

APPENDIX B  
BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS

Name of Project: **DORA DAY CARE CENTER**  
Address: **532 INGLE ST. CHARLOTTE NC**  
Proposed Use: **DAY CARE**  
Owner/Contact Person: **ROBERT WAYNE** Phone # **704-906-8041**  
Code Enforcement Jurisdiction: **MECKLENBURG COUNTY**

DESIGNER OF RECORD:  
DESIGNER NAME: **CHRIS GOODWIN** License # **7915** Telephone # **828-252-7640**  
Architectural:  Electrical:  Mechanical:  Plumbing:  Structural:  Fire Alarm:  Other:

BUILDING DATA  
Occupancy:  Assembly  Business  Educational  Mercantile  
 Hazardous  Factory-Industrial  Institutional (unrestricted)  
 Institutional (restrained) Use Condition  
 Residential  Storage  
Mixed Occupancy? Yes  No  Separation: \_\_\_\_\_ ft.  
Construction Type: I  II  III  IV  V  VI  VII  VIII   
Mixed construction: Yes  No  Type: \_\_\_\_\_  
Sprinkled? Yes  No  (13 13R 13D)  
Fire District? Yes  No   
Building Height: **16** Feet, **0** Number of Stories  
Mezzanine: Yes  No   
High Rise? Yes  No   
Gross Building Area: (Foot Print) (Foot Print)  
Floor: \_\_\_\_\_ Sq. Ft. 4th Floor: \_\_\_\_\_ Sq. Ft.  
Basement: **5417 S.F.** 5th Floor: \_\_\_\_\_ Sq. Ft.  
1st Floor: \_\_\_\_\_ Sq. Ft. 6th Floor: \_\_\_\_\_ Sq. Ft.  
2nd Floor: \_\_\_\_\_ Sq. Ft. 7th Floor: \_\_\_\_\_ Sq. Ft.  
3rd Floor: \_\_\_\_\_ Sq. Ft.  
Total Gross Area: **5417 S.F.** sq. ft.  
Area Increase? Yes  No  Yes code reference: \_\_\_\_\_  
If yes, calculations: \_\_\_\_\_

FIRE RESISTANCE RATINGS<sup>3</sup>

Required Hourly <sup>2</sup>	Detail # & Sheet #	% Wall Opening <sup>1</sup>	Design No. for Rated Assemblies <sup>2</sup>
Party/Firewalls:			
North			
East			
West			
South			
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* (Chase & E.L.)			
Mixed Occupancy Separation:			
Tenant Separation:			

FOOTNOTES:  
1. Required if wall to property line or assumed line is less than 30 feet.  
2. All fire rated walls shall be identified on plans by hatching, shading, etc.; show legend.  
3. Identify code section when using any special exceptions, etc.  
4. Stairs, elevators and/or atrium  
5. Details or Reproductions of rated assemblies/penetrations shall be incorporated on the drawings.

LIFE SAFETY SYSTEM:  
Emergency Lighting and Exit Signs Yes  No   
Fire Alarm and Smoke Detection Systems Yes  No   
Panic Hardware Yes  No

EXIT REQUIREMENTS:  
Dead end limit-maximum condition \_\_\_\_\_ Feet  
Travel distance to exit-maximum condition \_\_\_\_\_ Feet  
Number exits: \_\_\_\_\_  
Total Square Footage of floor \_\_\_\_\_ divided by net sq. ft. per occupancy \_\_\_\_\_ = Total number of people on floor.  
Number of doors provided \_\_\_\_\_ number of doors required \_\_\_\_\_

DESIGN LOADS:  
Roof live load: **20** psf  
Wind: Zone **80** mph Importance Factor **1.0**  
ASCE-7 **93** Exposure  
Floor: \_\_\_\_\_ psf  
Snow: **20** psf  
Lateral design Control: Earthquake  Wind   
Calculated Wind Base Shears (for MWFRS): Vx = **21.3**, Vy = **51.3**

SEISMIC PERFORMANCE CATEGORY A  
Compliance with Section 1607.3.6.1.1 Ties and continuity? **YES**

SEISMIC PERFORMANCE CATEGORY B & C  
Provide the following Seismic Design Parameters:  
Effective peak velocity-related acceleration: **A<sub>v</sub> = 0.10**  
Peak acceleration coefficient: **A<sub>s</sub> = 0.16**  
Seismic Hazard Exposure Group: **SHEG = 1**  
Seismic Performance Group: **SPG = 4**  
Site coefficient: **S = 2.0**

Basic structural system (check one):  
 Dual w/Special Moment Frame  
 Dual w/Intermediate RC or Special Steel  
 Building frame  
 Moment Frame  
Response modification factor: Rx = **3.5**, Ry = **3.5**  
Deflection amplification factor: Cd = **3.0**  
Building Height limit: H = **41.4** ft. Max Limit  
Seismic base shear: V = **41.4**

MODAL ANALYSIS PROCEDURE  
Modal base shear: V = **41.4**  
ELF procedure base shear: V = **N/A**

Architectural, Mechanical, Components anchored per force CcP? **YES**

SOIL BEARING CAPACITIES:  
Field Test (provided copy of test report) \_\_\_\_\_ psf.  
Presumptive Bearing capacity **2500** psf.  
Pile size, type, and capacity \_\_\_\_\_

PARKING SPACES: **16** Required **16** Provided  
Handicap Spaces **2** provided (13' wide and R7-8 sign)  
Special approval by Department of Insurance or by Local Jurisdiction, describe below: \_\_\_\_\_

ENERGY REQUIREMENTS:  
The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet and shall sign the Designer's statement for the appropriate portion, as required by G.S. 143-151.33. If energy cost budget method, state the annual energy cost budget vs allowable annual energy cost budget.

THermal ENVELOPE  
METHOD OF COMPLIANCE:  
Prescriptive  Performance  Energy Cost Budget   
Roof/Ceiling Assembly (each assembly)  
Description of assembly: **3/8" GYPSUM BOARD OVER 2X6 WOOD STUDS WITH 5/8" PLYWOOD SHEATHING AND BRICK VENEER. R-19 INSULATION.**  
U-Value of total assembly **0.177**  
R-Value of insulation **20**  
R-Value of each assembly **1.8**  
Sightlights in each assembly **1.0**  
U-Value of skylight \_\_\_\_\_  
total square footage of skylights in each assembly \_\_\_\_\_

EXterior Walls (each assembly)  
Description of assembly: **3/8" GYPSUM BOARD OVER 2X6 WOOD STUDS WITH 5/8" PLYWOOD SHEATHING AND BRICK VENEER. R-19 INSULATION.**  
U-Value of total assembly **0.177**  
R-Value of insulation **20**  
Openings (windows or doors with glazing) **YES**  
shading coefficient \_\_\_\_\_ projection factor \_\_\_\_\_  
low e required, if applicable \_\_\_\_\_  
Door R-Values **0.64**

Walls adjacent to unconditioned space (each assembly) **N/A**  
Description of 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) **N/A**  
Description of assembly \_\_\_\_\_  
U-Value of total assembly \_\_\_\_\_  
R-Value of insulation \_\_\_\_\_  
Horizontal/vertical requirement \_\_\_\_\_  
slab heated \_\_\_\_\_

Floors over unconditioned space (each assembly) **2X12 FLOOR JOIST WITH 3/4" PLYWOOD SUB-FLOOR. R-30 BATTES BETWEEN JOISTS.**  
Description of assembly \_\_\_\_\_  
U-Value of total assembly **0.177**  
R-Value of insulation **N/A**

Floors slab on grade (each assembly) **N/A**  
Description of assembly \_\_\_\_\_  
U-Value of total assembly \_\_\_\_\_  
R-Value of insulation \_\_\_\_\_  
Horizontal/vertical requirement \_\_\_\_\_  
slab heated \_\_\_\_\_

DESIGNER STATEMENT: <sup>1</sup>  
To the best of my knowledge and belief, the design of this building complies with the thermal envelope requirements of the North Carolina State Building Code, Volume X-Energy.  
SIGNED: **CHRIS GOODWIN**  
TITLE: **ARCHITECT**

ELECTRICAL SYSTEM AND EQUIPMENT  
METHOD OF COMPLIANCE:  
Prescriptive  Performance  Energy Cost Budget   
Provide a standard riser diagram which indicates designated points for check metering.  
Provide a standard panel schedule description which identifies different end-use loads.

Lighting schedule  
lamp type required in fixture  
number of lamps in fixture  
ballast type used in the fixture  
number of ballasts in fixture  
total wattage per fixture  
total interior wattage specified vs allowed  
total exterior wattage specified vs allowed  
Equipment schedules with motors (not used for mechanical systems)  
motor horsepower  
number of phases  
minimum efficiency  
motor type  
# of poles

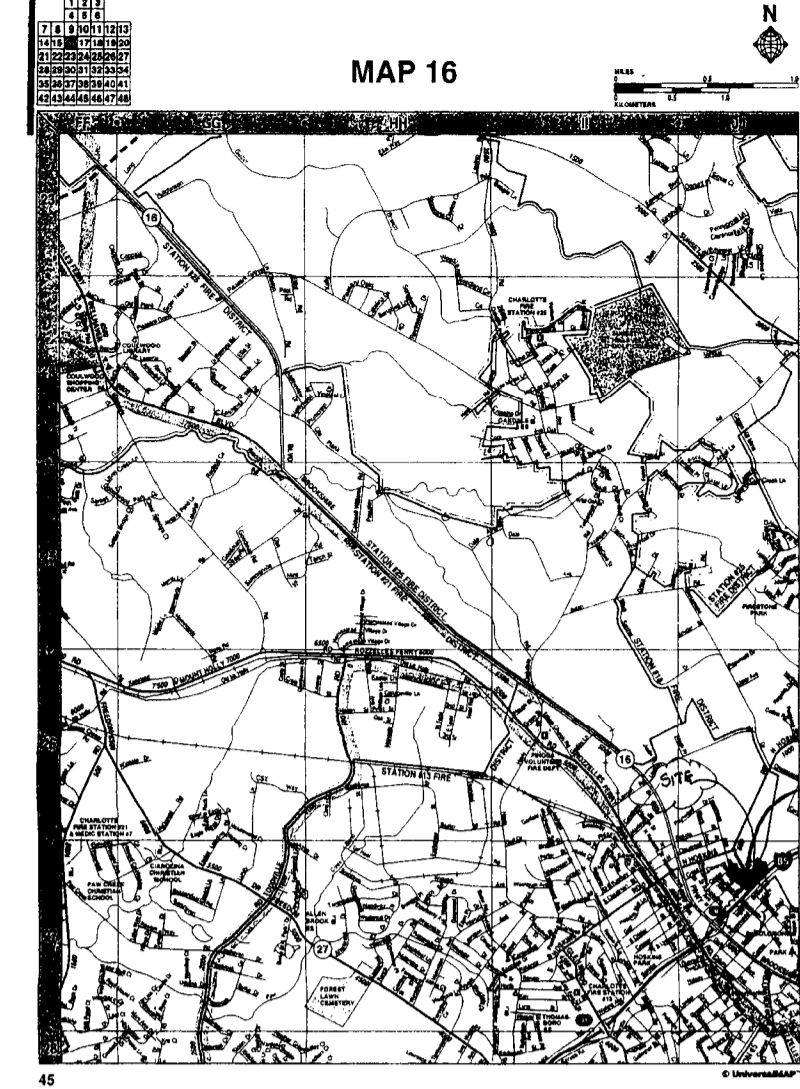
DESIGNER STATEMENT: <sup>1</sup>  
To the best of my knowledge and belief, the design of this building complies with the electrical system and equipment requirements of the North Carolina State Building Code, Volume X-Energy.  
SIGNED: **CHRIS GOODWIN**  
TITLE: **ARCHITECT**

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT  
METHOD OF COMPLIANCE:  
Prescriptive  Energy Cost Budget   
Thermal Zone \_\_\_\_\_  
Exterior design conditions  
winter dry bulb \_\_\_\_\_  
summer dry bulb \_\_\_\_\_  
Interior design conditions  
winter dry bulb \_\_\_\_\_  
summer dry bulb \_\_\_\_\_  
relative humidity \_\_\_\_\_  
Building heating load \_\_\_\_\_  
Building cooling load \_\_\_\_\_  
Mechanical Spacing Conditioning System  
Unitary \_\_\_\_\_  
description of unit heating efficiency cooling efficiency heat output of unit cooling output of unit  
chiller \_\_\_\_\_  
total chiller capacity. If oversized, state reason.  
total boiler output. If oversized, state reason.  
List equipment efficiencies  
Equipment schedules with motors (mechanical systems)  
motor horsepower  
number of phases  
minimum efficiency  
motor type  
# of poles

ZONING CODE SUMMARY  
(Reproduce the following data on the site plan)  
PROJECT NAME: **DORA DAY CARE CENTER** TAX PARCEL# **06914401**  
OWNER: \_\_\_\_\_ PHONE: \_\_\_\_\_  
PLANS PREPARED BY: **CHRIS GOODWIN** PHONE: **828-252-7640**  
ZONING: **R-17MECD/80** JURISDICTION: **MECKLENBURG COUNTY (1)**  
PROPOSED USE: **DAY CARE CENTER**  
BUILDING HEIGHT: **16** Feet, Stories: **1**  
BUILDING COVERAGE: **5417** Sq. Ft. GROSS FLOOR AREA: **5417** Sq. Ft.  
LOT SIZE: **33,853** Sq. Ft. NUMBER OF UNITS/SUITES: **1**  
YARD REQUIREMENTS:  
Setback (front): \_\_\_\_\_ ft. from R/W, \_\_\_\_\_ ft. from C/L of R/W  
Side Yard (L): \_\_\_\_\_ ft. Side Yard (R): \_\_\_\_\_ ft.  
Rear Yard: \_\_\_\_\_ ft.  
REQUIRED BUFFERS:  
Front: \_\_\_\_\_ ft. Side (L): \_\_\_\_\_ ft. Side (R): \_\_\_\_\_ ft.  
Rear: \_\_\_\_\_ ft.  
REQUIRED SCREENING:  
Front: \_\_\_\_\_ No / Yes Side (L): \_\_\_\_\_ No / Yes Side (R): \_\_\_\_\_ No / Yes  
Parking Only: \_\_\_\_\_ No / Yes  
PAVEMENT COVERAGE: **9190** Sq. Ft./acres  
INTERIOR LANDSCAPING: Required \_\_\_\_\_ sq. ft. provided \_\_\_\_\_ sq. ft.  
PARKING DATA: (specify requirement, zoning ordinance and section number)  
SPACE PER 10 CHILDREN @ 60 CHILDREN = 6 SPACES  
SPACE PER EMPLOYEE @ 8 EMPLOYEES = 8 SPACES  
OWNER: 10.8 AC.-11 ABC ASSOCIATES  
Required: **14** Provided: **14** Handicap: **1** Compact   
ALL SIGNAGE WILL BE APPROVED AND PERMITTED SEPARATELY.  
1021-25

CLASS 'C' BUFFER: 3 TREES & 20 SHRUBS EVERY 100 FEET.  
TREES: SHALL BE 2" MIN. CALIPER, 40% SOUTHERN RED OAK; 25% SOUTHERN MAGNOLIA; 35% HAWTHORNE "WINTER KING"; SHRUBS: 2" HIGH, 2" WIDE, 5' O.C., USE OAK LEAF HYDRANGIA, DECEMBERBLOA.  
NOTE: APPROVED SUBSTITUTIONS MAY BE SELECTED FROM APPENDIX G (ABOVE)

EXISTING CHILDREN TOTAL **66**  
ADDITION CHILDREN TOTAL **40**  
CHILDREN TOTAL **116**



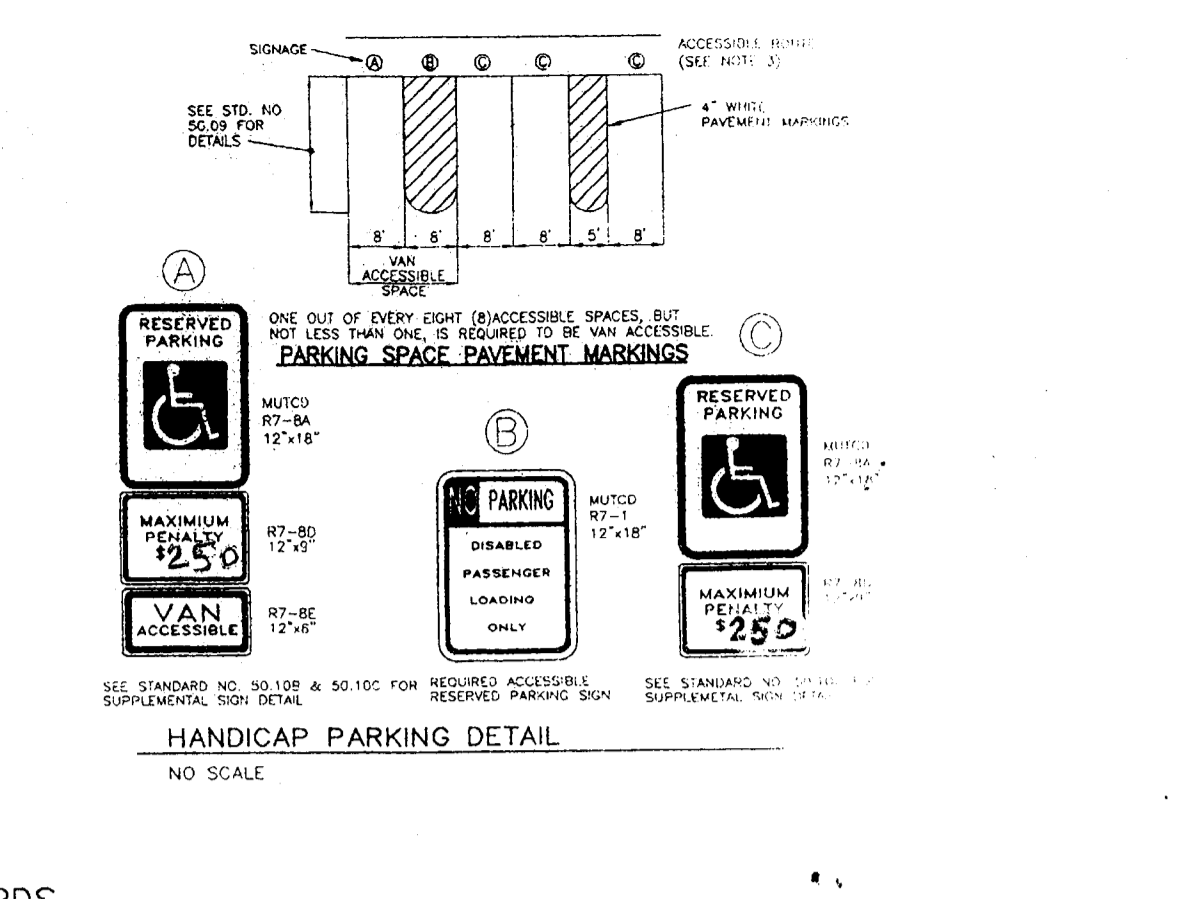
02 VICINITY MAP ABOVE

ACCESSIBLE PARKING REQUIREMENTS

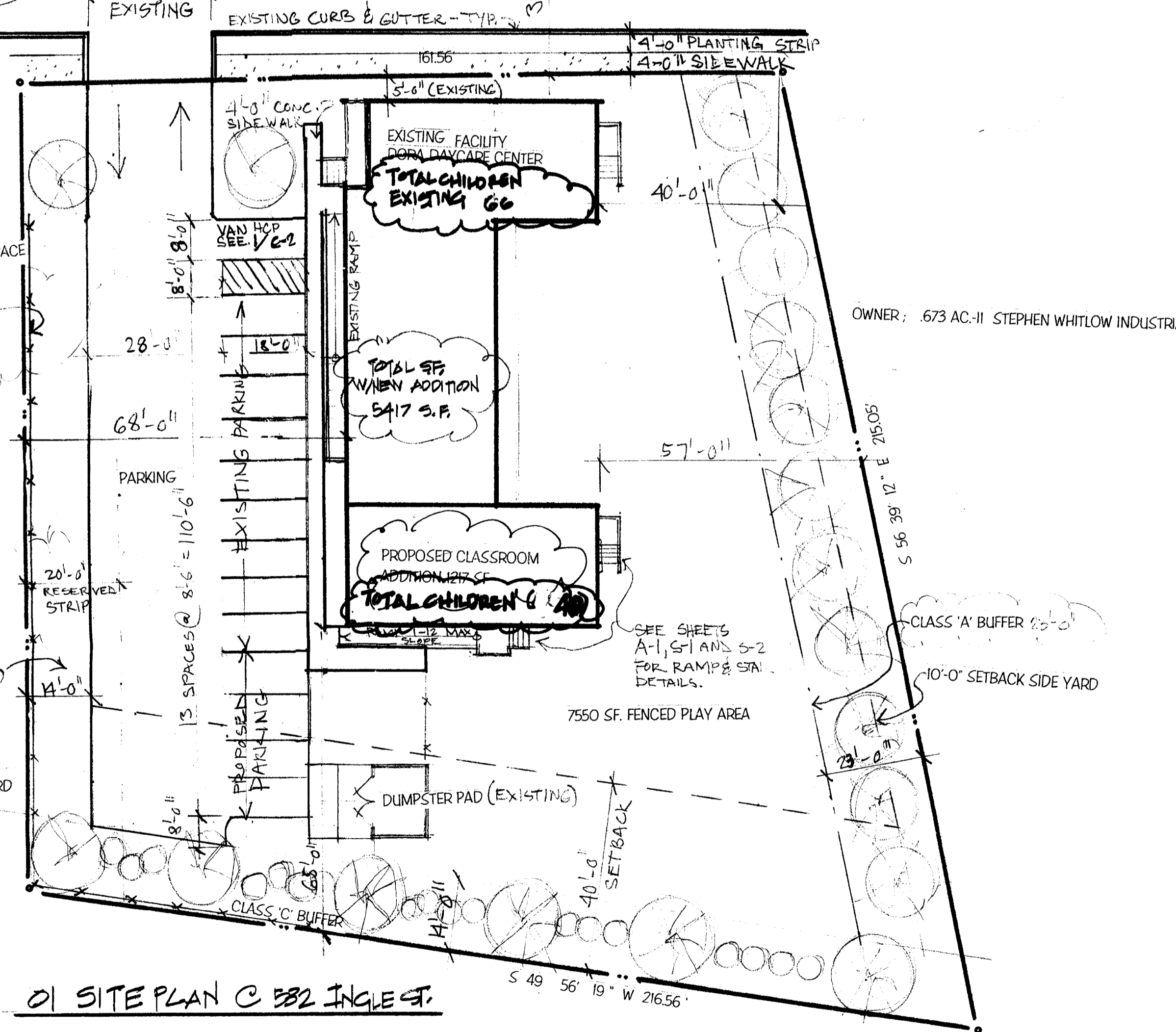
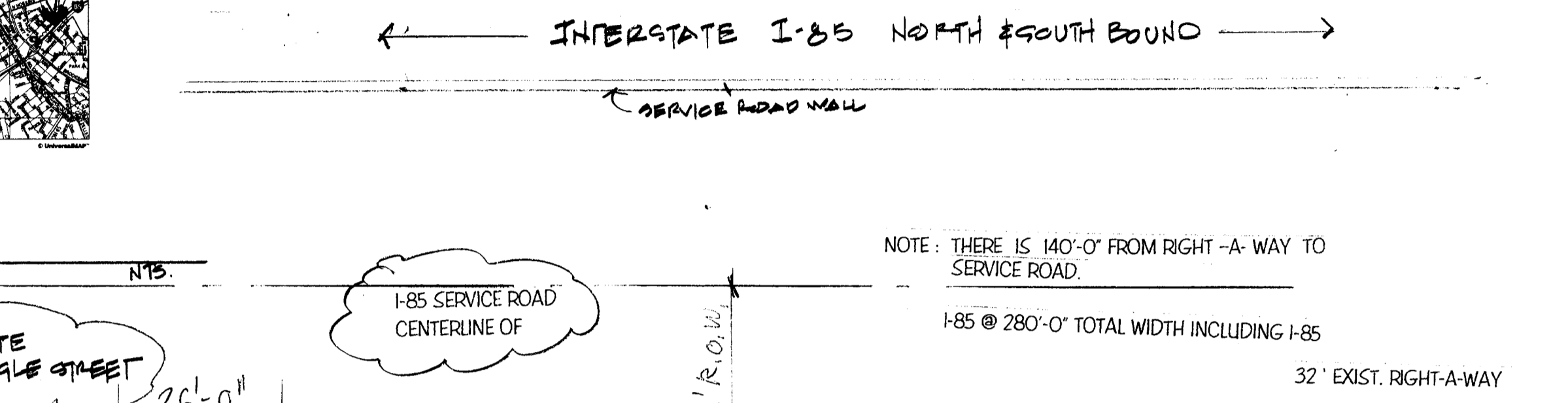
TOTAL MARKING SPACES PROVIDED	MINIMUM NUMBER OF ACCESSIBLE SPACES REQUIRED	MINIMUM NUMBER OF ACCESSIBLE SPACES REQUIRED TO BE VAN ACCESSIBLE
1 TO 25	1	1
26 TO 50	2	1
51 TO 75	3	1
76 TO 100	4	1
101 TO 150	5	1
151 TO 200	6	1
201 TO 300	7	1
301 TO 400	8	1
401 TO 500	9	2
501 TO 1000	2% OF TOTAL	1 IN EVERY 8 ACCESSIBLE SPACES
1001 AND OVER	2% PLUS 1 FOR EACH 100 OVER 1000	1 IN EVERY 8 ACCESSIBLE SPACES

SECTION 4.1.2 (3) OF THE AMERICANS WITH DISABILITIES ACT (ADA) SEE 4.1.2 (4) FOR MEDICAL CARE FACILITIES

NOTES:  
1. ALL 12'x18' ACCESSIBLE SPACES (R17-RA & R7-1) SHALL BE MONITORED BY A FEET FROM CURB TO BOTTOM EDGE OF SIGN FACE (MOUNTED) MOUNTING HEIGHT CAN BE REDUCED TO 5 FEET IF PLACED IN AN AREA BETWEEN SIDEWALK AND BUILDING FACE TO WHICH PEDESTRIANS ARE NOT EXPECTED TO TRAVEL.  
2. REFER TO MANUAL ON EXTERIOR TRAFFIC CONTROL DEVICES (MUTCD) U.S. DEPARTMENT OF TRANSPORTATION AND NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SUPPLIES.  
3. IF ACCESSIBLE ROUTE IS A PAVED SIDEWALK AREA, THEN RAMPS ARE REQUIRED AT LOADING ZONE AREA.

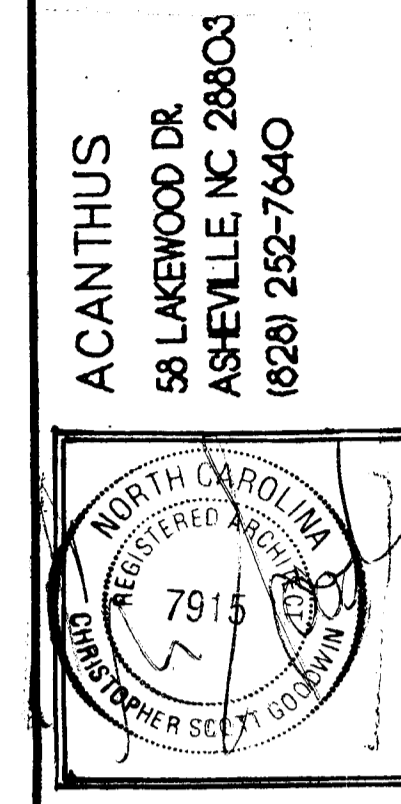


ACCESSIBLE PARKING & SIGNAGE STANDARDS  
NO SCALE CHAR.-MECK. STD. DET. #50.10A



NOTE: 1. ALL ADDITIONS WILL BE COMPATIBLE IN COLOR & ARCHITECTURE W/ EXISTING STRUCTURE.  
2. THE EXISTING BACK FLOW PREVENTOR IS LOCATED, AS SHOWN

APPROVED BY CITY COUNCIL  
DATE **9/17/01**  
SCALE: 1" = 20' - 0"



ACANTHUS  
58 LAKEWOOD DR.  
ASHEVILLE, NC 28803  
(828) 252-7640

DORA DAY CARE CENTER  
532 Ingle St Charlotte 28216  
OWNER: MRS THEODORA DAVIDSON

WAYNE SIMS, INC.  
7810 BALLANTYNE COMMONS PARKWAY, CHARLOTTE, NC 28277  
PHONE: 704-319-5599 FAX: 704-319-2350  
DESIGNER: ROBERT WAYNE SIGNATURE

PETITION: 01-77  
8-14-01  
C-1  
SITE PLAN/APP. B