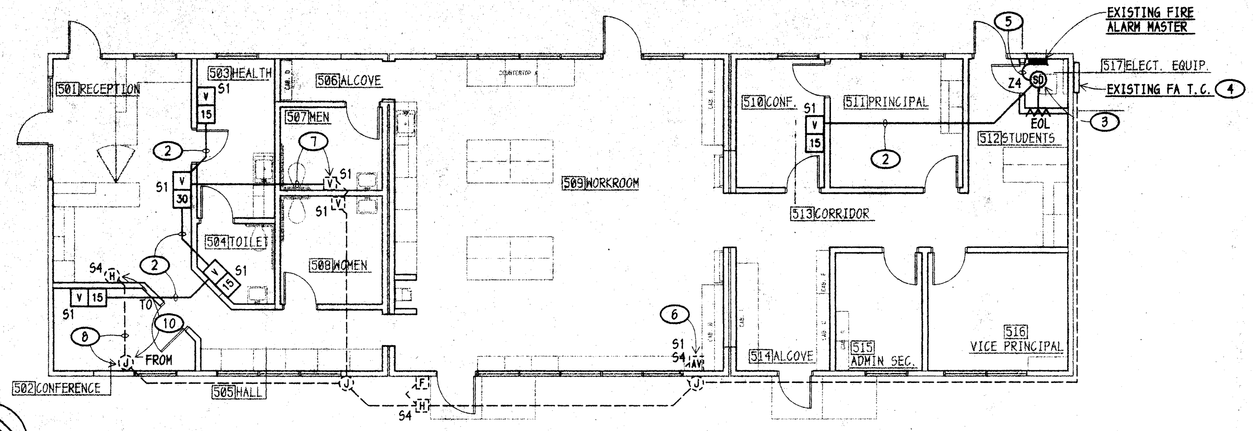
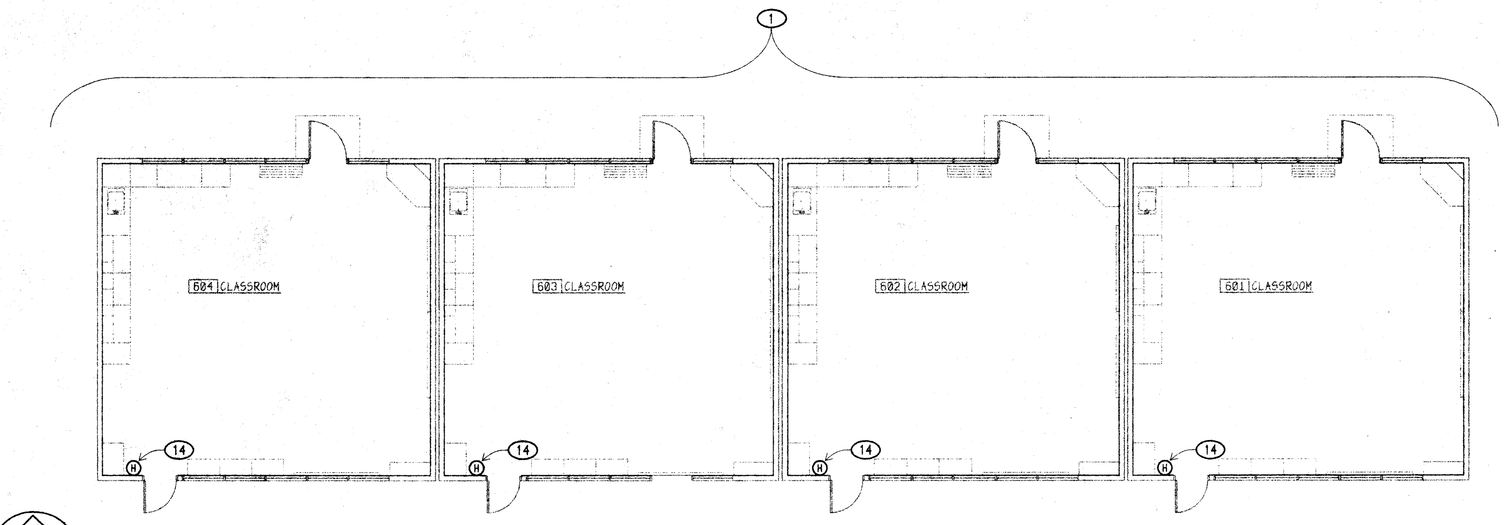


NORTH

BUILDING 500 - FIRE ALARM PLAN

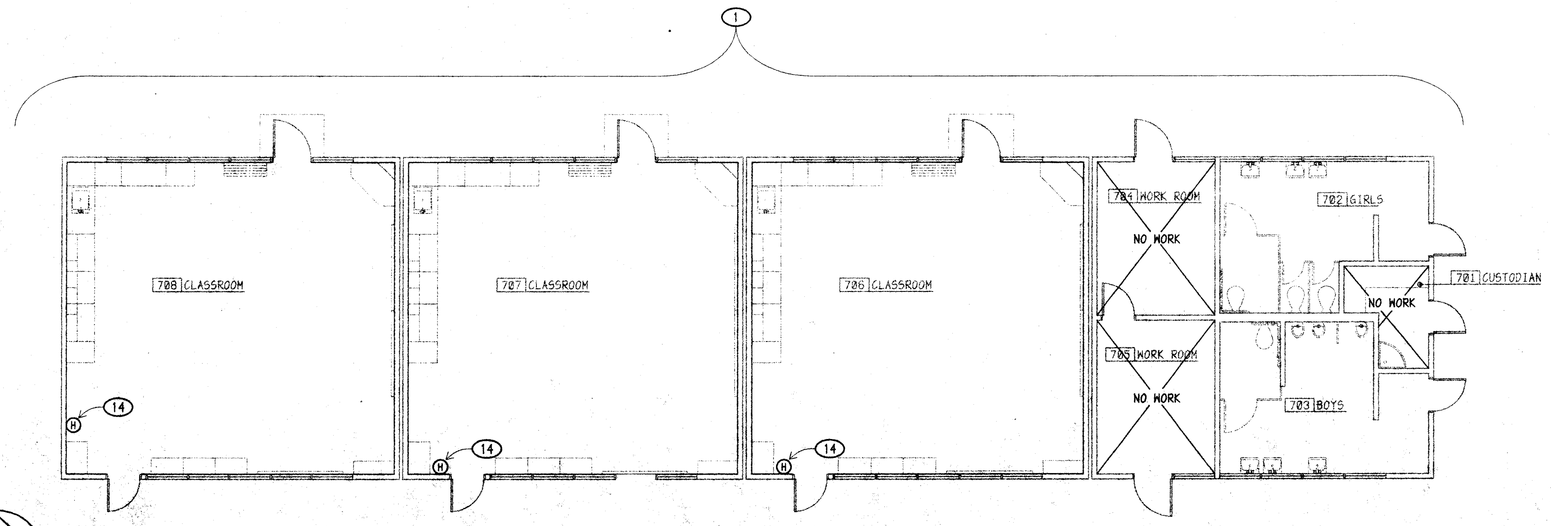
1/8"



NORTH

BUILDING 600 - FIRE ALARM PLAN

1/8"



NORTH

BUILDING 700 - FIRE ALARM PLAN

1/8"

FIRE ALARM SYSTEM VOLTAGE DROP CALCULATIONS

VOLTAGE DROP = $\frac{\text{CURRENT} \times \text{WIRE LENGTH} \times 21.6}{\text{CIR. MIL}}$

VOLTAGE DROP % = $\frac{\text{VOLTAGE DROP}}{\text{APPLIED VOLTAGE}} \times 100$

V.D. = $\frac{.842 \times 570' \times 21.6}{6530}$ = 1.59 VOLTS

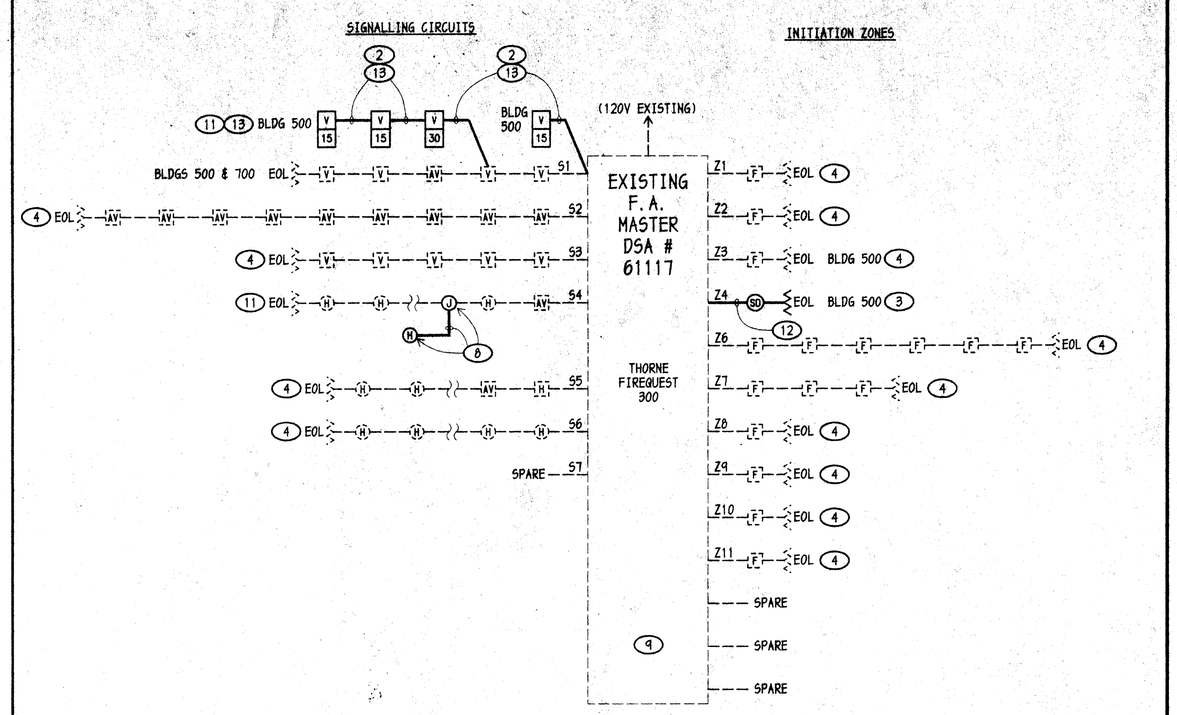
$\frac{1.59}{24} \times 100 = \underline{6.6\ \%}$ (516. CKT #51)

V.D. = $\frac{.211 \times 842' \times 21.6}{6530}$ = .59 VOLTS

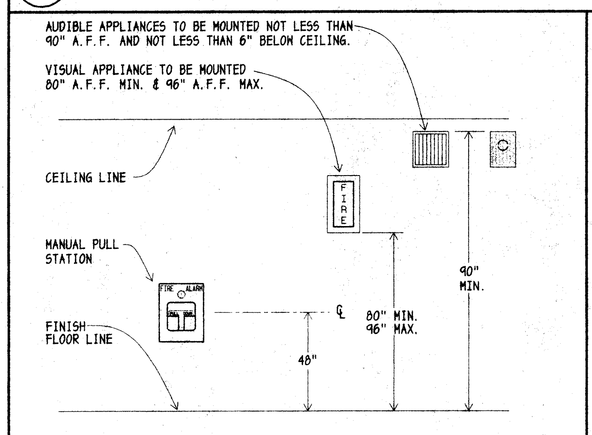
$\frac{.59}{24} \times 100 = \underline{2.4\ \%}$ (516.CKT #54)

FIRE ALARM LEGEND

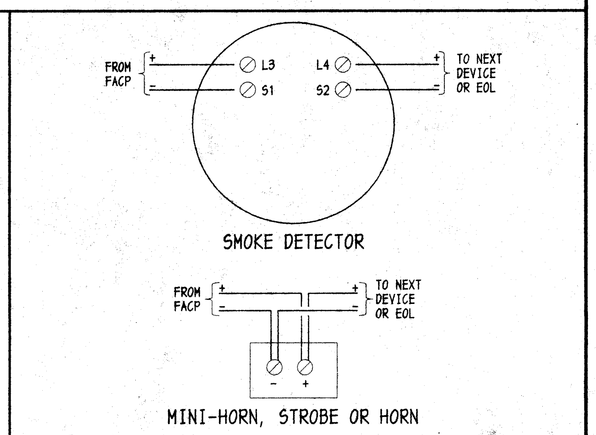
- V 30 VISUAL DEVICE, 30cd. MOUNT PER DETAIL #2/E9.0 WHEELOCK #MSS-2430H-FR CSFM #7125-0705:141
- V 15 VISUAL DEVICE, 15cd. MOUNT PER DETAIL #2/E9.0 WHEELOCK #MSS-2415H-FR CSFM #7125-0705:133
- (S) CEILING MOUNTED SMOKE DETECTOR - PHOTOELECTRIC THORNE #15C-350P WITH 15C-354 BASE CSFM #7272-1443:155



1 FIRE ALARM LINE DIAGRAM — NTS



2 FIRE ALARM DEVICES ELEVATION — NTS



3 FIRE ALARM EQUIPMENT WIRING DIAGRAMS — NTS

NOTES (THIS SHEET ONLY):

1. NO WORK REQUIRED AT THIS BUILDING, U.O.N..
2. 3/4"C - 4 #12.
3. RELOCATE AND RECONNECT EXISTING SMOKE DETECTOR AS SHOWN.
4. TO REMAIN. NO WORK REQUIRED.
5. 3/4"C - 2 #14, 4 #12
6. EXISTING AT DEVICE TO REMAIN - NO WORK REQUIRED.
7. INTERCEPT EXISTING VISUAL CIRCUIT AT THIS DEVICE AND EXTEND CONCEALED OVERHEAD WITH 3/4"C - 4 #12.
8. INTERCEPT EXISTING HORN CIRCUIT AT THIS DEVICE WITH SURFACE J-BOX & ROUTE CIRCUIT CONCEALED OVERHEAD AS REQUIRED WITH 3/4"C - 4 #12.
9. SYSTEM HAS 9.0 AMP HOUR BATTERIES.
10. RELOCATE EXISTING DEVICE AS SHOWN & NOTED.
11. DO NEW WORK AS NOTED.
12. 2 #14
13. DO THIS WORK ONLY AS PART OF ALTERNATE BID #3.
14. EXISTING MINI-HORN TO REMAIN. CUT AND PATCH WALL AS REQUIRED TO INSTALL DEVICE ON A NEW FLUSH J-BOX IN SAME LOCATION.

FIRE ALARM CONTROL PANEL BATTERY CALCULATION

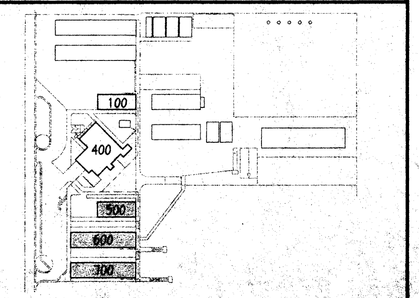
	QUANTITY	SUPV. CURRENT EACH	ALARM CURRENT EACH	SUPV. CURRENT SUB-TOTAL	ALARM CURRENT SUB-TOTAL
NEW 15cd STROBE	4	0	.074	0	.296
NEW 30cd STROBE	1	0	.124	0	.124
EXISTING 15cd STROBE	10	0	.074	0	.74
EXISTING HORN	17	0	.048	0	.816
EXISTING MINI-HORN	41	0	.012	0	.492
EXISTING HORN/STROBE 15cd	1	0	.122	0	.122
EXISTING HORN/STROBE 30cd	7	0	.172	0	1.20
EXISTING HORN/STROBE 75cd	1	0	.248	0	2.48
EXISTING MASTER PANEL	1	.37	1.62	.37	1.62
			TOTALS	.37	4.59

TOTAL ALARM CURRENT OF 4.59 x .083 (5 MINUTES) ..... = 0.38 A.H.
TOTAL SUPERVISORY CURRENT OF .37 x 24 HOURS ..... = 8.8 A.H.
TOTAL AMP HOURS REQUIRED ..... 9.18 A.H.

PROVIDE 14.0 AMP HOUR BATTERIES

COMPLETE FIRE ALARM PLAN SUBMITTAL

THE FIRE ALARM SYSTEM SHOWN ON THESE PLANS HAS BEEN SUBMITTED AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT. ANY SUBSTITUTION OF THE FIRE ALARM SYSTEM SHALL BE RESUBMITTED TO THE DIVISION OF THE STATE ARCHITECT FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL PAY ANY ADDITIONAL FEES THAT ARE INCURRED DUE TO THIS SUBSTITUTION.



KEY PLAN — NO SCALE

CORNELIUS CONSULTING GROUP, INC.
Consulting Electrical Engineers
918 W. Main St., Ph. 733-2671
Visalia, California 93291

REGISTERED PROFESSIONAL ENGINEER — No. 7198 Exp. 9/30/02 — ELECTRICAL — STATE OF CALIFORNIA

ORDIZ MELBY ARCHITECTS
5620 DISTRICT BLVD. #105
BAKERSFIELD, CA 93313
TEL. (805)-832-5258
FAX. (805)-832-4291

LICENSED ARCHITECT — DANNY ESPINOZA ORDIZ — No. C-14728 — 5-31-2001 RENEWAL DATE — STATE OF CALIFORNIA

DANNY E. ORDIZ A.I.A. ARCHITECT C-14,728

WILLIAM J. MELBY A.I.A. ARCHITECT C-16,835

IDENTIFICATION STAMP
DIV. OF STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL. NO. 101484
FILE NO.
A.C. F.L.S. B.B.
DATE

APPROVED
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
MR. LS — SS MO
03- 101484 6/1/01

AS BUILT DRAWINGS

MODERNIZATION OF COLLEGE HEIGHTS ELEM. SCHOOL FOR:

BAKERSFIELD CITY SCHOOL DISTRICT

2551 SUNNY LN.
BAKERSFIELD,
CALIFORNIA
93305

ADDENDUM #1 DRAWING #E9.0

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. REPORT DISCREPANCIES TO THE ARCHITECT

MARK	DATE	REVISION
1	01/01/2001	ADDENDUM #1

BUILDINGS 500, 600, AND 700 - FIRE ALARM PLANS

JOB NUMBER 97140
DATE 01-06-98
DRAWN BY RTS
SHEET E 9.0 OF

J:\JOBS\SCHOOLS\BFIELD\BCSD\COLEIGHTS\E9-0.2D REVISED: 02-22-01 NAME: DP JOB #9964