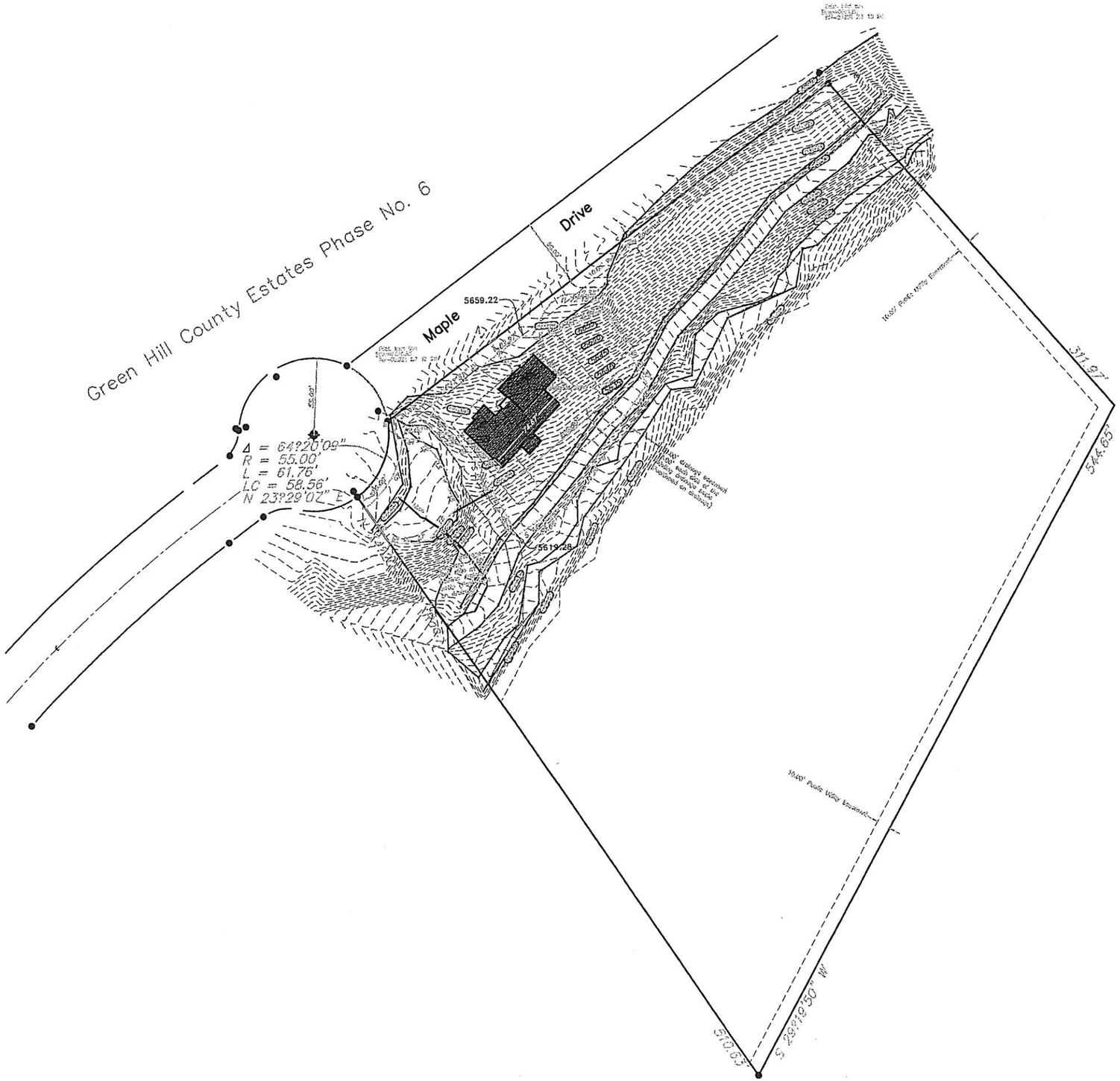


PLOT PLAN

100-R

201,234 sq. ft.
4.620 acres
133D N.

SCALE 1" = 80'

SITE PLAN NOTES:

OWNER/CONTRACTOR SHALL FIELD VERIFY THE LOT DIMENSIONS, SETBACKS, AND ALL EASEMENTS.

DIMENSIONS ON ANGLED LOT LINES ARE SHOWN PERPENDICULAR TO THE HOME.

DRAINAGE - OWNER/CONTRACTOR SHALL PROVIDE 5% SLOPE (6" IN 10'-0") AWAY FROM THE BUILDING TO INSURE PROPER DRAINAGE.

BERMS OR SWALES MAY BE REQUIRED ALONG THE PROPERTY LINES TO PREVENT STORM WATER FROM FLOWING TO ADJACENT PROPERTIES AND OR LOTS.

ALL STORM WATER AND DIRT WILL BE KEPT ON SITE DURING CONSTRUCTION UNTIL FINAL LANDSCAPING IS DONE. OWNER/CONSTRACTOR SHALL BE RESPONSIBLE FOR KEEPING DIRT/MUD ON SITE DURING BAD WEATHER AND FOR CLEANING UP AFTER SUBCONTRACTORS.

STREET, CURB, AND GUTTERS WILL BE INSPECTED AND CLEANED OF MUD AND DIRT EACH DAY PER CITY ORDINANCE.

GRAVEL BAGS TO BE PLACED AND MAINTAINED AROUND ANY STORM DRAIN INLET ADJACENT TO OR IMMEDIATELY DOWNSTREAM FROM SITE DURING CONSTRUCTION.

SURFACE DRAINAGE SHALL BE DIVERTED TO A STORM SEWER CONVEYANCE OR OTHER APPROVED POINT OF COLLECTION SO AS TO NOT CREATE A HAZARD.

LAND DRAIN - IF A LAND DRAIN IS AVAILABLE IN THE SUBDIVISION. THE LAND DRAIN SHALL BE EXTENDED TO AND CONNECTED TO A FOOTING DRAIN SYSTEM.

CURB AND GUTTER ARE NOT SHOWN FOR CLARITY. PROPERTY LINE GENERALLY STARTS 10'-0" FROM BACK OF CURB. FIELD VERIFY.

OWNER/CONTRACTOR TO FIELD LOCATE AND IDENTIFY POWER, SEWER AND WATER CONNECTION LOCATIONS.

ELEVATIONS INDICATED ON PLANS ARE APPROXIMATED. OWNER/CONTRACTOR SHALL BE REQUIRED TO FIELD VERIFY EXACT ELEVATION.

ounty Estates Phase No.

Drive

Maple

50.00'

10.00' Public Utility Easement

5659.22

Exist. Inlet Box
Top=5646.53
INV=CBSQR 2.7 15 SW

55.00'

Δ = 64?20'09"
R = 55.00'
L = 61.76'
LC = 58.56'
N 23?29'0Z" E

10.00'

Max.

5619.28

5655
5650
5645
5640
5635

170.60'

5' drainage easement
(2.00' each side of the
existing drainage swale
(Positioned on drainage)

5' drainage easement (2.00' each side of the existing drainage swale (Positioned on drainage)

County Estates Phase No. C

SCALE 1" = 30'

Drive

Maple

50.00'

10.0N' Public Utility Easement

12.38'

N 72°15'54" E

5659.22

Exist. Inlet Box
Top=5646.53
INV=CBSQR 2.7 15 SW/

N 83.97'

S 54°17'31" W

55.00'

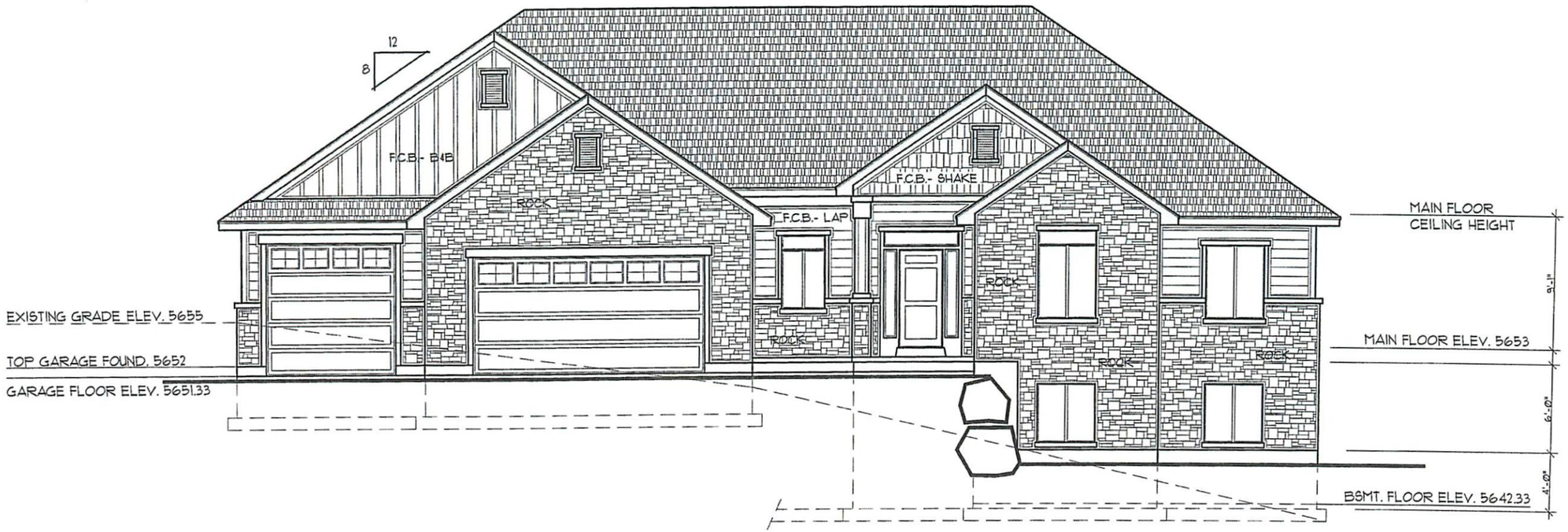
Δ = 64?20'09"
R = 55.00'
L = 61.76'
LC = 58.56'
N 23?29'0Z" E

Max.

5619.28

50.00' drainage easement
15.00' each side of the
existing drainage swale
(Positioned on drainage)

drainage easement 10.00' each side of the existing drainage swale (Positioned on drainage)



FRONT ELEV. VIEW

SCALE 1/8" = 1'-0"

WARNING - Signature must be in red or plans and calculations are void. Plans and Calculations submitted 30 days after date in red are void Plans and Calculations are for home and lot list above.

PROFESSIONAL STRUCTURAL ENGINEER
No. 353825
NATHAN JOHN KARRAS
3/12/18
STATE OF UTAH

BRICK VENEER R703.7

CORROSION RESISTANT ACHOR TIES EMBEDDED IN MORTAR OR GROUT AND EXTENDING INTO THE VENEER A MINIMUM OF 1-½" INCH, WITH NOT LESS THAN ¾" MORTAR OR GROUT COVER TO OUTSIDE FACE.

CORROSION RESISTANT 22 GAGE X 7/8" OR NO. 9 GAGE WIRE SPACED NO MORE THAN 24" O.C. HORIZ. AND VERTICALLY AND SHALL SUPPORT NOT MORE THAN 2.0 SQUARE FEET OF WALL AREA.

STEEL ANGLE - MIN. 6"x4"x$\frac{5}{16}$" WITH THE LONG LEG VERTICAL. COMPLY WITH SECTION R703.7.2.1

ALL STONE AND MASONRY VENEER SHALL COMPLY WITH SECTION R703.7

ATTIC VENTILATION R806

ATTIC VENTILATION SHALL COMPLY WITH SECTION R806.

THE NET FREE VENTILATION SHALL NOT BE LESS THAN 1/150th OF THE AREA OF THE SPACE VENTILATED, EXCEPT THAT THE AREA MAY BE 1/300th PROVIDED THAT AT LEAST 50% OF THE REQUIRED VENTILATING AREA IS LOCATED IN THE UPPER SPACE PORTION OF THE SPACE TO BE VENTILATED AND THE REMAINDER IS PROVIDED BY EAVES OR CORNICE VENTS. IRC R806.

EXTERIOR WALL COVERING R703

ALL EXTERIOR COVERINGS SHALL COMPLY WITH SECTION R703

STUCCO/(EIFS) - INSTALLATION SHALL COMPLY WITH ASTM E 2568

FIBER CEMENT SIDING - PANEL AND LAP SIDING INSTALLATION SHALL COMPLY WITH ASTM C1186.

VINYL SIDING - INSTALLATION SHALL COMPLY PER ASTM D 3679

ASPHALT SHINGLES - INSTALLATION SHALL COMPLY WITH ASTM D 225 OR D 3462. CLASS "A"

BUILDING ADDRESS IRC R319.1

BUILDING NUMBERS SHALL BE A MIN. 4" HIGH WITH A MIMINUM STROKE WITH OF ½" INCH.

BLACK DIAMOND CONTRACTORS
LOT 100 - GREEN HILL ESTATES

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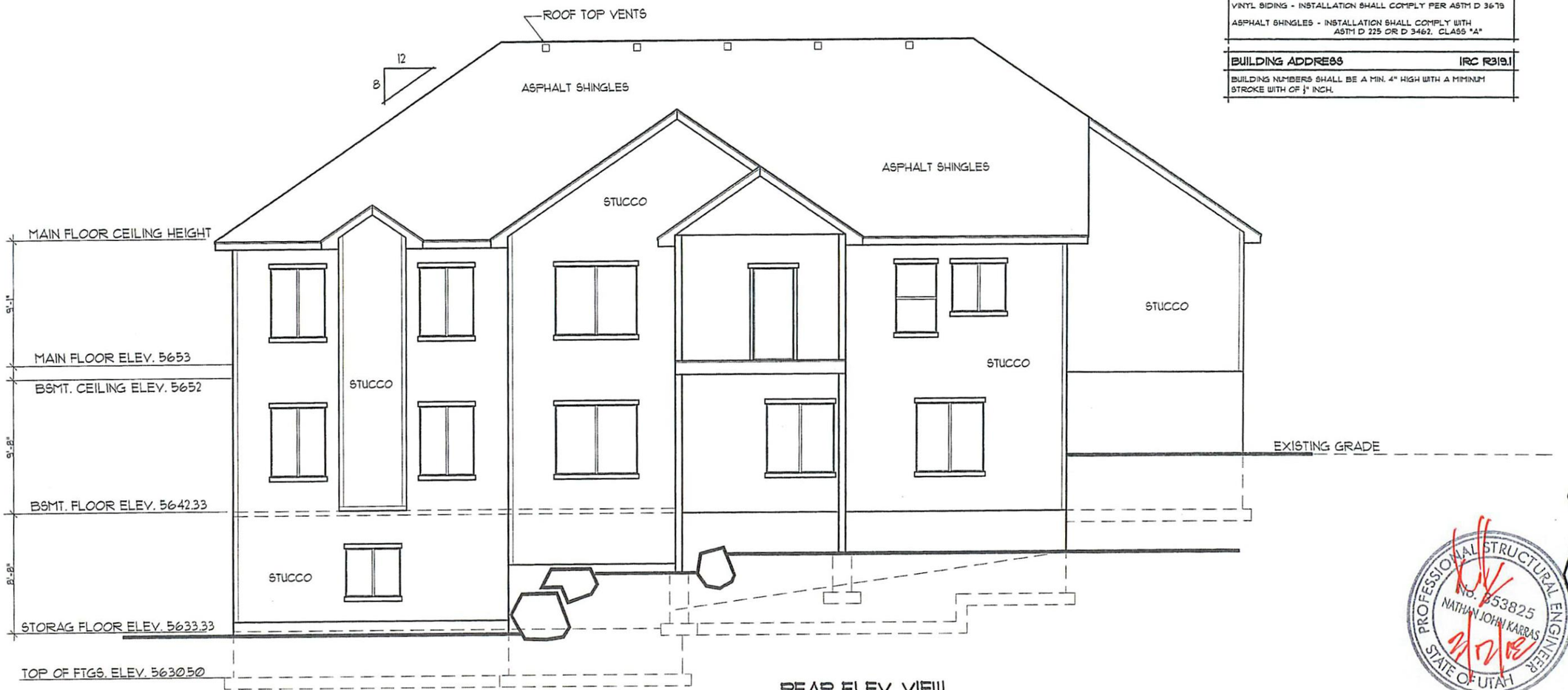
NATE KARRAS P.E. (801) 786-0849 email: KustomNK@gmail.com

SCALE
1/8" = 1'-0" 11x17
1/4" = 1'-0" 24x3

PLAN NUMBER
R1877A-18



REAR ELEV. VIEW

SCALE 1/8" = 1'-0"

BRICK VENEER	R103.7
CORROSION RESISTANT ACHOR TIES EMBEDDED IN MORTAR OR GROUT AND EXTENDING INTO THE VENEER A MINIMUM OF 1-½" INCH, WITH NOT LESS THAN ¾" MORTAR OR GROUT COVER TO OUTSIDE FACE.	
CORROSION RESISTANT 22 GAGE X 7/8" OR NO. 8 GAGE WIRE SPACED NO MORE THAN 24" O.C. HORIZ. AND VERTICALLY AND SHALL SUPPORT NOT MORE THAN 2.0 SQUARE FEET OF WALL AREA.	
STEEL ANGLE - MIN. 6"x4"x⅜" WITH THE LONG LEG VERTICAL. COMPLY WITH SECTION R103.12.1	
ALL STONE AND MASONRY VENEER SHALL COMPLY WITH SECTION R103.1	

ATTIC VENTILATION	R806
ATTIC VENTILATION SHALL COMPLY WITH SECTION R806.	
THE NET FREE VENTILATION SHALL NOT BE LESS THAN 1/150th OF THE AREA OF THE SPACE VENTILATED, EXCEPT THAT THE AREA MAY BE 1/300th PROVIDED THAT AT LEAST 50% OF THE REQUIRED VENTILATING AREA IS LOCATED IN THE UPPER SPACE PORTION OF THE SPACE TO BE VENTILATED AND THE REMAINDER IS PROVIDED BY EAVES OR CORNICE VENTS. IRC R806.	

EXTERIOR WALL COVERING	R703
ALL EXTERIOR COVERINGS SHALL COMPLY WITH SECTION R703	
STUCCO(EIFS) - INSTALLATION SHALL COMPLY WITH ASTM E 2568	
FIBER CEMENT SIDING - PANEL AND LAP SIDING INSTALLATION SHALL COMPLY WITH ASTM C1186.	
VINYL SIDING - INSTALLATION SHALL COMPLY PER ASTM D 3679	
ASPHALT SHINGLES - INSTALLATION SHALL COMPLY WITH ASTM D 225 OR D 3462. CLASS "A"	

BUILDING ADDRESS	IRC R319.1
BUILDING NUMBERS SHALL BE A MIN. 4" HIGH WITH A MINIMUM STROKE WITH OF ½" INCH.	

BLACK DIAMOND CONTRACTORS
LOT 100 - GREEN HILL ESTATES

PROFESSIONAL STRUCTURAL ENGINEER
No. 853825
NATHAN JOHN KARRAS
STATE OF UTAH
2/12/18

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SCALE	
1/8" = 1'-0"	11x17
1/4" = 1'-0"	24x36
PLAN NUMBER	
R1877A-18	A2

BRICK VENEER — R1Ø3.7

CORROSION RESISTANT ACHOR TIES EMBEDDED IN MORTAR OR GROUT AND EXTENDING INTO THE VENEER A MINIMUM OF 1-½" INCH, WITH NOT LESS THAN ⅝" MORTAR OR GROUT COVER TO OUTSIDE FACE.

CORROSION RESISTANT 22 GAGE X 7/8" OR NO. 9 GAGE WIRE SPACED NO MORE THAN 24" O.C. HORIZ. AND VERTICALLY AND SHALL SUPPORT NOT MORE THAN 2.Ø SQUARE FEET OF WALL AREA.

STEEL ANGLE - MIN. 6"x4"x⅜" WITH THE LONG LEG VERTICAL. COMPLY WITH SECTION R1Ø3.12.1

ALL STONE AND MASONRY VENEER SHALL COMPLY WITH SECTION R1Ø3.7

ATTIC VENTILATION — R8Ø6

ATTIC VENTILATION SHALL COMPLY WITH SECTION R8Ø6.

THE NET FREE VENTILATION SHALL NOT BE LESS THAN 1/15Øth OF THE AREA OF THE SPACE VENTILATED, EXCEPT THAT THE AREA MAY BE 1/3ØØth PROVIDED THAT AT LEAST 5Ø% OF THE REQUIRED VENTILATING AREA IS LOCATED IN THE UPPER SPACE PORTION OF THE SPACE TO BE VENTILATED AND THE REMAINDER IS PROVIDED BY EAVES OR CORNICE VENTS. IRC R8Ø6.

EXTERIOR WALL COVERING — R1Ø3

ALL EXTERIOR COVERINGS SHALL COMPLY WITH SECTION R1Ø3

STUCCO(EIFS) - INSTALLATION SHALL COMPLY WITH ASTM E 2568

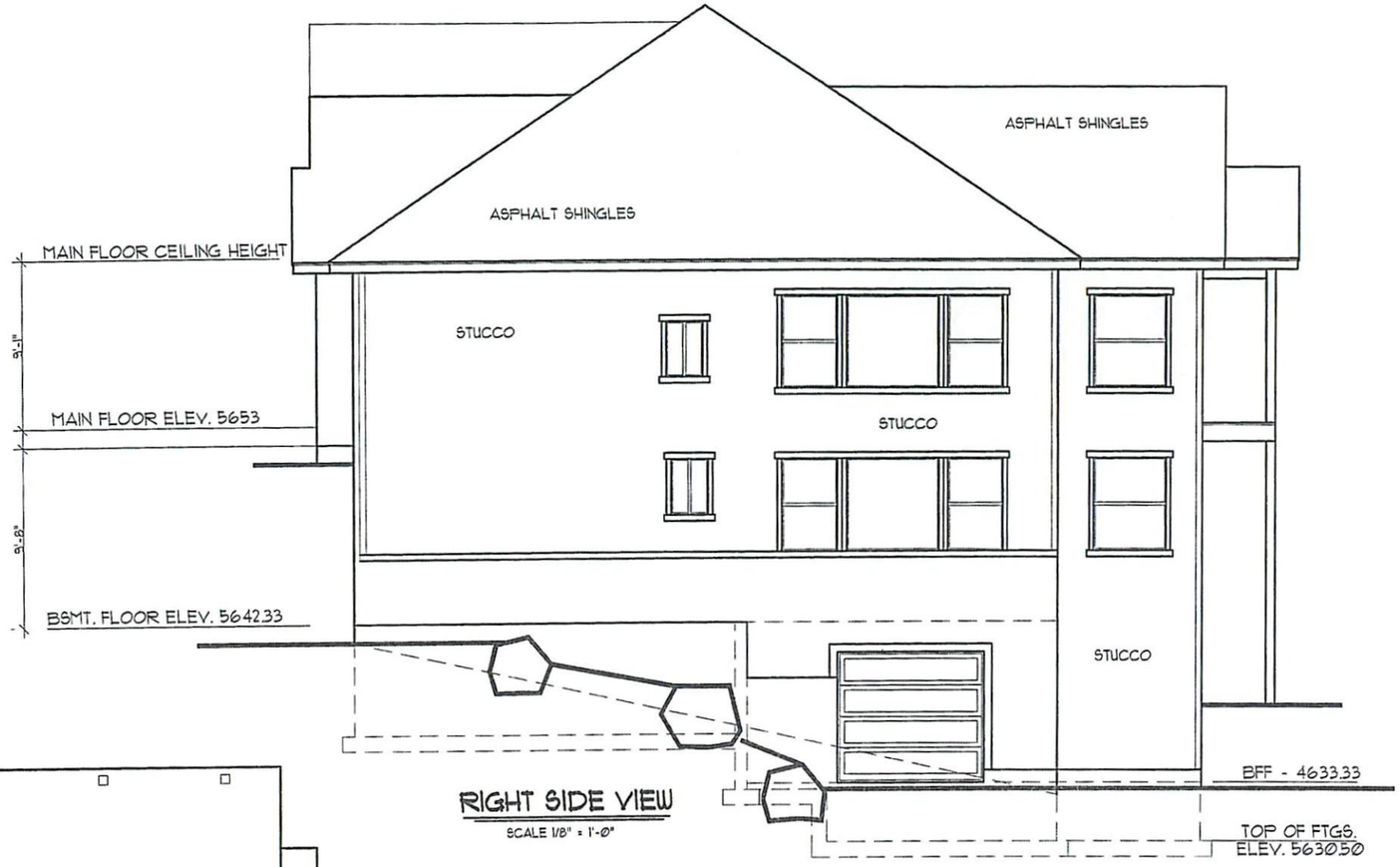
FIBER CEMENT SIDING - PANEL AND LAP SIDING INSTALLATION SHALL COMPLY WITH ASTM C1186.

VINYL SIDING - INSTALLATION SHALL COMPLY PER ASTM D 3679

ASPHALT SHINGLES - INSTALLATION SHALL COMPLY WITH ASTM D 225 OR D 3462. CLASS "A"

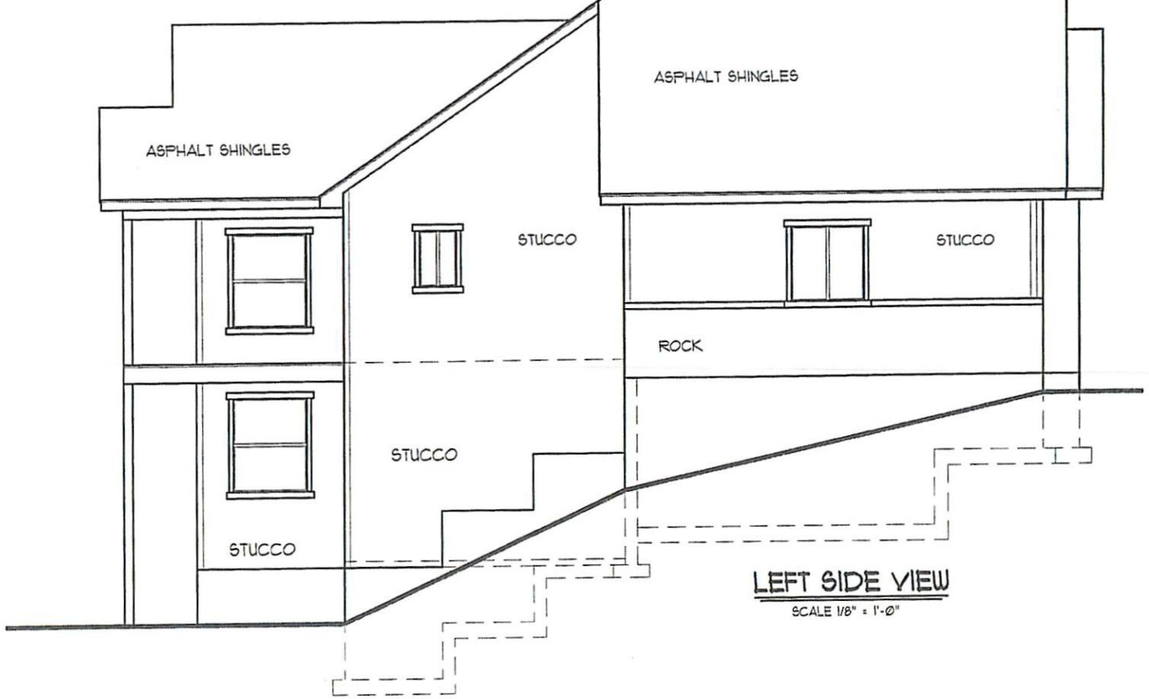
BUILDING ADDRESS — IRC R319.1

BUILDING NUMBERS SHALL BE A MIN. 4" HIGH WITH A MIMINUM STROKE WITH OF ½" INCH.



RIGHT SIDE VIEW

SCALE 1/8" = 1'-Ø"



LEFT SIDE VIEW

SCALE 1/8" = 1'-Ø"

PROFESSIONAL STRUCTURAL ENGINEER
No. 353825
NATHAN JOHN KARRAS
STATE OF UTAH
3/12/18

BLACK DIAMOND CONTRACTORS
LOT 100 - GREEN HILL ESTATES

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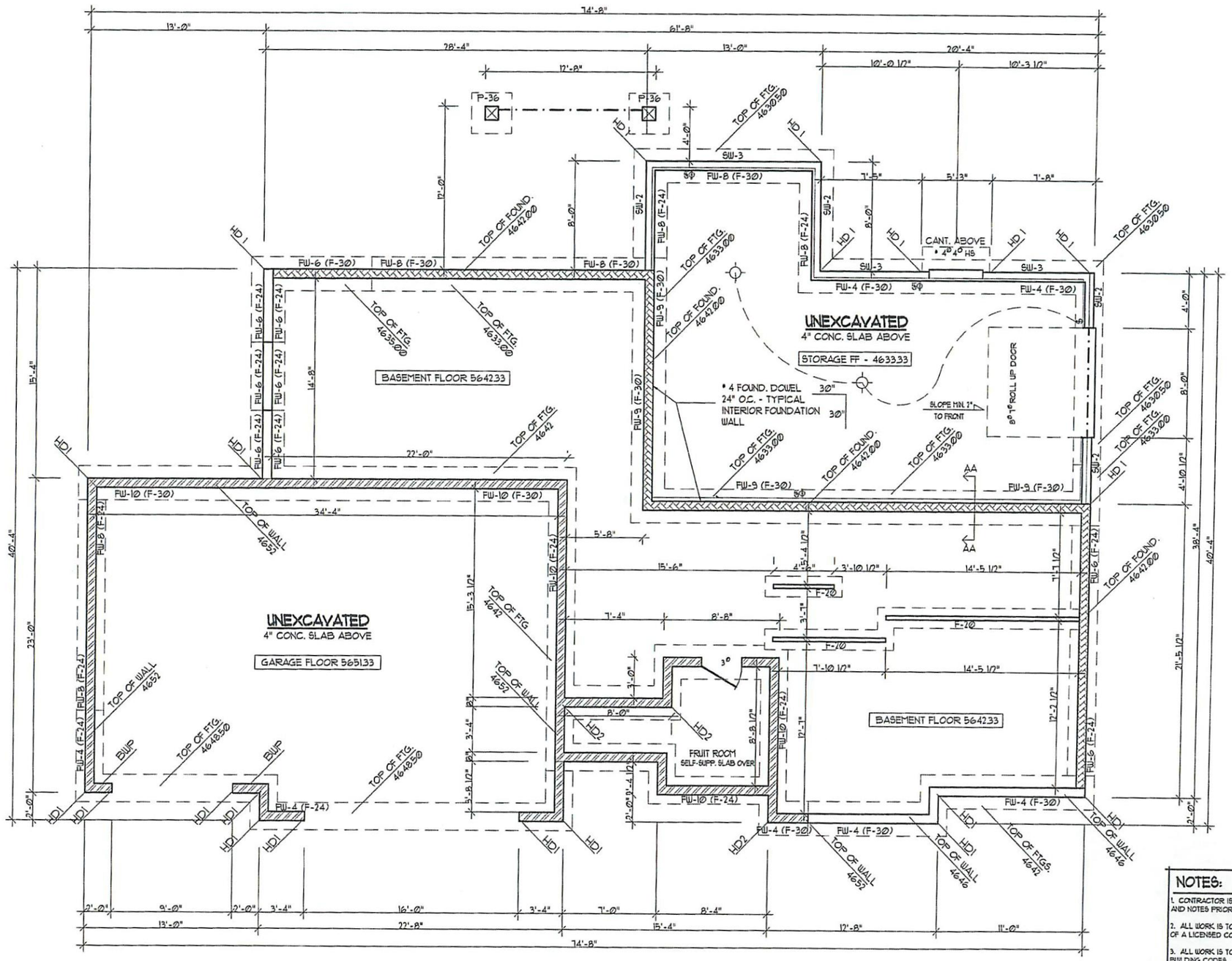
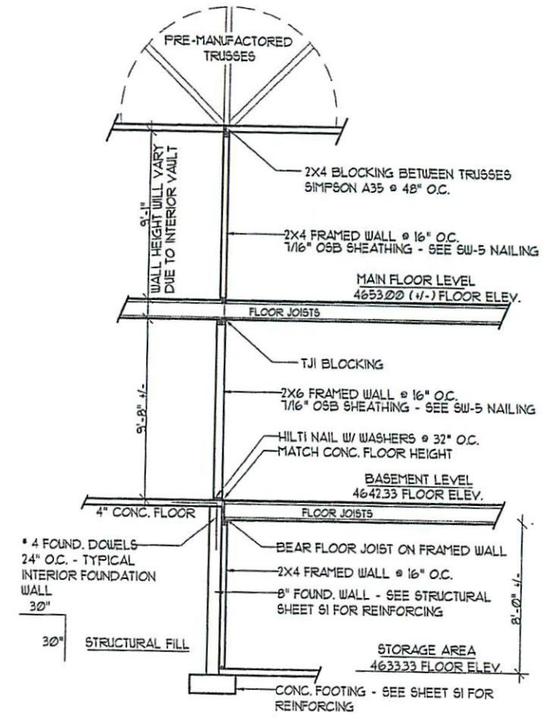
RESIDENTIAL / COMMERCIAL DESIGN & ENGINEERING
NATE KARRAS P.E. (801) 786-0849 email: KustomNK@gmail.com

SCALE	
1/8" = 1'-0"	11x17
1/4" = 1'-0"	24x36
PLAN NUMBER	
R1877A-18	A3



FOUNDATION PLAN

SCALE 1/8" = 1'-0"



SECTION VIEW

SCALE 1/8" = 1'-0"

NOTES: GENERAL

1. CONTRACTOR IS TO VERIFY DESIGN, DIMENSIONS AND NOTES PRIOR TO BEGINNING OF CONSTRUCTION.
2. ALL WORK IS TO BE DONE UNDER THE SUPERVISION OF A LICENSED CONTRACTOR.
3. ALL WORK IS TO DONE UNDER LOCAL AND STATE BUILDING CODES.
4. ELECTRICAL SHALL BE PER NATIONAL ELECTRIC CODE, LATEST EDITIONS.
5. HEATING/MECHANICAL WORK SHALL BE PER APPLICABLE CODES, LATEST EDITIONS.

NOTES: STRUCTURAL

SEE STRUCTURAL DETAILS - SHEET S-1, S-2, AND S-3

PROFESSIONAL STRUCTURAL ENGINEER
NO. 353825
NATHAN JOHN KARRAS
STATE OF UTAH
3/12/18

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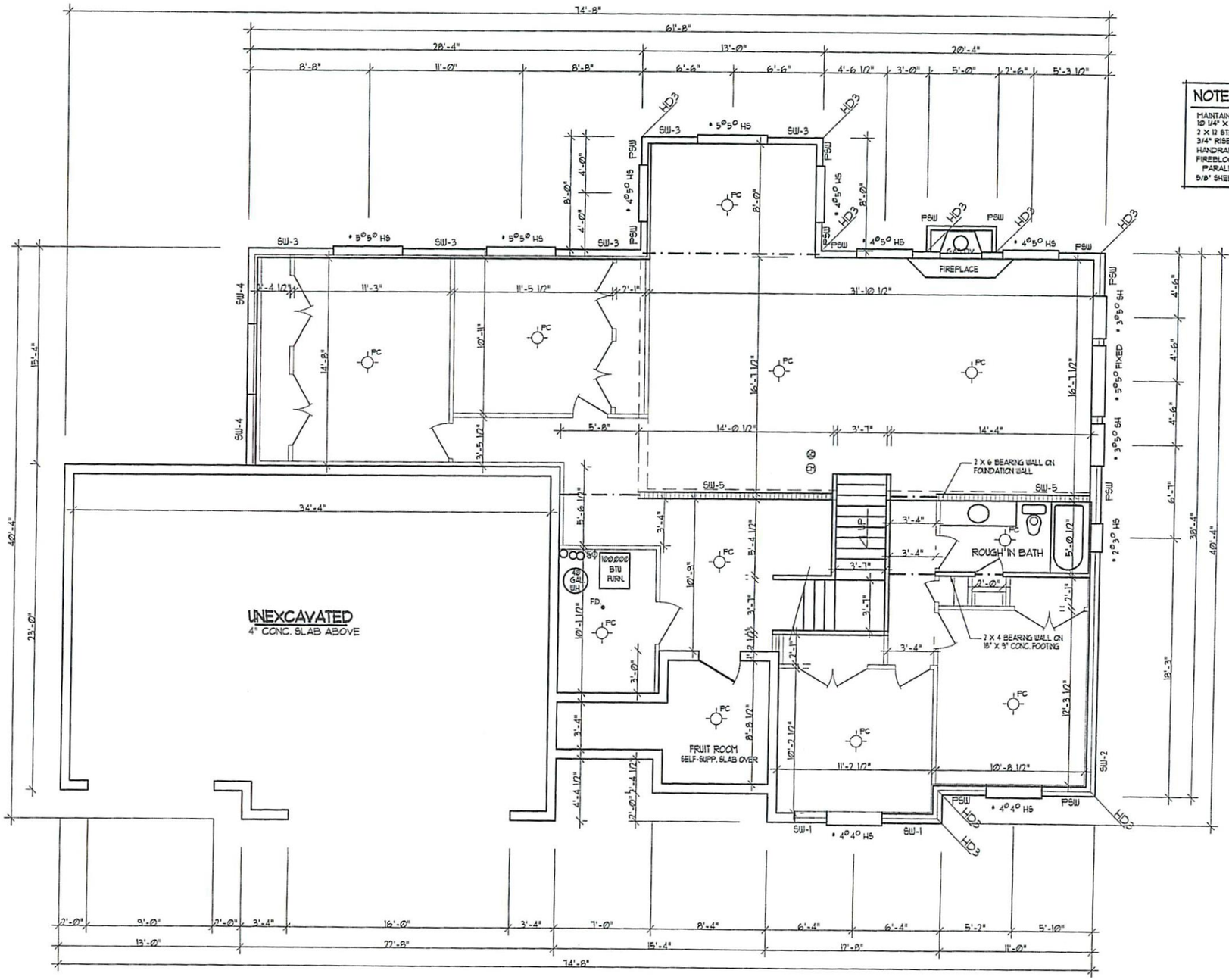
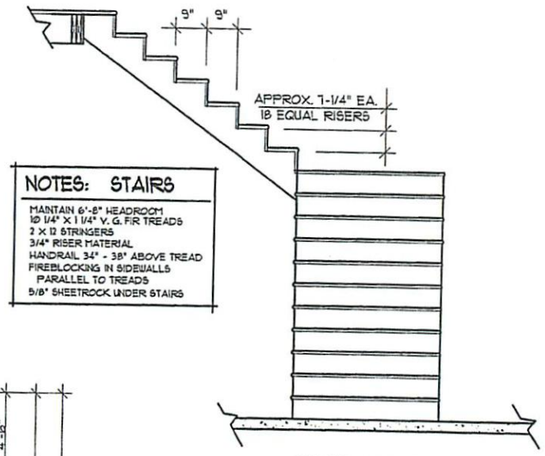
SCALE	
1/8" = 1'-0"	11x17
1/4" = 1'-0"	24x36
PLAN NUMBER	A4
R1877A-18	



BASEMENT PLAN

SCALE 1/8" = 1'-Ø"



STAIR DETAILS

SCALE 1/4" = 1' - Ø"

NOTES: STAIRS

- MAINTAIN 6'-8" HEADROOM
- 10 1/4" X 1 1/4" V. G. FIR TREADS
- 2 X 12 STRINGERS
- 3/4" RISER MATERIAL
- HANDRAIL 34" - 38" ABOVE TREAD
- FIREBLOCKING IN SIDEWALLS PARALLEL TO TREADS
- 5/8" SHEETROCK UNDER STAIRS

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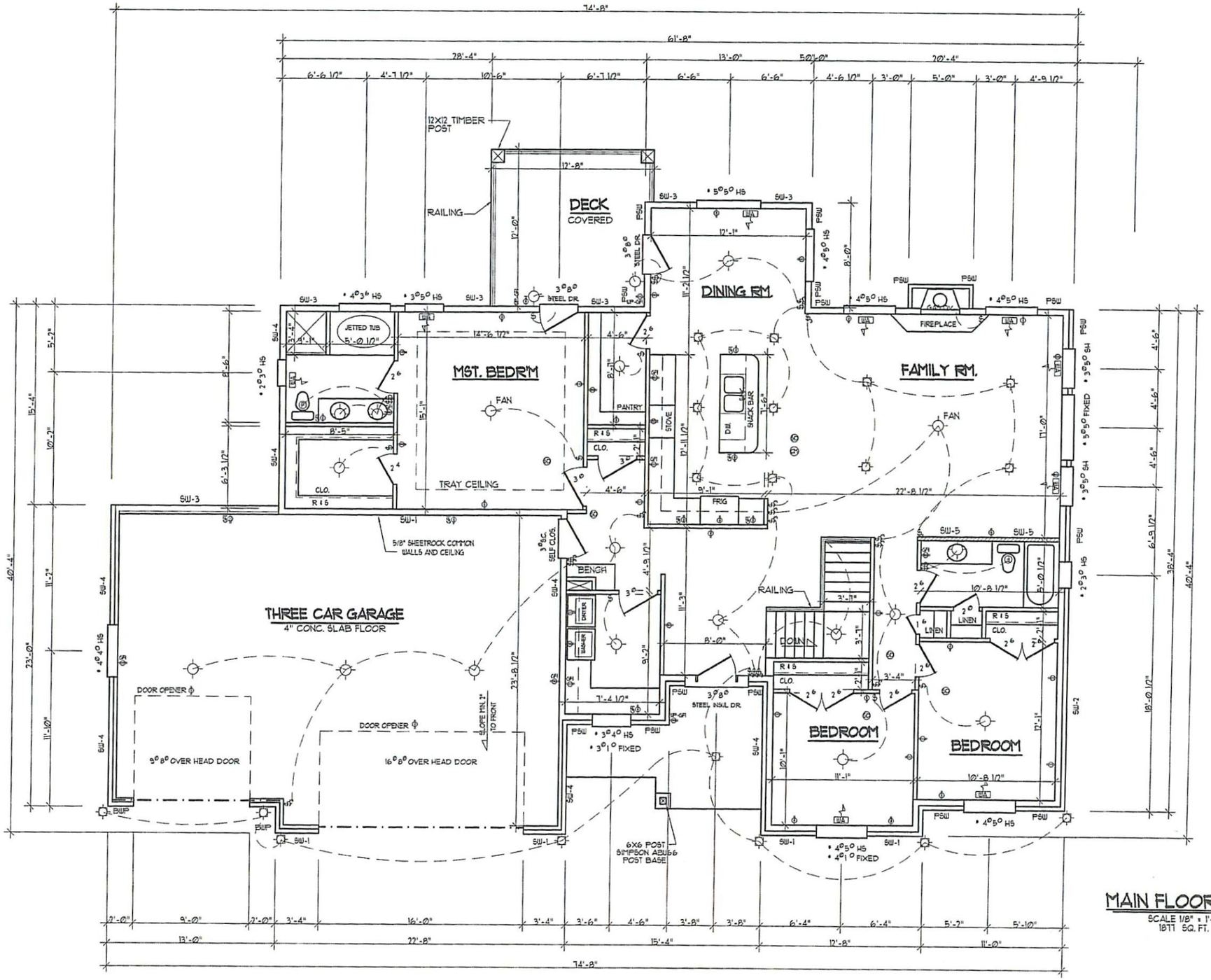
PROFESSIONAL STRUCTURAL ENGINEER
No. 353825
NATHAN JOHN KARRAS
STATE OF UTAH
3/12/18

SCALE	1/8" = 1'-0" 11x17 1/4" = 1'-0" 24x36
PLAN NUMBER	R1877A-18 A5



NOTES: GENERAL

1. CONTRACTOR IS TO VERIFY DESIGN, DIMENSIONS AND NOTES PRIOR TO BEGINNING OF CONSTRUCTION.
2. ALL WORK IS TO BE DONE UNDER THE SUPERVISION OF A LICENSED CONTRACTOR.
3. ALL WORK IS TO DONE UNDER LOCAL AND STATE BUILDING CODES.
4. ELECTRICAL SHALL BE PER NATIONAL ELECTRIC CODE, LATEST EDITIONS.
5. HEATING/MECHANICAL WORK SHALL BE PER APPLICABLE CODES, LATEST EDITIONS.

NOTES: STRUCTURAL

SEE STRUCTURAL DETAILS - SHEET S-1, S-2, AND S-3

MAIN FLOOR PLAN

SCALE 1/8" = 1'-Ø"
1811 SQ. FT.

PROFESSIONAL STRUCTURAL ENGINEER
No. 353825
NATHAN JOHN KARRAS
3/12/13
STATE OF UTAH

BLACK DIAMOND CONTRACTORS
LOT 100 - GREEN HILL ESTATES

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SCALE	
1/8" = 1'-0"	11x17
1/4" = 1'-0"	24x36
PLAN NUMBER	
R1629A-17	A6

NOTES: GENERAL

1. CONTRACTOR IS TO VERIFY DESIGN, DIMENSIONS AND NOTES PRIOR TO BEGINNING OF CONSTRUCTION.

2. ALL WORK IS TO BE DONE UNDER THE SUPERVISION OF A LICENSED CONTRACTOR.

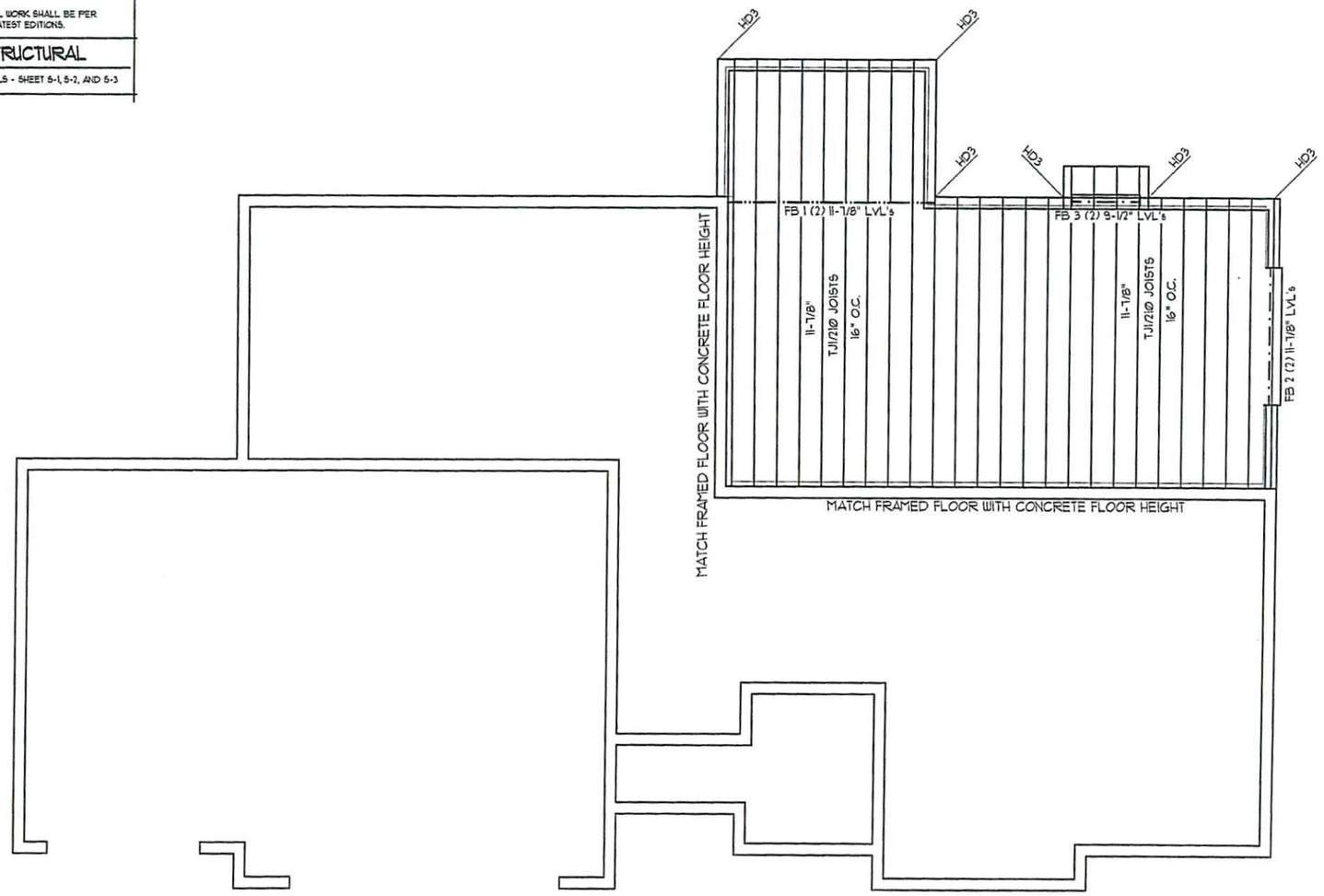
3. ALL WORK IS TO DONE UNDER LOCAL AND STATE BUILDING CODES.

4. ELECTRICAL SHALL BE PER NATIONAL ELECTRIC CODE, LATEST EDITIONS.

5. HEATING/MECHANICAL WORK SHALL BE PER APPLICABLE CODES, LATEST EDITIONS.

NOTES: STRUCTURAL

SEE STRUCTURAL DETAILS - SHEET S-1, S-2, AND S-3



BASEMENT STORAGE PLAN

SCALE 1/8" = 1'-0"

PROFESSIONAL STRUCTURAL ENGINEER
NO. 353825
NATHAN JOHN KARRAS
STATE OF UTAH
3/7/18

BLACK DIAMOND CONTRACTORS
LOT 100 - GREEN HILL ESTATES

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SCALE	
1/8" = 1'-0"	11x17
1/4" = 1'-0"	24x36
PLAN NUMBER	
R1877A-18	A7

NOTES: GENERAL

1. CONTRACTOR IS TO VERIFY DESIGN, DIMENSIONS AND NOTES PRIOR TO BEGINNING OF CONSTRUCTION.

2. ALL WORK IS TO BE DONE UNDER THE SUPERVISION OF A LICENSED CONTRACTOR.

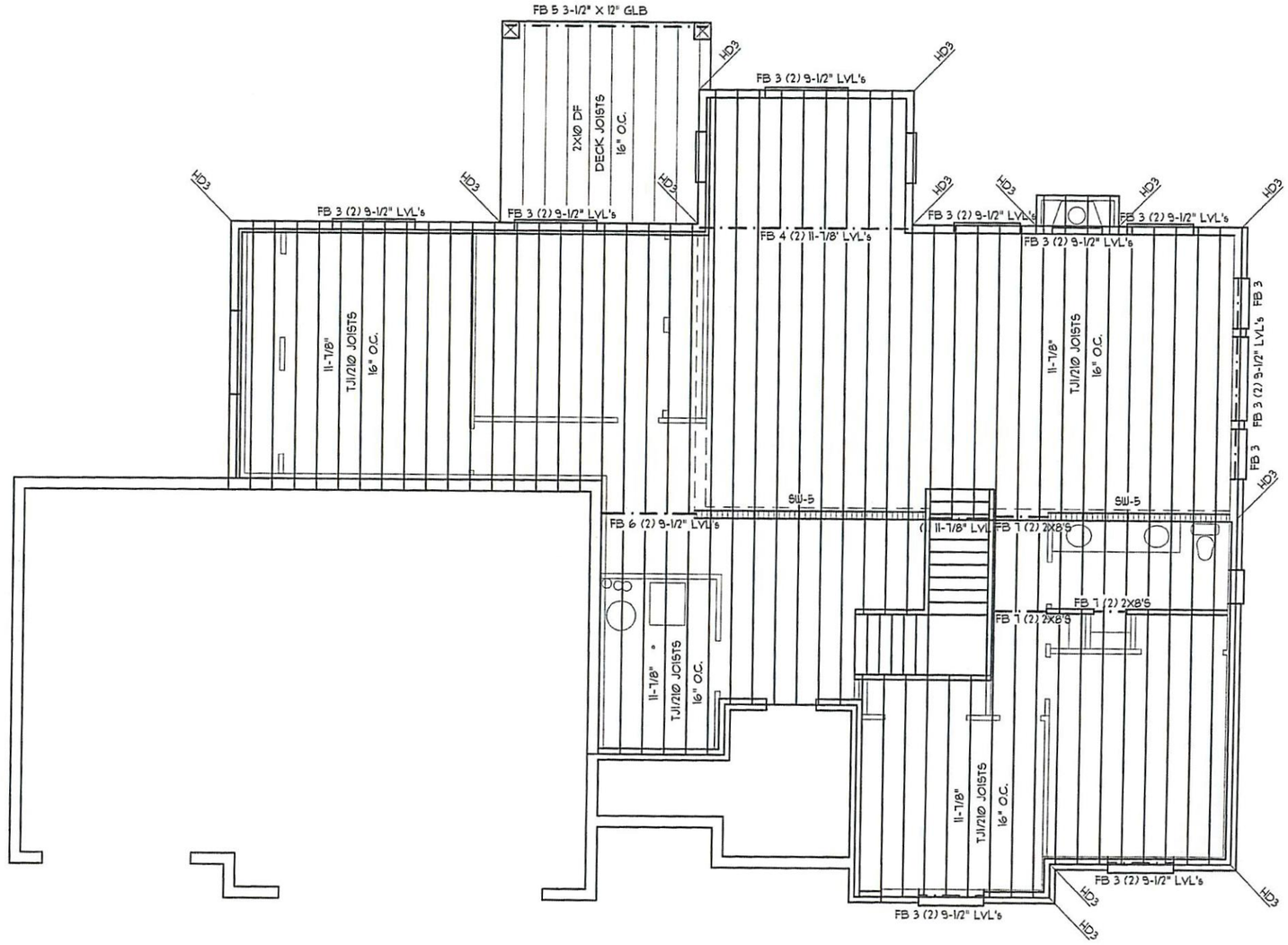
3. ALL WORK IS TO DONE UNDER LOCAL AND STATE BUILDING CODES.

4. ELECTRICAL SHALL BE PER NATIONAL ELECTRIC CODE, LATEST EDITIONS.

5. HEATING/MECHANICAL WORK SHALL BE PER APPLICABLE CODES, LATEST EDITIONS.

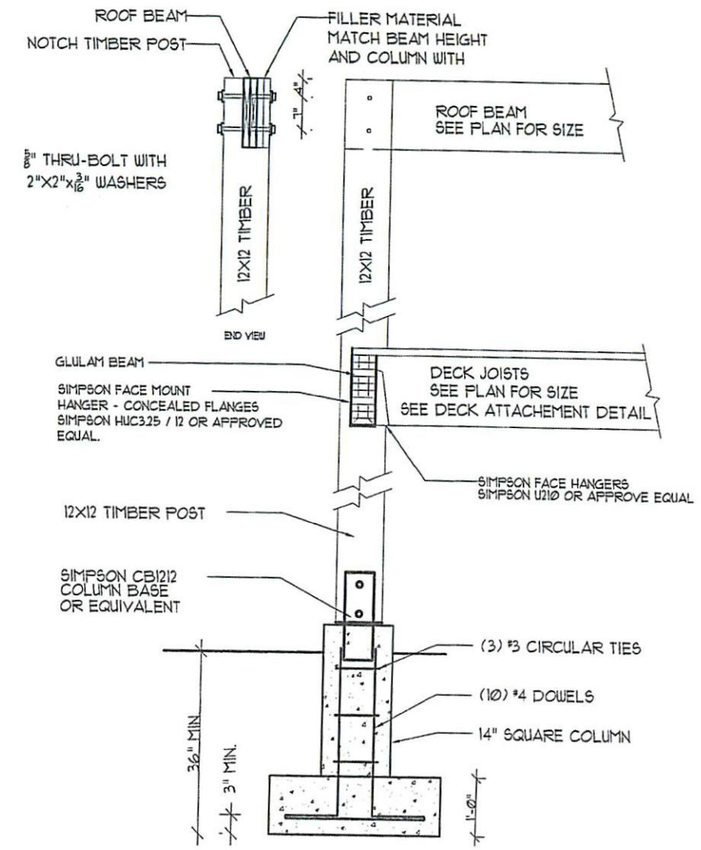
NOTES: STRUCTURAL

SEE STRUCTURAL DETAILS - SHEET S-1, S-2, AND S-3



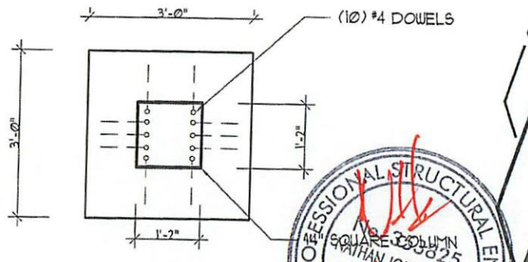
MAIN FLOOR FRAMING PLAN

SCALE 1/8" = 1'-0"



SEE FOOTING SCHEDULE FOR STEEL REINFORCING

ELEVATION VIEW



PLAN VIEW

TIMBER POST DETAIL

NOT TO SCALE

PROFESSIONAL STRUCTURAL ENGINEER
NO. 334825
NATHAN JOHN KARRAS
STATE OF UTAH
3/12/18

BLACK DIAMOND CONTRACTORS
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SCALE	
1/8" = 1'-0"	11x17
1/4" = 1'-0"	24x36
PLAN NUMBER	
R1877A-18	A8

NOTES: GENERAL

1. CONTRACTOR IS TO VERIFY DESIGN, DIMENSIONS AND NOTES PRIOR TO BEGINNING OF CONSTRUCTION.

2. ALL WORK IS TO BE DONE UNDER THE SUPERVISION OF A LICENSED CONTRACTOR.

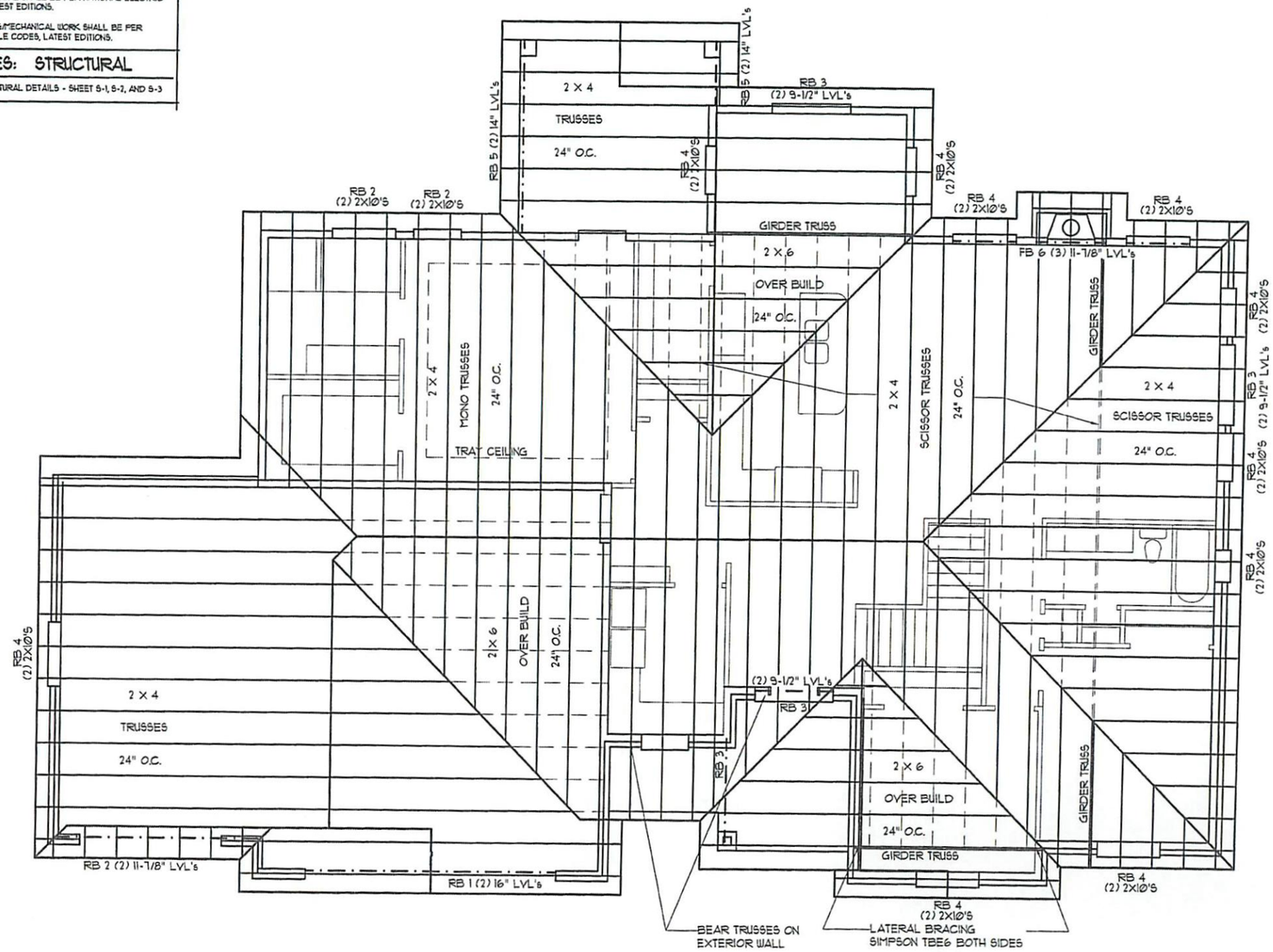
3. ALL WORK IS TO DONE UNDER LOCAL AND STATE BUILDING CODES.

4. ELECTRICAL SHALL BE PER NATIONAL ELECTRIC CODE, LATEST EDITIONS.

5. HEATING/MECHANICAL WORK SHALL BE PER APPLICABLE CODES, LATEST EDITIONS.

NOTES: STRUCTURAL

SEE STRUCTURAL DETAILS - SHEET S-1, S-2, AND S-3



ROOF FRAMING PLAN

SCALE 1/8" = 1'-0"

NOTES: PRE-MANUFACTOR TRUSSES

PRE-MANUFACTORED TRUSSES SHALL CONFORM WITH SECTION R802.10 AND R502.11.

TRUSS MANUFACTURE SHALL PROVIDE DETAILS AND INSTRUCTION FOR HANDLING, INSTALLING, RESTRAINING, AND BRACING OF TRUSSES BEFORE AND AFTER CONSTRUCTION.

TRUSS DESIGN DRAWINGS SHALL BE PREPARED BY A REGISTERED PROFESSIONAL WHERE REQUIRED BY THE STATUES OF THE JURISDICTION IN WHICH THE PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH SECTION R106.1

NO ALTERATIONS SHALL BE MADE TO THE TRUSSES OR THE TRUSS LAYOUT.

ANY CHANGES TO THE ROOF FRAMING PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER PRIOR TO MANUFACTURING AND OR CONSTRUCTION OF SAID TRUSSES.

TRUSS DESIGN DRAWINGS SHALL COMPLY WITH SECTION R502.11.4 & R802.10.1.

NOTES: 65 LB SNOW LOAD

BLACK DIAMOND CONTRACTORS
LOT 100 - GREEN HILL ESTATES

PROFESSIONAL STRUCTURAL ENGINEER
No. 353825
NATHAN JOHN KARRAS
STATE OF UTAH
11/12/08

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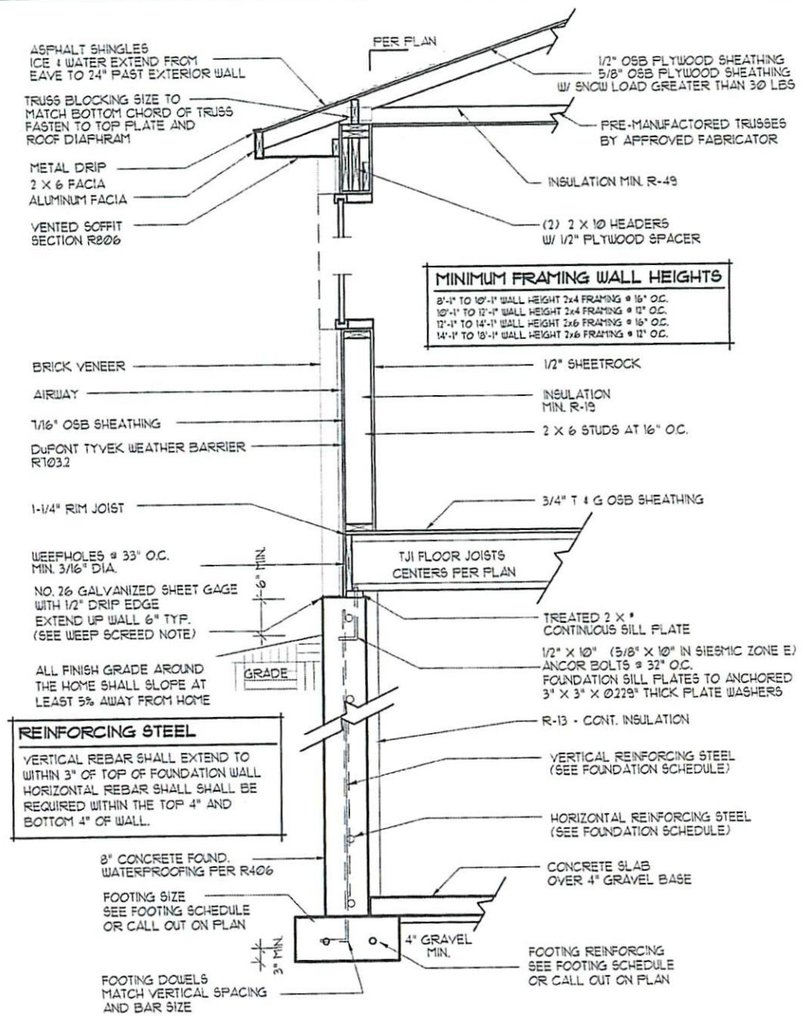
NATE KARRAS P.E. (801) 786-0849 email: KustomNK@gmail.com

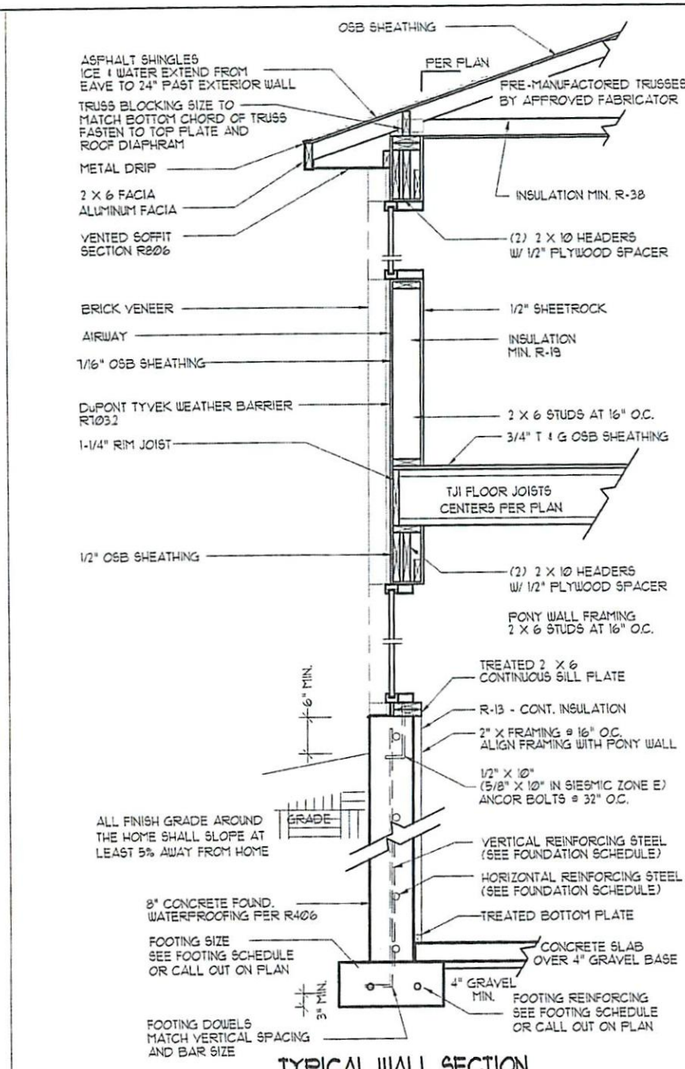
SCALE	
1/8" = 1'-0"	11x17
1/4" = 1'-0"	24x36
PLAN NUMBER	A9
R1877A-18	



TYPICAL WALL SECTION

SCALE 3/8" = 1' - 0"

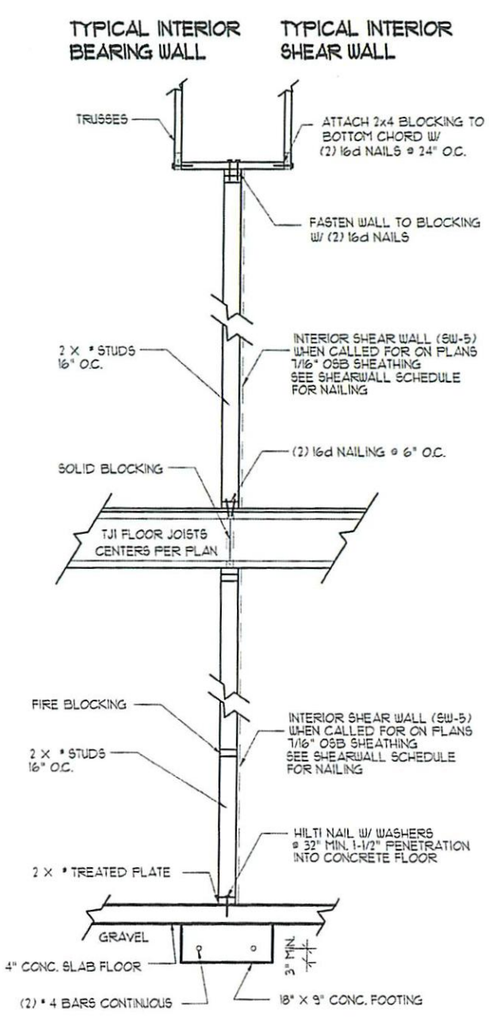
CONCRETE F'c - 3,000 psi
STEEL F'y - 60000 psi



TYPICAL WALL SECTION

SCALE 3/8" = 1' - 0"

CONCRETE F'c - 3000 psi
STEEL F'y - 60000 psi



TYPICAL INTERIOR BEARING WALL

SCALE 3/8" = 1' - 0"

FOUNDATION WALL SCHEDULE

CONCRETE F'c - 3,000 psi
STEEL F'y - 60000 psi

MARK	WALL HEIGHT	WIDTH	REINFORCING STEEL SPACING			NOTES
			HORIZONTAL BAR	# OF BARS	VERTICAL BAR	
FW-3	3'-0"	8"	# 4 BARS @ 9" O.C.	3	# 4 BARS @ 32" O.C.	PER STATE AMENDMENT (SEE WALL SECTION)
FW-4	3'-6"	8"	# 4 BARS @ 13" O.C.	4	# 4 BARS @ 24" O.C.	PER STATE AMENDMENT (SEE WALL SECTION)
FW-6	6'-0"	8"	# 4 BARS @ 18" O.C.	5	# 4 BARS @ 24" O.C.	(SEE WALL SECTION)
FW-8	8'-0"	8"	# 4 BARS @ 18" O.C.	6	# 4 BARS @ 24" O.C.	(SEE WALL SECTION)
FW-9	9'-0"	8"	# 4 BARS @ 18" O.C.	7	# 4 BARS @ 16" O.C.	(SEE WALL SECTION)

FOOTING SCHEDULE

CONCRETE F'c - 3,000 psi
STEEL F'y - 60000 psi

MARK	NOMINAL SIZES		LENGTH	REINFORCING STEEL				NOTES
	WIDTH	THICK-NESS		LENGTHWISE	# OF BARS	CROSSWISE	# OF BARS	
F-18	18"	9"	CONT.	# 4 BARS	2			(SEE WALL TYPICAL WALL SECTION)
F-20	20"	10"	CONT.	# 4 BARS	2			(SEE WALL TYPICAL WALL SECTION)
F-24	24"	10"	CONT.	# 4 BARS	2			(SEE WALL TYPICAL WALL SECTION)
F-30	30"	12"	CONT.	# 4 BARS	3			(SEE WALL TYPICAL WALL SECTION)
F-36	36"	12"	CONT.	# 4 BARS	4			(SEE WALL TYPICAL WALL SECTION)
P-24	24"	10"	24"	# 4 BARS	3	# 4 BARS	3	(SEE POST DETAIL)
P-30	30"	10"	30"	# 4 BARS	3	# 4 BARS	3	(SEE POST DETAIL)
P-36	36"	12"	36"	# 4 BARS	4	# 4 BARS	4	(SEE POST DETAIL)

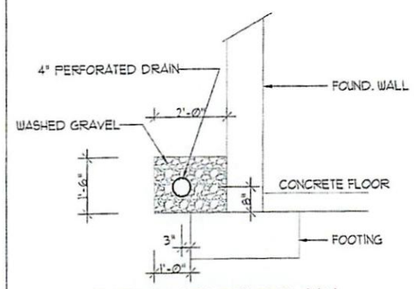
ACTUAL SIZES - F-24 (24"x8.25") - F-30 (30"x11.25") - F-36 (36"x12")

GENERAL NOTES

1. CONTRACTOR IS TO VERIFY DESIGN, DIMENSIONS AND NOTES PRIOR TO BEGINNING OF CONSTRUCTION.
2. ALL WORK IS TO BE DONE UNDER THE SUPERVISION OF A LICENSED CONTRACTOR.
3. ALL WORK IS TO DONE UNDER LOCAL AND STATE BUILDING CODES.
4. ELECTRICAL SHALL BE PER NATIONAL ELECTRIC CODE, LATEST EDITIONS.
5. HEATING/MECHANICAL WORK SHALL BE PER APPLICABLE CODES, LATEST EDITIONS.

FOUNDATION WALL NOTES

1. WALLS GREATER THAN 10'-0" SEE ENGINEERING
2. REINFORCING STEEL SHALL BE PLACED IN CENTER OF WALL
3. FOOTING DOWELS SHALL MATCH VERTICAL STEEL AND EXTEND A MIN. OF 18" INTO FOUNDATION WALL.
4. MIN. SPLICE LENGTH # 4 BAR 24" INCHES -# 5 BAR 30" INCHES
5. CORNER REINFORCING - LAP 24" INCHES
6. OPENINGS - BARS SHALL BE PLACED WITHIN TWO INCHES OF OPENINGS AND EXTEND 24" BEYOND THE EDGE OPENING.



FOUNDATION DRAIN

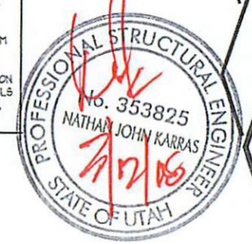
SCALE - NOT TO SCALE

NOTES: FOUNDATION DRAINAGE - R405

LAND DRAIN - IF A LAND DRAIN IS AVAILABLE THE FOUNDATION DRAIN SYSTEM SHALL BE EXTENDED AND CONNECTED TO THE LAND DRAIN.

A SUMP SHALL BE PROVIDED TO DRAIN THE POROUS LAYER AND FOOTINGS. THE SUMP SHALL BE AT LEAST 24 INCHES IN DIAMETER OR 20 INCHES SQUARE, SHALL EXTEND AT LEAST 24 INCHES BELOW THE BOTTOM OF THE BASEMENT FLOOR AND SHALL BE CAPABLE OF POSITIVE GRAVITY OR MECHANICAL DRAINAGE TO REMOVE ANY ACCUMULATED WATER. THE DRAINAGE SYSTEM SHALL DISCHARGE INTO AN APPROVED SEWER SYSTEM OR TO DAYLIGHT.

EXCEPTION - A DRAINAGE SYSTEM IS NOT REQUIRED WHEN THE FOUNDATION IS INSTALLED ON WELL-DRAINED GROUND OR SAND GRAVEL MIXTURE SOILS ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM, GROUP 1 SOILS, AS DETAILED IN TABLE R405).



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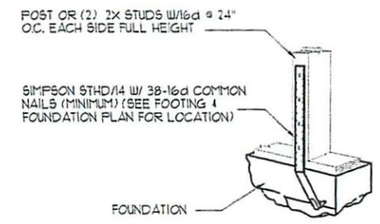
NATE KARRAS P.E. (801) 786-0849 email: KustomNK@gmail.com

SCALE
1/8" = 1'-0" 11x17
1/4" = 1'-0" 24x36

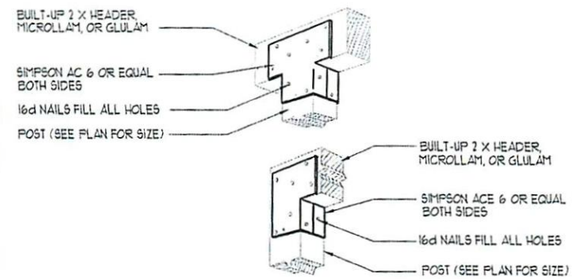
PLAN NUMBER
2-5-2018 S1



HD 1 DETAIL

NOT TO SCALE

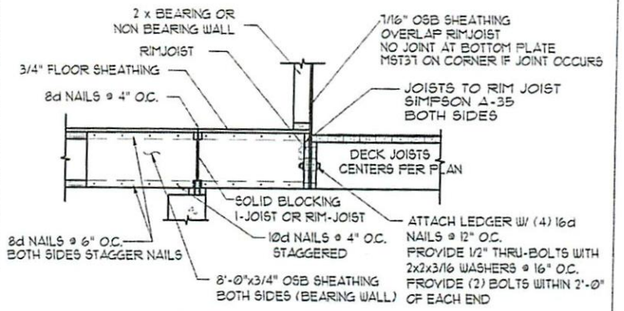
(SIMPSON PRODUCTS OR APPROVED EQUAL)



POST CAP DETAIL

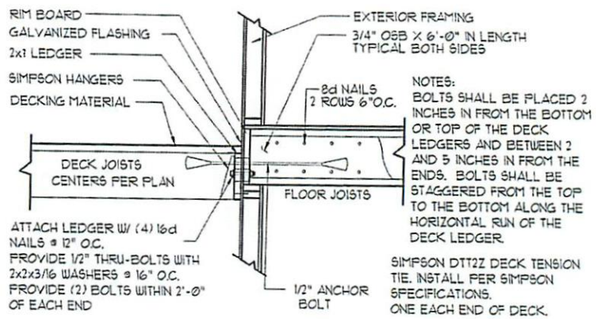
NOT TO SCALE

INSTALL SIMPSON HANGER PER SPECIFICATIONS.



CANTILEVER / DECK DETAIL

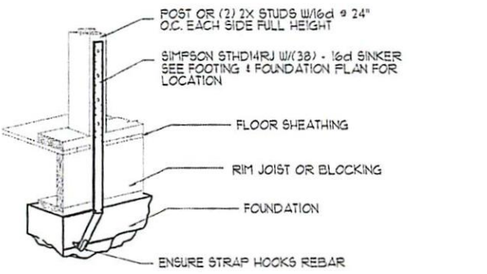
NOT TO SCALE



SIMPSON DTT2Z HOLDOWN - SPECIFICATIONS
INSTALLATION - USE ALL SPECIFIED FASTENERS. $\frac{3}{4}$" ANCHOR BOLT, 8-SDS $\frac{1}{4}$"x1-1/2" SIMPSON SCREWS, STANDARD CUT WASHER INSTALLED BETWEEN THE NUT AND THE SEAT. SDS SCREWS INSTALL BEST WITH A LOW SPEED HIGH TORQUE DRILL WITH A $\frac{3}{8}$" HEX. HEAD DRIVER. WHEN INSTALLING SCREWS PREVENT WOOD FROM SPLITTING.
HOLDOWNS-ANCHOR BOLT - DO NOT OVER-TORQUE, FINGER TIGHT PLUS $\frac{1}{3}$ TO $\frac{1}{2}$ TURN WITH A HAND WRENCH.
ATTACHMENT TO TJI FLOOR SYSTEM - INSTALL $\frac{3}{4}$" OSB FLOOR SHEATHING BY 6'-0" WITH 8d COMMON NAILS TWO ROWS AT 6" O.C TO BOTH SIDES OF I-JOISTS.

DECK ATTACHMENT

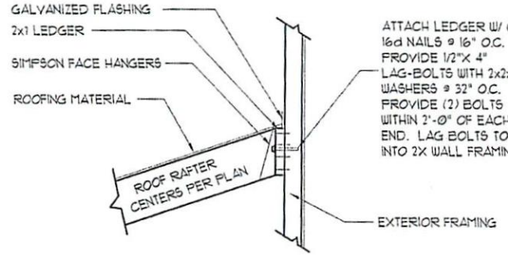
NOT TO SCALE



HD 2 DETAIL

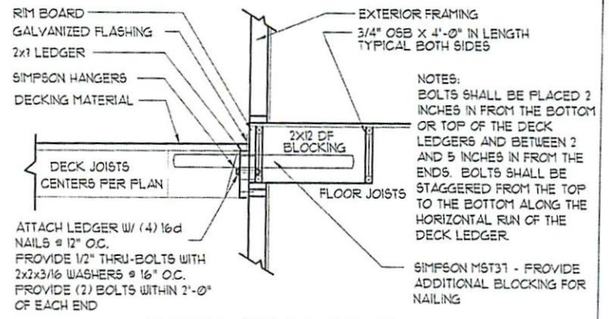
NOT TO SCALE

(SIMPSON PRODUCTS OR APPROVED EQUAL)



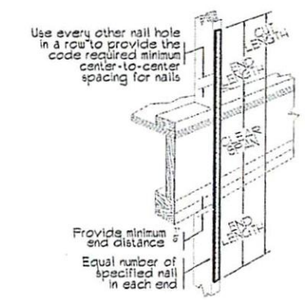
RAFTER ATTACHMENT

NOT TO SCALE



DECK ATTACHMENT

NOT TO SCALE



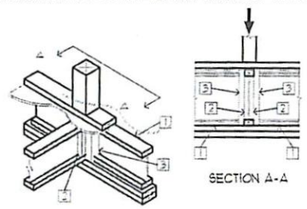
HD 3 DETAIL

NOT TO SCALE

MST37 Simpson Strong-Tie

(SIMPSON PRODUCTS OR APPROVED EQUAL)

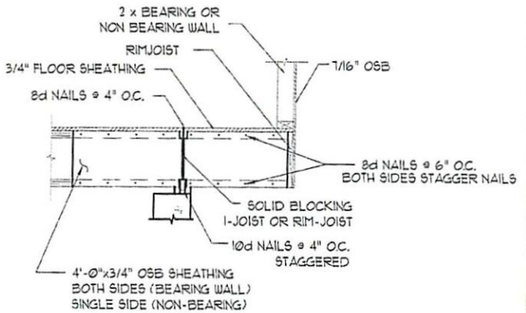
COLUMN LOADS CANNOT BE SUPPORTED BY WOOD I JOISTS



1 BLOCKING PANEL BY JOIST MANUFACTURER
2 WEB STIFFENER BY JOIST MANUFACTURER EACH SIDE OF JOIST
3 2 x 4 MIN BLOCKS BY CONTR. EA. SIDE OF JOIST TO SUPPORT COLUMN LOAD (LENGTH = JOIST DEPTH + 1)

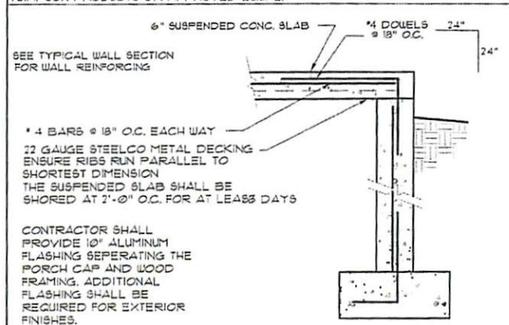
SOLID BLOCKING

NOT TO SCALE



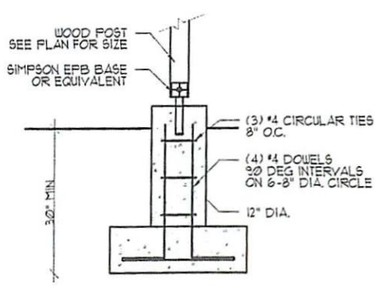
CANTILEVER DETAIL

NOT TO SCALE



SUSPENED PORCH CAP

NOT TO SCALE



POST DETAIL

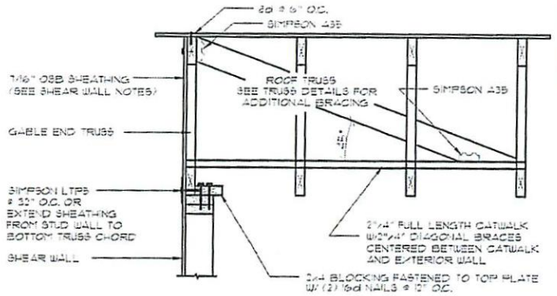
NOT TO SCALE

SEE FOOTING SCHEDULE FOR STEEL REINFORCING

PROFESSIONAL STRUCTURAL ENGINEER
No. 353825
NATHAN JOHN KARRAS
STATE OF UTAH
3/2/18

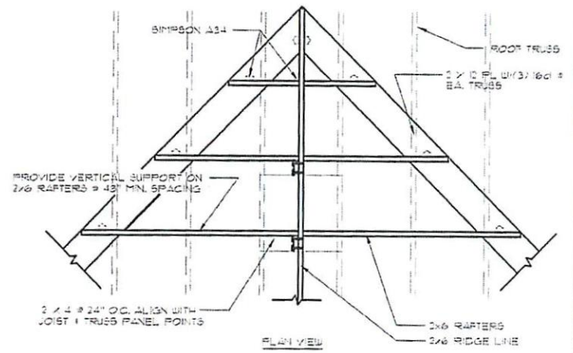
Karras Engineering
RESIDENTIAL / COMMERCIAL DESIGN & ENGINEERING
NATE KARRAS P.E. (801) 786-0849 email: KustomNK@gmail.com

SCALE	
1/8" = 1'-0"	11x17
1/4" = 1'-0"	24x36
PLAN NUMBER	
2-5-2018	S2



GABLE END DETAIL

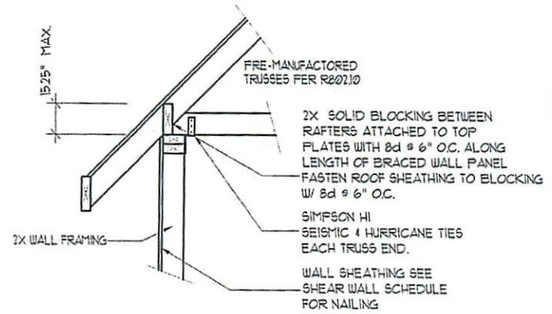
NOT TO SCALE

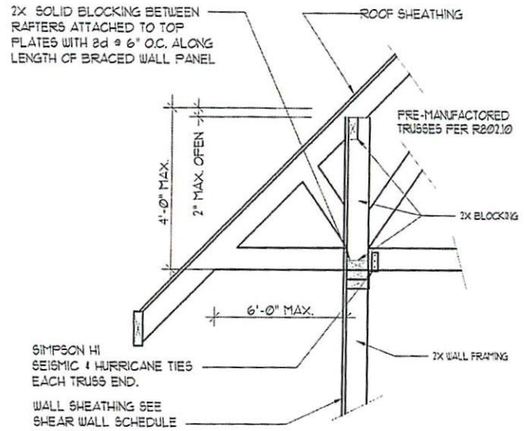


OVERBUILD DETAIL

NOT TO SCALE

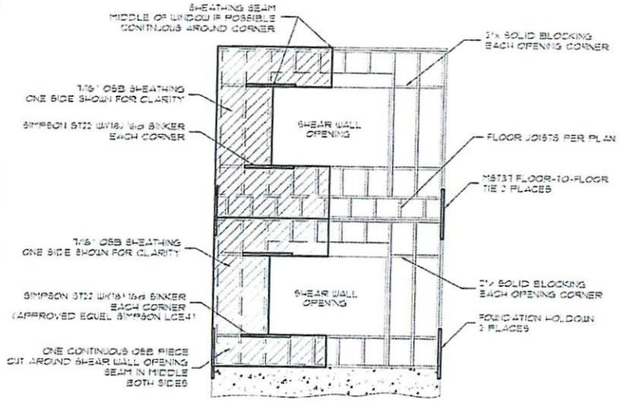
PROVIDE VENTING PER SECTION R806. CONTRACTOR SHALL PROVIDE 1"x1" NOTCH IN BLOCKING OR SHALL BE ALLOWED TO REMOVE 2X BLOCKING EVER THIRD TRUSS.





WALL TO ROOF TRUSS CONNECTION

NOT TO SCALE



PERFORATED SHEAR WALL FRAMING DETAIL

NOT TO SCALE

SHEAR WALL SCHEDULE

WIND	115 MPH		EXPOSURE C		SEISMIC		ZONE = D2, R = 6
MARK	OSB SHEATHING	NAILING			ANCHOR BOLTS		NOTES
		SIZE	EDGE	FIELD	DIA.	LENGTH/SPACING	
SW-1	7/16"	8d	4"	12"	1/2"	10"/32"	
SW-2	7/16"	8d	4"	12"	1/2"	10"/32"	
SW-3	7/16"	8d	4"	12"	1/2"	10"/32"	
SW-4	7/16"	8d	4"	12"	1/2"	10"/32"	
SW-5	7/16"	8d	6"	12"			
PSW	7/16"	8d	3"	12"	1/2"	10"/32"	INTERIOR SHEARWALL

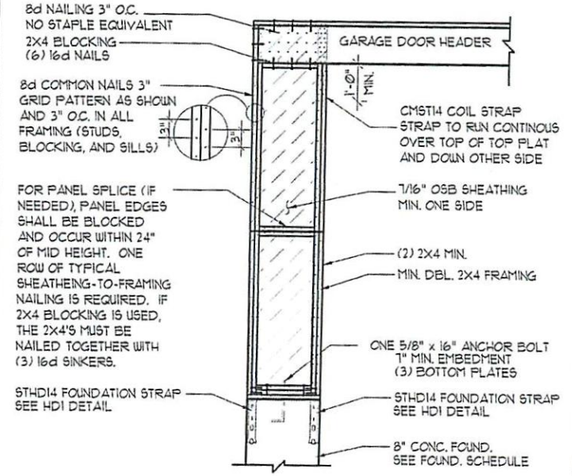
* FOUNDATION SILL PLATES TO ANCHORED WITH 3" X 3" X Ø229" THICK PLATE WASHERS

TABLE OF EQUIVALENT FASTENERS

* GAUGE
** PENETRATION

NAILS, STAPLES, & T-NAILS (VALID FOR LATERAL LOADS ONLY)

COMMON NAIL SPACING	STAPLE SPACING			T-NAIL SPACING	
	16ga* 1"**	15ga* 1"**	14ga* 1"**	11ga* 1 1/4"**	13ga* 1 1/2"**
NO STABLES EQUIVALENT FOR BWP & PSW SEE DETAILS FOR NAILING FOR BWP & PSW					
8d @ 4"	3 1/2"	4"	5"	4"	5"
6"	5"	6"	7"	7"	7 1/2"
8"	6 1/2"	8"	8 1/2"	8"	10"
10"	8 1/2"	10"	12"	10"	12"
12"	10"	12"	14 1/2"	12"	14 1/2"
8d @ 4"	2 1/2"	3 1/2"	4"	3 1/2"	4"
6"	4"	5"	6"	5"	6"
8"	5 1/2"	6 1/2"	8"	6 1/2"	8"
10"	8 1/2"	8"	10"	8"	10"
12"	8"	10"	12"	9 1/2"	12"



BRACED WALL PANEL DETAIL (BWP)

NOT TO SCALE

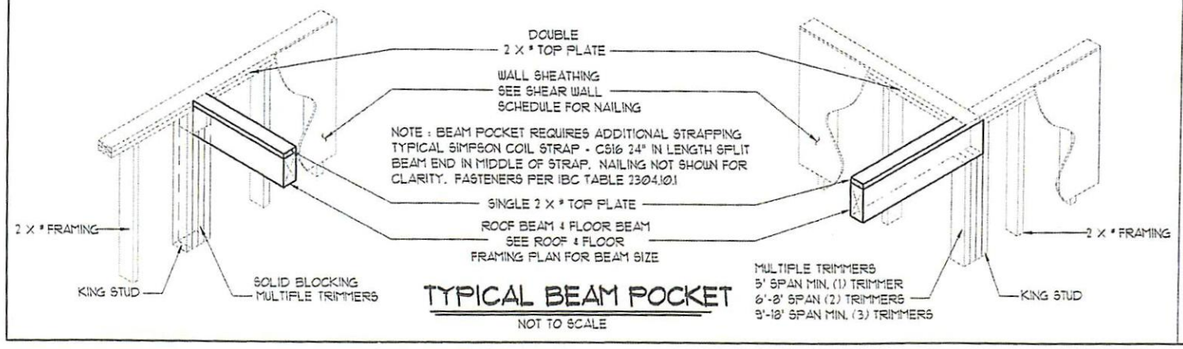
INSTALL SIMPSON HANGER PER SPECIFICATIONS.

NOTES: TRUSSES

PRE-MANUFACTORED TRUSSES - TRUSS PACKAGE MUST BE SUBMITTED TO THE BUILDING OFFICAL AS A DEFERRED SUBMITTAL. PER IBC 2303.4

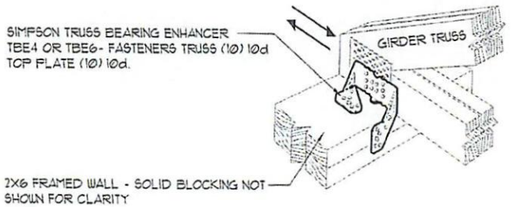
PRIOR TO SUBMITTING TO THE CITY THE PACKAGE MUST BE REVIEWED BY THE ENGINEER OF RECORD AND STAMPED FOR GENERAL CONFORMANCE.

NO TRUSSES ARE TO BE INSTALLED UNTIL APPROVED BY THE CITY. PER IBC 1703.4.2.



TYPICAL BEAM POCKET

NOT TO SCALE



LATERAL BRACING - SIMPSON TBE4/6

NOT TO SCALE

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NATE KARRAS P.E. (801) 786-0849 email: KustomNK@gmail.com

SCALE	
1/8" = 1'-0"	11x17
1/4" = 1'-0"	24x36
PLAN NUMBER	
2-5-2018	S3

2015 INTERNATIONAL BUILDING/RESIDENTIAL CODE

CONTRACTOR/OWNER SHALL COMPLY WITH BOTH IBC AND IRC BUILDING CODE REQUIREMENTS.

CONTRACTOR/OWNER SHALL COMPLY WITH UTAH ADMINISTRATIVE CODE RULE R156-56.

DESIGN CRITERIA

GOVERNING CODE	2015 IRC
SEISMIC	ZONE D1 Ss =116.1 Fa = 1.03
WIND LOADS	
ULTIMATE WIND SPEED	115 MPH EXPOSURE C
ROOF LOADS	
DEAD	15 PSF
ROOF SNOW	30 PSF
FLOOR LOADS	
DEAD	10 PSF
LIVE	40 PSF
DECK LOADS	
DEAD	20 PSF
LIVE	40 PSF
SOIL BEARING PRESSURE	1500 PSF

STRUCTURAL STEEL

1. FABRICATION AND CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING CODES AND STANDARDS:
   - A. AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, WITH " COMMENTARY.
   - B. AISC "CODE OF STANDARD PRACTICE" EXCLUDING THE FOLLOWING: SECTION 3.4 , SECTION 4.4, SECTION 4.41.
   - C. AISC "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS"
   - D. AMERICAN WELDING SOCIETY (AWS), STRUCTURAL WELDING CODE (SPECIFIC ITEMS DO NOT APPLY WHEN THEY CONFLICT WITH AISC REQUIREMENTS).
   - E. AISC "SEISMIC PROVISION FOR STRUCTURAL STEEL BUILDINGS"

CONCRETE

CONCRETE

1. ALL CONCRETE SHALL BE 3,000 PSI CONCRETE
2. TYPE I/II CEMENT COMPLYING WITH ASTM C-150 SHALL BE USED FOR ALL CONCRETE.
3. THE WATER/CEMENT RATIOS AND AIR ENTRAINMENT SHALL MEET THE REQUIREMENTS OF ACI 318.
4. REINFORCEMENT SHALL HAVE THE FOLLOWING CONCRETE COVER:
   - A. CAST IN PLACE CONCRETE. . . . . CLEAR COVER
   - B. CAST AGAINST PERMANENTLY EXPOSED TO EARTH. . . . . 3"
   - C. FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:
     - #6 THRU #18 BARS. . . . . 2"
     - #5 AND SMALLER BARS. . . . . 1-1/2"
   - D. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
     - SLABS, WALLS, JOISTS: #11 BARS AND SMALLER. . . . . 3/4"
     - BEAMS, COLUMNS: PRIMARY REINF., TIES, STIRRUPS, SPIRALS. . . . . 1 1/2'

FOOTING & FOUNDATION R403 & R404

FOOTINGS AND FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE TO SECTIONS R403 AND R404.

1. FOOTINGS HAVE BEEN DESIGNED TO THE SOIL BEARING PRESSURE SPECIFIED IN THE DESIGN CRITERIA. IT IS THE RESPONSIBILITY OF THE OWNER TO VERIFY THE BEARING PRESSURE. ANY ANOMALOUS SOIL BEARING CONDITION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE CONSTRUCTION.

2. ALL FOOTINGS ARE TO REST ON UNDISTURBED SOIL AND SHALL BE A MINIMUM OF 30", OR LOCAL FROST DEPTH, BELOW THE FINISH GRADE.

3. THE CONTRACTOR SHALL ENSURE THAT THE FOOTINGS ARE PROPERLY DRAINED AND THAT THE SOIL MOISTURE CONTENT MEETS THE IBC REQUIREMENTS.

4. ANY ANOMALOUS SOIL CONDITION ENCOUNTERED DURING EXCAVATION, SUCH AS SLIPPAGE, HIGH MOISTURE CONTENT, IMPROPER DRAINAGE, ETC., SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING.

5. COMPACT BACKFILL AGAINST FOUNDATION WALL TO 85% OF MODIFIED PROCTOR DRY DENSITY TO REDUCE SETTING OF FILL.

6. FOUNDATION ANCHOR BOLTS SHALL BE EMBEDDED IN AT LEAST 7" OF CONCRETE AND PLACED WITHIN 12" OF SILL PLATE END. IF MULTIPLE PLATES ARE USED, THE ANCHOR BOLTS SHALL EXTEND THROUGH ALL PLATES. THERE SHALL BE A MINIMUM OF 2 ANCHOR BOLT PER WALL SECTION. 3"X3"X3/16" SQUARE WASHERS SHALL BE USED BETWEEN ANCHOR BOLT AND PLATE. SEE CROSS SECTION FOR SIZE AND SPACING.

7. GRADE 60 REBAR SHALL BE USED FOR BOTH VERTICAL AND HORIZONTAL INSTALLATIONS.

8. HOLDDOWNS SHALL BE EMBEDDED IN THE FOUNDATION PER MANUFACTURERS REQUIREMENTS. THE CONTRACTOR SHALL ENSURE THAT THE FASTENERS HOOK THE REBAR AND MEETS THE MINIMUM EDGE DISTANCE.

STRUCTURAL FILL

STRUCTURAL FILL SHALL BE IMPORTED FILL MATERIAL.

IMPORTED FILL MATERIAL SHALL CONSISTS OF WELL-GRADED SANDY GRAVELS TO SILTY SANDS WITH A MAXIMUM SIZE OF 4" AND 5 TO 20 PERCENT FINES (MATERIALS PASSING NO. 200 SIEVE). THE LIQUID LIMIT OF THE FINES SHALL NOT EXCEED 35% AND THE PLASTICITY INDEX SHALL BE BELOW 15.

CLEAN GRAVEL RANGING FROM PEA GRAVEL TO 4" WITH LESS THAN 5 PERCENT FINES AND SAND COMBINED MAY ALSO BE USED AS STRUCTURAL FILL.

ALL FILL SOILS SHALL BE FREE FROM TOPSOIL, HIGHLY ORGANIC MATERIAL, FROZEN SOIL, AND OTHER DELETERIOUS MATERIALS.

THE THICKNESS OF EACH LIFT SHALL BE APPROPRIATE FOR THE COMPACTION EQUIPMENT BEING USED. MAX. 6" LIFT FOR HAND COMPACTION. MAX. 8" FOR TRENCH COMPACTORS.

THE FULL THICKNESS OF EACH LIFT OF STRUCTURAL FILL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557.

CLEAN GRAVEL FILL MAY BE PLACED IN MAX. 24" LIFTS. THE GRAVEL WILL NEED TO BE COMPACTED WITH AT LEAST 4 PASSES OF A VIBRATORY PLATE OR DRUM COMPACTOR.

WOOD - GENERAL FRAMING NOTES R602

1. FRAMING LUMBER SHALL BE #2 DOUGLAS FIR-LARCH OR BETTER UNLESS NOTED OTHER WISE.
2. ALL WOOD IN CONTACT WITH CONCRETE, MASONRY OR SOIL SHALL BE PRESSURE TREATED OR BE REDWOOD.
3. ALL FRAMING ANCHORS, POST CAPS, HOLD DOWNS, COLUMN BASES, ETC. SHALL BE PROVIDED BY SIMPSON STRONG-TIE OR APPROVED EQUAL.
4. ALL WALLS SHALL HAVE A MINIMUM OF TWO TOP PLATES . SPLICES IN TOP PLATES SHALL BE STAGGERED A MINIMUM OF FOUR FEET FROM THE NEAREST SPLICE IN ADJOINING TOP PLATE.
5. ALL CONSTRUCTION SHALL CONFORM TO IBC & IRC SPECIFICATIONS.
6. ALL EXTERIOR AND LOAD BEARING WINDOW AND DOOR HEADERS SHALL HAVE (2) 2x10 DF No. 2 W/FILLER UNLESS NOTED OTHERWISE ON DRAWING.
7. ALL HEADERS SUPPORTING A GIRDER TRUSS SHALL BE A MIN. OF (2) 1-3/4"X9-1/2" LVLs UNLESS NOTED OTHERWISE ON DRAWING.
8. ALL MULTIPLE BEAMS AND HEADERS SHALL BE NAILED USING 3 ROWS OF 16d NAILS @ 12" O.C.
9. ALL POINT LOADS SHALL BE SOLID BLOCKED TO THE FOUNDATION.
10. USE DOUBLE TRIMMERS TO SUPPORT BEAMS AND HEADERS GREATER THAN 6 FEET UNLESS NOTED OTHERWISE ON DRAWING.
11. USE SIMPSON OR EQUIVALENT HARDWARE TO CONNECT BEAMS 6' AND LONGER TO STUDS OR POSTS.
12. FASTENERS SCHEDULE FOR STRUCTURAL MEMBERS PER TABLE R602.3(1).

FLOOR SHEATHING NOTES R503

1. TYPICAL FLOOR SHEATHING SHALL BE 3/4" T&G WAFER BOARD NAILED W/ 8d NAILS @ 6" O.C. ON ALL EDGES, AND @ 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS.
2. SOLID JOIST BLOCKING REQUIRED AT ALL BEARING POINTS.
3. INSTALL FLOOR SHEATHING WITH FACE GRAIN AT RIGHT ANGLES TO FRAMING WITH END JOINTS STAGGERED.
4. USE DOUBLE FLOOR JOISTS UNDER ALL LOAD BEARING WALLS RUNNING PARALLEL WITH FLOOR JOISTS.
5. USE DOUBLE FLOOR JOISTS UNDER ALL SHEAR WALLS RUNNING PARALLEL WITH FLOOR JOISTS. NAIL BOTTOM PLATE TO JOISTS W/ 16d NAILS @ 3" O.C.
6. USE DOUBLE JOISTS TO SOLID BLOCK UNDER ALL SHEAR WALLS RUNNING PERPENDICULAR TO FLOOR JOISTS. NAIL BOTTOM PLATE TO BLOCKING W/ 16d NAILS @ 3" O.C.
7. FLOOR JOIST INTSTALLATION PER MANUFACTORS SPECIFICATIONS.

SHEAR WALL NOTES

1. AS A MINIMUM, ALL EXTERIOR WALL SHALL BE SHEATHED WITH 7/16" APA RATED C-D OR C-C SHEATHING AND NAILED WITH 8d's 4" O.C. EDGE AND 12" O.C. FIELD. IF NOT INDICATED ON PLANS. SEE SHEARWALL SCHEDULE.
2. SHEATHING SHALL EXTEND CONTINUOUS FROM MUD SILL TO TOP PLATE AND NAILED AT LEAST 1" O.C. ALONG SILL PLATE. SHEATHING SHALL EXTEND FROM FLOOR FRAMING TO HIGH ROOF FRAMING ON UPPER LEVEL EXTERIOR WALLS.
3. NAILS SHALL BE PLACED NOT LESS THAN 1/2" FROM EDGE OF PANEL AND DRIVEN FLUSH. NAIL SHALL NOT FRACTURE THE SURFACE OF THE SHEATHING.

WOOD TRUSS NOTES R802.10

1. CONTRACTOR SHALL PROVIDE MINIMUM 22" X 30" ATTIC ACCESS. - FIELD LOCATE PROVIDE WEATHER STRIPPING AROUND OPENING. R801.1.
2. THE CONTRACTOR SHALL BLOCK BETWEEN TRUSSES AND CONNECT EACH TRUSS TO WALL TOP PLATE WITH SIMPSON H1 CONNECTORS.
3. GABLE ENDS SHALL HAVE SIMPSON STRONGTIE STRAPS @ 32" O.C. CONNECTING GABLE TRUSS TO WALL FRAMING.
4. ANY CHANGES TO THE TRUSS CONFIGURATION SHOWN ON THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION.
5. ALL ENGINEERING TRUSS SUBMITTALS SHALL BE STAMPED BY A ENGINEER LICENSED IN THE STATE OF UTAH.
6. TRUSSES TO BE INSTALLED PER MANUFACTURES SPECIFICATIONS.
7. BLOCKING BETWEEN TRUSSES SHALL MATCH BOTTOM CHORD OF TRUSS.
8. BRACING - TRUSSES SHALL BE BRACED TO PREVENT ROTATION AND PROVIDE LATERL STABILITY.

ROOF SHEATHING NOTES R803

1. SHEATHING SHALL BE 7/16", 24/16, APA RATED SHEATHING. NAIL W/ 8d's @ 6" O.C. 3/8" FROM EDGE OF PANEL AT ALL PANEL ENDS, SUPPORTED EDGES, SHEARWALL TOPS, AND ALL BLOCKING. NAIL @ 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS.
(5/8" SHEATHING WITH SNOW LOADS GREATER THAN 30 LBS)
2. LAY SHEATHING WITH FACE GRAIN AT RIGHT ANGLES TO FRAMING WITH STAGGERED END JOINTS.

BRICK VENEER SUPPORT / LINTELS R703.7.2.1

A MINIMUM 6 INCHES BY 4 INCHES BY 5/16 INCH STEEL ANGLE, WITH THE LONG LEG PLACED VERTICALLY, SHALL BE ANCHORED TO DOUBLE 2 INCHES BY 4 INCHES WOOD STUDS AT A MAXIMUM ON-CENTER SPACING OF 16 INCHES. ANCHORAGE OF THE STEEL ANGLE AT EVERY DOUBLE STUD SPACING SHALL BE A MINIMUM OF TWO 1/2" DIAMETER BY 4 INCH LAG SCREWS.

STEEL LINTELS SHALL BE SHOP COATED WITH RUST INHIBITIVE PAINT, EXCEPT FOR LINTELS MADE OF CORROSION-RESISTANT STEEL.

FASTENERS R317.3

FASTENERS AND CONNECTORS IN CONTACT WITH PRESERVATIVE - TREATED WOOD SHALL BE HOT DIPPEED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. THE COATING WEIGHTS FOR ZINC-COATED FASTENERS SHALL BE IN ACCORDANCE WITH ASTM A 153. EXCEPTIONS 1/4" DIAMETER OR GREATER STEEL BOLTS.

DWELLING/GARAGE SEPERATION R302.6

STRUCTURAL MEMBERS SUPPORTING THE SEPARATION SHALL BE PROTECTED BY FIRE-RESISTIVE CONSTRUCTION. 1/2"-INCH GYPSUM BOARD TYPICAL. 5/8"-INCH TYPE X GYPSUM BOARD FOR HABITABLE ROOMS ABOVE THE GARAGE.

COMPLY WITH SECTION R302.6.

CEILING HEIGHT R305

HABITABLE SPACE, HALLWAYS, BATHROOMS, TOILET ROOMS, LAUNDRY ROOMS AND PORTIONS OF BASEMENTS CONTAINING THESE SPACES SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET. BASEMENTS 6'-8" MIN. EXCEPTIONS UNDER BEAMS, GIRDERS, DUCTS OR OTHER OBSTRUCTIONS MAY PROJECT TO WITHIN 6'-4" OF THE FINISHED FLOOR.

WINDOWS N1102.1.4

U-FACTOR ON WINDOWS SHALL BE A MIN. OF 0.35. U-FACTOR SHALL BE DETERMINED BY TESTING IN ACCORDANCE WITH NFRC 100 AND LABELED AS SUCH BY MANUFACTURE. SECTION 102.13 OF THE 2012 IECC.

WINDOW WELLS R310.2

WINDOW WELLS REQUIRED FOR EMERGENCY ESCAPE AND RESCUE SHALL HAVE HORZ. DIMENSIONS THAT ALLOW THE DOOR OR WINDOW OF THE EMERGENCY ESCAPE AND RESCUE OPENING TO BE FULLY OPENED. THE HORIZONTAL DIMENSIONS OF THE WINDOW WELL SHALL PROVIDE A MINIMUM NET CLEAR AREA OF 9 SQUARE FEET WITH A MINIMUM HORIZONTAL PROJECTION AND WIDTH OF 36". WINDOW WELLS WITH A VERTICAL DEPTH GREATER THAN 44 INCHES SHALL BE EQUIPPED WITH A PERMANENTLY AFFIXED LADDER. COMPLY WITH SECTION R310.2.1

BASEMENT - WINDOW SILL HEIGHT R310.2.2

BASEMENT WINDOWS SHALL HAVE A SILL HEIGHT OF NO MORE THAN 44-INCHES ABOVE THE FLOOR. WHERE THE SILL HEIGHT IS BELOW GRADE THE WINDOW SHALL BE PROVIDED WITH A WINDOW WELL IN ACCORDANCE WITH R310.2.3.

WINDOW SILL HEIGHTS R312.2.1

IN DWELLING UNITS, WHERE THE OPENING OF AN OPERABLE WINDOW IS LOCATED MORE THAN 72 INCHES ABOVE THE FINISH GRADE OR SURFACE BELOW, THE LOWEST PART OF THE OPENING OF THE WINDOW SHALL BE A MINIMUM OF 24" INCHES ABOVE THE FINISHED FLOOR OF THE ROOM IN WHICH THE WINDOW IS LOCATED. OPERABLE SECTIONS OF WINDOWS SHALL NOT PERMIT OPENINGS THAT ALLOW PASSAGE OF A 4 INCH DIA. SPHERE WHERE SUCH OPENINGS ARE LOCATED WITHIN 24 INCHES OF THE FINISHED FLOOR.

MEANS OF EGRESS R311

THERE SHALL BE A LANDING OR FLOOR ON EACH SIDE OF EACH EXTERIOR DOOR. THE WIDTH OF EACH LANDING SHALL NOT BE LESS THAN THE DOOR SERVED. EVERY LANDING SHALL HAVE A MINIMUM DIMENSION OF 36 INCHES MEASURED IN THE DIRECTION OF TRAVEL. EXTERIOR LANDINGS SHALL BE PERMITTED TO HAVE A SLOPE NOT TO EXCEED 0.25 UNIT VERTICAL IN 12 UNITS. (2%)

GUARDS AND WINDOW FALL PROTECTION R312

GUARDS SHALL BE LOCATED ALONG OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, RAMPS AND LANDINGS, THAT ARE LOCATED MORE THAN 30 INCHES MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW AT ANY POINT 36 INCHES HORIZONTALLY TO THE EDGE OF THE OPEN SIDE.

OPENING LIMITATIONS - REQUIRED GUARDS SHALL NOT HAVE OPENINGS FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT THAT ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER.

SMOKE ALARMS R314

SMOKE ALARMS SHALL BE IN ACCORDANCE WITH SECTION R314.

ALL SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 217 AND INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THIS CODE AND THE HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72.

SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS: IN EACH SLEEPING ROOM, OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS, ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS AND UNINHABITABLE ATTICS.

WHEN MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING UNIT THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT.

CARBON MONOXIDE ALARMS R315

CARBON MONOXIDE ALARMS SHALL BE IN ACCORDANCE WITH SECTION R315.

AN APPROVED CARBON MONOXIDE ALARMS SHALL BE INSTALLED ON EACH HABITABLE LEVEL WITHIN WHICH FUEL-FIRED APPLIANCES ARE INSTALLED AND IN DWELLINGS UNITS THAT HAVE ATTACHED GARAGES.

SINGLE STATION CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING WITH UL 2034 AND SHALL BE INSTALLED IN ACCORDANCE WITH THIS CODE AND NFPA 720.

GLAZING R308

1. GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS. GLAZING IN ANY PART OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE.

2. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24-INCH ARC OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR OR WALKING SURFACE.

3. GLAZING IN WALLS ENCLOSING STAIRWAY LANDING OR WITHIN 60 INCHES OF THE TOP AND BOTTOM OF STAIRWAYS WHERE THE BOTTOM EDGE OF THE GLASS IS LESS THAN 60 INCHES ABOVE THE WALKING SURFACE.

WEATHER-RESISTANT BARRIER R703.6.3

WEATHER-RESISTANT BARRIERS SHALL BE INSTALLED AS REQUIRED IN SECTION R703.2 AND, WHERE APPLIED OVER WOOD-BASED SHEATHING, SHALL INCLUDE A WEATHER-RESISTANT VAPOR PERMEABLE BARRIER WITH A PERFORMANCE AT LEAST EQUIVALENT TO TWO LAYERS OF GRADE D PAPER.

WEEP SCREEDS R703.6.2.1

A MINIMUM 0.019-INCH (NO. 26 GALVANIZED SHEET GAGE), CORROSION-RESISTANT WEEP SCREED OR PLASTIC WEEP SCREED, WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3-1/2" INCHES SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS IN ACCORDANCE WITH ASTM C 926. THE WEEP SCREED SHALL BE PLACED A MINIMUM OF 4 INCHES ABOVE THE EARTH OR 2" ABOVE PAVED AREAS AND SHALL BE OF TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. THE WEATHER-RESISTANT BARRIER SHALL LAP THE ATTACHMENT FLANGE. THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE WEEP SCREED.

CONCRETE-ENCASED ELECTRODE E3608.1.2

AN ELECTRODE ENCASED BY AT LEAST 2 INCHES OF CONCRETE, LOCATED WITHIN AND NEAR THE BOTTOM OF A CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET OF ONE OR MORE BARE OR ZINC-GALVANIZED OR OTHER ELECTRICALLY CONDUCTIVE COATED STEEL REINFORCING BARS OR RODS OF NOT LESS THAN 1/2 INCH DIAMETER, OR CONSISTING OF AT LEAST 20 FEET OF BARE COPPER CONDUCTOR NOT SMALLER THAN 4 AWG SHALL BE CONSIDERED AS A GROUNDING ELECTRODE. REINFORCING BARS SHALL BE PERMITTED TO BE BONDED TOGETHER BY THE USUAL STEEL TIE WIRE OR OTHER EFFECTIVE MEANS.

ARC-FAULT PROTECTION E3902.12

ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE PHASE, 15- AND 20-AMPERE OUTLETS IN FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUN-ROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT.

TUB AND SHOWER R307

BATHTUB AND SHOWER SPACES - R3012

BATHTUB ND SHOWER FLOORS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS AND IN SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBANT SURFACE. SUCH WALL SURFACES SHALL EXTEND TO HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR.

LIMIT WATER TEMPERATURE TO A MAX. 110° F. PER SECTION P2708.3 AND P2713.3.

JETTED TUB ACCESS - 12"X12" ACCESS PER IRC P2720.

GENERAL NOTES

1. CONTRACTOR IS TO VERIFY DESIGN, DIMENSIONS AND NOTES PRIOR TO BEGINNING OF CONSTRUCTION.
2. ALL WORK IS TO BE DONE UNDER THE SUPERVISION OF A LICENSED CONTRACTOR.
3. ALL WORK IS TO DONE UNDER LOCAL AND STATE BUILDING CODES.
4. ELECTRICAL SHALL BE PER NATIONAL ELECTRIC CODE, LATEST EDITIONS.
5. HEATING/MECHANICAL WORK SHALL BE STRUCTURAL ENGINEER APPLICABLE CODES, LATEST EDITIONS.

PROFESSIONAL ENGINEER No. 353825 NATHAN JOHN KARRAS STATE OF UTAH 3/12/18

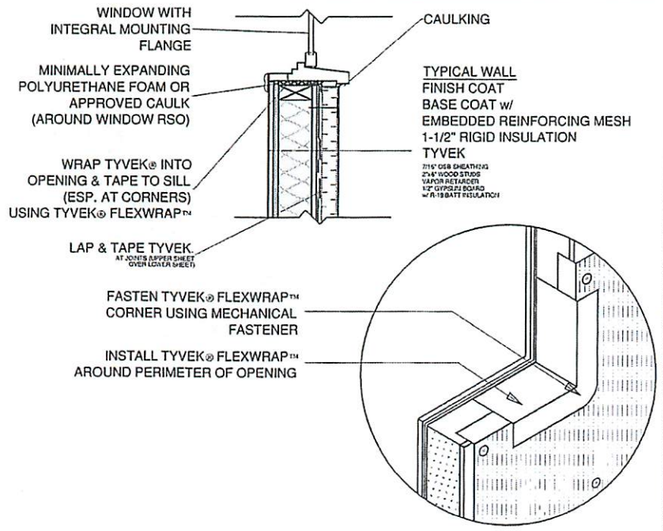
Karras Engineering
RESIDENTIAL / COMMERCIAL DESIGN & ENGINEERING
NATE KARRAS P.E. (801) 786-0849 email: KustomNK@gmail.com

SCALE
1/8" = 1'-0" 11x17
1/4" = 1'-0" 24x36

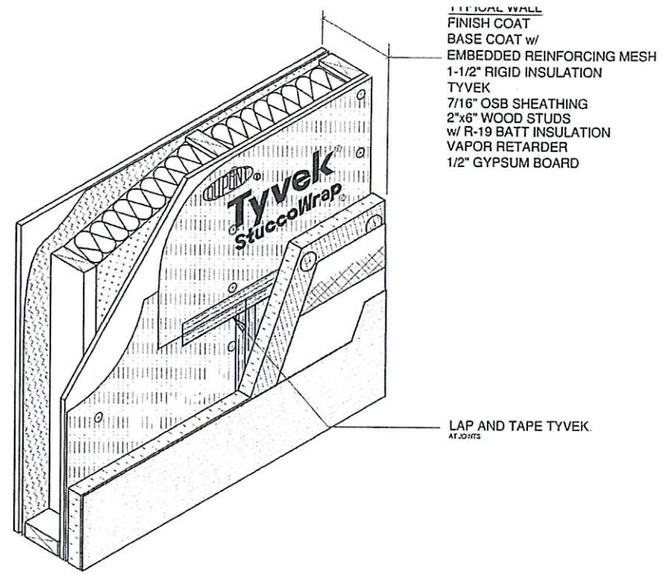
PLAN NUMBER
2-5-2018 S4

GENERAL NOTES

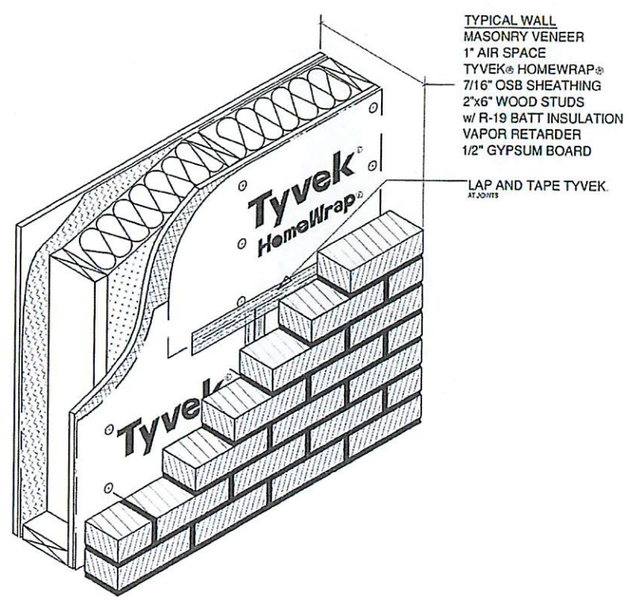
*SEAL ALL TYVEK® JOINTS AND PENETRATIONS WITH APPROVED TAPE. (ex. DUPONT CONTRACTOR TAPE)
*FASTEN TYVEK® TO SHEATHING WITH LARGE HEAD NAILS OR USE NAILS WITH LARGE PLASTIC WASHER HEADS. (ex. DUPONT WRAPCAPS)
*LOCAL LAWS, ZONING, AND BUILDING CODES VARY AND THEREFORE GOVERNS OVER MATERIAL SELECTION AND DETAILING SHOWN BELOW.
*INSTALL EIFS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS



WINDOW SILL DETAIL
RESIDENTIAL WOOD FRAME STRUCTURE w/ EIFS CLADDING



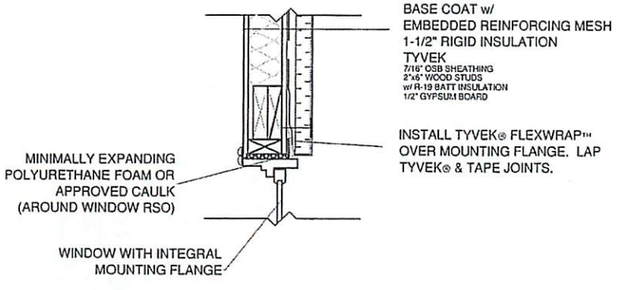
TYPICAL WALL ISOMETRIC
RESIDENTIAL WOOD FRAME STRUCTURE w/ EIFS CLADDING



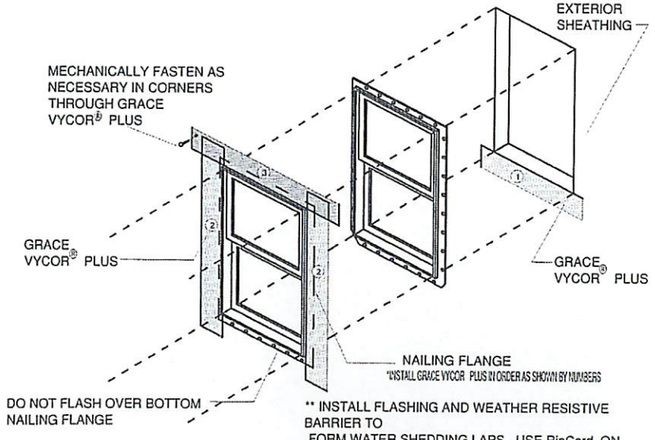
TYPICAL WALL ISOMETRIC
RESIDENTIAL WOOD FRAME STRUCTURE w/ MASONRY VENEER

GENERAL NOTES

*SEAL ALL TYVEK® JOINTS AND PENETRATIONS WITH APPROVED TAPE. (ex. DUPONT CONTRACTOR TAPE)
*FASTEN TYVEK® TO SHEATHING WITH LARGE HEAD NAILS OR USE NAILS WITH LARGE PLASTIC WASHER HEADS. (ex. DUPONT WRAPCAPS)
*LOCAL LAWS, ZONING, AND BUILDING CODES VARY AND THEREFORE GOVERNS OVER MATERIAL SELECTION AND DETAILING SHOWN BELOW.
*INSTALL EIFS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS



WINDOW / DOOR HEAD DETAIL
RESIDENTIAL WOOD FRAME STRUCTURE w/ EIFS CLADDING



WINDOW / DOOR HEAD DETAIL
RESIDENTIAL WOOD FRAME STRUCTURE w/ EIFS CLADDING

PROFESSIONAL STRUCTURAL ENGINEER
No. 353825
NATHAN JOHN KARRAS
STATE OF UTAH

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PLAN NUMBER
2-5-2018 | S5