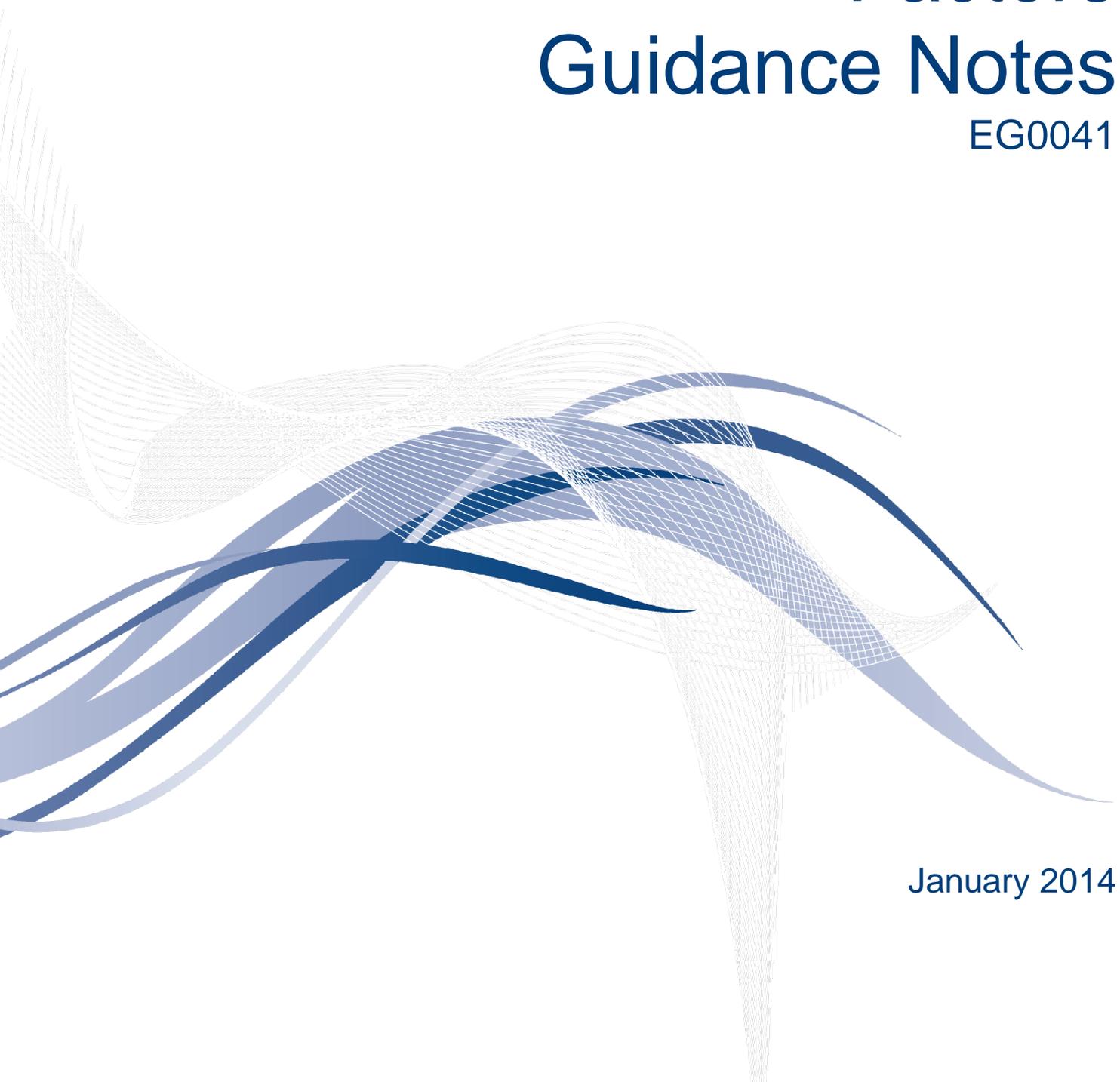




HUNTER WATER CORPORATION

Review of Environmental Factors Guidance Notes

EG0041



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PART A

REF Preparation Process

1 Purpose of the Guidance Notes

This document is to be used to provide guidance for the preparation of a Review of Environmental Factors (REF) under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). It provides minimum requirements and an example template for the preparation of a REF.

Hunter Water is prescribed as a State Owned Corporation by Schedule 5 of the State Owned Corporations Act (1989) and is classified as a public authority under section 4 of the Environmental Planning and Assessment Act, 1979. The State Environmental Planning Policy (Infrastructure) 2007 (iSEPP) was introduced to facilitate the delivery of infrastructure across the State by improving regulatory certainty and efficiency. The iSEPP defines which activities can be self assessed and determined by public authorities under Part 5 of the EP&A Act.

Prior to the approval for any activities to which Part 5 applies, Hunter Water will require a REF be submitted for approval. A REF considers the likely impacts an activity may have on the environment and will assist Hunter Water to make a determination on whether the works should proceed.

Part A of this document provides an overview of the REF process and Part B provides an example REF structure and requirements to be addressed in the REF.

2 Scope of these Guidance Notes

In order to demonstrate due diligence and comply with the requirements of the EP&A Act (1979) a REF may be required for developer works that involves construction or upgrade of water or wastewater services. Generally this would apply to activities located outside of an approved development disturbance boundary.

The general works to which these guidance notes apply include, but may not be limited to the following:

- Construction of new water or sewer mains.
- Extension, replacement, relocation or upgrade of water or sewer mains.
- Construction of wastewater pumping stations.
- Construction of water pumping stations.
- Construction of directed wastewater overflow structures.
- Construction of water tanks / reservoirs.

Hunter Water may however, require an REF for activities within an approved development boundary if it is considered that there are high risks of environmental impact. Examples of when this may occur are creek crossings, new wastewater pumping stations or when it cannot reasonably be demonstrated that the environmental impacts of the proposed infrastructure has been considered in the development application (DA) process.

3 Planning for Preparation of Review of Environmental Factors

Before commencing the preparation of a REF, consultation with Hunter Water should be carried out to discuss requirements. A Hunter Water Environmental Planner will be able to provide advice regarding consultation requirements and level of assessment required including if specialist assessments are needed. Early consultation with Hunter Water may avoid unnecessary time and costs in the preparation of the REF.

The REF must clearly demonstrate that the proponent has identified all environmental impacts of a proposal and mitigation measures to minimise impacts. The REF must also be appropriate to the nature and scale of the proposal and must be specific to the proposed water or wastewater works and not the related development. For example, related studies for the adjacent development may be used to support an assessment but specialist studies must cover the entire location of the proposed works.

All REFs submitted to Hunter Water in support of an application for approval of an activity must comply with the REF content requirements set out in the following sections of these guidelines. Submissions that do not comply with the guidelines may be rejected or may require revision.

The contents and level of assessment required in a REF will vary greatly depending on the nature of a proposal and the location. Therefore Hunter Water should be consulted prior to the preparation of a REF to confirm project specific requirements.

4 Determination of Review of Environmental Factors

Following the completion of the Part 5 assessment process, Hunter Water will review the REF and provide comments on the content. If the REF does not meet the Hunter Water requirements subsequent revisions may be required.

If all the requirements are met, Hunter Water will issue a formal letter to confirm approval of the REF. The formal letter of approval will contain specific conditions to be met by the approval holder. These conditions will require compliance along with any other commitments outlined in the REF.

If works are anticipated to commence 12 months after the initial approval, it is a requirement that a review of the REF be undertaken to ensure there have been no changes to legislation or the scope of works during that period. If the REF is still relevant the approval will be renewed. If changes have occurred and further assessment is required, Hunter Water will advise on what is required to obtain a new approval.

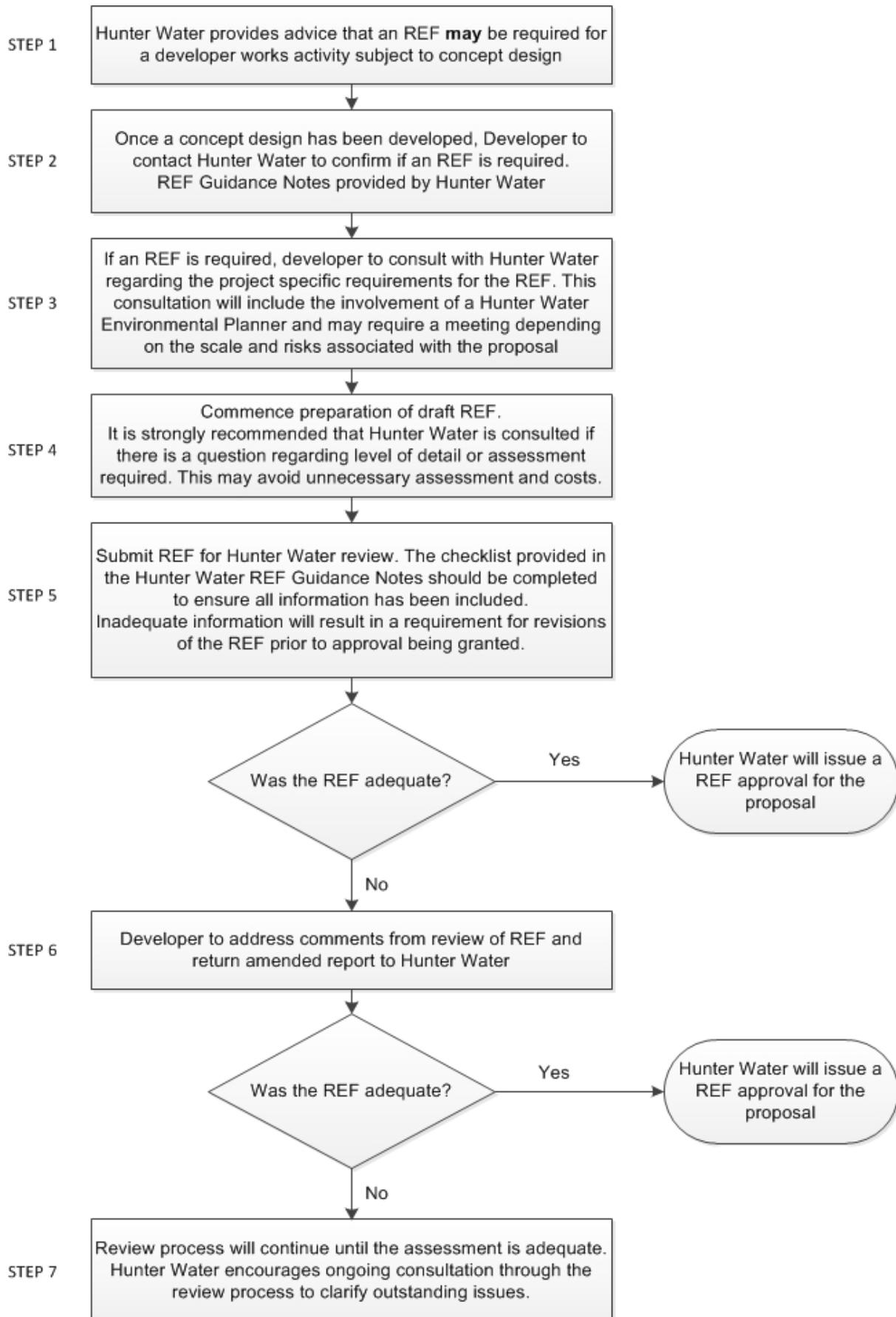
Subsequent reviews of the REF may also be required if the works are to be undertaken in a staged approach (e.g. residential subdivision).

Irrespective of the contents of the REF and approval, it is the responsibility of those carrying out the activity to ensure compliance with all legislative and regulatory requirements including any changes subsequent to approval.

5 Scope Change Management

A change in the scope of the approved activities may require further assessment and approval by Hunter Water. The REF must outline how changes to the scope will be managed in the event that the methodology, approach or other aspects of the development are changed.

6 REF preparation process



Part B

REF Structure and Guidance Notes

Instructions on the use of Part B of these Guidance Notes

Structure:

The table of contents below provides an example of a REF structure. This structure is optional, however, if a different structure is used the information must still be included.

The requirements for each section are provided under each heading below. These headings may be used as a template for the REF.

Required information:

Guidance on the information required for each section is described in the grey boxes. These boxes are not to be included in a REF, they are for information and guidance only. Any text not in a grey box must be included in the REF.

The level of information to be included is dependent on the scale of the project. The level of information provided in the REF should be appropriate for the potential environmental impacts, irrespective of the scale of the development.

Note: the information provided can be brief but must answer the questions where relevant and provide the reason and justification for that answer, e.g. "No threatened flora species will be impacted because the site is completely clear of vegetation."

REF content:

At the discretion of Hunter Water, additional content requirements may be applied to specific activities or circumstances.

If in doubt about any aspect of the REF process or what is required, please contact Hunter Water for more information.

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1 Introduction

1.1 Proposal identification

A brief introduction to the proposal is to be provided in this section. This section must explain the context of the proposal, any development associated with the proposal, and the consent status of that development.

The key components should be mentioned. This may be in dot point form. Further detail as to the design and construction methodology will be provided in Section 3.

This section must include a figure showing the location of the proposal. Key points of interest in the vicinity of the proposal should be labelled (e.g. schools, creeks, and development boundaries). The land tenure of any land that will be impacted or used for access must be identified.

1.2 Purpose of the report

This section should include the following:

- Identify who has prepared the report.
- Identify on behalf of who the report was prepared.
- Identify who the proponent and the determining authority are.
- Define the purpose of the REF.

2 Proposal need and justification

The REF must include the justification for the proposal. This will describe why the proposed development was chosen and what other options were considered and assessed. The objectives of the proposal should be clearly stated. The objectives need to be realistic and capable of being accomplished within the construction timeframe.

A following is a typical chapter structure for this section:

2.1 Objectives of the proposal

2.2 Existing water/wastewater infrastructure

2.3 Options considered

2.4 Preferred option justification

The justification must be clearly set out and show consideration of the principles of ecologically sustainable development, which is required to satisfy the objects of the EP&A Act.

This section may be very simple for a minor proposal (e.g. 40m watermain extension for a minor lot subdivision). If so, this may be brief and there is no need to use the subheadings. If there were no other options other than the proposal and 'do nothing', then this should just be clearly stated.

For a more complex proposal, options that were considered should be described and the reasons for choosing the preferred option provided. The option selection should take into account environmental impacts as well as other considerations such as costs and constructability.

3 Description of the proposal

3.1 Scope of works

This section of the REF is to include a comprehensive description of each aspect of the scope of works.

This section of the REF must include a site plan. The site plan must include, as a minimum, the layout of the proposed activity, access routes, existing structures and infrastructure, environmentally sensitive areas, topographic contours, Lot/DP numbers and boundaries, scale and orientation.

Additional plans, diagrams and photographs (including aerial imagery where available) may also be provided where these will assist in describing the activity.

3.1 Construction activities

The following construction related information is to be included in the REF, where applicable:

- Description of pre-construction, construction, and remediation activities.
- Construction footprint and surface disturbance area, including access tracks.
- Construction methods, materials and equipment.
- Any earthworks or site clearing, including extent and area of vegetation to be removed and rehabilitated.
- Sustainability measures including choice of materials (such as recycled content) and water and energy efficiency.
- Estimate of on-site employee or contractor numbers.
- Preparation of a Construction Management Environmental Plan (CEMP).

3.2 Operational requirements

The REF needs to outline any operational related management requirements, maintenance or inspection activities, future extensions or additions required by the proposal.

3.3 Timing and staging

The REF needs to clearly state the construction timetable and staging, as well as construction hours. Hours of construction for the proposal need to be in accordance with the *Interim Construction Noise Guideline (DECC, 2009)*. If works are required outside of the standard working hours it must be clearly justified and appropriate control measures identified.

3.4 Ancillary facilities and access

The following information regarding ancillary facilities need to be outlined if applicable to the proposal:

- The location of site compound/s.
- Detail regarding storage, and on site management for materials used in construction.
- Stockpile areas for materials and topsoil.
- Additional signage (including any temporary signs, banners or structures), roads, infrastructure and bush fire hazard reduction, if applicable.

If the exact locations of the above are unknown, limitations on the areas that will be selected need to be described. For example, compound locations will be located in previously cleared areas and will not require any disturbance of the ground surface etc.

4 Statutory framework

This section of the REF is to identify the relationship between the proposal and the planning framework. The section should address Environmental Planning Instruments, NSW legislation and Commonwealth legislation that is applicable to the projects.

4.1 Environmental Planning Instruments

The EP&A Act provides for the creation and implementation of State Environment Planning Policies (SEPPs) and Local Environment Plans (LEP). Collectively they are referred to as Environmental Planning Instruments (EPIs) and can be used to determine whether an activity is permissible.

To determine whether an activity is permissible you must look at the provisions of the SEPPs that apply to the site including the zonings that may apply with the LEP. The REF must identify SEPPs and LEPs relevant to the proposal, which may include but not be limited to, the following:

SEPP (Infrastructure) 2007.	SEPP 19 Bushland in Urban Areas.
SEPP 14 Coastal Wetlands.	SEPP 26 Littoral Rainforest.
SEPP 44 Koala Habitat Protection.	SEPP 71 Coastal Protection.
SEPP 55 Remediation of Land	

4.2 NSW and Commonwealth legislation

The REF must address other relevant legislation and make an assessment as to whether the legislation applies to the proposal. Other legislative requirements include, but are not limited to, the following:

<i>Environment Protection and Biodiversity Conservation Act 1999</i>	<i>Water Management Act 2000</i>
<i>Protection of the Environment Operations Act 1997</i>	<i>Waste Avoidance and Resource Recovery Act 2011</i>
<i>Threatened Species Conservation Act 1995.</i>	<i>Roads Act 1993</i>
<i>Heritage Act 1977</i>	<i>Water Act 1912</i>
<i>National Parks and Wildlife Act 1974</i>	<i>Hunter Water Act 1991</i>

This section must include a summary of any additional approvals required such as a controlled activity approval, approval under the Roads Act or dewatering licence. This also includes any requirements for an Environmental Protection Licence (EPL).

Note:

Hunter Water holds EPL's for its wastewater treatment works under the *Protection of the Environment Operations Act 1997*. The scope of these licences includes wastewater pumping stations and there are specific requirements that must be addressed for any new proposed directed overflow structures. If this is included in the scope of the proposal, the licence requirements must be addressed in the REF.

5 Stakeholder and community consultation

A number of stakeholders and government authorities may need to be consulted. This may include notifications and submissions made to Local Council or government authorities and consultation and/or notification undertaken with the local community or affected landowners.

The level of consultation must be appropriate to the scale and potential impacts of the development. Larger developments or projects may attract significant community interest and therefore broader community consultation would be required prior to submission of a REF.

Consultation may be required by Hunter Water or it may be a statutory requirement. Where consultation is required the information below should be included in the REF.

- Details of any consultation undertaken (evidence of consultation such as letters sent and received to be provided as an appendix to the REF).
- Details of comments received and response or the location in the REF where these were addressed (e.g. erosion controls addressed in Section X.X).
- Ongoing consultation arrangements during the construction and operational phases if required.
- Stakeholder management procedures, if applicable (may be relevant for larger scale developments).

The statutory requirements must also be followed including notification periods. Note that where Council consultation is required, this must be done specifically for the proposal, and in addition to any consultation or DA undertaken for a development

5.1 Community consultation

In preparing a REF, consultation with the following community groups must be considered and undertaken. Details of the consultation and outcomes are to be included in the REF.

- Adjoining, and/or affected, landholders.
- Local Aboriginal communities (if indicated as required by the due diligence process as per Section 6.7).
- The general community.

5.2 Government agency and other stakeholder consultation

Use the table below as a checklist of considerations for this section. This table should be included in the REF. If the answer is yes to any questions further detail and evidence of consultation is required.

Consultation with Council – clause 13, Council related infrastructure or services	Yes	No
Will the works:		
potentially have a substantial impact on stormwater management services provided by council?		
be likely to generate traffic that will strain the capacity of the LGA road system?		
involve connection to, and have a substantial impact on, the capacity of a sewerage system owned by council?		
involve connection to and use a substantial volume of water from a water supply system owner by council?		

involve installation of a temporary structure on, or enclosing, a public space under council's control that will cause a disruption to pedestrian or vehicular traffic that is not minor?		
Involve excavation of the surface of, or a footpath adjacent to, a road for which the council is the roads authority that is not minor or inconsequential?		
Consultation with council – clause 14, local heritage	Yes	No
Are the works likely to have an impact on a local heritage item (that isn't also a State heritage item) or a heritage conservation area that is not minor or inconsequential?		
Consultation with Council – flood liable land	Yes	No
Will the works be located on flood liable land and will they alter flooding patterns more than to a minor extent?		
Consultation with other public authorities	Yes	No
Will the proposal be located on land adjacent to land reserved under the <i>National Parks and Wildlife Act 1974</i> ?		
Will the proposal be adjacent to a marine park declared under the <i>Marine Parks Act 1997</i> ?		
Will the proposal be adjacent to an aquatic reserve declared under the <i>Fisheries Management Act 1994</i> ?		
Will the development involve a fixed or floating structure in or over navigable waters?		

6 Environmental assessment

Instructions for use of this section

The REF must include an assessment of the impacts of the proposal on the environment. Specific environmental aspects that must be addressed in the REF are set out under individual headings in this section. **Please consult with Hunter Water if in doubt about the level of detail required as this can vary greatly between project types.**

The questions under each section are to be used as prompts for the information to be provided. Where the answer to a question is yes, a description of the existing environment and potential impacts is required and measures to control the impacts included. If details are not provided a determination of the appropriateness of the assessment cannot be made.

The information provided does not have to be limited to these questions and it is the responsibility of the proponent to include any additional relevant information in order to carry out a full assessment.

In some cases specialist advice/investigations may be required. This will depend on the nature of the works and existing environment. If in doubt as to when input may be required please contact Hunter Water.

The assessment needs to consider impacts during all phases of the activity including site preparation, construction, operation, rehabilitation, and decommissioning if relevant. Depending on the proposal some activities may not have any potential impacts in some areas of assessment. If this is the case, please outline that no potential issues were identified and the details of any investigations undertaken, if applicable.

Where a particular standard or guideline is required to be followed, this information is provided in each section below.

Content requirement

For each environmental aspect the following need to be addressed:

- Existing environment. Described the nature of the aspect at the time of REF preparation. Where appropriate details from specialist reports describing the nature of the environment should be included (e.g. vegetation types and condition).
- Impact assessment outlining the environmental impacts of the proposed development during construction and operation phases.
- Mitigation measures. These are the controls that will be implemented during the construction and operation. Controls should be relevant to the impacts identified. If an impact is not identified, control measures should not be included.

6.1 Soils and geology

Use the table below as a checklist of considerations for this section. Do not include this table in the REF. It is a guide only and the information can be presented in a format appropriate to the specific proposal (e.g. tabulated, dot points, or text). If the answer is yes to any questions further detail is required.

Questions to consider include	Yes	No
Will the works require excavation? (if yes refer to note 1)		
Are the works within a landslip area?		
Are the works within an area of high erosion potential?		
Could the works disturb any natural cliff features, rock outcrops or rock shelves?		
Will the works result in permanent changes to surface slope or topography?		
Are there acid sulphate soils within or immediately adjacent to the boundaries of the work area? And could the works result in the disturbance of acid sulphate soils? (if yes refer to note 2)		
Are the works within an area affected by salinity?		
IS there potential for the works to encounter any contaminated material?		

Note 1:

Depending on the area of ground that will be disturbed an Erosion and Sediment Control Plan or a Soil and Water Management Plan may be required during construction. Information regarding which is applicable and the requirements can be found in the Blue Book (reference below). These plans are not required as part of the REF but should be mentioned as a requirement.

Note 2:

If Acid Sulphate Soils will or may be disturbed an Acid Sulphate Soil Management Plan will be required to be prepared prior to construction in accordance with the Acid Sulphate Soil Manual (ASSMAC, 1998). This plan is not required as part of the REF but should be mentioned as a requirement.

Information sources

- Acid sulphate soils - <http://www.environment.nsw.gov.au/acidsulfatesoil/riskmaps.htm>
- Erosion and sediment control - *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004) (the Blue Book).

6.2 Hydrology, flooding and water quality

Use the table below as a checklist of considerations for this section. Do not include this table in the REF. It is a guide only and the information can be presented in a format appropriate to the specific proposal (e.g. tabulated, dot points, or text). If the answer is yes to any questions further detail is required.

Questions to consider include	Yes	No
Are the works located on the bank of a natural watercourse?		
Do the works involve a creek crossing?		
Are the works located within a floodplain?		
Does the proposal involve the diversion of a creek?		
Will the works intercept groundwater?		
Will a licence under the <i>Water Act 1912</i> or the <i>Water Management Act 2000</i> be required? Will a Controlled Activity Approval be required?		
Could the works impact upon a water catchment area? Do any of the work areas drain directly to areas within the Hunter Water special areas?		
Could the works result in a discharge/overflow of sewage?		
Will pipe flushing activities result in potable water being discharged to a waterway?		

Information sources

- NSW Office of Water approvals - <http://www.water.nsw.gov.au/Water-Licensing/Approvals/default.aspx>

6.3 Ecology

Use the table below as a checklist of considerations for this section. Do not include this table in the REF. It is a guide only and the information can be presented in a format appropriate to the specific proposal (e.g. tabulated, dot points, or text). If the answer is yes to any questions further detail is required.

Questions to consider include	Yes	No
Could the works affect any <i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i> listed threatened species, ecological community or migratory species? (refer to note 1)		
Could the works affect any <i>Threatened Species Conservation Act (1995)</i> listed threatened species, populations or ecological communities? (refer to note 2)		
Could the works affect a National Park or reserve administered by the Office of Environment and Heritage?		
Is there any important vegetation or habitat (i.e. SEPP14 Urban Bushland, SEPP 14 Wetlands, SEPP 26 Littoral Rainforest) within or adjacent to the work area?		
Could the works impact on any aquatic flora or habitat (i.e. seagrasses, mangroves)?		
Are there any noxious or environmental weeds present within the work area?		
Will clearing of native vegetation be required? (if yes refer to note 3)		

Note 1:

Department of Environment Protected Matters Search tool

(<http://www.environment.gov.au/topics/about-us/legislation/environment-protection-and-biodiversity-conservation-act/protected>)

Note 2:

Office of Environment and Heritage Wildlife Atlas database

(http://www.environment.nsw.gov.au/atlaspublicapp/UI_Modules/ATLAS_/AtlasSearch.aspx)

Note 3:

If native vegetation is to be cleared or modified the REF must include the following:

- The total area of plants or vegetation communities to be cleared or modified and the species.
- Whether the vegetation provides important habitat for native species including threatened species (e.g. hollow-bearing trees, roosting sites etc.), and if so the area, condition and value of the habitat
- Whether an Endangered Ecological Community (EEC) may be affected and if so the area, condition and value of the community.
- The likely response of the species, population or vegetation community to the type of disturbance proposed.
- An Assessment of Significance (seven part test) in accordance with S.5A of the EP&A Act is required for any threatened species, population, ecological community or their habitats related to the site. This must be appended.
- Figures clearly showing the area of disturbance including access roads, construction corridors and mapped flora and fauna details.

6.4 Noise and vibration

Use the table below as a checklist of considerations for this section. Do not include this table in the REF. It is a guide only and the information can be presented in a format appropriate to the specific proposal (e.g. tabulated, dot points, or text). If the answer is yes to any questions further detail is required.

Questions to consider include	Yes	No
Are there residential properties or other sensitive land uses or areas that may be affected by noise from the proposal during construction? (i.e. schools, nursing homes, residential areas or native fauna populations)?		
Will any receivers be affected by noise for greater than three weeks? (if yes refer to note 1)		
Are there sensitive land uses or areas that may be affected by noise from the proposal during operation? (if yes refer to note 2)		
Will the works be undertaken during standard working hours? Monday – Friday: 7am to 6pm Saturday: 8am to 1pm Sunday and public holidays: no work		
Will the works result in vibration being experienced by any surrounding properties or infrastructure? (if yes refer to note 3)		

Note 1:

The assessment of construction noise impacts must be carried out in accordance with the *Interim Construction Noise Guidelines (DECC 2009)*. If sensitive receivers will be impacted for greater than 3 weeks a quantitative assessment is required.

Note 2:

The assessment of operational noise impacts must be in accordance with the *NSW Industrial Noise Policy (DECC, 1999)*.

Note 3:

Potential impacts from vibration during construction and/or operation must be quantified. Refer to *Assessing Vibration: a technical guideline (DEC, 2006)*

6.5 Air quality and energy

Use the table below as a checklist of considerations for this section. Do not include this table in the REF. It is a guide only and the information can be presented in a format appropriate to the specific proposal (e.g. tabulated, dot points, or text). If the answer is yes to any questions further detail is required.

Questions to consider include	Yes	No
Could the works result in dust generation?		
Could the works generate odours (during construction or operation)?		
Will the works involve the use of fuel-driven heavy machinery or equipment?		
Are the works located in an area or adjacent to land uses that may be highly sensitive to dust, odours, or emissions? (e.g. schools, hospitals, nursing homes)		
Have energy use considerations been included in the project design?		

6.6 Non-Aboriginal heritage

Use the table below as a checklist of considerations for this section. Do not include this table in the REF. It is a guide only and the information can be presented in a format appropriate to the specific proposal (e.g. tabulated, dot points, or text). If the answer is yes to any questions further detail is required.

Questions to consider include	Yes	No
Are there any heritage items listed on the following registers within or in the vicinity of the work area (see note 1): <ul style="list-style-type: none">• NSW heritage database (includes section 170 and local items)• Commonwealth EPBC heritage list		
Will works occur in areas that may have archaeological remains?		

Note 1:

Items of state or local heritage significance listed on the State register, a government agency Section 170 register or in a Councils Local Environment Plan can be searched for on the State Heritage Register located at <http://www.environment.nsw.gov.au/heritageapp/heritagesearch.aspx>.

6.7 Aboriginal heritage

Use the table below as a checklist of considerations for this section. Do not include this table in the REF. It is a guide only and the information can be presented in a format appropriate to the specific proposal (e.g. tabulated, dot points, or text). If the answer is yes to any questions further detail and/or assessment is required.

Questions to consider include	Yes	No
Will the works result in ground disturbance? (if yes see note 1)		
Will the works disturb any culturally modified trees? (if yes see note 1)		
Are there any <u>known</u> items of Aboriginal heritage located in the works area or in the vicinity of the works area? (see note 2)		
Are there any other sources of information that indicate Aboriginal objects are likely to be present in the area (e.g. previous studies or reports from related projects)?		
Will the works occur in the location of one or more of these landscape features and is on land not previously disturbed? (if yes see note 1) <ul style="list-style-type: none"> • Within 200m of waters. • Located within a sand dune system. • Located on a ridge top, ridge line or headland. • Located within 200m below or above a cliff face. • Within 20m of or in a cave, rock shelter or a cave mouth. 		

Note 1

A due diligence assessment to assess the likelihood of Aboriginal heritage impacts must be carried out. The minimum requirements for a level 1 due diligence assessment is outlined in the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (OEH 2010)*. The questions above are in line with this document and you should refer to the Code of Practice to ensure all requirements are met. The outcomes of the questions may determine further assessment and site inspections are required. If this is the case the REF must describe the investigations undertaken and the outcomes. Any specialist report must be appended.

Note 2

A search of the online Aboriginal Heritage Information Management System is mandatory for any works that will disturb the ground. This includes access tracks or compound sites. The search results must be appended to the REF.

Note 3

Hunter Water has developed a template for preparing a due diligence assessment. This shows the minimum standard required. If you would like to refer to, or use this template please contact Hunter Water.

6.8 Visual amenity

Use the table below as a checklist of considerations for this section. Do not include this table in the REF. It is a guide only and the information can be presented in a format appropriate to the specific proposal (e.g. tabulated, dot points, or text). If the answer is yes to any questions further detail is required.

Questions to consider include	Yes	No
Are the works visible from residential properties or other land uses that may be sensitive to visual impacts? (see note 1)		
Are the works located in areas of high scenic value? (see note 1)		
Will the works involve night work requiring lighting? (see note 2)		

Note 1:

Affected residents/businesses/land owners must be consulted with and issues considered during the project design phase.

Note 2:

Notification must be given to local residences prior works being undertaken.

6.9 Traffic and access

Use the table below as a checklist of considerations for this section. Do not include this table in the REF. It is a guide only and the information can be presented in a format appropriate to the specific proposal (e.g. tabulated, dot points, or text). If the answer is yes to any questions further detail is required.

Questions to consider include	Yes	No
Are the works located in a Roads and Maritime Services (RMS) road reserve? (see note 1)		
Will the works affect traffic or access on any local or regional roads? (see note 1)		
Will the works disrupt access to private properties? (see note 2)		
Are there likely to be any difficulties associate with site access?		
Are the works located in an area that may be highly sensitive to movement of vehicles or machinery to and from the work site (i.e. schools, quiet streets)? (see note 2)		
Will full or partial road closures be required? (see note 1)		

Note 1:

A Traffic Management Plan is required to be prepared if the activity is likely to impact on the operational efficiency of the road network. Refer to the Roads and Maritime Authority and AS1742 Set - Manual of uniform traffic control devices Set for more information.

Note 2:

Notification must be given to local residences prior works being undertaken.

6.10 Land uses and services

Use the table below as a checklist of considerations for this section. Do not include this table in the REF. It is a guide only and the information can be presented in a format appropriate to the specific proposal (e.g. tabulated, dot points, or text). If the answer is yes to any questions further detail is required.

Questions to consider include	Yes	No
Will the works result in a loss of or permanent disruption of an existing land use?		
Will the works involve the installation of structures or services that may be perceived as objectionable or nuisance?		
Will the works involve the disturbance or removal of asbestos?		
Is the work site located on land that is known to be or is potentially contaminated?		
Will the works impact on or be in the vicinity of other services? (see note 1)		

Note 1:

A Dial Before You Dig must be undertaken prior to any works commencing in order to locate buried services. If works are to be undertaken below power lines refer to Ausgrid Guidelines NS 209 Operating Cranes and Plant in Proximity to Power Line. If works are to be undertaken within the vicinity of Telstra pits refer to the Network Integrity Help Desk on 1800 653 935.

6.11 Waste generation

Use the table below as a checklist of considerations for this section. Do not include this table in the REF. It is a guide only and the information can be presented in a format appropriate to the specific proposal (e.g. tabulated, dot points, or text). If the answer is yes to any questions further detail is required.

Questions to consider include	Yes	No
Will works result in the generation of non-hazardous waste?		
Will the works result in the generation of hazardous waste?		
Will the works result in the generation of wastewater requiring offsite disposal?		

Note:

All waste in NSW must be classified per NSW EPA guidelines and may only be disposed of at a licensed waste facility – the REF should estimate the main types of waste that may be generated and specify options or requirements for handling and disposal.

6.12 Cumulative impacts

Use the table below as a checklist of considerations for this section. Do not include this table in the REF. It is a guide only and the information can be presented in a format appropriate to the specific proposal (e.g. tabulated, dot points, or text). If the answer is yes to any questions further detail is required.

Questions to consider include	Yes	No
Will the same receiver experience different impacts (e.g. combined effects of noise and visual impacts resulting in an overall significant impact)?		
Will there be a combination of impacts from other projects in the vicinity (e.g. traffic impacts from the proposal and residential development works combining to result in an overall significant impact)?		

7 Summary of mitigation measures

Include a summary table of environment mitigation measures for impacts identified in the assessment section. Using the template below identify the aspect, timing, mitigation measure/control monitoring requirements and responsibility for ensuring the actions are carried out.

These controls are to be included in the Construction Environment Management Plan (CEMP) for implementation during the works.

Aspect	Mitigation measure	Timing	Responsibility
E.g. soils and geology	E.g. an erosion and sediment control plan will be prepared	Pre-construction	Project Manager
	E.g. erosion and sediment control to be undertaken in accordance with the Blue Book – Managing Urban Stormwater: Soils and Construction	Site preparation and construction	Site supervisor

8 Conclusion

The REF must describe whether there is likely to be a significant effect on the environment, the approval holder must describe whether the activity as a whole will have a significant effect on the environment and explain the justification for this conclusion.

The conclusion should include consideration of the principles of ecologically sustainable development as defined in Schedule 2 of the EP&A Act (listed below):

- The precautionary principle
- Intergenerational equity
- Conservation of biological diversity and ecological integrity
- Improved valuation, pricing and incentive mechanisms

9 Declaration

The following declaration must be included in the REF.

This Review of Environmental Factors provides a true and fair review of the activity in relation to its likely impact on the environment. It addresses to the fullest extent possible, all the factors listed in Clause 228 of the Environmental Planning and Assessment Regulation Act (as amended) and the Commonwealth Environmental Protection and Biodiversity Conservation Act (as amended).

Signed:

Name:

Position:

Date

10 References

Appendix

The following documents may be required to be appended to the REF. The items in bold are mandatory. The remaining are examples of other documents which may be included. Examples of the checklists are included in this guidance notes below for use if desired.

- **Proposal design**
- **Clause 228 environmental factors checklist**
- **Matters of National Environmental Significance checklist**
- **Aboriginal Heritage Information Management System (AHIMS) search report**
- Consultation records (e.g. letters sent to and received from Council).
- Other – any other database search results should be appended (e.g. atlas search or NSW heritage database search)
- Flora and fauna impact assessment report.
- Aboriginal heritage due diligence assessment.
- Geotechnical report.

If specialist studies are referred to in the document, these should be appended along with any other information used to justify the proposal.

11 Clause 228 Environmental factors checklist

Has the REF considered the following points?	Positive	Negative
Any environmental impact on a community		
Any transformation of locality		
Any environmental impact on the ecosystems of the locality		
Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality		
Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations		
Any impact on the habitat of protected fauna (within the meaning of the <i>National Parks and Wildlife Act. 1974</i>)		
Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air		
Any long-term effects on the environment		
Any degradation of the quality of the environment		
Any risk to the safety of the environment		
Any reduction in the range of beneficial uses of the environment		
Any pollution of the environment		
Any environmental problems associated with the disposal of waste		
Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply		
Any cumulative environmental effect with other existing or likely future activities		

12 Matters of National Environmental Significance (MNES) checklist

Matters of National Environment Significance are matters protected under national environmental law (*Environment Protection and Biodiversity Conservation Act, 1999*). The following checklist provides guidance on whether an action is likely to have an impact on one of these matters, and whether further assessment of significance is required.

This checklist or similar should be included in the REF to demonstrate that all matters have been considered.

Significance matter	Yes / No	Relevant details
Listed threatened species and communities		
Listed migratory species		
Ramsar wetlands of international importance		
Commonwealth marine environment		
World heritage properties		
National heritage places		
The Great Barrier Reef Marine Park		
Nuclear actions		
A water resource, in relation to coal seam gas development and large coal mining development		