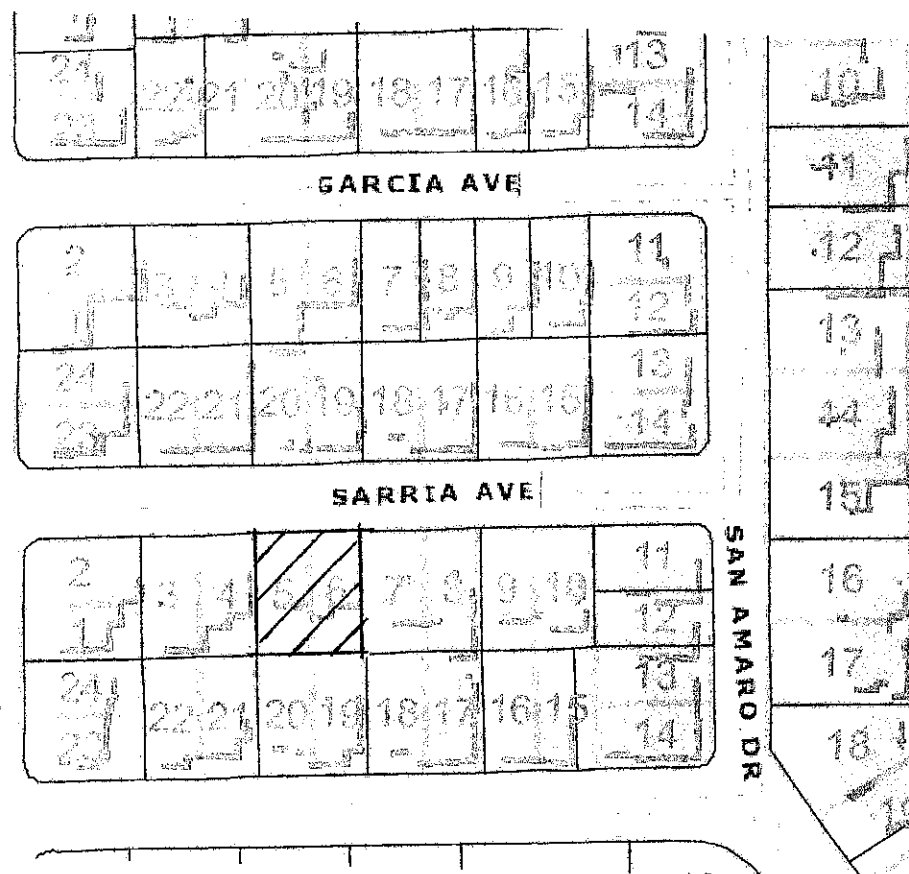


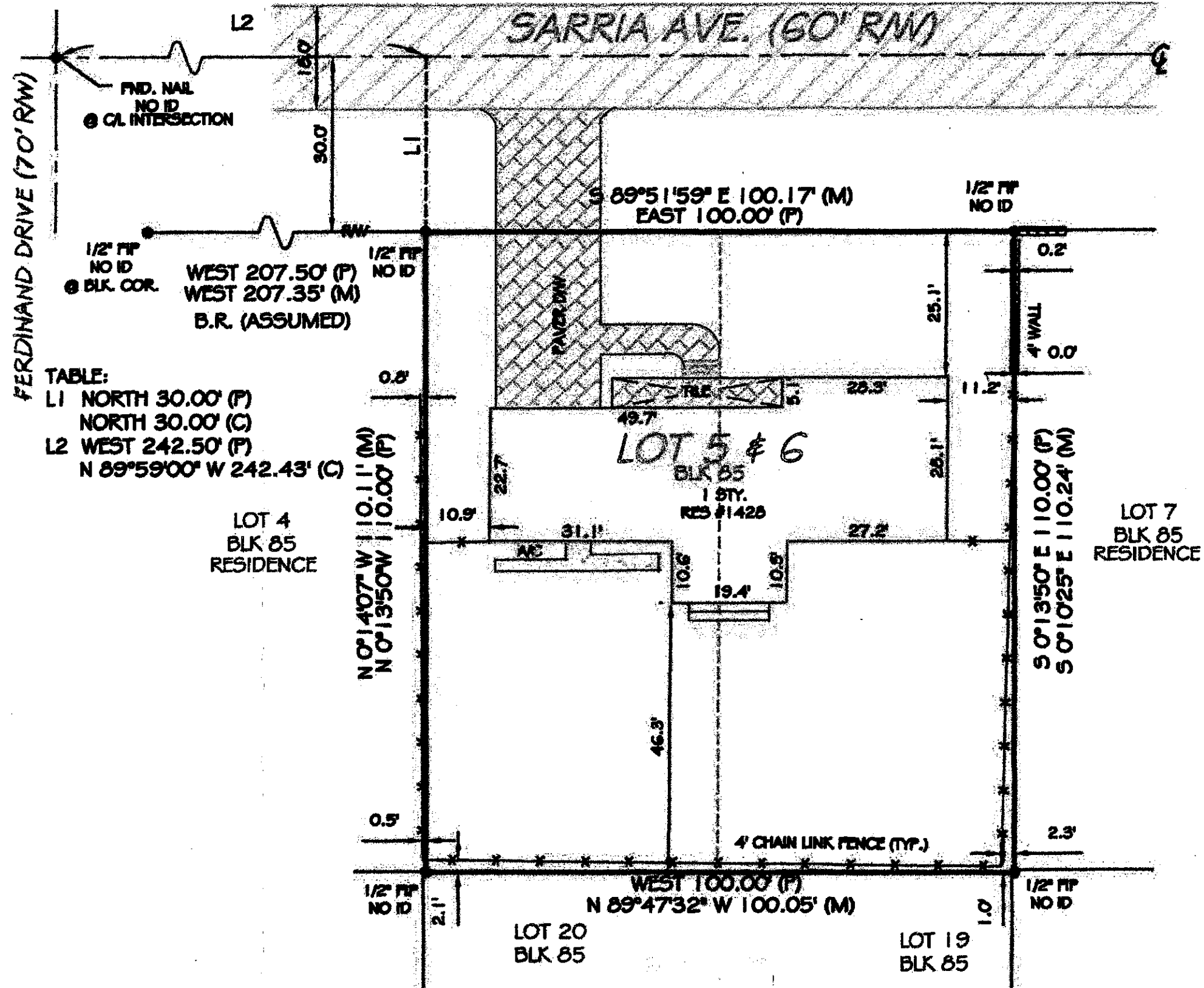
LB # 4680



By performing a search at www.fema.gov, the property is located in Flood Zone 'X' (with a Base Flood Elevation of NA).

BY: *HA*

Joseph L. Martin
Professional Land Surveyor #4368
State of Florida



FOR: BENJAMIN & MARIA FERNANDEZ		
SCALE: 1"=20'	APPROVED BY:	DRAWN BY JCM
DATE: 7-28-2020		REVISED
BOUNDARY SURVEY		
1428 SACRIA AVE: CORAL GABLES, FL		DRAWING NUMBER 2020



ADJACENT HOUSE TO WEST



612-260-0000



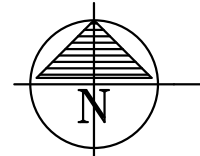


NICE ANTIQUE TR. 1/20/20

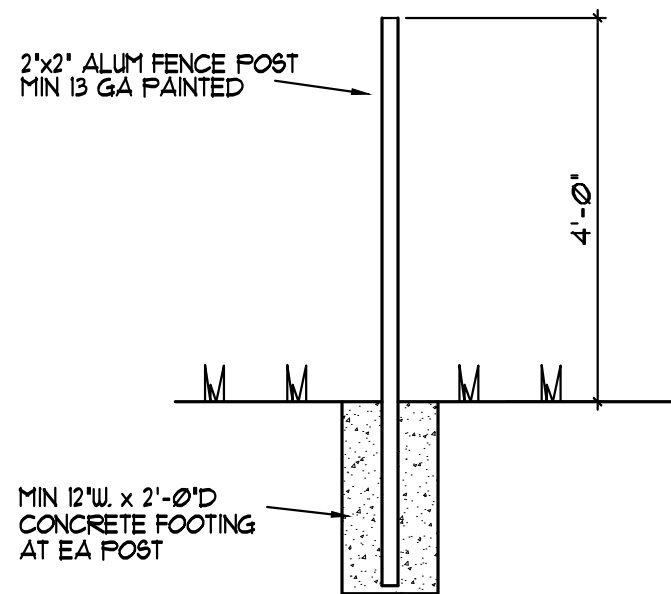


APPROXIMATE DRIVE TO EAST

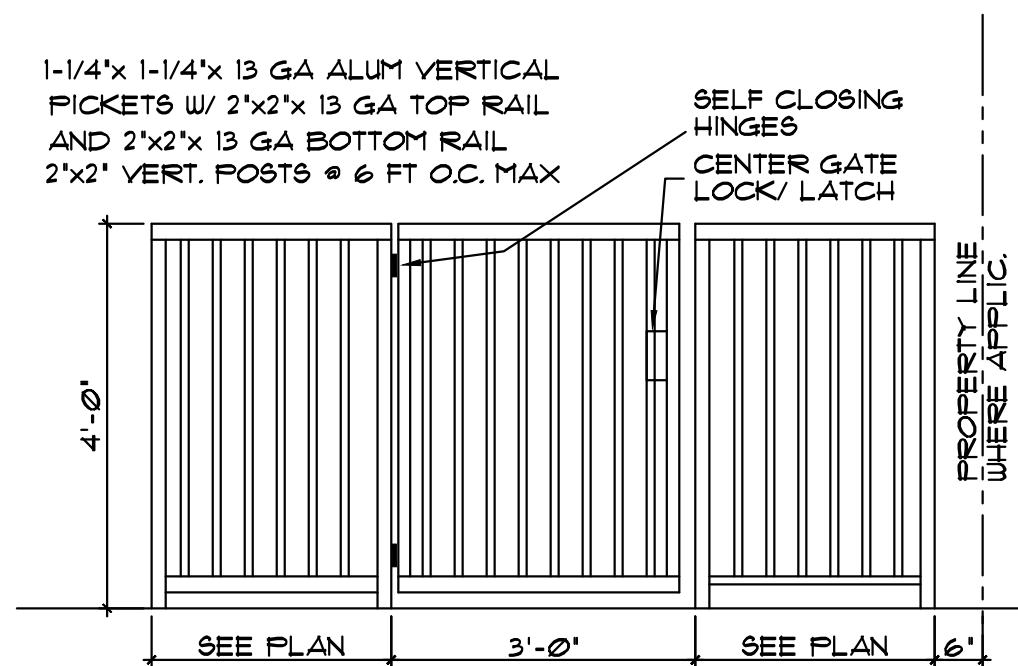




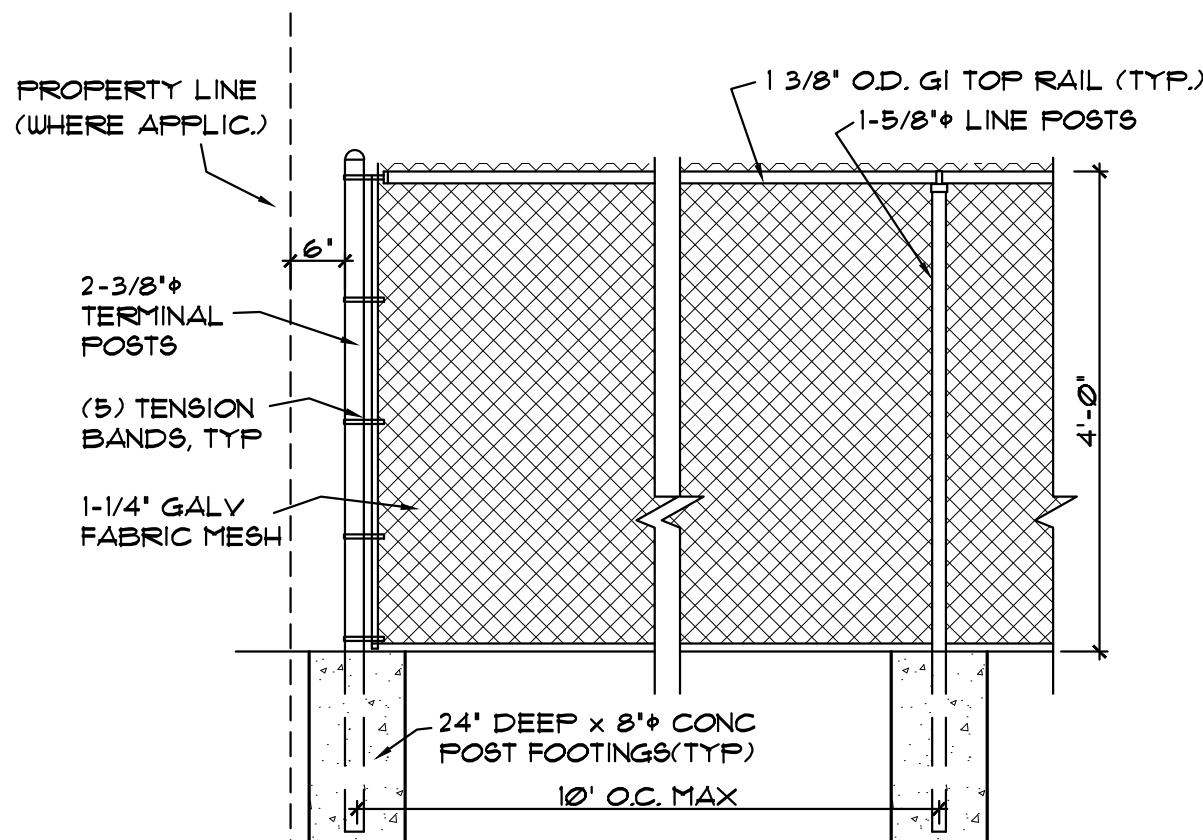
LOCATION PLAN
SCALE: NTS



ALUMINUM FENCE POST
SCALE: NTS



TYP ALUMINUM FENCE
SCALE: NTS



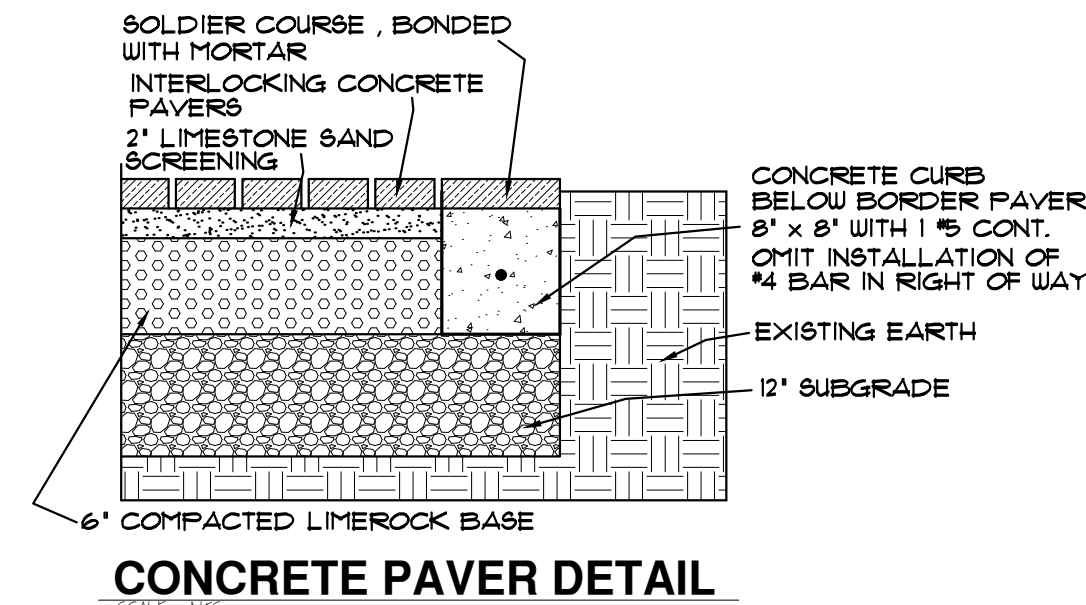
TYP CHAIN LINK FENCE
SCALE: NTS

NOTE: THERE ARE NO PERTINENT FEATURES ON ADJACENT PROPERTIES AND ACROSS THE STREET THAT MAY AFFECT THE SYSTEM INSTALLATION.

LAUNDRY SYSTEM
460 GPD OF SEWAGE FLOW= NEW 375 GAL LAUNDRY TANK
4 BEDRM= 15 SF PER 1ST 2 BEDRM= 25 SF FOR EACH ADD'L BEDRM= 125 SF OF TRENCH DRAIN FIELD 4 63 SF OF GREEN AREA.

SEWAGE FLOW CALCULATIONS

PROPOSED SEWAGE FLOW AS PER 64E-6 TABLE I 460 GAL (4 BEDRM= 4,132 SQ FT)
460 GPD OF SEWAGE FLOW= 1200 GAL SEPTIC TANK
460 GPD / 2= 515 SQ FT DRAINFIELD WITH 25% REDUCTION FOR LAUNDRY SYSTEM= 431 SF DRAINFIELD 4 216 SF GREEN AREA



CONCRETE PAVER DETAIL
SCALE: 1/8" = 1'-0"

LEGAL DESCRIPTION

LOT 5 & 6, BLOCK 88 OF CORAL GABLES COUNTRY CLUB SECTION PART FIC AMENDED, PLAT BOOK 23, PG 55 IN MIAMI DADE COUNTY, FL

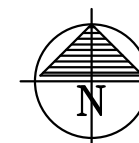
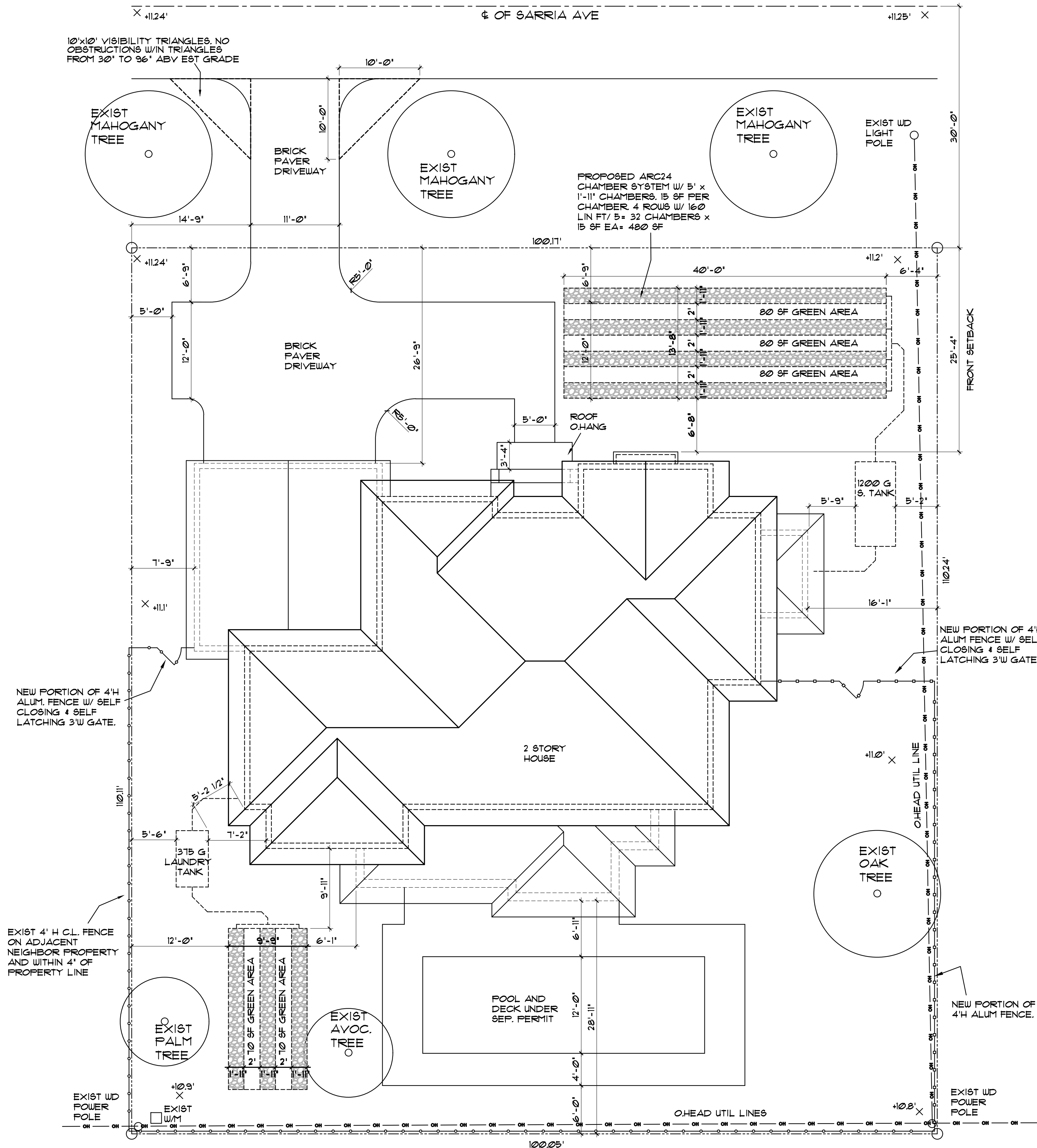
BUILDING AREA COMPUTATION		SQ FEET
1ST FL A/C AREA		2,138 SF
2ND FL A/C AREA		1,994 SF
TOTAL PROPOSED A/C SPACE		4,132 SF
GARAGE		588 SF
REAR TERRACE		367 SF
COVERED ENTRY		137 SF
TOTAL BLDG FOOTPRINT (1ST FL A/C, GARAGE, COVERED TERRACE & ENTRY)		3,230 SF
TOTAL F.A.R. (1ST AND 2ND FL AREAS MEASURED FROM INSIDE FACE OF EXTERIOR WALLS, DOUBLE HEIGHT STAIR OF 101 SF, NOT COUNTED AT 2ND FLR, GARAGE MEASURED FROM INSIDE FACE OF EXTERIOR WALLS)		4,374 SF
1ST FL FAR= 1993 SF, 2ND FL FAR= 1858 SF, GARAGE FAR= 523 SF		
TOTAL LOT COVER (FROM ABOVE)		3,230 SF
FUT POOL 420 SF & FUT DECK 607 SF DRIVEWAY/ ENTRY WALK		1,027 SF
		830 SF
TOTAL HARDSCAPE		5,087 SF

ZONING LEGEND

FOLIO # 03-4119-001-2430			
1. ZONING :	R		
2. LOT AREA			
NET AREA			11,000 SF
GROSS AREA (INCL. R.O.W.)			N. A.
3. LOT COVERAGE.	MIN.	MAX.	PROPOSED
PRINCIPAL BUILDING LOT COVERAGE	N. A.	35 %	29.5 %
F.A.R.		3,850 SF	3,230 SF
		4,450 SF	4,374 SF
TOTAL GREEN AREA	40 %	N. A.	53.7 %
	4400 SF		5,913 SF
MAX LOT COVER OF HOUSE & AUX STRUCTURES		45% LOT	33% LOT
		4,950 SF	3,650 SF
			3230 SF HOUSE
			420 SF POOL
TOTAL FRONT YARD GREEN AREA	20% OF REQUIRED GREEN AREA	FR YARD AREA= 2670 SF - 830 SF (DRIVEWAY/WALK)= 1,840 SF GREEN AREA	
4. SETBACKS :	MIN.	PROVIDED	
PRINCIPAL BUILDING:			
FRONT (NORTH)	25'-0"	25'-4"	
EAST SIDE	5'-0" MIN	16'-11"	
WEST SIDE	5'-0" MIN	7'-9"	
REAR (SOUTH)	10'-0"	28'-11"	
5. BUILDING HEIGHT		PROPOSED	
MEASURED FROM ESTABLISHED FIN. GRADE TO PEAK OF ROOF.			30'-2"

FLOOD PROGRAM CRITERIA

FLOOD ZONE- X4 MIN ELEV= NA
PROPOSED LOWEST FINISH FLOOR ELEV= +13.0' NGVD
PROPOSED GARAGE FINISH FLOOR ELEV AT LOW PT= +12.0' NGVD
HIGHEST CROWN OF ROAD ELEV= +12.5' NGVD
AVERAGE CROWN OF ROAD ELEV= +12.45' NGVD
PROPOSED HIGHEST ADJ. GRADE ELEV= +11.8' NGVD.



SITE PLAN

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

REVISION BY

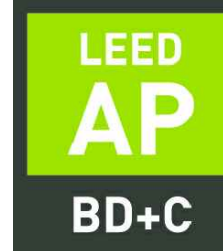
1- 5/1/21 BOA SUBMITTAL #2

MARK REARDON R.A.
architect
LIC# AR-0017521

sixandstones@bellsouth.net

phone: 786-355-6910

15790 SW 88TH AVE
MIAMI, FL 33157
AR 0017521



NOTE:

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SEAL:

NEW HOUSE FOR
BEN FERNANDEZ
MARIA ROSARIO
1428 SARRIA AVE
CORAL GABLES, FL

DATE:

3/15/21

SCALE:

AS NOTED

SHEET NO.:

A-1

CODE REFERENCE - 2020 FLORIDA BUILDING CODE
ALL CEILING AND WALL FINISHES TO HAVE FLAME SPREAD CLASSIFICATION NOT GREATER THAN 200, AND AS PER FBC 2020 R315.1.
ALL INSULATION MATERIALS TO HAVE FLAME SPREAD INDEX OF NO MORE THEN 25, AND A SMOKE- DEVELOPED INDEX OF NO MORE THEN 450.
AT ALL WALL HUNG ITEMS PROVIDE 20 GA STUDS @ 16" O.C. W/ 2" X 6" WOOD BLOCKING. SEE TYPICAL INTERIOR PARTITION DETAIL ON A-1

- LEGEND:
- NEW INTERIOR PARTITION W/ 3-5/8" 25 GA MTL STUDS @ 24" O.C. MAX W/ 5/8" GYP BD EA SIDE & SOUND INSULATION AT ALL PLUMB AND BEDRM PARTITIONS.
 - NEW CMU WALL PER PLANS & SECTIONS W/ STUCCO FIN. TO MATCH EXIST AND R-4.1 FOIL INSUL. AND 5/8" GYP BD.
 - NEW DOOR, SEE DOOR SCHEDULE.
 - NEW WINDOW, SEE DOOR SCHEDULE.
 - INDICATES LEVEL FLOOR ON BOTH SIDES OF OPENING. FINISHED FLOOR TO BE MAX 1-1/2" FROM TOP OF THRESHOLD TO FIN FLOOR LANDING. G.C. TO LOWER SLAB ON EXTERIOR SIDE OF DOORS TO ALLOW FOR EXTERIOR FIN. FLOOR TO BE INSTALLED BELOW SWING OF DOOR

KEY NOTES

- Ceiling: new 5/8" drywall on 1"x3" metal hi-hats at 16" on center. Typical unless otherwise noted throughout house.
- 5/8" drywall on 3/4" P.T. furring strips at 16" on center with R-4.1 foil insulation. Typical on new perimeter concrete block walls unless otherwise noted.
- 5/8" drywall on 1 5/8" x 3 5/8" 25 ga. metal studs at 24" on center. Typical for new interior partitions. See detail 5/A-1.
- Concrete utility slab on grade.
- At showers and tubs, provide non absorbant, water resistant tile up to min 72" a.f.f. with cement bd backing.
- All glass at showers and tubs to be CAT II rated.
- Min 22"x36" attic access w/ latches on all sides when closed.
- All cabinets and millwork to be selected by the owner & G.C.
- Denotes CAT II glass
- Built-in base cabinet and counter
- 1"x6" Tongue & Groove ceiling secured to under side of pre-fab truss chord w/ 2-8d nails at each chord.
- Provide niche in partition for recessed t.v. Coordinate all dimensions with owner
- 1"x6" Tongue & Groove ceiling secured to 2"x4" PT nailers as per sections
- 12" raised cove clg. Coordinate with truss manufacturer
- Painted metal guardrails, 36" high at inclined surfaces (stairs) and 36" high at landing and horizontal surfaces as per FBC R312.12 Provide pickets spaced to reject 4" sphere at all points. See stair section and elevations.
- Steel column, see structural plans
- 1/2" tempered glass partition w/ translucent finish
- Thoro seal liquid applied water proofing over conc slab with tile finish on inset sloped to drain as per plan
- Thoro seal liquid applied water proofing over conc slab with smooth stucco finish sloped to drain
- Conc roof slab sloped 1/4"/ft to drain with built up roof membrane. Provide min R-19 insulation on underside of this roof
- Provide min R-19 insulation to underside of portion of conc slab of Bedroom 4 that is above Rear Terrace.

NOTES:

ANY GLAZING IN EXTERIOR DOORS OR WINDOWS WITHIN 48" OF DOORS, OR WINDOWS ADJACENT TO SHOWERS/TUBS TO BE CAT II RATED GLASS. SEE DOOR/ WINDOW SCHEDULES

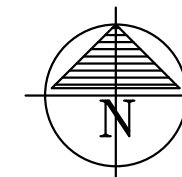
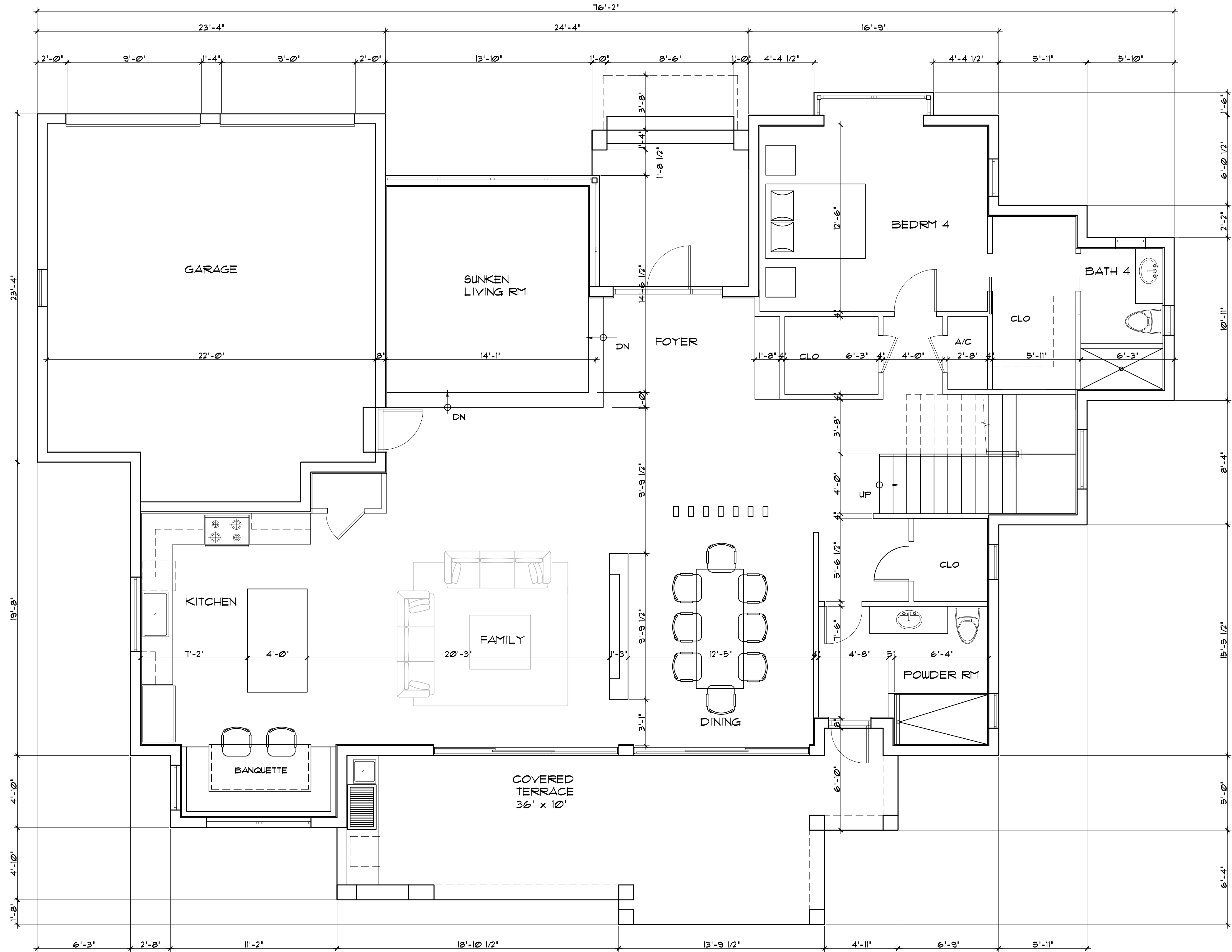
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DIMENSIONS INCLUDING CMU WALLS ARE TAKEN FROM THE APPLICABLE FACE OF THE CMU WALL.

ABBREVIATIONS (APPLIC. ALL SHEETS)

O.C. ON CENTER
AFF. ABOVE FINISHED FLOOR
V.I.F. VERIFY IN FIELD
AFG. ABOVE FINISHED GRADE
U.O.N. UNLESS OTHERWISE NOTED
TYP. TYPICAL
CONT. CONTINUOUS
R.D. ROOF DRAIN
E.O.S. EMERGENCY OVERFLOW SCUPPER



1ST FLOOR PLAN

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

REVISION BY

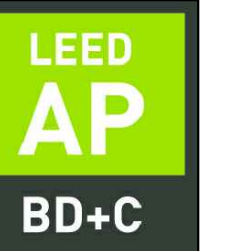
1- 5/1/21 BOA SUBMITTAL #2

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BEN FERNANDEZ
MARIA ROSARIO
1428 SARRIA AVE
CORAL GABLES, FL

DATE:

3/15/21

SCALE:

AS NOTED

SHEET NO.:

A-2

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ALL CEILING AND WALL FINISHES TO HAVE FLAME SPREAD CLASSIFICATION NOT GREATER THAN 200, AND AS PER FBC 2020 R315.1.
ALL INSULATION MATERIALS TO HAVE FLAME SPREAD INDEX OF NO MORE THEN 25, AND A SMOKE- DEVELOPED INDEX OF NO MORE THEN 450.
AT ALL WALL HUNG ITEMS PROVIDE 20 GA STUDS @ 16" O.C. W/ 2" X 6" WOOD BLOCKING. SEE TYPICAL INTERIOR PARTITION DETAIL ON A-1

LEGEND:

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- NEW CMU WALL PER PLANS 4 SECTIONS W/ STUCCO FIN. TO MATCH EXIST AND R-41 FOIL INSUL AND 5/8" GYP BD.
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- NEW WINDOW, SEE DOOR SCHEDULE.
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- Concrete utility slab on grade.
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- Provide min R-19 insulation to underside of portion of conc slab of Bedroom #4 that is above Rear Terrace.

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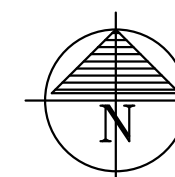
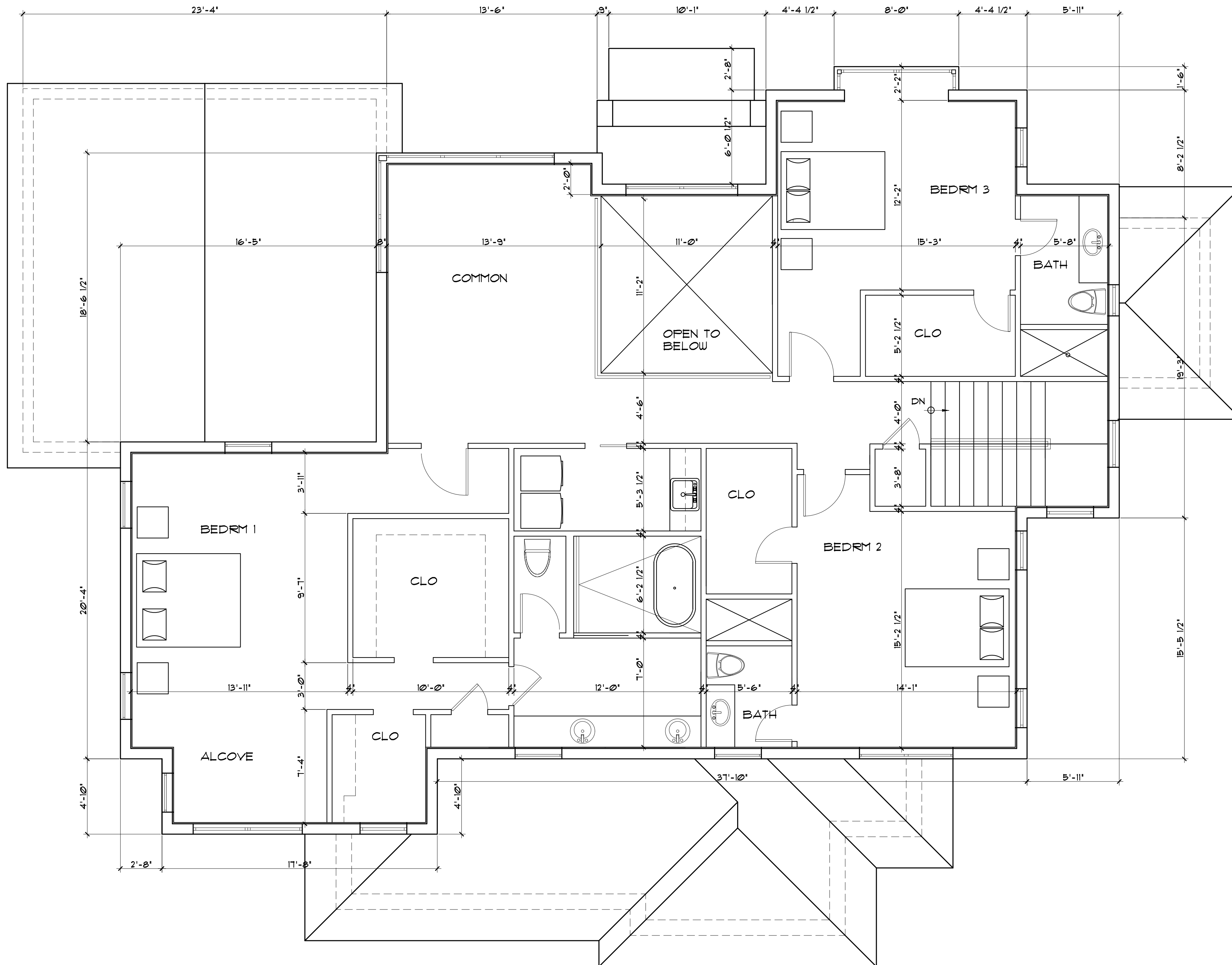
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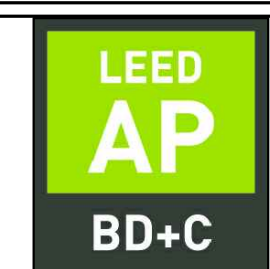


2ND FLOOR PLAN
SCALE: 1/4" = 1'-0"

REVISION BY
1- 5/1/21 BOA SUBMITTAL #2

MARK REARDON R.A.
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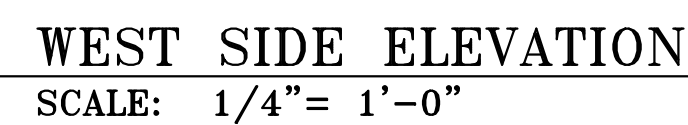
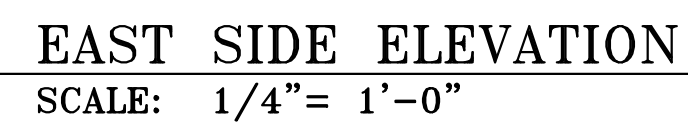
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CORAL GABLES, FL

DATE: 3/15/21
SCALE: AS NOTED
SHEET NO.:

A-3

A-4

A-5

[illegible]



Revised 1/2019

Clay Thin Brick

(1/2", 3/4" and 1" thick)

General

We provide clay thin brick in a multitude of shades and textures to accommodate the visual and application requirements of most projects. Sizes range from 8 to 16 inch and from extruded to handmade providing the widest range of thin brick available for any application.

The thickness of the thin brick available is based on the method of manufacture and the desired texture/uniformity.

Extruded thin brick available in 1/2" thickness are typically extruded as thin brick with unique surface textures and colors meeting Type TBS tolerances.

The greatest variety of thin brick are available in molded and extruded 3/4" thickness. This thickness allows units to be cut from full units often specifically manufactured with larger coring and thinner webs to facilitate cutting while reducing the quantity of raw material required for manufacture. Material cut from the thin brick can be ground and reused to manufacture thin or full size units. In addition, Brick It's unique large scale custom cutting operation allows thin brick to be cut from a specific lot of full brick to ensure color matching of both full and thin brick.

Handmade thin brick are available in 3/4" thickness to accommodate the inherent variation expected from handmade units.

Today's thin brick are installed in a wide variety of different wall systems including thickset, thinset, metal panel systems (such as Brick It DMG® Panels) as well as precast and tilt-up concrete wall systems. The appearance of thin brick, as well as the method of manufacture, affects the potential use of the thin brick in the various wall systems available. The thickness of the individual thin brick typically has minimal, if any, effect on any of the applications.

While each of the three categories of thin brick previously listed can be installed in most of thin brick wall systems, the precast and tilt-up concrete wall systems require thin brick with very rigid tolerances and surface textures limited to smooth or velour (wirecut) textures. In addition the cleaning techniques utilized by concrete panel manufacturers may also limit colors typical of full size units. See additional information at the end of this Profile regarding thin brick for use with precast and tilt-up concrete wall systems.

Additional information is available from your Brick It representative for each thin brick wall system.

Unit Specifications

Thin brick is typically manufactured to conform to the requirements of American Society for Testing

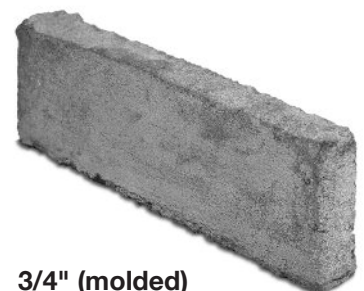
and Materials (ASTM) Standard Specification C 1088, Grade Exterior. Depending upon the particular product selected, Type TBA, TBS, or TBX may be available. These products also conform to the requirements of ASTM C 1088, Grade Interior. When specifying this product, the specifications should cite:

- 1) The product name and state "as distributed by Brick It."
- 2) Conformance to the requirements ASTM C 1088, Grade Exterior.
- 3) The actual unit dimensions listed as thickness x height x length.

Example: Harding Blend thin brick as distributed by Brick It to conform to the requirements of ASTM C 1088, Grade Exterior, Type TBS.
The units shall have dimensions of 3/4" X 2-1/4" X 7-5/8".



1/2" (extruded)



3/4" (molded)



3/4" (extruded)



3/4" (handmade)

Design Criteria

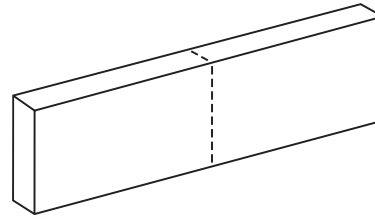
Size:

Table 1 provides the many sizes in which Brick It distributes thin brick.

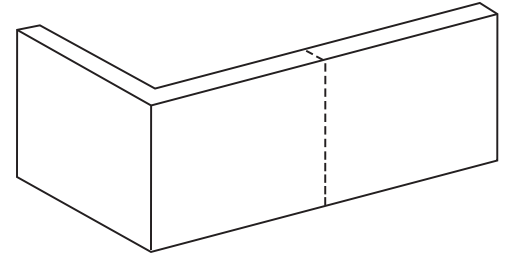
Dimensional Tolerances:

Thin brick is manufactured to provide specific dimensional tolerances. The dimensional tolerances of the product are intended to be within the requirements of ASTM C 1088, Type TBS for general use. Some products are manufactured to meet Type TBX. Products with colors matching Handmade bricks are manufactured to meet Type TBA. The product ordered will generally contain a number of units which are over or under the specified dimensions.

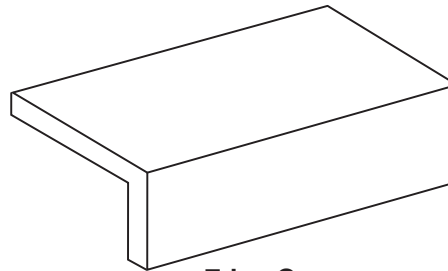
FIGURE A



Flats and 1/2 Flats



Corners and 1/2 Corners



Edge Cap

CONTINUED ON PAGE 3

TABLE 1
Thin Brick Size, Coverage and Weight

Thin Brick Size	Specified Dimension						Thin Brick per square foot	Average Weight per unit (kg)	
	Thickness (inches)	(mm)	Height (inches)	(mm)	Length (inches)	(mm)			
Queen	3/4	20	2-3/4	70	7-5/8	194	5.63	1.6	0.7
Lightweight Modular	3/4	20	2-1/4	57	7-5/8	194	6.75	1.0	0.5
Lightweight Engineer Modular	3/4	20	2-3/4	70	7-5/8	194	5.63	1.0	0.5
1/2-Modular (extruded)	1/2	13	2-1/4	57	7-5/8	194	6.75	0.7	0.3
3/4-Modular (extruded/molded)	3/4	20	2-1/4	57	7-5/8	194	6.75	1.1	0.5
Modular (handmade)	1	25	2-1/4	57	7-5/8	194	6.75	1.1	0.5
1/2-Engineer Modular	1/2	13	2-3/4	70	7-5/8	194	5.63	0.8	0.4
3/4- Engineer Modular	3/4	20	2-3/4	70	7-5/8	194	5.63	1.6	0.7
Econo	3/4	20	3-5/8	92	7-5/8	194	4.50	1.5	0.7
Standard	3/4	20	2-1/4	57	8	203	6.55	1.1	0.5
Engineer Standard	3/4	20	2-3/4	70	8	203	5.39	1.7	0.8
Handmade Oversized	1	25	2-3/4	70	8-1/2	216	5.00	1.7	0.8
King Narrow-Bed	3/4	20	2-3/4	70	9-5/8	244	4.55	1.5	0.7
Engineer King	3/4	20	2-3/16	71	9-5/8	244	4.55	1.5	0.7
King	3/4	20	3-5/8	92	9-5/8	244	4.55	1.5	0.7
Roman	3/4	20	1-5/8	41	11-5/8	295	6.00	1.0	0.5
Norman	3/4	20	2-1/4	57	11-5/8	295	4.50	1.5	0.7
Utility	3/4	20	3-5/8	57	11-5/8	295	3.00	2.4	1.1
Kingston	3/4	20	2-3/4	70	11-5/8	295	3.75	1.9	0.9
Viking			1-5/8	41	15-58	397	4.50	XX	XX
Saxon	3/4	20	2-1/4	57	15-5/8	397	3.38	2.0	0.9
Titan	3/4	20	3-5/8	92	15-5/8	397	2.25	3.0	1.4

CONTINUED FROM PAGE 2

The dimensional variations are related to the raw materials, forming, drying and firing processes, and the desired finish and color. Thus, for some products, all the units may be slightly over or slightly under the specified dimensions.

Inquiries should be made regarding the dimensional variations which might be expected if project detailing requires precise coursing.

Specialty products or gauged products may be desirable when thin brick are incorporated into precast or tilt-up concrete wall systems. Many of Brick It's extruded products include dimensional tolerances tighter than those required by ASTM and can be utilized for precast concrete wall systems. Brick It also offers edge-grinding of units to create tighter tolerances if required.

Configurations:

These units are manufactured to conform to the requirements of ASTM C 1088.

Weight:

The weight of the brick units vary with the raw material, size, manufacturing processes. While actual weight of specific thin brick should be confirmed, average weight of each size thin brick manufactured by Brick It is included in Table 1.

Finishes:

Thin brick is available in a variety of textures. The textures include smooth, velour, bar, rug, matt, paper cut, scored, rockface, slurry and sand finishes. The availability of a particular finish is usually dependent on the specific product.

Glazed thin brick meeting ASTM C126 surface requirements are also available.

Color:

Thin brick is available in a multitude of color blends. The colors

available include various shades of red, brown, gray, buff, and white. Some colors are the natural colors of the fired raw materials, while others are produced by fusing a surface treatment onto the surface of the brick during firing or adding minerals to the bodies of the brick. If through body colors are desired, inquiries should be made regarding the availability of the desired colors. The color selection may also be limited by the product selected and the desired finish. Consult with your Brick It representative for products acceptable in specific applications.

Shapes:

Common thin brick shapes are shown in Figure A.

Shapes dimensioned for coursing with other brick sizes, and custom shapes having configurations to fit specific project requirements are also available. These nonstandard shapes require detailed dimension drawings which must be submitted to and approved by Brick It.

All shapes should be identified early in the project design because certain shape configurations may require special forming, drying, or firing processes. These processes may require more time or different scheduling than standard thin brick.

Physical Properties of Units

Compressive Strength:

Because thin brick are individually attached to substrates, compressive strength is not a relevant quality of thin bricks. ASTM C 1088 does not require reporting of compressive strength because testing tall, thin sections of brick for compressive strength are not indicative of performance.

Water Absorption:

Extruded products: The average maximum hot-water absorption by submersion in boiling water for five hours is less than 17% and will typically be less than 9%. The average

saturation coefficient is generally less than 0.78. In instances where the saturation coefficient exceeds 0.78, the cold water absorption for Brick It brick is less than 8% and the units meet the requirements of ASTM C1088, Grade Exterior.

Molded and Handmade products: The average maximum hot-water absorption by submersion in boiling water for five hours is less than 17% and will typically be less than 15%. The average saturation coefficient is generally less than 0.65.

Initial Rate of Absorption (IRA):

Extruded products: The initial rate of absorption (suction) normally does not exceed 30 grams per 30 square inches per minute under laboratory conditions.

Molded and Handmade products: The initial rate of absorption (suction) normally may exceed 30 grams per 30 square inches per minute under laboratory conditions.

Properties of Walls

Compressive Strength:

Compressive strength of a thin brick wall system is not typically affected by the thin brick units provided.

TABLE 3
Units Per Linear Foot in Various Positions
 Nominal 3/8 Inch Mortar Joints

Thin Brick Size	FLATS		SHAPES	
	Stretcher	Soldier	Corner (Vertically)	Header (Horizontally)
Queen	1.50	3.75	3.75	1.57
Lightweight Modular	1.50	4.50	4.50	1.57
Lightweight Engineer Modular	1.50	3.75	3.75	1.57
Modular	1.50	4.50	4.50	1.57
Engineer Modular	1.50	3.75	3.75	1.57
Econo	1.50	3.00	3.00	1.57
Standard	1.43	4.50	4.50	1.50
Engineer Standard	1.43	3.75	3.75	1.50
Handmade Oversized	1.33	3.75	3.75	1.41
King Narrow-Bed	1.20	3.75	3.75	1.25
Engineer King	1.20	4.26	3.75	1.25
King	1.20	3.75	3.75	1.25
Roman	1.00	6.00	1.50	1.03
Norman	1.00	4.50	4.50	1.03
Utility	1.00	3.00	3.00	1.03
Kingston	1.00	3.75	3.75	1.03
Viking	XX	XX	XX	XX
Saxon	0.75	4.50	*	0.77
Titan	0.75	3.00	*	0.77

*12-inch units could be used at corner to allow proper 1/2-bond coursing.

Thermal Performances:

The thermal resistance of Brick It thin brick is approximately 0.11 (hr • sq. ft. • deg f)/(Btu • in.). Therefore thin brick thermal performance is as follows:

Thin Brick Thickness (inch)	Thermal Resistance (hr • sq. ft. • deg f)/(Btu • in.)
1/2	0.05
3/4	0.08
1	0.11

The thermal resistance is used to predict the thermal performance of wall elements under steady-state conditions. The mass and specific heat of this product provide additional benefit when subjected to the dynamic conditions of the natural environment. As described in the American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90.1, the effects of mass, specific heat, and the color of the brick should be considered. Reference: BIA Technical Notes on Brick Construction 4 Revised, "Heat Transmission Coefficients of Brick Masonry Walls", 4B Revised, "Energy Code Compliance of Brick Masonry Walls" and 43D, "Brick Passive Solar Heating Systems, Part IV – Material Properties."

Sound Transmission:

The sound transmission of thin brick has not been measured and is typically dependent upon the overall wall system.

Fire Resistance:

Fire resistance ratings for thin brick are dependent upon the entire wall system utilized. Prescriptive one-hour and two-hour fire-resistance-rated exterior walls constructed with adhered thin veneer brick units on steel or wood studs are included in the International Code Council (ICC) International Building Code (IBC). These designs can be used by architects/engineers/designers of building construction projects in those jurisdictions that adopt and enforce the IBC where the nonbearing exterior walls of a building are required to have a one-hour or two-hour fire-resistance rating.

Coefficient of Thermal Expansion:

Thin brick has a coefficient of thermal expansion of approximately 0.000004 in. (in. • °F) as listed in The

Building Code Requirements for Masonry Structures (TMS 402/ACI 530/ASCE 5) .

Coefficient of Moisture Expansion:

Brick It thin brick veneer have a coefficient of moisture expansion which is less than 0.0005 in./in. Most of the moisture expansion of Brick It thin brick occurs immediately after the bricks are fired, before the brick arrive at the job site.

Construction

Storage and Protection:

Store brick in their packaging off ground to avoid contamination by water, mud, dust or materials likely to cause staining or other defects. Do not use packages of thin brick as supports or work surfaces. Cover packages with a weather resistant membrane held securely in place or otherwise protect packages from the elements.

Wetting:

As deemed necessary (see IRA), wet units prior to contact with mortar. Wetting procedures vary by thin brick application and environment. Contact your Brick It representative for specific information.

Weather Extremes:

When using Portland cement mortars, follow the procedures required by The International Building Code (IBC). The IBC references cold and hot weather construction provisions for masonry that are based on those found in Specification for Masonry Structures (TMS 602/ACI 530.1/ASCE 6) and required by Building Code Requirements for Masonry Structures (TMS 402/ACI 530/ASCE 5). While specific cold and hot weather provisions are not included within the International Residential Code (IRC) the IRC states that mortar for use in masonry construction shall comply with ASTM C 270, which requires mortar for other than masonry veneer to be prepared in accordance with the Masonry Industry Council's "Hot and Cold Weather Masonry Construction Manual." Further information is also available in the BIA Technical Notes on Brick Construction 1, "Cold and Hot Weather Construction."

When using proprietary attachment systems, adhesives or preblended cements, consult the manufacturer's written instructions for cold and hot weather requirements.

Installation:

When using Portland cement mortars in thickset applications butter the backs of the units and set units in full mortar joints. Use a Portland cement lime mortar conforming to ASTM C 270. A prepackaged mortar mix conforming to these specifications is Brick It Color Mortar Blend. Reference: Brick It Product Profile "Brick It Color Mortar Blend." Joints must be completely filled to ensure performance.

When using proprietary attachment systems or preblended adhesives or cements, consult the manufacturer's written instructions for installation.

Tooling:

When thumbprint hard, tool all joints to produce a concave, grapevine, or vee joint finish.

Protection of Work:

At the end of each day and before each shut down period, cover work with a strong weather resistant membrane which is held in place securely. Scaffold boards closest to the wall should be tilted up at days end to prevent splatter during rain. Care should also be taken to protect brickwork located near the ground from mud and dirt.

Cleaning:

When the attachment system uses Portland cement mortars, remove excess mortar with a stiff bristle brush at the end of each shift. Clean with wooden paddles and stiff fiber brushes using clean water. If a cleaning agent is necessary, presoak the wall with clean water prior to applying the cleaning agent and thoroughly rinse the wall with clean water after cleaning. Prior to determining a final cleaning solution, test the procedure and cleaning agent on a small sample area to observe the effectiveness of the overall cleaning solution and, most importantly, to detect any possible deleterious effects

or changes in appearance of the brick. Additional information is available in the Brick It website. }

Check with your Brick It Distributor or District Sales Manager prior to making a final selection of a cleaning procedure and solution. When using Type N mortars, clean down should never occur prior to 7 days after work is completed to assure appropriate curing of the mortar. Reference: BIA Technical Notes on Brick Construction 20, "Cleaning Brickwork."

When using proprietary attachment systems, adhesives or preblended cements, consult the manufacturer's written instructions for cleaning.

Estimating:

The quantities of brick and mortar required for a project vary with the size of the brick unit, the wall construction, the number of field cuts necessary, and the workmanship. Table 2 provides the quantities of brick and mortar quantities per 1,000 brick units. The figures are based on the units being placed in the wall as stretchers in stack or running bond. The values provided are estimates of the quantities in the finished wall and do not account for waste. These values represent the actual number of units per linear foot for the various brick sizes placed on the four most frequently used positions in the wall. The values are based on a

nominal three-eighth inch mortar joint. Reference: BIA Technical Notes on Brick Construction 10, "Dimensioning and Estimating Brick Masonry."

PRECAST AND TILT-UP CONCRETE WALL PANEL APPLICATIONS

Concrete panel manufacturers, including precast and tilt-up wall systems, offer a unique and well performing walls for a variety of applications that typically involve relatively repetitive wall panels. Such systems allow the use of thin brick in wall systems that previously did not include thin brick. With the advent of various thin brick liners that hold the brick in place, as well as advancements in concrete technology, thin brick can be placed face down in the concrete liner. The liner holds the thin brick in place as concrete is poured and the brick form the finished surface. In such systems the thin brick must be uniform enough to reduce potential leakage between the liner and the edge of the brick.

In addition, the finished faces of the thin brick are typically required to be waxed in order to prevent concrete, which passes between the liner and the edge of the clay unit, from sticking to the finished surface of the brick. The wax and concrete is removed after the panel is removed from the liner utilizing a hot water pressure washer.

While Brick It produces a wide

variety of colors, textures and sizes available in thin brick, precast and tilt-up concrete panels typically require very uniform products that are often tighter than grade TBX, with textures limited to smooth or wirecut to reduce concrete leakage between the thin brick and the liner. Cleaning procedures typically limit surface coatings to very light sand or spray coatings that are not removed by the high pressure cleaning techniques.

Brick It is capable of providing a wide variety of thin brick meet such requirements, including many thru-body and surface coated brick, as well as smooth and wirecut textures capable of withstanding concrete panel cleaning techniques.

In addition, Brick It offers edge-grinding of thin brick to ensure such uniformity and waxing of finished faces often required by concrete panel manufacturers; as well as standard thin brick shapes and many custom shapes for unique thin brick possibilities.

Be sure to contact your local Brick It representative to determine available thin brick for such applications.

For further information contact:
Brick It:



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