

THAMES RIVER FLOOD CONTROL

EAST BRIMFIELD DAM & RESERVOIR

QUINEBAUG RIVER MASSACHUSETTS

DESIGN MEMORANDUM NO. 10

MASTER PLAN FOR RESERVOIR DEVELOPMENT



**U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS WALTHAM, MASS.**

DECEMBER 1961

100-100-100
100-100-100
100-100-100

ENGW-OM (3 Jan 62)

1st Ind

SUBJECT: East Brimfield Dam and Reservoir, Thames River Basin,
Massachusetts - Master Plan for Reservoir Development

Office, Chief of Engineers, Washington 25, D. C., 31 January 1962

TO: Division Engineer, U. S. Army Engineer Division, New England
Waltham, Massachusetts

1. The Master Plan is approved subject to the comments shown in the following paragraphs.

2. Reference pars. 3-03 and 3-04. Reports and studies prepared in connection with development of the resources of the project should be made part of the Master Plan as required by EM 1130-2-302.

3. Reference par. 7-09. Monumentation of the project boundary should be done by the Corps of Engineers as required.

4. Estimate of Cost. It is noted that a drinking water supply system is shown for the Holland Pond Area. Consideration should be given for a drinking water supply at Boat Launching Area No. 1, Streeter Point Area and Roadside Recreation Area.

FOR THE CHIEF OF ENGINEERS:

1 Incl w/d



MARK S. GURNEE
Chief, Operations Division
Civil Works

WEDGW (3 Jan 62)

2nd Ind

SUBJECT: East Brimfield Dam and Reservoir, Thomas River Basin,
Massachusetts - Master Plan for Reservoir Development

U. S. Army Engr Div, New England, Waltham, Mass. 6 Feb 62

TO: Chief of Engineers, ATTN: BRIM-CO, DA, Washington, D. C.

1. Continuing reports and studies will be made part of the Master Plan by appropriate supplement.

2. Monumentation, as required, will be accomplished by the Corps.

3. Well water, with handpumps, will be furnished at Boat Launching Area No. 1, Streeter Point Area and Roadside Recreation Area as suggested. It is considered that the contingency item in the approved estimate will cover the cost of the above.

FOR THE DIVISION ENGINEER:

JOHN W. LESLIE
Chief, Engineering Division

U. S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS

424 TRAPELO ROAD
WALTHAM 54, MASS.

ADDRESS REPLY TO:
DIVISION ENGINEER

REFER TO FILE NO.

NEDGW

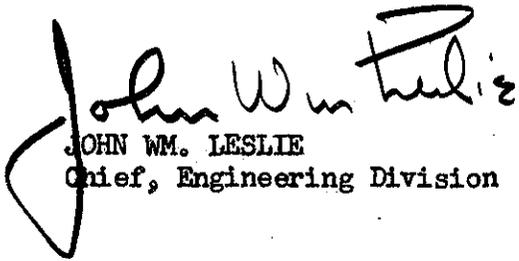
3 January 1962

SUBJECT: East Brimfield Dam and Reservoir, Thames River Basin,
Massachusetts - Master Plan for Reservoir Development.

TO: Chief of Engineers
Attention: ENGCW-0
Department of the Army
Washington, D. C.

1. Submitted for review and approval are four (4) copies of Design Memorandum No. 10, Master Plan for Reservoir Development, together with a copy of this letter bound in each copy of the memorandum, in accordance with EM 1110-2-1150.
2. The plan has been developed to provide for maximum use of the reservoir by the public consistent with the resources of the area and the authorized flood control functions of the project.
3. No additional land is required.
4. Adequate funds are contained in the approved project estimate.
5. Early approval is requested as a basis for initiation of construction this spring.

FOR THE DIVISION ENGINEER:


JOHN WM. LESLIE
Chief, Engineering Division

Incl.
as

BIBLIOGRAPHY OF DESIGN MEMORANDUMS

EAST BRIMFIELD RESERVOIR

<u>Design Memo No.</u>	<u>Title</u>	<u>Submission Date</u>	<u>Approved</u>
1	Hydrology	24 May 1956	31 Aug 1956
2	Hydraulic Design	19 July 1956	20 Jun 1957
3	Geology and Soils	22 June 1956	24 Aug 1956
4	General	31 July 1956	8 Mar 1957
5	Embankment Design	23 June 1956	22 Aug 1956
6	Structures	13 July 1956	9 Oct 1956
7	Real Estate Requirements	18 Oct 1956	28 Nov 1956
8	Relocations	21 Sept 1956	1 Feb 1957
9	Concrete Materials	12 Sept 1957	5 Nov 1957
10	Master Plan for Reservoir Development	Dec 1961	31 JAN. 1962

THAMES RIVER FLOOD CONTROL

QUINEBAUG RIVER

DESIGN MEMORANDUM NO. 10

MASTER PLAN

FOR

RESERVOIR DEVELOPMENT

EAST BRIMFIELD RESERVOIR, MASSACHUSETTS

This report, prepared in the Planning and Reports Branch of the Engineering Division, New England Division, has been coordinated with the Real Estate Division and is recommended for approval.


JOSEPH M. GEOGHEGAN
Chief, Real Estate Division

FOREWORD

The completion of the East Brimfield Flood Control Reservoir on the Quinebaug River in south central Massachusetts, provides an excellent opportunity to supplement existing public recreational resources in this heavily populated region of southern New England.

The cities of Worcester and Springfield, the second and third largest in Massachusetts, are within twenty-five miles of the project.

Hartford, the capital city of Connecticut, and Providence, the capital of Rhode Island, and their metropolitan areas, lie within forty miles of the project.

Boston, the capital of Massachusetts, with its populous surrounding area, is only a little over an hour's drive from the project.

Over 1,700,000 persons live within a forty-mile radius of the project and almost 900,000 of these reside within a twenty-five mile radius. The past decade has witnessed a population growth of over sixteen percent in this area.

Within forty miles of the project in Massachusetts, there are nine State Forests and six State Parks. Seven of these areas offer swimming facilities and six offer boating.

With this scarcity of public areas for those highly popular pursuits, officials of the Department of Natural Resources and the Division of Fisheries and Game of the Commonwealth of Massachusetts have expressed strong interest in the availability of the East Brimfield Reservoir for public recreation.

The reservoir lands, including a permanent pool of 360 acres retained by the dam, the 65-acre Holland Pond, and three smaller ponds will be an important addition to the existing public recreational areas.

This Master Plan has been developed from a study of the recreational requirements of the region and the recreation, conservation and wildlife potentialities of the reservoir area.

The views of other interested Federal, state and local agencies have been carefully considered.

The Master Plan proposes basic initial development by Federal funds to the extent necessary for public access, parking and sanitation and minimum facilities which will enable the public to enjoy the recreational resources.

The approved project estimate contains funds adequate for accomplishment of the proposed development.

It is contemplated that subsequent development and management will be by appropriate agencies of the Commonwealth of Massachusetts under license agreement.

Interim management and maintenance of the reservoir area for public use will be performed by this office subject to the availability of funds for this purpose.

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I. INTRODUCTION

1-01. Authorization. - The flood protection plan for the Thames River Basin was approved by the Flood Control Act dated 18 August 1941 (Public Law No. 228, 77th Congress) which reads, in part as follows:

"Sec. 3 - That the following works of improvement for the benefit of navigation and the control of destructive flood waters and other purposes are hereby adopted and authorized..."

"... THAMES RIVER BASIN. The plan for a system of reservoirs and channel improvements in the Thames River Basin, Connecticut, Rhode Island, and Massachusetts, in accordance with the recommendation of the Chief of Engineers in House Document Numbered 885, Seventy-sixth Congress, third session, is approved, and there is hereby authorized \$6,000,000 for initiation and partial accomplishment of the project."

The system of reservoirs in the Thames River Basin referred to above proposes the construction of seven reservoirs, one of which is the East Brimfield Reservoir on the Quinebaug River. The Flood Control Act approved 22 December 1944 authorized an additional amount of \$7,200,000 for the completion of the approved plan.

Authorization for development and use of reservoir areas for public recreational and other purposes is contained in Section 4 of the Flood Control Act approved 22 December 1944 (Public Law 534, 78th Congress, 2nd Session), as amended.

This Master Plan for reservoir development has been prepared in accordance with EM 1130-2-302, Planning and Administration of Project Lands and Waters, and related manuals.

1-02. Purpose and Scope. - The purpose of this Master Plan is to present a comprehensive and coordinated program for the development, management and use of the East Brimfield Flood Control Reservoir Area for public purposes which are not incompatible with the authorized project purpose. The plan will serve as a guide in the operation and control of land and water use for the derivation of maximum public benefits from the resources of the project. It is intended that this plan will be flexible so that adjustments may be made to it as any changing conditions may warrant.

The scope of this plan includes an evaluation of the public recreational potential of the reservoir area in relation to other recreational opportunities available to the public within the area on which the project may be expected to exert influence.

The development and subsequent operation required to carry out the program has not been considered solely a Federal responsibility but rather a partnership with State and local agencies in providing for public enjoyment of the recreational resources of the project.

1-03. Cooperative Planning. - The following agencies participated in studies leading to the recommended Master Plan:

- Massachusetts Department of Natural Resources
- Massachusetts Division of Forests and Parks
- Massachusetts Division of Fisheries and Game
- Massachusetts Water Resources Commission
- U.S. Fish and Wildlife Service
- U.S. Public Health Service
- U.S. National Park Service

In addition, comments were received from nearby communities, groups, and individuals.

The Master Plan, as submitted, has the general concurrence of the planning agencies.

Some interests in the Town of Holland and an official of a girls' summer camp near Holland Pond have indicated opposition to public recreational use of government-owned land in this area.

It has been concluded that the wide public benefits which will accrue with this use do not warrant further consideration of the few differing views of local interests. The Director of the State Department of Natural Resources has determined that the development would not be injurious to the Town.

II. DESCRIPTION OF AUTHORIZED PROJECT

2-01. Location. - The East Brimfield Flood Control Dam is located on the Quinebaug River, one mile southwest of the Village of Fiskdale, in the town of Sturbridge, Worcester County, Massachusetts. The reservoir site includes portions of the towns of Holland and Brimfield. The project is about 5 miles northwest of Southbridge, 20 miles west of Worcester and 23 miles east of Springfield, all in Massachusetts. It is 35 miles northeast of Hartford, Connecticut and 40 miles northwest of Providence, Rhode Island. It is 7.5 miles upstream from the Westville Flood Control Dam, another Corps' project which is scheduled for completion during the spring of 1962.

2-02. Pertinent Data. - The dam is a rolled earth fill and rock embankment 520 feet long, with a maximum height of 58 feet above the streambed. Elevation at top of dam is 672 feet, m.s.l. The spillway is a chute type with a low overflow weir and is located off the right abutment. Spillway crest elevation is 653 feet, m.s.l. and spillway length is 75 feet.

The outlet works include a 10'-6" horseshoe-shaped conduit approximately 210 feet long. Control is effected by two 6'-3" x 11'-0" sluice gates, electrically operated, with a discharge capacity of 2,850 c.f.s. at spillway crest elevation.

The capacity of the reservoir at spillway crest is 28,800 acre feet, which is the equivalent of a runoff of 8.0 inches from the drainage area of 67.5 square miles. The reservoir at spillway crest extends about 5.5 miles upstream and has a surface area of 2,270 acres.

A permanent pool with a surface area of 360 acres at elevation 632 feet, m.s.l., has been provided. This pool has a maximum depth of 13 feet at the dam. It is maintained by a concrete box weir around the intake structure. The weir contains a stop-log structure which permits draining of the pool if necessary and may also be used to adjust the pool level.

The East Brimfield Reservoir will be regulated whenever downstream discharges exceed, or are expected to exceed, the safe downstream channel capacity. The East Brimfield Reservoir will also be regulated in conjunction with authorized reservoirs on the French River, to affect as much flood regulation as possible at Putnam, Connecticut, and other downstream damage centers.

The cost of the project is \$6,580,000.

2-03. Description of Reservoir Area. - Reservoir land required for the project is about 2,849 acres, of which 2241 acres will be in fee simple with flowage easements on the remaining 608 acres. The major portion of the reservoir lying above the village of East Brimfield is a broad flat brush and woodland swamp through which the Quinebaug River and a portion of Mill Brook flow in well defined but meandering channels. In some places the swamp is well over a mile wide, showing only the slightest elevation change, thus creating a natural extensive swamp reservoir with extremely slow runoff. Most of the slopes rise rather abruptly from the broad flat bottom so that the upper flowage of the flood control pool will encroach only on the lower portions of the steep slopes and thus form rather steep shoreline bank. Nearly 70% of the reservoir area was in brush and woodland. The wooded portion of the upland is mixed

hardwood and soft woods, typical of southern New England.

The reservoir is irregularly shaped, the main stem river flowing generally in a northeasterly direction. The reservoir length is 8.5 miles with a maximum width of 10,000 feet and average width of 2,200 feet.

In the three miles of Quinebaug River between the Holland Pond outlet and the permanent pool inlet the elevation drop is only 3 feet.

2-04. Climate. - The climate in the area is variable. The mean annual rainfall approximates 47.0 inches with a maximum of 67.0 inches and a minimum of 31.0 inches. The mean annual temperature for the area is approximately 48° F. In summer, temperatures rarely rise to 100° F and during winter may fall to 0° F or lower occasionally.

III. PROJECT RESOURCES

3-01. - Suitability at Reservoir Area for Recreational Use.
The East Brimfield Reservoir is a single-purpose flood control reservoir and, in accomplishment of its objective, may impound floodwaters to a maximum depth of 50 feet at the dam. Although it is recognized that a flood may occur at any time of the year in New England, the major use of this reservoir will be in the spring of the year with release of the impounded floodwaters occurring as rapidly as downstream conditions and channel capacities permit. Experience over the past 20 years in the operation of other flood control reservoirs in New England indicates that the natural resources of the reservoirs are available for almost uninterrupted use during most of the summer, fall and winter seasons. Experience has further shown that the important benefits accruing from public recreational development and use, fish and game, forestry management and other uses have proven quite compatible with the authorized flood control purpose of these reservoirs. It is therefore concluded that the project is suitable for the development and use as proposed in the master plan.

Holland Pond with a surface area of 65 acres has been intensively used as a summer resort area in the past and offers excellent conditions for a park-type development.

The permanent pool with a surface area of 360 acres and a shoreline of 8 miles is the largest and one of the most attractive pools in the New England Reservoir project.

Lost Lake is a small, but highly scenic area of interest and potential for organized primitive camping and nature study by Boy Scout and similar groups.

The project is readily accessible over an excellent highway system.

The land and water areas are well suited for swimming, picnicking, fishing, boating, hiking, hunting and nature study with moderate development of basic facilities.

3-02. Fish and Wildlife Resources. - The permanent pool is perhaps the most significant feature of the post construction period in regard to its effect on the fishery resource. Generally speaking, this pool is rather shallow, with the greatest depth of 13 feet being situated immediately behind the dam. However, the pool is not shallow to the point of creating significantly extensive shoal areas under two feet deep. The major portion of the shoreline slopes are moderately steep. The important 110-acre Long Pond, about 2.2 miles of main stem Quinebaug River, roughly one-half mile of Long Pond inlet and about a quarter mile of Long Pond outlet is now inundated by the permanent pool. The new pool provides the same warm water type fishery that was formerly provided in Long Pond and the Quinebaug River. Bass continues as one of the more popular and eagerly sought species, while yellow perch, chain pickerel and bullheads continue as the other important species in the pool. This body of water is not suitable for trout. About the only fishery loss that can be attributed to the permanent pool is the loss of about one-half mile of Long Pond inlet trout water plus a small amount of trout fishery in the Quinebaug River. The permanent pool, with its warm water fishery, more than compensates for those portions of the trout fishery which have been eliminated.

The permanent pool will likely realize its greatest fishery potential if it remains relatively stable and is not subjected to frequent radical fluctuations in water levels. Changes in surface elevation of two to three feet can likely be sustained without significant adverse effects. It is expected that on an average of once every two years waters will be impounded eight feet above the permanent pool level. This pool will flow well over half the reservoir area and shallowly inundate the bulk of the broad wetland or swamp. It will flood Long Pond, Holland Pond and two of the three small ponds. A temporary pool at this level and higher, such as the expected 646, can be detrimental to fishery interests. Because of the character of the swamp reservoir area above East Brimfield, the greatest portion of which is broad and flat, with shallow pockets and depressions, seepage areas, brush and hummock grass, it presents a condition that is conducive to the stranding of fish and other forms of aquatic animal life.

The extent of the damage cannot be ascertained but observations made at Knightville and at Mansfield Hollow Reservoirs immediately following the flood water drawdown of 1955 indicated that

a considerable number of fish became stranded. These observations also revealed that the fishery resource suffered temporary damages indirectly through loss of food organisms, such as crayfish and other forms of aquatic animal life, that perished after having been stranded. The loss of considerable numbers of crayfish was particularly noticeable at Mansfield Hollow Reservoir. However, in spite of anticipated detrimental effects of inundation a warm water fishery should continue to exist in the permanent pool, the exposed ponds and in the main stem Quinebaug River. Management practices and annual stocking will more than compensate for the occasional damage.

The reservoir area has been heavily hunted in the past. Upland game animals are sufficiently numerous on the site to offer the hunter attractive and varied sport. The region of Massachusetts in which the project is located has been determined by the State to present above average deer range. The area possesses significant woodcock values and this species, along with grouse and cottontail, are hunted to a considerable extent. The permanent pool will deny terrestrial cover to these species with a subsequent reduction in value.

The pre-project pheasant population was not large enough to support any but the lightest hunting pressure. With the project, however, the Division of Fisheries and Game of the Commonwealth has a keen interest in acquiring a licence for the management of fish and wildlife resources of the area with particular interest in establishing a managed upland game public hunting area. The project presents such an opportunity and will help in fulfilling a need for an area of this type in the vicinity.

There is a steadily increasing demand for pheasant hunting and representatives of the State feel that habitat on portions of the area can be improved to the point where these areas can be managed intensively for pheasant shooting with a stocking program. This stocking would be done immediately before and during the hunting season and the habitat improvement would be geared to short period occupancy.

A portion of the reservoir area offers excellent opportunities for improved waterfowl habitat with a management and development program. State and Federal wildlife representatives have expressed strong interest in such a program. This type development would adequately compensate for wildlife losses and the area could become one of the key waterfowl areas in this section of the State.

3-03. Report of Wildlife Agencies. - A detailed report on the fish and wildlife resources in relation to the water development for the East Brimfield Flood Control Project on the Quinebaug River was prepared by the U.S. Fish and Wildlife Service in September 1957. This report was prepared with the assistance of the Massachusetts Division of Fisheries and Game.

These interests are currently reviewing the fish and game aspects of the project. Additional detail will be incorporated in the development plan which will be a part of the license for fish and game management purposes which the State desires.

3-04. Forestry Resources. - The forestry resources will be evaluated in cooperation with the Department of Agriculture (U.S. Forest Service) and appropriate State agencies as required by Public Law 86-717-H.R. 9377. The resources appear to be of major value as cover contributing to the presently desirable character of the area. If the subsequent evaluation, however, indicates any program of silvicultural management is warranted, it will be accomplished to the extent practicable and compatible with the recommended other uses of the project.

3-05. Water Supply. - Community and industrial interests downstream from the project have expressed interest in water storage in the reservoir for low-flow regulation. Studies indicate that the project has the capability of meeting this need with only negligible effect on the authorized purpose and with an operating schedule which is compatible with both public recreational and fish and wildlife uses. The results of these studies, and the action thereon by higher authority will be submitted as a Supplement to the Master Plan.

3-06. Other Resources. In accordance with the national policy of preserving significant aspects of the nation's heritage, an investigation of the historical, prehistorical and archeological significance of the reservoir area was made by personnel of the Peabody Museum of Harvard University under contract with Region Five of the National Park Service. The report was received in February 1959.

This report notes that the reservoir area lies within the southwest border of the Nipmuc territory. Several historic Nipmuc towns were nearby; Ashquash, four miles to the north in Brimfield, Metervemesick, four miles to the east in Sturbridge, both in Massachusetts, and Mashapaug, six miles to the south in Union, Connecticut.

In this region, history records the travel route over the Historic Bay Path, running from Boston (Massachusetts Bay) to the Springfield area, of John Oldham, the Rev. Thomas Hooker and the Dorchester Party almost a century and a half (1633-1635) before the American Revolution.

This is the region of the Eliot Grant. Two Nipmuc Indians, Wattallowekin and Nakin, were so impressed by the preaching of the Rev. John Eliot, so-called "Apostle to the Indians", that, in 1655 they gave a 1,000 acre plot of land to the famous missionary. This parcel lies near Alum Pond (originally Pookookuppog Pond) along the northerly end of the former Long Pond area of the reservoir.

Steps toward settlement of the area took place around 1701 when Major John Pynchon of Springfield and four others comprised a committee to lay out a settlement. The eight-mile square area included the present towns of Brimfield, Holland, Monson and Wales. The towns were separated in the period 1760-1762.

There is substantial evidence of aboriginal occupation in the East Brimfield Flood Control Reservoir, with most of this concentrated in the vicinity of Holland Pond. This area has been identified as the temporary encampment of Nipmuc at the beginning of King Philip's War in 1675. Captain Ephraim Curtis, who visited this camp of potential enemies with a party of only twelve men as the official representative of the Massachusetts Bay Colony, has left a fascinating eye-witness report of the mission.

The artifact assemblage from the reservoir area indicates a crude quartz chipped stone industry. The near absence of pottery suggests that the material represents either a pre-ceramic Archaic stage plus a trace of later occupation, or else a post-ceramic Woodland stage.

The National Park Service advises that it is doubtful that any of the sites which have been located are worthy of salvage excavation, but that further consideration will be given to this matter.

The reservoir area is available for research and observation to that segment of the public who have interests in the archeological and historic resources of the site.

"Old Sturbridge Village", a restoration of a typical early American community, is located near the project and is an attraction to visitors from all over the country.

No other known historical, archeological or mineral resources are affected by the project.

IV. FACTORS INFLUENCING RESERVOIR DEVELOPMENT

4-01. Features of Region Served. - The project is centrally located to the highly populous area of Southern New England. Over 1,700,000 persons live within an hour's drive (forty miles). This represents an increase of over sixteen percent in the past decade.

Although this region contains large cities with industrial and commercial developments, the project area has retained a charming rural character which proves so appealing to the hurried and harried city dweller.

The Massachusetts Turnpike and U.S. Route 20, the major east-west highways in New England pass through the project; U. S. Route 15, a major north-south road from the metropolitan New York area passes just east of the reservoir and these main arteries are fed by an excellent network of connecting roads, all contributing to ready and easy access.

In addition to the resident population, a large share of the heavy vacation travel to New England will have convenient access to the project.

Reflecting the importance of recreation to the New England economy, and indicative of the growing demand for recreational opportunities are figures compiled by the New England Council which showed that vacationists put about \$1.1 billion into the New England economy in 1960 and current reports of various type activities indicate a further increase this year. Fishermen and hunters will spend an estimated \$350 million in New England this year, according to an analysis of the U.S. Fish and Wildlife Service. Massachusetts is an important participant in the above activities.

4-02. Population. - The number of persons residing within an hour's drive (40 miles) of the project is estimated at 1,719,194 by the preliminary 1960 U.S. Census. See Table 1, "Population Data".

The principal cities within a 40-mile radius of the project follow:

<u>City</u>	<u>Population</u>
Northampton, Mass.	30,000
Westfield, Mass.	26,000
Leominster, Mass.	27,000
Worcester, Mass.	186,000
Chicopee, Mass.	61,000
Holyoke, Mass.	52,000
Springfield, Mass.	173,000
Westfield, Mass.	26,000
West Springfield, Mass.	24,000
West Hartford, Conn.	38,000
Hartford, Conn.	161,000
East Hartford, Conn.	28,000
Manchester, Conn.	41,000
Enfield, Conn.	31,000

TABLE I

Population Data

	<u>Within 10 miles</u>		<u>Within 25 miles</u>		<u>Within 40 miles</u>	
	<u>1960</u>	<u>1950</u>	<u>1960</u>	<u>1950</u>	<u>1960</u>	<u>1950</u>
Massachusetts	32,548	30,349	772,133	699,439	1,113,729	996,289
Connecticut	1,440	1,015	113,630	76,531	593,668	474,289
Rhode Island			5,362	5,058	11,797	11,127
TOTAL	33,988	31,364	891,125	781,078	1,719,194	1,481,705

4-03. Existing Public Recreation Areas.- The three states within the 40-mile zone of influence of the project all provide state parks, forests and other recreation areas for the public. The development of these vary greatly in extent. Plate Number 2 shows the location of existing public recreation areas and available uses. The greatest deficiency is in the water resource. The addition of the project water areas to supplement these will be of great value.

4-04. Interest in Public Use. Strong public interest has been shown in the recreational use and development of the project area with the exception of a group in the Town of Holland, who, identified as the "Taxpayers of Holland, Massachusetts" have registered opposition to the establishment and operation of any type of public park or recreation area in that portion of the reservoir within the Town. This matter is discussed in detail in letter to O.C.E. dated 14 December 1961. These objections appear far outweighed by the general public benefits which will be derived.

The Commissioner of Natural Resources of the Commonwealth has long been interested in full public utilization of the land and water areas of the project and, upon recent review dated 9 October 1961, confirmed his prior position by stating that "I am still convinced that the recreational facilities planned for Holland Pond will fill a need in that section of the state and will not be detrimental to the best interest of the Town". He requested that the development proceed as contained in this Master Plan.

In a report of an Inventory and Plan for Development of the Natural Resources of Massachusetts prepared by private consultants for the Commonwealth, it was noted that the project area should merit consideration for development. It also noted the recreational needs of the state are four times the present accommodations.

The Massachusetts Division of Fisheries and Game, supported by sportsmens' clubs, urge appropriate development for these features and utilization of portions of the reservoir for public hunting and fishing.

Newspaper articles have endorsed and commended public recreational use of the reservoir.

Officials of the Town of Sturbridge desire such use.

Boy Scout groups from Hampden County and the Town of Sturbridge, the Springfield Girls Club, and others have expressed interest in being able to use portions of the area for organized group activities.

4-05. Anticipated Public Use. - Intensive public use is expected at this project. The experience of State officials indicate that in a relatively short time the demand will be limited only by the capacity of the accommodations.

The recreation land and water resources of the East Brimfield Reservoir are those described as intermediate recreation areas in the 1959 publication by "Resources for the Future, Inc.," titled "The Crisis in Outdoor Recreation." This recognizes the difference between resource-based recreation areas of outstanding natural qualities and user-oriented recreation areas whose most important characteristic is accessibility. An intermediate recreation area is defined generally as a day-use area relatively easy to reach with boating, swimming, hiking, picnicking and fishing as the most common activities. It has pleasing scenic qualities and can readily be adapted to public recreation use. It has been estimated that the demand for this type area will increase as much as sixteen times by the year 2000.

The proposed initial development anticipates an annual attendance of about 60,000 by 1964 with ultimate attendance of 100,000. Subsequent expansion would be recommended as later demands may warrant.

The procedure used in estimating annual attendance is based upon the population, population trend, and consideration of other facilities and recreational opportunities within an hour's drive of the project, weighed by the experienced relationships between recreational activities and population, as demonstrated on existing state and federal areas.

V. IMPROVEMENTS NEEDED

5-01. Requirements for Maximum Benefits. - Cooperation of Federal, State and local agencies with the Corps of Engineers will be required in order to obtain maximum recreation, conservation, and wildlife benefits from the East Brimfield Reservoir. Development by the Corps of Engineers will be limited to adequate access, sanitary and picnic facilities, parking, boat launching ramps, and provisions to make the recreation areas safe for public use. It is expected that the provision of these basic facilities will encourage full development, management, maintenance and services by state and/or local agencies. The Department of Natural Resources of the Commonwealth has offered to furnish picnic tables and fireplaces and has requested a licence for management of the recreation areas by an appropriate state agency. The issuance of such a license will be recommended subsequent to approval of this Master Plan.

In order to secure maximum wildlife benefits from the project's resources, a general plan will be developed for fish and wildlife management with the U.S. Fish and Wildlife Service and the Massachusetts Division of Fisheries and Game with a subsequent licence to the State Division of Fisheries and Game for management and improvement of project areas for wildlife purposes.

The importance of the forestry resource of the project will be evaluated in cooperation with the U.S. Forest Service and the State Park and Forest Division and any appropriate improved forestry measures will be initiated. The value of any forestry resource at the project appears to be low at the present time.

Cooperation of state and local highway agencies will be required in order to continue desirable road access to the project and to erect suitable directional and information signs to the project.

5-02. Type and Facilities Required. - It is contemplated that Federal expenditures will be limited to the following types of facilities in the reservoir area: access roads, car and boat trailer parking, boat ramps, picnic facilities supplementing the tables and fireplaces furnished by the state, a beach area, change house structure, comfort station with flush-type toilets, pit-type toilets and attendant structures, water supply, and safety measures as required. Adequate signs will be posted for the information, direction, safety and convenience of the visiting public.

Snow will be cleared to provide a skating area during the winter months and for the parking of cars, to the extent that the demand for such use warrants.

VI. DEVELOPMENT PLAN

6-01. General. - In evaluating the requirements for recreational developments, it is important that consideration be given to the principal leisure-time periods of the surrounding population. These periods may be defined as day, weekend or holiday, and vacation. Day use, as the name implies, means use of the area for periods of one day, or portions of a day. Analysis of recreation trends indicates that the East Brimfield Reservoir would be primarily a day-use area and public use facilities have been initially planned to meet this need. Portions of the reservoir will be reserved for organized camping, initially of the primitive type, to meet the needs of Boy Scouts and similar groups. As a result of a joint study between representatives of the State agencies and this office, a overall plan of proposed use is being recommended. Development at Holland Pond (Lake Siog) area will be of the park type. For many years, the shores of this pond were occupied by a colony of summer cottages with attendant access facilities. The existing character of the area lends itself

readily to the proposed use. Two shore areas along U.S. Route 20 will be available for swimming with land reserved for subsequent development as the demand may warrant. Boat launching facilities will encourage use of the permanent pool. The Lost Lake area will be reserved for organized group camping.

6-02. Land Allocation. - The tentative allocation of project lands for various purposes is shown on Plate 3. It is contemplated that the area downstream of the log boom will be reserved for project operational and maintenance purposes, with accommodations for the visiting public at the dam under jurisdiction of the Corps.

The Holland Pond Recreation Area will be utilized for day-use public park purposes.

The Lost Lake Area will be reserved for camping and related use, initially as a primitive area.

Two areas on the permanent pool, adjacent to U. S. Route 20 will be reserved for day-use park purposes.

An area near Champeaux Road on the northwesterly side of the permanent pool will be reserved for primitive camping and related purposes.

Land for boat launching facilities is provided at designated sites in the permanent pool area.

Within the above-noted park and camping areas, it is proposed to make portions of land available for Boy Scout organizations, a Girls Club and similar type groups. The following table shows the size and elevations of these public use areas:

PUBLIC USE AREAS

<u>Name</u>	<u>Proposed Use</u>	<u>Above Conservation pool El. 632.0</u>	<u>Above 5-year frequency pool El. 644.0</u>	<u>Above flood control pool El. 653.0</u>	<u>Tree Cover</u>	<u>Terrain</u>
Holland Pond Recreation Area	Public Use	150*	25	2	Partially Wooded	Flat to Rolling
Road side Recreation Area	Public Use	8	3	0	Open	Rolling
Champeaux Road Recreation Area	Public Use	38	9	3	Partially Wooded	Rolling
Streeter Point Recreation Area	Public Use	12	0	0	Open	Flat
Lost Lake Recreation Area	Public Use	37	10	4	Partially Wooded	Flat

*Pond elev= 635 ±

The remainder of the project area will be available for fish and game management and public fishing and hunting under applicable state laws. It is contemplated that this allocation will include forestry management where appropriate, encouraging the concept of "Trees and Game - Twin Crops".

Any outgrants of land for individual, or non-public purposes will be of a temporary nature, and will not be in conflict with any public purpose noted above.

6-03. Plan of Improvement. - The development of facilities by the Corps of Engineers in areas to be later licensed to the state or other agencies will be confined initially to improvements described in this memorandum so that considerable latitude will be allowed the operating agency in its program. The proposed plan of initial improvements follows:

a. Vicinity of Dam. Located adjacent to heavily travelled U.S. Route 20 and near the Massachusetts Turnpike, both major east-west roads across the state, the East Brimfield Dam is expected to exert an attraction for visitors. An access road leading to the dam, a parking area providing a view of the dam and reservoir, and a comfort station have been furnished in the prime construction contract for the accommodation of the visiting public. An identification sign and an information sign with pertinent project data will be erected at the dam.

b. Holland Pond Recreation Area. This area will be initially developed at the southerly end of Holland Pond. This is the area of greatest appeal to state authorities. The proposed improvements consist of the following:

- Access Road
- Parking Area
- Comfort Station
- Water Bubblers
- Beach
- Change House
- Trash Receptacles
- Fire Barrels
- Selective Clearing
- Safety Measures -(Floats at swimming area, etc.)
- Signs, as required
- Hedge planting -(Live fence for portions of property delineation)
- 50 picnic tables)
- 25 fireplaces) to be furnished by the State

c. Streeter Point Recreation Area. This area, convenient to U. S. Route 20 with access by existing Streeter Road, is of interest to the Town of Sturbridge and will be developed as a supplementary area at such time as the primary facility at Holland Pond becomes saturated. Grading of the borrow area in conjunction with the prime contract has resulted in a desirable slope and bottom for informal swimming use, if desired.

d. Roadside Recreation Area. This general area was used in the past as a roadside picnic area by the State. It is attractive, contains spots of pleasant tree cover and is well suited for a continuation of this use. If needed in the future, the shore is suitable for beach development. At this time, it is recommended that twelve picnic tables and six fireplaces, along with trash receptacles and fire barrels be provided by the Corps.

e. Other Areas. It is proposed to establish reserve areas for park purposes on the westerly shore of the northerly arm of the permanent pool in the vicinity of Champeaux Road and on the easterly side of Lost Lake. Both of these areas contain pine groves with clean forest floors and gentle slopes, and have already been the object of interest by Boy Scout authorities and others for group primitive camping and short-term outdoor nature activities. Adequate signs will be provided.

f. Boat Launching Sites. These sites have been selected both because of east of access and the locations which will keep boating activities away from swimming areas. This is a prudent and desirable safety provision. The proposed improvements consist of the following at Sites Number 1 and 2 at this time, and future provision for a similar facility at Site 3 when the demand may require:

Boat launching ramps
Auto and boat trailer parking
and turn-around
Pit-type latrine
Access road improvement

g. General Reservoir Area. Minimum improvement of existing roads and cooperative planning with the State Forestry Department for fire protection and suppression measures will be instituted.

h. Control of Access Roads. Barriers will be installed on all roads leading into the reservoir area so that they may be closed, as a safety precaution for the public, prior to any impoundment of floodwaters. Suitable signs will also be posted.

6-04. Criteria. - The extent and type of the recommended basic facilities follows guideline criteria as established in EM 1130-2-312. These provisions are in general consonance with park criteria of the State of Massachusetts and the National Park Service.

The authorized project needs for availability of the reservoirs for the storage of flood flows at all times required some modification of features in order to eliminate hazards to this operation by providing against flotation.

Signs have been designed to blend with the rustic nature of the area.

6-05. Schedule of Development. - The proposed park-type development at Holland Pond and the boat-launching facilities at Site 1 and Site 2 at the permanent pool are scheduled for construction in the last quarter of Fiscal Year 1962.

Funds contained in the approved project estimate appear adequate to accomplish the proposed work.

If additional development should be required at some future date because of inadequacy of facilities due to increases in usage greater than anticipated and inability of the prospective licensee to provide such accommodations, then funds will be requested as part of the program for completed projects.

A summary of proposed facilities and estimate of cost are included in Appendix A.

VII. RESERVOIR MANAGEMENT

7-01. General. - Planning for management of the reservoir area for public use has proceeded on the basis of ultimate management by appropriate agencies of the State of Massachusetts under a long-term license agreement. The Department of Natural Resources of the State has requested such an arrangement. It is contemplated that the Holland Pond Area will be managed under license agreement by the State Division of Forests and Parks, an element of the Department of Natural Resources and the other public use areas will be under the direct jurisdiction of the Corps until such time as non-Federal management can be demonstrated to effect the maximum public use of these lands. The remainder of the land and water areas of the project will be managed by the State Division of Fisheries and Game in the interest of fish and wildlife. Any management of the forest resource will be integrated with this activity in a compatible manner.

It must be recognized, however, that several factors may not permit the immediate undertaking of these responsibilities by the state agencies. The method of funding for necessary personnel and maintenance, and the time when funds shall become available have not yet been fully determined.

In order to make the recreational use of the project available to the public during this interim period, this office will manage, operate and maintain roads and other public use facilities subject to the availability of funds for this purpose.

7-02. Corps Personnel Required. - Operating personnel required for this project to perform its authorized mission of flood control is limited to an operator of the dam and an assistant. Adequate management of the proposed public use program will require the employment of additional seasonal help. Supervision and maintenance of the developed public use area is required in the interest of orderly and safe use. The reconditioning of facilities will be a necessary annual operation. In consonance with intensity of usage which may be experienced, this Division proposes to engage the services of two or three additional personnel during the months of May to October to perform duties related to the public use program. Proficiency in life-saving techniques will be a requisite for employment.

7-03. Area to be Managed by Other Agencies. Prior to submitting any license or lease for use of reservoir lands or concessions concerned therewith to higher authority, the proposed detailed program of the agency, including personnel, financial capacity, proposed practices and schedules of development will be reviewed and approved by this office to insure proper management of the resources.

7-04. General Plan for Fish and Wildlife Management. On the recommendation of the U.S. Fish and Wildlife Service and the Massachusetts Division of Fisheries and Game a General Plan for Fish and Wildlife Conservation and Management will be prepared for submission to higher authority and subsequent execution. It is contemplated that the Massachusetts Division of Fisheries and Game will manage and improve the wildlife resources under a long-term license, as previously discussed.

7-05. Other Land Use. - Under the existing policy of priority of allocations for land use and the limited value of the reservoir lands for agricultural or grazing uses it is not contemplated that any private outgrants will be made.

7-06. Fire Protection. - About half of the reservoir is wooded. The danger of fires is ever present, particularly during dry periods of the year. Public recreational use tends to increase this hazard.

The fire protective and suppression services of the Massachusetts Division of Forests and Parks and surrounding communities are available for use on lands of this reservoir. Public use of the forest will be controlled in conformity to conditions as established by that Division. No open fires will be permitted except at fireplaces in the developed recreation areas. Roads throughout the reservoir will be maintained in a manner adequate to permit passage of fire-fighting equipment. Drums filled with water will be placed throughout the picnic area.

Any supplemental measures recommended by the U.S. Forest Service or the Massachusetts Division of Forests and Parks during the required review of the project forest resources will be instituted.

Public education in the field of forest fire dangers by Federal and State forest services through the medium of signs, press and radio has been quite successful in New England. No forest fires have occurred on reservoir lands in this Division for the past fifteen years and a fire of significant loss has yet to occur.

7-07. Health Measures. - A reconnaissance malaria survey was made by the U.S. Public Health Service in 1945. It advised that neither malaria nor mosquito-borne encephalities are recognized as public health problems in the area. The principal insects of public health importance are pest mosquitoes. In order to minimize mosquito problems, flottage, secondary growth and aquatic plants will be removed after impoundments. As part of the maintenance program, surveys to determine the amount of mosquito breeding will be made and chemical measures will be provided to control any significant production. The Massachusetts Department of Public Health will be consulted on desirable remedied measures for any health problems encountered.

The Massachusetts Department of Public Health has stated that the permanent pool will have no effect on pollution control measures in the Quinebaug River Valley and should have no major effects on the chemical and physical characteristics of the river after the pool is well established. The Department is of the opinion that neither oils nor floating substances should be used for mosquito control in the permanent pool since they would interfere with maintenance of suitable oxygen balance in the river.

Analysis of water quality of the streams and ponds in the project area for suitability for public swimming has been made, and the State Department of Health has found the water areas suitable.

Any well or spring water for public consumption will be tested before such use, after any inundation, and at least annually to insure its safety.

It is concluded that the overall effects of the project should be beneficial from the mosquito control standpoint since a reduction in flooding of downstream area will result in a decrease of the highly pestiferous mosquito.

7-08. Controls and Regulations. - The main objective of controls and regulations at reservoir lands and waters is to provide for the health and safety of the public. Signs shall be informative, permissive, and inviting. Negative signs and warnings shall be held to a minimum. This policy will be followed in administration of the reservoir for public use so that the public may enjoy the greatest freedom without implications of restraint.

7-09. Monumentation. - Monumentation of project boundaries and delineation of such lines at the designated public use areas is proposed for ease of management and elimination of possible trespass difficulties. Field markings will take the form of signs, blazed and painted trees, boulders, etc. and the utilization of readily identifiable features such as roads.

Further monumentation will be desirable only if a forestry management program which involves timber harvesting should later be found beneficial. This does not appear likely in the foreseeable future at this project.

In the event it were to be undertaken, however, it is contemplated that boundary delineation would be accomplished by the agency licensed to manage this resource.

VIII. CONCLUSIONS AND RECOMMENDATION

8-01. Conclusions. - The East Brimfield Reservoir area, including the permanent pool and other water bodies located therein, will be an important supplement to existing public recreation areas and will assist in meeting the present and future public needs for outdoor recreational opportunities.

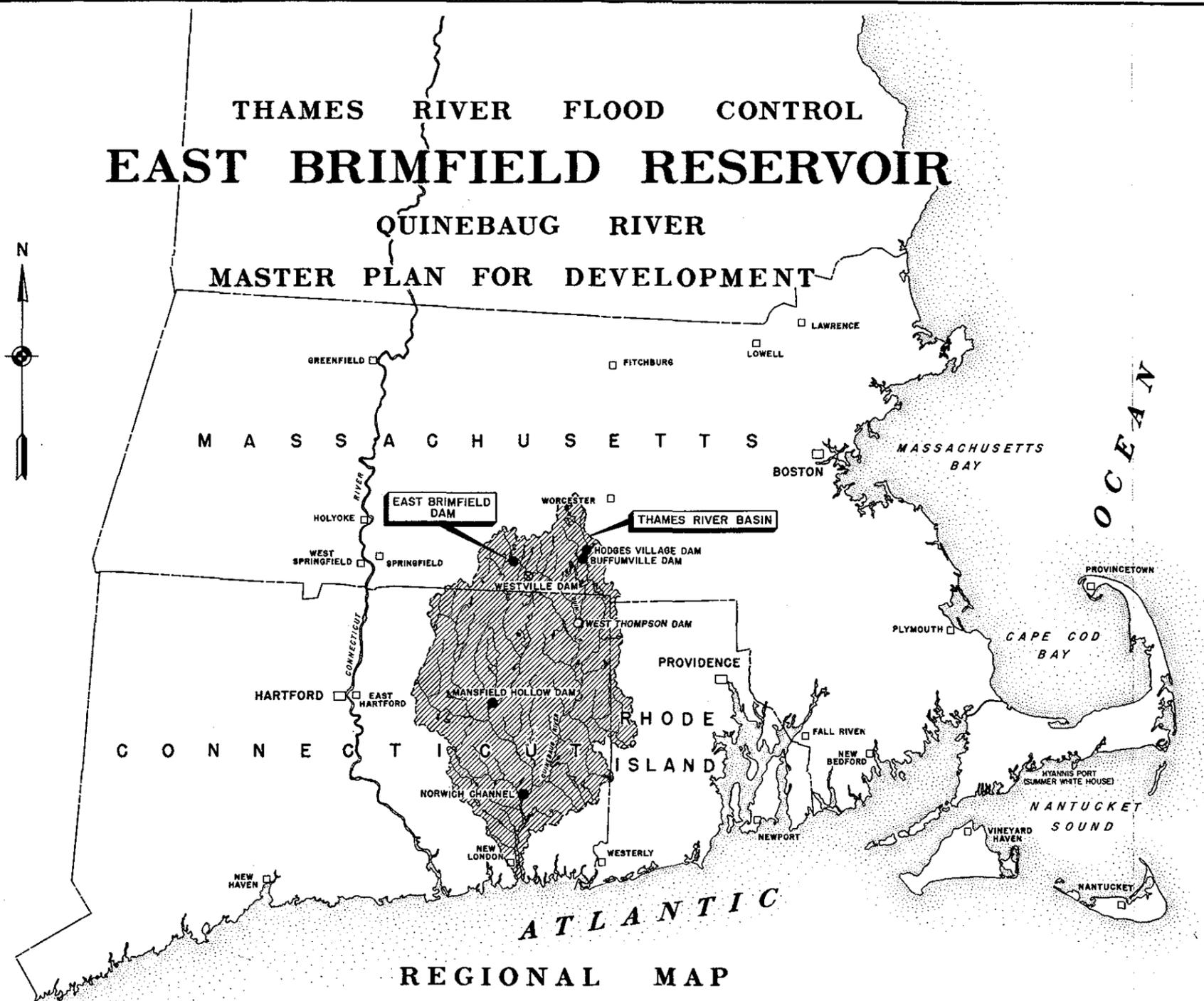
The proposed plan of improvement will utilize to best advantage project lands which are desirable for public access and recreation and those lands which are valuable for wildlife and other purposes.

The Master Plan, as presented, complies with the Flood Control Act of 1944, as amended; the Coordination Act of 1958; the Water Supply Act of 1958; the Forest Cover Act of 1960 and Engineering Manuals implementing these Acts.

The Plan also has the general concurrence of Federal and state agencies who are interested in the development of the reservoir area for maximum public benefit.

8-02. Recommendation. - It is recommended that this Master Plan for the development of the East Brimfield Reservoir, Massachusetts, be approved at the earliest practicable date.

THAMES RIVER FLOOD CONTROL EAST BRIMFIELD RESERVOIR QUINEBAUG RIVER MASTER PLAN FOR DEVELOPMENT



LEGEND

RESERVOIRS COMPLETED	●
RESERVOIRS UNDER CONSTRUCTION	⊗
RESERVOIRS AUTHORIZED (ACTIVE)	○

REGIONAL MAP

INDEX

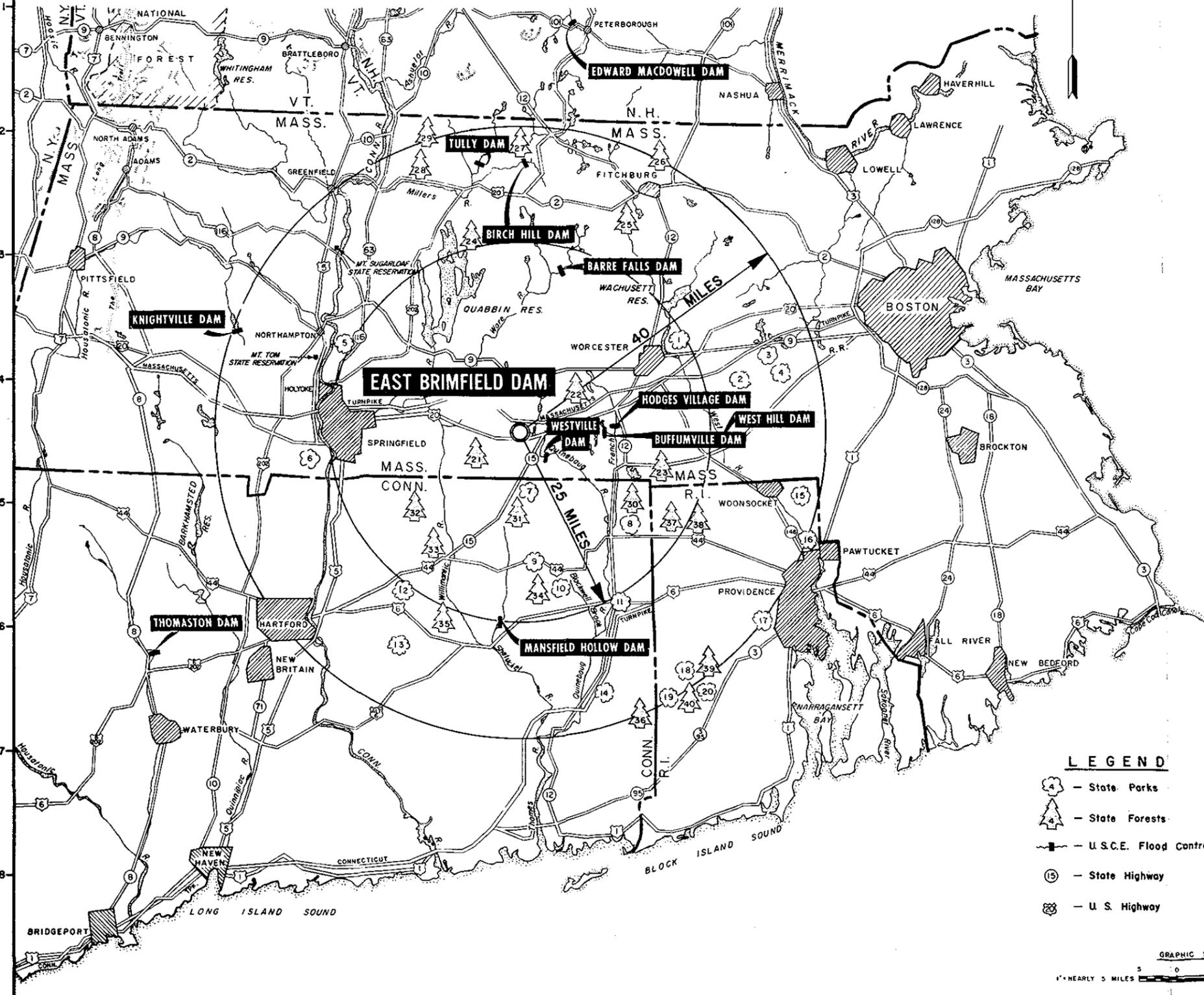
PLATE NO.	DRAWING NO.
1 REGIONAL MAP AND INDEX	TH-1-1722
2 PUBLIC RECREATION AREAS	TH-1-1723
3 GENERAL DEVELOPMENT PLAN	TH-1-1724
4 DEVELOPMENT AREAS	TH-1-1725
5 TYPICAL DETAILS	TH-1-1726
6 PIT LATRINE & CHANGE HOUSE	TH-1-1727

PLATE NO.	DRAWING NO.
7 DELETED	
8 COMFORT STATION - PLAN, ELEVATION & DETAILS	TH-1-1729
9 COMFORT STATION - UTILITIES	TH-1-1730
10 PROJECT INFORMATION SIGN	TH-1-1731
11 PROJECT IDENTIFICATION SIGN	TH-1-1732
12 PROJECT FEATURE SIGNS	TH-1-1733
13 REAL ESTATE MAPS (10 SHEETS - SEGMENTS A-J)	NED-PA-1338

REVISION	DATE	DESCRIPTION	BY

U. S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS.

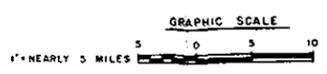
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SUBMITTED BY CHIEF DEVELOPMENT SECTION ENGINEER	APPROVED DATE DEC. 1961 CHIEF ENGINEERING STAFF
SCALE	DRAWING NUMBER TH-1-1722
SHEET	SHEET



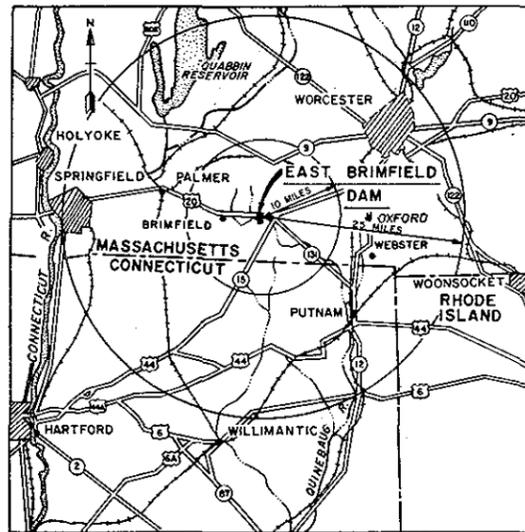
PUBLIC RECREATION AREAS										
NUMBER	TYPE OF AREA	INDEX	FACILITIES PROVIDED							
			SWIMMING	BOATING	CAMPING	FISHING	HUNTING	PICNICKING	SCENIC VIEWS	SKIING
1	STATE PARKS									
2	MASSACHUSETTS									
3	QUINSIGAMOND	D-4	X	X		X		X	X	X
4	WHITEHALL	D-4	X	X	X	X	X	X	X	X
5	HOPKINTON	D-4	X	X	X	X	X	X	X	X
6	ASHLAND	B-4	X	X		X	X	X	X	X
7	J.A. SKINNER	B-5	X			X	X	X	X	X
8	J.C. ROBINSON	B-5	X			X	X	X	X	X
9	CONNECTICUT									
10	BIGELOW HOLLOW	C-5	X	X		X		X	X	X
11	QUADDICK	C-5	X	X		X		X	X	X
12	NATHANIEL LYON (UNDEVELOPED)	C-5	X	X		X		X	X	X
13	MASHAMQUET BROOK	C-6	X	X		X		X	X	X
14	OLD FURNACE	C-6	X	X		X		X	X	X
15	BOLTON NOTCH (UNDEVELOPED)	B-6	X	X		X		X	X	X
16	GAY CITY	B-7	X	X		X		X	X	X
17	HOPEVILLE POND	C-7	X	X		X		X	X	X
18	RHODE ISLAND									
19	DIAMOND HILL	D-5	X	X		X		X	X	X
20	LINCOLN WOODS RES.	D-5	X	X		X		X	X	X
21	PETER RANDALL RES.	D-6	X	X		X		X	X	X
22	BEACH POND PARK	D-6	X	X		X		X	X	X
23	ARCADIA RESERVATION	D-7	X	X		X		X	X	X
24	DAWLEY MEM.	D-7	X	X		X		X	X	X
25	STATE FORESTS									
26	MASSACHUSETTS									
27	BRIMFIELD	C-5	X			X	X	X	X	X
28	SPENCER	C-4	X			X	X	X	X	X
29	DOUGLAS	D-5	X			X	X	X	X	X
30	MASS. FED. WOMENS CLUBS									
31	LEOMINSTER	D-3	X	X		X	X	X	X	X
32	WILLARD BROOK	D-2	X	X		X	X	X	X	X
33	MOHAWK TRAIL	C-2	X	X		X	X	X	X	X
34	SAVOY MT.	B-2	X	X		X	X	X	X	X
35	MONROE	B-2	X	X		X	X	X	X	X
36	CONNECTICUT									
37	QUADDICK	C-5	X			X	X	X	X	X
38	NIPMUCK	B-5	X			X	X	X	X	X
39	SHENIPSIT	B-5	X			X	X	X	X	X
40	NYE HOLMAN	B-5	X			X	X	X	X	X
41	NATCHAUG	C-6	X			X	X	X	X	X
42	NATHAN HALE (UNDEVELOPED)	B-6	X			X	X	X	X	X
43	PACHAUG	C-7	X			X	X	X	X	X
44	RHODE ISLAND									
45	CASIMIR PILASKI MEM.	D-5	X			X		X	X	X
46	GEO. WASHINGTON MEM.	D-5	X			X		X	X	X
47	WICKABOXT	D-6	X			X		X	X	X
48	ARCADIA AREA (UNDEVELOPED)	D-7	X			X		X	X	X
49	N.E.D. RESERVOIRS									
50	MASSACHUSETTS									
51	BARRE FALLS	C-3	X	X		X	X	X	X	X
52	BIRCH HILL	C-2	X	X		X	X	X	X	X
53	BUFFUMVILLE	C-4	X	X		X	X	X	X	X
54	HODGES VILLAGE	C-4	X	X		X	X	X	X	X
55	KNIGHTVILLE	A-4	X	X		X	X	X	X	X
56	TULLY	C-2	X	X		X	X	X	X	X
57	WEST HILL	D-4	X	X		X	X	X	X	X
58	WESTVILLE	C-4	X	X		X	X	X	X	X
59	CONNECTICUT									
60	MANSFIELD HOLLOW	C-6	X	X		X	X	X	X	X

LEGEND

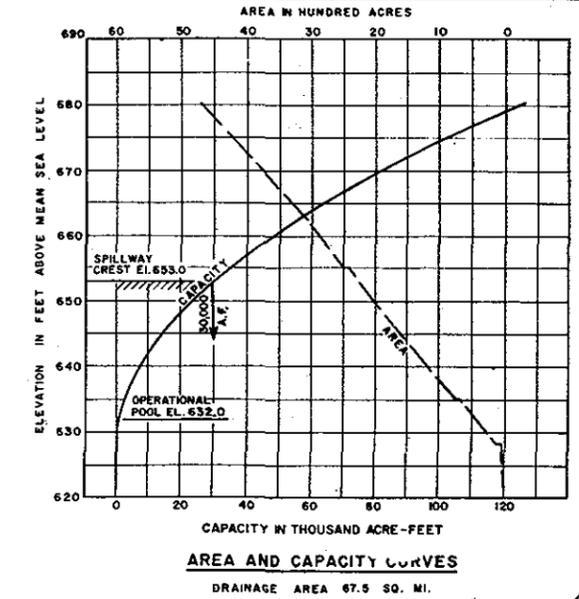
- State Parks
- State Forests
- U.S.C.E. Flood Control Dams
- State Highway
- U.S. Highway



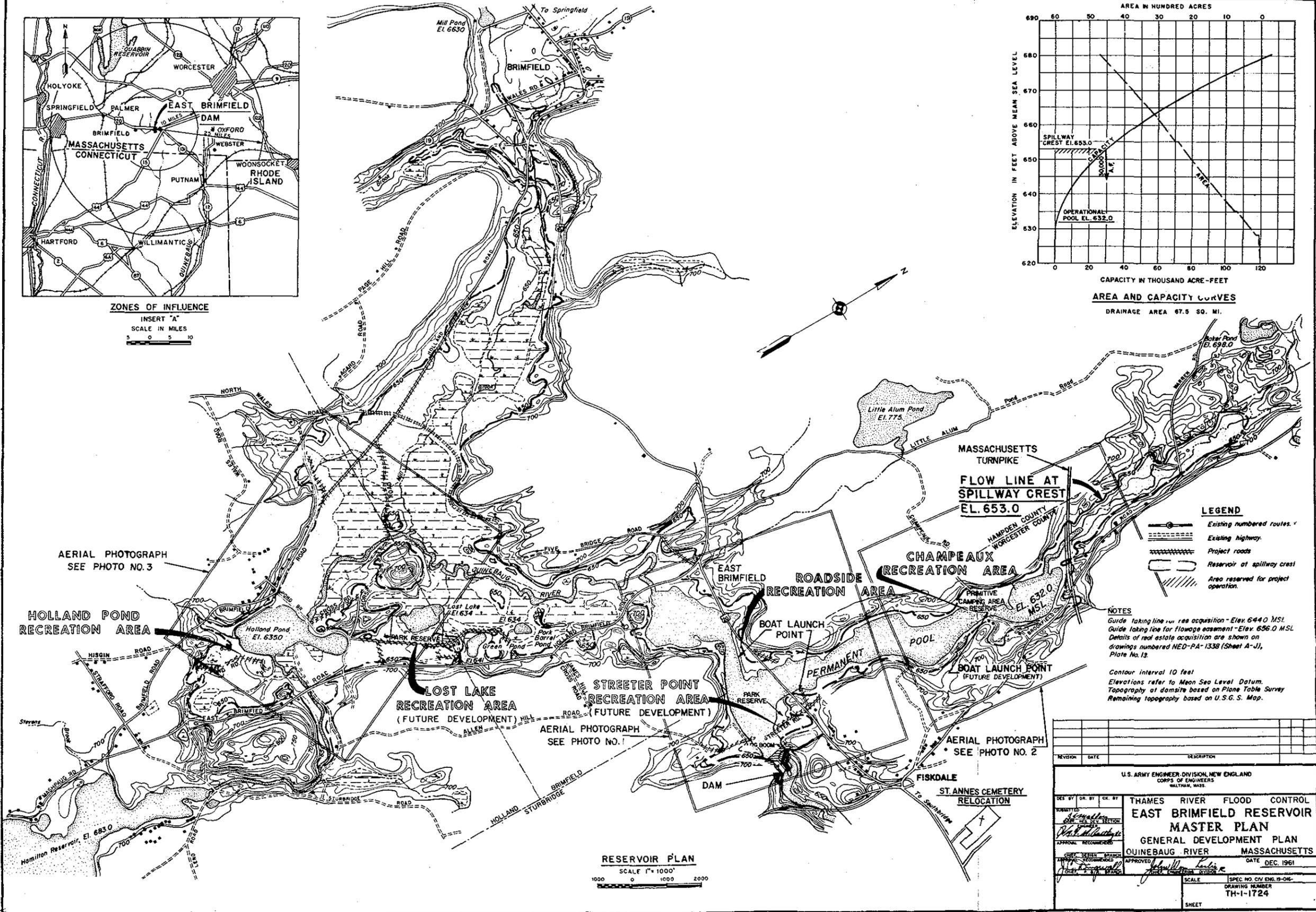
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APPROVED	DATE	DEC. 1961
SHEET NUMBER TH-1-1723		



ZONES OF INFLUENCE
 INSERT "A"
 SCALE IN MILES
 0 5 10



AREA AND CAPACITY CURVES
 DRAINAGE AREA 67.5 SQ. MI.



- LEGEND**
- Existing numbered routes.
 - Existing highway.
 - Project roads.
 - Reservoir at spillway crest.
 - Area reserved for project operation.

NOTES

Guide taking line for raw acquisition - Elev. 644.0 MSL.
 Guide taking line for flowage easement - Elev. 656.0 MSL.
 Details of real estate acquisition are shown on drawings numbered NED-PA-1338 (Sheet A-J), Plate No. 13.

Contour interval 10 feet.
 Elevations refer to Mean Sea Level Datum.
 Topography at damsite based on Plane Table Survey.
 Remaining topography based on U.S.G.S. Map.

REVISION	DATE	DESCRIPTION

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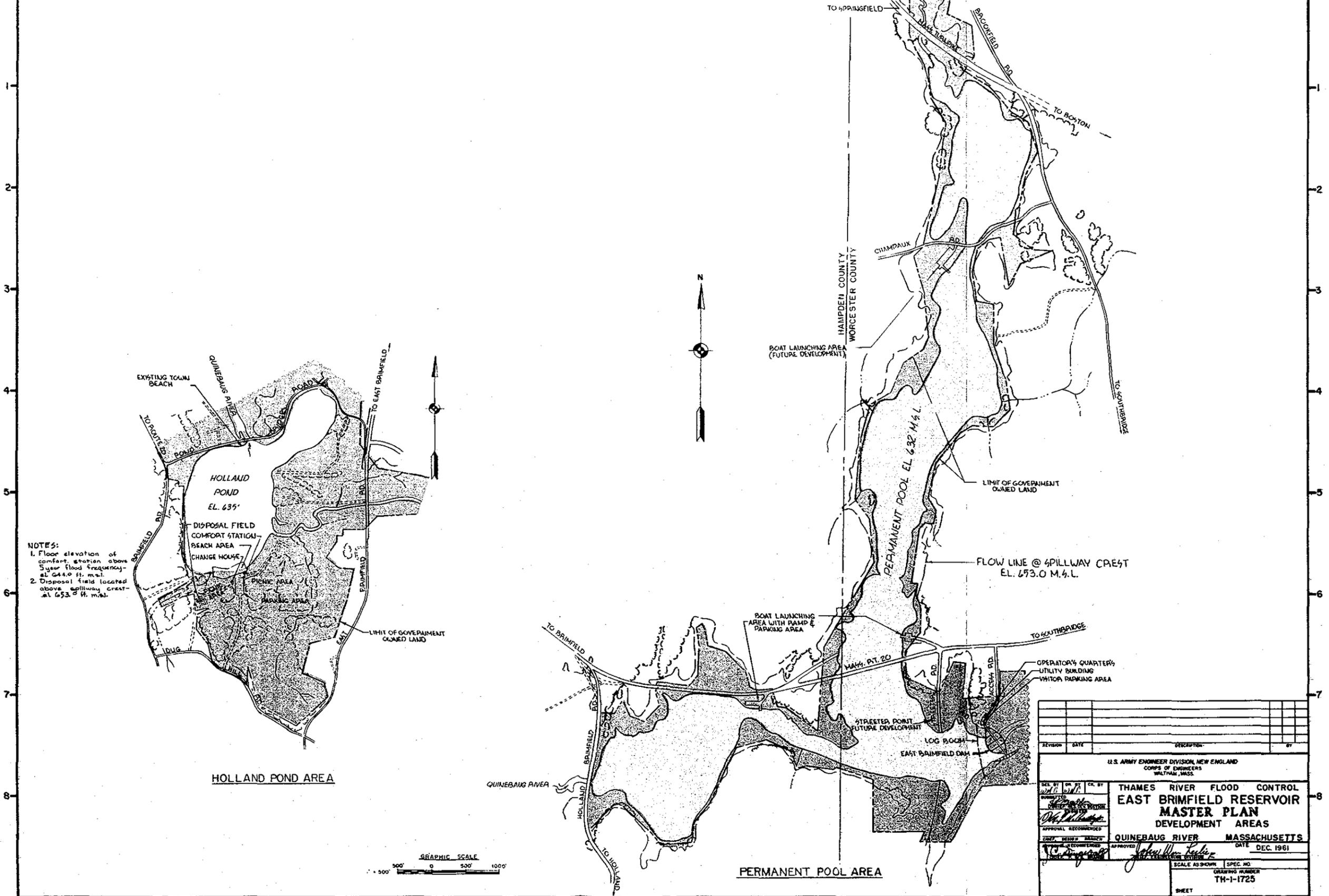
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 DR. BY: [Signature]
 CK. BY: [Signature]

THAMES RIVER FLOOD CONTROL
EAST BRIMFIELD RESERVOIR
MASTER PLAN
 GENERAL DEVELOPMENT PLAN
 QUINEBAUG RIVER MASSACHUSETTS
 DATE DEC. 1961

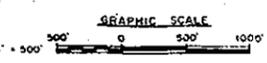
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 SPECIALIST: [Signature]

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 SPEC. NO. CIV. ENG. 19-06
 DRAWING NUMBER TH-1-1724
 SHEET

RESERVOIR PLAN
 SCALE 1" = 1000'
 1000 0 1000 2000



NOTES:
 1. Floor elevation of comfort station above 5 year flood frequency at 644.0 ft. m.s.l.
 2. Disposal field located above spillway crest at 653.0 ft. m.s.l.



REVISION	DATE	DESCRIPTION	BY

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
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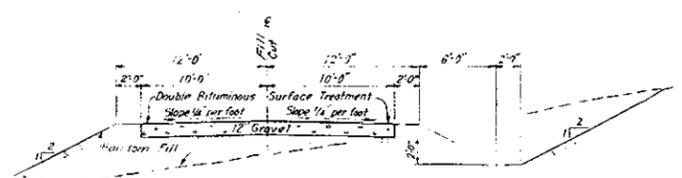
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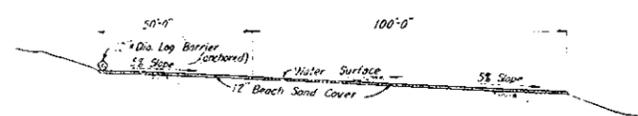
THAMES RIVER FLOOD CONTROL
EAST BRIMFIELD RESERVOIR
 MASTER PLAN
 DEVELOPMENT AREAS

QUINEBAUG RIVER MASSACHUSETTS
 DATE DEC. 1961

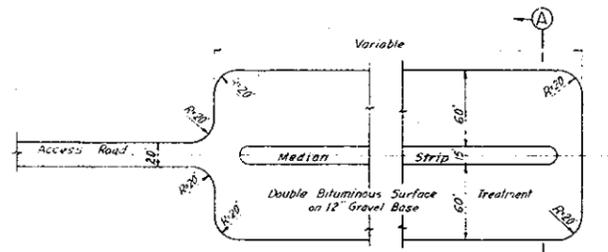
SCALE AS SHOWN SPEC. NO.
 DRAWING NUMBER
 TH-1-1725
 SHEET



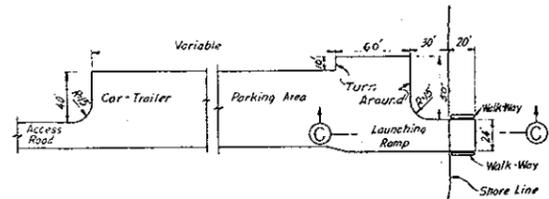
TYPICAL SECTION - ACCESS ROAD



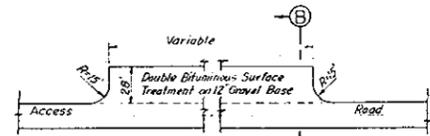
TYPICAL SECTION - BEACH



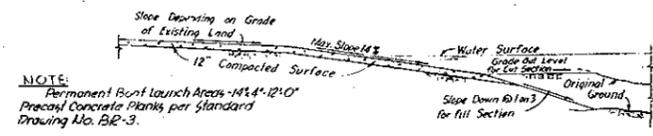
TYPICAL PLAN - CAR PARKING AREA



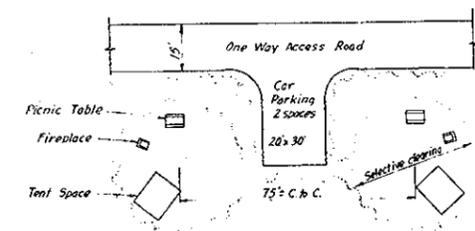
TYPICAL PLAN - BOAT LAUNCHING AREA



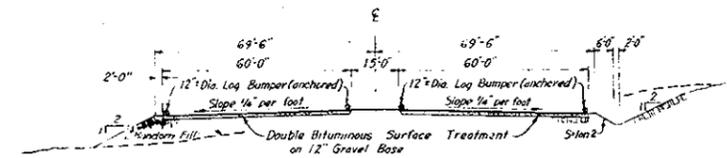
TYPICAL PLAN - CAR PARKING AREA



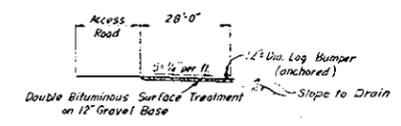
SECTION C-C



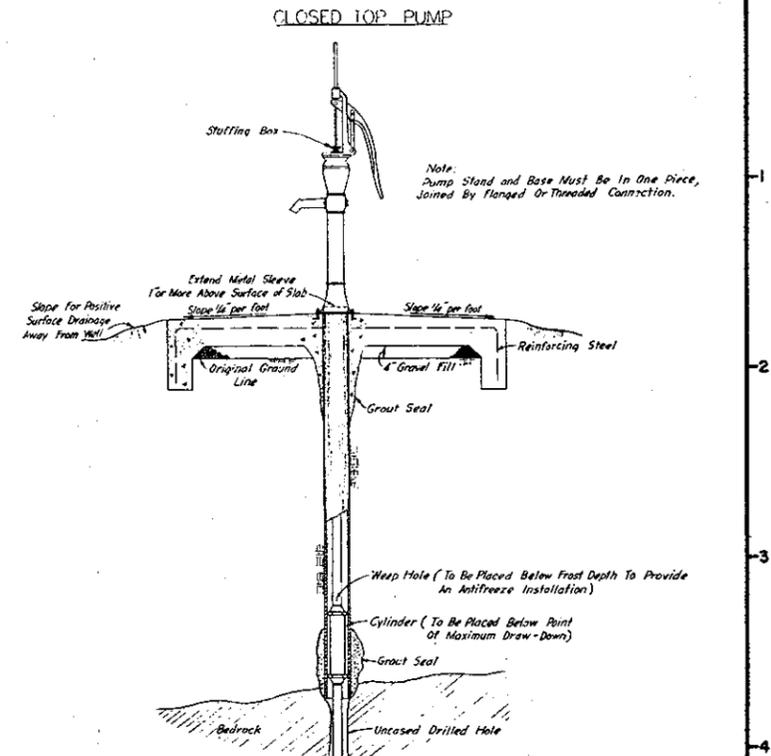
TYPICAL PLAN - CAMPING AREA



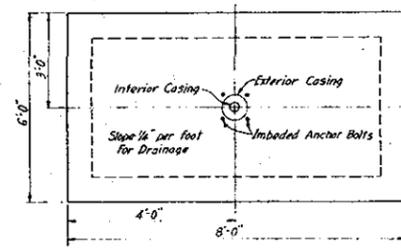
SECTION A-A



SECTION B-B



TYPICAL DETAIL - WELL & HAND PUMP



PLAN - CONCRETE PLATFORM

NOTE:
Permanent Boat Launch Areas - 14'4" x 12'0"
Precast Concrete Planks per Standard
Drawing No. B2-3.

REVISION	DATE	DESCRIPTION

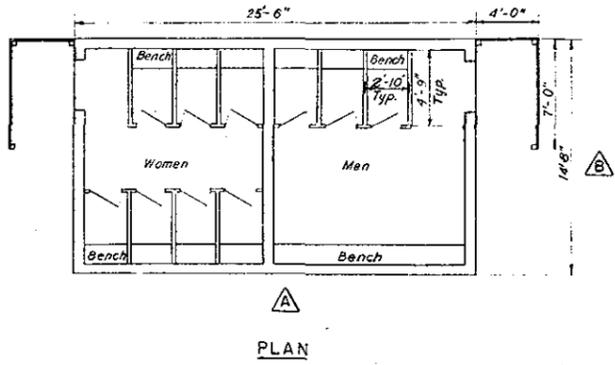
U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS.

THAMES RIVER FLOOD CONTROL
EAST BRIMFIELD RESERVOIR
MASTER PLAN
TYPICAL DETAILS
QUINEBAUG RIVER MASS.

DATE DEC. 1961

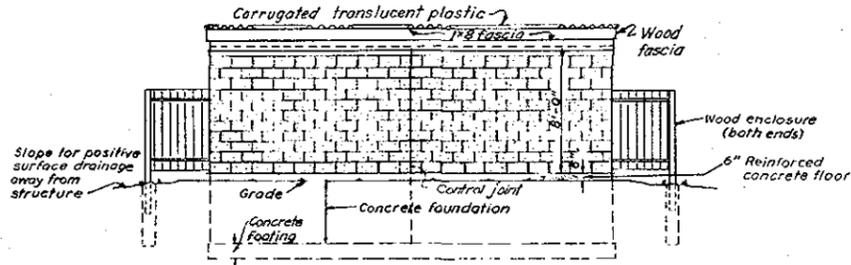
DRAWING NUMBER TH-1-1726

SHEET

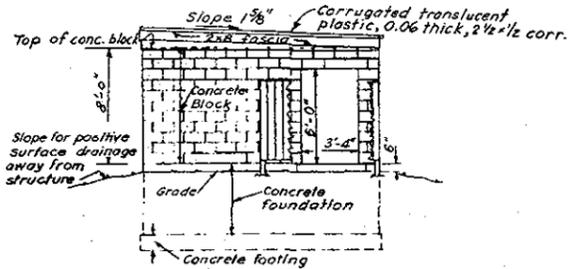


PLAN

NOTES:
Roofing to be of translucent corrugated plastic.
Floor in both men's and women's side to be sloped towards outer edges of structure to provide for drainage.
Every fourth concrete block in the bottom course, all around, omitted to provide drainage from within.

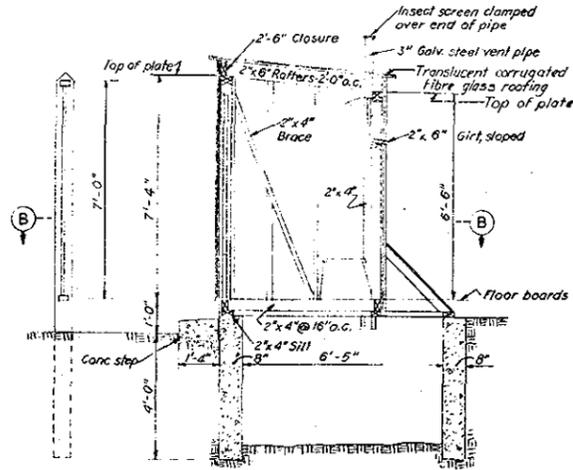


ELEVATION-A

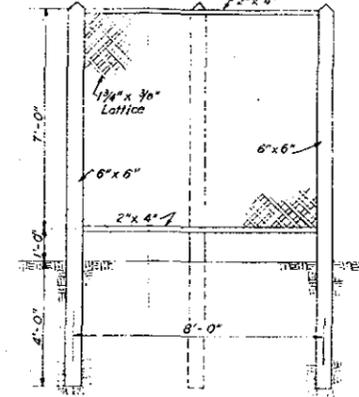


ELEVATION-B'

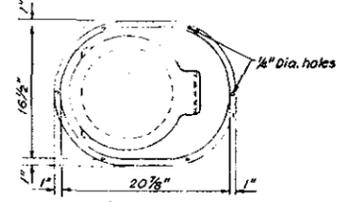
DETAILS CHANGE HOUSE
SCALE: 1/2" = 1'-0"



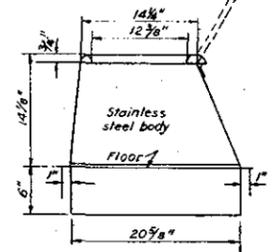
SECTION A-A



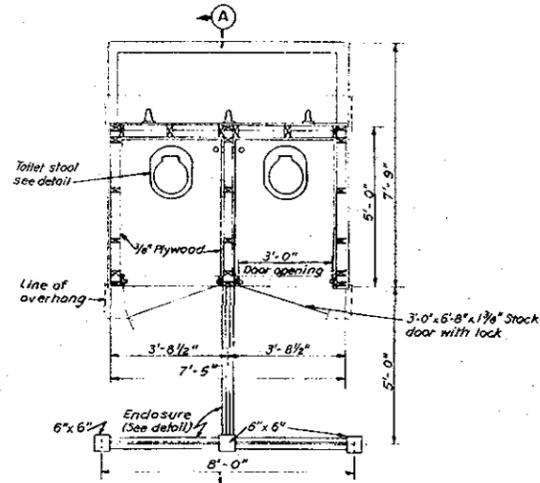
ENCLOSURE



PLAN
SCALE: 1" = 1'-0"

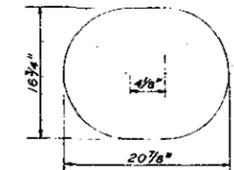


SIDE ELEVATION

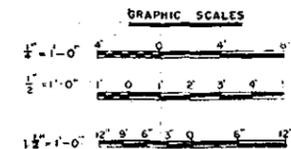


SECTION B-B

DETAIL - PIT LATRINE
SCALE: 1/2" = 1'-0"



FLOOR OPENING
TOILET STOOL
SCALE: 1 1/2" = 1'-0"



REVISION	DATE	DESCRIPTION

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WATERWAYS BRANCH

**THAMES RIVER FLOOD CONTROL
EAST BRIMFIELD RESERVOIR
MASTER PLAN
PIT LATRINE & CHANGE HOUSE**

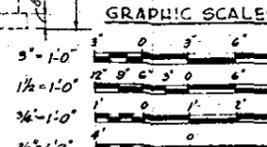
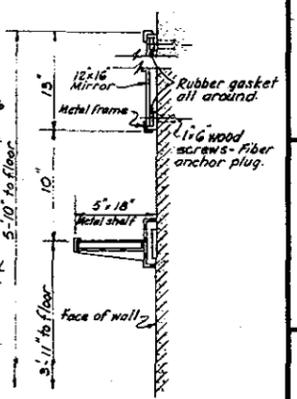
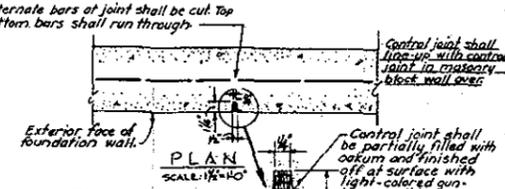
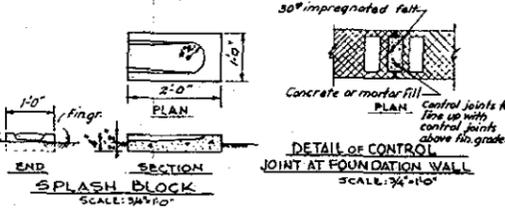
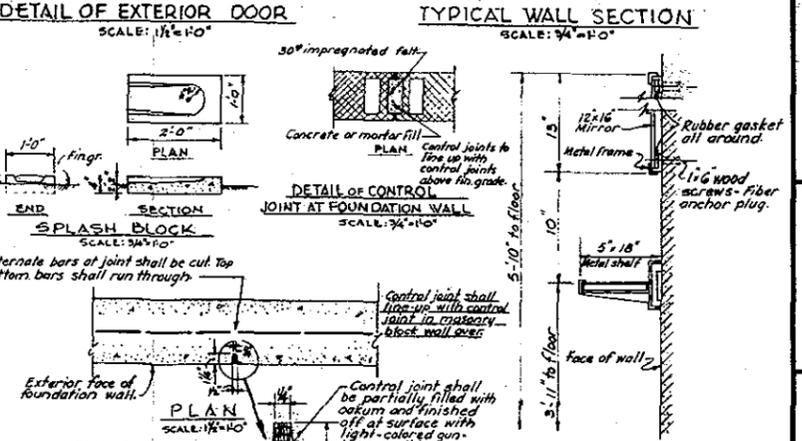
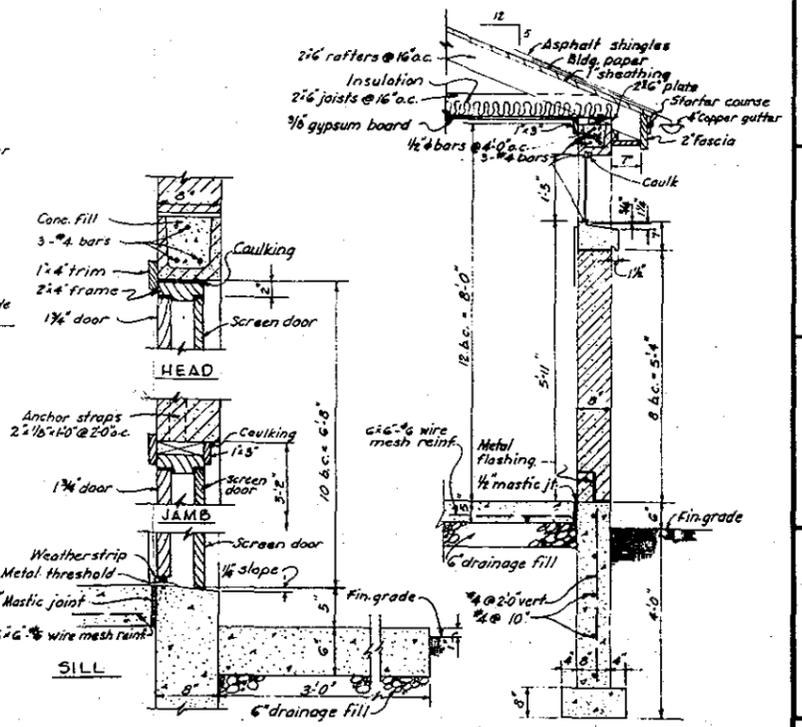
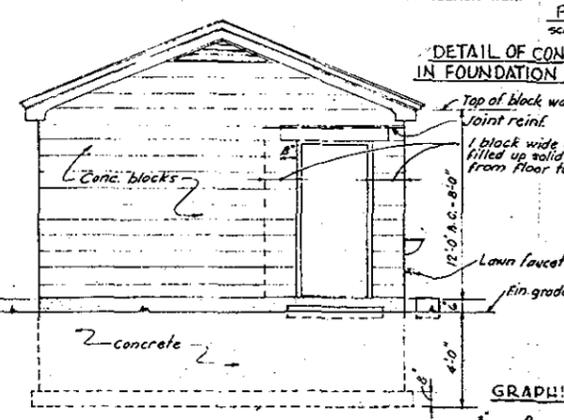
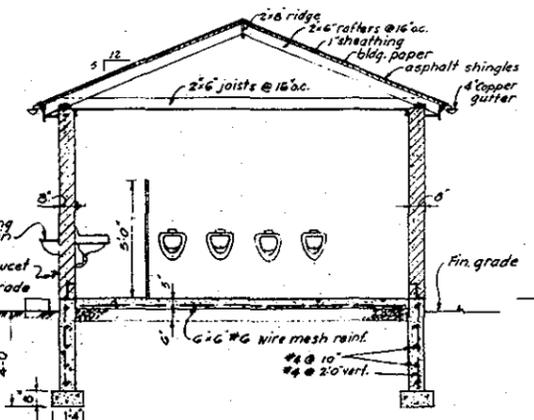
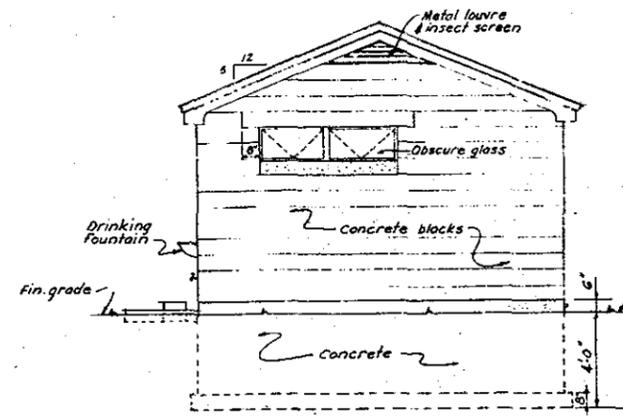
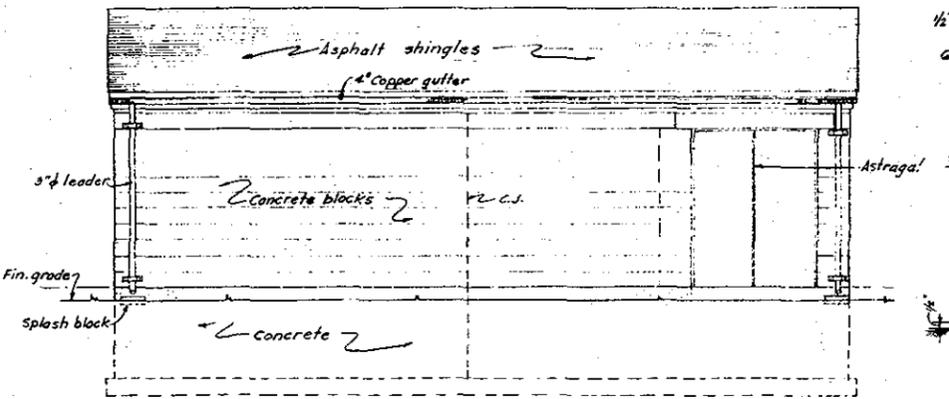
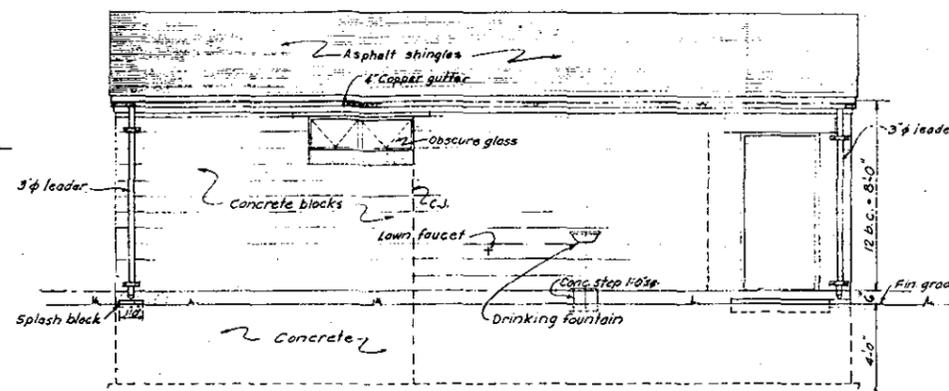
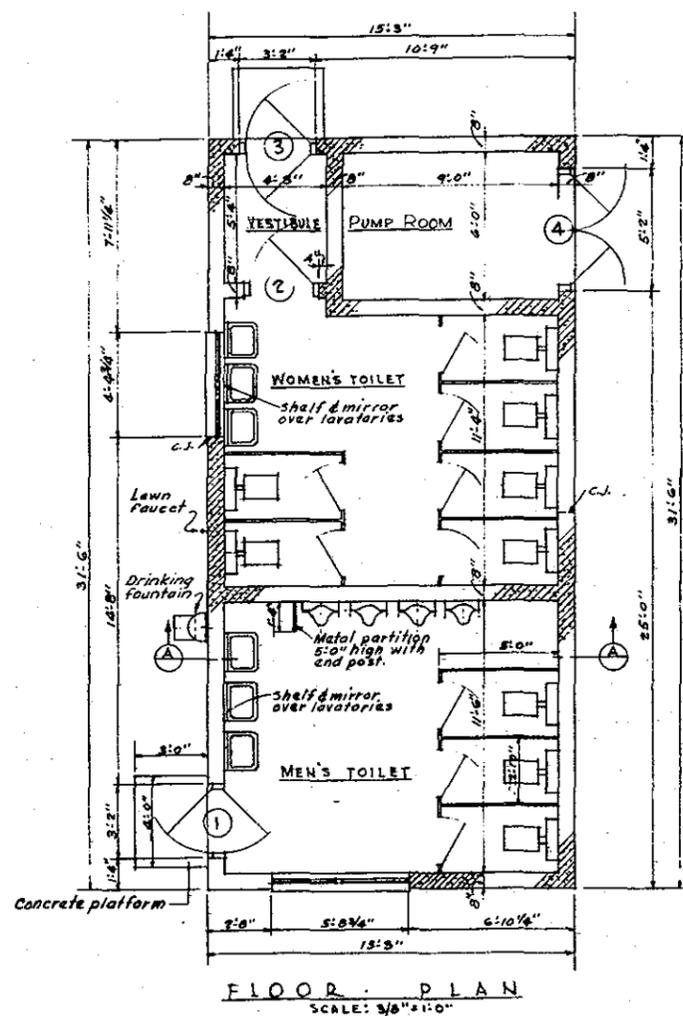
QUINEBAUG RIVER MASS.

APPROVED: *[Signature]* DATE: DEC. 1961

SCALE: AS SHOWN

DRAWING NUMBER: TH-1-1727

SHEET



REVISION	DATE	DESCRIPTION

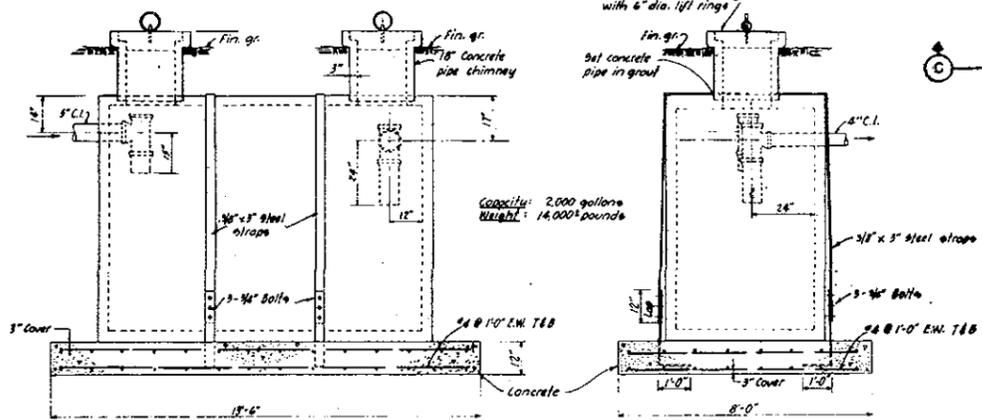
U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS.

DESIGNED BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

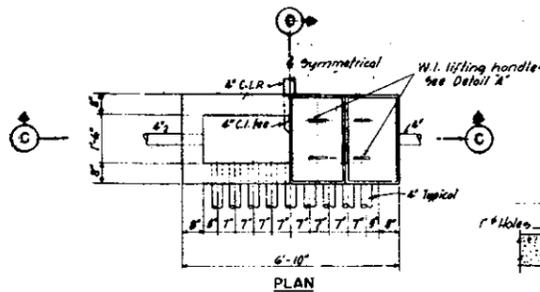
**THAMES RIVER FLOOD CONTROL
EAST BRIMFIELD RESERVOIR
MASTER PLAN
COMFORT STATION
PLAN, ELEVATIONS AND DETAILS
QUINEBAUG RIVER MASSACHUSETTS**

DATE: DEC. 1961

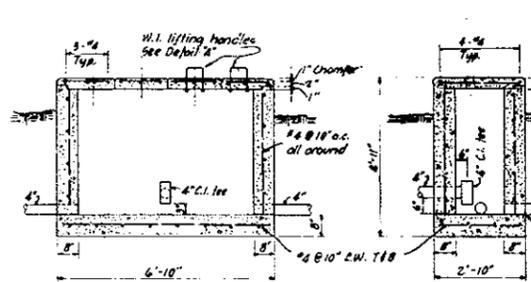
SCALE: [Blank]
SPEC. NO. CIV. ENR. 10-005
DRAWING NUMBER: TH-1-1729
SHEET: [Blank]



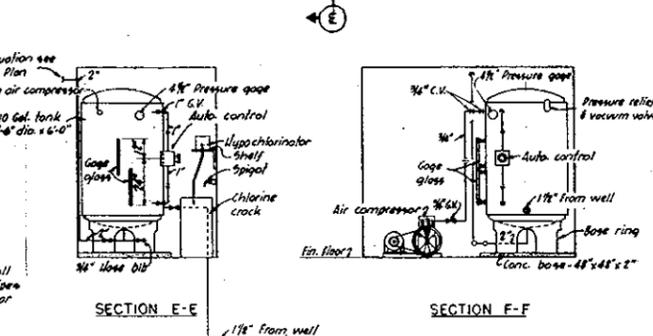
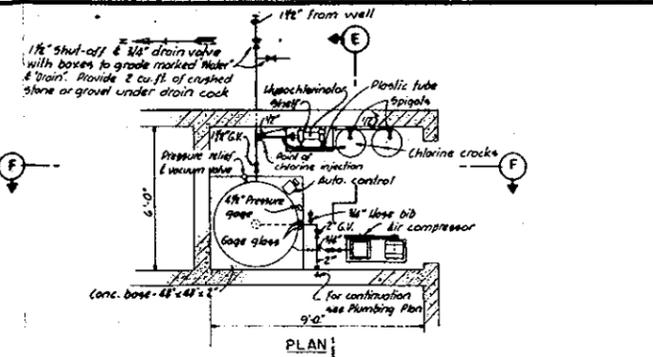
ELEVATION
END VIEW
PRE-CAST CONCRETE SEPTIC TANK ANCHORAGE
SCALE: 1/2" = 1'-0"



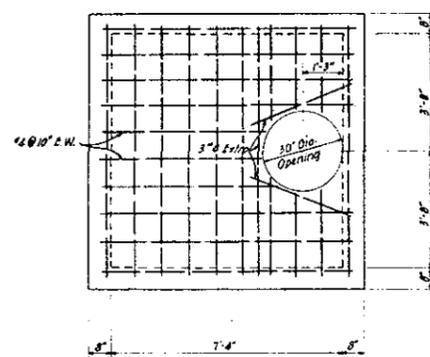
PLAN
DETAIL "A"
SCALE: 1 1/2" = 1'-0"



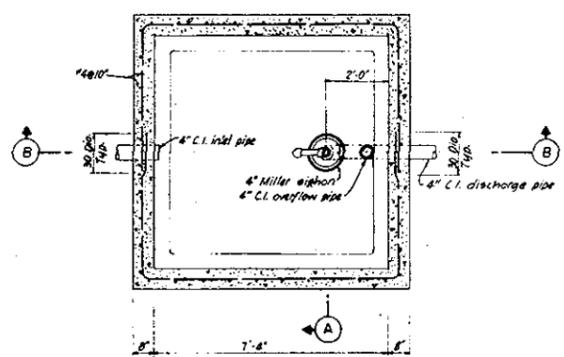
SECTION C-C
SECTION D-D
DISTRIBUTION BOX
SCALE: 1/2" = 1'-0"



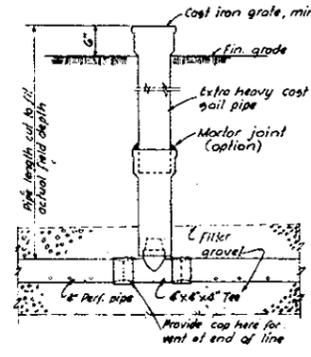
SECTION E-E
SECTION F-F
UTILITY ROOM
SCALE: 3/8" = 1'-0"



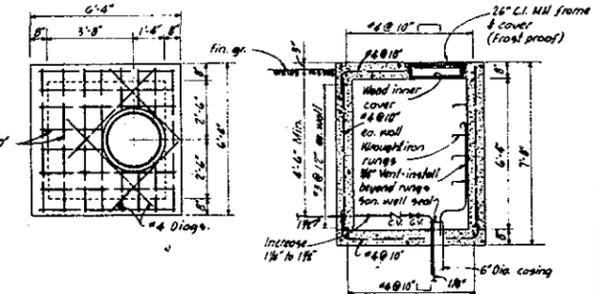
ROOF PLAN



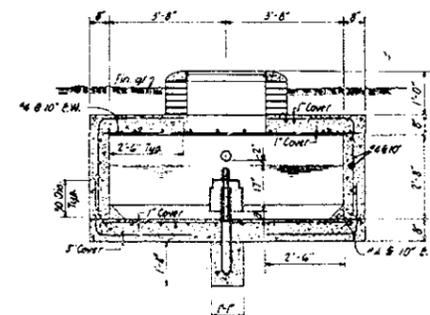
PLAN (ROOF REMOVED)



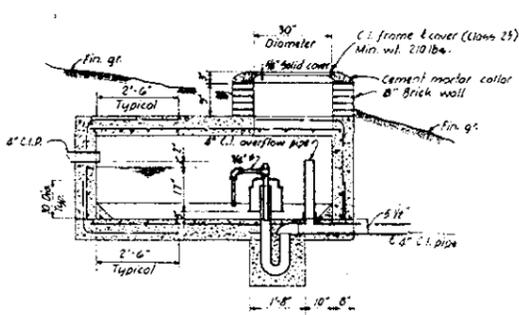
TYPICAL LEACHING TRENCH VENT PIPE
SCALE: 1" = 1'-0"



PLAN
SECTION
PUMP CHAMBER
SCALE: 3/8" = 1'-0"

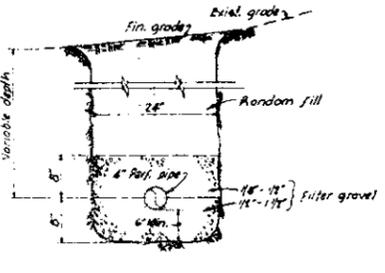


SECTION A-A



SECTION B-B

SIPHON CHAMBER
SCALE: 1/2" = 1'-0"



SECTION
TYPICAL LEACHING TRENCH
SCALE: 1" = 1'-0"

REVISION	DATE	REASON
U.S. ARMY ENGINEER DIVISION NEW ENGLAND CORPS OF ENGINEERS MILWAUKEE, WIS.		
DESIGNED BY	THAMES RIVER FLOOD CONTROL EAST BRIMFIELD RESERVOIR MASTER PLAN	DATE DEC 1961
DRAWN BY	COMFORT STATION UTILITIES	
CHECKED BY	QUINEBAUG RIVER MASSACHUSETTS	
APPROVED		
SCALE	SPEC. NO. CIV. ENL. 19-104	
	DRAWING NUMBER	
	TH-1730	
	SHEET	

EAST BRIMFIELD DAM
QUINEBAUG RIVER

DESIGNED CONSTRUCTED AND OPERATED BY
U.S. ARMY ENGINEER DIVISION
NEW ENGLAND
 CORPS OF ENGINEERS
 IN COOPERATION WITH
COMMONWEALTH OF MASSACHUSETTS

THIS PROJECT IS PART OF THE SYSTEM OF RESERVOIRS AND LOCAL PROTECTION WORKS FOR THE CONTROL OF FLOODWATERS IN THE THAMES RIVER BASIN. THIS DAM WAS CONSTRUCTED AT A COST OF \$6,500,000 AND WOULD PREVENT \$11,500,000 IN DAMAGES IN A RECURRENCE OF THE FLOOD OF 1955.

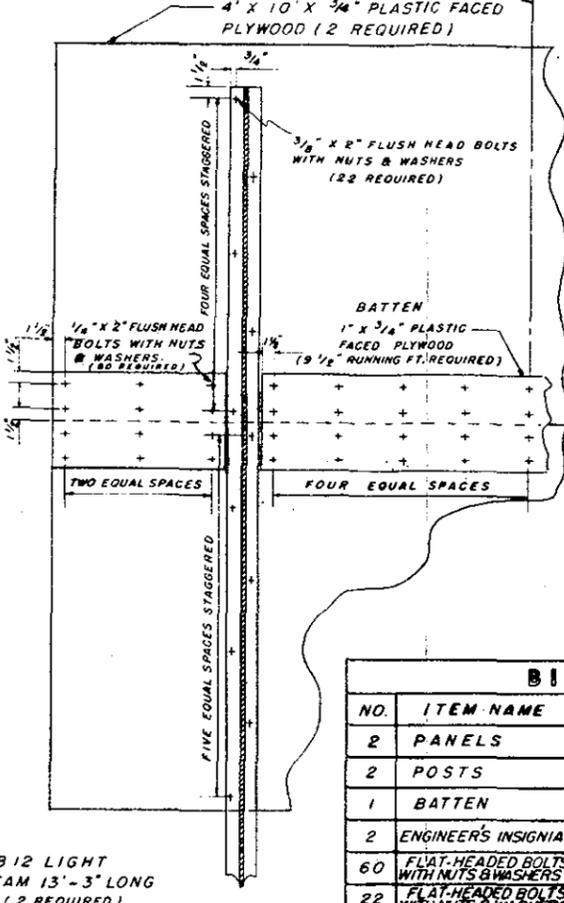
	CONSTRUCTED	1958 - 1960		
LENGTH OF DAM	520 FT.	LENGTH OF SPILLWAY	81 FT.	
HEIGHT OF DAM	55 FT.	ELEVATION SPILLWAY CREST	653 FT. M.S.L.	
BASE WIDTH	300 FT.	CONCRETE	4,300 C.Y.	
TOP WIDTH	24 FT.	AREA OF RESERVOIR	2270 ACRES	
TOTAL EMBANKMENT	90,000 C.Y.	DRAINAGE AREA	67.5 S.M.	
ELEVATION TOP OF DAM	672.2 FT. M.S.L.	MAXIMUM CAPACITY	9.4 BILLION GAL.	
		SPILLWAY CREST	28,800 ACRE-FT.	

REGULATION IS EFFECTED BY TWO 6'-3" X 11'-0" MECHANICALLY OPERATED GATES. THIS DAM IS OPERATED FOR THE PROTECTION OF DOWNSTREAM AREAS OF MASSACHUSETTS AND CONNECTICUT FROM FLOOD DAMAGE.

ENGINEER'S INSIGNIA (2 REQUIRED)

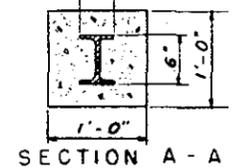
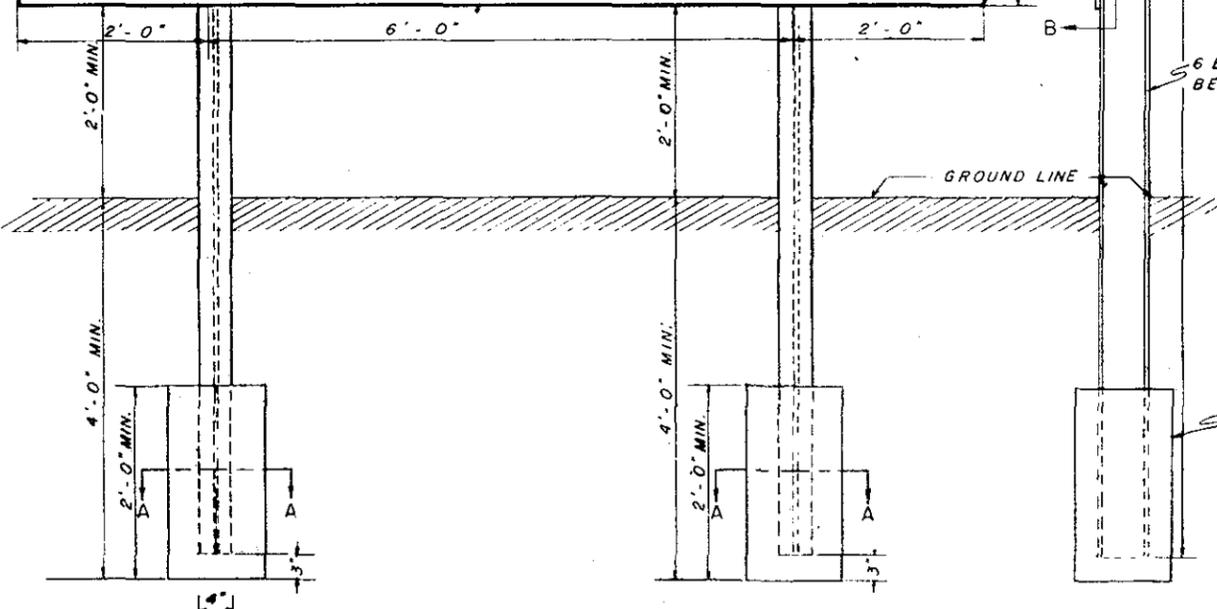
FASTENERS SYMMETRICAL ABOUT C

- NOTES:**
- SIGN BOARD PAINTED WITH TWO COATS ENAMEL UNDERCOAT FEDERAL SPEC. NO. T T-E-543 AND ONE COAT SYNTHETIC ENAMEL FEDERAL SPEC. NO. T T-E-489B.
 - LETTERS AND BORDER PAINTED WITH ONE COAT BLACK PAINT FEDERAL SPEC. NO. T T-P-61B
 - STEEL I BEAMS PAINTED WITH ONE COAT RED LEAD FEDERAL SPEC. NO. T T - P-86 A TYPE 2 AND TWO COATS BLACK PAINT FEDERAL SPEC. NO. T T-B-61-d.



BILL OF MATERIALS

NO.	ITEM NAME	STOCK SIZE	REMARKS
2	PANELS	4' X 10' X 3/4"	PLASTIC FACED WATERPROOF PLYWOOD
2	POSTS	13'-3" LONG	6 B 12 LIGHT BEAM
1	BATTEN	1' X 3/4" X 10'	PLASTIC FACED WATERPROOF PLYWOOD CUT AS NEEDED.
2	ENGINEER'S INSIGNIA	7" HIGH	MASONITE PAINTED RED & BLACK
60	FLAT-HEADED BOLTS WITH NUTS & WASHERS	1/4" X 2"	BRASS
22	FLAT-HEADED BOLTS WITH NUTS & WASHERS	3/8" X 2"	"
2	CONCRETE BASES	12" X 12" X 2'	CAST IN PLACE



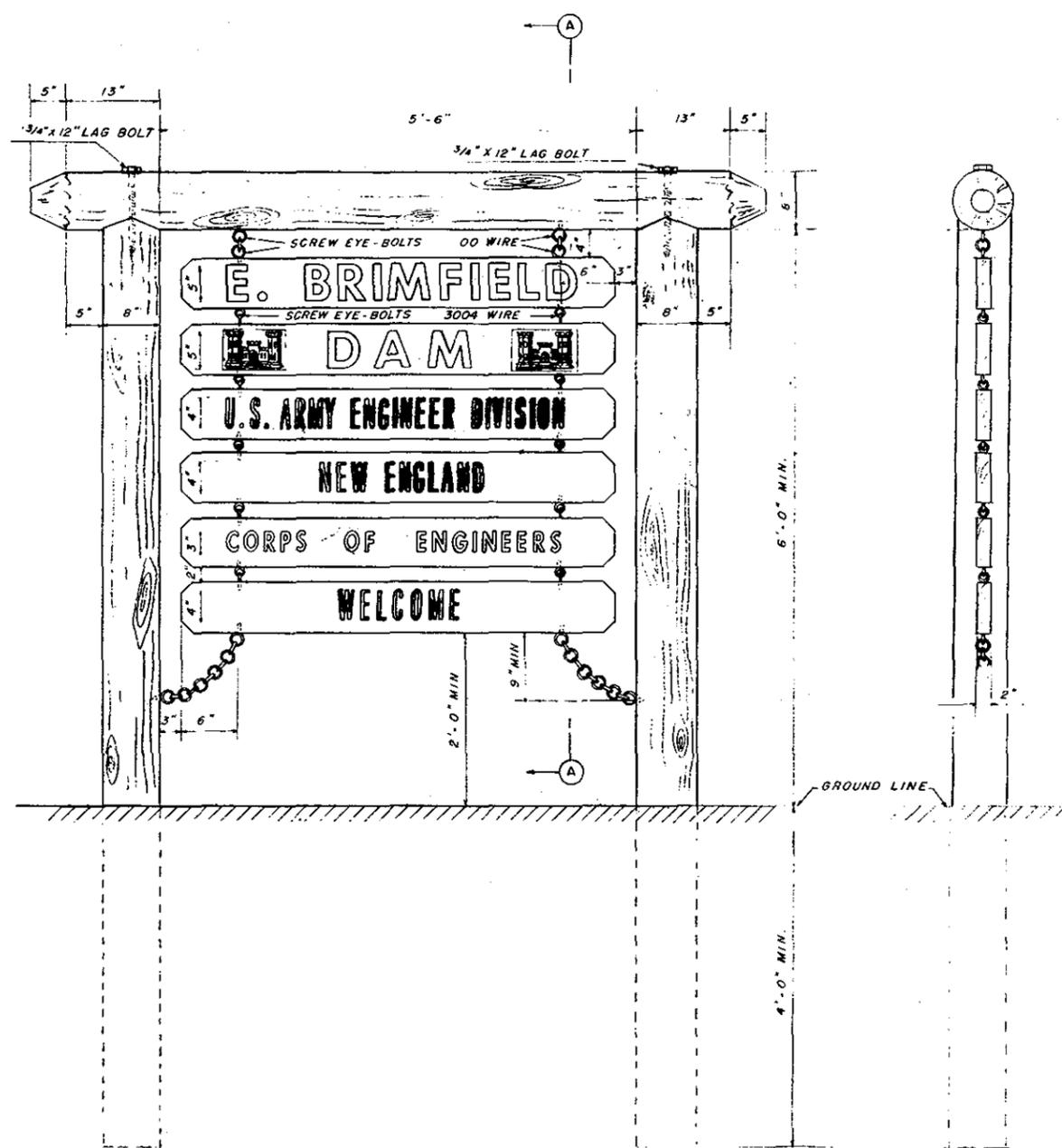
REVISION	DATE	DESCRIPTION

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
 CORPS OF ENGINEERS
 (MULTI-STATE)

DESIGNED BY: [Signature] DATE: [] [] []
 CHECKED BY: [Signature] DATE: [] [] []
 APPROVED BY: [Signature] DATE: DEC. 1961

THAMES RIVER FLOOD CONTROL
EAST BRIMFIELD RESERVOIR
MASTER PLAN
 PROJECT INFORMATION SIGN
 QUINEBAUG RIVER MASSACHUSETTS

SCALE: _____ SPEC. NO. CIV. ENR. B-08
 DRAWING NUMBER: TH-1-1731
 SHEET: _____



PROJECT IDENTIFICATION SIGN
SCALE 1/2" = 1'-0"

SECTION A-A

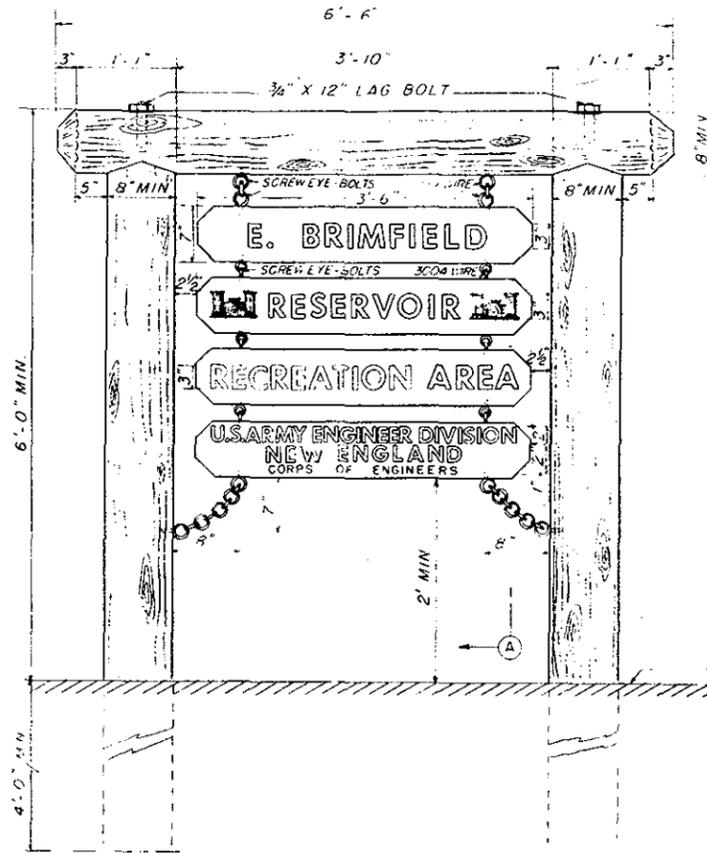
BILL OF MATERIALS			
NO.	ITEM NAME	STOCK SIZE	REMARKS
2	POST'S	8" ϕ X 10'-0"	NATIVE LOGS PEELED, PRESSURE-TREATED AND PAINTED OR STAINED
1	BFAM	8" ϕ X 8'-6"	TREATED AND PAINTED OR STAINED
6	BOARDS	2" X 7" X 5'-0"	PRESSURE TREATED AND STAINED
24	SCREW EYE BOLTS	3004 WIRE	BRASS
4	SCREW EYE BOLTS	00 WIRE	"
2	CHAINS	3004 WIRE	(Length as needed)
2	LOG BOLTS	3/4" X 12"	"
4	ENGINEER CASTLE INSIGNIA	5" CASTLE	RED ON WHITE MASONITE

NOTES:

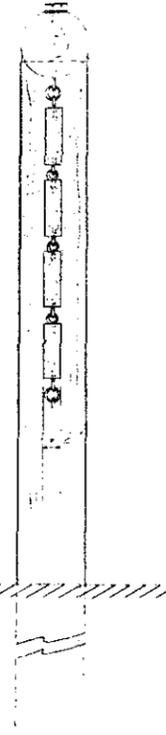
1. ALL LETTERS TO BE ROUTED AND PAINTED WITH WHITE LUMINOUS PAINT ON BOTH SIDES OF SIGN
2. ALL METAL TO BE BRASS.
3. ALL WOOD TO BE PRESSURE-TREATED AND PAINTED OR STAINED DARK BROWN.
4. POSTS AND BEAMS TO BE NOTCHED TO FIT AS INDICATED IN DRAWINGS.
5. ALL EYE-BOLTS TO BE CLOSED AFTER ASSEMBLY.

DESIGNER		DATE		DESCRIPTION		BY	
U. S. ARMY ENGINEER DIVISION, NEW ENGLAND CORPS OF ENGINEERS WALTHAM, MASS.							
DESIGNED BY: <i>J. D. Mullen</i>				THAMES RIVER FLOOD CONTROL EAST BRIMFIELD RESERVOIR MASTER PLAN PROJECT IDENTIFICATION SIGN QUINEBAUG RIVER MASSACHUSETTS			
CHECKED BY: <i>D. J. [Signature]</i>				APPROVED BY: <i>[Signature]</i> - DATE DEC 1961			
APPROVAL RECOMMENDED				SCALE: 1/2" = 1'-0"			
SPEC. NO. ENG-19-016				DRAWING NUMBER TH-1-1732			
SHEET				SHEET			

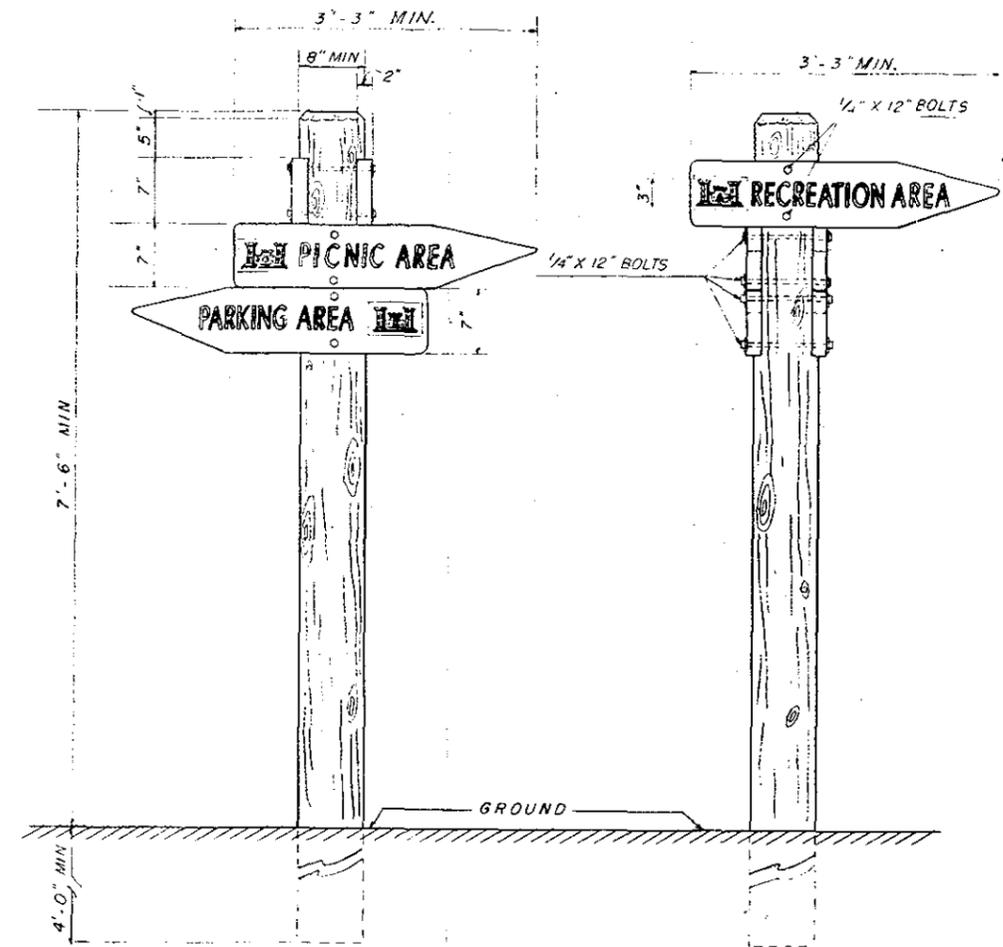
BILL OF MATERIALS			
NO	ITEM NAME	STOCK SIZE	REMARKS
1	POST	8"Ø X 11'-6"	NATIVE LOGS PEELED, PRESSURE-TREATED AND PAINTED OR STAINED
AS NEEDED	SIGN	2" X 7" X 3'-3"	PRESSURE TREATED AND STAINED
AS NEEDED	BOLTS	1/4" X 12" WITH NUTS & WASHERS	BRASS



FEATURE IDENTIFICATION SIGN
SCALE: 1/2" = 1'-0"



SECTION A - A



DIRECTIONAL SIGNS
SCALE: 1/2" = 1'-0"

BILL OF MATERIALS			
NO	ITEM NAME	STOCK SIZE	REMARKS
2	POST'S	8"Ø X 9'-2"	NATIVE LOGS PEELED, PRESSURE-TREATED AND PAINTED OR STAINED
1	BEAM	8"Ø X 6'-6"	TREATED AND PAINTED OR STAINED
4	BOARDS	2" X 7" X 3'-6"	PRESSURE TREATED AND STAINED
16	SCREW EYE BOLTS	3004 WIRE	BRASS
4	SCREW EYE BOLTS	00 WIRE	
2	CHAINS	3004 WIRE	(Length as needed)
2	LAG BOLTS	3/4" X 12"	

NOTES:

1. ALL LETTERS TO BE ROUTED AND PAINTED WITH WHITE LUMINOUS PAINT ON BOTH SIDES OF FEATURE IDENTIFICATION SIGN.
2. ALL METAL TO BE BRASS.
3. ALL WOOD TO BE PRESSURE-TREATED AND PAINTED OR STAINED DARK BROWN.
4. POSTS AND BEAMS TO BE NOTCHED TO FIT AS INDICATED IN DRAWINGS.
5. ALL EYE-BOLTS TO BE CLOSED AFTER ASSEMBLY.
6. DIRECTIONAL SIGNS TO BE USED TO GIVE DIRECTION TO SUCH OTHER FEATURES AS OVERLOOK PARKING AREA OR PICNIC AREA, TO BE LOCATED AND LABELED AS REQUIRED.
7. ENGINEER CASTLE INSIGNIA TO BE BRANDED INTO WOOD AND PAINTED RED ON WHITE BACKGROUND.

REVISION	DATE	DESCRIPTION	BY

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS.

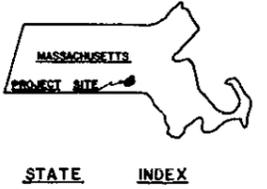
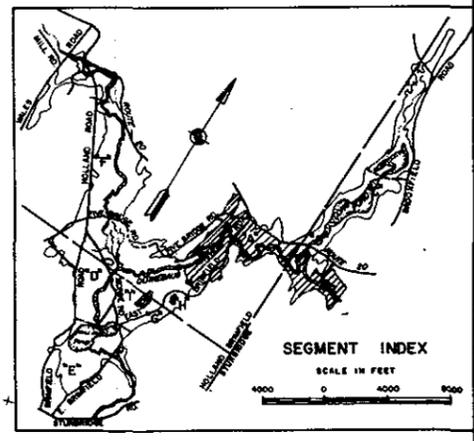
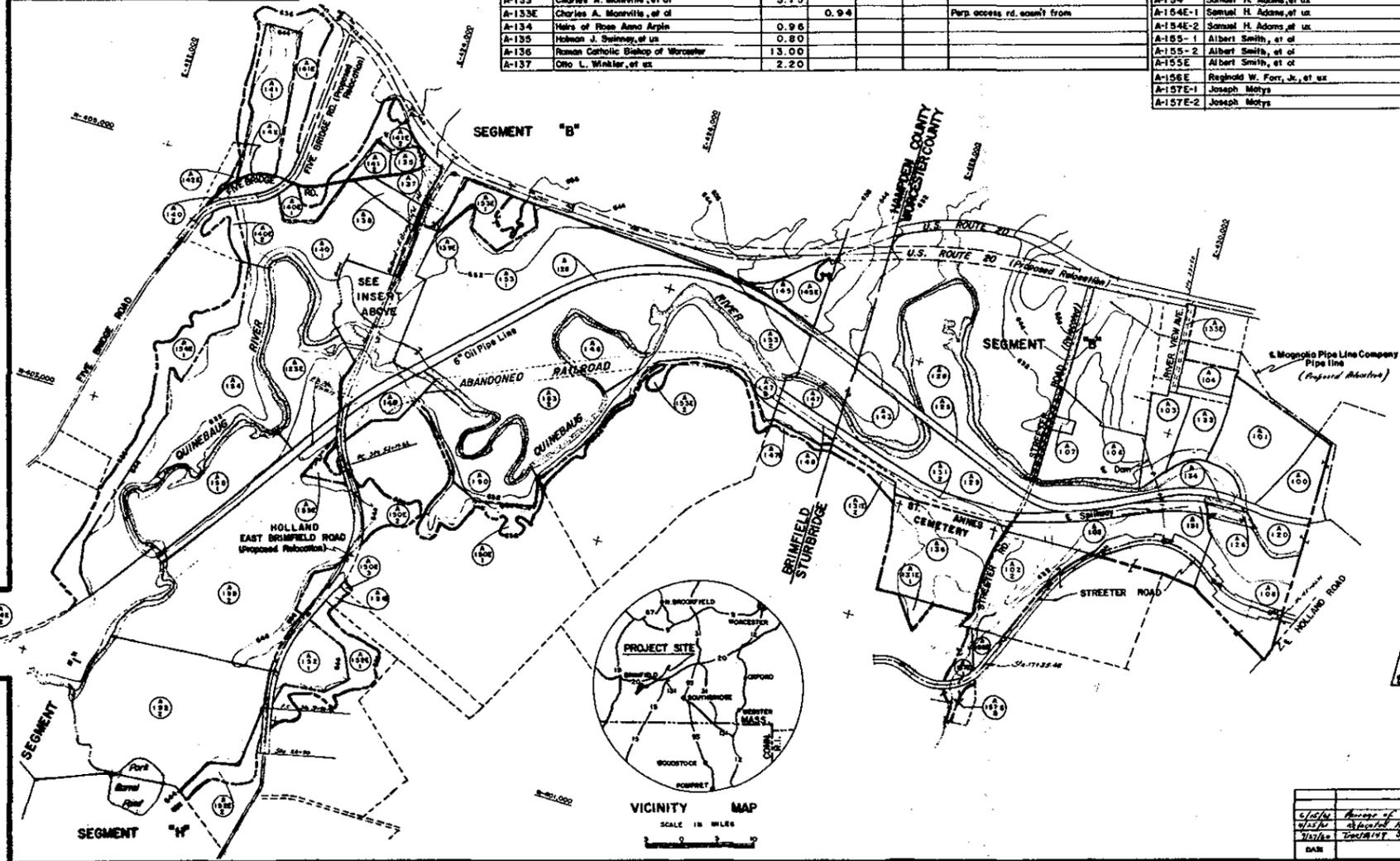
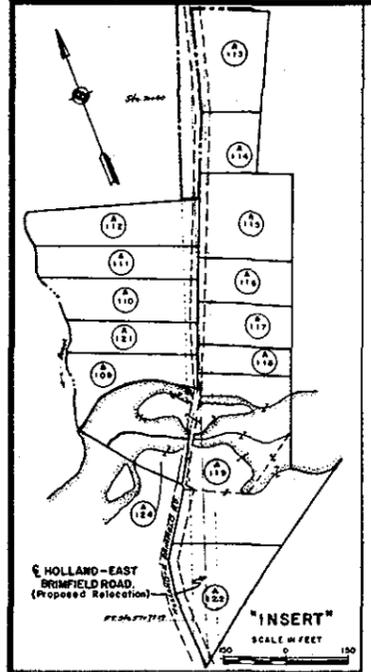
THAMES RIVER FLOOD CONTROL
EAST BRIMFIELD RESERVOIR
MASTER PLAN
PROJECT FEATURE SIGNS
QUINEBAUG RIVER MASSACHUSETTS

APPROVED: *[Signature]* DATE: DEC. 1961

SCALE: _____
DRAWING NUMBER: TH-1-1733
SHEET: _____

TRACT REGISTER OF ACQUISITION AFTER 1 JAN. 1943 (CIVIL).

TRACT NO.	LAND OWNER	ACREAGE				REMARKS	TRACT NO.	LAND OWNER	ACREAGE				REMARKS
		FEE	EASMT	LEASED	PERMIT				FEE	EASMT	LEASED	PERMIT	
A-100	Philias V. Leduc, et ux	3.95				A-138	Hairs of Lettie J. Clark	1.35					
A-101	William H. LaVergne, et ux	9.60				A-139E	Congregational Church of East Brimfield	0.15				Perp. floorage easmt from	
A-102	Nector J. Guertin, et ux	9.81				A-140-1	John Duschovsky	16.30					
A-103	Delfio F. DaDalt, et ux	4.00				A-140-2	John Duschovsky	1.00					
A-104	Charles A. Montville	1.92				A-140E-1	John Duschovsky		1.43			Perp. floorage easmt from	
A-102-2	Nector J. Guertin, et ux	8.04				A-140E-2	John Duschovsky		1.55			Perp. floorage easmt from	
A-105	Joseph Matys, et ux	9.25				A-141-1	Gerald A. Bonetta, et ux	7.00					
A-107	Robert P. Northrup, et ux	0.44				A-141-2	Gerald A. Bonetta, et ux	1.20					
A-108	Fitzhugh Lee Smith, et ux	10.40				A-141E-1	Gerald A. Bonetta, et ux		6.00			Perp. floorage easmt from	
A-109	Hornet F. Nichols	0.59				A-141E-2	Gerald A. Bonetta, et ux		2.60			Perp. floorage easmt from	
A-110	Edward Rosicot, et al	0.76				A-142	Harry Turner	0.38					
A-111	Charles E. Clarke, et al	0.62				A-142E	Harry Turner		0.39			Perp. floorage easmt from	
A-112	Almedo Mantha, et al	0.94				A-143	Mary Phillips	8.18					
A-113	Leo E. Lavigne, et ux	0.88				A-145	Arthur J. Chartier, et ux	0.05					
A-114	Albert H. Gendreau, et ux	0.42				A-145E	Arthur J. Chartier, et ux		3.48			Perp. floorage easmt from	
A-115	Alfred R. Dupois, et ux	0.99				A-146	Town of Brimfield	5.18					
A-116	Childs S. Wheaton	0.51				A-147-1	Adella Phillips Giller	1.54					
A-117	Alphonse J. St. Pierre, et ux	0.51				A-147-2	Adella Phillips Giller	1.40					
A-118	Geophon J. Capieux, et ux	0.31				A-147E	Adella Phillips Giller		0.37			Perp. floorage easmt from	
A-119	Richard R. Lucier	2.95				A-148	Town of Brimfield	1.15					
A-120	Thomas W. Palmer Jr.	2.60				A-149	Scovone Construction Company	3.07					
A-121	Chasler J. Nichols, et ux	0.52				A-150	Samuel O. Ormbee, et ux	8.50					
A-122	Arthur L. Lucier	0.92				A-150E-1	Samuel O. Ormbee, et ux		3.95			Perp. floorage easmt from	
A-123E	Marjorie F. Barr		12.67			A-150E-2	Samuel O. Ormbee, et ux		2.47			Perp. floorage easmt from	
A-124	Ruth MacElroy, et al	0.30				A-150E-3	Samuel O. Ormbee, et ux		0.06			Perp. floorage easmt from	
A-125	Magnolia Pipe Line Company	43.00				A-151E	Joseph Matys		0.30			Perp. floorage easmt from	
A-126	Napoleon Biron, et ux	0.87				A-152-1	Sherman W. Bourwell, et ux	4.61					
A-128	Frade B. Stegner	18.38				A-152-2	Sherman W. Bourwell, et ux	30.90					
A-129	Joseph Matys, et ux	11.50				A-152E-1	Sherman W. Bourwell, et ux		4.00			Perp. floorage easmt from	
A-131	Joseph Matys	2.61				A-152E-2	Sherman W. Bourwell, et ux		2.18			Perp. floorage easmt from	
A-131-2	Joseph Matys	4.10				A-153-1	Lottie M. Glimon Bolley	25.60					
A-131E-1	Joseph Matys		0.75			A-153-2	Lottie M. Glimon Bolley	49.50					
A-131E-2	Joseph Matys		0.90			A-153E-1	Lottie M. Glimon Bolley		3.95			Perp. floorage easmt from	
A-133	Charles A. Montville, et al	3.75				A-153E-2	Lottie M. Glimon Bolley		1.30			Perp. floorage easmt from	
A-133E	Charles A. Montville, et al		0.94			A-154	Samuel H. Adams, et ux	24.90					
A-134	Hairs of Roon Anna Argle	0.96				A-154E-1	Samuel H. Adams, et ux		7.80			Perp. floorage easmt from	
A-135	Hobson J. Swiney, et ux	0.80				A-154E-2	Samuel H. Adams, et ux		0.18			Perp. floorage easmt from	
A-136	Roman Catholic Bishop of Worcester	13.00				A-155-1	Albert Smith, et al	11.41					
A-137	Otto L. Winkler, et ux	2.20				A-155-2	Albert Smith, et al	35.90					
						A-155E	Albert Smith, et al		0.86			Perp. floorage easmt from	
						A-156E	Reginald W. Farr, Jr., et ux		0.85			Perp. floorage easmt from	
						A-157E-1	Joseph Matys		1.10			Perp. floorage easmt from	
						A-157E-2	Joseph Matys		0.55			Perp. floorage easmt from	



ACQUISITION AUTHORIZATION
 Public Law 228, dated 18 Aug. 1941
 1st. 1st. O.C.E. to R.E.D. 28 Nov. 1939
 1st. 1st. O.C.E. to R.E.D. 27 June 1937

SEGMENT "A"
 DEPARTMENT OF THE ARMY
 OFFICE OF THE DIVISION ENGINEER
 NEW ENGLAND DIVISION

REAL ESTATE
 EAST BRIMFIELD RESERVOIR

DATE: MARCH 1960
 OFFICE, CHIEF OF ENGINEERS, WASHINGTON 25, D. C.

PRELIMINARY
PROJECT MAP

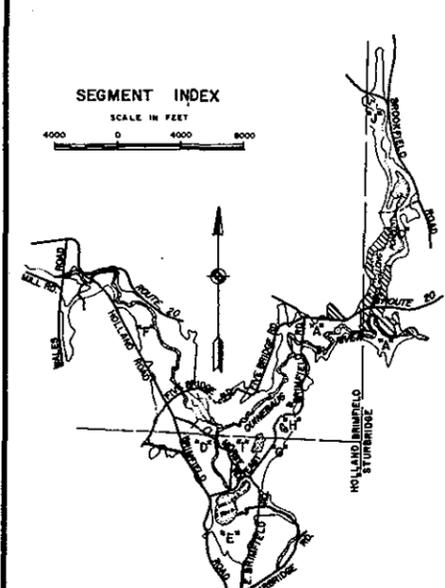
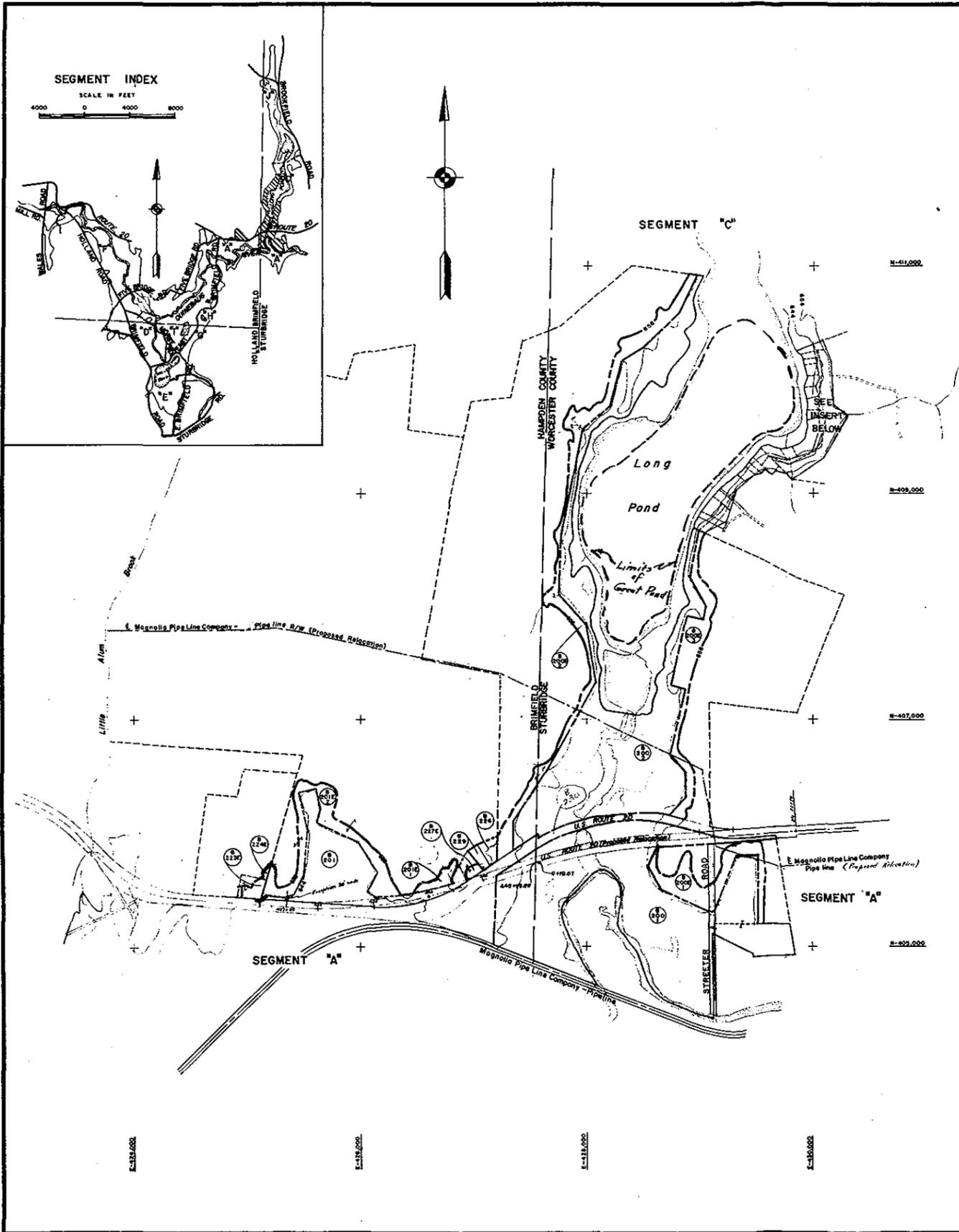
DEPT. OF THE ARMY
 USING SERVICE
LOCATION OF PROJECT
 STATE MASSACHUSETTS
 COUNTY WORCESTER & HAMDEN
 DIVISION NEW ENGLAND
 DISTRICT
 ARMY AREA FIRST
 25 MILES S.W. OF WORCESTER
 8 MILES N.W. OF SOUTHBRIDGE
 IN STURBRIDGE, BRIMFIELD & HOLLAND, MASS

TRANSPORTATION FACILITIES
 RAILROADS: NEW YORK, NEW HAVEN & HARTFORD
 STATE ROADS: 15, 8, 19
 FEDERAL ROADS: 20
 AIR LINES:

ACQUISITION
 TOTAL ACRES ACQUIRED
 FEE
 PUBLIC DOMAIN PERM. WITHDRAWAL
 TEMP. WITHDRAWAL
 USE PERMIT
 TRANSFER
 LEASE
 LESSER INTERESTS

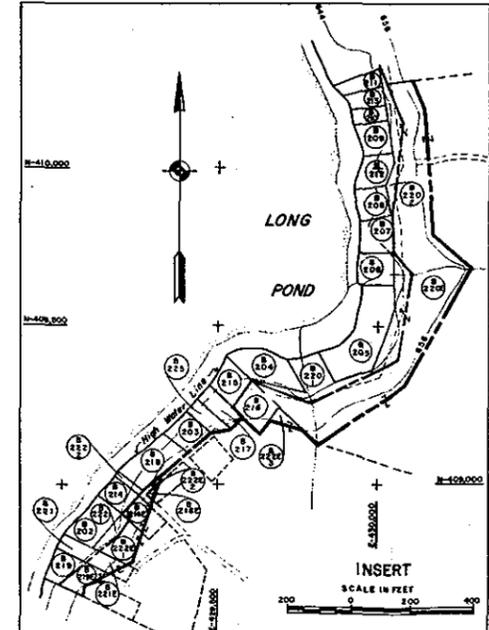
DISPOSAL
 TOTAL ACRES DISPOSED OF
 SOLD
 PUBLIC DOMAIN PERM. WITHDRAWAL
 TEMP. WITHDRAWAL
 USE PERMIT
 TRANSFERRED
 LEASES TERMINATED
 LESSER INTERESTS TERM.
 REASSIGNED
 OTHER

LEGEND
 EXCEPT FOR THE SPECIAL SYMBOLS SHOWN BELOW MAP SYMBOLS ARE STANDARD IN ARMY MAP SERVICE TECHNICAL MANUAL NO. 21.
 RESERVATION LINE (Actual Bound.)
 RESERVATION LINE (Assumed Bound.)
 TRACT BOUNDARY LINE
 TRACT NUMBER
 CONTOUR LINE
 DISPOSAL



TRACT REGISTER OF ACQUISITION AFTER 1 JAN 1943 (CIVIL).

TRACT NO.	LAND OWNER	ACREAGE				REMARKS
		FEE	EASEM ^t	LEASED	PERMIT	
B-200-1	Adelle Giller, et al	49.50				
B-200-2	Adelle Giller, et al	42.00				
B-200E-1	Adelle Giller, et al		4.56			Perp. flowage easm ^t from
B-200E-2	Adelle Giller, et al		8.66			Perp. flowage easm ^t from
B-200E-3	Adelle Giller, et al		5.44			Perp. flowage easm ^t from
B-201	George Watson	11.16				
B-201E-1	George Watson		0.44			Perp. flowage easm ^t from
B-202	James P. Nolia, et ux	0.34				
B-203	Margaret B. Baybutt, et al	0.23				
B-204	Edward A. Racicot, et ux	0.39				
B-205	Edgar Tremblay Jr., et ux	1.03				
B-206	Leopold R. Laviole, et ux	0.26				
B-207	George I. Leduc, et ux	0.26				
B-208	Albert R. Chamberlain	0.23				
B-209	Arthur F. Burgess, et ux	0.24				
B-210	John G. Naugler, et ux	0.13				
B-211	Fred A. Montesi, et ux	0.15				
B-212	J. Armand Tremblay, et ux	0.23				
B-213	Roland E. Langlois, et ux	0.14				
B-201E-2	George Watson		5.71			Perp. flowage easm ^t from
B-214	Eli F. Latandre, et ux	0.18				
B-214E	Eli F. Latandre, et ux		0.14			Perp. flowage easm ^t from
B-215	Josephine Mojeau	0.23				
B-216	Josephine Mojeau	0.29				
B-217	Albert Senecal, et ux	0.17				
B-218	Walter J. Salestnik, et ux	0.40				
B-218E	Walter J. Salestnik, et ux		0.01			Perp. flowage easm ^t from
B-219	Heirs of Arthur J. Lucier	0.10				
B-219E	Heirs of Arthur J. Lucier		0.17			Perp. flowage easm ^t from
B-220-1	Ernest G. Allard, et ux	0.80				
B-220-2	Ernest G. Allard, et ux	0.24				
B-220E	Ernest G. Allard, et ux		3.36			Perp. flowage easm ^t from
B-221	Leo J. Boisvert, et ux	0.15				
B-221E	Leo J. Boisvert, et ux		0.11			Perp. flowage easm ^t from
B-222-1	Arthur Deneault, et ux	0.11				
B-222-2	Arthur Deneault, et ux	0.05				
B-222E-1	Arthur Deneault, et ux		0.22			Perp. flowage easm ^t from
B-222E-2	Arthur Deneault, et ux		0.06			Perp. flowage easm ^t from
B-222E-3	Arthur Deneault, et ux		0.04			Perp. flowage easm ^t from
B-223E	Harry D. Gilman, et ux		0.61			Perp. flowage easm ^t from
B-224E	Arthur R. Gilman, et ux		0.13			Perp. flowage easm ^t from
B-225	Paul E. Bonnette, et ux	0.11				
B-226	Romeo H. Cantora, et ux	0.63				
B-227E	Arthur J. Chartier, et ux		0.37			Perp. flowage easm ^t from
B-229	Paul F. Locerte	0.41				



PROJECT MAP

AGENCY: _____
 STATE: _____
 COUNTY: _____
 DIVISION: _____
 DISTRICT: _____
 ARMY AREA: _____

LOCATION OF PROJECT

MILES OF _____
 MILES OF _____

TRANSPORTATION FACILITIES

RAILROADS: _____
 STATE ROADS: _____
 FEDERAL ROADS: _____
 AIR LINES: _____

ACQUISITION

TOTAL ACRES ACQUIRED: _____
 ACRES FEE: _____
 ACRES TRANSFERRED: _____
 ACRES LEASED: _____
 ACRES LESSER INTERESTS: _____

DISPOSAL

TOTAL ACRES DISPOSED OF: _____
 ACRES SOLD: _____
 ACRES TRANSFERRED: _____
 ACRES LEASES TERMINATED: _____
 ACRES LESS. INT'S. TERMINATED: _____
 ACRES REASSIGNED: _____
 ACRES TO: _____

LEGEND

EXCEPT FOR THE SPECIAL SYMBOLS SHOWN BELOW MAP SYMBOLS ARE STANDARD IN ARMY MAP SERVICE TECHNICAL MANUAL NO. 33.

- RESERVATION LINE: [Symbol]
- RESERVATION LINE (Actual Survey): [Symbol]
- TRACT BOUNDARY LINE: [Symbol]
- TRACT NUMBER: [Symbol]
- AVIGATION EASEMENT: [Symbol]
- CONTOUR LINE: [Symbol]
- DISPOSAL: [Symbol]

SEGMENT "B"

DEPARTMENT OF THE ARMY
 OFFICE OF THE DIVISION ENGINEER
 NEW ENGLAND DIVISION

REAL ESTATE
EAST BRIMFIELD RESERVOIR

DRAWN BY: R.S.P.
 CHECKED BY: _____
 DIMENSIONS BY: _____
 RECOMMENDED BY: _____

DATE: MARCH 1950

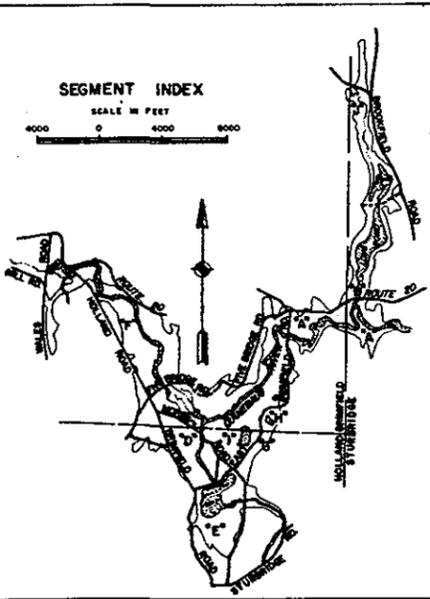
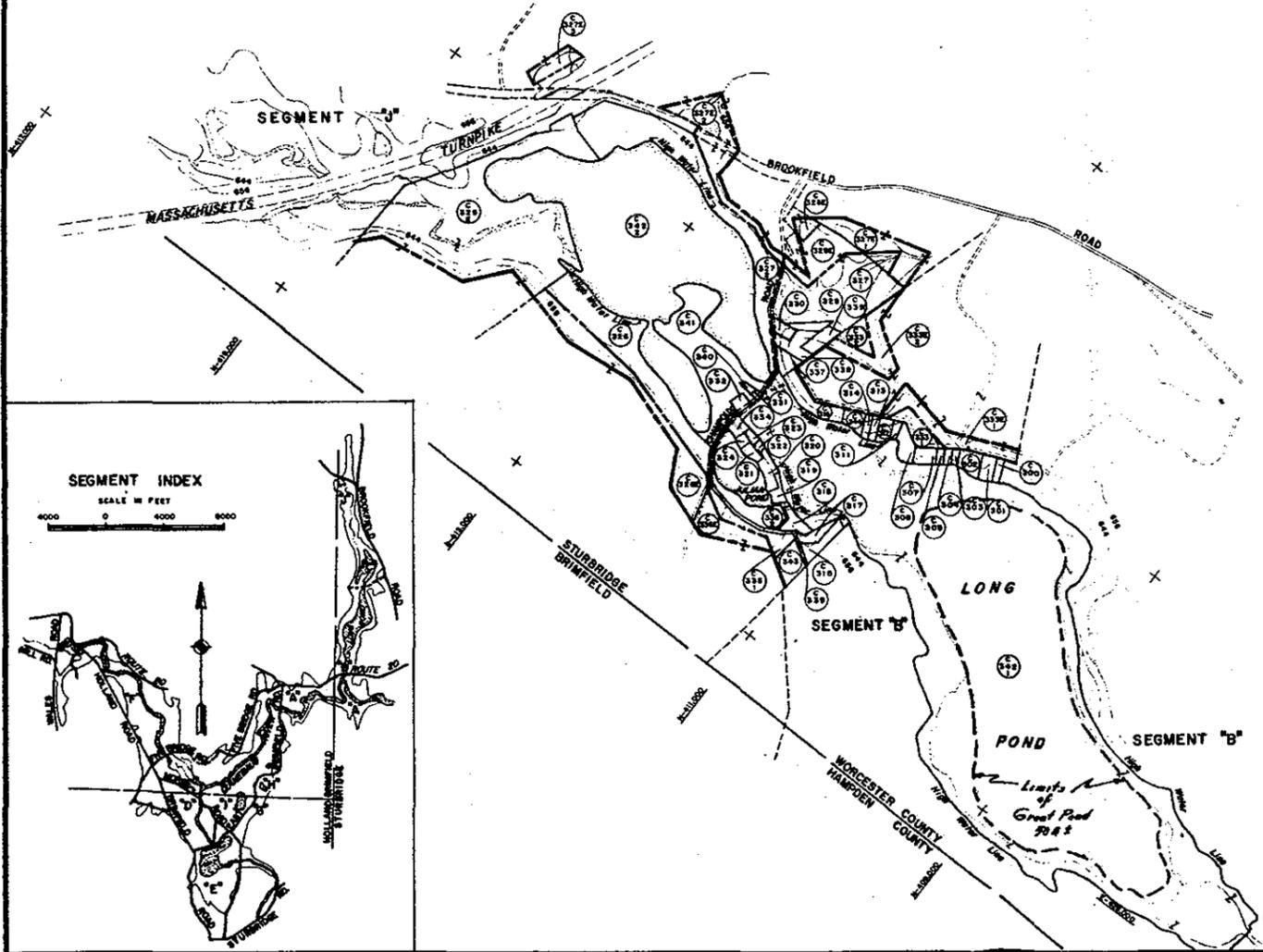
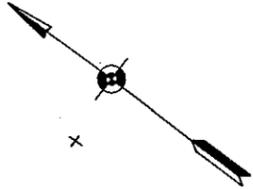
OFFICE, CHIEF OF ENGINEERS, WASHINGTON 25, D. C.

INSTALLATION OR PROJECT NO.: _____

DATE	REVISIONS
1/17/51	Tract B-227E re-designated as B-227E. Tract B-227E-1 changed to B-227E-1 & E-2 added.
6-5-60	Tract B-229 added.

TRACT REGISTER OF ACQUISITION AFTER 1 JAN. 1943 (CIVIL).

TRACT NO.	LAND OWNER	ACREAGE				REMARKS	TRACT NO.	LAND OWNER	ACREAGE				REMARKS
		FEE	EASMT	LEASED	PERMIT				FEE	EASMT	LEASED	PERMIT	
C-300	Clarence McDonald	0.18					C-327-1	Clara M. Kaogh	0.44				
C-301	Andrew Szrak, et ux	0.37					C-327-2	Clara M. Kaogh	12.02				
C-302	Ronald D. Eastman, et ux	0.46					C-327E-1	Clara M. Kaogh		2.56			Perp. flowage easmt from
C-303	Edgar J. Rich, et al	0.11					C-327E-2	Clara M. Kaogh		3.68			Perp. flowage easmt from
C-304	Andrew Boutillietts, et al	0.11					C-327E-3	Clara M. Kaogh		0.84			Perp. flowage easmt from
C-305	Donald Duchesneau, et ux	0.11					C-328E	Rosal J.B. Tavernier, et ux		0.37			Perp. flowage easmt from
C-307	Wilfred A. Dupuis, et ux	0.38					C-329	Philip L. Honey, et ux	6.67				
C-308	James P. Nodie, et ux	0.55					C-329E	Philip L. Honey, et ux		2.51			Perp. flowage easmt from
C-311	John B. Fournier, et ux	0.14					C-330	William E. Dandus	0.33				
C-312	John B. Fournier, et ux	0.34					C-331	Mary Jane Ringuette	0.06				
C-313	Alice E. Pascott	0.19					C-332	Heirs of Alfred Julian	0.23				
C-314	John T. Nyte, et ux	0.19					C-333-1	Edward A. Racicot, et ux	0.85				
C-315	Elzear Tremblay Jr., et ux	1.14					C-333-2	Edward A. Racicot, et ux	0.69				
C-316	C. Ernest Julien, et ux	0.55					C-333E-1	Edward A. Racicot, et ux		2.14			Perp. flowage easmt from
C-317	Evariste Boucher, et al	0.49					C-333E-2	Edward A. Racicot, et ux		1.95			Perp. flowage easmt from
C-318	Carl F. Graham, et ux	1.34					C-334	John L. Hemingway	0.30				
C-319	Wilfred A. Jalbert, et ux	0.32					C-335	John M. Julian Estate	3.15				
C-320	Roger M. Provost, et ux	0.46					C-336-1	Louis D. Julian, et ux	1.07				
C-321	Joseph Schmitt Jr., et ux	0.22					C-336-2	Louis D. Julian, et ux	1.33				
C-322	Oscar Julien, et ux	0.08					C-336E	Louis D. Julian, et ux		1.65			Perp. flowage easmt from
C-323	Louis Julien, et al	0.13					C-337	Henry Robidoux, et ux	0.47				
C-324	Ivan D. Patten, et ux	0.14					C-338	Emile Gaurin	1.04				
C-325E	Sturbridge Acres, Inc.		19.40			Perp. flowage easmt from	C-339	Elizabeth Costello	0.50				
C-326	Norbert W. Rossman	5.57					C-340	Irene Jackson	0.10				
C-326E	Norbert W. Rossman		4.90			Perp. flowage easmt from	C-341	Louis D. Julian, et ux	6.50				
							C-342-1	American Optical Co.	100.00				
							C-342-2	American Optical Co.	36.00				
							C-343	Joseph Boucher, et ux	0.83				
							C-344	Alfred J. LaBlanc, et ux	0.48				



PROJECT MAP

AGENCY: _____
 STATE: _____
 COUNTY: _____
 DIVISION: _____
 DISTRICT: _____
 ARMY AREA: _____

LOCATION OF PROJECT

MILES OF _____
 MILES OF _____

TRANSPORTATION FACILITIES

RAILROADS: _____
 STATE ROADS: _____
 FEDERAL ROADS: _____
 AIR LINES: _____

ACQUISITION

TOTAL ACRES ACQUIRED: _____
 ACRES FEE: _____
 ACRES TRANSFERRED: _____
 ACRES LEASED: _____
 ACRES LESSER INTERESTS: _____

DISPOSAL

TOTAL ACRES DISPOSED OF: _____
 ACRES SOLD: _____
 ACRES TRANSFERRED: _____
 ACRES LEASES TERMINATED: _____
 ACRES LESS. INT'S. TERMINATED: _____
 ACRES REASSIGNED: _____
 ACRES TO: _____

LEGEND

EXCEPT FOR THE SPECIAL SYMBOLS SHOWN BELOW MAP SYMBOLS ARE STANDARD BY ARMY MAP SERVICE TECHNICAL MANUAL NO. 11.

RESERVATION LINE: _____
 RESERVATION LINE (Actual Survey): _____
 TRACT BOUNDARY LINE: _____
 TRACT NUMBER: _____
 AVIGATION EASEMENT: _____
 CONTOUR LINE: _____
 DISPOSAL: _____

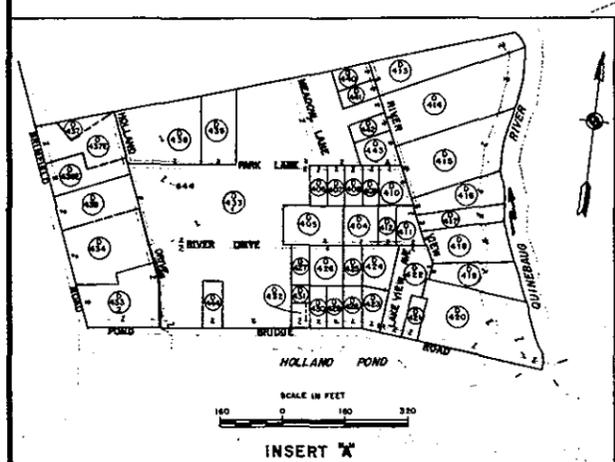
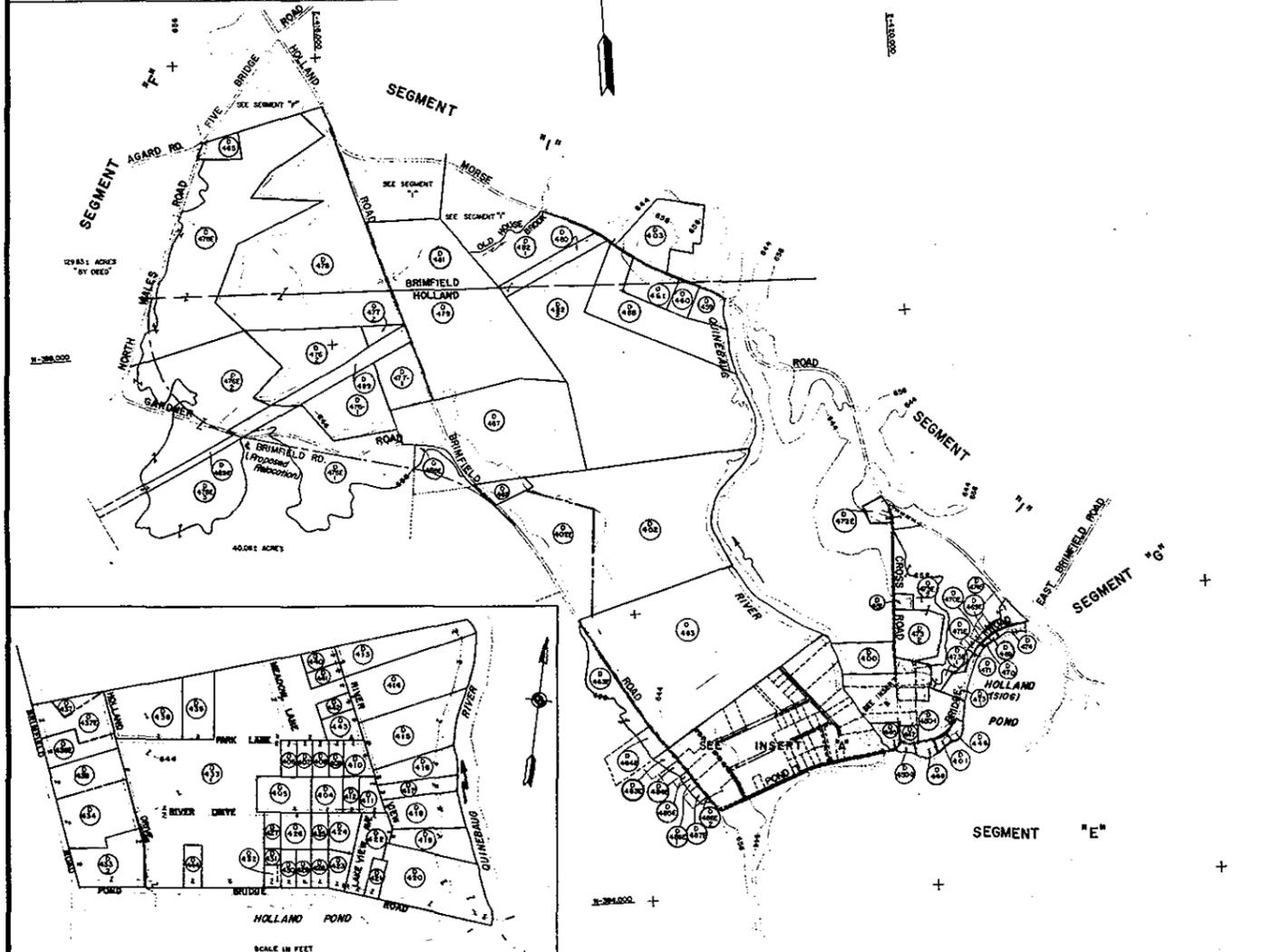
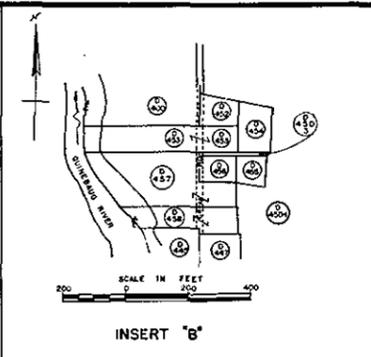
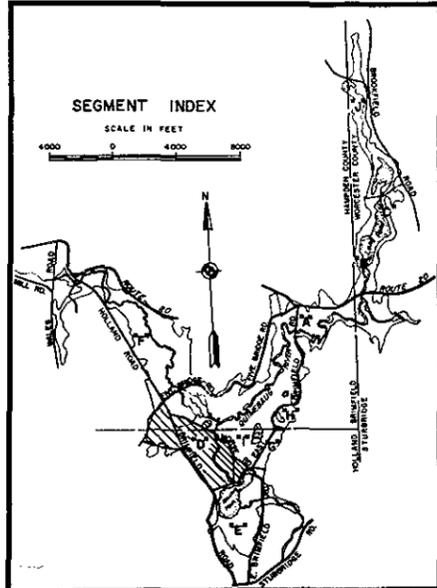
SEGMENT "C"
 DEPARTMENT OF THE ARMY
 OFFICE OF THE DIVISION ENGINEER
 NEW ENGLAND DIVISION

REAL ESTATE
EAST BRIMFIELD RESERVOIR

DATE: MARCH 1940

OFFICE, CHIEF OF ENGINEERS, WASHINGTON 25, D. C.

INSTALLATION OR PROJECT NO. _____



Continued:

TRACT NO.	LAND OWNER	ACREAGE			REMARKS
		FEE	EASMT	LEASED	
D-476	Leonard H. Pairier, et al	24.90		19.47	Perp. flowage easmt from
D-478E	Leonard H. Pairier, et al				
D-479	Bradford W. Ordway, et ux	13.85			
D-480	Freda B. Stegner	1.85			
D-481	Town of Brimfield, et al.	7.02			
D-482-1	Delia M. Boddgett, et al	4.44			
D-482-2	Delia M. Boddgett, et al				
D-483E	Armond B. Dumont, et ux		0.24		Perp. flowage easmt from
D-484E	Arthur A. Frederick, et ux		0.18		Perp. flowage easmt from
D-485E	Francis McCarthy, et al.		0.07		Perp. flowage easmt from
D-486E-1	Shirley E. Earnest		0.14		Perp. flowage easmt from
D-486E-2	Shirley E. Earnest		0.02		Perp. flowage easmt from
D-487E	Alfred J. Dumont, et ux			0.16	Perp. flowage easmt from
D-488	James A. Roberts, et al.	7.00			
D-450-3	Andrew J. Bogley	0.06			
D-489	Mary E. Lewis	2.28			
D-489E	Mary E. Lewis			0.96	Perp. flowage easmt from

TRACT REGISTER OF ACQUISITION AFTER 1 JAN. 1943 (CIVIL).

TRACT NO.	LAND OWNER	ACREAGE				REMARKS
		FEE	EASMT	LEASED	PERMIT	
D-400	Marion F. Leach	1.95				
D-401	Marion F. Leach	0.17				
D-402	Austin H. Crane, et ux	20.70				
D-402E	Austin H. Crane, et ux			7.10		Perp. flowage easmt from
D-403	M. Lee John, et ux	4.20				
D-404	Dominic R. Corabetto	0.29				
D-405	Evelyn Ada Hamilton	0.45				
D-406	Howard G. Sanford	0.13				
D-407	Walter M. White, et ux	0.13				
D-408	Willis E. Maynard	0.13				
D-409	Louis E. Evans, et ux	0.13				
D-410	Prime L. Mancini	0.22				
D-411	Aquino De Bonis, et ux	0.18				
D-412	Joseph F. Valinet, et ux	0.13				
D-413	Earl Wiss, et ux	0.70				
D-414	John Zonetti, et ux	1.08				
D-415	Joseph Buleman, et ux	0.90				
D-416	Shirley E. Earnest	0.33				
D-417	Jack Boggatti, et ux	0.28				
D-418	Daniel F. Satrio, et ux	0.60				
D-419	Edwin N. Hestler, et of	0.30				
D-420	Shirley E. Earnest	1.15				
D-421	Fred Lango, et ux	0.14				
D-422	Louis E. Evans, et ux	0.92				
D-423	Jean B. Lussier, et ux	0.19				
D-424	Clifford A. Brochu, et ux	0.26				
D-425	How J. Gerschu	0.13				
D-426	William J. Fowau, et ux	0.27				
D-427	Mar J. Kreiger Jr., et ux	0.13				
D-428	L. Lyman Brown, et ux	0.14				
D-429	Leon Dupont, et ux	0.14				
D-430	Raymond Croite	0.14				
D-431	Raymond F. Connel, et ux	0.06				
D-432	Alex Clelland, et ux	0.08				
D-433-1	Shirley E. Earnest	6.40				
D-433-2	Shirley E. Earnest	0.70				
D-434	Elmer H. Davis, et ux	0.82				
D-435	John A. Pandy, et ux	0.92				
D-436E	John Kallougar, et ux			0.40		Perp. flowage easmt from
D-437	Anthony J. Ruzak, et ux	0.11				
D-437E	Anthony J. Ruzak, et ux			0.51		Perp. flowage easmt from
D-438	Marie C. Sullivan	0.90				
D-439	Roger J. Charlier, et ux	0.46				
D-440	Earl Marlin, et ux	0.14				
D-441	Rosdie C. Mathieu	0.13				
D-442	Charles A. Boffige, et ux	0.13				
D-443	Dorothy M. Mansour	0.35				
D-444	Alma M. Bismol	0.14				
D-445	Robert A. Pizzo	0.37				
D-446	Marie C. Sullivan	0.17				
D-447	Estate of Laura L. Bush	0.25				
D-448	Elmer L. Dean	0.26				
D-450-1	Andrew J. Bogley	2.20				
D-450-2	Andrew J. Bogley	0.18				
D-451	George C. Vreeland, et ux	0.50				
D-452	Charles E. Vogel, et ux	0.29				
D-453	George E. Reinville, et ux	0.90				
D-454	George R. Foster, et ux	0.34				
D-455	Wilfred J. Meloch, et ux	0.19				
D-456	Theodore F. Wilson, et ux	0.22				
D-457	Lorenzo N. Bettiera, et ux	1.27				
D-458	Richard King, et ux	0.50				
D-459	Bertha A. Dana	1.17				
D-460	Mary B. Foster	0.86				
D-461	Michael A. Cuzzona, et ux	1.88				
D-462	Leon A. Griswold	0.98				
D-463	Bradford W. Ordway, et ux	28.50				
D-463E	Bradford W. Ordway, et ux			2.10		Perp. flowage easmt from
D-464E	Mary E. Lewis			0.54		Perp. flowage easmt from
D-465	Widow Tremblay et ux	0.97				
D-466E	Frederick T. Hunt Jr. et ux			0.47		Perp. flowage easmt from
D-467	Joseph A. Cordant	16.16				
D-469	Alphonse Blenvenue et ux	0.05				
D-469E	Alphonse Blenvenue et ux			0.08		Perp. flowage easmt from
D-470	Jeremiah Brick et ux	0.06				
D-470E	Jeremiah Brick et ux			0.08		Perp. flowage easmt from
D-471	Bessie V. Bourdoin	0.06				
D-471E	Bessie V. Bourdoin			0.07		Perp. flowage easmt from
D-472E	Arthur M. Eoria et ux			0.60		Perp. flowage easmt from
D-473-1	Marion G. Valentine	0.59				
D-473-2	Marion G. Valentine	2.40				
D-473E-1	Marion G. Valentine			0.64		Perp. flowage easmt from
D-473E-2	Marion G. Valentine			2.64		Perp. flowage easmt from
D-474	Levi B. Bliss et ux	0.28				
D-474E	Levi B. Bliss et ux			0.58		Perp. flowage easmt from
D-476-1	Alphus H. Hoy et ux	4.61				
D-476-2	Alphus H. Hoy et ux	5.80				
D-476E-1	Alphus H. Hoy et ux			10.54		Perp. flowage easmt from
D-476E-2	Alphus H. Hoy et ux			12.42		Perp. flowage easmt from
D-476E-3	Alphus H. Hoy et ux			6.57		Perp. flowage easmt from
D-477-1	Leon A. Griswold	2.60				
D-477-2	Leon A. Griswold	0.52				

PROJECT MAP

AGENCY: _____

STATE: _____

COUNTY: _____

DIVISION: _____

DISTRICT: _____

ARMY AREA: _____

LOCATION OF PROJECT

_____ MILES OF _____

_____ MILES OF _____

TRANSPORTATION FACILITIES

RAILROADS: _____

STATE ROADS: _____

FEDERAL ROADS: _____

AIR LINES: _____

ACQUISITION

TOTAL ACRES ACQUIRED: _____

ACRES FEE: _____

ACRES TRANSFERRED: _____

ACRES LEASED: _____

ACRES LESSER INTERESTS: _____

DISPOSAL

TOTAL ACRES DISPOSED OF: _____

ACRES SOLD: _____

ACRES TRANSFERRED: _____

ACRES LEASES TERMINATED: _____

ACRES LESS INTS. TERMINATED: _____

ACRES REASSIGNED: _____

ACRES TO: _____

LEGEND

EXCEPT FOR THE SPECIAL SYMBOLS SHOWN BELOW MAP SYMBOLS ARE STANDARD IN ARMY MAP SERVICE TECHNICAL MANUAL NO. 21.

RESERVATION LINE:

RESERVATION LINE (Actual Survey):

TRACT BOUNDARY LINE:

TRACT NUMBER:

AVIGATION EASEMENT:

CONTOUR LINE:

DISPOSAL:

SEGMENT "D"

DEPARTMENT OF THE ARMY
OFFICE OF THE DIVISION ENGINEER
NEW ENGLAND DIVISION

REAL ESTATE

EAST BRIMFIELD RESERVOIR

DRAWN BY: BSP

TRACED BY:

CHECKED BY:

SUBMITTED BY:

RECOMMENDED BY:

APPROVED BY: *Raymond A. Schmitt*

DATE: MARCH 1950

SCALE IN FEET
0 400 800

PLATE NO. 13D

MAPPING OF THE LAND DESIGNATED ON THIS SHEET WAS PERFORMED BY BARKES ENGINEERING CO. INC., 411 EXETER ST. AUBURNHOLE, MASS. UNDER CONTRACT NO. DA-19-016-CIV-ENG-52-28

Continued:

TRACT NO.	LAND OWNER	ACREAGE				REMARKS
		FEE	EASMT	LEASED	PERMIT	
E-564-2	Glodwin K. Lusk, et ux	3.34				
E-564E-1	Glodwin K. Lusk, et ux		3.08			Perp. flowage easmt from
E-564E-2	Glodwin K. Lusk, et ux		1.07			Perp. flowage easmt from
E-565	Frances S. Small	23.00				
E-565E	Frances S. Small		1.65			Perp. flowage easmt from
E-566E	William C. Groat, et ux		1.21			Perp. flowage easmt from
E-567E	Harold F. Hitchcock, et al.		1.84			Perp. flowage easmt from
E-568E	John S. Cloud		0.37			Perp. flowage easmt from
E-569E	Charles N. Turner		0.37			Perp. flowage easmt from
E-570E	Joseph J. Sichel, et al		0.15			Perp. flowage easmt from
E-535E	Matilda A. Burgess		0.33			Perp. flowage easmt from
E-536E	Donald M. Gleason		0.37			Perp. flowage easmt from
E-551E	David D. Linton, et ux		0.02			Perp. flowage easmt from
E-571-1	Lewis E. Howlett	7.81				
E-571-2	Lewis E. Howlett	6.76				
E-572	Charles Smith	2.40				
E-573	John S. Cloud, et ux	1.40				
E-577	Commonwealth of Massachusetts	65.00				
E-575E	Bryant H. Gardner, et ux.		0.25			Perp. flowage easmt from
E-576	Cosimiro M. Piazzi, et ux	0.70				

TRACT REGISTER OF ACQUISITION AFTER 1 JAN 1943 (CIVIL)

TRACT NO.	LAND OWNER	ACREAGE				REMARKS
		FEE	EASMT	LEASED	PERMIT	
E-500-1	Bryant H. Gardner	1.14				
E-500-2	Bryant H. Gardner	1.01				
E-501	Town of Holland	0.33				
E-502	William T. Simpson, et ux	2.15				
E-503	Caroline D. Emerson,	1.10				
E-504	John J. Tully	0.20				
E-505	James W. Davis, et ux	6.80				
E-506	Frederick S. Korzenewski	0.10				
E-507	Frank J. Yoppk, et ux	0.12				
E-508	Frank Godek, et ux	0.37				
E-509	J. Richard Vincent, Executor.	0.18				
E-510	Roméo R. Duchesneau, et ux	0.19				
E-511	Lester G. Hastings, et ux	0.19				
E-512	John W. Kobis	0.19				
E-513	Joseph C. Ziezutevicz, et ux	0.45				
E-514	Leonard J. LeBlanc, et ux	0.29				
E-515	Howard G. Reed	0.12				
E-516	Joseph T. Aube	0.14				
E-517	Mary E. Harrington	0.65				
E-518	Carlton F. Howlett, et ux	0.25				
E-519	Arthur L. Fallardeau, et ux	0.45				
E-520	Arthur L. Fallardeau, et al	0.10				
E-521	Louis W. Hemwood, et ux	0.30				
E-522	Ross Riegger	0.69				
E-523	Joseph H. Markson	0.16				
E-523E	Joseph H. Markson		0.21			Perp. flowage easmt from
E-524	Wilfred B. Putnam & Mary P. Hopkins	1.10				
E-525	Richard Perry, et ux	1.18				
E-526	Harold F. Hitchcock	5.23				
E-527	Armando D. Luppi	0.33				
E-528	Edmund A. Ryan, et ux	0.28				
E-529	Frederick T. Hunt, et ux	0.25				
E-530	Raymond H. Keith, et ux	0.25				
E-531	Walter E. Godfrey	0.27				
E-532	Lewis E. Howlett, et ux	7.86				
E-532E	Lewis E. Howlett, et ux		1.08			Perp. flowage easmt from
E-533E	Town of Holland		0.62			" " " "
E-534	George J. Gressdorn, et ux	4.13				
E-535	Matilda A. Burgess	0.26				
E-536	Donald M. Gleason	0.44				
E-537	Wendell R. Blodgett	19.83				
E-537E	Wendell R. Blodgett		3.31			Perp. flowage easmt from
E-539	Lewis E. Blodgett, et ux	42.4				
E-539E	Lewis E. Blodgett, et ux		7.28			Perp. flowage easmt from
E-539	George A. Roche, et ux	0.05				
E-540	Eva G. Congdon	0.20				
E-541	John P. Landers, et ux	0.20				
E-542	Fred A. Ferraro, et ux	0.40				
E-543	Joseph Stockert, et ux	0.18				
E-544	Joseph Worpa, et ux	1.12				
E-545	Fred T. Hunt Jr., et ux	0.78				
E-546	Harold F. Hitchcock	0.34				
E-547	Byron A. Means	1.85				
E-548	Mehin Markson, et ux	0.05				
E-548E	Mehin Markson, et ux		0.09			Perp. flowage easmt from
E-549	Robert W. Pizzo, et ux	0.09				
E-549E	Robert W. Pizzo, et ux		0.08			Perp. flowage easmt from
E-550	Austin D. MacKenzie, et ux	0.07				
E-550E	Austin D. MacKenzie, et ux		0.03			Perp. flowage easmt from
E-551	David D. Linton, et ux	0.04				
E-552	Fred E. Lemps, et ux	0.10				
E-552E	Fred E. Lemps, et ux		0.05			Perp. flowage easmt from
E-553	John T. Parsons, et ux	0.05				
E-553E	John T. Parsons, et ux		0.03			Perp. flowage easmt from
E-554	Austin D. MacKenzie, et ux	0.06				
E-554E	Austin D. MacKenzie, et ux		0.03			Perp. flowage easmt from
E-555	Barbara E. Desoe, et al	0.06				
E-555E	Barbara E. Desoe, et al		0.03			Perp. flowage easmt from
E-556	Austin D. MacKenzie, et ux	0.09				
E-556E	Austin D. MacKenzie, et ux		0.03			Perp. flowage easmt from
E-557	Springfield Girls Club Inc.	2.94				
E-557E	Springfield Girls Club Inc.		4.59			Perp. flowage easmt from
E-558	Ernest H. Dart	0.23				
E-558E-1	Ernest H. Dart		0.13			Perp. flowage easmt from
E-558E-2	Ernest H. Dart		0.48			Perp. flowage easmt from
E-559-1	George A. Roche, et ux	0.19				
E-559-2	George A. Roche, et ux	5.88				
E-559E	George A. Roche, et ux		1.73			Perp. flowage easmt from
E-560	James W. Davis, et ux	12.97				
E-561	Edward E. Lewis, et ux	0.87				
E-562	David H. Adams, et ux	0.38				
E-563-1	Charlotte E. Hitchcock Estate	10.85				
E-563-2	Charlotte E. Hitchcock Estate	0.81				
E-563E-1	Charlotte E. Hitchcock Estate		1.28			Perp. flowage easmt from
E-563E-2	Charlotte E. Hitchcock Estate		0.73			Perp. flowage easmt from
E-563E-3	Charlotte E. Hitchcock Estate		0.66			Perp. flowage easmt from
E-564-1	Glodwin K. Lusk, et ux	0.84				

PROJECT MAP

AGENCY: _____

STATE: _____

COUNTY: _____

DIVISION: _____

DISTRICT: _____

ARMY AREA: _____

LOCATION OF PROJECT

_____ MILES OF _____

_____ MILES OF _____

TRANSPORTATION FACILITIES

RAILROADS: _____

STATE ROADS: _____

FEDERAL ROADS: _____

AIR LINES: _____

ACQUISITION

TOTAL ACRES ACQUIRED: _____

ACRES FEE: _____

ACRES TRANSFERRED: _____

ACRES LEASED: _____

ACRES LESSER INTERESTS: _____

DISPOSAL

TOTAL ACRES DISPOSED OF: _____

ACRES SOLD: _____

ACRES TRANSFERRED: _____

ACRES LEASES TERMINATED: _____

ACRES LESS. INTS. TERMINATED: _____

ACRES REASSIGNED: _____

ACRES TO: _____

LEGEND

EXCEPT FOR THE SPECIAL SYMBOLS SHOWN BELOW MAP SYMBOLS ARE STANDARD IN ARMY MAP SERVICE TECHNICAL MANUAL NO. 11.

RESERVATION LINE:

RESERVATION LINE (land serv):

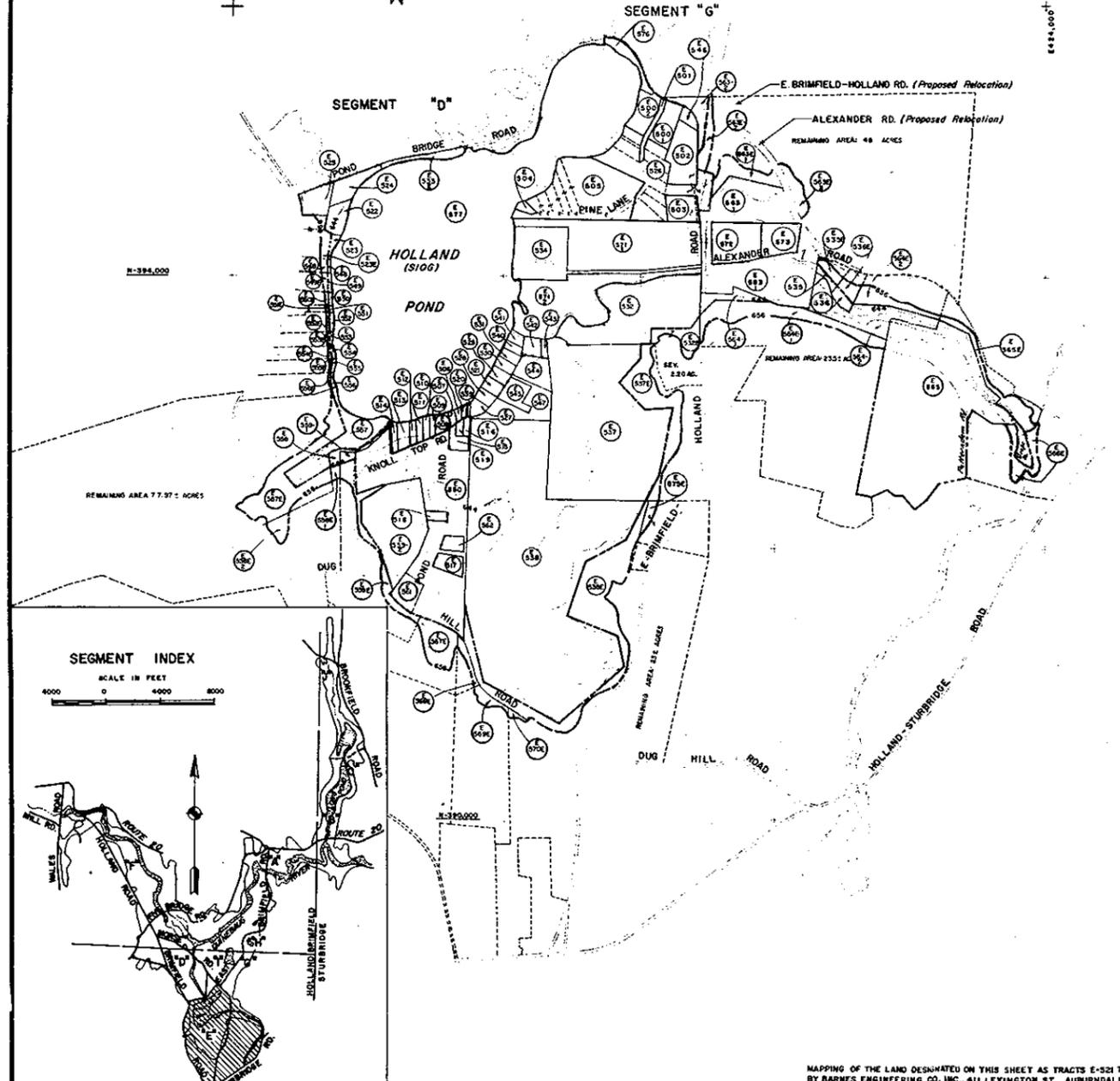
TRACT BOUNDARY LINE:

TRACT NUMBER:

AVIGATION EASEMENT:

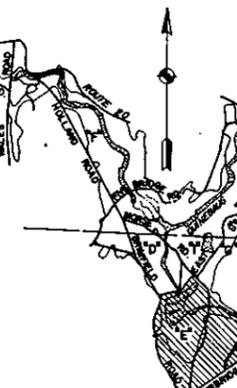
CONTOUR LINE:

DISPOSAL:



SEGMENT INDEX

SCALE IN FEET 0 4000 8000



MAPPING OF THE LAND DESIGNATED ON THIS SHEET AS TRACTS E-521 THROUGH E-576 WAS PERFORMED BY BARNES ENGINEERING CO. INC., 411 LEXINGTON ST., AUBURNDALE, MASSACHUSETTS UNDER CONTRACT NO. DA-19-016-CIV-ENG-59-219

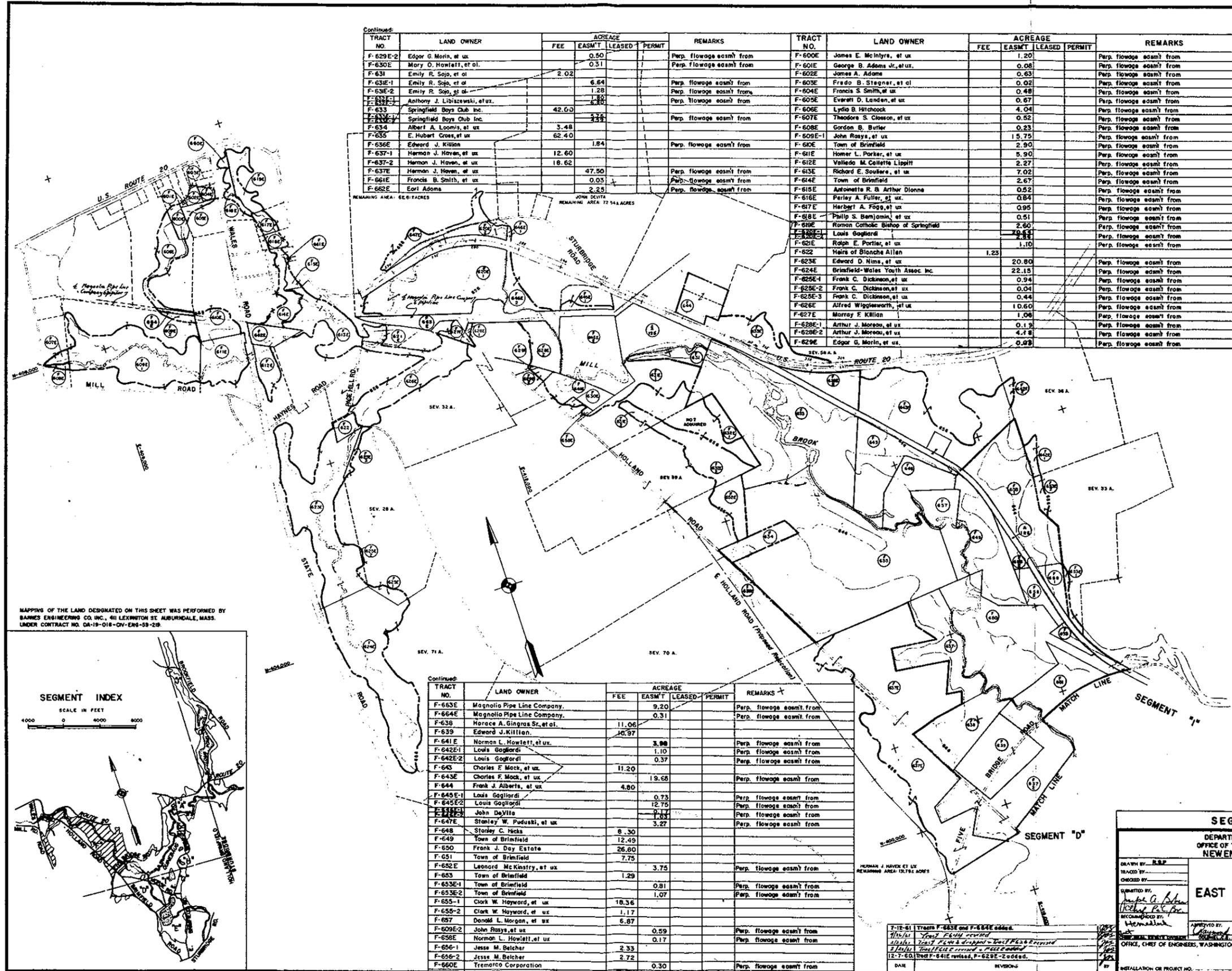
DATE: 3/14/60
 REVISIONS:
 1. 3/14/60 - Tract E-576 added
 2. 3/17/60 - Tract E-535 & E-577 dropped
 3. 8-26-50 Tract E-576 added.

SEGMENT "G"
 DEPARTMENT OF THE ARMY
 OFFICE OF THE DIVISION ENGINEER
 NEW ENGLAND DIVISION

REAL ESTATE
EAST BRIMFIELD RESERVOIR

DRAWN BY: R.S.P.
 TRACED BY: _____
 CHECKED BY: _____
 SUBMITTED BY: _____
 RECOMMENDED BY: _____
 APPROVED BY: _____
 DATE: MARCH 1960
 OFFICE: CHIEF OF ENGINEERS, WASHINGTON 25, D. C.

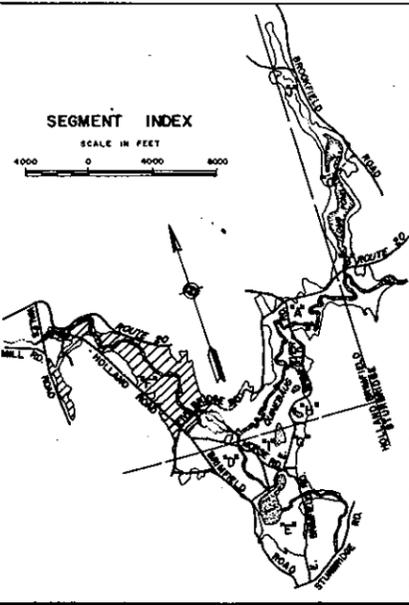
SCALE IN FEET 0 400 800
 SHEET 5 OF 10 DRAWING NO. MED-PH-1338



TRACT NO.	LAND OWNER	ACREAGE			REMARKS	TRACT NO.	LAND OWNER	ACREAGE			REMARKS			
		FEE	EASMT	LEASED				PERMIT	FEE	EASMT		LEASED	PERMIT	
F-629E-2	Edgar G. Morin, et ux		0.50			F-600E	James E. McIntyre, et ux	1.20			Perp. flowage easmt from			
F-630E	Mary O. Howlett, et al.		0.31		Perp. flowage easmt from	F-601E	George B. Adams Jr., et ux	0.08			Perp. flowage easmt from			
F-631	Emily R. Sage, et al.	2.02				F-602E	James A. Adams	0.63			Perp. flowage easmt from			
F-631E-1	Emily R. Sage, et al.		6.64		Perp. flowage easmt from	F-603E	Freda B. Stegner, et al	0.02			Perp. flowage easmt from			
F-631E-2	Emily R. Sage, et al.		1.28		Perp. flowage easmt from	F-604E	Francis S. Smith, et ux	0.48			Perp. flowage easmt from			
F-632E	Anthony J. Libickowski, et ux		6.30		Perp. flowage easmt from	F-605E	Everett D. Landon, et ux	0.67			Perp. flowage easmt from			
F-633	Springfield Boys Club Inc.	42.00				F-606E	Lydia B. Hitchcock	4.04			Perp. flowage easmt from			
F-633E-1	Springfield Boys Club Inc.		3.39		Perp. flowage easmt from	F-607E	Theodore S. Closson, et ux	0.82			Perp. flowage easmt from			
F-634	Albert A. Loomis, et ux	3.48				F-608E	Gordon B. Butler	0.23			Perp. flowage easmt from			
F-635	E. Hubert Cross, et ux	62.40				F-609E-1	John Rays, et ux	15.75			Perp. flowage easmt from			
F-636E	Edward J. Killian		1.84		Perp. flowage easmt from	F-610E	Tom of Brimfield	2.90			Perp. flowage easmt from			
F-637-1	Harmon J. Haven, et ux	12.60				F-611E	Homer L. Parker, et ux	5.90			Perp. flowage easmt from			
F-637-2	Harmon J. Haven, et ux	16.62				F-612E	Vallejo M. Collette Limpit	2.27			Perp. flowage easmt from			
F-637E	Harmon J. Haven, et ux		47.50		Perp. flowage easmt from	F-613E	Richard E. Souther, et ux	7.02			Perp. flowage easmt from			
F-661E	Francis B. Smith, et ux		0.03		Perp. flowage easmt from	F-614E	Tom of Brimfield	2.67			Perp. flowage easmt from			
F-662E	Earl Adams		2.25		Perp. flowage easmt from	F-615E	Antonette R. B. Arthur Dionne	0.52			Perp. flowage easmt from			
REMAINING AREA: 66.61 ACRES					JOHN DEVITA REMAINING AREA: 72.54 ACRES									
F-616E	Parley A. Fuller, et ux		0.84			F-616E	Parley A. Fuller, et ux	0.84			Perp. flowage easmt from			
F-617E	Herbert A. Fogg, et ux		0.95			F-617E	Herbert A. Fogg, et ux	0.95			Perp. flowage easmt from			
F-618E	Philip S. Benjamin, et ux		0.51			F-618E	Philip S. Benjamin, et ux	0.51			Perp. flowage easmt from			
F-619E	Roman Catholic Bishop of Springfield		2.60			F-619E	Roman Catholic Bishop of Springfield	2.60			Perp. flowage easmt from			
F-620E	Louis Gagliardi		79.63			F-620E	Louis Gagliardi	79.63			Perp. flowage easmt from			
F-621E	Ralph E. Portier, et ux		2.85			F-621E	Ralph E. Portier, et ux	2.85			Perp. flowage easmt from			
F-622	Hairs of Blanche Allen	1.23				F-622	Hairs of Blanche Allen	1.23			Perp. flowage easmt from			
F-623E	Edward D. Nims, et ux		20.80		Perp. flowage easmt from	F-623E	Edward D. Nims, et ux	20.80			Perp. flowage easmt from			
F-624E	Brimfield-Wales Youth Assoc. Inc.		22.15		Perp. flowage easmt from	F-624E	Brimfield-Wales Youth Assoc. Inc.	22.15			Perp. flowage easmt from			
F-625E-1	Frank C. Dickson, et ux		0.94		Perp. flowage easmt from	F-625E-1	Frank C. Dickson, et ux	0.94			Perp. flowage easmt from			
F-625E-2	Frank C. Dickson, et ux		0.04		Perp. flowage easmt from	F-625E-2	Frank C. Dickson, et ux	0.04			Perp. flowage easmt from			
F-625E-3	Frank C. Dickson, et ux		0.44		Perp. flowage easmt from	F-625E-3	Frank C. Dickson, et ux	0.44			Perp. flowage easmt from			
F-626E	Alfred Wigglesworth, et ux		10.60		Perp. flowage easmt from	F-626E	Alfred Wigglesworth, et ux	10.60			Perp. flowage easmt from			
F-627E	Murray F. Killian		1.06		Perp. flowage easmt from	F-627E	Murray F. Killian	1.06			Perp. flowage easmt from			
F-628E-1	Arthur J. Moreau, et ux		0.15		Perp. flowage easmt from	F-628E-1	Arthur J. Moreau, et ux	0.15			Perp. flowage easmt from			
F-628E-2	Arthur J. Moreau, et ux		4.18		Perp. flowage easmt from	F-628E-2	Arthur J. Moreau, et ux	4.18			Perp. flowage easmt from			
F-629E	Edgar G. Morin, et ux		0.09		Perp. flowage easmt from	F-629E	Edgar G. Morin, et ux	0.09			Perp. flowage easmt from			

TRACT NO.	LAND OWNER	ACREAGE			REMARKS
		FEE	EASMT	LEASED	
F-663E	Magnolia Pipe Line Company		9.20		Perp. flowage easmt from
F-664E	Magnolia Pipe Line Company		0.31		Perp. flowage easmt from
F-638	Morace A. Gingras Sr., et al.	11.06			
F-639	Edward J. Killian	10.97			
F-641E	Norman L. Howlett, et ux		3.88		Perp. flowage easmt from
F-642E-1	Louis Gagliardi		1.10		Perp. flowage easmt from
F-642E-2	Louis Gagliardi		0.37		Perp. flowage easmt from
F-643	Charles F. Mack, et ux	11.20			
F-643E	Charles F. Mack, et ux		19.68		Perp. flowage easmt from
F-644	Frank J. Alberts, et ux	4.80			
F-645E-1	Louis Gagliardi		0.75		Perp. flowage easmt from
F-645E-2	Louis Gagliardi		12.75		Perp. flowage easmt from
F-646E	John DeVita		7.53		Perp. flowage easmt from
F-647E	Stanley W. Puduski, et ux		3.27		Perp. flowage easmt from
F-648	Stanley C. Hicks	8.30			
F-649	Tom of Brimfield	12.49			
F-650	Frank J. Day Estate	26.80			
F-651	Tom of Brimfield	7.75			
F-652E	Leonard McKinstry, et ux		3.75		Perp. flowage easmt from
F-653	Tom of Brimfield	1.29			
F-653E-1	Tom of Brimfield		0.81		Perp. flowage easmt from
F-653E-2	Tom of Brimfield		1.07		Perp. flowage easmt from
F-655-1	Clark W. Hayward, et ux	18.36			
F-655-2	Clark W. Hayward, et ux	1.17			
F-657	Donald L. Morgan, et ux	6.87			
F-659E-2	John Rays, et ux		0.59		Perp. flowage easmt from
F-658E	Norman L. Howlett, et ux		0.17		Perp. flowage easmt from
F-656-1	Jesse M. Belcher	2.33			
F-656-2	Jesse M. Belcher	2.72			
F-660E	Tremelo Corporation		0.30		Perp. flowage easmt from

MAPPING OF THE LAND DESIGNATED ON THIS SHEET WAS PERFORMED BY BARNES ENGINEERING CO. INC., 411 LEXINGTON ST. AUBURNDALE, MASS. UNDER CONTRACT NO. GR-19-018-CV-ENG-59-218.



PROJECT MAP

AGENCY: _____
 STATE: _____
 COUNTY: _____
 DIVISION: _____
 DISTRICT: SEE SHEET

LOCATION OF PROJECT

_____ MILES OF _____
 _____ MILES OF _____

TRANSPORTATION FACILITIES

RAILROADS: _____
 STATE ROADS: _____
 FEDERAL ROADS: _____
 AIR LINES: _____

ACQUISITION

TOTAL ACRES ACQUIRED: _____
 ACRES FEE: _____
 ACRES TRANSFERRED: _____
 ACRES LEASED: _____
 ACRES LESSER INTERESTS: _____

DISPOSAL

TOTAL ACRES DISPOSED OF: _____
 ACRES SOLD: _____
 ACRES TRANSFERRED: _____
 ACRES LEASES TERMINATED: _____
 ACRES LESS. INTS. TERMINATED: _____
 ACRES REASSIGNED: _____
 ACRES TO: _____

LEGEND

EXCEPT FOR THE SPECIAL SYMBOLS SHOWN BELOW MAP SYMBOLS ARE STANDARD IN ARMY MAP SERVICE TECHNICAL MANUAL NO. 21.

RESERVATION LINE:

RESERVATION LINE (Actual Survey):

TRACT BOUNDARY LINE:

TRACT NUMBER:

AVIGATION EASEMENT:

CONTOUR LINE:

DISPOSAL:

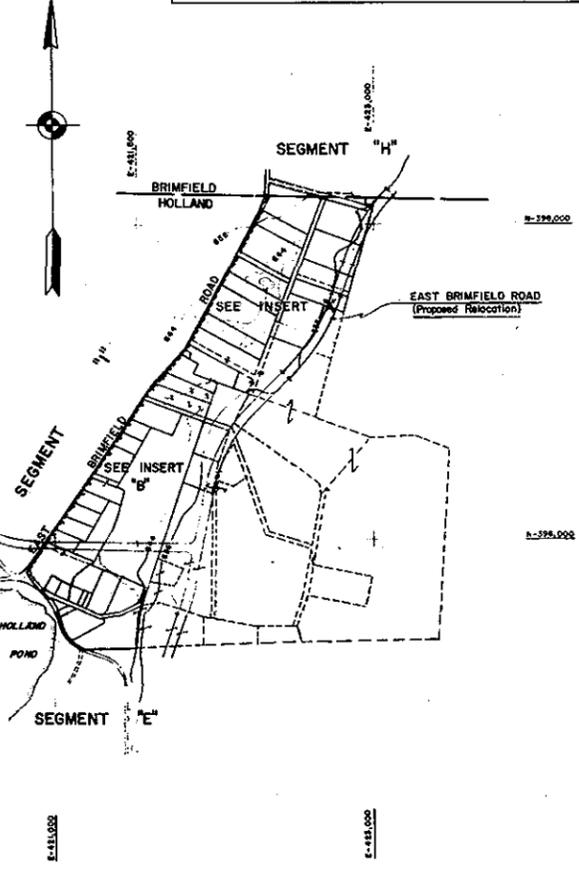
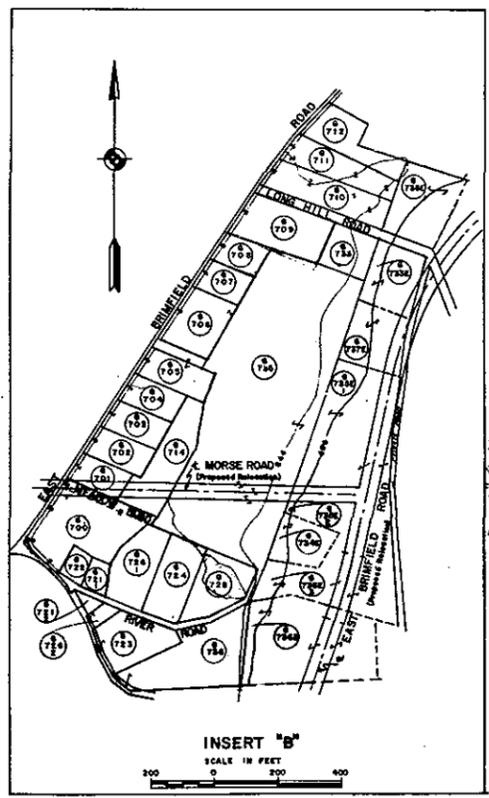
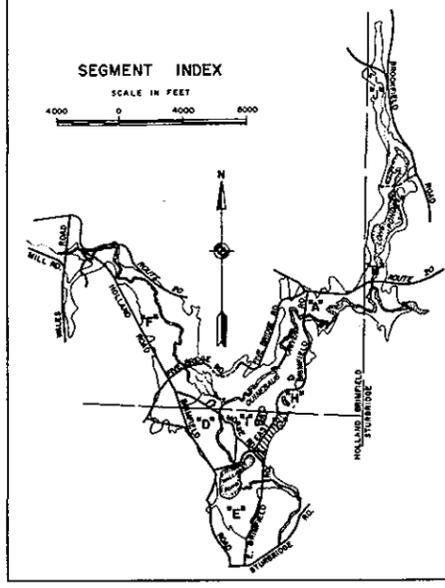
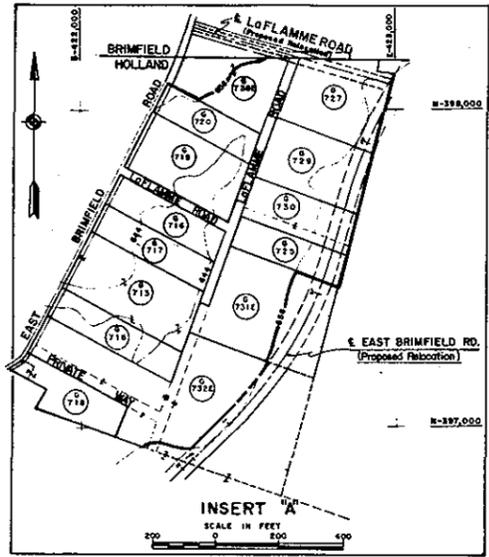
SEGMENT "F"
 DEPARTMENT OF THE ARMY
 OFFICE OF THE DIVISION ENGINEER
 NEW ENGLAND DIVISION

REAL ESTATE
EAST BRIMFIELD RESERVOIR

DATE: MARCH 1960

SCALE IN FEET: 1" = 400'

INSTALLATION OR PROJECT NO. _____ SHEET NO. 130 DRAWING NUMBER _____



TRACT REGISTER OF ACQUISITION AFTER 1 JAN. 1943 (CIVIL)

TRACT NO.	LAND OWNER	ACREAGE			REMARKS
		FEE	EASEM ^t	LEASED PERMIT	
G-700	Morino Pizzo, et ux	1.50			
G-701	Edith Stuart	0.42			
G-702	Dalco Contracting Inc.	0.47			
G-703	Iring M. Shultz, et ux	0.46			
G-704	Raymond J. LaBelle	0.44			
G-705	Rosel A. Gendron, et ux	0.54			
G-706	Paul E. Lusignea, et ux	0.80			
G-707	Lawrence A. Libby, et ux	0.38			
G-708	Frank A. Rickar, et ux	0.36			
G-709	Casimiro M. Pizzo, et al	1.00			
G-710	Charles G. Briate, et ux	0.89			
G-711	Walter J. LaDuc, et ux	0.71			
G-712	Robert J. Wilson, et ux	0.74			
G-713	Wilfred E. Lobbe, et ux	1.97			
G-714	Stevenson C. Jacobs, et ux	0.92			
G-715	Madison E. Henderson, et ux	1.03			
G-716	Laodora H. Gellinscu	0.91			
G-717	George H. Woyne, et ux	0.94			
G-718	Fedor Sovchuk, et ux	0.92			
G-719	Ambrose Fournier	1.72			
G-720	Lottie B. Nazuk	0.81			
G-721-1	Cecelia E. Power	0.17			
G-721-2	Cecelia E. Power	0.07			
G-722	Arthur L. Curtis, et ux	0.20			
G-723	Alphonse N. Mathieu, et ux	0.75			
G-724	Delora Pelouquin, et ux	0.74			
G-725	J. Armand Berthigume	0.61			
G-726-1	George W. Lindquist, et ux.	0.77			
G-726-2	George W. Lindquist, et ux.	0.13			
G-727	Leo E. Savoge	1.70			
G-728	Delora Pelouquin	0.73			
G-729	Lawrence J. Paquette (Trustee for Margaret Paquette)	1.48			
G-730	Walter O. Henderson, et ux	1.01			
G-731E	Daniel J. Sullivan, et ux		1.64		Perp. flowage easmt from
G-732E	Albert J. Paquette, et ux		3.49		Perp. flowage easmt from
G-733	Domenic G. DiPaolo, et ux.	0.50			
G-733E	Domenic G. DiPaolo, et ux.		0.23		Perp. flowage easmt from
G-734E	Alice E. Olney		0.16		Perp. flowage easmt from
G-735	Thomas Palmer Jr., et ux.	8.00			
G-735E-1	Thomas Palmer Jr., et ux.		0.57		Perp. flowage easmt from
G-735E-2	Thomas Palmer Jr., et ux.		0.23		Perp. flowage easmt from
G-735E-3	Thomas Palmer Jr., et ux.		0.20		Perp. flowage easmt from
G-736	Oscar V. Simonson, et ux.	1.49			
G-736E	Oscar V. Simonson, et ux.		0.23		Perp. flowage easmt from
G-737E	Casimiro M. Pizzo, et ux.		0.36		Perp. flowage easmt from
G-738E	Frederick E. Henke, Sr., et ux.		0.53		Perp. flowage easmt from
G-739E	Lawrence F. Hastings, et ux.		0.80		Perp. flowage easmt from

PROJECT MAP

AGENCY: _____

STATE: _____

COUNTY: _____

DIVISION: _____

DISTRICT: _____

ARMY AREA: _____

SEE SHEET 1

LOCATION OF PROJECT

MILES OF _____

MILES OF _____

TRANSPORTATION FACILITIES

RAILROADS: _____

STATE ROADS: _____

FEDERAL ROADS: _____

AIR LINES: _____

ACQUISITION

TOTAL ACRES ACQUIRED: _____

ACRES FEE: _____

ACRES TRANSFERRED: _____

ACRES LEASED: _____

ACRES LESSER INTERESTS: _____

DISPOSAL

TOTAL ACRES DISPOSED OF: _____

ACRES SOLD: _____

ACRES TRANSFERRED: _____

ACRES LEASES TERMINATED: _____

ACRES LESS. INT'S. TERMINATED: _____

ACRES REASSIGNED: _____

ACRES TO: _____

LEGEND

EXCEPT FOR THE SPECIAL SYMBOLS SHOWN BELOW MAP SYMBOLS ARE STANDARD IN ARMY MAP SERVICE TECHNICAL MANUAL NO. 33.

RESERVATION LINE:

RESERVATION LINE (Actual Survey):

TRACT BOUNDARY LINE:

TRACT NUMBER:

AVIGATION EASEMENT:

CONTOUR LINE:

DISPOSAL:

SEGMENT "G"

DEPARTMENT OF THE ARMY
OFFICE OF THE DIVISION ENGINEER
NEW ENGLAND DIVISION

REAL ESTATE
EAST BRIMFIELD RESERVOIR

DRAWN BY: R.S.P.

TRACED BY: _____

CHECKED BY: _____

SUBMITTED BY: *Robert L. Baker*

RECOMMENDED BY: *W. M. Sullivan*

APPROVED BY: *Raymond P. Thibault*

DATE: MARCH 1960

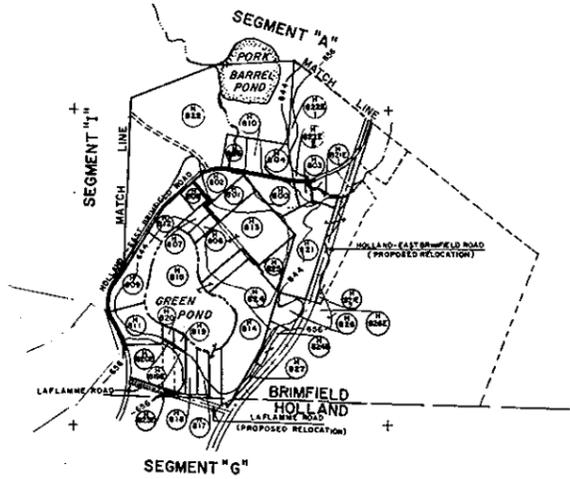
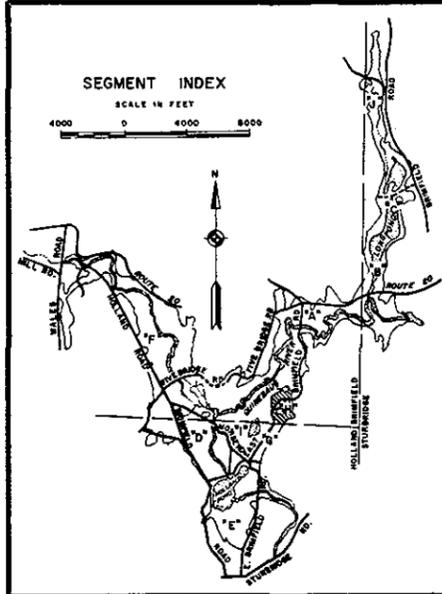
OFFICE, CHIEF OF ENGINEERS, WASHINGTON 25, D. C.

SCALE IN FEET
0 400 800

4-12-61 Tract G-739E reduced.

DATE _____ REVISION _____

INSTALLATION OR PROJECT NO. _____ SHEET 7 OF 10 DRAWING NO. 100-28-000



TRACT REGISTER OF ACQUISITION AFTER 1 JAN. 1943 (CIVIL)

TRACT NO.	LAND OWNER	FEE	ACREAGE			REMARKS
			EASMT	LEASED	PERMIT	
H-800	Arthur A. Cody, et ux.	1.23				
H-801	Alphons C. Suprenant, et ux.	0.90				
H-802	Emmo Roussseau	0.90				
H-803	William John Pinham, et ux.	0.33				
H-804	Norman E. Robidoux, et ux.	0.98				
H-805	Leo P. Hamel, et ux.	0.70				
H-806	Raymond B. Plouffe, et ux.	0.40				
H-807	Mary L. Kersey	0.40				
H-808	Walter F. Waite, et ux.	0.33				
H-809	Hector Livessoir, et ux.	2.00				
H-810	Leodora P. Menard	0.40				
H-811	Southbridge Credit Union	1.30				
H-812	Napolcon Biron, et ux.	1.08				
H-813	Arthur J. Lindsey, et ux.	4.06				
H-814	Leodora P. Menard	4.40				
H-815	Heirs of Joseph LaFlamme	7.30				
H-817	Donald J. Bronff, et ux.	0.49				
H-818	William A. Tourtelotte, et ux.	0.58				
H-819	James W. Haney, et ux.	0.18				
H-819E	James W. Haney, et ux.		0.20			Perp. flowage easmt. from
H-821	John A. Solomon, et ux.	3.00				
H-821E-1	John A. Solomon, et ux.		0.25			Perp. flowage easmt. from
H-821E-2	John A. Solomon, et ux.		0.09			Perp. flowage easmt. from
H-822	Heirs of Joseph LaFlamme	16.40				
H-822E-1	Heirs of Joseph LaFlamme		0.44			Perp. flowage easmt. from
H-822E-2	Heirs of Joseph LaFlamme		0.15			Perp. flowage easmt. from
H-823E	Eustace T. Quattracelli		0.02			Perp. flowage easmt. from
H-824	Lawrence Paquette	0.23				
H-824E	Lawrence Paquette		0.25			Perp. flowage easmt. from
H-825	Heirs of Joseph LaFlamme	0.72				
H-826	Heirs of Joseph LaFlamme	0.75				
H-826E	Heirs of Joseph LaFlamme		0.60			Perp. flowage easmt. from
H-827	Heirs of Joseph LaFlamme	0.18				
H-820	Lyman J. Haney, et ux.	0.17				
H-820E	Lyman J. Haney, et ux.		0.05			Perp. flowage easmt. from

PROJECT MAP

AGENCY: _____
 STATE: _____
 COUNTY: _____
 DIVISION: _____
 DISTRICT: _____
 ARMY AREA: _____

LOCATION OF PROJECT

_____ MILES OF _____
 _____ MILES OF _____

TRANSPORTATION FACILITIES

RAILROADS: _____
 STATE ROADS: _____
 FEDERAL ROADS: _____
 AIR LINES: _____

ACQUISITION

TOTAL ACRES ACQUIRED: _____
 ACRES FEE: _____
 ACRES TRANSFERRED: _____
 ACRES LEASED: _____
 ACRES LESSER INTERESTS: _____

DISPOSAL

TOTAL ACRES DISPOSED OF: _____
 ACRES SOLD: _____
 ACRES TRANSFERRED: _____
 ACRES LEASES TERMINATED: _____
 ACRES LESS. INTS. TERMINATED: _____
 ACRES REASSIGNED: _____
 ACRES TO: _____

LEGEND

- EXCEPT FOR THE SPECIAL SYMBOLS SHOWN BELOW MAP SYMBOLS ARE STANDARD IN ARMY MAP SERVICE TECHNICAL MANUAL NO. 11.
- RESERVATION LINE: [Symbol]
 - RESERVATION LINE (Adm. Survey): [Symbol]
 - TRACT BOUNDARY LINE: [Symbol]
 - TRACT NUMBER: [Symbol]
 - AVIGATION EASEMENT: [Symbol]
 - CONTOUR LINE: [Symbol]
 - DISPOSAL: [Symbol]

SEGMENT "H"

DEPARTMENT OF THE ARMY
 OFFICE OF THE DIVISION ENGINEER
 NEW ENGLAND DIVISION

REAL ESTATE

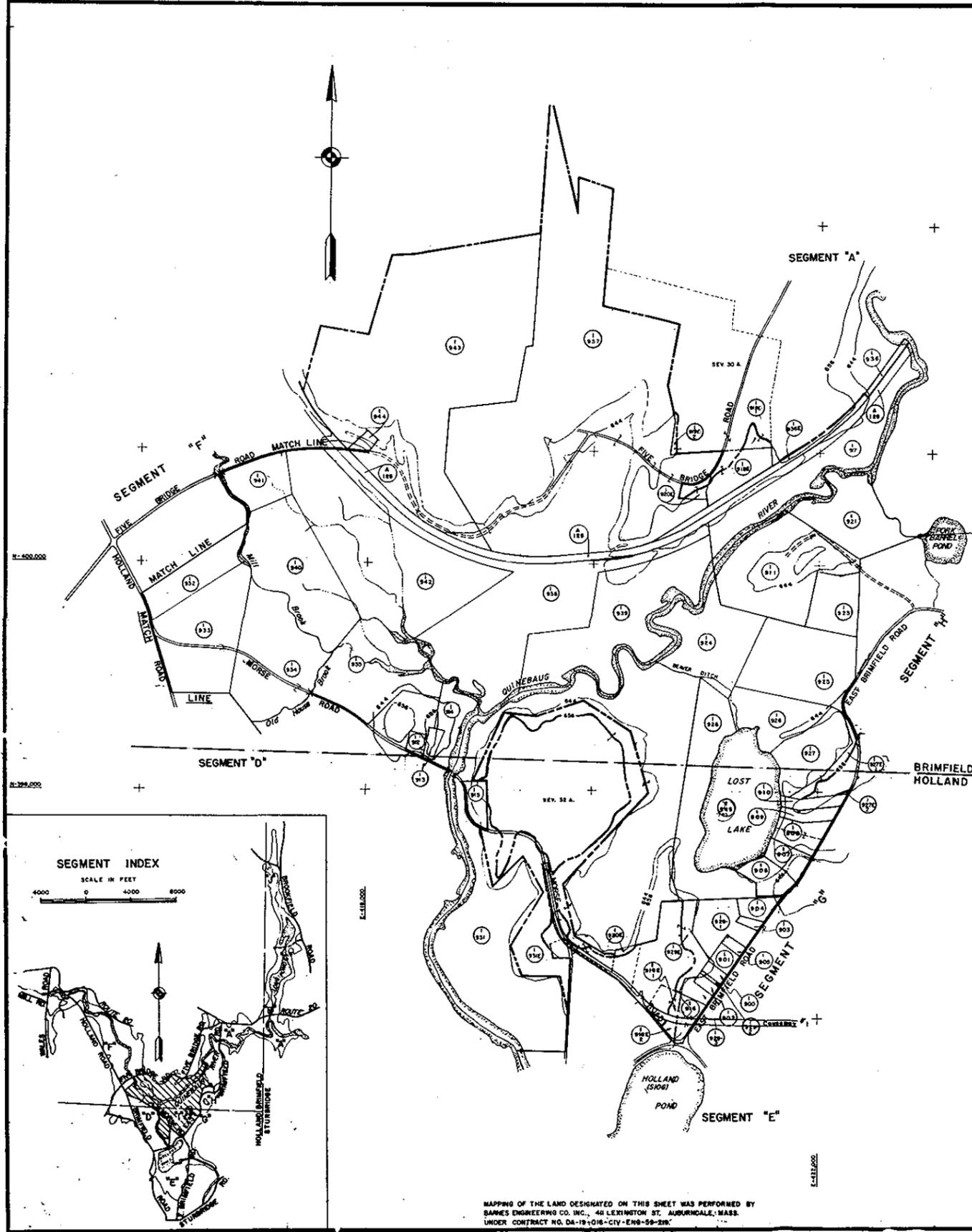
EAST BRIMFIELD RESERVOIR

DATE: MARCH 1980

SCALE IN FEET: 1" = 400'

OFFICE, CHIEF OF ENGINEERS, WASHINGTON 25, D. C.

DATE	BY	REVISIONS



TRACT REGISTER OF ACQUISITION AFTER 1 JAN. 1943 (CIVIL)

TRACT NO.	LAND OWNER	ACREAGE			REMARKS
		FEE	EASMT	LEASED PERMIT	
1-900	Edgar G. Moran, et ux	0.51			
1-901	Leo J. Gregoire, et ux	1.00			
1-902	George J. Gallipeau, et ux	0.51			
1-903	Armond Arnold, et ux	0.45			
1-904	Arthur H. Starke, et ux	1.56			
1-905	Cosimiro M. Pizzo, et ux	0.43			
1-906	Carl J. Modsen, et ux	2.18			
1-907	Edward H. Dayton, et ux	2.02			
1-908	Arthur D. Bradley, et ux	2.63			
1-909	Ashley P. Bock, et ux	1.31			
1-910	Burnard E. Hamilton, et ux	1.34			
1-911	Cosimiro Pizzo	17.20			
1-912	Conice F. Colahan, et ux	0.68			
1-913	Joseph Jackson, et ux	0.68			
1-914	Calvin L. Roots, et ux	4.40			
1-915	George P. Wing, et ux	1.76			
1-916	Herbert D. Bagley, et ux	1.57			
1-917	Evelyn L. Mohrka	14.80			
1-918E	Evelyn L. Mohrka	4.20			Perp. flowage easmt from
1-919E-1	Albert H. Gendreau, et ux	0.68			Perp. flowage easmt from
1-919E-2	Albert H. Gendreau, et ux	0.29			Perp. flowage easmt from
1-920E	Valentine J. Blocker, et ux	0.37			Perp. flowage easmt from
1-921	Joseph Matys	10.50			
1-923	Sherron W. Boutwell, et ux	4.96			
1-924	James A. Roberts	13.30			
1-925	Town of Brimfield	13.95			
1-926	Heirs of Tirzah K. Lane Estate	8.50			
1-927	Edward H. Dayton, et al	6.94			
1-927E-1	Edward H. Dayton, et al	1.51			Perp. flowage easmt from
1-927E-2	Edward H. Dayton, et al	0.03			Perp. flowage easmt from
1-928	Edward H. Dayton, et al	14.29			
1-929-1	Lewis E. Howlett	4.30			
1-929-2	Lewis E. Howlett	0.15			
1-929-3	Lewis E. Howlett	0.80			
1-929E	Lewis E. Howlett	1.95			Perp. flowage easmt from
1-930E	B S H Construction Co, Inc.	0.22			Perp. flowage easmt from
1-931	Miriam B. Jones Roberts	76.28			
1-931E	Miriam B. Jones Roberts	16.82			Perp. flowage easmt from
1-932	Walter A. Shaw, et al	6.13			
1-933	Harmon J. Hoven, et ux	15.00			
1-934	Charles Birnie	15.98			
1-935	Edward L. Lucien, et ux	14.30			
1-936	Freda B. Stegna	0.71			
1-937	William Cox, et al	104.00			
1-938	Town of Brimfield	32.84			
1-939	William Cox, et al	24.60			
1-940	Mary E. Lewis	17.11			
1-941	Harold E. Wallis Estate	5.18			
1-942	Donald L. Morgan, et ux	32.60			
1-943	Donald L. Morgan, et ux	72.40			
1-944	Frank J. Day	0.62			
1-936E	Freda B. Stegna	2.49			Perp. flowage easmt from
1-916E-1	Herbert D. Bagley, et ux	0.29			Perp. flowage easmt from
1-916E-2	Herbert D. Bagley, et ux	0.39			Perp. flowage easmt from
1-945	Commonwealth of Massachusetts	24.69			

PROJECT MAP

AGENCY: _____
 STATE: _____
 COUNTY: _____
 DIVISION: _____
 DISTRICT: SEE SHEET 1
 ARMY AREA: _____

LOCATION OF PROJECT

_____ MILES OF _____
 _____ MILES OF _____

TRANSPORTATION FACILITIES

RAILROADS: _____
 STATE ROADS: _____
 FEDERAL ROADS: _____
 AIR LINES: _____

ACQUISITION

TOTAL ACRES ACQUIRED: _____
 ACRES FEE: _____
 ACRES TRANSFERRED: _____
 ACRES LEASED: _____
 ACRES LESSER INTERESTS: _____

DISPOSAL

TOTAL ACRES DISPOSED OF: _____
 ACRES SOLD: _____
 ACRES TRANSFERRED: _____
 ACRES LEASES TERMINATED: _____
 ACRES LESS. INTS. TERMINATED: _____
 ACRES REASSIGNED: _____
 ACRES TO: _____

LEGEND

EXCEPT FOR THE SPECIAL SYMBOLS SHOWN BELOW MAP SYMBOLS ARE STANDARD IN ARMY MAP SERVICE TECHNICAL MANUAL NO. 11.

RESERVATION LINE: _____
 RESERVATION LINE (Actual Survey): _____
 TRACT BOUNDARY LINE: _____
 TRACT NUMBER: _____
 AVIGATION EASEMENT: _____
 CONTOUR LINE: _____
 DISPOSAL: _____

SEGMENT "I"

DEPARTMENT OF THE ARMY
 OFFICE OF THE DIVISION ENGINEER
 NEW ENGLAND DIVISION

REAL ESTATE
EAST BRIMFIELD RESERVOIR

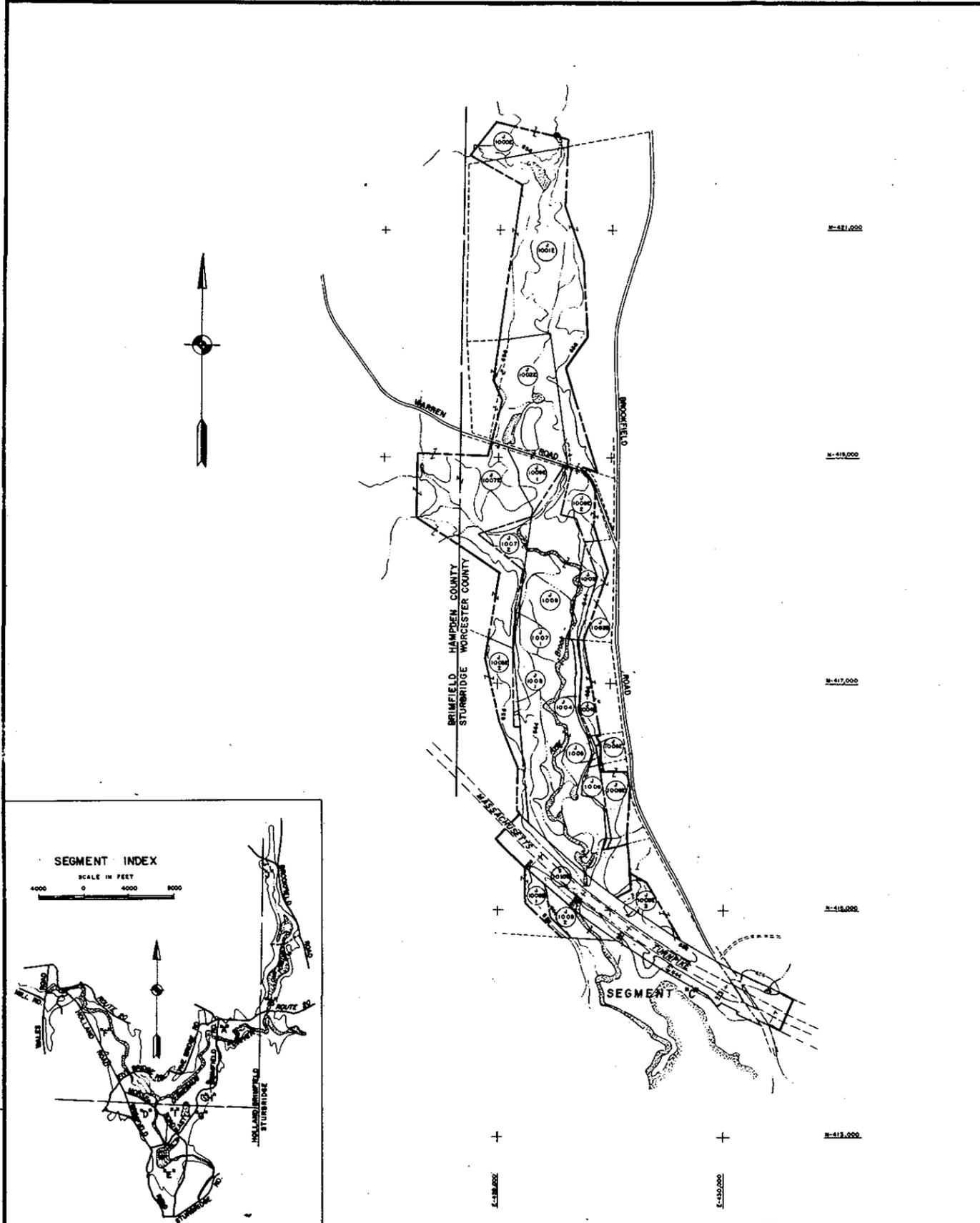
DRAWN BY: R.S.P.
 TRACED BY: _____
 CHECKED BY: _____
 SUBMITTED BY: _____
 RECOMMENDED BY: _____
 APPROVED BY: _____ DATE: MARCH 1950

OFFICE, CHIEF OF ENGINEERS, WASHINGTON 25, D. C.

SCALE IN FEET
 0 400 800

DATE: _____ BY: _____

MAPPING OF THE LAND DESIGNATED ON THIS SHEET WAS PERFORMED BY BARKES ENGINEERING CO. INC., 46 LEXINGTON ST., AUBURNDALE, MASS. UNDER CONTRACT NO. DA-19-1016-CIV-ENG-59-25.



TRACT REGISTER OF ACQUISITION AFTER 1 JAN 1943 (CIVIL).					
TRACT NO.	LAND OWNER	ACREAGE			REMARKS
		FEE	EASEM'T	LEASED PERMIT	
J-1000E	Joseph L. Hyland		3.68		Perp. flowage easm't from
J-1001E	John F. Kearns, et ux		27.10		Perp. flowage easm't from
J-1002E	Ernest H. Dion, et ux		13.10		Perp. flowage easm't from
J-1003	Stanley A. Harwood, et ux	2.18			
J-1003E	Stanley A. Harwood, et ux		1.42		Perp. flowage easm't from
J-1004	Alphonse O. Renne, et ux	0.89			
J-1004E	Alphonse O. Renne, et ux		1.64		Perp. flowage easm't from
J-1005	Thomas Laughlin, et ux	0.24			
J-1005E	Thomas Laughlin, et ux		0.29		Perp. flowage easm't from
J-1006	Henry Woodborough, et ux	1.34			
J-1006E	Henry Woodborough, et ux		2.96		Perp. flowage easm't from
J-1007-1	Rose E. Dore	0.22			
J-1007-2	Rose E. Dore	2.34			
J-1007E	Rose E. Dore		19.05		Perp. flowage easm't from
J-1008-1	William T. Wolf, et ux	0.39			
J-1008-2	William T. Wolf, et ux	2.52			
J-1008E-1	William T. Wolf, et ux		1.72		Perp. flowage easm't from
J-1008E-2	William T. Wolf, et ux		4.81		Perp. flowage easm't from
J-1008E-3	William T. Wolf, et ux		2.10		Perp. flowage easm't from
J-1009	Thomas E. Southwick	41.80			
J-1009E-1	Thomas E. Southwick		3.02		Perp. flowage easm't from
J-1009E-2	Thomas E. Southwick		3.00		Perp. flowage easm't from
J-1010E	The Massachusetts Turnpike Authority		20.70		Perp. flowage easm't from

PROJECT MAP

AGENCY: _____

STATE: _____

COUNTY: _____

DIVISION: _____

DISTRICT: _____

ARMY AREA: _____

LOCATION OF PROJECT

_____ MILES OF _____

_____ MILES OF _____

TRANSPORTATION FACILITIES

RAILROADS: _____

STATE ROADS: _____

FEDERAL ROADS: _____

AIR LINES: _____

ACQUISITION

TOTAL ACRES ACQUIRED: _____

ACRES FEE: _____

ACRES TRANSFERRED: _____

ACRES LEASED: _____

ACRES LESSER INTERESTS: _____

DISPOSAL

TOTAL ACRES DISPOSED OF: _____

ACRES SOLD: _____

ACRES TRANSFERRED: _____

ACRES LEASES TERMINATED: _____

ACRES LESS. INT'S. TERMINATED: _____

ACRES REASSIGNED: _____

ACRES TO: _____

LEGEND

EXCEPT FOR THE SPECIAL SYMBOLS SHOWN BELOW MAP SYMBOLS ARE STANDARD IN ARMY MAP SERVICE TECHNICAL MANUAL NO. 13.

RESERVATION LINE:

RESERVATION LINE (Aerial Survey):

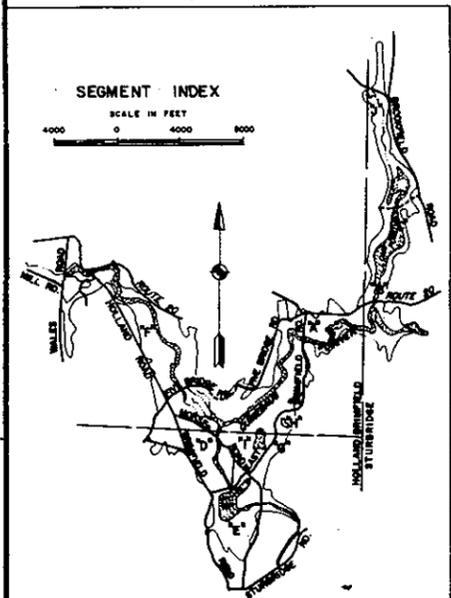
TRACT BOUNDARY LINE:

TRACT NUMBER:

AVIGATION EASEMENT:

CONTOUR LINE:

DISPOSAL:



SEGMENT "J"

DEPARTMENT OF THE ARMY
OFFICE OF THE DIVISION ENGINEER
NEW ENGLAND DIVISION

REAL ESTATE
EAST BRIMFIELD RESERVOIR

DRAWN BY: R.S.P.

TRACED BY: _____

CHECKED BY: _____

SUBMITTED BY: *Joseph A. Deane*

RECOMMENDED BY: *Robert A. Deane*

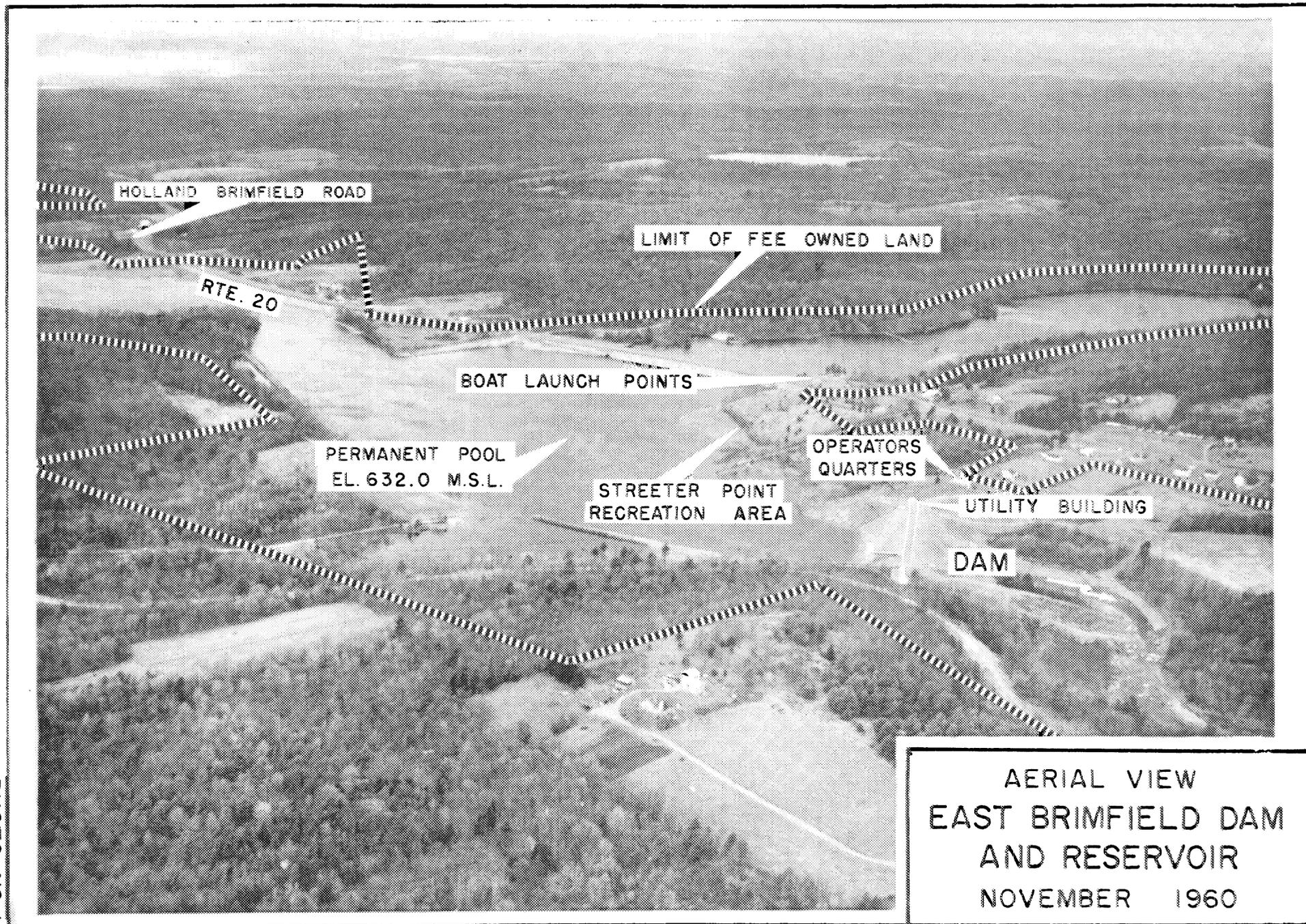
APPROVED BY: *[Signature]* DATE: MARCH 1960

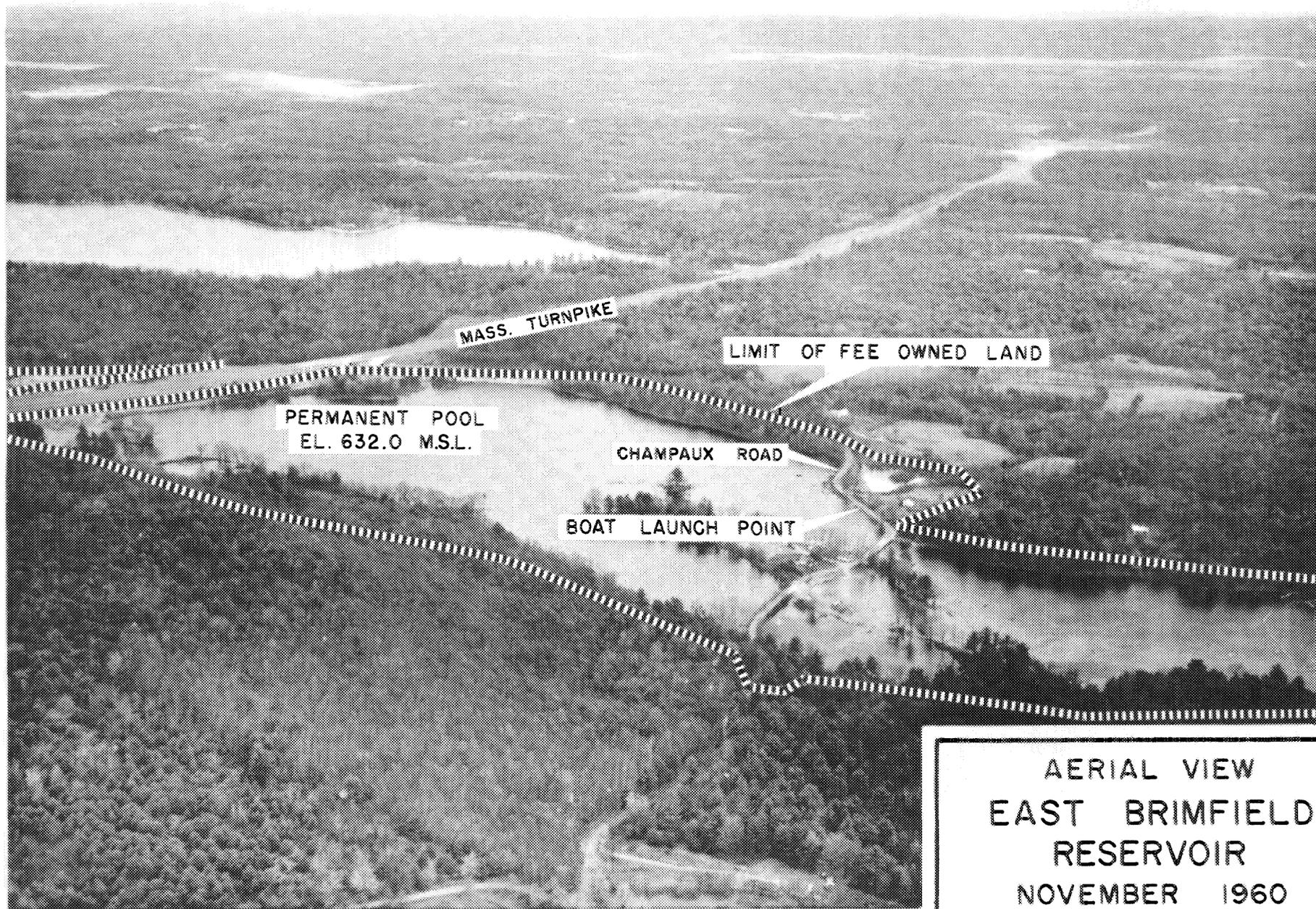
OFFICE, CHIEF OF ENGINEERS, WASHINGTON 25, D. C.

SCALE IN FEET: 0 400 800

SHEET 10 OF 10 DRAWING NO. MED-PB-458

PHOTO NO. 1





PERMANENT POOL
EL. 632.0 M.S.L.

MASS. TURNPIKE

LIMIT OF FEE OWNED LAND

CHAMPAUX ROAD

BOAT LAUNCH POINT

AERIAL VIEW
EAST BRIMFIELD
RESERVOIR
NOVEMBER 1960

PHOTO NO. 2

PHOTO NO. 3



AERIAL VIEW
EAST BRIMFIELD
RESERVOIR
HOLLAND POND AREA
NOVEMBER 1960

APPENDIX A

ESTIMATE OF COST

INITIAL DEVELOPMENT

Holland Pond Recreation Area

<u>Item</u>	<u>Unit Price</u>	<u>Quantity</u>	<u>Cost</u>
Access Road - improvement	\$ 1.50	1040 ft.	\$ 1,560
Parking Area	1.10	4200 sy.	4,620
Beach Area- improvement	0.40	6650 sy.	2,660
Selective Clearing - picnic area	200.00	10 acres	2,000
Site Preparation	8,200.00	Job	8,200
Change House	4,500.00	1	4,500
Comfort Station	23,000.00	1	23,000
Water Supply	2,000.00	Job	<u>2,000</u>
Total			\$ 48,540

Boat Launching Area No. 1

Parking Area	2.40	1000 sy.	2,400
Launching Ramp	18.00	100 l.f.	1,800
Picnic Tables-anchored	120.00	12 ea.	1,440
Fireplaces	105.00	6 ea.	630
Trash Receptacles	10.00	12 ea.	120
Pit Toilet	1,600.00	1 ea.	<u>1,600</u>
Total			7,990

Boat Launching Area No. 2

Parking Area	1.80	770 sy.	1,380
Launching Ramp	18.00	40 l.f.	720
Pit Toilet	1,600.00	1 ea.	<u>1,600</u>
Total			3,700

Vicinity of Dam

Project Identification Sign	300.00	1 ea.	300
Project Information Sign	450.00	1 ea.	<u>450</u>
Total			750

<u>Item</u>	<u>Unit Price</u>	<u>Quantity</u>	<u>Cost</u>
<u>General Reservoir Area</u>			
Feature Identification Signs	\$ 300.00	2 ea.	\$ 600
Miscellaneous Signs	800.00	Job	800
Chain Barriers	60.00	15 ea.	<u>900</u>
Total			\$ 2,300

SUMMARY OF COST - INITIAL DEVELOPMENT

Holland Pond Recreation Area		\$48,540
Boat Launching Area No. 1		7,990
Boat Launching Area No. 2		3,700
Vicinity of Dam		750
General Reservoir Area		<u>2,300</u>
Total Construction Cost Including Contingencies		\$ 63,280
Engineering & Design	(10%)	6,325
Supervision & Adm.	(8%)	<u>5,070</u>
Total Cost - Initial Development		\$ 74,675

ESTIMATE OF COST

FUTURE DEVELOPMENT
(Code 710)

Streeter Point Recreation Area

<u>Item</u>	<u>Unit Price</u>	<u>Quantity</u>	<u>Cost</u>
Access Road Improvement	\$ 1,000.00	Job	\$ 1,000
Parking Area	1.10	3100 sy.	3,400
Beach Area	0.70	5000 sy.	3,500
Combination Change House - Comfort Station	12,000.00	1 ea.	12,000
Picnic Tables	120.00	20 ea.	2,400
Fireplaces	105.00	10 ea.	1,050
Trash Receptacles	10.00	20 ea.	200
Site Preparation	1,000.00	Job	1,000
Total			\$ 24,550

Roadside Recreation Area

Parking Area	0.85	500 sy.	425
Beach Area	0.70	1,500 sy.	1,050
Combination Change House - Comfort Station	6,500.00	1 ea.	6,500
Total			\$ 7,975

Champeaux Road Boat Launching Area

Parking Area	1.30	1,750 sy.	2,280
Launching Ramp	18.00	55 ft.	990
Pit Latrine	1,600.00	1 ea.	1,600
Total			\$ 4,870

SUMMARY OF COST - FUTURE DEVELOPMENT

(Code 710)

Streeter Point Recreation Area	\$ 24,550
Roadside Recreation Area	7,975
Champeaux Road Boat Launching Area	<u>4,870</u>
Total Construction Cost Including Contingencies	\$ 37,395
Engineering & Design (10%)	3,740
Supervision & Adm. (8%)	<u>2,990</u>
Total Cost - Future Development	\$ 44,125

SUMMARY OF RECREATIONAL COST

Initial Development	\$ 74,675
Future Development	<u>44,125</u>
Total Cost	\$ 118,800