

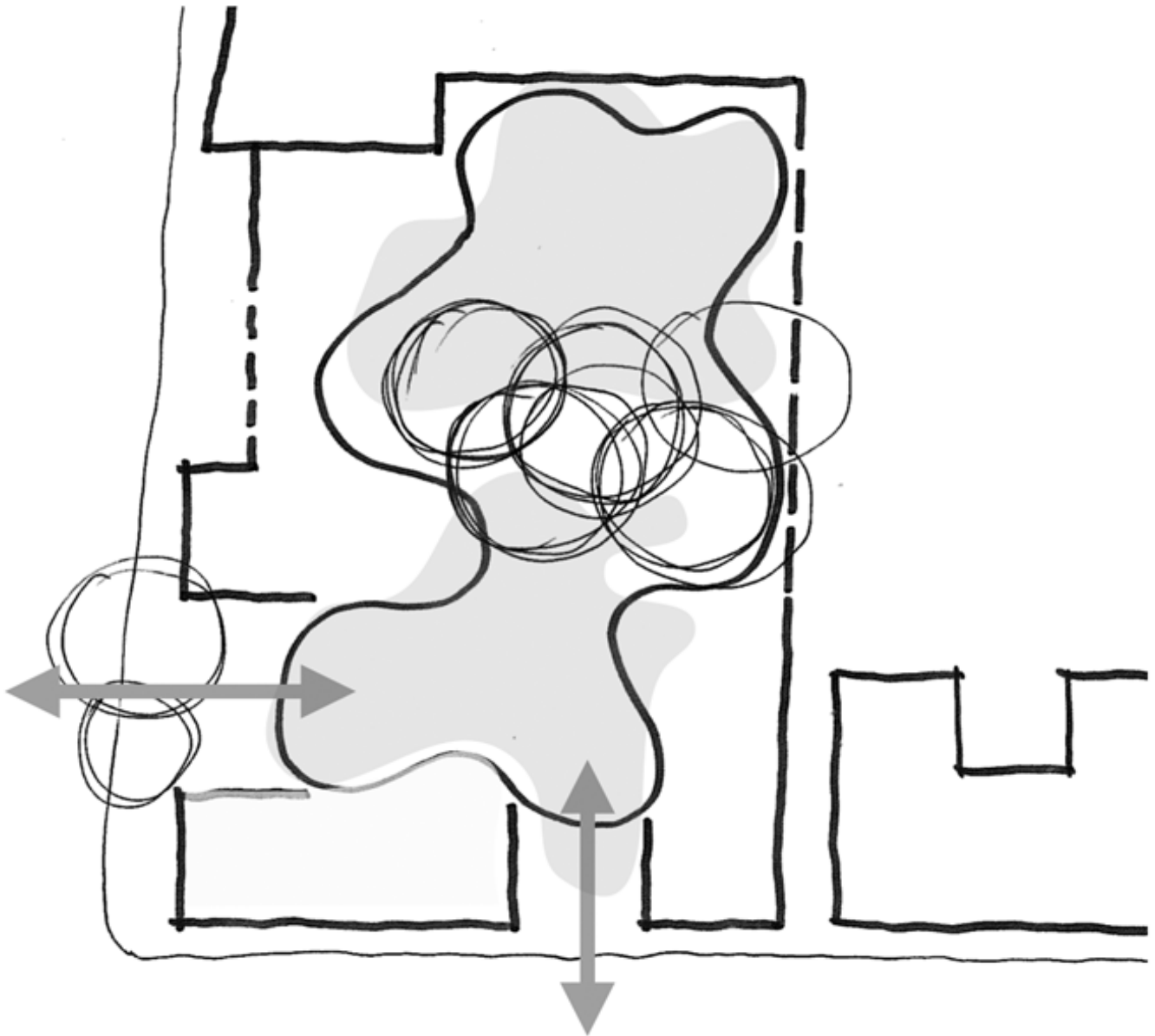
DARLINGTON PUBLIC SCHOOL REDEVELOPMENT

Appendix K — Construction Management Plan

SSD-9914

Prepared by Mace Group

For NSW Department of Education



For Information Only

Construction Management Plan for: Darlington Public School Main Works



SEARs Requirement	Relevant Report Section
Provide details regarding the staging of the proposed development.	3.4
Identify proposed construction hours and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours.	3.3
Provide details of how the school will continue to operate during construction activities of the new primary and secondary school, including proposed mitigation measures.	3.4, 4, 5, 6.3, 6.4, 6.5, 8,
Identify and detail how any asbestos waste, lead-based paint and Polychlorinated biphenyls (PCBs) that may be encountered will be handled, transported and disposed.	7

Table of Contents

Version Control	2
Purpose of Document.....	2
1. Introduction.....	3
2. Scope of Works	4
3. Operations of Site Establishment / Management.....	5
3.2. Legislative Requirements	5
3.3. Hours of Operation	6
3.4. Staging	6
3.5. Public and Property Protection	8
4. Consultation.....	9
4.1. Contractor Monthly Report	9
4.2. Disruption Request Notices	9
5. Environmental Management.....	10
5.1. Noise and Vibration	10
5.2. Dust	10
5.3. Erosion and Sediment Control	10
6. Traffic Management	10
6.1. Site Access.....	10
6.2. Parking	11
6.3. School Pick-up and Drop-off	11
6.4. Pedestrian Protection	12
6.5. Maintenance of Services	12
7. Waste Management and Recycling	13
7.1. Asbestos & Hazardous Materials	13
8. Stakeholder Consultation.....	13
8.1. Working within School Premise.....	13
8.2. Complaints Management System	13
9. Project Commissioning	14
9.1. As-Built Documentation.....	14
9.2. Security Handover	14
9.3. SINSW Defect Review	14
Appendix 1	1
Prohibited Employment Declaration.....	1
Appendix 2	1
Disruptive Request Notice Template	1
Appendix 3	4
Staging Plans	4

Version Control

Version	Date	Prepared By	Issued To	Status
V.01	30/03/20	D. Iuliano	J. Malin	Draft for comment
V1.0	16/04/20	Mace	Ethos Urban	SSDA Document
V1.1	23/04/20	Mace	Ethos Urban	Minor Changes

Purpose of Document

A note to prospective tendering contractors:

The purpose of this document is to advise tendering contractors of SINSW requirements. It also outlines expectations for the construction methodology and management plans of the Darlington Public School project (“**the Project**”).

This plan has been developed in consultation with SINSW to provide a guide to the successful tenderer on the construction management requirements of the project, inclusive of site-specific requirements throughout the construction period.

Please be aware that this plan is not prescriptive in its entirety nor has its development context been exhaustive. As such, tendering contractors are expected to further develop this plan for endorsement prior to commencement of works.

1. Introduction

Darlington PS was established in about 18783 and can currently accommodate up to 230 students with 219 enrolled as of 2019. Darlington PS is located on a site (across two (2) unconsolidated lots) which are both owned by the DoE. The existing facilities are more than 40 years old with no heritage buildings identified. However, a heritage item and conservation area are adjacent to the school and have been considered as part of the development.



Figure 1 - Site Layout

The intent of the works is to stage the construction in order to allow the school to remain on site. The works will be split into two stages.

The works for Stage 1 will see the north western portion of the site developed while the School continues to use the buildings along Abercrombie Street and the play area to the north east.

The works for Stage 2 will see the school move into the Stage 1 works, and the remainder of the site demolished and developed.

It is critical that the new facility merges seamlessly with existing operation.

The outcomes from this redevelopment is to increase the capacity of the school from current 230 students to 437 students and 60 preschool children.

This Construction Management Plan (“**CMP**”) has been prepared for the main construction works for the Project. The CMP will form the guidelines and principles for the final CMP that will be produced by the Contractor.

2. Scope of Works

The proposal is to develop the design and deliver approximately 6000m² of redevelopment within the existing school lots comprising:

- Preschool
- 19 Homebases
- Library
- Admin area and staff facilities
- Communal Hall
- Landscaped areas

3. Operations of Site Establishment / Management

The works will be undertaken under the supervision of the Main Contractor (“**Contractor**”). The Contractor will be required to prepare a site-specific CMP prior to any construction/ demolition or set up works for SINSW approval. All statements and proposals documented in this CMP will be reviewed at the time of contract award for the works to ensure alignment with proposed preferred methodologies and sequencing developments.

3.1. Site Establishment

To assist the Contractor in the development of the CMP, Mace has consulted with SINSW to provide a preliminary CMP. The following list is not a comprehensive list but will assist the Contractor:

- Proposed location of Contractors site amenities, offices and on floor lay down/tool store;
- Required site vehicle access and sizes of vehicles. All traffic management identified is to be provide by the Contract;
- Identify areas requiring site hoarding and fencing.

A proposed site establishment plan is shown below. Contractors are to make their own investigations into the suitability of the proposed site shed locations and the extent of the proposed fence line.



Figure 2 - Site Establishment

3.2. Legislative Requirements

The works will be undertaken in accordance with legislative requirements, the SSD Consent and as specified in the tender documents related to the awarding of the Main Contract.

Site accommodation, compliant with WorkCover requirements, will be established for site offices, lunch sheds, change sheds and ablutions within the construction site. This accommodation will

service all phases of the construction and may require adjustment during the phases of construction to allow safe and effective access for workers and construction.

All visitors to the site will be inducted by the Site Manager. The induction process will include site safety, evacuation and emergency procedures and environmental management.

All personnel and sub-Contractors working onsite are required to fill in the Prohibited Employment Declaration, shown in Appendix 1, or have a Working with Children Checks (WCC). This documentation is a requirement prior any construction on site set up for all persons working on the site.

3.3. Hours of Operation

The following hours of operation are proposed for the works but are subject to change according to the SSDA requirements:

- Monday to Friday 7:00AM to 6:00PM
- Saturdays 8:00AM to 3:00PM*
- Sundays and Public Holidays No works.

**Removal of contaminated waste can only occur on a weekend due to a live school site. It is expected that work on Saturday will usually finish by 1pm, except in the case of removal of waste.*

It is not envisaged that the construction works will require work to be undertaken out of the above normal working hours, however should this be necessary, appropriate applications and consultation will occur to obtain all stakeholder approvals.

3.4. Staging

It is envisaged that the SSDA works will be delivered in two stages.

4.4.1 Construction Staging

Stage 1 – Upper Site Works

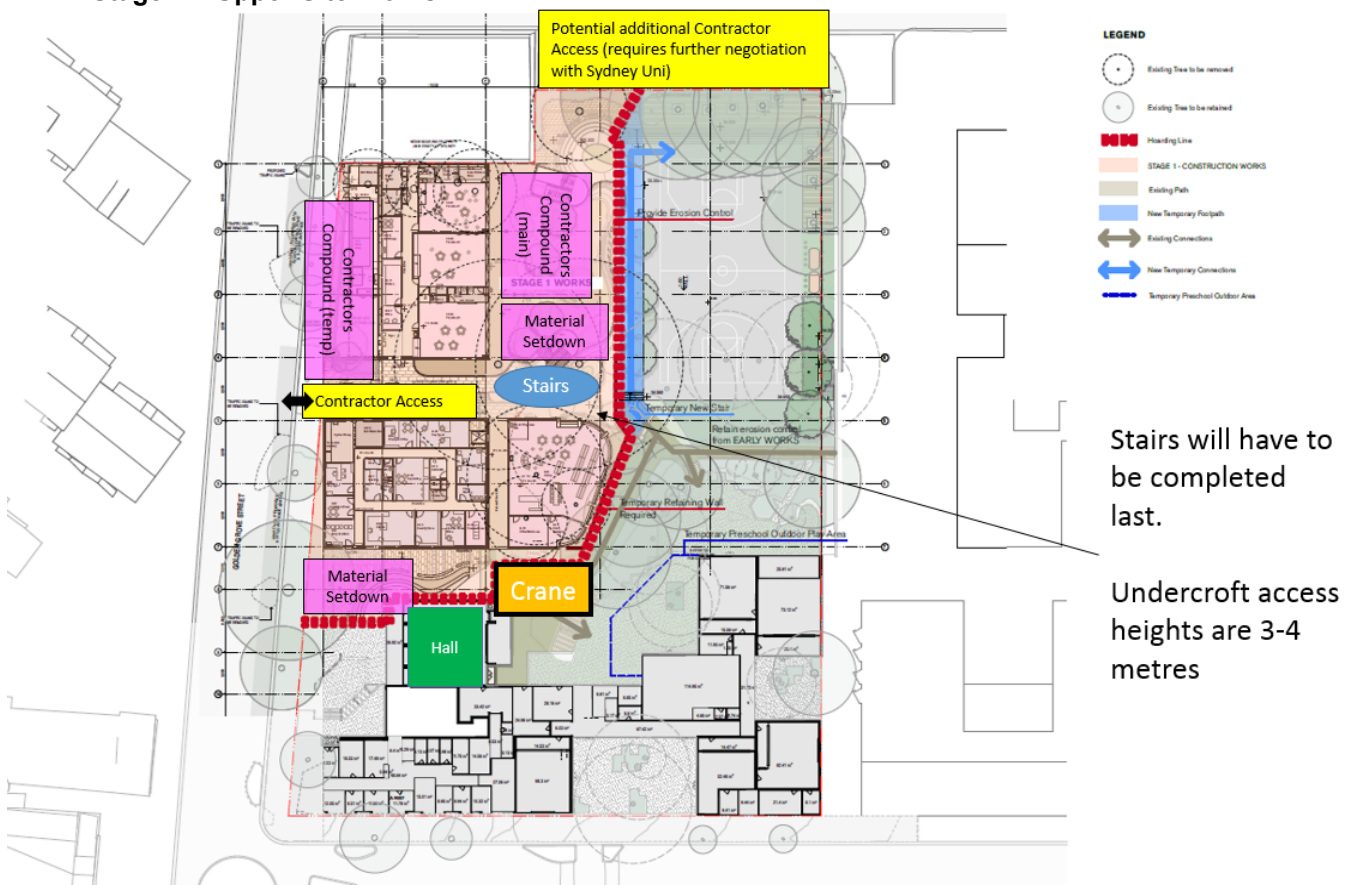


Figure 3 - Stage 1 Works

During stage 1, the school will remain operational in Block A & B. The area where Block C was previously (having been demolished previously under a separate approval) will form the area for construction of stage 1. The hoarding line through the middle of Block C will form the boundary of stage 1. Careful demolition of Block C will have enabled the continued use of the hall in this location. The Stage 1 works include:

- Construction of the administration/library block on ground level
- Construction of the preschool block also on ground level
- Construction of two levels of homebases that will lay atop the two ground level blocks
- Construction of the services area alongside Golden Grove
- Landscaping for the preschool area and the remainder of the northern portion of the site to tie in the existing early works playcourt
- Electrical supply connection to the Darlington Lane substation. At completion of stage 1, the site should change over its connection to the grid from Abercrombie Street pole to the Golden Grove connection.
- End of stage 1 will also trigger lot consolidation into a single lot.

The stairs indicated in the drawing will need to be constructed last in order to allow usage of the internal compound. Temporary access to Darlington Lane, or a temporary compound on Golden Grove Street will allow works to finish once the stairs are completed.

Stage 2 – Lower Site Works

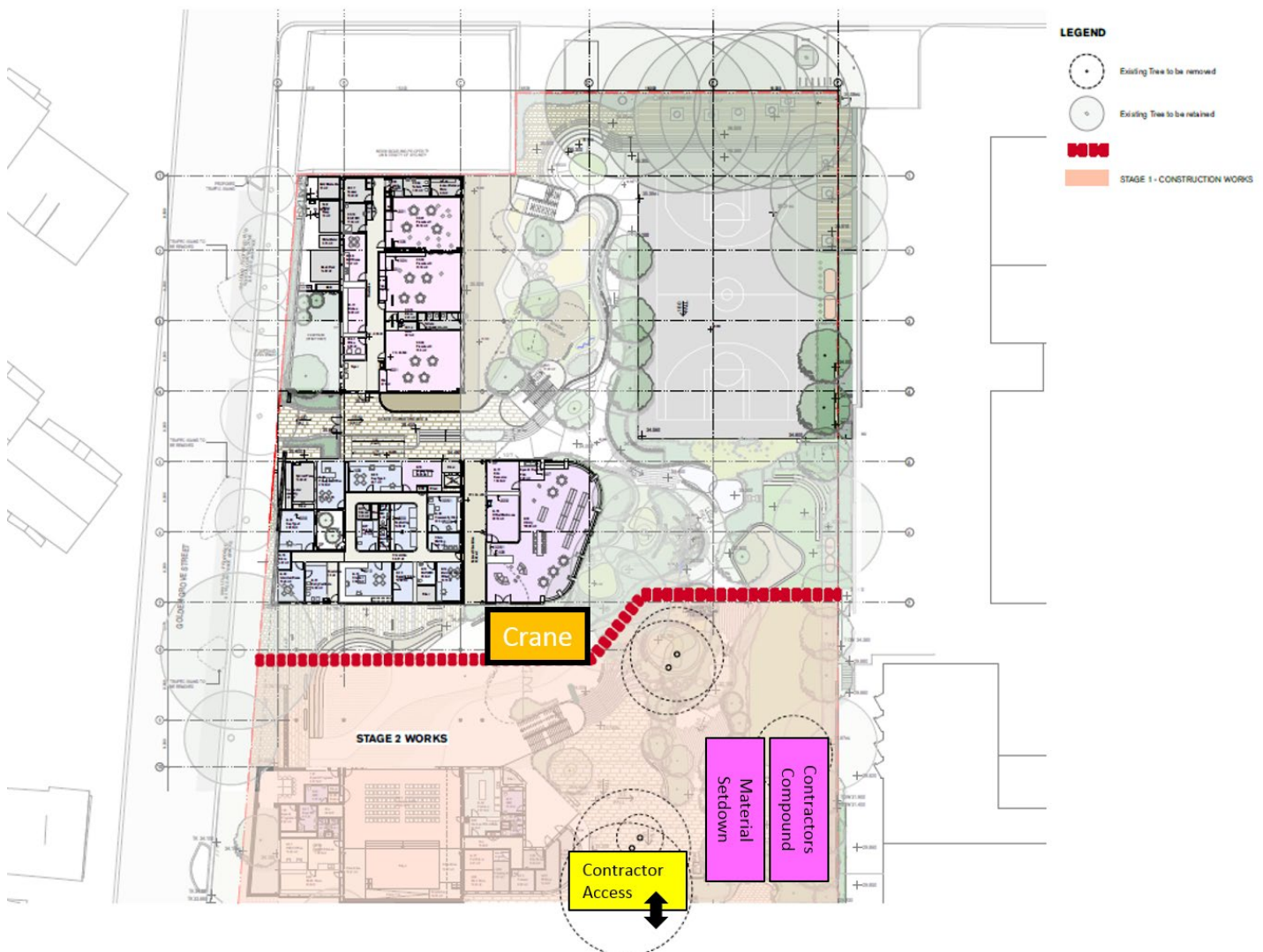


Figure 4 – Stage 2 Works

Once the existing school operations have decanted into the new Stage 1 building, the Contractor will be given access to the Stage 2 site to undertake the works as documented. The site will continue to operate as a live school environment in the stage 1 building. The Contractor will be required to manage any potential disruptions in accordance with the agreed disruption management process.

Stage 2 works include:

- Hall, canteen and associated areas
- Levels 1 & 2 of homebases above connecting to the Stage 1 levels
- COLA and outdoor landscaping areas

4.4.2 Electrical Staging

The current Electrical supply is via a pillar on Abercrombie Street. This will supply the site during stage 1 while the new trench and connection to the substation on Darlington Lane is made. The changeover to the new supply will occur near completion of stage 1 and will coincide with lot consolidation. The new electrical supply will enter site via the North Western corner below the IXL building.

4.4.3 Stormwater Staging

The site currently has 14 stormwater outlets to the kerb.

Stage 1 will have these outlets maintained without an OSD. City of Sydney Council has agreed to this temporary arrangement as there is no additional flow to the Stormwater system from the current system.

Stage 2 will include installation of two OSD tanks. Tank 1 will be connected to the Stormwater pipe articulated along Golden Grove. The other tank will be connected to kerb outlets. This tank is of a substantial size to reduce current flows.

With the install of both tanks, there will be a net decrease to the flow of site Stormwater to the current Council system.

3.5. Public and Property Protection

As specified in Australian Standards and WorkCover requirements, appropriate hoarding / fencing and safety barriers will be installed to the work areas prior to commencement of the works. Site hoardings will be erected around the perimeter of the site and maintained to prevent public access. The Contractor will be required to install and maintain a continuous shade cloth banner and vinyl signs to all site fences within the public view prior to commencement of works.

Site signage will provide 24-hour emergency contact details including contact name and telephone number. Signage will abide by the SINSW Government Brand Guidelines.

Security and monitoring of the construction site will also be implemented by the Contractor and maintained throughout the entire construction period.

These public and property protection measures will be reviewed at the time of contract award for the works to ensure alignment with proposed preferred methodologies and sequencing developments and to ensure that the safety of the general public is maintained at all times during the works.

4. Consultation

The Main Contractor will be responsible for setting up fortnightly construction meetings with the School staff, SINSW and Mace. The Contractor will be required to chair these meetings, provide minutes and produce a written fortnightly progress plan throughout the differing stages of construction/demolition period.

Typical agenda items should include the following key components:

- Attendance and apologies;
- Acceptance of previous minutes;
- Items requirement direction to continue construction progression;
- Update on programme;
- Key activities completed in the previous period; and key activities forecast for the upcoming period;
- Activities that may affect operations;
- Activities that may affect the contractor and;
- Listed RFI's and outstanding actions
- Any other business.

These meetings are separate from the monthly PRG that the contractor is expected to attend, but will be run by SINSW and Mace.

4.1. Contractor Monthly Report

In addition to the written progress plan, a written monthly report is required to be prepared by the Main Contractor for the Principal and is to be provided by the 28th of each month. The report should include but not limited to the following key components:

- All Work Health, Safety and Rehabilitation matters;
- The Contractors forecasted Project Completion;
- Status of the construction “works” against the current approved contract programme;
- Status of deviations from the current approved programme;
- Progress of the “works” including 6 digital photos of the “works”;
- Details of any matters which may have a positive or adverse effect on the “works”;
- Details of any matters the Contractor believes have potential to affect or delay the “works”;
- Mitigation or remedial actions is being, or may be taken in respect of potential delays in relation to the “works”;
- Status of all variations, including variations which a variation order has been issued, or anticipated variations;
- Summary and status of claims made by the Contractor under the Contract;
- Any other matters they may affect or current affecting the progress and cost of the “works”; and
- Programme showing projected status of the “works” three weeks from the date of the written report.

4.2. Disruption Request Notices

Where the Main Contractor wishes to undertake noisy or disruptive works, they must prepare and submit for approval a Disruption Request Notice (“DRN”) which shall be reviewed and approved by both Mace and Darlington PS prior to commencing any works. The Main Contractor should endeavour to issue these to Mace 14 days prior to when the works are proposed to take place. This should allow the school to review the proposal, assess the possible impact and have sufficient time to execute a management plan.

The DRNs will be formally discussed in the fortnightly contractor meetings, with Mace providing direction on their approval from the school in the meeting before the works are scheduled to commence.

5. Environmental Management

The Contractor is expected to develop a site-specific Environmental Management Plan that details mitigation strategies to protect the ecology of the Project site and control various sources of pollution.

5.1. Noise and Vibration

The Contractor will be required to monitor noise during the works and comply with legislative requirements authorised by the NSW Environment Protection Authority (“EPA”) and the local Council. As part of the noise mitigation actions for the project, the Contractor will be responsible for the management, checking of compliance maintenance regimes and statutory supervision of all equipment, such as ensuring all trucks and machinery involved in the works are checked for defective exhaust systems and general servicing.

The contractor must ensure that all site activities which have the potential to create noise and vibration omissions are controlled and suitable equipment is utilised to mitigate the associated disruption to the school and surrounding neighbours. If additional items are required to ensure a high level of noise and vibration control, then the contractor must specify the equipment as part of the tender and make reference in the prelims section. Where the Contractor wishes to undertake disruptive works, they must prepare and submit for approval a DRN, as detailed section 5.2 above.

A draft template of a DRN is provided at Appendix 2, which will be reviewed and approved by Mace, SINSW and DPS prior to commencing any works. Machine work and other works that expose residents, workers and visitors to excessive noise will not be permitted outside the above-mentioned hours of operation.

5.2. Dust

Mitigation of dust will be managed and controlled by the Contractor. The Contractor will assess the need for measures to prevent tracking of soil onto roadways outside of the site and provide if deemed necessary. These may include the provision of measures such as a shaker grid, wheel wash facilities, hosing and general manual cleaning.

The contractor must ensure that all site activities which have the potential to create dust omissions are controlled and suitable equipment is utilised to mitigate the release of dust and the associated disruption to the school and surrounding neighbours. If additional items are required to ensure a high level of dust control, then the contractor must specify and make reference in the prelims section.

Additional precautions that would be implemented during the works include the covering of all haulage trucks with tarpaulins and monitoring of weather conditions (including wind). Management and contingency plans will be developed to prevent any foreseeable impacts from dust.

5.3. Erosion and Sediment Control

Erosion and sediment controls for the works will be maintained in accordance with the requirements of Managing Urban Stormwater. Stormwater runoff and drainage will be managed by the Contractor through appropriate controls consistent with NSW Environment and Heritage standards and will be required to be monitored closely following heavy rainfall. Any remedial work required to maintain the effectiveness of controls will be undertaken as a priority.

6. Traffic Management

As part of the final CMP, the Contractor will be required to submit a Traffic and Pedestrian Management Plan for approval prior to commencement of the works.

6.1. Site Access

Figures 1 below presents a proposed route for construction vehicular traffic to access the school Site.

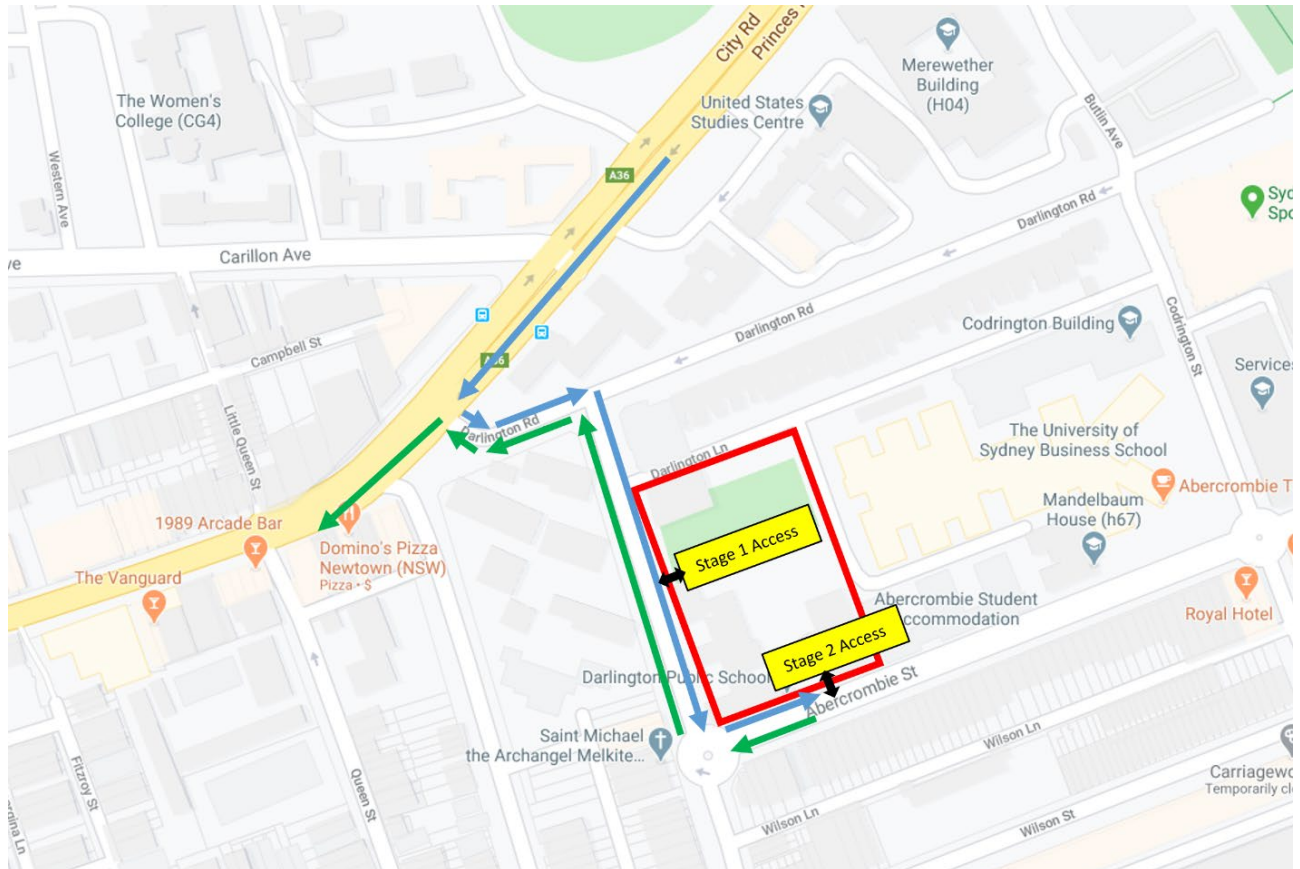


Figure 4 - Construction Vehicular Traffic Route to the Sites

It is envisaged that the construction plant and haulage will access the site from one dedicated construction access route.

During stage 1, the construction traffic will access the site via Golden Grove Street. During stage 2, access will be via Abercrombie Street. These entrances will be provided solely for the Contractors use, minimise potential impact of the regular school vehicular traffic. Appropriate traffic management procedures must be in accordance with the SSDA and include consultation with City of Sydney and TfNSW.

6.2. Parking

Parking will not be provided for construction personnel. Vehicle owners are to be solely responsible for finding appropriate places to park and shall be solely responsible for any fines incurred for not complying with relevant parking restrictions. Emergency vehicle access into the School is to be maintained at all times of the construction works.

The Contractor is to refer to the Traffic Impact Assessment (TIA) prepared by TTPA, the traffic consultant. The TIA should form the basis of the Contractor's parking management plan for the construction phase. Emphasis will be on recommending and providing alternate means for workers to get to site, specifically public transport. This will be to minimise the use of private vehicles and associated impacts on the surrounding streets.

It is recommended that on site tool storage is provided for workers so that they can more easily make use of the public transport in the surrounding area. If workers are required to park near site, recommended long stay areas need to be clearly identified in order to prevent any local disruption.

6.3. School Pick-up and Drop-off

Site vehicle activity should not be interfering with the drop-off and pick-up entrance along Golden Grove and Abercrombie Street. Contractor is required to identify the mitigation strategies in the Traffic Management Plan. The contractor will need to schedule main deliveries outside of these key school times.

6.4. Pedestrian Protection

Unauthorised pedestrian movements must not be permitted through the construction site entrance. The construction site will be defined by clear signage and maintained throughout the construction period. Hoarding, appropriate to the interaction between pedestrians and construction works (as per WorkCover requirements and Australian Standards), will be constructed to prevent unauthorised access to the site. These hoardings and fences will be staged to allow access to in-use areas during the work.

6.5. Maintenance of Services

Emergency vehicle access to the site is to be maintained at all times of the construction works. All services to the school are to be uninterrupted during school operating hours.

7. Waste Management and Recycling

A formal Construction Waste Management Plan will be produced by the Contractor prior to works commencing. All material that cannot be recycled or reused will be disposed to an approved landfill facility. Waste will be minimised and that generated will be separated to maximise recycling.

7.1. Asbestos & Hazardous Materials

An Asbestos Management Plan ("AMP") and the relevant statutory legislations will be consulted with nominated project stakeholders if any hazardous material is detected and requires immediate removal and treatment. The AMP will include removal control plans for any Synthetic Mineral Fibre ("SMF"), Polychlorinated Biphenyl ("PCB"), Lead Containing Paint and an Asbestos Removal Control Plan as appropriate.

Dangerous goods (such as petrol, diesel, oxy-acetylene, oils, etc.) will be stored in a lockable compound with sufficient ventilation in accordance with relevant codes of practice and standards. Material safety data sheets on all flammable and potentially harmful liquids will be provided by the Contractor undertaking the works.

The Removal Control Plan will be in accordance with the Remediation Action Plan R.001.Rev0 prepared by Douglas Partners on 23 March 2020.

8. Stakeholder Consultation

Weekly meetings and site walks will be undertaken by the Contractor with Mace, SINSW and school staff at the Project site. This will inform the team, project management team and Contractors of the upcoming events that fortnight and the detailed coordination of logistics.

Weekly site reports will be developed by the Contractor outlining the site works undertaken during the week and site works planned for the following week accompanied by progress images. The Contractor is responsible for chairing and minute taking for the site meetings and the project team will mitigate any risks posed to the operations of the school site.

8.1. Working within School Premise

As construction will be occurring within an operational school, the Contractor is to be mindful of this nature in tendering and throughout the works and should maintain noise and disturbance to a minimum. The Contractor is responsible for managing the sub-contractors on site and should ensure that they do not unnecessarily enter or interrupt non-construction areas or loiter in front of or peer through any windows or doors of classrooms unless specifically required to do so to undertake their works and have been duly authorised.

8.2. Complaints Management System

Complaints may include any interaction with a community member or stakeholder who expresses dissatisfaction with the project, services or staff member's actions during the course of the Project.

To ensure that complaints are managed consistently the following information is required to help resolve the complaint quickly and effectively:

- Complainant contact details;
- Description of complaint;
- The requested remedy/action;
- Due date for response; and
- Immediate action (if any).

All complaints are to be documented in the fortnightly site meeting to ensure effective and timely close out. In addition, the Contractor is to maintain a complaints tracking register which records the management and close out of all complaints. If the complaint escalates, the complaint shall be referred to Mace to be advised of a clear direction from SINSW.

9. Project Commissioning

A detailed building commissioning plan shall be developed in accordance with the relevant SINSW standard policies, procedures and guidelines. This plan is to be finalised no later than 6 months from completion of the works. The Contractor is responsible for coordinating all aspects of the commissioning plan including allowing sufficient time for review and revision of the commission plan by Mace, SINSW and DoE staff.

9.1. As-Built Documentation

All as-built documentation is required to be completed using the provided legends (these will likely be supplied by SINSW Technical Stakeholder representatives such as Security or ICT). Development of the required symbols is mandatory when completing drawings.

9.2. Security Handover

The SINSW Security team requires communication from the Main Contractor 7 days prior to project completion to allow sufficient time for the finalised security documentation to be completed. It is the Contractors responsibility to notify Mace and the Principal of this timing.

9.3. SINSW Defect Review

The SINSW are required to conduct a defects review during the project handover phase. The Contractor is required to inform Mace at project completion for a defects review to be coordinated.

Appendix 1

Prohibited Employment Declaration

Prohibited employment declaration

Commission for Children and Young People Act 1998



The *Commission for Children and Young People Act 1998* makes it an offence for a prohibited person (a person convicted of a serious sex offence, the murder of a child or a child-related personal violence offence, as well as a Registrable person under the *Child Protection (Offenders Registration) Act 2000*) to apply for or otherwise attempt to obtain, undertake or remain in, child-related employment. It does not apply if an order from the Industrial Relations Commission, Administrative Decisions Tribunal or Commission for Children and Young People, declares that the Act does not apply to a person in respect of a specific offence.

For further information on what is child-related employment see the *Working With Children Employer Guidelines*.

Section 33B of the *Commission for Children and Young People Act 1998* defines a serious sex offence as:

- An offence, involving sexual activity or acts of indecency, committed in New South Wales and that was punishable by penal servitude or imprisonment for 12 months or more; or
- An offence, involving sexual activity or acts of indecency, committed elsewhere and that would have been an offence punishable by penal servitude or imprisonment for 12 months or more, if it had been committed in New South Wales; or
- An offence under section 80D or 80E (sexual servitude) of the *Crimes Act 1900*, committed against a child; or
- An offence under Sections 91D-91G (child prostitution, other than if committed by a child prostitute) of the *Crimes Act 1900* or a similar offence under a law other than a law of New South Wales; or
- An offence under Section 91H, 578B or 578C (2A) (child pornography) of the *Crimes Act 1900* or a similar offence under a law other than a law of New South Wales; or
- An offence of attempting, or of conspiracy or incitement, to commit an offence referred to in the preceding paragraphs; or
- Any other offence, whether under the law of New South Wales or elsewhere, prescribed by the regulations.

NOTE: A conviction for carnal knowledge is classified as a serious sex offence under this legislation.

Section 33B of the *Commission for Children and Young People Act 1998* defines a child-related personal violence offence as an offence committed by an adult:

- Involving intentionally wounding and causing grievous bodily harm to a child; or
- Of attempting, or of conspiracy or incitement, to commit such an offence

Under *Commission for Children and Young People Act 1998*:

- It is an offence for a prohibited person to apply for or otherwise attempt to obtain, undertake or remain in child-related employment;
- Employers must ask existing employees, both paid and unpaid, and preferred applicants for child-related employment to declare if they are prohibited person or not;
- All people in child-related employment must inform their employers if they are a prohibited person or remove themselves from child-related employment; and
- Penalties are imposed for non compliance

I am aware that I am ineligible to apply for or otherwise attempt to obtain, undertake or remain in, child-related employment if I have been convicted of a serious sex offence or child-related personal violence offence as defined in the *Commission for Children and Young People Act 1998*, or if I am a Registrable Person under the *Child Protection (Offenders Registration) Act 2000*.

I have read and understood the above information in relation to the *Commission for Children and Young People Act 1998*. I am aware that it is an offence to make a false statement on this form.

I consent to a check of my relevant criminal records, to verify the statements I have made here, being undertaken by the NSW Commission for Children and Young People for monitoring and auditing purposes in accordance with Section 36 (1)(f) of the *Commission for Children and Young People Act 1998*.

I declare that I am not a person prohibited by the Act from seeking, obtaining, undertaking or remaining in child-related employment.

I understand that this information may be referred to the Commission for Children and Young People and/or to NSW Police for law enforcement purposes and for monitoring and auditing compliance with the procedures and standards for the Working With Children Check in accordance with Section 36 (1)(f) of the *Commission for Children and Young People Act 1998*.

Name (Block letters)			Signature
Alias (previous names)			
Date of Birth			Date

Note: Seek independent legal advice if you are unsure of your status as a prohibited person.
THIS FORM IS TO BE RETURNED TO YOUR EMPLOYER

January 2007

Appendix 2

Disruptive Request Notice Template

School Infrastructure NSW

Darlington Public School Redevelopment Main Works Package

Disruption Notice No: 001

Title:

Proposed Times Dates & Location:

Description	Proposed Start Date	Proposed End Date	Proposed Time Required	Total Duration
Total Duration				

Description of the Works:

Work Sequence:

Engineering Services Affected:

Levels and/or Areas Affected:

Contractor Contact during the works:

In the event of a "no answer" Contractors listed below will be contact in order of appearance until a number is reached

Company	Position	Contact Name	Mobile

Attachments /Reference Documents

Attachment	Document Name	Revision	Comments

Contract Approved Programme

DN Issued By Contractor (5days) working days prior to works commencing	Project Officer Required Approval Date (No less than 10 day prior to works commencing	Extended notice Period	Revised approval date

DRN Prepared By:

DRN Approved By:

Signed as accepted and approved for works to proceed by the School Principal Representative:

Name:

Signature:

Date:

Cc:

General Comments that form part of this approval.

Appendix 3

Staging Plans

- Early Works
- Stage 1 Works
- Staging Transition Zone
- Stage 2 Works