLER LEGEND

'R' INDICATES RELOCATED 'N' INDICATES NEW 'D' INDICATES DEMOLITION OF EXISTING 'E' INDICATES EXISTING TO REMAIN

RECESSED SPRINKLER HEAD

SPRINKLER COVERAGE RADIUS

SPRINKLER NOTES

1. THIS SPRINKLER DRAWING IS ISSUED FOR DESIGN BUILD PURPOSES, AND IS INTENDED TO BE SCHEMATIC IN NATURE. THE CONTRACTOR IS RESPONSIBLE TO DESIGN THE SYSTEM IN COMPLETE COMPLIANCE WITH ALL CODES AND REGULATIONS AND SUBMIT SIGNED & SEALED SHOP DRAWINGS AND HYDRAULIC CALCULATIONS. SEE SPECIFICATIONS FOR DETAILS. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVED BY THE AUTHORITY HAVING JURISDICTION. PRIOR TO THE INSTALLING OF ANY SPRINKLER HEADS.

2. PROVIDE CHROME PENDENT HEADS IN AREAS WITH CEILINGS, VIKING QUICK RESPONSE OR EQUAL. 3. PROVIDE UPRIGHT HEADS IN AREAS WITHOUT CEILINGS, VIKING QUICK RESPONSE OR EQUAL 4. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND JOB CONDITIONS AND SHALL REPORT TO ENGINEER ANY DISCREPANCIES OR OMISSIONS THAT WOULD INTERFERE WITH SATISFACTORY COMPLETION OF THE WORK.

5. COORDINATE THE FIRE PROTECTION SYSTEM WITH WORK OF ALL OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION. PROVIDE ALL FITTINGS, OFFSETS, AND TRANSITIONS AS REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING A FULL SET OF BID DOCUMENTS AND VISIT THE SITE TO MAKE HIMSELF AWARE OF THE TOTAL JOB BEFORE SUBMITTING HIS PRICE, FAILURE TO COMPLY SHALL NOT HOLD THE OWNER RESPONSIBLE FOR ANY ADDITIONAL COST. CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING WITH FACILITY'S BUILDING MANAGEMENT FOR HANDLING MATERIALS, AS WELL AS FOR ALLOWABLE WORKING HOURS AND DELIVERIES.

7. NOTIFY BUILDING MANAGER AT LEAST 48 HOURS BEFORE NEW WORK OR BEFORE SHUT DOWN OF EXISTING SERVICES. RISER SHUT DOWNS SHALL BE PERFORMED AT TENANT'S COST, AT DESIGNATED TIMES UNDER BUILDING MANAGER'S SUPERVISION AND ONLY WITH HIS APPROVAL.

8. CONTRACTOR SHALL CARRY AND DOCUMENT LIABILITY, ACCIDENT AND PROPERTY DAMAGE INSURANCE AS REQUIRED BY COOPERATIVE CORPORATION AND OBSERVE THEIR PERMITTED HOURS FOR

9. CONTRACTOR SHALL EXERCISE EXTREME CARE IN PROTECTING AREAS ADJACENT TO CONSTRUCTION AREAS SHALL FULLY PROTECT THEM FROM ANY DAMAGE RESULTING FROM CONTRACTOR'S WORKMEN, SUBCONTRACTORS OR AGENTS, AND SHALL BE RESPONSIBLE FOR REPAIRING, CLEANING OR REPLACING ANY SUCH DAMAGE.

10. ALL DIMENSIONS GIVEN ARE FINISH DIMENSIONS UNLESS OTHERWISE STATED.

11. UNLESS SPECIFICALLY STATED OTHERWISE, CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, APPURTENANCES, EQUIPMENT AND SERVICES TO COMPLETE ALL WORK AS INDICATED ON DRAWINGS AND/OR SPECIFIED ON NOTES.

12. UNLESS SPECIFICALLY STATED OTHERWISE, CONTRACTOR SHALL FOLLOW MANUFACTURER'S DIRECTIONS, INSTRUCTIONS AND RECOMMENDATIONS FOR ALL MATERIALS AND PROCESSES USED IN THIS CONTRACT. 13. SPRINKLERS IN MECHANICAL ROOM SHALL HAVE A TEMPERATURE RATING OF 212°F. LOCATIONS, NECESSARY FOR INSPECTION AND MAINTENANCE.

14. CONTRACTOR TO PROVIDE SPRINKLER SHOP DRAWINGS. SPRINKLER PIPING SHALL BE INSTALLED AS PER APPROVED SHOP DRAWINGS.

15. GC TO PROVIDE CODE COMPLIANT RECESSED SPRINKLER CAPS...COLOR WHITE.

16. EACH CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL PENETRATIONS, CUTTING, PATCHING, SLEEVES, AND FIRESTOPPING REQUIRED TO COMPLETE THE INSTALLATION OF ALL WORK INCLUDED UNDER THEIR CONTRACT.

17. ALL UPRIGHT SPRINKLER HEADS IN MECHANICAL AND STORAGE ROOMS SHALL HAVE HEAD GUARDS. 18. UPON COMPLETION OF THE WORK, CONTRACTOR SHALL COMPLETELY CLEAN THE CONSTRUCTION AREA SUITABLE FOR THE OWNER'S USE, INCLUDING REMOVAL OF ALL LABELS, CLEANING OF ALL THE EQUIPMENT, CONSTRUCTION WORK, WINDOWS AND OTHER WORK, NEW AND OLD, IN THAT CONSTRUCTION AREA. 19. BUILDING DEPARTMENT APPROVED PLANS SHALL BE TURNED OVER TO OWNER AT THE COMPLETION OF THE JOB.

20. AT THE FINAL COMPLETION OF THE JOB, CONTRACTOR SHALL SUBMIT TO THE FACILITY AND TO ENGINEER A NOTARIZED AFFIDAVIT STATING COMPLIANCE WITH ALL PROVISIONS OF THIS CONTRACT. INCLUDING ALL NOTES.

21. CONTRACTOR SHALL GUARANTEE ALL WORK PERFORMED UNDER THIS CONTRACT FOR ONE YEAR, STARTING FROM DATE OF FINAL ACCEPTANCE OF ALL WORK.

22. CONTRACTOR SHALL PROVIDE ALL FITTINGS AND PIPING REQUIRED TO MODIFY EXISTING SPRINKLER MAIN TO ALLOW FOR INSTALLATION OF HYAC DUCT WORK AND LIGHTING FIXTURES. 23. OWNER SHALL NOTIFY FDNY OF FIRE PROTECTION SYSTEM DISCONNECTION BY SUBMITTING A LETTER

ROD (SIZE AS REQ'D) CLEVIS HANGERS REQUIRED ON PIPING LARGER THAN 1", GENERAL PURPOSE HANGERS MAY BE USED ON 1" PIPING CLEVIS HANGER-

SCALE: NTS

TYPICAL HANGER DETAIL

OF NOTIFICATION.

MICHAEL SAVARESE ASSOCIATES 34 SYCAMORE AVENUE, UNIT 1E

LITTLE SILVER, NJ 07739 P: (732) 530-1424 F: (732) 443-4220 email msassc@msassc.com

114 WEST 26TH STREET, 6TH FLOOR NEW YORK, NY 10001 P: (646) 957-6031 email msassc@msassc.com

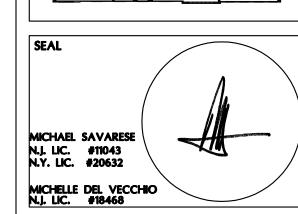
ISSUES DESCRIPTION 11/16/2017 FOR BID **REVISIONS** DESCRIPTION

PROJECT

DR. SADEK

479 ROUTE 520, SUITE A203 MARLBORO TOWNSHIP, NJ 07746

ZONE: OPT 2

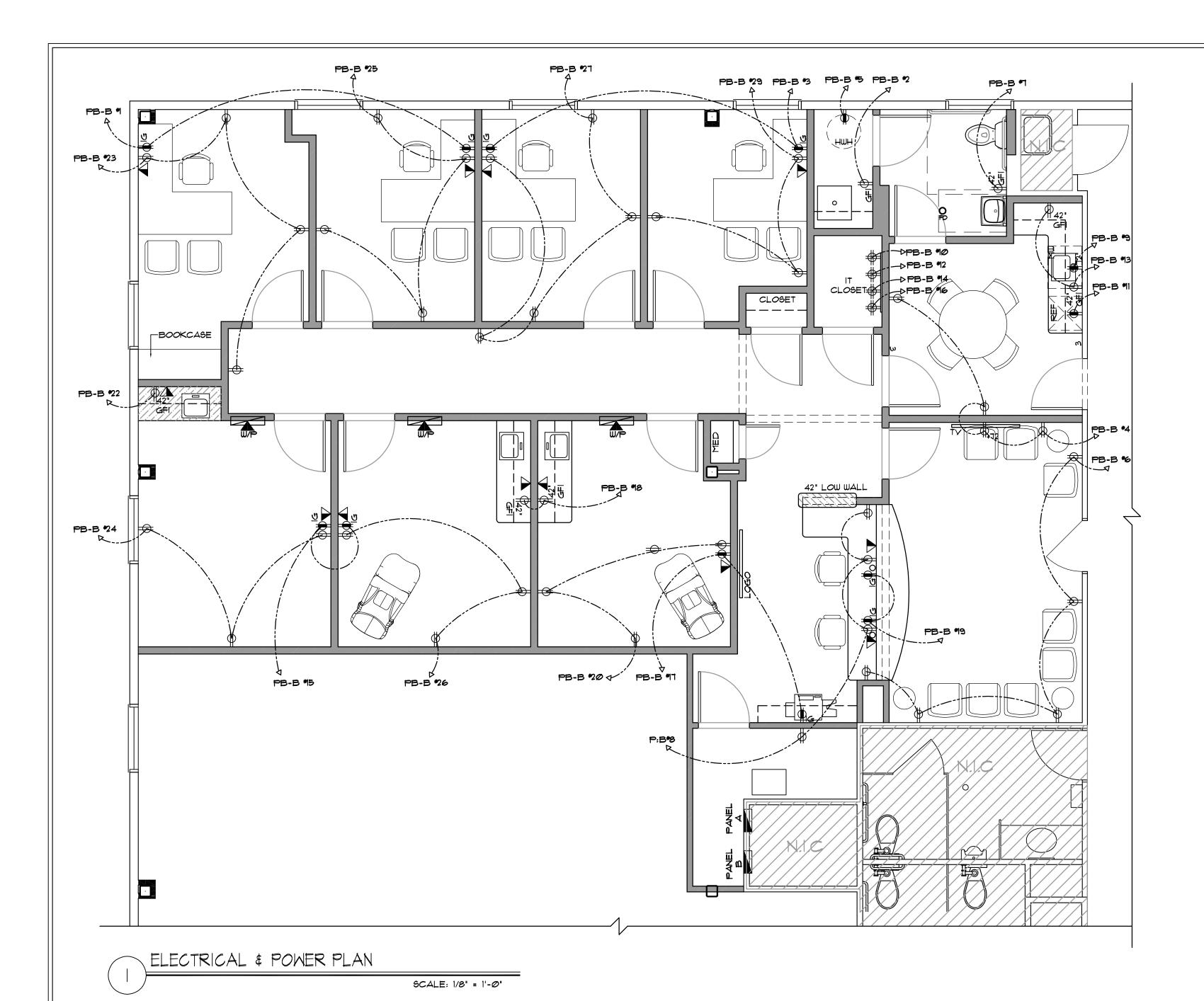


SHEET TITLE: SPRINKLER PLAN AND DETAILS

JOB NO.: DRAWN BY 890-1701 SPK 11/1/2017 AS NOTED

**BSCAN/ APPLICATION NO.:** 

SP-100.00 13 OF X



EXISTING PANEL: B CAT. #: BUS RATING 200 AMPS MAX. VOLTAGE <u>208Y/120 VOLTS</u> MOUNTING RECESSED CIR. NO. OF NO. POLES CIR. NO. OF TRIP DESCRIPTION DESCRIPTION 20 JANITOR GFI 1 20 OFFICE IG'S 20 OFFICE IG'S LOUNGE/WAITING RM CONVEN. RECP. 20 1 20 NOT USED WAITING RECP. 20 1 20 BATHROOM GFI RECEPTION/ELEC. RM CONVEN. RECP. 8 1 20 1 20 MICROWAYE DED 10 | 1 | 20 | IT CLOSET QUAD DED. 1 20 IT CLOSET QUAD DED. 1 20 FRIDGE DED 14 1 20 IT CLOSET QUAD DED. 1 20 LOUNGE GFI'S 20 IT CLOSET QUAD DED. 20 EXAM/PROCEDURE RM IG'S 1 20 EXAM RM/PRINTER IG'S 18 1 20 EXAM RM GFI'S 1 20 RECEPTION IG'S 20 1 20 EXAM RM CONVEN. RECP. 1 20 NOT USED 1 20 PROCEDURE RM GFI 23 | 1 | 20 | OFFICE CONVEN. RECP. 24 | 1 | 20 | PROCEDURE RM CONVEN. RECP. 25 | 1 | 20 | OFFICE CONVEN. RECP. 26 | 1 | 20 | EXAM RM CONVEN. RECP. 28 1 20 NOT USED 27 1 20 OFFICE/CORRIDOR CONVEN. RECP. 29 1 20 OFFICE CONVEN. RECP. 20 EXISTING USE

- -ALL BRANCH CIRCUIT WIRING SHALL BE INSTALLED IN METALLIC RACEWAYS, 3" MINIMUM, SIZED IN ACCORDANCE WITH NEC CONDUIT FILL TABLES.
- -CONTRACTOR SHALL REPLACE ANY EXISTING BRANCH BREAKER THAT IS NOT LISTED FOR USE WITH THE PANEL.
- -ALL BREAKER LABELING TO BE CONFIRMED IN FIELD PRIOR TO COMMENCEMENT OF WORK
- -MARK ALL CIRCUITS AS SPARE IF NO LONGER REQUIRED AFTER DEMOLITION AND INSTALLATION OF NEW WORK
- -PROVIDE UPDATED CIRCUIT BREAKER PANEL LABEL AT COMPLETION OF WORK

#### ELECTRICAL, TELEPHONE, & DATA NOTES

- 200. REFER TO GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 201. CONTRACTOR TO BRING TO ARCHITECT'S ATTENTION ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS AND FIELD CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
- ALL WALL MOUNTED ELEC., TEL., & DATA RECEPTACLES TO BE MOUNTED 18" AFF UNLESS OTHERWISE NOTED. (SEE 'TYPICAL MOUNTING HEIGHTS, THIS DWG.) YERIFY MOUNTING HEIGHTS WITH ARCHITECTURAL DETAILS.
- 203 ALL ELECTRICAL OUTLETS, DATA OUTLETS, SWITCHES & COVER PLATES SHALL BE TYPE: LEVITON DECORA, COLOR: WHITE ALL EXISTING OUTLETS, SWITCHES, ETC. TO REMAIN SHALL BE CHANGED TO MATCH NEW.
- 204. ALL OUTLETS ARE TO BE CENTERED ON WALL INDICATED UNLESS OTHERWISE NOTED. LOCATION OF POWER WHIPS, FLOOR OUTLETS AND MULTIPLE OUTLETS TO BE OBTAINED FROM PLAN, AND VERIFIED IN FIELD.
- 205) ALL POWER, DATA, SWITCHES, ETC SHOWN ARE NEW.
- ALL ELECT. DEVICES SHOWN ON THIS DWG. SHALL BE CIRCUITED ON NEXT AVAILABLE CIRCUIT.
- 207 IN ADDITION TO WHAT IS LOCATED ON THE PLAN, G.C. SHALL PROVIDE (1) LOCAL SWITCHES, (2) DUPLEX POWER OUTLETS AND (1) TEL/DATA RECEPTACLES LOCATED THROUGHOUT THE SPACE. LOCATIONS T.B.D. IN FIELD WITH ARCHITECT/OWNER.
- IF APPLICABLE, ALL WALL MOUNTED EMERGENCY LIGHTS & EXIT LIGHTS & CEILING MOUNTED EXIT LIGHTS NOTED AS EXIST'S TO REMAIN SHALL BE CONFIRMED TO BE IN GOOD WORKING ORDER
- 209) ALL DRAG LINES FOR TEL/DATA RECEPTACLES TO BE PULLED BACK TO ELECT. CLOSET
- (210) GC TO PROVIDE ALL DATA/TELEPHONE STUB-UPS INCLUDING BOXES FOR TENANT'S TEL/DATA VENDOR. G.C. SHALL COORDINATE W/ VENDOR'S PLAN.
- 211. ALL NEW ELECTRICAL WIRING THROUGHOUT SHALL BE MEDICAL GRADE. ANY EXISTING WIRING THAT IS NOT MEDICAL GRADE SHALL BE REMOVED & REPLACED
- 212. G.C. TO PROVIDE JUNCTION BOX IN CEILING FOR ILLUMINATED SIGNAGE

#### ELECTRICAL, TELEPHONE, & DATA LEGEND

'E' INDICATES EXISTING TO REMAIN 'GFI'= GROUND FAULT INTERRUPT 'IG' = ISOLATED GROUND 'R' INDICATES RELOCATED

- NEW WALL MOUNTED QUAD ELECTRICAL RECEPTACLE
- $\Rightarrow$ NEW WALL MOUNTED DUPLEX ELECTRICAL RECEPTACLE
- WALL MOUNTED PHONE

FIRE ALARM HORN STROBE

FIRE ALARM VISUAL STROBE

WALL MOUNTED THERMOSTAT HONEYWELL FOCUS PRO 6000 SERIES W/ AUTOMATIC CHANGEOVER

#### TYPICAL MOUNTING HEIGHTS

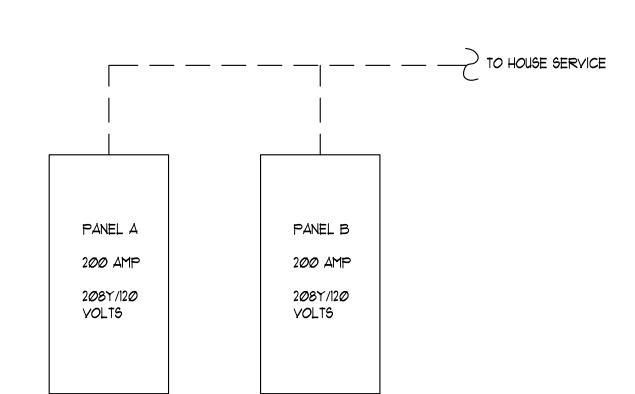
NOTE: HEIGHTS GIVEN ARE FROM FINISHED FLOOR TO

CENTERLINE OF OUTLET OR DEVICE U.O.N. GENERAL CONVENIENCE OUTLETS 18" U.O.N.

42" U.O.N. WALL LOCAL SWITCHES DEVICES LOCATED AT COUNTERS 6" ABOVE COUNTER OR

BACKSPLASH, U.O.N. 18" U.O.N. ECL AND TELEPHONE OUTLETS

42" U.O.N. WALL TELEPHONE OUTLETS **TELEVISION** 72" U.O.N. 72" U.O.N. MICROWAVE



PARTIAL PANEL RISER

## EXISTING PANEL: A

CAT. #: BUS RATING 200 AMPS MAX.

SCALE: NTS

MOUNTING RECESSED						VOLTAGE 208Y/120 VOLTS		
CIR. NO.	NO. OF POLES	TRIP	DESCRIPTION	CIR. NO.	NO. OF POLES	TRIP	DESCRIPTION	
1				2	1	20	EXISTING USE	
3	3	60	EXISTING USE	4	1	20	EXISTING USE	
5				6	1	20	LIGHTS	
7	† 1	20	30 ELECTRIC WATER HEATER	8	1	20	EMERGENCY LIGHTS/EXIT SIGNS	
9	2	20		10	1	20	NOT USED	
11	1	20	NOT USED	12	1	20	NOT USED	
13	1	20	NOT USED	14	1	20	NOT USED	
15	1	20	NOT USED	6	1	20	NOT USED	
17	1	20	NOT USED	18	1	20	NOT USED	
19	1	20	NOT USED	20	1	20	NOT USED	
21	1	20	NOT USED	22	1	20	NOT USED	
23	1	20	NOT USED	24	1	20	NOT USED	
25	1	20	NOT USED	26	1	20	NOT USED	
27	1	20	NOT USED	28	1	20	NOT USED	
29	1	20	NOT USED	3Ø	1	20	NOT USED	
31	1	20	NOT USED	32	1	20	NOT USED	
33	1	20	NOT USED	34	1	20	NOT USED	
35	1	20	NOT USED	36	1	20	NOT USED	
37	1	20	NOT USED	38	1	20	NOT USED	
39	1	20	NOT USED	40	1	20	NOT USED	
41	1	20	NOT USED	42	1	20	NOT USED	
110+20								

- -ALL BRANCH CIRCUIT WIRING SHALL BE INSTALLED IN METALLIC RACEWAYS, 3" MINIMUM, SIZED IN ACCORDANCE WITH NEC CONDUIT FILL TABLES.
- -CONTRACTOR SHALL REPLACE ANY EXISTING BRANCH BREAKER THAT IS NOT LISTED FOR USE WITH THE PANEL.
- -ALL BREAKER LABELING TO BE CONFIRMED IN FIELD PRIOR TO COMMENCEMENT OF WORK
- -MARK ALL CIRCUITS AS SPARE IF NO LONGER REQUIRED AFTER DEMOLITION AND INSTALLATION OF NEW WORK
- -PROVIDE UPDATED CIRCUIT BREAKER PANEL LABEL AT COMPLETION OF WORK



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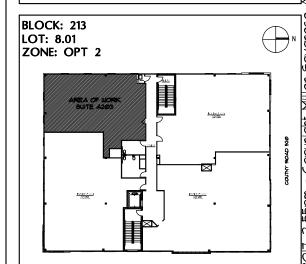
email msassc@msassc.com 114 WEST 26TH STREET, 6TH FLOOR | NEW YORK, NY 10001 P: (646) 957-6031 email msassc@msassc.com

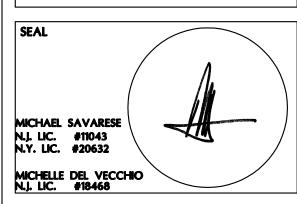
ISSUES DESCRIPTION FOR BID 11/16/2017 REVISIONS DESCRIPTION

PROJECT

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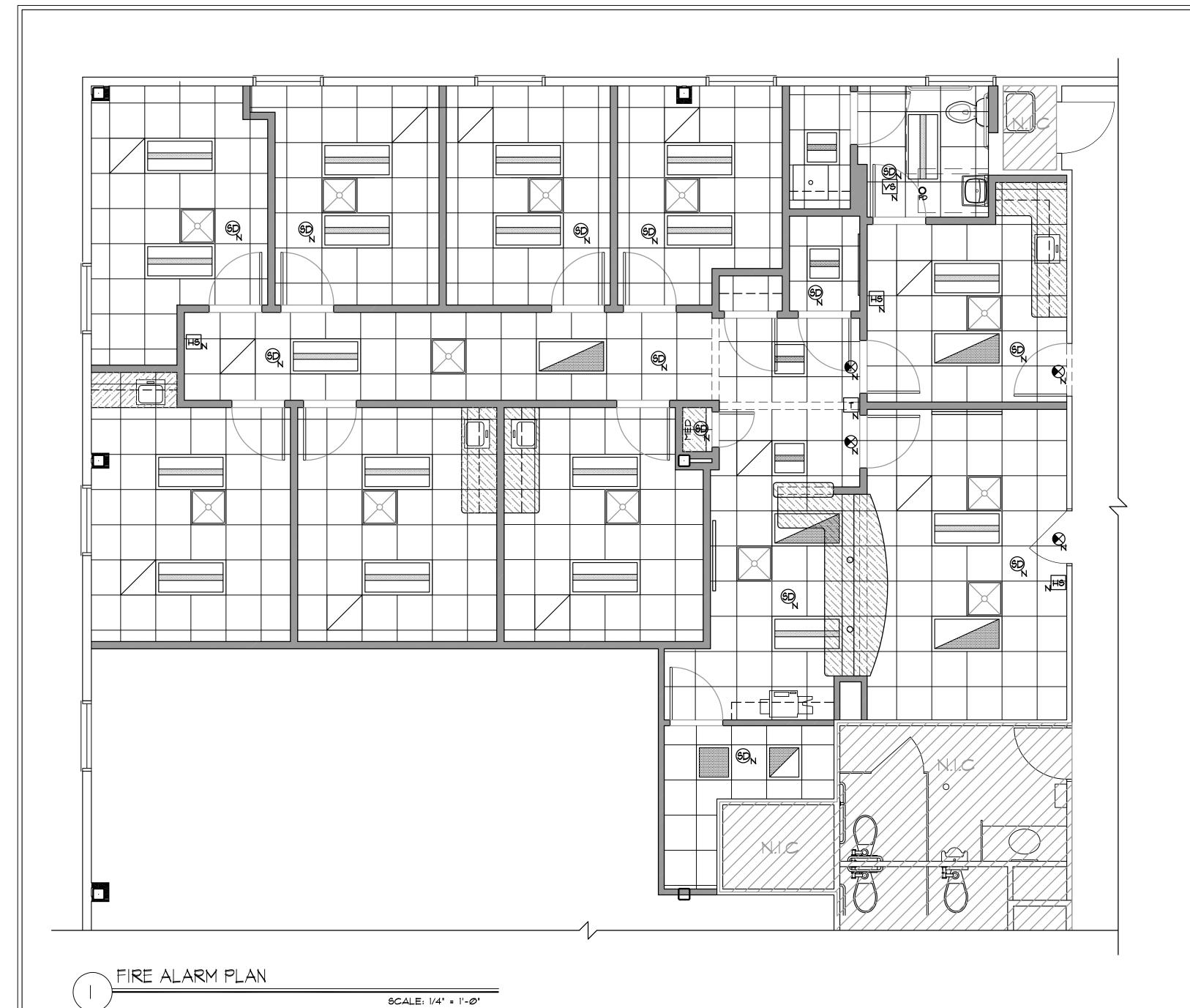
ELECTRICAL PLAN

SHEET TITLE:

DRAWN BY JOB NO.: 890-1701 SPK 11/1/2017 AS NOTED

BSCAN/ APPLICATION NO.:

E-100.00



| FIRE ALARM LEGEND

'R' INDICATES RELOCATED
'N' INDICATES NEW

'D' INDICATES DEMOLITION OF EXISTING 'E' INDICATES EXISTING TO REMAIN

SINGLE FACED WALL MNTD. EXIT LIGHT MANUFACTURER: PHILLIPS LIGHTING: MODEL \*:CAGRCAIIC2CKTI

(5D) HARDWIRED SMOKE DETECTOR W/ BATTERY BACKUP HONEYWELL 51935D/SDT ADDRESSABLE PHOTOELECTRIC

HS FIRE ALARM HORN STROBE MANUFACTURER: SPECTRALERT

FIRE ALARM VISUAL STROBE
MANUFACTURER: SPECTRALERT
MODEL#: SR

MODEL#: P2R

#### FIRE ALARM NOTES CONTINUED

1. CIRCUIT RUNS SHOWN DIAGRAMMATIC. CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS, DIMENSIONS, & ARRANGEMENTS PRIOR TO COMMENCEMENT OF WORK.

CONTRACTOR SHALL IDENTIFY INTERFERENCES BETWEEN WORK IN OTHER AREAS.

2. THE DUST COVERS FURNISHED WITH THE SMOKE DETECTORS MUST BE INSTALLED WITH EACH DEVICE UNTIL FINAL CHECKOUT.

3. INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH THE NATIONAL ELECTRIC

CODE, LOCAL CODE(S). AND/OR AUTHORITY HAVING JURISDICTION.

4. INSTALLATION MATERIAL (I.E. CONDUIT WIRE, FITTINGS, HANGERS & STANDARD ELECTRICAL BOXES) ARE NOT SUPPLIED BY MANUFACTURERS' FIRE SAFETY DIVISION.

5. WIRING SHALL BE PER PLAN WITH RESPECT TO CONDUCTOR SIZE, TYPE, & QUANTITY. CONDUCTORS SHALL BE PERMANENTLY MARKED FOR FUTURE IDENTIFICATION. PERMANENT WIRE MARKERS SHALL BE USED TO IDENTIFY THE TERMINATIONS OF ALL CONDUCTORS WITHIN THE FACP, PULL BOXES AND OTHER PANELS.

6. ALL CABLE AND WIRING SHALL BE COLOR CODED. DIFFERENT COLOR CODES SHALL BE USED FOR INITIATING, NOTIFICATION, CONTROL, AND COMMUNICATION CIRCUITS. CIRCUITS WHERE POLARITY MUST BE OBSERVED, TWO DIFFERENT COLORS SHALL BE USED. THE NUMBER OF SPLICES SHALL BE HELD TO AN ABSOLUTE MINIMUM. WHERE SPLICES CANNOT BE AVOIDED AND AT THE TERMINATION OF ALL EQUIPMENT WHICH INCORPORATE PIGTAIL CONNECTING WIRES, EITHER PHENOLIC TERMINAL BLOCKS OR PRESSURE TYPE CONNECTORS SHALL BE UTILIZED. WIRE NUTS SHALL NOT BE USED. ALL SUCH SPLICES SHALL TAKE PLACE WITH JUNCTION BOXES. WHERE PRESSURE TYPE CONNECTORS ARE UTILIZED, BREAK THE WIRE RUN FOR PROPER SUPERVISION. DO NOT LOOP THE WIRE. ALL FIRE ALARM SYSTEM JUNCTION BOXES, AND PULL BOXES SHALL BE PAINTED RED.

1. COVER PLATES SHALL BE PAINTED RED & MARKED 'FA'. IF CONDUIT IS UTILIZED, THE MINIMUM SIZE SHALL BE PROVIDED AS REQUIRED BY TABLE 4

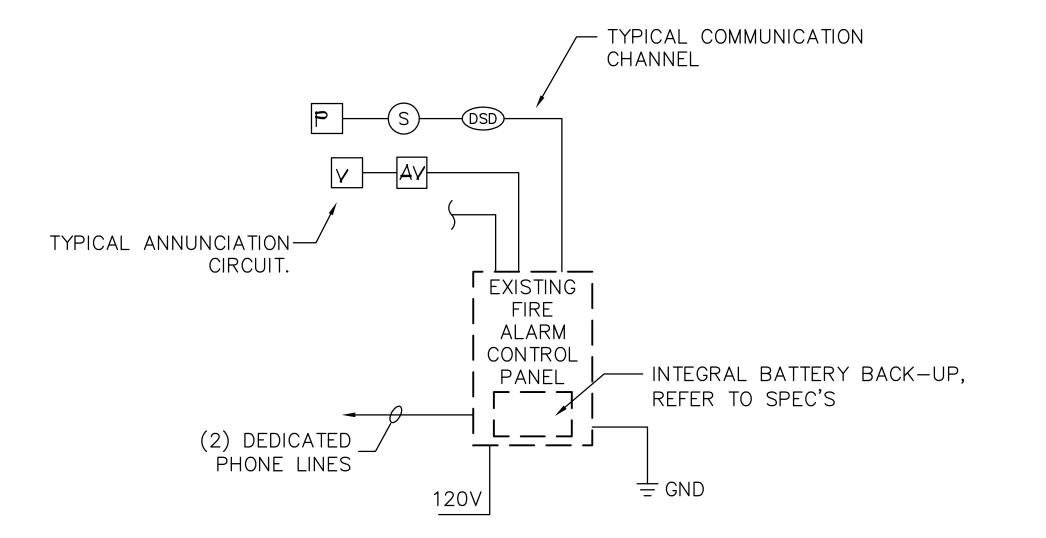
8. CHAPTER , OF THE NATIONAL ELECTRIC CODE, USING ACTUAL CROSS SECTION AREA OF THE WIRING TO BE INSTALLED.

9. ALL FIRE WALL AND/ OR MASONRY WALL PENETRATIONS SHALL BE DRILLED, SLEEVED, BUSHED AT BOTH ENDS, AND SEALED WITH THE REQUIRED FIRE RATED

CAULK OR FIRE STOPPING MATERIAL TO MAINTAIN THE FIRE RATING.

10. THE INSTALLER IS RESPONSIBLE FOR METERING ALL WIRES TO ENSURE THAT THEY ARE FREE AND CLEAR OF GROUNDS, OPENS, SHORTS, CORRECT RESISTANCE, CAPACITANCE, AND PROPER SUPPORT PRIOR TO TERMINATION ON ANY FIRE ALARM EQUIPMENT. MANUFACTURER WILL NOT BEGIN CHECKOUT WITHOUT WRITTEN DOCUMENTATION CONFIRMING THIS WORK BEING PERFORMED. IF GROUNDS AND/OR SHORT ARE FOUND ON THE SYSTEM WIRING UPON INITIAL CHECKOUT, THAT INITIAL CHECKOUT WILL BE DISCONNECTED UNTIL ALL WIRING IS CORRECTED. TEE BARS SHALL BE USED TO SUPPORT JUNCTION BOXES OF ALL SUSPENDED CEILING MOUNTED

II. INSTALLING CONTRACTOR SHALL RETURN ONE SET OF ACCURATELY MARKED DRAWINGS FOR 'AS BUILT' PURPOSES, WITH ACTUAL WIRE RUNS AHD EQUIPMENT LOCATIONS. 14. FOR ADDITIONAL INSTALLATION INSTRUCTIONS, REFER TO CATALOG CUT SHEETS AND/OR INSTALLATION INSTRUCTIONS.

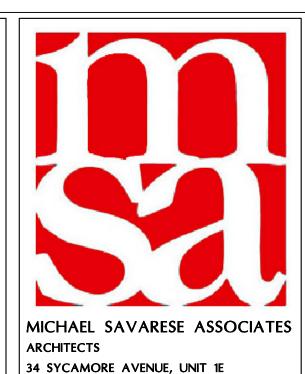


SCALE: NTS

FIRE ALARM RISER DIAGRAM

#### NOTES:

- 1. FOR EXACT QUANTITY AND LOCATION OF ALL DEVICES REFER TO FLOOR PLANS.
- 2. EXACT WIRE SIZE & QUANTITY SHALL BE PER SYSTEM MANUFACTURERS RECOMMENDATIONS. ALL WIRING SHALL BE RUN CONCEALED ABOVE THE CEILING AND/OR IN WALLS. SHALL HAVE INSULATION TYPE FPLP AS A MINIMUM.
- 3. WHERE RUN IN EXPOSED AREAS i.e., MECHANICAL ROOMS, WIRING SHALL BE RUN IN EMT CONDUIT.
- 4. ENTIRE INSTALLATION SHALL BE IN CONFORMANCE WITH NJ UCC, NFPA, NEC, IBC-NJ
- 5. PROVIDE MINIMUM 2 VISUAL STROBE CIRCUITS PER FLOOR, MORE IF REQUIRED NO MORE THAN (10) STROBES PER CIRCUIT.



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ISSUES

DATE: DESCRIPTION

11/16/2017 FOR BID

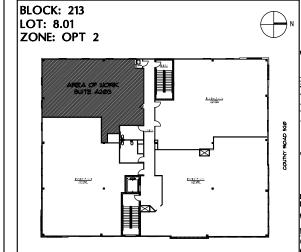
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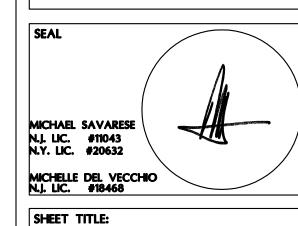
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FIRE ALARM PLAN
AND DETAILS

BSCAN/ APPLICATION NO.:

FA-100.00 PAGE 15 of X

