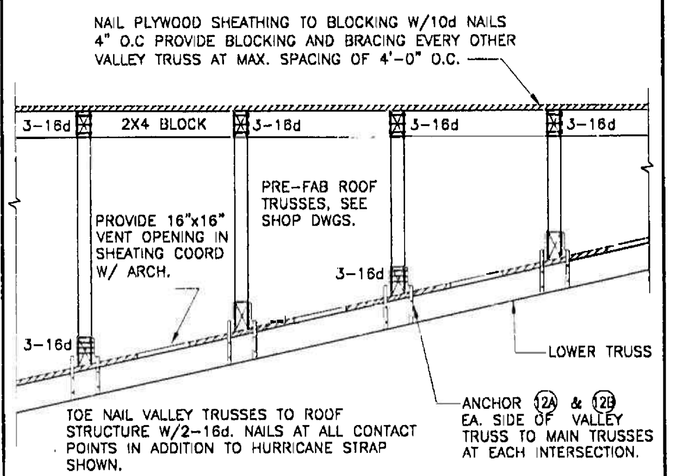
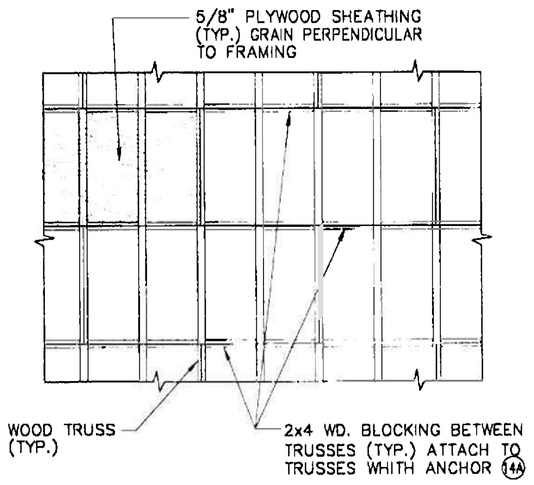


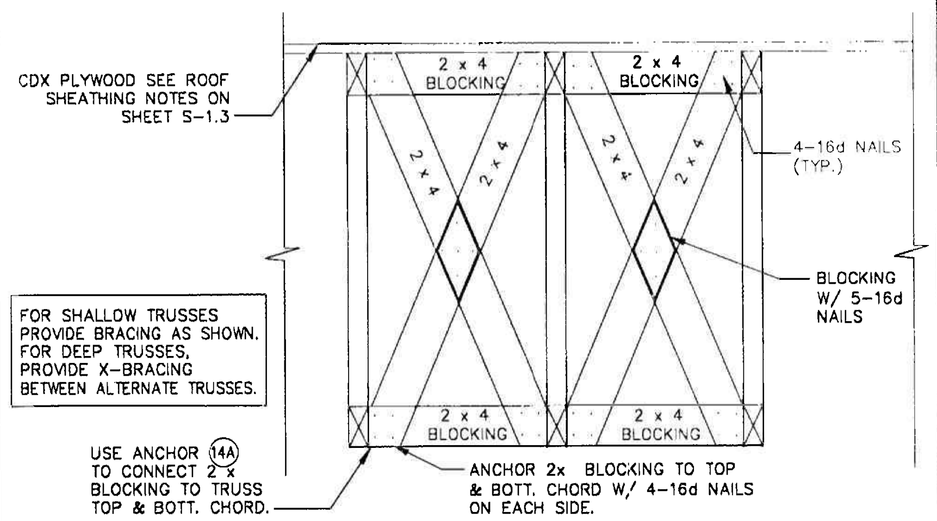
TYPICAL PIGGYBACK CONNECTION (A S-3.2)

N.T.S



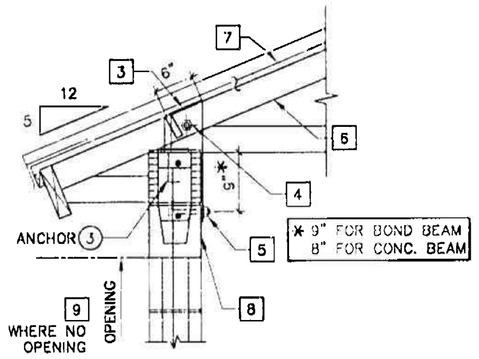
BLOCKED DIAPHRAGM DETAIL (B S-3.2)

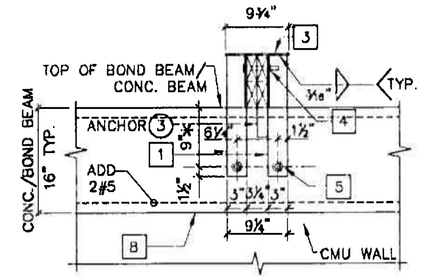
N.T.S



TYPICAL "X" BRACING DETAIL (C S-3.2)

SCALE: 3/4"=1'-0"





GIRDER TRUSS CONNECTION SCHEDULE			
MARK	DESCRIPTION	MARK	DESCRIPTION
1	L 3"x3"x¼" W/ EXTENDED LEG (Fy=36Ksi) SEE DIAG.	6	TWO (2) ⅝"ø HILTI KWIK BOLT II W/ 4" PENETRATION
1A	L 4"x4"x⅜" W/ EXTENDED LEG (Fy=36Ksi) SEE DIAG.		
		8	PREFABRICATED TWO, THREE OR FOUR PLY TRUSS
3	STL. PLATE 9¾"x6"x¼"	7	MIN. ⅝" EXT. GRADE PLYWOOD, SEE PLAN FOR NAILING
4	ONE (1) ⅝"ø, THRU BOLT	8	BOND BEAM / CONC. BEAM
		9	CONCRETE MASONRY BLOCK

ALLOWABLE UPLIFT CALCS. FOR ⅝"ø KWIK BOLTS IN 3000 PSI CONCRETE / GROUTED CELLS

ALLOWABLE SHEAR PER MIA DADE NOA #01-1001-03 = 3826#/2850#/ BOLT

EDGE DISTANCE FOR 100% = 1.5x4=6";
PROVIDED=7"MIN, R=1.0

SPACING FOR 100% = 2x4=8";
PROVIDED=8¼"; R=0.87
SHEAR PLANE THRU THREADS; R=0.93

ALLOWABLE LOAD IN CONCRETE FOR 2 BOLTS = 3826 x 2 x 0.87 x 0.93 = 6191#

ALLOWABLE LOAD IN GROUTED CELLS FOR 2 BOLTS = 2850 x 2 x 0.87 x 0.93 = 4612#

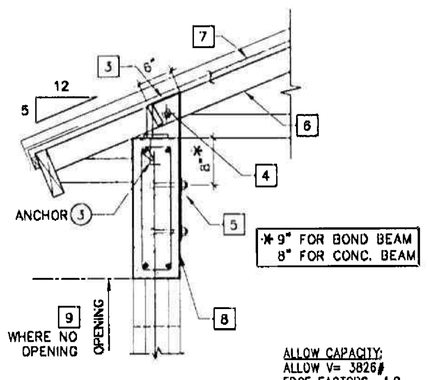
HD-1 + ANCHOR (2B)

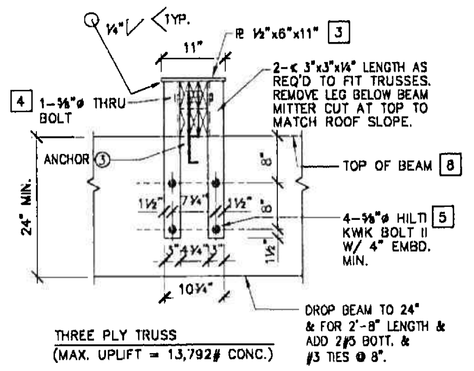
FOR DEEP HEEL TRUSSES SCALE: 3/4"=1'-0"

(ALLOWABLE UPLIFT FOR 2 PLY TRUSSES: IN 3000 PSI CONC. = 5858# IN GROUTED CELLS = 4384#)

GIRDER TRUSS CONNECTION HD-1 DETAIL (D S-3.2)

SCALE: 3/4" = 1'-0"





ALLOW CAPACITY:
ALLOW V= 3826#
EDGE FACTORS= 1.0
SPAC. FACTOR= 0.969
SHEAR PLANE THRU THREADS; R=0.93
CAPACITY= 3826x0.969x4x0.93 = 13,792# (CONC.)
CAPACITY= 2850x0.969x4x0.93 = 10,273# (GROUTED CELLS)
(N.O.A. 01-1001.03)

HD-2 + ANCHOR (2B)

GIRDER TRUSS CONNECTION HD-2 DETAIL (E S-3.2)

SCALE: 3/4" = 1'-0"

(NOT USED)

(NOT USED)

TRUSS ANCHOR & CONNECTOR SCHEDULE

ANCHOR	TYPE	ALLOW GRAV	ALLOW UPLIFT/TOT	ALLOW L1	ALLOW L2	STRAP/JOIST/TRUSS	SEAT/BM/LEDGER	MANUFACTURER	MIAMI-DADE N.O.A.	EXP. DATE	REMARKS
1A	NVHTA-12H	N/A	2078	1050	1450	10-10d NAILS x 1½"	8-10d NAILS x 1½"	NU-VUE	04-0510.03	12/23/2009	1 PLY TRUSS
1B	NVHTA-16H	N/A	2338	1181	1631	12-10d NAILS x 1½"	8-10d NAILS x 1½"	NU-VUE	04-0510.03	12/23/2009	1 PLY TRUSS
1C	NVHTA-20H	N/A	2598	1312	1812	14-10d NAILS x 1½"	8-10d NAILS x 1½"	NU-VUE	04-0510.03	12/23/2009	1 PLY TRUSS
1D	NVHTA-24H	N/A	2858	1444	1994	18-10d NAILS x 1½"	8-10d NAILS x 1½"	NU-VUE	04-0510.03	12/23/2009	1 PLY TRUSS
2A	NVSTA-12H	N/A	1545	823	1239	7-10d NAILS x 1½"	8-10d NAILS x 1½"	NU-VUE	04-0510.03	12/23/2009	1 PLY TRUSS
2B	NVSTA-16H	N/A	1664	887	1335	8-10d NAILS x 1½"	8-10d NAILS x 1½"	NU-VUE	04-0510.03	12/23/2009	1 PLY TRUSS
2C	NVSTA-20H	N/A	1783	950	1430	9-10d NAILS x 1½"	8-10d NAILS x 1½"	NU-VUE	04-0510.03	12/23/2009	1 PLY TRUSS
2D	NVSTA-24H	N/A	1783	950	1430	9-10d NAILS x 1½"	8-10d NAILS x 1½"	NU-VUE	04-0510.03	12/23/2009	1 PLY TRUSS
3A	NV358-12	N/A	2525	2206	2068	10-10d NAILS x 3"	8-10d NAILS x 3"	NU-VUE	04-0510.03	12/23/2009	2 PLY TRUSS
3B	NV358-16	N/A	2808	2452	2298	12-10d NAILS x 3"	8-10d NAILS x 3"	NU-VUE	04-0510.03	12/23/2009	2 PLY TRUSS
3C	NV358-20	N/A	3088	2697	2528	14-10d NAILS x 3"	8-10d NAILS x 3"	NU-VUE	04-0510.03	12/23/2009	2 PLY TRUSS
3D	NV358-24	N/A	3367	2942	2758	18-10d NAILS x 3"	8-10d NAILS x 3"	NU-VUE	04-0510.03	12/23/2009	2 PLY TRUSS
4A	NV458-12	N/A	2525	3131	2338	10-10d NAILS x 3"	10-10d NAILS x 3"	NU-VUE	04-0510.03	12/23/2009	3 PLY TRUSS
4B	NV458-16	N/A	2808	3479	2597	12-10d NAILS x 3"	10-10d NAILS x 3"	NU-VUE	04-0510.03	12/23/2009	3 PLY TRUSS
4C	NV458-20	N/A	3088	3827	2857	14-10d NAILS x 3"	10-10d NAILS x 3"	NU-VUE	04-0510.03	12/23/2009	3 PLY TRUSS
4D	NV458-24	N/A	3367	4175	3117	18-10d NAILS x 3"	10-10d NAILS x 3"	NU-VUE	04-0510.03	12/23/2009	3 PLY TRUSS
5A	NVTA-16	N/A	1117	783	735	8-10d NAILS x 1½"	EMBD. 4" CONC. OR MASONRY BM.	NU-VUE	04-0510.03	12/23/2009	EMBD. CONC. TO WOOD
5B	NVTA-24	N/A	1117	783	735	8-10d NAILS x 1½"	EMBD. 4" CONC. OR MASONRY BM.	NU-VUE	04-0510.03	12/23/2009	EMBD. CONC. TO WOOD
5C	NVTA-36	N/A	1398	783	735	10-10d NAILS x 1½"	EMBD. 4" CONC. OR MASONRY BM.	NU-VUE	04-0510.03	12/23/2009	EMBD. CONC. TO WOOD
5D	NVTA-48	N/A	1598	783	735	10-10d NAILS x 1½"	EMBD. 4" CONC. OR MASONRY BM.	NU-VUE	04-0510.03	12/23/2009	EMBD. CONC. TO WOOD
6A	NVRT-16	N/A	907	N/A	N/A	6-16d NAILS	6-16d NAILS	NU-VUE	04-0510.03	12/23/2009	WOOD TO WOOD; FLAT OR TWISTED
6B	NVRT-20	N/A	1059	N/A	N/A	7-16d NAILS	7-16d NAILS	NU-VUE	04-0510.03	12/23/2009	WOOD TO WOOD; FLAT OR TWISTED
6C	NVRT-24	N/A	1125	N/A	N/A	8-16d NAILS	8-16d NAILS	NU-VUE	04-0510.03	12/23/2009	WOOD TO WOOD; FLAT OR TWISTED
6D	NVRT-36	N/A	1125	N/A	N/A	9-16d NAILS	9-16d NAILS	NU-VUE	04-0510.03	12/23/2009	WOOD TO WOOD; FLAT OR TWISTED
7A	NVRT-16	N/A	704	N/A	N/A	6-16d NAILS	4-¼" TAPCONS W/ 1¼" EMBD.	NU-VUE	04-0510.03	12/23/2009	WOOD TO CONCRETE; FLAT OR TWISTED
7B	NVRT-20	N/A	880	N/A	N/A	7-16d NAILS	5-¼" TAPCONS W/ 1¼" EMBD.	NU-VUE	04-0510.03	12/23/2009	WOOD TO CONCRETE; FLAT OR TWISTED
7C	NVRT-24	N/A	880	N/A	N/A	7-16d NAILS	5-¼" TAPCONS W/ 1¼" EMBD.	NU-VUE	04-0510.03	12/23/2009	WOOD TO CONCRETE; FLAT OR TWISTED
7D	NVRT-36	N/A	880	N/A	N/A	7-16d NAILS	5-¼" TAPCONS W/ 1¼" EMBD.	NU-VUE	04-0510.03	12/23/2009	WOOD TO CONCRETE; FLAT OR TWISTED
8	NVJH26	2233	1213	N/A	N/A	10-16d NAILS	20-16d NAILS	NU-VUE	04-1202.01	8/21/2008	JOIST HANGER W/ DBL 2x LEDGER
9A	NVJH24	726	493	N/A	N/A	4-10d NAILS x 1½"	8-10d NAILS x 1½"	NU-VUE	03-0730.03	1/1/2009	JOIST HANGER W/ DBL 2x LEDGER
9B	NVJH26	1210	818	N/A	N/A	6-10d NAILS x 1½"	10-10d NAILS x 1½"	NU-VUE	03-0730.03	1/1/2009	JOIST HANGER W/ DBL 2x LEDGER
9C	NVJH28	1694	954	N/A	N/A	7-10d NAILS x 1½"	14-10d NAILS x 1½"	NU-VUE	03-0730.03	1/1/2009	JOIST HANGER W/ DBL 2x LEDGER
9D	EHUH26-2	2875	1690	N/A	N/A	11-10d NAILS x 1½"	22-16d NAILS x 2"	USP	03-0611.05	8/21/2008	DOUBLE JOIST HANGER W/ DBL 2x LEDGER
9E	EHUH28-2	4185	2155	N/A	N/A	14-10d NAILS x 1½"	32-16d NAILS x 2"	USP	03-0611.05	8/21/2008	DOUBLE JOIST HANGER W/ DBL 2x LEDGER
9F	EHUH210-2	5190	1645	N/A	N/A	18-10d NAILS x 1½"	40-16d NAILS x 2"	USP	03-0611.05	8/21/2008	DOUBLE JOIST HANGER W/ DBL 2x LEDGER
10A	NVTP4	N/A	818	N/A	N/A	8-10d NAILS x 1½"	N/A	NU-VUE	03-0730.03	1/1/2009	WOOD PLATE TO VERT. STUD
10B	NVTP4	N/A	1605	N/A	N/A	12-10d NAILS x 1½"	N/A	NU-VUE	03-0730.03	1/1/2009	WOOD PLATE TO VERT. STUD
10C	NVTP6	N/A	1605	N/A	N/A	12-10d NAILS x 1½"	N/A	NU-VUE	03-0730.03	1/1/2009	WOOD PLATE TO VERT. STUD
10D	NVTP8	N/A	1605	N/A	N/A	12-10d NAILS x 1½"	N/A	NU-VUE	03-0730.03	1/1/2009	WOOD PLATE TO VERT. STUD
11A	NVHC 4.3	N/A	687	407	308	9-10d NAILS x 1½"	9-10d NAILS x 1½"	NU-VUE	03-0730.03	1/1/2009	HURRICANE CLIP FOR SINGLE 2x
11B	NVHC 4.3/2	N/A	917	547	432	10-10d NAILS x 1½"	10-10d NAILS x 1½"	NU-VUE	03-0730.03	1/1/2009	HURRICANE CLIP FOR DOUBLE 2x
12A	NVHCR	N/A	525	253	333	6-10d NAILS x 1½"	6-10d NAILS x 1½"	NU-VUE	04-0510.03	12/23/2009	HURR. CLIP.2 REQ'D (L.MR.) FOR FBC UPLIFT
12B	NVHCL	N/A	525	253	333	6-10d NAILS x 1½"	6-10d NAILS x 1½"	NU-VUE	04-0510.03	12/23/2009	HURR. CLIP.2 REQ'D (L.MR.) FOR FBC UPLIFT
13	NVSNP3	578	594	594	594	6-8d NAILS x 1½"	6-8d NAILS x 1½"	NU-VUE	04-0510.03	12/23/2009	ADJUSTABLE CLIP ANGLE
14	JA3G	265	N/A	N/A	N/A	4-10d NAILS x 1½"	4-10d NAILS	USP	01-0417.11	7/9/2008	FRAMING ANGLE
14B	JA5G	550	735	N/A	N/A	6-10d NAILS x 1½"	6-10d NAILS	USP	01-0417.11	7/9/2008	FRAMING ANGLE
15	LUGT2	N/A	1850	1220	460	18-10d NAILS x 1½"	5¼" TAPCONS W/ 1½" EMBD.	USP	03-0219.02	8/20/2007	CONC/MASONRY BM. TO TRUSS/RAFTER CONN.
16A	C44	N/A	820	860	860	8-16d NAILS	8-16d NAILS	USP	03-508.05	5/2/2007	4x4 WD. POST TO WD. SILL OR CAP PLATE
16B	C46	N/A	745	950	950	10-16d NAILS	10-16d NAILS	USP	03-508.05	5/2/2007	4x6 WD. POST TO WD. SILL OR CAP PLATE
16C	C66	N/A	870	1690	1690	10-16d NAILS	10-16d NAILS	USP	03-508.05	5/2/2007	6x6 WD. POST TO WD. SILL OR CAP PLATE
16D	C88	N/A	1125	2390	3070	18-16d NAILS	18-16d NAILS	USP	03-508.05	5/2/2007	8x8 WD. POST TO WD. SILL OR CAP PLATE
16E	PAU44	6885	1825	N/A	N/A	12-16d NAILS OR 2¼" DIA. BOLTS	¾" DIA. ANCHOR BOLT	USP	03-508.05	5/2/2007	4x4 WD. POST TO CONCRETE.
16F	PAU66	14300	2425	N/A	N/A	12-16d NAILS OR 2¼" DIA. BOLTS	¾" DIA. ANCHOR BOLT	USP	03-508.05	5/2/2007	6x6 WD. POST TO CONCRETE.
17A	HJH 26 L/R	1920	1890	N/A	N/A	12-16d NAILS x 1½"	7-16d HIP & 8-16d JACK	USP	05-0204.01	12/2/2008	SKEWED PLATE CONNECTION
17B	HJH 28 L/R	2560	2185	N/A	N/A	18-16d NAILS x 1½"	7-16d HIP & 8-16d JACK	USP	05-0204.01	12/2/2008	SKEWED PLATE CONNECTION

* SEE DETAIL FOR ANCHOR (15) INSTALLATION

** NOTE THAT ANCHOR (14) IS NOT INTENDED TO USE AS A PRIMARY UPLIFT ANCHOR; RATHER IT IS USED TO CONNECT DIAPHRAGM MEMBER FRAMING. WHEN 4 NAILS CAN NOT BE ACCOMODATED, PROVIDE A MINIMUM OF 2 NAILS TO EACH FRAMING MEMBER.

→ INDICATES ANCHORS USED

TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NEITHER TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

10/19/05

T.A. KHAN
FL P.E. #60994

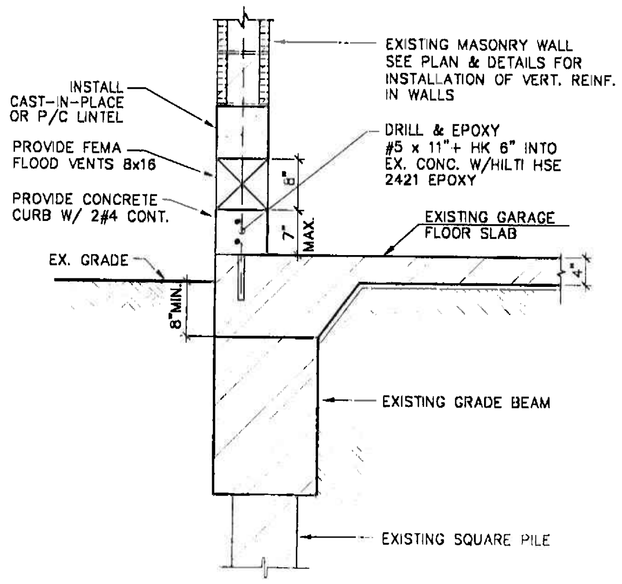
Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301 Comm. No. 05-018.00
FAX.(305)-661-3982 CA# EB0000289

SHEET TITLE
DRAWN T.R., J.P., R.A.
DATE OCTOBER 19, 2005
REVISIONS DATE

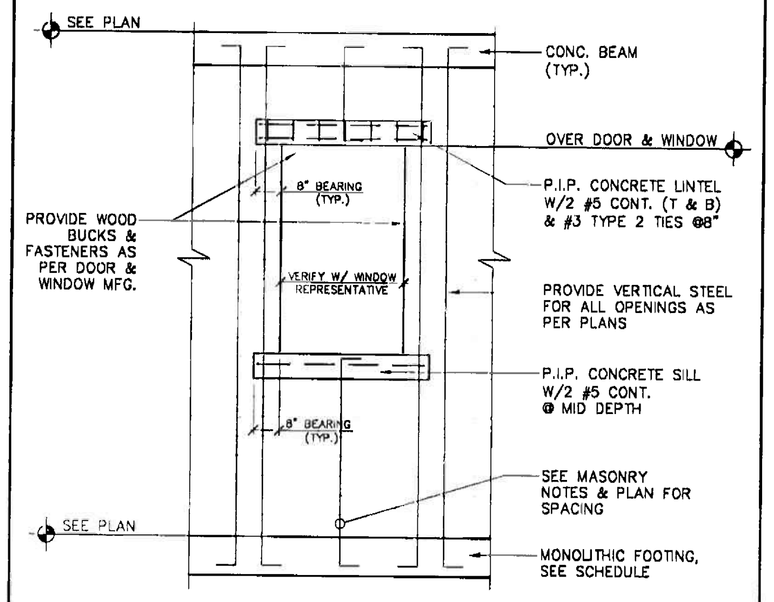
3DESIGN INC
ANTHONY LEON
AR0026252
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T 305.531.5208 F 305.531.4515

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

S-3.2

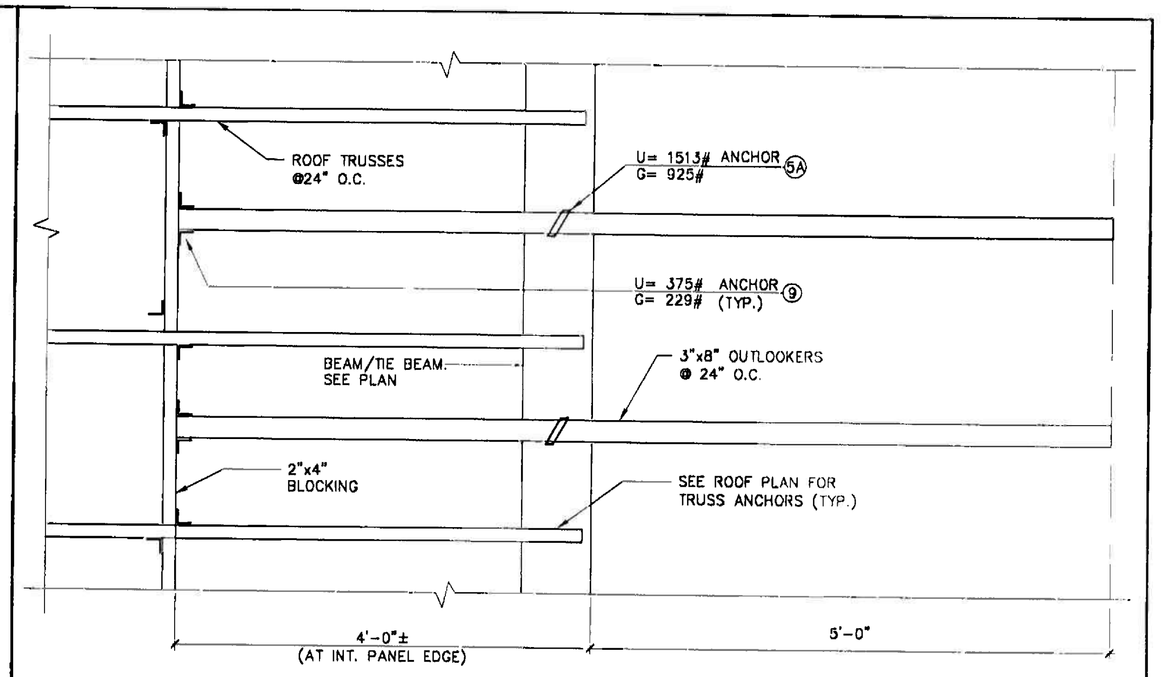


TYP. FLOOD VENT DETAIL @ GARAGE (1 / S-3.3)
N.T.S.

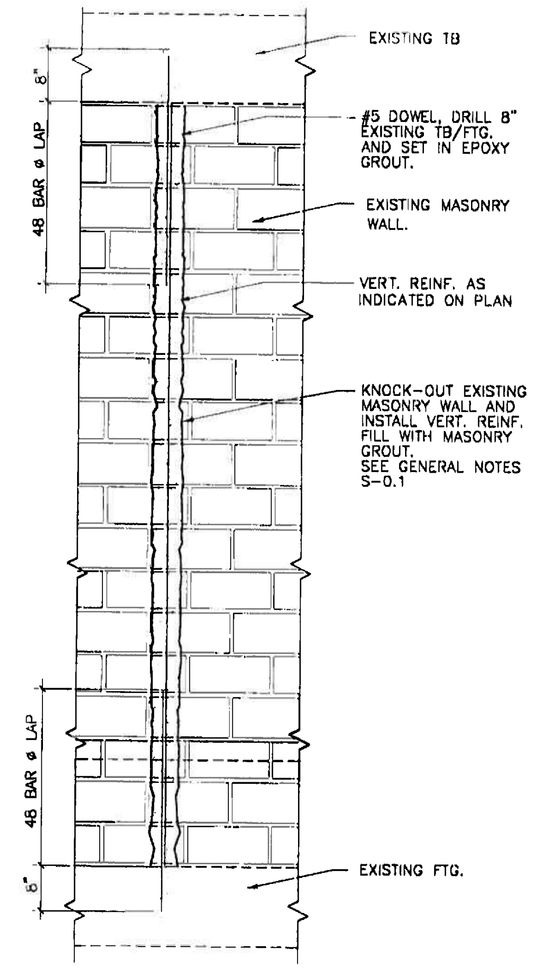


DOOR/WINDOW OPENING REINF. DETAIL (4 / S-3.3)
N.T.S.

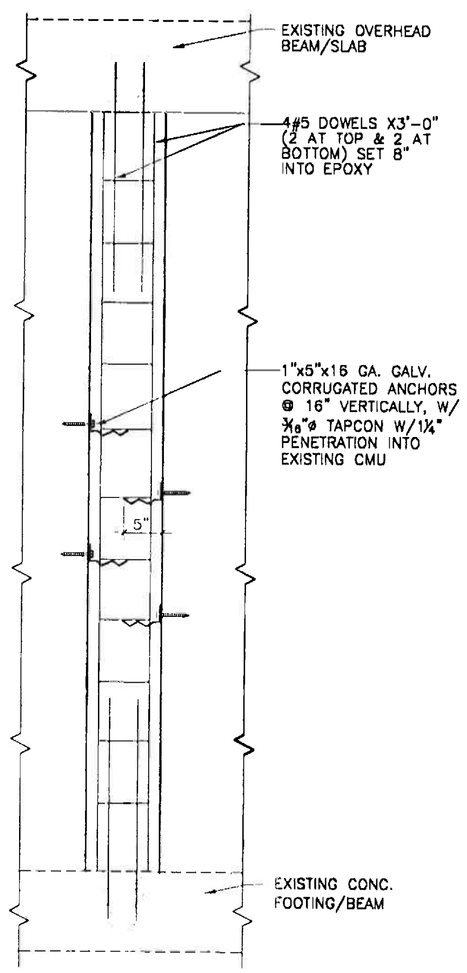
(NOT USED)



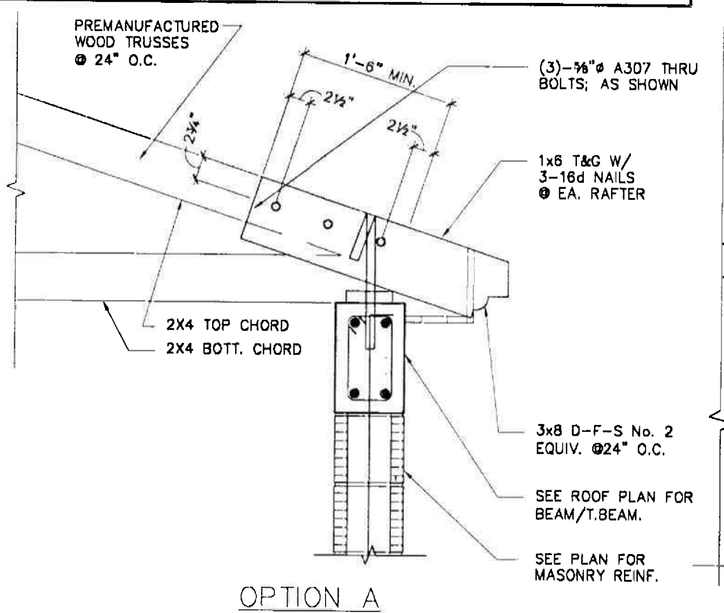
OPTION B



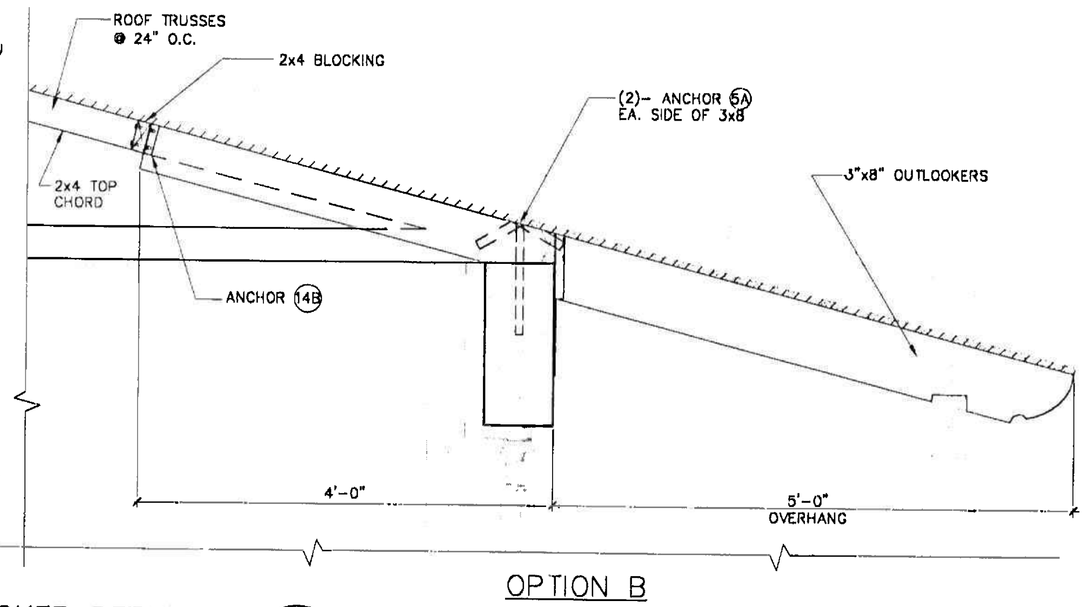
NEW FILLED CELL DETAIL (2 / S-3.3)
SCALE: N.T.S.



NEW COLUMN/TIE COLUMN INST. DETAIL @ EXIST. LOCATIONS (2A / S-3.3)
SCALE: N.T.S.

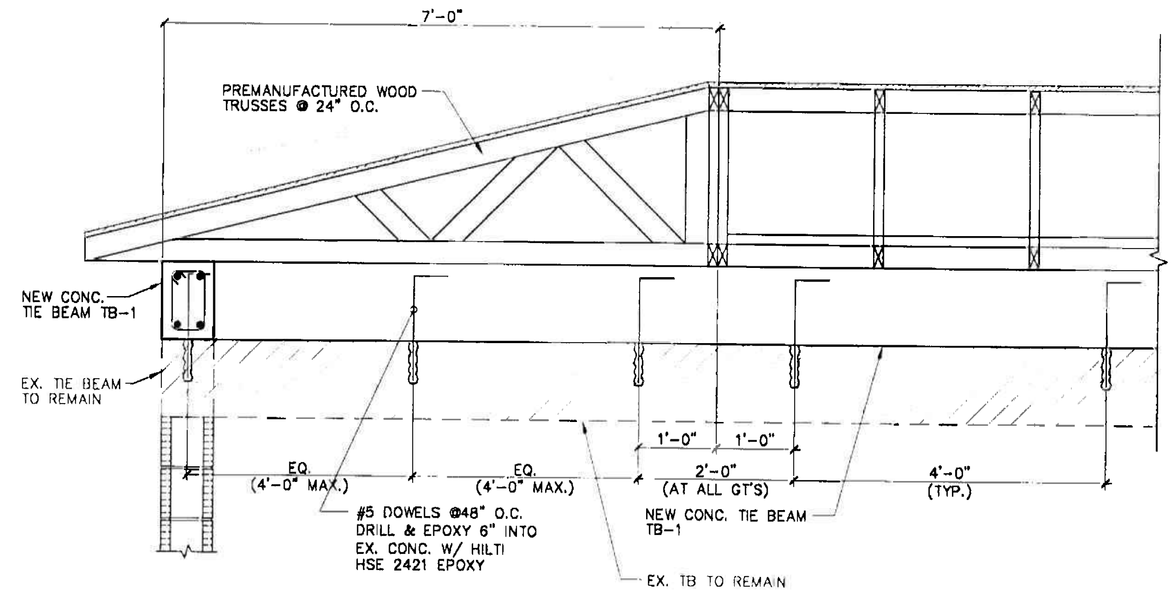


OPTION A

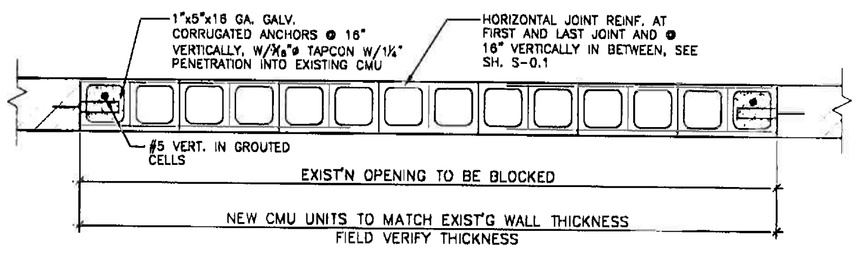


OPTION B

OUTLOOKER DETAIL (5 / S-3.3)
SCALE: 1"=1'-0"



NEW BEAM TO EXISTING BEAM CONNECTION (6 / S-3.3)
N.T.S.



TYP. WALL INFILL DETAIL (3 / S-3.3)
N.T.S.

SHEET TITLE:
DRAWN: T.A./Z.R.A.
DATE: OCTOBER 19, 2005
REVISIONS: DATE:

3DESIGN INC
ANTHONY LEON ARCHITECTS
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
3500 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

1/9/06

2/3/06

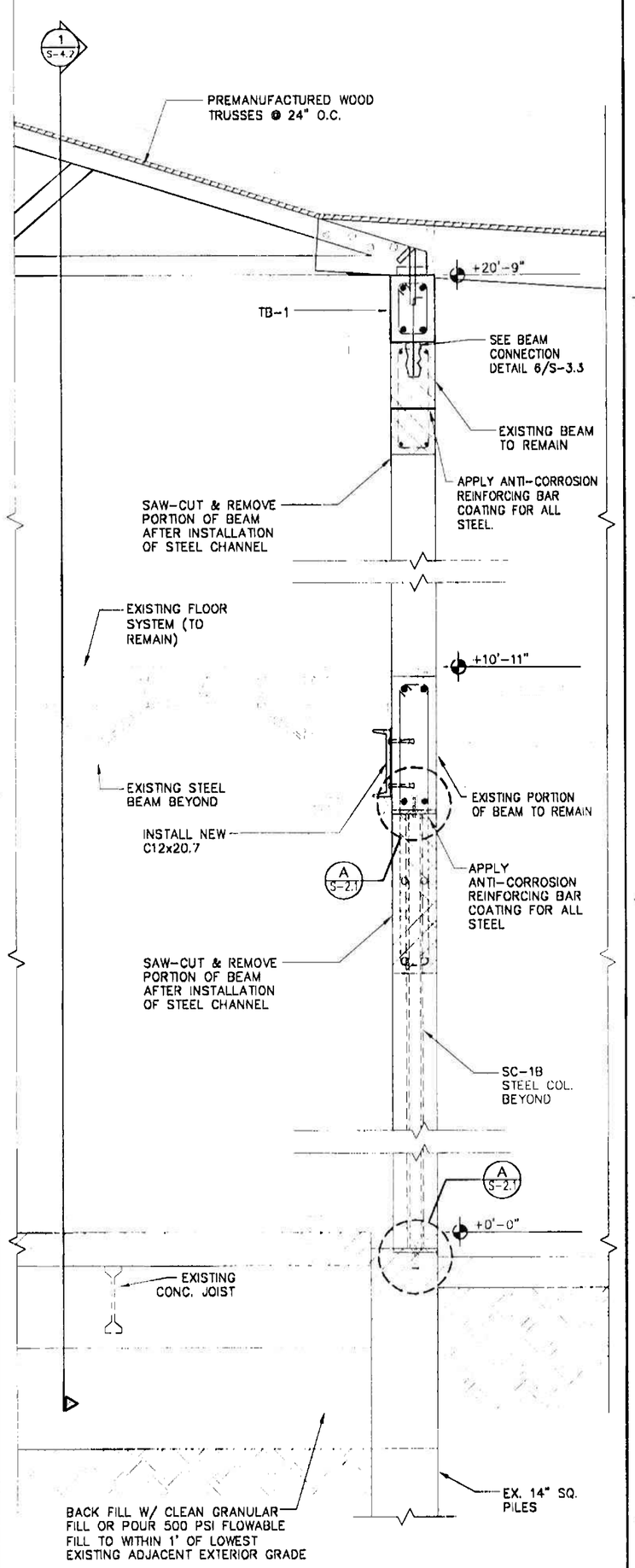
TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NOT/NOR TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

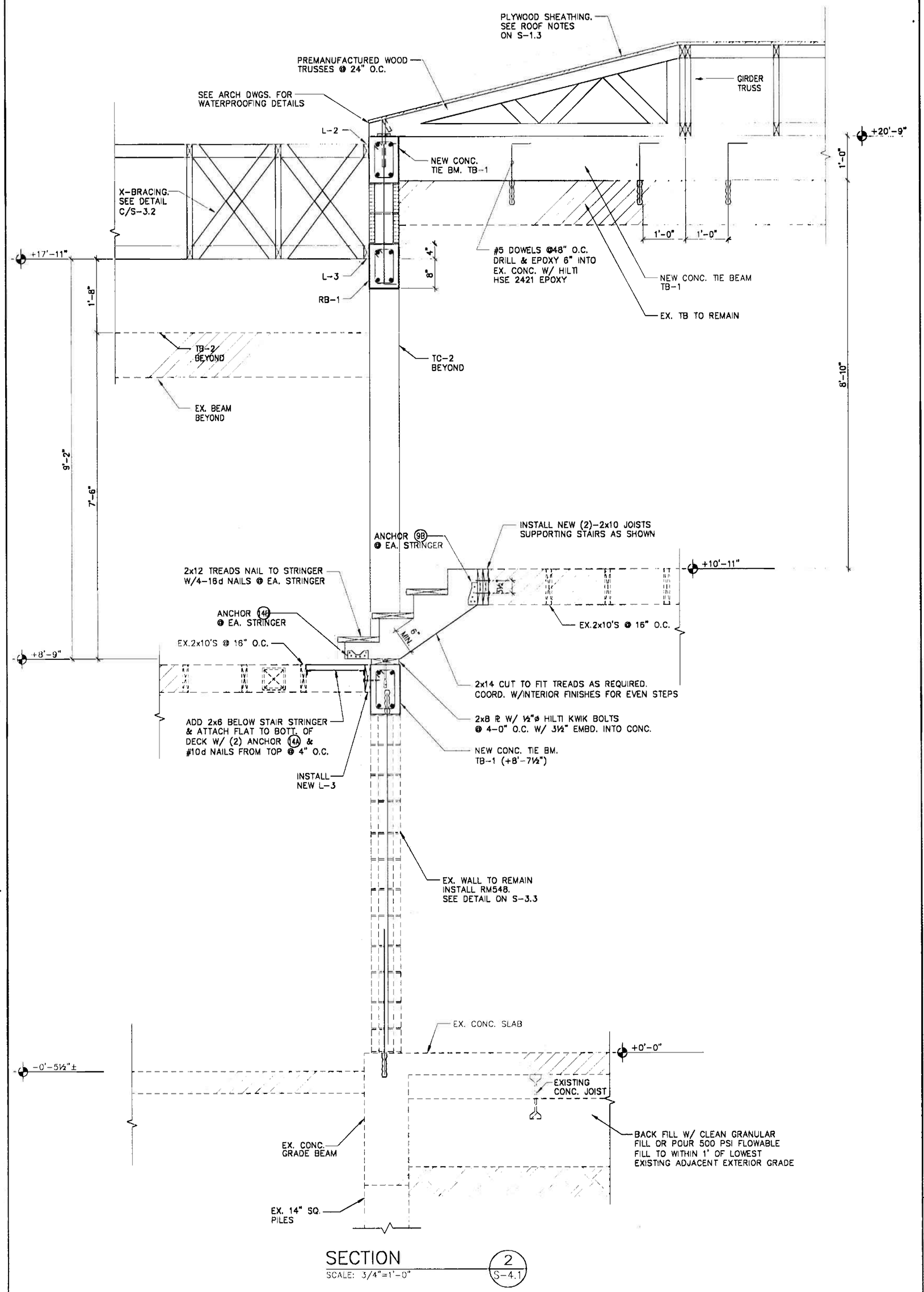
10/18/05
T.A. KHAN
FL P.E. #60994

Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301 Comm. No. 05-618.00
FAX.(305)-661-3982 CA# EB00002679

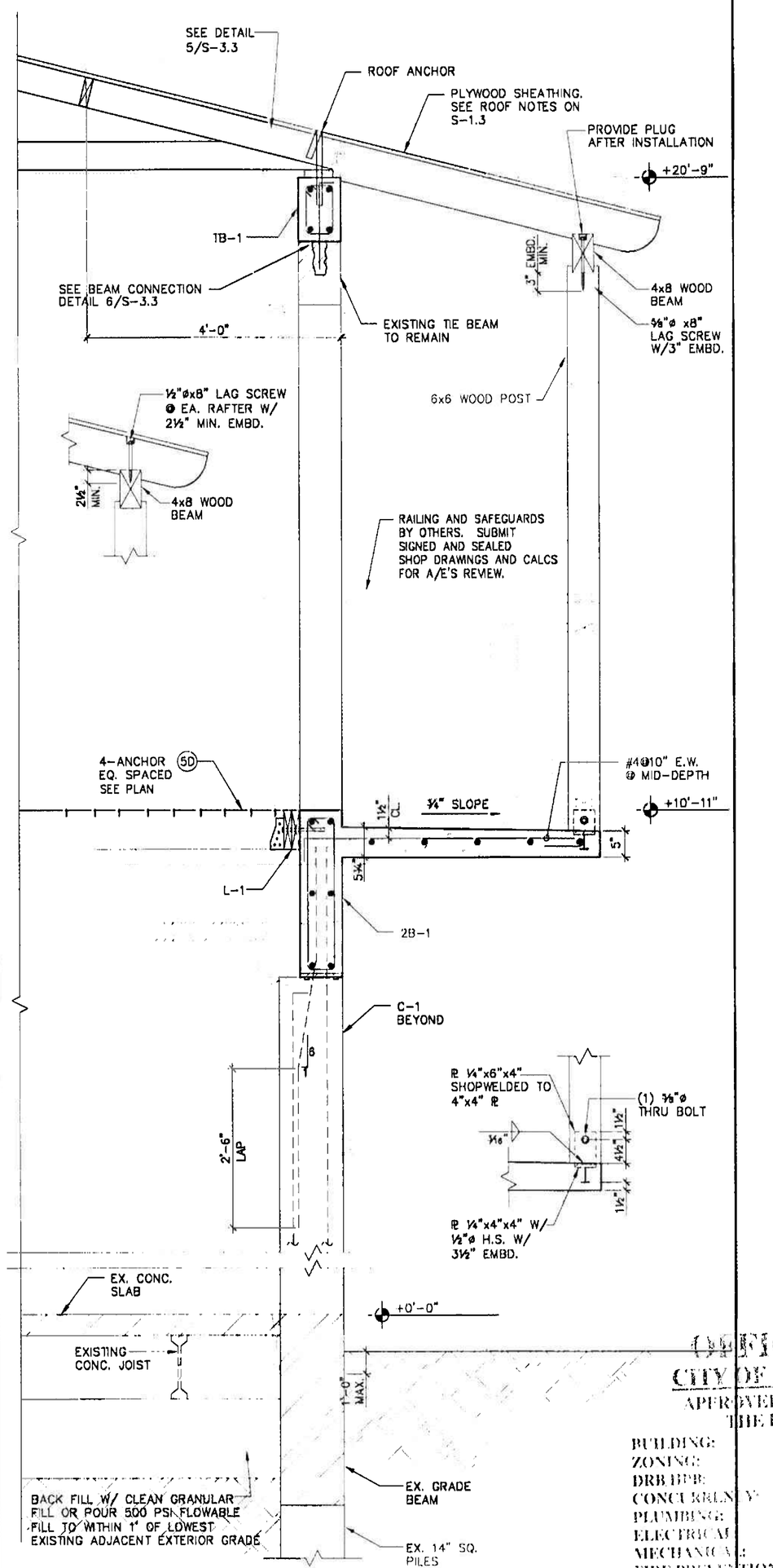
S-3.3



SECTION
SCALE: 3/4"=1'-0"
1 S-4.1



SECTION
SCALE: 3/4"=1'-0"
2 S-4.1



SECTION
SCALE: 3/4"=1'-0"
3 S-4.1

SHEET TITLE:	
DRAWN:	T.R., I.P., R.A.
DATE	OCTOBER 19, 2005
REVISIONS	DATE

3DESIGN INC
ANTHONY LEON
ARCHITECTURE
1234 WASHINGTON AVE. SUITE #207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5300 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

OFFICE COPY
CITY OF MIAMI BEACH
APPROVED FOR PERMIT
THE FOLLOWING

BUILDING:	
ZONING:	
DRB BPPB:	
CONCURRENCY:	
PLUMBING:	
ELECTRICAL:	
MECHANICAL:	
FIRE PREVENTION:	
ENGINEERING:	
PUBLIC WORKS:	
STRUCTURAL:	
ACCESSIBILITY:	
LEVATOR:	

As per Florida Building Code Section 104.5.3
"REVIEWED FOR CODE COMPLIANCE"

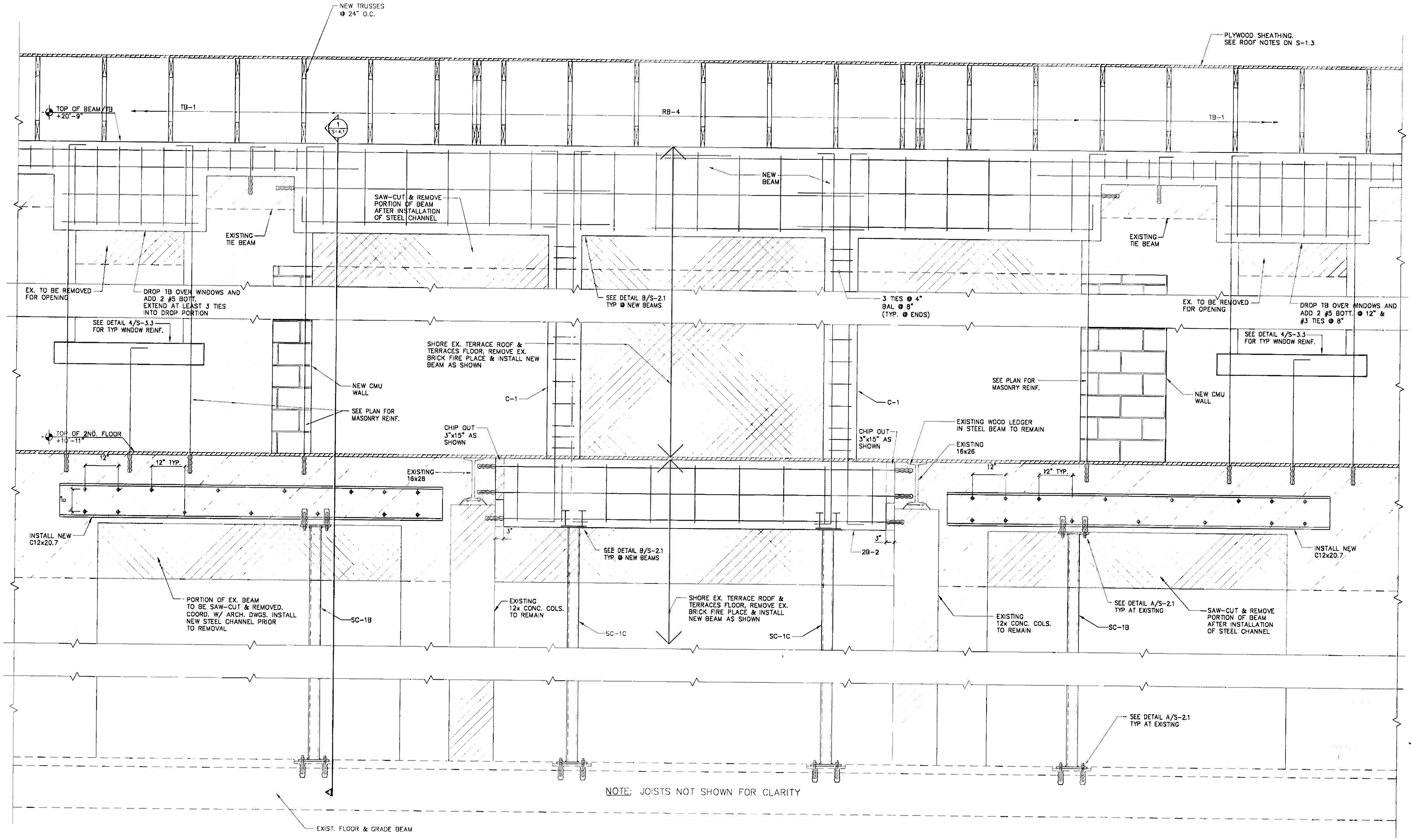
TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NEITHER TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF SIDDIQ KHAN & ASSOCIATES, INC.

10/19/05
T.A. KHAN
FL P.E. #60994

Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301
FAX.(305)-661-3962
Comm. No. 05-618.00
CA# EB0002879

S-4.1



SECTION

SCALE: 3/4"=1'-0"

1 / S-4.2

SHEET TITLE	
DRAWN	FR./P./R.A.
DATE	OCTOBER 19, 2005
REVISIONS	DATE

3DESIGN INC
ANTHONY LEON
AR0015571
ARCHITECTURE
1234 WASHINGTON AVE. SUITE 207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5900 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

10/18/05

10/26/05

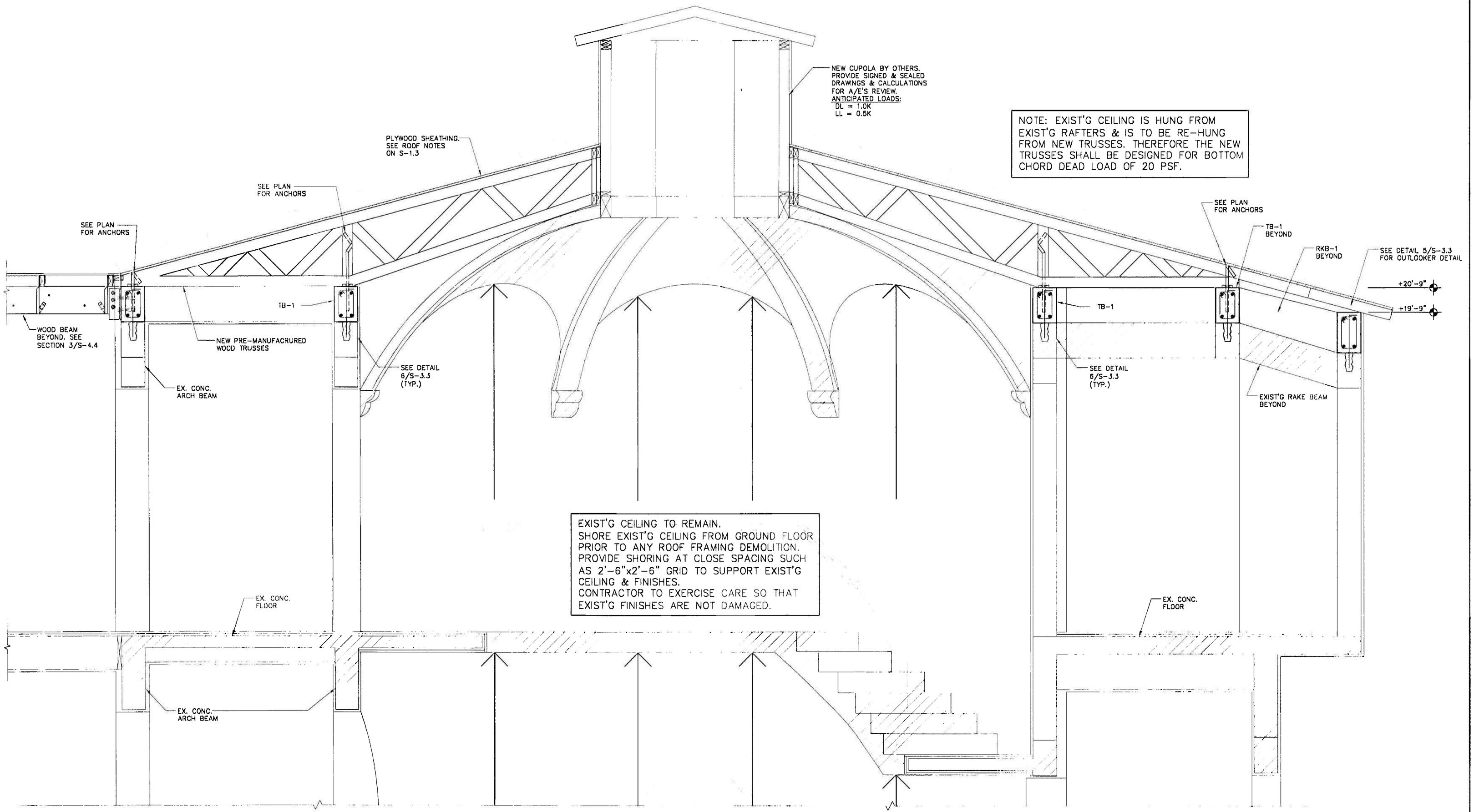
TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NEITHER TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

T.A. KHAN
FL P.E. #60994

SKA Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301
FAX.(305)-661-3982
Comm. No. 05-618.00
CA# EB000002879

S-4.2



SECTION
SCALE: 3/4"=1'-0"

1
S-4.3

SHEET TITLE:
DRAWN: T.A.; J.P.; R.A.
DATE: OCTOBER 19, 2005
REVISIONS: DATE

3DESIGN INC
ANTHONY LEON
AA0026252
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T:305.531.5206 F:305.531.4515

THE GAINOR RESIDENCE
5500 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

6/2/06

2/3/06

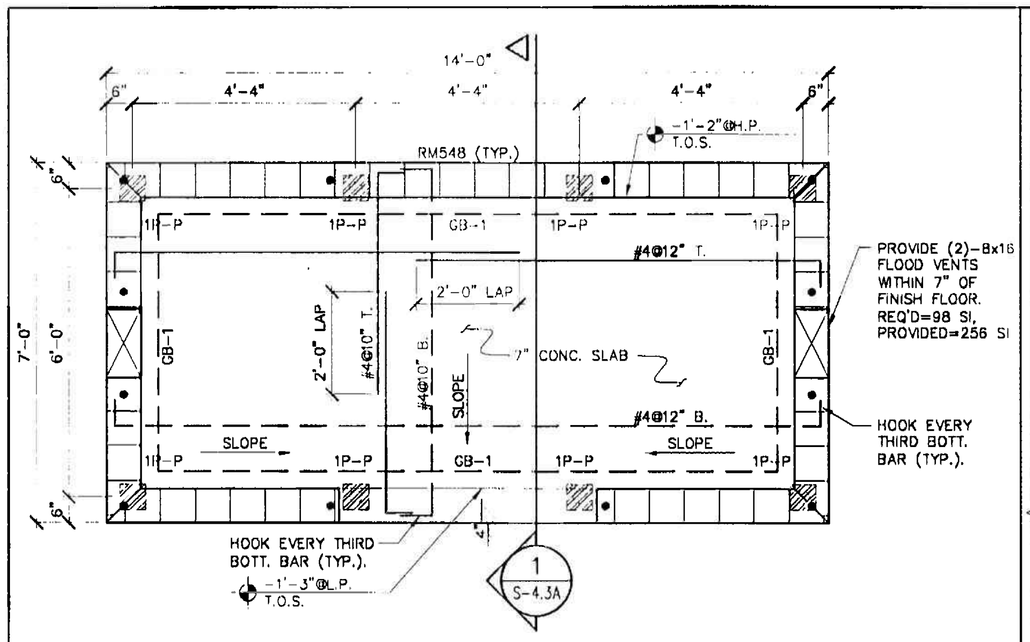
TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NEITHER TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

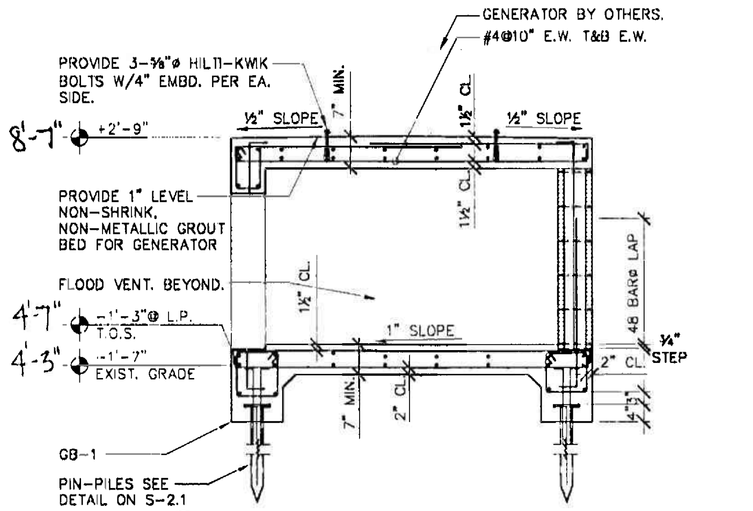
10/11/05
T.A. KHAN
FL P.E. #60994

SKa Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301 Comm. No. 05-618.00
FAX.(305)-661-3962 CA# EB000026?9

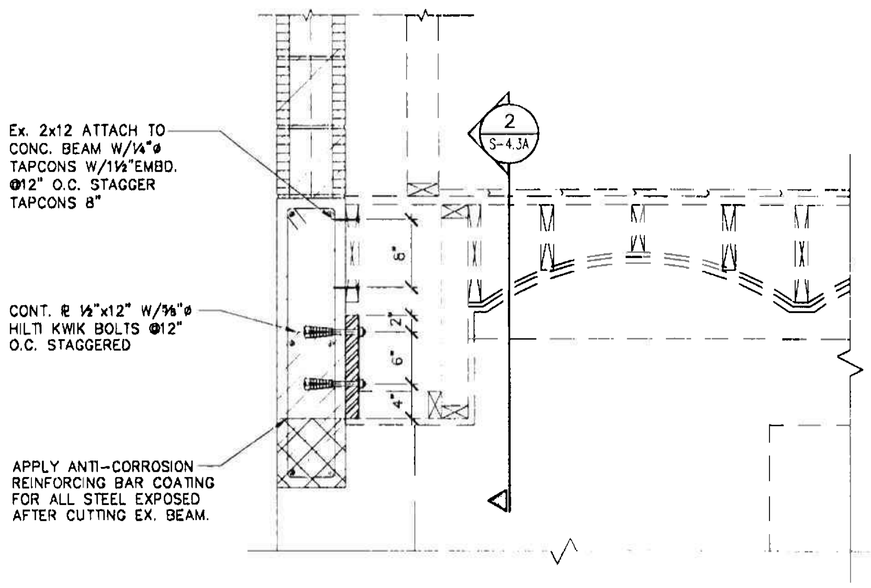
S-4.3



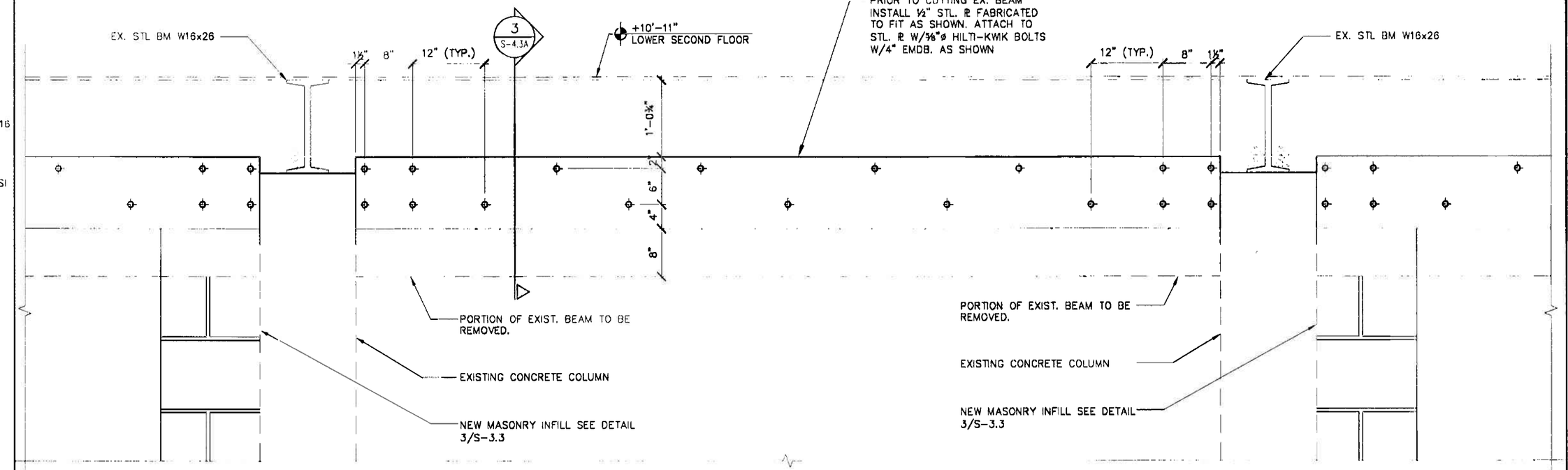
GENERATOR PARTIAL PLAN
SCALE: 1/2"=1'-0"



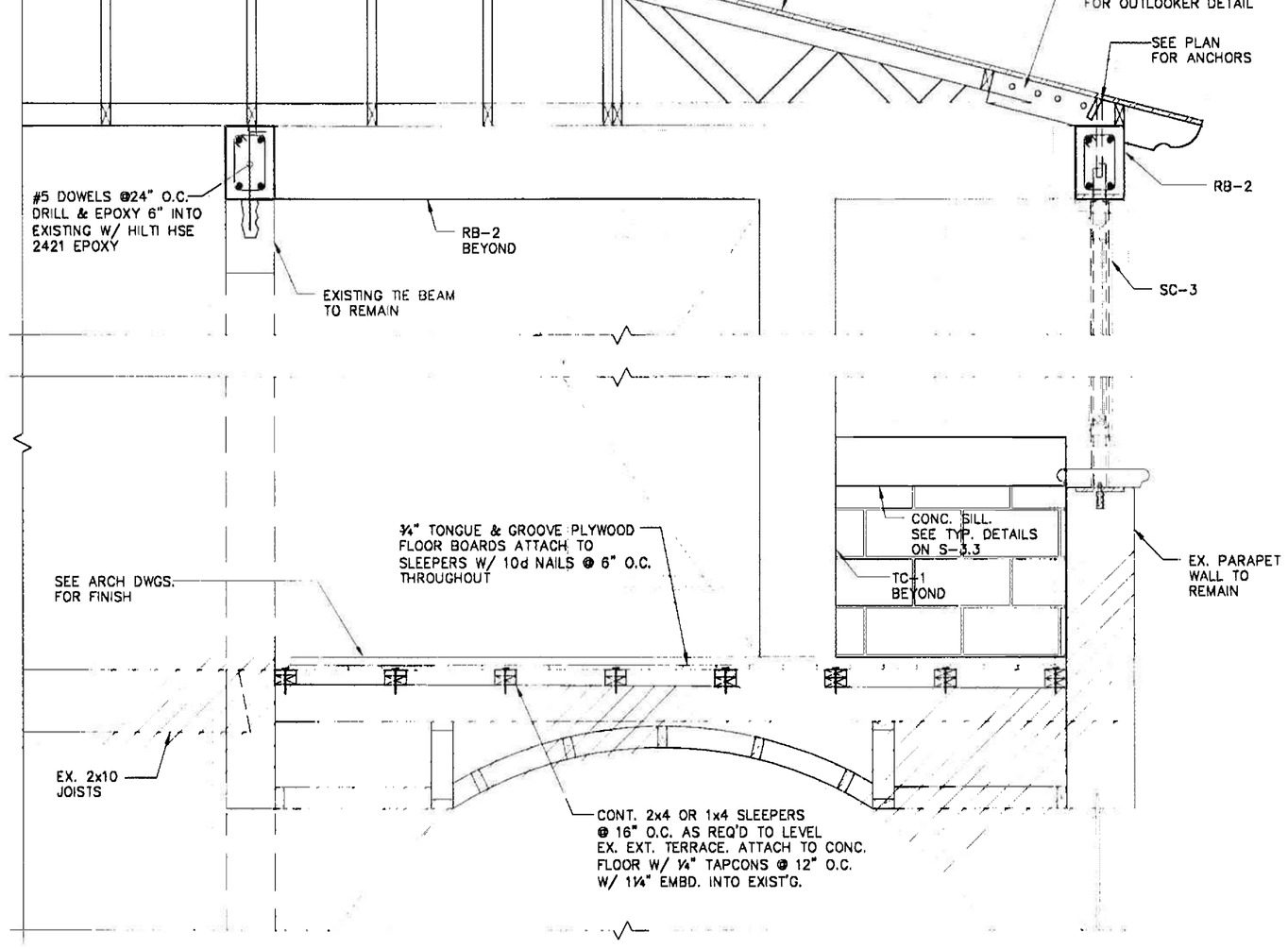
FUTURE
GENERATOR STRUCTURE SECTION (1 / S-4.3A)
SCALE: 1/2"=1'-0"
SEPARATE PERMIT



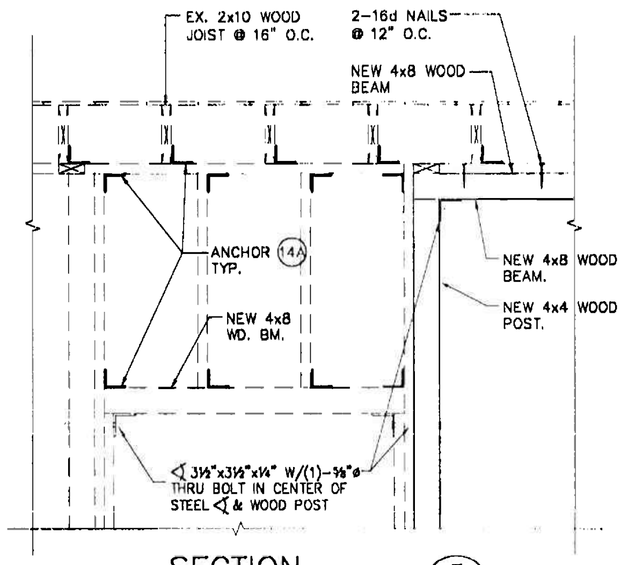
SECTION (3 / S-4.3A)
SCALE: 3/4"=1'-0"



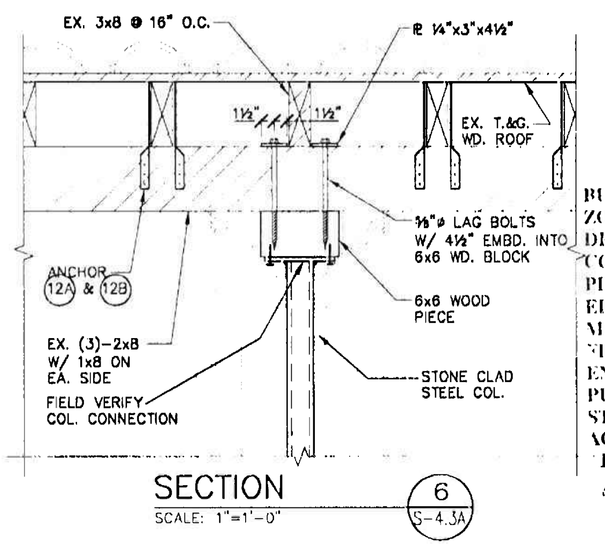
SECTION (2 / S-4.3A)
SCALE: 3/4"=1'-0"



SECTION (4 / S-4.3A)
SCALE: 3/4"=1'-0"



SECTION (5 / S-4.3A)
SCALE: 3/4"=1'-0"



SECTION (6 / S-4.3A)
SCALE: 1"=1'-0"

SHEET TITLE	
DRAWN	T.K.; J.P.; R.A.
DATE:	OCTOBER 19, 2005
REVISIONS	DATE

2DESIGN INC
ANTHONY LEON
ARCHITECTURE
AA0026252
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T:305.531.5208 F:305.531.4515

THE GAINOR RESIDENCE
3800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

APPROVED
CITY OF MIAMI BEACH
BUILDING:
ZONING:
DRB/HPB:
CONCURRENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
ENGINEERING:
PUBLIC WORKS:
STRUCTURAL:
ACCESSIBILITY:
ELEVATOR:
As per Florida Building Code Section 104.5
REVIEWED FOR CODE COMPLIANCE

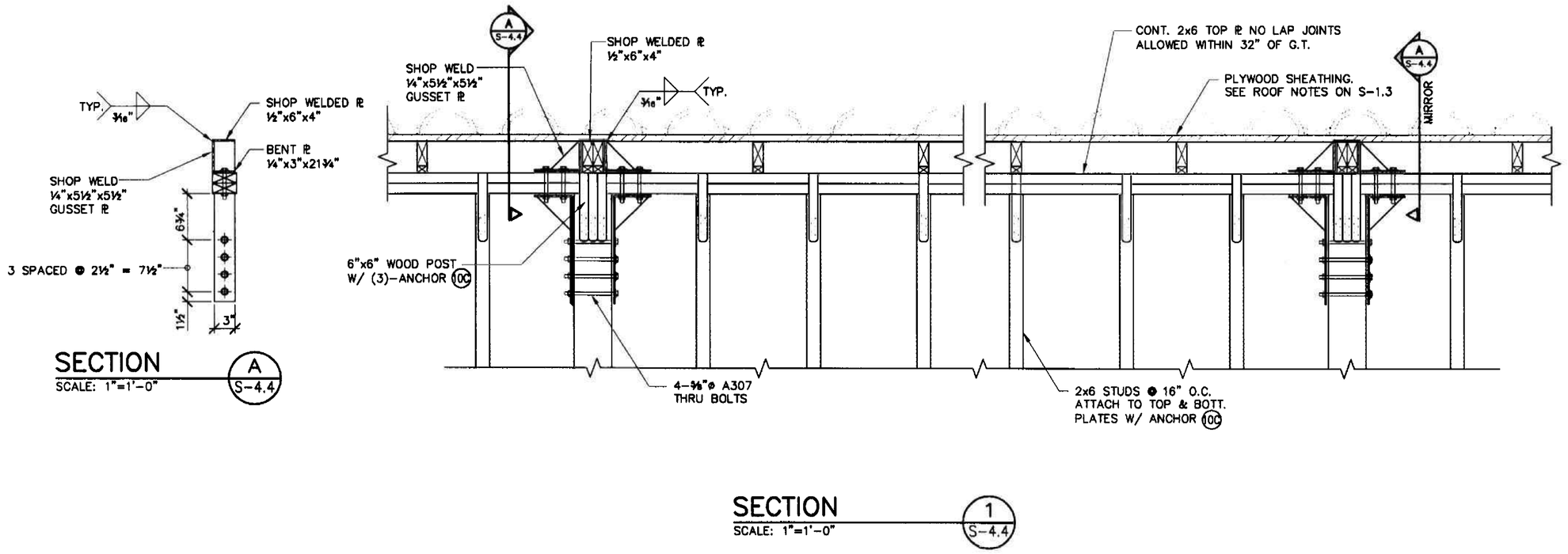
TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NOTHING TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

10/14/05
T.A. KHAN
FL P.E. #60994

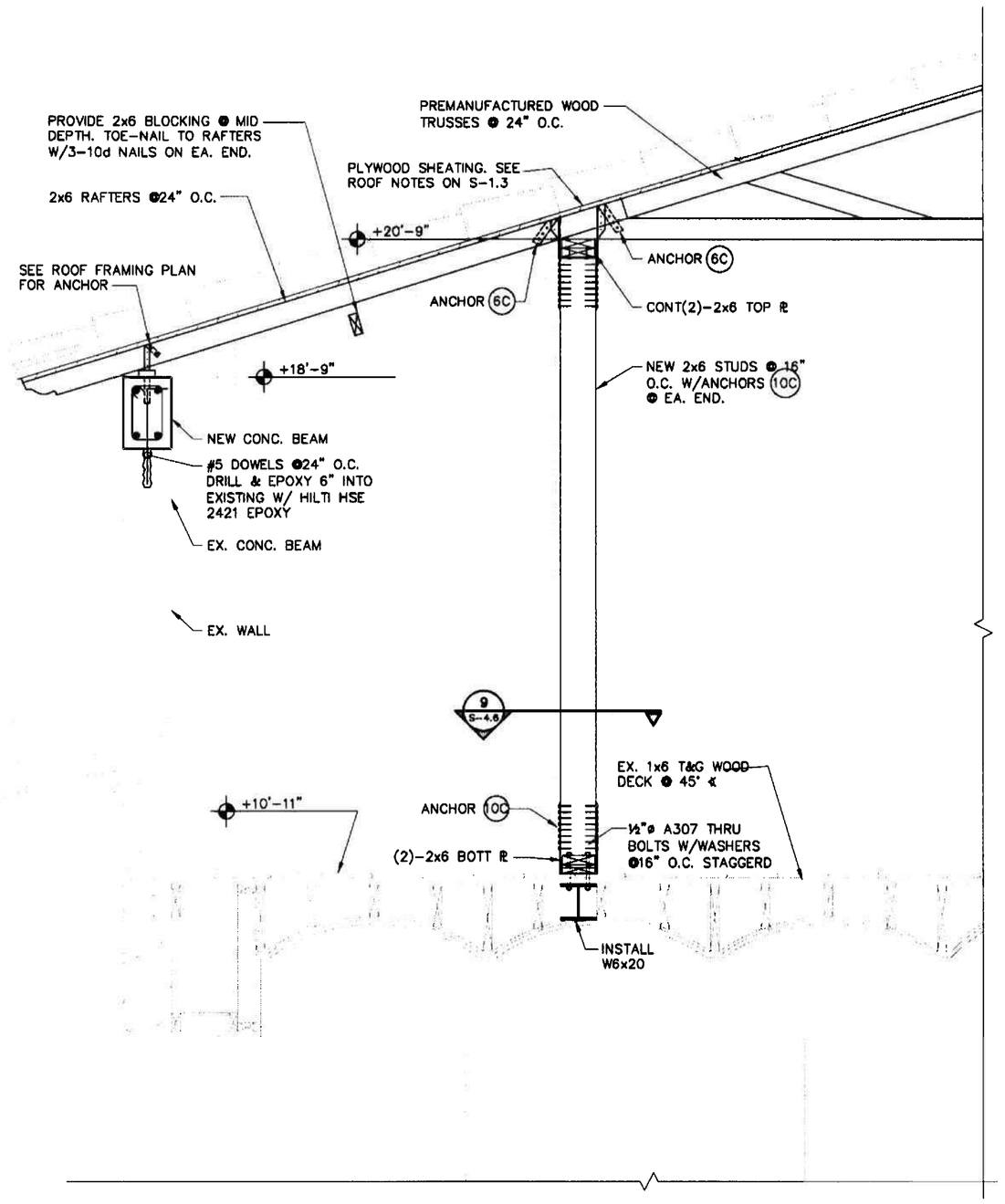
SKA Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301 Comm. No. 05-618.00
FAX.(305)-661-3982 CA# EB000028?9

S-4.3A

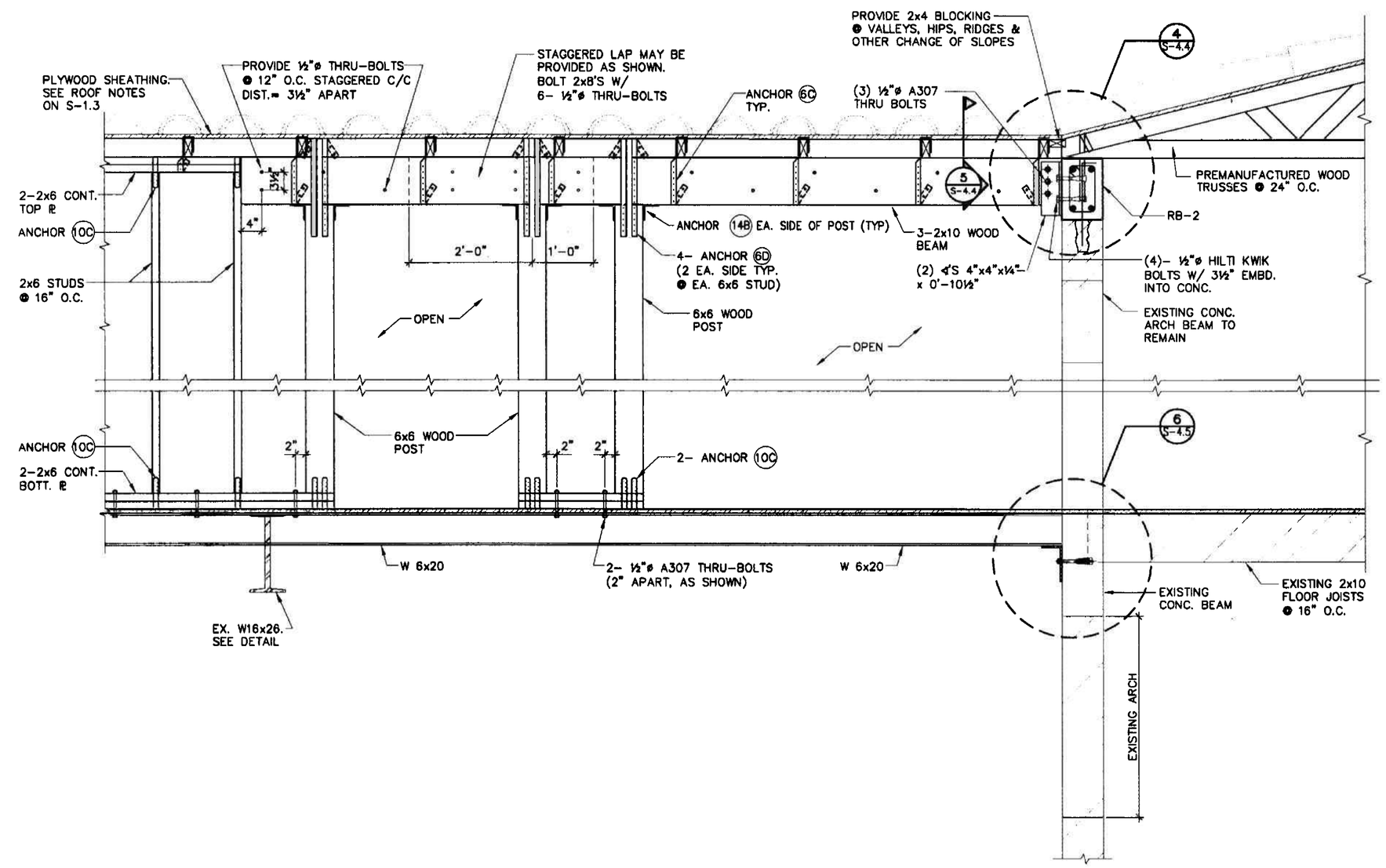


SECTION
SCALE: 1"=1'-0"
A S-4.4

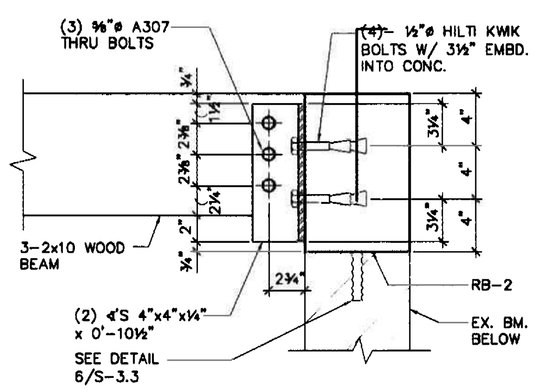
SECTION
SCALE: 1"=1'-0"
1 S-4.4



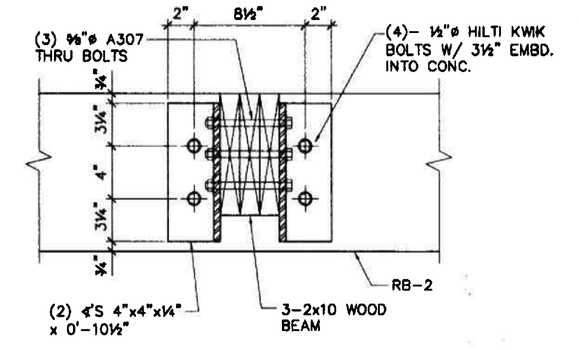
SECTION
SCALE: 3/4"=1'-0"
2 S-4.4



SECTION
SCALE: 3/4"=1'-0"
3 S-4.4



SECTION
SCALE: 1 1/2"=1'-0"
4 S-4.4



SECTION
SCALE: 1 1/2"=1'-0"
5 S-4.4

TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NEITHER TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

10/19/05
T.A. KHAN
FL P.E. #60994

Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301
FAX.(305)-661-3962
Comm. No. 05-618.00
CA# EB00002879

SHEET TITLE:	
DRAWN:	T.B.; J.P.; R.A.
DATE:	OCTOBER 19, 2005
REVISIONS:	DATE:

3DESIGN INC
ANTHONY LEON
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

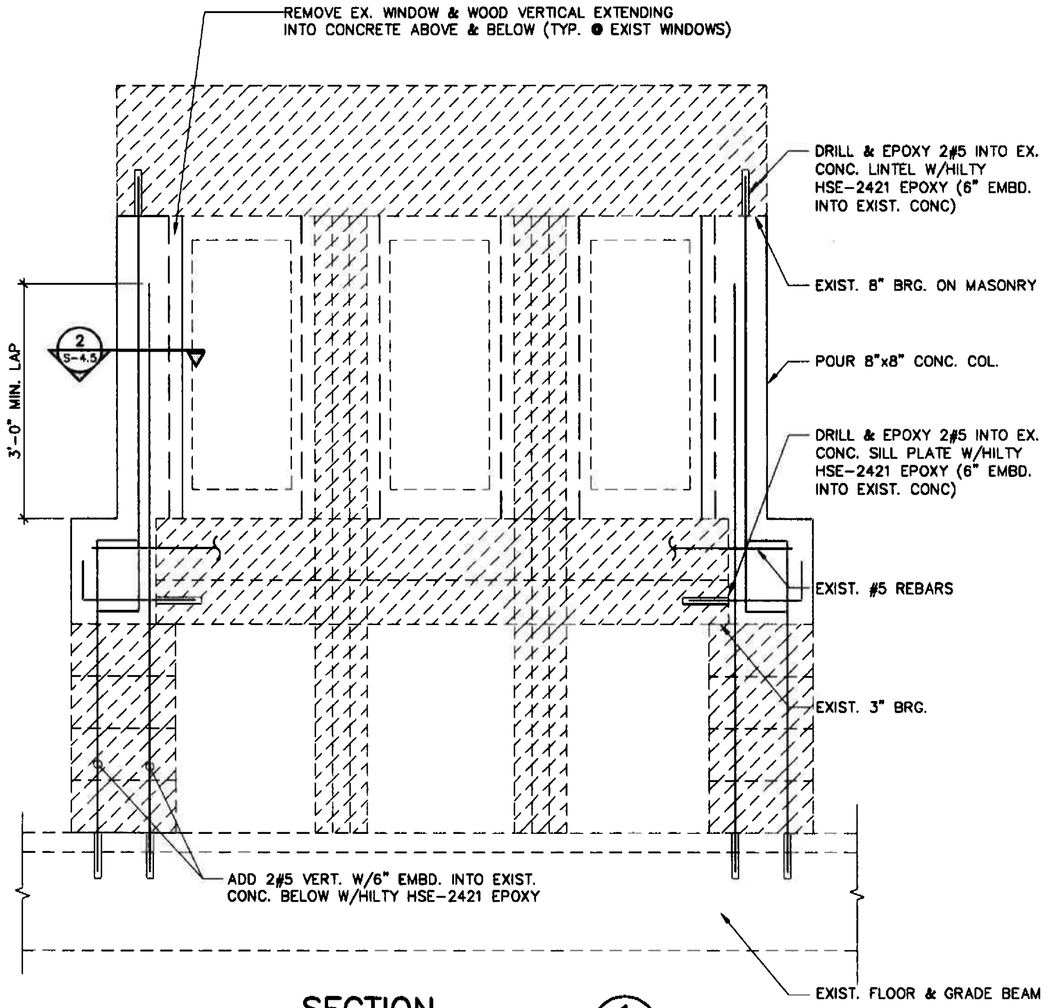
THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

Dec/9/05

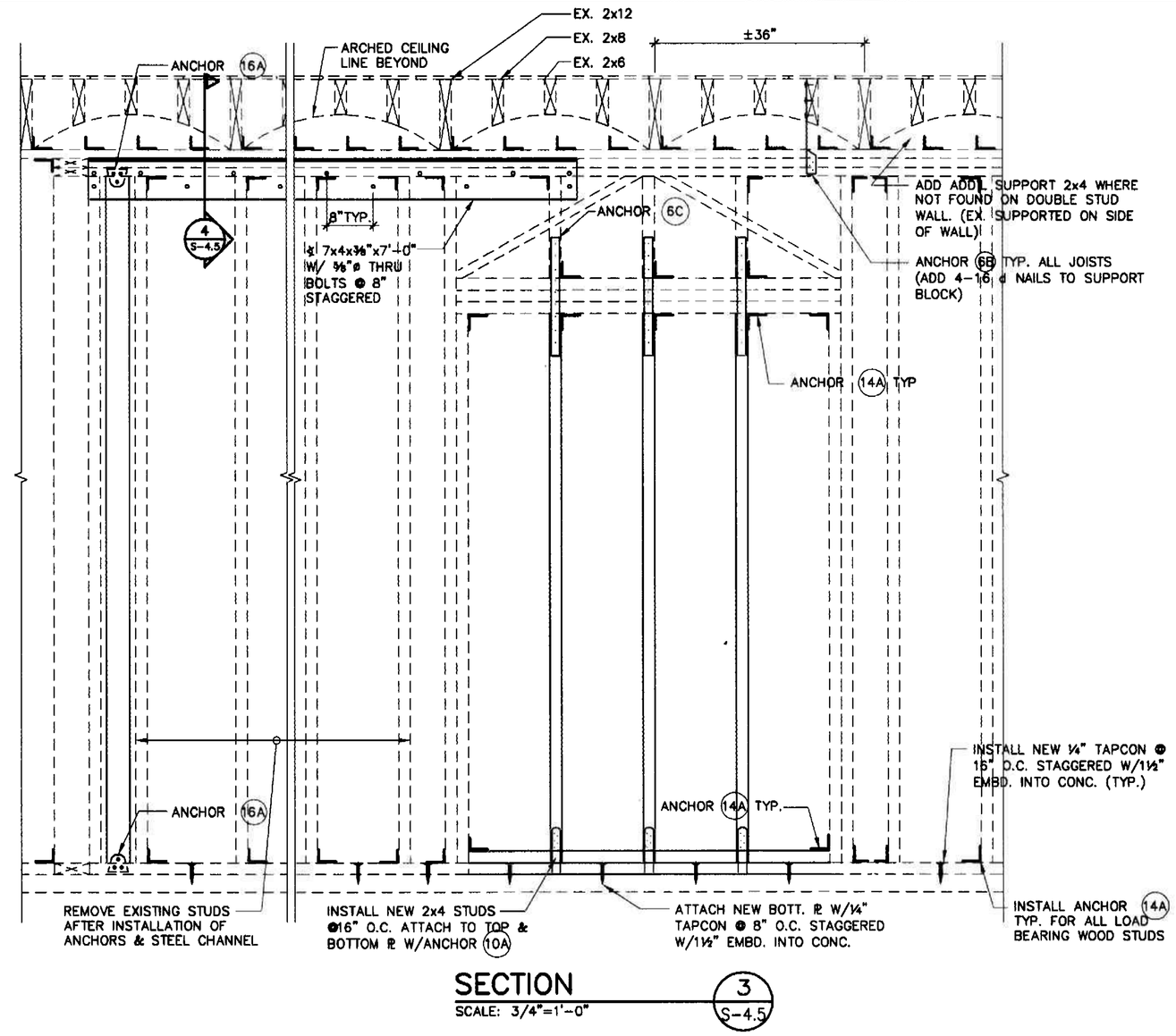
LPan 2/3/06

COMPLIANCE

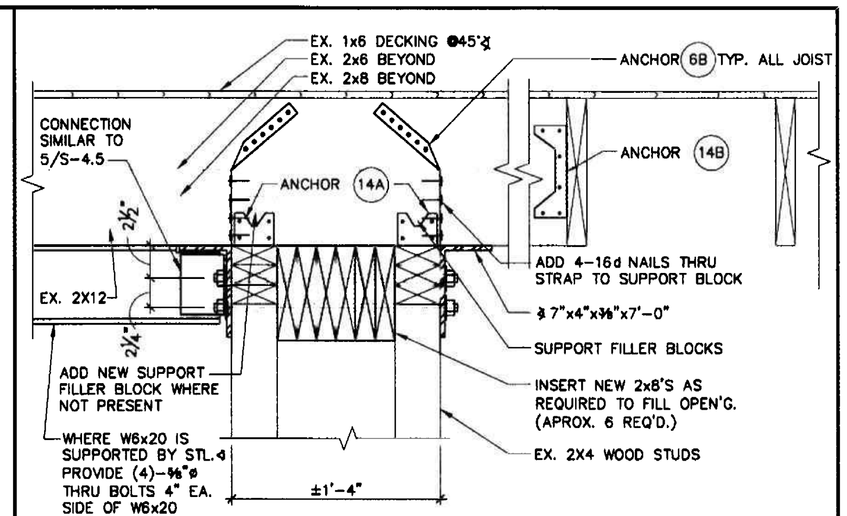
S-4.4



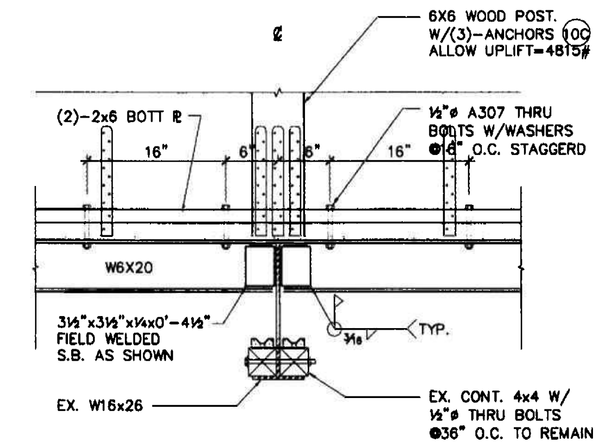
SECTION
SCALE: 3/4"=1'-0"
1 S-4.5



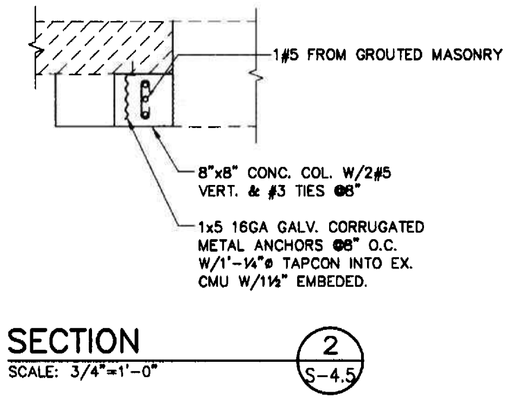
SECTION
SCALE: 3/4"=1'-0"
3 S-4.5



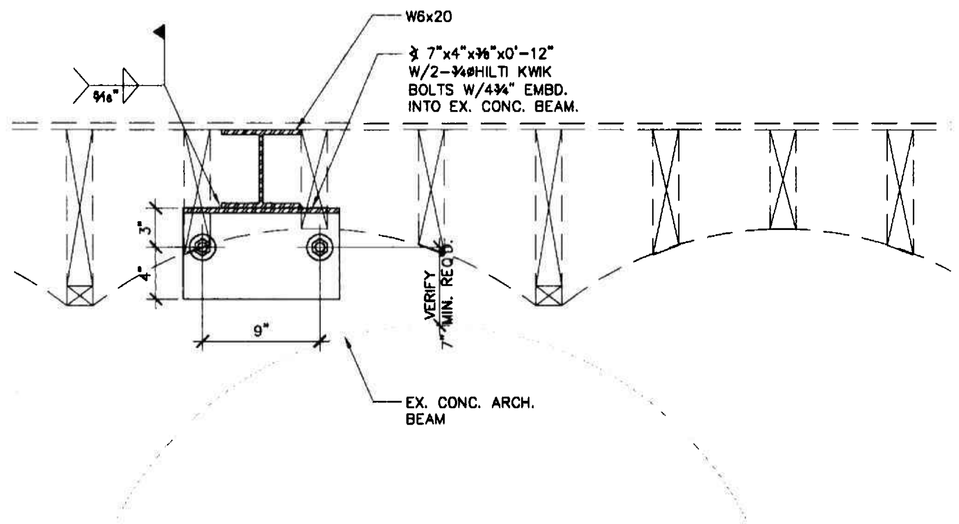
SECTION
SCALE: 1"=1'-0"
4 S-4.5



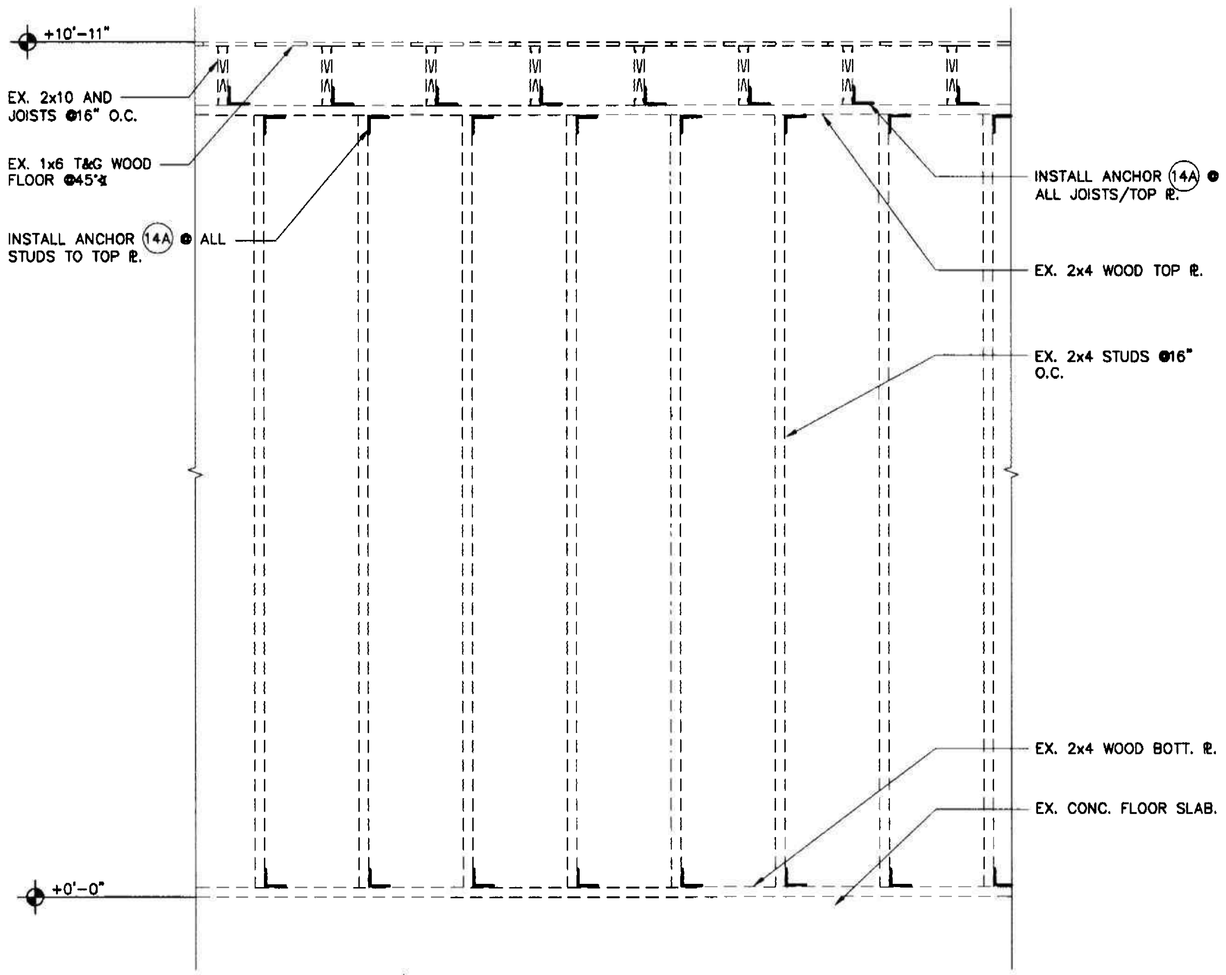
SECTION
SCALE: 1"=1'-0"
5 S-4.5



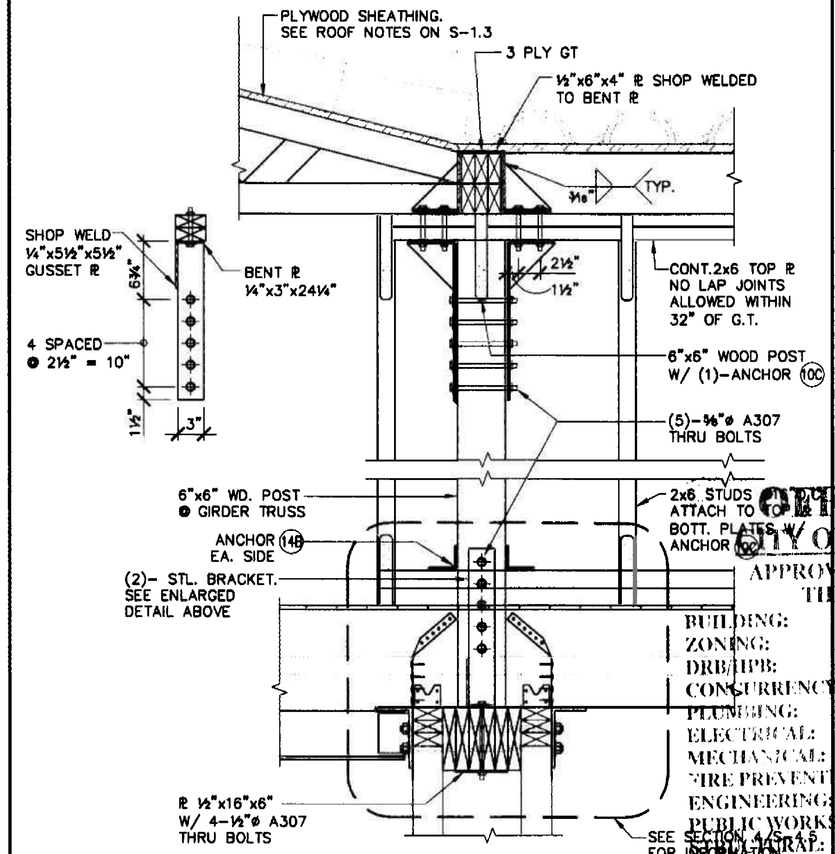
SECTION
SCALE: 3/4"=1'-0"
2 S-4.5



SECTION
SCALE: 1½"=1'-0"
6 S-4.5



INT. LOAD BRG. PARTITION (TYP.)
WALL UPGRADE DETAIL
SCALE: 3/4"=1'-0"
7 S-4.5



SECTION
SCALE: 1"=1'-0"
8 S-4.5

2DESIGN, INC
ANTHONY LEON
AR0008752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

SHEET TITLE:	
DRAWN:	T.R.; J.P.; R.A.
DATE:	OCTOBER 19, 2005
REVISIONS:	DATE:

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

OFFICE COPY
CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY THE FOLLOWING:
BUILDING:
ZONING:
DRB/HPB:
CONCURRENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
ENGINEERING:
PUBLIC WORKS:
LANDSCAPE:
ACCESSIBILITY:
ELEVATOR:
As per Florida Building Code Section 104.5.3
REVIEWED FOR CODE COMPLIANCE

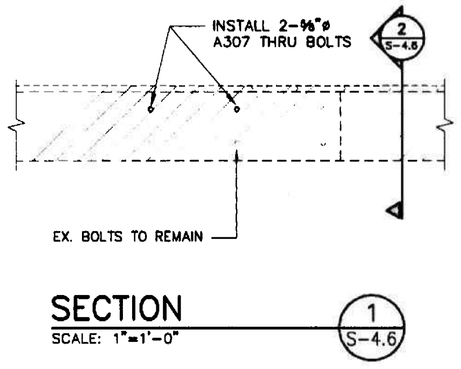
TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NEITHER TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

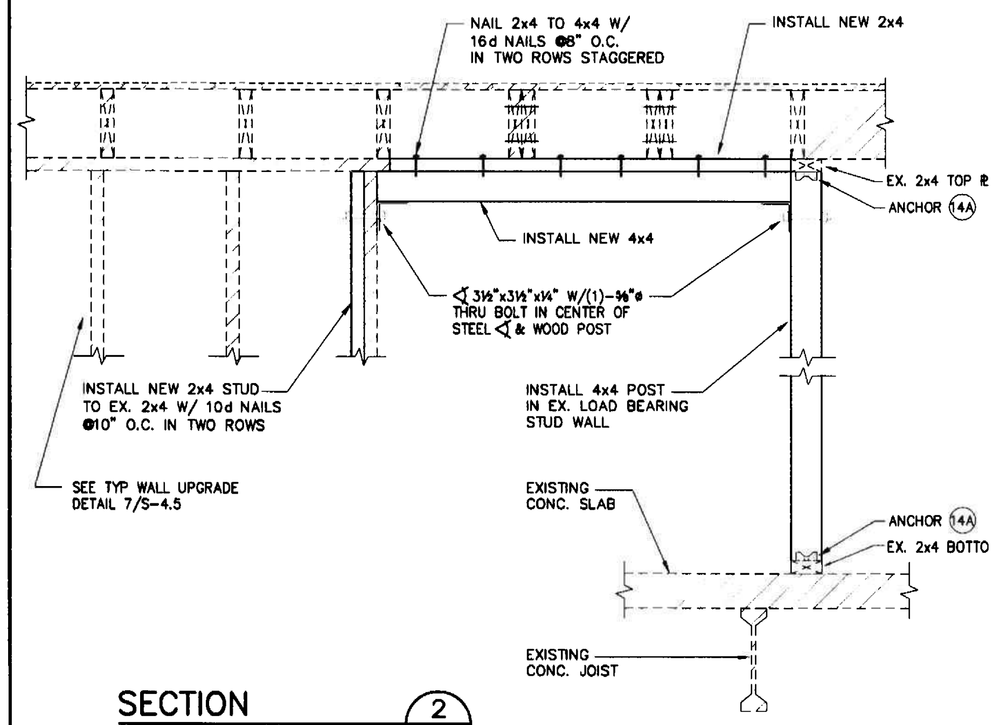
10/19/05
T.A. KHAN
FL P.E. #60994

SKA Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301
FAX.(305)-661-3962
Comm. No. 05-618.00
CA# EB00002679

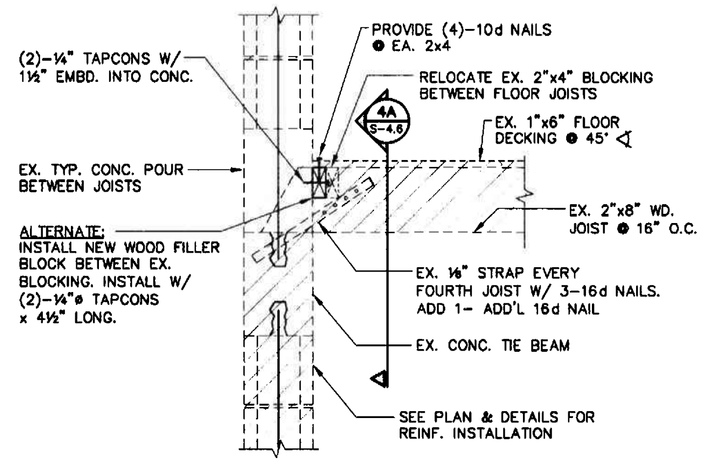
S-4.5



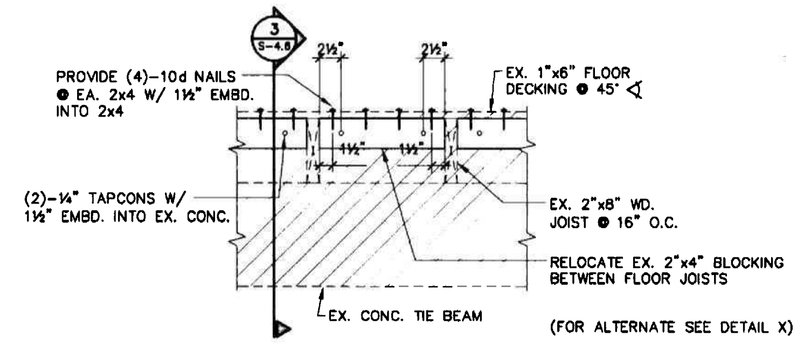
SECTION 1 S-4.6
SCALE: 1"=1'-0"



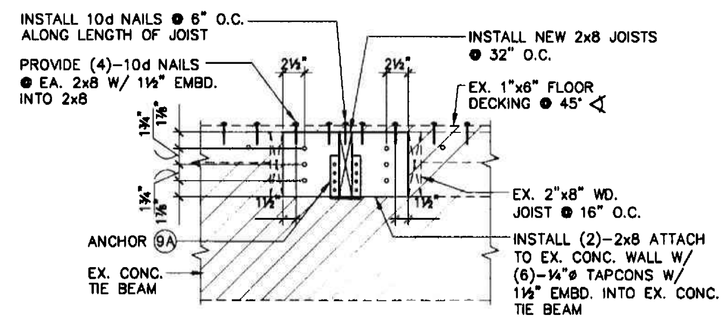
SECTION 2 S-4.6
SCALE: 1"=1'-0"



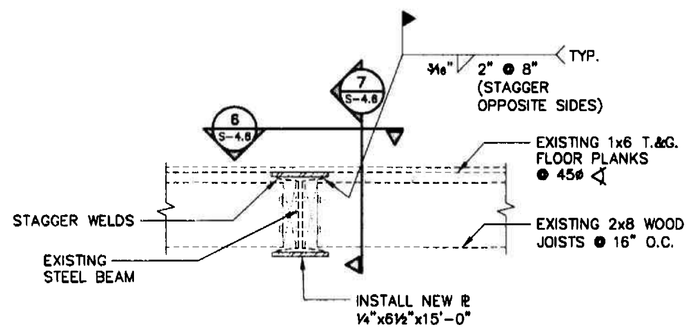
SECTION 3 S-4.6
SCALE: 1"=1'-0"



SECTION 4A S-4.6
SCALE: 1"=1'-0"

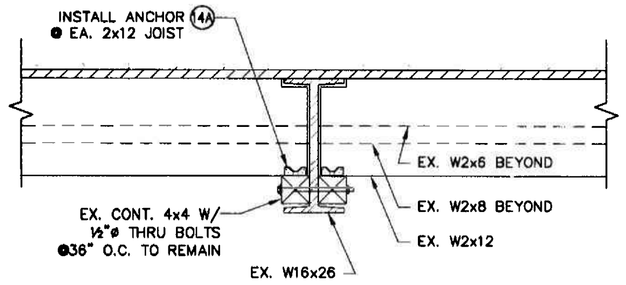


SECTION 4B S-4.6
SCALE: 1"=1'-0"

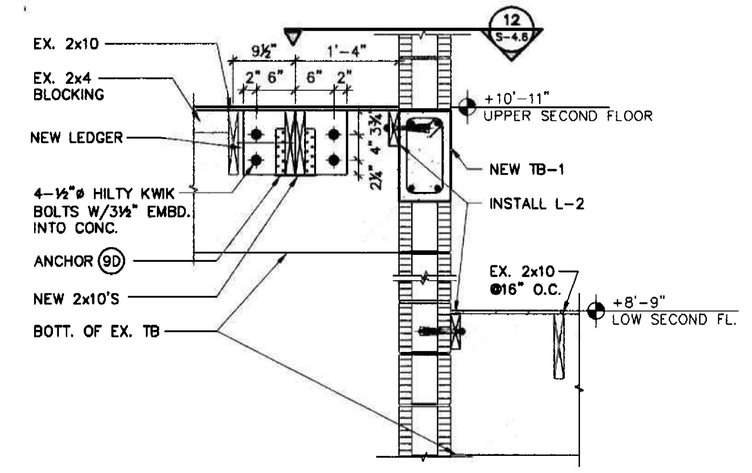


CAUTION:
CONTRACTOR TO EXERCISE CAUTION WHEN WELDING IN VACINITY OF WOOD MEMBERS. RECOMMEND TO USE PROTECTIVE WELDING BLANKETS TO COVER WOOD COMPONENTS. IN ADDITION, FIRE EXTINGUISHERS TO BE KEPT IN SAME AREA WHERE WELDING IS BEING PERFORMED.

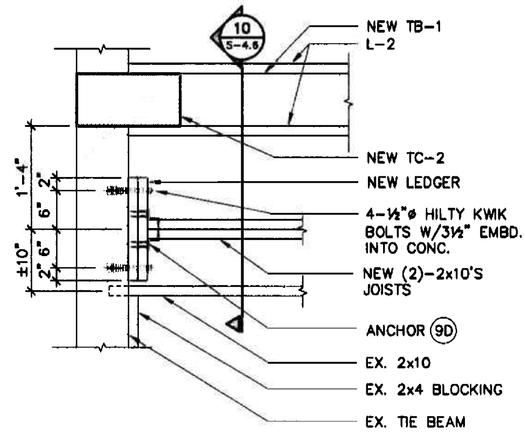
SECTION 5 S-4.6
SCALE: 1"=1'-0"



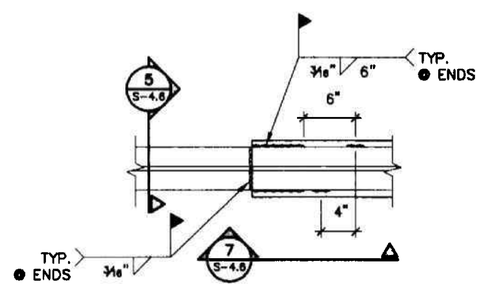
SECTION 8 S-4.6
SCALE: 1"=1'-0"



SECTION 10 S-4.6
SCALE: 3/4"=1'-0"

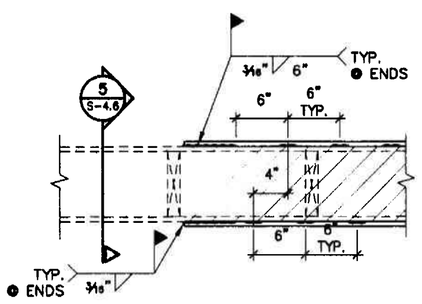


SECTION 12 S-4.6
SCALE: 3/4"=1'-0"

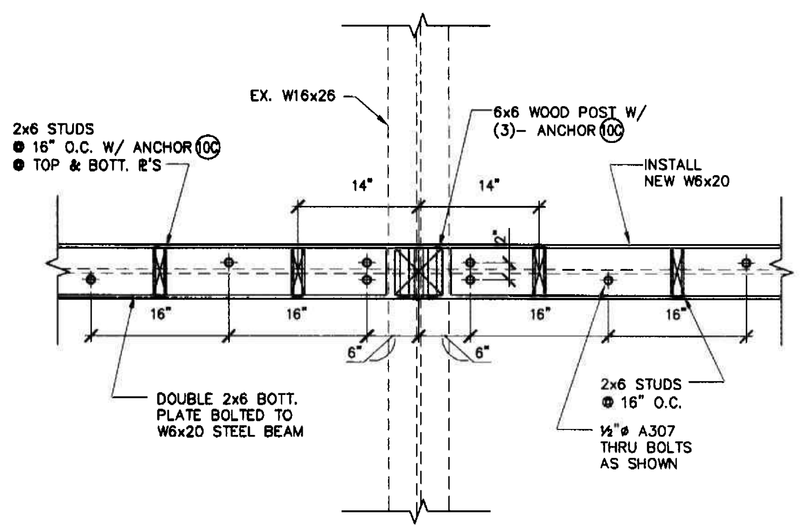


PLAN VIEW

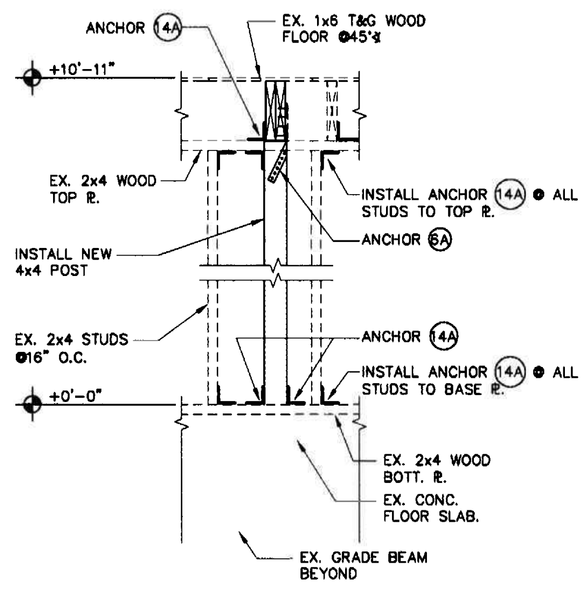
DETAIL 6 S-4.6
SCALE: 1"=1'-0"



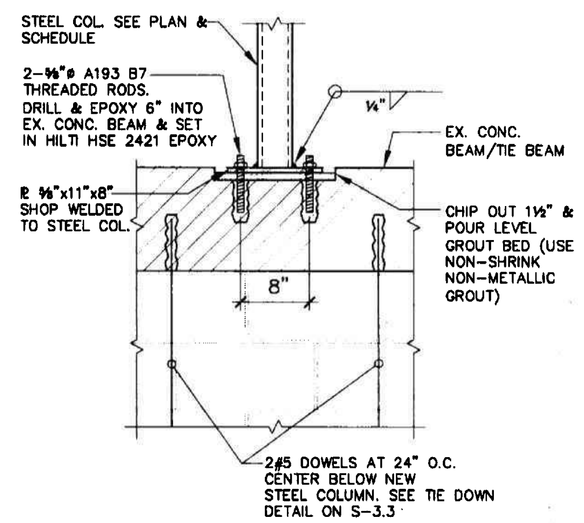
SECTION 7 S-4.6
SCALE: 1"=1'-0"



SECTION 9 S-4.6
SCALE: 1"=1'-0"



SECTION 11 S-4.6
SCALE: 3/4"=1'-0"



STEEL BASE PLATE DETAIL - "B"

SECTION 13 S-4.6
SCALE: 3/4"=1'-0"

TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NEITHER TO BE REPRODUCED, COPIED OR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

10/14/05
T.A. KHAN
FL P.E. #60994

Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301
FAX.(305)-661-3982
Comm. No. 05-618.00
CA# EB00002879

SHEET TITLE:
DRAWN: T.R.; J.P.; R.A.
DATE: OCTOBER 19, 2005
REVISIONS: DATE:

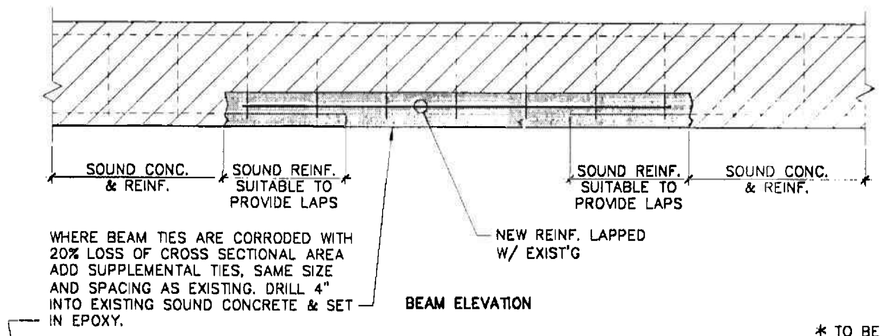
3DESIGN INC
ANTHONY LEON AR0009052
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL.33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

12/6/05

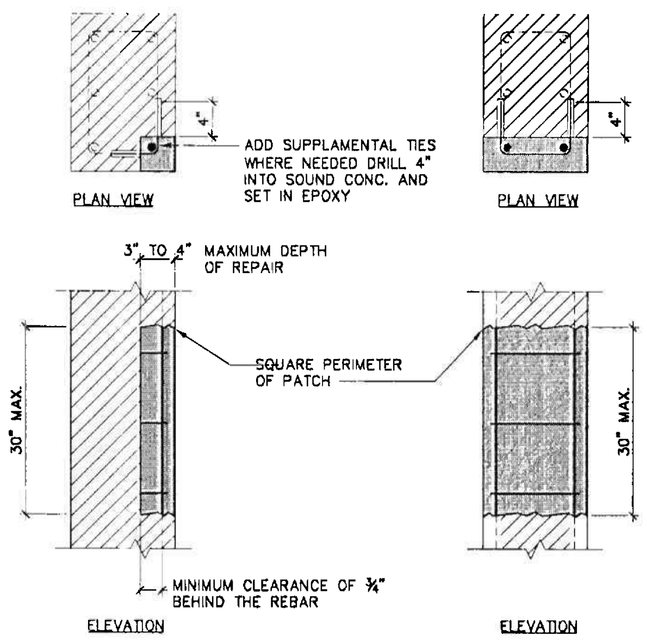
2/2/06

S-4.6



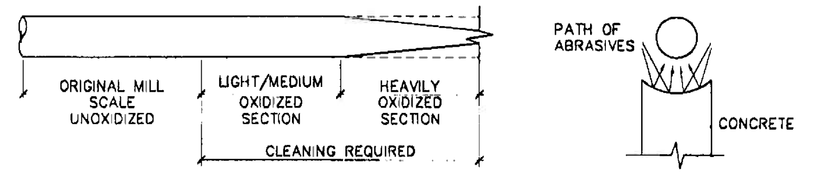
TYPICAL SLAB/BEAM REPAIR DETAILS (1 / S-5.1)

N.T.S.



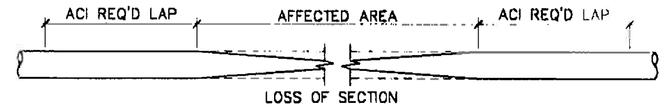
TYPICAL COLUMN REPAIR DETAILS (2 / S-5.1)

N.T.S.



ALL HEAVY OXIDES AND SCALE SHALL BE REMOVED FROM THE BAR AS NECESSARY TO PROMOTE MAXIMUM BOND OF REPLACEMENT MATERIAL. OIL FREE ABRASIVE BLAST IS THE PREFERED METHOD.

REINFORCING STEEL CLEANING



NOTES:

1. IF REBAR HAS LOST MORE THAN 10% OF ITS CROSS SECTION IT SHALL BE CUT OUT AND REPLACED.
2. IF REPAIRS ARE REQUIRED TO THE REINF. STEEL, ONE OF THE FOLLOWING REPAIR METHODS SHALL BE USED:
   a) COMPLETE BAR REPLACEMENT.
   OR
   b) ADDITION OF SUPPLEMENTAL BAR OVER AFFECTED SECTION. NEW BAR SHALL BE PLACED PARALLEL TO AND APPROXIMATELY ¾" FROM EXISTING BAR.
3. LAP LENGTH SHALL BE DETERMINED IN ACCORDANCE WITH ACI 318. SEE TABLES ON SH. S-0.2.

REINFORCEMENT REPLACEMENT IS REQUIRED WHEN...			
REINFORCEMENT BAR ORIGINAL SIZE	AREA IS LESS THAN	FIELD MEASURED DIAMETER IS LESS THAN	FIELD MEASURED CIRCUMFERENCE IS LESS THAN
#3	.099 IN²	0.355"	1.11" ≈ 1⅛"
#4	0.18 IN²	0.467"	1.46" ≈ 1⅜"
#5	0.279 IN²	0.598"	1.87" ≈ 1⅞"
#6	0.396 IN²	0.71"	2.29" ≈ 2⅜"
#7	0.54 IN²	0.829"	2.60" ≈ 2⅝"
#8	0.711 IN²	0.952"	2.99" ≈ 3"
#9	0.90 IN²	1.07"	3.36" ≈ 3⅜"
#10	1.14 IN²	1.207"	3.79" ≈ 3¾"
#11	1.40 IN²	1.335"	4.19" ≈ 4⅛"

REINF. REPLACEMENT DUE TO LOSS OF CROSS-SECTION (3 / S-5.1)

SLAB/BEAM/COLUMN REPAIR PROCEDURES

1. PHASE COLUMN REPAIR IN MAXIMUM 30" HIGH SEGMENTS. PHASE BEAM REPAIR IN MIN. OF THREE SECTION PER SPAN IF ENTIRE SPAN IS TO BE REPAIRED. SHORE AND BRACE AS NEEDED & REQ'D BY THE ENGINEER. DESIGN OF SHORING & BRACING SHALL BE BY THE CONTRACTOR'S SP. ENGINEER.
2. REMOVE SPALLED, DELAMINATED OR OTHERWISE UNSOUND CONCRETE.
3. SAW CUT THE PERIMETER OF THE REPAIR AREA FORMING A SHOULDER PERPENDICULAR TO THE SUBSTRATE. NO FEATHER EDGES.
4. CHIP OUT THE UNSOUND CONCRETE TO EXPOSE THE ENTIRE CIRCUMFERENCE OF THE REBAR. REMOVAL SHALL CONTINUE ALONG THE LENGTH OF THE REINFORCING STEEL UNTIL 6" OF UNCORRODED REBAR IS EXPOSED. EXCAVATE CONCRETE TO A MINIMUM DEPTH OF ¾" BEYOND THE REBAR TO ENABLE AN EXAMINATION OF THE LOSS OF CROSS SECTION. PHASE REPAIR WORK IF MAXIMUM AREA IS EXCEEDED.
5. SANDBLAST THE CONCRETE AND EXPOSED REBAR TO WHITE METAL. INSERT NEW REBARS OF EQUAL DIAMETER NEXT TO THOSE THAT HAVE DETERIORATED BY MORE THAN 20% ALL NEW STEEL SHALL BE ASTM A-615 GRADE 60.
6. COAT ALL NEW AND EXISTING REBAR WITH SIKA ARMATEC 110 OR EQUAL.
7. REPAIR MORTAR SHALL BE AS PER CONCRETE REPAIR SPECIFICATIONS (MAX. 4" THICKNESS). EXCEPT AS NOTED ON PLANS/DETAILS, EQUIVALENT MATERIALS MAY BE USED. SUBMIT MANUFACTURER'S INFO FOR REVIEW AND APPROVAL OF THE ARCHITECT/ENGINEER PRIOR TO USING A SUBSTITUTE MATERIAL.
8. CURE AND FINISH PER CONCRETE REPAIR SPECIFICATIONS.

ALSO SEE SH. S-5.2 FOR REPAIR SPECIFICATIONS.

NOTE: SEE SH. S-5.2 FOR REPAIR SPECIFICATIONS.

TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NOT/CAN TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

10/19/05
T.A. KHAN
FL P.E. #60994

Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301
FAX.(305)-661-3962
Comm. No. 05-618.00
CA# ED00002879

SHEET TITLE:
DRAWN: TR./J.P./R.A.
DATE: OCTOBER 19, 2005
REVISIONS DATE

2DESIGN INC
ANTHONY LEON
AR0006252
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5600 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

OFFICE COPY
CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY THE FOLLOWING:
BUILDING:
ZONING:
DRB/HPB:
CONCURRENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE:
ENGINEERING:
PUBLIC WORKS:
SIGN CERTIFICATE:
ACCESSIBILITY:
REVISIONS:
As per L.Peter 2/3/06

S-5.1

MASONRY AND CONC. REPAIR SPECIFICATIONS:

PART 1 GENERAL

1.01 SUMMARY

A. SECTION INCLUDES: FURNISHING OF MATERIALS, LABOR, TOOLS, AND EQUIPMENT NECESSARY TO REPAIR AND RESTORE POORLY PLACED AND DETERIORATED CONCRETE. THIS INCLUDES THE SPALLED AREAS AND CRACKS, AS INDICATED IN THE STRUCTURAL DRAWINGS AND SPECIFIED HEREIN.

B. SHOP DRAWINGS SHALL BE PREPARED, SUBMITTED AND APPROVED AS SPECIFIED IN THE STRUCTURAL DRAWINGS.

C. INSTALL SHORING AS DIRECTED OR AS NEEDED TO PERFORM THE WORK.

1.02 COORDINATION

A. COORDINATE SCHEDULING, SUBMITTALS, AND WORK OF VARIOUS SECTIONS OF THE SPECIFICATIONS TO ENSURE EFFICIENT AND ORDERLY SEQUENCE OF INSTALLATION OF INTERDEPENDENT CONSTRUCTION ELEMENTS.

B. COORDINATE DUMPSTER LOCATION, STAGING AND STORAGE REQUIREMENTS WITH THE OWNER.

1.03 EXAMINATION

A. VERIFY THAT EXISTING SITE CONDITIONS AND SUBSTRATE SURFACES ARE ACCEPTABLE FOR SUBSEQUENT WORK. BEGINNING NEW WORK MEANS ACCEPTANCE OF EXISTING CONDITIONS.

B. VERIFY THAT UTILITY SERVICES ARE AVAILABLE, OF THE CORRECT CHARACTERISTICS AND IN THE CORRECT LOCATION.

1.04 REFERENCES

A. REFERENCED CODES AND STANDARDS: COMPLY WITH THE MOST RECENT PUBLICATIONS OF THE FOLLOWING CODES, SPECIFICATIONS, AND STANDARDS.

1. ACI 301-96 "STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE.
2. ACI 308-87 "GUIDE FOR CONSOLIDATION OF CONCRETE."
3. ACI 318-99 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
4. ACI 546R-96 "CONCRETE REPAIR GUIDE."
5. ASTM C33-93 "STANDARD SPECIFICATION FOR CONCRETE AGGREGATES."
6. ASTM C94-94 "STANDARD SPECIFICATION FOR READY-MIXED CONCRETE."
7. ASTM C150-94 "STANDARD SPECIFICATION FOR PORTLAND CEMENT".
8. ASTM C260-94 "STANDARD SPECIFICATION FOR AIR-ENTRAINING ADMIXTURES FOR CONCRETE."
9. ASTM C309-93 "STANDARD SPECIFICATION FOR LIQUID MEMBRANE-FORMING COMPOUNDS FOR CURING CONCRETE."
10. ASTM C469-87 "STANDARD TEST METHOD FOR STATIC MODULUS OF ELASTICITY AND POISSON'S RATIO OF CONCRETE IN COMPRESSION."
11. ASTM C494-92 "STANDARD SPECIFICATION FOR CHEMICAL ADMIXTURES FOR CONCRETE."
12. ASTM A 615-94 "STANDARD SPECIFICATION FOR DEFORMED AND PLAIN BILLET-STEEL BARS FOR CONCRETE
13. ASTM C881-90 "STANDARD SPECIFICATION FOR EPOXY-RESIN-BASE BONDING SYSTEMS FOR CONCRETE."
14. ASTM C1042-91 "STANDARD TEST METHOD FOR BOND STRENGTH OF LATEX SYSTEMS USED WITH CONCRETE.
15. "GUIDE FOR SURFACE PREPARATION FOR THE REPAIR OF DETERIORATED CONCRETE RESULTING FROM REINFORCING STEEL CORROSION" (GUIDELINE NO. 03730) INTERNATIONAL CONCRETE REPAIR INSTITUTE. 1995 COPYRIGHT.
16. "GUIDE FOR SELECTING APPLICATION METHODS FOR REPAIR OF CONCRETE SURFACES" (GUIDELINE NO 03731) INTERNATIONAL CONCRETE REPAIR INSTITUTE 1996 COPYRIGHT.

1.05 SUBMITTALS

A. SUBMIT PRODUCT DATA UNDER PROVISIONS OF SECTION 01330.

B. SUBMIT COPY OF RECOMMENDED MANUFACTURER'S PRODUCT INSTALLATION INSTRUCTIONS.

C. APPROVAL BY ENGINEER IS REQUIRED BEFORE BEGINNING WORK AFFECTED BY SUBMITTALS.

1.06 QUALITY ASSURANCE

A. CONTRACTOR QUALIFICATIONS: ACCEPTABLE TO THE MANUFACTURER WITH DOCUMENTED EXPERIENCE OF AT LEAST 3 YEARS ON PROJECTS OF SIMILAR NATURE.

B. COMPLY WITH MANUFACTURERS' INSTRUCTIONS RELATED TO MIXING AND PLACING OF MATERIALS.

C. PROTECTION OF WORK: PROTECT INSTALLED WORK AND PROHIBIT TRAFFIC OR STORAGE UPON WATERPROOFED OR COATED SURFACES.

1.07 DELIVERY, STORAGE AND HANDLING

A. DELIVER PRODUCTS IN ORIGINAL UNOPENED CONTAINERS WITH THE MANUFACTURER'S NAME, LABELS, PRODUCT IDENTIFICATION AND BATCH NUMBER.

B. STORE AND CONDITION THE SPECIFIED PRODUCTS AS RECOMMENDED BY THE MANUFACTURER. PRODUCTS SHALL REMAIN UNOPENED UNTIL READY FOR USE.

C. WHERE MIXING OF COMPONENTS IS REQUIRED, USE COMPLETE PRE-MEASURED UNITS.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. MASTER BUILDERS

B. OTHER MANUFACTURERS MAY BE USED UPON APPROVAL OF THE ENGINEER. ALTERNATE PRODUCT DATA SHALL INCLUDE VERIFICATION THAT THE ALTERNATE PRODUCTS ARE EQUIVALENT TO THE SPECIFIED MASTER BUILDERS PRODUCTS.

ALL ALTERNATE MATERIALS MUST COME FROM A SINGLE MANUFACTURER TO QUALIFY FOR A "SYSTEM WARRANTY". SUBMITTAL OF THE REQUEST FOR USE OF ALTERNATE PRODUCTS MUST BE SUBMITTED 10 DAYS PRIOR TO BID DATE.

2.02 PATCHING REPAIR MATERIALS

SUBJECT TO COMPLIANCE WITH OTHER REQUIREMENTS IN THIS SPECIFICATION, PROVIDE THE FOLLOWING MATERIALS.

A. STRUCTURAL REPAIR MORTAR: PROVIDE SINGLE COMPONENT SHRINKAGE-COMPENSATED, SILICA FUME MODIFIED, CEMENT BASED MORTAR CONTAINING CORROSION INHIBITOR FOR STRUCTURAL REPAIR OF DISTRESSED HORIZONTAL, VERTICAL OR OVERHEAD CONCRETE. STRUCTURAL REPAIR MORTAR SHALL HAVE A MINIMUM MODULUS OF ELASTICITY OF 3.80 X 106.

1. EMACO S CI SERIES BY MASTER BUILDERS.

B. SURFACE REPAIR MORTAR: PROVIDE SINGLE COMPONENT POLYMER-MODIFIED CEMENTITIOUS REPAIR MORTAR CONTAINING CORROSION INHIBITOR FOR RESURFACING OF DISTRESSED HORIZONTAL, VERTICAL OR OVERHEAD CONCRETE. SURFACE REPAIR MORTAR SHALL HAVE A MAXIMUM MODULUS OF ELASTICITY OF 2.50 X 106.

1. EMACO R CI SERIES BY MASTER BUILDERS.

C. RAPID HARDENING AND HIGH EARLY STRENGTH REPAIR MORTAR: PROVIDE A HIGH EARLY STRENGTH, SINGLE COMPONENT MORTAR FOR APPLICATIONS REQUIRING RAPID RETURN TO SERVICE.

1. EMACO T SERIES BY MASTER BUILDERS.

2. SET 45 SERIES BY MASTER BUILDERS (REQUIRES SPECIAL APPLICATION METHODS).

D. AGGREGATE: SHALL CONFORM TO ASTM C 33-93. AGGREGATE FOR INCORPORATION WITH BAGGED MORTAR SHALL BE 3/8", WELL GRADED NON-REACTIVE AND CLEANED.

E. WATER: CLEAN AND POTABLE.

2.03 RELATED MATERIALS

A. EPOXY BONDING AGENT: PROVIDE 100% SOLIDS, TWO COMPONENT EPOXY BONDING COMPOUND FOR BONDING NEW CONCRETE TO EXISTING SURFACES. EPOXY BONDING AGENT SHALL MEET ASTM C881-90, TYPE V, GRADE B OR C MATERIAL

1. CONCRESIVE BONDING SERIES BY MASTER BUILDERS.

B. ANTI-CORROSION REINFORCING BAR COATING : PROVIDE POLYMERMODIFIED, CEMENT BASED COATING WITH CORROSION INHIBITING ADMIXTURE TO PROVIDE PROTECTION FOR STEEL REINFORCING.

1. EMACO P-22 OR EMACO P-24 BY MASTER BUILDERS.

C. EVAPORATION RETARDER: PROVIDE A SPRAY APPLIED MONOMOLECULAR FILM THAT REDUCES THE RATE OF SURFACE MOISTURE EVAPORATION UNDER HOT, DRY OR WINDY CONDITIONS.

1. MASTERKURE 100W BY MASTER BUILDERS.

E. EPOXY ADHESIVE: PROVIDE A TWO COMPONENT 100% SOLIDS MOISTURE INSENSITIVE, LOW VISCOSITY EPOXITY RESIN MEETING ASTM C 881-90, TYPE IV, GRADE 1, CLASS B OR C.

1. CONCRESIVE SERIES BY MASTER BUILDERS.

F. SURFACE SEAL: THE SURFACE SEAL MATERIAL FOR EPOXY INJECTION IS THAT MATERIAL USED TO CONFINE THE INJECTION ADHESIVE IN THE FISSURE DURING INJECTION. THIS MATERIAL SHALL HAVE SUFFICIENT STRENGTH TO RESIST INJECTION PRESSURES TO PREVENT LEAKAGE DURING INJECTION.

2.04 REINFORCEMENT MATERIALS

A. REINFORCING STEEL: CONFORMING TO ASTM A 615-94, 60 KSI YIELD GRADE BILLET-STEEL DEFORMED BARS.

B. STIRRUP STEEL: CONFORMING TO ASTM A 615-94, 60 KSI YIELD GRADE BILLET-STEEL DEFORMED BARS.

2.05 ALTERNATE TRANSIT MIXES

A. GENERAL: ALTERNATE TRANSIT MIXES MAY BE CONSIDERED FOR SELECTIVE APPLICATIONS. HOWEVER, BIDS SHALL BE BASED ON PRE-MIXED BAGGED REPAIR MATERIALS.

B. CONTRACTOR SHALL SUBMIT MIX DESIGN AND SUPPORTING BACK-UP DATA FOR PROPOSED TRANSIT MIX. ONE OF THE THREE DESIGN METHODS REFERENCED IN ACI 318-95 MUST BE USED.

C. CONCRETE MIXES TO BE PRODUCED AND DELIVERED CONFORMING TO ASTM C 94-94. MATERIALS AND THE MIX MUST CONFORM TO THE FOLLOWING REQUIREMENTS:

1. WATER/CEMENT RATIO SHALL NOT EXCEED .40 BY WEIGHT.
2. CEMENT: ASTM C 150-94, TYPE I OR TYPE II.
3. ADMIXTURES: ASTM C 494-92.
4. AIR ENTRAINING ADMIXTURE: ASTM C 260-94.
5. AGGREGATES: ASTM C 33-93.
6. FIBROUS REINFORCEMENT: FIBERMESH POLYPROPYLENE FIBERS. 1.5 POUNDS PER CUBIC YARD.
7. MIX SHALL CONTAIN RHEOCRETE CORROSION INHIBITOR BY MASTER BUILDERS AT MANUFACTURER'S RECOMMENDED DOSAGE.
8. WATER: POTABLE

PART 3 EXECUTION

3.01 SURFACE PREPARATION

A. MASONRY:

REMOVE SURFACE PAINT BY WIRE BRUSH OR PRESSURE WASHING TO EXPOSE MASONRY SURFACE ALONG THE SURFACE CRACKS/SPALLS. DISLODGE, CHIP AND REMOVE ALL LOOSE AND SPALLED MATERIALS TO SOUND MATERIAL (SOUND CMU OR CONCRETE) BENEATH. FOLLOW SAME REPAIR PROCEDURES AS FOR CONCRETE.

B. CONCRETE:

ALL REPAIR AREAS SHALL BE PREPARED IN ACCORDANCE WITH INTERNATIONAL CONCRETE REPAIR INSTITUTE'S "GUIDE FOR SURFACE PREPARATION FOR THE REPAIR OF DETERIORATED CONCRETE RESULTING FROM REINFORCING STEEL CORROSION" (GUIDELINE NO. 03730.) THIS INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING.

1. REMOVE LOOSE OR DETERIORATED CONCRETE ABOVE CORRODED REINFORCING STEEL. REMOVALS SHALL BE PERFORMED WITH CHIPPING HAMMERS OR OTHER ARCHITECT/ENGINEER APPROVED METHOD. CHIPPING HAMMERS SHALL NOT BE IN EXCESS OF 15 POUND RATING.

2. ONCE REMOVALS ARE MADE, PROCEED WITH UNDERCUTTING OF ALL EXPOSED CORRODED BARS. UNDERCUTTING WILL PROVIDE CLEARANCE FOR UNDER THE BAR CLEANING. CONCRETE SHALL BE REMOVED SUCH THAT A ¾ INCH CLEARANCE UNDER THE BAR IS ACHIEVED, OR ¼ INCH GREATER THAN THE LARGEST AGGREGATE USED IN THE REPAIR.

3. CONCRETE REMOVALS SHALL EXTEND ALONG THE BARS TO LOCATIONS ALONG THE BAR FREE OF BOND INHIBITING CORROSION. REMOVALS SHALL EXTEND TWO INCHES BEYOND THE LOCATION OF CORROSION-FREE BARS.

4. IF NON-CORRODED REINFORCING BARS ARE EXPOSED DURING THE UNDERCUTTING, CARE WILL BE TAKEN NOT TO DAMAGE THE BOND BETWEEN THE BAR AND THE CONCRETE.

5. LOOSE REINFORCEMENT SHALL BE SECURED IN PLACE BY TYING TO OTHER SECURED BARS OR BY APPROVED METHOD.

6. ENGINEER SHALL DETERMINE THE NECESSITY OF REPLACING OR SUPPLEMENTING REINFORCING STEEL WITH REDUCED CROSS SECTIONAL AREAS CAUSED BY CORROSION DAMAGE.

7. REPAIR CONFIGURATIONS SHOULD BE KEPT AS SIMPLE AS POSSIBLE TO MINIMIZE BOUNDARY EDGES,

8. AT EDGE LOCATIONS, PROVIDE RIGHT ANGLE CUTS TO THE CONCRETE SURFACE BY SAW-CUTTING ? INCH OR LESS AS REQUIRED TO AVOID CUTTING REINFORCING STEEL.

9. AFTER REMOVALS AND EDGE CONDITIONING ARE COMPLETE, REMOVE BOND-INHIBITING MATERIALS BY ABRASIVE BLASTING OR HIGH PRESSURE WATER BLASTING. CHECK CONCRETE SURFACES AFTER CLEANING TO INSURE THAT THE SURFACE IS FREE FROM LOOSE AGGREGATES.

10. PRESOAK REPAIR SUBSTRATE TO A SATURATED SURFACE DRY CONDITION.

C. BAR COATING AND BONDING OPTIONS

1. FOLLOWING COMPLETION OF REPAIR PREPARATION, APPLY ANTI-CORROSION REINFORCING BAR COATING TO THE EXPOSED REINFORCING STEEL.

2. BOND THE REPAIR MATERIAL TO THE PREPARED AREA WITH ONE OF THE FOLLOWING METHODS.

A. APPLY THE EPOXY-BONDING AGENT TO THE PREPARED CONCRETE SURFACE ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

B. APPLY A SLURRY BOND COAT TO THE REPAIR MATERIAL TO THE PREPARED AREA WITH A STIFF BRISTLE BRUSH OR BROOM. DO NOT ALLOW THE SLURRY TO DRY PRIOR TO INSTALLATION OF THE REPAIR MATERIAL. DO NOT RETEMPER THIS BOND COAT.

3.02 MIXING

A. MECHANICAL MIXING IS RECOMMENDED WITH THE USE OF A SLOW SPEED DRILL AND A JIFFLER TYPE PADDLE, OR IN AN APPROPRIATE MORTAR MIXER. TYPICAL MIXING TIME IS 3-5 MINUTES. DO NOT ADD MORE WATER THAN IS RECOMMENDED BY THE MANUFACTURER. DO NOT MIX LONGER THAN 5 MINUTES.

B. ONLY THAT PORTION OF MATERIAL THAT CAN BE PROPERLY MIXED WITHIN 10 MINUTES OF APPLICATION SHOULD BE MIXED.

3.03 APPLICATION

A. APPLY FRESH MORTAR TO THE BOND COAT. PLACE REPAIR MORTAR ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

B. EVAPORATION RETARDER: WHERE RAPID SURFACE EVAPORATION MAY OCCUR, IN HOT, WINDY CONDITIONS, APPLY SPECIFIED EVAPORATION RETARDER ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

C. FINISHING: COMPLETED REPAIR SURFACES SHOULD BE STRAIGHT, TRUE AND MATCH EXISTING PROFILES. DO NOT OVERWORK THE SURFACE.

3.04 CURING

A. ALL REPAIRED SURFACES MUST BE CURED FOR A MINIMUM OF 5 DAYS WITH ONE OF THE FOLLOWING METHODS.

1. WET CURE WITH BURLEEN OR WET BURLAP
2. PONDING
3. SHEETING MATERIAL
4. LIQUID MEMBRANE-FORMING CURING COMPOUND. APPLY PER MANUFACTURER'S RECOMMENDATIONS

B. PROTECT CURED AREAS FROM STORAGE AND TRAFFIC DURING CURING PERIOD.

3.05 CRACK REPAIR

A. EPOXY INJECTION

1. PREPARATION: PREPARE THE AREA AND CRACKS TO BE INJECTED IN THE FOLLOWING MANNER.

A. SURFACES ADJACENT TO CRACKS OR OTHER AREAS OF APPLICATION SHALL BE CLEANED OF DIRT, DUST, OIL, AND GREASE OR OTHER FOREIGN MATTER WHICH MAY BE DETRIMENTAL TO BOND OF INJECTION SURFACE SEAL.

B. ENTRY PORTS SHALL BE PROVIDED ALONG THE CRACK AT INTERVALS OF NOT LESS THAN THE THICKNESS OF CONCRETE AT THAT LOCATION.

C. SURFACE SEAL MATERIAL SHALL BE APPLIED TO THE FACE OF THE CRACK BETWEEN THE ENTRY PORTS. ALLOW SURFACE SEAL MATERIAL TO GAIN STRENGTH PRIOR TO INJECTION.

2. EQUIPMENT FOR INJECTION: PROVIDE INJECTION EQUIPMENT THAT IS PORTABLE, POSITIVE DISPLACEMENT TYPE PUMP. THE PUMP SHALL BE ELECTRIC OR AIR POWERED AND SHALL PROVIDE IN-LINE METERING AND MIXING. EQUIPMENT SHALL HAVE THE CAPABILITY OF MAINTAINING THE VOLUME RATIO FOR THE EPOXY ADHESIVE WITHIN A TOLERANCE OF +/-5% BY VOLUME AT ANY DISCHARGE PRESSURE UP TO 160 PSI.

3. INJECTION: SHALL BEGIN AT THE LOWEST ENTRY PORT AND CONTINUE UNTIL THERE IS AN APPEARANCE OF EPOXY ADHESIVE AT THE NEXT PORT ADJACENT TO THE ENTRY PORT BEING PUMPED. THE EPOXY INJECTION SHALL BE TRANSFERRED TO THE NEXT ADJACENT PORT WHERE THE ADHESIVE HAS APPEARED. INJECTION SHALL BE PERFORMED UNTIL CRACKS ARE COMPLETELY FILLED.

4. FINISHING: WHEN CRACKS ARE COMPLETELY FILLED, EPOXY ADHESIVE SHALL BE CURED FOR SUFFICIENT TIME TO ALLOW REMOVAL OF SURFACE SEAL WITHOUT ANY DRAINING OR RUN-BACK OF EPOXY ADHESIVE MATERIAL. SURFACE SEAL MATERIAL AND ANY ADHESIVE RUNS SHALL BE REMOVED FORM CONCRETE SURFACES. THE FACE OF THE CRACK SHALL BE FINISHED FLUSH WITH CONCRETE, SHOWING NO INDENTATIONS OR PROTRUSIONS CAUSED BY PLACEMENT OF ENTRY PORTS.

5. FILLING CORED HOLES: AFTER THE WORK HAS BEEN ACCEPTED BY THE ARCHITECT/ENGINEER, CORED HOLES SHALL BE REPAIRED USING A TWO COMPONENT BONDING AGENT AND A SUITABLE REPAIR MORTAR. THE BONDING AGENT SHALL BE APPLIED TO THE SURFACES OF THE CORED HOLES, FOLLOWED BY APPLICATION OF REPAIR MORTAR PLACED BY HAND TROWEL THOROUGHLY RODDED AND TAMPED IN PLACE, AND TAMPED IN PLACE, AND FINISHED TO MATCH COLOR, FINISH, AND TEXTURE OF EXISTING CONCRETE.

B. CRACK SEALING BY GRAVITY

1. REPAIR METHOD: NOTCH CUT CRACKS TO 20 MILS TO ¼ INCH WIDER CRACKS WITH A MECHANICAL ROUTER. REMOVE ALL LOOSE DEBRIS AND DUST. CLEAN OUT CRACKS AND VOIDS BY COMPRESSED AIR OR AS RECOMMENDED BY MANUFACTURER. IF APPROPRIATE, SEAL UNDERSIDE OF THE CRACK WITH A SURFACE SEAL. POUR NEAT (NO SAND) LOW VISCOSITY MATERIAL IN ROUTED CRACK UNTIL IT IS COMPLETELY FILLED. ALLOW TO SEEP INTO THE CRACK AND REFILL. FINISH MATERIAL OFF FLUSH WITH CONCRETE SO AS NOT TO SHOW ANY INDENTATIONS OR PROTRUSIONS.

3.06 CLEANING

A. GENERAL: KEEP AREA CLEAN DURING REPAIR OPERATION. REMOVE AND CLEAN PROMPTLY, MORTAR, OR EPOXY SPILLS WITH APPROPRIATE TOOLS AND SOLVENTS WITHOUT DAMAGING CONCRETE. COLLECT AND MAINTAIN SITE IN A CLEAN AND ORDERLY CONDITION. REMOVE DEBRIS DAILY FROM SITE.

B. FINAL CLEANING: REMOVE ALL MORTAR SPLATTER, EPOXY SPILLS FROM THE REPAIR AREA AND ADJACENT STRUCTURES ACCEPTABLE TO THE ENGINEER.

PART 4 WARRANTY

4.01 WARRANTY

A. MANUFACTURER AND CONTRACTOR SHALL JOINTLY AND SEVERALLY AGREE TO WARRANTY THE REPAIR WORK AGAINST FAILURE DUE TO MATERIALS OR WORKMANSHIP FOR THE PERIOD OF THE WARRANTY. CONTRACTOR SHALL PROVIDE A LETTER FROM THE MANUFACTURER PRIOR TO COMMENCEMENT OF THE WORK INDICATING THEIR WILLINGNESS TO PROVIDE SUCH A WARRANTY. CONTRACTOR SHALL PROVIDE SAMPLE WARRANTY PRIOR TO COMMENCEMENT OF WORK.

B. THE PERIOD OF THE WARRANTY SHALL BE FIVE (5) YEARS FROM THE DATE OF COMPLETION.

SHEET TITLE:	
DRAWN:	T.R.; J.P.; R.A.
DATE:	OCTOBER 19, 2005
REVISIONS:	DATE:

3DESIGN, INC
ANTHONY LEON AA0006252
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5500 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

COPY

10/19/05

Paul 2/3/06

TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

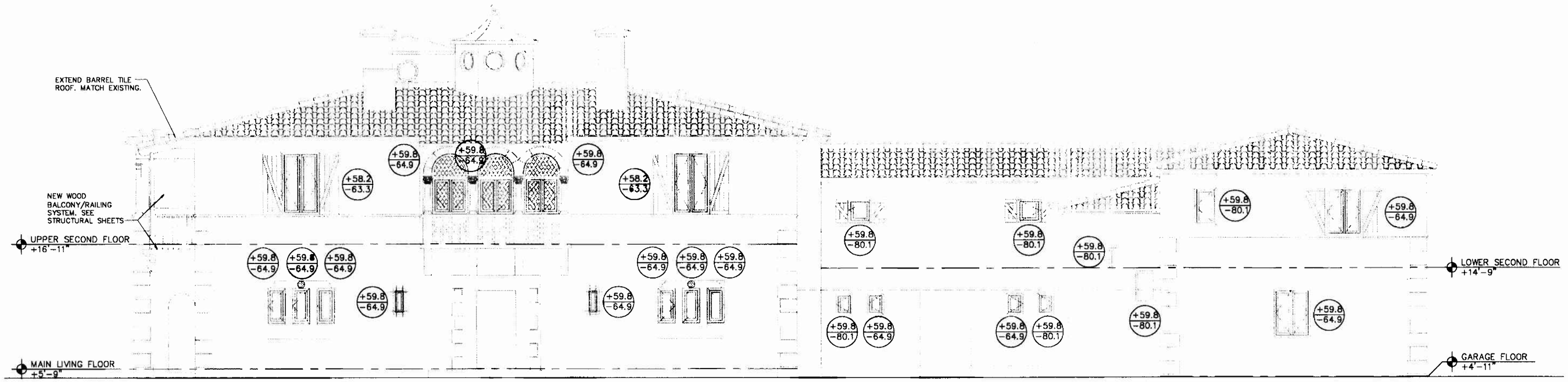
ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NEITHER TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

10/19/05

T.A. KHAN
FL P.E. #60994

Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301 Comm. No. 05-618.00
FAX.(305)-661-3962 CA# EB00002879

S-5.2



SOUTH ELEVATION

SCALE: 3/16"=1'-0"

WINDOWS, DOOR & OTHER OPENING PRESSURES (kd = 1.0)			
S.F. OF OPENING	POSITIVE PRESSURES	NEGATIVE ZONE 4	NEGATIVE ZONE 5
10	+59.8	-64.9	-80.1
15	+58.2	-63.3	-76.9
20	+57.1	-62.2	-74.7
25	+56.3	-61.3	-73.0
30	+55.5	-60.6	-71.6
35	+54.9	-60.0	-70.3
40	+54.4	-59.5	-69.3
50	+53.6	-58.6	-67.6
60	+52.8	-57.9	-66.2
70	+52.2	-57.3	-65.0
80	+51.7	-56.8	-63.9
90	+51.3	-56.3	-63.0
100	+50.9	-55.9	-62.2
110	+50.5	-55.6	-61.4
120	+50.2	-55.2	-60.8
130	+49.8	-54.9	-60.1
140	+49.6	-54.6	-59.6
150	+49.3	-54.4	-59.0
200	+48.2	-53.2	-56.8
300	+46.6	-51.7	-53.6
400	+45.5	-50.5	-51.4
500	+44.6	-49.7	-50.0
	A	A	B

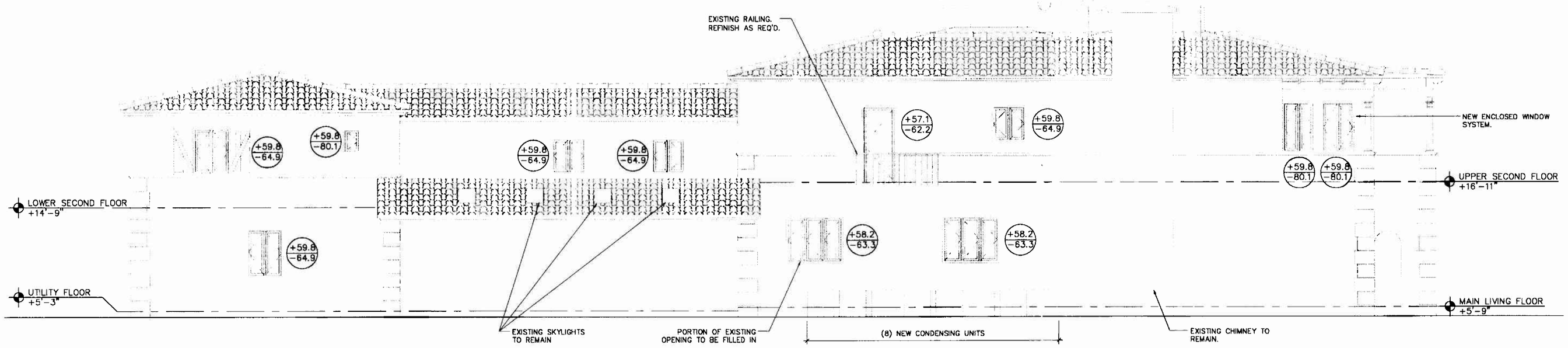
A - FOR ALL OPENINGS.

B - WITHIN OF 3'-6" OF CORNERS FOR MAIN RESIDENCE

FOR ALL FIXED TRANSOM, INTERMEDIATE MULLIONS AND INTERMEDIATE HORIZONTAL BEAMS, THE DESIGN PRESSURES BASED ON 10 SF. SHALL BE AS FOLLOW:
POSITIVE= + 59.8 PSF
NEGATIVE ZONE 4= -64.9 PSF.
NEGATIVE ZONE 5= -80.1 PSF.

** NOTE **
"a" = 3'-6" IS FOR THE MAIN RESIDENCE

BUILDING COMPONENT AND CLADDING PRESSURES



NORTH ELEVATION

SCALE: 3/16"=1'-0"

SHEET TITLE:
DRAWN: T.K.; J.P.; R.A.
DATE: OCTOBER 19, 2005
REVISIONS: DATE:

3DESIGN INC
ANTHONY LEON
ARCHITECTURE
AA0002572
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

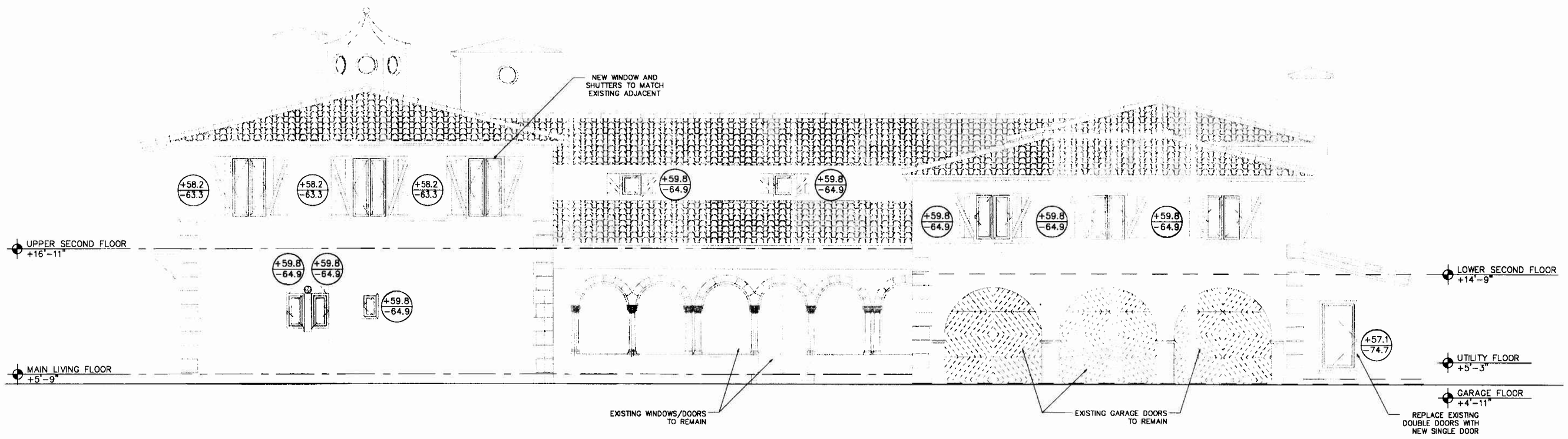
TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NOTHOT TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

10/19/05
T.A. KHAN
FL P.E. #60994

Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301 Comm. No. 05-618.00
FAX.(305)-661-3962 CA# EB00002879

S-6.1



EAST ELEVATION
SCALE: 3/16"=1'-0"

WINDOWS, DOOR & OTHER OPENING PRESSURES (kd = 1.0)			
S.F. OF OPENING	POSITIVE PRESSURES	NEGATIVE ZONE 4	NEGATIVE ZONE 5
10	+59.8	-64.9	-80.1
15	+58.2	-63.3	-76.9
20	+57.1	-62.2	-74.7
25	+56.3	-61.3	-73.0
30	+55.5	-60.6	-71.6
35	+54.9	-60.0	-70.3
40	+54.4	-59.5	-69.3
50	+53.6	-58.6	-67.6
60	+52.8	-57.9	-66.2
70	+52.2	-57.3	-65.0
80	+51.7	-56.8	-63.9
90	+51.3	-56.3	-63.0
100	+50.9	-55.9	-62.2
110	+50.5	-55.6	-61.4
120	+50.2	-55.2	-60.8
130	+49.8	-54.9	-60.1
140	+49.6	-54.6	-59.6
150	+49.3	-54.4	-59.0
200	+48.2	-53.2	-56.8
300	+46.6	-51.7	-53.6
400	+45.5	-50.5	-51.4
500	+44.6	-49.7	-50.0
	A	A	B

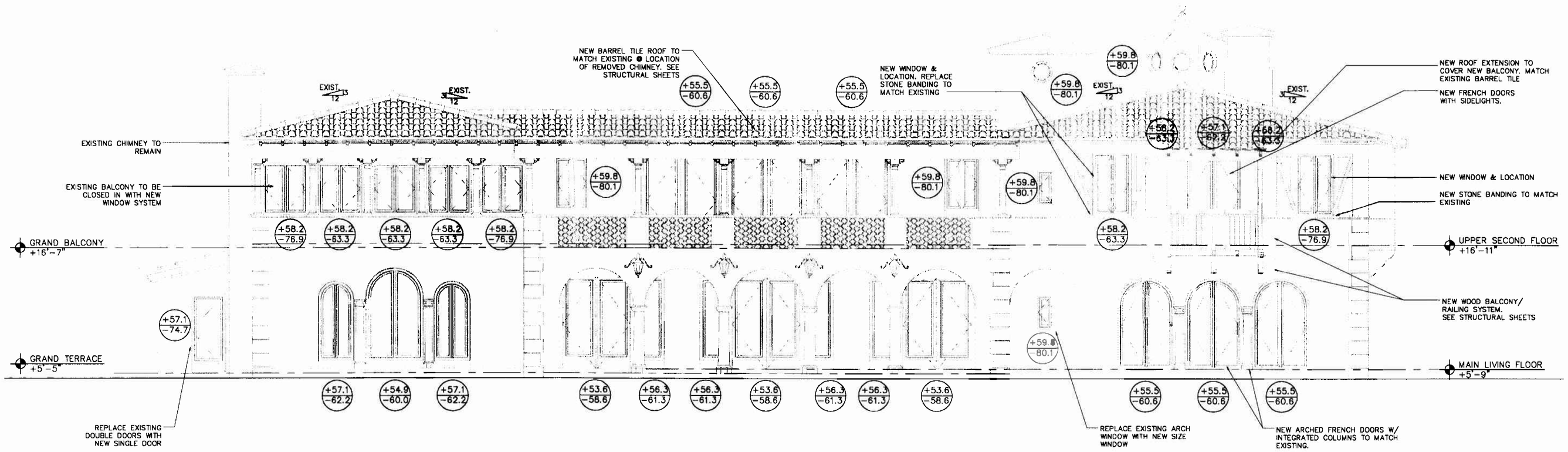
A - FOR ALL OPENINGS.

B - WITHIN OF 3'-6" OF CORNERS FOR MAIN RESIDENCE

FOR ALL FIXED TRANSOM, INTERMEDIATE MULLIONS AND INTERMEDIATE HORIZONTAL BEAMS, THE DESIGN PRESSURES BASED ON 10 SF. SHALL BE AS FOLLOW.
POSITIVE= + 59.8 PSF
NEGATIVE ZONE 4= -64.9 PSF.
NEGATIVE ZONE 5= -80.1 PSF.

** NOTE **
"a" = 3'-6" IS FOR THE MAIN RESIDENCE

BUILDING COMPONENT AND CLADDING PRESSURES



WEST ELEVATION
SCALE: 3/16"=1'-0"

SHEET TITLE:
DRAWN: T.K.; J.P.; R.A.
DATE: OCTOBER 19, 2005
REVISIONS: DATE:

3D DESIGN INC
ANTHONY LEON
AR0016521
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

OFFICE COPY
CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY THE FOLLOWING:

BUILDING:
ZONING:
DRB/HPB:
CONCURRENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
ENGINEERING:
PUBLIC WORKS:
STRUCTURAL: 12/8/05
ACCESSIBILITY:
LEVATOR:

As per Florida Building Code Section 104.5,
*REVIEWED FOR COMPLIANCE

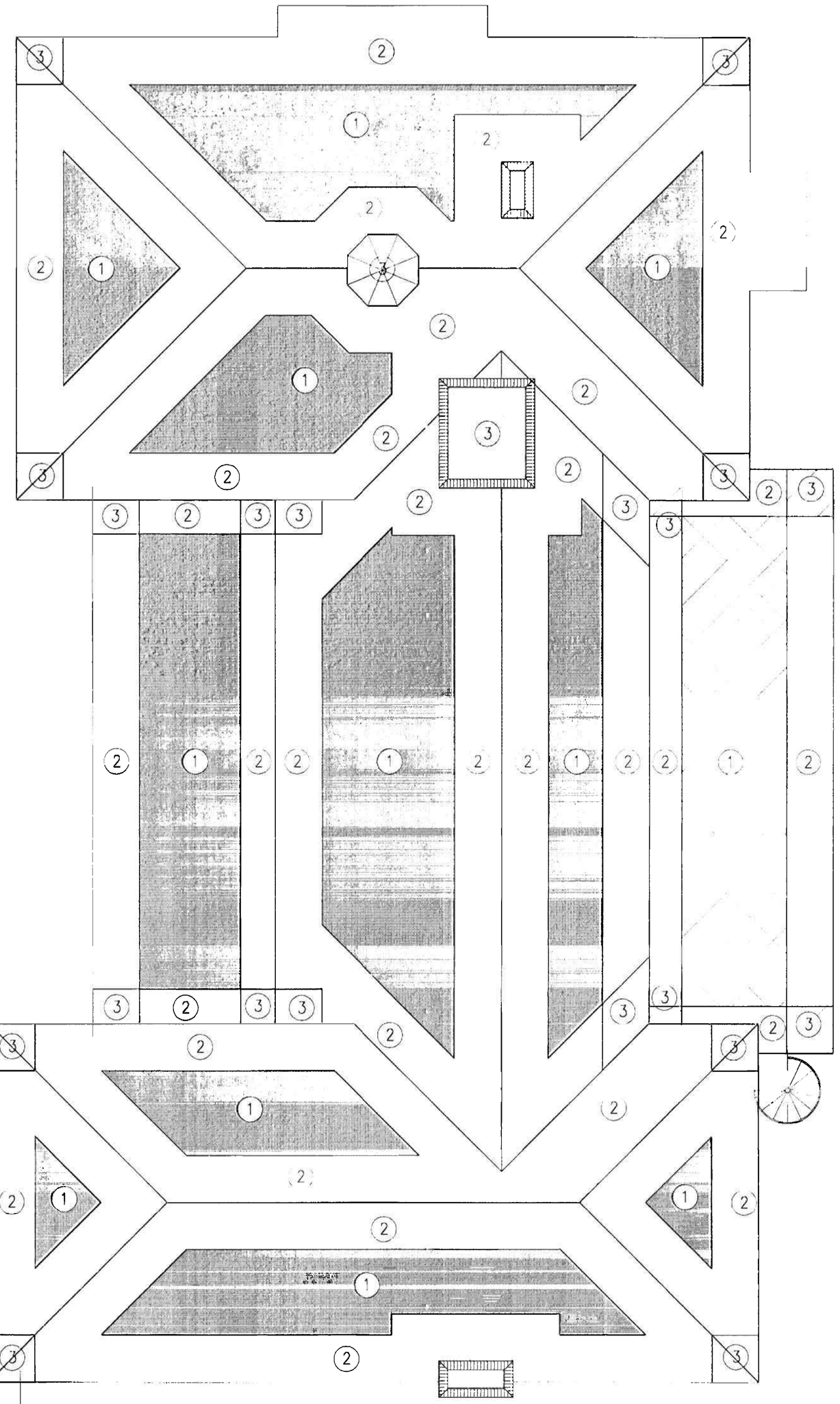
TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

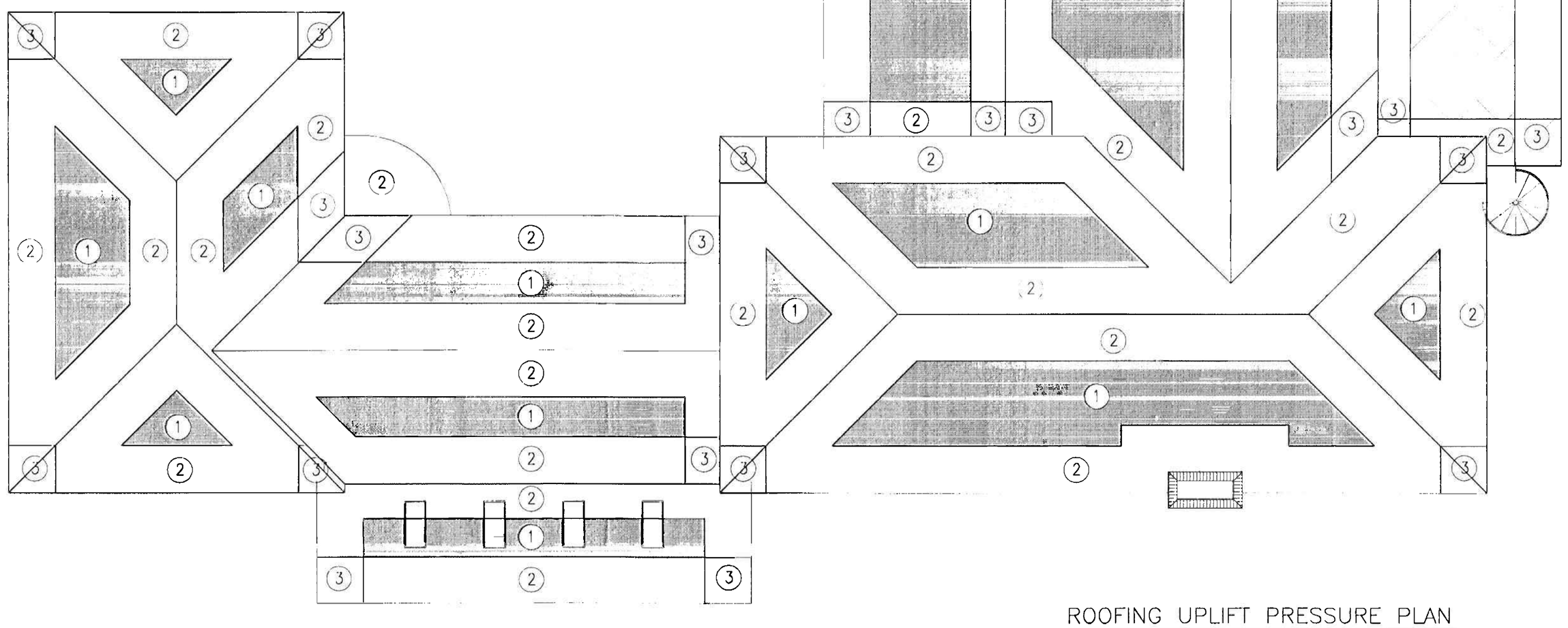
ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NEITHER TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

10/19/05
T.A. KHAN
FL P.E. #60994

Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301
FAX.(305)-661-3982
Comm. No. 05-618.00
CA# EB0000267

S-6.2





ROOFING UPLIFT PRESSURE PLAN
SCALE: 3/16"=1'-0"

NOTES:

1. THE WIND PRESSURES AND LOADING USED FOR THE DESIGN OF THE BUILDING STRUCTURE PER ASCE 7-98 AND FLORIDA BUILDING CODE 2001 ARE CALCULATED DIFFERENTLY THAN THE COMPONENT & CLADDING WIND PRESSURES REQUIRED BY THE SAME CODES. THE COMPONENT & CLADDING WIND PRESSURES SHOWN ON THESE DRAWINGS ARE PROVIDED AS GENERAL GUIDELINES AND AS A COURTESY TO THE OWNER TO FACILITATE PRICING AND/OR BIDDING AND ARE TO BE USED AS GENERAL INFORMATION ONLY.

2. COMPONENT & CLADDING PRESSURES SHOWN HEREIN ARE GROSS AND ARE BASED UPON kd=1.0. INCREASE IN ALLOWABLE STRESSES/LOADS IS NOT ALLOWED EXCEPT AS ALLOWED BY FBC 2004.

3. IT IS THE RESPONSIBILITY OF THE VARIOUS COMPONENT & CLADDING SPECIALTY ENGINEERS (HIRED BY THE MANUFACTURERS/ INSTALLERS/GENERAL CONTRACTOR/ SUBCONTRACTOR) TO DETERMINE AND ACCURATELY CALCULATE THESE PRESSURES AND LOADS AS REQUIRED BY THE CODES AND PROVIDE DESIGN, INSTALLATION AND ANY OTHER RELATED OPERATIONS ACCORDINGLY.

4. SIDDIQ KHAN AND ASSOCIATES, INC. (SKA) WILL NOT BE RESPONSIBLE FOR ANY DEFICIENCIES CAUSED BY DESIGN, ERECTIONS, INSTALLATION OR ANY OTHER OPERATIONS RELATED TO THE SPECIALTY COMPONENTS & CLADDINGS USED IN THIS BUILDING AS A RESULT OF USING THE COMPONENTS & CLADDING PRESSURES SHOWN HEREIN.

ROOFING UPLIFT PRESSURE (kd = 1.0)				
ZONE	SLOPE 3 : 12		FLAT ROOF	
1	+ 34.5 psf	- 54.7	+ 24.3	- 59.8
2	+ 34.5 psf	- 115.6	+ 24.3	- 100.4
3	+ 34.5 psf	- 115.6	+ 24.3	- 151.0

"a" : 3'-6"
* PRESSURES ARE BASED ON 10 SF.

TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE DESIGN AND DRAWINGS ARE NEITHER TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

10/19/05
T.A. KHAN
FL P.E. #60994

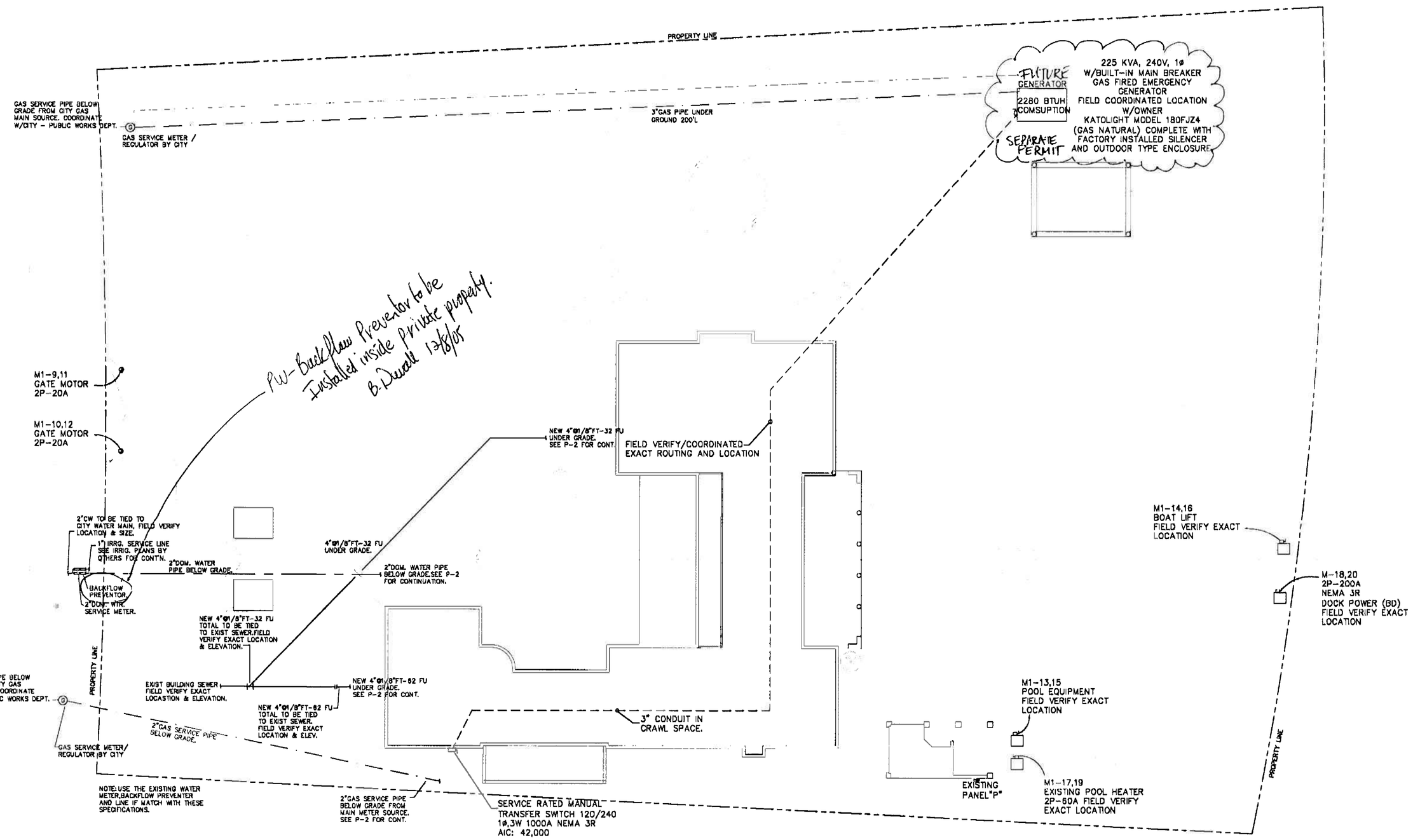
Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301 Comm. No. 05-618.00
FAX.(305)-661-3962 CA# EB00002879

SHEET TITLE:	
DRAWN	T.R.;J.P.;R.A.
DATE	OCTOBER 19, 2005
REVISIONS	DATE

3DESIGN INC.
ANTHONY LEON
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5500 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

S-6.3



1 MECHANICAL, ELECTRICAL, & PLUMBING PLAN
EMP1.1 1/16" = 1'-0"

SHEET TITLE: MEP SITE PLAN
DRAWN:
DATE: 10.19.05
REVISIONS: DATE:

10.19.05 SET / BID

2DESIGN INC
ANTHONY LEON
ARCHITECTURE
AR0006752
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5500 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESBEN ANDROGLU, P.E.
MECH./ELEC. – #42464
8881 DOUGLAS ROAD
MIAMI, FL. 33133
TEL. 305-448-8828
FAX. 305-448-7370
e-mail energys@bellsouth.net

OFFICE COPY
CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY THE FOLLOWING:
BUILDING:
ZONING:
DRB/HPB:
CONCURRENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
ENGINEERING:
PUBLIC WORKS:
STRUCTURAL:
ACCESSIBILITY:
LEVATOR:
As per Florida
MEP

EMP1.1

EMP1.1

LIGHTING KEY
NOT TO SCALE

Symbol	Description
	JUNCTION BOX
	2X2 RECESSED FLUORESCENT
	2X4 RECESSED FLUORESCENT
	RECESSED LINEAR FLUORESCENT
	RECESSED WALL LIGHT
	MOTION SENSOR. RUN LUTRON KEYPAD WIRE FROM SENSOR TO LOCAL 2 BUTTON KEYPAD.
	SCONCE
	CLOCK OUTLET
	1/2 SWITCHED DUPLEX OUTLET. ALWAYS SWITCH BOTTOM SOCKET.
	1/2 SWITCHED FLOOR OUTLET
	1/4 SWITCHED QUAD OUTLET.
	120V. CONSTANT POWER FOR CURTAIN MOTORS. RUN ONE CAT5 FROM MOTOR TO CONTROL.
	RUN 1 7 CONDUCTOR LUTRON QED WIRE FROM MOTOR TO QED PANEL.
	LINE VOLTAGE HIGH HAT
	LOW VOLTAGE HIGH HAT
EF	EXHAUST FAN. REMOTE LOCATION.
T.750	120>24 VOLT MAGNETIC TRANSFORMER.
	LINEAR LOW VOLTAGE CLICK STRIP.
123	LUTRON HOMEWORKS ZONE NUMBER.
KPS IR 27	LUTRON HOMEWORKS KEYPAD. TYPICAL LOCATION IS 48" A.F.F. O.C. 8" O.C. IN FROM EDGE OF WALL. CONFIRM ELEVATIONS. [1X 18-4S YELLOW STRIPE- LUTRON]
KPS 27 AV	LUTRON HOMEWORKS KEYPAD AND AV CONTROL KEYPAD IN TWO GANG DEEP BOX. [1X 18-4S YELLOW STRIPE- LUTRON]

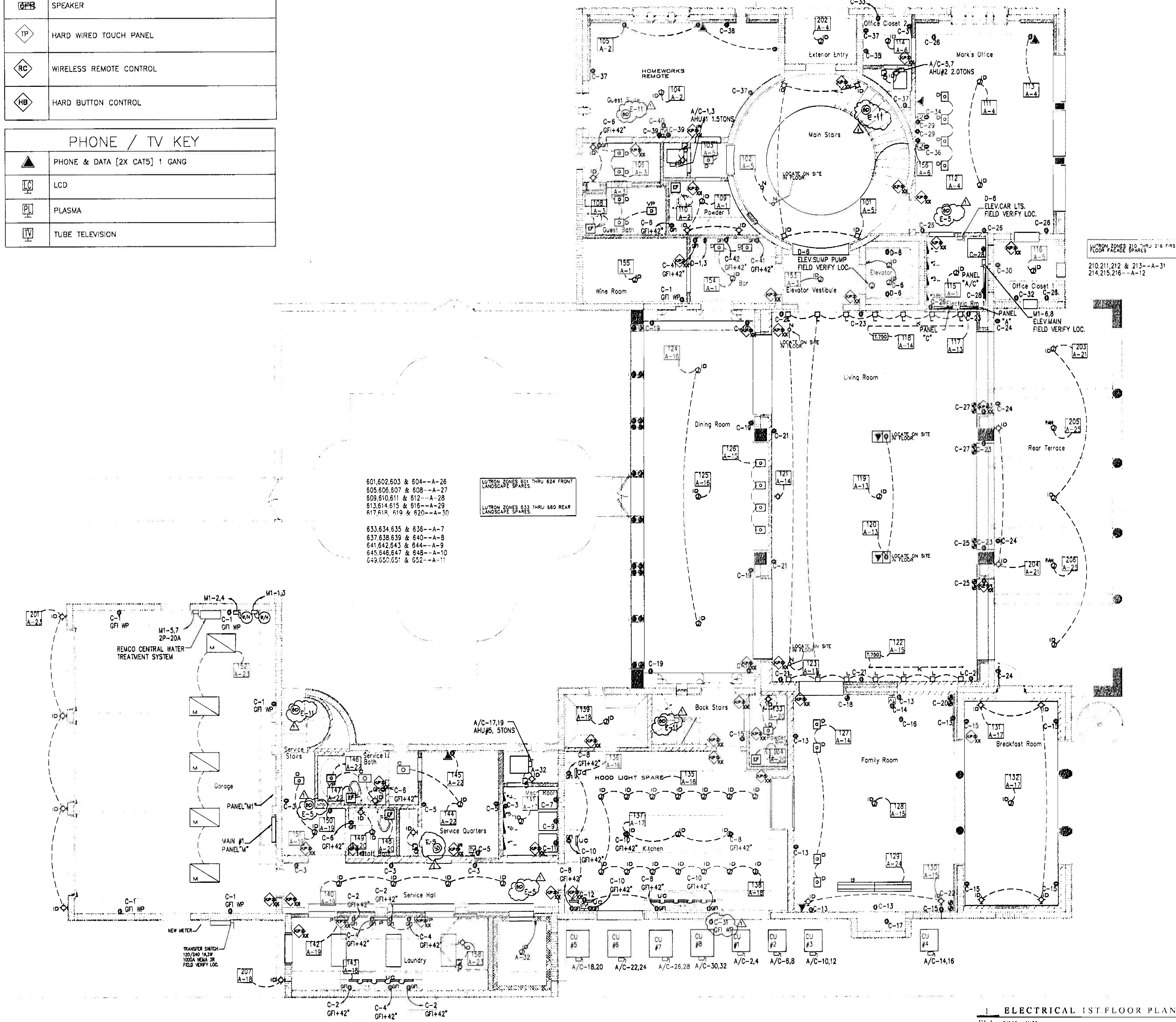
LUTRON KEYPAD WIRE LOOPS TO BE DISCUSSED ON SITE.

AUDIO VIDEO KEY

Symbol	Description
	SPEAKER
TP	HARD WIRED TOUCH PANEL
RC	WIRELESS REMOTE CONTROL
HB	HARD BUTTON CONTROL

PHONE / TV KEY

Symbol	Description
	PHONE & DATA [2X CAT5] 1 GANG
LC	LCD
PL	PLASMA
TV	TUBE TELEVISION



1 ELECTRICAL 1ST FLOOR PLAN
E1.1 3/16" = 1'-0"

PERMIT / BID SET 10.19.05

THE
GAINOR
RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

3DESIGN, INC
ANTHONY LEON
AR0016752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESBER ANDIROGLU, P.E.
MECH./ELEC. - #42454
2821 DOUGLAS ROAD
MIAMI, FL 33133
TEL 305-448-0856
FAX 305-448-7375
e-mail energy@bellsouth.net

...FOR PERMIT BY ... FOLLOWING:
ZONING:
DRB/HPB:
CONCURRENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
ENGINEERING:
PUBLIC WORKS:
STRUCTURAL:
ACCESSIBILITY:
ELEVATOR:
As per Florida ... Code
REVIEWED FOR CODE COMPLIANCE

SHEET TITLE:	ELECTRICAL PLAN
DRAWN:	
DATE:	10.19.05
REVISIONS:	DATE:

E1.1

E2.2

LIGHTING KEY
NOT TO SCALE

	JUNCTION BOX
	2X2 RECESSED FLUORESCENT
	2X4 RECESSED FLUORESCENT
	RECESSED LINEAR FLUORESCENT
	RECESSED WALL LIGHT
	MOTION SENSOR. RUN LUTRON KEYPAD WIRE FROM SENSOR TO LOCAL 2 BUTTON KEYPAD.
	SCONCE
	CLOCK OUTLET
	1/2 SWITCHED DUPLEX OUTLET. ALWAYS SWITCH BOTTOM SOCKET.
	1/2 SWITCHED FLOOR OUTLET
	1/4 SWITCHED QUAD OUTLET.
	120V. CONSTANT POWER FOR CURTAIN MOTORS. RUN ONE CAT5 FROM MOTOR TO CONTROL.
	RUN 1 7 CONDUCTOR LUTRON QED WIRE FROM MOTOR TO QED PANEL.
	LINE VOLTAGE HIGH HAT
	LOW VOLTAGE HIGH HAT
EF	EXHAUST FAN. REMOTE LOCATION.
T.750	120>24 VOLT MAGNETIC TRANSFORMER.
	LINEAR LOW VOLTAGE CLICK STRIP.
123	LUTRON HOMEWORKS ZONE NUMBER.
IR KPS 27	LUTRON HOMEWORKS KEYPAD. TYPICAL LOCATION IS 48" A.F.F. O.C. 8" O.C. IN FROM EDGE OF WALL. CONFRIM ELEVATIONS. [1X 18-4S YELLOW STRIPE- LUTRON]
KPS 27 AV	LUTRON HOMEWORKS KEYPAD AND AV CONTROL KEYPAD IN TWO GANG DEEP BOX. [1X 18-4S YELLOW STRIPE- LUTRON]

LUTRON KEYPAD WIRE LOOPS TO BE DISCUSSED ON SITE.

AUDIO VIDEO KEY

SPK	SPEAKER
TP	HARD WIRED TOUCH PANEL
RC	WIRELESS REMOTE CONTROL
HB	HARD BUTTON CONTROL

PHONE / TV KEY

	PHONE & DATA [2X CAT5] 1 GANG
LC	LCD
PL	PLASMA
TV	TUBE TELEVISION

601,602,603 & 604--A-26
605,606,607 & 608--A-27
609,610,611 & 612--A-28
613,614,615 & 616--A-29
617,618, 619 & 620--A-30

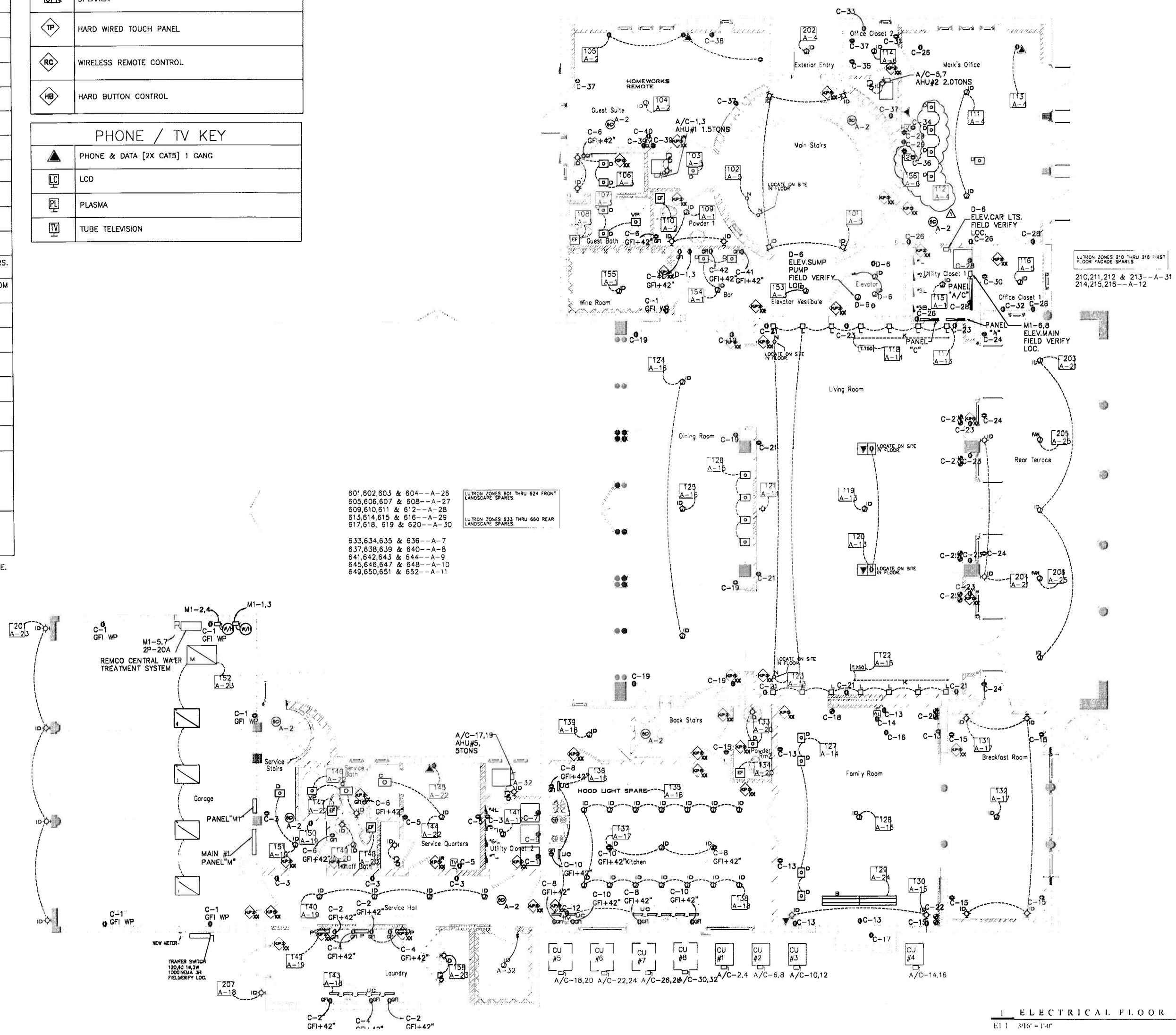
633,634,635 & 636--A-7
637,638,639 & 640--A-8
641,642,643 & 644--A-9
645,646,647 & 648--A-10
649,650,651 & 652--A-11

LUTRON ZONES 601 THRU 624 FRONT LANDSCAPE SPARES.

LUTRON ZONES 633 THRU 660 REAR LANDSCAPE SPARES.

LUTRON ZONES 210 THRU 218 FIRST FLOOR FACADE SPARES

210,211,212 & 213--A-31
214,215,216--A-12



1 ELECTRICAL FLOOR PLAN
E1.1 3/16" = 1'-0"

SET 10.19.05

PERMIT / BID

3DESIGN INC
ANTHONY LEON
AR0016752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305 531 5208 F.305.531.4515

SHEET TITLE: ELECTRICAL PLAN
DRAWN:
DATE: 10.19.05
REVISIONS: DATE:

ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESDEN ANDINOGLU, P.E.
MECH./ELEC. - #16454
2521 DOUGLAS ROAD
MIAMI, FL. 33133
TEL. 305-446-8826
FAX. 305-446-7275
e-mail energy@bellsouth.net

THE GAINOR RESIDENCE
5860 NORTH BAY ROAD
MIAMI BEACH FLORIDA

E1.1

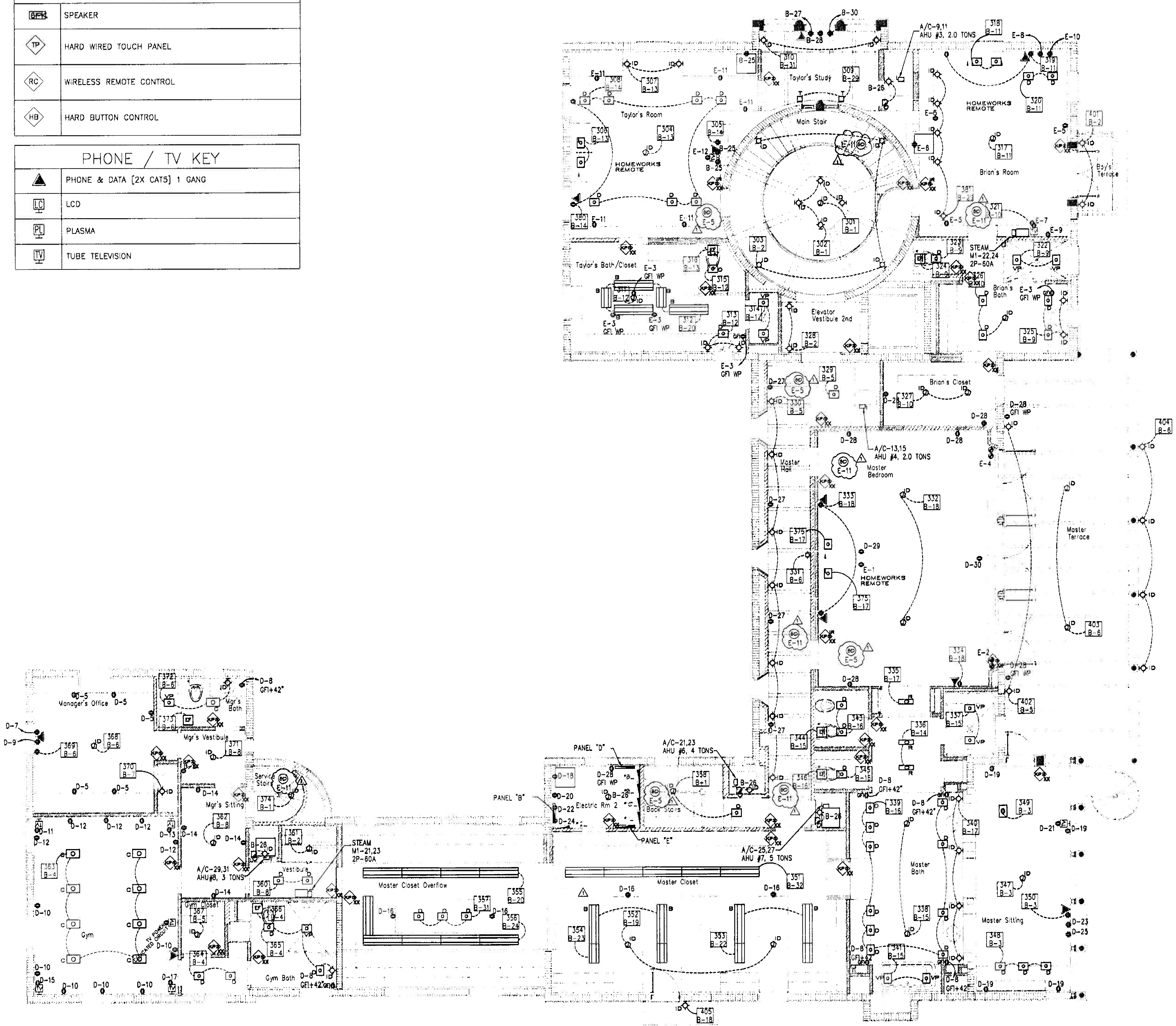
E2.2

LIGHTING KEY (NOT TO SCALE)	
[symbol]	JUNCTION BOX
[symbol]	2X2 RECESSED FLUORESCENT
[symbol]	2X4 RECESSED FLUORESCENT
[symbol]	RECESSED LINEAR FLUORESCENT
[symbol]	RECESSED WALL LIGHT
[symbol]	MOTION SENSOR. RUN LUTRON KEYPAD WIRE FROM SENSOR TO LOCAL 2 BUTTON KEYPAD.
[symbol]	SCONCE
[symbol]	CLOCK OUTLET
[symbol]	1/2 SWITCHED DUPLEX OUTLET. ALWAYS SWITCH BOTTOM SOCKET.
[symbol]	1/2 SWITCHED FLOOR OUTLET
[symbol]	1/4 SWITCHED QUAD OUTLET.
[symbol]	120V. CONSTANT POWER FOR CURTAIN MOTORS. RUN ONE CAT5 FROM MOTOR TO CONTROL.
[symbol]	RUN 1 7 CONDUCTOR LUTRON QED WIRE FROM MOTOR TO QED PANEL.
[symbol]	LINE VOLTAGE HIGH HAT
[symbol]	LOW VOLTAGE HIGH HAT
EF	EXHAUST FAN. REMOTE LOCATION.
T.750	120>24 VOLT MAGNETIC TRANSFORMER.
[symbol]	LINEAR LOW VOLTAGE CLICK STRIP.
123	LUTRON HOMEWORKS ZONE NUMBER.
KPS IR 27	LUTRON HOMEWORKS KEYPAD. TYPICAL LOCATION IS 48" A.F.F. O.C. 8" O.C. IN FROM EDGE OF WALL. CONFIRM ELEVATIONS. [1X 18-4S YELLOW STRIPE- LUTRON]
KPS 27 AV	LUTRON HOMEWORKS KEYPAD AND AV CONTROL KEYPAD IN TWO GANG DEEP BOX. [1X 18-4S YELLOW STRIPE- LUTRON]

LUTRON KEYPAD WIRE LOOPS TO BE DISCUSSED ON SITE.

AUDIO VIDEO KEY	
SPK	SPEAKER
TP	HARD WIRED TOUCH PANEL
RC	WIRELESS REMOTE CONTROL
HB	HARD BUTTON CONTROL

PHONE / TV KEY	
[symbol]	PHONE & DATA [2X CAT5] 1 GANG
LC	LCD
PL	PLASMA
TV	TUBE TELEVISION



1 ELECTRICAL 2ND FLOOR PLAN
E1.2 3/16" = 1'-0"

PERMIT / BID SET 10.19.05

3DESIGN, INC
ANTHONY LEON
AR0016752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESBER ANDIROGLU, P.E.
MECH/ELEC - #42454
2821 DOUGLAS ROAD
MIAMI FL 33133
TEL 305-446-8686
FAX 305-446-7375
e-mail esi@netrox.net

SHEET TITLE: ELECTRICAL PLAN
DRAWN:
DATE: 10.19.05
REVISIONS: DATE:
GENERAL REVIEW

CONCURRENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
ENGINEERING:
PUBLIC WORKS:
STRUCTURAL:
ACCESSIBILITY:
LEGATOR:
As per Florida [illegible]
[illegible] COMPLIANCE

E1.2

E2.2

PANEL 'A'

TYPE G.E.
SERVICE 1Ø, 3W
VOLTAGE 120/240

MAIN BUS 200 A
MAINS M.L.O.
A.I.C. : 10000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
1.62	1	20	1/2"	#12	MOD#1 1ST.FLOOR.PNL.2	1	2	MOD#2 1ST.FLOOR.PNL.2	#12	1/2"	20	1	1.05
1.04	1	20	1/2"	#12	MOD#3 1ST.FLOOR.PNL.2	3	4	MOD#4 1ST.FLOOR.PNL.2	#12	1/2"	20	1	1.34
1.04	1	20	1/2"	#12	MOD#5 1ST.FLOOR.PNL.2	5	6	MOD#6 1ST.FLOOR.PNL.2	#12	1/2"	20	1	0.50
1.80	1	20	1/2"	#12	MOD#1 1ST.FLOOR.PNL.3	7	8	MOD#2 1ST.FLOOR.PNL.3	#12	1/2"	20	1	1.80
1.80	1	20	1/2"	#12	MOD#3 1ST.FLOOR.PNL.3	9	10	MOD#4 1ST.FLOOR.PNL.3	#12	1/2"	20	1	1.80
1.80	1	20	1/2"	#12	MOD#5 1ST.FLOOR.PNL.3	11	12	MOD#6 1ST.FLOOR.PNL.3	#12	1/2"	20	1	1.05
1.64	1	20	1/2"	#12	MOD#1 1ST.FLOOR.PNL.4	13	14	MOD#2 1ST.FLOOR.PNL.4	#12	1/2"	20	1	1.74
1.70	1	20	1/2"	#12	MOD#3 1ST.FLOOR.PNL.4	15	16	MOD#4 1ST.FLOOR.PNL.4	#12	1/2"	20	1	1.65
1.80	1	20	1/2"	#12	MOD#5 1ST.FLOOR.PNL.4	17	18	MOD#6 1ST.FLOOR.PNL.4	#12	1/2"	20	1	1.75
1.69	1	20	1/2"	#12	MOD#7 1ST.FLOOR.PNL.4	19	20	MOD#8 1ST.FLOOR.PNL.4	#12	1/2"	20	1	0.96
1.20	1	20	1/2"	#12	MOD#1 1ST.FLOOR.PNL.5	21	22	MOD#2 1ST.FLOOR.PNL.5	#12	1/2"	20	1	1.00
1.25	1	20	1/2"	#12	MOD#3 1ST.FLOOR.PNL.5	23	24	MOD#4 1ST.FLOOR.PNL.5	#12	1/2"	20	1	0.40
1.00	1	20	1/2"	#12	MOD#5 1ST.FLOOR.PNL.5	25	26	MOD#1 1ST.FLOOR.PNL.6	#12	1/2"	20	1	1.80
1.80	1	20	1/2"	#12	MOD#2 1ST.FLOOR.PNL.6	27	28	MOD#3 1ST.FLOOR.PNL.6	#12	1/2"	20	1	1.80
1.80	1	20	1/2"	#12	MOD#4 1ST.FLOOR.PNL.6	29	30	MOD#5 1ST.FLOOR.PNL.6	#12	1/2"	20	1	1.80
1.20	1	20	1/2"	#12	MOD#6 1ST.FLOOR.PNL.6	31	32	GENERAL LIGHTS	#12	1/2"	20	1	1.80
1.00					SPARE	33	34	SPARE					1.00
						35	36						
						37	38						
						39	40						
0.93						41	42						0.14
29.11													27.10

56,210 VA
LOAD CALCS: 1st. 10KVA (100%) --- 10,000 VA
REST (40%) --- 18,484 VA
TOTAL LOAD : 33,192 VA --- 119 AMPS.
FEEDER: 3#2 THW. CU. IN 1 1/2" CONDUIT.

PANEL 'B'

TYPE G.E.
SERVICE 1Ø, 3W
VOLTAGE 120/240

MAIN BUS 200 A
MAINS M.L.O.
A.I.C. : 10000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
1.76	1	20	1/2"	#12	MOD#1 2ND.FLOOR.PNL.8	1	2	MOD#2 2ND.FLOOR.PNL.8	#12	1/2"	20	1	1.50
0.88	1	20	1/2"	#12	MOD#3 2ND.FLOOR.PNL.8	3	4	MOD#4 2ND.FLOOR.PNL.8	#12	1/2"	20	1	1.27
1.11	1	20	1/2"	#12	MOD#5 2ND.FLOOR.PNL.8	5	6	MOD#6 2ND.FLOOR.PNL.8	#12	1/2"	20	1	1.85
0.94	1	20	1/2"	#12	MOD#7 2ND.FLOOR.PNL.8	7	8	MOD#8 2ND.FLOOR.PNL.8	#12	1/2"	20	1	0.72
0.75	1	20	1/2"	#12	MOD#1 2ND.FLOOR.PNL.9	9	* 10	MOD#2 2ND.FLOOR.PNL.8	#12	1/2"	20	1	1.22
0.94	1	20	1/2"	#12	MOD#3 2ND.FLOOR.PNL.9	11 *	12	MOD#4 2ND.FLOOR.PNL.9	#12	1/2"	20	1	0.84
0.81	1	20	1/2"	#12	MOD#5 2ND.FLOOR.PNL.9	13	* 14	MOD#6 2ND.FLOOR.PNL.9	#12	1/2"	20	1	1.28
0.90	1	20	1/2"	#12	MOD#7 2ND.FLOOR.PNL.9	15	16	MOD#8 2ND.FLOOR.PNL.9	#12	1/2"	20	1	0.93
0.85	1	20	1/2"	#12	MOD#1 2ND.FLOOR.PNL.10	17	* 18	MOD#2 2ND.FLOOR.PNL.10	#12	1/2"	20	1	1.35
0.60	1	20	1/2"	#12	MOD#3 2ND.FLOOR.PNL.10	19	20	MOD#4 2ND.FLOOR.PNL.10	#12	1/2"	20	1	0.90
0.80	1	20	1/2"	#12	MOD#5 2ND.FLOOR.PNL.10	21	22	MOD#6 2ND.FLOOR.PNL.10	#12	1/2"	20	1	0.60
0.60	1	20	1/2"	#12	MOD#7 2ND.FLOOR.PNL.10	23	24	MOD#8 2ND.FLOOR.PNL.10	#12	1/2"	20	1	0.80
1.08	1	20	1/2"	#12	GENERAL OUTLETS	25 *	26	GENERAL LIGHTS	#12	1/2"	20	1	1.00
0.36	1	20	1/2"	#12	GENERAL OUTLETS	27	28	GENERAL OUTLETS	#12	1/2"	20	1	0.36
0.98	1	20	1/2"	#12	MOD#1 2ND.FLOOR.PNL.11	29	30	GENERAL OUTLETS	#12	1/2"	20	1	0.36
0.48	1	20	1/2"	#12	MOD#2 2ND.FLOOR.PNL.11	31	32	MOD#3 2ND.FLOOR.PNL.11	#12	1/2"	20	1	1.00
1.00					SPARE	33	34	SPARE					1.00
						35	36						
						37	38						
						39	40						
2.14						41	42						1.53
21.21													21.51

42,720 VA
LOAD CALCS: 1st. 10KVA (100%) --- 10,000 VA
REST (40%) --- 13,088 VA
TOTAL LOAD : 23,088 VA --- 96 AMPS.
FEEDER: 3#1 THW. CU. IN 1 1/2" CONDUIT.

* - ALL BEDROOM OUTLES WILL BE ARC-FAULT CURRENT PROTECTED

1

PANEL 'C'

TYPE G.E.
SERVICE 1Ø, 3W
VOLTAGE 120/240

MAIN BUS 200 A
MAINS M.L.O.
A.I.C. : 10000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
1.50	1	20	1/2"	#12	GFI WP GAREJE	1	2	SMALL APPLIANCES	#12	1/2"	20	1	1.50
0.90	1	20	1/2"	#12	GENERAL OUTLETS	3 *	4	SMALL APPLIANCES	#12	1/2"	20	1	1.50
0.54	1	20	1/2"	#12	GENERAL OUTLETS	5	6	GFI BATH	#12	1/2"	20	1	1.50
1.00	1	20	1/2"	#12	OUTLETS M/ROOM	7	8	SMALL APPLIANCES	#12	1/2"	20	1	1.50
1.00	1	20	1/2"	#12	OUTLETS M/ROOM	9	10	SMALL APPLIANCES	#12	1/2"	20	1	1.50
1.00	1	20	1/2"	#12	OUTLETS M/ROOM	11	12	TV OUTLET	#12	1/2"	20	1	0.50
1.08	1	20	1/2"	#12	GENERAL OUTLETS	13	14	TV OUTLET	#12	1/2"	20	1	0.50
1.08	1	20	1/2"	#12	GENERAL OUTLETS	15	16	SCREEN OUTLET	#12	1/2"	20	1	0.50
1.00	1	20	1/2"	#12	PROJECTOR OUTLET	17	18	MOTOR DOOR	#12	1/2"	20	1	0.50
1.08	1	20	1/2"	#12	GENERAL OUTLETS	19	20	MOTOR DOOR	#12	1/2"	20	1	0.50
1.08	1	20	1/2"	#12	GENERAL OUTLETS	21	22	MOTOR DOOR	#12	1/2"	20	1	0.50
1.08	1	20	1/2"	#12	GENERAL OUTLETS	23	24	GFI WP TERRACE	#12	1/2"	20	1	1.50
0.50	1	20	1/2"	#12	MOTOR DOOR	25	26	GENERAL OUTLETS	#12	1/2"	20	1	1.08
0.50	1	20	1/2"	#12	MOTOR DOOR	27	28	GENERAL OUTLETS	#12	1/2"	20	1	0.72
~~1.00~~	~~1~~	~~20~~	~~1/2"~~	~~#12~~	~~GENERAL OUTLETS~~	29	30	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.50	1	20	1/2"	#12	OUTLETS GFI WP	31	32	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.00					SPARE	33	34	SPARE					1.00
1.00					SPARE	35	36	SPARE					1.00
1.00	1	20	1/2"	#12	GENERAL OUTLETS	37 *	* 38	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.00	1	20	1/2"	#12	GENERAL OUTLETS	39 *	* 40	GENERAL OUTLETS	#12	1/2"	20	1	1.00
0.50					SPARE	41	42	SPARE					1.00
20.42													20.80

41,220 VA
LOAD CALCS: 1st. 10KVA (100%) --- 10,000 VA
REST (40%) --- 12,488 VA
TOTAL LOAD : 22,488 VA --- 94 AMPS.
FEEDER: 3#1 THW. CU. IN 1 1/2" CONDUIT.

* - ALL BEDROOM OUTLES WILL BE ARC-FAULT CURRENT PROTECTED

1

PANEL 'D'

TYPE G.E.
SERVICE 1Ø, 3W
VOLTAGE 120/240

MAIN BUS 200A
MAINS M.L.O.
A.I.C. : 10000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
2.00	2	20	1/2"	#12	COFFEE MACHINE	1	2	SPARE					1.50
						3	4	SPARE					0.60
1.08	1	20	1/2"	#12	GENERAL OUTLETS	5	6	ELEV.CAR LTS/OUTLETS	#12	1/2"	20	1	1.50
0.36	1	20	1/2"	#12	GENERAL OUTLETS	7	8	GFI BATH	#12	1/2"	20	1	1.50
0.36	1	20	1/2"	#12	GENERAL OUTLETS	9	10	GENERAL OUTLETS	#12	1/2"	20	1	1.08
1.00	1	20	1/2"	#12	GENERAL OUTLETS	11	12	GENERAL OUTLETS	#12	1/2"	20	1	0.90
1.00	1	20	1/2"	#12	GENERAL OUTLETS	13	14	GENERAL OUTLETS	#12	1/2"	20	1	0.72
1.00	1	20	1/2"	#12	GENERAL OUTLETS	15	16	GENERAL OUTLETS	#12	1/2"	20	1	1.08
1.00	1	20	1/2"	#12	GENERAL OUTLETS	17	18	GENERAL OUTLETS	#12	1/2"	20	1	1.00
0.72	1	20	1/2"	#12	GENERAL OUTLETS	19	20	GENERAL OUTLETS	#12	1/2"	20	1	1.00
0.50	1	20	1/2"	#12	TV OUTLET	21	22	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.00	1	20	1/2"	#12	GENERAL OUTLETS	23	24	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.00	1	20	1/2"	#12	GENERAL OUTLETS	25	26	GFI WP	#12	1/2"	20	1	1.50
0.72	1	20	1/2"	#12	GENERAL OUTLETS	27	* 28	GENERAL OUTLETS	#12	1/2"	20	1	0.52
1.00	1	20	1/2"	#12	PROJECTOR OUTLET	29	* 30	SCREEN OUTLET	#12	1/2"	20	1	1.00
1.00					SPARE	31	32	SPARE					1.00
						33	34						
						35	36						
						37	38						
						39	40						
						41	42						
16.74													21.90

38,640 VA
LOAD CALCS: 1st. 10KVA (100%) --- 10,000 VA
REST (40%) --- 11,456 VA
TOTAL LOAD : 21,456 VA --- 99 AMPS.
FEEDER: 3#1 THW. CU. IN 1 1/2" CONDUIT.

* - ALL BEDROOM OUTLES WILL BE ARC-FAULT CURRENT PROTECTED

1

PANEL 'A/C'

TYPE G.E.
SERVICE 1Ø, 3W
VOLTAGE 120/240

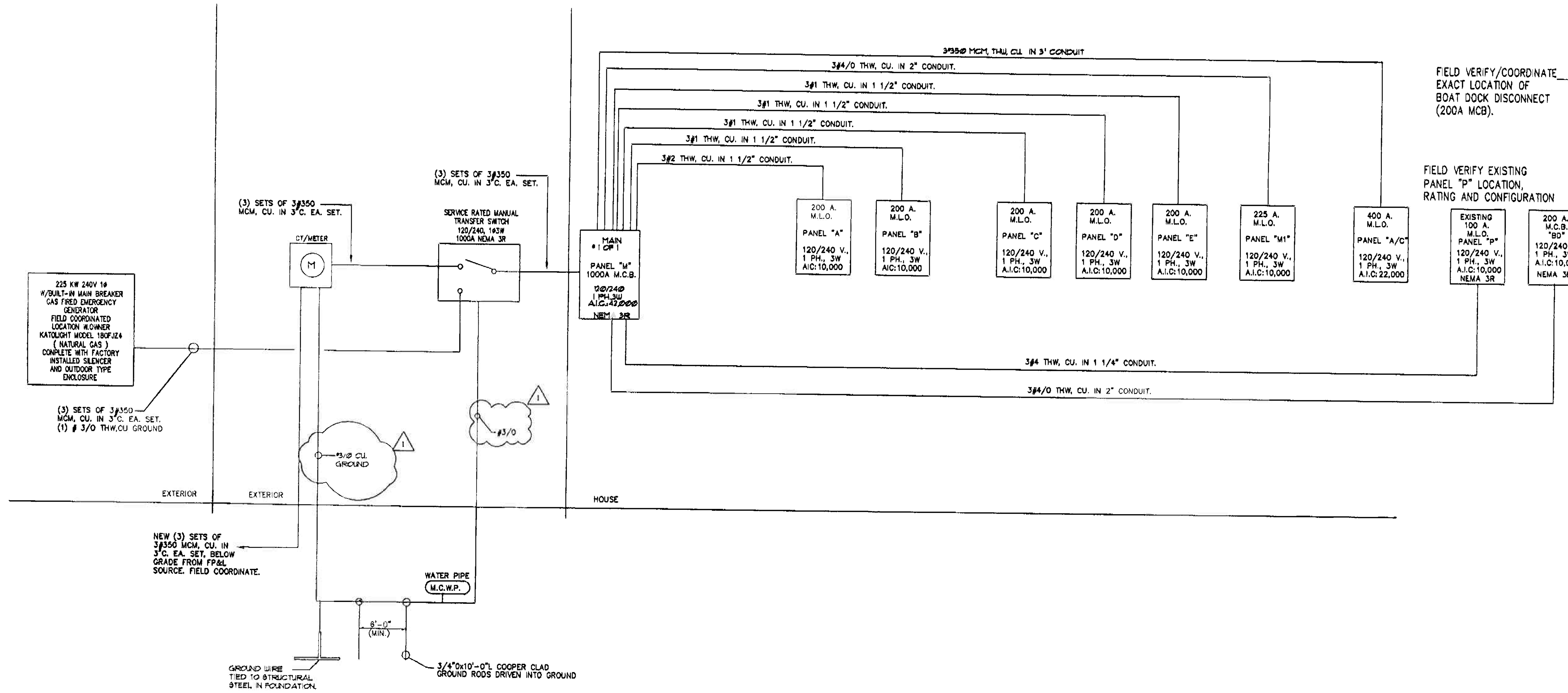
MAIN BUS 400A
MAINS M.L.O.
A.I.C. : 22000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
5.38	2	30	3/4"	#10	AHU #1	1, 3 *	* 2, 4	C.U. #1	#12	1/2"	20	2	2.59
11.03	2	60	1"	#6	AHU #2	5, 7 *	* 6, 8	C.U. #2	#12	1/2"	20	2	2.66
11.03	2	60	1"	#6	AHU #3	9, 11 *	* 10, 12	C.U. #3	#12	1/2"	20	2	2.66
11.03	2	60	1"	#6	AHU #4	13, 15 *	* 14, 16	C.U. #4	#12	1/2"	20	2	2.66
11.63	2	60	1"	#6	AHU #5	17, 19 *	* 18, 20	C.U. #5	#6	1"	50	2	6.58
11.03	2	60	1"	#6	AHU #6	21, 23 *	* 22, 24	C.U. #6	#8	3/4"	40	2	5.04
11.63	2	60	1"	#6	AHU #7	25, 27 *	* 26, 28	C.U. #7	#6	1"	50	2	6.58
11.03	2	60	1"	#6	AHU #8	29, 31 *	* 30, 32	C.U. #8	#10	3/4"	30	2	3.58
3.00					SPARE	33, 35	34, 36	SPARE					3.00
					SPACE	37, 39	38, 40	SPACE					
					SPACE	41	42	SPACE					
86.79													* 3.00

*TOTAL LOAD89,790 VA

LOAD CALCS:
HVAC IN HEATING. MODE @ 55% --- 54,464 VA
BALANCE @ (100%) --- 6,000 VA
DEMAND LOAD60,464 VA --- 252 AMPS.
FEEDER: 3 #350 MCM, THW, CU. IN 3" CONDUIT

*- HVAC LOADS IN HEATING MODE.



ELECTRICAL RISER DIAGRAM

SHEET TITLE: RISER & DIAGRAM ELECT.
DRAWN:
DATE: 10.19.05
REVISIONS: DATE:
1 GENERAL REVISION 11.22.05

PERMIT / BID SET 10.19.05

3DESIGN, INC
ANTHONY LEON AR0016752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33159 T.305.531.5208 F.305.531.4515

ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESBER ANDIROGLU, P.E.
MECH./ELEC. - #42464
2821 DOUGLAS ROAD
MIAMI, FL 33133
TEL 305-448-8826
FAX 305-448-7375
e-mail esi@netrox.net

THE
GAINOR
RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

OFFICE COPY
CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY
THE FOLLOWING:
BUILDING: 2/6/06
ZONING:
DRB:
CONCURRENCY:
PLUMBING:
ELECTRICAL: 1/12/6
MECHANICAL:
FIRE PREVENTION:
ENGINEERING:
PUBLIC WORKS:
STRUCTURAL:
ACCESSIBILITY:
ELEVATOR:
As per Florida Building Code Section 104.5.3

E2.1

E2.2

PANEL 'A'

TYPE G.E. — SERVICE 1Ø, 3W — VOLTAGE 120/240 — MAIN BUS 200 A — MAINS M.L.O. — A.I.C.: 10000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
1.62	1	20	1/2"	#12	MOD#1 1ST.FLOOR.PNL.2	1	2	MOD#2 1ST.FLOOR.PNL.2	#12	1/2"	20	1	1.05
1.04	1	20	1/2"	#12	MOD#3 1ST.FLOOR.PNL.2	3	4	MOD#4 1ST.FLOOR.PNL.2	#12	1/2"	20	1	1.34
1.04	1	20	1/2"	#12	MOD#5 1ST.FLOOR.PNL.2	5	6	MOD#6 1ST.FLOOR.PNL.2	#12	1/2"	20	1	0.50
1.80	1	20	1/2"	#12	MOD#1 1ST.FLOOR.PNL.3	7	8	MOD#2 1ST.FLOOR.PNL.3	#12	1/2"	20	1	1.80
1.80	1	20	1/2"	#12	MOD#3 1ST.FLOOR.PNL.3	9	10	MOD#4 1ST.FLOOR.PNL.3	#12	1/2"	20	1	1.80
1.80	1	20	1/2"	#12	MOD#5 1ST.FLOOR.PNL.3	11	12	MOD#6 1ST.FLOOR.PNL.3	#12	1/2"	20	1	1.05
1.64	1	20	1/2"	#12	MOD#1 1ST.FLOOR.PNL.4	13	14	MOD#2 1ST.FLOOR.PNL.4	#12	1/2"	20	1	1.14
1.70	1	20	1/2"	#12	MOD#3 1ST.FLOOR.PNL.4	15	16	MOD#4 1ST.FLOOR.PNL.4	#12	1/2"	20	1	1.65
1.80	1	20	1/2"	#12	MOD#5 1ST.FLOOR.PNL.4	17	18	MOD#6 1ST.FLOOR.PNL.4	#12	1/2"	20	1	1.18
1.69	1	20	1/2"	#12	MOD#7 1ST.FLOOR.PNL.4	19	20	MOD#8 1ST.FLOOR.PNL.4	#12	1/2"	20	1	0.96
1.20	1	20	1/2"	#12	MOD#1 1ST.FLOOR.PNL.5	21	22	MOD#2 1ST.FLOOR.PNL.5	#12	1/2"	20	1	1.00
1.25	1	20	1/2"	#12	MOD#3 1ST.FLOOR.PNL.5	23	24	MOD#4 1ST.FLOOR.PNL.5	#12	1/2"	20	1	0.40
1.00	1	20	1/2"	#12	MOD#5 1ST.FLOOR.PNL.5	25	26	MOD#1 1ST.FLOOR.PNL.6	#12	1/2"	20	1	1.80
1.80	1	20	1/2"	#12	MOD#2 1ST.FLOOR.PNL.6	27	28	MOD#3 1ST.FLOOR.PNL.6	#12	1/2"	20	1	1.80
1.80	1	20	1/2"	#12	MOD#4 1ST.FLOOR.PNL.6	29	30	MOD#5 1ST.FLOOR.PNL.6	#12	1/2"	20	1	1.80
1.20	1	20	1/2"	#12	MOD#6 1ST.FLOOR.PNL.6	31	32	GENERAL LIGHTS	#12	1/2"	20	1	1.80
1.00					SPARE	33	34	SPARE					1.00
						35	36						
						37	38						
						39	40						
0.93						41	42						0.14
29.11													27.10

56,210 VA

LOAD CALCS.: 1st. 10KVA (100%) --- 10,000 VA; REST (40%) --- 18,484 VA — TOTAL LOAD : 33,192 VA --- 119 AMPS. FEEDER: 3#2 THW, CU. IN 1 1/2" CONDUIT.

PANEL 'B'

TYPE G.E. — SERVICE 1Ø, 3W — VOLTAGE 120/240 — MAIN BUS 200 A — MAINS M.L.O. — A.I.C.: 10000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
1.76	1	20	1/2"	#12	MOD#1 2ND.FLOOR.PNL.8	1	2	MOD#2 2ND.FLOOR.PNL.8	#12	1/2"	20	1	1.50
0.88	1	20	1/2"	#12	MOD#3 2ND.FLOOR.PNL.8	3	4	MOD#4 2ND.FLOOR.PNL.8	#12	1/2"	20	1	1.27
1.71	1	20	1/2"	#12	MOD#5 2ND.FLOOR.PNL.8	5	6	MOD#6 2ND.FLOOR.PNL.8	#12	1/2"	20	1	1.85
0.94	1	20	1/2"	#12	MOD#7 2ND.FLOOR.PNL.8	7	8	MOD#8 2ND.FLOOR.PNL.8	#12	1/2"	20	1	0.72
0.15	1	20	1/2"	#12	MOD#1 2ND.FLOOR.PNL.9	9	10	MOD#2 2ND.FLOOR.PNL.8	#12	1/2"	20	1	1.22
0.94	1	20	1/2"	#12	MOD#3 2ND.FLOOR.PNL.9	11	12	MOD#4 2ND.FLOOR.PNL.9	#12	1/2"	20	1	0.84
0.81	1	20	1/2"	#12	MOD#5 2ND.FLOOR.PNL.9	13	14	MOD#6 2ND.FLOOR.PNL.9	#12	1/2"	20	1	1.28
0.90	1	20	1/2"	#12	MOD#7 2ND.FLOOR.PNL.9	15	16	MOD#8 2ND.FLOOR.PNL.9	#12	1/2"	20	1	0.93
0.85	1	20	1/2"	#12	MOD#1 2ND.FLOOR.PNL.10	17	18	MOD#2 2ND.FLOOR.PNL.10	#12	1/2"	20	1	1.35
0.60	1	20	1/2"	#12	MOD#3 2ND.FLOOR.PNL.10	19	20	MOD#4 2ND.FLOOR.PNL.10	#12	1/2"	20	1	0.90
0.80	1	20	1/2"	#12	MOD#5 2ND.FLOOR.PNL.10	21	22	MOD#6 2ND.FLOOR.PNL.10	#12	1/2"	20	1	0.60
0.60	1	20	1/2"	#12	MOD#7 2ND.FLOOR.PNL.10	23	24	MOD#8 2ND.FLOOR.PNL.10	#12	1/2"	20	1	0.80
1.08	1	20	1/2"	#12	GENERAL OUTLETS	25	26	GENERAL LIGHTS	#12	1/2"	20	1	1.00
0.36	1	20	1/2"	#12	GENERAL OUTLETS	27	28	GENERAL OUTLETS	#12	1/2"	20	1	0.36
0.95	1	20	1/2"	#12	MOD#1 2ND.FLOOR.PNL.11	29	30	GENERAL OUTLETS	#12	1/2"	20	1	0.36
0.48	1	20	1/2"	#12	MOD#2 2ND.FLOOR.PNL.11	31	32	MOD#3 2ND.FLOOR.PNL.11	#12	1/2"	20	1	1.00
1.00					SPARE	33	34	SPARE					1.00
						35	36						
						37	38						
						39	40						
2.14						41	42						1.53
21.21													21.51

42,720 VA

LOAD CALCS.: 1st. 10KVA (100%) --- 10,000 VA; REST (40%) --- 13,088 VA — TOTAL LOAD : 23,088 VA --- 96 AMPS. FEEDER: 3#1 THW, CU. IN 1 1/2" CONDUIT.

PANEL 'C'

TYPE G.E. — SERVICE 1Ø, 3W — VOLTAGE 120/240 — MAIN BUS 200 A — MAINS M.L.O. — A.I.C.: 10000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
1.50	1	20	1/2"	#12	GFI WP GAREJE	1	2	SMALL APPLIANCES	#12	1/2"	20	1	1.50
0.90	1	20	1/2"	#12	GENERAL OUTLETS	3	4	SMALL APPLIANCES	#12	1/2"	20	1	1.50
0.54	1	20	1/2"	#12	GENERAL OUTLETS	5	6	GFI BATH	#12	1/2"	20	1	1.50
1.00	1	20	1/2"	#12	OUTLETS M/ROOM	7	8	SMALL APPLIANCES	#12	1/2"	20	1	1.50
1.00	1	20	1/2"	#12	OUTLETS M/ROOM	9	10	SMALL APPLIANCES	#12	1/2"	20	1	1.50
1.00	1	20	1/2"	#12	OUTLETS M/ROOM	11	12	TV OUTLET	#12	1/2"	20	1	0.50
1.08	1	20	1/2"	#12	GENERAL OUTLETS	13	14	TV OUTLET	#12	1/2"	20	1	0.50
1.08	1	20	1/2"	#12	GENERAL OUTLETS	15	16	SCREEN OUTLET	#12	1/2"	20	1	0.50
1.00	1	20	1/2"	#12	PROJECTOR OUTLET	17	18	MOTOR DOOR	#12	1/2"	20	1	0.50
1.08	1	20	1/2"	#12	GENERAL OUTLETS	19	20	MOTOR DOOR	#12	1/2"	20	1	0.50
1.08	1	20	1/2"	#12	GENERAL OUTLETS	21	22	MOTOR DOOR	#12	1/2"	20	1	0.50
1.08	1	20	1/2"	#12	GENERAL OUTLETS	23	24	GFI WP TERRACE	#12	1/2"	20	1	1.50
0.50	1	20	1/2"	#12	MOTOR DOOR	25	26	GENERAL OUTLETS	#12	1/2"	20	1	1.08
0.50	1	20	1/2"	#12	MOTOR DOOR	27	28	GENERAL OUTLETS	#12	1/2"	20	1	0.72
1.08	1	20	1/2"	#12	GENERAL OUTLETS	29	30	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.00					SPARE	31	32	SPARE					1.00
						33	34						
						35	36						
						37	38						
						39	40						
						41	42						
20.42													20.80

41,220 VA

LOAD CALCS.: 1st. 10KVA (100%) --- 10,000 VA; REST (40%) --- 12,488 VA — TOTAL LOAD : 22,488 VA --- 94 AMPS. FEEDER: 3#1 THW, CU. IN 1 1/2" CONDUIT.

PANEL 'D'

TYPE G.E. — SERVICE 1Ø, 3W — VOLTAGE 120/240 — MAIN BUS 200A — MAINS M.L.O. — A.I.C.: 10000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
2.00	2	20	1/2"	#12	COFFEE MACHINE	1, 3	2	SPARE					1.50
							4	SPARE					0.60
1.08	1	20	1/2"	#12	GENERAL OUTLETS	5	6	ELEV.CAR LTS/OUTLETS	#12	1/2"	20	1	1.50
0.36	1	20	1/2"	#12	GENERAL OUTLETS	7	8	GFI BATH	#12	1/2"	20	1	1.50
0.36	1	20	1/2"	#12	GENERAL OUTLETS	9	10	GENERAL OUTLETS	#12	1/2"	20	1	1.08
1.00	1	20	1/2"	#12	GENERAL OUTLETS	11	12	GENERAL OUTLETS	#12	1/2"	20	1	0.90
1.00	1	20	1/2"	#12	GENERAL OUTLETS	13	14	GENERAL OUTLETS	#12	1/2"	20	1	0.72
1.00	1	20	1/2"	#12	GENERAL OUTLETS	15	16	GENERAL OUTLETS	#12	1/2"	20	1	1.08
1.00	1	20	1/2"	#12	GENERAL OUTLETS	17	18	GENERAL OUTLETS	#12	1/2"	20	1	1.00
0.72	1	20	1/2"	#12	GENERAL OUTLETS	19	20	GENERAL OUTLETS	#12	1/2"	20	1	1.00
0.50	1	20	1/2"	#12	TV OUTLET	21	22	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.00	1	20	1/2"	#12	GENERAL OUTLETS	23	24	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.00	1	20	1/2"	#12	GENERAL OUTLETS	25	26	GFI WP	#12	1/2"	20	1	1.50
0.72	1	20	1/2"	#12	GENERAL OUTLETS	27	28	GENERAL OUTLETS	#12	1/2"	20	1	0.52
1.00	1	20	1/2"	#12	PROJECTOR OUTLET	29	30	SCREEN OUTLET	#12	1/2"	20	1	1.00
1.00					SPARE	31	32	SPARE					1.00
						33	34						
						35	36						
						37	38						
						39	40						
						41	42						
16.74													21.90

38,640 VA

LOAD CALCS.: 1st. 10KVA (100%) --- 10,000 VA; REST (40%) --- 11,456 VA — TOTAL LOAD : 21,456 VA --- 99 AMPS. FEEDER: 3#1 THW, CU. IN 1 1/2" CONDUIT.

PANEL "A/C"

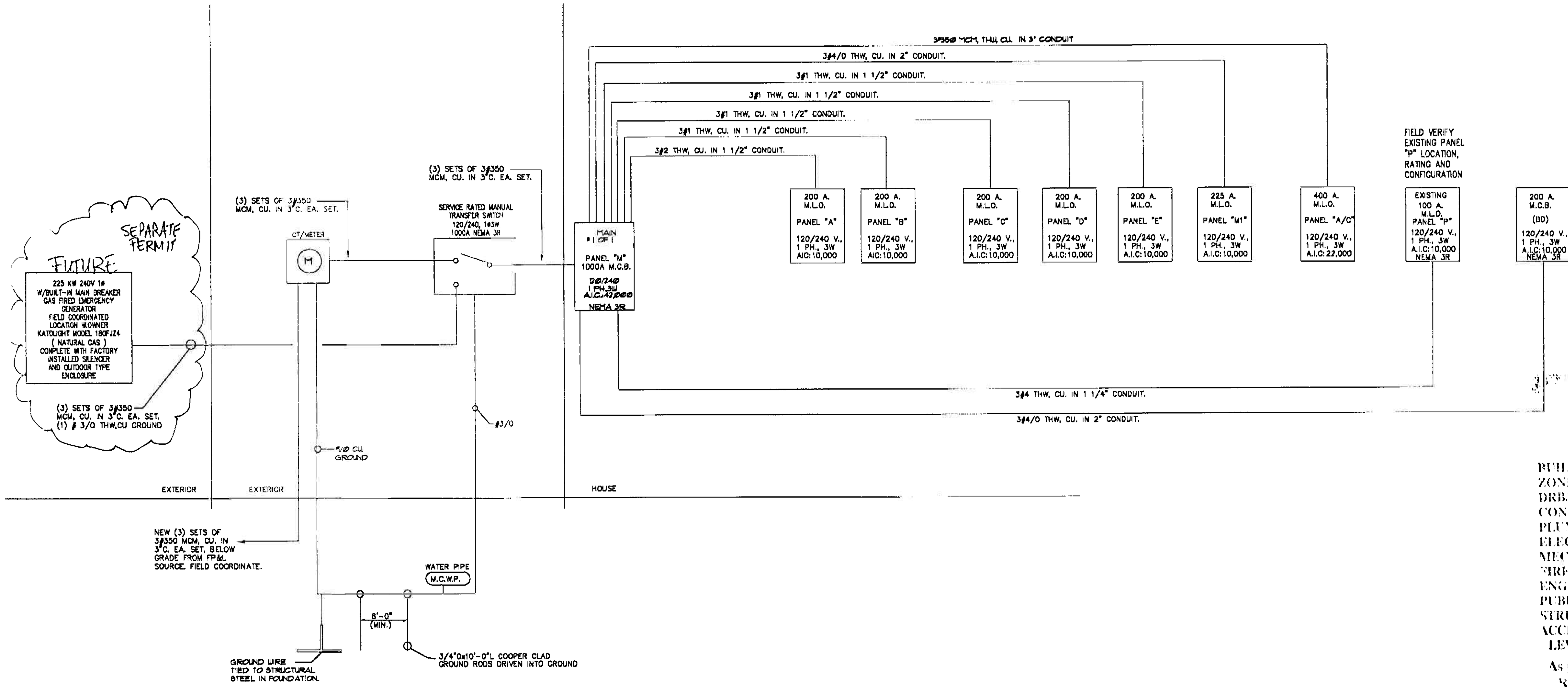
TYPE G.E. — SERVICE 1Ø, 3W — VOLTAGE 120/240 — MAIN BUS 400A — MAINS M.L.O. — A.I.C.: 22000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.			CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
5.38	2	30	3/4"	#10	AHU #1	1, 3	*	*	2, 4	C.U. #1	#12	1/2"	20	2	2.58
11.03	2	60	1"	#6	AHU #2	5, 7	*	*	6, 8	C.U. #2	#12	1/2"	20	2	2.66
11.03	2	60	1"	#6	AHU #3	9, 11	*	*	10, 12	C.U. #3	#12	1/2"	20	2	2.66
11.03	2	60	1"	#6	AHU #4	13, 15	*	*	14, 16	C.U. #4	#12	1/2"	20	2	2.66
11.63	2	60	1"	#6	AHU #5	17, 19	*	*	18, 20	C.U. #5	#6	1"	50	2	6.58
11.03	2	60	1"	#6	AHU #6	21, 23	*	*	22, 24	C.U. #6	#8	3/4"	40	2	5.04
11.63	2	60	1"	#6	AHU #7	25, 27	*	*	26, 28	C.U. #7	#6	1"	50	2	6.58
11.03	2	60	1"	#6	AHU #8	29, 31	*	*	30, 32	C.U. #8	#10	3/4"	30	2	3.58
3.00					SPARE	33, 35			34, 36	SPARE					3.00
					SPACE	37, 39			38, 40	SPACE					
					SPACE	41			42	SPACE					
86.79														*	3.00

*TOTAL LOAD 89,790 VA

LOAD CALCS.: HVAC IN HEATING. MODE @ 65% --- 54,464 VA; BALANCE @ (100%) --- 6,000 VA — DEMAND LOAD 60,464 VA --- 252 AMPS. FEEDER: 3 #350 MCM, THW, CU. IN 3" CONDUIT

*- HVAC LOADS IN HEATING MODE.



ELECTRICAL RISER DIAGRAM

PERMIT / BID SET 10.19.05

OFFICE … CITY OF MIAMI … APPROVED FOR … THE FOLLOWING:
BUILDING: … ZONING: … DRB/HPB: … CONCURRENCY: … PLUMBING: … ELECTRICAL: … MECHANICAL: … FIRE PREVENTION: … ENGINEERING: … PUBLIC WORKS: … STRUCTURAL: … ACCESSIBILITY: … ELEVATOR: …
As per Florida Building Code Section 104.5.3 REVIEWED FOR CODE COMPLIANCE

ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESBEN ANDIROGLU, P.E.
MECH./ELEC. - #42454
2821 DOUGLAS ROAD
MIAMI, FL 33133
TEL 305-446-5825
FAX 305-445-7376

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

3DESIGN, INC
ANTHONY LEON
AR0016752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

SHEET TITLE: RISER & DIAGRAM ELECT.
DRAWN:
DATE: 10.19.05
REVISIONS: DATE:

E2.1

E2.2

TYPE G.E.
SERVICE 1Ø, 3W
VOLTAGE 120/240

PANEL 'E'

MAIN BUS 200 A
MAINS M.L.O.
A.I.C. : 10000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.			CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
1.00	1	20	1/2"	#12	DROP DOWN	1	*		2	MOTOR DOOR	#12	1/2"	20	1	0.50
1.50	1	20	1/2"	#12	GFI BATH	3			4	MOTOR DOOR	#12	1/2"	20	1	0.50
0.72	1	20	1/2"	#12	GENERAL OUTLETS	5	*	*	6	GENERAL OUTLETS	#12	1/2"	20	1	1.00
0.50	1	20	1/2"	#12	TV OUTLET	7	*	*	8	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.00	1	20	1/2"	#12	GENERAL OUTLETS	9		*	10	GENERAL OUTLETS	#12	1/2"	20	1	1.00
0.90	1	20	1/2"	#12	GENERAL OUTLETS	11	*	*	12	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.00	1	20	1/2"	#12	GENERAL OUTLETS	13			14	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.00	1	20	1/2"	#12	GENERAL OUTLETS	15			16	TV OUTLET	#12	1/2"	20	1	0.50
1.00	1	20	1/2"	#12	GENERAL OUTLETS	17			18	TV OUTLET	#12	1/2"	20	1	0.50
0.72	1	20	1/2"	#12	GENERAL OUTLETS	19			20	GENERAL OUTLETS	#12	1/2"	20	1	1.00
0.72	1	20	1/2"	#12	GENERAL OUTLETS	21			22	TV OUTLET	#12	1/2"	20	1	0.50
1.50	1	20	1/2"	#12	SMALL APPLIANCES	23			24	SMALL APPLIANCES	#12	1/2"	20	1	1.50
1.00					SPARE	25			26	SPARE					1.00
						27			28						
						29			30						
						31			32						
						33			34						
						35			36						
						37			38						
						39			40						
						41			42						
20.56															19.00

39,560 VA
LOAD CALCS. 1st. 10KVA (100%) --- 10,000 VA
REST (40%) --- 11,824 VA
TOTAL LOAD : 21,824 VA --- 91 AMPS.
FEEDER: 3#1 THW, CU. IN 1 1/2" CONDUIT.

* - ALL BEDROOM OUTLES WILL BE ARC-FAULT CURRENT PROTECTED (1)

TYPE G.E.
SERVICE 1Ø, 3W
VOLTAGE 120/240

PANEL 'M'
(MAIN # 1 OF 1)

MAIN BUS 1000 A.
MAINS M.C.B.
A.I.C. : 42000

KVA CONN.	KVA DMND.	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	KVA DMND.	KVA CONN.
56.21	33.19	2	125	1.5"	#1	PANEL "A"	1 3	2 4	PANEL "C"	#1	1.5"	125	2	22.48	41.22
42.72	23.08	2	125	1.5"	#1	PANEL "B"	5 7	6 8	PANEL "D"	#1	1.5"	125	2	21.45	38.64
39.56	21.82	2	100	1.25"	#2	PANEL "E"	9 11	10 12	PANEL "A/C"	#350	3"	300	2	60.46	89.79
82.50	45.00	2	225	2"	#4/0	PANEL "M1"	13 15	14 16	PANEL "P" CABANA EXISTING	#4	1.25"	60	2	10.00	10.00
						SPACE	17 19	18 20	BOAT DOCK-BD	#4/0	2"	200	2	40.00	50.00
							21 23	22 24	SPACE						
							25 27	26 28							
							29 31	30 32							
							33 27	34 28							
							29 31	30 32							
							33 35	34 36							
							37 39	38 40							
							41	42							
222.99															229.65

* TOTAL LOAD : 452,640 VA
LOAD CALCS.
HVAC IN HEATING. MODE @ (65%) :--- 54,464 VA
POOL HEATER @ (100%) --- 10,000 VA
1st. 10KVA (100%) --- 10,000 VA
REST (40%) ---139,540 VA
DEMAND LOAD214,004 VA --- 892 AMPS.
FEEDER: (3) SETS OF 3#350 MCM, THW, CU. IN 3" CONDUIT EACH SET.

TYPE G.E.
SERVICE 1Ø, 3W
VOLTAGE 120/240

PANEL 'MI'

MAIN BUS 225 A
MAINS M.L.O.
A.I.C. : 10000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
6.00	2	30	3/4"	#10	WATER HEATER	1 3	2 4	WATER HEATER	#10	3/4"	30	2	6.00
3.00	2	20	1/2"	#12	TREATMENT SYSTEM	5 7	6 8	ELEVMAIN	#6	1"	60	2	12.00
2.00	2	20	1/2"	#12	GATE MOTOR	9 11	10 12	GATE MOTOR	#12	1/2"	20	2	2.00
2.50	2	20	1/2"	#12	POOL EQUIP.	13 15	14 16	BOAT LIFT	#6	1"	60	2	10.00
10.00	2	60	1"	#6	POOL HEATER EXISTING	17 19	18 20	SPARE				2	5.00
8.00	2	60	1"	#6	STEAM	21 23	22 24	STEAM	#6	1"	60	2	8.00
1.00					SPARE	25	26	SPARE					1.00
						27	28						
						29	30						
						31	32						
					SPACE	33	34	SPACE					
						35	36						
						37	38						
						39	40						
						41	42						
35.50													47.00

* TOTAL LOAD : 82,500 VA
LOAD CALCS.
POOL HEATER @ (100%) --- 10,000 VA
1st. 10KVA (100%) --- 10,000 VA
REST (40%) --- 25,000 VA
DEMAND LOAD45,000 VA --- 187.50 AMPS.
FEEDER:3# 4/0 THW, CU. IN 2" CONDUIT.

ELECTRICAL NOTES

1. General
   A. All work performed under this contract shall comply with all national, state and local codes having jurisdiction and with, the requirements of the utility companies whose services shall be used. All modifications required by these codes shall be made by this contractor without additional charge.
   B. Drawins: Refer to all drawings for coordination of the electrical work.
   C. Arrange and pay for all permits, licenses, inspections and tests. Obtain the required certificates and present to owner.
   D. Guarantee: The completed installation shall be fully guaranteed against defective materials and/or improper workmanship for minimum of one year for material and labor.
2. Contractor is directed to review the building plans and specifications for limitations of constructions. identifications of materials and products, definition of workmanship. This contractor shall include his bid proposal all costs necessary for a complete and operational installation and shall visit the job site prior to a bid date.
3. Contractor needs to establish a field liason with project supervisor, prior to commencing work.
4. All required insurance shall be provided for protection against public liability and property damage for duration of the work.
5. It shall not be the intent of these plans and/or specifications to show every minor detail of construction. The electrical contractor shall be expected to furnish and install all items for a complete electrical system and provide all requirements necessary for equipment to be placed in proper working order.
6. Electrical contractor shall not scale drawings. Contractor shall refer to architectural plans and elevations for exact locations of all equipment unless otherwise noted.
7. All conduit runs are shown diagrammactically. Exact routing shall be determined in the field, unless otherwise noted.
8. Electrical contractor shall visit the job site and verify all conditions, locations, dimensions and counts as shown and/or noted on the drawings. This shall include any and all fabrications prior to installations.
9. As a minimum, all equipment shall meet applicable standards, for the type of equipment and intended use, of the following:
   a. American National Standards Institute (ASTM).
   b. Illuminating Engineers Society (IES).
   c. American Society for Testing and Materials (ASTM)
   d. National Electrical Manufacturer's Association (NEMA).
   Note: These standards are subordinate to codes, and standards set by UL.
10. All electrical equipment, devices, wire, ect. shall be listed, for the intended use, with Underwriter laboratories, Inc. (UL), where standards have been established by UL.
11. As-built drawings shall be furnished to the owner upon completion of work.
12. Wiring devices to be spec. grade.
13. Where more than one devices is indicated at any location, these shall be ganged under one common cover plate.
14. Contractor shall coordinate with electric and telephone utility for service entrance location and any other requirements.
15. All connections to ground rods shall be made with UL approved welded connections, unless noted otherwise.
16. Provide a fuse holder and fuse in the primary side of each ungrounded conductor for all ballasts.
17. Unless noted as existing, all equipment, wiring, devices, etc. shall be new.
18. Contractor shall guarantee all materials and workmanship free from defects for a period of not less than (1) year from date of acceptance, unless indicated of specified otherwise.
19. Correction of any defects shall be completed without additional charge and shall include replacement or repair of any other phase of the installation which may have been damaged thereby.
20. Electrical contractor shall provide temporary service for use of all trades as required for construction.
21. Temporary wiring to be removed by contractor.
22. Electrical contractor shall verify requirements, exact location and type or outlet for all electrical fixtures, appliances and equipment.
23. Shaow drawings: Coordinate with owner or architect.
24. All wiring to have 600 volt insulation, type TW, THW, THWN, for branch circuits and type THW, THN for main feeders or as specified.
25. Design is based on copper conductor. Wire size #10 and smaller type "TW", wire size #8 and larger type "THW" or as specified.
26. Wire ways shall be sized as required, per NEC, unless otherwise noted.
27. All feeder, subfeeder and branch circuits shall be properly phase balanced.
28. All conductors shall be in conduits. All conduits shall be intermediate (IMC) or rigid galvanized steel (RGS) except that: (a) poly vinyl chloride (PVC) conduits may used in concrete slabs at underground provided elbows and riser are RGS; (b) electrical metallic tubing (EMT) may be used in or on walls or ceilings where not subject to mechanical damage, damp conditions or corrosive conditions; (c) liquid tight flexible conduits where required; (d) flexible metallic conduit where required in dry locations. All conduit hazardous areas (per NEC) shall meet the requirements of NEC Chapter.
29. Apply bitumastic coating to all metallic conduits in slabs or underground.
30. Electrical contractor shall verify circuit protective device rating for equipment prior to construction.
31. Provide fuse recommended by equipment manufacturer.
32. Furnish and install disconnect switches and wiring for air conditioning systems as per manufacturer recommendations. Controls are to be supplied by air conditioning contractor.
33. Install power and control wiring and required control components for air condition systems as shown/noted on these drawings and per other applicable drawings/instructions see A/C drawings.
34. Electrical contractor to run control wires for HVAC system as per HVAC drawings.
35. No conduits to be run in ductwork.
36. All electrical wiring must be in conduit (no Romex, BX, etc. is permitted unless specific permission is obtained from owner, engineering or local inspector).

SHEET TITLE: RISER & DIAGRAM ELECT.
DRAWN:
DATE: 10.19.05
REVISIONS: DATE:
(1) GENERAL REVISION 11.22.05

PERMIT / BID SET 10.19.05

3DESIGN, INC
ANTHONY LEON
AR0016752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESBER ANDIROGLU, P.E.
MECH./ELEC. - #42454
2621 DOUGLAS ROAD
MIAMI, FL. 33133
TEL. 305-448-8828
FAX. 305-448-7376
e-mail esi@netrox.net

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

... OF MIAMI BEACH
APPROVED FOR PERMIT BY
THE FOLLOWING:
BUILDING:
ZONING:
DRB/HPB:
CONCURRENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
ENGINEERING:
PUBLIC WORKS:
STRUCTURAL:
ACCESSIBILITY:
ELEVATOR:
As per Florida Bui...

E2.2

E2.2

PANEL 'E'

TYPE G.E.
SERVICE 1, 3W
VOLTAGE 120/240

MAIN BUS 200 A
MAINS M.L.O.
A.I.C. : 10000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
1.00	1	20	1/2"	#12	DROP DOWN	1	2	MOTOR DOOR	#12	1/2"	20	1	0.50
1.50	1	20	1/2"	#12	GFI BATH	3	4	MOTOR DOOR	#12	1/2"	20	1	0.50
0.72	1	20	1/2"	#12	GENERAL OUTLETS	5	6	GENERAL OUTLETS	#12	1/2"	20	1	1.00
0.50	1	20	1/2"	#12	TV OUTLET	7	8	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.00	1	20	1/2"	#12	GENERAL OUTLETS	9	10	GENERAL OUTLETS	#12	1/2"	20	1	1.00
0.50	1	20	1/2"	#12	GENERAL OUTLETS	11	12	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.00	1	20	1/2"	#12	GENERAL OUTLETS	13	14	GENERAL OUTLETS	#12	1/2"	20	1	1.00
1.00	1	20	1/2"	#12	GENERAL OUTLETS	15	16	TV OUTLET	#12	1/2"	20	1	0.50
1.00	1	20	1/2"	#12	GENERAL OUTLETS	17	18	TV OUTLET	#12	1/2"	20	1	0.50
0.72	1	20	1/2"	#12	GENERAL OUTLETS	19	20	GENERAL OUTLETS	#12	1/2"	20	1	1.00
0.72	1	20	1/2"	#12	GENERAL OUTLETS	21	22	TV OUTLET	#12	1/2"	20	1	0.50
1.50	1	20	1/2"	#12	SMALL APPLIANCES	23	24	SMALL APPLIANCES	#12	1/2"	20	1	1.50
1.00					SPARE	25	26	SPARE					1.00
						27	28						
						29	30						
						31	32						
						33	34						
						35	36						
						37	38						
						39	40						
						41	42						
20.56													19.00

39,560 VA
LOAD CALCS. 1st. 10KVA (100%) --- 10,000 VA
REST (40%) --- 11,824 VA

TOTAL LOAD : 21,824 VA --- 91 AMPS.
FEEDER: 3#1 THW, CU. IN 1 1/2" CONDUIT.

PANEL 'M'

(MAIN # 1 OF 1)

TYPE G.E.
SERVICE 1, 3W
VOLTAGE 120/240

MAIN BUS 1000 A.
MAINS M.C.B.
A.I.C. : 42000

KVA CONN.	KVA DMND.	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	KVA DMND.	KVA CONN.
58.21	33.19	2	125	1.5"	#1	PANEL "A"	1, 3	2, 4	PANEL "C"	#1	1.5"	125	2	22.48	41.22
42.72	23.08	2	125	1.5"	#1	PANEL "B"	5, 7	6, 8	PANEL "D"	#1	1.5"	125	2	21.45	38.64
39.56	21.82	2	100	1.25"	#2	PANEL "E"	9, 11	10, 12	PANEL "A/C"	#350	3"	300	2	60.46	89.79
82.50	45.00	2	225	2"	#4/0	PANEL "M1"	13, 15	14, 16	PANEL "P" CABANA EXISTING	#4	1.25"	60	2	10.00	10.00
						SPACE	17, 19	18, 20	BOAT DOCK (BD)	#4/0	2"	200	2	40.00	50.00
							21, 23	22, 24	SPACE						
							25, 27	26, 28							
							29, 31	30, 32							
							33, 27	34, 28							
							29, 31	30, 32							
							33, 35	34, 36							
							37, 39	38, 40							
							41	42							
222.99															229.65

* TOTAL LOAD : 452,840 VA
LOAD CALCS.
HVAC IN HEATING. MODE @ (65%) :--- 54,464 VA
POOL HEATER @ (100%) --- 10,000 VA
1st. 10KVA (100%) --- 10,000 VA
REST (40%) ---139,540 VA

DEMAND LOAD 214,004 VA --- 892 AMPS.
FEEDER: (3) SETS OF 3#350 MCM, THW, CU. IN 3" CONDUIT EACH SET.

PANEL 'M1'

TYPE G.E.
SERVICE 1, 3W
VOLTAGE 120/240

MAIN BUS 225 A
MAINS M.L.O.
A.I.C. : 10000

K/VOLT AMP	POLE	TRIP	CONDUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CONDUIT	TRIP	POLE	K/VOLT AMP
6.00	2	30	3/4"	#10	WATER HEATER	1, 3	2, 4	WATER HEATER	#10	3/4"	30	2	6.00
3.00	2	20	1/2"	#12	TREATMENT SYSTEM	5, 7	6, 8	ELEVMAIN	#6	1"	60	2	12.00
2.00	2	20	1/2"	#12	GATE MOTOR	9, 11	10, 12	GATE MOTOR	#12	1/2"	20	2	2.00
2.50	2	20	1/2"	#12	POOL EQUIP.	13, 15	14, 16	BOAT LIFT	#6	1"	60	2	10.00
10.00	2	60	1"	#6	POOL HEATER EXISTING	17, 19	18, 20	SPARE				2	5.00
8.00	2	60	1"	#6	STEAM	21, 23	22, 24	STEAM	#6	1"	60	2	8.00
1.00					SPARE	25	26	SPARE					1.00
						27	28						
						29	30						
						31	32						
					SPACE	33	34	SPACE					
						35	36						
						37	38						
						39	40						
						41	42						
35.50													47.00

* TOTAL LOAD : 82,500 VA
LOAD CALCS.
POOL HEATER @ (100%) --- 10,000 VA
1st. 10KVA (100%) --- 10,000 VA
REST (40%) --- 25,000 VA

DEMAND LOAD 45,000 VA --- 183.50 AMPS.
FEEDER: 3# 4/0 THW, CU. IN 2" CONDUIT.

ELECTRICAL NOTES

1. General
   - A. All work performed under this contract shall comply with all national, state and local codes having jurisdiction and with, the requirements of the utility companies whose services shall be used. All modifications required by these codes shall be made by this contractor without additional charge.
   - B. Drawins: Refer to all drawings for coordination of the electrical work.
   - C. Arrange and pay for all permits, licenses, inspections and tests. Obtain the required certificates and present to owner.
   - D. Guarantee: The completed installation shall be fully guaranteed against defective materials and/or improper workmanship for minimum of one year for material and labor.
2. Contractor is directed to review the building plans and specifications for limitations of constructions, identifications of materials and products, definition of workmanship. This contractor shall include his bid proposal all costs necessary for a complete and operational installation and shall visit the job site prior to a bid date.
3. Contractor needs to establish a field liason with project supervisor, prior to commencing work.
4. All required insurance shall be provided for protection against public liability and property damage for duration of the work.
5. It shall not be the intent of these plans and/or specifications to show every minor detail of construction. The electrical contractor shall be expected to furnish and install all items for a complete electrical system and provide all requirements necessary for equipment to be placed in proper working order.
6. Electrical contractor shall not scale drawings. Contractor shall refer to architectural plans and elevations for exact locations of all equipment unless otherwise noted.
7. All conduit runs are shown diagrammactically. Exact routing shall be determined in the field, unless otherwise noted.
8. Electrical contractor shall visit the job site and verify all conditions, locations, dimensions and counts as shown and/or noted on the drawings. This shall include any and all fabrications prior to installations.
9. As a minimum, all equipment shall meet applicable standards, for the type of equipment and intended use, of the following:
   - a. American National Standards Institute (ASTM).
   - b. Illuminating Engineers Society (IES).
   - c. American Society for Testing and Materials (ASTM)
   - d. National Electrical Manufacturer's Association (NEMA).

   Note: These standards are subordinate to codes, and standards set by UL.
10. All electrical equipment, devices, wire, ect. shall be listed, for the intended use, with Underwriter laboratories, Inc. (UL), where standards have been established by UL.
11. As-built drawings shall be furnished to the owner upon completion of work.
12. Wiring devices to be spec. grade.
13. Where more than one devices is indicated at any location, these shall be ganged under one common cover plate.
14. Contractor shall coordinate with electric and telephone utility for service entrance location and any other requirements.
15. All connections to ground rods shall be made with UL approved welded connections, unless noted otherwise.
16. Provide a fuse holder and fuse in the primary side of each ungrounded conductor for all ballasts.
17. Unless noted as existing, all equipment, wiring, devices, etc. shall be new.
18. Contractor shall guarantee all materials and workmanship free from defects for a period of not less than (1) year from date of acceptance, unless indicated of specified otherwise.
19. Correction of any defects shall be completed without additional charge and shall include replacement or repair of any other phase of the installation which may have been damaged thereby.
20. Electrical contractor shall provide temporary service for use of all trades as required for construction.
21. Temporary wiring to be removed by contractor.
22. Electrical contractor shall verify requirements, exact location and type or outlet for all electrical fixtures, appliances and equipment.
23. Shaow drawings: Coordinate with owner or architect.
24. All wiring to have 600 volt insulation, type TW, THW, THWN, for branch circuits and type THW, THN for main feeders or as specified.
25. Design is based on copper conductor. Wire size #10 and smaller type "TW", wire size #8 and larger type "THW" or as specified.
26. Wire ways shall be sized as required, per NEC, unless otherwise noted.
27. All feeder, subfeeder and branch circuits shall be properly phase balanced.
28. All conductors shall be in conduits. All conduits shall be intermediate (IMC) or rigid galvanized steel (RGS) except that: (a) poly vinyl chloride (PVC) conduits may used in concrete slabs at underground provided elbows and riser are RGS; (b) electrical metallic tubing (EMT) may be used in or on walls or ceilings where not subject to mechanical damage, damp conditions or corrosive conditions; (c) liquid tight flexible conduits where required; (d) flexible metallic conduit where required in dry locations. All conduit hazardous areas (per NEC) shall meet the requirements of NEC Chapter.
29. Apply bitumastic coating to all metallic conduits in slabs or underground.
30. Electrical contractor shall verify circuit protective device rating for equipment prior to construction.
31. Provide fuse recommended by equipment manufacturer.
32. Furnish and install disconnect switches and wiring for air conditioning systems as per manufacturer recommendations. Controls are to be supplied by air conditioning contractor.
33. Install power and control wiring and required control components for air condition systems as shown/noted on these drawings and per other applicable drawings/instructions see A/C drawings.
34. Electrical contractor to run control wires for HVAC system as per HVAC drawings.
35. No conduits to be run in ductwork.
36. All electrical wiring must be in conduit (no Romex, BX, etc. is permitted unless specific permission is obtained from owner, engineering or local inspector).

SHEET TITLE : RISER & DIAGRAM ELECT
DRAWN :
DATE : 10.19.05
REVISIONS : DATE:

PERMIT / BID SET 10.19.05

3DESIGN, INC
ANTHONY LEON
AR0016752
ARCHITECTURE
1234 WASHINGTON AVE SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

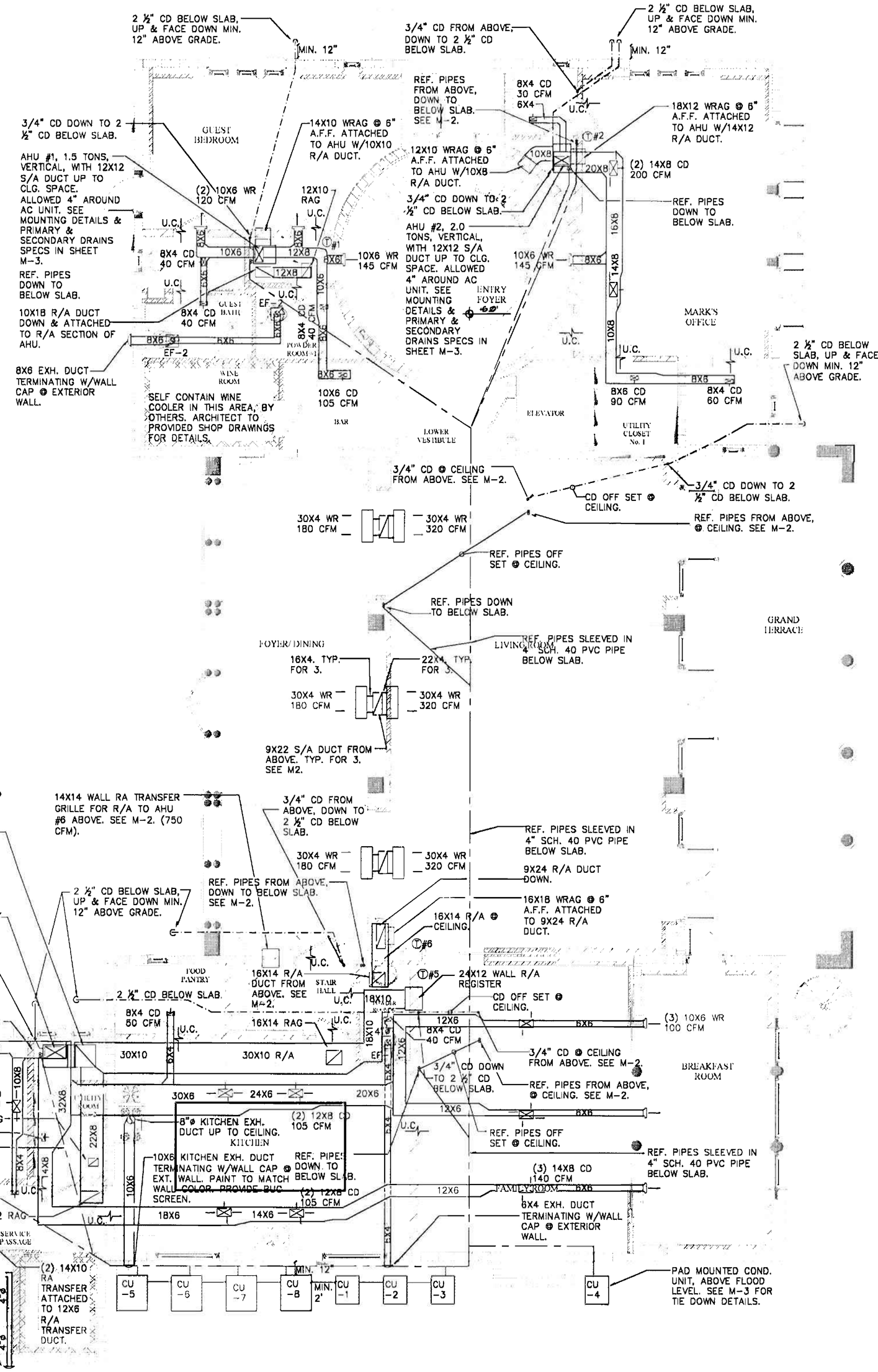
ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESBER ANDIROGLU, P.E.
MECH./ELEC. - #42454
2821 DOUGLAS ROAD
MIAMI, FL 33133
TEL. 305-448-8828
FAX 305-448-7376
e-mail esi@netrox.net

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

E2.2

E2.2

GENERAL SHEET NOTES



1 MECHANICAL FLOOR PLAN
M1.1 3/16" = 1'-0"

SHEET TITLE: MECHANICAL PLAN
DRAWN:
DATE: 10.19.05
REVISIONS: DATE

SET 10.19.05

PERMIT / BID

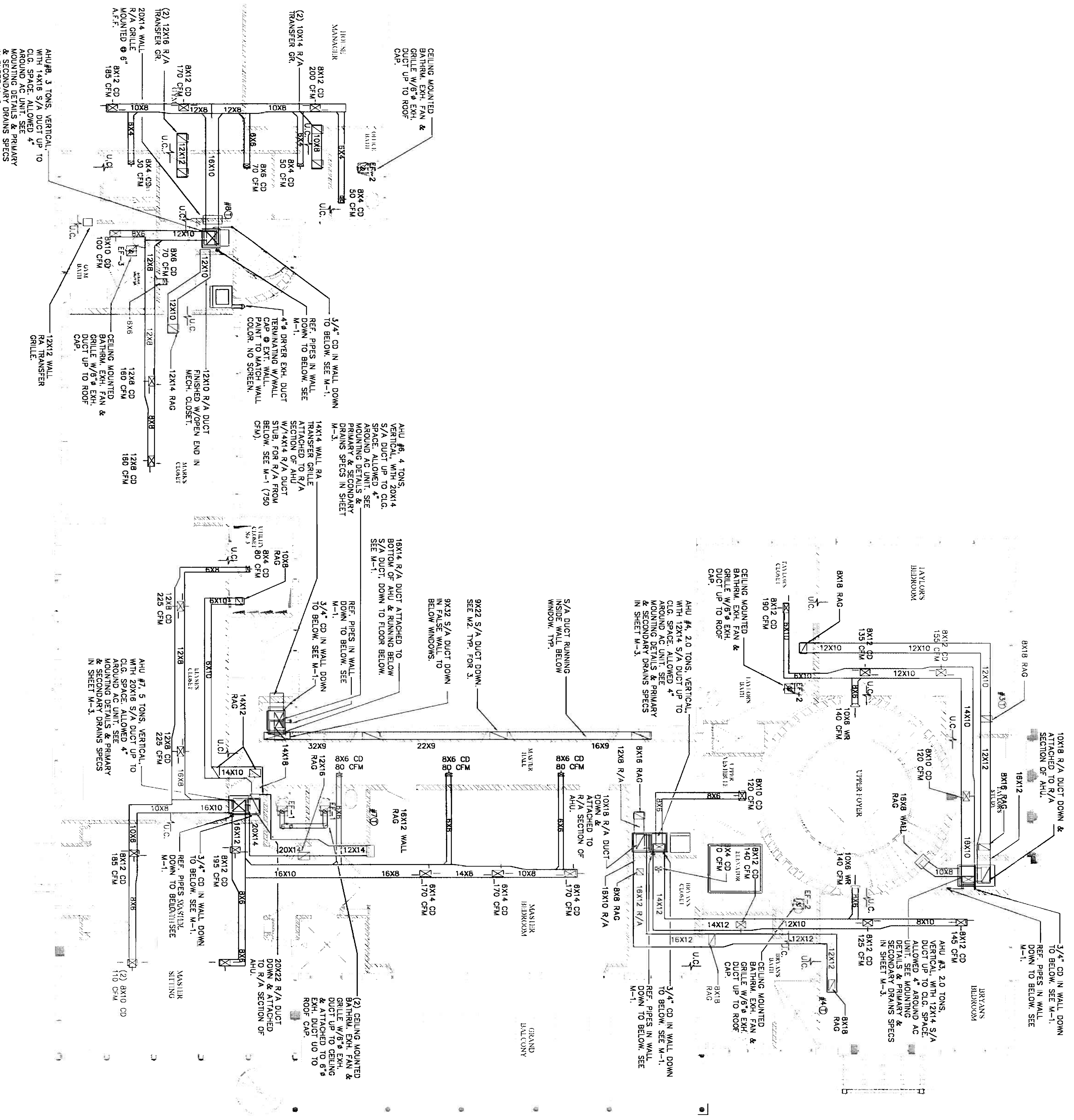
3DESIGN INC
ANTHONY LEON
AR0016752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T 305.531.5206 F 305.531.4515

THE GAINOR RESIDENCE
5500 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESBER ANDIROGLU, P.E.
MECH./ELEC. - #42454
2321 DOUGLAS ROAD
MIAMI, FL 33133
TEL 305-448-8828
FAX 305-448-7275
e-mail esargrs@bellsouth.net

M1.1

M3.1



MECHANICAL SECOND FLOOR PLAN

M1.2 3/16" = 1'-0"

GENERAL SHEET NOTES

PERMIT / BID SET 10.19.05

M1.2

M3.1

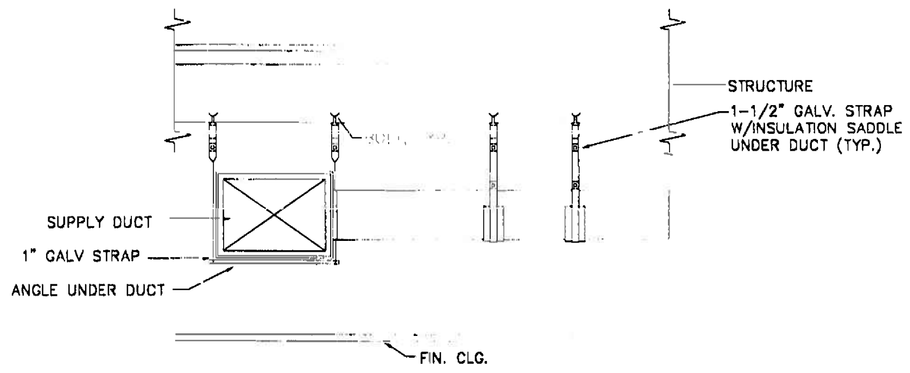
THE
GAINOR
RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESHER ANDROCLU, P.E.
MECH/ELEC. - #42454
2821 DOUGLAS ROAD
MIAMI FL 33133
TEL 305-448-8828
FAX 305-448-7376

3DESIGN, INC
ANTHONY LEON
AR0016752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

SHEET TITLE: MECHANICAL 2ND FLOOR PLAN
DRAWN:
DATE: 10.19.05
REVISIONS: DATE:

BUILDING:
ZONING:
DERM:
CONCURRENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
ENGINEERING:
PUBLIC WORKS:
STRUCTURAL:
ACCESSIBILITY:
ELEVATOR:
As per Florida Building Code
REVIEWED FOR CODE C
CITY OF MIAMI
OFFICE COPY



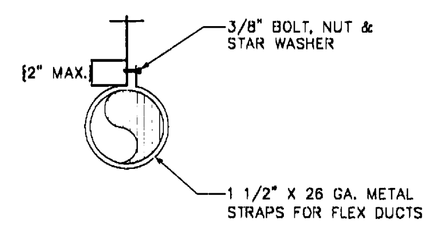
DUCT HANGING DETAIL
N.T.S.

AIR CONDITIONING UNIT SCHEDULE

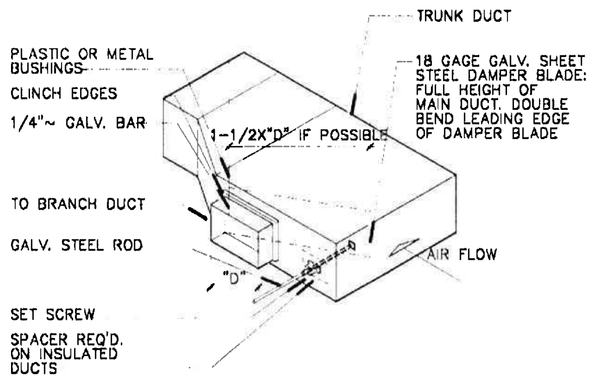
UNIT NO. SEER WT: (LB)	MANUF. MOD (POSITION OR MOUNTING)	UNIT NO. CU MODEL WT: (LB)	TOTAL CAP BTU/HR	SENSIBLE CAP BTU/HR	EVAPORATOR AIR FLOW CFM	EVAPORATOR AIR FLOW S.P. IN	COM. RLA a	OUT DOOR FAN FLA	BLOW COIL FLA HP	REF TYPE PIPING SIZE	HEAT KW V ph a	COND. UNIT V ph a
A.H.U.- 5 & 7. SEER=15.0 202	CARRIER FV4BNF006 (VERTICAL)	CU- 5 & 7. 38TDB060 310 (INFINITY,PURON)	57,900	38,600	2,000	0.4	26.3	1.1	6.8 / 3/4	R-410A V: 1 1/8" L: 3/8"	10.0 240 1 60	240 1 50
A.H.U.- 6. SEER=15.0 167	CARRIER FV4BNF005 (VERTICAL)	CU - 6. 38TDB048 308 (INFINITY,PURON)	47,100	32,200	1600	0.4	19.9	1.1	4.3 / 1/2	R-410A V: 7/8" L: 3/8"	10.0 240 1 60	240 1 40
A.H.U.- 8. SEER=15.5 130	CARRIER FV4BNF003 (VERTICAL)	CU - 8. 38TDB036 308 (INFINITY,PURON)	32,500	22,200	1200	0.4	14.1	0.8	4.3 / 1/2	R-410A V: 7/8" L: 3/8"	10.0 240 1 60	240 1 30
A.H.U.- 2, 3 & 4.. SEER=14.8 130	CARRIER FV4BNF002 (VERTICAL)	CU -2, 3 & 4.. 38TDB024 308 (INFINITY,PURON)	22,100	15,200	800	0.4	10.6	0.5	4.3 / 1/2	R-410A V: 5/8" L: 3/8"	10.0 240 1 60	240 1 20
AHU-1 14.0 115	CARRIER FK4DNF001 (VERTICAL)	CU- 1 38ETG018 209	16,600	11,100	550	0.2	10.3	0.5	1.6 / 1/5	R 22 V: 5/8" L: 3/8"	5 240 1 30	240 1 20

OUTDOOR CONDITIONS: 91°F DB, 79°WB
INDOOR CONDITIONS: 74°F DB, RELATIVE HUMIDITY = 50%

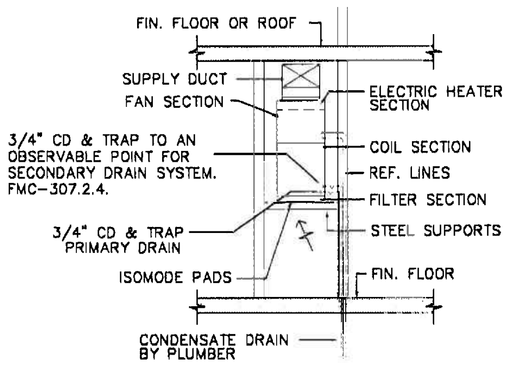
V – VOLTS
ph – NUMBER OF PHASES
a – FUSE AMPS



FLEXIBLE DUCT HANGER
N.T.S.



TYP. DETAIL OF 90^ DUCT TAP WITH DAMPER BLADE



NOTE:
PROVIDE A FLOAT SWITCH IN SECONDARY DRAIN PAN (IF USED), INTERCONNECTED W/AH START/STOP CONTROLS. FLOAT SWITCH IS TO SHUT DOWN AHU, WHENEVER WATER LEVEL IN DRAIN PAN RAISES TO 1/2" BELOW THE RIM OF PAN. FMC-307.2.3.

PROVIDE MINIMUM 4" AROUND AHU IN MECHANICAL CLOSET PER FBC CHAP.13 610.1.ABC.3.0.3 AND FMC SECT. 603.1.3.

NOTE :
FOR COND. DRAIN PIPES SCHEDULE & TERMINATION DETAILS SEE PLUMBING PLANS.

TYPICAL AIR HANDLING UNIT DETAIL
N.T.S.

HVAC Design Schedule.

HVAC DESIGN REQUIRES: YES	NO	REMARKS
DUCT SMOKE DETECTOR(S)	NO	NON REQUIRED
FIRE DAMPER(S)	NO	
SMOKE DAMPER(S)	NO	
FIRE RATED PARTITION	NO	
FIRE RATED ROOF/FLOOR CEILING ASSEMBLY	NO	
FIRE STOPPING	NO	
SMOKE CONTROL	NO	

H.V.A.C. NOTES

1. ALL WORK SHALL BE AS PER F.B.C. AND NFPA

2. ALL HEATING AND AIR CONDITIONING DUCT WORK SHALL BE FIBERGLASS, ENDURA GOLD TYPE, AS MANUFACTURED BY OWENS-CORNING, W/BACTERIAL / FUNGAL GROWTH RESISTANCE, TYPE 800 (1"THICK R-4.2) AT 1ST FLOOR WITH CONDITIONED SECOND FLOOR SPACE ABOVE, AND TYPE 800 (1.5" THICK R-6) AT 1ST AND 2ND FLRS. WITH NON-CONDITIONED ATTIC SPACE ABOVE. ALL BATHROOM, DRYER AND KITCHEN EXHAUST DUCTS SHALL BE 30 GA. GALV. METAL WITHOUT INSULATION.

3. DUCT WORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS & ACCORDING TO ASHRAE & SMACNA STANDARDS AND IN COMPLIANCE WITH UL 181.

4. DUCT DIMENSIONS ARE IN INCHES AND CORRESPOND TO INSIDE DIMENSIONS WIDTH x HEIGHT. DUCT SYSTEM SHALL COMPLY WITH NFPA STD. NO. 90A AND/OR 90B. DUCTWORK AND MATERIALS SHALL BE CLASS 1 MATERIALS IN ACCORDANCE WITH U.L. 181 TESTS.

5. COORDINATE LOCATIONS, SIZES & OPENINGS W/OTHER TRADES ON THE JOB. A/C CONTRACTOR SHALL PROVIDE THE COMPLETE DUCT SYSTEM W/TURNING VANES AT ALL ELBOWS. SPLITTERS AND DAMPERS AS REQUIRED. A/C CONTRACTOR SHALL USE THE BEST PRACTICES OF THE TRADE IN THE FABRICATION AND INSTALLATION OF THE SYSTEM.

6. ALL SUPPLY AIR AND RETURN AIR GRILLES/DIFFUSERS SHALL BE NEW, AND SHALL BE LOCATED AND BALANCED IN ORDER THAT THEY DELIVER THE REQUIRED CFM TO THE ENTIRE ROOM EVENLY & DRAFT FREE TO MAINTAIN THE FOLLOWING DESIGN CONDITIONS:

INSIDE	OUTSIDE	RELATIVE HUMIDITY
COOLING – 76 DB	90 DB – 79 WB	50% TO 60%
HEATING – 72 DB	45 – DB	

7. ALL TEMPERATURE CONTROLS SHALL BE DIGITAL PROGRAMMABLE THERMOSTAT MOUNTED WHERE SHOWN ON PLANS, AT 5'-0" A.F.F.

8. ALL NEW GRILLES AND DIFFISURES TO BE ALUMINUM CONSTRUCTION. DIFFUSERS SHALL HAVE HIDDEN OPPOSED BLADE DAMPERS. PROVIDE GASKETS ON ALL GRILLES & DIFFUSERS.

9. PROJECT ARCH. SHALL REVIEW AND APPROVE ALL DIFFUSER TYPES & FINISHES PRIOR TO PURCHASE AND INSTALLATION.

10. CONTRACTOR SHALL FIELD VERIFY/COORDINATE ALL CONDITIONS AND PARAMETERS W/OTHER TRADES INVOLEVED W/THE PROJECT.

11. REFRIGERANT PIPING (SUCTION) SHALL BE INSULATED WITH MINIMUM 3/4" THICK ARMAFLEX INSULATION.

12. ALL AIR HANDLING UNITS SHALL BE INSTALLED WITH 4" CLEARANCE ALL AROUND INSIDE MECHANICAL CLOSET.

13. PLACE ALL GRILLS MIN. 12" AWAY FROM WALLS TO ACCOMMODATE FOR DRYWALL AND MOLDINGS.

14. HVAC SYSTEMS SPECIFIED ON THIS PLAN AND INSTALLED AT THE PROJECT SITE WILL NOT BE USED AND IN OPERATION DURING WOOD FLOOR SANDING PROCESS.

15. UPON COMPLETION OF CONSTRUCTION, PRIOR TO THE DELIVERY OF THE HVAC SYSTEMS, ALL AIR HANDLING UNITS (COILS AND FAN SECTION) WILL BE CLEANED.

16. AT THE TIME OF INITIAL HVAC SYSTEM START-UP, THE FOLLOWING STEPS WILL BE FOLLOWED:

A. COMPLETE HVAC SYSTEM WILL BE BALANCED AT EACH ZONE, WITHIN 5% OF SPECIFIED VALUES.

B. FAN SPEED SETTING AT EACH AIR HANDLING UNIT WILL BE VERIFIED AGAINST THE TOTAL AIR FLOW AND SUPPLY AIR TEMP. AT AHU DISCHARGE.

C. SUPPLY AIR TEMPERATURE READINGS WILL BE RECORDED AT AHU DISCHARGE AND AT THE REMOTEST SUPPLY AIR DIFFUSER / GRILLE.

D. RETURN AIR TEMPERATURE READINGS WILL BE RECORDED AT EACH AHU ZONE.

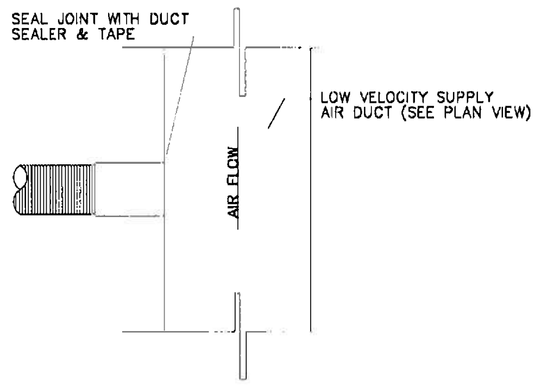
E. SUPPLY AND RETURN AIR DIFFERENTIAL IN THE RANGE OF 15 –20 DEG. WILL BE OBSERVED; OTHERWISE, FAN SPEED SETTINGS WILL BE MODIFIED INORDER TO ACHIEVE SUCH READINGS.

F. SUPPLY AIR TEMPERATURE READING AT EACH AHU DISCHARGE POINT, (RECORDED BY PROBE TYPE INSTRUMENT INSERTED DIRECTLY INTO THE AIR STREAM) WILL NOT BE LOWER THAN 53 DEG. F. OR HIGHER THAN 58 DEG. F.; OTHERWISE FAN SPEED SETTINGS WILL BE CHANGED.

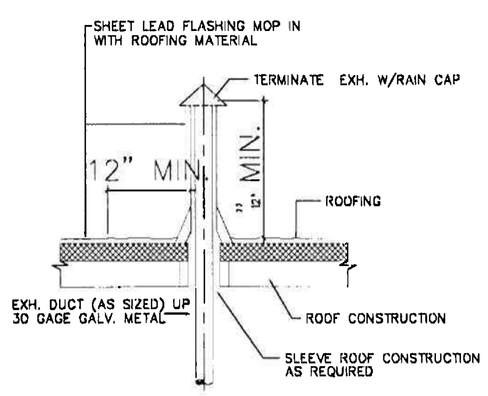
G. ALL OF THE START-UP TESTS NOTED ABOVE WILL BE CARRIED OUT, AFTER THE SYSTEMS HAVE BEEN RUNNING FOR A PERIOD OF 24 HOURS.

H. AT THE CONCLUSION OF THE START UP TESTING, ALL DUCT WORK WITHIN THE ATTIC SPACE WILL BE OBSERVED FOR SIGN OF CONDENSATION ON DUCT SURFACE, DAILY, FOR A PERIOD OF ONE WEEK.

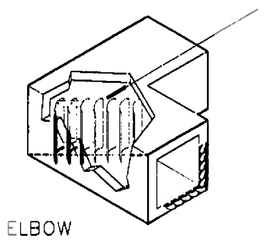
I. IN THE EVENT THAT TEMPERATURE READINGS AND / OR AIR FLOW QUANTITIES, ARE FOUND TO DIFFER FROM THE PARAMETERS NOTED ABOVE, AND / OR CONDENSATION IS OBSERVED ON THE DUCT SURFACE WITHIN THE ATTIC SPACE, PROJECT ARCHITECT AND ENGINEER WILL BE NOTIFIED FOR FURTHER EVALUATION AND IMPLEMENTATION OF CORRECTIVE MEASURES.



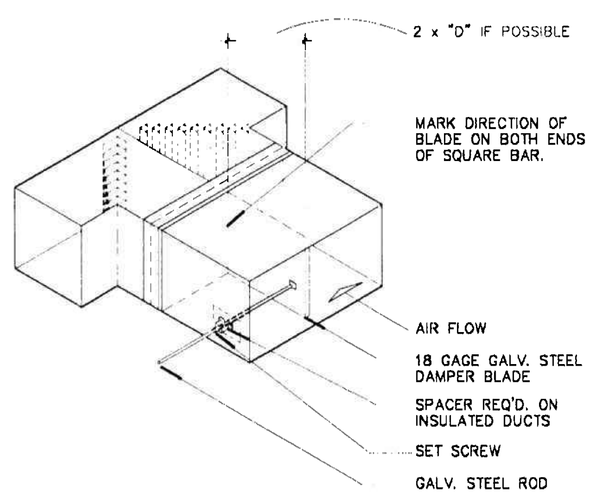
FLEXIBLE DUCT CONN. DETAIL (RES)
NTS



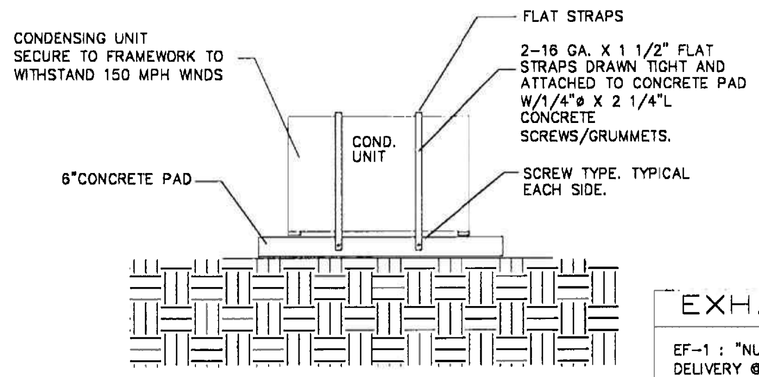
BATHROOM EXH. THRU ROOF DETAIL
N.T.S.



DUCT CONNECTION DETAILS
NTS



SPLITTER DAMPER



NOTE: PROVIDE 2'-0" MIN. CLEARENCE AROUND 3 SIDES OF UNIT.

NOTE:
DESIGNED AND INSTALLED TO RESIST WIND PRESSURES DETERMINED IN ACCORDANCE WITH F.B.C M 301.13 AND BUILDING 1619.2. CONTRACTOR SHALL PROVIDED SHOP DWG WITH INSTALLATION DETAILS.

PAD MOUNTED COND. UNIT DETAIL
NTS

EXHAUSTAN SPECS

EF-1 : "NUTONE" MODEL #LS-50, 50 CFM AIR DELIVERY @ 1/8" SP, 115 VOLTS, 60 Hz, 0.9 AMP. CEILING MOUNTED W/B.D.D. BUILT-IN.

EF-2 : "NUTONE" MODEL #LS-80, 80 CFM AIR DELIVERY @ 1/8" SP, 115 VOLTS, 60 Hz, 1.2 AMP. CEILING MOUNTED W/B.D.D. BUILT-IN.

EF-3 : "NUTONE" MODEL #LS-110, 110 CFM AIR DELIVERY @ 1/8" SP, 115 VOLTS, 60 Hz, 1.5 AMP. CEILING MOUNTED W/B.D.D. BUILT-IN.

SHEET TITLE: MECHANICAL DETAILS
DRAWN:
DATE: 10.19.05
REVISIONS: DATE:

S E T 1 0 . 1 9 . 0 5

P E R M I T / B I D S E T

2DESIGN INC
ANTHONY LEON
AR0006752
ARCHITECTURE
1234 WASHINGTON AVE SUITE#201 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5801 N. NORTH BAY ROAD
MIAMI BEACH, FLORIDA

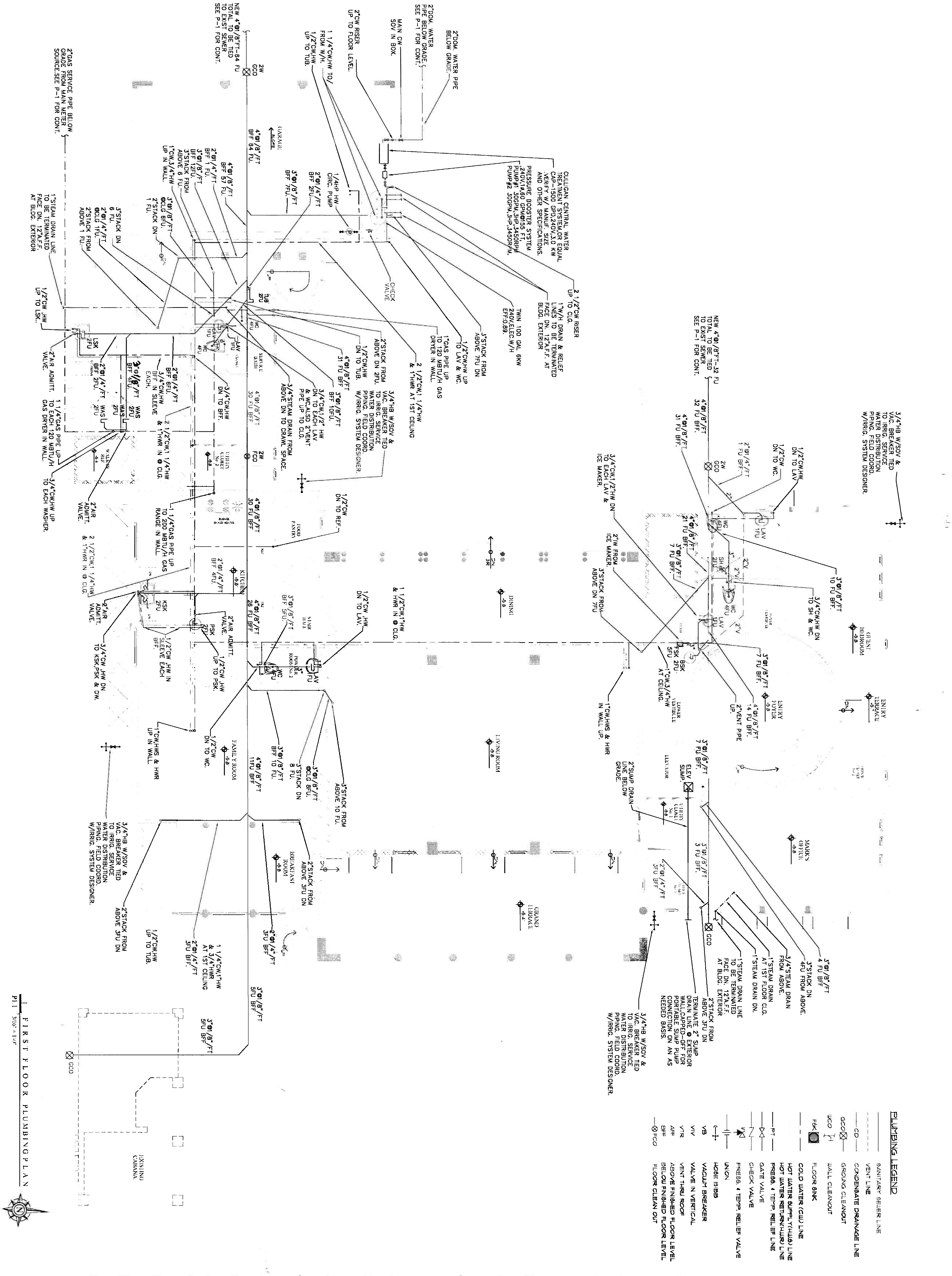
ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESSER ANDUNOGLU, P.E.
MECH./ELEC. – #42454
2981 DOUGLAS ROAD
MIAMI, FL. 33133
TEL. 305-448-8826
FAX 305-448-7375
e-mail energy@bellsouth.net

10/19/05

Section 13
COMPLIANCE

M1.3

M1.3



PERMIT / BID SET 10.19.05

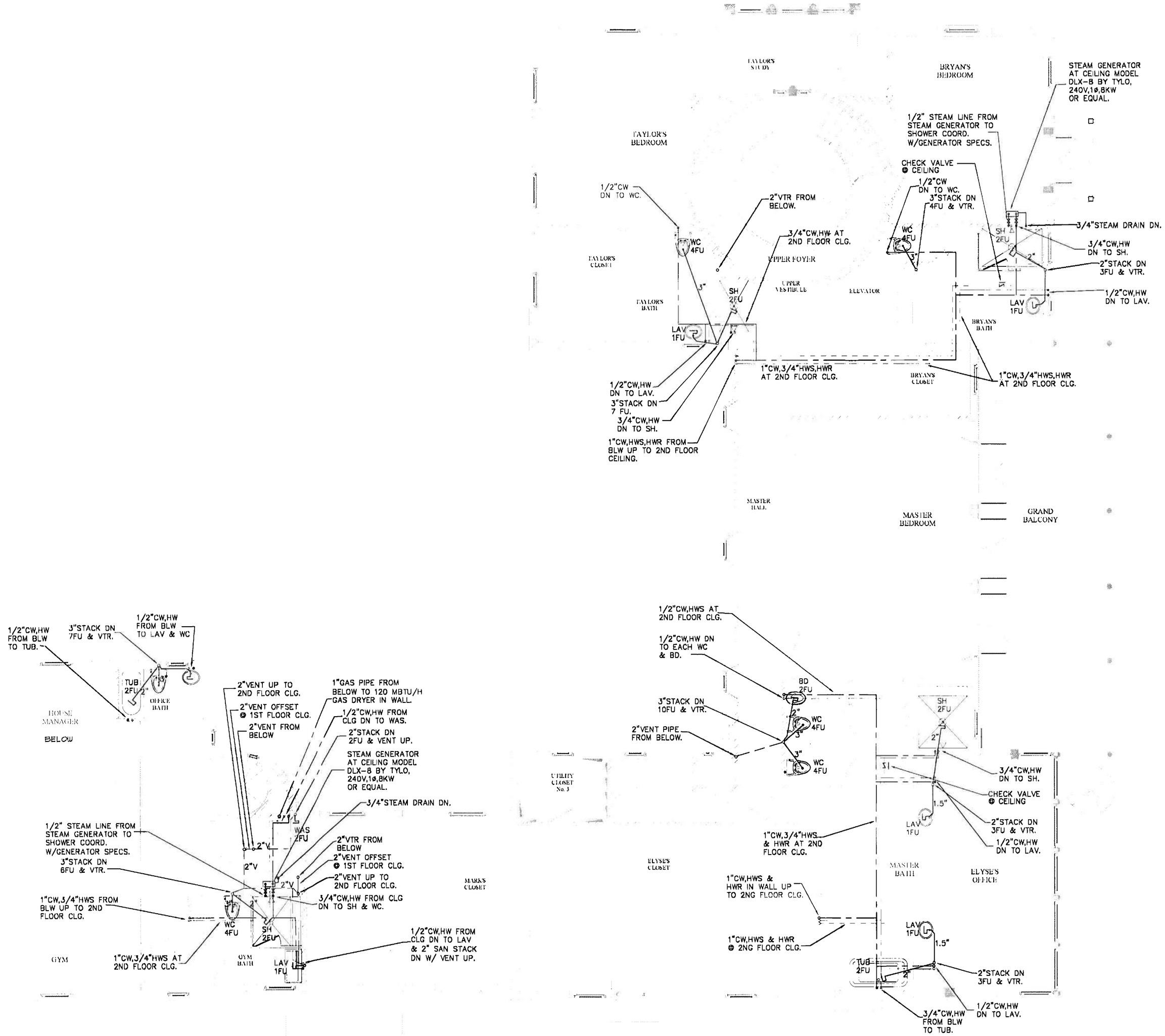
P1.1

P3.1

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

ESI

3DESIGN, INC
ANTHONY LEON
AR0016752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515



1 PLUMBING SECOND FLOOR PLAN
P1.2 3/16" = 1'-0"

SET 10.19.05

SHEET TITLE: PLUMBING 2ND FLOOR PLAN
DRAWN:
DATE:
REVISIONS: DATE:

3DESIGN INC
ANTHONY LEON
ARCHITECTURE
AR0006752
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESBER ANDROGLU, P.E.
MECH./ELEC. - #48454
2821 DOUGLAS ROAD
MIAMI, FL 33133
TEL 305-448-3828
FAX 305-448-7375
e-mail esergy@bellsouth.net

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

PERMIT / BIDS

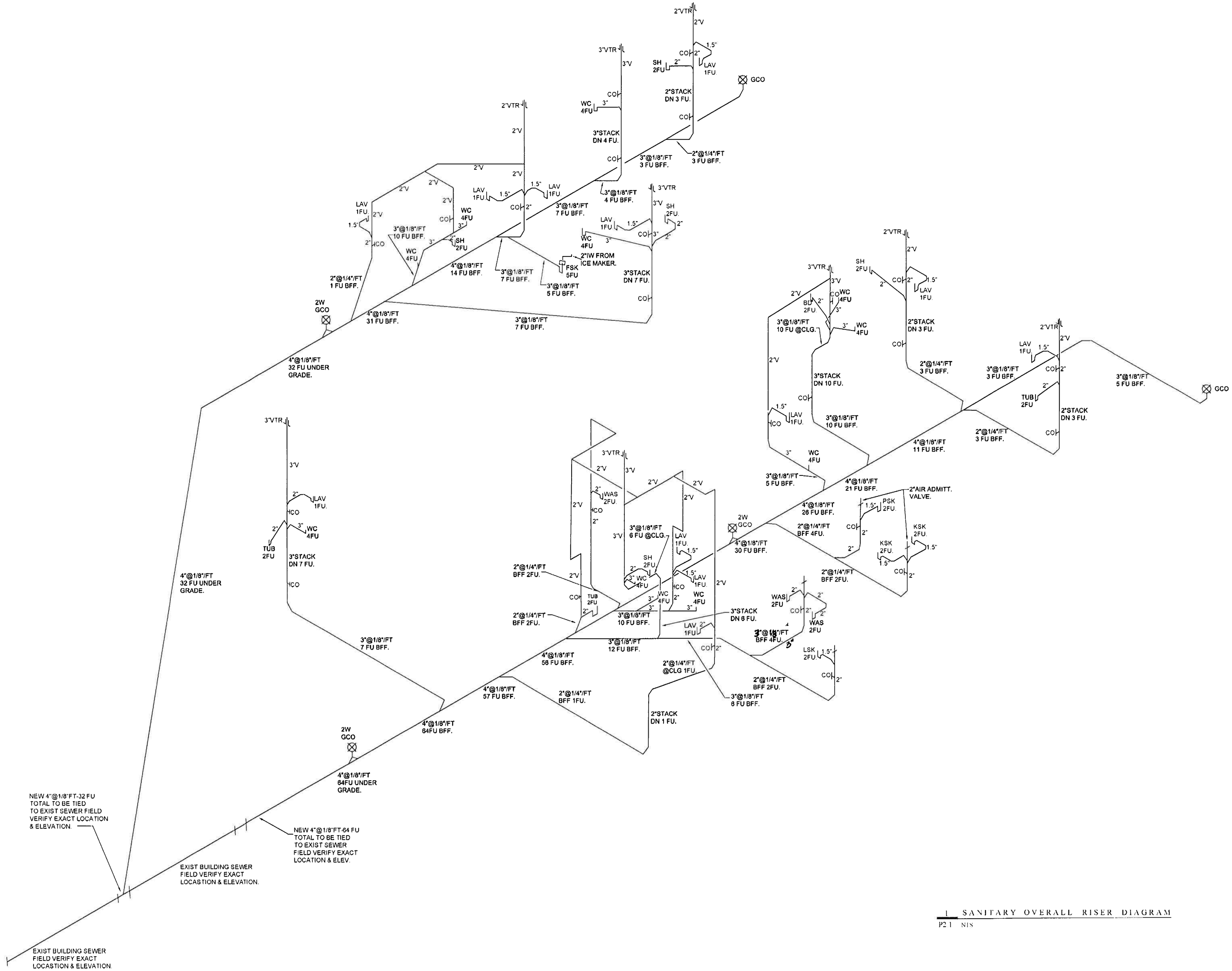
OFFICE COPY
CITY OF MIAMI BEACH

RECEIVED
ZONING:
DRB:
CONCURRENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PROTECTION:
ENGINEERING:
PUBLIC WORKS:
STRUCTURAL:
ACCESSIBILITY:
LEVATOR:

As per Florida Building Code Section 104.5
*REVIEWED FOR CODE COMPLIANCE

P1.2

P3.1



1 SANITARY OVERALL RISER DIAGRAM
P2.1 NTS

SHEET TITLE: OVERALL PLUMBING RISER
DRAWN:
DATE: 10.19.05
REVISIONS: DATE:

P E R M I T / B I D S E T 1 0 . 1 9 . 0 5

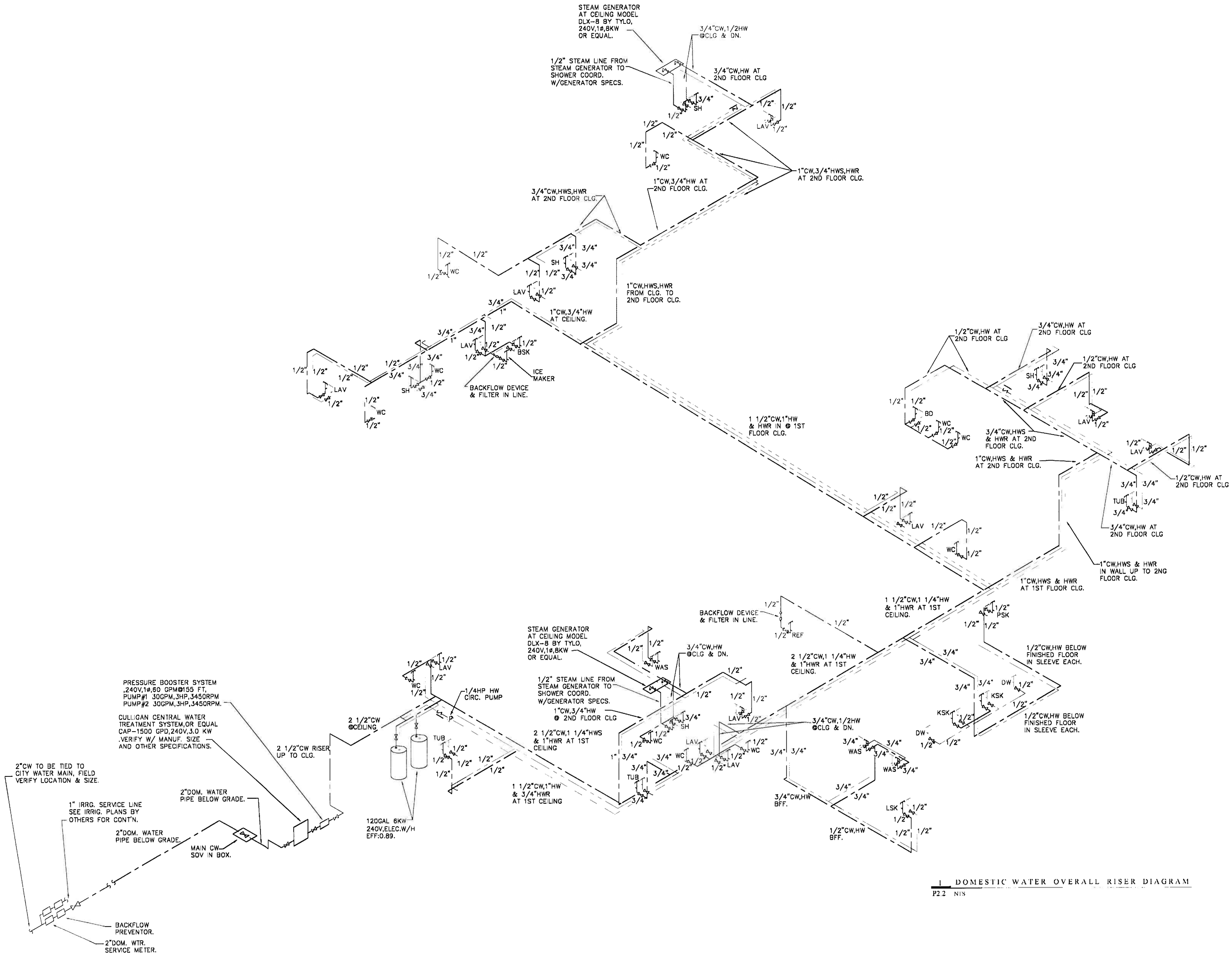
3DESIGN INC.
ANTHONY LEON
ARCHITECTURE
AR0026752
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T 305.531.5208 F 305.531.4515

ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESHEN ANDROGLU, P.E.
MECH./ELEC. - #42464
8921 DOUGLAS ROAD
MIAMI, FL 33133
TEL. 305-448-0828
FAX 305-448-7376
e-mail energys@bellsouth.net

THE GAINOR RESIDENCE
7816 FAIRFIELD BAY ROAD
MIAMI BEACH, FLORIDA

P2.1

P3.1



1 DOMESTIC WATER OVERALL RISER DIAGRAM
P2.2 NIS

SHEET TITLE: OVERALL WATER RISER
DRAWN:
DATE: 10.19.05
REVISIONS: DATE:

SET 10.19.05

PERMIT / BID SET

2DESIGN INC
ANTHONY LEON
AR0006752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T 305.531.5208 F 305.531.4515

THE GAINOR RESIDENCE
5400 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

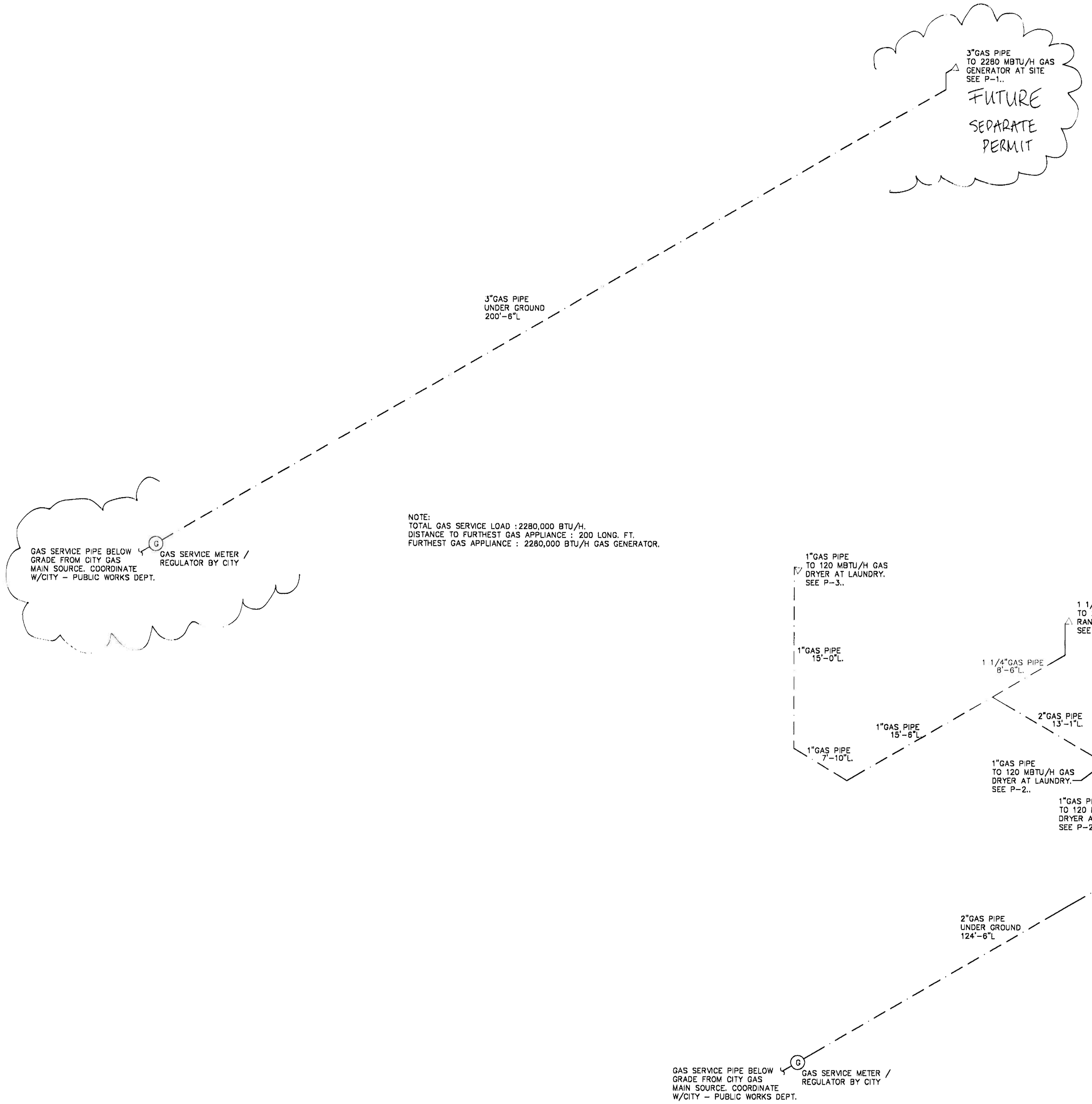
ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESSER ANDROGLU, P.E.
MECH./ELEC. - #42454
8881 DOUGLAS ROAD
MIAMI, FL 33328
TEL. 305-448-9868
FAX 305-448-7375
e-mail energy@bellsouth.net

OFFICE C
CITY OF MIAMI BEACH
APPROVED FOR PERMIT
FOR PUBLIC RECORD
BUILDING: 12/12/05
ZONING:
DESIGN REVIEW:
CONCURRENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PROTECTION:
ENGINEERING:
PUBLIC WORKS:
STRUCTURAL:
ACCESSIBILITY:
LEVATOR:

As per Florida Building Code Section 104.5.3
REVIEWED FOR CODE COMPLIANCE

P2.2

P3.1



1 GAS RISER DIAGRAM
P2.3 NTS

SHEET TITLE: GAS RISER
DRAWN:
DATE: 10.19.05
REVISIONS: DATE:

SET 10.19.05

PERMIT / BID SET

3DESIGN INC
ANTHONY LEON
ARCH0672
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5400 NORTH BAY ROAD
MIAMI BEACH FLORIDA

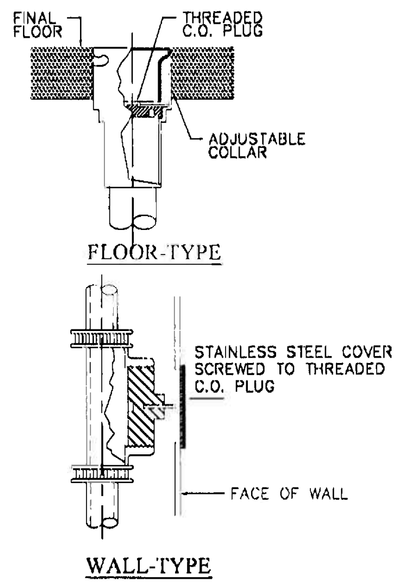
ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESBEN ANDROGLU, P.E.
MECH./ELEC. - #42454
8821 DOUGLAS ROAD
MIAMI, FL 33133
TEL 305-448-8828
FAX 305-448-7375
e-mail energy@bellsouth.net

11/9/05

12/16/05

P2.3

P3.1



1 TYPICAL CLEANOUT DETAILS
P3.1 NTS

Plumbing Notes

1. ALL PLUMBING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE "FLORIDA BUILDING CODE", CHAPTER 29, LOCAL ORDINANCE AND IN COMPLIANCE WITH "FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION.

2. CONTRACTOR TO VERIFY AT SITE LOCATION THE ELEVATION AND SIZE OF EXISTING WATER AND SEWER MAINS FOR CONNECTION OF NEW SERVICES BEFORE INSTALLATION OF ANY PIPING.

3. UNDERGROUND METAL PIPING SHALL BE PROTECTED WITH COAT OF BITUMINOUS COMPOUND ("BITUSMATIC" OR EQUAL) BEFORE COVERING.

4. PROVIDE SHUT-OFF AND VACUUM BREAKER TO ALL HOSE BIBBS AND FAUCETS WITH HOSE-END CONNECTION.

5. ALL FIXTURES SHALL BE PROTECTED AGAINST WATER HAMMER WITH AIR CHAMBERS OR SHOCK ABSORBERS.

6. PLUMBING FIXTURES SHALL BE "AMERICAN STANDARD" OR APPROVED EQUAL. ALL FIXTURE TRIM SHALL BE CHROME PLATED. FIXTURES SHALL BE PROVIDED WITH SUPPORTS, HANGERS, ETC.

7. WASTE LINES SHALL SLOPE 1/8" PER FOOT. UNLESS OTHERWISE NOTED.

8. PROVIDE FULLY ACCESSIBLE CLEANOUTS ON SANITARY AND ANY WASTE PIPING AT EVERY CHANGE OF DIRECTION AND AT BOTTOM OF STACKS CLEAN OUT LOCATION AND SIZES ON HORIZONTAL LINES SHALL BE ACCORDING TO CODE.

9. VENT LINES SHALL EXTEND 6" MIN. ABOVE ROOF AND FLASHED WITH LEAD OR CONNECTED TO EXISTING VENT LINES.

10. ALL FLOOR DRAINS SHALL HAVE TRAP PRIMERS TO PROTECT THE SEAL OF THE TRAP.

11. PROVIDE CONTROL VALVES TO ALL MAINS ENTERING THE BUILDING, RISERS, BRANCHES, GROUPS OF FIXTURES, AND TO EACH PIECE OF EQUIPMENT.

Piping Materials

1. SANITARY WASTE, VENT AND STORM DRAIN:
BELOW GROUND: POLYVINYL CHLORIDE (PVC) PIPE & FITTINGS (SCHEDULE 40). MATERIAL SHALL COMPLY WITH D-1784, TYPE 1, GRADE 1 COMPOUND. PIPE SHALL COMPLY WITH ASTM D-1785.

FITTINGS SHALL COMPLY WITH ASTM D-2467 SOCKET TYPE. SOLVENT CEMENT SHALL COMPLY WITH D-2564.

ABOVE GROUND: "CAST IRON", SOIL PIPE, "HUBLESS", ACCORDING TO CISPI-301-78, ASTM A-74, WITH STAINLESS STEEL SHIELD AND CLAMPS OVER NEOPRENE SEALING SLEEVE.

2. CONDENSATE DRAINS FROM AIR CONDITIONING UNITS: "PVC" SCHEDULE 40 PIPE & FITTINGS.

3. DOMESTIC WATER ABOVE GROUND: TYPE L COPPER PIPE WITH WROUGHT COPPER SOLDERED JOINT FITTINGS. TYPE K COPPER BELOW GROUND PIPE ACCORDING TO ASTM B-42. TUBE ACCORDING TO ASTM B-88. ALTERNATE FOR UNDERGROUND PIPE: CAST IRON WATER PIPE ACCORDING TO ANSI A 21.6. STEEL PIPE (SCHEDULE 40, GALVANIZED) ACCORDING TO ASTM A120-68.

4. ALL CONTROL VALVES FOR DOMESTIC WATER SHALL BE CAST BRASS OR B-88 BRONZE GATE VALVES.

5. PROVIDE DIELECTRIC FITTINGS FOR JOINING DISSIMILAR METALS.

FIXTURE CONNECTION SCHEDULE

ITEM	WASTE & SOIL	WATER	
		COLD	HOT
WATER CLOSET	3"@ 1/8"/FT.	1/2"	
TUB	2"@ 1/4"/FT.	3/4"	3/4"
PREP. SINK	1 1/2"@1/4" /FT.	1/2"	1/2"
LAVATORY	1 1/4"@1/4" /FT.	1/2"	1/2"
HOSE BIBB		3/4"	
SHOWER	2"@ 1/4" /FT.	3/4"	3/4"
KIT. SINK	1 1/2"@1/4" /FT.	1/2"	1/2"
WASHER	2"@ 1/4" /FT.	3/4"	3/4"
LAUNDRY SINK	2"@ 1/4" /FT.	1/2"	1/2"
BAR. SINK	1 1/2"@1/4" /FT.	1/2"	1/2"
REF		1/2"	

WC = 1.5 GALLON PER FLUSH

Domestic Water Piping

1. PIPE HANGERS AND SUPPORTS: PROVIDE ADJUSTABLE HANGERS, INSERTS BRACKETS, ROLLS, CLAMPS AND SUPPLEMENTARY STEEL AS REQUIRED FOR PROPER SUPPORT OF PIPE LINES. HANGERS SHALL ALLOW FOR EXPANSION AND CONTRACTION OF PIPE LINES AND COVERING TO RUN CONTINUOUSLY THROUGH HANGERS.

2. SPACING AND SIZES
   A. HORIZONTAL CARBON STEEL PIPE

PIPE SIZE	ROD DIAMETER	MAXIMUM SPACING
UP TO 1-1/4"	3/8"	
1-1/2" & 2"	3/8"	

   B. HORIZONTAL COPPER PIPING

PIPE SIZE	ROD DIAMETER	MAXIMUM SPACING
UP TO 1"	3/8"	
1-1/4" & 1-1/2"	3/8"	
2"	3/8"	

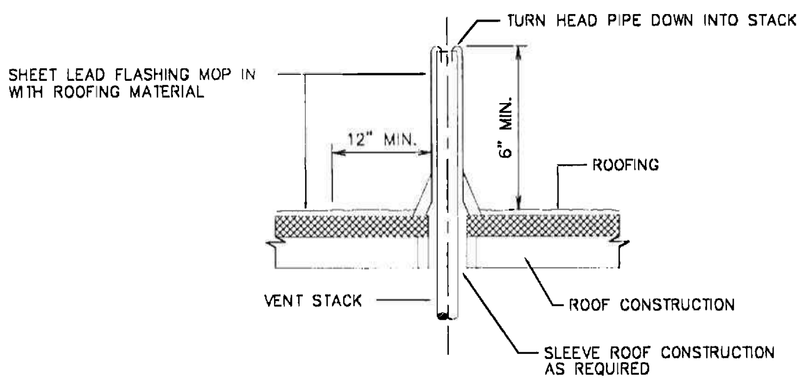
WATER HAMMER:
A WATER-HAMMER ARRESTOS SHALL BE INSTALLED WHERE QUICK-CLOSING VALVES ARE UTILIZED, UNLESS OTHERWISE APPROVED. WATER-HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010. ACCESS SHALL BE PROVIEDED TO WATER-HAMMER ARRESTORS.

NOTE: PROVIDE ANTI-SCALD VALVE AT HOT WATER CONNECTIONS TO ALL TUBS AND SHOWERS.

ALL ICE MAKER AND REF TO BE IN LINE BACKFLOW DEVICE & FILTER.

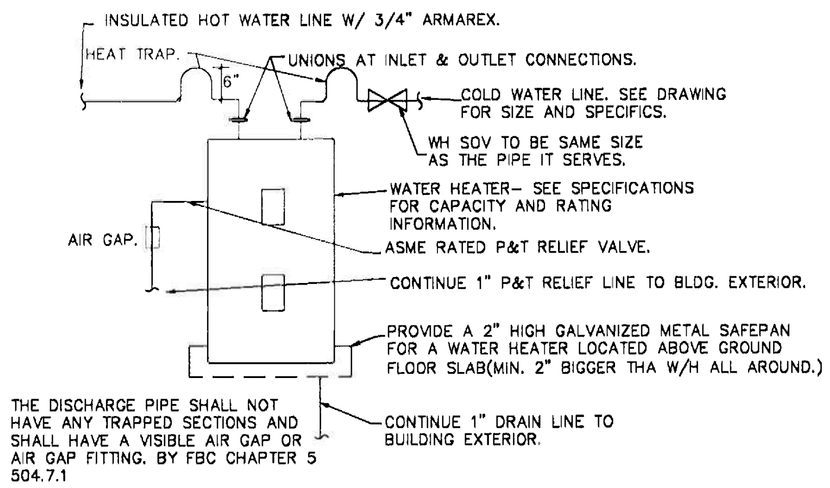
PLUMBING LEGEND

———	SANITARY SEWER LINE
- - - - -	VENT LINE
—CD—	CONDENSATE DRAINAGE LINE
GCO	GROUND CLEANOUT
WCO	WALL CLEANOUT
FSK	FLOOR SINK
— — —	COLD WATER (C.W.) LINE
	HOT WATER SUPPLY(H.W.S) LINE
	HOT WATER RETURN(H.W.R) LINE
—PT—	PRESS. & TEMP. RELIEF LINE
	GATE VALVE
	CHECK VALVE
	PRESS. & TEMP. RELIEF VALVE
	UNION
	HOSE BIBB
VB	VACUUM BREAKER
VIV	VALVE IN VERTICAL
VTR	VENT THRU ROOF
AFF	ABOVE FINISHED FLOOR LEVEL
BFF	BELOW FINISHED FLOOR LEVEL
—⊗FCO	FLOOR CLEAN OUT



NOTE:
ANY VENT PIPE WITHIN 10'-0" OF ANY DOOR, WINDOW, OR EXHAUST OPENINGS SHALL EXTEND NOT LESS THAN 3'-0" ABOVE SUCH

2 VENT THRU ROOF DETAIL
P3.1 NTS



3 WATER HEATER DETAIL
P3.1 NTS

NOTE:
1. ALL DRAINS 3"ø OR ABOVE SHOULD HAVE 1/8" SLOPE.
2.-ALL DRAIN CONDUITS BELOW 3"ø SHOULD HAVE 1/4" SLOPE

SHEET TITLE: PLUMBING NOTES & DETAILS
DRAWN:
DATE: 10.19.05
REVISIONS: DATE

2 DESIGN INC
ANTHONY LEON
ARCHITECTURE
AR0026752
1234 WASHINGTON AVE. SUITE 207 MIAMI BEACH, FL 33139 T 305.531.5208 F 305.531.4515

ESI
ENERGY SCIENCES INC
CONSULTING ENGINEERS
ESBER ANDROGLU, P.E.
MECH./ELEC. - #42454
2861 DOUGLAS ROAD
MIAMI, FL 33133
TEL 305-448-3828
FAX 305-448-7375
e-mail esergye@bellsouth.net

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

10/19/05

P3.1

P3.1

SIDDIQ KHAN & ASSOCIATES, INC
CONSULTING ENGINEERS AND PLANNERS
7400 S.W. 50TH TERRACE, SUITE 105
MIAMI, FLORIDA 33155

(305) 662-2301
FAX: (305) 661-3962
www.ska-engineering.com

Gainor Residence Shoring Calcs

5800 North Bay Road, Miami Beach, FL
SKA Project No. 05-618.01

This computation book contains manual and computerized structural calculations, certain printed manufacturer's data and Miami-Dade NOA's. Computation pages are numbered by sections as shown on the index sheets. Computations were performed to the best of our knowledge according to sound and generally accepted engineering principals and Code requirements, using nationally recognized computer software and in-house developed software. Prior to commissioning into service, the in-house developed software was thoroughly checked by performing parallel manual computations. The sign and seal provided herein is meant to cover all computation sheets excluding the manufacturer's printed data and Miami-Dade NOA's.

Total of 5 pages including cover.

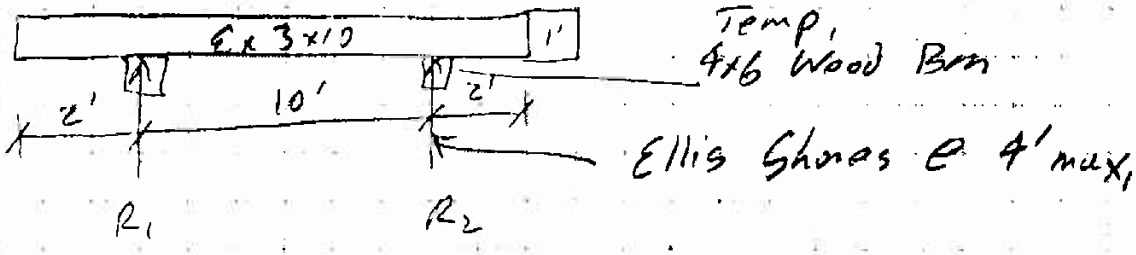
Taimur A. Khan
FL P.E. No. 60994
January 23, 2006

SIDDIQ KHAN & ASSOCIATES, INC.
Consulting Engineers And Planners
7400 S.W. 50th Terrace, Suite 105
MIAMI, FLORIDA 33155
(305) 662-2301

JOB 05-618.01 Gainor Shoring
SHEET NO 1 OF
CALCULATED BY TAK DATE 11/19/06
CHECKED BY DATE
SCALE

Ex. Rear Terrace Roof:

DL = 15 psf LL = 30 = 45 psf



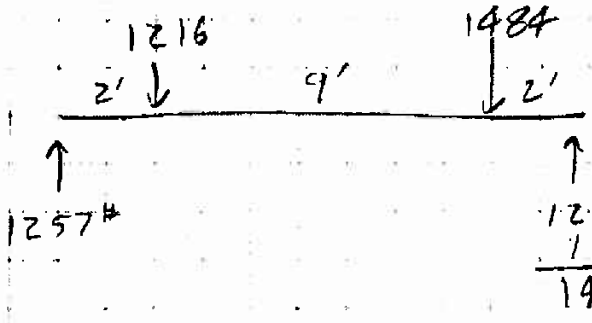
R_1 = 304 #/ft 4' spac = 1216 #/shore
R_2 = 371 #/ft = 1484 #/shore

Ex. Conc Terrace Slab:

Bearing = $1484/2.5^2$ = 121 psi

Allow Conc = 0.85(0.65)3000 = 1658 psi ∴ OK

Added M. on 2nd Flr:



M = 1257 x 2' + (1257 - 1216) 9' = 2883 ft-#

Move to LL = 40(13)²/8 = 845 x 4' = 3380 ft-#

∴ Load on Terrace OK.

PRODUCT 204-1 (Single Sheets) 205-1 (Pads of) ACCO Inc., Groton, Mass. 01471 To Order PHONE TOLL FREE 1 800 225-6380

SIDDIQ KHAN & ASSOCIATES, INC.
Consulting Engineers And Planners
7400 S.W. 50th Terrace, Suite 105
MIAMI, FLORIDA 33155
(305) 662-2301

JOB 05-618.01
SHEET NO 2 OF
CALCULATED BY TAK DATE
CHECKED BY DATE
SCALE

Provide 4x6 wD Bm @ Top.

$R_2 = 1484/4 = 371$ Plf.

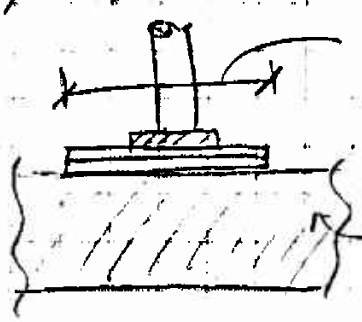
$M_{Bm} = 371 \times 4^2/8 = 742'\text{-}\#$

$S_x = 3.5(5.5)^2/6 = 17.65$

$f_b = \frac{742 \times 12}{17.65} = 504$ psi

∴ use STD. S-P No. 3 + Stud
Allow $F_b = 750$ psi.

Sill R Capacity use 2-layers of 3/4" Plywood



$f_b \Rightarrow \frac{0.5^2(2000)}{2} \Rightarrow \frac{250 \times 12}{6} = 500$ psi ∴ OK

Allow Soil Pressure = 2000 psf.
Allow Load = 1.85 ft $\times$ 2 k/ft = 3.5 k

Support of Roof Rotunda Area: metal Lath & Plaster Approx ½" thick = 7 psf + 2 psf misc.

= 9 psf use 10 psf.

@ of Room 14' Center Support use Scaffold.

Load to Scaffold = $\frac{\pi(7)^2}{4}(10) = 385\#$

= Say 1 k

PRODUCT 204 | (Single Sheets) 225-1 | (Padded) NEBS Inc. Groton, Mass 01471 To Order PHONE TOLL FREE 1 800 225 6380

SIDDIQ KHAN & ASSOCIATES, INC.
Consulting Engineers And Planners
7400 S.W. 50th Terrace, Suite 105
MIAMI, FLORIDA 33155
(305) 662-2301

JOB 05-618.01 Guinove Residence
SHEET NO. 3 OF
CALCULATED BY DATE
CHECKED BY DATE
SCALE

Rotunda Cont'd

Approx height = 20'-6" + 3' ≅ 24'/6 = 4 Sections of Scaffold

Allow Load on 4 Sections/Leg = 11.6 K

Actual Load/Leg = 250# + 200# = 450#

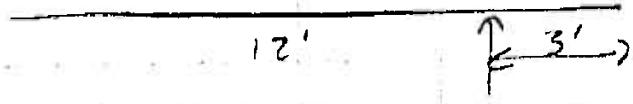
450# on $\frac{24 SF}{4}$ = 75 psf.

∴ Provide Post In Crawl Space. SFSJ36 Screw Jack.

Shoring of Second Floor: S.W. Corner Room.

2x10's ℓ = 15':

DL = 25 LL = 50 = 75 psf.



$K_1 = 75(18)^2/2(12) = 703$ #/ft

Provide Post Shores @ 3' 3 x 703 = 2109#

Allow/Ellis = 3K ∴ OK.

Provide 4x6 WD Bm @ Top. M = 703 x 3²/8 = 790

$f_b = \frac{790(12)}{17.6} = 538$ psi < 750 psi ∴ OK.

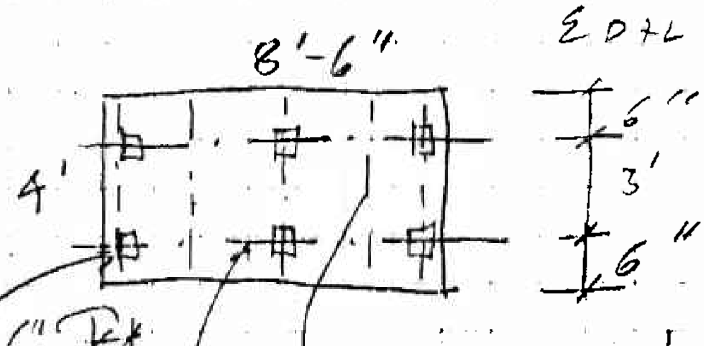
PRODUCT 1041 (Single Sheets) 208 | (Packed) Wecan Inc., Groton, Mass. 01471 To Order PHONE TOLL FREE 1 800 225 6380

SIDDIQ KHAN & ASSOCIATES, INC.
Consulting Engineers And Planners
7400 S.W. 50th Terrace, Suite 105
MIAMI, FLORIDA 33155
(305) 662-2301

JOB 05-618.01 Guiron Residence
SHEET NO. 4 OF
CALCULATED BY TAK DATE 1/16/06
CHECKED BY DATE
SCALE

Shoring of Conc. Balc.

WDL = 6×12 + 10 = 82 psf
LL = 50 psf
Σ D+L = 132 psf.



5 – 4×4 wood Cross Pieces
6 Ellis Shores typ.
2 – 4×6 wood Bms.

Bm load: 2 × 132 = 264 plf. l = 4'

$M = 264 \times 2' \times \frac{4'}{4} = 528$

$f_b = \frac{528(12)}{7.15} = 886$ psi

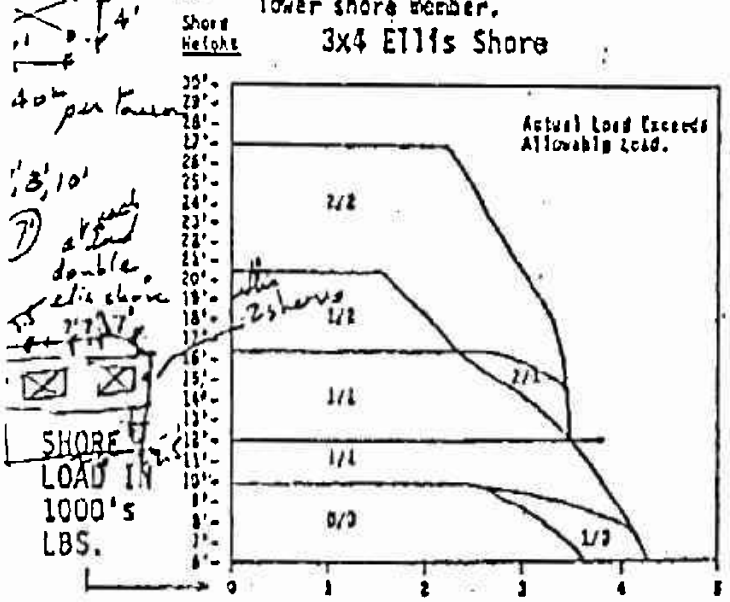
Load on Post ≈ 8.5×4/2 = 17 × 132 = 2244#

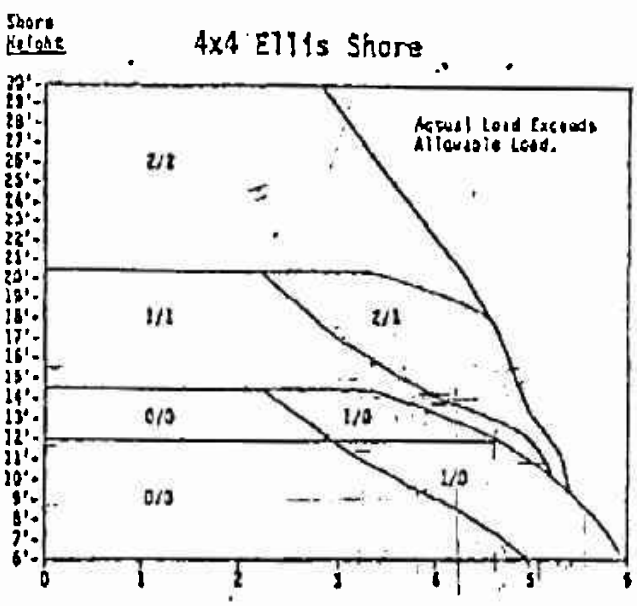
Allow on Ellis For 12' h = 3K ∴ OK

ELLIS SHORE ALLOWABLE LOAD CHART

These Charts Are Based On #1 Douglas Fir Or #1 Southern Pine Used At 19% Max. Moisture Content. The Following Design Values Are Taken From DESIGN VALUES FOR WOOD CONSTRUCTION, A Supplement To The 1986 Edition Of NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS).
Fb = 1700 PSI, Fc = 1250 PSI, E = 1,700,000 PSI

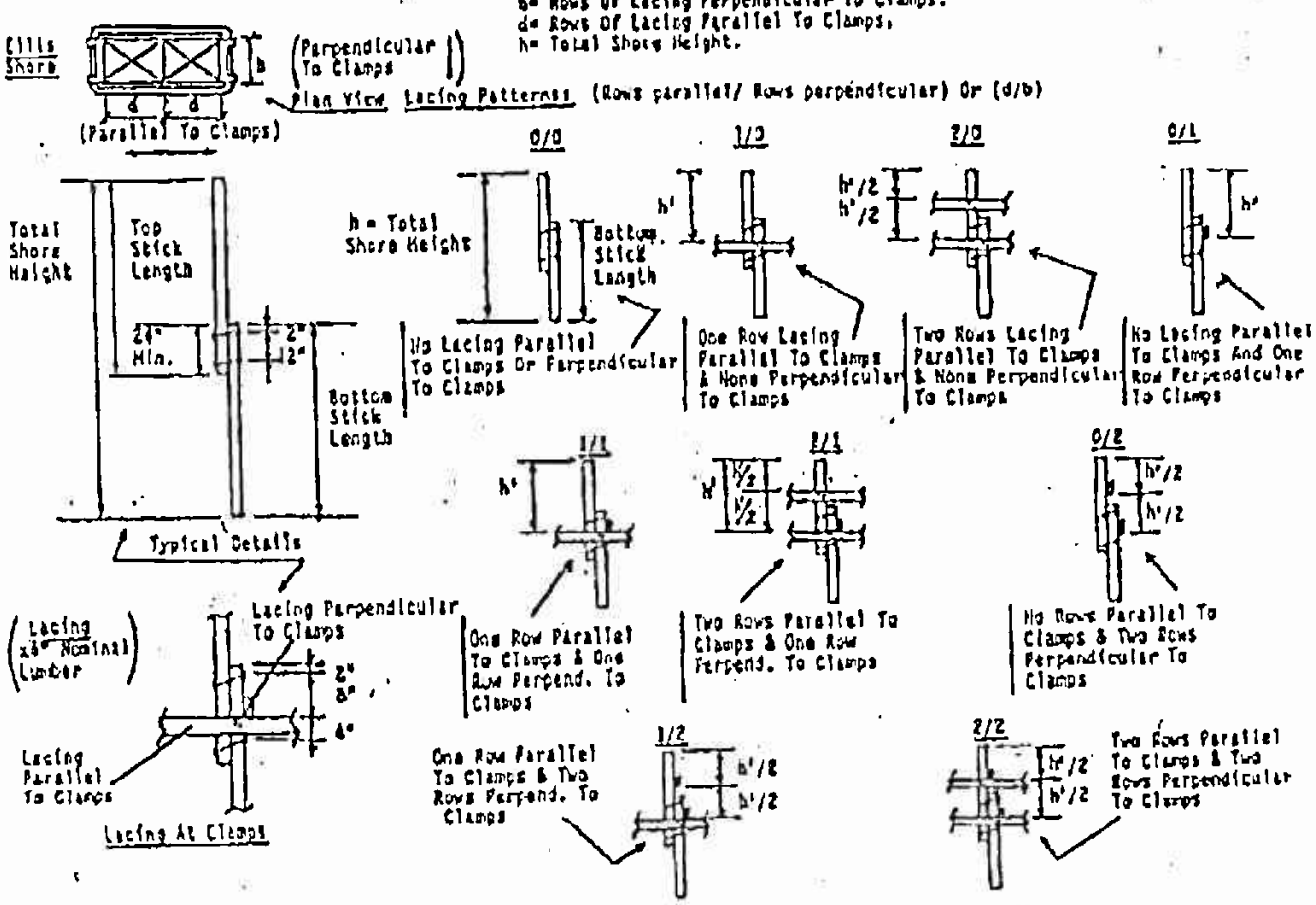
For the most efficient use of an Ellis Shore's strength, the clamps should be approximately at the midpoint on the shore. This will keep lateral deflection at a minimum. These charts are representative of the clamps used at midpoint for shore heights up to 12' high. For shore heights of 12' and over use a 7' lower shore member.





ELLIS SHORE LACING CHART

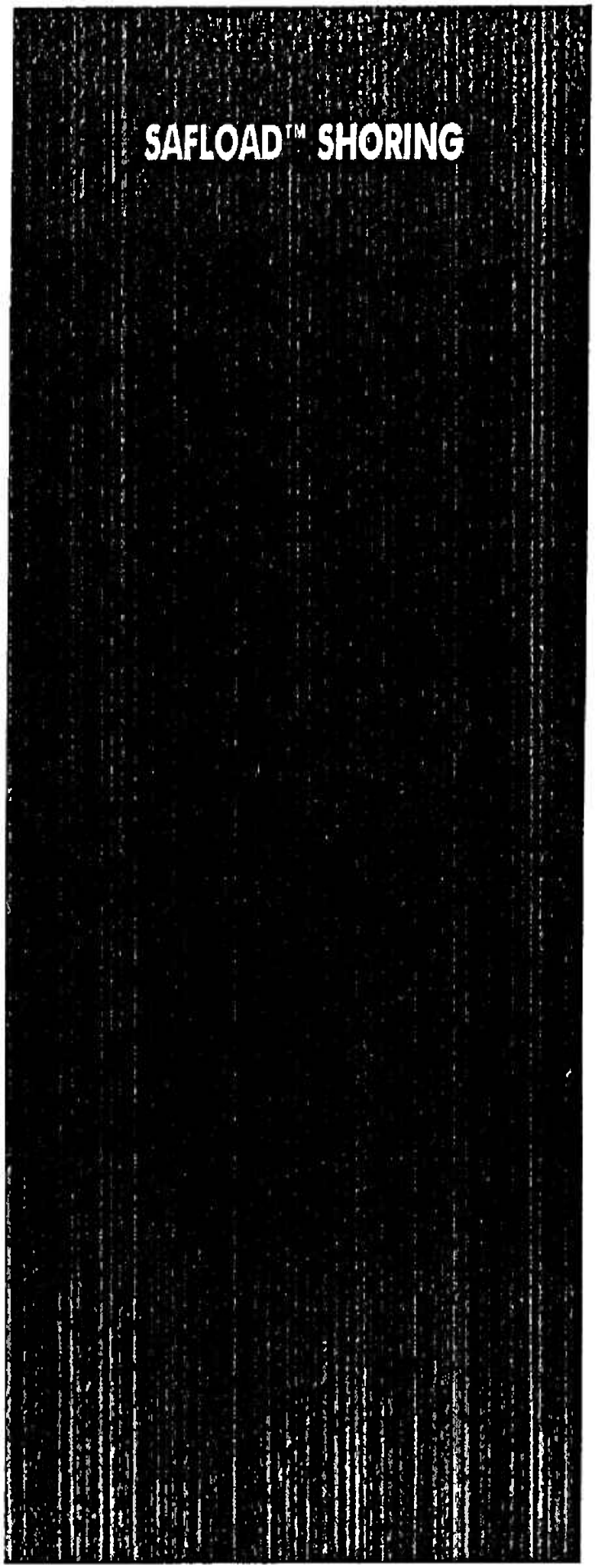
KEY TO SYMBOLS:
b= Rows Of Lacing Perpendicular To Clamps.
d= Rows Of Lacing Parallel To Clamps.
h= Total Shore Height.



© 1989 ELLIS MANUFACTURING COMPANY, INC.

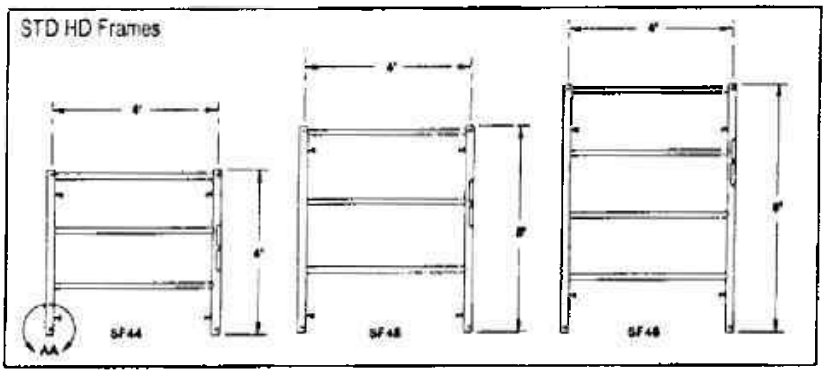
SAFWAY

Components Manual

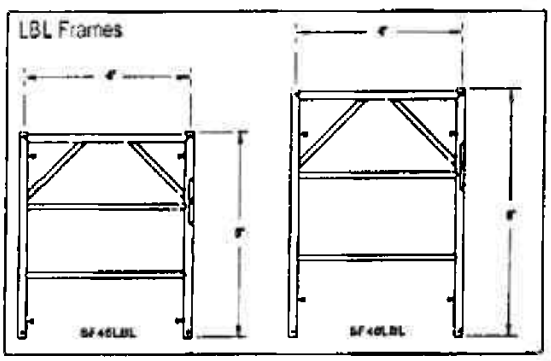


SafLoad™ Parts List

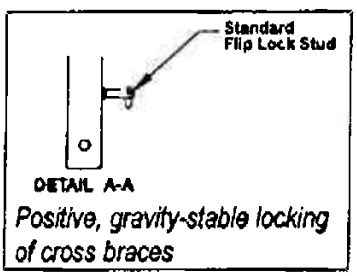
Frames *Heavy-Duty Steel Ledgers and Legs*



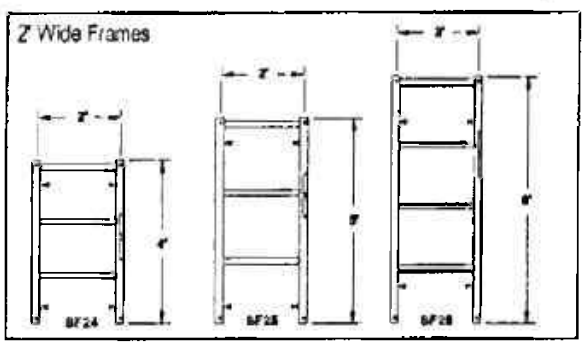
- All SafLoad™ Frames are painted grey and have 2 3/8" O.D. legs.
- Standard frames have a 1 5/8" horizontal ledger.
- All frames contain appropriate SIA warning labels.



- All load-bearing ledger frames have a 2 3/8" ledger.
- Combined loads on ledger and legs.



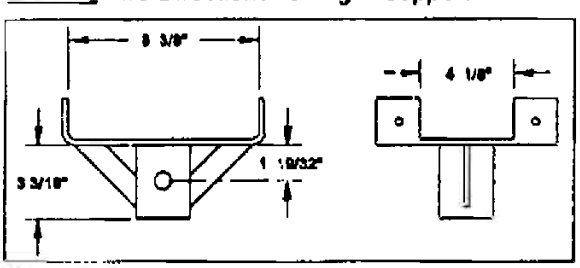
Positive, gravity-stable locking of cross braces



- Close leg spacing for high load applications.
- Perfect for beam support.

Part No.	Wt. in Lbs.
SF44	46.0
SF45	54.0
SF46	67.0
SF46LBL	69.6
SF46LBL	77.6
SF24	35.0
SF25	46.0
SF26	55.0

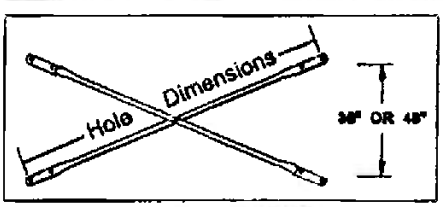
U-Head *Two Directional Stringer Support*



Part No.	Wt. in Lbs.
SFU88TW	7.0

- Provides support for single or double 4" wide flange beams.

Double Hole Cross Braces *Dual Function*

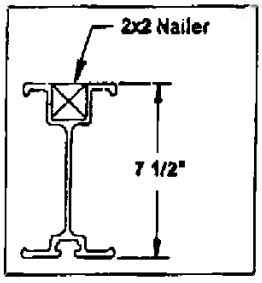


Part No.	Wt. in Lbs.	Hole Dims.
BDH3X4X4	9.4	67.88
BDH3X4X5	10.6	76.84
BDH3X4X6	11.8	86.53
BDH3X4X7	13.2	96.75
BDH3X4X8	14.6	107.33
BDH3X4X10	17.4	129.25

- Double Hole Cross Braces are used only with SafLoad™
- Same brace used for both 3' - 0" and 4' - 0" stud spacing.

SafLoad™ Parts List

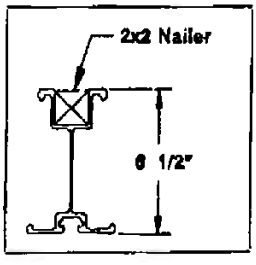
Aluminum Stringers



- All Aluminum Stringers have a 4" top and bottom flange.
- Plus a convenient 2 x 2 nailer for use in special applications.

Part No.	Length	Wt. in Lbs.
ALS6	6'	31.2
ALS8	8'	42.5
ALS10	10'	50.0
ALS12	12'	62.4
ALS14	14'	70.0
ALS16	16'	80.0
ALS20	20'	104.0
ALS22	22'	114.4

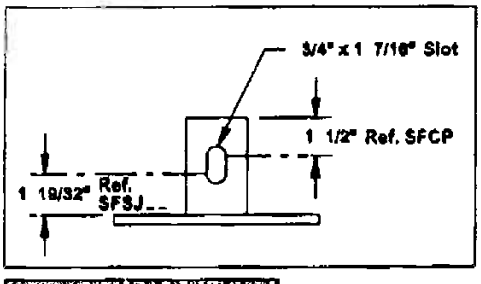
Aluminum Joists



- All Aluminum Joists have a 4" bottom flange.
- Strong yet lightweight support for concrete beams and slabs.

Part No.	Length	Wt. in Lbs.
ALJ7	7'	28.0
ALJ9	9'	36.0
ALJ11	11'	44.0
ALJ13	13'	52.0
ALJ15	15'	60.0
ALJ17	17'	68.0
ALJ19	19'	76.0
ALJ21	21'	84.0

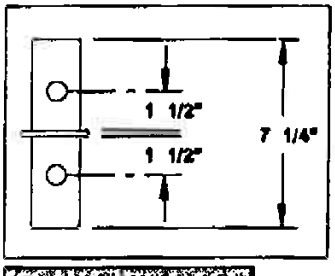
Base Plate



- Fits onto Coupling Pins or Screw Jacks.
- Special slot assures direct contact of jack and base.

Part No.	Wt. in Lbs.
SFSJBR	7.8

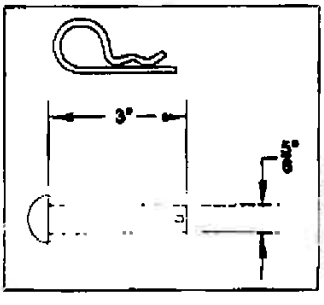
Coupling Pin



- Heavy-duty connection transfers load through stacked frames.

Part No.	Wt. in Lbs.
SFCP	2.0

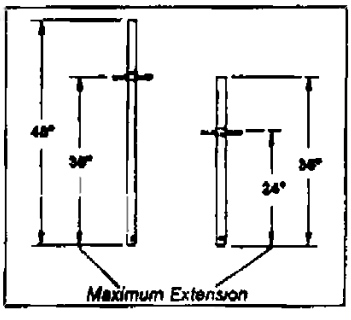
Rivet & Hitch Pin



- Quick and simple connections between frames and accessories.

Part No.	Wt. in Lbs.
SFRP	0.5
SFHP	0.3

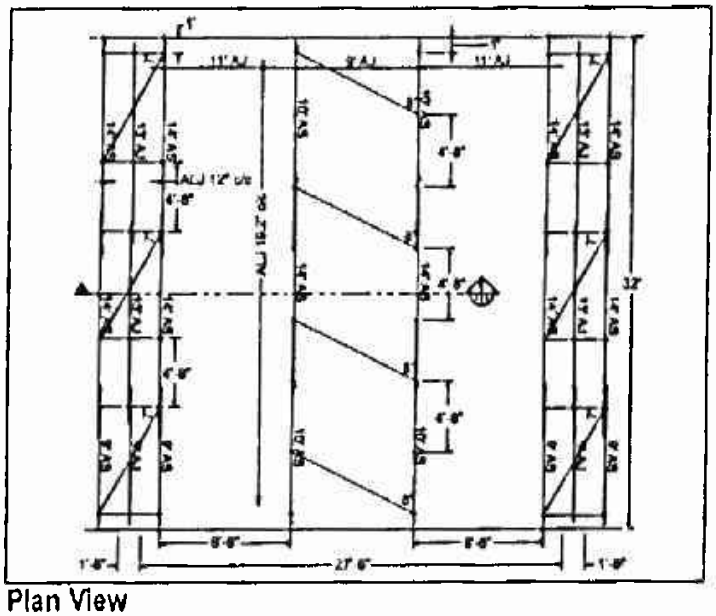
Screw Jacks



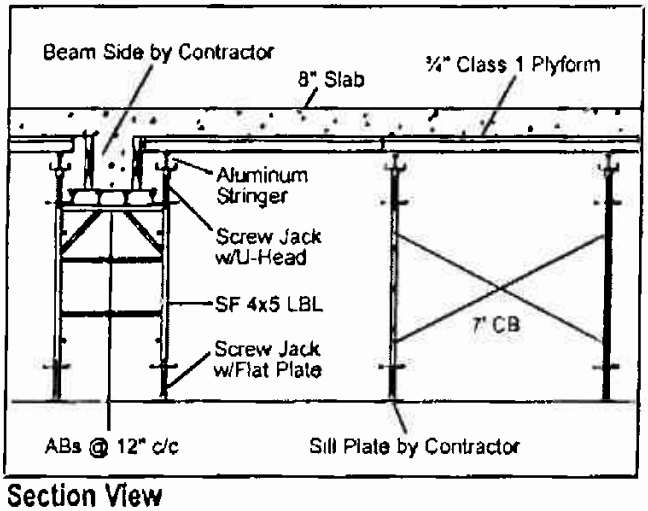
- All jacks are 1.9 O.D. and protected from corrosion.
- Special 48" jack for offset height applications.

Part No.	Wt. in Lbs.
SFSJ36	12.0
SFSJ48	15.0

SafLoad™ Views and Working Loads



Plan View



Section View

Safway employs compatable AutoCAD® software for flexible engineering solutions. Completed drawings may be e-mailed directly to the customer.

SafLoad™ Allowable Working Loads (lbs./leg)

Maximum Safe Working Leg Loads for SafLoad™ Frames with 36" or 48" Screws with 24" Maximum Screw Extension

Part No.	Description											
SF44	4' x 4' Frame	12"*	17,500	16,600	13,400	10,600	10,200	10,000	9,900	9,800	9,700	9,600
SF24	2' x 4' Frame	24"*	14,800	13,700	11,900	9,500	9,100	8,700	8,600	8,500	8,400	8,300
		36"*	12,200	11,200	10,400	8,300	8,800	7,700	7,300	7,000	6,750	6,500
		48"*	10,500	10,300	9,750	8,000	7,700	7,400	7,200	7,000	6,750	6,500
SF45	4' x 5' Frame	12"*	15,800	14,900	13,400	10,600	10,200	10,000	9,900	9,800	9,700	9,600
SF25	2' x 5' Frame	24"*	14,100	12,400	11,900	9,500	9,100	8,700	8,600	8,500	8,400	8,300
SF45LBL	4' x 5' Load Bearing Ledger	36"*	11,700	10,700	10,400	8,300	8,000	7,700	7,300	7,000	6,750	6,500
		48"*	10,200	10,000	9,750	8,000	7,700	7,400	7,200	7,000	6,750	6,500
SF46	4' x 6' Frame	12"*	14,400	13,200	11,600	10,600	10,200	10,000	9,900	9,800	9,700	9,600
SF46LBL	4' x 6' Load Bearing Ledger	24"*	12,400	11,100	10,800	9,500	9,100	8,700	8,600	8,500	8,400	8,300
		36"*	10,000	9,000	8,600	8,300	8,000	7,700	7,300	7,000	6,750	6,500
		48"*	8,500	8,400	8,200	8,000	7,700	7,400	7,200	7,000	6,750	6,500
No. of Tiers (frames) in Tower			1	2	3	4	5	6	7	8	9	10

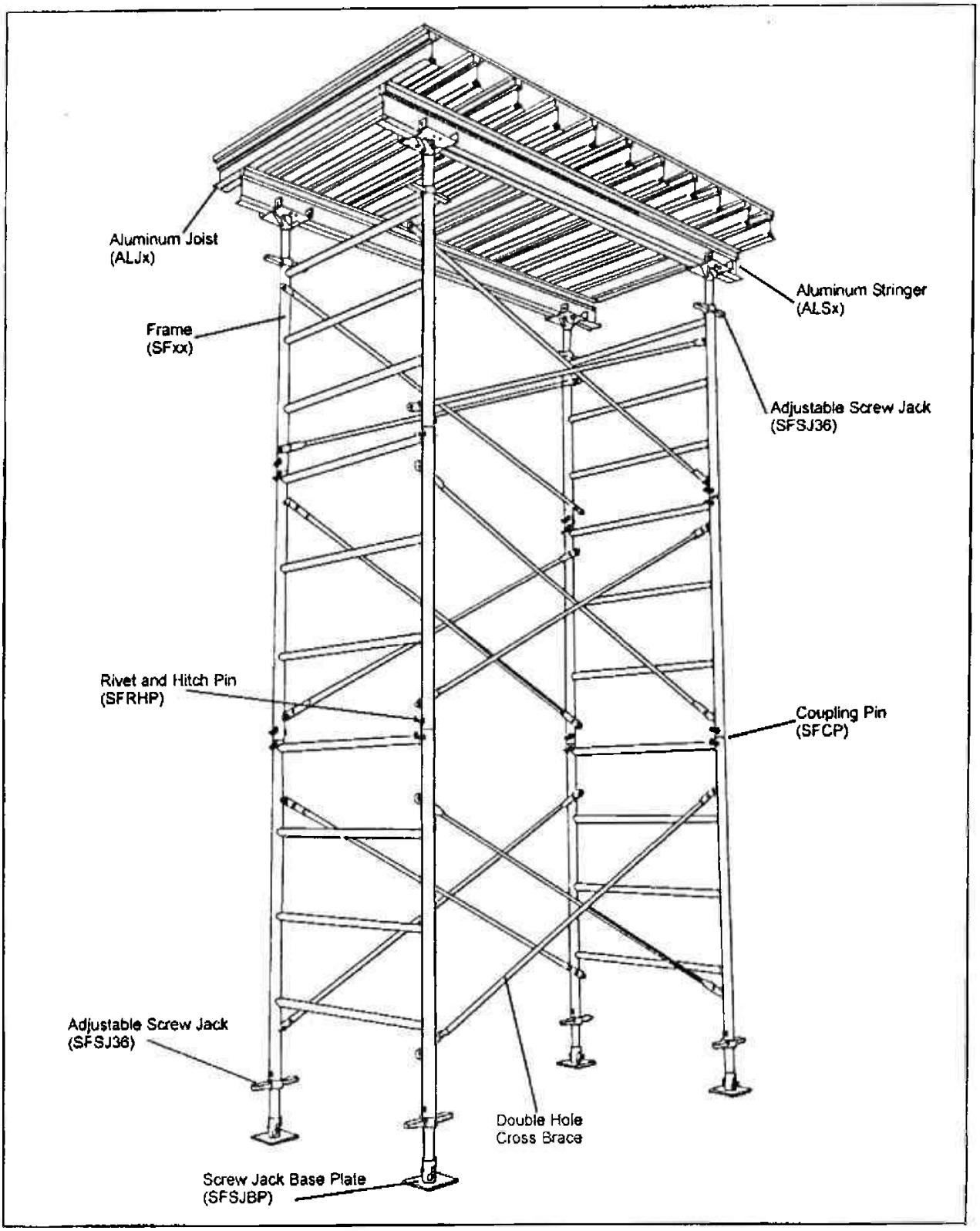
Tower Over 50' - 0" High – CONSULT WITH SAFWAY ENGINEERING DEPARTMENT

Note: 1. Use SF46 loading as above for combinations of SF44, SF45, SF46, SF24, SF25, and SF26 frames used in one tower.

* 2. Total screw jack adjustment is the sum of the adjustment Top & Bottom = A + B

3. The above allowable leg loads reflect a 2.5:1 safety factor.

SafLoad™ Tower



SafLoad™ Safety Guidelines

SAFLOAD™ SHORING SAFETY IS EVERYONE'S RESPONSIBILITY!

Everyone's safety depends upon the proper erection and safe use of shoring. Inspect your shoring before each use to see that the assembly has not been altered and is safe for your use.

POST THESE SHORING SAFETY RULES in a conspicuous place and be sure that all persons who erect, use, or dismantle shoring are aware of them.

FOLLOW ALL STATE, LOCAL AND FEDERAL CODES, ORDINANCES AND REGULATIONS pertaining to Shoring.

INSPECT ALL EQUIPMENT BEFORE USING. Never use any equipment that is damaged, severely rusted, or is missing locking devices. Any component which cannot be brought into proper alignment or contact with the component into or onto which it is intended to fit shall be removed and replaced.

A SHORING LAYOUT shall be available and used on the job site at all times. Shoring design must include analysis of load carrying members by properly qualified personnel. Safway Shoring component load capacity and weight information is available from your Safway Dealer.

INSPECT ERECTED SHORING AND FORMING FOR CONFORMITY WITH LAYOUT AND SAFETY PRACTICES PRIOR TO POUR, DURING POUR, AND AFTER POUR UNTIL CONCRETE IS SET.

CONSULT YOUR SAFWAY REPRESENTATIVE WHEN IN DOUBT. Shoring is our business. NEVER TAKE CHANCES.

⚠ WARNING

SERIOUS INJURY OR DEATH CAN RESULT FROM YOUR FAILURE TO FAMILIARIZE YOURSELF AND COMPLY WITH ALL APPLICABLE SAFETY REQUIREMENTS OF FEDERAL, STATE AND LOCAL REGULATIONS AND THESE SAFETY GUIDELINES BEFORE ERECTING, USING, OR DISMANTLING THIS SHORING.

I. PRIOR TO THE POUR

A. GENERAL

1. USE SAFWAY'S RECOMMENDED SAFE WORKING LOADS AND PROCEDURES FOR:
   a) Span, spacing, and types of shoring members.
   b) Types, sizes, heights, and spacing of vertical shoring supports.
2. USE LUMBER EQUIVALENT TO THE STRESS, species, grade and size specified on the layout. Use only lumber that is in good condition. Do not splice timber members between their supports.
3. PROVIDE PROPER FOUNDATION (sills, beams, or cribbing) below base plates for the distribution of leg loads to concrete slabs or ground. Existing ground shall be level and thoroughly compact prior to erection of shoring to prevent settlement. Consideration must be given to potential adverse weather conditions throughout the pour cycle such as washouts, freezing and thawing of ground, etc. Consult a qualified soils engineer to determine the proper size foundation required for existing ground conditions.
4. DO NOT MAKE UNAUTHORIZED CHANGES OR SUBSTITUTION OF EQUIPMENT; always consult your Safway supplier prior to making changes necessitated by job site conditions.
5. PROVIDE GUARDRAIL SYSTEMS ON ALL OPEN SIDES AND OPENINGS IN FORMWORK AND SLABS.
6. ACCESS MUST BE PROVIDED TO ALL FORMING DECK LEVELS. If it is not available from the structure, access ladders or stair towers must be provided. Access ladders must extend at least three (3) feet above formwork. Position or restrain ladders to prevent ladder or formwork displacement.

⚠ WARNING

FALL ARREST equipment attached to shoring MAY NOT prevent serious INJURY or DEATH if a fall occurs.

7. IF MOTORIZED CONCRETE PLACEMENT EQUIPMENT IS TO BE USED, be sure that lateral loads, vibration, and other forces have been considered and adequate precautions taken to assure stability.
8. PLAN CONCRETE POURING METHODS AND SEQUENCES TO insure against unbalanced loading of the shoring equipment. Take all necessary precautions to avoid uplift of shoring components and formwork.
9. FASTEN ALL BRACES SECURELY.
10. CHECK TO SEE THAT ALL CLAMPS, SCREWS, PINS and all other components are in a CLOSED OR ENGAGED POSITION.
11. MAKE CERTAIN THAT ALL BASE PLATES AND SHORE HEADS ARE IN FIRM CONTACT WITH THE FOUNDATION AND FORMING MATERIAL.
12. USE SPECIAL PRECAUTIONS when shoring to or from sloped surfaces.
13. AVOID ECCENTRIC LOADS ON U-HEADS, AND TOP PLATES by centering stringers on these members.
14. AVOID SHOCK OR IMPACT LOADS for which the shoring was not designed.
15. DO NOT PLACE ADDITIONAL TEMPORARY LOADS (such as rebar bundles) on erected formwork or poured slabs, without checking the capacity of the shoring and/or structure to safely support such additional loads.
16. The completed shoring setup shall have the specified bracing to give it lateral stability.
17. The erection of shoring shall be under the supervision of an experienced and competent person.

B. FRAME SHORING

1. FOLLOW THE SHORING LAYOUT DRAWING AND DO NOT OMIT REQUIRED COMPONENTS.
2. DO NOT EXCEED THE SHORE FRAME SPACINGS OR TOWER HEIGHTS as shown on the shoring layout.
3. SHORING LOAD MUST BE CARRIED ON ALL LEGS.
4. PLUMB AND LEVEL ALL SHORING FRAMES as the erection proceeds, and check plumb and level of shoring towers just prior to pour.
5. DO NOT FORCE braces on frames to fit - level the shoring towers until proper fit can be made easily.
6. TIE HIGH TOWERS OF SHORING FRAMES TOGETHER with sufficient braces to make a rigid, solid unit (consult your Safway representative for recommendations). Shoring must always be secured when the height of the shoring towers exceed four (4) times the minimum base width. See NOTE 1.
7. EXERCISE CAUTION in erecting or dismantling free standing shoring towers to prevent tipping.
8. DO NOT CLIMB CROSS BRACES.

C. SCREW JACKS

1. USE SCREW JACKS to adjust for uneven grade conditions, to level and accurately position the falsework and for easy stripping.
2. DO NOT EXCEED SAFWAY'S RECOMMENDED MAXIMUM EXTENSION OF SCREW JACKS. Keep screw jack extensions to a minimum for maximum load carrying capacity.
3. MAKE CERTAIN THAT ALL SCREW JACKS are firmly in contact with the foundation and frame legs.

SafLoad™ Safety Guidelines

D. POST SHORING

1. PLUMB ALL POST SHORES AS THE ERECTION PROCEEDS. Check plumb of post shores just prior to pour.
2. POST SHORES MAY REQUIRE ADDITIONAL STABILITY BRACING. Refer to manufacturer's instruction. Required bracing shall be installed as the shores are being erected.
3. DEVICES WHICH ATTACH THE EXTERNAL LATERAL STABILITY BRACING shall be securely fastened to each post shore.
4. POST SHORES MORE THAN ONE TIER HIGH SHALL NOT BE USED. Where greater shore heights are required consult your Safway supplier.

E. HORIZONTAL SHORING BEAMS

1. SPECIAL CONSIDERATION MUST BE GIVEN TO THE INSTALLATION OF HORIZONTAL SHORING BEAMS:
   a) When sloped or supported by sloping ledgers (stringers).
   b) When ledger (stringer) height/width ratio exceeds 2.5 to 1. Under no circumstances shall horizontal shoring beams bear on a single "two-by" ledger (stringer).
   c) When eccentric loading conditions exist.
   d) When ledger (stringer) consists of multiple members (i.e., double 2x6, 2x8, etc.)
   e) When horizontal shoring beams are placed other than at right angles to their supports.
2. ASSURE THAT BEARING ENDS OF SHORING BEAMS ARE PROPERLY SUPPORTED and that locking devices are properly engaged before placing any load on beams.
3. HORIZONTAL SHORING BEAMS SHOULD NOT be supported other than at the bearing prongs unless recommended by your Safway supplier or beam manufacturer. Cantilever "male end" of Safway horizontal beams only. Cantilever shall not exceed 24".
4. DO NOT NAIL BEAM BEARING ENDS TO LEDGER.
5. PROVIDE AND MAINTAIN ADEQUATE SUPPORT to properly distribute shoring loads. When supporting horizontal shoring beams on:
   a) MASONRY WALL - Insure that masonry units have adequate strength. Brace walls as necessary.
   b) LEDGERS - supported by walls using bolts, or other means, should be properly designed and installed per recommendation of supplier or job architect/engineer.
   c) FORMWORK - Formwork shall be designed for the additional loads imposed by the shoring beams.
   d) STRUCTURAL STEEL FRAMEWORK - The ability of the steel to support all loading should be checked and approved by the responsible project architect/engineer.
   e) STEEL HANGERS - be sure the bearing ends fully engage on the hangers. The hangers shall be designed to conform to the bearing end and shall have a rated strength to safely support the shoring loads imposed. Hangers must be plate saddle rather than wire type. Check with manufacturer of hangers for specific application. (Follow hanger manufacturers' recommendations.)

F. JOISTS AND STRINGERS

1. Joists and stringers shall only overlap at a support.
2. All joists and stringers shall have full bearing at each support.
3. All stringers shall be secured to their supports.

G. FINAL INSPECTION

Be sure that:

1. There is a sound foundation under every leg.
2. All base plates and screw jacks are in firm contact with foundation.
3. Every component (including exterior bracing) agrees with the shoring layout as to type, span, number, location, and size.
4. All shore pins are properly installed and fully seated.
5. All frames are plumb and braced to form towers and/or all posts are plumb and braced as required by user instructions.
6. All formwork follows forming layout and horizontal beams fully bear on their supports.
7. All clamps, screws, pins and other fasteners (including locking devices on adjustable beams) are closed, tightened, or engaged.

⚠ WARNING

Do not position workers below formwork while concrete is being placed.

II. DURING THE POUR

1. ADJUSTMENT OF SHORING AND/OR POST SHORES TO RAISE FORMWORK shall not be made once the pour begins.
2. INSURE POUR SEQUENCE will not cause an unbalanced load on shoring equipment.
3. Monitor possible movement of shoring components when placing concrete.

III. REMOVAL

Loaded shoring equipment shall not be released or removed, including cross braces, until the approval of a qualified engineer has been received. Premature releasing or stripping of forms can cause failure. A qualified engineer must decide when and how stripping is to proceed. Weather conditions, variations in different parts of the structure and the setting qualities of the concrete all affect the stripping process.

IV. RESHORING

DEFINITION: Reshoring means the construction operation in which shoring equipment is placed, as the original forms and shores are removed, in order to support partially cured concrete and construction loads.

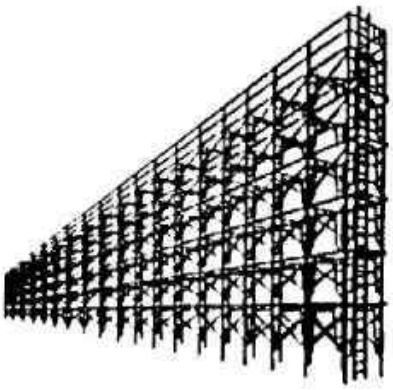
1. Reshoring is one of the most critical operations in formwork; consequently, reshoring procedure must be designed and planned in advance by a qualified structural engineer and approved by the project architect/engineer.
2. Slabs or beams which are to be reshored should be allowed to take their permanent deflection before final adjustment of reshoring equipment is made.
3. The reshoring shall be thoroughly checked by the architect/engineer to determine that it is properly placed and that it has the allowable load capacity to support the areas that are being reshored.
4. Equipment to be left in position for reshoring should be checked thoroughly by a qualified engineer. Horizontal shoring beams should never be used as a part of reshoring system. Extreme care must be taken to release the adjustment screws to a point where the slab takes its permanent deflection. The adjustment screws should then be tightened until contact is again made with the underside of the slab. In this manner the frame reshoring below will not be carrying the load of the slab that it had previously shored.

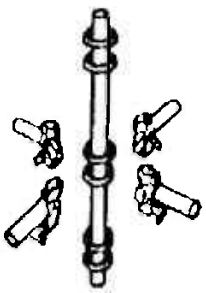
NOTE 1:

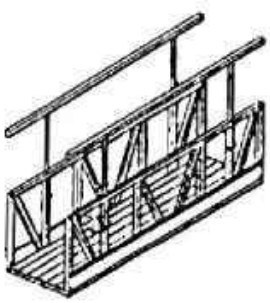
California and some other states require a height-to-minimum base width ratio of three to one (3:1). Refer to the governing codes for your job location.

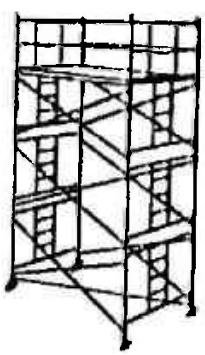
The Complete Safway Line

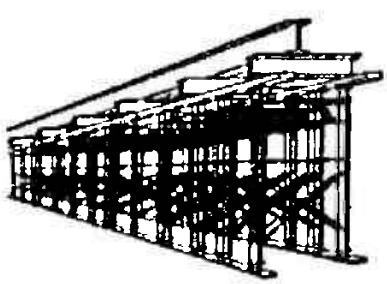
- Sectional Scaffold
- Systems™ Scaffold
- Power and Manual Swings
- Rolling Towers
- Tube & Clamp Scaffold
- Canopies/Overhead Protection
- Fall Protection and Confined Entry Equipment
- Material Hoisting Equipment
- Engineered Access Solutions
- Training Services
- Project Management Services

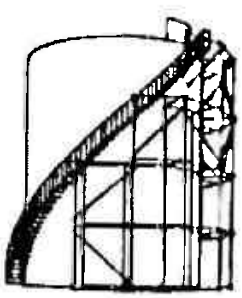












All drawings in this brochure are for illustrative purposes only.

This brochure is intended for general information only. Because of the many variables which affect the performance of the product line, some of the information in this brochure may not apply. For specific applications, contact Safway.

Note: Erection, use, maintenance, and disassembly must conform to current Safway instructions as well as ALL federal, state, provincial, and local regulations. Copies of complete safety guidelines for these and other products are available from Safway without charge.

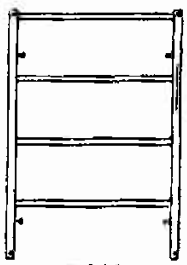
SAFWAY

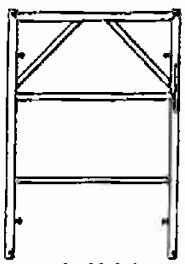
SAFWAY SERVICES, INC.
N19 W24200 Riverwood Drive
Waukesha, WI 53188
(800) 558-4772 ■ (262) 523-6500
Fax: (262) 523-9808
www.safway.com

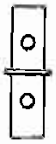
© 2004 Safway Services, Inc. All Rights Reserved.

Rev 5/04 ÖEN 1512

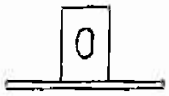
SafLoad® Shoring


SF46

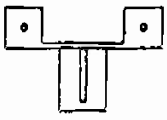

SF46LBL


SFCP

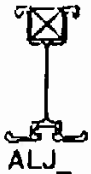

SFRP


SFSJBP


SFSJ48


SFU88TW


ALS_


ALJ_

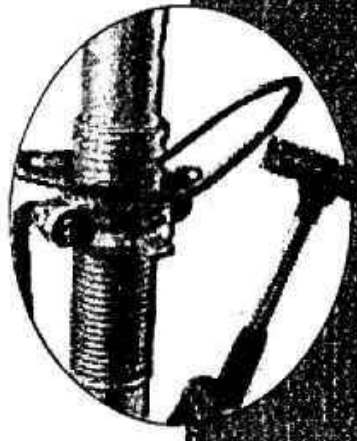
Part No.	Description	Wt.
Frames		
SF46	Frame 4' x 6'	67.0
SF45	Frame 4' x 5'	54.0
SF44	Frame 4' x 4'	46.0
SF26	Frame 2' x 6'	55.0
SF25	Frame 2' x 5'	45.0
SF24	Frame 2' x 4'	35.0
SF46LBL	4 x 6 LD Bearing Ledger Frame	77.8
SF45LBL	4 x 5 LD Bearing Ledger Frame	69.6
Accessories		
SFCP	Connector	2.0
SFHP	Hitchpin	0.3
SFRP	Rivetpin 5/8 x 3"	0.5
SFSJBP	Base Plate	7.8
SFSJ48	48" Screw Jack	15.0
SFSJ36	36" Screw Jack	12.0
SFU88TW	8" x 8" U-Head 2-Way	7.0
Beams		
ALJ21	Aluminum Joist 21'	84.0
ALJ19	Aluminum Joist 19'	76.0
ALJ17	Aluminum Joist 17'	68.0
ALJ15	Aluminum Joist 15'	60.0
ALJ13	Aluminum Joist 13'	52.0
ALJ11	Aluminum Joist 11'	44.0
ALJ9	Aluminum Joist 9'	36.0
ALJ7	Aluminum Joist 7'	28.0
ALS22	Aluminum Stringer 22'	114.4
ALS20	Aluminum Stringer 20'	104.0
ALS16	Aluminum Stringer 16'	80.0
ALS14	Aluminum Stringer 14'	70.0
ALS12	Aluminum Stringer 12'	62.4
ALS10	Aluminum Stringer 10'	50.0
ALS8	Aluminum Stringer 8'	42.5
ALS6	Aluminum Stringer 6'	31.2

©Safway Services, Inc. Availability and prices subject to change.

SAFWAY

Simple, Quick and Versatile Post Shore 350 DB and AS 550

- The Post Shore 350 DB and AS 550 offer you a simple, cost-effective way to shore or reshore.
- Shores can be used individually or in conjunction with frame shoring assemblies.
- U-Head provides a saddle to support the stringer or joists.
- Attached quick-release device saves time and energy during stripping.
- Hot-dipped galvanized finish prevents rust and extends life.
- All adjusting hardware is self-contained. No lost or missing parts.
- Both post shores may be used upside down and as wall braces.



Post shores are designed to support vertical loads. All formwork or supported structures must be restrained from lateral movement.

Post Shores 350 DB and AS 550

Post Shore 350 DB

Part No.: VFTP552147
Height: 6' - 6" to 11' - 6"
Weight: 46.5 lbs.

Post Shore AS 550

Part No.: VFTP463087
Height: 10' to 18'
Weight: 74.2 lbs.

Both post shores have a 3" O.D. base and a 2.5" O.D. staff.

Components

Part No.	Description	Weight
U8EP	U-Head	4.9 lbs.
VFTA470804	T-Spring Bolt	0.2 lbs.
VFTA002547	Swivel Clamp	4.2 lbs.
VFTA107118	Counter Nut	2.2 lbs.

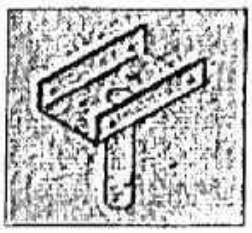
DB 350 Load Capacities*

Height (ft.)	Load (lbs.)
6' - 6"	6445
7' - 0"	6445
7' - 6"	6445
8' - 0"	6445
8' - 6"	6445
9' - 0"	6445
9' - 6"	6445
10' - 0"	5600
10' - 6"	5170
11' - 0"	4400
11' - 6"	3860

AS 550 Load Capacities*

Height (ft.)	Load (lbs.)
10' - 0"	9367
10' - 6"	8800
11' - 0"	8176
11' - 6"	7475
12' - 0"	6903
12' - 6"	6353
13' - 0"	5815
13' - 6"	5316
14' - 0"	4880
14' - 6"	4490
15' - 0"	4160
15' - 6"	3859
16' - 0"	3575
16' - 6"	3340
17' - 0"	3133
17' - 5"	2924
18' - 0"	2732

* Post shores must be braced or restrained from lateral movement by other means. Capacities indicated are at 3:1 safety factor.

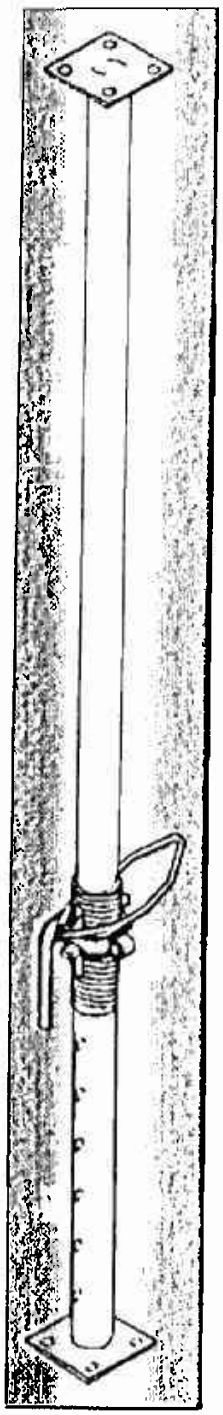


U8EP
Accepts 4" flange beams.

VFTA470804
Required to attach U-Head U8EP.

VFTA002547
(1.9" x 3.0")
Required to attach 1.9" tubes to post shore base.

VFTA107118
Required for tension loading in brace applications.



VFTP463087
AS 550 may be used upside down for easier adjustment.

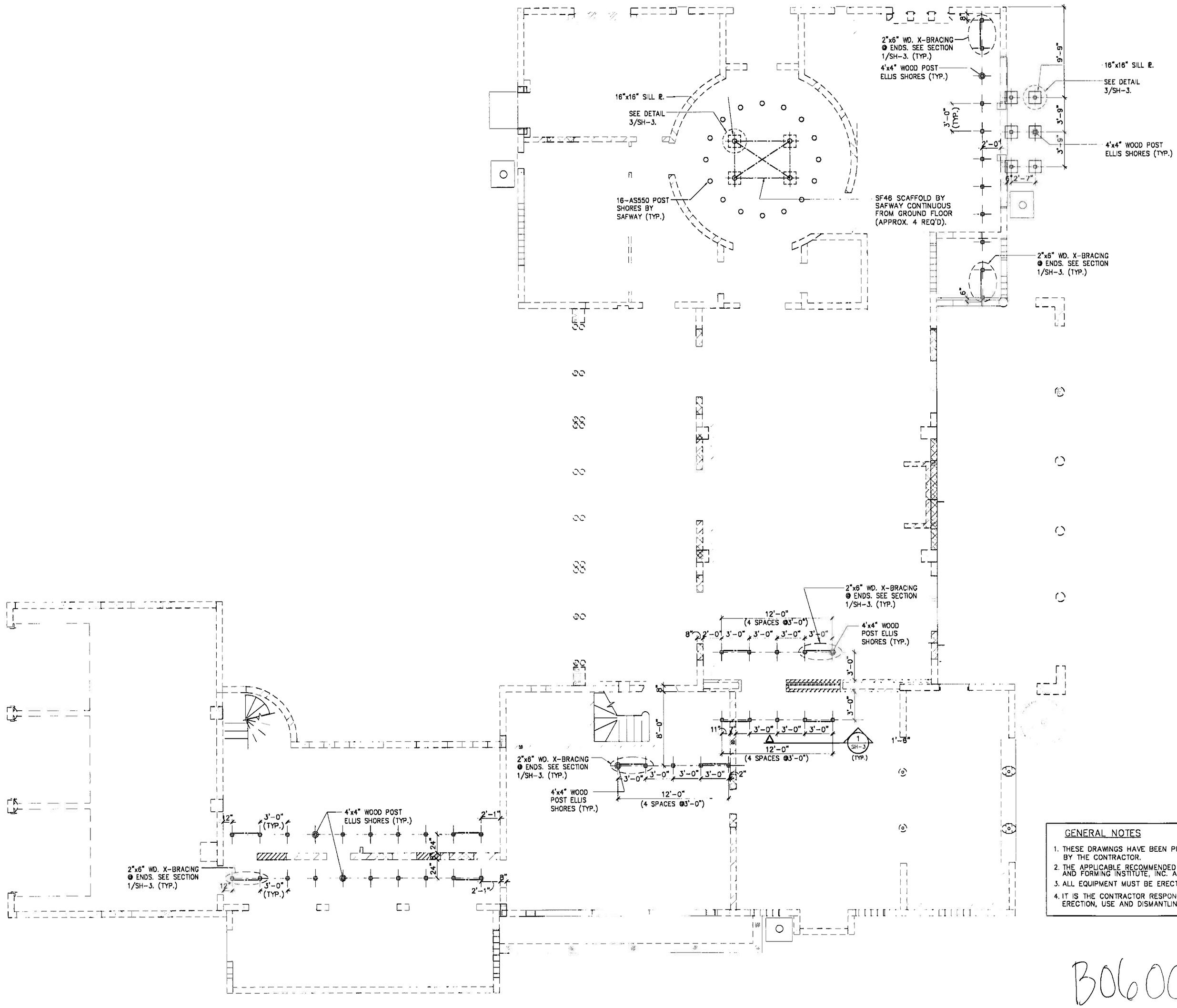
All drawings on this sheet are for illustrative purposes only. This sheet is intended for general information purposes only. Because of the many variables which affect the performance of the product line, some of the information in it may not apply. For specific applications, contact Safway.

NOTE: Erection, use, maintenance and disassembly must conform to current manufacturer's instructions as well as all federal, state and local regulations. Copies of complete Safety Guidelines for these and other products are available from Safway or your Safway dealer without charge.

SAFWAY
SAFWAY SERVICES, INC.
N19 W24200 Riverwood Drive
Waukesha, WI 53188
(800) 558-4772 • (262) 523-6500
Fax (262) 523-9808
www.safway.com

© 2001 Safway Services, Inc. All Rights Reserved.

Rev. 4/03 ORN 553



GROUND FLOOR SHORING PLAN

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

GENERAL NOTES

1. THESE DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION FURNISH BY THE CONTRACTOR.
2. THE APPLICABLE RECOMMENDED PRACTICES OF THE SCAFFOLDING SHORING AND FORMING INSTITUTE, INC. AND OSHA SHALL BE FOLLOWED.
3. ALL EQUIPMENT MUST BE ERECTED PLUMB AND LEVEL.
4. IT IS THE CONTRACTOR RESPONSIBILITY FOR SAFETY REQUIREMENTS DURING ERECTION, USE AND DISMANTLING OF ASSEMBLY.

OFFICE COPY
CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY THE FOLLOWING:

BUILDING:
ZONING:
FIRM/PW:
CONCURRENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
ENGINEERING:
PUBLIC WORKS:
STRUCTURAL: Open 2/3/06
ACCESSIBILITY:
ELEVATOR:

B06004 45

TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NOTTHER TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

1/25/06
T.A. KHAN
FL P.E. #60994

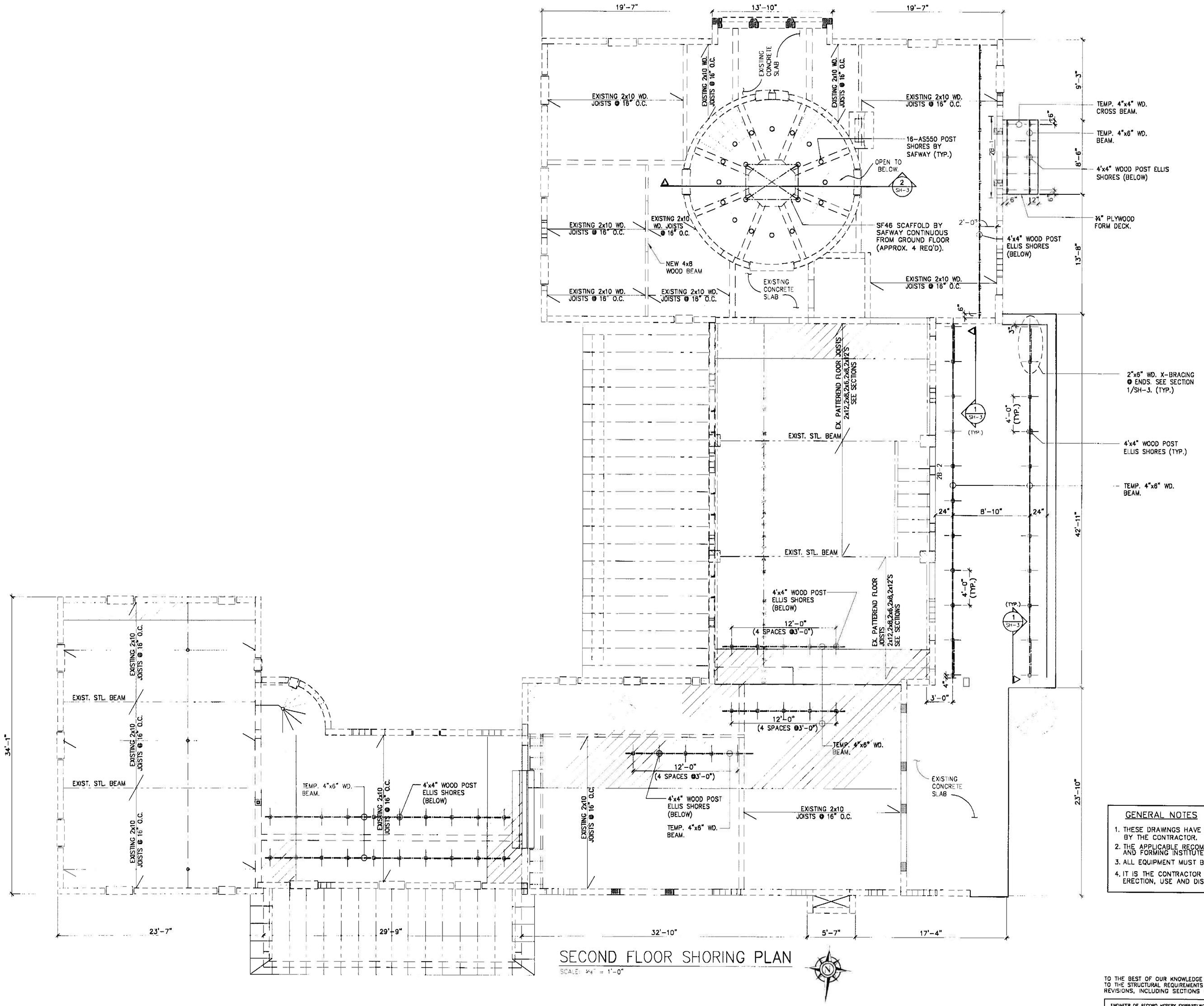
Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301 Comm. No. 05-018.00
FAX.(305)-661-3962 CA# EB00002979

SH-1

SHEET TITLE
DRAWN: T.R./P./K.A.
DATE: OCTOBER 19, 2005
REVISIONS: DATE

3DESIGN INC
ANTHONY LEON
AR0016752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE 207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA



SECOND FLOOR SHORING PLAN

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

SHEET TITLE:	
DRAWN:	T.K. / F.R.A.
DATE	OCTOBER 19, 2005
REVISIONS:	DATE:

3D DESIGN INC
ANTHONY LEON
AR0016752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5800 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

GENERAL NOTES

1. THESE DRAWNGS HAVE BEEN PREPARED BASED ON INFORMATION FURNISHED BY THE CONTRACTOR.
2. THE APPLICABLE RECOMMENDED PRACTICES OF THE SCAFFOLDING SHORING AND FORMING INSTITUTE, INC. AND OSHA SHALL BE FOLLOWED.
3. ALL EQUIPMENT MUST BE ERECTED PLUMB AND LEVEL.
4. IT IS THE CONTRACTOR RESPONSIBILITY FOR SAFETY REQUIREMENTS DURING ERECTION, USE AND DISMANTLING OF ASSEMBLY.

BUILDING:
ZONING:
DRB/HPB:
CONCURRENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
ENGINEERING:
PUBLIC WORKS:
STRUCTURAL:
ACCESSIBILITY:
ELEVATOR:

As per Florida Build
REVIEWED FOR CODE

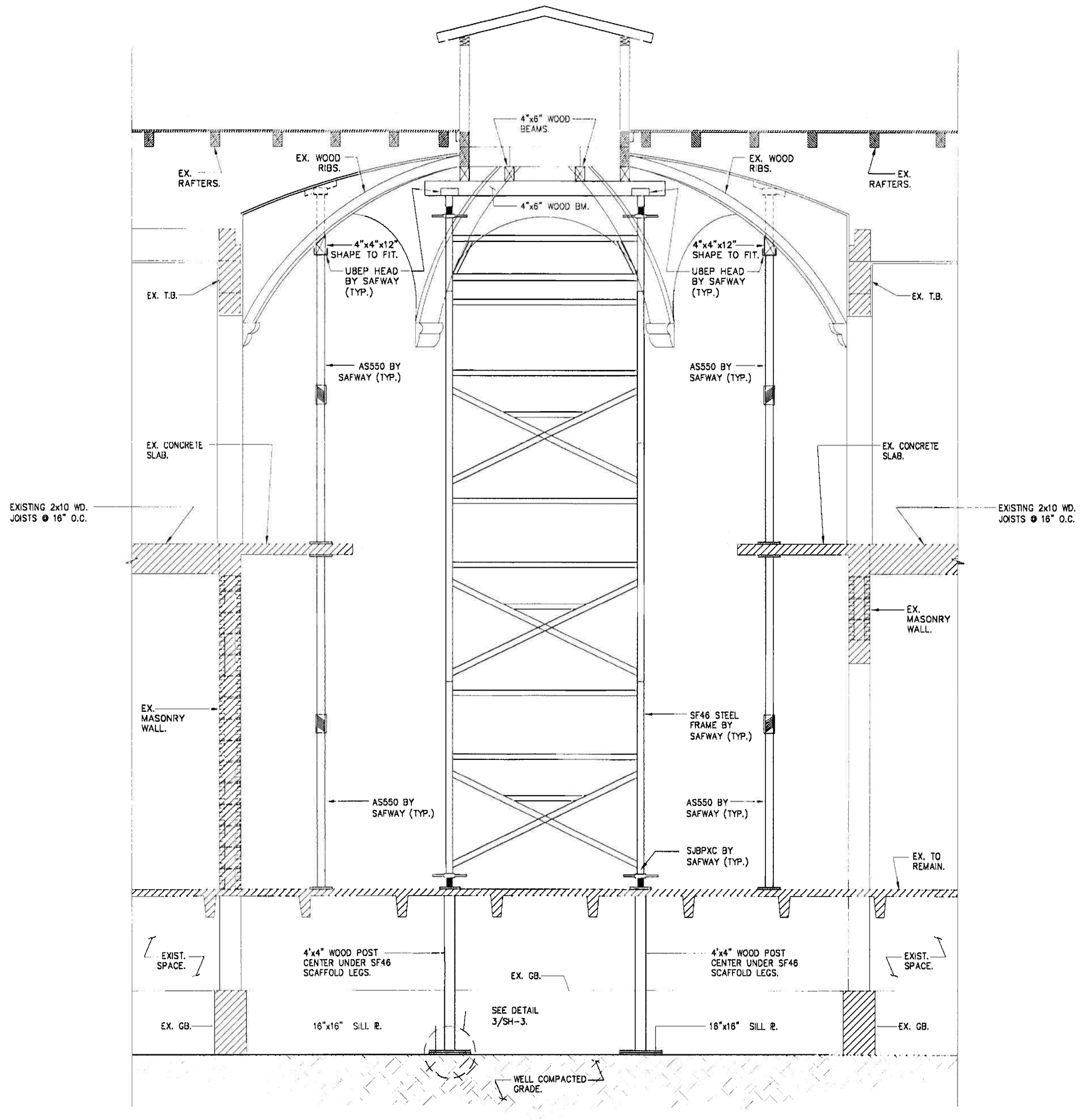
TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWINGS ARE NEITHER TO BE REPRODUCED, COPIED, NOR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

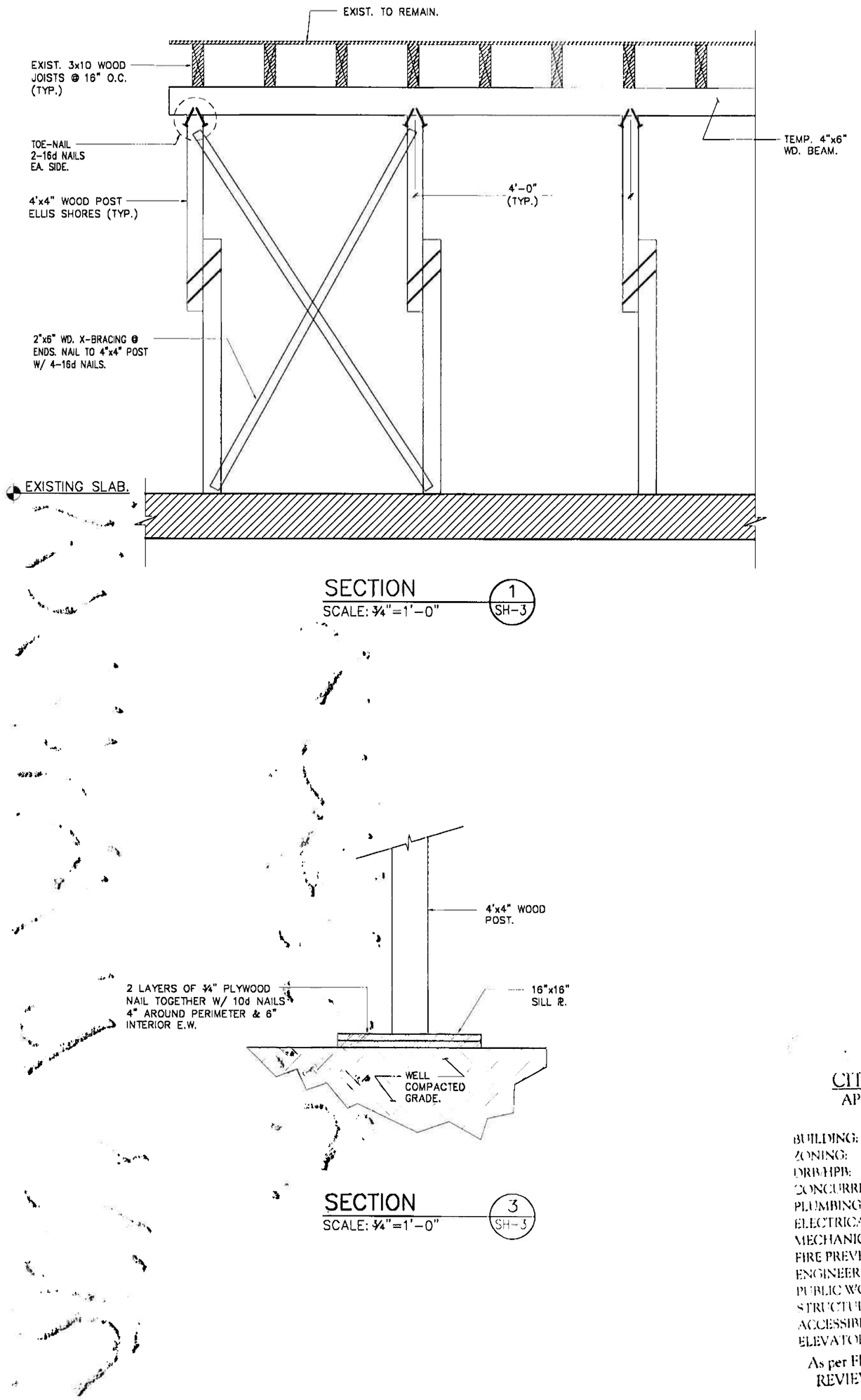
1/23/06
T.A. KHAN
FL P.E. #60994

Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301 Comm. No. 05-818.00
FAX.(305)-661-3982 CA# EB0000879

SH-2



SECTION 2
SCALE: 3/4"=1'-0" SH-3



SECTION 1
SCALE: 3/4"=1'-0" SH-3

SECTION 3
SCALE: 3/4"=1'-0" SH-3

SHEET TITLE:	
DRAWN:	T.R., P.R.A.
DATE:	OCTOBER 19, 2005
REVISIONS:	DATE:

2DESIGN, INC
ANTHONY LEON
AR0016752
ARCHITECTURE
1234 WASHINGTON AVE. SUITE#207 MIAMI BEACH, FL 33139 T.305.531.5208 F.305.531.4515

THE GAINOR RESIDENCE
5900 NORTH BAY ROAD
MIAMI BEACH, FLORIDA

CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY THE FOLLOWING:

BUILDING:	
ZONING:	2.16.06
DRB/HPB:	
CONCURRENCY:	
PLUMBING:	
ELECTRICAL:	
MECHANICAL:	
FIRE PREVENTION:	
ENGINEERING:	
PUBLIC WORKS:	
STRUCTURAL:	2/13/06
ACCESSIBILITY:	
ELEVATOR:	

As per Florida Build
REVIEWED

TO THE BEST OF OUR KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2001, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ENGINEER OF RECORD HEREBY EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THIS DESIGN AND DRAWING ARE NOTICE TO BE REPRODUCED, USED OR CHANGED IN ANY FORM OR MANNER WHATSO EVER NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF "SIDDIQ KHAN & ASSOCIATES, INC."

1/23/06
T.A. KHAN
FL P.E. #60994

Siddiq Khan & Associates, Inc.
Consulting Engineers And Planners
7400 S.W. 50 TERR. SUITE 105
Miami, Florida 33155
TEL.(305)-662-2301
FAX.(305)-661-3962
Comm. No. 05-618.00
CA# EB0000279

SH-3