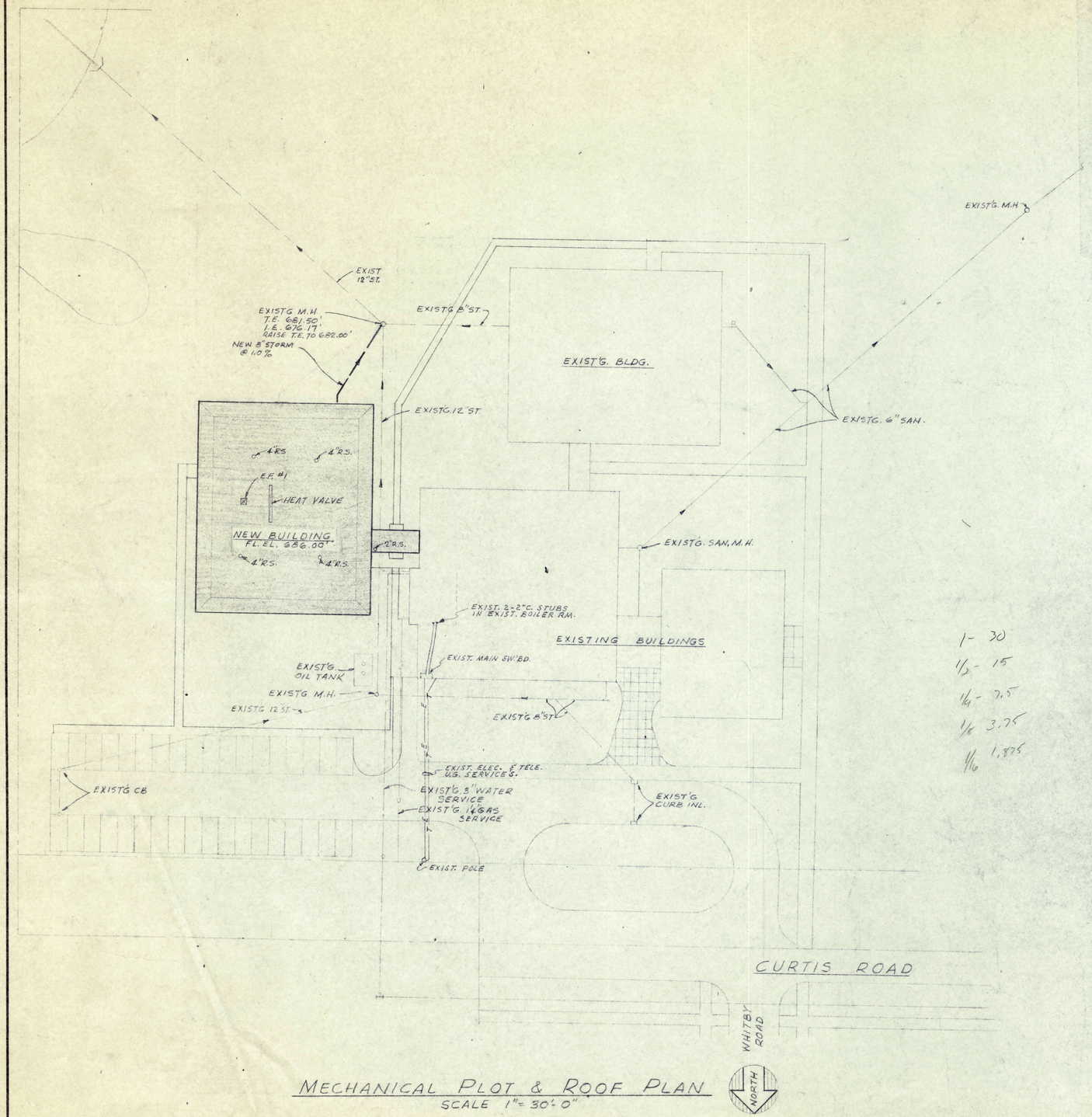
PEERLESS BLUE PRINT CO. 250-4-60



MECHANICAL PLOT & ROOF PLAN
SCALE 1"= 30'-0"

1- 30
1/2- 15
1/4- 7.5
1/6 3.75
1/16 1.875

SCHEDULES & SYMBOLS

MECHANICAL SYMBOLS

	AUTO. CONTROL VALVE	AAV	AUTOMATIC AIR VENT	EF	EXHAUST FAN	PRV	PRESSURE REDUCING VALVE	SWFD	SAFE WASTE FLOOR DRAIN
	BALANCING COCK	AWD	AREA WAY DRAIN	EP	END PLATE	R	CONDENSATE RETURN	TDC	TILE DRAIN CONNECTION
	CHECK VALVE	AC	AUTOMATIC CONTROL	FA	FRESH AIR	RA	RETURN AIR	UF	UTILITY FIXTURE
SAN.	SANITARY SEWER	AD	ACCESS DOOR	FD	FLOOR DRAIN	RG	RETURN GRILLE	UH	UNIT HEATER
CW	COLD WATER	BFW	BOILER FEED WATER	F	FILLER PANEL (UTIL. CABIT.)	RS	ROOF SUMP	UV	UNIT VENTILATOR
HW	HOT WATER	BL	BLEEDER LINE	FR	FINNED RADIATION	S	STEAM	UR	URINAL
HWR	HOT WATER RETURN	BCC	BALANCING COCK CONTROL	GT	GREASE TRAP	SH	SHOWER HEAD	VB	VACUUM BREAKER
ST.	STORM SEWER	BWV	BACK WATER VALVE	HB	HOSE BIBB	SS	SERVICE SINK	VD	VENT DUCT
	FLOW IN LINE	CB	CATCH BASIN	HFD	HOPPER FLOOR DRAIN	SN	SINK	VG	VENT GRILLE
	GATE VALVE	CC	CONTINUOUS CONVEYOR	HR	HEATING RETURN (WATER)	SP	SOIL PIPE	VP	VENT PIPE
G	GAS	CD	CEILING DIFFUSER	HS	HEATING SUPPLY (WATER)	S & D	STOP AND DRAIN	VR	VENT REGISTER
	RUNNING TRAP & C.O..	CA ½	COMPRESSED AIR	LAV	LAVATORY	SD	SUPPLY DUCT	HAVUL	HTG. & VENT. UNIT
T	THERMOSTAT	COND.	CONDUCTOR	MC	MANUAL CONTROL	SG	SUPPLY GRILLE	WH	WALL HYDRANT
	DUPLEX	CONV.	CONVECTOR	MH	MANHOLE	SR	SUPPLY REGISTER	W	WASTE
	STEAM CONTROL VALVE	DD	DRAFT DUCT	MT	MONOFLOW TEE	SO	SUPPLY OUTLET	W & V	WASTE AND VENT
	STRAINER	DF	DRINKING FOUNTAIN	MV	MANUAL VENT	SW	SAFE WASTE	WC	WATER CLOSET
		DPH	DRY PIPE HYDRANT	NIC	NOT IN CONTRACT	THRM	THERMOMETER AND WELL	WFD	WITH FLUE DAMPER
		EC	END COVER	PCR	PUMPED COND. RETURN	TEW	TEMPERED HOT WATER	WFR	WINDOW FIN RADIATION

PLUMBING FIXTURES

FIXTURE	LOCATION	MAKE	MODEL NO.	CODE NAME	SIZE	MAT'L	ACCESSORIES
WC	ALL	KOHLER	K-4280 ET	PENRYN		CHINA	SLOAN ROYAL #110 FVV OLSONITE #10 BLK. OPEN
UR	ALL	KOHLER	K-4920-T	BRANHAM		CHINA	SLOAN ROYAL #185 VV K-9173 STRAINER
LAV.	ALL	KOHLER	K-1975	GREENWICH	20x18	CHINA	SPEAKMAN S-4320 METERING FAUCET - K-7050 CHECK STOPS JOSAM C-804 WALL SUPPORT K-7714 DRAIN SEE SM-5
SS	ALL	KOHLER	K-12874-A	LAVINGTON	24x26	C.I.	K-13633 SUPPLY
D.F.	ALL	KOHLER	K-5260-A	SAYBROOK	14 x13	CHINA	
F.D.	TOILETS	BOOSEY	2015 RA		5"ϕ	C.I.	ILLINOIS METAL STRAINER
R.S.	ALL	BOOSEY	2005 A		2'-4"	C.I.	HUB OUTLET

EXHAUST FAN

NO.	SERVICE	CFM	S.P.	TIP SPD	DRIVE	VOLTAGE	HP	MAT'L.	DAMPER	REMARKS
1	TOILETS	1440	3/8"	3300	BELT	115V-1ϕ	¼	ALUM.	SELF-ACT.	JENN-AIR 241 BCR 515 RPM *

* AUTOMATIC CONTROL

UNIT VENTILATORS

NO.	CFM (STD)	F.T.	BTU/HR	HEAT MED	HP	VOLTAGE	REMARKS
1	1000	131°	65,200	180°	½	115V-1ϕ	SCHEMENAUER UH-1028-B-1-W4/WFR & OPEN SHELVING-8'-0 PER UNIT REMAINING SHELVING & WFR ALTERNATE LOUVERS BY GENL. CONTR.

UNIT HEATERS

No.	CFM	F.T.	BTU/HR.	HEAT. MED	HP	VOLTAGE	P.D.	REMARKS
1	650	120	43,000	180°F	⅛	115-1ϕ	.15	TRANE 250-2 FLOOR TYPE REWORK EXIST'G UH. WHICH IS FULLY REC. TYPE.
2	650	120	43,000	180°F	⅛	115-1ϕ	.15	TRANE 250-2 FLOOR TYPE TRANE 250-2 WALL HUNG FRONT INLET & OUTLET

ELECTRICAL SYMBOLS

	INCANDESCENT CEILING LIGHT	TV	TELEVISION OUTLET	A, B, Etc.	LIGHT FIXTURE DESIGNATION
	WALL LIGHT OUTLET		WALL SPEAKER OUTLET	A.F.	ABOVE FLOOR
	EXIT LIGHT OUTLET		CLOCK	C.	CONDUIT
	FLUORESCENT LIGHT FIXTURE		SIGNAL BELL	P.B.	PULL BOX
	DUPLEX RECEPTACLE		FIRE ALARM STATION	L8-12	PANEL & CIRCUIT DESIGNATION
S	SINGLE POLE WALL SWITCH		FIRE HORN	S.N.	SOLID NEUTRAL
S3	3-WAY WALL SWITCH		1-PHASE MOTOR	U.G.	UNDERGROUND
SK	KEY OPERATED WALL SWITCH		1-PHASE STARTER SWITCH		
	ELEC. PANEL OR CABINET	T	ELECTRIC THERMOSTAT		

LIGHTING FIXTURE SCHEDULE

DES.	TYPE	LAMPS NO.	LAMPS WATTS	MOUNTING	MAKE	LOCATION	REMARKS
A.	FLUOR.	4	40	CEILING RECESSED ON INVERTED "T" MEMBERS	LITECONTROL #2944RS	CLASS RMS & CONF. RMS.	4-LAMP, RAPID START EXTRA SHALLOW 2'X4' UNIT W/HINGED POLYSTYRENE DIFFUSER & END RAILS OF FINISH TO MATCH INVERTED "T" CEILING.
B.	FLUOR.	2	40	DO.	LITECONTROL #6129RS	CORRIDORS	2-LAMP, RAPID START, RECESSED 2'X4' UNIT W/ HINGED POLYSTYRENE DIFFUSER.
E.	FLUOR.	5	40	WALL SURF. ABOVE CHALKBOARD	SOLAR #233-RS-6 & #233-RS-8	CLASSROOMS	20-FT. CONTINUOUS CHALKBOARD LIGHT. INSTALL ONE SWITCH PER ROW. OMIT BRACKETS - MOUNT DIRECT TO WALL (ADDITIVE ALTERNATE #4.)
E	FLUOR.	6	40	DO.	SOLAR #237-RS-8	DO.	24-FT. UNIT TO MATCH "E" (ADDITIVE ALTERNATE #4.)
J.	INC.	2	75	CEILING SURFACE	ART METAL #1739	TOILETS	OPAL GLASS SHIELD ON METAL CEILING PAN.
L.	DO.	1	50	DO.	BRYANT #5228	CLOSETS	KEYLESS SOCKET IN PORCELAIN OUTLET COVER.
M.	INC.	1	150	SUSPEND TO LEVEL W/ JOISTS	BENJAMIN #E-1802	JAN. CLOS.	INDUSTRIAL SOCKET REFLECTOR-ALL WHITE-ON CONDUIT STEM.
U.	INC.	1	150	WALL SURF. ABOVE DOOR	McPHILBEN #43-50 VT	ENTRANCES	TAPERED, ROUND, SCREW-ON OPAL ENCLOSING GLASS IN WEATHER-PROOF ALUMINUM WALL BRACKET.
V.	INC.	1	150	CEILING RECESSED.	LITECRAFT N G-512	ENTRY B-55, B-56.	ADJUSTABLE SPOT UNIT IN RECESSED HOUSING. WHITE FINISH R-40 FLOOD LAMP.
AB.	FLUOR.	2	40	DO.	LITECONTROL #2924-RS	CORR. B-52, 58, 59	FIXT. "A" EXCEPT W/2 LAMPS.
EB.	INC.	2	25	DO.	DAYBRITE # G-2545-L	CORR. # B-59	RED "EXIT" LETTERS ON WHITE GLASS IN HINGED FRAME SINGLE FACE UNIT WITH ARROW LEFT. GLASS BOTTOM.
EC.	INC.	2	25	DO.	DAYBRITE G-2525-R&L	CORR. B-59	DOUBLE FACE UNIT TO MATCH "EB" W/ARROW RIGHT & ARROW LEFT.
EF.	INC.	2	25	DO.	DAYBRITE G-2525-D	PASS. B-53	DOUBLE FACE UNIT TO MATCH "EB" W/ DOUBLE ARROWS.

ALL FIXTURES SHALL BE IDENTICAL TO THEIR RESPECTIVE COUNTERPARTS IN EXIST. BLDG.

APPROVED BY:

MECH. & ELECT. PLOT PLAN & SCHEDULES

DATE 10/12/62
REVISED

ADDITION TO
MARSHALL ELEMENTARY SCHOOL SECT. 9
LIVONIA PUBLIC SCHOOLS SCHOOL DIST.
WAYNE COUNTY, MICHIGAN

FILE NO. 1587

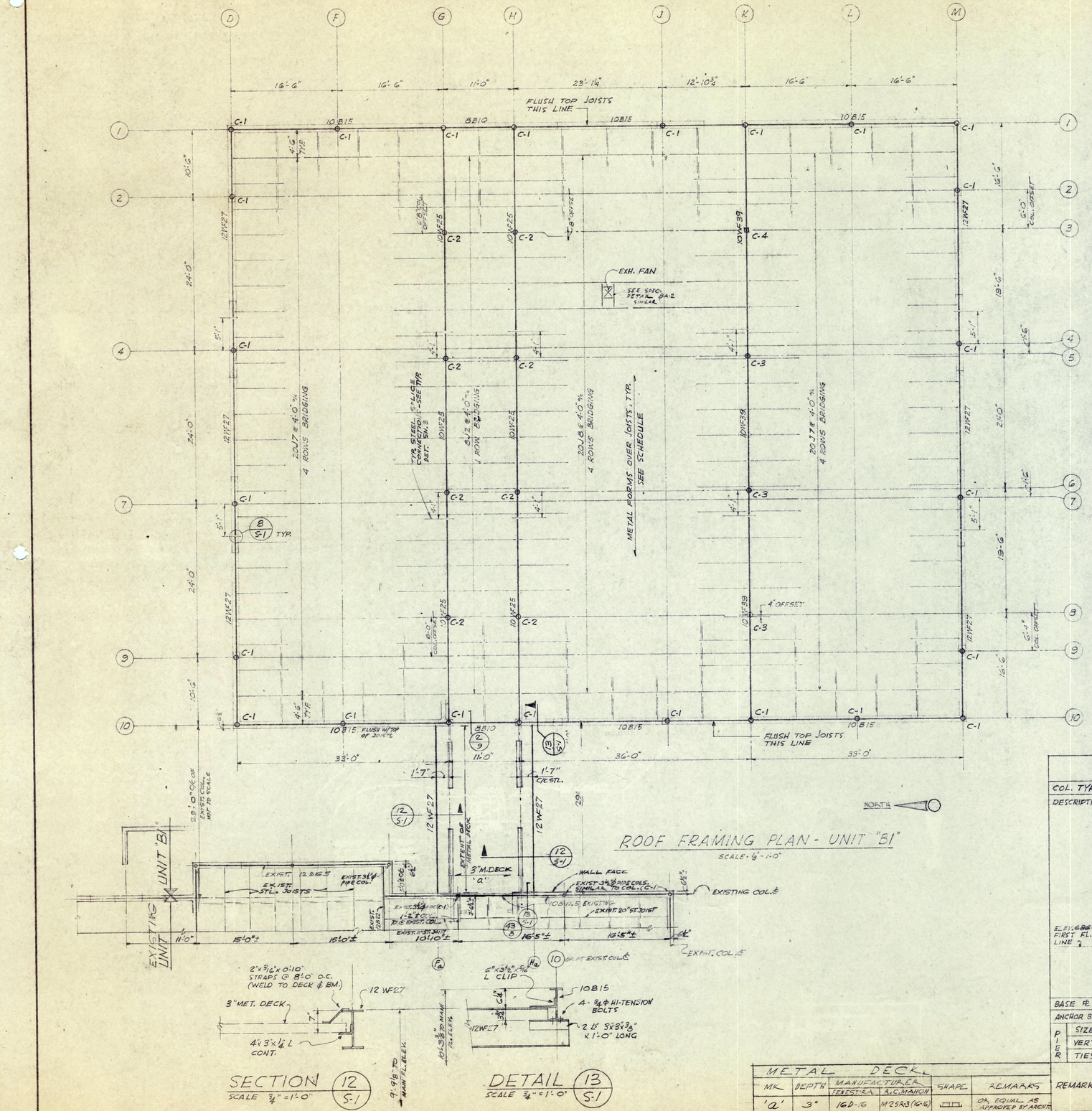
DRAWN BY B.A.T.

EBERLE M. SMITH ASSOC., INC.
ARCHITECTS ENGINEERS

SHEET NO. ME-1

ROOM 626 • 153 EAST ELIZABETH STREET - DETROIT 1. - WOODWARD 5-8180

B. K. ELLIOTT CO. 70012 500 3-59



ROOF FRAMING PLAN - UNIT "B1"

SCALE: ⅛" = 1'-0"

SECTION (12 / S-1)

SCALE ¾" = 1'-0"

DETAIL (13 / S-1)

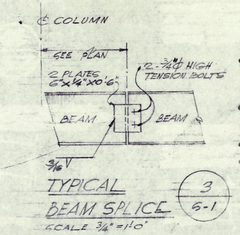
SCALE ¾" = 1'-0"

METAL DECK

MK.	DEPTH	MANUFACTURER		SHAPE	REMARKS
		TENESTRA	R.C.MAHON		
'a'	3"	16D-16	M25R3(16¼)		OR EQUAL AS APPROVED BY ARCH'T.

GENERAL NOTES

- EXCEPT AS OTHERWISE SHOWN OR NOTED, CONCRETE FOR STRUCTURAL ELEMENTS SHALL DEVELOP A 28 DAY COMPRESSIVE STRENGTH OF:
  - FOOTINGS & WALLS — 2500 P.S.I.
  - ALL SUPPORTED SLABS, BEAMS & COLUMNS — 3000 P.S.I.
  - UNFRAMED SLABS ON GRADE — 2500 P.S.I.
  - PIERS — 3000 P.S.I.
- FOOTINGS SHALL BE PLACED ON UNDISTURBED SOIL OF 1500 P.S.F. CAPACITY.
- DEPTHS SHOWN ON DRAWINGS ARE MINIMUM. IF POOR SOIL IS ENCOUNTERED, THE ARCHITECT SHALL BE NOTIFIED, AND WHERE PRACTICABLE, FOOTINGS SHALL BE LOWERED TO REST ON SOIL OF ADEQUATE BEARING CAPACITY.
- EXCEPT AS OTHERWISE SHOWN OR NOTED, THE FOLLOWING SHALL APPLY:
  - a. SLABS ON FILL SHALL BE 4" THICK, TYPICALLY, AND REINF. WITH 6X6"-W/W
  - b. ENTRANCEWAY SLABS SHALL BE 4" THICK, TYP. AND REINF. WITH #2 @ 8" O.C. EA. WAY, UNLESS NOTED OTHERWISE.
- FOR ANGLES, CLIPS, BARS, PL'S AND OTHER SECTIONS OR MATERIALS ATTACHED TO STRUCTURAL MEMBERS SEE ARCH. DETAILS.
- FOR EXACT DIMENSIONS & LOCATIONS OF MECH. ROOF OPENINGS CHECK MECH. SHOP DRAWINGS.
- FOR PAINTING & ADDITIONAL NOTES & DETAILS SEE SPECS.
- WHERE JOISTS FRAME @ RIGHT ANGLES TO EACH OTHER, PROVIDE A 2½"x2"x¼" CONTINUOUS L. CLIPPED TO JOISTS TO RECEIVE METAL FORMS.



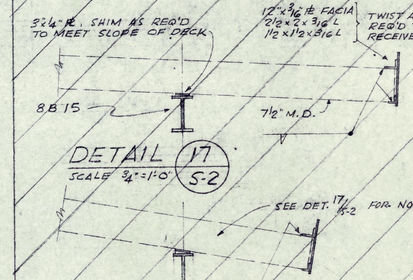
TYPICAL BEAM SPLICE (3 / S-1)

SCALE ¾" = 1'-0"

VOID

DETAIL (15 / S-2)

SCALE ¾" = 1'-0"



DETAIL (17 / S-2)

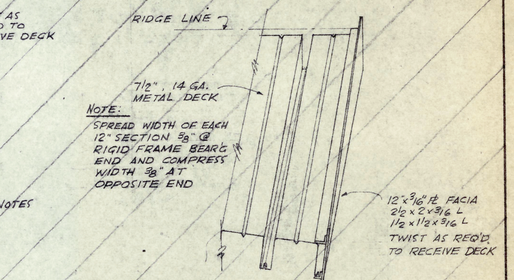
SCALE ¾" = 1'-0"

DETAIL (18 / S-2)

SCALE ¾" = 1'-0"

RIGID FRAME RF-1 (16 / S-2)

SCALE ¼" = 1'-0"

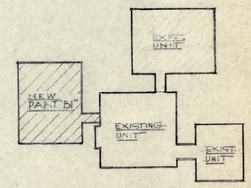


DETAIL (19 / S-2)

SCALE ¾" = 1'-0"

COLUMN SCHEDULE

COL. TYPE	C-1	C-2	C-3	C-4
DESCRIPTION	12" CAP ℄ BM. 3½ø @ 9.11 10'-0" UNLESS OTHERWISE SHOWN 10-3⅜" @ 5.21 LBS/FT	BM. ½" CAP ℄ 3½ø @ 9.11 10'-0"	BM. ½" CAP ℄ 3½ø @ 12.51# 10'-0"	BM. ½" CAP ℄ 4"x4"x½ TUBE 10'-0"
ELEV. 686'-0" FIRST FL. LINE	1'-7" TYP.	1'-7" TYP.	1'-7"	1'-7"
BASE ℄	6'x5⅝"x0'-9"	8'x3¼"x0'-9"	8'x3¼"x0'-9"	8'x3¼"x0'-9"
ANCHOR BOLTS	2-¾ø x 2'-6"	2-¾ø x 2'-6"	2-¾ø x 2'-6"	2-¾ø x 2'-6"
PIER SIZE	12x12	→	→	→
PIER VERT.	4-#5	→	→	→
PIER TIES	#2@10"	→	→	→
REMARKS	COLS. 11-Fa, Ha 8'-9⅛" HIGH			



KEY PLAN

APPROVED BY

ROOF FRAMING & COL. SCHEDULE - UNIT "B1"

ADDITION TO MARSHALL ELEMENTARY SCHOOL SECTION 9
LIVONIA PUBLIC SCHOOLS SCHOOL DISTRICT
WAYNE COUNTY, MICHIGAN

DATE 10/12/62 — REVISED —

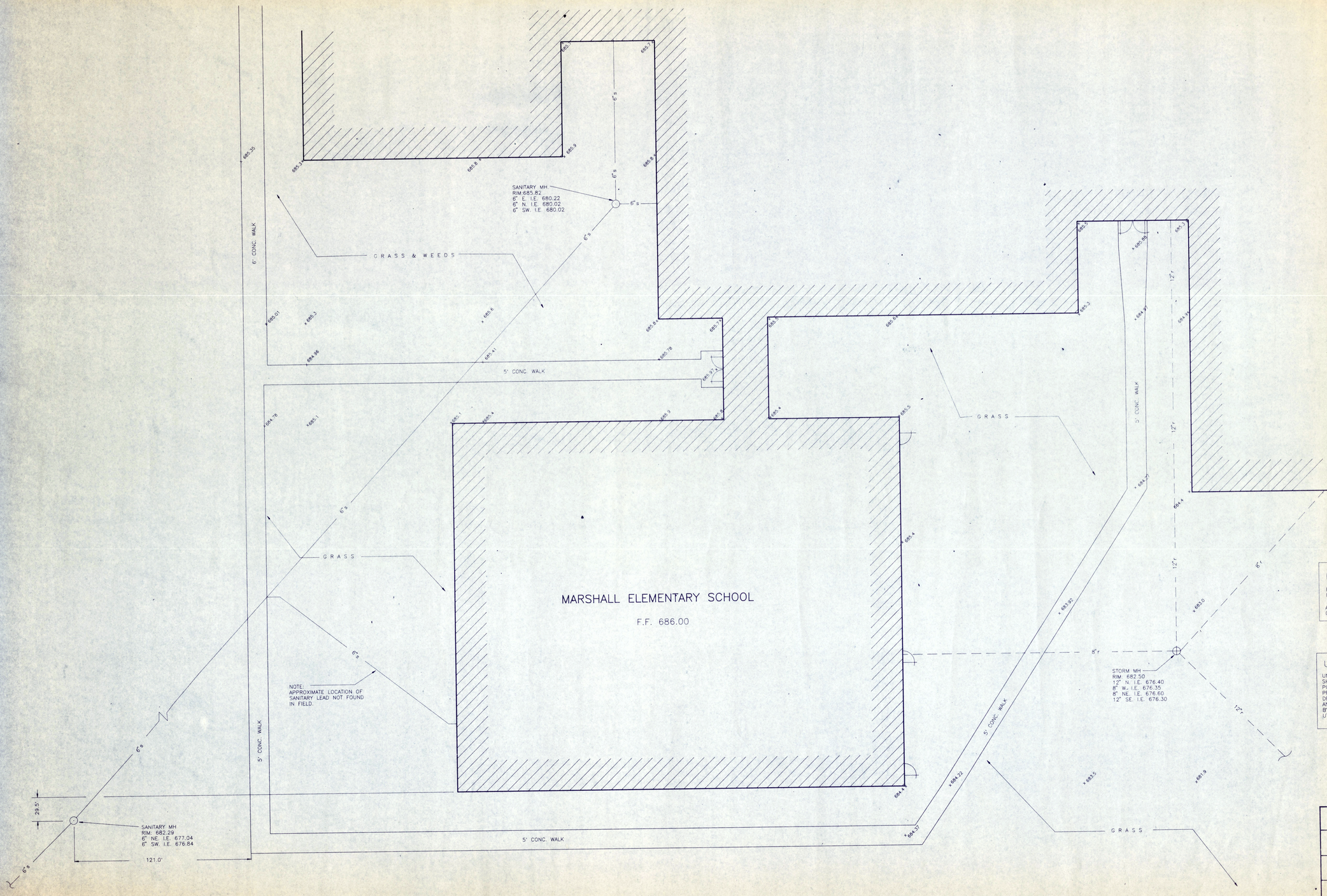
FILE NO. 1587

SHEET NO. S-1

DRAWN BY T.W., G.K.

EBERLE M. SMITH ASSOC., INC.
ARCHITECTS ENGINEERS

ROOM 626 · 133 EAST ELIZABETH STREET · DETROIT 1, · WOODWARD 5-8180



LEGEND

B.F.	Barrier Free Parking
I.E.	Invert Elevation
T/C	Top of Curb
G	Gutter
T/S	Top of Slope
B/S	Bottom of Slope
F/G	Finish Grade
Ex	Existing
P	Pavement
R	Record
M	Measured
F.I.	Found Iron
S.I.	Set Iron
F.M.	Field Measurement
C.M.F.	Concrete Monument Found
S.P.K.	Set P.K. Nail
○	Existing Sanitary Manhole
○	Proposed Sanitary Manhole
⊕	Existing Storm Manhole
○	Proposed Storm Manhole
⊖	Existing Gate and Well
⊖	Proposed Gate and Well
☤	Existing Fire Hydrant
☤	Proposed Fire Hydrant
◎	Existing Catch Basin
◉	Proposed Catch Basin
□	Existing Inlet
■	Proposed Inlet
o.CO	Clean Out
⊗	Water Shut Off
△	Existing Light Fixture
▲	Proposed Light Fixture
—SL—	Sanitary Lead
—WS—	Water Service
—s—	Existing Sanitary Sewer
—s—	Proposed Sanitary Sewer
—st—	Existing Storm Sewer
—ST—	Proposed Storm Sewer
—w—	Existing Watermain
—W—	Proposed Watermain
—g—	Existing Gas Main
—E—	Buried Electric
000.00	Existing Spot Elevation
000.00	Proposed Spot Elevation
—000—	Existing Contour
—000—	Proposed Contour
	Existing Utility Pole
—OH—	Existing Overhead Wires
	Centerline
	Property Line
	Fence
	Sign
	Mailbox

BENCHMARK NOTE:

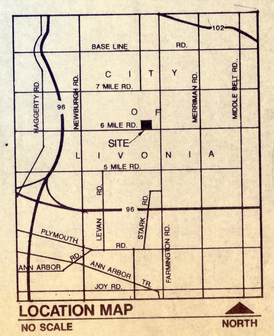
FINISHED FLOOR OF EXISTING BUILDING ELEVATION 686.00

ADD 600.00 TO ALL GRADES TO RECEIVE THE CORRECT ELEVATION.

UTILITIES NOTE:

UNDERGROUND UTILITY LINES AND STRUCTURES SHOWN ARE PER FIELD OBSERVATION WHERE POSSIBLE AND FROM SCHOOL SITE PLANS PREPARED BY: EBERLE M. SMITH ASSOC., INC., DETROIT, MI, DATED 2-5-60. ALL MUNICIPALITIES AND UTILITY COMPANIES SHOULD BE NOTIFIED BY CONTRACTOR FOR FIELD LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

72 HOURS BEFORE YOU DIG CALL MISS DIG 800-482-7171 (TOLL FREE)



CLIENT:
TWP. ASSOCIATES, INC.
31 MILL POND LANE
BLOOMFIELD HILLS, MI. 48302

BY	DATE	ISSUED FOR
MS	7-1-97	CLIENT
	8-14-97	8-15-97

DBA DIETRICH, BAILEY AND ASSOCIATES, P.C.
100 South Main Street Plymouth, Michigan 48170
313/455-3111 Fax 313/455-3127
Engineering Planning Surveying Landscape Architecture

TOPOGRAPHIC SURVEY

MARSHALL ELEMENTARY SCHOOL
PART OF THE S.E. 1/4 OF SECTION 9, T. 1 S., R. 9E.,
CITY OF LIVONIA, WAYNE COUNTY, MICHIGAN

#2034-07

C1.1