

EROSION CONTROL NOTES

- APPLICATION OF TEMPORARY AND PERMANENT EROSION CONTROL MEASURES FOR THE PROJECT SHALL BE IN ACCORDANCE WITH PROCEDURES AND SPECIFICATIONS OF THE "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES," MARCH 2003 (BMP HANDBOOK).
- SILTATION FENCE SHALL BE INSTALLED BEFORE GRUBBING OR EARTH MOVING OPERATIONS.
- PERMANENT SEEDING SHALL BE APPLIED WITHIN 15 DAYS OF FINAL GRADING FROM APRIL 15 TO SEPTEMBER 1.
- PERMANENT SEEDING SHALL BE:

SEED	SEEDING DEPTH	RECOMMENDED SEEDING DATES
BIRDSFOOT TREFOIL	.18	8/15-10/1
CROWNVECH	.34	4/1-7/1
CREEPING RED FESCUE OR TALL FESCUE	.46	8/15-9/15
- TEMPORARY SEEDING SHALL BE APPLIED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE OF THE SOIL IF PERMANENT SEEDING IS NOT APPLIED. TEMPORARY SEEDING SHALL BE:

SEED	SEEDING DEPTH	RECOMMENDED SEEDING DATES
WINTER RYE	1-1.5"	8/15-10/1
OATS	1-1.5"	4/1-7/1
ANNUAL RYEGRASS	.25"	8/15-9/15
SUDANGRASS	.5-1"	4/1-7/1
PERENNIAL	.25"	5/15-8/15
- FERTILIZER SHALL BE 10-20-20 GRANULAR GARDEN FERTILIZER AND APPLIED AT 18.4 LBS/1,000 S.F.
- LIMESTONE SHALL BE GROUND WITH 50% CALCIUM PLUS MAGNESIUM OXIDE AND APPLIED AT 138 LBS/1,000 S.F.
- MULCH SHALL BE HAY OR STRAW APPLIED AT 70-90 LBS/1,000 S.F.
- WINTER MULCH SHALL BE APPLIED BETWEEN OCTOBER 1 AND APRIL 1 AND SHALL BE HAY OR STRAW APPLIED AT 150 LBS/1,000 S.F.
- ALL EROSION CONTROL MEASURES, SEEDING AND MULCHING SHALL BE INSPECTED WEEKLY, AFTER RAINSTORMS AND DURING RUNOFF EVENTS. ALL MEASURES SHALL BE REPAIRED OR REPLACED WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DAMAGE.
- SEEDED AND MULCHED AREAS SHALL BE MAINTAINED UNTIL FINAL ACCEPTANCE OF THE WORK. SEED CATCH SHALL BE ACCEPTABLE WHEN 75 PERCENT CATCH IS ESTABLISHED. MAINTENANCE SHALL CONSIST OF PROVIDING PROTECTION AGAINST TRAFFIC AND REPAIRING ANY AREAS TO RE-ESTABLISHED THE CONDITION AND GRADE OF THE SOIL PRIOR TO SEEDING AND SHALL THEN BE REFERTILIZED, RESEEDED AND REMULCHED.
- TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED UPON COMPLETION OF GRADING OPERATIONS AND ESTABLISHMENT OF A 75 PERCENT CATCH OF GRASS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES DURING CONSTRUCTION.
- EROSION CONTROL AND CONSTRUCTION SEQUENCE:
 - INSTALL ALL TEMPORARY EROSION CONTROL AS SHOWN ON THE PLAN SHEET IN ACCORDANCE WITH THE DETAILS AND BMP'S.
 - CONSTRUCT THE BUILDING.
 - CONSTRUCT THE ACCESS DRIVE AND PARKING.
 - INSTALL LANDSCAPING AND LOAM, SEED AND MULCH ALL DISTURBED AREAS.
 - REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE IMPROVEMENTS ARE COMPLETE AND THERE IS 75 PERCENT CATCH OF GRASS.
 - INSTALL PERMANENT EROSION CONTROL MEASURES.

PLANTING NOTES

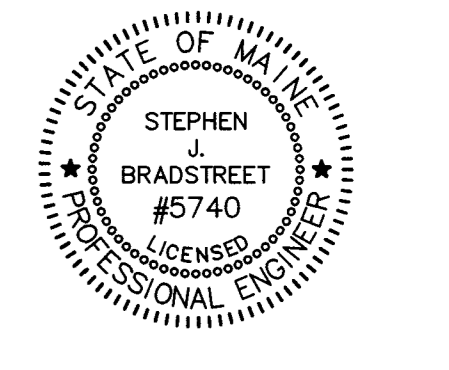
- PLANTING OF SHRUBS SHALL NOT OCCUR UNTIL ALL GRADING AND PAVING IS COMPLETED.
- ALL PLANTS SHALL HAVE A NORMAL HABIT OF GROWTH FOR THE SPECIES AND SHALL BE SOUND, HEALTHY AND FREE OF DISEASE AND INSECTS. THEY SHALL CONFORM TO THE MEASUREMENTS ON THE PLANT LIST AND SHALL CONFORM TO ANSI Z60.1 - NURSERY STOCK, LATEST REVISION.
- ALL PLANTS SHALL HAVE NON-BIODEGRADABLE MATERIALS (STRING, WIRE, POTS, ETC.) REMOVED AT THE TIME OF PLANTING. CIRCLING ROOTS OR ROOTS THAT WOULD LATER GIRDLE THE PLANT SHALL BE STRAIGHTENED, CUT OR THE ROOT BALL SHALL BE CUT UTILIZING THE "BUTTERFLY METHOD."
- BACKFILL MIX SHALL BE COMPOSED OF A 80/20, LOAM/PEAT MOSS MIX. PLANTING PITS SHALL BE EXCAVATED TO TWICE THE DIAMETER AND TO THE SAME DEPTH OF THE PLANT ROOT BALL. BACKFILL 1/2 OF DEPTH OF PIT AT A TIME AND COMPACT. SEE NOTE 5 AND INSTALL SLOW RELEASE FERTILIZER AFTER FIRST BACKFILL LIFT.
- ALL PLANTING SHALL HAVE SLOW RELEASE FERTILIZER TABLETS INSTALLED. TABLETS SHALL BE AGRIFORM 21 GRAM 20-10-5 PLANTING TABLETS OR AN APPROVED EQUAL. APPLICATION RATE: 3 TABLETS PER PLANT. AFTER PLANTS ARE INSTALLED, LIQUID FEED WITH "ROOTS" OR AN APPROVED EQUAL. MIX ACCORDING TO MANUFACTURER'S INSTRUCTIONS. APPLICATION RATE: 1.5 GAL. PER SHRUB.
- THREE SUPPORT STAKES INSTALLED SHALL BE REQUIRED FOR ALL PLANTINGS.
- ALL PLANTS SHALL BE MULCHED. MULCH SHALL BE INSTALLED TO A DEPTH OF 3" AFTER NORMAL SETTLING. MULCH SHALL BE MEDIUM SHREDDED HEMLOCK BARK.
- ALL SHRUBS SHALL BE ORIENTED FOR BEST APPEARANCE.
- PLANT SPECIES SUBSTITUTIONS WILL NOT BE ALLOWED.
- ALL PLANTS SHALL BE GUARANTEED FOR ONE GROWING SEASON. ANY PLANTS THAT DIE DURING THE GUARANTEE SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR AT NO COST TO THE OWNER.
- ALL AREAS NOT IDENTIFIED WITH OTHER SURFACE TREATMENTS SHALL BE LAWN. LOAM SHALL BE SCREENED AND PLACED 4" IN DEPTH IN LAWN AREAS AND 12" IN DEPTH IN PLANTING AREAS. THE LAWN AREA SHALL BE SEEDED WITH LOFTS TRI-PLEX GENERAL GENERAL OR APPROVED EQUAL AND STRAW MULCHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAWN MAINTENANCE. MAINTENANCE SHALL COMMENCE AT THE TIME OF PLANTING AND LAST UNTIL A GOOD FULL CATCH OF GRASS IS ESTABLISHED.

PLANT SPECIES LIST

SYM.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
WP	4	PINUS STROBUS	WHITE PINE	5-6' HGT.	B&B

WAREHOUSE FACILITY

380 WARREN AVENUE
PORTLAND, MAINE 04101



GRADING AND LANDSCAPING PLAN

DELTA REALTY CO., INC.
120 EXCHANGE STREET, SUITE 304
PORTLAND, MAINE 04101

No.	Revision/Issue	Date
D	ISSUED FOR CITY REVIEW	07/25/08
C	ISSUED FOR CITY COMMENTS	06/20/08
B	ISSUED FOR CITY REVIEW	03/21/08
A	ISSUED FOR CLIENT REVIEW	01/04/08

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DESIGN BY: SUB
DRAWN BY: JIM
PROJECT: 073013
DATE: 03-21-08

C-101

IBC 2003: CODE DATA	
OCCUPANT LOAD - TABLE 1004.1.2	18
USE GROUP CLASSIFICATION - SECTION 301	S-1
TYPE OF CONSTRUCTION - TABLE 503	V-B
ACTUAL BUILDING AREA	8,800 S.F.
BUILDING AREA LIMITATION - TABLE 503	9,200 S.F.
STREET FRONTAGE INCREASE - 504.2	NA
AUTOMATIC SPRINKLER SYS. INCREASE - 504.3	NONE
ALLOWABLE BUILDING AREA	9,200 S.F.
BUILDING HEIGHT	21'-4"
FIRE SUPPRESSION:	NA
FIRE WALLS & PARTY WALLS	NA
STAIR ENCLOSURES	NA
SHAFTS	NA
EXIT ACCESS CORRIDORS	NA
INTERIOR LOAD BEARING WALLS	NA
STRUCTURAL MEMBER SUPPORTING WALLS	NA
FLOOR CONSTRUCTION	NA
ROOF CONSTRUCTION	NA
INCIDENTAL SPACES	NA
ACCESSORY USE	NA
FIRE EXTINGUISHERS	SEE FLOOR PLAN
GENERAL NOTES	

NFPA 101: CODE DATA - 2006 EDITION	
OCCUPANT LOAD - TABLE 1.3.1.2	NA
USE GROUP CLASSIFICATION	STORAGE
TYPE OF CONSTRUCTION	V (200)
ACTUAL BUILDING AREA	8,800 S.F.
BUILDING HEIGHT	21'-4"
FIRE SUPPRESSION:	NONE
FIRE WALLS & PARTY WALLS	NA
STAIR ENCLOSURES	NA
SHAFTS	NA
EXIT ACCESS CORRIDORS	NA
INTERIOR LOAD BEARING WALLS	NA
STRUCTURAL MEMBER SUPPORTING WALLS	NA
FLOOR CONSTRUCTION	NA
ROOF CONSTRUCTION	NA
INCIDENTAL SPACES	NA
ACCESSORY USE	NA
FIRE EXTINGUISHERS	SEE FLOOR PLAN
GENERAL NOTES	

IECC - 2003 CLIMATE ZONE 15	
WINDOW TO WALL RATIO (WWR)	5.40 %
SLAB OR BELOW GRADE WALL REQUIRED "R" VALUE	0
SLAB OR BELOW GRADE WALL ACTUAL "R" VALUE	10
ROOF ASSEMBLIES REQUIRED "R" VALUE	20
ROOF ASSEMBLIES ACTUAL "R" VALUE	20
FLOORS OVER UNCOND. SPACE REQUIRED "R" VALUE	NA
FLOORS OVER UNCOND. SPACE ACTUAL "R" VALUE	NA
ABOVE GRADE WALLS REQUIRED "R" VALUE	15
ABOVE GRADE WALLS ACTUAL "R" VALUE	15
CHI OR MASONRY WALLS REQUIRED "R" VALUE	5
CHI OR MASONRY WALLS ACTUAL "R" VALUE	5
WINDOWS & GLASS DOORS REQUIRED SHGC	ANY
WINDOWS & GLASS DOORS ACTUAL "U" VALUE	.1
PASS DOORS ACTUAL "U" VALUE	.4
OVERHEAD DOORS ACTUAL "U" VALUE	.04
WINDOWS ACTUAL "U" VALUE	NA

REVISIONS	DATE
1 PERMITTING	06/19/08

B C G

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STATE OF MAINE
 JAMES M. STREETER
 REGISTERED ARCHITECT
 NO. 11162
 8/15/88
 LICENSED

J. M. STREETER
 ARCHITECTURAL
 ENGINEER

66 GARDNER DRIVE
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FLOOR PLAN,
 NOTES, LEGEND,
 CODE TABLES
 & SCHEDULE

CHARGE NUMBER
 088002

JOB TITLE
 DELTA REALTY ADDITION
 380 WARREN AVE
 PORTLAND, MAINE

BUILDING/FLOOR
 PL / 01

SCALE
 1/8" = 1'-0"

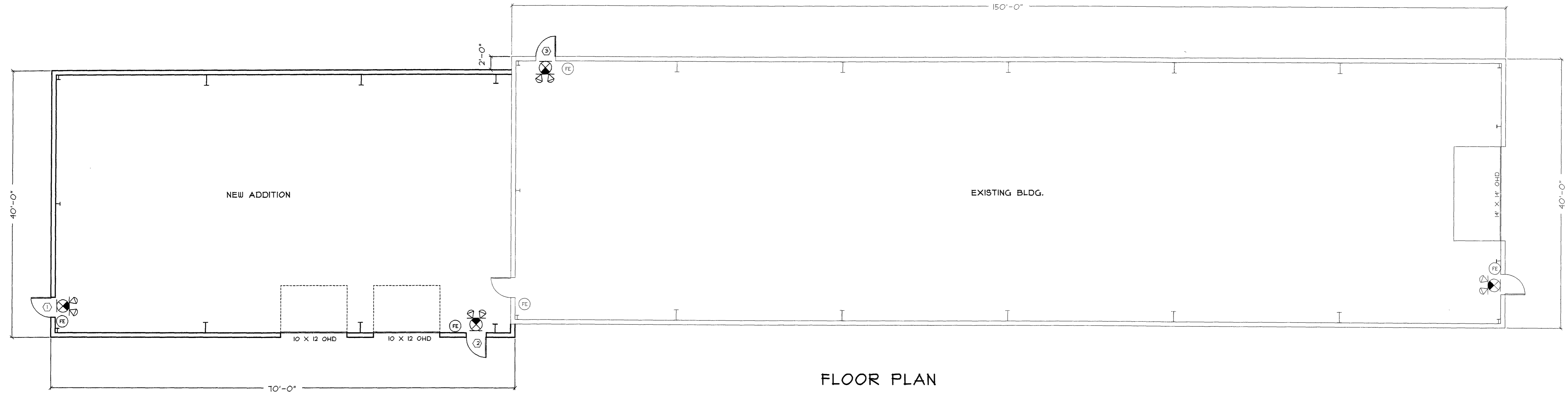
DESIGNER
 JP

CHECK
 JMS

DATE
 06/19/2008

Drawing Number
A-1

Sheet 1 of 2



FLOOR PLAN

DOOR SCHEDULE

TAG	DOOR SLAB	SIZE	THICKNESS	SWING	FIRE LABEL	FRAME	WALL THICKNESS	REMARKS
1	HM	3070	1 3/4	RH		HM	4 1/8	24 X 30 INS. GLASS HRDWR SET #1
2	HM	3070	1 3/4	LH		HM	4 1/8	24 X 30 INS. GLASS HRDWR SET #1
3	HM	3070	1 3/4	RH		HM	4 1/8	HRDWR SET #1

HARDWARE SCHEDULE

SET #1	HINGES, CLOSER, LOCKSET, WEATHERSTRIP, THRESHOLD

NOTE: ALL LOCKS TO BE MASTER KEYED

- EXIT SIGN
- EMERGENCY LIGHT PACK
- FIRE EXTINGUISHER

GENERAL NOTES

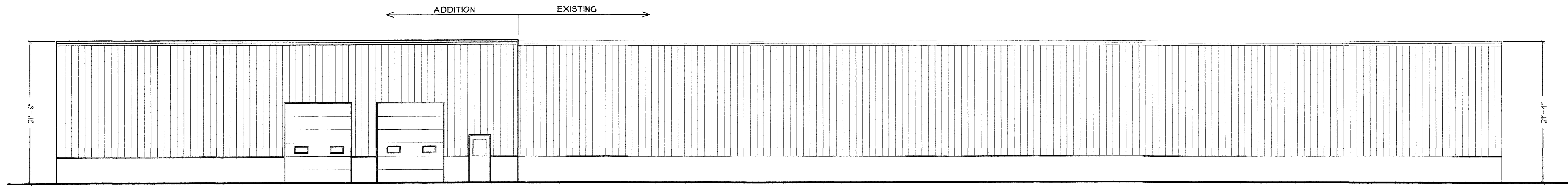
THIS BUILDING SHALL NOT HAVE A SPRINKLER OR ALARM SYSTEM
 THIS BUILDING SHALL BE USED FOR WAREHOUSING

THE BUILDING IS A PRE-ENGINEERED METAL BUILDING BY PACKAGE INDUSTRIES OF SUTTON, MA. BUILDING MANUFACTURER TO PROVIDE STRUCTURAL DESIGN, BUILDING ENVELOPE DETAILS, AND LETTER OF CERTIFICATION.

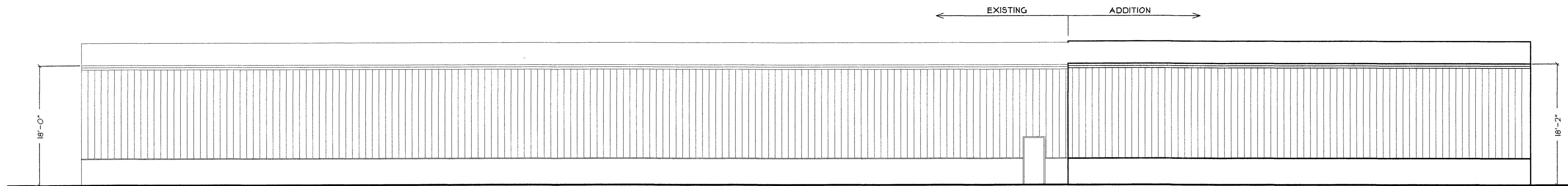
FOUNDATION DESIGN TO BE BY ASSOCIATED DESIGN PARTNERS

ALL DOORS SHALL BE 3'-0" WIDE AND HAVE HANDICAPPED LEVER TYPE HARDWARE

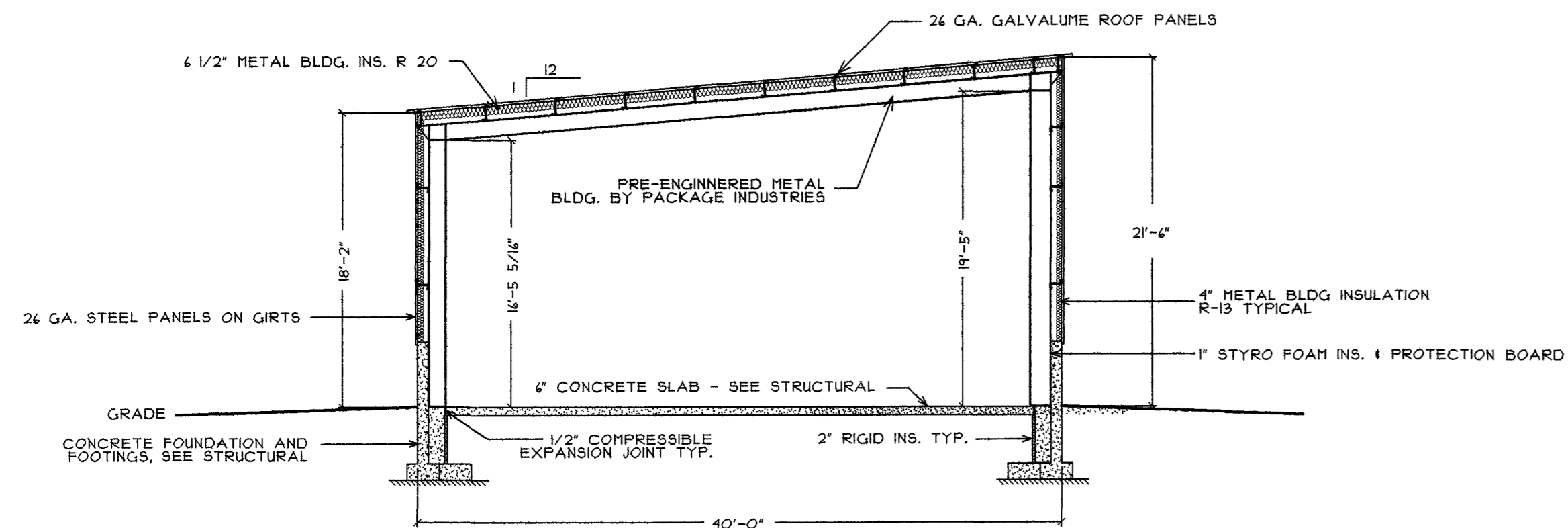
5 LB ABC FIRE EXTINGUISHERS SHALL BE MOUNTED AT EVERY EXIT



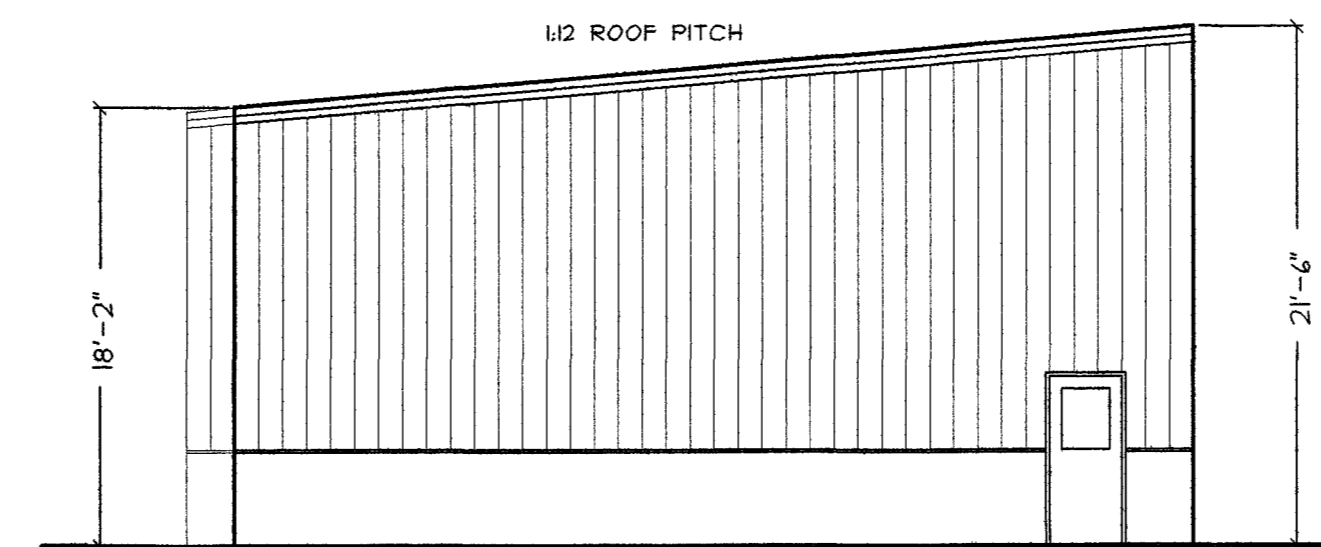
NORTH ELEVATION



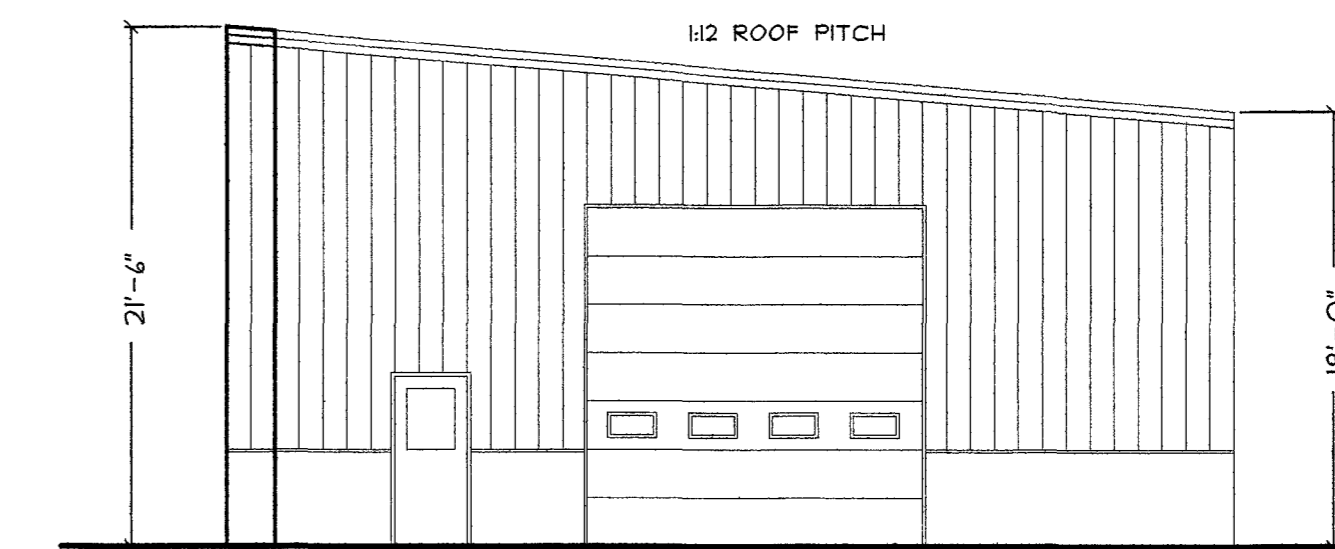
SOUTH ELEVATION



BUILDING SECTION

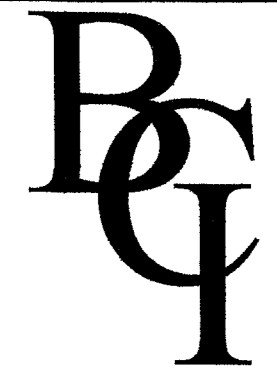


EAST ELEVATION

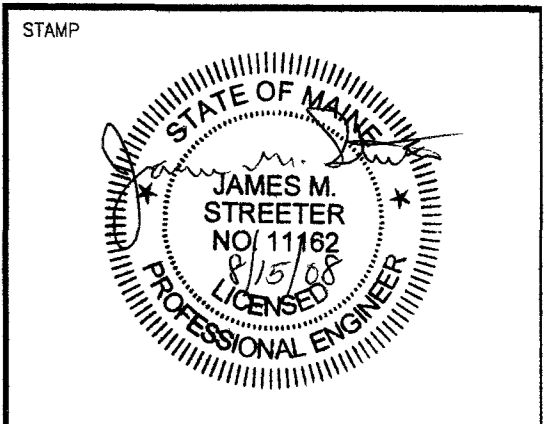


WEST ELEVATION

REVISIONS	DATE
1 PERMITTING	08/15/08



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ELEVATIONS
 & SECTION

DRAWING TITLE

CHARGE NUMBER
 08B002

JOB TITLE
 DELTA REALTY ADDITION
 380 WARREN AVE
 PORTLAND, MAINE

BUILDING/FLOOR
 BL / 01

DRAWING FILE NAME
 1.DWG

SCALE 1/8" = 1'-0"	Drawing Number
DESIGNER JP	A-2
CHECK JMS	
DATE 08/15/2008	

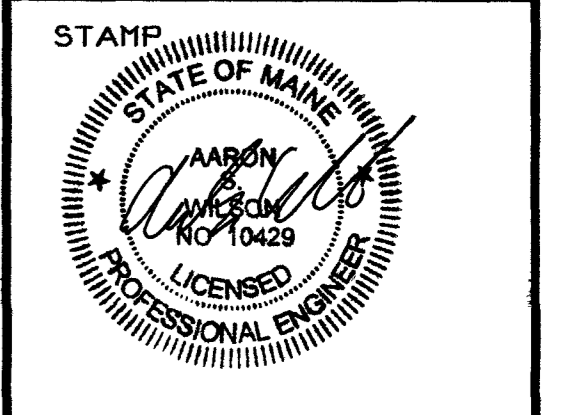
Sheet 1 of 2



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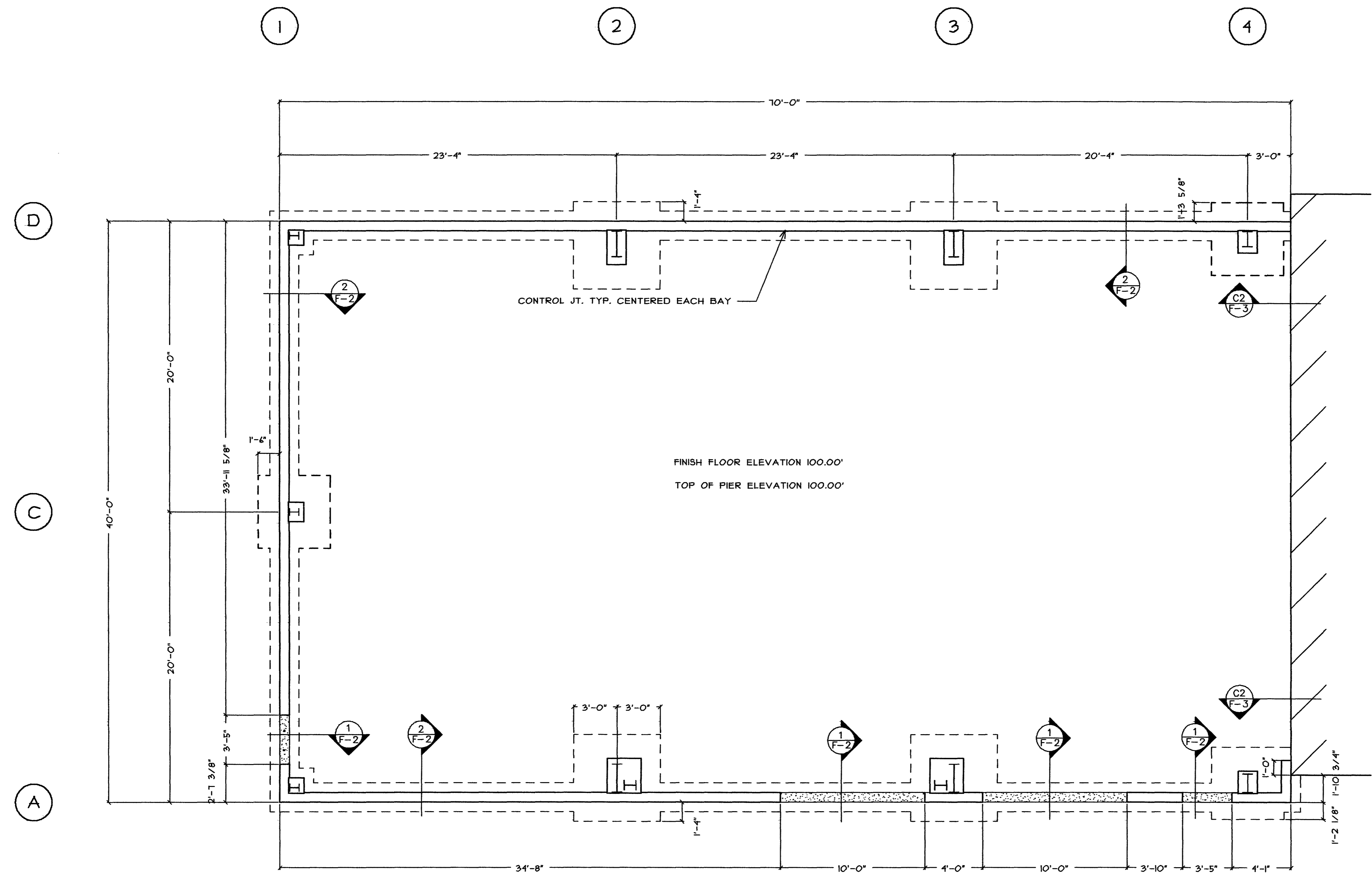
PROJECT:
 DELTA REALTY ADDITION
 380 WARREN AVENUE
 PORTLAND, MAINE

REVISIONS	
DATE	DESCRIPTION

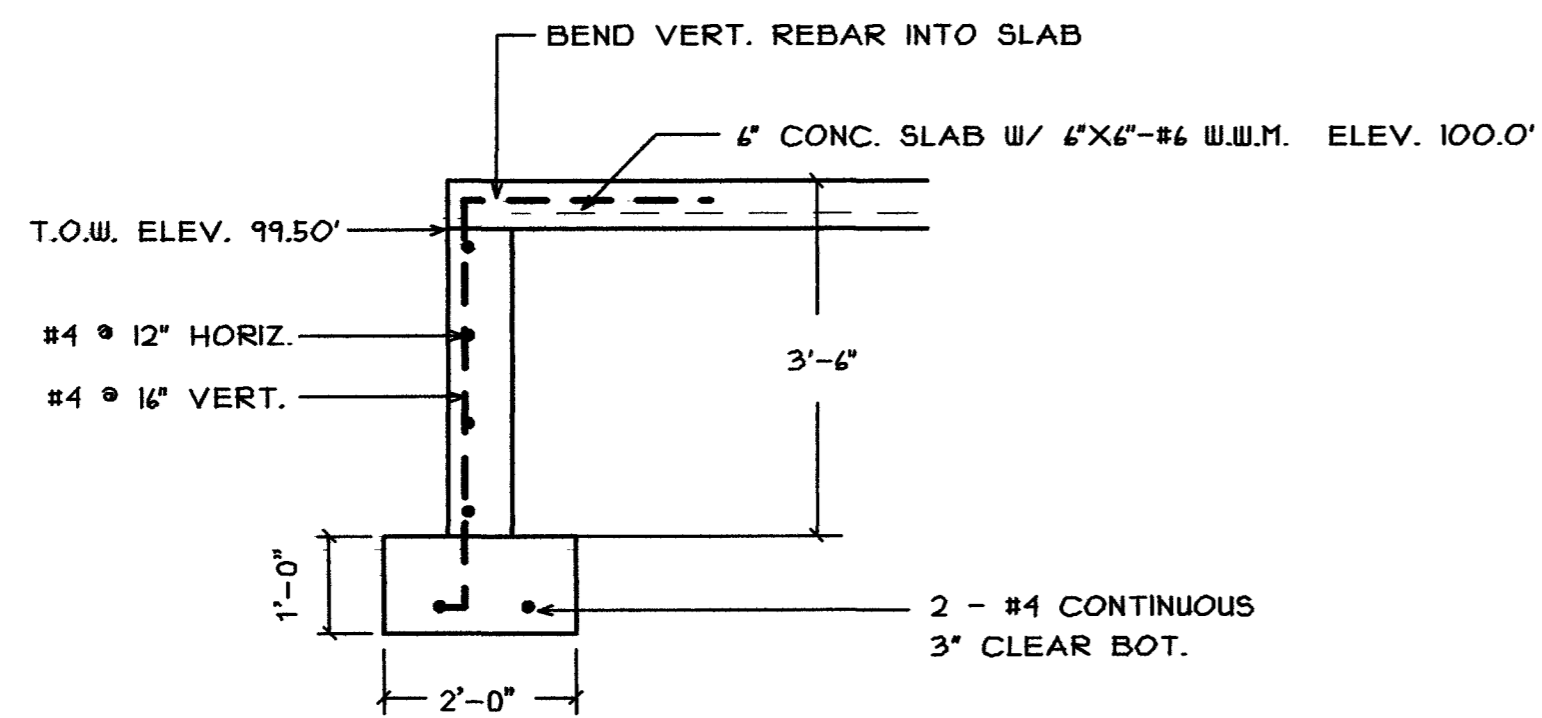
DATE: 9/15/08
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 DESIGNER: JB
 CHECKED BY: JB
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SHEET TITLE
FOUNDATION PLAN

SHEET NUMBER
F-1
 SHEET 1 OF 3

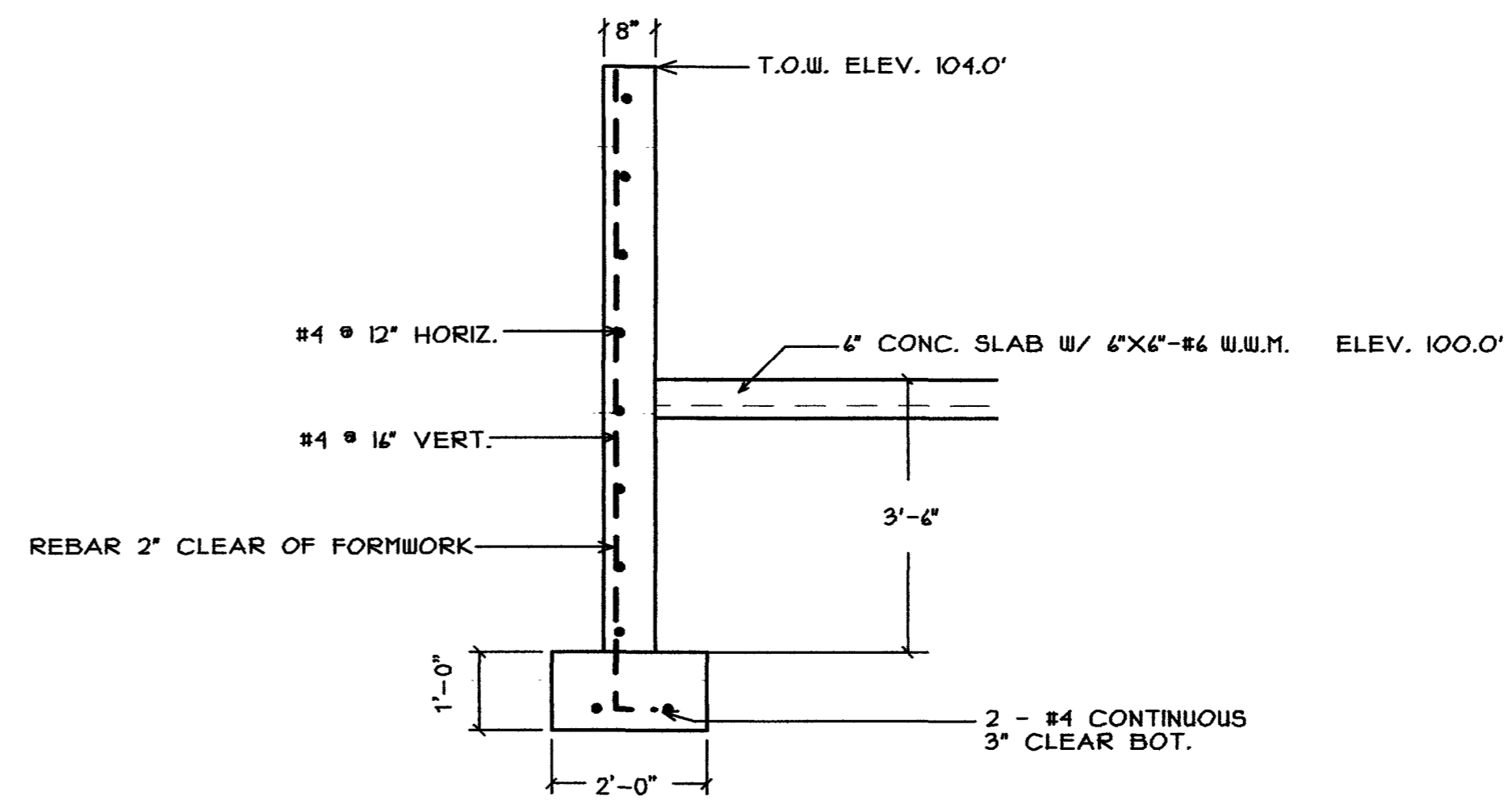
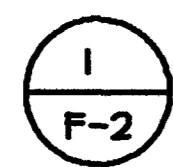


FOOTING & PIER SCHEDULE					
LOCATION	FOOTING SIZE	FOOTING REBAR	PIER SIZE	PIER REBAR	ANCHOR BOLTS
1A, 1D	3'-0" X 3'-0" X 1'-0"	4 #5 E.W. BOTT.	12" X 12"	4 #4 VERT. WITH #3 HOOPS 12" O.C.	5/8" X 16"
1C	5'-0" X 5'-0" X 1'-0"	4 #5 E.W. BOTT.	16" X 12"	4 #4 VERT. WITH #3 HOOPS 12" O.C.	3/4" X 18"
2A, 3A	6'-0" X 6'-0" X 1'-2"	1 #5 E.W. BOTT.	28" X 28"	1 #5 "U" BARS WITH #3 HOOPS 12" O.C.	3/4" X 18"
4A, 4D	5'-0" X 5'-0" X 1'-0"	4 #5 E.W. BOTT.	16" X 18"	4 #5 "U" BARS WITH #3 HOOPS 12" O.C.	3/4" X 18"
2D, 3D	6'-0" X 6'-0" X 1'-2"	1 #5 E.W. BOTT.	16" X 28"	1 #5 "U" BARS WITH #3 HOOPS 12" O.C.	3/4" X 18"



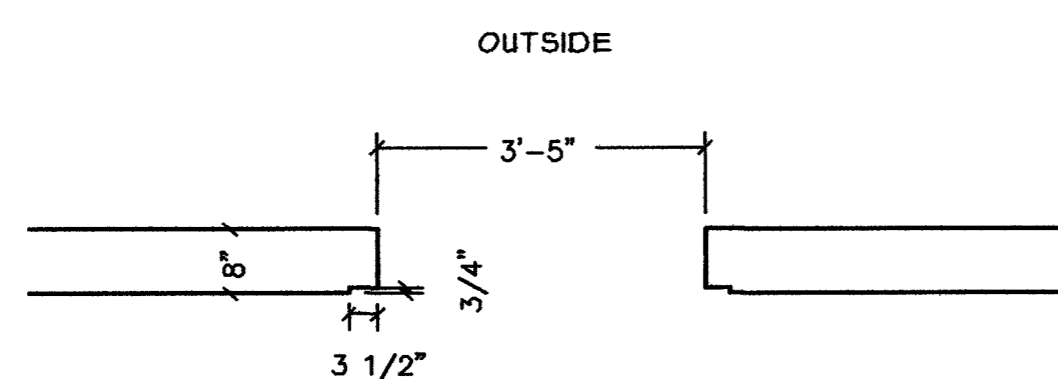
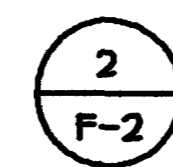
SECTION THRU DOOR OPENINGS

SCALE: 1/2"=1'-0"

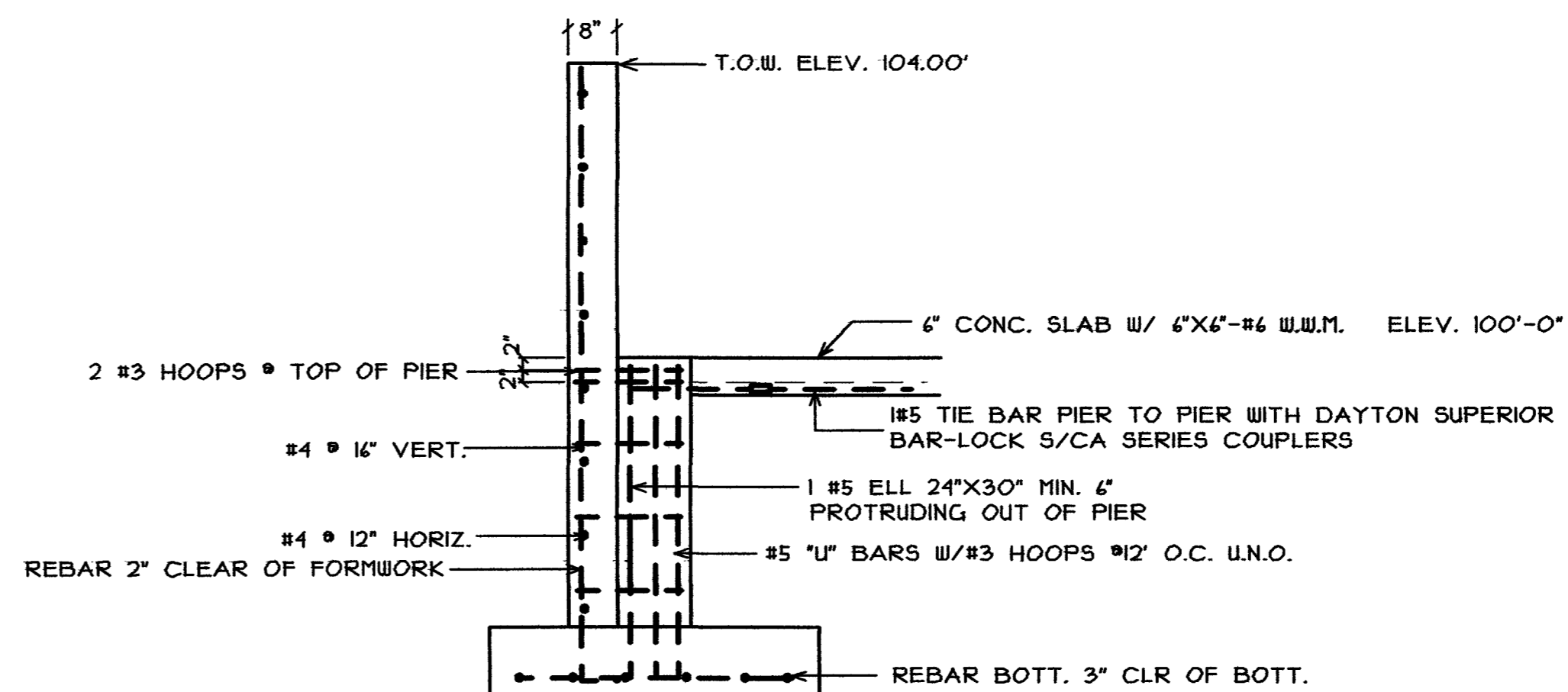
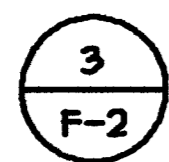


WALL SECTION

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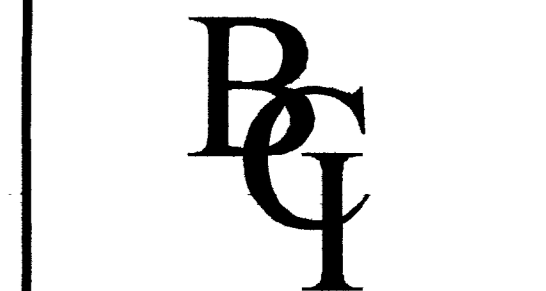
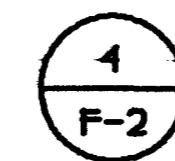


TYPICAL PASS DOOR OPENING



SEE SCHEDULE ON F-1 FOR FTG. SIZE & REINFORCING

WALL SECTION @ PIERS
2A, 3A, 2D, 3D



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STAMP



PROJECT:
DELTA REALTY ADDITION
380 WARREN AVENUE
PORTLAND, MAINE

REVISIONS	
DATE	DESCRIPTION

DATE: 1/15/08
SCALE: 3/16" = 1'-0"
DESIGNER: JB
CHECKED BY: JB

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SHEET TITLE
FOUNDATION
DETAILS

SHEET NUMBER

F-2

SHEET 2 OF 3

CONCRETE NOTES

1. CODES:
COMPLY WITH THE FOLLOWING LATEST EDITIONS AND CURRENT AMENDMENTS:
- 1.1 ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
 - 1.2 ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
 - 1.3 CRSI "CONCRETE REINFORCING STEEL INSTITUTE, MANUAL OF STANDARD PRACTICE"
2. TESTING:
- 2.1 LABORATORY TESTS: CONCRETE MIX DESIGN, FIELD FABRICATED CYLINDERS FOR COMPRESSIVE STRENGTH.
 - 2.2 FIELD TESTS: PERFORM FIELD TESTS FOR SLUMP, AIR CONTENT AND TEMPERATURE. PREPARE CYLINDERS FOR COMPRESSIVE TESTING, #1 AT 7 DAYS AND #2 AT 28 DAYS.
4. MATERIALS:
- 4.1 REINFORCING STEEL: GRADE 60, ASTM G15, NEW DEFORMED BARS.
 - 4.2 REINFORCING FOR SLABS: EQUAL TO FIBERMESH, 1.5 lbs/cy CONCRETE, OR 6wg. SW.5wg. 5 WVF.
 - 4.3 MIXING WATER SHALL BE POTABLE, FREE OF ANY SUBSTANCES THAT MAY BE DELETERIOUS TO THE CONCRETE OR REINFORCING STEEL.
5. CONCRETE:
- 5.1 INTERIOR SLABS:
CEMENT SHALL BE ASTM 150, TYPE II PORTLAND CEMENT
-28 DAY COMPRESSIVE STRENGTH: 3000 PSI
-MAX. AGG. SIZE: 3/4"
-AIR CONTENT: NO AIR
-MAX WATER-CEMENT RATIO: 0.5
-AGGREGATE SHALL CONFORM TO ASTM C33
 - 5.2 WALLS AND FOOTINGS:
CEMENT SHALL BE ASTM 150, TYPE II PORTLAND CEMENT
-28 DAY COMPRESSIVE STRENGTH: 3000 PSI
-MAX. AGG. SIZE: 1 1/2"
-AIR CONTENT: 5% +/- 1% BY VOLUME
-MAX WATER-CEMENT RATIO: 0.50
-AGGREGATE SHALL CONFORM TO ASTM C33
 - 5.3 ADMIXTURES:
PROVIDE ADMIXTURES WHICH ARE CHEMICALLY COMPATIBLE FOR THEIR INTENDED USE. COMPLY WITH MANUFACTURER'S INSTRUCTIONS FOR USE. BASE DOSAGE RATES ON CEMENT CONTENT. CALCIUM CHLORIDE IS NOT ALLOWED.
 - 5.3.1 HIGH RANGE WATER REDUCERS (SUPER PLASTICIZERS): EQUAL TO DARACEM 100 BY W.R. GRADE 4 CO., ASTM C-494.
 - 5.3.2 ACCELERATORS: EQUAL TO DARASET BY W.R. GRADE 4 CO., ASTM C-404 TYPE C OR E.
 - 5.3.3 AIR ENTRAINING: EQUAL TO DARAVAIR BY W.R. GRADE 4 CO., ASTM C-260 AND ARMY CORPS CRD-C-13.
 - 5.4 CONCRETE SURFACE COATINGS:
5.4.1 CURING COMPOUND: "KURE-N-SEAL" BY SOMMERBORN, OR EQUIVALENT.
 - 5.4.2 BITUMINOUS DAMPROOFING: EQUAL TO BRUSH GRADE FOUNDATION COATING BY EUCUID.
 - 5.5 FORMS AND RELATED MATERIAL:
5.5.1 FORMS FOR CONCRETE SURFACES THAT WILL BE EXPOSED IN THE FINISHED BUILDING SHALL BE PLYFORM CLASS I, B-B EXTERIOR TYPE CONFORMING TO U.S. PRODUCT STANDARD PS-1. FORMS FOR CONCRETE SURFACES NOT EXPOSED WITH FINISHED BUILDING MAY BE PLYFORM OR MATCHED LUMBER.
 - 5.5.2 FORM OIL USED ON SURFACE OF FORMS SHALL BE A NON-STAINING TYPE.
 - 5.6 ALUMINUM PRODUCTS:
5.6.1 NO ALUMINUM CONDUIT, PIPE, INSERTS, REGLETS, ETC. SHALL BE PLACED IN ANY CONCRETE, UNLESS COATED WITH BITUMINOUS DAMPROOFING.
 - 5.6.2 NO EQUIPMENT OR ALUMINUM OR ALUMINUM ALLOYS SHALL BE USED FOR PUMP LINES, TREMIES OR CHUTES IN CONVEYING CONCRETE TO POINT OF PLACEMENT.
 - 5.7 GROUT:
5.7.1 NON-SHRINK GROUT FOR USE UNDER COLUMN BASE PLATES AND BEAM BEARING PLATES SHALL BE EMBECO GROUT #805, PRE-MIXED, AS MANUFACTURED BY MASTER BUILDERS, OR APPROVED EQUIVALENT.
 - 5.8 PREFORMED EXPANSION JOINT FILLER:
5.8.1 A NON-EXTENDING AND RESILIENT BITUMINOUS TYPE JOINT FILLER, 1/2" THICK.
 - 5.9 EMBEDDED ITEMS:
5.9.1 EMBEDDED ITEMS SUCH AS ANCHOR BOLTS, ETC., SHALL BE INSTALLED USING A TEMPLATE AND BE SECURELY HELD IN PLACE DURING CONCRETE PLACEMENT.
 - 5.10 SPACERS, SUPPORTS AND FASTENERS:
5.10.1 FORM SPACERS, REINFORCING TIES AND CHAIRS, AND OTHER DEVICES NEEDED FOR PROPERLY SPACING, SUPPORTING, AND FASTENING REINFORCEMENT SHALL BE PROVIDED. CLAY BRICKS ARE NOT ALLOWED FOR USE AS SLAB STEEL BOLSTERS.
 - 5.11 VAPOR BARRIER:
5.11.1 UNDERSLAB MOISTURE VAPOR BARRIER SHALL BE MADE OF A LAYER OF 6 MIL. POLYETHYLENE PLASTIC. PLACE VAPOR BARRIER AS SHOWN IN DETAIL ON S301.
6. CONSTRUCTION PRACTICES:
6.1 REINFORCEMENT:
COMPLY WITH REQUIREMENTS OF CRSI, LATEST EDITION.
- 6.1.1 MINIMUM CONCRETE COVER: 3" FOR CONCRETE CASE AGAINST SOIL; 2" FOR OTHER CONCRETE, UNLESS OTHERWISE SHOWN.
- 6.2 DEVELOPMENT AND SPLICING:
PROVIDE DEVELOPMENT AND TENSION LAP SPICE LENGTHS IN ACCORDANCE WITH THE FOLLOWING, UNLESS NOTED OTHERWISE ON PLANS:
- | DEVELOPMENT BAR SIZE | LENGTH* | CLASS C' LAP SPICE |
|----------------------|---------|--------------------|
| #4 | 12 | 12" |
| #5 | 12 | 20" |
| #6 | 15 | 26" |
| #7 | 21 | 36" |
| #8 | 28 | 48" |
- *INCREASE BY 30% FOR BARS SPACED <6".

CONCRETE NOTES CONT.

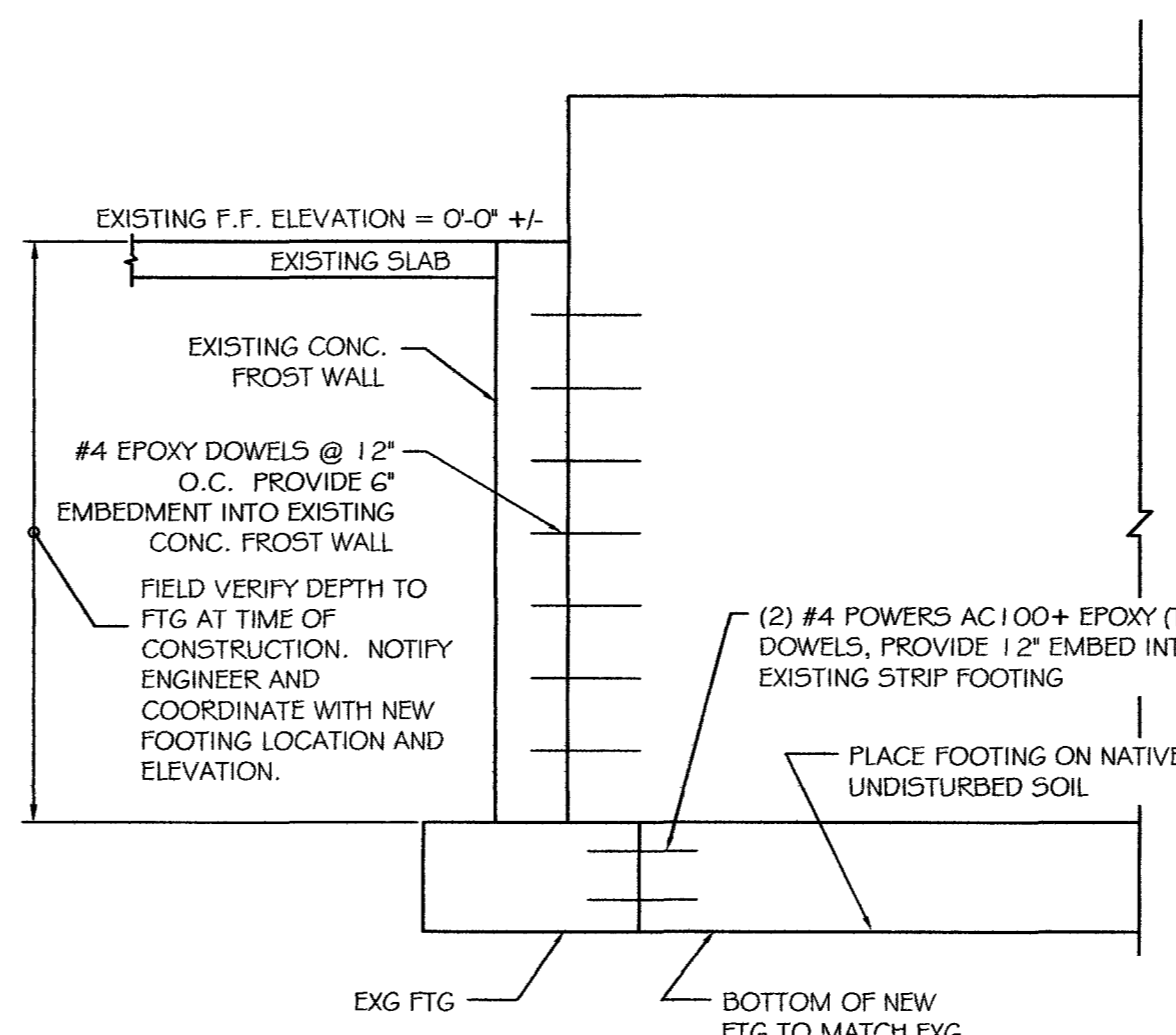
- 6.3 CHAMBERS:
CHAMFER ALL EXPOSED EDGES AND CORNERS OF CONCRETE 1/2" OR 1" SIMILAR THROUGHOUT.
- 6.4 JOINTS:
- 6.4.1 CONSTRUCTION JOINTS: PLACE PERPENDICULAR TO THE MAIN REINFORCEMENT. CONTINUE REINFORCEMENT ACROSS CONSTRUCTION JOINTS. PROVIDE KEYWAYS AT LEAST 1 1/2" UNLESS OTHERWISE SHOWN DEEP IN CONSTRUCTION JOINTS IN WALLS, SLAB, AND BETWEEN WALLS AND FOOTINGS. ACCEPTED BULKHEADS DESIGNED FOR THIS PURPOSE MAY BE USED IN SLABS. PROVIDE WATERSTOP WHERE INDICATED.
 - 6.4.2 ISOLATION JOINTS: PROVIDE IN SLABS ON-GRADE AT POINTS OF CONTACT BETWEEN SLABS ON-GRADE AND VERTICAL SURFACES, SUCH AS FOUNDATION WALLS, GRADE BEAMS, COLUMN FEDESTALS, AND ELSEWHERE AS NECESSARY.
 - 6.4.3 CONTRACTION (CONTROL) JOINT: PROVIDE IN SLABS ON-GRADE BY USING INSERTS OR BY SAW CUTTING TO A DEPTH OF 1/2 THE SLAB THICKNESS. PROVIDE A ONE PART ELASTOMERIC JOINT SEALANT TO JOINT GROOVE. A MINIMUM OF 60 DAYS AFTER SLAB PLACEMENT UNLESS OTHERWISE APPROVED.
- 6.5 CONCRETE MIXING:
6.5.1 READY-MIXED CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH IN ASTM C94.
6.5.2 ALL CONCRETE SHALL BE MIXED UNTIL THERE IS A UNIFORM DISTRIBUTION OF THE MATERIALS AND CONTINUOUS AFTER THE WATER HAS BEEN ADDED TO THE MIX IN THE DRUM.
6.5.3 NO CONCRETE SHALL BE PLACED IN THE FORMS MORE THAN 30 MINUTES AFTER THE WATER HAS BEEN ADDED.
6.5.4 AFTER THE MAXIMUM WATER CEMENT RATIO HAS BEEN AGREED UPON, THE PLACEMENT OF THE CONCRETE WILL NOT BE ALLOWED, UNLESS APPROVED BY ENGINEER.
- 6.6 CONCRETE PLACEMENT:
6.6.1 DEPOSIT CONCRETE CONTINUOUSLY IN LAYERS NOT DEEPER THAN 24" OVER PREVIOUS LAYERS WHICH ARE STILL PLASTIC. AVOID COLD JOINTS. CONSOLIDATE CONCRETE BY MECHANICAL VIBRATING EQUIPMENT, SUPPLEMENTED BY HAND SPACING, RODDING AND TAMPING. DO NOT USE MECHANICAL VIBRATORS TO TRANSPORT CONCRETE.
6.6.2 HOT WEATHER PLACING: COMPLY WITH ACI 306, LATEST EDITION. MAINTAIN A FRESH CONCRETE TEMPERATURE OF NOT LESS THAN 50°F AND NOT MORE THAN 80°F AT THE POINT OF PLACEMENT.
- 6.7 CONCRETE CURING:
COMPLY WITH ACI 308, LATEST EDITION. COMPLY WITH ACI 306 FOR HOT WEATHER CONCRETING. PROVIDE A MINIMUM OF A 7 DAY CONTINUOUS MOISTURE CURE BY COVERING CONCRETE SURFACE WITH A WET ABSORPTIVE COVER. MAINTAIN SATURATED COVER CONDITION. ALTERNATIVE CURING METHODS WILL ONLY BE ALLOWED IF APPROVED BY ENGINEER. CONTRACTOR WILL SUBMIT ALTERNATIVE CURING PRODUCTS AND METHODS FOR REVIEW AND APPROVAL. ALSO, MAINTAIN CONCRETE CURING TEMPERATURE ABOVE 50°.
- 6.7.1 SLABS: USE MOISTURE CURE OR CURING COMPOUND. APPLY CURING COMPOUND WITHIN 2 HOURS OF FINAL FINISHING BY SPRAY OR ROLLER. RECOAT AREAS SUBJECT TO HEAVY RAINFALL. DO NOT USE CURING COMPOUND ON SLABS WHICH WILL RECEIVE LIQUID FLOOR HARDENER OR OTHER FINISHES.
 - 6.7.2 FORMED SURFACES: CURE FORMED SURFACES WITH FORMS IN PLACE FOR ENTIRE CURING PERIOD. DURING COLD WEATHER CURING, PROVIDE CAST-IN THERMOMETERS FOR MONITORING CONCRETE CURING TEMPERATURE AT LOCATIONS AS DIRECTED BY ENGINEER. MAINTAIN A 50°F WITH USE OF INDIRECT HEAT OR INSULATIVE BLANKETS.
- 6.8 ANCHOR BOLTS: USE TYPE, SIZE, AND LENGTH AS INDICATED ON PLANS.

EARTHWORK NOTES

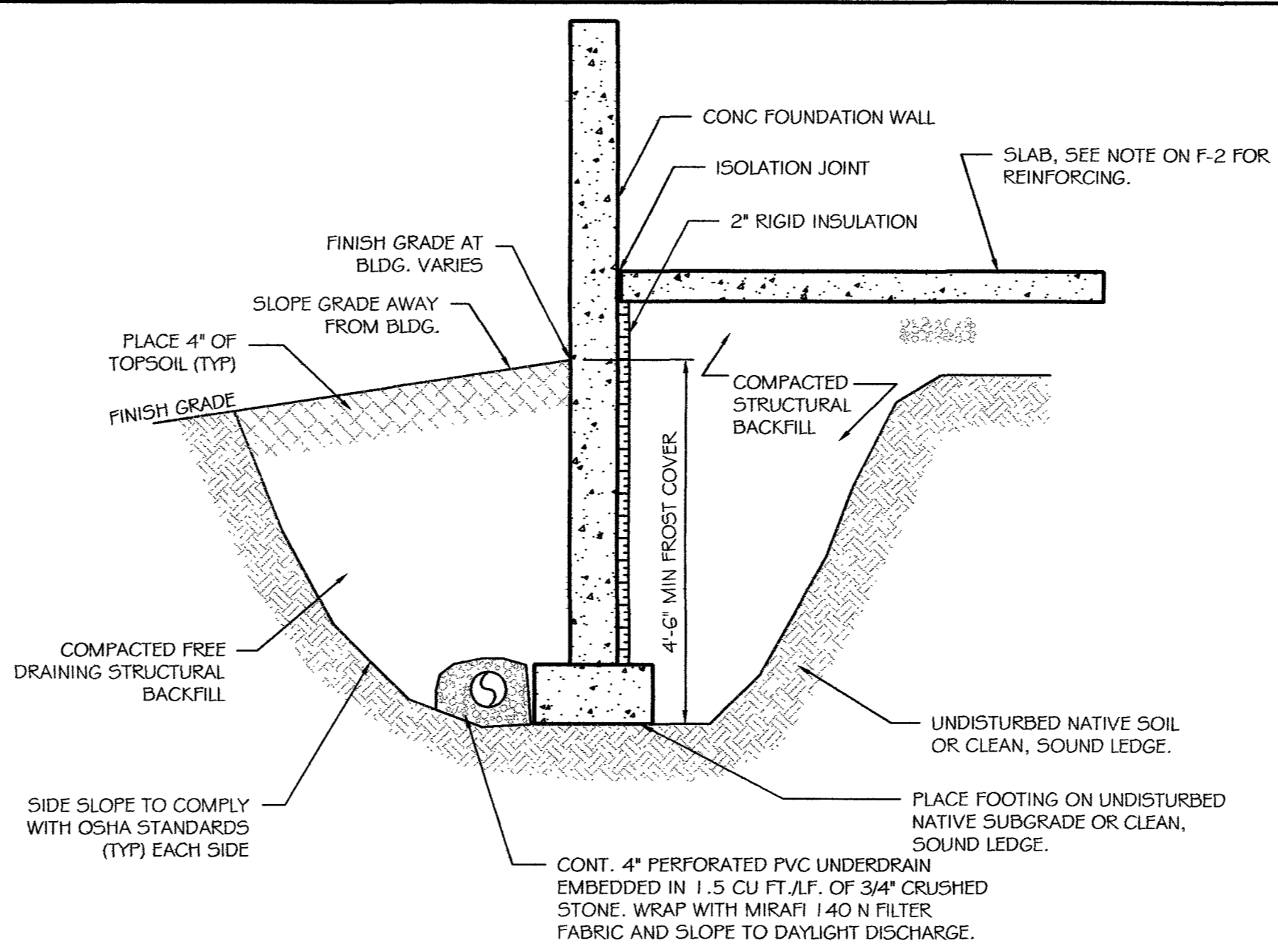
1. SITE WORK AND CONCRETE CONTRACTORS ARE REQUIRED TO REVIEW THE ON-SITE SUBSURFACE SOIL CONDITIONS WITH THE SIER AT THE START OF INITIAL CONSTRUCTION. SITE CONTRACTOR WILL NOTIFY SIER AFTER EXCAVATION HAS STARTED AND PRIOR TO THE PLACEMENT OF ANY STRUCTURAL FOUNDATIONS.
 2. REMOVE ALL TOPSOIL AND UNCONTROLLED FILL FOR THE AREAS RECEIVING BUILDING FOUNDATIONS.
 3. BACKFILL TO THE NECESSARY SUBGRADES REQUIRED ON THE STRUCTURAL FOUNDATION PLANS WITH CONTROLLED STRUCTURAL FILL MATERIAL MEETING THE FOLLOWING GRADATION:
- | PERCENT PASSING | SCREEN OR SIEVE SIZE |
|-----------------|----------------------|
| 100 | 3 |
| 90-100 | NO. 3 |
| 35-70 | NO. 40 |
| 5-35 | NO. 200 |
| 0-5 | 0.5 |
4. PLACE CONTROLLED STRUCTURAL FILL IN UNIFORM LIFTS AND COMPACT TO A MINIMUM OF 95% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D1557 MODIFIED PROCTOR DENSITY.
 5. PROVIDE SITE GRADING AROUND THE PERIMETER OF THE BUILDING TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE FOUNDATION DURING AND AFTER CONSTRUCTION.
 6. MAINTAIN THE INTEGRITY OF NATURAL SOILS AND CONTROLLED STRUCTURAL FILLS DURING CONSTRUCTION. PROTECT FOOTING AND STRUCTURE SUBGRADES AGAINST FREEZING AND EXCESSIVE WETTING. REMOVE AND REFILL FROZEN SUBGRADES, MOISTURE CONDITION, OR REPLACE EXCESSIVELY WET SUBGRADE MATERIALS.
 7. NOTIFY ENGINEER TO OBSERVE SUBGRADES PRIOR TO PLACING FOOTINGS. FOOTINGS ARE DESIGNED FOR A MIN. SOIL BEARING CAPACITY OF 2000PSF PER S.W. COLE GEOTECH REPORT.
 8. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER IF LEAD IS ENCOUNTERED TO DETERMINE FINING REQUIREMENTS.
 9. ALL FOOTINGS SHALL EXTEND A MINIMUM OF 4'-6" BELOW EXTERIOR FINISHED GRADE, OR BE DOWELED TO LEDGE.
 10. PROOF ROLL SUBGRADE PRIOR TO SLAB CONSTRUCTION. PROVIDE STRUCTURAL FILL MEETING THE GRADATION SPECIFIED HEREIN FOR FILL MATERIALS BELOW THE SLAB. MAXIMUM PERCENT PASSING 200 SIEVE = 7%.
 11. COMPACT CONTROLLED STRUCTURAL FILLS IN ACCORDANCE WITH THE FOLLOWING SCHEDULE AND ASTM D1557. USE ONLY HAND-OPERATED EQUIPMENT ADJACENT TO WALLS. FILL BOTH SIDES OF WALLS TO EQUAL ELEVATIONS BEFORE COMPACTING.
- DEGREE OF COMPACTION: COMPACT TO THE FOLLOWING MINIMUM DENSITIES:
- | FILL AND BACKFILL LOCATION | DENSITY |
|---|-------------|
| UNDER STRUCTURE FOUNDATIONS | 95% OF MAX. |
| TOP 2 FEET UNDER PAVEMENT | 92% |
| BELOW TOP 2 FEET UNDER PAVEMENT | 92% |
| TRENCHES THROUGH UNPAVED AREAS | 90% |
| EMBANKMENTS | 90% |
| PIPE BEDDING | 92% |
| BESIDE STRUCTURE FOUNDATION WALLS, TANK WALLS AND RETAINING WALLS | 90% |
| UNDER PIPES THROUGH STRUCTURAL FILLS UNDER DRAIN FILTER SAND | 90% |
| MAXIMUM DENSITY: ASTM D1557, MODIFIED. | |
- FIELD DENSITY TESTS: ASTM D1556 (SAND CONE), ASTM D1673 (RUBBER BALLOON), OR ASTM D2922 (NUCLEAR METHODS).
12. CONTRACTOR IS REQUIRED TO CONFORM TO OSHA (29 PART 1926.650-652) SUBPART P "CONSTRUCTION STANDARD FOR EXCAVATIONS".

GENERAL STRUCTURAL NOTES

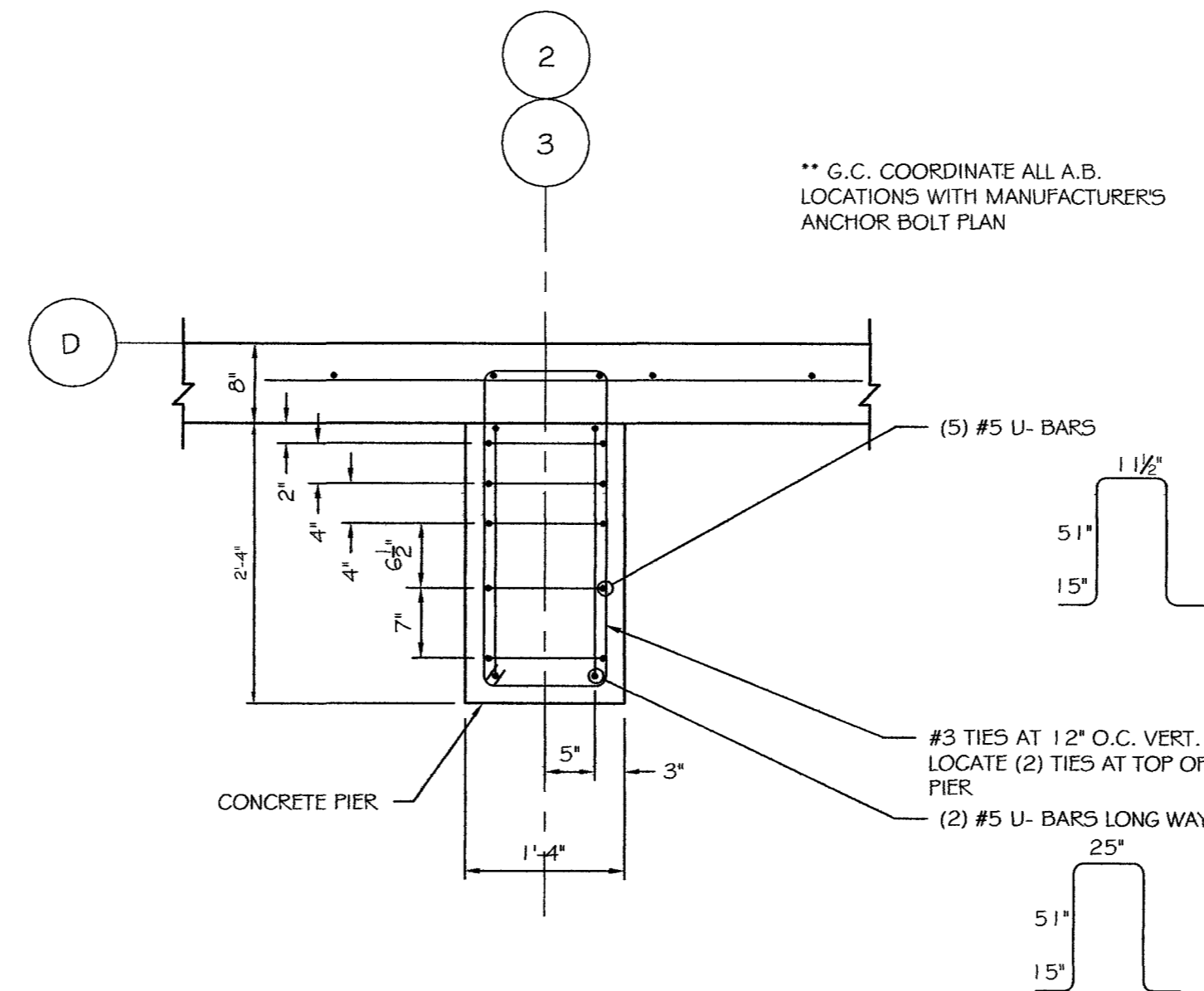
1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE STATE AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO:
-INTERNATIONAL BUILDING CODE - 2003 ED
-ANSI-ASSE 7-02
-ACI 318-09 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
-ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
-AISC STEEL CONSTRUCTION MANUAL
-SEI COLD FORMED STEEL DESIGN MANUAL
-ANSI-AFWA NDS-1997
2. ROOF DESIGN LOADS:
N.A. - COLUMN REACTIONS PROVIDED BY METAL BUILDING FABRICATOR.
3. FLOOR DESIGN LOADS: 125 PSF LIGHT WAREHOUSE STORAGE
4. WIND LOADS:
N.A. - COLUMN REACTIONS PROVIDED BY METAL BUILDING FABRICATOR.
5. CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ENGINEER ANY CONDITIONS DIFFERENT FROM THOSE SHOWN ON THE DRAWINGS AND ALSO ANY CONDITIONS THAT PREVENT THE CONTRACTOR'S COMPLETION OF THE WORK AS SHOWN ON THE CONSTRUCTION DRAWINGS.
6. ALL WORK SHALL BE PERFORMED BY PERSONS QUALIFIED IN THEIR TRADE AND LICENSED TO PRACTICE SUCH TRADE IN THE STATE IN WHICH THE PROJECT IS LOCATED.
7. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH ANY ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS, IN ADDITION TO SPECIFICATIONS AND ANY SHOP DRAWINGS PROVIDED BY SUBCONTRACTORS AND SUPPLIERS.
8. ALL DIMENSIONS, ELEVATIONS, AND CONDITIONS SHALL BE VERIFIED IN THE FIELD BY GENERAL CONTRACTOR (G.C.) AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
9. UNLESS OTHERWISE NOTED, DETAILS, SECTIONS, AND NOTES SHOWN ON ANY DRAWING SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR DETAILS.
10. THESE DRAWINGS DO NOT SHOW SIZE, LOCATION OR TYPE OF OPENINGS IN THE FOUNDATION SYSTEM FOR ELECTRICAL, PLUMBING OR MECHANICAL EQUIPMENT. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING THESE ITEMS.
11. ALL SHOP DRAWINGS PROVIDED BY OTHERS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION OF MATERIAL OR THE PURCHASE OF NON-RETURNABLE STOCK. DIMENSIONAL REVIEW IS THE CONTRACTOR'S RESPONSIBILITY.
12. USE PERIMETER DRAINS WHERE SHOWN. DRAIN TO APPROPRIATE OUTLET.



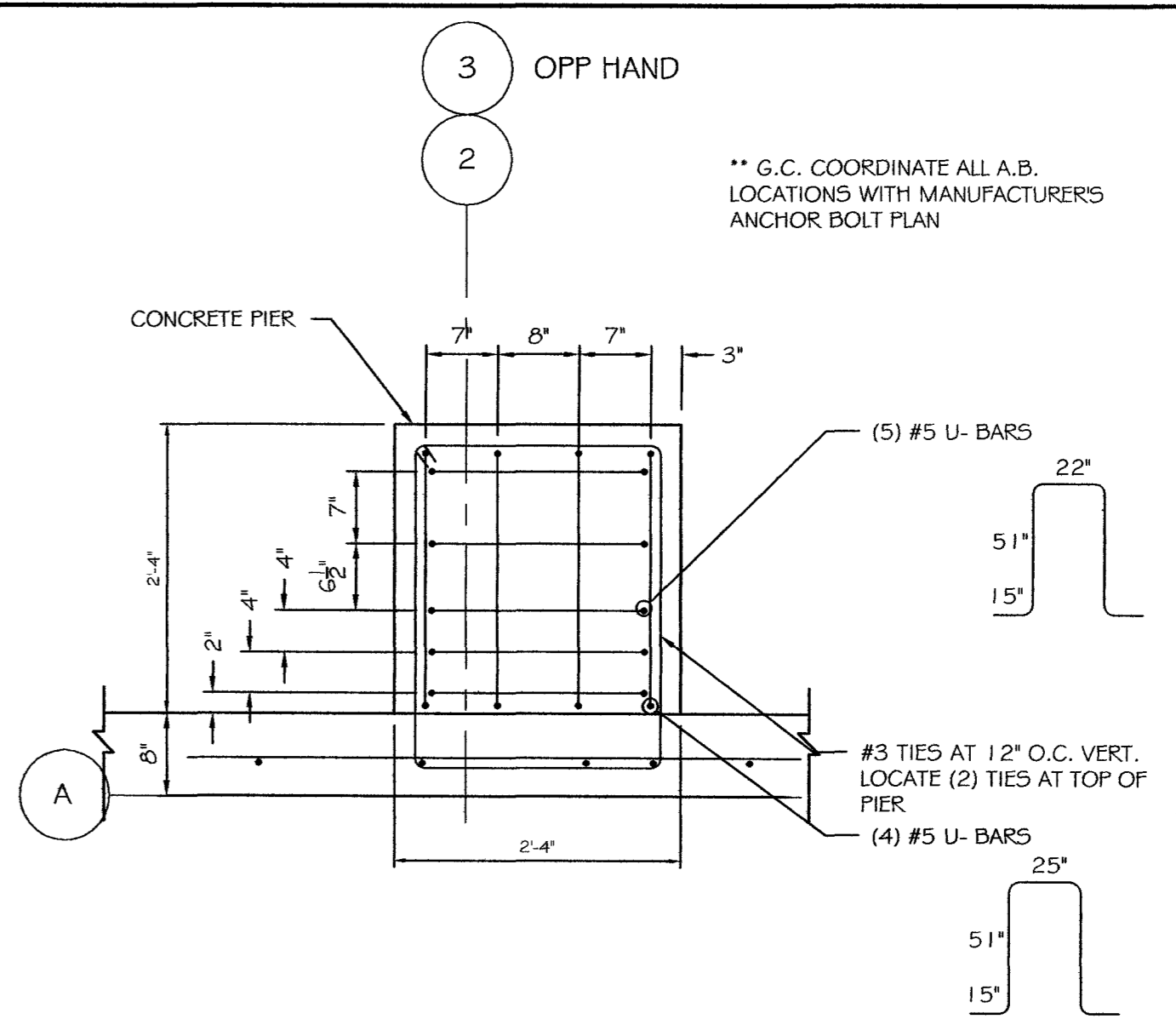
C2 NEW FOUNDATION TO EXISTING
SCALE: NO SCALE



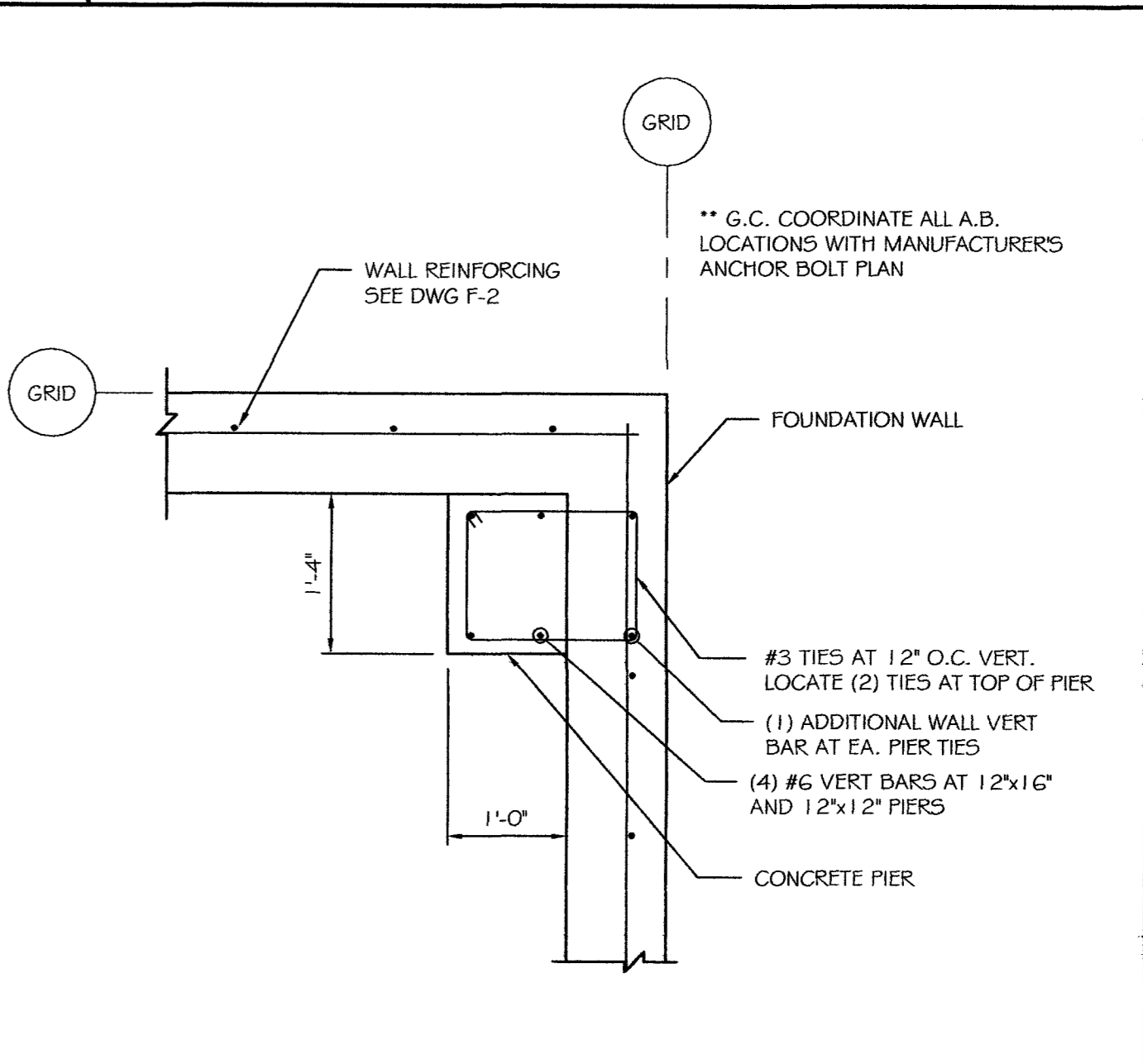
B2 TYPICAL EARTHWORK DETAIL
SCALE: NO SCALE



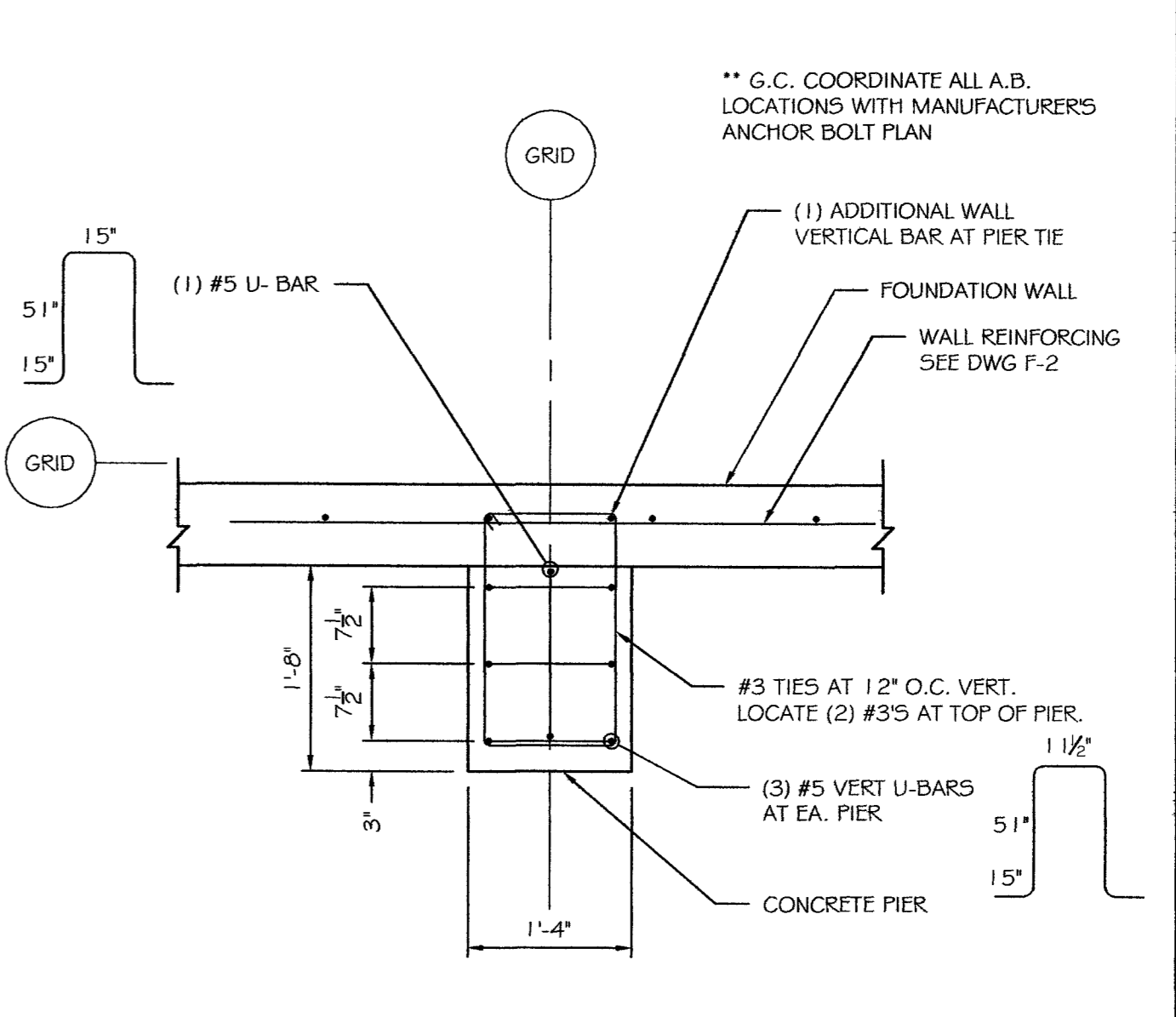
A2 16\"/>



C1 28\"/>



B1 12\"/>



A1 16\"/>

BQ

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STAMP
STATE OF MAINE
AARON S. WILSON
No. 10429
Professional Engineer

PROJECT:
DELTA REALTY ADDITION
380 WARREN AVE
PORTLAND, MAINE

REVISIONS

DATE	DESCRIPTION

DATE: 9/5/08
SCALE: 3/4" = 1'-0"
DESIGNER: ASB
CHECKED BY: JB
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SHEET TITLE
FOUNDATION DETAILS

SHEET NUMBER
F-3
SHEET 3 OF 3

A4 NOTES