

TOWN PLANNING BOARD

**TPB Paper No. 9656
For Consideration by the
Town Planning Board on 16.5.2014**

**PROPOSED REVISIONS TO
TOWN PLANNING BOARD GUIDELINES NO. 12B FOR
APPLICATION FOR DEVELOPMENTS WITHIN DEEP BAY AREA
UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE**

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UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE**

1. Purpose

The purpose of the paper is to seek Members' agreement to the proposed revisions to the Town Planning Board (TPB) Guidelines No. 12B for Application for Developments within Deep Bay Area under Section 16 of the Town Planning Ordinance (the Ordinance) (TPB PG-No. 12B).

2. Background

- 2.1 In view of the public concern and development pressure on the Deep Bay Area, TPB introduced a set of planning guidelines (TPB PG-No. 12) in 1993, which delineated two buffer zones (Buffer Zones 1 and 2) with a view to protecting the ecological value of the Deep Bay Area. The guidelines was subsequently revised twice in 1994 and 1999 respectively. The revisions to TPB PG-No. 12 in 1994 were mainly related to requiring applicant to submit an ecological study and continuing to adopt the "precautionary approach" in considering development proposals in the Deep Bay Area.
- 2.2 In April 1999, TPB PG-No. 12A was further revised based on the Study on the Ecological Value of Fish Ponds in the Deep Bay Area (the Fish Ponds Study) completed by the Planning Department in 1997. The revisions were mainly related to the replacement of the buffer zones with Wetland Conservation Area (WCA) and Wetland Buffer Area (WBA) with revised boundaries, and refinement to the precautionary approach.
- 2.3 According to TPB PG-No. 12B (Annex I), in view of the intrinsic value of fish ponds, which function as an important habitat for roosting and foraging of

waterbirds in the Deep Bay Area, and the complex response of birds to future land use changes and carrying capacity which has not been fully understood, a “precautionary approach” is adopted to protect and conserve the existing ecological functions of fish ponds in order to maintain the ecological integrity of the Deep Bay wetland ecosystem as a whole.

- 2.4 A WCA for all existing continuous and adjoining active/abandoned fish ponds is designated, where no new development would be allowed unless it is required to support the conservation of the ecological value of the area or the development is an essential infrastructural project. About 500m wide buffer area along the landward boundary of WCA is designated as WBA to protect the ecological integrity of WCA.
- 2.5 The fish ponds in Hoo Hok Wai (HHW) were within the study area of the Fish Ponds Study. However, as HHW was not covered by any statutory plan at that time, the fish ponds in HHW were not included in the TPB PG-No. 12B. It was announced in 2008 that about 2,400 ha of land would be released from the Closed Area in phases. A “Land Use Planning for the Closed Area – Feasibility Study” (the FCA Study) was conducted and completed in 2010. One of the recommendations of the FCA Study was that TPB PG-No. 12B be revised by extending its coverage to the HHW area. Statutory plans were prepared to cover the former Closed Area, including the fish ponds in HHW, and exhibited for public inspection in July 2013. An Ecological Field Survey for HHW (the Ecological Field Survey) was undertaken in parallel and completed in June 2013, which reaffirms the findings of the FCA Study on the ecological value of HHW. The continuous and contiguous fish ponds in HHW are currently zoned “Conservation Area (1)” (“CA(1)”) on the draft Ma Tso Lung and HHW OZP No. S/NE-MTL/2 (the OZP) (**Plan 1**).
- 2.6 With HHW covered by OZP, it is necessary to revise TPB PG-No. 12B to include HHW to provide guidance for consideration of applications for different uses and developments within HHW. The same principles and approach of development in the other Deep Bay wetland area as laid down in the TPB PG-No. 12B should also be applicable to the HHW area.

3. Ecological Value of the HHW Area

- 3.1 The Ecological Field Survey reveals that HHW comprises primarily fish ponds, fresh water and reed marshes, which have formed important habitats for fauna of

conservation significance (**Plan 3**¹). These habitats are of high ecological significance for the following reasons :

Fish ponds

- (a) the relatively large fish ponds in HHW as compared to other areas in Deep Bay and their strong ecological linkages with the other wetlands within the Deep Bay Area, including the Mai Po Inner Deep Bay Ramsar Site² and Ho Sheung Heung Egrettry have made HHW frequently visited by waterbirds for foraging or roosting. These fish ponds are important habitats for waterbirds including ardeids (鷺鳥) and spoonbills (琵鷺) and other wetland-dependent species such as the globally-threatened Eurasian Otter (歐亞水獺); and

Freshwater and reed marshes

- (b) the freshwater and reed marshes occur alongside each other and the boundary between the two is blurred. These marshes forming an integral part of the HHW area are known to support a rare community of reed-associated fauna species such as Eurasian Otter.

- 3.4 The extensive fish ponds and the freshwater marshes in HHW are zoned "CA(1)" on the OZP (**Plan 1**) with an intention to protect and to conserve the ecological value of wetland and fish ponds which form an integrated part of the wetland ecosystem in the Deep Bay Area. The woodland, shrubland and grassland are zoned "Green Belt" ("GB") due to their relatively lower importance in ecological value. Although the isolated marshes within the HHW area are accorded with moderate to high ecological value in the Ecological Field Survey, the Agriculture, Fisheries and Conservation Department considers that they are part and parcel of the ecosystem and should be included in the "CA(1)" zone on the OZP.

4. Delineation of WCA and WBA in HHW

Boundary of WCA

- 4.1 The contiguous and ecologically sensitive wetland complex in HHW is currently zoned "CA(1)". Given the WCA is to discourage new development unless it is required to support the conservation of the ecological integrity of the wetland

¹ The source of the plan was mainly from the FAC Study and the Ecological Field Survey.

² The Mai Po Marshes, the Inner Deep Bay and the surrounding fish ponds have been listed as a "Wetland of International Importance" (the "Ramsar Site") under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) since 1995.

ecosystem or the development is an essential infrastructure project with overriding public interest, it is proposed that the existing WCA boundaries in the TPB PG-No. 12B be extended to link and cover the extensive fish ponds and the freshwater marshes in HHW which fall within the "CA(1)" zone on the OZP. The revised boundary of WCA to include HHW is shown on **Plan 4**.

Boundary of WBA

- 4.2 The boundary of WBA is also proposed to be revised to cover the area in HHW that falls within 500m along the landward boundary of the revised WCA. WBA, which includes the planted mitigation woodland in the north-eastern part of the HHW area, grassland, shrubland and marshes/reedbeds on the landward side of the area, serves to prevent development that would have a negative off-site disturbance impact on the ecological value of fish ponds.

5. Proposed Revisions to the TPB PG-No. 12B

- 5.1 TPB PG-No. 12B would need to be revised to include the revised WCA and WBA boundaries, covering respectively the fish ponds and associated wetland, and mainly the landward vegetated land in HHW as detailed in paragraph 4 above. The draft TPB Guidelines No. 12C is at **Annex II** for the Members' consideration. A comparison of the existing and revised boundaries of WCA and WBA is at **Plan 4**.

- 5.2 The main revisions proposed to the TPB PG-No. 12B are highlighted as follows :

- (a) paragraph 3 – incorporating the findings of the Ecological Field Survey with respect to the HHW area (in *bold and italic* on page 2 of the draft TPB Guidelines);
- (b) Figure A – the boundaries of WCA and WBA are revised with:
 - (i) the contiguous and ecologically sensitive wetland complex in HHW currently zoned "CA(1)" (about 228 ha) on the OZP being designated WCA as detailed in paragraph 4.1 above so that a "precautionary approach" will apply for consideration of any change in use within HHW; and
 - (ii) an area of about 131 ha covering various zones on the OZP including "GB", "Agriculture", "Other Specified Uses" annotated "Eco-lodge"

("OU(Eco-lodge)"), "Village Type Development" and "Government, Institution or Community", being designated WBA to protect the integrity of the adjoining wetland habitats within WCA; and

- (c) Appendix A – a footnote is added to specify that the exemption of two of the uses, i.e. 'Government Refuse Collection Point' and 'Public Utility Installation', from Ecological Impact Assessment (EcoIA) does not apply to the "OU(Eco-lodge)" zone. The "OU(Eco-lodge)" covers a small knoll to the west of Tse Koo Hang which serves as a valuable natural setting and has access to the high value ecological areas, and hence EcoIA is required to minimize potential adverse impacts on the natural landscape and the surrounding rural environment. The revision to Appendix A is to reflect the requirement of the OZP in respect of the "OU(Eco-lodge)" zone.

6. Consultation

The revised WCA and WBA have been circulated to the Agriculture, Fisheries and Conservation Department for comments, and the comments received have been incorporated into the proposed revisions to TPB PG-No. 12B.

7. Advice Sought

Members are invited to :

- (a) consider and endorse the draft revised TPB Guidelines number TPB PG-No. 12C at **Annex II**; and
- (b) agree that the revised guidelines could be promulgated to the public.

8. Attachments

Annex I Current TPB PG-No. 12B

Annex II Draft TPB Guidelines PG-No. 12C

- Plan 1** Extract of the OZP
- Plan 2** Aerial Photo
- Plan 3** Habitat Map of HHW
- Plan 4** Comparison of the Existing and Proposed Boundary of WCA and WBA

PLANNING DEPARTMENT
MAY 2014

TPB PG-NO. 12B (Revised April 1999)

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(Important Note :- The Guidelines are intended for general reference only. The decision to approve or reject an application rests entirely with the Town Planning Board (the Board) and will be based on individual merits and other specific considerations of each case.

Any enquiry on this pamphlet should be directed to the Planning Information and Technical Administration Unit of the Planning Department, 17/F, North Point Government Offices, 333 Java Road, Hong Kong - Tel. No. 22315000.

The Guidelines are liable to revision without prior notice. The Board will only make reference to the Guidelines current at the date on which it considers an application.)

INTRODUCTION

1. The Deep Bay, Mai Po Marshes and its adjacent area (collectively known as the Deep Bay Area) is recognised as a wetland of international importance. It is a habitat for a variety of species of waterbirds such as herons and egrets, and a stopover point for thousands of migratory birds. The Deep Bay Area comprises natural and man-made wetlands (rivers, freshwater marshes, fish ponds, gei wais, mangroves and inter-tidal mudflats) which provide a wide range of habitats to support a high diversity of biota (insects, reptiles, amphibian, birds and mammals.) Five sites in the Deep Bay Area are designated as Sites of Special Scientific Interest (SSSI), respectively at Mai Po Village, Mai Po Marshes (including Lut Chau), Tsim Bei Tsui, Tsim Bei Tsui Egrettry and Inner Deep Bay. The Mai Po Marshes, the Inner Deep Bay and the surrounding fish ponds have been listed as a "Wetland of International Importance" (the "Ramsar Site") under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) since 1995. Such designation recognises the ecological importance of the Deep Bay Area as a wetland habitat and refueling station for thousands of migratory birds. Under the Ramsar Convention, if a party subsequently deletes or restricts a "Wetland of International Importance", it should as far as possible compensate for the loss of wetland resources and recreate additional nature reserves for the purpose.
2. In recent years, there has been an increasing number of development proposals in the Deep Bay Area involving filling of fish ponds or works which may adversely affect the Deep Bay Area wetland ecosystem. To avoid the irreversible adverse impacts on the fish ponds and other wetland habitats in the Deep Bay Area, the Board provides development guidance for the Deep Bay Area through statutory plans. To facilitate applications for different uses and developments, a set of planning guidelines was also published.

PRECAUTIONARY APPROACH TO CONSERVE THE ECOLOGICAL VALUE OF FISH PONDS

3. The ecological value of a habitat is defined as its contribution in sustaining the wildlife communities and essential ecological processes of a wider ecosystem. The Study on the Ecological Value of Fish Ponds in the Deep Bay Area (the Study) completed in 1997 has confirmed the unique international and regional importance of the fish pond system in the Deep Bay Area particularly for ardeids (i.e. herons and egrets). It has established that fish ponds in the area have intrinsic value as they function ecologically as a substantial source of food supply for the birds and as an important habitat for roosting and foraging of waterbirds. The fish pond system is fundamentally linked with the Mai Po Marshes and is part of the Deep Bay Area wetland ecosystem. Different ponds are used preferentially by birds in different seasons, and it would be difficult to justify removal of certain individual fish ponds. Higher bird usage was observed to correlate with ponds which are contiguous to each other and with a greater and continuous area as against fragmented and isolated ponds. Developments resulting in the loss of fish ponds would reduce the food source to birds and certain developments adjoining or in the vicinity of fish ponds with disturbance impact, in particular open storage uses, industrial uses, dispersed village type development and roads, would lead to a reduction in bird usage.
4. A "precautionary approach" has been adopted by the Board in view of the known intrinsic value of fish ponds in ecological terms and the complex response of birds to future landuse changes and carrying capacity which has not been fully understood. The intention is to protect and conserve the existing ecological functions of fish ponds in order to maintain the ecological integrity of the Deep Bay wetland ecosystem as a whole. This "precautionary approach" is formulated with the support of scientific surveys and analysis as provided in the Study.

THE PRINCIPLE OF "NO-NET-LOSS IN WETLAND"

5. In considering development proposals in the Deep Bay Area, the Board adopts the Study's recommended principle of "no-net-loss in wetland" which provides for the conservation of continuous and adjoining fish ponds. The no-net-loss can refer to both loss in "area" and "function". No decline in wetland or ecological functions served by the existing fish ponds, especially as a source to provide abundant and accessible food and roosting grounds to ardeids and other species, should occur. As the fish ponds form an integral part of the Deep Bay Area wetland ecosystem, alternative uses could be considered suitable only if it could be demonstrated that they would not result in the loss of ecological function of the original ponds and if they complement the ecological functions of the wetlands and fish ponds in and/or around the Deep Bay Area. It is important that the alternative wetland habitat to replace the fish ponds can provide food supplies in a sustainable manner so that birds, particularly, the egret and heron population, are not put at risk.

LAND USE CONCEPT AND DEVELOPMENT GUIDELINES

6. The fundamental landuse planning concept for the Deep Bay Area should be the avoidance of loss of fish ponds and habitat fragmentation as well as mitigation of negative impact from undesirable landuses and human disturbance. A two-pronged approach to landuse planning control is adopted through the designation of Wetland Conservation Area (WCA) for all existing continuous and adjoining active/abandoned fish ponds and the designation of Wetland Buffer Area (WBA) to protect the ecological integrity of the WCA. This buffer generally comprises the strip of land of about 500 m wide along the landward side of the WCA (Figure A).

Wetland Conservation Area (WCA)

- 6.1 The planning intention of the WCA is to conserve the ecological value of the fish ponds which form an integral part of the wetland ecosystem in the Deep Bay Area. It comprises the existing and contiguous, active or abandoned fish ponds in the Deep Bay Area, which should all be conserved. New development within the WCA would not be allowed unless it is required to support the conservation of the ecological value of the area or the development is an essential infrastructural project with overriding public interest. Any such development should be supported by an ecological impact assessment to demonstrate that the development would not result in a net loss in wetland function and negative disturbance impact. For any redevelopment which requires planning permission from the Board, an ecological impact assessment would also be required. Wetland compensation is required for any development involving pond filling and mitigation measures against disturbance would be necessary. They would be imposed as part of the planning approval conditions.
- 6.2 Subject to submission of ecological impact assessments, the types of activities which may be considered within the WCA must be related to one of the following uses:

Conservation

- 6.2.1 Land uses in WCA should be devoted to conservation management of the wetland areas such that the integrity of the habitat should be maintained to avoid disturbance and/or fragmentation. Alternative ecologically beneficial uses to existing fish ponds which would perform ecological functions similar to or better than the existing fish ponds to be replaced and be compatible with the conservation objectives of the wetland in Deep Bay Area, such as recreated nature reserve, wetland wildlife reserve for bird watching or sports fishery and aquaculture, would be considered. The proposed use should be appropriate to the rural and wetland setting and be able to enhance the visual and landscape quality of the area. It should not add to the pollution loading of the Deep Bay Area.

Environmental Education

- 6.2.2 Research and educational uses which will facilitate the public understanding of the ecology and nature conservation of the area would be encouraged. Educationally based facilities, such as nature trails, ecology study centre and field study centre, with controlled access would be considered. The proposed use should be appropriate to the rural and wetland setting and be able to enhance the visual and landscape quality of the area. It should not add to the pollution loading of the Deep Bay Area.

Essential Infrastructure Projects

- 6.2.3 Essential infrastructure projects needed for public purpose, such as rail, emergency vehicular access and footpath, road, drainage and flood protection project and public utility project, for which no suitable alternative locations outside the WCA could be identified, would also be considered by the Board. However, any such proposed project should include a practical wetland compensation scheme for the consideration of the Board. It should not add to the pollution loading of the Deep Bay Area.

Private-Public Partnership Approach

- 6.3 While the primary planning intention of the WCA is to conserve the ecological value of fish ponds, if there are strong planning justifications and positive measures to enhance the ecological functions of the existing fish ponds, the Board may consider development with conservation objectives within the WCA under a private-public partnership approach. Having regard to the precautionary principle and the "no-net-loss in wetland" concept, the approach would allow consideration of limited low-density private residential/recreational development at the landward fringe of the WCA in exchange for committed long-term conservation and management of the remaining ponds within the development site. Development of this nature should require minimum pond filling and be located as far away from the Deep Bay and/or adjoining to existing development site. Adherence to the "no-net-loss" principle would be important to ensure no decline in the wetland functions of the fish ponds within the development site and surrounding ponds. Any such development proposal should be accompanied by an ecological impact assessment with an acceptable and feasible wetland enhancement and management scheme to demonstrate that the development would not result in, or be able to fully compensate for, any loss of the total ecological function of the original ponds on the site and that the development impact can be mitigated. The proposal should also include a mechanism to ensure that the long-term management of the wetland could be practically implemented and monitored. A development proposal of this kind would be carefully scrutinized either through the objection consideration process or by way of a request to rezone the site to "Other Specified Uses (Comprehensive Development and Wetland Enhancement Area)".

Wetland Buffer Area (WBA)

- 6.4 The intention of the WBA is to protect the ecological integrity of the fish ponds and wetland within the WCA and prevent development that would have a negative off-site disturbance impact on the ecological value of fish ponds. A buffer area of about 500 m along the landward boundary of the WCA is thus designated as a WBA. As a substantial amount of the fish ponds within the WBA have already been lost over time through filling and certain areas have been degraded by the presence of open storage use, these degraded areas may be considered as target areas to allow an appropriate level of residential/recreational development so as to provide an incentive to remove the open storage use and/or to restore some of the fish ponds lost.
- 6.5 Within the WBA, for development or redevelopment which requires planning permission from the Board, an ecological impact assessment would also need to be submitted. Development/redevelopment which may have negative impacts on the ecological value of the WCA would not be supported by the Board, unless the ecological impact assessment can demonstrate that the negative impacts could be mitigated through positive measures. The assessment study should also demonstrate that the development will not cause net increase in pollution load to Deep Bay. Some local and minor uses are however exempted from the requirement of ecological impact assessment. They are listed in Appendix A and include temporary uses.
- 6.6 Applications for new open storage or container back-up uses including workshops within the WBA, whether temporary or permanent, would normally not be allowed in view of the adverse disturbances of such activities on birds, in particular for such uses involving filling of contiguous ponds. However, open storage or container back-up uses located close to the Lok Ma Chau crossing and without involving pond filling might be sympathetically considered by the Board in view of the genuine need to facilitate cross-boundary movements of goods in the area.
- 6.7 Proposals for residential/recreational developments on degraded sites to remove/replace existing open storage or container back-up uses and/or to restore lost wetlands may be given sympathetic consideration by the Board subject to satisfactory ecological and other impact assessments. For those disturbed areas directly abutting the WCA, the development should provide a wetland and visual buffer to separate the development from the WCA to minimise its impact on the wetland and to restore some of the lost fish ponds to an appropriate form of wetland adjoining the WCA. Within these degraded areas targetted for upgrading, the following types of activities may be considered:

Wetland Restoration

- 6.7.1 Development proposals to restore lost fish ponds or to replace existing undesirable uses by wetland habitats are encouraged.

Recreation

- 6.7.2 Appropriate recreational use may be considered. Consideration should be given to the compatibility of such use with any adjoining fish pond area and to other planning and environmental implications of the development.

Residential

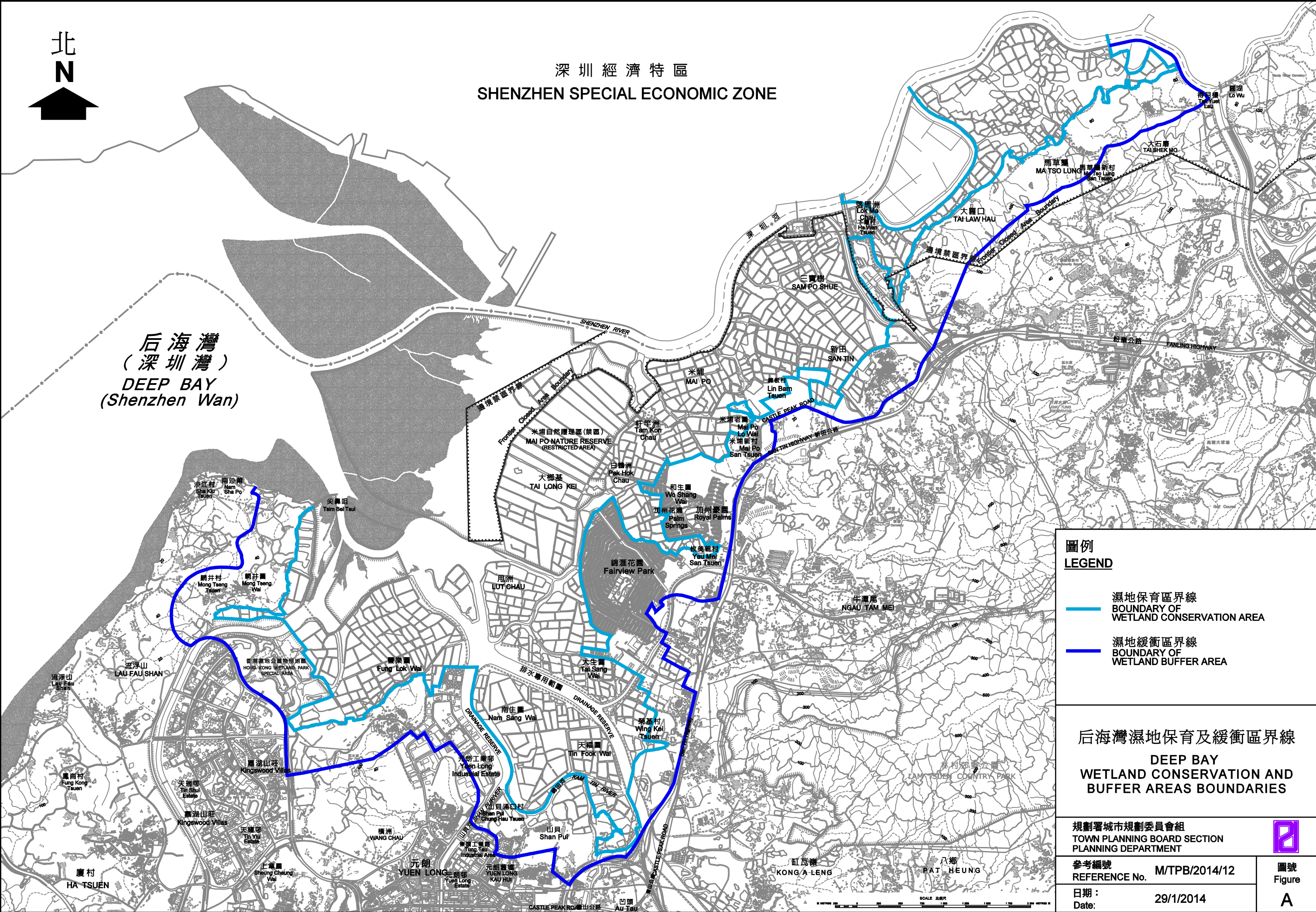
- 6.7.3 Residential development projects which include replacement of existing open storage and port back-up uses and/or proposals of detailed wetland restoration may be given special consideration subject to satisfactory ecological and other impact assessments. These developments should be compatible with the surrounding land uses and the rural setting of the area.

Ecological Field Investigation

- 6.8 For planning applications requiring ecological impact assessment within either the WCA or the WBA, field investigation normally covering a period of not less than 12 months should be included to provide baseline information of, and to study effects on, existing wildlife habitats, flora and fauna, and their seasonal changes. The exact requirements for the field investigation may depend on the proposed scale and nature of development, and whether any direct loss of fish ponds would be involved. Potential applicants should seek advice from the Agriculture and Fisheries Department on the technical requirements for the ecological impact assessment.

Other Planning Considerations

- 6.9 In addition to ecological consideration, other planning considerations including development intensity, compatibility with the surrounding land uses, environmental impact (e.g. noise, air and water qualities), traffic and drainage impacts, provision of infrastructure and visual impact are also important in the assessment of an application within the Deep Bay Area.



Appendix A

List of Uses Exempted from Ecological Impact Assessment Within the Wetland Buffer Area

For planning applications involving uses/development within the Wetland Buffer Area, the following uses/development are exempted from the requirement of ecological impact assessment as part of the submission to the Board :

- Temporary Uses
- Agricultural Use (except in SSSI Zone)
- Ancestral Hall
- Bank#
- Barbecue Spot
- Barber Shop#
- Beauty Parlour#
- Burial Ground
- Clinic/Polyclinic*
- Electricity Substation of single storey
- Government Refuse Collection Point
- House (Alteration, modification and/or redevelopment to the existing building bulk only)
- New Territories Exempted Houses
- Off-Course Betting centre#
- On-farm Domestic Structure
- Photographic Studio#
- Playground/Playing Field in "V" and "R(D)" zones
- Police Post/Police Reporting Centre
- Post Office*
- Private Club#
- Public Convenience
- Public Library*
- Public Utility Installation (electricity mast, lamp pole, pipeline and telephone booth only)
- Pumping Station of single storey
- Refreshment Kiosk
- Retail Shop#
- School*
- Showroom excluding Motor-vehicle Showroom#
- Shrine
- Social Welfare Facility*
- Tent Camping Site

Note:

other than free-standing building

* other than free-standing building exceeding 3 storeys

TPB PG-NO. 12BC (Revised ~~April 1999~~ *May 2014*)

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Under the Ramsar Convention, if a party subsequently deletes or restricts a “Wetland of International Importance”, it should as far as possible compensate for the loss of wetland resources and recreate additional nature reserves for the purpose.

2. In recent years, there has been an increasing number of development proposals in the Deep Bay Area involving filling of fish ponds or works which may adversely affect the Deep Bay Area wetland ecosystem. To avoid the irreversible adverse impacts on the fish ponds and other wetland habitats in the Deep Bay Area, the Board provides development guidance for the Deep Bay Area through statutory plans. To facilitate applications for different uses and developments, a set of planning guidelines was also published.

PRECAUTIONARY APPROACH TO CONSERVE THE ECOLOGICAL VALUE OF FISH PONDS

3. The ecological value of a habitat is defined as its contribution in sustaining the wildlife communities and essential ecological processes of a wider ecosystem. The Study on the Ecological Value of Fish Ponds in the Deep Bay Area (the Study) completed in 1997 has confirmed the unique international and regional importance of the fish pond system in the Deep Bay Area particularly for ardeids (i.e. herons and egrets). It has established that fish ponds in the area have intrinsic value as they function ecologically as a substantial source of food supply for the birds and as an important habitat for roosting and foraging of waterbirds. The fish pond system is fundamentally linked with the Mai Po Marshes and is part of the Deep Bay Area wetland ecosystem. *The Ecological Field Survey of Hoo Hok Wai completed in June 2013 has further confirmed that the fish ponds and freshwater marshes occupying majority of the Hoo Hok Wai area have high ecological value due to their importance to waterbirds, including ardeids and spoonbills and other wetland-dependent species, including Eurasian Otter, and their strong ecological linkages with other wetlands within the Deep Bay Area, including the Mai Po Inner Deep Bay Ramsar Site.* Different ponds are used preferentially by birds in different seasons, and it would be difficult to justify removal of certain individual fish ponds. Higher bird usage was observed to correlate with ponds which are contiguous to each other and with a greater and continuous area as against fragmented and isolated ponds. Developments resulting in the loss of fish ponds would reduce the food source to birds and certain developments adjoining or in the vicinity of fish ponds with disturbance impact, in particular open storage uses, industrial uses, dispersed village

type development and roads, would lead to a reduction in bird usage.

4. A “precautionary approach” has been adopted by the Board in view of the known intrinsic value of fish ponds in ecological terms and the complex response of birds to future landuse changes and carrying capacity which has not been fully understood. The intention is to protect and conserve the existing ecological functions of fish ponds in order to maintain the ecological integrity of the Deep Bay wetland ecosystem as a whole. This “precautionary approach” is formulated with the support of scientific surveys and analysis as provided in the Study.

THE PRINCIPLE OF “NO-NET-LOSS IN WETLAND”

5. In considering development proposals in the Deep Bay Area, the Board adopts the Study’s recommended principle of “no-net-loss in wetland” which provides for the conservation of continuous and adjoining fish ponds. The no-net-loss can refer to both loss in “area” and “function”. No decline in wetland or ecological functions served by the existing fish ponds, especially as a source to provide abundant and accessible food and roosting grounds to ardeids and other species, should occur. As the fish ponds form an integral part of the Deep Bay Area wetland ecosystem, alternative uses could be considered suitable only if it could be demonstrated that they would not result in the loss of ecological function of the original ponds and if they complement the ecological functions of the wetlands and fish ponds in and/or around the Deep Bay Area. It is important that the alternative wetland habitat to replace the fish ponds can provide food supplies in a sustainable manner so that birds, particularly, the egret and heron population, are not put at risk.

LAND USE CONCEPT AND DEVELOPMENT GUIDELINES

6. The fundamental landuse planning concept for the Deep Bay Area should be the avoidance of loss of fish ponds and habitat fragmentation as well as mitigation of negative impact from undesirable landuses and human disturbance. A two-pronged approach to landuse planning control is adopted through the designation of Wetland Conservation Area (WCA) for all existing continuous and adjoining active/abandoned fish ponds and the designation of Wetland Buffer Area (WBA) to protect the ecological integrity of the WCA. This buffer generally comprises the strip of land of about 500m wide along the landward side of the WCA (**Figure A**).

Wetland Conservation Area (WCA)

- 6.1 The planning intention of the WCA is to conserve the ecological value of the fish ponds which form an integral part of the wetland ecosystem in the Deep Bay Area. It comprises the existing and contiguous, active or abandoned fish ponds in the Deep Bay Area, which should all be conserved. New development within the WCA would not be allowed unless it is required to support the conservation of the ecological value of the area or the development is an essential infrastructural project with overriding public interest. Any such development should be supported by an ecological impact assessment to demonstrate that the development would not result in a net loss in wetland function and negative disturbance impact. For any redevelopment which requires planning permission from the Board, an ecological impact assessment would also be required. Wetland compensation is required for any development involving pond filling and mitigation measures against disturbance would be necessary. They would be imposed as part of the planning approval conditions.
- 6.2 Subject to submission of ecological impact assessments, the types of activities which may be considered within the WCA must be related to one of the following uses:

Conservation

- 6.2.1 Land uses in WCA should be devoted to conservation management of the wetland areas such that the integrity of the habitat should be maintained to avoid disturbance and/or fragmentation. Alternative ecologically beneficial uses to existing fish ponds which would perform ecological functions similar to or better than the existing fish ponds to be replaced and be compatible with the conservation objectives of the wetland in Deep Bay Area, such as recreated nature reserve, wetland wildlife reserve for bird watching or sports fishery and aquaculture, would be considered. The proposed use should be appropriate to the rural and wetland setting and be able to enhance the visual and landscape quality of the area. It should not add to the pollution loading of the Deep Bay Area.

Environmental Education

6.2.2 Research and educational uses which will facilitate the public understanding of the ecology and nature conservation of the area would be encouraged. Educationally based facilities, such as nature trails, ecology study centre and field study centre, with controlled access would be considered. The proposed use should be appropriate to the rural and wetland setting and be able to enhance the visual and landscape quality of the area. It should not add to the pollution loading of the Deep Bay Area.

Essential Infrastructure Projects

6.2.3 Essential infrastructure projects needed for public purpose, such as rail, emergency vehicular access and footpath, road, drainage and flood protection project and public utility project, for which no suitable alternative locations outside the WCA could be identified, would also be considered by the Board. However, any such proposed project should include a practical wetland compensation scheme for the consideration of the Board. It should not add to the pollution loading of the Deep Bay Area.

Private-Public Partnership Approach

6.3 While the primary planning intention of the WCA is to conserve the ecological value of fish ponds, if there are strong planning justifications and positive measures to enhance the ecological functions of the existing fish ponds, the Board may consider development with conservation objectives within the WCA under a private-public partnership approach. Having regard to the precautionary principle and the “no-net-loss in wetland” concept, the approach would allow consideration of limited low-density private residential/recreational development at the landward fringe of the WCA in exchange for committed long-term conservation and management of the remaining ponds within the development site. Development of this nature should require minimum pond filling and be located as far away from the Deep Bay and/or adjoining to existing development site. Adherence to the “no-net-loss” principle would be important to ensure no decline in the wetland functions of the fish ponds within the development site and surrounding ponds. Any such development proposal

should be accompanied by an ecological impact assessment with an acceptable and feasible wetland enhancement and management scheme to demonstrate that the development would not result in, or be able to fully compensate for, any loss of the total ecological function of the original ponds on the site and that the development impact can be mitigated. The proposal should also include a mechanism to ensure that the long-term management of the wetland could be practically implemented and monitored. A development proposal of this kind would be carefully scrutinized either through the objection consideration process or by way of a request to rezone the site to “Other Specified Uses (Comprehensive Development and Wetland Enhancement Area)”.

Wetland Buffer Area (WBA)

- 6.4 The intention of the WBA is to protect the ecological integrity of the fish ponds and wetland within the WCA and prevent development that would have a negative off-site disturbance impact on the ecological value of fish ponds. A buffer area of about 500m along the landward boundary of the WCA is thus designated as a WBA. As a substantial amount of the fish ponds within the WBA have already been lost over time through filling and certain areas have been degraded by the presence of open storage use, these degraded areas may be considered as target areas to allow an appropriate level of residential/recreational development so as to provide an incentive to remove the open storage use and/or to restore some of the fish ponds lost.
- 6.5 Within the WBA, for development or redevelopment which requires planning permission from the Board, an ecological impact assessment would also need to be submitted. Development/redevelopment which may have negative impacts on the ecological value of the WCA would not be supported by the Board, unless the ecological impact assessment can demonstrate that the negative impacts could be mitigated through positive measures. The assessment study should also demonstrate that the development will not cause net increase in pollution load to Deep Bay. Some local and minor uses are however exempted from the requirement of ecological impact assessment. They are listed in **Appendix A** and include temporary uses.
- 6.6 Applications for new open storage or container back-up uses including workshops within the WBA, whether temporary or permanent, would normally not be allowed in view of the adverse disturbances of such activities on birds, in

particular for such uses involving filling of contiguous ponds. However, open storage or container back-up uses located close to the Lok Ma Chau crossing and without involving pond filling might be sympathetically considered by the Board in view of the genuine need to facilitate cross-boundary movements of goods in the area.

- 6.7 Proposals for residential/recreational developments on degraded sites to remove/replace existing open storage or container back-up uses and/or to restore lost wetlands may be given sympathetic consideration by the Board subject to satisfactory ecological and other impact assessments. For those disturbed areas directly abutting the WCA, the development should provide a wetland and visual buffer to separate the development from the WCA to minimise its impact on the wetland and to restore some of the lost fish ponds to an appropriate form of wetland adjoining the WCA. Within these degraded areas targeted for upgrading, the following types of activities may be considered:

Wetland Restoration

- 6.7.1 Development proposals to restore lost fish ponds or to replace existing undesirable uses by wetland habitats are encouraged.

Recreation

- 6.7.2 Appropriate recreational use may be considered. Consideration should be given to the compatibility of such use with any adjoining fish pond area and to other planning and environmental implications of the development.

Residential

- 6.7.3 Residential development projects which include replacement of existing open storage and port back-up uses and/or proposals of detailed wetland restoration may be given special consideration subject to satisfactory ecological and other impact assessments. These developments should be compatible with the surrounding land uses and the rural setting of the area.

Ecological Field Investigation

- 6.8 For planning applications requiring ecological impact assessment within either the WCA or the WBA, field investigation normally covering a period of not less than 12 months should be included to provide baseline information of, and to study effects on, existing wildlife habitats, flora and fauna, and their seasonal changes. The exact requirements for the field investigation may depend on the proposed scale and nature of development, and whether any direct loss of fish ponds would be involved. Potential applicants should seek advice from the Agriculture, ~~and~~ Fisheries *and Conservation* Department on the technical requirements for the ecological impact assessment.

Other Planning Considerations

- 6.9 In addition to ecological consideration, other planning considerations including development intensity, compatibility with the surrounding land uses, environmental impact (e.g. noise, air and water qualities), traffic and drainage impacts, provision of infrastructure and visual impact are also important in the assessment of an application within the Deep Bay Area.

TOWN PLANNING BOARD

~~April 1999~~ MAY 2014

Appendix A

List of Uses Exempted from Ecological Impact Assessment Within the Wetland Buffer Area

For planning applications involving uses/development within the Wetland Buffer Area, the following uses/development are exempted from the requirement of ecological impact assessment as part of the submission to the Board :

- Temporary Uses
- Agricultural Use (except in SSSI Zone)
- Ancestral Hall
- Bank#
- Barbecue Spot
- Barber Shop#
- Beauty Parlour#
- Burial Ground
- Clinic/Polyclinic*
- Electricity Substation of single storey
- Government Refuse Collection Point^
- House (Alteration, modification and/or redevelopment to the existing building bulk only)
- New Territories Exempted Houses
- Off-Course Betting centre#
- On-farm Domestic Structure
- Photographic Studio#
- Playground/Playing Field in “V” and “R(D)” zones
- Police Post/Police Reporting Centre
- Post Office*
- Private Club#
- Public Convenience
- Public Library*
- Public Utility Installation (electricity mast, lamp pole, pipeline and telephone booth only)^
- Pumping Station of single storey
- Refreshment Kiosk
- Retail Shop#
- School*

- Showroom excluding Motor-vehicle Showroom#
- Shrine
- Social Welfare Facility*
- Tent Camping Site

Note:

other than free-standing building

* other than free-standing building exceeding 3 storeys

^ not applicable to the “Other Specified Uses” annotated “Eco-lodge” zone on the Ma Tso Lung and Hoo Hok Wai Outline Zoning Plan



SHENZHEN SPECIAL ECONOMIC ZONE

后海灣
(深圳灣)
DEEP BAY
(Shenzhen Wan)



圖例
LEGEND

- 濕地保育區界線
BOUNDARY OF
WETLAND CONSERVATION AREA
- 濕地緩衝區界線
BOUNDARY OF
WETLAND BUFFER AREA

后海灣濕地保育及緩衝區界線
DEEP BAY
WETLAND CONSERVATION AND
BUFFER AREAS BOUNDARIES

規劃署城市規劃委員會組
TOWN PLANNING BOARD SECTION
PLANNING DEPARTMENT

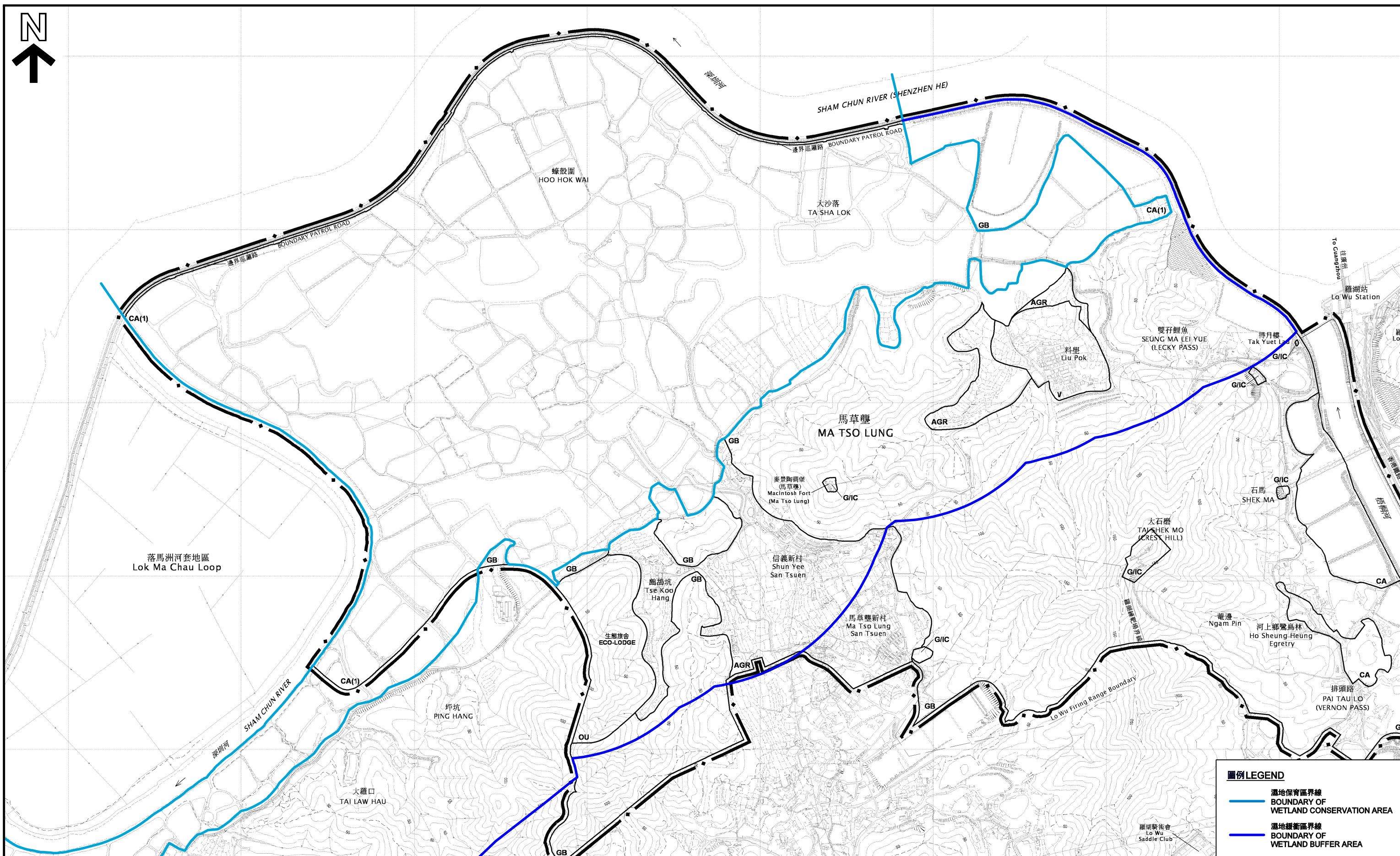
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日期: 29/1/2014
Date:



圖號
Figure

A



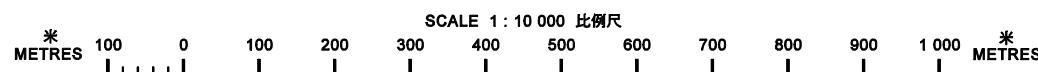
圖例 LEGEND

- 濕地保育區界線
BOUNDARY OF WETLAND CONSERVATION AREA
- 濕地緩衝區界線
BOUNDARY OF WETLAND BUFFER AREA

本摘要圖於2014年5月13日擬備，
所根據的資料為於2013年12月20日
展示的分區計劃大綱圖編號S/NE-MTL/2

EXTRACT PLAN PREPARED ON 13.5.2014
BASED ON OUTLINE ZONING PLAN No.
S/NE-MTL/2 EXHIBITED ON 20.12.2013

節錄自馬草壟及蠔殼圍分區計劃大綱草圖編號S/NE-MTL/2
EXTRACT OF THE DRAFT MA TSO LUNG AND HOO HOK WAI OUTLINE ZONING PLAN NO. S/NE-MTL/2



規劃署城市規劃委員會組
TOWN PLANNING BOARD SECTION
PLANNING DEPARTMENT



參考編號
REFERENCE No.
M/TPB/2014/13

圖 PLAN
1



本摘要圖於2014年5月13日擬備，
所根據的資料為地政總署的正射影像(2011年)

EXTRACT PLAN PREPARED ON 13.5.2014
BASED ON ORTHOPHOTO (YEAR 2011) PREPARED
BY LANDS DEPARTMENT

航攝照片 AERIAL PHOTO

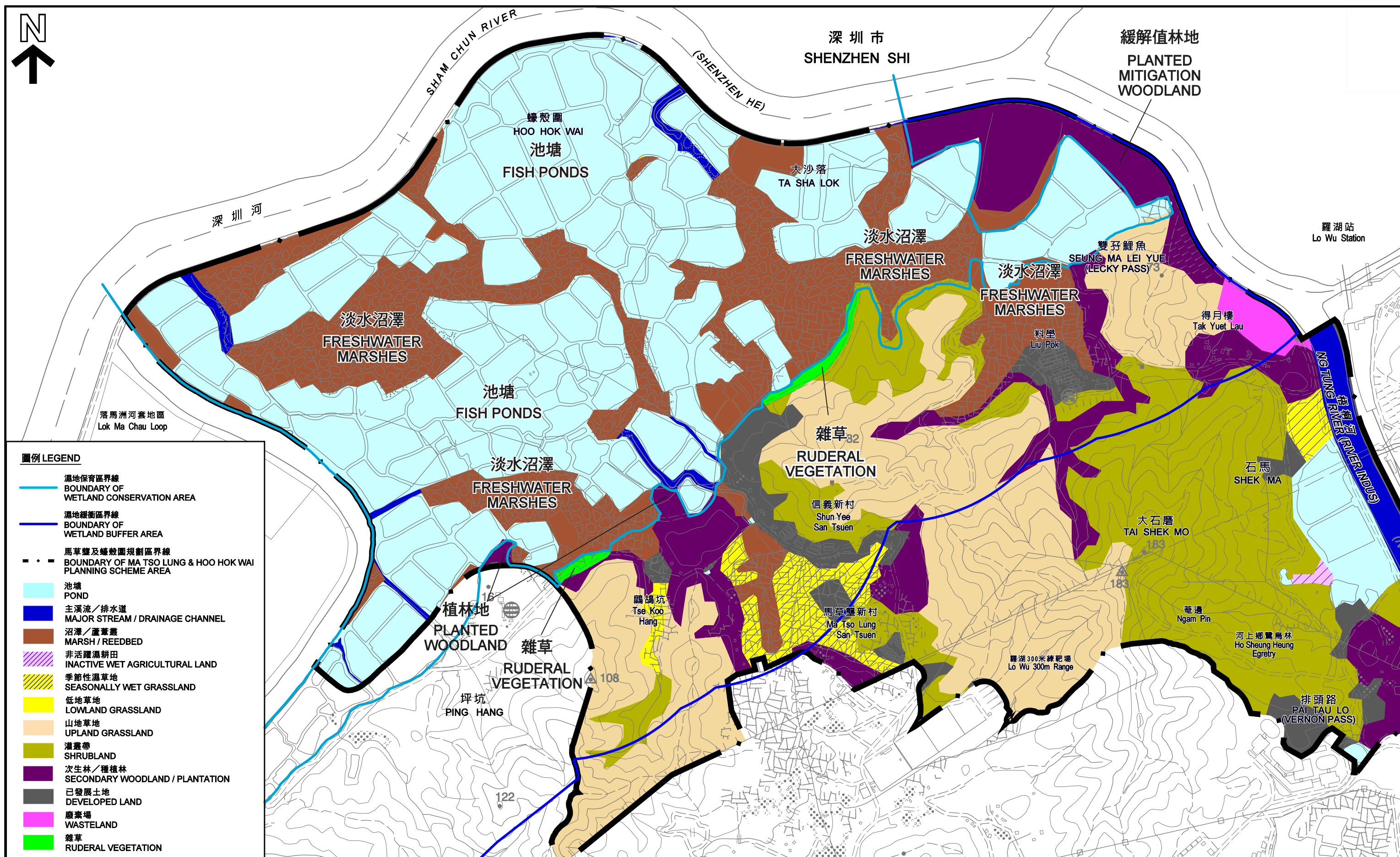
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DRAFT MA TSO LUNG AND HOO HOK WAI OUTLINE ZONING PLAN NO. S/NE-MTL/2

規劃署城市規劃委員會組
TOWN PLANNING BOARD SECTION
PLANNING DEPARTMENT



參考編號
REFERENCE No.
M/TPB/2014/13

圖 PLAN
2



本摘要圖於2014年5月13日擬備，
所根據的資料為於2013年12月20日
展示的分區計劃大綱圖編號S/NE-MTL/2

EXTRACT PLAN PREPARED ON 13.5.2014
BASED ON OUTLINE ZONING PLAN No.
S/NE-MTL/2 EXHIBITED ON 20.12.2013

蠔殼圍之生境地圖 HABITAT MAP OF HOO HOK WAI

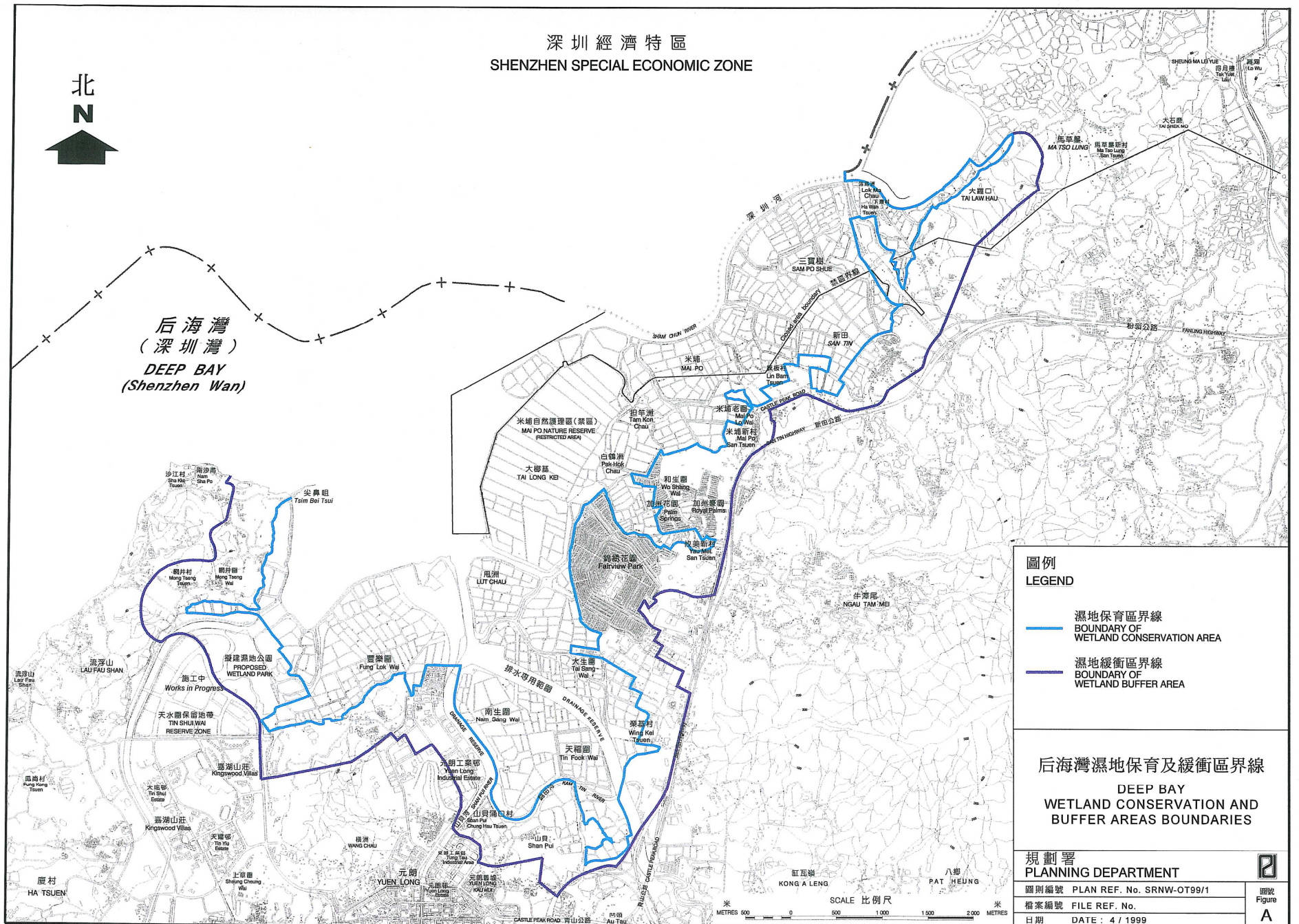
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PLANNING DEPARTMENT

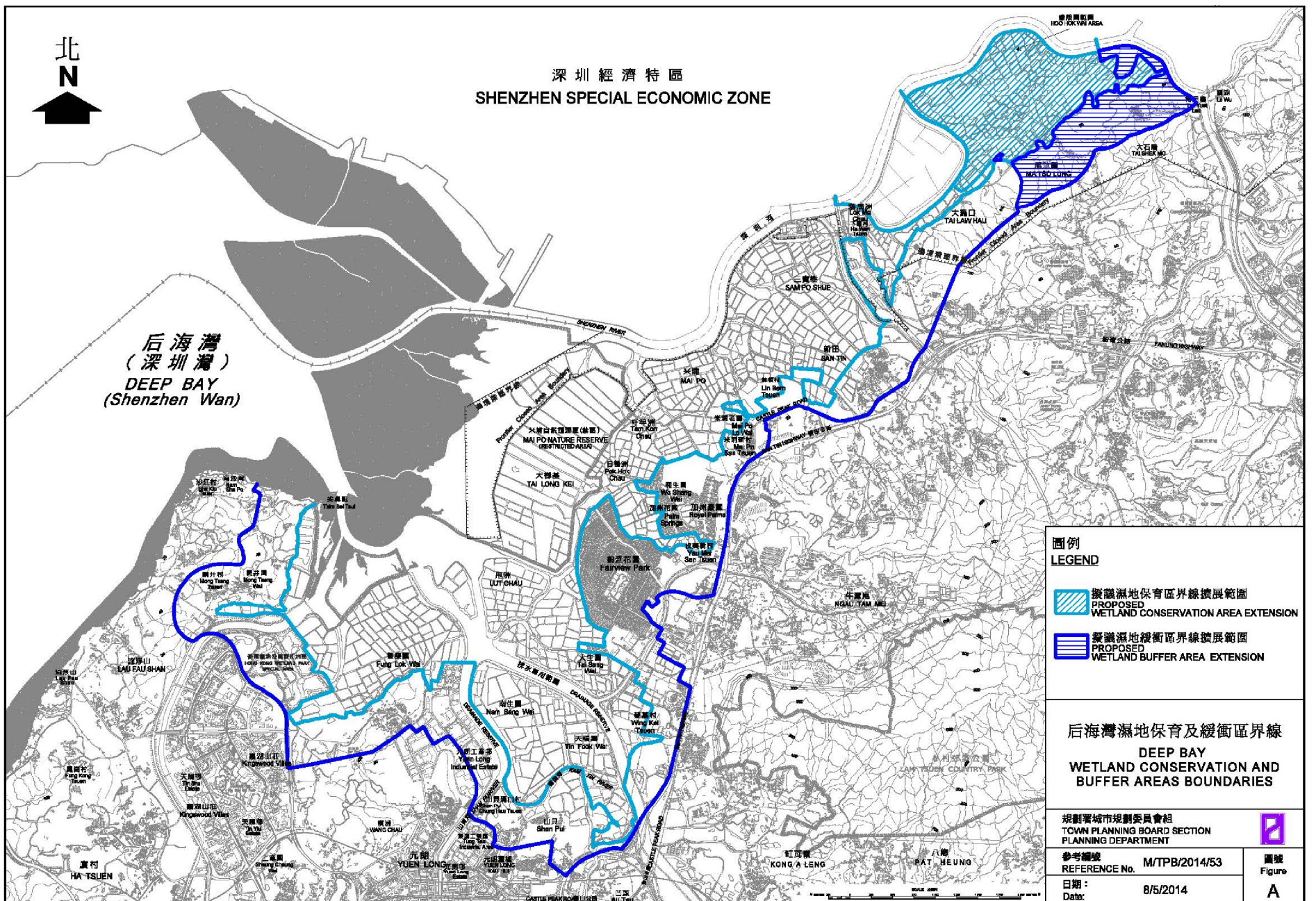


參考編號
REFERENCE No.
M/TPB/2014/13

圖 PLAN
3



現有的濕地保育區界線和濕地緩衝區界線
THE EXISTING BOUNDARY OF WETLAND CONSERVATION AREA AND WETLAND BUFFER AREA



擬議的濕地保育區界線和濕地緩衝區界線
THE PROPOSED BOUNDARY OF WETLAND CONSERVATION AREA AND WETLAND BUFFER AREA

本摘要圖於 2014 年 5 月 8 日擬備，
所根據的資料為圖則編號 SRNW-OT99/1 及
M/TPB/2014/53

EXTRACT PLAN PREPARED ON 8.5.2014
BASED ON PLANS No. SRNW-OT99/1 AND
M/TPB/2014/53

現有及擬議濕地保育區界線和濕地緩衝區界線的比較

COMPARISON OF THE EXISTING AND PROPOSED BOUNDARY OF WETLAND CONSERVATION AREA AND WETLAND BUFFER AREA

規劃署城市規劃委員會組
TOWN PLANNING BOARD SECTION
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/TPB/2014/13

圖 PLAN
4