

## **Boundary Review of the Chelsea Creek Designated Port Area, Chelsea, MA**

**Executive Office of Energy and Environmental Affairs  
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## I. INTRODUCTION

In 1972, Congress passed the Coastal Zone Management Act (CZMA), which establishes a national policy to “preserve, protect, develop, and where possible, to restore or enhance, the resources of the nation’s coastal zone for this and succeeding generations” and to “encourage and assist the states to exercise effectively their responsibilities in the coastal zone through the development and implementation of management programs to achieve wise use of the land and water resources of the coastal zone...” [16 U.S.C. 1452, Sec. 303(1) and (2)]. In the CZMA, Congress made declarations of national policy elements and encouraged states to develop management programs enforceable under state law to address these interests.

The Commonwealth established the Massachusetts Office of Coastal Zone Management (CZM) and developed its coastal zone management program, which was approved by the National Oceanic and Atmospheric Administration in 1978. The program plan, as amended, contains the coastal policies and underlying state statutory and regulatory authorities, which articulate Massachusetts’ priorities for protection and management of its coastal resources. CZM’s policies address coastal hazards, energy, growth management, habitat, ocean resources, ports and harbors, protected areas, public access, and water quality.

One of the interests established by Congress in the CZMA is the promotion of economic uses of coastal resources, including the “priority consideration being given to coastal-dependent uses” and processes for the siting and preservation of port, transportation, and other commercial and industrial development “in or adjacent to areas where such development already exists.” The Designated Port Area (DPA) policy was established in 1978 within the Massachusetts Coastal Zone Management Plan after extensive consultation with state agencies, elected officials, municipal planners, non-government organizations, and representatives from the business community, local citizens, and others. The two central principles of the DPA policy are to (1) promote water-dependent industries as an important sector of the state’s economy and (2) prevent the loss of areas that have certain key characteristics that make them particularly well suited to water dependent industrial uses. The premise for this strategy is that it is sound public policy to maximize use of areas currently suited for water dependent industrial uses and avoid the conversion of these areas to incompatible residential, commercial, and recreational uses, so that future marine industrial uses will not have to develop new areas for such use. The impact and expense of developing new marine industrial locations - including dredging, bulk-heading, building docks, development of transportation, power, and water infrastructure - are very high in terms of both economic and environmental costs, and such proposals are frequently met with extensive public and political opposition.

Under the Designation of Port Areas regulations at 301 CMR 25.00, CZM is responsible for mapping, interpreting, and periodic review of DPA boundaries. The purpose of the DPA boundary review process is to determine whether a DPA boundary should remain as it is currently established or whether it should be modified to more appropriately protect and promote the goals of DPA policy. DPA boundaries are reviewed in accordance with the procedures set forth in the Designation of Port Area regulations at 301 CMR 25.00.

## **II. THE DPA PROGRAM**

DPA's are geographic areas of particular state, regional, and national significance with respect to the promotion of commercial fishing, shipping, and other vessel-related activities associated with water-borne commerce, and of manufacturing, processing, and production activities reliant upon marine transportation or the withdrawal or discharge of large volumes of water. These water-dependent industrial uses vary in scale and intensity but share similar needs for infrastructure with three essential components: (1) a waterway and associated waterfront that has been developed for some form of commercial navigation or other direct utilization of the water; (2) backland space that is conducive in both physical configuration and use character to the siting of industrial facilities and operations; and (3) land-based transportation and public utility services appropriate for general industrial purposes.

This combination of industrial attributes is found in a very limited and diminishing portion of the coastal zone, and particularly few areas are of sufficient contiguous extent to invite concentrations of related businesses and/or large-scale facilities. Because economic, environmental, and social factors now virtually preclude further development of such an intensive nature, these marine industrial coastal areas are protected to assure that the long term needs of these water-dependent industries are accommodated. Therefore state policy seeks to prevent these areas from becoming irretrievably committed to, or otherwise significantly impaired by, non-industrial or non-water dependent types of development which could be sited elsewhere. Accordingly, within DPA's, state policy encourages water-dependent industrial use and, on tidelands subject to the jurisdiction of laws and regulations, limits or prohibits other uses except for compatible public access and certain industrial, commercial, and transportation activities that can occur without significant detriment to the capacity of DPA's to accommodate water-dependent industrial use in the future.

## **III. CHELSEA CREEK BOUNDARY REVIEW PROCESS**

Coincident with the initial development of the Commonwealth's DPA policy, the physical boundary for the Chelsea Creek DPA was established in 1978 (Figure 1). After the establishment of the physical boundaries of the state DPA's, the legal framework was further developed through a succession of regulatory measures. In 1979, the Department of Environmental Protection (DEP) incorporated DPA rules into its Waterways regulations under M.G.L. Chapter 91, with provisions to protect water-dependent industrial uses on the water-side areas of DPA's. In 1984, the legislature expanded the Chapter 91 licensing authority to include filled tidelands, and DPA jurisdiction was extended to include upland areas. In 1994, the Designation of Port Area regulations at 301 CMR 25.00 were promulgated to set forth the procedure for establishing and modifying DPA boundaries. Since the Chelsea Creek DPA boundary was originally established in 1978, and the underlying regulatory framework developed subsequently, there has not been a comprehensive boundary review, using the designation standards found at 301 CMR 25.04, to determine if the current Chelsea Creek DPA boundary should remain as currently established or whether it should be modified.

In February of 2015, the City of Chelsea (City) requested that CZM initiate a review of a portion of the Chelsea Creek DPA. The area requested for review included 20 parcels on the Chelsea side of the DPA (Figure 2) (not the entire DPA area within Chelsea) and excluded the portion of the DPA within Boston and Revere. The City requested that the review include all parcels, roads, rights-of-

way, railways and parcels within the requested DPA boundary review area but exclude the watershed of the DPA.

CZM accepted the City's request for review in late February 2015, and a notice of review was published in the Environmental Monitor on March 11, 2015. A public meeting was held on March 31, 2015 in Chelsea, and the formal 30-day public comment period closed on April 24, 2015 after a two-week extension.

Notice of this designation report, a public hearing, and a 30-day public comment period was included in the November 23, 2015 Environmental Monitor. A final decision will be issued pursuant to 301 CMR 25.03(4) and (5) within 60 days of the close of the public comment period.

To inform the DPA boundary review process, CZM reviewed comments submitted and met with property owners, city officials, DEP staff, and interested constituents. CZM also conducted reviews of available plans, permits, and licenses applicable to the DPA. Throughout the course of the review, CZM received formal and informal comments from DPA property owners, the public, local organizations and City and state agencies. CZM considered all comments in the context of the policy and regulatory framework that guides this review. Many commenters provided substantive information regarding history, uses, constraints, impacts, and other features of the existing DPA which was particularly useful in the assessment.

Although the request for boundary review was not for the entire Chelsea Creek DPA, CZM's review took into account the setting of the entire DPA as a cohesive, operational unit with common uses, interests and regional impact. Additionally, the geographic characteristics of the DPA as a long, narrow waterway with adjacent lands was also important to consider as a whole. Changes to any portion of the Chelsea Creek DPA boundary under review may have the potential to affect other areas of the DPA and the DPA as a whole. According to state policy regarding DPAs, the characteristics that lend themselves to DPA uses may not be found all on one parcel, but may be distributed across a grouping of parcels which collectively support the overall DPA. CZM's review employed this holistic perspective while undertaking this boundary review.

#### **IV. CHELSEA CREEK DPA**

The Chelsea Creek DPA acts as an important economic driver for the Boston area, eastern Massachusetts, and greater New England economies by creating a space for a high concentration of water-dependent industrial uses to operate. "Liquid bulk petroleum product imports via Chelsea Creek and the Mystic River represent the largest share of cargo tonnage by far in the Port of Boston" (Ports of Massachusetts Strategic Plan, Technical Memorandum #4, 11/8/2013). The liquid bulk cargo industry in the Chelsea Creek DPA supplies petroleum products including jet fuel, home heating oil, diesel, and gasoline to transportation systems, residences and businesses in Massachusetts and greater New England. Approximately 80 percent of home heating oil and more than 70 percent of gasoline and diesel fuel used in the region, and 100 percent of the jet fuel used at Logan Airport, are distributed by the industries operating in the Chelsea River (DLA Piper comments, 10/20/2015). Beyond the regular distribution of petroleum products, the Chelsea Creek DPA is also important in supporting the region in times of energy crisis. In 2000, the Northeast England Home Heating Oil Reserve and in 2014, the Northeast Gasoline Reserve were established at terminals in the Chelsea Creek DPA by the U.S. Department of Energy. The Chelsea Creek DPA

was chosen to host these energy reserves due to the close proximity to densely populated areas and the well-established distribution systems of the terminals. Another business in the Chelsea Creek DPA also provides road salt to over 200 public safety agencies in Massachusetts (Eastern Minerals, Inc. comments, 4/24/2015). Impacts to the distribution of energy and salt resources supplied by the industry in the Chelsea Creek DPA could severely impact the New England economy.

In recent years, significant public investment has been made to upgrade aging infrastructure and improve the safety of marine traffic in the Chelsea Creek DPA. The Chelsea Street Bridge, historically a draw bridge, was reconstructed and reopened in 2012 as the longest lift bridge in the state. The \$125 million project addressed long-standing navigational and safety concerns associated with large vessels transiting the Chelsea River. Additionally, the state is partnering with federal agencies to implement the Boston Harbor Deep Draft Navigation Improvement project, which includes the dredging of Boston Harbor and its approaches as well as the Chelsea River. Through cost-sharing with the terminal operators and a commitment to dredge the terminal berths, the Chelsea River will be dredged to a depth of 40 ft (Massport comments, 4/24/2015). The deepening project will improve navigational safety on the Chelsea River. Last, state agencies are partnering to fund a fendering/navigational aid system in the vicinity of the Chelsea Street Bridge which will add capacity and safety for the large vessels transiting the waterway (Massport comments, 4/24/2015).

On the whole, the Chelsea Creek DPA is a thriving and busy port area; however, there are portions of the DPA that are currently underutilized. Some parcels within the DPA have not supported water-dependent industrial uses for many years and a few parcels lie vacant. Two large parcels on the Chelsea side of the DPA currently support parking related uses which is allowed on a temporary basis within DPAs. However, the presence of these non-water dependent uses within the DPA does not inhibit or restrict the continued productivity of the DPA for water-dependent industrial use. Where present, the non-water dependent uses are compatible with the overall functionality of the Chelsea Creek DPA as a vibrant port.

## **V. PLANNING UNITS FOR BOUNDARY REVIEW**

The boundaries of DPAs are established by CZM in accordance with criteria governing the suitability of contiguous lands and waters to accommodate water-dependent industrial use, as appropriate to the harbor in question. The Designation of Port Area regulations at 301 CMR 25.00 define water-dependent industrial use to mean any use found to be such in accordance with the Chapter 91 Waterways regulations at 310 CMR 9.12(2)(b).

As a general rule, CZM applies DPA boundary review criteria within the context of groups of parcels that form coherent planning units, rather than to individual project sites or other properties under common ownership or control. DPA-related attributes vary across different parcels, such that the combined characteristics of associated parcels in the same general vicinity are not reflected accurately in the characteristics of any single property. For this reason, it is important that geographic areas proposed to be included in (or removed from) a DPA be sized and configured in a manner that allows consideration of all relevant factors affecting *overall suitability* to accommodate water-dependent industrial use. In the Chelsea Creek DPA review, CZM defined five planning units, forming coherent areas with groups of parcels that are delineated by shared physical, geographical, and land use characteristics, as described and detailed below and shown in Figure 3.

Because physical and functional characteristics are such that water-dependent industrial and non-water dependent industrial uses are frequently inter-mixed or co-occur, in the determination of whether an area was to be classified as water-dependent industrial, CZM considered the primary use of a planning unit to be that use to which a majority of that area is dedicated. The Chapter 91 Waterways regulations affirm this principle, recognizing that water-dependent industrial uses are permitted to include licensable accessory and supporting commercial uses that co-occur and are compatible with water-dependent industrial uses. Accessory uses include parking facilities, access and interior roadways, administrative offices and marine-oriented retail facilities. Supporting uses are industrial or commercial uses that provide direct economic or operational support for the water-dependent industrial use in the DPA and must be compatible with activities characteristic of a working waterfront and its backlands.

The area of the Chelsea Creek DPA under review encompasses the majority of the Chelsea Creek DPA on its northern and western banks, specifically extending from the western boundary of 197 Marginal Street to the intersection of the Chelsea River with the Massachusetts Bay Transportation Authority (MBTA) railroad. The Chelsea Street Bridge, the natural shape of the Chelsea River and the locations of historic tidal creeks help define five geographically and functionally distinct planning units of this Chelsea Creek DPA boundary review: Marginal Street, Eastern Avenue South, Eastern Avenue North, Railroad South and Railroad North (Figure 3).

### **Marginal Street Planning Unit**

The Marginal Street planning unit comprises 21 acres and includes the area extending from (and including) 197 Marginal Street to the Chelsea Street Bridge (Figure 3). The area is functionally and geographically distinct as it begins at the western boundary of the area requested for review and ends at (and includes) the Chelsea Street Bridge. The Marginal Street planning unit functions as the entrance to the upper reaches of the Chelsea Creek DPA as vessels traveling upstream must pass through this narrower portion of the creek and beneath the Chelsea Street Bridge.

The Marginal Street planning unit includes a mix of commercial and industrial uses. There is one small parcel licensed for water-dependent industrial use (currently vacant) while the majority of the planning unit (93%) is currently comprised of non-water dependent industrial uses. With the exception of 197 Marginal Street, water-dependent industrial uses have not been consistently supported in this planning unit for more than five years.

The most western portion of the Marginal Street planning unit includes three parcels (197, 201 and 215 Marginal Street) under the same ownership that are currently unused. 197 Marginal Street is vacant. 201 Marginal Street includes a small industrial building as well as a pier with associated pile supported float system reconstructed in 2010. The pier and float system are licensed for commercial use. 215 Marginal Street is comprised of an old pile field with little to no upland at high tide.

The next section upstream in the Marginal Street planning unit includes three parcels that do not have direct access to the Chelsea River. These parcels primarily provide commercial uses. 227, 229, and 235 Marginal Street include commercial uses owned by the Molly Corporation. 227 Marginal Street houses an unused warehouse while 229 and 235 Marginal Street house Harbour Food Service Equipment with office and commercial space. Enterprise Car Rental occupies a portion of 235 Marginal Street with office and detailing facilities. National Car Rental stores vehicles on the parcel which separates the Molly Corporation parcels from the Chelsea River at 239 Marginal Street. The

shoreline of the National Car Rental parking area is developed primarily with riprap and a small extent with a concrete bulkhead.

Parking facilities for Enterprise Car Rental comprise the next section along Marginal Street. The area is largely devoid of structures except for a small gatehouse with gate and a small boarded up brick building. A 10-foot concrete wall separates the easterly portions of the parking lot from Marginal Street. The parking use is allowed by a ten-year temporary waterways license. A fenced, paved harborwalk encircles the parking facilities. A few parking spaces are dedicated for harborwalk users. The shoreline of these parcels includes a portion of steel sheet bulkhead with rip rap encompassing the rest.

The last area of the Marginal Street planning unit includes a discontinued extension of road and two state owned parcels, 15 and 29 Eastern Avenue, which abut the Chelsea Street Bridge. The discontinued road, the historic location of the Chelsea Street Bridge, reaches from Marginal Street to the Chelsea River. The Massachusetts Water Resources Authority (MWRA) has an easement on this land to operate a subsurface sand catcher, waterworks valve chambers and a drainage outfall which are associated with the MWRA pump station located across Marginal Street. Both state-owned parcels are vacant and lack structures. 15 Eastern Avenue does not have direct access to the Chelsea River. The shoreline in this area is developed with portions of concrete retaining wall and rip rap.

### **Eastern Avenue South Planning Unit**

The Eastern Avenue South planning unit comprises 21 acres and extends easterly of the Chelsea Street Bridge along Eastern Avenue to the intersection with Griffin Way (across from the MWRA pump station) (Figure 3). It is geographically defined by the Chelsea Street Bridge on the western edge and the historic location of Bass Creek on the northeastern edge. This planning unit borders the Chelsea River where it is wider. The planning unit is dominated by non-water dependent industrial uses (98%). A small portion of the planning unit includes active water-dependent industrial uses.

The Eastern Avenue South planning unit includes a small parcel which hosts the control house for the Chelsea Street Bridge and supporting parking for employees. This parcel contains the only water-dependent industrial use in the Eastern Avenue South planning unit. The other parcel, located at 111 Eastern Avenue, houses two parking related uses: a Pre-Flight Shuttle facility and an Enterprise truck/van rental facility. This parcel, at over 20 acres, dominates the planning unit. The parking uses are allowed by a ten-year temporary waterways license. As a requirement of the temporary parking license, waterside infrastructure relating to the previous petroleum shipping and distribution use must be maintained. The waterside infrastructure includes concrete bulkheads, multiple berths, concrete and timber-decked piers, an off-shore wharf and dolphins.

### **Eastern Avenue North Planning Unit**

The 50-acre Eastern Avenue North planning unit extends from the location of the historic Bass Creek upstream to the end of the property owned by Gulf Oil, just before the intersection of Eastern Avenue with the MBTA railroad (Figure 3). The planning unit is geographically defined by the inlet at the location of the historic Bass Creek and the MBTA railroad and is functionally distinct as it is dominated by water-dependent industrial uses.

The majority of the Eastern Avenue North planning unit comprises water-dependent industrial uses (97%), including the Gulf Oil Terminal and associated parking facilities for distribution trucks. One vacant property, formerly New England Trawler, a manufacturer of trawl doors for fishing vessels,



comprises the non-water dependent use in this planning unit (3%). This unused property houses one brick and metal building with associated parking areas. The Gulf Oil Terminal includes a tank farm, truck parking, vehicle maintenance, office space, and shoreline structures to allow for waterside delivery of fuel by tanker. Shoreline structures include riprap, sheetpile, dolphins, and decking.

### **Railroad South Planning Unit**

The Railroad South planning unit, comprising 22 acres and two parcels (Figure 3), begins just westerly of the intersection of Eastern Avenue with the MBTA railroad, at the easterly edge of the property owned and operated by Gulf Oil. The planning unit extends upstream to the point where the Chelsea River shoreline curves north towards the MBTA railroad. The Railroad South planning unit is further defined by the undeveloped nature of its shoreline.

The Railroad South planning unit is entirely comprised of non-water dependent industrial uses including the Glyptal adhesives and coating company and the Atlas Glen-Mor home heating oil company. These non-water dependent uses have been operating for greater than five years. The Glyptal property is located between the MBTA railroad and Eastern Avenue extension. The company operates out of a three-story concrete industrial building. The Glyptal property does not have direct access to the Chelsea River. The Atlas Glen-Mor home heating oil property includes multiple structures which house storage, servicing bays, and parking for delivery trucks as well as office space. The shoreline of the Railroad South planning unit is undeveloped and characterized by salt marsh and tidal flats.

### **Railroad North Planning Unit**

The Railroad North planning unit comprises a single parcel known as the Forbes parcel. This planning unit comprises 18 acres and is located at the most upstream extent of the Chelsea Creek DPA (Figure 3). The Railroad North planning unit is geographically defined on the southerly edge by a natural curve of the Chelsea River which separates it from the Railroad South planning unit. The planning unit extends in a northeasterly direction following the Chelsea River to where it meets the MBTA railroad.

The Railroad North planning unit is functionally defined by the non-industrial character of the surrounding neighborhood. The MBTA railroad divides the planning area from the surrounding neighborhood; however, there is no direct access between the Railroad North planning unit and the railroad. The area on the northern side of the MBTA railroad is predominantly residential in character. Chelsea's only elementary school, the Mary C. Burke Elementary School, is located in this neighborhood. Dense residential housing with multi-family and single-family homes as well as the Mace Apartment public housing complex are located adjacent to the Forbes parcel on the northern side of the MBTA railroad.

The Railroad North planning unit is comprised entirely of non-water dependent industrial uses. The Forbes property is the site of the former Forbes Lithograph Company (1886 – 1968) and the Forbes Industrial Park (post 1968). The history of the site includes large scale printing, automotive parts distribution, and nylon strap/webbing manufacturing. More recently and after significant remediation, which included sampling; soil excavation and offsite disposal; repair and installation of a seawall; and the implementation of Activity and Use Limitations (AUL) for the property (MassDEP RTN 3-1755), the site has been the subject of various incomplete development proposals. Currently, the site houses a wind turbine (not operating), 1-story turbine maintenance

building, shorefront, walkway, partially renovated 3 and 4-story industrial building, partially completed 4-story 125-unit condominium building, and associated access ways.

The shoreline of the Forbes parcel is variable with portions undeveloped and portions developed with a sheet metal bulkhead. Because the Forbes parcel is primarily upstream of the Federal Navigation Channel and has not been actively used for water-dependent use, the shoreline is not dredged. Since the bulkhead on the Forbes property was constructed as part of the remediation efforts for the site, rather than to provide access to the water, dredging to the bulkhead was not conducted at the time of its construction. In fact, salt marsh was planted along portions of the bulkhead as part of remediation efforts. Significant salt marsh resource areas exist along the seaward edge, and over time even the areas that were historically dredged have shoaled in and now serve as tidal flat. Including areas with bulkhead and those without, salt marsh habitat extends along 54% of the shoreline of the Railroad North planning unit. The remainder of the shoreline is bordered by tidal flats.

## **VI. CZM REVIEW**

Pursuant to 301 CMR 25.00, CZM employs a two-step review process when evaluating planning units for inclusion within a DPA boundary. The first step assesses whether planning units meet the eligibility for review criteria according to 301 CMR 25.03(2). These criteria include whether a planning area 1) has been subject to a designation decision within the previous five years; 2) contained active water-dependent industrial use within the previous five years; 3) was requested for exclusion from review by the City or other municipal body; and 4) is entirely bounded by existing DPA lands and/or waters. If a planning unit meets any of these criteria, that area is not eligible for further review and the second step of the review process is not applied. For these ineligible planning units, the DPA boundary does not change. If a planning unit is not disqualified from review by any of these review criteria standards, it is eligible for review and proceeds to the second step of the review process.

The second step of the review process evaluates planning units with respect to their compliance with the designation standards for waters (301 CMR 25.04(1)) and for lands (301 CMR 25.04(2)). The designation standards for waters include two criteria governing suitability to accommodate water-dependent industrial use. The designation standards for waters require that the water area 1) must include or be contiguous with other DPA waters that include both a navigable channel with a design depth of at least 20 feet deep and a substantially developed shoreline which creates a functional connection to a land area meeting the standards of 301 CMR 25.04(2); and 2) must be of a configuration, size, and location appropriate for direct utilization of the water. Waters must exhibit both criteria to remain in the DPA. Consistent with the City's request to exclude waters from this boundary review, the designation of waters standards were not applied in this review.

The designation standards for lands include four criteria governing physical suitability to accommodate water-dependent industrial use pursuant to 301 CMR 25.04(2). The four physical suitability criteria require that a planning unit 1) include a substantially developed shoreline which creates a functional connection to a waterway; 2) lie in close proximity to road or rail links and water and sewer facilities; 3) exhibit a topography that is conducive to industrial use; and 4) exhibit a use character that is predominantly industrial in nature or reasonably capable of becoming so. As with the designation standards for water, a planning unit must exhibit all four criteria to remain in the

DPA. If a planning unit exhibits all four of the physical suitability criterion, the DPA boundary does not change in that area. If a planning unit lacks one of more of the physical suitability criterion, it is removed from the DPA boundary.

## **VII. ELIGIBILITY REVIEW**

Based on the eligibility for review standards at 301 CMR 25.03(2)(a) through (d), certain areas within the DPA are not eligible for review if they meet any of the four criteria.

For the first criterion, CZM has determined that no portion of the Chelsea Creek DPA has been the subject of a designation decision under 301 CMR 25.03(5) within the previous five years. Therefore, all of the planning units within the DPA area requested for review by the City (Figure 2) are eligible for review based on 301 CMR 25.03(2)(a).

The criterion at 301 CMR 25.03(2)(b) states that any area on which water-dependent industrial use has occurred within the last five years is not eligible for review unless the use was not continuous or was/will be discontinued voluntarily. As indicated in the regulations, in applying 301 CMR 25.03(2)(b), CZM considered the primary use within a given area to be the use to which a majority of the planning unit is dedicated. For this criterion, CZM considered first, whether water-dependent industrial use had occurred within the previous five years; and second, whether the water-dependent industrial use, if present, was the primary use for a given planning unit. Based on the review, this criterion held true for one of the planning units in the review area: Eastern Avenue North planning unit. The Eastern Avenue North planning unit is comprised of primarily water-dependent industrial uses. In this planning unit, 97% of the area is in active water-dependent industrial use. Therefore, this area does not meet the criterion for eligibility for review pursuant to 301 CMR 25.03(2)(b) and is not further analyzed for substantial conformance with the criteria governing physical suitability to accommodate water-dependent industrial use. The boundary of the Chelsea Creek DPA will not change in the area of the Eastern Avenue North planning unit.

When making their request for boundary review of the Chelsea Creek DPA, the City requested that the review include a subset of the DPA lands within Chelsea and exclude DPA lands in Revere and Boston. The City also requested to exclude the DPA waterway from review. Only the areas requested by the City (Figure 2) were considered for eligibility pursuant to 301 CMR 25.03(2)(c). Therefore, the areas subject to this review (Figure 2) are eligible for review based on the criterion at 301 CMR 25.03(2)(c).

Any area within a DPA that is entirely bounded by existing DPA lands or waters is not eligible for review pursuant to 301 CMR 25.03(2)(d). This criterion is intended to avoid conflict that could result from incompatible uses being developed in the middle of an otherwise substantially water-dependent industrial use area. This scenario could arise if a portion of the DPA that is otherwise completely surrounded by DPA lands is de-designated. Although this DPA boundary review excludes the watershed, it includes the roads and railroads within and surrounding the DPA. Thus, no such isolated area is under review, and this scenario is avoided. Therefore, the criterion at 301 CMR 25.03(2)(d) is not implicated in the Chelsea Creek DPA boundary review.

The Marginal Street, Eastern Avenue South, Railroad South and Railroad North planning units meet all of the eligibility criteria for review (Figure 4), and are therefore subject to the designation criteria and analysis for inclusion in the Chelsea Creek DPA described below.

## **VIII. DESIGNATION CRITERIA AND ANALYSIS**

The DPA regulations direct that an area of land or water reviewed under 301 CMR 25.00 shall be included or remain in a DPA if and only if CZM finds that the area is in substantial conformance with each of the four criteria governing suitability to accommodate water-dependent industrial use at 301 CMR 25.04(2)(a) through (d). The following contains a synopsis of CZM's analysis and findings of each planning unit's conformance with the four designation criteria in 301 CMR 25.04(2). The next section of this report concludes with a summary of the planning units' conformance and CZM's recommendation for continued inclusion in the DPA.

### **Marginal Street**

Pursuant to 301 CMR 25.04(2)(a), any area to remain in the DPA under this boundary review must include, or be contiguous with other DPA lands that include, a shoreline that has been substantially developed with piers, wharves, bulkheads, or other structures that establish a functional connection with a DPA water area. The shoreline in the Marginal Street planning unit consists entirely of filled tidelands, with seawalls, bulkheads and riprap providing stability for these areas. Additionally, a small portion of the shoreline has been developed further with a pier and a pile-supported float system that establish a connection between the land area and the water. There is also a portion of the shoreline where historic piles remain allowing for future replacement for water-dependent use. Based on this, CZM concludes that the Marginal Street planning unit meets this criterion.

The second key criterion for determining suitability of a land area for water-dependent industrial use, pursuant to 301 CMR 25.04(2)(b) is that the land must lie in reasonable proximity to an established road or rail link that leads to a major trunk or arterial route; and be served by water and sewer facilities that are capable of serving general industrial use. The Marginal Street planning unit is primarily served by Marginal Street, a main public road that links the Chelsea River area to Chelsea Street and Route 1A, which is a main roadway and connects to major regional routes. Marginal Street, flanked by industrial properties, is generally a wider road although it has only one lane in each direction. Marginal Street has served water-dependent uses in the past. The area is also served by both city water and sewer services. Based on these characteristics, CZM concludes that the Marginal Street planning unit meets the criteria for road access and utility infrastructure necessary to support water-dependent industrial uses.

To accommodate water-dependent industrial use, the land area must also exhibit a topography that is generally conducive to industrial use, or be reasonably capable of becoming so. As discussed above, the entire shoreline and the majority of the overall land area of the Marginal Street planning unit consists of filled tidelands. These areas are primarily low-lying and flat. Based on this, CZM concludes that the topography of the Marginal Street planning unit is generally conducive to industrial use, and therefore meets the criterion of 301 CMR 25.04(2)(c).

Finally, to remain within the DPA boundary, the land area must also exhibit a use character that is predominately industrial, or reasonably capable of becoming so because it does not contain a dense concentration of non-industrial buildings that cannot be removed or converted, with relative ease, to

industrial use; or residential, commercial, recreational or other uses that would unavoidably be destabilized if commingled with industrial activity.

CZM's review determined that the area in the Marginal Street planning unit is currently comprised of a mix of uses including vacant land, commercial, industrial, and parking (licensed for a temporary ten-year term). The area at the southern edge of the boundary review includes vacant land with an associated pier and pile supported float system that is licensed for water-dependent industrial operation. The rest of the Marginal Street planning unit is classified as industrial or commercial uses and includes structures that are either compatible with water-dependent industrial uses or could be easily removed. The areas currently supporting temporary parking uses or vehicle storage for commercial ventures such as Enterprise and National Car Rental include small entry gates or other such structures that are easily removed.

The uses within the Marginal Street planning area are primarily commercial or industrial. Structures supporting these uses are relatively compact and suitable for conversion to industrial uses. CZM finds that the uses in the Marginal Street planning unit, although not predominantly industrial, are compatible with activities characteristic of a water-dependent industry and do not largely include residential, commercial, recreational or other uses that would create inherent conflicts or be destabilized if commingled with industrial activity. Therefore, CZM finds that this area does meet this criterion as required by 301 CMR 25.04(2)(d).

### **Eastern Avenue South**

Pursuant to 301 CMR 25.04(2)(a), any area to remain in the DPA under this boundary review must include, or be contiguous with other DPA lands that include, a shoreline that has been substantially developed with piers, wharves, bulkheads, or other structures that establish a functional connection with a DPA water area. The shoreline in the Eastern Avenue South planning unit consists entirely of filled tidelands, with seawalls, bulkheads and riprap providing stability for these areas. Additionally, a portion of the shoreline has been substantially developed with bulkhead and berthing infrastructure for large vessels that establish a connection between the land area and the water. Based on this, CZM concludes that the Eastern Avenue South planning unit meets this criterion.

The second criterion for determining suitability of a land area for industrial use, pursuant to 301 CMR 25.04(2)(b) is that the land must lie in reasonable proximity to an established road or rail link that leads to a major trunk or arterial route; and be served by water and sewer facilities that are capable of serving general industrial use. The Eastern Avenue South planning unit is primarily served by Eastern Avenue and Marginal Street, a main public road that links the Chelsea River area to Chelsea Street and Route 1A, which is a main roadway and connects to major regional routes. Eastern Avenue is two lanes in each direction flanked by industrial and commercial properties. CZM believes that the road meets the criteria of an established road link leading to a major route. The area is also served by both city water and sewer services. Therefore, CZM concludes that the Eastern Avenue South planning unit meets the criterion for road access and infrastructure necessary to support water dependent industrial uses.

To accommodate water-dependent industrial use, the land area must also exhibit a topography that is generally conducive to industrial use or be reasonably capable of becoming so. As discussed above, the entire shoreline of the Eastern Avenue South planning unit consists of filled tidelands. These areas and those areas outside of historic tidelands jurisdiction are primarily low-lying and flat.

Based on this, CZM concludes that the topography of the Eastern Avenue South planning unit is generally conducive to industrial use, and therefore meets the criterion of 301 CMR 25.04(2)(c).

Finally, to remain within the DPA boundary, the land area must also exhibit a use character that is predominately industrial, or reasonably capable of becoming so because it does not contain a dense concentration of non-industrial buildings that cannot be removed or converted, with relative ease, to industrial use; or residential, commercial, recreational or other uses that would unavoidably be destabilized if commingled with industrial activity.

CZM's review determined that the area in the Eastern Avenue South planning unit is comprised largely of non-industrial uses. These non-industrial uses, primarily parking, include few supporting buildings. The area currently supporting the parking uses includes entry gates, landscaping and other small structures that are easily removed. The land supporting the operation of the Chelsea Street Bridge includes a small control building. CZM finds that the uses in the Eastern Avenue South planning unit, although not predominantly industrial, are largely compatible with activities characteristic of a water-dependent industry and do not include residential, commercial, recreational or other uses that would create inherent conflicts or be destabilized if commingled with industrial activity; therefore this area does meet the criterion as required by 301 CMR 25.04(2)(d).

### **Railroad South**

Pursuant to 301 CMR 25.04(2)(a), any area to remain in the DPA under this boundary review must include, or be contiguous with other DPA lands that include, a shoreline that has been substantially developed with piers, wharves, bulkheads, or other structures that establish a functional connection with a DPA water area. The entire shoreline of the Railroad South planning unit is undeveloped. It does not include piers, wharves, bulkheads or rip rap. The shoreline is characterized by shallow waters and sensitive coastal resources including salt marsh and tidal flats. Based on these facts, CZM concludes that the Railroad South planning unit does not meet this criterion.

The second key criterion for determining suitability of a land area for water-dependent industrial use, pursuant to 301 CMR 25.04(2)(b) is that the land must lie in reasonable proximity to an established road or rail link that leads to a major trunk or arterial route; and be served by water and sewer facilities that are capable of serving general industrial use. A portion of the Railroad South planning unit is served by Eastern Avenue which is a main public road that links the Chelsea River area to Chelsea Street and Route 1A, a main roadway which connects to major regional routes. Eastern Avenue provides access via two lanes in each direction and is flanked by industrial and commercial properties. The area is served by both city water and sewer services. Therefore, CZM concludes that the Railroad South planning unit does meet the criteria for road access and infrastructure necessary to support water dependent industrial uses.

To accommodate water-dependent industrial use, the land area must also exhibit a topography that is generally conducive to industrial use, or be reasonably capable of becoming so. As discussed above, the entire shoreline of the Railroad South planning unit consists of filled tidelands. These areas are primarily low-lying and flat. Based on this, CZM concludes that the topography of the Railroad South planning unit is generally conducive to industrial use, and therefore meets the criteria of 301 CMR 25.04(2)(c).

Finally, to remain within the DPA boundary, the land area must also exhibit a use character that is predominately industrial, or reasonably capable of becoming so because it does not contain a dense

concentration of non-industrial buildings that cannot be removed or converted, with relative ease, to industrial use; or residential, commercial, recreational or other uses that would unavoidably be destabilized if commingled with industrial activity.

Structures located within the Railroad South planning unit include only industrial buildings. The Atlas Glen-Mor home heating oil and Glyptal parcels include factory, warehouse, servicing bays, and supporting office space. CZM presumes that the uses in the Railroad South planning unit are largely compatible with activities characteristic of water-dependent industry and do not include residential, commercial, recreational or other uses that would create inherent conflicts or be destabilized if commingled with industrial activity. Therefore, CZM finds that the Railroad South planning unit meets the use character criterion as required by 301 CMR 25.04(2)(d).

### **Railroad North**

Pursuant to 301 CMR 25.04(2)(a), any area to remain in the DPA under this boundary review must include, or be contiguous with other DPA lands that include, a shoreline that has been substantially developed with piers, wharves, bulkheads, or other structures that establish a functional connection with a DPA water area. The shoreline of the Railroad North planning unit is not substantially developed with piers, wharves, bulkheads or rip rap that provide a functional connection to the water. Although a sheet metal bulkhead extends along the southern property boundary, it was originally installed as part of remediation actions required by the Massachusetts Contingency Plan and not to provide access to the water. As part of these remediation efforts, AUL were placed on the site which may preclude dredging or development for future waterside infrastructure (MassDEP RTN 3-1755). Further, the bulkhead is entirely bounded by shallow waters (3 to 5 feet), tidal flats or salt marsh. Where possible, DPA uses are targeted for lands and waters which are already developed. One reason for this is to limit impacts to coastal resource areas. Any proposed use of the Railroad North planning unit necessitating access to the Chelsea River and if allowed by the AUL would require dredging and significant impacts to the existing salt marsh and tidal flat habitats. Based on these facts, CZM concludes that the Railroad North planning unit does not meet the substantially developed shoreline with a functional connection to a water area criterion.

The second key criterion for determining suitability of a land area for water-dependent industrial use, pursuant to 301 CMR 25.04(2)(b) is that the land must lie in reasonable proximity to an established road or rail link that leads to a major trunk or arterial route; and be served by water and sewer facilities that are capable of serving general industrial use. The Railroad North planning unit is served by Crescent Avenue and Forbes Street. Forbes Street links the planning unit to Crescent Avenue by bridge over the MBTA railroad. Another bridge lies parallel to Forbes Street to provide redundant access to the property. Although the site was historically accessible by railroad, currently there is no direct rail link. Crescent Avenue is not ideally wide for large commercial vehicles, but CZM believes that the road network does currently meet the criteria of an established road link leading to a major route by connecting to Eastern Avenue, Chelsea Street and Route 1A. Previous industrial uses were supported by these roadway connections. The area is served by both city water and sewer services. Therefore, CZM concludes that the Railroad North planning unit does meet the criteria for road access and infrastructure necessary to support water dependent industrial uses.

To accommodate water-dependent industrial use, the land area must also exhibit a topography that is generally conducive to industrial use, or be reasonably capable of becoming so. As discussed above, the entire shoreline of the Railroad North planning unit consists of filled tidelands. These areas are primarily low-lying and flat. Based on this, CZM concludes that the topography of the

Railroad North planning unit is generally conducive to industrial use, and therefore meets the criteria of 301 CMR 25.04(2)(c).

Finally, to remain within the DPA boundary, the land area must also exhibit a use character that is predominately industrial, or reasonably capable of becoming so because it does not contain a dense concentration of non-industrial buildings that cannot be removed or converted, with relative ease, to industrial use; or residential, commercial, recreational or other uses that would unavoidably be destabilized if commingled with industrial activity.

The Railroad North planning unit primarily includes industrial buildings. The Forbes site includes both industrial and partially completed but unoccupied residential structures. Despite the partial completion of the Forbes condo development, CZM presumes that due to the site's industrial history, a conversion to industrial use is possible and current structures could be compatible with activities characteristic of a water-dependent industry. CZM presumes that the uses in the Railroad North planning unit are largely compatible with activities characteristic of a water-dependent industry and do not include active residential, commercial, recreational or other uses that would create inherent conflicts or be destabilized if commingled with industrial activity. Therefore, CZM finds that the Railroad North planning unit meets the use character criterion for inclusion in a DPA boundary as required by 301 CMR 25.04(2)(d).

## **IX. CONCLUSIONS AND RECOMMENDATIONS**

The DPA regulations direct that an area of land or water reviewed under 301 CMR 25.00 shall be included or remain in a DPA if and only if CZM finds that the area is in substantial conformance with all of the criteria governing suitability to accommodate water-dependent industrial use, as appropriate to the harbor in question.

CZM analysis indicates that the land in the Marginal Street and Eastern Avenue South planning units are in substantial conformance with all the physical suitability criteria in 301 CMR 25.04. Therefore these planning units will remain in the DPA.

CZM analysis of the land in the Railroad South planning unit indicates that while this area is in substantial conformance with the physical suitability criteria for possessing a topography that is conducive to industrial use, for exhibiting a use character that is predominantly industrial, and for being within reasonable proximity to established road/rail links and sewer/water facilities, the land area does not possess a substantially developed shoreline which creates a functional connection to DPA waters. The shoreline in the Railroad South planning unit is comprised of a mix of tidal flats and salt marsh and is wholly devoid of structures which would provide a functional connection to the waterway.

Additionally, CZM analysis of the land in the Railroad North planning unit indicates that while this area is in substantial conformance with the physical suitability criteria for possessing a topography that is conducive to industrial use, for exhibiting a use character that is predominantly industrial, and for being within reasonable proximity to established road/rail links and sewer/water facilities, the land area does not possess a substantially developed shoreline which creates a functional connection to DPA waters. To the contrary, this review found that the Railroad North planning unit is not in conformance with the substantially developed shoreline criteria because the shoreline in this



planning unit is either undeveloped or bordered by coastal resource areas. CZM finds that although a portion of the Railroad North shoreline includes a bulkhead, the area lacks a functional connection to the DPA waterway because the waters adjacent to the bulkhead have shoaled in to the point where use of the shoreline for water-dependent industrial use if allowed by the AUL would require significant dredging and impacts to natural resource areas, including salt marsh.

Accordingly, CZM finds that the Railroad South and Railroad North planning units, as well as the portion of the MBTA railroad associated with these planning units, shall be removed from the boundary of the Chelsea Creek DPA. Pursuant to this review, a revised Chelsea Creek DPA boundary reflecting the findings of this Boundary Review Report is shown on the attached map, Figure 5.

## **X. FIGURES**

See following pages 16 - 20

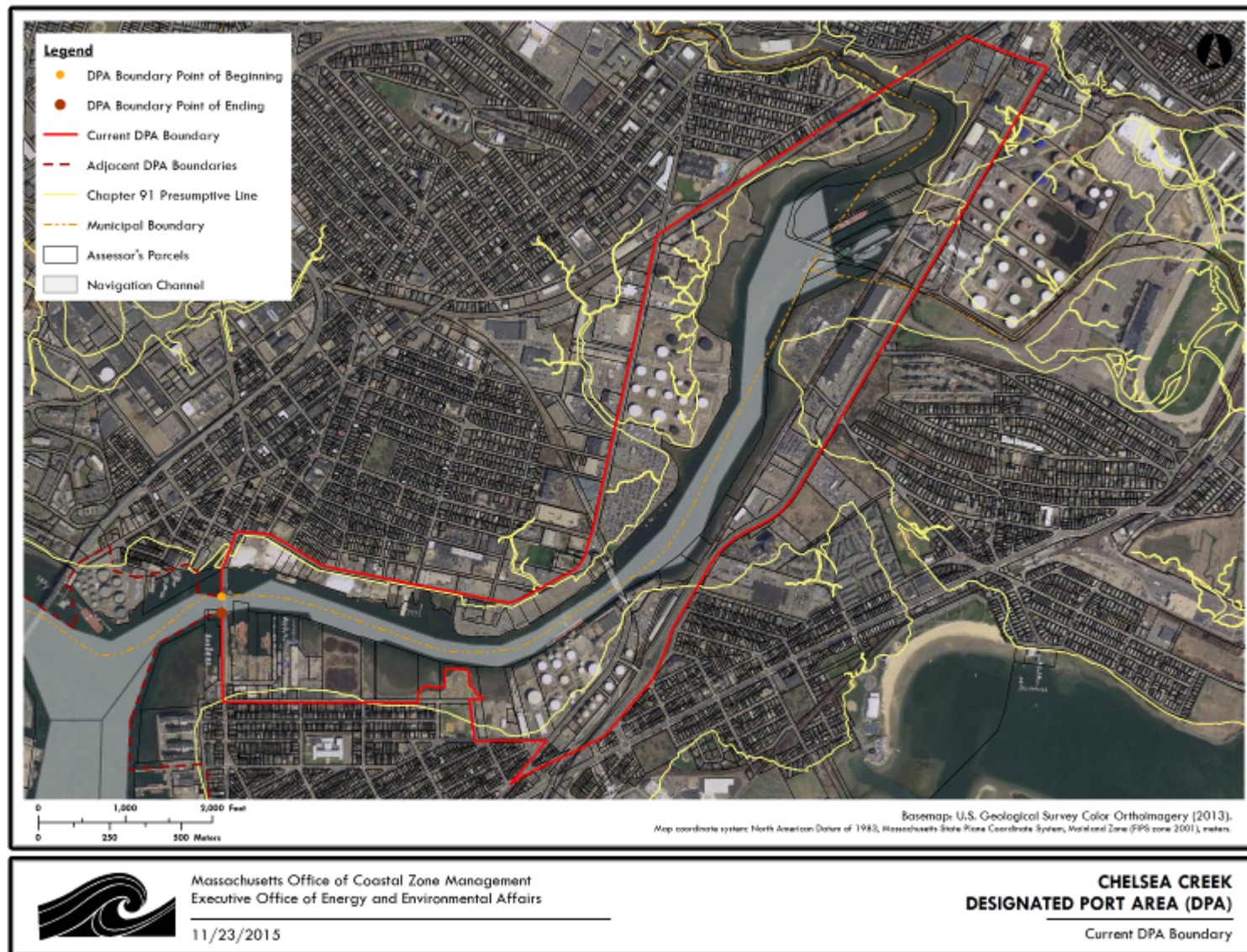


Figure 1 – Current Chelsea Creek Designated Port Area boundary map



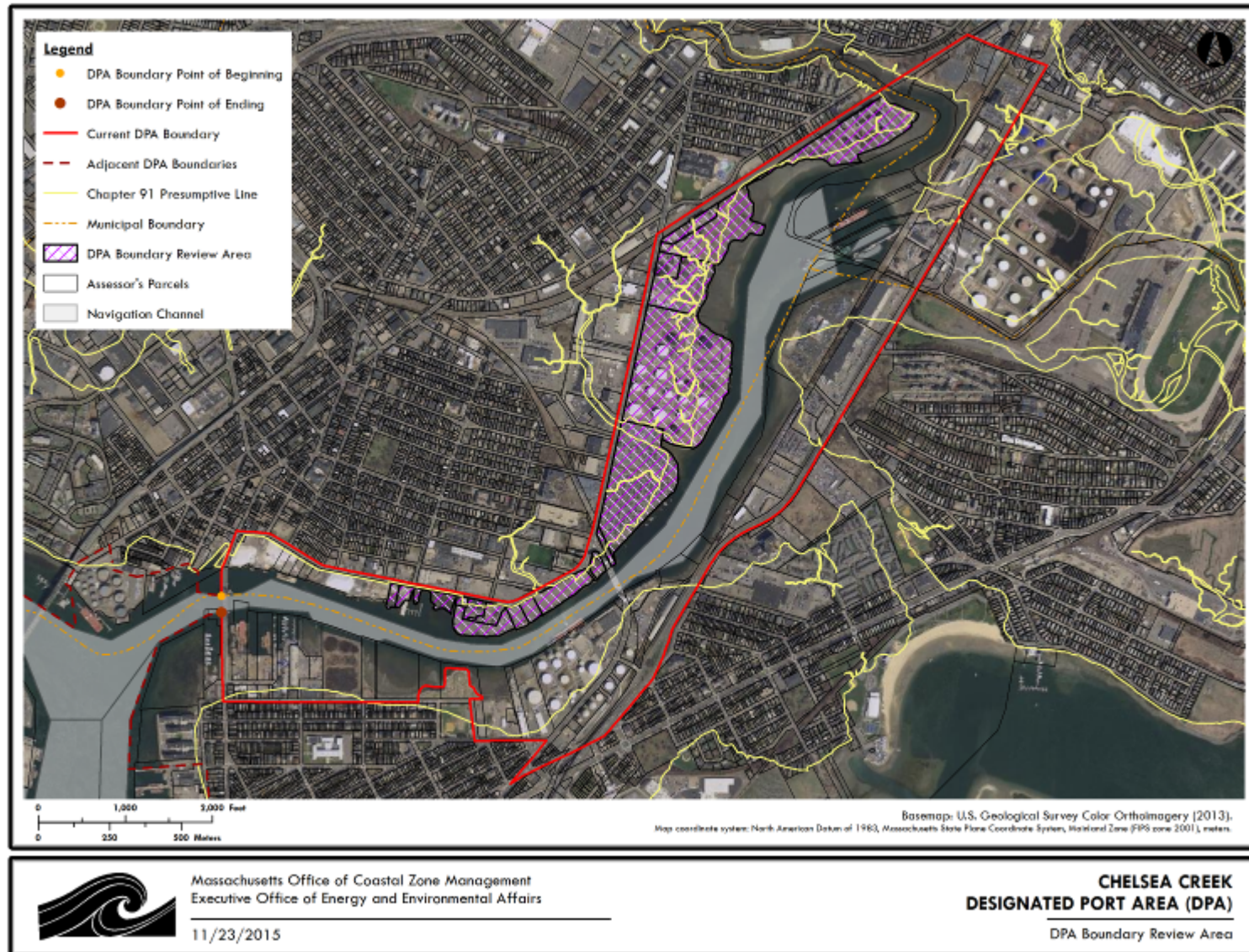


Figure 2 – Chelsea Creek DPA boundary review area



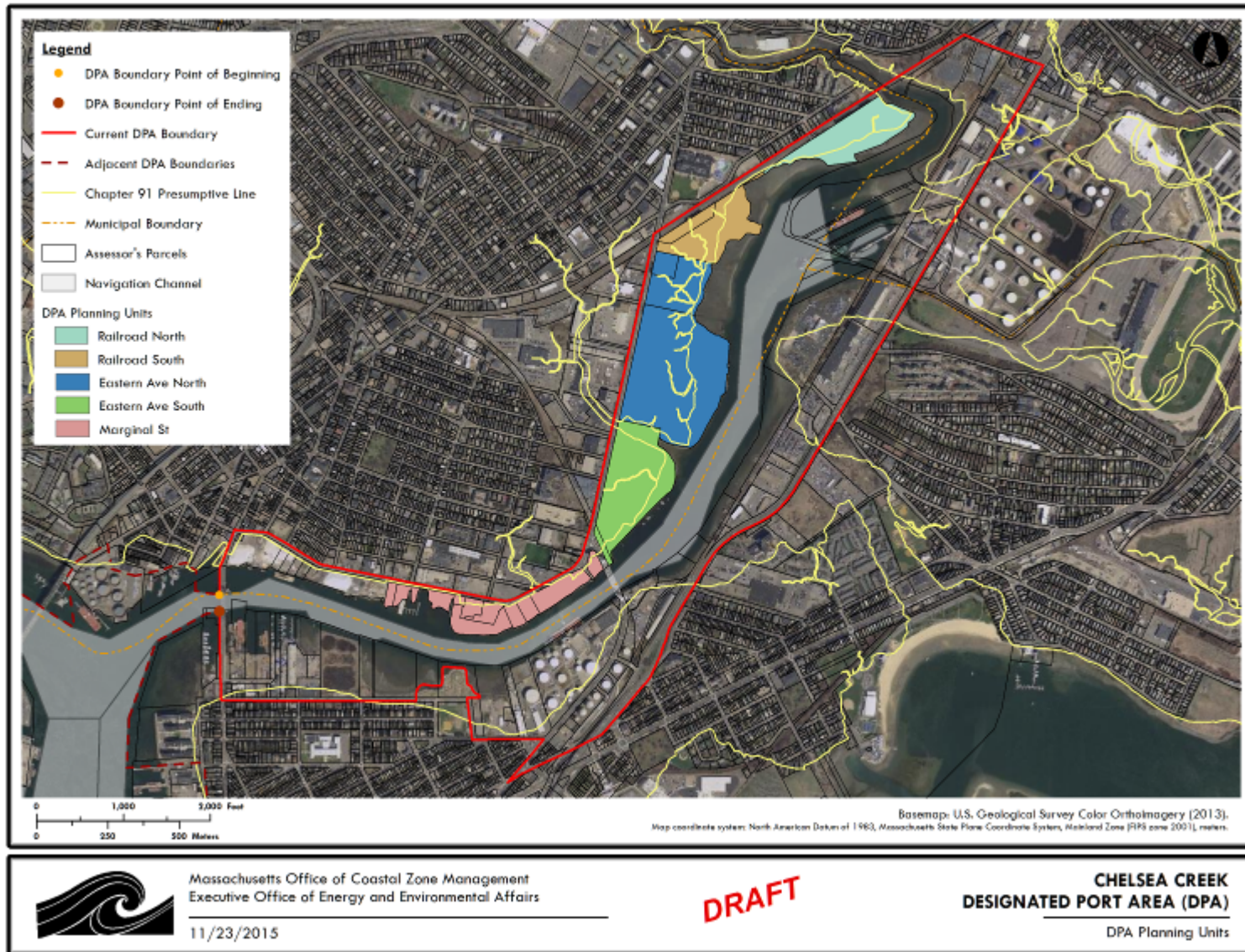


Figure 3 – Planning units within the Chelsea Creek DPA boundary review area



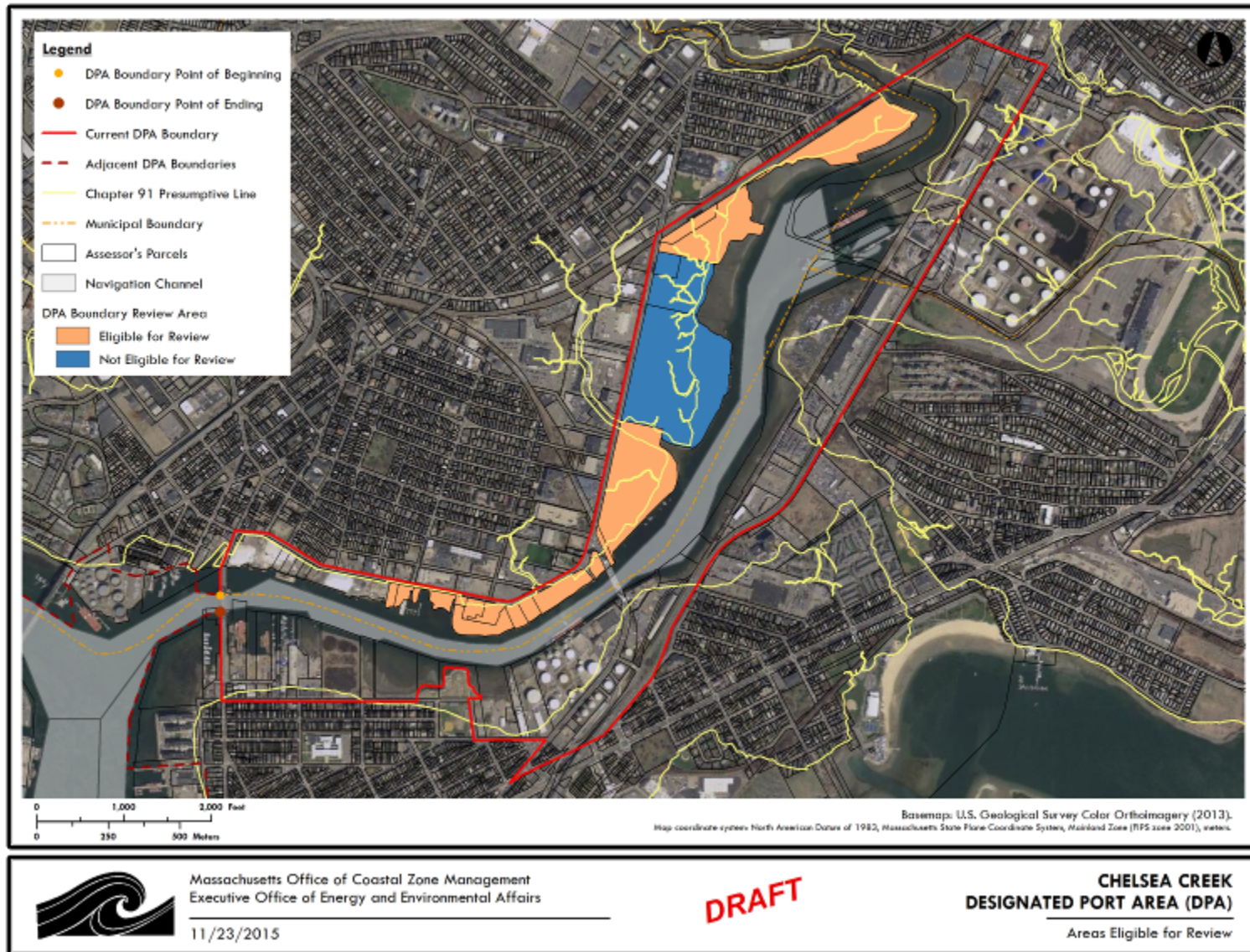


Figure 4 – Planning units eligible for review



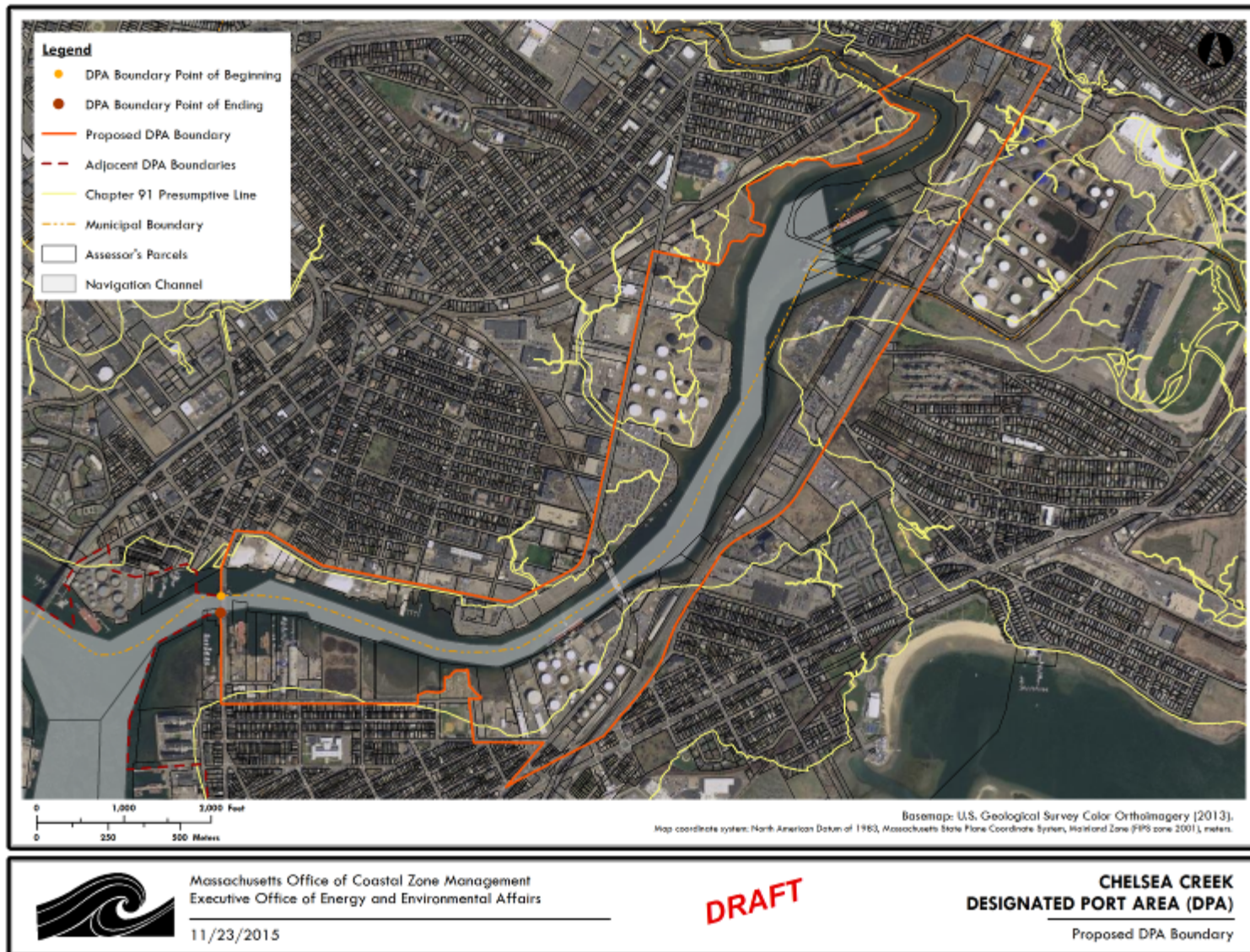


Figure 5 – Revised Chelsea Creek DPA boundary map