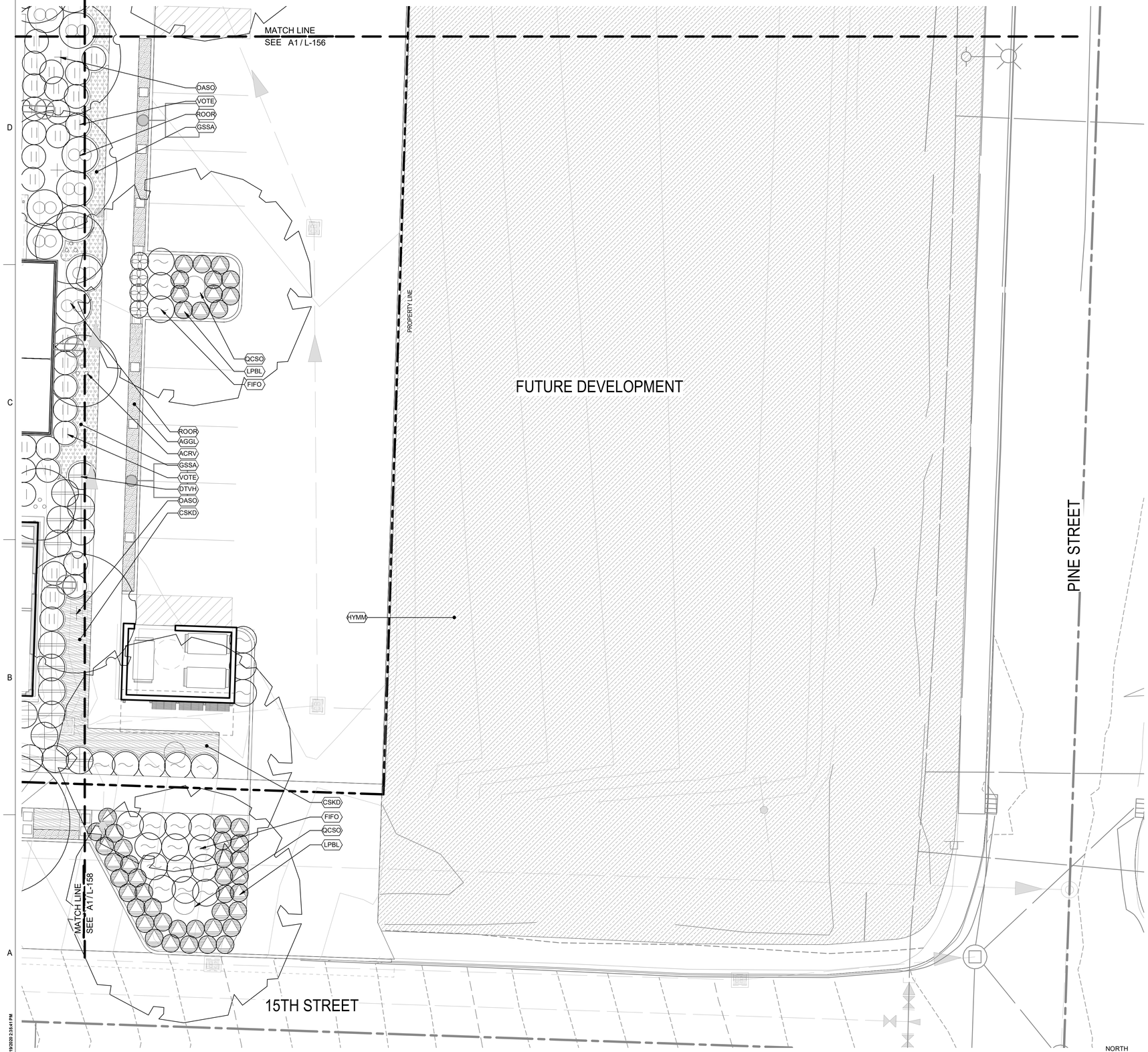


A1 PLANTING PLAN - SOUTHEAST
1/8" = 1'-0"

0' 4' 8' 16'

NORTH

PLOT DATE/TIME 6/19/2020 2:55:41 PM

PLANTING LEGEND

TREES:

TAG	BOTANICAL NAME	COMMON NAME
ACRV	ACER CIRCINATUM 'PACIFIC FIRE'	RED-BARK VINE MAPLE
AGAS	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	APPLE SERVICEBERRY
BNRB	BETULA NIGRA	RIVER BIRCH
CJJH	CARPINUS JAPONICA	JAPANESE HORNBEAM
CNNC	CHAMAECYPARIS NOOTKATENSIS VAR. PENDULA	NOOTKA CYPRESS
CKCD	CORNUS KOUSA VAR. CHINENSIS	CHINESE DOGWOOD
OASO	OXYDENDRUM ARBOREUM	SOURWOOD
QCSO	QUERCUS COCCINEA	SCARLET OAK
SMOS	STEWARTIA MONADELPHA	ORANGEBARK STEWARTIA
TDPC	TAXODIUM DISTICHUM VAR. IMBRICATUM 'NUTANS'	POND CYPRESS

SHRUBS:

TAG	BOTANICAL NAME	COMMON NAME
ASBB	ACANTHUS SPINOSUS	BEAR'S BREECHES
CSYT	CORNUS SERICEA 'FLAVIRAMEA'	YELLOW TWIG DOGWOOD
DTVH	DAPHNE X TRANSATLANTICA 'SUMMER ICE'	VARIEGATED HYBRID DAPHNE
ECEN	ENKIANTHUS CAMPANULATUS 'RED BELLS'	ENKIANTHUS
FGDF	FOTHERGILLA GARDENII	DWARF FOTHERGILLA
FIFO	FOTHERGILLA X INTERMEDIA 'BLUE SHADOW'	FOTHERGILLA
HIWH	HAMAMELIS X INTERMEDIA 'DIANE'	WITCH HAZEL
KLML	KALMIA LATIFOLIA 'ELF'	MOUNTAIN LAUREL
LPBL	LONICERA PILEATA	BOX-LEAF HONEYSUCKLE
MESC	MAHONIA EURYBRACTEATA 'SOFT CARESS'	'SOFT CARESS' MAHONIA
MMHM	MAHONIA X MEDIA 'WINTER SUN'	HYBRID MAHONIA
MCCW	MORELLA CALIFORNICA	CALIFORNIA WAX MYRTLE
POLD	PHYSOCARPUS OPULIFOLIUS 'DONNA MAY' LITTLE DEVIL	LITTLE DEVIL NINEBARK
PJJP	PIERIS JAPONICA 'VALLEY VALENTINE'	JAPANESE PIERIS
ROOR	RHODODENDRON ORBICULARE SSP. ORBICULARE	ORBICULARE RHODODENDRON
RSFC	RIBES SANGUINEUM 'UBRIC' WHITE ICICLE	FLOWERING CURRANT
SPST	STACHYURUS PRAECOX	STACHYURUS
SASN	SYMPHORICARPOS ALBUS	SNOWBERRY
VSBB	VACCINIUM 'SUNSHINE BLUE'	BLUEBERRY
VOTE	VACCINIUM OVATUM 'THUNDERBIRD'	THUNDERBIRD EVERGREEN HUCKLEBERRY

FERNSS, GRASSES, & PERENNIALS:

TAG	BOTANICAL NAME	COMMON NAME
AMML	ARUNCUS 'MISTY LACE'	MISTY LACE GOATSBEARD
BSDF	BLECHNUM SPICANT	DEER FERN
DCTH	DESCHAMPSIA CESPITOSA	TUFTED HAIR GRASS
DPES	DISPOROPSIS PERNYI	EVERGREEN SOLOMON'S SEAL
HMJF	HAKONECHLOA MACRA 'AUREOLA'	JAPANESE FOREST GRASS
HKRH	HOSTA 'KROSSA REGAL'	HOSTA
PFVS	POLYGONATUM FALCATUM 'VARIEGATUM'	VARIEGATED SOLOMON'S SEAL
PMSF	POLYSTICHUM MUNITUM	SWORD FERN

GROUNDCOVERS:

TAG	BOTANICAL NAME	COMMON NAME
HYMM		HYDROSEED MEADOW MIX
FEMI	70% DRYOPTERIS LEPIDOPODA, 30% EPIMEDIUM X RUBRUM 'SWEETHEART'	FERN MIX
AGGL	ACORUS GRAMINEUS 'OGON'	GRASSY-LEAVED SWEET FLAG
COSS	CAREX OBNUPTA	SLOUGH SEDGE
CSKD	CORNUS SERICEA 'KELSEYI'	KELSEY DOGWOOD
EPFB	EPIMEDIUM X PERRALCHIUM 'FROHNLEITEN'	BARRENWORT
GSSA	GAULTHERIA SHALLON	SALAL
MDRA	MICROBIOTA DECUSSATA	RUSSIAN ARBOR-VITAE
POPF	PENNISETUM ORIENTALE 'KARLEY ROSE'	PINK FOUNTAIN GRASS
PLDE	PRUNUS LAUROCERASUS 'MOUNT VERNON'	DWARF ENGLISH LAUREL
SHSB	SARCOCOCCA HOOKERIANA VAR. HUMILIS	SWEET BOX
SAAM	SESLERIA AUTUMNALIS	AUTUMN MOOR GRASS

GGLO DESIGN

1301 First Avenue, Suite 301
Seattle, WA 98101

http://www.gglo.com

FUTURE PHASE
SE

STATE OF WASHINGTON
MARIEKE LACASSE
LICENSED LANDSCAPE ARCHITECT
No. 965 EXP. 08/18/2021

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WA 98201

MARK	DATE	DESCRIPTION
		REVISIONS

MARK	DATE	DESCRIPTION
C	06/08/2020	BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
		ISSUE INFORMATION

PROJECT NO.: **2017033.00**
GGLO PRINCIPAL IN CHARGE: **JON HALL**
GGLO PROJECT MANAGER: **SCOTT SCHREFFLER**
OWNER APPROVAL:

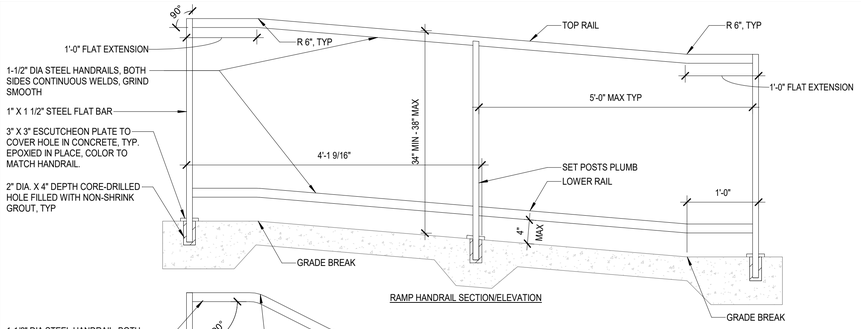
SHEET TITLE

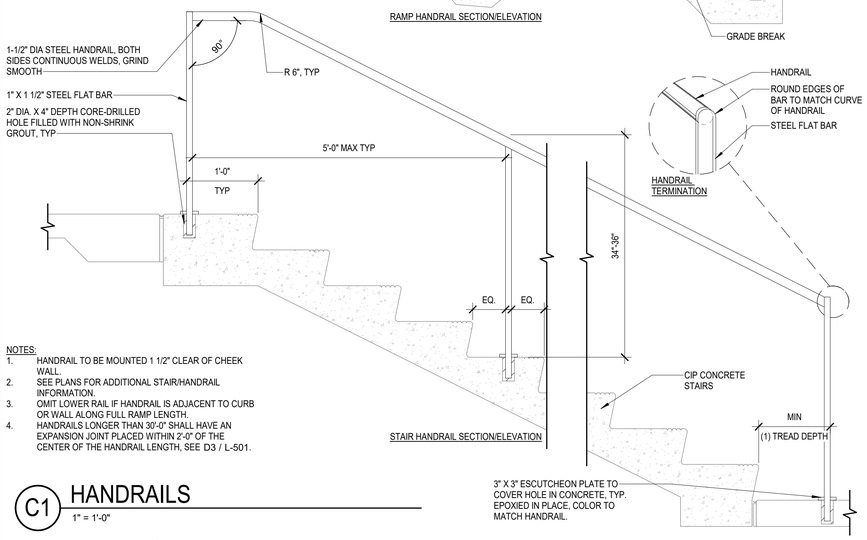
PLANTING PLAN - SOUTHEAST

SHEET NO.

L-159

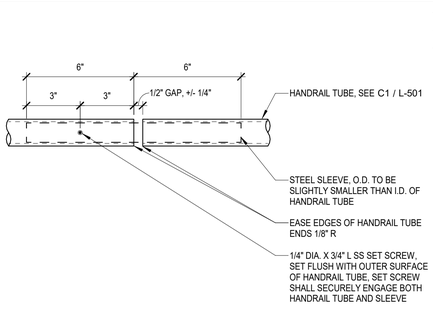
BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL





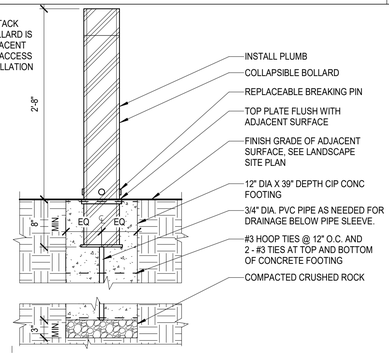
NOTES:
1. HANDRAIL TO BE MOUNTED 1 1/2" CLEAR OF CHEEK WALL.
2. SEE PLANS FOR ADDITIONAL STAIR/HANDRAIL INFORMATION.
3. OMIT LOWER RAIL IF HANDRAIL IS ADJACENT TO CURB OR WALL ALONG FULL RAMP LENGTH.
4. HANDRAILS LONGER THAN 30'-0" SHALL HAVE AN EXPANSION JOINT PLACED WITHIN 2'-0" OF THE CENTER OF THE HANDRAIL LENGTH, SEE D3 / L-501.

C1 HANDRAILS
1" = 1'-0"

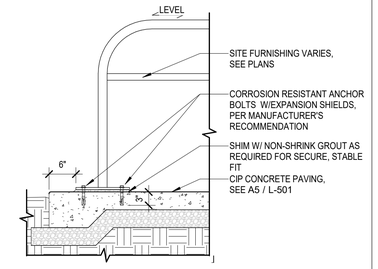


D3 HANDRAIL EXPANSION JOINT
3" = 1'-0"

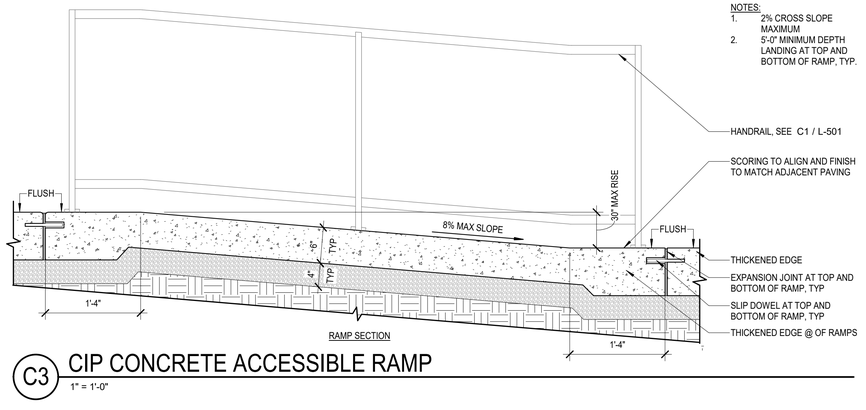
NOTES:
ENSURE ATTACK SIDE OF BOLLARD IS FACING ADJACENT VEHICULAR ACCESS UPON INSTALLATION



D4 COLLAPSIBLE BOLLARD
1" = 1'-0"



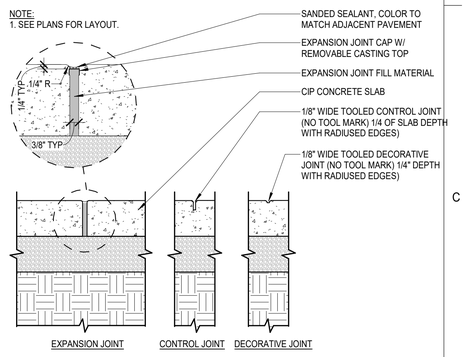
D5 FURNISHING ATTACHMENT
3/4" = 1'-0"



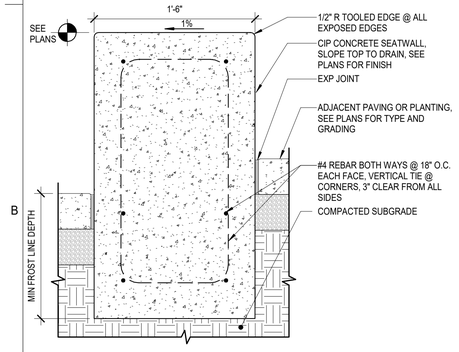
NOTES:
1. 2% CROSS SLOPE MAXIMUM
2. 5'-0" MINIMUM DEPTH LANDING AT TOP AND BOTTOM OF RAMP, TYP.

C3 CIP CONCRETE ACCESSIBLE RAMP
1" = 1'-0"

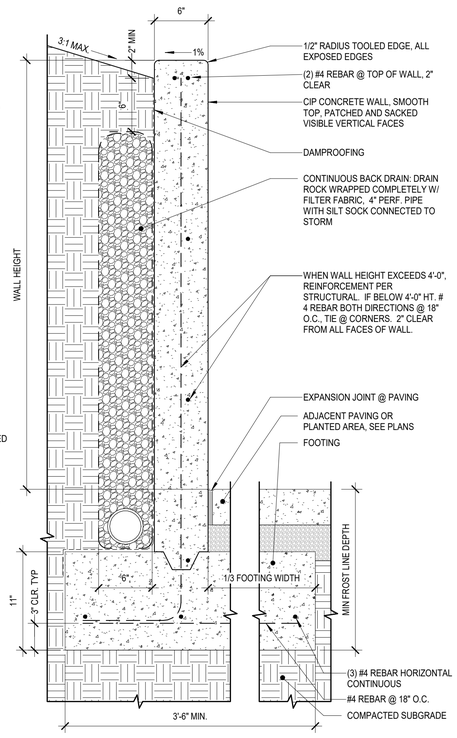
NOTE:
1. SEE PLANS FOR LAYOUT.



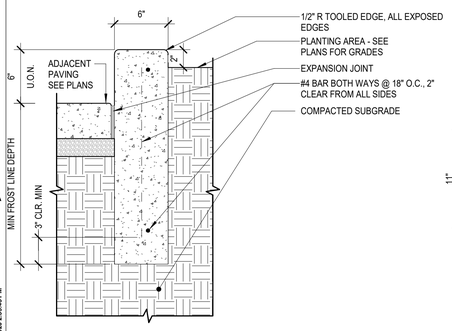
C5 CIP CONCRETE JOINTS
1 1/2" = 1'-0"



B1 CIP CONCRETE SEATWALL
1 1/2" = 1'-0"

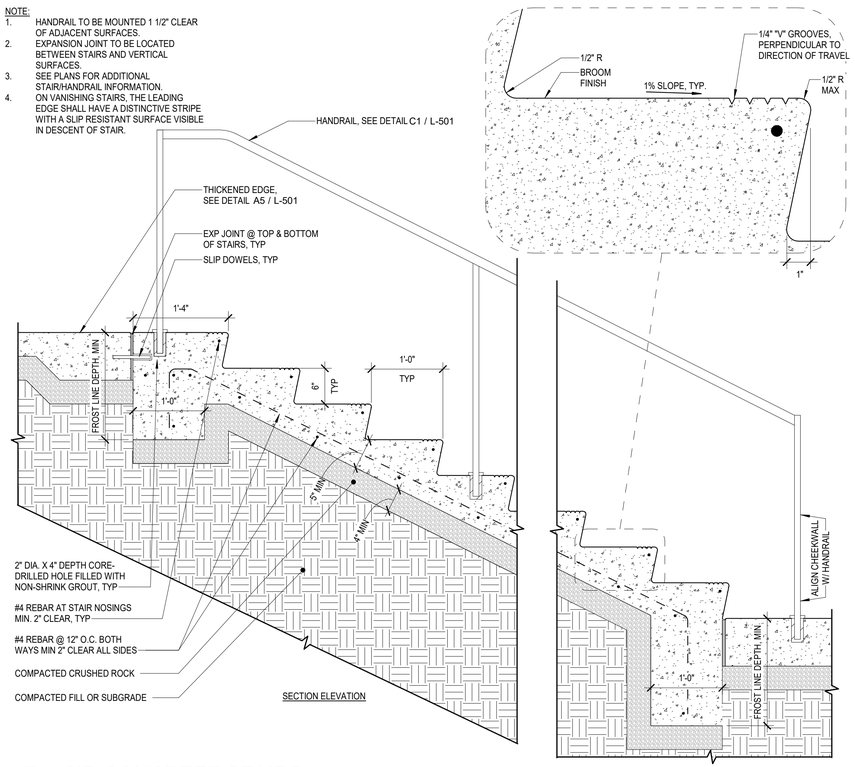


A2 CIP CONCRETE RETAINING WALL
1 1/2" = 1'-0"



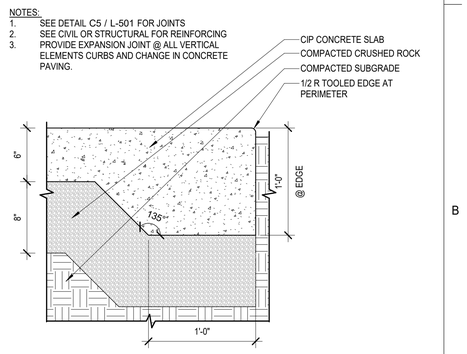
A1 CIP CONCRETE CURB
1 1/2" = 1'-0"

NOTE:
1. HANDRAIL TO BE MOUNTED 1 1/2" CLEAR OF ADJACENT SURFACES.
2. EXPANSION JOINT TO BE LOCATED BETWEEN STAIRS AND VERTICAL SURFACES.
3. SEE PLANS FOR ADDITIONAL STAIR/HANDRAIL INFORMATION.
4. ON VANISHING STAIRS, THE LEADING EDGE SHALL HAVE A DISTINCTIVE STRIPE WITH A SLIP RESISTANT SURFACE VISIBLE IN DESCENT OF STAIR.



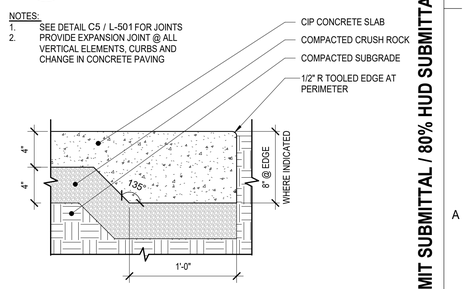
A3 CIP CONCRETE STAIRS
1" = 1'-0"

NOTES:
1. SEE DETAIL C5 / L-501 FOR JOINTS
2. SEE CIVIL OR STRUCTURAL FOR REINFORCING
3. PROVIDE EXPANSION JOINT @ ALL VERTICAL ELEMENTS CURBS AND CHANGE IN CONCRETE PAVING.



B5 CIP CONCRETE VEHIC. PAVING
1 1/2" = 1'-0"

NOTES:
1. SEE DETAIL C5 / L-501 FOR JOINTS
2. PROVIDE EXPANSION JOINT @ ALL VERTICAL ELEMENTS, CURBS AND CHANGE IN CONCRETE PAVING



A5 CIP CONCRETE PED. PAVING
1 1/2" = 1'-0"

BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL

PLOT DATE/TIME: 6/9/2020 2:36:43 PM

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com

STATE OF WASHINGTON MARIEKE LACASSE AD 865 EXP. 08/18/2021 LICENSED LANDSCAPE ARCHITECT

PROJECT:
EHA BAKER HEIGHTS
EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:
BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:
EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WA 98201

MARK	DATE	DESCRIPTION
REVISIONS		

C	06/08/2020	BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN

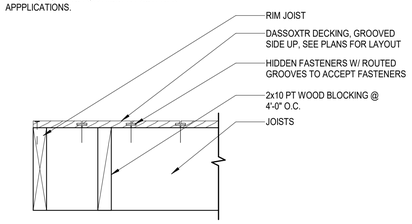
MARK	DATE	DESCRIPTION
ISSUE INFORMATION		

PROJECT NO.: **2017033.00**
GGLO PRINCIPAL IN CHARGE: **JON HALL**
GGLO PROJECT MANAGER: **SCOTT SCHREFFLER**
OWNER APPROVAL:

SHEET TITLE
LANDSCAPE DETAILS

SHEET NO.
L-501

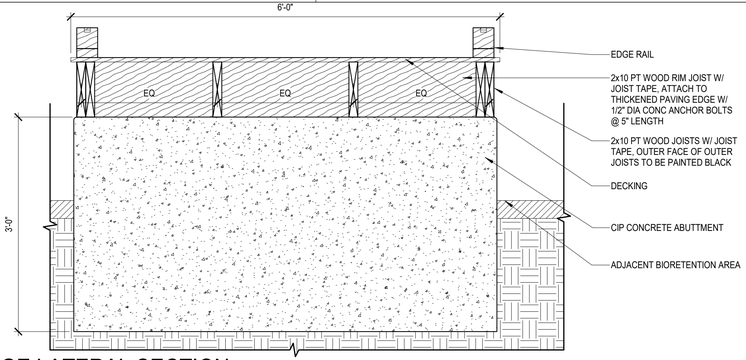
NOTES:
1. PROVIDE RIM JOISTS AT BOTH ENDS OF BRIDGE.
2. ATTACH DECKING TO RIM JOISTS W/ EXT. DECKING SCREWS FOR HIDDEN FASTENER APPPLICATIONS.



SECTION

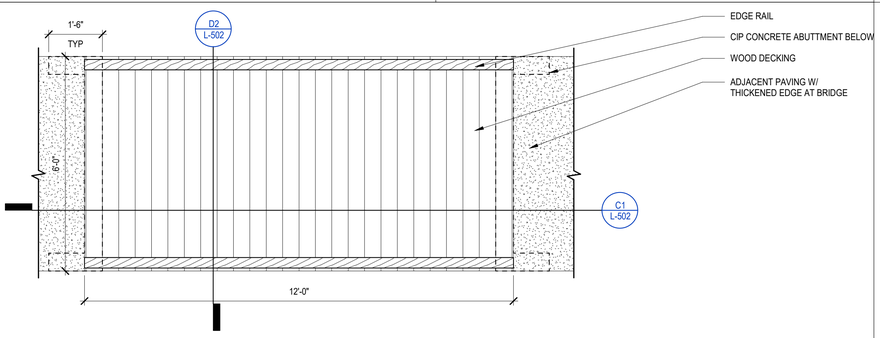
D1 BRIDGE DECKING

1 1/2" = 1'-0"



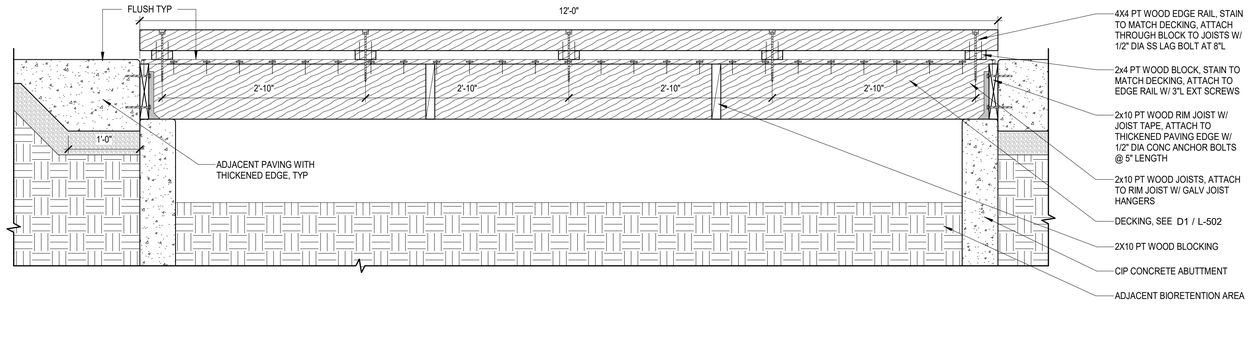
D2 BRIDGE LATERAL SECTION

1" = 1'-0"



D4 BIORETENTION BRIDGE

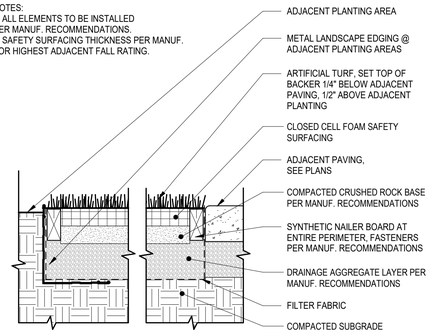
1/2" = 1'-0"



C1 BRIDGE LONGITUDINAL SECTION

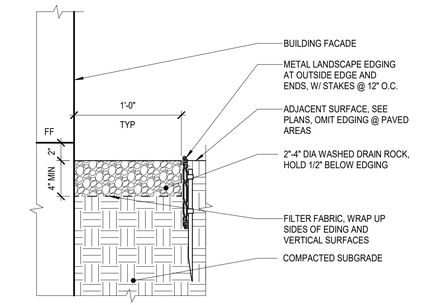
1" = 1'-0"

NOTES:
1. ALL ELEMENTS TO BE INSTALLED PER MANUF. RECOMMENDATIONS.
2. SAFETY SURFACING THICKNESS PER MANUF. FOR HIGHEST ADJACENT FALL RATING.



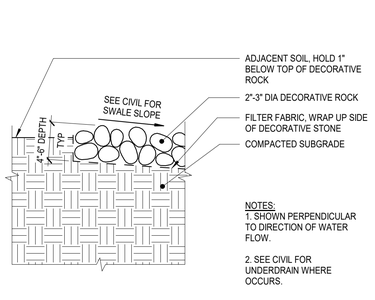
B1 ARTIFICIAL TURF PLAY SURFACE

1 1/2" = 1'-0" ADDITIVE ALTERNATE #2



B2 DECORATIVE STONE BAND

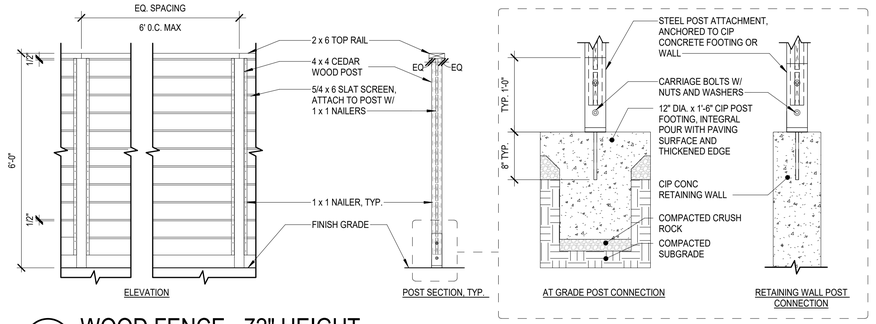
1 1/2" = 1'-0"



B3 DECORATIVE ROCK SWALE

1 1/2" = 1'-0"

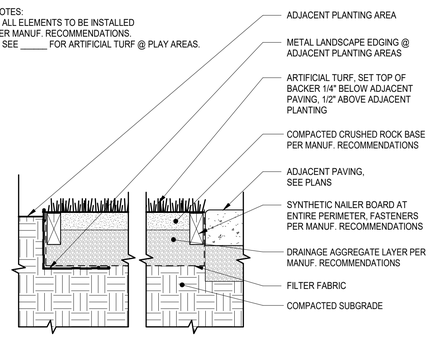
NOTES:
1.WOOD TO BE S4S CEDAR, SMOOTH FINISH W/ TRANSPARENT SEALER.
2. EXTERIOR SCREWS TO BE BLACK OR DARK GRAY.



C4 WOOD FENCE - 42" HEIGHT

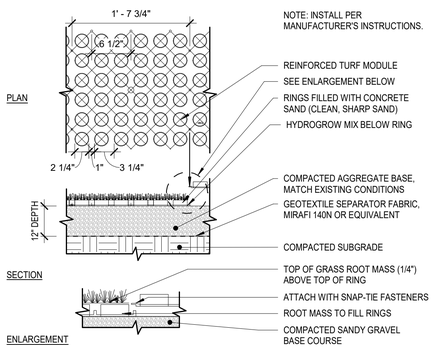
1/2" = 1'-0"

NOTES:
1. ALL ELEMENTS TO BE INSTALLED PER MANUF. RECOMMENDATIONS.
2. SEE _____ FOR ARTIFICIAL TURF @ PLAY AREAS.



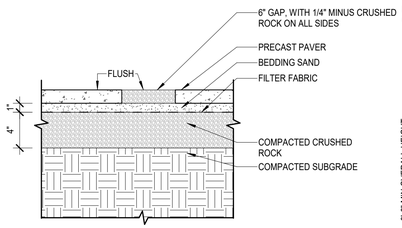
A1 ARTIFICIAL TURF

1 1/2" = 1'-0" ADDITIVE ALTERNATE #1



A2 REINFORCED TURF SURFACE

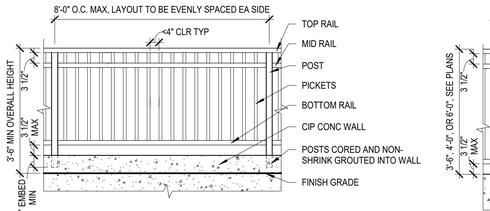
1" = 1'-0"



A3 STEPPING STONES

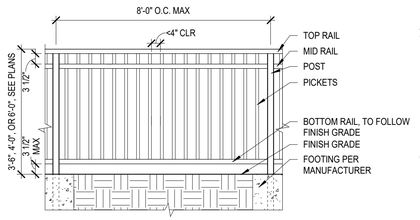
1 1/2" = 1'-0"

NOTE: RAILING TO BE ENGINEERED BY MANUFACTURER TO MEET ALL APPLICABLE CODE REQUIREMENTS FOR GUARDRAILS.



A4 METAL PICKET GUARDRAIL

1/2" = 1'-0"



A5 METAL PICKET FENCE

1/2" = 1'-0"

BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL

PLOT DATE/TIME: 6/19/2020 2:35:44 PM

GGLO DESIGN

1301 First Avenue, Suite 301
Seattle, WA 98101

http://www.gglo.com

STATE OF WASHINGTON
MARIEKE LACASSE
AD 865 EXP.08/18/2021
LICENSED LANDSCAPE ARCHITECT

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WA 98201

MARK	DATE	DESCRIPTION
		REVISIONS

MARK	DATE	DESCRIPTION
C	06/08/2020	BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
		ISSUE INFORMATION

PROJECT NO.: **2017033.00**
GGLO PRINCIPAL IN CHARGE: **JON HALL**
GGLO PROJECT MANAGER: **SCOTT SCHREFFLER**
OWNER APPROVAL:

SHEET TITLE

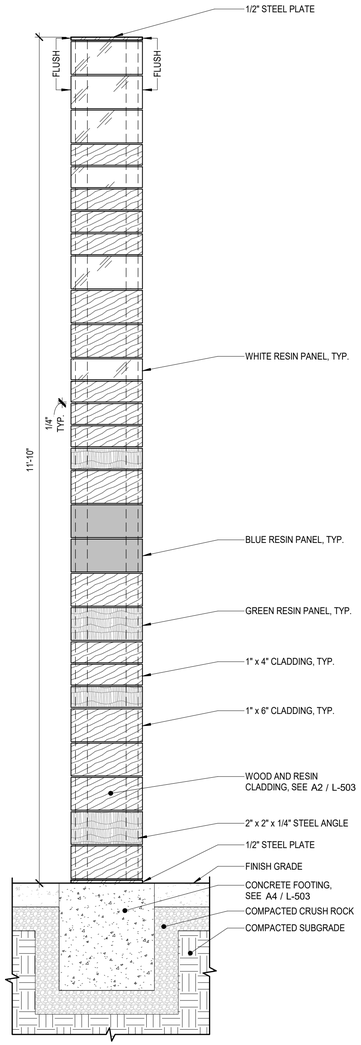
LANDSCAPE DETAILS

SHEET NO.

L-502

NOTE:

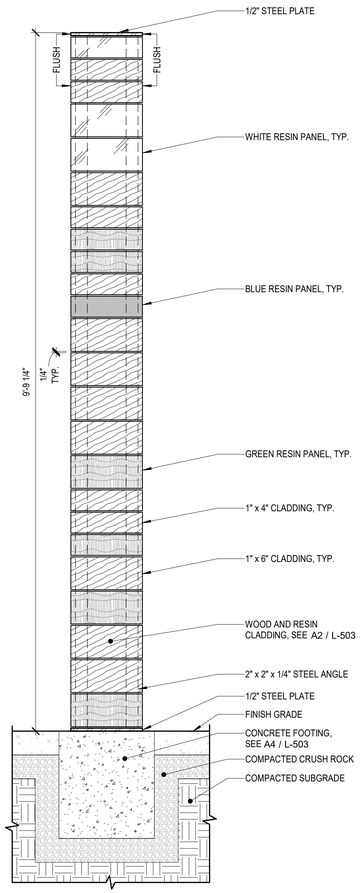
1. RESIN PANELS WILL FOLLOW THE SAME DIMENSIONS AND LAYOUT AS WOOD CLADDING PIECES.



B1 CLADDING LAYOUT - COLUMN 3
1" = 1'-0"

NOTE:

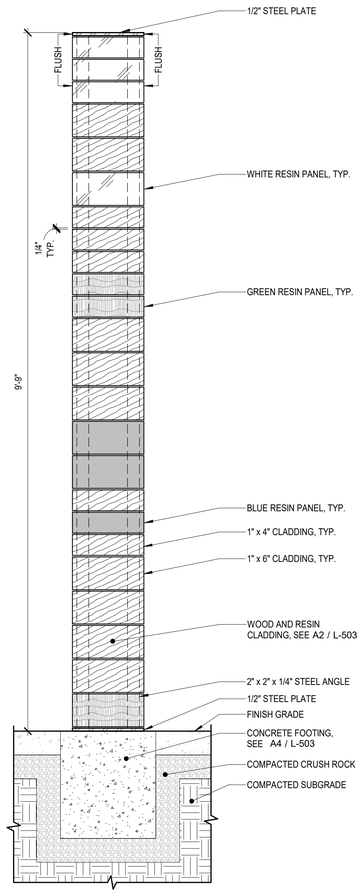
1. RESIN PANELS WILL FOLLOW THE SAME DIMENSIONS AND LAYOUT AS WOOD CLADDING PIECES.



B2 CLADDING LAYOUT - COLUMN 1
1" = 1'-0"

NOTE:

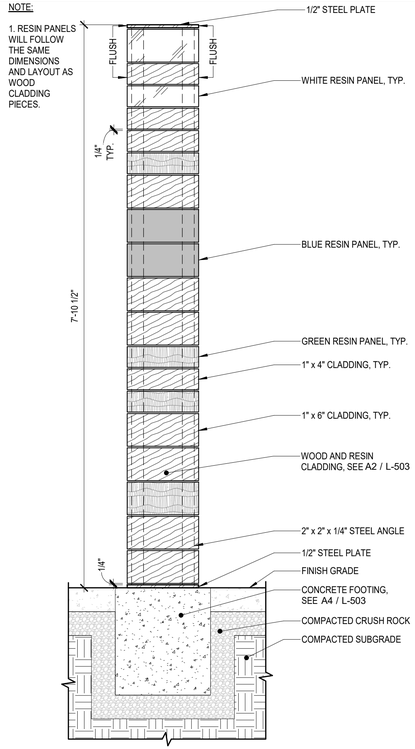
1. RESIN PANELS WILL FOLLOW THE SAME DIMENSIONS AND LAYOUT AS WOOD CLADDING PIECES.



B3 CLADDING LAYOUT - COLUMN 4
1" = 1'-0"

NOTE:

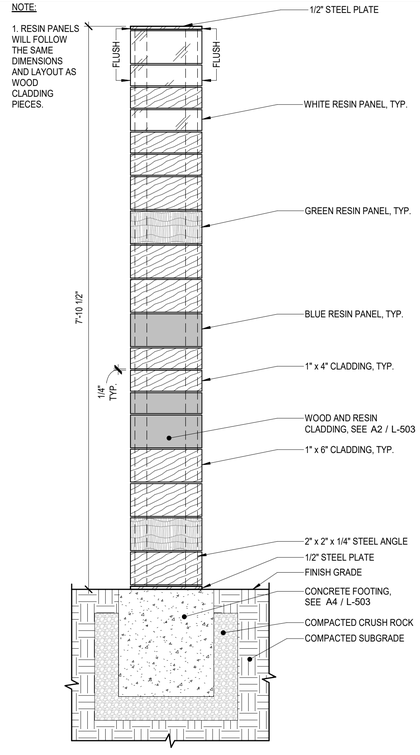
1. RESIN PANELS WILL FOLLOW THE SAME DIMENSIONS AND LAYOUT AS WOOD CLADDING PIECES.



C4 CLADDING LAYOUT - COLUMN 2
1" = 1'-0"

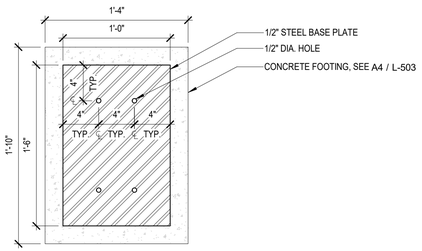
NOTE:

1. RESIN PANELS WILL FOLLOW THE SAME DIMENSIONS AND LAYOUT AS WOOD CLADDING PIECES.



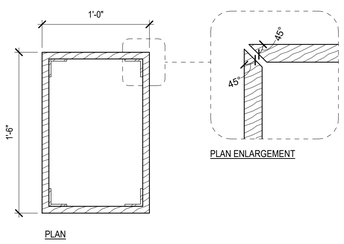
C5 CLADDING LAYOUT - COLUMN 5
1" = 1'-0"

NOTE:
J-BOLTS WILL BE PRE-CAST IN CONCRETE FOOTING. ENSURE THAT J-BOLT LAYOUT MATCHES THE INDICATED HOLE LAYOUT IN STEEL BASE PLATE.



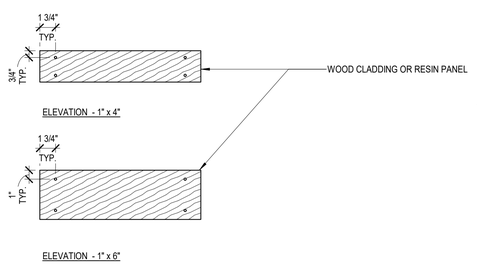
A1 DECORATIVE COLUMN - MOUNTING PLATE
1 1/2" = 1'-0"

NOTES:
1. MITER CLADDING CORNERS.
2. ENSURE CORNERS ARE ALIGNED AND GLUE MITERED EDGES TOGETHER ALONG SPLINE.

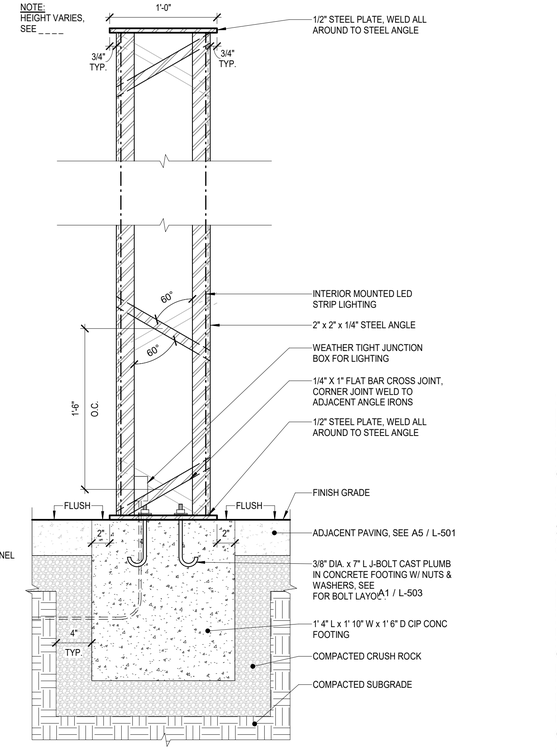


A2 DECORATIVE COLUMN - CLADDING ASSEMBLY
1 1/2" = 1'-0"

NOTES:
1. USE SELF-TAPPING SCREWS TO AFFIX CLADDING TO STEEL FRAME.
2. DRILL LOCATIONS REMAIN CONSISTENT BETWEEN 1' - 0" AND 1' - 6" LENGTHS.



NOTE:
HEIGHT VARIES, SEE _ _ _ _



A4 DECORATIVE COLUMN FRAME - ELEVATION
1 1/2" = 1'-0"

PLOT DATE/TIME: 6/19/2020 2:35:48 PM

BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL

GGLO DESIGN

1301 First Avenue, Suite 301
Seattle, WA 98101

http://www.gglo.com

STATE OF WASHINGTON
MARIEKE LACASSE
24965
EXP. 08/18/2021
LICENSED LANDSCAPE ARCHITECT

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WA 98201

MARK	DATE	DESCRIPTION
REVISIONS		

C	06/08/2020	BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN

MARK	DATE	DESCRIPTION
ISSUE INFORMATION		

PROJECT NO.: **2017033.00**
GGLO PRINCIPAL IN CHARGE: **JON HALL**
GGLO PROJECT MANAGER: **SCOTT SCHREFFLER**
OWNER APPROVAL:

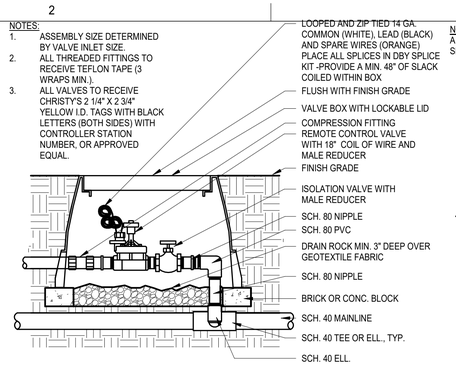
SHEET TITLE

LANDSCAPE DETAILS

SHEET NO.

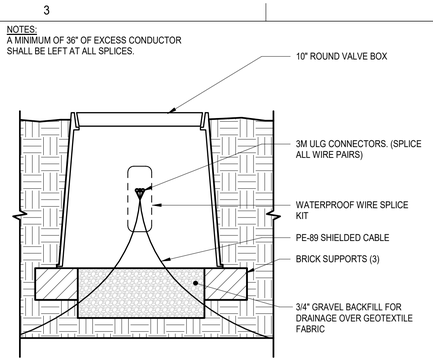
L-503

NOTES:
1. ASSEMBLY SIZE DETERMINED BY VALVE INLET SIZE.
2. ALL THREADED FITTINGS TO RECEIVE TEFLON TAPE (3 WRAPS MIN.).
3. ALL VALVES TO RECEIVE CHRISTY'S 2 1/4" X 2 3/4" YELLOW I.D. TAGS WITH BLACK LETTERS (BOTH SIDES) WITH CONTROLLER STATION NUMBER, OR APPROVED EQUAL.



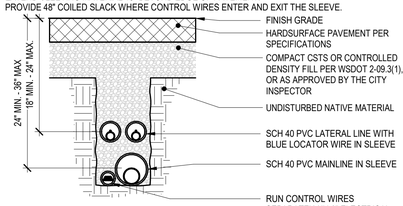
D2 CONTROL VALVE
1" = 1'-0"

NOTES:
A MINIMUM OF 36" OF EXCESS CONDUCTOR SHALL BE LEFT AT ALL SPLICES.



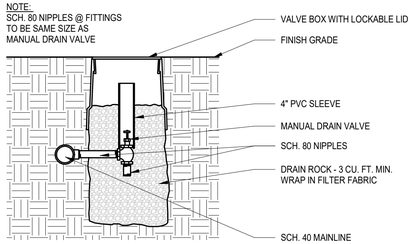
D3 WIRE SPLICE
1" = 1'-0"

NOTES:
1. SLEEVING MATERIAL SHALL BE SCH 40 PVC PIPE AND SHALL BE LARE ENOUGH TO ALLOW IRRIGATION PIPE AND ASSOCIATED COUPLINGS TO EASILY SLIP THROUGH SLEEVING MATERIAL, TYPICALLY 2x DIAMETER OF IRRIGATION PIPE.
2. ONLY 1 IRRIGATION PIPE PER SLEEVE, TYP.
3. USE DUCTILE IRON WHEN CROSSING UNDER HEAVILY TRAVELED ARTERIAL ROADWAYS.
4. EXTEND SLEEVING MATERIAL 18" BEYOND EDGE OF PAVEMENT.
5. PROVIDE 48" COILED SLACK WHERE CONTROL WIRES ENTER AND EXIT THE SLEEVE.

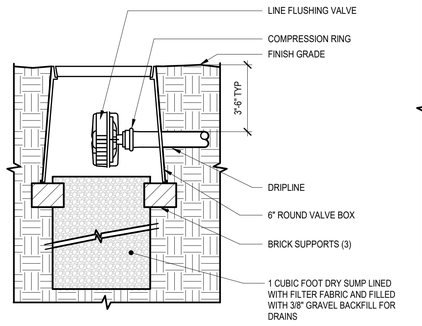


D4 IRRIGATION TRENCH UNDER PAVEMENT
1" = 1'-0"

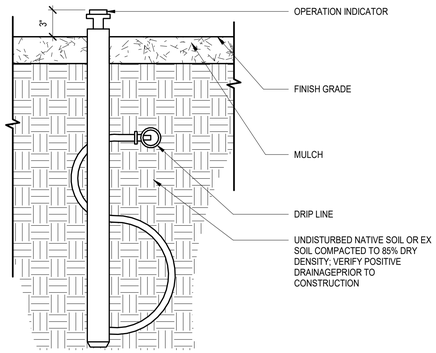
NOTE:
SCH. 80 NIPPLES @ FITTINGS TO BE SAME SIZE AS MANUAL DRAIN VALVE



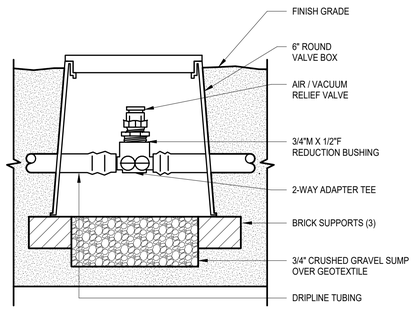
C1 MANUAL DRAIN VALVE
1" = 1'-0"



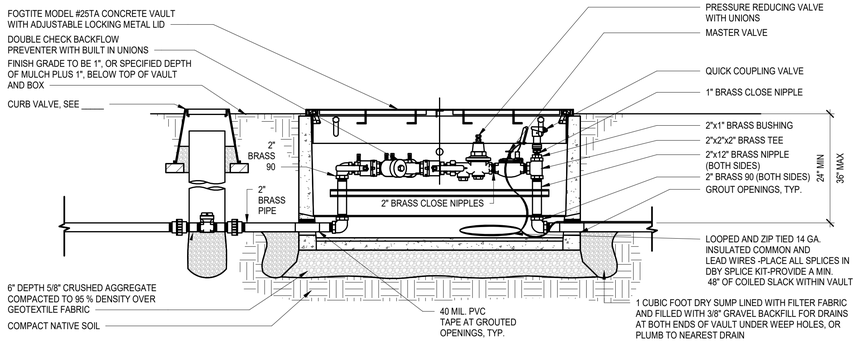
C2 DRIPLINE FLUSH VALVE
1" = 1'-0"



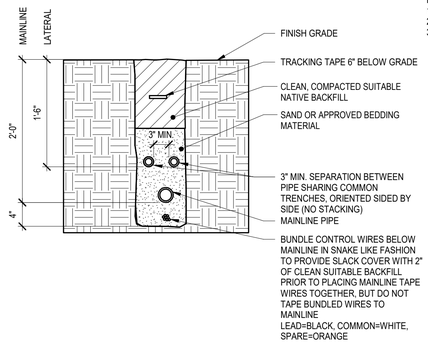
C3 DRIPLINE OPERATION INDICATOR
1 1/2" = 1'-0"



C4 DRIPLINE AIR VACUUM RELIEF VALVE
1" = 1'-0"

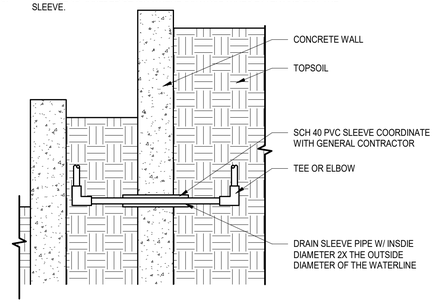


B1 DCVA / PR / MASTER VALVE ASSEMBLY
3/4" = 1'-0"

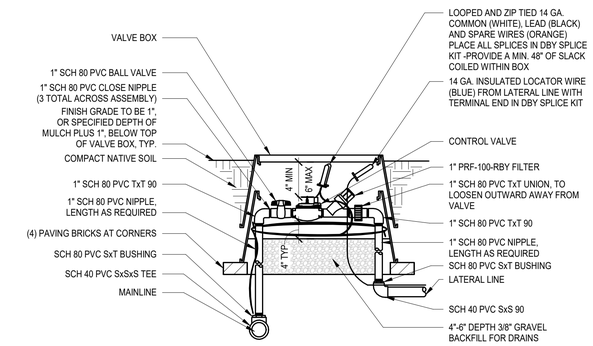


B3 IRRIGATION TRENCH
1" = 1'-0"

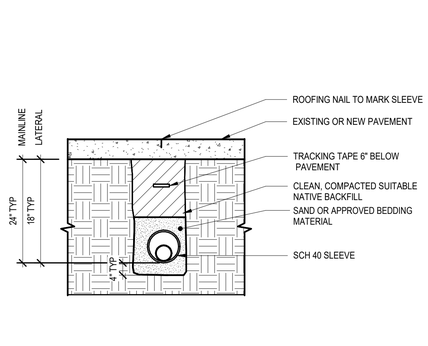
NOTES:
1. ONLY 1 IRRIGATION PIPE PER SLEEVE, TYP.
2. EXTEND SLEEVING MATERIAL 18" BEYOND EDGE OF WALL.
3. PROVIDE 48" COILDED SLACK WHERE CONTROL WIRES EVTER AND EXIT THE SLEEVE.



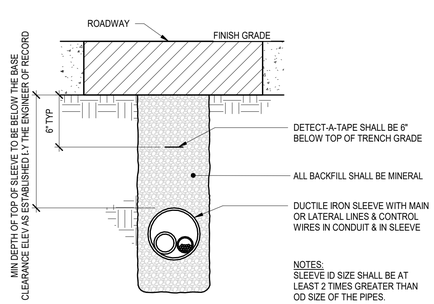
B4 SLEEVING DETAIL THROUGH WALL
1" = 1'-0"



A1 DRIPLINE CONTROL VALVE
1" = 1'-0"



A3 IRRIGATION SLEEVE
1" = 1'-0"



A4 DUCTILE IRON ROADWAY IRRIGATION SLEEVE SECTION
1 1/2" = 1'-0"

PLOT DATE/TIME: 6/9/2020 2:55:49 PM

BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com

STATE OF WASHINGTON · MARIEKE LACASSE · 20 965 EXP.08/18/2021 · LICENSED LANDSCAPE ARCHITECT

PROJECT:
EHA BAKER HEIGHTS
EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:
BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:
EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WA 98201

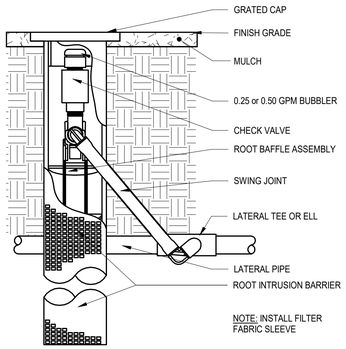
MARK	DATE	DESCRIPTION
		REVISIONS

MARK	DATE	DESCRIPTION
C	06/08/2020	BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
		ISSUE INFORMATION

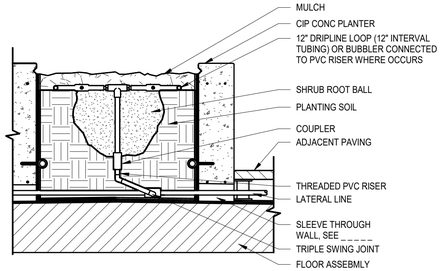
PROJECT NO.: **2017033.00**
GGLO PRINCIPAL IN CHARGE: **JON HALL**
GGLO PROJECT MANAGER: **SCOTT SCHREFFLER**
OWNER APPROVAL:

SHEET TITLE
IRRIGATION DETAILS

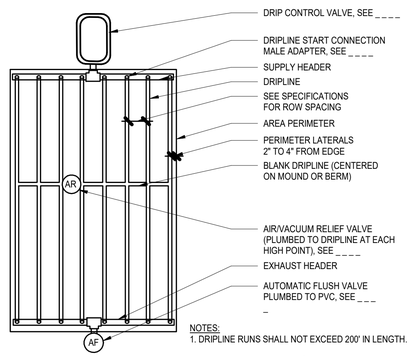
SHEET NO.
L-541



C1 ROOT WATERING SYSTEM
3" = 1'-0"

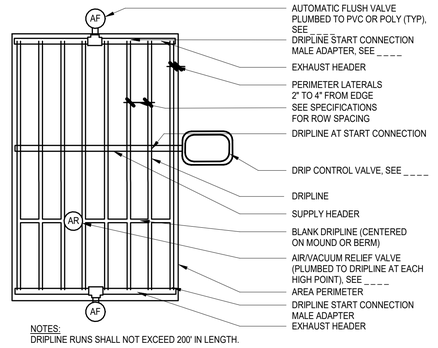


C2 CONC PLANTER IRRIGATION
1" = 1'-0"



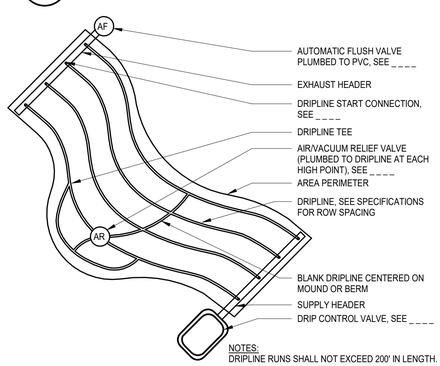
NOTES:
1. DRIPLINE RUNS SHALL NOT EXCEED 200' IN LENGTH.

C3 DRIPLINE END FEED LAYOUT
1" = 1'-0"



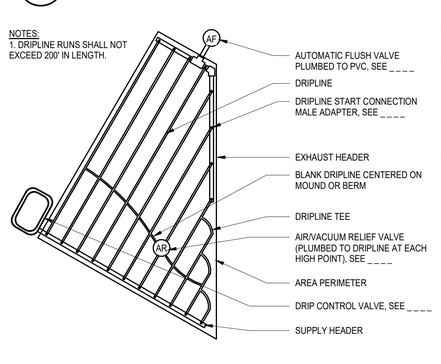
NOTES:
DRIPLINE RUNS SHALL NOT EXCEED 200' IN LENGTH.

C4 DRIPLINE CENTER FEED LAYOUT
12" = 1'-0"



NOTES:
DRIPLINE RUNS SHALL NOT EXCEED 200' IN LENGTH.

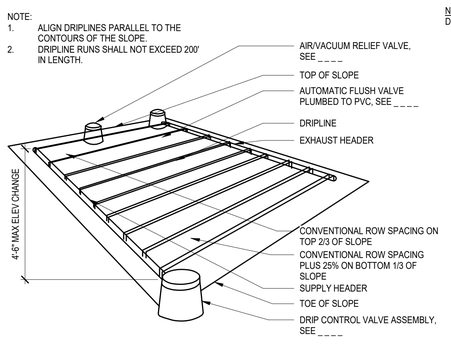
B1 DRIPLINE AT IRREGULAR CURVES
12" = 1'-0"



NOTES:
1. DRIPLINE RUNS SHALL NOT EXCEED 200' IN LENGTH.

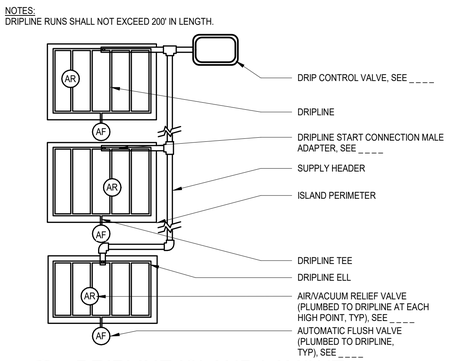
B2 DRIPLINE AT IRREGULAR ANGLES
12" = 1'-0"

NOTE:
1. ALIGN DRIPLINES PARALLEL TO THE CONTOURS OF THE SLOPE.
2. DRIPLINE RUNS SHALL NOT EXCEED 200' IN LENGTH.

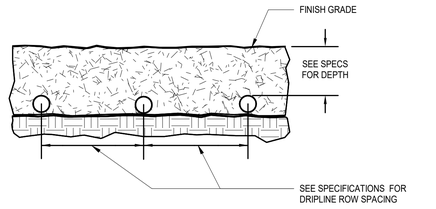


B3 DRIPLINE SLOPE FEED LAYOUT
1" = 1'-0"

NOTES:
DRIPLINE RUNS SHALL NOT EXCEED 200' IN LENGTH.

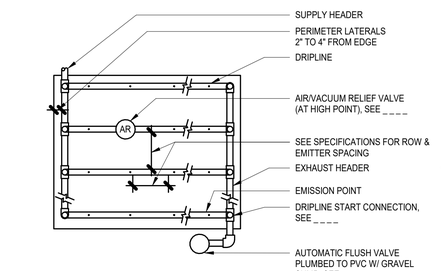


B4 DRIPLINE ISLAND LAYOUT
1" = 1'-0"

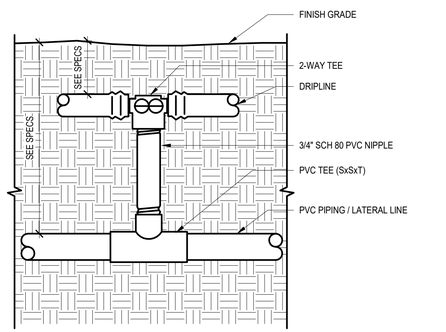


A1 DRIPLINE SUBGRADE INSTALLATION
1" = 1'-0"

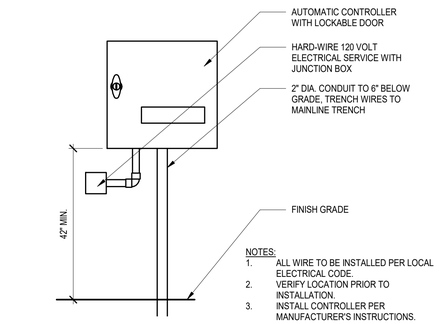
NOTES:
DRIPLINE RUNS SHALL NOT EXCEED 200' IN LENGTH.



A2 DRIPLINE ACCESSORIES LAYOUT
12" = 1'-0"



A3 DRIPLINE START CONNECTION
1" = 1'-0"



NOTES:
1. ALL WIRE TO BE INSTALLED PER LOCAL ELECTRICAL CODE.
2. VERIFY LOCATION PRIOR TO INSTALLATION.
3. INSTALL CONTROLLER PER MANUFACTURER'S INSTRUCTIONS.

A4 WALL MOUNTED IRRIGATION CONTROLLER LAYOUT
1" = 1'-0"

PLOT DATE/TIME: 6/9/2020 2:35:52 PM

BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com

STATE OF WASHINGTON · MARIEKE LACASSE · 20165 EXP.08/18/2021 · LICENSED LANDSCAPE ARCHITECT

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WA 98201

MARK	DATE	DESCRIPTION
		REVISIONS

MARK	DATE	DESCRIPTION
C	06/08/2020	BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
		ISSUE INFORMATION

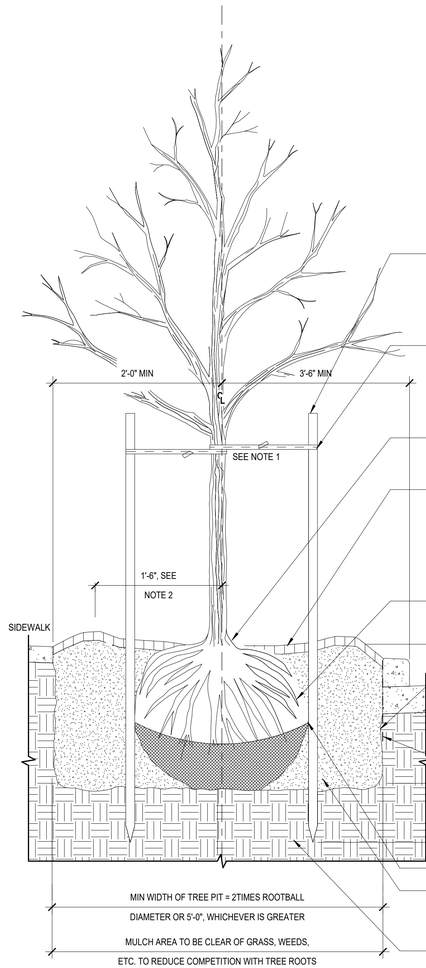
PROJECT NO.: **2017033.00**
GGLO PRINCIPAL IN CHARGE: **JON HALL**
GGLO PROJECT MANAGER: **SCOTT SCHREFFLER**
OWNER APPROVAL:

SHEET TITLE

IRRIGATION DETAILS

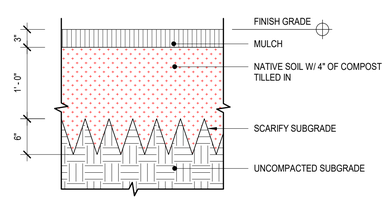
SHEET NO.

L-542

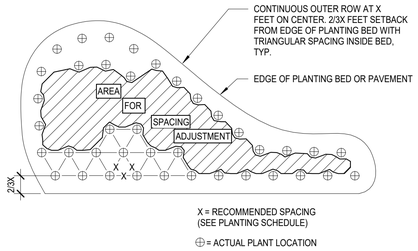


NOTES:
1. INSTALLATION INCLUDES REMOVAL OF STAKES ONE YEAR AFTER INSTALLATION
2. SHAPE SOIL SURFACE TO PROVIDE 3' DIAMETER WATERING RING
3. TREE CLEARANCES SHALL BE PER C.O.E. STD PLANS
4. SEE C.O.E. STD PLANS FOR TREE PIT DETAIL

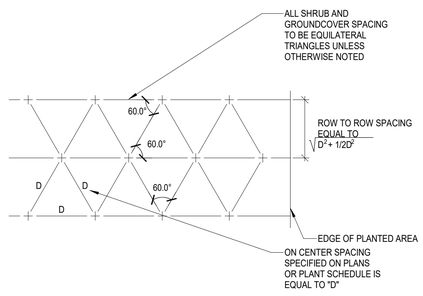
A1 DECIDUOUS TREE IN PLANTER STRIP
3/4" = 1'-0"



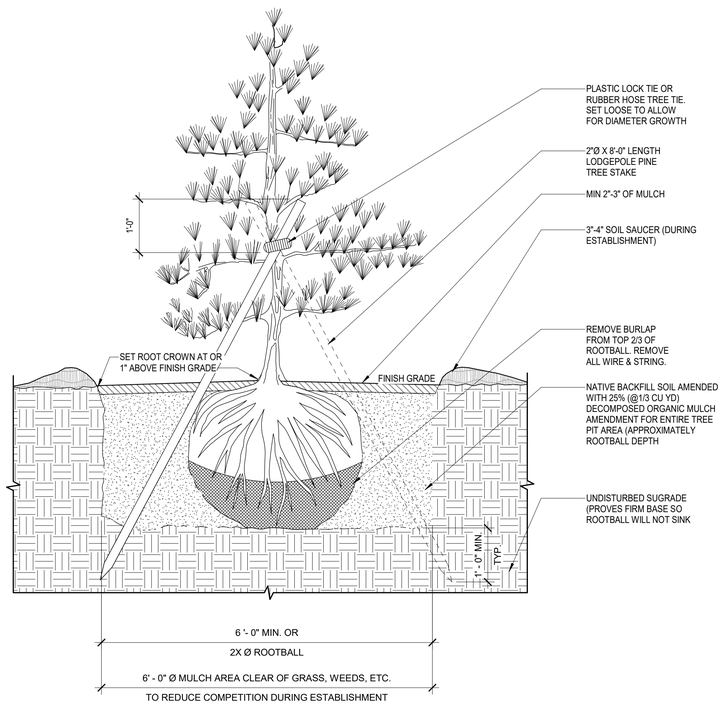
C3 SOIL PROFILE @ PLANTING
1" = 1'-0"



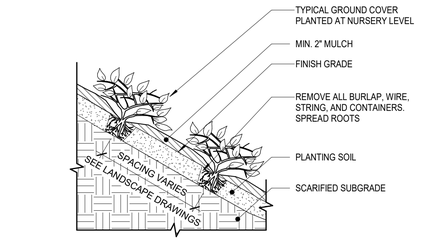
D4 TYP. PLANTING PATTERN
1 1/2" = 1'-0"



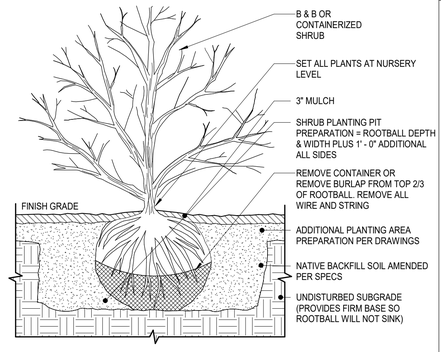
C4 TRIANGULAR PLANT SPACING
1/4" = 1'-0"



A3 CONIFEROUS TREE PLANTING
3/4" = 1'-0"

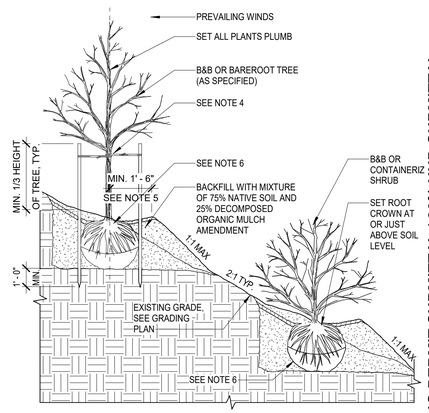


D5 GROUND COVER PLANTING
3/4" = 1'-0"



C5 SHRUB PLANTING
1" = 1'-0"

NOTES:
1. NO GUYING OR STAKING IN BUFFER MITIGATION ENHANCEMENT AREAS
2. ONE STAKE PER TREE ON WINDWARD SIDE; SECOND STAKE ON LEEWARD SIDE
3. SLOPES STEEPER THAN 2:1 MAY REQUIRE AN APPROVED EMBANKMENT STAILIZATION SYSTEM TO CREATE A LEVEL TREE PIT SUCH AS: ROCK FACING; PRECAST CONCRETE WALL UNITS; TIMBER WALL; MANUFACTURED SLOPE RETENTION UNITS
4. CHAIN LOCK TREE TIE. LOOP EACH TIE AROUND TREE LOOSELY TO PROVIDE 1" SLACK FOR DIAMETER GROWTH.
5. SHAPE SOIL TO PROVIDE 3' - 0"Ø OR ROOTBALL DIAMETER, WHICHEVER IS GREATER, WATERING RING
6. REMOVE ALL STRING. REMOVE TOP 2/3 OF BURLAP.



A5 PLANTING ON SLOPES
1/4" = 1'-0"

BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL

PLOT DATE/TIME 6/19/2020 2:35:54 PM

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com

STATE OF WASHINGTON · MARIEKE LACASSE · 24765 · REGISTERED LANDSCAPE ARCHITECT · 10/18/2021

PROJECT:
EHA BAKER HEIGHTS
EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:
BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:
EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WA 98201

MARK	DATE	DESCRIPTION
REVISIONS		

MARK	DATE	DESCRIPTION
C	06/08/2020	BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
ISSUE INFORMATION		

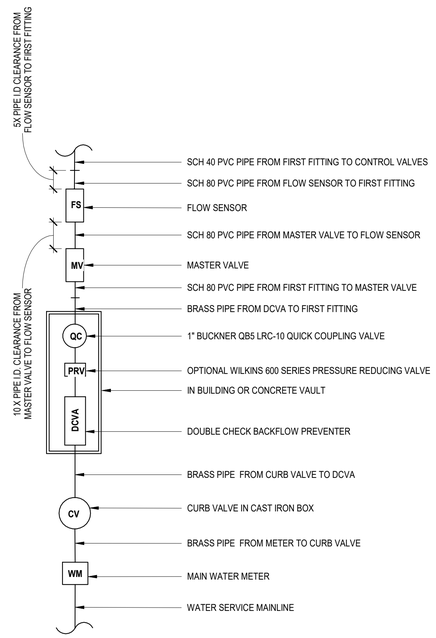
PROJECT NO.: **2017033.00**
GGLO PRINCIPAL IN CHARGE: **JON HALL**
GGLO PROJECT MANAGER: **SCOTT SCHREFFLER**
OWNER APPROVAL:

SHEET TITLE
PLANTING DETAILS

SHEET NO.
L-551

IRRIGATION NOTES:

1. ALL PROPOSED PLANTING AREAS WILL BE WATERED WITH A COMPLETE IN-GROUND AUTOMATIC IRRIGATION SYSTEM AS SHOWN.
2. THE CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT INSUFFICIENT MEASURED WATER PRESSURE TO THE ARCHITECT.
3. DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE DESIGN. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
4. WHERE THE FIELD CONDITIONS REQUIRE ADJUSTMENTS, IRRIGATION SHALL BE ADDED OR DELETED IN ACCORDANCE WITH THE IRRIGATION LEGEND OR MANUFACTURER'S SPECIFICATIONS. PIPE SIZING SHALL BE ADJUSTED ACCORDINGLY, AND WATER VELOCITY SHALL NOT EXCEED 5 FEET PER SECOND.
5. THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL LINES FOR OPTIMUM PERFORMANCE.
6. INSTALL BACKFLOW PREVENTION DEVICE AS REQUIRED BY LOCAL CODES AND HEALTH DEPARTMENT REQUIREMENTS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR SLEEVES, CHASES AND PENETRATIONS UNDER PAVING, THROUGH WALLS, ETC., UNLESS OTHERWISE NOTED PRIOR TO PAVING AND FORMING.
8. THE IRRIGATION SYSTEM IS DESIGNED TO BE WINTERIZED THROUGH THE DRAIN VALVE AT THE POINT OF CONNECTION. COMPRESSED AIR CAN ALSO BE USED THROUGH THE QUICK COUPLER VALVE AT THE POINT OF CONNECTION TO BLOW-OUT THE SPRINKLER ZONE.
9. FOR DRIPLINE ZONES, USE 3/4-INCH PVC PIPE IN SLEEVES TO CONNECT PLANTING AREAS.
10. COORDINATE ALL BUILDING PENETRATIONS WITH ARCHITECTURAL PLANS AND WATERPROOFING REQUIREMENTS.



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
T	HUNTER MP CORNER PROS-06-PRS40-CV TURF ROTATOR, 6" POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. T=TURQUOISE ADJ ARC 45-105.	1	40
K G R	HUNTER MP2000 PROS-06-PRS40-CV TURF ROTATOR, 6" POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. K=BLACK ADJ ARC 90-210, G=GREEN ADJ ARC 210-270, R=RED 360 ARC.	11	40
T	HUNTER MP CORNER PROS-12-PRS40-CV SHRUB ROTATOR, 12" POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE. T=TURQUOISE ADJ ARC 45-105 ON PRS40 BODY.	9	40
LST RST SST	HUNTER MP STRIP PROS-12-PRS40-CV SHRUB ROTATOR, 12" POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE. LST=IVORY LEFT STRIP, SST=BROWN SIDE STRIP, RST=COPPER RIGHT STRIP, ON PRS40 BODY.	52	40
ADJ. 360	HUNTER MP800SR PROS-00-PRS40 SHRUB ROTATOR, FIXED-RISER HEAD CLEAR OF FLOOD LEVEL, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. OR = ORANGE ADJ ARC 90 TO 210.	8	40
	HUNTER MP800SR PROS-12-PRS40-CV SHRUB ROTATOR, 12.0" POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. OR = ORANGE ADJ ARC 90 TO 210.	65	40
	HUNTER MP815 PROS-12-PRS40-CV SHRUB ROTATOR, 12" POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE. M=MAROON AND GRAY ADJ ARC 90 TO 210, L=LIGHT BLUE AND GRAY 210 TO 270 ARC, O=OLIVE AND GRAY 360 ARC ON PRS40 BODY.	23	40
0.25 0.50	HUNTER RZWS-SLEEVE-36-CV 36" LONG RZWS WITH FILTER FABRIC SLEEVE, .25GPM OR .50GPM BUBBLER OPTIONS, CHECK VALVE, 1/2" SWING JOINT FOR CONNECTION TO 1/2" PIPE	500	40

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICZ-151-XL-40 DRIP CONTROL ZONE KIT. 1-1/2" ICV GLOBE VALVE WITH 1" HY100 FILTER SYSTEM. PRESSURE REGULATION: 40PSI. FLOW RANGE: 20 GPM TO 60 GPM. 120 MESH STAINLESS STEEL SCREEN. 1-1/2" INLET X SINGLE 2" OUTLET	9
	AREA TO RECEIVE DRIPLINE HUNTER HDL-04-12-CV HDL-04-12-CV: HUNTER DRIPLINE W/ 0.4 GPH EMITTERS AT 12" O.C. CHECK VALVE, DARK BROWN TUBING WITH TAN STRIPING. DRIPLINE LATERALS SPACED AT 12" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. INSTALL WITH HUNTER PLD BARBED OR PLD-LOC FITTINGS.	37,865 L.F.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICV-G 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	16
C	RAIN BIRD ESP8LXMEF WITH (03) ESPLXMSM4 20 STATION COMMERCIAL CONTROLLER. MOUNTED ON A PLASTIC WALL MOUNT. FLOW SENSING AND WATER MANAGEMENT CAPABILITIES.	1
POC	POINT OF CONNECTION 2"	1
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21	9,085 L.F.
	IRRIGATION MAINLINE: PVC SCHEDULE 40	1,227 L.F.
	PIPE SLEEVE: PVC CLASS 200 SDR 21 TYPICAL PIPE SLEEVE FOR IRRIGATION PIPE. PIPE SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.	658.8 L.F.

Valve Callout
#1 Valve Number
#2 Valve Flow
#3 Valve Size

BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com

STATE OF WASHINGTON MARIEKE LACASSE LICENSED LANDSCAPE ARCHITECT 865 EXP. 08/18/2021

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WA 98201

MARK	DATE	DESCRIPTION
		REVISIONS

C	06/08/2020	BUILDING PERMIT SUBMITTAL /
		80% HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
		ISSUE INFORMATION

PROJECT NO.: **2017033.00**
GGLO PRINCIPAL IN CHARGE: **JON HALL**
GGLO PROJECT MANAGER: **SCOTT SCHREFFLER**
OWNER APPROVAL:

SHEET TITLE

IRRIGATION SCHEDULE AND NOTES

SHEET NO.

L-641

PLOT DATE/TIME: 6/19/2020 2:35:55 PM

PLANTING NOTES:

1. ALL FURNISHED PLANT MATERIAL SHALL COMPLY WITH ANSI Z60.1 AND THE DRAWINGS.
2. SUBMIT PRODUCT DATA, QUANTITY, AND SIZE INFORMATION FOR ALL PLANTS AND PRODUCTS.
3. SUBMIT SAMPLES OF ALL (MULCH, WEED BARRIER, EDGING MATERIALS, AND ROOT BARRIERS) TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL.
4. PLANT SUBSTITUTIONS SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL.
5. LANDSCAPE ARCHITECT SHALL INSPECT ALL PLANTS ON SITE OR AT THE NURSERY BEFORE PLANTING COMMENCES. NOTIFY LANDSCAPE ARCHITECT AT LEAST **7** DAYS PRIOR TO PLANT DELIVERY TO THE SITE.
6. DO NOT PLANT DURING FREEZING CONDITIONS OR ABOVE **90°F**.
7. PLANTING AREAS ARE TO BE FREE OF ALL FOREIGN AND DELETERIOUS MATERIAL AND HAVE ADEQUATE MOISTURE FOR PLANTING.
8. INSTALL PLANTING FERTILIZER TABLETS IN EACH PLANTING HOLE. TABLETS SHALL HAVE A **[20:10:5]** NUTRIENT COMPOSITION. PROVIDE **(1)** TABLET FOR GROUNDCOVERS AND SMALL SHRUBS, **(2)** TABLETS FOR MEDIUM TO LARGE SHRUBS, AND **(3)** TABLETS PER EACH CALIPER INCH FOR TREES.
9. INSTALL ROOT BARRIER PER DRAWINGS AND DETAILS.
10. USE INTEGRATED PEST MANAGEMENT PRACTICES. DO NOT APPLY PESTICIDES UNLESS WRITTEN AUTHORIZATION FROM THE OWNER IS RECEIVED.
11. DURING AND AFTER PLANT INSTALLATION, CLEAN ADJACENT AREAS OF ALL DEBRIS AND REMOVE SURPLUS MATERIALS. REMOVE NURSERY TAGS, NURSERY STAKES, TIE TAPE, WIRE, BURLAP, AND OTHER DEBRIS FROM PLANTS.
12. PLANT MATERIALS SHALL BE WARRANTED BY THE INSTALLER FOR A PERIOD OF **(1)** YEAR FROM TIME OF INSTALLATION.
13. CONTRACTOR SHALL OFFER MAINTENANCE SERVICES FOR A PERIOD OF (6) MONTHS FROM TIME OF INSTALLATION AT OWNER'S EXPENSE AND DISCRETION.
14. PLANTED AREAS TO BE IRRIGATED WITH A LOW WATER-USE, FULL HEAD-TO-HEAD COVERAGE OR 6" BELOW GROUND LEVEL DRIP IRRIGATION SYSTEM.

SOIL PREPARATION NOTES:

1. BEFORE CONSTRUCTION BEGINS, HAVE A CERTIFIED LABORATORY SOIL TEST PERFORMED THAT ANALYZES PHYSICAL, CHEMICAL, AND BIOLOGICAL PROPERTIES PER SOIL SCIENCE SOCIETY OF AMERICA'S *METHODS OF SOIL ANALYSIS*. SUBMIT THE SOIL REPORT TO THE OWNER AND LANDSCAPE ARCHITECT BEFORE IMPORTED TOPSOIL AND AMENDMENTS ARE ACQUIRED.
2. SUBMIT SAMPLES AND THE PRODUCT DATA OF EACH TYPE OF SOIL TO BE USED TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL.
3. REMOVE **12"** OF EXISTING SOIL DEPTH AND PLACE **12"** OF IMPORTED TOPSOIL. PLACE **3"** OF COMPOSTED MULCH ON TOP.
4. STOCKPILE AND PRESERVE ANY EXISTING TOPSOIL ON SITE IF DEEMED SUITABLE.
5. IMPORTED TOPSOIL SHALL HAVE A PH RANGE OF **6-7**, A MINIMUM OF **20%** ORGANIC-MATTER CONTENT, HAVE A **SANDY LOAM** STRUCTURE, BE FRIABLE, AND POSSESS THE CHEMICAL, NUTRIENT, AND BIOLOGICAL CONTENT NECESSARY FOR HEALTHY PLANT GROWTH. TOPSOIL SHALL BE FREE OF FOREIGN OR DELETERIOUS MATERIAL AND SHALL BE FREE OF WEEDS AND SEEDS.
6. REMOVE FOREIGN AND DELETERIOUS MATERIALS FROM NATIVE SOIL BEFORE AMENDING.
7. PLANTING SOIL SHALL BE PLACED IN **8"** LIFTS AND COMPACTED TO **80%** PROCTOR DENSITY AND SMOOTHED TO A LOOSE, FINE UNIFORM FINISH TO MEET FINISH GRADES.
8. DO NOT WORK SOIL OR APPLY AMENDMENTS IF CONDITIONS ARE FROZEN, MUDDY, OR EXCESSIVELY WET.
9. DO NOT MIX SOIL IN TREE PROTECTION ZONES.

PLANT SCHEDULE

DECIDUOUS TREES

QTY.	TAG	BOTANICAL NAME	COMMON NAME	MIN. HT	CONT.	REMARKS
41	ACRV	ACER CIRCINATUM 'PACIFIC FIRE'	RED-BARK VINE MAPLE	10'-0"	B&B	3-5 MULTISTEM
27	AGAS	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	APPLE SERVICEBERRY	12'-0"	B&B	
3	BNRB	BETULA NIGRA	RIVER BIRCH	12'-0"	B&B	3-5 MULTISTEM
6	CJJH	CARPINUS JAPONICA	JAPANESE HORNBEAM	12'-0"	B&B	
29	CKCD	CORNUS KOUSA VAR. CHINENSIS	CHINESE DOGWOOD	12'-0"	B&B	
20	OASO	OXYDENDRUM ARBOREUM	SOURWOOD	12'-0"	B&B	
21	QCSO	QUERCUS COCCINEA	SCARLET OAK	15'-0"	B&B	
10	SMOS	STEWARTIA MONADELPHA	ORANGEBARK STEWARTIA	10'-0"	B&B	

EVERGREEN TREES

QTY.	TAG	BOTANICAL NAME	COMMON NAME	CAL.	CONT.	REMARKS
14	CNNC	CHAMAECYPARIS NOOTKATENSIS VAR. PENDULA	NOOTKA CYPRESS	2"	B&B	
2	TDPC	TAXODIUM DISTICHUM VAR. IMBRICATUM 'NUTANS'	POND CYPRESS	2 1/2"	B&B	

SHRUBS

QTY.	TAG	BOTANICAL NAME	COMMON NAME	CONT.	REMARKS
97	ASBB	ACANTHUS SPINOSUS	BEAR'S BREECHES	2 GAL	
51	CSYT	CORNUS SERICEA 'FLAVIRAMEA'	YELLOW TWIG DOGWOOD	5 GAL	
78	DTVH	DAPHNE X TRANSATLANTICA 'SUMMER ICE'	VARIEGATED HYBRID DAPHNE	5 GAL	
39	ECEN	ENKIANTHUS CAMPANULATUS 'RED BELLS'	ENKIANTHUS	5 GAL	
287	FGDF	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	1 GAL	
128	FIFO	FOTHERGILLA X INTERMEDIA 'BLUE SHADOW'	FOTHERGILLA	2 GAL	
5	HIWH	HAMAMELIS X INTERMEDIA 'DIANE'	WITCH HAZEL	15 GAL	
244	KLML	KALMIA LATIFOLIA 'ELF'	MOUNTAIN LAUREL	2 GAL	
360	LPBL	LONICERA PILEATA	BOX-LEAF HONEYSUCKLE	2 GAL	
372	MESC	MAHONIA EURYBRACTEATA 'SOFT CARESS'	'SOFT CARESS' MAHONIA	1 GAL	
20	MMHM	MAHONIA X MEDIA 'WINTER SUN'	HYBRID MAHONIA	5 GAL	
13	MCCW	MORELLA CALIFORNICA	CALIFORNIA WAX MYRTLE	5 GAL	
239	POLD	PHYSOCARPUS OPULIFOLIUS 'DONNA MAY' LITTLE DEVIL	LITTLE DEVIL NINEBARK	2 GAL	
124	PJJP	PIERIS JAPONICA 'VALLEY VALENTINE'	JAPANESE PIERIS	5 GAL	
81	ROOR	RHODODENDRON ORBICULARE SSP. ORBICULARE	ORBICULARE RHODODENDRON	5 GAL	
18	RSFC	RIBES SANGUINEUM 'UBRIC' WHITE ICICLE	FLOWERING CURRANT	5 GAL	
4	SPST	STACHYURUS PRAECOX	STACHYURUS	5 GAL	
49	SASN	SYMPHORICARPOS ALBUS	SNOWBERRY	1 GAL	
85	VSBB	VACCINIUM 'SUNSHINE BLUE'	BLUEBERRY	2 GAL	
91	VOTE	VACCINIUM OVATUM 'THUNDERBIRD'	THUNDERBIRD EVERGREEN HUCKLEBERRY	5 GAL	

FERNS, GRASSES & PERENNIALS

QTY.	TAG	BOTANICAL NAME	COMMON NAME	CONT.	REMARKS
223	AMML	ARUNCUS 'MISTY LACE'	MISTY LACE GOATSBEARD	1 GAL	
17	BSDF	BLECHNUM SPICANT	DEER FERN	1 GAL	
106	DCTH	DESCHAMPSIA CESPITOSA	TUFTED HAIR GRASS	1 GAL	
270	DPES	DISPOROPSIS PERNYI	EVERGREEN SOLOMON'S SEAL	1 GAL	
414	HMJF	HAKONECHLOA MACRA 'AUREOLA'	JAPANESE FOREST GRASS	1 GAL	
6	HKRH	HOSTA 'KROSSA REGAL'	HOSTA	1 GAL	
140	PFVS	POLYGONATUM FALCATUM 'VARIEGATUM'	VARIEGATED SOLOMON'S SEAL	1 GAL	
469	PMSF	POLYSTICHUM MUNITUM	SWORD FERN	1 GAL	

GROUNDCOVERS

QTY	TAG	BOTANICAL NAME	COMMON NAME	CONT.	OC SPACING	REMARKS
324	FEMI	70% DRYOPTERIS LEPIDOPODA, 30% EPIMEDIUM X RUBRUM 'SWEETHEART'	FERN MIX	1 GAL	18"	CREATE CLUSTERS OF 3, 5 & 7 OF THE EPIMEDIUM MIXED IN BETWEEN THE DRYOPTERIS
1437	AGGL	ACORUS GRAMINEUS 'OGON'	GRASSY-LEAVED SWEET FLAG	1 GAL	15"	
150	COSS	CAREX OBNUPTA	SLOUGH SEDGE	1 GAL	18"	
308	CSKD	CORNUS SERICEA 'KELSEYI'	KELSEY DOGWOOD	1 GAL	24"	
429	EPFB	EPIMEDIUM X PERRALCHIUM 'FROHNLEITEN'	BARRENWORT	1 GAL	18"	
553	GSSA	GAULTHERIA SHALLON	SALAL	1 GAL	18"	
120	MDRA	MICROBIOTA DECUSSATA	RUSSIAN ARBOR-VITAE	1 GAL	30"	
155	POPF	PENNISETUM ORIENTALE 'KARLEY ROSE'	PINK FOUNTAIN GRASS	1 GAL	24"	
175	PLDE	PRUNUS LAUROCERASUS 'MOUNT VERNON'	DWARF ENGLISH LAUREL	1 GAL	24"	
315	SHSB	SARCOCOCCA HOOKERIANA VAR. HUMILIS	SWEET BOX	1 GAL	24"	
654	SAAM	SESLERIA AUTUMNALIS	AUTUMN MOOR GRASS	1 GAL	18"	

SEED MIX

TAG	AREA	COMMON NAME	REMARKS
HYMM	33,360 SF	HYDROSEED MEADOW MIX	

BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL

PLOT DATE/TIME 6/19/2020 2:36:03 PM

GGLO DESIGN

1301 First Avenue, Suite 301
Seattle, WA 98101

http://www.gglo.com

STATE OF WASHINGTON · MARIEKE LACASSE · 965 EXP.08/18/2021 · LICENSED LANDSCAPE ARCHITECT

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WA 98201

MARK	DATE	DESCRIPTION

REVISIONS

C	06/08/2020	BUILDING PERMIT SUBMITTAL / 80% HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN

MARK	DATE	DESCRIPTION

ISSUE INFORMATION

PROJECT NO.: **2017033.00**
GGLO PRINCIPAL IN CHARGE: **JON HALL**
GGLO PROJECT MANAGER: **SCOTT SCHREFFLER**
OWNER APPROVAL:

SHEET TITLE

PLANTING SCHEDULE AND NOTES

SHEET NO.

L-651

1 GENERAL STRUCTURAL NOTES

The following apply unless otherwise noted on plans

GENERAL REQUIREMENTS

ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (2015 EDITION) AS AMENDED BY THE WASHINGTON STATE BUILDING CODE DATED JULY 1, 2016.

STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. REFER TO ARCH'L DRAWINGS FOR OPENINGS, ARCH'L TREATMENTS, AND DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.

CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL INFORMATION SHOWN ON DRAWINGS AND REGARDING EXISTING CONDITIONS SHALL BE VERIFIED.

CONTRACTOR SHALL DESIGN AND PROVIDE TEMPORARY SUPPORT FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF EXCAVATION, SHORING AND OTHER WORK WITH ALL UTILITIES AND ADJACENT PROPERTIES.
FOR CONCRETE CONSTRUCTION, CONTRACTOR SHALL DESIGN, FABRICATE, INSTALL AND REMOVE FORMWORK IN ACCORDANCE WITH ACI 318-14 SECTION 26.11.1 "DESIGN OF FORMWORK" AND SECTION 26.11.2 "REMOVAL OF FORMWORK".

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THEIR WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTION OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES TO THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.

CONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

REQUESTS FOR INFORMATION (RFI) SHALL INCLUDE, AT A MINIMUM, A DETAILED WRITTEN STATEMENT THAT INDICATES THE SPECIFIC DRAWINGS OR SPECIFICATIONS IN NEED OF CLARIFICATION AND THE NATURE OF THE CLARIFICATION REQUESTED.

SITE VISITS BY THE STRUCTURAL ENGINEER ARE FOR THE PURPOSE OF PERFORMING PERIODIC OBSERVATION OF THE WORK RELATING TO THE DESIGN CONCEPT EXPRESSED AND INFORMATION SHOWN IN THE STRUCTURAL ENGINEER'S CONTRACT DOCUMENTS. THE STRUCTURAL ENGINEER IS NOT REQUIRED TO PERFORM EXHAUSTIVE OR CONTINUOUS ON-SITE OBSERVATIONS OR INSPECTIONS TO CHECK THE QUALITY OR QUANTITY OF WORK PERFORMED. THE STRUCTURAL ENGINEER DOES NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, SAFETY PRECAUTIONS, OR PROGRAMS OR ENFORCEMENT. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION OF THE PROJECT OR FOR THE CONTRACTOR'S OR SUBCONTRACTORS' SCHEDULE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS NOR SHALL THE STRUCTURAL ENGINEER HAVE CONTROL OVER OR CHARGE OF OR BE RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR(S), OR OTHER PERSONS PERFORMING THE WORK.

STRUCTURAL DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND ACCEPTANCE BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.

STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE IN CONFORMANCE WITH INSTRUCTIONS PREPARED BY THE MANUFACTURER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE, AND ERECTION.

SUBMITTALS AND SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER (AND BUILDING DEPARTMENT AS REQUIRED) FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS:
CONCRETE REINFORCING STEEL, STRUCTURAL STEEL, METAL DECKING, GLUED LAMINATED MEMBERS, ENGINEERED WOOD PRODUCTS (JOISTS, BEAMS, POSTS, etc), CONNECTOR PLATE WOOD TRUSSES, HOLDOWN SYSTEM, PV ARRAY SYSTEM and ELEVATOR SYSTEM.

SUBMITTAL AND SHOP DRAWING REVIEW: STRUCTURAL ENGINEER'S REVIEW OF SHOP DRAWINGS AND CONTRACTOR SUBMITTALS SHALL BE FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH INFORMATION GIVEN AND THE DESIGN CONCEPT EXPRESSED IN THE STRUCTURAL CONTRACT DOCUMENTS. REVIEW OF SUCH SUBMITTALS IS NOT CONDUCTED FOR THE PURPOSE OF DETERMINING THE ACCURACY AND COMPLETENESS OF ITEMS SUCH AS DIMENSIONS, QUANTITIES, INSTALLATION INSTRUCTIONS OR PERFORMANCE OF EQUIPMENT OR SYSTEMS. CONTRACTOR SHALL REVIEW AND STAMP SHOP DRAWINGS AND SUBMITTALS, PRIOR TO SUBMITTAL TO STRUCTURAL ENGINEER, FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND OPERATIONS OF CONSTRUCTION, AND ALL RELATED SAFETY PRECAUTIONS AND PROGRAMS. BY SUBMITTING SHOP DRAWINGS AND SIMILAR SUBMITTALS, THE CONTRACTOR REPRESENTS TO THE OWNER, ARCHITECT AND ENGINEER THAT THE CONTRACTOR HAS 1) REVIEWED AND APPROVED THE SHOP DRAWINGS AND SUBMITTALS, 2) DETERMINED AND VERIFIED MATERIALS, FIELD MEASUREMENTS AND FIELD CONSTRUCTION CRITERIA RELATED THERETO, AND 3) CHECKED AND COORDINATED THE INFORMATION CONTAINED WITHIN SUCH SUBMITTALS WITH THE REQUIREMENTS OF THE WORK AND OF THE CONTRACT DOCUMENTS.

CONTRACTOR SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN CONTRACTOR SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE CONTRACT DOCUMENTS SHALL CONTROL AND SHALL BE FOLLOWED.

SUBMITTALS OF DESIGN BUILD COMPONENTS INCLUDING GUARDS, ROOF ANCHOR SYSTEM, HOLDOWN SYSTEM, PV ARRAY SYSTEM AND ELEVATOR SYSTEM SYSTEM SHALL INCLUDE THE DESIGNING PROFESSIONAL ENGINEER'S STAMP, STATE OF WASHINGTON AND SHALL BE APPROVED BY THE COMPONENT DESIGNER PRIOR TO CURSORY REVIEW BY THE ENGINEER OF RECORD FOR LOADS IMPOSED ON THE BASIC STRUCTURE. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY INDICATED ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. SUBMITTALS SHALL INDICATE MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON BASIC STRUCTURE. DESIGN CALCULATIONS SHALL BE MADE AVAILABLE UPON REQUEST.

SPECIAL INSPECTION: SHALL BE SUPERVISED IN ACCORDANCE WITH SECTION 1704 OF THE INTERNATIONAL BUILDING CODE AND THE PROJECT SPECIFICATIONS BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ARCHITECT. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION REPORTS AND TEST RESULTS. THE SPECIAL INSPECTOR SHALL ALSO INSPECT ALL ITEMS NOTED IN STRUCTURAL ENGINEER'S SITE OBSERVATION REPORTS. SEE S004 AND 005 FOR REQUIRED SPECIAL INSPECTIONS.

ALL SPECIAL INSPECTORS SHALL BE REGISTERED WITH THE WASHINGTON ASSOCIATION OF BUILDING OFFICIALS.

ARCHITECTURAL, MECHANICAL, FIRE PROTECTION, ELECTRICAL, PLUMBING SYSTEMS AND THEIR COMPONENTS: THE CONTRACTOR SHALL PROVIDE ALL NECESSARY ENGINEERING AND CONSTRUCTION DOCUMENTS AS REQUIRED BY THE JURISDICTION FOR SUCH SYSTEMS. CONFORMANCE WITH ASCE 7-10 CHAPTER 13 IS REQUIRED; REFER TO THE STATEMENT OF SPECIAL INSPECTIONS ON S004 FOR ADDITIONAL REQUIREMENTS.
THE SYSTEM AND COMPONENT ENGINEERS SHALL INDICATE LOADS IMPOSED ON THE PRIMARY STRUCTURE; THE STRUCTURAL ENGINEER OF RECORD SHALL DESIGN THE PRIMARY STRUCTURE OF THE BUILDING TO SUPPORT THESE IMPOSED LOADS.

ELECTRICAL PANELS SHALL BE LOCATED IN NON-STRUCTURAL WALLS. SLEEVES AND PIPING IN STUD WALLS SHALL NOT INTERFERE WITH HOLDOWN ASSEMBLIES.

ELEVATOR GUIDE RAIL BRACKETS AND DIVIDER BEAMS: STRUCTURAL SUPPORT DETAILS ARE INDICATED ON 16/S402. CONTRACTOR SHALL COORDINATE THESE DETAILS WITH THE REQUIREMENTS INDICATED BY THE ELEVATOR MANUFACTURER. THE STRUCTURAL SUPPORT DETAILS MAY NEED TO BE MODIFIED BASED ON THE ELEVATOR MANUFACTURER'S REQUIREMENTS.

ROOF ANCHORS: THE STRUCTURAL ENGINEER OF RECORD IS NOT RESPONSIBLE FOR DETERMINING ANCHOR TYPES, ANCHOR LAYOUT OR VERIFICATION OF SUITABILITY FOR INTENDED PURPOSE OF ROOF ANCHOR SYSTEM; THIS INFORMATION SHALL BE PROVIDED BY OTHERS. TRUSS MANUFACTURER SHALL DESIGN TRUSSES FOR ANCHOR REACTIONS GIVEN BY THE ANCHOR MANUFACTURER.

POST-INSTALLED ANCHORS INTO CONCRETE

POST-INSTALLED MECHANICAL ANCHORS INTO CONCRETE SHALL BE KWIK BOLT TZ ANCHORS AS MANUFACTURED BY HILTI, INC. INSTALL IN STRICT ACCORDANCE WITH CURRENT ICC REPORT NO. ESR-1917 INCLUDING MINIMUM EMBEDMENT, SPACING, AND EDGE DISTANCE REQUIREMENTS. REFER TO THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) FOR ADDITIONAL REQUIREMENTS INCLUDING DUST CONTROL SOLUTIONS. PROPOSED SUBSTITUTIONS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE OR SUBSTITUTION. PROPOSED ALTERNATIVE PRODUCT SUBMITTALS WILL BE EVALUATED CONSIDERING AN ANSI ACCREDITED REPORT INDICATING COMPLIANCE WITH THE 2015 IBC FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. SPECIAL INSPECTION IS REQUIRED FOR POST-INSTALLED MECHANICAL ANCHOR INSTALLATION AND HOLE PREPARATION IN ACCORDANCE WITH THE REFERENCED ICC-ESR REPORT.

POST-INSTALLED MECHANICAL ANCHORS SHALL NOT BE SUBSTITUTED FOR SPECIFIED CAST-IN-PLACE ANCHORS WITHOUT PRIOR REVIEW AND APPROVAL BY THE ENGINEER OF RECORD.

POST-INSTALLED ADHESIVE ANCHORS INTO CONCRETE, USING THREADED RODS OR REINFORCING BARS, SHALL BE THE HIT-HY 200 ADHESIVE ANCHORING SYSTEM AND POST-INSTALLED REINFORCING BAR SYSTEM AS MANUFACTURED BY HILTI, INC. INSTALL IN STRICT ACCORDANCE WITH CURRENT ICC REPORT ESR-3187 INCLUDING MINIMUM EMBEDMENT, SPACING, AND EDGE DISTANCE REQUIREMENTS. THREADED RODS SHALL BE AS DESCRIBED IN THE REFERENCED ICC REPORT, UON. BOREHOLE SHALL BE DRILLED TO THE REQUIRED DEPTH WITH A HAMMER-DRILL SET IN ROTATION HAMMER MODE USING A CARBIDE DRILL BIT IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII). REFER ALSO TO THE MPII FOR DUST CONTROL SOLUTIONS. PROPOSED SUBSTITUTIONS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE OR SUBSTITUTION. PROPOSED ALTERNATIVE PRODUCT SUBMITTALS WILL BE EVALUATED CONSIDERING AN ANSI ACCREDITED REPORT INDICATING COMPLIANCE WITH THE 2015 IBC FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, CREEP, IN-SERVICE AND INSTALLATION TEMPERATURES, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. SPECIAL INSPECTION, IN ACCORDANCE WITH THE REFERENCED ICC REPORT, IS REQUIRED FOR ADHESIVE ANCHOR INSTALLATION AND HOLE PREPARATION. CONCRETE CONDITIONS AT THE TIME OF ANCHOR INSTALLATION SHALL BE AS FOLLOWS:

- COMPRESSIVE STRENGTH: 2,500 psi min (ACHIEVE DESIGN STRENGTH OF CONCRETE PRIOR TO LOADING ANCHORS).
- AGE OF CONCRETE: 21 DAYS min
- TEMPERATURE RANGE OF CONCRETE: 14 to 104 DEGREES FAHRENHEIT
- MOISTURE CONDITION OF CONCRETE: DRY or WATER SATURATED (WATER-FILLED BOREHOLE IS NOT ALLOWED)

POST-INSTALLED ADHESIVE ANCHORS SHALL NOT BE SUBSTITUTED FOR SPECIFIED CAST-IN-PLACE ANCHORS WITHOUT PRIOR REVIEW AND APPROVAL BY THE ENGINEER OF RECORD.

CONCRETE

CONCRETE CONSTRUCTION SHALL CONFORM TO THE ACI 301 STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE, LATEST EDITION.

CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED, PLACED, AND EVALUATED FOR ACCEPTANCE IN ACCORDANCE WITH ACI 318 SECTIONS 19.2, 26.4, 26.5, 26.12 AND WITH ACI 301. STRENGTHS AT 28 DAYS AND MIX CRITERIA SHALL BE AS FOLLOWS:

MIX LOCATION	28 DAY STRENGTH (f'c)	MAX SLUMP (+1")	MAX w/cm	AIR (%)	
FOUNDATIONS					
FOOTINGS	4,000 psi	5"	-	-	
SLAB-ON-GRADE, TOPPING SLABS STAIR LANDINGS AND TREADS					
EXTERIOR - NO DEICING	4,500 psi	5"	0.45	6	Exposure class F2
EXTERIOR - DEICING	5,000 psi	5"	0.40	6	Exposure class F3
PROTECTED	3,000 psi	5"	0.45	-	Exposure class F0
WALLS AND CURBS					
EXTERIOR AND RETAINING	4,500 psi	4"	0.45	6	Exposure class F2
PROTECTED	4,000 psi	4"	-	-	Exposure class F0
EXTERIOR SHOTCRETE	4,500 psi	2"	0.45	6	Exposure class F2
PROTECTED SHOTCRETE	4,000 psi	2"	-	-	Exposure class F0

EXPOSURE CLASS F0: REFERS TO CONCRETE IN DRY ENVIRONMENT, PROTECTED FROM MOISTURE, AND NOT EXPOSED TO FREEZING-THAWING CYCLES.
EXPOSURE CLASS F1: REFERS TO CONCRETE EXPOSED TO FREEZING-THAWING CYCLES, WITH LIMITED EXPOSURE TO WATER (NO CONCRETE SATURATION) BEFORE FREEZING, NOT IN DIRECT CONTACT WITH SOIL AND NOT EXPOSED TO DEICING CHEMICALS OR OTHER EXTERNAL SOURCES OF CHLORIDE.
EXPOSURE CLASS F2: REFERS TO CONCRETE EXPOSED TO FREEZING-THAWING CYCLES, FREQUENTLY EXPOSED TO WATER AND NOT EXPOSED TO DEICING CHEMICALS OR OTHER EXTERIOR SOURCES OF CHLORIDE.
EXPOSURE CLASS F3: REFERS TO CONCRETE EXPOSED TO FREEZING-THAWING CYCLES, FREQUENTLY EXPOSED TO WATER, AND OCCASIONALLY EXPOSED TO DEICING CHEMICALS OR OTHER EXTERIOR SOURCES OF CHLORIDE.

AIR-ENTRAINMENT SHALL NOT BE USED AT SLABS THAT WILL RECEIVE A SMOOTH, DENSE, HARD-TROWELED FINISH. AIR % IS BASED ON 3/4" COARSE AGGREGATE; ADJUST AIR % PER ACI 318 TABLE 19.3.3.1 FOR OTHER COARSE AGGREGATE SIZES.

THE CONCRETE PRODUCER SHALL PREPARE DESIGN MIXES FOR EACH CLASS OF CONCRETE NOTED ABOVE. CONCRETE MIXTURE PROPORTIONS SHALL BE ESTABLISHED IN ACCORDANCE WITH ARTICLE 4.2.3 OF ACI 301. THE DESIGN MIXES SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT FOR REVIEW AND ACCEPTANCE TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE SUBMITTAL SHALL BE STAMPED BY THE CONCRETE PRODUCER AND SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER-CEMENTITIOUS MATERIAL RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ARTICLE 4.2.3 OF ACI 301. DESIGN MIXES REQUIRE BATCH PLANT INSPECTION (UNLESS WAIVED BY THE BUILDING OFFICIAL), THE COST OF WHICH SHALL BE PAID BY THE GENERAL CONTRACTOR. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS. CONTRACTOR OR SUPPLIER MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.

CONCRETE MATERIALS SHALL CONFORM TO THE FOLLOWING:
PORTLAND CEMENT: TYPE I, ASTM C150
FLY ASH (IF USED): ASTM C618 CLASS F OR C, QUANTITY SHALL NOT EXCEED (BY WEIGHT) 20% OF CEMENT CONTENT, AND MAXIMUM LOSS ON IGNITION = 1%
SLAG CEMENT (IF USED): ASTM C989
LIGHTWEIGHT AGGREGATES: SHALL NOT BE USED WITHOUT PRIOR APPROVAL OF ENGINEER AND BUILDING DEPARTMENT
NORMAL WEIGHT AGGREGATES: ASTM C33
SAND EQUIVALENT: SHALL EXCEED 75 FOR FINE AGGREGATE
WATER: ASTM C1602
AIR ENTRAINING ADMIXTURES: ASTM C260
WATER-REDUCING ADMIXTURES: ASTM C494
SET TIME MODIFYING ADMIXTURES: ASTM C494
CORROSION INHIBITING ADMIXTURES: ASTM C1582
FLOWING CONCRETE ADMIXTURES: ASTM C1017

DURABILITY REQUIREMENTS OF CONCRETE MIXES SHALL CONFORM TO IBC SECTION 1904. THESE REQUIREMENTS INCLUDE WATER-CEMENTITIOUS MATERIAL RATIOS, MINIMUM COMPRESSIVE STRENGTHS, AIR ENTRAINMENT, TYPE OF CEMENT, AND MAXIMUM CHLORIDE ION CONTENT.

FINISH MATERIALS: AT THE TIME OF APPLICATION OF FINISH MATERIALS OR SPECIAL TREATMENT TO CONCRETE, MOISTURE CONTENT OF CONCRETE SHALL CONFORM TO REQUIREMENTS IN FINISH MATERIAL AND FINISH ADHESIVE SPECIFICATIONS. WHERE MOISTURE SENSITIVE COVERINGS OR ADHESIVES ARE TO BE PLACED ON SLABS ON GRADE, CONFORM STRICTLY TO SLAB ADHESIVE AND SLAB COVERING MANUFACTURERS' RECOMMENDATIONS REGARDING VAPOR RETARDER AND GRANULAR FILL REQUIREMENTS BELOW THE SLAB.

WATERPROOFING: REFER TO ARCH'L DRAWINGS AND SPECIFICATIONS FOR WATERSTOP AND WATERPROOFING REQUIREMENTS AT CONCRETE AND AT CONCRETE JOINTS (CONSTRUCTION JOINTS, SLAB TO WALL JOINTS, CURB TO SLAB JOINTS, ETC.)

PROTECT AND CURE FRESHLY PLACED CONCRETE PER ACI 305.1 IN HOT CONDITIONS, ACI 306.1 IN COLD CONDITIONS, ACI 301 SECTION ON "HANDLING, PLACING, AND CONSTRUCTION" AND "PRESERVATION OF MOISTURE", AND ACI 308.1 "STANDARD SPECIFICATION FOR CURING CONCRETE". USE LATEST EDITIONS OF ACI PUBLICATIONS. WHERE MOISTURE SENSITIVE ADHESIVES AND COVERINGS WILL BE APPLIED TO THE CONCRETE, THE FOLLOWING APPLY:

- CONCRETE SHALL NOT BE CURED BY ADDING WATER (i.e. PONDING, WET BURLAP).
- CURING COMPOUNDS OR CURE-AND-SEAL MATERIALS SHALL NOT BE USED UNLESS SUCH USE IS APPROVED IN WRITING BY THE ADHESIVE AND CONCRETE COVERING MANUFACTURERS.

CONSTRUCTION JOINTS IN WALLS SHALL BE KEYED WITH 1 1/2" THICK x 6" LONG x 3 1/2" WIDE KEYS PLACED IN ALTERNATE REINFORCING SPACES. ALL SURFACES OF CONSTRUCTION JOINTS SHALL BE CLEANED AND LAITANCE REMOVED. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, ALL CONSTRUCTION JOINTS SHALL BE WETTED AND STANDING WATER REMOVED. ALL VERTICAL REINFORCING IN CONCRETE WALLS SHALL BE CONTINUOUS FROM STRUCTURAL FLOOR TO STRUCTURAL FLOOR, OR FROM FOOTING TO FIRST STRUCTURAL FLOOR, UON.

PROPOSED CONSTRUCTION JOINT LOCATIONS FOR SLABS ON METAL DECK, BEAMS AND GIRDERS SHALL BE SUBMITTED TO STRUCTURAL ENGINEER FOR REVIEW AND JOINT/REINFORCING STRUCTURAL DETAILING. ALL CONSTRUCTION, CONTROL, AND ISOLATION JOINTS FOR SLABS ON GROUND SHALL BE IN ACCORDANCE WITH THE TYPICAL SLAB ON GROUND DETAILS.

THE CONTRACTOR SHALL SUBMIT THE PROPOSED LOCATIONS OF ALL CONSTRUCTION AND CONTROL JOINTS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO CONCRETE PLACEMENT.

THE "SHOTCRETE" METHOD MAY BE USED TO PLACE CONCRETE, PROVIDED THE APPROVALS, TESTS, AND INSPECTIONS REQUIRED BY THE BUILDING DEPARTMENT ARE OBTAINED. SHOTCRETE MATERIALS, EQUIPMENT, PROCEDURES, PROPORTIONS, BATCHING AND MIXING AND PLACEMENT SHALL BE IN ACCORDANCE WITH ACI 506 (LATEST ED.), ACI 506.2 (LATEST ED.), AND IBC SECTION 1908. REINFORCING DETAILING MAY NEED TO BE REVISED AT SHOTCRETE APPLICATIONS.

REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, fy = 60,000 psi UON (EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED SHALL BE ASTM A706 GRADE 60, fy = 60,000 psi.)

GRADE 60 REINFORCING BARS INDICATED ON DRAWINGS TO BE WELDED SHALL CONFORM TO ASTM A706 AND AWS D1.4. REINFORCING COMPLYING WITH ASTM A615(S1) MAY BE WELDED ONLY IF MATERIAL PROPERTY REPORTS INDICATING CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN A.W.S. D1.4 ARE SUBMITTED. WELDING WITHIN 4" OF COLD BENDS IN REINFORCING STEEL IS NOT PERMITTED.

REINFORCING CONFORMING TO EITHER (a) OR (b) IS REQUIRED AT ADDED VERTICAL REINFORCING AT CONCRETE WALLS (REINF NOTED ON PLAN) AND THEIR MATCHING DOWELS AND AT ANCHOR REINFORCING AT HOLDOWNS:
(a) ASTM A706 GRADE 60.
(b) ASTM A615 GRADE 60 WHERE (i) THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED THE SPECIFIED YIELD STRENGTH BY MORE THAN 18,000 PSI, AND (ii) RATIO OF THE ACTUAL TENSILE STRENGTH TO ACTUAL YIELD STRENGTH IS AT LEAST 1.25, AND (iii) MINIMUM ELONGATION IN 8 INCHES SHALL BE AT LEAST 14% FOR BAR SIZES #3-#6 AND AT LEAST 12% FOR BAR SIZES #7-#11.

WELDED WIRE REINFORCING (WWR) SHALL CONFORM TO ASTM A-1064.

REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315 AND 318, LATEST EDITIONS. LAP AND DEVELOP ALL REINFORCEMENT IN ACCORDANCE WITH THE REINFORCING SPLICE AND DEVELOPMENT LENGTH SCHEDULE 3/S004. LAP ADJACENT MATS OF WELDED WIRE REINFORCING A MINIMUM OF 8" AT SIDES AND ENDS. REFER TO 1/S302 FOR REINFORCING (INCLUDING CORNER BARS) AT FOOTING CORNERS, ENDS, AND INTERSECTIONS, UON. REFER TO 2/S301 FOR REINFORCING (INCLUDING CORNER BARS) AT WALL CORNERS, ENDS, AND INTERSECTIONS, UON.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER.

SPACED REINFORCING SPECIFIED ON THE DRAWINGS SHALL BEGIN A MAXIMUM OF 1/2 SPECIFIED SPACING FROM TOPS, BOTTOMS, ENDS, AND EDGES OF MEMBERS, WHICHEVER IS APPLICABLE.

REINFORCING STEEL SHALL BE ADEQUATELY SUPPORTED TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT. BEAM STIRRUPS SHALL BE POSITIVELY SUPPORTED FROM BEAM BOTTOM FORM WITH CONTINUOUS LONGITUDINAL BEAM BOLSTERS.

CONCRETE PROTECTION (COVER) AND SPACING LIMITS FOR REINFORCING STEEL SHALL BE AS FOLLOWS, UON ON PLAN OR IN DETAILS. IF BAR DIAMETER GREATER THAN COVER NOTED, USE COVER EQUAL TO BAR DIAMETER:

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST EARTH	3"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER)	1 1/2"
(#6 BARS OR LARGER)	2"
BEAM STIRRUPS	1 1/2"
COLUMN VERTICAL REINFORCING	2" (1 1/2" MIN CLR TO TIES/SPIRALS)
SLABS AND WALLS (INTERIOR FACE)	1"
MIN. CLEAR SPACING BETWEEN LONGIT. BARS IN TIED OR SPIRALED COMPRESSION MEMBERS	1 1/2 x BAR DIAMETER (1 1/2" MIN)

CONCRETE WALL REINFORCING - PROVIDE THE FOLLOWING UNLESS DETAILED OTHERWISE:

6" WALLS	#4 @ 12" oc ew CTRD
8" WALLS	#4 @ 12" oc ew CTRD
10" WALLS	#4 @ 10" oc ew CTRD
12" WALLS	#4 @ 12" oc ew EACH FACE

UPPER- AND LOWERMOST HORIZONTAL REINFORCING SHALL BE PLACED WITHIN 1 1/2" FROM THE TOP AND BOTTOM OF THE WALL. AT TOPS OF WALLS, PROVIDE (1) TYP. HORIZ BAR EACH FACE, UON.

CONCRETE OPENINGS AND FEATURES: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF MISCELLANEOUS OPENINGS IN ALL CONCRETE WALLS AND SLABS. SEE MEPF DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MEPF OPENINGS THROUGH CONCRETE WALLS AND SLABS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES. SEE STRUCTURAL DETAILS FOR REINFORCING REQUIREMENTS AT ALL OPENINGS IN CONCRETE WALLS AND SLABS, UON.

NON-SHRINK, NON-METALLIC GROUT FOR BASE PLATES, SLEEVES, AND EMBEDDED STEEL SHALL BE IN STRICT CONFORMANCE WITH ASTM C1107, SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED, APPLIED, AND CURED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. PROPOSED GROUT SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO CONSTRUCTION. GROUT 28-DAY COMPRESSIVE STRENGTH SHALL BE AT LEAST 1,000 PSI GREATER THAN THE CONCRETE ON WHICH IT IS PLACED (6000 PSI MINIMUM GROUT STRENGTH).

MECHANICAL SPLICING OF REINFORCING BARS, WHERE INDICATED ON THE DRAWINGS, SHALL BE ACHIEVED WITH THE LENTON MECHANICAL SPLICE SYSTEM IN STRICT ACCORDANCE WITH CURRENT IAPMO REPORT ER-129. REQUESTED SUBSTITUTIONS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO USE. REQUESTED SUBSTITUTIONS SHALL CONFORM TO ACI 318 18.2.7 AND 25.5.7 AND SHALL BE AN ICC OR IAPMO APPROVED SYSTEM.

HEADED STUD ANCHORS SHALL CONFORM TO ASTM A29 - TYPE A AND TO THE REQUIREMENTS OF THE STRUCTURAL WELDING CODE - STEEL (AWS D1.1). MANUFACTURER'S CERTIFICATION SHALL CONSTITUTE SUFFICIENT EVIDENCE OF CONFORMITY WITH AWS D1.1.

CONDUITS AND PIPES OF ALUMINUM SHALL NOT BE EMBEDDED IN CONCRETE CONSTRUCTION.

WET-SETTING OF ANCHOR RODS, REINFORCING, HARDWARE, etc. IS NOT ALLOWED IN CONCRETE. ANCHOR RODS, REINFORCING, HARDWARE, etc. SHALL BE FIRMLY TIED IN PLACE PRIOR TO CONCRETE PLACEMENT.

2 LEGEND

(span arrow)	JOIST / TRUSS SPAN DIRECTION
T	PRE-MANUFACTURED TRUSSES PER PLAN NOTES
G T	GIRDER TRUSS
V T	OVERFRAMED VALLEY TRUSSES @ 24" oc. SEE 11, 12, 13/S404
G E T	GABLE END TRUSS
H M	HIP MASTER
(X)	NUMBER OF STUDS IN BUILT-UP POST ABOVE REFERENCED LEVEL.
	CONCRETE WALL ABOVE REFERENCED LEVEL
	STRUCTURAL STUD WALL ABOVE REFERENCED LEVEL
	WALL OR CONCRETE BEAM BELOW REFERENCED LEVEL
	FLUSH OR DROPPED BEAM AT REFERENCED LEVEL
(PEN)	PANEL EDGE NAIL FLOOR/ROOF/WALL SHEATHING TO INDICATED FRAMING MEMBER
CSxx or CMSTCxx	COLLECTOR STRAP PER 1/S402. SEE DETAIL FOR FRAMING REQUIREMENTS. WHERE PANEL EDGES LOCATED AT STRAPS, PANEL EDGE NAIL @ 12" oc
CSxx or CMSTxx (roof)	COLLECTOR STRAP PER 9/S404. ADD FRAMING AS SHOWN IN DETAIL.
Fx	FOOTING MARK PER SCHEDULE
XXX.XX'	TOP OF SLAB ELEVATION. VERIFY W/ ARCH'L

3 DESIGN CRITERIA

FLOOR LIVE LOADS

RESIDENTIAL ROOMS	40 psf
CORRIDORS - RESIDENTIAL	40 psf
STAIRS, EXTERIOR WALKWAYS	100 psf
BUILDING A - LEVEL 1 COMMERCIAL SPACES	100 psf

ROOF LOADS

GROUND SNOW (Pg)	15 psf
ROOF SNOW (Pf)	25 psf
SNOW EXPOSURE FACTOR (Ce)	1.0
SNOW LOAD IMPORTANCE FACTOR (Is)	1.0
THERMAL FACTOR (Ct)	1.1

WIND DESIGN DATA

MAIN WIND FORCE RESISTING SYSTEM

ULTIMATE DESIGN WIND SPEED (3 sec GUST)	110 mph
NOMINAL DESIGN WIND SPEED (3 sec GUST)	85 mph
RISK CATEGORY	II
WIND EXPOSURE	B
TOPOGRAPHIC FACTOR (Kzt)	1.00
INTERNAL PRESSURE COEFFICIENT (Cpi)	+/- 0.18
(EQUIV. ULTIMATE DESIGN WIND SPEED WITH Kzt = 1.0)	100 mph
(EQUIV. NOMINAL DESIGN WIND SPEED WITH Kzt = 1.0)	100 mph

COMPONENT & CLADDING PRESSURES for DESIGN

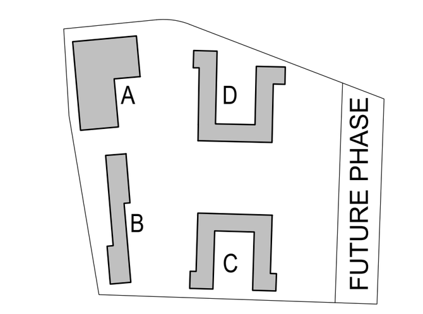
TBD by Specialty Structural Engineer (SSE) responsible for component and cladding design. (See S003 for C & C wind loading diagrams at roofs and walls)

EARTHQUAKE DESIGN DATA

RISK CATEGORY	II
SEISMIC IMPORTANCE FACTOR (Ie)	1.0
MAPPED SPECTRAL RESPONSE ACCELERATION (Ss)	1.256
MAPPED SPECTRAL RESPONSE ACCELERATION (S1)	0.491
SITE CLASS	C
SPECTRAL RESPONSE COEFFICIENT (Sds)	0.838
SPECTRAL RESPONSE COEFFICIENT (Sd1)	0.494
SEISMIC DESIGN CATEGORY	D
BASIC SEISMIC FORCE RESISTING SYSTEM	WOOD STRUCTURAL PANEL SHEARWALLS
DESIGN BASE SHEAR	Bldg A - 202 k, Bldg B - 111 k, Bldg C - 127 k, Bldg D - 136 k
SEISMIC RESPONSE COEFFICIENT (Cs)	0.129
RESPONSE MODIFICATION COEFFICIENT (R)	6.5
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE ANALYSIS

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:
EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:
BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:
EVERETT HOUSING AUTHORITY
3107 COLBY AVE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION

REVISIONS

MARK	DATE	DESCRIPTION
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	12/15/2019	SCHEMATIC DESIGN

ISSUE INFORMATION

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE
GEN STRUCT NOTES, LEGEND and DESIGN CRITERIA

SHEET NO.
S-000

1 GENERAL STRUCTURAL NOTES

The following apply unless otherwise noted on plans

GEOTECHNICAL

FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER. REFER TO 19/S301 FOR REQUIRED FOOTING DEPTHS AND RELATIONSHIPS. ALL BEARING SURFACES SHALL BE SUBJECT TO APPROVAL BY THE GEOTECHNICAL ENGINEER. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE. FOOTING DEPTHS/ELEVATIONS SHOWN ON PLANS (OR IN DETAILS) ARE MINIMUM AND FOR GUIDANCE ONLY; THE ACTUAL ELEVATIONS OF FOOTINGS MUST BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE GEOTECHNICAL ENGINEER. RETAINING WALLS ARE DESIGNED FOR A DRAINED CONDITION uon; REFER TO GEOTECHNICAL ENGINEER RECOMMENDATIONS FOR BACKFILL AND DRAINAGE REQUIREMENTS.

ALLOWABLE BEARING PRESSURE	6,000 psf (glacial till)
LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED)	55 pcf / 35 pcf
SEISMIC LATERAL SURCHARGE	8H psf

GEOTECHNICAL REPORT REFERENCE: GEOTECHNICAL ENGINEERING SERVICES 21288-002-00 BY GEOENGINEERS, INC. DATED OCTOBER 30, 2019

VAPOR RETARDERS PLACED BELOW SLABS ON GRADE SHALL CONFORM WITH ASTM E 1643 "STANDARD PRACTICE FOR INSTALLATION OF WATER VAPOR RETARDERS USED IN CONTACT WITH EARTH OR GRANULAR FILL UNDER CONCRETE SLABS" AND ASTM E 1745 "STANDARD SPECIFICATION FOR WATER VAPOR RETARDERS USED IN CONTACT WITH SOIL OR GRANULAR FILL UNDER CONCRETE SLABS".

LATERAL EARTH PRESSURE ON SUBGRADE WALLS: THE DESIGN PRESSURES FOR SUBGRADE WALLS ARE BASED ON A DRAINED CONDITION, uon. SEE GEOTECHNICAL REPORT AND CIVIL DRAWINGS FOR SUBGRADE DRAINAGE SYSTEM. SEE GEOTECHNICAL REPORT FOR BACKFILL AND COMPACTION REQUIREMENTS BEHIND SUBGRADE WALLS. PROVIDE TEMPORARY SHORING FOR SUBGRADE WALLS IF BACKFILL IS PLACED PRIOR TO SUPPORTING STRUCTURE BEING CONSTRUCTED. SUPPORTING STRUCTURE SHALL BE AS INDICATED ON THE STRUCTURAL PLANS AND DETAILS (i.e. CONCRETE SLAB, WOOD FLOOR/ROOF FRAMING AND SHEATHING, etc.)

STRUCTURAL STEEL

STRUCTURAL STEEL DESIGN, FABRICATION AND ERECTION SHALL BE BASED ON THE LATEST EDITIONS OF THE FOLLOWING A.I.S.C. SPECIFICATIONS AND CODES:

1. SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - ANSI/AISC 360
2. CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES - AISC 303
3. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS - AISC 348

STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER	ASTM SPECIFICATION	Fy
PLATES, BARS, ANGLES, RODS, CHANNELS	A36	36 ksi
W- SHAPES	A992	50 ksi
PIPE	A53 (GRADE B)	35 ksi
RECTANGULAR AND SQUARE HSS	A500 (GRADE C)	46 ksi
ANCHOR RODS (7" EMBED UON)	F1554 GRADE 36 W/ THREADED ENDS AND WELDED NUT AT END	
STEEL to STEEL CONNECTION BOLTS	A325-N TYPE I (TYPE 3 WHERE EXPOSED TO WEATHER OR CORROSION)	
TWIST OFF TYPE TENSION CONTROL BOLTS	F1852 (A325 STRENGTH)	
NUTS	A563	
HARDENED STEEL WASHERS	F436	
DIRECT TENSION INDICATOR WASHERS	F959	
HEADED STUDS	A29-A	

STEEL COATINGS AND PROTECTION (WEATHER, FIRE, CORROSION, etc.) SHALL BE AS SPECIFIED BY THE ARCHITECT. GALVANIZED STRUCTURAL STEEL MEMBERS SHALL CONFORM TO ASTM A123, GALVANIZED STEEL DECKING SHALL CONFORM TO ASTM A924, AND GALVANIZED STEEL HARDWARE SHALL CONFORM TO ASTM F2329 and A153. GUIDELINES OUTLINED IN ASTM A384 SHALL BE FOLLOWED IN ORDER TO SAFEGUARD AGAINST WARPING AND DISTORTION DURING HOT-DIP GALVANIZING OF STEEL ASSEMBLIES. THE PORTION OF STEEL ANCHORS AND TIES EMBEDDED IN CONCRETE AND MASONRY SHALL BE LEFT UNPAINTED.

ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) SHALL BE DESIGNATED ON ARCH'L DRAWINGS AND SHALL CONFORM TO SECTION 10 OF AISC 303-10.

ANCHOR RODS AT STEEL BASE PLATES HAVE A PLACEMENT TOLERANCE OF 1/4" (FOR 3/4" RODS) FROM SPECIFIED LOCATIONS. BASEPLATES AT 3/4" DIAM. ANCHOR RODS CAN HAVE OVERSIZED HOLE DIAMETERS OF 1 5/16" UNLESS OTHERWISE NOTED. PROVIDE 1/4" x 2" DIAMETER HEAVY PLATE WASHERS AT OVERSIZED HOLES IN BASEPLATES.

SPACED FASTENERS SPECIFIED ON THE DRAWINGS SHALL BEGIN AT 1/2 SPECIFIED SPACING FROM THE ENDS OF THE MEMBERS, UON. PROVIDE (2) FASTENERS MINIMUM EACH MEMBER, TYP.

JOINT TYPES AT HIGH-STRENGTH CONNECTION BOLTS (A325 OR A490) SHALL BE SNUG-TIGHTENED (ST) UNLESS OTHERWISE DESIGNATED AS PRETENSIONED (PT) OR SLIP CRITICAL (SC). REFER TO AISC 348 TABLE 4.1 FOR INSTALLATION AND INSPECTION REQUIREMENTS AT BOLTED JOINTS. FAYING SURFACES AT 'SC' JOINTS SHALL MEET THE REQUIREMENTS OF AISC 348 SECTION 3.2.2.

WELDING SHALL BE IN CONFORMANCE WITH A.I.S.C. AND A.W.S. STANDARDS AND SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS. ONLY PREQUALIFIED WELDS (AS DEFINED BY A.W.S.) SHALL BE USED. STRUCTURAL STEEL WELDS SHALL BE MADE USING LOW HYDROGEN ELECTRODES (70 ksi IN CONFORMANCE WITH AWS D1.1). LOW HYDROGEN ELECTRODES SHALL BE PROVIDED IN HERMETICALLY SEALED CONTAINERS; ELECTRODES THAT HAVE BEEN WET SHALL NOT BE USED. REFER TO AWS REQUIREMENTS REGARDING ALLOWABLE EXPOSURE OF LOW HYDROGEN ELECTRODES TO THE ATMOSPHERE AND FOR RE-DRYING RECOMMENDATIONS AND RESTRICTIONS. USE MATCHING FILLER METALS PER LATEST EDITION OF AWS D1.1. SEE REINFORCING STEEL NOTE FOR MATERIAL AND WELDING REQUIREMENTS FOR REINFORCING BARS. WELDING OF GALVANIZED STEEL SHALL CONFORM TO AWS SPECIFICATION D-19.0. WELDED AREAS OF GALVANIZED STEEL SHALL BE TOUCHED UP IN CONFORMANCE WITH ASTM A780.

ALL WELDING SHALL BE PERFORMED IN STRICT ADHERENCE TO A WRITTEN WELDING PROCEDURE SPECIFICATION (WPS) PER AWS D1.1. ALL WELDING PARAMETERS SHALL BE WITHIN THE ELECTRODE MANUFACTURER'S RECOMMENDATIONS. WPS'S SHALL BE SUBMITTED TO THE TESTING AGENCY FOR REVIEW BEFORE STARTING FABRICATION OR ERECTION. COPIES OF THE WPS SHALL BE ON SITE AND AVAILABLE TO ALL WELDERS AND THE SPECIAL INSPECTOR.

ALL COMPLETE-PENETRATION WELDS SHALL BE ULTRASONICALLY TESTED UPON COMPLETION OF THE CONNECTION, EXCEPT PLATE LESS THAN OR EQUAL TO 1/4" THICK SHALL BE MAGNETIC PARTICLE TESTED.

STEEL ROOF DECKING: PROVIDE SIZE, TYPE, GAUGE, AND ATTACHMENT TO THE SUPPORTING STRUCTURE AS SHOWN ON THE PLANS. ALTERNATES MUST CONFORM TO PUBLISHED ICC CRITERIA FOR SECTION PROPERTIES AND DIAPHRAGM SHEARS NOTED. PROVIDE SHORING WHERE REQUIRED PER MANUFACTURER'S PUBLISHED CRITERIA. ALL DECKING SHALL CONFORM TO THE REQUIREMENTS OF THE STEEL DECK INSTITUTE. WELD ELECTRODES AT STEEL DECKING SHALL BE 60 ksi IN CONFORMANCE WITH AWS D1.3.

PRE-MANUFACTURED WOOD TRUSSES

PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER TO COMPLETE THE ROOF FRAMING FROM THE ROOF SHEATHING TO THE SUPPORTING MEMBERS BELOW FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. LOADING SHALL BE AS FOLLOWS:

TOP CHORD SNOW LOAD	25 PSF (Cd = 1.15)
TOP CHORD DEAD LOAD	17 PSF (ADD 10 PSF PV ARRAY ALLOWANCE WHERE INDICATED ON PLANS)
BOTTOM CHORD DEAD LOAD	11 PSF
BOTTOM CHORD LIVE LOAD	10 PSF (UNINHABITABLE ATTICS WITHOUT STORAGE) 20 PSF (UNINHABITABLE ATTICS WITH LIGHT OR NO STORAGE, IN ALL AREAS INVOLVING TWO OR MORE ADJACENT TRUSSES WHERE A RECTANGLE 42" TALL x 24" LONG WILL FIT BETWEEN THE BOTTOM CHORD AND ANY OTHER MEMBERS)

(BOTTOM CHORD LIVE LOAD DOES NOT ACT CONCURRENTLY WITH ROOF SNOW LOAD).

WIND LOADING SEE S003 (INDIVIDUAL TRUSS DESIGN SHALL CONFORM TO ASCE 7-10, COMPONENTS AND CLADDING LOADING)

SEE ARCH'L AND MECHANICAL DRAWINGS FOR SPRINKLER, FALL PROTECTION ANCHOR, SATELLITE DISH AND MECH. EQUIPMENT INFORMATION.

TOTAL LOAD DEFLECTION SHALL NOT EXCEED THE LESSER OF 1" OR SPAN/360.

COMPLIANCE WITH THE LATEST EDITIONS OF THE FOLLOWING PUBLICATIONS IS REQUIRED: ANSI/TPI 1 "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION; TPI BCSI "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, AND BRACING OF METAL PLATE CONNECTED WOOD TRUSSES; AND TPI DSB "RECOMMENDED DESIGN SPECIFICATION FOR TEMPORARY BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."

THE TRUSS MANUFACTURER SHALL BE RESPONSIBLE FOR THE COMPLETE DESIGN, FABRICATION, AND ERECTION PROCEDURES FOR ALL TRUSSES, BLOCKING, INCIDENTAL FRAMING, FRAMING FOR OPENINGS, TEMPORARY AND PERMANENT BRACING AND BRIDGING, CONNECTIONS, AND ALL OTHER ITEMS REQUIRED FOR A COMPLETE AND SAFE INSTALLATION OF THE TRUSS SYSTEM. TRUSS CONFIGURATIONS ARE SHOWN ON THE ARCHITECTURAL DRAWINGS. THE TRUSS MANUFACTURER SHALL HAVE AT LEAST 3 YEARS EXPERIENCE IN THE FABRICATION OF PREFABRICATED WOOD TRUSSES.
PREFABRICATED WOOD TRUSSES SHALL BE METAL PLATE CONNECTED WOOD TRUSSES DESIGNED AND FABRICATED IN ACCORDANCE WITH THE CURRENT ANSI/TPI.1 REQUIREMENTS TO SUPPORT THEIR OWN WEIGHT PLUS SUPERIMPOSED DEAD, LIVE, UPLIFT, AND LATERAL LOADS INDICATED ON THE CONTRACT DRAWINGS.
CONTRACTOR SHALL SUBMIT DESIGN CALCULATIONS AND TRUSS DESIGN DRAWINGS (SEE BELOW) SEALED BY A WASHINGTON STATE REGISTERED CIVIL OR STRUCTURAL ENGINEER. DESIGN CALCULATIONS AND TRUSS DESIGN DRAWINGS SHALL BE APPROVED BY THE ARCHITECT, STRUCTURAL ENGINEER AND BUILDING DEPARTMENT PRIOR TO MANUFACTURING THE TRUSSES.

TRUSS DESIGN DRAWINGS ARE THE WRITTEN, GRAPHIC, AND PICTORIAL DEPICTION OF EACH INDIVIDUAL TRUSS. TRUSS DESIGN DRAWINGS SHALL BE PROVIDED WITH THE SHIPMENT OF TRUSSES DELIVERED TO THE JOB SITE. TRUSS DESIGN DRAWINGS SHALL INCLUDE AT A MINIMUM, THE FOLLOWING:

A. TRUSS PROFILES SHOWING SLOPE, DEPTH, SPAN AND SPACING.
B. LOCATION OF JOINTS.
C. REQUIRED BEARING WIDTHS.
D. DESIGN LOADS AS APPLICABLE.
E. TOP CHORD SNOW LOAD.
F. TOP CHORD DEAD LOAD.
G. BOTTOM CHORD LIVE LOAD.
H. BOTTOM CHORD DEAD LOAD.
I. CONCENTRATED LOADS AND THEIR POINTS OF APPLICATION.
J. CONTROLLING WIND AND EARTHQUAKE LOADS.
K. ADJUSTMENTS TO LUMBER AND METAL CONNECTOR PLATE DESIGN VALUE FOR CONDITIONS IF USED.
L. EACH REACTION FORCE AND DIRECTION.
M. METAL CONNECTOR PLATE TYPE, SIZE, THICKNESS OR GAGE, AND DIMENSIONED LOCATION. PROVIDE ICC ER REPORT FOR PLATES USED.
N. LUMBER SIZE, SPECIES AND GRADE FOR EACH MEMBER.
O. CONNECTION DETAILS FOR ALL TRUSS TO TRUSS, TRUSS PLY TO PLY, TRUSS TO BEAM/COLUMN, AND FIELD ASSEMBLY OF SEPARATE PIECES OF INDIVIDUAL TRUSSES. TRUSS TO TRUSS CONNECTORS/HANGERS SHALL BE SPECIFIED.
P. CALCULATED DEFLECTION RATIO AND MAXIMUM VERTICAL AND HORIZONTAL LIVE LOAD AND TOTAL LOAD DEFLECTIONS.
Q. MAXIMUM AXIAL TENSION AND COMPRESSION FORCES IN TRUSS MEMBERS.
R. PERMANENT BRACING REQUIREMENTS AT INDIVIDUAL TRUSS MEMBERS AND SELECTED BRACING METHOD PER IBC SECTION 2303.4.1.2.

DESIGN OF TRUSSES SHALL CONSIDER DEFLECTION OF TRUSSES RELATIVE TO ADJACENT PARALLEL SUPPORTS AND SHALL INCLUDE DESIGN OF BRIDGING, BRACING, ADDITIONAL TRUSSES OR OTHER MEANS NECESSARY TO MITIGATE PROBLEMS RESULTING FROM DIFFERENTIAL DEFLECTIONS. EACH INDIVIDUAL TRUSS DESIGN DRAWING SHALL BEAR THE SEAL AND SIGNATURE OF A WASHINGTON STATE REGISTERED CIVIL OR STRUCTURAL ENGINEER RESPONSIBLE FOR THE TRUSS DESIGN.

ALL TOP AND BOTTOM CHORD SPLICES SHALL BE CONNECTED WITH APPROVED METAL PRESS PLATES AND TENSION TESTED TO A MINIMUM OF 1.2 TIMES THE ALLOWABLE TENSION PARALLEL TO THE GRAIN (PER NDS SPECIFICATIONS). TRUSS LOAD DURATION FACTOR SHALL BE PER THE MOST CURRENT EDITION OF THE NDS.

TRUSS MANUFACTURER SHALL PROVIDE A TRUSS PLACEMENT DIAGRAM (TPD) THAT IDENTIFIES THE PROPOSED LOCATION FOR EACH INDIVIDUALLY DESIGNATED TRUSS AND REFERENCES THE CORRESPONDING TRUSS DESIGN DRAWING. THE TPD SHALL BE PROVIDED AS PART OF THE TRUSS SUBMITTAL PACKAGE, AND WITH THE SHIPMENT OF TRUSSES DELIVERED TO THE JOB SITE.
THE TRUSS SUBMITTAL PACKAGE SHALL CONSIST OF EACH INDIVIDUAL TRUSS DESIGN DRAWING, THE TRUSS PLACEMENT DIAGRAM, THE TRUSS MEMBER PERMANENT BRACING DETAILS or SPECIFICATIONS or DRAWINGS, THE TRUSS MEMBER TEMPORARY BRACING DETAILS, AND THE COVER SHEET/TRUSS INDEX SHEET. WHERE PERMANENT BRACING OF TRUSS MEMBERS IS SHOWN TO BE REQUIRED ON THE TRUSS DESIGN DRAWINGS, THE BRACING SHALL BE ACCOMPLISHED BY ONE OF THE FOLLOWING METHODS:

A. THE TRUSSES SHALL BE DESIGNED SO THAT THE BUCKLING OF ANY INDIVIDUAL TRUSS MEMBER CAN BE RESISTED INTERNALLY BY THE STRUCTURE OF THE INDIVIDUAL TRUSS (i.e. BUCKLING MEMBER T-BRACING, L-BRACING, etc.). THE TRUSS INDIVIDUAL MEMBER BUCKLING REINFORCEMENT SHALL BE INSTALLED AS SHOWN ON THE TRUSS DESIGN DRAWING OR ON SUPPLEMENTAL TRUSS MEMBER BUCKLING REINFORCEMENT DIAGRAMS PROVIDED BY THE TRUSS DESIGNER.
B. PERMANENT BRACING SHALL BE INSTALLED BY THE CONTRACTOR USING STANDARD INDUSTRY BRACING DETAILS THAT CONFORM WITH GENERALLY ACCEPTED ENGINEERING PRACTICE. INDIVIDUAL TRUSS MEMBER CONTINUOUS LATERAL BRACING LOCATIONS SHALL BE SHOWN ON THE TRUSS DESIGN DRAWINGS.

TRUSS MANUFACTURER SHALL PROVIDE A STANDARD GABLE END DETAIL INDICATING PERMANENT BRACING DETAILS FOR GABLE END TRUSSES. THE DETAILS SHALL CONSIDER WIND AND SEISMIC LOADING PERPENDICULAR TO THE PLANE OF THE TRUSS, WIND AND SEISMIC LOADING IN THE PLANE OF THE TRUSS, AND GRAVITY LOADING.

ERECTION BRACING AND BRIDGING SIZES AND SPACINGS SHALL BE AS REQUIRED BY THE TRUSS MANUFACTURER IN ACCORDANCE WITH THE LATEST RECOMMENDATIONS OF THE TPI. ADDITIONAL TRUSSES SHALL BE DESIGNED AND SUPPLIED AS REQUIRED TO SUPPORT MECHANICAL EQUIPMENT, PIPING, DUCTS, etc.
ALL CONNECTORS SPECIFIED BY THE TRUSS MANUFACTURER SHALL HAVE CURRENT ICC APPROVAL. CONNECTORS SHALL BE DESIGNED AND SIZED FOR TWICE THE CALCULATED LOAD UNLESS THE TRUSS MFR PROVIDES WRITTEN CONFIRMATION THAT CONNECTOR FASTENERS CAN PENETRATE TRUSS MEMBER METAL CONNECTOR PLATES. NO OFFSETS FOR CONNECTIONS WILL BE PERMITTED.
TRUSS MEMBERS AND COMPONENTS SHALL NOT BE CUT, NOTCHED, DRILLED, SPLICED, OR OTHERWISE ALTERED IN ANY WAY WITHOUT PRIOR WRITTEN CONSENT AND APPROVAL OF THE REGISTERED DESIGN PROFESSIONAL WHO HAS SEALED THE TRUSS DESIGN DRAWING. REVISIONS TO LOADING TO ANY TRUSS SHALL REQUIRE THE RESUBMITTAL OF THE TRUSS DESIGN DRAWING VERIFYING THE TRUSS IS CAPABLE OF SUPPORTING THE REVISED LOADING.

A SPECIAL INSPECTOR APPROVED BY THE BUILDING OFFICIAL SHALL VERIFY THAT THE TRUSS MANUFACTURER MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR INSPECTION CONTROL OF THE WORKMANSHIP AND OF THE FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTON DOCUMENTS AND REFERENCED STANDARDS. THE SPECIAL INSPECTOR SHALL REVIEW THE PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK. EACH TRUSS MEMBER SHALL CARRY A GRADING STAMP.

EXCEPTIONS TO SPECIAL INSPECTIONS:

A. SPECIAL INSPECTIONS ARE NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED BY THE BUILDING OFFICIAL TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. APPROVAL SHALL BE BASED UPON REVIEW OF THE FABRICATOR'S WRITTEN PROCEDURAL AND QUALITY CONTROL MANUALS AND UPON PERIODIC AUDITING OF FABRICATION PROCEDURES BY AN APPROVED SPECIAL INSPECTION AGENCY. AT COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE BUILDING OFFICIAL STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.
B. IN LIEU OF SPECIAL INSPECTIONS, THE BUILDING OFFICIAL IS AUTHORIZED TO ACCEPT REPORTS OF APPROVED INSPECTION AGENCIES.

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

GGLO DESIGN

1301 First Avenue, Suite 301
Seattle, WA 98101

http://www.gglo.com

FUTURE PHASE

MICHAEL L. NOUWENS — STATE OF WASHINGTON — 24644 — REGISTERED PROFESSIONAL ENGINEER

06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION

REVISIONS

MARK	DATE	DESCRIPTION
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	12/15/2019	SCHEMATIC DESIGN

ISSUE INFORMATION

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE

GENERAL STRUCTURAL NOTES

SHEET NO.

S-001

1 GENERAL STRUCTURAL NOTES

The following apply unless otherwise noted on plans

WOOD

FRAMING LUMBER SHALL HAVE 19% MAXIMUM MOISTURE CONTENT UON (KILN DRIED WHERE NOTED), AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

4x BEAMS & POSTS, 6x POSTS	
4x TREATED BEAMS & POSTS, 6x TREATED POSTS	
2x JOISTS, RAFTERS, BUILT-UP BEAMS, HEADERS	DF No. 2
2x, 3x FLATWISE & EDGEWISE BLOCKING	DF KDAT No. 2
3x NAILERS ON STEEL BEAMS	DF No. 2
2x4, 2x6, 2x8 STUDS	DF standard
3x STUDS	DF KD No. 2
STUDS AT HD AND HDU HOLDOWNS	DF KD stud
2x4 PLATES	DF KD No. 2
2x6, 2x8 PLATES	DF KD No. 2
2x, 3x, 4x TREATED PLATES/LEDGERS	DF KD standard
	DF KD No. 2
	DF KDAT No. 2

MOISTURE CONTENT AT TIME OF COVER: AT TIME OF APPLICATION OF FINISH, GYPSUM WALLBOARD, etc. TO MEMBERS, FRAMING LUMBER, PRE-MFR TRUSSES, GLU-LAMINATED MEMBERS, PLYWOOD WEB JOISTS, LSL, PSL AND LVL MEMBERS SHALL HAVE 15% MAX. MOISTURE CONTENT. (EXCEPTION: PROVIDE LOWER MOISTURE CONTENT IF REQUIRED BY FINISH MATERIAL SPECIFICATIONS).

AT TIME OF APPLICATION OF EXTERIOR FINISH (ROOFING, BUILDING ENVELOPE, etc.) TO APA RATED SHEATHING, SHEATHING SHALL HAVE MAX MOISTURE CONTENT REQUIRED BY EXTERIOR FINISH SPECIFICATION. SHEATHING SHALL HAVE 15% MAX. MOISTURE CONTENT AT TIME OF APPLICATION OF INTERIOR FINISH (INSULATION, GYPSUM WALLBOARD, etc.)

ALLOW FOR 3/8" OF WOOD SHRINKAGE/COMPRESSION AT EACH LEVEL (INCLUDING FOUNDATION). VALUES ARE CUMULATIVE FOR THE HEIGHT OF THE BUILDING. BUILDING SYSTEMS SUCH AS MECHANICAL, ELECTRICAL, PLUMBING, FIRE SPRINKLERS, etc. SHALL HAVE FLEXIBLE COMPONENTS THAT ACCOUNT FOR THE POTENTIAL WOOD SHRINKAGE/COMPRESSION. ARCHITECTURAL FINISHES SHALL ALSO ACCOUNT FOR THE POTENTIAL WOOD SHRINKAGE/COMPRESSION.

GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC CERTIFICATE OF CONFORMANCE. CERTIFICATES OF CONFORMANCE SHALL BE MADE AVAILABLE TO THE BUILDING INSPECTORS. BUILDING DEPARTMENT INSPECTION IS REQUIRED PRIOR TO COVERING GLUED LAMINATED MEMBERS. ALL BEAMS SHALL BE DOUGLAS FIR STRESS CLASS 24F-V4-1.8E, Fb = 2,400 psi, Fv = 265 psi. TREATED WALKWAY COLUMNS SHALL BE DF COMBINATION 3, Emin = 1,000 ksi, Fc = 2300 psi. SEE PRESERVATIVE TREATED WOOD NOTES FOR TREATMENT REQUIREMENTS AT WALKWAY COLUMNS.

TIMBERSTRAND LAMINATED STRAND LUMBER (LSL), MICROLLAM LAMINATED VENEER LUMBER (LVL), AND PARALLAM PARALLEL STRAND LUMBER (PSL) SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE STANDARDS SET FORTH IN THE ICC EVALUATION SERVICE REPORT ESR-1387. EACH PIECE SHALL BEAR THE REQUIRED IDENTIFICATION MARKS SPECIFIED IN THE ICC REPORT. ALL LAMINATED STRAND LUMBER SHALL BE MANUFACTURED IN A CONTINUOUS PROCESS WITH ALL STRANDS AND GRAIN PARALLEL TO THE LENGTH OF THE MEMBERS. ADHESIVES SHALL BE AS SPECIFIED IN THE ICC REPORT.

MINIMUM STRENGTH, STIFFNESS, AND DIMENSIONAL CRITERIA ARE:

Fb = 1,700 psi, E = 1,300,000 psi, Fv = 285* psi, Width = 3 1/2"	1.3E LSL Headers (7 1/4" depth or less)
Fb = 2,325 psi, E = 1,550,000 psi, Fv = 285* psi, Width = 1 3/4 and 3 1/2"	1.55E LSL Headers (9 1/2" depth or more)
Fb = 2,600 psi, E = 2,000,000 psi, Fv = 285 psi, Width = 1 3/4"	2.0E LVL Headers
Fb = 2,900 psi, E = 2,000,000* psi, Fv = 285* psi, Width = 3 1/2", 5 1/4", 7"	2.2E PSL Headers
Fc = 2,500 psi, E = 1,800,000 psi	1.8E PSL Posts

HEADER CATEGORIES ARE APPLICABLE TO DROPPED and FLUSH BEAMS, BLOCKING AND RIMS. CRITERIA NOTED WITH (*) ARE REDUCED VALUES RELATIVE TO MANUFACTURER'S PUBLISHED CRITERIA. WHERE SPECIFICALLY NOTED, FULL VALUES ARE REQUIRED AS FOLLOWS:

LSL HEADERS: Fv = 310 psi
PSL HEADERS: E = 2,200,000 psi, Fv = 290 psi

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY WEYERHAEUSER. ALTERNATIVE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND ACCEPTANCE BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATIVE HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

SEE PLYWOOD WEB JOIST NOTE BELOW REGARDING SUBSTITUTIONS AT RIM / BLOCKING MEMBERS AT SHEARWALLS.

PREFABRICATED WOOD I-JOISTS SHALL BE DESIGNED BY THE MANUFACTURER FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS AND SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S PUBLISHED SPECIFICATIONS. JOISTS SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE STANDARDS SET FORTH IN THE ICC EVALUATION SERVICE REPORTS ESR-1387 AND ESR-1153. EACH PIECE SHALL BEAR THE REQUIRED IDENTIFICATION MARKS SPECIFIED IN THE ICC REPORTS. ALL NECESSARY BRIDGING, BLOCKING, BLOCKING PANELS, STIFFENERS, ETC., SHALL BE DETAILED AND FURNISHED BY THE MANUFACTURER. SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. PERMANENT AND TEMPORARY BRIDGING SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.

DESIGN SHOWN ON PLANS IS BASED ON TRUS-JOIST TJI JOISTS MANUFACTURED BY WEYERHAEUSER. ALTERNATIVE PREFABRICATED WOOD I-JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND ACCEPTANCE BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATIVE JOISTS SHALL MATCH THE LATEST PUBLISHED SECTION PROPERTIES OF SPECIFIED JOISTS INCLUDING FLEXURAL STRENGTH, STIFFNESS (EI), SHEAR STRENGTH, AND MAXIMUM END REACTION.

ALTERNATIVE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH WOOD I-JOIST PROVIDED.

NOTE: FLOOR LIVE LOAD DEFLECTIONS SHALL BE LIMITED TO SPAN/480.

ALTERNATIVE FRAMING MEMBERS AT SHEARWALL RIM / BLOCKING LOCATIONS MAY BE USED, PROVIDED ICC REPORTS OR MANUFACTURER'S TEST DATA ARE SUBMITTED. THE SUBMITTED DATA SHALL VERIFY THE ABILITY OF THE ALTERNATIVE MEMBERS TO PROVIDE EQUIVALENT OR GREATER SHEAR CAPACITIES USING THE SPECIFIED NAIL AND ANCHOR SIZES AND SPACINGS.

CONTINUOUS ROD HOLDOWN SYSTEM: THE CONTINUOUS ROD HOLDOWN SYSTEM SPECIFIED ON THE DRAWINGS SHALL BE THE EARTHBOUND SYSTEM USING THE SLACKJACK SHRINKAGE COMPENSATING DEVICE (ICC ESR-2848) AS SUPPLIED BY INQUEST ENGINEERING OR APPROVED EQUAL. THE HOLDOWN SYSTEM SHALL BE FULLY SELF-COMPENSATING OR SELF-TIGHTENING FOR ANTICIPATED WOOD SHRINKAGE/COMPRESSION INDICATED IN THE GENERAL STRUCTURAL NOTES. SHRINKAGE COMPENSATING DEVICES SHALL BE LOCATED AT EVERY LEVEL. PROPOSED SUBSTITUTIONS FOR THE SPECIFIED HOLDOWN SYSTEM SHALL HAVE SHRINKAGE COMPENSATING DEVICES CONFORMING TO THE LATEST EDITION OF ICC-ES ACCEPTANCE CRITERIA AC316 AND SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO INSTALLATION. SUBMITTALS FOR HOLDOWN SYSTEMS SHALL INCLUDE THE APPLICABLE ICC REPORT(S) AND SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF WASHINGTON.

WOOD STRUCTURAL PANELS SHALL BE APA RATED SHEATHING. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE, EXPOSURE 1 DURABILITY CLASSIFICATION, IN CONFORMANCE WITH USDOC PS 1 or PS 2. ORIENTED STRAND BOARD, IN ACCORDANCE WITH USDOC PS 2, AND OF EQUIVALENT THICKNESS, EXPOSURE RATING AND SPAN RATING, MAY BE USED IN LIEU OF PLYWOOD PENDING ORIENTED STRAND BOARD SUBSTITUTION APPROVAL BY ARCHITECT. SEE PLANS FOR SHEATHING NAILING REQUIREMENTS. STRUCTURAL PANELS SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS UNLESS OTHERWISE NOTED:

ROOF SHEATHING: 19/32" THICKNESS WITH 40/20 min SPAN RATING
FLOOR SHEATHING: 23/32" THICKNESS WITH 48/24 min SPAN RATING
WALL SHEATHING: 15/32" THICKNESS WITH 32/16 min SPAN RATING (4 PLY MIN AT PLYWOOD OPTION)

PRESERVATIVE-TREATED WOOD SHALL BE REQUIRED IN THE FOLLOWING APPLICATIONS (SEE ARCH'L FOR ADDITIONAL APPLICATIONS):

1. POSTS, GIRDERS, JOISTS, SUBFLOOR WHERE JOISTS or SUBFLOOR ARE WITH 18" OR GIRDERS ARE WITHIN 12" OF EXPOSED GROUND LOCATED WITHIN PERIMETER OF BUILDING FOUNDATION.
2. FRAMING AND SHEATHING THAT REST ON EXTERIOR FOUNDATION WALLS AND ARE WITHIN 8" OF EXPOSED EARTH.
3. FRAMING ATTACHED DIRECTLY TO INTERIOR SIDE OF EXTERIOR MASONRY OR CONCRETE WALLS BELOW GRADE.
4. FRAMING ON INTERIOR CONCRETE SLABS AND FOUNDATIONS.
5. BEAMS or GIRDERS ENTERING CONCRETE OR MASONRY WALLS WITH LESS THAN 1/2" AIR SPACE AT TOP, SIDES, or END.
6. POSTS or COLUMNS SUPPORTED ON CONCRETE SLAB OR FOOTING, UNLESS SUPPORTED BY CONCRETE PIER THAT PROJECTS 1" ABOVE CONCRETE SLAB AND 8" ABOVE EXPOSED EARTH AND SEPARATION BETWEEN WOOD AND SLAB/EARTH/WEATHER IS PROVIDED BY AN IMPERVIOUS MOISTURE BARRIER.
7. FRAMING AND SHEATHING EXPOSED TO EARTH, WEATHER, MOISTURE or DAMPNESS.
8. FRAMING EMBEDDED IN CONCRETE.

PRESERVATIVE TREATMENT SHALL BE IN ACCORDANCE WITH AWPA STANDARDS U1 AND M4 (LATEST EDITIONS) AND SHALL USE WATER-BORNE PRESERVATIVES. REFER TO AWPA STANDARD U1 FOR REQUIRED USE CATEGORY DESIGNATIONS. CUT OR DRILLED SECTIONS OF TREATED MATERIAL SHALL BE TREATED WITH AN APPROVED PRESERVATIVE IN ACCORDANCE WITH AWPA STANDARDS. SBX/DOT AND ZINC BORATE PRESERVATIVE-TREATED WOOD SHALL NOT BE USED IN EXTERIOR APPLICATIONS OR IN WET OR DAMP LOCATIONS.

PRESERVATIVE-TREATED WOOD SHALL CONFORM STRICTLY TO MANUFACTURER'S RECOMMENDATIONS (DELIVERY, HANDLING, STORAGE, EXPOSURE TO MOISTURE, etc.)

TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NO. C-C-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS. PROVIDE NUMBER, LENGTH, AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER (SEE ALSO NAILING SCHEDULE THIS SHEET). FILL ALL HOLES WITH FASTENERS AS SPECIFIED BY MFR. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE CONNECTOR STRAPS OR TIES CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS, ANCHOR RODS, AND LAG SCREWS BEARING ON WOOD, UON. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE COMMON; SEE ALSO NAILING SCHEDULE THIS SHEET. ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED. WHERE STRAPS, CLIPS, etc. ARE CONNECTED TO TJI WEBS, PROVIDE WEB BLOCKING. MEMBERS IN HANGERS SHALL BEAR FULLY ON HANGER SEAT AND GAP BETWEEN END OF SUPPORTED MEMBER AND FACE OF SUPPORTING MEMBER SHALL NOT EXCEED 1/8" PER ASTM D1761 TEST STANDARDS.

SIMPSON HARDWARE IN CONTACT WITH ACQ, CA, OR CBA PRESERVATIVE-TREATED WOOD SHALL HAVE A ZMAX FINISH (G185 HDG PER ASTM A653) OR SHALL BE POST HOT-DIP GALVANIZED (PER ASTM A123 FOR CONNECTORS AND ASTM A153 FOR FASTENERS AND ANCHORS) UON. EXCEPTION: TYPE 304 OR 316 STAINLESS STEEL CONNECTORS AND FASTENERS ARE REQUIRED FOR THE FOLLOWING APPLICATIONS:

- ACQ, CA, or CBA TREATMENTS WITH AMMONIA WHERE MEMBERS ARE USED IN EXTERIOR APPLICATIONS.
- ALL ACZA TREATMENTS
- RETENTION LEVELS GREATER THAN 0.40 pcf FOR ACQ, 0.41 pcf FOR CBA-A, 0.21 FOR CA-B, OR 0.15 pcf FOR CA-C TREATMENTS.
- WHERE RECOMMENDED BY PRESERVATIVE-TREATED WOOD MANUFACTURER.

STAINLESS STEEL CONNECTORS REQUIRE MATCHING STAINLESS STEEL FASTENERS. ZMAX AND POST HOT-DIP GALVANIZED CONNECTORS REQUIRE FASTENERS GALVANIZED PER ASTM A153.

UNLESS NOTED OTHERWISE, THE FOLLOWING HANGER SPECIFICATIONS APPLY. FACE MOUNT HANGERS SHALL BE MAXIMUM DEPTH HANGER THAT FITS THE SPECIFIED MEMBER. (OPTIONS IN PARENTHESES ARE ZMAX OR HDG AND ARE FOR USE WITH PRESSURE-PRESERVATIVE TREATED WOOD. VERIFY AVAILABILITY WITH HANGER MFR; OTHERWISE SUBSTITUTE HANGER WITH EQUAL OR GREATER CAPACITY). STAINLESS STEEL OPTIONS, WHERE REQUIRED, SHALL BE AS RECOMMENDED BY SIMPSON STRONG-TIE:

2x or 2-2x MEMBER TO FLUSH WOOD MEMBER	LUS (LUSZ)
2x MEMBER TO SILL PLATE OR STEEL BEAM OR LESSER DEPTH FLUSH WOOD MEMBER	JB/JBA (LBZ/LBAZ)
2-2x MEMBER TO SILL PLATE OR STEEL BEAM OR LESSER DEPTH FLUSH WOOD MEMBER	WP (WPZ)
PRE-MFR TRUSS TO FLUSH WOOD MEMBER	MUS28 SERIES
TJI MEMBER TO FLUSH WOOD MEMBER	IUS
2-TJI MEMBER TO FLUSH WOOD MEMBER	MIU
TJI MEMBER TO SILL PLATE OR STEEL BEAM OR LESSER DEPTH FLUSH WOOD MEMBER	ITS
2-TJI MEMBER TO SILL PLATE OR STEEL BEAM OR LESSER DEPTH FLUSH WOOD MEMBER	MIT
TJI MEMBER TO STEEL BEAM WHERE GWB PASSES BEHIND HANGER	DGF
TJI MEMBER TO FLUSH WOOD MEMBER WHERE GWB PASSES BEHIND HANGER	DGF
4x, LSL, LVL or PSL BEAM TO FLUSH WOOD MEMBER	HU MAX (HUZ MAX)
4x, LSL, LVL or PSL BEAM TO SILL PLATE OR STEEL BEAM OR LESSER DEPTH FLUSH WOOD MEMBER	BA MAX (BAZ MAX)
4x4 POST TO CONCRETE BELOW	CBSQ44-SDS2 (HDG)
6x6 POST TO CONCRETE BELOW	CBSQ66-SDS2 (HDG)
4x, 6x OR PSL POST TO WOOD BEAM ABOVE	AC MAX / LCE MAX (ACZ MAX / LCEZ MAX)
WOOD BEAM TO WOOD BEAM THAT BEARS ON POST	HWPZ W/ OFFSET TOP FLANGE

WHERE HU/HUC HANGERS ARE SPECIFIED, MAX NAILING (PER SIMPSON CATALOG) IS REQUIRED, TYP. WHERE HUMAX/HUCMAX HANGERS ARE SUPPORTED FROM 1 3/4" WIDE LSL BEAMS, USE .148 x 1 1/2" NAILS FROM HANGER TO SUPPORTING LSL BEAM. WHERE HUCMAX HANGERS ARE REQUIRED AT ENDS OF 1 3/4" WIDE LSL BEAMS, ONE FLANGE SHALL BE CONCEALED.

WOOD FASTENERS

FASTENERS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS, UON. SPLITTING SHALL BE AVOIDED AT ALL WOOD FASTENERS:
STEEL to WOOD and WOOD to WOOD CONNECTION BOLTS - ANSI/ASME STANDARD B18.2.1
ANCHOR RODS (7" EMBED UON) - ASTM F1554 GRADE 36 W/ THREADED ENDS AND WELDED NUT AT END (HIGHER STRENGTH WHERE REQ'D BY HOLDOWN SCHEDULE)
LAG SCREWS - ANSI/ASME STANDARD B18.2.1
WOOD SCREWS - ANSI/ASME STANDARD B18.6.1
NAILS - ASTM F1667

FASTENER BENDING YIELD STRENGTHS Fyb SHALL CONFORM TO 2015 NATIONAL DESIGN SPECIFICATION TABLE I1.

NAIL SIZES ARE SPECIFIED AS FOLLOWS. IF THE CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS (INCLUDING LONGER NAILS), THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND ACCEPTANCE.

SHEATHING FASTENERS SHALL BE DRIVEN SO THAT HEAD OR CROWN IS FLUSH WITH SHEATHING SURFACE. 3/8" MIN. EDGE DISTANCE SHALL BE MAINTAINED ON SHEATHING FASTENERS.

SIMPSON CONNECTORS	TYP UON	SEE CATALOG
	MSTA STRAPS DIRECT TO FRAMING	.148 x 1 1/2"
	MSTA STRAPS OVER APA SHTG TO FRAMING	.148 x 2 1/2"
	CS STRAPS DIRECT TO FRAMING	.131 x 1 1/2"
	CS STRAPS OVER APA SHTG TO FRAMING	.131 x 2 1/2"
	CMSTC STRAPS DIRECT TO FRAMING	.148 x 1 1/2"
	CMSTC STRAPS OVER APA SHTG TO FRAMING	.148 x 3"
	HANGERS W/ 16d OR 10d OPTIONS	.162 x 3 1/2"
FLOOR SHEATHING	TYPICAL	.131 DEFORMED SHANK x 2 1/2"
ROOF SHEATHING	TYPICAL	.131 x 2 1/2"
STUD WALL APA SHEATHING	15/32 SHTG	.148 x 2 1/4"
MEMBER TO MEMBER FACE NAILING	TYP UON	.131 x 3"
	BOTTOM PLATE TO FRAMING BELOW	.131 x 3 1/2"
TOENAILING	TYP UON	.131 x 3"

FASTENERS (INCLUDING NUTS AND WASHERS) EXPOSED TO EARTH OR WEATHER OR PLACED IN PRESERVATIVE-TREATED OR FIRE-RETARDANT-TREATED WOOD SHALL BE AS FOLLOWS:

1. FASTENERS IN CONTACT WITH UNTREATED WOOD EXPOSED TO EARTH OR WEATHER OR IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE HOT-DIPPED ZINC-COATED GALVANIZED STEEL (PER ASTM A123 AND A153), STAINLESS STEEL, SILICON BRONZE, OR COPPER. FASTENERS OTHER THAN NAILS, TIMBER RIVETS, WOOD SCREWS, STAPLES AND LAG SCREWS SHALL BE PERMITTED TO BE OF MECHANICALLY DEPOSITED ZINC COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B 695, CLASS 55 MINIMUM.
   EXCEPTION: FASTENERS IN CONTACT WITH SBX/DOT AND ZINC BORATE PRESERVATIVE-TREATED WOOD IN AN INTERIOR, DRY ENVIRONMENT SHALL BE PERMITTED TO BE PLAIN CARBON STEEL.
2. FASTENERS IN CONTACT WITH FIRE-RETARDANT-TREATED WOOD IN EXTERIOR APPLICATIONS OR WET OR DAMP LOCATIONS SHALL BE HOT-DIPPED ZINC-COATED GALVANIZED STEEL (PER ASTM A123 AND A153), STAINLESS STEEL, SILICON BRONZE, OR COPPER. FASTENERS OTHER THAN NAILS, TIMBER RIVETS, WOOD SCREWS, STAPLES AND LAG SCREWS SHALL BE PERMITTED TO BE OF MECHANICALLY DEPOSITED ZINC COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B 695, CLASS 55 MINIMUM.
3. FASTENERS IN CONTACT WITH FIRE-RETARDANT-TREATED WOOD IN DRY INTERIOR LOCATIONS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. IN THE ABSENCE OF SUCH RECOMMENDATIONS, THE REQUIREMENTS IN NOTE 2 ABOVE SHALL APPLY.

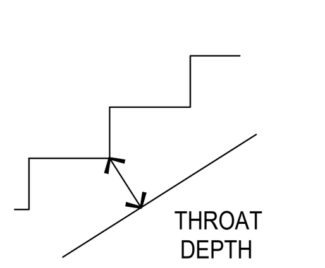
SPACED FASTENERS SPECIFIED ON THE DRAWINGS SHALL BEGIN AT 1/2 SPECIFIED SPACING FROM THE ENDS OF THE MEMBERS, UON. PROVIDE (2) FASTENERS MINIMUM EACH MEMBER, TYP. ANCHOR RODS FROM SILL PLATES TO CONCRETE SHALL BEGIN A MIN. OF 9 1/2" AND A MAX. OF 12" FROM EACH END OF EACH PIECE OF SILL PLATE. (EXCEPTION: AT SHEARWALLS, BEGIN AT 1/2 SPECIFIED SPACING IF THIS RESULTS IN LESS THAN 12" DISTANCE FROM END OF SILL PLATE PIECE).

INTERIOR WOOD STAIR STRINGER AND LANDING FRAMING AT BUILDING A SHALL CONFORM TO THE FOLLOWING SECTION:

LANDINGS: SEE FRAMING PLANS AND STRUCTURAL DETAILS FOR INFORMATION.

STRINGERS PER SCHEDULE:

	MAX HORIZ RUN OF STAIR	CENTER STRINGER SIZE	CENTER STRINGER CONNECTOR	SIDE STRINGERS SIZE	SIDE STRINGERS CONNECTOR
SERVING MORE THAN TWO DWELLING UNITS	5'-0"	2 x 12 / 2 x 6	A35	2 x 12	A35
	7'-6"	1 3/4 x 11 7/8 LSL / 2 x 6	A35 E.S.	2 x 12 / 2 x 6	A35
	8'-6"	1 3/4 x 11 7/8 LSL / 2 x 6 E.S.	A35 E.S.	1 3/4 x 11 7/8 LSL	A35
	10'-6"	1 3/4 x 14 LSL / 2 x 6	LSSR1.81Z	1 3/4 x 14 LSL	A35
	11'-4"	(2) 1 3/4 x 14 LSL	LSSR410Z	1 3/4 x 14 LSL	A35 w/ screws



1. WHERE TOPS OF STRINGERS ARE NOTCHED FOR TREADS AND RISERS, MINIMUM THROAT DEPTH AT NOTCH SHALL BE AS FOLLOWS: 2x12 - 5 1/4", 1 3/4 x 11 7/8 LSL - 5 7/8", 1 3/4 x 14 LSL - 8".
2. WHERE 2x6 MEMBERS INDICATED, FULL-DEPTH 2x6 MEMBER SHALL BE SISTERED WITH NOTCHED STRINGER (SISTER EA SIDE WHERE NOTED). PROVIDE (2) ROWS OF .131 x 3" NAILS @ 6" oc STAGGERED FROM 2x6 TO STRINGER. STOP 2x6 MEMBERS 4" SHORT OF ENDS OF STRINGERS.
3. BOTTOM EDGE OF STRINGERS SHALL NOT BE NOTCHED EXCEPT AS FOLLOWS: WHERE STRINGERS BEAR ON TOP OF WOOD FLOOR FRAMING BELOW, PROVIDE LET-IN 2x4 NAILER AT BOTTOM OF STRINGER PROVIDE (2) .131 x 3" NAILS EA SIDE EA STRINGER FROM NAILER TO FRAMING BELOW. WHERE STRINGERS BEAR ON CONCRETE SLAB, PROVIDE LET-IN 2x4 TREATED NAILER W/ 3/8" EXP. BOLT AT EACH STRINGER (EMBED 1 5/8"). DO NOT DAMAGE POST-TENSIONED OR MILD REINFORCING WHEN USING EXPANSION BOLTS. PROVIDE VAPER BARRIER AT BOTTOM OF STRINGERS IN CONTACT WITH CONCRETE.
4. PROVIDE (12) .131 x 1 1/2" NAILS AT A35 CONNECTORS. A35 WITH SCREWS SHALL HAVE (12) #9 x 1 1/2" SD SCREWS.
5. WHERE A35 E.S. INDICATED, STAGGER CONNECTORS EA SIDE OF STRINGER TO AVOID NAIL INTERFERENCE. WHERE STRINGER END DEPTH NOT ADEQUATE FOR STAGGERED A35, PROVIDE THAI22 MIN HANGERS. USE .148 x 3" NAILS AND FIELD FORM STRAP 2 1/2" OVER TOP OF SUPPORTING BEAM/LEDGER.
6. AT LSSR HANGERS, STRINGER END DEPTH SHALL BE 9 1/2" MIN. WHERE STRINGER END DEPTH LESS THAN 9 1/2", PROVIDE THAI22 HANGER PER NOTE 5.
7. AT DOUBLE LSL STRINGER, INTERCONNECT WITH (2) ROWS OF 3 3/8" LONG SDW SCREWS @ 16" oc EA ROW.

WOOD FRAMING NOTES - THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE PLANS

STRUCTURAL MEMBERS SHALL NOT BE DRILLED OR NOTCHED WITHOUT PRIOR REVIEW AND ACCEPTANCE BY THE STRUCTURAL ENGINEER, UNLESS OTHERWISE NOTED. SEE STRUCTURAL DETAILS FOR PENETRATION LIMITATIONS AT STRUCTURAL STUDS AND PLATES. THRU-BOLT AND ANCHOR ROD HOLES SHALL BE AT LEAST 1/32" BUT NO MORE THAN 1/16" LARGER THAN BOLT/ROD DIAMETER. CLEARANCE HOLES FOR LAG SCREW SHANKS SHALL HAVE THE SAME DIAMETER AS THE LAG SHANK AND THE SAME PENETRATION DEPTH AS THE LENGTH OF THE UNTHREADED SHANK. LEAD HOLES FOR THREADED PORTION OF LAG SCREWS SHALL HAVE A DIAMETER OF 40 TO 70% OF LAG SCREW SHANK DIAMETER WITH LARGER PERCENTILE APPLICABLE TO LAG SCREWS OF GREATER DIAMETER. LEAD HOLES SHALL EXTEND THE LENGTH OF THE THREADED PORTION OF THE LAG SCREW.

ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO TABLE 2304.10.1 OF THE INTERNATIONAL BUILDING CODE. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE COMMON. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS, ANCHOR RODS, AND LAG SCREWS BEARING ON WOOD, UON. INSTALLATION OF LAG SCREWS SHALL CONFORM TO 2015 NDS SECTION 12.1.4. BOLTS, ANCHOR RODS, AND LAG SCREWS SHALL BE CENTERED IN MEMBERS, UON.

WALL FRAMING: ALL STRUCTURAL STUD WALLS (BEARING OR SHEAR WALLS) SHOWN AND NOT OTHERWISE NOTED SHALL BE SHALL BE AS INDICATED IN SCHEDULES OR CALLOUTS ON STRUCTURAL FRAMING PLANS. SEE ARCHITECTURAL DRAWINGS FOR DIFFERING WALL WIDTHS AND FOR FRAMING AT NONSTRUCTURAL WALLS. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS, AND BELOW BEAM BEARING POINTS. SOLID BLOCKING FOR SOLID WOOD POSTS AND MULTI-STUD POSTS SHALL BE PROVIDED THROUGH INTERMEDIATE LEVELS TO SUPPORTS BELOW. PROVIDE CONTINUOUS SOLID BLOCKING AT MID-HEIGHT OF ALL STUD WALLS OVER 10' IN HEIGHT AND AT MID-HEIGHT OF WALLS WITH SHEATHING ON ONE SIDE ONLY (i.e. EACH SIDE OF PARTY WALLS).

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH .131 x 3 1/2" NAILS @ 8" oc OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR RODS @ 6'-0" oc UON. EMBED ANCHOR RODS 7" UON. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH .131 x 3" NAILS @ 8" oc STAGGERED, UON.

REFER TO THE PLANS AND SHEAR WALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE GYPSUM WALLBOARD ON INTERIOR SURFACES; SEE ARCH'L FOR THICKNESS AND ATTACHMENT REQUIREMENTS. PROVIDE 15/32" APA RATED SHEATHING (SPAN RATING 32/16) ON EXTERIOR SURFACES NAILED AT ALL PANEL EDGES (BLOCK UNSUPPORTED EDGES), TOP AND BOTTOM PLATES WITH .148 x 2 1/4" NAILS @ 6" oc AND TO ALL INTERMEDIATE STUDS AND BLOCKING @ 12" oc. ALLOW 1/8" GAP AT ALL APA SHEATHING PANEL EDGES AND ENDS. (SEE DETAILS WHERE LARGER GAP IS REQUIRED).

AT WOOD FRAMED FLOOR AND ROOF LEVELS, PROVIDE CONTINUOUS 5 1/4" WIDE PSL RIMS ALL SIDES OF STAIR OPENINGS, ELEVATOR OPENINGS AND 2-HOUR SHAFTS. RIM DEPTHS SHALL MATCH DEPTHS OF ADJACENT FLOOR / ROOF FRAMING. AT INTERSECTIONS OF THESE CONTINUOUS RIMS, PROVIDE 2-A35 CLIPS ON INSIDE FACE AND 2-LSTA36 STRAPS ON OUTSIDE FACE CENTERED ON RIM INTERSECTION.

AT EXTERIOR WALLS, PROVIDE FLATWISE 2x6 AT ALL DOOR HEADS AND WINDOW SILLS AND HEADS, UON. (PROVIDE FLATWISE 2-2x6 WHERE OPENING WIDTH IS GREATER THAN 6' AND LESS THAN 9'-6", UON). SEE 6/S401 AT OPENINGS WITHIN SHEARWALLS. PROVIDE (3) .131 x 3" TOENAILS EACH END OF EACH 2x6 MEMBER.

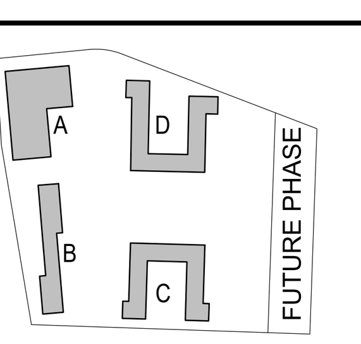
FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS.

TOENAIL JOISTS TO SUPPORTS WITH (3) .131 x 3" NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. INDIVIDUAL MEMBERS OF MULTI-JOIST BEAMS SHALL BE NAILED TO EACH OTHER WITH (2) ROWS OF .131 x 3" NAILS @ 12" oc.

UNLESS OTHERWISE NOTED ON THE PLANS, APA SUB-FLOORING AND ROOF SHEATHING SHALL BE LAID UP WITH GRAIN (STRENGTH AXIS) PERPENDICULAR TO SUPPORTS (JOISTS, TRUSSES, etc.), IN A STAGGERED PATTERN WITH PANEL ENDS OCCURING OVER SUPPORTING STRUCTURAL MEMBERS, AND NAILED @ 6" oc TO FRAMED PANEL EDGES, @ 4" oc OVER SHEAR WALLS AND @ 12" oc TO INTERMEDIATE SUPPORTS. SEE NOTES ABOVE FOR NAIL SIZES. NAILS SHALL BE LOCATED AT LEAST 3/8" FROM PANEL EDGES. ALL SUB-FLOORING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING/FRAMING. ALL ROOF SHEATHING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING/FRAMING WHERE INDICATED ON THE STRUCTURAL DRAWINGS OR AS REQUIRED BY THE ROOFING MANUFACTURER. GLUE SUB-FLOORING TO ALL SUPPORTS WITH ADHESIVE CONFORMING TO APA SPEC. AFG-01 IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALLOW 1/8" GAP AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. WHERE BLOCKED FLOOR AND ROOF DIAPHRAGMS ARE INDICATED, PROVIDE FLAT 2x BLOCKING AT ALL UNFRAMED PANEL EDGES AND NAIL WITH EDGE NAILING SPECIFIED.

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com



MICHAEL L. NOUWENS
STATE OF WASHINGTON
24644
PROFESSIONAL ENGINEER
06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:
EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:
BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:
EVERETT HOUSING AUTHORITY
3107 COLBY AVE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION

REVISIONS

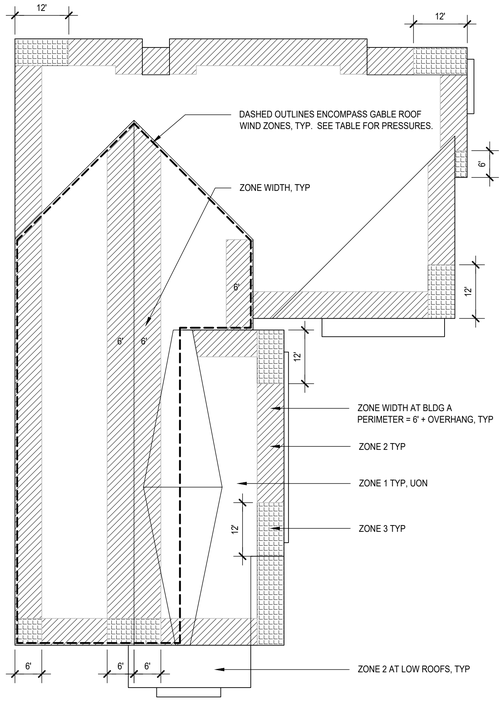
MARK	DATE	DESCRIPTION
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	12/15/2019	SCHEMATIC DESIGN

ISSUE INFORMATION

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE
GENERAL STRUCTURAL NOTES

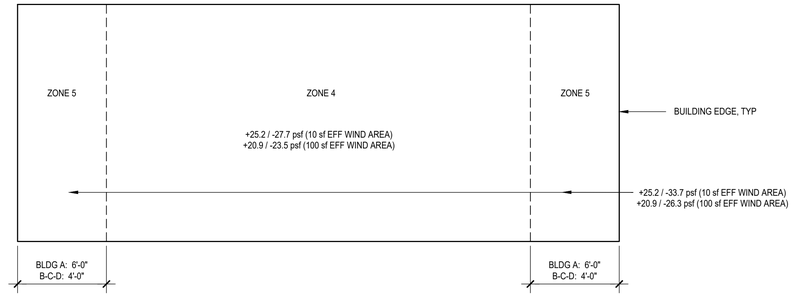
SHEET NO.
S-002



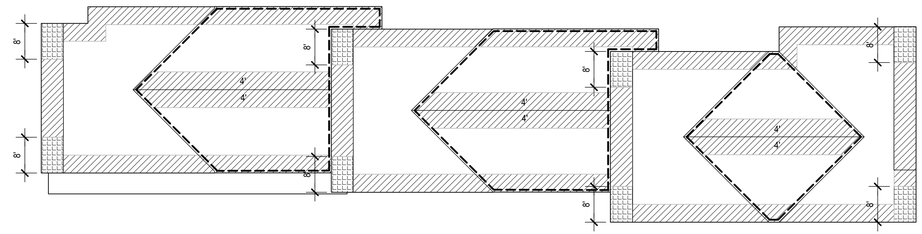
1A COMPONENT AND CLADDING WIND LOADING DIAGRAM: BUILDING A ROOF

	ZONE	10 sf EFF	100 sf EFF	OVERHANGS
TYP	1	18.8 psf / -50.8 psf	16.0 / -36.9	
	2	27.3 / -72.1	20.9 / -60.1	use zone 2 values
	3	20.9 / -91.3	18.8 / -82.8	use zone 3 values
GABLE	1	16.0 / -23.0	16.0 / -20.9	
	2	16.0 / -40.1	16.0 / -29.5	-50.8
	3	16.0 / -59.3	16.0 / -46.5	-82.8 (10 sf) / -55.9 (100 sf)

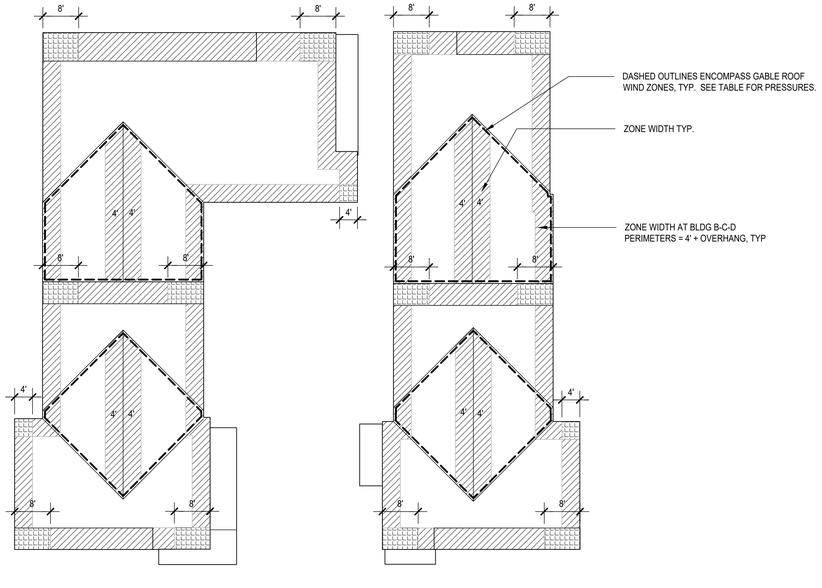
1. LOADS ARE SHOWN AT ULTIMATE LEVELS; MULTIPLY VALUES BY 0.6 TO OBTAIN ASD LEVELS.
2. USE LINEAR INTERPOLATION FOR EFF WIND AREAS BETWEEN 10 sf AND 100 sf.
3. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE EXTERIOR SURFACES, RESPECTIVELY.



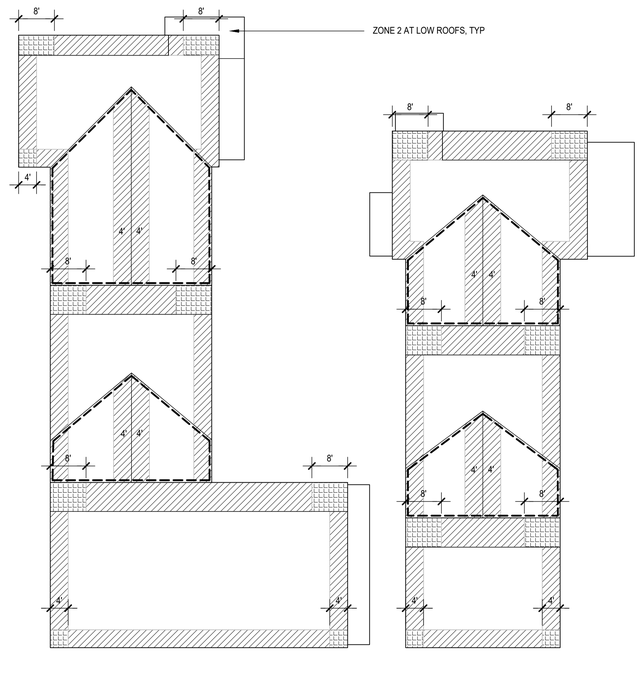
2 COMPONENT AND CLADDING WIND LOADING DIAGRAM: TYPICAL EXTERIOR WALL ELEVATION



1B COMPONENT AND CLADDING WIND LOADING DIAGRAM: BUILDING B ROOF



1C COMPONENT AND CLADDING WIND LOADING DIAGRAM: BUILDING C ROOF

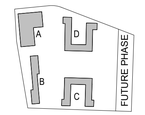


1D COMPONENT AND CLADDING WIND LOADING DIAGRAM: BUILDING D ROOF

GGLO DESIGN

1301 First Avenue, Suite 301
Seattle, WA 98101

http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
REVISIONS		

C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	12/15/2019	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
ISSUE INFORMATION		

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE

WIND LOADING DIAGRAMS

SHEET NO.

S-003

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

f'c = 3,000 psi

BAR	Ld			Ld-top			Lst			Lst-top			Ldh
min cover	1"	1.5"	2"	1"	1.5"	2"	1"	1.5"	2"	1"	1.5"	2"	
#3	12	12	12	13	13	13	13	13	13	17	17	17	6
#4	14	14	14	18	18	18	18	18	18	23	23	23	8
#5	20	17	17	26	22	22	26	22	22	33	28	28	10
#6	27	20	20	35	26	26	35	26	26	46	34	34	12
#7	44	33	29	57	43	38	57	43	38	75	55	49	14
#8	55	41	33	72	54	43	72	54	43	93	70	56	16
#9	67	51	41	87	66	54	87	66	54	113	86	70	18

f'c = 4,000 psi

BAR	Ld			Ld-top			Lst			Lst-top			Ldh
min cover	1"	1.5"	2"	1"	1.5"	2"	1"	1.5"	2"	1"	1.5"	2"	
#3	12	12	12	12	12	12	12	12	12	15	15	15	6
#4	12	12	12	15	15	15	15	15	15	20	20	20	7
#5	17	15	15	22	19	19	22	19	19	29	24	24	9
#6	24	18	18	31	23	23	31	23	23	40	29	29	10
#7	38	29	25	50	37	33	50	37	33	65	48	43	12
#8	48	36	29	62	47	38	62	47	38	81	61	49	14
#9	58	44	36	76	58	46	76	58	46	98	75	60	15

f'c = 4,500 psi

BAR	Ld			Ld-top			Lst			Lst-top			Ldh
min cover	1"	1.5"	2"	1"	1.5"	2"	1"	1.5"	2"	1"	1.5"	2"	
#3	12	12	12	12	12	12	12	12	12	14	14	14	6
#4	12	12	12	14	14	14	14	14	14	19	19	19	7
#5	16	14	14	21	18	18	21	18	18	27	23	23	8
#6	22	17	17	29	21	21	29	21	21	38	28	28	10
#7	36	27	24	47	35	31	47	35	31	61	45	40	11
#8	45	34	27	59	44	35	59	44	35	76	57	46	13
#9	55	42	34	71	54	44	71	54	44	92	70	57	15

f'c = 5,000 psi

BAR	Ld			Ld-top			Lst			Lst-top			Ldh
min cover	1"	1.5"	2"	1"	1.5"	2"	1"	1.5"	2"	1"	1.5"	2"	
#3	12	12	12	12	12	12	12	12	12	13	13	13	6
#4	12	12	12	14	14	14	14	14	14	18	18	18	6
#5	16	13	13	20	17	17	20	17	17	26	22	22	8
#6	21	16	16	28	20	20	28	20	20	36	26	26	9
#7	34	26	23	45	33	30	45	33	30	58	43	38	11
#8	43	32	26	56	42	34	56	42	34	72	54	44	12
#9	52	40	32	68	52	42	68	52	42	88	67	54	14

1. TABLE A APPLIES TO WALL HORIZONTAL REINFORCING, SLABS, FOOTINGS AND ALL OTHER ELEMENTS NOT SPECIFICALLY NOTED IN TABLES B-D.
2. TABLE IS BASED ON 4" MIN CLEAR SPACING BETWEEN REINFORCING BARS.
3. Ldh VALUES ARE BASED ON 2 1/2" MIN SIDE COVER AND 2" MIN END COVER.

TABLE A

min clear spacing between bars, typ

f'c = 3,000 psi

BAR	Ld			Ld-top			Lst			Lst-top			Ldh
	2"	3"	4"	2"	3"	4"	2"	3"	4"	2"	3"	4"	
#3	12	12	12	13	13	13	13	13	13	17	17	17	6
#4	14	14	14	18	18	18	18	18	18	23	23	23	8
#5	20	17	17	26	22	22	26	22	22	33	28	28	10
#6	27	20	20	35	26	26	35	26	26	46	34	34	12
#7	44	33	29	57	43	38	57	43	38	75	55	49	14
#8	55	41	33	72	54	43	72	54	43	93	70	56	16
#9	67	51	41	87	66	54	87	66	54	113	86	70	18

f'c = 4,000 psi

BAR	Ld			Ld-top			Lst			Lst-top			Ldh
	2"	3"	4"	2"	3"	4"	2"	3"	4"	2"	3"	4"	
#3	12	12	12	12	12	12	12	12	12	15	15	15	6
#4	12	12	12	15	15	15	15	15	15	20	20	20	7
#5	17	15	15	22	19	19	22	19	19	29	24	24	9
#6	24	18	18	31	23	23	31	23	23	40	29	29	10
#7	38	29	25	50	37	33	50	37	33	65	48	43	12
#8	48	36	29	62	47	38	62	47	38	81	61	49	14
#9	58	44	36	76	58	46	76	58	46	98	75	60	15

f'c = 4,500 psi

BAR	Ld			Ld-top			Lst			Lst-top			Ldh
	2"	3"	4"	2"	3"	4"	2"	3"	4"	2"	3"	4"	
#3	12	12	12	12	12	12	12	12	12	14	14	14	6
#4	12	12	12	14	14	14	14	14	14	19	19	19	7
#5	16	14	14	21	18	18	21	18	18	27	23	23	8
#6	22	17	17	29	21	21	29	21	21	38	28	28	10
#7	36	27	24	47	35	31	47	35	31	61	45	40	11
#8	45	34	27	59	44	35	59	44	35	76	57	46	13
#9	55	42	34	71	54	44	71	54	44	92	70	57	15

f'c = 5,000 psi

BAR	Ld			Ld-top			Lst			Lst-top			Ldh
	2"	3"	4"	2"	3"	4"	2"	3"	4"	2"	3"	4"	
#3	12	12	12	12	12	12	12	12	12	13	13	13	6
#4	12	12	12	14	14	14	14	14	14	18	18	18	6
#5	16	13	13	20	17	17	20	17	17	26	22	22	8
#6	21	16	16	28	20	20	28	20	20	36	26	26	9
#7	34	26	23	45	33	30	45	33	30	58	43	38	11
#8	43	32	26	56	42	34	56	42	34	72	54	44	12
#9	52	40	32	68	52	42	68	52	42	88	67	54	14

1. TABLE B APPLIES TO BEAM LONGITUDINAL REINFORCING AND ASSOCIATED DOWELS THAT CONFORM TO MINIMUM COVER REQUIREMENTS IN NOTES 2 AND 3.
2. AT #3-#7 BARS, TABLE IS BASED ON 1 7/8" MIN COVER TO BARS AND 1 1/2" MIN COVER TO ENCLOSING TIES/STIRRUPS.
3. AT #8-#9 BARS, TABLE IS BASED ON 2" MIN COVER TO BARS AND 1 1/2" MIN COVER TO ENCLOSING TIES/STIRRUPS.
4. Ldh VALUES ARE BASED ON 2 1/2" MIN SIDE COVER AND 2" MIN END COVER.

TABLE B

f'c = 3,000 psi

BAR	Ld	Ldc	Lst
#4	14	11	18
#5	17	14	22
#6	20	17	26
#7	29	20	38
#8	33	22	43
#9	41	25	54

f'c = 4,000 psi

BAR	Ld	Ldc	Lst
#4	12	10	15
#5	15	12	19
#6	18	15	23
#7	25	17	33
#8	29	19	38
#9	36	22	46

f'c = 6,000 psi

BAR	Ld	Ldc	Lst
#4	12	9	12
#5	12	12	16
#6	14	14	19
#7	21	16	27
#8	24	18	31
#9	30	21	38

1. TABLE C APPLIES TO COLUMN LONGITUDINAL REINFORCING AND ASSOCIATED DOWELS THAT CONFORM TO MINIMUM COVER AND CLEAR SPACING REQUIREMENTS IN NOTE 2.
2. TABLE IS BASED ON 2" MIN COVER TO BARS AND 4" MIN CLEAR SPACING BETWEEN BARS.

TABLE C

f'c = 3,000 psi

BAR	Lst			Ldh
min cover	1"	1.5"	2"	
#4	22	22	22	10
#5	32	27	27	12
#6	44	32	32	15
#7	72	54	47	17
#8	89	68	54	20

f'c = 4,000 psi

BAR	Lst			Ldh
min cover	1"	1.5"	2"	
#4	19	19	19	9
#5	28	24	24	11
#6	38	28	28	13
#7	62	47	41	15
#8	78	59	47	17

f'c = 4,500 psi

BAR	Lst			Ldh
min cover	1"	1.5"	2"	
#4	18	18	18	8
#5	26	22	22	10
#6	36	27	27	12
#7	59	44	39	14
#8	73	55	44	16

1. TABLE D APPLIES TO WALL VERTICAL REINFORCING AND ASSOCIATED DOWELS. (TABLE D DOES NOT APPLY TO SITE WALLS).
2. Ldh VALUES ARE BASED ON 2 1/2" MIN SIDE COVER AND 2" MIN END COVER.
3. LENGTHS INCLUDE 1.25 MULTIPLIER REQUIRED PER ACI 318-14 18.10.2.3(b) TO ACCOMMODATE YIELDING AS A RESULT OF LATERAL DISPLACEMENTS DUE TO SEISMIC FORCES.

TABLE D

LEGEND

Ld:	DEVELOPMENT LENGTH - TENSION (inches typ)
Ld-top:	DEVELOPMENT LENGTH - TENSION (TOP)
Lst:	LAP SPLICE LENGTH - TENSION
Lst-top:	LAP SPLICE LENGTH - TENSION (TOP)
Ldh:	STANDARD HOOK DEVELOPMENT LENGTH - TENSION
Ldc:	DEVELOPMENT LENGTH - COMPRESSION

TOP IS DEFINED AS HORIZONTAL BARS WITH MORE THAN 12 INCHES OF FRESH CONCRETE CAST BELOW THE BARS.

(For Grade 60, Uncoated Bars, Normal Weight Concrete)

3 CONCRETE REINFORCING SPLICE AND DEVELOPMENT SCHEDULE

1 VERIFICATIONS AND SPECIAL INSPECTIONS

SEE IBC CHAPTER 17: "STRUCTURAL TESTS AND SPECIAL INSPECTIONS" FOR MORE DETAILED REQUIREMENTS.

VERIFICATION AND INSPECTION	FREQUENCY: CONTINUOUS	FREQUENCY: PERIODIC	REFERENCED STANDARD	IBC REFERENCE
WOOD CONSTRUCTION				
W1. NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF ELEMENTS OF THE SEISMIC FORCE RESISTING SYSTEM INCLUDING COLLECTORS, BRACES, HOLDOWNS, SHEARWALLS, THRU FLOOR and ROOF BLOCKING, AND DIAPHRAGMS. EXCEPTIONS: a. WOOD SHEAR WALLS AND DIAPHRAGMS, INCLUDING NAILING, BOLTING, ANCHORING AND OTHER FASTENING TO OTHER COMPONENTS (OTHER THAN POST-INSTALLED CONCRETE ANCHORS) WHERE SHEATHING FASTENERS ARE SPACED MORE THAN 4" oc.		X		1705.12.2
W2. INSPECTION OF FABRICATION OF PRE-FABRICATED WOOD STRUCTURAL ELEMENTS AND ASSEMBLIES.				1704.2.5
GEOTECHNICAL - GENERAL				
G1. VERIFICATION OF MATERIALS BELOW FOOTINGS FOR ADEQUACY TO ACHIEVE THE DESIGN BEARING CAPACITY.		X		1705.6
G2. VERIFICATION THAT EXCAVATIONS ARE EXTENDED TO THE PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.		X		1705.6
G3. PERFORMANCE OF CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.		X		1705.6
G4. VERIFICATION OF USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X			1705.6
G5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECTION OF SUBGRADE AND VERIFICATION THAT SITE HAS BEEN PREPARED PROPERLY.		X		1705.6

VERIFICATION AND INSPECTION	FREQUENCY: CONTINUOUS	FREQUENCY: PERIODIC	REFERENCED STANDARD	IBC REFERENCE
CONCRETE CONSTRUCTION (SEE IBC 1705.3 FOR EXCEPTIONS)				
C1. INSPECTION OF REINFORCING BARS, ~~INCLUDING PRESTRESSING TENDONS,~~ AND PLACEMENT.		X	ACI 318: Ch. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
C2. INSPECTION OF REINFORCING STEEL WELDING : a. WELDABILITY OF BARS OTHER THAN ASTM A706 b. SINGLE PASS FILLET WELDS; 5/16" MAX c. ALL OTHER WELDS	X	X X	AWS D1.4 ACI 318: 26.6.4	
C3. INSPECTION OF ANCHORS CAST IN CONCRETE.		X	ACI 318: 17.8.2	
C4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS. b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN PARAGRAPH C4a.	X	X	ANSI ACCREDITED REPORT FOR SPECIFIED PRODUCT, ACI 318: 17.8.2	
C5. VERIFICATION OF USE OF REQUIRED DESIGN MIX.		X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
C6. PRIOR TO CONCRETE PLACEMENT, FABRICATION OF SPECIMENS FOR STRENGTH TESTS, PERFORMANCE OF SLUMP AND AIR CONTENT TESTS, AND DETERMINATION OF CONCRETE TEMPERATURE.	X		ASTM C172 ASTM C31 ACI 318: 26.4, 26.12	1908.10
C7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X		ACI 318: 26.5	1908.6, 1908.7, 1908.8
C8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.		X	ACI 318: 26.5.3-26.5.5	1908.9
C9. INSPECTION ~~OF POST-TENSIONED~~ CONCRETE: A. APPLICATION OF PRESTRESSING FORCES. B. TENDON FINISHING (SEE GEN STRUCT NOTES)	X X		ACI 318: 26.10	
C10. INSPECTION OF ERECTION ~~OF PRECAST~~ CONCRETE MEMBERS.		X	ACI 318: Ch. 26.8	
C11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POSTTENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.		X	ACI 318: 26.11.2	
C12. INSPECTION OF FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.		X	ACI 318: 26.11.1.2	
C13. INSPECTION OF MECHANICAL SPLICING OF REINFORCING BARS.	X		ANSI ACCREDITED REPORT FOR SPECIFIED PRODUCT	
C14. SUBMITTAL OF MILL TEST REPORTS WHERE ASTM A615 REINF IS PROPOSED AS A SUBSTITUTION FOR ASTM A706 REINF			ACI 318: 20.2.2.5, 26.13.2.3	
C15. INSPECTION OF HEADED SHEAR STUD (STUDRAIL) INSTALLATION	X		ANSI ACCREDITED REPORT FOR SPECIFIED PRODUCT	
C16. INSPECTION OF HEADED STUD ANCHOR INSTALLATION		X		

2 STATEMENT OF SPECIAL INSPECTIONS

1. SPECIAL INSPECTIONS AND TESTING IN ACCORDANCE WITH IBC CHAPTER 17 ARE REQUIRED FOR THE ITEMS INDICATED IN THE TABLES ON THIS SHEET AND S005.
2. SEISMIC FORCE RESISTING SYSTEMS SUBJECT TO SPECIAL INSPECTIONS AND TESTING INCLUDE:
   a. APA RATED SHEARWALLS, HOLDOWN SYSTEMS, SHEARWALL OPENING CORNER STRAPS, DIAPHRAGMS AND COLLECTORS, THROUGH FLOOR/ROOF BLOCKING AND NAILING AND HARDWARE, and SILL PLATE ANCHORAGE.
3. DESIGNATED SEISMIC SYSTEMS, DEFINED IN IBC SECTION 202 AS ARCHITECTURAL, ELECTRICAL AND MECHANICAL SYSTEMS AND THEIR COMPONENTS THAT REQUIRE DESIGN IN ACCORDANCE WITH ASCE 7-10 CHAPTER 13 AND HAVE A COMPONENT IMPORTANCE FACTOR Ip GREATER THAN ONE, ARE SUBJECT TO SPECIAL INSPECTION AND TESTING. CERTIFICATION, AS DESCRIBED IN ASCE 7-10 SECTION 13.2.2, SHALL BE PROVIDED FOR ACTIVE MECHANICAL AND ELECTRICAL EQUIPMENT THAT MUST REMAIN OPERABLE FOLLOWING THE DESIGN EARTHQUAKE GROUND MOTION AND FOR COMPONENTS WITH HAZARDOUS SUBSTANCES AND ASSIGNED A COMPONENT IMPORTANCE FACTOR Ip OF 1.5. THE SPECIAL INSPECTOR SHALL VERIFY THAT THE LABEL, ANCHORAGE AND MOUNTING CONFORM TO THE CERTIFICATE OF COMPLIANCE. CERTIFICATES OF COMPLIANCE SHALL STATE THAT THE MATERIALS AND PRODUCTS MEET THE SPECIFIED STANDARDS OR THAT THE WORK WAS DONE IN COMPLIANCE WITH APPROVED CONTRACT DOCUMENTS.
4. ARCHITECTURAL COMPONENTS: PERIODIC SPECIAL INSPECTION SHALL BE PROVIDED DURING THE ERECTION AND FASTENING OF EXTERIOR CLADDING, INTERIOR AND EXTERIOR NON-BEARING WALLS AND INTERIOR AND EXTERIOR VENEER WITH EXCEPTIONS AS NOTED IN IBC SECTION 1705.12.5. CERTIFICATION THROUGH ANALYSIS, TESTING OR EXPERIENCE DATA AS DESCRIBED IN ASCE 7-10 SECTION 13.2.1 SHALL BE PROVIDED FOR ARCHITECTURAL COMPONENTS, SUPPORTS AND ATTACHMENTS. PERIODIC SPECIAL INSPECTION IS REQUIRED FOR THE ANCHORAGE OF ACCESS FLOORS. CERTIFICATES OF COMPLIANCE SHALL STATE THAT THE MATERIALS AND PRODUCTS MEET THE SPECIFIED STANDARDS OR THAT THE WORK WAS DONE IN COMPLIANCE WITH APPROVED CONTRACT DOCUMENTS.
5. PLUMBING, MECHANICAL AND ELECTRICAL COMPONENTS: PERIODIC SPECIAL INSPECTION IS REQUIRED FOR:
   a. ANCHORAGE OF ELECTRICAL EQUIPMENT FOR EMERGENCY OR STANDBY POWER SYSTEMS.
   b. INSTALLATION AND ANCHORAGE OF PIPING SYSTEMS DESIGNED TO CARRY HAZARDOUS MATERIALS AND THEIR ASSOCIATED MECHANICAL UNITS.
   c. INSTALLATION AND ANCHORAGE OF DUCTWORK DESIGNED TO CARRY HAZARDOUS MATERIALS.
   d. INSTALLATION AND ANCHORAGE OF VIBRATION ISOLATION SYSTEMS THAT HAVE A NOMINAL CLEARANCE OF 1/4" OR LESS BETWEEN EQUIPMENT SUPPORT FRAME AND RESTRAINT.

   CERTIFICATION THROUGH ANALYSIS, TESTING OR EXPERIENCE DATA AS DESCRIBED IN ASCE 7-10 SECTION 13.2.1 SHALL BE PROVIDED FOR PLUMBING, MECHANICAL AND ELECTRICAL COMPONENTS, SUPPORTS AND ATTACHMENTS. CERTIFICATES OF COMPLIANCE SHALL STATE THAT THE MATERIALS AND PRODUCTS MEET THE SPECIFIED STANDARDS OR THAT THE WORK WAS DONE IN COMPLIANCE WITH APPROVED CONTRACT DOCUMENTS.
6. STORAGE RACKS EIGHT FEET OR GREATER IN HEIGHT REQUIRE PERIODIC INSPECTION DURING ANCHORAGE OF RACKS.
7. SPECIAL INSPECTION AND TESTING REPORTS, IN ACCORDANCE WITH IBC SECTION 1704.2.4, SHALL BE SUBMITTED TO THE ARCHITECT, ENGINEER, CONTRACTOR, BUILDING OFFICIAL, AND OWNER.
8. EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A SEISMIC FORCE RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM, OR COMPONENT LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT SHALL CONTAIN ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS.

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

GGLO DESIGN

1301 First Avenue, Suite 301
Seattle, WA 98101

http://www.gglo.com

FUTURE PHASE

MICHAEL L. NOUWENS — STATE OF WASHINGTON — 24644 — REGISTERED PROFESSIONAL ENGINEER

06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:
BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:
EVERETT HOUSING AUTHORITY
3107 COLBY AVE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
		REVISIONS
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	12/15/2019	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
		ISSUE INFORMATION

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE
SPECIAL INSPECTIONS, REINFORCING SPLICES

SHEET NO.
S-004

1 VERIFICATIONS AND SPECIAL INSPECTIONS

SEE IBC CHAPTER 17: "STRUCTURAL TESTS AND SPECIAL INSPECTIONS" FOR MORE DETAILED REQUIREMENTS.

STRUCTURAL STEEL BOLTING INSPECTIONS	FREQUENCY O	FREQUENCY P	2009 RCSC SPECIFICATION REFERENCE
INSPECTION TASKS PRIOR TO BOLTING AISC 360-10, Chapter N			
Manufacturer's certifications available for fastener materials		X	2.1, 9.1
Fasteners marked in accordance with ASTM requirements	X		Figure C-2.1, 9.1
Proper fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane)	X		2.3.2, 2.7.2, 9.1
Proper bolting procedure selected for joint detail	X		4, 8
Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements	X		3, 9.1, 9.3
Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used	X		7, 9.2
Proper storage provided for bolts, nuts, washers and other fastener components	X		2.2, 8, 9.1
INSPECTION TASKS DURING BOLTING AISC 360-10, Chapter N			
Fastener assemblies, of suitable condition, placed in all holes and washers (if required) are positioned as required	X		8.1, 9.1
Joint brought to the snug-tight condition prior to the pretensioning operation	X		8.1, 9.1
Fastener component not turned by the wrench prevented from rotating	X		8.2, 9.2
Fasteners are pretensioned in accordance with the RCSC *Specification*, progressing systematically from the most rigid point toward the free edges	X		8.2, 9.2
INSPECTION TASKS AFTER BOLTING			AISC 360-10, Chapter N
Document acceptance or rejection of bolted connections		X	

STRUCTURAL STEEL WELDING INSPECTIONS	FREQUENCY O	FREQUENCY P	2010 AWS D1.1 STANDARD
INSPECTION TASKS PRIOR TO WELDING AISC 360-10, Chapter N			
Welding procedure specifications (WPSs) available		X	6.3
Manufacturer certifications for welding consumables available		X	6.2
Material identification (type/grade)	X		6.2
Welder identification system: Fabricator or erector, as applicable, shall maintain a system by which a welder who has welded a joint or member can be identified. Stamps, if used, shall be the low-stress type	X		6.4 welder qualification
Fit-up of groove welds (including joint geometry) • Joint preparation • Dimensions (alignment, root opening, root face, bevel) • Cleanliness (condition of steel surfaces) • Tacking (tack weld quality and location) • Backing type and fit (if applicable)	X		6.5.2 5.22 5.15 5.18 5.10, 5.22.1.1
Configuration and finish of access holes	X		6.5.2, 5.17
Fit-up of fillet welds • Dimensions (alignment, gaps at root) • Cleanliness (condition of steel surfaces) • Tacking (tack weld quality and location)	X		5.22.1 5.15 5.18
Check welding equipment	X		6.2, 5.11
INSPECTION TASKS DURING WELDING AISC 360-10, Chapter N			
Use of qualified welders	X		6.4
Control and handling of welding consumables • Packaging • Exposure control	X		6.2 5.3.1 5.3.2 (SMAW), 5.3.3 (SAW)
No welding over cracked tack welds	X		5.18
Environmental conditions • Wind speed within limits • Precipitation and temperature	X		5.12.1 5.12.2
WPS followed • Settings on welding equipment • Travel speed • Selected welding materials • Shielding gas type/flow rate • Preheat applied • Interpass temperature maintained (min/max) • Proper position (F, V, H, OH)	X		6.3.3, 6.5.2, 5.5, 5.21 5.6, 5.7
Welding techniques • Interpass and final cleaning • Each pass within profile limitations • Each pass meets quality requirements	X		6.5.2, 6.5.3, 5.24 5.30.1
INSPECTION TASKS AFTER WELDING AISC 360-10, Chapter N			
Welds cleaned	X		5.30.1
Size, length and location of welds		X	6.5.1
Welds meet visual acceptance criteria • Crack prohibition • Weld/base-metal fusion • Crater cross section • Weld profiles • Weld size • Undercut • Porosity		X	6.5.3 Table 6.1(1) Table 6.1(2) Table 6.1(3) Table 6.1(4), 5.24 Table 6.1(6) Table 6.1(7) Table 6.1(8)
Arc strikes		X	5.29
k-area: visually inspect web *k*-area for cracks within 3 inches of welds of doubler plates, continuity plates or stiffeners		X	
Backing removed and weld tabs removed (if required)		X	5.10, 5.31
Repair activities		X	6.5.3, 5.26
Document acceptance or rejection of welded joint or member		X	6.5.4, 6.5.5

VERIFICATION AND INSPECTION	FREQUENCY CONTINUOUS	FREQUENCY PERIODIC	REFERENCED STANDARD	IBC REFERENCE
STEEL CONSTRUCTION				
S1. MATERIAL VERIFICATION OF STRUCTURAL STEEL:				
A. FOR SHOP-STANDARD MATERIAL, IDENTIFY SHAPE DESIGNATION. FOR MATERIAL OF OTHER GRADES, IDENTIFY SHAPE DESIGNATION AND MATERIAL GRADE.			AISC 303 section 6.1.1	
B. MILL PRODUCT MATERIAL TEST REPORTS			AISC 303 sect 6.1.1 and 8.2	
S2. INSPECTION OF FABRICATORS				1704.2.5, 1705.2

FREQUENCY DESCRIPTION FOR STRUCTURAL STEEL WELD AND BOLTING INSPECTIONS:

O - OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.

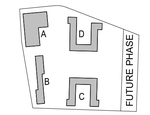
P - PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER and EACH BOLTED CONNECTION.

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

GGLO DESIGN

1301 First Avenue, Suite 301
Seattle, WA 98101

http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION

REVISIONS

MARK	DATE	DESCRIPTION
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	12/15/2019	SCHEMATIC DESIGN

ISSUE INFORMATION

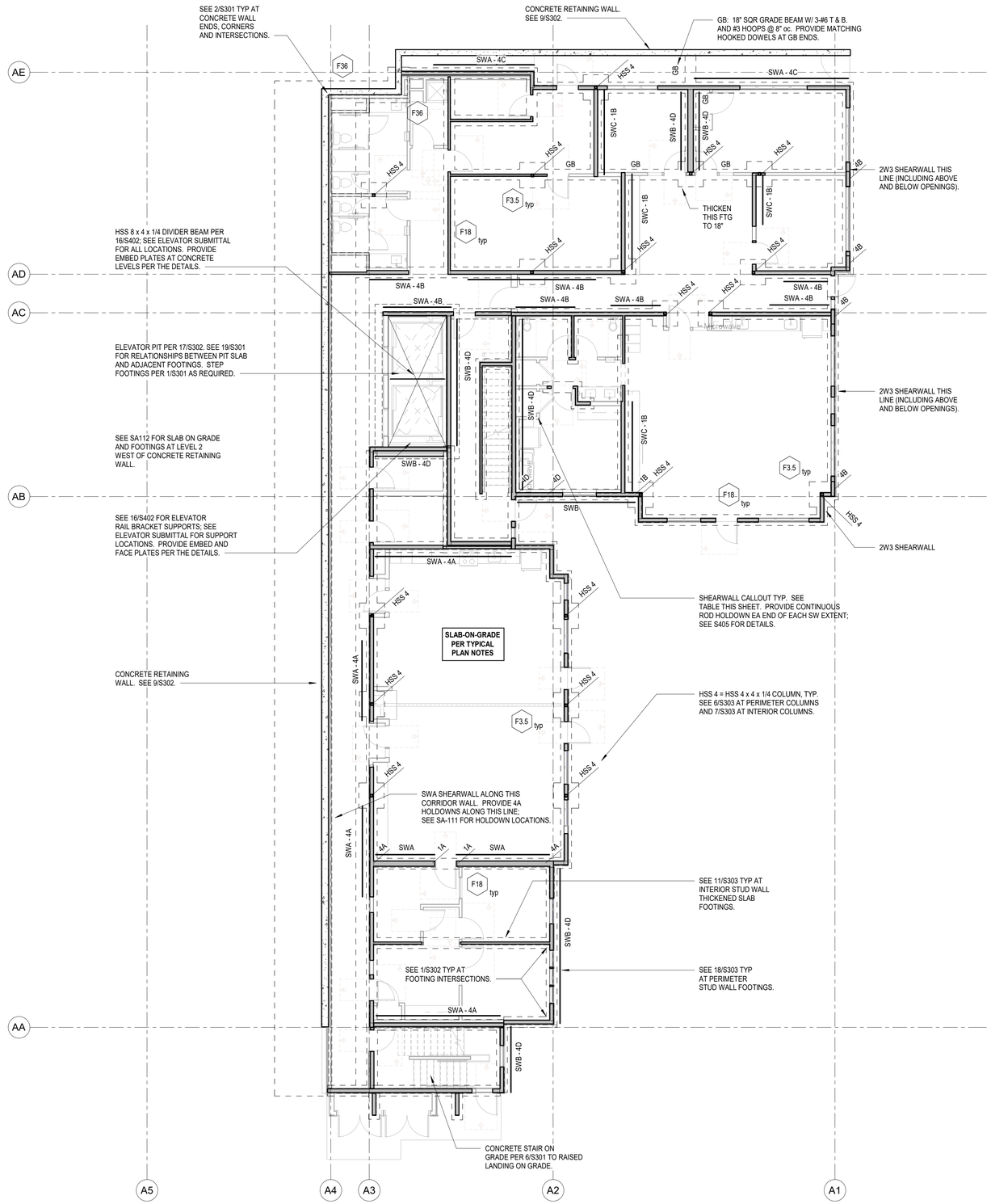
PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE

SPECIAL INSPECTIONS

SHEET NO.

S-005



1 BUILDING A - LEVEL 1 FOUNDATION PLAN

1/8" = 1'-0"

WOOD STUD WALL SCHEDULE - LEVEL 1

LOCATION	STUDS
EXTERIOR WALL - PERP to FLOOR JOISTS	2-2x6 @ 16"
EXTERIOR WALL - PARALLEL to FLOOR JOISTS	2x6 @ 16"
UNIT INTERIOR WALL - PERP to FLOOR JOISTS	2-2x4 @ 12", 2-2x6 @ 16"
UNIT INTERIOR WALL - PARALLEL to FLOOR JOISTS	2x4 @ 16", 2x6 @ 16"
CORRIDOR WALL	2-2x6 @ 16"
STAIR, ELEVATOR WALLS	2-2x6 @ 16"
DEMISING WALL (between dwelling units)	EA SIDE: 2-2x4 @ 12", 2x6 @ 12"

1. STUD SCHEDULE APPLIES TO STRUCTURAL STUD WALLS AT REFERENCED LEVEL UNLESS SPECIFICALLY NOTED ON PLAN. SEE ARCH'L FOR ACTUAL WALL THICKNESSES AND COMPLETE WALL ASSEMBLIES.
2. SEE SHEARWALL SCHEDULE FOR ADDITIONAL 3x STUD REQUIREMENTS.

FOOTING SCHEDULE

MARK	FOOTING SIZE	REINFORCING
F3.5	3'-6" SQR x 1'-3" DP	4-#5 EW BOT
F18	1'-6" WIDE x 1'-0" DP	2-#5 BOT LONG
F36	3'-0" WIDE x 1'-6" DP	4-#5 BOT LONG

BASED ON 6,000 PSF ALLOWABLE BEARING PRESSURE

FOUNDATION PLAN NOTES

1. SLAB ON GRADE SHALL BE 4" THICK WITH 6x6 W1.4 x W1.4 WELDED WIRE REINFORCING AT CENTER, UON. PROVIDE VAPOR RETARDER (THICKNESS PER ARCH'L) BELOW SLAB AT INTERIOR SPACES. PREPARE SUBGRADE AND PROVIDE FREE-DRAINING GRANULAR FILL IN ACCORDANCE WITH GEOTECHNICAL REPORT. SEE ARCH'L FOR SLAB SLOPES AND STEPS AND FOR TOP OF SLAB ELEVATIONS. FIBERMESH, ADDED PER MFR'S RECOMMENDATIONS, CAN BE SUBSTITUTED FOR WELDED WIRE REINFORCING. WHERE VAPOR SENSITIVE ADHESIVES OR COVERINGS ARE TO BE PLACED ON SLAB ON GRADE, SEE S000 (CONCRETE - FINISH MATERIALS) FOR ADDITIONAL REQUIREMENTS AT VAPOR RETARDER AND GRANULAR FILL.
2. PROVIDE CONTROL OR CONSTRUCTION JOINTS PER 7/S301 IN SLABS ON GRADE TO DIVIDE SLAB INTO RECTANGULAR AREAS 225 SQUARE FEET OR LESS. AREAS SHALL BE APPROXIMATELY SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS MUST BE APPROVED BY THE ARCHITECT.
3. FOOTING ELEVATIONS SHOWN IN DETAILS ARE FOR CONTRACTOR CONVENIENCE AND BIDDING ONLY; ACTUAL ELEVATIONS MAY VARY IN THE FIELD. FINAL ELEVATIONS SHALL BE DETERMINED BY ON-SITE VERIFICATION BY GEOTECHNICAL ENGINEER. SEE 19/S301 FOR FOOTING DEPTH REQUIREMENTS AND RELATIONSHIPS.
REQUIREMENTS FOR STEPPED FOOTINGS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. SEE 1/S301 FOR DIMENSIONS AT FOOTING STEPS.
4. REFER TO MEPF AND CIVIL DRAWINGS FOR UNDERSLAB AND UNDERGROUND PIPING. FOOTINGS MAY BE LOWERED TO AVOID CONFLICTS. SEE 17/S301 FOR FOOTING RELATIONSHIPS WITH PIPES AND TRENCHES.
5. SEE CALLOUTS ON PLAN FOR STUD INFORMATION AT STRUCTURAL STUD WALLS.
6. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS.
7. SEE 16/S401 FOR STUD TO STUD NAILING AT ALL SHEARWALL ENDS AND INTERSECTIONS, TYP.
8. SPLICE TOP PLATES PER 1/S401 TYP.
9. SEE 11/S401 FOR LIMITATIONS AT PENETRATIONS THROUGH WOOD STUDS AND PLATES AT STRUCTURAL STUD WALLS.
10. SEE S000 FOR TYPICAL LEGEND.
11. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

SHEARWALL TABLE (ref 18/S401)

MARK	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
SWA	W3	W3	W4	W6B
SWB	W2	W2	W3	W4
SWC	2W2	-	-	-

SWx - 4x

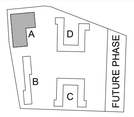
SWx INDICATES SHEARWALL MARK PER THIS TABLE. LINE INDICATES SHEARWALL EXTENT; SEE ARCH'L FOR SIDE OF STUDS ON WHICH SHEARWALL SHEATHING IS PLACED. NUMERICAL CALLOUT (4A, 4B, etc.) INDICATES CONT. ROD HOLDOWN RUN EACH END OF SHEARWALL. SEE 18/S405 FOR CONT. ROD HOLDOWN TABLE. SEE 6/S401 AT OPENINGS THAT OCCUR WITHIN SHEARWALL EXTENT.

PLAN NORTH

0' 4' 8' 16'

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
		REVISIONS

MARK	DATE	DESCRIPTION
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
		ISSUE INFORMATION

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

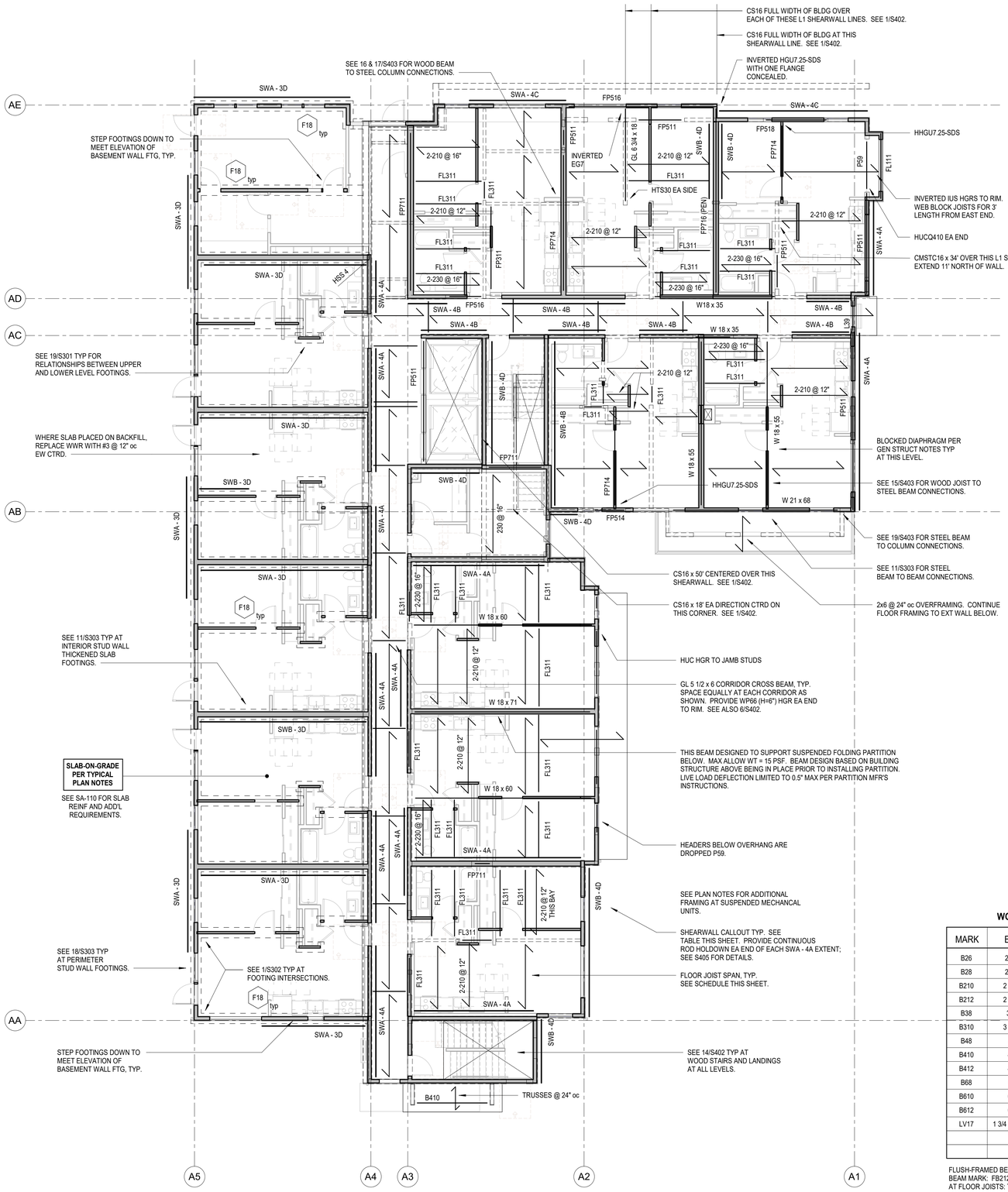
SHEET TITLE

BUILDING A - LEVEL 1 FOUNDATION PLAN

SHEET NO.

SA-110

PLOT DATE/TIME 6/19/2020 8:16:03 AM



1 BUILDING A - LEVEL 2 FRAMING PLAN

1/8" = 1'-0"

WOOD STUD WALL SCHEDULE - LEVEL 2

LOCATION	STUDS	BLOCKING/RIM AT LEVEL 2
EXTERIOR WALL - PERP to FLOOR JOISTS	2x6 @ 12"	(1) 1 3/4" LSL
EXTERIOR WALL - PARALLEL to FLOOR JOISTS	2x6 @ 16"	(1) 1 3/4" LSL
UNIT INTERIOR WALL - PERP to FLOOR JOISTS	2-2x4 @ 16", 2x6 @ 12"	(2) TJI 110 or (1) 1 3/4" LSL
UNIT INTERIOR WALL - PARALLEL to FLOOR JOISTS	2x4 @ 16", 2x6 @ 16"	SEE SW SCHEDULE
CORRIDOR WALL	2x6 @ 12"	(1) 1 3/4" LSL (SEE NOTE 7)
STAIR, ELEVATOR WALLS	2x6 @ 12"	5 1/4" PSL
DEMISING WALL (between dwelling units)	EA SIDE: 2-2x4 @ 16", 2x6 @ 16"	(1) 1 3/4" LSL EA SIDE

1. STUD SCHEDULE APPLIES TO STRUCTURAL STUD WALLS AT REFERENCED LEVEL UNLESS SPECIFICALLY NOTED ON PLAN. SEE ARCH'L FOR ACTUAL WALL THICKNESSES AND COMPLETE WALL ASSEMBLIES.
2. BLOCKING/RIM SCHEDULE APPLIES TO BLOCKING/RIMS AT REFERENCED LEVEL UNLESS SPECIFICALLY NOTED ON PLAN. SEE ALSO NOTE 4.
3. SEE PLAN NOTES AND PLAN CALLOUTS FOR BEAM REQUIREMENTS OVER OPENINGS.
4. AT SHEARWALLS, COMPARE THIS BLOCKING/RIM SCHEDULE TO SHEARWALL SCHEDULE. USE MOST STRINGENT QUANTITY/SIZE OF BLOCKING/RIM REQUIREMENT.
5. SEE SHEARWALL SCHEDULE FOR ADDITIONAL 3x STUD REQUIREMENTS.
6. AT CORRIDOR CROSS BEAM HANGERS, LAP 3' LONG 1 3/4" LSL WITH TYP CORRIDOR RIM. PROVIDE (2) ROWS OF 3 3/8" LONG SDW SCREWS @ 10" oc H AND 6" oc V FROM 3' LONG LSL TO RIM. WHERE CROSS BEAM BEARS OVER OPENING BELOW, LENGTHEN LAPPED 1 3/4" LSL TO EXTEND 3" BEYOND EACH SIDE OF OPENING.

FLOOR JOIST SCHEDULE
27 psf DEAD LOAD
40 psf LIVE LOAD

CLEAR SPAN	JOIST
14' max	11 7/8" TJI 110 @ 19.2" oc
16' max	11 7/8" TJI 210 @ 19.2" oc
17' max	11 7/8" TJI 230 @ 16" oc
18' max	11 7/8" TJI 360 @ 16" oc
20' max	11 7/8" TJI 560 @ 16" oc
22' max	11 7/8" TJI 560 @ 12" oc

SCHEDULED JOISTS ARE APPLICABLE UNLESS SPECIFICALLY NOTED ON PLAN

TYPICAL FLOOR FRAMING DETAILS

I-JOIST PARALLEL TO EXTERIOR WALL	4/S402
I-JOIST PERPENDICULAR TO EXTERIOR WALL	5/S402
I-JOIST PARALLEL TO INTERIOR WALL	9/S402
I-JOIST PERPENDICULAR TO INTERIOR WALL	10/S402
I-JOIST TO FLUSH WOOD BEAM	8/S402
I-JOIST TO DOUBLE STUD WALL	3/S402

FLOOR FRAMING PLAN NOTES

1. TYPICAL FLOOR CONSTRUCTION SHALL CONSIST OF 1 1/4" MAX GYPCRETE TOPPING (1" THICKNESS WHERE ACOUSTIC MAT SPECIFIED ON ARCH'L) OVER APA RATED SHEATHING (THICKNESS AND SPAN RATING PER GENERAL STRUCTURAL NOTES) GLUED AND NAILED TO SUPPORTING FRAMING, UON. SEE ARCH'L FOR GYPCRETE AND ACOUSTIC MAT SPECIFICATIONS.
2. FLOOR JOIST SPAN EXTENTS ARE INDICATED ON PLAN. SEE JOIST SCHEDULE AND CALLOUTS ON PLAN FOR JOIST DESIGNATIONS AND SPACINGS.
3. NAIL FLOOR SHEATHING @ 6" OC AT FRAMED PANEL EDGES AND @ 4" OC OVER SHEARWALLS BELOW, UON. NAIL SHEATHING @ 12" OC TO ALL INTERMEDIATE FRAMING MEMBERS. SHEATHING NAILS SHALL BE PER GENERAL STRUCTURAL NOTES.
4. SEE ARCH'L FOR TOP OF SHEATHING ELEVATION.
5. SEE CALLOUTS ON PLAN FOR STUD INFORMATION AT STRUCTURAL STUD WALLS.
6. HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PARALLEL TO JOISTS SHALL BE FL311, UON (EXCEPTION: AT SHEARWALLS, PROVIDE WIDER MEMBERS WHERE INDICATED ON SHEARWALL SCHEDULE). HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PERPENDICULAR TO JOISTS SHALL BE FL311 UON (THIS SUPERSEDES SW SCHEDULE RIM/BLOCKING REQUIREMENT EXCEPT AT SW TYPE 2W3 AND 2W2). ALL INTERIOR DROPPED HEADERS SHALL BE L35 AND INTERIOR FLUSH BEAMS SHALL BE FL111, UON. WHERE JOISTS ARE PERPENDICULAR TO FLUSH BEAMS/HEADERS, PROVIDE HANGERS PER GENERAL STRUCTURAL NOTES.
7. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS. MULTIPLE STUDS SHALL CONTINUE THROUGH LEVELS BELOW TO CONCRETE SLAB OR FOUNDATION. PROVIDE SOLID BLOCKING THROUGH INTERMEDIATE LEVELS; SEE 6/S401.
8. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS AND SIZES OF SUSPENDED MECHANICAL UNITS. VERIFY LOCATIONS AND WEIGHTS OF MECHANICAL UNITS WITH MECHANICAL DRAWINGS.
PROVIDE FL311 ALONG SIDES OF MECH UNITS PARALLEL TO ADJACENT FLOOR JOISTS; FL311 EXTENTS SHALL MATCH ADJACENT JOIST EXTENTS. PROVIDE FL111 ALONG SIDES OF MECH UNITS PERP TO ADJACENT FLOOR JOISTS AND AROUND SIDES OF FLOOR OPENINGS
9. SEE 16/S401 FOR STUD TO STUD NAILING AT ALL SHEARWALL ENDS AND INTERSECTIONS, TYP.
10. SPLICE TOP PLATES PER 1/S401, TYP.
11. SEE 11/S401 FOR LIMITATIONS AT PENETRATIONS THROUGH WOOD STUDS AND PLATES AT STRUCTURAL STUD WALLS.
12. SEE S000 FOR TYPICAL LEGEND.
13. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

WOOD BEAM SCHEDULE

MARK	BEAM	MARK	BEAM
B26	2 - 2 x 6	L19	1 3/4 x 9 1/2 LSL
B28	2 - 2 x 8	L111	1 3/4 x 11 7/8 LSL
B210	2 - 2 x 10	L35	3 1/2 x 5 1/2 LSL
B212	2 - 2 x 12	L37	3 1/2 x 7 1/4 LSL
B38	3-2 x 8	L39	3 1/2 x 9 1/2 LSL
B310	3 - 2 x 10	L311	3 1/2 x 11 7/8 LSL
B48	4 x 8	P39	3 1/2 x 9 1/2 PSL
B410	4 x 10	P59	5 1/4 x 9 1/2 PSL
B412	4 x 12	P79	7 x 9 1/2 PSL
B68	6 x 8	P311	3 1/2 x 11 7/8 PSL
B610	6 x 10	P511	5 1/4 x 11 7/8 PSL
B612	6 x 12	P711	7 x 11 7/8 PSL
LV17	1 3/4 x 7 1/4 LVL	P714	7 x 14 PSL
		P716	7 x 16 PSL
		P718	7 x 18 PSL

FLUSH-FRAMED BEAMS ARE NOTED WITH AN "F" PRECEDING THE BEAM MARK: FB212, FL311, etc.
AT FLOOR JOISTS: TOP OF FLUSH BEAM IS FLUSH WITH TOP OF JOISTS.
AT ROOF TRUSSES: BOTTOM OF FLUSH BEAM IS FLUSH WITH BOTTOM OF TRUSSES.

SHEARWALL TABLE (ref 18/S401)

MARK	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
SWA	W3	W3	W4	W6B
SWB	W2	W2	W3	W4
SWC	2W2	-	-	-

SWx - 4x

SWx INDICATES SHEARWALL MARK PER THIS TABLE. LINE INDICATES SHEARWALL EXTENT; SEE ARCH'L FOR SIDE OF STUDS ON WHICH SHEARWALL SHEATHING IS PLACED.
NUMERICAL CALLOUT (4A, 4B, etc.) INDICATES CONT. ROD HOLDOWN RUN EACH END OF SHEARWALL. SEE 18/S405 FOR CONT. ROD HOLDOWN TABLE. SEE 6/S401 AT OPENINGS THAT OCCUR WITHIN SHEARWALL EXTENT.

PLAN NORTH

0' 4' 8' 16'

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com

FUTURE PHASE

MICHAEL L. NOUWENS — STATE OF WASHINGTON — 24644 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
		REVISIONS

MARK	DATE	DESCRIPTION
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
		ISSUE INFORMATION

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE

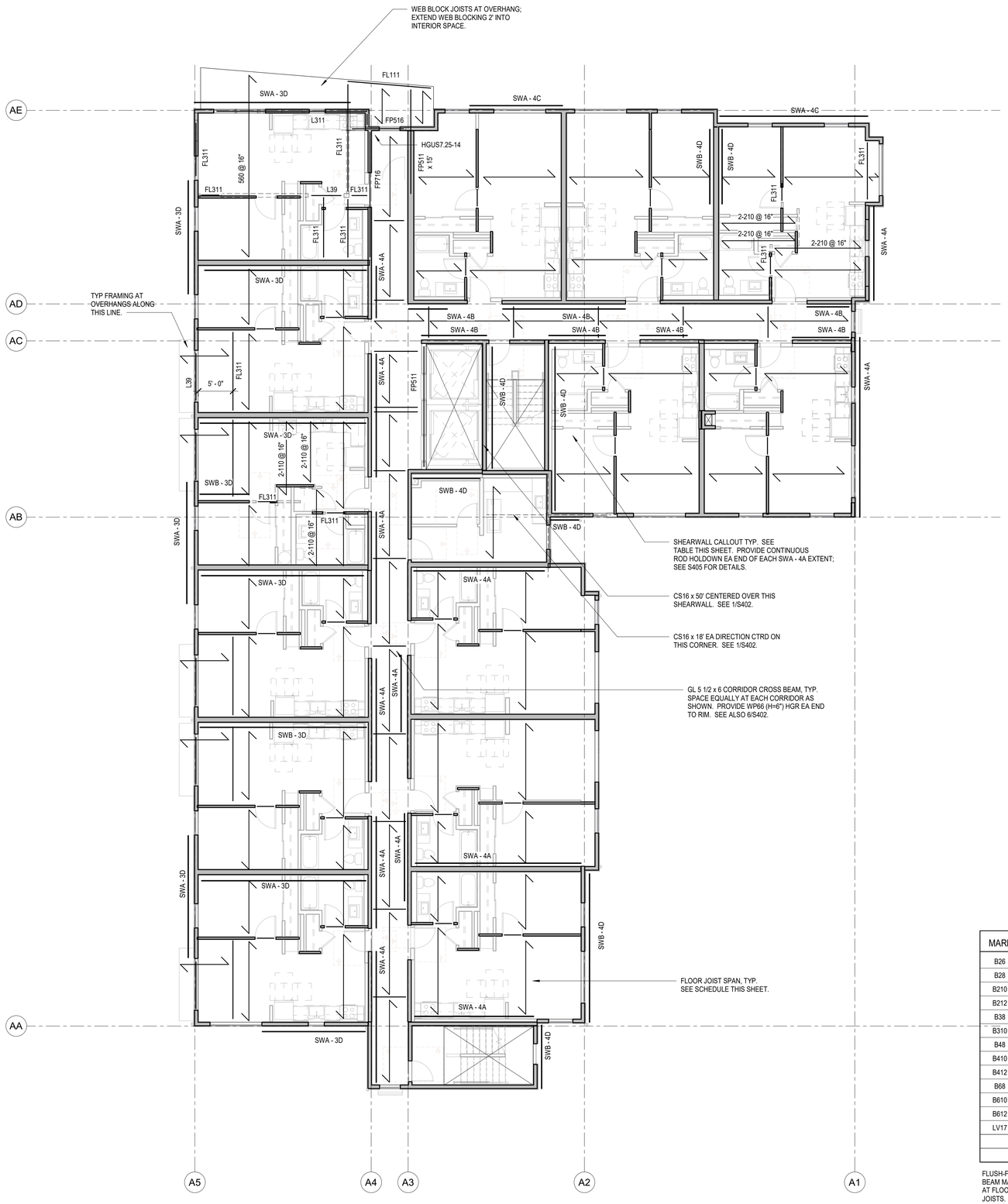
BUILDING A - LEVEL 2 FRAMING PLAN

SHEET NO.

SA-111

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

PLOT DATE/TIME 6/19/2020 8:16:04 AM



1 BUILDING A - LEVEL 3 FRAMING PLAN

1/8" = 1'-0"

WOOD STUD WALL SCHEDULE - LEVEL 3

LOCATION	STUDS	BLOCKING/RIM AT LEVEL 3
EXTERIOR WALL - PERP to FLOOR JOISTS	2x6 @ 16"	(1) 1 3/4" LSL
EXTERIOR WALL - PARALLEL to FLOOR JOISTS	2x6 @ 16"	(1) 1 3/4" LSL
UNIT INTERIOR WALL - PERP to FLOOR JOISTS	2x4 @ 12", 2x6 @ 16"	(1) TJI 110 or (1) 1 3/4" LSL
UNIT INTERIOR WALL - PARALLEL to FLOOR JOISTS	2x4 @ 16", 2x6 @ 16"	SEE SW SCHEDULE
CORRIDOR WALL	2x6 @ 16"	(1) 1 3/4" LSL (SEE NOTE 6)
STAIR, ELEVATOR WALLS	2x6 @ 16"	5 1/4" PSL
DEMISING WALL (between dwelling units)	EA SIDE: 2x4 @ 16", 2x6 @ 16"	(1) 1 3/4" LSL EA SIDE

1. STUD SCHEDULE APPLIES TO STRUCTURAL STUD WALLS AT REFERENCED LEVEL UNLESS SPECIFICALLY NOTED ON PLAN. SEE ARCH'L FOR ACTUAL WALL THICKNESSES AND COMPLETE WALL ASSEMBLIES.
2. BLOCKING/RIM SCHEDULE APPLIES TO BLOCKING/RIMS AT REFERENCED LEVEL UNLESS SPECIFICALLY NOTED ON PLAN. SEE ALSO NOTE 4.
3. SEE PLAN NOTES AND PLAN CALLOUTS FOR BEAM REQUIREMENTS OVER OPENINGS.
4. AT SHEARWALLS, COMPARE THIS BLOCKING/RIM SCHEDULE TO SHEARWALL SCHEDULE. USE MOST STRINGENT QUANTITY/SIZE OF BLOCKING/RIM REQUIREMENT.
5. SEE SHEARWALL SCHEDULE FOR ADDITIONAL 3x STUD REQUIREMENTS.
6. AT CORRIDOR CROSS BEAM HANGERS, LAP 3' LONG 1 3/4" LSL WITH TYP CORRIDOR RIM. PROVIDE (2) ROWS OF 3 3/8" LONG SDW SCREWS @ 10" oc H AND 6" oc V FROM 3' LONG LSL TO RIM. WHERE CROSS BEAM BEARS OVER OPENING BELOW, LENGTHEN LAPPED 1 3/4" LSL TO EXTEND 3" BEYOND EACH SIDE OF OPENING.

FLOOR JOIST SCHEDULE
27 psf DEAD LOAD
40 psf LIVE LOAD

CLEAR SPAN	JOIST
14' max	11 7/8" TJI 110 @ 19.2" oc
16' max	11 7/8" TJI 210 @ 19.2" oc
17' max	11 7/8" TJI 230 @ 16" oc
18' max	11 7/8" TJI 360 @ 16" oc
20' max	11 7/8" TJI 560 @ 16" oc
22' max	11 7/8" TJI 560 @ 12" oc

SCHEDULED JOISTS ARE APPLICABLE UNLESS SPECIFICALLY NOTED ON PLAN

TYPICAL FLOOR FRAMING DETAILS

I-JOIST PARALLEL TO EXTERIOR WALL	4/S402
I-JOIST PERPENDICULAR TO EXTERIOR WALL	5/S402
I-JOIST PARALLEL TO INTERIOR WALL	9/S402
I-JOIST PERPENDICULAR TO INTERIOR WALL	10/S402
I-JOIST TO FLUSH WOOD BEAM	8/S402
I-JOIST TO DOUBLE STUD WALL	3/S402

FLOOR FRAMING PLAN NOTES

1. TYPICAL FLOOR CONSTRUCTION SHALL CONSIST OF 1 1/4" MAX GYPCRETE TOPPING (1" THICKNESS WHERE ACOUSTIC MAT SPECIFIED ON ARCH'L) OVER APA RATED SHEATHING (THICKNESS AND SPAN RATING PER GENERAL STRUCTURAL NOTES) GLUED AND NAILED TO SUPPORTING FRAMING, UON. SEE ARCH'L FOR GYPCRETE AND ACOUSTIC MAT SPECIFICATIONS.
2. FLOOR JOIST SPAN EXTENTS ARE INDICATED ON PLAN. SEE JOIST SCHEDULE AND CALLOUTS ON PLAN FOR JOIST DESIGNATIONS AND SPACINGS.
3. NAIL FLOOR SHEATHING @ 6" OC AT FRAMED PANEL EDGES AND @ 4" OC OVER SHEARWALLS BELOW, UON. NAIL SHEATHING @ 12" OC TO ALL INTERMEDIATE FRAMING MEMBERS. SHEATHING NAILS SHALL BE PER GENERAL STRUCTURAL NOTES.
4. SEE ARCH'L FOR TOP OF SHEATHING ELEVATION.
5. SEE CALLOUTS ON PLAN FOR STUD INFORMATION AT STRUCTURAL STUD WALLS.
6. HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PARALLEL TO JOISTS SHALL BE FL311, UON (EXCEPTION: AT SHEARWALLS, PROVIDE WIDER MEMBERS WHERE INDICATED ON SHEARWALL SCHEDULE). HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PERPENDICULAR TO JOISTS SHALL BE FL311 UON (THIS SUPERSEDES SW SCHEDULE RIM/BLOCKING REQUIREMENT EXCEPT AT SW TYPE 2W3 AND 2W2). ALL INTERIOR DROPPED HEADERS SHALL BE L35 AND INTERIOR FLUSH BEAMS SHALL BE FL111, UON. WHERE JOISTS ARE PERPENDICULAR TO FLUSH BEAMS/HEADERS, PROVIDE HANGERS PER GENERAL STRUCTURAL NOTES.
7. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS. MULTIPLE STUDS SHALL CONTINUE THROUGH LEVELS BELOW TO CONCRETE SLAB OR FOUNDATION. PROVIDE SOLID BLOCKING THROUGH INTERMEDIATE LEVELS; SEE 8/S401.
8. SEE 16/S401 FOR STUD TO STUD NAILING AT ALL SHEARWALL ENDS AND INTERSECTIONS, TYP.
9. SPLICE TOP PLATES PER 1/S401, TYP.
10. SEE 11/S401 FOR LIMITATIONS AT PENETRATIONS THROUGH WOOD STUDS AND PLATES AT STRUCTURAL STUD WALLS.
11. SEE S000 FOR TYPICAL LEGEND.
12. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

WOOD BEAM SCHEDULE

MARK	BEAM	MARK	BEAM
B26	2 - 2 x 6	L19	1 3/4 x 9 1/2 LSL
B28	2 - 2 x 8	L111	1 3/4 x 11 7/8 LSL
B210	2 - 2 x 10	L35	3 1/2 x 5 1/2 LSL
B212	2 - 2 x 12	L37	3 1/2 x 7 1/4 LSL
B38	3-2 x 8	L39	3 1/2 x 9 1/2 LSL
B310	3 - 2 x 10	L311	3 1/2 x 11 7/8 LSL
B48	4 x 8	P39	3 1/2 x 9 1/2 PSL
B410	4 x 10	P59	5 1/4 x 9 1/2 PSL
B412	4 x 12	P79	7 x 9 1/2 PSL
B68	6 x 8	P311	3 1/2 x 11 7/8 PSL
B610	6 x 10	P511	5 1/4 x 11 7/8 PSL
B612	6 x 12	P711	7 x 11 7/8 PSL
LV17	1 3/4 x 7 1/4 LVL	P714	7 x 14 PSL
		P716	7 x 16 PSL
		P718	7 x 18 PSL

FLUSH-FRAMED BEAMS ARE NOTED WITH AN "F" PRECEDING THE BEAM MARK: FB212, FL311, etc.
AT FLOOR JOISTS: TOP OF FLUSH BEAM IS FLUSH WITH TOP OF JOISTS.
AT ROOF TRUSSES: BOTTOM OF FLUSH BEAM IS FLUSH WITH BOTTOM OF TRUSSES.

SHEARWALL TABLE (ref 18/S401)

MARK	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
SWA	W3	W3	W4	W6B
SWB	W2	W2	W3	W4
SWC	2W2	-	-	-

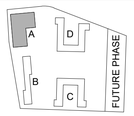
SWx - 4x

SWx INDICATES SHEARWALL MARK PER THIS TABLE. LINE INDICATES SHEARWALL EXTENT; SEE ARCH'L FOR SIDE OF STUDS ON WHICH SHEARWALL SHEATHING IS PLACED.
NUMERICAL CALLOUT (4A, 4B, etc.) INDICATES CONT. ROD HOLDOWN RUN EACH END OF SHEARWALL. SEE 18/S405 FOR CONT. ROD HOLDOWN TABLE. SEE 6/S401 AT OPENINGS THAT OCCUR WITHIN SHEARWALL EXTENT.

PLAN NORTH

0' 4' 8' 16'

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
		REVISIONS

MARK	DATE	DESCRIPTION
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
		ISSUE INFORMATION

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE

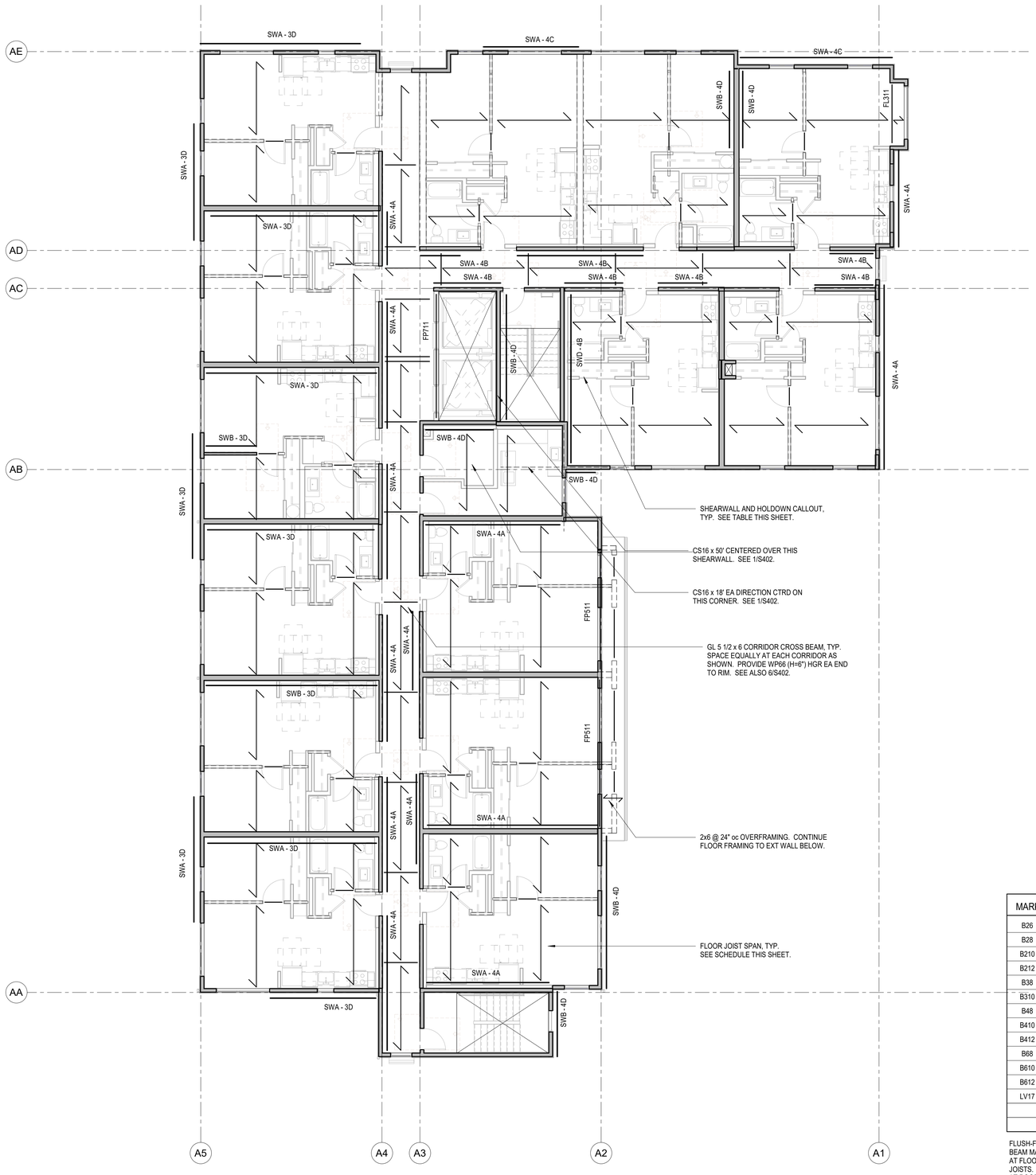
BUILDING A - LEVEL 3 FRAMING PLAN

SHEET NO.

SA-112

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

PLOT DATE/TIME: 6/19/2020 8:16:54 AM



1 BUILDING A - LEVEL 4 FRAMING PLAN

1/8" = 1'-0"

WOOD STUD WALL SCHEDULE - LEVEL 4

LOCATION	STUDS	BLOCKING/RIM AT LEVEL 4
EXTERIOR WALL - PERP to ROOF JOISTS	2x6 @ 16"	(1) 1 3/4" LSL
EXTERIOR WALL - PARALLEL to ROOF JOISTS	2x6 @ 16"	(1) 1 3/4" LSL
UNIT INTERIOR WALL - PERP to ROOF JOISTS	2x4 @ 16", 2x6 @ 16"	(1) TJI 110 or (1) 1 3/4" LSL
UNIT INTERIOR WALL - PARALLEL to ROOF JOISTS	2x4 @ 16", 2x6 @ 16"	SEE SW SCHEDULE
CORRIDOR WALL	2x6 @ 16"	(1) 1 3/4" LSL (SEE NOTE 8)
STAIR, ELEVATOR WALLS	2x6 @ 16"	5 1/4" PSL
DEMISING WALL (between dwelling units)	EA SIDE: 2x4 @ 16" oc, 2x6 @ 16"	(1) 1 3/4" LSL EA SIDE

1. STUD SCHEDULE APPLIES TO STRUCTURAL STUD WALLS AT REFERENCED LEVEL UNLESS SPECIFICALLY NOTED ON PLAN. SEE ARCH'L FOR ACTUAL WALL THICKNESSES AND COMPLETE WALL ASSEMBLIES.
2. BLOCKING/RIM SCHEDULE APPLIES TO BLOCKING/RIMS AT REFERENCED LEVEL UNLESS SPECIFICALLY NOTED ON PLAN. SEE ALSO NOTE 4.
3. SEE PLAN NOTES AND PLAN CALLOUTS FOR BEAM REQUIREMENTS OVER OPENINGS.
4. AT SHEARWALLS, COMPARE THIS BLOCKING/RIM SCHEDULE TO SHEARWALL SCHEDULE. USE MOST STRINGENT QUANTITY/SIZE OF BLOCKING/RIM REQUIREMENT.
5. SEE SHEARWALL SCHEDULE FOR ADDITIONAL 3x STUD REQUIREMENTS.
6. AT CORRIDOR CROSS BEAM HANGERS, LAP 3' LONG 1 3/4" LSL WITH TYP CORRIDOR RIM. PROVIDE (2) ROWS OF 3 3/8" LONG SDW SCREWS @ 10" oc H AND 6" oc V FROM 3' LONG LSL TO RIM. WHERE CROSS BEAM BEARS OVER OPENING BELOW, LENGTHEN LAPPED 1 3/4" LSL TO EXTEND 3" BEYOND EACH SIDE OF OPENING.

FLOOR JOIST SCHEDULE
27 psf DEAD LOAD
40 psf LIVE LOAD

CLEAR SPAN	JOIST
14' max	11 7/8" TJI 110 @ 19.2" oc
16' max	11 7/8" TJI 210 @ 19.2" oc
17' max	11 7/8" TJI 230 @ 16" oc
18' max	11 7/8" TJI 360 @ 16" oc
20' max	11 7/8" TJI 560 @ 16" oc
22' max	11 7/8" TJI 560 @ 12" oc

SCHEDULED JOISTS ARE APPLICABLE UNLESS SPECIFICALLY NOTED ON PLAN

TYPICAL FLOOR FRAMING DETAILS

I-JOIST PARALLEL TO EXTERIOR WALL	4/S402
I-JOIST PERPENDICULAR TO EXTERIOR WALL	5/S402
I-JOIST PARALLEL TO INTERIOR WALL	9/S402
I-JOIST PERPENDICULAR TO INTERIOR WALL	10/S402
I-JOIST TO FLUSH WOOD BEAM	8/S402
I-JOIST TO DOUBLE STUD WALL	3/S402

FLOOR FRAMING PLAN NOTES

1. TYPICAL FLOOR CONSTRUCTION SHALL CONSIST OF 1 1/4" MAX GYPCRETE TOPPING (1" THICKNESS WHERE ACOUSTIC MAT SPECIFIED ON ARCH'L) OVER APA RATED SHEATHING (THICKNESS AND SPAN RATING PER GENERAL STRUCTURAL NOTES) GLUED AND NAILED TO SUPPORTING FRAMING, UON. SEE ARCH'L FOR GYPCRETE AND ACOUSTIC MAT SPECIFICATIONS.
2. FLOOR JOIST SPAN EXTENTS ARE INDICATED ON PLAN. SEE JOIST SCHEDULE AND CALLOUTS ON PLAN FOR JOIST DESIGNATIONS AND SPACINGS.
3. NAIL FLOOR SHEATHING @ 6" OC AT FRAMED PANEL EDGES AND @ 4" OC OVER SHEARWALLS BELOW, UON. NAIL SHEATHING @ 12" OC TO ALL INTERMEDIATE FRAMING MEMBERS. SHEATHING NAILS SHALL BE PER GENERAL STRUCTURAL NOTES.
4. SEE ARCH'L FOR TOP OF SHEATHING ELEVATION.
5. SEE CALLOUTS ON PLAN FOR STUD INFORMATION AT STRUCTURAL STUD WALLS.
6. HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PARALLEL TO JOISTS SHALL BE FL311, UON (EXCEPTION: AT SHEARWALLS, PROVIDE WIDER MEMBERS WHERE INDICATED ON SHEARWALL SCHEDULE). HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PERPENDICULAR TO JOISTS SHALL BE FL311 UON (THIS SUPERSEDES SW SCHEDULE RIM/BLOCKING REQUIREMENT EXCEPT AT SW TYPE 2W3 AND 2W2). ALL INTERIOR DROPPED HEADERS SHALL BE L35 AND INTERIOR FLUSH BEAMS SHALL BE FL111, UON. WHERE JOISTS ARE PERPENDICULAR TO FLUSH BEAMS/HEADERS, PROVIDE HANGERS PER GENERAL STRUCTURAL NOTES.
7. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS. MULTIPLE STUDS SHALL CONTINUE THROUGH LEVELS BELOW TO CONCRETE SLAB OR FOUNDATION. PROVIDE SOLID BLOCKING THROUGH INTERMEDIATE LEVELS; SEE 8/S401.
8. SEE 16/S401 FOR STUD TO STUD NAILING AT ALL SHEARWALL ENDS AND INTERSECTIONS, TYP.
9. SPLICE TOP PLATES PER 1/S401, TYP.
10. SEE 11/S401 FOR LIMITATIONS AT PENETRATIONS THROUGH WOOD STUDS AND PLATES AT STRUCTURAL STUD WALLS.
11. SEE S000 FOR TYPICAL LEGEND.
12. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

WOOD BEAM SCHEDULE

MARK	BEAM	MARK	BEAM
B26	2 - 2 x 6	L19	1 3/4 x 9 1/2 LSL
B28	2 - 2 x 8	L111	1 3/4 x 11 7/8 LSL
B210	2 - 2 x 10	L35	3 1/2 x 5 1/2 LSL
B212	2 - 2 x 12	L37	3 1/2 x 7 1/4 LSL
B38	3-2 x 8	L39	3 1/2 x 9 1/2 LSL
B310	3 - 2 x 10	L311	3 1/2 x 11 7/8 LSL
B48	4 x 8	P39	3 1/2 x 9 1/2 PSL
B410	4 x 10	P59	5 1/4 x 9 1/2 PSL
B412	4 x 12	P79	7 x 9 1/2 PSL
B68	6 x 8	P311	3 1/2 x 11 7/8 PSL
B610	6 x 10	P511	5 1/4 x 11 7/8 PSL
B612	6 x 12	P711	7 x 11 7/8 PSL
LV17	1 3/4 x 7 1/4 LVL	P714	7 x 14 PSL
		P716	7 x 16 PSL
		P718	7 x 18 PSL

FLUSH-FRAMED BEAMS ARE NOTED WITH AN "F" PRECEDING THE BEAM MARK: FB212, FL311, etc.
AT FLOOR JOISTS: TOP OF FLUSH BEAM IS FLUSH WITH TOP OF JOISTS.
AT ROOF TRUSSES: BOTTOM OF FLUSH BEAM IS FLUSH WITH BOTTOM OF TRUSSES.

SHEARWALL TABLE (ref 18/S401)

MARK	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
SWA	W3	W3	W4	W6B
SWB	W2	W2	W3	W4
SWC	2W2	-	-	-

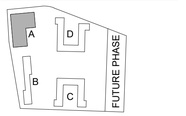
SWx - 4x

SWx INDICATES SHEARWALL MARK PER THIS TABLE. LINE INDICATES SHEARWALL EXTENT; SEE ARCH'L FOR SIDE OF STUDS ON WHICH SHEARWALL SHEATHING IS PLACED.
NUMERICAL CALLOUT (4A, 4B, etc.) INDICATES CONT. ROD HOLDOWN RUN EACH END OF SHEARWALL. SEE 18/S405 FOR CONT. ROD HOLDOWN TABLE. SEE 6/S401 AT OPENINGS THAT OCCUR WITHIN SHEARWALL EXTENT.

PLAN NORTH

0' 4' 8' 16'

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
		REVISIONS

MARK	DATE	DESCRIPTION
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
		ISSUE INFORMATION

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE

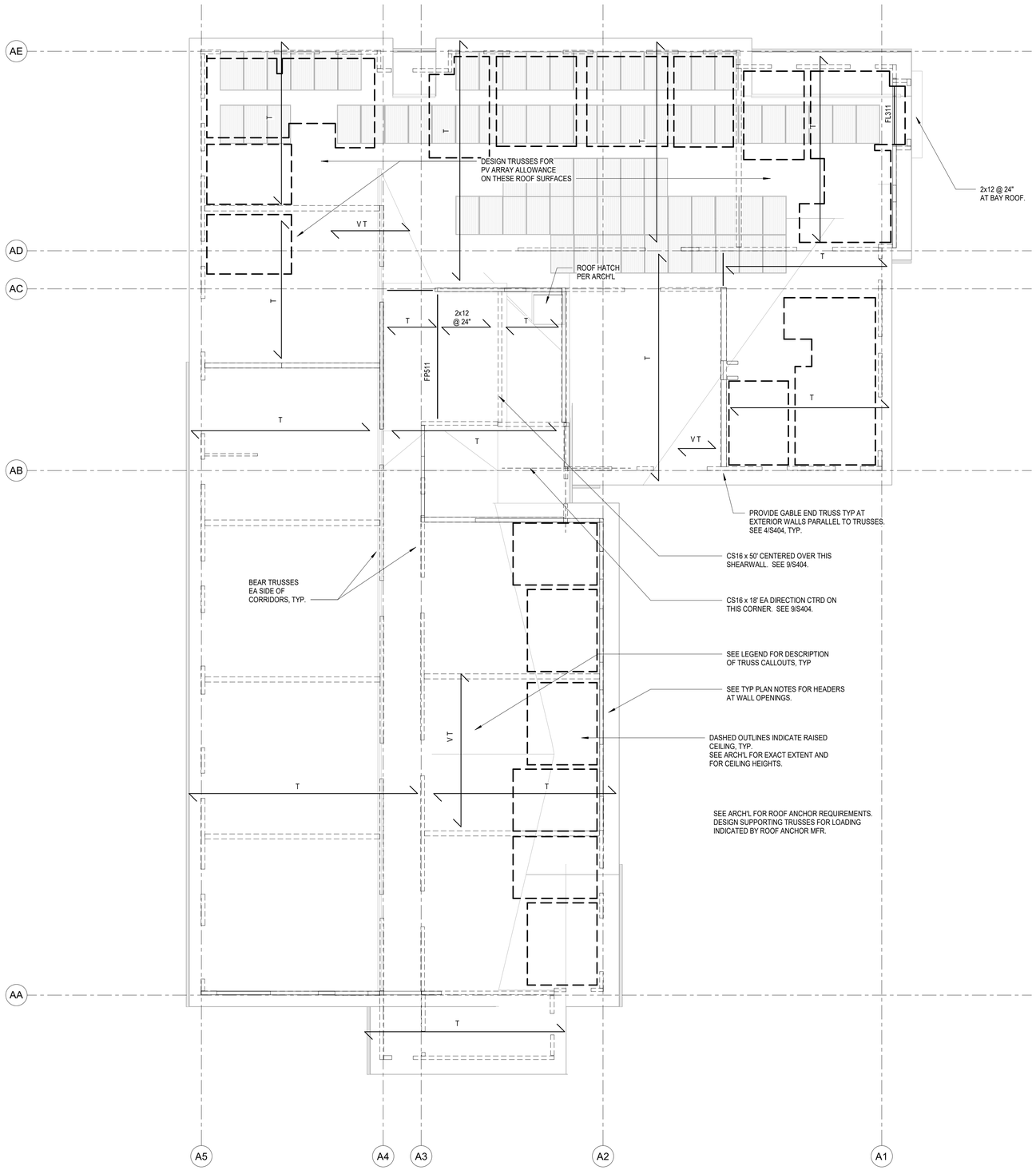
BUILDING A - LEVEL 4 FRAMING PLAN

SHEET NO.

SA-113

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

PLOT DATE/TIME: 6/19/2020 8:16:56 AM



1 BUILDING A - ROOF FRAMING PLAN

1/8" = 1'-0"

PLAN NORTH

0' 4' 8' 16'

TYPICAL ROOF FRAMING DETAILS

ROOF TRUSS PARALLEL TO EXTERIOR WALL	4/S404
ROOF TRUSS PERPENDICULAR TO EXTERIOR WALL	5/S404
ROOF DRAG TRUSS AT PARALLEL SHEARWALL	1/S404
ROOF TRUSS PERPENDICULAR TO INTERIOR WALL	9/S404
ROOF TRUSS TO FLUSH WOOD BEAM	16/S404
ROOF TRUSS TO NON-STRUCTURAL WALL	6/S404
VALLEY TRUSS DETAILS	11, 12, 13/S404

WOOD BEAM SCHEDULE

MARK	BEAM	MARK	BEAM
B26	2 - 2 x 6	L19	1 3/4 x 9 1/2 LSL
B28	2 - 2 x 8	L111	1 3/4 x 11 7/8 LSL
B210	2 - 2 x 10	L35	3 1/2 x 5 1/2 LSL
B212	2 - 2 x 12	L37	3 1/2 x 7 1/4 LSL
B38	3-2 x 8	L39	3 1/2 x 9 1/2 LSL
B310	3 - 2 x 10	L311	3 1/2 x 11 7/8 LSL
B48	4 x 8	P39	3 1/2 x 9 1/2 PSL
B410	4 x 10	P59	5 1/4 x 9 1/2 PSL
B412	4 x 12	P79	7 x 9 1/2 PSL
B68	6 x 8	P311	3 1/2 x 11 7/8 PSL
B610	6 x 10	P511	5 1/4 x 11 7/8 PSL
B612	6 x 12	P711	7 x 11 7/8 PSL
LV17	1 3/4 x 7 1/4 LVL	P714	7 x 14 PSL
		P716	7 x 16 PSL
		P718	7 x 18 PSL

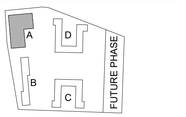
FLUSH-FRAMED BEAMS ARE NOTED WITH AN "F" PRECEDING THE BEAM MARK: FB212, FL311, etc.
AT FLOOR JOISTS: TOP OF FLUSH BEAM IS FLUSH WITH TOP OF JOISTS.
AT ROOF TRUSSES: BOTTOM OF FLUSH BEAM IS FLUSH WITH BOTTOM OF TRUSSES.

ROOF FRAMING PLAN NOTES

1. TYPICAL ROOF CONSTRUCTION SHALL CONSIST OF APA RATED SHEATHING (THICKNESS AND SPAN RATING PER GENERAL STRUCTURAL NOTES) OVER PRE-MANUFACTURED WOOD TRUSSES @ 24" oc MAX, UON.
2. NAIL ROOF SHEATHING @ 6" OC AT FRAMED PANEL EDGES AND @ 4" OC OVER SHEARWALLS BELOW, UON. NAIL SHEATHING @ 12" OC TO ALL INTERMEDIATE FRAMING MEMBERS. SHEATHING NAILS SHALL BE PER GENERAL STRUCTURAL NOTES.
3. SEE ARCH'L FOR ROOF SHEATHING ELEVATIONS, EXACT SLOPES AND ROOF DRAINAGE REQUIREMENTS. ROOF SHEATHING PER PLAN NOTE 1 SHALL BE CONTINUOUS BELOW OVERFRAMED AREAS.
4. HEADERS OVER OPENINGS IN EXTERIOR WALLS SHALL BE: B28 AT OPENINGS 4' OR LESS, B38 AT OPENINGS 4'-1" TO 5'-6" AND L37 AT LARGER OPENINGS UON ON PLAN.
5. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS. PROVIDE (3) BEARING STUDS BELOW BEARING LOCATIONS OF GIRDER TRUSSES AND HIP MASTERS, UON. MULTIPLE STUDS SHALL CONTINUE THROUGH LEVELS BELOW TO CONCRETE FOUNDATION. PROVIDE SOLID BLOCKING THROUGH INTERMEDIATE LEVELS; SEE 8/S401.
6. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS AND SIZES OF ROOF OPENINGS AND MECHANICAL UNITS. VERIFY LOCATIONS AND WEIGHTS OF MECHANICAL UNITS WITH MECHANICAL DRAWINGS.
ROOF TRUSS SUPPLIER SHALL PROVIDE TRUSSES ALONG SIDES OF OPENINGS AND MECH UNITS ADEQUATE TO SUPPORT TRIBUTARY ROOF LOADS IN ADDITION TO LOADING FROM MECHANICAL EQUIPMENT. PROVIDE FL111 ALONG SIDES OF MECH OPENINGS AND UNITS WHERE TRUSSES DO NOT OCCUR. TRUSSES SUPPORTING FL111 MEMBERS SHALL HAVE SOLID BLOCKING AS REQUIRED TO RECEIVE HANGER FASTENERS.
7. SPLICE TOP PLATES PER 1/S401, TYP.
8. SEE S000 FOR TYPICAL LEGEND.
9. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
REVISIONS		
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
ISSUE INFORMATION		

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

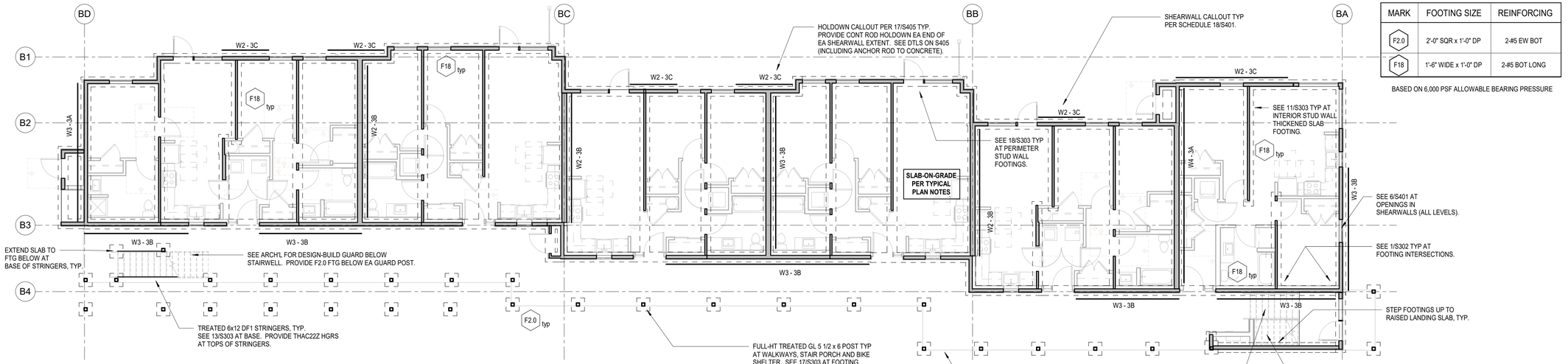
SHEET TITLE

BUILDING A - ROOF FRAMING PLAN

SHEET NO.

SA-114

PLOT DATE/TIME 6/19/2020 8:16:56 AM



1 BUILDING B - LEVEL 1 FOUNDATION PLAN

1/8" = 1'-0"

FOOTING SCHEDULE

MARK	FOOTING SIZE	REINFORCING
F2.0	2'-0" SQR x 1'-0" DP	2-#5 EW BOT
F18	1'-6" WIDE x 1'-0" DP	2-#5 BOT LONG

BASED ON 6,000 PSF ALLOWABLE BEARING PRESSURE

WOOD BEAM SCHEDULE

MARK	BEAM	MARK	BEAM
B26	2 - 2 x 6	L19	1 3/4 x 9 1/2 LSL
B28	2 - 2 x 8	L111	1 3/4 x 11 7/8 LSL
B210	2 - 2 x 10	L35	3 1/2 x 5 1/2 LSL
B212	2 - 2 x 12	L37	3 1/2 x 7 1/4 LSL
B38	3-2 x 8	L39	3 1/2 x 9 1/2 LSL
B310	3 - 2 x 10	L311	3 1/2 x 11 7/8 LSL
B48	4 x 8	P39	3 1/2 x 9 1/2 PSL
B410	4 x 10	P59	5 1/4 x 9 1/2 PSL
B412	4 x 12	P79	7 x 9 1/2 PSL
B68	6 x 8	P311	3 1/2 x 11 7/8 PSL
B610	6 x 10	P511	5 1/4 x 11 7/8 PSL
B612	6 x 12	P711	7 x 11 7/8 PSL
LV17	1 3/4 x 7 1/4 LVL	P37	P39 RIPPED TO 7 1/4" DEPTH
		P57	P59 RIPPED TO 7 1/4" DEPTH

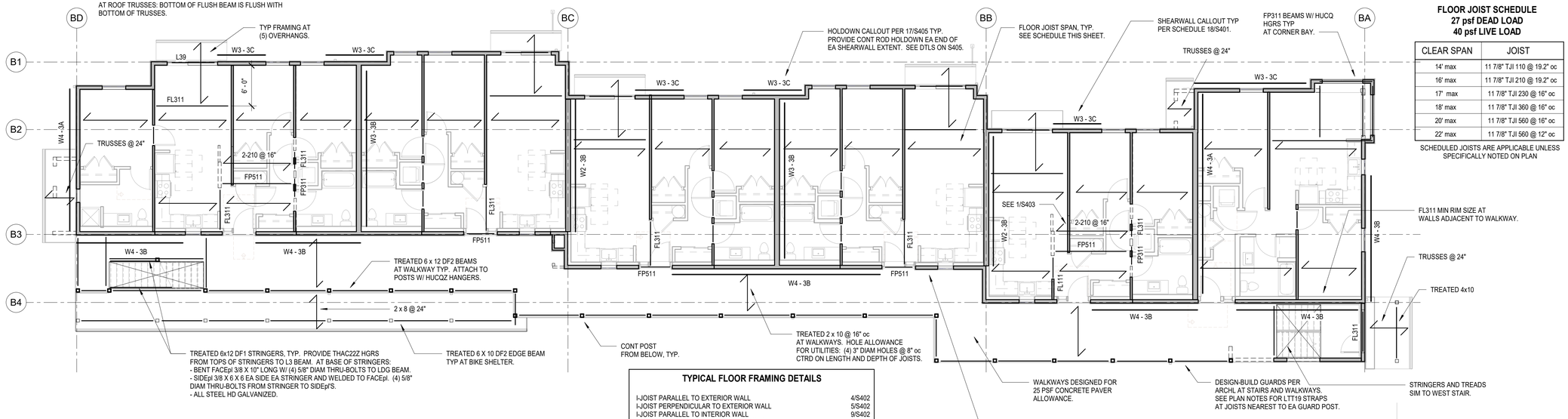
FLUSH-FRAMED BEAMS ARE NOTED WITH AN "F" PRECEDING THE BEAM MARK: FB212, FL311, etc.
AT FLOOR JOISTS: TOP OF FLUSH BEAM IS FLUSH WITH TOP OF JOISTS.
AT ROOF TRUSSES: BOTTOM OF FLUSH BEAM IS FLUSH WITH BOTTOM OF TRUSSES.

ELEVATED FLOOR FRAMING PLAN NOTES

1. TYPICAL FLOOR CONSTRUCTION SHALL CONSIST OF 1 1/4" MAX GYPCRETE TOPPING (1" THICKNESS WHERE ACOUSTIC MAT SPECIFIED ON ARCH'L) OVER APA RATED SHEATHING (THICKNESS AND SPAN RATING PER GENERAL STRUCTURAL NOTES) GLUED AND NAILED TO SUPPORTING FRAMING, UON. SEE ARCH'L FOR GYPCRETE AND ACOUSTIC MAT SPECIFICATIONS.
2. FLOOR JOIST SPAN EXTENTS ARE INDICATED ON PLAN. SEE JOIST SCHEDULE AND CALLOUTS ON PLAN FOR JOIST DESIGNATIONS AND SPACINGS.
3. NAIL FLOOR SHEATHING @ 6" OC AT FRAMED PANEL EDGES AND @ 4" OC OVER SHEARWALLS BELOW, UON. NAIL SHEATHING @ 12" OC TO ALL INTERMEDIATE FRAMING MEMBERS. SHEATHING NAILS SHALL BE PER GENERAL STRUCTURAL NOTES.
4. SEE ARCH'L FOR TOP OF SHEATHING ELEVATION.
5. SEE CALLOUTS ON PLAN FOR STUD INFORMATION AT STRUCTURAL STUD WALLS.
6. HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PARALLEL TO JOISTS SHALL BE FL311, UON (EXCEPTION: AT SHEARWALLS, PROVIDE WIDER MEMBERS WHERE INDICATED ON SHEARWALL SCHEDULE). HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PERPENDICULAR TO JOISTS SHALL BE FL311 UON (THIS SUPERSEDES SW SCHEDULE RIM/BLOCKING REQUIREMENT EXCEPT AT SW TYPE 2W3 AND 2W2). ALL INTERIOR DROPPED HEADERS SHALL BE L35 AND INTERIOR FLUSH BEAMS SHALL BE FL111, UON. WHERE JOISTS ARE PERPENDICULAR TO FLUSH BEAMS/HEADERS, PROVIDE HANGERS PER GENERAL STRUCTURAL NOTES.
7. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS. MULTIPLE STUDS SHALL CONTINUE THROUGH LEVELS BELOW TO CONCRETE SLAB OR FOUNDATION. PROVIDE SOLID BLOCKING THROUGH INTERMEDIATE LEVELS; SEE 8/S401.
8. SEE 16/S401 FOR STUD TO STUD NAILING AT ALL SHEARWALL ENDS AND INTERSECTIONS, TYP.
9. SPLICE TOP PLATES PER 1/S401, TYP.
10. SEE 11/S401 FOR LIMITATIONS AT PENETRATIONS THROUGH WOOD STUDS AND PLATES AT STRUCTURAL STUD WALLS.
11. AT (2) WALKWAY JOISTS NEAREST TO EACH GUARD POST, PROVIDE LTT19 T & B FROM EACH JOIST TO WALKWAY EDGE BEAM. PROVIDE 1/2" X 2 1/2" LAG SCREWS FROM LTT TO EDGE BEAM.
12. SEE S000 FOR TYPICAL LEGEND.
13. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

FOUNDATION PLAN NOTES

1. SLAB ON GRADE SHALL BE 4" THICK WITH 6x6 W1.4 x W1.4 WELDED WIRE REINFORCING AT CENTER, UON. PROVIDE VAPOR RETARDER (THICKNESS PER ARCH'L) BELOW SLAB AT INTERIOR SPACES. PREPARE SUBGRADE AND PROVIDE FREE-DRAINING GRANULAR FILL IN ACCORDANCE WITH GEOTECHNICAL REPORT. SEE ARCH'L FOR SLAB SLOPES AND STEPS AND FOR TOP OF SLAB ELEVATIONS. FIBERMESH, ADDED PER MFR'S RECOMMENDATIONS, CAN BE SUBSTITUTED FOR WELDED WIRE REINFORCING. WHERE VAPOR SENSITIVE ADHESIVES OR COVERINGS ARE TO BE PLACED ON SLAB ON GRADE, SEE S000 (CONCRETE - FINISH MATERIALS) FOR ADDITIONAL REQUIREMENTS AT VAPOR RETARDER AND GRANULAR FILL.
2. PROVIDE CONTROL OR CONSTRUCTION JOINTS PER 7/S301 IN SLABS ON GRADE TO DIVIDE SLAB INTO RECTANGULAR AREAS 225 SQUARE FEET OR LESS. AREAS SHALL BE APPROXIMATELY SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS MUST BE APPROVED BY THE ARCHITECT.
3. FOOTING ELEVATIONS SHOWN IN DETAILS ARE FOR CONTRACTOR CONVENIENCE AND BIDDING ONLY; ACTUAL ELEVATIONS MAY VARY IN THE FIELD. FINAL ELEVATIONS SHALL BE DETERMINED BY ON-SITE VERIFICATION BY GEOTECHNICAL ENGINEER. SEE 19/S301 FOR FOOTING DEPTH REQUIREMENTS AND RELATIONSHIPS. REQUIREMENTS FOR STEPPED FOOTINGS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. SEE 1/S301 FOR DIMENSIONS AT FOOTING STEPS.
4. REFER TO MEPF AND CIVIL DRAWINGS FOR UNDERSLAB AND UNDERGROUND PIPING. FOOTINGS MAY BE LOWERED TO AVOID CONFLICTS. SEE 17/S301 FOR FOOTING RELATIONSHIPS WITH PIPES AND TRENCHES.
5. SEE CALLOUTS ON PLAN FOR STUD INFORMATION AT STRUCTURAL STUD WALLS.
6. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS.
7. SEE 16/S401 FOR STUD TO STUD NAILING AT ALL SHEARWALL ENDS AND INTERSECTIONS, TYP.
8. SPLICE TOP PLATES PER 1/S401 TYP.
9. SEE 11/S401 FOR LIMITATIONS AT PENETRATIONS THROUGH WOOD STUDS AND PLATES AT STRUCTURAL STUD WALLS.
10. SEE S000 FOR TYPICAL LEGEND.
11. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.



FLOOR JOIST SCHEDULE
27 psf DEAD LOAD
40 psf LIVE LOAD

CLEAR SPAN	JOIST
14' max	11 7/8" TJI 110 @ 19.2" oc
16' max	11 7/8" TJI 210 @ 19.2" oc
17' max	11 7/8" TJI 230 @ 16" oc
18' max	11 7/8" TJI 360 @ 16" oc
20' max	11 7/8" TJI 560 @ 16" oc
22' max	11 7/8" TJI 560 @ 12" oc

SCHEDULED JOISTS ARE APPLICABLE UNLESS SPECIFICALLY NOTED ON PLAN

TYPICAL FLOOR FRAMING DETAILS

I-JOIST PARALLEL TO EXTERIOR WALL	4/S402
I-JOIST PERPENDICULAR TO EXTERIOR WALL	5/S402
I-JOIST PARALLEL TO INTERIOR WALL	9/S402
I-JOIST PERPENDICULAR TO INTERIOR WALL	10/S402
I-JOIST TO FLUSH WOOD BEAM	8/S402
I-JOIST TO DOUBLE STUD WALL	3/S402

2 BUILDING B - LEVEL 2 FRAMING PLAN

1/8" = 1'-0"

PLAN NORTH

0' 4' 8' 16'

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com

FUTURE PHASE

06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION

REVISIONS

C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN

MARK	DATE	DESCRIPTION

ISSUE INFORMATION

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE

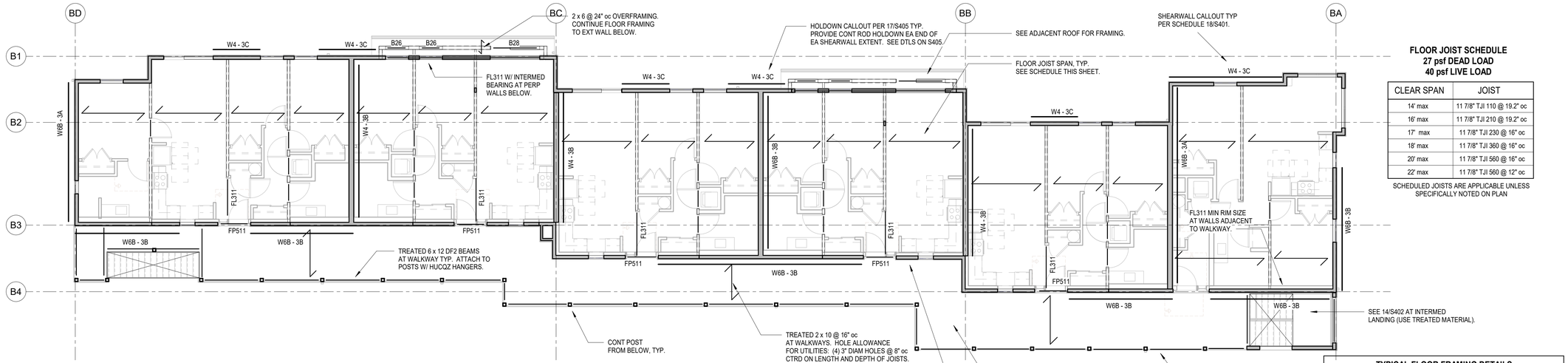
BUILDING B - LEVEL 1 FOUNDATION PLAN and LEVEL 2 FRAMING PLAN

SHEET NO.

SB-110

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

PLOT DATE/TIME 6/19/2020 8:26:39 AM



FLOOR JOIST SCHEDULE
27 psf DEAD LOAD
40 psf LIVE LOAD

CLEAR SPAN	JOIST
14' max	11 7/8" TJI 110 @ 19.2" oc
16' max	11 7/8" TJI 210 @ 19.2" oc
17' max	11 7/8" TJI 230 @ 16" oc
18' max	11 7/8" TJI 360 @ 16" oc
20' max	11 7/8" TJI 560 @ 16" oc
22' max	11 7/8" TJI 560 @ 12" oc

SCHEDULED JOISTS ARE APPLICABLE UNLESS SPECIFICALLY NOTED ON PLAN

TYPICAL FLOOR FRAMING DETAILS

I-JOIST PARALLEL TO EXTERIOR WALL	4/S402
I-JOIST PERPENDICULAR TO EXTERIOR WALL	5/S402
I-JOIST PARALLEL TO INTERIOR WALL	9/S402
I-JOIST PERPENDICULAR TO INTERIOR WALL	10/S402
I-JOIST TO FLUSH WOOD BEAM	8/S402
I-JOIST TO DOUBLE STUD WALL	3/S402

1 BUILDING B - LEVEL 3 FRAMING PLAN

1/8" = 1'-0"

WOOD BEAM SCHEDULE

MARK	BEAM	MARK	BEAM
B26	2 - 2 x 6	L19	1 3/4 x 9 1/2 LSL
B28	2 - 2 x 8	L111	1 3/4 x 11 7/8 LSL
B210	2 - 2 x 10	L35	3 1/2 x 5 1/2 LSL
B212	2 - 2 x 12	L37	3 1/2 x 7 1/4 LSL
B38	3-2 x 8	L39	3 1/2 x 9 1/2 LSL
B310	3 - 2 x 10	L311	3 1/2 x 11 7/8 LSL
B48	4 x 8	P39	3 1/2 x 9 1/2 PSL
B410	4 x 10	P59	5 1/4 x 9 1/2 PSL
B412	4 x 12	P79	7 x 9 1/2 PSL
B68	6 x 8	P311	3 1/2 x 11 7/8 PSL
B610	6 x 10	P511	5 1/4 x 11 7/8 PSL
B612	6 x 12	P711	7 x 11 7/8 PSL
LV17	1 3/4 x 7 1/4 LVL	P37	P39 RIPPED TO 7 1/4" DEPTH
		P57	P59 RIPPED TO 7 1/4" DEPTH

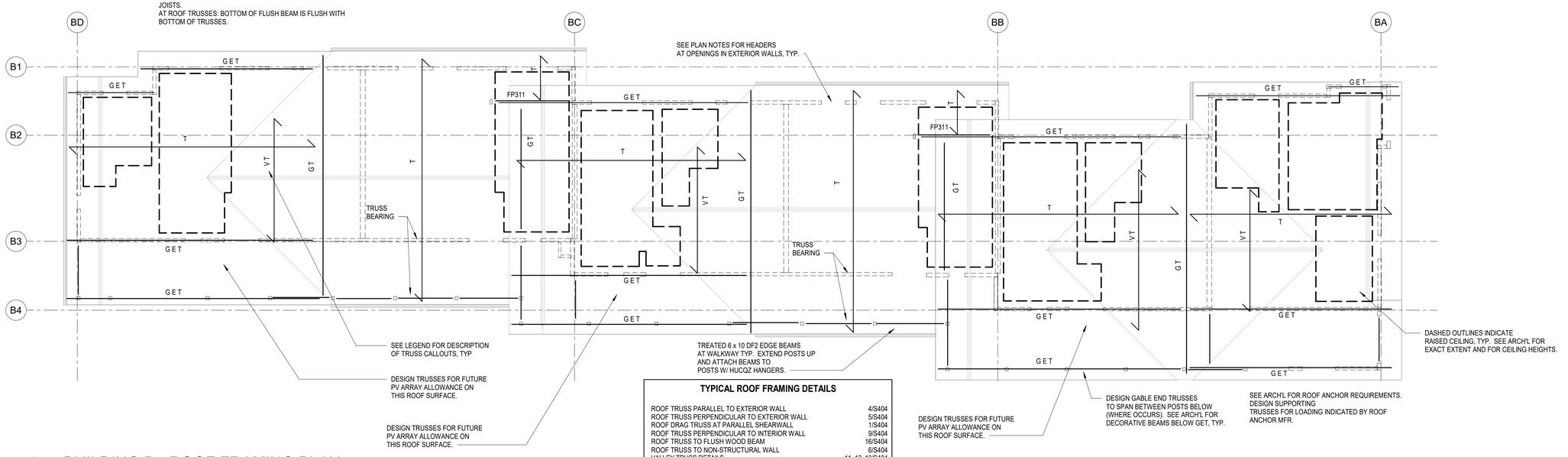
FLUSH-FRAMED BEAMS ARE NOTED WITH AN "F" PRECEDING THE BEAM MARK: FB212, FL311, etc.
AT FLOOR JOISTS: TOP OF FLUSH BEAM IS FLUSH WITH TOP OF JOISTS.
AT ROOF TRUSSES: BOTTOM OF FLUSH BEAM IS FLUSH WITH BOTTOM OF TRUSSES.

ELEVATED FLOOR FRAMING PLAN NOTES

1. TYPICAL FLOOR CONSTRUCTION SHALL CONSIST OF 1 1/4" MAX GYPCRETE TOPPING (1" THICKNESS WHERE ACOUSTIC MAT SPECIFIED ON ARCH'L) OVER APA RATED SHEATHING (THICKNESS AND SPAN RATING PER GENERAL STRUCTURAL NOTES) GLUED AND NAILED TO SUPPORTING FRAMING, UON. SEE ARCH'L FOR GYPCRETE AND ACOUSTIC MAT SPECIFICATIONS.
2. FLOOR JOIST SPAN EXTENTS ARE INDICATED ON PLAN. SEE JOIST SCHEDULE AND CALLOUTS ON PLAN FOR JOIST DESIGNATIONS AND SPACINGS.
3. NAIL FLOOR SHEATHING @ 6" OC AT FRAMED PANEL EDGES AND @ 4" OC OVER SHEARWALLS BELOW, UON. NAIL SHEATHING @ 12" OC TO ALL INTERMEDIATE FRAMING MEMBERS. SHEATHING NAILS SHALL BE PER GENERAL STRUCTURAL NOTES.
4. SEE ARCH'L FOR TOP OF SHEATHING ELEVATION.
5. SEE CALLOUTS ON PLAN FOR STUD INFORMATION AT STRUCTURAL STUD WALLS.
6. HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PARALLEL TO JOISTS SHALL BE FL311, UON (EXCEPTION: AT SHEARWALLS, PROVIDE WIDER MEMBERS WHERE INDICATED ON SHEARWALL SCHEDULE). HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PERPENDICULAR TO JOISTS SHALL BE FL311 UON (THIS SUPERSEDES SW SCHEDULE RIM/BLOCKING REQUIREMENT EXCEPT AT SW TYPE 2W3 AND 2W2). ALL INTERIOR DROPPED HEADERS SHALL BE L35 AND INTERIOR FLUSH BEAMS SHALL BE FL111, UON. WHERE JOISTS ARE PERPENDICULAR TO FLUSH BEAMS/HEADERS, PROVIDE HANGERS PER GENERAL STRUCTURAL NOTES.
7. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS. MULTIPLE STUDS SHALL CONTINUE THROUGH LEVELS BELOW TO CONCRETE SLAB OR FOUNDATION. PROVIDE SOLID BLOCKING THROUGH INTERMEDIATE LEVELS; SEE 8/S401.
8. SEE 16/S401 FOR STUD TO STUD NAILING AT ALL SHEARWALL ENDS AND INTERSECTIONS, TYP.
9. SPLICE TOP PLATES PER 1/S401, TYP.
10. SEE 11/S401 FOR LIMITATIONS AT PENETRATIONS THROUGH WOOD STUDS AND PLATES AT STRUCTURAL STUD WALLS.
11. AT (2) WALKWAY JOISTS NEAREST TO EACH GUARD POST, PROVIDE LTT19 T & B FROM EACH JOIST TO WALKWAY EDGE BEAM. PROVIDE 1/2" X 2 1/2" LAG SCREWS FROM LTT TO EDGE BEAM.
12. SEE S000 FOR TYPICAL LEGEND.
13. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

ROOF FRAMING PLAN NOTES

1. TYPICAL ROOF CONSTRUCTION SHALL CONSIST OF APA RATED SHEATHING (THICKNESS AND SPAN RATING PER GENERAL STRUCTURAL NOTES) OVER PRE-MANUFACTURED WOOD TRUSSES @ 24" oc MAX, UON.
2. NAIL ROOF SHEATHING @ 6" OC AT FRAMED PANEL EDGES AND @ 4" OC OVER SHEARWALLS BELOW, UON. NAIL SHEATHING @ 12" OC TO ALL INTERMEDIATE FRAMING MEMBERS. SHEATHING NAILS SHALL BE PER GENERAL STRUCTURAL NOTES.
3. SEE ARCH'L FOR ROOF SHEATHING ELEVATIONS, EXACT SLOPES AND ROOF DRAINAGE REQUIREMENTS. ROOF SHEATHING PER PLAN NOTE 1 SHALL BE CONTINUOUS BELOW OVERFRAMED AREAS.
4. HEADERS OVER OPENINGS IN EXTERIOR WALLS SHALL BE: B28 AT OPENINGS 4' OR LESS, B38 AT OPENINGS 4'-1" TO 5'-6" AND L37 AT LARGER OPENINGS UON ON PLAN.
5. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS. PROVIDE (3) BEARING STUDS BELOW BEARING LOCATIONS OF GIRDER TRUSSES AND HIP MASTERS, UON. MULTIPLE STUDS SHALL CONTINUE THROUGH LEVELS BELOW TO CONCRETE FOUNDATION. PROVIDE SOLID BLOCKING THROUGH INTERMEDIATE LEVELS; SEE 8/S401.
6. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS AND SIZES OF ROOF OPENINGS AND MECHANICAL UNITS. VERIFY LOCATIONS AND WEIGHTS OF MECHANICAL UNITS WITH MECHANICAL DRAWINGS.
ROOF TRUSS SUPPLIER SHALL PROVIDE TRUSSES ALONG SIDES OF OPENINGS AND MECH UNITS ADEQUATE TO SUPPORT TRIBUTARY ROOF LOADS IN ADDITION TO LOADING FROM MECHANICAL EQUIPMENT. PROVIDE FL111 ALONG SIDES OF MECH OPENINGS AND UNITS WHERE TRUSSES DO NOT OCCUR. TRUSSES SUPPORTING FL111 MEMBERS SHALL HAVE SOLID BLOCKING AS REQUIRED TO RECEIVE HANGER FASTENERS.
7. SPLICE TOP PLATES PER 1/S401, TYP.
8. SEE S000 FOR TYPICAL LEGEND.
9. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.



TYPICAL ROOF FRAMING DETAILS

ROOF TRUSS PARALLEL TO EXTERIOR WALL	4/S404
ROOF TRUSS PERPENDICULAR TO EXTERIOR WALL	5/S404
ROOF DRAG TRUSS AT PARALLEL SHEARWALL	1/S404
ROOF TRUSS PERPENDICULAR TO INTERIOR WALL	9/S404
ROOF TRUSS TO FLUSH WOOD BEAM	16/S404
ROOF TRUSS TO NON-STRUCTURAL WALL	6/S404
VALLEY TRUSS DETAILS	11, 12, 13/S404

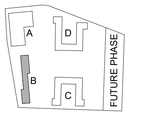
2 BUILDING B - ROOF FRAMING PLAN

1/8" = 1'-0"

PLAN NORTH

0' 4' 8' 16'

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
		REVISIONS
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
		ISSUE INFORMATION

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE

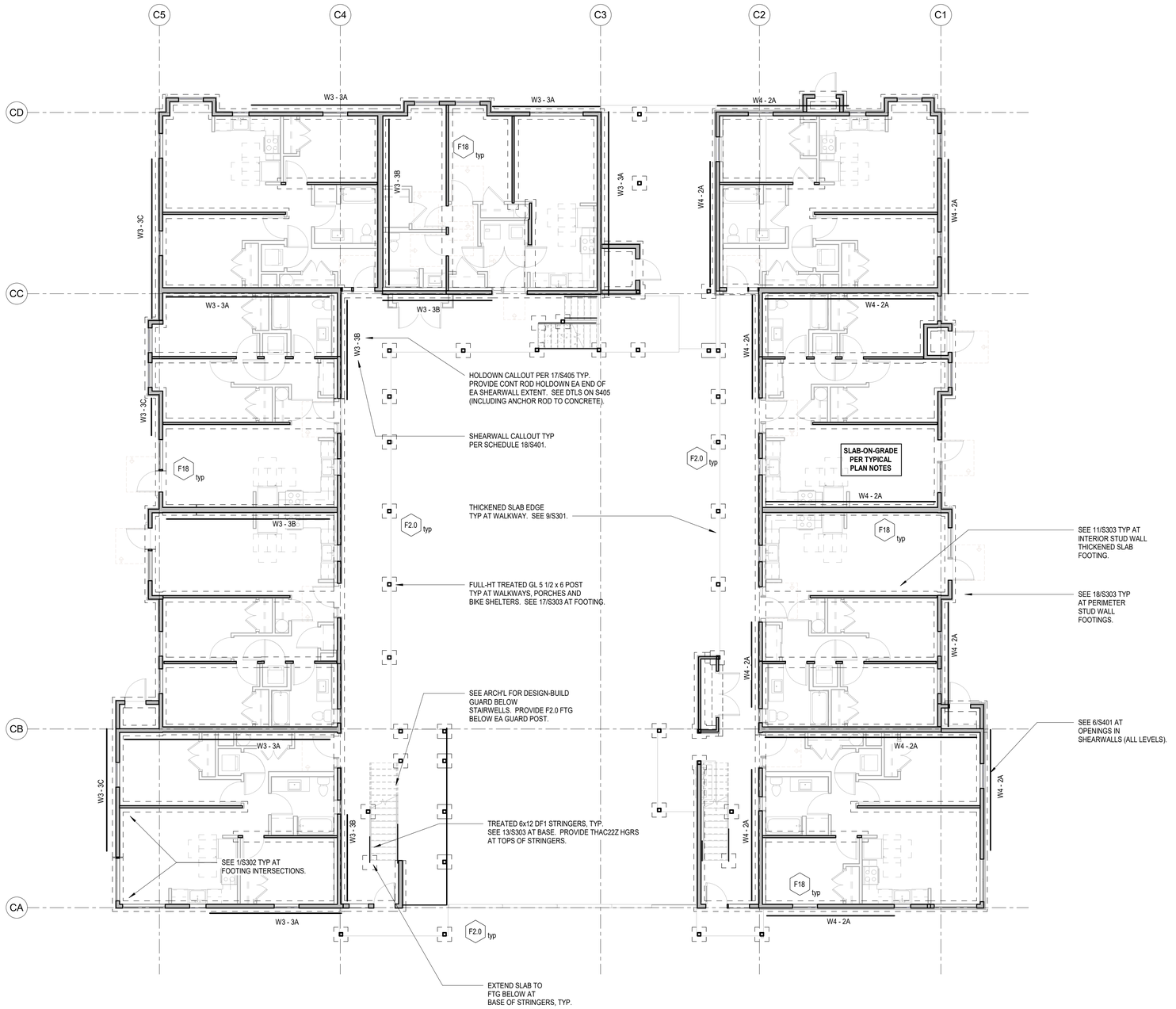
BUILDING B - LEVEL 3 FRAMING PLAN and ROOF FRAMING PLAN

SHEET NO.

SB-111

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

PLOT DATE/TIME 6/19/2020 8:26:26 AM



1 BUILDING C - LEVEL 1 FOUNDATION PLAN

1/8" = 1'-0"

PLAN NORTH

0' 4' 8' 16'

FOOTING SCHEDULE

MARK	FOOTING SIZE	REINFORCING
F2.0	2'-0" SQR x 1'-0" DP	2-#5 EW BOT
F18	1'-6" WIDE x 1'-0" DP	2-#5 BOT LONG

BASED ON 6,000 PSF ALLOWABLE BEARING PRESSURE

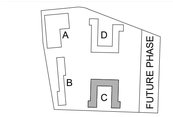
FOUNDATION PLAN NOTES

1. SLAB ON GRADE SHALL BE 4" THICK WITH 6x6 W1.4 x W1.4 WELDED WIRE REINFORCING AT CENTER, UON. PROVIDE VAPOR RETARDER (THICKNESS PER ARCH'L) BELOW SLAB AT INTERIOR SPACES. PREPARE SUBGRADE AND PROVIDE FREE-DRAINING GRANULAR FILL IN ACCORDANCE WITH GEOTECHNICAL REPORT. SEE ARCH'L FOR SLAB SLOPES AND STEPS AND FOR TOP OF SLAB ELEVATIONS. FIBERMESH, ADDED PER MFR'S RECOMMENDATIONS, CAN BE SUBSTITUTED FOR WELDED WIRE REINFORCING. WHERE VAPOR SENSITIVE ADHESIVES OR COVERINGS ARE TO BE PLACED ON SLAB ON GRADE, SEE S000 (CONCRETE - FINISH MATERIALS) FOR ADDITIONAL REQUIREMENTS AT VAPOR RETARDER AND GRANULAR FILL.
2. PROVIDE CONTROL OR CONSTRUCTION JOINTS PER 7/S301 IN SLABS ON GRADE TO DIVIDE SLAB INTO RECTANGULAR AREAS 225 SQUARE FEET OR LESS. AREAS SHALL BE APPROXIMATELY SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS MUST BE APPROVED BY THE ARCHITECT.
3. FOOTING ELEVATIONS SHOWN IN DETAILS ARE FOR CONTRACTOR CONVENIENCE AND BIDDING ONLY; ACTUAL ELEVATIONS MAY VARY IN THE FIELD. FINAL ELEVATIONS SHALL BE DETERMINED BY ON-SITE VERIFICATION BY GEOTECHNICAL ENGINEER. SEE 19/S301 FOR FOOTING DEPTH REQUIREMENTS AND RELATIONSHIPS.
   REQUIREMENTS FOR STEPPED FOOTINGS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. SEE 1/S301 FOR DIMENSIONS AT FOOTING STEPS.
4. REFER TO MEPF AND CIVIL DRAWINGS FOR UNDERSLAB AND UNDERGROUND PIPING. FOOTINGS MAY BE LOWERED TO AVOID CONFLICTS. SEE 17/S301 FOR FOOTING RELATIONSHIPS WITH PIPES AND TRENCHES.
5. SEE CALLOUTS ON PLAN FOR STUD INFORMATION AT STRUCTURAL STUD WALLS.
6. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS.
7. SEE 16/S401 FOR STUD TO STUD NAILING AT ALL SHEARWALL ENDS AND INTERSECTIONS, TYP.
8. SPLICE TOP PLATES PER 1/S401 TYP.
9. SEE 11/S401 FOR LIMITATIONS AT PENETRATIONS THROUGH WOOD STUDS AND PLATES AT STRUCTURAL STUD WALLS.
10. SEE S000 FOR TYPICAL LEGEND.
11. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

GGLO DESIGN

1301 First Avenue, Suite 301
Seattle, WA 98101

http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
		REVISIONS

C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN

MARK	DATE	DESCRIPTION
		ISSUE INFORMATION

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE

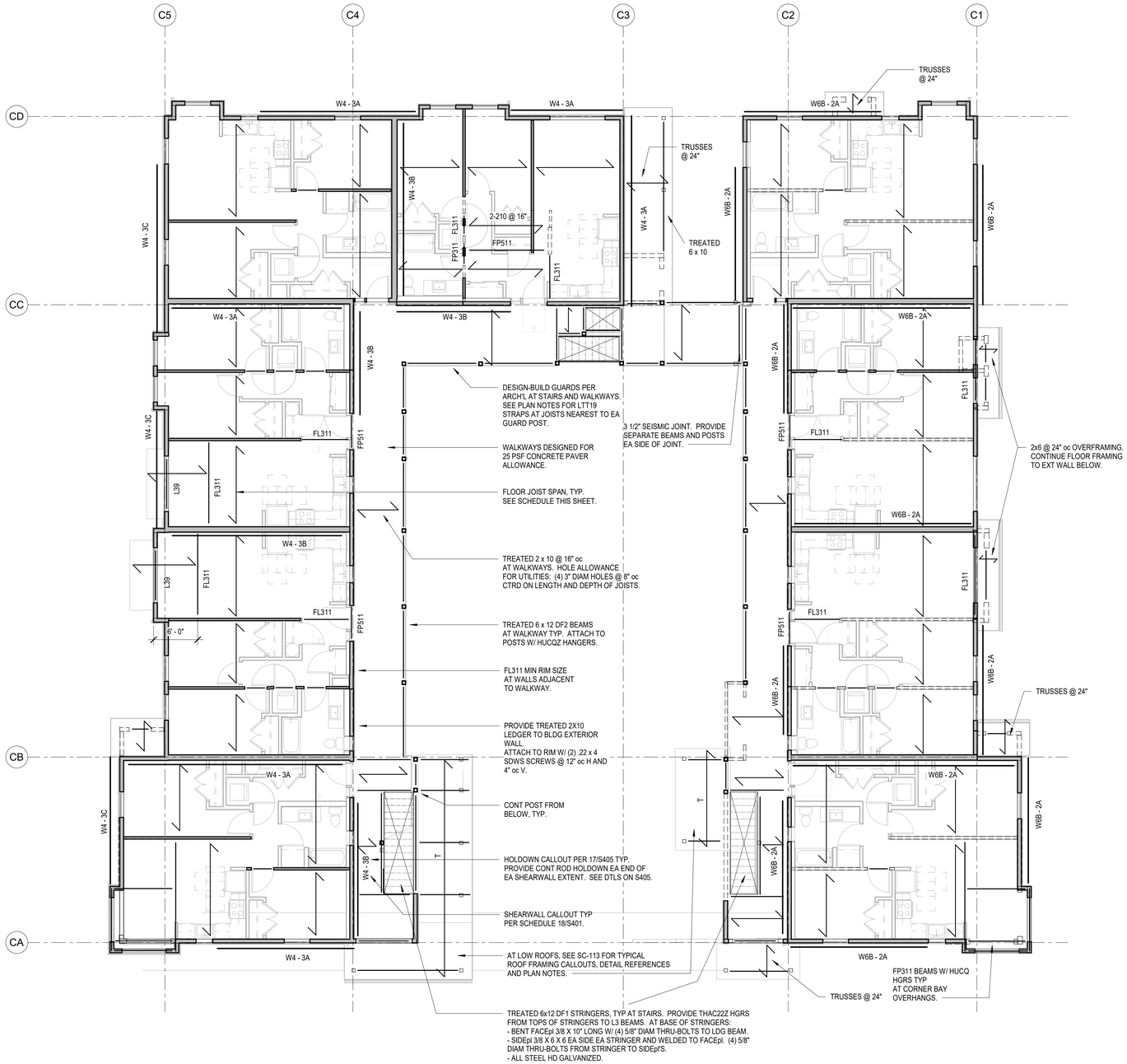
BUILDING C - LEVEL 1 FOUNDATION PLAN

SHEET NO.

SC-110

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

PLOT DATE/TIME 6/19/2020 5:56:43 AM



TYPICAL FLOOR FRAMING DETAILS

I-JOIST PARALLEL TO EXTERIOR WALL	4/S402
I-JOIST PERPENDICULAR TO EXTERIOR WALL	5/S402
I-JOIST PARALLEL TO INTERIOR WALL	9/S402
I-JOIST PERPENDICULAR TO INTERIOR WALL	10/S402
I-JOIST TO FLUSH WOOD BEAM	8/S402
I-JOIST TO DOUBLE STUD WALL	3/S402

WOOD BEAM SCHEDULE

MARK	BEAM	MARK	BEAM
B26	2 - 2 x 6	L19	1 3/4 x 9 1/2 LSL
B28	2 - 2 x 8	L111	1 3/4 x 11 7/8 LSL
B210	2 - 2 x 10	L35	3 1/2 x 5 1/2 LSL
B212	2 - 2 x 12	L37	3 1/2 x 7 1/4 LSL
B38	3-2 x 8	L39	3 1/2 x 9 1/2 LSL
B310	3 - 2 x 10	L311	3 1/2 x 11 7/8 LSL
B48	4 x 8	P39	3 1/2 x 9 1/2 PSL
B410	4 x 10	P59	5 1/4 x 9 1/2 PSL
B412	4 x 12	P79	7 x 9 1/2 PSL
B68	6 x 8	P311	3 1/2 x 11 7/8 PSL
B610	6 x 10	P511	5 1/4 x 11 7/8 PSL
B612	6 x 12	P711	7 x 11 7/8 PSL
LV17	1 3/4 x 7 1/4 LVL	P37	P39 RIPPED TO 7 1/4" DEPTH
		P57	P59 RIPPED TO 7 1/4" DEPTH

FLUSH-FRAMED BEAMS ARE NOTED WITH AN "F" PRECEDING THE BEAM MARK: FB212, FL311, etc.
AT FLOOR JOISTS: TOP OF FLUSH BEAM IS FLUSH WITH TOP OF JOISTS.
AT ROOF TRUSSES: BOTTOM OF FLUSH BEAM IS FLUSH WITH BOTTOM OF TRUSSES.

FLOOR FRAMING PLAN NOTES

1. TYPICAL FLOOR CONSTRUCTION SHALL CONSIST OF 1 1/4" MAX GYPCRETE TOPPING (1" THICKNESS WHERE ACOUSTIC MAT SPECIFIED ON ARCH'L) OVER APA RATED SHEATHING (THICKNESS AND SPAN RATING PER GENERAL STRUCTURAL NOTES) GLUED AND NAILED TO SUPPORTING FRAMING, UON. SEE ARCH'L FOR GYPCRETE AND ACOUSTIC MAT SPECIFICATIONS.
2. FLOOR JOIST SPAN EXTENTS ARE INDICATED ON PLAN. SEE JOIST SCHEDULE AND CALLOUTS ON PLAN FOR JOIST DESIGNATIONS AND SPACINGS.
3. NAIL FLOOR SHEATHING @ 6" OC AT FRAMED PANEL EDGES AND @ 4" OC OVER SHEARWALLS BELOW, UON. NAIL SHEATHING @ 12" OC TO ALL INTERMEDIATE FRAMING MEMBERS. SHEATHING NAILS SHALL BE PER GENERAL STRUCTURAL NOTES.
4. SEE ARCH'L FOR TOP OF SHEATHING ELEVATION.
5. SEE CALLOUTS ON PLAN FOR STUD INFORMATION AT STRUCTURAL STUD WALLS.
6. HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PARALLEL TO JOISTS SHALL BE FL311, UON (EXCEPTION: AT SHEARWALLS, PROVIDE WIDER MEMBERS WHERE INDICATED ON SHEARWALL SCHEDULE). HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PERPENDICULAR TO JOISTS SHALL BE FL311 UON (THIS SUPERSEDES SW SCHEDULE RIM/BLOCKING REQUIREMENT EXCEPT AT SW TYPE 2W3 AND 2W2). ALL INTERIOR DROPPED HEADERS SHALL BE L35 AND INTERIOR FLUSH BEAMS SHALL BE FL111, UON. WHERE JOISTS ARE PERPENDICULAR TO FLUSH BEAMS/HEADERS, PROVIDE HANGERS PER GENERAL STRUCTURAL NOTES.
7. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS. MULTIPLE STUDS SHALL CONTINUE THROUGH LEVELS BELOW TO CONCRETE SLAB OR FOUNDATION. PROVIDE SOLID BLOCKING THROUGH INTERMEDIATE LEVELS, SEE 8/S401.
8. SEE 16/S401 FOR STUD TO STUD NAILING AT ALL SHEARWALL ENDS AND INTERSECTIONS, TYP.
9. SPLICE TOP PLATES PER 1/S401, TYP.
10. SEE 11/S401 FOR LIMITATIONS AT PENETRATIONS THROUGH WOOD STUDS AND PLATES AT STRUCTURAL STUD WALLS.
11. AT (2) WALKWAY JOISTS NEAREST TO EACH GUARD POST, PROVIDE LTT19 T & B FROM EACH JOIST TO WALKWAY EDGE BEAM. PROVIDE 1/2" X 2 1/2" LAG SCREWS FROM LTT TO EDGE BEAM.
12. SEE S000 FOR TYPICAL LEGEND.
13. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

FLOOR JOIST SCHEDULE
27 psf DEAD LOAD
40 psf LIVE LOAD

CLEAR SPAN	JOIST
14' max	11 7/8" TJI 110 @ 19.2" oc
16' max	11 7/8" TJI 210 @ 19.2" oc
17' max	11 7/8" TJI 230 @ 16" oc
18' max	11 7/8" TJI 360 @ 16" oc
20' max	11 7/8" TJI 560 @ 16" oc
22' max	11 7/8" TJI 560 @ 12" oc

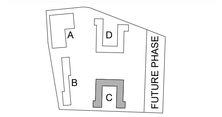
SCHEDULED JOISTS ARE APPLICABLE UNLESS SPECIFICALLY NOTED ON PLAN

PLAN NORTH

0' 4' 8' 16'

1 BUILDING C - LEVEL 2 FRAMING PLAN
1/8" = 1'-0"

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
		REVISIONS

C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
		ISSUE INFORMATION

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE

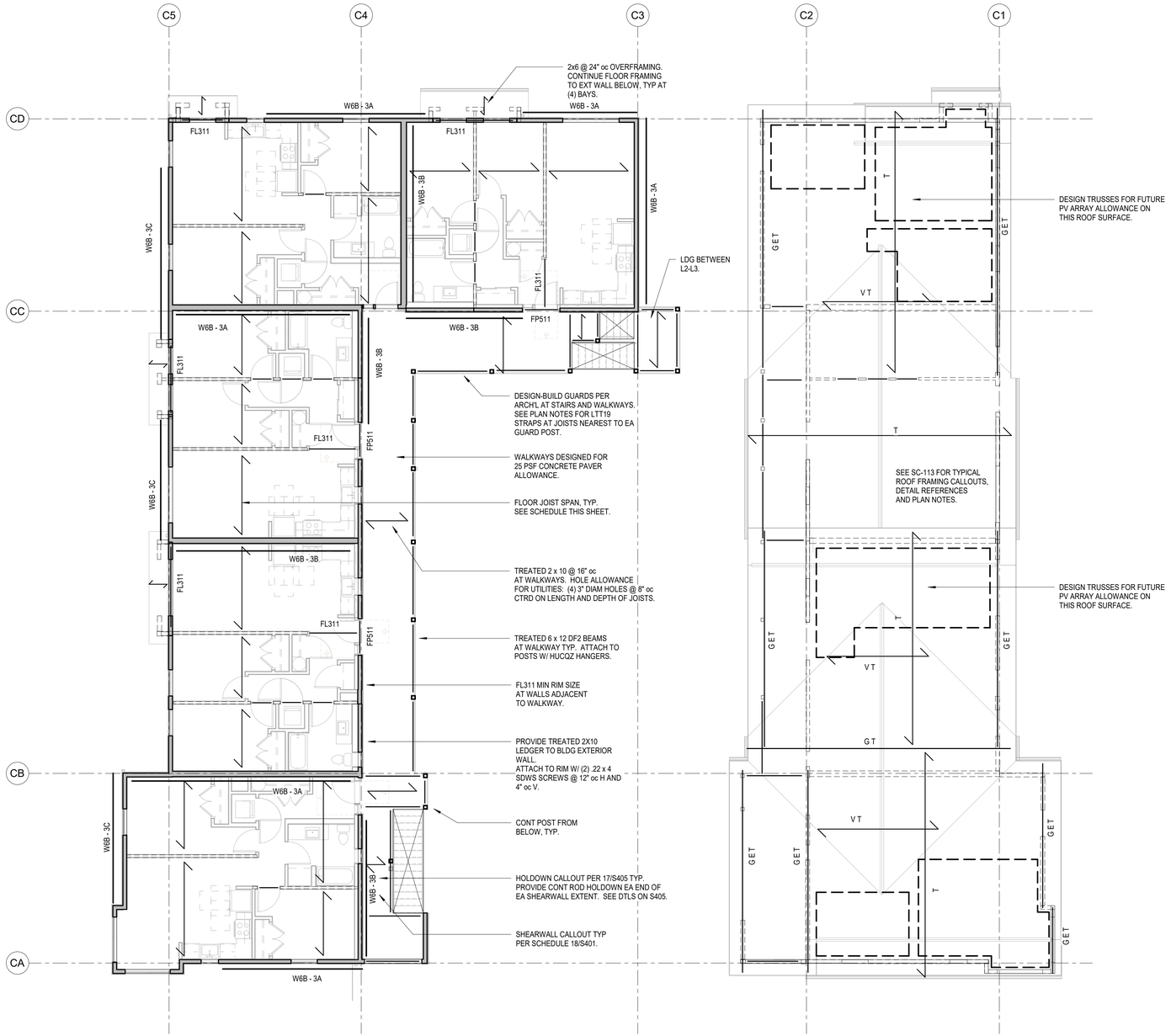
BUILDING C - LEVEL 2 FRAMING PLAN

SHEET NO.

SC-111

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

PLOT DATE/TIME: 6/19/2020 8:56:43 AM



1 BUILDING C - LEVEL 3 FRAMING PLAN

1/8" = 1'-0"

TYPICAL FLOOR FRAMING DETAILS	
I-JOIST PARALLEL TO EXTERIOR WALL	4/S402
I-JOIST PERPENDICULAR TO EXTERIOR WALL	5/S402
I-JOIST PARALLEL TO INTERIOR WALL	9/S402
I-JOIST PERPENDICULAR TO INTERIOR WALL	10/S402
I-JOIST TO FLUSH WOOD BEAM	8/S402
I-JOIST TO DOUBLE STUD WALL	3/S402

WOOD BEAM SCHEDULE

MARK	BEAM	MARK	BEAM
B26	2 - 2 x 6	L19	1 3/4 x 9 1/2 LSL
B28	2 - 2 x 8	L111	1 3/4 x 11 7/8 LSL
B210	2 - 2 x 10	L35	3 1/2 x 5 1/2 LSL
B212	2 - 2 x 12	L37	3 1/2 x 7 1/4 LSL
B38	3-2 x 8	L39	3 1/2 x 9 1/2 LSL
B310	3 - 2 x 10	L311	3 1/2 x 11 7/8 LSL
B48	4 x 8	P39	3 1/2 x 9 1/2 PSL
B410	4 x 10	P59	5 1/4 x 9 1/2 PSL
B412	4 x 12	P79	7 x 9 1/2 PSL
B68	6 x 8	P311	3 1/2 x 11 7/8 PSL
B610	6 x 10	P511	5 1/4 x 11 7/8 PSL
B612	6 x 12	P711	7 x 11 7/8 PSL
LV17	1 3/4 x 7 1/4 LVL	P37	P39 RIPPED TO 7 1/4" DEPTH
		P57	P59 RIPPED TO 7 1/4" DEPTH

FLUSH-FRAMED BEAMS ARE NOTED WITH AN "F" PRECEDING THE BEAM MARK: FB212, FL311, etc.
AT FLOOR JOISTS: TOP OF FLUSH BEAM IS FLUSH WITH TOP OF JOISTS.
AT ROOF TRUSSES: BOTTOM OF FLUSH BEAM IS FLUSH WITH BOTTOM OF TRUSSES.

FLOOR FRAMING PLAN NOTES

1. TYPICAL FLOOR CONSTRUCTION SHALL CONSIST OF 1 1/4" MAX GYPCRETE TOPPING (1" THICKNESS WHERE ACOUSTIC MAT SPECIFIED ON ARCH'L) OVER APA RATED SHEATHING (THICKNESS AND SPAN RATING PER GENERAL STRUCTURAL NOTES) GLUED AND NAILED TO SUPPORTING FRAMING, UON. SEE ARCH'L FOR GYPCRETE AND ACOUSTIC MAT SPECIFICATIONS.
2. FLOOR JOIST SPAN EXTENTS ARE INDICATED ON PLAN. SEE JOIST SCHEDULE AND CALLOUTS ON PLAN FOR JOIST DESIGNATIONS AND SPACINGS.
3. NAIL FLOOR SHEATHING @ 6" OC AT FRAMED PANEL EDGES AND @ 4" OC OVER SHEARWALLS BELOW, UON. NAIL SHEATHING @ 12" OC TO ALL INTERMEDIATE FRAMING MEMBERS. SHEATHING NAILS SHALL BE PER GENERAL STRUCTURAL NOTES.
4. SEE ARCH'L FOR TOP OF SHEATHING ELEVATION.
5. SEE CALLOUTS ON PLAN FOR STUD INFORMATION AT STRUCTURAL STUD WALLS.
6. HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PARALLEL TO JOISTS SHALL BE FL311, UON (EXCEPTION: AT SHEARWALLS, PROVIDE WIDER MEMBERS WHERE INDICATED ON SHEARWALL SCHEDULE). HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PERPENDICULAR TO JOISTS SHALL BE FL311 UON (THIS SUPERSEDES SW SCHEDULE RIM/BLOCKING REQUIREMENT EXCEPT AT SW TYPE 2W3 AND 2W2). ALL INTERIOR DROPPED HEADERS SHALL BE L35 AND INTERIOR FLUSH BEAMS SHALL BE FL111, UON. WHERE JOISTS ARE PERPENDICULAR TO FLUSH BEAMS/HEADERS, PROVIDE HANGERS PER GENERAL STRUCTURAL NOTES.
7. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS. MULTIPLE STUDS SHALL CONTINUE THROUGH LEVELS BELOW TO CONCRETE SLAB OR FOUNDATION. PROVIDE SOLID BLOCKING THROUGH INTERMEDIATE LEVELS; SEE 8/S401.
8. SEE 16/S401 FOR STUD TO STUD NAILING AT ALL SHEARWALL ENDS AND INTERSECTIONS, TYP.
9. SPLICE TOP PLATES PER 1/S401, TYP.
10. SEE 11/S401 FOR LIMITATIONS AT PENETRATIONS THROUGH WOOD STUDS AND PLATES AT STRUCTURAL STUD WALLS.
11. AT (2) WALKWAY JOISTS NEAREST TO EACH GUARD POST, PROVIDE LTT19 T & B FROM EACH JOIST TO WALKWAY EDGE BEAM. PROVIDE 1/2" X 2 1/2" LAG SCREWS FROM LTT TO EDGE BEAM.
12. SEE S000 FOR TYPICAL LEGEND.
13. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

FLOOR JOIST SCHEDULE
27 psf DEAD LOAD
40 psf LIVE LOAD

CLEAR SPAN	JOIST
14' max	11 7/8" TJI 110 @ 19.2" oc
16' max	11 7/8" TJI 210 @ 19.2" oc
17' max	11 7/8" TJI 230 @ 16" oc
18' max	11 7/8" TJI 360 @ 16" oc
20' max	11 7/8" TJI 560 @ 16" oc
22' max	11 7/8" TJI 560 @ 12" oc

SCHEDULED JOISTS ARE APPLICABLE UNLESS SPECIFICALLY NOTED ON PLAN

PLAN NORTH

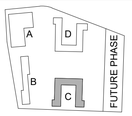
0' 4' 8' 16'

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

GGLO DESIGN

1301 First Avenue, Suite 301
Seattle, WA 98101

http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
REVISIONS		
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
ISSUE INFORMATION		

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

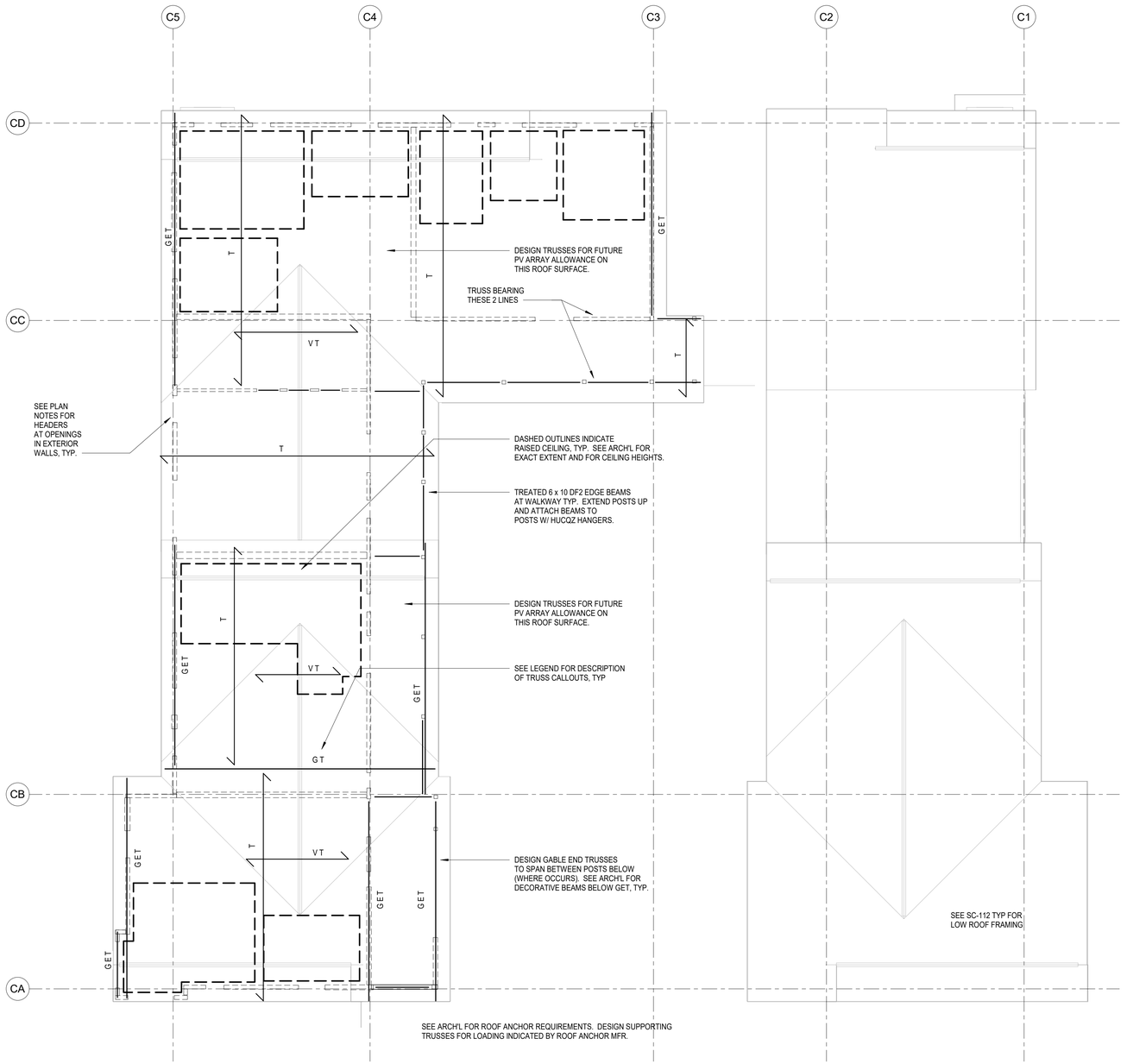
SHEET TITLE

BUILDING C - LEVEL 3 FRAMING PLAN

SHEET NO.

SC-112

PLOT DATE/TIME: 6/19/2020 8:56:44 AM



1 BUILDING C - ROOF FRAMING PLAN

1/8" = 1'-0"

TYPICAL ROOF FRAMING DETAILS

ROOF TRUSS PARALLEL TO EXTERIOR WALL	4/S404
ROOF TRUSS PERPENDICULAR TO EXTERIOR WALL	5/S404
ROOF DRAG TRUSS AT PARALLEL SHEARWALL	1/S404
ROOF TRUSS PERPENDICULAR TO INTERIOR WALL	9/S404
ROOF TRUSS TO FLUSH WOOD BEAM	16/S404
ROOF TRUSS TO NON-STRUCTURAL WALL	6/S404
VALLEY TRUSS DETAILS	11, 12, 13/S404

WOOD BEAM SCHEDULE

MARK	BEAM	MARK	BEAM
B26	2 - 2 x 6	L19	1 3/4 x 9 1/2 LSL
B28	2 - 2 x 8	L111	1 3/4 x 11 7/8 LSL
B210	2 - 2 x 10	L35	3 1/2 x 5 1/2 LSL
B212	2 - 2 x 12	L37	3 1/2 x 7 1/4 LSL
B38	3-2 x 8	L39	3 1/2 x 9 1/2 LSL
B310	3 - 2 x 10	L311	3 1/2 x 11 7/8 LSL
B48	4 x 8	P39	3 1/2 x 9 1/2 PSL
B410	4 x 10	P59	5 1/4 x 9 1/2 PSL
B412	4 x 12	P79	7 x 9 1/2 PSL
B68	6 x 8	P311	3 1/2 x 11 7/8 PSL
B610	6 x 10	P511	5 1/4 x 11 7/8 PSL
B612	6 x 12	P711	7 x 11 7/8 PSL
LV17	1 3/4 x 7 1/4 LVL	P37	P39 RIPPED TO 7 1/4" DEPTH
		P57	P59 RIPPED TO 7 1/4" DEPTH

FLUSH-FRAMED BEAMS ARE NOTED WITH AN "F" PRECEDING THE BEAM MARK: FB212, FL311, etc.
AT FLOOR JOISTS: TOP OF FLUSH BEAM IS FLUSH WITH TOP OF JOISTS.
AT ROOF TRUSSES: BOTTOM OF FLUSH BEAM IS FLUSH WITH BOTTOM OF TRUSSES.

ROOF FRAMING PLAN NOTES

1. TYPICAL ROOF CONSTRUCTION SHALL CONSIST OF APA RATED SHEATHING (THICKNESS AND SPAN RATING PER GENERAL STRUCTURAL NOTES) OVER PRE-MANUFACTURED WOOD TRUSSES @ 24" oc MAX, UON.
2. NAIL ROOF SHEATHING @ 6" OC AT FRAMED PANEL EDGES AND @ 4" OC OVER SHEARWALLS BELOW, UON. NAIL SHEATHING @ 12" OC TO ALL INTERMEDIATE FRAMING MEMBERS. SHEATHING NAILS SHALL BE PER GENERAL STRUCTURAL NOTES.
3. SEE ARCH'L FOR ROOF SHEATHING ELEVATIONS, EXACT SLOPES AND ROOF DRAINAGE REQUIREMENTS. ROOF SHEATHING PER PLAN NOTE 1 SHALL BE CONTINUOUS BELOW OVERFRAMED AREAS.
4. HEADERS OVER OPENINGS IN EXTERIOR WALLS SHALL BE: B28 AT OPENINGS 4' OR LESS, B38 AT OPENINGS 4'-1" TO 5'-6" AND L37 AT LARGER OPENINGS UON ON PLAN.
5. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS. PROVIDE (3) BEARING STUDS BELOW BEARING LOCATIONS OF GIRDER TRUSSES AND HIP MASTERS, UON. MULTIPLE STUDS SHALL CONTINUE THROUGH LEVELS BELOW TO CONCRETE FOUNDATION. PROVIDE SOLID BLOCKING THROUGH INTERMEDIATE LEVELS; SEE 8/S401.
6. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS AND SIZES OF ROOF OPENINGS AND MECHANICAL UNITS. VERIFY LOCATIONS AND WEIGHTS OF MECHANICAL UNITS WITH MECHANICAL DRAWINGS.
ROOF TRUSS SUPPLIER SHALL PROVIDE TRUSSES ALONG SIDES OF OPENINGS AND MECH UNITS ADEQUATE TO SUPPORT TRIBUTARY ROOF LOADS IN ADDITION TO LOADING FROM MECHANICAL EQUIPMENT. PROVIDE FL111 ALONG SIDES OF MECH OPENINGS AND UNITS WHERE TRUSSES DO NOT OCCUR. TRUSSES SUPPORTING FL111 MEMBERS SHALL HAVE SOLID BLOCKING AS REQUIRED TO RECEIVE HANGER FASTENERS.
7. SPLICE TOP PLATES PER 1/S401, TYP.
8. SEE S000 FOR TYPICAL LEGEND.
9. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

PLAN NORTH

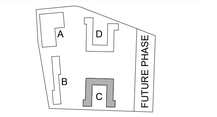
0' 4' 8' 16'

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

GGLO DESIGN

1301 First Avenue, Suite 301
Seattle, WA 98101

http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
REVISIONS		

C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN

MARK	DATE	DESCRIPTION
ISSUE INFORMATION		

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE

BUILDING C - ROOF FRAMING PLAN

SHEET NO.

SC-113

PLOT DATE/TIME 6/19/2020 8:56:44 AM

FOOTING SCHEDULE

MARK	FOOTING SIZE	REINFORCING
F2.0	2'-0" SQR x 1'-0" DP	2-#5 EW BOT
F18	1'-6" WIDE x 1'-0" DP	2-#5 BOT LONG

BASED ON 6,000 PSF ALLOWABLE BEARING PRESSURE

FOUNDATION PLAN NOTES

1. SLAB ON GRADE SHALL BE 4" THICK WITH 6x6 W1.4 x W1.4 WELDED WIRE REINFORCING AT CENTER, UON. PROVIDE VAPOR RETARDER (THICKNESS PER ARCH'L) BELOW SLAB AT INTERIOR SPACES. PREPARE SUBGRADE AND PROVIDE FREE-DRAINING GRANULAR FILL IN ACCORDANCE WITH GEOTECHNICAL REPORT. SEE ARCH'L FOR SLAB SLOPES AND STEPS AND FOR TOP OF SLAB ELEVATIONS. FIBERMESH, ADDED PER MFR'S RECOMMENDATIONS, CAN BE SUBSTITUTED FOR WELDED WIRE REINFORCING. WHERE VAPOR SENSITIVE ADHESIVES OR COVERINGS ARE TO BE PLACED ON SLAB ON GRADE, SEE S000 (CONCRETE - FINISH MATERIALS) FOR ADDITIONAL REQUIREMENTS AT VAPOR RETARDER AND GRANULAR FILL.
2. PROVIDE CONTROL OR CONSTRUCTION JOINTS PER 7/S301 IN SLABS ON GRADE TO DIVIDE SLAB INTO RECTANGULAR AREAS 225 SQUARE FEET OR LESS. AREAS SHALL BE APPROXIMATELY SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS MUST BE APPROVED BY THE ARCHITECT.
3. FOOTING ELEVATIONS SHOWN IN DETAILS ARE FOR CONTRACTOR CONVENIENCE AND BIDDING ONLY; ACTUAL ELEVATIONS MAY VARY IN THE FIELD. FINAL ELEVATIONS SHALL BE DETERMINED BY ON-SITE VERIFICATION BY GEOTECHNICAL ENGINEER. SEE 19/S301 FOR FOOTING DEPTH REQUIREMENTS AND RELATIONSHIPS.
REQUIREMENTS FOR STEPPED FOOTINGS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. SEE 1/S301 FOR DIMENSIONS AT FOOTING STEPS.
4. REFER TO MEPF AND CIVIL DRAWINGS FOR UNDERSLAB AND UNDERGROUND PIPING. FOOTINGS MAY BE LOWERED TO AVOID CONFLICTS. SEE 17/S301 FOR FOOTING RELATIONSHIPS WITH PIPES AND TRENCHES.
5. SEE CALLOUTS ON PLAN FOR STUD INFORMATION AT STRUCTURAL STUD WALLS.
6. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS.
7. SEE 16/S401 FOR STUD TO STUD NAILING AT ALL SHEARWALL ENDS AND INTERSECTIONS, TYP.
8. SPLICE TOP PLATES PER 1/S401 TYP.
9. SEE 11/S401 FOR LIMITATIONS AT PENETRATIONS THROUGH WOOD STUDS AND PLATES AT STRUCTURAL STUD WALLS.
10. SEE S000 FOR TYPICAL LEGEND.
11. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

PLAN NORTH

0' 4' 8' 16'

1 BUILDING D - LEVEL 1 FOUNDATION PLAN
1/8" = 1'-0"

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

PLOT DATE/TIME: 6/19/2020 9:01:12 AM

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com

FUTURE PHASE

MICHAEL L. NOUWENS — STATE OF WASHINGTON — 24644 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER
06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:
EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:
BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:
EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

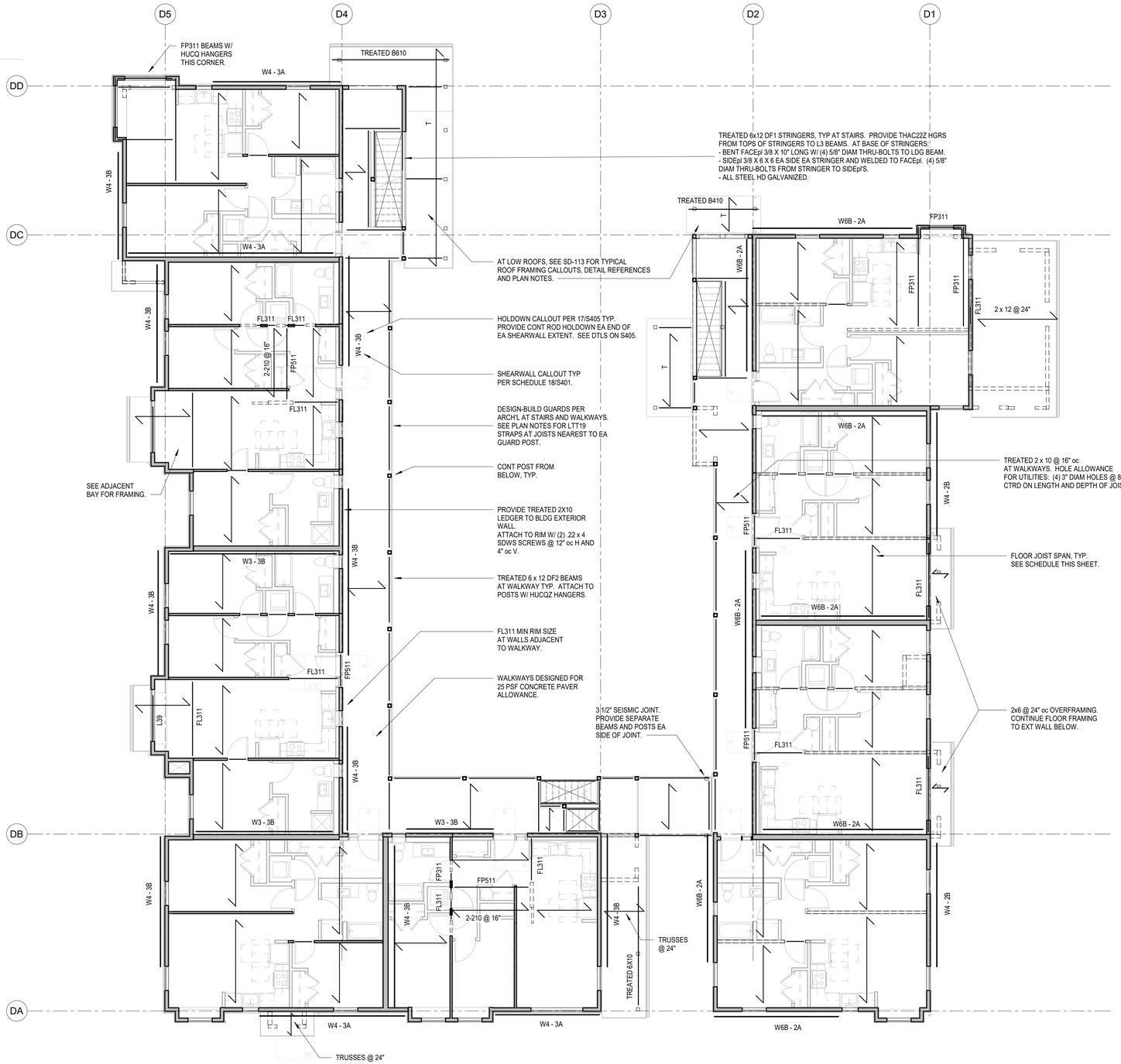
MARK	DATE	DESCRIPTION
REVISIONS		

MARK	DATE	DESCRIPTION
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
ISSUE INFORMATION		

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE
BUILDING D - LEVEL 1 FOUNDATION PLAN

SHEET NO.
SD-110



TYPICAL FLOOR FRAMING DETAILS

I-JOIST PARALLEL TO EXTERIOR WALL	4/S402
I-JOIST PERPENDICULAR TO EXTERIOR WALL	5/S402
I-JOIST PARALLEL TO INTERIOR WALL	9/S402
I-JOIST PERPENDICULAR TO INTERIOR WALL	10/S402
I-JOIST TO FLUSH WOOD BEAM	8/S402
I-JOIST TO DOUBLE STUD WALL	3/S402

WOOD BEAM SCHEDULE

MARK	BEAM	MARK	BEAM
B26	2 - 2 x 6	L19	1 3/4 x 9 1/2 LSL
B28	2 - 2 x 8	L111	1 3/4 x 11 7/8 LSL
B210	2 - 2 x 10	L35	3 1/2 x 5 1/2 LSL
B212	2 - 2 x 12	L37	3 1/2 x 7 1/4 LSL
B38	3-2 x 8	L39	3 1/2 x 9 1/2 LSL
B310	3 - 2 x 10	L311	3 1/2 x 11 7/8 LSL
B48	4 x 8	P39	3 1/2 x 9 1/2 PSL
B410	4 x 10	P59	5 1/4 x 9 1/2 PSL
B412	4 x 12	P79	7 x 9 1/2 PSL
B68	6 x 8	P311	3 1/2 x 11 7/8 PSL
B610	6 x 10	P511	5 1/4 x 11 7/8 PSL
B612	6 x 12	P711	7 x 11 7/8 PSL
LV17	1 3/4 x 7 1/4 LVL	P37	P39 RIPPED TO 7 1/4" DEPTH
		P57	P59 RIPPED TO 7 1/4" DEPTH

FLUSH-FRAMED BEAMS ARE NOTED WITH AN "F" PRECEDING THE BEAM MARK: FB212, FL311, etc.
AT FLOOR JOISTS: TOP OF FLUSH BEAM IS FLUSH WITH TOP OF JOISTS.
AT ROOF TRUSSES: BOTTOM OF FLUSH BEAM IS FLUSH WITH BOTTOM OF TRUSSES.

FLOOR FRAMING PLAN NOTES

1. TYPICAL FLOOR CONSTRUCTION SHALL CONSIST OF 1 1/4" MAX GYPCRETE TOPPING (1" THICKNESS WHERE ACOUSTIC MAT SPECIFIED ON ARCH'L) OVER APA RATED SHEATHING (THICKNESS AND SPAN RATING PER GENERAL STRUCTURAL NOTES) GLUED AND NAILED TO SUPPORTING FRAMING, UON. SEE ARCH'L FOR GYPCRETE AND ACOUSTIC MAT SPECIFICATIONS.
2. FLOOR JOIST SPAN EXTENTS ARE INDICATED ON PLAN. SEE JOIST SCHEDULE AND CALLOUTS ON PLAN FOR JOIST DESIGNATIONS AND SPACINGS.
3. NAIL FLOOR SHEATHING @ 6" OC AT FRAMED PANEL EDGES AND @ 4" OC OVER SHEARWALLS BELOW, UON. NAIL SHEATHING @ 12" OC TO ALL INTERMEDIATE FRAMING MEMBERS. SHEATHING NAILS SHALL BE PER GENERAL STRUCTURAL NOTES.
4. SEE ARCH'L FOR TOP OF SHEATHING ELEVATION.
5. SEE CALLOUTS ON PLAN FOR STUD INFORMATION AT STRUCTURAL STUD WALLS.
6. HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PARALLEL TO JOISTS SHALL BE FL311, UON (EXCEPTION: AT SHEARWALLS, PROVIDE WIDER MEMBERS WHERE INDICATED ON SHEARWALL SCHEDULE). HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PERPENDICULAR TO JOISTS SHALL BE FL311 UON (THIS SUPERSEDES SW SCHEDULE RIM/BLOCKING REQUIREMENT EXCEPT AT SW TYPE 2W3 AND 2W2). ALL INTERIOR DROPPED HEADERS SHALL BE L35 AND INTERIOR FLUSH BEAMS SHALL BE FL111, UON. WHERE JOISTS ARE PERPENDICULAR TO FLUSH BEAMS/HEADERS, PROVIDE HANGERS PER GENERAL STRUCTURAL NOTES.
7. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS. MULTIPLE STUDS SHALL CONTINUE THROUGH LEVELS BELOW TO CONCRETE SLAB OR FOUNDATION. PROVIDE SOLID BLOCKING THROUGH INTERMEDIATE LEVELS; SEE 8/S401.
8. SEE 16/S401 FOR STUD TO STUD NAILING AT ALL SHEARWALL ENDS AND INTERSECTIONS, TYP.
9. SPLICE TOP PLATES PER 1/S401, TYP.
10. SEE 11/S401 FOR LIMITATIONS AT PENETRATIONS THROUGH WOOD STUDS AND PLATES AT STRUCTURAL STUD WALLS.
11. AT (2) WALKWAY JOISTS NEAREST TO EACH GUARD POST, PROVIDE LTT19 T & B FROM EACH JOIST TO WALKWAY EDGE BEAM. PROVIDE 1/2" X 2 1/2" LAG SCREWS FROM LTT TO EDGE BEAM.
12. SEE S000 FOR TYPICAL LEGEND.
13. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

FLOOR JOIST SCHEDULE
27 psf DEAD LOAD
40 psf LIVE LOAD

CLEAR SPAN	JOIST
14' max	11 7/8" TJI 110 @ 19.2" oc
16' max	11 7/8" TJI 210 @ 19.2" oc
17' max	11 7/8" TJI 230 @ 16" oc
18' max	11 7/8" TJI 360 @ 16" oc
20' max	11 7/8" TJI 560 @ 16" oc
22' max	11 7/8" TJI 560 @ 12" oc

SCHEDULED JOISTS ARE APPLICABLE UNLESS SPECIFICALLY NOTED ON PLAN

PLAN NORTH

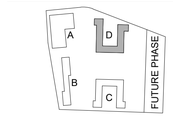
0' 4' 8' 16'

1 BUILDING D - LEVEL 2 FRAMING PLAN
1/8" = 1'-0"

PLOT DATE/TIME: 6/19/2020 9:03:12 AM

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
REVISIONS		

C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN

MARK	DATE	DESCRIPTION
ISSUE INFORMATION		

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE

BUILDING D - LEVEL 2 FRAMING PLAN

SHEET NO.

SD-111

BUILDING D - LEVEL 3 FRAMING PLAN

1/8" = 1'-0"

PLAN NORTH

0' 4' 8' 16'

TYPICAL FLOOR FRAMING DETAILS	
I-JOIST PARALLEL TO EXTERIOR WALL	4/S402
I-JOIST PERPENDICULAR TO EXTERIOR WALL	5/S402
I-JOIST PARALLEL TO INTERIOR WALL	9/S402
I-JOIST PERPENDICULAR TO INTERIOR WALL	10/S402
I-JOIST TO FLUSH WOOD BEAM	8/S402
I-JOIST TO DOUBLE STUD WALL	3/S402

WOOD BEAM SCHEDULE

MARK	BEAM	MARK	BEAM
B26	2 - 2 x 6	L19	1 3/4 x 9 1/2 LSL
B28	2 - 2 x 8	L111	1 3/4 x 11 7/8 LSL
B210	2 - 2 x 10	L35	3 1/2 x 5 1/2 LSL
B212	2 - 2 x 12	L37	3 1/2 x 7 1/4 LSL
B38	3-2 x 8	L39	3 1/2 x 9 1/2 LSL
B310	3 - 2 x 10	L311	3 1/2 x 11 7/8 LSL
B48	4 x 8	P39	3 1/2 x 9 1/2 PSL
B410	4 x 10	P59	5 1/4 x 9 1/2 PSL
B412	4 x 12	P79	7 x 9 1/2 PSL
B68	6 x 8	P311	3 1/2 x 11 7/8 PSL
B610	6 x 10	P511	5 1/4 x 11 7/8 PSL
B612	6 x 12	P711	7 x 11 7/8 PSL
LV17	1 3/4 x 7 1/4 LVL	P37	P39 RIPPED TO 7 1/4" DEPTH
		P57	P59 RIPPED TO 7 1/4" DEPTH

FLUSH-FRAMED BEAMS ARE NOTED WITH AN "F" PRECEDING THE BEAM MARK: FB212, FL311, etc.
AT FLOOR JOISTS: TOP OF FLUSH BEAM IS FLUSH WITH TOP OF JOISTS.
AT ROOF TRUSSES: BOTTOM OF FLUSH BEAM IS FLUSH WITH BOTTOM OF TRUSSES.

FLOOR FRAMING PLAN NOTES

1. TYPICAL FLOOR CONSTRUCTION SHALL CONSIST OF 1 1/4" MAX GYPCRETE TOPPING (1" THICKNESS WHERE ACOUSTIC MAT SPECIFIED ON ARCH'L) OVER APA RATED SHEATHING (THICKNESS AND SPAN RATING PER GENERAL STRUCTURAL NOTES) GLUED AND NAILED TO SUPPORTING FRAMING, UON. SEE ARCH'L FOR GYPCRETE AND ACOUSTIC MAT SPECIFICATIONS.
2. FLOOR JOIST SPAN EXTENTS ARE INDICATED ON PLAN. SEE JOIST SCHEDULE AND CALLOUTS ON PLAN FOR JOIST DESIGNATIONS AND SPACINGS.
3. NAIL FLOOR SHEATHING @ 6" OC AT FRAMED PANEL EDGES AND @ 4" OC OVER SHEARWALLS BELOW, UON. NAIL SHEATHING @ 12" OC TO ALL INTERMEDIATE FRAMING MEMBERS. SHEATHING NAILS SHALL BE PER GENERAL STRUCTURAL NOTES.
4. SEE ARCH'L FOR TOP OF SHEATHING ELEVATION.
5. SEE CALLOUTS ON PLAN FOR STUD INFORMATION AT STRUCTURAL STUD WALLS.
6. HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PARALLEL TO JOISTS SHALL BE FL311, UON (EXCEPTION: AT SHEARWALLS, PROVIDE WIDER MEMBERS WHERE INDICATED ON SHEARWALL SCHEDULE). HEADERS AT THIS LEVEL AT OPENINGS IN EXTERIOR WALLS PERPENDICULAR TO JOISTS SHALL BE FL311 UON (THIS SUPERSEDES SW SCHEDULE RIM/BLOCKING REQUIREMENT EXCEPT AT SW TYPE 2W3 AND 2W2). ALL INTERIOR DROPPED HEADERS SHALL BE L35 AND INTERIOR FLUSH BEAMS SHALL BE FL111, UON. WHERE JOISTS ARE PERPENDICULAR TO FLUSH BEAMS/HEADERS, PROVIDE HANGERS PER GENERAL STRUCTURAL NOTES.
7. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS. MULTIPLE STUDS SHALL CONTINUE THROUGH LEVELS BELOW TO CONCRETE SLAB OR FOUNDATION. PROVIDE SOLID BLOCKING THROUGH INTERMEDIATE LEVELS; SEE 8/S401.
8. SEE 16/S401 FOR STUD TO STUD NAILING AT ALL SHEARWALL ENDS AND INTERSECTIONS, TYP.
9. SPLICE TOP PLATES PER 1/S401, TYP.
10. SEE 11/S401 FOR LIMITATIONS AT PENETRATIONS THROUGH WOOD STUDS AND PLATES AT STRUCTURAL STUD WALLS.
11. AT (2) WALKWAY JOISTS NEAREST TO EACH GUARD POST, PROVIDE LTT19 T & B FROM EACH JOIST TO WALKWAY EDGE BEAM. PROVIDE 1/2" X 2 1/2" LAG SCREWS FROM LTT TO EDGE BEAM.
12. SEE S000 FOR TYPICAL LEGEND.
13. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

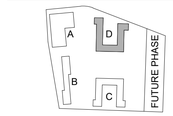
FLOOR JOIST SCHEDULE
27 psf DEAD LOAD
40 psf LIVE LOAD

CLEAR SPAN	JOIST
14' max	11 7/8" TJI 110 @ 19.2" oc
16' max	11 7/8" TJI 210 @ 19.2" oc
17' max	11 7/8" TJI 230 @ 16" oc
18' max	11 7/8" TJI 360 @ 16" oc
20' max	11 7/8" TJI 560 @ 16" oc
22' max	11 7/8" TJI 560 @ 12" oc

SCHEDULED JOISTS ARE APPLICABLE UNLESS SPECIFICALLY NOTED ON PLAN

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com



06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION
REVISIONS		

MARK	DATE	DESCRIPTION
C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN
ISSUE INFORMATION		

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

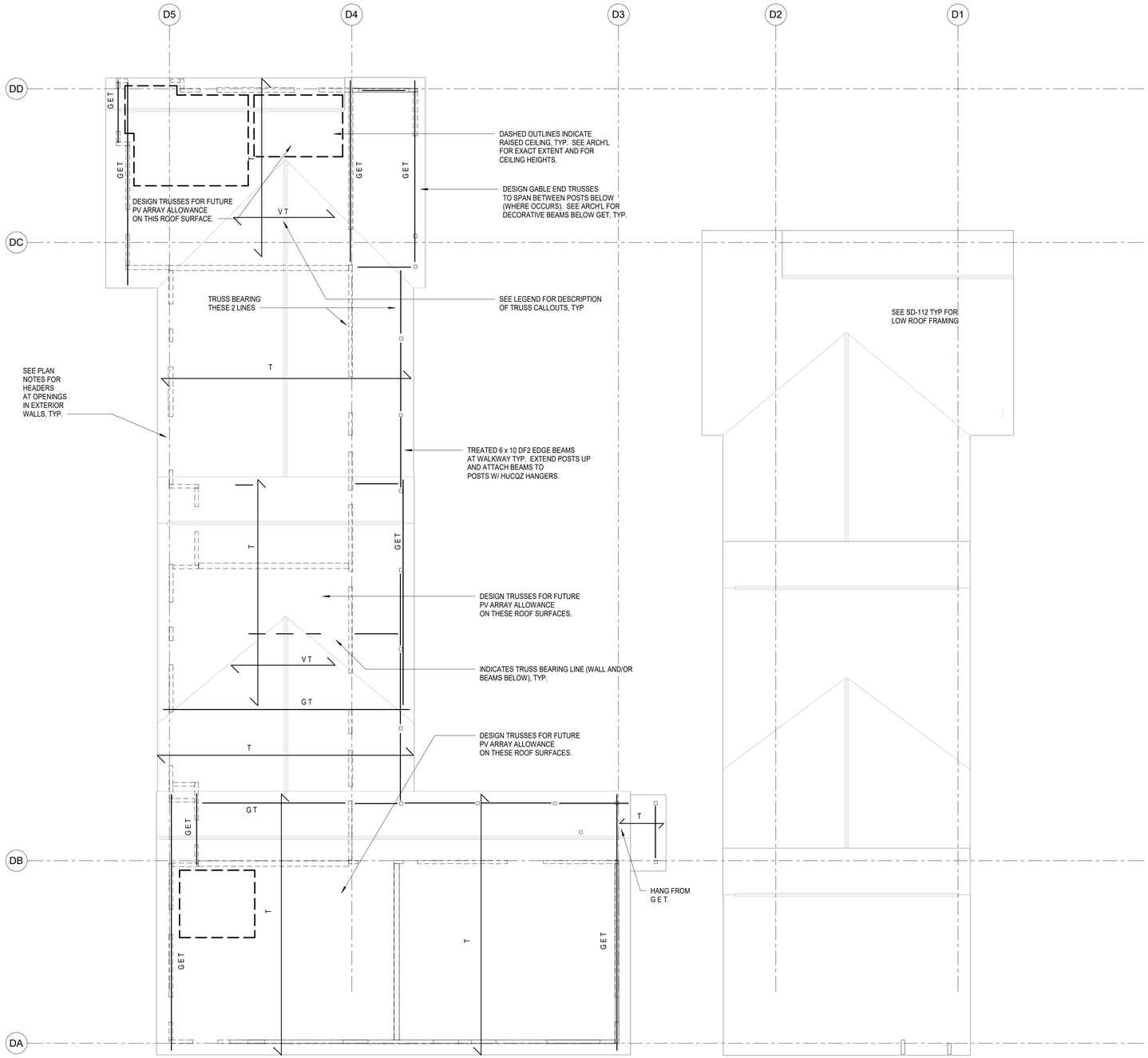
SHEET TITLE

BUILDING D - LEVEL 3 FRAMING PLAN

SHEET NO.

SD-112

PLOT DATE/TIME: 6/19/2020 9:03:15 AM



SEE ARCH'L FOR ROOF ANCHOR REQUIREMENTS. DESIGN SUPPORTING TRUSSES FOR LOADING INDICATED BY ROOF ANCHOR MFR.

TYPICAL ROOF FRAMING DETAILS

ROOF TRUSS PARALLEL TO EXTERIOR WALL	4/S404
ROOF TRUSS PERPENDICULAR TO EXTERIOR WALL	5/S404
ROOF DRAG TRUSS AT PARALLEL SHEARWALL	1/S404
ROOF TRUSS PERPENDICULAR TO INTERIOR WALL	9/S404
ROOF TRUSS TO FLUSH WOOD BEAM	16/S404
ROOF TRUSS TO NON-STRUCTURAL WALL	6/S404
VALLEY TRUSS DETAILS	11, 12, 13/S404

WOOD BEAM SCHEDULE

MARK	BEAM	MARK	BEAM
B26	2 - 2 x 6	L19	1 3/4 x 9 1/2 LSL
B28	2 - 2 x 8	L111	1 3/4 x 11 7/8 LSL
B210	2 - 2 x 10	L35	3 1/2 x 5 1/2 LSL
B212	2 - 2 x 12	L37	3 1/2 x 7 1/4 LSL
B38	3-2 x 8	L39	3 1/2 x 9 1/2 LSL
B310	3 - 2 x 10	L311	3 1/2 x 11 7/8 LSL
B48	4 x 8	P39	3 1/2 x 9 1/2 PSL
B410	4 x 10	P59	5 1/4 x 9 1/2 PSL
B412	4 x 12	P79	7 x 9 1/2 PSL
B68	6 x 8	P311	3 1/2 x 11 7/8 PSL
B610	6 x 10	P511	5 1/4 x 11 7/8 PSL
B612	6 x 12	P711	7 x 11 7/8 PSL
LV17	1 3/4 x 7 1/4 LVL	P37	P39 RIPPED TO 7 1/4" DEPTH
		P57	P59 RIPPED TO 7 1/4" DEPTH

FLUSH-FRAMED BEAMS ARE NOTED WITH AN "F" PRECEDING THE BEAM MARK: FB212, FL311, etc.
AT FLOOR JOISTS: TOP OF FLUSH BEAM IS FLUSH WITH TOP OF JOISTS.
AT ROOF TRUSSES: BOTTOM OF FLUSH BEAM IS FLUSH WITH BOTTOM OF TRUSSES.

ROOF FRAMING PLAN NOTES

1. TYPICAL ROOF CONSTRUCTION SHALL CONSIST OF APA RATED SHEATHING (THICKNESS AND SPAN RATING PER GENERAL STRUCTURAL NOTES) OVER PRE-MANUFACTURED WOOD TRUSSES @ 24" oc MAX, UON.
2. NAIL ROOF SHEATHING @ 6" OC AT FRAMED PANEL EDGES AND @ 4" OC OVER SHEARWALLS BELOW, UON. NAIL SHEATHING @ 12" OC TO ALL INTERMEDIATE FRAMING MEMBERS. SHEATHING NAILS SHALL BE PER GENERAL STRUCTURAL NOTES.
3. SEE ARCH'L FOR ROOF SHEATHING ELEVATIONS, EXACT SLOPES AND ROOF DRAINAGE REQUIREMENTS. ROOF SHEATHING PER PLAN NOTE 1 SHALL BE CONTINUOUS BELOW OVERFRAMED AREAS.
4. HEADERS OVER OPENINGS IN EXTERIOR WALLS SHALL BE: B28 AT OPENINGS 4' OR LESS, B38 AT OPENINGS 4'-1" TO 5'-6" AND L37 AT LARGER OPENINGS UON ON PLAN.
5. SEE 2/S401 FOR MULTIPLE STUD REQUIREMENTS AT WOOD BEAMS AND HEADERS. PROVIDE (3) BEARING STUDS BELOW BEARING LOCATIONS OF GIRDER TRUSSES AND HIP MASTERS, UON. MULTIPLE STUDS SHALL CONTINUE THROUGH LEVELS BELOW TO CONCRETE FOUNDATION. PROVIDE SOLID BLOCKING THROUGH INTERMEDIATE LEVELS; SEE 8/S401.
6. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS AND SIZES OF ROOF OPENINGS AND MECHANICAL UNITS. VERIFY LOCATIONS AND WEIGHTS OF MECHANICAL UNITS WITH MECHANICAL DRAWINGS.
ROOF TRUSS SUPPLIER SHALL PROVIDE TRUSSES ALONG SIDES OF OPENINGS AND MECH UNITS ADEQUATE TO SUPPORT TRIBUTARY ROOF LOADS IN ADDITION TO LOADING FROM MECHANICAL EQUIPMENT. PROVIDE FL111 ALONG SIDES OF MECH OPENINGS AND UNITS WHERE TRUSSES DO NOT OCCUR. TRUSSES SUPPORTING FL111 MEMBERS SHALL HAVE SOLID BLOCKING AS REQUIRED TO RECEIVE HANGER FASTENERS.
7. SPLICE TOP PLATES PER 1/S401, TYP.
8. SEE S000 FOR TYPICAL LEGEND.
9. VERIFY DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE STRUCTURAL DRAWINGS.

PLAN NORTH

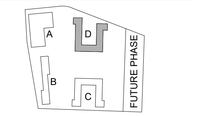
0' 4' 8' 16'

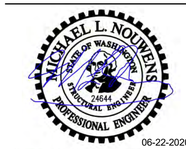
1 BUILDING D - ROOF FRAMING PLAN
1/8" = 1'-0"

BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL

PLOT DATE/TIME: 6/19/2020 9:05:13 AM

GGLO DESIGN
1301 First Avenue, Suite 301
Seattle, WA 98101
http://www.gglo.com





06-22-2020

MICHAEL NOUWENS
Structural Consultants
130 Second Avenue North #921
Edmonds, WA 98020
michael@nouwens-structural.com
www.nouwens-structural.com
P 206.546.8446

PROJECT:

EHA BAKER HEIGHTS

EVERETT HOUSING AUTHORITY

PROJECT ADDRESS:

BUILDING A: 2710 14th STREET
BUILDING B: 2715 15th STREET
BUILDING C: 2815 15th STREET
BUILDING D: 2810 14th STREET
EVERETT, WA 98201

OWNER:

EVERETT HOUSING AUTHORITY
3107 COLBY AVENUE
EVERETT, WASHINGTON 98201

MARK	DATE	DESCRIPTION

REVISIONS

C	06/22/2020	BUILDING PERMIT SUBMITTAL / HUD SUBMITTAL
B	04/10/2020	DESIGN DEVELOPMENT
A	01/07/2020	SCHEMATIC DESIGN

MARK	DATE	DESCRIPTION

ISSUE INFORMATION

PROJECT NO.: **2017033**
PRINCIPAL IN CHARGE:
PROJECT MANAGER: **Michael Nouwens**
OWNER APPROVAL:

SHEET TITLE

BUILDING D - ROOF FRAMING PLAN

SHEET NO.

SD-113