

Building Code Summary

Name of Project: MT. MOUNTAIN ISLAND LAKE APARTMENTS
 Address: MT. HOLLY/HUNTERSVILLE RD AND HWY 16
 Proposed User: COMMUNITY ACTIVITY CENTER
 Owner/Contact Person: BROWN INVESTMENT PROPERTIES Phone #: (336) 379-8771
 Code Enforcement Jurisdiction: CHARLOTTE / MECKLENBURG CO.
 DESIGNER OF RECORD:
 Designer Name: CHARLES M. HILL, AIA License # 4877 (NC) Telephone # 828-659-1540
 Architectural: _____
 Electrical: _____
 Plumbing: _____
 Mechanical: _____
 Structural: _____
 Sprinkler-Standpipe: _____
 Fire Alarm: _____
 Other: _____

BUILDING DATA
 Occupancy: BUSINESS
 Mixed Occupancy? N/A Separation: NONE
 Construction Type: VB Mixed construction: _____ Types: _____
 Sprinklered? NO
 Fire District? NO
 Building Height: 2B' +/- Ft. Number of Stories: (1)
 High Rise? NO
 Gross Building Area: (footprint) _____
 FLOOR: SO. FT.
 Basement _____
 1st Floor 318 SQ. FT. CONDITIONED INTERIOR SPACE OUTSIDE FRAME
 2nd Floor _____
 3rd Floor _____
 Total Gross Area: 3572 SQ. FT. JUNIOR ROOF (INCLUDES COVERED PATIO AND FRONT STOOP)
 Area Increase: N/A Code reference (if yes): _____
 Calculations (if yes): _____

FIRE RESISTANCE RATINGS

Party/Firewalls:	Required Hourly	Detail # & Sheet #	% WALL Opening	Design No. for Rated Assemblies
Exterior Bearing Walls:	(1) HR., #1A, #1, #2, #4			UL # U305
North				
East				
West				
Exterior Non-Bearing Walls:				
North				
East				
West				
South				

Interior Walls:
 Bearing _____
 Non-Bearing _____
 Tenant Separation _____
 Ceiling-Floors Assembly: _____
 Beams: _____
 Columns: _____
 Ceiling-Roof Assembly: _____
 Vertical Shafts: _____
 Chases - P.E.M.: _____
 Mixed Occupancy Separation: _____
 Tenant Separation: _____

SOIL BEARING CAPACITIES:
 Field Test (provided copy of test report) _____
 Assumed Bearing Capacity: ASSUMED 2000 PSI
 File size/type, and capacity _____

DESIGN LOADS:
 Roof live load: 20 LB. Importance Factor: 1 psf.
 Wind: Zone: 90 mph Exposure: 1
 VOLUME Section 1606 ASCE-7 X
 Floor: SLAB ON GRADE Exposure 1 psf.
 Stairs: ZONE "C" Av. .075 Importance Factor: 1 psf.
 (PERFORMANCE CATEGORY) "B"
 Method of Resistance: Braaced Frame/Moment Frame/Shear Walls

LIFE SAFETY SYSTEM:
 Emergency Lighting and Exit Signs: Yes No
 Smoke Detectors: Yes No
 Panic Hardware: Yes No

EXIT REQUIREMENTS:
 Dead and limit-maximum condition: 20 FEET
 Travel distance to exit-maximum condition: 200 FT.
 Number exits: 2684, divided by net/sq. ft. per occupant
 VARIOUS = Total number of people on floor 103
 Number of doors provided (3) number of doors required (2)
 SEE FLOOR PLAN SHEET 2-A FOR OCCUPANT LOAD CALC.

PARKING SPACES: SEE SITE PLAN. Required _____ Provided _____
 Handicap Spaces: _____ provided (1.3, w. & P7-8 sign)
 Special approval by Department of Insurance or by Local Jurisdiction, describe below: _____
 SEE SITE PLAN

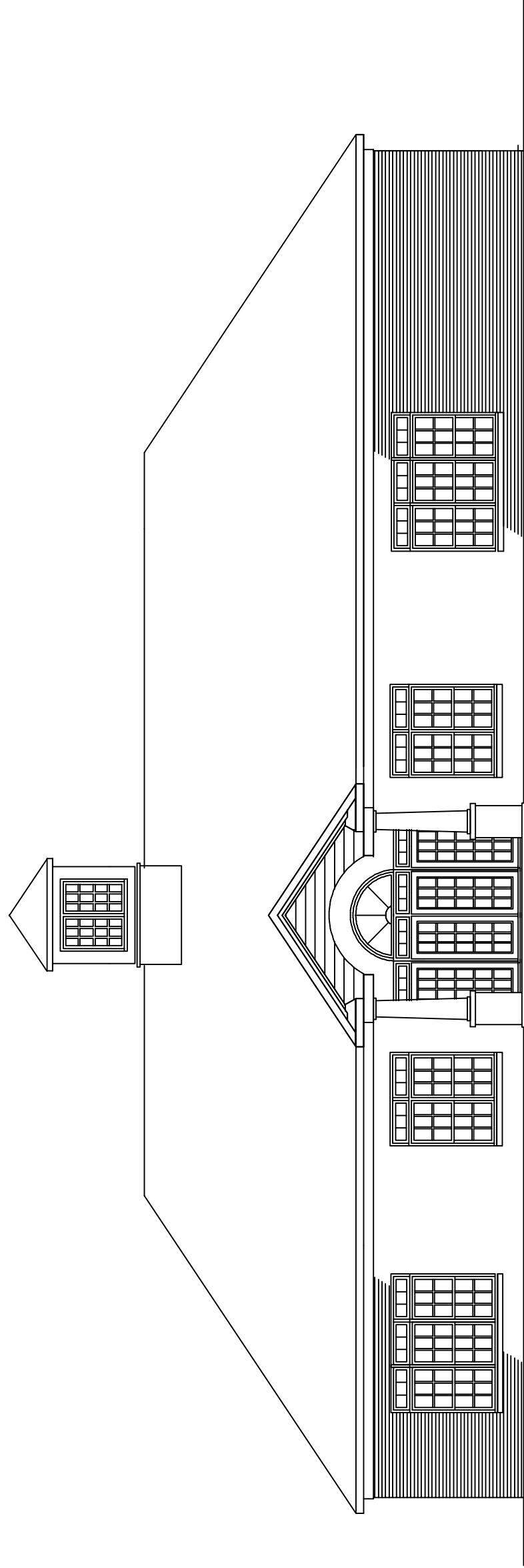
THERMAL ENVELOPE
 METHOD OF COMPLIANCE: PRESCRIPTIVE
 Roof/Ceiling Assembly (each assembly)
 Description of assembly _____
 U-Value of assembly _____
 R-Value of insulation .032 = U VALUE ASSEMBLY
 Skylights in each assembly R-30 / BLOWN OR BATT
 U-Value of skylight _____
 total square footage of skylights in each assembly _____
 Exterior Walls (each assembly)
 Description of assembly _____
 U-Value of total assembly = BRICK VENEER = .052
 R-Value of insulation R-15 BATS
 Openings (windows or doors with glazing)
 U-Value of assembly U=0.65 MAX. GLASS ALL EXTERIOR WINDOWS
 shading coefficient _____
 low e required, if applicable _____
 Door R-Values _____
 Walls adjacent to unconditioned space (each assembly)
 U-Value of total assembly _____
 R-Value of insulation _____
 Openings (windows or doors with glazing)
 U-Value of assembly _____
 low e required, if applicable _____
 Door R-Values _____
 Walls below grade (each assembly) _____
 Description of assembly _____
 U-Value of total assembly _____
 R-Value of insulation _____
 Floors over unconditioned space (each assembly)
 U-Value of total assembly _____
 R-Value of insulation _____
 Floors slab on grade _____
 Description of assembly 4" CONC. ON 6 MIL. POLY ON 4" GRAVEL
 U-Value of total assembly _____
 R-Value of insulation R-5.0 PERIMETER INSULATION
 Horizontal/vertical requirement 24" HOR. / 4" VERT. / SEE SHEET #1A
 slab heated _____
 DESIGNER STATEMENT:
 To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipment requirements of the North Carolina State Building Code, Volume X-Energy.

SIGNED: _____
 NAME: CHARLES M. HILL, AIA
 ARCHITECT OF RECORD / #4877 (NC)
 TITLE: _____
 MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT
 METHOD OF COMPLIANCE: PRESCRIPTIVE
 Thermal Zone #4
 Exterior design conditions
 winter dry bulb 14
 summer dry bulb 91
 Interior design conditions
 winter dry bulb 70
 summer dry bulb 74
 relative humidity 50%

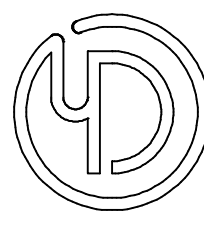
MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT cont.
 Building heating load ZONE #1 34,795 BTU LOSS ZONE #2 52,261 BTU LOSS
 Building cooling load ZONE #1 20,463 BTU GAIN ZONE #2 51,954 BTU GAIN
 HEAT GAIN / HEAT LOSS CALCULATIONS ON FILE
 Mechanical Space Conditioning System
 Unitary UNITARY SPLIT SYSTEM SEE EQUIP. SCHEDULE SHEET M-1
 description of unit _____
 heating efficiency 13 SEER
 heat output of unit (S) SEE EQUIP. SCHEDULE SHEET M-1
 cooling output of unit (S) SEE EQUIP. SCHEDULE SHEET M-1
 List equipment efficiencies _____
 SEE ABOVE
 Equipment schedules with motors (mechanical systems) _____
 motor horsepower _____
 number of phases _____
 minimum efficiency _____
 motor type _____
 # of poles _____
 DESIGNER STATEMENT:
 To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipment requirements of the North Carolina State Building Code, Volume X-Energy.

SIGNED: _____
 NAME: _____
 TITLE: _____
 ELECTRICAL SYSTEM AND EQUIPMENT
 METHOD OF COMPLIANCE: _____
 PERFORMANCE
 Lighting Schedule _____
 lamp type required in fixture _____
 ballast type used in fixture _____
 number of ballasts in fixture _____
 total wattage per fixture _____
 total interior wattage specified vs. allowed _____
 total interior wattage specified vs. allowed _____
 Equipment Schedules w/ motors (not used for mechanical systems) _____
 motor horsepower _____
 number of phases _____
 motor type _____
 # of poles _____
 DESIGNER STATEMENT:
 To the best of my knowledge and belief, the design of this building complies with the electrical system and equipment requirements of the North Carolina State Building Code, Volume X-Energy.

SIGNED: _____
 NAME: _____
 TITLE: _____



MOUNTAIN ISLAND LAKE ACTIVITY CENTER



CHARLES M. HILL, A.I.A.
 ARCHITECT
 NEBO, NC
 TELEPHONE (828) 659-1540

OWNER DEVELOPER:
 MOUNTAIN ISLAND APARTMENTS, LLC
 1329 EAST MOREHEAD STREET, SUITE 200
 CHARLOTTE, NC 28204

MOUNTAIN ISLAND LAKE APARTMENTS
 ACTIVITY CENTER
 MT. HOLLY/HUNTERSVILLE RD AND HWY 16
 CHARLOTTE, NC 28216



JOB NO.	DRAWN BY	CHECKED BY	DATE	REVISIONS
8-2-10			4-22-2010	
6-30-2010				

SHEET NO.
 ACT -
 COVER