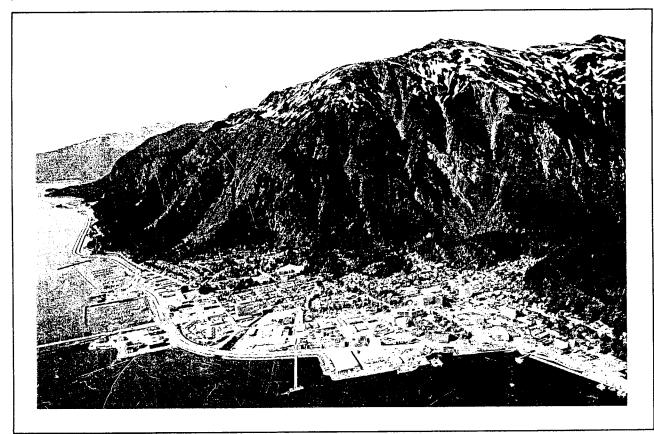
ALASKA LEGISLATIVE HALL

JUNEAU

ALASKA



SITE EVALUATION REPORT

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES SOUTHEAST REGION DESIGN AND CONSTRUCTION **BUILDING SECTION**

HEERY

HEERY PROGRAM MANAGEMENT, INC. ALASKA **SEPTEMBER 15, 1983**

September 15, 1983



State of Alaska
Department of Transportation
and Public Facilities
Division of General Design
and Construction
P.O. Box 1467
Juneau, Alaska 99802

Attention: Mr. Neil L. Atkinson

Legislative Hall

Dear Mr. Atkinson:

Heery Program Management, Inc. is pleased to submit the "Site Evaluation Report for the Alaska Legislative Hall".

Near the completion of the report, a building permit was issued for site preparation and foundation work on Lot 5, Block 6, the northeast corner of Site AB at West 3rd and Main Street. The timing of this development, which is to eventually house an eight story commercial office building, did not allow for its incorporation into this report. The implication of this new use will need to be carefully evaluated relative to Site A and AB.

With the submission of this document, our site evaluation portion of our contract is complete. We look forward to working with you on the programming effort of this project.

Sincerely,

HEERY PROGRAM MANAGEMENT, INC.

Johnston

JAJ/lgs

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INTRODUCTION

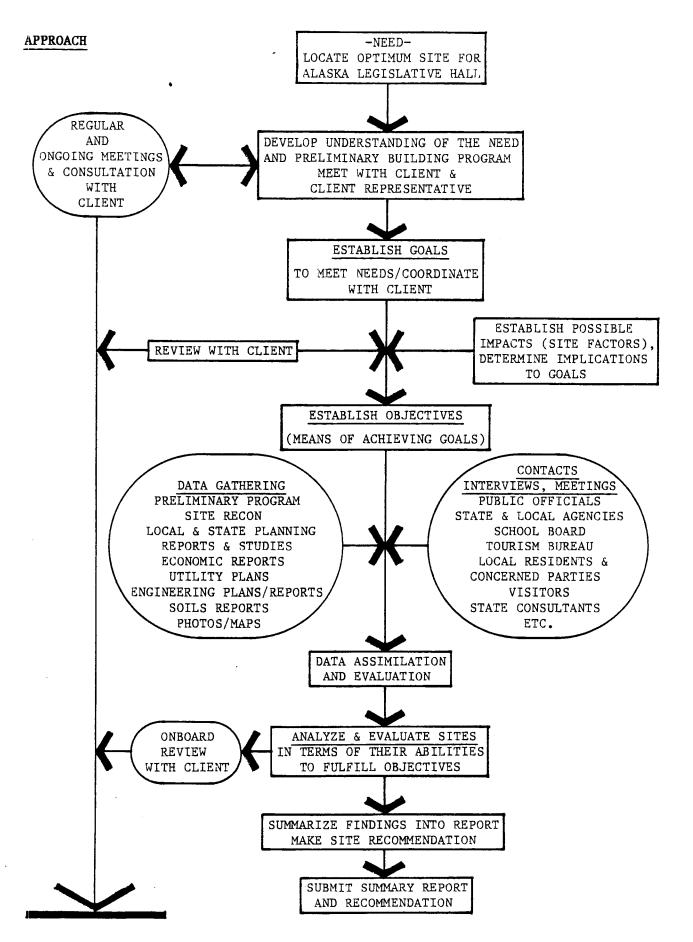
The Alaska Legislative Hall will house the Legislative and Executive Branches of the State, their staff, and related functions. Currently, Legislative and Executive offices and staff occupy several spaces and buildings in various locations throughout downtown Juneau. Many of these facilities are rented in addition to being functionally and physically inadequate to effectively carry out the business of the State. In addition, the former Federal and Territorial Building now serving as the State Capitol Building has been determined to be no longer adequate to serve or represent the Legislature and the people of Alaska.

The State has initiated plans and procedures necessary to implement the construction of a new Legislative Hall which will relieve current program inefficiencies and operational costs. This Site Evaluation Report is a summary of pertinent findings relative to determining the most suitable, valuable, and practical location to house the programmed functions of the facility. It was prepared for the State of Alaska, Department of Transportation and Public Facilities, Southeast Region, Design and Construction Building Section, by Heery Program Management, It is the first portion of the Alaska Legislative Hall Optimum Site Analysis and Detailed Program to be finally submitted in November, 1983. The second portion is to provide detailed architectural and engineering programs, recommendations for design, spatial requirements, standards and guidelines, building and materials standards, environmental systems, utility systems, and overall facility performance criteria.

Currently, the Department of Transportation and Public Facilities is under contract with Jim Steinman and Associates, a private consultant, to determine preliminary building requirements. Preliminary investigations indicate that the probable building program gross area will be between 200,000 and 250,000 square feet. The terms "Programmed Use" and "New Planned Use" refers to the Alaska Legislative Hall and the related facilities programmed within it. This report assumes a minimum optimum first floor area of 45,000 square feet.

Evaluation centers around providing the greatest amount of good and least amount of harm for the greatest number of people, and deals with key physical, cultural and economic concerns and human values.

Based on the analysis and evaluations of this report, the downtown Juneau location known as "Telephone Hill" (Site Ab) is recommended as the optimum site for the Alaska Legislative Hall.



GOALS AND OBJECTIVES

The following Goals and Objectives were established for the Alaska Legislative Hall siting:

GOALS

- 1. Determine the optimum site in Juneau to house the Legislative Hall and related functions while providing the greatest amount of good and the least amount of harm for the greatest number of people.
- 2. The site will have the optimum impacts, implications and opportunities associated with siting a facility of this nature and scale, and its required program elements.
- The site will have the most potential for energy efficiency and cost effectiveness for the programmed use.
- 4. The site will present the most favorable public image to users and visitors.

OBJECTIVES

Each Objective must in some way contribute to the Goals. The Objectives are the means by which the Goals are achieved and are stated in the report for each Factor.

Factors are defined as the potential impact, implications and opportunities presented by a site to the building and facilities program. They relate to physical, cultural, or economic characteristics or any combination of the three. Physical characteristics are defined as relating to material or physical science. Cultural characteristics are defined as values relating to life styles and their expression in the environment. Economic characteristics are costs.

These possible positive and adverse characteristics of the Factors are used to establish the values, and therefore, the criteria by which the Factors are evaluated. Each site is evaluated in terms of high, medial or low value through the criteria for each Factor. Criteria and values for each Factor may be found in Table I - Evaluation Key.

SITE FACTORS

- 1. Landform and Drainage
- 2. Geophysical
- 3. Hazards
- 4. Holding Capacity
- 5. Climate and Exposure
- 6. Energy
- 7. Infrastructure
- 8. Access and Circulation
- 9. Adjacencies
- 10. Staging Adaptability
- 11. Security/Control

- 12. Relations to Surroundings and Community Structure
- 13. Visual Orientation
- 14. Educational Opportunities
- 15. Environmental Impacts
- 16. Historical Implications
- 17. Psychological Implications/
 Impacts
- 18. Special Opportunities and Amenities
- 19. Adaptability to Land Use and Zoning
- 20. Ownership Implications

SITE LOCATIONS

It became apparent early in the site evaluation process that the optimum site location was close to the existing State, Legislative, and Executive offices, functions and support facilities. Early evaluations took into account locations from West Juneau to Douglas, and the entire Juneau area from downtown to Auke Bay (Figure 1). For nearly all Factors, values were significantly lower when locations further from existing Capital facilities were evaluated against the criteria. The further from the "State Capital Area", (see Figure 2) as defined in Juneau's Draft Comprehensive Plan and Coastal Management Program, the less efficient and less cost effective was the location. For example, transportation costs, time costs, movement of goods and services, communication, availability of support functions and facilities, security, traffic volumes, noise and air pollution, etc. are all significantly less efficient and less cost effective from the standpoint of Access and Circulation the further the location was from the existing Capital Area. All Factors relating to energy, transportation, time and utilities have significantly higher cost implications farther from the Capital Area including higher costs to employees. In addition, costs associated with these impacts

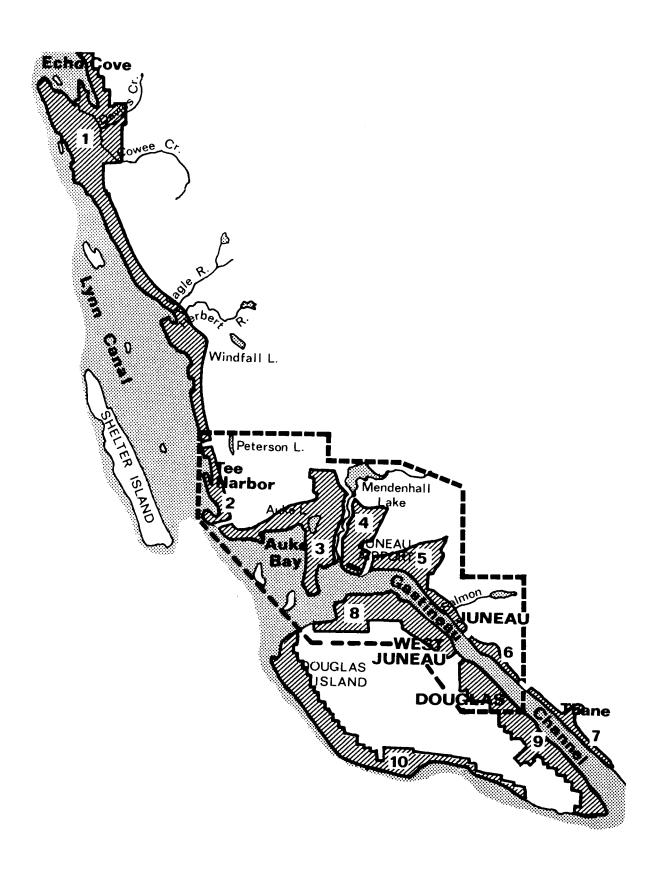
CITY AND BOROUGH OF JUNEAU

LEGEND:

---- LOCATION AREA BOUNDARY

WWW.SUBAREAS

- 1 ECHO COVE/EAGLE RIVER
- 2 LENA COVE/TEE HARBOR
- 3 AURE BAY/ WEST MENDENHALL VALLEY/MENDENHALL PENINGULA
- 4 EAST MENDENHALL VALLEY/AIRPORT
- 5 LEMON CREEK/SWITZER CREEK
- 6 JUNEAU
- 7 THANE
- 8 NORTH DOUGLAS
- 9 WEST JUNEAU/DOUGLAS
- 10 WEST DOUGLAS



FOR THE CITY AND BOROUGH OF JUNEAU, ALASKA DRAFT COMPREHENSIVE PLAN

LEGEND:

WINTER STONEOF

Copen Space

KY2 ITENTIAL

Low Density Residential

Medium Densily Residential

(High Density Kesidential) Downtown Mixed Use

COMMERCIAL

女人 女人 女子 女子

--- Collector

General Commercial

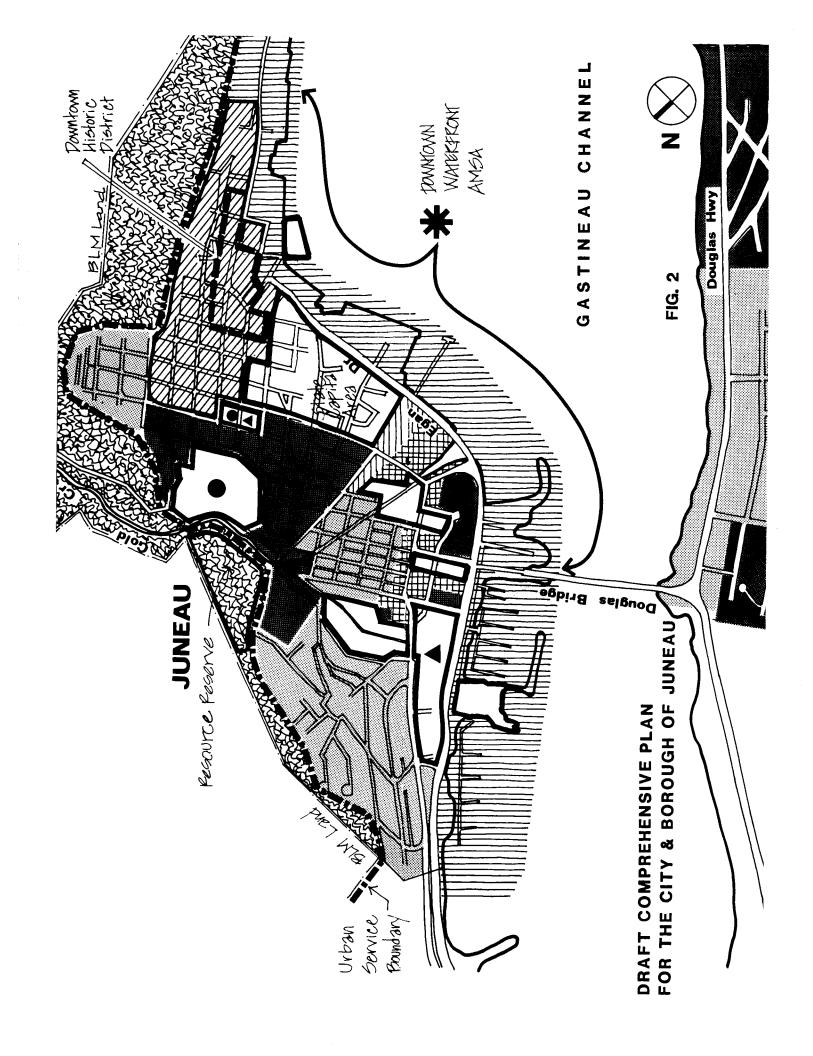
Tudvehrial

* Area Meritim Special Attention AMOA

PURIC FURIC

I Institutional and Public Use

★ Existing School * ● Existing Park* * Additional Proposed Schools and Parks Will be located prior to Plan Adoption.



are not a one-time cost. They are weekly, monthly or annual, and will be subject to economic escalation and future increases in service and employees and add unnecessary annual operational costs. Proximity to the existing Capital complex precludes these and many other costs associated with Factors impacting the site location.

There were five potentially optimum sites in proximity to the existing central Capital complex and related facilities. They were given the following letter designations for ease in reference:

```
Site A: Figure 4 ("Telephone Hill")
Site AB: Figure 4 ("Telephone Hill")
Site C: Figure 5 ("Sally's Kitchen")
Site D: Figure 6 (Capital School)
Site E: Figure 7 (Channel Apartments)
```

Site AB is one site consisting of both Site A ("Telephone Hill") and the perimeter property illustrated as Site B in Figure 4.

Each of these sites is significantly more energy efficient, functionally efficient and cost effective than more remote locations, and represent the closest, largest, most suitable and contigous areas to the existing government complex. Because they have certain similar characteristics, their evaluation is presented in detail by Factor to clearly illustrate their differentials. The impacts, implications and opportunities of each Factor for each site are presented in terms of their abilities to fulfill the Goals and Objectives.

SITE LOCATIONS

LEGEND:

STATE CAPITAL AREA

HISTORIC DISTRICT BOUNDARY

ZONING DISTRICT

SITE AREA

SOIL TYPE: BEDROCK

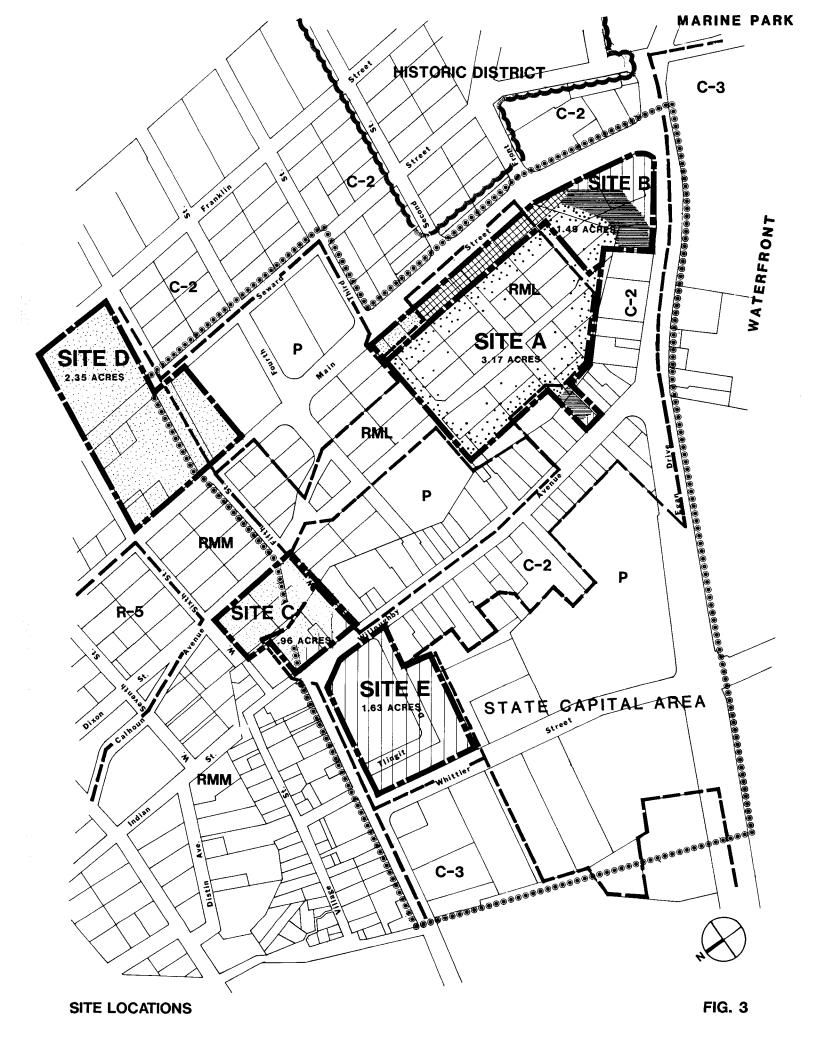
SOIL TYPE: BEACH DEPOSITS

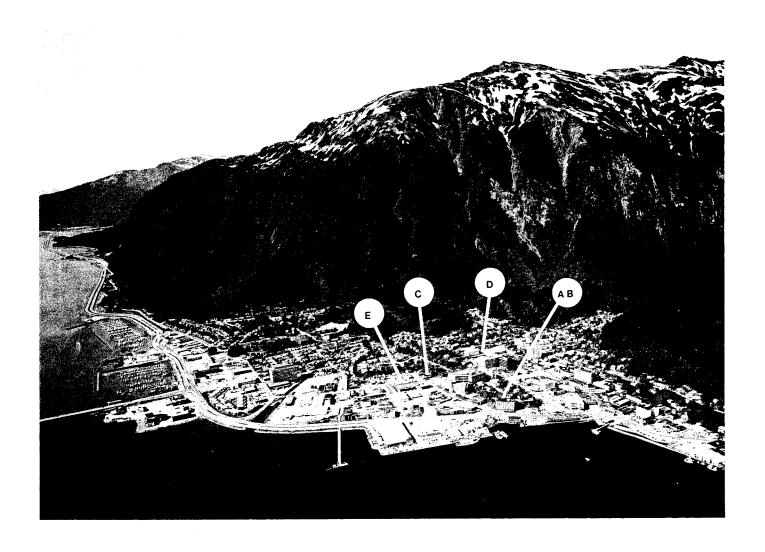
SOIL TYPE: ALLUVIAL

SOIL TYPE: UNCONSOLIDATED SEDIMENT

SOIL TYPE: FILL

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SITES A & B

LEGEND:

SITE AREA

TRAFFIC DIRECTION

RETAINING WALL

STAIRS

OWNERSHIP (LOT # OR OWNER)

POTENTIAL HIGH TRAFFIC CONGESTION (BOTH SIDES OF STREET)

STEEP GRADES

BLOCK NUMBER

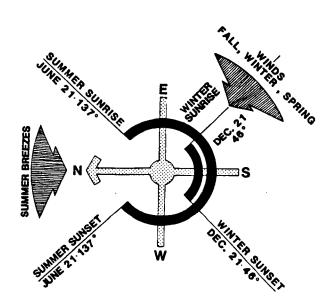
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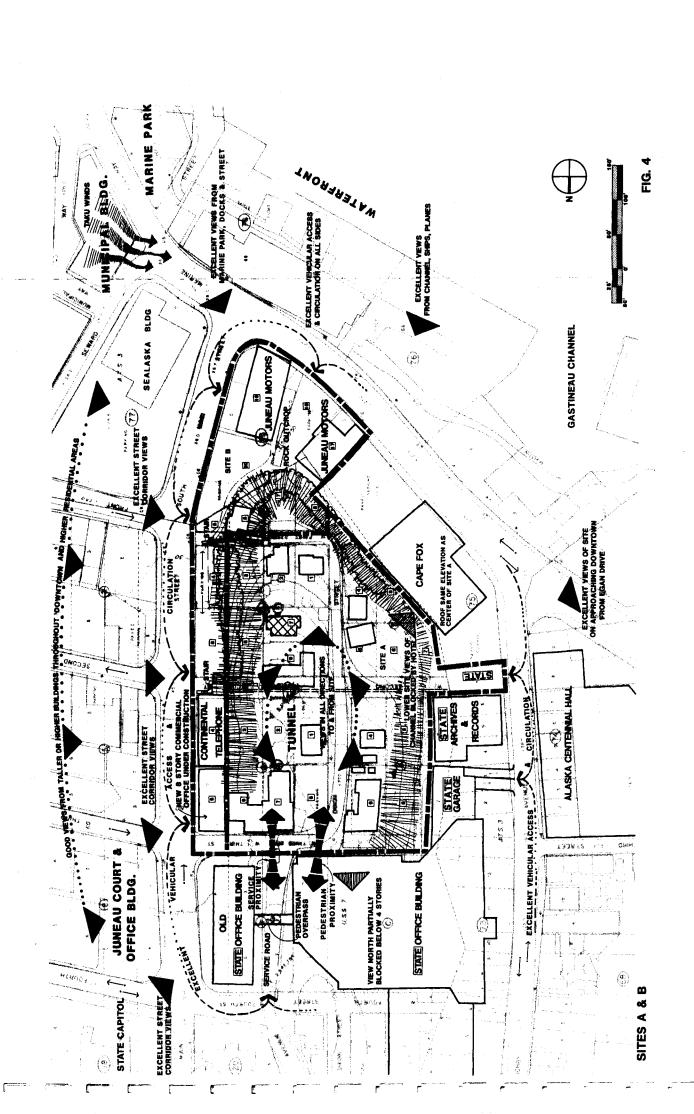
ALASKA HERITAGE RESOURCE SURVEY

EXCELLENT VIEW

VIEW BLOCKED







SITE C

LEGEND:

SITE AREA

TRAFFIC DIRECTION

RETAINING WALL

STAIRS

OWNERSHIP (LOT # OR OWNER)

POTENTIAL HIGH TRAFFIC CONGESTION (BOTH SIDES OF STREET)

STEEP GRADES

BLOCK NUMBER

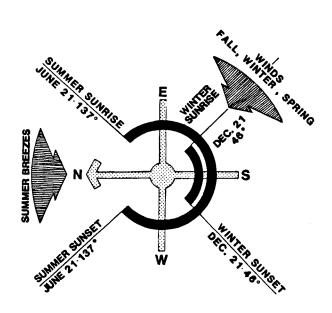
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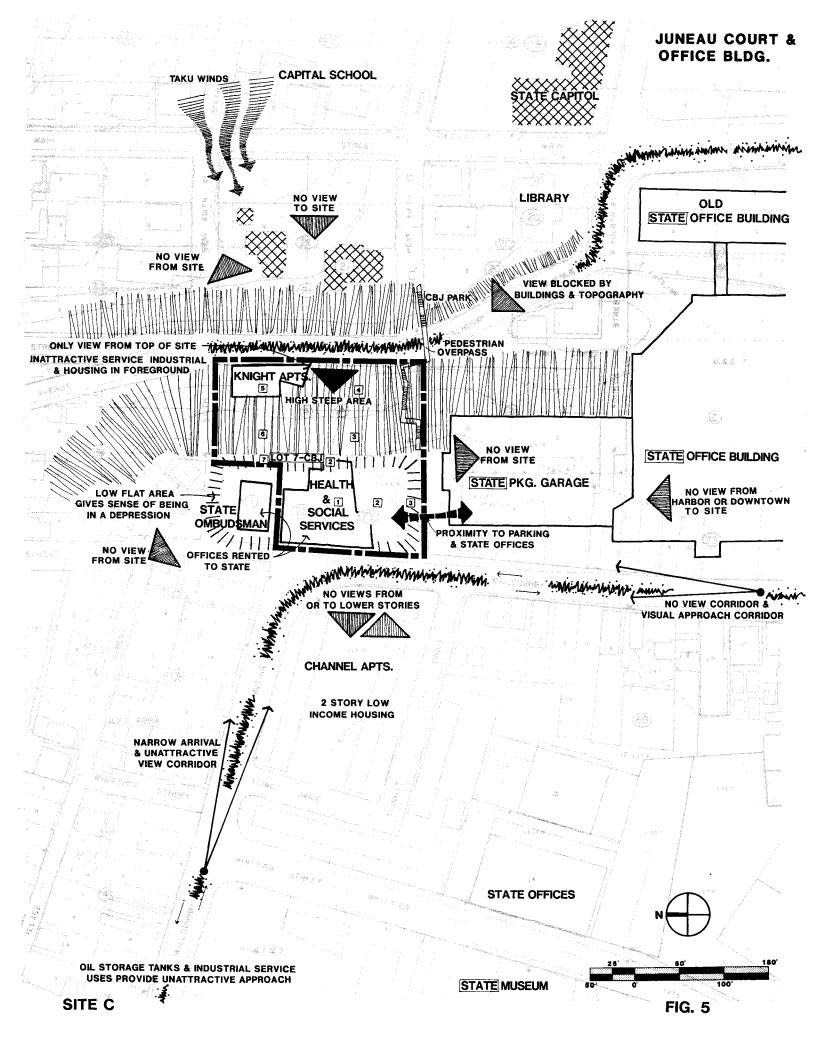
ALASKA HERITAGE RESOURCE SURVEY

EXCELLENT VIEW

VIEW BLOCKED







SITE D

LEGEND:

SITE AREA

TRAFFIC DIRECTION

RETAINING WALL

STAIRS

OWNERSHIP (LOT # OR OWNER)

POTENTIAL HIGH TRAFFIC CONGESTION (BOTH SIDES OF STREET)

STEEP GRADES

BLOCK NUMBER

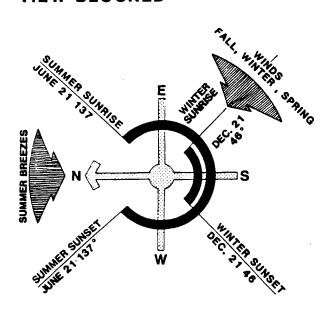
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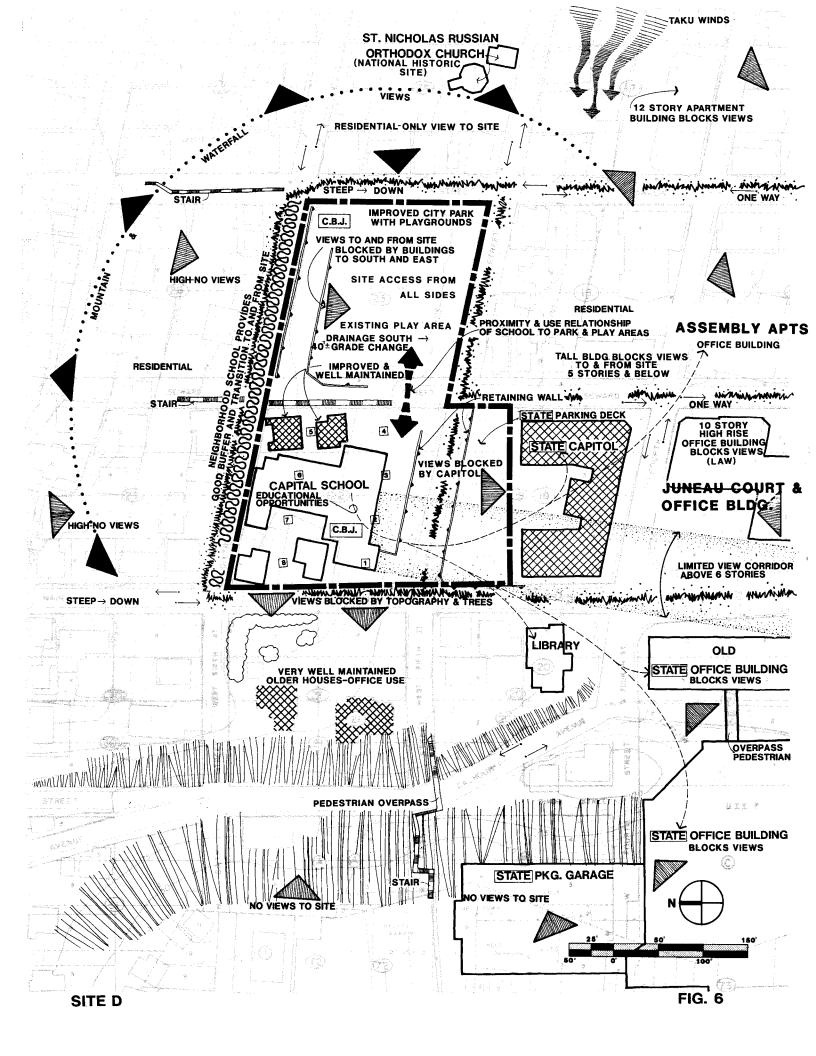
ALASKA HERITAGE RESOURCE SURVEY

EXCELLENT VIEW

VIEW BLOCKED







SITE E

LEGEND:

SITE AREA

TRAFFIC DIRECTION

RETAINING WALL

STAIRS

OWNERSHIP (LOT # OR OWNER)

POTENTIAL HIGH TRAFFIC CONGESTION (BOTH SIDES OF STREET)

STEEP GRADES

BLOCK NUMBER

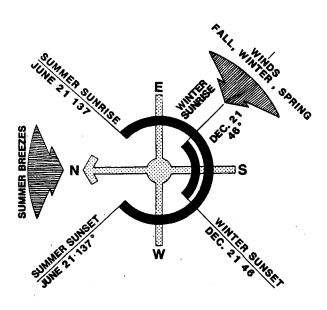
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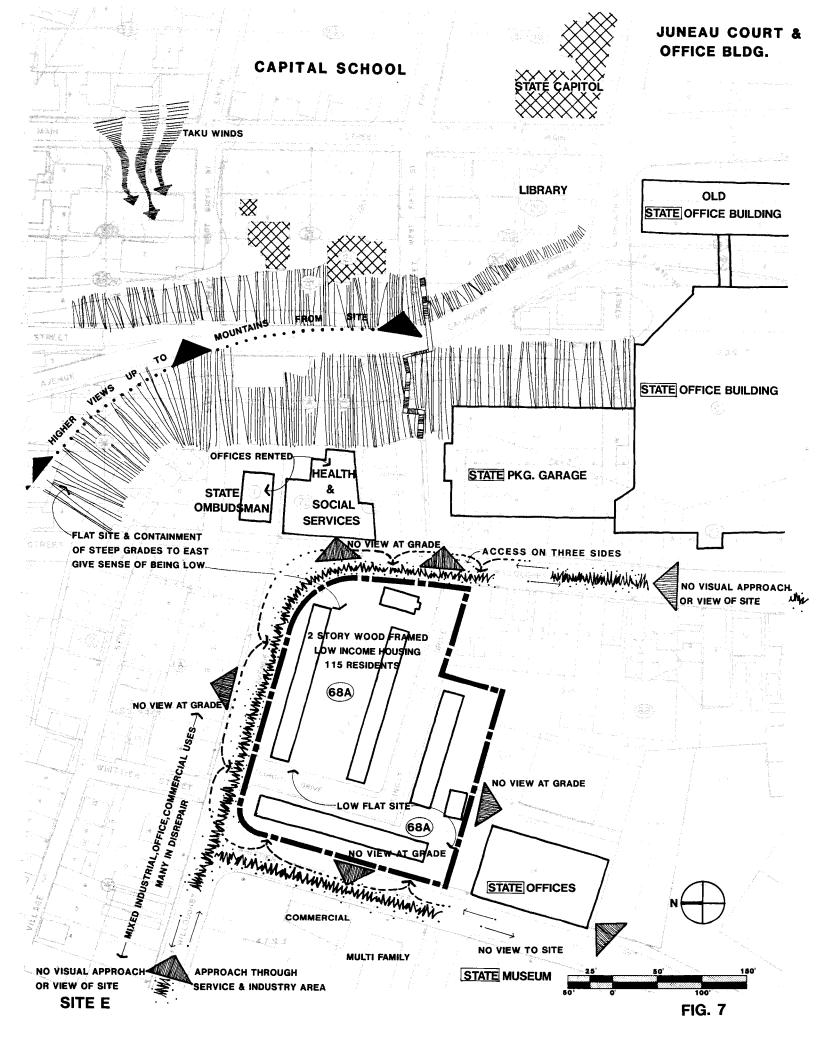
ALASKA HERITAGE RESOURCE SURVEY

EXCELLENT VIEW

VIEW BLOCKED







SITE FACTOR EVALUATIONS

1. LANDFORM AND DRAINAGE

DEFINITION

Optimum landform and drainage will present varying, interesting or unusual characteristics and opportunities which do not offer significant adverse implications to the building program. Optimum cultural implications consider whether or not it is psychologically lifting, pleasant in appearance, interesting, historically significant or provides educational opportunities.

Landform and drainage are expressed in terms of topography, elevation changes, the form they take, their location and orientation. The acceptability of steep slopes, ravines, etc., depend upon the building design and program - functional adjacencies, optimum first floor area and optimum building heights.

OBJECTIVE

Evaluate landform and drainage in terms of its ability to support the Programmed Use and Goals.

SITE A

- Promontory immediately visible from three sides with a 260° view angle to and from higher portions of the site.
- * Highly visible from most of downtown, waterfront, vehicular approaches and Douglas Island.
- Highly visible from docks, Gastineau Channel, ships, boats and floatplanes.
- * Higher elevations are at center of site, providing a superior drainage pattern, higher security and visibility.
- Positive drainage in three directions dispersing storm runoff loads.
- Excellent views provide visual connection to educational opportunities (geologic formations, ecosystems, Juneau history, etc. [see EDUCATIONAL OPPORTUNITIES and HISTORICAL IMPLICATIONS]).

- * Higher elevations, views and vistas are of significantly higher human value. This value is expressed through higher rents. The landform of Site A provides these elements of itself regardless of building heights.
- Interesting variation from flat, to rounded, to steep landforms occurs on three sides.
- Entire site forms a notable promontory providing excellent views and vistas, to and from site positive, uplifting image.

Conclusion: Site A has a high landform value.

SITE AB

- Inclusive of Site A, it has the same characteristics and considerations, in addition to those following:
 - The additional portion is predominantly flat except rock outcrops rising from 0 to 20 feet along sides abutting Site A.
 - Rock outcrop is the only interesting landform characteristic - portions maybe obscured or hidden, depending on building design.
 - Has good variation and interest in vertical configuration with convex bend at southern end.
 - Would probably require little grading.
 - May require some blasting quantity dependent on design.

Conclusion: Site AB has a high landform value.

SITE C

- Sixty percent of the site contains a very steep, high grade change (approximately 60 feet).
- On a flat plane on the east half, rising up to Calhoun Avenue - not a significantly interesting variation, is even, continuous and no variation in top elevations.
- Positive surface drainage although concentrating most of it into a single storm line.
- The uniform variation produced by the vertical drop and rock outcrop would likely be obscured by

building height and mass necessitated by the small site area.

- ° Requires little grading.
- Landform prevents daylighting (energy efficiency) lower stories (5 to 6).
- Landform could provide structural stability and lower wind loads and infiltration.
- Site and landform will tend to hide the Programmed Use (see VISUAL ORIENTATION), whereas usual psychological implications associated with the Planned Use might be those of prestige, nobility strength, character, etc.

Conclusion: Site C has a low landform value.

SITE D * Moderately steep incline slope along the extent of east and west edges; is uniform, and provides little interest or variation.

- Site is significantly terraced as a result of existing school, park and play area uses - it may require only minimal grading depending on building design and site development.
- Has positive surface drainage to south with access to storm lines on three sides of the site and down the center (Main, Fifth, Franklin and Seward Streets).

Conclusion: Site D has a medial landform value.

<u>SITE E</u> * Flat - no significant landform variation, interest or unusual characteristics.

- Surface drainage adequate no significant direction.
- Access to only a single storm main on two sides of the site following the Willoughby Avenue right-of-way.
- * Higher surrounding landform on north and east sides suggest an overbearing sense of inclosure and confinement.
- Requires little grading, assuming below-grade levels. Below-grade levels depend on building design - an unknown at this time.

Conclusion: Site E has a medial landform
value.

2. GEOPHYSICAL

DEFINITION

Subsurface materials, their characteristics and any significant cost implications.

An optimum site will not exhibit unusual or difficult characteristics requiring significantly higher costs for excavation or structural systems. It will not contain significantly fragmented rock, expansive soils, ledges, voids, significant moisture or water, a high watertable, underground streams or drainage channels.

Geophysical evaluation in preliminary project stages such as this deals with generally known conditions of soil types, general area characteristics, and cost implications. They are usually based on soils reports and other subsurface data generally available through local agencies and soils engineers.

OBJECTIVES

Evaluate the geophysical conditions of each site in terms of their ability to support the Programmed Use and Goals.

DISCUSSION

The following geophysical evaluations for the potential Legislative Hall sites are based on soil reports and generally known information about subsurface conditions available. There were no preliminary site borings taken for purposes of these evaluations. Extensive soil borings will need to be taken on the site selected. It is recommended that preliminary borings be taken and assessed relative to their implications before purchase of land.

SITE A * Entire site, except Lot 7 adjacent to State Archives and Records, is bedrock. Predominantly shallow to the ground surface, and in a few places at the surface.

- Lot 7 consists of alluvial soils which will not significantly affect the cost of the overall program.
- Bedrock is close to the surface and in places exposed implying shorter columns and greater cost efficiencies.
- Bedrock is consolidated and, as evidenced by State Office Building borings, is likely to have high or adequate bearing pressures.
- Rock blasting and/or ripping normally is expensive and can significantly add to construction costs. However, the amount of blasting will depend highly on architectural and engineering design as it relates the Programmed Use to the site configuration and landform.
- Bearing on bedrock is generally a relatively economic structural system. Large volumes of rock excavation, numbers of columns, and column spacing are a function of the architectural and engineering design and affects the cost efficiency of bearing on bedrock.

Conclusion: Site A has a high geophysical value.

SITE AB

- Inclusive of Site A, it has the same characteristics, in addition to the following:
 - Partially on bedrock in portions abutting Site
 - Site consists of three additional soil types: miscellaneous fill material, beach deposits, and alluvial deposits.
 - It is not anticipated that additional soil types will necessarily present serious problems or construction cost ineffeciencies, although higher structures not on bedrock may add to foundation costs.
 - Bearing pressures of fill, alluvial and beach deposits, are lower than bedrock and depending on architectural and engineering design may require either caissons, piers, spread footings, strip footings or a combination. Combinations of foundation systems usually increase construction costs.

Conclusion: Site AB has a medial geophysical value.

- SITE C Bedrock on east edge and top side to Calhoun Avenue; unconsolidated sediment through most of the site; and fill material on west edge.
 - The limited amount of bedrock is steep on the vertical drop, increasing costs of tying structural system to the site.
 - Ounconsolidated sediment may require removal and/or compaction - it is generally less cost effective than bedrock.
 - May require a combination of foundation systems which could increase costs.

Conclusion: Site C has a medial geophysical value.

SITE D * Consists of unconsolidated sediment implying lower bearing pressures and higher costs than bearing on bedrock.

Conclusion: Site D has a medial geophysical value.

- SITE E ° Is beyond the original Juneau shore line consisting of fill material.
 - * Fill material implies less economical foundation system than bedrock.
 - Potential low bearing pressures or excavation imply higher costs.

Conclusion: Site E has a medial geophysical value.

3. HAZARDS

DEFINITION

Susceptibility to flooding, avalanche, high tide, tidal wave, fire encroachment, landslide, falling timber or ice, noise, air or water pollution, or potentially dangerous nearby uses.

OBJECTIVE

Evaluate sites in terms of their susceptibilities to hazards.

SITES A, B, C, D & E all are susceptable to intermitent noise levels from float planes and ships horns in Gastineau Channel. The noise is proliferated by the containment and reflective characteristics of the surrounding mountains, and thus generally of similar levels throughout the downtown. Interior noise levels can be controlled to a degree by design and building materials. Because it is intermittent, controllable, and similar at all sites, noise levels are not considered a significant impact in establishing one site more valuable than another.

Fire encroachment refers to susceptibility to firespread from adjacent structures. Proximity to wood structures increase fire hazard. The fuel storage tanks on West Willoughby are a factor in nearby potentially dangerous uses from the standpoint of explosion.

HAZARD	SITES AFFECTED BY HAZARD
Flooding Avalanche High Tides or Tidal Wave Fire Encroachment Falling Timber or Ice Noise Air Water Nearby Potentially	None None None C & E None All Sites None None
Dangerous Uses (1)	C & E

(1) The fuel storage tanks.

SITES A, AB & D

No significant dangers associated with hazards. ("High" value denotes acceptability.)

SITE C & E

Potential exposure to fire and explosion hazards due to proximity of wood structures and fuel storage area on Willoughby Avenue. ("Medial" value denotes lesser acceptability.)

Conclusion:

Sites A, AB & D are of highest value in terms of being free of hazards.

Sites C & E are of medial value in terms of being free of hazards due to their proximity to the fuel storage area, and wood structures which represent.

4. HOLDING CAPACITY

DEFINITION

Land area holding capacity is the ability of a site to accommodate the building program including loading requirements. It takes into consideration all other site-specific factors such as topography, geophysical conditions, easements, utility lines within the site, natural resources, wildlife, historical or archeological sites, ravines, streams and drainage as they may apply to the Programmed Use.

An optimum site will accommodate the optimum first floor square footage with additional land remaining and will not contribute to cost or energy inefficiencies due to interior site-specific factors (See definition above).

OBJECTIVE

Evaluate the holding capacity of each site in terms of its ability to accommodate the Programmed Use and Goals.

SITE A * Will accommodate optimum first floor square footage including loading requirements with a significant amount of land area remaining.

- Interior site-specific factors do not significantly impact the ability of the site to accommodate the optimum square footage.
- Its larger size, relative to programmed use gross area requirements, provides flexibility for cost and energy efficiences.
- There are no significant adverse physical limitations that would imply unusual, difficult or costly design or construction (bedrock is generally considered more economical for structural systems See GEOPHYSICAL)
- Will require minimal blasting quantity depending on design.

Conclusion: Site A has a high holding capacity
value.

SITE AB Inclusive of Site A it has the same characteristics in addition to:

- Increased land area adding flexibility to design in terms of size and configuration of floor areas.
- Increased percentage of flatter land suitable and available for staging and other uses.

Conclusion: Site AB has a high value in terms of holding capacity.

SITE C

- * Flatter areas below on west side accommodate 40% of optimum first floor square footage, not including loading.
- Sixty percent of the site comprises a steep incline with rock outcrops - may necessitate significant excavation and/or blasting and rock removal.
 - Without rock excavation, building may require five to six stories in height before reaching optimum first floor square footage on single floor.
- * Has a probability of higher construction and operational costs due to smaller site and higher building height, (see ENERGY).
- Ground and lower floors may be smaller and functionally less efficient with higher operational costs.
- Blasting could be significant in increasing costs and impacts to existing State Office Building and garage depending on proposed design and engineering.

Conclusion: Site C has a low holding capacity value.

SITE D

- Accommodates minimum optimum first floor and loading requirements including, or not including, the two existing houses listed with the Alaska Heritage Resource Survey (both on Lot 5, Block 22).
- Over 50% of the site area could be left remaining for expansion, parking or other functions. However, estimated parking needs of 200 cars on a

single level would use the entire remaining 50% of the site.

Some grading costs would be incurred-significance depending on design.

Conclusion: Site D has a high land area holding capacity value.

SITE E * Accommodates minimum optimum first floor and loading square footage.

- Approximately 33% of site area could be left remaining for expansion, parking or other functions.
- Significantly higher costs could be incurred from foundation system.
- If there is significant excavation, additional costs could be incurred depending on design. (One floor below grade is one cost, two floors down, etc., is another cost. Generally the deeper, the higher the floor area square foot cost.)

Conclusion: Site E is of medial holding capacity value.

5. CLIMATE AND EXPOSURE

Juneau monthly normal temperatures range from 55° F. in July to 25° F. in January. The downtown area experiences minimum below zero readings an average of only one day per year. Monthly precipitation averages three inches from February to June, then increases to a maximum of over seven inches during October. November to February amounts tend to decrease to approximately three inches.

Snow accumulation downtown rarely stays long, however, accumulation can reach up to 38 inches, or more, as it did in 1972. Mean monthly snow ranges from one inch in October to a high of 25 inches in January; to four inches in April, with almost none in May.

The highest monthly average wind speed is 8.5 mph in March, with direction generally east to southeast, shifting northeasterly in July and August. Taku winds are strong

colder winds coming over the mountains from across the Juneau ice field. They are usually of brief duration and can be damaging.

OBJECTIVE

Evaluate the climate and exposure of each site in terms of its ability to support the Programmed Use and Goals.

DISCUSSION

Generally, the climate and weather patterns are the same for all Sites, A through E, although Site C has more protection from easterly winds and wind-driven precipitation. However, the size of Site C and proposed program square footage will require a structure that rises higher than this protection.

In consideration of the building program and building heights as they relate to site sizes, all sites have relatively equal levels of exposure to climate and are moderately affected. Sites A and AB, however, have an advantage to the others in that they are significantly larger and immediately adjacent to the larger State Office Building. A larger site can afford lower buildings, and therefore, less exposure. Being directly adjacent to another major facility, such as the State Office, may provide for the potential of several direct climate protected connections or energy efficient atrium space. Such a significant design decision could be justifiable only in the final design program and energy analysis of the Programmed Use.

Conclusion: Sites D & E have medial exposure value, and Sites A, AB and C have high climate value (See ENERGY).

6. ENERGY

DEFINITION

In site considerations, energy efficiency is the degree to which a site is able to use resources (natural and man-made) to provide passive and active support systems to the building program and its functions. Efficiency is the potential ability to adopt energy systems to necessary program functions in the most cost effective manner.

OBJECTIVE

Evaluate the energy efficiency and related cost efficiencies of each site in terms of its ability to support the programmed use and goals.

DISCUSSION

There are five energy related impacts to the Legislative Hall in the Juneau area:

- 1. Wind.
- 2. Solar Heating.
- Daylighting.
- 4. Adjacencies (time, energy and environmental costs associated with travel distances between facilities).
- 5. Infrastructure (availabililty of utilities).

Wind

In general, wind infiltration rates will be a significant energy factor thoughout Juneau due to large temperature differences between inside and outside. Because smaller sites require higher buildings, infiltration rates are higher due to the extended height. The extended height requires additional vertical transportation and larger mechanical equipment and space to circulate systems. Thus floor plans and square footages become less efficient. Each of these factors make energy consumption, energy costs, building costs and operational costs less efficient than larger sites which are be able to minimize the effects of wind and exposure through a lower building form.

Gusty winds known as "Taku Winds" often occur in Juneau when cold air masses from Canada flow over the ice fields and mountains to the east. They extend then through the channels to the northwest and southeast. Because the Taku Winds affect all the sites relatively equally, and therefore, do not present unequal structural cost implications, they are not considered a differential factor between Sites A, AB, D & E. Site C does, however, offer some protection from Taku and easterly winds for the lower five stories.

Solar Heating and Daylighting

Both solar heating and daylighting considerations are simultaneous throughout the year in Juneau. Total solar radiation averages 683 BTU's per square foot per day; less than half the

average of lower latitudes in the United States. However, only a small portion of solar radiation can be used for heating in similar sized buildings in the United States due to climate and cooling requirements. Therefore, a much larger than average percentage of available solar energy can be used in Juneau. Of that which is available, all can be used for both heating and daylighting and solar exposure becomes desirable.

Daylighting is not affected by cloud cover. In providing daylighting, cloud cover must be assumed in any latitude. However, it is affected by reflection and shielding. Mountains and adjacent structures can reduce daylighting potentials.

The sun travels through a 125 degree arc in June and only a 13 degree arc in December. Therefore, although exposure to the south is most important, exposure to the east and west is similarly important in Juneau. The greatest exposure to light is the best possible condition for solar heating and daylighting (See INFRASTRUCTURE, ACCESS AND CIRCULATION, and ADJACENCIES).

SITE A * Exposed to the greatest amount of available light due to site landform and topography (site height and shape) minimizing shading and shielding by adjacent buildings and nearby mountains.

Contains the largest land area available enabling a more energy efficient, cost effective, lower building form.

Conclusion: Site A has a high value in terms of energy efficiency.

SITE AB * Southerly and most buildable portion exposed to most of the available light.

Northern portion of site is less exposed to light due to topography, configuration and easterly orientation decreasing energy efficiency and cost effectiveness. (It is significantly shielded from solar exposure by Telephone Hill, adjacent buildings and mountains.)

Conclusion: Site AB has a high value relative to energy efficiency.

SITE C & E ° In a physical depression exposed to only a 90° solar arc, generally in a southwesterly direction.

- Both sites are shielded from much of the morning solar radiation and light by the Telephone Hill ridge and surrounding mountains during six months of the year, Site C significantly more.
- Site C will increase building height and construction costs, and decrease energy efficiency and operational efficiencies, increasing costs further.
- Site E will increase costs for movement of goods and services making it less energy and cost efficient due to greater travel distances to and from existing associated state facilities (See ACCESS AND CIRCULATION, AND ADJACENCIES).
- Site C will have partial protection from wind infiltration and wind loads. Although the lower 5 stories have potential easterly wind protection (pending building design and siting) the higher story produced by the smaller site and floor areas will not. It should be noted here that a lower building on a fully exposed site may have less wind load and infiltration than a higher narrower structure on extending above Site C. This again will be a function of design. Because this is an unknown at this time, Site C is given a slightly higher value with respect to potential wind loads and infiltration only.

Conclusion: Site C has a potential medial value in terms of energy efficiency, and Site E has a low value.

SITE D * Exposed to most of the available solar radiation and light.

- Shielding from adjacent buildings and nearby mountains is the greatest consideration in diminishing available solar radiation and light.
- Although the larger site provides the potential for a lower building form, energy efficiency and cost effectiveness, such aspects are diminished since the lower building form creates a greater potential of shielding the building from solar radiation and daylighting by nearby mountains and existing and future buildings.

Conclusion: Site D has of medial value in terms of energy efficiency.

7. INFRASTRUCTURE

DEFINITION

Infrastructure includes all utilities necessary to the functional requirements of the building program. They can involve availability and costs of providing water, sanitary sewer, storm sewer, electrical, gas, and communication services to the building program.

OBJECTIVE

Evaluate infrastructure availability at each site in terms of its ability to support the Programmed Use and Goals.

DISCUSSION

Electricity water, sewer, and communication connections are available at all sites. Detailed program information will indicate the demand necessary, however, preliminary indication are that existing sytems are capable of handling anticipated loads.

ALL SITES Because all sites are in close proximity to each other, and in the downtown area, there is no particular advantage of any one site over another relative to infrastructure. All necessary utilities are available and adequate.

SITES A & D Site A & D, however, provide some advantage in that utilities are available on at least three sides, thereby distributing loads into or from the existing systems, which would allow more flexibility in design, or more development potential before capacities are reached in individual lines, either on site or nearby.

Conclusion: Sites A, AB & D have a high value, and Sites C & E are of medial value in terms of available infrastructure.

8. ACCESS AND CIRCULATION

DEFINITION

The ability and means to access a site. An optimum site will be highly accessible through normal means of transportation without incurring unusually significant transportation or construction costs, and without causing significant or unmitigable traffic problems.

OBJECTIVE

Evaluate access and circulation to each site in terms of their ability to support the Programmed Use and Goals.

SITE A * Accessible from three sides by pedestrians (from State Office Building, Main Street, 2nd and 3rd Streets and Willoughby Avenue, although involving high steep steps on East); not

accessible from south.

- Very limited vehicular accessibility from one side (Main Street).
- Topography and surrounding uses on east, west and south sides require all vehicular access through State Office Ruilding Service area and access.
- General site location highly accessible by vehicle from major thoroughfares (primarily Egan Drive, secondarily Main Street) and public transportation.
- Existing tunnel through site may provide potential for pedestrian access or circulation to and/or through the site.
- In close proximity, central and highly accessible to existing State Capital Area, Capitol Building, and related facilities and services.
- Moderately accessible to and from downtown, professional offices, businesses, facilities and public due to surrounding use and topographic barriers.

Moderately accessible to visitors and tourists from docks and downtown requires climbing long high stairs up 'pedestrian' West 2nd and 3rd Streets.

Conclusion: Site A has a medial access and circulation value.

SITE AB

- In addition to all aspects of Site A, Site AB includes:
- Potential of eliminating steps and/or providing other non-step access such as ramps, elevators, etc.
- Increased accessibility to visitors and tourists from docks and downtown-direct access to both.
- Increased and direct accessibility to and from downtown facilities, offices, businesses and public.
- Increased vehicular accessibility or parking potentials along east and south perimeters.
- Increased pedestrian accessibility along east and south perimeters.
- Increased potential for more than one vehicular access point at State Office Building.
- Increased circulation potential around east and south perimeters improving potential congestion and flows.

Conclusion: Site AB has a high value relative to access and circulation.

SITE C

- Accessible by vehicles on two sides, from two separate streets (Willoughby and Calhoun Avenues).
- · Would have no through site circulation.
- Accessible to pedestrian traffic on three sides (Willoughby Avenue, Calhoun Avenue and State Office Building).
- Moderately accessible to Capital School, downtown, visitors, tourists and waterfront docks.

- There may be some potential of connection by adding two floors to the existing State parking garage adjacent to the site. Independent structural analysis would be needed before determining viability of connections over the garage. In any case, circulation down through the existing garage is not considered through site circulation.
- Moderately accessible by pedestrian to other existing State facilities due to distance and travel times.
- Will cause undesirable traffic volumes, congestion and noise loads on Willoughby Avenue and on Calhoun Avenue - Calhoun Avenue is a narrow, highly used, residential, cross-town thoroughfare.
- No vehicular circulation around site perimeter a long travel distance is necessary to get from one side of the site to the other.

Conclusion: Site C has a medial access and circulation value.

SITE D Relative to the other sites, it is least accessible by vehicular means due to distance from activity nodes, points of origin, and Egan Drive.

- Would bring significant vehicular traffic volumes and associated congestion, noise, air pollution, and parking problems into the surrounding residential neighborhood which has existing parking problems and narrow streets.
- The on-site programmed use has potential vehicular access on all sides at several levels resulting from topography and elevation change from north to south.
- Immediately accessible to existing State Capitol Building and moderately accessible to other existing State facilities due to distance and travel times.
- Moderately accessible to downtown, visitors, and waterfront docks.
- ° Circulation around all sides.

Conclusion: Site D is of medial value in terms of access and circulation.

SITE E * Accessible by vehicle on two sides of the site and from one street (Willoughby Avenue).

- Will cause the greatest increased traffic loads and congestion on Willoughby Avenue and at its two intersections with Egan Drive, which is Juneau's most heavily used major thoroughfare.
- Provides the least pedestrian and vehicular accessibility to downtown, visitors, waterfront docks, and Capital School by nature of its distance from these activity nodes and the physical barrier presented by "Telephone Hill".

Conclusion: Site E has a low access and circulation value.

9. ADJACENCIES

DEFINITION

The degree to which the building program is compatible with adjacent uses and how close the site is to necessary or useful support related functions or facilities.

OBJECTIVE

Evaluate the adjacencies of each site in terms of its ability to support the Programmed Use and Goals.

SITE A * Most centrally located to all necessary and useful support and related functions and facilities.

- It is compatible with existing surrounding uses on its west side.
- Adjacent southern and eastern uses provide unrelated and unattractive foreground for the Legislative Hall.
- It is not compatible with existing uses adjacent to its eastern and southern boundary (automotive sales, service, storage, and utility station).
- Closest to downtown although Site B to the east presents an access barrier.

Conclusion: Site A has a medial adjacency value.

SITE AB

- Inclusive of Site A, it is also most centrally located to all necessary and useful support and related functions and facilities.
- ° It is compatible with all surrounding uses.
- Closer to other related State facilities and functions.
- Closer to downtown and waterfront with direct access along the eastern and southern perimeter to both (no use barriers).

Conclusion: Site AB has a high adjacency value.

SITE C

- Moderately incompatible with adjacent uses and structures (low income multi-family housing, residential, commercial and office-industrial uses).
- ° Close to State Office Building.
- If an independent structural analysis of the adjacent State parking garage were to show potential for additional floors above the garage, adjacency and operational efficiencies may be realized. Possibilities of adding floors to the garage in conjunction with using Lots 4 and 5 (State owned) as potential connection may reduce building heights and increase operational efficiencies due to adjacencies. This would be a function of the future programming, architecture and engineering. It must also be noted that construction costs may not be reduced, and in fact could be increased.
- Moderately close to other State functions and facilities - is on farthest perimeter from related functions and facilities including downtown.
- Moderately close to downtown.

Conclusion: Site C has a medial adjacency value.

SITE D

- Moderately compatible with surrounding residential use.
- Moderately close to necessary or useful support and related facilities or functions including downtown.

Conclusion: Site D has a medial value in terms of adjacencies.

SITE E * Moderately incompatible with surrounding commercial, office and industrial type uses.

- ° Compatible with the existing State Office Building.
- Moderately distant to many other State facilities in the Capitol Building Area implying functional and operational cost inefficiencies.
- Most distant from downtown with "Telephone Hill" presenting a significant barrier.
- Is on farthest perimeter from related functions and facilities including downtown.

Conclusion: Site E has a medial adjacency value.

10. PHASING AND STAGING ADAPTABILITY

DEFINITION

The ability of a site to accommodate both phased development for future expansion, and a staging area for construction, while accommodating optimum first floor square footage and related program uses. On sites large enough to provide more than the optimum first floor area, phasing adaptability depends on uses and location of the first construction phase which is a function of design. Generally, the larger the remaining land area, the greater the phasing and staging adaptability and availability.

OBJECTIVE

Evaluate the phasing and staging adaptability of each site in terms of its ability to support the programmed use and goals.

SITE A * Has three times the amount of land area necessary to accommodate the program, leaving 60% for construction staging and phased future expansion.

- Area configuration is long and wide providing space for potential functional phasing.
- Perimeter portions have steep slopes not lending themselves to access for construction, delivery during construction, stock piling, etc.
- Limited construction access necessarily through and adjacent to State Office Building Service and access center.

Conclusion: Site A has a medial value relative to
phasing and staging adaptability.

SITE AB ° Inclusive of Site A, building coverage would be 23%, leaving 77% for future phases and construction staging.

Site configuration excellent with long narrow portion adjacent to Main Street lending itself to very efficient staging of construction, and delivery and storage of materials.

Conclusion: Site AB has a high value relative to phasing and staging adaptability.

SITE C Steep slope on east side does not permit optimum ground floor square footage.

- Site configuration is awkward both vertically and horizontally. In view of the site's small size, and high steep grades, construction staging and future expansion will be difficult and costly.
- Inclusion and use of Lots 4 and 5 due east of the state parking garage would increase site size, however, it is a continuation of the same high, steep slope. In addition, due to their size, narrow configuration and orientation, they would involve high construction costs. These lots, although providing a potential connection to the State Office Building, are narrow, increasing the akwardness of site configuration, and presenting marginal staging or future expansion potentials.

Conclusion: Site C has a low staging adaptability
value.

- SITE D * Fifty-five percent of site could be planned for other uses or future expansion and is adaptable to practical construction staging.
 - Site configuration provides a contiguous land area and lends itself to construction staging and future expansion.

Conclusion: Site D has a high phasing and staging adaptability value.

- SITE E Thirty-seven percent of site could be planned for other uses or future expansion and is adaptable to construction staging.
 - Site configuration provides a contiguous land area and lends itself to construction staging and future expansion.

Conclusion: Site E has a medial phasing and staging adaptability value.

11. SECURITY/CONTROL

DEFINITION

The ability of a site configuration, land form and location, to provide or assist in security and control of vandalism, control of public and employee access, and life safety.

OBJECTIVE

Evaluate the security/control of each site in terms of its ability to support the Programmed Use and Goals.

SITE A * Highly visible from most of downtown and waterfront.

- ° Close to downtown activity areas.
- Close to police and fire protection and facilities.
- Access and egress could be limited by taking advantage of steep rock outcrops surrounding base of site.

Conclusion: Site A has a high security and control value.

SITE AB ° Inclusive of Site A, it is highly visible.

- Close to police and fire protection and facilities.
- Close to downtown activity nodes.
- High visual exposure to public view.

Conclusion: Site AB is of high security and control value.

Moderately visible from west and is backed into the surrounding steep, high grade and buildings on three sides possibly preventing unwanted access on lower east side and desirable visual access pending building design.

- Of the five sites, it is the most remote from activity.
- ° Close to police and fire protection and facilities.
- Moderate to high potential for limiting access or egress because it is backed into other uses and the high steep grade to the east.

Conclusion: Site C has a medial security/control
value.

SITE D * Moderately visible from surrounding neighborhoods and higher buildings.

- Close to moderate activity node.
- Close to police and fire protection and facilities.
- Moderate to low potential for controlling access and egress through use of steep area on north side.

Conclusion: Site D has a medial security/control value.

SITE E * Moderately visible from higher areas to east and is otherwise not significantly visible except from site area itself.

Not close to significant activity node.

- Close to police and fire protection and facilities.
- No physical characteristics that lend themselves to limiting access or egreee.

Conclusion: Site E has a low security and control value.

12. RELATIONS TO SURROUNDINGS AND COMMUNITY STRUCTURE

DEFINITION

Relation to surroundings and community structures concerns compatibility of the programmed site use with local land use and planning and site surroundings, - functionally, visually and psychologically.

OBJECTIVE

Evaluate the relationship to surroundings and community structure of each site in terms of its ability to support the Programmed Use and Goals.

SITE A * Is compatible with surrounding functions and uses, excepting the auto sales and maintenance located at southern end of Site B.

- * There are several significant useful interrelationships (State Office Buildings, State Capitol and other state offices, downtown commercial and banking services, bus, car and float plane transportation, and library).
- Is located within the "State Capital Area" of the City of Juneau's Draft Comprehensive Plan and Coastal Management Program (Figure 2) and therefore compatible with local land use and planning.
- Will not disrupt surrounding functions, however, programmed use is not compatible with utility stations and automotive sales.
- Site landform, location and mountain backdrop provide prominent and noble setting for the

programmed use and is visually and psychologically in character with the program and surroundings.

Programmed use, landform and prominent backdrop is related to regional (mountain) character.

Conclusion: Site A has a medial value in relation to surroundings and community structure.

- Several usefully significant interrelationships the same as for Site A, with additional interface with waterfront.
- Within the "State Capital Area" of the City of Juneau's Draft Comprehensive Plan and Coastal Management Program (Figure 2) and highly compatible with local land use and planning.
- Will not disrupt surrounding functions, land use or traffic/transportation.

Conclusion: Site AB is of high value relative to the other sites in terms of its relation to surroundings and community structure.

SITE C Not functionally compatible with surrounding uses. However, if Lots 4 and 5 east of the State parking garage are used, and/or expansion over the parking garage itself occurs, a connection could be made to the State Office Building making the site marginally compatible. (See also, ADJACENCIES, AND ACCESS AND CIRCULATION.)

- The few immediate interrelationships are the State Office Buildings (parking garage and potential connection), State Capital, law offices and library.
- Fifty percent of the land area is not within the "State Capital Area" defined by the Draft Comprehensive Plan and Coastal Management Program of the City and Borough of Juneau (Figure 2), and therefore, marginally compatible with local land use and planning.
- Will cause traffic congestion on Willoughby, Main, 4th Street and in the residential area along Calhoun Avenue.

Site 40% flat with singular steep rise is moderately related to surroundings and regional character. However, this feature would most likely be hidden by building mass. There is no significantly interesting topographic variation and the low flat portion of the site is level with northern and western surrounding areas.

Conclusion: Site C has a medial value relationship to surroundings and community structure.

Only fourteen percent of the external site perimeter uses (State Capital) bear a relationship to the programmed use. The remaining 86% of the perimeter is residential, 14% of which is registered with Alaska Heritage Resources Survey. (Two homes on Main Street are in excellent con-

(Two homes on Main Street are in excellent condition functioning as professional and private office space.) The greater portion of the remaining 72% is not compatible with the programmed use.

- Useful interrelationships are State Capital, State Office Building, library and other State offices in the immediate vicinity. It has reasonable access to downtown.
- Downtown and associated services are within a reasonable distance.
- Parents of the school children often make use of the opportunity to visit their children from downtown offices during the day.
- * It is not within the "State Capital Area" as designated by the Draft Comprehensive Plan and Coastal Management Program of the City and Borough of Juneau (Figure 2), and therefore, not compatible with local land use and planning.
- The site houses Capital School and City Park play area facilities used by the school - they would need to be replaced elsewhere which would disrupt the existing neighborhood fabric. Traffic, noise, service and circulation associated with the proposed new use will significantly disrupt the existing surrounding functions and uses.
- The sites west half houses Capital Elementary School and four homes, two of which are registered with the Alaska Heritage Resources Survey. The school facilities would need to be replaced (see HISTORICAL and OWNERSHIP FACTORS).

- The sites east half consists of the Capital School Park, a municipal recreation play area owned and maintained by the City which is currently under contract for improvements. As the only large downtown recreation area, it also will need to be replaced.
- The school and recreation facilities serve and are used for scheduled neighborhood activities including adult programs.
- Existing use represents a unique and extremely useful asset in furthering educational opportunities, PTA, and child-parent relations. Parents have expressed that the downtown location of Capital School is particularly useful in that they are able to drop off and/or pick up their children and often visit them during the day for lunch or other activities.

Conclusion: Site D has a low value relative to surroundings and community structure. (The removal of these assets which serve such a large population is viewed as a significant negative and harmful impact to the surrounding neighborhood fabric, to the school system, to the neighborhood families which they serve, and to the public in general.)

SITE E Majority of surrounding functions are moderatley compatible to the proposed new use with no significant relationship. There are two State offices along 12% of the site perimeter.

- The only significant functional interrelationship adjacent to the site is the possible expansion of the State parking garage east of Willoughby Avenue.
- The State Office Building is in proximity, while other useful interrelationships are remote involving street crossings and substantial grade changes up to 80 feet.
- * Highly compatible with local land use being located within the "State Capital Area" of the Draft Comprehensive Plan and Coastal Management Program of the City and Borough of Juneau.
- Programmed use is not visually or otherwise psychologically in character with surrounding

uses. The site is within mixed uses of industrial, commercial and office with visually discordant approaches, including fuel storage tank, liquor sales establishments and others.

- It has a sensation of feeling low and enclosed.
- Proposed new use would cause moderate traffic congestion along Willoughby Avenue particularly in the vicinity of the existing State parking garage although otherwise would not significantly disrupt surrounding uses.
- As a flat site and somewhat hidden, it is not related to the regional character.

<u>Conclusion</u>: Site E has a low value relative to surroundings and community structure.

13. VISUAL ORIENTATION

DEFINITION

Visual orientation refers to the ability of the site with the proposed new use to function as a visual focal point and provide orientation, with a sense of location, direction, and distance. It also refers to a site's ability to support visual requirements of a Programmed Use such as seclusion, prominence, prestige, nobility, strength, character, or statement of the type of use, etc.

OBJECTIVE

Evaluate the visual orientation of each site in terms of its ability to support the Programmed Use and Goals.

Occupying the most conspicuous promontory within Juneau and being highly visible from most locations including Gastineau Channel, Site A satisfies all criteria for a high value in terms of visual orientation - it is highly visible, locatable with few or no directions and with the programmed use would be a highly visual focal point.

Conclusion: Site A has a high value relative to visual orientation.

SITES AB Site AB offers a high visual orientation value higher than Site A by itself since all values of Site A still apply along with an added visibility from the removal of existing uses on Site AB (Juneau Motors and Telephone Building), extending

and tying Site A directly to the waterfront development and downtown along Main Street.

Conclusion: Site AB has a high value relative to visual orientation.

SITE C * Would not be significantly different than siting on flat, low area closely surrounded by buildings.

- Is not visible from downtown, the docks and most points in Juneau, except the view from Willoughby with industrial, commercial and office uses in foreground.
- Being hidden and away from downtown, the waterfront and airport approach, this site would require detailed directions to locate.
- Not being particularly visible until one is on the east approach on Willoughby, Egan Drive or the Douglas Bridge, it is not a focal point.
- The high, massive State Office Building would likely remain the focal point in the area.
- Does not offer support to elements of prestige, character, strength, scale, or nobility associated with the Programmed Use.

Conclusion: Site C has a low value relative to visual orientation.

SITE D Excludes visibility from most all points, places and/or activity nodes where visibility would be useful in providing orientation and a positive impact. Except for high residential areas to north and east, the back of the State Capital and higher floors of the law offices and Mendenhall Apartments, the site and first seven to eight floors of the Legislative Hall would not be

Would require directions from most Juneau locations.

visible.

- ° Cannot be seen from downtown, Egan Drive, the waterfront, docks or Gastineau Channel.
- Is not a focal point.

Conclusion: Site D has a low value relative to visual orientation.

SITE E Relates to the visual orientation criteria in the same way as Site C; low flat site, not visible, not a focal point and would require directions.

Conclusion: Site E has a low value relative to visual orientation.

14. EDUCATIONAL OPPORTUNITIES

DEFINITION

The ability of a site to provide opportunities for education. The opportunities normally extend from an education value of the proposed new use or site itself, or from site landform or vistas providing access to subjects of interest and educational value.

OBJECTIVE

Evaluate the educational opportunities of each site in terms of its ability to support Programmed Use and Goals.

- Close to several potential user groups: two blocks from Capital School, one block from the Museum, adjacent to downtown and one-half block from the waterfront and Marine Park, disembarkcation point for the cruise ships.
 - Landform provides promontory with views and vistas in a 270° arc to most of the surrounding mountains of Juneau, Douglas Island and down the Gastineau Channel. History, economy, geology, geography, sociology, and general historical and cultural background are subjects of potential interest and educational value which the site provides a visual connection to.

The rock outcrop and geologic formation of the site itself is of educational value. It was also the location of Fort Rockwell, and the location to which Juneau's first telephone line from Douglas Island was strung (see HISTORICAL).

Conclusion: Site A has a high value relative to educational opportunities.

SITE AB Inclusive of Site A, it provides the same educational opportunities with better access and views and/or vistas and connection to waterfront.

Conclusion: Site AB has a high value in terms of educational opportunities.

- SITE C

 A singular view is provided from the high precipice along the east edge of the site: an extended foreground of mixed uses (commercial, industrial, office and low income multi-family housing), and distant background of Douglas Island and Gastineau Channel none of significant educational value.
 - Site itself has marginal educational value in terms of descriptions indicating how the steep east edge was formed, although it is not unique to this particular site.
 - Although not adjacent to downtown local and visitor activity nodes, it is close to the library and the top eastern edge is within a reasonable distance to Capital School, downtown and residential neighborhoods.
 - No visual connection with all of the surrounding Juneau area. Educational opportunities are considerably less visual.

<u>Conclusion</u>: Site C has a medial value relative to educational opportunities.

- SITE D "Within reasonable distance to major facilities or activities that could gain educationally from the proposed new use. Site is on the outside edge of downtown local and visitor activity nodes.
 - Capital School would be replaced elsewhere thus making the proposed new use less accessible to one of the more valuable local populations.

- Site itself is not of significant educational value.
- Although the site is high relative to the downtown and Gastineau Channel area, views and vistas of educational subjects are blocked by topography and trees to the west and taller buildings in the foreground to the south leaving the singular view of the inclosing mountains to the east and north. Marginal vistas over the State Capitol Building would be available above seven to eight stories.

Conclusion: Site D has a medial value relative to educational opportunities depending on a new Capital School location and height of the programmed use - which in this case is a design option.

SITE E

- Is not visually or physically in proximity to significant facility or activity nodes that could gain educationally from the programmed use (downtown, waterfront, schools, library, etc.).
- The site is low with views and vistas being blocked in all directions except the top portion of surrounding mountains to the east and northeast.
- The site itself has no significant or marginal educational value.

Conclusion: Site E has a low value relative to educational opportunities.

15. ENVIRONMENTAL IMPACTS

DEFINITION

The environmental effects a proposed new use will have on a site and surroundings. Environmental effects can range from positive to negative.

OBJECTIVE

Evaluate the environmental impacts of each site in terms of its ability to support Programmed Use and Goals.

DISCUSSION

The environmental impact evaluation here considers water, air, noise, drainage, erosion, wildlife, mineral and fuel

resources - those impacts not already considered under separate Factor headings. For other impacts such as traffic congestion, natural hazards, historical and relocation aspects, etc. (See respective Factor headings, e.g.; HAZARDS, ACCESS AND CIRCULATION, HISTORICAL IMPLICATIONS and OWNERSHIP IMPLICATIONS).

For all sites there are no significant negative environmental impacts relative to:

- Water availability, pollution or quality water supply available, no pollutant discharges from programmed use except normal sanitary wastes which is handled through sanitary sewer (see INFRASTRUCTURE).
- Mineral or fuel resources no known mineral or fuel resources.
- Endangered species or other wildlife sites are not unique or scarce habitats for unusual or endangered species. No endangered species depend on sites for existence.
- Erosion presently no significant erosion is anticipated. The proposed new use would provide proper erosion/drainage control through design, site planning, retaining walls, planted slopes, etc.

All sites would have normal, temporary short-term construction impacts associated with noise, erosion, traffic congestion, air pollutants, heavy equipment and its movement. Being relatively equal to all sites, these construction impacts are not considered a significant factor to any one site.

SITES A & AB

- No adverse impacts relative to air, noise or drainage all are significantly dispersed due to site size, landform and configuration:
 - Site size disperses concentrations.
 - Landform acts as buffer to undesirable noise and air particles.
 - Landform disperses storm runoff evenly over a larger area diminishing concentrated volumes is also close to waterfront in the unlikely event capacities would be reached such as in a '200' or '300 year storm'.
 - Circulation pattern disperses access over a long perimeter, further decreasing noise and air pollutants.

- Normal temporary short-term construction impacts would be diminished for same reason above.

SITE C Presents a mitigable negative drainage impact to existing storm sewer system:

- Due to size, landform and configuration, Site C increases (concentrates) time-of-concentration and volumes of storm water runoff diminishing capacities significantly more than other sites.

Mitigation: When necessary, can be mitigated by an additional storm system discharging to local treatment facility or Gastineau Channel, or increasing the size of the existing system - both representing significant costs.

SITES C & E

- Present relatively unmitigable environmental impacts to air quality:
 - The increased traffic and its concentration due to site size and/or access and circulation will periodically and intermittently reduce air quality particularly at grade levels. (Site D is larger; undesirable air particles and fumes would be significantly more dispersed and air pollution is not as significant as Sites C and E.)

Mitigation: Eliminate automobile circulation - provide other urban transportation.

$\underline{\text{SITES}}$ * Relatively unmitigable negative impacts to present $\underline{\text{C, D \& E}}$ noise levels:

- Proposed programmed use relative to site size and access will concentrate and increase traffic noise above existing conditions.
- For Sites C and E the noise will be more concentrated with the existing access circulation pattern.
- Acoustical characteristics presented by the physical inclosure of the two sites will further increase noise levels.
- Noise levels for the residential areas around Site D would be more noticeable due to the comparatively low levels existing.

Mitigation: Eliminate cars - provide other urban transportation.

OVERALL CONCLUSION: Sites A and AB have a high value relative to environmental impacts. Sites C, D and E have significant cost implications and are of low value relative to environmental impacts not evaluated under other Factors.

16. HISTORICAL IMPLICATIONS

DEFINITION

Historical values pertain to any portion of a site having factual association with physical or recorded evidence, people or events of the past of significant interest, and importance relevant to present conditions. Historical values cannot be legendary or fictional.

OBJECTIVE

Evaluate the historical impacts of each site in terms of its ability to support the Programmed Use and Goals.

- SITE A " Hill was location of Fort Rockwell, the first U.S. Army Post in Juneau, and no longer existing.
 - The first telephone was strung by Edward Webster, a placer miner, from Douglas, to his house (Lot 7, Block 1) in 1893. The house was completed in 1884. In 1895 there were 24 telephones in Juneau. The Juneau-Douglas Telephone Company, owned by Continental Telephone, was owned by Webster's family until the 1950's. The framed house is two-story with medium hip roof, rectangular floor plan and was not given a high preservation status by the Alaska Heritage Resources Survey. While the history is of interest, the house itself is not significantly relevant.

Conclusion: Site A is of high value relative to historical implications and its ability to accommodate them with the programmed use.

SITE AB ° The Site B portion contains no elements of historical value.

Conclusion: Inclusive of Site A, Site AB then has the same high value as Site A.

SITE C ° Is not historically significant.

Conclusion: Site C has a medial value relative to historical implications in that the Programmed Use would not disrupt any historical values.

- SITE D Davis Apartments (called the Wallis George Home), 526 Seward Street, Lot 5, Block 22, now a three apartment bed-and-breakfast establishment, is listed on the Alaska Heritage Resources Survey.

 Significance listed with Alaska Heritage Resources Survey: home built for Martin George, Chief Draftsman for Surveyor General's Office and father of Wallis George, builder of the Baranof Hotel.
 - Francis Apartments, 151-6th Street, Lot 5, Block 22. Built in 1895 contains carved stairways and doors, leaded glass, curving archways, center gable and scalloped shingling. Significance listed with Alaska Heritage Resource Survey: once the home of the superintendent of Preserverance Mine.

Conclusion: Site D has a high value relative to historical significant.

SITE E " Has no known historical value or significance.

Conclusion: Site E has a high value relative to historical significant.

17. PSYCHOLOGICAL IMPLICATIONS/IMPACTS

DEFINITION

Pertains to mental associations, attitudes, feelings, impressions and reactions that result directly from the conditions of a location or place.

OBJECTIVE

Evaluate the psychological implications of each site in terms of its ability to support Programmed Use and Goals.

DISCUSSION

SIGNIFICANT SITE CONSIDERATIONS

- Represents an optimum setting for the programmed use: without the right and proper setting the values are significantly reduced in the same way a finely cut jewel is reduced by a poorly designed or constructed setting.
- Site and Programmed Use is representative of the people of Alaska and the State of Alaska: the site and Legislative Hall together should be prestigeous and represent the strength, character and nobility of its people. The site selected should imply or exemplify these characteristics.
- Views and vistas to the site for all visitors, tourists, users and the local population become extremely significant in terms of public image.
- Public image can significantly affect State and local economy.
- Views and approach to and from vehicular thoroughfares, walks, activity nodes, Gastineau Channel and tourship docks are significant considerations - are they positive.
- Views and vistas from the site are also significant to image and educational opportunities (State and local history and activities, Alaskan geologic formations, etc. - See EDUCATIONAL OPPORTUNITIES).
- Approach and arrival are particularly significant in public image contexts as they are the first impressions and are usually memorable and 'color' all other impressions.
- Ease of location and access contribute to first impressions and public image (see ACCESS AND CIRCULATION) in precluding negative emotions associated with locating and accessing facility.
- Public value, image and impressions of promontories, views and/or vistas is verifiable through comparative property costs and rents of higher elevations or building floors.
- NOTE * Architectural design and engineering will also have significant implications in terms of public image and impressions.

- SITE A Promontory landform provides excellent views and vistas to and from the site, in or from, most all locations in Juneau, the Gastineau Channel, West Juneau, and Douglas Island.
 - ° Contributes significantly to public image.
 - Contributes significantly to educational opportunities.
 - * Has potential of significantly contributing to State and local economy through its positive image or impressions.
 - Provides views of mountains in 270° arc including waterfalls to the north and northeast.

Conclusion: Site A is of high value relative to
psychological implications.

- SITE AB * Has same characteristics as Site A being inclusive of Site A.
 - Contributes additional positive public image and impressions with potential of site development foreground and connections with waterfront and downtown.
 - Contributes additional positive public image and impressions through east access and circulation to and from the site.
 - Provides views from east side to surrounding mountains and waterfalls.

Conclusion: Site AB is of high value relative to psychological implications.

- SITE C Visibility and vistas to and from the site are limited to and from the east and west.
 - * Foreground (mixed commercial, industrial, office and low income multi-family) and background (limited view of Gastineau Channel and Douglas Island) uses, views and vistas present significant limitations to public image and impression.
 - Does not present views or vistas of significant educational value, and thereby, interest.

- Is not visible from Gastineau Channel, waterfront development, docks, or downtown.
- Is not easily locatable from same points or activity nodes due to visibility.
- Programmed Use may not stand out; may be overshadowed by adjacent State Office Building and topography.

Conclusion: Site C has a medial value relative to psychological implications.

SITE D * Visibility to and from the site is severely limited by surrounding tall buildings creating no immediate favorable public image or impression from the surrounding downtown and activity nodes -

from the surrounding downtown and activity nodes the site is not visible from Gastineau Channel, Egan Drive, or grade level activity nodes in downtown area.

- Limits potential visitor and educational opportunities due to very limited visual connection to points of interest, historic or educational value.
- Is not easily locatable due to its low visibility.
- Provides views to mountains and waterfalls in east and northeast.

Conclusion: Site D has a low value relative to psychological implications.

SITE E Presents no views or vistas to or from site.

- Has a low elevation.
- Is not visible from significant activity nodes, visitor, downtown locations, or Juneau approaches.
- Site location itself does not present favorable public image or impressions due to surrounding industrial, commercial and office uses.
- Is not easily locatable due to visibility.

Conclusion: Site E does not significantly contribute to the public image economy or other positive psychological images, implications, or opportunities and has a low site value relative to psychological implications.

18. SPECIAL OPPORTUNITIES AND AMENITIES

DEFINITION

Pertains to the significant, positive contributions a site can offer of itself or to design enhancing the overall Goals and Objectives of the Programmed Use over and above normal Factors.

OBJECTIVE

Evaluate the special opportunities and amenities of each site in terms of its ability to support Programmed Use and Goals.

- SITE A Direct physical connection to a major facility (the State Office Building).
 - Service accessibility through existing service to State Office Building.
 - Potential views and vistas from all working floors.
 - Significant energy cost effectiveness through potential atrium design that would enhance daylighting and could increase energy cost efficiency through connection to State Office Building.
 - Increased access potential through use of existing tunnel between Main and Willoughby at Second Street.

Conclusion: Site A has significant advantages in terms of special opportunities and amenities, and therefore, is of high value.

- SITE AB ° Inclusive of Site A it has all special opportunities of Site A in addition to:
 - Increased HOLDING CAPACITY (land area, Factor No. 4).
 - 2) Increased protection from CLIMATE AND EXPOSURE (Factor No. 5).
 - Increased ENERGY EFFICIENCY (and opportunities, Factor No. 6).
 - 4) Increased ACCESS AND CIRCULATION potential (Factor No. 8).

- 5) Increased ADJACENCY opportunities (Factor No. 9).
- 6) Increased STAGING ADAPTABILITY (more land area, Factor No. 10).
- 7) Increased SECURITY AND CONTROL (through increased access and control of visibility, Factor No. 11).
- 8) Increased RELATION TO SURROUNDINGS AND COMMUNITY STRUCTURE (through all Factors).
- 9) Increased VISITOR ORIENTATION (Factor No. 13).
- 10) Increased positive ENVIRONMENTAL IMPACTS (less taxing on utilities and on ecosystems of drainage, erosion, air and noise considerations, Factor No. 15).
- 11) Increased positive PSYCHOLOGICAL IMPLICATIONS (through access, visibility, views, image, etc., Factor No. 17).

<u>Conclusion</u>: Site AB has significant and particular advantages and a high value relative to special opportunities and amenities.

- SITE C Potential physical vehicular and pedestrian access from two separate elevations (Willoughby Avenue and Calhoun Street).
 - offered by Sites A and AB. (See also, ADJACENCIES, and ACCESS AND CIRCULATION.)

Conclusion: Site C has a medial value relative to special opportunities and amenities.

SITE D Potential vehicular and pedestrian access to several different levels due to surrounding topography.

Conclusion: Site D has a medial value relative to
special opportunities and amenities.

SITE E Presents no significant special opportunities or amenities.

Conclusion: Site E has a low value in terms of
special opportunities and amenities.

19. ADAPTABILITY TO LAND USE AND ZONING

DEFINITION

The ability of the programmed use to contribute to overall community goals and objectives as established by local land use, planning, management programs and zoning. Land use represents the means by which the Goals and Objectives of a community, and management programs and zoning are the means by which they are achieved. They are established to guide a community's growth and development in the interest of providing the greatest public good and the least public harm for the greatest number of people.

OBJECTIVE

Evaluate each sites adaptability to local land use and zoning in terms of its ability to support the Programmed Use and Goals.

DISCUSSION - EXISTING LOCAL PLANNING (Figure 2)

The following are guidelines and policies of the City and Borough of Juneau (CBJ) that are related to the planned programmed use. They are portions taken from the Draft Comprehensive Plan and Coastal Management Program of the City and Borough of Juneau which is scheduled to go before the Assembly for adoption late October, 1983. The policies are followed by a city resolution and the individual site evaluations as they relate to current CBJ planning.

Juneau's City and Borough governments were incorporated into a unified home rule municipality in 1970. State statutes require such an entity to prepare a comprehensive plan, which is defined as "a compilation of policy statements, goals, standards, and maps for guiding the physical, social, and economic development...of the Borough."* After it is adopted by the Borough Assembly, the document must be reviewed and revised as necessary every two years.

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* Alaska Statutes (AS) Section 29.33.085.

In addition, the CBJ must adhere to the provisions of the Alaska Coastal Management Act of 1977 which requires jurisdictions to develop a district management program for coastal areas to insure the protection, enhancement, and appropriate development of the State's coastal resources. Each district program is to establish policies, standards, and procedures governing public and private development activities, and coordinating the local, state and federal agencies which have responsibilities for coastal areas. Most of the potentially developable land in the CBJ lies within the coastal area as defined by state statute.

As noted above, because most of the usable land in the CBJ planning area is within the State's definiton of coastal, the comprehensive plan is designed to fulfill these requirements for a coastal management program. Compact growth is a preferable development pattern due to the following:

- Permits efficient use of land and facilities the economic and efficient provision of urban level services;
- Minimizes adverse environmental impacts by concentrating urban activities in a relatively small area;
- Serves the needs of the majority of people who live in urban areas who both prefer a high level of public services and facilities, and value proximity to commercial, employment, educational, cultural, and recreational opportunities.

Based on extensive studies of the experience of other American cities, compact urban development is preferable to urban sprawl. By concentrating development, the CBJ will limit the number of acres dedicated to urban uses and minimize the per unit costs of extending sewer, water, and utility lines and roadways. Significant reductions in travel, energy consumption, and pollution will result by encouraging the development of residential uses in relative proximity to shopping, employment, cultural, and recreational facilities.

POLICY 2

IT IS THE POLICY OF THE CBJ TO PROMOTE COMPACT URBAN DEVELOPMENT WITHIN AND ADJACENT TO EXISTING URBAN AREAS TO INSURE EFFICIENT UTILIZATION OF LAND RESOURCES AND FACILITATE ECONOMIC PROVISION OF URBAN FACILITIES.

POLICY 4

IT IS THE POLICY OF THE CBJ TO PROTECT THE REGION'S SCENIC, ENVIRONMENTAL, AND ECONOMICALLY VALUABLE NATURAL RESOURCES FROM THE ADVERSE IMPACTS OF URBAN DEVELOPMENT. DEVELOPMENT SHALL BE CONTROLLED CAREFULLY, AND, IF NECESSARY, PROHIBITED IN NATURALLY HAZARDOUS AREAS.

POLICY 9

IT IS THE POLICY OF THE CBJ, THROUGH A COOPERATIVE EFFORT WITH THE STATE OF ALASKA, TO PLAN FOR AND SUPPORT DEVELOPMENT OF AN ATTRACTIVE SETTING, FACILITIES, AND OTHER SERVICES TO ENHANCE THE STATE CAPITAL.

Downtown Juneau has traditionally been the economic, civic, and cultural center of the CBJ. With the decision to retain the capital in Juneau, opportunities and pressures for development will increase. It is important that new development be based on community objectives for the waterfront, capital complex, historical district, and other areas. Careful planning for public facilities and development of an urban design concept and development standards for the areas are necessary.

POLICY 10

IT IS THE POLICY OF THE CBJ TO EXPAND THE ROLE OF DOWNTOWN JUNEAU AS THE CIVIC, CULTURAL, AND ECONOMIC CENTER OF THE COMMUNITY THROUGH CAREFUL URBAN DESIGN AND PLANNING OF PUBLIC AND PRIVATE FACILITIES.

Tourism in Juneau has been expanding at an annual rate of approximately 10% in recent years. Construction of Centennial Hall and retention of the capital will lead to additional increases in tourism, conventions, and business visitation. These activities add to the economic diversity of the CBJ and the strength and vitality of the downtown area. The CBJ can assist in the development of these economic activities.

POLICY 11

IT IS THE POLICY OF THE CBJ TO EXPAND TOURISM, CONVENTION, AND OTHER VISITOR-RELATED ACTIVITIES, AND DEVELOP FACILITIES TO SERVICE THESE ACTIVITIES AND THE NEEDS OF LOCAL RESIDENTS.

POLICY 23

IT IS THE POLICY OF THE CBJ TO MINIMIZE NOISE IMPACTS ON RESIDENTIAL AND OTHER PARTICULARLY SENSITIVE DEVELOPMENT.

A major concern expressed by citizens of Juneau is the need to protect the character of existing, low density, single family neighborhoods from incompatible uses. Their primary concern is to minimize the instrusion of heavy traffic on neighborhood streets and avoid conflicts related to incompatible design, noise, and other factors associated with higher intensity uses.

POLICY 29

IT IS THE POLICY OF THE CBJ TO MAINTAIN SUBSTANTIALLY DEVELOPED AND ESTABLISHED SINGLE FAMLLY NEIGHBORHOODS AT THEIR EXISTING ZONING AND DENSITY DESIGNATIONS AND TO MINIMIZE CONFLICTS BETWEEN RESIDENTIAL AREAS AND COMMERCIAL/INDUSTRIAL AREAS THROUGH APPROPRIATE LAND USE LOCATIONAL DECISIONS AND REGULATORY MEASURES.

Although the CBJ contains a wide variety of outdoor recreational resources, more park and recreational facilities should be provided within the urban area.

POLICY 36

IT IS THE POLICY OF THE CBJ TO ACQUIRE AND DEVELOP SUFFICIENT LOCAL PARKS AND RECREATIONAL FACILITIES IN LOCATIONS CONVENIENT TO ALL AREAS OF THE CBJ. PRIORITY PLACES FOR NEW FACILITIES ARE CURRENTLY DEVELOPED AREAS WHICH LACK ADEQUATE PARKS AND RAPIDLY DEVELOPING AREAS.

Collaborate with the school district to plan for joint use of neighborhood parks by students and general public.

LAND USE PLAN MAP GUIDELINES:

Provide for orderly expansion of central state government facilities in the vicinity of the State Capital and the State Office Building, as part of a State and CBJ civic center.

The Draft Comprehensive Plan (Figure 2) illustrates the "State Capital Area" boundary. All sites fall within the "State Capital Area" boundary with the exception of Site D. As part of the normal planning process, it is the CBJ's intent to establish contiguous and consistant land use and zoning districts once the Comprehensive Plan and Coastal Management Program is adopted (possibly late October, 1983). This would provide zoning districts within the "State Capital Area" which would accommodate the programmed use.

CITY RESOLUTION:

The following Resolution (Exhibit A) was adopted by the Assembly of the City and Borough of Juneau, August 18, 1983. It identifies Site AB ("Telephone Hill") as the ideal site for the Legislative Hall from the standoint of the local goals and planning of the City and Borough of Juneau.

"EXHIBIT A"

Presented by: The Manager Introduced: 08/18/83 Drafted by: J.R.C.

RESOLUTION OF THE CITY AND BOROUGH OF JUNEAU, ALASKA

Serial No. 972

A RESOLUTION IDENTIFYING TELEPHONE HILL AS AN AREA SUITABLE FOR THE PROPOSED LEGISLATIVE HALL.

WHEREAS, in 1982 the people of Alaska affirmed that Juneau is their capital city, and

WHEREAS, the former Federal and Territorial Building, now serving as Alaska's capitol, is no longer adequate to serve or represent the legislature and people of Alaska, and

WHEREAS, the Telephone Hill area, generally bounded by Main Street, Egan Drive and Willoughby Avenue is adjacent to existing government buildings, dominates the geography of downtown Juneau, and features a noble view of Gastineau Channel and Admiralty Island, and

WHEREAS, on May 10, 1960 pursuant to City of Juneau Resolution No. 49, the people of Juneau voted at a ratio of 7 to 1 in favor of acquiring Telephone Hill for the purpose of constructing a capitol which, in the words of the ballot proposition, would be "convenient in location, adequate in size, and practical in operating economy", and

WHEREAS, Telephone Hill presents the best available balance between benefits to the public and the inevitable damages to individuals caused by construction of a capitol center at any useful location in Juneau, and

WHEREAS, the current and proposed comprehensive plans of the City and Borough of Juneau designate Telephone Hill as the site for a new capitol center:

NOW, THEREFORE, BE IT RESOLVED BY THE ASSEMBLY OF THE CITY AND BOROUGH OF JUNEAU, ALASKA:

- 1. That the area known as Telephone Hill is identified as the best site for construction of a new capitol and related state offices.
- 2. That the governor and legislature of the State of Alaska are urged to proceed with all deliberate speed in the acquisition and development of said area.
- 3. That the manager shall insure that copies of this resolution are distributed to appropriate state officers.

EVALUATIONS:

SITES A Are consistant with, and significantly contribute to all the above pertinent policies, goals and statements of the Draft Comprehensive Plan and Coastal Management Program of the City and Borough of Juneau.

- Are within the "State Capital Area" defined by the Comprehensive Plan which is intended to include other State facilities as well as the programmed use.
- Contribute to the protection of Telephone Hill for public use and enjoyment as a special promontory in the Juneau vicinity available to the public.
- Are consistant with Resolution No. 972.

Conclusion: Sites A and AB have a high value relative to consistancy and support of local land use, planning and zoning.

SITE C Contributes less to the region's scenic, environmental and economic viability (see other individual Factors).

- ° Contributes less to Policy No.'s 9, 11, 23 and 29.
- Roughly one-half of the site not within the "State Capital Area" defined by the Draft Comprehensive Plan.
- Is medially supportive of the Draft Comprehensive Plan and is partly within the "State Capital Area".
- Site C is zoned C-2 which will accommodate the anticipated programmed use.

Conclusion: Site C is of medial value in terms of consistancy and contribution to existing local land use, planning and zoning.

SITE D * Is not consistant with, or supportive of, the Draft Comprehensive Plan - particularly regarding Policy No.'s 9, 10, 11, 23, 29 and 36.

Is outside the "State Capital Area" and in a residential district.

Existing zoning regulations (maximum 60 foot height and set back restrictions) would not permit the anticipated programmed use on Site D.

Conclusion: Site D is of low value relative to adaptability to land use and zoning.

SITE E ° Is within the "State Capital Area".

- * Is within a C-2 zoning district which permits and accommodates the anticipated Programmed Use.
- ° Is not supportive of Policy No.'s 9 and 11.

Conclusion: Site E is of medial value relative to adaptability to land use and zoning.

20. OWNERSHIP IMPLICATIONS

DEFINITION

Pertains to any effects the process of acquiring lands for the programmed use may have on existing site property owners or persons who regularly use such property.

OBJECTIVE

Evaluate the ownership implications of each site in terms of its ability to support the programmed use.

DISCUSSION

Displacement of individuals renting facilities is not considered a significant, harmful or adverse impact unless such displacement involves low income families or persons.

SITE A * Eleven ownerships other than the State of Alaska and the CBJ.

- The CBJ owns the street rights-of-way of which application can be made to the CBJ for acquisition.
- ° One business would have to relocate.

- Approximately 57 individuals which includes owner occupants would have to relocate.
- The majority of owners do not express opposition to selling their property, and some are in favor of selling.
- One owner has expressed opposition.

<u>Conclusion</u>: Site A has a high value in terms of minimizing relocation adversities and harm to property owners and users.

SITE AB ° Four additional ownerships to that of Site A (total 15).

- One business and one utility company would have to relocate.
- * Four additional individuals would have to relocate (total 61).
- Involves only one additional home.
- Juneau-Douglas Telephone owned by Continental Telephone, Bakersfield, California would incur substantial relocation costs. However, planned upgrading of equipment and service may (require other locations and facilities) preclude the usefulness of the existing facility on Main Street making relocation necessary or desirable.
- Although property taxes and/or business may be more favorable for Juneau Motors in other locations, business relocation costs could be moderately high depending on location.
- Although business intensity may be affected by relocation, replacement costs for the improvements could be moderate depending on location and land costs.

Conclusion: Site AB has a medial value relative to ownership implications and minimizing relocation adversities and harm to property owners and users.

SITE C * Two private ownerships.

One public ownership (CBJ, Lot 7, Block A).

- No business relocations would be necessary.
- No single-family residences.
- Approximatley 51 individuals would have to relocate - the site includes Knight Apartments (Lot 5, Block A) rentals.
- State Department presently leases office space on Lot 1, Block 72. This space would need to be replaced.

Conclusion: Site C has a high value relative to ownership implications and minimizing relocation adversities and harm.

SITE D * Five ownerships. (Majority owned by CBJ.)

- Approximately 19 individuals would have to relocate (four homes).
- Capital School 325 elementary school children plus staff - would have to relocate.
- The school serves the downtown Juneau area as a public school as well as community school.
- The loss of Capital School would be significantly disruptive to Borough's School System which would have to replace Capital School.
- Probable location of replacement school would be Mendenhall Valley - distance from service area causing significant hardship and cost to families.
- Capital School also serves several community extracurricular and recreation programs which would either be lost or have to relocate.
- Probable replacement cost to the City and Borough School System including revenue from sale of the school is estimated at \$7 Million Dollars.
- Loss of major community and downtown play and recreation area.
- Play and recreation area presently under contract for improvements.

Would adversely affect more persons and be more costly to the local population than any of the other sites.

Conclusion: Site D has a low value relative to ownership implications and minimizing relocation adversities and harm to owners and users.

SITE E Two ownerships. (One is the CBJ: street rights-of-way.)

- ° Is occupied by Channel Apartments in its entirety.
- Approximately 100 renting individuals would have to relocate.
- The majority of residents are low income families and relocation for these individuals could have significant adverse social impacts.
- Has the highest number of residential relocations.

<u>Conclusion</u>: Site E has a low value relative to ownership: Implications and minimizing relocation adversities and public harm to users.

PRELIMINARY VALUE ESTIMATES

Preliminary value estimates are prepared to help establish possible costs incurable by purchase of land and improvements existing on the sites. They are not appraisals, rather, they establish relative anticipated costs through an estimate of value to assist in the site evaluation process. Since the sites are of different sizes, and therefore not comparable by total cost, costs are broken down into units (in this case cost per acre) to provide comparisons.

These value estimates prepared by the State of Alaska, Department of Transportation and Public Facilities are based on field inspection and represent real estate market values in the Juneau area. They include contingency for administrative costs, appraisal fees, court and negotiation costs. They do not include relocation of public utilities, business relocation costs, or legal questions such as titles and encumbrance. Properties are considered as if free and clear. Payment for individual and business relocation is prohibitive under Sate law, and therefore, not included. Table (I) is a summary of site areas, types of ownership, and value estimates.

TABLE I - PRELIMINARY VALUE ESTIMATES

ITEM	SITE A	SITE AB	SITE C	SITE D	SITE E
Total Site Acreage	3.17	4.66	0.96	2.35	1.63
State Acres Owned	0.23 (7%)	0.23	-0-	-0-	-0-
CBJ Owned Acreage	1 0.83 (26%)	1 0.90	2 0.03 (3%)	3 2.08 (89%)	1 0.25 (15%)
Privately Owned Acreage	2.11 (67%)	3.53	0.93 (97%)	0.27 (11%)	1.38 (85%)
Value Privately Owned	\$3,143,000	\$6,879,000	\$1,162,000	\$3,873,000	\$2,950,000
Cost Per Acre	\$ 991,500	\$1,476,200	\$1,210,400	4 \$1,648,100	\$1,236,200

- (1) Street Rights-Of-Way
- (2) Lot 7, Block A
- (3) Capital School, Capital School Play Area, and Street Rights-Of-Way
- (4) Does not include cost of new school, play field and downtown park.

Street rights-of-way can be deeded to Public Use district zoning by application to the City and Borough. Based on strong voter support, current CBJ needs and plans, and the Draft Comprehensive Plan, the CBJ would look favorably on such application for the Legislative Hall on Site AB. Use of Dixon, West 2nd, and West 3rd Streets on Site A only may be more difficult or costly. It is the desire and intent of the City and Borough that all of Site AB be used for the Legislative Hall, significantly improving Land Use and the Juneau urban fabric toward the greatest public good. Resolution 972 (Exhibit A) refers to Site AB.

Similar opposition and higher costs would be likely for acquiring CBJ lands in Sites C, D, and E for the same reason the voters and CBJ strongly support Site AB. Public dollar costs and other public harm would be significantly greater for Sites D and E, e.g. the loss of Capital School and replacement costs for a new school (\$7,000,000.00), neighborhood traffic congestion and many other adverse aspects. (See Site D and Site E under each individual Factor.)

Useful comparisons can be made on a cost per acre basis and related to Factor evaluations. For example:

- Dollar costs per acre are likely to be lowest for the second most desirable site.
- Dollar costs per acre are highest for Site D which is the third most desirable site in terms of Site Evaluation Factors. Carries with it some significant penalties in terms of public harm and long term local and social costs and harm.
- Dollar costs per acre for Sites AB, C and E are in a similar range although again going back to some of the Site Evaluation Factors:
 - a) Smaller sites imply smaller floor plans, more floors, higher facades, increased infiltration and exposure, higher structural, mechanical, electrical and plumbing system costs, higher energy consumption, higher gross square footage and larger net-to-gross square footage ratio (elevator, column and chase space, etc.), reduced functional efficiency etc., all in addition to which, mean higher construction costs and long term functional and energy costs.

The point here is that a less costly site does not necessarily mean a less costly project. Indeed, immediate construction costs alone may more than make up the difference in the spread, in addition to added annual and escalating costs of functional and energy deficiencies.

Another cost implication aspect in this case is that the increased functional efficiency of consolidating the Programmed Use represents a cost efficiency in diminishing State government operational costs.

Exact or even general dollar estimates and dollar comparisons of a Programmed Use to each possible site cannot be given without a definitive design for each. The design variables of architecture, engineering and site planning relative to site and designer variables preclude this. Unless all sites offer indentical conditions, site land cost comparison is not then reasonable to use in evaluating an optimum site. Using demolition costs is likewise not a viable method of determining an optimum site. The optimum site should be determined first and the site selection next. The raw site cost is another consideration based on how much the optimum site is valued and how much the purchaser is willing to pay.

TABLE II - SITE PREPARATION ESTIMATES

ITEM	SITE A	SITE AB	SITE C	SITE D	SITE E
Demolition Estimate	\$210,000	\$330,000	\$110,000	\$360,000	\$100,000

Site Preparation Estimates are based on demolition of all on-site structures, curb to curb clearing of on-site improvements including vegetation, excluding cliff areas and natural bedrock. These costs are not included in the Value Estimates (Table I).

SUMMARY RECOMMENDATION

Based on the potential impacts and technical implications (positive and adverse) and the cummulative evaluation of all data collected during the Optimum Site Analysis, Site AB ("Telephone Hill") is recommended as the optimum site in Juneau for the Alaska Legislative Hall. Sites A and AB (both "Telephone Hill") received a significantly greater portion of high values for each site Factor than did other sites when measured against site criteria. It was also the findings of this analysis that Site AB has a significantly higher value than Site A. This is due primarily to the fact that Site AB is inclusive of Site A, and the addition of Site B to Site A increases and enhances all the positive considerations for each Factor. Therefore, both Sites A and AB are evaluated as superior sites and Site AB is recommended as the optimum site.

Summarization of values can be found in the matrix chart (Table II: VALUES). The criteria range used to evaluate the impacts of each site Factor to each site are listed in Table III: Evaluation Key. The conditions impacting each site can be found in the body of the report. Costs due to a less efficient site will affect more people. While immediate higher construction costs are a one-time cost, higher costs due to operational and functional inefficiencies are not, and extend over the life of the building.

Dollars costs then can also constitute public harm in that they affect all or a greater number of State residents. In general, smaller sites imply smaller building footprints (first floors), more floors, higher facades, more exterior exposure, greater wind infiltration, higher energy costs; more mechanical, electrical, plumbing and elevator space, more equipment and ducts, greater wind loads, stronger/larger structural systems, more building gross area, and less efficiency - all adding to operational and square foot costs. For example, while immediate property values are less for Site C, imminent construction costs and operational costs to the people and the State of Alaska will be significantly greater. Such additional and unnecessary operational costs caused by building and functional inefficiencies are continuous, annual and escalating costs. They do not fulfill or contribute to the Program Goals, and are, in fact, what orginally cause the need for the new Legislative Hall.

Although Site C involves ten fewer individual relocations than Site AB, and the least number of relocations of all sites, it has attached to it several adversities - among them significant cost ineffectiveness and energy inefficiency - all in some sense insupportive of the public good and the Goals of the Legislative Hall building program.

Sites D and E require significantly more displacement than the other sites. Site D includes Capital Elementary School (325 students), Capital School Park and Recreation Area, and approximately eighteen individuals. Site E includes approximately 100 low income families. These sites also have greater energy inefficiencies and other adversities, and are less cost effective than Site A or AB due to location, size, and almost all other factors.

Relative to Resolution No. 972 (Exhibit A) and the desires of the people of the City and Borough of Juneau, Site AB is heavily favored as the location of the Alaska Legislative Hall. Resolution 972 (Exhibit A) was overwhelmingly adopted August 18, 1983. In addition to this recommendation, Site AB has the full support of the people of Juneau, CBJ Planning and The Juneau Assembly.

FACTOR	HIGH	MEDIAL	LOW
4. HOLDING CAPACITY	Accommodates optimum first floor square footage and loading space with no significant cost or inefficiency implications with additional land remaining for other uses such as future expansion, passive or active recreation, light, air, landscaping, pedestrian space, or parking.	Accommodates optimum first floor square footage and loading space with little or no land area remaining, and little or no significant cost or inefficiency implications.	Does not accommodate optimum first floor square footage and loading requirements, or marginally accommodates the above with significant cost or inefficiency implications.
5. CLIMATE AND EXPOSURE	Offers some protection, or is little affected by cli- mate or weather extremes.	Moderately affected by climate or weather.	Severely affected by climate or weather.
6. ENERGY	Highest energy efficiency, lower building- least wind load, least infiltration, greatest solar exposure and day- lighting potentials.	Average energy efficiency, moderate wind loads, infiltration, solar exposure, and daylighting potentials.	Lowest energy efficiency, higher building-high wind loads, high infiltration rates, low solar exposure or low daylighting potentials.
7. INFRASTRUCTURE	All utilities available without unusually significant costs, with potentials for even load distribution, systems able to handle capacities.	All or majority of utilities available without unusually significant costs or some capacities below projected needs.	Some or no utilities available without unusually significant costs, or capacities significant cantly below projected needs.

МОЛ	Site inaccessible or accessible only with highly unusual time, transportation, or construction costs, or otherwise provides least accessibility.	Incompatible with adjacent uses, not close to necessary or useful support or related facilities or functions.	Incontiguous and/or awk- ward land area con- figuration. Less than 20% of site remaining for other uses after optimum square footage is sited, inade- quate, or no area available for staging, or minimal areas o with significant grade changes, not convenient to initial or future phasing, not well located relative to staging and phasing cost implications due to inef- ficiencies associated with staging and phasing.
MEDIAL	Site moderately accessible or accessible with significant transportation, time or construction costs with or without some traffic problems.	Moderately compatible with adjacent uses, moderately close to necessary or useful support or related facilities or functions.	Moderately contiguous land area, 20% to 50% of site remaining for other uses after optimum square footage is sited, moderate to minimal level area available for construction staging, not necessarily convenient to initial or future phasing, not necessarily well located relative to adjacent uses, moderately convenient access, moderate convenient access, moderate staging cost inefficiencies.
нісн	Site highly accessible without significantly unusual time, transportation, or construction costs, or traffic problems.	Compatible with adjacent uses, adjacent to necessary or useful support or related facilities or functions.	Contiguous land area, over 50% of site remaining for other uses after optimum square footage is sited, significant level area available for construction staging, staging area well located for initial and future phasing relative to programmed use and adjaccent uses, good access, high cost efficiencies associated with staging and phasing functions.
FACTOR	8. ACCESS AND CIRCULATION	9. ADJACENCIES	10. PHASING AND STAGING ADAPTABILITY

sible, medium activity ate distance nd fire pro- ities. ntial of ss and terrelation- atible with ses. Few nterrelation- ately compat- al land use t signifi- character ing uses sychologi- ate or ruption to unctions, s moderately glonal ss Some cessary. Can some focal ivity areas	FACTOR	HIGH	MEDIAL	T,0W
Frogrammed use has high tionally compatible with tunctional compatibility tionally compatible with surrounding uses. Significant interrelationationships. Highly compatible with local land use use planning. Visually or otherwise psychologically in character with surrounding uses. Does not disrupt surrounding functions, uses. Site is highly related to regional character. SIENTATION Highly locatable visually moderately visible from from most areas. Requires few or no directions to locate. Is a visual focal points or activity areas tation from most areas. but is not a visual focal points or activity areas tation from most areas. but is not a visual focal point is not a visual visua	11. SECURITY/CONTROL	Highly visible, close to activity nodes, close to police and fire facilities-protection, high potential of limiting access and egress.	Moderately visible, medium distance from activity nodes. Moderate distance from police and fire protection-facilities. Moderate potential of limiting access and egress.	Not visible, marginally visible, or visible only from site itself. Not near activity node. Not near police or fire protection-facilities. No or little potential of limiting access or egress, except by high wall or fence.
Highly locatable visually Moderately visible from from most areas. Requires other locations. Some few or no directions to directions necessary. Can locate. Is a visual focal be seen from some focal point, providing orien— points or activity areas tation from most areas.	TO	Programmed use has high functional compatibility with surrounding uses. Significant interrelationships. Highly compatible with local land use planning. Visually or otherwise psychologically in character with surrounding uses. Does not disrupt surrounding functions, uses. Site is highly related to regional character.	Programmed use functionally compatible with surrounding uses. Few significant interrelationships. Moderately compatible with local land use planning. Not significantly out of character with surrounding uses visually or psychologically. Moderate or mitigable disruption to surrounding functions, uses. Site is moderately related to regional	Programmed use not functionally compatible with surrounding uses. No or few interrelationships not compatible with local land use planning. Visually or psychologically out of character with surroundings. Significant and/or unmitigable disruption to surrounding functions, uses. Site is not related to regional character.
	13. VISUAL ORIENTATION	Highly locatable visually from most areas. Requires few or no directions to locate. Is a visual focal point, providing orientation from most areas.	Moderately visible from other locations. Some directions necessary. Can be seen from some focal points or activity areas but is not a visual focal point itself.	Not easily visible or locatable from a distance or nearby. Requires detailed directions. Is not a visual focal point from which one can orient oneself from other areas.

14. EDUCATIONAL OPPORTUNITIES 15. ENVIRONMENTAL IMPACTS	Very close to facilities or activities that could gain from the programmed use educationally. Site itself is of educational value. Landform or vistas provide significant views to subjects of potential interest or educational value. Site and programmed use present no negative environmental elements.	Reasonable distance to facilities or activities that could gain for the programmed use educationally. Site itself is of marginal educational value. Landform or vistas provide some or few medial views to subjects of potential interest or educational value. Site and programmed use present mitigable and/or few unmitigable negative environmental elements.	Not close to facilities or activities close that could gain of the programmed use educationally. Site itself has no significant educational value. No views to subjects of potential interest or educational value. Site and programmed use present significant number of unmitigable negative environmental elements.
16. HISTORICAL IMPLICATIONS	Programmed use, siting or construction would not cause any significant harm or disruption to any historical values. Can be developed cost effectively without loss of energy efficiency or disruption of the historical value.	Programmed use, siting or construction would cause moderate harm or disruption to any historical values on the site. Programmed use cannot be developed without diminishing cost effectiveness and cost efficencies.	Programmed use, siting or construction would cause significant harm or disruption to any historical values that are on the site. Has significant historical value that would significantly minimize the cost effectiveness or energy efficiency of the programmed use.

МОЛ	Is not visible from many points and activity nodes. Does not create significant positive impressions or public image, or has potential of creating lesser image impressions.	No additional opportunities or amenities beyond those evaluated under the normal site Factors.	Is not contributory supportive, or consistant with local planning and zoning.	Significant amount of relocation adversities and harm to owners, users and/or public. Large number of ownerships or relocations. Relocations involve significant number of low income families.
MEDIAL	Can be seen from some places and activity nodes. Creates limited, moderate or average public image or impressions.	Has medial additional opportunities or amendities over above those evaluated in the normal site evaluation Factors, that are not particular, significant or unusual.	Is moderately supportive and/or consistant with local planning and zoning.	Moderate to relocation adversities and harm to owners, users and/or public. moderate number of relocations. Few or no locations. Few or no cations.
ндн	Easily seen from many places and activity nodes. Creates significant, positive, impressions and public image.	Has additional signifi- cant special opportuni- ties and/or amenities.	Contributes, supports, to and is consistant with local planning and zoning.	Minimal relocation adversities and harm to owners, users and/or public. Relative few number of relocations. No low income family relocations.
FACTOR	17. PSYCHOLOGICAL IMPLICATIONS	18. SPECIAL OPPORTUNITIES AND AMENITIES	19. ADAPTABILITY TO LAND USE AND ZONING	20. OWNERSHIP IMPLICATIONS