

LANDSCAPE CHARACTER VISUAL IMPACT SOLAR GLINT AND GLARE ASSESSMENTS

CAPABILITY

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Contact Mark Perkins



Web: <http://www.ennismorefield.com.au> Email: mark.perkins@ennismorefield.com.au Ph +61 447713999

Web: <http://www.solarglare.com.au> Email: office@solarglare.com.au Ph +61 447713999

ENNISMORE FIELD PTY LTD. Landscape Architects. ABN 93946429434 ACN 138864150. 16, Rainforest Drive, Eltham, NSW, 2480.

LANDSCAPE ARCHITECTS incorporating SOLARGLARE©

As the principal of EF Landscape Architects incorporating SOLARGLARE® I'd like to introduce you to our Visual Impact Assessment services.

I specialise in Strategic Landscape Planning, Visual Impact Assessment and Landscape Character Assessment. I have been providing these services since 2006 to Developers, Council and Private Landholders in the Northern Rivers and South East Queensland.

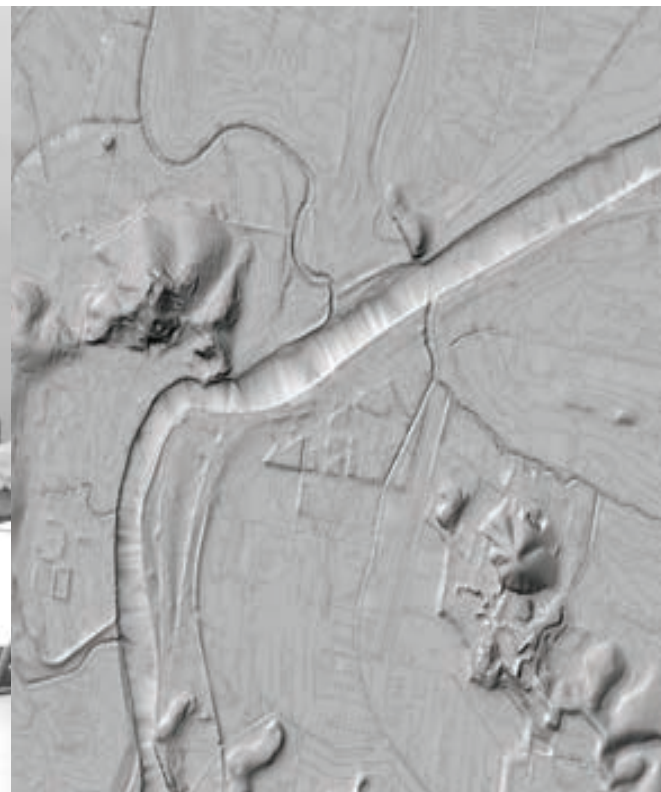
I have presented at the British Columbia Society of Landscape Architects Annual Conference at Kelowna, British Columbia in 2017 and published in Landscape Australia Magazine in 2018. The paper discussed scenic amenity and ecosystem classification within the context of peri-urban and rural residential development in NNSW.

I'm a Pre-approved Consultant to supply Tweed Shire Council with professional services in the category of: Landscape, Visual Impact Assessment: REF. RFO2019032 2019-2021 and have presented to Councilors and community groups in Byron and Tweed Shires and acted as Expert Witness in the Land and Environment Court of NSW for Visual Impact and Landscape.

Landscape Character, Visual and Glare Assessments are undertaken within the regulatory context of Local and state authorities. Photomontages are consistent with, NOTE 1 : Land and Environment Court Policy: Use of Photomontages.

Mark Perkins

Director and Principal RLA AILA Member No 002060



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COMPANY PROFILE

We are a boutique Landscape Architecture practice, highly agile and project driven in our delivery of design services. Our passion is for the landscapes in which we live, work and build communities. The methodologies and knowledge we develop and acquire on this journey are brought to each project we undertake. We work in partnership with our clients to achieve their goals.

Our services include Strategic Landscape Master Planning and Plans of Management: Landscape Character and Visual Impact Assessments: Solar Glint and Glare Hazard Assessments: Conceptual Design: Detailed Planting and Construction Documentation: Contract Documentation: Project Management and Contract Administration: Environmental Assessment and Reporting. We collaborate with allied design, planning, environmental and engineering practices as lead consultant and as team members

Our Solar Glint and Glare Hazard assessments utilise the Solar Glare Hazard Analysis Tool (SGHAT 2.0) developed by Sandi National Laboratory. The SGHAT was developed to evaluate glare resulting from solar farms at different viewpoints, based on the location, orientation and specifications of the PV modules. This tool is required by the United States FAA for glare hazard analysis near airports and is also recognised by the Australian Government Civil Aviation Safety Authority (CASA).

Landscape Character is assessed identifying, vegetation communities and land use in local, regional and historical context.

Visual Impact is assessed through a viewshed analysis of views from static and linear public and private viewpoints, evaluating visual sensitivity and determining mitigation measures to address any visual impact.

The Visual Impact Assessment methodology has been developed with the guidance of;

- AILA Guidance Note for Visual Impact Assessment. June 2018.
- Landscape Institute and Institute of Environmental Management and Assessment (2013). The Guidelines for Landscape and Visual Impact . London 2013.
- Scenic Management System (1996) as described in the publication Landscape Aesthetics: A Handbook of Scenery Management prepared by the US Forestry Service. Assessment, Third Edition.

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SELECTED PROJECT EXPERIENCE

Ballina Central Shopping Centre Proposed Digital Signage, 2021, Client, oOH Media. Provide a Landscape Character and Visual Impact Assessment for proposed digital signage.

Byron Bay Solar Farm, 2020, Client, Byron Bay Solar Farm Holdings. Provide a Landscape Character and Visual Impact Assessment for a proposed 6 Hectare Solar array and associated infrastructure. Provide a Solar Glare Assessment utilising Solar Glare Hazard Analysis Tool (SGHAT 2.0) developed by Sandi National Laboratory.

Tyalgum, Hewitville Pty Ltd, 2020, Client, Fish Developments: Development Application for a proposed Seven Lot Subdivision. Landscape Character and Visual Impact Assessment within World Heritage viewsheds.

Wardrop Valley, Client, 2019, Client, Tweed Shire Council, DAC Town Planning for Messrs. Dickinson. Proposed rezoning for Industrial and Residential Development. Landscape Character, Visual Impact Assessment and Landscape Guidelines within high viewing population viewsheds.

Station Street, Bangalow, 2018, Client, Bob Dunnet. Visual Impact Assessment, Statement of Landscape Intent and Expert Witness, for street-scape and heritage values in regard to Bangalow Heritage Precinct.

Winchelsea Way, Terranora, 2017-19, Client, Ian Fraser. Proposed planning proposal (rezoning) from non-urban to R5 large lot residential. Landscape Character, Visual Impact Assessment within high viewing population and 7 (d) zoned scenic amenity viewsheds.

West Byron State Significant Site Study and Development Application, 2010-2022, Client, West Byron Land Holders Association. Landscape Character, Visual Impact Assessment, Landscape plans for Development Application, Statement of Landscape Intent and Expert Witness.

Essential Energy, Suffolk Park Substation, 2013: Visual Amenity Assessment, Landscape Plans for Development application and for Construction.

Essential Energy Lismore Substation, 2009. Visual Amenity Assessment, Landscape Plans for Development application and for Construction.

Cumalun Precinct B. Urban Land Release, 2008. Visual Impact Assessment and landscape treatments consultancy. Attendance Enquiry by Design and Stakeholder Consultation workshops.

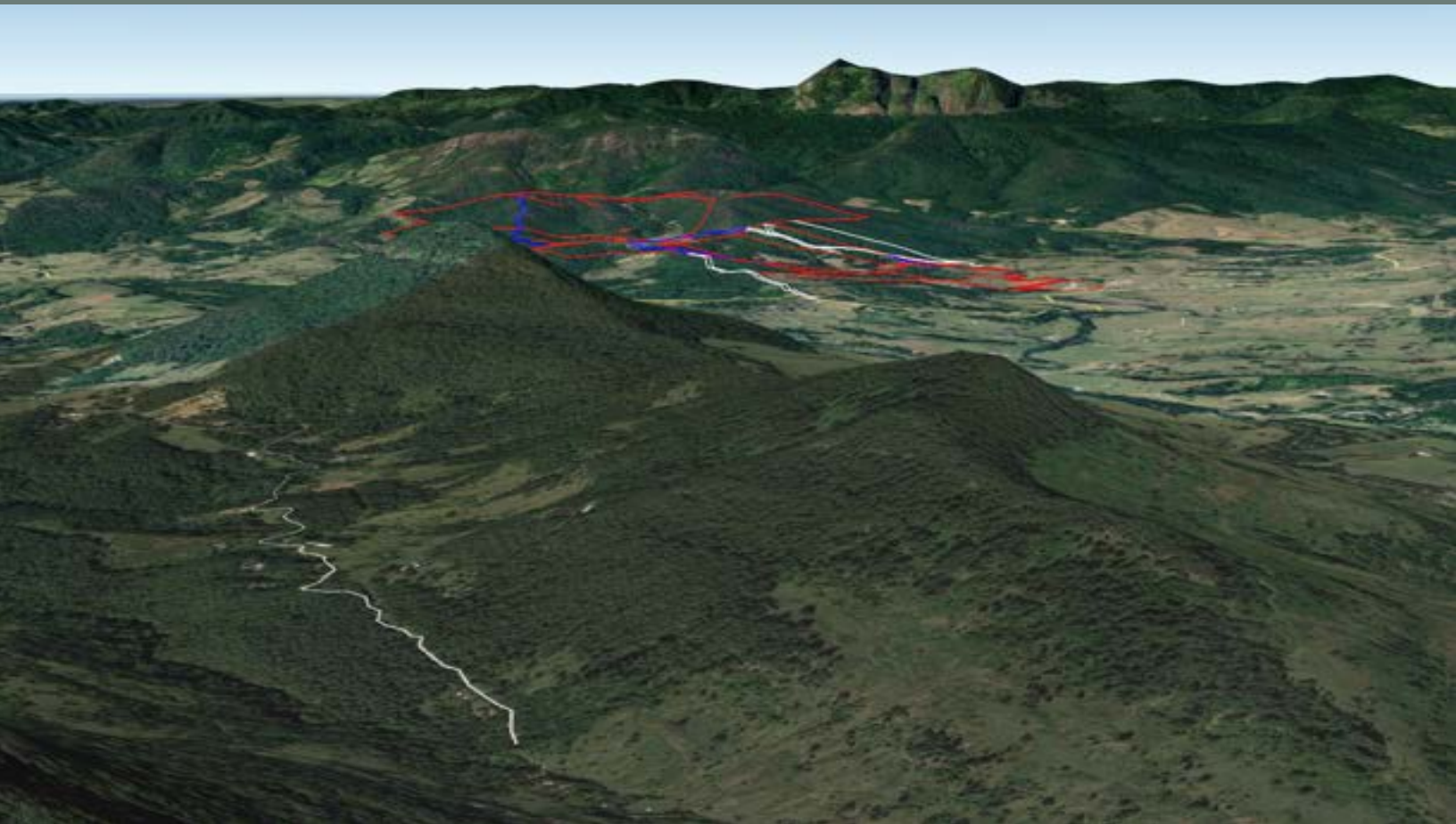
Valley Views Estate Tarampa, Client, Williams Property Group 2007. Subdivision Landscape Plans, Visual Assessment and Landscape Guidelines.

Sea Breeze Estate Stage 2, Pottsville 2007. Visual Assessment and Landscape Treatments Consultancy.

Scarborough Boat Harbour Marina and Foreshore Development QLD, 2007/2008, Client, Compass Marinas. Provided Project Management of Environmental and Survey Consulting services. Provided Concept development and Construction drawings. Consulted on site, heritage, visual amenity, environmental and community constraints and opportunities.

Pacridge Rural Residential Subdivision, Lismore, 2006. Subdivision Landscape Plans, Visual Assessment and Landscape Guidelines for rezoning.

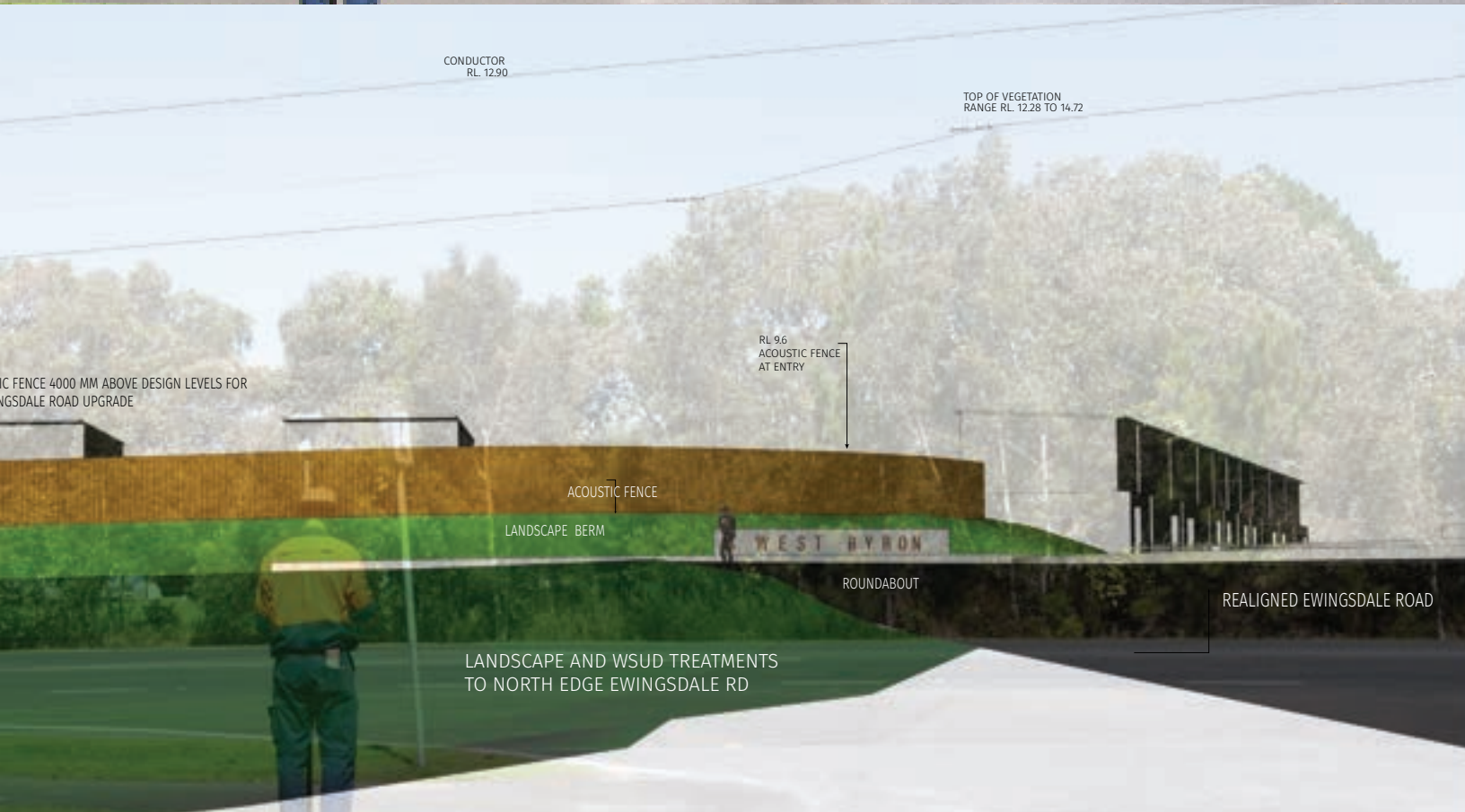




Locality: Tyalgum NSW



VISUAL IMPACT AND LANDSCAPE CHARACTER ASSESSMENT
DATA COLLECTION PROJECT MODELLING AND PHOTOMONTAGE



VISUAL IMPACT ASSESSMENT
WORKFLOW FOR WIRE FRAME AND PHOTOMONTAGE



PHOTOMONTAGE OF IMPACT OF VISUAL CHANGE



LANDSCAPE ARCHITECTS
incorporating SOLARGLARE®

Locality: Byron Bay NSW

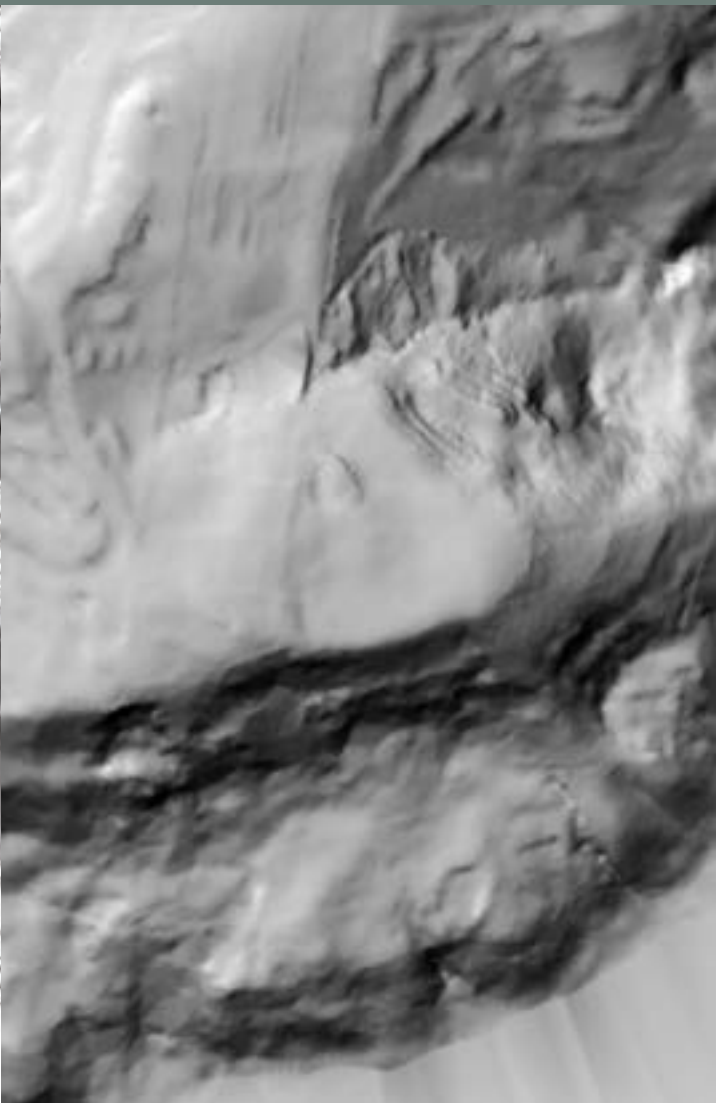
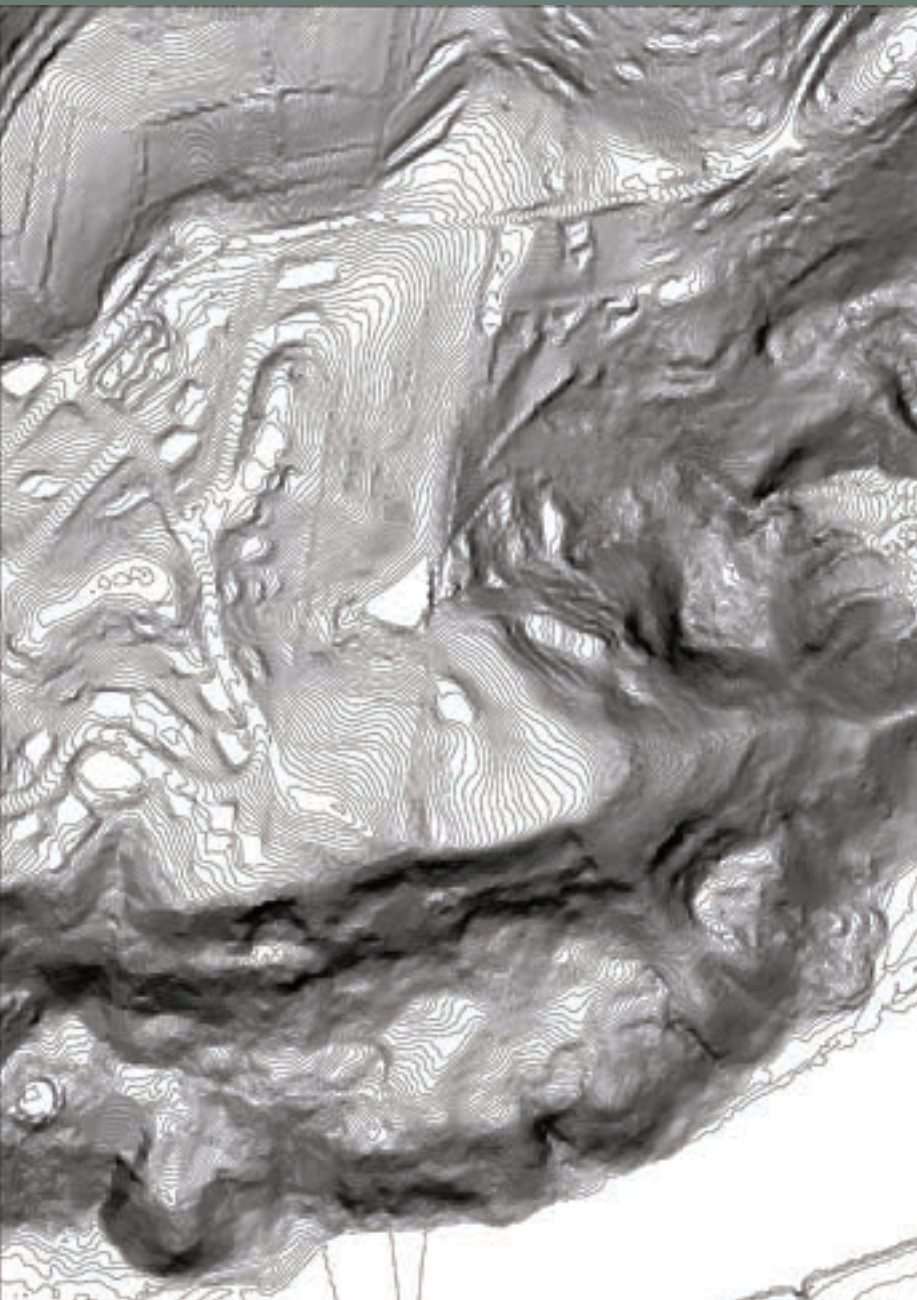
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GRIDSOURCE:

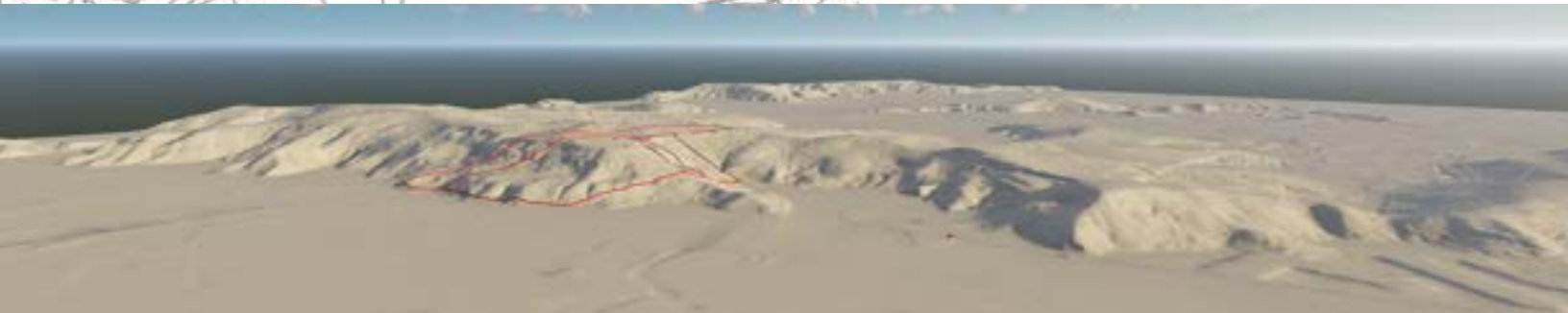
CADASTRAL BOUNDARY: LOCAL COUNCIL.

LIDAR: NSW LAND AND PROPERTY INFORMATION.

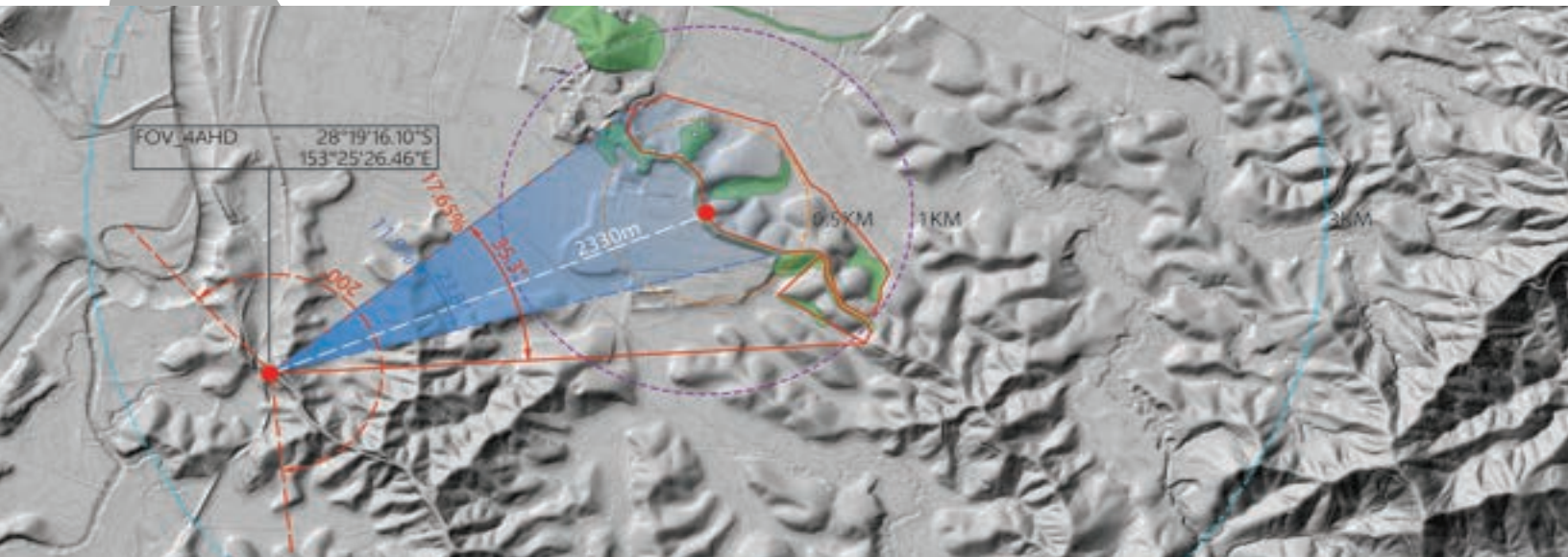
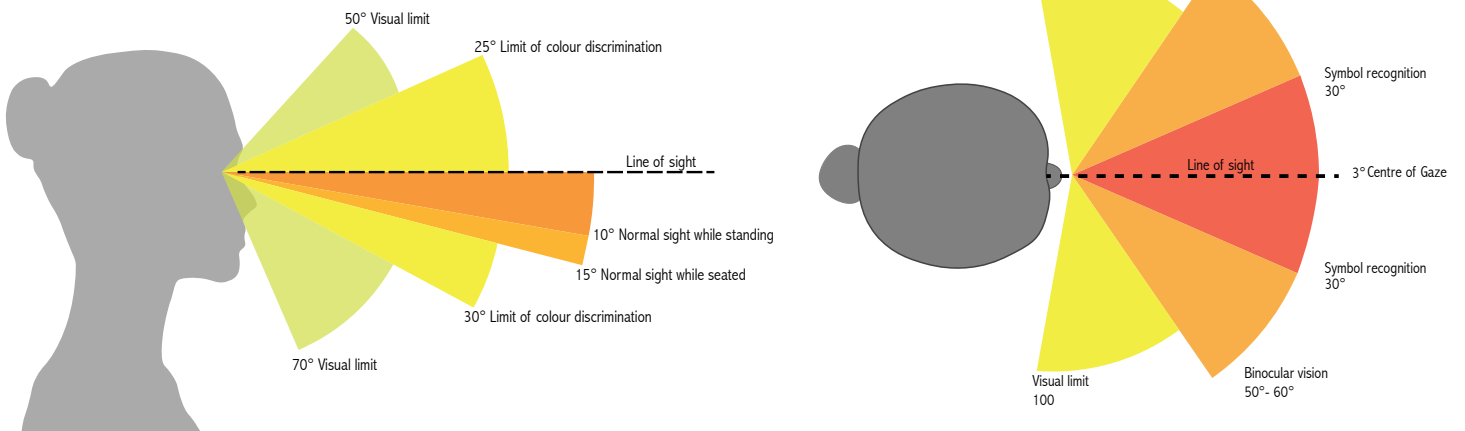
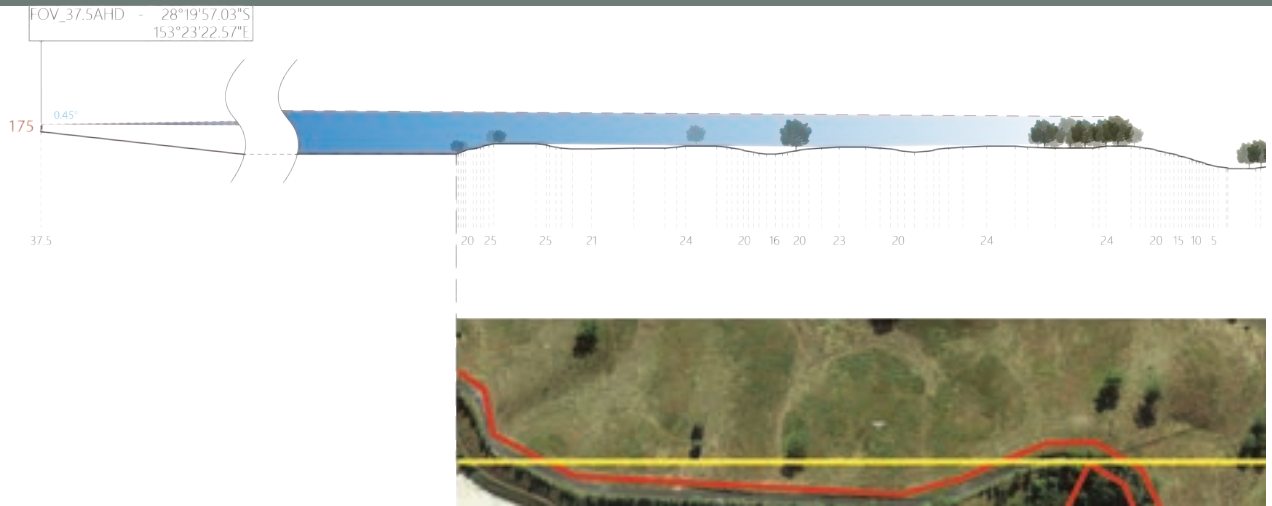
GRAPHIC DEVELOPMENT RHINO AND LUMION



Locality: Terranora NSW



FIELD OF VIEW AND DISTANCE ANALYSIS



Locality: Tweed Valley NSW





Locality: Federal NSW





Locality: Tweed Valley NSW

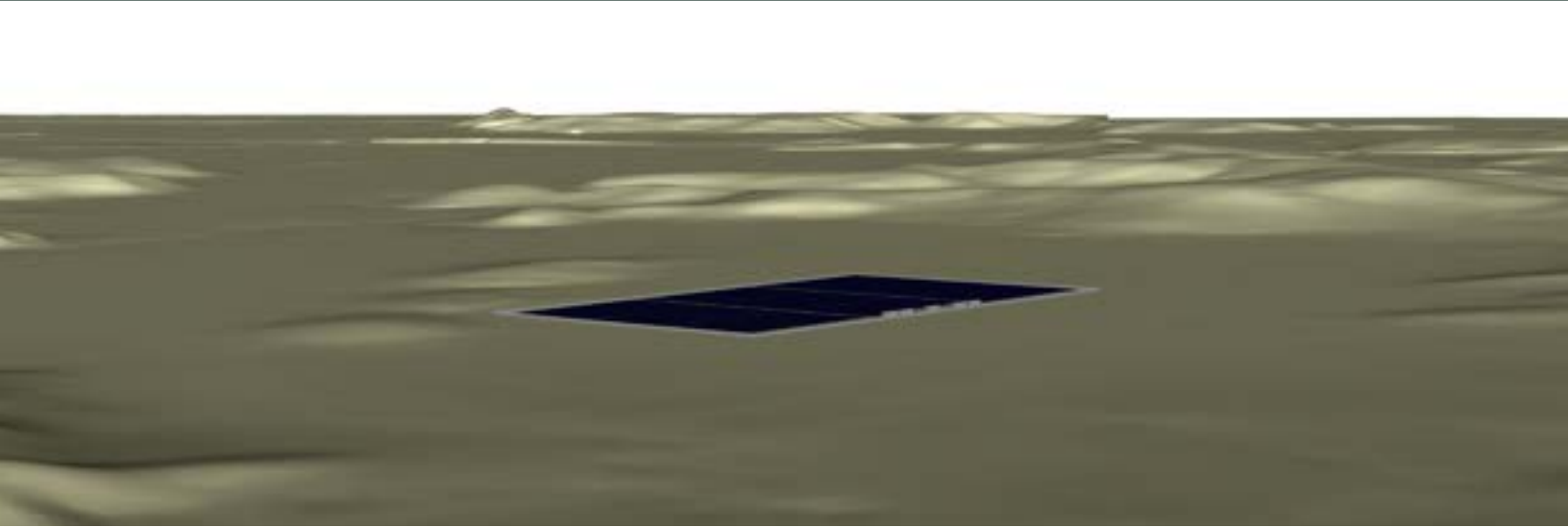


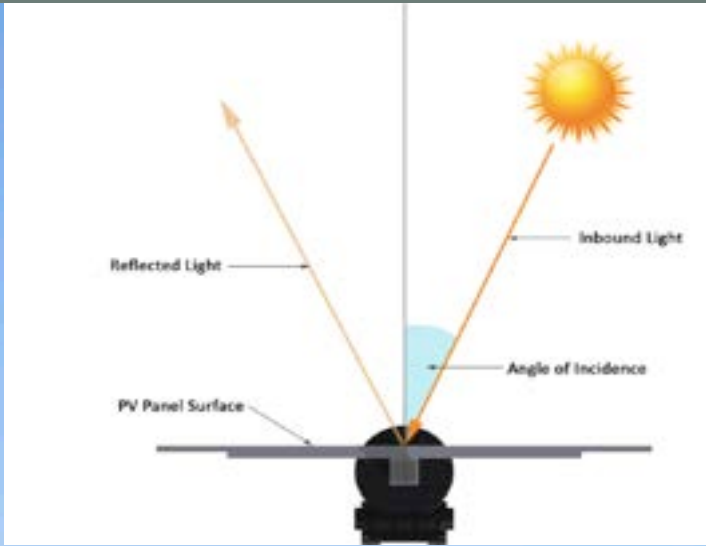


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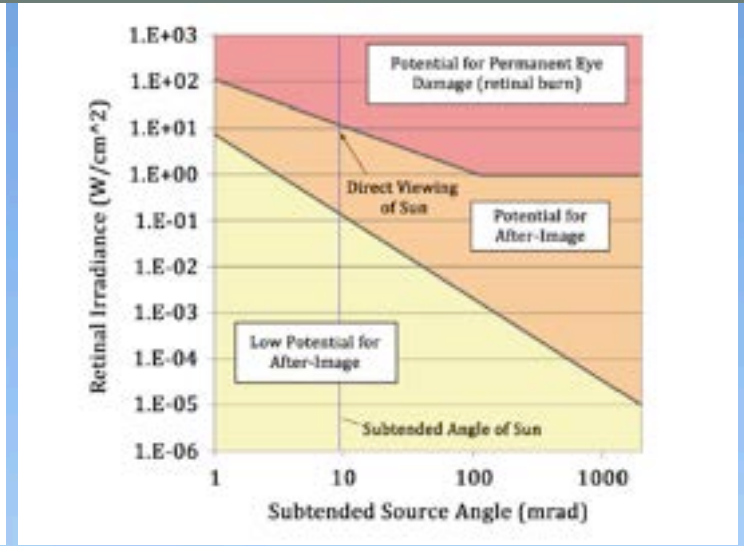


SOLAR GLINT AND GLARE ASSESSMENT
VISUAL IMPACT AND LANDSCAPE CHARACTER ASSESSMENT
TERRAIN, PROJECT MODELLING AND PHOTOMONTAGE





Angle of incidence Relative to PV Panel Surface



Ocular incidence and Hazard Ranges



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