PRELIMINARY UTILITY LOCATIONS
FOR
GATEWAY COMMONS
AND
OSCEOLA CORPORATE CENTER

Prepared for

THE CITY OF KISSIMMEE
WATER AND SEWER DEPARTMENT

Submitted by:

IVEY, HARRIS & WALLS, INC.
122 E. Colonial Drive
Orlando, Florida 32801
(407) 849-0362

July 6, 1992
July 6, 1992

Mr. Robert Pelham, Assistant Director
City of Kissimmee Water & Sewer Dept.
City Hall
P.O. Box 421608
Kissimmee, Fl 34742-1608

Re: Gateway Commons and Osceola Corporate Center
Water, Sewer, and Reclaimed Water Stubout Locations

Dear Mr. Pelham:

Attached please find the following:

Exhibit 1 - Preliminary layout, Gateway Commons, with preliminary sewer layout. This layout was only used to determine feasible invert elevations. We understand that the realignment of Michigan will move the entrance for the northwest loop road to somewhere in the vicinity of Manhole 17. Note that the presence of Mill Slough indicates that tract 8b will have to be served by another lift station to eliminate a gravity sewer wetlands crossing.

Exhibit 2 - Preliminary layout, OCC, with location data for stubouts shown.

Exhibit 3 - Preliminary layout, OCC, preliminary utility map, showing water and sewer master plan.

Exhibit 4 - OCC East Wastewater Flow Analysis, furnishing design information for Osceola Corporate Center east of 441.

Exhibit 5 - OCC West Wastewater Flow Analysis, furnishing elevation data on the proposed gravity sewer on Dart Boulevard west of 441. A complete flow analysis was not redone, since this design is roughly based on the proposed line sizing which has previously been determined as adequate.

Exhibit 6 - Gateway Commons Wastewater flow analysis, furnishing line sizes and proposed elevations for the Gateway Commons gravity sewer design.

Exhibit 7 - Preliminary lift station and force main sizing.

Exhibit 8 - Osceola Corporate Center Unit Flow Projections.
Exhibit 9 - Gateway Commons Unit Flow Projections.
### OCC EAST WASTEWATER FLOW ANALYSIS

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## OCC WEST WASTEWATER FLOW ANALYSIS

(Includes flows from Gateway Commons and OCC East plus 52,000 GPD off site)

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EXHIBIT 6
EXHIBIT 7

PRELIMINARY LIFT STATION SIZING EAST OF 441

Design Average Daily Flow:

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<th>Peaking Factor</th>
<th>Gallons/Minute Required</th>
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Attached:

- Hydraulic Analysis, Table A, both stations on
- Hydraulic Analysis, Table B, Gateway off
- Hydraulic Analysis, Table C, OCC East off

System Head Curves, OCC lift station
System Head Curves, Gateway lift station
### TABLE A
MANIFOLDED SYSEM PUMPING ANALYSIS FOR
OCC and Gateway Commons
Both Pumps on

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**Friction Headloss with OCC East = 150 GPM**

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**Friction Headloss with OCC East = 300 GPM**

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**Friction Headloss with OCC East = 450 GPM**

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## TABLE B
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OCC East Offf

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<th>(@ Plant)</th>
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OCC LIFT STATION

MOTOR INPUT KW

FLOW GPM

TOTAL HEAD FEET

HYDRAULIC EFFICIENCY

S = Risk of sedimentation at velocity below 2 ft/sec.

G C O N @ 850 GPM

G C - OFF

PERFORMANCE CURVES ARE BASED ON TESTS WITH CLEAR WATER AT AMBIENT TEMPERATURE.
PERFORMANCE CURVES ARE BASED ON TESTS WITH CLEAR WATER AT AMBIENT TEMPERATURE.
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0.794022

EXHIBIT 8
GATEWAY COMMONS TRACT FLOW PROJECTIONS

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Off Site 2000 gpd/acre 2000 26.25 52,500
Total From Gateway Commons Area 406,400

EXHIBIT 9