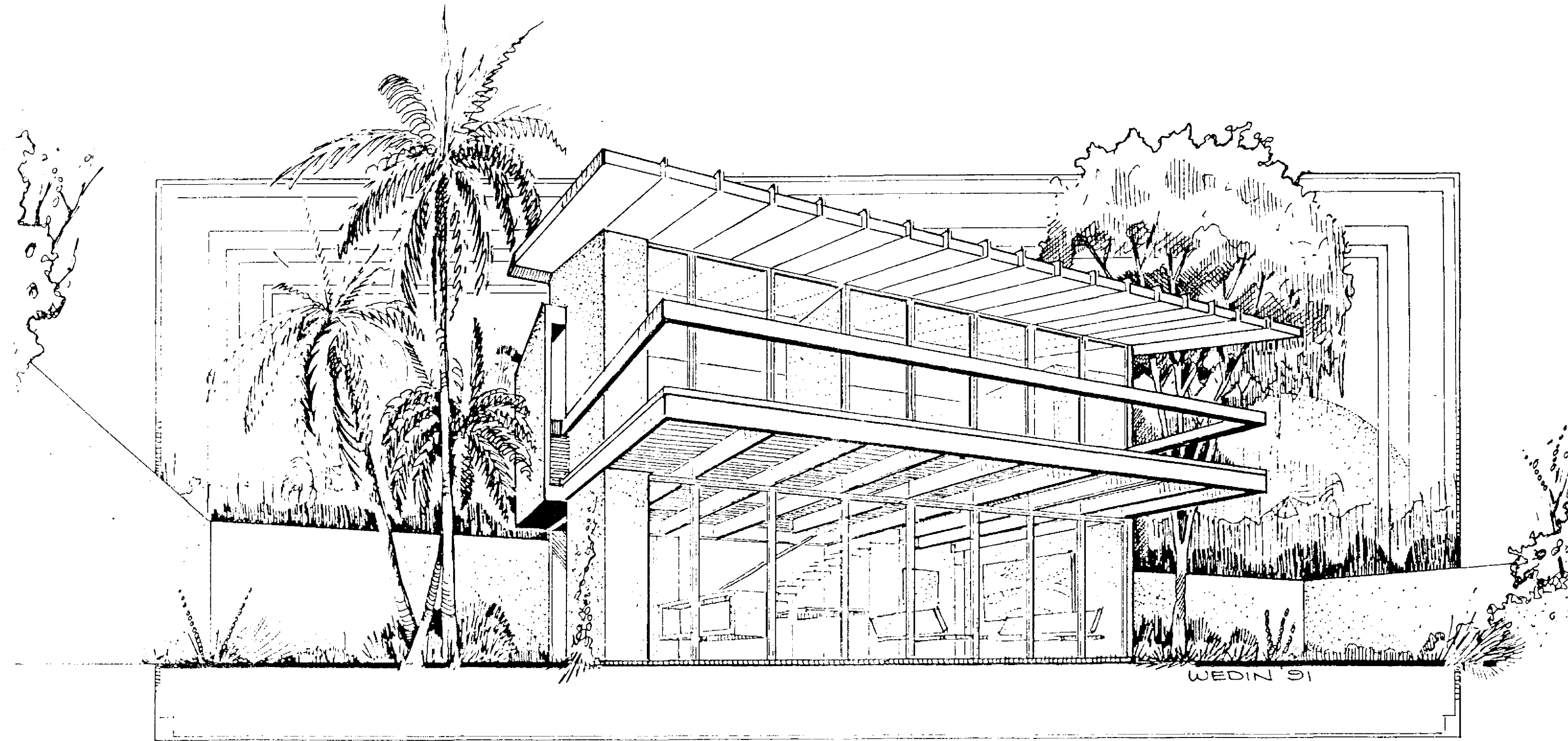


SOLAR ESSENCE

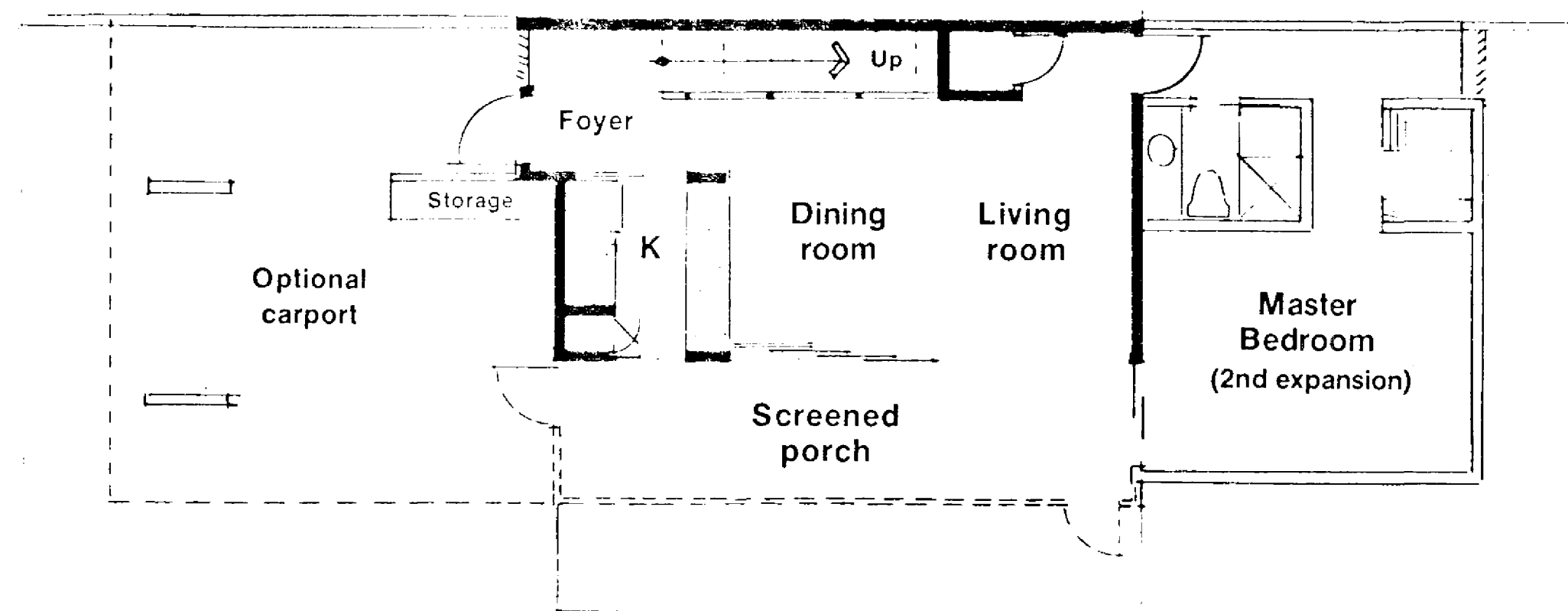
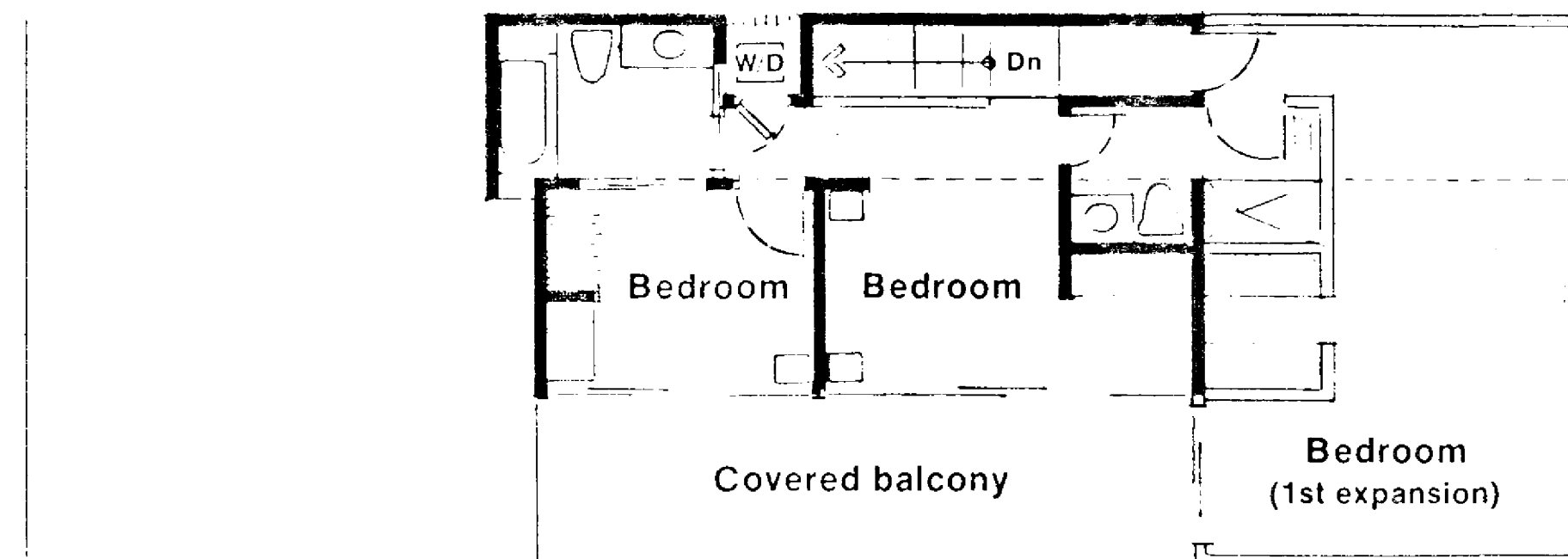


These drawings and specifications are experimental in nature and the energy performance of the design has not been tested or evaluated in actual construction. Also note that these homes were designed for use only in the State of Florida and may be more appropriate for use in some climatic regions within the state than others.

The Florida Solar Energy Center, and the Designer, Architects, Judges, Plans Designers, and Artists involved in developing these drawings and specifications (hereinafter referred to "FSEC/Contractors") make no statement, representation, claim or warranty, whether express, implied or statutory with respect to these plans and specifications. Any implied warranties of merchantability or fitness for a particular purpose are hereby disclaimed.

FSEC/Contractors assume no liability for, and by its use Purchaser hereby releases FSEC/Contractors from all liability for, damages, losses or injury, whether direct, indirect, consequential or incidental, including, but not limited to personal injury, death and damage to property, whether or not due to or caused by FSEC/Contractors negligence, that may arise from or be connected with uses of these drawings and specifications. FSEC/Contractors does not authorize any person, whether employees or agents of FSEC/Contractors or otherwise, to make any representation or warranty or to assume any liability with respect to these drawings and specifications.

Florida Solar Energy Center, 1991



REVISIONS

WISLOW ELLIOT WEIN ARCHITECT
 P.O. BOX 1873, BOCA RATON, FLORIDA 33429
 141 N. W. 20TH STREET, BOCA RATON, FLORIDA 33431 (407)392-9216
 REPLY



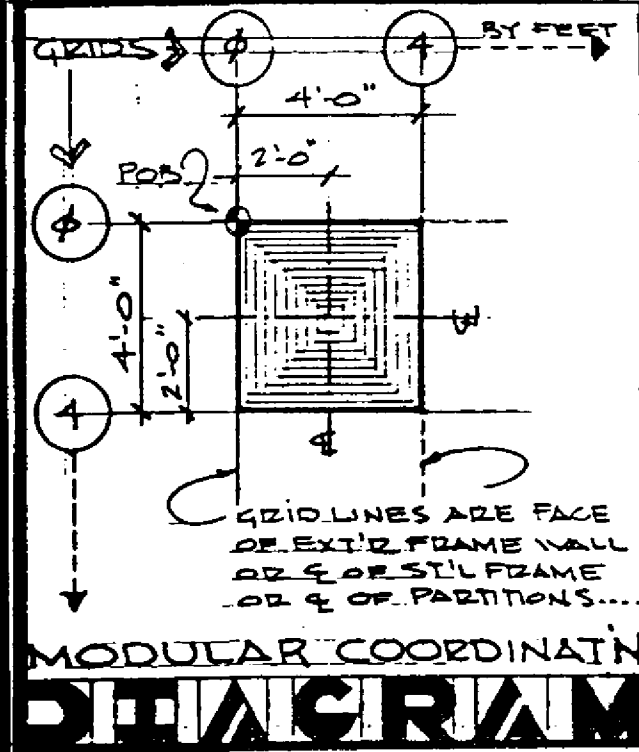
SOLAR METAL AFFORDABLE HOUSING FOR
 FLORIDA SOLAR ENERGY CENTER 1991
 300 State Road 401, Cape Canaveral, Florida 32920-4099, Telephone: (407) 783-0300
 Fax: (407) 783-2571
 State University System of Florida

Date: 29 July 91
 91.0003
 Drawn: SHZ/CRW
 Job: 9122

COVER SHEET

GENERAL NOTES:

1. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS WHICH WILL AFFECT THE INSTALLATION OF ALL NEW WORK. IF SIGNIFICANT DISCREPANCIES ARE DISCOVERED, THE ARCHITECT MUST BE NOTIFIED BEFORE PROCEEDING WITH ANY MODIFICATION TO THE APPROVED DOCUMENTS.
2. ALL CONSTRUCTION SHALL COMPLY WITH ALL STATE, COUNTY AND LOCAL CODES AND APPLICABLE AMENDMENTS (LATEST ADDITION).
3. THE CONTRACTOR IS RESPONSIBLE FOR THE ADEQUATE BRACING OF ALL STRUCTURAL AND NON-STRUCTURAL COMPONENTS DURING CONSTRUCTION.
4. THE CONTRACTOR SHALL PAY FOR AND APPLY FOR ALL PERMITS AS REQUIRED BY THE LOCAL AUTHORITIES.
5. DO NOT SCALE DRAWINGS. IF WRITTEN DIMENSIONS DO NOT EXIST, WHICH ARE NECESSARY FOR CONSTRUCTION, THE CONTRACTOR MUST CONTACT THE ARCHITECT TO OBTAIN SAME.
6. INFORMATION FOR THE BASIC LAYOUT OF THIS DRAWING WAS BASED ON EXISTING DOCUMENTS OR FIELD DIMENSIONS (F.D.). CONTRACTOR MUST VERIFY IN FIELD (V.I.F.) ACTUAL CONDITIONS AS DISCOVERED AND OBSERVED AND NOTIFY ARCHITECT.
7. THE ARCHITECT IS IN NO WAY RESPONSIBLE; NOR CAN BE HELD LIABLE FOR ANY UNSAFE SITUATIONS AT JOB SITE OR RELATED CONSTRUCTION ACTIVITIES.
8. ALL WORK SHALL BE PERFORMED BY CONTRACTORS POSSESSING VALID CERTIFICATES OF COMPETENCY AND OCCUPATIONAL LICENSES, RECOGNIZED AND ACCEPTED BY THE LOCAL GOVERNMENT HAVING JURISDICTION.
9. ALL WORK SHALL BE PERFORMED BY COMPETENT MECHANICS TRAINED IN THEIR FIELD AND SHALL RESULT IN A QUALITY, "FIRST CLASS" JOB.
10. TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS SUBMITTED HEREWITH COMPLY WITH ALL EXISTING INTERPRETATIONS AND PROVISIONS OF THE APPLICABLE BUILDING CODES AT THE TIME OF THE PLANS PREPARATION. NO WARRANTY EITHER EXPRESSED OR IMPLIED IS HEREWITH GIVEN.



These drawings and specifications are prepared in nature and the energy performance of the design has not been tested or evaluated in actual construction. Also note that these homes were designed for use only at the State of Florida and may be more appropriate for use in some climatic regions within the state than others.

The Florida Solar Energy Center, and the Designer, Architect, Engineer, Plans Designer, and Artist, are not responsible for any damage, loss or injury, whether direct, indirect, consequential or incidental, including, but not limited to personal injury, death and damage to property, whether or not due to or caused by FSEC-Contractor negligence, that may arise from or be connected with use of these drawings and specifications. FSEC-Contractor does not warrant any person, whether employee or agent of FSEC-Contractor or otherwise, to make any representation or warranty or to assume any liability with respect to these drawings and specifications.

FSEC-Contractor assumes no liability for, and by its use the Purchaser hereby releases FSEC-Contractor from all liability for, damage, loss or injury, whether direct, indirect, consequential or incidental, including, but not limited to personal injury, death and damage to property, whether or not due to or caused by FSEC-Contractor negligence, that may arise from or be connected with use of these drawings and specifications. FSEC-Contractor does not warrant any person, whether employee or agent of FSEC-Contractor or otherwise, to make any representation or warranty or to assume any liability with respect to these drawings and specifications.

© Florida Solar Energy Center, 1991

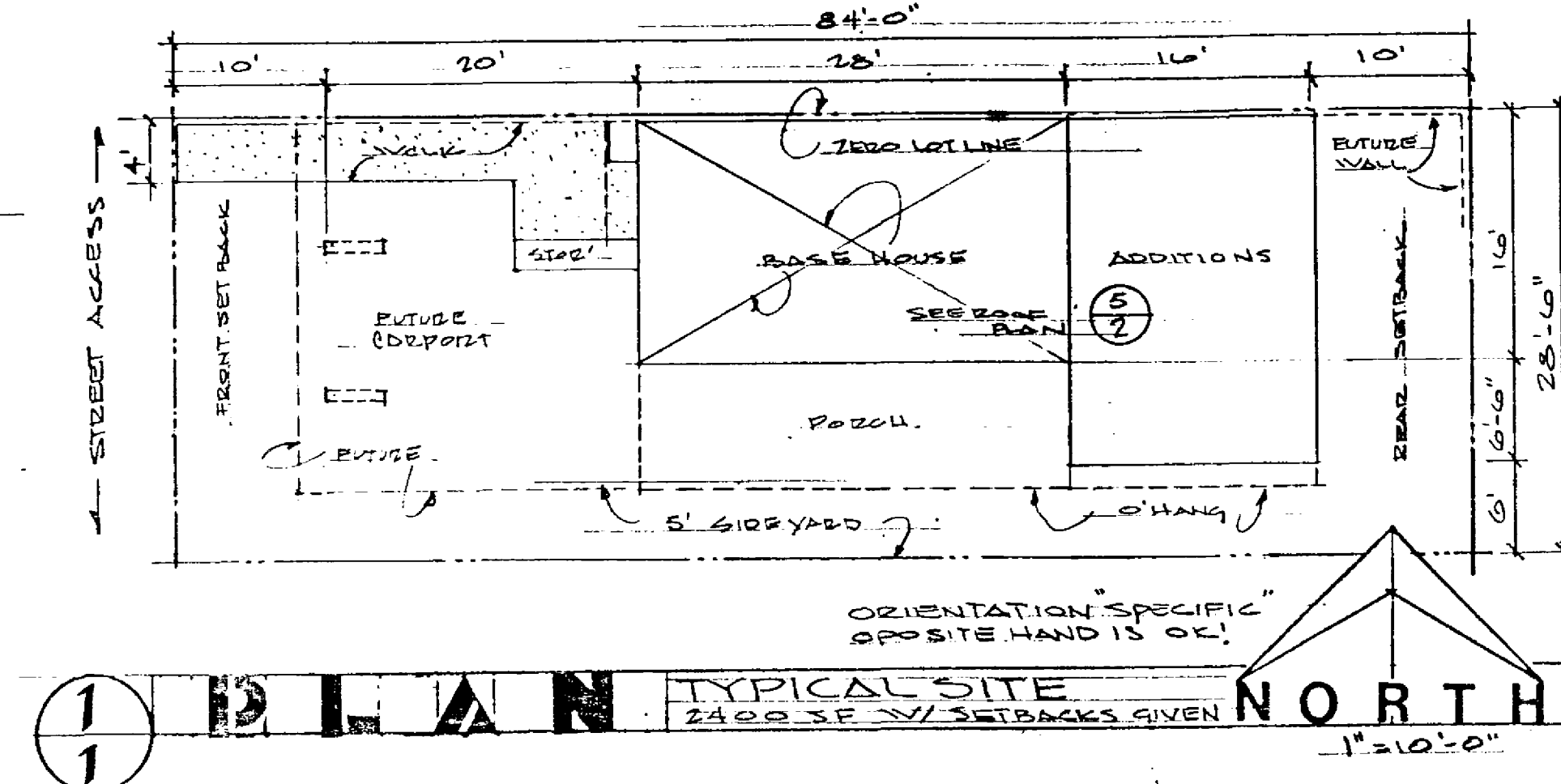
NOTICE

This Architect has not been retained for construction/contract administration on this project. The Architect has no control over the project. If a Building Permit for construction has been obtained, actual selection and installation of all products, materials or services is not the Architect's responsibility. If changes are made in the actual construction the Architect cannot guarantee that the finished product/project will function to the customer's full expectation. The Architect assumes no obligation or liability for the results.

Wislow E. Wein
WISLOW ELLIOT WEIN ARCHITECT

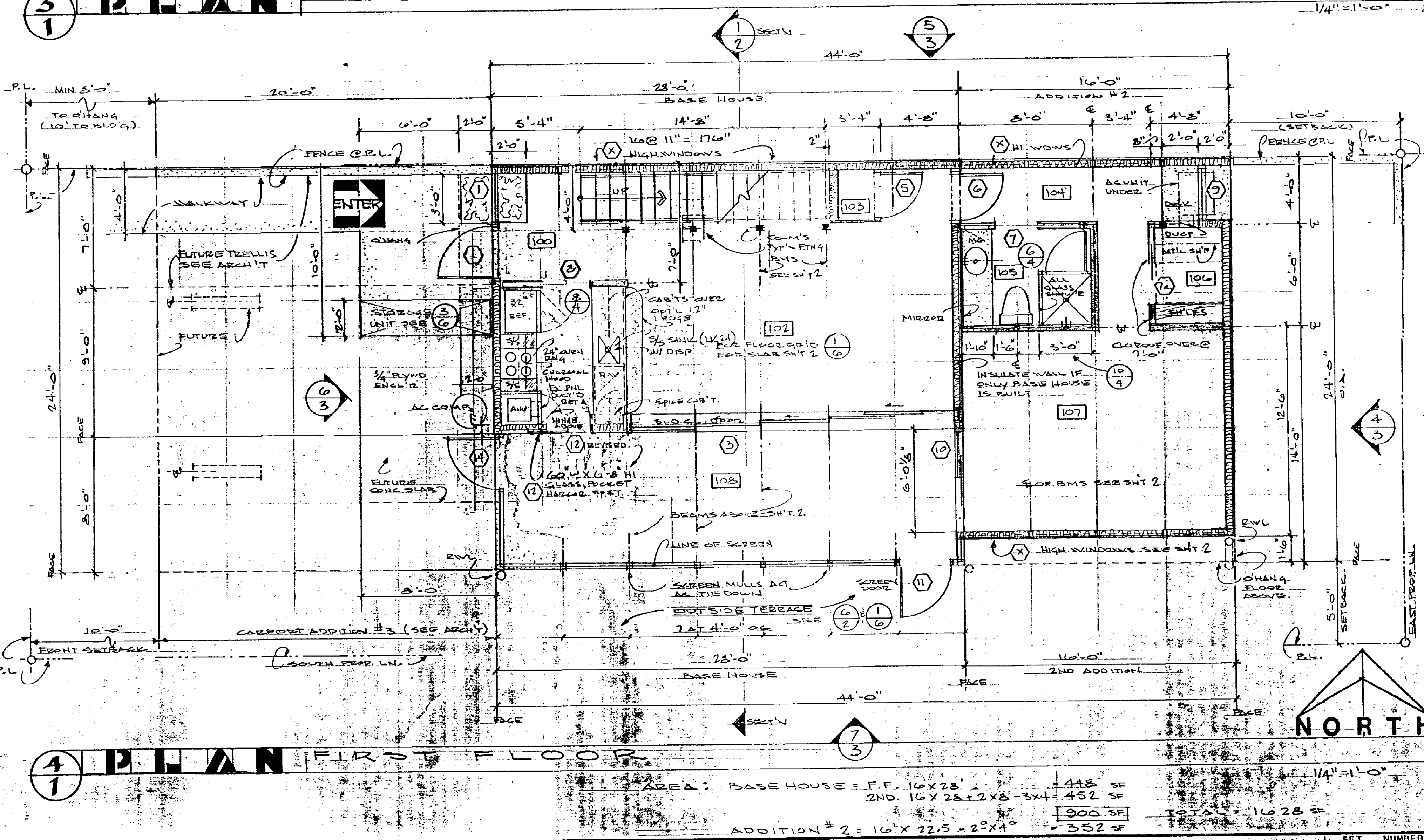
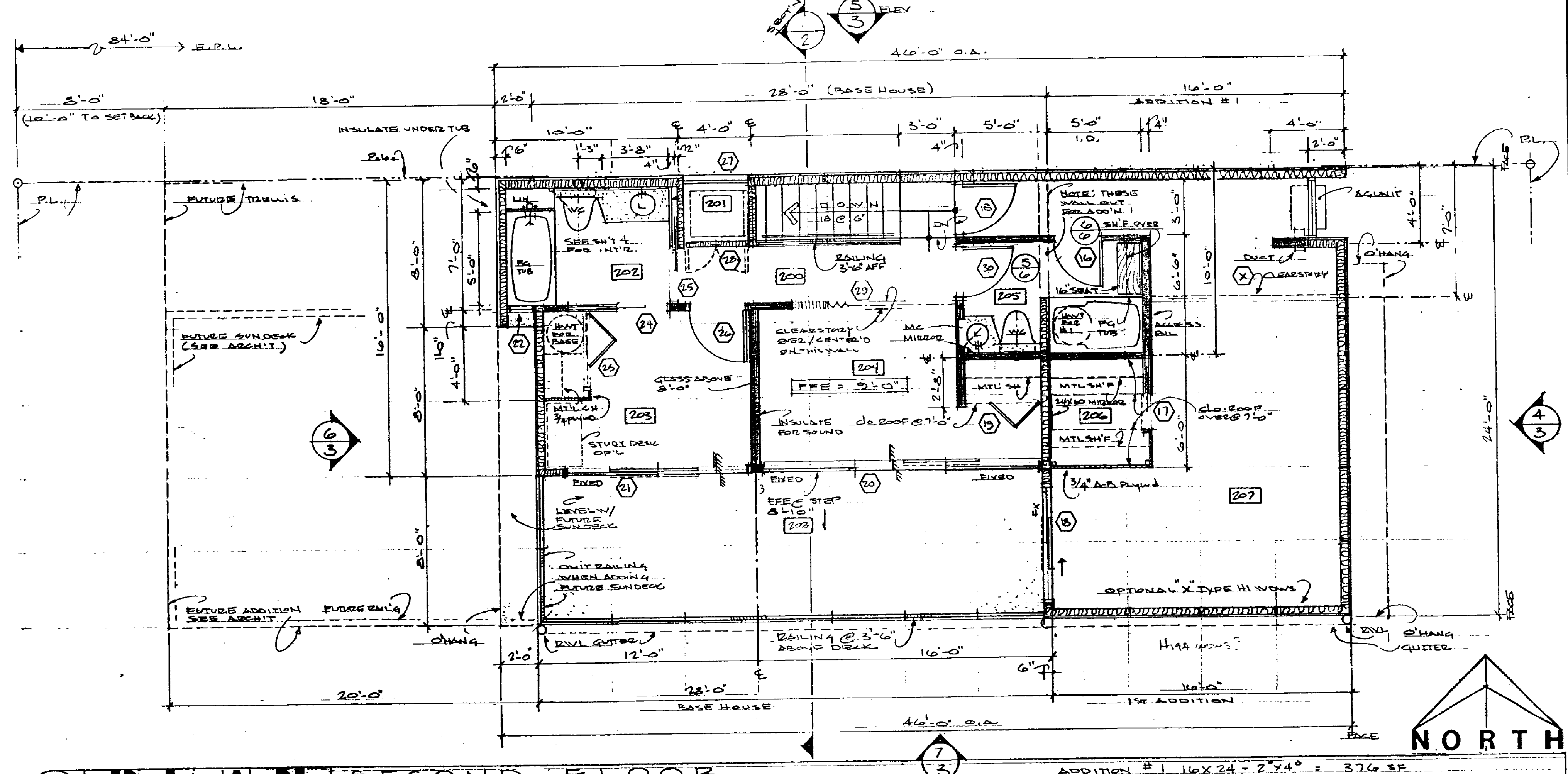
INDEX

SHT	SCOPE	DETAILS
1	PLANS	AND FOUNDATION, SITE
2	STRUCTL	FLOORING, FLOOR, PARTITIONS, ROOF, DETAILS
3	ELEVATIONS	BUILDING SECTIONS, ELEVATIONS, E & V.
4	MECHANICAL	SCHEDULE, STAIR PLUMBING, ZONES
5	ELECTRICAL	PLANS, DISCREET SCHEDULES
6	MECHANICAL	SLAB, CLIMATS.



ROOM FINISH SCHEDULE

IDENTIFICATION	FLOOR	BASE	WALLS	CEILING	MSL	REMARKS																	
NUM	NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
100	FOYER																						FOR #1 SEE 1/6
101	KITCHEN																						
102	LIVE-DINE																						
103	STORAGE																						
104	ALCOVE																						
105	BATH (2-1)																						
106	CLOSET																						
107	BEDRM 4																						
108	PORCH																						
200	HALL/STAIR	2																					
201	LAUNDRY	3																					
202	BATH (3-1)	3																					
203	BEDR'M 1	2																					
204	BEDR'M 2	2																					
205	BATH (3-2)	3																					
206	CLOSET	2																					
207	BEDR'M 3	2																					13N.7'-0"
208	BALCONY	3																					



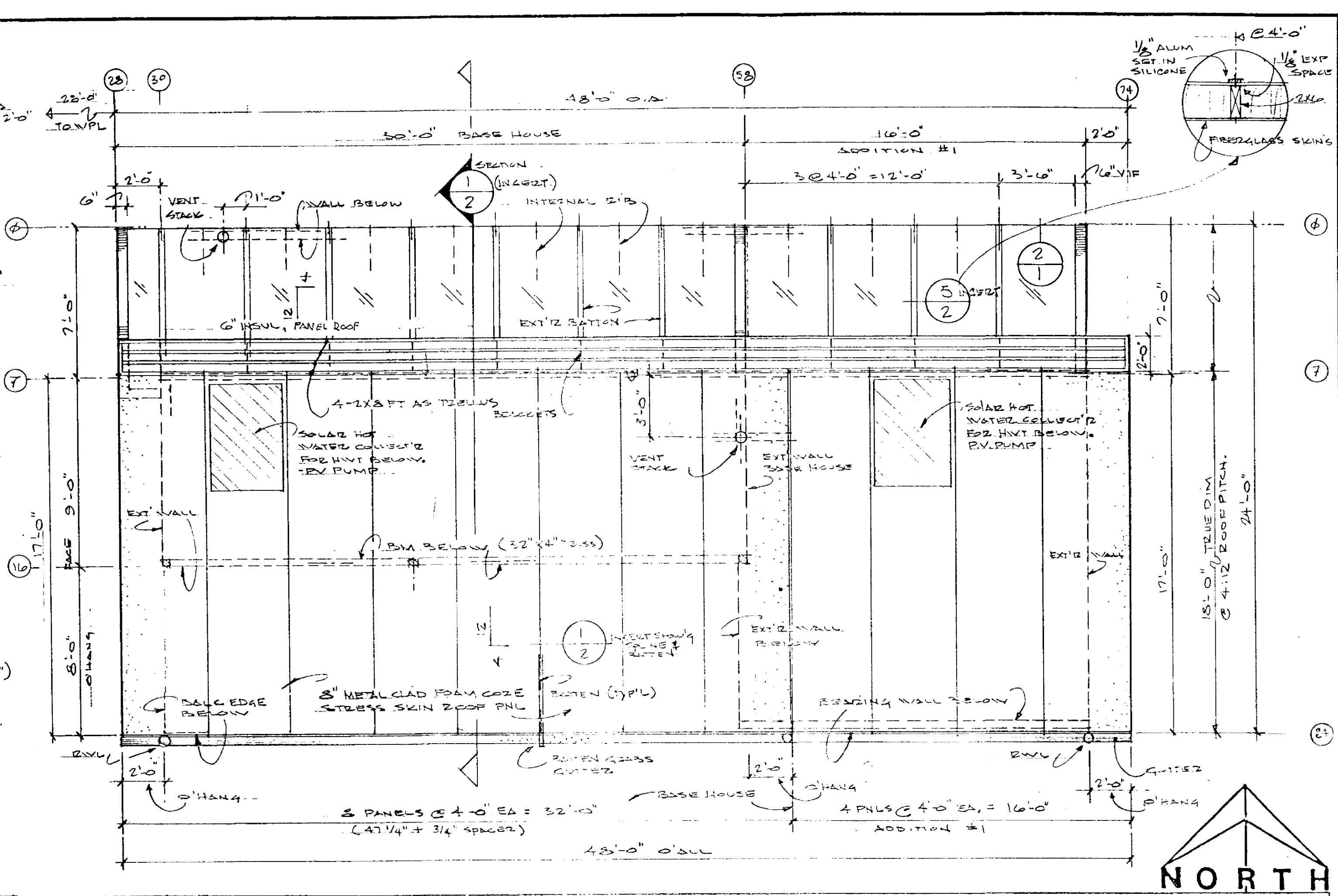
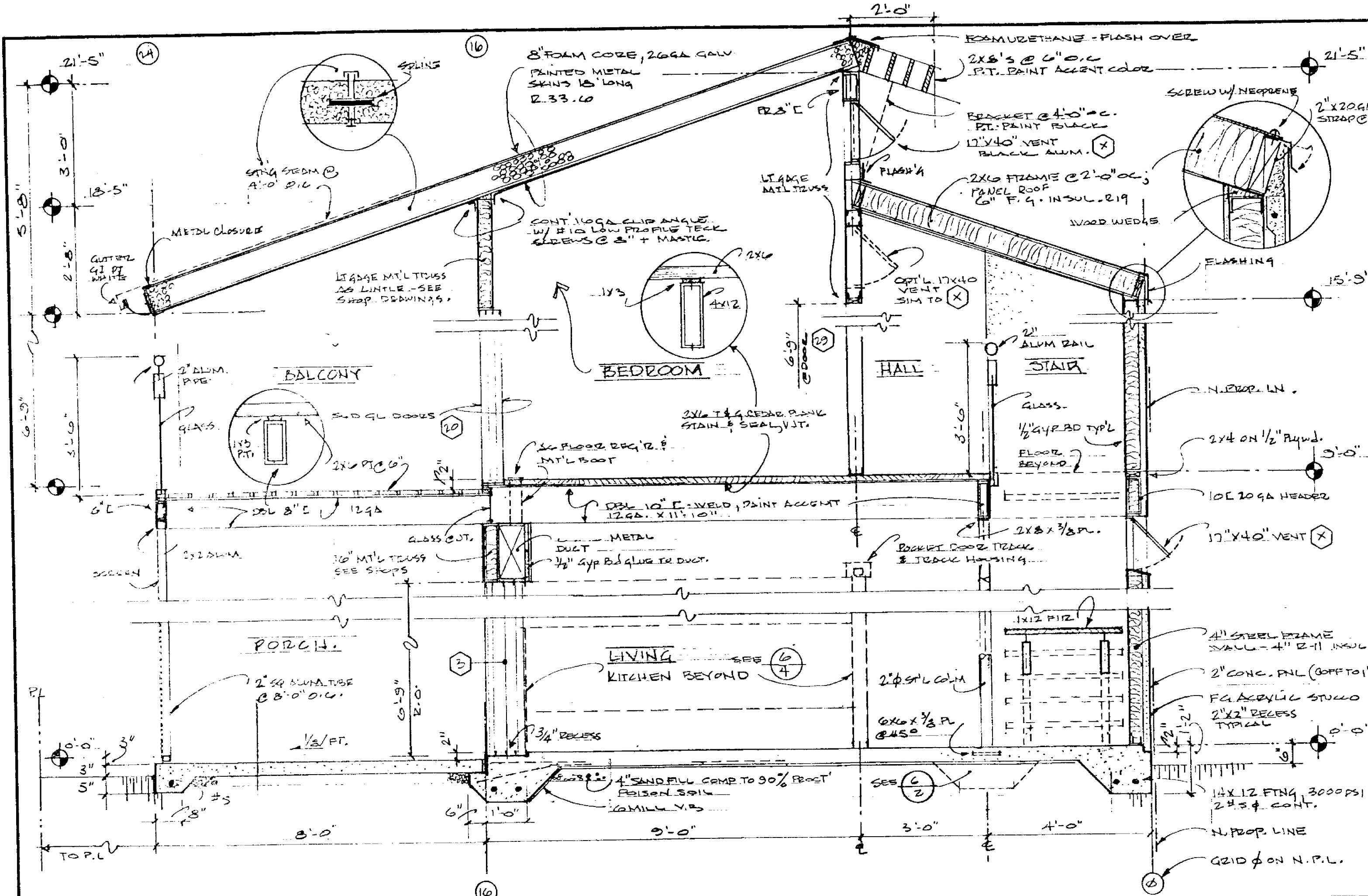
REVISIONS

NO.	DESCRIPTION	DATE

WISLOW ELLIOT WEIN ARCHITECT

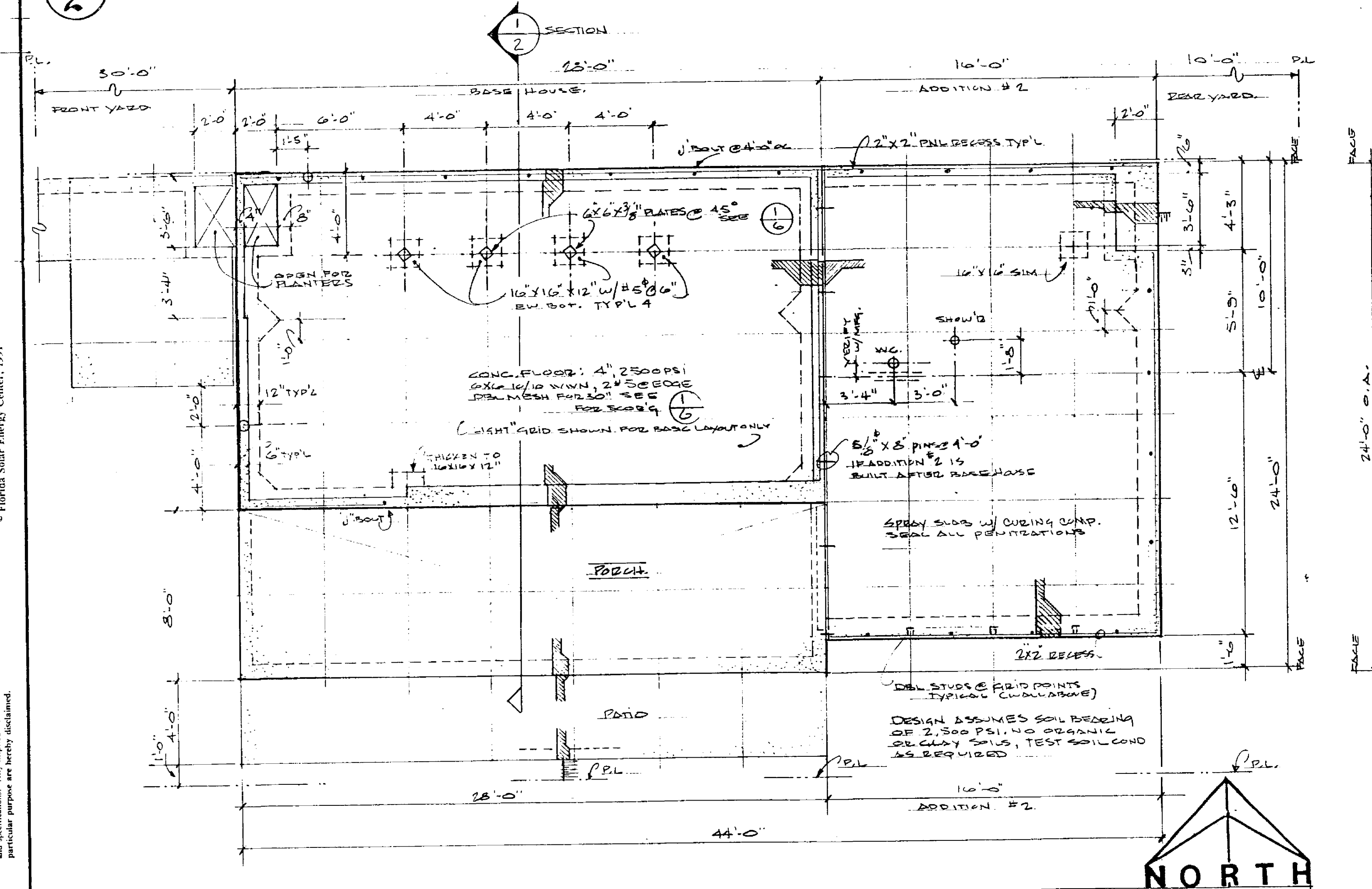
SOLAR METAL AFFORDABLE HOUSING FOR
 FLORIDA SOLAR ENERGY CENTER 1991
 300 State Road 401, Cape Canaveral, Florida 32920-4098, Telephone: (407) 783-0300
 Fax: (407) 783-2571
 State University System of Florida

Date: 29 July 91
 91-0003
 Drawn: SMC/KCW
 Job: 9122
 Sheet: 1 of 6
 SET NUMBER

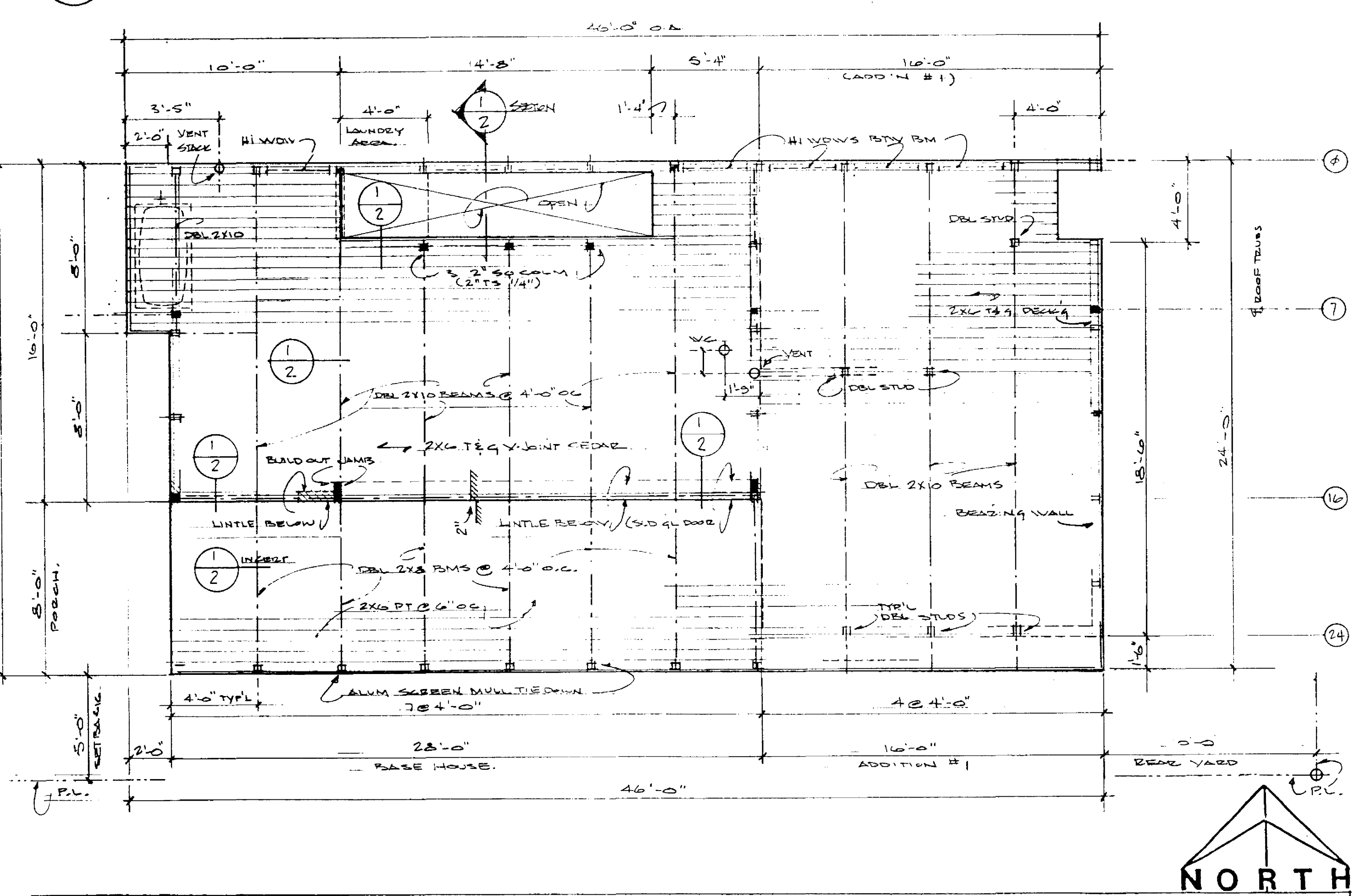


1/2 PLAN BUILDING N to S & APPROX E
1/2" = 1'-0"

5/2 PLAN ROOF FRAMING ~ METAL STRESS SKIN FOAM CORE
1/4" = 1'-0"



6/2 PLAN FOOTING AND FOUNDATIONS w/ PROFILES
1/4" = 1'-0"



7/2 PLAN SECOND FLOOR FRAMING
1/4" = 1'-0"

These drawings and specifications are experimental in nature and the energy performance of the design is dependent on the quality of the materials used and the skill of the contractor. The Florida Solar Energy Center, Inc. is not responsible for any failure, damage, or injury resulting from the use of these drawings and specifications. The Florida Solar Energy Center, Inc. is not responsible for any failure, damage, or injury resulting from the use of these drawings and specifications. The Florida Solar Energy Center, Inc. is not responsible for any failure, damage, or injury resulting from the use of these drawings and specifications.

REVISIONS	BY

WISLOW ELLIOT WEIN ARCHITECT

SOLAR METAL AFFORDABLE HOUSING FOR FLORIDA SOLAR ENERGY CENTER 1981

300 STATE ROAD 401, CAPE CANAVERAL, FLORIDA 32920-0099, Telephone: (407) 783-0300 Fax: (407) 783-2571

Florida Solar Energy Center, 1991

Date: 29 July 91
 91-0618
 Drawn: SMEZ:CEW
 Job: 9122
 Sheet: 2
 Of 6 Sheets

MPG: I.T.F. TYPE: LOAD CENTER PANEL: "A" MAINS: 200 AMP

VOLTS: 120/240V 1Ø 3Ø POS: 40

BUS	AMPS	LOAD	WIRE SIZE	CONDUCTOR	BUS	CONDUCTOR	POLARITY	LOAD	BUS	CONDUCTOR
6	6	Refrigerator	#12	1	20	1	2	30	2	#10
6	6	Garage disposal	#12	1	20	3	4	5	5	5
12	7	Dishwasher	#12	1	20	5	6	40	2	8
11	7	Kitchen/Entry *	#14	1	15	7	8	5	8	A/C UNIT-1
11	8	Small Appliance*	#12	1	20	9	10	50	2	6
7	8	Livingroom	#14	1	15	11	12	5	5	5
7	7	Bedroom	#14	1	15	13	14	20	1	12
4	4	Bedroom/Patio*	#14	1	15	15	16	20	2	12
7	5	Bedroom/Porch*	#14	1	15	17	18	5	5	5
7	5	Hall/Stair/Bedrm	#14	1	15	19	20	20	2	12
7	7	Bath #	#12	1	20	21	22	30	2	10
7	7	Bedroom	#14	1	15	23	24	5	5	5
12	12	Wall A/C unit	#12	2	20	25	26	20	1	12
12	12	Space	#12	2	20	27	28	30	2	10
							30	5	5	5
							32			
							34			
							36			
							38			
							40			
							42			

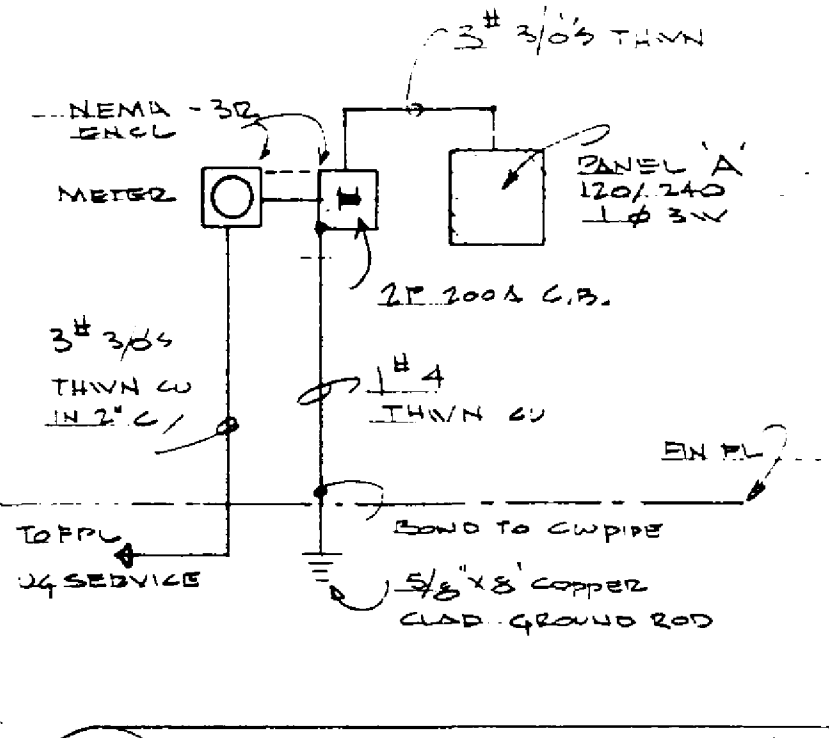
*PROVIDE G.F.I. RECEPTACLE OUTLET
REMARKS: MAIN LUGS ONLY
ALL A/C BRKRS TO BE "HACR" RATED
MOUNT: FLUSH
W.C. A.I.C. 10,000 AMP

LOAD CALCULATIONS

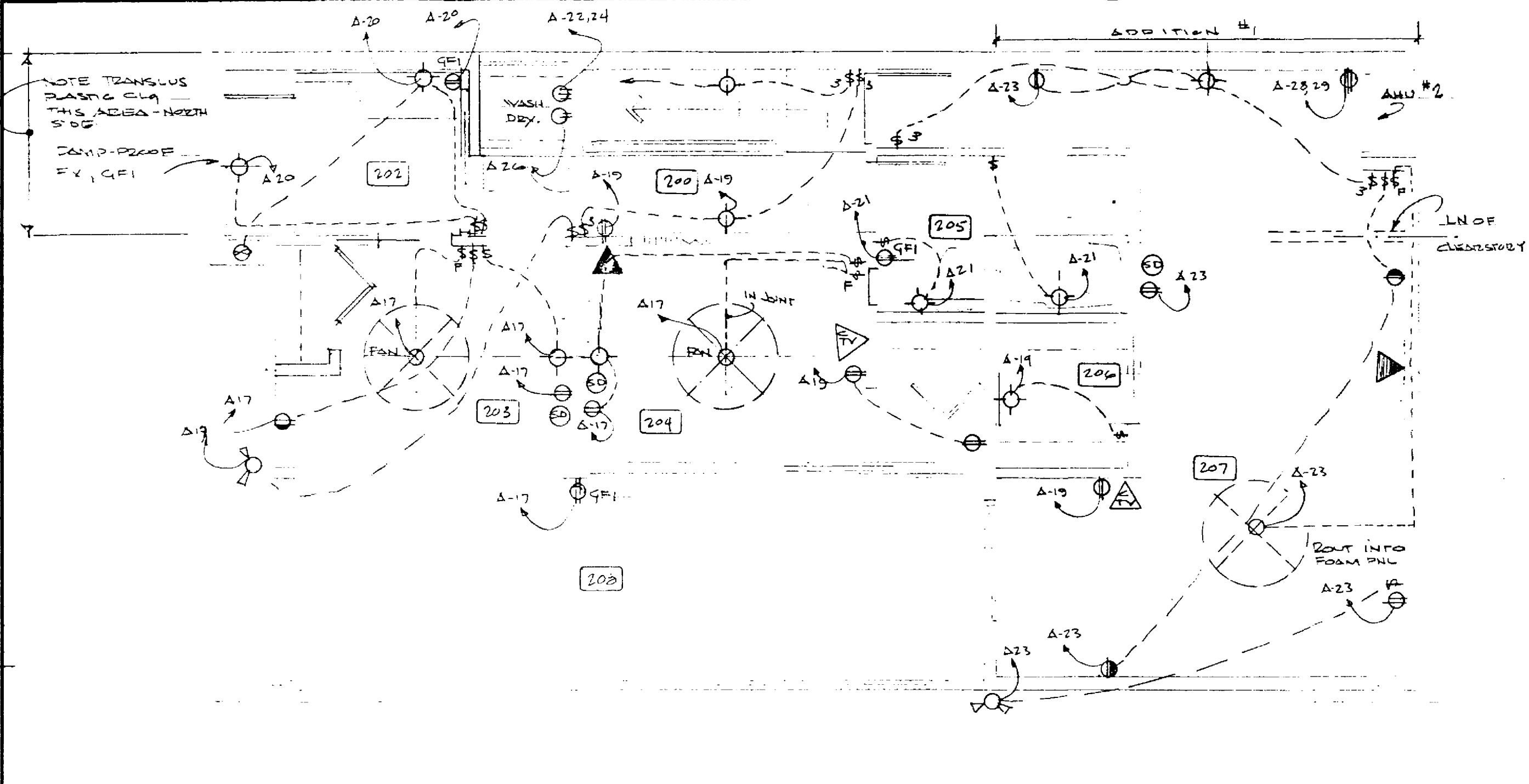
APPROXIMATE SQUARE FOOTAGE= 1630 ±

GENERAL POWER & LIGHTING @ 1630 SQ FT X 3 VOLT AMPS.....	4.8 KVA
(1) SMALL APPLIANCE CIRCUIT @ 1500 VOLT AMPS.....	1.5 KVA
CLOTHES WASHER.....	1.5 KVA
RANGE @ 10.0 KW.....	10.0 KVA
DISHWASHER.....	1.5 KVA
(1) WATER HEATER @ 5.0 KW.....	5.0 KVA
CLOTHES DRYER.....	5.0 KVA
(SEE SEPARATE HEADLINE FOR WATER HEATER - ELEC. IS OPTIONAL)	
TOTAL=	29.3 KVA

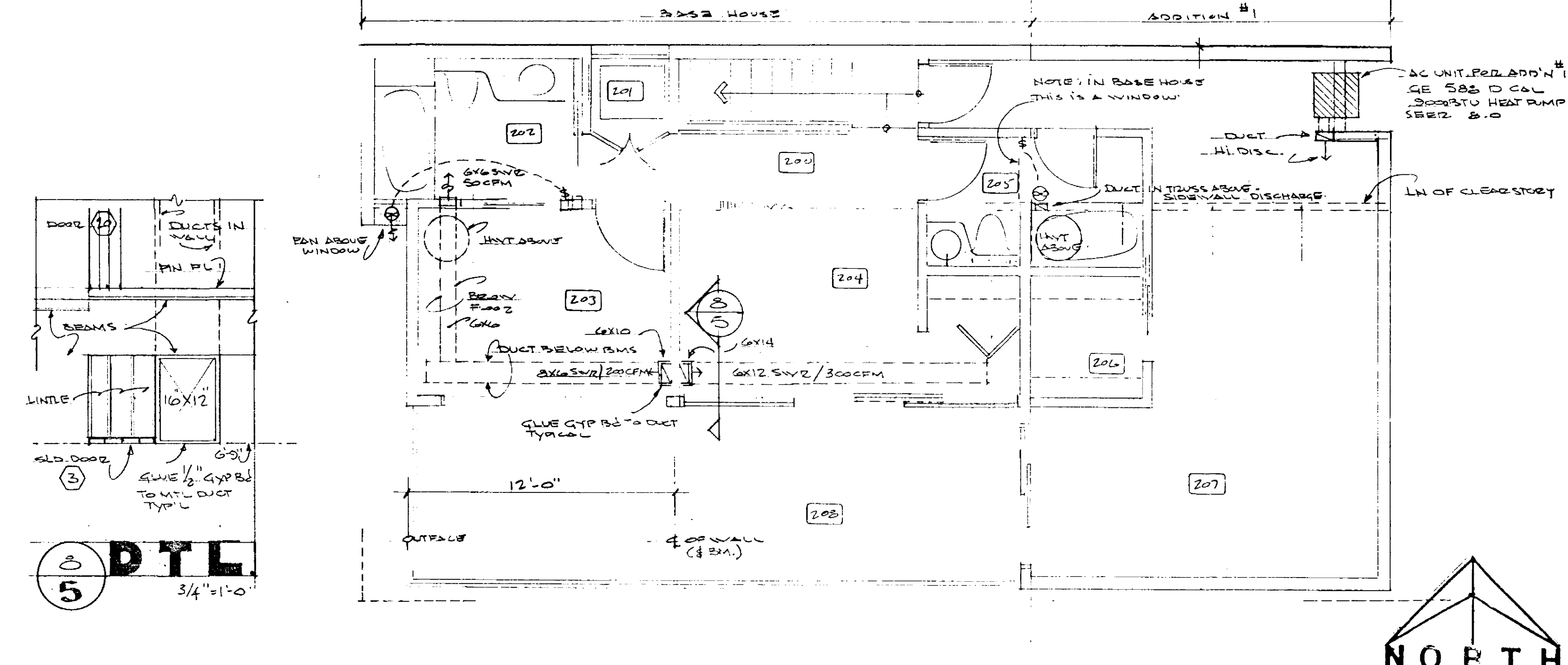
FIRST 10 KVA @ 100%..... 10.0 KVA
REMAINDER @ 40% (19.3 X .4)..... 7.7 KVA
AIR CONDITIONING @ 100%..... 10.5 KVA
TOTAL SERVICE..... 28.2 KVA
SERVICE SIZE (28.2 X 2.2)..... 122.6 AMPS



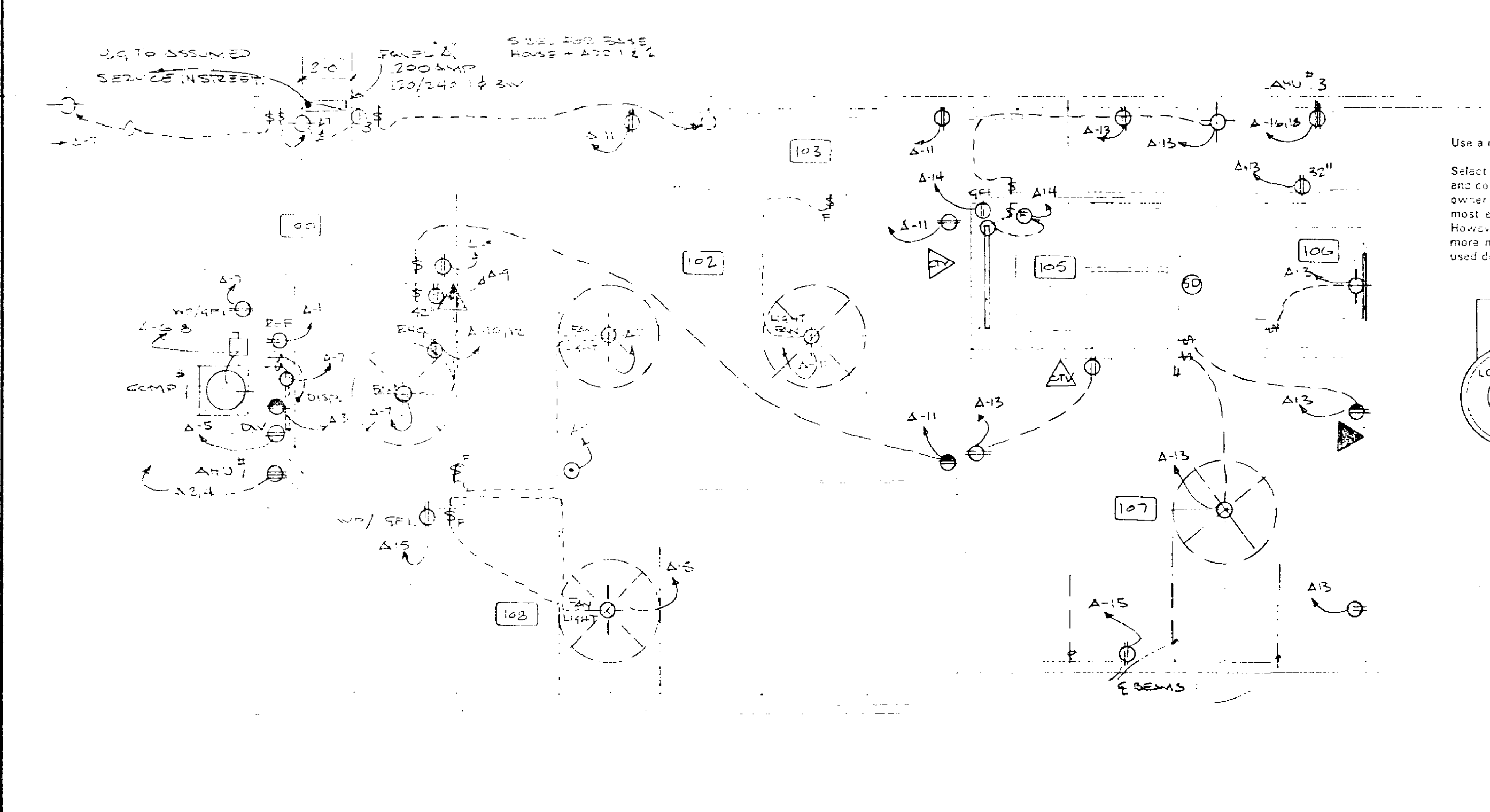
5 DIAGRAM - ELECTRICAL SERVICE



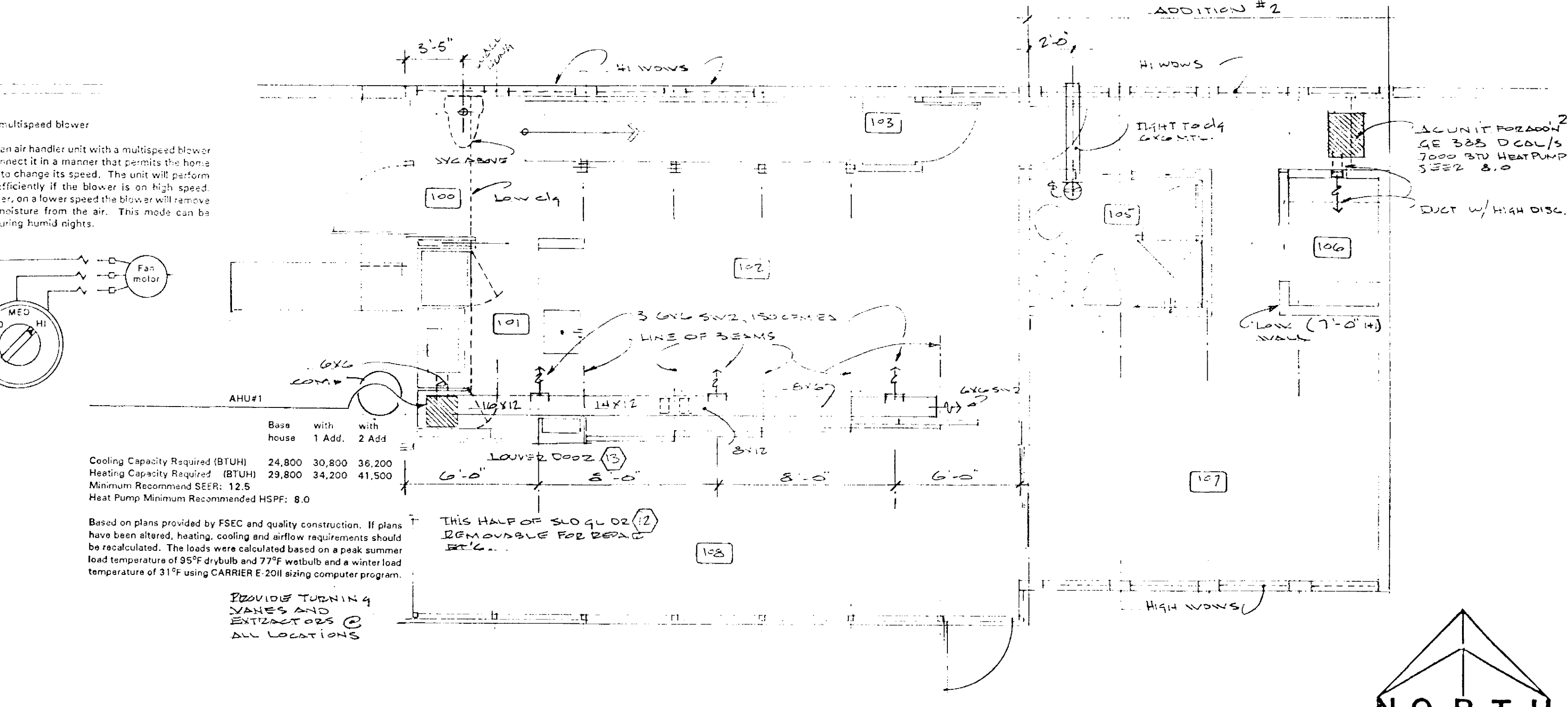
4 PLAN 2ND FLOOR ELECTRICAL, PHONE, TV, SMOKE DETECTOR 1/4" = 1'-0"



9 PLAN 2ND FLOOR HVAC 1/4" = 1'-0"

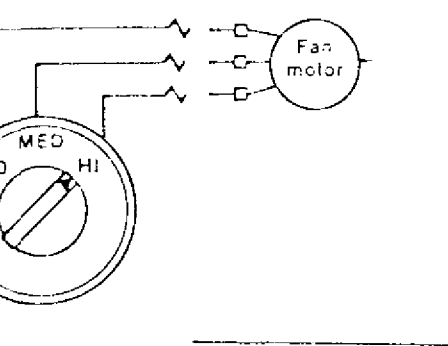


5 PLAN 1ST FLOOR ELECTRICAL, PHONE, TV, SMOKE DETECTOR 1/4" = 1'-0"



10 PLAN 1ST FLOOR HVAC 1/4" = 1'-0"

Use a multispeed blower
Select an air handler unit with a multispeed blower and connect it in a manner that permits the home owner to change its speed. The unit will perform most efficiently if the blower is on high speed. However, on a lower speed the blower will remove more moisture from the air. This mode can be used during humid nights.



Base house	with 1 Add.	with 2 Add.
Cooling Capacity Required (BTUH)	24,800	30,800
Heating Capacity Required (BTUH)	29,800	34,200
Minimum Recommended SEER	12.5	
Heat Pump Minimum Recommended HSPF	8.0	

Based on plans provided by FSEC and quality construction. If plans have been altered, heating, cooling and airflow requirements should be recalculated. The loads were calculated based on a peak summer load temperature of 95°F drybulb and 77°F wetbulb and a winter load temperature of 31°F using CARRIER 2011 sizing computer program.

PROVIDE TURNING VANES AND EXTRACTORS @ ALL LOCATIONS

These drawings and specifications are experimental in nature and the energy performance of the design has not been tested or evaluated in actual construction. Also note that these drawings were designed for use only in the State of Florida and may be more appropriate for use in some climatic regions within the state than others.

The Florida Solar Energy Center, and the Designer, Architects, Judges, Plans Designers, and Artists involved in developing these drawings and specifications (hereinafter referred to as "FSEC/Contractors") make no statement, representation, claim or warranty, whether express, implied or statutory with respect to these plans and specifications. Any implied warranties of merchantability or fitness for a particular purpose are hereby disclaimed.

FSEC/Contractors assume no liability for, and by its use Purchaser hereby releases FSEC/Contractors from all liability for, damages, losses or injury, whether direct, indirect, consequential or incidental, including, but not limited to personal injury, death and damage to property, whether or not due to or caused by FSEC/Contractors negligence, that may arise from or be connected with use of these drawings and specifications. FSEC/Contractors does not authorize any person, whether employee or agent of FSEC/Contractors or otherwise, to make any representation or warranty or to assume any liability with respect to these drawings and specifications.

© Florida Solar Energy Center, 1991

REVISIONS B.

WISLOW ELLIOTT WEIN ARCHITECT

REPLY P.O. BOX 1873 BOCA RATON, FLORIDA 33429
141 N. W. 20TH STREET BOCA RATON, FLORIDA 33431 (407) 392-9216

SOLAR METAL AFFORDABLE HOUSING FOR

FLORIDA SOLAR ENERGY CENTER 1991
300 State Road 401, Cape Canaveral, Fla. 32926-4699, Telephone: (407) 785-0900
(407) 785-0900
State University System of Florida

Date: 23 July 91
91-0618
Drawn: S.M.Z./C.W.V.
Job: 9122
Sheet: 6

