MARITIME STRATEGY

SAN FRANCISCO PORT COMMISSION

Prepared by Port Commission Staff

Dated: October 25, 1978

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PREAMBLE:

On March 28, 1978, the San Francisco Port Commission approved Resolution #78-5 approving the concept of a coordinated development effort for the Central Waterfront District of San Francisco. The effort to be undertaken by the Mayor's office of Economic Development, the City Planning Department, the Redevelopment Agency, and the Port of San Francisco. The joint effort was intended to take fully into account the responsibility of the Port to achieve to the maximum extent feasible, the Maritime development of its Central Waterfront properties.

Concurrently with this Central Basin project, the City Planning Department, the Redevelopment Agency, and the Port of San Francisco were involved in a survey of the Northeastern Waterfront (Pier 7 South to Pier 46) to provide a development program for the area.

The eventual development program will be based upon a market analysis, which will indicate the range of activities and the magnitude of new development the Port can realize in the survey area; a site analysis, which indicates building and pier conditions and potential revenue; a transportation analysis, and other related measures necessary to insure an orderly development of the survey area maximizing public open space with necessary needed economic revitalization.

Also as a result of the Northeastern Waterfront Survey, a Total Design Plan for the area between Pier 7 and 24 will be

specifc policy guidances for specific areas. The following questions were posed:

1. Is it the policy of the Commission that the Pier 42-46A area be reserved for future new maritime facilities or rather that it be utilized for appropriate non-maritime development (such as a marina)? If the latter, could Pier 40, which is in non-maritime use, be used to support this non-maritime development?

2. Is it the policy of the Commission that Seawall lots landward of the Embarcadero (generally lots 331-334) be made available for new non-maritime uses which are revenue producing and compatible with adjacent maritime uses?

3. The staff and consultants have recommended that Piers 28, 30-32, 36 and 38 remain in maritime use as long as possible and that Piers 26 and 34, which are presently in non-maritime use, be reserved for future maritime use. Does the Commission concur in that judgment?

The staff, therefore, is submitting this report on maritime strategy to the Commission for a public hearing

and approval. Upon approval, the staff will prepare an implementation strategy for Port Commission consideration.

TERMS AND CONCEPTS RELATED TO THE MARITIME STRATEGY

The Agreement relating to the Transfer of the Port of San Francisco from the State of California to the City and County of San Francisco and the Burton Act provides

... "the parties agree that the following are matters of "maritime activity":

All construction, reconstruction, improvement, repair, maintenance, operation, acquisition, promotion and protection of any property, facility or service,

(a) which provides for, or is necessary, incidental, or auxiliary to the interchange of goods, products or persons, between land or water or land-based or water carriers, or any combination thereof; or

(b) which provides for, or is necessary, incidental, or auxiliary to the berthing, accommodation, repair, construction or equipment of vessels or other facilities used in connection with commerce or water activities.

Non-maritime activities on the transferred lands shall include the following:

Parks, playgrounds, public educational and recreational

facilities, and all works, buildings, facilities, structures and appliances used in connection therewith.

Any use which is not covered under the foregoing definition of maritime activity or non-maritime activity shall be subject to further agreement between the Port Commission and the Director of Finance.

In determining excess revenues the Port shall:

(a) First expand all amounts necessary for operating costs and expenditures incurred during the previous fiscal year related to the operation of the maritime activity.

(b) Expend all amounts necessary for the maintenance of non-maritime activities incurred for the previous fiscal year.

Based upon the above definitions the staff considers the following as examples of maritime uses:

1. Cargo handling facilities and all uses necessary, incidental or auxiliary to the interchange of goods.

2. Berthing of vessels, including tug boats, commercial fishing boats, ferries, water taxis, and auxiliary facilities such as offices, storage, etc.

3. Ship repair and construction.

4. Warehousing and storage used in connection with commerce or water activities

5. Fish handling and processing

6. Where the dominant uses are auxiliary and incidental support services to Maritime uses, such as accommodation to service, repair, construct, or equip vessels, a marina may be considered maritime

7. Parking and marshalling yards for autos, trucks, and railroads in conjunction with maritime facilities, such as the passenger terminal and cargo handling facilities.

Other terms and concepts are:

Mini-Bridge - An intermodal sea/land transport system under a single bill of lading at a single rate and under a joint thru tariff using a United States transcontinental railway system connecting United States west and east or gulf coast ports and railway terminals for the movement of cargo between foreign ports and railway terminals in United States port cities via United States port cities on the opposite coast. The system is in direct competition with the all-water transport system using the Panama Canal between foreign and United States ports.

O.C.P. (Overland Common Point) Cargo - O.C.P. being imported cargo via west coast ports to Overland Common Point and "Overland" being exported via west coast ports form an inland common point. The total transport cost is theoretically equal to the total all-water plus land transport cost, but the transit time is not always necessarily the shortest.

Land-Bridge - an intermodal sea/land transport system under a single bill of lading using the U.S. transcontinental railway system connecting U.S. west and east or gulf coast ports for the movement of cargo between foreign ports of origin and destination. The system is in direct competition with the all-water transport system using the Panama Canal between foreign ports.

Break-bulk is any cargo that is neither bulk nor containerized, is generally packaged in some manner--cartons, crates, drums, etc.--and is normally loaded or discharged in the pre-container conventional method. Break-bulk cargo is frequently either unitized or palletized. Large pieces which cannot be containerized because of unusual size or weight are considered break-bulk cargo also.

A container is a single, rigid, non-disposal, dry cargo,

insulated, temperature or atmosphere controlled box without wheels or bogees having not less than 225 cubic feet capacity. They generally are either 40' long or 20' long although there are also intermediate sizes.

Bulk cargo - commodities which by nature of their unsegregated mass are usually handled by shovel, scoops, buckets, forks, magnets, mechanical conveyors, or in liquid form through a pipeline or hose, and which are loaded or unloaded and carried without wrappers or containers and received or delivered by carrier without transportation mark or count.

Neo-bulk - are commodities which by their nature cannot be containerized viz = large tractors, long steel lengths, automobiles, lumber.

Break-bulk facility - consists optimally of 6 to 8 acres including back-up land, 80,000 to 100,000 square feet of enclosed transit sheds, back-up truck loading, 700 feet of apron wharf, 35 feet of water and berthside, and truck and rail interface.

Neo-bulk facility - consists of 8 to 12 acres including back-up land, 700 feet of apron wharf, 35 feet of water berthside, and truck and rail interface.

Container facility - consists optimally of 30 acres, but can range from a minimum of 20 to 50 acres,

gate house, and possible on-site container freight station, 800 feet of berth, 40 feet of water, container cranes (3 cranes per 2 berths), and truck and rail interface.

Bulk facility depends on type of cargo handled, requires 800 to 1,000 feet of berthing, and 40 to 50 feet of water; direct rail service preferable with unit train capabilities requiring one mile of loop track and interface with major line haul.

Railroad Service: The Port of San Francisco is served by three line-haul railroads and one switching line. The Southern Pacific line is the only rail line entering the city by a land route; the Atchison, Topeka, and Santa Fe Railroad and the Western Pacific Railroad gain access to San Francisco by operating car ferry-service across from Richmond and Oakland-Alameda, respectively. The San Francisco Belt Railroad is a switching line which serves nearly all of San Francisco's deep-draft facilities. Interchange connections are made by this line with the three line-haul railroads serving the Port. The following is a general indication of the railroad, yard location, and normal operating capacity:

Railroad	Yard	Normal Operating Capacity (car)
Atchison, Topeka & Santa Fe	Illinois Street	235
	China Basin	355
Southern Pacific	Mission Bay Yard (1)	450
	Bayshore Yard (2)	1200
	South S.F. Yard (3)	200
	(1) Total capacity 2,380	
	(2) Total capacity 3,092	
	(3) Total capacity 348	
Western Pacific	Army & 25th Street (4)	250
	(4) Total capacity 300	

(Source - San Francisco Bay Area In-depth Study, U.S. Army Corps of Engineers)

Channel depth: The controlling channel depth to the San Francisco Bay Area is the San Francisco Bar. The Bar Channel is dredged and maintained by the U.S. Army Corps. of Engineers at 55 feet. The Port has its own maintenance dredging capabilities and maintains 35 feet of water at most maritime facilities on the Northern Waterfront. In the Southern Waterfront, Piers 94 - 96 are maintained at 40 feet. Islais Creek is maintained at 40 feet, and Piers 70-80 are maintained at 40 feet.

PORT OF SAN FRANCISCO'S MARITIME TRENDS

"The popular mis-conception that San Francisco is a dying Port has persisted for so many years that it has become firmly entrenched in the minds of many native San Franciscans". (Arthur D. Little Report, 1966).

This myth has continued in spite of the fact that the Port of San Francisco has continued to be a significant maritime center in the Bay Area. This myth is directly related to the visual impression given the public by the Northern and Northeastern Waterfronts, the loss of a number of major lines particularly APL and PFEL, and the fact that the Oakland Port, by capitalizing on Federal EDA assistance, has been able to develop a highly sophisticated and mechanized Port, while San Francisco lagged behind.

However, San Francisco continues to be a significant maritime center. Fifty percent of the Port's revenues are generated by the maritime; the Port serves 34 steamship lines at our facilities; the Port and its related maritime activities remains one of the few remaining blue-collar employment centers; and the Port has available, today, one of the best three-berth container facilities on which to build the future.

At the time of the transfer,-a great number of the Port's maritime piers were virtually unusable for their original intended uses. Others required significant captial investment to improve them in order to extend their life:

	Year Built	Life	Cost of Extending Life	Year Work Was Done
Pier 15	1932	45 years	$160,500	1974
Pier 17	1922	35 years		
Pier 26	1928	N/A	218,000	1974
Pier 28	1912	45 years	120,000	1974
Pier 30	1928	30 years	425,000	1974
Pier 32	1928	30 years		

In some cases as Pier 35, the Port's substructure was constructed in 1916 with a 35-year life and other than minor maintenance, no major capitalization has been expended to continue its life.

Therefore, due to the limiting ability of the Port to make major capital improvements to the existing finger piers in the Northern and Northeastern Waterfront, the Port embarked on a major building project in the South. Piers

94-96, Pier 80, Pier 70, and the proposed Pier 98 all respresent modern facilities capable of handling today's mechanized cargo.

The shift to the Southern Waterfront is demonstrated by analyzing the cargo movement through our piers:

	Percentage of Tonnage	
Year	Northern	Southern
1969	45%	40%
1970	39%	51%
1971	42%	45%
1975	28%	65%
1976	26%	68%
1977	27%	67%

Whereas in 1977, the Port of San Francisco handled approximately 2,000,000 short tons of cargo, the Port's Engineering department estimates the Southern Waterfront capacity at 5,175,000 short tons:

Pier	Break Bulk	Container	Neo Bulk	Total
48	170,000	-	-	170,000
50	425,000	-	-	425,000
70	-	-	160,000	160,000
80	425,000	1,500,000	-	1,925,000
90	-	-	160,000	160,000
92	85,000	-	-	85,000
94 - 96	-	2,250,000	-	2,250,000
Current capacity in short tons	1,105,000	3,750,000	320,000 =	5,175,000

(Based upon Moffett & Nichol, April '78, table #10)

This does not mean that the necessary and important maritime facilities on the Northern and Northeastern Waterfront are not necessary. Nor should one conclude that all of the existing cargo handled on the Northern Waterfront can be handled in the Southern Waterfront from an operational point of view. Stevedoring contracts, terminal agreements, preferential docking agreements must all be taken into account. However, one can conclude that the Port's ability to attract new business, particularly at Piers 94 - 96, can be accomplished with our existing facilities.

Also, with the ability of the Port to improve and add to our existing facilities in the South, specifically Pier 98, Piers 54 - 64, Pier 62, Pier 94, Pier 70, and the modification of Pier 80, the Port can increase its current short ton capacity for all modes of cargo handling. Specifically, if Piers 40 - 42 were joined together, as Piers 30 - 32 and Piers 15 - 17 were in the past, it would cost from $15 to 20 million. This facility would be primarily designed for break-bulk cargo. On the other hand, a similar invest at Pier 94 by adding an additional berth to the existing Pier 94 - 96 complex would allow for greater flexibility to handle all types of vessels. The Port staff recommends against any major new construction of facilities that would be solely a break-bulk terminal.

Piers 27 - 29, which is classified as one of the best break-bulk facilities in the Bay Area, serves as a prime example of the changing requirements in the movement of cargo. For many years, the major commodities handled here have been categorized as solely "break-bulk". Today, previously break-bulk commodities such as coffee, are handled in some cases by containers. For six months in 1978, Piers 27 - 29 and Pier 50, break-bulk facilities, have handled in excess of 2,000 containers.

In conclusion, the possible ability of the Port to acquire the existing Hunter's Point Naval Shipyard is still uncertain. The economic development potential of this shipyard for the maritime is great. However, unless the City and County of San Francisco, through the Port Commission, can acquire use of this area on a long-term basis with a minimum of cost, the Port looks to areas outside of Hunter's Point Naval Shipyard.

CONCLUSIONS:

The staff's maritime strategy calls for the retention of the following piers for maritime cargo and passenger facilities:

Pier 35 (passenger terminal)
Pier 33
Pier 31
Pier 27 - 29
Pier 15 - 17
Pier 26
Pier 28
Pier 30 - 32
Pier 34
Pier 36
Pier 38
Pier 62 (new)
Pier 48
Pier 50
Pier 54 - 64 (new)
Pier 70
Pier 80
Pier 94E
Pier 94 - 96
Pier 98

Pier 45, Sheds B & D should be planned for maritime uses associated with fish handling and Fisherman's Wharf Improvements.

Pier 19 - 23 should be improved and retained as the Foreign Trade Zone #3.

Pier 9 should be used in conjunction with tugboat operations and related office.

Piers 40 - 44 could be retained as maritime, but not for rehabilitation or construction of new cargo handling facilities. The Port staff would review and report back to the Commission on the possibility of a Marina Construction with dominant uses not being commercial recreation.

Pier 46B and Apron, used predominantly for Port maintenance facility and tie-up of idle ships as well as warehousing and storage.

It is further recommended as part of this strategy, that it be the policy of the San Francisco Port Commission to optimize the development of the Northeastern and Northern Waterfront for uses compatible with BCDC Special Area Plan I, Total Design Plan, and the City Master Plan to generate necessary revenues to support the Maritime Industry. This will allow the Port to strive to maintain a balance of

development for the maritime and non-maritime at its present mix.

Provided that this strategy is adopted by the Commission, the Port staff will immediately prepare an implementation strategy, identifying specific projects and sources of funding for adoption by the Port Commission.