Lantana Condominium

Brevard County, Florida

GENERAL NOTES:

1. TO THE BEST OF OUR KNOWLEDGE, THESE PLANS COMPLY WITH APPLICABLE BUILDING CODES.
2. EACH BIDDER SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED.
3. ALL WORK SHALL BE IN ACCORDANCE WITH STATE, LOCAL, AND ALL APPLICABLE CODES.
4. ALL DIMENSIONS SHALL BE FIELD-VERIFIED, AND ALL ROUGH OPENING DIMENSIONS FOR WINDOW AND DOOR OPENINGS, EQUIPMENT, ETC., SHALL BE VERIFIED WITH THE MANUFACTURERS AS APPLICABLE.
5. THE ARCHITECT IS NOT RESPONSIBLE FOR CHANGES OR DEVIATIONS FROM THESE PLANS UNLESS SPECIFICALLY APPROVED BY THE ARCHITECT IN WRITING.
6. ALL UNDERGROUND UTILITIES CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS ESTABLISHED BY THE GOVERNING AUTHORITY HAVING JURISDICTION.
7. SEE SITE ENGINEERING DRAWINGS (BY OTHERS) FOR HANDICAPPED PARKING AND ACCESS TO THE BUILDING. ALL UNITS HAVE BEEN DESIGNED TO BE ACCESSIBLE TO THE PHYSICALLY HANDICAPPED IN ACCORDANCE WITH ADA LEGISLATION.
8. ELECTRICAL DISTRIBUTION AND TRANSFORMER LOCATION TO BE AS DESIGNED BY F.P.L., WITH ON-SITE DISTRIBUTION LINES AND SERVICE TO THE BUILDING UNDERGROUND.
9. THE ENTIRE BUILDING SHALL BE EQUIPPED WITH AUTOMATIC FIRE SPRINKLERS PER NFPA 13, 13R, OR FLORIDA ADMINISTRATIVE CODE 4A-45, AS APPLICABLE. PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED IN LOCATIONS AS DESIGNATED BY THE LOCAL FIRE AUTHORITY.
10. THESE PLANS ARE THE PROPERTY OF THE ARCHITECT. THEY ARE AN INSTRUMENT OF SERVICE AND SHALL NOT BE RE-USED, REVISED, REPRODUCED, OR COPIED WITHOUT WRITTEN CONSENT FROM THE ARCHITECT.

13. Fire sprinkler instructions.
Provide a complete and operational Class III fire protection system or as otherwise required by the Fire Authority. The Fire sprinkler system to be designed by a certified fire protection engineer according to NFPA 13, 14 & 15 and all other applicable codes and regulations and submitted to the Fire Authority for approval. The entire structure is to be sprinkled. [redacted]. Fire pump est. 60 to 70 HP. min. 1000 gpm with 65 psi residual at roof fire dept. connection. The hose cabinet provided at each level is to have 1.5" valve and 2.5" fire dept. connection with 100 ft of 1.5" hose. The system shall be installed by a certified fire protection contractor and tested in accordance with the Fire Authorities requirements.

DOMESTIC WATER BOOSTER PUMP SPECIFICATIONS (IF REQUIRED)

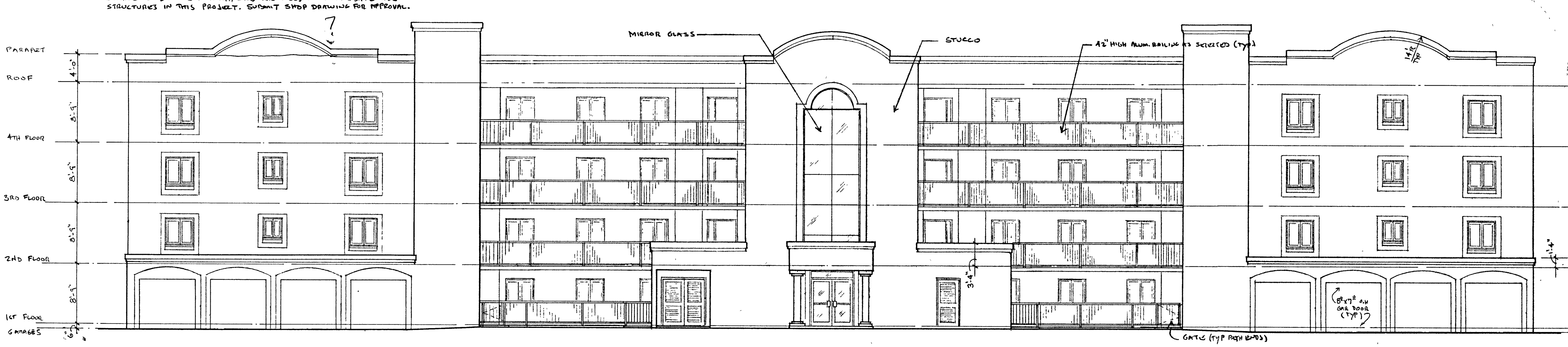
This contractor shall furnish and install a complete, operation and approved "Hydro-Pneumatic" or tankless "Packaged Pressure Booster System" for the domestic water system. The system shall be designed for a total system capacity of 400 gpm against a total discharge system pressure of 60 psi when supplied with a minimum suction pressure of 30 psi.
The electric power supply shall be 120/208 volt, 3 phase. All piping shall be type "K" copper. The system shall be complete with check valves, suction and discharge pressure gauges, isolation valves, bypass valves, all electrical wiring and necessary controls. Low suction pressure shall cause immediate shutdown of the system and the system shall automatically restart upon return of the suction pressure. The electric requirements shall be coordinated with the electrical system design and adjustments made accordingly.

FIRE PUMP NOTE:

FIRE PUMP SHALL BE DIESEL POWERED. CONTRACTOR SHALL PROVIDE A SYSTEM ADEQUATE TO MEET ALL FIRE CODES AND BREVARD COUNTY REQUIREMENTS. FIRE PUMP SHALL BE LOCATED IN GARAGE BLDG "C-1" NORTH END AND SIZED TO ACCOMODATE ALL STRUCTURES IN THIS PROJECT. SUBMIT SHOP DRAWING FOR APPROVAL.

ARCHITECT'S CERTIFICATION:

1. These design plans and specifications are in compliance with the standards established in Section 168-33.007, Florida Administrative Code.
2. The components and cladding have been selected and their use incorporated into design and specifications in accordance with Section 6, American National Standards/American Society of Civil Engineering 7-88 (July 1990) "Minimum Design Loads for Buildings and Other Structures" to withstand the wind loads associated with a minimum basic wind speed of 110 miles per hour.



NOTE:
SEE SITE PLAN FOR BUILDING LOCATION, ORIENTATION, GRADES, UTILITIES AND RELATED PAVING AND PARKING.

FRONT ELEVATION SCALE: 1/8" = 1'-0"

NOTE!

These drawings are to be considered a "Contractor's Permit Document" and are not intended to cover all areas of contractual agreement between the Owner and the Contractor. Specific materials, finishes, fixtures, allowances, etc not covered by these plans should be included in the written agreement between the Owner and the Contractor.

REVISIONS	BY
PER OWNER REQUEST	MAP 1/10/98
PER COMMENTS BY SBCC	MAP 6/4/98

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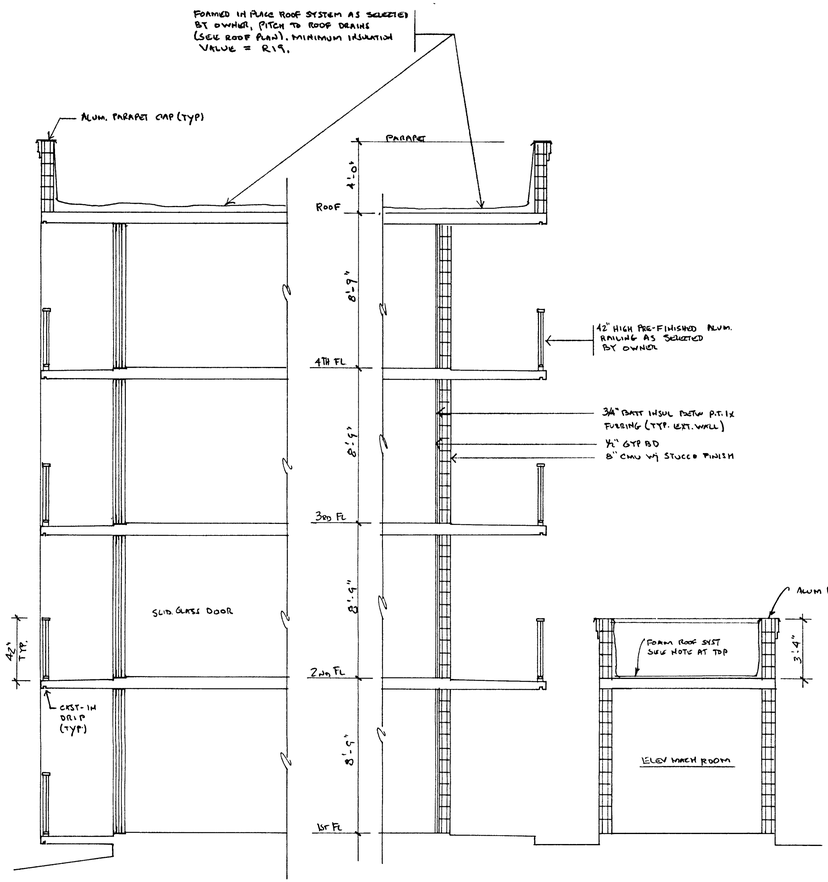
FRONT ELEVATION

LANTANA CONDOMINIUM
BREVARD COUNTY, FLORIDA

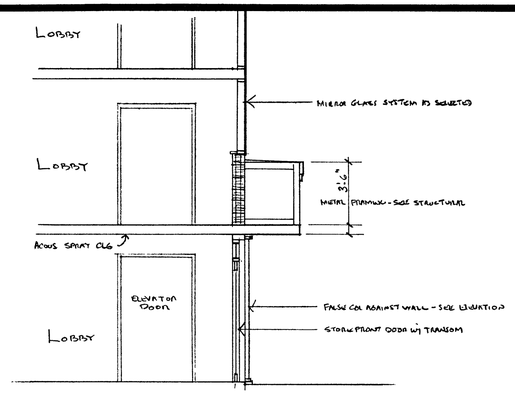
DRAWN MAP
CHECKED MAP
DATE 10-22-97
SCALE AS NOTED
JOB NO. 30197
SHEET A-1 OF 22 SHEETS

NATIONAL PRINTFAST NO. 186A 24x36

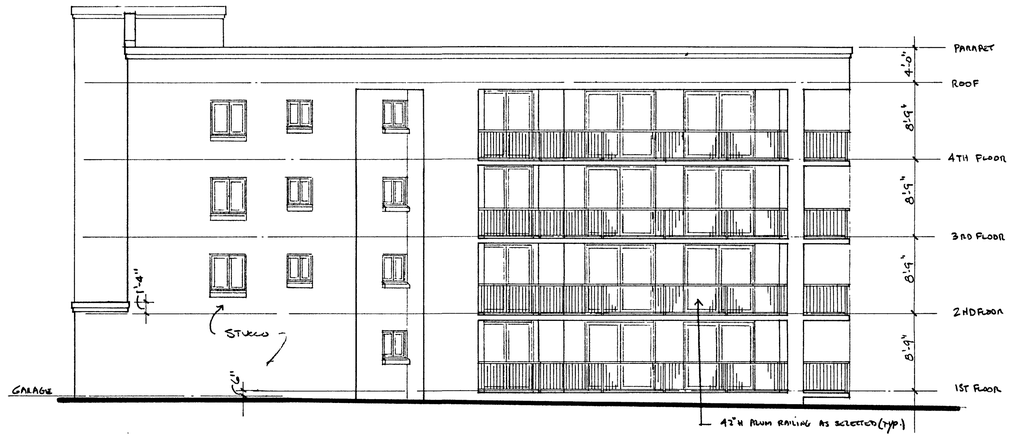


A B

SECTIONS SCALE: 1/4" = 1'-0"

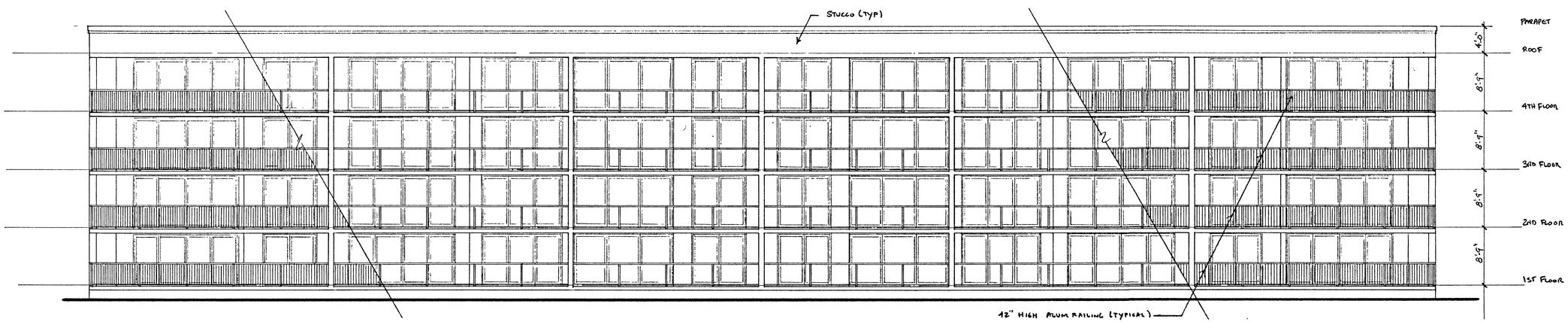


SECTION @ ENTRY SCALE: 1/4" = 1'-0"



RIGHT SIDE (SOUTH)

LEFT SIDE (NORTH) IDENTICAL BUT OPPOS. HAND



REAR (EAST)

ELEVATIONS SCALE: 1/8" = 1'-0"

REVISIONS	BY
Per comments by Staci	MAP 12/4/97

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Michael A. Penney 12/4/97

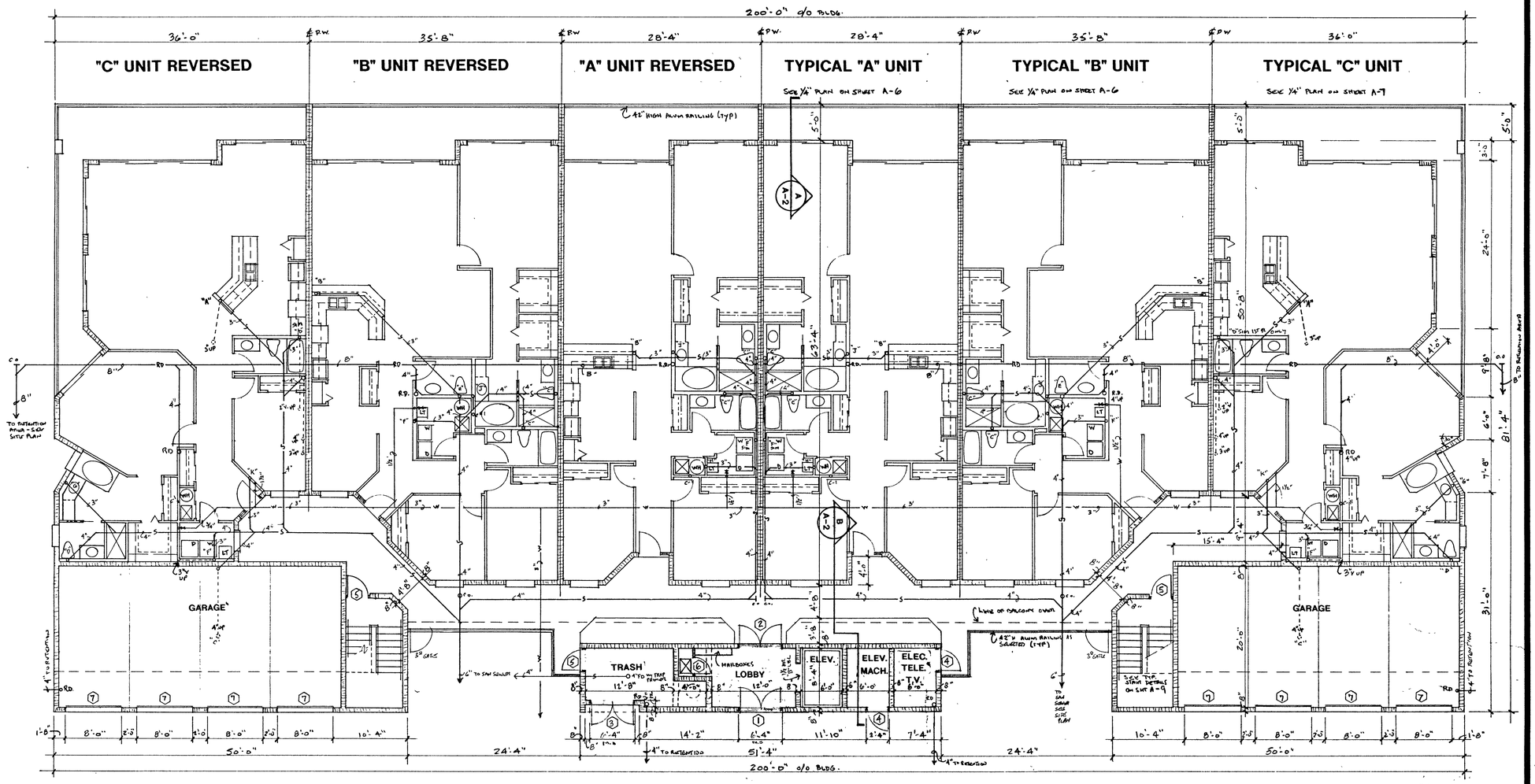
ELEVATIONS, SECTIONS

LANTANA CONDOMINIUM
BREVARD COUNTY, FLORIDA

DRAWN	MAP
CHECKED	MAP
DATE	10-22-97
SCALE	AS NOTED
JOB NO.	30197
SHEET	A-2
OF	22 SHEETS

DOOR SCHEDULE (COMMON AREA)

MARK	SIZE	TYPE	MATERIAL	FRAME	REMARKS
1	(PR) 3'-0"x6'-8"	STOREFRONT	ALUM/GLASS	ALUM	TRANSOM OVER
2	(PR) 3'-0"x6'-8"x1¾"	PANEL	INSUL. METAL	METAL	
3	(PR) 3'-0"x6'-8"x1¾"	FLUSH	METAL	METAL	FULL LOUVER W/ INSECT SCRN.
4	3'-0"x6'-8"x1¾"	FLUSH	METAL	METAL	FULL LOUVER
5	3'-0"x6'-8"x1¾"	FLUSH	METAL	METAL	
6	2'-4"x6'-8"x1⅜"	FLUSH	WOOD	METAL	FULL LOUVER
7	8'-0"x 7'-0"	O.H. GARAGE	AS SELECTED		
8	3'-0"x6'-8"x1¾"	FLUSH	METAL	METAL	1½ HR "B" LABEL W/ CLOSER
9	3'-0"x6'-8"x1¾"	FLUSH	METAL	METAL	¾ HR RATED W/ CLOSER



1ST FLOOR PLAN SCALE: 1/8" = 1'-0"

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REVISIONS	BY
REVISED PER OWNER REQUEST	MAP 1/9/98
PER COMMENTS BY SBCI	MAP 4/6/98

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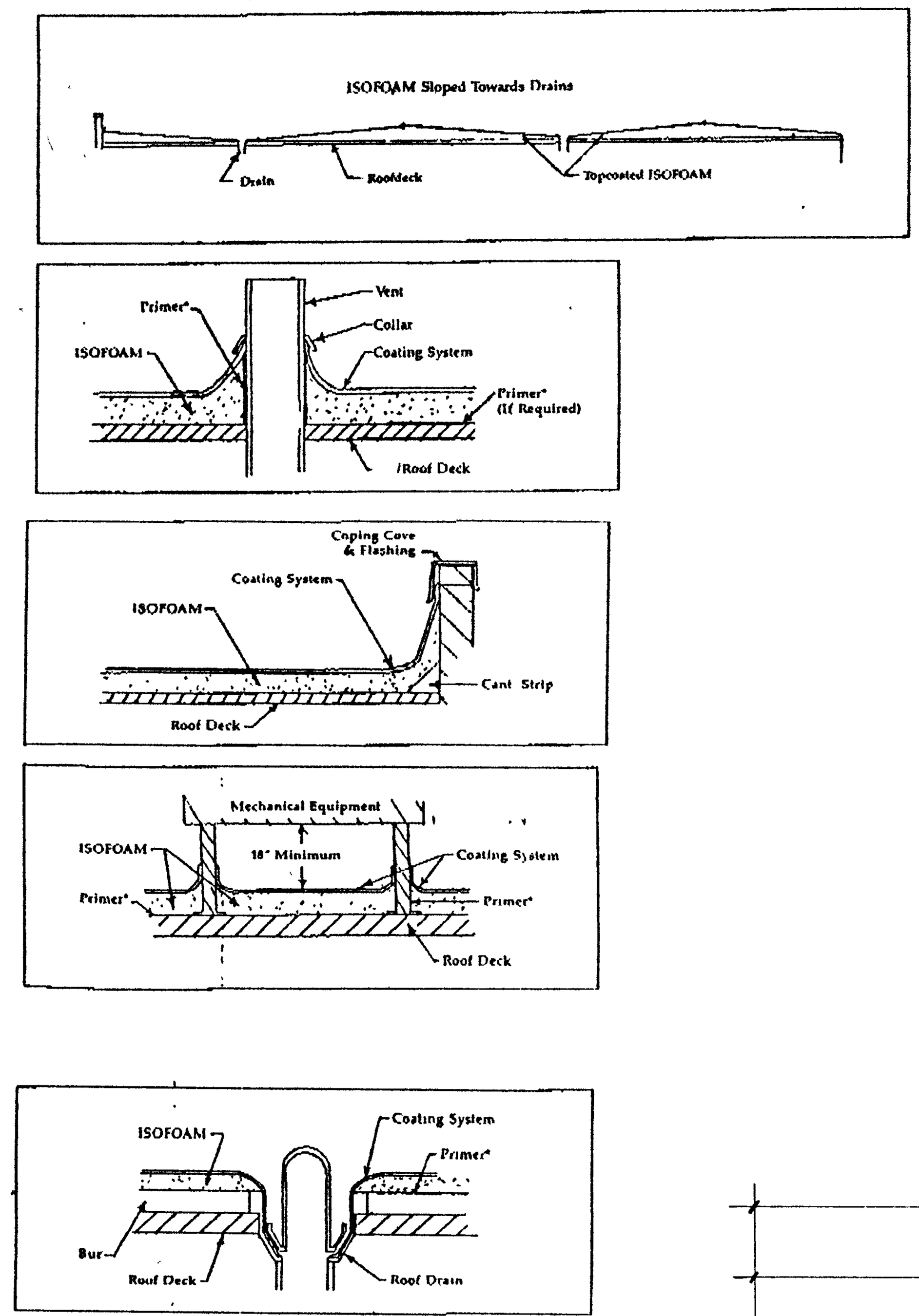
NCARB CERT #34619

1ST FLOOR PLAN

LANTANA CONDOMINIUM
BREVARD COUNTY, FLORIDA

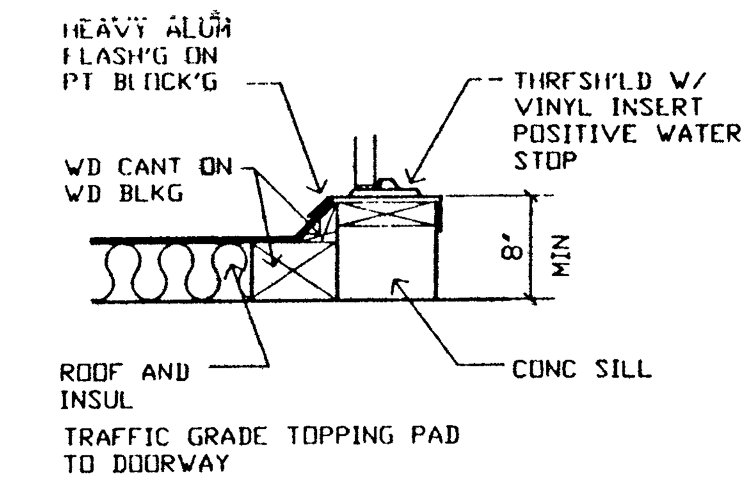
DRAWN	M.A.P.
CHECKED	MAP
DATE	10-22-97
SCALE	AS NOTED
JOB NO.	30197
SHEET	A-3
OF	22 SHEETS

K·E



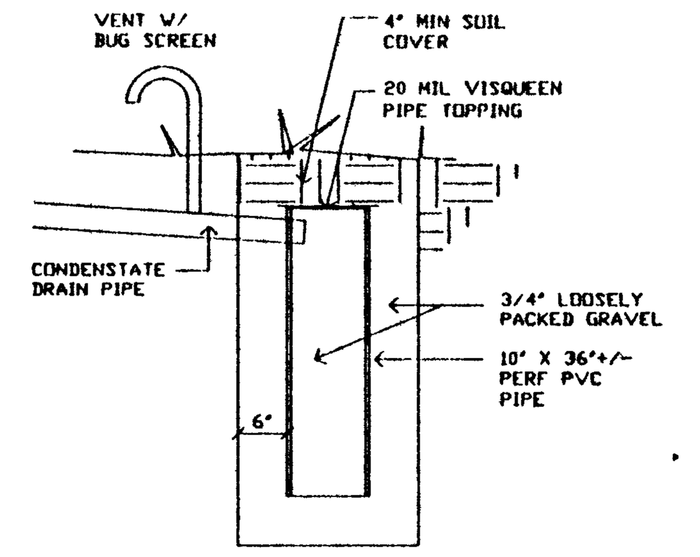
ROOFING DETAILS

NO SCALE



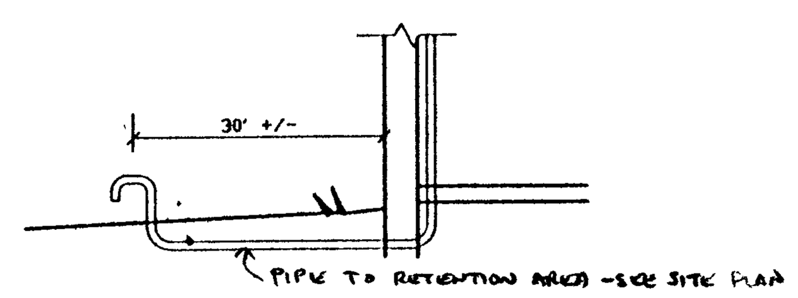
ROOF-TOP DOOR SILL

3/4" = 1'-0"



CONDENSATE DRAIN PIT

NO SCALE



TYP ROOF DRAIN AT GRADE

NO SCALE

ROOF DRAIN CALCULATIONS:

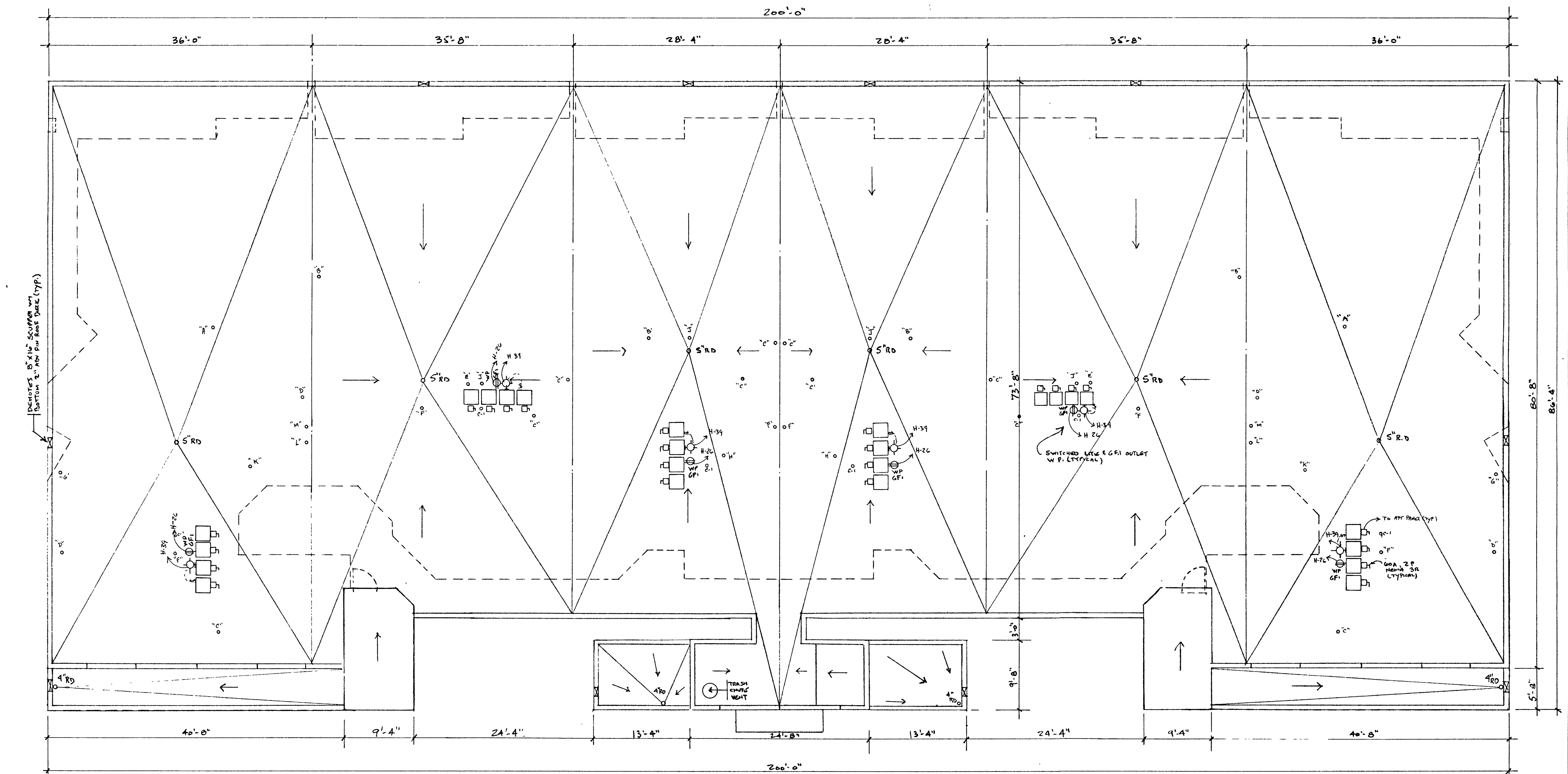
ROOF SLOPE @ 1/8" PER FOOT

ROOF AREA @ 100%	= 15,940 SQ FT
PARAPET AREA @ 50% (2756 x.5)	= 1,378 SQ FT
TOTAL	= 17,318 SQ.FT.

17,318 S.F ÷ 6 DRAINS = 2886 S.F/DRAIN
MAX. ROOF AREA SERVED BY ANY DRAIN = 2904 S.F.
PER TABLE 1108.2, SPC, 5" ROOF DRAIN = 3340 S.F
X 4 = 13,360 ÷ 4.5 = 2969 S.F. ∴ 5" DRAIN OK WITH 4" VERT LEADER

OVERFLOW SCUPPER SIZING:

MAXIMUM TRIBUTORY AREA FOR ANY SCUPPER = 731 S.F.
FROM NOTE 1, TABLE 1108.1, SPC, AN 8"X16" SCUPPER IS EQUAL TO A 6"Φ PIPE.
RAINFALL RATE FROM TABLE 1108.4, SPC, GIVES 8.4"/HR
FROM TABLE 1108.2, 6"Φ DRAIN = 5350 S.F X 4 = 21,400 ÷ 8.4 = 2548 S.F WHICH IS GREATER THAN 731 S.F. ∴ 8"X16" SCUPPER O.K.



ROOF PLAN

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REVISIONS	BY
REVISED PER OWNER REQUEST	MAP 1-10-98
PER COMMENT BY SBCCI	MAP 6/4/98

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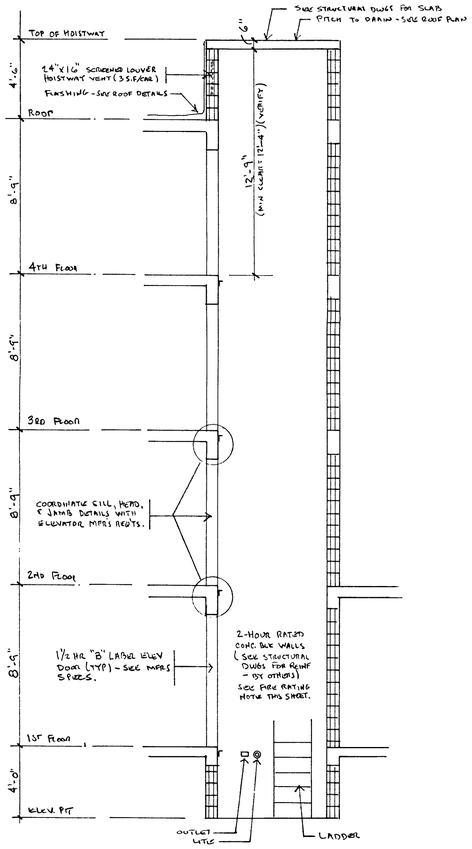
ROOF PLAN

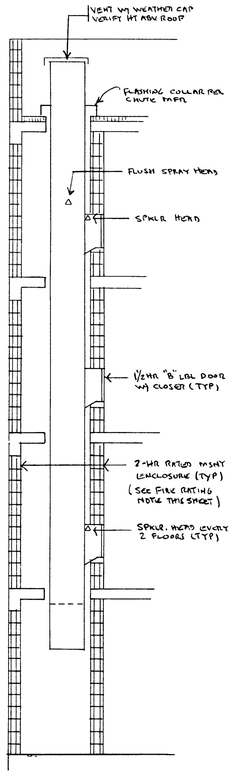
LANTANA CONDOMINIUM
BREVARD COUNTY, FLORIDA

DRAWN	MAP
CHECKED	MAP
DATE	10-22-97
SCALE	AS NOTED
JOB NO.	30197
SHEET	A-5

OF 22 SHEETS

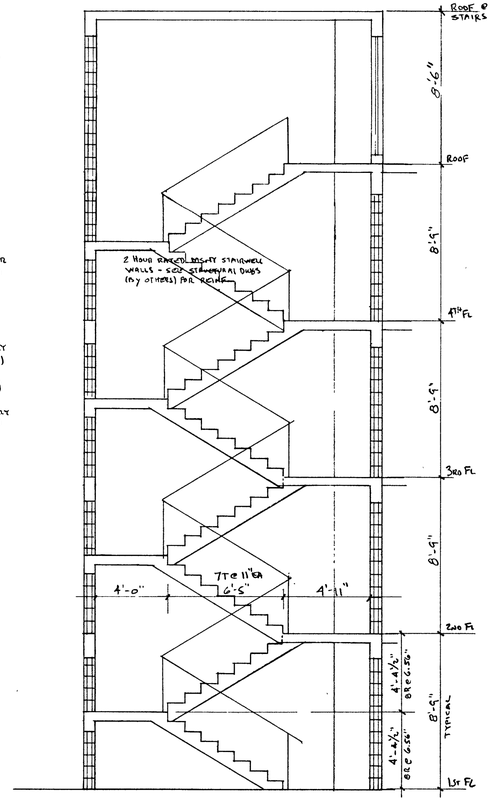


ELEVATOR



NOTE!
SEE STRUCTURAL DRAWINGS (BY OTHERS) FOR COLUMN, BEAM SIZES, REINFORCING AND MASONRY DETAILS

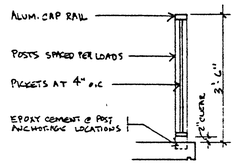
TRASH CHUTE



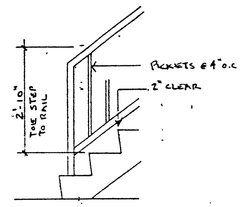
STAIRS

SECTIONS SCALE: 1/4" = 1'-0"

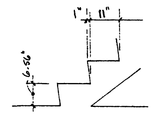
ALUMINUM HAND & GUARD RAILS SHALL BE PRE-FINISHED IN COLOR & STYLE AS SELECTED BY OWNER



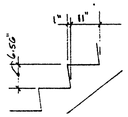
ALUM. RAILINGS



RAILING DETAIL

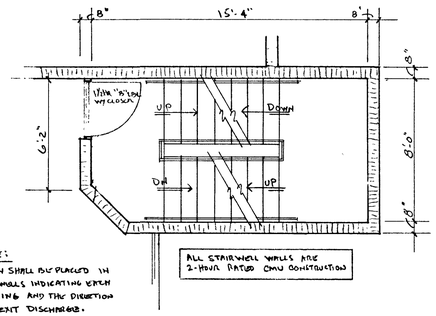


1st FLOOR RISERS



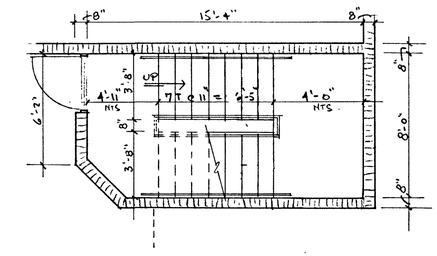
TYPICAL RISERS

TYPICAL STAIR DETAILS NO SCALE



NOTE:
A SIGN SHALL BE PLACED IN STAIRWELLS INDICATING EACH LANDING AND THE DIRECTION OF EXIT DISCHARGE.

FIRE RATING NOTE:
(2-HOUR RATED MASONRY CONSTRUCTION)
8"X16"X8" RINKER TYPE 10 C.M.U. EQUALS 3.7" CONC. W/ ⅝" STUCCO FINISH (.625") IS EQUIV. TO 4.375" OF CONCRETE. PER SPECI TABLE 709.3.1, FIRE RATING IS IN EXCESS OF 2 HOURS.



NOTE
STAIR PLANS SHOWN ARE FOR SOUTH END STAIRS, NORTH END SIMILAR, OPP. HAND.

STAIR PLANS SCALE: 1/4" = 1'-0"

REVISIONS	BY
REVISED PER OWNER REQUEST	MAP 1/10/98
REVISED PER COMMENTS BY SBCCI	MAP 6/4/98

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NCARB CERT #34518

Michael A. Penney 6/6/98

SECTIONS, DETAILS

LANTANA CONDOMINIUM
BREVARD COUNTY, FLORIDA

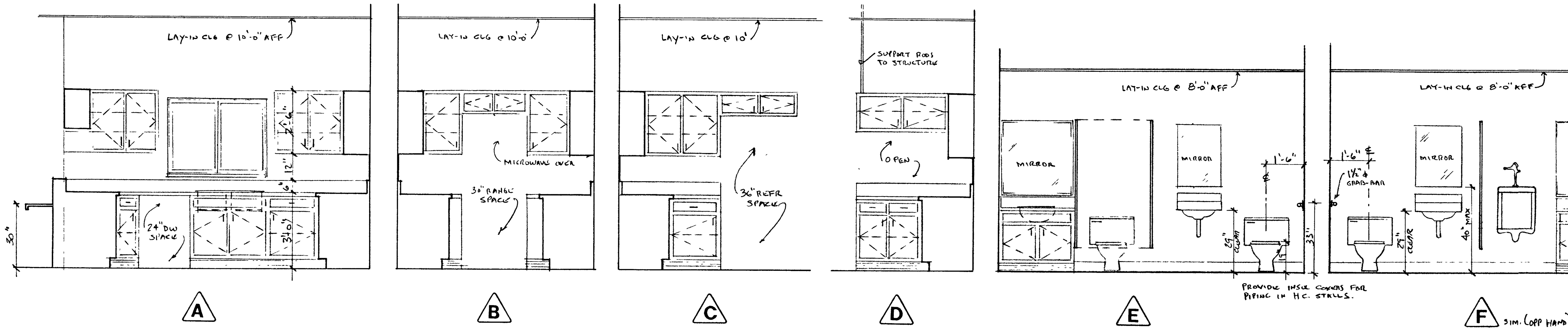
DRAWN	MAP
CHECKED	MAP
DATE	10-22-97
SCALE	AS NOTED
JOB NO.	30197
SHEET	A-9
OF	12 SHEETS

DOOR SCHEDULE

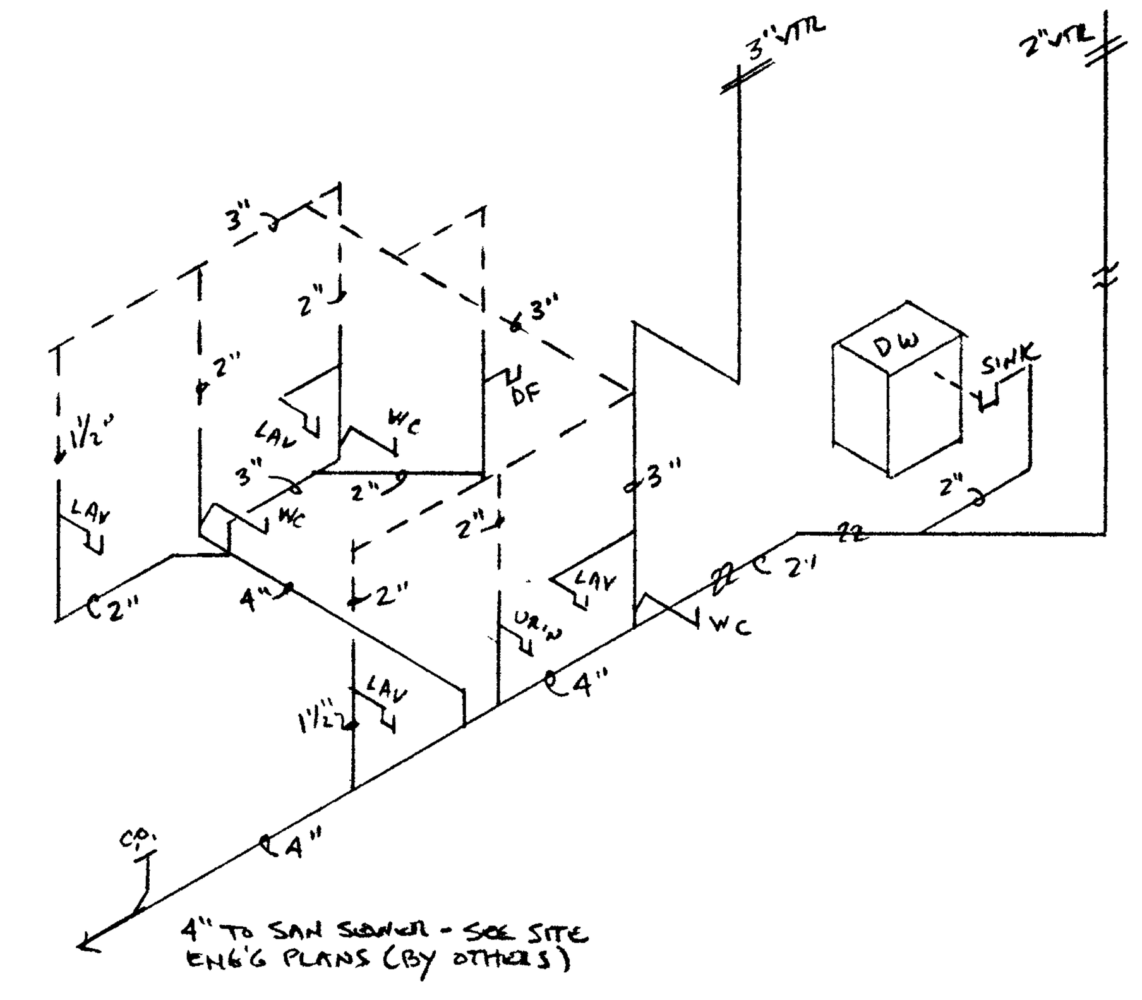
MARK	SIZE	TYPE	MATERIAL	FRAME	REMARKS
1	3'-0"x6'-8"x1 3/4"	PANEL	INSUL. METAL	METAL	PANIC HARDWARE
2	3'-0"x6'-8"x1 3/4"	FLUSH	METAL	METAL	BOTTOM LOUVER
3	2'-8"x6'-8"x1 3/4"	FLUSH	METAL	METAL	FULL LOUVER
4	3'-0"x6'-8"x1 3/4"	PANEL	S.C. WOOD	METAL	
5	2'-0" x 6'-8"	BIFOLD	WOOD	N/A	FULL LOUVER
6	6'-0" x 6'-8"	BIFOLD	WOOD	N/A	FULL LOUVER
7	12'-0" x 8'-0"	SL. GL DOOR	ALUM / GLASS	ALUM	

ROOM FINISH SCHEDULE

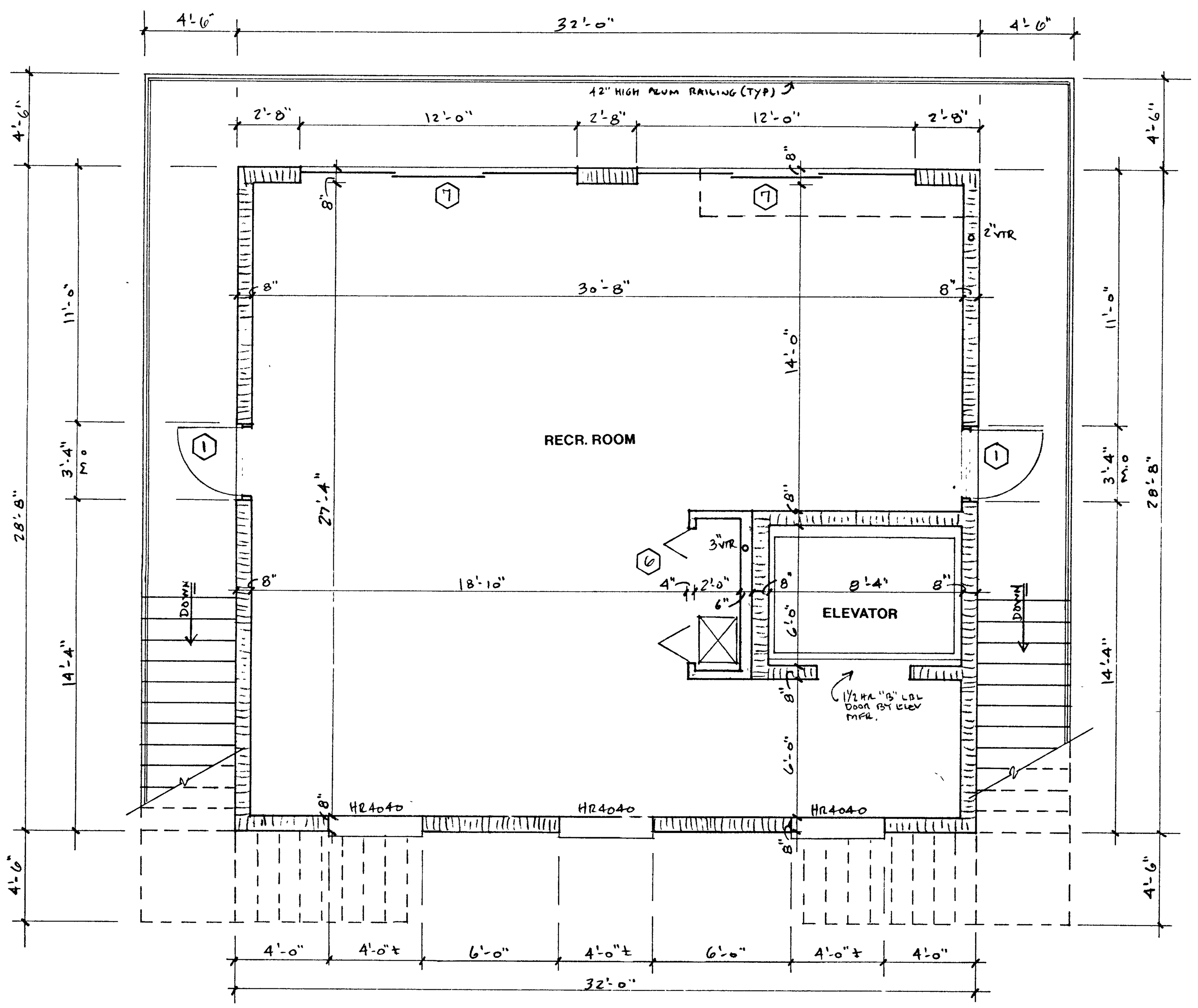
ROOM	BASE	FLOOR	WALLS	CEILING	CLG.HT.	REMARKS
"ICE CREAM"	TILE	TILE	PAINT ON G.W.B	ACOUST LAY-IN	10'-0"	
KITCHEN	TILE	TILE	PAINT ON G.W.B	"	10'-0"	SEMI-GLOSS PAINT
VESTIBULE	TILE	TILE	PAINT ON G.W.B	"	10'-0"	
ELEV MACH	NONE	CONC.	CONC. BLOCK	NONE		CONC. SEALER
MEN	TILE	TILE	TILE WAINSCOT TO 48"/PAINT ON GWB	ACOUST LAY-IN	8'-0"	SEMI-GLOSS PAINT
WOMEN	TILE	TILE	"	"	8'-0"	
CLOS.	NONE	CONC	CMU/GYP BD.	NONE		CONC. SEALER



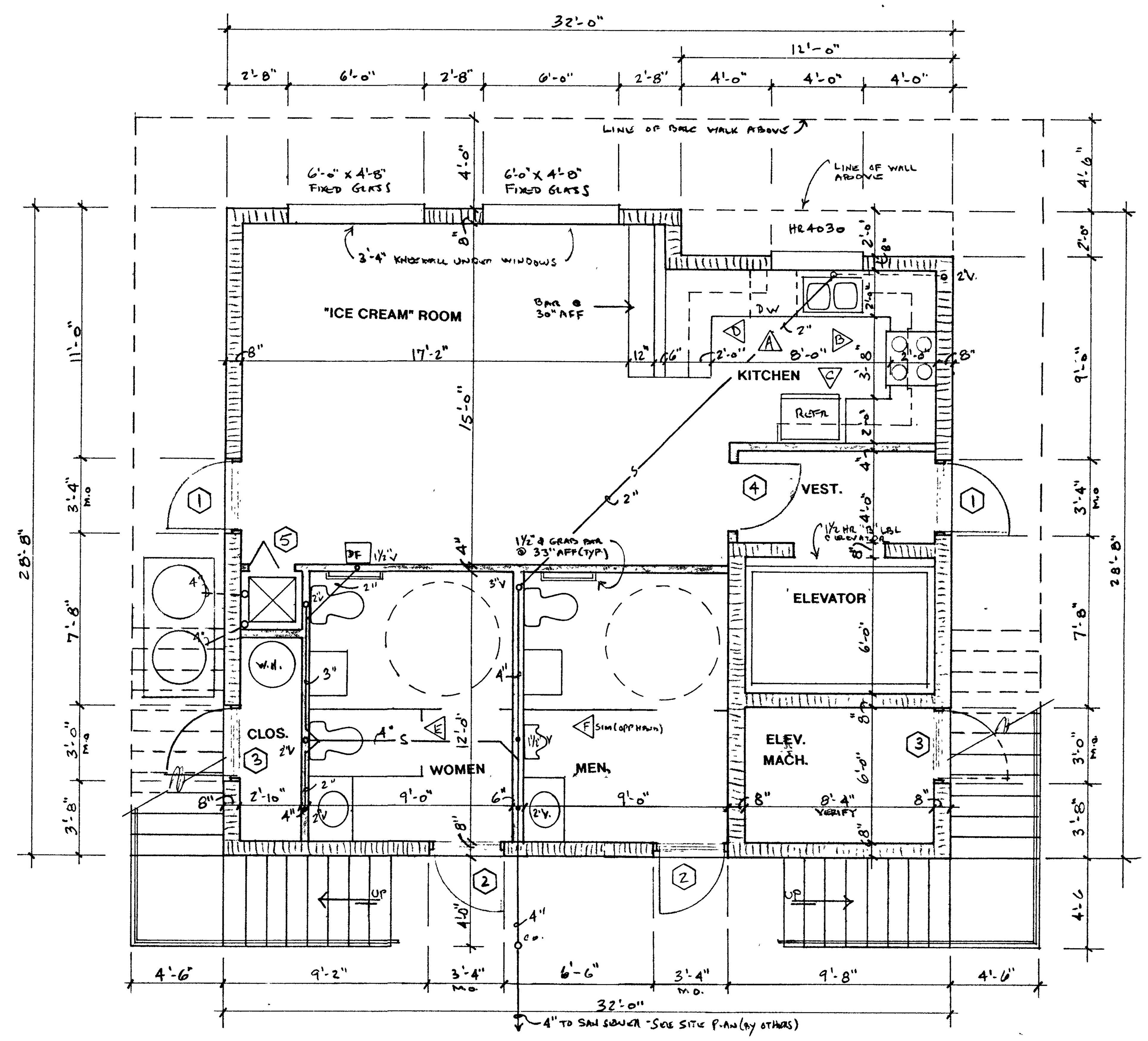
INTERIOR ELEVATIONS
SCALE: 3/8" = 1'-0"



WASTE RISER
NO SCALE



2ND FLOOR PLAN
SCALE: 1/4" = 1'-0"



1ST FLOOR PLAN
SCALE: 1/4" = 1'-0"

REVISIONS	BY
PER OWNER REQUEST FLIP MENS TOILET	MAP 10/29/97
PER SBCCI COMMENTS	MAP 6/4/98

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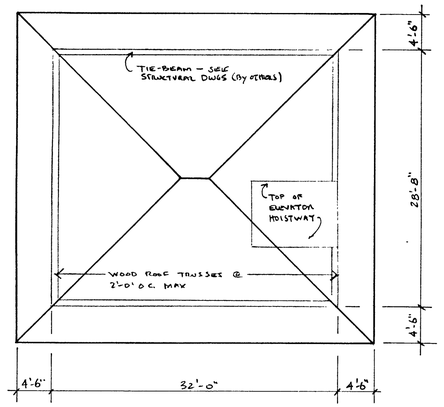
FLOOR PLANS, SCHEDULES

RECREATION BLDG.

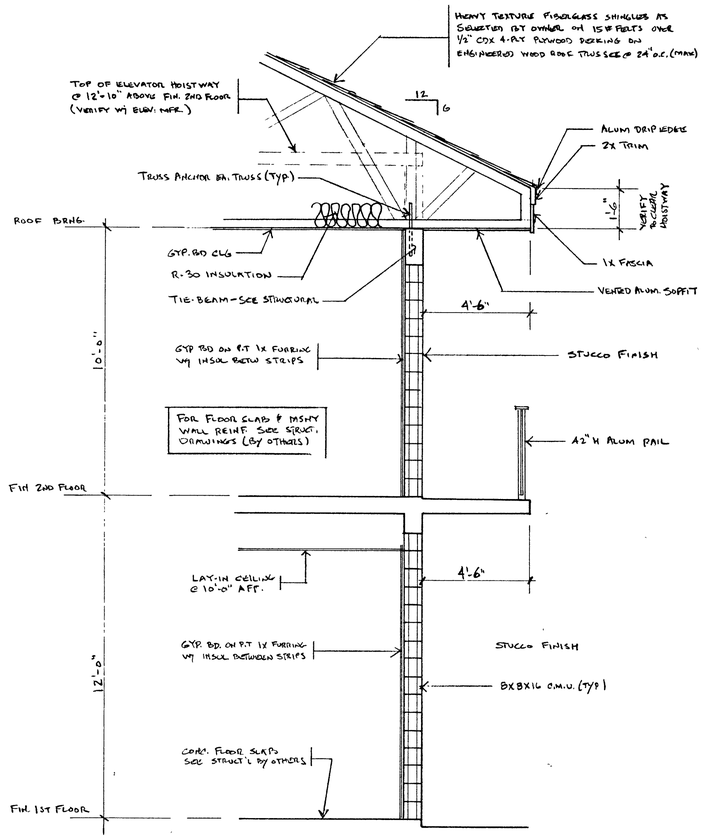
LANTANA CONDOMINIUM
BREVARD COUNTY, FLORIDA

DRAWN	M.A.P
CHECKED	M.A.P.
DATE	10-22-97
SCALE	AS NOTED
JOB NO.	30197
SHEET	A-10
OF	22 SHEETS



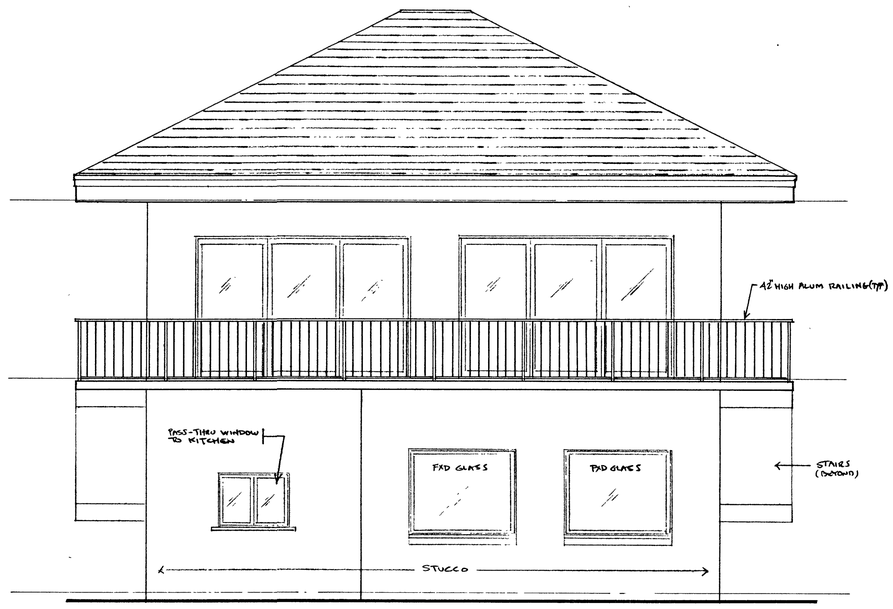
ROOF PLAN SCALE: 1/8" = 1'-0"

SEE TRUSS MFR'S DRAWINGS FOR TRUSS LAYOUT AND MEMBER CONFIGURATION.

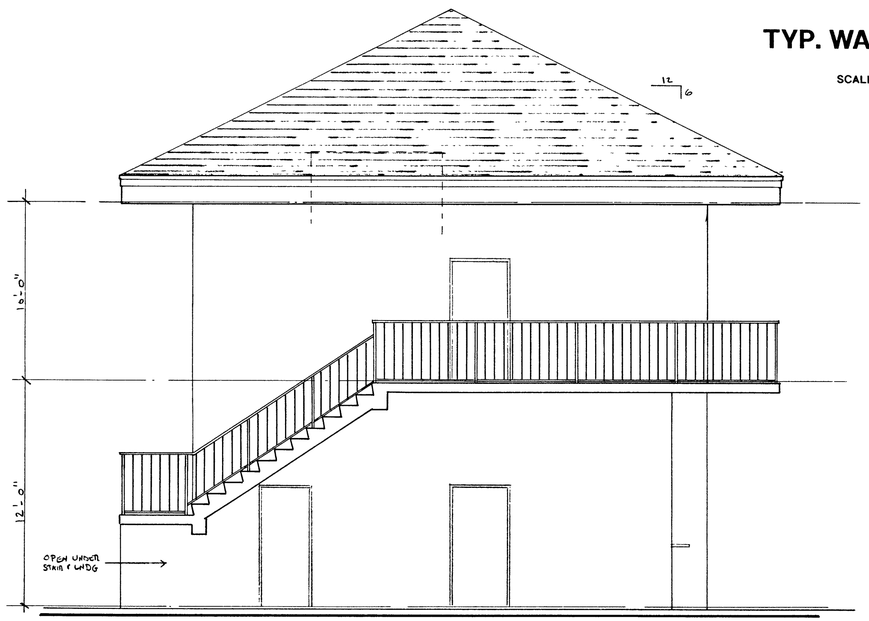


TYP. WALL SECTION

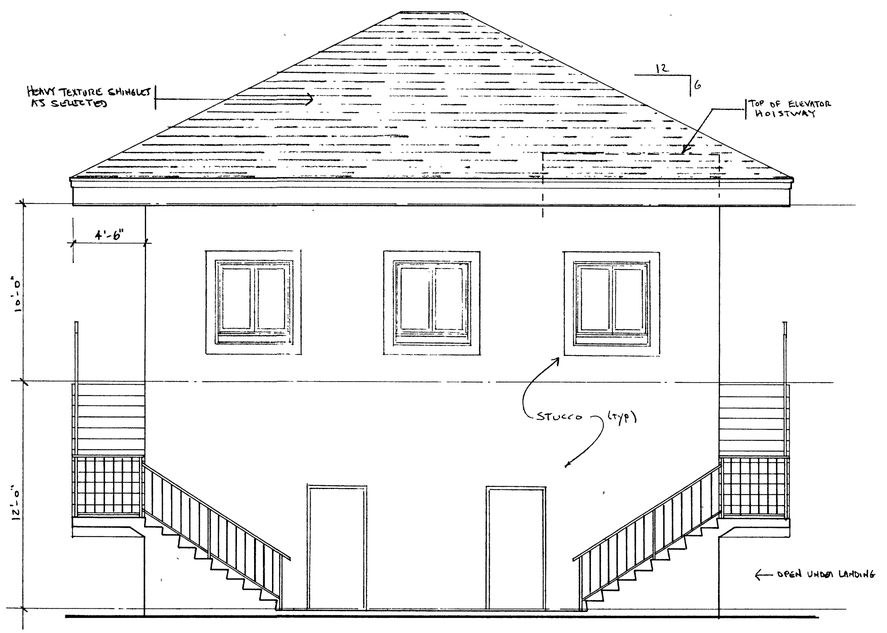
SCALE: 3/8" = 1'-0"



EAST SIDE



SOUTH SIDE (NORTH SIDE SIMILAR – OPP.HAND)



FRONT (WEST)

ELEVATIONS SCALE: 1/4" = 1'-0"

REVISIONS	BY
PER OWNER REQUEST	MAP 10/20/97
PER SBCCI COMMENTS	MAP 6/4/98

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FL. REG. #13128 - GA. REG #2738
NCARB CERT. #34518

RECREATION BLDG.

ELEVATIONS, SECTION, PLAN

LANTANA CONDOMINIUM
BREVARD COUNTY, FLORIDA

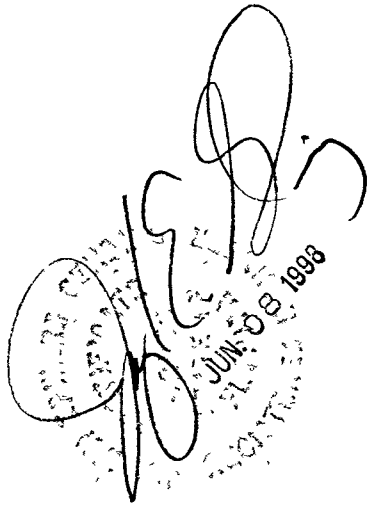
DRAWN	MAP
CHECKED	MAP
DATE	10-22-97
SCALE	AS NOTED
JOB NO.	3097
SHEET	A-11
OF	22 SHEETS

PROJECT NO 106397

STRUCTURAL COMPUTATIONS
WIND LOADS (ASCE 7-95)

PROPOSED LANTANA CONDOMINIUMS

INDIAN HARBOUR BEACH, BREVARD COUNTY, FLORIDA



GERDING ENGINEERING CORPORATION
STRUCTURAL ENGINEERING
65 EAST NASA BOULEVARD, SUITE 201
MELBOURNE, FLORIDA 32901
407 984 3255

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DATE 6.5.98 PAGE 1 OF 3

PROJECT LANTANA CONDOMINIUM
WINDLOAD CALCULATIONS ASCE 7-95

PROJECT # 106397 ENGINEER JEG

DESIGN LOADS

WIND (REF ASCE 7-95)

BASIC WIND SPEED	135 MPH	(FIG. 6.1)
BUILDING DESCRIPTION	ENCLOSED, LOW-RISE	
BUILDING HEIGHT	36'	
BUILDING CATEGORY	II	(TABLE 1.1)
IMPORTANCE FACTOR	1.00	
EXPOSURE CATEGORY	D	(6.5.3)
VELOCITY PRESSURE EXPOSURE COEFF	1.19	(TABLE 6-3)
TOPOGRAPHIC FACTOR	1.0	
GUST EFFECT FACTOR	0.85	6.6.1
GC_{pi}	± 0.18	

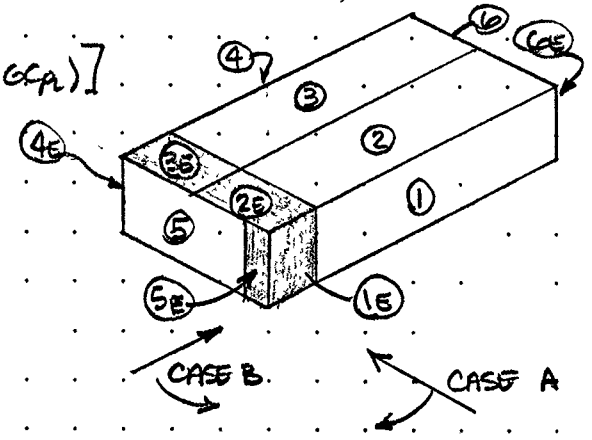
VELOCITY PRESSURE $q_z = (.00256)(K_z)(K_{zt})V^2 I$ (EQ 6-1) 6.5.1

$q_z = (.00256)(1.19)(1.0)(135)^2(1.0) = \underline{55.5 \text{ psf}}$

MWFRS $\theta = 0$, PARAPET > 3', $a = 8.6'$, $2a = 17.2'$

DESIGN WIND LOAD $P = q_h[(GC_{pf}) - (GC_{pi})]$

$q_h = 55.5$ psf



CASE A DESIGN PRESSURES

SURFACE	GC_{pf}	$+GC_{pi}$	$-GC_{pi}$
1	0.4	32.3	12.2
2	-0.69	-28.3	-48.3
3	-0.37	-10.5	-30.5
4	-0.29	-6.1	-26.1
1E	0.61	43.8	23.9
2E	-1.07	-49.4	-69.4
3E	-0.53	-19.4	-39.4
4E	-0.43	-13.9	-33.9

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DATE 6.5.98 PAGE 2 OF 3
PROJECT LANTANA
PROJECT # 1063.97 ENGINEER JGS

DESIGN LOADS

WIND (ASCE 7-95)

MWFRS (TABLE 6-1) CASE B LOADS ARE WORST CASE (FIG 6-4)

$p = q_h [GC_{pf} - GC_{pi}]$ $q_h = 55.5$ PSF

ZONE	GC_{pf}	GC_{pi}	$[GC_{pf} - GC_{pi}]$ +INT.	$[GC_{pf} - GC_{pi}]$ -INT.	p (PSF) +INT	p (PSF) -INT
1	-0.45	±0.18			-15.0	-35.0
2	-0.69	"			-28.3	-48.3
3	-0.37				-10.5	-30.5
4	-0.45				-15.0	-35.0
5	0.10				32.3	12.2
6	-0.29				-6.1	-26.1
1E	-0.48				-16.7	-36.6
2E	-1.09				-49.4	-69.4
3E	-0.53				-19.4	-39.4
4E	-0.98	"			-16.7	-36.6
5E	0.61	"			42.8	23.9
6E	-0.43	"			-13.9	-33.9

WORST CASE LOADS (MWFRS)

ZONE	ASCE 7-95	ASCE 7-88
WALL	-35.0	44.4 (AVG.)
WALL EDGE	43.8	
ROOF	-48.3	-50.1
ROOF EDGE	-69.4	-81.5
LATERAL	38.4	(E-W) 67.0 (AVG.)
LAT. EDGE	57.7	(N-S) 56.1 (AVG.)
PARAPET	53.3	65.2

ASCE 7-95 (AVG) = (38.4)(.8) + (57.7)(.2)
= 42.3

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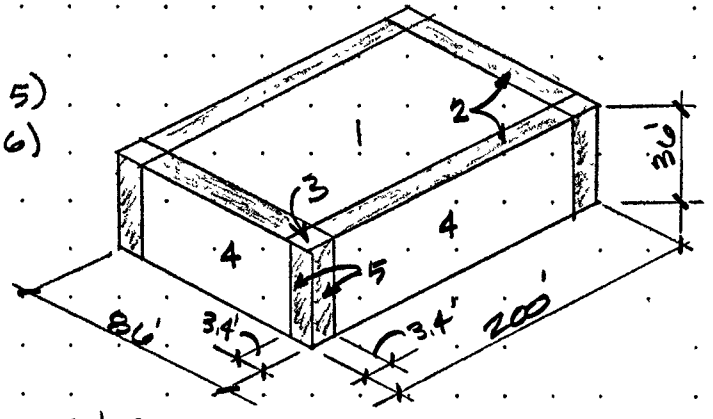
PROJECT LANTANA CONDOMINIUM
WIND LOAD CALCULATIONS

PROJECT # 1066397 ENGINEER JGB

DESIGN WIND PRESSURES (COMPONENTS & CLADDING)

(FIG 6-5A & 6-5B)
$\theta < 10°$
PARAPET = 4.0'
GC_p WALLS REDUCED 10% (NOTE 5)
ZONE 3 = ZONE 2 (NOTE 6)
$a = (0.04)(86) = 3.4'$
$GC_{pi} = \pm 0.18$
$p = q_h [GC_p - GC_{pi}]$
$q_h = 55.5$ PSF



EXTERNAL PRESSURE COEFFICIENTS

ZONE	COMPONENT	EFFECTIVE WIND AREA	GC_p	$[GC_p - GC_{pi}]$	P (WORST)
1	CONCRETE SLAB	>100 SF	-0.9, 0.2	-1.08, 0.38	-60.0
2,3	CONCRETE SLAB	>100 SF	-1.1, 0.2	-1.28, 0.38	-71.0
	PARAPET CMU	16 SF	-1.7, 0.3	-1.88, 0.48	-104
4	CMU WALL	≈30 SF (x.9)	-0.9, 0.8	-1.08, 0.98	-60.0
	WINDOW, DOOR				
5	CMU WALL	≈30 SF (x.9)	-1.1, 0.8	-1.28, 0.98	-71.0
	WINDOW, DOOR				

ASCE 7-88 @ 110 MPH WORST CASE

ZONE	P_{36}	P_{27}	P_{18}
1	-70.3	—	—
2,3	-84.9	—	—
4	-80.0	-75.6	-68.6
5	-99.4	-93.9	-85.3

PARAPET = P_{36} ZONE 5 = -99.4

DELTA
Fire Sprinklers, Inc

111 TECH DRIVE, SANFORD, FL 32771
(407) 328-3000 FAX (407) 328-3001

June 9, 1998

Mr Alan Vinacke
Tricon Development, Inc
P O Box 320637
Cocoa Beach, FL 32932
Phone (407) 453-5360
Fax (407) 453-3618

RE: LANTANA CONDOMINIUM
S. R. A-1-A
INDIAN HARBOUR BEACH, FLORIDA

SUB SBCCI PLAN REVIEW

Dear Mr Vinacke

The following is our response to the Subject Plan Review Comments

Item No 1 (Code Section SBC 706) CPVC plastic pipe and fittings shall be installed concealed behind minimum 3/8 inch gypsum drywall in accordance with its UL listing and SBCCI Report No 8661 All exposed piping shall be black steel Schedule 40 and Schedule 10

Item No 2 (Code Section SBC 903 3) The automatic sprinkler system shall be equipped with control valve monitor switches and waterflow indicating switches at each level Standpipe sectional valves shall be equipped with a monitor switch Fire pump valves shall be equipped with a monitor switch A water flow indicating switch shall be provided at the fire pump room to monitor distribution and standpipe piping It is the responsibility of the property owner to obtain central station monitoring services

Item No 3 (Code Section SBC 1004 3 2 1) Automatic sprinkler system design specified in accordance with NFPA #13R, 1996 edition, complies with NFPA #13, 1996 edition Section 5-3 2 and as such justifies determination as fully sprinklered in accordance with NFPA #13, 1996 edition The general notes on Drawing 1 of 3 dated 2/16/98 shall be amended

If you have any questions concerning our response, please contact the undersigned

Respectfully,

DELTA FIRE SPRINKLERS, INC.

Skip Bateman
Vice President

SB/cw

5'

FENCE

WOOD WALKWAY TO BEACH

4 25' TO 1980 CCCL

12'

WOOD DECK

INDIAN HARBOR BEACH

25' SETBACK LINE

4'

12" OVERFLOW GUTTER

5' CONCRETE WALL
STUCCO W/ BAND

6Ft. DEPTH

12"

30'

12"

6'

POOL EQUIP.

40'

2'x2' CONC COLUMN
W/ LIGHT FIXTURE

DECK ELEV. 18.0

ALUMINUM FENCE
5FT. MIN. HEIGHT

12'

8'6"

3FT
DEPTH

CONCRETE DECK
WITH SPRAY FINSH

12"

5'

PLANTER

PLANTER

A/C

TO FRONT OF BUILDING 22.8'

BATH HOUSE

PLANTER

BUILDING "B"

LANTANA CONDOMINIUM

PROPOSED POOL & DECK

1/8" = 1'

APPROVED PLAN AS PERMITTED
BY BUREAU OF BEACHES
AND COASTAL SYSTEMS
FLORIDA DEPT OF
ENVIRONMENTAL PROTECTION

AUTHORIZED CONSTRUCTION AND ANY OTHER AUTHORIZED ACTIVITIES MUST COMPLY WITH ALL CONDITIONS OF THE PERMIT CONSTRUCTION AND ACTIVITIES ARE STRICTLY LIMITED TO THOSE BOTH SHOWN ON THE APPROVED PLANS AND LISTED IN THE PROJECT DESCRIPTION THIS PERMIT IS ISSUED PURSUANT TO CH 161, FS, AND OTHER PERMITS MAY BE REQUIRED

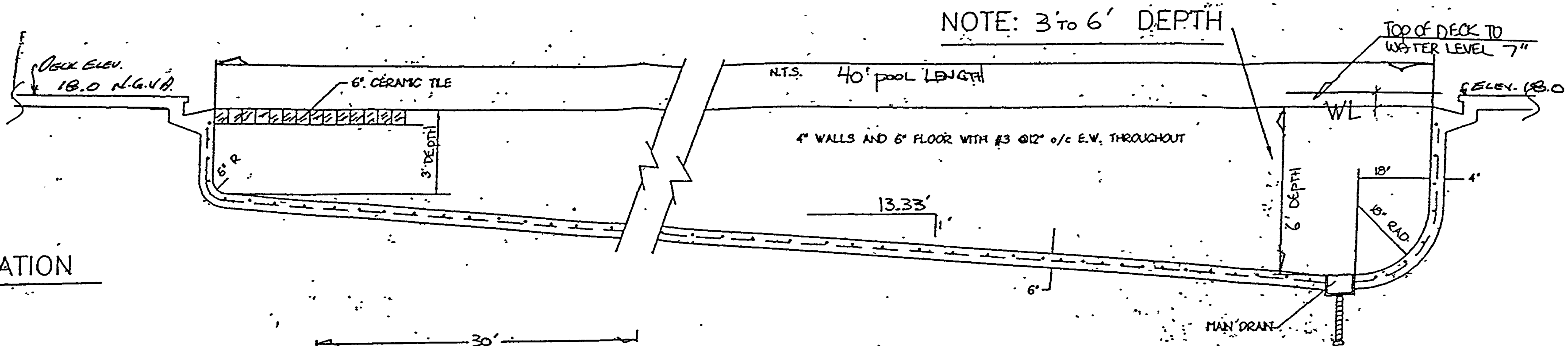
Steve Palmer 6-11-98 BE-885

REVIEWED DATE PERMIT NO

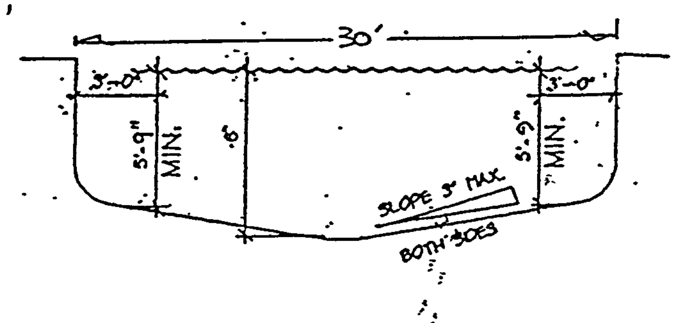
EDWARD M. FLEJ
REGISTERED
STATE OF FLORIDA

3.9.98

PROPOSED POOL DETAILS FOR: LANTANA CONDOMINIUM

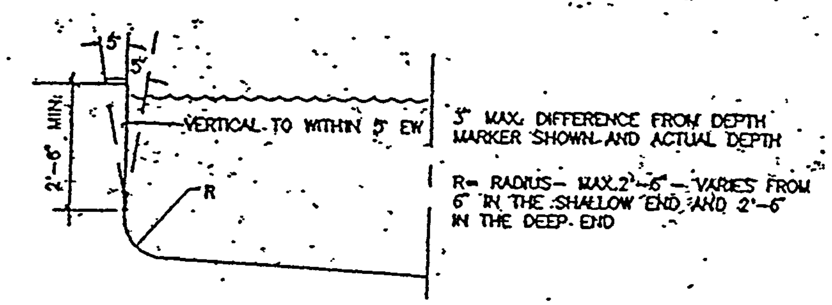


POOL ELEVATION



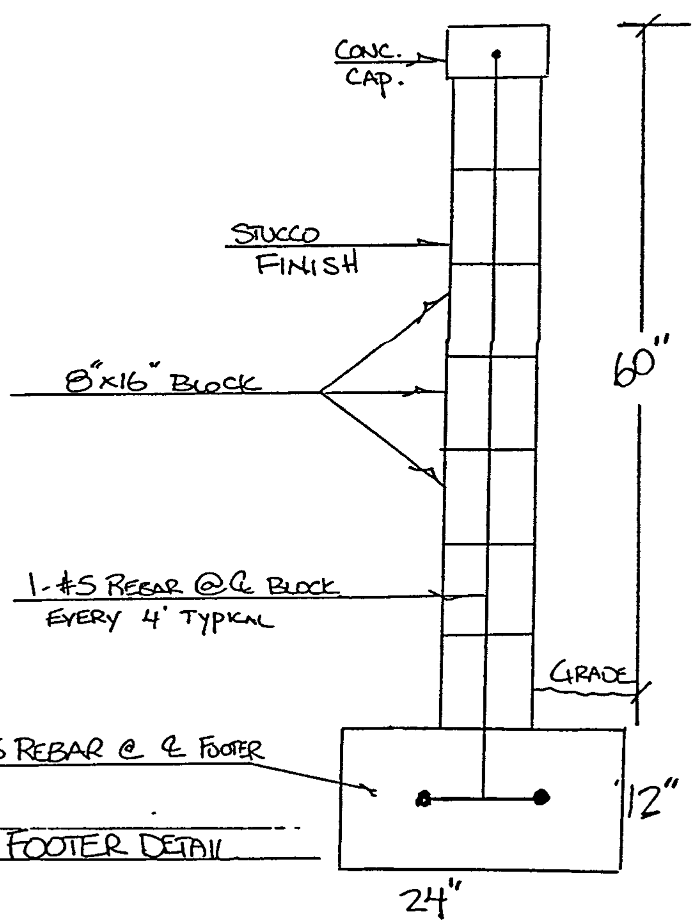
SECTION DEEP END

SCALE: N.T.S.



SECTION C/L OF POOL (TYPICAL BOTH SIDES)

SCALE: N.T.S.



WALL & FOOTER DETAIL

CONSTRUCTION NOTES

1. These design plans and specifications are in compliance with the standards established in section 16B-33.007 Florida Administrative Code
2. The main wind force resisting system has been designed in accordance with section 6 American National Standards / American Society of Civil Engineering 7-88 (July 1990) "Minimum design loads for buildings and other structures" to withstand the wind loads associated with a minimum basic wind speed of 110 miles per hour (section 1606-SBC-1994 edition) .
3. The components and cladding have been selected and their use incorporated into design and specifications in accordance with section 6. American National Standards / American Society of Civil Engineering 7-88 (July 1990) " Minimum Design Loads for Buildings and Other Structures " to withstand the wind loads associated with a minimum basic wind speed of 110 miles per hour (section 1606-SBC-1994 edition) .
4. Privacy walls constructed of concrete masonry units on a footer shall be frangible at minimum 5 foot intervals.
5. Pool deck to be frangible concrete.

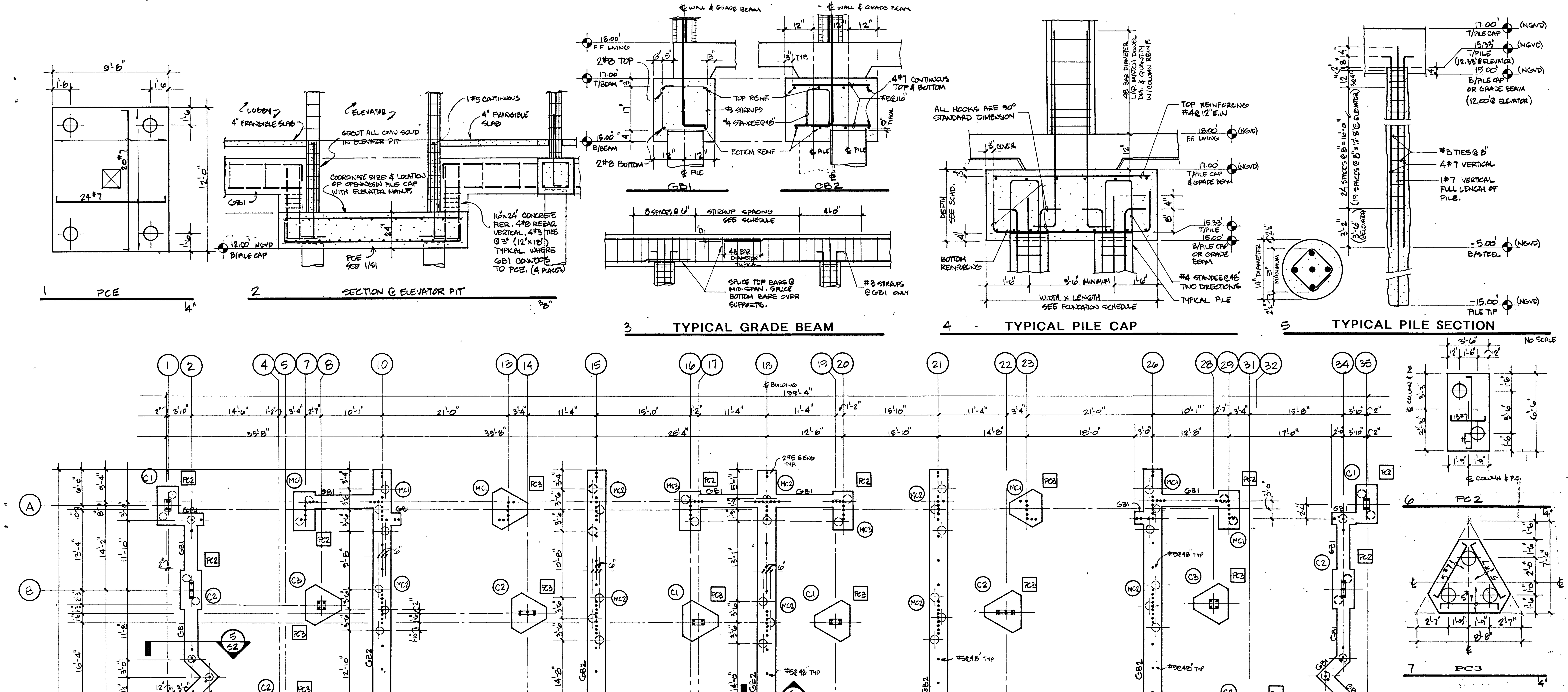
APPROVED PLAN AS PERMITTED BY BUREAU OF BEACHES AND COASTAL SYSTEMS FLORIDA DEPT OF ENVIRONMENTAL PROTECTION

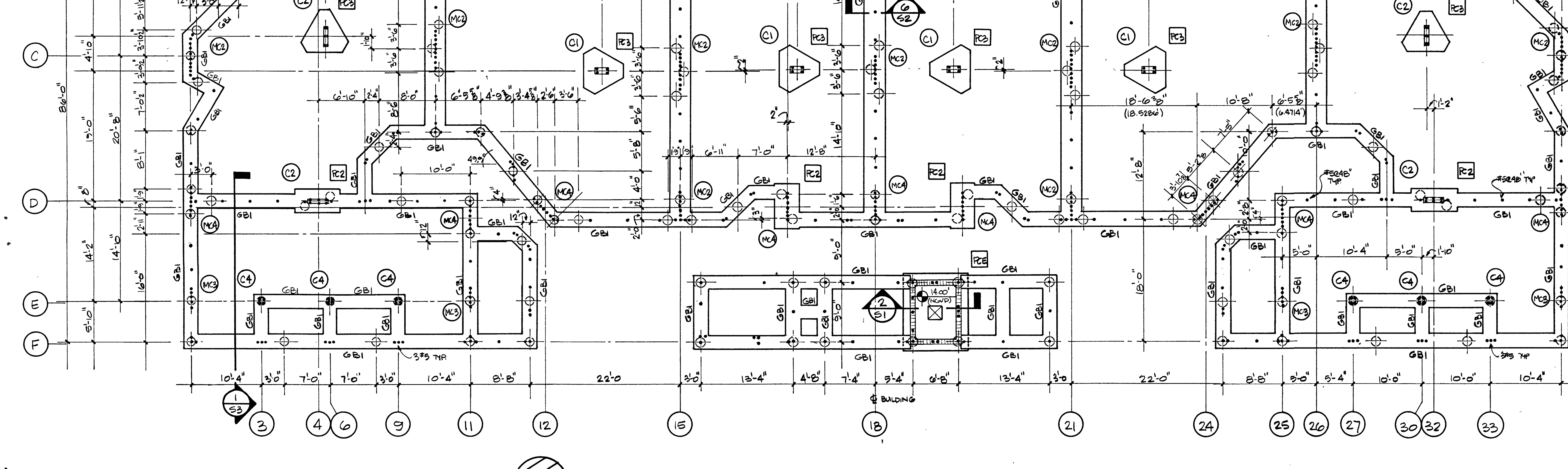
AUTHORIZED CONSTRUCTION AND ANY OTHER AUTHORIZED ACTIVITIES MUST COMPLY WITH ALL CONDITIONS OF THE PERMIT CONSTRUCTION AND ACTIVITIES ARE STRICTLY LIMITED TO THOSE BOTH SHOWN ON THE APPROVED PLANS AND LISTED IN THE PROJECT DESCRIPTION THIS PERMIT IS ISSUED PURSUANT TO CH 161 FS, AND OTHER PERMITS MAY BE REQUIRED

REVIEWED	DATE	PERMIT NO
[signature]	6-11-98	BE-885

[signature] 3.9.98

BE-855





TO THE BEST OF MY KNOWLEDGE, THE STRUCTURAL CONSTRUCTION DRAWINGS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ALL THE PROVISIONS, CONDITIONS AND CRITERIA ESTABLISHED AND SET FORTH IN BREVARD COUNTY ORDINANCE 88-14 THE "COASTAL CONSTRUCTION CODE" TO WITHSTAND 140 MPH WIND SPEEDS

TO THE BEST OF MY KNOWLEDGE, THE DESIGN OF THE STRUCTURE COMPLIES WITH THE APPLICABLE PROVISIONS AND REQUIREMENTS OF THE SBCCI 1994 STANDARD BUILDING CODE, INCLUDING THE REQUIREMENTS OF CHAPTER 16 AND SPECIFICALLY SECTION 1606

TO THE BEST OF MY KNOWLEDGE, THESE DESIGN PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE STANDARDS ESTABLISHED IN SECTION 16B-33.007, FLORIDA ADMINISTRATIVE CODE.

TO THE BEST OF MY KNOWLEDGE, THE MAIN WIND-FORCE RESISTING SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH ANSI/ASCE 7-88, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" SECTION 6, TO WITHSTAND THE WIND LOADS ASSOCIATED WITH A MINIMUM BASIC WIND SPEED OF 110 MILES PER HOUR

TO THE BEST OF MY KNOWLEDGE, THE COMPONENTS AND CLADDING HAVE BEEN SELECTED AND THEIR USE INCORPORATED INTO THE DESIGN AND SPECIFICATIONS IN ACCORDANCE WITH ANSI/ASCE 7-88, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" SECTION 6, TO WITHSTAND THE WIND LOADS ASSOCIATED WITH A MINIMUM BASIC WIND SPEED OF 110 MILES PER HOUR

LEGEND

PILE CAP MARK	PC2
COLUMN MARK	C2
AUGER PILE MARK	
#3 REBAR DOWEL	
REINF. CONCRETE COLUMN	
GRADE BEAM MARK	GB1

FOUNDATION PLAN

1/8" = 1'-0"

* ALL REINFORCING IS SYMMETRIC ABOUT BUILDING CENTERLINE
* REFER TO ARCHITECTURAL UNIT PLANS FOR DOWEL LOCATIONS ADJACENT TO DOORS, WINDOWS & AT CORNERS OF CMU WALLS.

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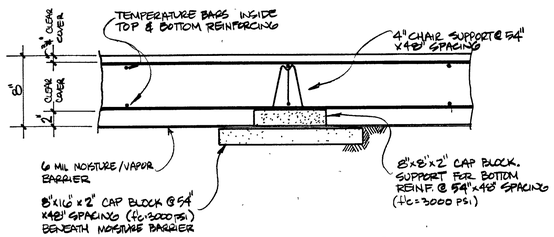
2-18-98

LANTANA CONDOMINIUMS

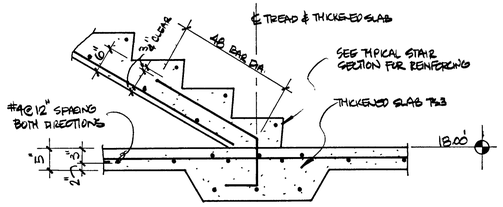
DATE	11-6-97
DESIGN	J GERDING
DRAWN	J GERDING
PROJECT	106397

REVISIONS

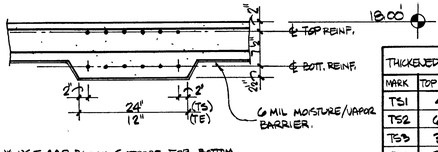
11-6-97	DEP PERMIT ISSUE
2-18-98	CITY PERMIT ISSUE



3 TYPICAL REBAR SUPPORT @ 1ST FLOOR



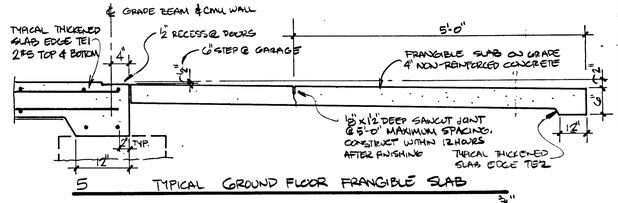
2 THICKENED SLAB @ STAIRS



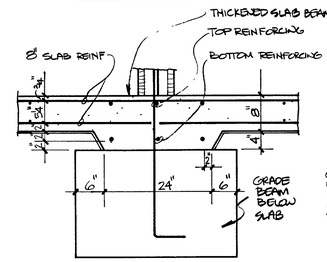
* USE CAP BLOCK SUPPORT FOR BOTTOM REINFORCING. SEE DETAIL ABOVE.
* TERMINATE TOP BARS W/STANDARD HOOK @ END OF BEAMS

THICKENED SLAB REINF		
MARK	TOP REINF	BOT. REINF
TS1	4#6	4#6
TS2	6#6	6#6
TS3	3#5	3#5
TE1	2#5	2#5
TE2	NONE	NONE

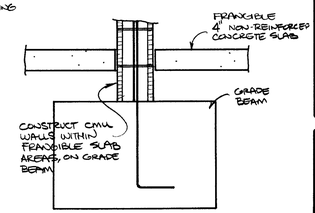
4 TYPICAL THICKENED SLAB BEAM (TS)



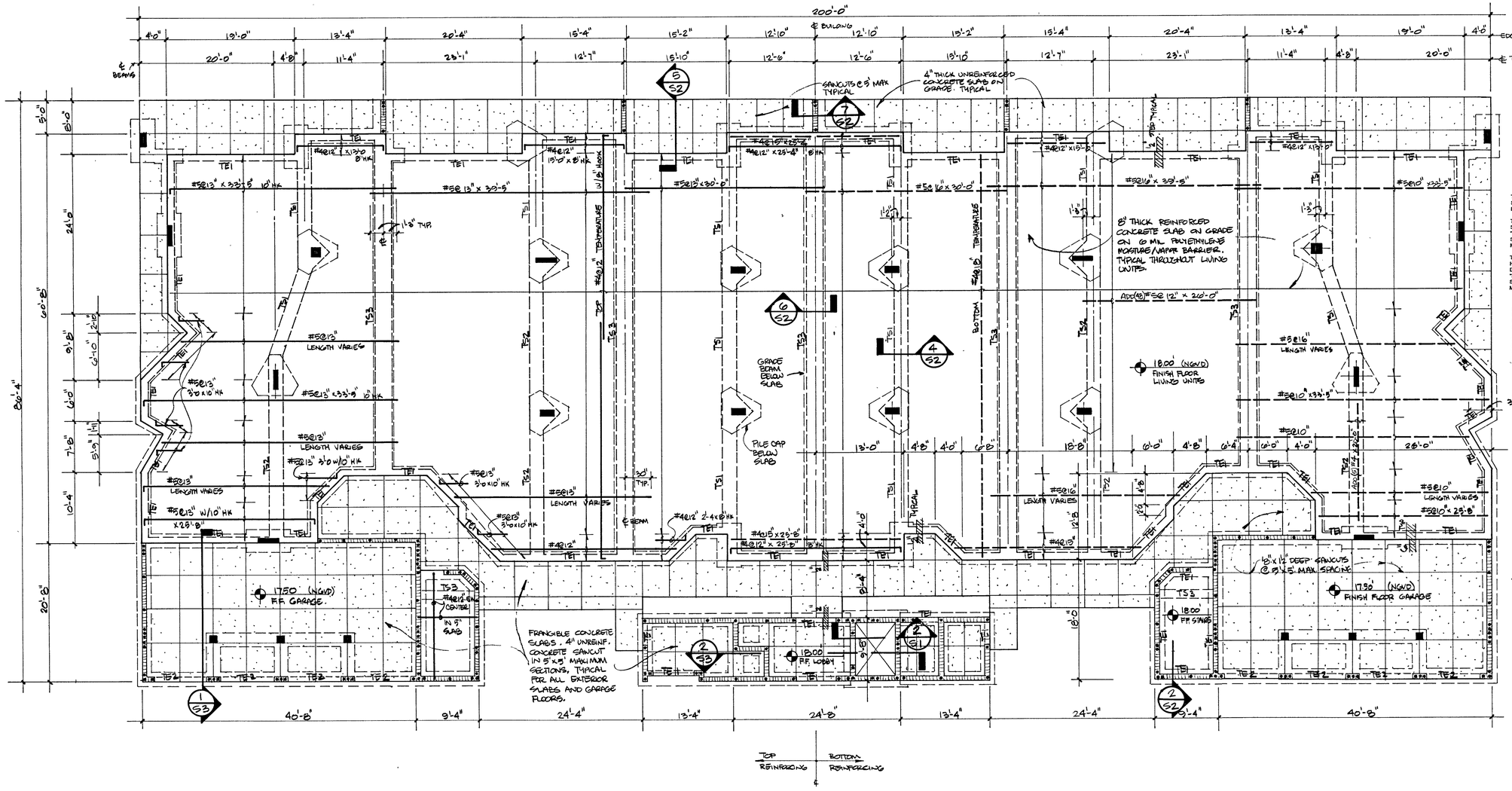
5 TYPICAL GROUND FLOOR FRANGIBLE SLAB



6 TYPICAL SECTION



7 TYPICAL SECTION



FIRST FLOOR PLAN

* ALL DIMENSIONS AND REINFORCING ARE SYMMETRIC ABOUT BUILDING CENTERLINE ℄
* CMU WALLS AND COLUMNS WITHIN LIVING UNITS HAVE BEEN OMMITTED FOR CLARITY SEE S1 FOR DOWEL LOCATIONS.

3/16"=1'-0"

LEGEND

- CONCRETE COLUMN
- CMU WALL
- GRADE BEAM OR PILE CAP
- THICKENED SLAB EDGE (TE1)
- THICKENED SLAB BEAM (TS1)
- FRANGIBLE SLAB
- TOP REINFORCING
- BOTTOM REINFORCING
- STEP IN SLAB

TO THE BEST OF MY KNOWLEDGE, THESE DESIGN PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE STANDARDS ESTABLISHED IN SECTION 168-33 007, FLORIDA ADMINISTRATIVE CODE

TO THE BEST OF MY KNOWLEDGE, THE MAIN WIND-FORCE RESISTING SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH ANSI/ASCE 7-88, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" SECTION 6, TO WITHSTAND THE WIND LOADS ASSOCIATED WITH A MINIMUM BASIC WIND SPEED OF 110 MILES PER HOUR

TO THE BEST OF MY KNOWLEDGE, THE COMPONENTS AND CLADDING HAVE BEEN SELECTED AND THEIR USE INCORPORATED INTO THE DESIGN AND SPECIFICATIONS IN ACCORDANCE WITH ANSI/ASCE 7-88, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" SECTION 6, TO WITHSTAND THE WIND LOADS ASSOCIATED WITH A MINIMUM BASIC WIND SPEED OF 110 MILES PER HOUR

TO THE BEST OF MY KNOWLEDGE, THE STRUCTURAL CONSTRUCTION DRAWINGS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ALL THE PROVISIONS, CONDITIONS AND CRITERIA ESTABLISHED AND SET FORTH IN BREVARD COUNTY ORDINANCE 88-14 THE "COASTAL CONSTRUCTION CODE" TO WITHSTAND 140 MPH WIND SPEEDS.

TO THE BEST OF MY KNOWLEDGE, THE DESIGN OF THE STRUCTURE COMPLIES WITH THE APPLICABLE PROVISIONS AND REQUIREMENTS OF THE SBCCI 1994 STANDARD BUILDING CODE, INCLUDING THE REQUIREMENTS OF CHAPTER 16 AND SPECIFICALLY SECTION 1606

GERDING ENGINEERING CORPORATION
STRUCTURAL ENGINEERING
115 S. ORANGE BLOSSOM TRAIL, SUITE 201
ORLANDO, FLORIDA 32805
TELEPHONE: 407 894 3255
FAX: 407 728 7289

2.18.98

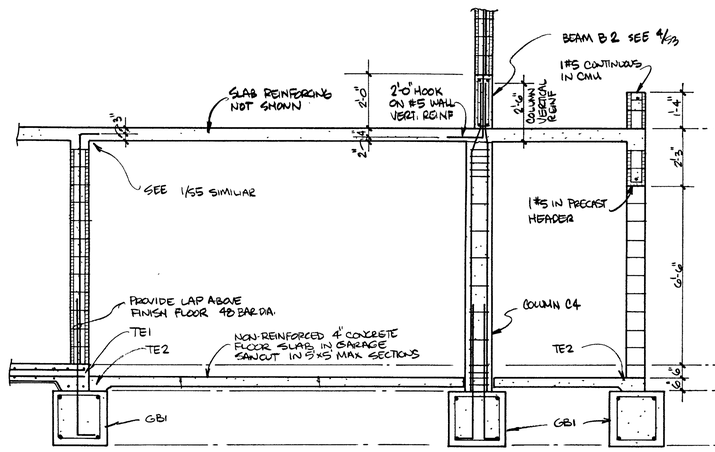
LANTANA CONDOMINIUMS

REVISIONS	
11.6.97	DEP PERMIT ISSUE
1.26.98	MOVE STAIR, DOORS TO EAST END
2.18.98	CITY PERMIT ISSUE

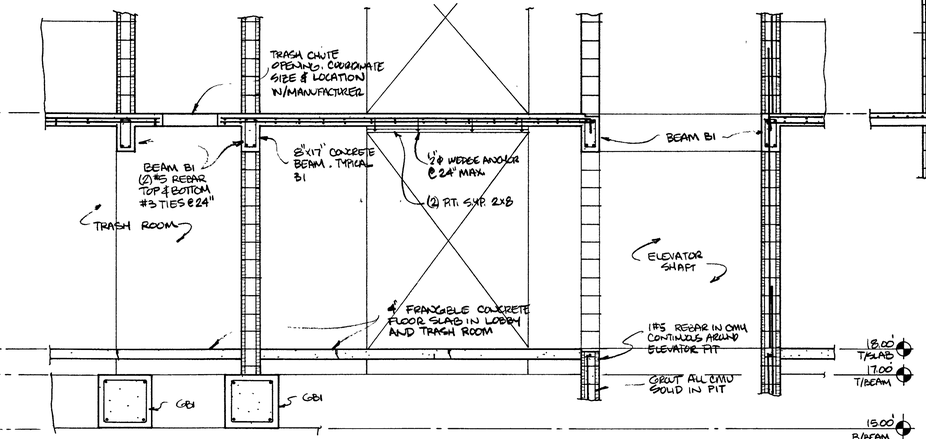
DATE	11.6.97
DESIGN	J. GERDING
DRAWN	J GERDING
PROJECT	006397

S2

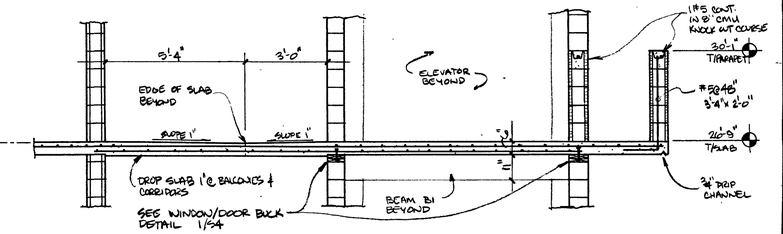
2 OF 7

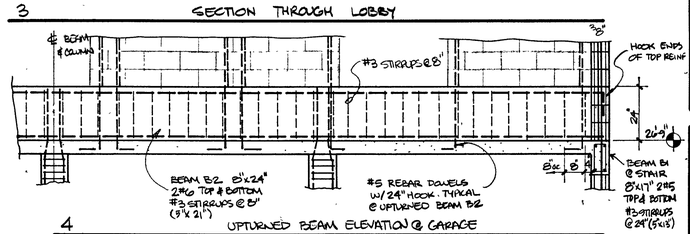


1 SECTION THROUGH GARAGE

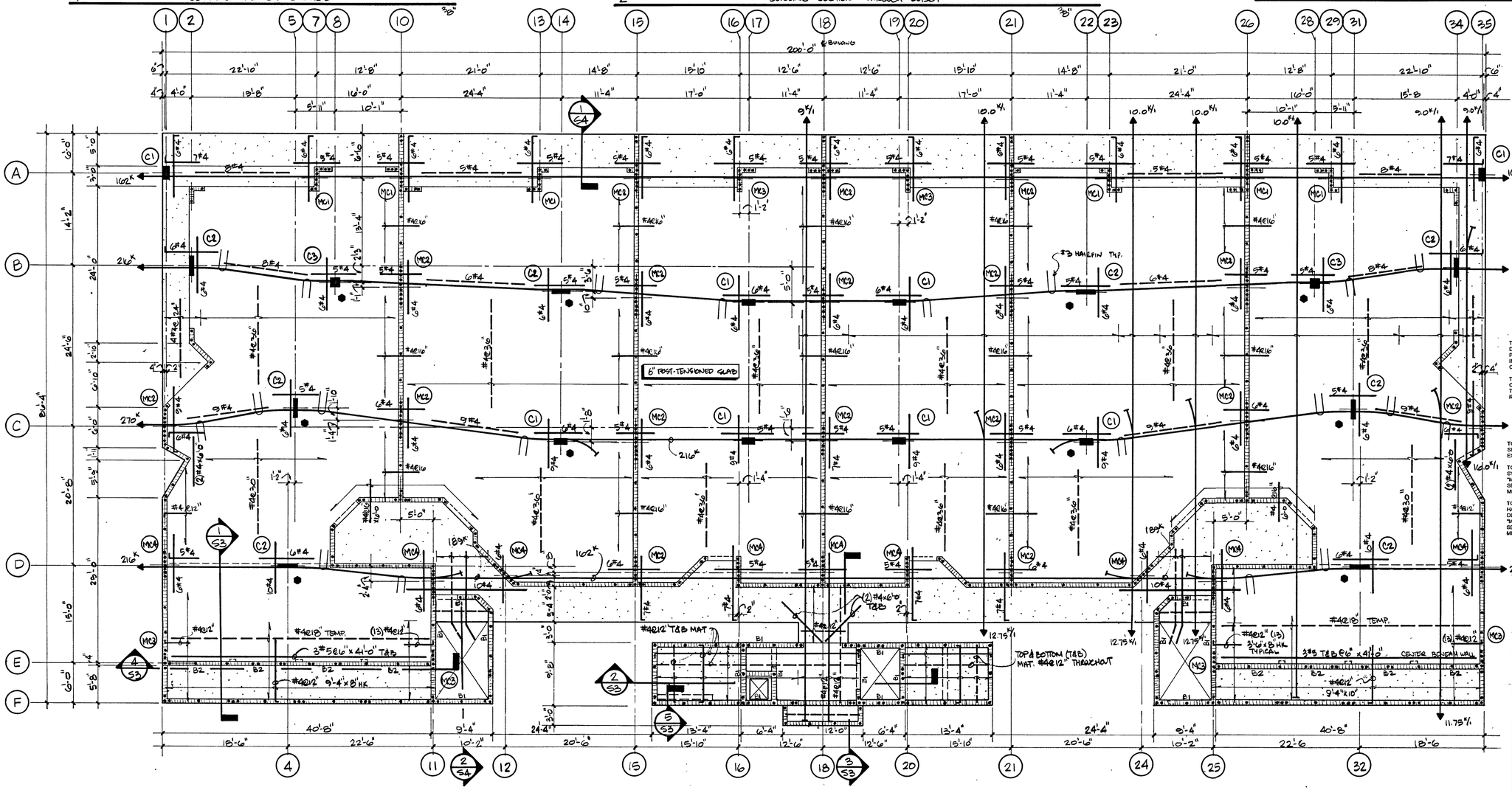


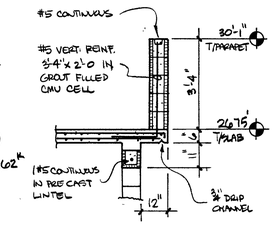
2 BUILDING SECTION THROUGH LOBBY





4 UPTURNED BEAM ELEVATION @ GARAGE





5 PARAPET @ TRASH ROOM

TO THE BEST OF MY KNOWLEDGE, THE STRUCTURAL CONSTRUCTION DRAWINGS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ALL THE PROVISIONS, CONDITIONS AND CRITERIA ESTABLISHED AND SET FORTH IN BREVARD COUNTY ORDINANCE 88-14 THE "COASTAL CONSTRUCTION CODE" TO WITHSTAND 140 MPH WIND SPEEDS .

TO THE BEST OF MY KNOWLEDGE, THE DESIGN OF THE STRUCTURE COMPLIES WITH THE APPLICABLE PROVISIONS AND REQUIREMENTS OF THE SBCCI 1994 STANDARD BUILDING CODE, INCLUDING THE REQUIREMENTS OF CHAPTER 16 AND SPECIFICALLY SECTION 1606

TO THE BEST OF MY KNOWLEDGE, THESE DESIGN PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE STANDARDS ESTABLISHED IN SECTION 168-33 007, FLORIDA ADMINISTRATIVE CODE .

TO THE BEST OF MY KNOWLEDGE, THE MAIN WIND-FORCE RESISTING SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH ANSI/ASCE 7-88, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" SECTION 6, TO WITHSTAND THE WIND LOADS ASSOCIATED WITH A MINIMUM BASIC WIND SPEED OF 110 MILES PER HOUR

TO THE BEST OF MY KNOWLEDGE, THE COMPONENTS AND CLADDING HAVE BEEN SELECTED AND THEIR USE INCORPORATED INTO THE DESIGN AND SPECIFICATIONS IN ACCORDANCE WITH ANSI/ASCE 7-88, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" SECTION 6, TO WITHSTAND THE WIND LOADS ASSOCIATED WITH A MINIMUM BASIC WIND SPEED OF 110 MILES PER HOUR.

LEGEND

- REINFORCED CONCRETE COLUMN
- REINFORCED CMU WALL (1#5)
- BEAM OR WALL BELOW SLAB
- MASONRY COLUMN (5#5)
- EXPOSED CONCRETE
- POST-TENSION REINFORCING
- TOP REINFORCING (90° HOOK)
- BOTTOM REINFORCING
- COLUMN MARK (C1)

SECOND FLOOR PLAN

● - INDICATES A SHEARHEAD IS REQUIRED . (10 PLACES)

1/8"=1'-0"

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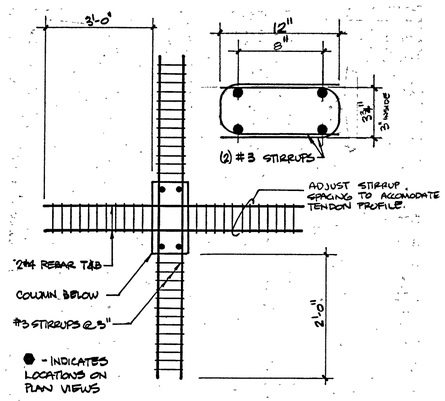
2-10-98

LANTANA CONDOMINIUMS

REVISIONS		
11-6-97	DSP PERMIT ISSUE	
1-24-98	MOVE STAIR DOORS & REMOVE BALCONY	
2-10-98	CITY PERMIT ISSUE	

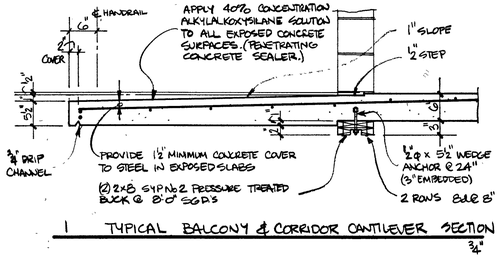
DATE 11-6-97
DESIGN J GERDING
DRAWN J GERDING
PROJECT 106397

S3
3 OF 7



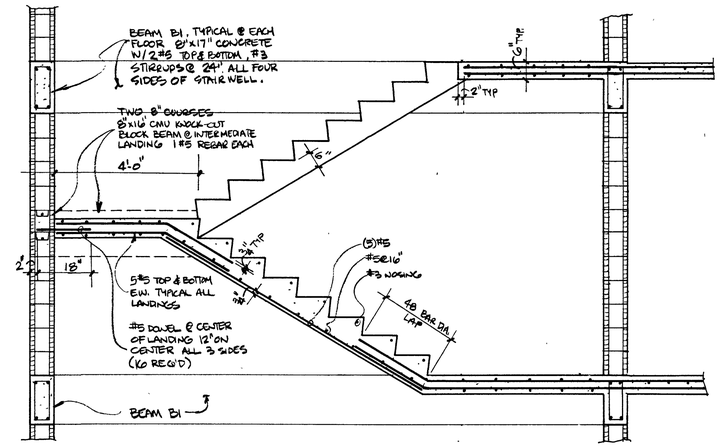
3 TYPICAL COLUMN SHEARHEAD REINFORCIING

NO SCALE



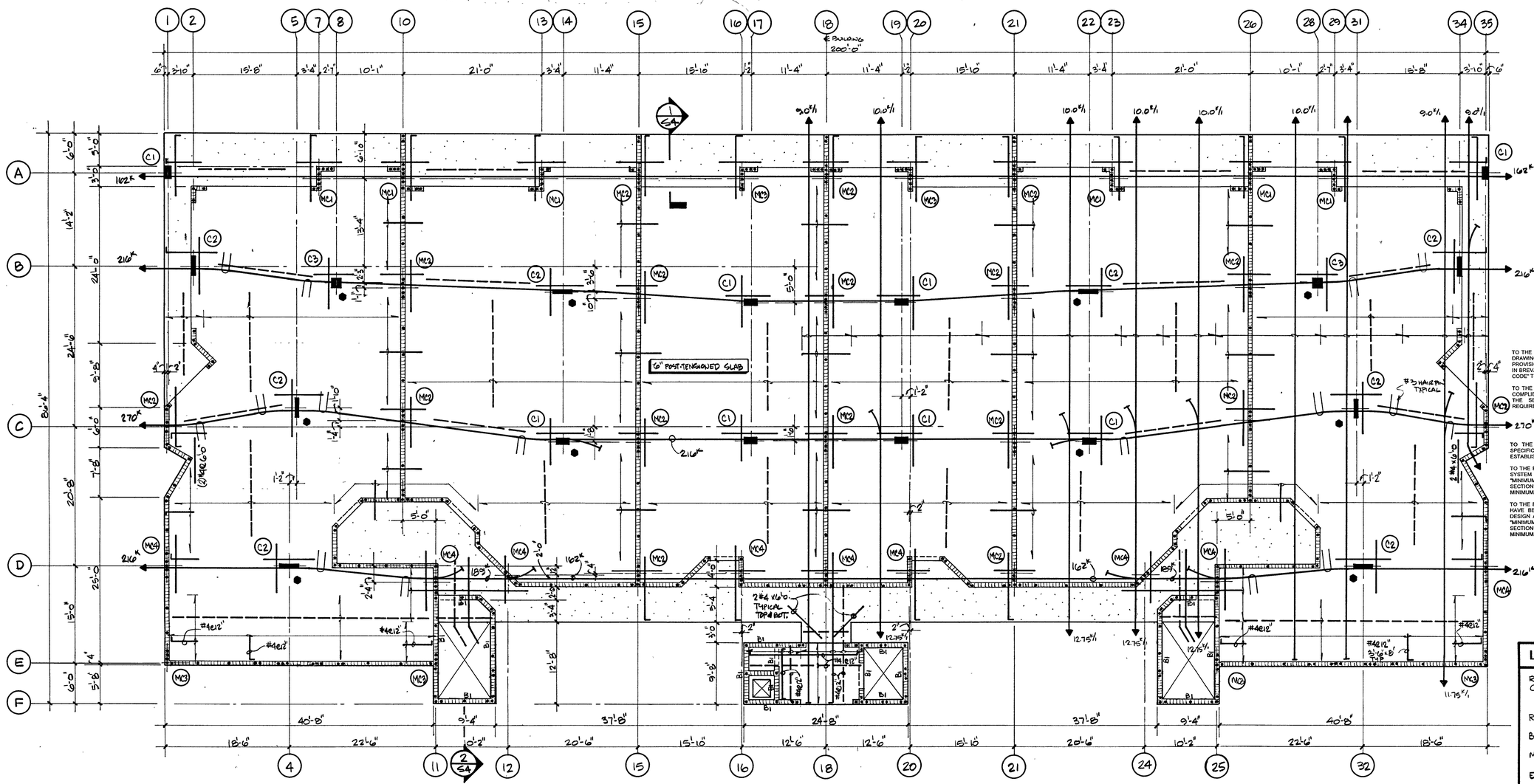
1 TYPICAL BALCONY & CORRIDOR CANTILEVER SECTION

¾"



2 TYPICAL STAIR SECTION

½"



3rd & 4th FLOOR PLAN

* SLAB REINFORCING IS IDENTICAL TO 2ND FLOOR EXCEPT AS NOTED.
●-INDICATES A SHEARHEAD, 10 PLACES

1/8"=1'-0"

LEGEND

- REINFORCED CONCRETE COLUMN
- REINFORCED CMU WALL
- BEAM OR WALL BELOW SLAB
- MASONRY COLUMN MARK (MC1)
- EXPOSED CONCRETE
- POST-TENSION REINFORCING
- TOP REINFORCING (90° HOOK)
- BOTTOM REINFORCING
- COLUMN MARK (C1)

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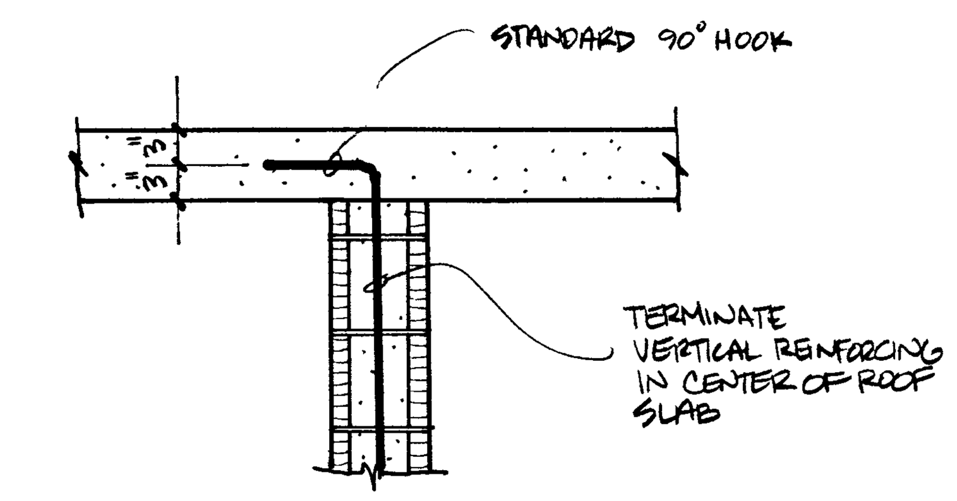
LANTANA CONDOMINIUMS

REVISIONS	
11-6-97	DEP PERMIT ISSUE
1-26-98	MOVE STAIR DOORS & REMOVE BALCONY
2-18-98	CITY PERMIT ISSUE

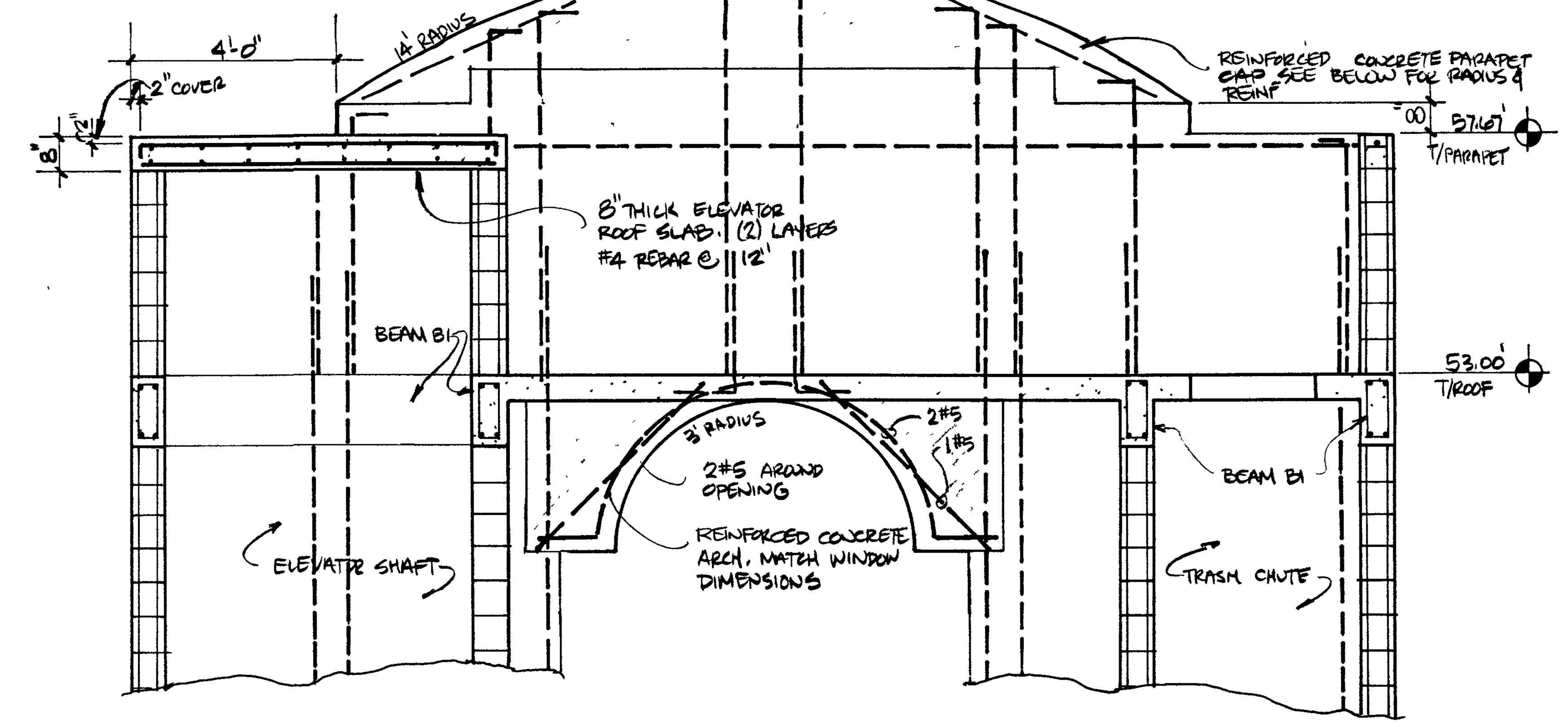
DATE 11-6-97
DESIGN J. GERDING
DRAWN J. GERDING
PROJECT 102397

S4

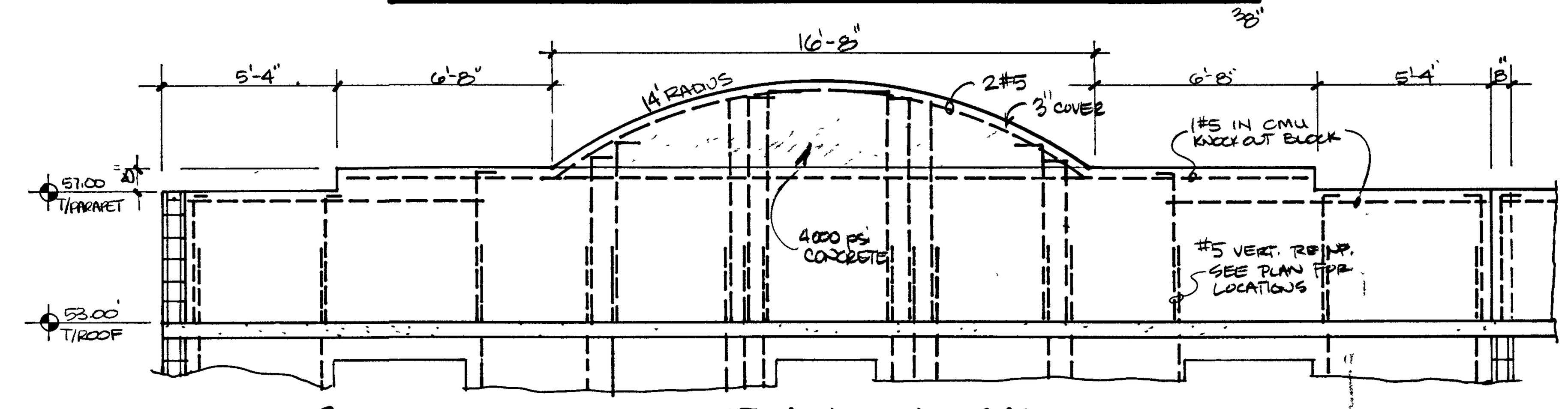
4 OF 7



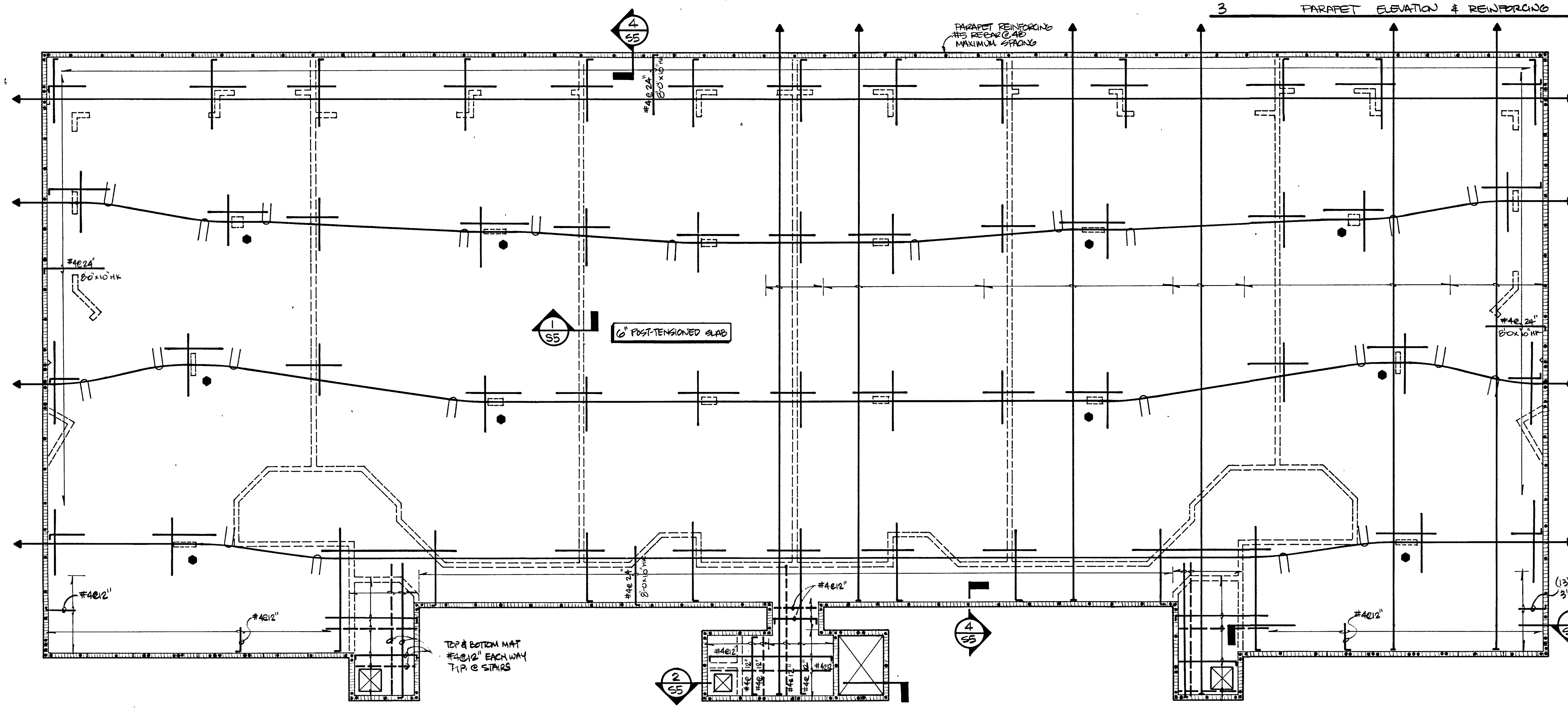
1 VERTICAL REINFORCING @ ROOF
3/4"

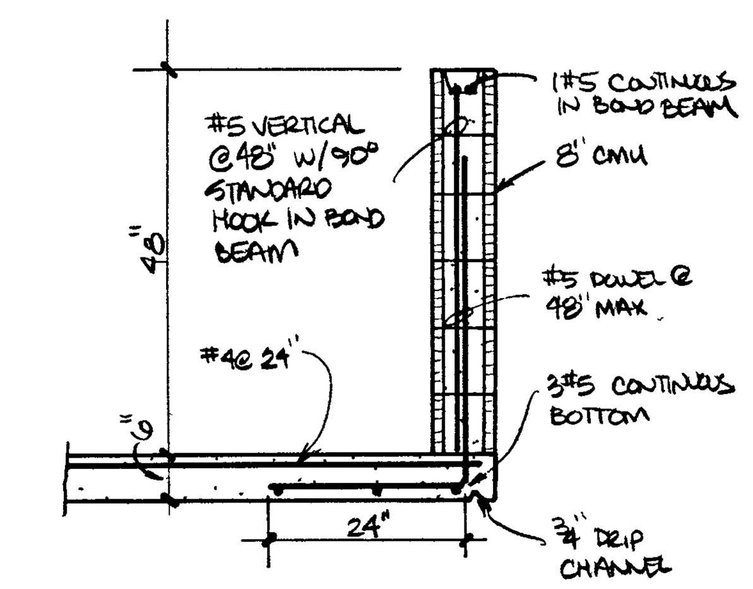


2 SECTION @ LOBBY ROOF
3/8"



3 PARAPET ELEVATION & REINFORCING
1/4"





4 PARAPET @ CANTILEVERED ROOF SLAB
1/2"

DRAWINGS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ALL THE PROVISIONS, CONDITIONS AND CRITERIA ESTABLISHED AND SET FORTH IN BREVARD COUNTY ORDINANCE 88-14 THE "COASTAL CONSTRUCTION CODE" TO WITHSTAND 140 MPH WIND SPEEDS

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ROOF FRAMING PLAN

1/8" = 1'-0"

* GROSS UPLIFT = 50 PSF
* REINFORCING IS SAME AS 2ND FLOOR EXCEPT AS NOTED.

LEGEND

- REINFORCED CONCRETE COLUMN
- REINFORCED CMU WALL (1#5)
- BEAM OR WALL BELOW SLAB
- MASONRY COLUMN (5#5)
- EXPOSED CONCRETE
- POST-TENSION REINFORCING
- TOP REINFORCING (90° HOOK)
- BOTTOM REINFORCING
- COLUMN MARK (C1)

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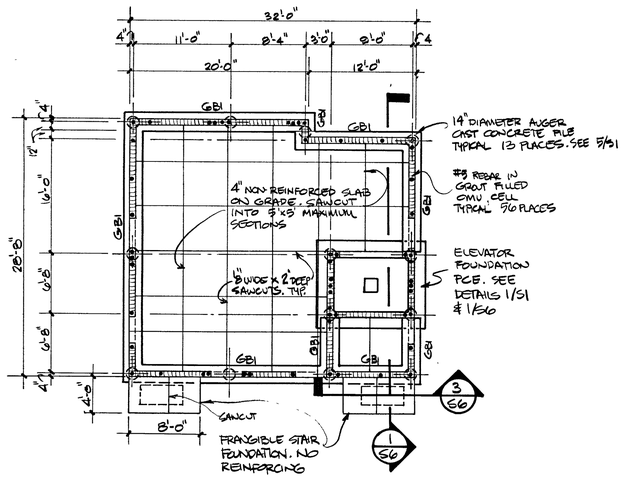
2-18-98

LANTANA CONDOMINIUMS

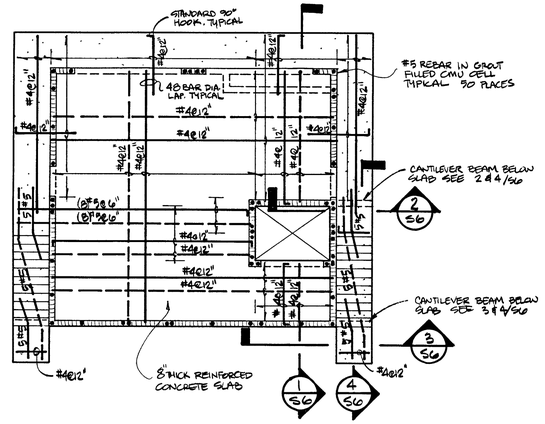
REVISIONS	
11-6-97	DEP PERMIT ISSUE
1-26-98	REMOVE PARAPET & OVERHANG @ STAIRS
2-18-98	CITY PERMIT ISSUE

DATE	11-6-97
DESIGN	J. GERDING
DRAWN	J. GERDING
PROJECT	100397

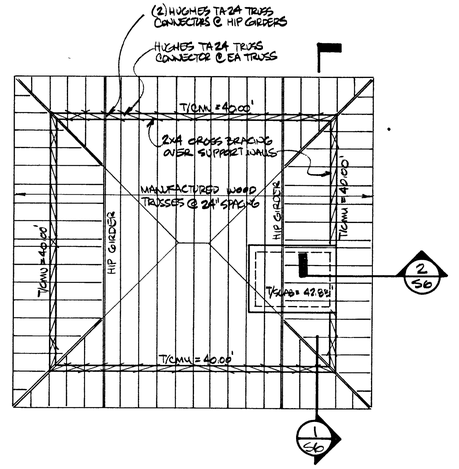
S5



FOUNDATION PLAN

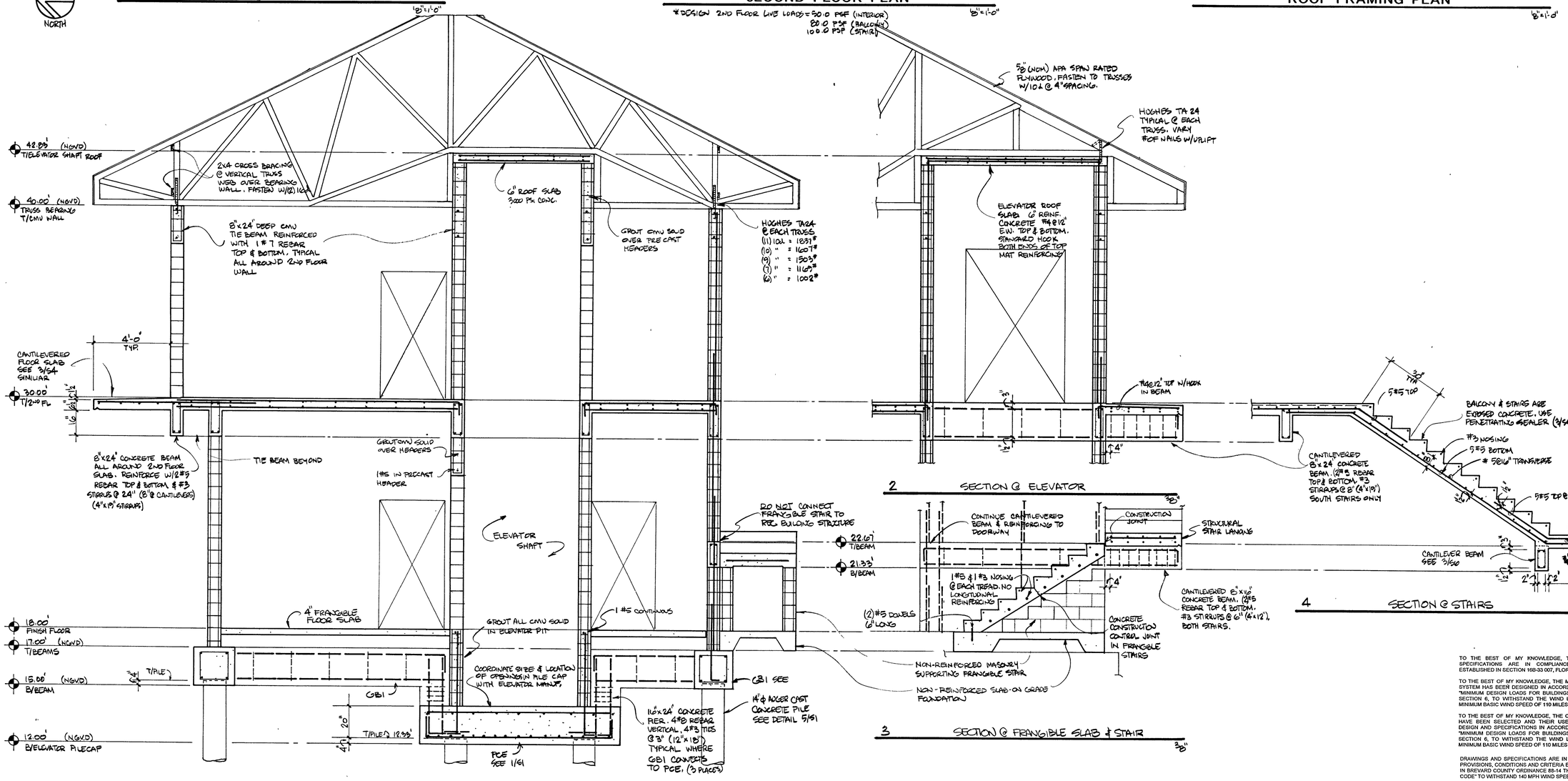


SECOND FLOOR PLAN



ROOF FRAMING PLAN

NORTH



TO THE BEST OF MY KNOWLEDGE, THESE DESIGN PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE STANDARDS ESTABLISHED IN SECTION 166-33.007, FLORIDA ADMINISTRATIVE CODE

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2098

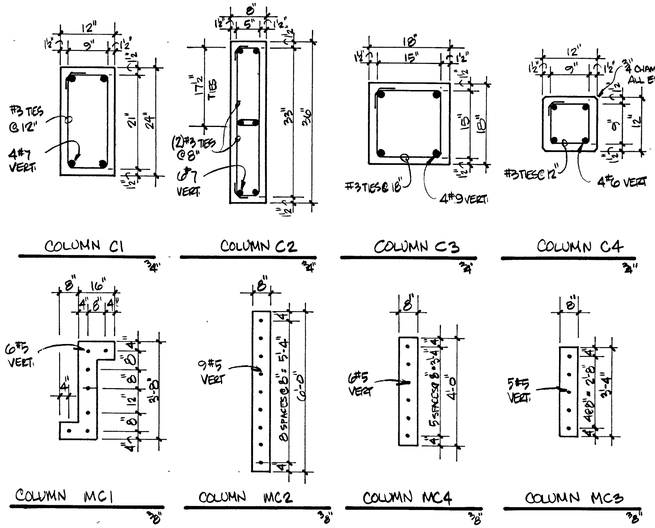
LANTANA CONDOMINIUMS

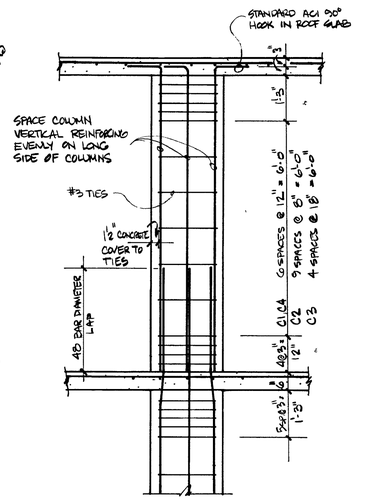
RECREATION BUILDING

REVISIONS	
11 6 97	PERMIT ISSUE (DEP)
2 10 98	CITY PERMIT ISSUE

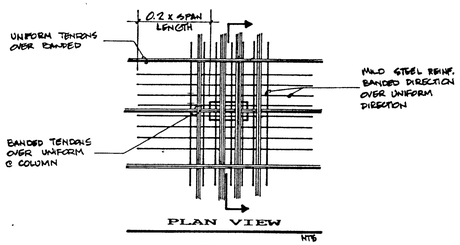
DATE 11 6 97
DESIGN J GERDING
DRAWN J. GERDING
PROJECT 06397

S6



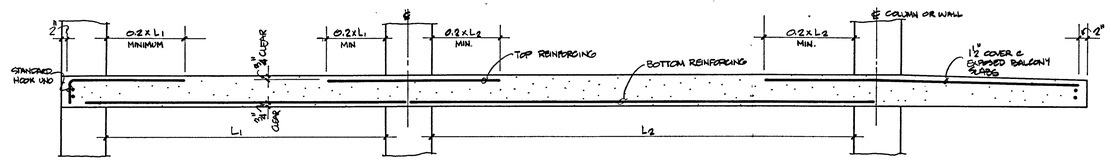


TYPICAL COLUMN SECTION



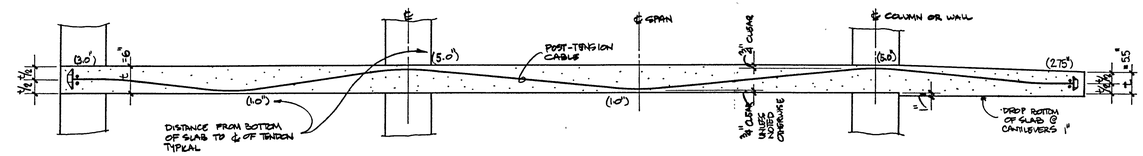
SLAB EDGE

SLAB REINFORCING @ COLUMN



TYPICAL SLAB REINFORCING

* ROUND UP ALL TOP STEEL LENGTHS TO NEXT WHOLE FOOT
* TERMINATE BOTTOM BARS @ COLUMN OR WALL CENTERLINE UNLESS NOTED OTHERWISE.



TYPICAL TENDON PROFILE

GENERAL NOTES:

01. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS LISTED.

02. THE GENERAL CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION SHOWN ON THE DRAWINGS ANY ATTENTION OF THE ENGINEER BEFORE STARTING CONSTRUCTION

03 THE STRUCTURE HAS BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE 1991 STANDARD BUILDING CODE, ASCE 7-88 AND SECTION 16B-33 007 OF THE FLORIDA ADMINISTRATIVE CODE.

GENERAL NOTES: AUGER-CAST PILES

01. ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE AMERICAN SOCIETY OF CIVIL ENGINEERS "STANDARD FOR PILE FOUNDATIONS" 1984

02. FINE GROUT (SIZE 1 OR 2) SHALL BE USED WITH A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 5,000 PSI CONFORMING TO THE REQUIREMENTS OF ASTM C 109

03. FOUNDATION HAS BEEN DESIGNED FOR AN INDIVIDUAL PILE BEARING CAPACITY OF 50 0 TONS, UPLIFT CAPACITY OF 10 TONS AND A LATERAL LOAD OF 3 5 KIPS

04. AS A MINIMUM, ALL PILES SHALL BE 14" DIAMETER AUGER CAST, REINFORCED WITH FOUR #7 REBAR VERTICALLY AND #3 TIES AT 8" SPACING FOR A DEPTH EXTENDING 10 FEET BELOW THE SOIL EROSION LINE ONE ADDITIONAL #7 REBAR SHALL BE PLACED THE FULL DEPTH OF THE PILE

05. ALL REINFORCEMENT SHALL BE ADEQUATELY TIED OR WELDED AND INSTALLED WITH SPACERS TO PREVENT DISTORTION AND MAINTAIN PROPER CONCRETE COVERAGE AND ALIGNMENT.

06. ALL REINFORCING STEEL SHALL COMPLY WITH ASTM STANDARD A615-86 GRADE 60

07. GROUT CONSISTENCY SHALL BE PROPORTIONED AND PRODUCED TO HAVE A SLUMP OF 8-11 INCHES

08. DRILLING AND GROUT PLACEMENT SHALL BE PERFORMED IN A SMOOTH CONTINUOUS OPERATION IF THE PLACEMENT OF GROUT IS INTERRUPTED DUE TO A DROP IN PRESSURE, CLOGGED TIP OR SUPPLY LINE, A DELAY IN CONCRETE DELIVERY, OR ANY OTHER REASON, THE AUGER SHALL BE REDRILLED DOWN A MINIMUM OF 5 FEET PAST THE INTERRUPTION POINT AND THE PILE REFORMED.

09. AFTER THE AUGER IS WITHDRAWN, A 16" WIDE STEEL SLEEVE SHALL BE PLACED AROUND THE TOP OF THE PILE THE SLEEVE SHALL BE REMOVED PRIOR TO PLACING THE GRADE BEAM OR PILE CAP.

GENERAL NOTES: WOOD

01. ALL WOOD FRAMING CONSTRUCTION, WORKMANSHIP AND MATERIALS (INCLUDING TRUSSES) SHALL CONFORM WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE REFERENCES LISTED BELOW
*"AMERICAN INSTITUTE OF TIMBER CONSTRUCTION" THIRD EDITION 1985
*"NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" 1994 AND SUPPLEMENT
*"U.S. PRODUCT STANDARD PS 1" OR "APA PRP-108 PERFORMANCE STANDARDS"

02. ALL FRAMING MEMBERS SHALL BE SPECIES AND GRADES OF LUMBER WHICH WILL PRODUCE DESIGN VALUES EQUAL TO OR EXCEEDING THE VALUES FOR SOUTHERN YELLOW PINE NO 3, 19% M C

03. GALVANIZED METAL HANGERS AND FRAMING ANCHORS SHALL BE USED AND SHALL BE FASTENED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS

04. ANCHORING AND NAILING NOT SPECIFIED SHALL COMPLY WITH THE NAILING SCHEDULE GIVEN WITHIN TABLE 2306 1 SBC

05. TRUSSES SHALL BE SIZED AND DETAILED IN ACCORDANCE WITH THE DIMENSIONS AND LOADS INDICATED

06. TRUSS SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED BY A FLORIDA LICENSED ENGINEER FOR REVIEW PRIOR TO FABRICATION (IN ACCORDANCE WITH CHAPTER 61G15-30 & 31 FLA DEPT OF BPR) THE DELEGATED ENGINEER SHALL SPECIFY BLOCKING AND BRACING NECESSARY TO WITHSTAND WIND LOADS DETERMINED USING ASCE 7.

07. DESIGN GRAVITY LOADING. (RECREATION BUILDING)

	ROOF
SUPERIMPOSED DEAD LOADS	
TOP CHORD	15 PSF
BOTTOM CHORD	5 PSF
SUPERIMPOSED LIVE LOADS	
TOP CHORD	20 PSF
BOTTOM CHORD	10 PSF

08. ALL EXTERIOR WALL AND ROOF SHEATHING SHALL CONSIST OF 5/8" (NOM) APA SPAN RATED, EXPOSURE I PLYWOOD NAILED TO SUPPORTS WITH 10d NAILS AT 4" SPACING

09. ALL PRESSURE TREATED LUMBER AND PLYWOOD SHALL BE SYP NO 2, 19% MAX M C , PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARDS C1,C2 AND C9 LATEST EDITIONS, WITH A WATERBORNE PRESERVATIVE IN ACCORDANCE WITH STANDARD P5

10. ALL NAILS, BOLTS AND SCREWS SHALL BE GALVANIZED OR STAINLESS STEEL

GENERAL NOTES: POST-TENSIONED CONCRETE

01. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE FOLLOWING STANDARDS

*ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
*ASTM A416 "STANDARD SPECIFICATION FOR UNCOATED SEVEN WIRE STRESS RELIEVED STEEL STRAND FOR PRESTRESSED CONCRETE"
*ACI 423 "RECOMMENDATIONS FOR CONCRETE MEMBERS PRESTRESSED WITH UNBONDED TENDONS"
*ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
*POST-TENSIONING INSTITUTE "GUIDE SPECIFICATIONS FOR POST-TENSIONING MATERIALS" SECTION 3.1.

02. PRESTRESSING STEEL SHALL CONFORM TO ASTM A-416 GRADE 270K

03. SUPERIMPOSED GRAVITY LOADS.

AREA	LIVE	DEAD
INTERIOR LIVING	40 PSF	10 PSF
BALCONY	60 PSF	0 PSF
CORRIDOR	80 PSF	0 PSF
ROOF	40 PSF	10 PSF

04. PRESTRESSING TENDONS SHALL BE FIRMLY SUPPORTED AT INTERVALS NOT EXCEEDING FOUR FEET TO PREVENT DISPLACEMENT DURING CONCRETE OPERATIONS.

05. STRESSING ANCHORS SHALL BE INSTALLED PERPENDICULAR TO THE TENDON AXIS.

06. STRESSING ANCHORAGES SHALL BE ATTACHED TO THE BULKHEAD FORMS WITH BOLTS, RING SHANK NAILS OR THREADED POCKET FORMER FITTINGS. THE CONNECTIONS SHALL BE SUFFICIENTLY RIGID TO AVOID ACCIDENTAL LOOSENING DUE TO CONSTRUCTION TRAFFIC OR DURING CONCRETE PLACEMENT

07. MINIMUM CONCRETE COVER FOR THE ANCHORAGE SHALL BE TWO INCHES

08. POCKET FORMERS USED AT STRESSING END ANCHORAGES SHALL POSITIVELY PRECLUDE INTRUSION OF CONCRETE OR CEMENT PASTE INTO THE WEDGE CAVITY DURING CONCRETE PLACEMENT

09. FIXED END ANCHORAGES SHALL BE INSTALLED ON THE TENDON AT THE SUPPLIERS PLANT PRIOR TO SHIPMENT

10. AFTER INSTALLING THE TENDONS IN THE FORMS AND PRIOR TO CONCRETE CASTING, THE SHEATHING SHALL BE INSPECTED FOR POSSIBLE DAMAGE.

11. STRESSING RAMS AND GAUGES SHALL INDIVIDUALLY BE IDENTIFIED AND CALIBRATED AGAINST KNOWN STANDARDS A MAXIMUM OF SIX MONTHS PRIOR TO USE. CALIBRATION CERTIFICATES FOR EACH JACK USED SHALL BE AVAILABLE UPON REQUEST.

12. ELONGATION MEASUREMENTS SHALL BE MADE AT EACH STRESSING LOCATION. MEASURED ELONGATIONS SHALL AGREE WITHIN +/-7% DISCREPENCIES SHALL BE RESOLVED WITH THE SPECIALTY ENGINEER AND ENGINEER OF RECORD

13. STRESSING RECORDS SHALL BE FILLED OUT DURING THE TENSIONING OPERATION WITH THE FOLLOWING DATA RECORDED AS A MINIMUM

* TENDON MARK OR IDENTIFICATION
* REQUIRED ELONGATION
* GAUGE PRESSURE TO ACHIEVE REQUIRED ELONGATION
* ACTUAL ELONGATION ACHIEVED
* ACTUAL GAGE PRESSURE
* DATE OF STRESSING OPERATION
* SIGNATURE OF THE STRESSING OPERATOR.
*SERIAL OR IDENTIFICATION NUMBER OF JACKING EQUIPMENT.

14. STRESSING RECORDS SHALL BE TURNED OVER TO THE OWNER OR THEIR REPRESENTATIVE FOR VERIFICATION AND SAFEKEEPING

15. EXCESS TENDON LENGTH SHALL BE CUT AS SOON AS POSSIBLE AFTER TENDON TENSIONING AND SATISFACTORY CHECK OF TENDON ELONGATIONS THE TENDON LENGTH PROTRUDING BEYOND THE WEDGES AFTER CUTTING SHALL BE BETWEEN O 75 AND 1 25 INCHES WHENEVER POSSIBLE, EXCESS TENDON LENGTH SHALL BE THOUROUGHLY CLEANED OF ANY DELITEROUS MATERIAL AND EMBEDED IN CONCRETE SLAB

16. STRESSING POCKETS SHALL BE FILLED WITH HIGH STRENGTH SHRINKAGE COMPENSATING GROUT AS SOON AS PRACTICAL AFTER TENDON STRESSING AND CUTTING.

17. STRESSES INDICATED ON PLAN DO NOT INCLUDE LOSSES DUE TO FRICTION POST-TENSION CABLE SUPPLIER SHALL LIST ESTIMATED FRICTION LOSSES ON SHOP DRAWINGS

18. POST-TENSION TENDON AND REBAR REINFORCING SHOP DRAWINGS SHALL BE PREPARED AND CERTIFIED BY A SPECIALTY ENGINEER AND SHALL BE SUBMITTED TO THE ENGINEER/ARCHITECT FOR REVIEW PRIOR TO FABRICATION.

19. POST-TENSIONING HARDWARE SHALL BE DESIGNED AND SUPPLIED FOR USE IN A CORROSIVE ENVIRONMENT

20. CONCRETE TESTING FOR POST-TENSIONED SLABS SHALL BE PERFORMED IN ACCORDANCE WITH ACI 301 SECTION 16 3.4

GENERAL NOTES: CONCRETE

01. ALL CONCRETE CONSTRUCTION, WORKMANSHIP AND MATERIAL SHALL COMPLY WITH THE REQUIREMENTS OF ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS "

02. ALL CONCRETE SHALL BE TYPE I OR II PORTLAND CEMENT COMPLYING WITH ASTM C150 AND SHALL HAVE COMPRESSIVE STRENGTH SHOWN BELOW:

PILE GROUT	5000 PSI
PILE CAPS/GRADE BEAMS	4000 PSI
COLUMNS	5000 PSI
ELEVATED FLOOR SLABS	4000 PSI
MASONRY GROUT	3000 PSI
SLABS ON GRADE	3000 PSI
OTHER	3000 PSI

03. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60. BARS SHALL BE FREE OF COATINGS THAT WILL REDUCE CONCRETE BOND.

04. ALL CONCRETE REINFORCEMENT SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED AND SPACED IN FORMS AND SECURED IN PLACE IN ACCORDANCE WITH ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT "

05. ALL BAR SPLICES, DOWELS AND CONCRETE COVERAGE SHALL MEET THE REQUIREMENTS OF ACI 318/318R "BUILDING CODE AND COMMENTARY FOR REINFORCED CONCRETE."

06. CAST IN PLACE BEAMS SHALL HAVE CONTINUOUS TOP AND BOTTOM REINFORCEMENT. LAP SPLICES IN BOTTOM BARS SHALL OCCUR OVER SUPPORTS. TOP BARS SHALL LAP AT MID-SPAN

07. CONCRETE BEAMS AND SLABS SHALL BE FINISHED LEVEL AND TO THE ELEVATIONS SHOWN ON THE DRAWINGS.

08. CALCIUM CHLORIDE SHALL NOT BE USED IN ANY FORM

09. UNLESS OTHERWISE PERMITTED OR SPECIFIED, 4000 AND 5000 PSI CONCRETE SHALL BE PRODUCED TO HAVE A SLUMP OF 5 INCHES +/- 1 INCH & MAXIMUM WATER/CEMENT RATIO OF 0.45.

10. REBAR SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION

11. FIVE SETS OF TEST CYLINDERS SHALL BE MADE AND TESTED FOR EACH 50 YARDS OR LESS OF CONCRETE POURED IN ANY DAY FOR EACH DESIGN MIX. TESTS SHALL BE MADE FOR 3 OR 7 DAYS, 14 DAYS, TWO AT 28 DAYS AND ONE HELD IN RESERVE CONTRACTOR SHALL SUBMIT DESIGN MIX FOR REVIEW AND APPROVAL BY ENGINEER.

12. EXPOSED CONCRETE SHALL

* RECEIVE A PENETRATING SEALER TO HORIZONTAL SURFACES. THE CONTRACTOR SHALL SUBMIT THE PROPOSED SEALER TO ENGINEER FOR REVIEW

GENERAL NOTES: MASONRY

01. ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL CONFORM TO "SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1/ASCE 6/TMS 602)."

02. COURSE GROUT (SIZE 8) SHALL BE USED CONFORMING TO THE REQUIREMENTS OF ASTM C476-83 "STANDARD SPECIFICATIONS FOR GROUT FOR REINFORCED AND NON-REINFORCED MASONRY "

03. CONCRETE MASONRY SHALL BE NORMAL WEIGHT, GRADE N, TYPE I OR II, CONFORMING WITH ASTM C90-85 "STANDARD SPECIFICATIONS FOR HOLLOW LOAD BEARING CONCRETE MASONRY UNITS."

04. THE NET AREA COMPRESSIVE STRENGTH OF MASONRY UNITS (f'm) SHALL BE 2000 PSI USING TYPE M OR S MORTAR.

05. THICKNESS OF MORTAR BED SHALL NOT EXCEED 5/8"

06. MASONRY REINFORCING STEEL BARS SHALL BE CONTINUOUS WITH LAP SPLICES OF 48 BAR DIAMETERS (MINIMUM).

07. OPENINGS IN MASONRY WALLS SHALL BE REINFORCED WITH A MINIMUM OF ONE #5 REBAR ON ALL SIDES AND SHALL BE REINFORCED WITH A PRECAST LINTEL (BEARING 8" ON EACH END) WHERE CAST-IN-PLACE CONCRETE BEAMS ARE NOT INDICATED

08. ALL MASONRY CELLS ADJACENT TO DOORS, WINDOWS, CORNERS OR ENDS OF WALLS SHALL BE REINFORCED WITH ONE #5 REBAR AND GROUTED SOLID.

09. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL MASONRY STRUCTURAL ELEMENTS ARE ADEQUATELY BRACED TO RESIST WIND, BACKFILLING, SOIL COMPACTION AND OTHER NATURAL AND CONSTRUCTION FORCES OCCURING DURING CONSTRUCTION BRACING SHALL REMAIN IN PLACE UNTIL THE STRUCTURE IS COMPLETED.

10. VERTICAL REINFORCING SHALL BE CONTINUOUS THROUGH ALL WALL BEAMS.

11. MASONRY GROUT SHALL BE PROPORTIONED AND PRODUCED TO HAVE A SLUMP BETWEEN 8 AND 11 INCHES.

12. WHEN GROUT POURS EXCEED 5 FEET IN HEIGHT, PROVIDE A CLEAN-OUT HOLE AT THE BOTTOM CELL. CLEAN THE CELL BY REMOVING ALL MORTAR, DEBRIS, LOOSE AGGREGATES AND ANY MATERIAL DELETERIOUS TO MASONRY GROUT INSTALL AND SECURELY TIE THE VERTICAL STEEL REINFORCEMENT TOGETHER. CLOSE THE OPENING AFTER INSPECTION.

13. ALL WALLS SHALL BE REINFORCED HORIZONTALLY WITH 9 GAGE GALVANIZED JOINT REINFORCING AT 16 INCH VERTICAL SPACING. JOINT REINFORCING SHALL CONFORM WITH ASTM A82

TO THE BEST OF MY KNOWLEDGE, THESE DESIGN PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE STANDARDS ESTABLISHED IN SECTION 16B-33 007, FLORIDA ADMINISTRATIVE CODE

TO THE BEST OF MY KNOWLEDGE, THE MAIN WIND-FORCE RESISTING SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH ANSI/ASCE 7-88, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" SECTION 6, TO WITHSTAND THE WIND LOADS ASSOCIATED WITH A MINIMUM BASIC WIND SPEED OF 110 MILES PER HOUR

TO THE BEST OF MY KNOWLEDGE, THE COMPONENTS AND CLADDING HAVE BEEN SELECTED AND THEIR USE INCORPORATED INTO THE DESIGN AND SPECIFICATIONS IN ACCORDANCE WITH ANSI/ASCE 7-88, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" SECTION 6, TO WITHSTAND THE WIND LOADS ASSOCIATED WITH A MINIMUM BASIC WIND SPEED OF 110 MILES PER HOUR

TO THE BEST OF MY KNOWLEDGE, THE STRUCTURAL CONSTRUCTION DRAWINGS AND SPECIFICATIONS ARE IN COMPLIANCE WITH ALL THE PROVISIONS, CONDITIONS AND CRITERIA ESTABLISHED AND SET FORTH IN BREVARD COUNTY ORDINANCE 88-14 THE "COASTAL CONSTRUCTION CODE" TO WITHSTAND 140 MPH WIND SPEEDS

TO THE BEST OF MY KNOWLEDGE, THE DESIGN OF THE STRUCTURE COMPLIES WITH THE APPLICABLE PROVISIONS AND REQUIREMENTS OF THE SBCCI 1994 STANDARD BUILDING CODE, INCLUDING THE REQUIREMENTS OF CHAPTER 16 AND SPECIFICALLY SECTION 1606

GERDING ENGINEERING CORPORATION
STRUCTURAL ENGINEERING
650 EAST NASA BOULEVARD, SUITE 201
MELBOURNE, FLORIDA 32949
TELEPHONE: 407 984 3265
FAX: 407 728 7289

LANTANA CONDOMINIUMS

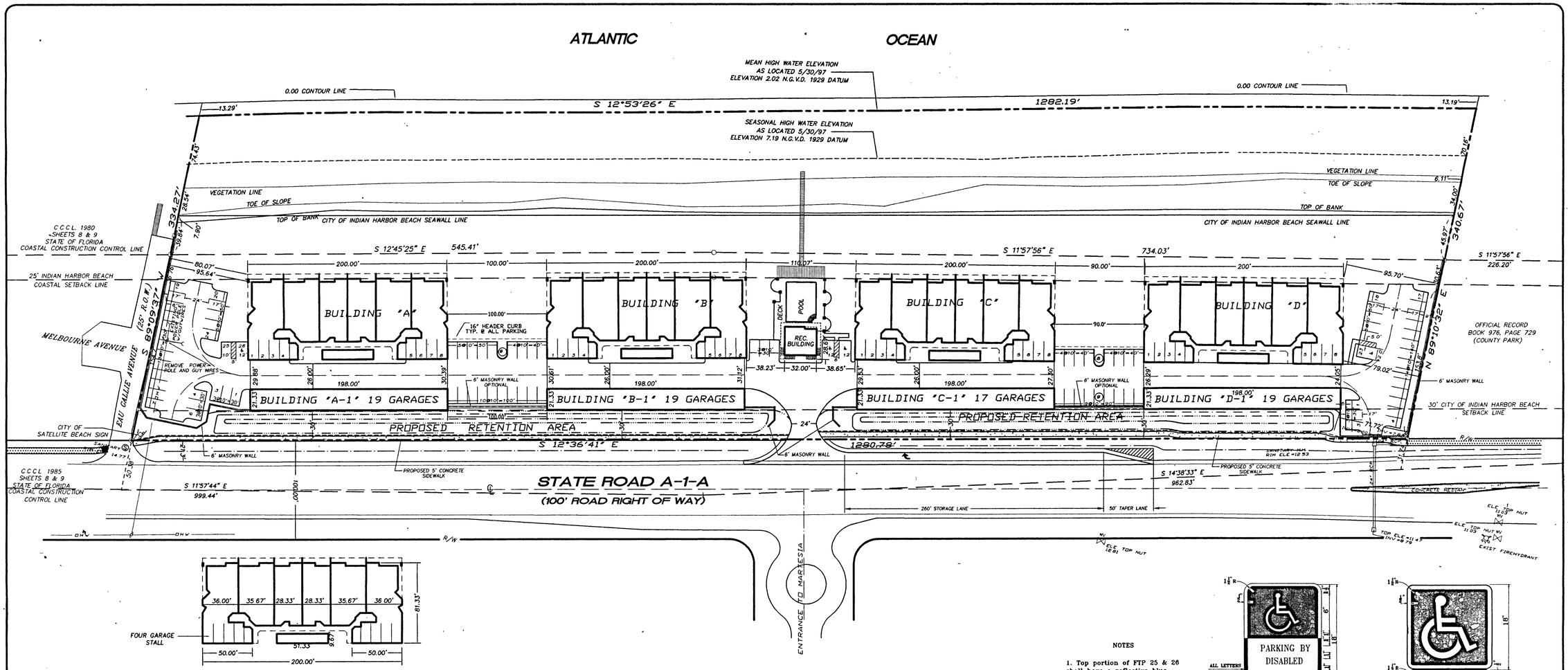
REVISIONS	
11-6-97	DEP PERMIT ISSUE
2-18-98	CITY PERMIT ISSUE

DATE	11-6-97
DESIGN	J GERDING
DRAWN	J GERDING
PROJECT	106997

S7

7 OF 7

LANTANA



DEVELOPER

TRICON DEVELOPMENT
925 N. COURTENAY PKWY SUITE 28
MERRITT ISLAND, FL 32953
(407) 453-5360

GENERAL STATEMENT

THE PROPOSED DEVELOPMENT OF THE 9.75-ACRE OCEANFRONT SITE INCLUDES THE CONSTRUCTION OF FOUR 24-UNIT BUILDINGS, FOUR GARAGE STRUCTURES, SWIMMING POOL, RECREATION BUILDING, DUNE CROSSOVER, PARKING, AND LANDSCAPING.

EACH BUILDING WILL HAVE FOUR RESIDENTIAL FLOORS. EACH RESIDENTIAL UNIT WILL HAVE A PARKING GARAGE SPACE.

THE EXTERIOR OF THE BUILDING WILL HAVE ATTRACTIVE ARCHITECTURAL FEATURES. BALCONIES WILL PROJECT FIVE FEET BEYOND THE BUILDING FOOTPRINT, TOWARD THE OCEAN.

SITING OF THE BUILDINGS TAKES INTO CONSIDERATION THE SHORE PARALLEL COVERAGE LIMITING CRITERIA OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION; AND THE SETBACKS, DISTANCE BETWEEN BUILDINGS, AND BREEZEWAY CRITERIA OF THE CITY OF INDIAN HARBOUR BEACH. THE REAR SETBACK WILL BE THE CITY COASTAL SETBACK LINE WHICH IS LOCATED 25-FEET LANDWARD OF THE 1980 COASTAL CONSTRUCTION CONTROL LINE AS ESTABLISHED BY THE FLORIDA DEPARTMENT OF NATURAL RESOURCES.

THE SITE WILL BE ACCESSED DIRECTLY FROM HIGHWAY A-1-A AT A SINGLE ENTRANCE. A SECOND EXIT WILL BE PROVIDED TO THE NORTH TO EAU GALLIE AVENUE. WATER FOR POTABLE AND FIRE PROTECTION USES WILL BE PROVIDED BY THE CITY OF MELBOURNE UTILITY SYSTEM. THE WATER LINE WILL BE EXTENDED THROUGH THE PROPERTY AND FIRE HYDRANTS INSTALLED. THE SANITARY SEWER, PROVIDED BY THE BREVARD COUNTY UTILITY DEPARTMENT, IS AVAILABLE AT THE SITE.

THE STORM DRAINAGE SYSTEM WILL BE DESIGNED TO MEET THE CURRENT REQUIREMENT OF ST JOHNS RIVER WATER MANAGEMENT DISTRICT AND THE CITY OF INDIAN HARBOUR BEACH. THE RETENTION SYSTEM OF SWALES WILL BE DESIGNED AS "DRY" SYSTEMS.

THE SITE TO BE DEVELOPED IS VEGETATED WITH COASTAL SCRUB. THE WESTERLY PART OF THE PREVIOUSLY DISTURBED SITE IS LOW AND WILL REQUIRE THREE TO FIVE FEET OF FILL. THE DEVELOPED SITE WILL BE ATTRACTIVELY LANDSCAPED AND THE EXTENT OF PLANTINGS WILL MEET OR EXCEED THE REQUIREMENTS OF THE CITY'S LANDSCAPE ORDINANCE.

THE COMMON AMENITIES OF A SWIMMING POOL, RECREATION BUILDING, AND DUNE CROSSOVER WILL BE INCORPORATED INTO THE SITE FOR THE ENJOYMENT OF THE RESIDENTS AND THEIR GUESTS. THE COMMON AMENITIES AND COMMON AREAS OF THE SITE WILL BE OWNED, CONTROLLED AND MAINTAINED BY THE LANTANA OCEAN FRONT CONDOMINIUM ASSOCIATION.

ZONING: R-3

THE SITE WILL BE DEVELOPED IN ACCORDANCE WITH THE DEVELOPMENT STANDARDS UNDER R-3 (MULTIPLE-FAMILY RESIDENTIAL DISTRICT) ZONING CLASSIFICATION AND THE LAND DEVELOPMENT REGULATIONS OF THE CITY OF INDIAN HARBOUR BEACH.

TABULATIONS

AREA

GROSS AREA = 9.75 ACRES - 425,052 SQ.FT.

IMPERVIOUS AREA		
RESIDENTIAL BUILDINGS AND GARAGES	74,140 SQ.FT.	17.4 %
POOL & DECK	2,400 SQ.FT.	0.6 %
RECREATION BUILDING	1,080 SQ.FT.	0.3 %
ROAD DRIVES & WALKS	58,285 SQ.FT.	13.7 %

PERCENT OF SITE COVERED BY IMPERVIOUS SURFACE 32.0 %

17.9% PERCENT OF SITE COVERED BY STRUCTURES

DENSITY

ALLOWED DENSITY
15 UNITS PER ACRE
(THE AREA BETWEEN THE SEAWALL LINE AND THE A1A EAST RIGHT-OF-WAY IS 6.64 ACRES)
CALCULATION: 6.64 ACRES X 15 = 99.6 UNITS

PROPOSED DENSITY = 96 UNITS = 14.45 UNITS PER ACRE

STRUCTURES

TOTAL NUMBER OF BUILDINGS: (4 RESIDENTIAL, 4 GARAGE, 1 RECREATION)	=	9	BUILDINGS
TOTAL NUMBER OF UNITS	=	96	UNITS
MAXIMUM BUILDING HEIGHT	=	35	FEET
MINIMUM LIVING AREA PER UNIT	=	1,200	SQUARE FEET

SETBACKS	MINIMUM REQUIRED	PROVIDED
FRONT	30 FT	30 FT
REAR	CITY COASTAL SETBACK LINE	CITY COASTAL SETBACK LINE
SOUTH SIDE	15 FT	71.97 FT
NORTH SIDE	15 FT	80.07 FT MIN.

PARKING

REQUIRED PARKING
2 SPACES PER UNIT X 96 UNITS = 192 SPACES

PROVIDED PARKING, COVERED	
BUILDINGS A, B, C, D WILL HAVE 8 GARAGE UNITS EACH	= 32
BUILDINGS A-1,B-1 AND D-1 WILL HAVE 19 GARAGE UNITS EACH	= 57
BUILDINGS C-1 = 17 GARAGE UNITS EACH	= 17
COVERED PARKING, TOTAL	= 106
PROVIDED PARKING, UNCOVERED, INCLUDING 5 HANDICAP, TOTAL	= 90
PROVIDED PARKING, TOTAL	= 196

NOTES:

1. THE SOLID WASTE WITHIN THE PROJECT SITE WILL BE COLLECTED INTERNALLY IN DUMPSTERS.
2. THE TOPOGRAPHIC AND BOUNDARY SURVEY WAS PROVIDED BY B.L.S.&C., INC., OF 1300 PINETREE DRIVE, SUITE 11, INDIAN HARBOUR BEACH.
3. WATER FOR FIREFIGHTING WILL BE AVAILABLE PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
4. THE SWIMMING POOL FENCE WILL BE FIVE FEET IN HEIGHT AND BE CONSTRUCTED OF ALUMINUM PICKET RAIL.
5. ALL SITE LIGHTING FOR SIGNAGE AND LANDSCAPING WILL BE MOUNTED ON THE BUILDING.
6. INSTALLATION OF SECURITY LIGHTS ON THE BUILDING WILL BE COORDINATED BY THE BUILDER WITH THE POLICE CHIEF AND WILL BE CONSISTENT WITH THE TURTLE PROTECTION CRITERIA OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

SHORE PARALLEL COVERAGE

1. AT CONDO BUILDING LINE

FOUR 200 FT BUILDINGS	=	800 FT
POOL/RECREATION BLDG.	=	32 FT
TOTAL	=	832 FT
PERCENT: 832 / 1282.00	=	64.00%

NOTES

1. Top portion of FTP 25 & 26 shall have a reflective blue background with white reflective symbol and border.
2. Bottom portion shall have a reflective white background with black opaque legend and border
3. FTP 25 & 26 may be fabricated on one panel or two.
4. FTP 25 may be substituted for the FTP 26 in areas where space is limited.
5. Signs are to be mounted at standard height. (7' from pavment to bottom of sign).

SIGNS USED AS PER FLORIDA STATUTES

FTP 25, FTP 26 Per FS 316.1955, FS 316.1956

LEGAL DESCRIPTION (O.R.B. 2971 PG. 2449)

A tract of land lying in the North 1/2 of Government Lot 1, Section 12, Township 27 South, Range 37 East; Also lying in the North 1/2 of the Northwest 1/4 of Section 12, Township 27 South, Range 37 East, Brevard County, Florida, more particularly described as follows: Commence at the Northwest corner of Section 12; Thence run North 89°10' 57" East, (North 89°09'37" East measured)1675.64 feet along the Northern line of Section 12 to the East right of way of State Road A 1 A, and the POINT OF BEGINNING; Thence run South 12°35'21" East, (South 12°36'41" East measured)1280 feet (1280.78 feet measured) along the East right of way line; Thence run North 89°11'52" East (North 89°10'32" East measured) along North line of parcel described in Official Records Book 976, Page 729, 281.4 feet more of less (340.67 feet measured) to the mean high water line of the Atlantic Ocean; Thence run Northwesterly 1280 feet more or less along the mean high water line to the intersecting point of the mean high water line and the North line of Section 12 which point lies North 89°10' 57" East (North 89°09'37" East measured), 309.69 feet more or less (334.27 feet measured) from the point of beginning; Thence run South 89°10'57" West (South 89°09'37" West measured), 309.69 feet more or less (334.27 feet measured) along the Northern line of Section 12 to the POINT OF BEGINNING. Subject to restrictions, easements, liens, covenants and mortgages of record if any.

NORTH

SCALE 1"=50'

LANTANA
DEVELOPMENT OF BREVARD INC.
925 N. COURTENAY PKWY, SUITE 28
MERRITT IS., AND FL 32953

LANTANA OCEAN FRONT
A CONDOMINIUM

NO.	DATE	REVISION
1	11/28/97	BLDG FOOTPRINT AND ADD F.D.O.T. DATA
2	12/4/97	REVISED POOL LAYOUT
3	3-6-98	REVISED RETENTION SIDEWALK AND ENTRANCE
4	5-11-98	REVISED PER F.D.O.T. COMMENTS
5		
6		
7		

FLEIS ASSOCIATES
FIRST UNION NATIONAL BANK BUILDING
1080 HIGHWAY A1A, SUITE 200
SATELLITE BEACH, FLORIDA 32937
(407) 777-2701
FAX (407) 777-2173
ENGINEERS / PLANNERS
EDWARD M. FLEIS
P.E. NO. 30651
DATE

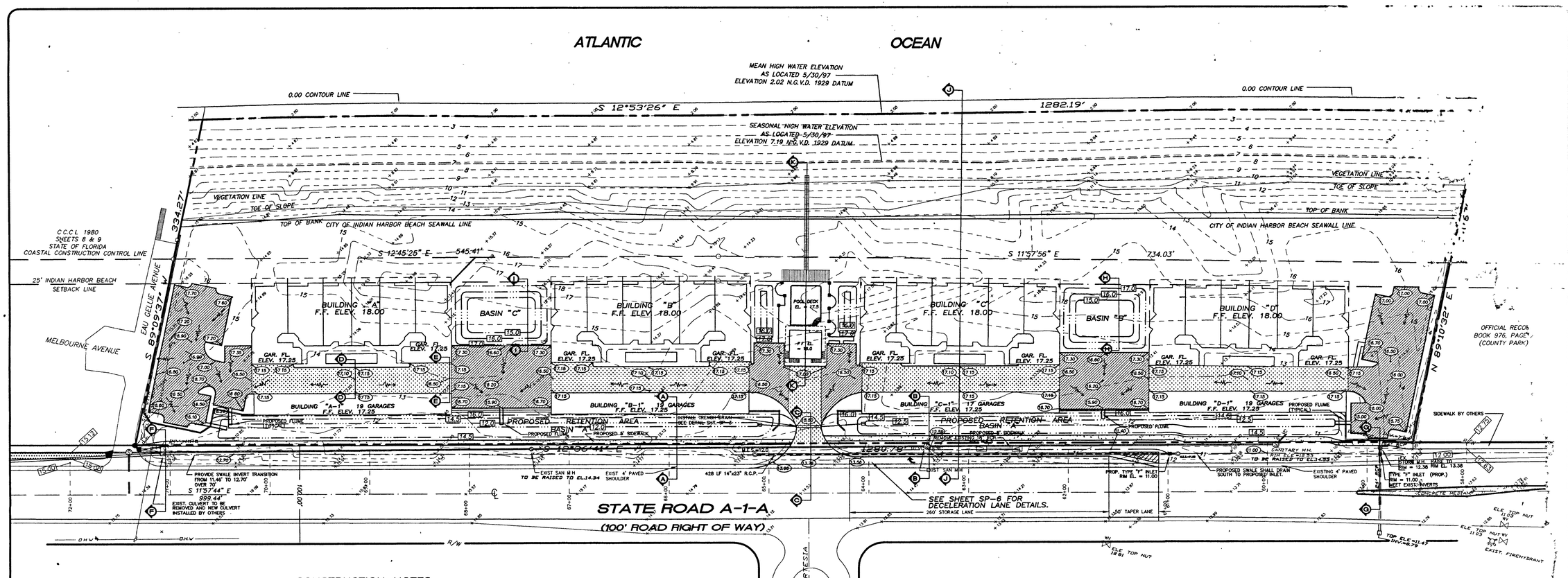
THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION UNLESS SIGNED HERE.

DATE

DESIGNED:	EMF	DATE 7/2/97
DRAWN BY	CD	7/2/97
CHECKED		
APPROVED.		
ACAD. CODE:	97750S1B	
PROJECT NO:	97.750	

FINAL SITE PLAN

SP-1



CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL REMOVE ANY STUMPS, ROOTS, MUCK AND OTHER DELETERIOUS MATERIAL FROM UNDER PROPOSED BUILDINGS, PARKING LOT, DRIVES AND RETENTION AND SWALE AREAS.
2. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC AND PRIVATE UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT HIS EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY GRADES.
3. SELECTED GRANULAR BACKFILL SHALL BE PLACED AND COMPACTED UNDER THE BUILDING SLAB TO 95% DENSITY (STANDARD PROCTOR). THE SITE SHALL BE GRADED BY THE CONTRACTOR TO THE ELEVATIONS SHOWN ON THE DRAWINGS. UNLESS OTHERWISE INDICATED IN THE LANDSCAPING PLAN, DISTURBED AREAS WILL BE FINE GRADED AND SODDED OR SEEDED AND MULCHED.
4. ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
5. WHERE NEW PAVEMENT IS TO BE CONSTRUCTED NEXT TO EXISTING PAVEMENT, THE CONTRACTOR SHALL MATCH THE EXISTING ELEVATIONS FOR A FLUSH JOINT EXCEPT WHERE ASPHALT PAVEMENT ABUTS CONCRETE PAVEMENT, IN WHICH CASE THE FINISHED ELEVATION OF THE ASPHALT SHALL BE 1/4" HIGHER THAN THE CONCRETE.
6. ROOF DRAIN OUTLETS SHALL DIRECT STORM RUNOFF TO THE RETENTION AREAS.
7. DRIVES SHALL BE COMPACTED AND STABILIZED PRIOR TO CONSTRUCTION OF BUILDINGS TO PROVIDE ACCESS FOR FIRE APPARATUS.
8. THE CONTRACTOR SHALL CONTACT THE BUREAU OF FIRE LOSS MANAGEMENT TO DETERMINE THE INSPECTIONS NEEDED FOR THIS FACILITY.

EROSION AND SEDIMENT CONTROL NOTES:

EROSION AND SEDIMENT CONTROL MEASURES SHALL COMPLY WITH THESE MINIMUM STANDARDS.

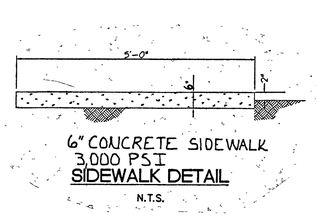
1. Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment shall be constructed as a first step in any land-disturbing activity and shall be made functional before upslope land disturbance takes place.
2. All sediment control measures are to be adjusted to meet field conditions at the time of construction and be constructed prior to any grading or disturbance of existing surface material on balance of site. Perimeter sediment barriers shall be constructed to prevent sediment or trash from flowing or floating on to adjacent properties.
3. Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site. Temporary soil stabilization shall be applied with seven days to denuded areas that may not be at final grade but will remain undisturbed for longer than 30 days. Permanent stabilization shall be applied to areas that are to be left undisturbed for more than one year.
4. A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved that, in the opinion of the Reviewer, is uniform, mature enough to survive and will inhibit erosion.
5. Surface runoff from disturbed areas that is comprised of flow from drainage areas greater than or equal to three acres shall be controlled by a sediment basin. The sediment basin shall be designed and constructed to accommodate the anticipated sediment loading from the land-disturbing activity. The outfall device or system design shall take into account the total drainage area flowing through the disturbed area to be served by the basin.
6. After any significant rainfall, sediment control structures will be inspected for integrity. Any damaged devices shall be corrected immediately.
7. Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or permanent channel, flume or slope drain structure.
8. Whenever water seeps from a slope face, adequate drainage or other protection shall be provided.
9. Sediment will be prevented from entering any storm drain system, ditch, or channel. All storm sewer inlets that are made operable during construction shall be protected so that sediment-laden water cannot enter the conveyance system without first being filtered or otherwise treated to remove sediment.
10. Before temporary or newly constructed stormwater conveyance channels are made operational, adequate outlet protection and any required temporary or permanent channel lining shall be installed in both the conveyance channel and receiving channel.
11. When work in a live watercourse is performed, precautions shall be taken to minimize encroachment, control sediment transport and stabilize the work area to the greatest extent possible during construction. Nonerodible material shall be used for the construction of causeways and cofferdams. Earthen fill may be used for these structures if armored by nonerodible cover materials.
12. The bed and banks of a watercourse shall be stabilized immediately after work in the watercourse is completed.
13. Periodic inspection and maintenance of all sediment control structures must be provided to ensure intended purpose is accomplished. The Developer, owner, and/or contractor shall be continually responsible for all sediment leaving the property. Sediment control measures shall be in working condition at the end of each working day.
14. Where construction vehicle access routes intersect paved public roads, provisions shall be made to minimize the transport of sediment by tracking onto the paved surface. Where sediment is transported onto a public road surface with curbs and gutters, the road shall be cleaned thoroughly at the end of each day. Sediment shall be removed from the roads by shoveling or sweeping and transported to a sediment control disposal area. Street washing shall be allowed only after sediment is removed in this manner. This provision shall apply to individual subdivision lots as well as to larger land-disturbing activities.
15. All temporary erosion and sediment control measures shall be removed with 30 days after final site stabilization or after the temporary measures are no longer needed, in the opinion of the Reviewer. Disturbed soil areas resulting from the disposition of temporary measures shall be permanently stabilized to prevent further erosion and sedimentation.
16. Properties and waterways downstream from construction sites shall be protected from sediment deposition and erosion.
17. Phased projects should be cleared in conjunction with construction of each phase.
18. Erosion control design and construction shall follow the requirements in Index Nos. 101, 102, and 103 of FDOT Roadway and Traffic Design Standards.

F.D.O.T. NOTES

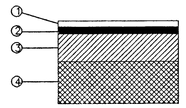
1. All design and construction shall be performed per the requirements of F.D.O.T Roadway and Traffic Design Standards 1998 Edition and Road and Bridge Specification 1996.
2. All existing signs must be kept in place at all times. If conflict is unavoidable and removal is necessary, replace per Index #17302.
3. Install all necessary pollution control devices per index #102 – #105.
4. Contractor to use sheeting and shoring as necessary.
5. The elevation of the top of water valves and meters must be at ground level.
6. All disturbed back slopes must be sodded as soon as possible. Sod all disturbed areas with Bermuda sod only.
7. A preconstruction conference is required for this project. Contact Jack West at the Cocoa office at (407) 690-3241.

LEGEND

- TYPE "A" PAVEMENT
- TYPE "B" PAVEMENT
- F.D.O.T. PAVEMENT
- DRAINAGE FLOW
- (16.70) PROPOSED ELEVATION
- 6" HEADER CURB

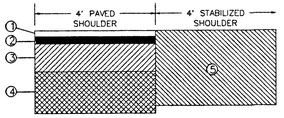


6" CONCRETE SIDEWALK
3,000 PSI
SIDEWALK DETAIL
N.T.S.



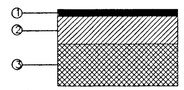
1.) 5/8" ASPHALTIC CONCRETE TYPE FC-2 FRICTION COURSE RUBBERIZED
2.) 3" ASPHALTIC CONCRETE TYPE S-1.
3.) 10" LIMEROCK COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180.
4.) 12" STABILIZED SUBGRADE, L.B.R. OF 40

F.D.O.T PAVEMENT SECTION



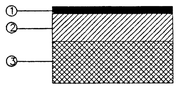
1.) 5/8" ASPHALTIC CONCRETE TYPE FC-2 FRICTION COURSE RUBBERIZED
2.) 1 1/2" ASPHALTIC CONCRETE TYPE S-1.
3.) 5" LIMEROCK COMPACTED TO 95% MAXIMUM DENSITY PER AASHTO T-180, MODIFIED PROCTOR, AVERAGE LBR OF NOT LESS THAN 100.
4.) 6" STABILIZED SUBGRADE, L.B.R. OF 40
5.) 4' SHOULDER WITH 12" STABILIZATION, L.B.R. OF 40

4' PAVED SHOULDER WITH A 4' STABILIZED SHOULDER



1.) 1 1/2" ASPHALTIC CONCRETE TYPE S-III
2.) 6" LIMEROCK COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180.
3.) 6" STABILIZED SUBGRADE, L.B.R. OF 40.

TYPE "A" PAVEMENT SECTION



1.) 1" ASPHALTIC CONCRETE TYPE FC-II.
2.) 6" LIMEROCK COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180.
3.) 6" STABILIZED SUBGRADE, L.B.R. OF 40.

TYPE "B" PAVEMENT SECTION

LANTANA OCEAN FRONT, A CONDOMINIUM

SCALE: 1" = 50'

ENGINEERS / PLANNERS

EDWARD M. F. P.E. NO. 30...

THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION UNLESS SIGNED HERE

DATE

	DATE
DESIGNED: EMF	7/2/97
DRAWN BY: CD	7/2/97
CHECKED:	
APPROVED:	
ACAD CODE: 97750C2	
PROJECT NO: 97.750	

PAVING, GRADING AND DRAINAGE PLAN

SP-2

SHEET 2 OF 12

OCEAN

WATER ELEVATION
5/30/97
V.D. 1929 DATUM

0.00 CONTOUR LINE

1282.19'

WATER ELEVATION
5/30/97
V.D. 1929 DATUM

VEGETATION LINE

TOE OF SLOPE

TOP OF BANK

CITY OF INDIAN HARBOR BEACH SEAWALL LINE

340.67'

S 11°57'56" E
734.03'

S 11°57'56" E
226.20'

N 89°10'32" E

MATCH LINE

POOL DECK
F.F. EL. = 17.5

F.F. EL. = 18.0

BUILDING "C"
F.F. ELEV. 18.00

BASIN "B"

BUILDING "D"
F.F. ELEV. 18.00

GAR. FL. ELEV. 17.25

BUILDING "C-1" 17 GARAGES
F.F. ELEV. 17.25

BUILDING "D-1" 19 GARAGES
F.F. ELEV. 17.25

PROPOSED RETENTION AREA
BASIN "A"

PROPOSED 5' SIDEWALK

REMOVE EXISTING 18" RCP AND M.H.

PROPOSED FLUME

PROPOSED FLUME (TYPICAL)

1280.78' 10' V.C. 8' V.C.

EXIST. SAN M.H.

PROP. TYPE "F" INLET
RIM EL. = 11.00

PROPOSED SWALE SHALL DRAIN SOUTH TO PROP. INLET.

SANITARY M.H.
RIM ELE.=12.53
TO BE RAISED TO EL.14.53

EXISTING 4' PAVED SHOULDER

SIDEWALK BY OTHERS

12.75' R/W

24" RCP

STORM M.H. RAISE TO RIM = 12.38
RIM EL. 13.38

TYPE "F" INLET (PROP.)
RIM = 11.00
MEET EXIST. INVERTS

CONCRETE MEDIAN

SEE SHEET SP-6 FOR DECELERATION LANE DETAILS.

260' STORAGE LANE

350' TAPER LANE

ELE. TOP NUT 11.03 WV

TOP ELE.=11.47
INV.=8.79

EXIST FIREHYDRANT

ELE. TOP NUT 12.81 WV

ENTRANCE TO MARTESIA

OFFICIAL RECORD
BOOK 976, PAGE 729
(COUNTY PARK)

F.D.O.T. NOTES

1. All design and construction shall be performed per the requirements of F.D.O.T Roadway and Traffic Design Standards 1998 Edition and Road and Bridge Specification 1996.
2. All existing signs must be kept in place at all times. If conflict is unavoidable and removal is necessary, replace per index #17302.
3. Install all necessary pollution control devices per index #102 – #105.
4. Contractor to use sheeting and shoring as necessary.
5. The elevation of the top of water valves and meters must be at ground level.
6. All disturbed back slopes must be sodded as soon as possible. Sod all disturbed areas with Bermuda sod only.
7. A preconstruction conference is required for this project. Contact Jack West at the Cocoa office at (407) 690–3241.

LEGEND

- TYPE "A" PAVEMENT
- TYPE "B" PAVEMENT
- F.D.O.T. PAVEMENT
- DRAINAGE FLOW
- PROPOSED ELEVATION
- 6" HEADER CURB

NORTH

SCALE: 1"=30'

DEVELOPER
THCON DEVELOPMENT
955 N. COURTNEY PKWY. SUITE 28
MERRITT ISLAND, FL. 32953

LANTANA OCEAN FRONT,
A CONDOMINIUM

NO.	DATE	REVISION
1	11/19/97	REVISED BLDG FOOTPRINT & ADD F.F. ELEV.
2	12/4/97	REVISED PAVE LAYOUT
3	3/6/98	REV. RETENTION, SIDEWALK & ENTRANCE
4	5-11-98	REV PER F.D.O.T COMMENTS
5	6/15/98	REV PER F.D.O.T COMMENTS
6		
7		

FLEIS ASSOCIATES
FIRST UNION NATIONAL BANK BUILDING
1090 HIGHWAY A1A, SUITE 200
SATELLITE BEACH, FLORIDA 32937
(407) 777-2701
FAX (407) 779-2173
ENGINEERS / PLANNERS

DATE
EDWARD M. FLEIS
P.E. NO. 30632

THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION UNLESS SIGNED HERE:

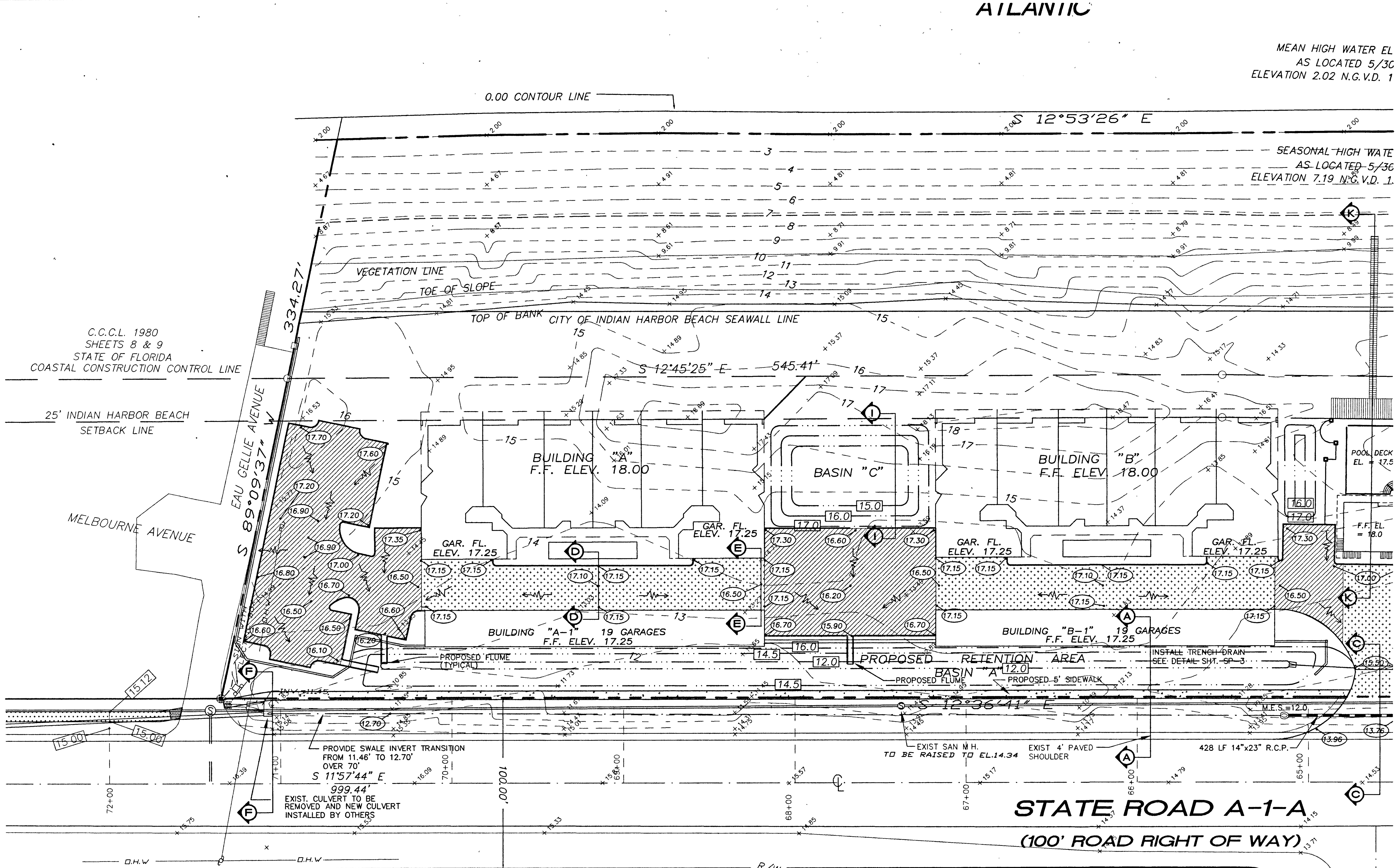
DATE

	DATE
DESIGNED: EMF	7/2/97
DRAWN BY: CD	7/2/97
CHECKED:	
APPROVED:	
ACAD CODE: 97750C2A	
PROJECT NO: 97.750	

PAVING, GRADING AND DRAINAGE PLAN

SP-2A

SHEET 3 OF 12



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LEGEND

- TYPE "A" PAVEMENT
- TYPE "B" PAVEMENT
- F.D.O.T. PAVEMENT
- DRAINAGE FLOW
- PROPOSED ELEVATION
- 6" HEADER CURB

NORTH

SCALE: 1"=30'

DEVELOPER
TINNON DEVELOPMENT

LANTANA OCEAN FRONT, A CONDOMINIUM

NO.	DATE	REVISION
1	11/19/97	REVISED BLDG FOOTPRINT & ADD F.D.O.T. NOTES
2	12/4/97	REVISED POOL LAYOUT
3	3/6/98	REV. RETENTION, SIDEWALK & ENTRANCE
4	5-11-98	REVISED PER F.D.O.T. COMMENTS
5	6/30/98	REVISED PER F.D.O.T. COMMENTS
6		
7		

FLEIS ASSOCIATES
FIRST UNION NATIONAL BANK BUILDING
1980 HIGHWAY A1A, SUITE 200
SATELLITE BEACH, FLORIDA 32937
(407) 777-2701
FAX (407) 779-2173
ENGINEERS / PLANNERS

EDWARD M. FLEIS
P.E. NO. 30632
DATE

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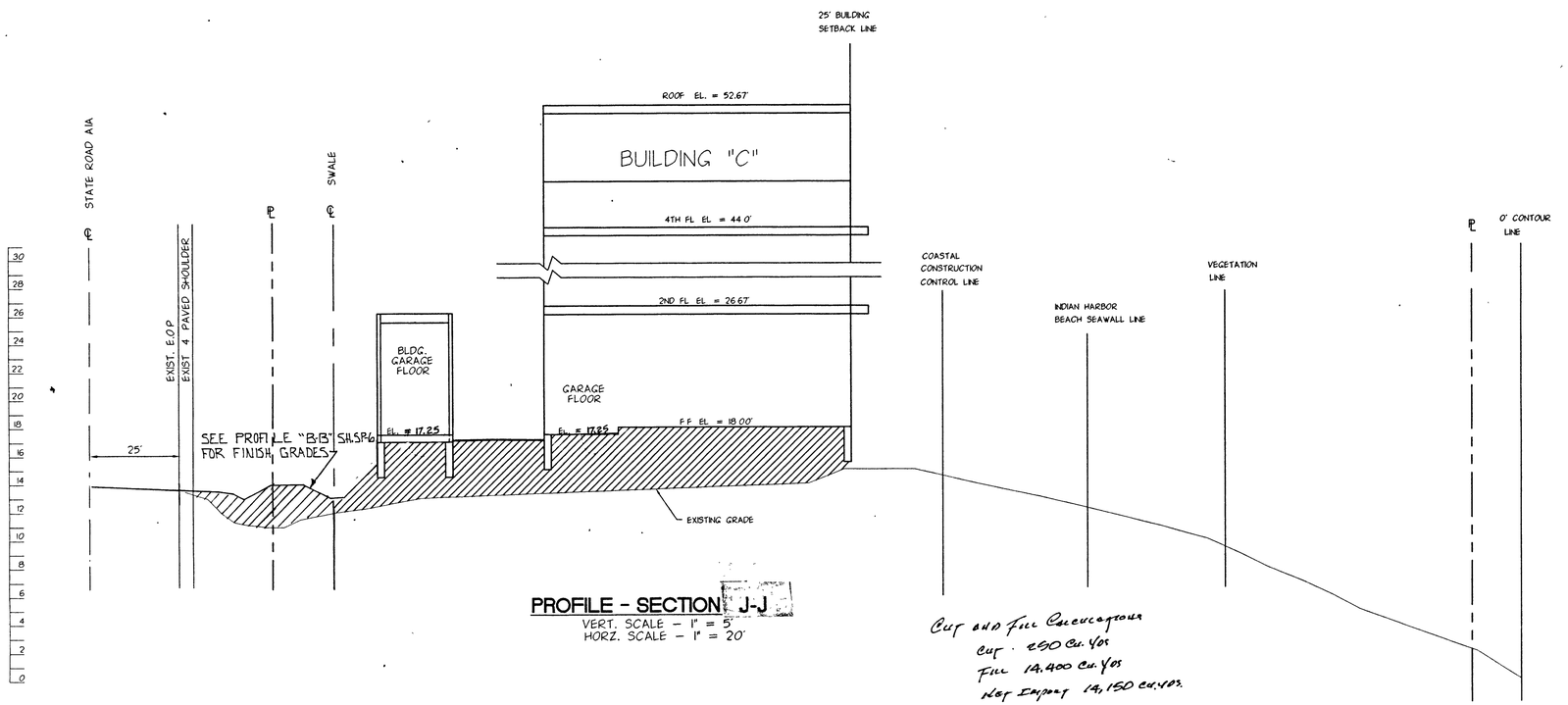
PROJECT NO: 97.750	

PAVING, GRADING AND DRAINAGE PLAN

SP-2B

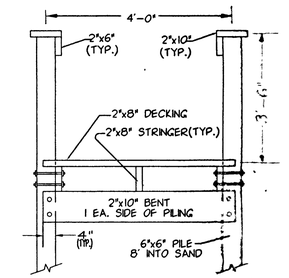
SHEET 4 OF 12



PROFILE - SECTION J-J

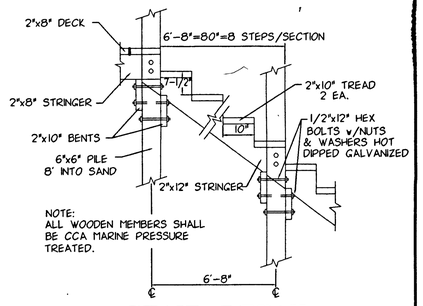
VERT. SCALE - 1" = 5'
HORZ. SCALE - 1" = 20'

Cut and Fill Calculations
Cut - 250 Cu. Yds
Fill 14,400 Cu. Yds
Net Import 14,150 Cu. Yds.



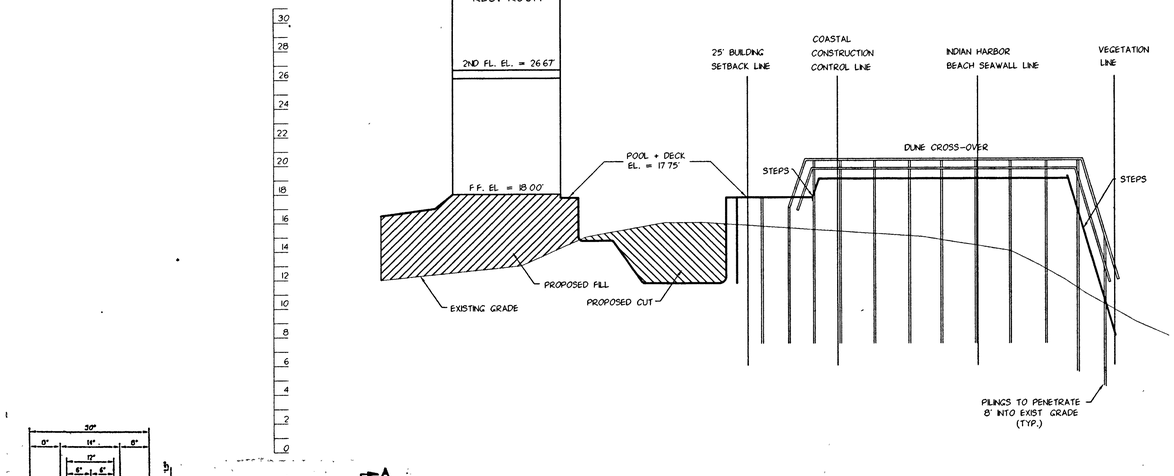
DUNE CROSSOVER SECTION (TYP.)

NTS



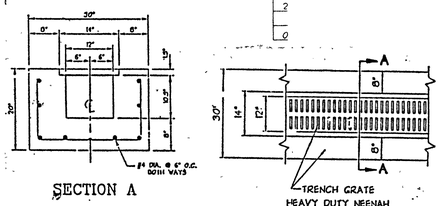
STAIR DETAIL

NTS

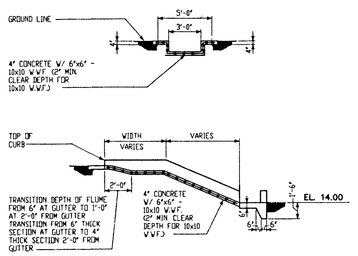


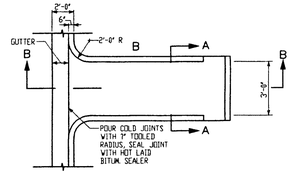
PROFILE - SECTION K-K

VERT. SCALE - 1" = 5'
HORZ. SCALE - 1" = 20'



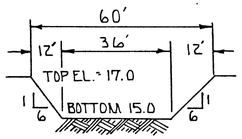
TRENCH GRATE DETAIL



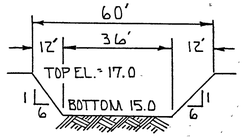


FLUME DETAIL

N.T.S.



PROFILE SECTION "H-H"
N.T.S.



PROFILE SECTION "I-I"
N.T.S

SCALE: 1"=20'

DEVELOPMENT OF BREVARD INC.
925 N. COURTNEY PKWY. SUITE 28
MERRIT ISLAND, FL. 32935

LANTANA OCEANFRONT, A CONDOMINIUM

NO	DATE	REVISION
1	10/18/96	REVISED PER MELBOURNE / FDOT AND COUNTY COMMENTS
2	5-11-98	REVISED PER FDOT COMMENTS.
3		
4		
5		
6		

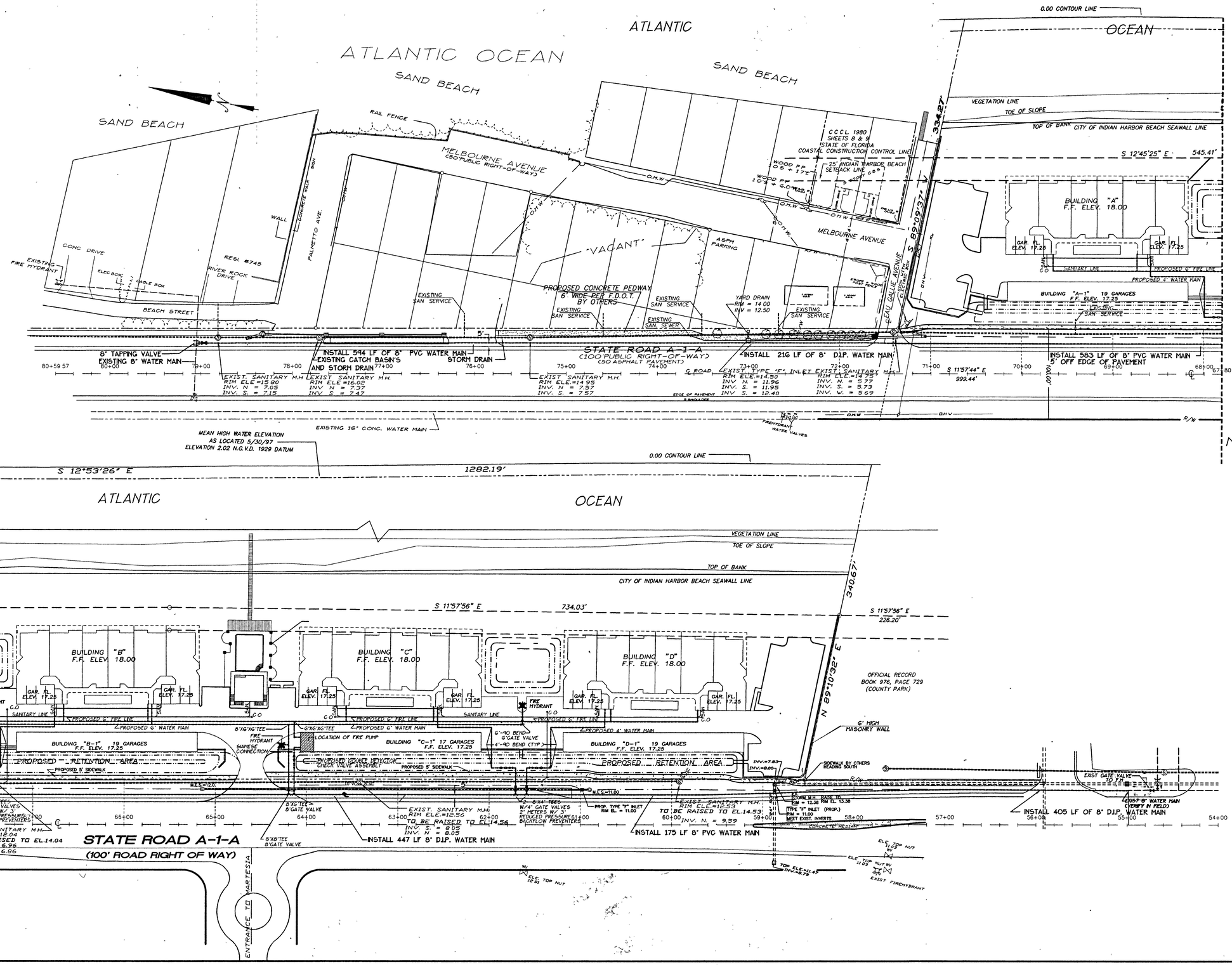
FLEIS ASSOCIATES
FIRST UNION NATIONAL BANK BUILDING
1090 HIGHWAY A1A, SUITE 200
SATELLITE BEACH, FLORIDA 32937
(407) 777-2701
FAX (407) 779-2173
ENGINEERS / PLANNERS
EDWARD M. FLEIS
P.E. NO. 30632
DATE

THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION UNLESS SIGNED HERE:

DATE

DESIGNED: MVD	DATE 10/8/97
DRAWN BY: MVD	10/8/97
CHECKED:	
APPROVED:	
ACAD CODE: 97750C3	
PROJECT NO: 97.750	

DETAIL SHEET
SP-3
SHEET 5 OF 12



NORTH

SCALE: 1"=50'

LANTANA
DEVELOPMENT OF BREVARD INC.
925 N. COURTENAY PKWY, SUITE 28
MERRITT ISLAND, FL 32953

LANTANA, [illegible] FRONT, A CONDOMINIUM

NO.	DATE	REVISION
1	3/6/98	REV. RETENT., SIDEWALK AND ENTRANCE
2	5/11/98	REV. PER F.D.O.T. COMMENTS
3	6/30/98	REV. PER F.D.O.T. & D.E.P. COMMENTS
4		
5		
6		

FLEIS ASSOCIATES
FIRST UNION NATIONAL BANK BUILDING
1000 HIGHWAY A1A, SUITE 200
SATELLITE BEACH, FLORIDA 32937
(407) 777-2701
FAX (407) 779-2173
ENGINEERS / PLANNERS
EDWARD M. FLEIS
P.E. NO. 30632
DATE

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DATE

		DATE
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DRAWN BY:	CD	7/11/97
CHECKED:		
APPROVED:		
ACAD CODE:	97750C4B	
PROJECT NO:	97.750	

UTILITY PLAN

SP-4

SHEET 6 OF 12

ED 4" WATER MAIN

ING "D-1" 19 GARAGES
F.F. ELEV. 17.25

ROPOSED RETENTION AREA

PROP. SIDEWALK ESMT.

MASONRY WALL

PROP. TYPE "F" INLET RIM = 11.00 MEET EXIST. INVERT INV.=7.83 INV.=8.00

EXIST. STORM M.H. RIM = 12.38 RAISE TO RIM EL. 13.38

SIDEWALK BY OTHERS HEADING SOUTH ADOPT A HIGHWAY SIGN (EXIST.)

24" RCP

EX. STORM DRAIN M.H. TOP EL. 13.60 BOTTOM EL. 6.30

EX. 36" CMP

EX. 24" RCP STORM DRAIN

EXIST GATE VALVE TO F.H

EXIST 8" WATER MAIN (VERIFY IN FIELD)

VEMENT

INSTALL 165 LF 8" PVC WATER MAIN

EXIST. SANITARY M.H. RIM ELE.=12.53 TO BE RAISED TO EL.14.53 INV. N. = 9.59

5'

EDGE OF PAVED SHOULDER

INSTALL 405 LF 8" D.I.P. WATER MAIN

5'

NO PARKING ON RIGHT-OF-WAY SIGN (EXIST.)

NO PARKING ON RIGHT-OF-WAY SIGN (EXIST.)

NOTE: SIGN ARE APPROX. 10' OFF EDGE OF PAVED SHOULDER (TYP.)

60+00 59+00 58+00 57+00 56+00 55+00

CONCRETE MEDIAN

24" RCP EX.

TOP ELE.=11.47
INV.=8.79

NOTE: ALL SIDEWALK, GRADING AND STORM DRAINS NORTH AND SOUTH OF THE PROPERTY LINE IS BY OTHERS. PROPOSED SIDEWALK AND RELATED WORK IS TAKEN FROM PLANS FOR PROPOSED SIDEWALK CONSTRUCTED FOR BREVARD COUNTY PROJECT NO. 90-005-C-115 PREPARED BY BUSSEN MAYER ENGINEERING GROUP

EXIST. MANHOLE STA. 59+91.47 RIM EL.= 14.53 INV. OUT: 9.59

RAISE M.H. TO 13.38

℄ PROFILE

W.M. PROFILE

30" MIN COVERAGE (TYP.)

EXIST. SAN. SEWER

165 LF OF 8" PVC WATER MAIN

INSTALL 405 LF OF 8" D.I.P. WATER MAIN

EXIST. 24" RCP STORM DRAIN

EXIST. 8" PVC (VERIFY LOCATION AND SIZE IN FIELD)

EXIST. 24" RCP

165 LF OF 8" PVC WATER MAIN

405 LF OF 8" DIP WATER MAIN

DATUM ELEV 0.00

DATUM ELEV 0.00

13.73 13.69 13.67 13.64 13.62 13.63 13.61 13.59 13.59 13.59 13.60 13.60

60+00 59+00 58+00 57+00 56+00 55+00

NORTH

SCALE: 1"=20'

LANTANA DEVELOPMENT OF BREVARD INC.
925 N. COURTENAY PKWY, SUITE 23
MERRITT ISLAND, FL. 32953

LANTANA OCEAN FRONT, A CONDOMINIUM

NO.	DATE	REVISION
1	3/6/98	REV. RETENT., SIDEWALK AND ENTRANCE
2	5/11/98	REV. PER F.D.O.T. COMMENTS
3	6/30/98	REV. PER F.D.O.T. COMMENTS
4		
5		
6		

FLEIS ASSOCIATES
FIRST UNION NATIONAL BANK BUILDING
1090 HIGHWAY A1A, SUITE 200
SATELLITE BEACH, FLORIDA 32937
(407) 777-2701
FAX (407) 779-2173
ENGINEERS / PLANNERS

EDWARD M. FLEIS
P.E. NO. 30632
DATE

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DATE

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CHECKED:		
APPROVED:		
ACAD CODE:	97750C4BA	
PROJECT NO:	97.750	

WATER MAIN PLAN & PROFILE

SP-4A

SHEET 7 OF 12

PROPOSED 6" FIRE LINE
PROPOSED 6" WATER MAIN
8"X6"X6" TEE
6"X6"X6" TEE
FIRE HYDRANT
SIAMESE CONNECTION
LOCATION OF FIRE PUMP
BUILDING "B-1" 19 GARAGES
F.F. ELEV. 17.25
BUILDING "C-1" 17 GARAGES
F.F. ELEV. 17.25
6"-90 BEND
6" GATE VALVE
4"-90 BEND (TYP.)
PROPOSED RETENTION AREA
PROPOSED DOUBLE DETECTOR CHECK VALVE ASSEMBLY
PROPOSED 6" SAN. SERVICE
1' SIDEWALK ESMT.
PROPOSED 5' SIDEWALK
PROPOSED 5' SIDEWALK
R.O.W. LINE
EXIST. SAN. SEWER
M.E.S.=12.0
10" VC
8" VC
INSTALL 163 LF 8" PVC WATER MAIN
5' EDGE OF PAVED SHOULDER
NO PARKING ON RIGHT-OF-WAY SIGN (EXIST.)
8"X6" TEE
8" GATE VALVE
NO PARKING ON RIGHT-OF-WAY SIGN (EXIST.)
INSTALL 447 LF 8" D.I.P. WATER MAIN
EXIST. SANITARY M.H.
RIM ELE.=12.56
TO BE RAISED TO EL.14.56
PROP. DECELERATION LANE
EDGE OF PAVED SHOULDER
EXIST. SAN. SEWER
M.E.S.=11.00
PROP. TYPE "F" INLET
RIM EL. = 11.00
2 8"X4" TEES
5' W/ 4" GATE VALVES
2" METERS W/ 3" REDUCED PRESSURE BACKFLOW PREVENTERS
INSTALL 10 LF 8" PVC WATER MAIN
NOTE: SIGNS ARE APPROX. 10' OFF EDGE OF PAVED SHOULDER (TYP.)
8"X8" TEE
8" GATE VALVE
66+00
65+00
64+00
63+00
62+00
61+00

EXIST. MANHOLE
RIM EL.=14.58
INV. IN: 8.05
INV. OUT: 8.05
℄ PROFILE
W.M. PROFILE
30" MIN COVERAGE (TYP.)
PROPOSED 163 LF 8" PVC WATER MAIN
PROPOSED 447 LF 8" D.I.P. WATER MAIN
PROPOSED 10 LF 8" PVC WATER MAIN
EXIST. SAN. SEWER
EXIST. SAN. SEWER
PROPOSED 163 LF 8" PVC WATER MAIN
PROPOSED 447 LF 8" D.I.P. WATER MAIN
PROP. LF 8" PVC WATER MAIN
DATUM ELEV 0.00
20
16
12
8
4
10'
15.03 14.86 14.72 14.60 14.52 14.49 14.45 14.32 14.19 14.04 13.89 13.80
66+00 65+00 64+00 63+00 62+00 61+00

NORTH

SCALE: 1"=20'

LANTANA DEVELOPMENT OF BREVARD INC.
925 N. COURTENAY PKWY, SUITE 28
MERRITT ISLAND, FL. 32953

LANTANA OCEAN FRONT, A CONDOMINIUM

NO.	DATE	REVISION
1	3/6/98	REV. RETENT., SIDEWALK AND ENTRANCE
2	5/11/98	REV. REV. PER F.D.O.T. COMMENTS
3	6-30-98	REVISED PER F DOT COMMENTS
4		
5		
6		

FLEIS ASSOCIATES
FIRST UNION NATIONAL BANK BUILDING
1090 HIGHWAY A1A, SUITE 200
SATELLITE BEACH, FLORIDA 32937
(407) 777-2701
FAX (407) 779-2173
ENGINEERS / PLANNERS
EDWARD M. FLEIS
P.E. NO. 30632
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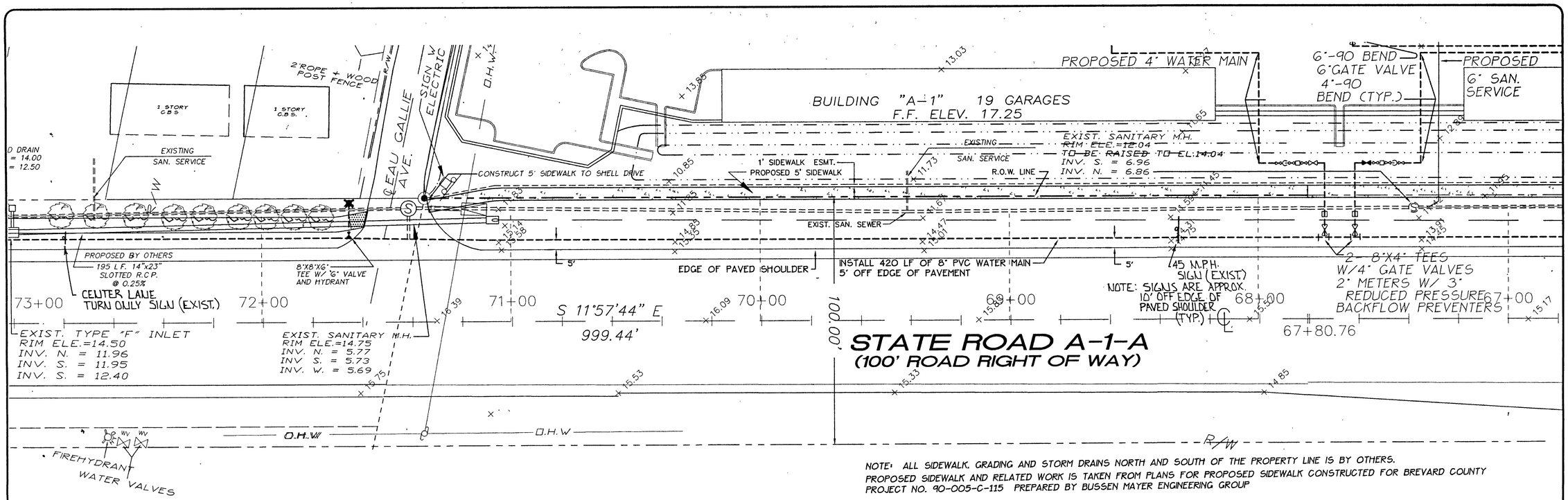
ACAD CODE: 97750C4BB	
PROJECT NO: 97.750	

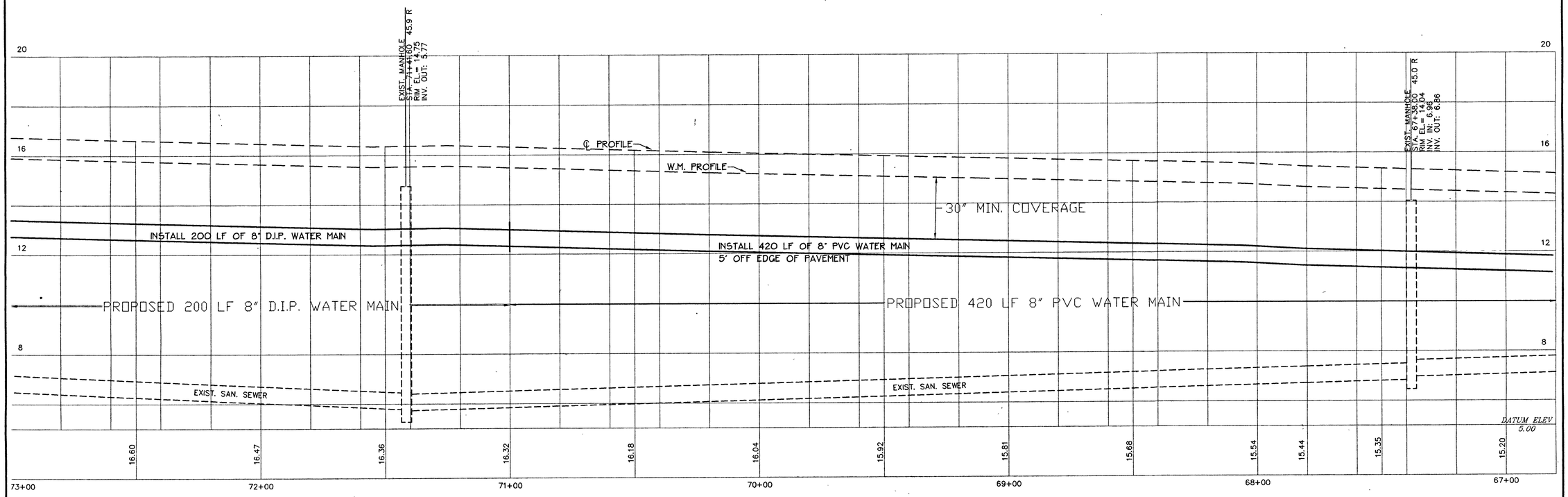
WATER MAIN PLAN & PROFILE

SP-4B

SHEET 8 OF 12



NOTE: ALL SIDEWALK, GRADING AND STORM DRAINS NORTH AND SOUTH OF THE PROPERTY LINE IS BY OTHERS.
PROPOSED SIDEWALK AND RELATED WORK IS TAKEN FROM PLANS FOR PROPOSED SIDEWALK CONSTRUCTED FOR BREVARD COUNTY PROJECT NO. 90-005-C-115 PREPARED BY BUSSEN MAYER ENGINEERING GROUP



NORTH

SCALE: 1"=20'

LANTANA DEVELOPMENT OF BREVARD INC.
925 N. COURTENAY PKWY, SUITE 28
MERRITT ISLAND, FL. 32953

LANTANA OCEAN FRONT, A CONDOMINIUM

NO.	DATE	REVISION
1	5/6/98	REV. RETENT., SIDEWALK AND ENTRANCE
2	5/11/98	REV. PER F.D.O.T. COMMENTS
3	6/30/98	REV. PER F.D.O.T. COMMENTS
4		
5		
6		

FLEIS ASSOCIATES
FIRST UNION NATIONAL BANK BUILDING
1090 HIGHWAY A1A, SUITE 200
SATELLITE BEACH, FLORIDA 32937
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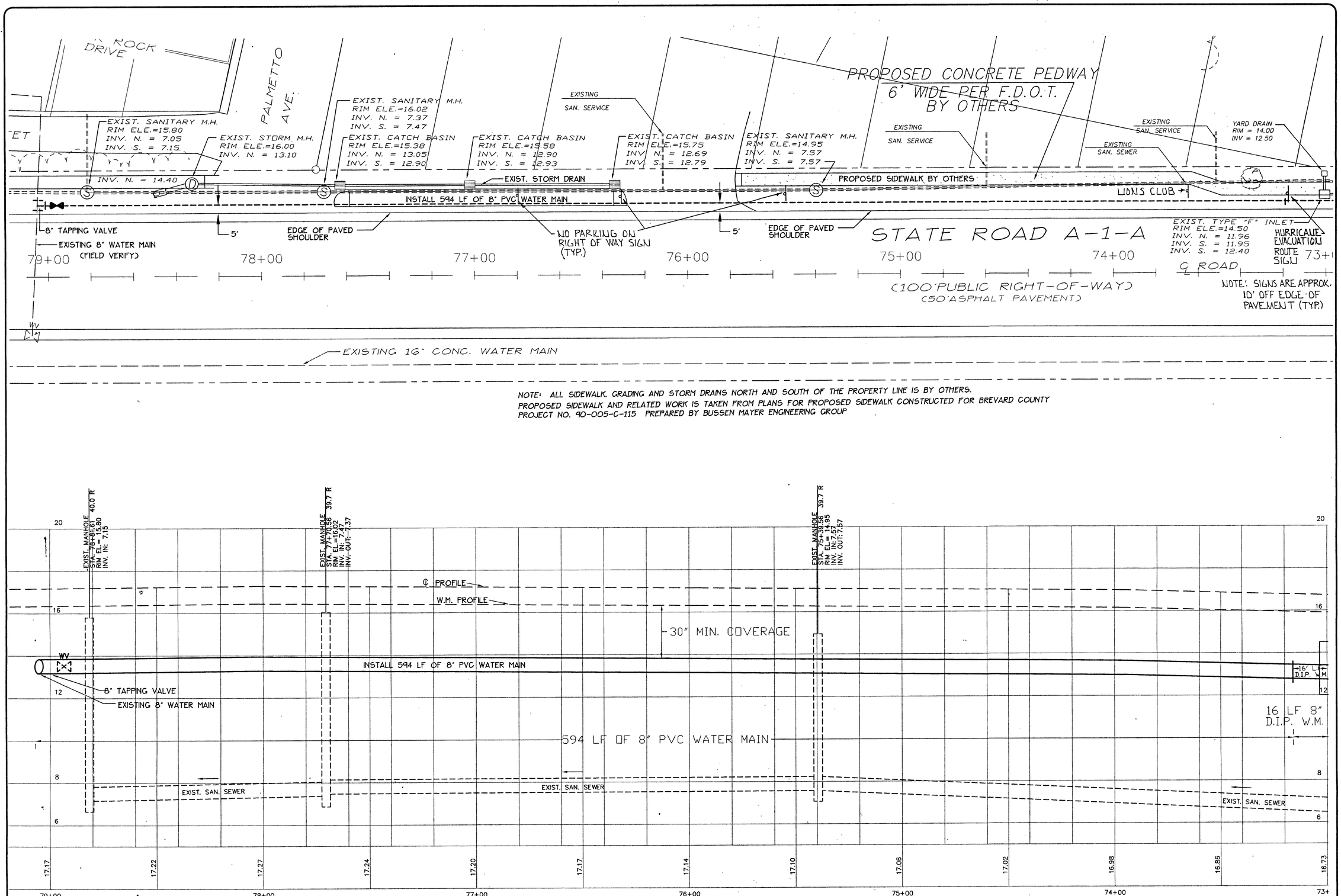
PROJECT NO:	97.750	

WATER MAIN PLAN & PROFILE

SP-4C

SHEET 9 OF 12



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PROPOSED SIDEWALK AND RELATED WORK IS TAKEN FROM PLANS FOR PROPOSED SIDEWALK CONSTRUCTED FOR BREVARD COUNTY
PROJECT NO. 90-005-C-115 PREPARED BY BUSSEN MAYER ENGINEERING GROUP

NORTH

SCALE: 1"=20'

LANTANA DEVELOPMENT OF BREVARD INC.
925 N. COURTENAY PKWY, SUITE 28
MERRITT ISLAND, FL. 32953

LANTANA OCEAN FRONT, A CONDOMINIUM

NO.	DATE	REVISION
1	DATE	REV. RETENT., SIDEWALK AND ENTRANCE
2	6/30/98	REV. PER F.D.O.T. COMENTS
3		
4		
5		
6		

FLEIS ASSOCIATES
FIRST UNION NATIONAL BANK BUILDING
1090 HIGHWAY A1A, SUITE 200
SATELLITE BEACH, FLORIDA 32937
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ENGINEERS / PLANNERS

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P.E. NO. 30632
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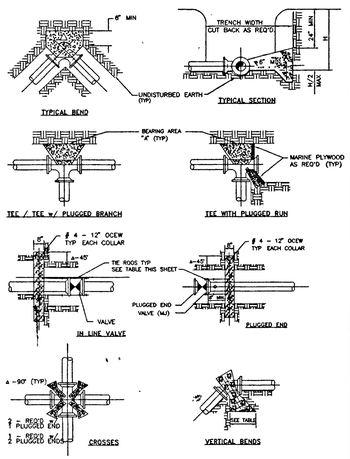
APPROVED:		
ACAD CODE:	97750C4BD	
PROJECT NO:	97.750	

WATER MAIN PLAN & PROFILE

SP-4D

SHEET 10 OF 12

"A" SEE THRUST BLOCKING SCHEDULE & NOTES FOR ADDITIONAL DETAILS



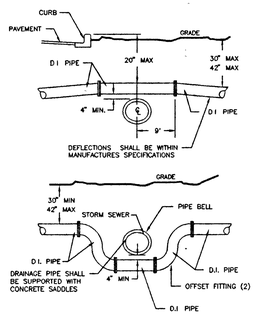
1A THRUST BLOCKS

THRUST BLOCKING SCHEDULES AND NOTES

1. THRUST BLOCKS TO BE USED ONLY WHERE CALLED OUT OR DETAILED ON THE DRAWING ALL THRUST BLOCKING SHALL BE APPROVED BY THE CITY PRIOR TO INSTALLATION, ALL OTHER JOINTS TO BE RESTRAINED WITH DEVICES OR MANUFACTURED FITTINGS AS SPECIFIED UNDER CONTRACT DOCUMENTS
2. THRUST BLOCK BEARING AREAS SHALL BE POURED AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL & EXTEND TO UNDISTURBED MATERIAL
3. EXTEND THRUST BLOCK FULL LENGTH OF FITTINGS PUT BOARD IN FRONT OF PLUG BEFORE POURING CONCRETE, JOINT SHALL NOT BE COVERED BY THRUST BLOCK DO CARE SHALL BE TAKEN WHILE POURING CONCRETE TO ENSURE THAT ACCESS TO PIPE JOINTS IS MAINTAINED.
4. ROUGH BLOCKING FORMS SHALL BE USED ALONG SIDES OF THRUST BLOCKS
5. THRUST BLOCKS SHALL BE USED IN COMBINATION, AS REQUIRED, TO SUIT THE SPECIFIC FITTING ARRANGEMENT.
6. ALL WOOD FORMS SHALL BE PRESSURE TREATED w/PRESERVATIVE
7. ALL EXPOSED TIE RODS AND ASSOCIATED HARDWARE SHALL BE TYPE 304 STAINLESS STEEL.
8. CONCRETE USED SHALL HAVE A MINIMUM STRENGTH OF 2,500 PSI, CERTIFICATION OF CONCRETE STRENGTH SHALL BE PROVIDED BY THE ENGINEER OF RECORD.

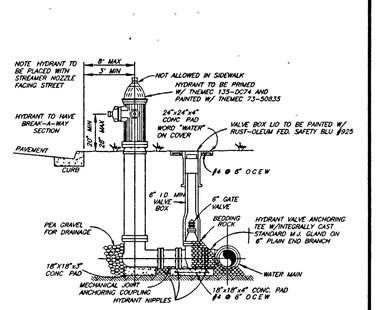
PIPE DIA. (IN.)	BEARING AREA - SQ FEET (SQ. OR RADIAL DIM.)					VERTICAL THRUST BLOCK VOLUME OF CONCRETE - C.Y.				TIE RODS	
	11-1/4°	22-1/2°	45°	90°		11-1/4°	22-1/2°	45°	90°		
6	2.8	1.0	1.1	2.2	4.0	0.3	0.5	1.1	2.0	TWO RODS	3/4
8	4.9	1.0	1.9	3.7	6.9	0.5	0.9	1.8	3.4	TWO RODS	3/4
10	8.1	1.6	3.1	6.2	11.4	0.8	1.6	3.0	5.6	TWO RODS	3/4
12	11.4	2.2	4.4	8.7	16.1	1.1	2.2	4.3	7.9	TWO RODS	3/4
14	15.5	3.0	6.0	11.8	21.9	1.5	3.0	5.8	10.8	TWO RODS	3/4
16	20.2	4.0	7.9	15.4	28.5	2.0	3.9	7.6	14.1	TWO RODS	3/4
TEST PRESSURE 150 PSIG SOIL BEARING PRESSURE 2000 LB/SF MIN *											

* CERTIFICATION OF SOIL BEARING CAPACITY SHALL BE PROVIDED BY ENGINEER OF RECORD.

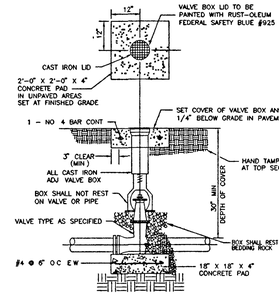


ALL JOINTS MECHANICALLY RESTRAINED USING JCM -610 SUR-GRIP RESTRAINER OR CITY APPROVED SUBSTITUTE

3A WATER MAIN / STORM SEWER CROSSING

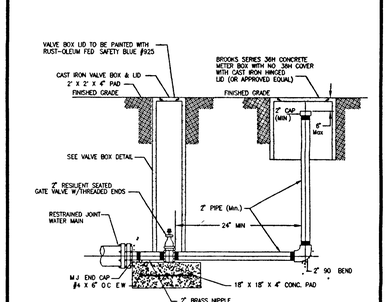


4A HYDRANT ASSEMBLY WITH ANCHOR TEE



1 PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION
2 THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4' FOOT DEPTH BELOW FINISHED GRADE SEE VALVE EXTENSION STANDARD DRAWING

5A GATE VALVE AND VALVE BOX

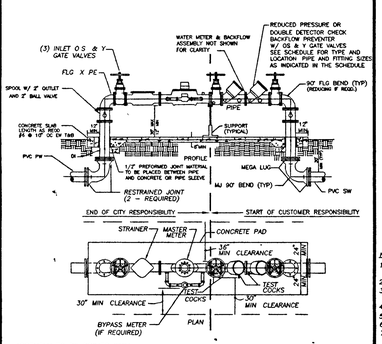


NOTES
1 ALL 2" PIPE AND FITTINGS SHALL BE BRASS WITH THREADED (NPT) JOINTS
2 PROTECT ALL FITTINGS, NIPPLE & BOLTS FROM CONCRETE WITH WSQUEEN

6A BLOW-OFF WITH GATE VALVE AND BOX

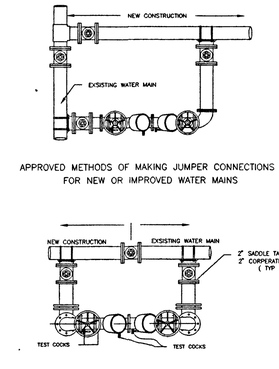
ALL ABOVE GROUND PIPING SHALL BE FLANGED DUCTILE IRON. FIELD FABRICATED FLANGES ARE UNACCEPTABLE.

DEVICE TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS



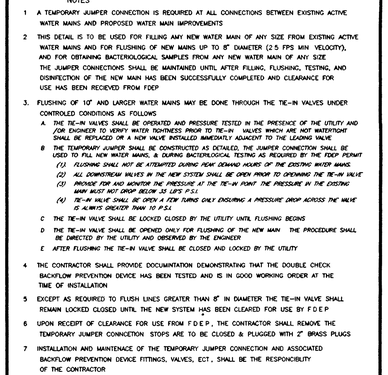
ASSEMBLY TO BE PRIMED WITH RUST-OLEUM RUST INHIBITIVE PRIMER # 960 AND PAINTED WITH RUST-OLEUM INDUSTRIAL ENAMEL # 925 FEDERAL SAFETY BLUE.

1B COMBINATION MASTER METER AND BACKFLOW PREVENTER



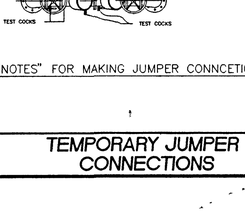
DDC BACKFLOW ASSEMBLY TO BE PRIMED WITH RUST-OLEUM RUST INHIBITIVE PRIMER # 960
DDC BACKFLOW ASSEMBLY TO BE PAINTED WITH RUST-OLEUM INDUSTRIAL ENAMEL # 964

4B DOUBLE DETECTOR CHECK VALVE



APPROVED METHODS OF MAKING JUMPER CONNECTIONS FOR NEW OR IMPROVED WATER MAINS

SEE "NOTES" FOR MAKING JUMPER CONNCETIONS



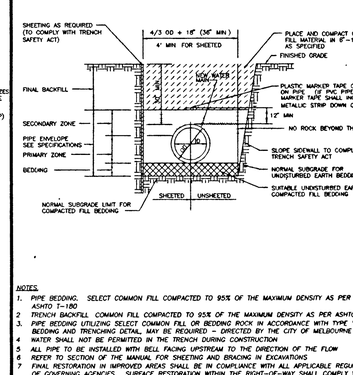
SEE "DETAIL" FOR MAKING JUMPER CONNCETIONS

5B TEMPORARY JUMPER CONNECTIONS

NOTES

1. A TEMPORARY JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING ACTIVE WATER MAINS AND PROPOSED WATER MAIN IMPROVEMENTS
2. THIS DETAIL IS TO BE USED FOR FILLING ANY NEW WATER MAIN OF ANY SIZE FROM EXISTING ACTIVE WATER MAINS AND FOR FLUSHING OF NEW MAINS UP TO 8" DIAMETER (2.5 FPS MIN VELOCITY), AND FOR OBTAINING BACTERIOLOGICAL SAMPLES FROM ANY NEW WATER MAIN OF ANY SIZE. THE JUMPER CONNECTIONS SHALL BE MAINTAINED UNTIL AFTER FILLING, FLUSHING, TESTING, AND DISINFECTION OF THE NEW MAIN HAS BEEN SUCCESSFULLY COMPLETED AND CLEARANCE FOR USE HAS BEEN RECIEVED FROM FDEP.
3. FLUSHING OF 10" AND LARGER WATER MAINS MAY BE DONE THROUGH THE TIE-IN VALVES UNDER CONTROLLED CONDITIONS AS FOLLOWS
   A. THE TIE-IN VALVES SHALL BE OPERATED AND PRESSURE TESTED IN THE PRESENCE OF THE UTILITY AND /OR ENGINEER TO VERIFY WATER TIGHTNESS PRIOR TO TIE-IN. VALVES WHICH ARE NOT WATERTIGHT SHALL BE REPLACED OR A NEW VALVE INSTALLED IMMEDIATELY ADJACENT TO THE LEAKING VALVE
   B. THE TEMPORARY JUMPER SHALL BE CONSTRUCTED AS DETAILED, THE JUMPER CONNECTION SHALL BE USED TO FILL NEW WATER MAINS, & DURING BACTERIOLOGICAL TESTING AS REQUIRED BY THE FDEP PERMIT
      (1). FLUSHING SHALL NOT BE ATTEMPTED DURING PEAK DEMAND HOURS OF THE EXISTING WATER MAINS.
      (2) ALL DOWNSTREAM VALVES IN THE NEW SYSTEM SHALL BE OPEN PRIOR TO OPENING THE TIE-IN VALVE
      (3) PROVIDE FOR AND MONITOR THE PRESSURE AT THE TIE-IN JOINT. PRESSURE IN THE EXISTING MAIN MUST NOT DROP BELOW 35 LBS P.S.I.
      (4) TIE-IN VALVE SHALL BE OPEN A FEW TURNS ONLY ENSURING A PRESSURE DROP ACROSS THE VALVE IS ALWAYS GREATER THAN 10 P.S.I.
   C. THE TIE-IN VALVE SHALL BE LOCKED CLOSED BY THE UTILITY UNTIL FLUSHING BEGINS
   D. THE TIE-IN VALVE SHALL BE OPENED ONLY FOR FLUSHING OF THE NEW MAIN. THE PROCEDURE SHALL BE DIRECTED BY THE UTILITY AND OBSERVED BY THE ENGINEER
   E. AFTER FLUSHING THE TIE-IN VALVE SHALL BE CLOSED AND LOCKED BY THE UTILITY
4. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION DEMONSTRATING THAT THE DOUBLE CHECK BACKFLOW PREVENTION DEVICE HAS BEEN TESTED AND IS IN GOOD WORKING ORDER AT THE TIME OF INSTALLATION
5. EXCEPT AS REQUIRED TO FLUSH LINES GREATER THAN 8" IN DIAMETER THE TIE-IN VALVE SHALL REMAIN LOCKED CLOSED UNTIL THE NEW SYSTEM HAS BEEN CLEARED FOR USE BY F.D.E.P.
6. UPON RECEIPT OF CLEARANCE FOR USE FROM F.D.E.P., THE CONTRACTOR SHALL REMOVE THE TEMPORARY JUMPER CONNECTION. STOPS ARE TO BE CLOSED & PLUGGED WITH 2" BRASS PLUGS
7. INSTALLATION AND MAINTENACE OF THE TEMPORARY JUMPER CONNECTION AND ASSOCIATED BACKFLOW PREVENTION DEVICE FITTINGS, VALVES, ECT., SHALL BE THE RESPONCIBILITY OF THE CONTRACTOR

6B "NOTES" TEMPORARY JUMPER CONNECTIONS

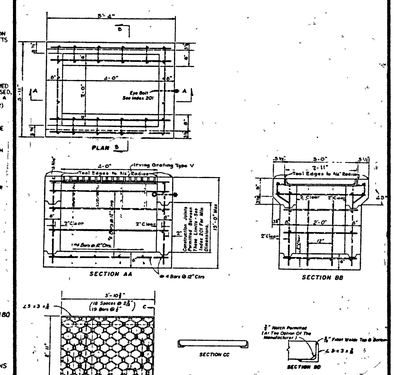


NOTES

1. PIPE BEDDING. SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER ASHTO T-180
2. TRENCH BACKFILL COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER ASHTO T-180
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE 'A' BEDDING AND TRENCHING DETAIL, MAY BE REQUIRED - DIRECTED BY THE CITY OF MELBOURNE
4. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION
5. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW
6. REFER TO SECTION OF THE MANUAL FOR SHEETING AND BRACING IN EXCAVATIONS
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES SURFACE RESTORATION WITHIN THE RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS

SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS

2B UTILITY TRENCHING DETAIL



3B TYPE "F" INLET

NOTES

1. ASPHALT SHALL BE ASPHALTIC CONCRETE TYPE S FOR RESIDENTIAL & TYPE S-1 FOR COMMERCIAL/INDUSTRIAL MINIMUM 1500 P.S.I
2. A 'SLOPE OF 2:1 RATIO SHALL BE USED ONLY WHEN SOIL CONDITIONS DO NOT ALLOW VERTICAL TRENCHING.
3. COMPACTED BACKFILL MATERIAL SHALL BE FREE OF ASPHALT, LARGE ROCKS (3" DIA. MAX.), WOOD AND OTHER ORGANIC MATTER.
4. NEW ASPHALT SURFACE SHALL BE THE SAME THICKNESS AS EXISTING ASPHALT SURFACE (1.5" MINIMUM).
5. CONTRACTOR SHALL EXCAVATE BOTTOM OF TRENCH TO ALLOW FOR BELL SECTION OF PIPE.
6. BACKFILL SHALL BE COMPACTED BENEATH THE HAUNCHES OF THE PIPE USING MECHANICAL TAMPS. THIS COMPACTION APPLIES TO THE MATERIAL PLACED BENEATH THE HAUNCHES OF THE PIPE AND ABOVE ANY BEDDING REQUIRED. COMPACTION SHALL BE DONE IN 8" LAYERS. BACKFILL SHALL BE COMPACTED TO 98% MINIMUM DENSITY UNDER ROADS, CURB & GUTTER, OR 95% MINIMUM DENSITY IN SHOULDERS AND OUTSIDE ROAD R/W. MAXIMUM DENSITY SHALL BE AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST AASHTO T-99.
7. REPLACED BASE MATERIAL OVER DITCH SHALL BE TWICE THE THICKNESS OF THE ORIGINAL BASE (12" MIN.)
8. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED SURFACE TREATED PAVEMENT JOINTS SHALL BE LAPPED AND FEATHERED
9. BASE MATERIALS SHALL BE EITHER OF THE SAME TYPE AND COMPOSITION AS THE MATERIALS REMOVED OR EQUAL OR GREATER STRUCTURAL ADEQUACY. BASE MATERIAL IS TO BE COMPACTED IN 6" LIFTS
10. REPLACEMENT OF EXISTING ASPHALT OR CONCRETE TO BE AN EVEN STRAIGHT CUT FROM THE WIDEST DAMAGED AREA.

1C OPEN ROADWAY CUT

WATER DISTRIBUTION NOTES:

1. THE CONTRACTOR SHALL INSTALL ALL WATER MAINS AND APPURTENANCES IN ACCORDANCE WITH CITY OF MELBOURNE WATER DEPARTMENT TECHNICAL PROVISIONS FOR CONSTRUCTION OF WATER DISTRIBUTION SYSTEMS (ISSUE DATE JANUARY 1995), THE APPROVED PLANS AND STANDARD DETAIL SHEET. THE CONTRACTOR SHALL NOTIFIY THE ENGINEERING DIVISION 24 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. INSTALLATIONS AND HYDROSTATIC (PRESSURE AND LEAKAGE) TESTINGS OF WATER LINES SHALL BE IN ACCORDANCE WITH ANSI/AWWA C900 (MANUAL M23) FOR PVC PRESSURE PIPE, AND C600 FOR DUCTILE IRON PIPE.
3. CONNECTION OF THE NEW WATER LINE TO THE EXISTING 6" PVC LINE TO BE DONE BY A QUALIFIED TAPPING CONTRACTOR IN THE PRESENCE OF THE CITY OF MELBOURNE WATER DEPARTMENT REPRESENTATIVE. CITY OF MELBOURNE WATER DEPARTMENT TO BE NOTIFIED THREE FULL WORKING DAYS IN ADVANCE OF WATERLINE TAP.
4. ALL WATER MAINS TO HAVE A MINIMUM COVER OF 30" UNLESS OTHERWISE NOTED.
5. WATER SUPPLY FACILITIES, INCLUDING MAINS, SHALL BE INSTALLED, CLEANED, DISINFECTED, AND BACTERIOLOGICALLY CLEARED FOR SERVICE, IN ACCORDANCE WITH THE LATEST APPLICABLE AWWA STANDARDS AND THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION RULES.
6. POLYVINYL CHLORIDE (PVC) PRESSURE PIPE SHALL CONFORM TO THE REQUIREMENTS OF AWWA C900 WITH OUTSIDE DIAMETER EQUAL TO THAT OF STANDARD DUCTILE IRON PIPE AND MINIMUM WALL THICKNESS OF DR 18 CLASS 150 BETWEEN 4"-12". USE SDR 21 CLASS CLASS 200 FOR LESS THAN 4" PIPE THAT MEETS THE REQUIREMENTS OF ASTM D2241.
7. FITTINGS FOR PVC PRESSURE PIPE AND D.I.P. SHALL BE DUCTILE IRON, MECHANICAL JOINT, CEMENT MORTAR LINES IN ACCORDANCE WITH ANSI 21.4 RATED AT 350 PSI AND SHALL COMPLY WITH ANSI/AWWA C110/A21.10 AND C111/A21.11.
8. THE CONTRACTOR SHALL PROVIDE WATER SERVICE LINES AS INDICATED. ALL POTABLE WATER SERVICES SHALL BE THREADED BRASS CONNECTIONS MADE USING 1" SADDLE TAPS. SOLVENT WELDED PVC PIPE WILL NOT BE ACCEPTABLE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING THE ENGINEER WITH AN ACCURATE ANNOTATED UTILITY PLAN SHOWING THE AS-BUILT IN SUFFICIENT DETAIL TO SHOW THE EXACT LOCATION OF ALL MAINS AND SERVICES.
10. PVC PIPES MUST BEAR NSF LOGO FOR POTABLE WATER USE.
11. WATER LINE CONSTRUCTION SHALL CONFORM TO CITY OF MELBOURNE SPECIFICATIONS, ISSUE DATE JANUARY 1995.
12. CITY OF MELBOURNE WATER DEPARTMENT TO BE NOTIFIED THREE FULL WORKING DAYS IN ADVANCE OF WATER LINE TAP. A CITY OF MELBOURNE WATER DEPARTMENT REP. SHALL BE PRESENT WHEN TAP IS MADE.
13. THE CONTRACTOR MAY NOT PHYSICALLY CONNECT 8" OR SMALLER WATER MAINS TO EXISTING CITY WATER UNTIL F.D.E.P. CLEARANCE HAS BEEN OBTAINED FLUSHING SHALL NOT TAKE PLACE UNTIL AFTER PRESSURE TESTING HAS BEEN SUCCESFULLY COMPLETED. FILLING OF NEWLY CONSTRUCTED WATER MAINS SHALL TAKE PLACE THROUGH A 2" JUMPER CONNECTION THAT INCORPORATES AN AWWA APPROVED DOUBLE CHECK BACKFLOW PREVENTION DEVICE.
14. A horizontal clearance of 10' in parallel installation and 18" vertically at crossings must be maintained between potable water lines and sanitary hazards (sanitary sewer, force main, storm sewer, reuse water). If the vertical distance is less than 18" when water line crosses over or under sewer line, the sewer line shall be ductile iron with a 20' length centered on crossing. When the water line crosses a storm sewer pipe with less than 18" vertical distance, the water line shall be ductile iron with a 20' length centered on crossing or be encased in concrete.

Sewer pipes with less than 36" cover shall be PVC, DR-18.

Water mains and sanitary hazards may be laid with less than 10 feet horizontal separation provided that one or more of the following conditions are satisfied:

1. The crown of the sewer line is a minimum of 18" below the invert of the water main and installed in a separate trench.
2. Sewer line is placed in a sleeve.
3. Sewer line is encased in a minimum thickness of 6" of concrete on all sides.

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

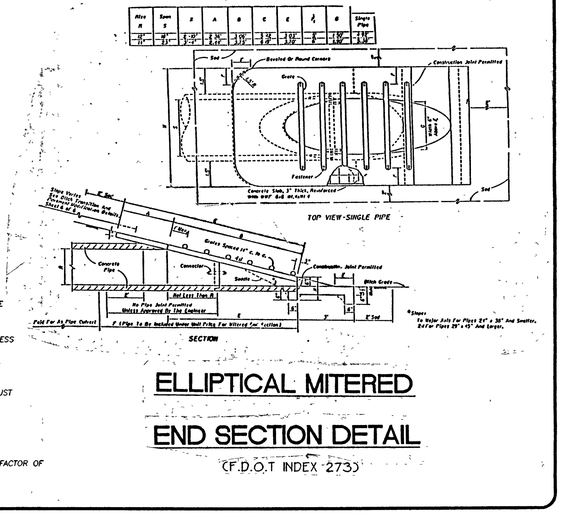
FITTINGS	PIPE SIZE	
	6"	8"
90 BEND	44 (51)	57 (66)
45 BEND	18(21)	24 (29)
22.5 BEND	9 (11)	12 (14)
11.25 BEND	5 (6)	6 (8)
BRANCH OF TEE	42 (59)	69 (99)
DEAD END	92 (131)	120(171)

NOTES

1 ALL FITTINGS SHALL BE RESTRAINED JOINT TYPE UNLESS OTHERWISE INDICATED
2 INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO, OR GREATER THAN THE LENGTH SHOWN IN THE TABLE
3 WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE
4. IN-LINE VALVES OUTSIDE THE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
5. LENGTH OF RESTRAINED JOINT PIPING FOR REDUCERS, REDUCING TEES, AND VERTICAL POSITION FITTINGS SHALL BE DESIGNED ON AN INDIVIDUAL BASIS, WITH DESIGN CALCULATIONS FOR EACH BEGIN SUBMITTED FOR REVIEW
6. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, WITH THE FOLLOWING ASSUMPTIONS

WORKING PRESSURE	150 P.S.I.
SOIL DESIGNATION	SAND-SILT
LAYING CONDITION	TYPE 2
SAFETY FACTOR:	1.5

7. FOR PIPE ENCASED IN POLYETHYLENE, USE VALUES GIVEN IN PARENTHESES OR INCREASE THE GIVEN VALUE BY A FACTOR OF 1.2



ELLIPTICAL MITERED

END SECTION DETAIL

(F.D.O.T INDEX 273)

FLEIS ASSOCIATES
FIRST UNION NATIONAL BANK BUILDING
1090 HIGHWAY A1A, SUITE 200
SATELLITE BEACH, FLORIDA 32937
(407) 777-2701 ~ FAX (407) 779-2173
ENGINEERS / PLANNERS / DEVELOPERS
EDWARD M. FLEIS, P.E.
P.E. NO. 30632

NOT TO SCALE

LANTANA
DEVELOPMENT OF BREVARD INC.
255 N. COURTENAY PKWY, SUITE 28
MERRITT ISLAND, FL 32953

LANTANA OCEANFRONT
A CONDOMINIUM

NO.	DATE	REVISION
1	5/11/98	REVISED PER F.D.O.T. COMMENTS
2	6/30/98	REVISED PER F.D.O.T. COMMENTS
3		
4		
5		
6		
7		

THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION UNLESS SIGNED HERE:

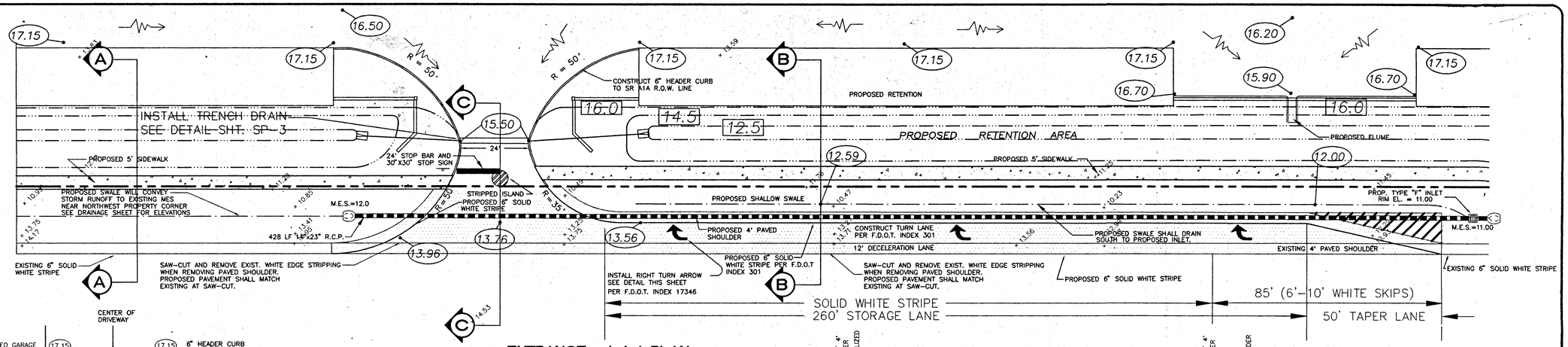
DATE

DESIGNED: LDM	DATE 07/17/97
CHECKED: MJO	07/17/97
APPROVED: EMF	
DISK NO.	
ACAD CODE:	97750SP5
PROJECT NO:	97.750

WATER DETAILS

SP-5

SHEET 11 OF 12

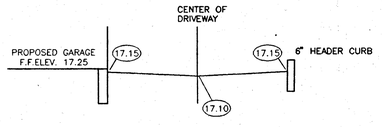


ENTRANCE - A-1-A PLAN

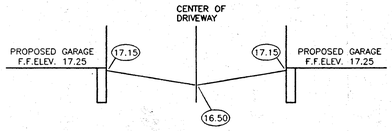
SCALE 1"=20'

FDOT NOTES:

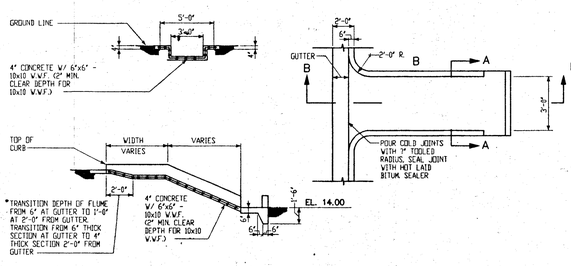
1. ALL STRUCTURES, PIPES, AND OTHER CONSTRUCTION IN THE F.D.O.T. RIGHT OF WAY SHALL BE PERFORMED ACCORDING TO THE F.D.O.T. "ROADWAY DESIGN STANDARDS AND SPECIFICATIONS" – 1998 EDITION
2. SOD ALL DISTURBED AREAS IN THE S.R. A-1-A RIGHT OF WAY WITH BERMUDA SOD ONLY.
3. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARD INDEX NO. 612.
4. CONTRACTOR SHALL SUBMIT A COPY OF ALL DENSITY TESTING TO THE F.D.O.T. MAINTENANCE OFFICE PRIOR TO PLACEMENT OF ANY ASPHALT.
5. ALL STRIPING SHALL BE THERMOPLASTIC AND INSTALLED PER F.D.O.T. STANDARD INDEX NO. 17346.



PROFILE - SECTION D-D

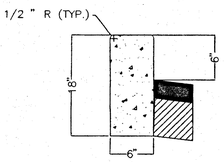


PROFILE - SECTION E-E

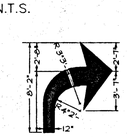


FLUME DETAIL

N.T.S.

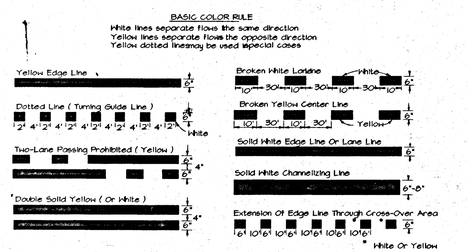


VERTICAL CURB



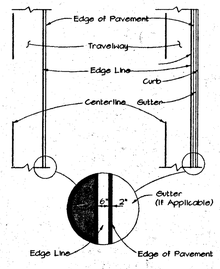
RIGHT TURN ARROW

PER F.D.O.T. INDEX 17346

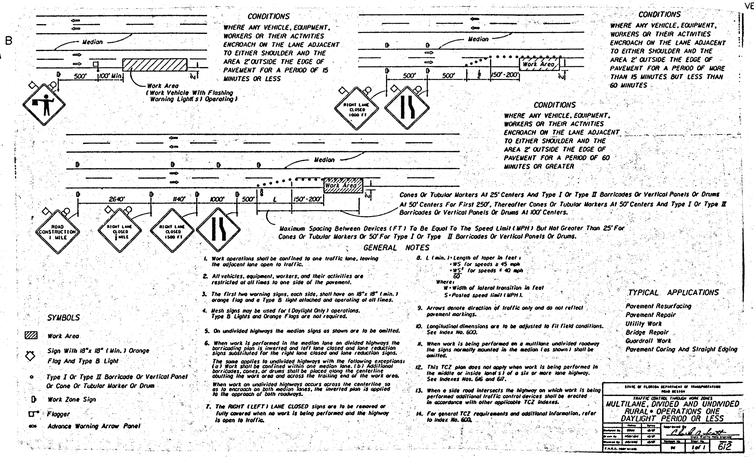


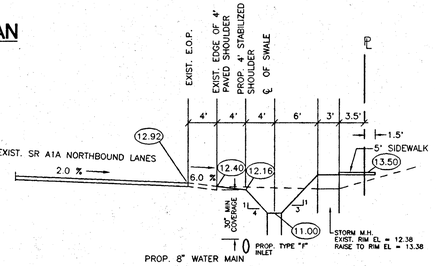
TYPES OF PERMANENT LONGITUDINAL LINES

SPECIAL MARKING AREAS INDEX NO. 17346



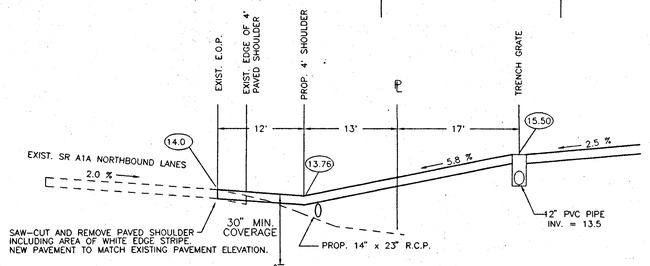
PLACEMENT OF EDGE LINES





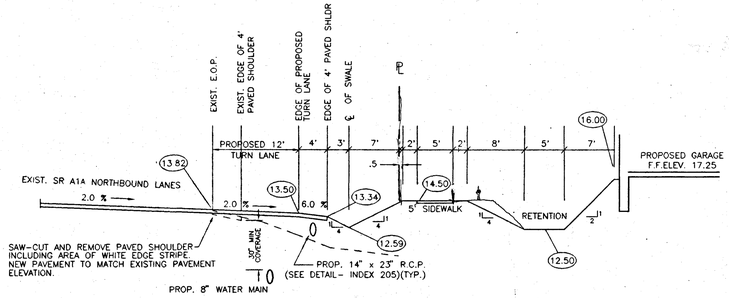
PROFILE - SECTION G-G

HORIZONTAL SCALE: 1" =10'
VERTICAL SCALE: 1" =5'



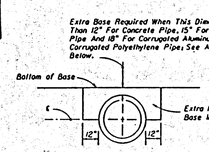
NOTES:
1. DRIVEWAY WITHIN F.D.O.T. RIGHT-OF-WAY TO BE CONSTRUCTED PER STANDARD INDEX # 515.
2. SOD ALL DISTURBED AREA IN F.D.O.T. RIGHT-OF-WAY WITH BERMUDA SOD ONLY.

PROFILE - SECTION C-C



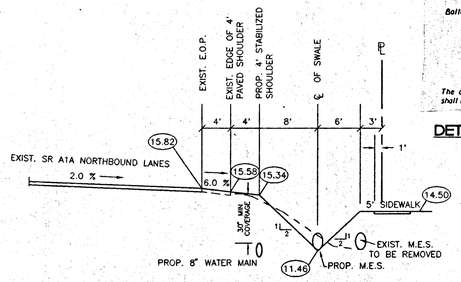
PROFILE - SECTION B-B

Extra Base Required When This Dimension Is Less Than 12" For Concrete Pipe, 15" For Corrugated Steel Pipe And 18" For Corrugated Aluminum Pipe And Corrugated Polyethylene Pipe; See Application Note Below.



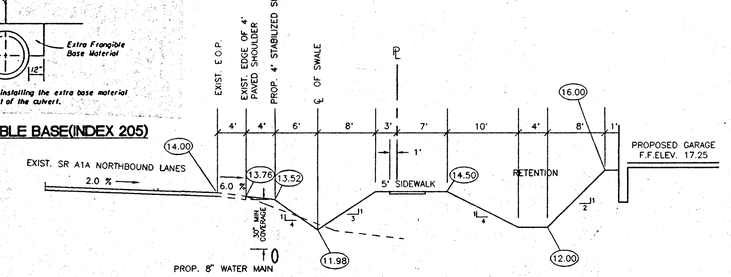
The cost of furnishing and installing the extra base material shall be included in the cost of the culvert.

DETAIL- FRANGIBLE BASE(INDEX 205)



PROFILE - SECTION F-F

HORIZONTAL SCALE: 1" =10'
VERTICAL SCALE: 1" =5'



PROFILE - SECTION A-A

HORIZONTAL SCALE: 1" =10'
VERTICAL SCALE: 1" =5'

SCALE: 1"=20'

DEVELOPER
TRICON DEVELOPMENT
925 N. COURTNEY PKWY. SUITE 28
MERRITT ISLAND, FL. 32953

LANTANA OCEAN FRONT, A CONDOMINIUM

NO.	DATE	REVISION
1		
2		
3	3/6/98	REVISED RETENTION, SIDEWALK & ENTRANCE
4	5/11/98	REVISED PER F.D.O.T. COMMENTS
5	6/30/98	REVISED PER F.D.O.T. COMMENTS
6		
7		

FLEIS ASSOCIATES
FIRST UNION NATIONAL BANK BUILDING
1090 HIGHWAY A1A, SUITE 200
SATELLITE BEACH, FLORIDA 32937
(407) 777-2701
FAX (407) 779-2173
ENGINEERS / PLANNERS
EDWARD M. FLEIS
P.E. NO. 30632
DATE

THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION UNLESS SIGNED HERE:

DATE

		DATE
DESIGNED:	EMF	7/2/97
DRAWN BY:	CD	7/2/97
CHECKED:		
APPROVED:		
ACAD CODE:	97750C6	
PROJECT NO:	97.750	

ENTRANCE TO A-1-A

SP-6

SHEET 12 OF 12