

	Inspection/Test	Periodic (minimum)	Reference Standard (See ECC Chapter C5) or Other Criteria	ECC or Other Citation
IIA	Envelope Inspections			
IIA1	Protection of exposed foundation insulation: Insulation shall be visually inspected to verify proper protection where applied to the exterior of basement or cellar walls, crawl-space walls and/or the perimeter of slab-on-grade floors.	As required during foundation work and prior to backfill	Approved construction documents	C303.2.1; ASHRAE 90.1 – 5.8.1.7
IIA2	Insulation placement and R-values: Installed insulation for each component of the conditioned space envelope and at junctions between components shall be visually inspected to ensure that the R-values are marked, that such R-values conform to the construction documents and that the insulation is properly installed.  Certifications for unmarked insulation shall be similarly visually inspected.	As required to verify continuous enclosure while walls, ceilings and floors are open	Approved construction documents	C303.1, C303.1.1, C303.1.2, C402.1, C402.2; ASHRAE 90.1 – 5.5, 5.6 or 11; 5.8.1
IIA3	Fenestration U-factor and product ratings: U-factors, SHGC and VT values of installed fenestration shall be visually inspected for conformance with the U-factors, SHGC and VT values identified in the construction drawings by verifying the manufacturer's NFRC labels or, where not labeled, using the ratings in ECC Tables C303.1-3(1), (2) and (3).	As required during installation	Approved construction documents; NFRC 100, NFRC 200	C303.1, C303.1.3, C402.3; ASHRAE 90.1 5.5; 5.6 or 11; 5.8.2
IIA4	Fenestration air leakage: Windows and sliding or swinging door assemblies, except site-built windows and/or doors, shall be visually inspected to verify that installed assemblies are listed and labeled by the manufacturer to the referenced standard.  For curtain wall, storefront glazing, commercial entrance doors and revolving doors, the testing reports shall be reviewed to verify that the installed assembly complies with the standard cited in the approved plans.	As required during installation; prior to final construction inspection	NFRC 400, AAMA/WDMA/CSA 101/ULS2/A440 ASTM E285, ANSI/DASMA 105	C402.4.3; ASHRAE 90.1 – 5.4.3.2
IIA5	Fenestration areas: Dimensions of windows, doors and skylights shall be verified by visual inspection.	Prior to final construction inspection	Approved construction documents	C402.3; ASHRAE 90.1 – 5.4.3.2, 5.6 or 11
IIA6	Air sealing and insulation visual inspection: Openings and penetrations in the building envelope, including site-built fenestration and doors, shall be visually inspected to verify that a continuous air barrier around the envelope forms an air-tight enclosure.  The progress inspector shall visually inspect to verify that materials and/or assemblies have been tested and meet the requirements of the respective standards, or that the building is tested and meets the requirements of the standard, in accordance with the standard(s) cited in the approved plans.	As required during construction	Approved construction documents; ASTM E2179, ASTM E2357, ASTM E1677, ASTM E779, ASTM E285	C402.4; ASHRAE 90.1 – 5.4.3.1
IIA9	Veilbulbs: Required entrance veilbulbs shall be visually inspected for proper operation.	Prior to final construction inspection	Approved construction documents	C402.4.7; ASHRAE 90.1 – 5.4.3.4
IIB	Mechanical and Service	Water Heating Inspections		
IIB1	Fireplaces: Provision of combustion air and tight-fitting fireplace doors shall be verified by visual inspection.	Prior to final construction inspection	Approved construction documents; ANSI Z21.60 (see also MC 904), ANSI Z21.50	C402.2.9; BC 2111; MC Chapters 7, 8, 9; FCC Chapter 6
IIB2	Shutoff dampers: Dampers for stair and elevator shaft vents and other outdoor air intakes and exhaust openings integral to the building envelope shall be visually inspected to verify that such dampers, except where permitted to be gravity dampers, comply with approved construction drawings.  Manufacturer's literature shall be reviewed to verify that the product has been tested and found to meet the standard.	As required during installation	Approved construction documents; AMCA 500D	C403.2.4.4; ASHRAE 90.1 – 6.4.3.4
IIB3	HVAC and service water heating equipment: Equipment rating, efficiencies and other performance factors as determined by the applicant of record, and no less than 15% of minor equipment units, shall be verified by visual inspection and, where necessary, review of manufacturer's data. Pool heaters and covers shall be verified by visual inspection.	Prior to final plumbing and construction inspection	Approved construction documents	C403.2, C404.2, C404.7, C406.2; ASHRAE 90.1 – 6.3, 6.4.1, 6.4.2, 6.8; 7.4, 7.8

	Inspection/Test	Periodic (minimum)	Reference Standard (See ECC Chapter C5) or Other Criteria	ECC or Other Citation
IIB5	HVAC Insulation and sealing: Installed duct and piping insulation shall be visually inspected to verify proper insulation placement and values.  Joints, longitudinal and transverse seams and connections in ductwork shall be visually inspected for proper sealing.	After installation and prior to ceiling shafts, ceilings and walls	Approved construction documents; SMACNA Duct Construction Standards, Metal and Flexible	C403.2.7, C403.2.8, C404.5; MC 603.9; ASHRAE 90.1 – 6.3, 6.4.4, 6.8.2, 6.8.3; 7.4.3
IIC	Electrical Power and Lighting Systems			
IIC1	Electrical energy consumption: The presence and operation of individual meters – or other means of monitoring individual apartments shall be verified by visual inspection for all apartments and where required in a covered tenant space.	Prior to final electrical and construction inspection	Approved construction documents	C405.7
IIC2	Lighting in dwelling units: Lamps in permanently installed lighting fixtures shall be visually inspected to verify compliance with high-efficacy requirements.	Prior to final electrical and construction inspection	Approved construction documents	C405.1; ASHRAE 90.1 – 9.1.1
IIC3	Interior lighting power: Installed lighting shall be verified for compliance with the lighting power allowance by visual inspection of fixtures, lamps, ballasts and transformers.	Prior to final electrical and construction inspection	Approved construction documents	C405.5; C406.3; ASHRAE 90.1 9.1, 9.2, 9.5, 9.6, 10.6; NYC §101-07(c)(3)(v)(C)4
IIC4	Exterior lighting power: Installed lighting shall be verified for compliance with source efficacy and/or the lighting power allowance by visual inspection of fixtures, lamps, ballasts and relevant transformers.	Prior to final electrical and construction inspection	Approved construction documents	C405.6; ASHRAE 90.1 9.4.3, 10.6; NYC §101-07(c)(3)(v)(C)4
IIC5	Lighting controls: Each type of required lighting controls, including: <ul style="list-style-type: none"><li>• occupant sensors</li><li>• manual interior lighting controls</li><li>• light-reduction controls</li><li>• automatic lighting shut-off</li><li>• daylight zone controls</li><li>• sleeping unit controls</li></ul> Exterior lighting controls shall be verified by visual inspection and tested for functionality and proper operation.	Prior to final electrical and construction inspection	Approved construction documents, including control system narratives	C405.2; ASHRAE 90.1 – 9.4.1 (as modified by section ECC A102)
IIC6	Exit signs: Installed exit signs shall be visually inspected to verify that the label indicates that they do not exceed maximum permitted wattage.	Prior to final electrical and construction inspection	Approved construction documents	C405.4; ASHRAE 90.1 – 9.4.2
IIC7	Electric motors (including but not limited to fan motors): Where required by the construction documents for energy code compliance, motor flating or labels shall be visually inspected to verify that they comply with the respective energy requirements in the construction documents.	Prior to final electrical and construction inspection	Approved construction documents	C403.2.10; ASHRAE 90.1 – 10.4
IID	Other			
IID1	Maintenance Information: Maintenance manuals for mechanical, service hot water and systems requiring preventive maintenance shall be reviewed for applicability to installed equipment and systems before such manuals are provided to the owner. Labels required for such equipment or systems shall be inspected for accuracy and completeness.	Prior to sign-off or issuance of Final Certificate of Occupancy	Approved construction documents, including electrical drawings where applicable; ASHRAE Guideline 4; Preparation of Operating and Maintenance Documentation for Building Systems	C303.3, C408.2.5.2; ASHRAE 90.1 – 4.2.2.5, 6.7.2.2, 8.7.2, 8.7.2.3

1. RCNY 5000.01 - NARRATIVE OF CONTROLS SYSTEMS
1. CONDENSER WATER SYSTEM - BMS CONTROLS SHALL CONTROL COOLING TOWERS -FANS, AND PUMP VFD'S TO MAINTAIN CONDENSER WATER SET POINTS OPERATION BETWEEN 87 TO 90 DEG. F SUPPLY TEMPERATURES TO HEAT PUMP SYSTEMS WITHIN THE BUILDING. DURING HEATING SEASON, GAS FIRED HOT WATER BOILERS SHALL BE STAGED AND OPERATED TO PROVIDE HOT WATER INJECTION OF 160 DEG. F WATER FOR THE HEAT PUMP LOOP TO MAINTAIN BETWEEN 87 TO 92 CONDENSER WATER SUPPLY TEMPERATURE TO HEAT PUMPS.
2. HOT WATER BOILER SYSTEM - BMS CONTROLS SHALL STAGE GAS FIRED BOILERS AND MODULATE HW PUMP VFD'S TO PROVIDE HOT WATER SUPPLY AT 160 DEG.F TO HEAT PUMP SYSTEM INJECTION BY CONTROL VALVE MODULATION, AND TO SUPPLY HOT WATER TO HVAC HEATING COILS/RADIATION FOR COMMON AREA SYSTEMS. BOILERS SHALL BE STAGED AND MODULATED BASED ON OUTDOOR AIR RESET SCHEDULE, AND DOMESTIC HOT WATER DEMAND LOADS.
3. HEAT PUMP AC UNITS SHALL BE INDIVIDUALLY CONTROLLED BY ROOM THERMOSTATS TO CONTROL EACH HEAT PUMP UNIT TO MAINTAIN OCCUPIED TEMPERATURES BETWEEN 68 DEG.F TO 75 DEG. F. AND SHALL USE PROGRAMMABLE 7 DAY DIGITAL THERMOSTATS. CONTROL SYSTEM SHALL INCLUDE AUTOMATIC SETBACK CONTROL DURING UNOCCUPIED HOURS.
4. HEAT RECOVERY SYSTEM - BMS CONTROLS SHALL CONTROL HEAT RECOVERY UNITS AND THE ASSOCIATED SUPPLY AND EXHAUST FANS AND VFD'S. OUTSIDE AIR FANS SHALL OPERATE CONTINUOUSLY SERVING EACH GUEST ROOM TO MEET CODE. TOILET EXHAUST FANS SHALL OPERATE CONTINUOUSLY SERVING EACH GUEST ROOM TO MEET CODE. AUTOMATIC MOTORIZED DUCT DAMPERS SHALL BE INSTALLED TO OPEN WHEN THE FANS START.
5. AC UNITS SERVING CORRIDORS SHALL BE 100 % OUTDOOR AIR WATER COOLED AC UNITS WITH SPACE TEMPERATURE SENSOR TO CONTROL TYPICAL CORRIDOR SPACE TEMPERATURE BETWEEN 68 DEG. F TO 75 DEG. F RANGE USING HEAT PUMP CONTROL OPERATION, HEAT PIPE DEHUMIDIFICATION COIL, HOT GAS REHEAT CONTROL, AND HW HEATING COIL PACKAGED BY MANUFACTURER WITH CONTROLS. AUTOMATIC MOTORIZED DUCT DAMPERS SHALL BE INSTALLED TO OPEN WHEN UNIT STARTS.
6. TOILET EXHAUST FANS SHALL OPERATE CONTINUOUSLY SERVING THE HOTEL COMMON AREA RESTROOMS TO MEET CODE. AUTOMATIC MOTORIZED DUCT DAMPERS SHALL BE INSTALLED TO OPEN WHEN FAN STARTS.
7. KITCHEN EXHAUST FANS AND PRECIPITATORS WITH VFD'S SHALL BE CONTROLLED BY KITCHEN HOOD CONTROL SYSTEM.
8. AC UNITS SERVING KITCHENS SHALL BE 100 % OUTDOOR AIR WATER COOLED AC UNITS WITH SPACE TEMPERATURE SENSOR TO CONTROL TYPICAL SPACE TEMPERATURE BETWEEN 68 DEG. F TO 75 DEG. F RANGE USING HEAT PUMP CONTROL OPERATION, HEAT PIPE DEHUMIDIFICATION COIL, HOT GAS REHEAT CONTROL, AND HW HEATING COIL PACKAGED BY MANUFACTURER WITH CONTROLS. HEATING AND VENTILATING MAKEUP AIR UNIT WILL PROVIDE MAKEUP AIR AND SHALL BE INTERLOCKED WITH KITCHEN EXHAUST FAN OPERATION. AUTOMATIC MOTORIZED DUCT DAMPERS SHALL BE INSTALLED TO OPEN WHEN UNITS START.
9. GENERAL EXHAUST FANS FOR BACK OF HOUSE SPACES SHALL OPERATE CONTINUOUSLY FOR VENTILATION FOR TRASH ROOM CLOSETS, MECHANICAL ROOMS, ELECTRICAL ROOMS, ETC.
10. HEATING AND VENTILATING UNITS WITH VFD'S SHALL BE CONTROLLED WITH SPACE TEMPERATURE SENSORS TO MAINTAIN TEMPERATURE FOR MECHANICAL ROOMS.
11. LOADING DOCK EXHAUST FAN WITH VFD SHALL BE CONTROLLED TO OPERATE AT MINIMAL VENTILATION RATE, AND MODULATE HIGHER UPON INCREASE OF MEASURE CO BY CO SENSORS IN LOADING DOCK.
12. STAIR PRESSURIZATION FANS WITH VFD'S SHALL BE CONTROLLED TO OPERATE IF CALLED BY FIRE ALARM SYSTEM. AUTOMATIC MOTORIZED DUCT DAMPERS SHALL BE INSTALLED TO OPEN WHEN UNIT STARTS.
13. SMOKE CONTROL FANS WITH VFD'S SHALL BE CONTROLLED TO OPERATE IF CALLED BY FIRE ALARM SYSTEM. AUTOMATIC MOTORIZED DUCT DAMPERS SHALL BE INSTALLED TO OPEN WHEN FAN STARTS.
14. POST FIRE SMOKE EXHAUST FANS WITH VFD'S SHALL BE CONTROLLED VIA FIRE COMMAND CENTER. AUTOMATIC MOTORIZED DUCT DAMPERS SHALL BE INSTALLED TO OPEN WHEN FAN STARTS.
15. AC UNITS SERVING ELEVATOR MACHINE ROOMS SHALL BE INDIVIDUALLY CONTROLLED BY SPACE TEMPERATURE SENSORS TO CONTROL EACH AC UNIT TO MAINTAIN TEMPERATURE AT 80 DEG. F (ADJ.).
16. AC UNITS AND HEAT PUMPS SERVING HOTEL COMMON AREAS SHALL BE INDIVIDUALLY CONTROLLED BY SPACE TEMPERATURE SENSORS TO CONTROL EACH AC UNIT TO MAINTAIN TEMPERATURE.
17. OUTSIDE AIR AND GENERAL EXHAUST FANS WITH VFD'S SHALL BE CONTROLLED TO MAINTAIN CODE REQUIRED VENTILATION FOR HOTEL COMMON AREAS. AUTOMATIC MOTORIZED DUCT DAMPERS SHALL BE INSTALLED TO OPEN WHEN FANS START.
18. DRYER EXHAUST FANS WITH VFD'S SHALL BE CONTROLLED BY DUCT MOUNTED STATIC PRESSURE SENSORS FOR EACH FAN SYSTEM TO CONTROL FAN SPEED BASED ON EXHAUST STATIC PRESSURE TO MAINTAIN MINIMUM SET POINT OF (-0.10" W.G.) PRESSURE WITHIN DUCTS AT FURTHEST POINT IN SYSTEM. NO DAMPERS ARE PERMITTED IN DRYER EXHAUST SYSTEMS.
19. EXHAUST FANS SERVING ELEVATOR HOISTWAYS SHALL BE CONTROLLED BY SMOKE DETECTION.

NOTES:  
Professional Statement:  
To the best of my knowledge, belief, and personal judgement, these plans and specifications are in compliance with the 2016 New York City Energy Conservation Code (by application of ASHRAE 90.1–2013) as amended by Appendix A.

Performance Method Rating Calculation:

Proposed annual energy cost= \$1,473,490  
Baseline annual energy cost = \$1,646,171  
% Improvement = 10.5% or \$172,681 annual energy cost

The baseline is established according to 2016 NYCCEC (by application of ASHRAE 90.1–2013) as amended by Appendix A. The proposed design is 10.5% better than the baseline. The proposed case includes high efficiency water source heat pumps, condensing boilers, heat recovery on apartment ventilation system, variable speed drives on fans and pumps, high efficacy lighting fixtures and a high performance envelope.

Commissioning Statement:

Per 6.7.2.4, the project is over 50,000 SF therefore commissioning is required. HVAC control systems shall be tested to ensure that control elements are calibrated, adjusted, and in proper working condition. Detailed instructions are included in the specification package under Section 230800 'Commissioning of HVAC Equipment' and 230593 'Testing, Adjusting, and Balancing of HVAC Equipment.'

SHEET NO.	DRAWING TITLE
EN-001	ENERGY COMPLIANCE FORM AND NOTES
EN-002	ENERGY COMPLIANCE FORM AND NOTES
EN-003	ENERGY COMPLIANCE FORM AND NOTES
EN-004	ENERGY COMPLIANCE FORM AND NOTES
EN-005	ENERGY COMPLIANCE FORM AND NOTES
EN-006	ENERGY COMPLIANCE FORM AND NOTES
EN-007	ENERGY COMPLIANCE FORM AND NOTES
EN-008	WALL TYPE AND ELEVATION DIAGRAM
EN-009	WALL TYPE AND ELEVATION DIAGRAM
EN-010	EXTERIOR WALL TYPES DETAILS
EN-011	EXTERIOR WALL TYPES DETAILS
EN-012	WALL/CEILING U-VALUE REFERENCE
EN-013	FOUNDATION WALL DETAILS
EN-014	ROOF DETAILS
EN-200	ELECTRICAL GROUND FLOOR LIGHTING PLAN
EN-201	ELECTRICAL LEVEL 20 LIGHTING PLAN
EN-202	ELECTRICAL LEVEL 2 LIGHTING PLAN
EN-203	ELECTRICAL LEVEL 3 LIGHTING PLAN
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EN-433	ELECTRICAL LEVEL 233 LIGHTING PLAN



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ASHRAE 90.1-2013 WITH 2016 NYC ENERGY CONSERVATION CODE AMENDMENTS NOTES:

STATEMENT OF COMPLIANCE:

TO THE BEST OF MY KNOWLEDGE, AND PERSONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2016 NEW YORK CITY ENERGY CONSERVATION CODE BY APPLICATION OF ASHRAE 90.1-2013 WITH 2016 NEW YORK CITY ENERGY CONSERVATION CODE AMENDMENTS.

MANDATORY PROVISIONS:

ASHRAE 90.1-2013 WITH 2016 NYC AMENDMENTS NOTES:

STATEMENT OF COMPLIANCE:

TO THE BEST OF MY KNOWLEDGE AND PERSONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2016 NEW YORK CITY ENERGY CONSERVATION CODE BY APPLICATION OF ASHRAE 90.1-2013.

MANDATORY PROVISIONS:

- PER SECTION 6.4.3.3.5, IN HOTELS AND MOTELS WITH GREATER THAN 50 GUEST ROOMS, AUTOMATIC CONTROLS FOR THE HVAC EQUIPMENT SERVING EACH GUEST ROOM WILL BE CONFIGURED ACCORDING TO THE REQUIREMENTS IN THE FOLLOWING SUBSECTION. CONTROLS MUST COMPLY WITH EITHER SECTION 6.4.3.3.5.1 OR 6.4.3.3.5.2.
- PER SECTION 6.4.3.3.5.1, HVAC SETPOINT IN THE GUESTROOM WILL BE AUTOMATICALLY CONTROLLED IN ACCORDANCE WITH THE REQUIREMENT IN SECTION 6.4.3.3.5.1
- PER SECTION 6.4.3.3.5.2, CAPTIVE KEY CARD SYSTEMS WILL BE PERMITTED TO BE USED TO COMPLY WITH SECTION 6.4.3.3.5.
- PER SECTION 6.4.3.4.5, ENCLOSED PARKING GARAGE VENTILATION SYSTEM WILL AUTOMATICALLY DETECT CONTAMINANT LEVELS AND STAGE FANS OR MODULATE FAN AIRFLOW RATES TO 50% OR LESS OF DESIGN CAPACITY, PROVIDED ACCEPTABLE CONTAMINANT LEVELS ARE MAINTAINED. EXCEPTIONS ARE LISTED IN SECTION 6.4.3.4.5.
- PER SECTION 6.4.1.1, EQUIPMENT WILL MEET MINIMUM EFFICIENCY SHOWN IN TABLES 6.8.1-1 THROUGH 6.8.1-13.
- PER SECTION 6.4.1.2.1, WATER-COOLED CENTRIFUGAL CHILLING PACKAGES NOT DESIGNED FOR OPERATION AT AHRI STANDARD 550/590 TEST CONDITION OF 44F LEAVING CHILLED-FLUID TEMPERATURE AND 2.4 GPM/TON EVAPORATOR FLUID FLOW AND 85F ENTERING CONDENSER-FLUID TEMPERATURE WITH 3.0 GPM/TON CONDENSER-FLUID FLOW WILL HAVE MAXIMUM FULL-LOAD KW/TON (FL) AND PART-LOAD RATING REQUIREMENTS ADJUSTED USING THE EQUATIONS IN SECTION 6.4.1.2.1.
- PER SECTION 6.4.1.2.2, POSITIVE DISPLACEMENT (AIR- AND WATER- COOLED) CHILLING PACKAGES WITH AN EVAPORATOR LEAVING FLUID TEMPERATURE HIGHER THAN 32F AND WATER-COOLED POSITIVE DISPLACEMENT CHILLING PACKAGES WITH A CONDENSER LEAVING FLUID TEMPERATURE BELOW 115F WILL SHOW COMPLIANCE WITH TABLE 6.8.1-3 WHEN TESTED OR CERTIFIED WITH WATER AT STANDARD RATING CONDITIONS, PER THE REFERENCED TEST PROCEDURE.
- PER SECTION 6.4.1.3, EQUIPMENT NOT LISTED IN THE TABLES REFERENCED IN SECTION 6.4.1.1 AND 6.4.1.2 MAY BE USED.
- PER SECTION 6.4.1.4, EQUIPMENT EFFICIENCY INFORMATION SUPPLIED BY MANUFACTURERS WILL BE VERIFIED BY ONE OF THE SIX OPTIONS SHOWN IN SECTION 6.4.1.4.
- PER SECTION 6.4.1.5.1, MECHANICAL EQUIPMENT THAT IS NOT COVERED BY US NATIONAL APPLIANCE ENERGY CONSERVATION ACT (NAECA) OF 1987 WILL CARRY A PERMANENT LABEL INSTALLED BY THE MANUFACTURER STATING THAT THE EQUIPMENT COMPLIES WITH THE REQUIREMENT OF STANDARD 90.1.
- PER SECTION 6.4.1.5.2, NON-STANDARD-SIZE PACKAGED TERMINAL AIR CONDITIONERS AND HEAT PUMPS WITH EXISTING SLEEVES HAVING AN EXTERNAL WALL OPENING OF LESS THAN 16 IN. HIGH OR LESS THAN 42 IN. WIDE AND HAVING A CROSS-SECTIONAL AREA LESS THAN 67 IN.^2 WILL BE FACTORY LABELED IN ACCORDANCE WITH SECTION 6.4.1.5.2 REQUIREMENT.
- PER SECTION 6.4.2.1, HEATING AND COOLING SYSTEM DESIGN LOADS FOR THE PURPOSE OF SIZING SYSTEMS AND EQUIPMENT HAVE BEEN DETERMINED IN ACCORDANCE WITH ANSI/ASHRAE/ACCA STANDARD 183.
- PER SECTION 6.4.2.2, PUMP DIFFERENTIAL PRESSURE FOR THE PURPOSE OF SIZING PUMPS HAS BEEN DETERMINED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING STANDARDS AND HANDBOOKS ACCEPTABLE TO THE ADOPTING AUTHORITY. THE PRESSURE DROP THROUGH EACH DEVICE AND PIPE SEGMENT IN THE CRITICAL CIRCUIT AT DESIGN CONDITIONS WILL BE CALCULATED.
- PER SECTION 6.4.3.1.1, THE SUPPLY OF HEATING AND COOLING ENERGY TO EACH ZONE WILL BE INDIVIDUALLY CONTROLLED BY THERMOSTATIC CONTROLS RESPONDING TO TEMPERATURE WITHIN THE ZONE. EXCEPTIONS ARE APPLIED IN ACCORDANCE WITH SECTION 6.4.3.1.1 FOR PERIMETER SYSTEMS OFFSETTING SKIN LOADS.
- PER SECTION 6.4.3.1.2, WHERE USED TO CONTROL BOTH HEATING AND COOLING, ZONE THERMOSTATIC CONTROLS WILL BE CAPABLE OF PROVIDING A TEMPERATURE RANGE OR DEAD BAND OF AT LEAST 5F WITHIN WHICH THE SUPPLY OF HEATING AND COOLING ENERGY TO THE ZONE IS SHUT OFF OR REDUCE TO A MINIMUM. EXCEPTIONS ARE APPLIED IN ACCORDANCE WITH SECTION 6.4.3.1.2.
- PER SECTION 6.4.3.2, WHERE HEATING AND COOLING TO A ZONE ARE CONTROLLED BY SEPARATE ZONE THERMOSTATIC CONTROLS LOCATED WITHIN THE ZONE, MEANS WILL BE PROVIDED TO PREVENT THE HEATING SETPOINT FROM EXCEEDING THE COOLING SETPOINT MINUS ANY APPLICABLE PROPORTIONAL BAND.
- PER SECTION 6.4.3.3, HVAC SYSTEMS WILL HAVE OFF-HOUR CONTROLS REQUIRED BY SECTIONS 6.4.3.3.1 THROUGH 6.4.3.3.4. EXCEPTIONS ARE APPLIED IN ACCORDANCE WITH SECTION 6.4.3.3.
- PER SECTION 6.4.3.3.1, HVAC WILL BE EQUIPPED WITH AT LEAST ONE OF THE FOUR AUTOMATIC SHUTDOWN OPTIONS IN SECTION 6.4.3.3.1.
- PER SECTION 6.4.3.3.2, HEATING/COOLING SYSTEM WILL BE EQUIPPED WITH CONTROLS CONFIGURED TO AUTOMATICALLY RESTART AND TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES REQUIRED BY SECTION 6.4.3.3.2
- PER SECTION 6.4.3.3.3, INDIVIDUAL HEATING AND COOLING SYSTEMS WITH SETBACK CONTROLS AND DDC WILL HAVE OPTIMUM START CONTROLS. THE CONTROL ALGORITHM WILL MEET THE REQUIREMENT IN SECTION 6.4.3.3.3.
- PER SECTION 6.4.3.3.4, HVAC SERVING ZONES THAT ARE INTENDED TO OPERATE OR BE OCCUPIED NONSIMULTANEOUSLY WILL BE DIVIDED INTO ISOLATION AREAS. ZONES MAY BE GROUPED INTO A SINGLE ISOLATION AREA IN ACCORDANCE WITH SECTION 6.4.3.3.4. EACH ISOLATION AREA WILL BE EQUIPPED WITH ISOLATION DEVICES CAPABLE OF AUTOMATICALLY SHUTTING OFF THE SUPPLY OF CONDITIONED AIR AND OUTDOOR AIR TO AND EXHAUST AIR FROM THE AREA. EACH ISOLATION AREA SHALL BE CONTROLLED INDEPENDENTLY BY A DEVICE MEETING THE REQUIREMENTS OF SECTION 6.4.3.3.1. FOR CENTRAL SYSTEMS AND PLANTS, CONTROLS AND DEVICES WILL BE PROVIDED TO ALLOW STABLE SYSTEM AND EQUIPMENT OPERATION FOR ANY LENGTH OF TIME WHILE SERVING ONLY THE SMALLEST ISOLATION AREA SERVED BY THE SYSTEM OR PLANT. EXCEPTIONS ARE LISTED IN SECTION 6.4.3.3.4.
- PER SECTION 6.4.3.4.1, STAIRS AND ELEVATOR SHAFT VENTS WILL BE EQUIPPED WITH MOTORIZED DAMPERS THAT ARE CAPABLE OF BEING AUTOMATICALLY CLOSED DURING NORMAL BUILDING OPERATION AND ARE INTERLOCKED TO OPEN AS REQUIRED BY FIRE AND SMOKE DETECTION SYSTEM.
- PER SECTION 6.4.3.4.2, ALL OUTDOOR AIR INTAKE AND EXHAUST SYSTEMS WILL BE EQUIPPED WITH MOTORIZED DAMPERS THAT WILL AUTOMATICALLY SHUT WHEN THE SYSTEMS OR SPACES SERVED ARE NOT IN USE. VENTILATION OUTDOOR AIR AND EXHAUST/RELIEF DAMPERS WILL BE CAPABLE OF AUTOMATICALLY SHUTTING OFF DURING PREOCCUPANCY BUILDING WARM-UP, COOLDOWN AND SETBACK, EXCEPT WHEN VENTILATION REDUCES ENERGY COSTS OR WHEN VENTILATION MUST BE SUPPLIED TO MEET CODE REQUIREMENTS. EXCEPTIONS ARE LISTED IN SECTION 6.4.3.4.2.
- PER SECTION 6.4.3.4.3, WHERE OUTDOOR AIR SUPPLY AND EXHAUST/RELIEF DAMPERS ARE REQUIRED BY SECTION 6.4.3.4.1, THEY WILL HAVE A MAXIMUM LEAKAGE RATE AS INDICATED IN TABLE 6.4.3.4.3 WHEN TESTED IN ACCORDANCE WITH AMCA STANDARD 500.
- PER SECTION 6.4.3.4.4, FANS WITH MOTORS GREATER THAN 0.75 HP WILL HAVE AUTOMATIC CONTROLS COMPLYING WITH SECTION 6.4.3.3.1 THAT ARE CAPABLE OF SHUTTING OFF FANS WHEN NOT REQUIRED.  
EXCEPTION: HVAC SYSTEMS INTENDED TO OPERATE CONTINUOUSLY.
- PER SECTION 6.4.3.5, HEAT PUMPS EQUIPPED WITH INTERNAL ELECTRIC RESISTANCE HEATERS WILL HAVE CONTROLS THAT PREVENT SUPPLEMENTAL HEATER OPERATION WHEN THE HEATING LOAD CAN BE MET BY THE HEAT PUMP ALONE DURING BOTH STEADY-STATE OPERATION AND SETBACK RECOVERY. SUPPLEMENTAL HEATER OPERATION IS PERMITTED DURING OUTDOOR COIL DEFROST CYCLES.  
EXCEPTION: HEAT PUMPS WHOSE MINIMUM EFFICIENCY IS REGULATED BY NAECA AND WHOSE RATINGS MEET THE REQUIREMENTS SHOWN IN TABLE 6.8.1-2 AND INCLUDE ALL USAGE OF INTERNAL ELECTRIC RESISTANCE HEATING.
- PER SECTION 6.4.3.6, HUMIDITY CONTROL WILL PREVENT THE USE OF FOSSIL FUEL OR ELECTRICITY TO PRODUCE RH ABOVE 30% IN THE WARMEST ZONE SERVED BY THE HUMIDIFICATION SYSTEM AND TO REDUCE RH BELOW 60% IN THE COLDEST ZONE SERVED BY THE DEHUMIDIFICATION SYSTEM. WHERE A ZONE IS SERVED BY A SYSTEM OR SYSTEMS WITH BOTH HUMIDIFICATION AND DEHUMIDIFICATION CAPABILITY, MEANS WILL BE PROVIDED CAPABLE OF PREVENTING SIMULTANEOUS OPERATION OF HUMIDIFICATION AND DEHUMIDIFICATION EQUIPMENT.
- PER SECTION 6.4.3.7, FREEZE PROTECTION SYSTEMS INCLUDING SELF-REGULATING HEAT TRACING WILL INCLUDE AUTOMATIC CONTROLS CAPABLE OF SHUTTING OFF THE SYSTEMS WHEN OUTDOOR AIR TEMPERATURES ARE ABOVE 40F OR WHEN THE CONDITION OF THE PROTECTED FLUID WILL PREVENT FREEZING. SNOW- AND ICE- MELTING SYSTEMS WILL INCLUDE AUTOMATIC CONTROLS CAPABLE OF SHUTTING OFF THE SYSTEMS WHEN THE PAVEMENT TEMPERATURE IS ABOVE 50F AND NO PRECIPITATION IS FALLING, AND AN AUTOMATIC OR MANUAL CONTROL THAT WILL ALLOW SHUTOFF WHEN THE OUTDOOR TEMPERATURE IS ABOVE 40F SO THAT THE POTENTIAL FOR SNOW OR ICE ACCUMULATION IS NEGLIGIBLE.
- PER SECTION 6.4.3.8, DEMAND CONTROL VENTILATION (DCV) IS REQUIRED FOR SPACES LARGER THAN 500 SF AND WITH A DESIGN OCCUPANCY FOR VENTILATION OF ≥ 25 PEOPLE PER 1000 SF OF FLOOR AREA AND SERVED BY SYSTEMS WITH ONE OR MORE OF THREE FEATURES LISTED IN SECTION 6.4.3.8.
- PER SECTION 6.4.3.9, HEATING FOR VESTIBULES, IN ACCORDANCE WITH SECTION 5.4.3.4, AND AIR CURTAINS WILL INCLUDE AUTOMATIC CONTROLS CONFIGURED TO SHUT OFF THE HEATING SYSTEM WHEN OUTDOOR AIR TEMPERATURE ARE ABOVE 45F. VESTIBULE HEATING SYSTEMS WILL ALSO BE CONTROLLED BY A THERMOSTAT IN THE VESTIBULE WITH A SETPOINT LIMITED TO A MAXIMUM OF 60F.
- PER SECTION 6.4.3.10.1, DIRECT DIGITAL CONTROL (DDC) WILL BE PROVIDED IN THE APPLICATIONS AND QUALIFICATIONS LISTED IN TABLE 6.4.3.10.1  
EXCEPTION: DDC IS NOT REQUIRED FOR SYSTEMS USING THE SIMPLIFIED APPROACH TO COMPLIANCE IN ACCORDANCE WITH SECTION 6.3
- PER SECTION 6.4.3.10.2, WHERE DDC IS REQUIRED BY SECTION 6.4.3.10.1, THE DDC SYSTEM WILL BE CAPABLE OF ALL OF THE FOUR FUNCTIONS DESCRIBED IN SECTION 6.4.3.10.2 (A) THROUGH 6.4.3.10.2 (D), AS REQUIRED, TO PROVIDE THE CONTROL LOGIC REQUIRED IN SECTION 6.5.
- PER SECTION 6.4.3.10.3, WHERE DDC IS REQUIRED BY SECTION 6.4.3.10.1 FOR NEW BUILDINGS, THE DDC SYSTEM WILL BE CAPABLE OF TRENDING AND GRAPHICALLY DISPLAYING INPUT AND OUTPUT POINTS.
- PER SECTION 6.4.4.1.1, INSULATION REQUIRED BY THIS SECTION WILL BE INSTALLED IN ACCORDANCE WITH INDUSTRY-ACCEPTED STANDARDS. THESE REQUIREMENTS DO NOT APPLY TO HVAC EQUIPMENT. INSULATION WILL BE PROTECTED FROM DAMAGE, INCLUDING THAT DUE TO SUNLIGHT, MOISTURE, EQUIPMENT MAINTENANCE AND WIND, BUT NOT LIMITED TO TWO SITUATIONS DESCRIBED IN SECTION 6.4.1.1.
- PER SECTION 6.4.4.1.2, ALL SUPPLY AND RETURN DUCTS AND PLENUMS INSTALLED AS PART OF HVAC AIR DISTRIBUTION SYSTEM WILL BE THERMALLY INSULATED IN ACCORDANCE WITH TABLE 6.8.2-1 AND 6.8.2-2, EXCEPT FOR FOUR SITUATIONS DESCRIBED IN SECTION 6.4.4.1.2.
- PER SECTION 6.4.4.1.3, PIPING WILL BE THERMALLY INSULATED IN ACCORDANCE WITH TABLES 6.8.3-1 AND 6.8.3-2, EXCEPT FOR FIVE SITUATIONS DESCRIBED IN SECTION 6.4.4.1.3.
- PER SECTION 6.4.4.1.4, ALL THERMALLY INEFFECTIVE PANEL SURFACES OF SENSIBLE HEATING PANELS, INCLUDING U-BENDS AND HEADERS, WILL BE INSULATED WITH A MINIMUM OF R-3.5. ADJACENT ENVELOPE INSULATION COUNTS TOWARD THIS REQUIREMENT
- PER SECTION 6.4.4.1.5, THE BOTTOM SURFACES OF FLOOR STRUCTURES INCORPORATING RADIANT HEATING WILL BE INSULATED WITH A MINIMUM OF R-3.5. ADJACENT ENVELOPE INSULATION COUNTS TOWARD THIS REQUIREMENT
- PER SECTION 6.4.4.2.1, DUCTWORK AND ALL PLENUMS WITH PRESSURE CLASS RATINGS WILL BE CONSTRUCTED TO SEAL CLASS A, AS REQUIRED TO MEET THE REQUIREMENTS OF SECTION 6.4.4.2.2 AND WITH STANDARD INDUSTRY PRACTICE. OPENINGS FOR ROTATING SHAFTS WILL BE SEALED WITH BUSHINGS OR OTHER DEVICES THAT SEAL OFF AIR LEAKAGE. PRESSURE-SENSITIVE TAPE WILL NOT BE USED AS THE PRIMARY SEALANT UNLESS IT HAS BEEN CERTIFIED TO COMPLY WITH UL-181A OR UL-181B BY AN INDEPENDENT TESTING LABORATORY AND THE TAPE IS USED IN ACCORDANCE WITH THAT CERTIFICATION. ALL CONNECTIONS WILL BE SEALED, INCLUDING BUT LIMITED TO SPIN-INS, TAPS, OTHER BRANCH CONNECTIONS, ACCESS DOORS, ACCESS PANELS, AND DUCT CONNECTIONS TO EQUIPMENT. SEALING THAT WOULD VOID PRODUCT LISTINGS IS NOT REQUIRED. SPIRAL LOCK SEAMS NEED NOT BE SEALED. ALL DUCT PRESSURE CLASS RATINGS WILL BE DESIGNATED IN THE DESIGN DOCUMENTS.
- PER SECTION 6.4.4.2.2, DUCTWORK THAT IS DESIGNED TO OPERATE AT STATIC PRESSURES IN EXCESS OF 3 IN. WC AND ALL DUCTWORK LOCATED OUTDOORS WILL BE LEAK-TESTED ACCORDING TO INDUSTRY-ACCEPTED TEST PROCEDURES. REPRESENTATIVE SECTIONS TOTALING NO LESS THAN 25% OF THE TOTAL INSTALLED DUCT AREA FOR THE DESIGNATED PRESSURE CLASS WILL BE TESTED. ALL SECTIONS WILL BE SELECTED BY THE BUILDING OWNER OR THE DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER. POSITIVE PRESSURE LEAKAGE TESTING IS ACCEPTABLE FOR NEGATIVE PRESSURE DUCTWORK. THE MAXIMUM PERMITTED DUCT LEAKAGE WILL BE MEET THE EQUIATION IN SECTION 6.4.4.2.2.

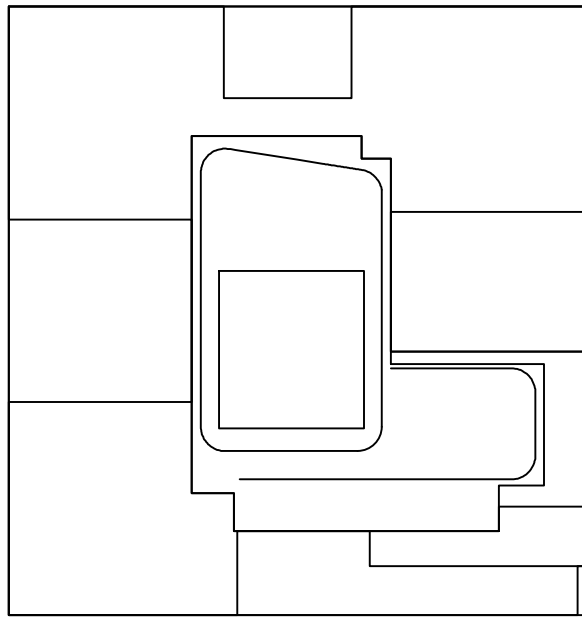
ASHRAE 90.1-2013 WITH 2016 NYC ENERGY CONSERVATION CODE AMENDMENTS NOTES:

STATEMENT OF COMPLIANCE:

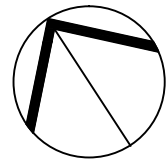
TO THE BEST OF MY KNOWLEDGE, AND PERSONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2016 NEW YORK CITY ENERGY CONSERVATION CODE BY APPLICATION OF ASHRAE 90.1-2013 WITH 2016 NEW YORK CITY ENERGY CONSERVATION CODE AMENDMENTS.

MANDATORY PROVISIONS:

- PER SECTION 7.4.1, SERVICE WATER HEATING SYSTEM DESIGN LOADS FOR THE PURPOSE OF SIZING SYSTEMS AND EQUIPMENT HAVE BEEN DETERMINED IN ACCORDANCE WITH MANUFACTURES' PUBLISHED SIZING GUIDELINES OR GENERALLY ACCEPTED ENGINEERING STANDARDS AND HANDBOOKS ACCEPTABLE TO THE ADOPTING AUTHORITY.
- PER SECTION 7.4.2, WATER HEATING EQUIPMENT AND HOT WATER STORAGE TANKS WILL MEET THE CRITERIA LISTED IN TABLE 7.8.
- PER SECTION 7.4.3, THE FOLLOWING PIPING WILL BE INSULATED TO LEVELS SHOWN IN SECTION 6, TABLE 6.9.3-1
  - RECIRCULATING SYSTEM PIPING, INCLUDING THE SUPPLY AND RETURN PIPING OF A CIRCULATING TANK TYPE WATER HEATER
  - THE FIRST 8 FT OF OUTLET PIPING FOR A CONSTANT TEMPERATURE NONRECIRCULATING STORAGE SYSTEM
  - THE INLET PIPING BETWEEN THE STORAGE TANK AND A HEAT TRAP IN A NONRECIRCULATING STORAGE SYSTEM
  - PIPING THAT IS EXTERNALLY HEATED (SUCH AS HEAT TRACE OR IMPEDANCE HEATING)
- PER SECTION 7.4.4.1, TEMPERATURE CONTROLS SHALL BE PROVIDED THAT ALLOW FOR STORAGE TEMPERATURE ADJUSTMENT FROM 120F OR LOWER TO MAXIMUM TEMPERATURE COMPATIBLE WITH THE INTENDED USE, EXCEPT WHEN THE MANUFACTURES' INSTALLATION INSTRUCTIONS SPECIFY A HIGHER MINIMUM THERMOSTAT SETTING TO MINIMIZE CONDENSATION AND RESULTING CORROSION
- PER SECTION 7.4.4.2, SYSTEM DESIGNED TO MAINTAIN USAGE TEMPERATURES IN HOT-WATER PIPES SHALL BE EQUIPPED WITH AUTOMATIC TIME SWITCHES OR OTHER CONTROLS THAT CAN BE SET TO SWITCH OFF THE USAGE TEMPERATURE MAINTENANCE SYSTEM DURING EXTENDED PERIODS WHEN HOT WATER IS NOT REQUIRED.
- PER SECTION 7.4.4.3, TEMPERATURE CONTROLLING MEANS WILL BE PROVIDED TO LIMIT THE MAXIMUM TEMPERATURE OF WATER DELIVERED FROM LAVATORY FAUCETS IN PUBLIC FACILITY RESTROOMS TO 110F.
- PER SECTION 7.4.4.4, RECIRCULATING PUMPS SHALL BE EQUIPPED WITH CONTROLS LIMITING OPERATION TO A PERIOD FROM THE START OF THE HEATING CYCLE TO A MAXIMUM OF FIVE MINUTES AFTER THE END OF THE HEATING CYCLE, WHEN USED TO MAINTAIN STORAGE TANK WATER TEMPERATURE.
- PER SECTION 7.4.5.1, POOL HEATERS SHALL BE EQUIPPED WITH AN ON-OFF SWITCH TO ALLOW SHUTTING OFF THE HEATER WITHOUT ADJUSTING THE THERMOSTAT SETTING. POOL HEATERS FIRED BY NATURAL GAS SHALL NOT HAVE CONTINUOUSLY BURNING PILOT LIGHTS.
- PER SECTION 7.4.5.2, HEATED POOLS SHALL BE EQUIPPED WITH A VAPOR RETARDANT POOL COVER ON OR AT THE WATER SURFACE. POOLS HEATED TO MORE THAN 90F SHALL HAVE A POOL COVER WITH A MINIMUM INSULATION VALUE OF R-12, EXCEPT FOR POOLS DERIVING OVER 60% OF THE ENERGY FOR HEATING FROM SITE-RECOVERED ENERGY OR SOLAR ENERGY SOURCE.
- PER SECTION 7.4.5.3, TIME SWITCHES SHALL BE INSTALLED ON SWIMMING POOL HEATERS AND PUMPS.  
EXCEPTION:
  - WHERE PUBLIC HEALTH STANDARDS REQUIRE 24-HOUR PUMP OPERATION
  - WHERE PUMPS ARE REQUIRED TO OPERATE SOLAR AND WASTE HEAT RECOVERY POOL HEATING SYSTEMS



KEY PLAN



NOTES:

NOT FOR CONSTRUCTION

2

Number: Date: Revision:

Project:

City View Tower at Court Square  
23-15 44th Drive  
Long Island City, NY 11101

Client:

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DOB STAMPS & SIGNATURES:

DWG TITLE:

ENERGY CODE  
COMPLIANCE SHEET - 2

SEAL & SIGNATURE:



DATE: 08/15/2017

PROJECT #: 19018

SCALE: NONE

DWG NO. EN-002.00

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ASHRAE 90.1-2013 AS MODIFIED BY 2016 NYCECC APPENDIX CA.

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES\*

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.



ASHRAE 90.1-1013 WITH 2016 NYC ENERGY CONSERVATION CODE AMENDMENTS NOTES:

STATEMENT OF COMPLIANCE:

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MANDATORY PROVISIONS:

8.4.2 AUTOMATIC RECEPTACLE CONTROL:  
FOR EACH CONTINUOUSLY POWERED 125V PC DUPLEX PROVIDED, AT LEAST ONE 125V GENERAL CONVENIENCE (GC) DUPLEX WILL BE PROVIDED. GC DUPLEXES WILL BE LABELED AS AUTO CONTROLLED. TIME CLOCK RELAYS TO ALL GC DUPLEXES WILL TURN OFF RECEPTACLES AT PROGRAMMED TIMES AND WILL SATISFY THE FOLLOWING:  
A. 50% OF ALL 125-VOLT 15- AND 20-AMP RECEPTACLES IN ALL PRIVATE OFFICES, CONFERENCE ROOMS, ROOMS USED PRIMARILY FOR PRINTING AND/OR COPYING FUNCTIONS, BREAK ROOMS, CLASSROOMS, AND INDIVIDUAL WORKSTATIONS  
B. 25% OF BRANCH CIRCUIT FEEDERS INSTALLED FOR MODULAR FURNITURE NOT SHOWN ON THE CONSTRUCTION DOCUMENTS  
[OFFICE/LOUNGE/KIDS/BREAK ROOMS: 50% OF THE GC DUPLEXES WILL BE CONTROLLED VIA TIME CLOCK RELAYS TO TURN RECEPTACLES OFF AT SPECIFIC PROGRAMMED TIMES.]  
COMMERCIAL TENANT SPACE: IT IS THE TENANT RESPONSIBILITY, AS THEY ARE CIRCUITING THEIR LEASED SPACE, TO INSTALL AUTOMATIC RECEPTACLE CONTROLS FOR 50% OF RECEPTACLES AS PER SECTION 8.4.2. THE REQUIREMENT IS INCLUDED IN TENANT LEASE AGREEMENT.

8.4.3 ELECTRICAL ENERGY MONITORING  
8.4.3.1 MONITORING  
BMS METERING DEVICES WILL BE PROVIDED FOR THE BASE BUILDING TO MONITOR THE ELECTRICAL ENERGY USE FOR EACH OF THE FOLLOWING SEPARATELY: TOTAL ELECTRICAL ENERGY, HVAC SYSTEMS, INTERIOR LIGHTING, EXTERIOR LIGHTING, AND RECEPTACLE CIRCUITS.  
[IN THIS PROJECT, METERING DEVICES ARE INTEGRATED WITH BMS SYSTEM TO MONITOR THE BASE BUILDING ENERGY END USES MENTIONED ABOVE. THE SYSTEM WILL MONITOR ENERGY USE FOR PUMPS, COOLING TOWERS, BOILERS, COMMON AREA AIR HANDELING UNITS, COMMON AREA LIGHTING, COMMON AREA EXTERIOR LIGHTING, AND COMMON RECEPTACLE CIRCUITS]

RESIDENTIAL DWELLING UNITS: DWELLING UNITS ARE EXEMPT FROM SECTION 8.4.3.1, PER SECTION 8.4.3-EXCEPTIONS, BUT ARE DIGITALLY SUB-METERED PER REQUIREMENT OF SECTION 8.4.5.

COMMERCIAL TENANT SPACE: TENANTS WILL BE PROVIDED DIGITAL DIRECT METER FOR TOTAL ELECTRICAL CONSUMPTION. IT IS THE TENANT RESPONSIBILITY TO INSTALL DEVICES TO MONITOR EACH ENERGY END-USE SEPARATELY IF TENANT SPACE IS GREATER THAN 10,000 SF. INDIVIDUAL RETAIL SPACES ARE BELOW 10,000 SF, BUT MARKET LINE PLAZA AND OFFICE SPACES CAN BE GREATER. THE REQUIREMENT IS INCLUDED IN TENANT LEASE AGREEMENT.

8.4.3.2 RECORDING AND REPORTING  
THE ELECTRICAL ENERGY USAGE FOR ALL LOADS SPECIFIED IN SECTION 8.4.3.1 SHALL BE RECORDED A MINIMUM OF EVERY 15 MINUTES AND REPORTED AT LEAST HOURLY, DAILY, MONTHLY, AND ANNUALLY. THE DATA FOR EACH TENANT SPAE SHALL BE MADE AVAILABLE TO THAT TENANT. THE SYSTEM SHALL BE CAPABLE OF MAINTAINING ALL DATA COLLECTED FOR A MINIMUM OF 36 MONTHS.  
BASE BUILDING:  
[IN THIS PROJECT, ENERGY DATA ARE GATHERED BY METERING DEVICES, SENT TO BMS, AND RECORDED AND REPORTED IN THE DATABASE THAT IS INTEGRATED WITH BMS].  
RESIDENTIAL DWELLING UNITS: DWELLING UNITS ARE EXEMPT FROM SECTION 8.4.3.2, PER SECTION 8.4.3-EXCEPTIONS, BUT THEY ARE DIGITALLY SUB-METERED PER REQUIREMENT OF SECTION 8.4.5.  
COMMERCIAL TENANT SPACE: IT IS THE TENANT RESPONSIBILITY TO INSTALL DEVICES TO RECORD AND REPORT THE ENERGY END-USES MENTIONED IN SECTION 8.4.3.1, IF TENANT SPACE IS GREATER THAN 10,000 SF. THE REQUIREMENT IS INCLUDED IN TENANT LEASE AGREEMENT.

8.4.5 MEASUREMENT OF ELECTRICAL CONSUMPTION OF TENANT SPACES IN COVERED BUILDINGS  
COMMERCIAL TENANT SPACE: PROVIDE DIGITAL DIRECT METERS WITH SERVICE FROM MASTER METER FOR ALL COMMERCIAL TENANTS.  
RESIDENTIAL TENANT SPACE: PROVIDE DIGITAL SUB-METERS WITH SERVICE FROM MASTER METER FOR ALL RESIDENTIAL TENANTS.  
[MASTER METERS ARE LOCATED IN THE ELECTRIC ROOM IN THE CELLAR. RESIDENTIAL SUBMETERS ARE LOCATED THE ELECTRIC CLOSET ON EVERY THREE FLOORS].

10.4.3 ELEVATORS  
10.4.3.1 ELEVATOR LIGHTING: ELEVATOR CAB LIGHT FIXTURE IS SPECIFIED TO HAVE EFFICACY GREATER THAN 35 LM/W  
LIGHTING IN ELEVATOR CABS WILL COMPLY WITH 10.4.3.1 BY MAINTAINING 5 fc AT EFFICACY OF 35 lm/W  
10.4.3.2 ELEVATOR VENTILATION POWER LIMITATION: CAB VENTILATION FANS FOR ELEVATORS WITHOUT AIR CONDITIONG IS SPECIFIED TO NOT CONSUME OVER 0.33W/CFM AT MAXIMUM SPEED.  
THE NOMINAL HORSEPOWER OF THE DESIGNED CAB VENTILATION FAN IS [282] W, AND THE NOMINAL DESIGNED CFM IS [1800] CFM. VENTILATION FAN POWER = [0.157] W/CFM < 0.33W/CFM  
10.4.3.3 STANDY MODE: WHEN STOPPED AND UNOCCUPIED WITH DORRS CLOSED FOR OVER 15 MINUTES, CAB INTERIOR LIGHTING AND VENTILATION ARE SPECIFIED TO BE DE-ENERGIZED UNTIL REQUIRED FOR OPERATION.

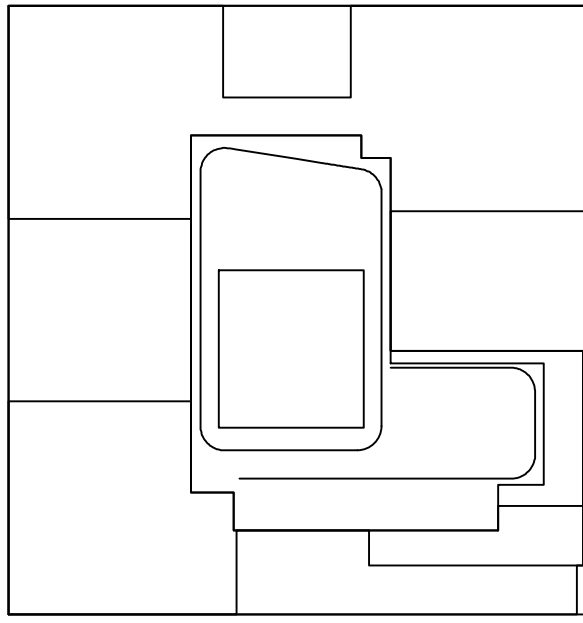
ASHRAE 90.1-1013 WITH 2016 NYC ENERGY CONSERVATION CODE AMENDMENTS NOTES:

STATEMENT OF COMPLIANCE:

TO THE BEST OF MY KNOWLEDGE, AND PERSONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2016 NEW YORK CITY ENERGY CONSERVATION CODE BY APPLICATION OF ASHRAE 90.1-2013 WITH 2016 NEW YORK CITY ENERGY CONSERVATION CODE AMENDMENTS.

MANDATORY PROVISIONS:

- PER SECTION 9.4.1.1, FOR EACH SPACE IN THE BUILDING, ALL OF THE LIGHTING CONTROL FUNCTIONS INDICATED IN TABLE 9.6.1, FOR THE APPROPRIATE SPACE TYPE IN COLUMN A, AND AS DESCRIBED IN SECTION 9.4.1.1, WILL BE IMPLEMENTED. FOR SPACE TYPES NOT LISTED, SELECT A REASONABLY TYPE. IF USING THE SPACE-BY-SPACE METHOD FOR LPD REQUIREMENTS, THE SPACE TYPE USED FOR DETERMINING CONTROL REQUIREMENTS WILL BE THE SAME SPACE TYPE USED TO DETERMINE THE LPD.
- PER SECTION 9.4.1.2, LIGHTING FOR PARKING GARAGES WILL COMPLY WITH THE FOLLOWING REQUIREMENTS:
  - PARKING GARAGE LIGHTING WILL HAVE AUTOMATIC LIGHTING SHUTOFF PER SECTION 9.4.1.1 (I)
  - LIGHTING POWER FOR EACH LUMINAIRE WILL BE AUTOMATICALLY REDUCED BY A MINIMUM OF 30% WHEN THERE IS NO ACTIVITY DETECTED WITHIN LIGHTING ZONE FOR 20 MINUTES, AND WHERE LIGHTING ZONES ARE NO LARGER THAN 3600 FT<sup>2</sup>  
EXCEPTION: DAYLIGHT TRANSITION ZONES AND RAMPS WITHOUT PARKING
- LIGHTING FOR COVERED VEHICLE ENTRANCES AND EXITS FROM BUILDINGS AND PARKING STRUCTURES WILL BE SEPARATELY CONTROLLED BY A DEVICE THAT AUTOMATICALLY REDUCES THE LIGHTING BY AT LEAST 50% FROM SUNSET TO SUNRISE
- THE POWER TO LUMINAIRES WITHIN 20 FT OF ANY PERIMETER WALL PERIMETER WALL STRUCTURE THAT HAS A NET OPENING TO WALL RATIO OF AT LEAST 40% AND NO EXTERIOR OBSTRUCTIONS WITHIN 20 FT, WILL BE AUTOMATICALLY REDUCED IN RESPONSE TO DAYLIGHT  
EXCEPTION: LIGHTING IN DAYLIGHT TRANSITIONS ZONES AND RAMPS WITHOUT PARKING
- PER SECTION 9.4.1.3,
  - LIGHTING LISTED IN SECTION 9.4.1.3 (I) WILL BE SEPARATELY CONTROLLED FROM THE GENERAL LIGHTING IN ALL SPACE.
  - GUESTROOMS
    - ALL LIGHTING AND ALL SWITCHED RECEPTACLES IN GUESTROOMS AND SUITES IN HOTELS, MOTELS, BOARDING HOUSES, OR SIMILAR BUILDINGS WILL BE AUTOMATICALLY CONTROLLED IN ACCORDANCE WITH SECTION 9.4.1.3 (2)
    - BATHROOMS WILL HAVE A SEPARATE CONTROL DEVICE INSTALLED TO AUTOMATICALLY TURN OFF THE BATHROOM LIGHTING WITHIN 30 MINUTES AFTER ALL OCCUPANTS HAVE LEFT THE BATHROOM.  
EXCEPTION: NIGHT LIGHTING OF UP TO 5W PER BATHROOM IS EXEMPT.
  - ALL SUPPLEMENTAL TASK LIGHTING, INCLUDING PERMANENTLY INSTALLED UNDERSHELF OR UNDERCABINET LIGHTING, WILL BE CONTROLLED IN ACCORDANCE WITH SECTION 9.4.1.3 (3).
  - PER SECTION 9.4.1.4, LIGHTING FOR EXTERIOR APPLICATIONS NOT EXEMPTED IN SECTION 9.1 WILL MEET THREE REQUIREMENTS IN SECTION 9.4.1.4.  
ALL TIME SWITCHES WILL BE CAPABLE OF RETAINING PROGRAMMING AND THE TIME SETTING DURING LOSS OF POWER FOR A PERIOD OF AT LEAST TEN HOURS.
- PER SECTION 9.4.2, THE TOTAL EXTERIOR LIGHTING POWER ALLOWANCE FOR ALL EXTERIOR BUILDING APPLICATIONS IS THE SUM OF THE BASE SITE ALLOWANCE PLUS THE INDIVIDUAL ALLOWANCES FOR AREAS THAT ARE DESIGNED TO BE ILLUMINATED AND ARE PERMITTED IN TABLE 9.4.2-2 FOR THE APPLICABLE LIGHTING ZONE. THE INSTALLED EXTERIOR LIGHTING POWER IDENTIFIED IN ACCORDANCE WITH SECTION 9.1.3 WILL NOT EXCEED THE EXTERIOR LIGHTING POWER ALLOWANCE DEVELOPED IN ACCORDANCE WITH THIS SECTION. TRADE-OFFS ARE ALLOWED ONLY AMONY EXTERIOR LIGHTING APPLICATIONS LISTED IN THE TABLE 9.4.2-2 "TRADABLE SURFACE" SECTION. THE LIGHTING ZONE FOR THE BUILDING EXTERIOR IS DETERMINED FROM TABLE 9.4.2-1 UNLESS OTHERWISE SPECIFIED BY THE LOCAL JURISDICTION.  
EXCEPTION IS LISTED IN SECTION 9.4.2.
- PER SECTION 9.4.3 (NYC), INTERNALLY ILLUMINATED EXIT SIGNS WILL NOT EXCEED 5W PER FACE.  
PER SECTION 9.4.4 (NYC), LIGHTING CONTROL DEVICES AND CONTROL SYSTEMS WILL BE TESTED TO ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED, AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTALLATION INSTRUCTION. WHEN OCCUPANT SENSORS, TIME SWITCHES, PROGRAMMABLE SCHEDULE CONTROLS, OR PHOTOSENSORS ARE INSTALLED, AT A MINIMUM, THE PROCEDURES DESCRIBED IN SECTION 9.4.4 WILL BE PERFORMED.  
THE INDIVIDUAL(S) RESPONSIBLE FOR THE FUNCTIONAL TESTING WILL NOT BE DIRECTLY INVOLVED IN EITHER THE DESIGN OR CONSTRUCTION OF THE PROJECT AND WILL PROVIDE DOCUMENTATION CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET OR EXCEED ALL DOCUMENTED PERFORMANCE CRITERIA.



KEY PLAN

NOTES:

NOT FOR CONSTRUCTION

2	10/02/2017 09/15/2017 08/02/2017 03/04/2017 01/27/2017 01/25/2017 11/17/2016 11/11/2016 10/12/2016 02/05/2016	ISSUED FOR DOB 90% CD SET 95% CD SET 95% CD SUBMITTAL SET SUPERSTRUCTURE SET ISSUED FOR DOB PACKAGE WORKING SET 100% CD FOUNDATION AND SET ISSUED FOR DOB DOB FILING SET
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Number:	Date:	Revision:
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Project:  
**City View Tower at Court Square**  
23-15 44th Drive  
Long Island City, NY 11101

Client:  
**Cityview Tower LLC**  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
(718) 321-8652

Architect:  
**HILL | WEST**  
ARCHITECTS  
11 BROADWAY  
17TH FLOOR  
NEW YORK, NY 10004  
T: 212.213.8607

Consultant:  
**DESIMONE CONSULTING ENGINEERS**  
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New York, NY, 10005  
(212) 532-2211  
**Cosentini Associates**  
Two Pennsylvania Plaza, 3rd FL,  
New York, NY, 10121  
(212) 615-3600  
**Whitehall**  
11 Broadway, 17th Floor  
New York, NY 10004  
(212) 908-4940

DOB STAMPS & SIGNATURES:

DWG TITLE:  
**ENERGY CODE COMPLIANCE SHEET - 3**

SEAL & SIGNATURE:	DATE: 09/15/2017
	PROJECT #: 156818
	SCALE: NONE
	<b>EN-003.00</b>
	DWG NO.

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ASHRAE 90.1 2013 AS MODIFIED BY 2016 NYCECC APPENDIX CA.

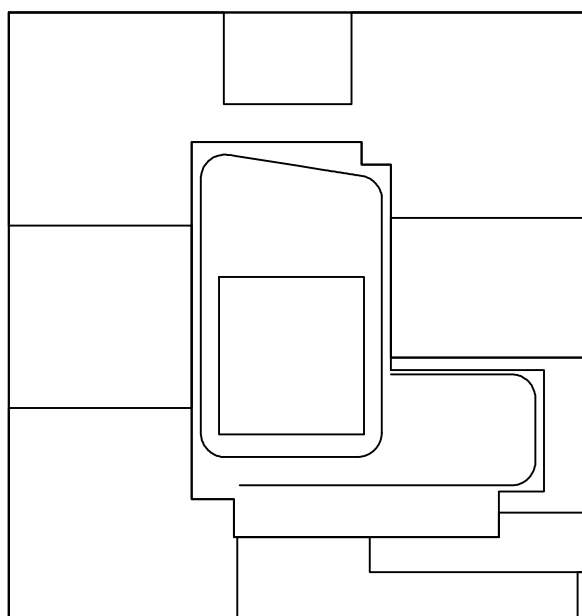
THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES\*

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

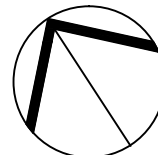








KEY PLAN



NOTES:

NOT FOR CONSTRUCTION

10/02/2017	ISSUED FOR DOB
08/15/2017	95% CD SET
06/02/2017	95% CD SET
03/24/2017	95% CD SUBMISSION SET
01/27/2017	SUBMITTAL SET
01/25/2017	ISSUED FOR DOB
11/17/2016	FACADE PRELIM SET
11/11/2016	100% SUBMITTAL SET
10/12/2016	ISSUED FOR DOB
02/02/2016	DOB FILING SET

Number: Date: Revision:

Project:

City View Tower at Court Square  
23-15 44th Drive  
Long Island City, NY 11101

Client:

Cityview Tower LLC  
112-15 NORTHERN BLVD, CF-2  
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(718) 321-8652

Architect:

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ARCHITECTS  
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Consultant:

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(212) 615-3600  
Whitehall  
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New York, NY 10004  
(212) 908-4940

DOB STAMPS & SIGNATURES:

DWG TITLE:

ENERGY CODE  
COMPLIANCE SHEET - 5

SEAL & SIGNATURE:



DATE: 08/15/2017

PROJECT #: 13018

SCALE: NONE

EN-005.00  
DWG NO.

Enter information for sections 1, 2 and 3 - incorporate in the drawing set.

Must be typewritten

Location Information			
Project Name	Street Name & Address	City	State
Project Name	Street Name & Address	City	State
Project Name	Street Name & Address	City	State

Applicant Information			
Applicant Name	First Name	Last Name	Address
Applicant Name	First Name	Last Name	Address
Applicant Name	First Name	Last Name	Address

Energy Modeling Information			
Modeling Software & Version	Modeling Software & Version	Modeling Software & Version	Modeling Software & Version
Modeling Software & Version	Modeling Software & Version	Modeling Software & Version	Modeling Software & Version
Modeling Software & Version	Modeling Software & Version	Modeling Software & Version	Modeling Software & Version

I, the undersigned, being a duly qualified professional engineer or architect, do hereby certify that the foregoing is a true and correct copy of the original as submitted to the Department of Buildings, City of New York, for filing and recording.

Signature of Professional Engineer or Architect  
DOUGLAS C. MASS  
Date  
10/04/2017

P.E. / R.A. Seal (apply seal, then sign and date over seal)

Energy Modeling Protocol (encl)

Section 11 ECR

Purchased Energy Rates			
Fuel	Utility Rate Provider/Rate Schedule (if a contract)	Annual Energy Total Charge (\$)	Proposed Energy Total Charge (\$)
Electric	ConEd - Elec	\$0.20	\$ 1,085,886.00
Gas	ConEd - Natural Gas	\$1.20	\$ 854,485.00
Steam			
Water			
TOTAL			

Performance Cost Index - Appendix C ONLY			
Building Performance Factor	Baseline Building	Proposed Building	
Baseline Registered Factor	0.00	0.00	
Baseline Unregistered Factor	0.00	0.00	
Baseline Unregistered Factor	0.00	0.00	
Baseline Unregistered Factor	0.00	0.00	

INSTRUCTIONS: If the modeling parameters call for averaging 4 rotations, enter the data into each of the white columns. If the modeling protocol does not require averaging the 4 rotations, enter the data into only the column labeled "0" (do not enter "0" into the columns labeled 90, 180, 270).

Baseline Model											
0				90				180			
Annual usage (kWh/kWh)				Annual usage (kWh/kWh)				Annual usage (kWh/kWh)			
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Annual usage (kWh/kWh)				Annual usage (kWh/kWh)				Annual usage (kWh/kWh)			
Annual usage (kWh/kWh)				Annual usage (kWh/kWh)				Annual usage (kWh/kWh)			
Annual usage (kWh/kWh)				Annual usage (kWh/kWh)				Annual usage (kWh/kWh)			
Annual											





6. Exterior Lighting Power					
	Baseline Design ( Watts)	Proposed Design ( Watts)	Supporting Data ( Watts)	Model Output ( Watts)	Notes
Tradeable Lighting Power	1746	2435	ENL2, ENL3, ENL8	RFPU	
Non-Tradeable Lighting Power	500	5346	ENL2, ENL3, ENL8	RFPU	
Base Site Allowance	1,900				
Total Lighting Power	9653	7384.5		RFPU	

\* Use the tab labeled "Ext. LPI Calculation" to automatically fill in the table above

8. Process/Warehouse Equipment						
Process Type (or Equipment Type)	Space Area (or Volume) (sq ft or cu ft)	Equipment Power Density (Watt/sq ft or Watt/cu ft)	Modeling Parameter's Schedule	Baseline Modeling (Watt/sq ft or Watt/cu ft)	Supporting Data Location	Model Output
Multifamily Dwelling Unit	659686	0.00	0.00	3556 Watts	NA	LV-B
Convenience all other	280231	0.20	0.20	8760 Watts	NA	LV-B
Laundry all other	66660	0.00	0.00	8760 Watts	NA	LV-B
Childcare all other	5173	0.50	0.50	8760 Watts	NA	LV-B
Office/Mechanical Support/Warehouse/Storage	619664	0.20	0.20	8680 Watts	NA	LV-B
Automotive Wash	12036	0.50	0.50	8760 Watts	NA	LV-B
Automotive Wash all other	33202	0.50	0.50	8760 Watts	NA	LV-B
Automotive Wash all other	4903	1.00	1.00	2080 Watts	NA	LV-B
Restaurant all other	2795	0.20	0.20	8760 Watts	NA	LV-B
Hotel all other	60256	0.50	0.50	8760 Watts	NA	LV-B
Hotel all other	86234	0.50	0.50	4535 Watts	NA	LV-B
Hotel all other	20256	0.50	0.50	4535 Watts	NA	LV-B
Parking Area, Interior	38278	0.00	0.00	0 Watts	NA	LV-B
Parking Area, Interior	38278	0.00	0.00	4535 Watts	NA	LV-B
Parking Area, Interior	42144	0.00	0.00	0 Watts	NA	LV-B
TOTAL	975,534	421				

[illegible]

Performance Analysis Summary						
Module Input Parameter	Baseline Design	CM1	Proposed Design	CM2	Supporting Data Location	Model Output Parameter
	MultiModality					
System Type & Fuel	Gas storage/Steam Reactor		Gas storage/Water Reactor		Fig. A-11	Fig. A
Input Rating (MW <sub>th</sub> )	12000	12000	12000	12000	Fig. A-12	Fig. A
Efficiency	83	77	76	71	Fig. A-13	Fig. A
Storage Volume	2450	2450	2450	2450	Fig. A-14	Fig. A
Cost	200	200	150	140	Fig. A-15	Fig. A
Peak Load Demand	32	30MF	30	30MF	Fig. A-16	Fig. A
Number of Years of Decay	NA	4	NA	4	NA	Fig. A
Primary DTR Pump/Reactor	NA	NA	NA	NA	NA	Fig. A
Primary DTR Pump/Control	NA	NA	NA	NA	NA	Fig. A

[illegible]

10/06/2017	ISSUED FOR DOB
09/15/2017	90% CD SET
06/02/2017	85% CD SET
03/24/2017	50% CD SUBMISSION SET
01/27/2017	SUPERSTRUCTURE SET
01/25/2017	ISSUED FOR DOB
11/17/2016	FACADE FRAMING SET
11/11/2016	100% BID FOUNDATION BID SET
10/12/2016	ISSUED FOR DOB
02/05/2016	DOB FILING SET

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DOB STAMPS & SIGNATURES:

DWG TITLE: ENERGY CODE  
COMPLIANCE SHEET - 6

SEAL & SIGNATURE:	DATE: 09/15/2017
-------------------	------------------



PROJECT #:	150318
SCALE:	NONE
<b>EN-006.00</b>	
DWG NO.	

<p>TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS COMPLY WITH ALL CITY, STATE AND FEDERAL REQUIREMENTS AND CONFORM TO THE ENERGY CONSERVATION CODE OF NEW YORK CITY 2016</p>	<p>THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATERIALS SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES*</p>	<div style="text-align: right;">                Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209-2 of the New York State Education Law.               DWG NO. _____              6 OF 27           </div>
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Model Input Parameter	Offshore System / Group Baseline DESIGN			Onshore System / Group PROPOSED DESIGN			Supporting Off-Site System	Model Output Parameter
	Description	Units	Value	Description	Units	Value		
4 and 5 tons of CO2 and capacity of all CO2 storage tanks (1 year + 1 year)	N/A			N/A			N/A	N/A
Total Offshore Capacity	N/A			N/A			MM3	N/A
Offshore Efficiency - Full Load	N/A			N/A			60/70%	N/A
Offshore Efficiency - Part Load	N/A			N/A			N/A	N/A
Offshore System CO2H2 Split Ratio	N/A	%	75	N/A	%	75	N/A	N/A
CO2 Split	N/A	%	75	N/A	%	75	N/A	N/A
CO2H2 Supply Time Burst	N/A			N/A			N/A	N/A
CO2H2 Line Configuration	N/A			N/A			N/A	N/A
Number of Primary CO2 Flows	N/A	#	1	N/A	#	1	N/A	N/A
Primary CO2 Flow Power	N/A			N/A			MM	N/A
Primary CO2 Pump Flow	N/A	gpm	1000	N/A	gpm	1000	N/A	N/A
Primary CO2 Pump Control	N/A			N/A			N/A	N/A
Number of Secondary CO2 Flows	N/A	#	1	N/A	#	1	N/A	N/A
Secondary CO2 Flow Power	N/A			N/A			MM	N/A
Secondary CO2 Pump Flow	N/A	gpm	1000	N/A	gpm	1000	N/A	N/A
Secondary CO2 Pump Control	N/A			N/A			N/A	N/A
Water Side Interconnection	N/A			N/A			N/A	N/A
Water Side Energy Recovery	N/A			N/A			N/A	N/A
Offshore Separator								
Offshore Separator								
Offshore Separator								

[illegible]

Combined Heat & Power Systems						
Model Input Parameter	HVAC System / Group (BASELINE DESIGN)			HVAC System / Group (PROPOSED DESIGN)		
	Description	Units		Description	Units	Supporting Input Location
Model Output Report						
CHP "Type of generator"	NA			NA	NA	NA
Quantity of CHP generators	NA			NA	NA	NA
Total capacity of CHP generators (kW at design conditions)	NA			kW	NA	NA
CHP Thermal efficiency (%) at design conditions	NA			NA	%	NA
CHP Thermal efficiency (%) at design conditions	NA			NA	%	NA
CHP capacity / loadable	NA			NA	NA	NA
CHP fuel/energy	NA			NA	NA	NA
CHP efficiency is the measured heat and (p.g. gas) energy divided by the heat and (p.g. gas) energy input. When no source is specified, the efficiency is assumed to be 1.0. The efficiency from CHP is unvariable (p.g. fossil fuel efficiency is variable).	NA			NA	NA	NA
CHP Thermal efficiency is the measured heat and (p.g. gas) energy divided by the heat and (p.g. gas) energy input. When no source is specified, the efficiency is assumed to be 1.0. The efficiency from CHP is unvariable (p.g. fossil fuel efficiency is variable).	NA			NA	NA	NA
CHP capacity is the maximum heat and (p.g. gas) energy that can be produced by the CHP unit.	NA			NA	NA	NA
CHP loadable is the maximum heat and (p.g. gas) energy that can be produced by the CHP unit.	NA			NA	NA	NA
Other (describe)	NA			NA	NA	NA
Other (describe)	NA			NA	NA	NA
Other (describe)	NA			NA	NA	NA

10/06/2017	ISSUED FOR DOB
09/15/2017	90% CO SET
06/02/2017	85% CO SET
03/24/2017	50% CO SUBMISSION SET
01/27/2017	SUPERSTRUCTURE SET
01/25/2017	ISSUED FOR DOB
11/17/2016	FACADE PRICING SET
11/11/2016	100% DECONTAMINATION BID SET
10/12/2016	ISSUED FOR DOB
02/05/2016	DOB FILING SET

Number:	Date:	Revision:
---------	-------	-----------

Client: Cityview Tower LLC  
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DOB STAMPS &amp; SIGNATURES:

SEAL & SIGNATURE: \_\_\_\_\_ DATE: 09/15/2017



SCALE: NONE  
 EN-007.00  
 DWG NO.

7 OF 27

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ASHRAE 90.1 2013 AS MODIFIED BY 2016 NYCEEC APPENDIX CA.	THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES*	Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16 Title VIII, Article 145 § 7209.2 of the New York State Education Law.
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DATE	FOR	CONSTRUCTION
10/06/2017	ISSUE FOR IDB	
09/13/2017	20% CD SET #002 # 3	
06/23/2017	ISSUE FOR IDB	
06/07/2017	20% CD SET	
03/24/2017	20% CD SET	
03/16/2017	ISSUE FOR IDB	
02/07/2017	ISSUE FOR IDB	
02/14/2017	ISSUE FOR IDB	
01/07/2017	SUPPLEMENTARY SET	
01/05/2017	ISSUE FOR IDB	
11/17/2016	FINAL PRICING SET	
11/11/2016	100% CD FOR MECHANICAL BID SET	
10/12/2016	ISSUES FOR IDB	
02/05/2016	ORDER PLACING SET	

Project:	Date:	Revision:
----------	-------	-----------

**Court Square**  
23-15 44th Drive  
Long Island City, NY 11101

Cityview Tower LLC  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
(718) 321-8652

architect:

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New York, NY 10004  
(2) 908-4940


STAMPS &amp; SIGNATURES:

ENERGY CODE

ENERGY CODE  
ELEVATIONS

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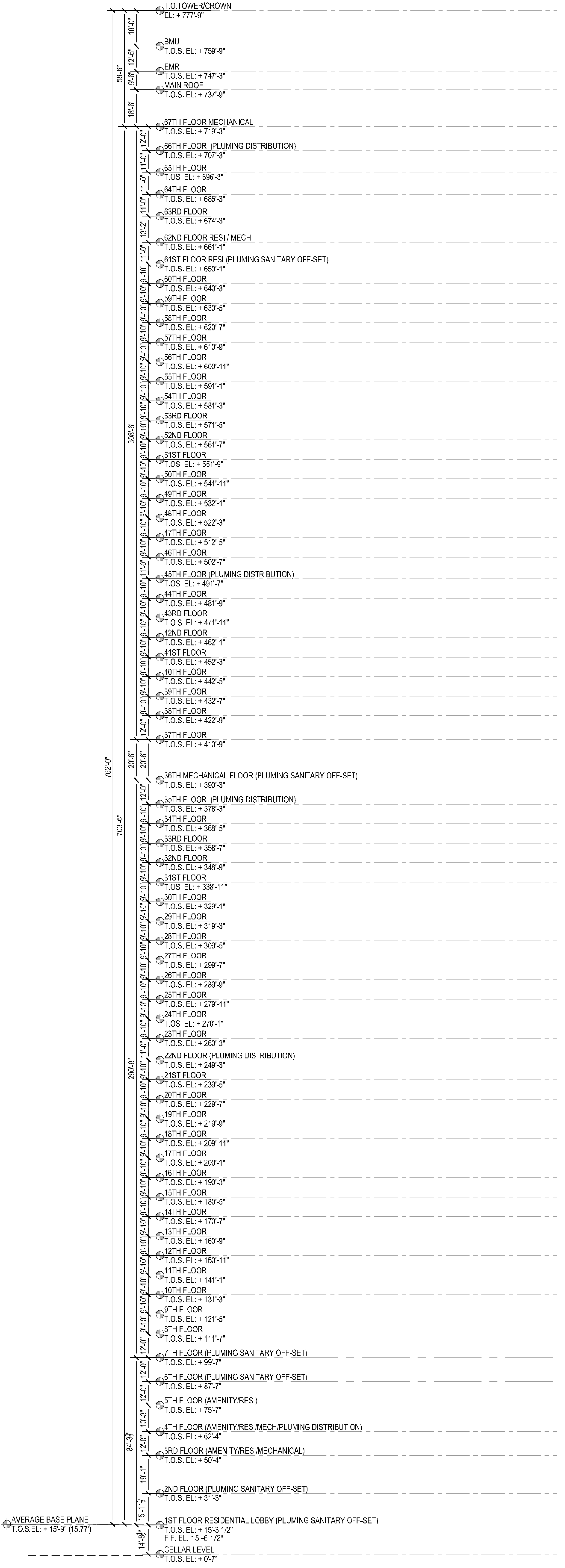
DATE: 10/06/2017

	PROJECT #:	15A12
	SCALE:	AS NOTED



NY-009 00

LN 000.00  
DWG NO.

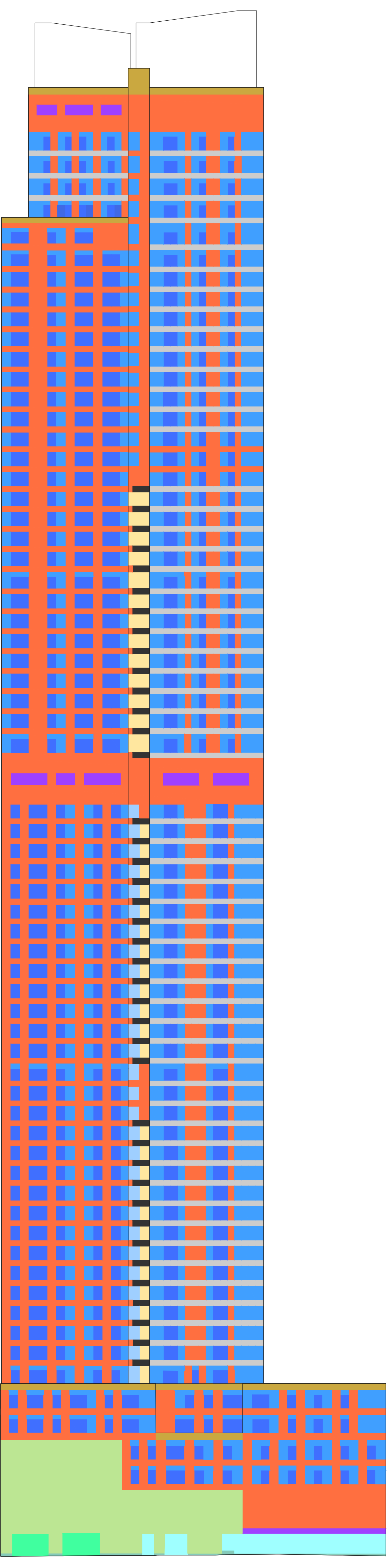


LEGEND			LAST ELEVATION		
	WALL TYPE	AREA (SQ.FT.)		WALL TYPE	AREA (SQ.FT.)
	TYPE 1-GLASS SPANDREL @ CURTAIN WALL	43,425.56(27)		TYPE 8-GLASS SPANDREL, PROPERTY @ TERRACE	2,381.56(27)
	TYPE 2-GLASS SPANDREL @ WINDOW WALL			TYPE 10-EXTERIOR DOOR	2,073.56(27)
	TYPE 3-ALUM. SPANDREL @ CURTAIN WALL	505.56(27)		TYPE 11-MECHANICAL DOORS	1,035.56(27)
	TYPE 4-GLASS SPANDREL @ CURTAIN WALL	15,629.56(27)		TYPE 12-EXTERIOR ALUM. FIN. ENTRY	2,073.56(27)
	TYPE 5-GLASS SPANDREL @ CURTAIN WALL	15,629.56(27)		TYPE 13-SOLID ALUM. GLASS DOORFRAME	
	TYPE 6-GLASS SPANDREL @ WINDOW WALL	2,617.56(27)		TYPE 14-ALUM. ALUM. 601 LVL	26,771.56(27)
	TYPE 7-GLASS SPANDREL @ CURTAIN WALL			TYPE 15-LOADING DOCKS	
	TYPE 9-ALUM. FINISH @ EXTERIOR	1,628.56(27)		TYPE 16-BASE CORNER	3.56(27)
TOTAL AREA @ BASE ELEVATION					101,187.56(27)

2 East Elevation  
Scale: 1/32"=1'-0"

[illegible]

1 North Elevation  
Scale: 1/32"=1'-0"



NORTH ELEVATION					
LESION	MILL TYPE	AREA SQ.FT.	LESION	MILL TYPE	AREA SQ.FT.
TYPE 1-GLASS SURFACE	CLUSTEN MILL	28.72 SQ.FT.	TYPE 6-BLACK SURFACE, INDOOR	TERACE	124.02 SQ.FT.
TYPE 2-GLASS SURFACE	WINDROW MILL	15.77 SQ.FT.	TYPE 10-EXTERIOR CORNER		85.57 SQ.FT.
TYPE 3-ACETATE, PAPER OR CLUSTEN MILL		1.88 SQ.FT.	TYPE 11-MICROFILM, CLUSTEN		80.57 SQ.FT.
TYPE 4-GLASS PAGES OR CLUSTEN MILL		1.88 SQ.FT.	TYPE 12-EXTERIOR CORNER, IN PAPER		62.50 SQ.FT.
TYPE 5-GLASS SURFACE	CLUSTEN MILL	15.87 SQ.FT.	TYPE 13-1/4" SQUARE, QUARTZ STREPTHER		98.57 SQ.FT.
TYPE 6-GLASS SURFACE	WINDROW MILL	15.87 SQ.FT.	TYPE 14-1/4" RING, IN GUS. LINE		124.02 SQ.FT.
TYPE 7-GLASS, DESKTOP, OR WINDROW MILL		15.87 SQ.FT.	TYPE 15-1/4" RING, INDOOR		80.57 SQ.FT.
TYPE 8-ACETATE, PAPER OR BLOCYNT		88.57 SQ.FT.	TYPE 16-BASE, GRANITE		124.02 SQ.FT.
TOTAL AREA OF NORTH ELEVATION					97.21 SQ.FT.

1 North Elevation  
Scale: 1/32"=1'-0"





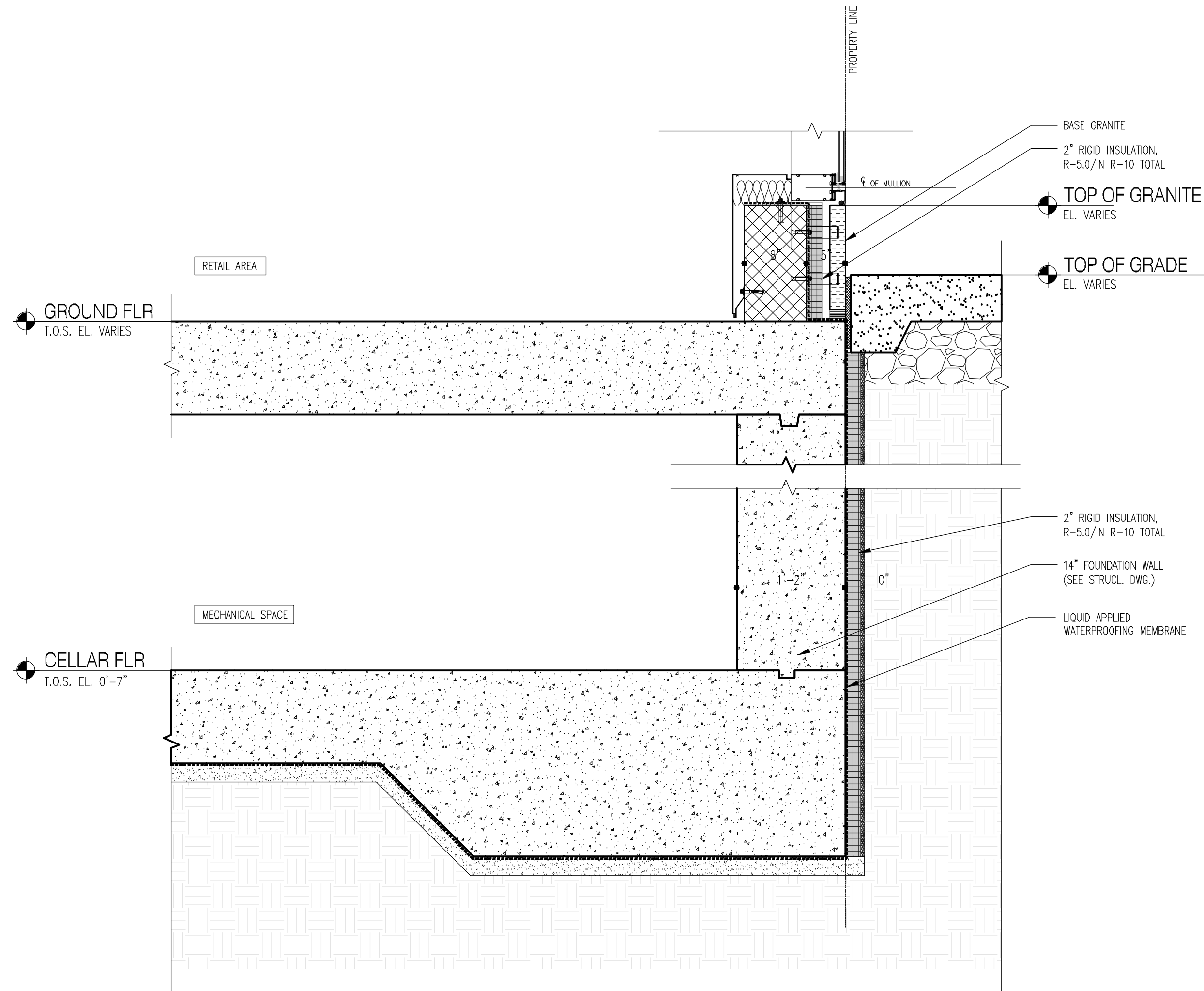






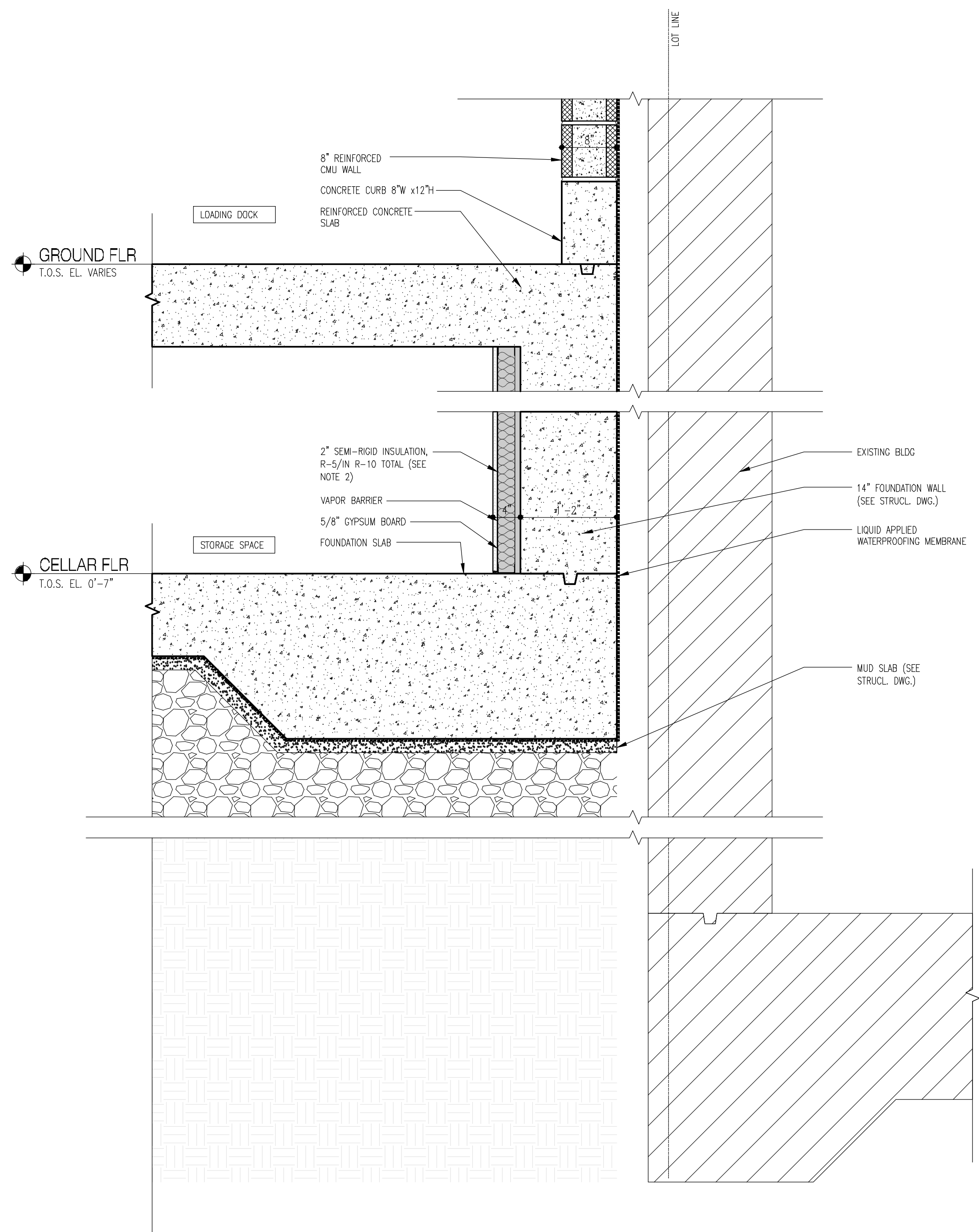






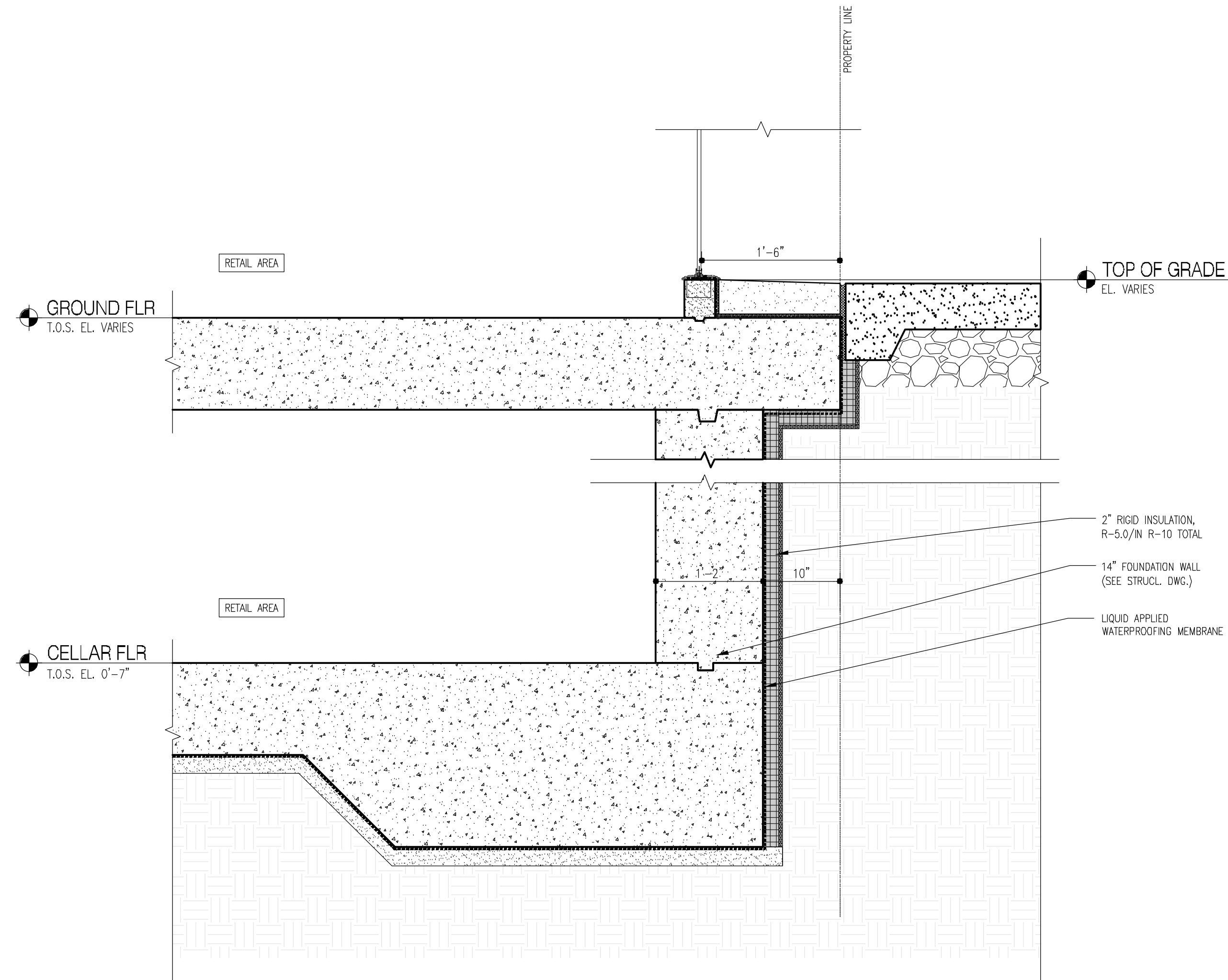
WALL TYPE 17  
SOUTH FOUNDATION WALL  
C-FACTOR 0.087  
NOTE: SEE NOTE 1

1 WALL TYPE 17 -SOUTH FOUNDATION WALL  
Scale: 1"=1'-0"



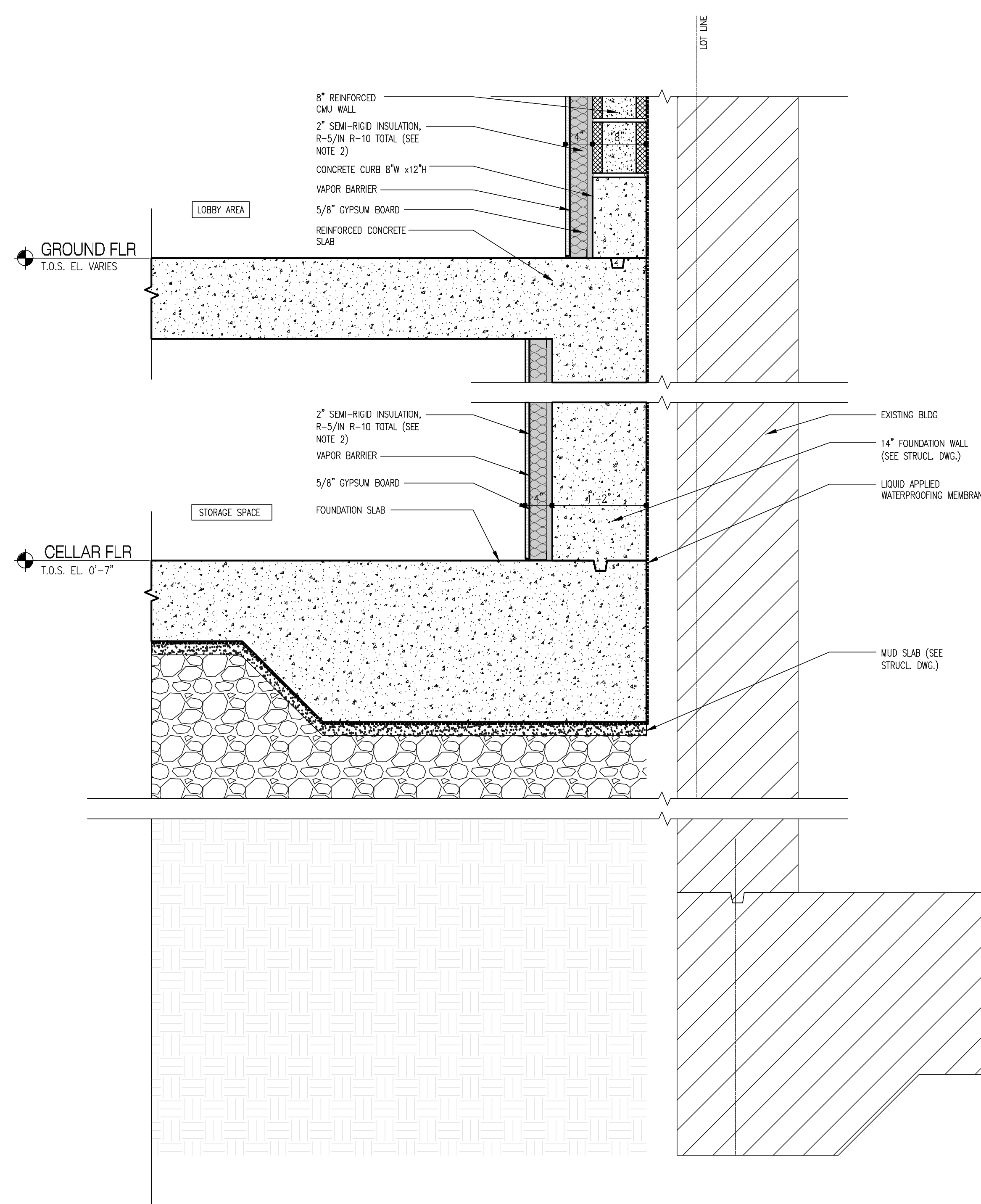
WALL TYPE 20  
FOUNDATION WALL AT LOT LINE  
C-FACTOR 0.087  
NOTE: SEE NOTE 1

4 WALL TYPE 20 -FOUNDATION WALL AT LOT LINE  
Scale: 1"=1'-0"



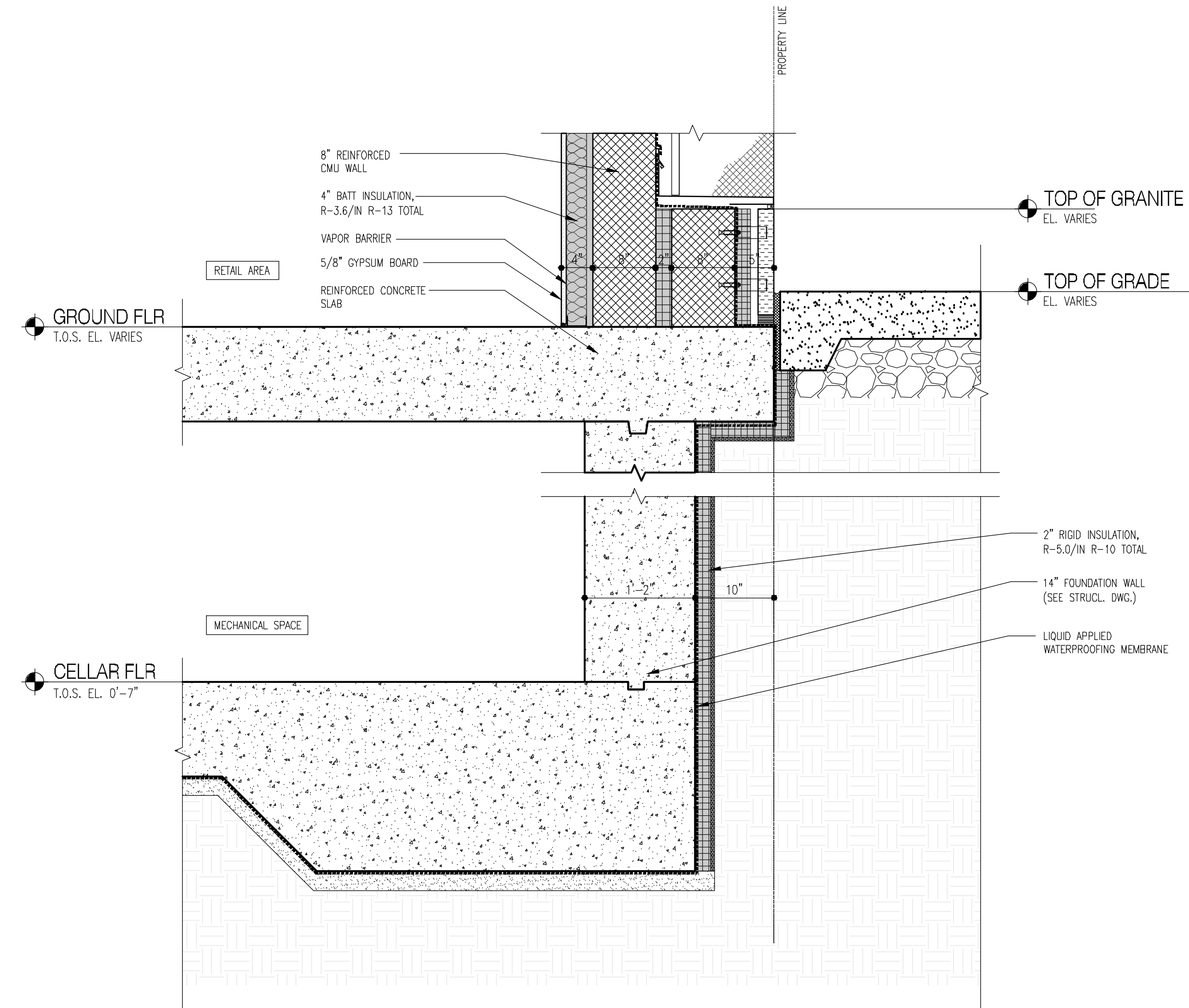
WALL TYPE 18  
NORTH FOUNDATION WALL  
C-FACTOR 0.087  
NOTE: SEE NOTE 1

2 WALL TYPE 18 -NORTH FOUNDATION WALL  
Scale: 1"=1'-0"



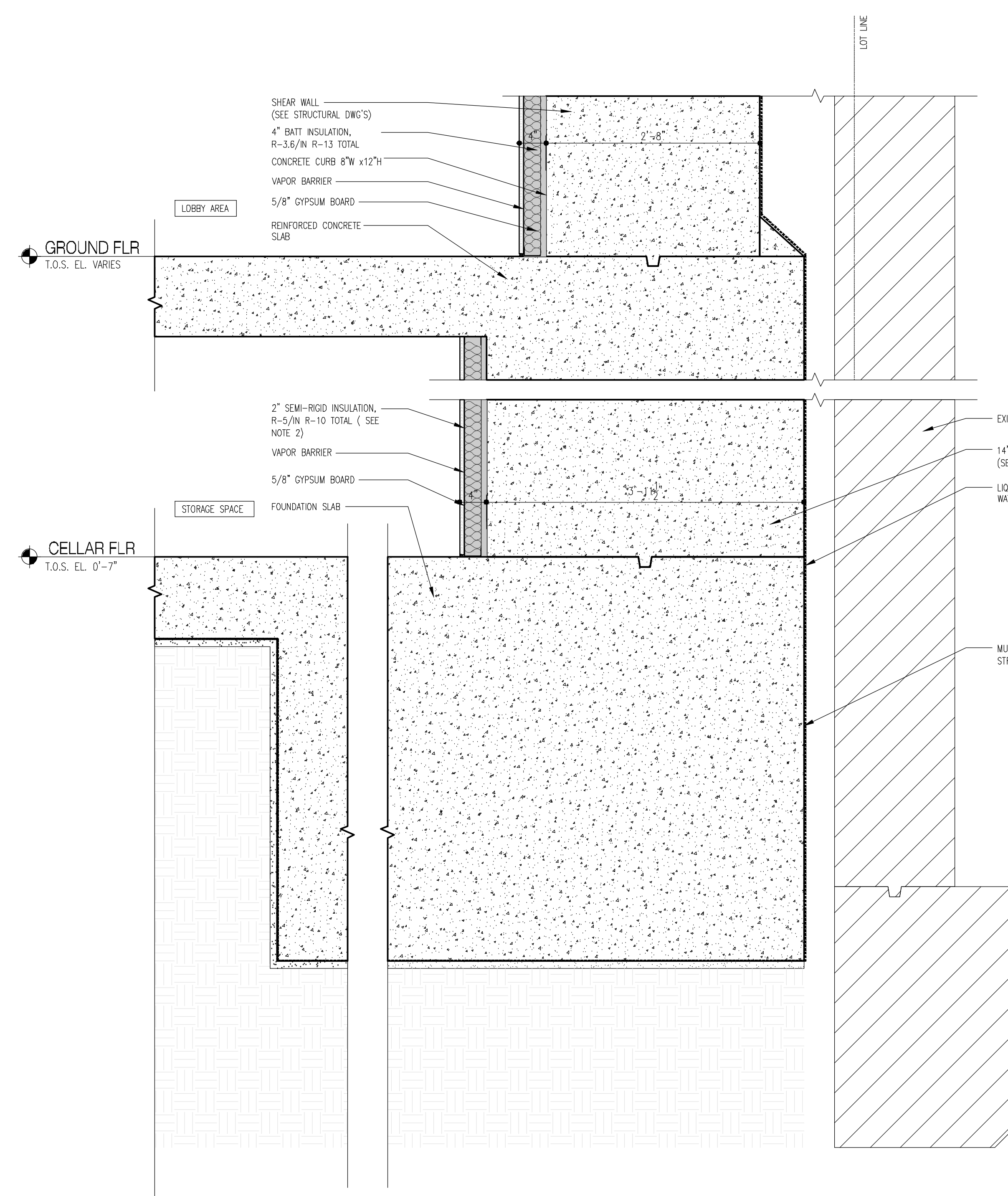
WALL TYPE 21  
FOUNDATION WALL AT LOT LINE  
C-FACTOR 0.087  
NOTE: SEE NOTE 1

5 WALL TYPE 21 -FOUNDATION WALL AT LOT LINE  
Scale: 1"=1'-0"



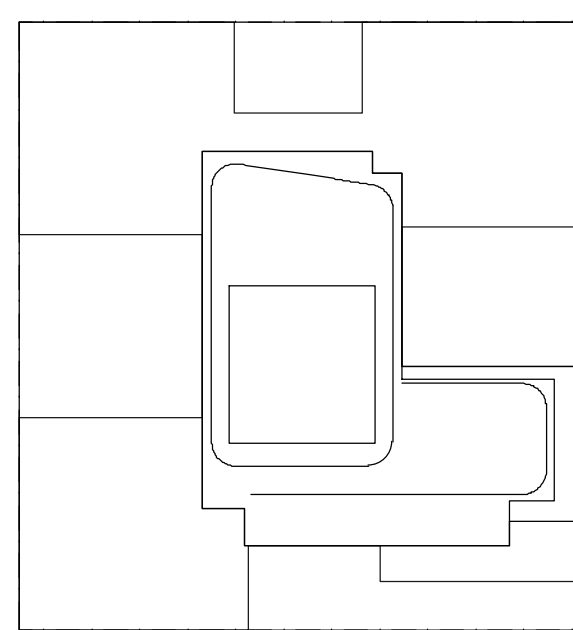
WALL TYPE 19  
FOUNDATION WALL AT LOT LINE  
C-FACTOR 0.087  
NOTE: SEE NOTE 1

3 WALL TYPE 19 -NORTH FOUNDATION WALL  
Scale: 1"=1'-0"



WALL TYPE 22  
FOUNDATION WALL AT LOT LINE  
C-FACTOR 0.087  
NOTE: SEE NOTE 1

6 WALL TYPE 22 -FOUNDATION WALL AT LOT LINE  
Scale: 1"=1'-0"



KEY PLAN

NOTES:

1. R-VALUE OF 14" FOUNDATION WALL WITH INSULATION REFERS TO ASHRAE 90.1-2013 APPENDIX A TABLE A9.4.3-1 CONCRETE AT R=0.0625/IN.  
R-VALUE OF 5/8" GYPSUM BOARD REFER TO ASHRAE 90.1-2013 APPENDIX A TABLE A9.4.3-1 5/8" GYPSUM BOARD AT R=0.56.  
C-FACTOR=1/(14"R-0.0625+R-0.56+R-10)= C-0.087
2. U-FACTOR REFERS TO ASHRAE-90.1.2013 APPENDIX A TABLE A3.1-1. CONTINUOUS METAL FRAMING AT 24 IN. ON CENTER HORIZONTALLY AND 2.5 IN. IN DEPTH WITH R-VALUE OF 10

NOT FOR CONSTRUCTION

10/08/2017	ISSUE FOR DOB
08/10/2017	ISSUE FOR DOB # 5
08/25/2017	ISSUE FOR DOB
08/25/2017	ISSUE FOR DOB
02/02/2017	ISSUE FOR DOB
03/02/2017	ISSUE FOR DOB
02/14/2017	ISSUED FOR DOB
01/07/2017	SUPPLEMENTAL SET
03/01/2017	ISSUED FOR DOB
02/14/2017	ISSUED FOR DOB
01/07/2017	ISSUED FOR DOB
11/07/2016	FACE PLUMB SET
11/01/2016	100% EDITIONARY DOB SET
10/12/2016	ISSUED FOR DOB

Number: Date: Revision:

Project:  
**City View Tower at Court Square**  
23-15 44th Drive  
Long Island City, NY 11101

Client:  
**Cityview Tower LLC**  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
(718) 321-8652

Architect:  
**HILL | WEST**  
ARCHITECTS  
11 BROADWAY  
17TH FLOOR  
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T. 212 213 8007

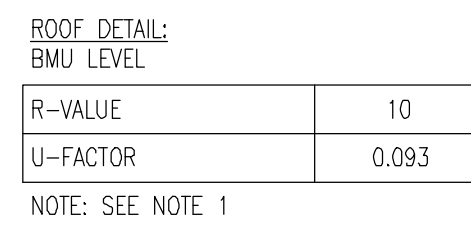
Consultant:  
**DESIMONE CONSULTING ENGINEERS**  
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(212) 532-2211  
**Cosentini Associates**  
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**Whitehall**  
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New York, NY 10004  
(212) 908-4940

DOB STAMPS & SIGNATURES:

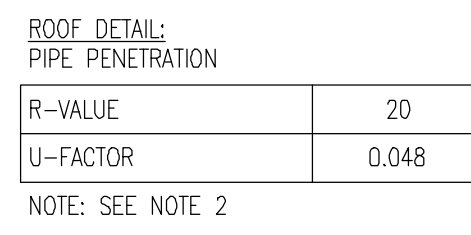
DWG TITLE:  
**ENERGY CODE  
FOUNDATION WALL DETAILS**

SEAL & SIGNATURE: PROJECT # 15412  
DATE: 10/08/2017  
SCALE: AS NOTED  
EN-013.00  
DWG NO.

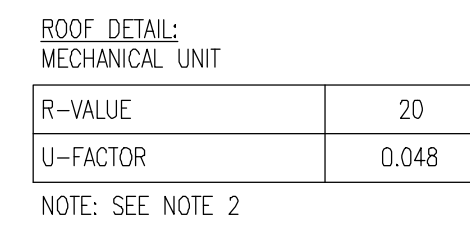




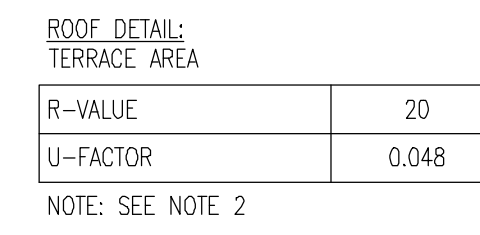
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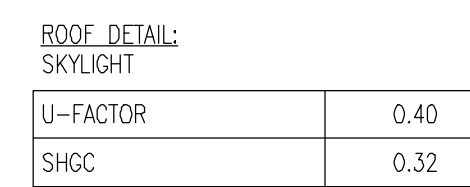
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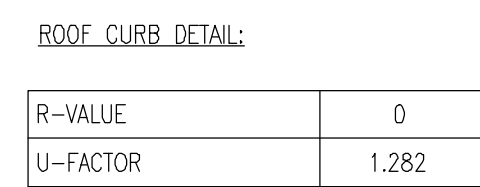
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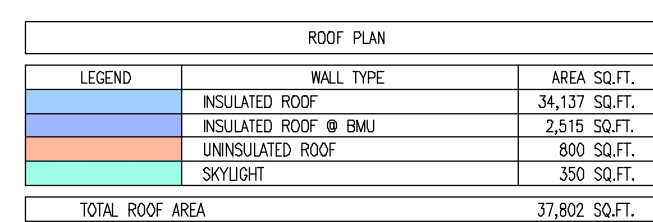
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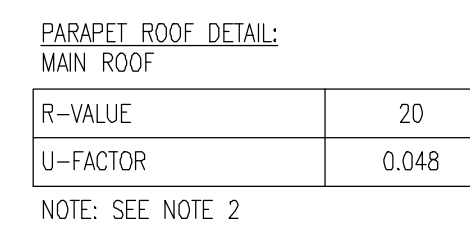
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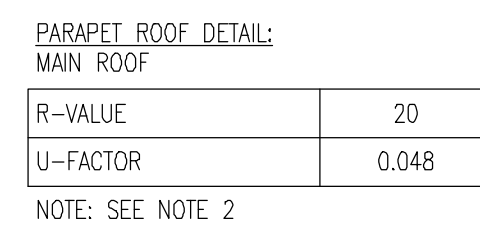
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Scale: 1/16"=1'-0"



Scale: 1"=1'-0"



Scale: 1"=1'-0"



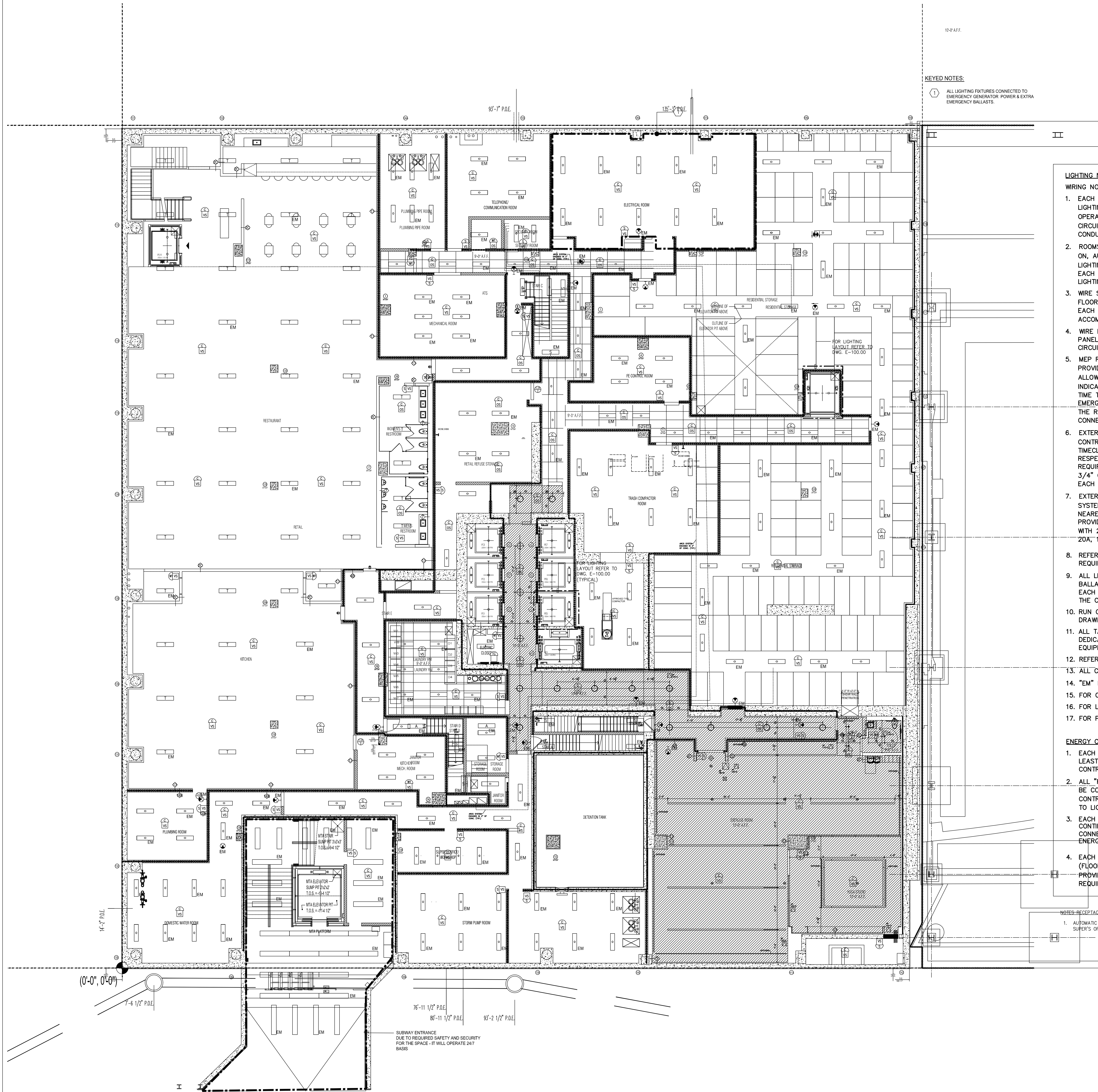
1.U-FACTOR REFERS TO ASHRAE 90.1-2013  
APPENDIX A TABLE A2.2.3

2.WORST CASE R-20 IS USED IN ORDER TO BE  
CONSERVATIVE. U-FACTOR REFERS TO ASHRAE  
90.1-2013 APPENDIX A TABLE A2.2.3

10/06/2017	ISSUE FOR DOB
08/15/2017	90% CB SET #DO #3
04/25/2017	ISSUE FOR DOB
06/02/2017	60% DO SET
03/04/2017	50% CB SET
03/30/2017	ISSUED FOR DOB
03/01/2017	ISSUED FOR DOB
02/04/2017	ISSUED FOR DOB
01/15/2017	SUPERSTYLUS SET
01/25/2017	ISSUED FOR DOB
11/17/2016	FACIAL PRIMO SET
11/11/2016	100% EDUICATION BID SET
10/12/2016	ISSUED FOR DOB

Project: \_\_\_\_\_





KEYED NOTES:

1. ALL LIGHTING FIXTURES CONNECTED TO EMERGENCY GENERATOR POWER & EXTRA EMERGENCY BALLASTS.

LIGHTING NOTES:

WIRING NOTES:

1. EACH STAIR: CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL POWER LIGHTING PANEL BOARD. PROVIDE EMERGENCY BALLAST AND BATTERY PACK (ABLE TO OPERATE AT FULL LOAD FOR MIN. OF 90 MINUTES) AS REQUIRED BY THE CODE. CIRCUIT SEPARATELY EACH STAIRS WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB.
2. ROOMS WITH STAND ALONE OCCUPANCY SENSORS SHALL OPERATE AS A "MANUAL - ON, AUTO - OFF" SYSTEM. CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL LIGHTING PANEL. WIRE WITH 2#12 AWG, & 1#12G CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM OF 1200W FOR FLUORESCENT LIGHTING FIXTURES OR 600W FOR LED TYPE LIGHTING FIXTURES.
3. WIRE SWITCHABLE LIGHTING FIXTURES TO ELECTRICAL LIGHTING PANELS SERVING THE FLOOR WITH 2#12 AWG & 1#12G CU WIRES IN 3/4" CONDUIT PER CIRCUIT. CONNECT EACH CIRCUIT TO 20A, 1P CIRCUIT BREAKER. QUANTITIES OF CIRCUITS SHALL ACCOMMODATE RESPECTIVE LOADS (AS MENTIONED IN POINT 2).
4. WIRE EXIT SIGNS TO ONE UNSWITCHABLE CIRCUIT ORIGINATING AT ELECTRICAL LIGHTING PANEL SERVING THE FLOOR WITH 2#12 AWG & 1#12G, CU IN 3/4" CONDUIT. CONNECT CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 15 EXIST SIGNS TO EACH CIRCUIT.
5. MEP ROOMS - IF NOT INDICATED ON DRAWINGS PROVIDE LOCAL MANUAL SWITCHES. PROVIDE A MINIMUM OF (1) ONE NORMAL SWITCH FOR EVERY 500 SQUARE FEET TO ALLOW OCCUPANTS FOR MANUAL ON/OFF OPERATION. IF VACANCY SWITCHES ARE INDICATED ON THE DRAWINGS - (MANUAL ON/ AUTO OFF) SET THE "AUTO OFF" MODE TIME TO THE MAXIMUM CODE ALLOWED SET UP. WIRE ALL LIGHTS TO NEAREST 120V EMERGENCY LIGHTING PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE ROOM. WIRE WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 1200W TO EACH CIRCUIT.
6. EXTERIOR/ FACADE MOUNTED NORMAL ARCHITECTURAL ACCENT LIGHTING FIXTURES- CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.
7. EXTERIOR/ FACADE MOUNTED ILLUMINATED SIGNS - CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH 2#10 AWG & 1#10G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.
8. REFER TO LIGHTING SCHEDULE AND SPECIFICATIONS FOR CATALOG NUMBER, FINISHED REQUIRED, VOLTAGE, LOADS, WIRE AND OTHER CONTROL REQUIREMENTS.
9. ALL LIGHTING FIXTURES WITH SUBSCRIPT "EM" SHALL BE PROVIDED WITH EMERGENCY BALLAST AND BATTERY PACK. PROVIDE BATTERY PACKS TO SUPPORT OPERATION OF EACH LIGHTING FIXTURE FOR MINIMUM OF 90 MINUTES AT FULL LOAD, AS REQUIRED BY THE CODE.
10. RUN GROUND WIRE WITH EACH LIGHTING CIRCUIT WHETHER IT IS INDICATED ON THE DRAWING OR NOT.
11. ALL TASK LIGHTS AND UNDER CABINET LIGHTING FIXTURES SHALL BE PROVIDED WITH DEDICATED LOCAL SWITCH. FURNISH DEDICATED SWITCHES FOR ALL FIXTURES NOT EQUIPPED WITH FACTORY INSTALLED MANUAL CONTROL DEVICE.
12. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS.
13. ALL "CORRIDOR LIGHTING SHALL BE CONTROLLED BY OCCUPANCY SENSOR.
14. "EM" INDICATES LIGHTING FIXTURES ON EMERGENCY POWER.
15. FOR CORRIDOR AND EXIT SIGNS CIRCUITING SEE DRAWINGS E-305 THRU E-307.
16. FOR LIGHTING FIXTURE SCHEDULES SEE DRAWING-404.
17. FOR PANEL LOCATIONS SEE POWER DRAWINGS.

ENERGY CODE NOTES:

1. EACH AREA ENCLOSED BY WALLS OR FLOOR TO CEILING PARTITIONS SHALL HAVE AT LEAST ONE MANUAL CONTROL FOR THE LIGHTING SERVING THAT AREA. THE REQUIRED CONTROLS SHALL BE LOCATED WITHIN THE AREA SERVED BY THE CONTROLS.
2. ALL "FRONT OF THE HOUSE AREAS" INCLUDING RECEPTION AND CORRIDOR AREAS WILL BE CONTINUOUSLY LIT DURING IMAGING FACILITY WORKING HOURS AND SHALL BE TIMER CONTROLLED. CONTRACTOR TO CIRCUIT ALL LIGHTING ZONES (DIMMED AND SWITCHED) TO LIGHTING CONTROL PANEL WITH 2#12 AWG & 1#12G, CU IN 3/4" CONDUIT.
3. EACH AREA ENCLOSED BY WALLS OR PARTITIONS AND NOT DESIGNATED AS CONTINUOUS OPERATION SHALL HAVE MANUAL CONTROLS ALLOWING REDUCTION OF THE CONNECTED LIGHTING LOADS BY 50 PERCENT (DUAL SWITCHING), AS REQUIRED BY NYC ENERGY CONSERVATION CODE.
4. EACH OFFICE AND BACK OF THE HOUSE AREA ENCLOSED BY WALLS OR FULL HEIGHT (FLOOR TO CEILING) PARTITIONS IN ADDITION TO MANUAL CONTROLS SHALL BE PROVIDED WITH VACANCY SENSORS OPERATING ON MANUAL ON/ AUTO OF BASIS, AS REQUIRED BY THE NYC ENERGY CONSERVATION CODE.

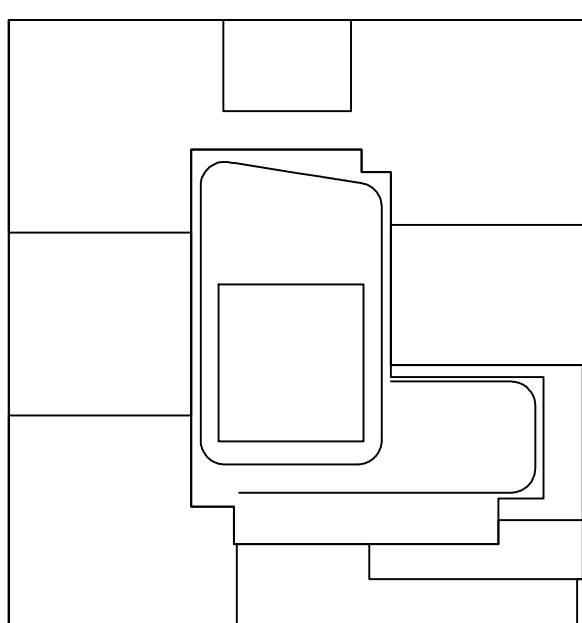
NOTES-RECEPTACLES:

1. AUTOMATIC RECEPTACLE CONTROLS WILL BE PROVIDED ON 50% OF RECEPTACLES IN ALL OFFICES SUCH AS SUPER'S OFFICE AN ON INDIVIDUAL WORKSTATIONS IN THIS ROOM.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ASHRAE 90.1 2013 AS MODIFIED BY 2016 NYECC APPENDIX CA.

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KEY PLAN

NOTES:

NOT FOR CONSTRUCTION

10/02/2017	653.63 FOR DOB
08/02/2017	95% CB SET
06/02/2017	95% CB SET
03/24/2017	95% CB SUBMISSION SET
01/02/2017	SUPERSTRUCTURE SET
01/25/2017	653.63 FOR DOB
11/17/2016	FACADE PRKNG SET
11/11/2016	95% DOB SUBMISSION SET
10/12/2016	653.63 FOR DOB
03/02/2016	DOB PRNG SET

Number: Date: Revision:

Project:

City View Tower at  
Court Square  
23-15 44th Drive  
Long Island City, NY 11101

Client:

Cityview Tower LLC  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
(718) 321-8652

Architect:

**HILL | WEST**  
ARCHITECTS  
11 BROADWAY  
17TH FLOOR  
NEW YORK, NY 10004  
T. 212 213 8007

Consultant:

DESIMONE  
CONSULTING ENGINEERS  
140 Broadway 25th Floor  
New York, NY, 10005  
(212) 532-2211

Cosentini Associates  
Two Pennsylvania Plaza, 3rd FL,  
New York, NY 10121  
(212) 615-3600

Whitehall  
11 Broadway, 17th Floor  
New York, NY 10004  
(212) 908-4940

DOB STAMPS & SIGNATURES:

DWG TITLE:

LIGHTING  
CELLAR LIGHTING PLAN

SEAL & SIGNATURE:



DATE: 08/15/2017

PROJECT #:

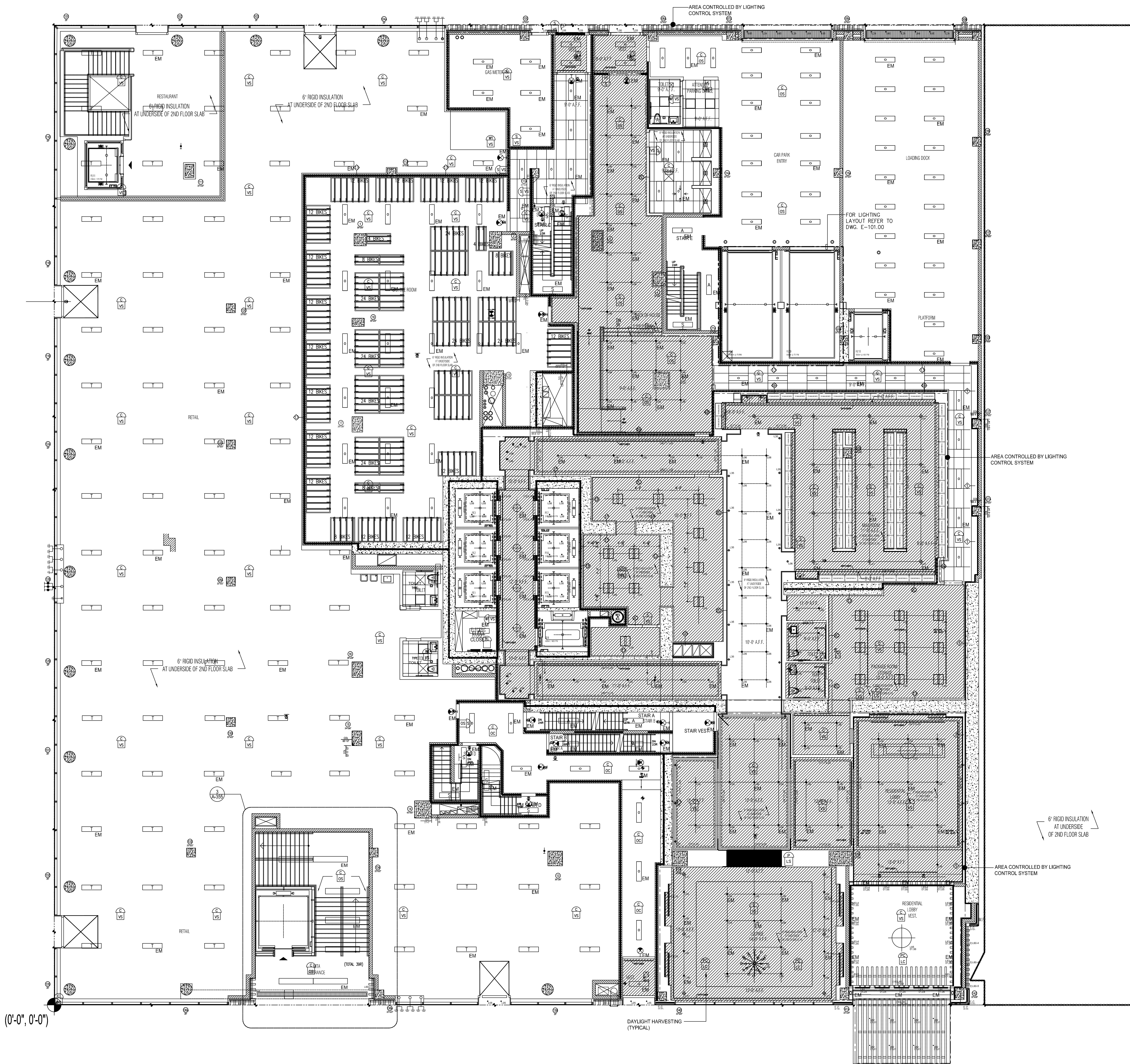
136018

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

EN-200.00

DWG NO.





**LIGHTING NOTES:**

**WIRING NOTES:**

- EACH STAIR: CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL POWER LIGHTING PANEL BOARD. PROVIDE EMERGENCY BALLAST AND BATTERY PACK (ABLE TO OPERATE AT FULL LOAD FOR MIN. OF 90 MINUTES) AS REQUIRED BY THE CODE. CIRCUIT SEPARATELY EACH STAIRS WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB.
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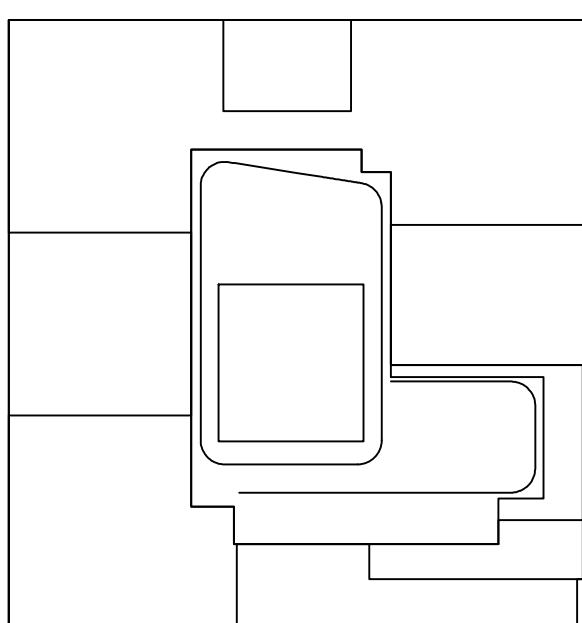
**NOTES, REVISIONS:**

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**KEY PLAN**

**NOTES:**

**NOT FOR CONSTRUCTION**

10/02/2017	ISSUED FOR DOB
08/02/2017	95% CD SET
06/02/2017	95% CD SET
03/24/2017	95% CD SUBMISSION SET
01/02/2017	SUPERSTRUCTURE SET
01/25/2017	ISSUED FOR DOB
11/17/2016	FACADE PAVING SET
11/11/2016	95% CD FOUNDATION SET
10/12/2016	ISSUED FOR DOB
03/02/2016	DOB RUMING SET

Number: Date: Revision:

Project:

**City View Tower at Court Square**  
23-15 44th Drive  
Long Island City, NY 11101

Client:

**Cityview Tower LLC**  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
(718) 321-8652

Architect:

**HILL | WEST**  
ARCHITECTS  
11 BROADWAY  
17TH FLOOR  
NEW YORK, NY 10004  
T. 212 213 8007

Consultant:

**DESIMONE CONSULTING ENGINEERS**  
140 Broadway 25th Floor  
New York, NY, 10005  
(212) 532-2211  
**Cosentini Associates**  
Two Pennsylvania Plaza, 3rd FL.  
New York, NY 10121  
(212) 615-3600  
**Whitehall**  
11 Broadway, 17th Floor  
New York, NY 10004  
(212) 908-4940

DOB STAMPS & SIGNATURES:

DWG TITLE:

**LIGHTING**  
GROUND FLOOR LIGHTING PLAN

SEAL & SIGNATURE:



DATE: 08/15/2017

PROJECT #: 136018

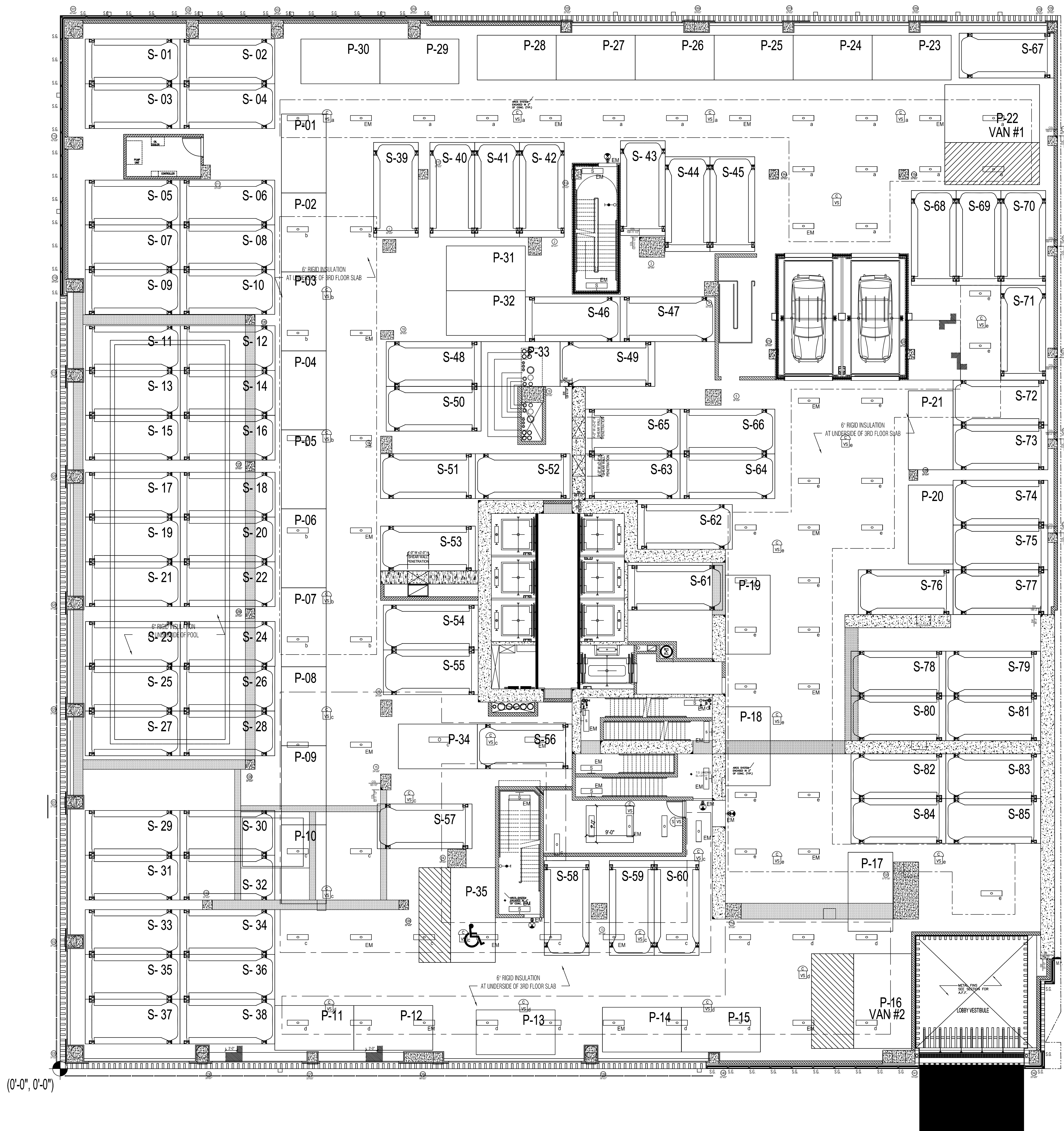
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**EN-201.00**

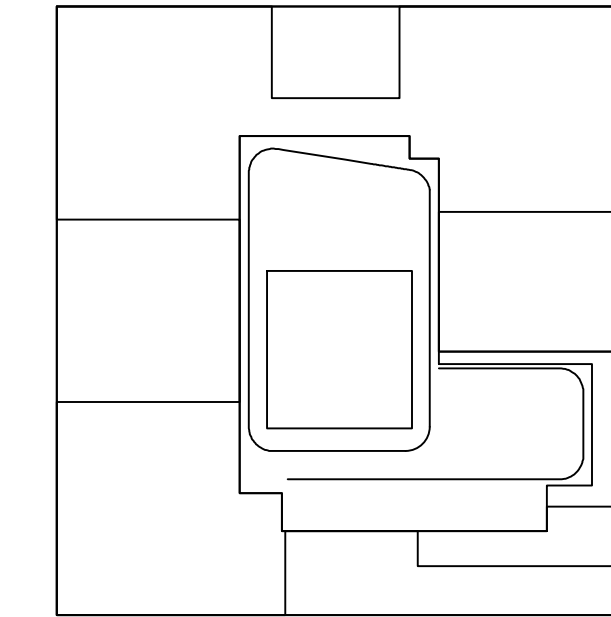
DWG NO.



FILE NAME: I:\50318\EN\20170922 EN Response\EN\50318EN202 (2ND FL)dwg SAVED ON 8/22/2017 3:28 PM PLOTTED ON 10/3/2017 5:12 PM PLOTTED BY CHU, JING



- LIGHTING NOTES:**
- WIRING NOTES:**
- EACH STAIR: CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL POWER LIGHTING PANEL BOARD. PROVIDE EMERGENCY BALLAST AND BATTERY PACK (ABLE TO OPERATE AT FULL LOAD FOR MIN. OF 90 MINUTES) AS REQUIRED BY THE CODE. CIRCUIT SEPARATELY EACH STAIRS WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB.
  - ROOMS WITH STAND ALONE OCCUPANCY SENSORS SHALL OPERATE AS A "MANUAL - ON, AUTO - OFF" SYSTEM. CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL LIGHTING PANEL. WIRE WITH 2#12 AWG & 1#12G CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM OF 1200W FOR FLUORESCENT LIGHTING FIXTURES OR 600W FOR LED TYPE LIGHTING FIXTURES.
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  - WIRE EXIT SIGNS TO ONE UNSWITCHABLE CIRCUIT ORIGINATING AT ELECTRICAL LIGHTING PANEL SERVING THE FLOOR WITH 2#12 AWG & 1#12G, CU IN 1/2" CONDUIT. CONNECT CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 15 EXIST SIGNS TO EACH CIRCUIT
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## KEY PLAN

## NOTES:

## NOT FOR CONSTRUCTION

10/02/2017	ISSUED FOR DOB
08/15/2017	95% CD SET
06/02/2017	95% CD SET
03/24/2017	95% CD SUBMISSION SET
01/27/2017	SUPERINTENDENT SET
01/25/2017	ISSUED FOR DOB
11/17/2016	FACADE PRELIM SET
11/11/2016	100% COORDINATION SET
10/12/2016	ISSUED FOR DOB
02/02/2016	DOB FILING SET

Number: Date: Revision:

Project:  
**City View Tower at Court Square**  
23-15 44th Drive  
Long Island City, NY 11101

Client:  
**Cityview Tower LLC**  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
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Architect:  
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ARCHITECTS  
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(212) 615-3600  
**Whitehall**  
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New York, NY 10004  
(212) 908-4940

DOB STAMPS & SIGNATURES:

DWG TITLE:  
**LIGHTING**  
2ND FLOOR LIGHTING PLAN

SEAL & SIGNATURE: DATE: 08/15/2017

PROJECT #: 193018

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

DWG NO. **EN-202.00**

10/07/27

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

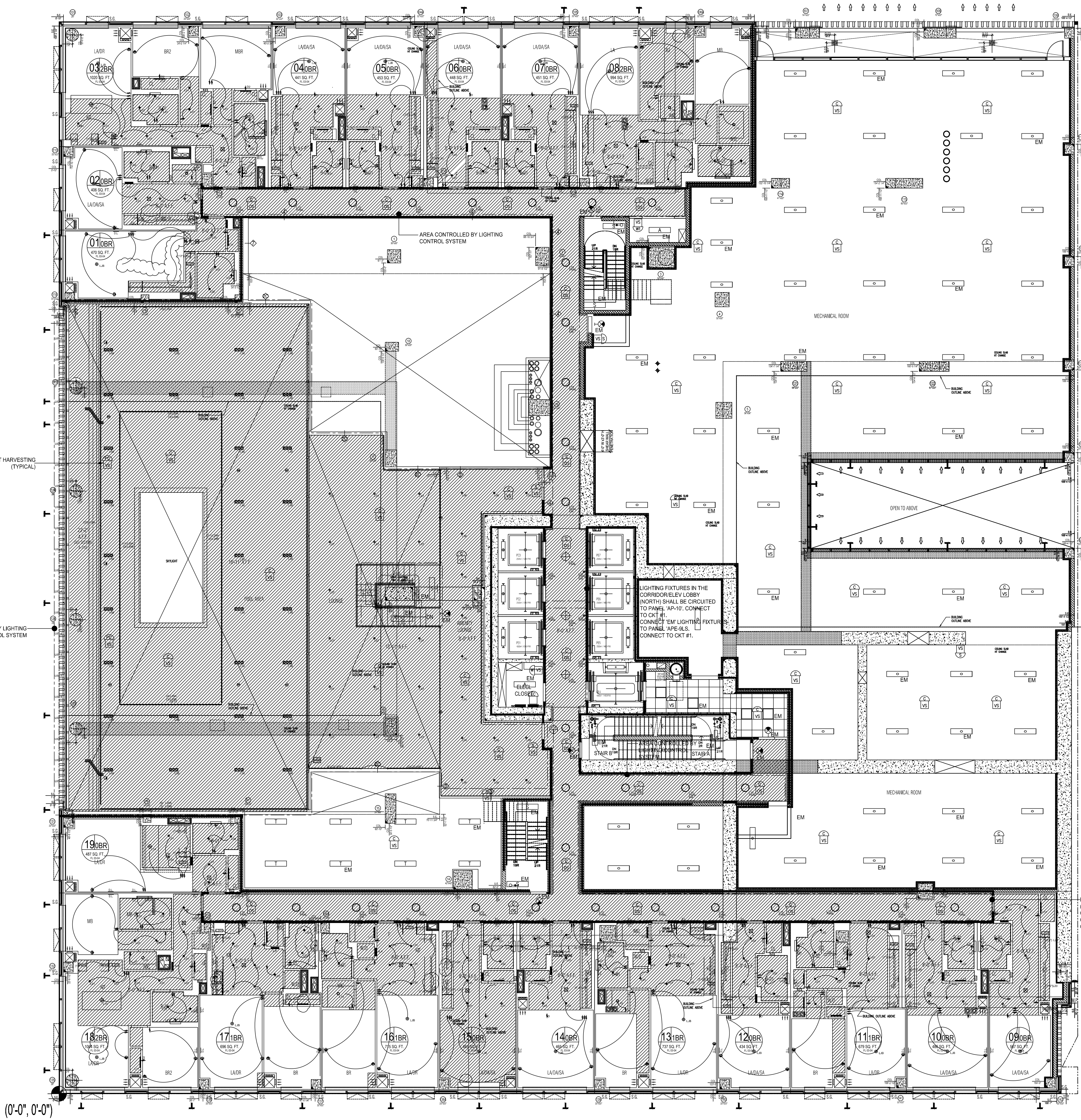
TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ASHRAE 90.1 2013 AS MODIFIED BY 2016 NYCEC APPENDIX C.

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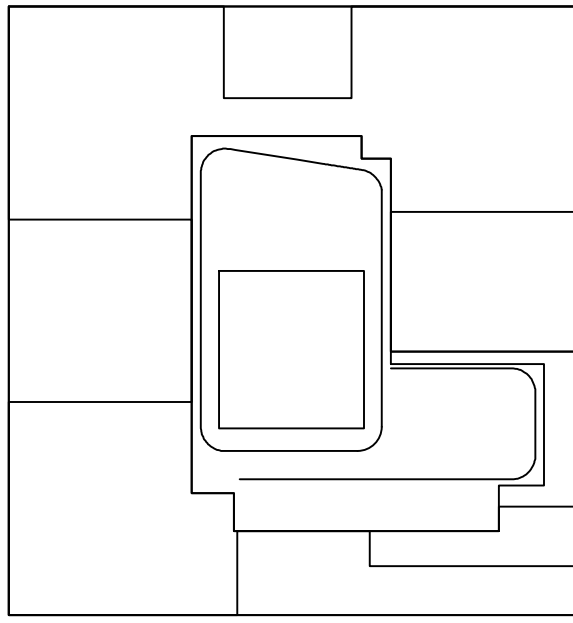
- LIGHTING NOTES:**
- WIRING NOTES:**
1. EACH STAIR: CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL POWER LIGHTING PANEL BOARD. PROVIDE EMERGENCY BALLAST AND BATTERY PACK (ABLE TO OPERATE AT FULL LOAD FOR MIN. OF 90 MINUTES) AS REQUIRED BY THE CODE. CIRCUIT SEPARATELY EACH STAIRS WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB.
  2. ROOMS WITH STAND ALONE OCCUPANCY SENSORS SHALL OPERATE AS A "MANUAL - ON, AUTO - OFF" SYSTEM. CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL LIGHTING PANEL. WIRE WITH 2#12 AWG, & 1#12G CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM OF 1200W FOR FLUORESCENT LIGHTING FIXTURES OR 800W FOR LED TYPE LIGHTING FIXTURES.
  3. WIRE SWITCHABLE LIGHTING FIXTURES TO ELECTRICAL LIGHTING PANELS SERVING THE FLOOR WITH 2#12 AWG & 1#12G CU WIRES IN 3/4" CONDUIT PER CIRCUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 15 EXIST SIGNS TO EACH CIRCUIT.
  4. WIRE EXIT SIGNS TO ONE UNSWITCHABLE CIRCUIT ORIGINATING AT ELECTRICAL LIGHTING PANEL SERVING THE FLOOR WITH 2#12 AWG & 1#12G, CU IN 3/4" CONDUIT. CONNECT CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 15 EXIST SIGNS TO EACH CIRCUIT.
  5. MEP ROOMS - IF NOT INDICATED ON DRAWINGS PROVIDE LOCAL MANUAL SWITCHES. PROVIDE A MINIMUM OF (1) ONE NORMAL SWITCH FOR EVERY 500 SQUARE FEET TO ALLOW OCCUPANTS FOR MANUAL ON/OFF OPERATION. IF VACANCY SWITCHES ARE INDICATED ON THE DRAWINGS - (MANUAL ON/ AUTO OFF) SET THE "AUTO OFF" MODE TIME TO THE MAXIMUM CODE ALLOWED SET UP. WIRE ALL LIGHTS TO NEAREST 120V EMERGENCY LIGHTING PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE ROOM. WIRE WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 1200W TO EACH CIRCUIT.
  6. EXTERIOR/ FACADE MOUNTED NORMAL ARCHITECTURAL ACCENT LIGHTING FIXTURES- CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.
  7. EXTERIOR/ FACADE MOUNTED ILLUMINATED SIGNS - CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH 2#10 AWG & 1#10G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.
  8. REFER TO LIGHTING SCHEDULE AND SPECIFICATIONS FOR CATALOG NUMBER, FINISHED REQUIRED, VOLTAGE, LOADS, WIRE AND OTHER CONTROL REQUIREMENTS.
  9. ALL LIGHTING FIXTURES WITH SUBSCRIPT "EM" SHALL BE PROVIDED WITH EMERGENCY BALLAST AND BATTERY PACK. PROVIDE BATTERY PACKS TO SUPPORT OPERATION OF EACH LIGHTING FIXTURE FOR MINIMUM OF 90 MINUTES AT FULL LOAD, AS REQUIRED BY THE CODE.
  10. RUN GROUND WIRE WITH EACH LIGHTING CIRCUIT WHETHER IT IS INDICATED ON THE DRAWING OR NOT.
  11. ALL TASK LIGHTS AND UNDER CABINET LIGHTING FIXTURES SHALL BE PROVIDED WITH DEDICATED LOCAL SWITCH. FURNISH DEDICATED SWITCHES FOR ALL FIXTURES NOT EQUIPPED WITH FACTORY INSTALLED MANUAL CONTROL DEVICE.
  12. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS.
  13. ALL CORRIDOR LIGHTING SHALL BE CONTROLLED BY OCCUPANCY SENSOR.
  14. "EM" INDICATES LIGHTING FIXTURES ON EMERGENCY POWER.
  15. FOR CORRIDOR AND EXIT SIGNS CIRCUITING SEE DRAWINGS E-305 THRU E-307.
  16. FOR LIGHTING FIXTURE SCHEDULES SEE DRAWING-404.
  17. FOR PANEL LOCATIONS SEE POWER DRAWINGS.

- ENERGY CODE NOTES:**
1. EACH AREA ENCLOSED BY WALLS OR FLOOR TO CEILING PARTITIONS SHALL HAVE AT LEAST ONE MANUAL CONTROL FOR THE LIGHTING SERVING THAT AREA. THE REQUIRED CONTROLS SHALL BE LOCATED WITHIN THE AREA SERVED BY THE CONTROLS.
  2. ALL "FRONT OF THE HOUSE AREAS" INCLUDING RECEPTION AND CORRIDOR AREAS WILL BE CONTINUOUSLY LIT DURING IMAGING FACILITY WORKING HOURS AND SHALL BE TIMER CONTROLLED. CONTRACTOR TO CIRCUIT ALL LIGHTING ZONES (DIMMED AND SWITCHED) TO LIGHTING CONTROL PANEL WITH 2#12 AWG & 1#12G, CU IN 3/4" CONDUIT.
  3. EACH AREA ENCLOSED BY WALLS OR PARTITIONS AND NOT DESIGNATED AS CONTINUOUS OPERATION SHALL HAVE MANUAL CONTROLS ALLOWING REDUCTION OF THE CONNECTED LIGHTING LOADS BY 50 PERCENT (DUAL SWITCHING), AS REQUIRED BY NYC ENERGY CONSERVATION CODE.
  4. EACH OFFICE AND BACK OF THE HOUSE AREA ENCLOSED BY WALLS OR FULL HEIGHT (FLOOR TO CEILING) PARTITIONS IN ADDITION TO MANUAL CONTROLS SHALL BE PROVIDED WITH VACANCY SENSORS OPERATING ON MANUAL ON/ AUTO OF BASIS, AS REQUIRED BY THE NYC ENERGY CONSERVATION CODE.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ASHRAE 90.1 2013 AS MODIFIED BY 2016 NYCEC APPENDIX C.

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KEY PLAN

NOTES:

NOT FOR CONSTRUCTION

10/02/2017	65243 FOR DOB
08/02/2017	95% CO SET
06/02/2017	95% CO SET
03/24/2017	95% CO SUBMISSION SET
01/07/2017	SUPERINTENDENT SET
01/25/2017	ISSUED FOR DOB
11/17/2016	FACADE PRELIM SET
11/17/2016	95% CO SUBMISSION SET
10/12/2016	65243 FOR DOB
02/02/2016	DOB FILING SET

Number: Date: Revision:

Project:  
**City View Tower at Court Square**  
23-15 44th Drive  
Long Island City, NY 11101

Client:  
**Cityview Tower LLC**  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
(718) 321-8652

Architect:  
**HILL | WEST**  
ARCHITECTS  
11 BROADWAY  
17TH FLOOR  
NEW YORK, NY 10004  
T. 212 213 8007

Consultant:  
**DESIMONE CONSULTING ENGINEERS**  
140 Broadway 25th Floor  
New York, NY, 10005  
(212) 532-2211  
**Cosentini Associates**  
Two Pennsylvania Plaza, 3rd FL,  
New York, NY 10121  
(212) 615-3600  
**Whitehall**  
11 Broadway, 17th Floor  
New York, NY 10004  
(212) 908-4940

DOB STAMPS & SIGNATURES:

DWG TITLE:  
**LIGHTING**  
4TH FLOOR LIGHTING PLAN

SEAL & SIGNATURE: DATE: 08/15/2017

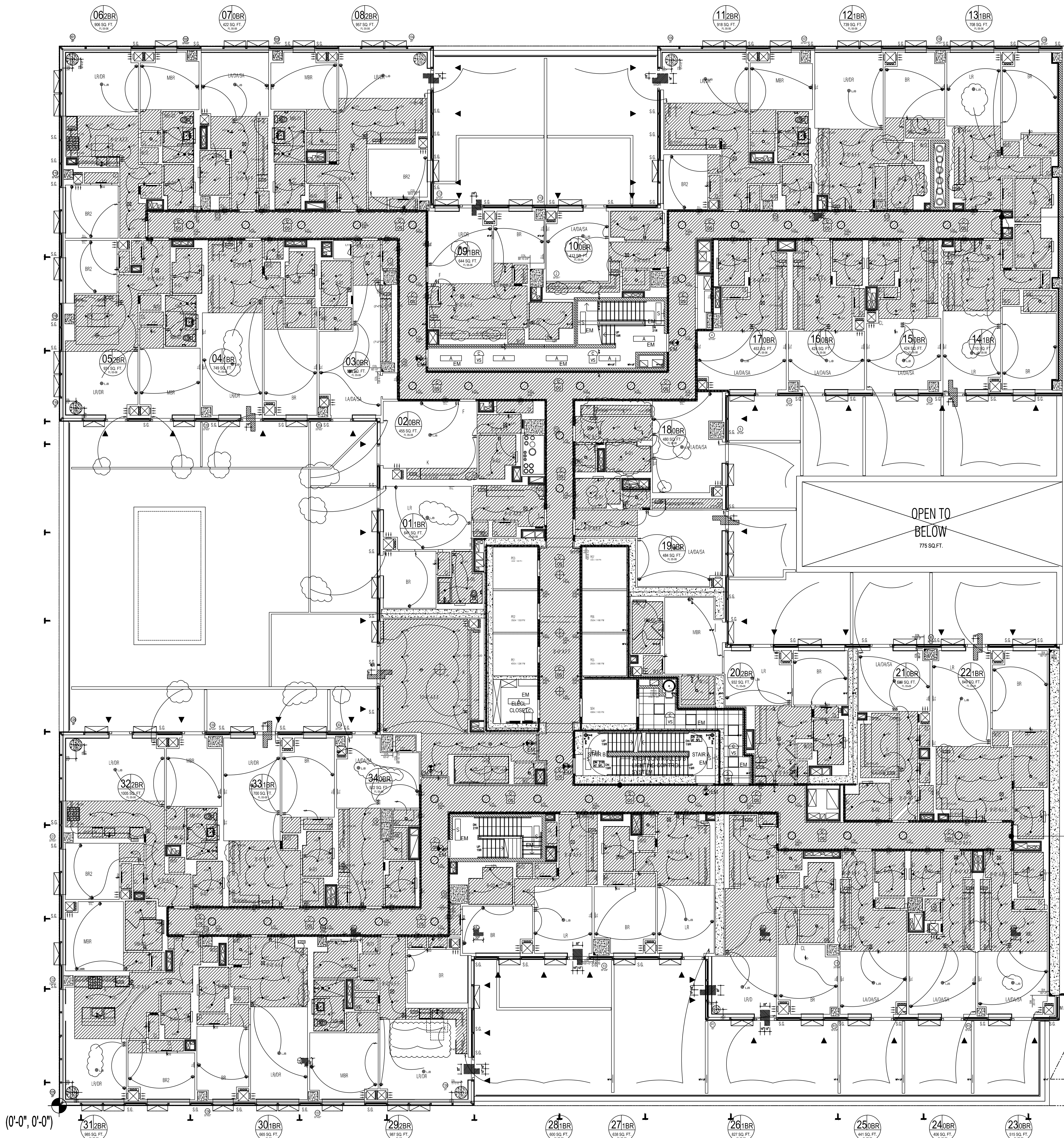
PROJECT #: 193018

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

**EN-204.00**  
DWG NO.



FILE NAME: I:\50318\EN\2070922 EN Response\EN\50318\EN\205 5TH FLOOR LAYOUT EN 10/23/2017 11:00 AM PLOTTED BY: CHU, JING



LIGHTING FIXTURES IN THE CORRIDOR/ELEV LOBBY  
NORTH SHALL BE CIRCUITED TO PANEL AP-107.  
CONNECT EM LIGHTING FIXTURES TO PANEL APE-8LS.  
CONNECT TO CKT #5.

LIGHTING FIXTURES IN THE CORRIDOR/ELEV LOBBY  
SHALL BE CIRCUITED TO PANEL AP-107. CONNECT TO  
CKT #7.  
CONNECT EM LIGHTING FIXTURES TO PANEL APE-8LS.  
CONNECT TO CKT #7.

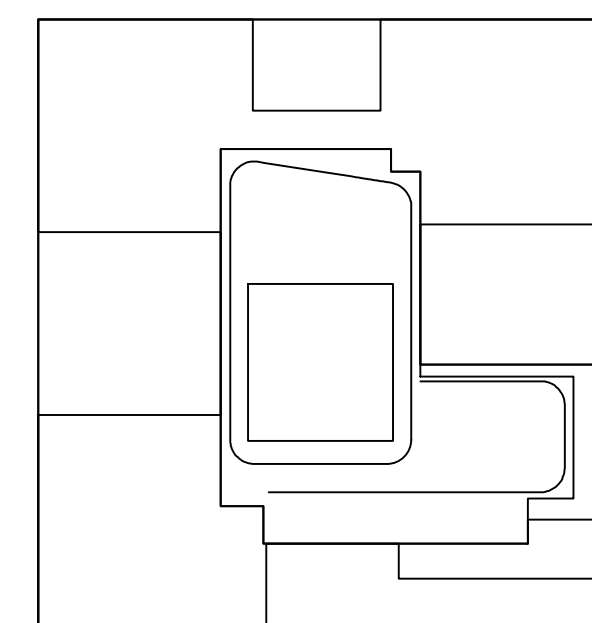
#### LIGHTING NOTES:

##### WIRING NOTES:

1. EACH STAIR: CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL POWER LIGHTING PANEL BOARD. PROVIDE EMERGENCY BALLAST AND BATTERY PACK (ABLE TO OPERATE AT FULL LOAD FOR MIN. OF 90 MINUTES) AS REQUIRED BY THE CODE. CIRCUIT SEPARATELY EACH STAIRS WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM OF 1200W FOR FLUORESCENT LIGHTING FIXTURES OR 600W FOR LED TYPE LIGHTING FIXTURES.
2. ROOMS WITH STAND ALONE OCCUPANCY SENSORS SHALL OPERATE AS A "MANUAL - ON, AUTO - OFF" SYSTEM. CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL LIGHTING PANEL. WIRE WITH 2#12 AWG, & 1#12G CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM OF 1200W FOR FLUORESCENT LIGHTING FIXTURES OR 600W FOR LED TYPE LIGHTING FIXTURES.
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4. WIRE EXIT SIGNS TO ONE UNSWITCHABLE CIRCUIT ORIGINATING AT ELECTRICAL LIGHTING PANEL SERVING THE FLOOR WITH 2#12 AWG & 1#12G, CU IN 1/2" CONDUIT. CONNECT CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 15 EXIST SIGNS TO EACH CIRCUIT
5. MEP ROOMS - IF NOT INDICATED ON DRAWINGS PROVIDE LOCAL MANUAL SWITCHES. PROVIDE A MINIMUM OF (1) ONE NORMAL SWITCH FOR EVERY 500 SQUARE FEET TO ALLOW OCCUPANTS FOR MANUAL ON/OFF OPERATION. IF VACANCY SWITCHES ARE INDICATED ON THE DRAWINGS - (MANUAL ON/ AUTO OFF) SET THE "AUTO OFF" MODE TIME TO THE MAXIMUM CODE ALLOWED SET UP. WIRE ALL LIGHTS TO NEAREST 120V EMERGENCY LIGHTING PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE ROOM. WIRE WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 1200W TO EACH CIRCUIT.
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8. REFER TO LIGHTING SCHEDULE AND SPECIFICATIONS FOR CATALOG NUMBER, FINISHED REQUIRED, VOLTAGE, LOADS, WIRE AND OTHER CONTROL REQUIREMENTS.
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10. RUN GROUND WIRE WITH EACH LIGHTING CIRCUIT WHETHER IT IS INDICATED ON THE DRAWING OR NOT.
11. ALL TASK LIGHTS AND UNDER CABINET LIGHTING FIXTURES SHALL BE PROVIDED WITH DEDICATED LOCAL SWITCH. FURNISH DEDICATED SWITCHES FOR ALL FIXTURES NOT EQUIPPED WITH FACTORY INSTALLED MANUAL CONTROL DEVICE.
12. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS.
13. ALL CORRIDOR LIGHTING SHALL BE CONTROLLED BY OCCUPANCY SENSOR.
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15. FOR CORRIDOR AND EXIT SIGNS CIRCUITING SEE DRAWINGS E-305 THRU E-307.
16. FOR LIGHTING FIXTURE SCHEDULES SEE DRAWING-404.
17. FOR PANEL LOCATIONS SEE POWER DRAWINGS.

#### ENERGY CODE NOTES:

1. EACH AREA ENCLOSED BY WALLS OR FLOOR TO CEILING PARTITIONS SHALL HAVE AT LEAST ONE MANUAL CONTROL FOR THE LIGHTING SERVING THAT AREA. THE REQUIRED CONTROLS SHALL BE LOCATED WITHIN THE AREA SERVED BY THE CONTROLS.
2. ALL "FRONT OF THE HOUSE AREAS" INCLUDING RECEPTION AND CORRIDOR AREAS WILL BE CONTINUOUSLY LIT DURING IMAGING FACILITY WORKING HOURS AND SHALL BE TIMER CONTROLLED. CONTRACTOR TO CIRCUIT ALL LIGHTING ZONES (DIMMED AND SWITCHED) TO LIGHTING CONTROL PANEL WITH 2#12 AWG & 1#12G, CU IN 1/2" CONDUIT.
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#### KEY PLAN

#### NOTES:

#### NOT FOR CONSTRUCTION

10/06/2017	65457 FOR DOB
08/05/2017	95% CD SET
08/02/2017	95% CD SET
03/24/2017	95% CD SUBMISSION SET
01/02/2017	SUBMITTAL SET
01/02/2017	65457 FOR DOB
11/17/2016	FACADE PRELIM SET
11/17/2016	100% CD FOUNDATION MD SET
10/12/2016	65457 FOR DOB
02/02/2016	DOB FILING SET

Number: Date: Revision:

Project:

City View Tower at  
Court Square  
23-15 44th Drive  
Long Island City, NY 11101

Client:

Cityview Tower LLC  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
(718) 321-8652

Architect:

HILL | WEST  
ARCHITECTS  
11 BROADWAY  
17TH FLOOR  
NEW YORK, NY 10004  
T. 212 213 8007

Consultant:

DESIMONE  
CONSULTING ENGINEERS  
140 Broadway 25th Floor  
New York, NY 10005  
(212) 532-2211

Cosentini Associates  
Two Pennsylvania Plaza, 3rd FL.  
New York, NY 10121  
(212) 615-3600

Whitehall  
11 Broadway, 17th Floor  
New York, NY 10004  
(212) 908-4940

DOB STAMPS & SIGNATURES:

DOB STAMPS & SIGNATURES:

DWG TITLE:

LIGHTING  
5TH FLOOR LIGHTING PLAN

SEAL & SIGNATURE:

DATE: 150318 08/15/2017

PROJECT #: 193018

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

DWG NO. EN-205.00

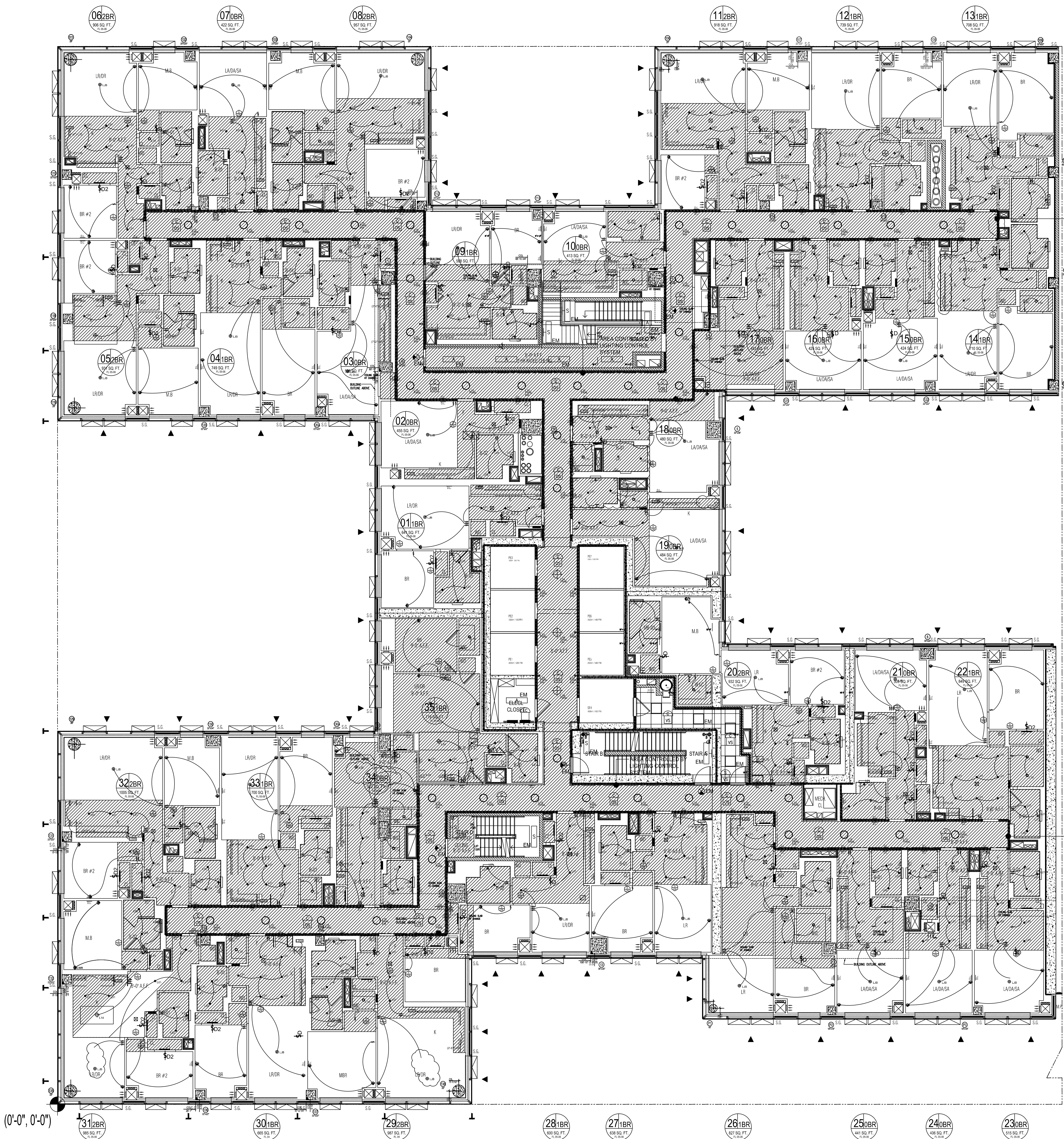
13 OF 27

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#### LIGHTING NOTES:

##### WIRING NOTES:

- EACH STAIR: CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL POWER LIGHTING PANEL BOARD. PROVIDE EMERGENCY BALLAST AND BATTERY PACK (ABLE TO OPERATE AT FULL LOAD FOR MIN. OF 90 MINUTES) AS REQUIRED BY THE CODE. CIRCUIT SEPARATELY EACH STAIRS WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB.
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- WIRE SWITCHABLE LIGHTING FIXTURES TO ELECTRICAL LIGHTING PANELS SERVING THE FLOOR WITH 2#12 AWG & 1#12G CU WIRES IN 3/4" CONDUIT PER CIRCUIT. CONNECT EACH CIRCUIT TO 20A, 1P CIRCUIT BREAKER. QUANTITIES OF CIRCUITS SHALL ACCOMMODATE RESPECTIVE LOADS (AS MENTIONED IN POINT 2).
- WIRE EXIT SIGNS TO ONE UNSWITCHABLE CIRCUIT ORIGINATING AT ELECTRICAL LIGHTING PANEL SERVING THE FLOOR WITH 2#12 AWG & 1#12G, CU IN 3/4" CONDUIT. CONNECT CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 15 EXIT SIGNS TO EACH CIRCUIT
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- FOR LIGHTING FUTURE SCHEDULES SEE DRAWING-404.
- FOR PANEL LOCATIONS SEE POWER DRAWINGS.

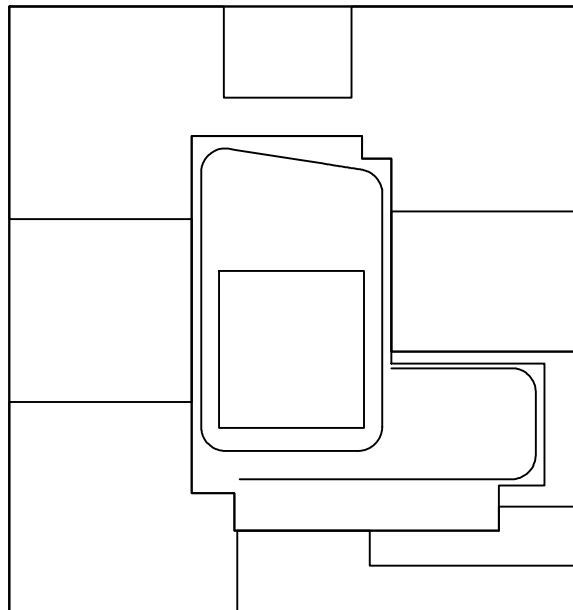
#### ENERGY CODE NOTES:

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#### KEY PLAN

#### NOTES:

#### NOT FOR CONSTRUCTION

10/02/2017	6543 FOR DOB
08/25/2017	95% CO SET
08/22/2017	95% CO SET
03/24/2017	50% CO SUBMISSION SET
01/02/2017	SUBMITTAL SET
01/25/2017	6543 FOR DOB
11/17/2016	FACADE PRELIM SET
11/17/2016	100% CO SUBMISSION SET
10/12/2016	6543 FOR DOB
02/02/2016	DOB FILING SET

Number: Date: Revision:

Project:

City View Tower at  
Court Square  
23-15 44th Drive  
Long Island City, NY 11101

Client:

Cityview Tower LLC  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
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Architect:

**HILL | WEST**  
ARCHITECTS  
11 BROADWAY  
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Consultant:

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Two Pennsylvania Plaza, 3rd FL.  
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11 Broadway, 17th Floor  
New York, NY 10004  
(212) 908-4940

DOB STAMPS & SIGNATURES:

DWG TITLE:

LIGHTING  
6TH FLOOR LIGHTING PLAN

SEAL & SIGNATURE:



DATE: 08/15/2017

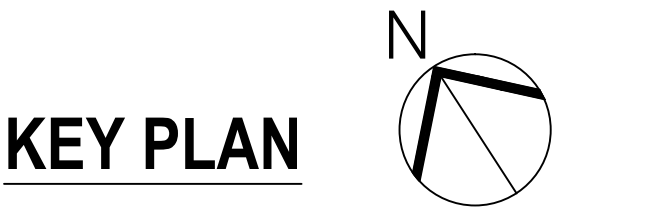
PROJECT #: 19318

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

DWG NO. EN-206.00

14 OF 27





**NOTES:**

- ENERGY CODE NOTES:
1. EACH AREA ENCLOSED BY WALLS OR FLOOR TO CEILING PARTITIONS SHALL HAVE AT LEAST ONE MANUAL CONTROL FOR THE LIGHTING SERVING THAT AREA. THE REQUIRED CONTROLS SHALL BE LOCATED WITHIN THE AREA SERVED BY THE CONTROLS.
  2. ALL "FRONT OF THE HOUSE AREAS" INCLUDING RECEPTION AND CORRIDOR AREAS WILL BE CONTINUOUSLY LIT DURING IMAGING FACILITY WORKING HOURS AND SHALL BE TIMER CONTROLLED. CONTRACTOR TO CIRCUIT ALL LIGHTING ZONES (DIMMED AND SWITCHED) TO LIGHTING CONTROL PANEL WITH 2#12 AWG & 1#12, CU IN 3" CONDUIT.
  3. EACH AREA ENCLOSED BY WALLS OR PARTITIONS AND NOT DESIGNATED AS CONTINUOUS OPERATION SHALL HAVE MANUAL CONTROLS ALLOWING REDUCTION OF THE CONNECTED LIGHTING LOADS BY 50 PERCENT (DUAL SWITCHING), AS REQUIRED BY NYC ENERGY CONSERVATION CODE.
  4. EACH OFFICE AND BACK OF THE HOUSE AREA ENCLOSED BY WALLS OR FULL HEIGHT (FLOOR TO CEILING) PARTITIONS IN ADDITION TO MANUAL CONTROLS SHALL BE PROVIDED WITH VACANCY SENSORS OPERATING ON MANUAL ON/ AUTO OF BASIS, AS REQUIRED BY THE NYC ENERGY CONSERVATION CODE.

10/09/2017	ISSUED FOR DOB
09/05/2017	60% CD SET
06/02/2017	65% CD SET
03/24/2017	50% CD SUBMISSION SET
01/27/2017	SUPERSTRUCTURE SET
01/25/2017	ISSUED FOR DOB
11/17/2016	FAÇADE FRAMING SET
11/11/2016	100% CD FOUNDATION BID SET
10/12/2016	ISSUED FOR DOB
02/05/2016	DOB FILING SET

er:	Date:	Revision:
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City View Tower at  
Court Square  
23-15 44th Drive  
Long Island City, NY 11101

Cityview Tower LLC  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
(718) 321-8652

architect:

**HILL | WEST**  
**ARCHITECTS**  
11 BROADWAY  
17TH FLOOR  
NEW YORK, NY 10004  
T. 212 213 8007

consultant:

**ESIMONE  
CONSULTING ENGINEERS**  
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(212) 532-2211


**Posentini Associates**  
100 Pennsylvania Plaza, 3rd FL,  
New York, NY 10121  
(212) 615-3600

**Whitehall**  
Broadway, 17th Floor  
New York, NY 10004  
(212) 908-4940

STAMPS &amp; SIGNATURES:

TITLE: LIGHTING  
7TH FLOOR LIGHTING PLAN

& SIGNATURE:	
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	DATE:	09/15/2017
	PROJECT #:	150318

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

EN-207.00  
DWG NO.

15 OF 27

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TO THE BEST OF MY KNOWLEDGE, BELIEF AND  
PROFESSIONAL JUDGEMENT, THESE PLANS AND  
SPECIFICATIONS ARE IN COMPLIANCE WITH ASHRAE  
90.1 2013 AS MODIFIED BY 2016 NYCECC APPENDIX  
CA.

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**NOTES:**

	10/06/2017	ISSUED FOR DOB
	09/15/2017	90% CD SET
	06/02/2017	85% CD SET
	03/24/2017	50% CD SUBMISSION SET
	01/27/2017	SUPERSTRUCTURE SET
	01/25/2017	ISSUED FOR DOB
	11/17/2016	FACADE FRILING SET
	11/11/2016	100% DO FOUNDATION BID SET
	10/12/2016	ISSUED FOR DOB
	02/05/2016	DOB FILING SET
or:	Date:	Revision:
Project:		

City View Tower  
Court Square  
23-15 44th Drive  
Long Island City, NY 11101


architect:

**HILL | WEST**  
**ARCHITECTS**

11 BROADWAY  
17TH FLOOR  
NEW YORK, NY 10004  
T. 212 213 8007

STAMPS &amp; SIGNATURES:

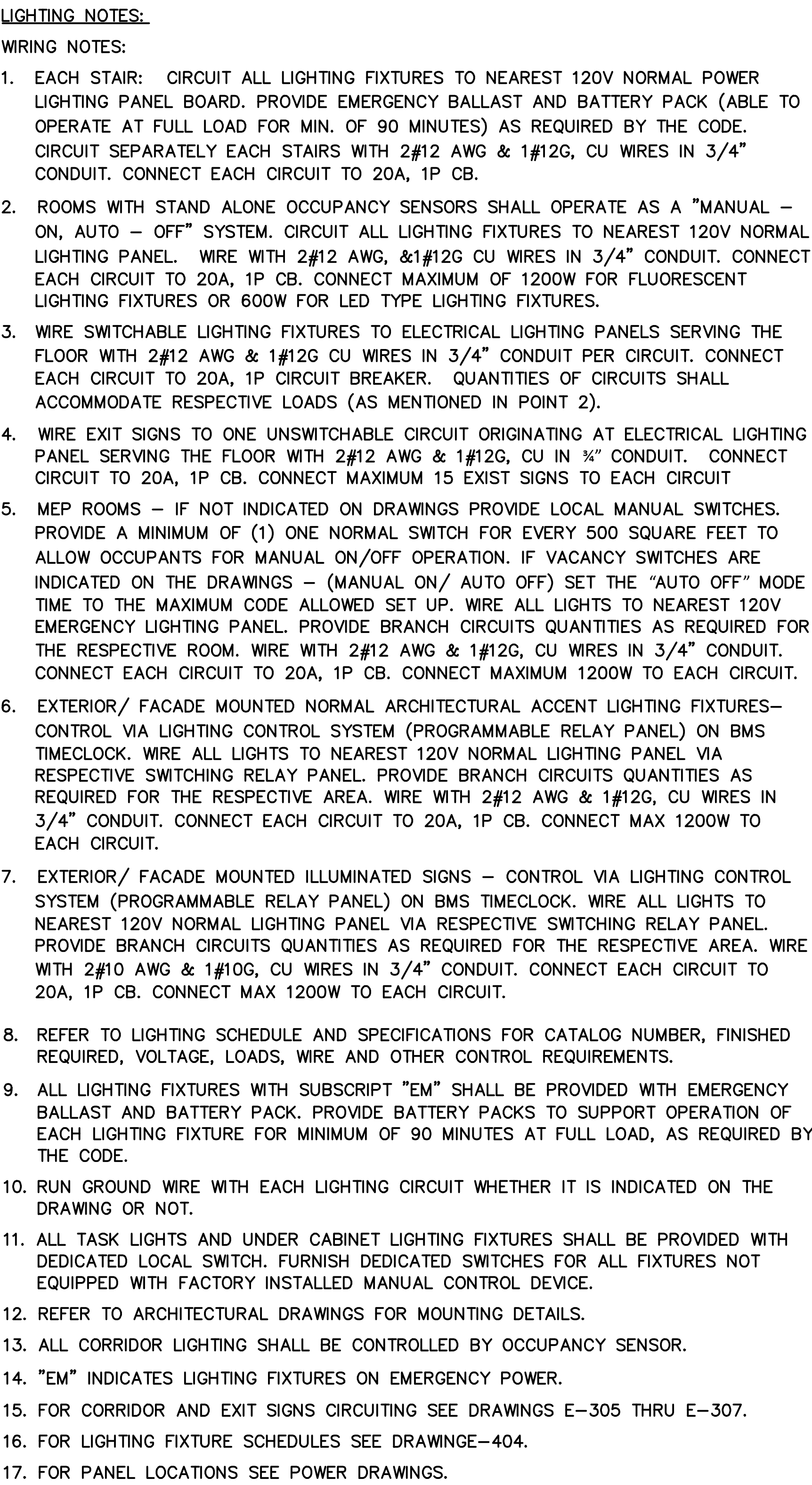
DATE: 09/15/2017	STATE OF NEW YORK
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SCALE: 1/8" = 1'-0"

EN-208.00

DWG NO.



1. EACH AREA ENCLOSED BY WALLS OR FLOOR TO CEILING PARTITIONS SHALL HAVE AT LEAST ONE MANUAL CONTROL FOR THE LIGHTING SERVING THAT AREA. THE REQUIRED CONTROLS SHALL BE LOCATED WITHIN THE AREA SERVED BY THE CONTROLS.
2. ALL "FRONT OF THE HOUSE AREAS" INCLUDING RECEPTION AND CORRIDOR AREAS WILL BE CONTINUOUSLY LIT DURING IMAGING FACILITY WORKING HOURS AND SHALL BE TIMER CONTROLLED. CONTRACTOR TO CIRCUIT ALL LIGHTING ZONES (DIMMED AND SWITCHED) TO LIGHTING CONTROL PANEL WITH 2#12 AWG & 1#12G, CU IN 1/2" CONDUIT.
3. EACH AREA ENCLOSED BY WALLS OR PARTITIONS NOT DESIGNATED AS CONTINUOUS EXISTENCE SHALL HAVE MANUAL CONTROLS ALLOWING REDUCTION OF THE CONNECTED LIGHTING LOADS BY 50 PERCENT (DUAL SWITCHING), AS REQUIRED BY NYC ENERGY CONSERVATION CODE.
4. EACH OFFICE AND BACK OF THE HOUSE AREA ENCLOSED BY WALLS OR FULL HEIGHT (FLOOR TO CEILING) PARTITIONS IN ADDITION TO MANUAL CONTROLS SHALL BE PROVIDED WITH VACANCY SENSORS OPERATING ON MANUAL ON/ AUTO OF BASIS, AS REQUIRED BY THE NYC ENERGY CONSERVATION CODE.

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**NOTES:**

10/06/2017	ISSUED FOR DOB
09/15/2017	90% CD SET
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03/24/2017	50% CD SUBMISSION SET
01/27/2017	SUPERSTRUCTURE SET
01/25/2017	ISSUED FOR DOB
11/17/2016	FACADE FRAMING SET
11/11/2016	100% DO/FUNDATION BID SET
10/12/2016	ISSUED FOR DOB
02/05/2016	DOB FILING SET

City View Tower at  
Court Square  
23-15 44th Drive  
Long Island City, NY 11101

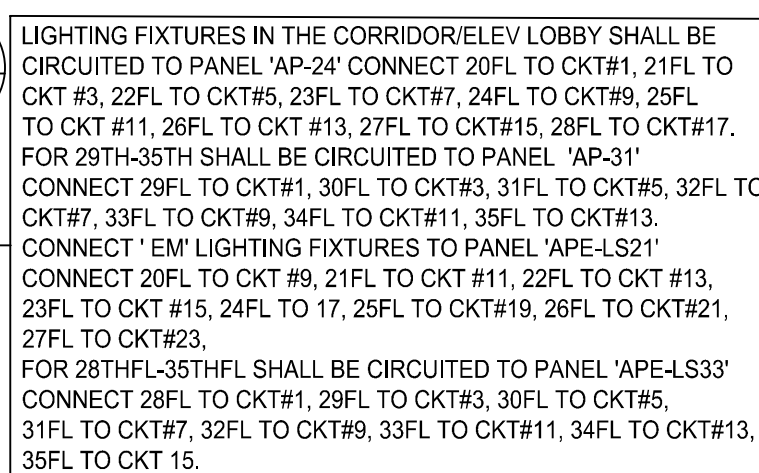
HILL | WEST  
ARCHITECTS  
11 BROADWAY  
17TH FLOOR  
NEW YORK, NY 10004  
T. 212 213 8007

STAMPS &amp; SIGNATURES:

& SIGNATURE: \_\_\_\_\_ DATE: 09/15/2017

PROJECT #: 150318  
SCALE: 1/8" = 1'-0"  
**EN-220.00**  
DWG NO.

17 OF 27



WRITING NOTES:

EACH STAIR: CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL POWER LIGHTING PANEL BOARD. PROVIDE EMERGENCY BALLAST AND BATTERY PACK (ABLE TO OPERATE AT FULL LOAD FOR MIN. OF 90 MINUTES) AS REQUIRED BY THE CODE. CIRCUIT SEPARATELY EACH STAIRS WITH #212 AWG & #12IG, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB.

2. ROOMS WITH STAND ALONE OCCUPANCY SENSORS SHALL OPERATE AS A "MANUAL - ON, AUTO - OFF" SYSTEM. CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL LIGHTING PANEL. WIRE WITH #212 AWG, & #12IG CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM OF 1200W FOR FLUORESCENT LIGHTING FIXTURES OR 600W FOR LED TYPE LIGHTING FIXTURES.

3. WIRE SWITCHABLE LIGHTING FIXTURES TO ELECTRICAL LIGHTING PANELS SERVING THE FLOOR WITH #212 AWG & #12IG CU WIRES IN 3/4" CONDUIT PER CIRCUIT. CONNECT EACH CIRCUIT TO 20A, 1P CIRCUIT BREAKER. QUANTITIES OF CIRCUITS SHALL ACCOMMODATE RESPECTIVE LOADS (AS MENTIONED IN POINT 2).

4. WIRE EXIT SIGNS TO ONE UNSWITCHABLE CIRCUIT ORIGINATING AT ELECTRICAL LIGHTING PANEL SERVING THE FLOOR WITH #212 AWG & #12IG, CU IN 3/4" CONDUIT. CONNECT CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 15 EXIST SIGNS TO EACH CIRCUIT

5. MEP ROOMS - IF NOT INDICATED ON DRAWINGS PROVIDE LOCAL MANUAL SWITCHES. PROVIDE A MINIMUM OF (1) ONE NORMAL SWITCH FOR EVERY 500 SQUARE FEET TO ALLOW OCCUPANTS FOR MANUAL ON/OFF OPERATION. IF VACANCY SWITCHES ARE INDICATED ON THE DRAWINGS - (MANUAL ON/ AUTO OFF) SET THE "AUTO OFF" MODE TIME TO THE MAXIMUM CODE ALLOWED SET UP. WIRE ALL LIGHTS TO NEAREST 120V EMERGENCY LIGHTING PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE ROOM. WIRE WITH #212 AWG & #12IG, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 1200W TO EACH CIRCUIT.

6. EXTERIOR/ FACADE MOUNTED NORMAL ARCHITECTURAL ACCENT LIGHTING FIXTURES- CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH #212 AWG & #12IG, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.

7. EXTERIOR/ FACADE MOUNTED ILLUMINATED SIGNS - CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH #210 AWG & #10IG, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.

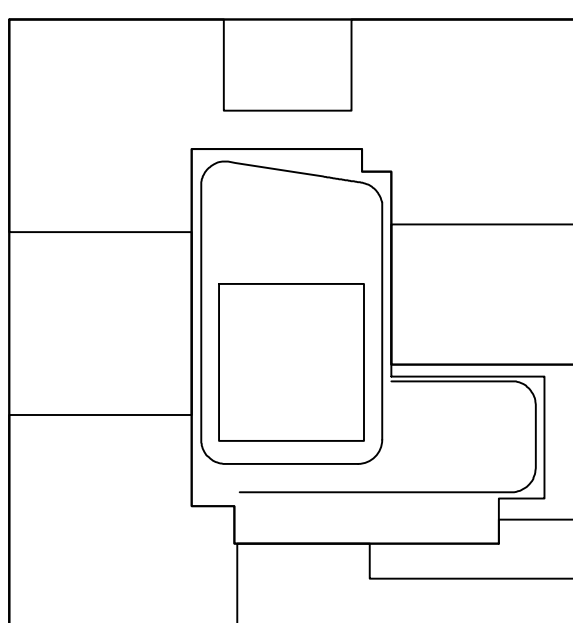
1. EACH AREA ENCLOSED BY WALLS OR FLOOR TO CEILING PARTITIONS SHALL HAVE AT LEAST ONE MANUAL CONTROL FOR THE LIGHTING SERVING THAT AREA. THE REQUIRED CONTROLS SHALL BE LOCATED WITHIN THE AREA SERVED BY THE CONTROLS.
2. ALL "FRONT OF THE HOUSE AREAS" INCLUDING RECEPTION AND CORRIDOR AREAS WILL BE CONTINUOUSLY LIT DURING IMAGING FACILITY WORKING HOURS AND SHALL BE TIMER CONTROLLED. CONTRACTOR TO CIRCUIT ALL LIGHTING ZONES (DIMMED AND SWITCHED) TO LIGHTING CONTROL PANEL WITH 2#12 AWG & 1#12G, CU IN 3% CONDUIT.
3. EACH AREA ENCLOSED BY WALLS OR PARTITIONS AND NOT DESIGNATED AS CONTINUOUS OPERATION SHALL HAVE MANUAL CONTROLS ALLOWING REDUCTION OF THE CONNECTED LIGHTING LOADS BY 50 PERCENT (DUAL SWITCHING), AS REQUIRED BY NYC ENERGY CONSERVATION CODE.
4. EACH OFFICE AND BACK OF THE HOUSE AREA ENCLOSED BY WALLS OR FULL HEIGHT (FLOOR TO CEILING) PARTITIONS IN ADDITION TO MANUAL CONTROLS SHALL BE PROVIDED WITH VACANCY SENSORS OPERATING ON MANUAL ON/ AUTO OF BASIS, AS REQUIRED BY THE NYC ENERGY CONSERVATION CODE.

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90.1 2013 AS MODIFIED BY 2016 NYCEC APPENDIX  
G.

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**KEY PLAN**

**NOTES:**

NOT	FOR	CONSTRUCTION
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10/06/2017	ISSUED FOR DOB
09/15/2017	90% CD SET
06/02/2017	85% CD SET
03/24/2017	50% CD SUBMISSION SET
01/27/2017	SUPERSTRUCTURE SET
01/25/2017	ISSUED FOR DOB
11/17/2016	FACADE PRICING SET
11/11/2016	100% DD FOUNDATION BID SET
10/12/2016	ISSUED FOR DOB
02/05/2016	DOB FILING SET

Number:	Date:	Revision:
---------	-------	-----------

Project: **City View Tower at  
Court Square**  
23-15 44th Drive  
Long Island City, NY 11101

Client: Cityview Tower LLC  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
(718) 321-8652

Architect:

**HILL | WEST**  
**ARCHITECTS**  
11 BROADWAY  
17TH FLOOR  
NEW YORK, NY 10004  
T. 212 213 8007

Consultant:


**DESIMONE  
CONSULTING ENGINEERS**  
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New York, NY, 10005  
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**Cosentini Associates**  
Two Pennsylvania Plaza, 3rd FL,  
New York, NY 10121  
(212) 615-3600

**Whitehall**  
11 Broadway, 17th Floor  
New York, NY 10004  
(212) 908-4940

OB STAMPS & SIGNATURES:

WG TITLE: LIGHTING  
36TH FLOOR LIGHTING PLAN  
(MECHANICAL LEVEL)

REAL & SIGNATURE: 	DATE: 09/15/2017
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PROJECT #: 150318

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

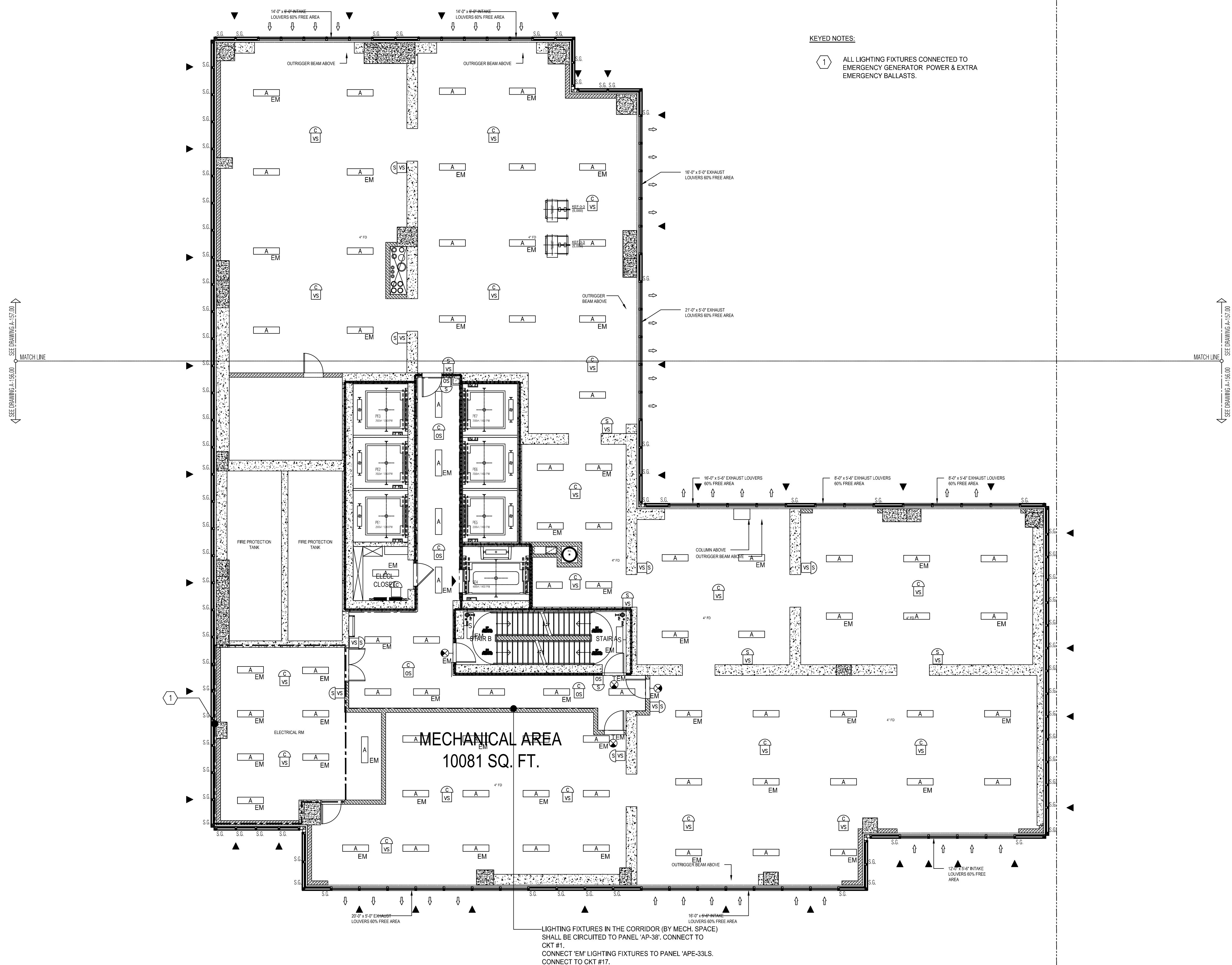
**EN-236.00**

DWG NO.

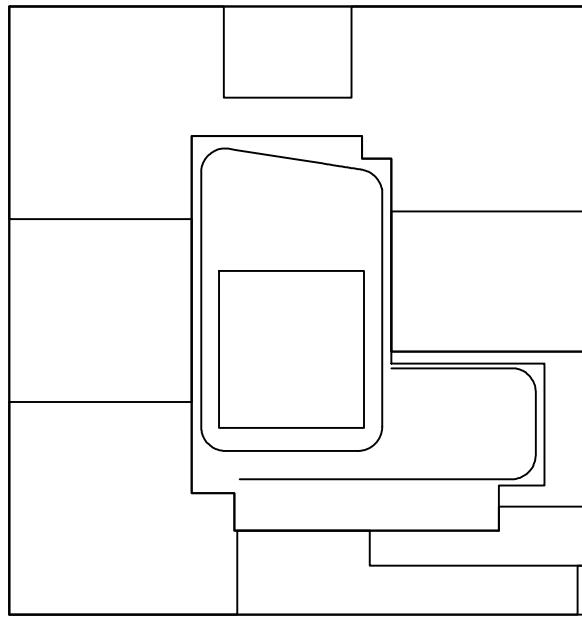
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 $(0'-0'', 0'-0''')$





KEY PLAN

NOTES:

NOT FOR CONSTRUCTION

10/06/2017	65,625 FOR DOB
08/05/2017	95% CD SET
06/02/2017	95% CD SET
03/24/2017	50% CD SUBMISSION SET
01/02/2017	SUBMITTAL SET
01/25/2017	65,625 FOR DOB
11/17/2016	FAÇADE PRING SET
11/17/2016	100% CD FOUNDATION BD SET
10/12/2016	65,625 FOR DOB
02/06/2016	DOB FILING SET

Number: Date: Revision:

Project:  
**City View Tower at Court Square**  
23-15 44th Drive  
Long Island City, NY 11101

Client:  
**Cityview Tower LLC**  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
(718) 321-8652

Architect:  
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ARCHITECTS  
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Consultant:  
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**Cosentini Associates**  
Two Pennsylvania Plaza, 3rd FL,  
New York, NY 10121  
(212) 615-3600  
**Whitehall**  
11 Broadway, 17th Floor  
New York, NY 10004  
(212) 908-4940

DOB STAMPS & SIGNATURES:

DWG TITLE:  
**LIGHTING**  
37TH FLOOR LIGHTING PLAN

SEAL & SIGNATURE: DATE: 08/15/2017  
PROJECT #: 193018  
SCALE: 1/8" = 1'-0"  
**EN-237.00**  
DWG NO. 19 OF 27

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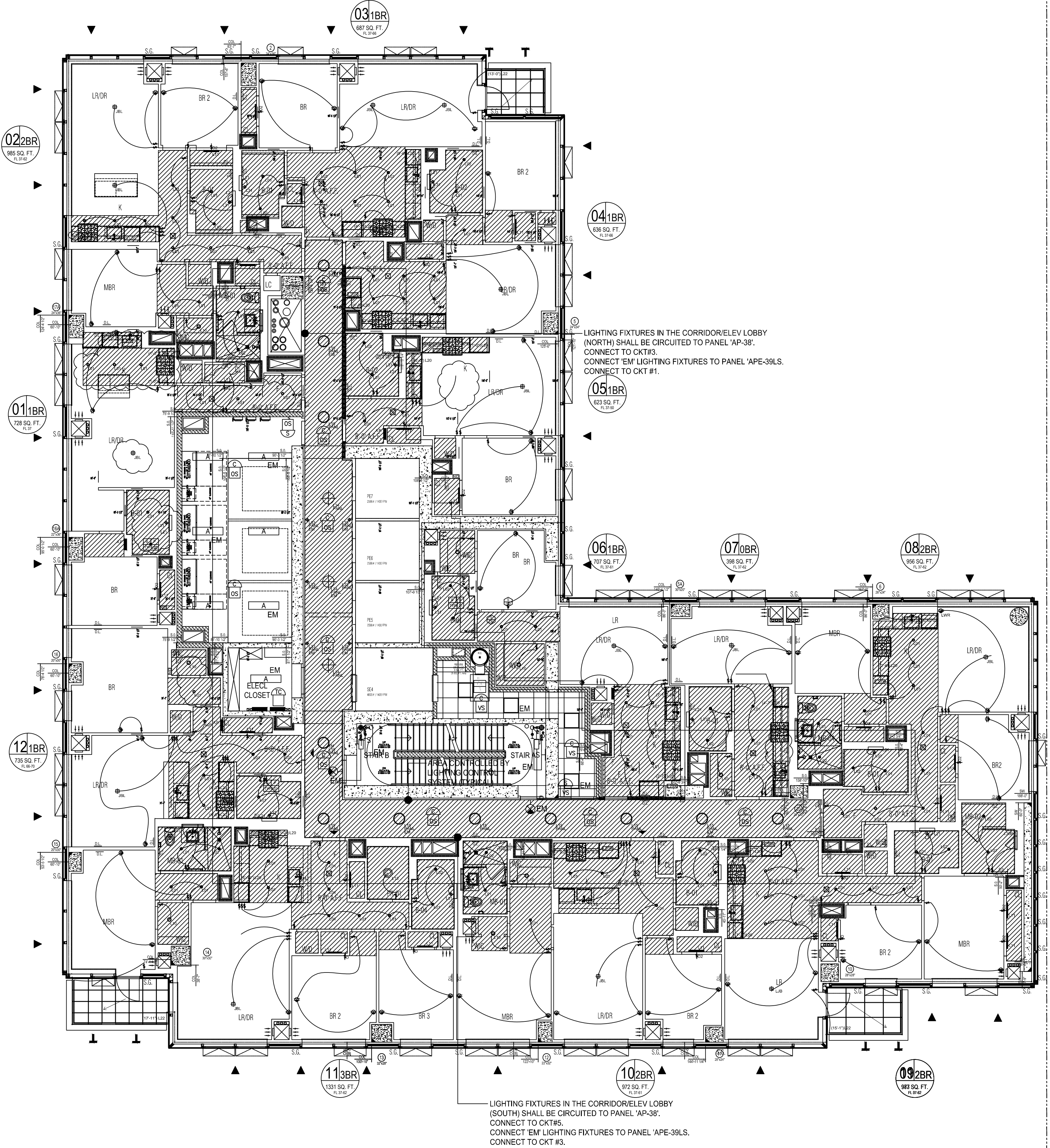
**LIGHTING NOTES:**

**WIRING NOTES:**

- EACH STAIR: CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL POWER LIGHTING PANEL BOARD. PROVIDE EMERGENCY BALLAST AND BATTERY PACK (ABLE TO OPERATE AT FULL LOAD FOR MIN. OF 90 MINUTES) AS REQUIRED BY THE CODE. CIRCUIT SEPARATELY EACH STAIRS WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB.
- ROOMS WITH STAND ALONE OCCUPANCY SENSORS SHALL OPERATE AS A "MANUAL – ON, AUTO – OFF" SYSTEM. CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL LIGHTING PANEL. WIRE WITH 2#12 AWG, &1#12G CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM OF 1200W FOR FLUORESCENT LIGHTING FIXTURES OR 600W FOR LED TYPE LIGHTING FIXTURES.
- WIRE SWITCHABLE LIGHTING FIXTURES TO ELECTRICAL LIGHTING PANELS SERVING THE FLOOR WITH 2#12 AWG & 1#12G CU WIRES IN 3/4" CONDUIT PER CIRCUIT. CONNECT EACH CIRCUIT TO 20A, 1P CIRCUIT BREAKER. QUANTITIES OF CIRCUITS SHALL ACCOMMODATE RESPECTIVE LOADS (AS MENTIONED IN POINT 2).
- WIRE EXIT SIGNS TO ONE UNSWITCHABLE CIRCUIT ORIGINATING AT ELECTRICAL LIGHTING PANEL SERVING THE FLOOR WITH 2#12 AWG & 1#12G, CU IN 1/2" CONDUIT. CONNECT CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 15 EXIST SIGNS TO EACH CIRCUIT
- MEP ROOMS – IF NOT INDICATED ON DRAWINGS PROVIDE LOCAL MANUAL SWITCHES. PROVIDE A MINIMUM OF (1) ONE NORMAL SWITCH FOR EVERY 500 SQUARE FEET TO ALLOW OCCUPANTS FOR MANUAL ON/OFF OPERATION. IF VACANCY SWITCHES ARE INDICATED ON THE DRAWINGS – (MANUAL ON/ AUTO OFF) SET THE "AUTO OFF" MODE TIME TO THE MAXIMUM CODE ALLOWED SET UP. WIRE ALL LIGHTS TO NEAREST 120V EMERGENCY LIGHTING PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE ROOM. WIRE WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 1200W TO EACH CIRCUIT.
- EXTERIOR/ FAÇADE MOUNTED NORMAL ARCHITECTURAL ACCENT LIGHTING FIXTURES– CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.
- EXTERIOR/ FAÇADE MOUNTED ILLUMINATED SIGNS – CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH 2#10 AWG & 1#10G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.
- REFER TO LIGHTING SCHEDULE AND SPECIFICATIONS FOR CATALOG NUMBER, FINISHED REQUIRED, VOLTAGE, LOADS, WIRE AND OTHER CONTROL REQUIREMENTS.
- ALL LIGHTING FIXTURES WITH SUBSCRIPT "EM" SHALL BE PROVIDED WITH EMERGENCY BALLAST AND BATTERY PACK. PROVIDE BATTERY PACKS TO SUPPORT OPERATION OF EACH LIGHTING FIXTURE FOR MINIMUM OF 90 MINUTES AT FULL LOAD, AS REQUIRED BY THE CODE.
- RUN GROUND WIRE WITH EACH LIGHTING CIRCUIT WHETHER IT IS INDICATED ON THE DRAWING OR NOT.
- ALL TASK LIGHTS AND UNDER CABINET LIGHTING FIXTURES SHALL BE PROVIDED WITH DEDICATED LOCAL SWITCH. FURNISH DEDICATED SWITCHES FOR ALL FIXTURES NOT EQUIPPED WITH FACTORY INSTALLED MANUAL CONTROL DEVICE.
- REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS.
- ALL CORRIDOR LIGHTING SHALL BE CONTROLLED BY OCCUPANCY SENSOR.
- "EM" INDICATES LIGHTING FIXTURES ON EMERGENCY POWER.
- FOR CORRIDOR AND EXIT SIGNS CIRCUITING SEE DRAWINGS E–305 THRU E–307.
- FOR LIGHTING FIXTURE SCHEDULES SEE DRAWING–404.
- FOR PANEL LOCATIONS SEE POWER DRAWINGS.

**ENERGY CODE NOTES:**

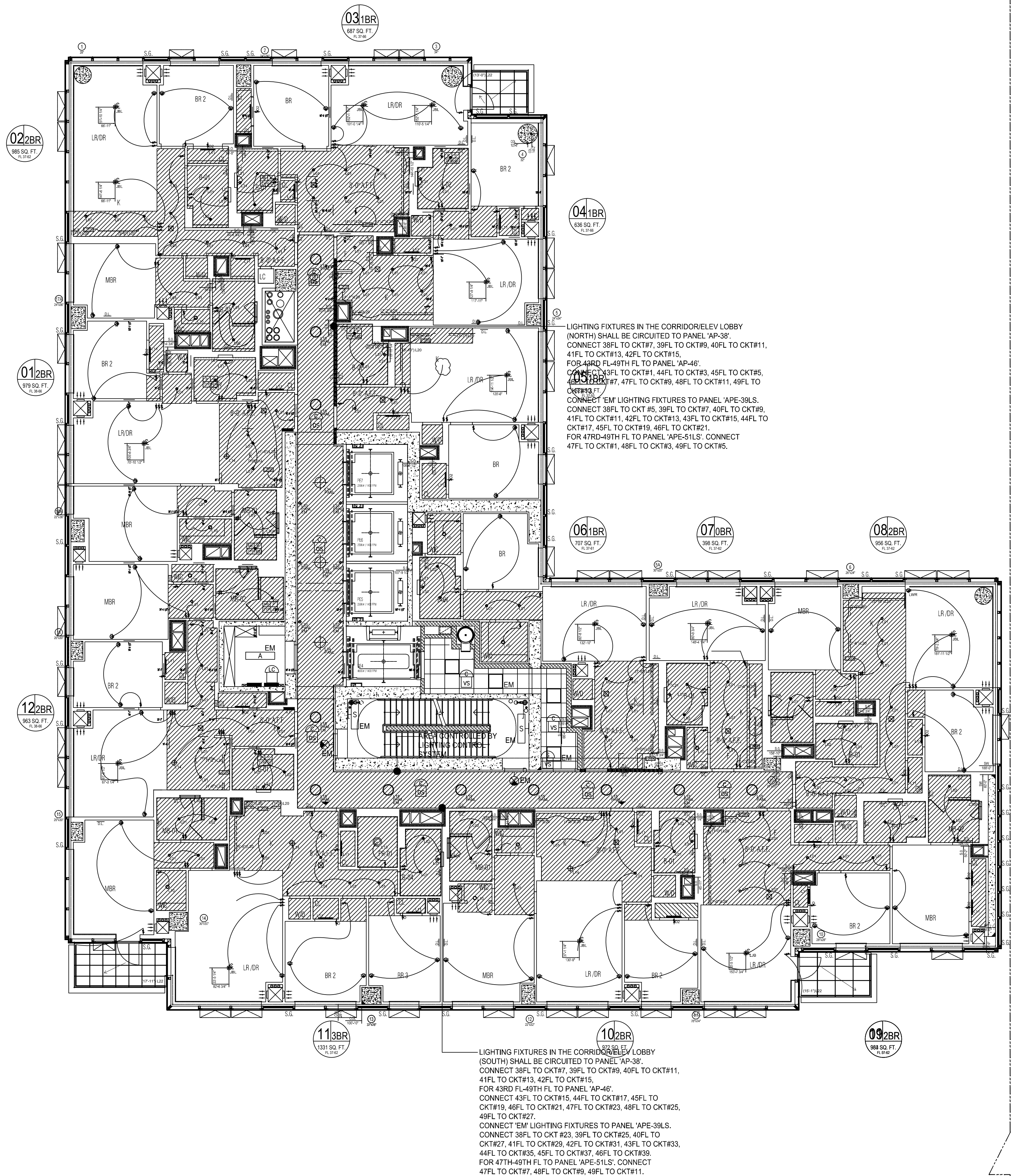
- EACH AREA ENCLOSED BY WALLS OR FLOOR TO CEILING PARTITIONS SHALL HAVE AT LEAST ONE MANUAL CONTROL FOR THE LIGHTING SERVING THAT AREA. THE REQUIRED CONTROLS SHALL BE LOCATED WITHIN THE AREA SERVED BY THE CONTROLS.
- ALL "FRONT OF THE HOUSE AREAS" INCLUDING RECEPTION AND CORRIDOR AREAS WILL BE CONTINUOUSLY LIT DURING IMAGING FACILITY WORKING HOURS AND SHALL BE TIMER CONTROLLED. CONTRACTOR TO CIRCUIT ALL LIGHTING ZONES (DIMMED AND SWITCHED) TO LIGHTING CONTROL PANEL WITH 2#12 AWG & 1#12G, CU IN 1/2" CONDUIT.
- EACH AREA ENCLOSED BY WALLS OR PARTITIONS AND NOT DESIGNATED AS CONTINUOUS OPERATION SHALL HAVE MANUAL CONTROLS ALLOWING REDUCTION OF THE CONNECTED LIGHTING LOADS BY 50 PERCENT (DUAL SWITCHING), AS REQUIRED BY NYC ENERGY CONSERVATION CODE.
- EACH OFFICE AND BACK OF THE HOUSE AREA ENCLOSED BY WALLS OR FULL HEIGHT (FLOOR TO CEILING) PARTITIONS IN ADDITION TO MANUAL CONTROLS SHALL BE PROVIDED WITH VACANCY SENSORS OPERATING ON MANUAL ON/ AUTO OF BASIS, AS REQUIRED BY THE NYC ENERGY CONSERVATION CODE.



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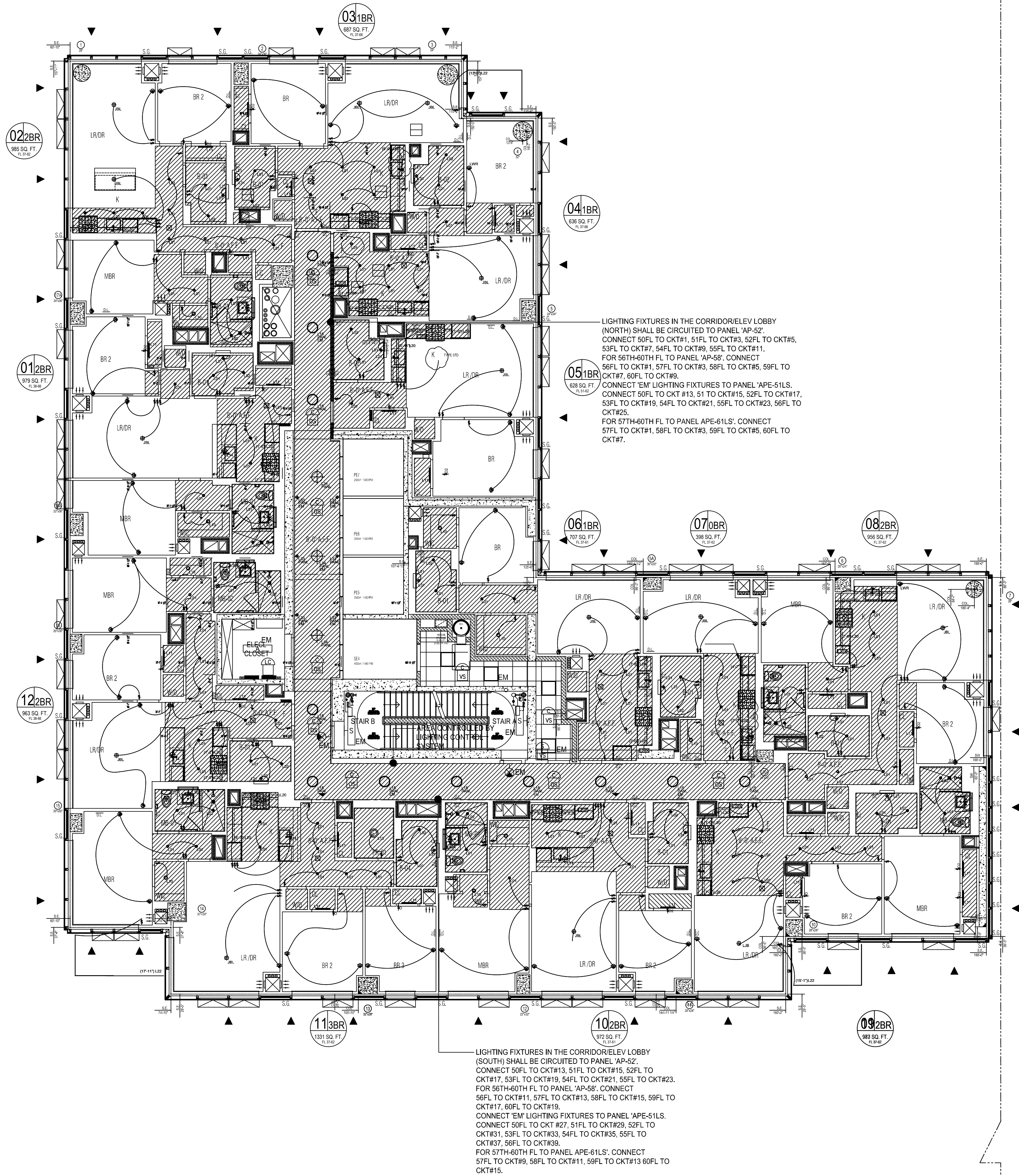


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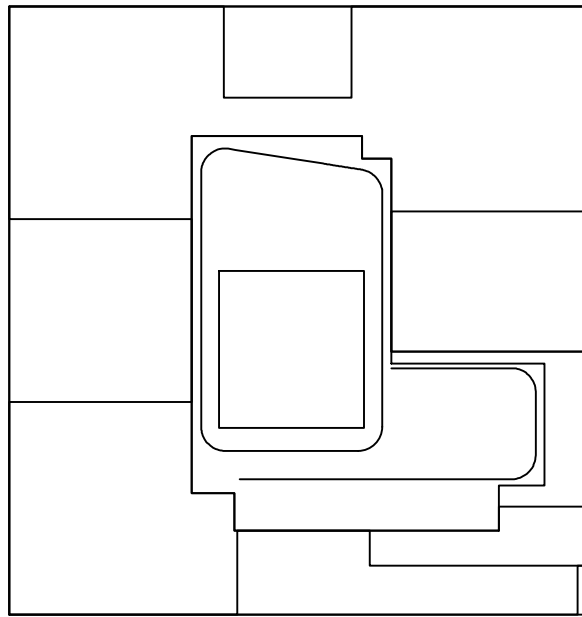


- LIGHTING NOTES:**
- WIRING NOTES:**
1. EACH STAIR: CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL POWER LIGHTING PANEL BOARD. PROVIDE EMERGENCY BALLAST AND BATTERY PACK (ABLE TO OPERATE AT FULL LOAD FOR MIN. OF 90 MINUTES) AS REQUIRED BY THE CODE. CIRCUIT SEPARATELY EACH STAIRS WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB.
  2. ROOMS WITH STAND ALONE OCCUPANCY SENSORS SHALL OPERATE AS A "MANUAL - ON, AUTO - OFF" SYSTEM. CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL LIGHTING PANEL. WIRE WITH 2#12 AWG, & 1#12G CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM OF 1200W FOR FLUORESCENT LIGHTING FIXTURES OR 600W FOR LED TYPE LIGHTING FIXTURES.
  3. WIRE SWITCHABLE LIGHTING FIXTURES TO ELECTRICAL LIGHTING PANELS SERVING THE FLOOR WITH 2#12 AWG & 1#12G CU WIRES IN 3/4" CONDUIT PER CIRCUIT. CONNECT EACH CIRCUIT TO 20A, 1P CIRCUIT BREAKER. QUANTITIES OF CIRCUITS SHALL ACCOMMODATE RESPECTIVE LOADS (AS MENTIONED IN POINT 2).
  4. WIRE EXIT SIGNS TO ONE UNSWITCHABLE CIRCUIT ORIGINATING AT ELECTRICAL LIGHTING PANEL SERVING THE FLOOR WITH 2#12 AWG & 1#12G, CU IN 3/4" CONDUIT. CONNECT CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 15 EXIST SIGNS TO EACH CIRCUIT
  5. MEP ROOMS - IF NOT INDICATED ON DRAWINGS PROVIDE LOCAL MANUAL SWITCHES. PROVIDE A MINIMUM OF (1) ONE NORMAL SWITCH FOR EVERY 500 SQUARE FEET TO ALLOW OCCUPANTS FOR MANUAL ON/OFF OPERATION. IF VACANCY SWITCHES ARE INDICATED ON THE DRAWINGS - (MANUAL ON/ AUTO OFF) SET THE "AUTO OFF" MODE TIME TO THE MAXIMUM CODE ALLOWED SET UP. WIRE ALL LIGHTS TO NEAREST 120V EMERGENCY LIGHTING PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE ROOM. WIRE WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 1200W TO EACH CIRCUIT.
  6. EXTERIOR/ FACADE MOUNTED NORMAL ARCHITECTURAL ACCENT LIGHTING FIXTURES- CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.
  7. EXTERIOR/ FACADE MOUNTED ILLUMINATED SIGNS - CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH 2#10 AWG & 1#10G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.
  8. REFER TO LIGHTING SCHEDULE AND SPECIFICATIONS FOR CATALOG NUMBER, FINISHED REQUIRED, VOLTAGE, LOADS, WIRE AND OTHER CONTROL REQUIREMENTS.
  9. ALL LIGHTING FIXTURES WITH SUBSCRIPT "EM" SHALL BE PROVIDED WITH EMERGENCY BALLAST AND BATTERY PACK. PROVIDE BATTERY PACKS TO SUPPORT OPERATION OF EACH LIGHTING FIXTURE FOR MINIMUM OF 90 MINUTES AT FULL LOAD, AS REQUIRED BY THE CODE.
  10. RUN GROUND WIRE WITH EACH LIGHTING CIRCUIT WHETHER IT IS INDICATED ON THE DRAWING OR NOT.
  11. ALL TASK LIGHTS AND UNDER CABINET LIGHTING FIXTURES SHALL BE PROVIDED WITH DEDICATED LOCAL SWITCH. FURNISH DEDICATED SWITCHES FOR ALL FIXTURES NOT EQUIPPED WITH FACTORY INSTALLED MANUAL CONTROL DEVICE.
  12. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS.
  13. ALL CORRIDOR LIGHTING SHALL BE CONTROLLED BY OCCUPANCY SENSOR.
  14. "EM" INDICATES LIGHTING FIXTURES ON EMERGENCY POWER.
  15. FOR CORRIDOR AND EXIT SIGNS CIRCUITING SEE DRAWINGS E-305 THRU E-307.
  16. FOR LIGHTING FIXTURE SCHEDULES SEE DRAWING-404.
  17. FOR PANEL LOCATIONS SEE POWER DRAWINGS.
- ENERGY CODE NOTES:**
1. EACH AREA ENCLOSED BY WALLS OR FLOOR TO CEILING PARTITIONS SHALL HAVE AT LEAST ONE MANUAL CONTROL FOR THE LIGHTING SERVING THAT AREA. THE REQUIRED CONTROLS SHALL BE LOCATED WITHIN THE AREA SERVED BY THE CONTROLS.
  2. ALL "FRONT OF THE HOUSE AREAS" INCLUDING RECEPTION AND CORRIDOR AREAS WILL BE CONTINUOUSLY LIT DURING IMAGING FACILITY WORKING HOURS AND SHALL BE TIMER CONTROLLED. CONTRACTOR TO CIRCUIT ALL LIGHTING ZONES (DIMMED AND SWITCHED) TO LIGHTING CONTROL PANEL WITH 2#12 AWG & 1#12G, CU IN 3/4" CONDUIT.
  3. EACH AREA ENCLOSED BY WALLS OR PARTITIONS AND NOT DESIGNATED AS CONTINUOUS OPERATION SHALL HAVE MANUAL CONTROLS ALLOWING REDUCTION OF THE CONNECTED LIGHTING LOADS BY 50 PERCENT (DUAL SWITCHING), AS REQUIRED BY NYC ENERGY CONSERVATION CODE.
  4. EACH OFFICE AND BACK OF THE HOUSE AREA ENCLOSED BY WALLS OR FULL HEIGHT (FLOOR TO CEILING) PARTITIONS IN ADDITION TO MANUAL CONTROLS SHALL BE PROVIDED WITH VACANCY SENSORS OPERATING ON MANUAL ON/ AUTO OF BASIS, AS REQUIRED BY THE NYC ENERGY CONSERVATION CODE.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ASHRAE 90.1 2013 AS MODIFIED BY 2016 NYCECC APPENDIX C.

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KEY PLAN

NOTES:

NOT FOR CONSTRUCTION

10/06/2017	65.63 FOR DOB
08/05/2017	95% CO SET
08/02/2017	95% CO SET
03/24/2017	95% CO SUBMISSION SET
01/02/2017	SUBMITTAL SET
01/25/2017	65.63 FOR DOB
11/17/2016	FACADE PRELIM SET
11/17/2016	95% CO FOUNDATION BD SET
10/12/2016	65.63 FOR DOB
03/02/2016	DOB FILING SET

Number:	Date:	Revision:
Project: City View Tower at Court Square 23-15 44th Drive Long Island City, NY 11101		
Client: Cityview Tower LLC 112-15 NORTHERN BLVD, CF-2 CORONA, NY 11368 (718) 321-8652		
Architect: <b>HILL   WEST</b> ARCHITECTS 11 BROADWAY 17TH FLOOR NEW YORK, NY 10004 T. 212 213 8007		

Consultant: <b>DESIMONE</b> <b>CONSULTING ENGINEERS</b> 140 Broadway 25th Floor New York, NY 10005 (212) 532-2211 <b>Cosentini Associates</b> Two Pennsylvania Plaza, 3rd FL. New York, NY 10121 (212) 615-3600 <b>Whitehall</b> 11 Broadway, 17th Floor New York, NY 10004 (212) 908-4940
---

DOB STAMPS & SIGNATURES:

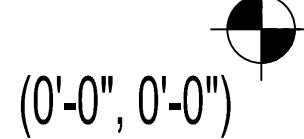
DWG TITLE:  
LIGHTING  
50TH - 60TH FLOORS LIGHTING PLAN

SEAL & SIGNATURE:	DATE: 08/15/2017
PROJECT # 139318	SCALE: 1/8" = 1'-0"
EN-250.00	DWG NO.
21 OF 27	





**NOTES:**



- ENERGY CODE NOTES:**
1. EACH AREA ENCLOSED BY WALLS OR FLOOR TO CEILING PARTITIONS SHALL HAVE AT LEAST ONE MANUAL CONTROL FOR THE LIGHTING SERVING THAT AREA. THE REQUIRED CONTROLS SHALL BE LOCATED WITHIN THE AREA SERVED BY THE CONTROLS.
  2. ALL "FRONT OF THE HOUSE AREAS" INCLUDING RECEPTION AND CORRIDOR AREAS WILL BE CONTINUOUSLY LIT DURING IMAGING FACILITY WORKING HOURS AND SHALL BE TIMER CONTROLLED. CONTRACTOR TO CIRCUIT ALL LIGHTING ZONES (DIMMED AND SWITCHED) TO LIGHTING CONTROL PANEL WITH 2#12 AWG & 1#12G, CU IN 1/2" CONDUIT.
  3. EACH AREA ENCLOSED BY WALLS OR PARTITIONS AND NOT DESIGNATED AS CONTINUOUS OPERATION SHALL HAVE MANUAL CONTROLS ALLOWING REDUCTION OF THE CONNECTED LIGHTING LOADS BY 50 PERCENT (DUAL SWITCHING), AS REQUIRED BY NYC ENERGY CONSERVATION CODE.
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TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ASHRAE 90.1 2013 AS MODIFIED BY 2016 NYCECC APPENDIX CA.

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22 OF 27





**NOTES:**



10/06/2017	ISSUED FOR DOB
09/15/2017	90% CD SET
06/02/2017	85% CD SET
03/24/2017	50% CD SUBMISSION SET
01/27/2017	SUPERSTRUCTURE SET
01/25/2017	ISSUED FOR DOB
11/17/2016	FACADE PRICING SET
10/11/2016	100% DD/FOUNDATION BID SET
10/12/2016	ISSUED FOR DOB
02/05/2016	DOB FILING SET

Rev:	Date:	Revision:
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City View Tower at  
Court Square  
23-15 44th Drive  
Long Island City, NY 11101

Cityview Tower LLC  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
(718) 321-8652

architect:

**HILL | WEST**  
**ARCHITECTS**  
11 BROADWAY  
17TH FLOOR  
NEW YORK, NY 10004  
T. 212 213 8007

consultant:

**ESIMONE  
CONSULTING ENGINEERS**  
1 Broadway 25th Floor  
New York, NY, 10005  
(212) 532-2211

**Posentini Associates**  
200 Pennsylvania Plaza, 3rd FL.,  
New York, NY 10121  
(212) 615-3600

**Whitehall**  
Broadway, 17th Floor  
New York, NY 10004  
(212) 908-4940

STAMPS &amp; SIGNATURES:

TITLE: LIGHTING  
62ND - 66TH FLOORS LIGHTING PLAN

NAME	DATE
ADDRESS	TELEPHONE
CITY	STATE
COUNTY	ZIP
POST OFFICE	
MAILING ADDRESS	
DATE	
SIGNATURE	

DATE: 09/15/2017

STATE OF NEW YORK CLERK	PROJECT #	100210
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SCALE:  $1/8" = 1'-0"$

FN 202 00

FN-707 11



EN 60100  
DWG NO.

23 OF 27

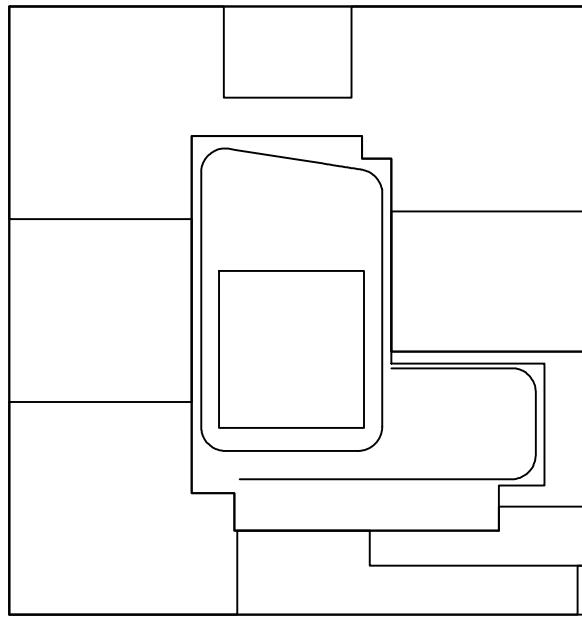
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KEY PLAN

NOTES:

NOT FOR CONSTRUCTION

10/03/2017	65-LED FOR DOB
08/15/2017	95% CB SET
08/02/2017	95% CB SET
03/24/2017	50% CB SUBMISSION SET
01/02/2017	SUPPLEMENTARY SET
01/25/2017	65-LED FOR DOB
11/17/2016	FACADE PRELIM SET
11/17/2016	100% DOB FOUNDATION BD SET
10/12/2016	65-LED FOR DOB
02/03/2016	DOB FILING SET

Number: Date: Revision:

Project:

City View Tower at  
Court Square  
23-15 44th Drive  
Long Island City, NY 11101

Client:

Cityview Tower LLC  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
(718) 321-8652

Architect:

HILL | WEST  
ARCHITECTS  
11 BROADWAY  
17TH FLOOR  
NEW YORK, NY 10004  
T. 212 213 8007

Consultant:

DESIMONE  
CONSULTING ENGINEERS  
140 Broadway 25th Floor  
New York, NY 10005  
(212) 532-2211

Cosentini Associates

Two Pennsylvania Plaza, 3rd FL,  
New York, NY 10121  
(212) 615-3600

Whitehall

11 Broadway, 17th Floor  
New York, NY 10004  
(212) 908-4940

DOB STAMPS & SIGNATURES:

DWG TITLE:

LIGHTING  
67TH FLOOR LIGHTING PLAN

SEAL & SIGNATURE:



DATE: 08/15/2017

PROJECT #:

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

EN-267.00

DWG NO. 24 OF 27

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LIGHTING NOTES:

WIRING NOTES:

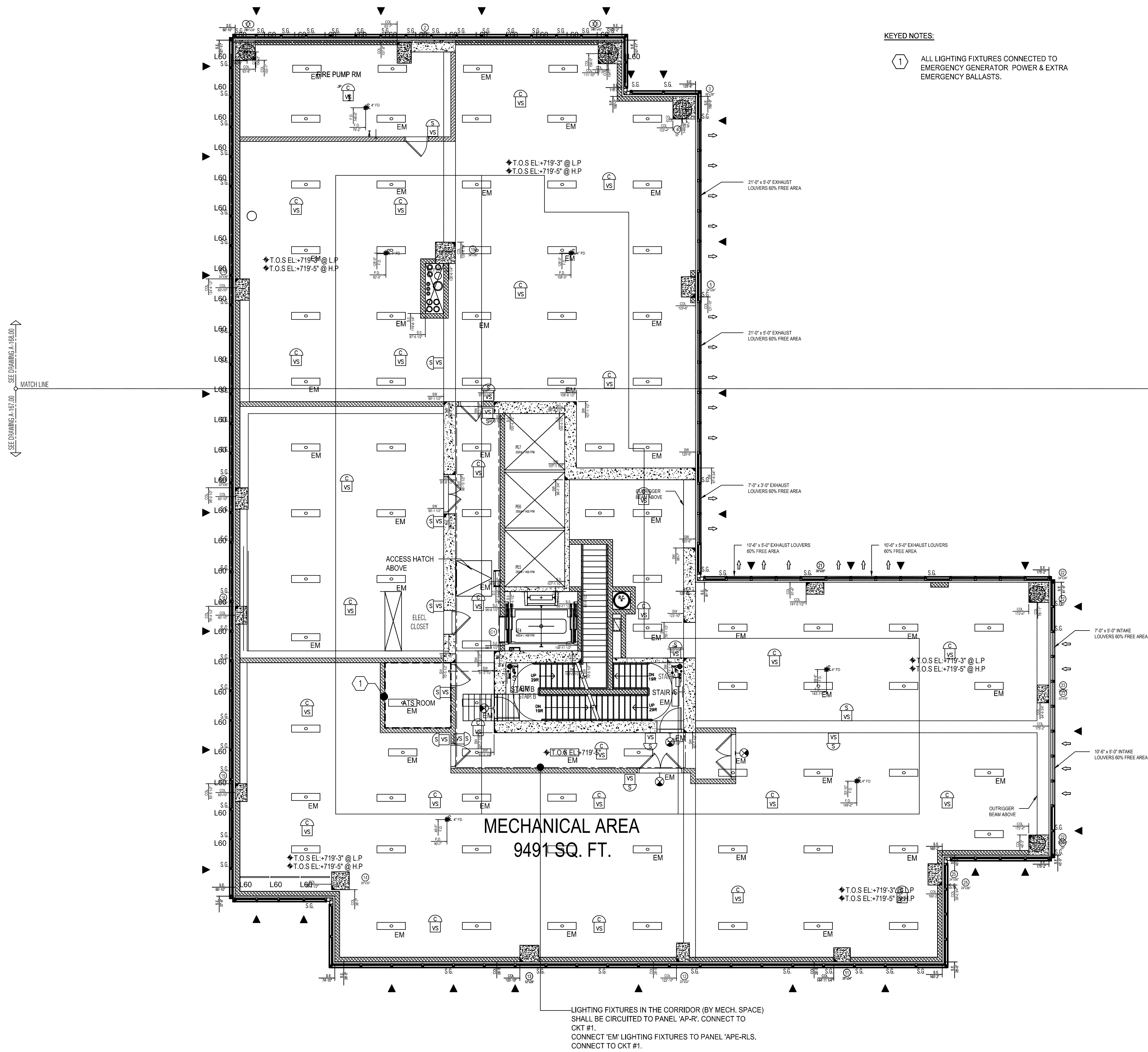
1. EACH STAIR: CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL POWER LIGHTING PANEL BOARD. PROVIDE EMERGENCY BALLAST AND BATTERY PACK (ABLE TO OPERATE AT FULL LOAD FOR MIN. OF 90 MINUTES) AS REQUIRED BY THE CODE. CIRCUIT SEPARATELY EACH STAIRS WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB.
2. ROOMS WITH STAND ALONE OCCUPANCY SENSORS SHALL OPERATE AS A "MANUAL – ON, AUTO – OFF" SYSTEM. CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL LIGHTING PANEL. WIRE WITH 2#12 AWG, & 1#12G CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM OF 1200W FOR FLUORESCENT LIGHTING FIXTURES OR 600W FOR LED TYPE LIGHTING FIXTURES.
3. WIRE SWITCHABLE LIGHTING FIXTURES TO ELECTRICAL LIGHTING PANELS SERVING THE FLOOR WITH 2#12 AWG & 1#12G CU WIRES IN 3/4" CONDUIT PER CIRCUIT. CONNECT EACH CIRCUIT TO 20A, 1P CIRCUIT BREAKER. QUANTITIES OF CIRCUITS SHALL ACCOMMODATE RESPECTIVE LOADS (AS MENTIONED IN POINT 2).
4. WIRE EXIT SIGNS TO ONE UNSWITCHABLE CIRCUIT ORIGINATING AT ELECTRICAL LIGHTING PANEL SERVING THE FLOOR WITH 2#12 AWG & 1#12G, CU IN 3/4" CONDUIT. CONNECT CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 15 EXIST SIGNS TO EACH CIRCUIT
5. MEP ROOMS – IF NOT INDICATED ON DRAWINGS PROVIDE LOCAL MANUAL SWITCHES. PROVIDE A MINIMUM OF (1) ONE NORMAL SWITCH FOR EVERY 500 SQUARE FEET TO ALLOW OCCUPANTS FOR MANUAL ON/OFF OPERATION. IF VACANCY SWITCHES ARE INDICATED ON THE DRAWINGS – (MANUAL ON/ AUTO OFF) SET THE "AUTO OFF" MODE TIME TO THE MAXIMUM CODE ALLOWED SET UP. WIRE ALL LIGHTS TO NEAREST 120V EMERGENCY LIGHTING PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE ROOM. WIRE WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 1200W TO EACH CIRCUIT.
6. EXTERIOR/ FACADE MOUNTED NORMAL ARCHITECTURAL ACCENT LIGHTING FIXTURES – CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.
7. EXTERIOR/ FACADE MOUNTED ILLUMINATED SIGNS – CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH 2#10 AWG & 1#10G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.
8. REFER TO LIGHTING SCHEDULE AND SPECIFICATIONS FOR CATALOG NUMBER, FINISHED REQUIRED, VOLTAGE, LOADS, WIRE AND OTHER CONTROL REQUIREMENTS.
9. ALL LIGHTING FIXTURES WITH SUBSCRIPT "EM" SHALL BE PROVIDED WITH EMERGENCY BALLAST AND BATTERY PACK. PROVIDE BATTERY PACKS TO SUPPORT OPERATION OF EACH LIGHTING FIXTURE FOR MINIMUM OF 90 MINUTES AT FULL LOAD, AS REQUIRED BY THE CODE.
10. RUN GROUND WIRE WITH EACH LIGHTING CIRCUIT WHETHER IT IS INDICATED ON THE DRAWING OR NOT.
11. ALL TASK LIGHTS AND UNDER CABINET LIGHTING FIXTURES SHALL BE PROVIDED WITH DEDICATED LOCAL SWITCH. FURNISH DEDICATED SWITCHES FOR ALL FIXTURES NOT EQUIPPED WITH FACTORY INSTALLED MANUAL CONTROL DEVICE.
12. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS.
13. ALL CORRIDOR LIGHTING SHALL BE CONTROLLED BY OCCUPANCY SENSOR.
14. "EM" INDICATES LIGHTING FIXTURES ON EMERGENCY POWER.
15. FOR CORRIDOR AND EXIT SIGNS CIRCUITING SEE DRAWINGS E-305 THRU E-307.
16. FOR LIGHTING FIXTURE SCHEDULES SEE DRAWING-404.
17. FOR PANEL LOCATIONS SEE POWER DRAWINGS.

ENERGY CODE NOTES:

1. EACH AREA ENCLOSED BY WALLS OR FLOOR TO CEILING PARTITIONS SHALL HAVE AT LEAST ONE MANUAL CONTROL FOR THE LIGHTING SERVING THAT AREA. THE REQUIRED CONTROLS SHALL BE LOCATED WITHIN THE AREA SERVED BY THE CONTROLS.
2. ALL "FRONT OF THE HOUSE AREAS" INCLUDING RECEPTION AND CORRIDOR AREAS WILL BE CONTINUOUSLY LIT DURING IMAGING FACILITY WORKING HOURS AND SHALL BE TIMER CONTROLLED. CONTRACTOR TO CIRCUIT ALL LIGHTING ZONES (DIMMED AND SWITCHED) TO LIGHTING CONTROL PANEL WITH 2#12 AWG & 1#12G, CU IN 3/4" CONDUIT.
3. EACH AREA ENCLOSED BY WALLS OR PARTITIONS AND NOT DESIGNATED AS CONTINUOUS OPERATION SHALL HAVE MANUAL CONTROLS ALLOWING REDUCTION OF THE CONNECTED LIGHTING LOADS BY 50 PERCENT (DUAL SWITCHING), AS REQUIRED BY NYC ENERGY CONSERVATION CODE.
4. EACH OFFICE AND BACK OF THE HOUSE AREA ENCLOSED BY WALLS OR FULL HEIGHT (FLOOR TO CEILING) PARTITIONS IN ADDITION TO MANUAL CONTROLS SHALL BE PROVIDED WITH VACANCY SENSORS OPERATING ON MANUAL ON/ AUTO OF BASIS, AS REQUIRED BY THE NYC ENERGY CONSERVATION CODE.

KEYED NOTES:

- 1 ALL LIGHTING FIXTURES CONNECTED TO EMERGENCY GENERATOR POWER & EXTRA EMERGENCY BALLASTS.



(0'-0", 0'-0")





**NOTES:**

10/06/2017	ISSUED FOR DOB
09/15/2017	90% CD SET
06/02/2017	85% CD SET
03/24/2017	50% CD SUBMISSION SET
01/27/2017	SUPERSTRUCTURE SET
01/25/2017	ISSUED FOR DOB
11/17/2016	FACADE PRICING SET
11/11/2016	100% CD/FOUNDATION BID SET
10/12/2016	ISSUED FOR DOB
02/05/2016	DOB FILING SET

Project:

Cityview Tower LLC  
112-15 NORTHERN BLVD, CF-2  
CORONA, NY 11368  
(718) 321-8652


consultant:

**ESIMONE  
CONSULTING ENGINEERS**  
10 Broadway, 25th Floor  
New York, NY, 10005  
(2) 532-2211

**rosentini Associates**  
One Pennsylvania Plaza, 3rd FL.,  
New York, NY 10121  
(2) 615-3600

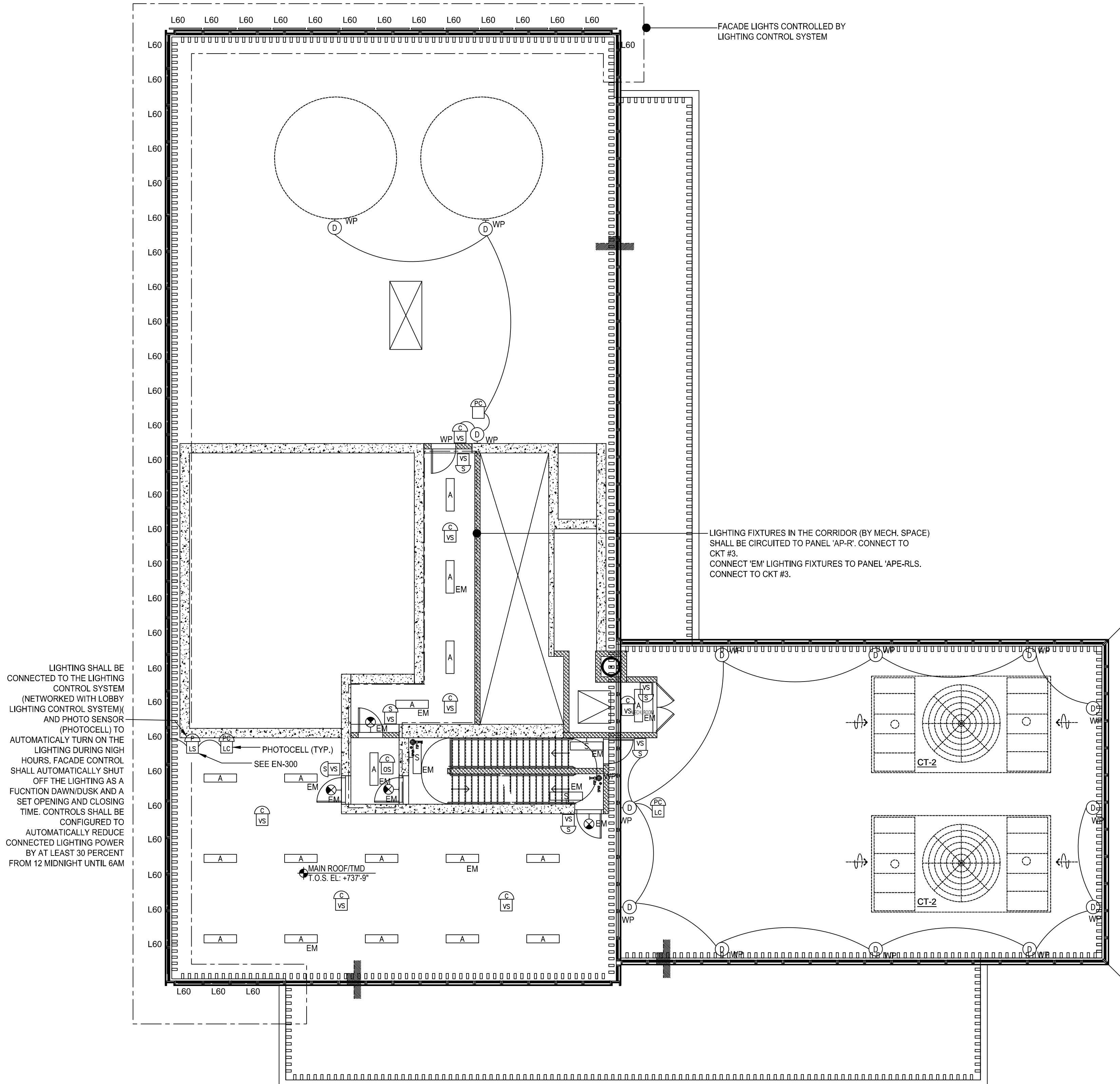
**whitehall**  
Broadway, 17th Floor  
New York, NY 10004  
(2) 908-4940

TITLE: LIGHTING  
ROOF LIGHTING PLAN

	PROJECT #:	150318
	SCALE:	1/8" = 1'-0"

25 OF 27

- ENERGY CODE NOTES:**
1. EACH AREA ENCLOSED BY WALLS OR FLOOR TO CEILING PARTITIONS SHALL HAVE AT LEAST ONE MANUAL CONTROL FOR THE LIGHTING SERVING THAT AREA. THE REQUIRED CONTROLS SHALL BE LOCATED WITHIN THE AREA SERVED BY THE CONTROLS.
  2. ALL "FRONT OF THE HOUSE AREAS" INCLUDING RECEPTION AND CORRIDOR AREAS WILL BE CONTINUOUSLY UT DURING IMAGING FACILITY WORKING HOURS AND SHALL BE TIMER CONTROLLED. CONTRACTOR TO CIRCUIT ALL LIGHTING ZONES (DIMMED AND SWITCHED) TO LIGHTING CONTROL PANEL WITH #212 AWG & #1262, CU IN 3/4" CONDUIT.
  3. EACH AREA ENCLOSED BY WALLS OR PARTITIONS AND NOT DESIGNATED AS CONTINUOUS OPERATION SHALL HAVE MANUAL CONTROLS ALLOWING REDUCTION OF THE CONNECTED LIGHTING LOADS BY 50 PERCENT (DUAL SWITCHING), AS REQUIRED BY NYC ENERGY CONSERVATION CODE.
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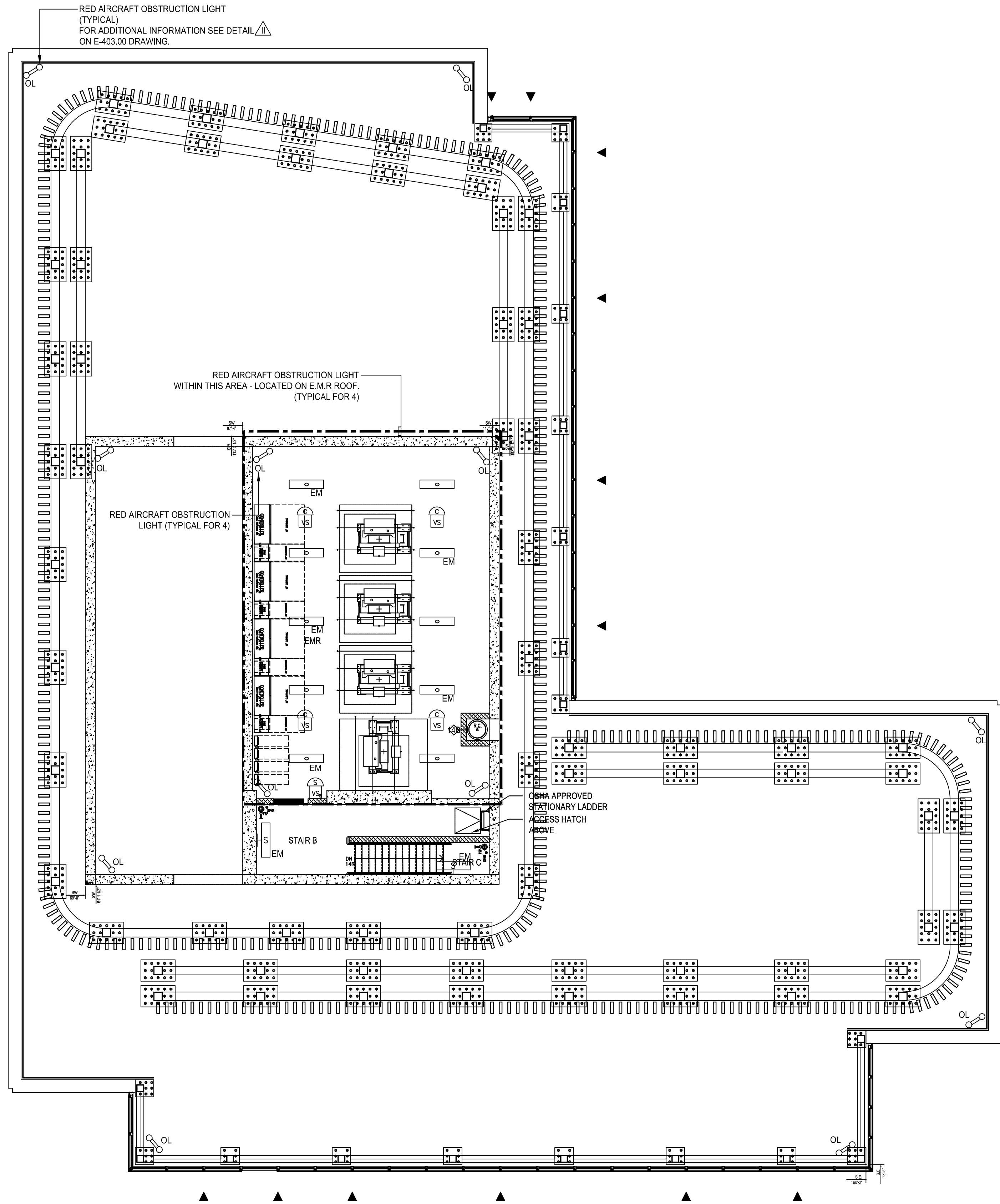
TO THE BEST OF MY KNOWLEDGE, BELIEF AND  
PROFESSIONAL JUDGEMENT, THESE PLANS AND  
SPECIFICATIONS ARE IN COMPLIANCE WITH ASHRAE  
90.1 2013 AS MODIFIED BY 2016 NYCECC APPENDIX  
CA.

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FILE NAME I:\50318\Energy Modeling\Submission\EN\20170922 EN Response\EN\50318\EN269 (EMR).dwg SAVED ON 8/25/2017 11:19 AM PLOTTED ON 10/3/2017 5:36 PM PLOTTED BY CHU, JING

(0'-0", 0'-0")



#### LIGHTING NOTES:

##### WIRING NOTES:

1. EACH STAIR: CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL POWER LIGHTING PANEL BOARD. PROVIDE EMERGENCY BALLAST AND BATTERY PACK (ABLE TO OPERATE AT FULL LOAD FOR MIN. OF 90 MINUTES) AS REQUIRED BY THE CODE. CIRCUIT SEPARATELY EACH STAIRS WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB.
2. ROOMS WITH STAND ALONE OCCUPANCY SENSORS SHALL OPERATE AS A "MANUAL - ON, AUTO - OFF" SYSTEM. CIRCUIT ALL LIGHTING FIXTURES TO NEAREST 120V NORMAL LIGHTING PANEL. WIRE WITH 2#12 AWG, & 1#12G CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM OF 1200W FOR FLUORESCENT LIGHTING FIXTURES OR 600W FOR LED TYPE LIGHTING FIXTURES.
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5. MEP ROOMS - IF NOT INDICATED ON DRAWINGS PROVIDE LOCAL MANUAL SWITCHES. PROVIDE A MINIMUM OF (1) ONE NORMAL SWITCH FOR EVERY 500 SQUARE FEET TO ALLOW OCCUPANTS FOR MANUAL ON/OFF OPERATION. IF VACANCY SWITCHES ARE INDICATED ON THE DRAWINGS - (MANUAL ON/ AUTO OFF) SET THE "AUTO OFF" MODE TIME TO THE MAXIMUM CODE ALLOWED SET UP. WIRE ALL LIGHTS TO NEAREST 120V EMERGENCY LIGHTING PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE ROOM. WIRE WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAXIMUM 1200W TO EACH CIRCUIT.
6. EXTERIOR/ FACADE MOUNTED NORMAL ARCHITECTURAL ACCENT LIGHTING FIXTURES- CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH 2#12 AWG & 1#12G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.
7. EXTERIOR/ FACADE MOUNTED ILLUMINATED SIGNS - CONTROL VIA LIGHTING CONTROL SYSTEM (PROGRAMMABLE RELAY PANEL) ON BMS TIMECLOCK. WIRE ALL LIGHTS TO NEAREST 120V NORMAL LIGHTING PANEL VIA RESPECTIVE SWITCHING RELAY PANEL. PROVIDE BRANCH CIRCUITS QUANTITIES AS REQUIRED FOR THE RESPECTIVE AREA. WIRE WITH 2#10 AWG & 1#10G, CU WIRES IN 3/4" CONDUIT. CONNECT EACH CIRCUIT TO 20A, 1P CB. CONNECT MAX 1200W TO EACH CIRCUIT.
8. REFER TO LIGHTING SCHEDULE AND SPECIFICATIONS FOR CATALOG NUMBER, FINISHED REQUIRED, VOLTAGE, LOADS, WIRE AND OTHER CONTROL REQUIREMENTS.
9. ALL LIGHTING FIXTURES WITH SUBSCRIPT "EM" SHALL BE PROVIDED WITH EMERGENCY BALLAST AND BATTERY PACK. PROVIDE BATTERY PACKS TO SUPPORT OPERATION OF EACH LIGHTING FIXTURE FOR MINIMUM OF 90 MINUTES AT FULL LOAD, AS REQUIRED BY THE CODE.
10. RUN GROUND WIRE WITH EACH LIGHTING CIRCUIT WHETHER IT IS INDICATED ON THE DRAWING OR NOT.
11. ALL TASK LIGHTS AND UNDER CABINET LIGHTING FIXTURES SHALL BE PROVIDED WITH DEDICATED LOCAL SWITCH. FURNISH DEDICATED SWITCHES FOR ALL FIXTURES NOT EQUIPPED WITH FACTORY INSTALLED MANUAL CONTROL DEVICE.
12. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS.
13. ALL CORRIDOR LIGHTING SHALL BE CONTROLLED BY OCCUPANCY SENSOR.
14. "EM" INDICATES LIGHTING FIXTURES ON EMERGENCY POWER.
15. FOR CORRIDOR AND EXIT SIGNS CIRCUITING SEE DRAWINGS E-305 THRU E-307.
16. FOR LIGHTING FIXTURE SCHEDULES SEE DRAWINGE-404.
17. FOR PANEL LOCATIONS SEE POWER DRAWINGS.

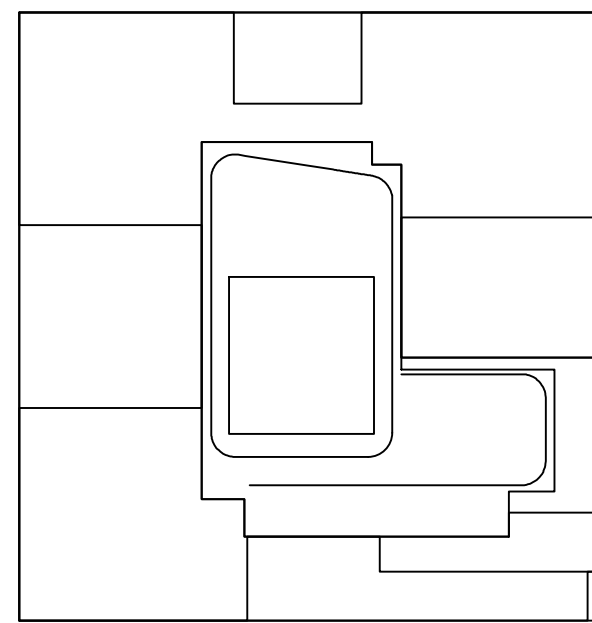
#### ENERGY CODE NOTES:

1. EACH AREA ENCLOSED BY WALLS OR FLOOR TO CEILING PARTITIONS SHALL HAVE AT LEAST ONE MANUAL CONTROL FOR THE LIGHTING SERVING THAT AREA. THE REQUIRED CONTROLS SHALL BE LOCATED WITHIN THE AREA SERVED BY THE CONTROLS.
2. ALL "FRONT OF THE HOUSE AREAS" INCLUDING RECEPTION AND CORRIDOR AREAS WILL BE CONTINUOUSLY LIT DURING IMAGING FACILITY WORKING HOURS AND SHALL BE TIMER CONTROLLED. CONTRACTOR TO CIRCUIT ALL LIGHTING ZONES (DIMMED AND SWITCHED) TO LIGHTING CONTROL PANEL WITH 2#12 AWG & 1#12G, CU IN 3/4" CONDUIT.
3. EACH AREA ENCLOSED BY WALLS OR PARTITIONS AND NOT DESIGNATED AS CONTINUOUS OPERATION SHALL HAVE MANUAL CONTROLS ALLOWING REDUCTION OF THE CONNECTED LIGHTING LOADS BY 50 PERCENT (DUAL SWITCHING), AS REQUIRED BY NYC ENERGY CONSERVATION CODE.
4. EACH OFFICE AND BACK OF THE HOUSE AREA ENCLOSED BY WALLS OR FULL HEIGHT (FLOOR TO CEILING) PARTITIONS IN ADDITION TO MANUAL CONTROLS SHALL BE PROVIDED WITH VACANCY SENSORS OPERATING ON MANUAL ON/ AUTO OF BASIS, AS REQUIRED BY THE NYC ENERGY CONSERVATION CODE.

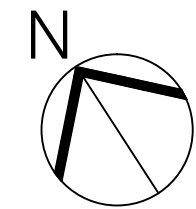
Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ASHRAE 90.1 2013 AS MODIFIED BY 2016 NYCDC APPENDIX CA.

\*THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES\*



#### KEY PLAN



#### NOTES:

#### NOT FOR CONSTRUCTION

10/06/2017	65.67 FOR DOB
08/15/2017	95% CD SET
08/02/2017	95% CD SET
03/24/2017	50% CD SUBMISSION SET
01/02/2017	SUPPLEMENTARY SET
01/25/2017	65.67 FOR DOB
11/17/2016	FACADE PRELIM SET
11/17/2016	100% CD FOUNDATION BD SET
10/12/2016	65.67 FOR DOB
02/03/2016	DOB FILING SET

Number: Date: Revision:

Project:

**City View Tower at Court Square**  
23-15 44th Drive  
Long Island City, NY 11101

Client:

**Cityview Tower LLC**  
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New York, NY 10004  
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DOB STAMPS & SIGNATURES:

DWG TITLE:

**LIGHTING**  
EMR LIGHTING PLAN

SEAL & SIGNATURE:



DATE: 08/15/2017

PROJECT #

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

**EN-269.00**  
DWG NO.



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2 Court Square  
Fixture Schedule

Note: Verify all components and quantities. Refer to product specifications for complete fixture data.

FixtureType	Fixture Specification	Lamp Specification	Fixture Wattage	Load Type	Fixture Voltage	Accessories	Mounting
L01	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	12w	ELV	120		Recessed
L02	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	12w	ELV	120		Recessed
L05	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 85 CRI, 1039 lm	15.5w	0-10V	120		Recessed
L06	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 1200 lm	15.1w	Phase Dimmable	120	Requires Flush Mount Adapter	Recessed
L07	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 2000 lm	27w	Phase Dimmable	120	Requires Flush Mount Adapter	Recessed
L08	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 100 lm	2w	0-10V	120		Recessed
L09	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 80+ CRI, 3275 lm	38w	0-10V	120		Recessed
L10	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 1000 lm	14.4w		120		Surface
L11	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 85 CRI, 925 lm	14w	NON-DIM	120		Surface

85% CD  
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2 Court Square  
Fixture Schedule

Note: Verify all components and quantities. Refer to product specifications for complete fixture data.

FixtureType	Fixture Specification	Lamp Specification	Fixture Wattage	Load Type	Fixture Voltage	Accessories	Mounting
L25	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90+ CRI, 762 lm	8.9w/LF	MLV	24VDC	CHS-5-1208 (Channel), CWS-5-2010 (Channel)	Surface
L25X	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	N/A	95w	MLV	120		Surface
L26	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90+ CRI, 262 lm	5w/LF	MLV	24VDC	CHS-5-1208 (Channel), CWS-5-2010 (Channel)	Surface
L26X	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	N/A	95w	MLV	120		Surface
L28	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K 85+ CRI LED	7.5w/LF	Phase Dimmable	24VDC		Recessed
L29A	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 440V, 327 lm	15w	ELV	120-277		Surface
L29B	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 440V, 327 lm	4w	ELV	120-277		Surface
L30A	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 367 lm	15w	MLV	24VDC	CHS-5-1215 (Channel), CWS-5-2010 (Channel)	Surface

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2 Court Square  
Fixture Schedule

Note: Verify all components and quantities. Refer to product specifications for complete fixture data.

FixtureType	Fixture Specification	Lamp Specification	Fixture Wattage	Load Type	Fixture Voltage	Accessories	Mounting
L39	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	E27 LED Candle lamp, 330-350 lm (Included)	24w	ELV	120		Suspended
L40	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	E27 LED Candle lamp, 330-350 lm (Included)	4w	ELV	240		Surface
L41	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	E27 LED Candle lamp, 330-350 lm (Included)	4w	ELV	240		Suspended
L42	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	150w	INC	120V		Surface
L43	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	100w	INC	120V		Surface
L44	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	150w	INC	120V		Surface
L45	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	27w	ELV	120		Suspended
L46	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	150w	INC	120V		Suspended

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2 Court Square  
Fixture Schedule

Note: Verify all components and quantities. Refer to product specifications for complete fixture data.

FixtureType	Fixture Specification	Lamp Specification	Fixture Wattage	Load Type	Fixture Voltage	Accessories	Mounting
L61	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 80+ CRI, 1200 lm	30w	0-10V	120-277		Surface
L62	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED	8.5w	MLV	12VAC		Surface
L62X	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 85 CRI, 1039 lm	15.5w	MLV	120		Surface
L63	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 85 CRI, 1039 lm	15w/LF	NON-DIM	380		Surface
L63X	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 85 CRI, 1039 lm	15w/LF	NON-DIM	380		Surface
L64	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 85 CRI, 1039 lm	15w/LF	NON-DIM	380		Surface
L64X	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 85 CRI, 1039 lm	15w/LF	NON-DIM	380		Surface
L65	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 85 CRI, 1039 lm	200w		120		Surface
L66	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 275 lm	9w	MLV	120		Recessed

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2 Court Square  
Fixture Schedule

Note: Verify all components and quantities. Refer to product specifications for complete fixture data.

FixtureType	Fixture Specification	Lamp Specification	Fixture Wattage	Load Type	Fixture Voltage	Accessories	Mounting
L13	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	18w	ELV	120		Surface
L14	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	60w	INC	120V		Surface
L15	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	18w	NON-DIM	120		Surface
L20	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 367 lm	4.4w/LF	MLV	24VDC	CHS-5-1215 (Channel), CWS-5-2010 (Channel)	Surface
L20X	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 367 lm	95w	ELV	120		Surface
L21	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 354 lm	4.5w/LF	ELV	120	CHW-5-3535 (Channel)	Surface
L22	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 354 lm	4.5w	ELV	120	CHW-5-3535 (Channel)	Surface
L23	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 421 lm	2.9w/LF	0-10V	24VDC	Channel 004, Linear Optic Lens	Surface
L24	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 80+ CRI, 550 lm	7w/LF		120		Recessed

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2 Court Square  
Fixture Schedule

Note: Verify all components and quantities. Refer to product specifications for complete fixture data.

FixtureType	Fixture Specification	Lamp Specification	Fixture Wattage	Load Type	Fixture Voltage	Accessories	Mounting
L30B	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90+ CRI, 367 lm	55w	MLV	24VDC	CHS-5-1215 (Channel), CWS-5-2010 (Channel)	Surface
L30X	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90+ CRI, 367 lm	95w	MLV	120		Surface
L31	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90+ CRI, 367 lm	5.5w		120		Surface
L32	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 85 CRI	8.6w	0-10V	120-277		Surface
L33	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 85 CRI	100w	INC	120V		Surface
L34	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 85 CRI	9w	ELV	120		Surface
L35	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 85 CRI	6w	NON-DIM	120		Surface
L37	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 85 CRI	60w		120		Suspended
L38	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 3000K LED, 85 CRI	44w		120		Suspended

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2 Court Square  
Fixture Schedule

Note: Verify all components and quantities. Refer to product specifications for complete fixture data.

FixtureType	Fixture Specification	Lamp Specification	Fixture Wattage	Load Type	Fixture Voltage	Accessories	Mounting
L47	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	150w		120		Surface
L48	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	150w		120		Surface
L51	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	11w	ELV	120		Recessed
L52	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	12w	ELV	120		Recessed
L55	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	2.9w/LF	TBD	120V		Ceiling Suspended
L56	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	123w	ELV	120		Recessed
L60	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	29w/LF	NON-DIM	380VDC		Surface
L60X	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	29w/LF	NON-DIM	380VDC		Surface

85% CD  
Release: Jun 2, 2017  
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2 Court Square  
Fixture Schedule

Note: Verify all components and quantities. Refer to product specifications for complete fixture data.

FixtureType	Fixture Specification	Lamp Specification	Fixture Wattage	Load Type	Fixture Voltage	Accessories	Mounting
L66X	Pharos Lighting Light Fixture 14" Round (11m) (OR EQUAL)	Integral 2700K LED, 90 CRI, 800 lm	150w		120		Surface

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BACK-OF-HOUSE LIGHTING FIXTURE LIST

FIXTURE TYPE DESIGNATION	FIXTURE DESCRIPTION	FIXTURE MANUFACTURERS & CATALOG NUMBERS	QUANTITY PER FIXTURE	DESIGNATION (LAMP MANUFACTURERS ABBREVIATION)	VOLTS	VOLT AMPS
A	4' SURFACE OR PENDANT MOUNTED FLOURESCENT INDUSTRIAL FIXTURE WITH WHITE BAKED ENAMEL REFLECTOR. REFLECTOR ALLOWS 10%-20% UPLIGHT.	DAYBRITE NF1232-PP-1/2-EB-120; COLUMBIA KL-4-232-EBB-120-NY-20GA; METALUX DIM-232-120-EBB1-20GA-REP; CROWNLINE 100-232-73.	2	F032/835 ECO.	120	70
D	VAPORTIGHT INCANDESCENT JAR LIGHT, WALL OR CEILING-MOUNTED, AS INDICATED ON DRAWINGS. UL WET LOCATION LISTED.	WALL-MOUNT: CANLET GWF-151-G-GHC; RIG-A-LITE CVPH-151-12-HR-GC; HUBBELL VVX151VCG15.	1	100W A21.	120	150
E	EXPLOSION-PROOF INCANDESCENT JAR LIGHT, WALL OR CEILING-MOUNTED, AS INDICATED ON DRAWINGS. UL WET LOCATION LISTED, AND UL 844 HAZARDOUS LOCATIONS LISTED FOR CLASS 1, DIVISION 2, GROUPS A, B, C, D.	WALL-MOUNT: CANLET GWF-151-G-GHC; RIG-A-LITE CVPH-151-12-HR-GC; HUBBELL VVX151VCG15.	1	100W A21.	120	150
XA	CEILING-MOUNTED, SINGLE-FACE EXIT SIGN - DIE-CAST ALUMINUM HOUSING CANOPY-MOUNTED TO CEILING. SATIN ALUMINUM STENOIL FACE WITH DIFFUSER BEHIND. ELECTRONICS FOR LED'S CONTAINED WITHIN HOUSING. 8" LETTERS PER NYC	ATLITE AUKA BRUSHED ALUM. MODIFY CATALOGUE NUMBER AS REQUIRED FOR ORCUITED VOLTAGE.	N/A	RED LED	120/277	0.9
D	4' SURFACE OR PENDANT MOUNTED FLOURESCENT INDUSTRIAL FIXTURE WITH WHITE BAKED ENAMEL REFLECTOR. REFLECTOR ALLOWS 10%-20% UPLIGHT.	DAYBRITE NF1232-PP-1/2-EB-120; COLUMBIA KL-4-232-EBB-120-NY-20GA; METALUX DIM-232-120-EBB1-20GA-REP; CROWNLINE 100-232-73.	2	F032/835 ECO.	120	70
S	WALL OR CEILING SURFACE MOUNTED FLOURESCENT FIXTURE 4' LONG WITH RECESSED CLEAR ACRYLIC DIFFUSER. B-LEVEL LUMINAIRE CONTROLLED BY AN INTEGRAL ULTRASONIC OCCUPANCY SENSOR SWITCHES LAMP TO 30% OUTPUT WHEN STAIR IS UNOCCUPIED AND 100% OUTPUT WHEN OCCUPANCY IS DETECTED. INTEGRAL EMERGENCY BATTERY PACK.	LAMAR LIGHTING VO-2-32-XX-OB-U-PA-2C,F0,AS-8"X48"-F32B STAIRWELL CONTRACTOR TO ORDER. FEATURES: WITH UNOCCUPIED SENSOR SWITCH SET AT 30% OUTPUT.	2	F32TB	120	70
T	4' SURFACE OR PENDANT MOUNTED FLOURESCENT INDUSTRIAL FIXTURE WITH WHITE BAKED ENAMEL REFLECTOR. REFLECTOR ALLOWS 10%-20% UPLIGHT.	DAYBRITE NF1232-PP-1/2-EB-120; COLUMBIA KL-4-232-EBB-120-NY-20GA; METALUX DIM-232-120-EBB1-20GA-REP; CROWNLINE 100-232-73.	2	F032/835 ECO.	120	70

SYMBOL	DESCRIPTION	NOTES
1	WALL BOX TYPE COMBINATION VACANCY SENSOR AND SWITCH. LINE OF SIGHT COVERAGE OF 300 SQUARE FEET MINIMUM. DEVICE SHALL HAVE SELECTABLE MANUAL-ON AND AUTO-ON MODES. DEVICE SHALL BE SELF-ADJUSTING, RATED FOR LINE-VOLTAGE SWITCHING OF 800VA DUAL.	SENSORS WILL SHUT OFF LIGHTING WHEN 20 MINUTES OF INACTIVITY IS RECORDED.
2	CEILING MOUNT DUAL TECHNOLOGY OCCUPANCY SENSOR. SENSOR SHALL PROVIDE LINE OF SIGHT COVERAGE OF 1000 SQUARE FEET MINIMUM. SENSOR SHALL BE SELF-ADJUSTING. WHERE LIGHTING LOAD EXCEEDS THE SWITCHING CAPACITY OF THE SENSOR, PROVIDE POWER PACKS AS REQUIRED PER MANUFACTURERS RECOMMENDATIONS. EACH POWER PACK SHALL BE SUITABLE FOR SWITCHING LINE-VOLTAGE 20A LOAD.	WHERE MULTIPLE SENSORS ARE LOCATED IN A SPACE, CONNECT ALL SENSORS IN THE SPACE TO THE ASSOCIATED POWER PACKS. PROVIDE INTERCONNECTING CIRCUITRY PER MANUFACTURER'S REQUIREMENTS. MOUNT SENSOR A MINIMUM OF 4 FEET FROM AIR SUPPLY REGISTERS. WHERE LOCATED IN A CORRIDOR, PROVIDE SENSOR WITH APPROPRIATE COVERAGE PATTERN. SENSORS WILL SHUT OFF LIGHTING WHEN 20 MINUTES OF INACTIVITY IS RECORDED.
3	CEILING MOUNT DUAL TECHNOLOGY VACANCY SENSOR. USED IN COMBINATION WITH WALL MOUNTED TOGGLE SWITCH. SENSOR DETECTS ROOM VACANCY AND TURNS OFF LIGHTS AFTER SET PERIOD OF TIME. SAME SPECIFICATIONS AS OCCUPANCY SENSOR.	SENSORS WILL SHUT OFF LIGHTING WHEN 20 MINUTES OF INACTIVITY IS RECORDED.
4	CEILING MOUNT KENALL SMARTSENSE SENSOR. SENSOR SWITCHES LIGHTS TO 100% WHEN AREA IS OCCUPIED AND TO 30% WHEN AREA IS UNOCCUPIED. SENSOR SHALL PROVIDE LINE OF SIGHT COVERAGE OF 25 FOOT RADIUS. DEVICE TO BE CONNECTED TO KENALL SMARTSENSE LIGHTING CONTROL MODULE.	LIGHTING CONTROL MODULE LIMITED TO 6 SENSORS AND 32 LIGHTING FIXTURES PER MODULE. MODULES MAY BE CONNECTED TOGETHER TO SERVE MORE LIGHTING FIXTURES AND RECEIVE INPUT FROM MORE SENSORS. SENSORS WILL SHUT OFF LIGHTING WHEN 20 MINUTES OF INACTIVITY IS RECORDED.
5	PHOTOCELL - DAYLIGHT CONTROL	

OCCUPANCY/VACANCY SENSOR DETAIL

GENERAL:  
CONTRACTOR SHALL PROVIDE A COMPLETE MICROPROCESSOR BASED LIGHTING CONTROL SYSTEM AS DESCRIBED HEREIN INCLUDING START-UP, PROGRAMMING AND USER OPERATION MANUALS FOR EACH SCHEDULED LIGHTING CONTROL PANEL.

A. SYSTEM DESCRIPTION

THE LIGHTING CONTROL PANEL (LCP) SHALL PROVIDE THE ABILITY TO CONTROL LIGHTING THROUGH THE USE OF LOW VOLTAGE INPUTS AND LATCHING RELAYS. THE PANEL SHALL BE FIELD PROGRAMMABLE BY A USER FRIENDLY INTERNAL OR DEMONSTRABLE PROGRAMMING MODULE.

LEGEND	LIGHTING CONTROL PANEL SCHEDULE
1	ASSOCIATED LIGHTING PANEL(S)
2	DESIGNATION
3	VOLTAGE
4	DESIGNATION
5	VOLTAGE
6	QUANTITY OF RELAYS
7	DESIGNATION
8	VOLTAGE
9	QUANTITY OF RELAYS
10	DESIGNATION
11	VOLTAGE
12	QUANTITY OF RELAYS

NETWORKED LIGHTING CONTROL SYS

STATEMENT OF COMPLIANCE:

TO THE BEST OF MY KNOWLEDGE, AND PERSONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ASHRAE 90.1-2013 AS MODIFIED BY 2016 NYECC APPENDIX CA.

NOTES (MANDATORY PROVISIONS):

- LIGHTING CONTROLS SHALL BE PROVIDED FOR EACH INTERIOR SPACE IN THE BUILDING AS INDICATED ON CONTRACT DRAWINGS. ALL OF THE LIGHTING CONTROL FUNCTIONS SHALL BE AS INDICATED IN BASIS OF DESIGN TABLE INDICATED ON CONTRACT DRAWINGS.
- THERE SHALL BE ONE OR MORE MANUAL LIGHTING CONTROLS IN THE SPACE THAT CONTROLS ALL OF LIGHTING IN THE SPACE AS REQUIRED BY THE CODE.
- THE CONTROL DEVICES SHALL BE READILY ACCESSIBLE AND LOCATED SO THE OCCUPANT CAN SEE THE CONTROLLED LIGHTING WHEN USING THE DEVICE. SWITCHES LOCATED IN REMOTE LOCATIONS FOR SAFETY OR SECURITY SHALL BE EQUIPPED WITH INDICATOR LIGHT AND SHALL BE CLEARLY LABELED TO IDENTIFY CONTROLLED LIGHTING.
- SEQUENCE OF OPERATION FOR MOST LIGHTING FIXTURES IN THE SPACE SHALL BE MANUAL ON/ AUTO OFF.
- MANUAL ON IS NOT REQUIRED WHERE MANUAL ON OPERATION OF THE GENERAL LIGHTING WOULD ENDANGER THE SAFETY OR SECURITY OF THE ROOM OR BUILDING OCCUPANTS.
- CORRIDORS: LIGHTING FIXTURES MARKED "EM" OR "EM/NL" FOR SAFETY AND SECURITY OF OCCUPANTS WILL BE ON 365/24/7. REMAINING LIGHTING FIXTURES BUT NOT NO MORE THAN 50% OF THE LIGHTING POWER FOR GENERAL CORRIDOR LIGHTING SHALL BE AUTOMATICALLY TURNED ON USING OCCUPANCY SENSORS UPON SENSING THE MOVEMENT. THE LIGHTING POWER IN THE CORRIDOR SHALL BE AUTOMATICALLY REDUCED AT LEAST 50% WITHIN 20 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE.
- THE GENERAL LIGHTING IN THE SPACES SHALL BE CONTROLLED AS AS TO PROVIDE AT LEAST ON INTERMEDIATE STEP IN LIGHTING POWER OR CONTINUOUS DIMMING IN ADDITION TO FULL ON/ FULL OFF. STEP SHALL BE BETWEEN 30% AND 70% OF FULL LIGHTING POWER.
- IN ANY SPACE INDICATED ON CONTRACT DRAWINGS SUCH AS MAIN LOBBY WITH SIDELIGHTED AREAS (TYPICALLY PRIMARY SIDELIGHTED AREAS 150W OR GREATER, PRIMARY AND SECONDARY SIDELIGHTED AREAS 300W OR GREATER) THE GENERAL LIGHTING IN THESE SPACES SHALL BE CONTROLLED BY PHOTO CONTROLS WITH THE FOLLOWING CHARACTERISTICS:
  - THE CALIBRATION ADJUSTMENTS SHALL BE READILY ACCESSIBLE.
  - AT MINIMUM, GENERAL LIGHTING IN THE SECONDARY SIDELIGHTED AREA SHALL BE CONTROLLED INDEPENDENTLY OF THE GENERAL LIGHTING IN THE PRIMARY AREAS.
  - THE PHOTOCONTROLS SHALL REDUCE ELECTRIC LIGHTING IN RESPONSE TO AVAILABLE DAYLIGHT USING CONTINUOUS DIMMING OR WITH AT LEAST ONE CONTROL POINT BETWEEN 50% AND 70% OF DESIGN LIGHTING POWER AND SECOND CONTROL POINT BETWEEN 20% AND 40% OF DESIGN LIGHTING POWER OR TO THE LOWEST DIMMING CONTROL TECHNOLOGY ALLOWED, AND THIRD CONTROL POINT THAT TURNS ALL OF THE CONTROLLED LIGHTING OFF.
- BATHROOMS SHALL HAVE A SEPARATE CONTROL DEVICE INSTALLED TO AUTOMATICALLY TURN OFF THE BATHROOM LIGHTING WITHIN 30 MINUTES AFTER ALL OCCUPANTS HAVE LEFT THE BATHROOM. (NIGHT LIGHTING OF UP TO 5W PER BATHROOM IS EXEMPT FROM THIS REQUIREMENT).
- ALL SUPPLEMENTAL TASK LIGHTING, INCLUDING PERMANENTLY INSTALLED UNDERSHELF OR UNDERCABINET LIGHTING, SHALL BE CONTROLLED IN ACCORDANCE WITH CODE SECTION 9.4.1.3 (3).
- EXTERIOR LIGHTING CONTROL. LIGHTING FOR EXTERIOR APPLICATIONS SHALL MEET THE FOLLOWING REQUIREMENTS:
  - ROOF LIGHTING SHALL BE CONTROLLED BY A DEVICE THAT AUTOMATICALLY TURNS OFF THE LIGHTING WHEN SUFFICIENT DAYLIGHT IS AVAILABLE.
  - ALL BUILDING FACADE AND LANDSCAPE LIGHTING SHALL BE AUTOMATICALLY SHUT OFF BETWEEN MIDNIGHT OR BUSINESS CLOSING, WHICHEVER IS LATER, AND 8 A.M. OR BUSINESS OPENING, WHICHEVER COMES FIRST, OR BETWEEN TIMES ESTABLISHED BY THE AUTHORITY HAVING JURISDICTION.
  - LIGHTING NOT SPECIFIED IN (B) AND LIGHTING FOR EXTERIOR SIGNAGE (IF ANY) SHALL BE CONTROLLED BY A DEVICE THAT AUTOMATICALLY REDUCES THE CONNECTED LIGHTING POWER BY AT LEAST 30% FOR AT LEAST ONE OF THE FOLLOWING CONDITIONS:
    - FROM 12 MIDNIGHT OR WITHIN ONE (1) HOUR OF THE END OF BUSINESS OPERATIONS, WHICHEVER IS LATER, UNTIL 6 A.M. OR BUSINESS OPENING, WHICHEVER IS EARLIER
    - DURING ANY PERIOD WHEN NO ACTIVITY HAS BEEN DETECTED FOR A TIME OF NO LONGER THAN 15 MINUTES
- ALL TIME SWITCHES WILL BE CAPABLE OF RETAINING PROGRAMMING AND THE TIME SETTING DURING LOSS OF POWER FOR A PERIOD OF AT LEAST TEN HOURS.
- PER SECTION 9.4.3 (NYC), INTERNALLY ILLUMINATED EXIT SIGNS SHALL NOT EXCEED 5W PER FACE.
- LIGHTING CONTROL DEVICES AND CONTROL SYSTEMS SHALL BE TESTED TO ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED, AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTALLATION INSTRUCTION.
- THE INDIVIDUAL(S) RESPONSIBLE FOR THE FUNCTIONAL TESTING SHALL NOT BE DIRECTLY INVOLVED IN EITHER THE DESIGN OR CONSTRUCTION OF THE PROJECT AND WILL PROVIDE DOCUMENTATION CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET OR EXCEED ALL DOCUMENTED PERFORMANCE CRITERIA.
- AUTOMATIC RECEPTACLES CONTROL IN BACK OF THE HOUSE AREAS: AT LEAST 50% OF ALL 125-VOLT 15 AND 20 AMP RATED RECEPTACLES IN ALL BACK OF THE HOUSE PRIVATE OFFICES, CONFERENCE ROOMS, ROOMS USED PRIMARILY FOR PRINTING AND/OR COPYING FUNCTIONS, BREAKROOMS, CLASSROOMS (IF ANY) AND INDIVIDUAL WORKSTATIONS. THESE RECEPTACLES SHALL BE CONTROLLED BY AN OCCUPANT SENSOR THAT SHALL RECEPTACLE OFF WITHIN 20 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE.
- ALL CONTROLLED RECEPTACLES SHALL BE PERMANENTLY MARKED TO VISUALLY DIFFERENTIATE THEM FROM UNCONTROLLED RECEPTACLES.
- ALL CONTROLLED RECEPTACLES SHALL BE UNIFORMLY DISTRIBUTED THROUGH THE SPACE.
- ELECTRICAL MONITORING:  
AS RESIDENTIAL COMMON AREAS EX



10/05/2017	ISSUED FOR DOB
09/15/2017	90% CO SET
06/02/2017	85% CO SET
03/24/2017	50% CO SUBMISSION SET
01/27/2017	SUPERSTRUCTURE SET
01/25/2017	ISSUED FOR DOB
11/17/2016	FACADE PRICING SET
11/11/2016	100% CO/FOUNDATION BID SET
10/12/2016	ISSUED FOR DOB
02/05/2016	DOB FILING SET

Client: Cityview Tower LLC  
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DWG TITLE:

MECHANICAL  
SCHEDULES SHEET-1

STATE OF NEW YORK  
JUL 1 1964

SCALE: NONE

IV 400.00  
DWG NO.

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<p>TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ASHRAE 90.1 2013 AS MODIFIED BY 2016 NYCECC APPENDIX CA.</p>	<p>* THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES*</p>	<p>Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.</p>
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HEAT RECOVER UNIT (ERV WHEEL) SCHEDULE																																												MWSK EQUIPMENT AS STD			
UNIT NO.	AREA SERVED	LOCATION	TYPE	EVAPORATOR FAN					EXHAUST CFM	COMPRESSOR				COOLING COIL CAPACITY										HOT GAS REHEAT COIL				HEATING COIL CAPACITY				Volts/Ph/Hz		SUMMER WHEEL		WINTER WHEEL		MODEL NO.	MANUFACTURE	EER	REMARKS						
				AIR QTY (CFM)	TOTAL O.A. CFM	EXT SP IN. WG	RPM	FAN QTY		FAN HP	QTY	MCA	MOP	LRA	RLA	TOTAL MBH	SENS MBH	EAT EAT DB F	LAT LAT DB F	EW EWT DB F	LWT LWT DB F	GPM	PD	EAT	LAT	TOTAL MBH	EAT EAT DB F	LAT LAT DB F	EW EWT DB F	LWT LWT DB F	GPM			PD	EAT DB F	RAT DB F	EAT DB F					RAT DB F					
AC-4-1	APARTMENT 0.A (3rd FL. - 6th FL.)	4th FL MER	VERTICAL	5,400	5,400	2	1725	1	5	5,400	2	35.2	45	100	12.6	198.8	150.1	80.1	66	54.9	53.9	85	97	38.4	13.2	54.9	75.6	122.8	391.1	10	76.5	180	160	39.3	7.4	460/3/60	89.9	75	25.8	72	VZWL15G4ATAA-X	MWSK EQUIPMENT	13.5				
AC-4-2	APARTMENT 0.A (3rd FL. - 6th FL.)	4th FL MER	VERTICAL	8,000	8,000	2	1725	2	5	8,000	4	57.7	60	75	9.5	222.4	462	79.9	85.9	54.7	52.9	85	97	62	11.5	54.7	74.1	170.9	590.1	10	77.7	180	160	60	7.3	460/3/60	90.1	75	25.2	72	VZW024G40TAA-X	MWSK EQUIPMENT	13.5				
AC-4-3	APARTMENT 0.A (7th FL. - 19th FL.)	4th FL MER	VERTICAL	10,200	10,200	2	1725	2	7.5	10,200	4	73.7	80	100	12.6	389.6	290.9	80.7	86.5	54.8	54	85	99.8	62	11.4	54.8	74.8	224.6	764	10	78.7	180	160	78	12.2	460/3/60	89.3	75	27.9	72	VZW030G40TAA-X	MWSK EQUIPMENT	13.5				
AC-4-4	APARTMENT 0.A (7th FL. - 19th FL.)	4th FL MER	VERTICAL	19,200	19,200	2	1725	2	15	19,200	4	134.3	150	150	23.1	742.6	544.8	80.9	86.6	55.2	54	85	97	144	7	55.2	75.3	423.7	1480.9	10	80.8	180	151	151	10.5	460/3/60	89.1	75	28	72	VZW060G40TAA-X	MWSK EQUIPMENT	13.5				
AC-36-1	APARTMENT 0.A (20th FL. - 35th FL.)	36th FL MER	VERTICAL	19,300	19,300	2	1725	2	7.5	19,300	4	134.3	150	150	23.1	742.6	544.8	80.9	86.6	55.2	55	85	97	144	7	55.2	75.3	423.7	1480.9	10	80.8	180	160	151	10.5	460/3/60	89.1	75	28.4	72	VZW060G40TAA-X	MWSK EQUIPMENT	13.5				
AC-36-2	APARTMENT 0.A (20th FL. - 35th FL.)	36th FL MER	VERTICAL	10,800	10,800	2	1725	2	7.5	10,800	4	73.7	80	100	12.6	389.6	290.9	80.7	86.5	54.8	54	85	97	78	17.2	54.8	74.8	224.6	764	10	78.7	180	160	78	12.2	460/3/60	89	75	28.6	72	VZW030G40TAA-X	MWSK EQUIPMENT	13.5				
AC-36-3	APARTMENT 0.A (37th FL. - 52nd FL.)	36th FL MER	VERTICAL	16,800	16,800	2	1725	2	10	16,800	4	102.8	110	125	17.9	619.4	467.9	80.4	86.2	55.1	54.1	85	97	118	14.5	55.1	75.4	375.8	1224.7	10	76.9	180	160	128	7.3	460/3/60	89.6	75	26.8	72	VZW050G40TAA-X	MWSK EQUIPMENT	13.5				
AC-36-4	APARTMENT 0.A (37th FL. - 52nd FL.)	36th FL MER	VERTICAL	10,800	10,800	2	1725	2	7.5	10,800	4	73.7	80	100	12.6	389.6	290.9	80.7	86.5	54.8	54	85	97	78	17.2	54.8	74.8	224.6	764	10	78.7	180	160	78	12.2	460/3/60	89	75	28.6	72	VZW030G40TAA-X	MWSK EQUIPMENT	13.5				
AC-67-1	APARTMENT 0.A (53rd FL. - 66th FL.)	67th FL MER	VERTICAL	13,500	13,500	2	1725	2	7.5	13,500	4	91.9	100	114	16.7	501.6	379.2	80.6	86.4	55.1	54.3	85	97.1	96	8.7	55.1	77.8	336.6	1021.6	10	79.4	180	160	98.2	7.8	460/3/60	89.4	75	27.4	72	VZW040G40TAA-X	MWSK EQUIPMENT	13.5				
AC-67-2	APARTMENT 0.A (53rd FL. - 66th FL.)	67th FL MER	VERTICAL	16,800	16,800	2	1725	2	10	16,800	4	102.8	110	125	17.9	619.4	467.9	80.4	86.2	55.1	54.1	85	97	118	14.5	55.1	75.4	375.8	1224.7	10	76.9	180	160	128	7.3	460/3/60	89.6	75	26.8	72	VZW050G40TAA-X	MWSK EQUIPMENT	13.5				
NOTES:																																															
1. PROVIDE R-410a GREEN REFRIGERANT FOR ALL UNITS. 2. 100% OUTSIDE AIR UNIT 3. COATED COIL 4. MODULATING HOT GAS REHEAT. 5. FREEZE BLOCK HOT WATER COIL INCLUDING EXPANSION RELIEF HEADERS EQUIPPED WITH PRESSURE AND TEMPERATURE SENSING VALVES TO PREVENT FREEZE DAMAGE TO THE UNITS AND INSTALL IN FIELD). 6. EXTRA QUIET SOUND PACKAGE. 7. STAINLESS STEEL DRAIN PAN. 8. HOT GAS BYPASS.																																															

VERTICAL HEAT PUMP UNIT SCHEDULE																					"ENVIROTEC" AS STD. (ISLANDAIRE AND HTS APPROVED EQUAL)						
UNIT TYPE	TOTAL COOLING (MBH)	SENSIBLE COOLING (MBH)	CONDENSER WATER				AIR TEMP (°F)		FAN DATA		TOTAL HEAT REJECTION (MBH)	HEATING MODE			COMPRESSOR				MIN. CIRCUIT AMP.	MAX FUSE/HACR	VOLTS/PH/HZ	MODEL NO.	DIMENSIONS	EER	COP	REMARKS	
			EWI	LWT (°F)	GPM	WPD (FT)	ENT.	LVG.	CFM	ESP		EWI	LWT (°F)	HTG (MBH)	QUANTITY	TYPE	RLA	FLA									
A	8.2	6.3	87	101	1.6	7	80	61.7	320	0.05	11.6	70	60	17.6	1	ROTARY	4.7	5.4	6	15	208/1/60	XXX	17"(W)x17"(D)x8"(H)	13	4.3		
B	11.1	8.4	87	101	1.8	7	80	64.6	390	0.05	11.9	70	60	24.7	1	ROTARY	5.6	6.6	7	15	208/1/60	XXX	20"(W)x20"(D)x8"(H)	13	4.3		
C	13.7	11.2	87	101	2	7	80	62.3	570	0.05	19	70	60	28.8	1	ROTARY	6.6	7.6	9	15	208/1/60	XXX	20"(W)x20"(D)x8"(H)	13.2	4.3		
D	17.1	13.4	87	101	2.4	7	80	62.3	655	0.05	23	70	60	28.8	1	ROTARY	6.6	7.6	12	15	208/1/60	XXX	20"(W)x20"(D)x8"(H)	13.2	4.3		
NOTES:																											
1. CAPACITIES INDICATED ARE NOMINAL. ALL UNITS TO BE PROVIDED WITH THERMOSTAT, DISCONNECT SWITCH, EXTENDED RANGE VALVE FOR LOW WATER TEMP OPERATION, AND BE PROVIDED WITH EXTRA QUIET SOUND PACKAGE. UNIT TO BE PROVIDED WITH AUTOMATIC CONTROL/BALANCING VALVE TO CLOSE WATER WHEN UNIT IS OFF.																											
2. ALL UNITS AND COMPONENTS TO BE DESIGNED FOR MINIMUM OF 250 PSI FROM 1ST FLOOR TO 30TH FLOOR AND 200 PSI FROM 31ST FLOOR TO 49TH FLOOR.																											
3. UNITS SERVING MULTIPLE ROOMS TO BE PROVIDED WITH INTERNAL ACOUSTIC LINED 2" THICK BAFFLE TO BALANCE AIR TO DIFFERENT ROOMS.																											

HEAT PUMP UNIT SCHEDULE (AC)																														"FLORIDA" AS STD.									
UNIT TYPE	SERVICE	LOCATION	TONNAGE	TOTAL COOLING (MBH)	SENSIBLE COOLING (MBH)	CONDENSER WATER				AIR TEMP (°F)		MED.SP. FAN DATA		OA CFM	TOTAL HEAT REJECTION (MBH)	HEATING MODE				COMPRESSOR				MIN. CIRCUIT AMP.	MAX FUSE/HACR	FLA	VOLTS/PH/HZ	HP	MODEL NO.	EER	COP	CONFIGURATION	REMARKS						
						EWI	LWT (°F)	GPM	WPD (FT)	ENT.	LVG.	CFM	ESP			EWI	LWT (°F)	HTG (MBH)	QUANTITY	TYPE	RLA	LRA																	
AC-C-1	TELECOM ROOM	CELLAR	5	59	44.7	85	95	15	10.6	75	55	2,000	.5	0	72.5	70	60	73.7	1	SCROLL	7.8	52	13.8	20	11.8	460/3/60	1	LV060-4HZC	13	4.8	HORIZONTAL								
AC-C-2	ELECTRICAL ROOM	CELLAR	5	59	44.7	85	95	15	10.6	75	55	2,000	.5	0	72.5	70	60	73.7	1	SCROLL	7.8	52	13.8	20	11.8	460/3/60	1	LV060-4HZC	13	4.8	HORIZONTAL								
AC-C-3	LOBBY	CELLAR	30	301.4	219.2	85	95	75	18.1	83	57	8,000	1.5	3200	369.8	70	60	366.6	2	SCROLL	18.6	125	50.5	60	45.8	460/3/60	3	EC300-4VTC	13	4.3	VERTICAL								
AC-C-4	TENANT STORAGE	CELLAR	10	119.2	90.2	85	95	28	12.6	75	54	3,800	1.0	0	145.2	70	60	155.4	2	SCROLL	7.8	52	21.9	25	19.9	460/3/60	3	EC120-4HZC-SLSBUA	12.9	5.1	HORIZONTAL								
AC-C-5	COMPACTOR ROOM	CELLAR	2	22.7	17.4	85	95	6.0	12.8	85	55	800	.5	0	27.6	70	60	28.8	1	SCROLL	2.9	30	5.7	15	5.00	460/3/60	.5	LV024-4HZC	13	4.5	HORIZONTAL								
AC-C-6	EXERCISE ROOM	CELLAR	10	123.2	95.47	85	95	24	10	80	55	3800	1.0	1200	156.05	70	60	148.58	2	SCROLL	9.7	3.2	EA	26.4	35	20.3	460/3/60	3	EC120-4HZC-SLSBUA	13	4.3	HORIZONTAL							
AC-C-7	SUPER'S OFFICE	CELLAR	.75	35.8	28.0	85	95	9.0	11.9	75	55	1,200	.5	200	43.4	70	60	44.3	1	SCROLL	3.9	34	7	15	6.00	460/3/60	.5	LV036-4HZC	13	5.1	HORIZONTAL								
AC-C-8	LAUNDRY ROOM	CELLAR	2	22.7	17.4	85	95	6.0	12.8	85	55	800	.5	200	27.6	70	60	28.8	1	SCROLL	2.9	30	5.7	15	5.00	460/3/60	.5	LV024-4HZC	13	4.5	HORIZONTAL								
AC-C-9	MTA EMR	CELLAR	3	35.8	28.0	85	95	9.0	11.9	75	55	1,200	.5	0	43.4	70	60	44.3	1	SCROLL	3.9	34	7	15	6.00	460/3/60	.5	LV036-4HZC	13	5.1	HORIZONTAL								
AC-C-10	EMR	CELLAR	5	59	44.7	85	95	15	10.6	75	55	2,000	.5	0	72.5	70	60	73.7	1	SCROLL	7.8	52	13.8	20	11.8	460/3/60	1	LV060-4HZC	13	4.8	HORIZONTAL								
AC-C-11	(NOT USED)																																						
AC-C-12	ELECTRICAL CLOSET RM	CELLAR	2	22.7	17.4	85	95	6.0	12.8	85	55	800	.5	0	27.6	70	60	28.8	1	SCROLL	2.9	30	5.7	15	5.00	460/3/60	.5	LV024-4HZC	13	4.5	HORIZONTAL								
AC-C-13	STORAGE RM	CELLAR	2.5	28.8	22	85	95	7.5	13.7	75	63	900	.4	0	34.8	70	60	35.5	1	SCROLL	3.5	30	6.6	15	5.7	460/3/60	.5	LV030-4HZC	14.2	5.5	HORIZONTAL								
AC-2-1	MER	2ND FL.	3	35.8	28.0	85	95	9.0	11.9	75	55	1,200	.5	0	43.4	70	60	44.3	1	SCROLL	3.9	34	7	15	6.00	460/3/60	.5	LV036-4HZC	13	5.1	HORIZONTAL								
AC-3-1	LOUNGE	3RD FL.	15	157.5	120.9	85	95	42	11.9	80	57	4,510	1.0	1500	190.6	70	60	154	2	SCROLL	10.6	75	30	40	6.1	460/3/60	5	EC181-4VTC	13.8	4.8	VERTICAL								
AC-3-2	POOL EQUIP. ROOM	3RD FL.	3	35.8	28.0	85	95	9.0	11.9	75	55	1,200	.5	0	43.4	70	60	44.3	1	SCROLL	3.9	34	7	15	6.00	460/3/60	.5	LV036-4HZC	13	5.1	HORIZONTAL								
AC-3-3	ATS/ELECT. ROOM	3RD FLOOR	5	59	44.7	85	95	15	10.6	75	55	2,000	.5	0	72.5	70	60	73.7	1	SCROLL	7.8	52	13.8	20	11.8	460/3/60	1	LV060-4HZC	13	4.8	HORIZONTAL								
AC-3-4	KID'S ROOM	3RD FLOOR	5	59	44.7	85	95	15	10.6	75	55	2000	.5	200	72.5	70	60	73.7	1	SCROLL	7.8	52	13.8	20	11.8	460/3/60	.5	LV024-4HZC	13	4.8	HORIZONTAL								
AC-3-5	POOL	3RD FLOOR	10	119.2	90.2	85	95	28	12.6	75	54	3,800	1.0		145.2	70	60	155.4	2	SCROLL	7.8	52	21.9	25	19.9	460/3/60	3	EC120-4HZC-SLSBUA	13	4.3	HORIZONTAL								
AC-CS-3-1	CORRIDOR 3RD-6TH FL.	3RD FLOOR	15	157.5	120.9	85	95	42	11.9	80	57	4,510	1.0	4,510	190.6	70	60	154	2	SCROLL	10.6	75	30	40	6.1	460/3/60	5	EC181-4VTC	13.8	4.8	VERTICAL								
AC-CS-3-2	CORRIDOR 3RD-6TH FL.	3RD FLOOR	15	157.5	120.9	85	95	42	11.9	80	57	4,510	1.0	4,510	190.6	70	60	154	2	SCROLL	10.6	75	30	40	6.1	460/3/60	5	EC181-4VTC	13.8	4.8	VERTICAL								
AC-CS-4-1	CORRIDOR 7TH-19TH FL.	4TH FLOOR	20	301.4	219.2	85	95	75	18.1	83	57	8,000	1.0	8000	369.8	70	60	366.6	2	SCROLL	18.6	125	50.5	60	45.8	460/3/60	3	EC300-4VTC	13	4.3	VERTICAL								
AC-CS-4-2	CORRIDOR 7TH-19TH FL.	4TH FLOOR	20	301.4	219.2	85	95	75	18.1	83	57	8,000	1.0	8000	369.8	70	60	366.6	2	SCROLL	18.6	125	50.5	60	45.8	460/3/60	3	EC300-4VTC	13	4.3	VERTICAL								
AC-CS-36-5	CORRIDOR 20TH-30TH FL.	36TH FLOOR	20	301.4	219.2	85	95	75	18.1	83	57	8,000	1.0	8000	369.8	70	60	366.6	2	SCROLL	18.6	125	50.5	60	45.8	460/3/60	3	EC300-4VTC	13	4.3	VERTICAL								
AC-CS-36-6	CORRIDOR 37TH-51ST FL.	36TH FLOOR	20	301.4	219.2	85	95	75	18.1	83	57	8,000	1.0	8000	369.8	70	60	366.6	2	SCROLL	18.6	125	50.5	60	45.8	460/3/60	3	EC300-4VTC	13	4.3	VERTICAL								
AC-36-7	37TH FLOOR EMR	36TH FLOOR	10	119.2	90.2	85	95	28	12.6	75	54	3,800	1.0	0	145.2	70	60	155.4	2	SCROLL	7.8	52	21.9	25	19.9	460/3/60	3	EC120-4HZC-SLSBUA	13	4.3	HORIZONTAL								
AC-CS-67-1	CORRIDOR 52ND-66TH FL.	67TH FLOOR	15	157.5	120.9	85	95	42	11.9	80	57	4,510	1.0	4,510	190.6	70	60	154	2	SCROLL	10.6	75	30	40	6.1	460/3/60	5	EC181-4VTC	13.8	4.8	VERTICAL								
AC-CS-67-2	CORRIDOR 52ND-66TH FL.	67TH FLOOR	15	157.5	120.9	85	95	42	11.9	80	57	4,510	1.0	4,510	190.6	70	60	154	2	SCROLL	10.6	75	30	40	6.1	460/3/60	5	EC181-4VTC	13.8	4.8	VERTICAL								
AC-67-3	CORRIDOR 52ND-66TH FL.	67TH FLOOR	2	22.7	17.4	85	95	6.0	12.8	75	55	800	.5	200	27.6	70	60	28.8	1	SCROLL	2.9	30	5.7	15	5.00	460/3/60	.5	LV024-4HZC	13	4.5	HORIZONTAL								
<div>NOTES:<div>1. CAPACITIES INDICATED ARE NOMINAL. ALL UNITS TO BE PROVIDED WITH THERMOSTAT, DISCONNECT SWITCH, EXTENDED RANGE VALVE FOR LOW WATER TEMP OPERATION, AND BE PROVIDED WITH EXTRA QUIET TONNO PACKAGE. UNIT TO BE PROVIDED WITH AUTOMATIC CONTROL/BALANCING VALVE TO CLOSE WATER WHEN UNIT IS OFF.</div><div>2. ALL UNITS AND COMPONENTS TO BE DESIGNED FOR MINIMUM OF 300 PSI FROM 1ST FLOOR TO 30TH FLOOR AND 200 PSI FROM 31ST FLOOR TO 49TH FLOOR.</div><div>3. UNITS SERVING MULTIPLE ROOMS TO BE PROVIDED WITH INTERNAL ACOUSTIC LINED 2" THICK Baffle TO BALANCE AIR TO DIFFERENT ROOMS.</div></div>																																							