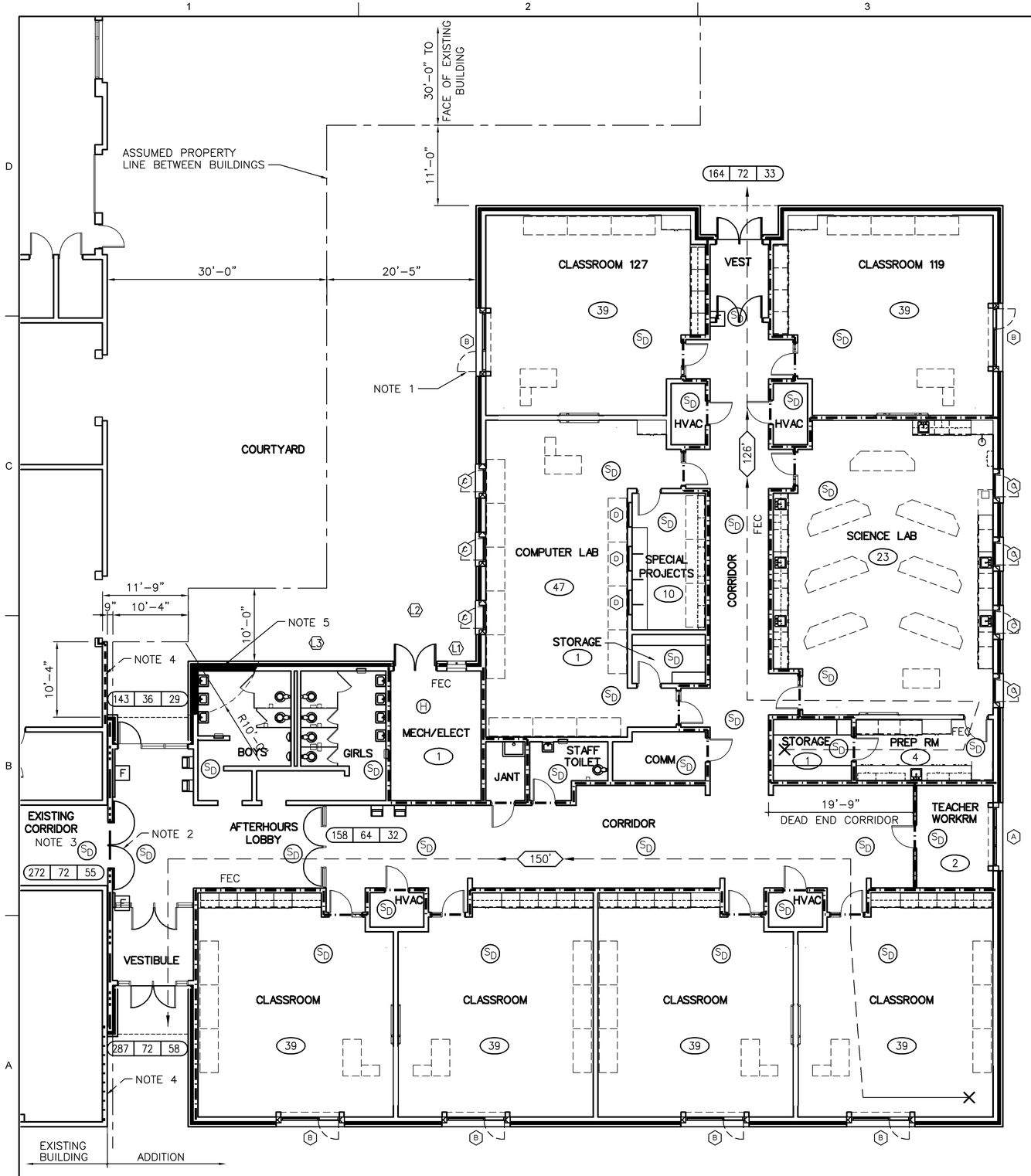


BUILDING AREA

GROSS AREA (SQUARE FEET)

INTERIOR AREA	= 11,918
EXTERIOR COVERED AREA = 139/2	= 70
TOTAL GROSS AREA	= 11,988

NET AREA (SQUARE FEET)

TYPICAL CLASSROOM	= 778 X 4 = 3112
CLASSROOMS 119 & 127	= 767 X 2 = 1534
SCIENCE LAB/PREPERATION RM/STOR	= 1391
COMPUTER LAB/SPECIAL PROJECTS/STOR	= 1191
TEACHER WORKROOM	= 147
MECHANICAL/HVAC/COMMUNICATION	= 449
JANITOR/TOILET ROOMS	= 541
CORRIDORS/VESTIBULES	= 2361
TOTAL NET AREA	=10,726

OCCUPANT LOAD

NFPA CHAPTER 7, TABLE 7.3.1.2

CLASSROOMS = 20 NET SQUARE FEET PER PERSON
TYPICAL CLASSROOM = 778/20 = 39 PEOPLE
COMPUTER (LESS STOR) = 1124/20 = 56 PEOPLE

LAB SPACES = 50 NET SQUARE FEET PER PERSON
SCIENCE LAB = 1391/50 = 28 PEOPLE

STORAGE = 500 SQUARE FEET PER PERSON
TYPICAL STORAGE ROOM = 90/500 = 1 PERSON

TEACHER WORKRM (BUSINESS) = 100 SF PER PERSON
WORKROOM = 147/100 = 2 PEOPLE

BUILDING OCCUPANT LOAD =

TOTAL NET CLASSRM AREA 5770/20	=	289 PEOPLE
SCIENCE LAB SPACES	=	28 PEOPLE
STORAGE SPACES	=	2 PEOPLE
TEACHER WORKROOM	=	2 PEOPLE
		321 PEOPLE

CODE REQUIREMENTS

NFPA 101 & IBC , 2009 EDITIONS

1. LIFE SAFETY AND BUILDING CONSTRUCTION SHALL BE IN ACCORDANCE WITH NFPA 101 AND UFC 1-200-01 DESIGN: GENERAL BUILDING REQUIREMENTS.
2. CONSTRUCTION TYPE - IBC, CHAPTER 6
   ADDITION - TYPE IIB, NON-SPRINKLERED
   EXISTING - TYPE IIA, NON-SPRINKLERED
3. USE AND OCCUPANCY CLASSIFICATION - NFPA, CHAPTER 6
   EDUCATIONAL - GROUP E
4. BUILDING HEIGHT AND AREA - IBC, CHAPTER 5
   ALLOWABLE = 2 STORIES, 14,500 SF
   ACTUAL = 1 STORY, 11,988 SF
4. AUTOMATIC SPRINKLER SYSTEM NOT REQUIRED BY UFC 3-600-01 PER EXCEPTION IN SECTION 4-2.2. BUILDING AREA IS LESS THAN 15,000 SF. ADDITION IS SEPARATED FROM EXISITNG BUILDING BY 3 HR FIRE WALL, & IS CLASSIFIED AS A SEPARATE BUILDING BY IBC & NFPA.
5. FIRE EXTINGUISHERS SHALL COMPLY WITH NFPA 10.
6. BUILDINGS ON SAME LOT - IBC, CHAPTER 7, SECT 705.3 & TABLE 705.8, CHAPTER 6, TABLE 602 EXISTING BUILDING AND ADDITION ARE CONSIDERED TWO SEPARATE BUILDINGS WITH AN ASSUMED PROPERTY LINE BETWEEN THEM. SEPARATION TO EXISTING MODULAR CLASSROOMS IS 24'. IBC TABLE 602 INDICATES NO RATING REQUIRED.
7. TRAVEL DISTANCE- NFPA CHAPTER 14. PARA 14.2.6.2 150 FEET MAX WITHOUT SPRINKLERS.

EXTERIOR WALL/OPENINGS FIRE RATINGS REQUIRED
IBC TABLES 602 & 705.8

SEPARATION DISTANCE (FEET)	EXISTING BLDG		ADDITION	
	WALL	OPENING	WALL	OPENING
<5	1	PROHIBITED	1	PROHIBITED
≥5 & <10	1	10% @ 0	1	10% @ 0
≥10 & <30	1	15% @ 0	0	15% @ 0
≥30	0	0	0	0

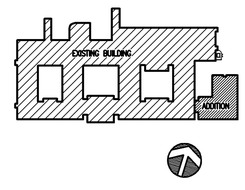
KEYED NOTES

1. OPERABLE WINDOW FOR MEANS OF ESCAPE. TYPICAL FOR EACH CLASSROOM.
2. 3 HOUR RATED DOORS WITH MAGNETIC HOLD OPEN DEVICE.
3. EXIT REQUIREMENTS FROM EXISTING BUILDING TAKEN FROM AS-BUILT DRAWINGS PROVIDED BY COE AND ARE BASED UPON FIRE COMPARTMENTS INDICATED ON THE DRAWINGS.
4. EXISTING BUILDING EXTERIOR WALLS ARE PRECAST CONCRETE INSULATED PANELS WITH AN EQUIVALENT THICKNESS OF 5" CONCRETE. IBC CHAPTER 7 INDICATES THAT THE EXISTING WALL HAS A ONE HOUR FIRE RATING.
5. EXTERIOR WALL THIS LOCATION TO BE 1 HOUR FIRE RATED WITHIN 10' RADIUS FROM ASSUMED PROPERTY LINE.

LEGEND

- 1 HOUR FIRE RATED PARTITION
- 3 HOUR RATED FIRE WALL
- SD — SMOKE DETECTOR
- H — HEAT DETECTOR
- F — FIRE ALARM PULL STATION
- FEC — FIRE EXTINGUISHER
- NO. PERSONS/EXIT
- WIDTH (INCHES) REQUIRED/EXIT
- WIDTH (INCHES) PROVIDED/EXIT
- MAXIMUM EXIT PATH & TRAVEL DISTANCE (FEET)
- NO. OF PERSONS EXITING
- EXIT PATH ORIGIN

KEY PLAN



GRAPHIC SCALE

0 4' 8' 16'
1/8" = 1'-0"

US ARMY CORPS OF ENGINEERS SAVANNAH

BY	DATE	DESCRIPTION	SYMBOL

DATE: 25 JAN 2010
SOLICITATION NO.: W912HN-09-R-0018
CONTRACT NO.: _____
CATEGORY CODE: 730-45-01
PILOT DATE:
DESIGNED BY: SCD
DWN BY: SCD/JDA
CHD BY: SCD
SUBMITTED BY: _____
FILE NAME: _____
SIZE: 24x36
PLOT SCALE: 34x22

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH DISTRICT

LS3P ASSOCIATES LTD.
205 ½ KING STREET
CHARLESTON, SC, 29401

ALBRITTON JUNIOR HIGH SCHOOL ADDITION
FT BRAGG NORTH CAROLINA

LIFE SAFETY & AREA CALCULATIONS

PLATE REFERENCE NUMBER
A-002
SHEET 38