

SFG2924

Report

Social Impact Assessment - Vaitele Street, Samoa

Prepared for Land Transport Authority (LTA)

Prepared by Beca International Consultants Ltd (Beca)

9 June 2014



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1 Introduction

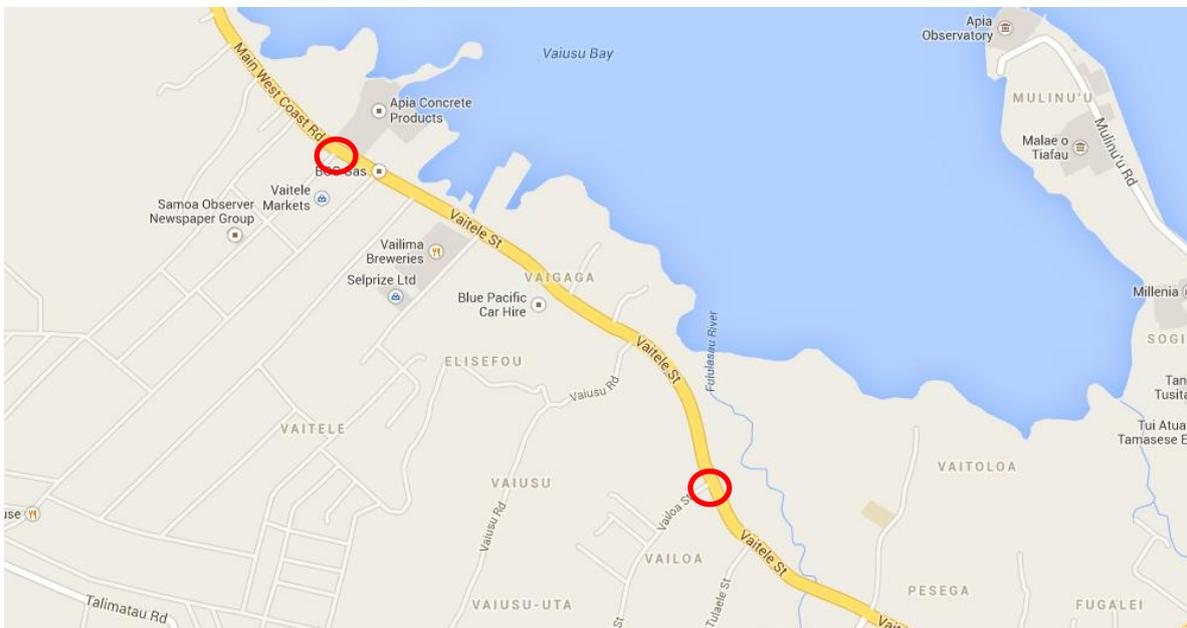
1.1 Project Description

The Land Transport Authority (LTA) has commissioned Beca International Consultants Ltd (Beca) to design road widening options and drainage improvement works required for 2.3km of Vaitele Street from Vailoa village to the western boundary of Vaitele village in order to reduce traffic congestion and surface water flooding on the road and surrounding land during times of heavy rainfall. As a result there will be improved social, environmental and economic benefits to the local communities and to the country as a whole. The general location of the project is shown on Figure 1 below. It extends to the eastern boundary of Saina village.

The Planning and Urban Management Agency (PUMA) has advised that the requirement for the assessment of environmental impacts of the proposed work can be met through the submission of a Preliminary Environmental Assessment Report (PEAR), in accordance with the Environmental Impact Assessment Regulations 2007. This is because the works are predominantly an extension to existing infrastructure and are therefore not likely to generate significant adverse impacts.

This Social Impact Assessment (SIA) has been prepared to identify and assess the social impacts associated with the proposed works.

Figure 1: General Location Plan (Vaitele Street between Vailoa and Saina Villages.)



1.2 Background to the Project

The two main issues in the area of the Project are traffic congestion and flooding of the road and adjacent land.

Traffic congestion is a result of the increasing use of the road as an arterial route between Apia and western villages, as well as to Faleolo International Airport and to the Vaitele industrial area. To the east of Vailoa Vaitele Street has already been upgraded and widened to four lanes. This has alleviated the traffic flows to the east however, there remains a problem for westbound traffic as vehicles merge from 2 lanes to a single lane.

The flooding issue is caused by a number of problems including:

- Undersized culverts;
- Not enough culverts;
- Broken or blocked culverts;
- Inadequate or blocked/filled culvert inlets and outfall channels; and
- Very flat grades for some sections of the surface water channels alongside the road.

Approximately 2.3km of Vaitele Street is proposed to be widened to four lanes in this upgrade project, including drainage improvement works. The widening to four lanes will be largely similar to the road widening undertaken to the east. Almost all of the road widening works will take place within the designated road reserve (approximately 15m either side of the centerline of the roadway), with only one small portion of land required for acquisition. There are many places along the route that will require structures such as fences and hedges that currently encroach on the road reserve, to be set back from the widened road. There are no buildings, graves or other permanent structures that are required to be moved as the design has been prepared to avoid these where they are close to the road carriageway.

Where drainage easements are required to protect drains taking water away from the road, consultation with the property owners/occupiers has been carried out with the affected land owners to determine potential easement alignments.

Easements are proposed rather than the outright purchase of the land so that the property owner retains ownership of the land and may continue to use the land provided that the easement or drain is not blocked with any permanent structure. This arrangement benefits both parties to the easement agreement and ensures ongoing access to maintain the drainage system. Easements are not required, and will not be provided, over or alongside permanent free-flowing watercourses or within the road reserve.

1.3 Report Organisation

This report is organised into a number of main sections as follows:

- Section 2 outlines the scope of this SIA report and the adopted approach;
- Section 3 provides a description of the project;
- Section 4 provides a description of the social environment;
- Section 5 describes the key stakeholders and communities of interest for the Project and the consultation undertaken,
- Section 6 provides an assessment of the effects on the social environment; and
- Section 7 provides recommendations to manage and respond to the social impacts of the road widening project.

2 SIA Scope and Approach

2.1 Scope of this SIA

The purpose of this SIA report is to provide an assessment of the potential social effects (benefits and dis-benefits) that may arise as a result of the proposed Vaitele Street widening project. The SIA report will provide a single source document that summarises the issues, information, assessment and management/recommendations in respect of the social consequences of the project.

2.1.1 SIA Process and Framework

The International Association for Impact Assessment (IAIA) states that SIA is:

‘...analysing, monitoring and managing the social consequences of development. Social impact assessment includes the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions.’

The IAIA notes that SIA can be undertaken in different contexts and for different purposes, but that the following principle is important across all SIA:

‘The improvement of social wellbeing of the wider community should be explicitly recognised as an objective of planned interventions, and as such should be an indicator considered by any form of assessment. However, awareness of the differential distribution of impacts among different groups in society, and particularly the impact burden experienced by vulnerable groups in the community should always be of a prime concern.’

The IAIA outlines the key areas to consider when undertaking a SIA. In summary, these areas include:

- **People’s Way of Life:** How people live, work, play and interact;
- **Culture:** People’s shared beliefs, customs, values and language or dialect;
- **Community:** The cohesion, stability, character, services and facilities;
- **Political Systems:** The extent to which people are able to participate in decisions that affect their lives, the level of ‘democratisation’ that is taking place, and the resources provided for this purpose;
- **The Environment:** The quality of the environment that people live, work and socialise in (eg. air and water that people use, the availability and quality of the food they eat, the level of hazardous risk, dust and noise they are exposed to, the adequacy of sanitation, their physical safety, and their access to, and control over, resources);
- **People’s Health and Wellbeing:** The state of physical, mental, social and spiritual wellbeing;
- **People’s Personal and Property Rights:** Particularly whether people are economically affected, or experience personal disadvantage which may include a violation of their civil liberties;
- **People’s Fears and Aspirations:** This relates to perceptions about people’s safety, their fears about the future of their community and their aspirations for their future and the future of their children.

Based on consideration of the above this SIA assesses the proposal in relation to four key themes – being, ‘Community Cohesion and People’s Way of Life’, ‘People’s Health and Well-Being’, ‘The

Environment' and 'People and their Property'. These are discussed further in Section 5 (description of the social environment), Section 6 (assessment of social effects), and Section 7 (recommendations to manage and respond to the social impacts).

2.1.2 Exclusions and Assumptions

The following exclusions and assumptions apply to the scope of this SIA:

- The SIA is informed by consultation that has been undertaken to date in relation to the proposal and it is recognised that the process of consultation will be on-going. No additional consultation has been undertaken specifically for the preparation of this SIA. The consultation that has informed this SIA is summarised in Section 5 with more detail provided in Appendix A.
- This SIA has not considered alternatives to this project (including benefits and costs) from a social perspective, as this will be undertaken from an environmental perspective in the Preliminary Environmental Assessment Report.
- This SIA has not assessed economic or cultural impacts. However, economic impacts and specific cultural values - insofar as they relate to social effects - will be noted.

2.2 SIA Approach

Social assessment methodology is typically undertaken in phases. The approach for this SIA has been undertaken in two phases, namely:

- Scoping and consultation,
- Assessment and reporting.

This SIA has been prepared to provide an assessment of the likely social effects (benefits and disbenefits) of the proposed works. Phase One (scoping and consultation) is the information gathering phase and Phase Two (assessment and reporting) is the analysis, assessment and reporting stage.

2.2.1 Phase One: Scoping and Consultation

Community and stakeholder consultation has been carried out in relation to the Project. This has been undertaken to determine the preferred options of the road alignment, the location and placement of structures in the road reserve and the location of bus stop, pedestrian crossings and parking spaces. A brief summary of consultation undertaken is shown in Table 1 below.

Table 1: Summary of Consultation

Consultation Group	Date
Vaiusu, Vaigaga, Saina Village Pulenu'u	28 April 2014 (morning)
Vaitele Village Pulenu'u	28 April 2014 (afternoon)
Vailoa Village	23 May 2014
Vaigaga Village	26 May 2014
Vaitele Village	27 May 2014

Consultation Group	Date
Vaiusu Village	27 May 2014
Vailoa Family	30 May 2014
Vaiusu Family	30 May 2014
Vaiusu Family	30 May 2014

2.2.2 Phase Two: Assessment and Reporting

On the basis of the information provided in consultation this SIA has included consideration of community/stakeholder views for the project and our technical assessment.

Of particular relevance to this SIA is the previous road widening works undertaken for the eastern part of Vaitele Street. The project is similar in scale and intensity to this proposal, resulting in a two laned road being widened to two lanes each way with improved drainage infrastructure. The previous works were undertaken in similar fashion to this proposal in that community consultation was carried out and resulted in a general support for the project.

Table 2 below summarises the primary issues raised in consultation and the responses provided in the final design of the project as described in the following section. A detailed report on consultation is included in Section 5 of this report and a record of consultation is provided in Appendix A. While consultation raised a number of specific issues that are addressed in the final design there was general support for the project.

Table 2: Summary of Issues and Responses

Consultation Group	Issues	Responses
Vaiusu, Vaigaga, Saina Village Pulenu'u	<ul style="list-style-type: none"> • Land • Road reserve • Compensation 	<ul style="list-style-type: none"> • The final design provides for almost the entire road to be constructed within the road reserve. • The road reserve was defined by survey and shown to the adjacent landowners. • Compensation is payable in accordance with the Government of Samoa's standards.
Vaitele Village Pulenu'u	<ul style="list-style-type: none"> • Land • Road reserve • Compensation • Impact on grave • Drainage easements 	<ul style="list-style-type: none"> • As above plus • The road widening is designed to avoid the grave • Drainage easements are required to protect the flow of water from the road to the sea. Families retain the ownership of the land.
Vailoa Village	<ul style="list-style-type: none"> • Road reserve • Compensation 	<ul style="list-style-type: none"> • As above plus • Traffic to/from the west is increasing and will flow

Consultation Group	Issues	Responses
	<ul style="list-style-type: none"> • Need for the widening • Pedestrian safety • Traffic speed/increased danger • Effect on village pool • Drainage • Impact of road works 	<p>more easily if the road is widened</p> <ul style="list-style-type: none"> • Design provides for footpaths and pedestrian crossing areas with central refuges as well as improving safety features within the road. • The village pool will not be affected by the road works. • Drainage will be improved. • Construction impacts will be dealt with through the Development consent required from PUMA.
Vaigaga Village	<ul style="list-style-type: none"> • Road reserve • Compensation • Drainage • Fences • Impact on Church land and stone wall • Pedestrian safety, crossings at school and church 	<ul style="list-style-type: none"> • As above plus • Fences will be replaced • The Church land is not required for the road. • Pedestrian crossings and footpaths are provided to improve pedestrian safety.
Vaitele Village	<ul style="list-style-type: none"> • Traffic speed • Grave • Drainage • Drainage easements • Where road works end, why doesn't it go on into Saina • Church rock fence • Limited land available on the sea-side of the road • Works programme 	<ul style="list-style-type: none"> • As above plus • Extent of widening limited by funds available and there isn't enough to extend into Saina • Fences will be replaced • Road works will almost all be within the road reserve and limited land on the northern side is not needed. • Works may start at the beginning of 2015 and it is usual to do one side at a time to keep traffic flowing.
Vaiusu Village	<ul style="list-style-type: none"> • Drainage • Compensation • Effect on the village pool • Fences • The impact of the road on steep land • Pedestrian safety 	<ul style="list-style-type: none"> • As above plus • The road design will take into account the land slope adjacent to it as well as the need for pedestrian safety especially around the school and also around bus stops. Sixteen bus stops will be provided. A pedestrian crossing is provided at the school.

Consultation Group	Issues	Responses
	<p style="text-align: center;">near the school</p> <ul style="list-style-type: none"> • Bus stops 	
Vailoa Family	<ul style="list-style-type: none"> • Compensation • Area of land required for the road 	<ul style="list-style-type: none"> • A small area of land is required from this family. The area required was identified and the process of compensation explained. An agreement would be prepared for discussion before anything was finalised.
Vaiusu Family	<ul style="list-style-type: none"> • Should hedges continue to be planted • Where is the land required 	<ul style="list-style-type: none"> • Yes and they would be replaced if they were needed to be moved. • A surveyor will point out where the land required is.
Vaiusu Family	<ul style="list-style-type: none"> • Where will the works end • Will the breadfruit tree be affected • Can the driveway be made good if it is damaged. 	<ul style="list-style-type: none"> • End of works pointed out. • Breadfruit tree may be affected although none of the owner's land will be affected. • If damaged the driveway would be made good.

3 Project Description

The project is proposed to extend the four-lane section of Vaitele Street from Vailoa village to the western boundary of Vaitele village. The cross-section and function of the road will generally be as it is for the existing four-lane sections of Vaitele Street as shown in the photographs below. Plans of the proposed alignment are provided in Appendix B.

There will be footpaths along both sides for most of the length of the project with bus stops and pedestrian crossings at regular intervals. Two sets of traffic lights are proposed; one at the intersection of Vaitele Street and Vaitele Industrial Road and the other at the intersection of Vaitele Street and Faleata Road. There will be pedestrian crossings incorporated into the light phasing.

The four laning will have a painted flush median and entry to other roads and adjacent properties can be made from the central median where necessary. Crossings that are not at the traffic lights will have central refuges to slow traffic and protect pedestrians. Crossings are proposed at Vaiusu Road and the Vaiusu School.

Sixteen bus stops are provided for at regular intervals. All except one of the bus stops are long enough for three or four buses at once and the shorter bus stop is able to be extended in the final construction if that is considered necessary.

Car parking is provided outside of all of the shops along the project length. Access to all the adjacent properties is to be retained.



Photo 1: Standard Four-lane cross-section showing reinstated hedge, footpaths on both sides and painted flush median.



Photo 2: Pedestrian Crossing on existing four-lane section showing pedestrian refuge in the centre of the road.



Photo 3: Bus stop on existing four-lane section.

4 Description of Social Environment

The following section provides a description of the existing social environment of the Vaitele Street Widening Project.

4.1 Establishing the Assessment Area

The existing environment for this SIA has been identified as the land, community and properties directly adjacent to the Vaitele Street road reserve (the 'immediate area of effect') and, to a much lesser degree, the surrounding areas and communities (the 'local area of effect'). The Vaitele Street widening project is located close to Apia and it is recognised that the proposal will also contribute to, and impact on, the City overall. Figure 2 illustrates the proposed road widening area, and the surrounding areas of interest.

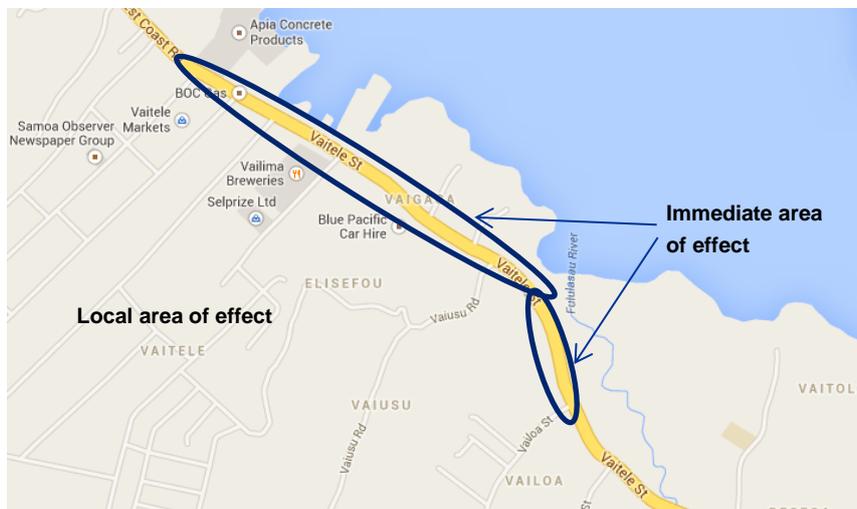


Figure 2: Vaitele Street - immediate area of effect (road boundary) and its surrounding areas (local area of effect)

4.2 Population

This section of the report provides a summary of the population in the vicinity of the Project. It is important to note that the Samoa Bureau of Statistics Census data for 2006 and 2011 does not provide specific data for each village, therefore accurate data is not available relating to population trends in the local area of assessment. The available Census data provides an important element of the existing social environment in terms of the people who live in the region and its broad socio-economic characteristics. Understanding the demographic composition of the study area provides context for the potential impacts of the proposed activity for this SIA.

4.2.1 Population

The latest Census data from 2011 defines the population geographically into broad regions. The geographical region that applies to the study area is the Apia Urban Area (AUA). This is the general area shown in Figure 3 as the most populated area of Samoa.

MAP OF SAMOA
Total Population by Faipule District, 2011

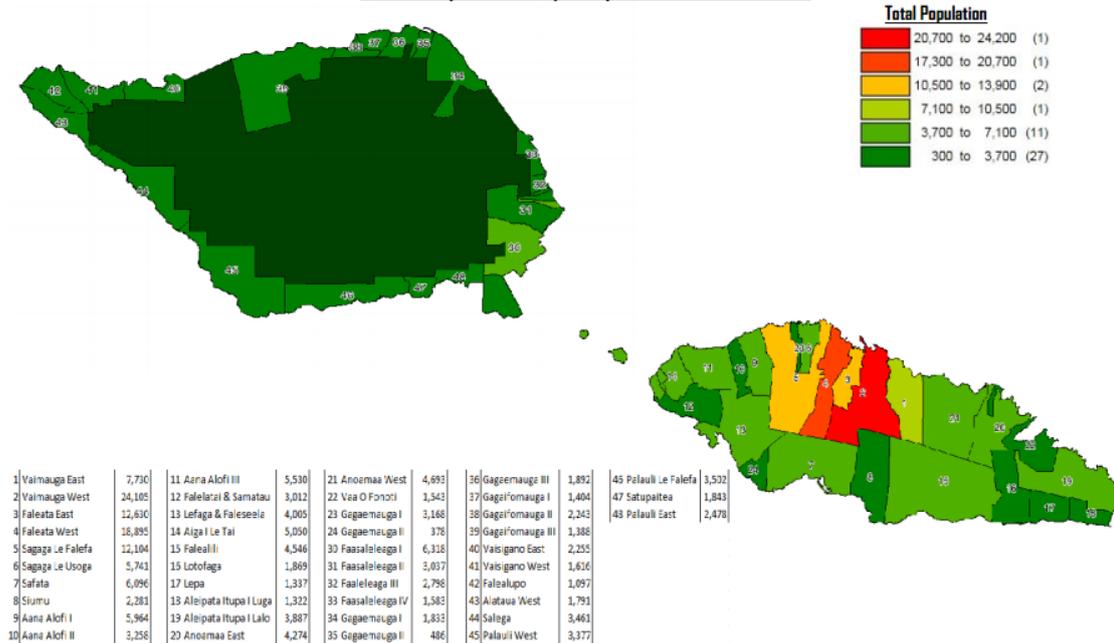


Figure 3 – Total Population per District 2011.

Table 3 provides a summary of the total population living in urban and rural settings. The Vaitele Street area is considered to be an urban area and the census indicates that the population living in urban areas has decreased while the number of people living in rural areas has increased. Transportation from rural areas to the Apia urban area has therefore become increasingly important. Vaitele Street is a critical corridor between central and western Upolu.

Table 3: Total population and estimates 2006-2020

	Year	Population ¹	Urban ²	Rural ³
Census	2006	180,741	37,708	143,033
	2007	182,157	37,513	144,643
	2008	183,573	37,319	146,254
	2009	184,989	37,124	147,864
	2010	186,405	36,930	149,475
Census	2011	187,820	36,735	151,085
	2012	189,236	36,540	152,695
	2013	190,652	36,346	154,306
	2014	192,067	36,151	155,916
	2015	193,483	35,957	157,527
	2016	194,899	35,762	159,137
	2017	196,315	35,567	160,747
	2018	197,731	35,373	162,358
	2019	199,146	35,178	163,968
	2020	200,562	34,984	165,579

Source: Samoa Bureau of Statistics, Population and Housing Census 2011

Notes:

1. Total estimate is based on an annual growth rate of 0.8% from census 2011
2. Urban estimate is based on an annual growth rate of -0.5% from census 2011
3. Rural estimate is based on an annual growth rate of 1.1% from census 2011.

From the census data the means of travel to work is identified as being a variety of individual vehicles and public transportation. Buses play a very important role in transportation between villages and to Apia, however, the number of privately owned vehicles has increased dramatically since Samoa's road rules changed in 2009 (to require driving on the left side of the road) allowing cheaper right hand drive vehicles to be imported from Japan.

Within the immediate and local area of effect of the Project the land use is predominantly rural-residential, and includes commercial, retail, education and community activities. A number of 'suburban centres', which include retail, commercial, and takeaway food stores, are also located within the assessment area. These predominantly serve their surrounding residential neighbourhoods. There are also commercial and industrial land uses around the Vaitele Industrial area including Vailima Brewery.

There are also a number of primary schools located along or close to Vaitele Street, such as the Vaiusu Primary School, and a number of churches within the immediate area of effect.

5 Key Stakeholders /Communities of Interest

Community and stakeholder consultation for the Vaitele St widening project has been carried out from April to May 2014. Consultation commenced with a presentation to the Pulenu'u of the affected villages by the LTA and Beca/OSM Consultants. The Project Team was then invited to each of the villages for a more detailed presentation and to answer any questions or concerns that the residents had. Families were then asked if they wished to have specific meetings at their own homes to discuss the details of the project adjacent to their property. The details of each meeting are recorded in Appendix A. The attendance for each of the village meetings is shown in Table 4.

Table 4: Attendance at Village Consultation Meetings

Village	Attendance
Vailoa	14
Vaiusu	8
Vaitele	16 (included representatives of Saina Village)

The details of this consultation have been analysed and the key issues raised by each group have been considered for further investigation as indicated in Table 2. The detailed design of the alignment has been amended where practicable to mitigate the issues raised. The social issues identified are discussed in the Assessment of Social Effects (Section 6).

6 Assessment of Effects

6.1 Introduction

This assessment section will discuss the proposal in relation to the four key social impact themes determined in Section 3.1.1 ('Community Cohesion and People's Way of Life', 'People's Health and Well-being', 'The Environment', and 'People and their Property'). This Section of the SIA relies on a combination of information; the existing social environment as well as the consultation undertaken to date.

The effects of construction activity are assessed in the PEAR.

This SIA also seeks to identify how identified social impacts can be managed. Recommendations for the avoidance and management of social effects, and the ways in which the management framework will assist with this, are considered in more detail in the following Section (Section 7).

6.2 Community Cohesion and People's Way of Life

Community cohesion and people's way of life refers to the stability, character, services and facilities of a community, and how people live, work, play and interact within it. The following section will assess how the Project impacts on these services and facilities, and people's movements and interactions, within the local area and the immediately affected area.

6.2.1 Changes to traffic volume and flow and how this will affect the community

Potential adverse effects

Potential social effects that can result from widened roads include higher speeds, reduced safety, and social severance. Reduced road safety (and the potential for increased accident and injury for road users and pedestrians) was raised during consultation, with particular concern for reduced safety on the roads near residential areas, schools, local shops and in the vicinity of other established land uses located close to the road.

Social severance effects occur when the movement of people is affected (e.g., by increased traffic volumes making it more difficult for pedestrians to cross the road) and these effects can flow into social and economic life as people change their patterns, for example, to meet people or do business. Over time, severance effects change as communities adapt and create new patterns of movement. Once Vaitele Street works have been completed it is not anticipated that social severance will be a significant effect as the road will still continue to carry similar amounts of traffic as it is currently. The new footpaths, kerb and channel and better drainage will make it safer for pedestrians along the roadway and people will adapt by using the new pedestrian crossings.

Motorists have a tendency to operate at higher speeds when the road environment is wider and to a better standard which has the potential to reduce safety for the area. This has been mitigated by a number of methods including:

- Formalised pedestrian crossings, particularly around churches and schools and at the two main intersections
- Designated bus stops

- Marked parking areas along the street.

Traffic speed is an underlying issue across Samoa that is not able to be dealt with in this application. However, a safer, better formed and marked road alignment with parking, footpaths and bus stops will help to mitigate the potential adverse effect of high speed vehicles along this widened segment of road.

Potential benefits

Within the city wide roading network congestion is a significant issue, particularly along Vaitele Street between the Vaitele Industrial area and central Apia and the Port. The project will help to reduce traffic congestion and improve travel times which will provide for better vehicle movement improving productivity for Apia and Samoa as a whole.

Drainage will be improved reducing the potential for weather related accidents and road closures.

The works will also provide pedestrian footpaths along the road, allowing safer pedestrian access to commercial areas, schools and churches.

It is considered that the positive effects of relieved traffic congestion, improved drainage and better safety for pedestrians outweigh the potential adverse effects of increase traffic speeds on this segment of road.

6.3 People's Health and Well-being

6.3.1 Amenity Effects

6.3.1.1 Visual

It is acknowledged that the proposed road widening will change the landscape of the area. However, the environment in this area is already highly modified as a paved two laned road. The landscape will change as a result of the proposal with an increase in road surface area, footpaths, drainage channels and other modifications including pedestrian crossings, bus stops, parking spaces etc.

As this is already a modified environment the proposed works are not considered to generate adverse visual amenity effects. The works will upgrade the existing roading situation, creating cleaner and better defined roadsides. The improvement to drainage will also contribute to the visual amenity of the area by reducing the potential for large pools of water and debris to gather after large rainfall events.

6.3.2 Community Values in Respect of the Project

The consultation undertaken to date indicates that the local community is generally supportive of the proposal provided their concerns around traffic and pedestrian safety, damage to graves, buildings and fences are taken into account in the final design. The community can generally see that the road widening will improve traffic flows through their villages and reduce the potential for accidents and flooding.

6.4 The Environment

Effects on the environment as a result of the proposal were raised in consultation in relation to drainage, the loss of green space and locally significant trees.

Immediately southeast of Vaitele Industrial Road are a line of semi-mature shade trees, these trees are within a reserve and are adjacent to a popular bus stop. These trees may need to be removed as part of the proposal. This is important to the local community as the trees provide shade for people waiting for the bus. The new bus stops may be provided with bus shelters that provide shade as well as shelter from rain and wind as shown in Photo 3.

Villagers consulted also commented on the effect of the removal of existing hedges and mature trees within the road reserve. Hedges are to be reinstated at the boundary of the roadway but larger trees will not be replaced.

Drainage improvements are likely to have an effect on the environment to the north of the road as areas are cleared to allow better flow of water to the sea. This may involve the removal of existing vegetation and small structures/fences etc but provided the easements are not blocked with permanent structures and water flow is not held back with vegetation in the future they will be able to be replanted with grass.

An assessment of all environmental effects is provided in the PEAR.

6.5 People and their Property

The nature of the works is such that only a small area of private land will need to be purchased for the road widening. Nearly all works will be able to be maintained within the road reserve. There are, however, a number of private structures such as fences, stalls and even some buildings that have been constructed within the road reserve. Each situation has been looked at separately to try to avoid the structure. However, there are some cases where fences etc may need to be moved. These structures will be relocated and restored to their original condition as part of the project.

There is one grave within the road reserve that the family wanted to remain. The road alignment has been designed to avoid the grave.

Business people along the road were concerned that access to their businesses is maintained and the final design provides for car parking and footpaths to each of these properties.

6.6 Summary of Effects

The purpose of this assessment of effects was to consider the social impacts on the immediately affected community. These impacts include:

The impacts on the immediately affected community:

- Effects on community cohesion - existing dwellings in the area will experience a change in terms of the character of their local area, including the potential increase in speed of vehicles along the road.
- Visual effects – Changed landscape and visual amenity of the area – conversion from a 2-lane road to 4-lane road, with kerb and channel, footpaths, formalised pedestrian crossings and bus stops.

- Economic effects – positive effects of a safer and more efficient route, improved travel times and reduced potential for accidents, resulting in improved productivity for Apia and Samoa as a whole.
- Improved drainage resulting in improved water quality in local waterways and reduced ponding and debris along the road. Reduced ponding also provides a safer traffic environment (reducing the potential for aqua-planing) and raised footpaths allow pedestrians to keep off the carriageway to avoid flooded areas.

7 Recommendations for Avoidance and Management of Social Effects

7.1 Mitigation

The final design of the 4-lane widening has taken into account many of the issues raised in consultation, in particular:

1. Formal pedestrian crossings are provided at regular intervals not more than 500m apart. Two of these crossings are at traffic lights which will effectively slow the traffic down as it is required to stop for turning traffic and to allow pedestrian phasing. These breaks in the traffic will also allow gaps further along the street that will help cars turn into properties or smaller side roads. Pedestrian crossings away from the traffic lights are provided at the Vaiusu Primary School and close to other churches and community facilities. These crossings have a central refuge as shown in Photograph 2 above.
2. Footpaths are provided on both sides of the roadway along most of the length of the project. These are protected from the carriageway by high kerbs that will stop most vehicles encroaching on the footpath.
3. Bus stops are provided for off the main traffic lanes to provide a safe environment for passengers to get on and off the busses. There will be shelters at these bus stops.
4. The central painted median will allow vehicles to turn across the traffic safely.
5. Car parking provided off the main traffic lanes will allow people to access local shops and businesses safely.
6. More and larger culverts will help to reduce the potential for flooding and defined channels will help the water to drain more freely to the sea. Drainage easements will allow the land owners to retain ownership of the land will allowing the drains to be maintained.
7. Important community structures such as the village pools and the grave are avoided in the final design.
8. Fences and hedges are to be replaced on the new road boundary. No other buildings are required to be removed or relocated.

7.2 Monitoring a Higher Speed Environment

Of particular concern for many people during consultation is the potential for higher speeds along this segment of road, potentially reducing the safety of the area. This is a nationwide issue and further regulation and enforcement is needed, not only for this section of Vaitele Street but across the country.

Appendix A

Consultation records

Appendix B

Plans