

GENERAL NOTES

1.CONSTRUCTION SHALL CONFORM TO THE LOCAL BUILDING AND SAFETY CODES AND TO THE RULES AND REGULATIONS OF ALL AGENCIES HAVING JURISDICTION.

2.APPLICABLE CODE IS THE SAN FRANCISCO BUILDING CODE, 2001 EDITION

3.GENERAL CONTRACTOR SHALL COMPARE STRUCTURAL DRAWINGS WITH EXISTING CONDITIONS IN THE FIELD PRIOR TO ORDERING OR FABRICATING MATERIAL. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING IF THERE ARE ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THESE DRAWINGS

4.THE CONTRACTOR SHALL LOCATE AND PROTECT ALL EXISTING UTILITY LINES AND CONNECTIONS, INCLUDING SEWER, WATER, GAS, AND ELECTRIC SERVICES BEFORE AND DURING THE WORK.

5.THE CONTRACT STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, SHORING AND BRACING TO ALLOW FOR THE REMOVAL AND REPLACEMENT OF EXISTING STRUCTURAL MEMBERS, AND SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT AND MATERIALS.

6.CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO ENSURE THAT ALL PROPERTY IS PROTECTED DURING CONSTRUCTION. ANY DAMAGED OR CHANGED CONDITIONS SHALL BE REPAIRED AND RESTORED TO THE PRECONSTRUCTION CONDITIONS. CONTRACTOR SHALL REPAIR ANY DAMAGE AT HIS OWN EXPENSE.

7.PROTECT THE WATERS OF THE SAN FRANCISCO BAY DURING THE WORK. PROVIDE MEASURES AS REQUIRED BY AUTHORITIES HAVING JURISDICTION TO PREVENT SPILLS OR CONTAMINATION OF ANY SORT.

SUMMARY OF WORK

1.THE WORK INVOLVES REPAIR AND REPLACEMENT OF WHARF SUBSTRUCTURE MEMBERS THAT HAVE BEEN DAMAGED BY INSECT INFESTATION, OVERLOADING, ROT OR OTHER CAUSES. THE WHARF SUBSTRUCTURES SUPPORTS THE WHARF DECK AND THE BUILDINGS ABOVE. THE WHARVES AND BUILDING ABOVE WILL REMAIN OCCUPIED DURING THE WORK.

2.MEMBERS REQUIRING REPAIR OR REPLACEMENT INCLUDE DRIVEN WOOD PILES, WOOD PILE CAPS AND BEAMS, WOOD JOISTS, STEEL BEAMS, AND REINFORCED CONCRETE COLUMNS, INCLUDING ASSOCIATED CONNECTIONS.

3.CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT, LABOR, TOOLS, TEMPORARY FACILITIES, SHORING AND BRACING AS REQUIRED TO PERFORM THE WORK, COMPLETE, IN PLACE, INCLUDING FIELD MEASURING, LAYOUT, AND ENGINEERING.

4.CONTRACTOR SHALL EXPECT TO ENCOUNTER EXISTING LIVE AND ABANDONED UTILITY LINES AT ALL REPAIR LOCATIONS.

SUBMITTALS

1.CONTRACTOR SHALL PREPARE SUBMITTALS IN A TIMELY MANNER TO ALLOW FOR A 2 WEEK REVIEW PERIOD BY THE ENGINEER. SUBMIT 6 COPIES OF ALL SUBMITTALS REQUIRED BELOW.

- 1.CONSTRUCTION SCHEDULE.
- 2.TEMPORARY FACILITIES PLAN.
- 3.SHORING AND BRACING PLAN.
- 4.CONCRETE MIX DESIGN.
- 5.REINFORCING SHOP DRAWING.
- 6.PILE REPAIR PROCEDURES AND PRODUCT DATA. INCLUDE ENGINEERING CALCULATIONS.
- 7.ADHESIVE FOR BONDING DOWELS.

CONCRETE MATERIALS

1.CAST-IN-PLACE CONCRETE SHALL HAVE COMPRESSIVE STRENGTH AT 28 DAYS OF 5000 PSI.

2.MAXIMUM WATER/CEMENT RATIO 0.40.

3.ALL CONCRETE SHALL INCLUDE THE CORROSION INHIBITING ADMIXTURE RHEOCRETE CNI AT THE RATE OF 4 GALLONS PER CUBIC YARD.

4.REINFORCING STEEL: ASTM A615 GRADE 60, EPOXY COATED.

5.ADHESIVE FOR GROUTED DOWELS: MASTERBUILDERS SET-45, OR ANY PROPRIETARY EPOXY BONDING SYSTEM FORMULATED FOR GROUTING REINFORCEMENT DOWELS INTO EXISTING CONCRETE.

6.PATCHING MATERIAL: PROPRIETARY NON-SHRINK, NON-METALLIC GROUT WITH 28 DAY COMPRESSIVE STRENGTH OF 6000 PSI MINIMUM.

STEEL MATERIALS

1.ALL STEEL MATERIALS INCLUDING FASTENERS TO BE HOT-DIPPED GALVANIZED AFTER FABRICATION.

2.MACHINE BOLTS: ASTM A307.

3.THREADED RODS: ASTM A36 OR ASTM A307.

4.STEEL PLATES, SHAPES, AND BARS: ASTM A992 OR A36.

WOOD MATERIALS

1.BEAMS, JOISTS AND BLOCKING SHALL BE DOUGLAS FIR NUMBER 1, PRESSURE TREATED, ACZA, WITH A RETENTION RATE OF 1.5 PCF.

2.NAILS SHALL BE HOT DIPPED GALVANIZED, 16D OR 20D.

PILE REPAIR SYSTEM

1.PILE REPAIR SHALL CONSIST OF A GROUT FILLED STRUCTURAL SHEATHING BONDED TO THE EXISTING WOOD PILES. THE SYSTEM SHALL BE AS MANUFACTURED BY HARDCORE COMPOSITES USING ENHANCE MULTI AXIS COMPOSITE SHELLS 18" IN DIAMETER WITH 0.273" WALL THICKNESS.

2.REMOVE (E) PLASTIC WRAPPING OR CONCRETE JACKETING PRIOR TO STARTING REPAIR.

3.REMOVE UNSOUND MATERIAL AND MATERIAL THAT WOULD AFFECT BOND OF GROUT PRIOR TO PLACING SHEATHING.

MEMBER REPLACEMENT REQUIREMENTS

1.DRAWINGS INDICATE EXISTING CONDITIONS, MEMBER SIZES AND LOCATIONS OF DAMAGED MEMBERS TO BE REPLACED. PHOTOGRAPHS HAVE BEEN PROVIDED TO PARTIALLY ILLUSTRATE EXISTING CONDITIONS TO BE ENCOUNTERED AT REPAIR LOCATIONS. IT IS EXPECTED THAT EXISTING FASTENERS AND OTHER ELEMENTS OF CONNECTIONS ARE SUBSTANTIALLY DETERIORATED AND WILL NEED TO BE CUT OUT. DO NOT REUSE EXISTING FASTENERS. CONTRACTOR SHALL INVESTIGATE, RECORD AND MATCH EXISTING CONNECTION MATERIALS. REFER TO DETAIL 3/54 FOR TYPICAL SUBSTRUCTURE FRAMING.

2.MEMBERS SHALL BE PROVIDED AND INSTALLED FULL LENGTH BETWEEN SUPPORTS WITHOUT SPLICES UNLESS APPROVED BY THE ENGINEER.

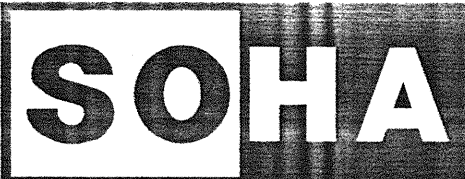
CONCRETE COLUMN STRENGTHENING AND REPAIR

1.REFER TO DETAIL 5/54. CLEAN ALL EXISTING CONCRETE SURFACES PRIOR TO PLACEMENT OF NEW CONCRETE WALL.

2.PROVIDE STEEL SLEEVES AT EXISTING UTILITY LINE PENETRATIONS. SLEEVES SHALL BE 1 INCH IN DIAMETER LARGER THAN EXISTING PIPE.

3.INSTALL NEW CONCRETE WALLS PRIOR TO PERFORMING REPAIRS TO EXISITNG COLUMNS.

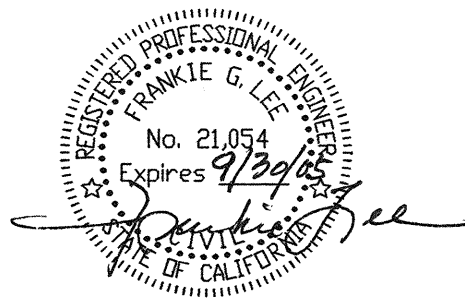
4.COLUMN SPALL REPAIR: REMOVE UNSOUND CONCRETE. CHIP TO EXPOSE 8 INCHES OF SOUND VERTICAL REINFORCEMENT. LAP NEW VERTICAL REINFORCEMENT, SIZED TO MATCH EXISTING. CHIP CONCRETE COVER ALL AROUND AT REPAIR AREA. ADD #3 TIES AT #4 ON CENTER. PATCH WITH SPECIFIED PATCHING MATERIAL PLACED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.



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REVISIONS

MARK	DATE	DESCRIPTION

PROJECT TITLE:

WHARF J-1 AND J-3
SUBSTRUCTURE
REPAIR

PROJECT ADDRESS:

PORT OF
SAN FRANCISCO
WHARF J-1 AND J-3

DESIGNED BY:	AL
CHECKED BY:	AD
DRAWN BY:	MFC
DATE:	07/15/03
SOHA JOB #:	030103.00
CLIENT JOB #:	XXXX

DRAWING TITLE:

GENERAL NOTES

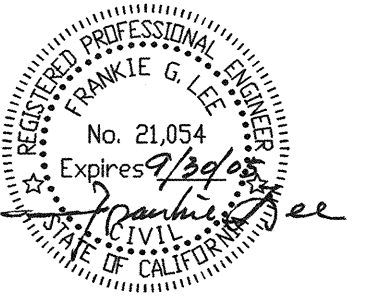
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S-1

SHEET 1 OF 5

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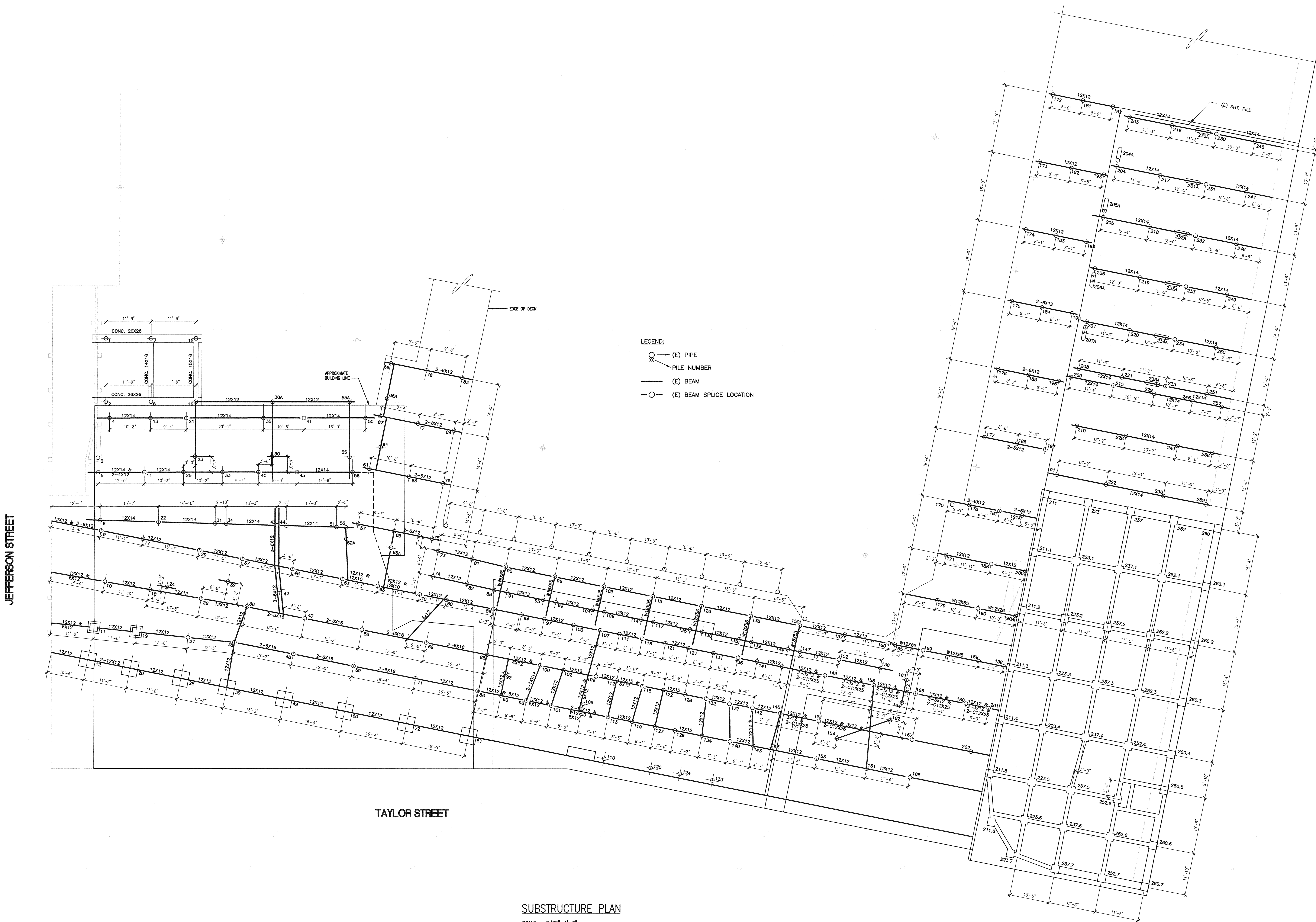
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SUBSTRUCTURE
DIMENSION PLAN

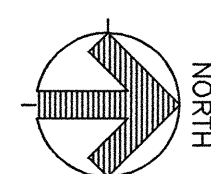
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S-2

SHEET 2 OF 5



SUBSTRUCTURE PLAN
SCALE = 3/32"=1'-0"



REPAIR NOTES - JOISTS				
LOCATION	CONDITION	REPAIR	DETAIL SHEET S4	PHOTO SHEET S5
J1	DECAY OF ONE 4x12 JOIST, 6' SPAN	REPLACE JOIST.	3	F1
J2	DECAY AND INFESTATION OF 3 JOISTS (3-4x12); 10' SPAN.	REPLACE DAMAGED JOISTS.	2, 3	F2
J3	DECAY AND INFESTATION OF 3 JOISTS (3-4x12); 10' SPAN.	REPLACE DAMAGED JOISTS.	3	-
J4	DECAY OF 2 JOISTS (2-4x12); 12' SPAN.	REPLACE DAMAGED JOISTS.	3	-
J5	DECAY OF 2 JOISTS (1-4x12, 1-8x12); 12' SPAN.	REPLACE DAMAGED JOISTS.	3, 4	F3, F4
J6	DECAY OF 2 JOISTS (2-4x12); 12' SPAN.	REPLACE DAMAGED JOISTS.	3	F5
J7	DECAY OF 1 JOIST (1-4x12); 10' SPAN.	REPLACE DAMAGED JOIST.	3	F6
J8	INFESTATION OF 13 JOISTS (13-4x12); 10' SPAN.	REPLACE DAMAGED JOISTS.	3	-
J9	DECAY OF 3 JOISTS (3-4x12); 12' SPAN.	REPLACE DAMAGED JOISTS.	3	F7
J10	INFESTATION OF 6 JOIST (6-4x12); 10' SPAN.	REPLACE DAMAGED JOISTS.	3	-
J11	DECAY OF 4 JOISTS (4-4x12); 12' SPAN.	REPLACE DAMAGED JOISTS.	3	F8, F9
J12	DECAY OF 6 JOISTS (6-4x12); 10' SPAN.	REPLACE DAMAGED JOISTS.	3	-
J13	DECAY OF 1 JOIST (1-4x12); 12' SPAN.	REPLACE DAMAGED JOIST.	3	F9
J14	LARGE AREA WITH INFESTATION IN JOISTS AND BEAMS.	REPLACE DAMAGED JOISTS.	3	F10

REPAIR NOTES - BEAMS				
LOCATION	CONDITION	REPAIR	DETAIL SHEET S4	PHOTO
B1	INFESTATION OF BEAM (1-12x12).	REPLACE BEAM BETWEEN PILES 74 AND 82.	3	F11
B2	DECAY OF BEAM (1-12x12).	REPLACE BEAM BETWEEN PILES 70 AND 89.	2, 4	F12
B3	EXISTING BEAM IS NOTCHED	REPLACE ENTIRE BEAM.	4	F13
B4	DOUBLE 6x16, ONE OF THEM SPLIT AND DEFLECTING 8".	REPLACE SPLIT MEMBER.	3	F14
B5	INFESTED 12x12 BEAM.	REPLACE BEAM.	3	F15
B6	INFESTED 12x12 BEAM.	REPLACE BEAM.	3	F16
B7	HEAVILY CORRODED W12x50 BEAM.	REPLACE WF BEAM.	-	F17
B8	DECAYED 12x12 BEAM SISTERED BY C12x25 EACH SIDE.	REPLACE 12x12 BEAM.	-	F18
B9	"	"	-	F19
B10	"	"	-	F20
B11	TOP FLANGE OF W12x26 HEAVILY CORRODED.	REPLACE WF BEAM.	-	F21, F22
B12	INFESTATION OF BEAMS (3-12x14)	REPLACE ALL BEAMS.	3	F23

REPAIR NOTES - PILES	
PILE NO.	EXISTING CONDITION
107	CONC. JACKETED
108	PLASTIC WRAPPED
119	PLASTIC WRAPPED
140	PLASTIC WRAPPED
143	PLASTIC WRAPPED
146	PLASTIC WRAPPED
154	PLASTIC WRAPPED
162	PLASTIC WRAPPED
201	PLASTIC WRAPPED

SUBSTRUCTURE REPAIR LEGEND:

BXX BEAM REPAIR NUMBER
BXXX BEAM REPAIR (SEE REPAIR NOTES - BEAMS)
⊙ PILE REPAIR (SEE DETAIL 1 ON SHEET S4)

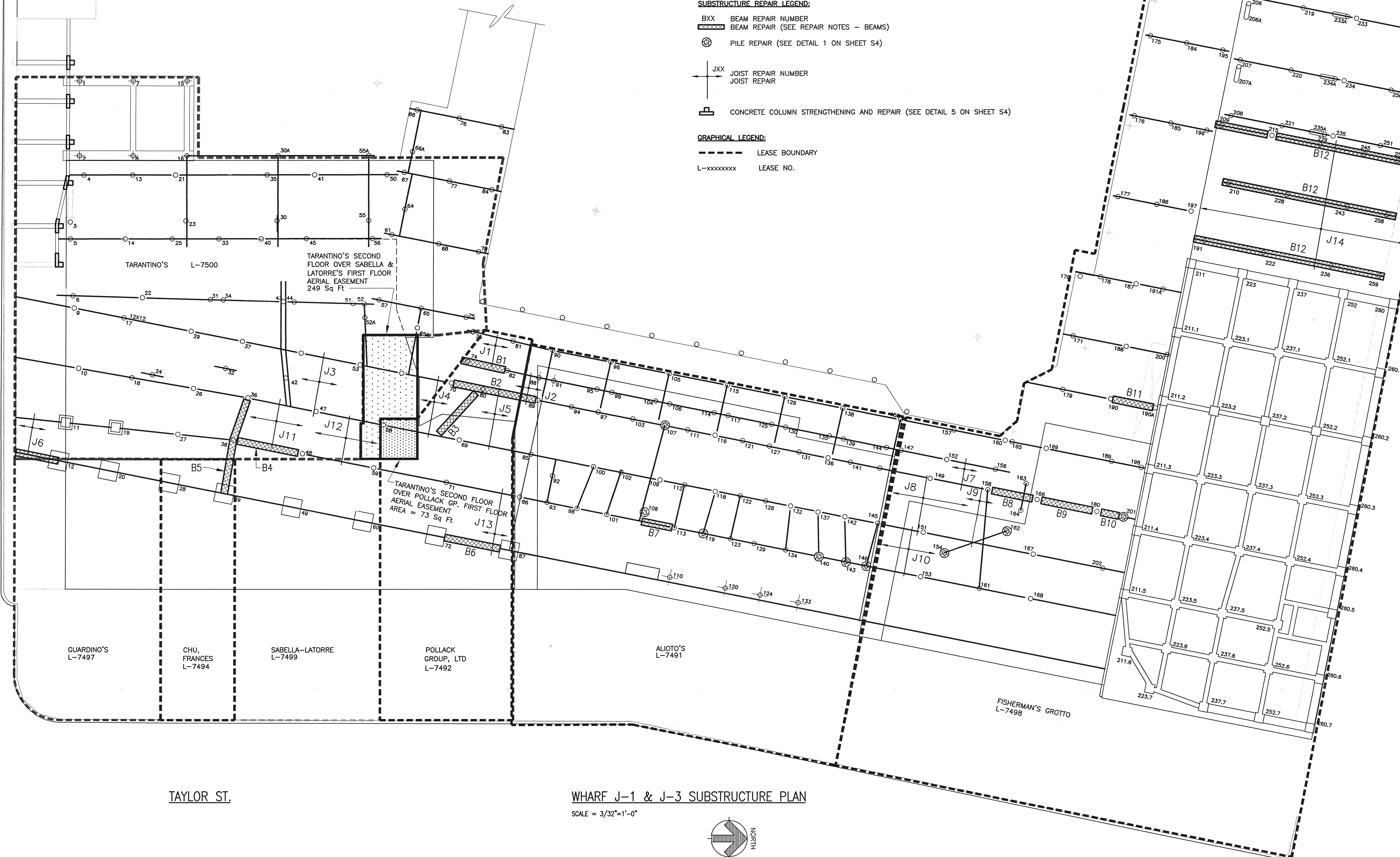
JXX JOIST REPAIR NUMBER
JXXX JOIST REPAIR

□ CONCRETE COLUMN STRENGTHENING AND REPAIR (SEE DETAIL 5 ON SHEET S4)

GRAPHICAL LEGEND:

--- LEASE BOUNDARY
L-xxxxxxx LEASE NO.

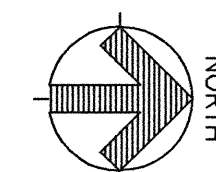
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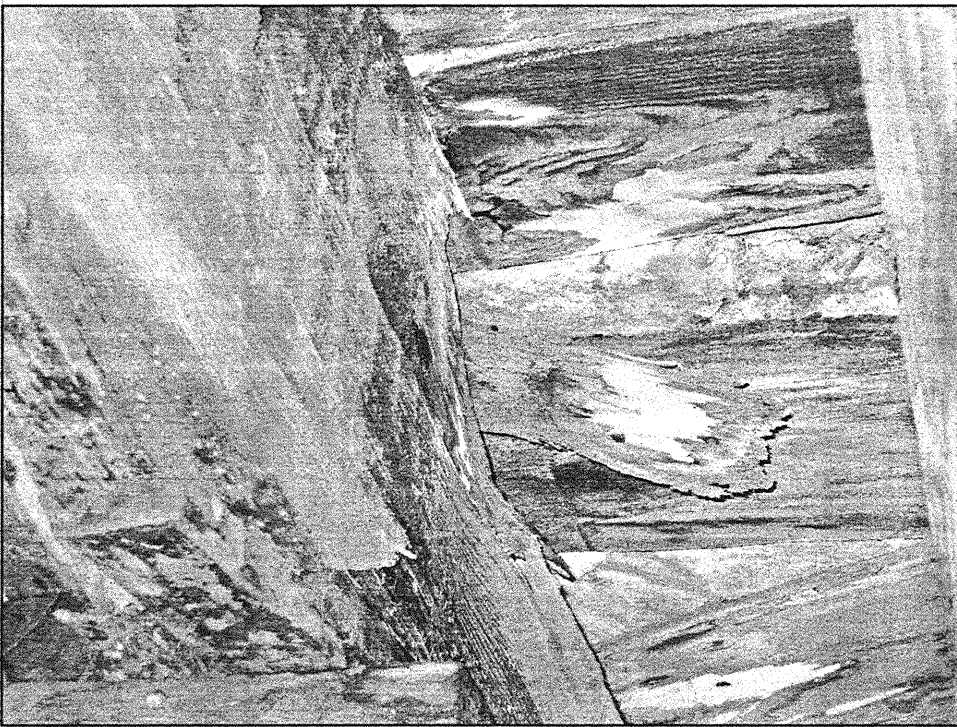
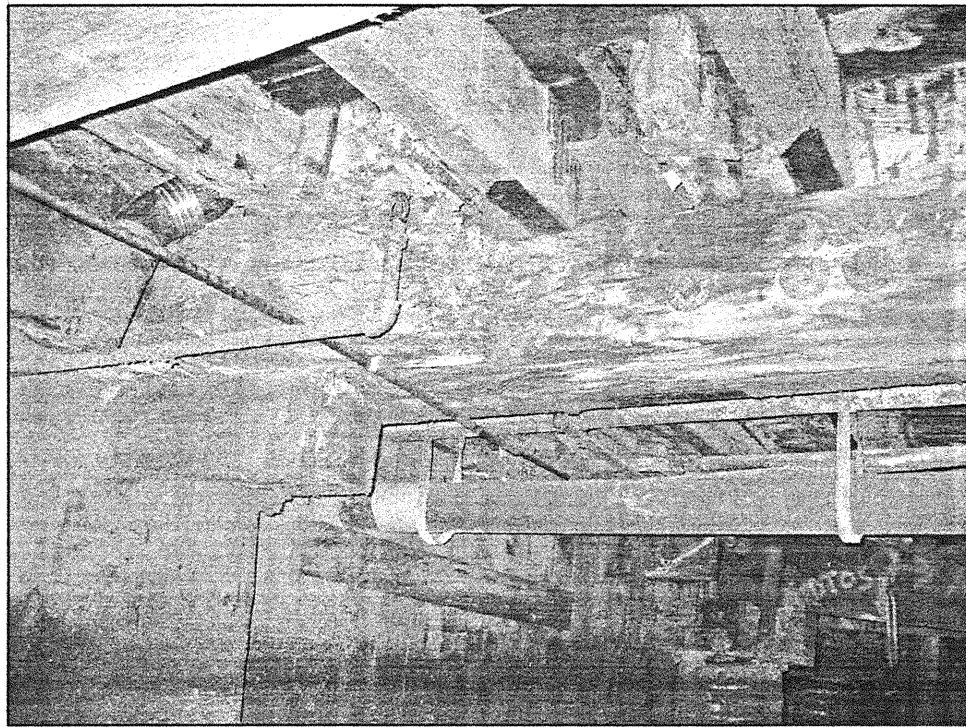
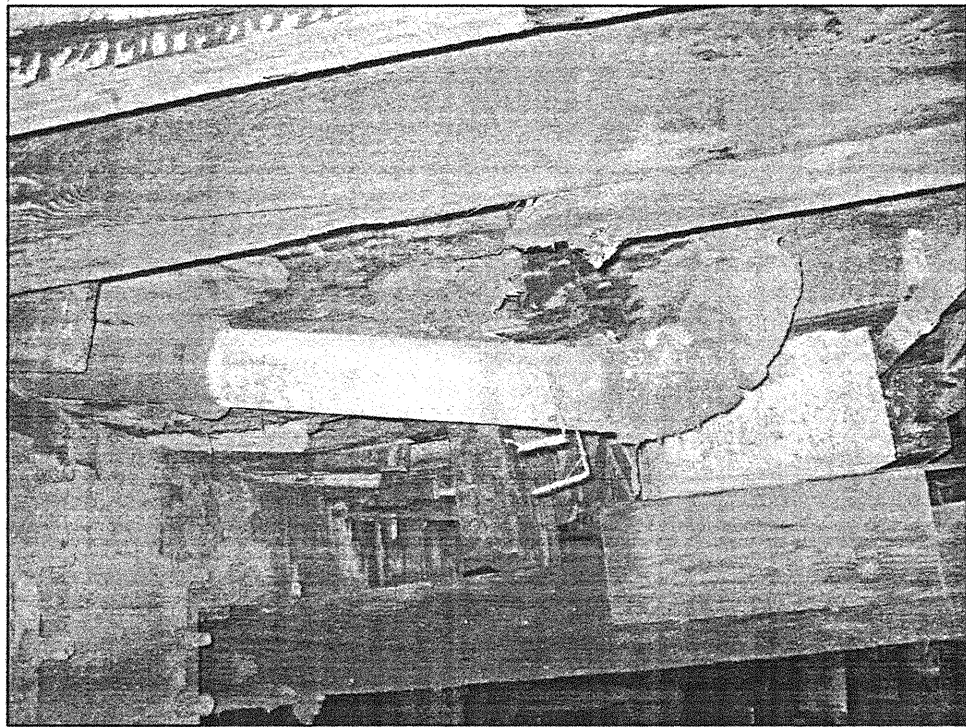
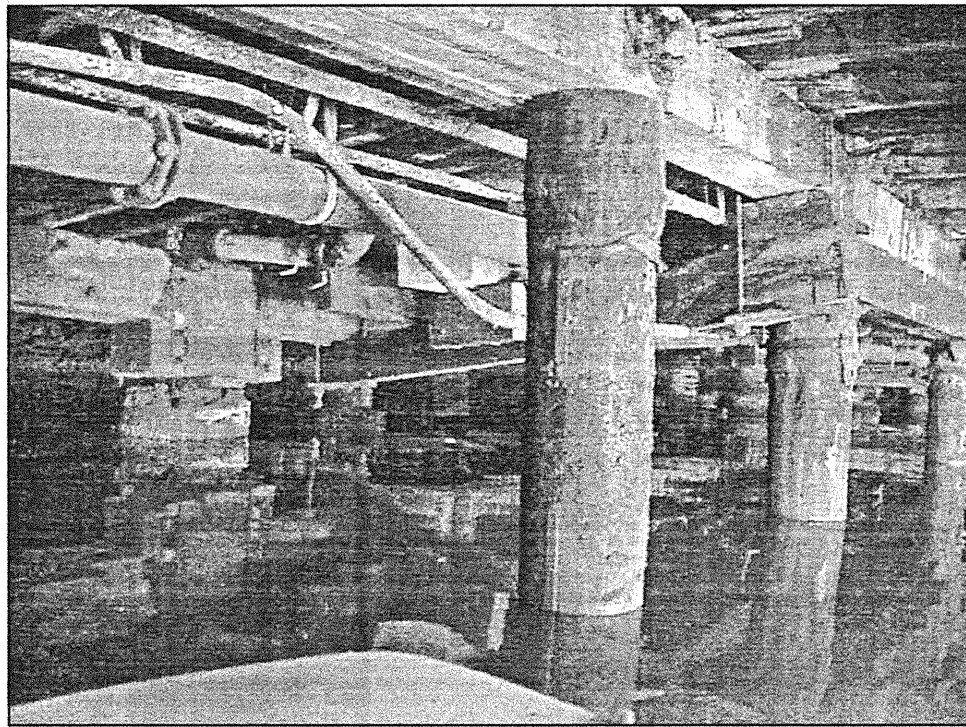
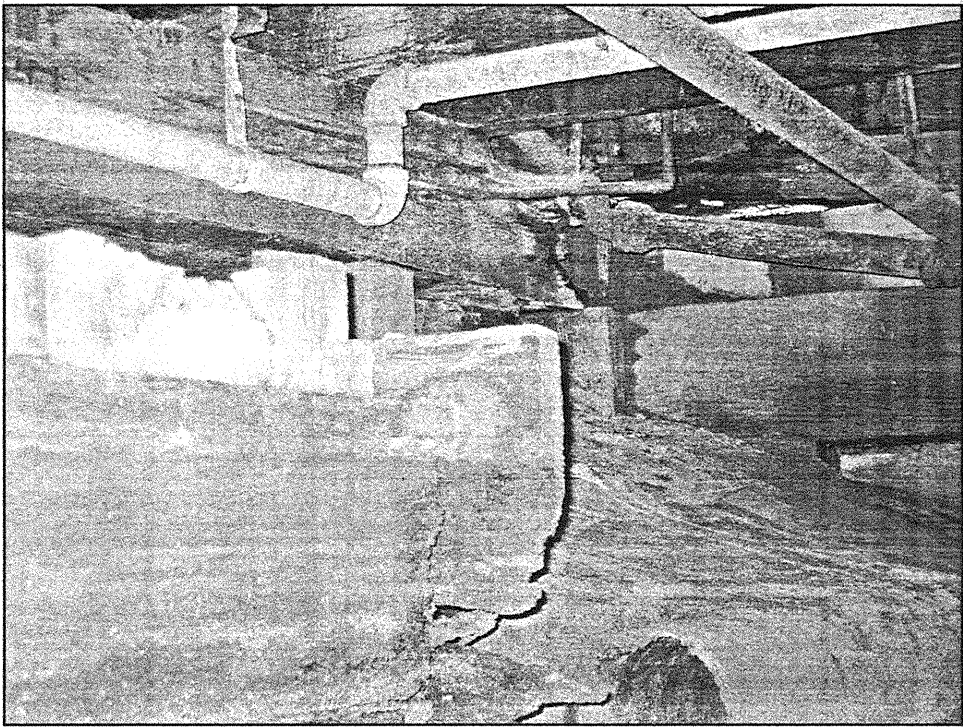
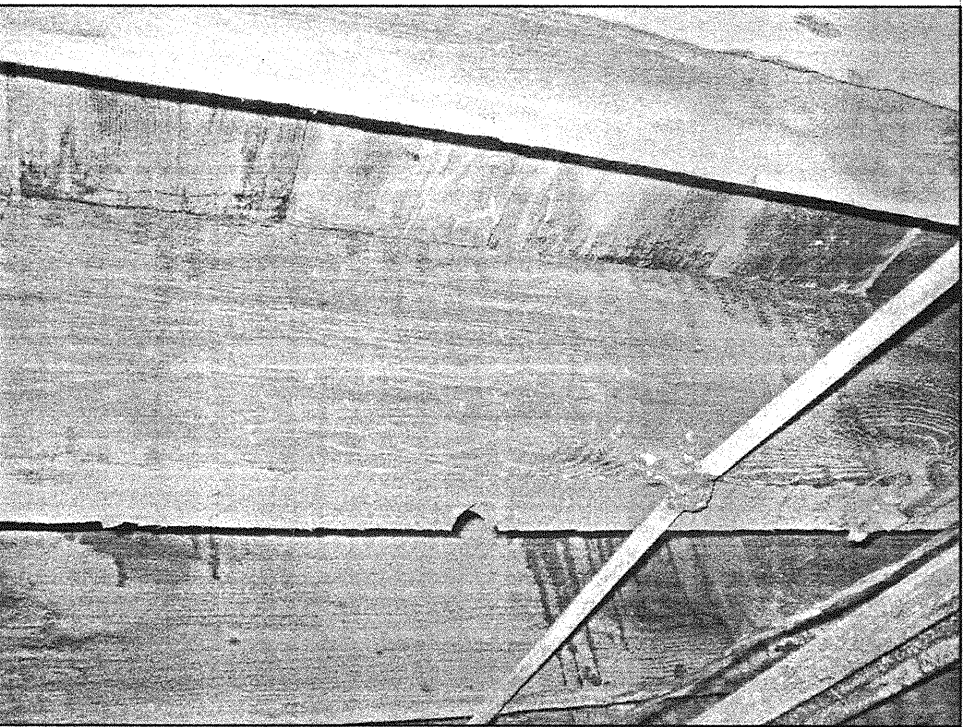
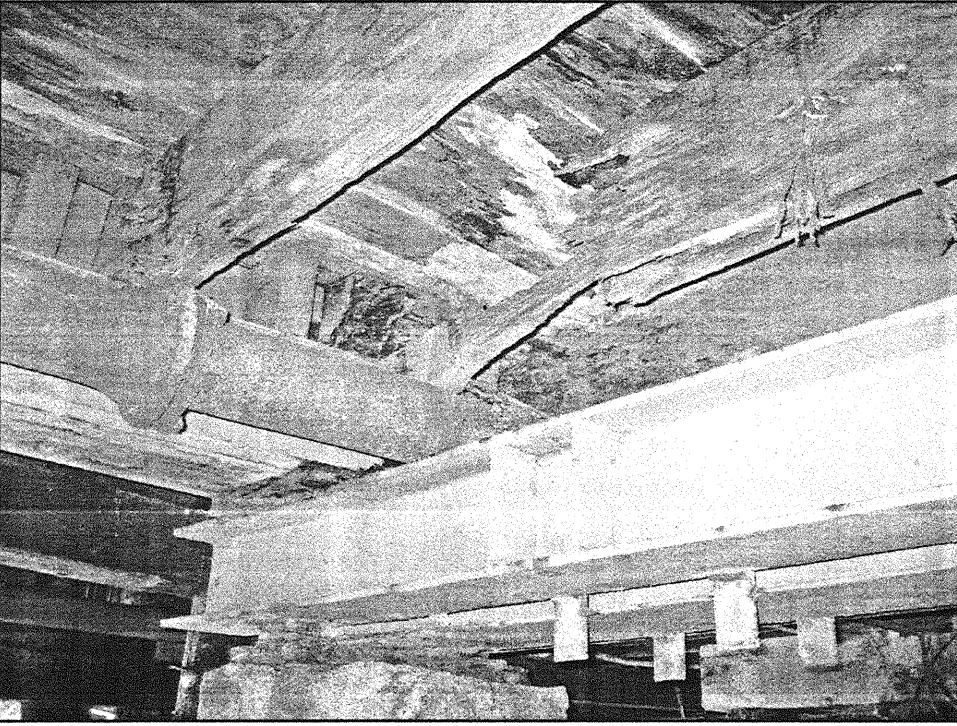
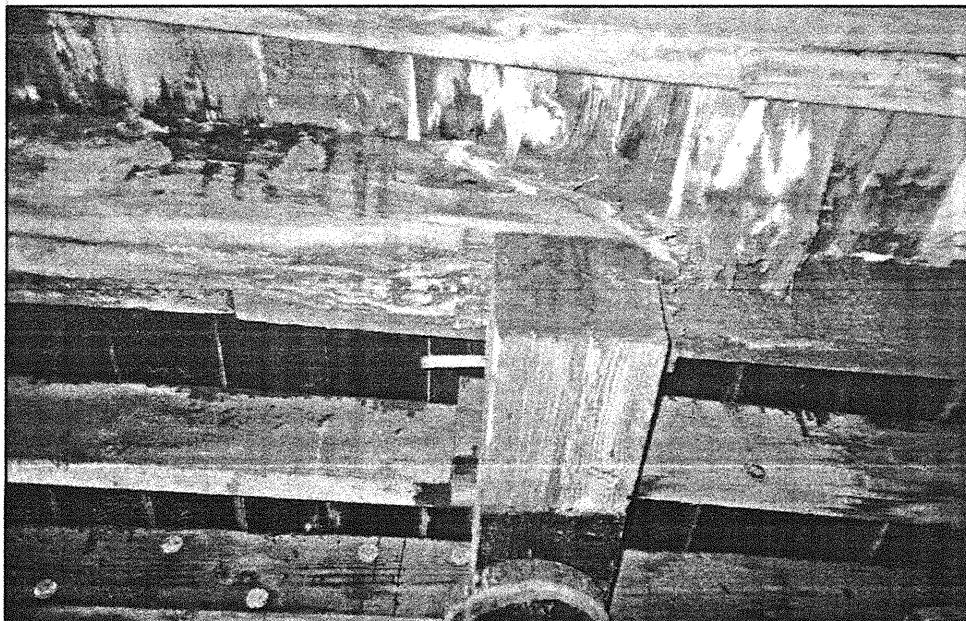
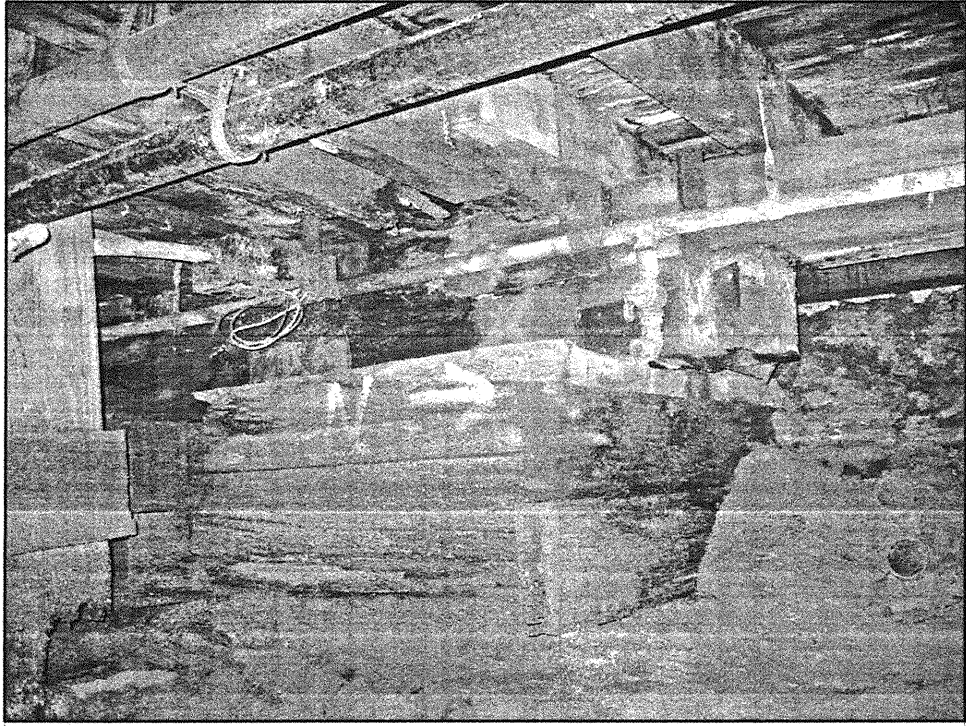
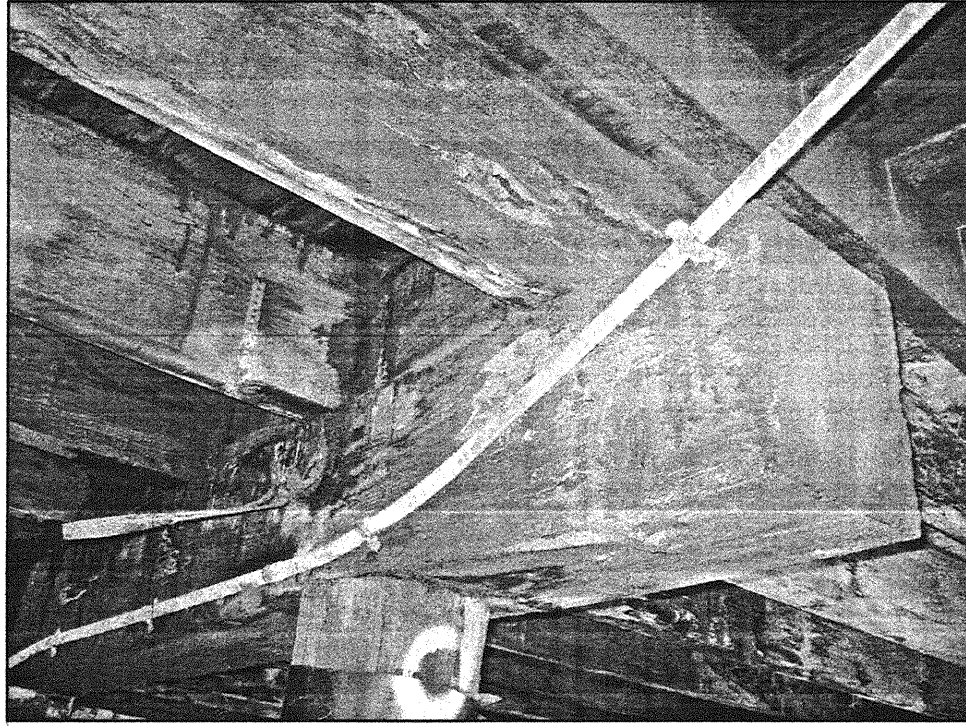
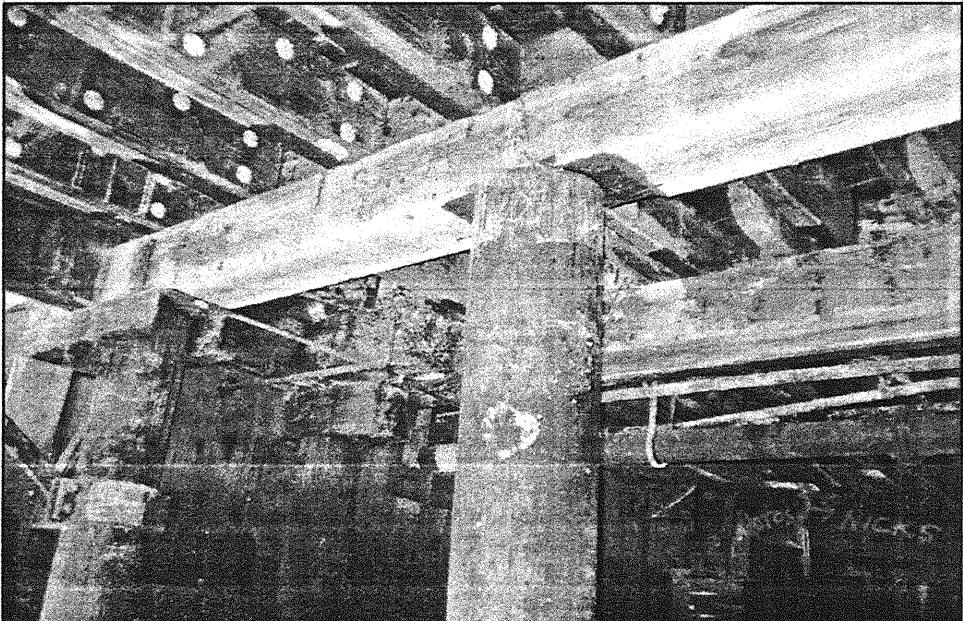
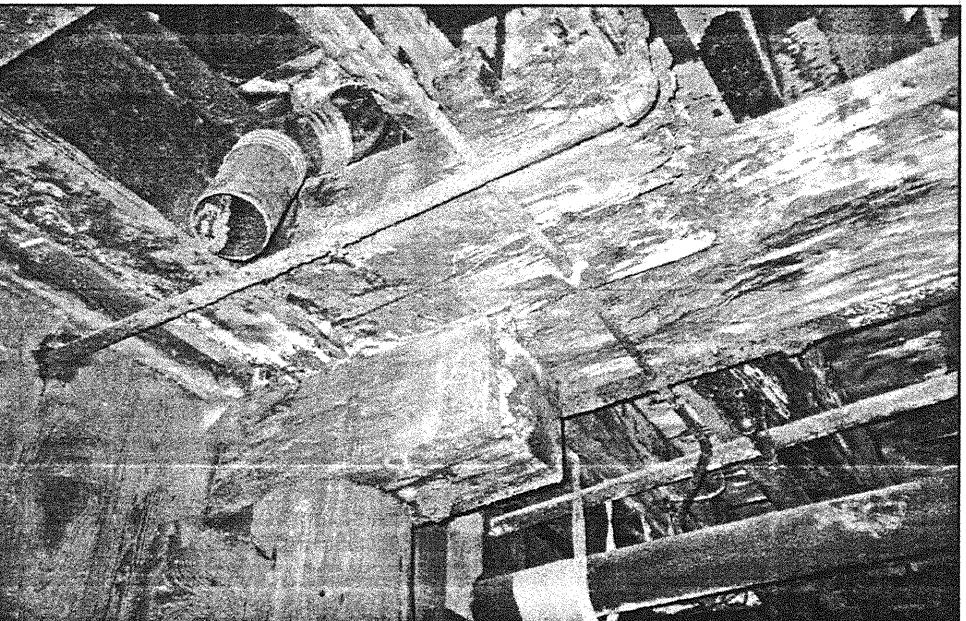
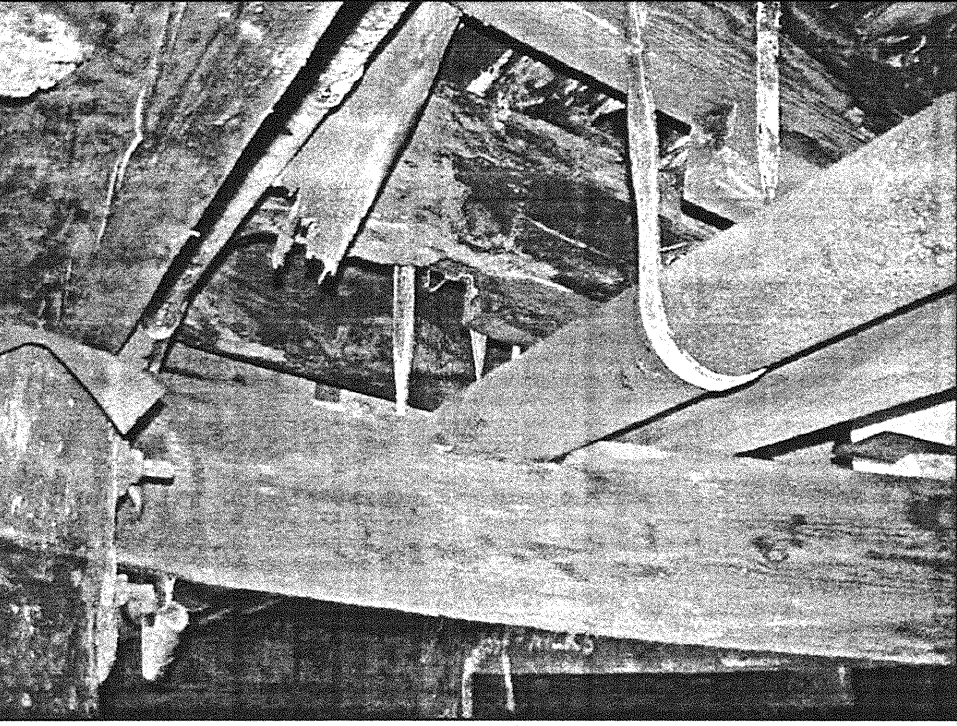
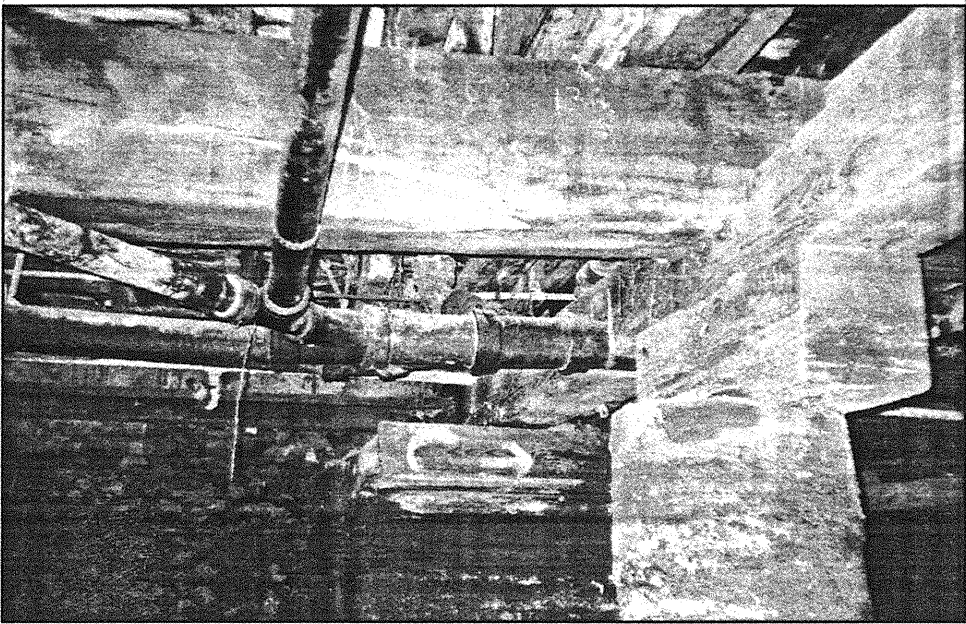
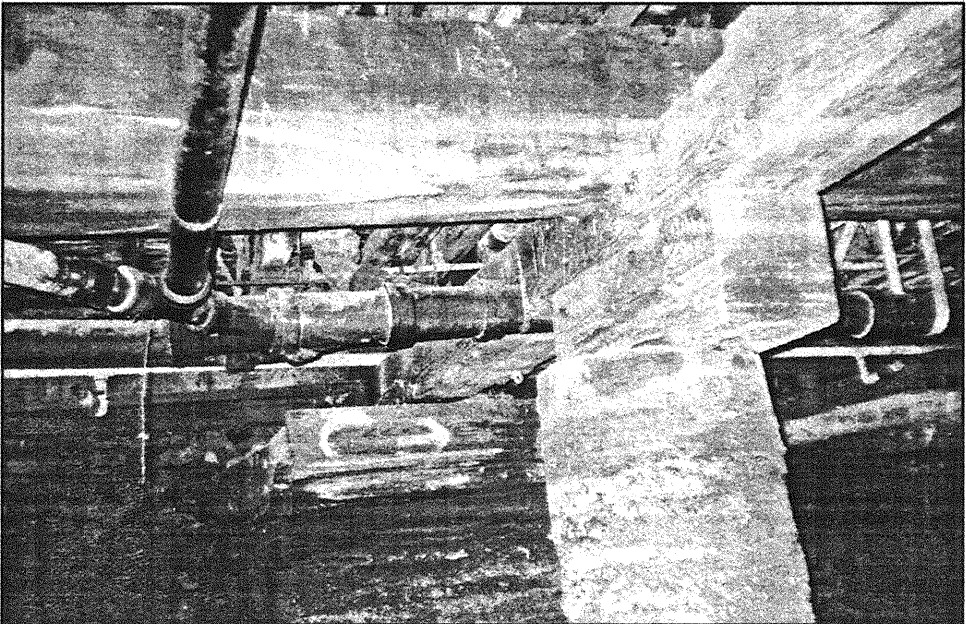
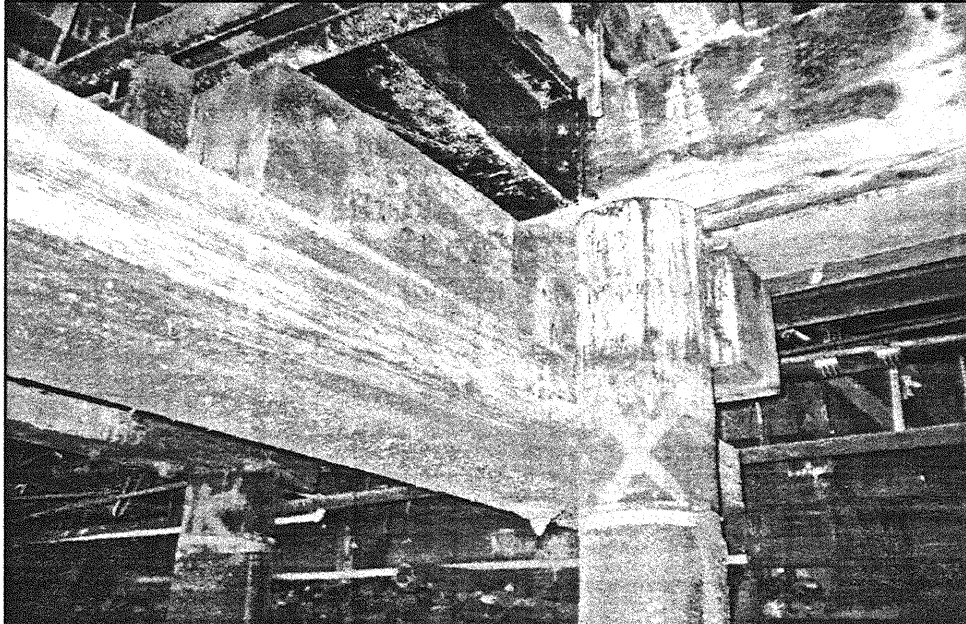
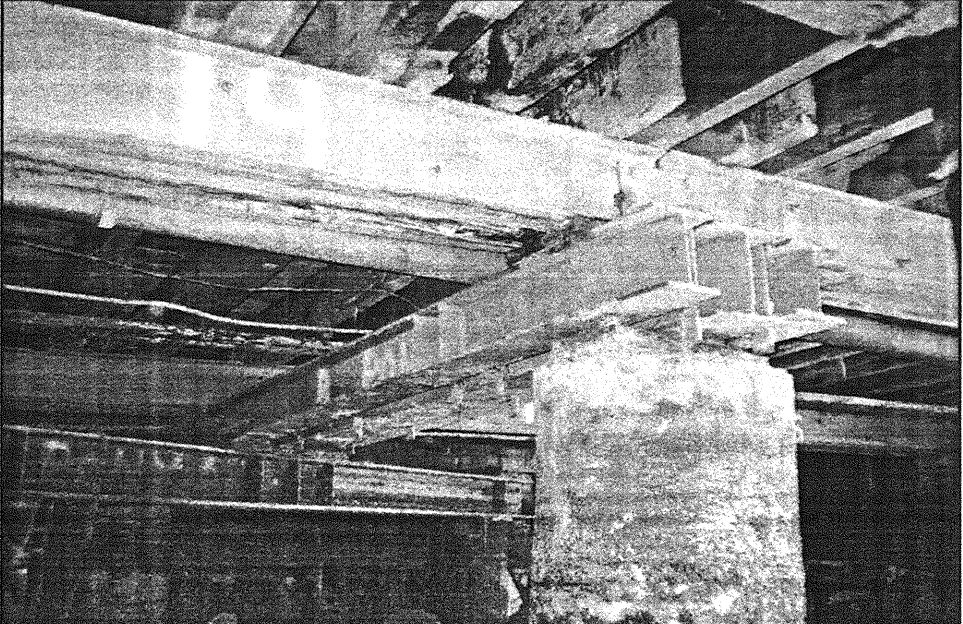
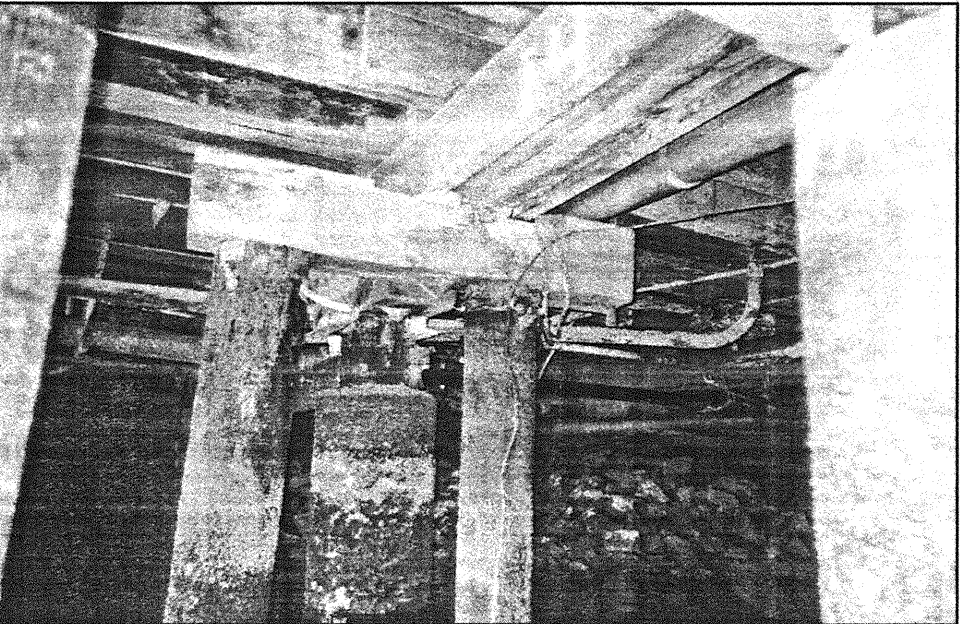
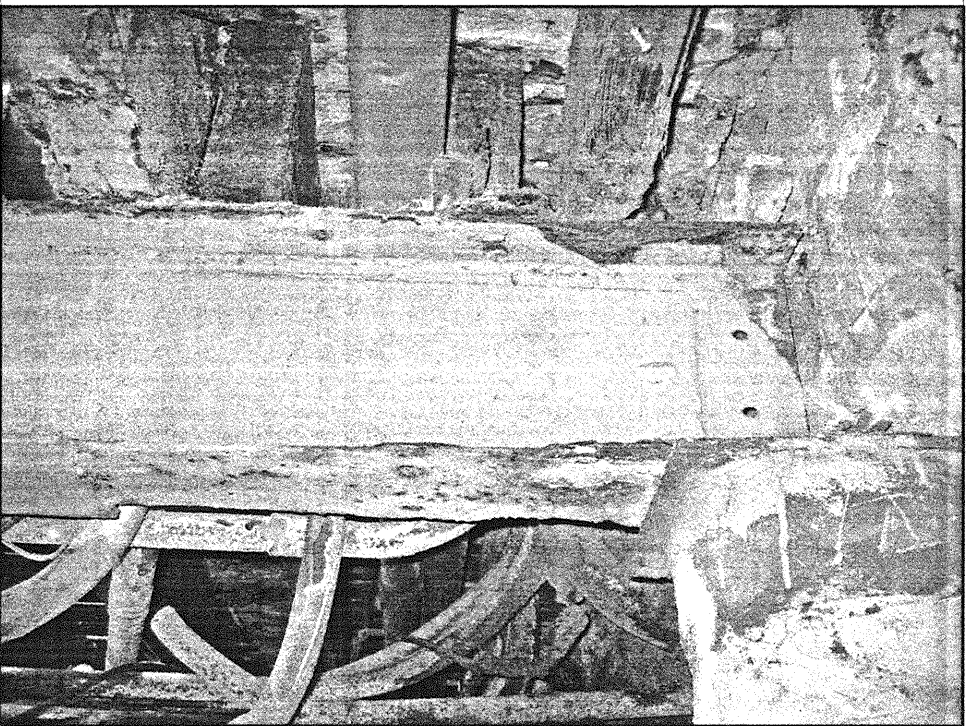
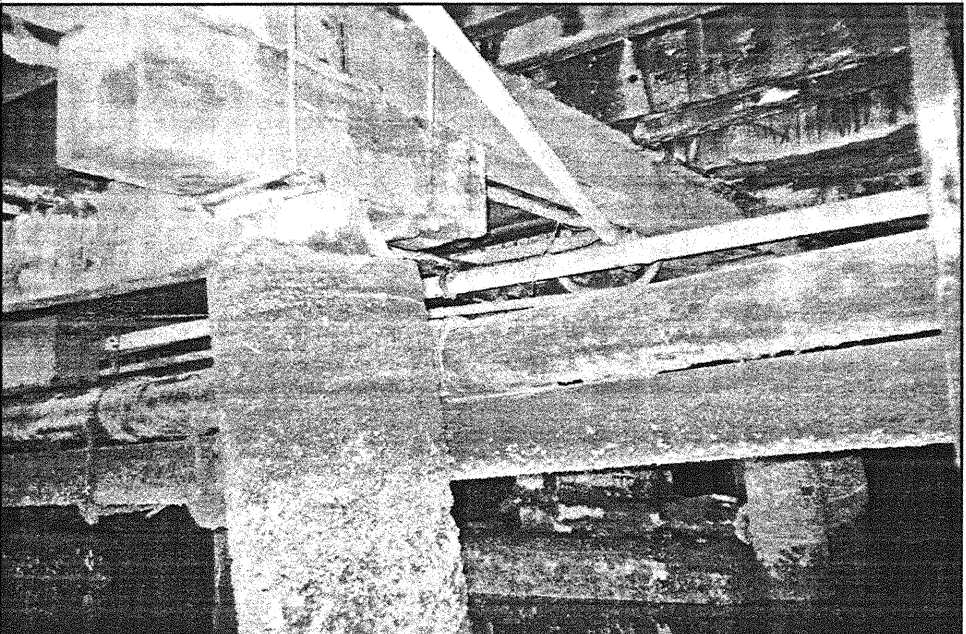
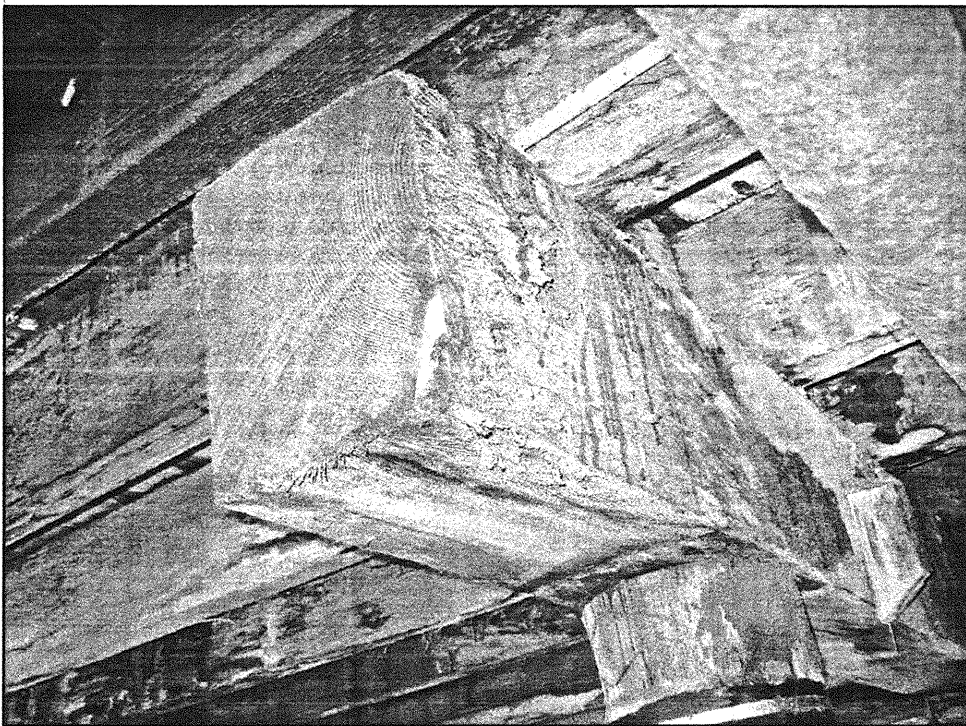


TAYLOR ST.

WHARF J-1 & J-3 SUBSTRUCTURE PLAN

SCALE = 3/32"=1'-0"



					
PHOTO NO. F1	PHOTO NO. F2	PHOTO NO. F3	PHOTO NO. F4	PHOTO NO. F5	PHOTO NO. F6
					
PHOTO NO. F7	PHOTO NO. F8	PHOTO NO. F9	PHOTO NO. F10	PHOTO NO. F11	PHOTO NO. F12
					
PHOTO NO. F13	PHOTO NO. F14	PHOTO NO. F15	PHOTO NO. F16	PHOTO NO. F17	PHOTO NO. F18
					
PHOTO NO. F19	PHOTO NO. F20	PHOTO NO. F21	PHOTO NO. F22		

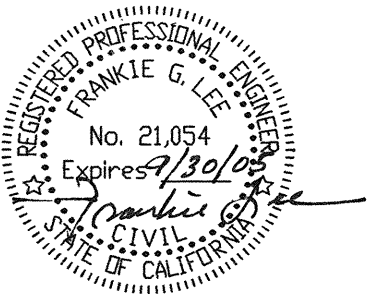
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CLIENT JOB #: XXXX
DRAWING TITLE:
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DRAWING
NUMBER:
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SHEET 5 OF 5