CITY OF HOUSTON

Building Code Enforcement

MULTI-TRADE REVISION TO #22088503

COH Project Number

23012792

MULTI-TRADE REVISION TO PROJECT# 22088503 (18 PGS)

Structural

APPROVED

FOR BUILDING PERMIT ONLY
CITY OF HOUSTON
CODE ENFORCEMENT DIVISION

The owner is responsible for compliance with the Building Code. Such approved plans and specifications shall not be changed, modified or altered without authorization from the building official, and all work shall be done in accordance with the approved plans.

Daniel Storer 2/24/2023

Electrical

Mechanical

Plumbing

Storm

Traffic

Planning

RECOMMENDED APPROVAL

PLANNING AND DEVELOPMENT DEPARTMENT

DEVELOPMENT SERVICES

Graylin Cook 3/9/2023

LANDSCAPING REQUIRED

Utility Analysis

Airport (HAS)

FLOODPLAIN MANAGEMENT OFFICE
Development Permit #22-4514
Date:03/07/2023
Kendal Montgomery

Health

Health/Pools

Fire Marshal

High Pile/HazMat

LPG Tank

Sprinkler

designed for:

Vita Real Estate Group

front elevation

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

Scope of Work

3730 DRUMMOND ST. HOUSTON, TX.
LOT 23- BLOCK 27- SECT. 9
BRAES HEIGHTS
2 STORY SINGLE FAMILY HOME
LIVING AREA 5,184 SF. FT.
LOT AREA 10,004 SQ.FT.
ATTACHED GARAGE
PUBLIC DRIVEWAY, PUBLIC UTILITIES

PERMIT SET

5020 NOLDA STREET
HOUSTON, TX 77007
(713) 464-0740

Sullivan Henry Oggero
BUILDING DESIGNERS

AIBD

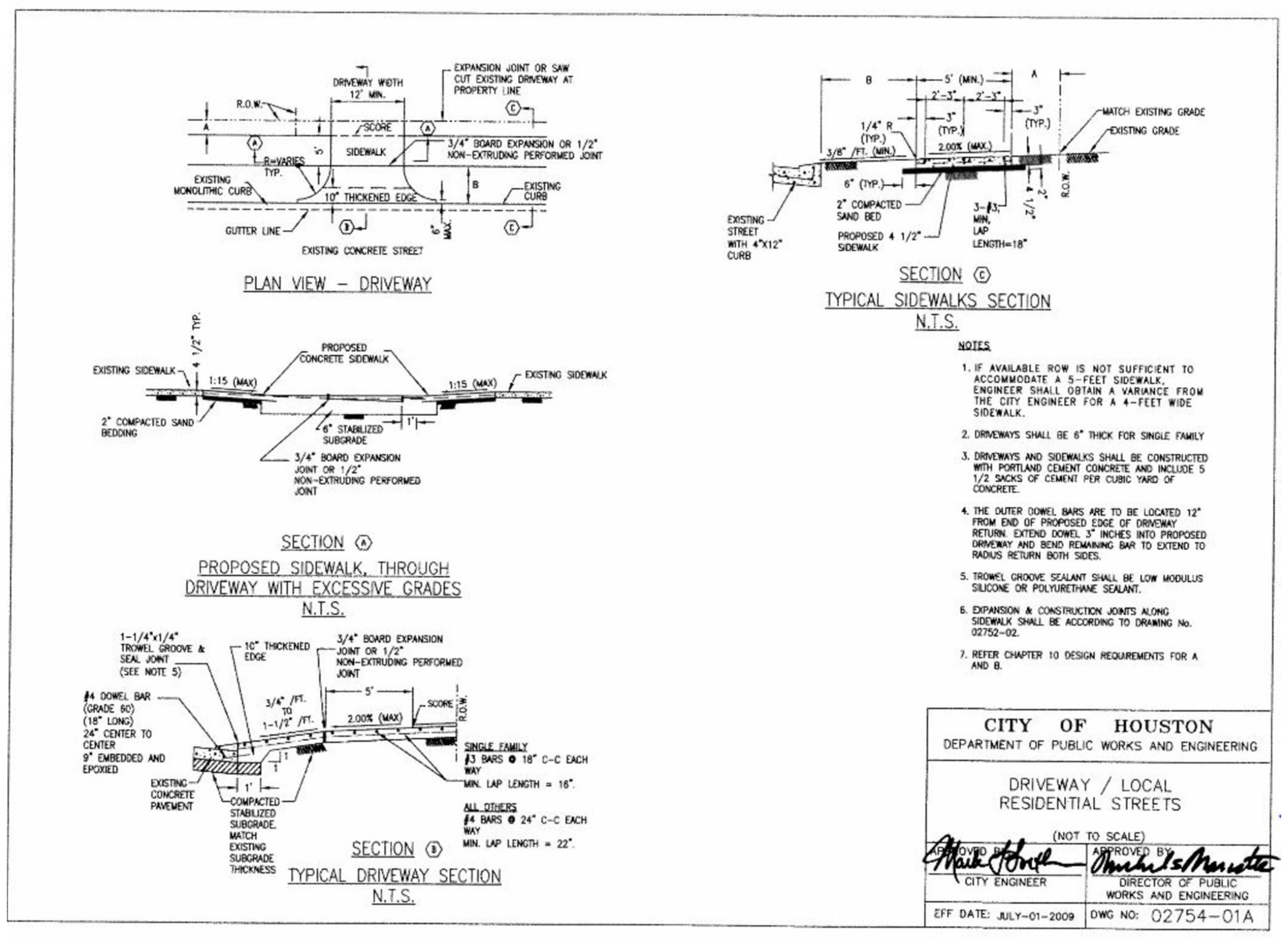
NATIONAL COUNCIL OF BUILDING DESIGNERS CERTIFICATION

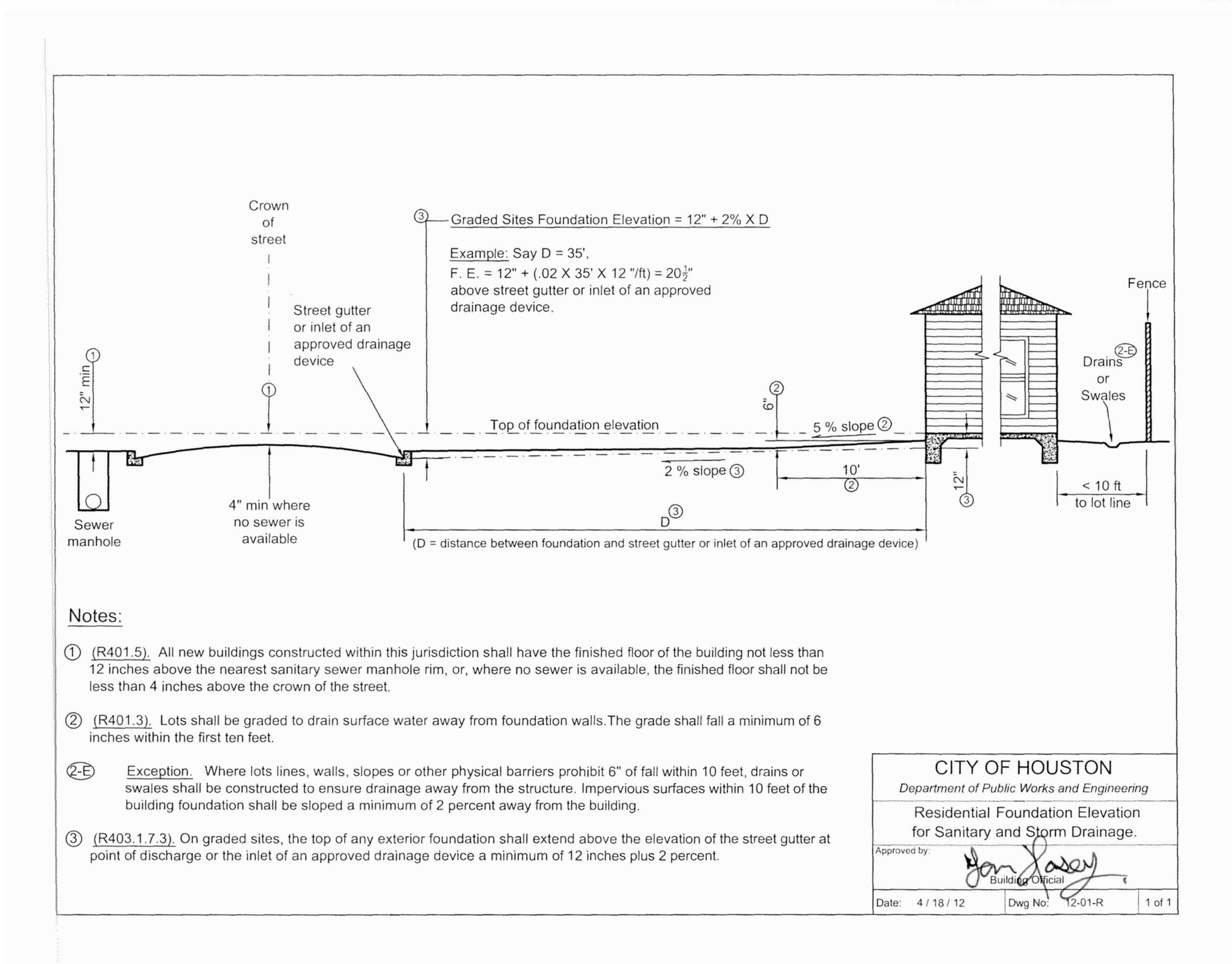
City of Houston
23012792
REVIEWED FOR COMPLIANCE
Performance of this review does not relieve the applicant from full responsibility to comply with all applicable code and regulations.
03/10/23

SHEET NUMBER A1 OF 11

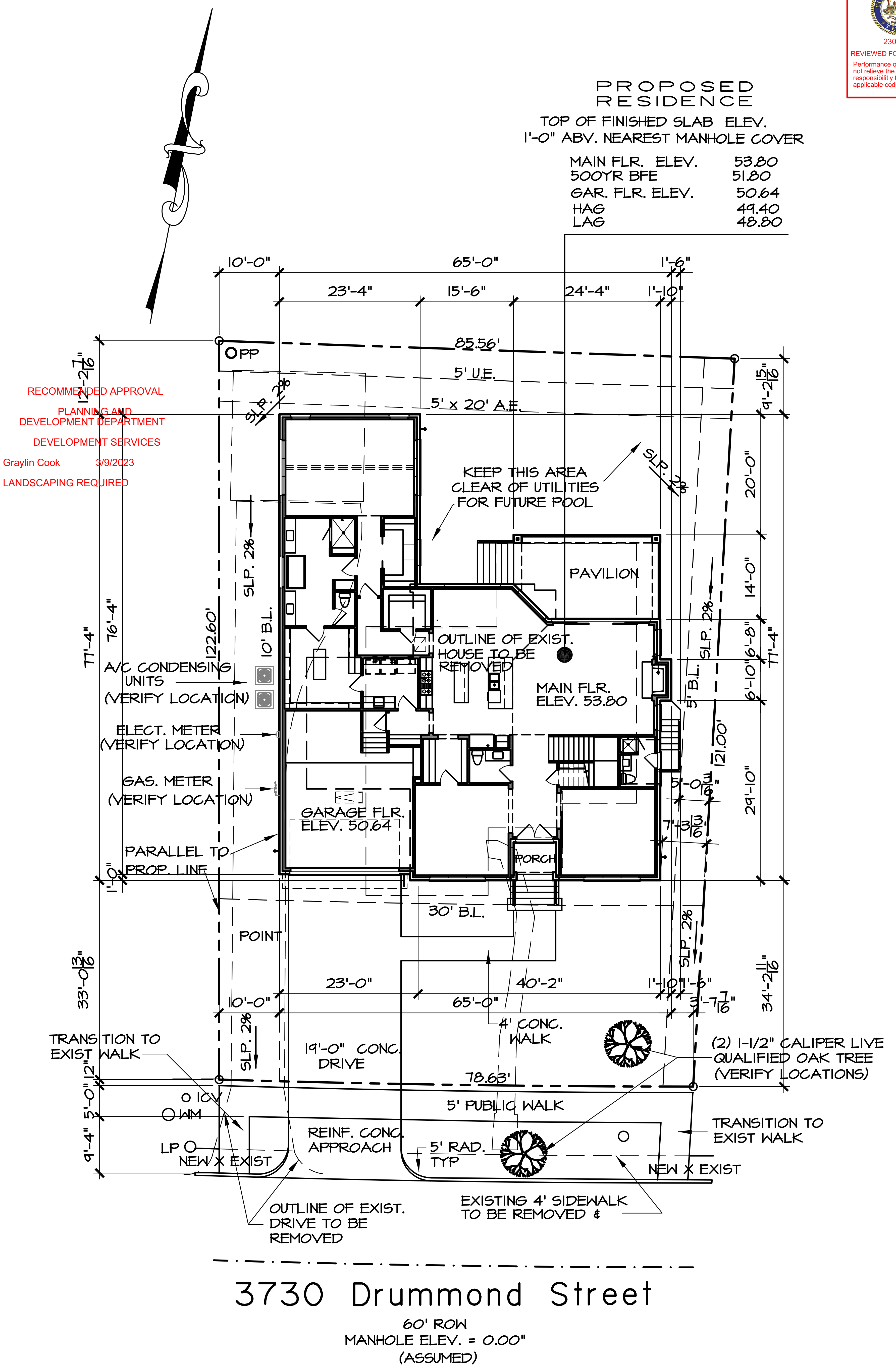
PLAN NO. 5184

GCK 220076 (MC)





RECOMMENDED APPROVAL
PLANNING AND DEVELOPMENT DEPARTMENT
DEVELOPMENT SERVICES
Graylin Cook 3/9/2023
LANDSCAPING REQUIRED



note:

OWNER/BUILDER TO APPROVE LOCATION OF HOUSE ON LOT AND TO VERIFY ALL EASEMENTS AND BUILDING LINES, PRIOR TO START OF CONSTRUCTION.

- FINISHED FLOOR ELEVATION TO BE 1'-0" (MIN.) ABOVE NEAREST SAN. SEWER M.H. SERVING THIS RESIDENCE OR 4" ABOVE THE CROWN OF THE STREET WHICH EVER IS GREATER. R401.5 LOTS SHALL BE GRADED TO PROVIDE A POSITIVE DRAINAGE PATH AWAY FROM FOUNDATIONS. THE FALL SHALL BE A MIN OF 6" IN THE FIRST 10' (5%) R401.3

DRAINAGE: R401.3 EXCEPTION 2015 IRC
IF A SWALE OR DRAIN IS USED DUE TO A PHYSICAL BARRIER OR LOT LINE THE PLANS MUST INDICATE THE POSITIVE DRAINAGE DETAILS. IMPERVIOUS SURFACES WITHIN 10' OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF 2% AWAY FROM THE BUILDING.

- DRAINAGE DESIGN IS BEYOND THE SCOPE OF WORK OF THIS FIRM. GREAT CARE SHOULD BE TAKEN IN EVALUATING THE DRAINAGE REQUIREMENTS.

coverage calculation:

LOT AREA	9,979	SQ. FT.
HOUSE PAD	4091	SQ. FT.
BUILDING COVERAGE (60 % MAX)	40.99	%
LOT AREA	9,979	SQ. FT.
HOUSE PAD	4091	SQ. FT.
WALK AND DRIVEWAY	787	SQ. FT.
POOL DECKING	500	SQ. FT.
TOTAL PAD (IMPERVIOUS)	5378	SQ. FT.
LOT COVERAGE (65% MAX.)	53.89	%

PERMIT SET

lot	23
block	27
section	9

Braes Heights

site plan

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

PLAN NO. 5184	SHEET NO. A0 OF 11

REFERENCE:
VERIFY SETBACKS
D.B.:
DATE
JOB #

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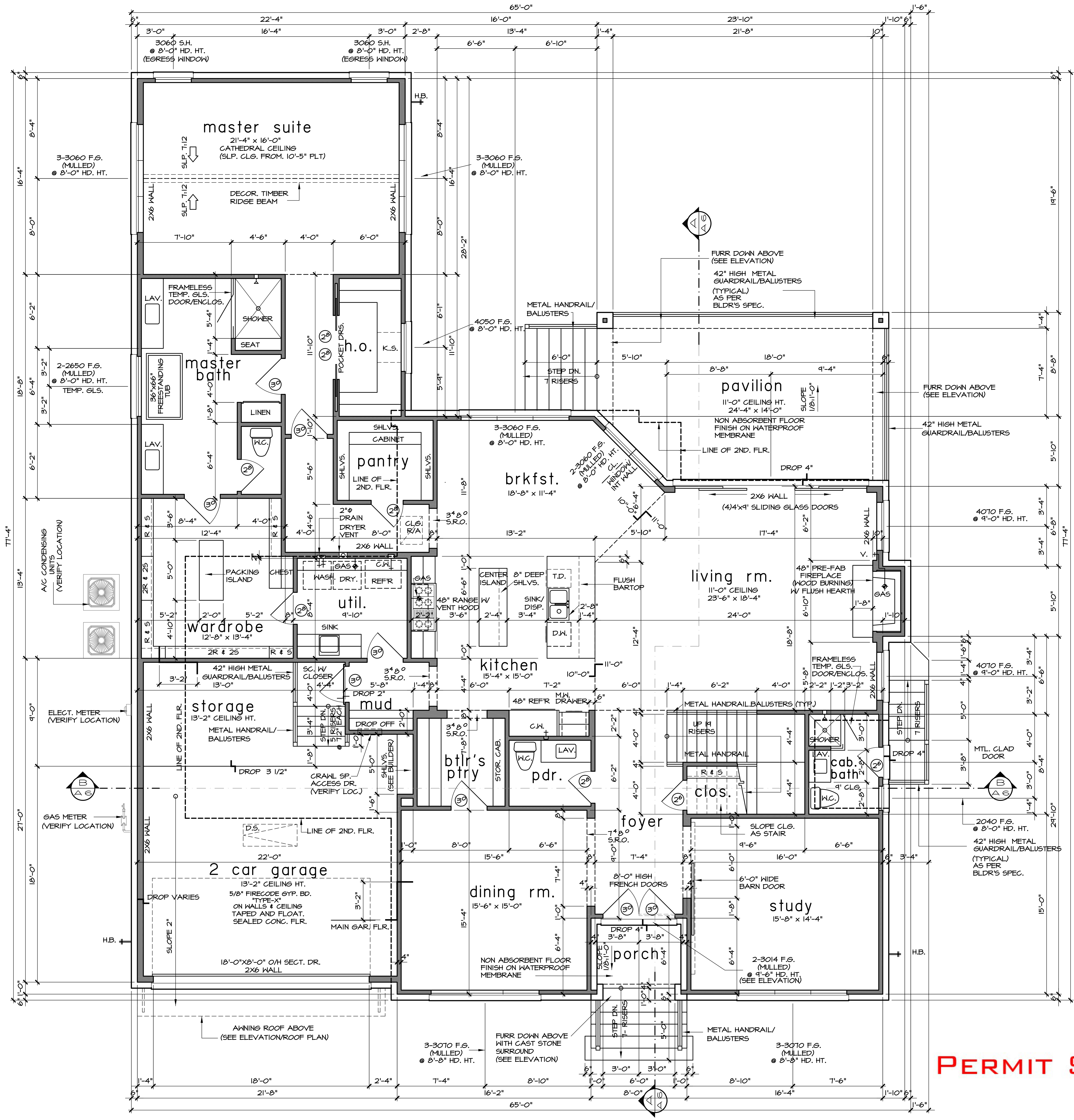

City of Houston
23012792
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03/10/23

unless otherwise noted

- GYP. BOARD WLLS AND CEILING
- 10'-0" CLG. HT. AT FIRST FLOOR
- 9'-0" CLG. HT. AT SECOND FLOOR
- ALL ANGLES TO BE 45 DEGREES
- 1 3/4" S.C. DOORS
- 8'-0"DOOR HT. AT FIRST FLOOR
- 8'-0"DOOR HT. AT SECOND FLOOR
- VINYL WINDOWS WITH DIVIDED LTS.
- 8'-0"HEADER HT. AT FIRST FLOOR
- 8'-0"HEADER HT. AT SECOND FLOOR
- ALL BEDROOM WINDOWS TO BE 44" A.F.F. (MAX.) 24" HIGH x 20" WIDE (MIN.) OPENING WITH 5.7 SQ. FT. (MIN.) NET CLEAR OPENING WHEN DOORS ARE USED FOR EMERGENCY EGRESS, IT SHALL BE OPERATIONAL FROM THE INSIDE WITHOUT THE USE OF KEYS OR TOOLS.
- ALL BEDROOM WDW @ 2nd FLR. TO BE MIN. 24" A.F.F.
- ALL GLAZING WITHIN HAZARDOUS LOCATIONS SHALL HAVE SAFETY GLASS IN COMPLIANCE WITH R308 (IRC 2015.)
- ALL EGRESS DOORS & WINDOWS SHALL HAVE LOCKS ALLOWING EGRESS WITHOUT THE USE OF A KEY AND MEET R310 & 311.
- SMOKE DETECTORS REQUIRE 110V CONNECTION TO HOUSE WIRING AND BATTERY BACKUP. LOCATIONS TO COMPLY WITH R314 (IRC 2015). MULTIPLE UNITS SHALL BE 2015 INTERCONNECTED TO ACTIVATE ALL ALARMS. CONSULT MANUF. RECOMMENDATIONS FOR DISTANCE FROM R/A.
- LOCATE GAS WATER HEATER IN ATTIC ABV. LOAD BEARING PARTITION IN PAN WITH RELIEF DRAIN LINE TO OUTSIDE, INSTALLATION MUST COMPLY WITH MANUF. INSTRUCT. AND ALL APPL. CODES.
- PROVIDE VENTILATION AT ALL BATHS AND UTILITY ROOMS THROUGH NATURAL OR MECH. MEANS AND COMPLY WITH R303 & M1507 (IRC 2015)
- CHIMNEYS TO BE 3'-0" MIN. ABV. THE HIGHEST POINT WHERE THEY PASS THROUGH THE ROOF AND AT LEAST 2'-0" MIN. HIGHER THAN ANY PORTION OF THE ROOF WITHIN A 10'-0" RADIUS
- ALL PREFAB FIREPLACES TO BE U.L. & IRC 2015 APPROVED & A COPY OF THE MANUF. INSTALLATION MANUAL SHALL BE AVAILABLE @ JOB SITE FOR INSPECTOR'S REVIEW
- A CARBON MONOXIDE DETECTOR SHALL BE INSTALLED IN BEDROOMS WHEN A GAS FIREPLACE IS INSTALLED AND OUTSIDE EACH SEPERATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS WHICH FUEL-FIRED APPLIANCES ARE INSTALLED & OR HAVE ATTACHED GARAGES.
- STAIRWAYS SHALL COMPLY WITH R311 (IRC 2015.) SEE DETAIL SHT.
- HANDRAILS TO BE 34" TO 38" ABV. NOSE OF TREAD 7 SHALL BE CONTINUIOUSFOR THE FULL FLIGHT & TERNINATE AT A NEWEL OR SAFETY TERNIMAL. ADJACENT TO THE WALL ALLOW 2" MIN. BTWN WALL & RAIL R 311.7
- ALL GUARDRAILS AND HANDRAILS SHALL COMPLY WITH R311 & R301.5 (IRC 2015). THE MIN UNIFORM LIVE LOAD SHALL BE 200# AND A SINGLE CONCENTRATED LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP
- GUARDRAILS TO BE 36" A.F.F. (MIN.) WITH BALUSTERS AT 4" O.C. MAX. PER R311 & 312 (IRC 2015.) SEE DETAIL SHT.
- THE TRIANGULAR OPENINGS FORMED BY THE RISER, TREAD AND BOTTOM RAIL OF A GUARD AT THE OPEN SIDE OF A STAIRWAY ARE PERMITTED TO BE OF SUCH A SIZE THAT A SPHERE 6 INCHES (152 mm) CANNOT PASS THROUGH.
- HANDGRIPPING PORTION OF HANDRAILS SHALL BE NOT LESS THAN 1 1/4" NOT MORE THAN 2" IN CROSS SECTIONAL DIMENSION OR THE SHAPE SHALL PROVIDE AND EQUIV. GRIPPING SURFACE PER R311 (IRC 2015)
- ENCLOSE UNDERSIDE OF STAIRWELL WITH 5/8" TYPE "X" FIRE CODE GYP. BOARD
- SIZE AND NUMBER OF NAILS CONNECTING WOOD MEMBERS SHALL COMPLY WITH IRC 2015 TABLE R602.3 (1) & .3 (2) (OR EQ.) REFER TO STANDARD DETAIL SHEET
- DISAPPEARING STAIRS TO BE MIN. 22" x 30" CLEAR OPENING (30" x 54" R.O.) & SHALL COMPLY WITH R807 (IRC 2015). INDIVIDUAL STAIR TREADS SHALL BE DESIGNED FOR UNIFORMLY DISTRIBUTED LIVE LOAD OR A 350 LB CONCENTRATED LOAD ACTING OVER AN AREA OF 4 SQ. INCHES, WHICHEVER PRODUCES THE GREATEST STRESS
- ATTIC ACCESS/DISAPPEARING STAIRS IN THE GARAGE CLG. MAY BE INSTALLED PROVIDED THE EXPOSED PANEL IS NOT LESS THAN 3/8" THICK FIRE RETARDANT TREATED PLYWOOD, 1/2" SHEET ROCK OR COVERED W/ A MIN. OF 16ga SHEET METAL. ROUGH OPENING SHALL NOT BE LESS THAN 22" X 30" AS PER IRC 2015 SECTION R807.1.
- ALL HEIGHTS ARE DEFINED FROM MAIN FINISHED FLOOR.
- SLOPE 1/8" PER EVERY 1'-0" TYP. AT PORCH, PAVILION, ETC.

bath schedule

- TILE FLOORS (AT WET AREAS)
- TILE WALLS AT TUB (SECONDARY BATHS)
- TILE FULL AT SHOWER
- SOLID SURFACE COUNTER TOPS AND SPLASHES
- ALL GLASS AT TUBS AND SHOWERS SHALL BE TEMPERED SAFETY GLASS AND MUST COMPLY WITH R308 (IRC 2015.)
- SHOWER STALLS AND TUB (WITH SHOWER HEADS) WALLS TO BE FINISHED WITH NON ABSORBENT SURFACE TO A HT. OF NOT LESS THAN 72" ABV. DRAIN INLET OVER CONCRETE BACKERBOARD R307.2.
- ALL PLUMBING FIXTURES SHALL BE SPACED PER R307.1 (IRC 2015)
- DROP SLAB AT SHOWER AS REQUIRED

NOTE:

* ALL INTERIOR OPENINGS AND FLOOR FINISHES SHALL BE AS PER BUILDER SPECIFICATIONS

square footage

FIRST FLOOR	3009
SECOND FLOOR	2175
LIVING AREA	5184
PORCH	116
GARAGE	642
PAVILION	324
TOTAL COVERED AREA	6266

first floor plan

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

PERMIT SET

PLAN NO. 5184 | SHEET NO. A2 OF 11

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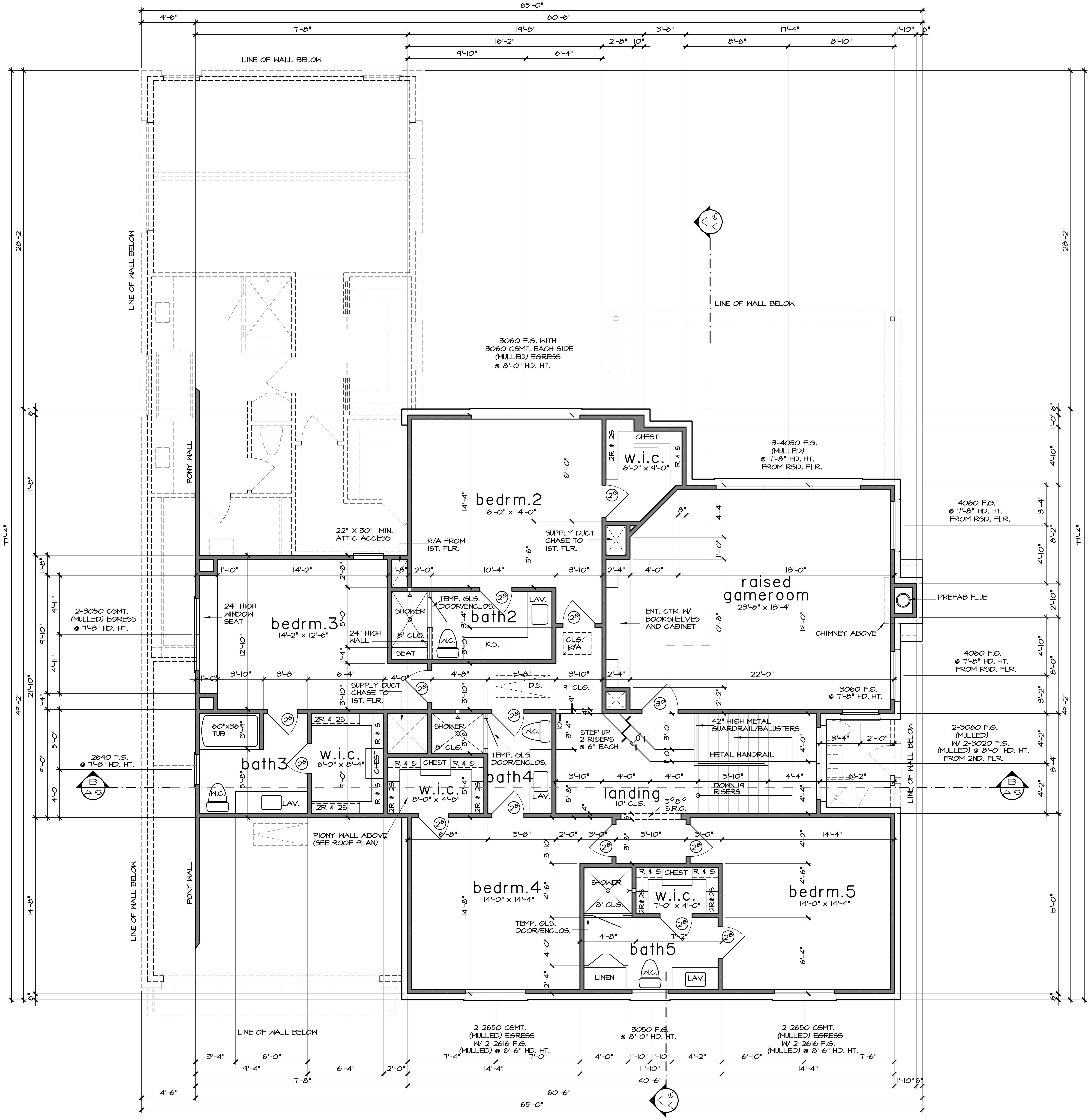

NOTES:

- LOCATE ADDITIONAL DUCT CHASE TO 1ST. FLOOR AS REQUIRED. COORDINATE WITH H.V.A.C. CONTRACTOR, AND TO BE APPROVED BY OWNER/BLDR.
- VERIFY W.I.C. ROD AND SHELVES WITH OWNER PRIOR TO BID.

NOTE:
THE STRUCTURAL DESIGN OF THE STAIRS INCLUDING LOAD CARRYING CAPABILITY, STABILITY, STRENGHT AND CONNECTIONS TO SUPPORT MEMBERS, ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THE FRAMING CONTRACTOR. THE STRUCTURAL DESIGN HAS NOT BEEN REVIEWED BY THE STRUCTURAL ENGINEER OF RECORD OR SULLIVAN/STEVENS & HENRY ASSOC., INC.

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PERMIT SET

second floor plan

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

PLAN NO. 5184	SHEET NO. A3 OF 11

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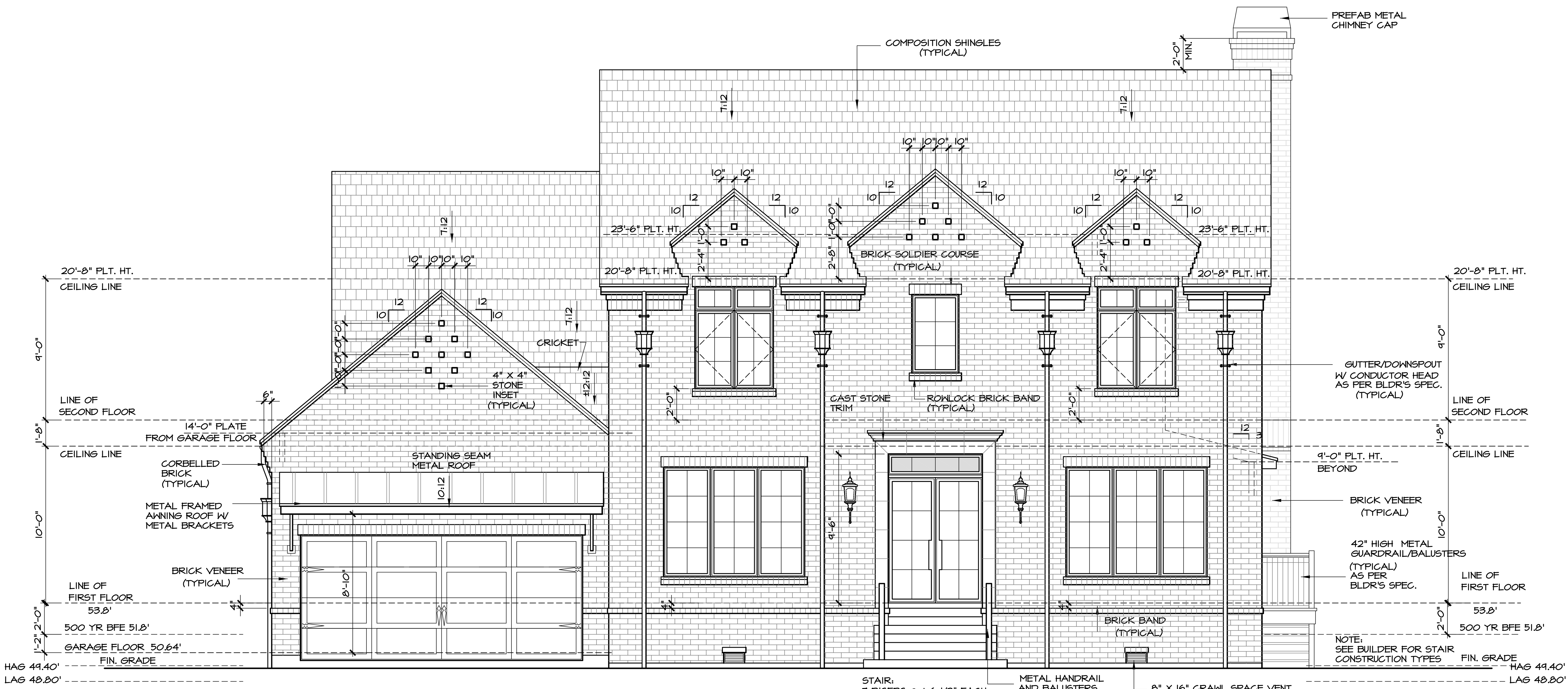
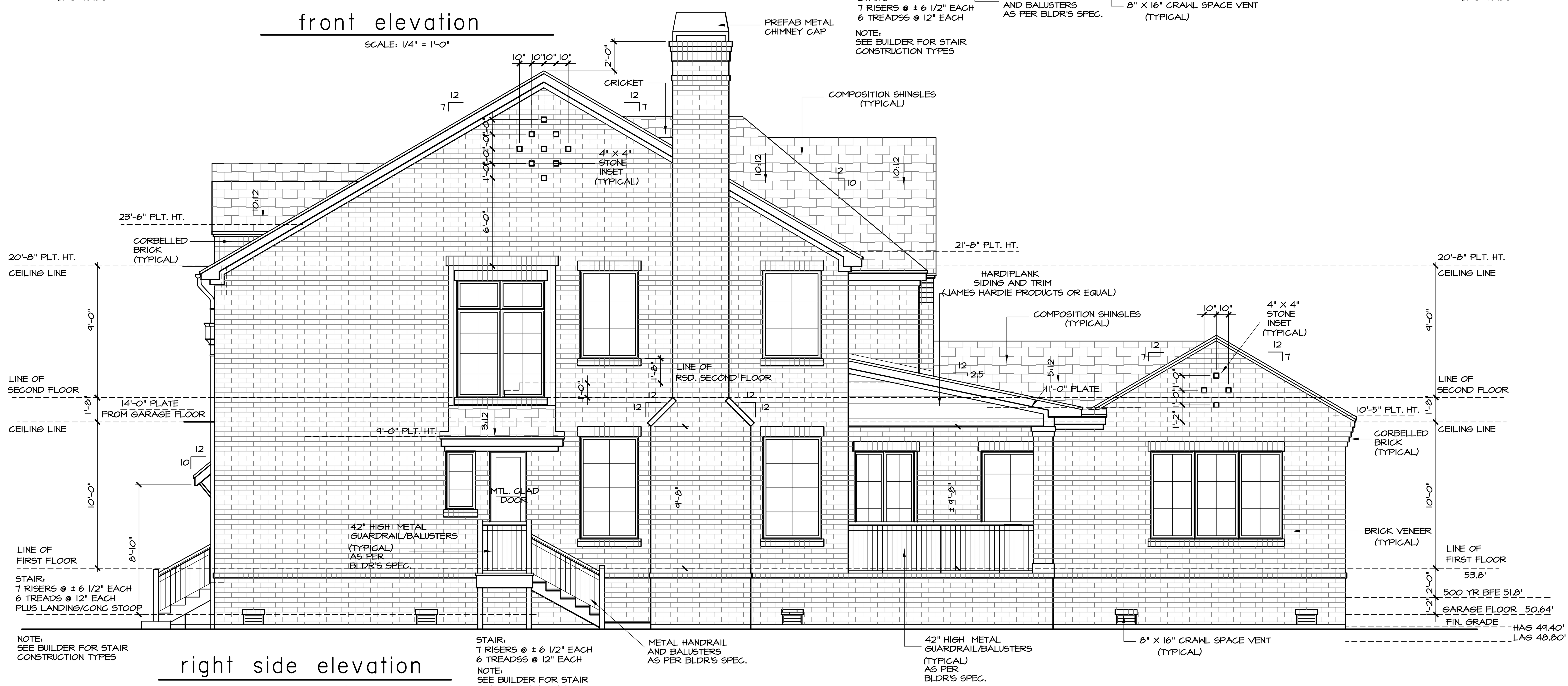


front elevation

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



right side elevation

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

elevation notes

- OVERHANG TO BE 1'-8" FROM EXTERIOR FRAME AT 7:12 AND 1'-2" AT 10:12 SLOPE, OTHERS TO MATCH. U.O.N. (SEE ROOF PLAN)
- RAKES TO BE FLUSH/ 8" FROM EXTERIOR WALL. (SEE ROOF PLAN)
- PROVIDE SPARK ARRESTORS AT CHIMNEYS TO COMPLY WITH IRC 2015, WITH 1/2" GAP MAX.
- PROVIDE STEEL LINTEL AT ALL OPENINGS WITH BRICK ABOVE. REFER TO REAR DETAIL SHEET.
- BRICK/MASONRY VENEER SHALL BE SUPPORTED PER R703.7.2.
- GUTTERS AND DOWNSPOUTS PER BUILDER.
- WINDOW SILLS SHALL BE 24" A.F.F. MIN ABV THE FIRST FLOOR. WINDOWS LESS THAN 24" A.F.F. SHALL BE FIXED OR HAVE OPENINGS THROUGH WHICH A 4" DIA. SPHERE CANNOT PASS.
- CHIMNEYS TO BE 3'-0" MIN. ABV. THE HIGHEST POINT WHERE THEY PASS THROUGH THE ROOF AND AT LEAST 2'-0" MIN. HIGHER THAN ANY PORTION OF THE ROOF WITHIN A 10'-0" RADIUS
- ALL PLATE HEIGHTS SHOWN ARE BASED FROM MAIN FIRST FLOOR

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PERMIT SET

front and right side elevations

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

PLAN NO. 5184	SHEET NO. A4 OF 11

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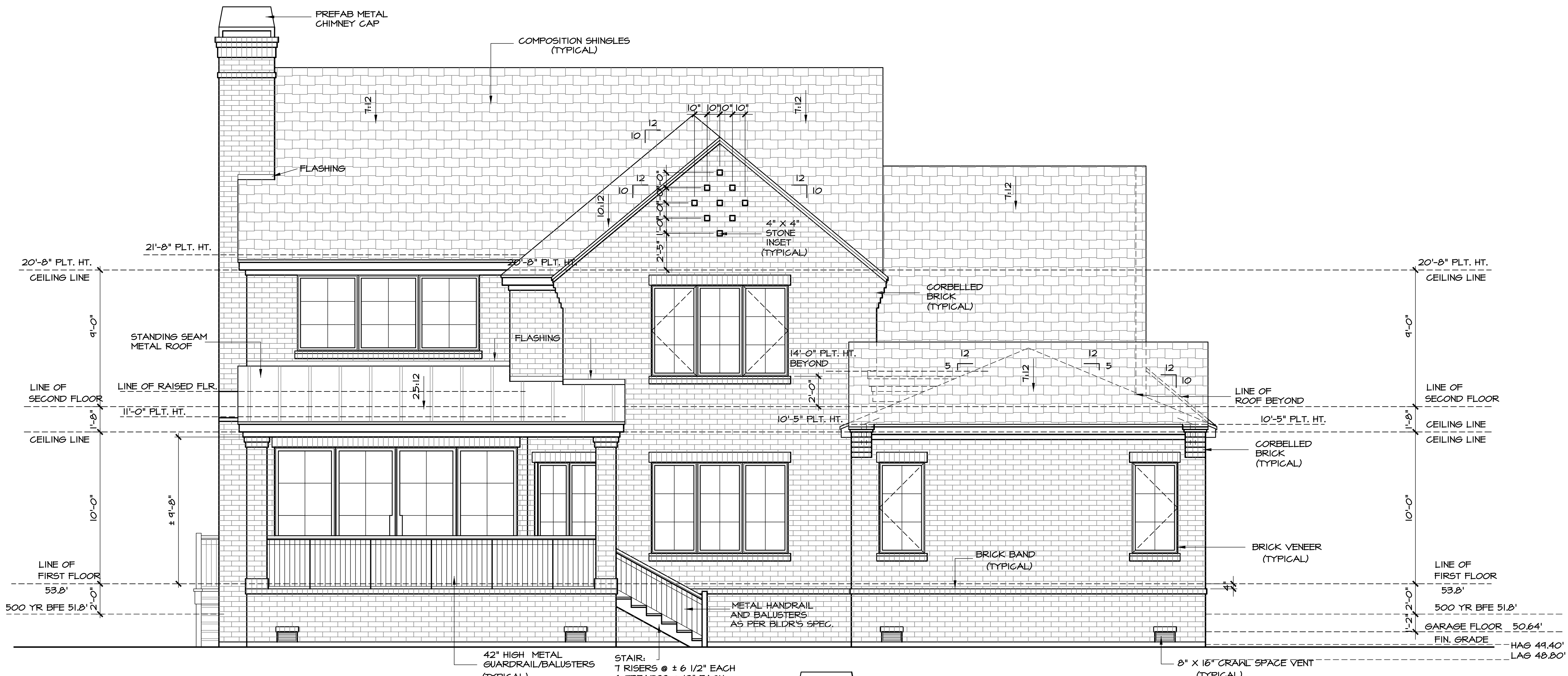
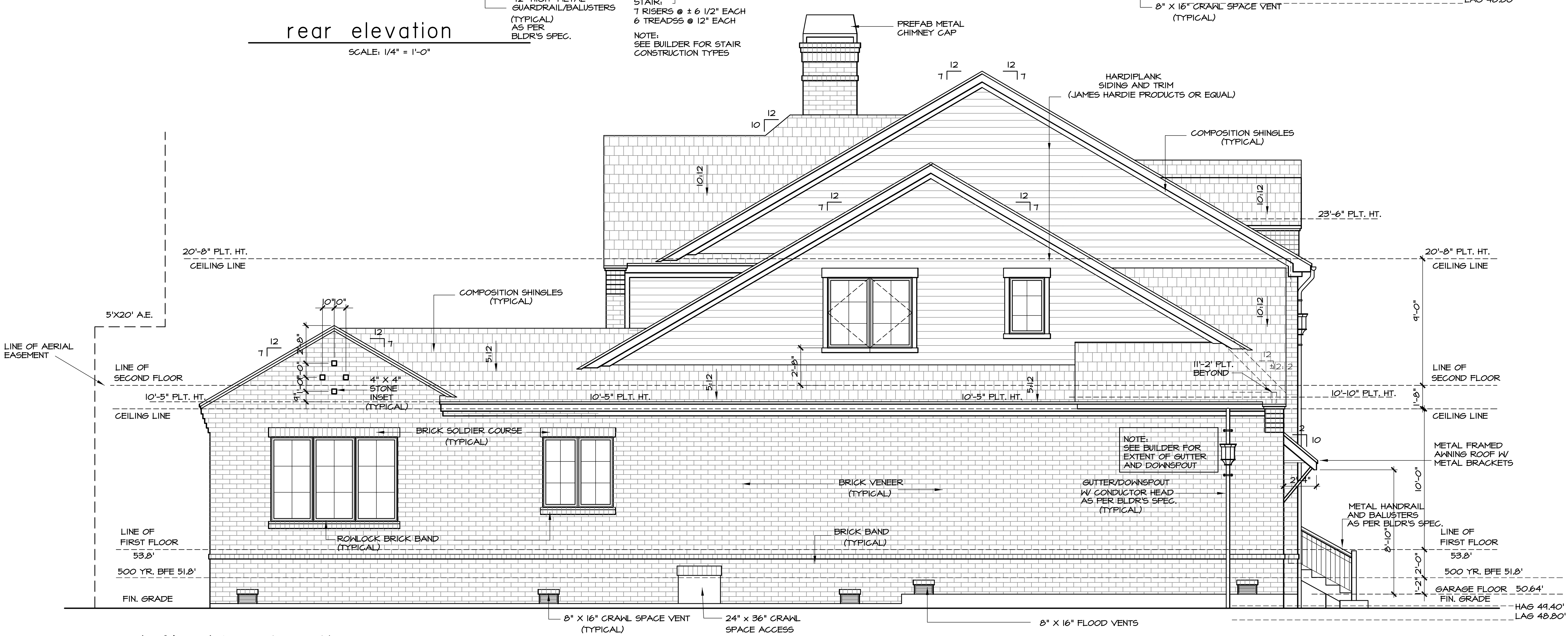


rear elevation

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



left side elevation

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

elevation notes

- OVERHANG TO BE 1'-8" FROM EXTERIOR FRAME AT 7:12 AND 1'-2" AT 10:12 SLOPE, OTHERS TO MATCH, U.O.N. (SEE ROOF PLAN)
- RAKES TO BE FLUSH/ 8" FROM EXTERIOR WALL. (SEE ROOF PLAN)
- PROVIDE SPARK ARRESTORS AT CHIMNEYS TO COMPLY WITH IRC 2015, WITH 1/2" GAP MAX.
- PROVIDE STEEL LINTEL AT ALL OPENINGS WITH BRICK ABOVE. REFER TO REAR DETAIL SHEET.
- BRICK/MASONRY VENEER SHALL BE SUPPORTED PER R703.7.2.
- GUTTERS AND DOWNSPOUTS PER BUILDER.
- WINDOW SILLS SHALL BE 24" A.F.F. MIN ABV THE FIRST FLOOR. WINDOWS LESS THAN 24" A.F.F. SHALL BE FIXED OR HAVE OPENINGS THROUGH WHICH A 4" DIA. SPHERE CANNOT PASS.
- CHIMNEYS TO BE 3'-0" MIN. ABV. THE HIGHEST POINT WHERE THEY PASS THROUGH THE ROOF AND AT LEAST 2'-0" MIN. HIGHER THAN ANY PORTION OF THE ROOF WITHIN A 10'-0" RADIUS
- ALL PLATE HEIGHTS SHOWN ARE BASED FROM MAIN FIRST FLOOR

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PERMIT SET

rear and left side elevations

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

PLAN NO. 5184	SHEET NO. A5 OF 11

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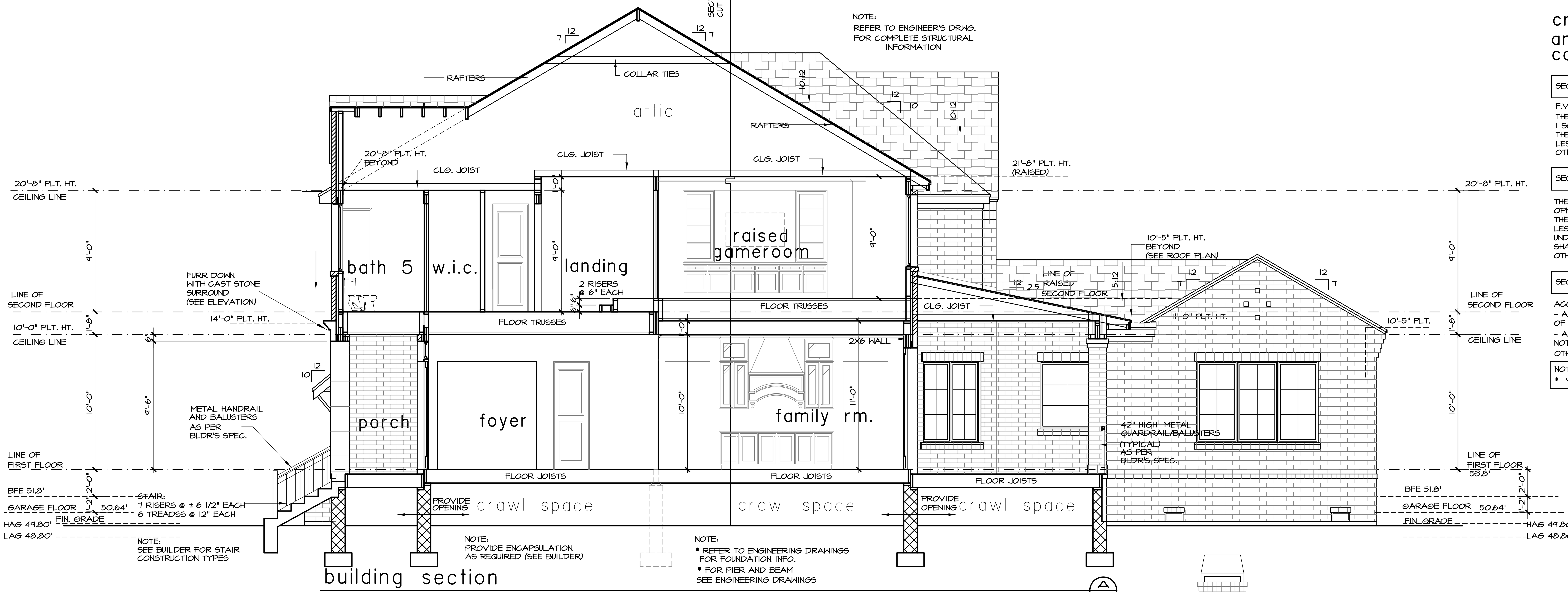


building section

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

crawl space vent and flood vent calculation:

SECTION R322.2 - ENCLOSED AREA BELOW FLOOD ELEV.

F.V. (FLOOD VENTS):
THE TOTAL AREA OF ALL OPENINGS SHALL BE AT LEAST 1 SQ. INCH FOR EACH SQUARE FOOT OF ENCLOSED AREA, THE BOTTOM OF EACH OPENING SHALL BE 1 FOOT OR LESS ABOVE THE ADJACENT GROUND LEVEL
OTHER PROVISIONS PER I.R.C.

SECTION R408 - UNDER-FLOOR SPACE:

THE UNDER FLOOR SPACE SHALL BE PROVIDED W/ VENTILATION OPNGS. THROUGH FOUNDATION WALLS OR EXTERIOR WALLS. THE MIN. NET AREA OF VENTILATION OPNGS. SHALL NOT BE LESS THAN 1 SQ. FOOT FOR EACH 150 SQ. FOOT OF UNDER FLOOR SPACE AREA. SUCH VENTILATION OPNG. SHALL BE WITHIN 3 FEET OF EACH CORNER OF BLDG.
OTHER PROVISIONS PER I.R.C.

SECTION R408.4 - UNDER-FLOOR SPACE ACCESS:

ACCESS SHALL BE PROVIDED TO ALL UNDER FLR. SPACES.
- ACCESS OPENINGS THROUGH THE FLOOR SHALL BE A MINIMUM OF 18 INCHES BY 24 INCHES.
- ACCESS OPENINGS THROUGH A PERIMETER WALL SHALL BE NOT LESS THAN 16 INCHES BY 24 INCHES.

OTHER PROVISIONS PER I.R.C.

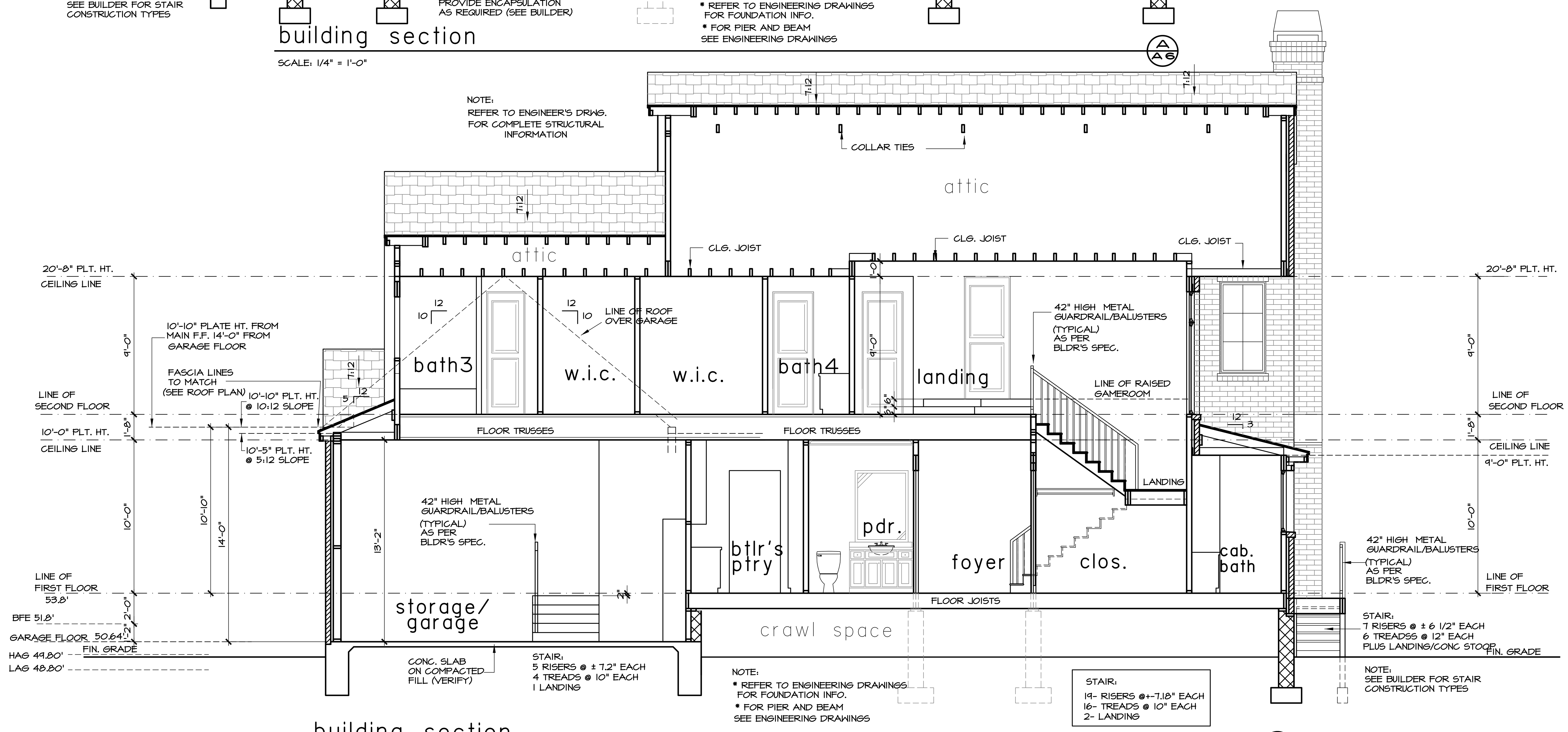
NOTE:
* VERIFY NUMBER OF VENTS W/ OWNER PRIOR TO BID.

CRAWL SPACE AREA
3449 SQ. FT.

REQUIRED: 23 SQ. FT. VENT AREA
PROVIDED: 14 (8"X 16") SUPER VENTS
200 SQ. FT. COVERAGE EACH
2800 SQ. FT. TOTAL COVERAGE

ENCLOSED GARAGE AREA
642 SQ. FT.

REQUIRED: 642 SQ. IN. (4.45 SQ. FT.) VENT AREA
PROVIDED: 2 (8"X 16") SUPER VENTS
200 SQ. FT. COVERAGE EACH
400 SQ. FT. TOTAL COVERAGE



building section

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

section notes

- ALL LOAD BEARING STUDS TO BE 16" O.C.
- JOISTS SHALL BE SUPPORTED LATERALLY AT EACH END AND AT SUPPORT PER R802 (IRC 2015).
- SOLID BLOCKING SHALL NOT BE LESS THAN 2" IN THICKNESS AND MUST BE THE FULL DEPTH OF JOIST PER R602 (IRC 2015).
- ALL EXTERIOR WALLS AND MAIN CROSS-STUD PARTITIONS SHALL BE EFFECTIVELY BRACED AT EACH END OR AS NEAR THERETO AS POSSIBLE, AND AT LEAST EVERY 25' OF LENGTH & COMPLY R602 (IRC 2015).
- PURLIN BRACE SHALL BE 45 DEGREES OR GREATER AND SHALL NOT EXCEED 8' IN LENGTH WITHOUT LATERAL SUPPORT OR STIFFENERS (SEE ENGINEER'S DATA ATTACHED).
- ATTIC ACCESSES ARE PROVIDED ON PLAN TO SERVICE MECH. EQUIP. AND LIMITED LIGHT STORAGE.
- PROVIDE STEEL LINTEL AT ALL OPENINGS WITH STONE ABV. RE:SEE ENGINEER FRAMING PLANS
- MASONRY VENEER SHALL BE SUPPORTED PER R703.8.

NOTE:
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PERMIT SET

building sections

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

PLAN NO. 5184	SHEET NO. A6 OF 11

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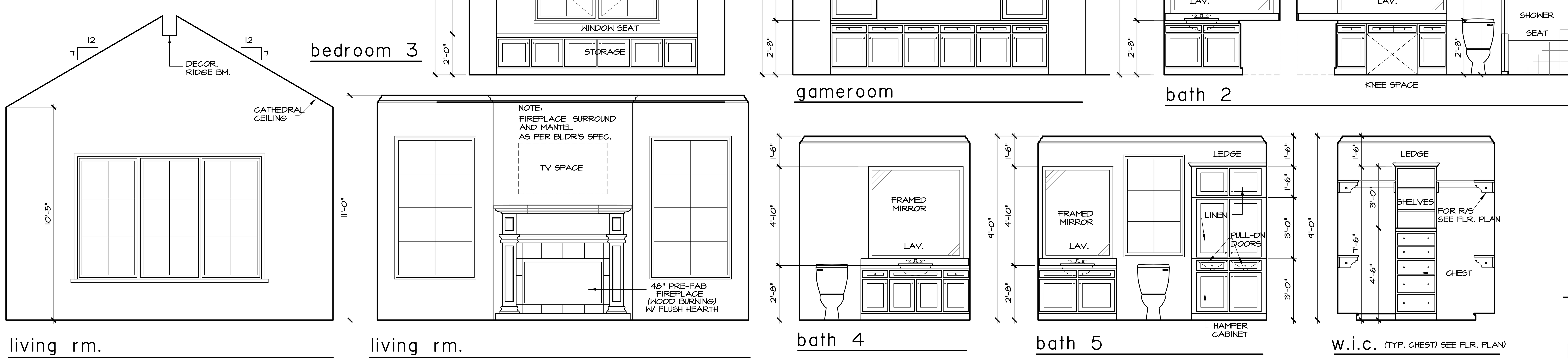


note:

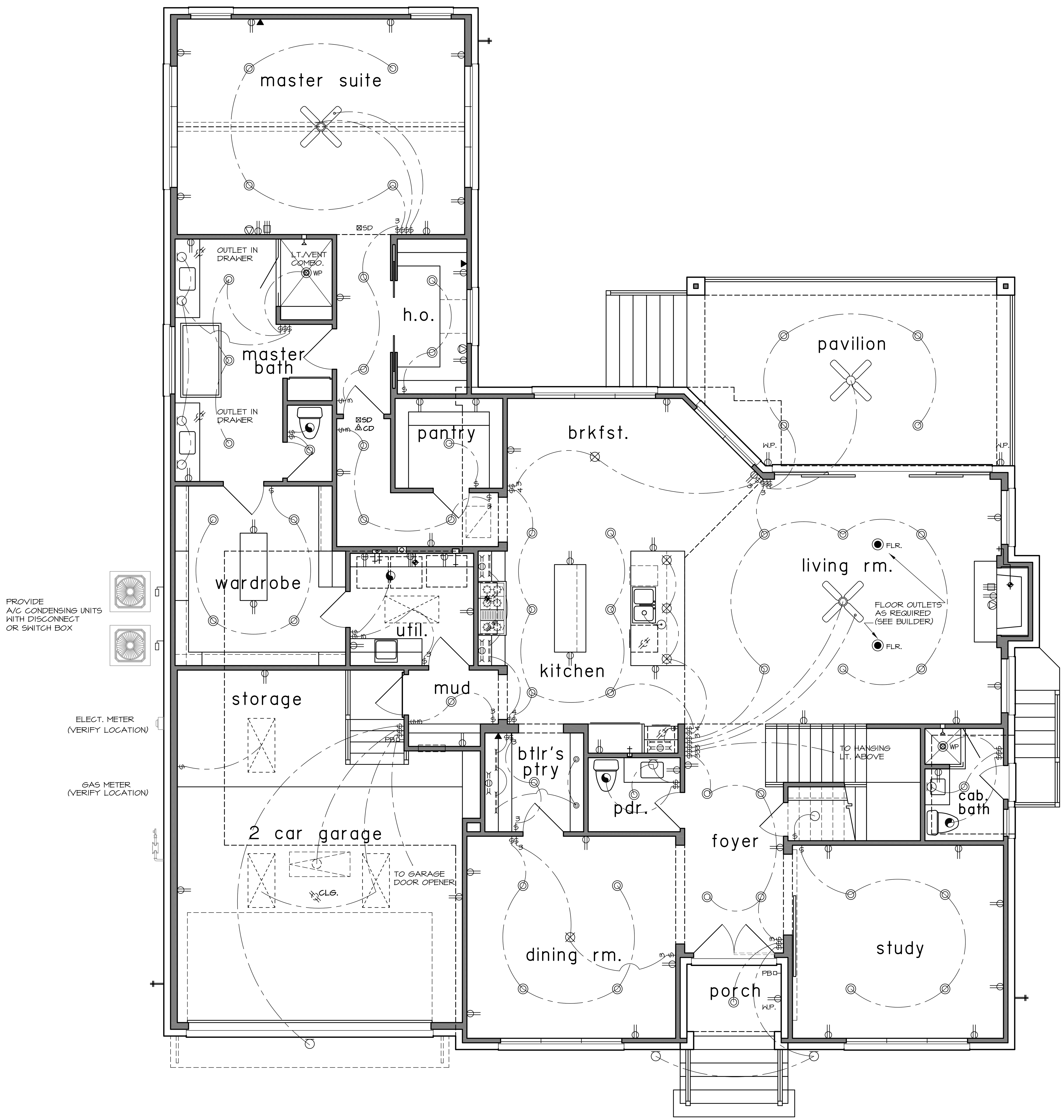
- VERIFY ALL CABINET DESIGN, MATERIALS AND FINISHES WITH OWNER OR BUILDER PRIOR TO BID/CONSTRUCTION.
- COORDINATE FLOOR MATERIALS, WALL FINISHES, FLOOR BASE, TRIM AND CEILING MOLDINGS WITH OWNER OR BUILDER PRIOR TO BID/CONSTRUCTION.

PERMIT SET

interior elevations

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

PLAN NO. 5184	SHEET NO. A7 OF 11



legend

- 110 VOLT RECEPTACLE
- WATERPROOF RECEPTACLE
- 110 VOLT W/ GROUND FAULT INTERRUPTOR
- 110 PLUG STRIP (UNDER UPPER CABINET)
- FLR. 110 VOLT IN FLOOR
- 220 VOLT RECEPTACLE
- TELEVISION ANTENNA
- TELEPHONE OUTLET
- SINGLE POLE SWITCH
- THREE WAY SWITCH
- FOUR WAY SWITCH
- DIM DIMMER SWITCH
- VACUUM SWITCH
- PB PUSH BUTTON
- SD SMOKE DETECTOR
- CD CARBON MONOXIDE DETECTOR
- CH CHIMES
- CEILING MOUNTED LIGHT FIXTURE
- CEILING MOUNTED HANGING FIXTURE
- RECESSED CAN LIGHT
- WP WATERPROOF RECESSED CAN LIGHT
- RECESSED EYEBALL SPOT LIGHT
- SL 4" SOFFIT LIGHT (ROOF OVERHANG)
- PIN LIGHT
- WALL MOUNTED LIGHT FIXTURE
- PC PORCELAIN FIXTURE W/ PULL CORD
- FLOOD LIGHTS
- EXHAUST FAN
- NETWORK DROP, ALLOW FOR TEL, CATV, CAT6
- J JUNCTION BOX
- CEILING FAN
- CEILING FAN W/ LIGHT
- 24" X 48" LED LIGHT PANEL
- UNDER CABINET LT.
- TRACK LIGHTS

notes

- ALL CONSTRUCTION SHALL COMPLY W/ IBC 2015 & THE 2020 NEC.
- SMOKE DETECTORS REQUIRE 110V CONNECTION TO HOUSE WIRING AND BATTERY BACKUP. MULTIPLE UNITS SHALL BE INTERCONNECTED TO ACTIVATE ALL ALARMS. CONSULT MANUF. RECOMMENDATIONS FOR DISTANCE FROM R/A. LOCATION TO COMPLY WITH R314 IRC.
- VENT ALL EXHAUST FANS TO OUTSIDE
- PROVIDE G.F.I. PROTECTION AS REQ'D.
- PROVIDE LIGHT FIXTURE AND SMOKE DETECTORS AT EACH WATER HEATER AND A/C UNIT LOCATION IN ATTIC
- PROVIDE DIMMER SWITCHES @ RECESSED LT'S. AND DECORATIVE LT'S.
- PROVIDE ELECTRIC DISCONNECT AT EACH A/C UNIT
- ALLOW FOR A/C UNITS PER MECH. ENGINEER.
- PROVIDE LOW VOLTAGE CIRCUITS FOR SECURITY SYSTEM
- PROVIDE LOW VOLTAGE CIRCUITS FOR INTERCOM SYSTEM W/ BASE AND SPEAKER LOCATIONS BY OWNER
- PROVIDE CIRCUITS FOR FRONT AND REAR YARD LICHTING
- ALL BEDROOMS BRANCH CIRCUITS MUST BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER AS PER THE 210-12 NEC.
- GFCI PROTECTION SHALL BE PROVIDED IN ACCORDANCE W/ ELEC. CODE 210.8 NEC.

PERMIT SET

first floor electrical plan

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

PLAN NO. 5184	SHEET NO. A8 OF 11

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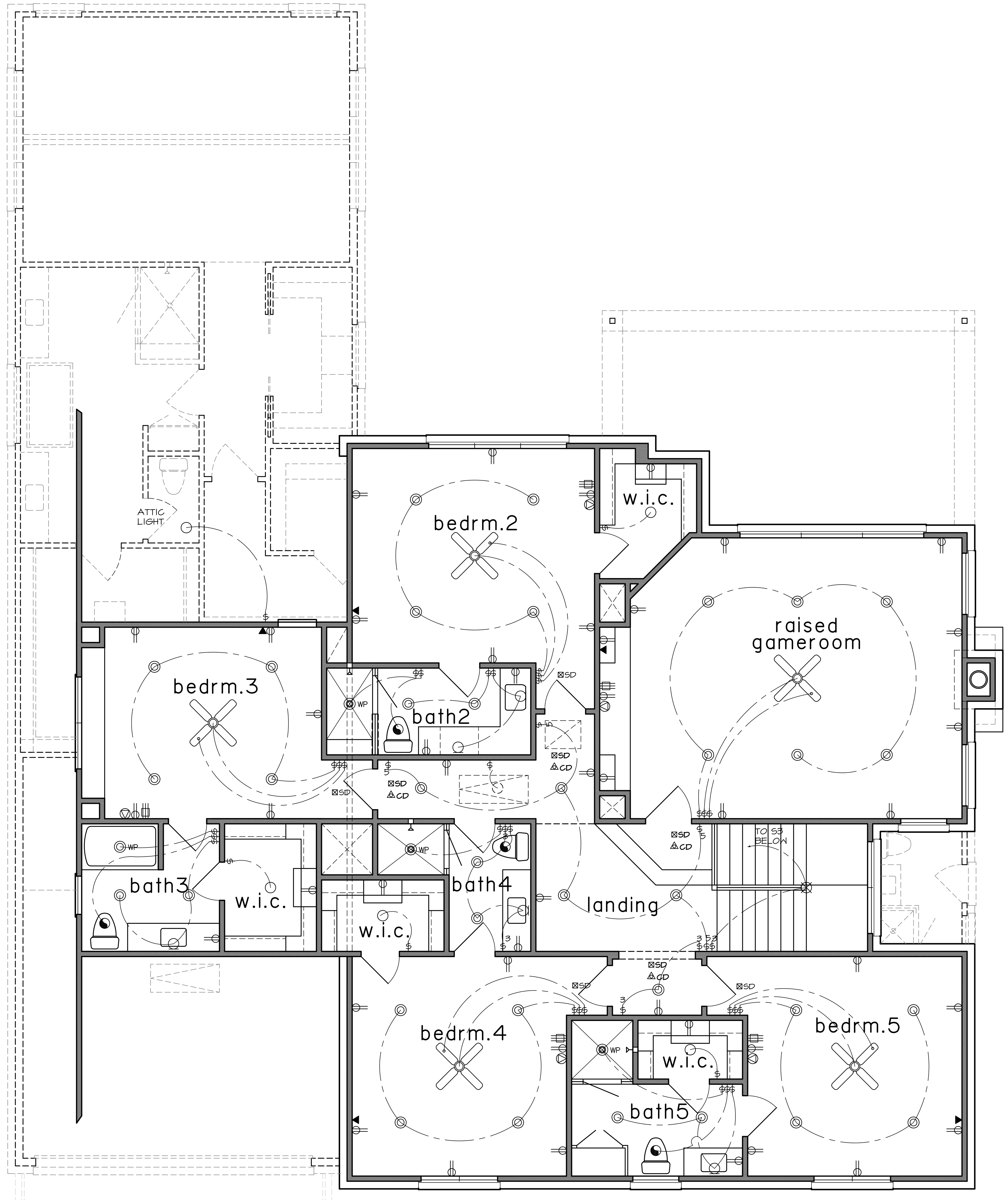
220076

GCK



legend

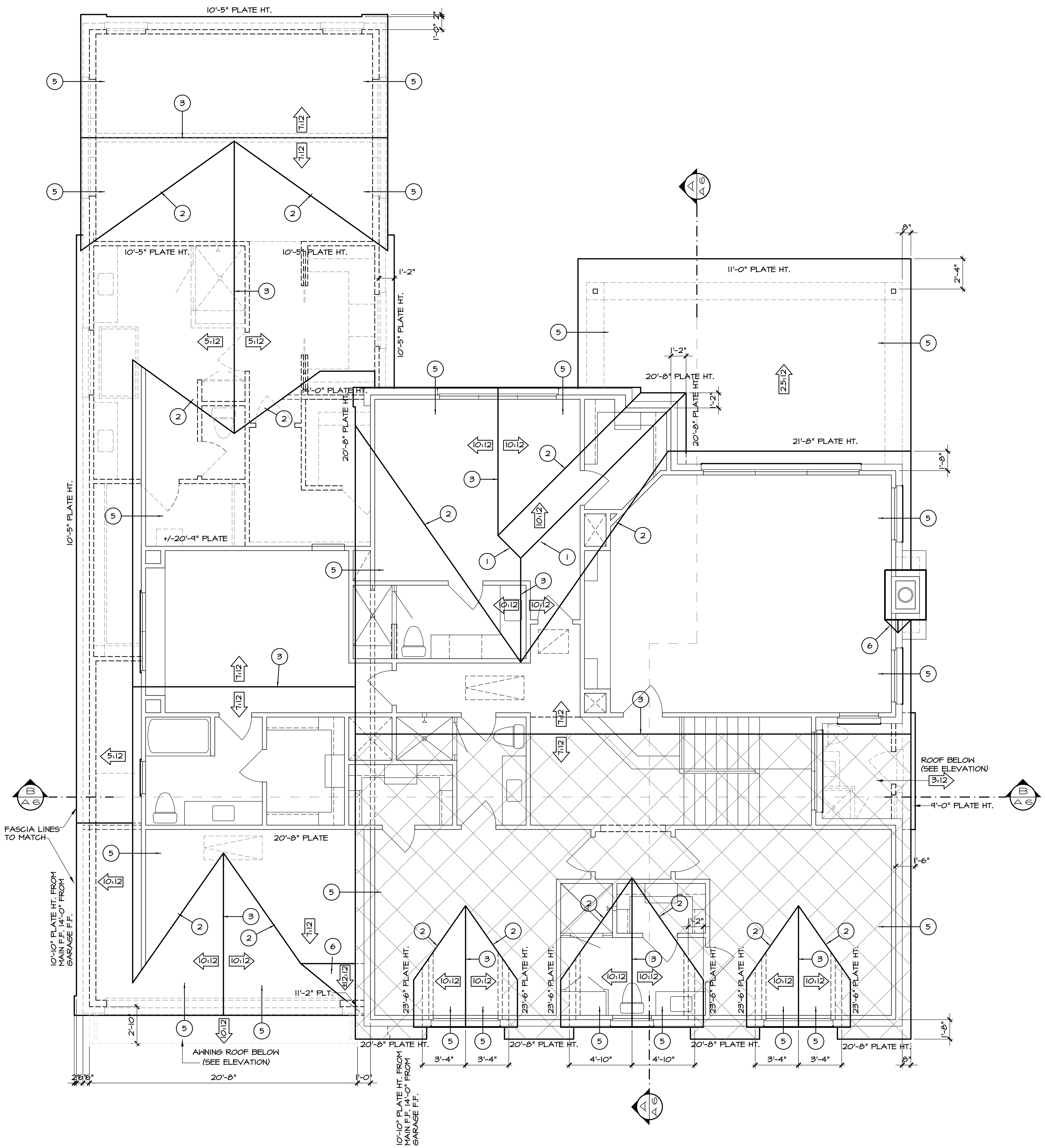
110 VOLT RECEPTACLE
WATERPROOF RECEPTACLE
110 VOLT W/ GROUND FAULT INTERRUPTOR
110 PLUG STRIP (UNDER UPPER CABINET)
110 VOLT IN FLOOR
220 VOLT RECEPTACLE
TELEVISION ANTENNA
TELEPHONE OUTLET
SINGLE POLE SWITCH
THREE WAY SWITCH
FOUR WAY SWITCH
DIMMER SWITCH
VACUUM SWITCH
PUSH BUTTON
SMOKE DETECTOR
CARBON MONOXIDE DETECTOR
CHIMES
CEILING MOUNTED LIGHT FIXTURE
CEILING MOUNTED HANGING FIXTURE
RECESSED CAN LIGHT
WATERPROOF RECESSED CAN LIGHT
RECESSED EYEBALL SPOT LIGHT
4" SOFFIT LIGHT (ROOF OVERHANG)
PIN LIGHT
WALL MOUNTED LIGHT FIXTURE
PORCELAIN FIXTURE W/ PULL CORD
FLOOD LIGHTS
EXHAUST FAN
NETWORK DROP, ALLOW FOR TEL, CATV, CAT6
JUNCTION BOX
CEILING FAN
CEILING FAN W/ LIGHT
FLUORESCENT LIGHT PANEL
UNDER COUNTER FLUORESCENT LT.
TRACK LIGHTS

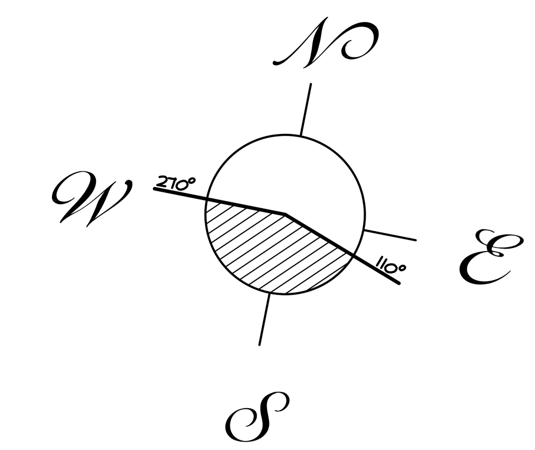
PERMIT SET

second floor electrical plan

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

PLAN NO. 5184	SHEET NO. A9 OF 11





note::

ROOF AREA FOR
OPT. SOLAR PANELS

1113 SQ. FT.

* OPTIONAL
SOLAR PANEL ROOF AREA
(600 SQ. FT. MIN.)

roof notes

- CRICKETS SHALL BE APPLIED TO ROOF DECKING.
- ROOF PITCHES AS INDICATED HEREON.
- DOUBLE FRAMING AROUND CHIMNEYS, DORMERS, SKYLTS, AND ANY MAJOR ROOF OPENINGS.
- OUTLOOKERS TO BE 2x4 AT 16" O.C.
- RAKES TO BE 8" UNLESS OTHERWISE NOTED.
- FASCIAS AND RAKE BOARDS TO BE 1x6.
- ATTIC VENTILATION CALCULATIONS SHALL BE PROVIDED BY HVAC CONTRACTOR AND SHALL COMPLY WITH CODE REQUIREMENTS R 806 AND OTHER RELATED SECTIONS.

1 HIP
2 VALLEY
3 RIDGE
4 PURLIN
5 OUTLOOKERS
6 CRICKET
7 KICKOUTS
8 ROOF TRANSITION LINE

SULLIVAN HENRY OGGERO & ASSOC., INC. IS A PROFESSIONAL BUILDING DESIGN FIRM. IT IS NOT AN ENGINEERING FIRM. WE ARE NOT QUALIFIED TO AN ENGINEERING FIRM. WE ARE NOT QUALIFIED TO NOR LICENSED TO DESIGN STRUCTURAL FRAMING OR FOUNDATIONS. A LICENSED PROFESSIONAL ENGINEER SHOULD BE CONSULTED REGARDING THE FRAMING AND FOUNDATION. SHOULD AN ENGINEER'S SEAL BE PRESENT ON THESE DRAWINGS, THE "ENGINEER OF RECORD" SHALL BEAR THE RESPONSIBILITY FOR THE STRUCTURAL DESIGN. SULLIVAN HENRY OGGERO & ASSOC., INC. WILL NOT BE HELD RESPONSIBLE FOR THE STRUCTURAL DESIGN IN ANY WAY AND/OR ANY PROBLEMS WHICH MAY ARISE.

PERMIT SET

roof plan

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

PLAN NO. 5184	SHEET NO. A10 OF 11

PROPERTY LEGAL DESCRIPTION

A LAND BOUNDARY SURVEY CONTAINING 0.2291 ACRES 9,979 SQUARE FEET OF LAND OUT BEING LOT 23 AND ADJOINING PART OF 22 BLOCK 27 OF BRAES HEIGHTS ADDITION SECTION 9 RECORDED IN VOLUME33 PG 51 H.C.M.R. LOCATED IN THE P.W. ROSE SURVEY A-645 HARRIS COUNTY, TEXAS.

SURVEYOR

ALL EXISTING TOPOGRAPHIC & FLOOD PLAIN DATA SHOWN HEREIN IS EXTRACTED DIRECTLY FROM SURVEY BY:

MOMENTUM ENGINEERING+SURVEYING

12651 BRIAR FOREST, SUITE 350
HOUSTON, TEXAS 77077
(TEL)281-741-1998 (FAX)281-741-2068
TX.REG.NO. 10109600

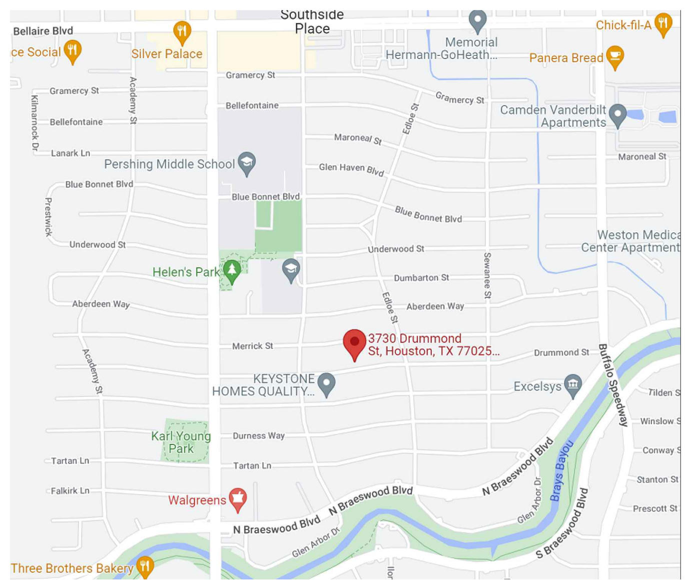
BENCHMARK DATA

HCFRM/FIRM RM 040145
ELEVATION: 49.55' NAVD 1988, 2001 ADJUSTED

FLOOD PLAIN DATA

PART OF OF THIS PROPERTY LIES IN ZONE "AE" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY 480296 PANEL NO. 48201C-0860 L WHICH BEARS AN EFFECTIVE DATE JUNE 18, 2007 ZONE "AE" SHADED DENOTES AREAS INSIDE THE 100 YEAR FLOOD PLAIN.

VICINITY MAP



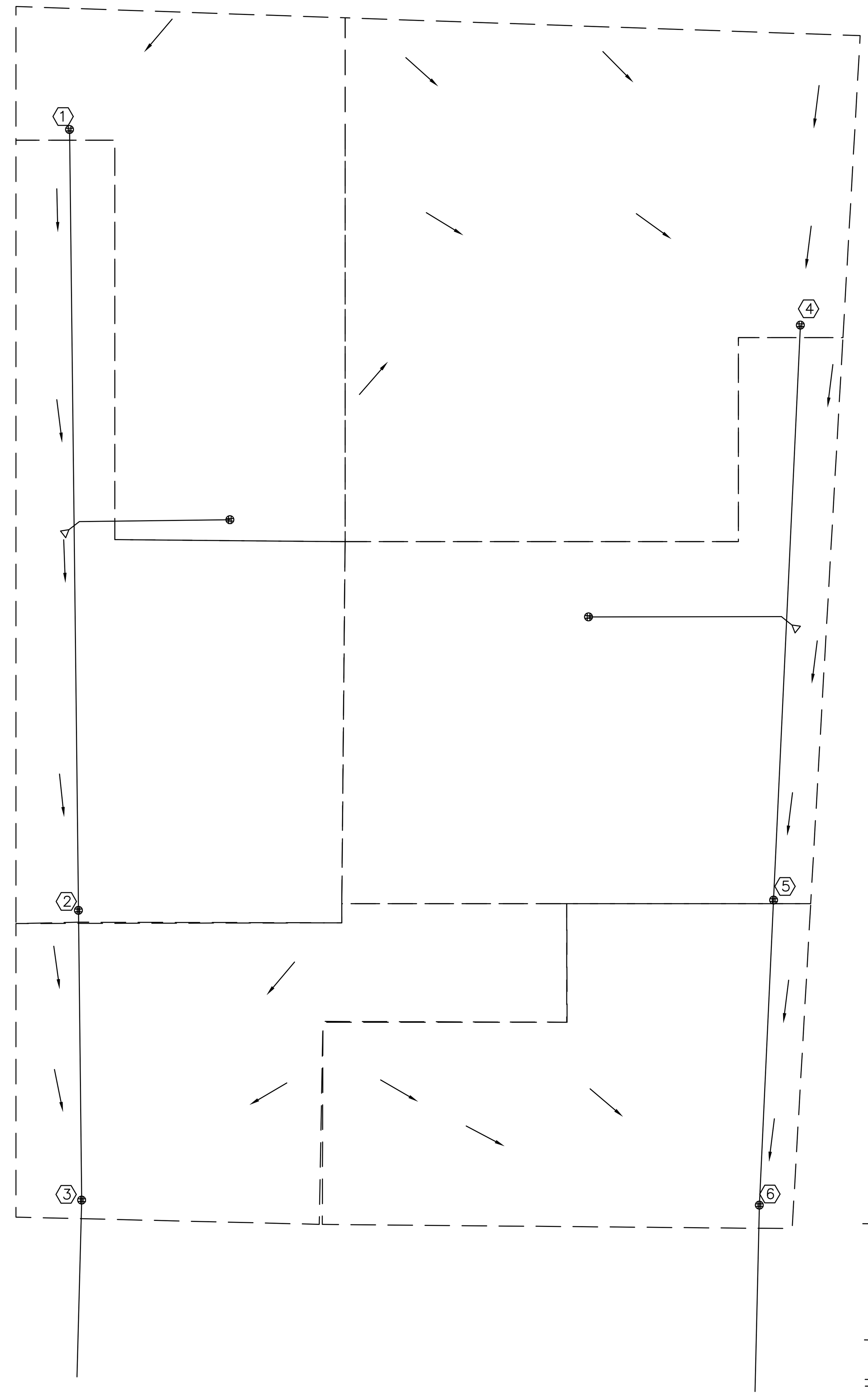
LEGEND

	PROPOSED STORM SEWER
	EXISTING STORM SEWER
	PROPERTY LINE
	GRADE BREAK (G.B.)
	SLOPE OF PAVEMENT OR FINISH GRADE
EXIST.=FILLED PROP.=OPEN	STORM SEWER MANHOLE
	CLEAN-OUT (MATCH PIPE SIZE UP TO 6"ø)
	IN-LINE CLEANOUT (MATCH PIPE SIZE UP TO 6"ø)
1	DRAINAGE AREA DESIGNATION
	CATCH BASIN (RE: DETAIL)
XX.XX	EXISTING NATURAL GRADE ELEVATIONS
FF = XX	PROPOSED FINISH FLOOR ELEVATION
BC 99.95	PROPOSED BACK OF CURB ELEVATION
TP 99.45	PROPOSED TOP OF PAVEMENT ELEVATION
TG 99.15	PROPOSED TOP OF INLET GRATE ELEVATION
FL 96.53	PROPOSED FLOW LINE ELEVATION
FG 99.15 OR 99.15	PROPOSED FINISHED GRADE ELEVATION
TOC 99.15	PROPOSED TOP OF CONCRETE ELEVATION
	k SWALE
	DOWNSPOUT W/ CONNECTOR TO DRAINAGE SYSTEM
S	EXISTING TREE

GENERAL NOTES: SITEWORK

(THESE NOTES CONTROL EXCEPT AS NOTED OTHERWISE IN PLANS & DETAILS)

1. CONTRACTOR/BUILDER SHALL FIELD-VERIFY EXISTING ELEVATIONS AND SET FINISH FLOOR (FF) ELEVATION AT LEAST 18 INCHES ABOVE THE BASE FLOOD ELEVATION, ACCORDING TO FEMA MAPS & TOPOGRAPHIC SURVEY DATA; 12 INCHES ABOVE THE NEAREST SANITARY SEWER MANHOLE RIM, OR, WHERE, NO SEWER IS AVAILABLE, THE FINISHED FLOOR SHALL NOT BE LESS THAN 4 INCHES ABOVE THE CROWN OF THE STREET.
2. PROPOSED FF ELEVATION IS MINIMUM. BUILDER MAY SET SLAB @ A HIGHER ELEVATION, BUT NOTIFY ENGINEER PRIOR TO SETTING FORM.
3. FINISH GRADE ELEVATIONS @ SIDE & REAR PROPERTY LINES SHALL MATCH EXISTING GRADE ELEVATIONS U.O.N.
4. CONTRACTOR/ BUILDER SHALL FIELD-VERIFY ALL EXISTING CONDITIONS & INFORM ENGINEER OF ALL DISCREPANCIES THAT MAY IMPACT THIS WORK.
5. ALL EXCAVATED SOIL FROM FOUNDATIONS SHALL BE REMOVED FROM CONSTRUCTION SITE AND MAY NOT BE USED AS FILL DIRT, UNLESS SPECIFICALLY CALLED FOR IN FOUNDATION DRAWINGS.
6. CONSTRUCTION SITE IS TO BE MAINTAINED FREE OF ANY OPEN TRENCHES, PITS, HOLES, OR OTHER EXCAVATIONS THAT MAY HOLD WATER.
7. RUNOFF FROM CONSTRUCTION SITE SHALL BE FILTERED SO AS TO PREVENT SAND, MUD AND DIRT OF ANY KIND FROM ENTERING CITY STORM DRAINAGE SYSTEM.
8. ADJOINING PROPERTIES
   A. THIS PROPOSED DRAINAGE SCHEME WILL NOT RESULT IN ANY STORMWATER RUNOFF ONTO ADJOINING PROPERTIES DURING A 2-YEAR STORM.
   B. CONTRACTOR SHALL MAINTAIN DRAINAGE DURING CONSTRUCTION SO AS TO ENSURE THAT NO RUNOFF FROM CONSTRUCTION SITE TRAVERSES ADJOINING PROPERTIES AT ANYTIME.
9. CITY RIGHT-OF-WAY
   A. ANY DAMAGE TO EXISTING ROADS, DRIVEWAYS, SIDEWALKS, OR OTHER APPURTENANCES WITHIN THE CITY'S RIGHT-OF-WAY SHALL BE SAW-CUT, REMOVED AND REPLACED WITH MATERIAL EQUAL TO OR SUPERIOR TO EXISTING MATERIAL, AND SHALL BE INSTALLED TO CITY STANDARDS.
   B. ANY AREAS OF GRASS WITHIN THE CITY'S RIGHT-OF-WAY WHICH ARE DISTURBED OR DUG UP DURING CONSTRUCTION SHALL BE REPLACED WITH ST. AUGUSTINE, OR GRASS WHICH MATCHES THE GRASS REMOVED.
10. ROOF DRAINAGE NOTE
    ALL ROOF DRAINAGE SHALL BE COLLECTED BY A GUTTER AND DOWNSPOUT COLLECTION SYSTEM. ALL DOWNSPOUTS SHALL BE CONNECTED TO THE SUB-SURFACE COLLECTION SYSTEM.
11. SWALE NOTE
    SWALES SHALL NOT BE COMPACTED AFTER EXCAVATION AND DURING RE-GRADING AND SHALL ME SODDED
12. DETENTION MAINTAINACE NOTES
    A. OWNER IS RESPONSIBLE FOR MAINTAINING DETENTION FACILITY
    B. SUBSURFACE DRAINAGE SYSTEMS ARE REQUIRED TO BE DRAINED IN 48 HOURS



Total Tract Area (sf)	9979	Frequency	b	d	e
Impervious area (sf)	5378	2-Year	48.35	9.07	0.7224
Ia=Imperv A/Total A	0.54	10-Year	54.68	6.96	0.6623
C=.6Ia+.2	0.52	100-Year	60.66	4.44	0.5797

2 year $Tc=10A^{0.1761}+15$ $I=b/(d+Tc)^e$

Drainage Area	A (sf)	A (acres)	TC (min.) {2-Year}	I (in/hr) [2-yr]	Q=CIA (cfs)
1	1379	0.032	20.444	4.192	0.069
2	1690	0.039	20.643	4.172	0.085
3	1220	0.028	20.328	4.204	0.062
4	2420	0.056	21.011	4.135	0.120
5	1980	0.045	20.802	4.156	0.099
6	1290	0.030	20.381	4.199	0.065
Total	**9979**	**0.229**	22.714	3.974	0.476

100 year $Tc=10A^{0.1761}+15$ $I=b/(d+Tc)^e$

Drainage Area	A (sf)	A (acres)	TC (min.) {100-Year}	I (in/hr) [100-yr]	Q=CIA (cfs)
1	1379	0.032	20.444	4.192	0.069
2	1690	0.039	20.643	4.172	0.085
3	1220	0.028	20.328	4.204	0.062
4	2420	0.056	21.011	4.135	0.120
5	1980	0.045	20.802	4.156	0.099
6	1290	0.030	20.381	4.199	0.065
Total	**9979**	**0.229**	22.714	8.948	1.073

$I=b/(d+Tc)^e$ Q=VA $v=(1.49/n)*R^{2/3}*S^{1/2}$

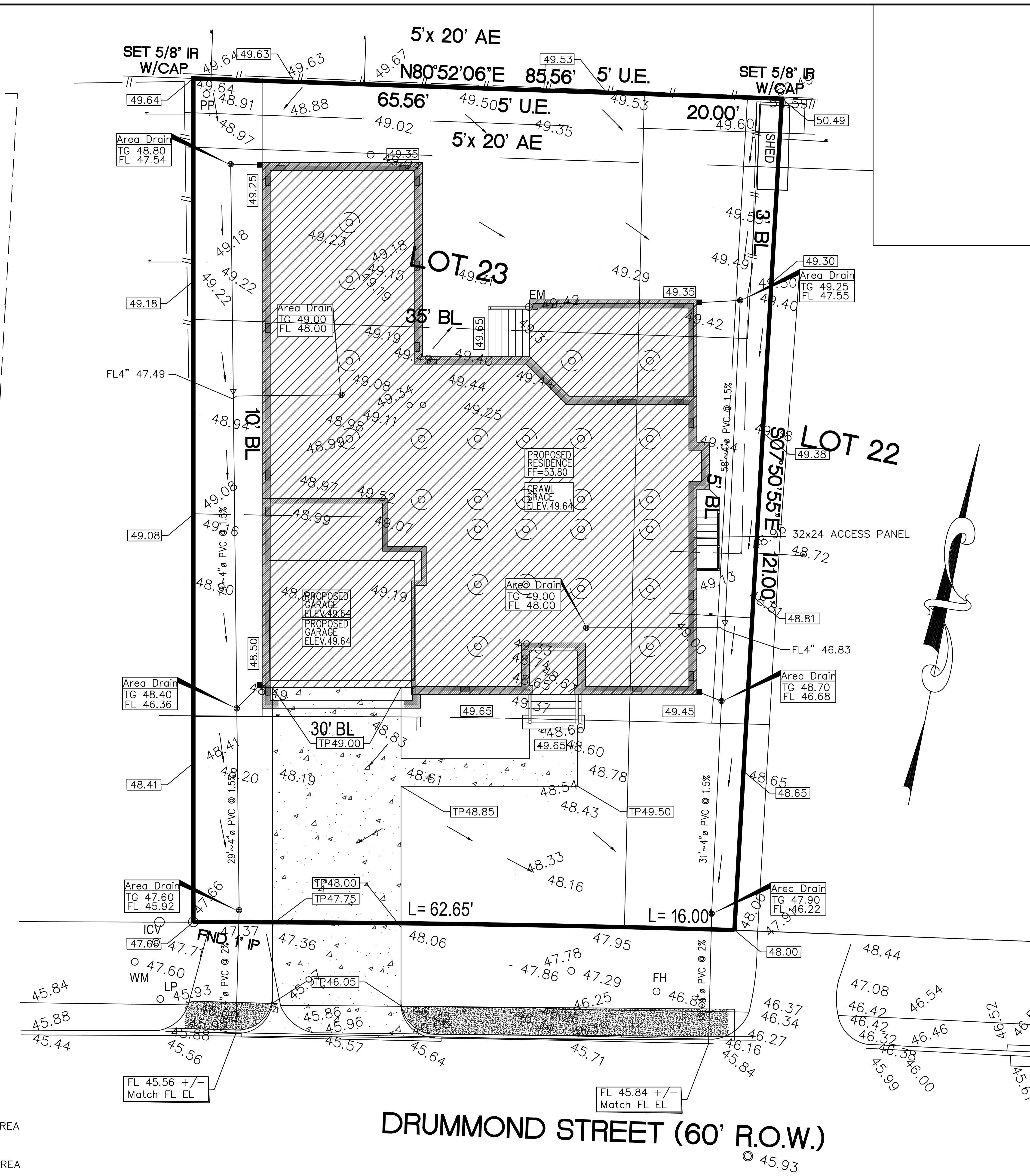
DA or Node Number	DA or Node Number	Area (Acres)	C	Sum C*A	Time conc T_c	Intencity (I) (IN/HR)	Q (cfs)	T/C	Pipe Length (FT)	Pipe DIA (IN)	Pipe Slope	Manning (n)	Design Capacity Q (cfs)	Design Velocity (V) (ft/sec)	FALL (FT)	MH Drop (FT)	Flow Line Elev. Upstream (FT)	Flow Line Elev. Downstream (FT)	Actual Velocity (fps)	HGL SLOPE	Change in Head (FT)	ELEV. HYD GRAD Upstream	ELEV. HYD GRAD Downstream	Nat. Ground Upstream	Nat. Ground Downstream
1	2	0.032	0.52	0.017	20.44	4.19	0.069	20.44	79	4	1.50%	0.011	0.28	3.16	1.185	0	47.54	46.36	0.80	0.04%	0.03	45.95	45.92	48.80	48.40
2	3	0.039	0.52	0.037	20.64	4.17	0.154	20.64	29	4	1.50%	0.011	0.28	3.16	0.435	0	46.36	45.92	1.76	0.06%	0.02	45.92	45.90	48.40	47.60
3	OUTFALL	0.028	0.52	0.052	20.33	4.20	0.217	20.33	18	4	2.00%	0.011	0.32	3.65	0.36	0	45.92	45.56	2.48	0.08%	0.01	45.90	45.89	47.60	-
4	5	0.056	0.52	0.029	21.01	4.14	0.120	21.01	58	4	1.50%	0.011	0.28	3.16	0.87	0	47.55	46.68	1.38	0.05%	0.03	46.24	46.21	49.25	48.70
5	6	0.045	0.52	0.053	20.80	4.16	0.220	20.80	31	4	1.50%	0.011	0.28	3.16	0.465	0	46.68	46.22	2.52	0.07%	0.02	46.21	46.19	48.70	47.90
6	OUTFALL	0.030	0.52	0.068	20.38	4.20	0.287	20.38	19	4	2.00%	0.011	0.32	3.65	0.38	0	46.22	45.84	3.29	0.09%	0.02	46.19	46.17	47.90	-

CRAWL SPACE AREA
3449 SQ. FT.

REQUIRED: 23 SQ. FT. VENT AREA
PROVIDED: 14 (8"X 16") SUPER VENTS
200 SQ. FT. COVERAGE EACH
2800 SQ. FT. TOTAL COVERAGE

ENCLOSED GARAGE AREA
642 SQ. FT.

REQUIRED: 642 SQ. IN. (4.45 SQ. FT.) VENT AREA
PROVIDED: 2 (8"X 16") SUPER VENTS
200 SQ. FT. COVERAGE EACH
400 SQ. FT. TOTAL COVERAGE



coverage calculation:

LOT AREA	9,979	SQ. FT.
HOUSE PAD	4091	SQ. FT.
WALK AND DRIVEWAY	787	SQ. FT.
POOL DECKING	500	SQ. FT.
TOTAL PAD (IMPERVIOUS)	5378	SQ. FT.
LOT COVERAGE (65% MAX.)	53.89	%

DRAINAGE CALCULATIONS

3730 DRUMMOND STREET,
HOUSTON, TX, 77025

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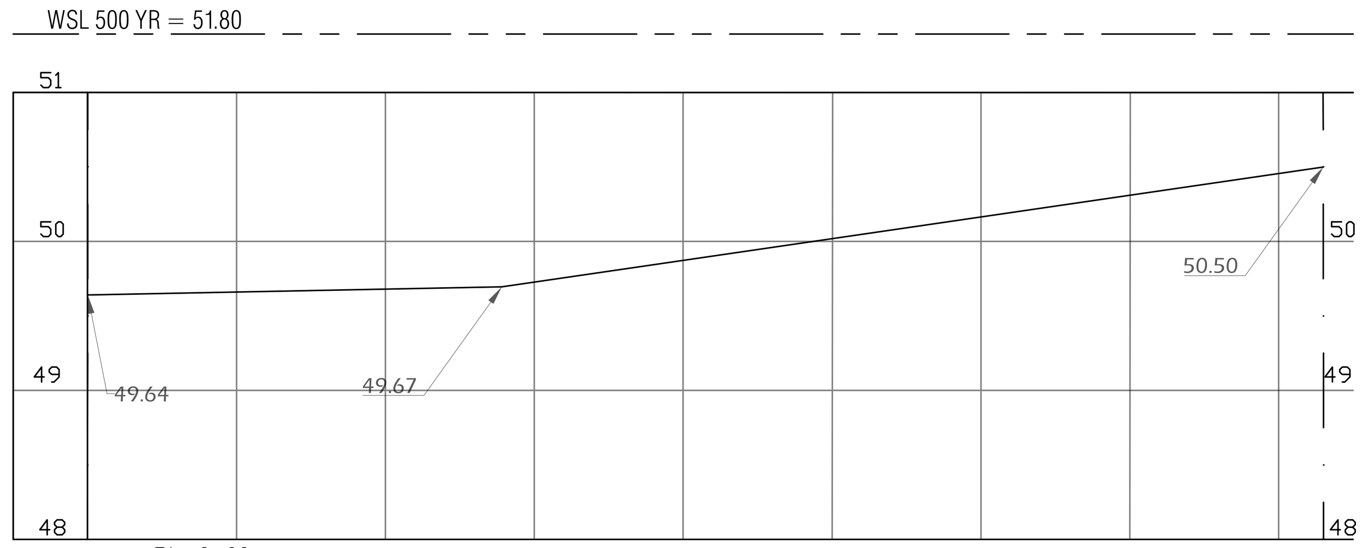
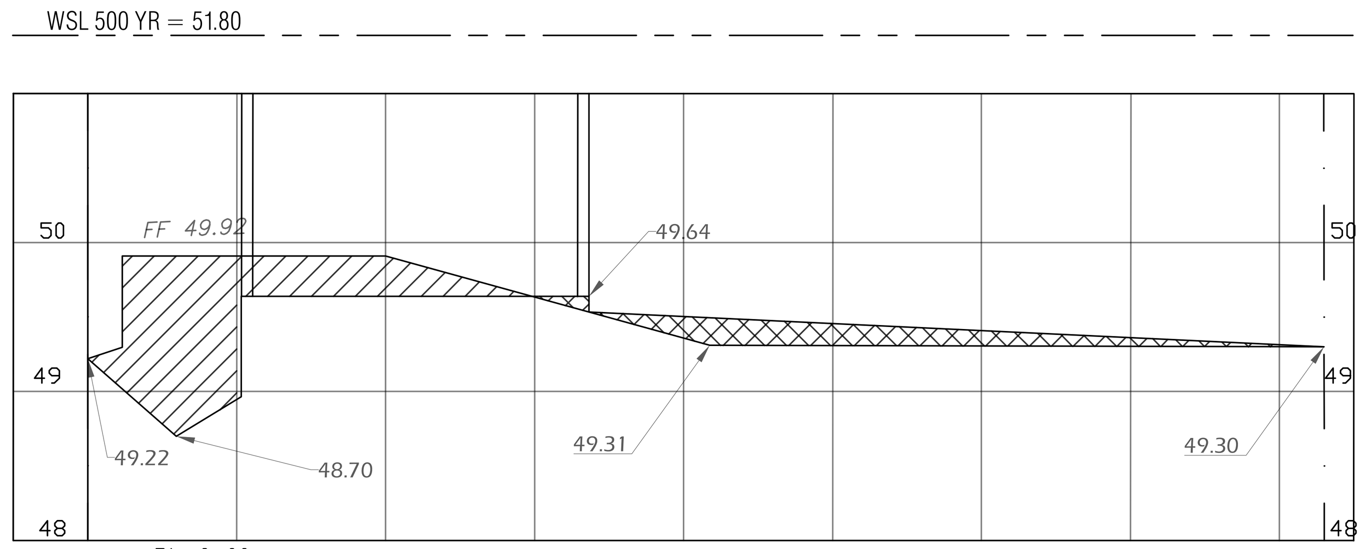
STATE OF TEXAS
SIAMAK FARIABI
57035
LICENSED PROFESSIONAL ENGINEER
01/31/2023

PROJECT:	
PROJECT NO.:	
DATE:	08/29/2022
REVISION:	
REVISION:	
DRAWN:	cns
SHEET NO.:	

C.001.01



SECTION E–E



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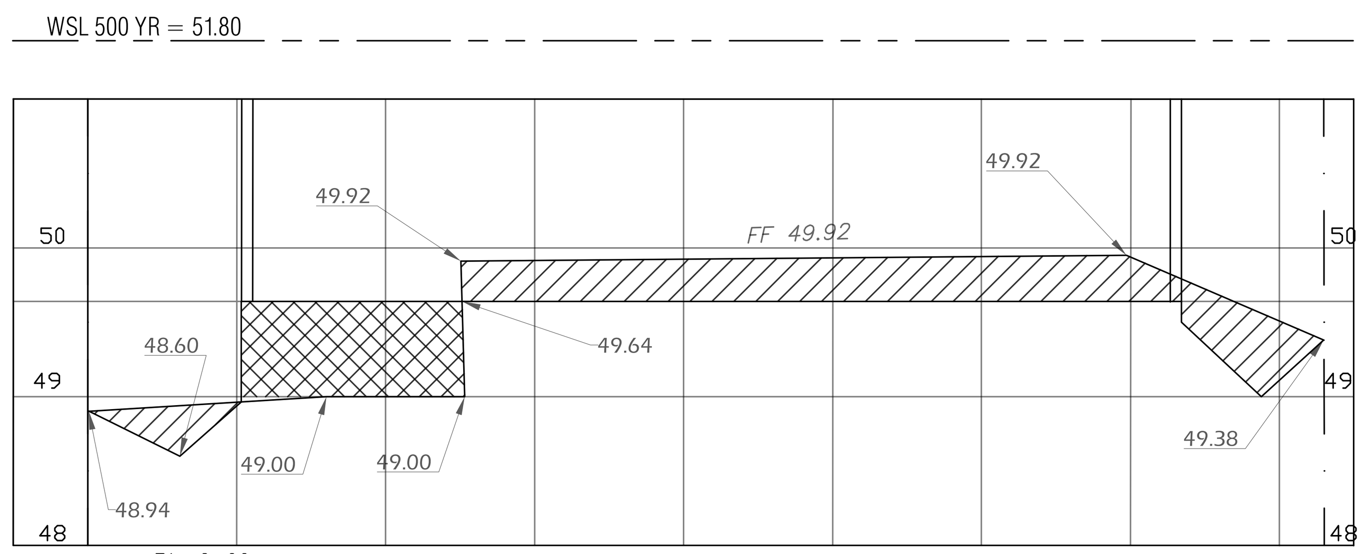

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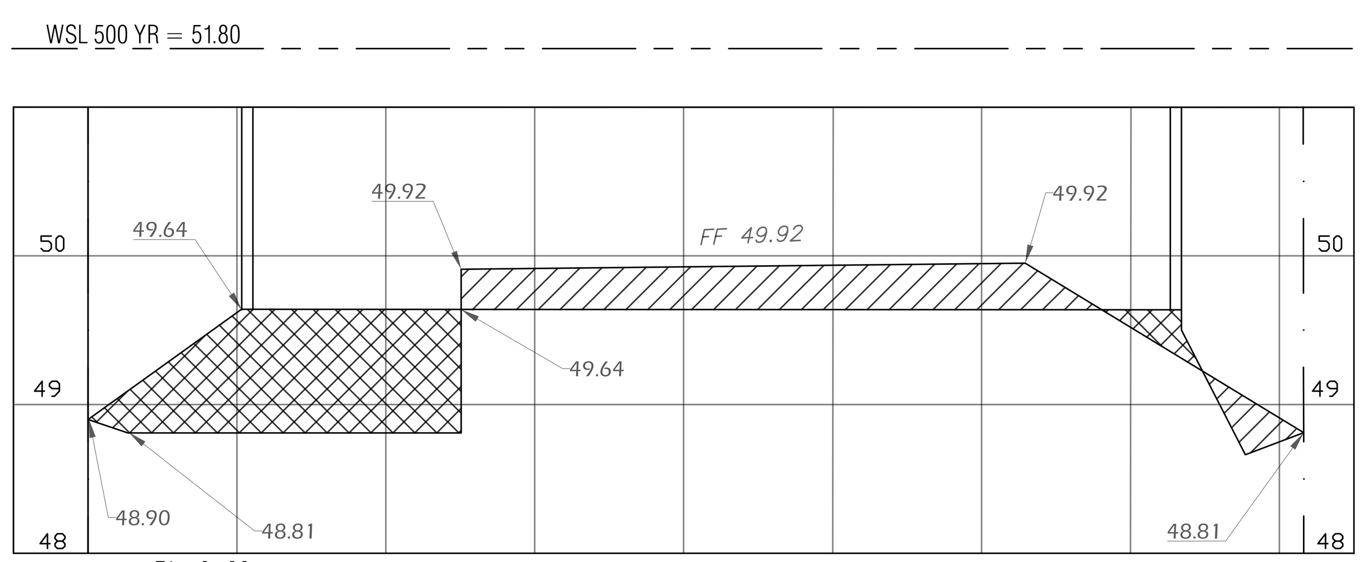

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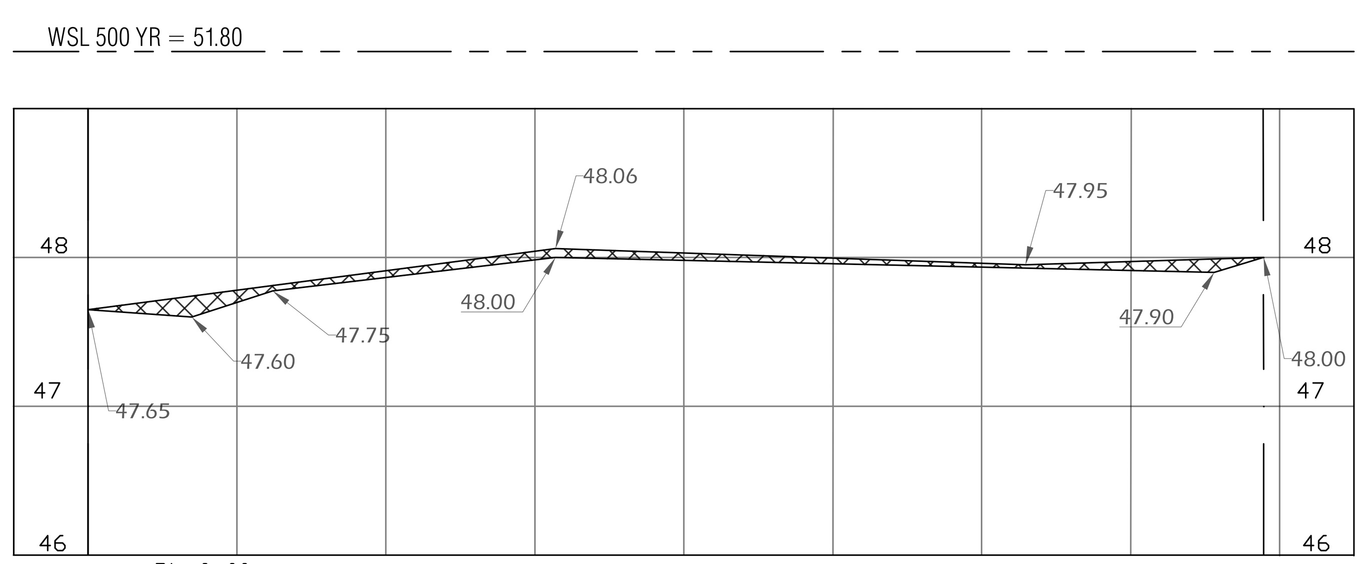


SECTION A–A

FILL MITIGATION

SCALE: 1"=10' H: 1"=1'V

PROPOSED CUT TO OFFSET FILL MITIGATION

Section	Distance (FT)	Cut Area (CU. FT)	Fill Area (CU. FT.)	Avg Cut Area (CU. FT.)	Avg Fill Area (CU. FT.)	Cut Vol (CU. FT.)	Fill Vol (CU. FT.)
A		0	4				
	48			6.6	10.9	(317)	523
B		13.2	17.8				
	25			16.1	13.65	(403)	341
C		19	9.5				
	22			15.75	7.1	(347)	156
D		12.5	4.7				
	29			6.25	2.35	(181)	68
E		0	0				
				TOTAL (CUT/FILL)		(1247)	1089
				NET (CUT/FILL)		(158)	C.Y.

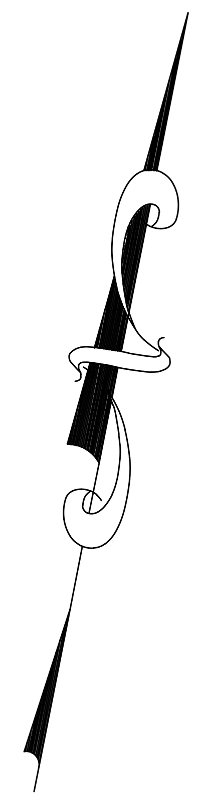
CRAWL SPACE WALLS			CRAWL SPACE PIERS		
WALL THICKNESS	12.00	INCHES	12" Pier section Area	0.79	sq. Ft
WALL LENGTH	335	L.F.	# od Piers	25	L.F.
AREA	335	S.F.	AREA	20	S.F.
500 YEAR FLOOD PLAI	51.80	FT.	500 YEAR FLOOD PLAI	51.80	FT.
GRADE ELEVATION	49.64	FT.	GRADE ELEVATION	49.64	FT.
DEPTH OF WALL IN FL	2.16	FT.	DEPTH OF PIER IN FLC	2.16	FT.
(CUT)/FILL VOLUME	724	CU. FT.	(CUT)/FILL VOLUME	43	CU. FT.

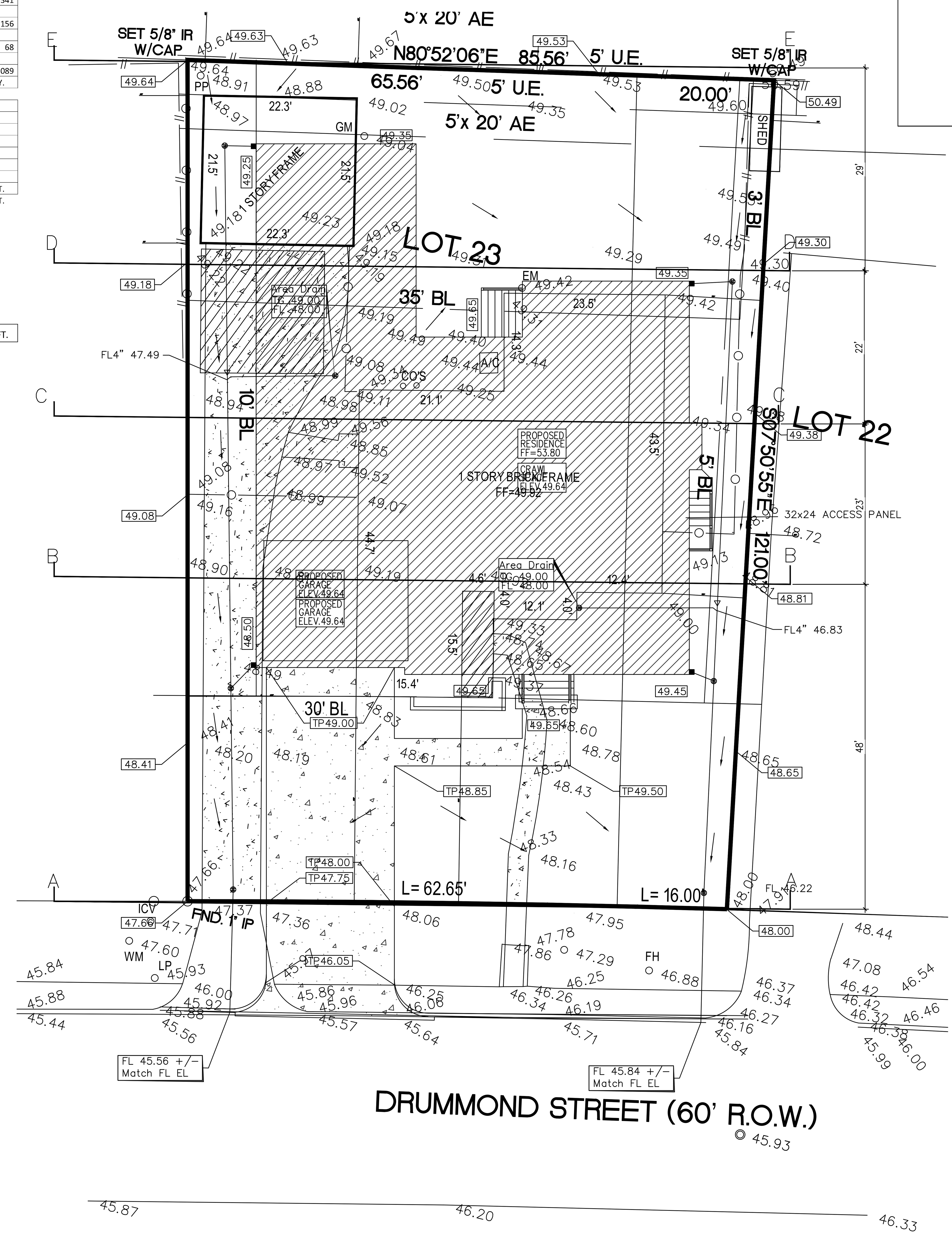
TOTAL FILL VOL. FROM WALLS AND PIERS 766 CU. FT.

EXISTING SPACE WALLS		
WALL THICKNESS	12.00	INCHES
WALL LENGTH	(343)	L.F.
AREA	(343)	S.F.
500 YEAR FLOOD PLAI	51.80	FT.
GRADE ELEVATION	49.64	FT.
DEPTH OF WALL IN FL	2.16	FT.
(CUT)/FILL VOLUME	(741)	CU. FT.

TOTAL CUT VOL. FROM EXISTING WALLS (741)

NET (CUT)/FILL (133) CU. FT.





PLAN

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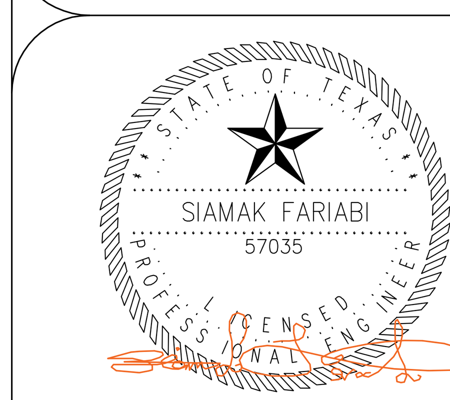


01/31/2023

PROJECT:

PROJECT NO.:

DATE: 08/29/2022

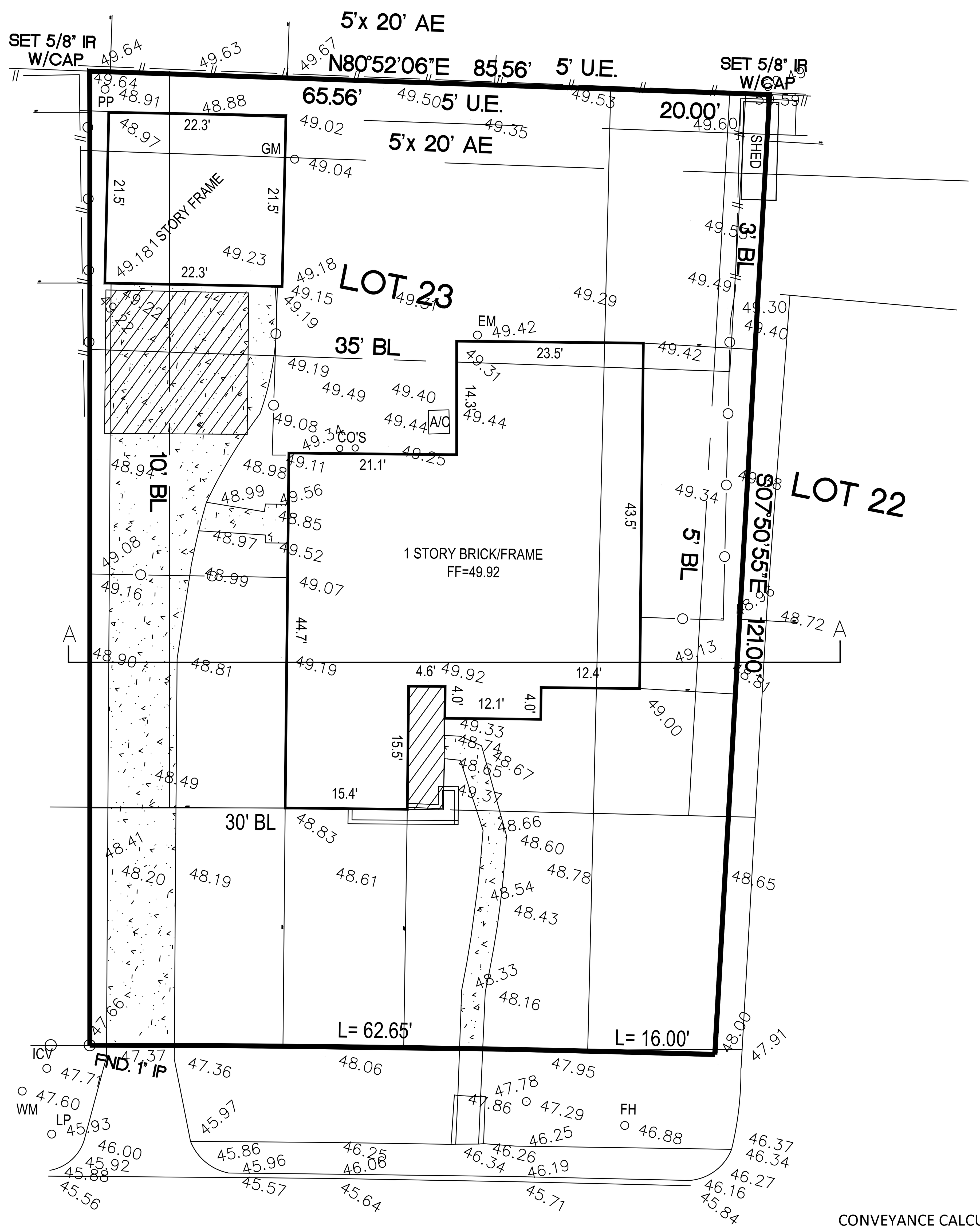
REVISION:

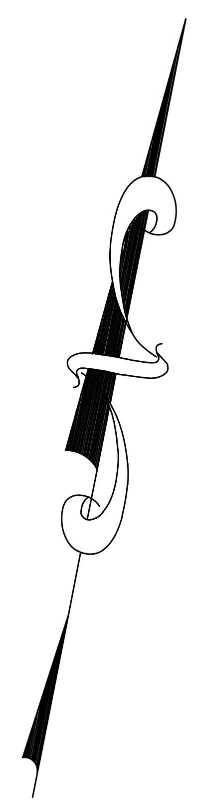
REVISION:

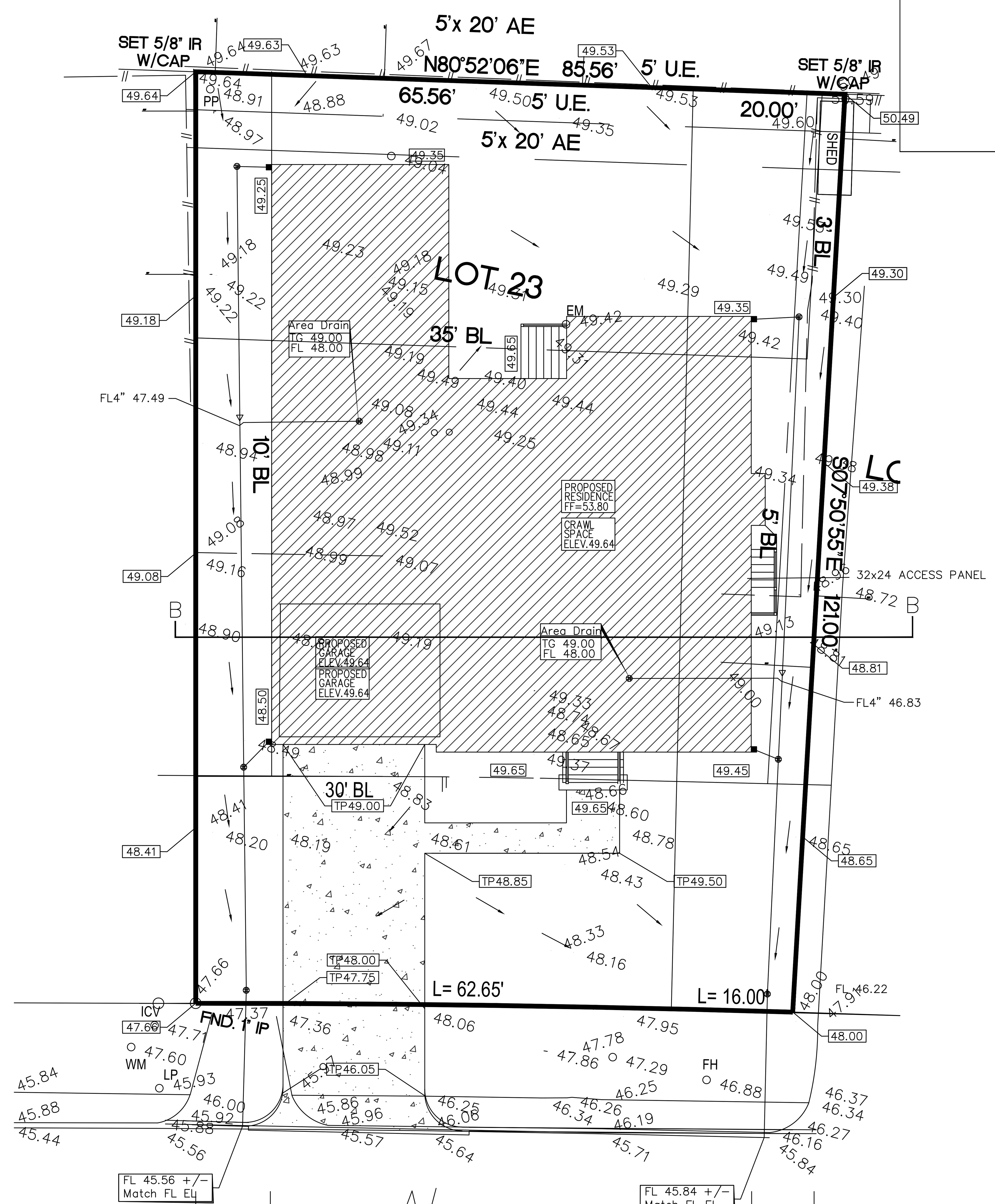
DRAWN: cns

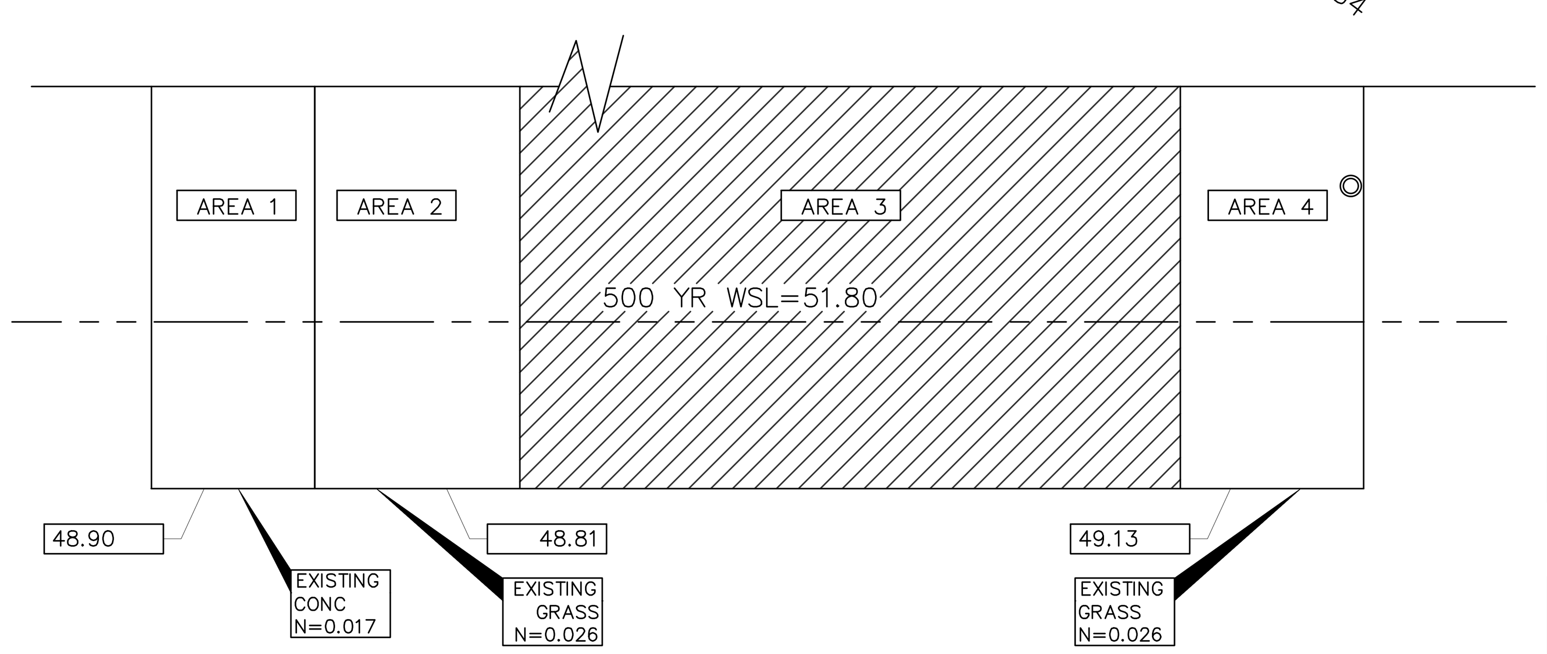
SHEET NO.:

C.001.02









EXISTING CONDITION – SECTION A–A

CONVEYANCE CALCULATIONS

$$\text{CONVEYANCE (K)} = \frac{1.49 \times A \times R^{2/3}}{N}$$

WHERE:
A = AREA
R = HYDRAULIC RADIUS
S = SLOPE

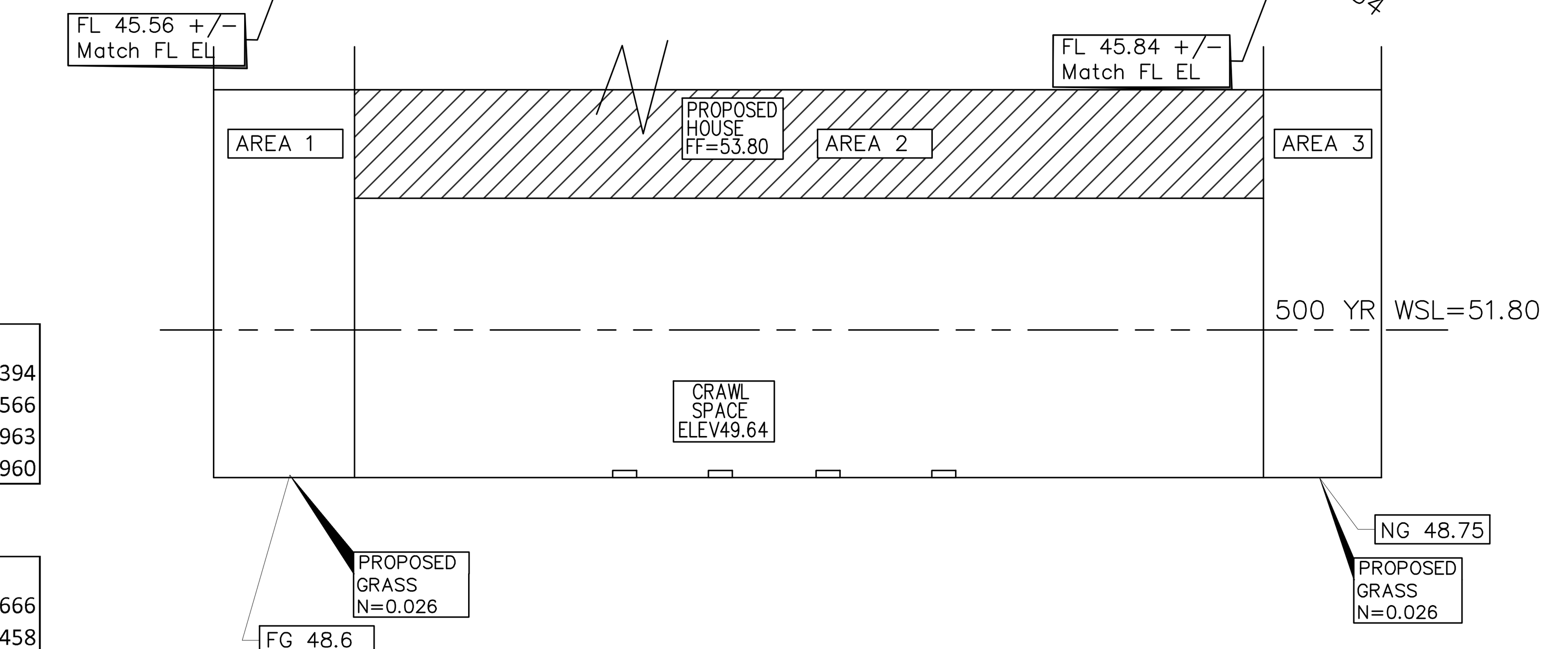
EXISTING CONDITION

PROFILE AREA	SURFACE DESCRIPTION	N	A	R	K
1	CONCRETE	0.017	32.45	1.9201	4394
2	GRASS	0.026	39.2	2.0000	3566
3	GRASS	0.026	33.6	1.9091	2963
	TOTAL				7960

PROPOSED CONDITION

PROFILE AREA	SURFACE DESCRIPTION	N	A	R	K
1	GRASS	0.026	32.2	2.8000	3666
2	CONCRETE	0.017	14.24	0.2225	458
3	GRASS	0.026	33.6	2.8000	3825
	TOTAL				7950

TOTAL CONVEYANCE CHANGE =		-0.13%
CONVEYANCE OR IS LESS THAN +/-0.5%		



PROPOSED CONDITION – SECTION B–B

3730 DRUMMOND STREET,
HOUSTON, TX, 77025

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ENGINEERING, L.L.C.
MACK FARIABI, P. E.
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STATE OF TEXAS
SIAMAK FARIABI
57035
LICENSED PROFESSIONAL ENGINEER
01/31/23

PROJECT:

PROJECT NO.:

DATE: 08/29/2022

REVISION:

REVISION:

DRAWN: cns

SHEET NO.:

C.001.03

USE ARCHITECTURAL DRAWINGS TO SET FORMS

TYPICAL EXTERIOR GRADE BEAM

PROVIDE 16"x 24" GRADE BEAM REINF. W/ 3– #5 CONT. TOP AND BOTTOM W/ #3 CLOSED TIES.

TYPICAL INTERIOR GRADE BEAM

PROVIDE 12"x 24" GRADE BEAM REINF. W/ 2– #5 CONT. TOP AND BOTTOM W/ #3 CLOSED TIES.

SEE DETAILS FOR DEPTH OF GRADE BEAM AND ADDITIONAL INFORMATION

SITE DRAINAGE NOTE

THE FOUNDATION IS A LOAD CARRYING SYSTEM FOR STRUCTURAL PURPOSES ONLY & IS NOT INTENDED TO ON THE SITE. DRAINAGE DESIGN IS BEYOND SCOPE OF WORK OF THE STRUCTURAL ENGINEER OF RECORD. THE FOUNDATION DESIGN IS PREDICATED ON PROPER FINAL GRADING BY OTHERS TO ENSURE ADEQUATE DRAINAGE AND CONFORMANCE WITH THE STRUCTURAL FOUNDATION DETAILS.

FOUNDATION DESIGN NOTES

LOCATE BOTTOM OF FOOTINGS @ 12'–0" BELOW THE EXISTING GRADE. THE DESIGN SOIL BEARING CAPACITY AT THIS DEPTH IS 4375 PSF TOTAL LOAD AND 3500 PSF NET SUSTAINED LOAD BASED ON SOILS INVESTIGATION REPORT NUMBER 17G4234 PREPARED BY GEOSCIENCE. DATED JUL–2017.
FINAL GRADE IS GRADE ELEVATION FOLLOWING THE PLACEMENT OF FILL. PLACEMENT OF 24" COMPACTED SELECT FILL IS REQUIRED UNDER GARAGE FOUNDATION

SLAB NOTES

4 " THICK NORMAL WEIGHT CONCRETE. REINFORCE W/#3 @ 15" O/C EACH WAY PLACED 2" DOWN FROM TOP OF SLAB OVER 10 MIL VAPOR BARRIER OVER OVER COMPACTED FILL PREPARED IN ACCORDANCE WITH SOILS REPORT.

NOTES: PROVIDE # 5 CORNER BARS x 24" 24"
2 TOP & 2 BOTT. AT ALL GRADE BEAM DEAD–END INTERSECTIONS AND CORNERS.

TERMITE TREATMENT

TERMITE TREATMENT PROTECTION SHALL BE PROVIDED IN ONE OF THE FOLLOWING WAYS:

1. CHEMICAL TERMITICIDE TREATMENT
2. TERMITE BAITING
3. PRESSURE PRESERVATIVE–TREATED WOOD
4. NATURALLY DURABLE, TERMITE RESISTANT WOOD
5. PHYSICAL BARRIERS
6. COLD FORMED STEEL FRAMING

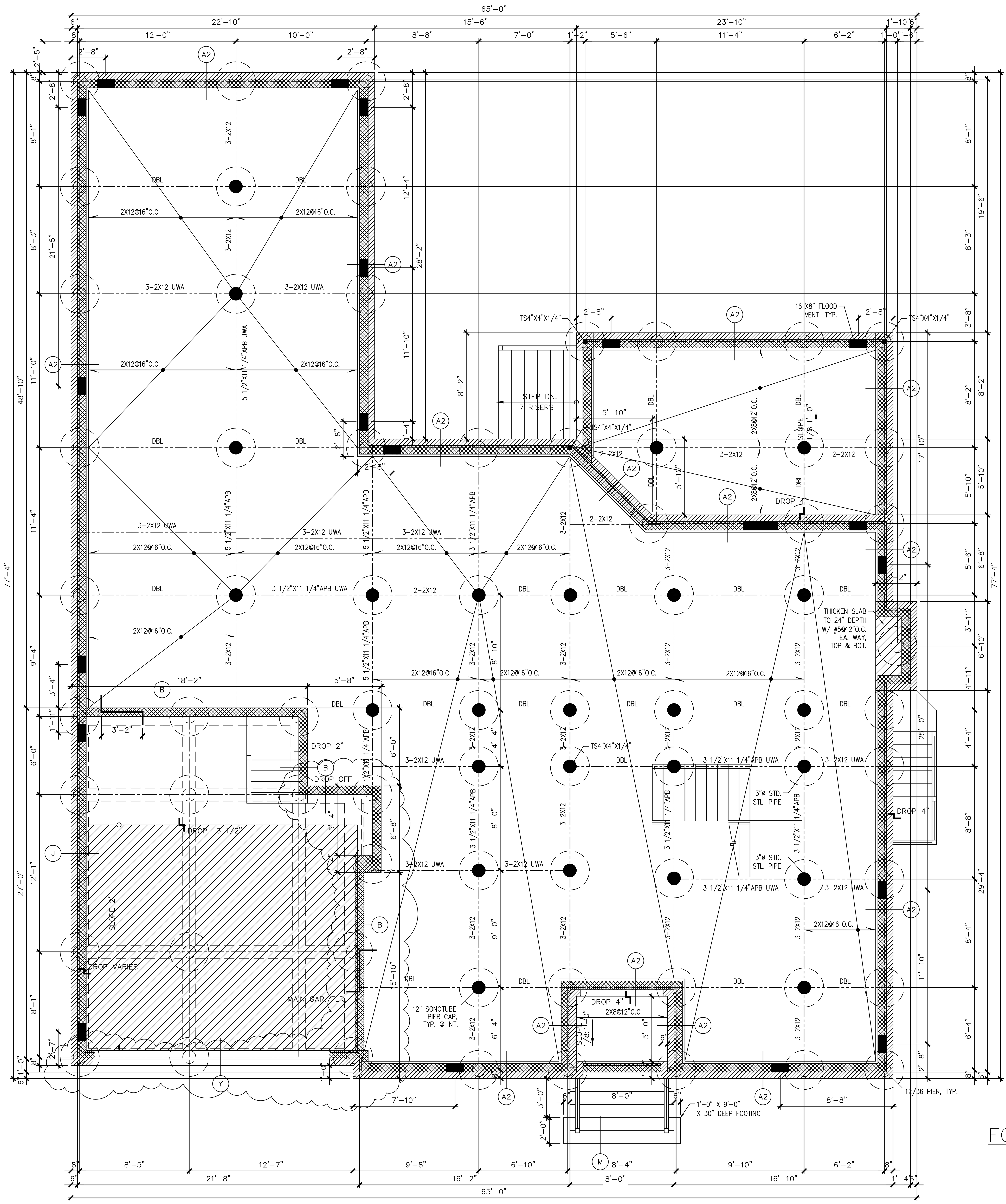
FLOOR FRAMING NOTES

1. FLOOR JOISTS – 2x12 @ 16" O.C NO.2 U.N.O
2. TYP. SHEATHING – 3/4" 48/24 APA RATED T & G GLUED & NAILED W/ 8d @ 6" EDGES & 10" FIELD (FOR 1 1/8" SHEATHING USE 10d NAILS)
3. ALTERNATE SHEATHING – 2 x 6 T & G DIAG. DECKING W/2 – 16d EA. SUPPORT
4. ALL BEAMS AND HEADERS SHALL BE SYP #2
5. PROVIDE 2 – 2x12 HEADERS AT ALL FIRST LEVEL OPENINGS U.N.O.
6. ALL BEAMS ARE FLUSH BEAMS U.N.O.
7. PROVIDE FULL BEARING UNDER ALL BEAMS CONTINUOUSLY TO FOUNDATION.
8. DL = 10 PSF LL = 40 PSF
DEFLECTION CRITERIA: LIVE LOAD L/360
TOTAL LOAD L/240

SEE ARCHITECTURAL FOR ALL NON–SPECIFIED SLAB DROPS AND SLOPES

VERIFY ALL DIMENSIONS WITH ARCHITECTURAL.

24X36@1/4"=1'–0"



FOUNDATION PLAN

SCALE: 1/4" = 1'–0"

3730 DRUMMOND ST.

HOUSTON, TEXAS 77025 HARRIS COUNTY
LOT 23 & TR 22A, BLOCK 27 – BRAES HEIGHTS, SEC. 9

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STATE OF TEXAS
SIAMAK FARIABI
57035
LICENSED PROFESSIONAL ENGINEER

02/01/2023

PROJECT:	3730 DRUMMOND
PROJECT NO.:	MFE22–193
DATE:	08/26/2022
REVISION:	
REVISION:	
DRAWN:	BPW
SHEET NO.:	S–1

GENERAL NOTES

1. GENERAL

A. These general notes shall apply to the structural drawings, unless otherwise shown or noted.
B. Unless otherwise indicated, all details of design, workmanship, and materials shall conform to the International Building Code, latest edition (I.R.C.) of the International Conference of Building Officials, with City of Houston Amendments.
C. Gravity loads: Roof DL – 10 PSF Clg DL – 5 PSF Floor DL – 10PSF
Roof LL – 20 PSF Clg LL – 10 PSF Floor LL – 40 PSF

D. Do not scale drawing.

2. FOUNDATION NOTES

A. See foundation plan for net total load and net sustained load soil bearing capacity, depth of footing, and Geotechnical Engineer Report number and author.
B. All foundation excavation to be carried to undisturbed material or placed in approved engineered fill. Excavations shall be free of loose material or water.
C. Over excavation of materials shall be backfilled with concrete.
D. All backfill around footings, behind walls, and under slab shall be compacted to not less than 95% relative density. See Soils Report for site preparation specifications.
E. Backfilling against foundation walls will not be permitted until the wall has reached 28 day strength. and all supporting structure is in placed.
F. Step footings at a ratio of one vertical to two horizontal, with a maximun vertical step of 2'–0" unless otherwise noted.
G. Waterproofing of foundation and retaining walls shall be the responsibility of the Owner or Contractor, and is not the responsibility of the Engineer.
H. Any unusual site conditions (e.g. loose fill, sub–surface water, etc.) shall be reported to the Engineer.
I. Concrete and reinforcing for drilled footings shall be placed inmediately after excavation.
J. All pipes through exterior grade beams shall be sleeved. All pipes shall be located at mid depth of grade beam. Size of sleeves shall not exceed 1/3 overall depth of grade beam. Spacing of sleeves shall not be closer than 3 diameters on center.

3. REINFORCED CONCRETE

A. Reinforced concrete shall conform to applicable requirements of the IRC and ACI Standard 318.
B. All concrete used in foundations and slabs on grade shall have a 28 day compressive strength of not less than 3000 PSF.
C. The maximun slump shall not exceed 5 inches.
D. Provide #3 @ 15" o.c. each way in all slabs on grade, placed 1 1/2" down from the top of slab, supported by chairs at 48" o.c. each way, unless noted otherwise.
E. Provide control joints in all exposed slabs on grade. The maximun spacing of control joints shall be 20'–0" o.c. unless noted otherwise.
F. Pour slab in strip pours, not in checkerboard pattern.
G. Provide vertical control joints in all concrete walls. The maximun spacing of control joints shall be 20'–0" o.c., unless noted otherwise. Cut alternate horizontal reinforcing bars, each face.
H. Additives containing calcium chloride shall be used.

4. REINFORCING STEEL

A. All reinforcing steel shall conform to ASTM A615 Grade 60 unless otherwise indicated, except #3 or smaller may be ASTM A615 Grade 40.
B. All reinforcing steel shall accurately located and adequqtely secured in position before and during placement of concrete.
C. All details of fabrication and installation of reinforcing steel shall be in accordance with the ACI Manual of Standard Practice.
D. Lap reinforcing bar splices 40 bar diameters, unless noted otherwise. Splice top bars at midspan. Splice bottom bars over supports.
E. Bend all horizontal beam and wall bars 40 bar diameters around all corners, unless noted otherwise.
F. Provide vertical and horizontal reinforcing bars in concrete and masonry walls to conform to the minimum provisions of ACI 318, Section 14.3, unless noted otherwise.
G. Provide the following minimum concrete cover over reinforcing steel:
Concrete cast against and permanently exposed to earth...........3"
Concrete exposed to earth or weather...1–1/2"
Concrete not exposed to weather or in contact with ground...3/4"

5. MASONRY

A. All concrete masonry units shall conform to ASTM C90 Grade N.
B. Mortar for concrete units shall conform to ASTM C279 Type S.
C. Grout for concrete masonry shall in accordance with U.B.C. Section 2403(d). Minimum 28 day compressive strength shall not be less than 2000 PSI.
D. All walls shall be grouted solid. Grout shall be vibrated into place and shall be placed in lifts not exceeding 4 feet unless appropiate cleanout holes are provided in accordance with the U.B.C.
E. Provide bond breaker at masonry bearing of all cast–in–placed slabs with building paper or as otherwise detailed.

6. MISCELLANEOUS STRUCTURAL STEEL

A. All miscellaneous structural steel plates and sections shall conform to ASTM A36.
B. Structural steel pipe shall conform to ASTM A53, Type E or S, Grade B or ASTM 501.
C. Structural steel tubing shall conform to ASTM A500 Grade B
D. All detailing shall conform to current AISC sPECIFICATIONS.
E. All welding shall conform shall conform to Current American Welding Society specifications for materials being welded and be performed by certified welders.
F. All bolts shall be unfinished ASTM A307, unless noted otherwise.
G. All structural steel and miscellaneous iron not encased in concrete shall receive one shop coat of approved primer paint.

7. WOOD FRAMING

A. All reinforcing steel shall conform to ASTM A615 Grade 60 unless other indicated, except #3 or smaller may be ASTM A615 Grade 40.
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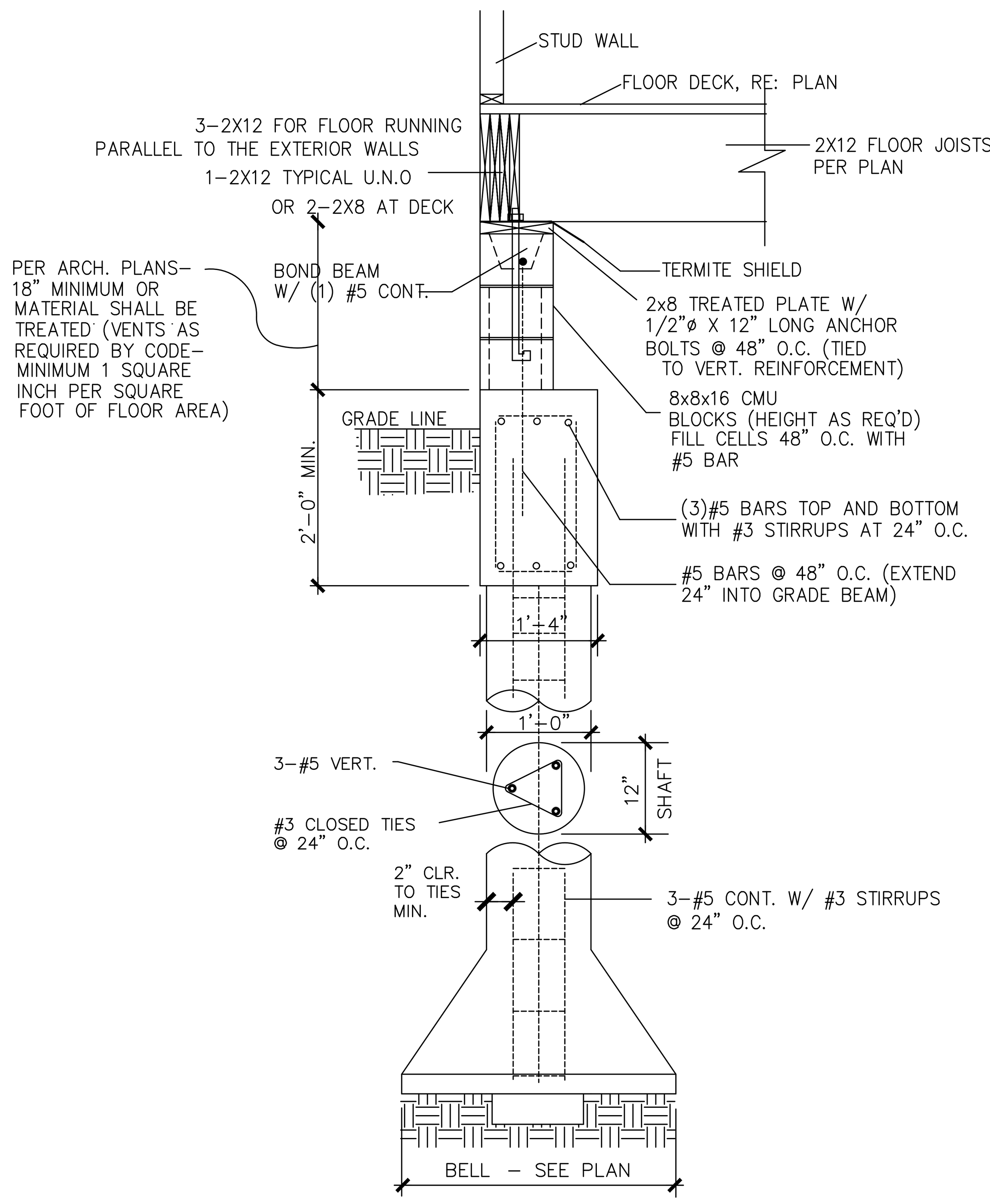
A. All framing lamber shall be Southern Yellow Pine #2 or better unless noted otherwise on plan. Studs and plates may be construction grade material. 6X material shall be Southern Yellow Pine #1 SR or better.
B. Plywood sheating shall be manufactured with exterior glue in accordance with requirements for the UBC and American Plywood Association Standard PS1–83. The grade, thickness, and panel identification index shall be as shown on the plans.
C. All glue laminated beams shall be stress grade 24F–V3 unless noted otherwise on the plans.
D. All framing clips and devices shall be Simpson "Strong Tie" or equivalent.
E. Minimun nailing for connections not indicated on the plans shall be in accordance with Table 25Q of the U.B.C.
F. Truss joints shall be manufactured and installed in accordance with the requirements of the manufacturer.
G. All nails shall common, unless noted otherwise.
H. Posts used for beam or girder supports shall have full bearing for the foundation, unless noted otherwise.
I. Timber sizes prescribed are minimun. Larger sizes may be substituted. Detailed connections may required modification if substitutions are made.
J. Flush framed wood joists shall be attached to supporting beams with steel joist hangers.

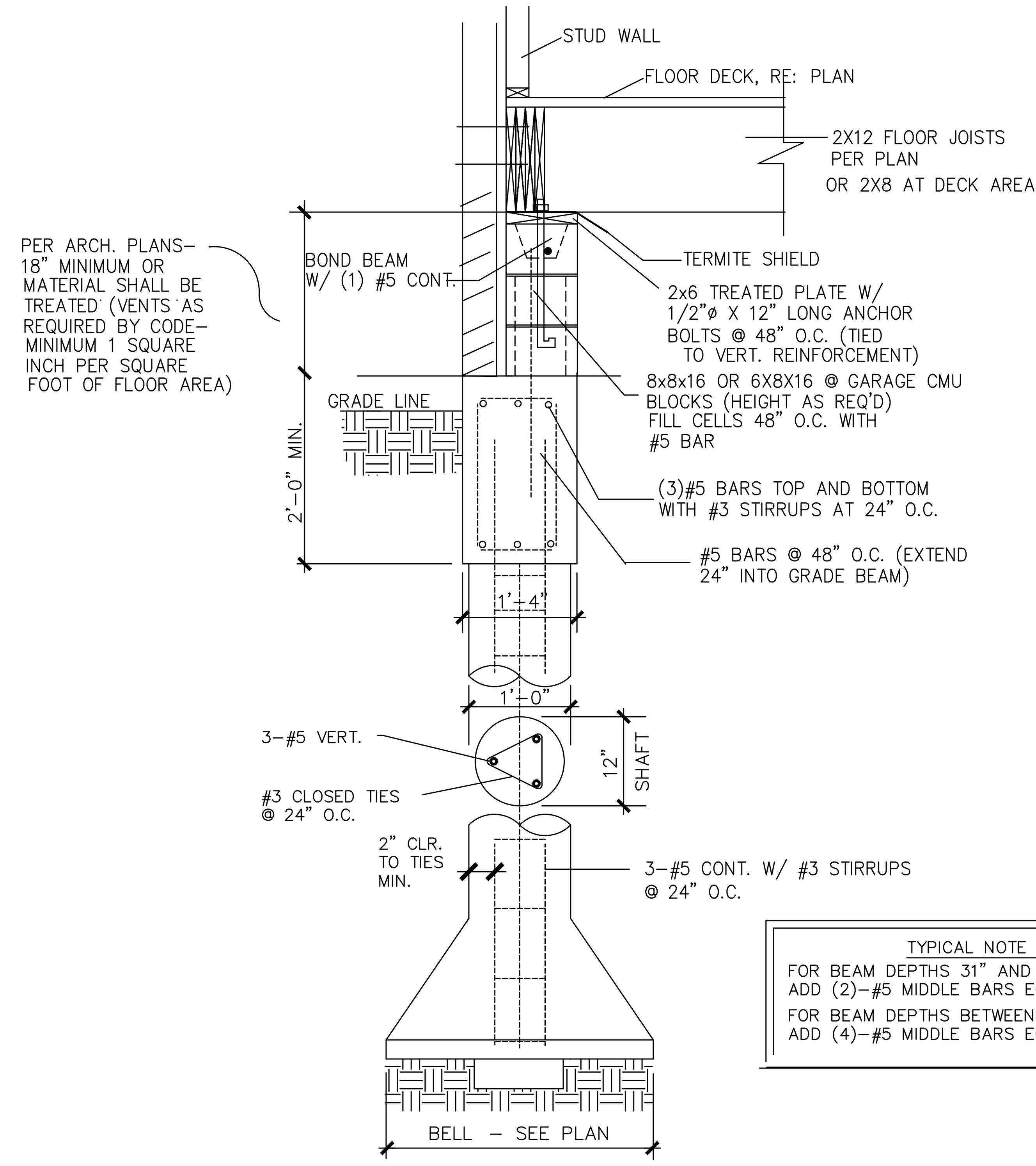
8. MISCELLANEOUS STRUCTURES

The following items have not been reviewed by the Structural Engineer of Record, Mack Fariabi, for load carrying capacity, stability, resistance to lateral loads (including wind and seismic), or connections to support elements, temporary construction bracing, formwork, chimneys, stairs, built–in cabinet work, and fixtures.



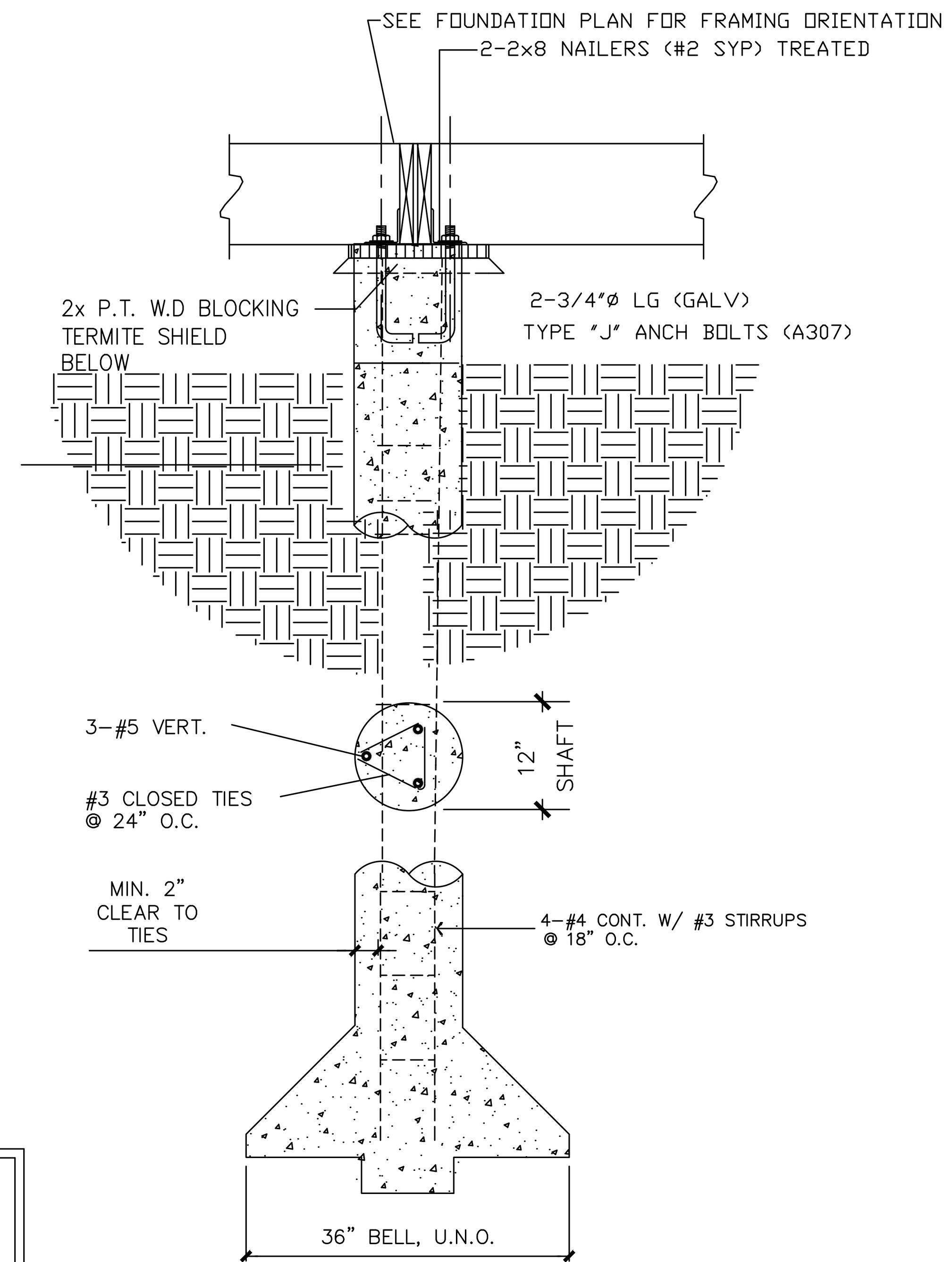
A2 TYPICAL PERIMETER FOOTING
SCALE: 3/4" = 1'–0"

— 4" THICK NORMAL WT.

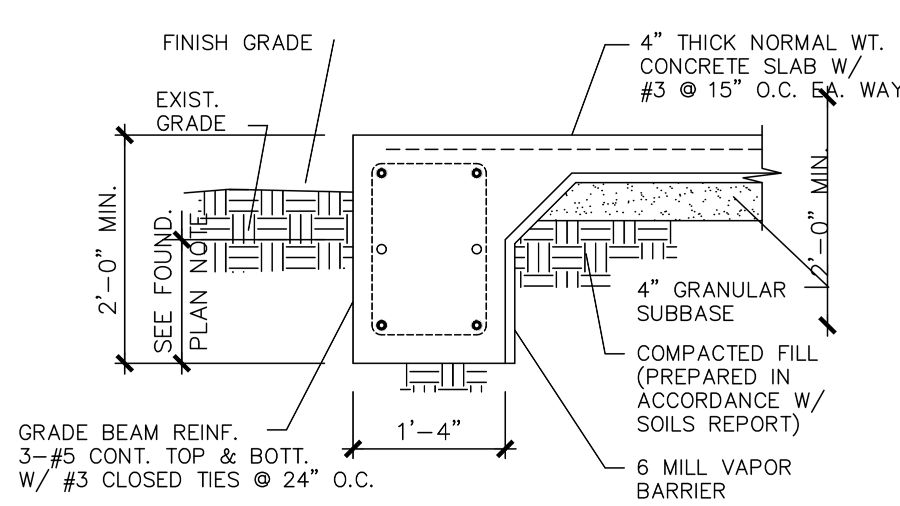


A1 TYPICAL PERIMETER FOOTING
SCALE: 3/4" = 1'–0"

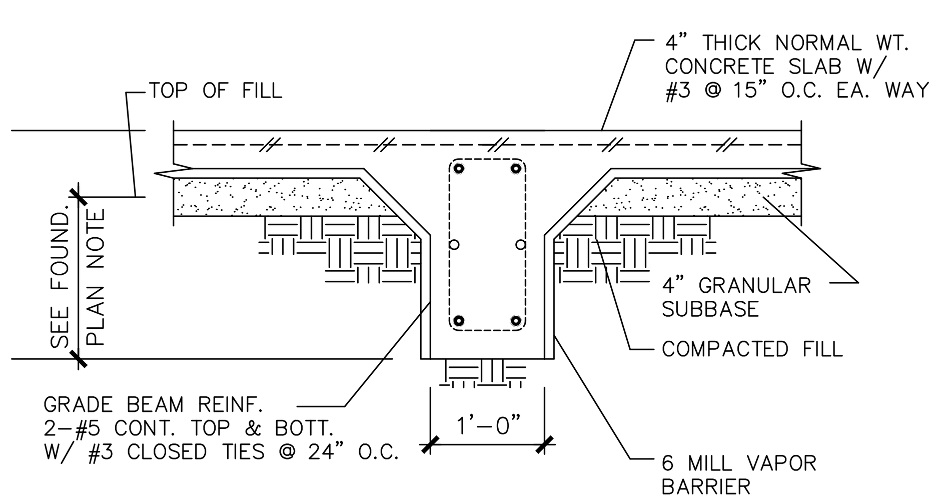
TYPICAL NOTE
FOR BEAM DEPTHS 31" AND 40"
ADD (2)–#5 MIDDLE BARS EQUALLY SPACED
FOR BEAM DEPTHS BETWEEN 41" AND 48"
ADD (4)–#5 MIDDLE BARS EQUALLY SPACED



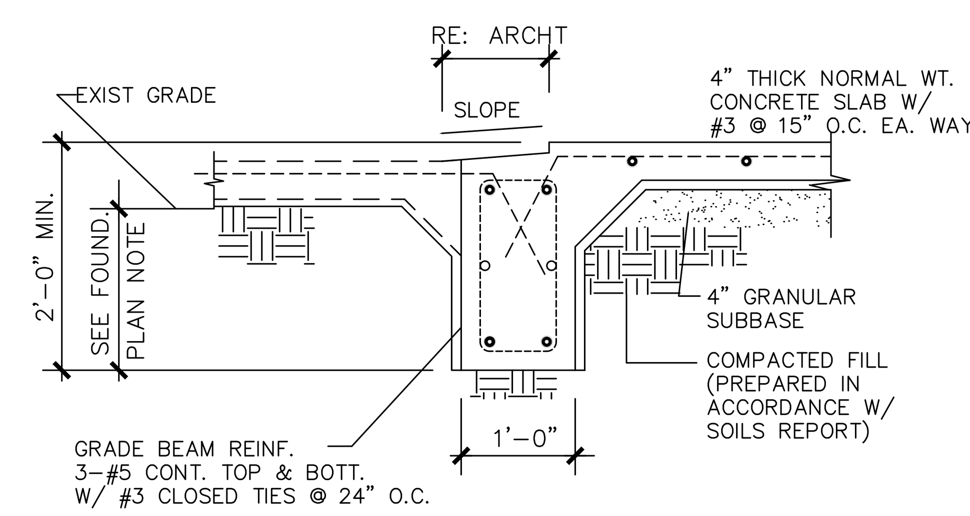
A3 TYPICAL PERIMETER FOOTING
SCALE: 3/4" = 1'–0"



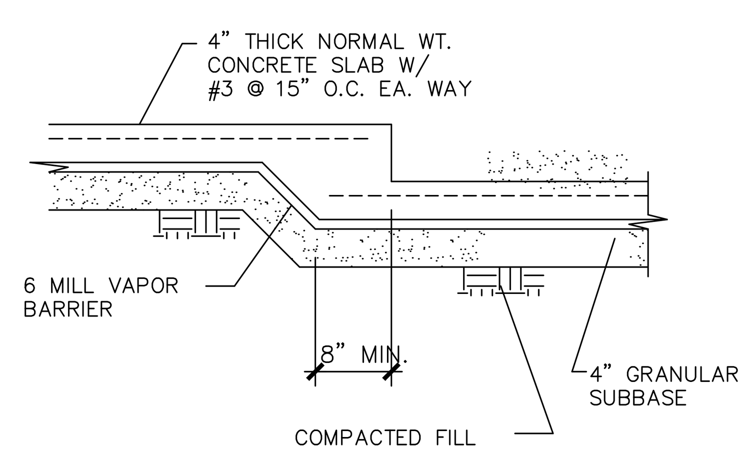
Q SCALE: 3/4" = 1'–0"



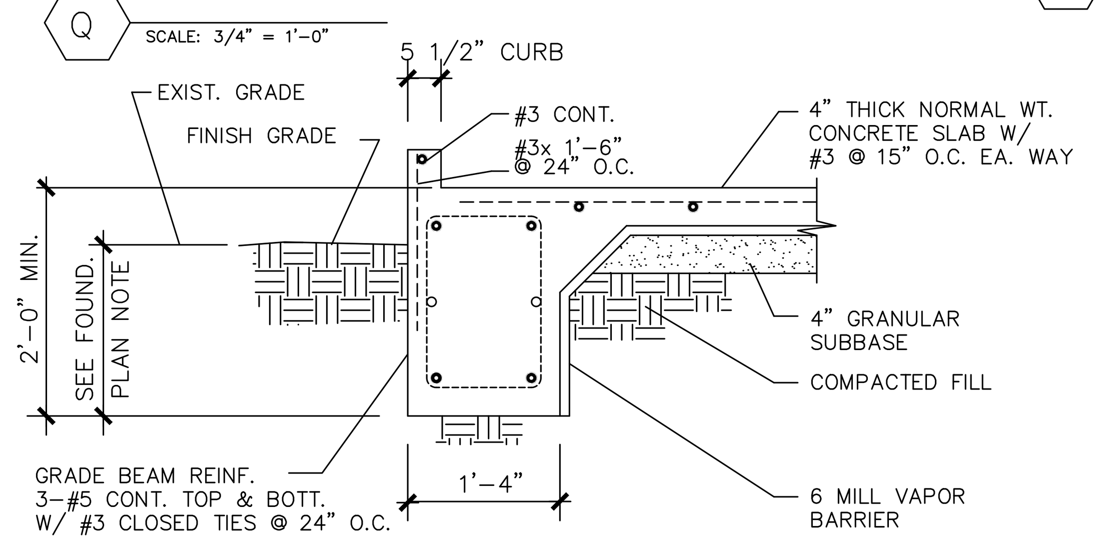
H SCALE: 3/4" = 1'–0"



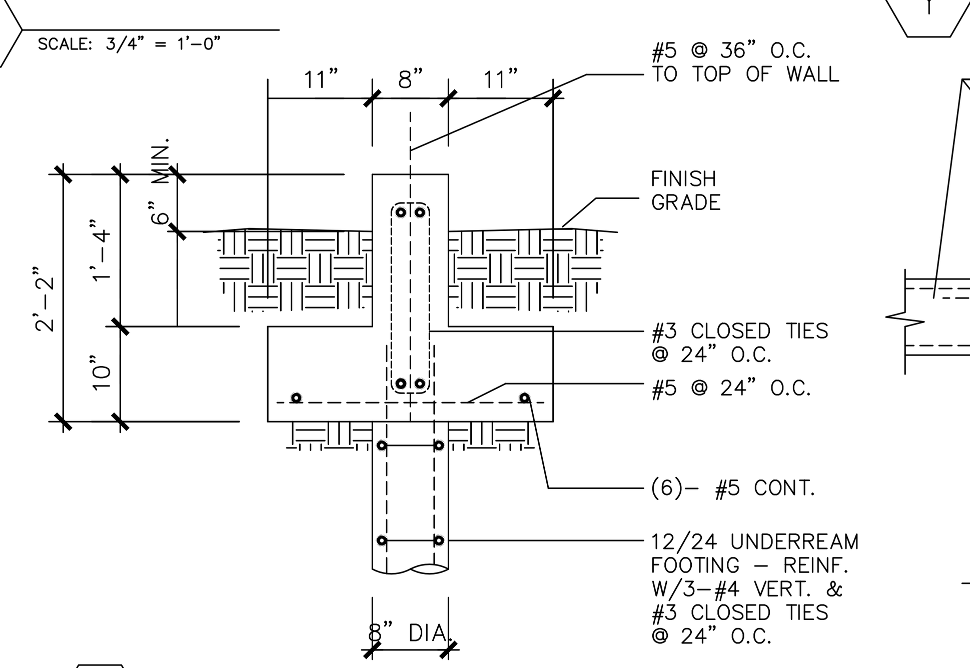
Y SCALE: 3/4" = 1'–0"



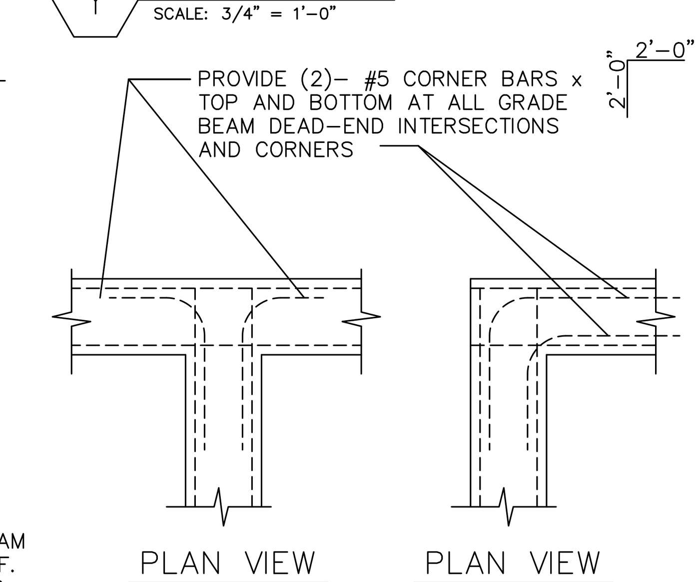
K SCALE: 3/4" = 1'–0"



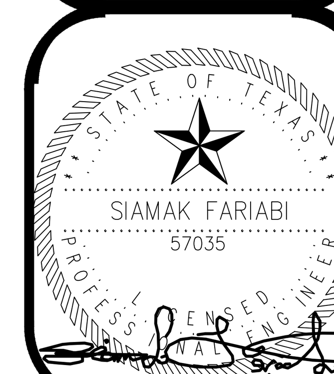
F SCALE: 3/4" = 1'–0"



M SCALE: 3/4" = 1'–0"



S SCALE: 3/4" = 1'–0"



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D. Do not scale drawing.

2. FOUNDATION NOTES

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C. Structural steel tubing shall conform to ASTM A500 Grade B
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F. All bolts shall be unfinished ASTM A307, unless noted otherwise.
G. All structural steel and miscellaneous iron not encased in concrete shall receive one shop coat of approved primer paint.

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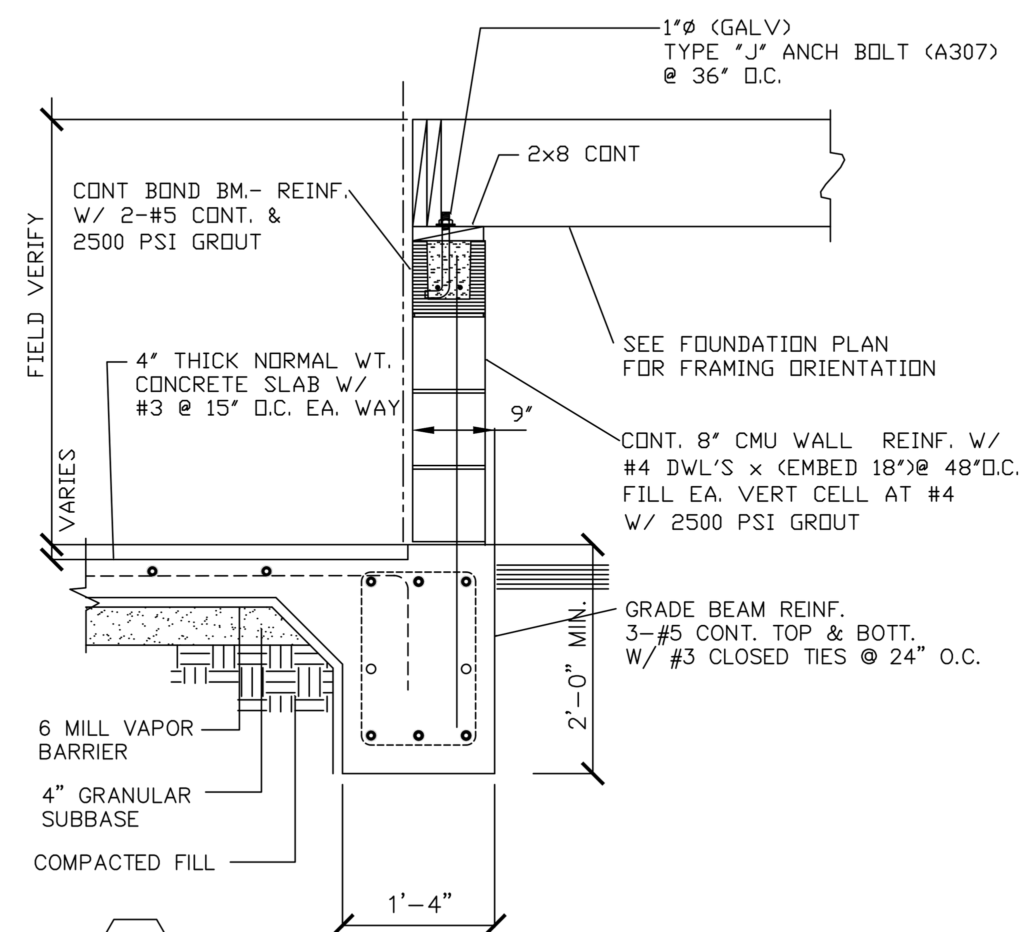
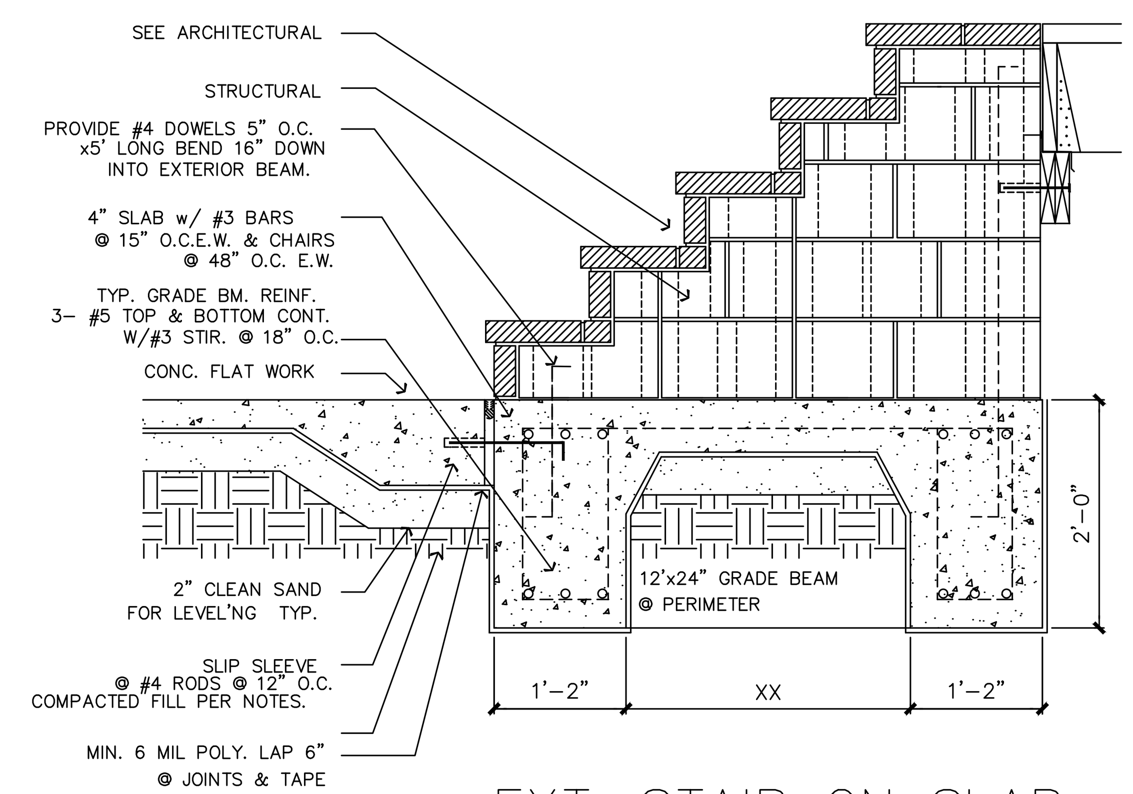


B

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



EXT. STAIR ON SLAB
1" = 1'-0" BRICK TREADS

City of Houston

STATE OF TEXAS
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S-2.1

STRUCTURAL ABBREVIATIONS

ARCH.	ARCHITECTURAL
ASI	ALPHA STRUCTURES INCORPORATED
APB	ANTHONY POWER BEAM
BLDG.	BUILDING
BOTT.	BOTTOM
C.J.	CEILING JOIST
CNTLVRD.	CANTILEVERED
CONT.	CONTINUOUS
D.J.	DECK JOIST
DIAG.	DIAGONAL
DWG.	DRAWING
D.B.	DROP BEAM
EA.	EACH
F.B.	FLUSH BEAM
F.J.	FLOOR JOIST
G & N	GLUED AND NAILED
GL.	GLULAM
HDR.	HEADER
HORIZ.	HORIZONTAL
LLV	LONG LEG VERTICAL
LVL	LAMINATED VENEER LUMBER (MICROLAM)
MANUF.	MANUFACTURED
O.C.	ON CENTER
O.C.E.W.	ON CENTER EACH WAY
P.T.	PRESSURE TREATED
PLF	POUNDS PER LINEAR FOOT
PSL	PARALLEL STRAND LUMBER (PARALLAM)
RBS	ROOF BRACING SUPPORT
RE:	REFER TO
R.J.	ROOF JOIST
S.B.C.	SOUTHERN BUILDING CODE
STD.	STANDARD
STL.	STEEL
S.Y.P.	SOUTHERN YELLOW PINE
T & B	TOP & BOTTOM
T & G	TONGE AND GROOVED
T.J.	TRUSS JOIST
T.J.I.	TRUSS JOIST INTERNATIONAL
U.W.A.	UNDER WALL ABOVE
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
&	AND
@	AT
ø	DIAMETER
#	NUMBER, POUNDS
?	PLATE
W/	WITH

FLUSH BEAM TO BEAM CONNECTION NOTES

1. ALL FLUSH WOOD BEAM TO WOOD BEAM CONNECTIONS SHALL BE SIMPSON HGB OR GHLT HANGERS.
2. ALL FLUSH STEEL BEAM TO STEEL BEAM CONNECTIONS SHALL BE 2- L 4x4x1/4x0-9" W/ 3-3/4 DIA. AB THROUGH BOLTS IN EACH

2X6 @ 16" O.C. TYPICAL (U.N.O.)

RBS = ROOF BEAM SUPPORT

STUD WALL FRAMING NOTE

1. FRAME EXTERIOR LOAD-BEARING STUD WALLS WITH UNBRACED HEIGHT GREATER THAN 10'-0" WITH 2x6 STUDS @ 16" O.C.
2. FRAME INTERIOR LOAD-BEARING STUD WALLS WITH UNBRACED HEIGHT GREATER THAN 10'-0" WITH 2-2x4 STUDS @ 16" O.C.
3. PROVIDE 2x6 STUDS AT 16" O.C. OR 2-2x4 STUDS AT 16" O.C. FOR WALLS SUPPORTING MORE THAN ONE FLOOR.

FLOOR FRAMING NOTES

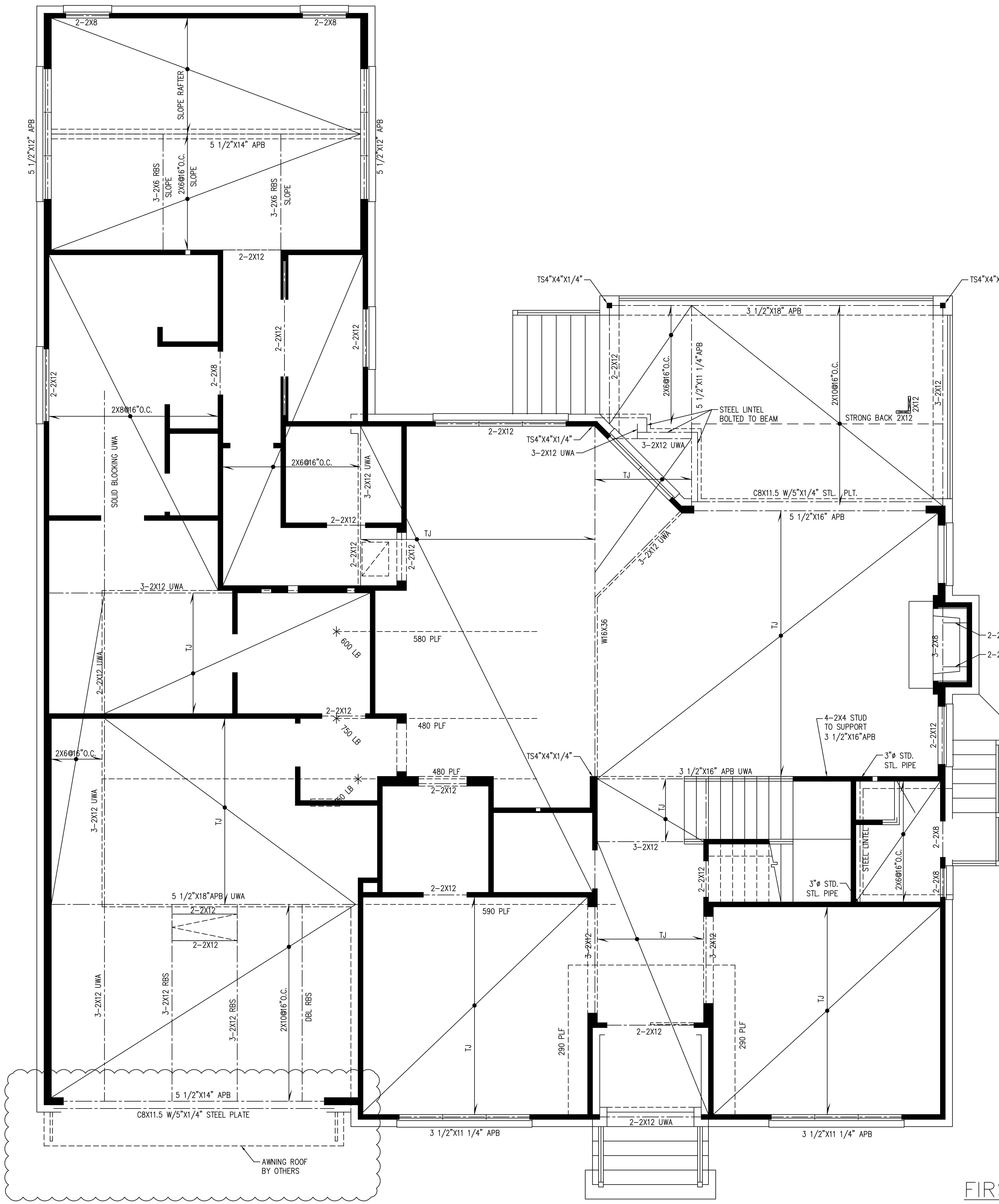
1. FLOOR JOISTS – 18" DEEP OPEN WEB MANUFACTURED WOOD TRUSSES ENGINEERED BY OTHERS AT 19.2" O.C.
2. TYP. SHEATHING – 3/4" 48/24 APA RATED T & G GLUED & NAILED W/ 8d @ 6" EDGES & 10" FIELD (FOR 1 1/8" SHEATHING USE 10d NAILS)
3. ALTERNATE SHEATHING – 2 x 6 T & G DIAG. DECKING W/2 – 16d EA. SUPPORT
4. ALL BEAMS AND HEADERS SHALL BE SYP #2
5. PROVIDE 2 – 2x12 HEADERS AT ALL FIRST LEVEL OPENINGS U.N.O.
6. ALL BEAMS ARE FLUSH BEAMS U.N.O.
7. PROVIDE FULL BEARING UNDER ALL BEAMS CONTINUOUSLY TO FOUNDATION.
8. DL = 10 PSF LL = 40 PSF
   DEFLECTION CRITERIA: LIVE LOAD L/360
   TOTAL LOAD L/240

TRUSS LOAD NOTES

– – – – TYPICAL INDICATION FOR LOAD TO TRUSS FROM WALL ABOVE IN POUNDS PER LINEAR FOOT. LOADS SHOWN DO NOT INCLUDE FLOOR LOAD.

✳ TYPICAL INDICATION FOR POINT LOAD TO TRUSS FROM WALL ABOVE IN POUNDS. LOADS SHOWN DO NOT INCLUDE FLOOR LOAD

1. USE 120 PLF WALL LOAD TO TRUSSES FROM NON LOAD-BEARING WALLS ABOVE. LOADS SHOWN DO NOT INCLUDE FLOOR LOAD.
2. ALL FLUSH BEAM – TO – BEAM CONNECTIONS SHALL BE SIMPSON HGB OR HGLT (U.N.O.)
3. ALL FLUSH STEEL BEAM TO STEEL BEAM CONNECTIONS SHALL BE 2 – L 4x4x1/4x0'-9" W/3 – 3/4"? A307 BOLTS IN EA. LEG.



FIRST FLOOR FRAMING PLAN

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

3730 DRUMMOND ST.

HOUSTON, TEXAS 77025 HARRIS COUNTY
LOT 23 & TR 22A, BLOCK 27 – BRAES HEIGHTS, SEC. 9

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02/01/2023

PROJECT:	3730 DRUMMOND
PROJECT NO.:	MFE22-193
DATE:	08/26/2022
REVISION:	
REVISION:	
DRAWN:	BPW
SHEET NO.:	S-3

24X36@¼"=1'-0"

STRUCTURAL ABBREVIATIONS

ARCH.	ARCHITECTURAL
ASI	ALPHA STRUCTURES INCORPORATED
APB	ANTHONY POWER BEAM
BLDG.	BUILDING
BOTT.	BOTTOM
C.J.	CEILING JOIST
CNTLVRD.	CANTILEVERED
CONT.	CONTINUOUS
D.J.	DECK JOIST
DIAG.	DIAGONAL
DWG.	DRAWING
D.B.	DROP BEAM
EA.	EACH
F.B.	FLUSH BEAM
F.J.	FLOOR JOIST
G & N	GLUED AND NAILED
GL.	GLULAM
HDR.	HEADER
HORIZ.	HORIZONTAL
LLV	LONG LEG VERTICAL
LVL	LAMINATED VENEER LUMBER (MICROLAM)
MANUF.	MANUFACTURED
O.C.	ON CENTER
O.C.E.W.	ON CENTER EACH WAY
P.T.	PRESSURE TREATED
PLF	POUNDS PER LINEAR FOOT
PSL	PARALLEL STRAND LUMBER (PARALLAM)
RBS	ROOF BRACING SUPPORT
RE:	REFER TO
R.J.	ROOF JOIST
S.B.C.	SOUTHERN BUILDING CODE
STD.	STANDARD
STL.	STEEL
S.Y.P.	SOUTHERN YELLOW PINE
T & B	TOP & BOTTOM
T & G	TONGE AND GROOVED
T.J.	TRUSS JOIST
T.J.I.	TRUSS JOIST INTERNATIONAL
U.W.A.	UNDER WALL ABOVE
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
&	AND
@	AT
ø	DIAMETER
#	NUMBER, POUNDS
?	PLATE
W/	WITH

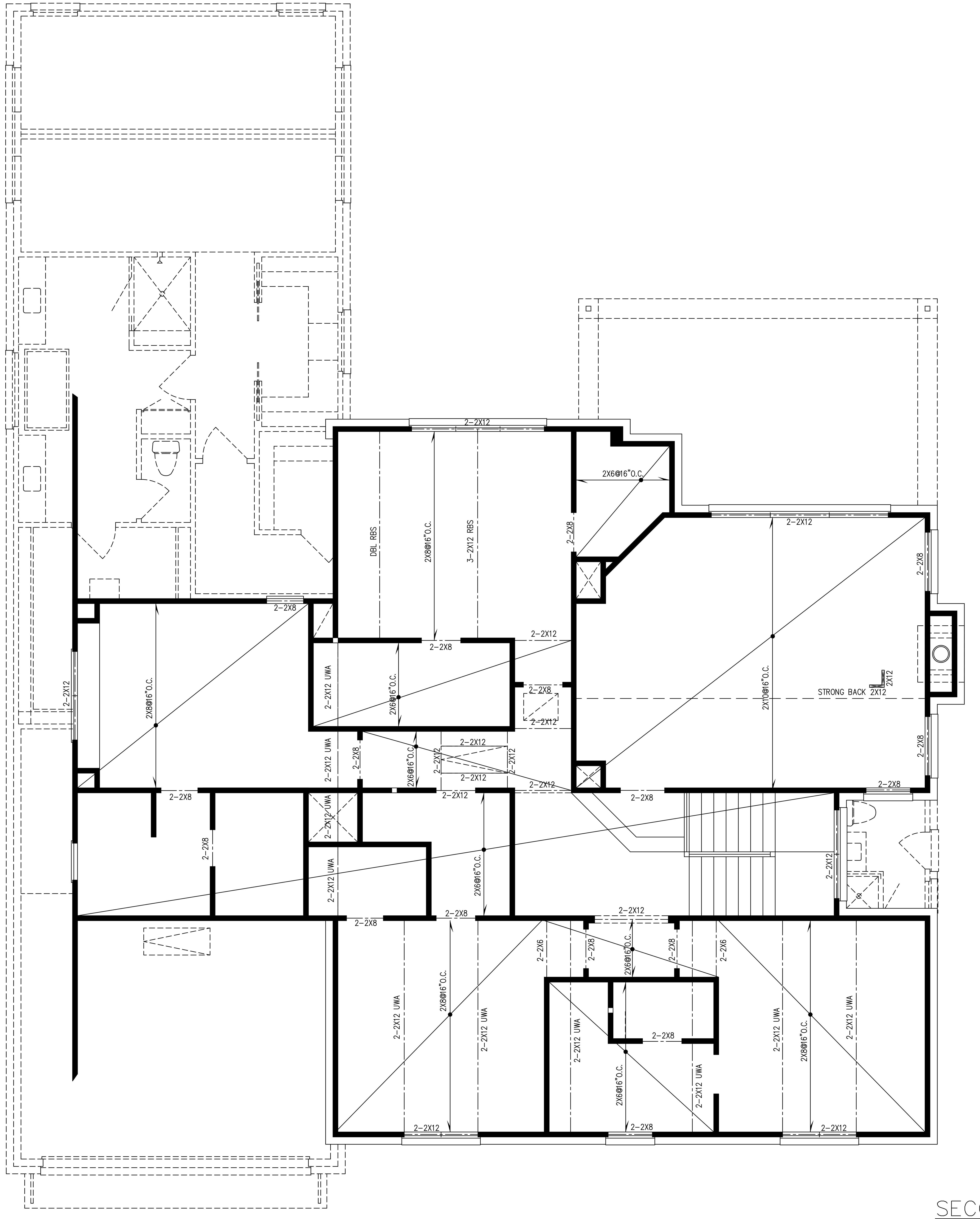
NOTES:

UNLESS OTHERWISE SPECIFIED:

- ALL FRAMING MATERIAL TO BE #2 S.Y.P. (K.D. 15)
- ALL STRUCTURAL BEAMS AND HEADERS TO BE #2 S.Y.P. (K.D. 15)
- ALL HEADERS AT FIRST FLOOR AND SECOND FLOOR REFER TO SCHEDULE.
- CEILING JOISTS ARE BASED ON 10 P.S.F. LIVE LOAD WITH 5 P.S.F. DEAD LOAD.
- PROVIDE 2–2x4 VERTICAL SUPPORT (MIN.) UNDER EACH END OF ALL STRUCTURAL BEAMS AND HEADERS LONGER THAN 5'–0".
- SIZE AND NUMBER OF NAILS CONNECTING WOOD MEMBERS SHALL COMPLY WITH BLDG. CODE
- ALL STEEL TO HAVE A YIELD STRENGTH OF 36 K.S.I. (MIN.)
- ALL FLUSH WOOD BEAM – TO – WOOD BEAM CONNECTIONS SHALL BE SIMPSON HGB OR HGLT HANGERS.
- PROVIDE FULL BEARING UNDER ALL BEAMS CONTINUOUSLY TO FOUNDATION.
- ALL BEAMS ARE FLUSH BEAMS UNLESS NOTED OTHERWISE.

2X6 @ 16" O.C. TYPICAL (U.O.N.)

RBS = ROOF BEAM SUPPORT



SECOND FLOOR FRAMING PLAN

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

3730 DRUMMOND ST.
HOUSTON, TEXAS 77025 HARRIS COUNTY
LOT 23 & TR 22A, BLOCK 27 – BRAES HEIGHTS, SEC. 9

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08/29/2022

PROJECT:	3730 DRUMMOND
PROJECT NO.:	MFE22-193
DATE:	08/26/2022
REVISION:	
REVISION:	
DRAWN:	BPW
SHEET NO.:	S-4

24X36@¼"=1'-0"

ROOF PURLIN NOTES

④ TYPICAL INDICATION FOR CONT. PURLIN W/ 2x6 BRACES @ 32" O.C. TO BEAM OR WALL BELOW.

ROOF FRAMING NOTES

1. RAFTERS – SYP #2
2. TYP. RAFTER – 2x6 @ 16" O.C. (U.N.O.)
3. TYP. SHEATHING – 1/2" CDX 32/16 APA RATED W/ 8d @ 6" EDGES – 12" FIELD.
4. ALL HIPS, RIDGES, AND VALLEYS SHALL BE ONE SIZE LARGER THAN RAFTER SIZE (U.N.O.)
5. DL = 10 PSF LL = 20 PSF
6. DBL. = 2–2x8, U.N.O.

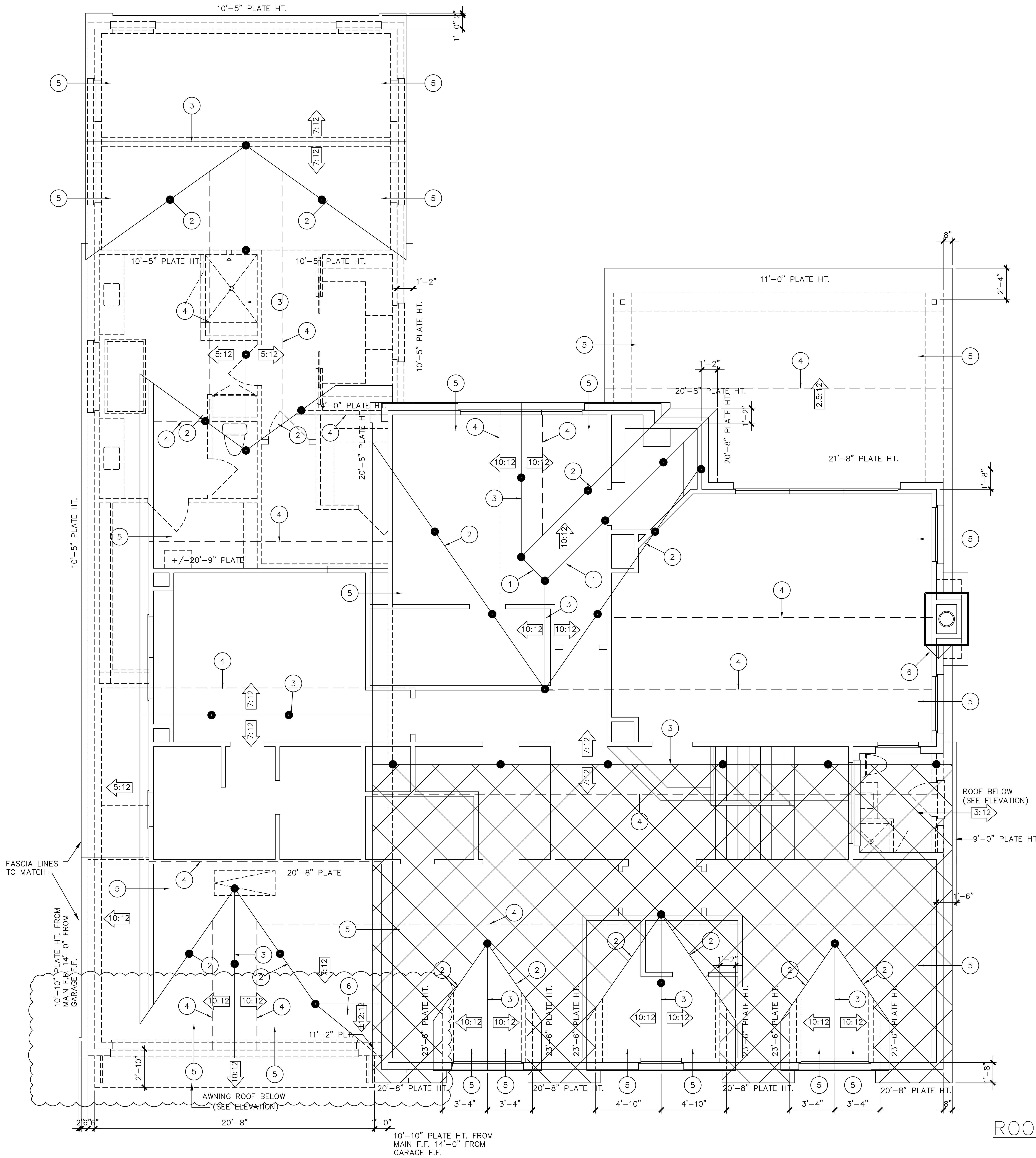
PROVIDE SIMPSON H2.5 HURRICANE CLIPS EVERY RAFTER TYP.

VALLEY BRACE NOTES

● TYPICAL INDICATION FOR VALLEY BRACE TO BEAM OR WALL BELOW

OVERLAY FRAMING NOTES

TYPICAL INDICATION FOR OVERLAY FRAMING BRACE RAFTERS TO OVERLAY FRAMING BELOW WITH 2x4 STRUTS AT 32" O.C. EACH WAY.



ROOF FRAMING PLAN

SCALE: 1/4" = 1'–0"

3730 DRUMMOND ST.

HOUSTON, TEXAS 77025 HARRIS COUNTY

LOT 23 & TR 22A, BLOCK 27 – BRAES HEIGHTS, SEC. 9

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02/01/2023

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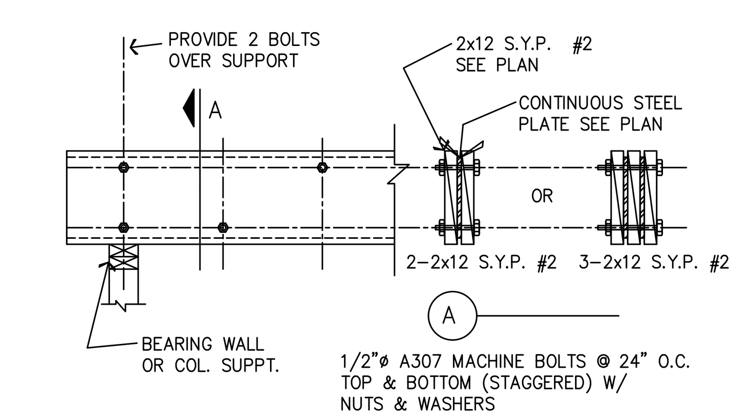
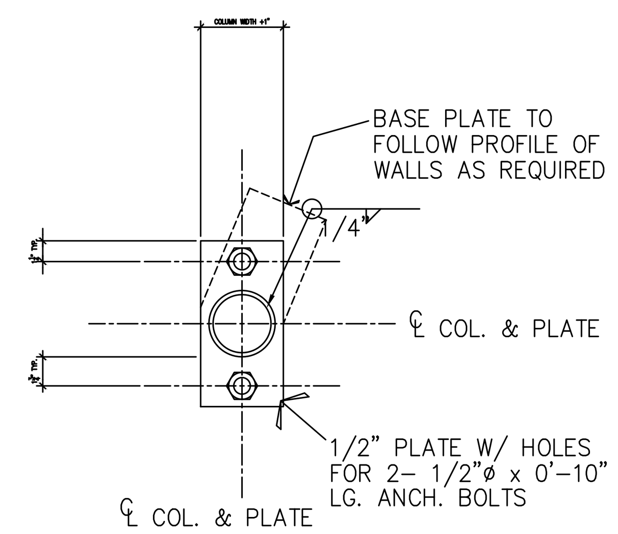
DRAWN:	BPW
SHEET NO.:	S-5

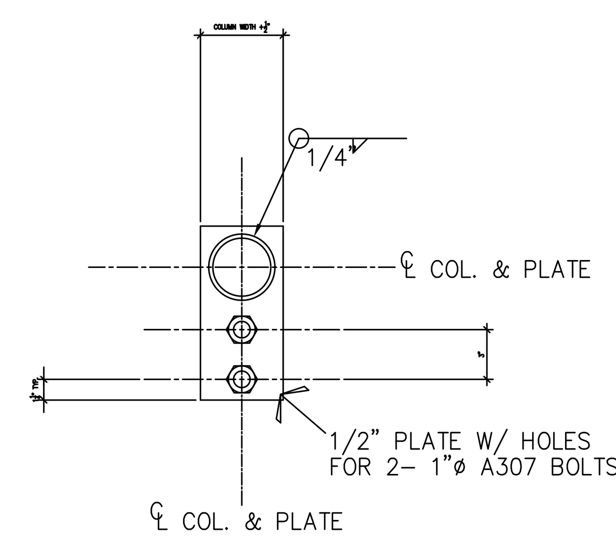
THIS STRUCTURE IS DESIGNED TO WITHSTAND A ULTIMATE DESIGN WIND SPEED (VULT)- 136 MPH.
RISK CATEGORY- CATEGORY II BUILDINGS EXPOSURE - B



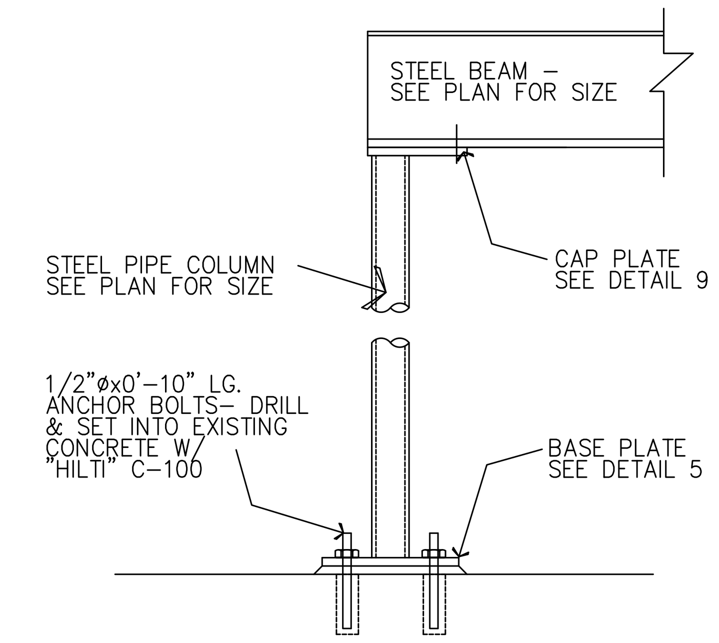
TYPICAL STEEL FLITCH BEAM 1



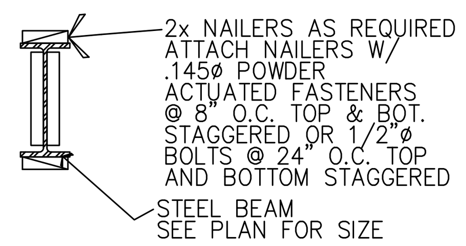
BASE PLATE 5



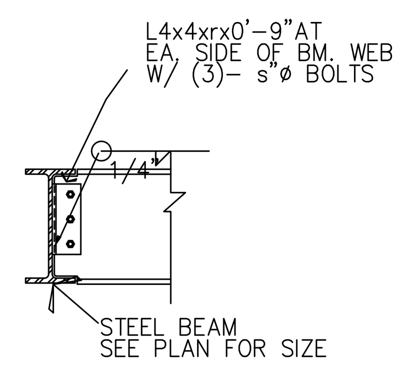
CAP PLATE 9



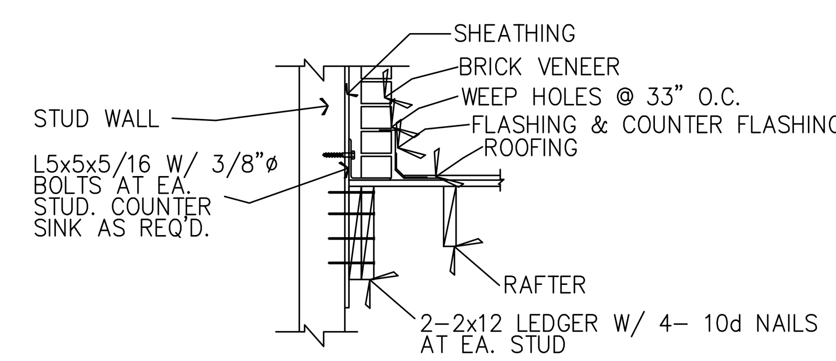
PIPE COLUMN DETAIL 11



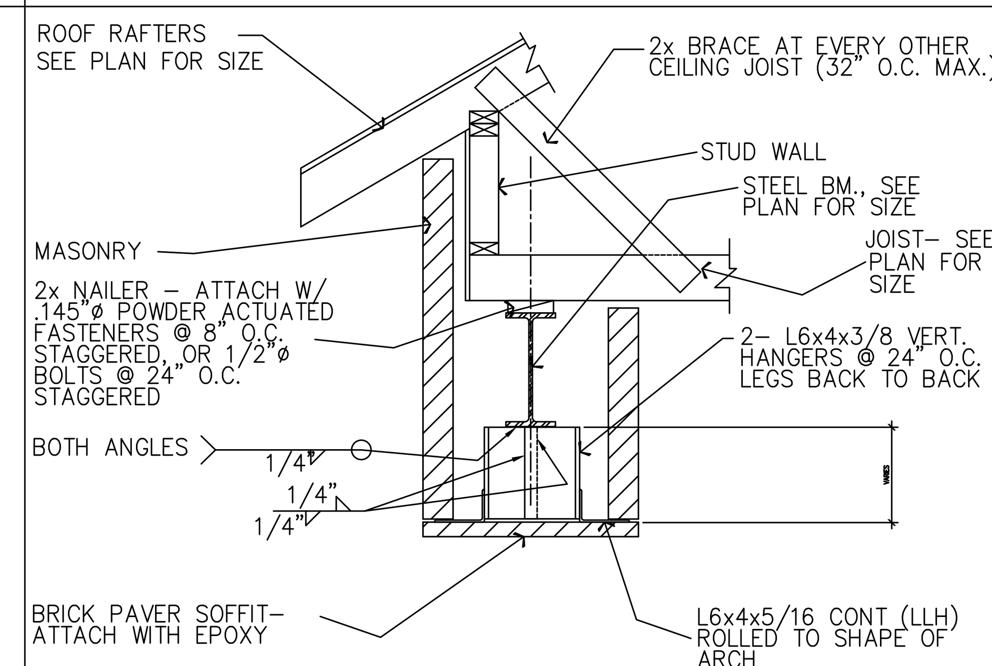
TYPICAL WOOD NAILER AT STL. BM 2



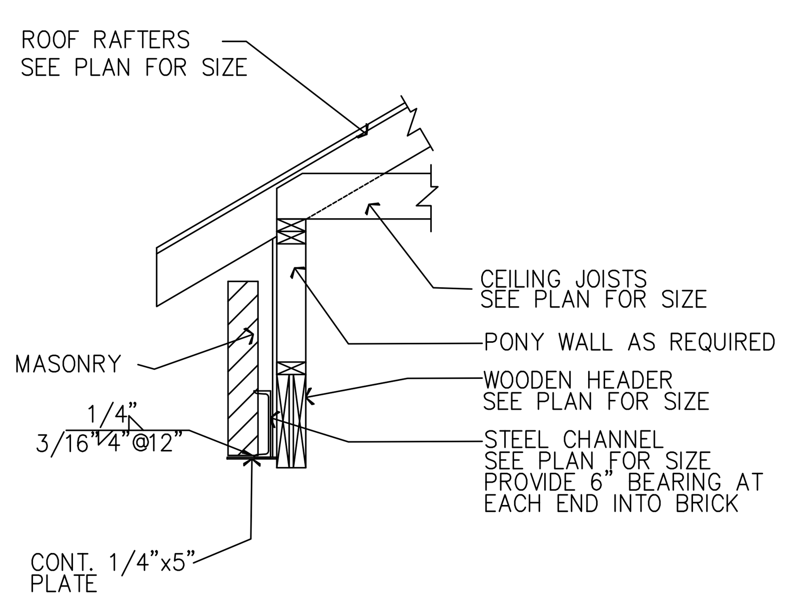
STRUCTURAL STEEL BM TO BM CON. 6



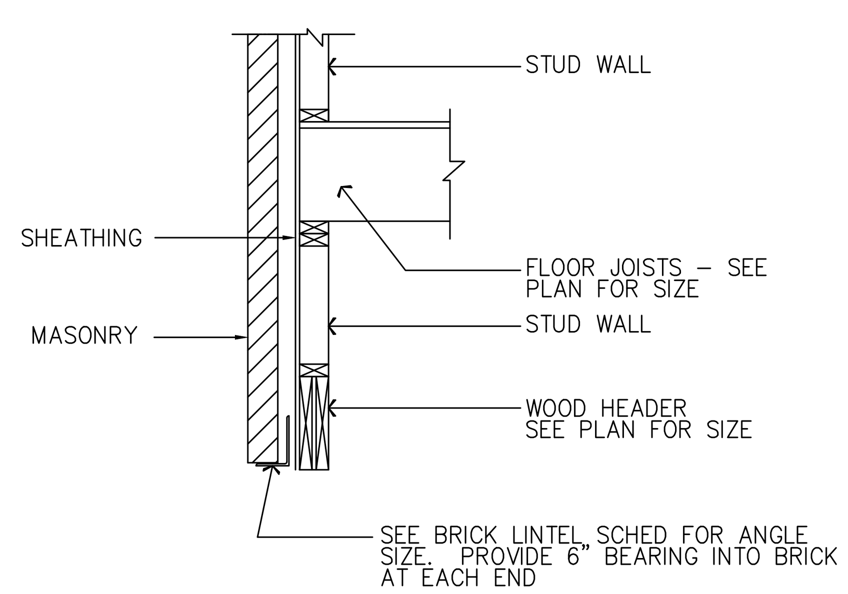
LEDGER BEAM BRICK SUPPORT 10



STEEL BM LINTEL @ ROLLED ANGLE 12



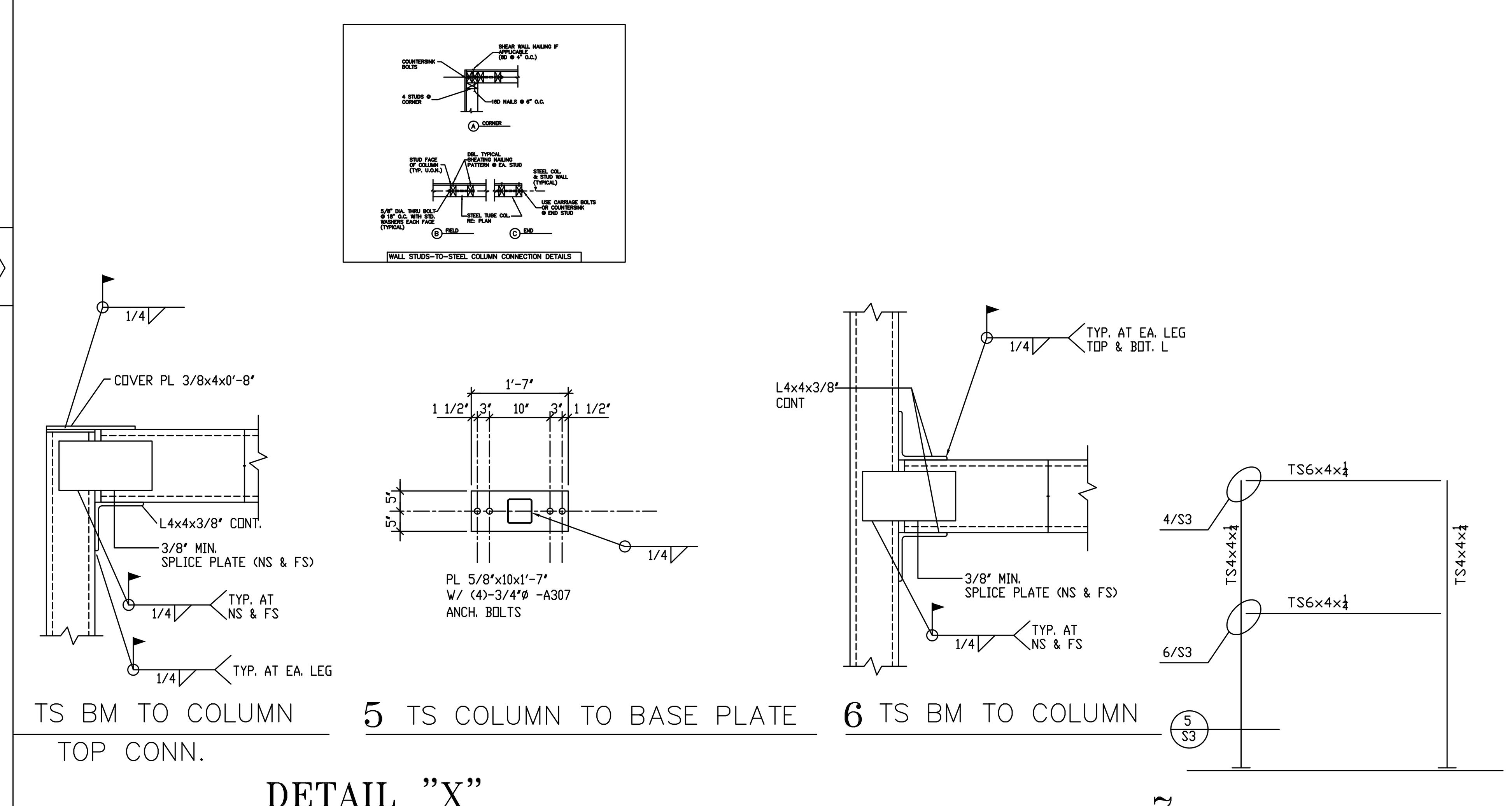
STEEL CHANNEL BRICK LINTEL 3



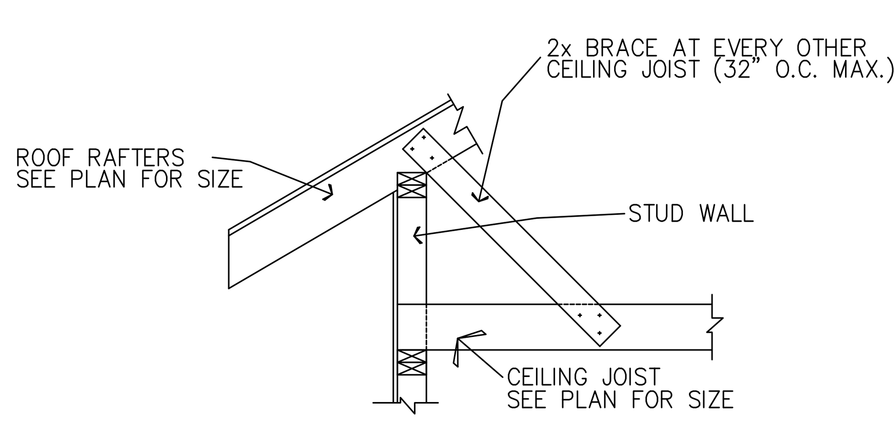
STEEL BRICK LINTEL AT OPENING 7

Steel Lintel Angle Schedule (provide 4" min. bearing- each end)

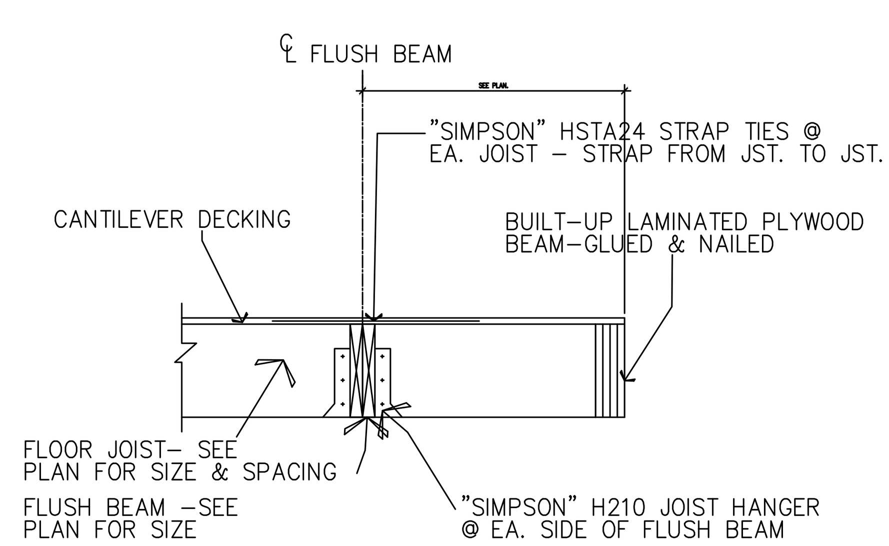
span	5'-0" or less	6'-0" or less	7'-0" or less	8'-0" or less	9'-0" or less	10'-0" or less
angle	L3x3x3/8	L4x3x3/8 (LLV)	L4x3x3/8(LLV)	L5x3x3/8 (LLV)	L5x3x3/8(LLV)	L6x3x3/8(LLV)



13



BRACE AT RAISED PLATE 4



CANTILEVERED BALCONY DETAIL 8

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06/17/2022

PROJECT:

PROJECT NO.:

DATE:

REVISION:

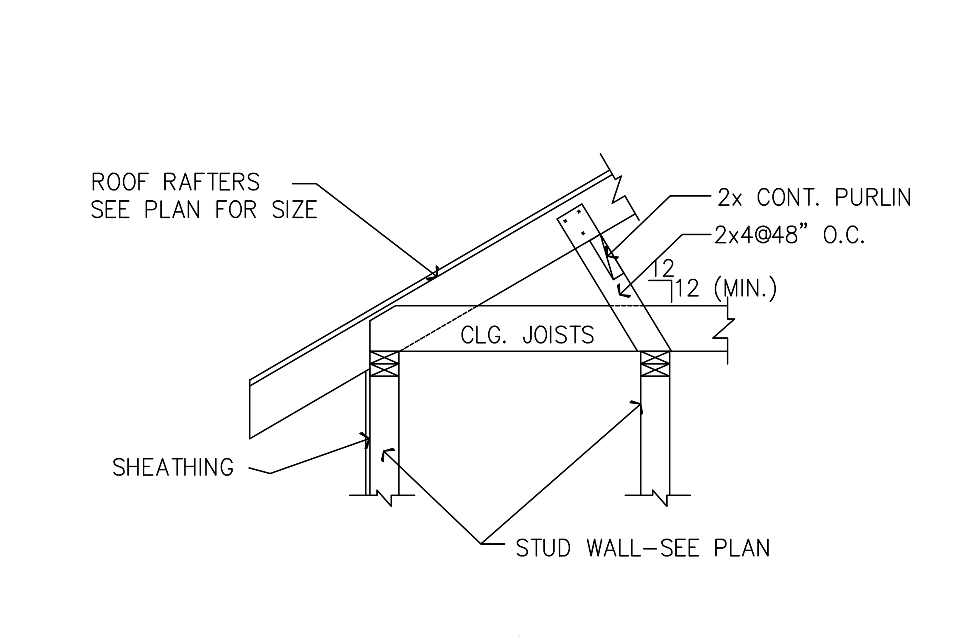
REVISION:

DRAWN: XXX

SHEET NO.:

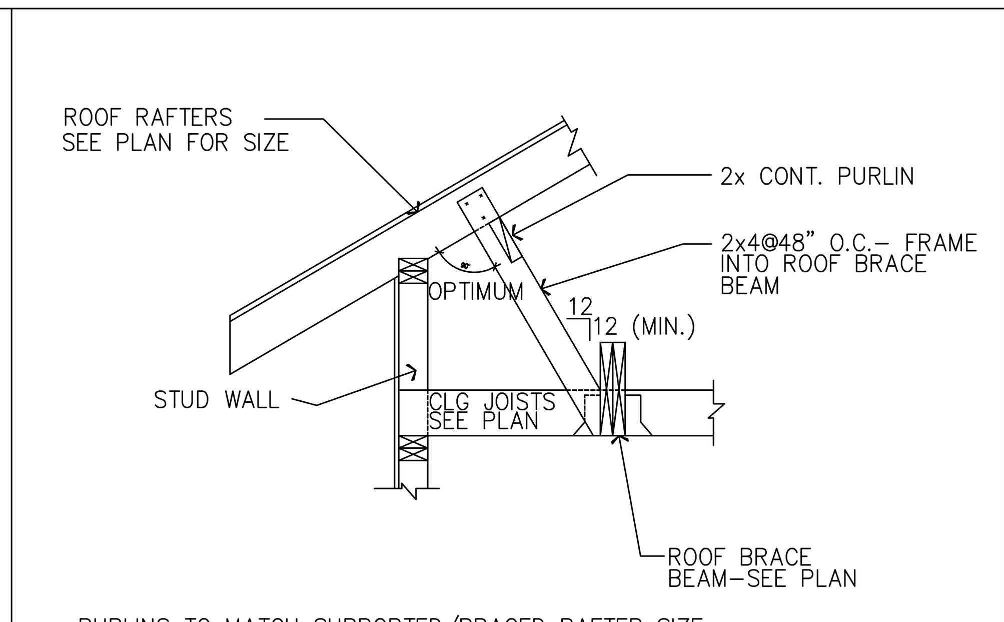
S6.1

 STRUCTURAL DETAILS



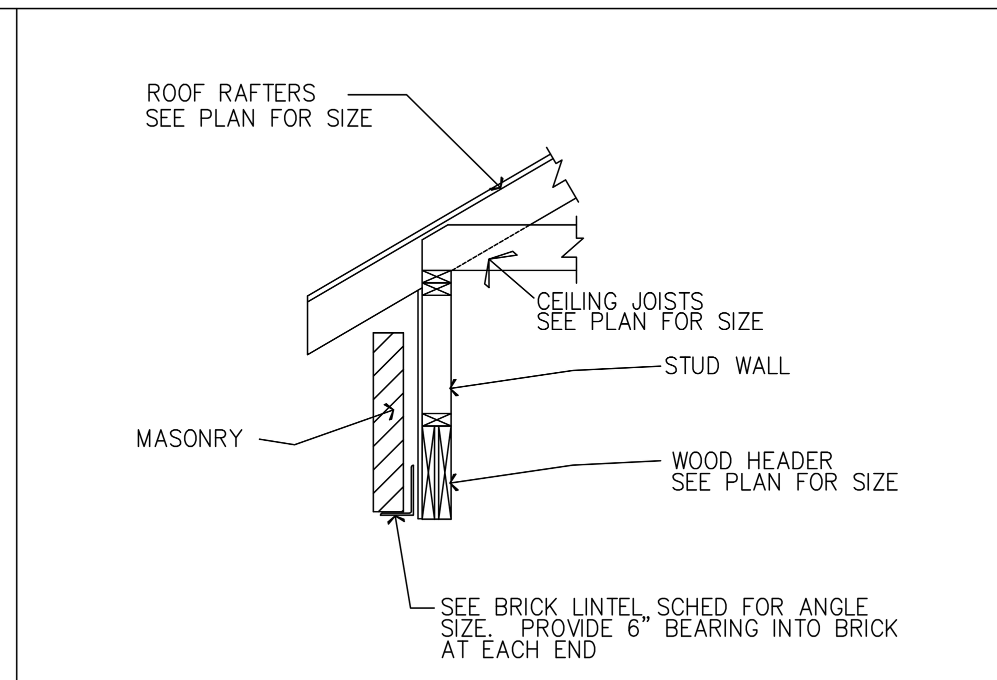
PURLINS TO MATCH SUPPORTED/BRACED RAFTER SIZE

ROOF PURLIN AT WALL (1)

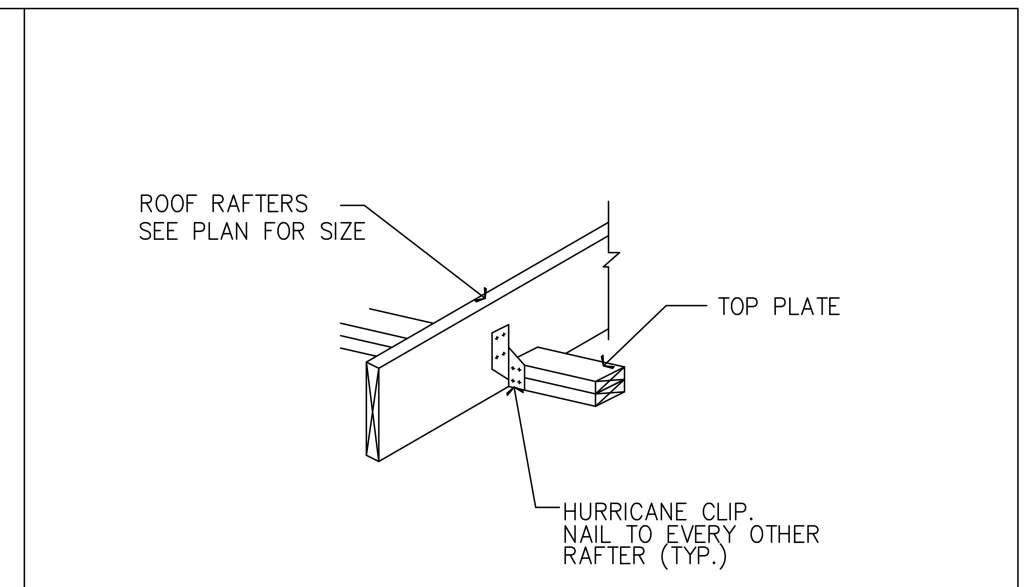


PURLINS TO MATCH SUPPORTED/BRACED RAFTER SIZE

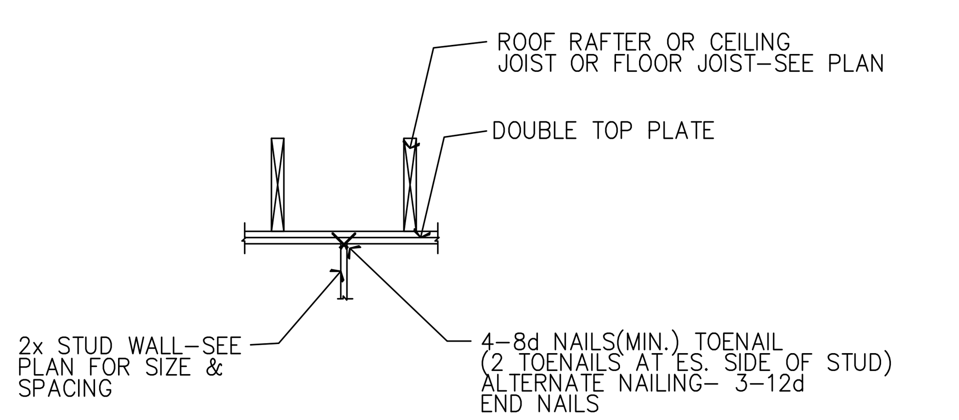
ROOF PURLIN BRACE AT BEAM AND RAISED PLATE (5)



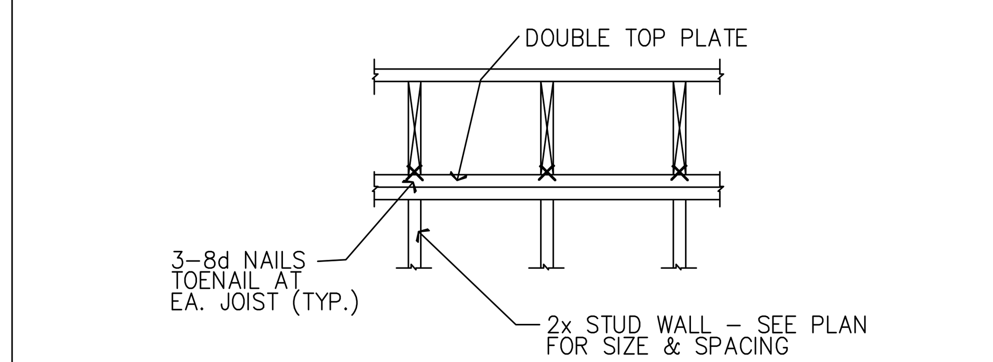
STEEL BRICK LINTEL AT OPENING (9)



HURRICANE CLIP (12)

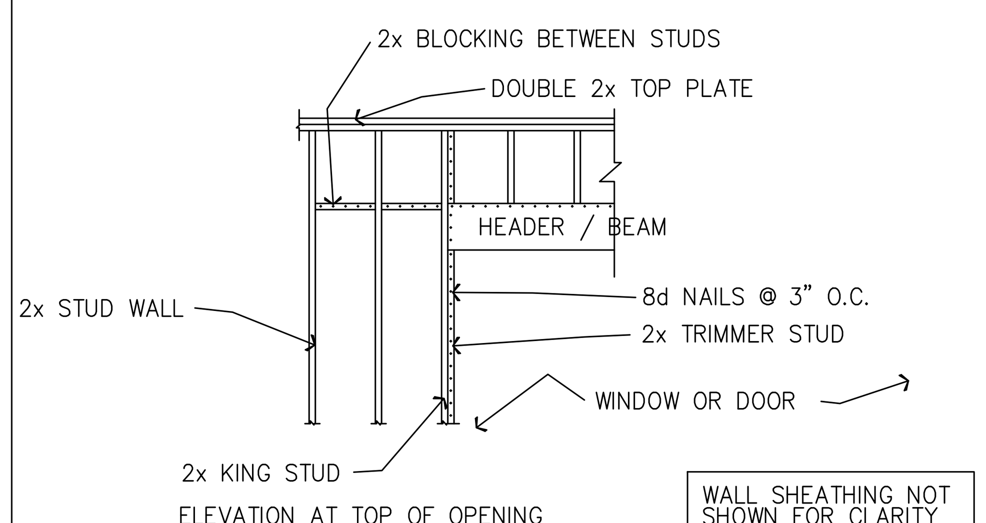


TOP PLATE TOE NAILING DETAIL (2)



FLOOR JOIST PERPENDICULAR TO WALL
NOT REQUIRED IF STEEL STRAPS USED

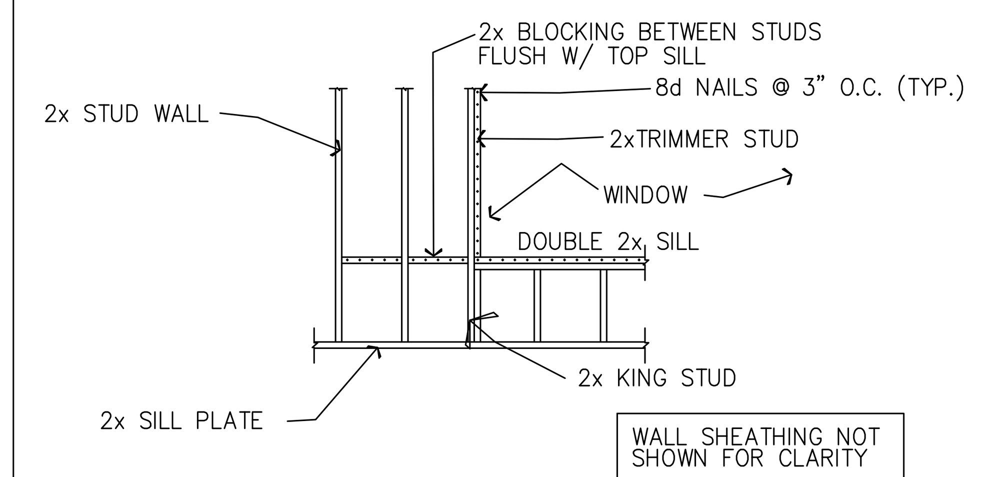
TOE NAILING DETAIL (6)



ELEVATION AT TOP OF OPENING
NOT REQUIRED IF STEEL STRAPS USED

WALL SHEATHING NOT SHOWN FOR CLARITY

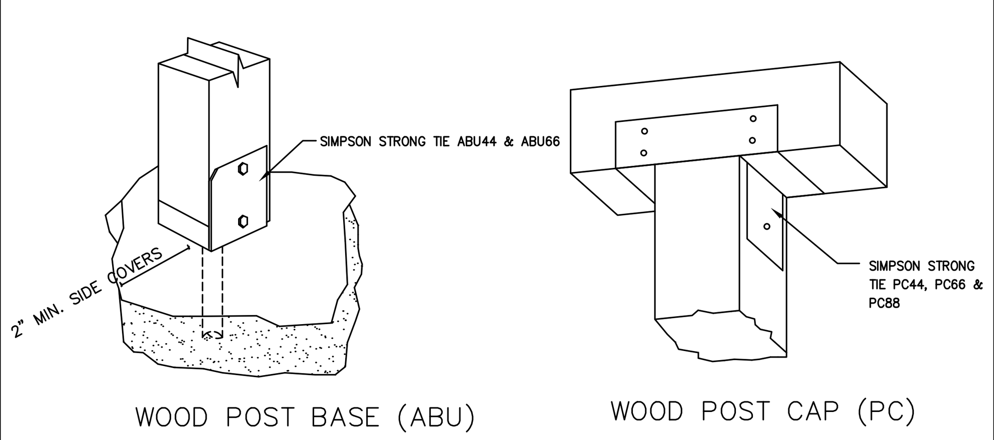
SHEARWALL NAILING PATTERN (10)



WALL SHEATHING NOT SHOWN FOR CLARITY

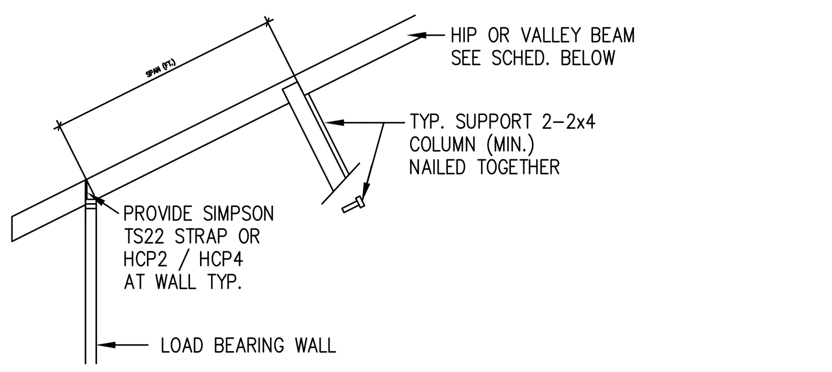
ELEVATION– PLYWOOD
AT BOTTOM OF OPENINGS
NOT REQUIRED IF STEEL STRAPS USED

SHEARWALL NAILING PATTERN (13)



WOOD POST BASE (ABU)
WOOD POST CAP (PC)

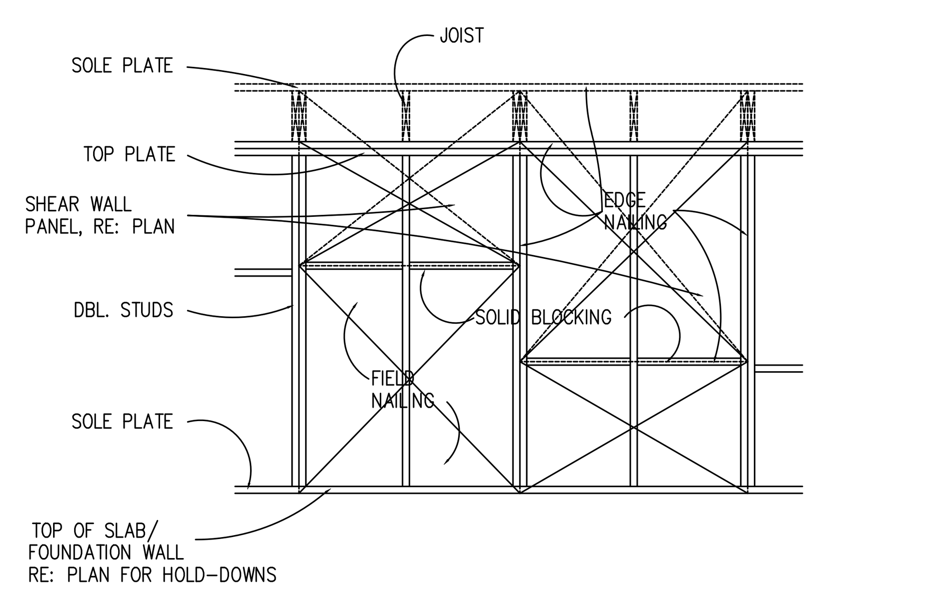
SIMPSON BASE/POST CAP CONNECTIONS DETAILS (3)



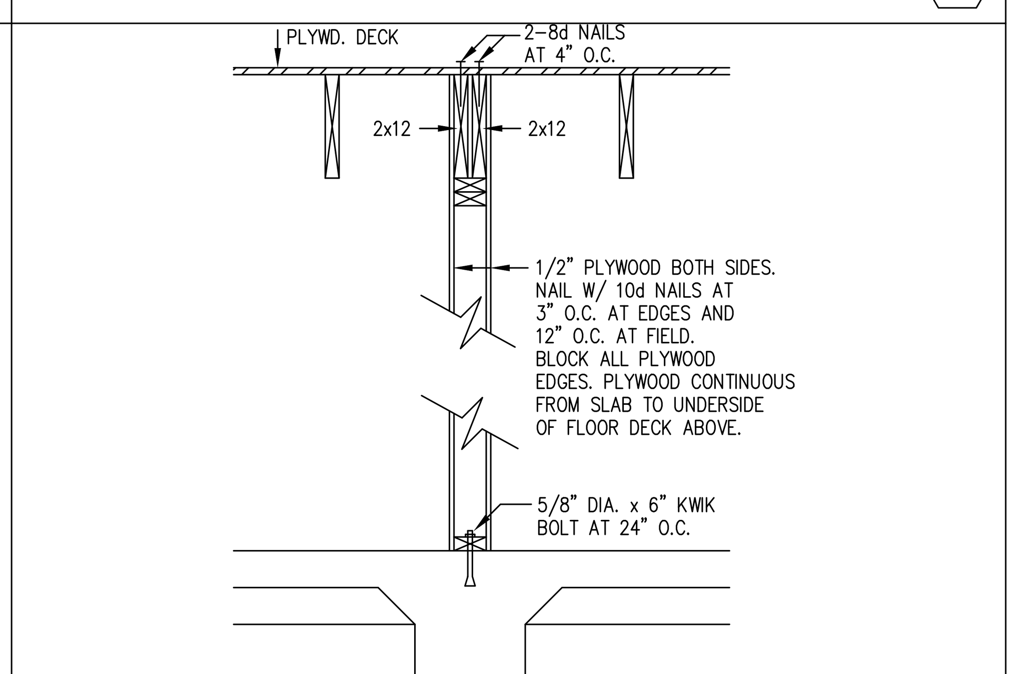
HIP AND VALLEY BEAM SCHEDULE

SPAN (FT.)	BEAM SIZE (#2 SYP)
0'-6'	2x6
6'-7'	2x8
7'-8'	2x10
8'-9'	2x12 or 2-2x8
9'-10'	2-2x10
10'-11'	2-2x12
OVER 11'	SEE PLAN FOR SIZE

HIP/VALLEY BRACING DETAIL (7)



SHEAR WALL NAILING DETAIL (4)



SHEAR WALL SECTION (8)

NOTES

GENERAL NOTES FOR WOOD FRAMING:

(THESE NOTES SHALL CONTROL UNLESS NOTED OTHERWISE ON PLANS AND DETAILS.)

TIMBER GRADES:
ROOF RAFTERS: ____ NO. 2 SOUTHERN YELLOW PINE (SYP), KD, S4S.
CEILING AND FLOOR JOISTS: ____ NO. 2 SOUTHERN YELLOW PINE (SYP), KD, S4S.
BEAMS AND HEADERS: ____ NO. 2 SOUTHERN YELLOW PINE (SYP), KD, S4S.
STUDS: ____ STUD GRADE, SYP, KD, S4S.
WOOD POST: ____ NO. 2 SYP, SURFACE GREEN.

JOISTS & FLOOR DECKING:

1. JOIST BLOCKING:
   A) JOISTS SHALL BE LATERALLY SUPPORTED AT EAC H END AND AT EACH SUPPORTED BY SOLID BLOCKING EXCEPT WHERE THE ENDS OF JOISTS ARE NAILED INTO A HEADER, BAND OR RIM JOIST OR TO AN ADJOINING STUD. SOLID BLOCKING SHALL NOT BE LESS THAN TWO INCHES IN THICKNESS AND SHALL MATCH THE DEPTH OF THE JOIST. 8'-0" O.C.
   B) PROVID E SOLID BLOCKING UNDER ALL BEARING WALLS PERPENDICULAR TO THE DIRECTION OF THE JOISTS.
   C) PROVIDE DOUBLE JOISTS UNDER ALL BEARING WALLS PARALLEL TO THE DIRECTION OF THE JOISTS.
2. JOIST BRIDGING:
   PROVIDE BRIDGING AT ALL FLOOR JOISTS AT SPACING NOT TO EXCEED 8'-0".
3. JOIST HOLES AND NOTCHES
   A) NOTCHES IN TOP OF JOISTS SHALL NOT EXCEED ONE SIXTH (1/6) THE JOIST DEPTH AND SHALL NOT BE LOCATED WITHIN MIDDLE THIRD OF THE SPAN.
   B) HOLES SHALL NOT BE CLOSER THAN 2" TO TOP OF JOIST, THE DIAMETER OF ANY HOLE SHALL NO T EXCEED ONE FOURTH (1/4) THE JOIST DEPTH UNLESS APPROVED BY THE ENGINEER.
4. TYPICAL JOISTS – S.Y.P. #2 U.N.O.
5. TYP. CEILING JOIST – 2x6 @ 16" O.C. U.N.O., TYPICAL FLOOR JOIST 2x12 @ 16" O.C. U.N.O.
6. TYPICAL TOP LEVEL CEILING JOIST U.N.O: DL: 5 PSF LL: 10 PSF
7. TYPICAL SHEATHING – 3/4" 48/24 APA RATED T&G, GLUED AND NAILED WITH 8d NAILS @ 6" O.C. AT EDGES & 10" FIELD (FOR 1 1/8" SHEATHING USE 10d NAILS).
8. ALTERNATE SHEATHING – 2x6 T&G DIAG. DECKING WITH 2-16d NAILS AT EA. SUPPORT.
9. U.N.O. DL: 10 PSF LL: 40 PSF
   DEFLECTION CRITERIA: LIVE LOAD L/360 TOTAL LOAD : L/240

STUD WALLS:

1. ALL STUD WALLs SHALL BE AS FOLLOWS:
   2x4s @ 16" O.C. AT ALL FLOORS IN ONE- OR TWO-STORY STRUCTURES. U.N.O.
   2-2x4s G & N OR 2x6s @ 16" @ ALL STUD WALLS SUPPORTING TWO OR MORE FLOOR AREAS. (SEE NOTE 3 DIRECTLY BELOW FOR WALL HEIGHT LIMITATIONS.)
2. PROVIDE A MINIMUM OF TWO (2) KING STUDS A T EACH SIDE OF OPENINGS LARGER THAN 4'-0", FULL HEIGHT OF WALL.
3. MAXIMUM STUD WALL HEIGHT SHALL BE AS FOLLOWS: PER TABLE R602.31 IRC 2015 W/ C.O.H. AMMENDMENTS
   2x4 STUDS @ 16" O.C. 10'-0"
   2x6 STUDS @ 16" O.C. 12'-0"
   2x8 STUDS @ 16" O.C. 16'-0"
4. BLOCKING AND LATERAL BRACING:
   A. PROVIDE BLOCKING AN D/OR TEMPORARY CROSS BRACING AS REQUIRED TO ENSURE STUD STRAIGHTNESS ACCORDING TO SPECIFIED TOLERANCES.
   B. MAXIMUM TOLERANCE FOR STUD STRAIGHTNESS IN EITHER DIRECTION IS 1/4" INCH PER TEN (10) FEET OF STUD HEIGHT.
   C. MINIMUM BLOCKING:
      1 ROW FOR STUD HEIGHT UP TO 9'-0"
      2 ROWS FOR STUD HEIGHT UP TO 15'-0"
      3 ROWS FOR STUD HEIGHT OVER 15'-0"
5. FRAME UNBRACED STUD WALLS HEIGHT LESS THAN 10'-0" WITH 2x4 STUDS @ 16" O.C. U.N.O.

ROOF DECK:

1. MINIMUM THICKNESS SHALL BE 1/2" THICK. MATERIAL SHALL BE CDX PLYWOOD.
2. ORIENTED STRAND BOARD (OSB) MAY BE USED IN LIEU OF PLYWOOD.
3. MINIMUM NAILING SHALL BE AS REQUIRE D BY THE SHEAR WALL & DIAPHRAM SCHEDULE.
4. PLYWOOD CLIPS SHALL BE INSTALLED @ ROOF DECKING TO RESULT IN A 1/8" GAP BETWEEN ALL PANEL EDGES. PROVIDE 1 CLIP PER SPAN (JOIST SPACING). CLIPS SHALL BE SIMPSON PSCL. CORRESPONDING PLYWOOD THICKNESS.

PLYWOOD FLOOR DECK:

1. PLYWOOD SHALL BE 1 1/8" THICKNESS AND SHALL BE RATED STURD -D-FLOOR (2-4-1) EXPOSURE 1.
2. LAY PANELS IN A STAGGARED PATTERN.
3. BLOCK ALL EDGES W/ 2 -2x4 BLOCKING.
4. GLUE & NAIL TO FRAMING MEMBERS AS FOLLOWS:
   A. GLUE SHALL CONFOR M TO APA SPECIFICATION AF6 01, APPLIED IN A CONTINUOUS BEAD & IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
   B. ALL NAILS SHALL BE 8d RING OR SCREW SHANK. NAIL SPACING SHALL BE 4" O.C. @ PANEL EDGES & 12" O.C. @ INTERMEDIATE SUPPORTS.

CONNECTORS & FASTENERS:

1. CONNECTORS SHALL BE AS MANUFACTURED BY SIMPSON STRONG TIE – COMPANY, INC., SAN LEANDRO, CA. NAIL ALL NAIL HOLES.
2. PROVIDE BASE AND CAP CONNECTORS AT ALL COLUMNS 4x4 OR LARGER, AS FOLLOWS:
   COLUMN BASE CONNECTOR: CB SERIES
   COLU MN CAP CONNECTOR: PC SERIES (OR EPC AT BM ENDS)
   USE APPLICABLE COLUMN/BEAM MODEL NUMBERS.
3. WHERE REQUIRED, JOIST HANGERS SHALL BE 16 GA., GALVANIZED "U-STANDARD" JOIST HANGERS, APPLICABLE TO CORRESPONDING SIZE, INCLUDING DOUBLED OR TRIPLED JOISTS.
4. WHERE RE QUIRED, BEAM/PURLIN HANGER SHALL BE 12 GA., GALVANIZED, "B SERIES" APPLICABLE TO CORRESPONDING SIZE.
5. PROVIDE 1/2" DIAMETER ANCHOR BOLTS @ 4' -0" MAXIMUM SPACING AT ALL EXTERIOR STUD WALL SILL PLATES. BOLTS SHALL BE 10" LONG, ASTM A – 307.
6. WHERE CALLED OUT, AL L THROUGH BOLTS SHALL BE ASTM A 307. PROVIDE STANDARD WASHERS AT ALL WOOD SURFACES.
7. ALL BOLTS, NUTS, WASHERS, NAILS & OTHER FASTENERS EXPOSED TO WEATHER SHALL BE HOT -DIPPED GALVANIZED.

WALL SHEATHING

1. CORNER SHEATHING (FROM CORNER TO A DISTANCE 8'-0" FOR CORNER) PROVIDE 1/2" PLYWOOD SHEATHING. BLOCK ALL UNSUPPORTED EDGES OF SHEATHING. NAIL WITH 8d NAILS @ 6" O.C. EDGES @ 12" O.C. FIELD

ROOF PURLIN NOTES

1. U.N.O. ALL RAFTERS ARE 2x6 @ 16" O.C.
2. ALL FRAMING MATERIAL TO BE #2 S.Y.P.
3. TYPICAL SHEATHING – 1/2" CDX 32/16 APA RATED WITH 8d NAILS @ 6" AT EDGES AND @ 12" FIELD.
4. ALL RIDGES, HIPS AND VALLEYS TO BE ONE SIZE LARGER THAN CONNECTING RAFTER AND SHALL BE SIZED TO MATCH THE CUT END OF THE CONNECTING RAFTER (R802.3). EXAMPLE: 2x6 RAFTER -2x8 VALLEY (U.N.O.).
5. U.N.O. – DL: 10 PSF LL: 20 PSF

------ TYPICAL INDICATION FOR CONT. PURLIN W/ 2x4 BRACES @ 48" O.C. TO BEAM OR WALL BELOW.

TRUSSES & THEIR SUPPORT BY OTHERS:

A. ALL TRUSSES ARE TWO-POINT BEARING UNLESS SPECIFICALLY NOTED. 5/8" SHEETROCK MUST BE USED WHEN TRUSSES ARE SPACED 24" O.C.
B. PREFABRICATED TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH "DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE" CONNECTED WOOD TRUSSES" BY THE TRUSS INSTITUTE (TPI-95).
C. THE TRUSSES SHALL BE DESIGNED TO ADEQUATELY SUPPORT THE LOADS ABOVE. ALL CANTILEVERED TRUSSES SHALL ALSO BE DESIGNED WITH AND WITHOUT THE CANTILEVERED LOADS.
D. THE TRUSS MANUFACTURER SHALL SUBMIT TRUSS LAYOUT DRAWINGS TO ENGINEER.
E. PROVIDE SIMPSON H2.5 HOLDDOWNS FOR ROOF TRUSSES TO TOP PLATE AND (2) SIMPSON H6 FOR ROOF TRUSS GIRDERS.
F. PROVIDE STUD SUPPORT MAXIMUM OF 4" FROM ALL TRUSSES.
G. TRUSSES USED TO SUPPORT CEILING OR FLOOR JOISTS SHALL HAVE PLYWOOD NAILED TO ALL TRUSS MEMBERS WITH (2) 12d NAILS @ 12" O.C.

BEAMS & HEADERS:

1. AT BEAMS MADE UP OF A NUMBER OF 2x JOISTS, EACH JOIST WILL BEAR ON A WALL STUD (I.E. NUMBER OF WALL STUDS SHALL MATCH NUMBER OF JOISTS BEARING ON THESE STUDS). THE CENTERLINE OF THE BEAM SHALL BE THE CENTERLINE OF THE SUPPORTING WALL STUDS.
2. ALL BEAMS MADE UP OF A NUMBER OF 2x JOISTS SHALL BE FASTENED AS FOLLOWS:
   FOR THE MAXIMUM HORIZONTAL SPACING OF BOLTS:
   2-2x12 16d NAILS @ 12" TOP & BOTTOM, STAGGER, EA. FACE
   3-2x12 20d NAILS @ 12" TOP & BOTTOM, STAGGER, EA. FACE
   4-2x12 (OR MORE) 5/8" DIA. BOLTS @ 12" TOP & BOTTOM, STAGGER (W/ STANDARD WASHERS)
   BOLTS SHALL BE 5/8" DIA., LOCATED 2" MINIMUM FROM BEAM EDGES AND SHALL BE STAGGERED IN TOP AND BOTTOM ROWS. PROVIDE STANDARD WASHERS @ EACH FACE.
3. ALL DOOR AND WINDOW HEADERS (OR HEADERS AT ANY OTHER OPENING) THAT ARE NOT SPECIFIED ON PLANS SHALL BE AS FOLLOWS:
   ALL FLOOR FRAMING LEVELS: 2-2x12s AT 2x4 WALLS OR 3-2x12s AT 2x6 WALLS
   TOP LEVEL CEILING FRAMING: 2-2x8
4. MINIMUM BEARING OF ANY BEAM OR HEADER AT A STUD WALL IS 3"
5. PROVIDE FULL BEARING UNDER BEAMS CONTINUOUS TO FOUNDATION.
6. ALL FLUSH BEAM-TO-BEAM CONNECTIONS SHALL BE "SIMPSON" HSB OR HGLT (U.N.O.)

GENERAL NOTES:

A. These general notes shall apply to the structural drawings, unless otherwise shown or noted.
B. Unless otherwise indicated, all details of design, workmanship, and materials shall conform to the I.R.C 2015.
C. Gravity loads: Roof DL – 10 PSF Clg DL – 5 PSF Floor DL – 10PSF
   Roof LL – 20 PSF Clg LL – 10 PSF Floor LL – 40 PSF
D. Wind loads: A ultimate design wind speed (VULT)–136 MPH
   Risk Category – Category II Buildings
   Exposure – B
E. Do not scale drawing.
F. The structural engineering for stair, stair rail & guradrail details are compliance of R301.5 2015 IRC and meet the 50 PLF uniform load and a 200 lb a single concentrated load applied in any direction at any point along the top.

NOTES (11)

SCHEDULES

SHEAR WALL NOTES:

1. WHERE BLOCKING" IS INDICATED , PROVIDE 2x4 BACK-UP GYPBOARD OR PLYWOOD PANEL EDGES.
2. NAILING PATTERN APPLIES AT ALL PANEL EDGES. AT INTERMEDIATE SUPPORTS, PROVIDE NAILING @ 6" O.C. USING CORRESPONDING NAIL SIZE.
3. SHEATHING MATERIAL AND NAILING PATTERN APPLY TO ONE SIDE OF SHEAR WALL ONLY.
4. WHERE A SHEAR WALL IS CALLED OUT ON A PLAN, PROVIDE SCHEDULED SHEATHING MATERIAL AND NAILING FOR THE FULL LENGTH OF THAT WALL.
5. PROVIDE SCHEDULED STUDS AT EACH END OF SHEAR WALL OR SEGMENT THEREOF.
6. HOLD-DOWN CONNECTIONS:
   A) CONNECTIONS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC.
   B) THE FOLLOWING SUBSTITUTIONS MAY BE MADE:

HOLDDOWN MARK	SUBSTITUTION	
	@ SLAB FOUNDATION	@ FLOOR FRAMING
HDU2-SDS2.5	STHD10 OR HTT16	HST2
HDU5-SDS2.5	STHD14 OR HTT16	HST2
	HTT22	HST2

   C) ALL HOLD-DOWNS MUST BE INSTALLED IN STRICT ADHERENCE TO MANUFACTURE'S INSTRUCTIONS USING BOLT & NAIL NUMBERS, SIZES & LENGTH AS SPECIFIED BY MANUFACTURER.
7. WHERE PLYWOOD IS SHOWN ON BOTH FACES OF A SHEAR WALL:
   A) DOUBLE STUDS OR 3" WIDE STUDS MUST BE USED.
   B) STAGGER PLYWOOD JOINTS AT WALL FACES.
   C) USE 4x4 WOOD POSTS @ EA. END TO BOLT HOLD DOWNS
   D) USE 4x4 WOOD POSTS @ EA. END TO BOLT W/ 1/2" ø ANCHOR BOLTS @ 24" O.C. IN ADDITION TO HOLD- DOWN ANCHOR BOLTS.
8. SIMPSON "WELD -ALL " WEDGE ANCHORS MAY BE USED IN LIEU OF SCHEDULED ANCHOR BOLTS TO MATCH (DIAMETERS) MINIMUM EMBEDMENT LENGTHS AS SUGGESTED BY MANUFACTURER.
9. THIS STRUCTURE IS DESIGNED TO WITH A SUSTAINED 110 MPH WIND GUST FOR A 3 SECOND DURATION.

NAILING SCHEDULE: (WALL SHEATHING & SIDING)

SHEATHING TYPE & THICKNESS	FASTNER SIZE & TYPE	NAILING PATTERN
PLYWOOD & PARTICLE BOARD		6" O.C. @ PANEL EDGES
LESS THAN 1/2"	6d COMMON DEF ORMED SHANK OR STAPLE	12" O.C. @ INTERMEDIATE SUPPORTS
1/2" THRU 3/4"	8d COMMON, OR 6d DEFORMED SHANK	
FIBERBOARD		
1/2" OR LESS	6d COMMON NAILS, OR	
	NO. 11 GA. NAILS (2) OR,	
	NO. 16 GA. NAILS STAPLES (3) OR,	3" O.C. @ PANEL EDGES
25/32"	8d COMMON NAILS OR	6" O.C. @ INTERMEDIATE SUPPORTS
	NO. 11 GA. NAILS (2) OR,	
	NO. 16 GA. STAPLES (3)	
GYPSUM SHEATHING 1/2" OR 5/8"	12 GA. (4)	3" O.C. @ EDGES 6" O.C. @ INTERMEDIATE SUPPORTS
GYPSUM WALLBOARD 1/2"	1 3/8" DRYWALL NAILS	6" O.C. @ CEILINGS
5/8"	1 1/2" DRYWALL NAILS	6" O.C. @ CEILINGS
PANEL SIDING (TO FRAMING)		
1/2"	6d (1)	1 EACH PANEL
5/8"	8d (1)	

1 – STORY OR TOP LEVEL HEADER SCHEDULE

SPAN (2x4 WALLS*)	HEADER (U.N.O.) (*3-2x6 HEADERS AT 2x6 WALLS U.N.O.)
2'-6" OR LESS	2-2x4
4'-6" OR LESS	2-2x6
6'-0" OR LESS	2-2x8
7'-6" OR LESS	2-2x10

SHEAR WALL SCHEDULE

MARK	DESCRIPTION
6	3/8" CD ExTERIOR PLYWOOD W/8d NAILS @ 6" O.C., EDGES @ 12" O.C. FIELD.
4	3/8" CD ExTERIOR PLYWOOD W/8d NAILS @ 4" O.C., EDGES @ 12" O.C. FIELD.
3	3/8" CD ExTERIOR PLYWOOD W/8d NAILS @ 3" O.C., EDGES @ 12" O.C. FIELD.
2	3/8" CD ExTERIOR PLYWOOD W/8d NAILS @ 2" O.C., EDGES @ 12" O.C. FIELD. W/ 4x STUDS @ PANEL EDGES.
5	3/8" STRUCT. 1 PLYWOOD W/ 8d NAILS @ 3" O.C., EDGES @ 12" O.C. FIELD.
3_1	3/8" STRUCT. 1 PLYWOOD W/ 8d NAILS @ 2" O.C., EDGES @ 12" O.C. FIELD. W/ 4x STUDS @ PANEL EDGES.
2_1	3/8" CD ExTERIOR PLYWOOD ON TWO SIDES W/ STAGGERED EDGES W/ 8d NAILS @ 4" O.C. EDGES @ 12" O.C. FIELD. IF TWO EDGES ARE ON THE SAME STUD, USE 4x STUDS.
4_2	3/8" CD ExTERIOR PLYWOOD ON TWO SIDES W/ STAGGERED EDGES W/ 8d NAILS @ 3" O.C. EDGES @ 12" O.C. FIELD. IF TWO EDGES ARE ON THE SAME STUD, USE 4x STUDS.
3_2	3/8" CD ExTERIOR PLYWOOD ON TWO SIDES W/ STAGGERED EDGES W/ 8d NAILS @ 2" O.C. EDGES @ 12" O.C. FIELD. W/ 4x STUDS @ EDGES.
2_2	1/2" GYP BD. W/ 5d COOLER OR PARKER NAILS @ 4" O.C.
W_1	1/2" GYP BD. W/ 5d COOLER OR PARKER NAILS @ 4" O.C.
W_1	1/2" GYP BD. BLOCKED W/ 5d COOLER OR PARKER NAILS @ 4" O.C.
W_1	1/2" GYP BD.BLOCKED W/ 6d COOLER OR PARKER NAILS @ 4" O.C.

NAILING SCHEDULE: (FLOOR & ROOF DECK)

DECK TYPE & THICKNESS	NAIL SIZE (NOTE 1)	NUMBER OR NAILING PATTERN
PLYWOOD OR PARTICLE BOARD 1/2" OR LESS	6" COMMON, DEFORMED SHANK OR STAPLE (1)	6" O.C. @ PANEL EDGES
19/32" THRU 3/4"	8d COMMON, OR 6d DEFORMED SHANK	10" O.C. @ INTERMEDIATE SUPPORTS TYPICAL (TYPICAL)
7/8" THRU 1" (FLR.)	8d COMMON OR DEFORMED SHANK	
1 1/8" THRU 1 1/4" (FLR.)	10d COMMON OR 8d DEFORMED SHANK	

NOTES: (1) COROSION -RESISTANT STAPLES

NAILING SCHEDULE: (FRAMING MEMBERS)

CONNECTED MEMBERS	NAIL SIZE (NOTE 1)	NUMBER OR NAILING PATTERN
BRIDGING TO JOIST	8d	2 TOE ANIL EA. END
SOLE PLATE TO JOIST OR BLOCKING.	16d	@ 16" O.C. FACE NAIL.
TOP PLATE TO STUD	16d	2 END NAIL.
STUD TO SOLE PLATE.	8d OR 16d	4 TOE NAIL. 2 END NAIL.
DOUBLE STUDS.	16d	@ 24? FACE NAIL.
DOUBLED TOP PLATES.	16d	@ 16? FACE NAIL.
TOP PLATES: LAPS & INTERSECTIONS.	16d	2 FACE NAIL.
CONTINUOUS HEADER, TWO PIECE.	16d	@ 16" FACE NAIL ALONG EA. EDGE.
CEILING JOISTS TO PLATE.	8d	3 TOE NAIL.
CONTINUOUS HEADER TO STUD.	8d	4 TOE NAIL.
CEILING JOISTS, LAPS OVER PARTITIONS.	16d	3 FACE NAIL.
CEILING JOISTS TO PARALLEL RAFTERS.	16d	3 FACE NAIL.
RAFTER TO PLATE.	8d	3 TOE NAIL.
1' BRACE TO EACH STUD & PLATE.	8d	2 FACE NAIL.
BUILT UP CORNER STUDS.	16d	@ 24" FACE NAIL.
CONTINUOUS HEADER, 3 OR MORE PIECE & BUILT UP GIRDERS OR BEAMS.	BOLTS	RE: GEN. NOTES.

NOTES: ALL NAILS SHALL BE COMMON UNLESS NOTED OTHERWISE.

STEEL LINTEL ANGLE SCHEDULE (PROVIDE 4" MIN. BEARING – EA. END)

SPAN	5'-0" OR LESS	6'-0" OR LESS	7'-0" OR LESS	8'-0" OR LESS	9'-0" OR LESS	10'-0" OR LESS
ANGLE (LLV)	L 3 1/2x3 1/2x5/16	L 4 x 3 1/2 x 5/16	L 4 x 3 1/2 x 5/16	L 5 x 3 1/2 x 5/16	L 5 x 3 1/2 x 3/8	L 6 x 3 1/2 x 3/8

SCHEDULES (14)

 STRUCTURAL DETAILS/NOTES/SCHEDULES

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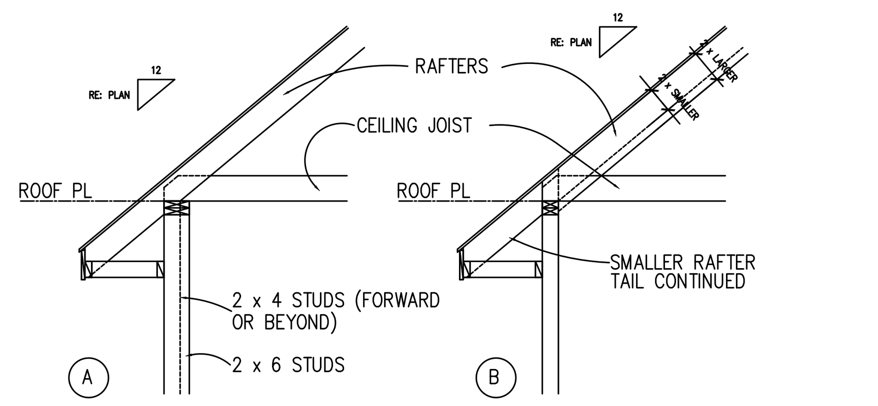
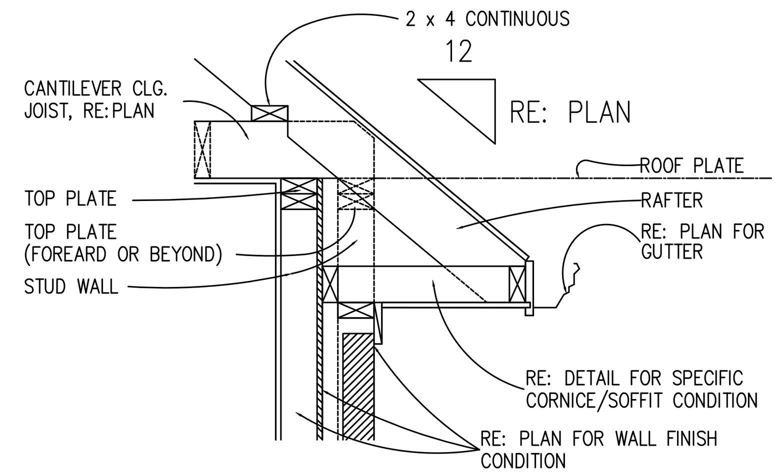
S6.2



RE: PLAN FOR TYPICAL WALL, CEILING, ROOF & CORNICE/SOFFIT ASSEMBLY

A. RAFTER @ 2 x 4 WALL TO 2 x 6 WALL
B. 2 x SMALLER RAFTER TO 2 x LARGER RAFTER

RAFTER SEAT CUT (1)



RE: PLAN FOR TYPICAL WALL, CEILING, ROOF & CORNICE/SOFFIT ASSEMBLY

FRAMING AT RECESSED FRAMING LINE (2)

DETAIL KEYED NOTES

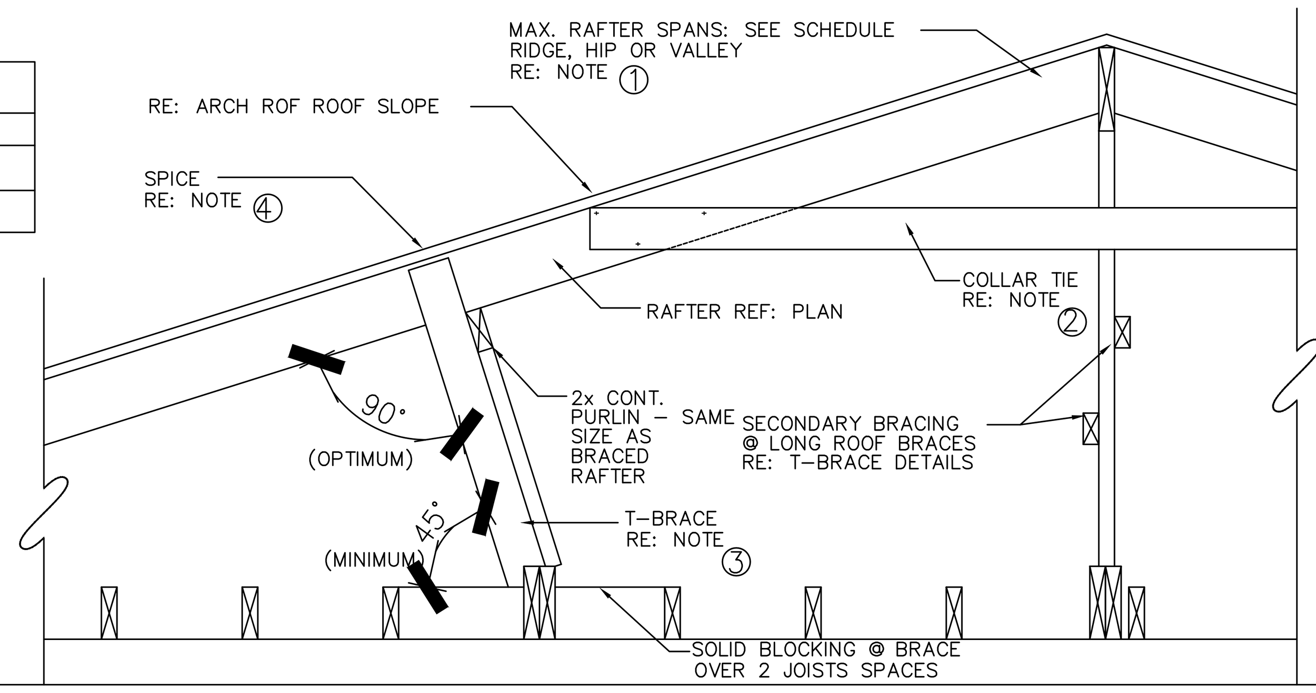
(1) RIDGE BEAM HIP RAFTER, OR VALLEY RAFTER
DEPTH SHALL BE THE LAGER OF THE FOLLOWING:
A. ONE SIZE DEEPER THAN THE LARGER RAFTER FRAMING INTO IT (2x LUMBER)
B. DEPTH OF CUT END OF RAFTER

(2) COLAR TIES:
2x6; LOCATED @ UPPER ONE THIRD (1/3) OF ROOF @ EVERY THIRD RAFTER OR 5'-0" (WHICHEVER SMALLER)

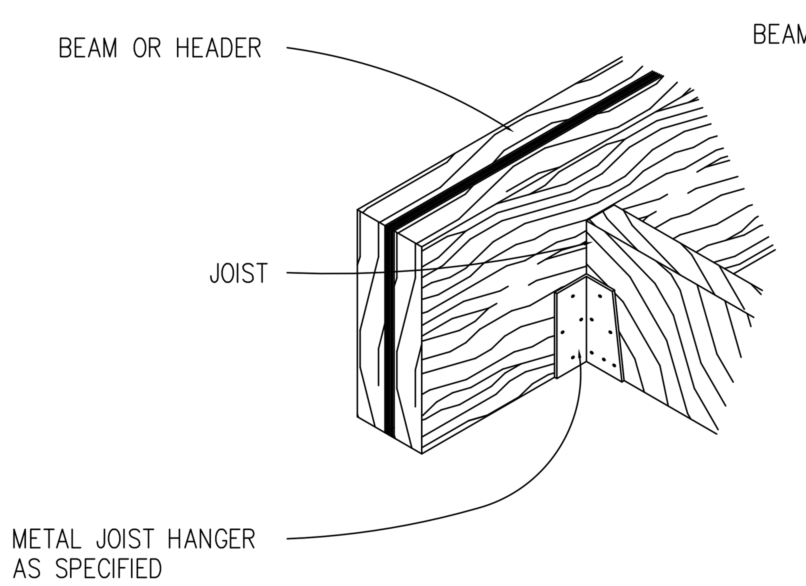
(3) T-BRACE:
A. RE: TYPICAL DETAILS BELOW
B. MAXIMUM SPACING AS FOLOWS:
4'-0" @ 2x4 CONT. PURLIN
6'-0" @ RIDGE BEAM, HIP OR VALLEY RAFTER
C. BRACE SHALL BEAR ON AN INTERIOR WALL, BEAM OR STRONG-BACK (DOUBLE) 2 SIZES LARGER THAN JOIST) RE: FRAMING PLAN

(4) RAFTER & RIDGES SPLICES:
A. LOCATE SPICES OVER A PURLIN OR PROVIDE ADDITIONAL BRACE @ SPLICE
B. MINIMUM LAP = 12" NAIL W/ 4-16 NAILS

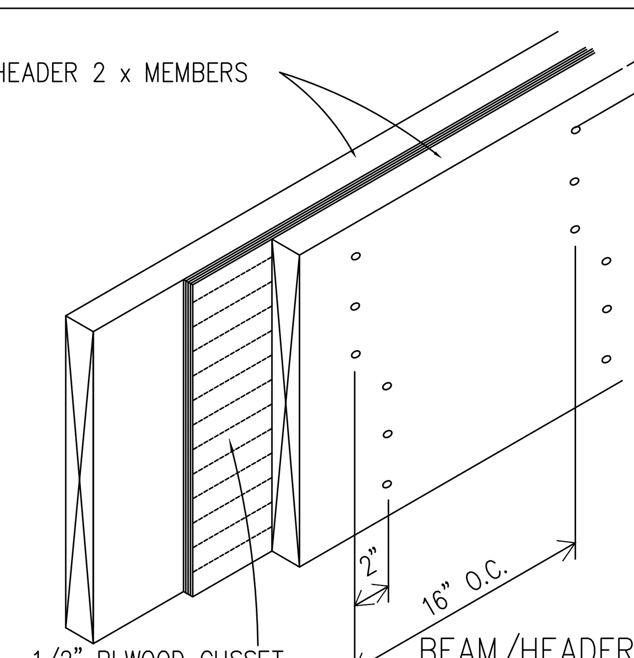
RAFTER SCHEDULE (#2 SYP)	
2x6	10'-0"
2x8	16'-0"
2x10	20'-0"



CEILING JOISTS PERPENDICULAR TO RAFTERS (3)



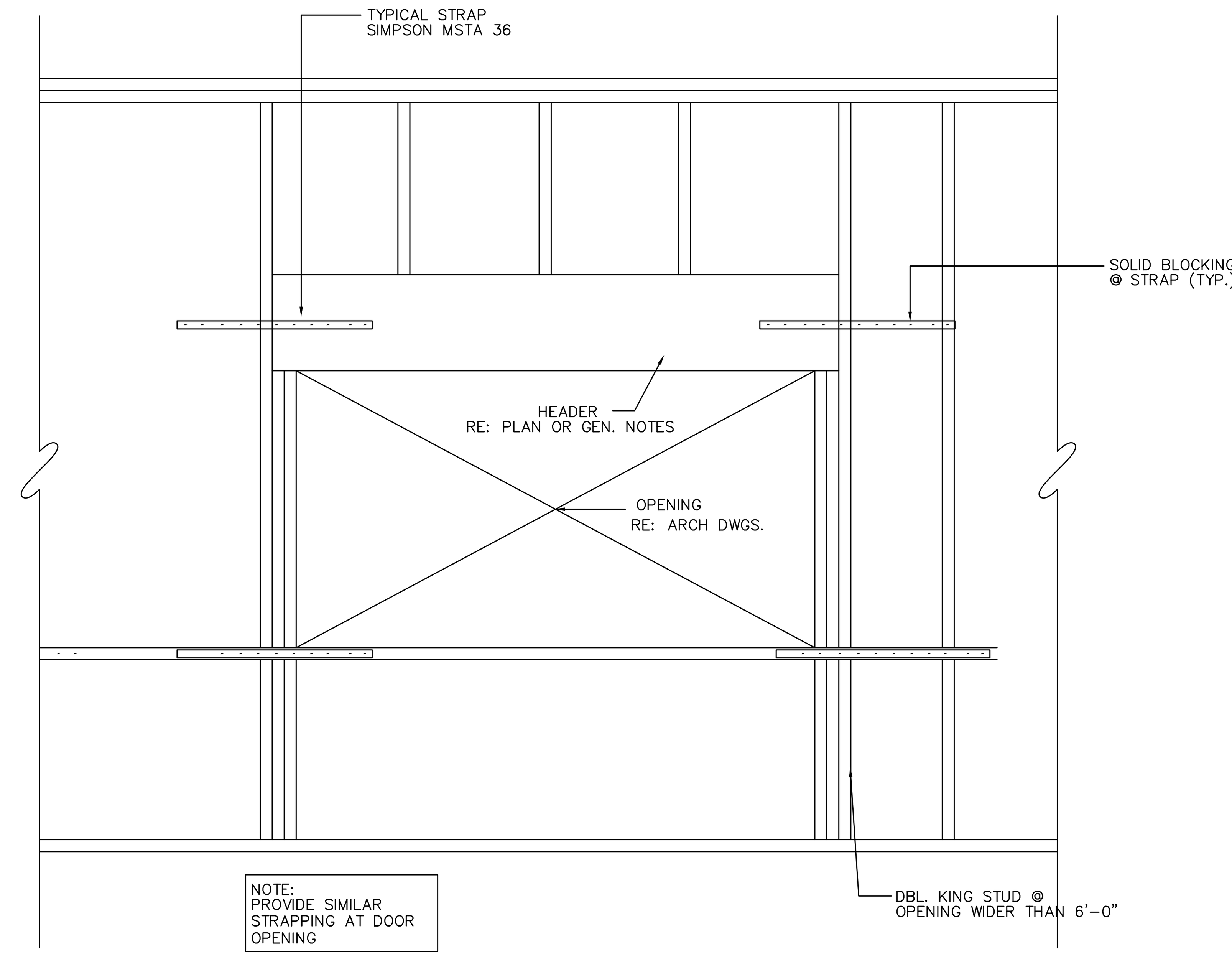
JOIST TO BEAM/HEADER-ISOMETRIC ELEVATION



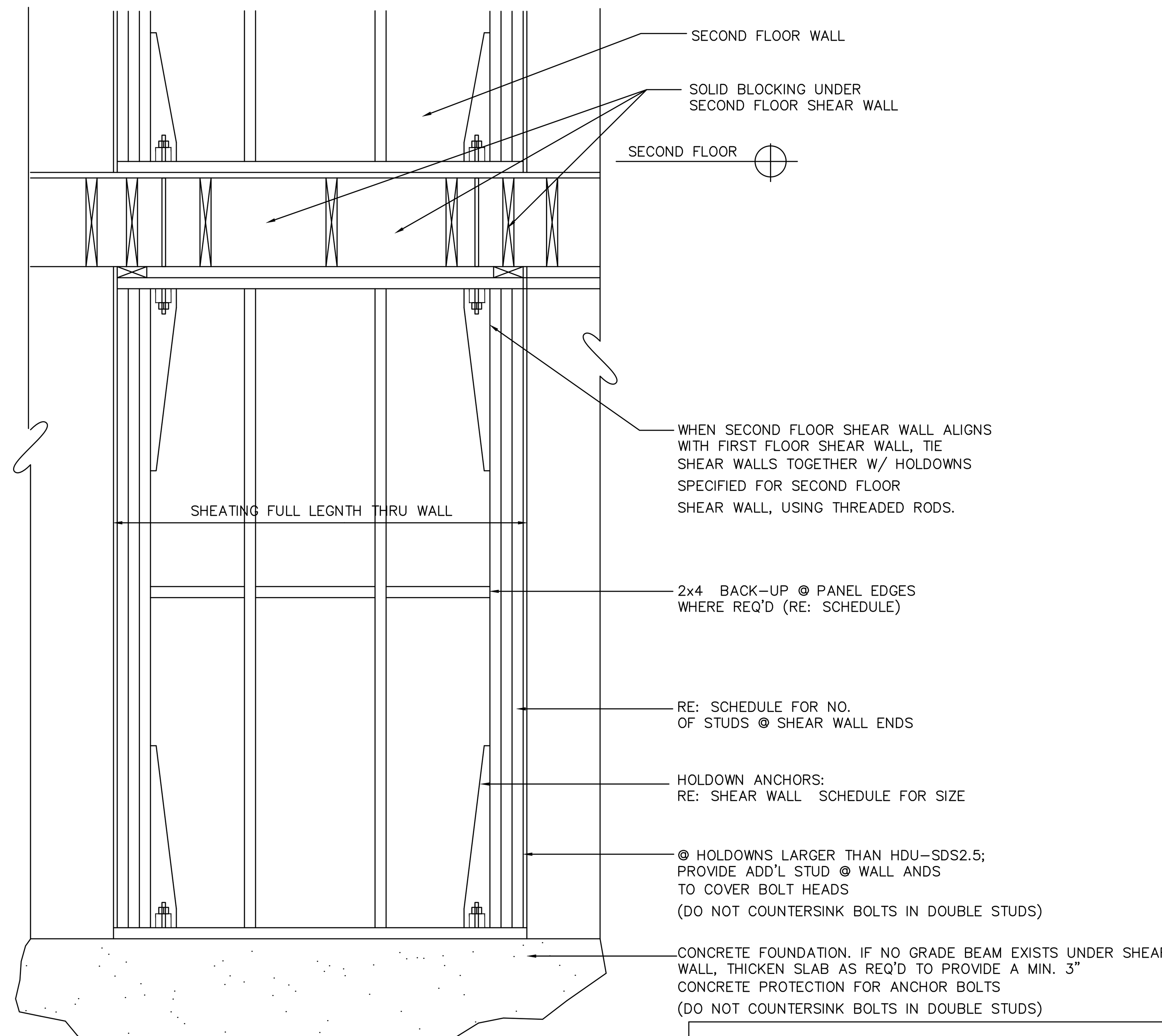
2 x 6's 3 NAILS
2 x 8'S 4 NAILS
2 x 10's 5 NAILS
2 x 12'S 6 NAILS
(NAIL ON BOTH SIDES)
NOTE:
CONSTRUCTION ADHESIVE APPLIEDIN CROSS HATCH PATTERN TO ALL MATING SURFACES

BEAM/HEADER-ISOMETRIC ELEVATION

WOOD BEAM DETAILS (4)



STRAPPING REQUIREMENTS FOR ALL SHEAR WALL OPENING (5)



TYPICAL SHEAR WALL ELEVATION (6)

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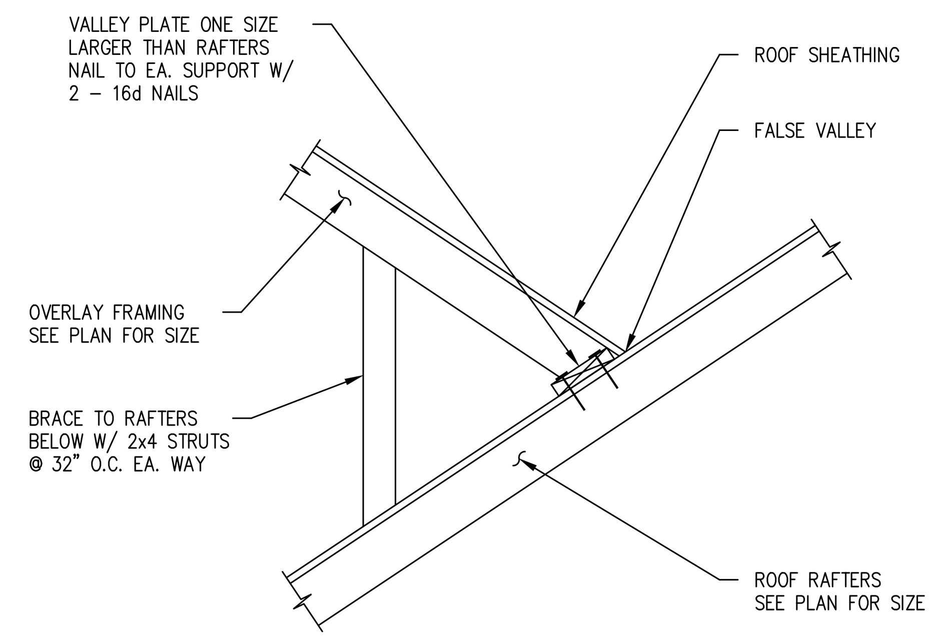
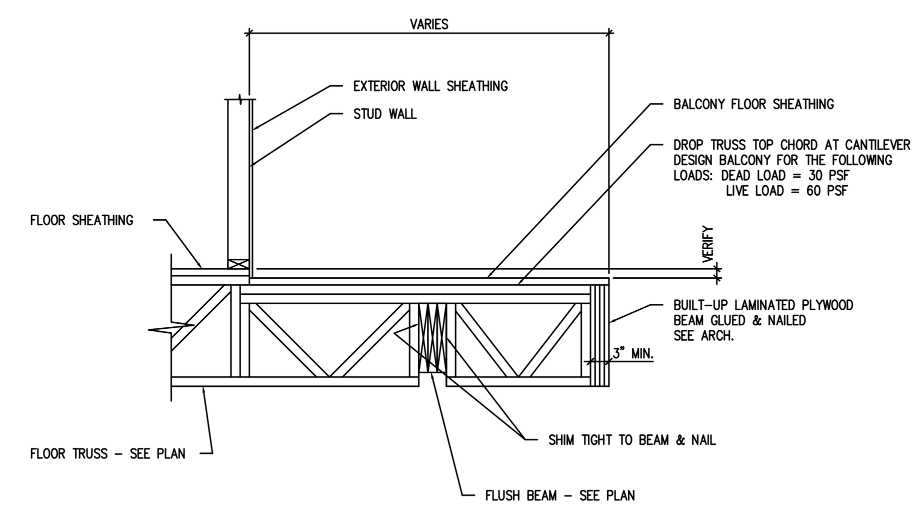
S6.3

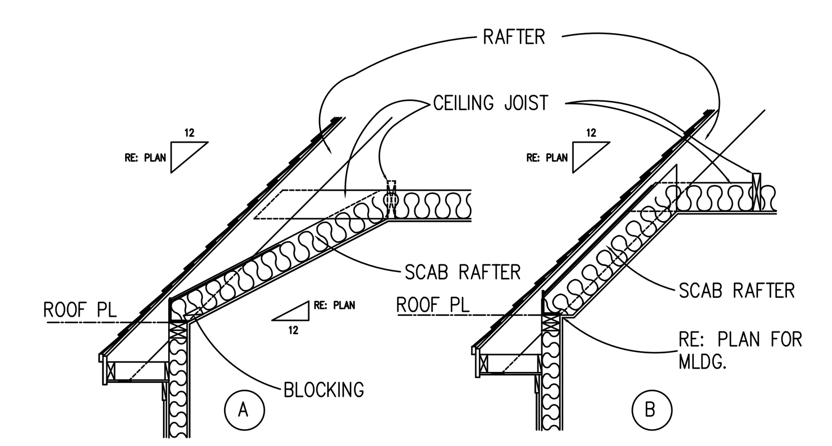
 STRUCTURAL DETAILS



ROOF OVERLAY FRAMING DETAIL 1



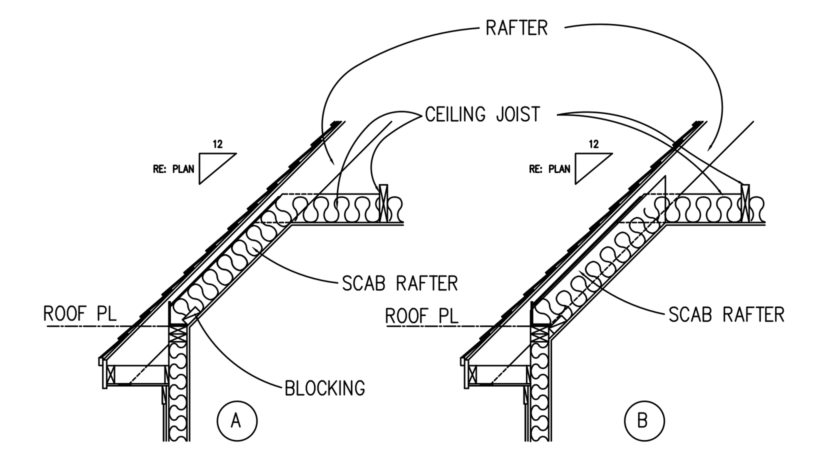
CANTILEVERED BALCONY FRAMING DET. 2



RE: PLAN FOR TYPICAL WALL, CEILING, ROOF & CORNICE/SOFFIT ASSEMBLY

A. SCAB RAFTER @ VAULT B. SCAB RAFTER @ VAULT

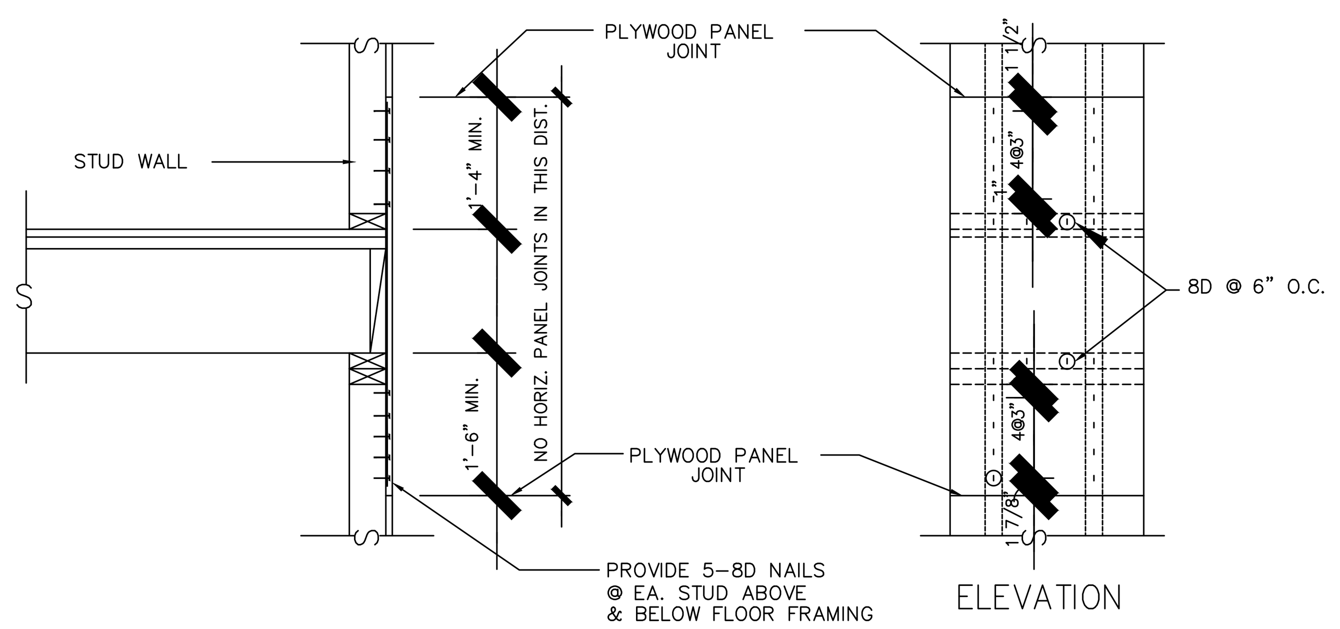
RAISED CEILING @ EXTERIOR WALL 3



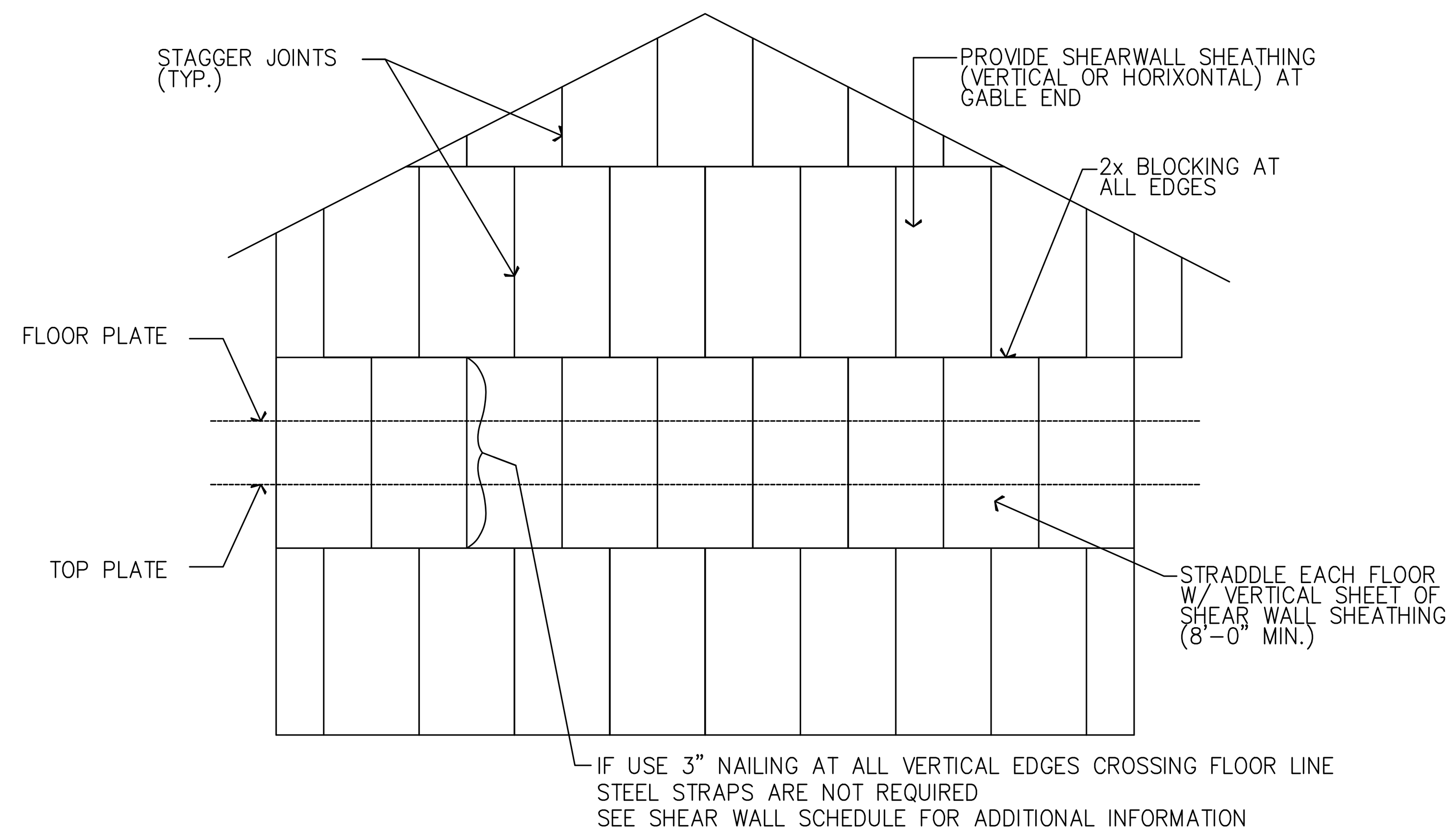
RE: PLAN FOR TYPICAL WALL, CEILING, ROOF & CORNICE/SOFFIT ASSEMBLY

A. RAFTER @ VAULT B. SCAB RAFTER @ VAULT

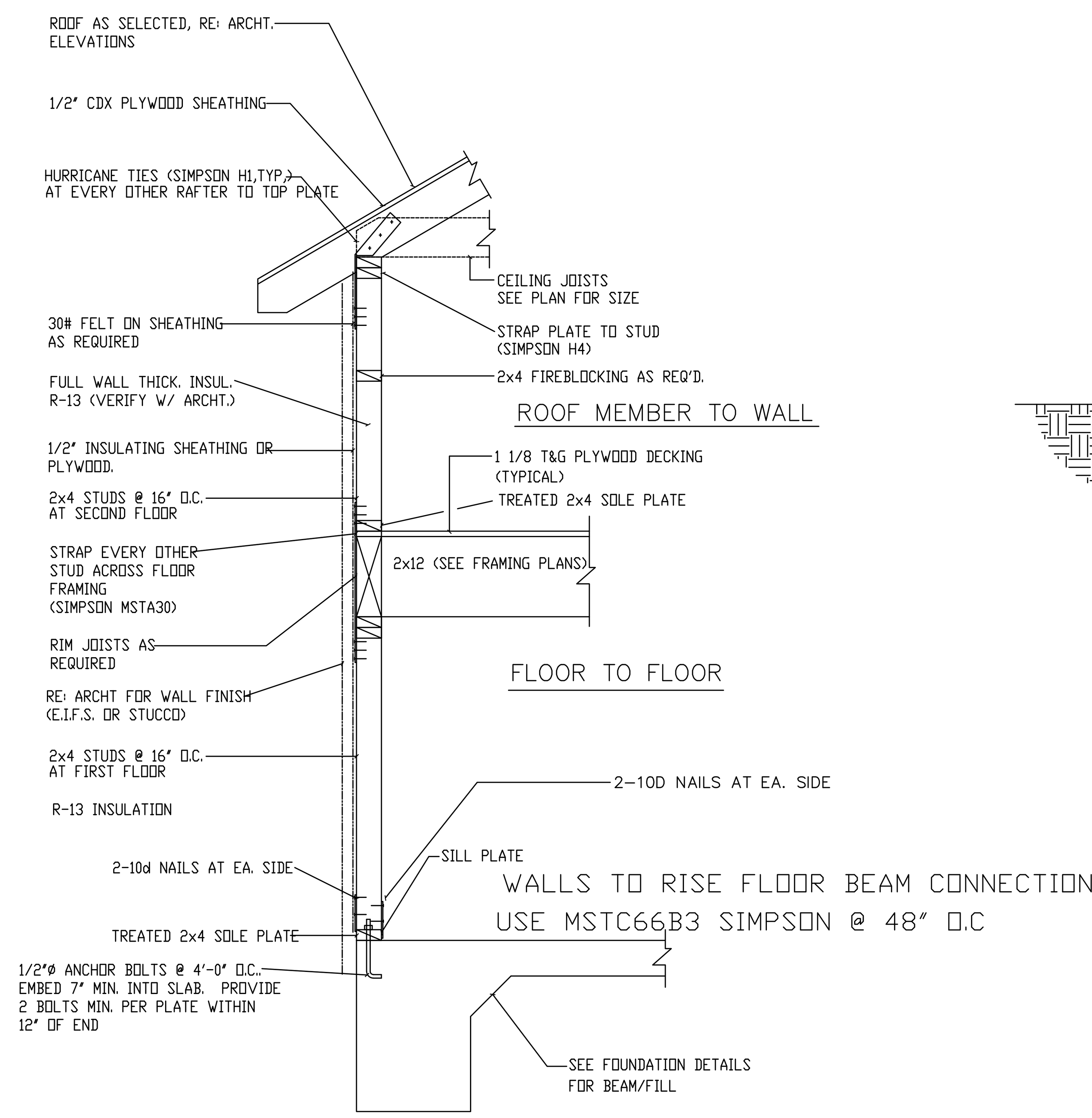
RAISED CEILING @ EXTERIOR WALL 4



ELEVATION

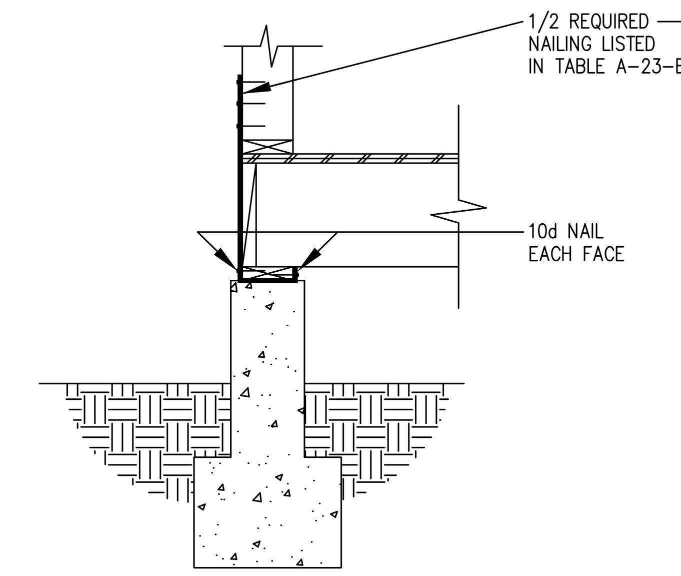


TYPICAL PLYWOOD / SHEARWALL EXTERIOR ELEVATION

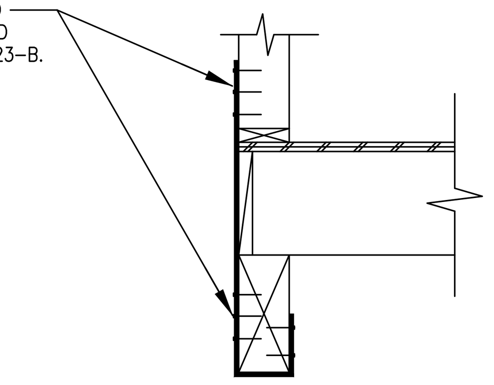


SLAB ON GRADE

COMPLETE LOAD PATH DETAILS



RAISED FOUNDATION



GIRDER AT ELEVATED FOUNDATION

ROOF AND FLOOR ANCHORAGE AT EXTERIOR WALLS

BASIC WIND SPEED (mph)	LOCATION (1)	NUMBER OF NAILS (1)		
		EXPOSURE		
X 1.61 for km/h		B	C	D
110	roof to wall	10-10d	12-10d	12-10d
	floor to floor	8-10d	10-10d	10-10d
	floor to foundation	6-10d	8-10d	8-10d

(1) Number of common nails listed is total required for each strap. The tie straps shall be spaced at 48 inches (1219 mm) on center along the length of the wall. The number of nails on each side of the roof or floor plate joints shall be equal. Nails shall be spaced to avoid splitting the wood.

RIDGE TIE STRAP NAILING (1)

BASIC WIND SPEED (mph)	NUMBER OF NAILS (1)		
	EXPOSURE		
X 1.61 for km/h	B	C	D
110	12-10d	14-10d	16-10d

(1) Number of common nails listed is total required for each strap. The tie straps shall be spaced at 48 inches (1219 mm) on center along the length of the roof. The number of nails on each side of the rafter/ridge joint shall be equal. Nails shall be spaced to avoid splitting the wood.

LOAD PATH/STRAP DETAILS 5

STRUCTURAL DETAILS

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