

# **ADDENDUM NO. 1**

Project:

**City of Dublin City Hall  
Lobby Interior Renovation**  
5200 Emerald Parkway  
Dublin, OHIO 43017

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PREPARED FOR:

**CITY OF DUBLIN, OHIO**  
ADMINISTRATIVE SERVICES – FACILITIES  
6555 SHIER RINGS ROAD  
DUBLIN, OHIO 43016  
614-410-4700

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**Addendum No. 1**

**Specification Sections: N/A**

**Reissued Sheets (24 x 36): H1.0, & E2.0**

Total Number of Pages: 02

Date: **April 12, 2013**

PREPARED BY:

**MOODY•NOLAN**  
RESPONSIVE ARCHITECTURE

300 SPRUCE STREET, SUITE 300  
COLUMBUS, OHIO 43215  
614-461-4664

**TO: ALL PLANHOLDERS OF RECORD**

**Addendum No. 1** to the Drawings and Project Manual, dated **March 27, 2013**, for **City of Dublin, City Hall Lobby Interior Renovation**, 5200 Emerald Parkway  
Dublin, OHIO 43017; as prepared by Moody Nolan, Inc., 300 Spruce St. Suite 300,  
Columbus, OH 43215.

This Addendum shall hereby be done and become part of the Contract Documents the same as if originally bound thereto.

The following clarifications, amendments, additions, revisions, changes, and modifications change the original Contract Documents only in the amount and to the extent hereinafter specified in this Addendum.

**Each Bidder shall acknowledge receipt of this Addendum in his proposal or bid.**

NOTE: Bidders are responsible for becoming familiar with every item of this Addendum.

***PART 1- DRAWINGS:***

Item 1-1 Sheets H1.0

A. **Revised** HVAC Sheet H1.0. See attached reissued sheet H1.0

Item 1-2 Sheets E2.0

A. **Revised** Electrical Sheet E2.0. See attached reissued sheet E2.0

***PART 3 - MISCELLANEOUS:***

Item 1-3 Pre-Bid RFI's

A. **Question:** The schedule at walkthrough indicates Phase 2 beginning in August lasting 10 weeks completing in September. That does not add up! Does it begin in May?

**Answer:** *Phase 2 Duration: is >10 weeks. It starts on 5/20/13 When the notice to proceed is issued and ends on 9/06/13. Phase 2 on site construction activities' period is limited to 4 weeks (8/13/13 to 9/6/13). In the preconstruction period (5/20/13 to 8/12/13) contractors have access to the building for field verifications.*

**Question:** On Sheet E2.0 Note 14 it calls for us to add (1) new fire alarm device. Are we required to have stamped drawings for this device? What are your requirements for adding this device if any?

**Answer:** *The E.C. is required to pay the owner's fire alarm contractor for all fire alarm work (per General note D on Sheet E2.0). This will include all permit fees and stamped drawings. (See Specifications Section A – GENERAL, paragraph 8 on Sheet E3.0). I think the plans examiner will want to see stamped fire alarm drawings.*

MECHANICAL SPECIFICATIONS

I. GENERAL CONDITIONS

A. GENERAL

- EXCEPT AS SPECIFIED TO THE CONTRARY, THIS CONTRACT SHALL INCLUDE FURNISHING, INSTALLING, CONNECTING, AND OPERATION OF ALL EQUIPMENT WHICH IS PART OF MECHANICAL SYSTEMS.
- GENERAL AND SPECIAL CONDITIONS OF AIA (AMERICAN INSTITUTE OF ARCHITECTS) AND OWNER'S GENERAL REQUIREMENTS SHALL APPLY UNLESS NOTED OTHERWISE.
- THE REQUIREMENTS SET FORTH UNDER "GENERAL CONDITIONS", "MODIFICATIONS TO GENERAL CONDITIONS" AND "SPECIAL CONDITIONS" ARE A PART OF THIS CONTRACT.
- THIS CONTRACT SHALL INCLUDE A VISIT TO THE JOB SITE AND TAKE INTO CONSIDERATION MECHANICAL, ELECTRICAL AND GENERAL TRADE WORK IN PLACE AND WORK TO BE PUT INTO PLACE PRIOR TO BIDDING. REROUTING OF DUCTWORK, PIPING AND EQUIPMENT AS REQUIRED, TO MISS THIS WORK SHALL BE ACCOMPLISHED AT NO ADDITIONAL COST TO THE OWNER.
- ALL MOTORS FOR SUCH EQUIPMENT (IF AND WHERE SPECIFIED ON DRAWINGS) SHALL BE FURNISHED AND INSTALLED AS PART OF THIS CONTRACT. CONTROLS FOR SUCH MOTORS SHALL BE FURNISHED UNDER THIS CONTRACT AND INSTALLATION OF CONTROLS AND ALL ELECTRICAL WIRING, NOT SHOWN ON ELECTRICAL DRAWINGS, SHALL BE PERFORMED UNDER THIS CONTRACT.

B. SUBSTITUTIONS AND MISCELLANEOUS EQUIPMENT

- THE BIDDING OF THIS WORK WILL CONTEMPLATE THE USE OF EQUIPMENT AND MATERIALS EXACTLY AS SPECIFIED HEREIN, WHERE ONE OR MORE NAMES OF MANUFACTURERS ARE MENTIONED ANY ONE MAY BE UTILIZED.
- ALTERNATE EQUIPMENT MAY BE BID AS A SUBSTITUTION TO THAT SPECIFIED WITH THE APPROPRIATE DEDUCT NOTED, HOWEVER, THE EQUIPMENT SUBSTITUTED SHALL MEET ALL SPECIFICATIONS IN DESIGN AND BE SUBJECT TO OWNER AND/OR ENGINEER APPROVAL. ANY ADDITIONAL COST INCURRED DUE TO SUBSTITUTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- MISCELLANEOUS ITEMS NECESSARY TO COMPLETE THE PIPING SYSTEMS SUCH AS FITTING, HANGERS, ETC., CAN BE OF ANY RECOGNIZED MANUFACTURER PROVIDED THESE ITEMS MEET MINIMUM STANDARDS AS SET BY THE ENGINEER.

C. ORDINANCES, PERMITS, AND CERTIFICATES AND OWNER REQUIREMENTS

- ALL WORK UNDER THIS CONTRACT SHALL BE INSTALLED IN FULL ACCORDANCE WITH THE OWNER'S REQUIREMENTS, ALL LAWS, ORDINANCES AND ALL REGULATIONS OF THE STATE, COUNTY, AND MUNICIPALITY WHICH IN ANY WAY AFFECTS THIS WORK. THIS CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND CERTIFICATES OF INSPECTION REQUIRED BY THE FOREGOING GOVERNMENTAL AUTHORITIES. ALL WORK SHALL ALSO BE INSTALLED IN ACCORDANCE WITH REGULATIONS OF THE FIRE UNDERWRITERS HAVING JURISDICTION AND LOCAL UTILITIES. CONTRACTOR SHALL ALSO SECURE ANY PERMITS OR PAY ANY FEES TO THE LOCAL UTILITY COMPANIES FOR THE WORK REQUIRED.

D. DRAWINGS

- MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO SHOW THE APPROXIMATE LOCATION OF OUTLETS, EQUIPMENT AND PIPING.
- THE EXACT LOCATION OF OUTLETS, EQUIPMENT AND PIPING MAY BE CHANGED FROM TIME TO TIME AS WORK PROGRESSES. UNDER THIS CONTRACT ALL LOCATIONS SHALL BE VERIFIED WITH ALL TRADES AND THAT THEY ARE ACCORDING TO THE LATEST INFORMATION AVAILABLE. SHOULD THIS NOT BE DONE THE WORK WILL BE CHANGED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- THE OWNER RESERVES THE RIGHT TO MAKE MINOR CHANGES IN LOCATIONS OF EQUIPMENT OR PIPING ARRANGEMENTS UP TO THE TIME OF ROUGH-IN WITHOUT ADDITIONAL COSTS.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO SUPPLEMENT EACH OTHER AND ANY MATERIALS OR LABOR CALLED FOR IN ONE SHALL BE FURNISHED EVEN THOUGH NOT MENTIONED IN BOTH. ANY MATERIAL OR LABOR WHICH IS NEITHER SHOWN ON THE DRAWINGS NOR CALLED FOR IN THE SPECIFICATIONS BUT WHICH IS OBVIOUSLY NECESSARY TO COMPLETE THE WORK AND WHICH IS USUALLY INCLUDED IN WORK OF A SIMILAR CHARACTER SHALL BE FURNISHED UNDER THIS CONTRACT.
- ALL EXISTING UTILITY AND MECHANICAL SERVICES SHALL BE FIELD VERIFIED. CORRECTIONS TO THE DESIGN AND INSTALLATION SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.
- AS PART OF THIS WORK THE CONTRACTOR SHALL SUBMIT THREE (3) BLUE LINE SETS AND ONE SET OF SEPIAS OF AS BUILT DRAWINGS INDICATING THE EXACT LOCATION OF ALL WORK INSTALLED. ACCEPTANCE SHALL NOT OCCUR UNTIL RECEIPT OF THESE DRAWINGS IS OBTAINED BY THE OWNER.

E. SHOP DRAWINGS

- AS PART OF THE WORK INCLUDED UNDER EACH MECHANICAL SECTIONS, WITHOUT CAUSING ANY DELAY IN WORK, SHOP DRAWINGS OF ALL EQUIPMENT AND MATERIAL SHALL BE SUBMITTED FOR ENGINEER'S REVIEW.
- SUBMITTAL SHALL INCLUDE WIRING DIAGRAMS, PERFORMANCE CURVES AND DATA SPECIFIC TO THIS PROJECT AND BEAR CONTRACTOR'S APPROVAL STAMP CERTIFYING THAT HE HAS VERIFIED CONFORMANCE TO THE CONTRACTUAL DOCUMENTS.
- IN THE ENGINEER'S REVIEW OF SHOP DRAWINGS AND REVIEW IS FOR CONFORMANCE WITH THE GENERAL DESIGN CONCEPT AND ARRANGEMENT ONLY. COMMENTS, CORRECTIONS OR MARKINGS DO NOT CONSTITUTE WAIVER OF THE CONTRACT DOCUMENTS REQUIREMENTS, DIMENSIONS, QUANTITIES AND COORDINATION ARE THE RESPONSIBILITY OF THE CONTRACTOR.

F. CLEANING UP

- UNLESS OTHERWISE NOTED, ALL EXCESS MATERIALS AND DEBRIS CAUSED BY THIS WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND PROMPTLY BE REMOVED FROM THE SITE. ALL FIXTURES AND EQUIPMENT SHALL BE THOROUGHLY CLEANED WEEKLY. ALL MOTORS AND EQUIPMENT SHALL BE COVERED OR OTHERWISE PROTECTED FROM CONSTRUCTION DUST AND DEBRIS. EQUIPMENT OTHER THAN THOSE DESIGNATED TO ARE TO BE EXPOSED TO INCLEMENT WEATHER.

G. CUTTING AND PATCHING

- CUTTING FOR OPENINGS, WHEN NECESSARY, SHALL BE DONE BY THIS CONTRACTOR WITH SUCH TOOLS AND METHODS AS TO PREVENT UNNECESSARY DAMAGE TO SURROUNDING AREAS OR EQUIPMENT.
- FILL SPACE IN ALL AREAS PACKING WHERE REQUIRED TO MAINTAIN FIRE RATING. OPENINGS SHALL BE TEMPORARILY FIRE STOPPED UNTIL PERMANENT FIRE STOPPING IS DONE. THIS INCLUDES HOLES LEFT DUE TO REMOVAL OF PIPING.
- PATCHING SHALL MATCH EXISTING SURFACES IN KIND AND FINISH, AND SHALL BE DONE BY THE GENERAL CONTRACTOR.
- NO STRUCTURAL MEMBER WILL BE CUT INTO WITHOUT THE EXPRESSED PERMISSION OF THE OWNER'S REPRESENTATIVE.

H. FIRE STOPPING

- EACH CONTRACTOR SHALL BE RESPONSIBLE FOR FIRE STOPPING AROUND ALL OPENINGS FOR PIPES, DUCTS, CONDUITS ETC., INSTALLED HIM AT ALL FIRE WALLS AND SMOKE WALLS. FIRE STOPPING SHALL BE PERFORMED BY AN INSTALLER WHO HAS BEEN TRAINED BY MANUFACTURER, OR MANUFACTURER'S REPRESENTATIVE, IN THE INSTALLATION PROCEDURES BASED ON PUBLISHED UL TESTED FIRE STOP SYSTEMS.
- FIRE STOPPING MEET THE REQUIREMENTS OF ASTM E-814 OR UL 1479 FIRE TESTS BY RECOGNIZED TESTING AGENCY. FIRE STOPPING SHALL ALSO CONFORM BY THE FOLLOWING GOVERNING CODES: OHIO BASIC BUILDING CODE, NFPA 101- LIFE SAFETY CODE & NFPA 70 - NATIONAL ELECTRIC CODE.
- PENETRATION
  - CLEAN PENETRATION HOLES OF DIRT, LOOSE MATERIALS, AND FOREIGN MATTER WHICH MAY AFFECT BOND OR INSTALLATION.
  - REMOVE COATINGS SUCH AS PAINT, CURING COMPOUNDS, WATER REPELLENT, SEALERS AS REQUIRED.
  - INSTALL BACKING MATERIALS TO PREVENT LIQUID MATERIAL LEAKAGE.
- APPLICATION
  - PREPARE AND APPLY PENETRATION SEALING SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.
  - EMPLOY INSTALLATION TECHNIQUES WHICH WILL ENSURE THAT FIRE STOPPING IS DEPOSITED TO FILL AND SEAL HOLES AND OPENINGS.
  - TOOL EXPOSED SURFACES OF APPLIED SEALANT TO SMOOTH FINISH.
  - PROTECT MATERIALS FROM DAMAGE ON SURFACES SUBJECT TO TRAFFIC.
  - FIRE STOPPING BY DOW CORNING, 3M, HILTI OR METACAULK MAY FURNISHED AT THE CONTRACTOR'S OPTION.

I. GUARANTEE

- ALL LABOR AND MATERIALS FURNISHED UNDER THIS CONTACT SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER WHICH WILL COMMENCE UPON THE FINAL INSPECTION BY THE ENGINEER. DURING THIS TIME, ALL CLAIMS, CORRECTION OF ALL THE FAILURES TO SUCH MATERIAL AND THE CORRECTION OF ALL DISCREPANCIES WITH DRAWING CODE AND THE SPECIFICATIONS SHALL BE DONE UNDER THIS CONTRACT AT NO ADDITIONAL EXPENSE TO THE OWNER.

J. RECORD DRAWINGS

- THE CONTRACTOR SHALL KEEP AN ACCURATE RECORD OF ALL DEVIATIONS FROM CONTRACT DRAWINGS AND SPECIFICATIONS. HE SHALL NEATLY AND CORRECTLY ENTER IN COLORED PENCIL ANY DEVIATIONS ON DRAWINGS. AT COMPLETION OF THE PROJECT DELIVER DRAWINGS TO OWNER'S REPRESENTATIVE.

II. HVAC

A. GENERAL

- EXCEPT AS SPECIFIED TO THE CONTRARY, THIS CONTRACT SHALL INCLUDE FURNISHING, INSTALLING, CONNECTING, AND OPERATION OF ALL EQUIPMENT WHICH IS PART OF MECHANICAL SYSTEMS.
- GENERAL AND SPECIAL CONDITIONS OF AIA (AMERICAN INSTITUTE OF ARCHITECTS) AND OWNER'S GENERAL REQUIREMENTS SHALL APPLY UNLESS NOTED OTHERWISE.

B. HVAC INSULATION

- INSULATION THICKNESSES ARE BASED ON INSULATION HAVING THERMAL RESISTANCE IN THE RANGE OF 4.0 HR F R<sub>L2</sub>/BTU TO 4.6 HR F R<sub>L2</sub>/BTU PER INCH OF THICKNESS ON A FLAT SURFACE AT A MEAN TEMPERATURE OF 73°. MINIMUM INSULATION THICKNESS SHALL BE INCREASED FOR MATERIALS HAVING R VALUES LESS THAN 4.0 OR MAY BE REDUCED FOR MATERIALS HAVING R VALUES GREATER THAN 4.6 TO GIVE EQUIVALENT "R" VALUES.
- COVER REFRIGERANT PIPING AS FOLLOWS:
  - INSULATE WITH 1" THICK ELASTOMERIC PIPE INSULATION.
  - COVER VALVES (INCLUDING BONNET) AND APPURTENANCES IN COLD LINES.
  - SEAL ALL BUTT JOINTS WITH ARMSTRONG NO. 520 ADHESIVES.
  - FITTINGS SHALL BE COVERED WITH ELASTOMERIC INSULATION TO THE SAME THICKNESS AS ADJACENT PIPE. SEAL ALL JOINTS WITH ARMSTRONG NO. 520 ADHESIVE.
  - INSTALL A RIGID ELASTOMERIC INSERT BETWEEN PIPE AND HANGER AT EACH PIPE HANGER TO PREVENT EXCESSIVE COMPRESSION OF THE ELASTOMERIC INSULATION. AT THE CONTRACTOR'S OPTION, CORK STOPPERS OR WOOD BLOCKS MAY BE INSTALLED AT EACH HANGER. VAPOR BARRIER TO BE MAINTAINED THROUGHOUT.
  - PIPE COVERING OUTSIDE OF BUILDING SHALL BE SAME THICKNESS, AND COATED WITH ARMSTRONG TYPE MB FINISH TO MAKE WEATHER RESISTANT.
- COVER CONDENSATE DRAIN PIPING AS FOLLOWS:
  - INSULATE WITH 1/2" ELASTOMERIC PIPE INSULATION.
  - SEAL ALL BUTT JOINTS WITH ARMSTRONG NO. 520 ADHESIVE.
- COVER LOW PRESSURE SUPPLY, RETURN AND OUTSIDE DUCTWORK AS FOLLOWS:
  - ALL SUPPLY AND RETURN AIR DUCTS SHALL BE INSULATED WITH 1 1/2" THICK, 1 LB DENSITY BLANKET FLEXIBLE DUCT INSULATION.
  - ALL LINED DUCTS WITHIN THE CEILING PLENUM SPACE DO NOT REQUIRE WRAPPING.
  - ADHERE INSULATION TO DUCT SURFACE WITH FOSTER NO. 85-20 ADHESIVE APPLIED IN 6" WIDE STRIPS ON 12" CENTERS. BUTT ALL EDGES OF INSULATION AND SEAL ALL JOINTS WITH A FOL-SKIM-KRAFT TAPE OR FLANGE ADHERED OVER THE JOINT. SECURE INSULATION WITH FLARE DOOR STAPLES UNTIL THE ADHESIVE SETS.
  - SEAL ALL BREAKS AND JOINTS IN VAPOR BARRIER WITH 2-1/2" WIDE PRESSURE SENSITIVE TAPE TO MATCH VAPOR BARRIER FACING. ADHERE WITH FOSTER 85-20 ADHESIVE WHERE NECESSARY.
- COVER THE TOP OF ALL SUPPLY DIFFUSERS ABOVE CEILINGS WHEN NOT IN A RETURN AIR PLENUM. INSULATION TO BE 1 1/2" THICK, 1 LB DENSITY FLEXIBLE BLANKET.
- ALL COVER ABOVE SHALL BE BY JOHNS-MANVILLE. EQUIVALENT TYPE THICKNESS AND CONDUCTIVITY INSULATION BY OWENS CORNING, KNAUF, OR CERTAIN TEED MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.
- ALL SUPPLY AIR CONDITIONING DUCT INSULATION TO BE CONTINUOUS THROUGH WALLS AND PIPE HANGERS.

C. LOW PRESSURE DUCTWORK AND ACCESSORIES

- DUCTWORK AND ACCESSORIES SHALL BE FABRICATED AND INSTALL IN STRICT ACCORDANCE WITH THE 2" W.G. TABLE IN THE LATEST EDITION OF SMANCA EXCEPT AS HEREIN NOTED AND/OR AS DETAILED ON THE DRAWINGS.
  - FIBERGLASS DUCT BOARD SHALL NOT BE UTILIZED. DUCTWORK, PLENUM, ETC. SHALL BE CONSTRUCTED OF SHEET METAL.
  - VANED ELBOWS ARE TO UTILIZE DOUBLE THICKNESS VANES WITH THE ELBOW HEAL RADIUSED THE SAME AS THE TURNING VANE. ELBOW CHECKS ARE TO BE MINIMUM OF 3". VANED ELBOWS ARE NOT TO BE UTILIZED IN DUCTWORK WHERE VELOCITY EXCEEDS 2000 FPM.
  - RADIUS ELBOWS, 1/3 RADIUS OR FULL RADIUS ARE TO BE UTILIZED EXCEPT WITHIN 20' OF AN AIR OUTLET. 1/3 RADIUS ELBOWS SHALL HAVE A TURNING VANE ONE GAGE HEAVIER THAN DUCT CONSTRUCTION.
  - ALL DUCTWORK DIMENSIONS INDICATED ON PLANS ARE CLEAR INSIDE DIMENSIONS. WHERE DUCTS ARE LINED, DUCTWORK IS TO BE INCREASED TO MAINTAIN THAT FREE AREA.
  - FLEXIBLE CONNECTIONS TO ALL EQUIPMENT SHALL BE MADE WITH 3" WIDE DOUBLE NEOPRENE COATED FLAME RETARDANT FIBER GLASS FLEXIBLE CONNECTION. FLEXIBLE TO HAVE A MINIMUM OF 24" GAGE, 3" WIDE SHEET METAL COLLARS PERMANENTLY ATTACHED TO EACH SIDE.
  - MITERED OFFSETS GREATER THAN 30° IN EITHER DIRECTION SHALL NOT BE PERMITTED.
  - CHANGES IN DUCT SIZES SHALL BE MADE BY UNIFORM TAPER SECTION WITH A MAXIMUM INCLUDED ANGLE OF DIVERGENCE OF 15°.
  - SPLITTER DAMPERS SHALL NOT BE PERMITTED UNLESS SPECIFICALLY NOTED ON THE DRAWING.
  - VOLUME DAMPERS SHALL BE SINGLE BLADE UP TO 6" IN WIDTH AND MULTIBLADE FOR LARGER SIZES. VOLUME DAMPERS SHALL HAVE BALL BEARINGS AND SHALL INCORPORATE LOCKING TYPE INDICATING ADJUSTMENT.
  - DUCT HANGER - WHERE DUCTWORK EXCEEDS 36" IN THE LARGEST DIMENSION TRAPEZE HANGERS SHALL BE UTILIZED.
  - FLEXIBLE DUCTS TO BE WIREMOLD W/ INSULATED FLEXIBLE DUCTWORK RATED AT 0.5" POSITIVE STATIC PRESSURE MINIMUM. MAXIMUM LENGTH OF FLEXIBLE DUCT TO BE 5'-0".
- CONDENSATION DRAIN PIPING SYSTEM
  - PROVIDE CONDENSATION DRAIN PIPING FOR AIR CONDITIONING UNITS AS SHOWN ON DRAWINGS.
  - PIPING SHALL BE SCHEDULE TYPE DWV HARD DRAWN COPPER DRAINAGE TUBING FOR DRAINS WITH CAST BRASS DRAINAGE FITTINGS.
  - PITCH ALL CONDENSATION AND OTHER DRAIN LINES DOWN A MINIMUM OF 1" IN 30' IN THE DIRECTION OF FLOW.
- REFRIGERANT PIPING SYSTEM
  - PIPE TYPE L-ACR HARD DEHYDRATED SCALE FREE COPPER TUBING.
  - FITTINGS WROUGHT COPPER, SOLDER TYPE.
  - SHUT-OFF VALVES IN REFRIGERANT LINES SHALL BE SIMILAR TO HENRY, BALANCED-ACTING DIAPHRAGM TYPE WITH BRASS BODY WITH SOLDER TYPE ENDS.
  - PROPERLY CLEAN ENDS OF ALL TUBING BEFORE SOLDERING.
  - ALL JOINTS SHALL BE MADE WITH "SILFOS".
  - DURING CONSTRUCTION, THIS CONTRACTOR SHALL TAKE PRECAUTION TO MINIMIZE CONTAMINATION OF SYSTEM BY DIRT, SCALE, MOISTURE OR OTHER FOREIGN MATTER. ALL FOREIGN MATERIAL AND MOISTURE IN THE SYSTEM SHALL BE REMOVED.

1. AIR DEVICES BY TITUS, ANEMOSTAT, PRICE, CARNES OR KRUEGER MEETING ALL SPECIFIED REQUIREMENTS MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.

I. DUCTLESS SPLIT SYSTEMS

- REFER TO DRAWINGS FOR BASIS OF DESIGN.
- UNITS MUST COMPLY WITH OHIO ENERGY CODE IN REGARDS TO COP, EER, ETC.
  - CONDENSING UNIT SHALL BE FURNISHED WITH A DIGITAL SCROLL TYPE COMPRESSOR UTILIZING R-410A AND BE PROVIDED WITH CRANKCASE HEATER, AUTOMATICALLY REVERSIBLE OIL PUMPS, INTERNAL AND EXTERNAL MOTOR PROTECTION, DIRECT DRIVE UP DISCHARGE PROPELLER FAN, LOW AMBIANT CONTROLS, AND OUTDOOR DEFROST THERMOSTAT.
  - PRECHARGED INSULATED TUBING FURNISHED WITH UNITS PROPERLY SIZED AND INSTALLED TO MANUFACTURER'S RECOMMENDATIONS. SERVICE VALVES, FILTER DRIER AND SIGHT GLASS TO BE FIELD INSTALLED.
  - A WALL MOUNTED 7-DAY PROGRAMMABLE THERMOSTAT FURNISHED WITH THE UNIT SHALL CONTROL THE OUTDOOR UNIT TO MAINTAIN ROOM TEMPERATURE. THERMOSTAT TO HAVE SELECTION FOR HEATING, COOLING, CONTINUOUS OR AUTOMATIC FAN OPERATION.
  - POWER WIRING TO UNITS AND DISCONNECT BY ELECTRICAL CONTRACTOR. CONTROL WIRING BY THIS CONTRACTOR.
  - MOUNT CONDENSING UNITS ON MINIMUM 4" HIGH HOUSEKEEPING PAD. PAD BY THIS CONTRACTOR.
- DUCTLESS SPLIT SYSTEM UNIT EQUIPMENT MEETING ALL REQUIREMENTS BY MITSUBISHI, DAIKEN, LG OR SANYO MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.

K. GRILLES, REGISTERS AND DIFFUSERS

- REFER TO DRAWINGS FOR BASIS OF DESIGN.
  - AIR DEVICES BY TITUS, ANEMOSTAT, PRICE, CARNES OR KRUEGER MEETING ALL SPECIFIED REQUIREMENTS MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.
- L. MANUAL BALANCE DAMPERS
- BASED ON AMERICAN WARMING TYPE VC-2 OPPOSED BLADE WITH HEAVY DUTY MOLDED NYLON BEARINGS, 16 GAUGE GALVANIZED STEEL BLADES (8" MAX. WIDTH), EXTENDED SHAFT AND LINKAGE.
    - BALANCE DAMPERS FOR ROUND DUCTS SHALL BE AMERICAN WARMING TYPE VC-9 SINGLE BLADE, 22 GAUGE (4" TO 12"), 20 GAUGE (13" TO 18") AND AND 18 GAUGE (19" TO 24") GALVANIZED STEEL.
    - ALL DAMPERS SHALL BE EQUIPPED WITH LOCKING QUADRANTS.
  - AT THE CONTRACTOR'S OPTION, MANUAL BALANCING DAMPERS SHALL BE MANUFACTURED BY THE CONTRACTOR PER SMANCA STANDARDS. DAMPERS SHALL HAVE LOCKING QUADRANTS ON BOTH SIDES OF THE DUCT.
  - DAMPERS BY RUSKIN, AIR BALANCE, GREENHECK OR VENT PRODUCTS OF THE SAME TYPE AND MEETING SPECIFIED REQUIREMENTS, MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.

N. TESTS AND ADJUSTMENTS

- CONTRACTOR SHALL ARRANGE AND PAY FOR A CERTIFIED TEST AND AIR BALANCE FOR THE PROJECT, WITHIN TWO WEEKS AFTER COMPLETION OF THE CONSTRUCTION. A CERTIFIED AIR BALANCE REPORT SHALL BE SUBMITTED TO THE OWNER FOR REVIEW AND APPROVAL. IN THE EVENT THAT THE OWNER REQUIRED ADJUSTMENTS TO OWNER'S AIR DISTRIBUTION, CONTRACTOR SHALL PAY ALL COSTS RELATED THERE.

O. CONTROLS

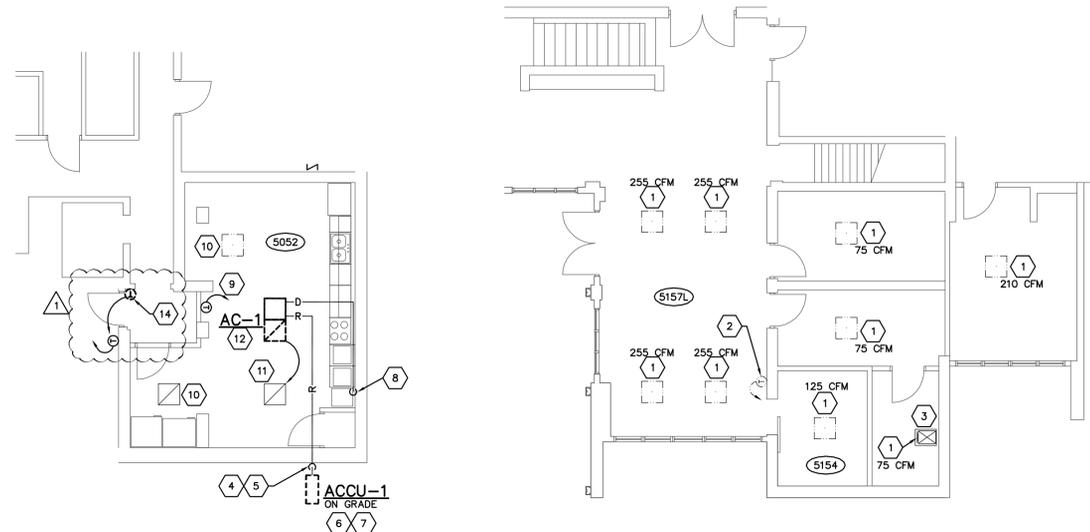
- THIS CONTRACT SHALL INCLUDE ALL LINE, LOW VOLTAGE CONTROL WIRING AND INTERLOCK WIRING TO OPERATE HEATING, VENTILATING AND AIR CONDITIONING EQUIPMENT INSTALLED UNDER THIS CONTRACT. ALL WIRING TO COMPLY WITH ELECTRICAL SPECIFICATIONS, THE NATIONAL ELECTRIC CODE, AND ALL STATE AND LOCAL CODES.

EQUIPMENT NOTES

AC-1 & ACCU-1  
 MITSUBISHI MODEL SLZ-KA12NA, CEILING CASSETTE, DUCTLESS HEAT PUMP WITH MATCHING MODEL SUZ-KA12NA CONDENSING UNIT, 11,100 BTUH TOTAL COOLING CAPACITY, 15.4 SEER, 13,600 BTUH TOTAL HEATING CAPACITY, 208V, 1φ, 12A MCA, 15A MAX OVERCURRENT PROTECTION DEVICE. CONTROL WIRING BY THE HVAC CONTRACTOR. PROVIDE WITH LOW AMBIENT CONTROLS TO 0° F AND LOCKING BRACKET FOR REMOTE THERMOSTAT. PROVIDE WITH CONDENSATE PUMP AND CONDENSATE OVERFLOW SWITCH.

CODED NOTES

- BALANCE EXISTING AIR DEVICE TO VALUE NOTED ON PLAN.
- EXISTING THERMOSTAT TO REMAIN.
- EXISTING HEAT PUMP UNIT TO REMAIN.
- ROUTE REFRIGERANT LINES THRU WALL AND ABOVE BASEMENT CEILING TO HEAT PUMP. COORDINATE EXACT LOCATION WITH ALL OTHER TRADES.
- EXTEND REFRIGERANT LINES THROUGH WALL, SEAL PENETRATION WATER TIGHT.
- SIZE REFRIGERANT LINES ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. REFRIGERANT PIPING MAY BE PRE-CHARGED LINE SETS IF AVAILABLE IN REQ'D LENGTHS. INSULATE ALL REFRIGERANT SUCTION PIPING. PROVIDE WEATHER COATING ON INSULATION LOCATED OUTSIDE.
- CONDENSING UNIT ON 4" HIGH CONCRETE PAD. PAD SHALL EXTEND 6" BEYOND UNIT IN EACH DIRECTION. MAINTAIN MANUFACTURER'S REQUIRED CLEARANCES ALL AROUND. BOLT CONDENSING UNIT TO PAD WITH 1/2" GALVANIZED BOLTS.
- EXTEND CONDENSATE DRAIN PIPING DOWN IN WALL AND DISCHARGE INTO FLOOR DRAIN.
- LOCATE NEW 7-DAY PROGRAMMABLE THERMOSTAT AT 48" A.F.F.. COORDINATE EXACT LOCATION WITH OWNER.
- EXISTING AIR DEVICE TO REMAIN.
- RELOCATED EXISTING AIR DEVICE AS SHOWN. EXTEND DUCTWORK AS NEEDED.
- HANG UNIT FROM STRUCTURE PER MANUFACTURERS INSTRUCTIONS.
- EXTEND CONDENSATE DRAIN TO FLOOR DRAIN IN ADJACENT RESTROOM. CONTRACTOR TO VERIFY EXACT LOCATION.
- EXISTING THERMOSTAT TO BE RELOCATED AS SHOWN. EXTEND CONTROL WIRING AS NEEDED TO REVISED LOCATION.



BASEMENT HVAC PLAN  
 SCALE: 1/8"=1'-0"

GROUND FLOOR HVAC PLAN  
 SCALE: 1/8"=1'-0"



#	Date	Change Description
1	04/11/13	ADDENDUM #1

**Dublin City Hall Lobby Interior Renovation**  
 8200 Emerald Parkway  
 Dublin, Ohio 43017  
 City of Dublin, Ohio

**MOODY-NOLAN, INC.**  
 architecture • civil engineering • interior architecture  
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 Columbus, Ohio 43215 www.moody-nolan.com

Dwg. Coord.: Tech. Coord.: M/N # 12340  
**HVAC NEW WORK PLANS**  
 BID / PERMIT SET  
**H1.0**  
 3-27-2013

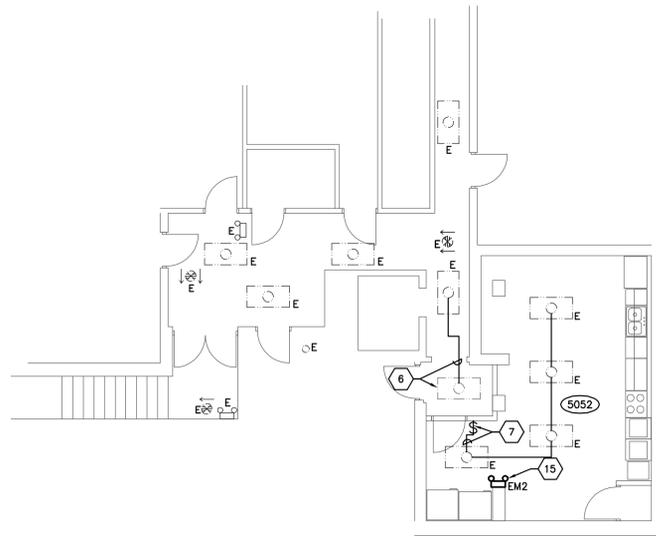
H1-0-13031.DWG  
**PRATER**  
 Engineering Associates, Inc.  
 6130 Wilcox Road (614) 766 4896  
 Dublin, Ohio 43016 FAX: (614) 766 2354  
 DESIGNED BY MAM DRAWN BY MAM CHECKED BY JK JOB NUM. 13031

## LIGHTING ENERGY COMPLIANCE NOTES

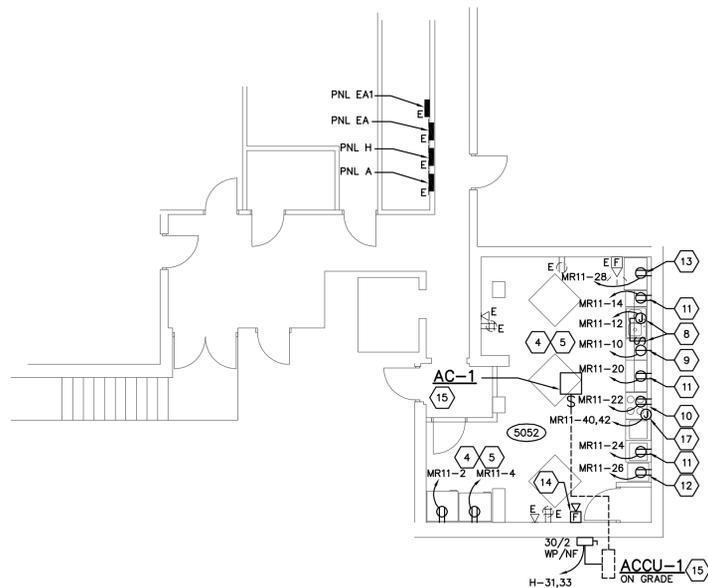
PER ASHRAE 90.1-2007, PARAGRAPH 9.1.2 "LIGHTING ALTERATIONS", ALTERATIONS THAT REPLACE LESS THAN 50% OF THE LUMINAIRES IN A SPACE NEED NOT COMPLY WITH ENERGY CODE REQUIREMENTS PROVIDED THAT SUCH ALTERATIONS DO NOT INCREASE THE INSTALLED INTERIOR LIGHTING POWER.

IN THE RENOVATIONS PROVIDED UNDER THIS PROJECT, LESS THAN 50% OF LUMINAIRES SHALL BE REPLACED, AND ACTUAL LUMINAIRE QUANTITIES AND INTERIOR LIGHTING POWER ARE REDUCED; HENCE THIS DESIGN QUALIFIES FOR THE EXCEPTION STATED ABOVE. BELOW IS A LIGHTING ENERGY CALCULATION SUMMARY:

LENGTH OF TRACK LIGHTS TO BE REMOVED: 138 FEET  
 WATTAGE OF TRACK LIGHTS TO BE REMOVED: 138 X 30W = 4140W  
 WATTAGE OF NEW LIGHTS TO BE INSTALLED: \*34 X 60W = 2040W  
 (\* 34 4-FT SEGMENTS OF 54W TSHO LAMPS RATED 60W PER SEGMENT)  
 TOTAL WATTAGE REDUCTION = 4140W - 2040W = 2100W.



**BASEMENT LIGHTING PLAN**  
 SCALE: 1/8"=1'-0"



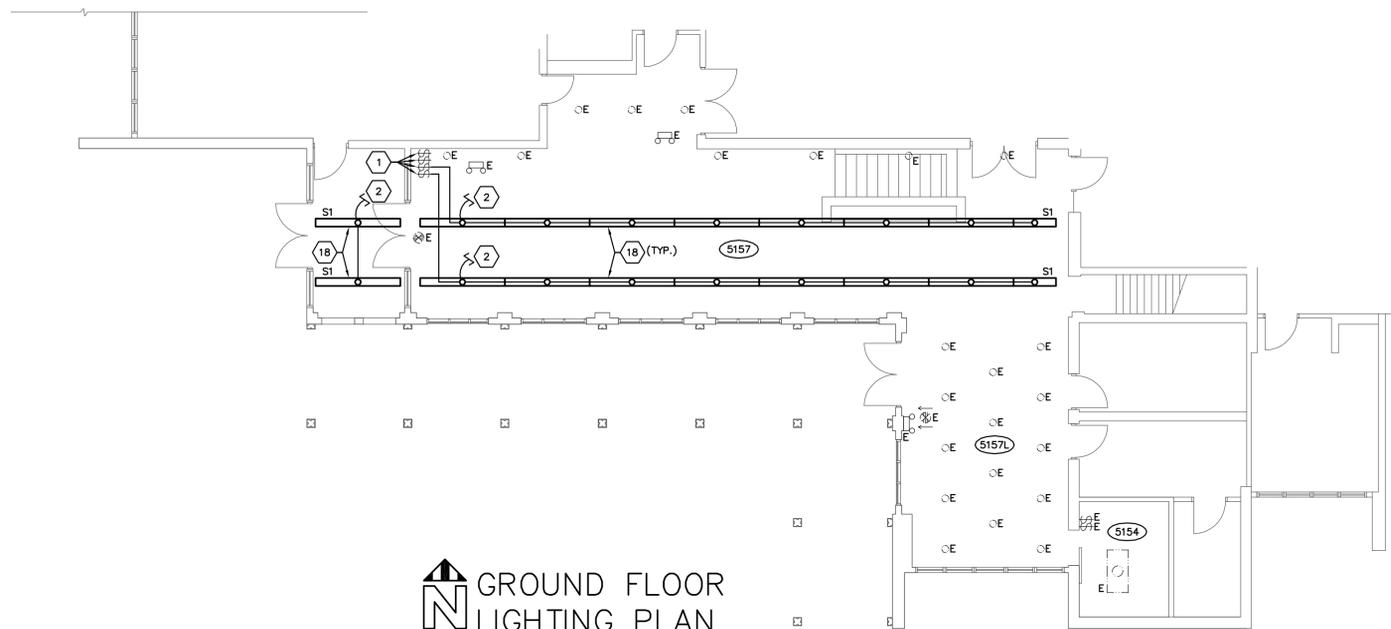
**BASEMENT POWER PLAN**  
 SCALE: 1/8"=1'-0"

## CODED NOTES

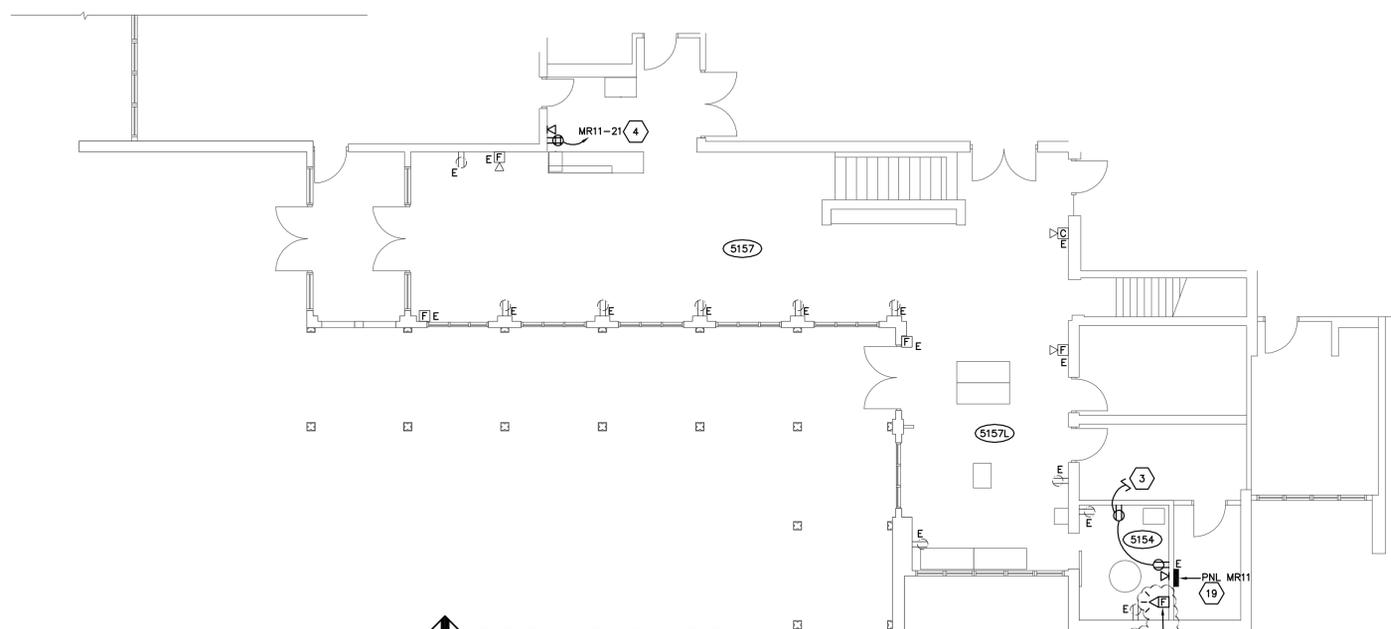
- REUSE EXISTING SWITCHES AS SHOWN TO CONTROL NEW LOBBY LIGHTS. PROVIDE LABEL ON UNUSED SWITCH THAT READS "UNUSED".
- REUSE EXISTING LIGHTING CIRCUIT.
- CIRCUIT RECEPTACLES TO EXISTING CIRCUIT MADE AVAILABLE BY THE DEMOLITION OF RECEPTACLES IN THIS ROOM.
- PROVIDE 20A/1P BREAKERS IN INDICATED PANELS TO SERVE NEW CIRCUITS.
- ALL RECEPTACLES IN THIS BREAK ROOM SHALL BE GFCI TYPE AND BE READILY ACCESSIBLE. WHERE RECEPTACLES CANNOT BE READILY ACCESSIBLE (E.G., INSTALLED BEHIND FRIDGE), THEIR ASSOCIATED CIRCUIT BREAKERS SHALL BE GFCI TYPE.
- NEW LOCATION OF RELOCATED LIGHT FIXTURE. CIRCUIT TO EXISTING HALLWAY LIGHTS AS SHOWN.
- PROVIDE NEW SWITCH AND CIRCUIT TO CONTROL EXISTING LIGHTS AS SHOWN.
- PROVIDE 120V CONNECTION TO GARBAGE DISPOSER. PROVIDE SPST SWITCH ABOVE COUNTERTOP AND CIRCUIT AS SHOWN. COORDINATE WITH PLUMBING CONTRACTOR.
- PROVIDE 120V CONNECTION TO DISHWASHER. COORDINATE WITH PLUMBING CONTRACTOR.
- PROVIDE 120V CONNECTION TO ABOVE-RANGE MICROWAVE. COORDINATE WITH KITCHEN EQUIPMENT INSTALLER.
- MOUNT DEVICE ABOVE COUNTERTOP/BACKSPLASH.
- PROVIDE 120V CONNECTION TO WATER COOLER. COORDINATE WITH OWNER.
- PROVIDE 120V CONNECTION TO REFRIGERATOR. COORDINATE WITH EQUIPMENT INSTALLER.
- PROVIDE FIRE ALARM NOTIFICATION DEVICE. INTERFACE WITH EXISTING SIMPLEX FIRE ALARM PANEL.
- PROVIDE 208V, 1P CONNECTION TO AC-1/ACCU-1. RUN (2) #10 AND #10 GROUND IN 3/4" CONDUIT FROM INDICATED PANEL TO EXTERIOR UNIT. RUN (2) #12 AND #12 GROUND IN 3/4" CONDUIT FROM EXTERIOR UNIT TO INDOOR UNIT. PROVIDE WEATHERPROOF, NON-FUSED, 30A/2P DISCONNECT SWITCH AT EXTERIOR UNIT. COORDINATE WITH HVAC CONTRACTOR.
- CIRCUIT EMERGENCY LIGHTING UNIT TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHING.
- PROVIDE 208V/1-PHASE CONNECTION TO RANGE. PROVIDE NEMA 14-50R RECEPTACLE AND CORRESPONDING PLUG FOR RANGE. RUN (3) #8 AND #8 GROUND IN 1" CONDUIT. COORDINATE WITH BREAK ROOM EQUIPMENT INSTALLER.
- REUSE EXISTING LOCATIONS OF FIXTURE PENDANT SUPPORTS FOR NEW FIXTURE SUPPORTS SO AS TO MINIMIZE DAMAGE TO WOOD FINISH OF VESTIBULE AND LOBBY CEILING SURFACES. PROVIDE SUPPLEMENTARY SUPPORTS AS NECESSARY FOR INSTALLATION TO MEET MANUFACTURER'S RECOMMENDATIONS. REPAIR AND POLISH ANY AFFECTED AREAS TO MATCH SURROUNDING AREA.
- PANEL IS ALSO FIELD MARKED AS NP2.

## GENERAL NOTES

- DEVICES WITH SUBSCRIPT "E" ARE EXISTING TO REMAIN. MAINTAIN AND PROTECT.
- NOTE THAT CIRCUIT ASSIGNMENTS AND PLAN NOTES HAVE BEEN ASSUMED BASED ON AVAILABLE RECORD DRAWINGS AND FIELD NOTES. FIELD VERIFY ALL CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
- FOR EACH DATA OUTLET (K) LOCATION, PROVIDE OUTLET BOX AND RUN (1) 1" CONDUIT TO ABOVE ACCESSIBLE CEILING. PROVIDE PULL STRING IN CONDUIT.
- ALL FIRE ALARM SYSTEM MODIFICATIONS SHALL BE PERFORMED BY OWNER'S FIRE ALARM CONTRACTOR AT THE ELECTRICAL CONTRACTOR'S EXPENSE. COORDINATE WITH CITY OF DUBLIN.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE TYPED PANEL DIRECTORIES WHICH COMPLY WITH THE NATIONAL ELECTRICAL CODE ARTICLE 408.4 - CIRCUIT DIRECTORY OR CIRCUIT IDENTIFICATION - WHICH STATES: "EVERY CIRCUIT SHALL BE IDENTIFIED AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE. THE IDENTIFICATION SHALL INCLUDE SUFFICIENT DETAIL TO ALLOW EACH CIRCUIT TO BE DISTINGUISHED FROM ALL OTHERS. NO CIRCUIT SHALL BE DESCRIBED IN A MANNER THAT DEPENDS ON TRANSIENT CONDITIONS." THIS REQUIREMENT IS SPECIFIC FOR DISTRIBUTION PANELS AND LIGHTING & APPLIANCE TYPE PANELS, INCLUDING EXISTING PANELS BEING MODIFIED. HOWEVER, THE IDENTIFICATION REQUIREMENTS OF NEC 110.22 APPLY TO ALL DISCONNECTING MEANS.
- ALL DEVICE COVER PLATES SHALL BE STAINLESS STEEL. PROVIDE CUSTOM LABEL TO INDICATE CIRCUIT ASSIGNMENTS ON ALL DEVICE COVERS. MATCH EXISTING DEVICES LABELS.
- REFER TO SHEET G1.2 FOR PHASING PLAN.



**GROUND FLOOR LIGHTING PLAN**  
 SCALE: 1/8"=1'-0"



**GROUND FLOOR POWER PLAN**  
 SCALE: 1/8"=1'-0"



#	Date	Change Description
1	04/11/13	ADDENDUM #1

**Dublin City Hall Lobby Interior Renovation**  
 8200 Emerald Parkway  
 Dublin, Ohio 43017  
 City of Dublin, Ohio

**MOODY-NOLAN, INC.**  
 architecture • civil engineering • interior architecture  
 300 Spruce Street Suite 300 Columbus, Ohio 43215  
 Phone: (614) 461-4864 Fax: (614) 280-8881  
 www.moodynolan.com

Dwg. Coord.: Tech. Coord.: M/N # 12340  
**ELECTRICAL NEW WORK PLANS**  
 BID / PERMIT SET  
**E2.0**  
 3-27-2013

**PRATER Engineering Associates, Inc.**  
 6130 Wilcox Road Dublin, Ohio 43016  
 (614) 766 4896 FAX: (614) 766 2354  
 DESIGNED BY BAO DRAWN BY BAO CHECKED BY DLP JOB NUM. 13031