# DEVELOPMENT ASSESSMENT REPORT DEVELOPMENT APPLICATION 0418/19DA

**ELECTRICITY GENERATING WORKS (SOLAR FARM) AND ASSOCIATED STRUCTURES** 54 FERRETTS ROAD (LOT 37 DP752808 AND LOT 100 DP134747) AND 25 COLDWATER CREEK ROAD (LOT 354 DP617156), NANA GLEN

# EXECUTIVE SUMMARY:

- 1. The DA was lodged on 23 November 2018 for electricity generating works (solar farm) and associated structures at 54 Ferretts Road (Lot 37 DP752808 and Lot 100 DP134747) and 25 Coldwater Creek Road (Lot 354 DP617156), Nana Glen. The applicant provided an authority that all communication be made to NGH Environmental Consultants.
- 2. The proposal is regionally significant development to be determined by Northern Regional Planning Panel with a Capital investment value of \$16million.
- 3. The development is prohibited in the RU2 zone under Coffs Harbour LEP 2013. It is however permitted under the Clause 34 of State Environmental Planning Policy (Infrastructure).
- 4. The plans submitted were not in accordance with the Environmental Planning and Assessment Regulations. Revised plans were submitted mid July 2019, which allowed advertising of the application to commence. Council received considerable community objection to the application. It received 152 individual submissions (5 of which were in support), and a petition with 388 signatures against the development.
- 5. The application was referred to Essential Energy under State Environmental Planning Policy (Infrastructure) who raised objection. It was referred to NSW Department of Planning, Infrastructure & Environment who required further aboriginal heritage assessment. GTAs were issued by NSW Natural Resources Access Regulator and conditions from the Rural Fire Service.
- 6. Council wrote to the applicant 17 July 2019 requesting further Aboriginal heritage assessment in response to advice provided by NSW Department of Planning, Infrastructure & Environment.
- 7. Council wrote to the applicant 19 September 2019 following review of the application. In this letter, Council stated its position that, due to the proximity of the site to existing residential development, it is considered that the development is likely to result in unacceptable impacts, and the site is considered unsuitable for the development as currently proposed. The letter outlined a multitude of issues of concern that must be addressed by the applicant to progress the application.
- 8. Within its letter dated 19 September 2019, Council provided a time frame of 60 days for the required information to be submitted to enable further assessment in accordance with Section 54 of the Environmental Planning and Assessment Regulations 2000. This requested an update from NGH Consultants on progress within 30 days. At that time, NGH Consultants advised that the application was not progressing as they had not been instructed to do so by the applicant. The consultant advised that they would recommend to the applicant that the application is withdrawn.
- 9. No further correspondence or communication has been received from the applicant or the consultant or the applicant to date to address Council's letter of 19 September 2019.
- Based on the information that it holds, the proposal has been assessed against the relevant clauses within the applicable environmental planning instruments (Appendix B). The development is considered to have unacceptable impacts and is unsuitable on the site.
- 11. In conclusion, this report recommends that the application is refused.

# PURPOSE:

This report provides an assessment of Development Application 0418/19DA for electricity generating works (solar farm) and associated structures.

It is recommended that the application is refused due to insufficient information and likely unacceptable impacts.

This report includes the following appended documents:

- Appendix A Plans of the Proposed Development;
- Appendix B Section 4.15 Evaluation Report.

# THE PROPOSAL

The proposed development is for an electricity generating works (solar farm) and associated structures on the site at 54 Ferretts Road (Lot 37 DP752808 and Lot 100 DP134747) and 25 Coldwater Creek Road (Lot 354 DP617156), Nana Glen.

The electricity generating works (solar farm) consists of:

- Solar panels (approximately 50,000 panels on trackable arrays, mounted on 6250 posts across the site);
- Capacity 16MW of power;
- Inverters and transformers (12 are proposed to be installed across the site);
- Site compound (to house the control facilities and be used for administration);
- Perimeter fencing and CCTV (fencing is proposed to be 1.94m high, with a gap at bottom to allow wildlife through);
- Transmission line connection and cabling (underground to existing substation at Ferretts Road);
- Site access and internal tracks;
- Rehabilitation of site after 25 years to former condition.

Plans of the proposed development are provided at Appendix A.

# THE SITE:

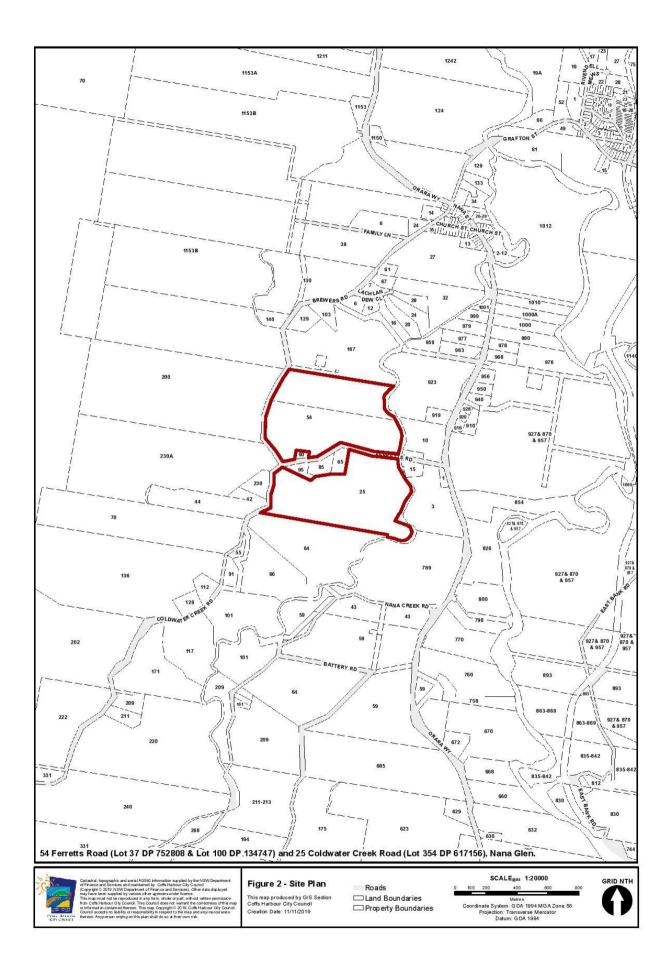
The site comprises three parcels, two to the north and one to the south of Ferretts Rd which have a combined area of 72 hectares.

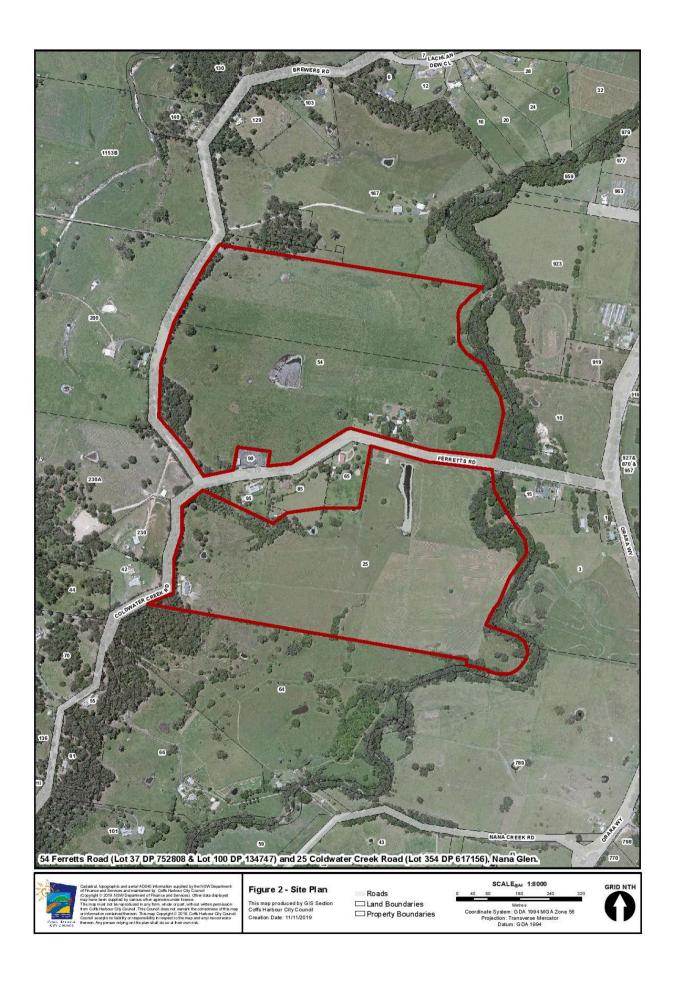
The lots extend to Brewers Road to the west, Nana Creek to the east and adjoin other rural residential lots to the north and south. Three privately owned residential properties are located at 65, 85 and 95 Ferretts Road and will be encircled by the solar farm. Another two dwellings are located within the development site, being 54 Ferretts Rd and 25 Coldwater Creek Road.

The site is located approximately 2 kilometers south of Nana Glen village. The site will be accessed by Ferretts Rd. This intersects with Orara Way, and is to the west of Orara Way, on the western side of Nana Creek.

The site has moderate fall and is drained to Nana Creek on the eastern boundary of the site. The majority of the site is largely cleared, except for mature trees along the creek and the western property boundary along Brewers and Coldwater Creek Rd.

Figure 1 indicates the locality and Figure 2 shows the site from an aerial perspective.





# CONSULTATION:

## Advertising and Notification

The development was advertised and notified in accordance with the requirements of nominated integrated development with a submission period from 17 July 2019 to 14 August 2019 (28 days). A total of 152 individual submissions (five in support, 146 objecting, and one raising no objection) and a petition with 388 signatures were received. Twenty-three individual submissions were received mostly against the development when the application was first received and prior to the formal advertising period.

The matters raised in submissions are summarised in Appendix B - Section 4.15 Evaluation Report in the 'any submissions made in accordance with this Act or the regulations' section of that report.

## State Government Referrals

The development requires a 'Controlled Activities Approval' under the Water Management Act 2000 (NSW). It was referred to the NSW Natural Resources Access Regulator as integrated development for their general terms of approval. The general terms of approval have been provided.

The development requires approval under Section 91 of the Environmental Planning and Assessment Act. The application was also referred to the NSW Office of Environment & Heritage (now NSW Department of Planning, Infrastructure & Environment) for their general terms of approval in relation to aboriginal heritage. These were not issued as they required further information to enable assessment. This has not been addressed by the applicant.

## **Other Authorities**

Under Clause 45 of the State Environmental Planning Policy (Infrastructure) the application was referred to Essential Energy. This was because the development proposes to utilise the existing substation and is likely to affect an electrical transmission or distribution network. Essential Energy raised concerns and required additional information on the safety and impact of their overhead electricity powerlines and substation. This has not been addressed by the applicant.

The application was also referred to NSW Rural Fire Service for advice on the development's conformance with Planning for Bushfire Protection under Clause 4.14 of the Environmental Planning and Assessment Act. Recommended conditions of consent have been provided by the RFS.

# **Council Departments**

Council internal departments have provided comment on the development proposal and their recommended actions have been incorporated into the evaluation process. Comments were provided requiring additional information on environmental and health impacts; amenity; parking and access; utilities; flooding; waste disposal; visual impact and vegetation removal; to enable the proper assessment of the application. This has not been addressed by the applicant.

## STATUTORY MATTERS:

#### Section 4.15 - Evaluation - Environmental Planning and Assessment Act 1979

Section 4.15 of the Environmental Planning & Assessment Act 1979 (NSW) specifies the matters which a consent authority must consider when determining a development application. The consideration of matters is limited in so far as they must be of relevance to the particular application being examined. A Section 4.15 Evaluation Report is provided as Appendix B to this report.

# **Relevant Statutory Instruments**

The following environmental planning instruments are relevant to assessment of this application.

- State Environmental Planning Policy (State & Regional Development) 2011.
- State Environmental Planning Policy No 55 Remediation of Land.
- State Environmental Planning Policy (Infrastructure) 2007.
- State Environmental Planning Policy (Primary Production and Rural Development) 2019.
- Coffs Harbour Local Environmental Plan 2013.

Coffs Harbour Development Control Plan 2015 is also relevant to assessment of this application.

The application is identified as 'Regionally Significant Development' under State Environmental Planning Policy (State and Regional Development) 2011 and as a consequence the application is to be determined by the Northern Regional Planning Panel.

#### **ISSUES:**

There are unacceptable impacts (or undetermined impacts as the required information has not been provided) on:

- Safety of electricity infrastructure;
- Aboriginal heritage;
- Visual impact and character of existing area;
- Flood waters;
- Noise and vibration particularly during construction;
- Electromagnetic field;
- Micro-climate;
- Vehicle safety and congestion;
- Waste disposal.

The development as currently submitted is not in the public interest and is unsuitable for the site.

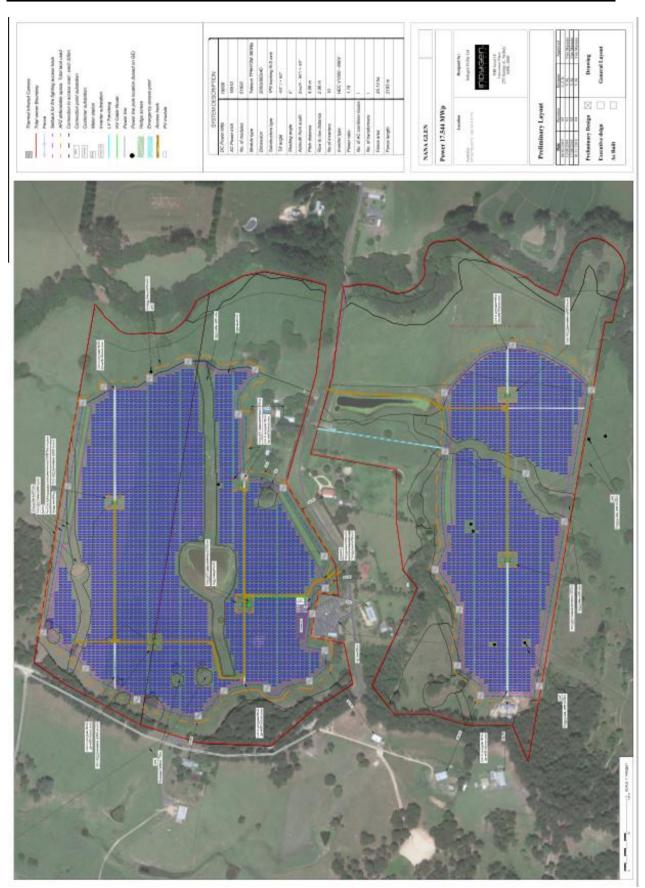
# **RECOMMENDATION:**

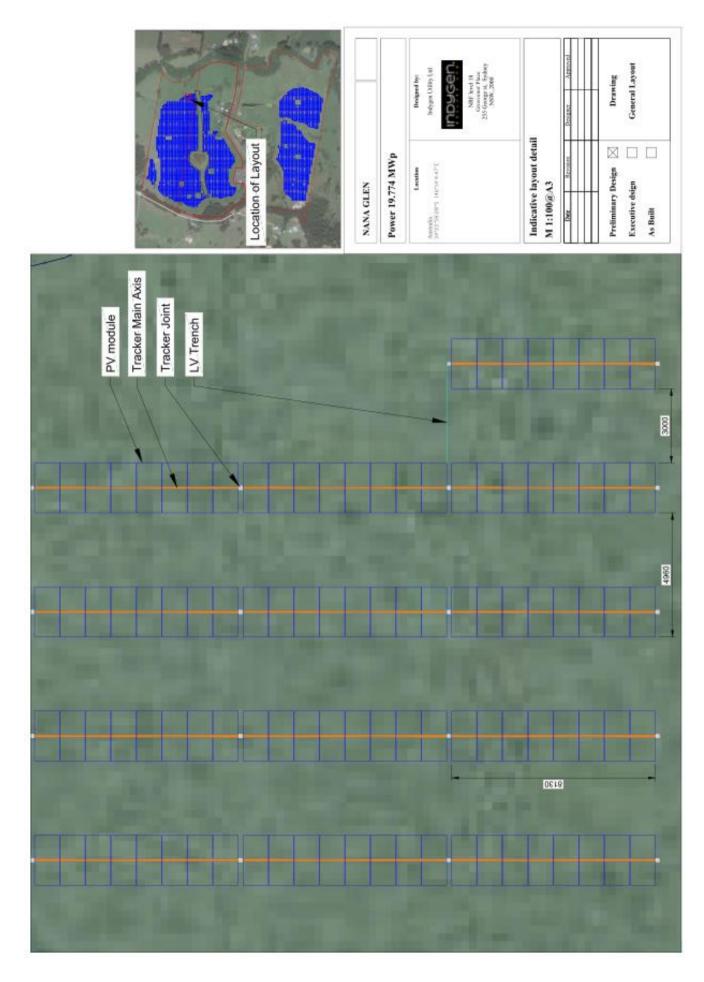
# A. That Development Application 0418/19DA for be refused for the following reasons:

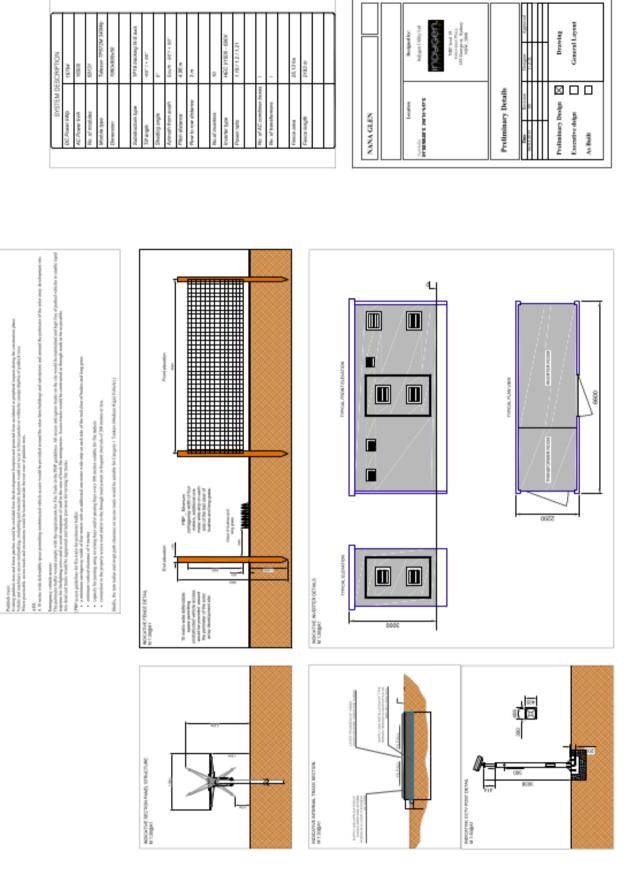
- 1. The site is unsuitable given the:
  - Location of the development in proximity of existing residential dwellings;
  - Location of the development in proximity of existing electricity infrastructure; and
  - Flood prone nature of the land.
- 2. The development will result in unacceptable impacts on electricity infrastructure.
- 3. The NSW Department of Planning, Infrastructure & Environment have not provided general term of approval in relation to Aboriginal heritage on the site.
- 4. The development will result in adverse visual impact to some parts of the surrounding rural area. This is not consistent with the objective of the RU2 Rural Landscape zone in the Coffs Harbour LEP 2015 'to maintain the rural landscape character of the land'.
- 5. The development is not compatible with the flood hazard of the land.
- 6. The development is expected to result in impacts from noise and vibration. The Statement of Environmental Effects is insufficient to adequately determine potential noise and vibration impacts.
- 7. The development may result in impacts from the electromagnetic field. The Statement of Environmental Effects is insufficient to adequately determine potential impacts from the electromagnetic field.
- 8. The development may result in impacts from microclimate changes. The Statement of Environmental Effects is insufficient to adequately determine potential impacts from microclimate changes.
- 9. The development may result in impacts on traffic congestion and safety. The Statement of Environmental Effects is insufficient to adequately determine potential impacts from access and parking onsite.
- 10. The development may result in operational impacts as reticulated water is not available to be connected to the site.
- 11. The development may result in operational and environmental impacts as a Waste Management Plan has not been provided outlining the management of the panels at the end of their life.
- B. That persons who have made submissions on the application be informed of the determination.

# APPENDIX A

# Plans of Proposed Development

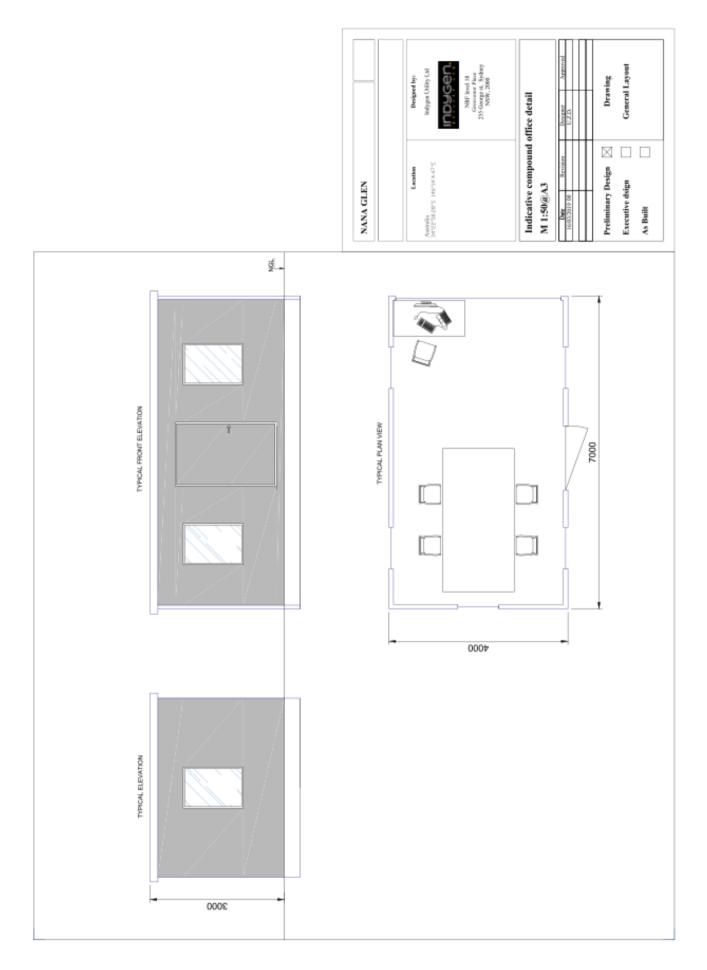






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NOTES



## APPENDIX B

#### Section 4.15 Evaluation Report

(a) the provisions of,

#### (i) any environmental planning instrument, and

## • State Environmental Planning Policy No 55 - Remediation of Land

This state policy stipulates that the consent authority must not consent to the carrying out of any development unless it has considered whether the land is contaminated. If the land is contaminated, the consent authority must be satisfied that the land is suitable in its contaminated state or will be remediated, so that is suitable, before the land is used for that purpose.

The land is not identified as potentially contaminated. The submitted application indicates that the land has been previously primarily used for grazing purposes. There are no records that suggest that the land is likely to be contaminated.

## State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)

#### 34 - Development permitted with consent

The works are proposed to be contained within that part of the land zoned RU2. Permissibility for electricity generating works is provided under Clause 34 (1)(b) of the State Environmental Planning Policy (Infrastructure). This states they may be carried out by any person with consent on a prescribed rural zone. The RU2 zone of the site is a prescribed rural zone as provided by Clause 33.

#### 45 - Determination of development applications—other development

This clause applies to a development application for development comprising or involving any of the following:

- (a) the penetration of ground within 2m of an underground electricity power line or an electricity distribution pole or within 10m of any part of an electricity tower,
- (b) development carried out:
  - (i) within or immediately adjacent to an easement for electricity purposes (whether or not the electricity infrastructure exists), or
  - (ii) immediately adjacent to an electricity substation, or
  - (iii) within 5m of an exposed overhead electricity power line.

Before determining a development application (or an application for modification of a consent) for development to which this clause applies, the consent authority must:

- (a) give written notice to the electricity supply authority for the area in which the development is to be carried out, inviting comments about potential safety risks, and
- (b) take into consideration any response to the notice that is received within 21 days after the notice is given.

Council provided written notice of the application to Essential Energy who provided the following response:

There are numerous existing overhead powerlines (and a substation), which are likely to be impacted by the proposed development. Essential Energy also has safety concerns in relation to the proximity of the proposed development to it's infrastructure and objects to the development, as currently proposed. Prior to undertaking further

assessment, Essential Energy has advised that the following matters need to be resolved:

- a) Detailed plans and specifications taking into account the location of the existing overhead powerlines (66kV and 11kV feeders) that cross the properties, together with required easement widths, ensuring no proposed improvements are within 30 metres of the 66kV feeders (15 metres either side of the conductors) and 20 metres of the 11kV feeders (10 metres either side of the conductors). The overhead lines over the aerial is included in Figure 3.
- b) If easements are already registered, details of those easements including providing copies of all registered plans and dealings are required.
- c) Details on the proposal to connect to Essential Energy's existing substation adjoining the property and the contact person / department at Essential Energy that discussions have occurred with in relation to this proposal.
- d) Details on how the applicant proposes to access the site, including plans and specifications showing the proposed access location/s.
- e) Details of the proposed fencing, including all plans and specifications of materials, height, earthing etc.

Any development in proximity to Essential Energy's electrical infrastructure should comply with the latest industry guideline currently known as ISSC 20 Guideline for the Management of Activities within Electricity Easements and Close to Infrastructure. A copy of this guideline can be located at <a href="https://energy.nsw.gov.au/sites/default/files/2018-09/ISSC-20-Electricity-Easements.pdf">https://energy.nsw.gov.au/sites/default/files/2018-09/ISSC-20 Guideline for the Management of Activities within Electricity Easements and Close to Infrastructure. A copy of this guideline can be located at <a href="https://energy.nsw.gov.au/sites/default/files/2018-09/ISSC-20-Electricity-Easements.pdf">https://energy.nsw.gov.au/sites/default/files/2018-09/ISSC-20-Electricity-Easements.pdf</a>.

If you believe that the proposed development complies with ISSC 20, please provide plans certified by a suitability qualified person (showing distances from the proposed development to Essential Energy's infrastructure) together with any other relevant information for further consideration.

Your attention is also drawn to Section 49 Electricity Supply Act 1995 (NSW). Essential Energy may require structures or things that could either destroy, damage or interfere with electricity works, or could make those works become a potential cause of bush fire or risk to public safety; to be modified or removed.

The applicant was requested to address the matters raised. No further information has been provided to satisfactorily address this issue.

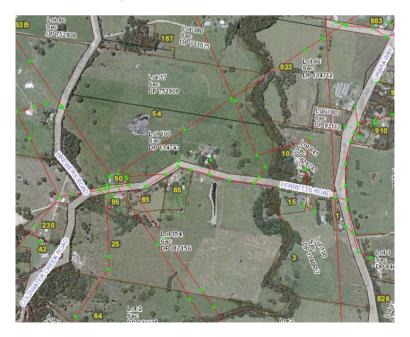


Figure 3 – Overhead powerlines (red lines), power poles (green dots)

#### State Environmental Planning Policy (State & Regional Development) 2011

The development constitutes 'Private infrastructure and community facilities with a capital investment value of over \$5 million". This is identified as 'regionally significant development', pursuant to Clause 20(1) of the SEPP. The estimated cost of the overall development is \$16 million.

Clause 4.5 of the EPAAct states that the consent authority for regionally significant development is the regional planning panel of the area.

# State Environmental Planning Policy (Primary Production and Rural Development) 2019

The aims of the SEPP are to:

- (a) facilitate the orderly economic use and development of lands for primary production;
- (b) To reduce land use conflict and sterilisation of rural land by balancing primary production, residential development and the protection of native vegetation, biodiversity and water resources.

The development will cause impacts to adjoining residential development which will cause land-use conflict. This is not consistent with the objectives.

#### • Coffs Harbour Local Environmental Plan 2013

#### 2.2 Zoning of land to which Plan applies

Under the Land Zoning Map, the site is zoned RU2 Rural Landscape and E2 Environmental Conservation along the Creek.

#### 2.3 Zone objectives and Land Use Table

This provision provides the Land Use Table of Local Environmental Plan 2013 which specifies for each zone:

- (a) the objectives for development, and
- (b) development that may be carried out without development consent, and
- (c) development that may be carried out only with development consent, and
- (d) development that is prohibited.

'Electricity generating works' are defined as a building or place used for the purpose of making or generating electricity.

The development is proposed to be contained within that part of the land zoned RU2. Electricity generating works are prohibited in the zone under the LEP. Permissibility for the land use is provided under Clause 34 (1)(b) of the State Environmental Planning Policy (Infrastructure).

This provision also provides that the consent authority must have regard to the objectives for development in a zone when determining a development application in respect of land within the zone. The objectives of the RU2 Rural Landscape zone are:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To maintain the rural landscape character of the land.
- To provide for a range of compatible land uses, including extensive agriculture.

• To minimise the fragmentation and alienation of resource lands.

The objectives of the E2 Environmental Conservation zone are:

- To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- To prevent development that could destroy, damage or otherwise have an adverse effect on those values.

The proposed development is considered to be inconsistent with the rural character and not compatible with adjoining residential uses.

The development is outside the E2 zoned land.

#### 4.3 Height of Buildings

The maximum height of structures in the zone is 8.5m. While the development does not exceed this, clarification of the height of the solar arrays upon which the panels are mounted is required. The SEE states a height of 3.3m, and the plans show 2.2m.

#### 7.2 Earthworks

This clause specifies a number of matters that must be considered for development proposals that involve earthworks including the following:

- (a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,
- (b) the effect of the development on the likely future use or redevelopment of the land,
- (c) the quality of the fill or the soil to be excavated, or both,
- (d) the effect of the development on the existing and likely amenity of adjoining properties,
- (e) the source of any fill material and the destination of any excavated material,
- (f) the likelihood of disturbing relics,
- (g) the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,
- (h) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

The development will involve earthworks to install the array posts, associated structures underground cables and access ways. The site drains to the watercourse on the eastern part of the site. Impacts can be mitigated by erosion and sediment controls and management practices during construction.

The impact on Aboriginal heritage cannot be determined.

#### 7.3 Flood planning

This provision applies to land at or below the flood planning level and stipulates that development consent must not be granted (to development on land to which this clause applies) unless the consent authority is satisfied that the development:

- (a) is compatible with the flood hazard of the land, and
- (b) will not significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and
- (c) incorporates appropriate measures to manage risk to life from flood, and

- (d) will not significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and
- (e) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.

The SEE states that the solar arrays are located outside of flood prone land. Council's mapping however indicates that a portion of the solar arrays are within the 100 year ARI flood extent. The development in this flood affected location is not considered to be compatible with the flood hazard of the land. The applicant was requested to review and adjust the plans to ensure that all structures are free from the 100 year ARI flood extent. Adjusted plans have not been provided.

#### 7.4 Terrestrial biodiversity

This provision applies to land identified as "Biodiversity" on the Terrestrial Biodiversity Map. The site contains land identified as "Biodiversity" on the Terrestrial Biodiversity Map so this provision must be considered.

Before determining a development application for development on land to which this clause applies, the consent authority must consider:

- (a) whether the development is likely to have:
  - (i) any adverse impact on the condition, ecological value and significance of the fauna and flora on the land, and
  - (ii) any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna, and
  - (iii) any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land, and
  - (iv) any adverse impact on the habitat elements providing connectivity on the land, and
- (b) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

The consent authority must also be satisfied that:

- (a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or
- (b) if that impact cannot be reasonably avoided by adopting feasible alternatives—the development is designed, sited and will be managed to minimise that impact, or
- (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.

The area of the site, identified as "Biodiversity" on the Terrestrial Biodiversity Map, is in proximity to Nana Creek at the eastern boundary of the site. The area used for the solar arrays does not affect this area, and contains primarily cleared farmland, with buffers to the creek. As such there will be minimal impact on fauna habitat. A Controlled Activity Approval for works on waterfront land must be obtained prior to the commencement of works onsite (General Terms of Approval have been provided by NSW Natural Resources Access Regulator).

The ecology report also states that

'The terrestrial habitat that would require removal for the proposal comprises 5.59 ha of PCT 1262 in low condition (groundcover only) and 27.97 ha of exotic vegetation'. Elsewhere the following is stated: 'The proposal would have a direct impact on vegetation within the study area through removal for construction and shading with vegetation to be cleared'.

Clarification of vegetation removal has been requested from the applicant but has not been provided.

It is considered with appropriate mitigation measures, the proposal is unlikely to have a significant impact on any threatened species, populations or ecological communities. The ecology report has already confirmed that no hollow bearing trees require removal.

On balance, the proposed development is considered unlikely to result in unacceptable impacts.

#### 7.8 Koala habitat

This provision stipulates that consent must not be granted to development on land to which this Plan applies unless the development is in accordance with Coffs Harbour City Koala Plan of Management, ISBN 0 7313 6050 8, published in November 1999. This site contains areas that are mapped as Primary Koala Habitat under this plan.

The plan specifies a number of matters that should be taken into consideration including:

- That there will be no net loss of Primary Koala Habitat;
- The significance of the trees proposed to be removed (to koalas);
- The number of trees proposed to be removed in relationship to the extent and quality of adjacent or nearby Primary and/or Secondary Koala Habitat;
- The threats to koalas which may result from the development;
- Whether the proposal will not result in significant barriers to koala movement;
- Whether boundary fencing does not prevent the free movement of koalas;
- Preferred koala trees are used in landscaping where suitable;
- Threats to koalas from domestic animals.

Small sections of primary, secondary and tertiary Koala habitat are mapped along the creek line of the site. The proposed work is outside these areas.

Clarification of tree removal was requested as while none of the development footprint is mapped as Koala habitat, Koalas have been known to cross through the farmland areas around Nana Glen to access food trees such as the Tallowwood that occur on site. Once the detail regarding native tree removal is clarified, conditions for approval can be provided.

Additional information clarifying tree removal has been requested from the applicant but has not been provided.

#### 7.11 Essential services

Development consent must not be granted to development unless the consent authority is satisfied that any of the following services that are essential for the development are available or that adequate arrangements have been made to make them available when required:

- (a) the supply of water,
- (b) the supply of electricity,
- (c) the disposal and management of sewage,
- (d) stormwater drainage or on-site conservation,
- (e) suitable vehicular access.

The SEE makes incorrect statements that reticulated water is available. It is not and this was requested to be reconsidered in the design of the development.

Details of suitable vehicular access have also not been provided. This additional information was requested but has not been provided by the applicant.

# 7.13 Central Business District

The objectives of this clause are as follows:

- (a) to maintain the primacy of the Coffs Harbour central business district (the CBD), being the land identified as "CBD" on the Central Business District Map, as the principal business, office and retail hub of the city centre and to ensure that development does not conflict with the hierarchy of commercial centres,
- (b) to strengthen Coffs Harbour's position as an eminent regional centre by creating employment opportunities for tourism, commerce, education, health care, culture and the arts.

Development consent must not be granted to development on any land unless the consent authority has considered whether the development maintains the primacy of the CBD as the principal business, office and retail hub of the Coffs Harbour City.

The development does not impact on the primacy of the Coffs Harbour CBD.

(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and

There are no proposed instruments of relevance.

- (iii) any development control plan, and
  - Coffs Harbour Development Control Plan 2015

# Part B1 Public Consultation

The development was advertised and notified in accordance with the requirements of nominated integrated development with a submission period from 17 July 2019 to 14 August 2019 (28 days). A total of 152 individual submissions (five in support, 146 objecting, and one raising no objection) and a petition with 388 signatures were received. It is further noted that 23 individual submissions were received mostly against the development (and mostly from the same individuals) when the application was first received and prior to the formal advertising period. The issues are discussed in Section (d) below with letters in Appendix C.

#### Part D 4 – Rural and large lot residential development

#### D4.1 Setback requirements

The setbacks of structures are generally compliant with the requirement for 20m to front, 10m to rear and side.

The adjoining neighbours at 65 to 95 Ferretts Road have indicated that the southern property boundary is not in accordance with the dimensions of DP617156. This would mean that the solar arrays are closer to their property. The applicant was advised that this needs to be investigated and property boundaries correctly represented on the DA plans. This has not been addressed by the applicant.

#### D4.2 Design requirements

Development is to be:

- Compatible with the rural or large lot residential character of the locality; and
- Designed to minimise direct overlooking of living areas and private open spaces of other dwellings; and
- Designed to minimise impacts on existing views and view corridors.

It is considered that the development is not compatible with the rural or large lot residential character of the locality and will impact existing views and view corridors. This is further discussed in 'Built Environment - Visual Impact' below.

## D4.7 Ancillary Requirements

Ancillary development comprising large sheds, greenhouses, solar panels and associated solar tracking devices and other structures are to be designed, located and landscaped to reduce amenity impacts on adjoining land.

It is considered that the development does not satisfy this requirement. This is further discussed in 'Built Environment - Visual Impact' below.

## D4.10 Consolidation requirements

Where the development is situated over the boundary of two or more lots, the subject lots are to be consolidated into one allotment. This would be a requirement should the application be approved.

#### D4.13 Water Management Requirements

The objectives are to:

- To implement best practice stormwater management techniques.
- To incorporate the use of water sensitive urban design techniques to reduce negative impacts on the natural water cycle and aquatic ecosystems.
- To manage water as a valuable and finite regional resource on a total water cycle basis.

These would be required should the application be approved.

#### D4.14 Erosion and Sediment Control requirements

To ensure that earthworks will not have a detrimental impact on environmental functions and processes, neighbouring uses or features of the surrounding land.

This would be a requirement should the application be approved.

# D4.21 Rural Land use conflict

The objective is to minimise land use interface issues and risks between rural land uses.

It is considered that this is not satisfied. This is further discussed in 'Amenity Impacts' below.

# Part E1 – Biodiversity

Preservation of trees and riparian zone requirements have been addressed above.

#### Part E3 – Contamination

Contamination requirements have been addressed above.

#### Part E4.1 Flood planning requirements generally

There are five requirements of this section which are as follows:

- (1) Development is to be designed and located so that it is free from any land that is at or below the 100-year Average Recurrence Interval flood level.
- (2) Development is to be designed and located so that it is free from any floodways.
- (3) Development is not to comprise the external storage of any materials below the 100-year Average Recurrence Interval flood level that are potentially hazardous or that may cause pollution.
- (4) Development is not to result in an increase in flood levels on adjoining or surround land.
- (5) Operational access to the development is to provide a level of service commensurate with the zoning and proposed use with consideration to both on site and off site access.

Additional flood information has been requested but not provided by the applicant.

#### Part F1 – Access and parking

Driveway construction details, details of emergency assess during flood, and parking details have been requested but not provided by the applicant.

#### Part F2 – Heritage conservation

Aboriginal heritage has not been adequately addressed as discussed above. There is no European heritage on or in vicinity of the site.

#### Part F3 – Landscaping

The objectives are to:

- To contribute to streetscape character and the amenity of the public domain.
- To protect, enhance and maintain key features of the natural environment.
- To encourage plant selection that is sensitive to local climate, topography and natural features.

It is considered that the landscaping of the development is not compatible with the rural or large lot residential character of the locality and will impact on the natural environment. This is further discussed in 'Built Environment - Visual Impact' below.

#### Part F6 – Waste management.

An objective of this part is to ensure that waste management systems are compatible with collection services.

A Waste Management Plan, including the end of life of the panels have been requested but not provided by the applicant.

#### (iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and

The are no planning agreements of relevance.

(iv) the regulations (to the extent that may prescribe matters for the purposes of this paragraph), that apply to the land to which the development application relates.

The are no regulations of relevance.

(b) the likely impacts of that development, including environmental impacts, on both the natural and built environments, and social and economic impacts in the locality,

#### Natural impacts

The SEE makes reference to the site having the potential to create heat islands, which can result in an increase in temperature of 20°C more than ambient temperatures, but concludes the impacts would be highly localised and unlikely to extend beyond the boundaries of the subject land. A site specific assessment was requested by a suitably qualified person, which describes and assesses heat emissions expected from the development and the impact to the local environment. This issue was not addressed by the applicant.

Fuel and chemical storage are proposed as part of the development and that refuelling is to occur during the construction stage. Details of quantities, method of storage/dispensing were requested to ensure compliance with relevant legislation. This information was not addressed by the applicant.

#### • Built Environment - Visual Impact:

It is considered that the *Visual Impact Assessment* report dated April 2019 does not adequately address the following matters:

- 1. The solar arrays and perimeter fence will substantially alter the visual character of the area. As such it is not consistent with the objective of the RU2 Rural Landscape zone 'to maintain the rural landscape character of the land'.
- 2. The tree planting proposed is considered insufficient to address the visual impact of the solar arrays and the 1.9m perimeter fence from surrounding areas, in particular close receivers (R1-8 and 11) and elevated areas to the south-west (Receivers R13-16 and 18 in the report).
- 3. The screen planting is in conflict with the Rural Fire Service requirement for a 10m Asset Protection Zone that permits unobstructed vehicle assess around all solar arrays and associated infrastructure.
- 4. The site is in a rural setting, there would be an increase in glare to what is typically expected in the area. Further information on mitigation of glare and glint from the panels, supports and ancillary structures was required but not provided by the applicant.
- 5. The report only shows photos of existing views. Photomontages showing views with solar panels superimposed would assist assessment of impact.

#### • Social Impacts

An incomplete aboriginal cultural heritage assessment has been provided, which may have impact on cultural heritage.

The noise assessment provided is considered insufficient to adequately determine potential noise and vibration impacts. The submitted assessment is based on guidance levels specified by the NSW Industrial Noise Policy and is not site specific. It is based on the nearest residents being 75m away, however, this distance is incorrect. It is also expected that there would be significant noise impacts to adjoining premises and residential premises in the general vicinity of the site for the six-month construction period.

A detailed site specific acoustic assessment, to determine the acoustic and vibrational impacts and the mitigation measures is necessary to enable proper assessment. This assessment should address construction and operational phase of the development, including road noise associated with heavy vehicles and construction works. The report

should give consideration to all potentially impacted residences including those dwellings that are located within the development. This issue was not addressed by the applicant. The SEE assessment is based on global information and is not site specific for the proposed development. The information provided needs to address residential dwellings located within and bordering the site. This issue was not addressed by the applicant.

#### (c) the suitability of the site for the development,

The site is considered unsuitable for the site due to the following likely impacts:

- **Proximity of development to existing residences** Given the proximity of the development to residential properties (in particular, 65, 85 and 95 Ferretts Road and the two dwellings within the development site, being 54 Ferretts Rd and 25 Coldwater Creek Road), Council considers that the development is likely to result in unacceptable impacts. The site is considered unsuitable for the development as currently proposed.
- The flood prone nature of the land; and
- Existing electricity infrastructure.

#### (d) any submissions made in accordance with this Act or the regulations,

The development was advertised and notified in accordance with the requirements of nominated integrated development with a submission period from 17 July 2019 to 14 August 2019 (28 days). A total of 152 individual submissions (five in support, 146 objecting, and one raising no objection) and a petition with 388 signatures were received. Twenty-three individual submissions were received mostly against the development when the application was first received and prior to the formal advertising period.

The matters raised in the submissions can be summarised into the following:

#### Solar farm Objectors

#### • Visual Impacts

- The solar arrays and boundary fence will have adverse visual impact to adjoining properties. Proposed screen vegetation is inadequate as surrounding dwellings are elevated.
- Solar arrays will result in loss of rural character and scenic outlook. This will adversely impact on tourism in area and the ambience that attracted residents to the area.
- adverse impact of glare and glint from the panels on residents, motorists and pedestrians.
- o adverse impact of night lighting of the facility.

#### Comment -

Council has concern on all issues, with the exception that no night lighting is proposed. Additional information was requested but has not been addressed by the applicant.

#### • Amenity impacts

- Impact on enjoyment of the properties of the three private residences in the middle of the solar farm site. Health impacts of these property owners due to stress caused by the application and fear of devaluation of land.
- Potential Impacts during operation and construction especially from noise and dust.
- Increased heat and reduced rainfall
- Insufficient setback to adjoining residences provided.
- Land-use conflict, similar to blueberry farm impacts on residents and the environment.
- Land-use conflict with future residential release areas. Restrict future expansion of Nana Glen village.

# Comment -

It is agreed that rural character will change. Council considers that the development is likely to result in unacceptable impacts particularly 65, 85 and 95 Ferretts Road and the two dwellings within the development site, and the site is considered unsuitable for the development as currently proposed.

Additional information was requested on noise, vibration, microclimate, setbacks but has not been addressed by the applicant.

# • Economic impacts

- Devaluation of land in the area and compensation required;
- Foreign owned company will have no benefit to Nana Glen, ie will not create cheaper power for local residents;
- The existing substation is the motivation for the location, with no regard to impact on adjoining residents;
- Once established will expand in size and longevity;
- Council will wear and pass onto ratepayers the additional fees to dispose of panels at the end of their life;
- Solar energy is intermitted in supply and is not reliable;
- The site is undulating and vegetated and is not suited to a solar farm.

# Comment –

All of these issues are beyond what Council is required to considered in its assessment under Section 4.15 of the EPAA.

- Permissibility
  - How is an industrial scaled development permitted in a rural zone?
  - Council should require it to be located on inland where there is higher solar radiation;
  - o State government should provide agricultural land in compensation elsewhere;
  - Council rates indicate the land use is for rural land;
  - Many submitters are not opposed to solar energy, but are at the proposed site and where it will impact on residents.

# Comment –

The use is permissible under the State Environmental Planning Policy (Infrastructure) as discussed above. Many of these issues are beyond what Council is required to considered in its assessment under Section 4.15 of the EPAA.

# Loss of agricultural land

- Loss of high capacity Class 3 agricultural lands for food production;
- Grazing animals around arrays are incompatible;
- It is doubtful if land can be rehabilitated and returned to agricultural use after 25 years.

# Comment –

The SEE states that half of the site has high agricultural potential based on the Office of Environment and Heritage land and soil capability assessment scheme. The land will be used for the solar farm for 25 years and then revert back to agricultural use. This reduction will only be a 0.3% reduction in the larger Biophysical Strategic Agricultural Land mapped by Office of Environment and Heritage for NSW and is considered acceptable.

# • Environmental Impacts

- Impacts on soils and waterways from chemical cleaning of panels, herbicides to control weeds and toxins in panels;
- o Impacts on wildlife corridors from fencing and temperature increase;
- Removal of top soil;
- The site is flood affected to the north-east corner. Panels will cause damage if swept away in flood waters.

## Comment –

Additional information on flooding, microclimate and panel disposal were requested but has not been addressed by the applicant.

The environmental impacts of the proposed development are addressed in the 'likely impacts of that development' section of this report. On balance it is considered that the proposal will not result in unacceptable impacts on the environment.

## • Bushfire Hazard Concerns

The area is a high hail and lighting strike area, with soils having high electrical conductivity. There is a risk of damaging panels and sparking bushfire, with no staff to control incidents.

**Comment** - The NSW Rural Fire Service has provided advice and recommended conditions for the proposed development.

## Cultural Heritage Assessment

Aboriginal items will be destroyed by the development.

#### Comment -

A complete cultural heritage assessment has been requested but has not been addressed by the applicant.

## • Impacts from Additional Traffic

Additional traffic is not within the capacity of the existing rural roads. Potential conflict with logging truck, school bus.

**Comment** - it is considered that the likely additional traffic from the proposed development will be within the capacity of the existing road network. It could be designed to not result in unacceptable traffic impacts.

#### Inadequate application

- Inadequate consultation from Rio Indygen Utility Ltd (proponent) with surrounding residents at pre-Da stage. This is a concern of accountability of company to the community if approved;
- Insufficient communication from Council. The applicant was treated favourably in the excessive time given to submit revised information;
- $\circ$   $\;$  The number of submissions mean that the application should be rejected;
- o There are factual errors in SEE and the property boundaries are incorrect.

#### Comment

Pre- DA consultation by the proponent is outside of Council's control. The plans submitted were not in accordance with the Regulations. Revised plans were submitted mid July 2019, which allowed advertising of the application to commence as required in the regulations. Council has followed all regulatory requirements in the assessment of the application.

#### Solar farm Supporters

The supporters put forward the following points:

- Climate change requires a move towards renewable energy;
- Co-location with existing substation is a good idea;
- The solar farm will reduce carbon emissions more than cattle grazing;
- The solar farm will create employment and economic benefit to local businesses, will be silent and pollution free once established;
- The use is compatible with agriculture and the land will be returned to agriculture after 25 years;
- As the panels move to follow the sun they will not cause glare elsewhere;
- No impact on property values as the substation exists.

# (e) the public interest:

As a multitude of issues discussed in this report have not been adequately addressed and due to the proximity of the development to residential properties, Council considers that the development is likely to result in unacceptable impacts, is considered unsuitable for the site and not within the public interest.