

J

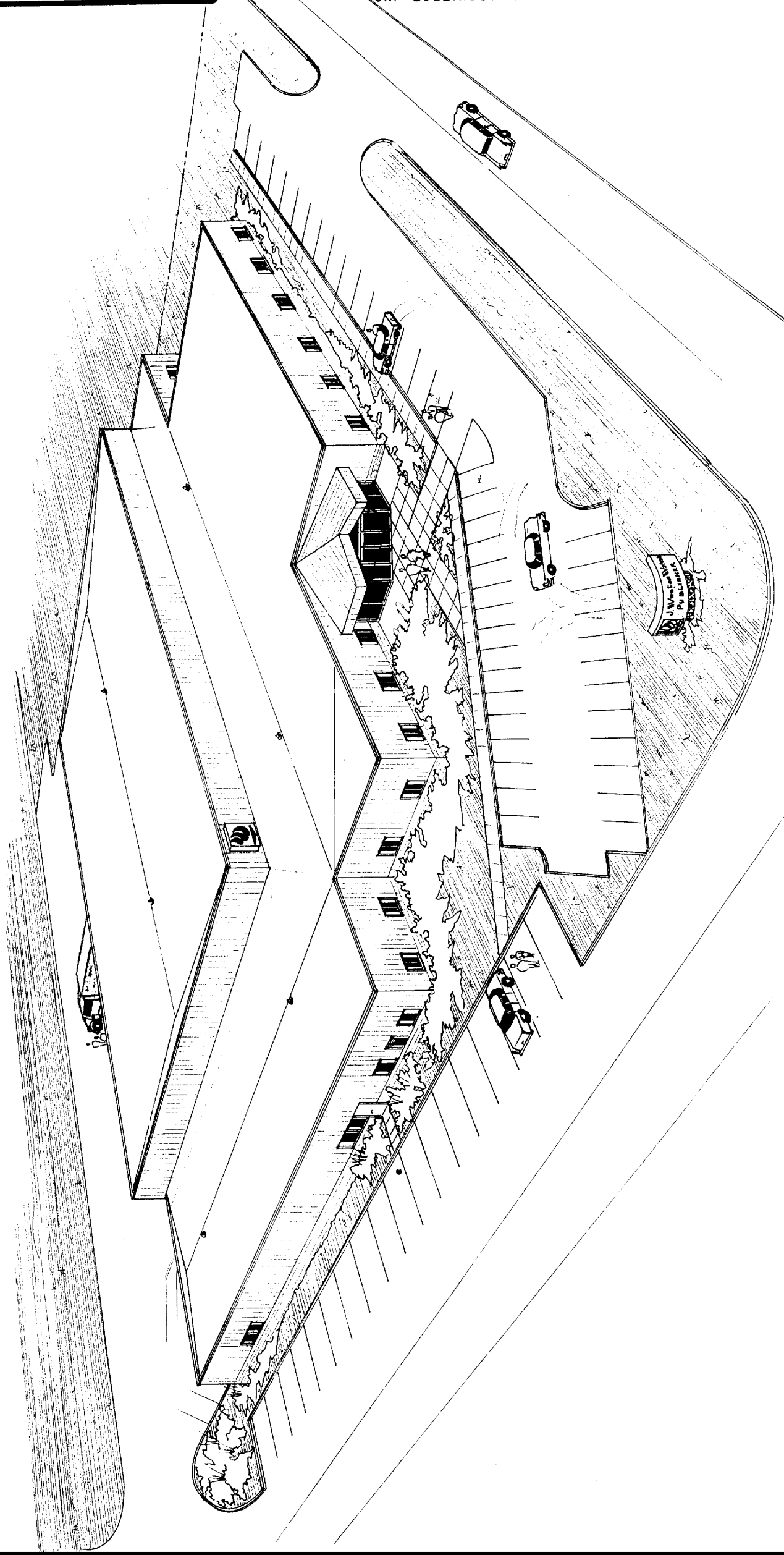
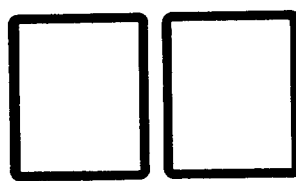
R1

OFFICE & WAREHOUSE FOR  
J. WESTON WALCH  
1039 RIVERSIDE STREET  
PORTLAND, MAINE



JOHN H. LEASURE ARCHITECT, INC.  
SIX Q STREET  
SOUTH PORTLAND, MAINE 04106

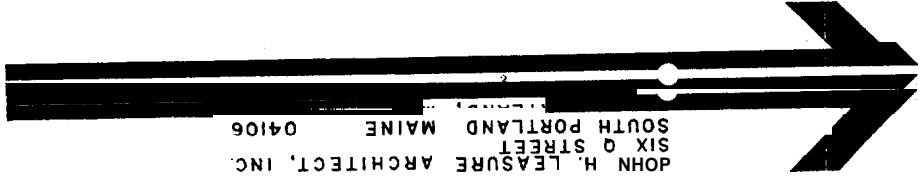
REV.	DATE	STATUS
2	12-18-66	DRAWN



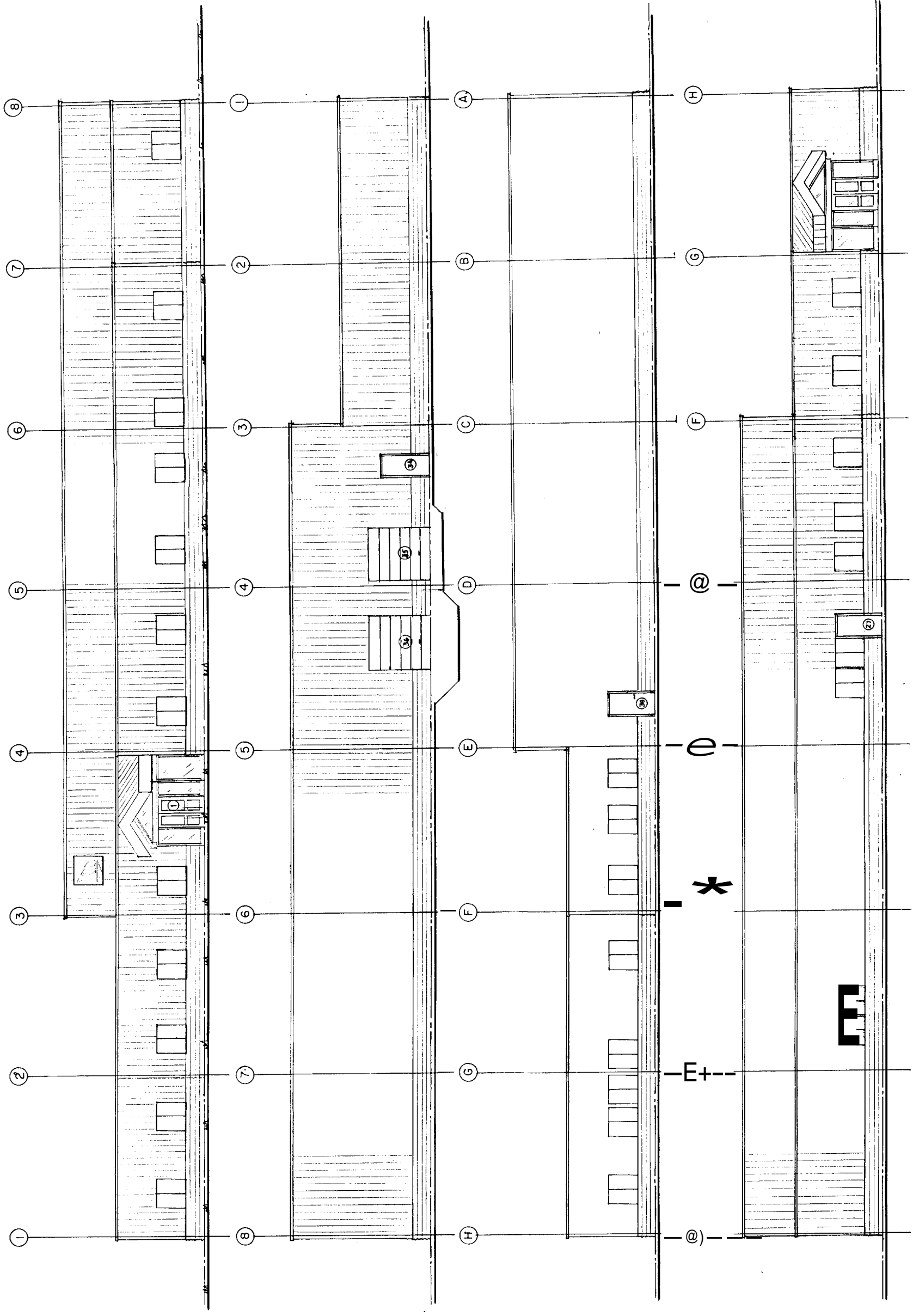


A2

OFFICE & WAREHOUSE FOR  
J. WESTON WALCH  
1039 RIVERSIDE STREET  
PORTLAND, MAINE



REV	DATE	STATUS





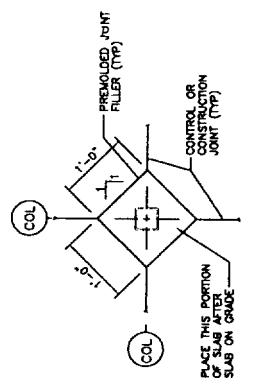
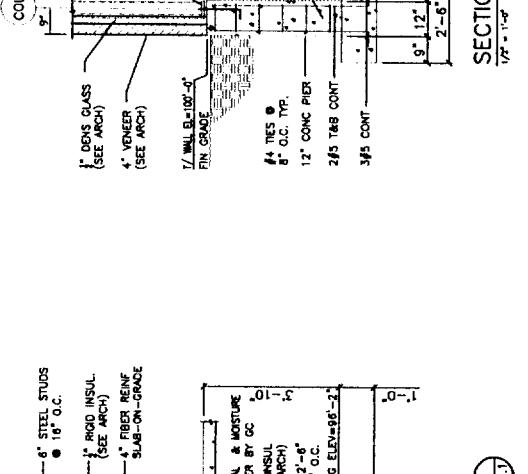
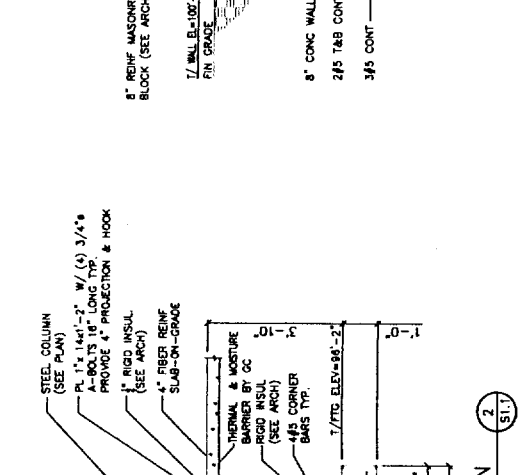
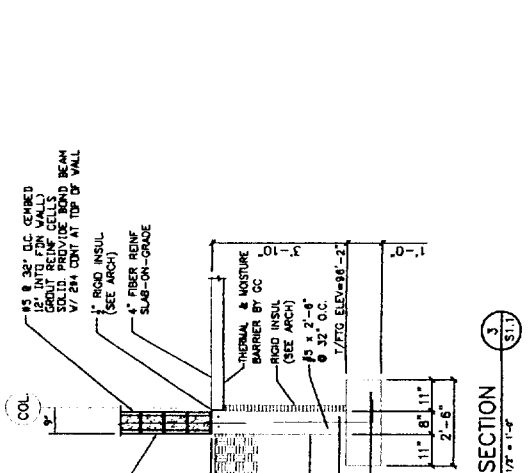
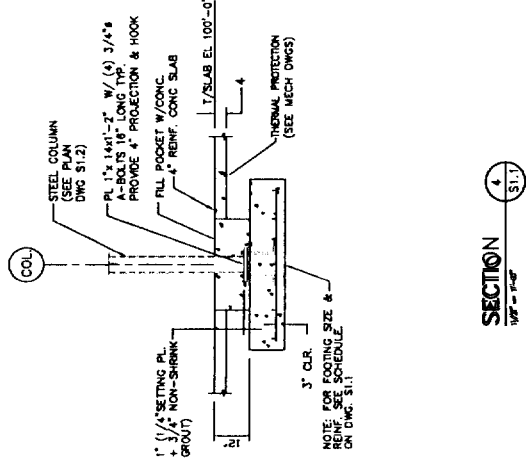
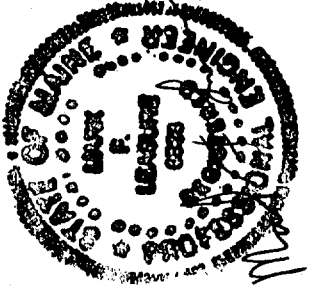




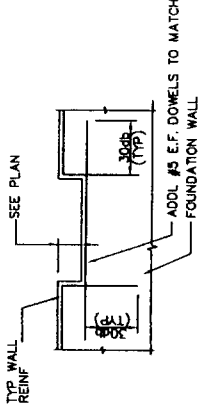
OFFICE & WAREHOUSE for J. WESTON WALCH  
 1039 RIVERHIDE STREET  
 FORT AND, MAINE

designed by: MFL	checked by: JFL
drawn by: MFL	scale: 1/2" = 1'-0"
date: MARCH 28, 2004	plot date: MARCH 28, 2004
project # 24056	

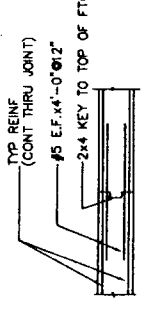
J & L STRUCTURAL  
 ENGINEERING SERVICES, INC.  
 518 O. STREET  
 500 B. PERKINS, MAINE 04100  
 PHONE: (207) 883-8243  
 FAX: (207) 883-8243  
 EMAIL: mics@jlell-eng.com



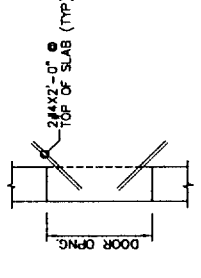
INTERIOR COLUMN - TYP DETAIL  
 N.T.S.



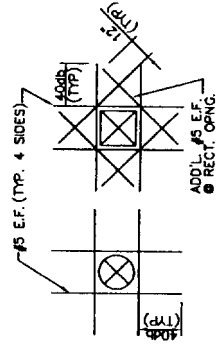
TYP. WALL DEPRESSION DETAIL  
 N.T.S.



TYP. CONTROL JOINT IN WALL  
 N.T.S.

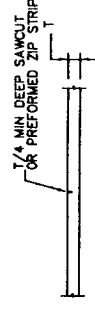


TYP. SLAB CORNER DETAIL @ DOOR  
 N.T.S.

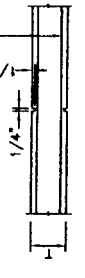


TYP. OPENING IN WALL OR SLAB  
 N.T.S.

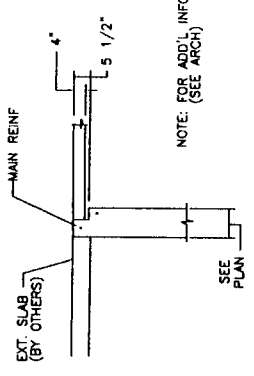
NOTE: OPENING IN SLAB APPLIES TO ALL OPENINGS INCLUDING STAIRS, ELEVATORS & HVAC OPENINGS. PLACE REINF IN MIDDLE OF SLAB @ SLAB OPENINGS.



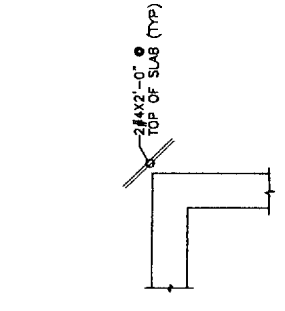
TYP. CONTROL JOINT DETAIL  
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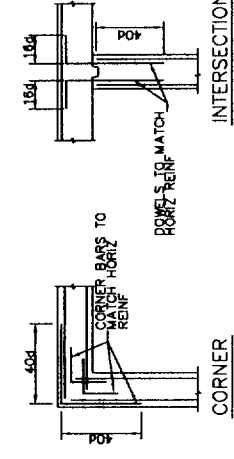
TYP. CONTROL JOINT IN WALL  
 N.T.S.



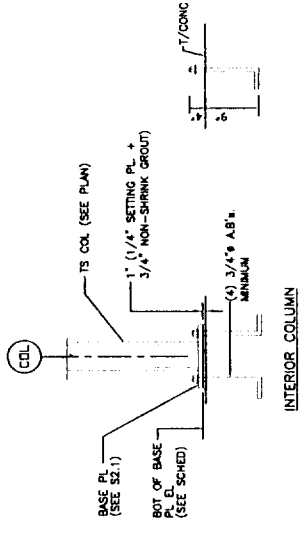
TYP. DETAIL @ ENTRY DOOR  
 N.T.S.



TYP. SLAB CORNER DETAIL  
 N.T.S.



TYP. WALL REIN DETAILS  
 N.T.S.



TYP. COLUMN BASE DETAILS  
 1/2\"/>

THESE DRAWINGS HAVE BEEN PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MAINE. I AM NOT PROVIDING CONTRACT ADMINISTRATION SERVICES.





GENERAL NOTES:

- 1. The notes on the drawings are not intended to replace specifications. See specifications for requirements in addition to those shown on the drawings.
2. Structural drawings shall be used in conjunction with the specifications and mechanical, electrical, plumbing, and mechanical drawings. Consult these drawings for locations, dimensions, and other details not shown on these drawings.
3. Dimensions and conditions must be verified in the field before proceeding with the affected part of the work.
4. Do not build plans.
5. All dimensions shall be shown on any structural drawings that are considered.
6. As proprietary products shall be indicated in accordance with the building's design to be per supporting and stable after the building's erection.
7. The contractor shall be responsible for the safety of the building and its components during erection. The contractor shall be responsible for the safety of the building and its components during erection.
8. The contractor shall be responsible for the safety of the building and its components during erection.

DESIGN LOADS:

- 1. Building code: BOCA Basic Building Code (1998)
IBC 2000 (International Building Code-2000)
Roof Live Loads: (Ground snow load = 60 PSF)
First floor ..... 42 PSF + Drift
100 PSF
2. Design wind loads are based on exposure B using 85 mph basic wind speed.
3. Seismic design utilizes the following criteria:
a. Building framing system: Concentrically Braced Frame
b. Analysis procedure: Equivalent Lateral Force Procedure.
c. Seismic hazard exposure group: "C"
d. Seismic performance category: "C"
e. Soil profile type: S=1.5
f. Peak velocity-related acceleration (AV): "0.10"
g. Peak acceleration (AG): "0.10"
h. Response modification factor (R): "5"
i. Deflection amplification factor (Cd): "4 1/2"

FOUNDATION NOTES:

- 1. Foundations have been designed to conform with the recommendations provided in the report.
2. Interior spread footings and exterior strip footings shall be founded on native soil or compacted structural fill.
3. Exterior strip and spread footings shall be founded on a minimum of 4'-0" below finished grade.
4. Slabs on grade shall bear on a minimum of 8" of compacted structural fill over suitable material. If loose or undesirable fills are encountered at the slab sub grade level, the contractor shall be responsible for the removal and replacement with suitable material.
5. Structural fill shall be used at all locations below footings and slabs and adjacent to the foundation walls.
6. Structural fill shall consist of clean granular material free of organics, trash, snow, ice, frozen soil or any other objectionable material. It shall be well graded within the following units:

Table with 2 columns: SCREEN OR SEIVE SIZE, PERCENT FINER BY WEIGHT. Rows include 1/2 inch, 3/4 inch, NO. 40, NO. 100, NO. 200, and 0 to 8.

- 6. Structural fill beneath slabs shall be placed in layers not exceeding 6" in loose measure and compacted by self-propelled vibratory equipment to approximately optimum moisture content to a dry density of at least 95% of the maximum in place dry density as determined by the modified Proctor test (ASTM D-1557).
7. Under drains shall be placed as shown on the site drawings. Under drains shall be installed in accordance with the manufacturer's instructions.
8. Exterior concrete slabs on grade, shall be constructed by at least 4 feet of structural fill meeting gradation and compaction requirements noted above.
9. Backfill both sides of foundation walls simultaneously.

CONCRETE NOTES:

- 1. All concrete work shall conform to ACI 318-Latest Edition.
2. Concrete strength of 28 days shall be:
a. 4000 PSI for footing, walls, and piers.
b. 4000 PSI for slabs on grade.
3. All concrete shall be air entrained 4% to 6%.
4. Concrete shall not be placed in water or on frozen ground.
5. Provide PVC sleeves where pipes pass through concrete walls or slabs.
6. Reinforcing bars shall conform to ASTM A615 Grade 60 deformed bars, and shall be deformed, fabricated and erected in accordance with ACI 318-Latest Edition.
7. Welded wire fabric shall be provided in flat slabs.
8. Fiber reinforced concrete shall conform to ASTM C-1116.
9. Complete shop drawings and schedules of all reinforcing steel shall be prepared by the contractor and submitted to the Engineer for review prior to commencement of that portion of work.
10. Splices of reinforcing bars shall be in accordance with ACI 318. Splices of W/F shall be 6" minimum.
11. Concrete finishes: See specifications and Architectural drawings for additional information.
12. Anchor bolts shall conform to ASTM A307 unless noted otherwise on plan.
13. Provide contra/construct joints in foundation walls at a maximum spacing of 15 ft. from any corner or 30 ft. along length of wall. At contra/construct joints all reinforcing shall be continuous through the joint.
14. The general contractor shall be responsible for coordination of:
a. Door bent out locations, slab depression, and other required mechanical & plumbing, and Electrical drawings.
b. As necessary to properly install each specific item.

STRUCTURAL STEEL NOTES:

- 1. Structural steel fabrication, erection, and connection design shall conform to AISC Specification for the Ninth Edition.
2. Structural steel:
a. Structural steel shall conform to ASTM A-36.
b. Structural tubing shall conform to ASTM A-500 GR-B (Fy=46 ksi)
c. Structural pipe shall conform to ASTM A-53, TYPE E OR S
3. Design connections for the reactions shown on the drawings or the maximum end reaction that can be produced by a uniformly distributed uniformly loaded beam for each given beam size and span.
4. Field connections shall be bolted using 3/4" diameter ASTM A325 high strength bolts except where field welding is indicated on the drawings.
5. All welding shall conform to AWS D1.1-Latest edition.
6. All structural steel shall be shop primed using standard Inmatec 10-99 red or equal.

METAL DECK NOTES:

- 1. Steel roof deck shall be as indicated on plan by Vulcraft or approved alternate. Steel deck shall conform with the latest edition of the "Design Institute" Standard Specification for steel joist and joist girders.
2. Fasten metal deck to all steel supports with 5/8" diameter puddle welds at 12" o.c. unless otherwise indicated on plan. Provide welding washers on all deck units 24 gage and lighter.
3. Provide 3/10 TEXS screws on all side lap connections.
4. All welding shall conform to AWS D1.1-Latest Edition, and AWS D1.3-Latest Edition
5. Welding electrodes shall be E70XX.

OPEN WEB STEEL JOIST NOTES:

- 1. Open web steel joists shall conform to steel joist Institute "Standard Specification for steel joist and joist girders."
2. All bridging and bridging anchors shall be completely installed before construction loads are placed on the joists. Bridging shall support the top chord against lateral movement during construction period and shall hold the joist in place until construction is shown on the plans. Bridging shall be as called out on the plans.
3. Items attached to steel joists shall be attached to panel points only, or an additional web member shall be added in the joist at the location of the concentrated load. The manufacturer shall be responsible for supplying the proper additional web member size.
4. Loads shall not be placed on joists unless the joist has been designed to support the load.
5. Steel joists shall be shop primed using standard Inmatec 10-99 red or equal.
6. All welding shall conform to AWS D1.1-Latest edition. Welding electrodes shall be E70XX.

LIGHT GAUGE METAL FRAMING:

General:

- 1. Acceptable light gage Manufacturer: See Specifications
2. The extent of the work for the exterior metal stud wall system is detailed on the Architectural drawings. These notes shall be worked in conjunction with those drawings and the specifications.
3. The following specifications and publications shall be followed.
a. American Iron and steel institute cold form design manual, specification for the design of cold form steel structural members - latest edition.
b. American Society for testing and materials (ASTM).
c. American Institute of steel construction Manual of Steel Construction - 9TH Edition.
4. Fabrication of light gage steel shall conform with requirements of ASTM A446 with the following minimum yield points (Fy):
a. 18 gage. - Fy = 33,000 Psi (Grade A)
b. 20 gage. - Fy = 33,000 Psi (Grade A)
5. Manufacturer of studs, runners, tracks and other framing members shall comply with ASTM C933.
6. Framing components and accessories shall be galvanized per ASTM A525 minimum G60 coating.
7. Screws and other attachment devices shall have a protective coating equivalent to cadmium or zinc plating and shall comply with ASTM A165 Type NS, self tapping screws shall be of the minimum diameter as indicated on the design drawings for each specific attachment detail. Penetration through joined materials shall not be less than three exposed threads.
8. Standard steel shoes, plates, etc. shall conform to the material and finish specifications under Division 5.

Exterior curtain walls:

- 1. Provide channel shaped studs, plates, runners, tracks, blocking, clip angles, shoes, reinforcements, fasteners and other accessories recommended by the manufacturer for a complete framing system.
2. The exterior stud framing subcontractor shall submit shop drawings and design calculations as specified in the previous mentioned specifications and publications. These drawings shall illustrate the design of the steel stud exterior wall framing and structural steel stiffening and all necessary structural steel stiffening and bracing.
3. The exterior wall system shall be designed for a maximum allowable deflection, either horizontal or vertical, of 1/360 of the span in inches measured from point of attachment to structural steel or concrete including affect of studs only, not sheathing board or facing material. Refer to specifications for interior partition design criteria.
4. The design wind pressure shall be as indicated in the specifications and/or Boca 1999 which ever produces the most severe condition.
5. Securely anchor studs in track to floor construction and overhead structure. Provide slip joints where nonbearing vertical studs meet floor or roof structural members allow for 1" of vertical live load deflection at slip joints. Do not install steel studs until all dead load has been applied to the structure.
6. Frame all openings larger than two feet with a minimum of double studs or as determined by the design submitted.
7. Welding of framing components will be permitted only where indicated on structural drawings or as approved by the Engineer of Record.
8. Field cutting of holes in steel framing members shall not be permitted.
9. Touch up all steel bared by welding with zinc rich paint.
10. Splices of axially loaded members shall not be permitted.
11. Wire tying of members is not permitted.
12. Complete bearing on supports shall be maintained for studs in axially loaded assemblies.

REQUIRED SUBMITTALS & TESTING:

- For each submittal, submit (3) copies and (1) reproducible set to the Architect.
1. Concrete reinforcing, concrete mix design & testing. (03300)
Submit complete shop drawings and schedules of all reinforcing steel. Drawings shall be prepared by the contractor and submitted to the engineer for review prior to commencement of that portion of the work. All accessories, schedules, bend types etc. shall be shown on the shop drawings.
Compressive Strength Tests: ASTM C39; prepare one set for each 100 cubic yards or fraction thereof, or concrete slabs placed in any one day or for each 5,000 square feet of surface area placed; test 1 specimen at 7 days and 1 specimen at 28 days, and reserve 1 specimen for later testing if required.
2. Structural Steel:
Submit detailed drawings, including complete details and members for fabrication and assembly of structural steel members and diagrams, including details of cuts, copes, connections, corner, holes and other pertinent data.
Indicate welds by standard AWS symbols, and show size, length, and type of each weld.
Provide setting drawings, templates and directions for installation of anchor bolts and other anchorages to be installed by others.
3. Open Web Roof Joists
Submit shop drawings, prepared under the supervision of a professional engineer licensed to practice in the State of Maine, showing species, sizes and stress grade of lumber to be used in the span, comb, configuration, and spacing for each type of lumber, comb, configuration, and material, finish, design value and local, type size, connector plates; including bearing and anchorage details.
4. Metal Deck
Submit shop drawings, prepared under the supervision of a professional engineer licensed to practice in the State of Maine, showing species, sizes and stress grade of lumber to be used in the span, comb, configuration, and spacing for each type of lumber, comb, configuration, and material, finish, design value and local, type size, connector plates; including bearing and anchorage details.
5. Light Gage Steel Framing
Submit shop drawings, prepared under the supervision of a professional engineer licensed to practice in the State of Maine, showing species, sizes and stress grade of lumber to be used in the span, comb, configuration, and spacing for each type of lumber, comb, configuration, and material, finish, design value and local, type size, connector plates; including bearing and anchorage details.
Engineers Stamp: Provide a final set of shop drawings which have been signed and stamped by a structural engineer licensed to practice in the State of Maine if the submittal is for Arch/Ear review only.

W & L STRUCTURAL ENGINEERING SERVICES, INC. 178 O STREET SOUTH PORTLAND, MAINE 04106 PHONE: (207) 883-8243 FAX: (207) 883-8243 EMAIL: micsured@eng.com

Table with 3 columns: REV, DATE, DESCRIPTION. Includes entries for Project # 24056, Plot date MARCH 26, 2004, Date MARCH 26, 2004, Scale NOT APPLICABLE, Checked by JH, Drawn by MFL, and Designed by MFL.

OFFICE & WAREHOUSE for J. WESTON WALCH 1039 RIVERFRONT STREET FORT AND, MAINE CENTRAL HOTEL



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BOUNDARY SURVEY DEPICTED  
 IS SHOWN ON A PLAN TITLED  
 "THE PLAN" BY BH2M,  
 DATED MAY 1994, JOB

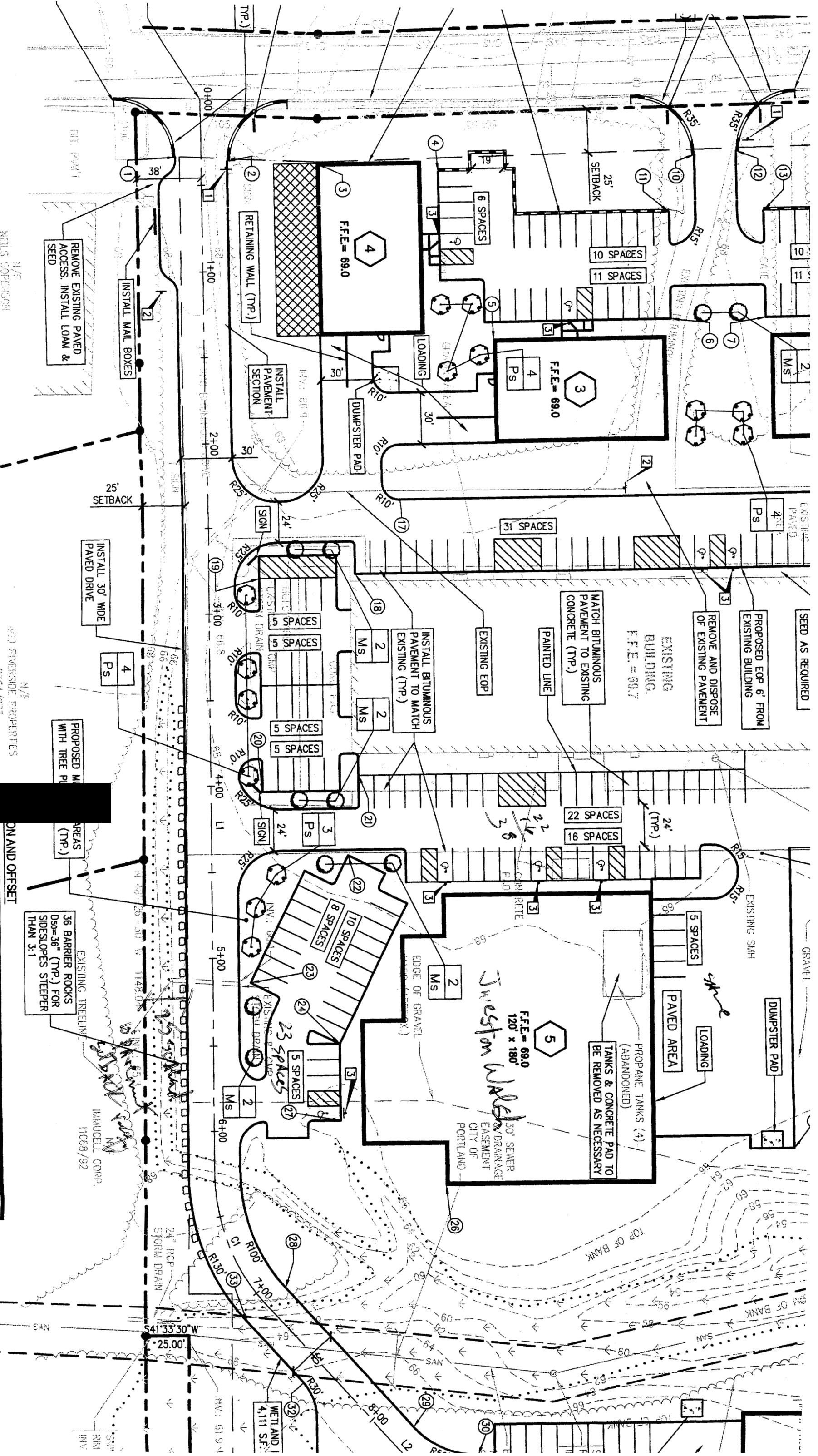
**CURVE TABLE**

CURVE	LENGTH	RADIUS	DELTA	TANGENT	PC STATION	PT STATION
C1	84.44	115.0	42°04'13"	44.23	6+24.54	7+08.98
C2	46.30	100.0	26°31'38"	23.57	8+79.91	9+26.21

**ON AND OFFSET**

#	STATION	OFFSET	#	STATION	OFFSET
1	0+32.37	15.00	21	3+94.64	85.78
2	0+36.26	15.00	22	4+40.75	79.32
3	0+38.13	67.07	23	5+13.88	21.92
4	0+52.84	137.13	24	5+49.45	73.49
5	+41.72	167.49	25	8+48.28	287.09
6	+31.31	270.45	26	7+28.03	123.80
7	+31.09	324.45	27	5+94.45	73.67
		497.73	28	7+08.98	15.00

REMOVE EXISTING PAVED ACCESS. INSTALL LOAM & SEED  
 INSTALL MAIL BOXES  
 25' SETBACK  
 INSTALL 30' WIDE PAVED DRIVE  
 PROPOSED MAIL AREAS WITH TREE PLANTINGS  
 36 BARRIER ROCKS D50=36" (TYP.) FOR SIDESLOPES STEEPER THAN 3:1  
 EXISTING TREELINE  
 IMMUCELL CORP. 11068/92



N/E  
 NGILS CORPORATION  
 8153/117

N/W  
 420 RIVERSIDE PROPERTIES  
 8364/273

ON AND OFFSET

36 BARRIER ROCKS D50=36" (TYP.) FOR SIDESLOPES STEEPER THAN 3:1  
 EXISTING TREELINE  
 IMMUCELL CORP. 11068/92

WETLAND 4,111 S.F.  
 TOP OF BANK  
 3M OF BANK

W 25.00'  
 S41°33'30"W