## Chaffey Dam

### Augmentation and Safety Upgrade

### Site Access and Traffic Management Plan

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<th>Rev</th>
<th>Date</th>
<th>Prepared by Name &amp; Signature</th>
<th>Reviewed by Name &amp; Signature</th>
<th>Approved by Name &amp; Signature</th>
<th>Remarks</th>
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<td>Dirk van Weeren</td>
<td>Brandon Perrin</td>
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<td>Dirk van Weeren</td>
<td>Jason Camilleri (Select/Modify Traffic Plans Cert. No. 2452049592)</td>
<td>Tony O’Reilly</td>
<td>TCPs added DPE Comments</td>
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<td>Dirk van Weeren</td>
<td>Peter Sheehan</td>
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1 References, Definitions and Abbreviations

1.1 Definitions and Abbreviations

Definitions and abbreviations to be applied to the Site Access and Traffic Management Plan are listed in Table 1 below.

Table 1: Definitions and Abbreviations

<table>
<thead>
<tr>
<th>Term/Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT</td>
<td>Articulated Dump Trucks</td>
</tr>
<tr>
<td>Client (Principal)</td>
<td>The party to whom John Holland is contracted for a Project. For this project the Client is State Water Corporation.</td>
</tr>
<tr>
<td>Client’s Representative</td>
<td>The person appointed by the Client to perform the duties of the &quot;PAP&quot; as defined in the contract. For this project the Client Representative is Jubrahil Khan.</td>
</tr>
<tr>
<td>EPL</td>
<td>Environment Protection Licence</td>
</tr>
<tr>
<td>JH</td>
<td>John Holland Pty Ltd (JH) as the organisation responsible for the total performance of the works under the Contract.</td>
</tr>
<tr>
<td>JHPL</td>
<td>John Holland Pty Ltd</td>
</tr>
<tr>
<td>Plan</td>
<td>A document setting out the specific practices, resources, activities and responsibilities relevant to a particular project or contract.</td>
</tr>
<tr>
<td>PAP</td>
<td>Principal’s Authorised Person</td>
</tr>
<tr>
<td>PAPD</td>
<td>Principal’s Authorised Person Delegate</td>
</tr>
<tr>
<td>Project</td>
<td>Chaffey Dam Augmentation and Safety Upgrade</td>
</tr>
<tr>
<td>RMS</td>
<td>Roads and Maritime Services</td>
</tr>
<tr>
<td>Subcontractor</td>
<td>Any company, body or person who is contracted to John Holland for the purpose of supplying plant and/or services. Categories such as manufacturer, fabricator and supplier are considered Subcontractors.</td>
</tr>
<tr>
<td>SWC</td>
<td>State Water Corporation</td>
</tr>
<tr>
<td>TCP</td>
<td>Traffic Control Plan</td>
</tr>
<tr>
<td>TCAWS</td>
<td>Traffic Control at Worksites Manual</td>
</tr>
<tr>
<td>TRA</td>
<td>Task Risk Assessment</td>
</tr>
<tr>
<td>TRC</td>
<td>Tamworth Regional Council</td>
</tr>
<tr>
<td>TMP</td>
<td>Traffic Management Plan</td>
</tr>
<tr>
<td>TSP</td>
<td>Traffic Staging Plan</td>
</tr>
<tr>
<td>TCSE</td>
<td>Traffic Control Site Engineer</td>
</tr>
<tr>
<td>VMP</td>
<td>Vehicle Movement Plan</td>
</tr>
<tr>
<td>WSMP</td>
<td>Workplace Safety Management Plan</td>
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</table>
2 INTRODUCTION

2.1 Purpose & Application

The State Water Corporation has appointed John Holland Pty Ltd (JHPL) under a Design & Construct Contract, to perform the design, construction, commissioning and completion of Chaffeby Dam Augmentation and Safety Upgrade.

The purpose of this Traffic Management Plan (TMP) is to provide a framework describing how the Principal Contractor, John Holland Pty Ltd (JHPL) will manage the traffic aspects of the Chaffeby Dam Augmentation and Safety Upgrade Project (referred to as “the Project”). The TMP provides the processes to ensure that the Project maintains appropriate controls to manage traffic in and around the project during the design, construction and commissioning phases of the project. The TMP is a sub plan of the CEMP. The TMP will:

- Ensure the safety of road users and construction traffic.
- Ensure there is a safe interface between construction traffic and local traffic.
- Eliminate the risk of injury to local traffic users and construction personnel.
- Ensure that access to adjoining properties is maintained during construction.
- Minimise traffic delays and traffic issues.

2.2 Project Overview

Chaffeby Dam is one of seven dams throughout regional NSW included in State Water’s dam safety upgrade program. The augmentation and upgrade involves raising the dam embankment by 6.2 metres including foundation grouting and subsequent works to raise the morning glory spillway including the demolition of the pier nose and baffle wall. These works will increase the full supply level of the dam by 6.5 metres. The dam wall raising will be done by constructing a reinforced earth embankment and a 1.8 metre parapet wall.

Additionally a new T-junction at Nundle and River Roads will be constructed. This will involve the realignment of Nundle Road and the construction of a new Bowling Alley Point Bridge.

2.3 Objectives and Targets

The key objective of this TMP is to set in place a Project TMP which addresses the traffic measures required on the Project. The traffic measures put in place will be designed to maintain the safety of all stakeholders while attempting to minimise disruption to these stakeholders.

2.4 Implementation

To implement the TMP, John Holland will:

- Communicate the details of this plan to all personnel on site during the mandatory site induction. This training will be recorded and provided to the project Safety Advisor.
- Reiterate aspects of the TMP as required during regular pre-start meetings, tool box talks, and other necessary occasions.
- Develop a Vehicle Movement Plan, where required, for specific areas of the construction site.
Place a copy of each Vehicle Movement Plan developed for a particular area at each entry
gate for all personnel to review if required.

All plant will be provided with a copy of the Vehicle Movement Plan related to their role in the
construction zone.

The effectiveness of the TMP will be reviewed at least once a month, or more frequently if
additional risk areas are encountered. The TMP will be revised and more appropriate
procedures implemented if the original traffic management practices are not proven to be
effective.

3 SITE ACCESS AND TRAFFIC

3.1 Access to Site

The main access to the Chaffey Dam site is from Nundle Road (MR105).

3.2 Construction Hours

All activities and project works, including the arrival and departure of vehicles delivering or
removing materials from or to the site, shall be carried out between the hours of:

- 7:00am to 6:00pm Monday to Friday
- 8:00am to 1:00pm Saturdays

Any work outside these hours must be approved by TRC, SWC and fall within the requirements
of the EPL.

3.3 Traffic Control Site Manager

In accordance with RMS specification G10 the following member of the site management team
is the nominated Traffic Control Site Engineer (TCSE).

Name: TBA
Mobile:
Email:

The TCSE will be responsible for:

- Ensuring that the approved traffic control measures are established, implemented and
  maintained in accordance with the approved plans.
- Carrying out regular inspections and auditing of the traffic control measures to ensure that
  they are effective and are being followed.
- Amending and updating the plans, as required, to ensure that they remain current as the
  work progresses.
- Identifying locations and times where traffic congestions or unsafe conditions for vehicles,
  cyclists, pedestrians and workers are occurring, and providing recommendations for
  improvement,
• Liaising with the Principal and other authorities such as, NSW Police and Tamworth Regional Council on traffic management matters for the construction site.
• Facilitating traffic awareness and giving toolbox talks to site personnel.

3.4 Roads Authority

Nundle Road (MR105) is a regional road and Tamworth Regional Council is the Roads Authority. Council should be contacted in the first instance to ensure they are satisfied that appropriate arrangements are in place during the construction phase of the project.

The Council's contact regarding this matter is Brendan Moran.

3.5 Roadworks Traffic Staging Plans

Traffic staging plans will be prepared to show how traffic will pass safely through or around the Nundle and River Road construction site during the two stages of construction. Staging of works will occur for the realignment of Nundle and River Roads, and the construction of Bowling Alley Point Bridge.

The works in this area will occur in two stages. A temporary roadway will be constructed from the existing Nundle Road to the existing western abutment of Bowling Alley Point Bridge. The new alignment on the eastern side of the existing roads will be constructed where possible offline. The tie-ins at the northern end of Nundle Road will be constructed under traffic control with traffic being restricted to one lane working in contra-flow and controlled by traffic signals.

The tie-in to Nundle Road on the Western Side of the Peel River will also be completed in a contra-flow configuration in one lane controlled by traffic signals.

On completion of the new Bowling Alley Point Bridge and the new Nundle Road alignment the traffic will be switched to the new alignment and the old bridge removed.

Traffic Staging Plans will be finalised and included as part of this TMP to show the traffic configurations at each stage of the works. They will show the work site, construction activities, construction durations, road alignment & geometry and direction of traffic.

• Lane configurations on existing and new (temp and permanent) pavements.
• Intersection layouts and temporary traffic signals arrangements.
• Working areas, and pedestrian and cyclist paths
• Access to residential properties.
• Pavement markings.
• Drainage system, both temporary and permanent, including any pollution control measures.
• Utilities and their impact on the Works.

These staging plans should be read in conjunction with the construction program.

Traffic Staging Plans will be prepared for each stage of the works by a suitably qualified person in accordance with G10. Traffic Staging Plans will be prepared for the following areas.

<table>
<thead>
<tr>
<th>TSP</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSP 001</td>
<td>Tamworth – Nundle Road, River Road. Gate 5,6 – Stage 1</td>
<td>Proposed</td>
</tr>
</tbody>
</table>
3.5.1 Stage 1

Stage 1 works include:
- Construction of temporary roadway to the existing bridge south west abutment.
- Traffic diverted for construction of the new Bowling Alley Point Bridge
- Construction of Nundle Road northern tie-in with construction of temporary roadway/ramp across new T-intersection for access to existing Bowling Alley Point Bridge.
- Begin construction of new River Road that is offline from the existing River Road.
- Complete western Nundle Road tie-in

3.5.2 Stage 2

Tamworth - Nundle Road and Bowling Alley Point Bridge complete.

Stage 2 works include:
- Removal of temporary roadway on western side of existing bridge for stage 1 traffic.
- Switch traffic and open Nundle Road and New Bowling Alley Point Bridge.
- Completion of new River Road and tie-in
- Final traffic relocation opening River Road

3.6 Access Points

The dam complex has a number of access points that allows both construction and operational personnel to enter the premises. All gates will be numbered as identified on the plans. (Final access points to be determined upon the completion of the design).

3.6.1 Site Security and Fences

Temporary fences and gates will be provided and maintained at all times throughout the Contract. JHG will ensure that all gates are locked outside of normal working hours.
Realignment of Roads and Bowling Alley Bridge

Main Office

Gate 6

Morning Glory Spillway Raising

Dam Embankment Raising

Gate 3

Gate 2

Gate 1

Gate 4

Gate 5

Figure 1 - Gate Locations
3.6.2 Gate 1 (JHG Temporary)

Gate 1 is to be located at the northern end of the project for access to the stockpile areas via the Peel River Temporary Crossing.

Signage will advise of “No Entry” to the site and to report to the site office if the person/s are not inducted.

3.6.3 Gate 2 (JHG Temporary)

Gate 2 is situated at the Chaffey Dam lookout on the Tamworth-Nundle Road, approximately 800m south of Gate 1.

3.6.4 Gate 3 (JHG Temporary)

Gate 3 is situated at the Chaffey Dam lookout on the Tamworth-Nundle Road, approximately 200m south of Gate 2. The existing gate will be moved up the hill from its current location adjacent to the lookout carpark/turning area. The gate will be manned at all times or closed. This gate did not allow the public to access the reservoir site and is used only by operational personnel for access. Operational Signage will advise of “No Entry” to the site and to report to the site office if the person/s are not inducted. The lookout will remain open to the general public during construction and will be separated by a fence from construction traffic.

3.6.5 Gate 4 - State Water Operations Gate (Chaffey Dam Office and Workshop)

This will be the entrance to the main office compound. Access to the office will be via the existing roads within the operations area. There will be a double 4m wide gate adjacent to the JHPL office. All persons will be required to report to the site office prior to entering this area.

3.6.6 Gate 5 (JHG Temporary)

Gate 5 is located at the southern end of the project. It will be on the eastern side end of the Bowling Alley Point Bridge works in the vicinity of the Nundle and River Road junction.

Signage will advise of “No Entry” to the site and to report to the site office if the person/s are not inducted.

3.6.7 Gate 6 (JHG Temporary)

Gate 6 is located at the southern end of the project for access to the new Bowling Alley Point Bridge. It will be on the western side of the bridge on the approach from Nundle.

Signage will advise of “No Entry” to the site and to report to the site office if the person/s are not inducted.

3.7 Chaffey Dam Complex Users

3.7.1 Construction Traffic

The dam works will require approximately 20 JHPL light vehicles to access the site on a daily basis plus courier delivery vehicles. The primary access point will be via the State Water Operations Gate for the site office. However works will primarily be occurring through Gates 1, 2 and 3.

The current methodology is to use Gate 1 as the access point for the borrow and stockpile areas for embankment fill materials. Internal haul roads will then be utilised for hauling to the embankment for the Reinforced Earth Wall backfill.
Additionally deliveries of plant will be made through Gates 1 and 3 during the Project. These items of plant will include but not be limited to scrapers, excavators, dozers, graders, and off road trucks (ADT's). These deliveries will be made in accordance with RMS and TRC requirements with regards to oversized loads. Prior to delivery an assessment will be made on the delivery being able to gain access through the front gate with regards to the width of the load.

For the purposes of this plan it is assumed that the existing road network and services underlying the pavement are suitable to be trafficked by road registered vehicles. Notwithstanding this, John Holland will complete a desktop survey of the existing services during the Activity Method Statement (AMS) and identifying if there are any potential issues with the network with regards cover etc. under the existing roads.

If non-road registered vehicles are required to traffic over existing in-ground services this will be assessed during the development of the AMS and may require additional protection of the existing service in an attempt to redistribute the traffic loadings.

When vehicles are not on internal roads, all vehicles should observe normal road rules.

If any of the establishment/de-establishment low loader movements are over width or over mass, and hence Restricted Access Vehicles, Tamworth Regional Council will need to issue permits for movements between Lindsays Gap Road and the Chaffey Dam site.

3.7.2 Reservoir Operational Staff & Contractors

As part of the TMP it is understood that the Chaffey Dam Reservoir is still an operational asset that requires ongoing monitoring and maintenance to be conducted on a daily basis. As there will be significant numbers of plant working on the site, restrictions will be placed on persons entering the site. These restrictions are detailed above in the individual gate entry points with persons being required to be either inducted or stopping at the site office prior to proceeding through the site and contact area supervisor on the appropriate UHF channel as outlined below.

- Embankment, Material Processing and Preparation Area/Haul Roads – Channel 33
- Road and Bridge Works – Channel 26
- Morning Glory Spillway and Tower Crane – Private JH Channel

3.8 Oversized and Heavy Vehicle Access

Oversized vehicles can only approach from via Lindsays Gap Road which has unrestricted load limits. Timing restrictions will be put in place by the NHVR when a licence is issued. No oversized vehicles to access the site via the Tamworth Nundle Road. The precast units will originate from Newcastle and the plant from Tamworth, they will use Lindsays Gap Road as shown in Appendix C.

Heavy vehicles have access from Lindsays Gap Road and Tamworth Nundle Road There are no timing restrictions of heavy vehicle access to site. There are no school zones or peak traffic times within the works area (or the locality generally).
3.9 Adjoining Private Property Access

Along the Project alignment the current adjoining private property access will be maintained during construction with consultation with the property owner/stakeholders. Access to private property shall be maintained during construction unless otherwise agreed with the property owner in advance. A landowner’s access that is physically affected by the SSI shall be reinstated to at least an equivalent standard in consultation with the property owner. SWC will be responsible for community engagement with the Community Communication Strategy. State Water will provide feedback and address concerns through its Stakeholder Community Consultation Liaison Groups and the general public will be kept up to date with construction progress through the local media, including road changes. The State Water Communication Strategy is in Appendix 8 of the CEMP.

3.10 Public Transport and School Bus

The local school bus departs Nundle at 7:30am to Tamworth and returns from Tamworth at 3:30pm during the school term.

The Nundle shopping bus departs Nundle at 9:00am arriving in Tamworth at 10:00am before returning from Tamworth at 2:00pm arriving in Nundle at 3:15pm. This service only runs on a Thursday.

For management of interaction with construction traffic all large deliveries will occur under traffic control whilst adequate signage will be provided as detailed in the TCPs during normal operations. The road will always be open for traffic and bus transport should not be affected.
The bus company will be advised if there are any unforeseeable developments which may impact on bus travel.

### 3.11 Temporary Roadways and Works

Temporary roadways and works will be designed to minimise adverse changes to existing property access arrangements and road functionality for other road users. All temporary traffic diversions and controls will be completed before the construction activities interfere with the current traffic arrangements. Any temporary roads will be removed and the area restored to its original condition upon completion of the works.

#### 3.11.1 Travel Lanes & Widths, Geometry and Configuration

Travel lanes, widths, road geometry and configuration will meet RMS road design guidelines, RMS specifications in particular G10 annexure A3. These indicate design travel speed of 40 km/h, traffic lane widths of 3.5m and shoulder widths of 1.0m.

#### 3.11.2 Pedestrian and Cycle Access

There are no pedestrian or cycling accesses within the works.

#### 3.11.3 Pavement Markings and Signposting

Pavement marking and signposting will be in accordance with road design guidelines and RMS specifications.

This requires marking and signposting shall be reflected in the temporary works design and construction staging plans. Signs will be new, markings will be appropriate for the speed and the works.

### 3.12 Traffic Control Personnel

John Holland will appoint traffic controllers to assist the safe movement of traffic past or through the worksite.

Personnel in traffic control roles will be suitably qualified in accordance with clause 1.5.3 of specification G10.

The following is the minimum training requirement for personnel involved with traffic control, applying traffic control plans, selecting/ modifying traffic control plans or designing & inspecting traffic control plans:

- **Blue Card - Traffic Controller**
- **Yellow Card - Apply Traffic Control Plans**
- **Red Card - Select / Modify Traffic Control Plans**
- **Orange Card - Design and Inspect Traffic Control Plan**

### 3.13 Informing the Public - Variable Message Signs

Portable Variable Message Signs will be installed at each end of the Project, prior to any changed traffic conditions due to construction activity. These will be used to inform the public where any road changes as a result of the construction works.
Additionally, project signboards will be located at each end of the Project. The State Water Corporation will liaise with the public through the Community Construction Liaison Group (CCLG), traffic management will be an agenda item for each of these meetings.

3.14 Monitoring of Traffic Control Measures

At the commencement and conclusion of each day's work all required traffic control measures and signs will be checked to ensure that they are in place as detailed on the Traffic Control Plans (TCP) for the appropriate stage of the works.

3.15 Road Design

Any new or modified road or parking infrastructure will:

- Be designed in consultation with the Tamworth Regional Council and State Water,
- Be in consideration of existing and future demand, road safety and traffic network impacts,
- Meet relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Engineering Practice.
4 TRAFFIC CONTROL PLANS

Traffic Control Plans will be prepared for each phase of the works by a suitably qualified person. Traffic Control Plans will be prepared for the following areas.

<table>
<thead>
<tr>
<th>TCP</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCP 001</td>
<td>Gate 1 and Nundle Rd</td>
<td>Proposed</td>
</tr>
<tr>
<td>TCP 002</td>
<td>Gate 2 and Nundle Rd</td>
<td>Proposed</td>
</tr>
<tr>
<td>TCP 003</td>
<td>Gate 3 and Nundle Road</td>
<td>Proposed</td>
</tr>
<tr>
<td>TCP 004</td>
<td>Gate 4 State Water Operations and Nundle Road</td>
<td>Proposed</td>
</tr>
<tr>
<td>TCP 005</td>
<td>Gate 5 Nundle &amp; River Roads, Bowling Alley Point Bridge – Stage 1</td>
<td>Proposed</td>
</tr>
<tr>
<td>TCP 006</td>
<td>Gate 6, Nundle &amp; River Roads, Bowling Alley Point Bridge – Stage 2</td>
<td>Proposed</td>
</tr>
</tbody>
</table>

Each Traffic Control Plan will detail the signs, devices and traffic controllers required to warn approaching vehicles of the works, and guide the traffic through or around the worksite. These plans will be monitored and updated as required. The TCP’s will be discussed at the induction and be displayed on a notice board. If a TCP is modified, the TCP will be presented at a Toolbox meeting to inform workers of the changes.
5 VEHICLE MOVEMENT PLANS

Vehicle Movement Plans (VMP) will be prepared for each phase of the works by a suitably qualified person. Each VMP will show the preferred travel paths for vehicles associated with the works and will include details of how construction traffic will safely enter and leave the worksite.

VMPs will be prepared for the following areas.

<table>
<thead>
<tr>
<th>VMP</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMP 001</td>
<td>General Arrangement</td>
<td>Issued</td>
</tr>
<tr>
<td>VMP 002</td>
<td>Crushing Area</td>
<td>Issued</td>
</tr>
<tr>
<td>VMP 003</td>
<td>Downstream Area</td>
<td>Issued</td>
</tr>
<tr>
<td>VMP 004</td>
<td>Dam Crest</td>
<td>Issued</td>
</tr>
<tr>
<td>VMP 005</td>
<td>John Holland Compound</td>
<td>Issued</td>
</tr>
<tr>
<td>VMP 006</td>
<td>Bridge Area</td>
<td>Issued</td>
</tr>
</tbody>
</table>

Each VMP will show the preferred travel paths for vehicles associated with the works and will include details of how construction traffic will safely enter and leave the worksite.

These will be updated when required and shown during induction and on notice boards.

VMPs are included in Appendix A.
6 SITE TRAFFIC RULES

6.1 Site Speed Limit

The speed limit for existing road Nundle Road around the reservoir site is 100km/h. As detailed in relevant TCP’s a temporary road works speed zone will be implemented. Appropriate signage will be included in the TCP’s to advise drivers of the speed limit and this will be reinforced at the site induction. This speed limit will be reduced for the duration of the project, to be determined by the Principal in consultation with Tamwoth Regional Council. This speed will be further reduced if necessary when constructing the tie-ins at Nundle and River Roads under traffic control contra-flow conditions. The effectiveness of this speed zoning will be monitored throughout the works and if required will be adjusted to maintain the safety of the works.

The speed limit in the dam embankment site and borrow area haul roads will be 20km/h, however this may be reassessed as part of the AMS/TRA process, particularly once the haul road construction has been finalised.

All public temporary roadways will have a design travel speed of 40 km/h.

This information will be included in the induction presentation and any changes will be updated at Toolbox Meetings.

6.2 Access Roads/Haul Roads

Persons inducted onto the project will be informed of the need to only use existing access roads and to not travel off the existing pavement and into other grassed areas or on the shoulders of the road.

Plant working on the dam embankment will be restricted to the haul roads that are created as part of the Project. The edges of haul roads will generally be delineated with windrows that will also serve as a safety barrier. In the circumstance that a windrow cannot be installed due to other constraints bunting or flagging will be installed to delineate the haul road.

All haul roads will be constructed to ensure that safe traffic operation can be maintained at all times. Haul roads will be constructed to the following standard:

- Roads will be constructed with sound material.
- All bends or corners in haul roads will be constructed to maintain the stability of equipment regularly using the corner or bend.
- A windrow the height of the largest vehicles axle shall be constructed where the difference in level between a haul road and an adjacent surface is greater than 1.5 m.
- One way haul roads will have a minimum width that is 1.5 times the maximum truck width.
- Two way haul roads will have a minimum width that is 3 times the maximum truck width. Except the temporary crossing of the Peel River downstream which will be 7m wide.
- Haul roads will be inspected on a regular basis to ensure they are in a satisfactory condition and comply with plant manufacturers recommendations
- When working in stockpile areas non-essential plant will be restricted to the cleared area in these locations.

6.3 Maximum Loads

Loading plant operators are to load trucks in such a manner that the load is safely distributed and the likelihood of spillage is minimised.
The driver of the truck being loaded shall remain inside the cab while loading is taking place, or must leave the operating area to a place of safety before loading commences.

6.4 Parking

Parking, with the exception of plant within the dam embankment area, will be restricted to existing marked parking bays either at the site office compound or the car park at the base of the dam wall.

At times, a truck may be required to queue at Gate 2 prior to accessing the site; however this is not likely to be for a significant duration. Despite this, the importance of queuing on the road pavement and not on the shoulder of the road will be included in the induction.

Plant within the dam embankment will park in designated areas that will be determined as the works progress and will be chosen to avoid close proximity to existing waterways.

Members of the public will have access to the car park and lookout at Gate 2. Construction traffic access will be divided from the public in this area.

6.5 Private Vehicles

Private vehicles are not allowed on site except with approval of the Project Manager or Superintendent. If allowed on site, private vehicles must adhere to all aspects of the TMP and mandatory safety requirements set out in 7.2.

Private vehicles must be escorted to, or through any operational areas.
7 Requirements for Access to Site

7.1 Personnel

All persons entering the site beyond the main site compound will be required to attend and complete a Project Induction. The Site Induction will be conducted at specific times or by special arrangement, but will not be completed at on demand.

Visitor Inductions can be arranged but will require an inducted escort at all times when on the project if available.

All State Water Corporation personnel requiring access to or through the work areas will be required to complete the JH Project Induction.

If access is required to the site out of hours, all gates will be locked however access can be gained via the locks that are fitted on the gates. If access is required within the dam embankment area contact should be made with Paul Trembath – 0419 289 102 or Tony O'Reilly – 0438 155 687.

7.2 Light Vehicles

All Light vehicles that are required access past Gate 1, 2, and 3 will require the following items:

- Flashing Light
- UHF Radio (Hard wired or Hand Held)
- Mining Flag (Minimum 3 metres from Ground)
- Reversing Alarm

Prior to entering Gates 1, 2 and 3 for the first time all light vehicles will be required to be inspected to ensure that the vehicle is equip with all of the mandatory requirements.
8 TRAINING AND AWARENESS

8.1 Training, Awareness and Competency

All JH personnel, subcontractors and visitors will be inducted and/or trained to a level appropriate to the level of risk their works are likely to entail, prior to commencing on site. The specific elements of training that relate to an individual understanding and applying their environmental responsibilities may include:

- Environmental & Safety policies and the requirements of the site Management Plans and associated documents including ESEPs, environmental roles and responsibilities;
- Significant environmental impacts which may be caused by their activities;
- Incident management and notification; and
- Potential consequences of non-conformance;

8.2 Inductions

8.2.1 Project Inductions

All JH personnel and subcontractors will be inducted into the key requirements of this Workplace Safety Management Plan JH-C680-03 and associated management documents as part of the Project Induction.

The Project Induction has been developed to induct personnel into the broad aspects of the Project including safety, environment, community and the Project overview. The induction will reinforce that it is the responsibility of all personnel to adhere to the safety and traffic requirements of the Project. The Induction will include but not be limited to the following:

- Overview of the requirements of this WSMP.
- Overview of the site TMP.
- PPE requirements.
- Project contact details.
- Incident management and notification.
- Hours of work.
- Safety policy.
- Key safety issues moving plant, interaction with other dam users.
- Designated Parking Areas
- Speed Limits
- Community Protocol
- Timetabled public transport and school bus

8.2.2 Visitor Inductions

All visitors will undergo a visitor’s induction and their host will be responsible for the actions and conduct of their visitors and will ensure that all requirements of the site are obeyed. All visitors will be accompanied around the site by JH personnel at all times.
8.3 Toolbox Talks

Regular toolbox talks will be conducted for subcontractors and employees to maintain and improve safety, health, quality and environmental issues. A wide range of topics will be covered over time with a focus on issues most relevant to current or upcoming works. Toolbox talks will highlight the specific safety aspects, requirements and activities being undertaken within each site as part of ongoing training and development. The toolbox talks will typically cover:

- General overview of works being conducted at that time.
- Traffic/access, location of entry/exit points, traffic routes and designated parking areas.
- Possibility of other persons required to enter the site on that day.
- Incidents that have occurred either on the Project or other worksites and possible implications on the Project.
# Compliance Matrix

<table>
<thead>
<tr>
<th>No.</th>
<th>SSI-5039 Infrastructure Approval Condition / Commitment</th>
<th>Implementation Plan</th>
<th>Document Reference OR Documents to be Produced</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>B3 4</td>
<td>The SSI shall be designed with the objective of minimising adverse changes to existing property access arrangements and road functionality for other road users.</td>
<td>C</td>
<td>Incorporate requirements of condition into Traffic Management Plan</td>
<td>Section 3.9 Adjoining Private Property Access</td>
</tr>
<tr>
<td>B3 5</td>
<td>Access to private property shall be maintained during construction unless otherwise agreed with the property owner in advance. A landowner's access that is physically affected by the SSI shall be reinstated to at least an equivalent standard, in consultation with the property owner.</td>
<td>C</td>
<td>Incorporate requirements of condition into Traffic Management Plan</td>
<td>Section 3.9 Adjoining Private Property Access Section 3.11 Temporary Roadworks and Works</td>
</tr>
<tr>
<td>B3 6</td>
<td>In relation to new or modified road, parking, pedestrian or cycle infrastructure, the SSI shall be designed: (a) in consultation with the Relevant Roads Authority; (b) in consideration of existing and future demand, road safety and traffic network impacts; (c) to meet relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Engineering Practice; and (d) is certified by an appropriately qualified person that has considered the above matters. Note: A separate approval to open or close any road under Section 138 of the Roads Act 1993 may be required from the Relevant Roads Authority.</td>
<td>C</td>
<td>Incorporate requirements of condition into Traffic Management Plan Note: As the Project comprises State Significant Infrastructure, then in accordance with the provisions of Section 115ZH(1)(f) of the EP&amp;A Act, a consent under Section 138 of the Roads Act 1993 cannot be refused.</td>
<td>Section 3.15 Road Design</td>
</tr>
<tr>
<td>No.</td>
<td>SSI-5039 Infrastructure Approval Condition / Commitment</td>
<td>Implementation Stage Pre-Construction (P), Construction (C), Operation (O)</td>
<td>Implementation Plan</td>
<td>Document Reference OR Documents to be Produced</td>
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<td>C2</td>
<td>The Proponent shall ensure that the following specific requirements are considered in developing the sub-plans or procedures identified in condition C1, further to any guidelines contained within the Guideline for the Preparation of Environmental Management Plans (Department of Planning, Infrastructure and Natural Resources 2004): d) <strong>Construction Traffic</strong> to be prepared and implemented in consultation with the Relevant Road Authority/Authorities and include the following:</td>
<td>P C</td>
<td>Incorporate requirements of condition into Construction Traffic Management Plan.</td>
<td>Section 3. Site Security and Fences Section 3.5 Roadworks Staging Plans Section 3.7 Chaffey Dam Complex Users Section 3.12 Traffic Control Personnel Section 8.2 Inductions</td>
</tr>
<tr>
<td></td>
<td>(i) details of traffic routes for heavy vehicles, including any necessary route or timing restriction for oversized loads;</td>
<td>P C</td>
<td>Incorporate requirements of condition into Construction Traffic Management Plan.</td>
<td>Section 3.8 Oversized and heavy vehicle access</td>
</tr>
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<td>(ii) interaction with local, regional and state roads and surrounding land uses</td>
<td>P C</td>
<td>Incorporate requirements of condition into Construction Traffic Management Plan.</td>
<td>Section 3.4 Roads Authority Section 3.5 Roadworks Staging Plans</td>
</tr>
<tr>
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<td>(iii) measures to manage interaction with local school bus travel or other timetabled public passenger transport; and</td>
<td>P C</td>
<td>Incorporate requirements of condition into Construction Traffic Management Plan.</td>
<td>Section 3.10 Public Transport and School Bus</td>
</tr>
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<td>(iv) procedures for informing the public where any road access will be restricted as a result of the project; <em>Note: the construction traffic measures must be consistent with noise and vibration measures with regard to noise and vibration impacts of traffic generated during construction of the SSI.</em></td>
<td>P C</td>
<td>Incorporate requirements of condition into Construction Traffic Management Plan.</td>
<td>Section 3.9 Adjoining Private Property Access</td>
</tr>
</tbody>
</table>
Appendix A – Vehicle Movement Plans
Notes
Vehicle Types in Operation
- Rigid Dump Trucks
- Articulated Dump Trucks
- Light Vehicles
- Heavy Vehicles
- Service Vehicles
- Other plant equipment - graders and excavators etc
- School Bus
- Vehicles travel in both directions along Nundle Rd and River Rd

Emergency Contact Details:
Paul Trembath: 0419 289 102
Tony O'Reilly: 0438 155 687
Appendix B – Traffic Control Plans

1. Local constraints may not allow the signs and devices to be placed in accordance with the TCP. It may be necessary to place the signs and devices as close as possible to the spacing noted on the TCP.
An authorized person with a minimum current select & modify (Red card) is to inspect the site before implementing this plan. Speak to the site foreman; then if necessary, mark any changes on the TCP & sign off on the TCP.
2. This TCP is based on RMS TCP 57 from the TCWHS manual.
3. This is a Long Term TCP.
4. Ensure all approval requirements are met where approvals are required for the works.
5. Cover all conflicting road signs where required.
6. All signs must be a minimum of 1.5m from the bottom edge of the sign to the ground.

Amendments:

Name: ____________________________

Red Card Number: __________________

Date: __________________ Sign: ________________
1. Local constraints may not allow the signs and devices to be placed in accordance with the TCP. It may be necessary to place the signs and devices as close as possible to the spacing's noted on the TCP. An authorized person with a minimum current select & modify (red card) is to inspect the site before implementing this plan, speak to the site foreman, then if necessary, mark any changes on the TCP & sign off on the TCP.
2. This TCP is based on RMS TCP 195 from the TCAWS manual.
3. This is a Long term TCP.
4. Ensure all approval requirements are met where approvals are required for the works.
5. Cover all conflicting road signs where required.
6. All signs must be a minimum of 1.5m from the bottom edge of the sign to the ground.

Amendments:

Name: ________________________________
Red Card Number: ____________________________
Date: ___________ Sign: _______________________
1: Local constraints may not allow the signs and devices to be placed in accordance with the TCP. It may be necessary to place the signs and devices as close as possible to the spacing's noted on the TCP.
An authorized person with a minimum current select & modify (red card) is to inspect the site before implementing this plan, speak to the site foreman, then if necessary, mark any changes on the TCP & sign off on the TCP.

2: This TCP is based on RMS TCP 57 from the TCAWS manual.

3: This is a Long term TCP.

4: Ensure all approval requirements are met where approvals are required for the works.

5: Cover all conflicting road signs where required.

6: All signs must be a minimum of 1.5m from the bottom edge of the sign to the ground.


Amendments:

Name: ____________________________

Red Card Number: __________________

Date: ______________ Sign: ____________

Notices:

- RM 300 - ROAD WORKS IN PROGRESS
- RM 093 - ROAD WORKS AHEAD
- RM 092 - ROAD WORKS AHEAD
- RM 091 - ROAD WORKS AHEAD
- RM 090 - ROAD WORKS AHEAD
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- RM 003 - ROAD WORKS AHEAD
- RM 002 - ROAD WORKS AHEAD
- RM 001 - ROAD WORKS AHEAD

Client: John Holland

Date: 28th April 2010

 Approver: Paul Lewis

Designated Person: Nathan Smith

Project Manager: Andrew Gussin

Construction Manager: John Holland

Contact: 0411 900 182

Information available from WorkCover Queensland (0472 068 500) for design purposes. Only to be used for delivery of highway facilities to public road.
Appendix C Heavy Vehicle Routes
Heavy Vehicle Route Newcastle to Chaffey Dam for Precast Concrete via Lindsays Gap Road
Heavy Vehicle Route Tamworth to Chaffey Dam for Plant via Lindsays Gap Road