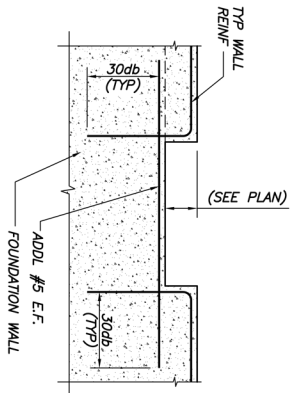
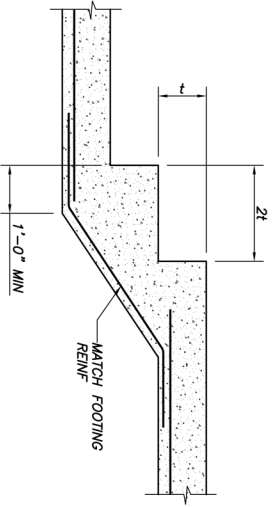


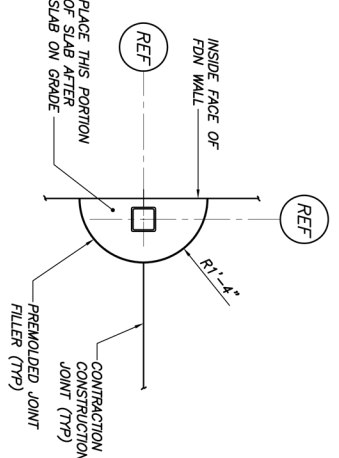
TYP SLAB DETAIL  
N.T.S.



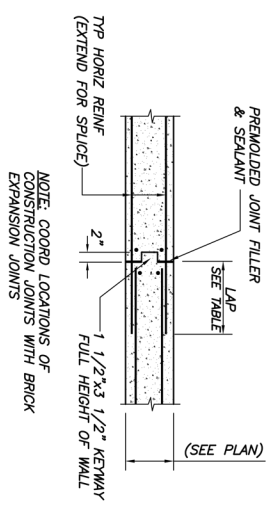
TYP STEP IN FDN WALL  
N.T.S.



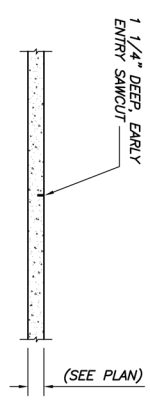
TYP STEP FOOTING DETAIL  
N.T.S.



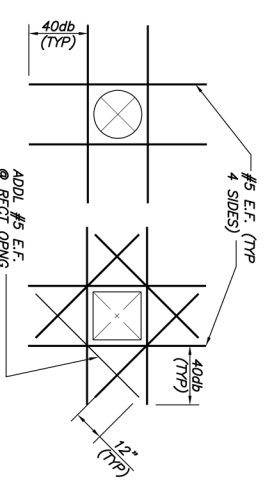
ALT EXT COLUMN ISOLATION JOINT DETAIL  
N.T.S.



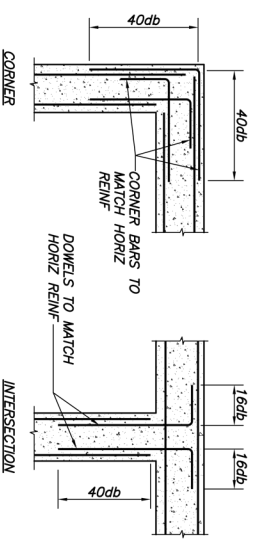
TYP CONSTRUCTION JOINT IN WALL  
N.T.S.



TYP SLAB ON GRADE CONTRACTION JOINT DETAIL  
N.T.S.



TYP OPENING IN WALL OR SLAB DETAIL  
N.T.S.



TYP WALL REINF DETAILS  
N.T.S.

REBAR LAP SPLICE TABLE	
BAR SIZE	LAP LENGTH
#4	3,000 PSI CONC
#5	24"
	28"

- FOUNDATION NOTES**
- FOUNDATIONS TO BEAR ON COMPETENT NATIVE SOILS OR SOLID ROCK LEDGE.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SITE CONDITIONS AND TO SETTING FORMWORK.
  - PRESUMPTIVE BEARING CAPACITY = 3,000 PSF.
  - BOTTOM OF EXTERIOR FOOTINGS ON SOIL MUST BE AT LEAST 4'-6" BELOW FINISHED EXTERIOR GRADE FOR PROTECTION AGAINST FROST.
  - REMOVE SOIL, DEBRIS, CLAY, ORGANIC MATERIAL FOR FOOTING BEARING.
  - COMPACTED STRUCTURAL FILL SHALL BE USED TO BACKFILL FOR SUBGRADE BENEATH SLABS ON GRADE. STRUCTURAL FILL SHALL BE A CLEAN SAND-GRAVEL MIXTURE MEETING THE FOLLOWING GRADATION:
- | SCREEN OR SIEVE SIZE | PERCENT PASSING |
|----------------------|-----------------|
| 6 INCH               | 100             |
| 3 INCH               | 90-100          |
| 1 1/4 INCH           | 25-90           |
| NO. 40               | 0-30            |
| NO. 200              | 0-5             |

- STRUCTURAL FILL SHALL BE PLACED IN LUMBER LITS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS AND SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1557, MODIFIED PROCTOR TEST.
- DO NOT BACKFILL FOUNDATION WALLS UNLESS WALLS ARE ADEQUATELY BRACED TO PREVENT MOVEMENT OR STRUCTURAL DAMAGE.
- PROVIDE FOUNDATION DRAINAGE SYSTEM WITH GRANULAR FLOW TO PROPERLY DESIGNED AND APPROVED OUTLET. REFER TO ARCHITECTURAL AND SITE DRAWINGS FOR ADDITIONAL INFORMATION.
- SLOPE EXCAVATIONS AS REQUIRED FOR STABILITY AND SAFETY IN ACCORDANCE WITH OSHA REQUIREMENTS. PROVIDE SHEETING OR SHORING IN ACCORDANCE WITH OSHA GUIDELINES.

- CONCRETE NOTES**
- CONCRETE WORK SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318 - LATEST), AND SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301-LATEST). THESE PUBLICATIONS ARE AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE (248) 848-3800.
  - CONCRETE SHALL BE PROPORTIONED MIXED AND PLACED IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN ACI 318-LATEST.
  - CONCRETE MIX DESIGN, FOOTINGS, PIERS, AND FOUNDATION WALLS:
    - STRENGTH: 3000 PSI @28 DAYS
    - AGGREGATE: 3/4"
    - W/C RATIO: 0.55 MAX
    - ENTRAINED AIR: 5% TO 7%
    - SLUMP: 4" MAX
  - EXTERIOR SLABS ON GRADE:
    - STRENGTH: 4000 PSI @28 DAYS
    - AGGREGATE: 1/2" MAX
    - ENTRAINED AIR: 5% TO 7%
    - SLUMP: 4" MAX
  - INTERIOR SLABS ON GRADE:
    - STRENGTH: 3000 PSI @28 DAYS
    - AGGREGATE: 3/4"
    - W/C RATIO: 0.55 MAX
    - ENTRAINED AIR ONLY (NO ENTRAINMENT)
    - SLUMP: 4" MAX
- NOTE:**
- ADD AIR ENTRAINING ADMIXTURE AT MANUFACTURER'S PRESCRIBED RATE TO RESULT IN CONCRETE AT POINT OF PLACEMENT HAVING THE ABOVE NOTED AIR CONTENT.
  - ADDITIONAL SLUMP MAY BE ACHIEVED BY THE ADDITION OF A MIDRANGE OR HIGH RANGE WATER REDUCING ADMIXTURE. MAXIMUM SLUMP AFTER ADDITION OF ADMIXTURE SHALL BE 6 INCHES AND 8 INCHES RESPECTIVELY.
- CONCRETE MIXING:**
- A JOB-SITE MIXING OF CONCRETE WILL NOT BE PERMITTED.
  - READY-MIX CONCRETE MUST COMPLY WITH THE REQUIREMENTS OF ASTM C94, AND AS SPECIFIED. PROVIDE BATCH TICKET FOR EACH BATCH DISCHARGED THROUGH PIERS OR ISOLATED COLUMN OR PIER FOOTINGS.
  - QUANTITY AND PROPORTIONS OF INGREDIENTS.

- CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
- PROVIDE PVC SLEEVES WHERE PIPES PASS THROUGH EXTERIOR CONCRETE OR SLABS CAST ON GRADE. ADJACENT SLEEVES SHALL BE SPACED A MINIMUM OF THREE DIAMETERS APART. OBTION, CORED HOLES, NO PENETRATIONS SHALL BE MADE THROUGH PIERS OR ISOLATED COLUMN OR PIER FOOTINGS.
- REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 318, LATEST EDITION.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND SHALL BE PROVIDED IN FLAT SHEETS. LAP TWO SQUARES AT ALL JOINTS AND TIE AT 3'-0" ON CENTER.
- FIBER REINFORCEMENT SHALL BE TYPE III SYNTHETIC VIRGIN HOMO-POLYMER/CEM POLYPROPYLENE FIBERS CONFORMING TO ASTM C1116.
- REINFORCING STEEL SHOP DRAWINGS BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW. PROVIDE AND SCHEDULE ON THE SHOP DRAWINGS ALL NECESSARY ACCESSORIES TO HOLD REINFORCEMENT SECURELY IN POSITION.
- MINIMUM CONCRETE COVER TO REINFORCEMENT AS FOLLOWS:
  - CONCRETE CAST AGAINST SOIL = 3 INCHES
  - FORMED CONCRETE IN CONTACT WITH SOIL OR EXPOSED TO WEATHER #5 BARS AND SMALLER = 1 1/2 INCHES
  - BARS AND LARGER = 2 INCHES
- SURFACES NOT IN CONTACT WITH SOIL OR EXPOSED TO WEATHER = 1 INCH
- REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS. PROVIDE LAPPED BARS AT SPLICES AND HOOKED BARS AT DISCONTINUOUS ENDS. SEE SCHEDULE FOR MINIMUM REBAR LAP SPLICE LENGTHS.
- WELDING OF REINFORCEMENT IS NOT PERMITTED.
- CONCRETE SHALL BE PLACED WITHOUT HORIZONTAL CONSTRUCTION JOINTS. VERTICAL CONSTRUCTION JOINTS SHALL BE MADE 4 FEET MINIMUM FROM A WALL CORNER OR INTERSECTION AS SHOWN ON DETAIL.
- PROVIDE ANCHOR RODS OR ANCHOR BOLTS CONFORMING TO ASTM A307, A36, OR F1554 WITH NUT AND WASHER ALL HOT DIP GALVANIZED FOR P.I. WOOD SILL PLATES.

- DESIGN LOADS**
- BUILDING CODE: MAKE UNIFORM BUILDING AND ENERGY CODE INTERNATIONAL EXISTING BUILDING CODE ASSE 7-05 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
  - DESIGN FLOOR LIVE LOADS: 40PSF DWELLING UNITS; 40 PSF STAIRS;
  - DESIGN ROOF SNOW LOAD: 60 PSF GROUND SNOW LOAD (Pg); SNOW EXPOSURE FACTOR (Ce): 1.0; SNOW LOAD IMPORTANCE FACTOR (Is): 1.0; SNOW LOAD THERMAL FACTOR (Ct): 1.1; FLAT ROOF SNOW LOAD (P<sub>s</sub>): 46 PSF + DRIFT
  - DESIGN WIND LOAD: 100 MPH BASIC WIND SPEED; WIND LOAD IMPORTANCE FACTOR (I<sub>w</sub>): 1.0; WIND EXPOSURE: B; INTERNAL PRESSURE COEFFICIENT: 0.18; COMPONENTS & CLADDING LOADS PER ASCE: 7-05
  - DESIGN SEISMIC LOADS: RESIDENTIAL STRUCTURE

- STRUCTURAL STEEL NOTES**
- STRUCTURAL STEEL, FABRICATION, AND ERECTION SHALL CONFORM TO AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL, 9TH EDITION, AND THE CODE OF STANDARD PRACTICE, LATEST EDITION.
  - STRUCTURAL STEEL: PLATES, SHAPES, AND BARS SHALL CONFORM TO ASTM A36 UNLESS NOTED OTHERWISE (L.N.O.). WIDE FLANGE STRUCTURAL STEEL SHAPES (W SECTIONS): ASTM A992 (F<sub>y</sub> = 50 KSI) WITH SPECIAL REQUIREMENTS PER AISC TECHNICAL BULLETIN #3 DATED MARCH, 1997.
  - STRUCTURAL TUBING: CONFORM TO ASTM A500 GRADE B, F<sub>y</sub> = 46 KSI.
  - STRUCTURAL STEEL BOLTS: ASTM A325.
  - ALL WELDING SHALL CONFORM TO AWS D11.1 - LATEST EDITION. ELECTRODES SHALL CONFORM TO AWS A5.1 E70XX SERIES WITH PROPER ROD TO PRODUCE OPTIMUM WELD (LOW HYDROGEN).
  - ALL STRUCTURAL STEEL SHALL BE PRIMED AFTER FABRICATION.
  - PROVIDE HILTI HAS-E OR H.D. GALV A36 THREADED ROD ANCHORS WITH HILTI HY200 OR HY70 ADHESIVE EPOXY AS NOTED ON DRAWINGS AS A SYSTEM INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
  - SUBMIT SHOP DRAWINGS FOR REVIEW.

- WOOD FRAMING NOTES:**
- 2x8, 2x10, & 2x12 LUMBER: NO 2 GRADE OR BETTER. 2x6 & 2x4 LUMBER: STUD GRADE OR BETTER. SPRUCE-PINE-FIR SOUTH (SPF-S) OR SPRUCE-PINE-FIR (SPF) KILN DRIED TO 19 PERCENT MAXIMUM MOISTURE CONTENT.
  - STRUCTURAL COMPOSITE LUMBER (I/L AND PSL) SHALL BE BOISE MANUFACTURER OR TRUS-JOIST MANUFACTURER FOR PARALLEL REFER TO MANUFACTURERS LITERATURE FOR PROPER HANDLING AND INSTALLATION GUIDELINES. POSTS: 1.7E, 2.40D (B) (MIN)-SOLID, NOT BUILT UP BEAMS: 1.9E, 2.80D (B) (MIN)
  - O.S.B. & PLYWOOD SHALL BE APA PERFORMANCE RATED. PLYWOOD & O.S.B. SHALL BE NAILED TO ALL FRAMING AND BLOCKING AS FOLLOWS: 8d (0.113" MIN) GALV NAILS AT 4" O.C. AT PANEL EDGES AND 8" O.C. WITHIN PANELS. FLOORS: 3/4" NOM. (MIN) TONGUE & GROOVE, GLUED TO ALL FRAMING AND USE RING SHANK NAILS. ROOF: 5/8" NOM. (MIN)-TONGUE & GROOVE OR H-CUPS AT 24" O.C. RAFTERS. WALLS: 1/2" NOM. (MIN) PREPARED OF WALLS AND OPENINGS NAILED AT SAME SPACING AS SPECIFIED FOR PLYWOOD & O.S.B. EDGES
  - ALL BUILT-UP BEAMS AND POSTS SHALL BE NAILED AS FOLLOWS: BEAMS: (3) ROWS 12d (0.128" MIN) NAILS @ 12" O.C. IN EA PIECE; (2) ROWS 12d NAILS @ 8" O.C. IN EA PIECE
  - FASTENING NOT SPECIFIED SHALL CONFORM WITH IBC TABLE 2304.9.1
  - WOOD CONNECTION HARDWARE (JOIST HANGERS, STRAPS, ETC) SHALL BE STANDARD. ALL HARDWARE SHALL BE MANUFACTURED BY A COMPANY THAT IS A MEMBER OF THE NATIONAL ASSOCIATION OF MANUFACTURERS OF CONNECTION HARDWARE. HARDWARE SHALL BE GALVANIZED G-90 EXCEPT CONNECTION HARDWARE USED IN CONNECTION WITH PRESERVATIVE TREATMENT SHALL MEET THE FOLLOWING: ZMAX GALVANIZED MEETING G185 HDG PER ASTM A653 AND ASTM 153 FASTENERS. FASTENERS SHALL MATCH MATCH MATERIAL/COATING OF CONNECTION HARDWARE. UNLESS NOTED BY MANUF. SPECIFICATIONS, REFER TO MANUFACTURER'S LITERATURE FOR PROPER HANDLING AND INSTALLATION GUIDELINES.
  - 1-JOIST FRAMING INCLUDING 1" THICK (MIN) RIM BOARD, INSTALL ACCORDING TO MANUFACTURERS DETAILS.
  - PROVIDE WEB STIFFENERS, SQUASH BLOCKS, BACKER BLOCKS, BLOCKING, AND NAILING AS SPECIFIED BY 1-JOIST MANUFACTURER.
  - PROVIDE VERTICAL 2x4 OR 2x6 STUD BLOCKS AT BOX SILLS UNDER POSTS.
  - PRESERVATIVE TREATED LUMBER (P.T.): NO 2 GRADE OR BETTER SOUTHERN PINE (SP OR STP) TREATED W/ ACO NON-AMMONIA PROCESS TO 0.25 PCF (MIN) RETENTION.
  - ALL FRAMING & SHEATHING NAILS TO BE HOT DIPPED GALVANIZED. HOT DIP GALVANIZED NAILS, BOLTS, LAG SCREWS, AND FASTENERS AT EXTERIOR AND IN P.I. LUMBER CONSTRUCTION.

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PAUL B. BECKER  
NO. 654

Rev No	Date	Issued For	Apprd
	08/15/15	ISSUED FOR PERMIT	

35 PLEASANT STREET RENOVATION & ADDITION

GENERAL NOTES & TYPICAL DETAILS

Revised	By	Scale
DB	NOTED	
APP	08/15/15	
PBB	3620	

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