- **The applicant states that an outside vendor is currently sizing the appropriate water quality treatment systems for the project. This should be discussed with the Jetport's engineers as this is a very large project and it will be necessary to apply the Planning Authority's current interpretations for water quality treatment to this project consistent with recent projects.**

  The "outside vendor" we were referring to in Section 14 - Stormwater Management Plan was considered to be DeLuca-Hoffman as they have designed various water quality units throughout the Jetport. A stormwater quality unit is proposed on the gravity system line prior to discharging to the natural detention basin to remove total suspended solids and oils and greases. The design of this unit was coordinated with DeLuca-Hoffman on Tuesday, February 13, 2001.

- **It seems that an overabundance of catch basins are being provided along the loop road while not enough catch basins are being provided in the parking lots. The lot on the north side appears to be without a catch basin to collect runoff, particularly if the lot has curb around it.**

  The north parking lot has been reconfigured and the storm drain system reevaluated. This parking are will be curbed and the revised storm drain system has accounted for the curbed area.

  As discussed at our February 3, 2001 meeting, we have provided additional catch basins in the surface lot west of the proposed parking garage shown on Attachment D. In addition, catch basins have been added to the surface lot west of the existing parking garage to minimize the flow of stormwater into the garage.

5. **The following comments are provided regarding utilities.**

   - **Why is the sanitary sewer not being located in the road?**

     The sanitary sewer has been relocated as shown on the attached revised Utility Relocation sheet C1-8.

   - **To what extent are the UE and UT in the existing loop road being removed?**

     The attached revised Utility Relocation plan sheet C1-8 shows the extent of which the UE and UT are being removed in the existing loop road.

6. **The following comments are provided regarding erosion control.**

- **The erosion control plan should identify the proposed stockpiles areas and construction staging areas. There will be a significant amount of earthwork for the project and I would anticipate that temporary stockpiles of material will result. Earthwork cuts for the parking lot on the west side of the proposed garage will be as much as 6 feet.**

  The project plans identify the proposed stockpile areas and construction staging areas are shown on the attached revised Erosion and Sedimentation Control Plan sheet C1-51 and Overall Site Plan sheet C1-1 respectively. It is expected that the Contractor will stockpile some material, but that it will be removed and disposed of offsite intermittently.

- **The erosion control plan should include provisions for street sweeping and mud control around the areas.**

  Provisions for street sweeping and mud control around the areas has been included in the attached revised Erosion and Sedimentation Control Details sheet C1-52.

- **The erosion control plan should include provisions for cleaning and jetwashing of all pipes and structures after the completion of work and prior to acceptance by the City or Jetport.**

  Provisions for street sweeping and mud control around the areas have been included in the attached revised Erosion and Sedimentation Control Details sheet C1-52.

- **The cut slope on the NW side should be evaluated for stability and any need for reinforcement.**

  The cut slope on the NW side is at a 4:1 slope. This is not considered to be excessive. No special reinforcement is anticipated.

- **The swale on the north side of the work limits should have curlex blankets or equal identified for use along the bottom.**

  Sheet C1-52 Erosion Control and Sedimentation Details provided in our previous submittal to the Planning Board on January 9, 2001 included a stabilization blanket. However, we have shown the stabilization blanket on the attached revised sheet C1-51 Erosion Control and Sedimentation Control Plan.

7. **The following comments are provided regarding other details.**

- **The sidewalk should be paved in two lifts.**

  Noted. This will be included in the Contract Documents.

- **What pavement section will be provided for the new paved areas?**

  A pavement section is provided on plan sheet C1-32, Roadway Notes, Typical Sections & Details and was included in our January 9, 2001 Planning Board Application.

- **Additional detail should be provided for striping, crosswalk, directional arrows, etc. on all paved surfaces.**

  Additional details have been provided on the attached revised plan sheet C1-32, Roadway Notes, Typical Sections & Details to include striping, crosswalk, directional arrows, etc. on all paved surfaces.

- **The site lighting plan did not show much detail regarding the lights including pole base design, conduit runs, and parking lot lighting. Additional information is required.**

  Additional lighting details will be provided prior to the public hearing on February 27, 2001.

- **Additional details should be provided for the electric, telephone and fire alarm underground utilities. Will they be concrete encased? Where will these utility manholes and handholes be located?**

  The underground utilities will be located in concrete duct banks. Utility manholes and handholes are shown on Sheet C1-8 Utility Relocation Plan.

- **Is any revenue control equipment being proposed for the parking lots?**

  Power and other provisions are being provided to accommodate revenue control equipment. However, the equipment itself will be provided by the Jetport's Parking Management Contractor.

Comments Received at February 3, 2001 Meeting

- **Provide information regarding enplanements projected at the Jetport.**

  Information regarding enplanements from the Walker Consulting Study is included as Attachment E.

- **Provide the total land area at the Jetport.**

  The total land area at the Jetport was provided in the Planning Board Application and is 1035.25 acres.

- **What is proposed garage building foot print area?**

  The proposed garage building foot print was provided in the Planning Board Application and is 88,492 sf.

- **What is the land area involved in the Phase I Parking Garage project?**

  Approximately 13 acres.

- **What is the overall increase in impervious area associated with the proposed project?**

  The overall increase in impervious area is approximately 2.1 acres.

- **Provide acceptance letter for project by the Portland Water District.**

  We have discussed the project with David Coffin, Portland Water District, who indicates that the existing water system has adequate capacity to provide service to the proposed project. A confirmation letter is expected in the near future and will be forwarded to you as soon as we receive it.

- **Provide acceptance letter for project by the City of Portland Sewer Department.**

  Email correspondence dated January 12, 2001 from Anthony Lombardo, Portland City Engineer is attached and indicates that there are no issues or concerns for the City of Portland regarding the sewer improvements and is included as Attachment F.

- **Provide a photometric plan, lighting specs, mounting heights and light fixture chart.**

  A photometric plan will be provided prior to the Public Hearing on February 27, 2001. A chart indicating the type of lighting, and mounting heights will be provided prior to the Public Hearing on February 21, 2001.

- **Provide a Construction Schedule**

  A construction schedule is provided in Attachment G.

- **Show the proposed canopies at the Jetport on the project plans.**

  The attached revised plan sheet C1-3, General Layout Plan shows the proposed canopies.

- **Provide Material Samples of the Parking Garage.**

  Material samples of the garage will be provided under separate cover.

- **Provide details on the Parking Management building to be located in the new northwest surface lot.**

  Details of the parking management building are provided as Attachment H.

- **Describe the parking.**

  There are several surface lots located at the Jetport. The surface lot west of the existing parking garage is utilized for short term parking and will not changed under the proposed project. The surface lot beyond the west surface lot on the opposite side of the terminal access road is currently being utilized as an employee parking lot and will not change under the proposed project. The surface lot west of the proposed parking garage will be utilized as long term parking and will not change under the proposed project. The north surface lot is used as an overflow parking area currently. This parking lot will be utilized as employee parking for Northeast Air and General Aviation personnel. The small parking area east of the existing parking garage will be utilized as short term public parking associated with the baggage claim area for the public to park while picking up baggage.

- **How does the taxi operation work?**

  Taxis will be qued in the new northwest surface lot. When a passenger needs a taxi, the taxi driver will be radioed and will drive to the terminal building and pick up the passenger. After taking the passenger to their destination, the taxi will return to the taxi queing area for the next call.

- **Is there an existing sidewalk on Westbrook Street?**

  There is no existing defined sidewalk on Westbrook Street where the proposed improvements end.

- **What will the cross-walk material be?**

  The cross walks will be painted.

- **What material will the curbs be?**

  The curbs will be granite.

- **Is the entire project located within Portland?**

  Yes.

- **Label properties not owned by the Jetport on the project plan.**

  Properties not owned by the Jetport are shown on the revised attached plans, sheet C1-2.

- **Is the property plan provided as Exhibit "A" a boundary survey?**

  The Exhibit a plan details all of the properties under control by the airport. However, it is not considered a boundary survey although the property lines shown on the drawing are based on the deed descriptions. A boundary survey of the Alamo lot which is the only property affected by the proposed improvements, see Attachment I.

- **Discuss Baggage Claim area.**

  Baggage Claim area improvements are planned for the future. An entrance is shown on the north side of the existing Airport Fire Station. This entrance will be completed at a time when the Baggage Claim improvements take place and is intended to serve the existing Tower.

- **What are the dimensions of the parking spaces inside the parking garage?**

  The dimensions of the parking spaces in the parking garage are 9' wide by 18' long.

- **Provide a traffic flow diagram.**

  A traffic flow diagram is provided as Attachment J.

- **Provide a plan showing only the proposed project with landscaping and pedestrian walkways.**

  Plan sheet L1-1, Landscaping Plan has been revised to better show pedestrian routes from the parking lots to the terminal building and is attached. A colored landscape plan will be available for the February 27th Public Hearing.

- **Provide a site section showing the relative height of the Phase I Garage.**

  A site section from the September 2000 Parking Master Plan is included as Attachment K.

- **Provide site plans showing the temporary off-site parking area.**

  A set of plans is included with the revised drawings detailing the temporary parking area. This parking area will be developed in a field adjacent to the City's snow dump. Work will involve regrading the area, installing 12 inches of gravel material, paving with 2 inches of base course pavement, and paint striping. A total of 464 parking spaces will be provided, including 12 handicap spaces.

  The site will include two temporary shelters, a paved access drive, a revenue control island with ticket dispenser and operator hut, and site lighting. The jetport parking management consultant will utilize passenger vans to shuttle people back and forth the

temporary parking lot and the jetport. Site lighting will consist of wood utility poles with overhead wiring and cut-off type fixtures. Fixture types are provided in Attachment L.

Comments Received at February 6, 2001 Meeting

- **Provide additional landscaping along the perimeter of the regraded surface lots west and north west of the proposed garage in accordance with the City's Technical Guidelines to the extent possible. Provide additional landscaping within the regraded surface lots.**

  Plan sheet L1-1, Landscaping Plan has been revised and includes landscaping along the perimeter and within the regraded surface lots.

- **When creating landscaped islands combined with pedestrian walkways, place the walkway on one side of the island rather than the middle. Plant trees in remaining space.**

  The landscaped islands that include pedestrian walkways have been designed as required above.

As we discussed, we have provided a copy of this submittal to Anthony Lombardo, City Engineer, Jeff Tarling, City Arborist, Larry Ash, City Traffic Engineer and Steve Bushey, DeLuca-Hoffman directly. If you have any questions or comments regarding the above information, please contact us.

Very truly yours,

DUFRESNE-HENRY, INC.

Jeffrey D. Preble, P.E.
Senior Project Manager

cc: Paul Bradbury, P.E. Portland International Jetport
Mickey Krockmalic, Domenech, Hicks & Krockmalnic

Portland International Jetport - Phase I Parking Garage Improvements
Planning Board Application - Response to Comments

February 16, 2001

List of Attachments

Attachment A	Signage Plans
Attachment B	Artist's Rendering CCRF (Retaining Wall)
Attachment C	Gravity Stormwater System Analysis
Attachment D	Stormwater Catch Basin Location Plan
Attachment E	Excerpt from Walker Consulting Study
Attachment F	Email correspondence from City Engineer
Attachment G	Construction Schedule
Attachment H	Parking Management Building Details
Attachment I	Alamo Survey Plan
Attachment J	Traffic Flow Diagram
Attachment K	Site Sections
Attachment L	Temporary Parking Lot Lighting Details

Portland International Jetport - Phase I Parking Garage Improvements
Planning Board Application - Response to Comments

February 16, 2001

List of Revised Attached Plan Sheets

L1-1	Landscaping Plan (includes pedestrian walkways)
L1-3	Landscaping Plan Jetport Drive
C1-1	Overall Site Plan
C1-2	Existing Site Plan
C1-3	General Layout Plan
C1-6	Grading Plan
C1-8	Utility Relocation Plan
C1-32	Roadway Notes, Typical Sections & Details
C1-51	Erosion and Sedimentation Control Plan
C1-52	Erosion and Sedimentation Control Details

Temporary Parking Lot

T-1	Existing Site Plan
T-2	Parking Lot Layout Plan
T-3	Grading Plan
T-4	Electrical Site Plan
T-5	Electrical Details

ATTACHMENT A

Signage Plans

Signage and Wayfinding Graphics
at the
Portland International Jetport
in conjunction with
The Phase I Parking Garage
and
Roadway Modification
Project

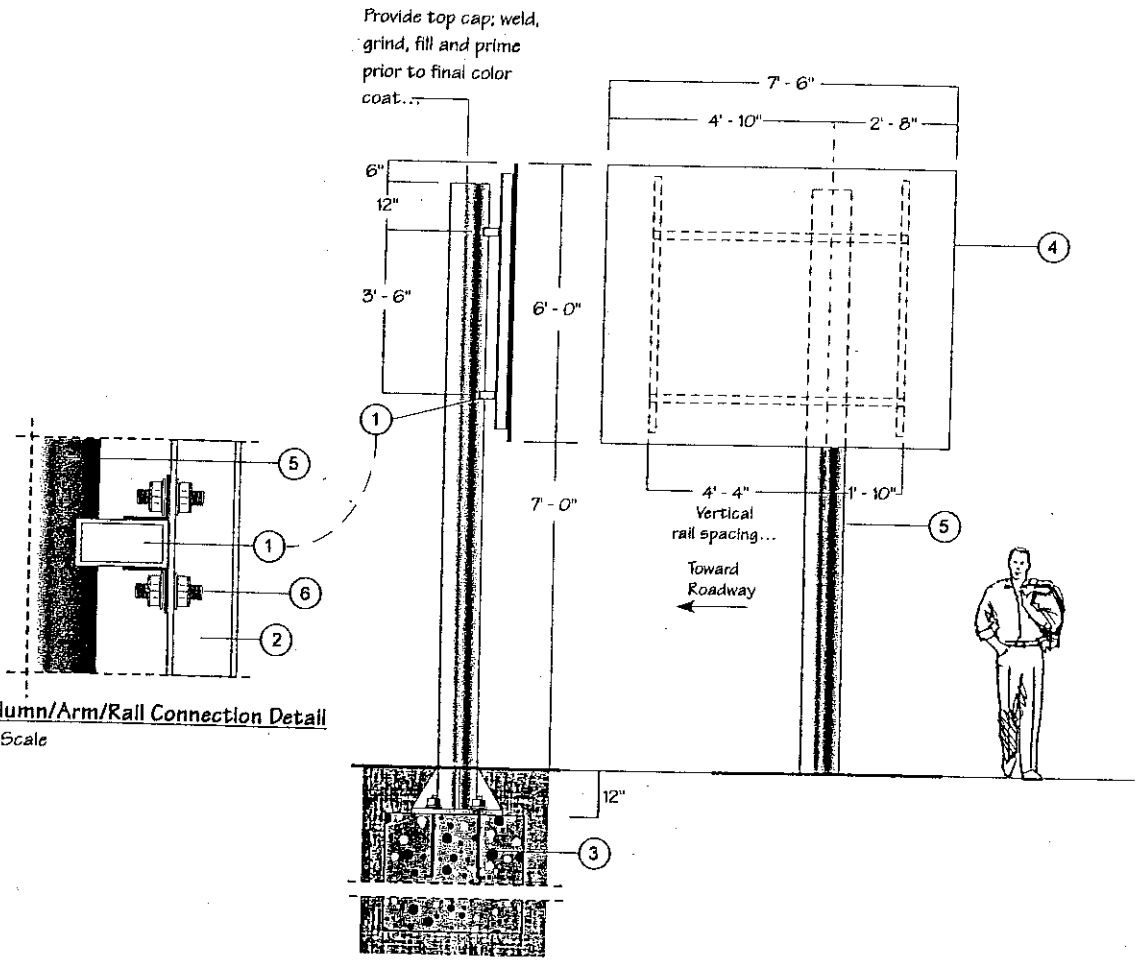
SCHEMATIC

2 February 2001

Design:Clark
8336 Foxworth Trail
Powell, Tennessee 37849
v. 865.947.5926
f. 865.947.6118
e. DsgnClark@aol.com
www.designclark.com

Portland International Jetport
Signage and Graphics
Drawing Name: Sign Type A.1
Scale: 3/8" = 1' - 0"
Date: 02.02.01

SG-1.01



Column/Arm/Rail Connection Detail
No Scale

General Notes

1. 2" x 4" x .375" x 6' - 4" painted horizontal aluminum square tube "arm"; let-into vertical column 1 1/2"; full penetration weld. Provide end caps; weld, grind, fill and prime prior to final color coat (Typical 2).

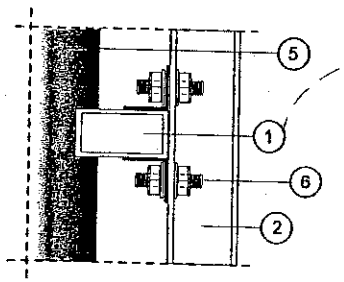
2. 2" x 3" x 5' - 8" painted aluminum vertical rail; mechanically fastened to horizontal arms (Typical 2).

3. Concrete footing; see Specifications regarding Registered Professional Services.

4. 7' - 6" x 6' - 0" x 1" painted honey-comb sign panel with surface installed reflective vinyl die-cut legends and graphic devices; see Graphic Layouts and Color Schedule. Provide painted Modified "H" extrusion along all edges and continuous Closure Extrusion at all panel joins; see Graphic Layouts.

5. 10" dia. x 13' - 6" painted structural aluminum vertical column, let-into and welded to 22" dia. x 1" aluminum base-plate. Provide four (4) 6" x 12" x .750" triangular aluminum plate gussets welded to column and base-plate, as shown. Provide four (4) 1 1/4" dia. holes for 1" dia. "J-bolt" connection.

6. 2" x 2" x 3" x .250" painted aluminum "clips", welded to horizontal cross-arm at vertical rail location (typical top and bottom of rail as shown). Provide 5/8" dia. hole through vertical clip arm and rail-flange; holes aligned. Provide 1/2" dia. s/s allthread and washer/nut combination as shown.



Column/Arm/Rail Connection Detail
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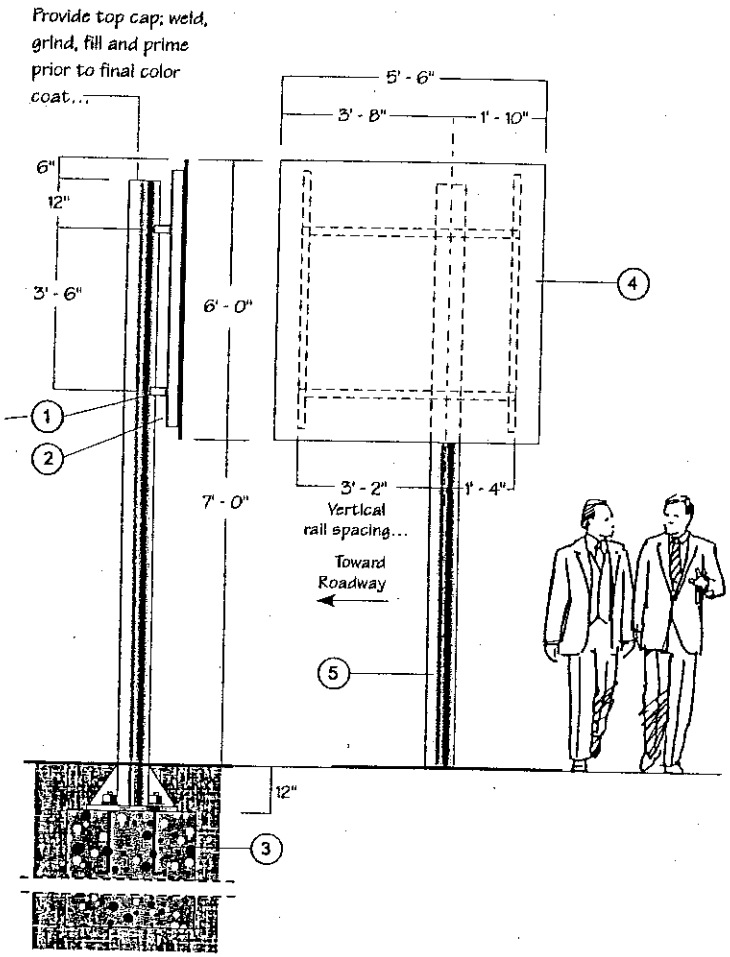


General Notes

1. 2" x 4" x .375" x 4' - 6" painted horizontal aluminum square tube "arm"; let-into vertical column 1 1/2"; full penetration weld. Provide end caps; weld, grind, fill and prime prior to final color coat (Typical 2).

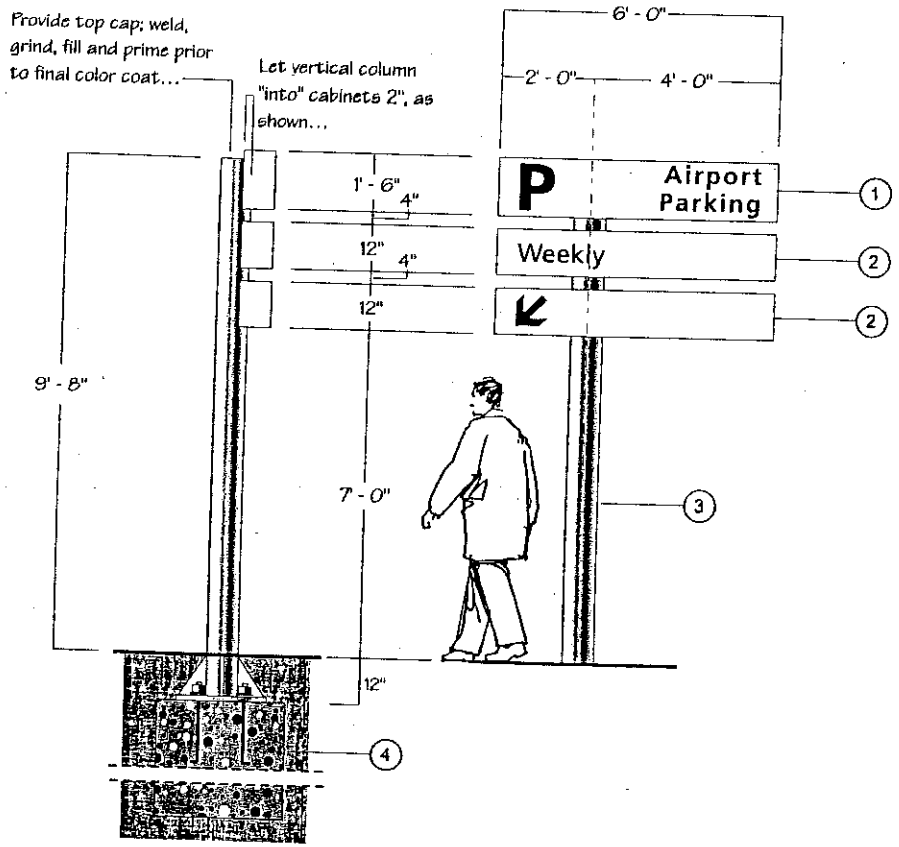
2. 2" x 3" x 5' - 8" painted aluminum vertical rail; mechanically fastened to horizontal arms (Typical 2).

3. Concrete footing; see Specifications regarding Registered Professional Services.

4. 5' - 6" x 6' - 0" x 1" painted honey-comb sign panel with surface installed reflective vinyl die-cut legends and graphic devices; see Graphic Layouts and Color Schedule. Provide painted Modified "H" extrusion along all edges and continuous Closure Extrusion at all panel joins; see Graphic Layouts.

5. 10" dia. x 13' - 6" painted structural aluminum vertical column, let-into and welded to 22" dia. x 1" aluminum base-plate. Provide four (4) 6" x 12" x .750" triangular aluminum plate gussets welded to column and base-plate, as shown. Provide four (4) 1 1/4" dia. holes for 1" dia. "J-bolt" connection.

6. 2" x 2" x 3" x .250" painted aluminum "clips", welded to horizontal cross-arm at vertical rail location (typical top and bottom of rail as shown). Provide 5/8" dia. hole through vertical clip arm and rail-flange; holes aligned. Provide 1/2" dia. s/s all-thread and washer/nut combination as shown.



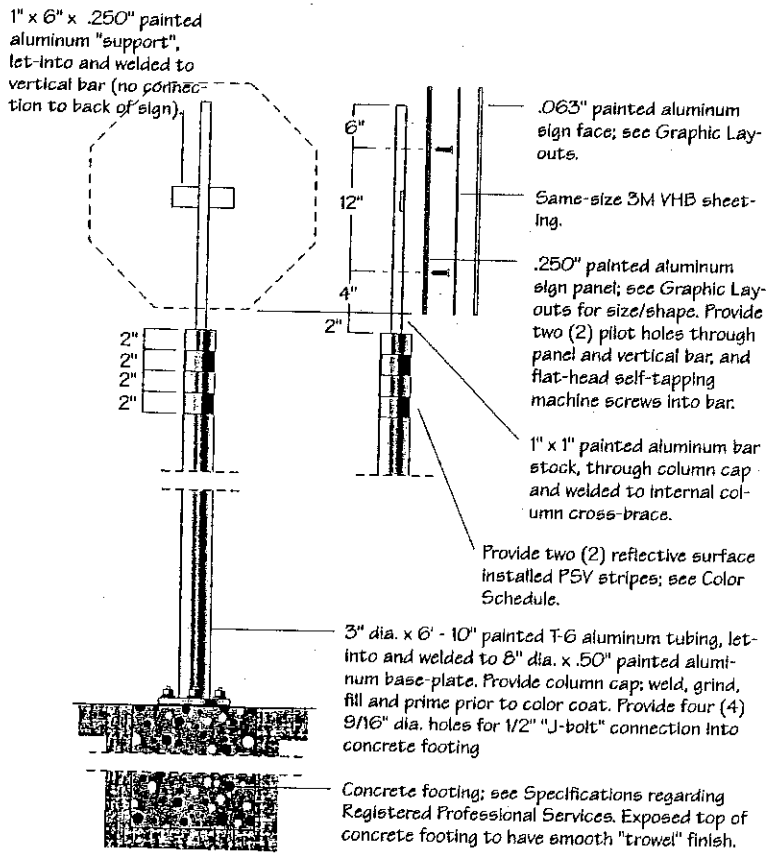
General Notes

1. 18" x 8" x 6' - 0" painted fabricated aluminum internally illuminated sign cabinet, with acrylic-plastic face and "frisket-cut" legend and pictogram, as shown; see Color Schedule and Graphic Layout.

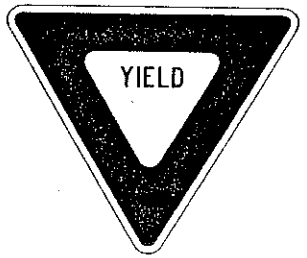
2. 12" x 8" x 6' - 0" painted fabricated aluminum internally illuminated sign cabinet, with acrylic-plastic face and "frisket-cut" legend and/or arrowform, as shown; see Color Schedule and Graphic Layout.

3. 10" dia. x 10' - 8" painted aluminum vertical tubing, let-into and welded to 24" dia. x 1" aluminum base-plate. Provide four (4) 6" x 12" x .750" triangular aluminum plate gussets welded to column and base-plate as shown. Provide four (4) 13/16" dia. holes for 3/4" "J-bolt" connection. Provide all power source through vertical column into illuminated sign cabinets, and required "cut-off" access on side of column "away" from traffic/view.

4. Concrete footing; see Specifications regarding Registered Professional Services.

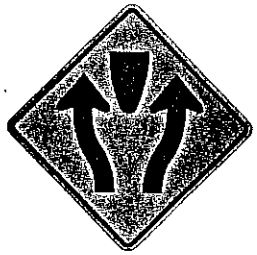


Sign Type C-101

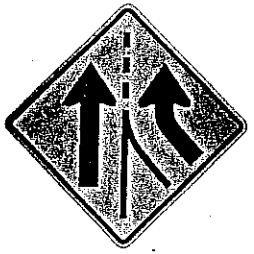


Sign Type C-102

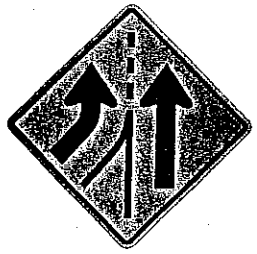
Sign Type C-103



Sign Type C-104

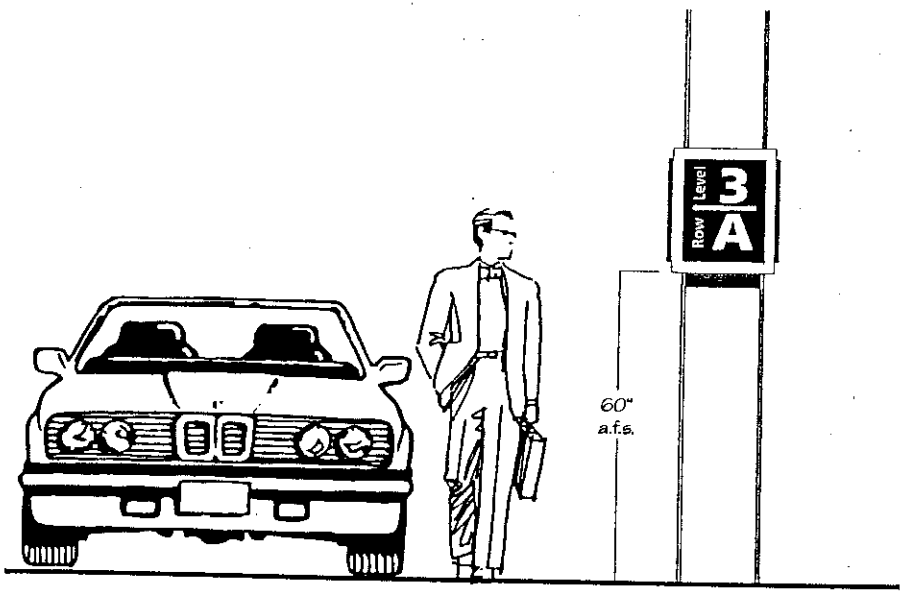


Sign Type C-105

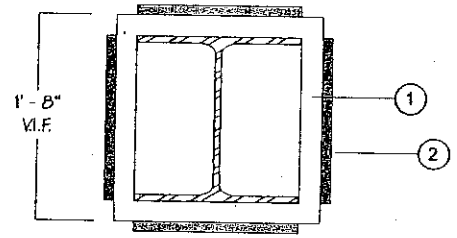


Sign Type C-106

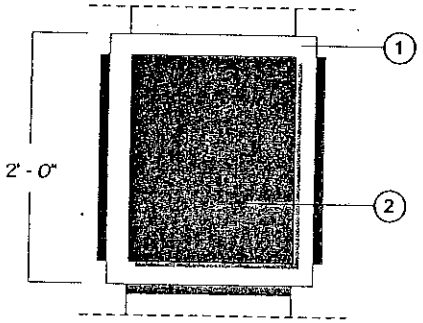
Note: the imagery shown above shall conform to the Guidelines contained in the federal Manual on Uniform Traffic Control Devices.



Column Address Installation Elevation
Scale: 1/2" = 1' - 0"



Plan/Section

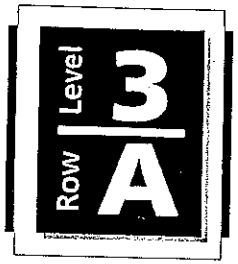


Column Address Elevation
Scale: 1" = 1' - 0"

General Notes

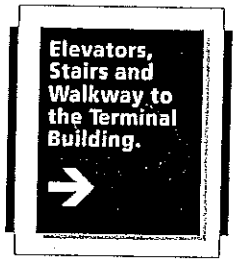
1. 1' - 8" x 2' - 0" x 2" painted fabricated aluminum cabinet, to visually "wrap" around vertical column as shown. Provide all required internal stiffeners and bracing to preclude "oilcanning" of .063" sheet aluminum surface. Provide top, bottom, and interior faces to column web "opening". All field joins are to be "seamless" (see Specification for definition). All shop joins are to be filled, ground and primed prior to final finish color coat. Provide mechanical connection to vertical column at height above finished surface as shown.

2. 1' - 4" x 1' - 8" x 1" painted fabricated aluminum cabinet (Typical 4). Provide all required internal stiffeners and bracing to preclude "oilcanning" of .063" sheet aluminum surface. Provide "blind" connection to base cabinet. All shop joins are to be filled, ground and primed prior to final finish color coat.



Graphic Layout - Address
Scale: 1" = 1' - 0"

Graphic Layout - Notice
Scale: 1" = 1' - 0"



Graphic Layout - Directional
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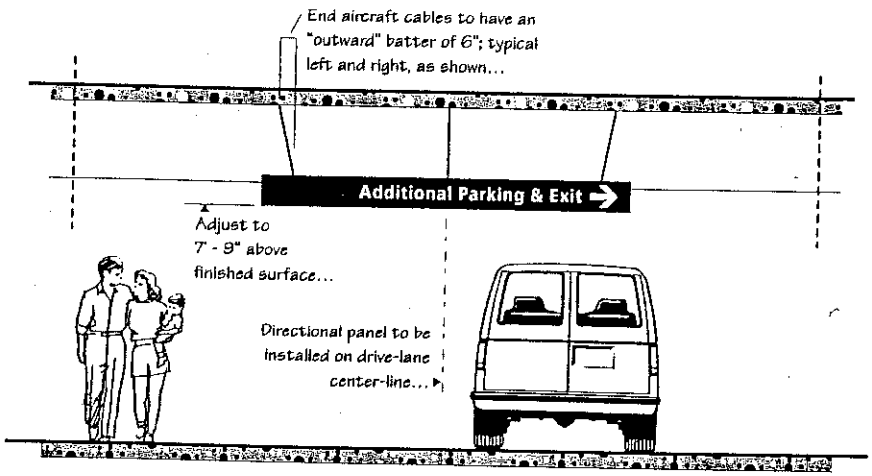

Sign Type E.1 - Installation Elevation
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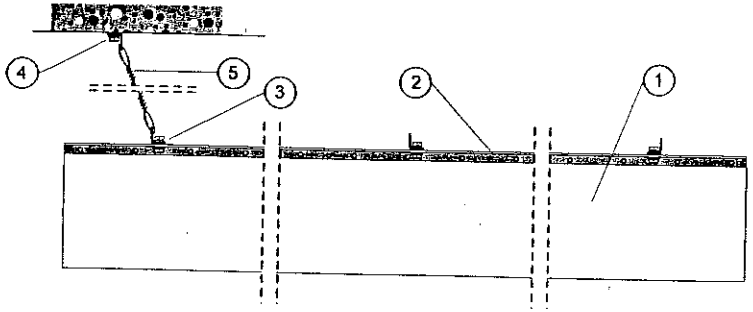

Sign Type E - Elevation
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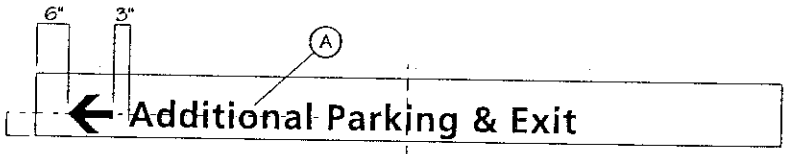
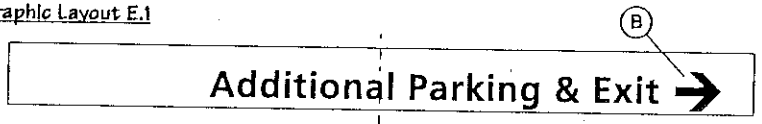
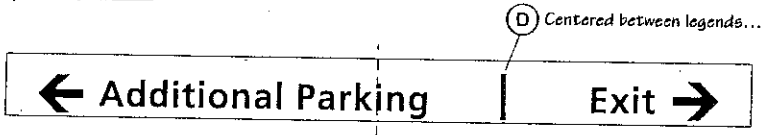


4 3/4" to arrow/legend center-line (typical all)

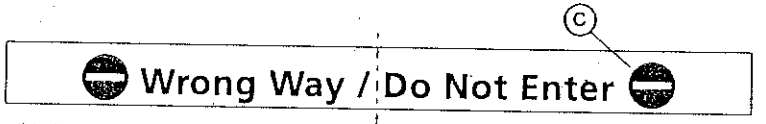
Graphic Layout E.1



Graphic Layout E.2



Graphic Layout E.3



Graphic Layout E.4

General Notes

1. 12" x 12' - 0" x .250" painted aluminum sheet sign panel, w/ surface installed reflective PSV legends and graphics; see Graphic Layouts.

2. 1" x 1" x .125" x 12' - 0" painted aluminum "top" angles (both sides), w/ 1/4" dia. acorn-head machine-screws through angles and sign panel at 6" o.c.

3. 2 1/4" x 2" x 2" x .125" angle brackets, w/ 1/4" dia. machine-screws and lock-washers through bracket and "top" angles, as shown.

4. Provide angle bracket (item 3 above) and Hilti connection into concrete slab; see Specification regarding Registered Professional Services.

5. Aircraft cable connection through holes in angle brackets. Provide "crimp-lock" clamp device at top and bottom, w/ wrap of loose ends. Adjust to height indicated above finished surface.

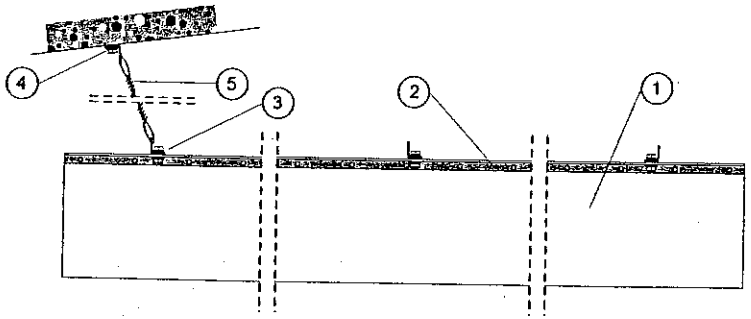
Graphic Notes

A. Surface installed reflective PSV 5" Frutiger 65

B. Surface installed reflective PSV 7 1/2" Project Standard Arrowform, rotate as required; see Sign Message Schedule.

C. Surface installed reflective PSV 8" Pictogram.

D. Surface installed reflective PSV 1" x 9" graphic bar



Sign Type E.2 - Elevation

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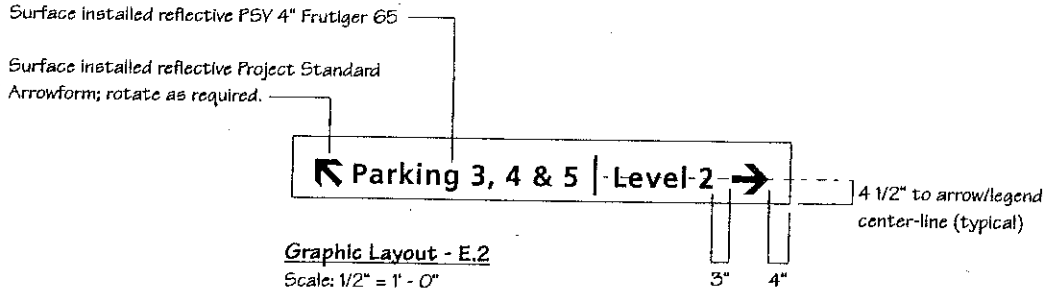


Graphic Layout - E.2

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

General Notes

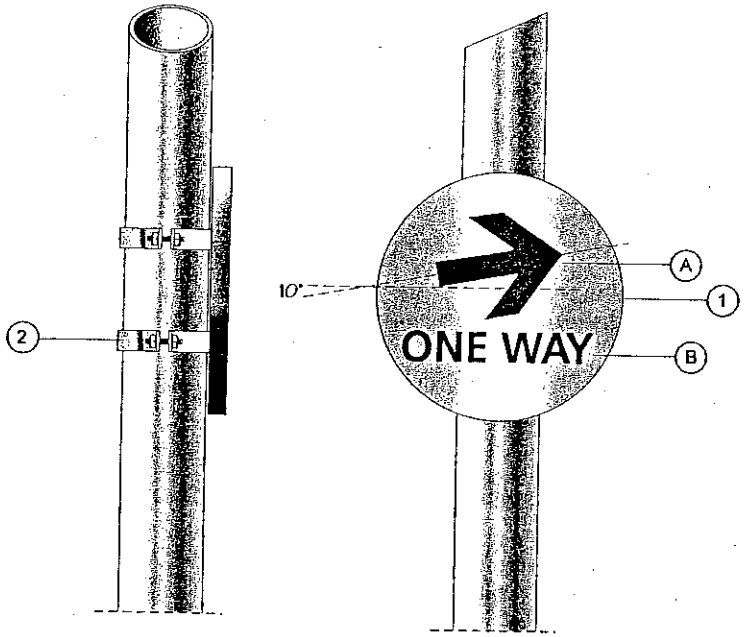
1. 12" x 8' - 0" x .250" painted aluminum sheet sign panel, w/ surface installed reflective PSV legends and graphics; see Graphic Layouts.

2. 1" x 1" x .125" x 12' - 0" painted aluminum "top" angles (both sides), w/ 1/4" dia. acorn-head machine-screws through angles and sign panel at 6" o.c.

3. 2 1/4" x 2" x 2" x .125" angle brackets, w/ 1/4" dia. machine-screws and lock-washers through bracket and "top" angles, as shown.

4. Provide angle bracket (item 3 above) and Hilti connection into concrete slab; see Specification regarding Registered Professional Services.

5. Aircraft cable connection through holes in angle brackets. Provide "crimp-lock" clamp device at top and bottom, w/ wrap of loose ends. Adjust to height indicated above finished surface.



Sign Type F - Elevation
Scale: 1" = 1' - 0'

General Notes

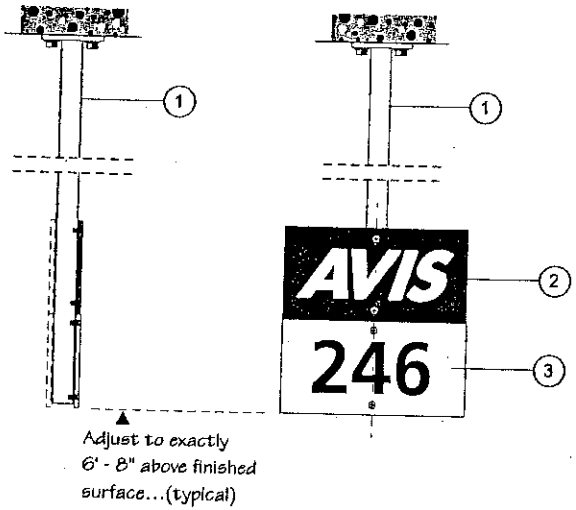
1. 24" dia. x 2" painted fabricated aluminum sign cabinet, w/ surface installed reflective PSV legends and graphics. Provide all required internal stiffeners and bracing to preclude "oilcanning" of .125" sheet aluminum face and back. All joins are to be filled, ground and primed prior to final finish color coat.

2. Provide 2" x .250" painted aluminum connector "strap", w/ 3/8" dia. all-thread and washer/nut combination, as shown. Strap is to be connected to panel interior; connection component is to be rolled (8" dia.; V.I.F.) to match existing structural vertical (Typical 2).

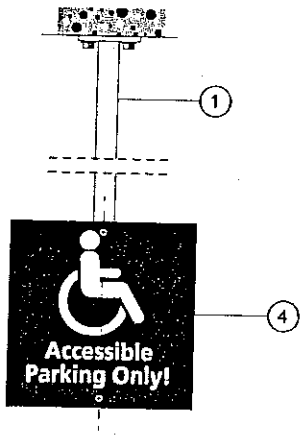
Graphic Notes

A. Surface installed reflective PSV 10" Project Standard Arrowform; rotated as shown.

B. Surface installed reflective PSV 3" Frutiger 65 legend, centered as shown.



Elevation - Sign Type G.1



Elevation - Sign Type G.2

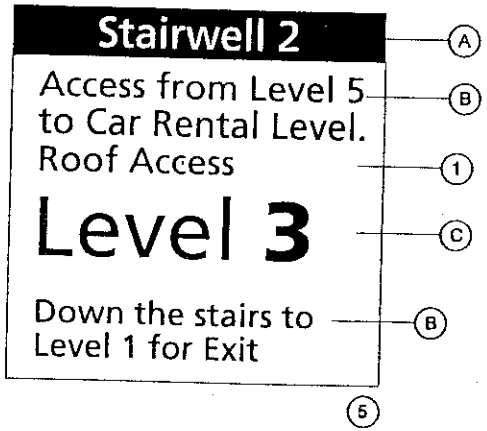
General Notes

1. 2" x 2" x .125" x (length to allow bottom of sign to be at exactly 6' - 8" above finish surface - V.I.F. based on Sign Location Plans) painted square-section aluminum tubing, let into and welded to 6" x 6" x .50" painted aluminum base-plate. Provide four (4) 3/8" dia. holes for 1/4" Hilti connection into existing concrete ceiling/slab. Provide welded aluminum tube "end"; join to be ground and filled prior to final color coat.

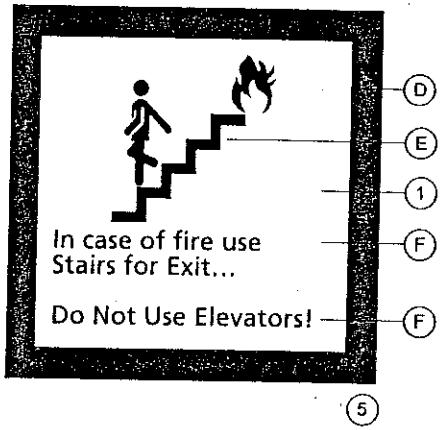
2. 18" x 9" x .250" painted aluminum sign panel, w/ surface applied PSV or screen-print tenant logo image. Logo image and background color (single contrasting color) to be compatible with existing or proposed branding visual statements/vocabulary. This sign panel is to be supplied by the tenant as part of his fit-out effort. Attach to vertical post (supplied by the Owner) with two (2) self-tapping TORX-head machine screws into "pilot holes" provided. Screw heads are to be painted to match adjacent surface color; see Color Schedule.

3. 18" x 9" x .250" painted aluminum sign panel, w/ surface applied PSV "space address". This sign panel is to be supplied by the Owner. Attach to vertical post with two (2) self-tapping TORX-head machine screws into "pilot holes" provided. Screw heads are to be painted to match adjacent surface color; see Color Schedule

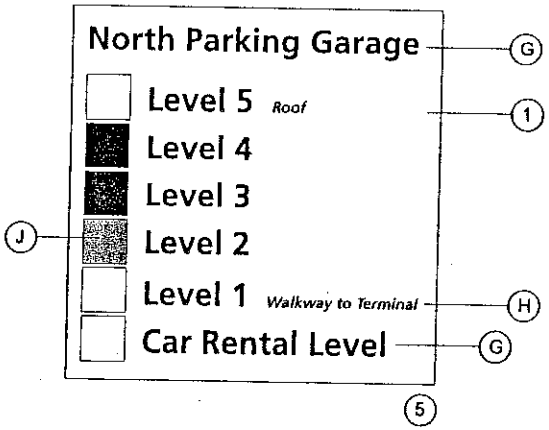
4. 18" x 18" x .250" painted aluminum sign panel, w/ surface applied PSV pictogram and legends; see color schedule and graphic layouts. Attach to vertical post with two (2) self-tapping TORX-head machine screws into "pilot holes" provided. Screw heads are to be painted to match adjacent surface color; see Color Schedule



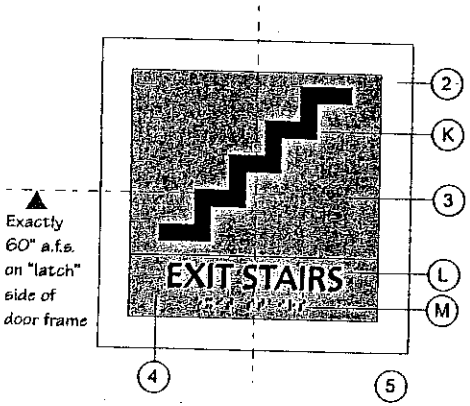
Sign Type H.1



Sign Type H.2



Sign Type H.3



Sign Type H.4

General Notes

1. 12" x 12" x 1/8" colorless acrylic-plastic base-plate, w/ sub-surface screen-print legends and color background back-spray; see Message Schedule and Color Schedule.

2. 10" x 10" x 1/8" painted acrylic-plastic base-plate.

3. 8" x 6" x 1/16" colorless acrylic-plastic graphic-plate, w/ sub-surface screen-print pictogram and color background back-spray; see Message Schedule and Color Schedule. Attach to base-plate with same-size VHB sheeting.

4. 8" x 2" painted photopolymer piece, with tactile legend and Grade 2 braille. Legend face is to be "kiss" screen-printed with color indicated in Color Schedule; braille does NOT receive color. Attach to base-plae with same-size VHB sheeting.

5. Completed plaques are to be attached to the installation wall surface indicated with 3M foam tape around four (4) sides and construction adhesive "zig-zag" across rear surface.

Graphic Notes

A. 1 1/2" graphic bar (see Color Schedule) w/ 1" Frutiger 55 legend centered as shown.

B. 3/4" on 1/2" Frutiger 55 legends, left justified as shown.

C. 2" Frutiger 55 and 75 assembled legend, left justified as shown.

D. 1" wide graphic border; see Color Schedule.

E. 5" two-color pictogram, centered as shown; see Color Schedule.

F. 1/2" on 1/4" Frutiger 55 legends, left justified as shown.

G. 3/4" Frutiger 65 legends, layout as shown.

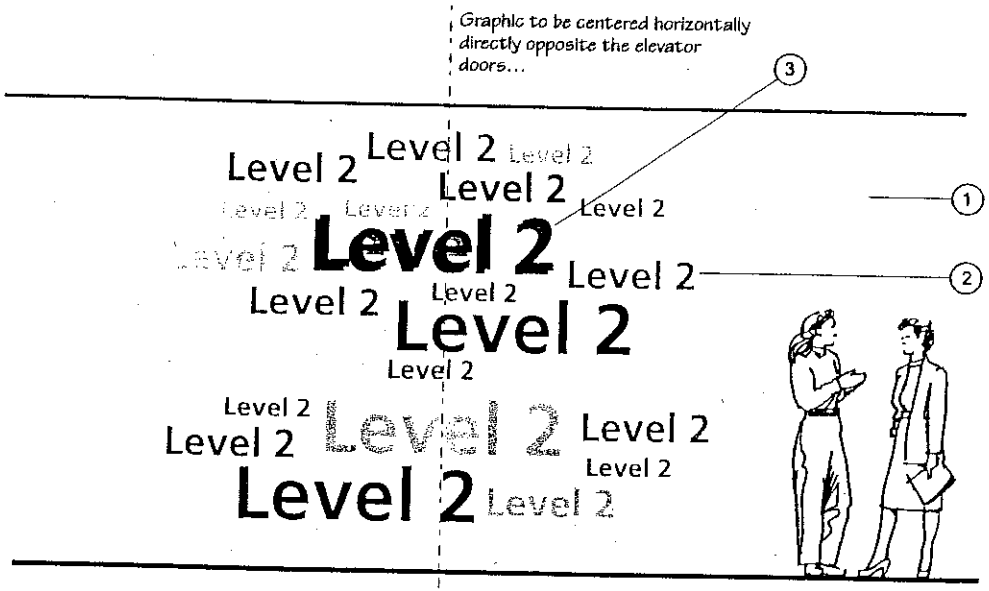
H. 1/4" Frutiger 56 legends, layout as shown.

J. 1 1/2" x 1 1/2" color square; see Color Schedule.

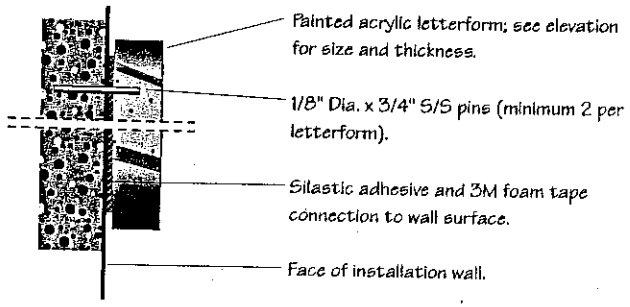
K. 5" pictogram, centered as shown; see Message Schedule and Color Schedule.

L. 3/4" Frutiger 55 legend, centered as shown.

M. 1/4" Grade 2 braille, centered as shown.



Installation Elevation - Sign Type J
Scale: 3/8" = 1' - 0"



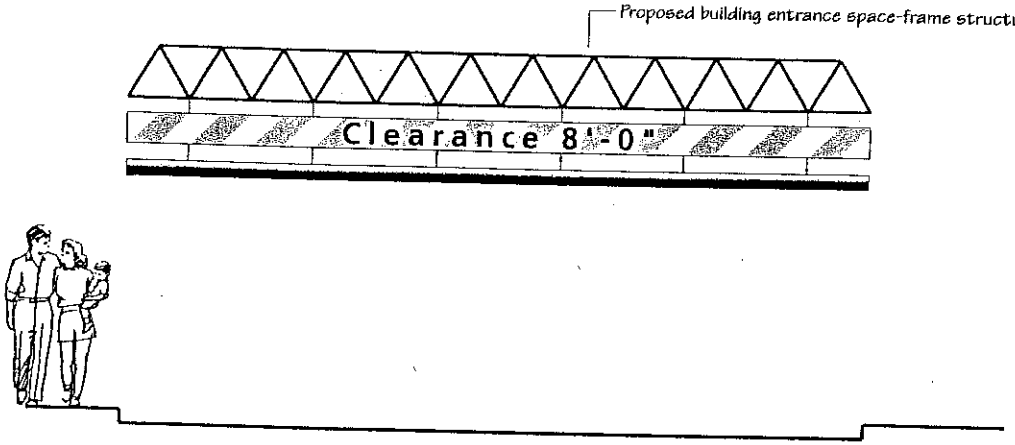
Section
Scale: 3/4 Full Size

General Notes

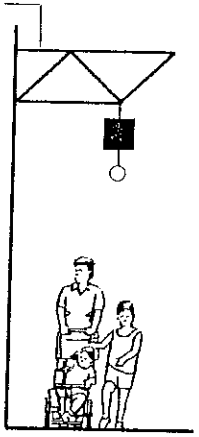
1. Color vinyl wall covering; see Color Schedule.

2. Surface installed PSV legend; various size and hue range of floor color.

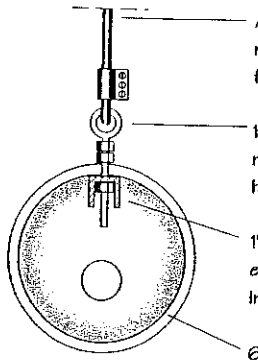
3. 14" x 1/2" painted water-jet cut acrylic-plastic legend. Attach to installation wall surface with s/s pins (minimum 3 per letterform), 3M foam tape and permanent construction adhesive.



Sign Type K - Elevation @ Public Parking Entrance
Scale: 1/4" = 1' - 0"



Sign Type K - Side Elevation @ Public Parking Entrance
Scale: 1/4" = 1' - 0"

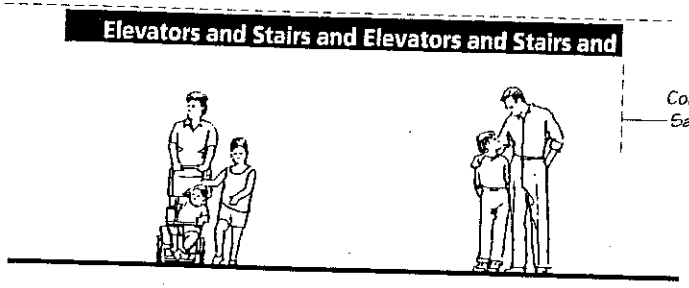


Headache Bar Section
Scale: 3" = 1' - 0"

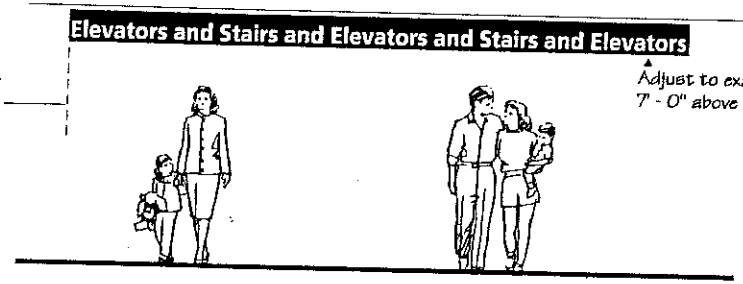
General Notes

1. 12" x 12" x 24' - 0" Painted fabricated internally illuminated aluminum cabinet, with water-jet cut legend as shown, with acrylic-plastic back-up. Provide reflecitve PSV "stripes" as shown; see Graphic Layout and Color Schedule. Mechanicalty attach(see Detail) to proposed building entrance space-frame structure. Provide power source through/adjacent to mechanical connection.

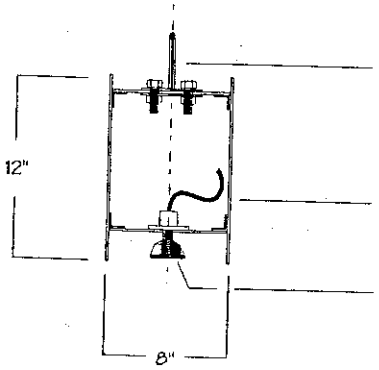
2. 6" dia. x 24' - 0" assembled (joined with "male" sleeves) painted PVC "headache bar". Provide 1" x 1" x .125" channel stiffener within tubing, eye connections through tubing and "aircraft cable" swag-connection to illuminated cabinet. See Color Schedule.



Elevation Looking South - Sign Type L
Scale: 1/4" = 1' - 0"



Elevation Looking East - Sign Type L
Scale: 1/4" = 1' - 0"



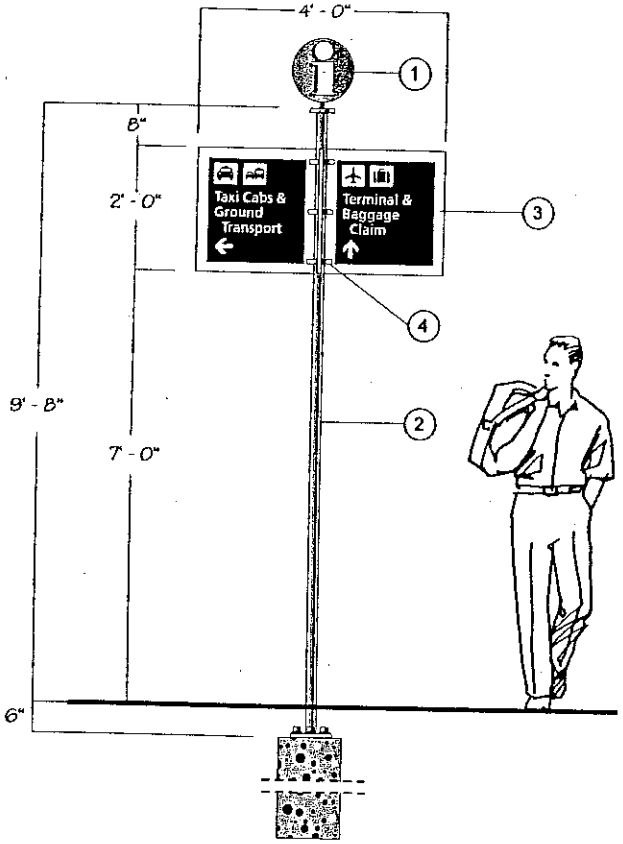
Provide 1/2" dia. painted aluminum tubing support, let-into and welded to 4" x 4" x .250" plate. Provide four (4) 1/4" dia. machine bolts, washers and nuts into plate within cabinet, as shown. Mechanically fasten to concrete ceiling above; adjust to height indicated.

12" x 8" painted aluminum sign cabinet; see elevation for cabinet length. Provide all required internal stucture and bracing to avoid "oil-canning" of .125" aluminum sheet faces. Vent cabinet on top.

Provide low-voltage high-intensity halogen spot lights in cabinet recess @ 12" o.c.. Provide power source through tubing connection so far as possible, and transformers within sign cabinet. Provide keyed and hinged access panel on rear of sign cabinet; all locks keyed alike. Panel recess is to be polished to a No. 6 finish and clear-coated.

Section - Sign Type L
Scale: 1 1/2" = 1' - 0"

Typical Graphics on Reverse Face - Sign Type L



Elevation
Scale: 1/2" = 1' - 0"

General Notes

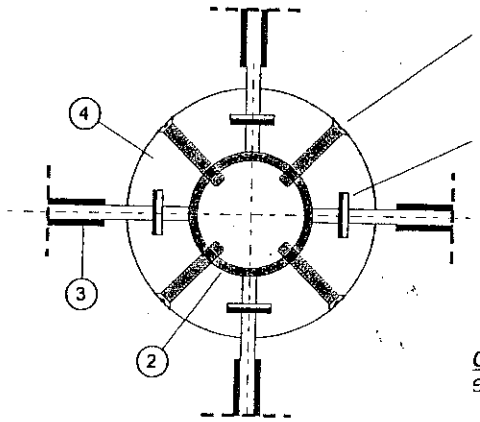
1. 12" dia. x 2" painted fabricated aluminum "disk" cabinet, w/ 10" (vert dim.) x 1/2" painted laser-cut aluminum sheet information pictogram; Lord's adhesive to face of cabinet (Typical both faces). Attach to vertical column w/ 1" x 1" x .125" painted square section aluminum tube; welded to disk cabinet interior and to internal column connection.

2. 2" dia. x 10' - 2" x .375" painted aluminum tube vertical, let-into and welded to 8" dia. x .50" thick aluminum base-plate. Provide four (4) 5/8" dia. holes for four (4) 1/2" dia. "J-bolt" connection to concrete footing. Provide 4" dia. x 1" painted fabricated aluminum capital, welded to tube top, w/ hole provided for connection tube.

3. 1' - 10" x 2' - 0" x .375" painted aluminum sign base-plate, w/ 1' - 7" x 1' - 8" x .125" painted aluminum sign face. Attach to sign base-plate w/ same-size VHB sheeting and Lord's Adhesive (Typical both faces, all panels indicated).

4. 90 degree x 2" radius x 1" thick aluminum connection piece (Typical 4 x 3 locations); see Section below for connection to sign and column.

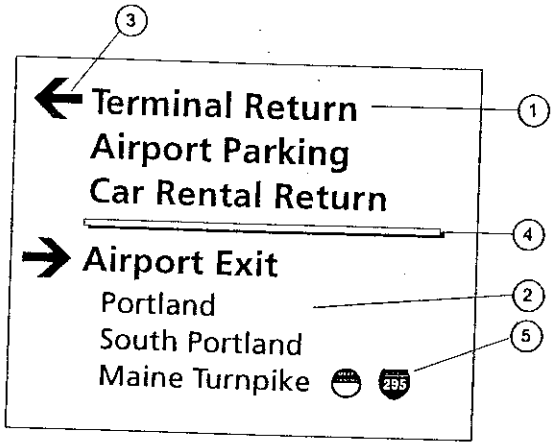
5. Concrete footing; see Specifications regarding Registered Professional Services.



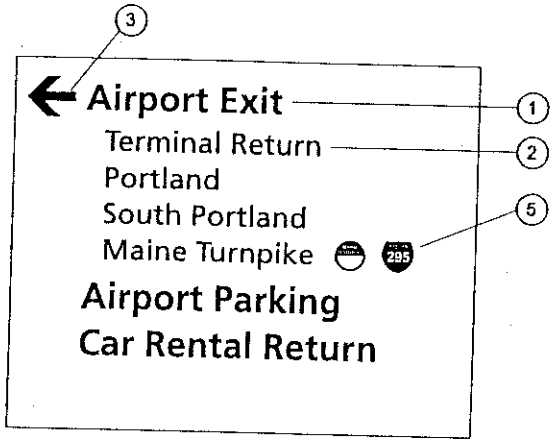
1/4" dia. x 1 1/4" TORX-head machine screw through connection piece into threaded hole in tube vertical (Typical 4).

3/16" dia. x 3/4" s/s pin, through sign base-plate and into press-fit holes in connection piece, as shown (Typical 4).

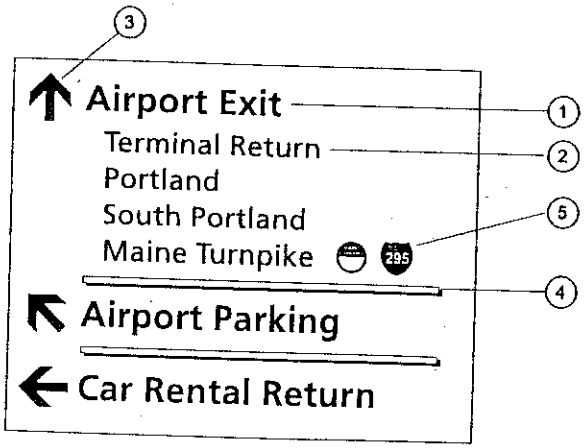
Connection Detail / Section
Scale: 1/2 full size



Graphic Layout - Sign A.1-10x



Graphic Layout - Sign A.1-10x



Graphic Layout - Sign A.1-10x

Graphic Notes

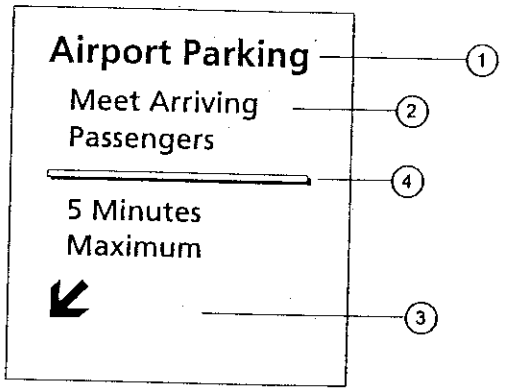
1. 5" surface installed reflective PSV Frutiger 65 legend; left justified as shown.

2. 4" on 3" surface installed reflective PSV Frutiger 55 legend; indented and left justified as shown.

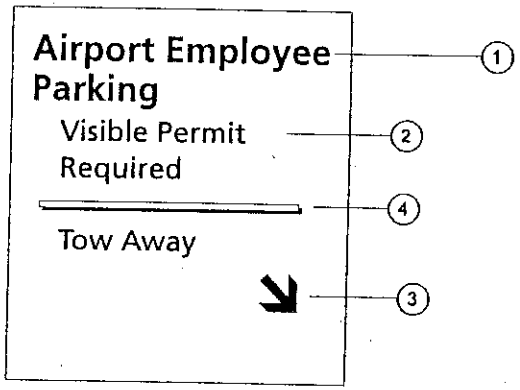
3. 8" surface installed reflective PSV Project Standard Arrowform; rotate as required; see Sign Message Schedule.

4. Surface installed two-color reflective PSV graphic rule; see detail.

5. 6" surface installed PSV logo images; see details.



Graphic Layout - Sign A.2-10x



Graphic Layout - Sign A.2-10x

Graphic Notes

1. 5" surface installed reflective PSV Frutiger 65 legend; left justified as shown.

2. 4" on 3" surface installed reflective PSV Frutiger 55 legend; indented and left justified as shown.

3. 8" surface installed reflective PSV Project Standard Arrowform; rotate as required; see Sign Message Schedule.

4. Surface installed two-color reflective PSV graphic rule; see detail.

Portland International Jetport
Parking Structure Signage and Graphics
Drawing Name: Project Standard Alphabets and Arrowforms
Scale: none
Date:
SG-4.xx

ABCDEFGHIJKLM
NOPQRSTUVWXYZ
abcdefghijklmn
opqrstuvwxyz
1234567890

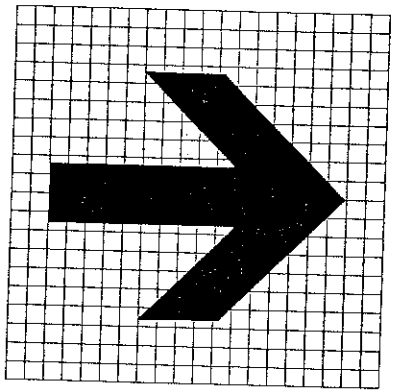
Alphabet No. 1 - Frutiger 55

ABCDEFGHIJKLM
NOPQRSTUVWXYZ
abcdefghijklmn
opqrstuvwxyz
1234567890

Alphabet No. 2 - Frutiger 65

ABCDEFGHIJKLM
NOPQRSTUVWXYZ
abcdefghijklmn
opqrstuvwxyz
1234567890

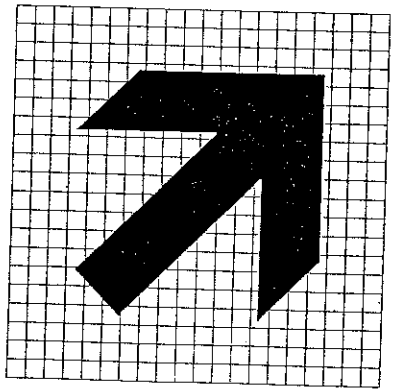
Alphabet No. 3 - Frutiger 56



This arrowform is to be used in instances where indicated for "up", "down", "left", or "right" orientations; as identified in the Sign Message Schedule.

This is NOT a Gerber Scientific arrowform. Contractor is to photomechanically size to that indicated on the drawings, or scan into a computerized cutter.

Project Standard Normal Arrowform



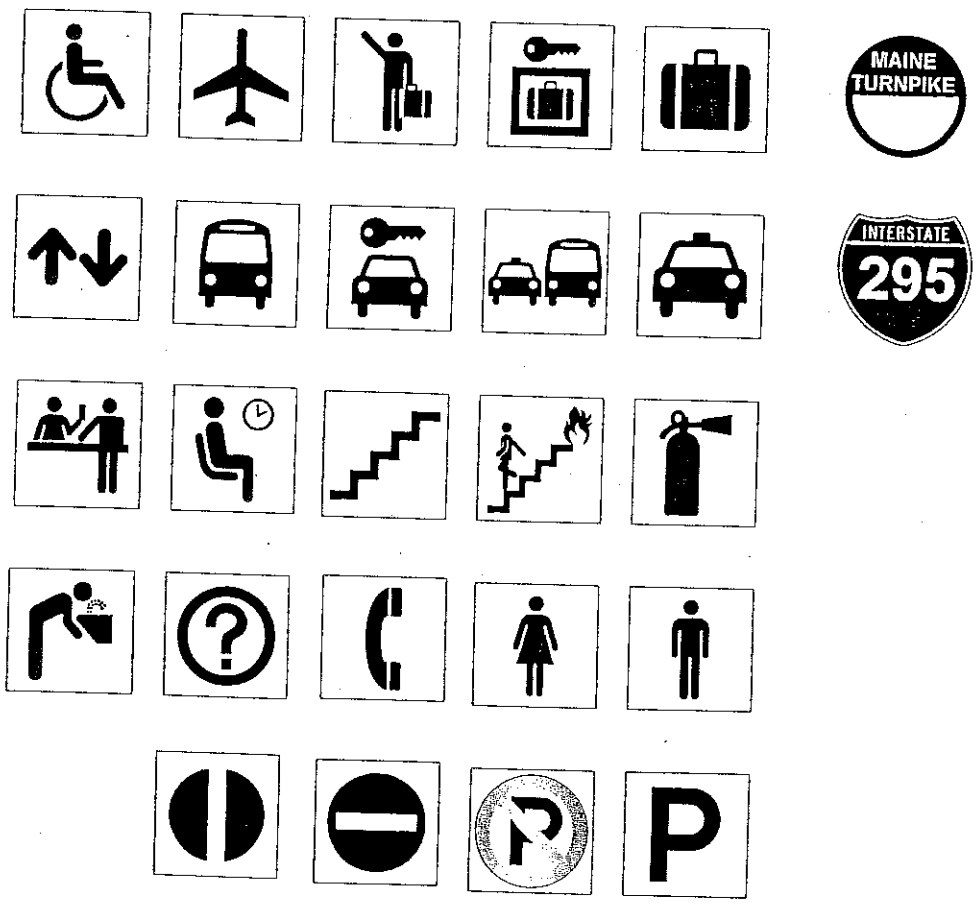
This arrowform is to be used in instances where indicated for "up right", "down right", "up left", or "down left" orientations; as identified in the Sign Message Schedule.

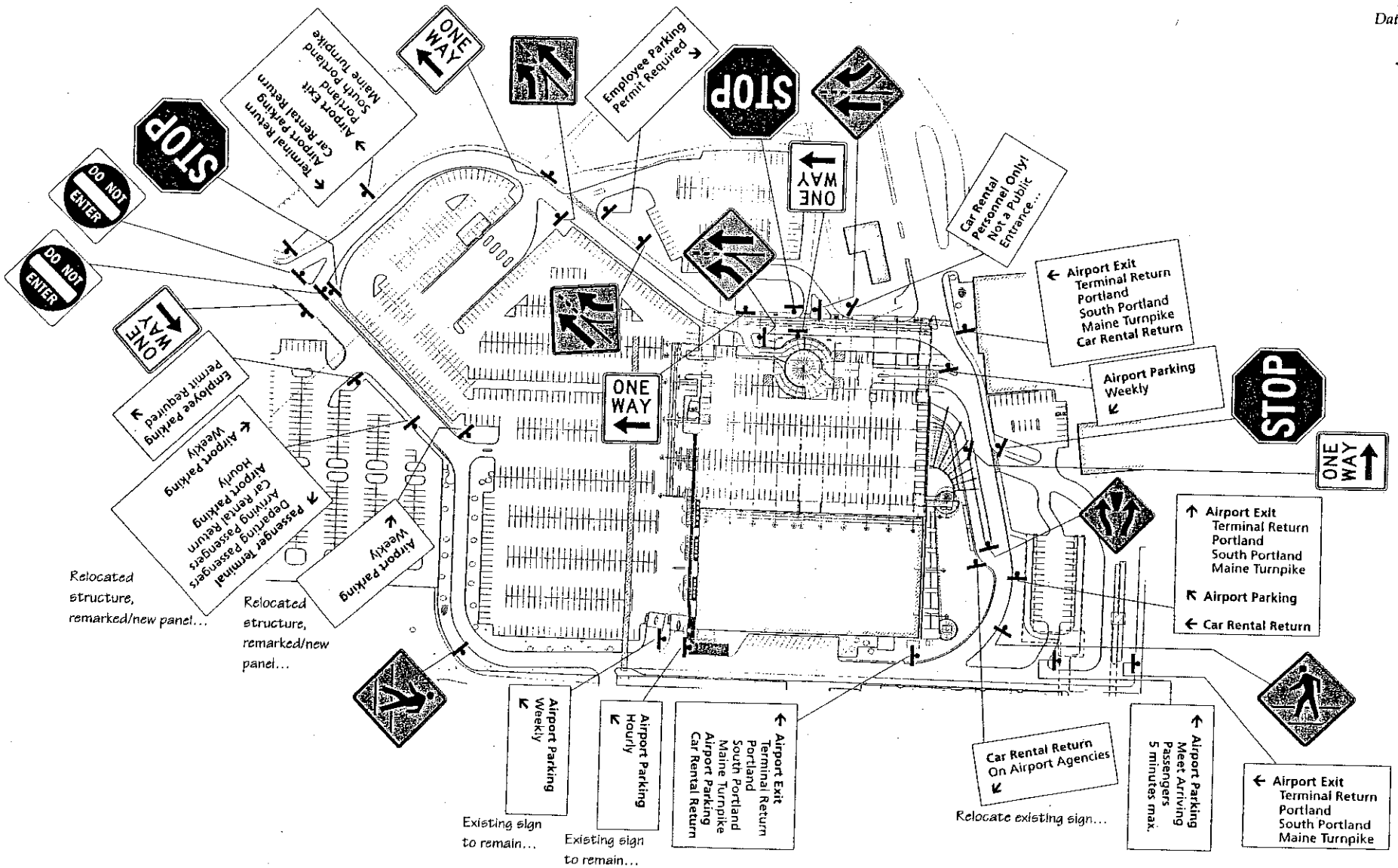
This is NOT a Gerber Scientific arrowform. Contractor is to photomechanically size to that indicated on the drawings, or scan into a computerized cutter.

Project Standard Diagonal Arrowform

Portland International Jetport
Signage and Graphics
Drawing Name: Project Standard Pictograms
Scale: none
Date: 02.02.01

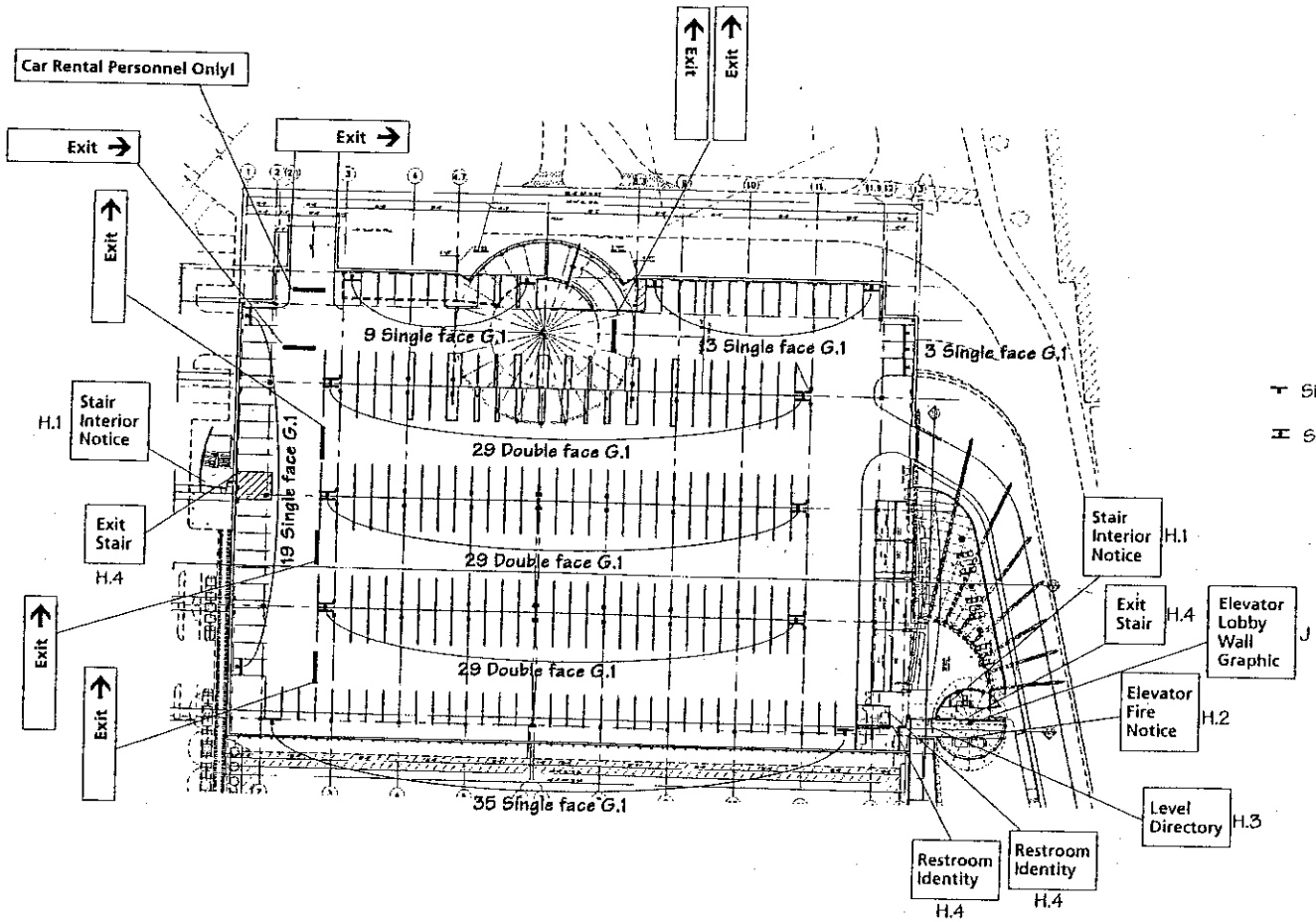
SG-4.xx




STOP
DO NOT ENTER
DO NOT ENTER
ONE WAY
Terminal Return
Airport Parking
Car Rental Return
Airport Exit
Portland
South Portland
Maine Turnpike
Employee Parking
Permit Required
ONE WAY
Car Rental
Personnel Only!
Not a Public
Entrance...
Airport Exit
Terminal Return
Portland
South Portland
Maine Turnpike
Car Rental Return
Airport Parking
Weekly
STOP
ONE WAY
ONE WAY
Employee Parking
Permit Required
Airport Parking
Weekly
Passenger Terminal
Departing Passengers
Arriving Passengers
Car Rental Return
Airport Parking
Hourly
Airport Parking
Weekly
Airport Exit
Terminal Return
Portland
South Portland
Maine Turnpike
Airport Parking
Car Rental Return
Airport Exit
Terminal Return
Portland
South Portland
Maine Turnpike
Airport Parking
Meet Arriving
Passengers
5 minutes max.
Car Rental Return
On Airport Agencies
Airport Exit
Terminal Return
Portland
South Portland
Maine Turnpike
Relocated structure, remarked/new panel...
Relocated structure, remarked/new panel...
Existing sign to remain...
Existing sign to remain...
Relocate existing sign...

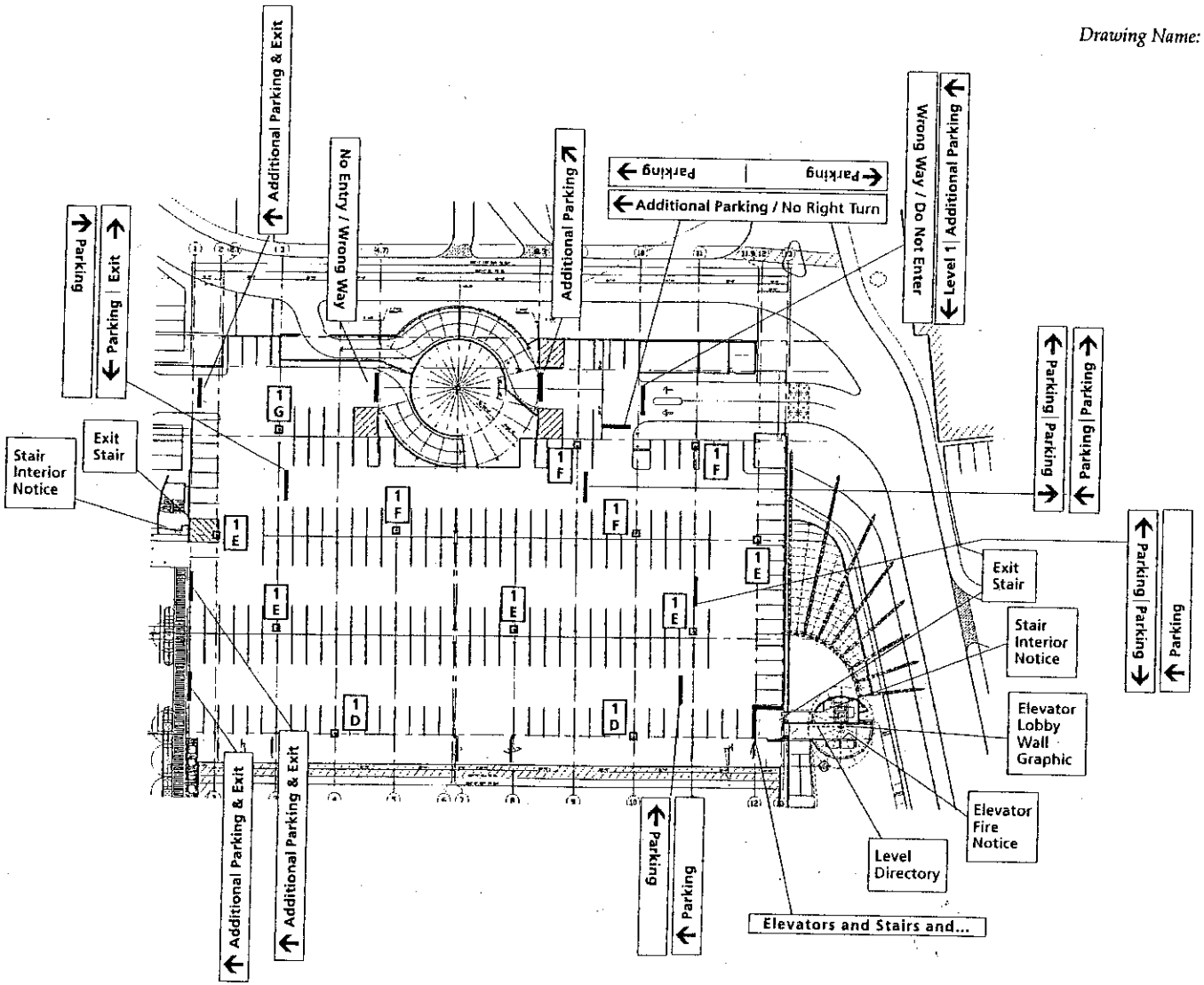
Portland International Jetport
Signage and Graphics
Drawing Name: Car Rental Level Sign Location Plan
Scale: none
Date: 02.02.01

SL-02



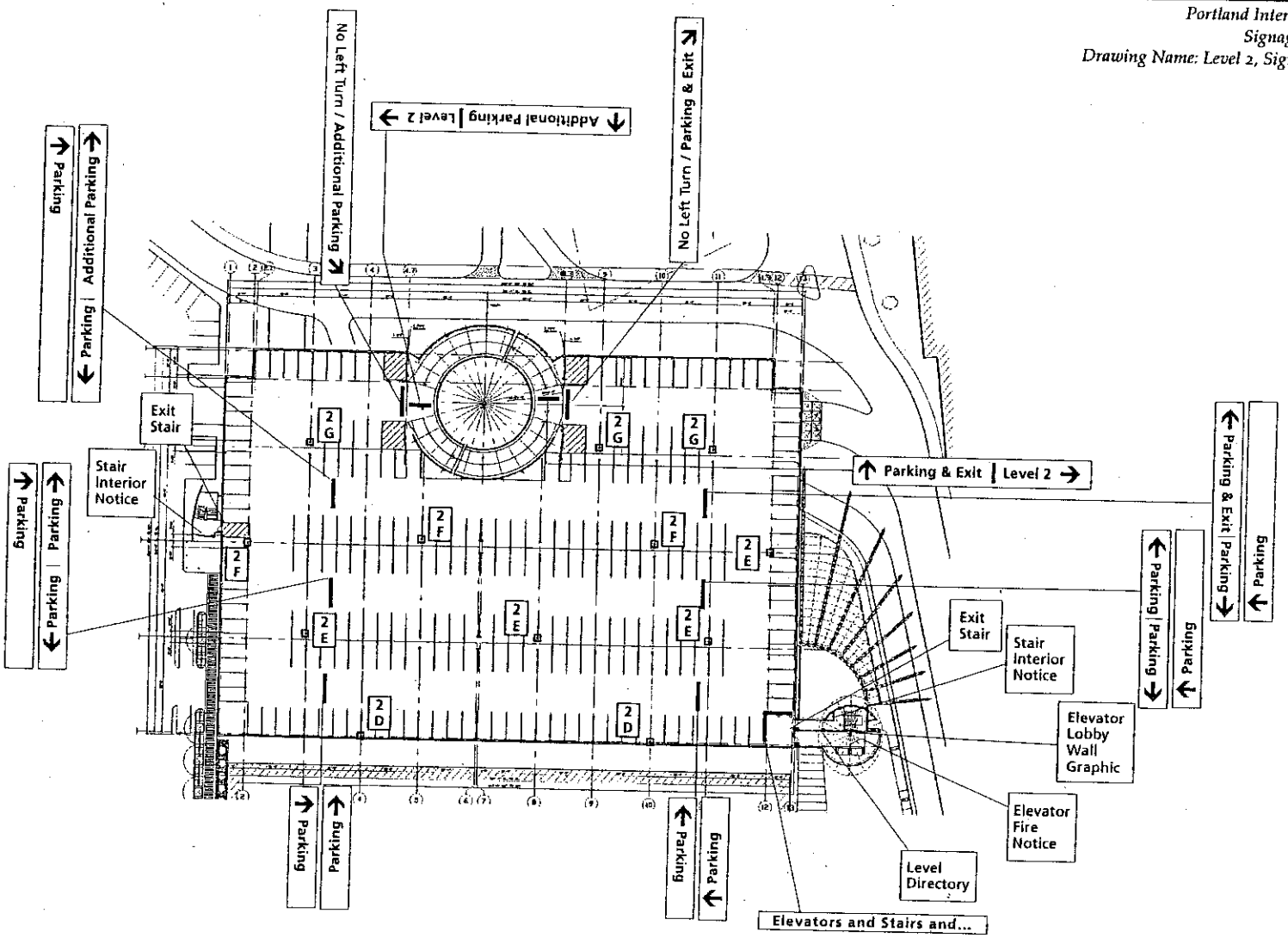
Portland International Jetport
Signage and Graphics
Drawing Name: Level 1, Sign Location Plan
Scale: none
Date:

SL-03



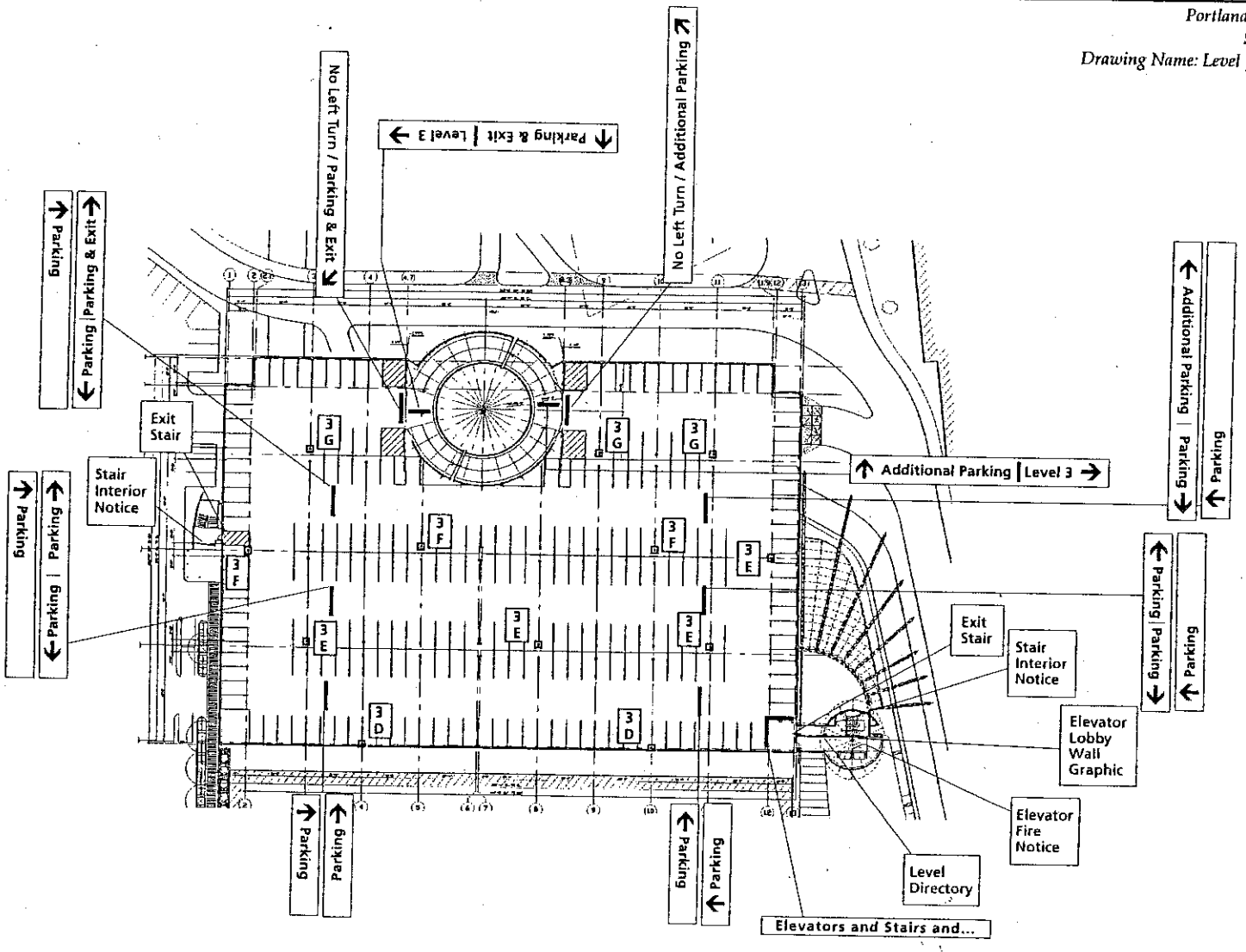
Portland International Jetport
Signage and Graphics
Drawing Name: Level 2, Sign Location Plan
Scale: none
Date: 02.02.01

SL-04

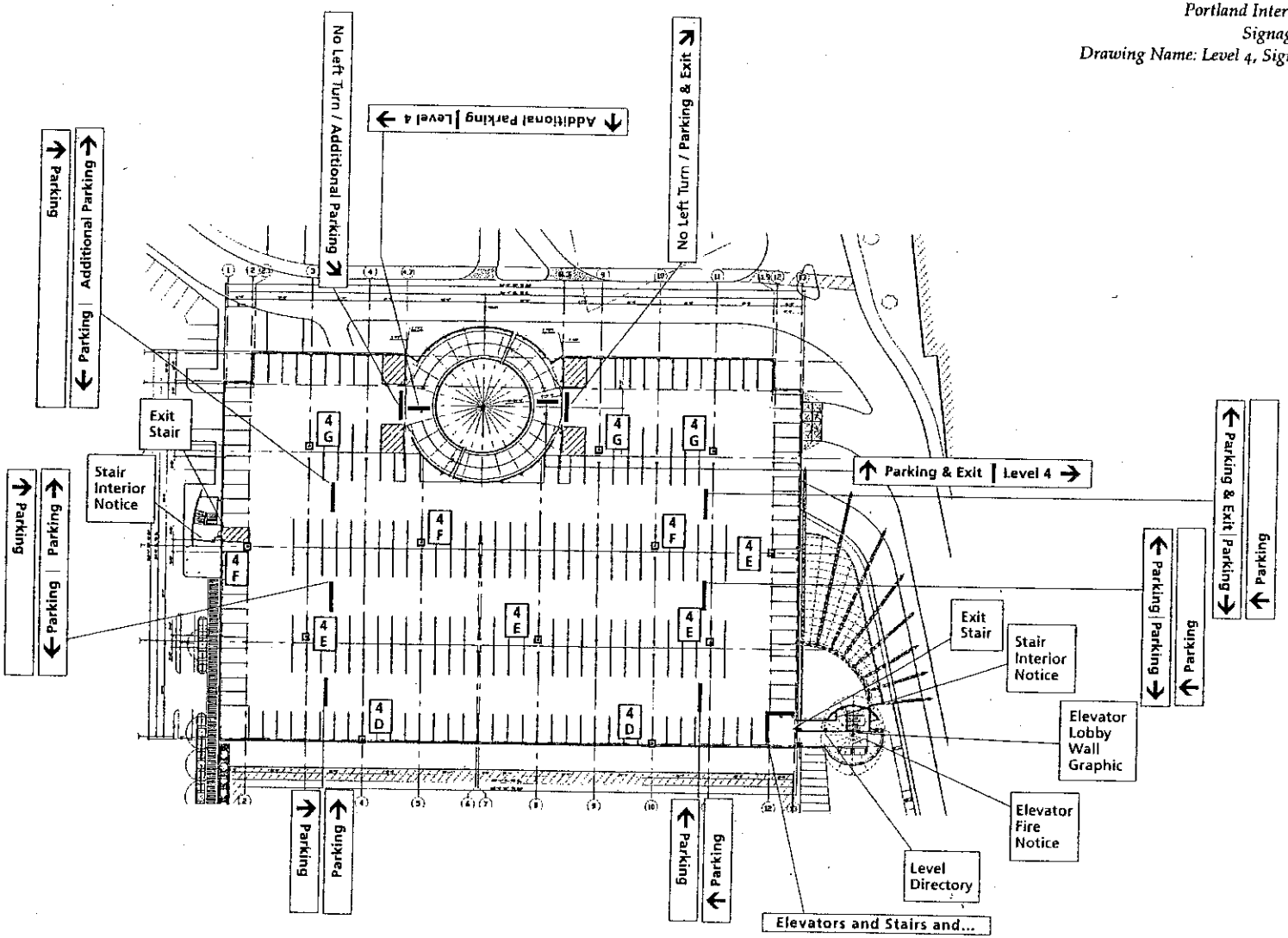


Portland International Jetport
Signage and Graphics
Drawing Name: Level 3, Sign Location Plan
Scale: none
Date: 02.02.01

SL-05

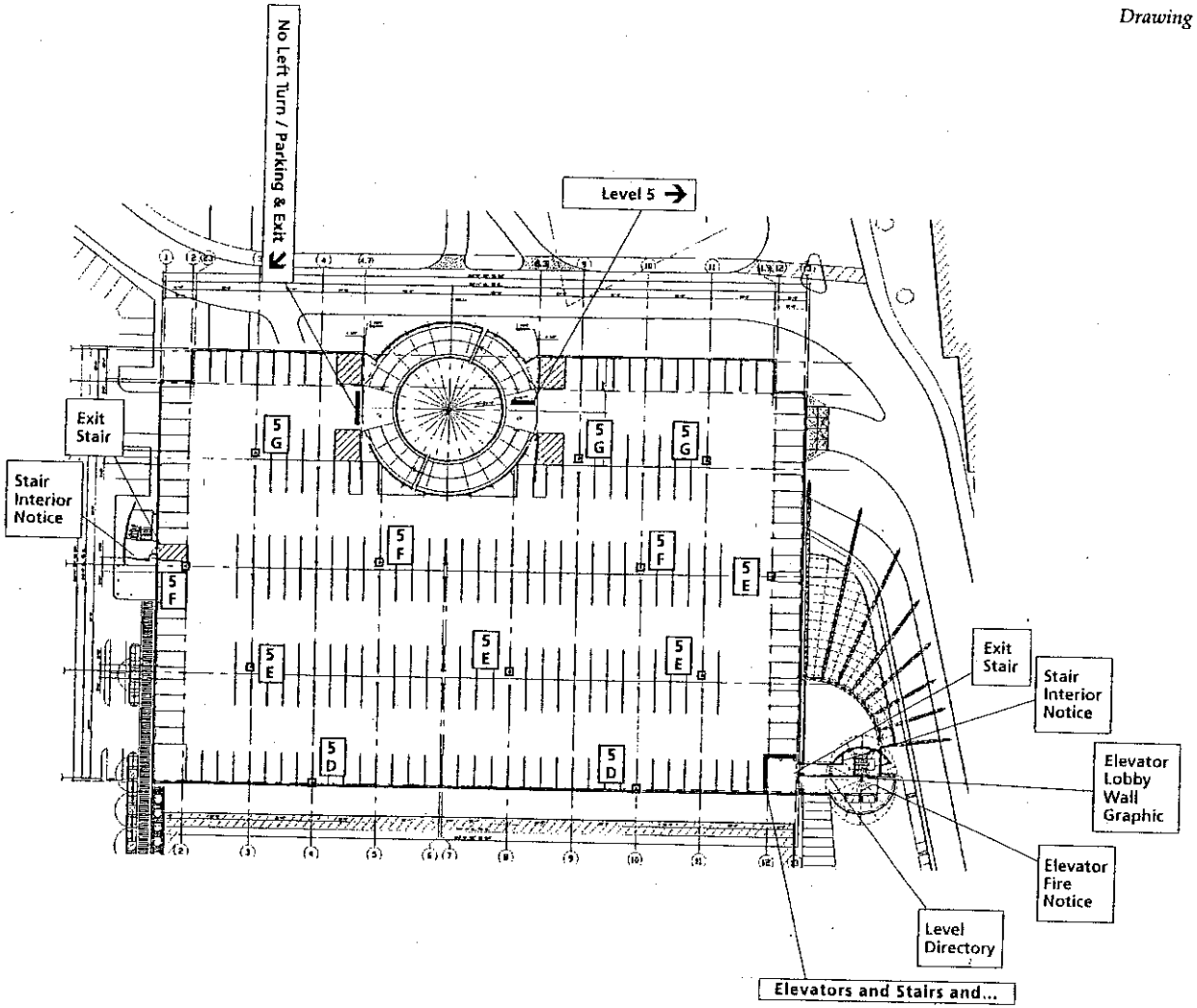


Portland International Jetport
Signage and Graphics
Drawing Name: Level 4, Sign Location Plan
Scale: none
Date: 02.02.01
SL-06



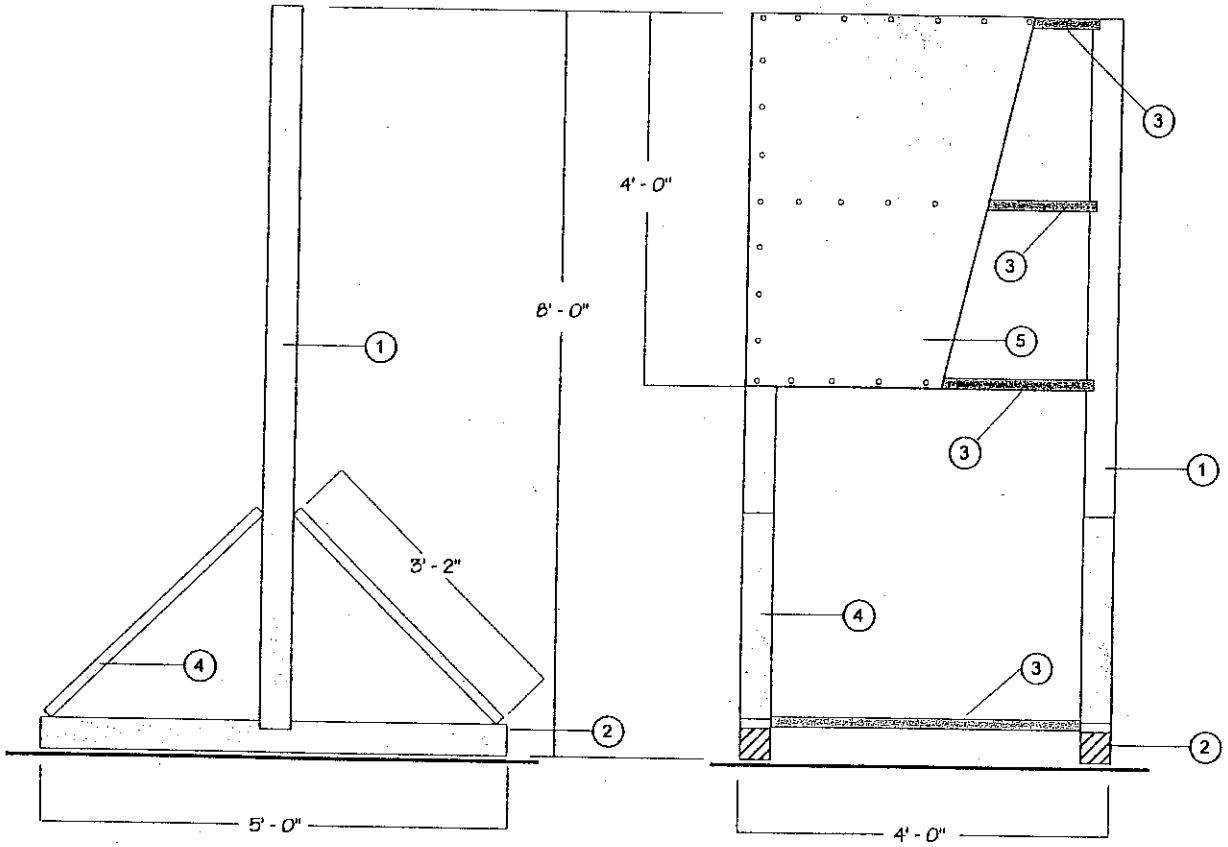
Portland International Jetport
Signage and Graphics
Drawing Name: Level 5, Sign Location Plan
Scale: none
Date: 02.02.01

SL-07



Portland International Jetport
Signage and Graphics
Drawing Name: Temporary Roadway Directional
Scale: 3/4" = 1' - 0"
Date: 02.05.01

SK-01



Side Elevation

Elevation

Note: for stability in windy conditions, provide several CMU blocks and/or sand-bags on "skids" to serve as weight anchors...

General Notes

1. 4" x 4" x 7' - 9" painted pressure-treated clear wood post, let-into "skid" 1" as shown (Typical 2).

2. 4" x 4" x 5' - 0" painted pressure-treated clear wood "skid" (Typical 2).

3. 2" x 4" x 3' - 6" painted pressure treated clear wood horizontal supports, let-into vertical post 1" as shown (Typical 4)

4. 2" x 4" x 3' - 2" painted pressure treated clear wood diagonal support (Typical 4)

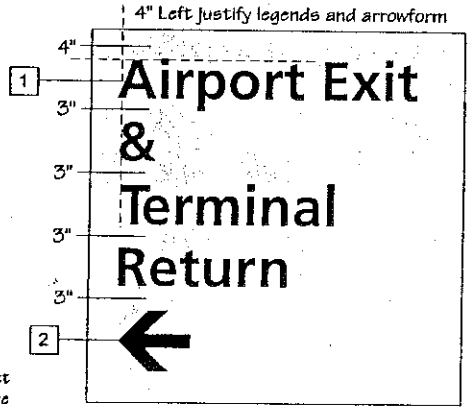
Note: all connections are to be "toe-nailed", using galvanized nails.

5. 48" x 48" x 3/8" painted marine-grade plywood, with galvanized nails into post and supports @ 6" o.c.

Graphic Notes

1. 5" on 3" surface installed reflective PSV Frutiger 65 legends, left justified as shown.

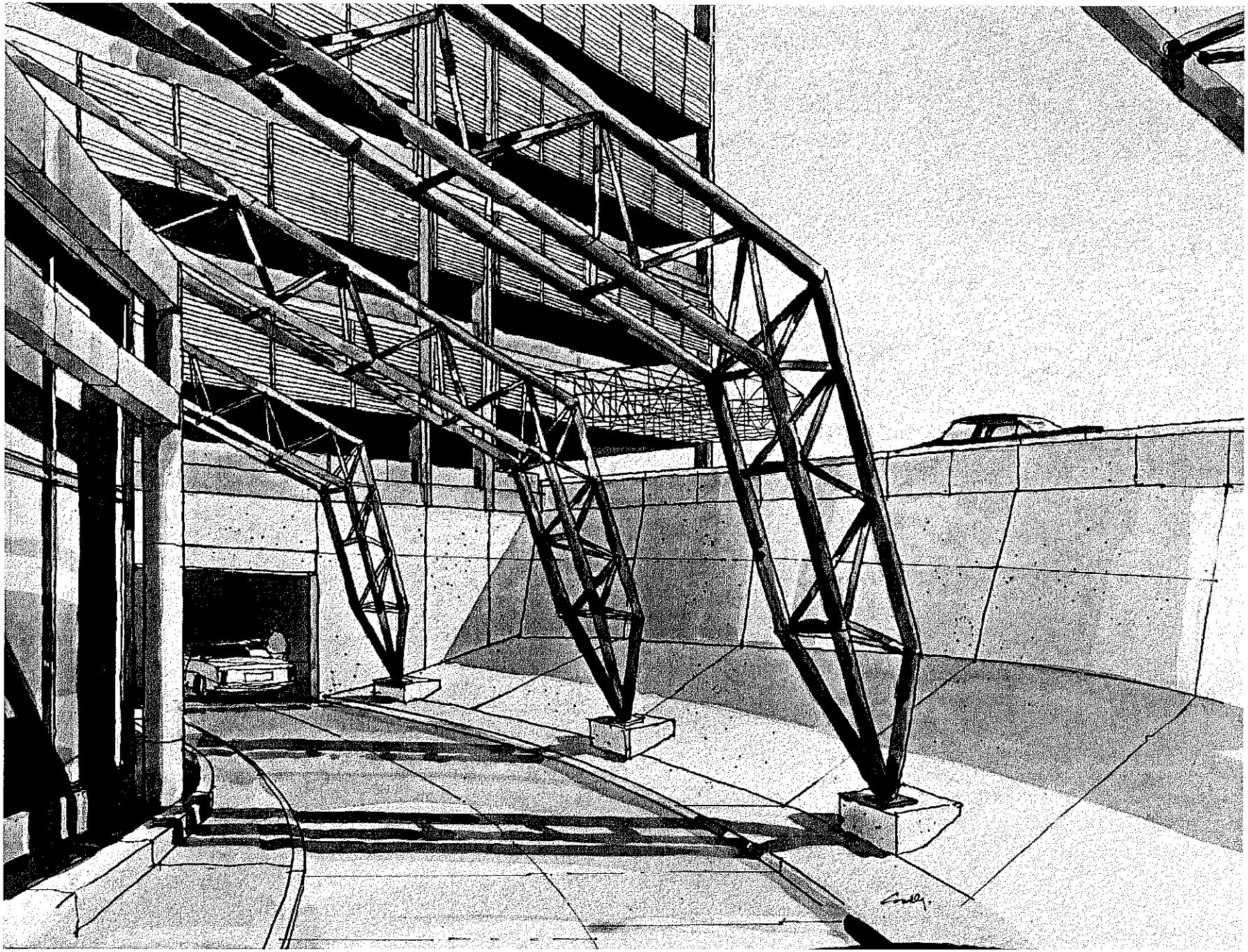
2. 8" surface installed reflective PSV Project Standard Arrowform; rotate as required, see contractor provided message schedule.



Typical Graphic Layout

ATTACHMENT B

Artist's Rendering CCRF (Retaining Wall)



Artist's Rendering CCRF (Retaining Wall)

ATTACHMENT C

Gravity Stormwater System Analysis

STORMWATER MANAGEMENT
GRAVITY STORMWATER SYSTEM ANALYSIS

Background Information

The gravity system has been evaluated regarding stormwater impacts. To determine the stormwater impact accociated with the proposed deep gravity storm system, Dufresne-Henry performed a limited analysis of the existing natural drainage basin capacity to handle the increased drainage from the proposed project. This analysis was performed using the attached data provided in the DeLuca-Hoffman "Drainage Analysis" report prepared for the Portland Jetport.

The DeLuca-Hoffman report included the drainage areas, time of concentration and curve numbers for the various drainage areas discharging to the natural drainage basin. Inflow and outflow hydrographs under these existing conditions were developed for the 10 year storm event. Inflow and outflow hydrographs were also developed under the proposed conditions during the 10 year storm event. A graphical plot of these hydrographs is attached.

The hydrographs show that flow into the natural drainage basin increases by approximately 9.2 cfs and the elevation in the natural drainage basin increases by approximately 7.2 inches (elevation 38 feet) from pre-development to post development conditions during the 10 year storm event. The top of the natural drainage basin is approximately elevation 46 feet. It should be noted that a portion of the drainage area has been counted twice. Stormwater draining from watershed area 4 (approximately 5.0 acres) is currently discharged at A43 (see the attached DeLuca-Hoffman Figure 1) and has not been subtracted from the DeLuca-Hoffman numbers while it has been included in the drainage area to the proposed gravity system. Therefore, the analysis is conservative. As noted in our previous submittal to the Planning Board of January 9, 2001, based on our discussions with DeLuca-Hoffman and Jetport personnel, the natural drainage basin did not overtop during the October 1996 storm which dropped over 12 inches of rain in the City of Portland. Therefore, it is not anticipated that the proposed project will impact the capacity of the natural drainage basin.

A stormwater quality unit is proposed on the gravity system line prior to discharging to the natural detention basin to remove total suspended solids. The design of this unit was coordinated with DeLuca-Hoffman on Tuesday, February 13, 2001. The stormwater quality unit design is attached and has been designed to remove 80% of the total suspended solids. Under current Maine Department of Environmental Protection guidelines, a removal credit of 50% is allowed for treatment units demonstrating that an 80% removal rate can be achieved under the design conditions discussed in the attached sizing information.

Information from DeLuca-Hoffman December 1999 Report

PORTLAND INTERNATIONAL JETPORT
DRAINAGE ANALYSIS

Task:

Determine adequacy of existing drainage system, to be used as basis for examining increased runoff from proposed improvements including:

- Addition of 10 foot paved snow shoulders to Runway 11-29.
- Increase width of Taxiways A, B, & D from 60 feet to 75 feet.
- Addition of 10 foot snow shoulders to Taxiways A, B, & D.

} INCLUDED IN DUFRESNE-HENRY ANALYSIS

Sources of Information:

1. Portland International Jetport, Stormwater Conveyance System Analysis, by Dufresne-Henry, 1994.

2. A design report for Air Carrier Ramp Expansion, by Dufresne-Henry, July 1987.

3. Storm Water Pollution Prevention Plan, Drainage Plan, July 1997, by DeLuca-Hoffman Associates, Inc. (G:\1255\81901401.DWG).

4. Survey of Runway 11-29, for DeLuca-Hoffman Associates, Inc., by Owen Haskell, Inc.

5. Airport Drainage (AC150/5320-5B), Department of Transportation, FAA, July 1970.

6. East-West Runway Extension Grading and Drainage Plan, Tippetts, Abbett, McCarthy, Stratton Engineers and Architects, December 25, 1967.

Method of Analysis:

Surficial soil conditions consist mainly of Scantic with some Buxton soils, of Hydrologic Soil Groups C and D. (Cumberland County Soil Survey, Maps 81 and 86). For the purposes of this analysis, all soils were considered HSG D.

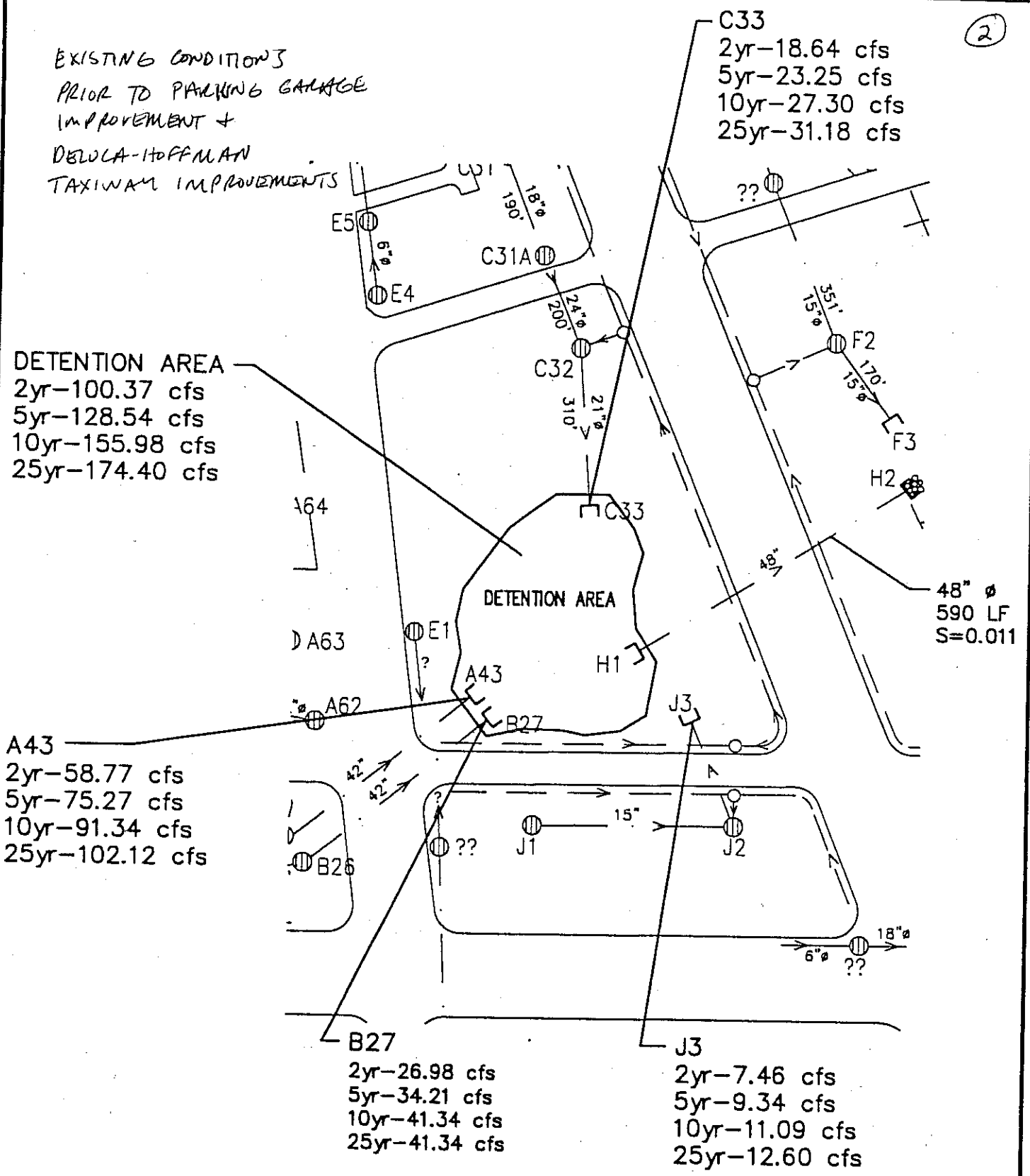
Hydrological analysis for all conditions has been conducted utilizing the rational method. Cover types have been broken into three major categories: impervious surfaces, grassed surfaces, and wooded area.

Per FAA guidelines, the 5-year, 24-hour rainfall was used as the design storm. The rainfall intensity-duration-frequency curve for Portland, Maine was utilized for this analysis.

The subcatchment times of concentration (Tc) were derived from 3 sources. Where survey data is available (between Runway 11-29 and Taxiway A running east-west) the FAA method (Source 5) was used to determine Tc. Where up-to-date survey data was not available, times of concentration were taken from the analysis by Dufresne-Henry of 1994 (Source 1) (for terminal apron areas, the time of concentration was assumed to be 5 minutes.) In all cases, the time of concentration is not to be less than 5 minutes.

EXISTING CONDITIONS
PRIOR TO PARKING GARAGE
IMPROVEMENT &
DELUCA-HOFFMAN
TAXIWAY IMPROVEMENTS

(2)



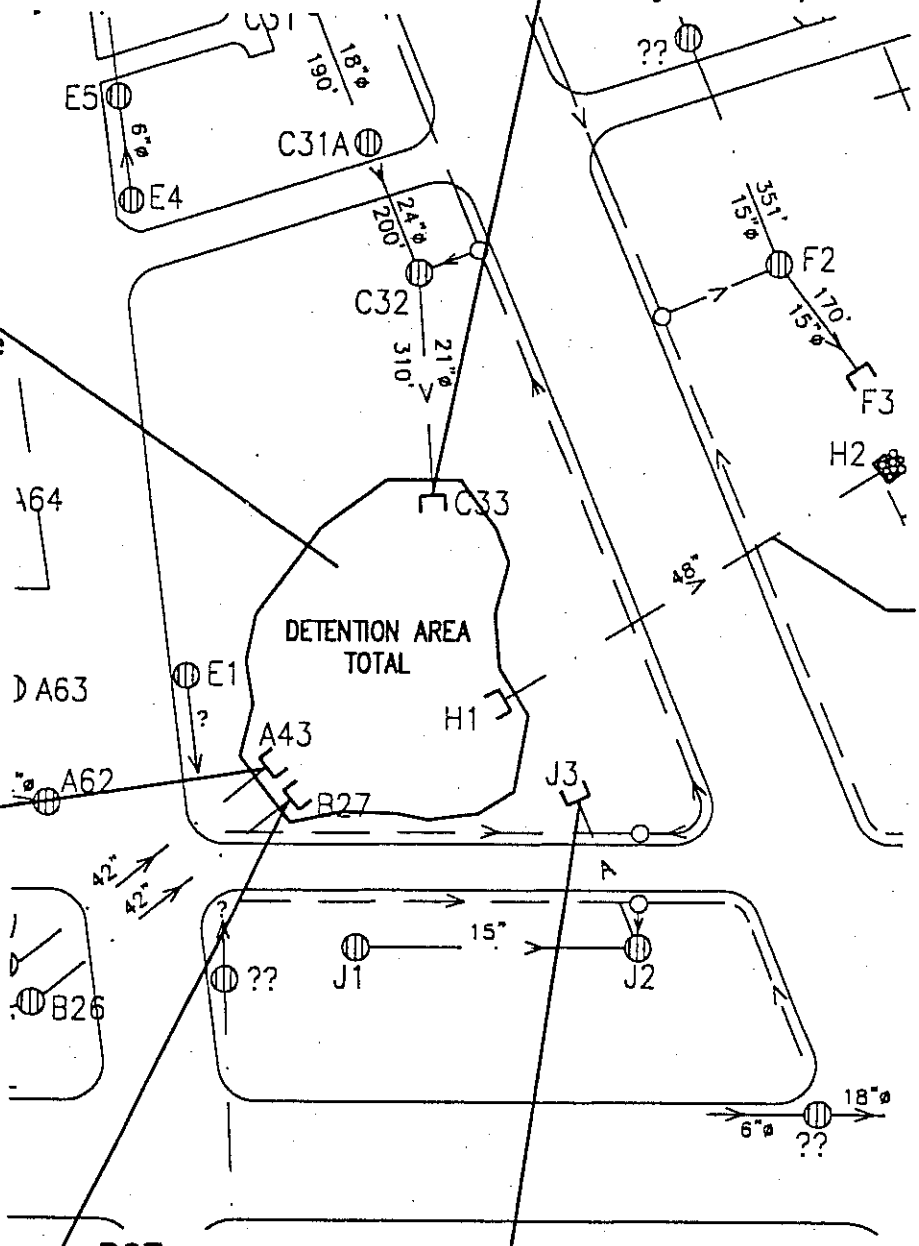
EXISTING DETENTION BASIN

PORTLAND JETPORT DRAINAGE

DH
DeLuca–Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
(207) 775–1121
DHAI@MAINE.RR.COM

DRAWN:	DED	DATE:	SEPT 1999	FIGURE
DESIGNED:	LSA	SCALE:	1" = 250'	1
CHECKED:	MJD	JOB NO.	1699	
FILE NAME:	1699–81901401			

DATA – UTILIZED IN DUPUESNE-HENRY ANALYSIS



POST DEVELOPMENT DETENTION BASIN

PORTLAND JETPORT DRAINAGE

DeLuca-Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
(207) 775-1121
DHAI@MAINE.RR.COM

DRAWN:	DED	DATE:	SEPT 1999	FIGURE
DESIGNED:	LSA	SCALE:	1" = 250'	2
CHECKED:	MJD	JOB NO.	1699	
FILE NAME:	1699-81901401			

1699 Jetport Drainage Analysis Proposed Widening Conditions
Watershed Subares Runoff by TR-55 Equations

Q = (P - 0.2*S)^2 / (P + 0.8*S)
S = (1000 / CN) -10

				Storm Event		Annual +/-		2-Year		5-Year		100-Year	
				Rainfall, P (In)		2.5		3.0		4.0		6.7	
						Runoff							
Subares	CN	Area, Ac.	S	Inches	Ac-ft	Inches	Ac-ft	Inches	Ac-ft	Inches	Ac-ft
Pre-Dev. Subareas													
A	86	110.65	1.36	1.38	12.74	1.82	16.77	2.73	25.16	5.30	48.89
B	84	60.11	1.90	1.12	5.59	1.52	7.60	2.37	11.88	4.86	24.32
C	86	15.70	1.36	1.38	1.92	1.82	2.53	2.73	3.80	5.30	7.38
H	80	11.00	2.50	0.89	0.81	1.25	1.15	2.04	1.87	4.42	4.05
J	87	8.62	1.49	1.31	0.94	1.74	1.25	2.64	1.89	5.19	3.73
							Total	12.51	44.60		

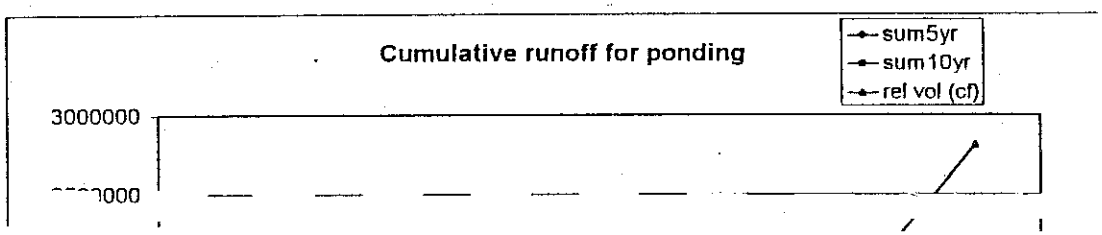
CN, Area, Ac USED IN Dufresne-Henry Analysis

TR-55 METHOD FOR ESTIMATING BASIN STORAGE VOLUME

$vs/vr = Co + C1(qo/qi) + C2(qo/qi)^2 + C3(qo/qi)^3$

c0	0.682		
c1	-1.43		
c2	1.64		
c3	-0.804	vs/vr	0.16
vs(a-ft)	7.135507844		
vr(a-ft)	44.60	goal seek	0.16
qo(In.)	10.44207319		
qi(In.)	12.51	qo(cfs)	107.70

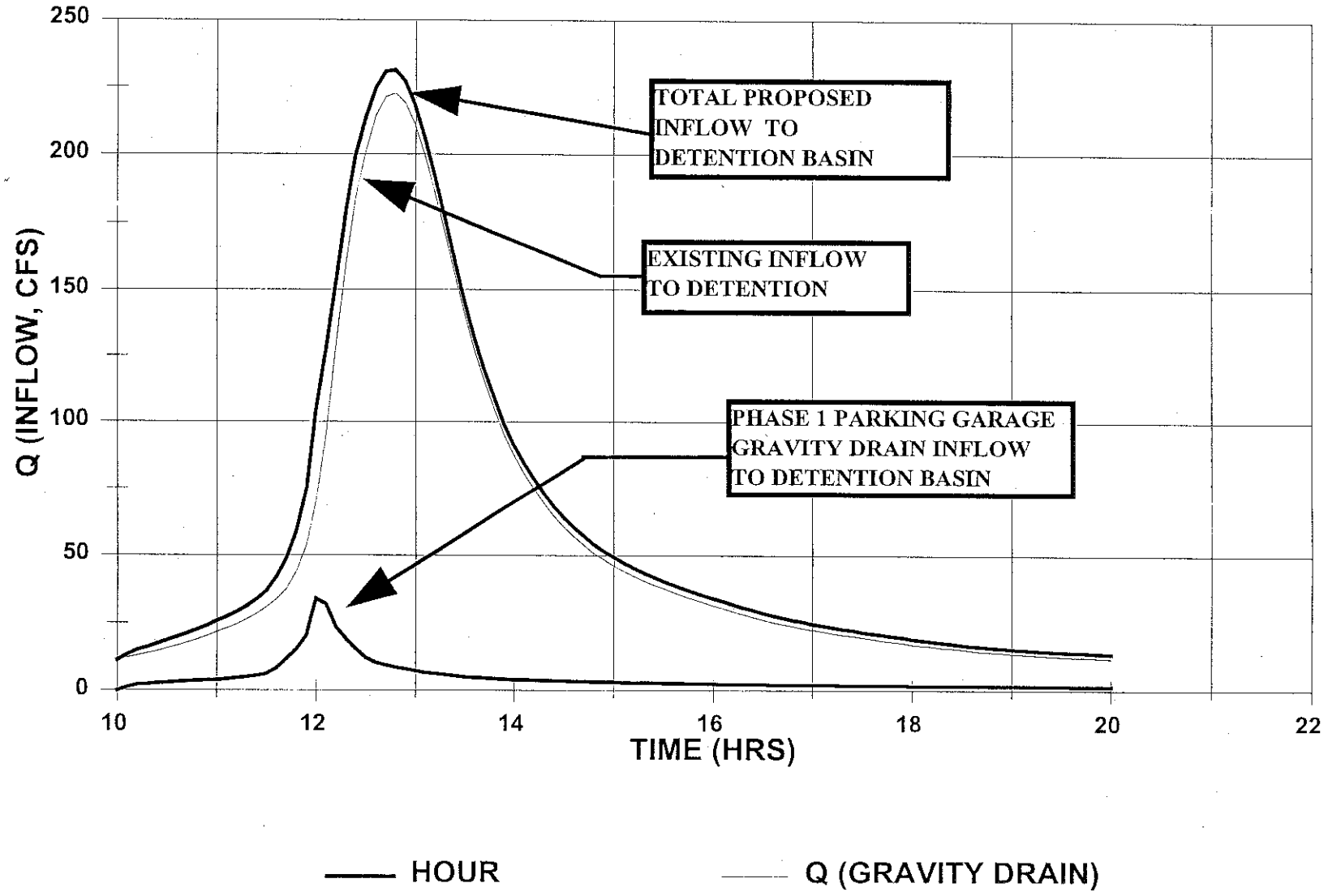
h(elev)		vs(acre-ft)	vs(cu-ft)
	25	0.043349754	1888.315271
	26	0.157438424	6858.017734
	27	0.225418719	9819.239409
	28	0.266206897	11595.97241
	29	0.298719212	13012.20887
	30	0.341871921	14891.94089
	31	0.414581281	18059.16059
	32	0.535763547	23337.8601
	33	0.724334975	31552.03153
	34	0.999211823	43525.667
		1.37931	60082.7
		1.8835	82047.2



Graphical Plot of Pre and Post - Development Hydrographs

NATURAL DRAINAGE BASIN EVALUATION

INFLOW HYDROGRAPHS



Stormwater Quality Treatment Unit Sizing

Vortechnics

ENGINEERED PRODUCTS
FOR STORMWATER TREATMENT

Fax Transmittal

To:	Valerie Giguere - DuFresne-Henry Inc.	**From:**	Thomas P. Gorrivan
Fax:	207-775-6434	**Pages:**	1 of 3
Phone:	207-775-3211	**Date:**	02/15/01
Re:	Jetport Parking Garage – Portland, Maine	**CC:**	

Val:

I'm sending the sizing letter as discussed. Let me know if you have any questions.

Sincerely,

Thomas P. Gorrivan
Sales Engineer

Vortechnics, Inc. ▼ 41 Evergreen Drive ▼ Portland, Maine 04103
Ph 207.878-3662 ▼ Fax 207.878.8507

Vortechnics

ENGINEERED PRODUCTS
FOR STORMWATER TREATMENT

Jetport Parking Garage, Portland, Maine

Vortechs Model 16000 Sizing Calculations –

1. The appropriate offline Vortechs System should operate at no greater than 24% of the system treatment capacity during the 2-Month storm. Given that the design storm, Q_{25}, equals 41.19 CFS, the 2-Month storm is determined using the ratios provided in Technical Bulletin No. 3 as follows:

$$\frac{25-YearStorm}{8} \approx 2-MonthStorm \Rightarrow \frac{41.19cfs}{8} = 5.15cfs \approx 2-MonthStorm$$ ✓

2. Therefore, the 2-Month storm operating rate as a percentage of the treatment capacity is calculated as follows:

$$\frac{2-MonthStorm}{Vortechs16000TreatmentCapacity} = \frac{5.15cfs}{25.0cfs} = 20.6\%$$ ✓

Vortechnics™

Engineered Products
FOR STORMWATER TREATMENT

February 15, 2001

Valerie Giguere
DuFresne-Henry Inc.
22 Free Street
Portland, ME 04101-3900

Re: Jetport Parking Garage, Portland, Maine

Dear Valerie:

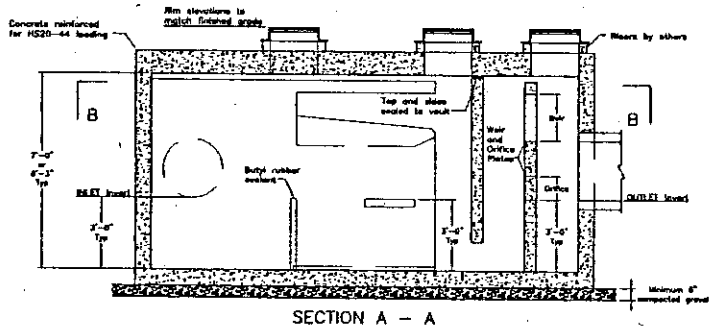
I am writing to confirm that the Vortechs System you have selected for stormwater treatment on the above referenced project is of the correct model number and has been sized in accordance with our sizing criteria as outlined in Vortechnics' Technical Bulletin #3.

Specifically, the selected Model 16000 in an off-line configuration is of the correct size for the 25-year storm runoff rate of 41.19 cfs. As stated in Technical Bulletin #3, in an off-line configuration the 2-month storm should cause a Vortechs System to operate at no greater than 24% of the system's treatment capacity. As shown on the attached calculations, the 2-month storm operating rate as a percentage of the system's treatment capacity is 20.6%, within the accepted limit. Therefore, based on Vortechnics' extensive testing and monitoring program, the specified system can be expected to provide at least 80% TSS removal of typical sediments found in parking lot runoff.

Please do not hesitate to call if you have any questions regarding this matter.

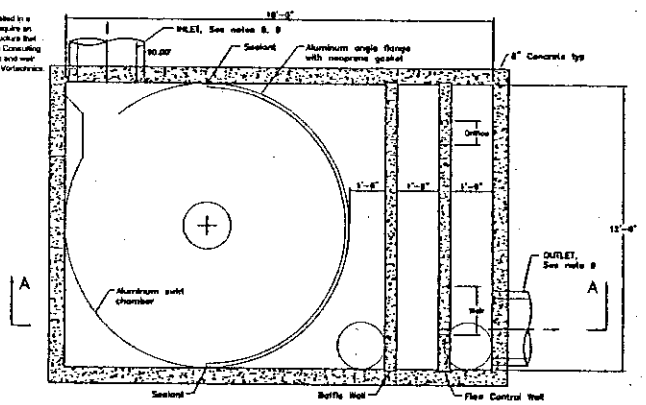
Very truly yours,

Thomas P. Gorrivan
Regional Engineer



SECTION A – A

NOTE:
Vortechs Systems installed in a bypass configuration require an upstream diversion structure that shall be detailed by the Consulting Engineer with elevation and weir width data provided by Vortechnics



PLAN VIEW B – B

NOTES:

1. Stormwater Treatment System (SWTS) shall have:
   Peak treatment capacity: 25 cfs
   Sediment storage: 7.0 cu yd
   Sediment chamber dia: 12' min
2. SWTS shall be contained in one rectangular structure
3. SWTS shall remove 80% of annual TSS loading
4. SWTS shall retain floatables and trapped sediment up to and including peak treatment capacity
5. SWTS inverts in and out shall be at the same elevation
6. SWTS shall not be compromised by effects of downstream tailwater
7. SWTS shall have no internal components that obstruct maintenance access
8. Inlet pipe must be perpendicular to the structure
9. Pipe orientation may vary; see site plan for size and location
10. Purchaser shall not be responsible for assembly of unit
11. Manhole frames and perforated covers supplied with system, not installed
12. Purchaser to prepare excavation and provide lifting equipment
13. Contact Vortechnics ☎ (207) 878-3662 Ext. [illegible] for ordering information

Vortechnics®
41 Evergreen Drive
Portland, ME 04103
Tel.: 207-878-3662
Fax: 207-878-3307

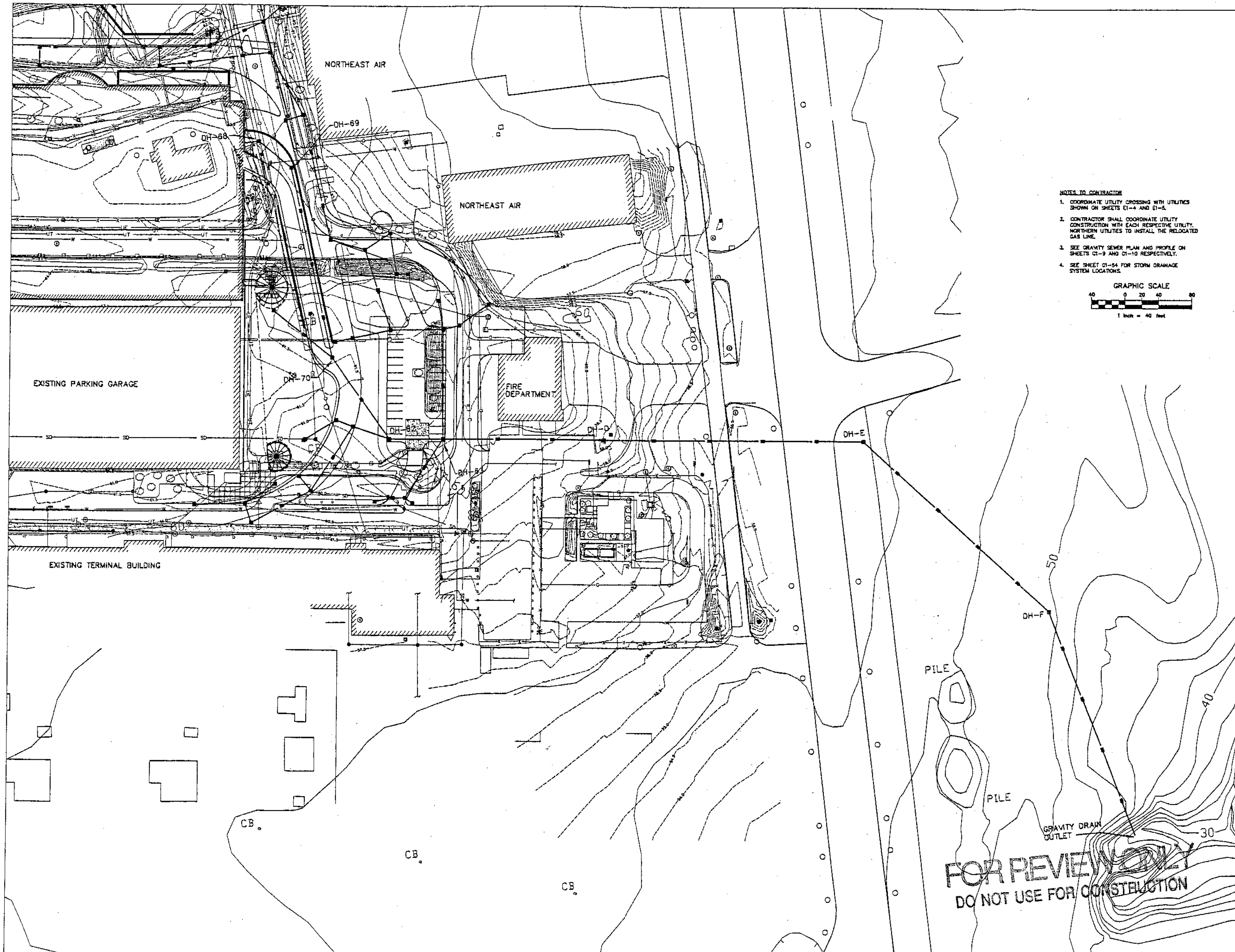
STANDARD DETAIL
STORMWATER TREATMENT SYSTEM
VORTECHS™ MODEL 16000 U.S. PATENT No. 5,759,415

Dufresne-Henry
Portland, Maine

PORTLAND INTERNATIONAL JETPORT
PHASE I PARKING GARAGE
STORMWATER QUALITY TREATMENT UNIT
PORTLAND MAINE

Project No.	8150016.01
Proj. Mgr.	JDP
Scale	1/4"=1'-0"
Date	02-13-01
B	

Gravity Storm System Layout Plan



NOTES TO CONTRACTOR

1. COORDINATE UTILITY CROSSING WITH UTILITIES SHOWN ON SHEETS E1-4 AND E1-6.
2. CONTRACTOR SHALL COORDINATE UTILITY CONSTRUCTION WITH EACH RESPECTIVE UTILITY. NORTHERN UTILITIES TO INSTALL THE RELOCATED GAS LINE.
3. SEE GRAVITY SEWER PLAN AND PROFILE ON SHEETS C1-9 AND C1-10 RESPECTIVELY.
4. SEE SHEET C1-54 FOR STORM DRAINAGE SYSTEM LOCATIONS.

GRAPHIC SCALE

40 0 20 40 80

1 inch = 40 feet

DOMENECH HICKS & KROCKMALNIC ARCHITECTS

155 Massachusetts Ave.
Boston, MA 02115
617-267-6408
Fax 617-257-1990

Dufresne-Henry

CITY OF PORTLAND
PORTLAND, MAINE

DEPARTMENT OF WATERFRONT AND TRANSPORTATION

PHASE I
PARKING GARAGE

PORTLAND INTERNATIONAL JETPORT

PORTLAND, MAINE

No.	Date	Revision
1	02-13-01	PLANNING BOARD SUBMISSION

Title: STORMWATER LAYOUT PLAN

Scale: 1"=40'

Drawn By: ALW

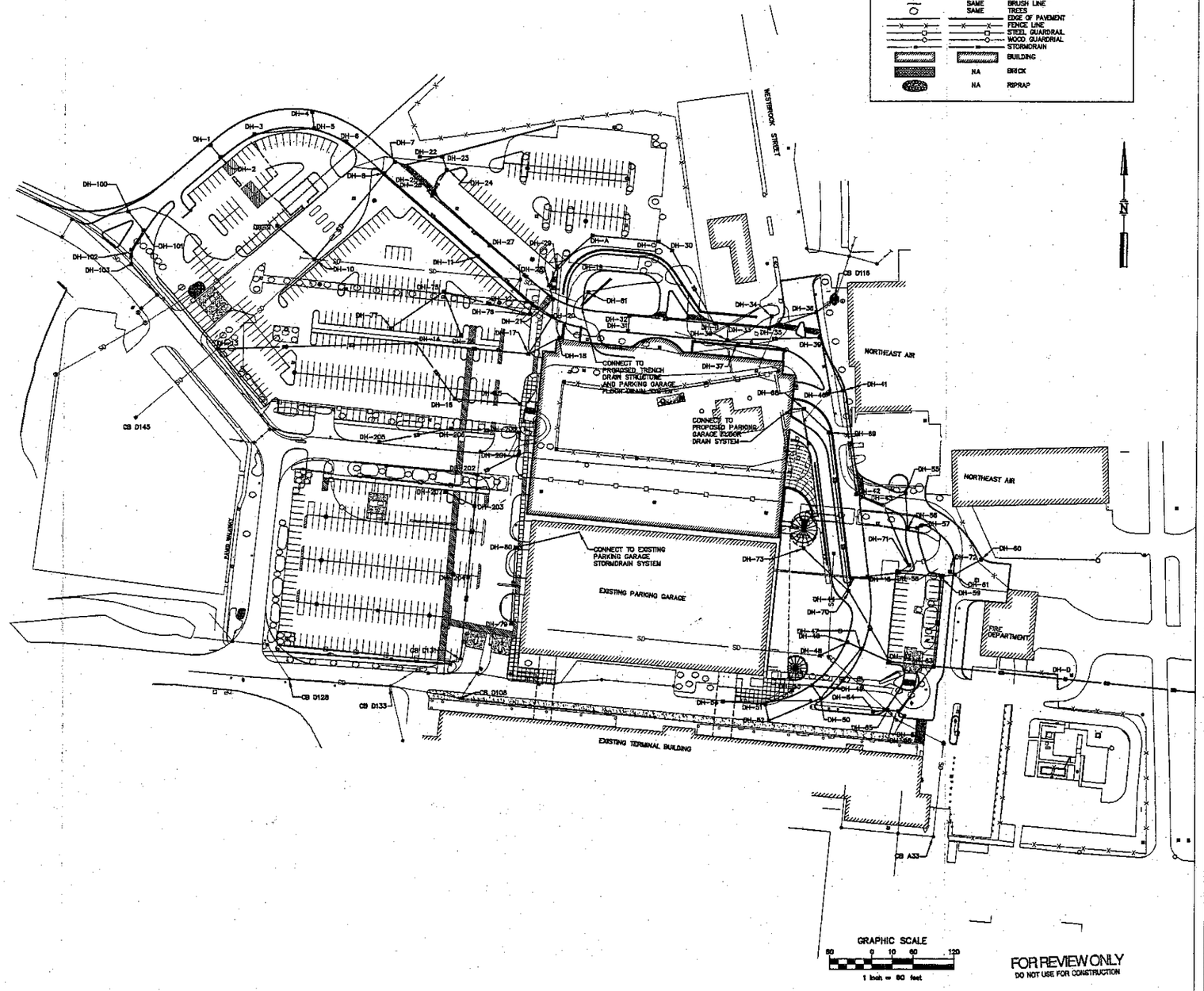
Checked By: JDP

Drawing No. C1-57

ATTACHMENT D

Stormwater Catch Basin Location Plan

STRUCTURE ID	RIM ELEVATION (FT.)	INVERT IN ELEV. (FT.)	INVERT OUT ELEV. (FT.)	OUTLET SLOPE (FT/FT)	OUTLET LENGTH (FT)
DH-A (DMH)	66.1	57.31	57.31	.003	113
DH-B (DMH)	61.8	56.41	56.41	.003	21
POND SPILLWAY CULVERT	--	--	56.20	.127	20
POND OUTLET STRUCTURE	--	--	54.43	.0147	307
DH-1	75.1	--	67.20	.015	17
DH-2	73.1	66.95	66.70	.015	54
DH-3	74.3	65.90	65.85	.015	84
DH-4	72.8	--	64.65	.013	18
DH-5	72.8	64.41	64.16	.015	46
DH-6	73.1	63.48	62.23	.015	97
DH-7	71.0	64.83	62.30	.015	17
DH-8	71.0	62.54	61.99	.012	173
DH-9	70.8	--	63.28	.003	65
DH-10	70.8	64.22	63.14	.015	154
DH-11	66.8	60.36	58.13	.003	89
DH-12	63.8	58.82	58.57	.003	30
DH-13	71.3	66.12	61.91	.016	381
DH-14	67.0	60.81	58.85	.016	119
DH-15	63.5	--	58.07	.003	55
DH-16	64.7	58.91	58.91	.003	52
DH-17	64.0	58.75	58.60	.003	19
DH-18	63.5	--	58.43	.003	39
DH-19	63.8	58.54	58.34	.003	42
DH-20	63.4	58.48	58.21	.003	30
DH-21	63.5	58.13	57.98	.003	35
DH-22	71.0	--	63.00	.016	23
DH-23	71.2	--	62.84	.02	15
DH-24	71.2	62.34	62.06	.02	38
DH-25	70.0	61.33	61.08	.02	10
DH-26	66.4	61.09	60.81	.02	105
DH-27	65.8	58.71	58.48	.008	118
DH-28	63.8	--	57.92	.003	12
DH-29	67.4	57.63	57.46	.003	85
DH-30	63.3	56.97	56.79	.003	111
DH-31	63.6	--	57.44	.01	139
DH-32	63.5	57.76	56.78	.003	136
DH-33	61.7	56.39	56.10	.003	85
DH-34	61.4	--	56.28	.003	14
DH-35	61.8	53.85	53.60	.003	97
DH-36	63.8	55.39	55.14	.003	29
DH-37	63.2	--	56.06	.003	12
DH-38	61.7	56.05	54.05	.003	188
DH-39	61.8	56.87	55.67	.003	76
DH-40	62.8	--	56.48	.003	19
DH-41	63.4	55.43	55.43	.003	146
DH-42	62.7	54.98	54.98	.003	39
DH-43	63.3	54.88	54.88	.003	3
DH-44	62.2	--	55.43	.01	18
DH-45	63.2	55.25	55.15	.01	100
DH-49	61.1	53.38	52.25	.006	18
DH-47	61.1	52.19	52.19	.006	87
DH-48	60.8	52.83	52.49	.005	41
DH-49	60.4	--	51.83	.01	18
DH-50	60.4	51.75	51.75	.006	73
DH-51	60.1	52.90	52.8	.01	18
DH-52	60.1	52.42	52.52	.01	77
DH-53	60.8	--	53.39	.01	39
DH-54	60.8	--	53.47	.01	87
DH-55	61.9	54.96	54.06	.003	32
DH-56	61.8	55.10	55.10	.003	45
DH-57	61.8	--	55.12	.003	9
DH-58	61.8	--	56.11	.01	11
DH-59	61.5	--	58.35	.01	19
DH-60	61.1	--	58.20	.127	33
DH-61	61.2	56.67	56.67	.015	238
DH-62	61.4	55.46	55.35	.01	65
DH-63	61.4	--	56.05	.01	60
DH-64	60.9	51.38	51.38	.006	108
DH-65	60.1	54.79	54.99	.01	15
DH-66	60.1	54.91	54.91	.01	11
DH-67	60.4	--	54.99	.01	7
DH-68	59.8	40.97	40.72	.003	46
DH-69	54.8	40.58	40.33	.003	225
DH-70	51.3	38.65	38.40	.003	114
DH-71	61.8	52.17	52.27	.006	48
DH-72	61.5	--	51.85	.006	31
DH-73	46.8	--	40.23	.01	65
DH-74	51	--	44.09	.01	7
DH-75	66.8	--	56.82	.003	134
DH-76	64.3	58.66	58.30	.003	13
DH-77	60.4	--	54.99	.01	99
DH-78	60.4	--	54.99	.01	83
DH-79	60.4	--	54.99	.01	7
DH-80	60.4	--	54.99	.01	7
DH-81	60.4	--	54.99	.01	29
DH-100	79.9	--	66.70	.005	31
DH-101	75.8	68.54	68.44	.005	29
DH-102	74.9	69.29	69.19	.005	15
DH-103	74.3	69.11	69.01	.005	24
DH-200	63.8	--	56.81	.005	28
DH-201	63.7	56.67	56.57	.005	64
DH-202	64.3	56.25	56.15	.005	41
DH-203	64.0	57.84	57.84	.005	98
DH-204	63.7	57.35	57.35	.005	114
DH-205	63.7	57.35	57.35	.005	100
DH-206	63.7	57.35	57.35	.005	69
DH-207	63.7	57.35	57.35	.005	43



DOMENECH HICKS & KROCKMALNIC ARCHITECTS
155 Massachusetts Ave.
Boston, MA 02115
617-267-6408
Fax 617-267-1990

Dufresne-Henry

CITY OF PORTLAND
PORTLAND, MAINE

DEPARTMENT OF WATERFRONT AND TRANSPORTATION

PHASE I
PARKING GARAGE

PORTLAND INTERNATIONAL JETPORT

PORTLAND, MAINE

No.	Date	Revision
1	09-13-02	PLANNING BOARD SUBMISSION

PROPOSED STORMDRAIN LOCATION PLAN

Scale: 1"=80'
File Name: C1-56_DrainLayout
Drawing By: JPK
Checked By: JEF
Job No.: 9190018.01
Date: 09-13-02
Drawing No.: C1-56

ATTACHMENT E

Excerpt From Walker Consulting Study

WALKER
PARKING CONSULTANTS

INTRODUCTION

The Portland International Jetport (PWM) is located in southern Maine, bound by the Fore River and Long Creek to the east and southeast. Its facilities encompass approximately 636 acres, three miles west of downtown Portland. Future plans of building an interchange from the turnpike to the Jetport will make it easier for residents of outlying cities to reach the Jetport. The National Plan of Integrated Airport Systems (NPIAS) classified PWM as a medium-haul commercial service airport. It generally provides commercial airline service within 1,500 miles of its locale. Because it enplanes between one-tenth to one-quarter percent of airline passengers in the United States, PWM is classified as a small hub air passenger airport. PWM had 611,431 enplanements in 1997, and 654,843 in 1998.

The City of Portland is in the process of assessing the adequacy of the Jetport's parking system. Currently, the Jetport has 1,677 parking spaces (see Table 1) and is experiencing shortages of parking spaces for its passengers, employees, and rental car customers. Because the Jetport receives such a large portion of its operating budget from parking related revenue, the administration has asked Walker Parking Consultants to analyze the parking shortages and provide recommendations for future parking at the Jetport.

The study has four sections. The supply and demand analysis projects how many hourly, daily, weekly, employee, and rental car parking spaces will be needed in the future. The rate analysis recommends the appropriate rates based on convenience of the spaces, revenue generated, local rate structures, other airports and Jetport parking competition. The alternatives analysis offers solutions to meet the future parking demand. The financial analysis studies costs associated with constructing and operating the planned facilities.

SUPPLY AND DEMAND ANALYSIS

Portland International Jetport Parking Supply

The Jetport has a parking structure used for hourly and daily parking, a daily surface lot, and a weekly surface lot for public parking. There are separate car rental and employee surface lots. There are two off-site public surface lots; Alamo Rental has an undeveloped surface lot within walking distance of the terminal, and the DoubleTree Hotel provides parking and shuttle service. These spaces are included in the current supply in order to count the parkers who will be parking at the Jetport in the future. The future parking demand projected for the Jetport includes the patrons currently parking offsite. It is assumed that these patrons will park on site when there are enough spaces available. Table 1 shows the current spaces available.

Table 1: Parking Supply

Hourly		156
Daily		712
	Garage	454
	Surface	258
Weekly		492 ✓
	Total Public	1,360
Employee		206✓
Car Rental		111✓
	Total Non-Public	317
Total On Site Parking		1,677
Total Off Site Parking		388
	Total Parking	2,065

Method

Walker used a multi-step process to determine how many spaces the Jetport will need in the future. We developed each of the following for hourly, daily, weekly, rental car and employee parking.

- A design day – To determine how many parkers used the parking facilities, we used car counts provided by the Jetport for a recent twelve-month period from August 1997 to July 1998. Car counts were taken at 8:00 a.m., 3:00 p.m., and midnight for most of the months. From these counts, the 95th percentile occupancy was selected as the design day demand for each user group. Therefore, on 95% of days (347) the parking demand will be less than the design day, and on 5% of days, (18) the demand will be greater than the design day.
- An effective parking supply or cushion – When a parking lot's occupancy reaches 85 to 90%, it becomes difficult for newly arriving parkers to find available spaces. The parking lot is perceived to be full. To account for this, parking planners compare parking demand with the effective supply (85 to 90% of the total parking capacity). The remaining cushion (10-15% of the spaces) can be utilized on days when the peak occupancy exceeds the demand calculated from the design day. Parkers will find it more difficult to find the last few available spaces, but they can be accommodated. We used a 90% effective supply factor for PWM.
- A parkers-to-enplanement ratio – This is developed by comparing the design day occupancy (95% highest occupancy day for the past twelve months) to the number of annual enplanements. A ratio was developed and can be found in Tables 2 and 3. Ratios were developed for each type of parking patron.

Table 2: Ratio of Parkers to 1,000 Enplanements

	Enplanements	Hourly	Daily	Weekly	Off-Site	Total
Aug-97	75,136					
Sep-97	56,268					
Oct-97	58,078					
Nov-97	43,418					
Dec-97	44,052					
Jan-98	38,860					
Feb-98	42,286					
Mar-98	48,129					
Apr-98	47,829					
May-98	48,984					
Jun-98	56,773					
Jul-98	71,517					
95% Occupancy		136	719	386	388	1629
Total	631,330	0.22	1.14	0.61	0.61	2.58

- Projected number of spaces needed – This is based on the number of enplanements multiplied by the parkers-to-enplanement ratio. We projected spaces based on a 1 and 4 percent increase in enplanements until approximately 2021. These calculations can also be found in Table 3.
- Assumption – The Jetport wants to reduce the need for off-site parking by offering enough parking supply on Jetport property.

Employee Parking

The Employee parking lot was recently relocated to a more convenient location. The parking operator does not have regular car counts taken. However, both the parking manager and Jetport staff said that the lot is usually full. Walker observation verified that it fills even on less busy public parking days. According to Jetport staff, Jetport and airline employees currently use the lot. As a professional courtesy, the Jetport allows "non-based" employees, or employees who live in Portland, but fly for airlines in other cities, to park in the lot. The staff estimates that up to half of the employees parking in the employee lot are these non-based employees. They are willing to relocate these employees to the public parking areas. Therefore, the parking demand projections only include 50% of the current demand, or only the employees who work on Jetport property.

Rental Parking

Rental car companies are busy during the summer months when tourism is high. These are also peak enplanement months, but lower months for public parking utilization. Unlike the public and employee parking demand that was projected from enplanements, the rental demand was projected from a rental car survey that Walker took in 1998. Survey results were obtained from each of the four rental car companies currently leasing spaces. Some of the questions and results are:

Company	Currently Leased	Currently Desired	2-year Desire	5-year Desire	10-year Desire
Avis	35	50	65	80	120
Budget	17	30	40	40	40
Hertz	34	55	70	90	130
National	25	40	50	60	75
Total	111	175	225	270	365

The rental companies currently lease 111 spaces, but will need 159 additional spaces for a total of 270 by 2003.

Parking Demand

Table 3 presents the analysis of current parking demand and adequacy based on the design day and 631,330 enplanements from August 1997 through July 1998. The table divides the demand into separate uses. There is a public parking subtotal of Hourly, Daily and Weekly parking demand by enplanements. We included off-airport demand (patrons parking at the DoubleTree and Alamo) as a Weekly subtotal. The total current public parking demand is 1,629 spaces as seen in Table 2. The current effective supply (excluding the cushion) is 1,573, leaving a 56-space shortage during the Jetport's peak design days during the August through July period.

Enplanement projections from the FAA and used in Portland's 1995 Master Plan estimated 5% enplanement growth annually and a total of 956,000 passengers by 2003. However actual enplanement growth has averaged about 1% per year over the past 10 years. After considerable study the Jetport and Walker decided to project growth conservatively at the current 1% and more optimistically at 4% growth. The increased growth could be achieved with the added convenience of using the Jetport because of the new turnpike exit, and possibly obtaining a low-cost carrier at the Jetport. Increased growth translates to increased parking demand.

Planned terminal expansion and additional roadway construction will eliminate existing parking east of the terminal, east of the existing garage, in a portion of the weekly lot, and eventually in the employee lot. Therefore, the new parking facilities to be built must replace these lost spaces as well as accommodate future demand. In addition, the actual construction process will cause temporary loss of additional spaces.

Due to future added parking demand and reduced parking spaces, we recommend beginning the design and building additional parking spaces immediately.

The following explains the future parking demand at Portland International Jetport. The parking demand for each user group is compared to the current effective supply for that group, resulting in the surplus or deficit.

Table 3 contains estimates of parking demand for 2011 and 2021 at growth rates of 1% and 4%. Information included in the table is how many spaces are existing in each facility considering the 90-95% effective supply or cushion, and the demand on the design day. The table shows the location and the parking spaces.

As seen in Table 3, demand exceeds supply. There is currently an overall demand for 2,024 spaces (effective supply of 1,859.) This demand will increase to 2,305 by 2011. In order to maintain the recommended 10% cushion in the parking supply and accommodate all parking on site, PWM will need a total of 2,673 or 3,726 spaces by 2011 at 1% and 4% growth respectively. Because of the loss of existing spaces to terminal and roadway construction, more spaces will need to be built than the aggregate deficit suggests.

Table 3: Parking Supply and Demand

	Supply			Demand			
				1% Growth		4% Growth	
	Current	1998 Effective	Demand	2011	2021	2011	2021
				Enplnmnts 739,761	817,156	1,082,298	1,602,065
Hourly	156	140	136	159	176	233	345
Daily	712	641	719	842	931	1233	1825
Weekly	492	443	386	452	500	662	980
Off Airport Weekly	388	349	388	455	502	665	985
Public Parking Total	1,748	1,573	1,629	1,908	2,109	2,793	4,135
Employee	206	185	220[1]	133	147	195	288
Rental	111	100	175	365	490	365	490
Total Supply	2,065	1,859					
Total Demand			2,024	2,406	2,746	3,353	4,913
Total Deficit				(341)	(681)	(1,288)	(2,848)
Total Supply Needed to Meet Demand Including 10% Cushion				2,673	3,051	3,726	5,459

(1) Non-based employees currently park in the employee lot but will be moved to public parking.

ATTACHMENT F

Email Correspondence from City Engineer

From:	**Jeffrey Preble <jpreble@dufresne-henry.com>**
To:	**'Mickey Krockmalnic' <mkrockmalnic@dhkinc.com>, 'Paul Bradbury' <PHB@ci.portland.me.us>, "'PHRay@aol.com'" <PHRay@aol.com>**
Copies to:	**'Andrea Clemon' <aclemon@dhkinc.com>, 'Valerie Giguere' <vgiguere@dufresne-henry.com>**
Subject:	**FW: Jetport Parking Expansion**
Date sent:	**Fri, 12 Jan 2001 11:38:52 -0500**

-----Original Message-----
From: Anthony Lombardo [SMTP:AWL@ci.portland.me.us]
Sent: Friday, January 12, 2001 9:15 AM
To: jpreble@dufresne-henry.com
Cc: KAS@ci.portland.me.us; RWK@ci.portland.me.us
Subject: Jetport Parking Expansion

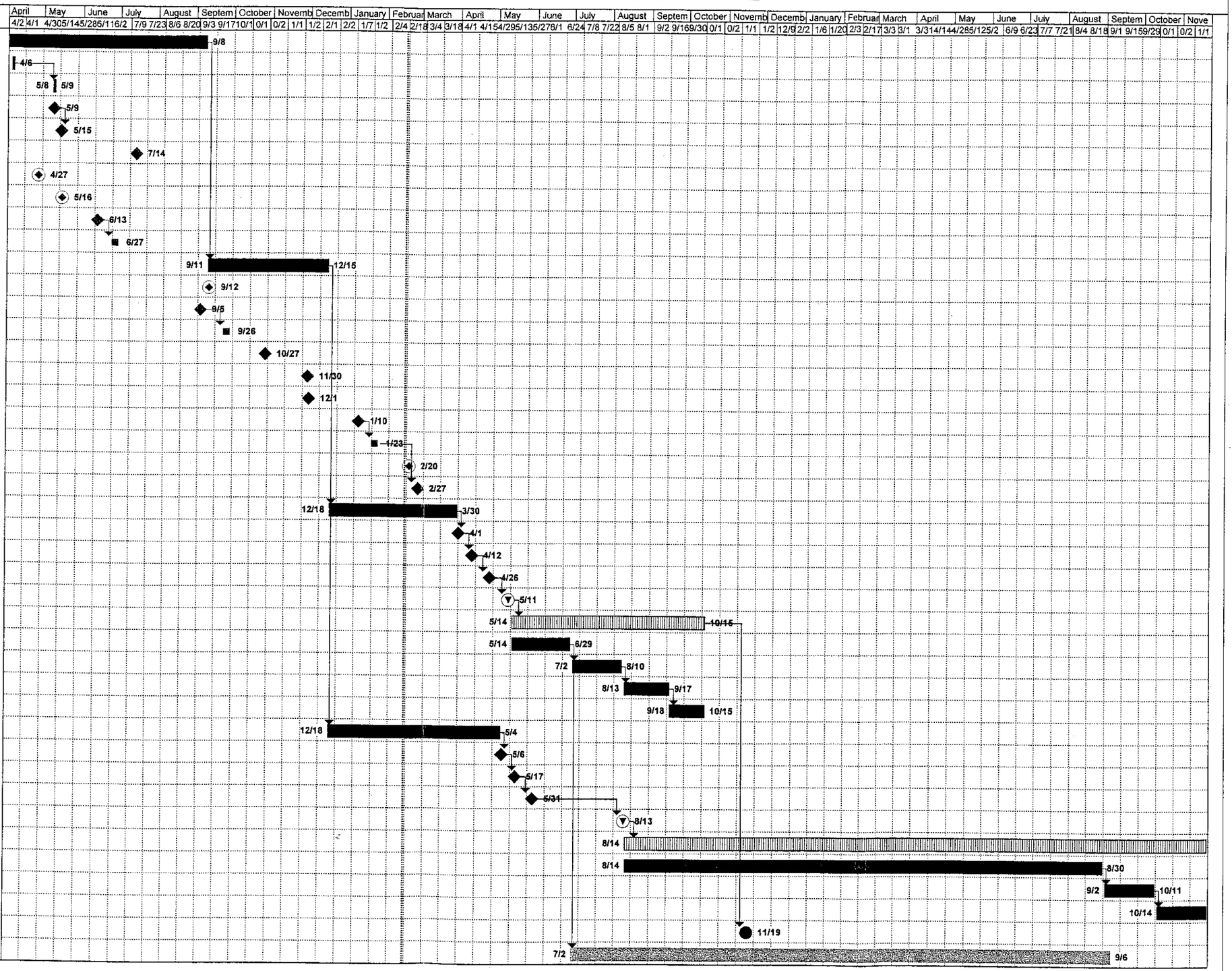
Jeff,
I've reviewed your recent submittal of plans as they relate to the upgrade and modification of the existing sanitary sewer utility. Upon review, I find no issues or concerns for the City of Portland. If you require a more formal or detailed sign-off, please contact me by e-mail or by phone at 874-8848.

ATTACHMENT G

Construction Schedule

PORTLAND INTERNATIONAL JETPORT PARKING GARAGE

ID	Task Name
1	Master planning phase
2	1st charrette
3	2nd charrette
4	1st mtg. car rental companies
5	Produce cost estimate indicators
6	Produce master plan level cost estimate
7	Mtg. No. 1 w/neighborhood reps
8	Mtg. No. 2 w/neighborhood reps
9	Submit material for Planning Board workshop no. 1
10	Planning Board workshop no. 1
11	Preliminary design garage & roadway
12	Mtg. No. 3 w/neighborhood reps
13	Submit material for Planning Board workshop no. 2
14	Planning Board Workshop no. 2
15	2nd mtg. car rental companies
16	Submit to Inspectional Services
17	3rd mtg. car rental companies
18	Submit material for Planning Board workshop no.3
19	Planning Board Workshop no. 3
20	Mtg. No. 4 w/neighborhood reps
21	Public hearing
22	Final design Contract I
23	Advertisement in newspaper Contract I
24	Prebid conference Contract I
25	Bids due Contract I
26	Contract award Contract I
27	Construction period Contract I
28	*Contract I - Phase A*
29	*Contract I - Phase B*
30	*Contract I - Phase C*
31	*Contract I - Phase D*
32	Final design Contract II
33	Advertisement in newspaper Contract II
34	Prebid conference Contract II
35	Bids due Contract II
36	Contract award Contract II
37	Construction period Contract II
38	*Contract II - Phase A*
39	*Contract II - Phase B*
40	*Contract II - Phase C*
41	Avis site becomes available to Contractor
42	Overall period car rental companies are in temporary location



Project: Portland International Jetport
Date: Fri 2/16/01

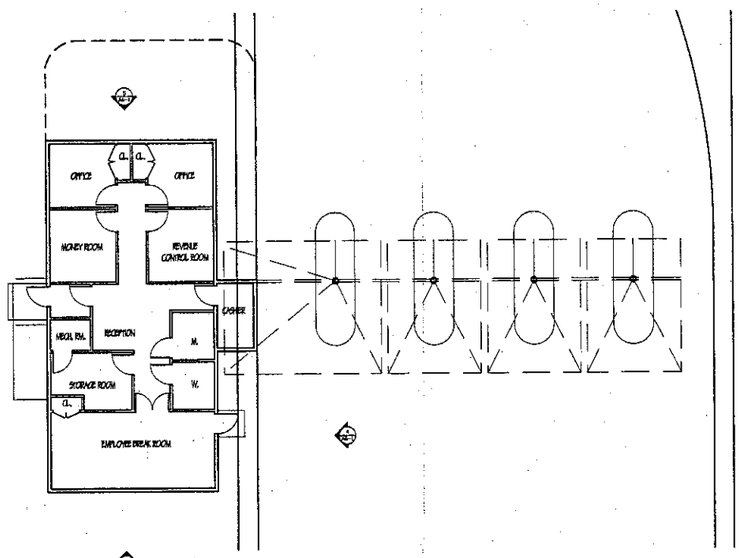
Task | Progress | Milestone | Summary | Rolled Up Task | Rolled Up Milestone | Rolled Up Progress | Split | External Tasks | Project Summary

ATTACHMENT H

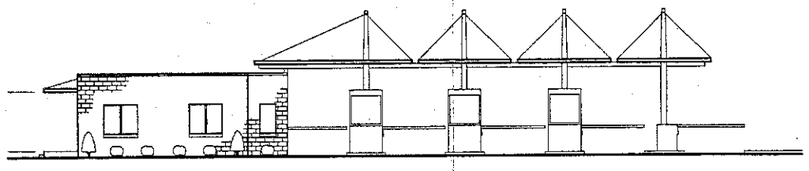
Parking Management Building Details

1/16"=1' 5 0 10 20 30 40ft | 1/8"=1' 5 0 5 10 15 20ft | 1/4"=1' 2 0 2 4 6 8 10ft | 1/2"=1' 1 0 1 2 3 4 5ft | 3/4"=1' 1 0 1 2 3ft | 1"=1' 1 0 1 2ft | 1 1/2"=1' 0 1 2ft | 3"=1' 0 1ft

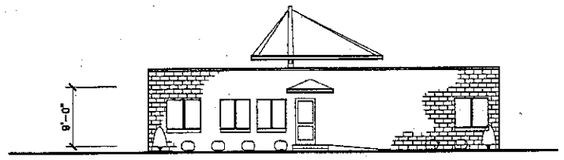
If this sheet is less than 30"x42" in size, it has been reduced. Graphic scales must be adjusted accordingly.



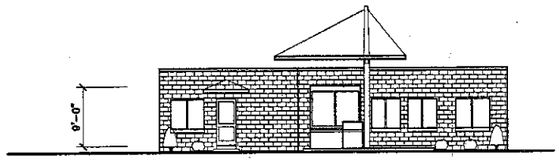
1 APCOA BUILDING PLAN



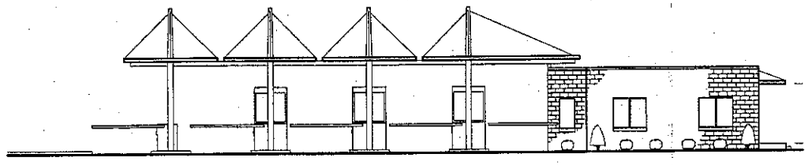
2 SOUTHWEST ELEVATION



3 NORTHWEST ELEVATION



4 SOUTHEAST ELEVATION



5 NORTHEAST ELEVATION

FOR REVIEW ONLY
DO NOT USE FOR CONSTRUCTION

DOMENECH HICKS & KROCKMALNIC ARCHITECTS

155 Massachusetts Ave.
Boston, MA 02115
617-267-6408
Fax 617-267-1990

CITY OF PORTLAND
PORTLAND, MAINE

DEPARTMENT OF WATERFRONT AND TRANSPORTATION

PHASE I
PARKING GARAGE

PORTLAND INTERNATIONAL JETPORT

PORTLAND, MAINE

No.	Date	Revisions

Title: APCOA BUILDING

Scale: 1/8"=1'-0"
File Name: A6-1
Drawn By: ARC
Checked By: HMK
Job No.: 2003.00
Date: 02/12/06

Drawing No.: A6-1

ATTACHMENT I

Alamo Survey Plan

01051

Suggested Deed Description
Lot to be Conveyed

A certain lot or parcel of land situated on the westerly side, but not adjacent to, Westbrook Street in the City of Portland, County of Cumberland, State of Maine, being depicted on a plan of land titled "Site Plan of Thrifty Car Rental", dated through November 20, 1995 by Sebago Technics, Inc., said parcel being more particularly bounded and described as follows:

Beginning at a capped 5/8 inch iron rebar found at the southwesterly corner of parcel herein described at the northeasterly corner of land now or formerly of the City of Portland as shown on said plan;

Thence N 08°-54'-54" W, by and along said City of Portland, a distance of 55.00 feet to a point;

Thence S 83°-28'-06" E, passing through land of the Grantor, a distance of 88.19 feet to a point in the northerly line of said City of Portland, said point lies S 60°-44'-36" W, 16.00 feet from a capped 5/8 inch iron rebar found on the westerly side of said Westbrook Street;

Thence S 60°-44'-36" W, 90.65 feet to the point of beginning.

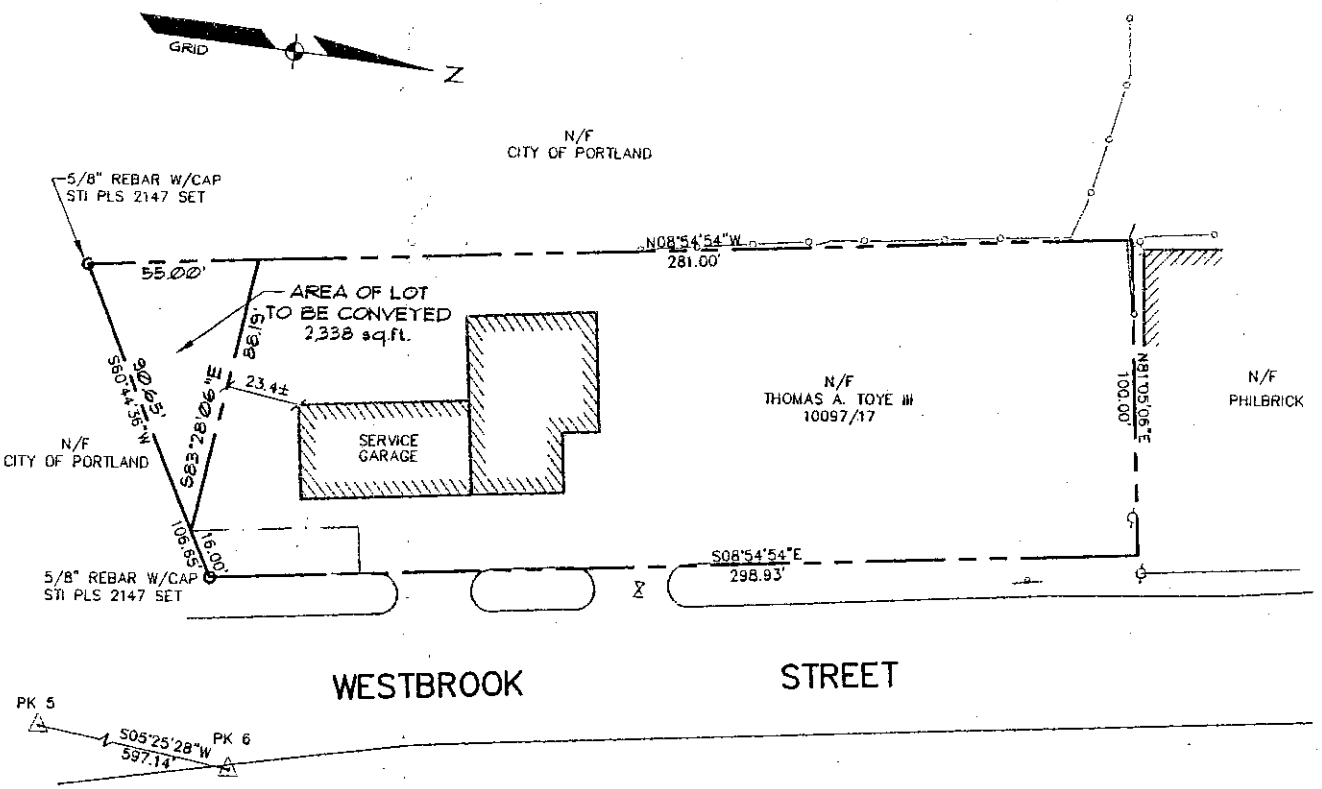
Meaning and intending to describe a certain parcel of land containing 2,338 square feet, more or less, being a portion of the premises depicted on a plan of land titled "Site Plan of Thrifty Car Rental", dated through November 20, 1995 by Sebago Technics, Inc.

The above described property being a portion of the premises described in a deed to Thomas A. Toye III, recorded in Book 10097, Page 17.

Bearings referenced herein are based upon Grid North NAD 1983 Maine West Zone.

DCS:jc
February 2, 2001

2-2-01



GENERAL NOTES

1. THIS PLAN IS BASED UPON A STANDARD BOUNDARY SURVEY PREPARED BY SEBAGO TECHNICS, FOR THRIFTY CAR RENTAL AND DEPICTED ON A PLAN OF LAND TITLED "SITE PLAN OF THRIFTY CAR RENTAL" DATED THROUGH NOVEMBER 20, 1995 BY SEBAGO TECHNICS, INC. TOGETHER WITH SITE DESIGN PLAN FOR THE PORTLAND INTERNATIONAL JETPORT PROVIDED BY DUFRESNE-HENRY, INC.
2. THE PURPOSE OF THIS PLAN IS TO DEPICT A PROPOSED CONVEYANCE TO AN ABUTTER. THE AFOREMENTIONED ABUTTER BEING THE CITY OF PORTLAND.
3. THIS PLAN IS BASED UPON STANDARD BOUNDARY SURVEY PERFORMED IN CONFORMANCE WITH THE STATE OF MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS STANDARD OF PRACTICE FOR A CATEGORY I CONDITION II WITH THE EXCEPTIONS THAT NO UPDATED RESEARCH HAS BEEN PERFORMED, NO REPORT OF SURVEY HAS BEEN PREPARED AND PROPOSED MONUMENTATION HAS NOT BEEN SET AT THE ISSUANCE OF THIS PLAN.
4. THIS PLAN IS SUBJECT TO CHANGE UPON RECEIPT AND REVIEW OF A TITLE COMMITMENT.

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	PROPERTY/ROW	
	SETBACK	
	EASEMENT	
o	IRON PIPE/ROD	●
C1/L1	CURVE/LINE NO.	C1 / L1
	BUILDING	
	SIGN	
	EDGE PAVEMENT	
OHE	OVERHEAD ELEC. & TEL.	
	GATE VALVE	
	UTILITY POLE	
	CHAIN LINK FENCE	
	PK BY OTHERS	

Sebago Technics
Engineering & Planning for the Future
One Chabot Street
Westbrook, Me 04098-1339
Tel (207) 856-0277

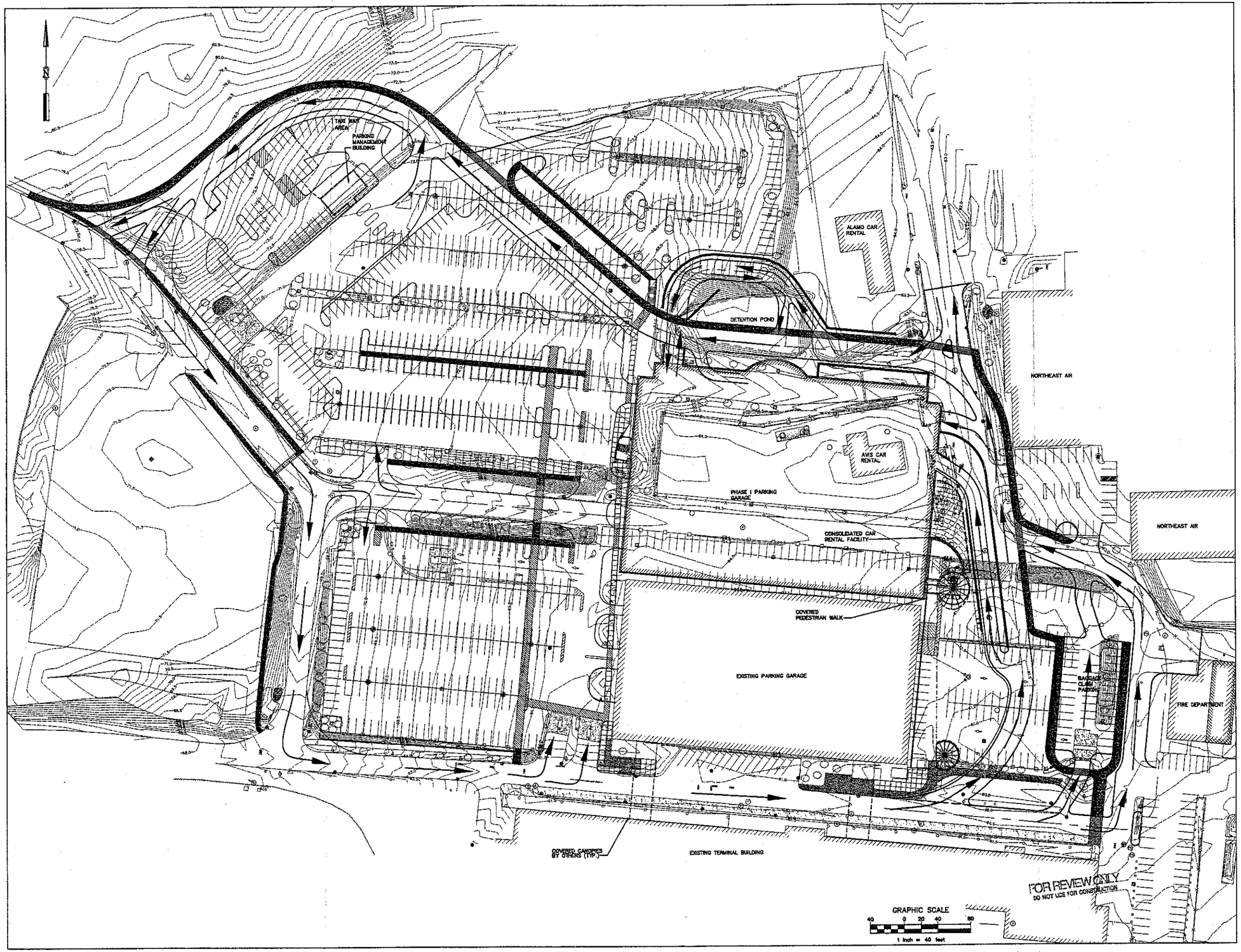
SURVEY PLOT PLAN
OF:
LAND TO BE CONVEYED
WESTBROOK STREET
PORTLAND, MAINE
FOR:
DUFRESNE-HENRY, INC.
CONSULTING ENGINEERS
PORTLAND, ME 04101

DESIGN BY:	
DRAWN BY:	DCS
CHECKED BY:	DED
DATE:	1-30-01
SCALE:	1"=40'
FIELD BK:	245&487
PROJ. NO:	01051EC
DRAWING:	01051EC
SHEET	OF

2-2-01

ATTACHMENT J

Traffic Flow Diagram



DOMENECH HICKS & KROCKMALNIC ARCHITECTS

155 Massachusetts Ave.
Boston, MA 02115
617-267-6408
Fax 617-267-1990

Dufresne-Henry

CITY OF PORTLAND
PORTLAND, MAINE

DEPARTMENT OF WATERFRONT AND TRANSPORTATION

PHASE I
PARKING GARAGE

PORTLAND INTERNATIONAL JETPORT

PORTLAND, MAINE

No.	Date	Revision
1	02-13-01	PLANNING BOARD SUBMISSION

Title: TRAFFIC FLOW DIAGRAM

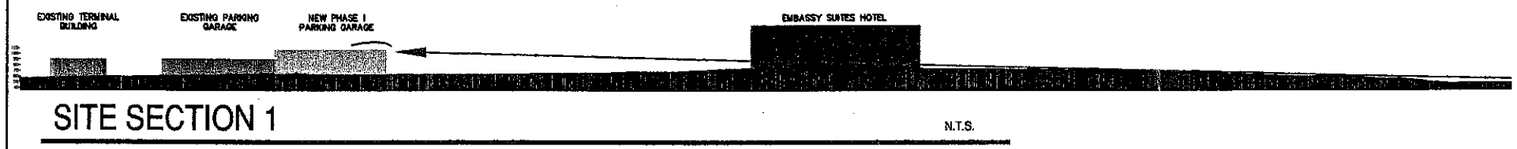
Scale: 1" = 40'

File Name: 12EXHIBIT
Drawn by: MRS
Checked by: GF
Job No.: R99016.01
Date: 12-15-00

Drawing No.: EXHIBIT

ATTACHMENT K

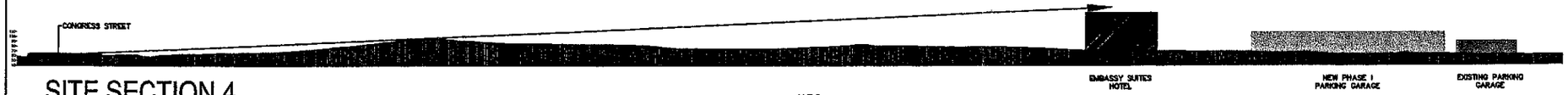
Site Sections



SITE SECTION 1 N.T.S.

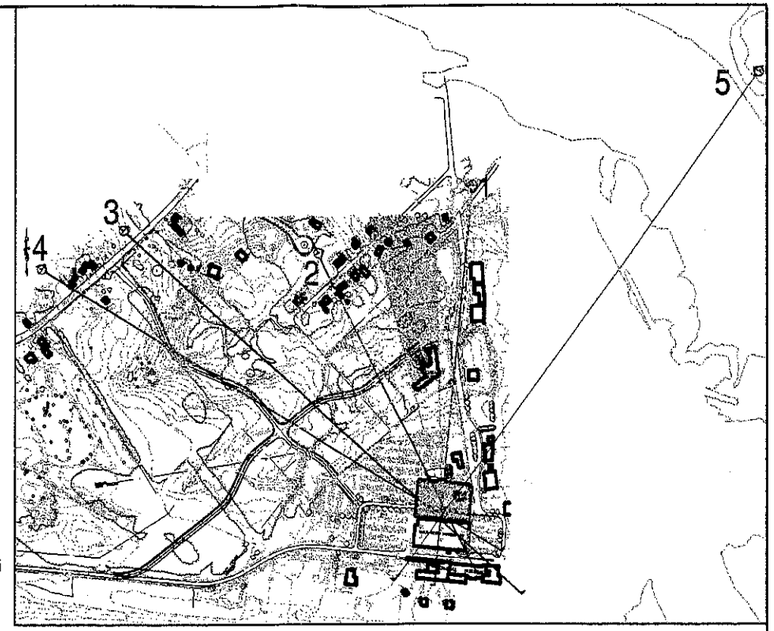
SITE SECTION 2 N.T.S.

SITE SECTION 3 N.T.S.



SITE SECTION 4 N.T.S.

SITE SECTION 5 N.T.S.



KEY PLAN N.T.S.

SITE SECTIONS

PARKING MASTER PLAN · PORTLAND INTERNATIONAL JETPORT · PORTLAND, ME

CITY OF PORTLAND, PORTLAND, ME · DEPARTMENT OF WATERFRONT AND TRANSPORTATION

- DOMENECH HICKS & KROCKMALNIC, INC.
- DUFRESNE-HENRY, INC.
- RICH AND ASSOCIATES, INC.
- GORRILL-PALMER CONSULTING ENGINEERS, INC.
- HALEY & ALDRICH, INC.
- HANSCOMB, INC.

DOMENECH HICKS & KROCKMALNIC ARCHITECTS

DRWG 18a

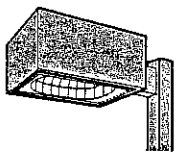
ATTACHMENT L

Temporary Parking Lot Lighting


TEMPORARY PARKING LOT
EKG

Ordering Information

EKG Models



EKG
Mogul Base
70 to 400 Watt

Ordering Example:
For Standard Fixture and Pole

Mounting	Fixture	Electrical Module	Finish	Options	Pole
2B /	EKG501 /	250HPS277 /	BL-P /	A-25 /	PSA25-5188B / BL-P
1	2	3	4	5-7	8

See separate Kim Pole Catalog. Omit for 1W Wall Mount.

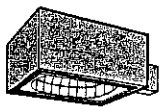
1 Mounting:

Plan View: 

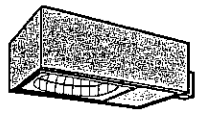
Cat. No.:	1A	2B	2L	3T	4C	1W

2 Fixture:

Cat. No. designates EKG fixture with standard mounting arm.



Cat. No.: **EKG401**
EKG402



EKG501

3 Electrical Module:

HPS = High Pressure Sodium
MH = Metal Halide
SMH = Metal Halide with reduced outer jacket

Lamp Watts	Lamp Type	Line Volts
400	HPS	277

EKG401 fixture only:

70HPS120	100HPS120	150HPS120	200HPS120	250HPS120	175MH120	250MH120
70HPS208	100HPS208	150HPS208	200HPS208	250HPS208	175MH208	250MH208
70HPS240	100HPS240	150HPS240	200HPS240	250HPS240	175MH240	250MH240
70HPS277	100HPS277	150HPS277	200HPS277	250HPS277	175MH277	250MH277
70HPS347	100HPS347	150HPS347	200HPS347	250HPS347	175MH347	250MH347
70HPS480	100HPS480	150HPS480	200HPS480	250HPS480	175MH480	250MH480

EKG402 fixture only:

400HPS120	400SMH120
400HPS208	400SMH208
400HPS240	400SMH240
400HPS277	400SMH277
400HPS347	400SMH347
400HPS480	400SMH480

EKG501 fixture only:

150HPS120	200HPS120	250HPS120	400HPS120	175MH120	250MH120	400MH120
150HPS208	200HPS208	250HPS208	400HPS208	175MH208	250MH208	400MH208
150HPS240	200HPS240	250HPS240	400HPS240	175MH240	250MH240	400MH240
150HPS277	200HPS277	250HPS277	400HPS277	175MH277	250MH277	400MH277
150HPS347	200HPS347	250HPS347	400HPS347	175MH347	250MH347	400MH347
150HPS480	200HPS480	250HPS480	400HPS480	175MH480	250MH480	400MH480

4 Finish:

Standard Finish is Super TGIC powder coat paint over chromate conversion coating.

Optional Architectural Class 1 anodized finish is available at extra cost.

Standard Finishes

Color:	Black	Dark Bronze	Light Gray	White	*Custom Colors
Cat. No.:	BL-P	DB-P	LG-P	WH-P	CC-P

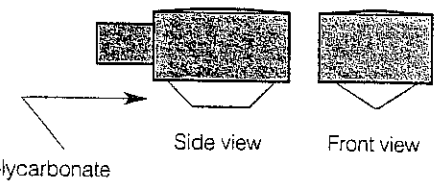
*Consult representative for custom colors.

Optional Anodized Finish (Available at extra cost.)

Color: Dark Bronze Anodize
Cat. No.: **DB-A**

5 Optional Polycarbonate Shield:

Cat. No.: **LS**

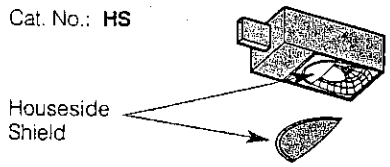


Optional Polycarbonate Shield replaces standard tempered glass lens. One piece vacuum formed clear polycarbonate. Polycarbonate Shield is semi-pyramidical in shape for high thermal resistance, impact resistance and light transmission. 250 watt maximum.

NOTE: May be used with 400HPS in outdoor locations where ambient air temperature during fixture operation will not exceed 85°F. **CAUTION:** Use only when vandalism is anticipated to be high. Useful life is limited by discoloration caused by UV from sunlight and metal halide lamps.

6 Optional Houseside Shield:

Cat. No.: **HS**



For highly reduced light on houseside. Two shielding components permanently installed at the Kim factory. One component reduces light directly from the lamp; the other component reduces reflected light. Recommended for use with clear lamps only.

7 Optional Photocell Receptacle:

Cat. No.: **A-25**

A fully gasketed receptacle installed above the electrical compartment for NEMA base photocell (by others). For all multiple-fixture pole mountings with two or three fixtures, one fixture has a receptacle to operate the others. Four fixtures (250 watt or less) also require one fixture with a receptacle. Four fixtures (400 watt) require two fixtures with receptacles.

Mounting Configuration *Fixture with photocell receptacle **s** slave unit(s).	1A or 1W	2B	2L	3T	4C	4C
Allowable Wattage per fixture:	150-400W				150-250W	400W

8 Poles

See Kim Pole Catalog for a complete selection of square and round poles in aluminum or steel.

Lamp and Electrical Guide for EKG and Type 5 Luminaires

LAMP/WATTS **HPS**	BALLAST TYPE	LINE VOLTS	LINE WATTS	MAX. AMPS
70HPS CLEAR, E-23½ MOGUL BASE	HX-HPF	120	91	1.45
		208	91	0.85
		240	91	0.75
		277	91	0.65
		347	93	0.55
		480	93	0.36
100HPS CLEAR, E-23½ MOGUL BASE	HX-HPF	120	130	2.20
		208	130	1.25
		240	130	1.10
		277	130	0.85
		347	130	0.70
		480	130	0.55
150HPS CLEAR, E-23½ MOGUL BASE	HX-HPF	120	188	2.80
		208	188	1.60
		240	188	1.40
		277	188	1.25
		347	188	0.92
		480	188	0.70
200HPS CLEAR, E-23½ MOGUL BASE	CWA	120	240	2.22
		208	240	1.28
		240	240	1.11
		277	240	0.96
		347	245	0.75
		480	480	0.58
250HPS CLEAR, E-18 MOGUL BASE	CWA	120	295	2.50
		208	295	1.50
		240	295	1.30
		277	295	1.10
		347	295	0.93
		480	295	0.63
400HPS CLEAR, E-18 MOGUL BASE	CWA	120	464	3.80
		208	464	2.20
		240	464	1.90
		277	464	1.70
		347	464	1.32
		480	464	0.97

LAMP/WATTS **MH**	BALLAST TYPE	LINE VOLTS	LINE WATTS	MAX. AMPS
175MH CLEAR BT-28 OR ED-28 PIN ORIENTED MOGUL BASE	CWA	120	210	1.80
		208	210	1.04
		240	210	0.90
		277	210	0.80
		347	210	0.65
		480	210	0.45
250MH CLEAR BT-28 OR ED-28 PIN ORIENTED MOGUL BASE	CWA	120	294	2.60
		208	294	1.50
		240	294	1.30
		277	294	1.10
		347	295	0.90
		480	298	0.65
400MH CLEAR BT-37 OR ED-37 PIN ORIENTED MOGUL BASE	CWA	120	458	4.00
		208	458	2.30
		240	458	2.00
		277	458	1.75
		347	460	1.40
		480	462	1.00
400SMH CLEAR ED-28, (Reduced Outer Jacket) PIN ORIENTED MOGUL BASE	CWA	120	458	4.00
		208	458	2.30
		240	458	2.00
		277	458	1.75
		347	460	1.40
		480	462	1.00

NOTE: For lamp/ballast information outside of the U.S.A. and Canada, please consult your local Kim representative.

WARNING: All fixtures must be grounded in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.

Lamps by others.

D

City of Portland
Portland International Jetport
Phase I Parking Garage
City of Portland Major Site Plan Application

January 2001

Prepared for:

City of Portland
Department of Waterfront and Transportation
Portland International Jetport
Westbrook Street
Portland, ME 04102

Prepared by:

Domenech Hicks & Krockmalnic
155 Massachusetts Avenue
Boston, MA 02115

Rich Associates
21800 W. Ten Mile Road
Southfield, MI 48075

Dufresne-Henry
22 Free Street
Portland, ME

DOMENECH
HICKS &
KROCKMALNIC
ARCHITECTS

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January 9, 2001

Mr. Alexander Jaegerman, Chief Planner
Planning and Urban Development
389 Congress Street
Portland, Maine 04101

Re: Portland International Jetport, Phase I Parking Garage
Application for Major Site Plan Approval

Dear Mr. Jaegerman:

On behalf of the City of Portland, Department of Transportation, we are pleased to present nine (9) copies of the Major Site Plan Application for the Phase I Parking Garage project at the Portland International Jetport. This project follows the recommendations of the Parking Master Plan completed in September 2000, and presented to the Planning Board on September 26, 2000.

This project involves the following major elements:

- A new six level parking garage to be located behind the existing parking structure. The new structure will have capacity for approximately 1,480 vehicles.
- A new Consolidated Car Rental Facility (CCRF). This facility will be the new home for the rental car agencies that currently reside in the Jetport terminal. The lower level of the new garage will be set aside for the car rental agencies.
- A new loop road to route traffic from the terminal around the new garage and onto International Drive.
- A visual buffer to be planted along Jetport Drive to shield the garage from the Stroudwater area.

Fernando J. Domenech, Jr., AIA
D. Michael Hicks, AIA, CDT
Arnold M. Krockmalnic, AIA

Alberto Cardenas, AIA
Stephen DeMarco, CSI, CDT
John Gonzalez

- New pedestrian corridors to ease movement from the parking areas to the terminal. These corridors have been coordinated with the Jetport's plans to construct two raised traffic tables and covered pedestrian walkways in front of the terminal.

- An off site temporary parking area located near the city's snow dump off outer Congress Street. Construction of the garage will affect existing parking, which is already at a premium. The temporary lot will mitigate further parking impacts during construction.

- A new parking management office building to be located in the surface parking lot to the west of the proposed garage.

- Several utility relocations required to construct the new loop road and garage. The affected utilities include water, sewer, storm drainage, electric, telephone, fire alarm, cable service, and natural gas.

- A new surface parking lot near the baggage claim area to serve as a short term parking area. This lot will be integrated into future plans for improvements in the Baggage Claim area.

As part of the Master Planning Process, a series of meetings were held with the Stroudwater Neighborhood Association. Issues heard at these meetings have been incorporated into the design of the new garage. For example:

- In order to decrease the overall height of the structure, the lowest level of the garage will be constructed below grade;

- The overall number of stories to be built has also been reduced; this minimizes any visual impact from this part of the community;

- In addition, we are proposing to plant a 'forest' of trees along Jetport Drive to further lessen any potential visual impacts;

- A roof will also be constructed over a portion of the top floor to trap any lighting that may escape from the upper level of the garage;

- The phasing of the project has also been changed in response to

neighborhood concerns;

- An elaborate façade treatment is designed to adjust shielding of the garage lighting from the Stroudwater homes, as required by various view angles.

Other items to note in review of this application are summarized below:

- The storm water management system at the Jetport will be affected by this project. Most of the additional surface runoff will be directed to the natural detention basin located to the east of taxiway C. Our civil engineering subconsultant, Dufresne-Henry, has discussed the proposed storm water management system with DeLuca-Hoffman prior to submitting this application. Currently, there may be an option to drain the lower level of the garage by gravity rather than pumping as outlined on the plans. Gravity discharge is preferred if at all possible. This option is presented in conceptual form in the application and will be further explored prior to the workshop session and public hearing on this project.

- Construction of the project will take place under two construction contracts. Actual construction will start in April 2001 and last through November 2002. A detailed construction phasing plan has been developed for both contracts and is included in the set of drawings.

- Wetlands will be impacted by the proposed project. The city has a separate permit under negotiation with the Maine DEP for wetland impacts around the facility. The impacts from this project are included in that negotiation.

- Design criteria used in the garage layout were derived from a combination of the City's original request for proposals and the design team's own standards. A summary of the major design criteria is presented here:

    - A 9 foot by 18 foot parking stall dimension to provide adequate room for users to load and unload baggage;

- A floor-to-floor height of 11.5 feet was established to improve overall visibility and user comfort. A floor-to-floor height of 13.5 feet was established for the rental car level;

- Due to the large peak volumes of traffic that occur in an airport operation, an express ramp solution determined to best needs the needs of the users of the facility.

Our team of consultants looks forward to reviewing this project with you and the Planning Board. Please let us know if there are any questions that arise during the review process.

Very truly yours,

DOMENECH HICKS & KROCKMALNIC, INC.

Arnold M. Krockmalnic, AIA
Vice President

Enclosures

cc: Paul Bradbury, P.E., Portland International Jetport
Jeffrey Preble, P.E., Dufresne-Henry
Richard Kinnell, AIA, Rich and Associates

Site Review Pre-Application
Multi-Family/Attached Single Family Dwellings/Two-Family Dwelling or Commercial Structures and Additions Thereto

In the interest of processing your application in the quickest possible manner, please complete the Information below for Site Plan Review

Note**If you or the property owner owes real estate or personal property taxes or user charges on ANY PROPERTY within the City, payment arrangements must be made before permits of any kind are accepted.

Portland International Jetport	**January 9, 2001**
Applicant	Application Date
1001 Westbrook Street, Portland, Me 04102	**Phase I Parking Garage/Attached**
Applicant's Mailing Address	Project Name/Description
Dufresne-Henry, Inc.	**1001 Westbrook Street, Portland, Me 04102**
Consultant/Agent	Address of Proposed Site
775-3211/775-6434	**199-A-1, Unit 16**
Applicant/Agent Daytime Telephone and FAX	Assessor's Reference, Chart #, Block, Lot #

Proposed Development (Check all that apply) ☒ New Building ☐ Building Addition ☐ Change of Use ☐ Residential ☐ Office ☐ Retail ☐ Manufacturing ☐ Warehouse/Distribution ☐ Other (Specify) **New Parking Garage, loop road, utility relocation**

5 Story Parkung Garage, 88,492 sf +/-	**1035.25**	**Airport Business Zone**
Proposed Building Square Footage and/or # of Units	Acreage of Site	Zoning

You must include the following with your application

1) A copy of your Deed or Purchase and Sale Agreement
2) 9 sets of Site Plan packages containing the information found in the attached sample plans and checklist.

(Section 14-522 of the Zoning Ordinance outlines the process, copies are available for review at the counter, photocopies are $ 0.25 per page)

I hereby certify that I am the Owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if an approval for the proposed project or use described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this approval at any reasonable hour to enforce the provisions of the codes applicable to this approval.

Signature of Applicant:	Date: 1/9/01

Site Review Fee: Major $500.00 Minor $400.00

This application is for site review ONLY, a Building Permit application and associated fees will be required prior to construction.

PORTLAND INTERNATIONAL JETPORT
PHASE ONE PARKING GARAGE
PLANNING BOARD SUBMITTAL

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PORTLAND INTERNATIONAL JETPORT
PHASE ONE PARKING GARAGE
PLANNING BOARD SUBMITTAL

Table of Contents

Section 1

PROJECT DESCRIPTION

Introduction

Growth at the Portland International Jetport has resulted in a shortage of sufficient parking spaces due to increased enplanements and boardings. This shortage was documented in the Conceptual Needs Study prepared by Walker Parking Consultants for the city of Portland in March 1999. This study identified both long and short term perking requirements at the Jetport based on current enplanements and estimated future enplanements. The increase in enplanements has precipitated an immediate need for additional parking in the form of a parking garage with approximately 1,200 cars.

In September 2000, Domenech, Hicks and Krockmalnic in association with Rich and Associates, and Dufresne-Henry completed a Parking Master Plan that recommended a three phase plan aimed at addressing parking needs for the next twenty year period. This Parking Master Plan was presented to the City Planning Board on September 26, 2000. The immediate need for available parking spaces has prompted the city of Portland and the Portland International Jetport to undertake the proposed Phase I parking improvements. The Phase I improvements will include the following:

- Construction of a new 1,480 +/- car parking garage,
- Construction of a new 7,500 square foot Consolidated Car Rental Facility (CCRF),
- A new loop road that will circle the new garage and create an infield area where future garage expansions will take place,
- Relocation of numerous utilities, including primary electrical and telephone service to the facility,
- Construction of a 2,050 square foot Parking Management Office,
- A recessed level of the garage set aside for rental car operations,
- An overpass structure that will carry traffic on the loop road over the ramp for drop-off and returns for the rental car operation,
- Several retaining walls achieve grade separation, and
- Planting of a hundred trees along the south side of Jetport Drive to provide additional visual buffers between the garage and the surrounding area.

The Phase I improvements are aimed at accomplishing the following:

- Relieving parking congestion for the next 5 to 10 years,
- Optimizing car rental operations,
- Improving passenger operations, and
- Optimizing vehicular operations.

To accommodate loss of parking during the construction, one or more temporary parking lots will be provided as part of the project. An off-site parking area is envisioned by airport personnel adjacent to the city's new snow dump off from Outer Congress Street.

Section 1

PROJECT DESCRIPTION

The Phase I Parking Garage, with a capacity of 1,480 cars, is anticipated to start construction in the spring of 2001 and is scheduled to be completed in the year 2002. The Phase I Parking Garage will be constructed in two separate construction contracts. At the completion of Phase I, the Jetport's total parking capacity will be approximately 3,180 parking spaces.

PROJECT COMPONENTS:

Components of the proposed project are discussed in further detail in the following text.

Phase I Parking Garage

The Phase I Parking Garage will be sited to the north of the existing parking garage structure, and immediately adjacent to it. This phase of the design will displace the Avis facility to a different site on the airport grounds. The garage will be a six-story structure, with one story being below grade and five stories above grade. This structure will have six parking levels (car rental level, grade level, and levels 3, 4, 5 and 6), the last of which will be roof parking. The lower (below grade) level of the garage will house all of the "ready and return" cars belonging to the rental car companies. At this location there will be a new Consolidated Car Rental Facility (CCRF), where the four car rental companies (Hertz, Avis, Budget, and National) will relocate from their present location inside the airport terminal (Alamo will continue to operate in the same manner and at the same location as in the present). The remaining five parking levels will become the long term parking for the airport, while the existing parking structure will continue to serve as a combination of short and long-term parking. Circulation inside the garage will be via a double spiral helix, which will project partially out from the northern garage façade.

The below grade rental car level will be serviced by three ramps. The renting public who returns the cars after looping in front of the terminal will use one ramp. There is a second ramp for the renting public exiting with the rental cars directly onto the loop road. The third ramp will be used exclusively by the rental car service personnel, who will take out the returned cars for cleaning and fueling to remote facilities, and will return the ready cars for rental.

The Phase I Parking Garage will feature two elevators (in one bank) and two stairs. One stair and the elevator bank will connect all parking garage levels as well as the Consolidated Car Rental Facility on the east side of the new facility. Another stairwell will be located on the west side of the structure.

The Phase I Parking Garage will communicate with the existing 3-story parking structure (which has 610 parking spaces) via short ramps at the grade level and at the roof level of the existing parking garage. The surface lot west of the new parking garage will be redesigned to include new entrances and a new toll plaza. In addition, a small building will be constructed to house the airport's parking management consultant. Entrance/exit to/from the Phase I Parking Garage will be through the surface lot to the west, as well as a direct entry located after passing the terminal drop-off lane on the east side of the new garage.

Section 1

PROJECT DESCRIPTION

Redesigned Surface Lot (West)

The Phase I surface lot, west of the new parking garage, will be redesigned to include new entrances and a new toll plaza. Entrance/exit to/from the Phase I Parking Garage will be through this surface lot, as well as a direct entry located after passing the terminal drop-off lane on the east side of the new parking garage.

As part of the Phase I Parking Garage, the west surface lot will also be expanded further north and west and will operate as long-term parking. It will feature a new exit plaza through which all cars will exit (with the exception of the rental cars that will use a dedicated customer exit ramp from the car rental level directly onto the loop road). Overall, the total surface parking capacity in this phase will be approximately 1,090 cars (inclusive of the Hertz car rental spaces), compared with the equivalent present total surface parking capacity of 1,067 cars on the project site (inclusive of all car rentals on site). Both these totals exclude an addition to the present employee parking lot of approximately 60 cars, that is expected to be completed in the year 2000. (Note: No off-site parking is included in the above numbers.)

Thus, the overall gain in parking spaces (surface and garage) in Phase I Parking Garage will be approximately 1,503 cars over the existing conditions.

Loop Road

The new loop road will be constructed as part of the Phase I improvements and will preserve a good portion of the existing roadway configuration. Most of the airport's parking facilities are scheduled to be located inside this loop road, including the Phase I Parking Garage, the expanded west surface lot, and the new toll plaza. The loop road will also serve a secondary baggage claim area loop, which will in a in its final implementation, incorporate spaces for pick-up/loading of baggage, spaces for taxis, and staging areas for buses, vans and limousines. Off this secondary loop a new access to the control tower will be provided in a future phase. The new portions of the loop road will have a 2-lane, 26 ft.-wide configuration.

The September 2000 Master Plan envisioned an integrated transportation center between the current baggage claim area and the fire station. In the airport facility master plan, the fire station will be relocated to the south of the airfield in the future. Until this is completed, the envisioned transportation center cannot be fully implemented. In Phase I of the parking garage a new baggage claim parking area will be constructed.

The new loop road will function as a thoroughfare with a one-way counter clockwise pattern as it currently operates.

Section 1

PROJECT DESCRIPTION

Relocated Utilities

Before construction of the Phase I Parking Garage and loop road can begin, a large amount of existing utilities will need to be relocated. The affected utilities are: water, sanitary sewer, storm sewer, fire alarm and cable service, telephone service, electrical service, and natural gas. All utilities in the proposed Phase I garage area must be relocated prior to starting construction of the new structure.

Navigable Airspace

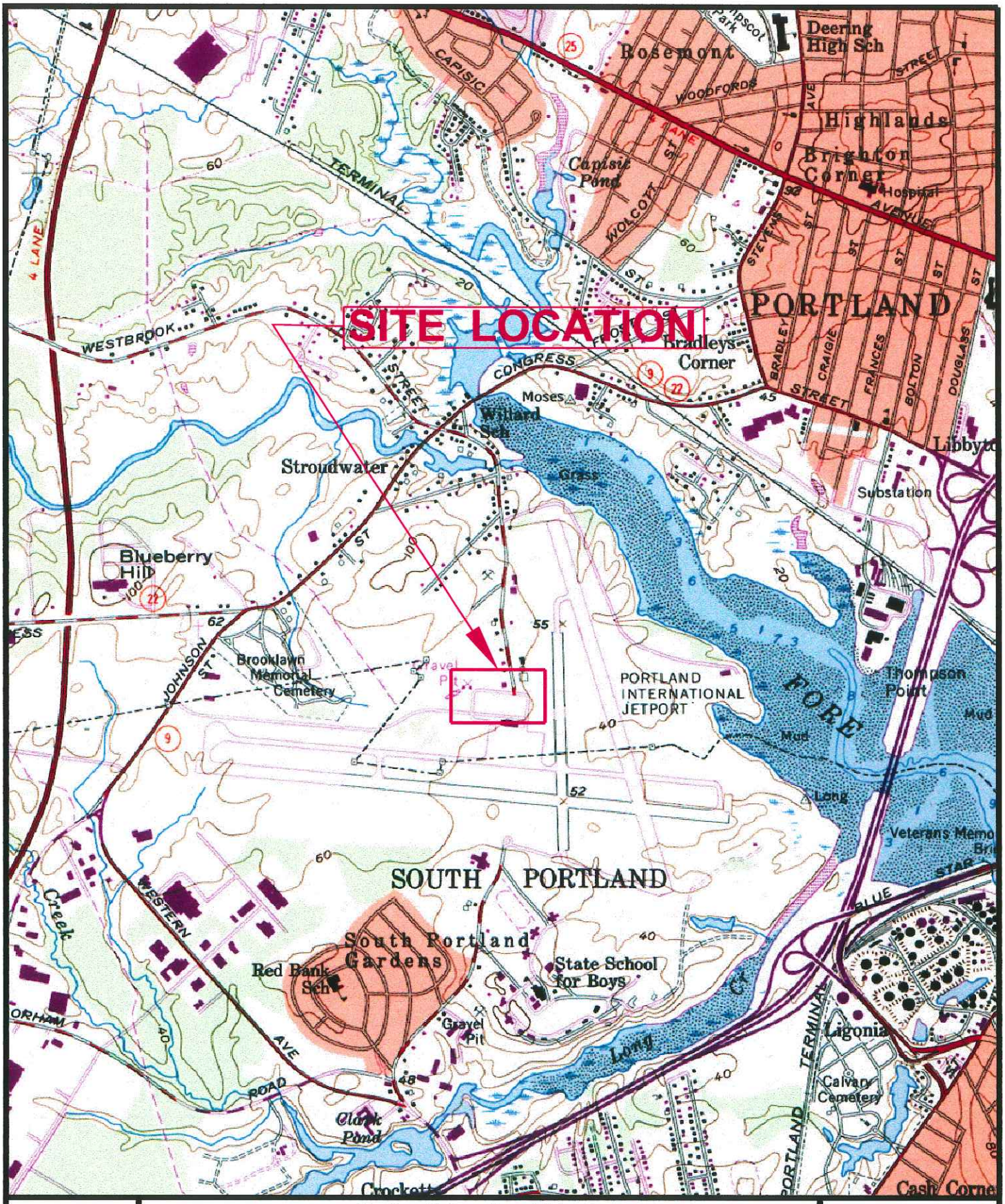
The Phase I Parking Garage will be constructed in compliance with applicable Federal Aviation Regulations (FAR Part 77 - Objects Affecting Navigable Airspace, Control Tower Line of Sight, FAA Form 7460-1 - Notice of Proposed Construction or Alteration). The FAA form is being submitted at the same time as the Planning Board Application.

Project Phasing

As noted previously, the Phase I Parking Garage will be constructed in two construction contracts. The first contract will involve construction of the utility relocations and a portion of the new loop road. During part of this construction contract, traffic will be routed onto Westbrook Street and onto Jetport Drive. This will allow certain construction activities to take place in the vicinity of the existing loop road. At the completion of this contract, traffic will continue to flow from the terminal to Westbrook Street and onto Jetport Drive.

The second construction contract will involve the Phase I garage, west surface lot modifications, and the remaining new road network. This contract will not start until the first contract is complete. Traffic will continue to move in the manner outlined above, until the second construction contract is completed in 2002.

The following sections provide backup and supporting documentation as required by the city of Portland site plan application.

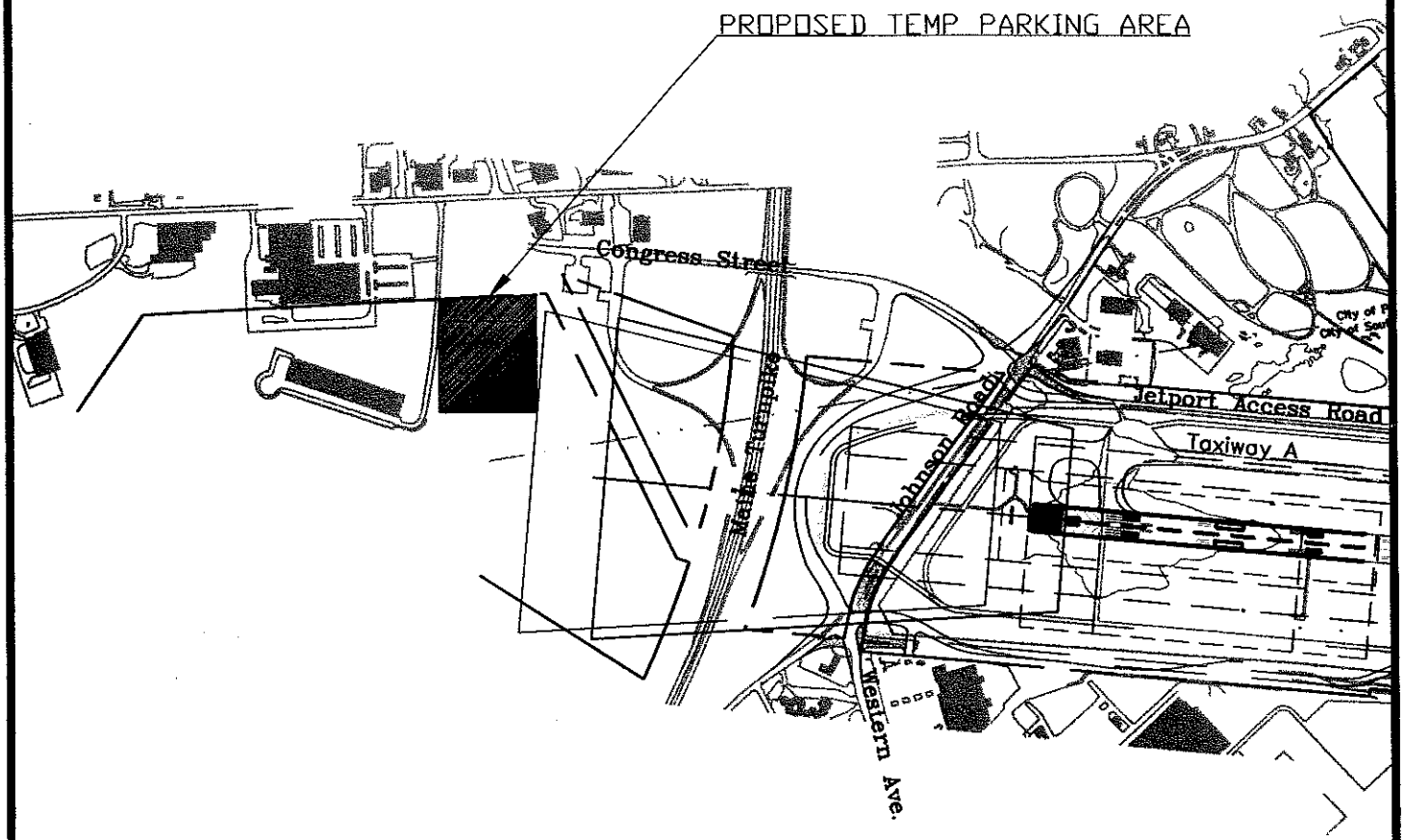


Portland International Jetport

SITE LOCATION MAP - PHASEI PARKING GARAGE

January 9, 2001

Dufresne-Henry



1000 0 500 1000 2000

Portland International Jetport

TEMPORARY PARKING LOCATION

January 9, 2001

Dufresne-Henry

Section 2

PROJECT DRAWINGS

Drawing List:

A complete listing of the drawings required for this project is included for reference. The list is broken down between Planning Board Submittal, Contract 1, and Contract 2. All pertinent drawings required for Major Site Plan Approval are included herein.

	CAD FILE	DRAWING NO.	DWG TITLE	SCALE	Responsible	Construction Contract Requirements: Contract 1 (Blue)	Contract 2 (Yellow)	Planning Board
	GENERAL DRAWINGS				DHK			
1	A0-0	A0-0	Cover Sheet	NA				
2	A0-1	A0-1	List of Drawings, Abbreviations, Symbols and Notes	NA				
	SURVEY DRAWINGS - EXISTING CONDITIONS (Note: include Temporary Parking Lot)				D-H			
		(INCLUDED IN CIVIL SITE DRAWINGS)						
	CIVIL ENGINEERING DRAWINGS (Note: Include Temporary Parking Lot)				D-H			
			CIVIL SITE:					
1	C1-1	C1-1	Overall Site Plan			Y	Y	Y
2	C1-2	C1-2	Existing Conditions Plan			Y	Y	Y
3	C1-3	C1-3	General Layout Plan			Y	Y	Y
4	C1-4	C1-4	Construction Phasing Plan			Y	Y	Y
5	C1-5	C1-5	Construction Phasing Plan			Y	Y	
6	C1-6	C1-6	Site Grading Plan			Y		Y
7	C1-7	C1-7	Site Grading Plan			Y		Y
8	C1-8	C1-8	Utility Relocation Plan			Y		Y
9	C1-9	C1-9	Gravity Sewer Plan			Y		Y
10	C1-10	C1-10	Gravity Sewer Profile			Y		
11	C1-11	C1-11	Miscellaneous Civil Details			Y		Y
12	C1-12	C1-12	Water Details			Y		Y
13	C1-13	C1-13	Wastewater Pump Station Plan, Section & Details				Y	Y
			UNDERDRAIN SYSTEM:					
			Underdrain Layout Plan				Y	
			Groundwater Pumps Station(s) Details				Y	
			ROADWAY:					
14	C1-14	C1-14	Roadway Plan - Horizontal Alignment			Y	Y	Y
15	C1-15	C1-15	Baggage Claim Area Plan			Y		Y
16	C1-16	C1-16	Roadway Profile - Loop Road			Y	Y	Y
17	C1-17	C1-17	Profiles - Entrances & Exits				Y	Y
18	C1-18	C1-18	Roadway Cross-Sections - Loop Road			Y		
19	C1-19	C1-19	Roadway Cross-Sections - Loop Road			Y		
20	C1-20	C1-20	Roadway Cross-Sections - Loop Road			Y		
21	C1-21	C1-21	Roadway Cross-Sections - Loop Road			Y		
22	C1-22	C1-22	Roadway Cross-Sections - Loop Road			Y		
23	C1-23	C1-23	Roadway Cross-Sections - Loop Road			Y		
24	C1-24	C1-24	Roadway Cross-Sections - Loop Road			Y		
25	C1-25	C1-25	Roadway Cross-Sections - Loop Road			Y		
26	C1-26	C1-26	Roadway Cross-Sections - Loop Road				Y	
27	C1-27	C1-27	Roadway Cross-Sections - Loop Road				Y	
28	C1-28	C1-28	Roadway Cross-Sections - Entrances & Exits				Y	
29	C1-29	C1-29	Roadway Cross-Sections - Entrances & Exits				Y	
30	C1-30	C1-30	Roadway Cross-Sections - Entrances & Exits				Y	
31	C1-31	C1-31	Roadway Cross-Sections - Entrances & Exits				Y	
32	C1-32	C1-32	Roadway Notes, Typical Sections & Details			Y	Y	Y
			OVERPASS STRUCTURE:					
33	C1-33	C1-33	Abutment No.1 Footing				Y	
34	C1-34	C1-34	Abutment No.2 Footing				Y	
35	C1-35	C1-35	Abutment No.1 Plan and Elevation				Y	
36	C1-36	C1-36	Abutment No.2 Plan and Elevation				Y	
37	C1-37	C1-37	Abutment Details				Y	
38	C1-38	C1-38	Deck Plan and Typical Section				Y	
39	C1-39	C1-39	Superstructure Details I				Y	
40	C1-40	C1-40	Superstructure Details II				Y	
41	C1-41	C1-41	Superstructure Details III				Y	
42	C1-42	C1-42	Bridge Railing Layout				Y	
43	C1-43	C1-43	Reinforcing Sheet				Y	
44	C1-44	C1-44	Reinforcing Sections				Y	
45	C1-45	C1-45	Miscellaneous Details				Y	
46	C1-46	C1-46	Retaining Wall Elevation and Section			Y		
47	C1-47	C1-47	Retaining Wall Elevation and Section			Y		
			TEMPORARY PARKING LOT:					
48	C1-48	C1-48	Existing Conditions Plan			Y		
49	C1-49	C1-49	Site Grading Plan & Drainage Plan			Y		
50	C1-50	C1-50	Proposed Parking Lot Plan, Section & Details			Y		
			EROSION CONTROL:					
51	C1-51	C1-51	Erosion & Sedimentation Control Plan			Y	Y	Y
52	C1-52	C1-52	Erosion & Sedimentation Control Details			Y	Y	Y
53	C1-53	C1-53	Stormwater Pre-Development Plan					Y
54	C1-54	C1-54	Stormwater Post-Development Plan					Y
55	C1-55	C1-55	Stormwater Details			Y	Y	Y
	SITE DEMOLITION PLANS				D-H			
		(INCLUDED IN CIVIL SITE DRAWINGS)						
	LANDSCAPING PLANS				D-H			
	L1-1	L1-1	Landscaping Plan				Y	Y
	L1-2	L1-2	Landscaping Details				Y	Y
	ARCHITECTURAL DEMOLITION PLANS				DHK			
1	D0-0	D0-0	Demolition General Notes				Y	
2	D0-1	D0-1	Existing garage demolition plan	1/16"			Y	
	ARCHITECTURAL PLANS				DHK			
1	A1-0	A1-0	Site Plan	1/40"			Y	Y
2	A1-1	A1-1	First (CRF) Level Floor Plan	1/16"			Y	Y
3	A1-2	A1-2	Second (Ground) Level Floor Plan	1/16"			Y	Y
4	A1-3	A1-3	Third Level Floor Plan	1/16"			Y	Y
5	A1-4	A1-4	Fourth Level Floor Plan	1/16"			Y	Y
6	A1-5	A1-5	Fifth Level Floor Plan	1/16"			Y	Y

	CAD FILE	DRAWING NO.	DWG TITLE	SCALE	Responsible	Contract 1 (Blue)	Contract 2 (Yellow)	Planning Board
7	A1-6	A1-6	Sixth (Roof) Level Floor Plan	1/16"			Y	Y
8	A1-7	A1-7	Roof Canopy Plan	1/16"			Y	
9	A1-8	A1-8	First (CRF) Level Floor Plan Reflected Ceiling Plan	1/16"			Y	
10	A1-9	A1-9	Second (Ground) Level Floor Plan Reflected Ceiling Plan	1/16"			Y	
11	A1-10	A1-10	Third Level Floor Plan Reflected Ceiling Plan	1/16"			Y	
12	A1-11	A1-11	Fourth Level Floor Plan Reflected Ceiling Plan	1/16"			Y	
13	A1-12	A1-12	Fifth Level Floor Plan Reflected Ceiling Plan	1/16"			Y	
14	A1-13	A1-13	Sixth (Roof) Level Floor Plan Reflected Ceiling Plan	1/16"			Y	
15	A1-14	A1-14	Roof Canopy Plan Reflected Ceiling Plan	1/16"			Y	
	ARCHITECTURAL ENLARGED PLANS				DHK			
1	A2-1	A2-1	CRF Enlarged Floor Plan	1/8"			Y	
2	A2-2	A2-2	CRF Enlarged Reflected Ceiling Plan	1/8"			Y	
3	A2-3	A2-3	CRF Enlarged Roof Plan	1/8"			Y	
4	A2-4	A2-4	Ramp Enlarged Plan	1/8"			Y	
5	A2-5	A2-5	Ramp Enlarged Reflected Ceiling Plan	1/8"			Y	
6	A2-6	A2-6	Ramp Enlarged Roof Plan	1/8"			Y	
7	A2-7	A2-7	West Stair Enlarged Floor Plans, Reflected Ceiling Plans and Roof Plan	1/8"			Y	
8	A2-8	A2-8	East Stair & Elevator Enlarged Plans, Reflected Ceiling Plans and Roof Plan	1/8"			Y	
9	A2-9	A2-9	Partial Ground Level Enlarged Floor Plan	1/8"			Y	
10	A2-10	A2-10	Partial Ground Level Enlarged Floor Plan Reflected Ceiling Plan	1/8"			Y	
	ARCHITECTURAL BUILDING ELEVATIONS AND SECTIONS				DHK			
1	A3-1	A3-1	North & South Building Elevations	1/16"			Y	Y
2	A3-2	A3-2	East & West Building Elevations	1/16"			Y	Y
3	A3-3	A3-3	Cross Sections A-A & B-B	1/16"			Y	
4	A3-4	A3-4	Longitudinal Sections C-C & D-D	1/16"			Y	
5	A3-5	A3-5	CRF Cross Section E-E	1/8"			Y	
6	A3-6	A3-6	CRF Longitudinal Section F-F	1/8"			Y	
7	A3-7	A3-7	CRF Longitudinal Section G-G	1/8"			Y	
8	A3-8	A3-8	Ramp Longitudinal & Cross Sections H-H & I-I	1/8"			Y	
9	A3-9	A3-9	Roof Canopy Longitudinal & Cross Sections J-J & K-K	1/8"			Y	
	ARCHITECTURAL WALL SECTIONS				DHK			
1	A4-1	A4-1	Garage Wall Sections	3/8"			Y	
2	A4-2	A4-2	Garage Wall Sections	3/8"			Y	
3	A4-3	A4-3	West Stair Wall Sections	3/8"			Y	
4	A4-4	A4-4	East Stair Wall Sections	3/8"			Y	
5	A4-5	A4-5	CRF Wall Sections	3/8"			Y	
6	A4-6	A4-6	Ramp Wall Section	3/8"			Y	
	ARCHITECTURAL STAIR & ELEVATOR DETAILS				DHK			
1	A5-1	A5-1	Stair & Railing Details				Y	
2	A5-2	A5-2	Stair & Railing Details				Y	
3	A5-3	A5-3	Elevator Details				Y	
	ARCHITECTURAL DETAILS				DHK			
1	A6-1	A6-1	Miscellaneous Details				Y	
2	A6-2	A6-2	Miscellaneous Details				Y	
3	A6-3	A6-3	Miscellaneous Details				Y	
	ARCHITECTURAL INTERIOR FINISHES AND SCHEDULES				DHK			
1	A6-1	A7-1	Interior Elevations				Y	
2	A6-2	A7-2	Interior CRF Details				Y	
3	A6-3	A7-3	Room Finish & Door Schedules				Y	
	STRUCTURAL DRAWINGS GARAGE				Rich			
	STRUCTURAL DRAWINGS CRF, EAST STAIR & RAMP				Weidlinger			
	ELECTRICAL DRAWINGS				D-H			
1	E1-1	E1-1	Electrical Legend, Symbols, General Notes			Y	Y	
2	E1-2	E1-2	Site Electrical Riser Diagram			Y		
3	E1-3	E1-3	Parking Garage Electrical Riser Diagram				Y	
4	E1-4	E1-4	Site Lighting Layout			Y		Y
5	E1-5	E1-5	Site Power Layout			Y		Y
			Simulated Lighting Levels					Y
6	E1-6	E1-6	Garage Lighting and Power Plan - Level 1				Y	
7	E1-7	E1-7	Garage Lighting and Power Plan - Level 2				Y	
8	E1-8	E1-8	Garage Lighting and Power Plan - Level 3				Y	
9	E1-9	E1-9	Garage Lighting and Power Plan - Level 4				Y	
10	E1-10	E1-10	Garage Lighting and Power Plan - Level 5				Y	
11	E1-11	E1-11	Garage Lighting and Power Plan - Level 6				Y	
12	E1-12	E1-12	Garage Lighting and Power Plan - Electrical Room				Y	
13	E1-13	E1-13	Garage Lighting and Power Plan - Rental Car Offices				Y	
14	E1-14	E1-14	Lighting Fixture and Panel Schedules				Y	Y
15	E1-15	E1-15	Panel Schedules				Y	
16	E1-16	E1-16	Miscellaneous Electrical Details			Y	Y	
17	E1-17	E1-17	Miscellaneous Electrical Details			Y	Y	
18	E1-18	E1-18	Miscellaneous Electrical Details				Y	
	PLUMBING AND FIRE PROTECTION DRAWINGS				D-H			
1	P1-1	P1-1	Plumbing Legend & Schedules				Y	
2	P1-2	P1-2	Plumbing Details				Y	
3	P1-3	P1-3	Plumbing Plan - Car Rental Area				Y	
4	P1-4	P1-4	Plumbing Plan - Car Rental Area				Y	
5	P1-5	P1-5	Plumbing Partial Plans - Car Rental Area				Y	
6	P1-6	P1-6	Plumbing Plan - Parking Garage Drainage Upper Level				Y	
7	P1-7	P1-7	Plumbing Plan - Parking Garage Drainage Typical Level				Y	
8	P1-8	P1-8	Plumbing Plan - Parking Garage Drainage Ground Level				Y	
9	P1-9	P1-9	Plumbing Riser Diagrams				Y	
10	P1-10	P1-10	Plumbing Riser Diagrams				Y	
11	FP1-1	FP1-1	Sprinkler Plan - Car Rental Area				Y	

	CAD FILE	DRAWING NO.	DWG TITLE	SCALE	Responsible	Contract 1 (Blue)	Contract 2 (Yellow)	Planning Board
12	FP1-2	FP1-2	Standpipe Plan - Parking Garage				Y	
	MECHANICAL DRAWINGS				D-H			
1	M1-1	M1-1	HVAC Legend & Schedules				Y	
2	M1-2	M1-2	HVAC Details				Y	
3	M1-3	M1-3	HVAC Plan - Air Conditioning				Y	
4	M1-4	M1-4	HVAC Plan - Air Conditioning				Y	
5	M1-5	M1-5	HVAC Plan - Heating Piping				Y	
6	M1-6	M1-6	HVAC Plan - Heating Piping				Y	
7	M1-7	M1-7	HVAC Partial Plans - Mechanical Room				Y	
8	M1-8	M1-8	HVAC Partial Plans				Y	
	COMMUNICATION AND SECURITY DRAWINGS				D-H			
			(TO BE DETERMINED)					
	SIGNAGE & GRAPHICS DRAWINGS				DHK			
1	SG-1	SG-1	Site Signage Plan	1/40"		Y	Y	
2	SG-2	SG-2	First (CRF) Level Signage Plan	1/16"			Y	
3	SG-3	SG-3	Second (Ground) Level Signage Plan	1/16"			Y	
4	SG-4	SG-4	Third Level Signage Plan	1/16"			Y	
5	SG-5	SG-5	Fourth Level Signage Plan	1/16"			Y	
6	SG-6	SG-6	Fifth Level Signage Plan	1/16"			Y	
7	SG-7	SG-7	Sixth (Roof) Level Signage Plan	1/16"			Y	
8	SG-8	SG-8	Signage Schedule			Y	Y	
9	SG-9	SG-9	Signage Details			Y	Y	
10	SG-10	SG-10	Signage Details			Y	Y	
	PARKING EQUIPMENT DRAWINGS				Rich			

Section 3

TITLE RIGHTS OR INTEREST

Property Plan

The airport is required to maintain a property plan, known as an Exhibit A plan, showing all of the holdings and easements for the airport operations. The Exhibit A plan showing all of the Jetport properties is included as an attachment to this section. The Exhibit A plan shows a complete listing of all property holdings including the Book and Page references.

Deed Description:

The construction of the Phase I Parking Garage and associated site improvements will take place on airport property. A land transfer will be required for a small portion of the project near the Alamo Rental Car Facility. This is discussed further below. The deed for the portion of the property where construction will take place is included as an attachment to this section.

Property Impacts:

A small land transfer will be needed prior to construction. The loop road, sidewalk, and retaining wall off the northeast corner of the Phase I Garage will impact the Alamo property. The property transfer to the airport will need to be completed prior to construction taking place. The exact impact of the work on the Alamo property is currently being assessed. No other property impacts are anticipated.