Sydney Football Stadium Redevelopment Addendum to Construction Management Plan for Modification to SSD 9249

May 16, 2019

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1. Background

1.1. Introduction

This is an addendum to the approved Concept State Significant Development Consent (SSD9249) Construction Management Plan (CMP) to support a modification to the for the redevelopment of the Sydney Football Stadium (SFS) which is submitted to the Minister for Planning pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The existing commitments and assessment in the original SSD9249 CMP will stand, however the additional impacts addressed in this Addendum report will be:

- Archaeology with Curio Projects updating their previous SSD9249 advice
- Dust management (existing mitigation measures remain)
- Traffic (same number of trucks as per original application)
- Noise & Vibration (Arup have confirmed with no additional/different equipment required therefore impact as per original application)
- Waste- original quantities submitted in the CMP included all slabs, footings and piles that are now contemplated in this modification

A staged approach to the planning applications is in progress which includes:

- **Stage 1 Approved under Consent SSD9249** – Concept Proposal for the stadium envelope and supporting retail and functional uses as well as development consent for the carrying out of Works, including demolition of the existing facility and associated structures down to slab level only.
- **Stage 1 Modification (this addendum)** involves removal and disposal of the ground slabs, pavements, footings and piles from the former Sydney Football Stadium. It will also include the diversion of an existing Sydney Water stormwater main through the site.
- **Stage 2 future application** – detailed design, construction and operation of the stadium and supporting business, retail and functional uses (not part of this addendum).

Infrastructure NSW have awarded the Stage 1 Contract Works to Lend Lease who are currently onsite undertaking the SSD9249 approved Works.

This addendum relates to the modification to the approved Stage 1 Development Consent SSD9249.

Infrastructure NSW is the Proponent for the Stage 1 planning modification.

2. SSD9249 Modification Scope of Works

The modification involves removal and disposal of the ground slabs, pavements, footings and piles from the former Sydney Football Stadium. It will also include the diversion of an existing Sydney Water stormwater main through the site.

The works proposed as part of the modification will be undertaken concurrent with works already approved under SSD9249. This will include demolition of the slabs using the current excavators fitted with hammers and pulverisers on the areas shown on Figure 1. Demolished material will be carted from site for recycling and disposal at a licenced waste facility.

The ground surrounding the piles will be excavated to expose the pile and excavators will cut off the pile to a depth of RL37.8. Waste from the pile will be transported to a licenced waste facility for recycling.

The diversion of the existing Sydney Water stormwater main will involve connecting the new pipe to the existing pit (W1 in Figure 2) and constructing a new main to the west of the proposed stadium. These works are required to ensure the demolition of buildings approved within SSD9249 do not impact the existing stormwater servicing through the site. The existing stormwater drain through the site will be decommissioned and removed following installation and commissioning of the new drain.

Project: Sydney Football Stadium
Client: Infrastructure NSW
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Drawn By: Kieren Watson
Date: 1.5.2019

Figure 1 Demolition of below ground structures

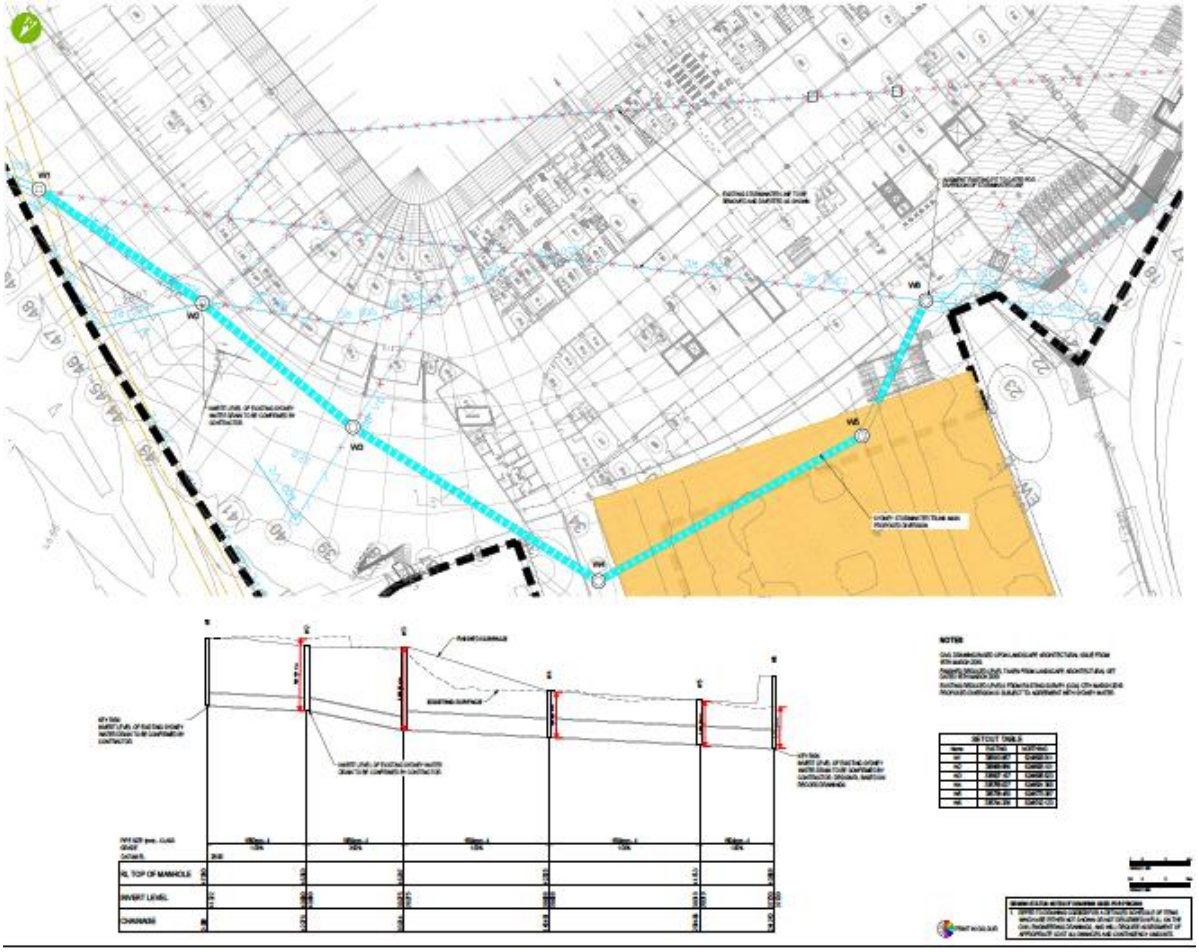


Figure 2: Stormwater Concept Location and long section

3. Archeological

3.1. Heritage

Curio Projects have produced an *Addendum Archeological Impact Statement – May 2019*, noting:

> ***"The s4.55 Modification works have been divided into two different categories of ground impacts: those that will only impact upper fill layers (i.e. removal of the concrete slabs, footings and paving); and those that will have a deeper subsurface impact (i.e. excavation of existing piles). The lesser impacts (i.e. removal of the concrete slab, paving and building footings) will have no to very low to impact on any potential historical archaeological resource, and no potential to impact on potential Aboriginal archaeology.***
>
> ***Therefore, no targeted historical archaeological monitoring/supervision is required for the modification works, and works should proceed for the modification works following the developed 'Unexpected Finds' protocol with regards to historical archaeology".***

As part of the site preparation works, further investigation of Busby's Bore has occurred under a s57 Exemption Permit including.

- Investigations in locating the vertical and horizontal shafts i under supervision of our Excavation Director.
- The vertical and horizontal shafts sit below the demolition works
- Substantial photographic condition and dilapidation records of the bores have been undertaken
- The horizontal shafts are at 12.5m below the existing ground level and are filled with silt, water and rubble
- Lend Lease have installed vibration loggers to monitor any vibration above 3mm that arises from the demolition work so the shafts are protected
- The 2 shafts have been surveyed and accurate records of their location and depth are in place
- Sydney Water Engineers and Heritage Manager has attended the site and witnessed the compliance with the Methodology.
- Sydney Water have provided a letter of concurrence for the hard demolition works to proceed as part of the SSD 9249.

4. Environmental

The original approved CMP environmental principles will be maintained for the Modification Works including:

- Noise and Vibration
- Noise and vibration measures
- Monitoring of noise and vibration
- Dust
- Dust control measures
- Monitoring of air quality
- Odour Control
- Storage of Dangerous Goods
- Erosion and Sediment Control
- Flora and Fauna Management
- Flood Mitigation
- Water Quality Management

In relation to this CMP Addendum, the following specific environmental management principles to be implemented on site with environmental performance to be monitored throughout the Works.

Monitoring to ensure environmental management/compliance shall be undertaken by Lend Lease. Where and if required, specialist consultants will be engaged to help establish monitoring systems.

In addition to formal environmental monitoring Lend Lease will ensure that regular environmental inspections are undertaken of all work activities being carried out at the project. Inspections will be carried out in conjunction with personnel responsible for a particular work area.

4.1. Noise & Vibration

Arup (letter dated 02 May 2019) have confirmed in relation to the modification scope of works:

> ***"The loudest anticipated activities to take place as part of the modification works, identified as hammering and excavating, have been previously assessed as part of the original Stage 1 works Noise and Vibration Impact Assessment (2018-06-05 - AC01-v5_SFSR_Noise and Vibration Impact Assessment, Arup, June 2018) and appropriate recommendations were provided in accordance with the Interim Construction Noise Guideline (DECC, 2009).***
>
> ***No additional acoustic impacts due to the modification works are expected and therefore no mitigation measures additional to those proposed as part of the Stage 1 works acoustic assessment are considered necessary."***

4.2. Contamination

Douglas Partners Pty Ltd (DP) has been commissioned in March 2019 by Lend Lease to prepare a Detailed Site Investigation (DSI) for the SFSR site.

The DSI was undertaken to:

- assess the general levels of soil contamination resulting from past and present activities at accessible locations on the site;
- assess the potential for contaminant migration by examining the groundwater quality on the site
- assess the suitability of the site for the proposed development; and
- provide recommendations for remediation works, if required.

The conclusion of the Douglas DSI was in relation to Site Suitability:

> ***"On the basis of the results outlined in this report, the site is considered suitable for its proposed continued use as a sporting stadium, provided that unexpected finds are managed appropriately during the construction phase of the project. The USTs present in the eastern portion of the site will need to be managed in accordance with the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2008."***

5. Traffic Management

A Construction Pedestrian and Traffic Management Plan (CPTMP) (Section 6 of the Transport Assessment Report prepared by Arup) has been approved for the Works under SSD9249.

Arup (letter dated 02 May 2019) have confirmed the following as it relates to the Modification Works;

> ***"Section 6 of the Arup Transport Impact Assessment (dated 28 May 2018) provided an overview of the likely construction related impacts of the project. The assessment noted that the envisaged works would generate in the order of 30-40 construction vehicles per day.***
>
> ***The works proposed under the modification would not generate any additional construction vehicle movements compared to that considered in the Transport Impact Assessment prepared by Arup in May 2018. The additional demolition waste would be transported from site using construction vehicles that are already accessing the SFS associated with works approved under SSD 9249.Therefore the findings of the assessment remain unchanged, principally being that the transport network in the vicinity of the SFS can support the expected level of construction activity with appropriate mitigation measures in place. No additional works or measures are considered necessary to support the modification."***

6. Demolition Management

6.1. Scope of Works

It is proposed that the removal of the ground slabs, pavements, footings and piles will be undertaken concurrent with works approved under SSD9249. This will involve demolition of the slabs using the current excavators fitted with hammers and pulverisers on the areas shown on Figure 1. Demolished material will be carted from site for recycling and disposal at a licenced waste facility.

Removal of the footings and piles from the former Sydney Football Stadium will be undertaken using the current excavators fitted with hammers and pulverisers. The ground surrounding the piles will be excavated to expose the pile and excavators will cut off the pile to a depth of RL37.8.. Waste from the pile will be transported to a licenced waste facility for recycling.

7. Stormwater Diversion Scope & Methodology

The existing Sydney Water 1050mm service is currently installed in the location of the new Stadium and is preventing final demolition occurring due to its zone of influence location.

Lend Lease are currently working closely with Sydney Water to have the design approved for the required diversion around the new stadium. The Strategy for completing the Sydney Water Stormwater Diversion project is to locate the existing inground pipe work, excavate, install pipe and connect drainage with minimal disruption to the Sydney Water system.

The strategy for the works includes:

Prior to the Sydney Water Stormwater application approval site hoardings will be established to isolate the works area and restrict access only to authorised personnel required to do the works. Once the work area has been established Lendlease will scan the work area using ground penetrating radar to locate existing services within the new stormwater diversion location. During this process, all associated storm water manhole locations will be surveyed with a dilapidation report completed on the 2 connection points.

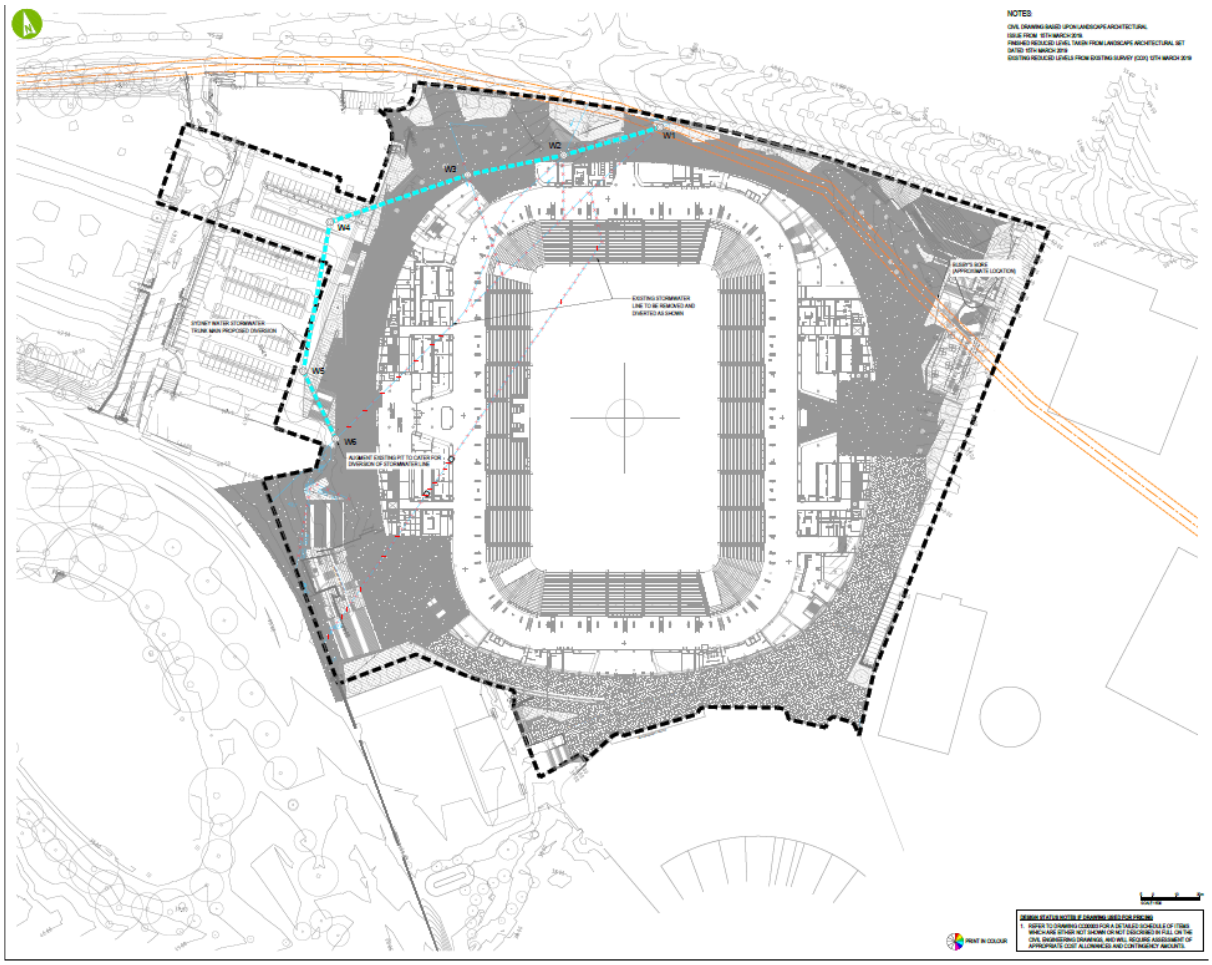
Using the data obtained from the services scan and survey, a detailed design will be developed, reviewed and approved for construction ready for installation. The detailed design drawing will be used to determine the extent of existing services to be worked around during the installation. Lend Lease will review the detailed drawings before adopting a pothole strategy that ensures inground services have been identified and all reasonable precautions have been taken to ensure a safe installation. The initial strategy does not envisage the relocation of existing inground services.

Following site establishment, services scan and Sydney Water approval the stormwater diversion works will commence. The installation strategy is to saw cut, excavate, lay services and backfill 2 standard length RCP stormwater pipes per day to minimise the amount of open trench outside of working hours.

Due to the size of the storm water installation and depth it is envisaged a 30T excavator will be based on site to do the excavation, bedding and installation of pipe. For pipe sizes 1050mm/1500mm the excavation strategy will require the use of heavy-duty shoring box for excavations deeper than 2.5m. Excavations less than 2.5m will be benched out in accordance with the relevant code of practices.

Lendlease, the accredited subcontractor and the Water Services Coordinator will engage with Sydney Water throughout the installation process to ensure the Flow Isolation Flow Management plan is approved, all relevant QA

documentation is signed off and the diversion strategy is accepted ready for the final connections. Once all relevant documentation has been approved Sydney Water will enable the accredited subcontractor to commence the final connection starting with installation of the Stormwater diversion followed by the permanent connections.



8. Waste

8.1. Waste Storage and Handling

Waste- The original quantities and breakdowns submitted in the approved CMP included all slabs, footings and piles as now contemplated in this modification. As such there is no additional waste expected to be generated by the works proposed compared to the original approval.

It has been determined by iNSW that onsite concrete crushing will no longer occur.