Arboricultural Statement 211 Pacific Highway St Leonards NSW

Client:

Stanton Dahl architects
PO Box 833 Epping NSW 1710
Epping NSW 1710

Attention Caroline Hart

Date: 16th December 2019

In relation to the additional information requested by the Department in relation to the International Chinese Schools SSD application for 211 Pacific Highway, St. Leonards we provide the following commentary:

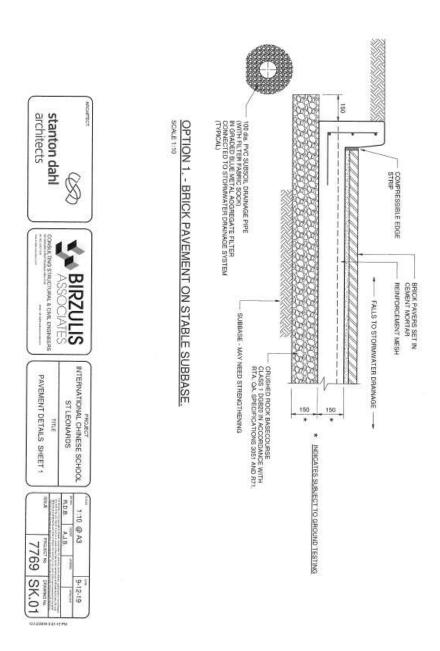
In relation to the second school signage location at the pedestrian entry to the site facing The Avenue, I refer to the attached statements and plans and wish to advise the proposed works will not have any detrimental impact on the existing shrubbery. It is noted that the installation of the signage footings can be adjusted within reason to be located in and around any major roots, therefore there will be little if no impact on the existing shrubbery, with the exception of required light pruning.

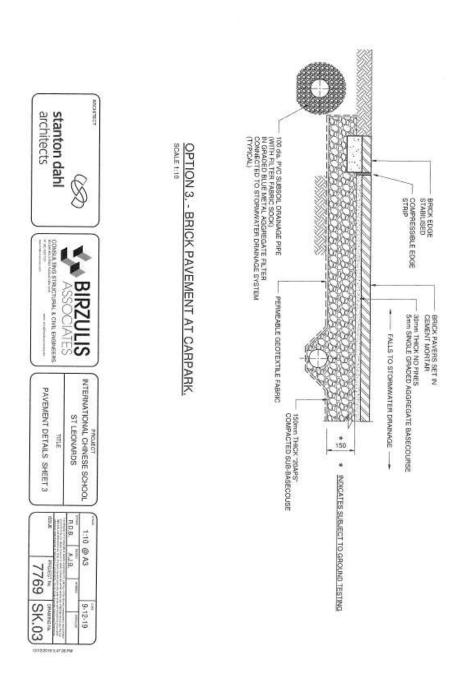
In relation to the impact on vegetation, including the root zone of adjacent trees, of the construction of a second access driveway to The Avenue to serve the proposed school, please refer to the attached proposed civil design (option 2) from Birzulis Associates for the new driveway entry. The civil design proposes the use of porous pavers on concrete subgrade (drilled to allow for drainage through to root zone), cardboard void former for future root growth and pier supports at 3000mm centres position adjustment allowed to avoid major roots. This construction methodology to considered acceptable.

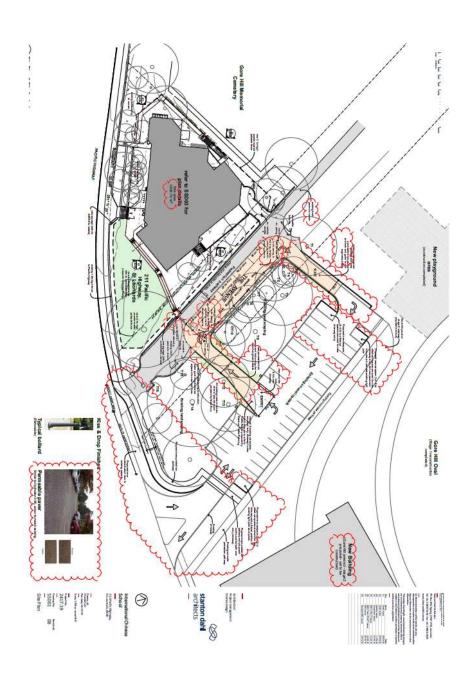
Mark Bury

Principal Consultant Mark Bury Consulting

AQF Level 5 Arborist Hortus Australia National Code 1042 Diploma of Horticulture/Arboriculture Parchment Number 6621 31st January 2006 Course Code RTF50203 International Society of Arboriculture Certified Arborist and Municipal Arborist Licence Number AU-0345AM

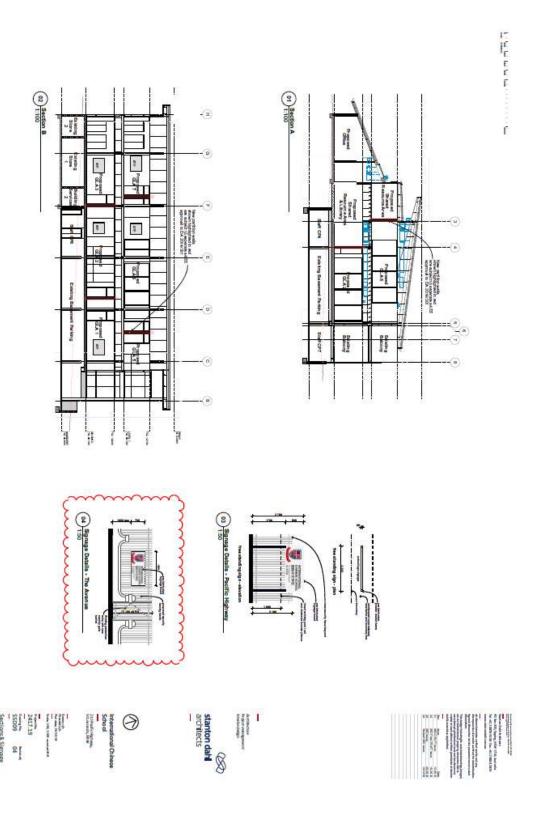








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Brief Qualifications and Experience of Mark Bury

- 1. Qualifications: Diploma of Horticulture/Arboriculture 2005, Advanced Certificate of Management 1995, Graduate Certificate in Parks Management UTS 2001. Advanced Certificate Horticulture TAFE 1986, Hadlington Certificate of Tree Care 1995 Licensed QTRA Practitioner since 2006. International Society of Arboriculture Tree Risk Assessment Qualification 2014, Completed refresher Course in 2018 and Licensed till 2024 International Society of Arboriculture Certified Arborist 2014 Licensed till 2020, International Society of Arboriculture Certified Municipal Specialist 2015 Licensed till 2020, currently studying International Society of Arboriculture Board Master Arborist Course
- 2. **Practical experience:** Twenty Three (23) years experience as a consulting arborist, 20 years experience in Local Government as a consulting arborist. A Founding member of the Institute of Australian Consulting Arborist 9Resigned 2006) and The Local Government Tree Resources Group which I was Secretary of in 1995.
- 3. Continuing professional development: Member of International Society of Arboriculture (AU0345A). Member of Australian Institute of Horticulture (MXB0615), attended courses by Jeremy Barrell and Claus Matteck. I attended the update of QTRA certification March 2015 and completed course in Visual Tree Assessment in 2015 and Visual Tree Assessment and Estimating the probability of failure in 2015.
- **4. Relevant experience** Twenty Three (23) Years experience as a consulting arborist and Twenty years experience in tree management in local government. Twenty (20) years experience in Local Government assessing development applications in regards to tree management issues. (Councils; Warringah, North Sydney, Mosman, Manly, Ashfield, Pittwater, Marrickville and Hornsby).

With my qualifications and experience I am an AQF 5. Furthermore I have written and published books on Trees and Asset Management, Trees and Real Estate, Planning and Trees and Inherent Failure Patterns of Trees in the Greater Sydney Area.

I have also been a high Level Asset Manager in Local Government for 10 years and have carried out numerous courses in asset management and risk management and developed Council Budgets in this area for a number of years.

I also have lectured at UTS on Asset Management. I have worked in the Industry for 36 years and have carried out major Asset management inventories including trees for large Local Government Areas and developed financial and operations plans to manage assets. Furthermore I have developed, written and implemented asset tree master plans for Ashfield, Pittwater, Hornsby and Marrickville Councils.

International Society of Arboriculture Continuing Education Units Completed 2014, 2015 and 2016

Tree Risk-Strategies for Preserving Heritage Trees

Tree Risk-Mitigation and Reporting

Tree Risk-Structural Defects and Conditions

Tree Risk-Tree Load: Concept

Tree Risk—Loads and Growth Response

Tree Risk-Levels of Tree Risk Assessment

Tree Risk- Sap Rot

Tree Risk- Anchorage: Root Plate Resistance to Failure

Tree Risk- Indicators of Decay in Urban Trees

Tree Risk- Visual Inspection Prior to Dismantling

Urban Forestry-Wildfire and the Role of the Arborist

Urban Forestry-Managing Trees during Construction Part 1 and 2

Urban Forestry-Tree Risk Assessment: A Foundation Urban Forestry-Tree Inventories Part 1 and Part 2

Trees & Their Environment- Fertilizing Trees & Shrubs Part 1 and Part 2

Urban Forestry-Root Management Challenges on Urban Sites

Urban Forestry-Challenges for the Built Environment

Urban Forestry - The Benefit of Trees

Urban Forestry- Root Planting Friendly Site Design

Urban Forestry- Root Management Challenges on Urban Sites

Urban Forestry- Tree Inventories Part 1

Urban Forestry- Tree Inventories Part 2

Urban Forestry- Tree Risk Assessment a Foundation

Urban Forestry- Managing Trees during Construction Parts 1 and 2

Urban Forestry- Wildfire and the Role of the Arborist

Trees & Their Environment- Soil Properties: Part 1 and Part 2

Trees & Their Environment- Fertilizing Trees & Shrubs Part 1 and Part 2

Trees & Their Environment- Analyse Before You Fertilize

Trees & Their Environment- Back to Basics: Tree Fertilization

Trees & Their Environment- Slow or Controlled Release Fertilizers

Tree Maintenance- Trees & Lightning

Tree Maintenance- Cabling

Tree Maintenance- Pollarding: What Was Old Is New Again

Tree Maintenance- Why Utilities "V-Out" Trees

Tree Maintenance- Pruning Trees Part 1: Principles, Objectives & Pruning Types

Tree Maintenance- Pruning Trees Part 2: How, Where and How Much

Plant Health Care-Plant Health Care

Plant Health Care- Maintaining Tree and Turf Associations

Plant Health Care- Preserving Trees during the Construction Process

Plant Health Care- Mulch

Plant Health Care- Preserving trees during the Construction Process

Plant Health Care- Trees v Turf

Plant Health Care-Resource Allocation Trade Off

Plant Health Care- Root System Care

Safe Working Practices -Innovations in Climbing Techniques and Equipment

Safe Working Practices- Basic Chain Saw Maintenance

Safe Working Practices- Felling Techniques

Safe Working Practices- Engineering Concepts for Arborists

Safe Working Practices- Tree Removals

Safe Working Practices- Chain Saw Cutting Techniques

Tree Science-Palms just not for the Tropics

Tree Science-Damage and Diagnosis Steps to Proper Diagnosis

Tree Science- Plant Traits that Resemble Abiotic Disorders

Tree Science- Adventitious Roots Occurrence and Management in Trees

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Tree Science- Cool Trees Surviving Cold Temperatures

Tree Science- Identifying Wood Decay and Wood Decay Fungi in Urban Trees

Tree Science- How Pests use Bark or Wood as Food

Tree Science- How trees get to fat

Tree Science- Kissing under the Mistletoe

Biology-Tree Failure Risk Evaluations

Biology-Tree Growth Rings Formation and Form

Biology- Regulating Tree Growth Keeping the Green Side Up

Biology- How Wind Affects Trees

Biology- Allelopathy in Trees

Biology- Fantasy Facts and Fall Colour

Biology- Blowing in the Wind

Biology-Tree Physiology

Biology-Basic Woody Plant Biology

Diagnosis and Treatment- Plant Health Care and the Diagnostic Process

Diagnosis and Treatment- Want to be a Better Plant Diagnostician

Diagnosis and Treatment- Diagnosing Disease Problems on Trees

Diagnosis and Treatment- How Weather Influences Insect and Mite Populations

Diagnosis and Treatment- Understanding and Diagnosing Scale Insects

Diagnosis and Treatment-Surefire Rules of Diagnosis

Diagnosis and Treatment- Diagnosing Abiotic Disorders

Tree Selection and Planting- A plant by any Other Name

Tree Selection and Planting-Installation and Establishment of Trees and Shrubs

Tree Selection and Planting- Ten Keys to Plant and Site Selection

Tree Selection and Planting- Tree Transplanting

Tree Selection and Planting- Tree Transplanting and Establishment
Tree Selection and Planting- Post Planting Maintenance of Trees and Shrubs

Tree Selection and Planting- Tree Trunk Protection

Tree Selection and Planting-Siting Selecting and Planting Problems

Tree Selection and Planting- Girdling Root Formation in Landscape Trees

Tree Selection and Planting- Right Tree, Right Location

Tree Selection and Planting- Dendrology and Taxonomy

Tree and Development

The Landscape below Ground

General- Arborist Equipment Study Program

International Society of Arboriculture Continuing Education Units Completed 2017

Root Pruning Part 2

Palms: Woody Giants of the Monocots Part 2

Biology and Assessment of Callus and Woundwood

Managing Soils That Support Urban Trees Part 1

Palms: Woody Giants of the Monocots Part 1

Tree Injection Part 1

Plant Health Care and Diagnostics

Root Management: An Introduction

Bark Traits are Important to Tree health and Survival

The Cost of Not Maintaining the Urban Forest

Flood Tolerant Trees in the Urban Sphere

Integrated Vegetation Management

Advanced Twig Anatomy

Tree Lightning Protection Systems Part 2

Tree Safety

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Continuing Education Units Completed 2018

Managing Soils That Support Urban Trees Part Two

Preserving Trees During Construction

Arborists and Wildlife Retaining Trees for Wildlife Habitat

Understanding Tree Responses to Abiotic and Biotic Stress Complexes

Storm Response Part 1 Types of Storms and Their Effects on Trees

Storm Response Part 2 Preparing for Safe and Effective Responses to Storms

Storm Response Part 3 Effective Response to Large and Small -Scale Storm Emergencies

Storm Response Part 4 Unique Aspects : Keeping Employees Safe, Talking to the Media, Saving

Damaged Trees, Winding Down, and Lessons Learned

Tree Inventories

Understanding Tree Responses to Stress

Tree Lightning Protection Systems (Part One)

Root Management Challenges on Urban Sites Achieving a Healthy Root Crown Balance

Root Management Challenges on Urban Sites Human Intervention in Root Development

Tree Risk Assessment Structural Defects and Conditions that Affect the Likelihood of Failure

Basic Tree Plumbing Translocation

Tree Injection (Part 2)

Advanced Twig Anatomy Starting Little to Get Big (Part 1)

Biology and Identification of Fungi

Urban Tree Inventory Data

Comparison of Tree Conditions

Roadside Soil Enhancement

Tree Species as Tools for Biodiversity and Phytemediation

Homeowner Interactions with Residential Trees In Urban Areas

Does Modulus of Elasticity Vary

Long Term Fluctuations in Water Status and Crown Die Back

Maximum Size Expectations in Designed Space

The Arboricultural and Economic Benefits of Formative Pruning

Protecting Your Assets

The Management of Tree Roots in Urban and Suburban Settings

The Costs on Not Maintaining and Maintaining Urban Forest

Tree Performance during Early Years and Future Performance

Effects of Urbanisation on Tree Species Composition and Structure

Things Arborist Should Know about Soil Microbes

Wood Chips and Compost Improve Compacted Urban Soil

The Linear Index of Tree Appraisal Model

The Influence of Abiotic factors on street tree condition and mortality in a commercial retail Streetscape

Water Management Strategies in Dry Environments

Comparison of Shading Effectiveness

Vines and Utility Arboriculture

Vegetation and Storm Water Run Off

Disclaimer

This assessment has been prepared for the exclusive use of the client and Mark Bury Consulting which accepts no responsibility for its use by other persons.

The client acknowledges that this appraisal, and any opinions, advice or recommendations expressed or given in it, are based on the information supplied by the client and on the data inspections, measurements and analysis carried out or obtained by Mark Bury Consulting and referred to in the assessment. The client should rely on the assessment and on its contents, only to that extent.

This assessment was carried out from the ground, and covers what was reasonably able to be assessed and available to this assessor at the time of inspection. No aerial or subterranean inspections were carried out.

This report is to be utilised in its entirety only. Any written or verbal submission, report or presentation that includes statements taken from the findings, discussions conclusions or recommendations made in this report, may only be used where the whole of the original report (or a copy) is referenced in, and directly attached to that submission, report or presentation. This report must be revised for use in the Land and Environment Court and permission sorted from the owner for its use in court.

Care has been taken to obtain information from reliable sources. All data has been verified were possible, however, Mark Bury Consulting can neither guarantee nor be responsible for the accuracy of information provided by others.

Information contained in this report covers only the trees that were examined and reflects the condition of the trees at the time of inspection, furthermore the inspection was limited to a visual examination of the subject trees without dissection, excavation, probing or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject tree may not arise in the future. This report cannot be used in a court of law until it is revised and referenced.