



WEILMORINGLE COMMUNITY WORKING PARTY

HOUSING and ENVIRONMENTAL HEALTH PLAN

MARCH 2022



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ASSEMBLY**

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WEILMORINGE COMMUNITY WORKING PARTY

HOUSING and ENVIRONMENTAL HEALTH PLAN

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HOUSING and ENVIRONMENTAL HEALTH PLAN

EXECUTIVE SUMMARY

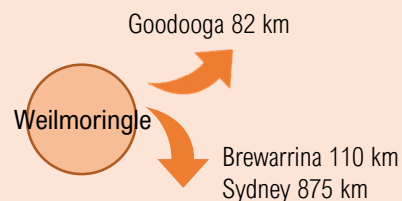


Weilmoringle

Housing and Environmental Health Plan Executive Summary

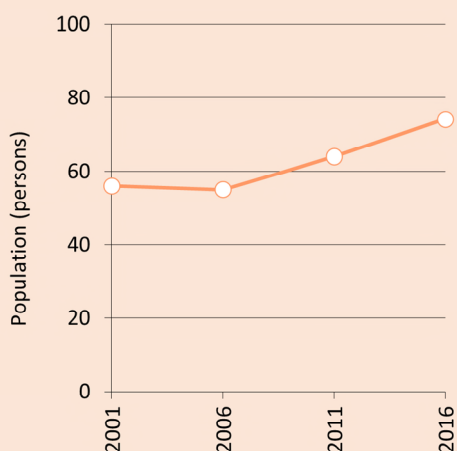
This Housing and Environmental Health Plan provides a Master Plan for housing, infrastructure and housing-related human services for the small Aboriginal community of Weilmoringle. The Master Plan is based on a body of evidence outlined in this Executive Summary. Much community input is drawn from the Household Survey organised by Murdi Paaki Services, and from the Weilmoringle CWP's Community Action Plan. This Plan describes the current situation and proposes measures to improve the state and supply of housing, the way it is allocated and managed, and what needs to be done in the future to meet community needs for housing, wrap-around services and economic development. The Executive Summary begins with some facts about the community, looks at the housing situation, then presents the key points of the Master Plan. The Plan belongs to the Aboriginal community of Weilmoringle

Where we are to be found?

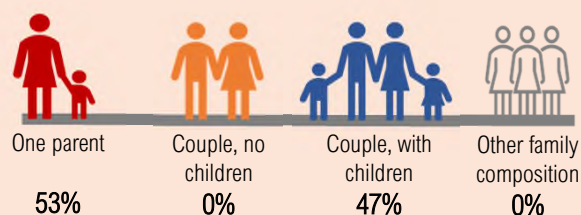


The Weilmoringle climate is hot, dry, semi-arid. The number of days with temperatures $>35^{\circ}\text{C}$, already 65 days, is predicted to increase by 30-40 days by 2070

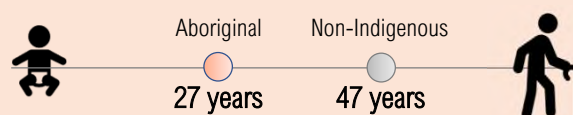
About the Wyalitaba



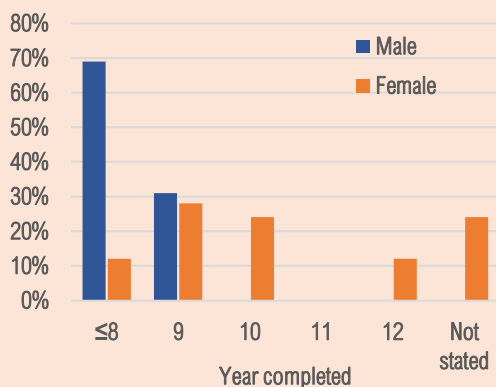
Family household composition



Median age of the population



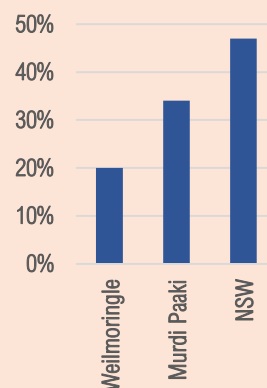
Highest year of schooling, all Aboriginal adults



34% of the Aboriginal population is aged under 15 years



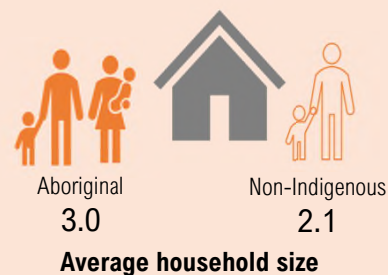
Employment to population ratio



Weilmoringle

Tenure type (from Census)

- Owners
- Private renters
- Social housing renters
- Other



Facts about housing in our community:



On Census night, all private dwellings were occupied



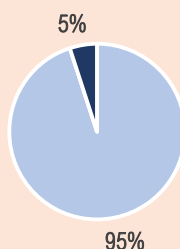
100% of households lived in the same house 5 years before the MRH&BC

Social housing manager(s)



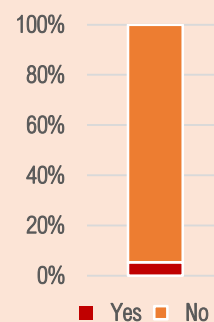
- Local ACHP
- Regional ACHP
- Out of Region ACHP
- Community housing manager
- Public housing manager

Satisfaction with housing manager

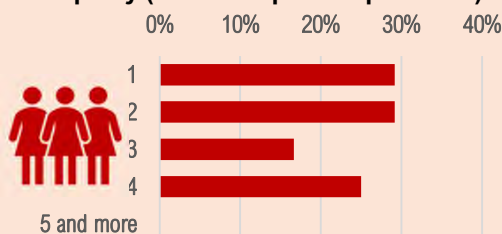


- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied
- Not stated

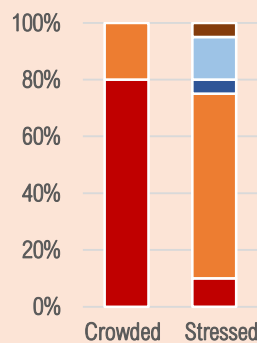
Feeling safe



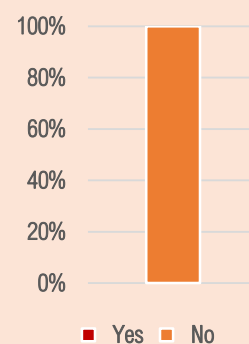
Occupancy (number of persons per house)



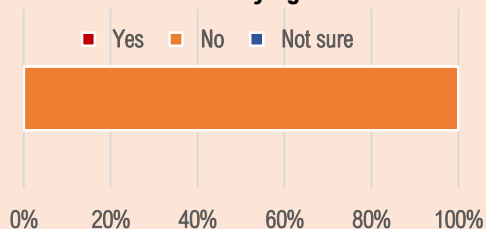
Households feeling



Households giving shelter

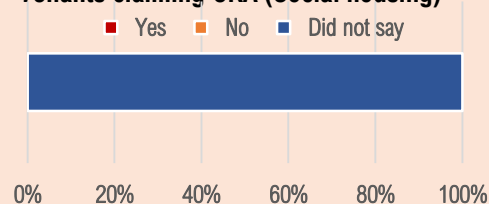


Tenants with a tenancy agreement



- Never
- Rarely
- Sometimes
- Often
- Always

Tenants claiming CRA (Social housing)



REASONS FOR LIVING IN WEILMORINGLE

My family has been here a long

To be close to family and relations

To be on Country

100%

95%

90%

Weilmoringle

ESTIMATE OF HOUSING NEED

Predicted housing need

	Bedrooms			
	2	3	4	5
Families	-	-	2	1
Older persons	4	-	-	-
Young persons	-	-	-	-
Homeless families	-	-	-	-
Total dwellings	4	0	2	1

Includes a five bedroom replacement dwelling

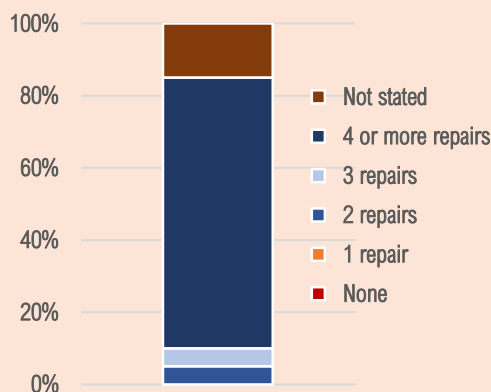
Home modifications

Required	-
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Extra bedrooms

	Bedrooms		
	1	2	3
Estimated	2	-	-

Tenant reported condition



Housing repairs

(Number of properties)

Degree of work	Number
↗	0
↗ ↗	0
↗ ↗ ↗	21
↗ ↗ ↗ ↗	0
↗ ↗ ↗ ↗ ↗	0

MASTER PLAN - HOUSING

- Support the Land Council to achieve NRSCH registration so that the community has direct control over the management of its properties and is not prevented from accessing government funding in the future, failing which pass management over to a NRSCH registered Regional ACHP to manage
- Work with the managing ACHP to establish a relationship which satisfies community aspirations and cultural ways of doing business
- Establish a line of regular and formal communication which allows information flow to the CWP on ACHP operations and performance, including reporting on asset condition
- As part of the MPRH&BC project, co-design rent setting policies which set fair and affordable rents
- Housing supply and mix does not cater adequately for community needs and priorities. Advocate for supply to be increased by the number and mix of properties estimated by the HEHP as a minimum. Extend existing houses where judged to be crowded with the addition of bedrooms
- Carry out independent property inspections, arrange adequate funding, and carry out repairs, upgrades and extensions using only values-aligned contractors with the capacity to carry out work professionally to a high standard. Develop a replacement programme as part of each Property Management Plan
- Arrange with the managing ACHP to negotiate with the Aged Care Assessment Team to audit properties for accessibility, and arrange home modifications where found necessary
- Train and employ a local Aboriginal worker as a licensed handyman to maintain property condition by carrying out basic repairs

MASTER PLAN - INFRASTRUCTURE

- Negotiate with the Department of Planning, Industry and Environment under the Roads2Home programme for upgrading of all roads and drainage, levee, streetlighting and new footpath/cycleway to the school and shop

Weilmoringle

MASTER PLAN - INFRASTRUCTURE

Advocate with Brewarrina Shire Council and other responsible agencies for:

- Works which raise the visual and environmental amenity of the village streetscape and public facilities to make a positive contribution to the quality of life of residents
- Assistance with swimming pool management
- A small water park for use by the children at the pool
- Assistance with a request to Telstra for improved telecommunications security and advocacy for fast internet access for the school and community
- A kerbside domestic waste service and regular bulky waste clean up community-wide
- Upgrading of the village bore and river water supplies to provide an adequate supply for all uses including irrigation and firefighting

The Master Plan sets out the actions the CWP has adopted to secure a better future for the community. The actions come from the contributions of the community and from analysis of the gaps which prevent people from living healthy, productive and comfortable lives in Weilmoringle. The actions written into this Executive Summary are shorthand versions of the actions in the Plan itself

MASTER PLAN - HUMAN SERVICES

- Engage with MPRA, DCJ and other agencies to advance the actions in the Weilmoringle Community Action Plan in conjunction with this Housing and Environmental Health Plan to advance community priorities in early childhood, education and youth services, and an employment strategy
- Establish a close working relationship between the CWP, MPS and Council to jointly drive improvements in human services including a greater focus on provider coordination, performance, cost-effectiveness and cultural safety
- Audit and review human services to confirm that services promised are being received, that gaps are identified and can be addressed, and protocols established which increase awareness, transparency and accountability
- Improve the community's ability to access family-centred health care services through regular and frequent outreach services in Weilmoringle
- Increase the cultural safety, quality and accessibility of health services by employing and training a young resident as an Allied Health Assistant as a service coordinator for the outreach service
- Develop a transport solution which will allow community members without a vehicle to attend health appointments locally and in Brewarrina, Bourke, Dubbo and Orange
- Assess the presence and capabilities of funded NDIS registered providers, the level of care delivered against clients' funded package, and package availability and inequalities of care of Aboriginal people with disability

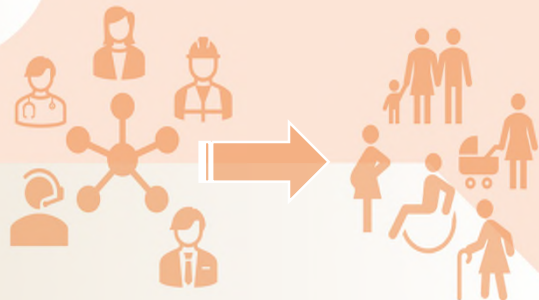


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GLOSSARY

ABS	Australian Bureau of Statistics
ACDP	Aboriginal Communities Development Programme
ACHP	Aboriginal Community Housing Provider
AEDC	Australian Early Development Census
AEP	Annual Exceedance Probability
AHIMS	Aboriginal Heritage Management Information System
AHO	NSW Aboriginal Housing Office
ALRA	Aboriginal Land Rights Act
APB	Aborigines Protection Board
ASIC	Australian Securities Investment Commission
CAP	Community Action Plan
CDEP	Community Development Employment Projects
CHSP	Commonwealth Home Support Programme
CNOS	Canadian Occupancy Standard
COAG	Council of Australian Governments
CRA	Commonwealth Rent Assistance
CSP	Community Strategic Plan
CWP	Community Working Party
DCJ	NSW Department of Communities and Justice
DFV	Domestic and Family Violence
DPIE	NSW Department of Planning, Industry and Environment
ERP	Estimated Resident Population
HCP	Home Care Package
HEHP	Housing and Environmental Health Plan
HLP	Healthy Living Practices
IFD	Intensity Frequency Duration
ILC	Indigenous Land Corporation
ILOC	Indigenous Location
IRSD	Index of Relative Socio-economic Disadvantage
IPA	Indigenous Protected Area
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
LHD	Local Health District
LSPS	Local Strategic Planning Statement
MLAHMC	Mid Lachlan Aboriginal Housing Management Corporation
MPRA	Murdi Paaki Regional Assembly
MPRH&BC	Murdi Paaki Regional Housing and Business Consortium
MPS	Murdi Paaki Services Limited
MP TSEP	Murdi Paaki Tenant Support and Education Programme
NDIS	National Disability Insurance Scheme
NRM	Natural Resource Management
NSHS	National Social Housing Survey
N-W NSW IREG	North-West NSW Indigenous Region
NSWALC	New South Wales Aboriginal Land Council
OCHRE	Opportunity, Choice, Healing, Responsibility and Empowerment (NSW Government Aboriginal Affairs Plan)
RAHLA	Regional Aboriginal Housing Leadership Assembly
REDI.E	Regional Enterprise Development Institute Ltd

SA1	ABS Statistical Area Level 1
SEIFA	Socio-Economic Indexes for Areas
SSC	State Suburb
WLALC	Weilmoringle Local Aboriginal Land Council
WLHC	Weilmoringle Land Holding Corporation Ltd

ACKNOWLEDGEMENT

This Housing and Environmental Health Plan has been prepared by the Weilmoringle Community Working Party with the help of Murdi Paaki Services Ltd. The Weilmoringle Community Working Party acknowledges the contributions of all community members and others who participated in the development of this plan through offering their advice, knowledge and encouragement.

We acknowledge and pay our respects to Elders past and present. We also acknowledge and respect the efforts of those community members seeking to improve the wellbeing of all Aboriginal families and individuals living in our community.



For the purposes of this Plan, an Aboriginal person is a person of Aboriginal and/or Torres Strait Islander descent who identifies as an Aboriginal and/or Torres Strait Islander (person) and is accepted as such by the community in which he or she lives.

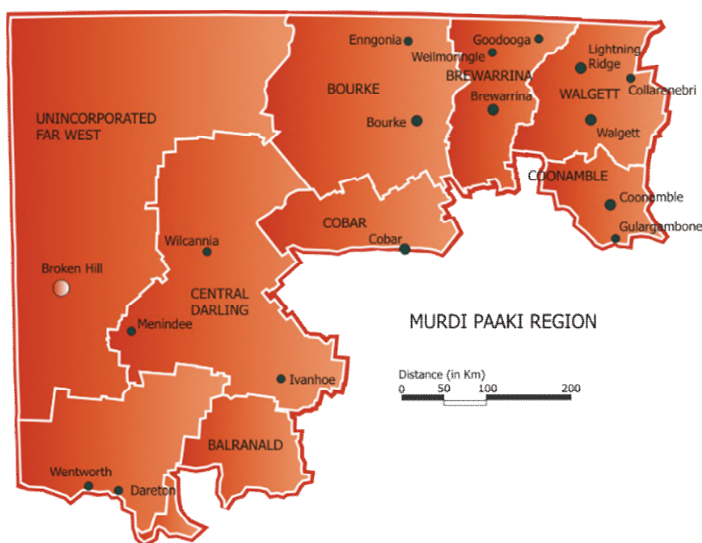


1 INTRODUCTION

1.1 Purpose of the Plan

This Housing and Environmental Health Plan (HEHP) is prepared by the Aboriginal community of Weilmoringle in north-western NSW. The Weilmoringle community is one of sixteen communities within the Murdi Paaki Region shown in Figure 1.1.

Figure 1.1: Murdi Paaki Region



- Contribute to a review by Murdi Paaki Regional Assembly (MPRA) of requirements for financial wellbeing of the Aboriginal social housing sector;
- Provide the basis for planning for future housing need and development; and
- Describe a community-led approach to project master planning to shape the future of Aboriginal housing and related human services in Weilmoringle.

The Plan describes the aspirations of Aboriginal people living in Weilmoringle and outlines a strategic approach to achieving the community's goals. Planning is the first step aimed at achieving better housing and environmental health outcomes by building and improving housing and environmental health infrastructure, together with related services and community amenities.

1.2 Governance arrangements

HEHPs are an initiative of the Murdi Paaki Regional Aboriginal Housing Leadership Assembly (RAHLA), a partnership of MPRA and the NSW Government created through the OCHRE Local Decision-Making policy. The project delivery framework recognises

the status of the Weilmoringle Community Working Party (CWP) as the principal point of contact for conducting business within the Aboriginal community and for leading the development of the HEHP planning process at community level.

The RAHLA sees the preparation of HEHPs as a priority project and has authorised Murdi Paaki Services Ltd (MPS) to begin the process of developing the evidence base for regional policy setting and decision making.

1.3 Respecting Land Council autonomy

The roles and functions of Local Aboriginal Land Councils (LALCs) are defined in the NSW Aboriginal Land Rights Act 1982 (ALRA). Land Councils play a vital role in maintaining cultural practice and conserving Aboriginal heritage within their

The purpose of the HEHP is to:

With data collected through the Murdi Paaki Regional Housing and Business Consortium (MPRH&BC) project and described in the *Social Housing Providers and Assets Audit Report*, build an evidence-base to guide the way in which policy and decisions are made in respect of Aboriginal social housing. This Plan will:

- Describe the current situation in relation to housing Aboriginal individuals and families in Weilmoringle;
- To the extent possible, report on the condition of Aboriginal social housing assets;
- Give an assessment of 'wrap-around' human services;
- Determine the need for and form of tenant support and education services;

boundaries. They fulfil a critical function in NSW of restoring to the local Aboriginal population land which has been alienated by European colonisation. This land may be used for cultural or economic purposes; the rationale for each land claim is based upon the aspirations of the relevant LALC. LALCs also provide Community Benefit Schemes which may include Aboriginal social housing provision. In the Murdi Paaki Region, most LALCs are housing owners; some also manage their own housing. Individual LALCs have the inalienable right to make decisions in relation to their assets in accordance with the processes and constraints set out in the ALRA.

The Murdi Paaki Regional Assembly has made it a policy not to involve itself in matters of heritage and culture which are rightly the domain of the LALCs. Similarly, the Assembly recognises the autonomy of LALCs to make their own decisions in relation to their land and property. This Housing and Environmental Health Plan does not in any way impinge on the LALC's autonomy as a sovereign decision-maker in relation to its assets. In the interests of achieving maximum benefit for the community, the CWP invites the LALC to join its voice and hands in unity to advocate for and implement the change agenda set out in the Master Plan.

1.4 The bigger picture

This HEHP is intended to add to the work undertaken to date through the MPRH&BC project with more detailed and targeted investigations at community level. The Plans acknowledge the reality of the experiences of Aboriginal people living in western NSW and form a resource for intelligent leadership and an integrated, creative response which places communities, to the greatest extent possible, as the principal drivers of sustainable local action.

It is hoped the HEHPs will:

- Reinststate and strengthen the capacity of Murdi Paaki regional and local Aboriginal Community Housing Providers (ACHPs) to ensure that all Aboriginal people living in Aboriginal social housing in the community

can receive culturally appropriate, professional and sustainable tenancy and asset management services from ACHPs which themselves are viable and supported;

- Increase access, opportunity and choice in affordable, healthy and safe housing for Aboriginal persons and families living in Murdi Paaki communities through growing the size and mix of the ACHP asset base;
- Work to ensure that properties are maintained in good condition in the long term;
- Ensure that tenants most at risk of a tenancy breach can access the services they need to sustain their tenancies; and
- Establish the level of financial investment in required to ensure sector viability.

2 BRIEF HISTORY

2.1 Snapshot

This chapter has been largely drawn from work completed by Burns Aldis in their Housing and Environmental Health Plan for the Weilmoringle Working Party in January 2000. The history of the Weilmoringle community has been well documented by Merri Gill in *Weilmoringle: A Unique Bi-cultural Community* (1998), with further insights obtained from Charles Rowley's *Outcasts in White Australia* (1972), *A Preliminary Cultural Survey of Woodshed, Sawmill & Burbon Dam Paddocks on Weilmoringle Station, Weilmoringle* prepared by Phillip Sullivan in 2009, and *Shared landscapes: archaeologies of attachment and the pastoral industry in NSW*, by Rodney Harrison (2004). Information about Murrawari societal structures, traditional practice and cultural continuity is documented in *The Two Worlds of Jimmie Barker* (1988). Additional information about the Indigenous Land Corporation (ILC) purchase and the Indigenous Protected Area (IPA) has been drawn from online government sources.

The land on which the Wyaliba Community is situated traditionally belongs to the Murrawari people, and many of the residents of Weilmoringle are of Murrawari descent and identify as Murrawari. Other residents have come to live at Weilmoringle from Queensland in more recent times. Alone among discrete Aboriginal settlements in the Murdi Paaki Region, the Wyaliba Community has never been a reserve or Government station; it represents the formalisation of a station camp which was excised from the grazing property Weilmoringle Station in the 1970s and handed back to its Aboriginal population to own through the Weilmoringle Local Aboriginal Land Council. This chapter tells the story of this unique place.

2.2 Aboriginal ownership

Jimmie Barker described the boundary of Murrawari country as follows: "Starting at North Bourke, the line moves along the Darling River to the east, then it continues along the western bank of the Culgoa River to Collierina. Here it moves to

the western bank of the Birrie River until it is level with Langboyd. At this point it moves north-west and crosses the Culgoa again, approximately twelve miles north of Weilmoringle. It is here that the border adjoins the Juwalarai tribe. The boundary crosses the Queensland border a few miles west of Toulby Gate, and Guwamu is the neighbour here. The line then moves north-west and crosses the Warrego River south of Cunnamulla, continuing to the eastern bank of the Paroo River, where it turns south through Caiwarro. Soon after this point the direction becomes south-easterly. The line passes through Warroo and slightly west of Yantabulla, then just south of Goombalie it moves due east to join the starting point at North Bourke." He observed that Weilmoringle means 'old man saltbush'. In addition to providing an abundance of food, water and shelter to the Murrawari people, Murrawari country is a densely storied landscape rich in narratives of creation and of ancestral travels, with the Culgoa River at its heart.

Murrawari heritage and cultural practice has been well documented; there is a continuous thread of spiritual belief, cultural knowledge and practice which extends from the old people and is still strong within the community today. Jimmie Barker, for example, recorded the knowledge he learned as a child from Murrawari-speaking family and friends at Mundiwa and Milroy, downstream from Weilmoringle on or close to the Culgoa River, during the first decade of the twentieth century. Jimmie Barker spoke about the dialect groups of the Murrawari: Weilmoringle, and the land around it, belong to the Gandugari, whose manner of speech was faster than other groups, and with a pronounced rolled 'r' sound. Many of the current residents of Weilmoringle are descended from this dialect group and live on their own traditional country; their ancestors, too, having lived around the Culgoa River for tens of thousands of years.

The traditional Aboriginal way of life was devastated by the arrival of Europeans in the region. European explorers Captain Charles Sturt and Major Thomas Mitchell opened up the region to Europeans over a period of less than twenty years, between 1828 and 1845. The effects of European settlement in the east of the state were, however, felt by Aboriginal people in the region

before this: highly infectious, often deadly diseases such as smallpox, tuberculosis and influenza had spread into western NSW before European explorers came.

Aboriginal people managed to ensure that seizure of the land along the Darling River and its tributaries was temporary until the 1860s, and defended their land and safeguarded their laws to the best of their ability. Problems arose where the invading Europeans flouted those laws, and Aboriginal people acted in accordance with their law. The Europeans' response to the Aboriginal people's action tended to be murder on a colossal scale, and there are several massacre sites in the region. Eventually, though, most of the land was taken for grazing. In general, Aboriginal people were able to gain employment as stockmen and shepherds for a time, particularly during the 1850s when most non-Aboriginal labourers had deserted the stations to go to the goldfields, until, in the 1870s, the availability of cheap drawn fencing wire meant that paddocks could be fenced, and shepherds and stockmen became redundant. The misguided policies relating to subdivision of parcels of marginal rangelands into smaller areas, pursued by successive NSW governments, led to further employment problems for Aboriginal people, since graziers were limited by economic necessity to depend on the labour of their own families. At Weilmoringle and on neighbouring properties, though, the experience was somewhat different, with extensive station camps developing and remaining in place throughout much of the pastoral period; and continuing employment on the larger properties, at least for some, in pastoral and domestic work into the latter half of the twentieth century.

In 1882, the Aborigines Protection Act passed through the NSW Parliament, and a Protector of Aborigines was appointed. This had ramifications for Aboriginal people which lasted directly until the 1960s, and which still affects the way Aboriginal families live their lives. The effect of that Act, and subsequent legislation, was that Aboriginal people were made wards of the state, and lost autonomy to make decisions about the way they lived their lives. Aboriginal people were deprived of the right to decide where to live, whom and when to marry, how to raise their children, what jobs to take, and

every other facet of existence which anyone else would take for granted. The ironically named Protector of Aborigines commenced the establishment of reserves and government ration stations for Aboriginal people in the 1880s. At Weilmoringle, though, joint action by the Aboriginal community and the property owners resulted in Aboriginal people being far less exposed to the impacts of Protection policy than elsewhere.

Weilmoringle has never been a government ration station, reserve, or mission under the Aborigines Protection Act. Weilmoringle was alienated for grazing prior to 1862. Little is known of the relationship between the squatters who established Weilmoringle as a grazing property and the Murrawari traditional owners during the early days of European colonisation but there has been a continual presence by Murrawari people on their own land, and the pastoral camp, established as such in the 1880s, endured until title to Wytaliba passed into Aboriginal hands in the 1970s.

Some residents are descended from families which came to Weilmoringle from southern Queensland and thus have an historical association with the place dating back to the 1920s. Pressures on Aboriginal people in Queensland arising from drought-related unemployment in the 1920s, 30s and 40s brought about migration from south-western Queensland into northern NSW through this period. James Tyson, who owned Tinnenburra Station (on traditional Murrawari land) south of Cunnamulla, had, in 1867, set aside a reserve for a station camp. This camp accommodated up to 200 people, mainly Kunja but also Badjuri/Badjeti and Murrawari. Later, a ration station was established there. When the Tinnenburra property was broken up in the 1930s several families moved south to Yantabulla, Enngonia and Weilmoringle. Descendants of these families still live at Weilmoringle, Enngonia, Bourke and Brewarrina. Charles Rowley, in fieldwork undertaken in the 1960s, recorded the presence at Weilmoringle of several people who had migrated from Dirranbandi, Cunnamulla, St George and Thargomindah. They had moved to improve their chances of obtaining award wages and educate their children, escape the provisions of the *Queensland Aborigines Protection and Restriction*

of the Sale of Opium Act, the strictures of which were even more oppressive than the NSW legislation of the time.

Aboriginal people were employed by the station owners in a variety of rural trades or as domestic or station labour in exchange for rations, and maintained their language and traditional culture. Later, award wages were paid. Aboriginal people camped in self-built dwellings in several locations about the property. In 1941, an attempt by the Aborigines Welfare Board to remove the Aboriginal population of Weilmoringle to Goodooga Reserve was foiled by resistance from within the community, with the co-operation of the property owners.

Rowley estimated in 1964 that the Aboriginal population at Weilmoringle was about 130 (including 77 children). He noted that the people with Queensland origins were reported to be living at one end of the camp while 'old station families' (the Murrawari Traditional Owners) lived at the other. Rowley also identified a desire among the Aboriginal residents of the pastoral camp for formal land tenure to house sites.

The extent of social infrastructure at Weilmoringle was not limited to the homestead and the Aboriginal people's pastoral camp. A store, post office and telephone exchange were built to replace the former station store in 1955 and, in 1961, a temporary school was built, to be replaced the following year by a permanent school building. The first Aboriginal principal was appointed to Weilmoringle School in 1995. The Weilmoringle Store and Post Office and the Public School continue to provide for the needs of the community. These facilities are located closer to the homestead than the Wyaliba Community, north of Jobs Gate Road.

It is important in the context of Weilmoringle to mention another location important to Murrawari members of the community. Dennawan, now part of the Culgoa National Park and located approximately 20 km upstream along the Culgoa River as the crow flies, is also part of the traditional country of Gandugari people. Following European colonisation, Thomas Caddell alienated a block now named "Tatala" which is where Dennawan is

situated. This block, like Weilmoringle, passed through the hands of various lessees and was amalgamated with and then divided from other pastoral runs at different times. From the 1880s it was part of Toulby; Aboriginal people were an important source of labour on Toulby, and camped on the Tatala block at Dennawan. Dennawan was located on a Travelling Stock Route and was provided with a post office, police station, store and hotel in the early years of the 20th century. Aboriginal people camped alongside a small lagoon. In 1912, because of representations to the Aborigines Protection Board (APB) by local non-Indigenous people keen to have Aboriginal people able to be confined by police to a specified parcel of land, a 30-acre reserve was surveyed, and then gazetted in September 1913. This reserve was located close to the store, police station and hotel. APB Annual Reports incorporate Dennawan as part of the Goodooga Reserve, suggesting a close connection between the two communities. The Dennawan Reserve was never a managed station; missionary workers from the Aborigines Inland Mission taught the children and conducted church services. By about 1940, Dennawan was in decline; the store had closed, and the APB policy of concentrating Aboriginal people at large managed stations had come to constitute a threat to Aboriginal people living at Dennawan owing to the risk of being transported to Brewarrina Aboriginal Station. The camp broke up; residents moved to Goodooga and other towns but several former residents relocated to Weilmoringle. The reserve was revoked in 1969. Dennawan is still an important place to Murrawari people living at Weilmoringle.

2.3 Aboriginal people, the settlement of Weilmoringle and the Wyaliba Community

By the early 1970s, it was generally agreed among community members and Rens Gill, the owner of Weilmoringle, that security of tenure for the Aboriginal residents at Weilmoringle needed to be ensured. The imperative for land ownership to pass to the Aboriginal community was reinforced by a Department of Aboriginal Affairs proposal to erect formal dwellings to replace the self-built houses that the Aboriginal community lived in.

The 'Saltbush Committee' was established in 1972 by community members with a view to securing housing. The committee was replaced by the Wyaliba Housing Committee in 1974.

In 1976, an area of 6.58 acres situated between West Culgoa Road, Jobs Gate Road and the Culgoa River, to the west of the original station camps, was made over to the Aboriginal Lands Trust by Rens Gill, on the understanding that it would be under the control of the local Aboriginal community. The settlement was named the Wyaliba Community. Construction of housing commenced in 1977 and continued to 1981.

The levee was constructed in 1980; kerb and gutter was provided and Brown Street, named after Cecil Brown, was sealed in 1981. Reticulated water supply and sewerage were provided in 1982. In 1983, the land was transferred to the Minister under the Aboriginal Land Rights Act and then, in 1984, to the Weilmoringle Local Aboriginal Land Council. Community buildings were built, and CDEP commenced operation through Wyaliba Aboriginal Corporation in 1990.

In May 1998, the NSW Government announced an allocation of \$200M over the following seven years to Aboriginal housing and infrastructure projects. This initiative, labelled the Aboriginal Communities Development Programme (ACDP), involved allocation of capital works funding to most communities in the Murdi Paaki Region, including Weilmoringle, designated a 'priority community'. In parallel with allocation of capital works funding under this programme, a Community Working Party was created to govern the roll-out of ACDP and other development projects. The first Weilmoringle Housing and Environmental Health Plan was prepared in 2000. This Plan documented a need for five additional two-bedroom dwellings, two extensions, an extensive programme of housing repairs and maintenance, and infrastructure refurbishment including reconstruction of the levy, roadworks and street lighting. The works were carried out in the early 2000s. At about the same time, Brewarrina Shire Council sealed Jobs Gate Road from Langboyd, with all-weather access to the community completed in the 2006-2007 financial year. Then, in the mid-2000s, the Murdi Paaki COAG Trial led

to preparation by the CWP of a Community Action Plan (CAP), with subsequent allocation of funding to build a swimming pool in the community (this was not, in fact, a CAP strategy). To the shame of the government, the keys of the pool were handed not to the Aboriginal owners of the land on which it had been constructed, but to the school.

At the time of commencement of the ACDP project, the Wyaliba Community was not provided with municipal services, as Brewarrina Shire Council did not collect council rates from the community. During the project, a change was negotiated which led to the community's land becoming rateable, and some services being delivered, although the water supply and wastewater infrastructure is still owned and operated privately by Weilmoringle Local Aboriginal Land Council (LALC).

The Wyaliba Community cannot be considered in isolation from Weilmoringle Station as a whole. In 2001, Rens Gill sold the 17,300 ha property to the Indigenous Land Corporation (ILC), with the intention that the property be divested to the Murrawari traditional owners. The adjoining property, Orana, which had originally been part of Weilmoringle, was also purchased. Initially, Weilmoringle was leased to a non-Aboriginal business entity to maintain the property as a going concern. In 2002, the Weilmoringle Land Holding Corporation Ltd (WLHC) was registered with the Australian Securities Investment Commission (ASIC) as a company limited by guarantee. The WLHC prepared a property management plan in 2005 then, the following year, the property was leased by the ILC to the WLHC, and then divested in 2010. In 2011, an area of 4,073 ha was declared an Indigenous Protected Area (IPA).

The WLHC ran into difficulties between 2011 and 2013 because of drought and funding shortfalls resulting from a dispute with the IPA administration within the Department of the Prime Minister and Cabinet. Brewarrina Shire Council (a creditor) applied to ASIC in 2015 for WLHC to be wound up, and the company was deregistered in 2016, at which point the property passed back into the hands of the ILC. In 2017, the Gandugari Murrawari Aboriginal Corporation was registered with objectives primarily related to securing title to

Weilmoringle Station and the adjoining Orana, creation of a Permanent Conservation Area, and management of the property in a way responsive to its cultural, historical and environmental values for the benefit of current and future generations of Murrawari people. Gandugari Murrawari Aboriginal Corporation was granted a three-year lease to the property in 2018 but was not provided with funding to re-establish the IPA.

In 2013, the Murrawari Republic, a micronation claiming jurisdiction over Murrawari Country, declared its independence from Australia. Sovereignty of the Murrawari Republic over Country has not been recognised by the Australian Government. The Murrawari Republic is under the governance of the People's Council of the Murrawari Republic.

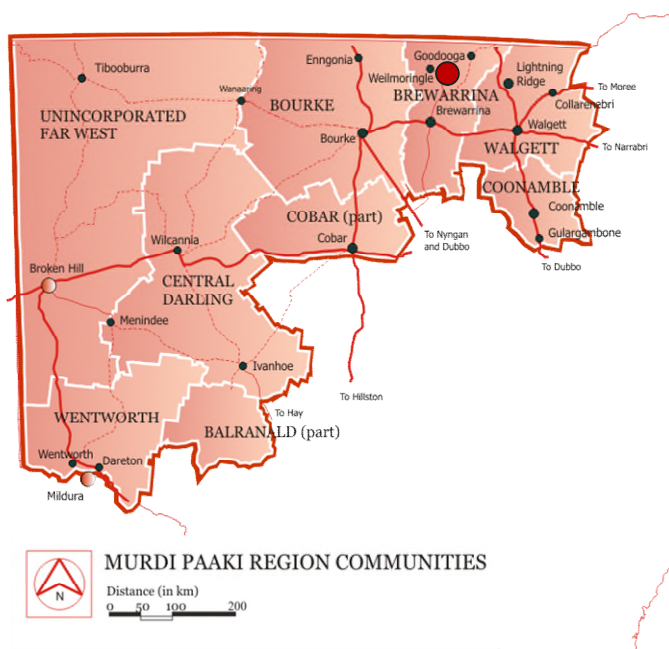
The cultural and rural industry heritage of the Aboriginal people of the Wyaliba Community has been the subject of recent research, writing and filmmaking by Dr Lorina Barker, an academic historian who is descended from both the traditional Murrawari owners and the families who migrated from Queensland. Dr Barker's work has provided the opportunity for community members' own histories to be given voice in a culturally authentic way.

3 GEOGRAPHY

3.1 Location

Weilmoringle is located in the far west of New South Wales, nearly 900 km to the north-west of Sydney. The village is part of Brewarrina Shire. The nearest service centre is Brewarrina. The Aboriginal settlement of Wyaliba is situated on the western bank of the Culgoa River approximately 1 km south of the village. The location of Weilmoringle is shown in Figure 3.1.

Figure 3.1: Locality



3.2 Access

Weilmoringle is an isolated community and so transport connections are few. The only sealed road into Weilmoringle is from Brewarrina, 110 km away, and the carriageway is single width. This road is subject to flooding, denying access. Unsealed roads, impassable when wet, connect to Bourke, Enngonia and Goodooga.

Weilmoringle airstrip (YWMG) to the north-east of the village is a non-controlled aircraft landing area, not registered or certified by CASA. The north-south runway is approximately 1,000 m in length, and is unsealed. It is for emergency use.

There are no public transport services available to Weilmoringle residents. To access a service, residents must travel by private means to Brewarrina to connect with the Trainlink rail/bus service operating between Sydney, Dubbo and Brewarrina. The service operates four days per week.

3.3 Natural environment

The village is located at the north-western edge of the Darling Riverine Plains bioregion adjacent to the Culgoa River within the floodplain. Elevation in the centre of the village is approximately 129 m above sea level.

The country around Weilmoringle has little topographic relief: the landscape is flat with river channels, streams and floodplains the primary features. Past sedimentation and flooding events have created a patchwork of landforms which give rise to differences in soils and vegetation. Predominantly, the floodplain is of deep, alluvial, cracking grey clays with localised areas of red and brown soils which exhibit an abrupt texture change between the topsoil and subsoil. Drainage lines and swamps may be ill-defined in places to channels incised to a depth of 2 m in others. Overall, relief is generally no more than 1 m. Small areas of the floodplain to the north of Weilmoringle are scalded.

Dominant vegetation is low, dense to open coolibah and black box woodland with belah and myall on the floodplains of the Culgoa River with river red gum woodlands along river frontages. Understorey is of scattered lignum and swamp wilga with a sparse ground cover of neverfail, copperburrs, annual saltbushes and wildflower species. Away from the river on the clay plains to the east are the more widespread open areas of mitchell grass with scattered gidgee, whitewood and prickly wattle. As noted by the NSW National Parks and Wildlife Service, the riverine woodlands on the Culgoa floodplain, particularly in the nearby Culgoa National Park, are the largest and least disturbed areas of coolibah woodland remaining in NSW.

Habitat loss through agricultural activity and encroachment by feral animals have depleted the range of fauna species and numbers supported by these woodland communities. The NPWS Wildlife Atlas records sightings of a limited range of amphibians and reptiles, water birds, nectar and insect-eating birds, parrots, birds of prey and a species of small tree and ground-dwelling mammals as well as grey and red kangaroo in the vicinity of Weilmoringle. The red kangaroo population is estimated by NSW Department of Planning, Industry and Environment (DPIE) to be a quarter of that estimated in 2015 while the grey kangaroo population has fallen to be less than 8% of the 2013 estimate.

3.4 Climate

The climate of Weilmoringle may be described as hot, dry, semi-arid. There is no Bureau of Meteorology weather station at Weilmoringle recording data so, for the purposes of this Plan, reference is made to climate data recorded continuously at Brewarrina Hospital (048015) from 1872 to date. Rainfall data has been recorded from 1872 onwards and temperature data from 1911. A more comprehensive climate record is available at the same site from 1965.

Temperature-related information is shown in Figure 3.2 to Figure 3.5. Mean monthly temperatures range from a low of 4°C to a high of 36°C with the highest temperature recorded being 48.9°C in 1912. Figure 3.3 indicates that temperatures above 30°C are experienced for a mean of 138 days each year and above 35°C for 65 days each year.

Figure 3.4 investigates the trend in highest monthly temperature. The graph points to a gradual rise in higher temperatures over time. If this trend continues, the community can expect to live with more extreme temperatures for longer.

In November 2014, the former NSW Office of Environment and Heritage released its *Far West Climate Change Snapshot* which provided predictions based on modelling of changes in climate for the far west of NSW. The projected impact for residents of Weilmoringle is an increase in the number of days with temperatures over 35°C

of 10-20 days in the period 2020–2039, increasing to 30-40 additional days by 2070.

Figure 3.2: Temperatures

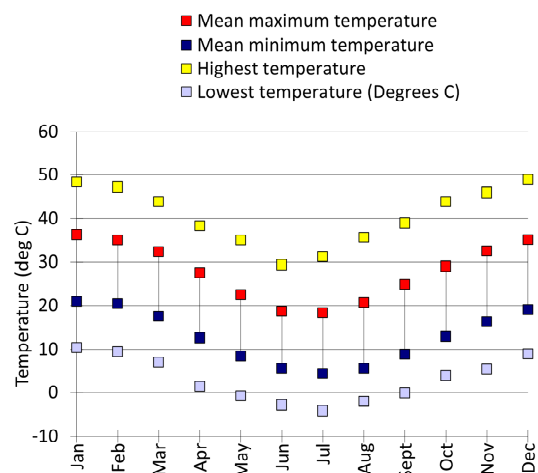


Figure 3.3: Mean number of hot days

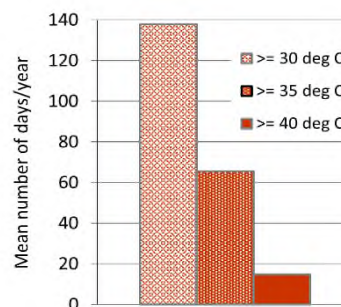


Figure 3.4: Trend in highest monthly temperatures

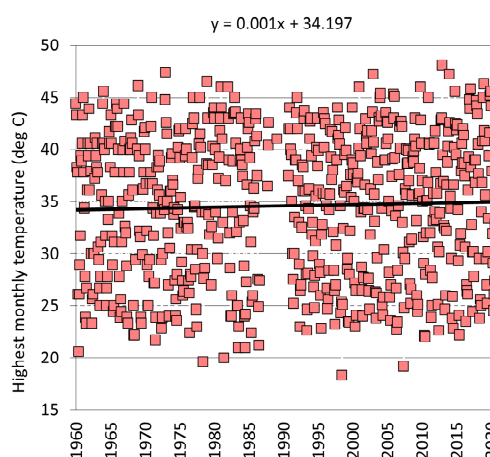
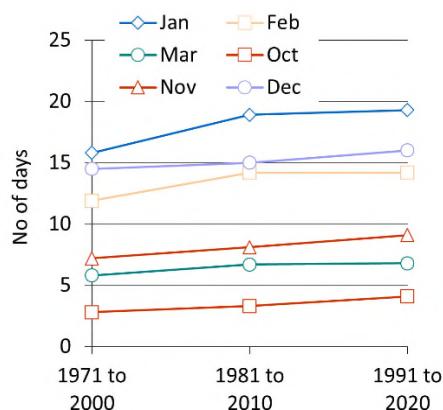


Figure 3.5 appears to reinforce this assessment. Although based on a recent dataset commencing in

1965, the mean number of days above 35°C has progressively increased for all warmer months although the trend has moderated. The temperature record at Goodooga Post Office (048046) extends from 1969 to 1982 and is of limited value in determining trends.

Figure 3.5: Mean number of days with temperatures $\geq 35^{\circ}\text{C}$



Mean annual rainfall calculated from 142 years of records at Brewarrina Hospital between 1872 and 1996 is 411 mm. Highest rainfall occurs during the summer months. Monthly rainfall distribution and average monthly pan evaporation are shown in Figure 3.6. Average monthly pan evaporation estimated from Bureau of Meteorology mapping is well in excess of the mean monthly rainfall throughout the year.

Change in relative humidity over the year is shown in Figure 3.7. Mean humidity is typically above 40% in the morning, at the threshold of 40% accepted as ideal for human health and comfort, for all the year, but reduces to below 40% into the afternoon except for winter months.

Prevailing winds are light from the south, remaining southerly in the afternoon. Mean morning and afternoon wind speeds are shown in Figure 3.8. Maximum wind gust speed is not recorded.

Figure 3.6: Rainfall and monthly pan evaporation

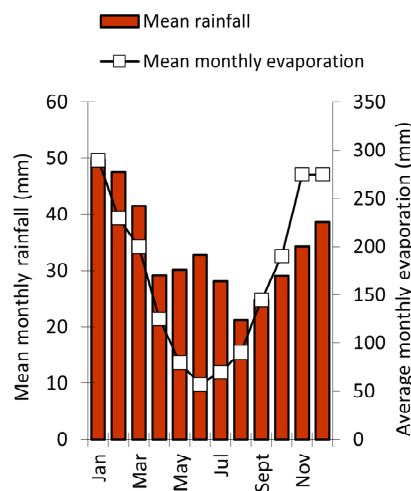


Figure 3.7: Relative humidity

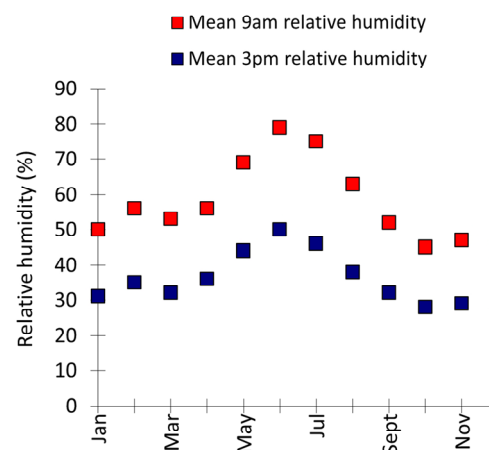


Figure 3.8: Wind speed

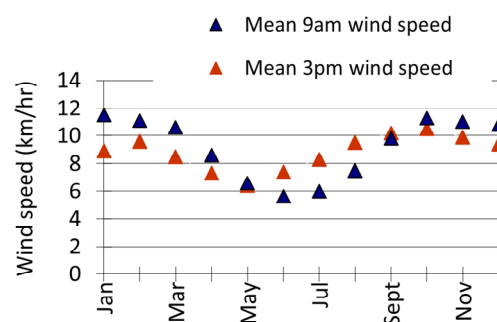
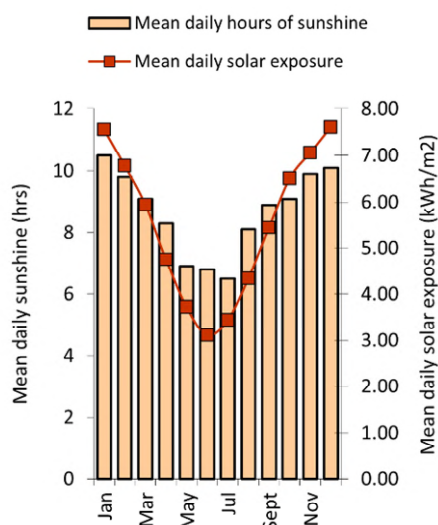


Figure 3.9: Sunshine and solar exposure



Mean daily hours of sunshine and solar exposure is given by Figure 3.9. Solar energy available to residential solar PV installations varies from a low 3.1 kWh/m² in winter to a high of 7.6 kWh/m² at the height of summer.

3.5 Flooding and drainage

Weilmoringle is situated on the west bank of the Culgoa River and is at risk of flooding from major rainfall events occurring higher in the Murray Darling Basin catchment. Floodwaters are usually slow moving, taking weeks to reach Weilmoringle, thereby allowing time for assessment of flood characteristics, and to carry out any emergency works to structures.

Periods of intense rainfall can result from significant weather events in Queensland associated with tropical depressions and cyclones generating floods from February to April while winter flows tend to result from high rainfall in the river system upper catchment in northern and eastern NSW. In consequence, flooding at Weilmoringle can be expected to occur in late summer and early autumn and in late winter.

Several major flood events have occurred since the 1950s: the floods of 1956 (gauge height of 6.50 m), 1983 (5.99 m), 2012 (6.01 m). The relationship of the flood of record of 1956 to the 1% Annual

Exceedance Probability (AEP) flood or the Probable Maximum Flood are not known as a flood study has not been conducted. By way of definition, a 1% AEP flood is a flood that has a 1% chance of occurring, or being exceeded, in any one year.

The Wyaliba community is protected by a ring levee to a crest level of RL 127.340m AHD (gauge height of 6.2 m) but the village and airstrip, generally being on slightly higher ground, are not.

Localised heavy rainfall can also contribute to ponding of inside the levee which can be released via two controlled outlets on the eastern side of the levee.

The Bourke Road closes at a gauge height of 5.5 m and all roads are cut when floodwaters reach 5.7 m gauge height, separating the Post Office/Store, school and airstrip from the Wyaliba community. Essential utilities to the Wyaliba community may be affected as power supplies are terminated and the sewage pumping station is shut down. Steps to evacuate the Wyaliba community are inevitable at a gauge height of 5.6 m when the sewage pumps are switched off.

Floodwaters can isolate the village for weeks at a time and evacuation to Dubbo is not uncommon as a precaution against failure of the levee embankment. It should be noted that most families will decline temporary shelter Brewarrina and some have decided to sit out past floods.

For reference, flood classification for Weilmoringle is given by Table 3.1.

Table 3.1: Flood classification

Gauge	Gauge height (m)		
	Flood classification		
	Minor	Moderate	Major
Weilmoringle	5.2	-	5.8

Source: Brewarrina Shire Local Flood Plan, 2013, NSW State Emergency Service

The highest daily rainfall on record for Brewarrina is given by Table 3.2.

Table 3.2 Highest daily rainfall totals (mm) (048015)

Jan	Feb	Mar	Apr	May	Jun
103.6	123.4	106.4	107.8	97	72.4
1964	1976	1967	1990	1996	1948
Jul	Aug	Sept	Oct	Nov	Dec
64	52.3	129.5	68.3	145	121.9
1945	1893	1878	1955	2000	1923

Rainfall intensity-frequency-duration (IFD) values for Weilmoringle are shown at Table 3.3.

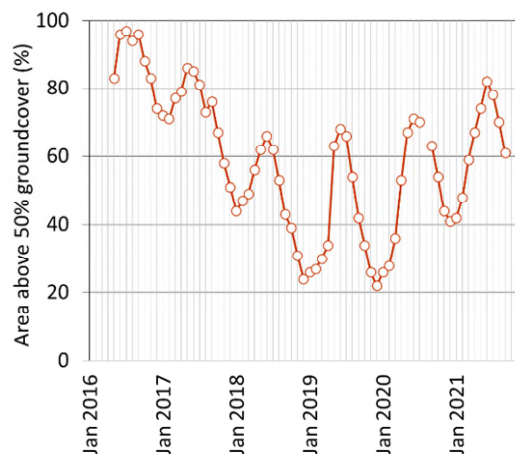
Table 3.3: Rainfall IFD (-29.2375, 146.9125)

Duration	IFD Design Rainfall Depth (mm)			
	Annual Exceedance Probability			
	10%	5%	2%	1%
1 min	4.28	5.10	6.21	7.08
2 min	7.56	9.12	11.0	12.5
3 min	10.4	12.5	15.1	17.2
4 min	12.9	15.4	18.7	21.2
5 min	15.1	18.0	21.8	24.8
10 min	23.3	27.7	33.8	38.5
20 min	33.2	39.6	48.3	55.2
30 min	39.4	47.0	57.5	65.8
1 hour	49.8	59.8	73.1	83.7
2 hours	59.8	71.9	88.0	101
6 hours	76.5	91.2	112	128
12 hours	89.8	106	131	150
18 hours	99.3	118	145	166
24 hours	107	127	156	179
48 hours	128	154	189	218
72 hours	141	171	209	241
96 hours	149	181	222	256
120 hours	153	186	229	263

3.6 Dust

The NSW Office of Environment and Heritage collects data related to dust, including the hours of dust haze and storms and the extent of ground cover, through its DustWatch programme in the Western Natural Resource Management (NRM) Region. Figure 3.10 highlights the change in the amount of groundcover at regional scale greater than 50% since 2016.

Figure 3.10: Seasonal variation in the land area with groundcover exceeding 50%, Western NRM



The nearest DustWatch monitoring station to Weilmoringle is at Bourke so locally specific data is not available to indicate the level of exposure to residents. There is strong evidence of long-term exposure to fine particles (PM_{2.5}) in the air contributing to adverse respiratory conditions so mitigation of the causes of dust generation:

- Very low groundcover resulting from prolonged dry conditions;
- High temperatures; and
- Increased hours of strong winds (> 40km/h) associated with the passage of cold fronts bringing with them north to north westerly winds

to the extent practicable, can have health benefits for the community. At this stage, these benefits cannot be quantified.

3.7 Native Title

There are no existing Native Title claims on record for the Country around Enngonia.

3.8 Sites of cultural significance

A preliminary search of the Heritage NSW Aboriginal Heritage Management Information System (AHIMS) for sites of cultural significance within the rectangle formed by latitude and longitude -29.2813, 146.8713 and -29.2092,

146.9853 indicates the existence of several recorded Aboriginal sites in or near the above location. In the interests of sites preservation, and as a condition of accessing the data, no details are included in this Plan other than to note their existence.

The *Brewarrina Shire Community-based Heritage Study*, 2003, prepared by Elaine Thompson and edited and updated by Laila Haglund & Associates Pty Ltd in 2008 does make mention of an Aboriginal site in the vicinity of Weilmoringle: the Dennawan Aboriginal Reserve, also referred to in Chapter 2, while a 2018 report prepared by Rural Solutions South Australia for the Cultural Flows Planning and Research Committee as part of the National Cultural Flows Research Project makes reference to the spiritual importance of Gerrara Springs and Gooraman Swamp.

3.9 Economic geography

Pastoral activity is the principal economic enterprise on the rangelands surrounding Weilmoringle, with a focus on merino sheep for wool, and some cattle for beef production.

The community is keen to exploit experiential tourism underpinned by the district's Aboriginal and European heritage and natural environmental attractions but the physical and human infrastructure required to take advantage of the opportunities requires to be created. Remoteness and lack of facilities are major constraints on further development and, rather than promote Weilmoringle offerings independently, it might be more productive to partner with other communities in a Regional eco- and cultural tourism strategy.

It is known that Brewarrina Local Government Area (LGA) is the most disadvantaged local government area in NSW with a SEIFA Index of Relative Socio-economic Disadvantage (IRSD) score of 757 as shown by Table 3.4. The score for Weilmoringle State Suburb (SSC) is slightly higher at 889 but the community still exhibits a situation where many households have a low income, many people have no educational qualifications, and many people are in either in low skill occupations or are unemployed.

Table 3.4: SEIFA Index of disadvantage (IRSD), 2016

Weilmoringle SSC	889
Rank in NSW	3822 nd of 4122
Brewarrina LGA	757
Rank in NSW	130 th of 130
Murdi Paaki Region:	
Highest (Cobar)	968
Lowest (Brewarrina)	757

Weilmoringle is too small to support industrial activity at a commercial scale but forms of home industries might mesh with a cultural tourism strategy.

KEY FINDINGS

- The median weekly income for Aboriginal households is lower than the median for non-Indigenous households. The median weekly individual income is almost 40% lower than for non-Indigenous persons;
- It is well established that the Murdi Paaki Region suffers the highest level of socio-economic disadvantage in NSW. Brewarrina LGA is the lowest in NSW in the IRSD ranking. The IRSD for the Weilmoringle SSC is higher than the LGA as a whole.

4 THE POPULATION

4.1 Population profile

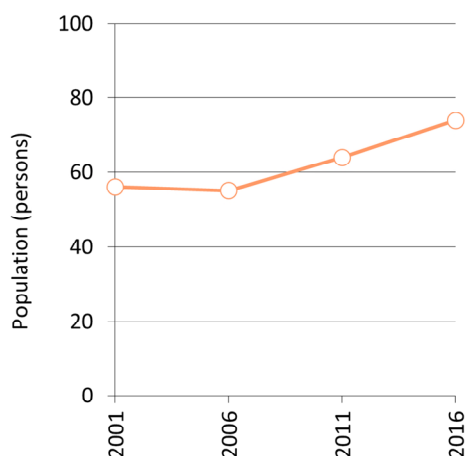
The statistical information set out in this Chapter has been derived from the Australian Bureau of Statistics (ABS) 2016 Census using data available from ABS TableBuilder. Where possible, the Murdi Paaki Region comparison geography used in this Plan is the aggregated 154 SA1s (ABS Statistical Area Level 1) that approximate the Region. For variables where SA1 level data are not published, either the 8 LGAs approximating the Murdi Paaki Region or the North-West NSW Indigenous Region (IREG) has been adopted.

Table 4.1: Total Aboriginal population, Weilmoringle (SA1)

persons	74
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Source: ABS 2016 Census

Figure 4.1: Population trend, Aboriginal population



The most accurate count of the population is the Estimated Resident Population (ERP); however, the finest scale at which this is available is by Local Government Area. At the ABS 2016 Census, based on comparison with the ERP, the Aboriginal population of the Brewarrina Shire was undercounted by 15%.

KEY FINDINGS

- According to the ABS 2016 Census, the Aboriginal population of Weilmoringle on census night was 74 persons. Based on the ERPs, the Aboriginal population at the time was closer to 86 persons. Almost all, if not all, Aboriginal residents would have been at the Wyaliba community which is an exclusively Aboriginal population;
- Of all those counted in Weilmoringle on census night, all were residing in a private dwelling;
- The median age of the Aboriginal population, at 27 years, is just under half that of the non-Indigenous population, but is slightly higher than for the Murdi Paaki Region on average, and for NSW.
- The Aboriginal population aged under 15 years is slightly more than for the Murdi Paaki Region as a whole, but slight lower than for NSW;
- There are no entirely non-Indigenous households in Weilmoringle;
- Almost one third of Aboriginal households are composed of one person households which is higher than all households in the Murdi Paaki Region and NSW;
- More than half the Aboriginal households are composed of single parent families: higher than all households in the Murdi Paaki Region and NSW;
- The remaining Aboriginal households are couple families with children;
- No Aboriginal household comprised multiple families;
- Data from Indigenous Location (ILO) geography records Aboriginal households with a higher proportion of resident non-dependent children than non-Indigenous households.

Figure 4.2: Population age distribution

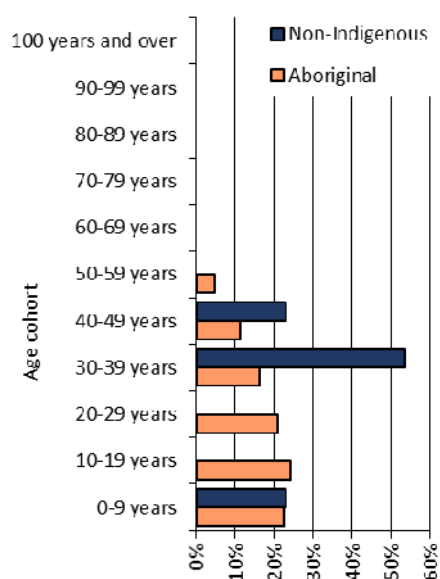
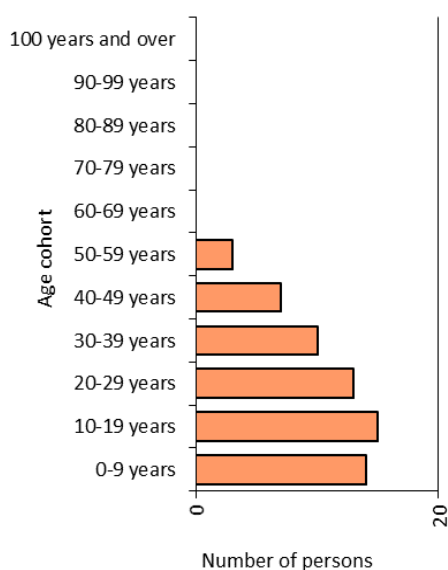


Figure 4.3: Aboriginal population age distribution



Population fraction	Aboriginal	Non-Indigenous
Table 4.2: Median age of persons (years) (Brewarrina surrounds (ILOCC))		
Median age	27	47
Murdi Paaki Region	26	46
New South Wales	22	38

Population fraction	Aboriginal	Non-Indigenous
Table 4.3: Population aged under 15 years (2016)		
	n=21	n=3

Of population fraction	34%	50%
Murdi Paaki Region	32%	16%
New South Wales	34%	18%

Table 4.4: Social marital status (Persons aged 15 years and over)

Registered marriage	0%	57%
De facto marriage	32%	0%
Not married	68%	43%

Table 4.5: Lone person households

	n=24	n=9
Lone person household	29%	0%
Murdi Paaki Region	21%	36%
New South Wales	15%	24%

Table 4.6: Family household family composition

One parent	53%	0%
Couple, no children	0%	0%
Couple, with children	47%	0%
Other family	0%	0%
One parent families:		
Murdi Paaki Region	43%	15%
New South Wales	36%	15%

Population fraction	Aboriginal	Non-Indigenous
Table 4.7: Multi-family households (of all family households)		
	n=24	n=9
Multi-family households	0%	0%
Murdi Paaki Region	4%	1%
New South Wales	4%	2%
Table 4.8: Families with resident non-dependent children (Brewarrina surrounds (ILOC))		
	n=82	n=76
	11%	7%
Murdi Paaki Region	25%	18%
New South Wales	25%	21%
A non-dependent child is a natural, adopted, step or foster child of a couple or lone parent usually resident in the household, who is aged 15 years and over and is not a full-time student aged 15-24 years, and who has no identified partner or child of his/her own usually resident in the household		

4.2 Educational status

Table 4.9: Educational institution attended by the Aboriginal population of Weilmoringle (SSC)	
	n=17
Preschool	0
Infants/primary - Government	14
Infants/primary – other non-Government	0
Secondary - Government	3
Secondary – Other Non-Government	0
University or other Tertiary Institution	0
Other educational institution	0
Not stated	0

KEY FINDINGS

- There were no 3- or 4-year-olds counted in Weilmoringle on census night;
- An Australian Early Development Census (AEDC) Community Profile for Brewarrina LGA

is not available due to insufficient data for reporting purposes;

- Student attendance level (the proportion of students attending 90% or more of the time) at Weilmoringle Central School is low at 27%;
- NAPLAN data is not available for Weilmoringle Public School due to small numbers (in 2019 there were only 13 students);
- No Aboriginal people in Weilmoringle aged 15 to 19 years who had left school had completed Year 12;
- Only one fifth of Aboriginal persons aged 17 or 18 years were engaged in learning or learning;
- Aboriginal adults were as likely as non-Indigenous adults to hold a post-school qualification at any level. The Aboriginal population aged over 15 years has a lesser proportion of adults with a post-school qualification than the Murdi Paaki Region or NSW.

Figure 4.4: Highest year of schooling, all Aboriginal adults

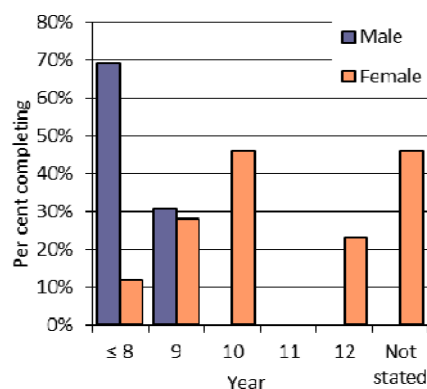
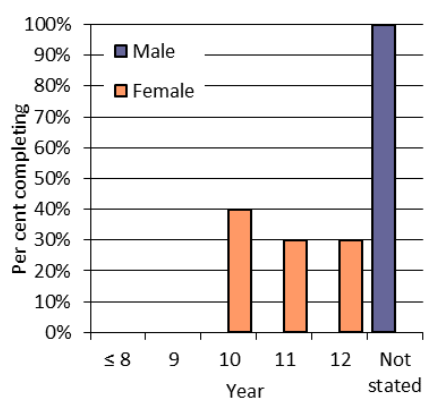


Figure 4.5: Highest year of schooling, all non-Indigenous adults



Population fraction	Aboriginal	Non-Indigenous
Table 4.10: Percentage of students completed Year 12 (Persons aged 15 to 19 who have completed schooling and are no longer at school)		
	n=5	n=0
	0%	-
Murdi Paaki Region	20%	48%
New South Wales	33%	51%
Table 4.11: Percentage of persons aged 15 years and over with a vocational qualification		
	n=37	n=13
Cert I-IV	22%	23%
Murdi Paaki Region	18%	26%
New South Wales	25%	20%
Table 4.12: Percentage of persons aged 15 years and over with an undergraduate diploma		
	n=37	n=13
Diploma and Advanced Diploma	0%	0%
Murdi Paaki Region	5%	7%
New South Wales	7%	10%

Population fraction	Aboriginal	Non-Indigenous
Table 4.13: Percentage of persons aged 15 years and over with a tertiary qualification		
	n=37	n=13
Degree and higher	0%	0%
Murdi Paaki Region	4%	12%
New South Wales	8%	27%
Table 4.14: Engagement of persons aged 17 and 18 years in employment, education and training		
Fully engaged	19%	0%
Murdi Paaki Region	49%	74%
New South Wales	62%	84%

4.3 Economic participation

Population fraction	Aboriginal	Non-Indigenous
Table 4.15: Labour force status (Percent of labour force)		
	n=35	n=15
In full-time or part-time work	100%	100%
Unemployed, looking for work	0%	0%
Murdi Paaki Region	76%	94%
New South Wales	85%	94%
28% of those employed worked part-time		
Table 4.16: Participation in the labour market (Percent of population aged 15 and over)		
	n=35	n=15
In labour force	23%	67%
Not in labour force	77%	33%
Murdi Paaki Region	44%	61%
New South Wales	56%	64%

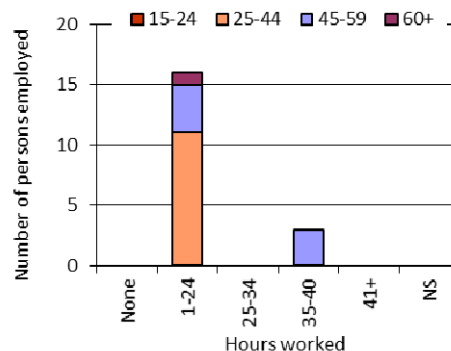
Population fraction	Aboriginal	Non-Indigenous
Table 4.17: Employment to population ratio (Percent of population aged 15 and over)		
	n=41	n=10
Employment to population ratio	20%	100%
Murdi Paaki Region	34%	57%
New South Wales	47%	60%

Table 4.18: Industry of employment – Total population				
Industry	Aboriginal		Non-Indigenous	
	No employed	% of total employed	No employed	% of total employed
Education and Training	5	63%	0	-
Public Administration and Safety	3	38%	0	-
Agriculture, Forestry and Fishing	0	-	5	100%

Population fraction	Aboriginal	Non-Indigenous
Table 4.19: Occupation of all persons employed		
Managers	0%	100%
Professionals	0%	0%
Technician/trades	0%	0%
Community service workers	100%	0%
Clerical/admin workers	0%	0%
Sales workers	0%	0%
Machinery operators	0%	0%
Labourers	0%	0%

Table 4.20: Number of Aboriginal workers employed in the public and private sectors	
Australian Government	-
NSW Government	0
Brewarrina Shire Council	3
Private sector	3
Not stated	-

Figure 4.6: Hours worked by age group



Population fraction	Aboriginal	Non-Indigenous
Table 4.21: Median total household income (Brewarrina surrounds (ILOC))		
\$/week	718	1,125
N-W NSW IREG	907	1,013
New South Wales	1,214	1,498

KEY FINDINGS

- All people who are currently wanting to work (ie are in the labour force) are employed;
- Investigation of the age structure of the Weilmoringle Aboriginal population through calculation of the dependency ratio (51.2 for Weilmoringle – lower than for the Murdi Paaki Region, at 61.6) indicates that this is not the cause of the very low employment to population ratio. It is simply that Aboriginal people of working age resident in Weilmoringle have a low workforce participation rate;
- Aboriginal employees are more likely than their non-Indigenous counterparts to be employed as community/personal service workers and not likely to be employed as a manager;
- The Agricultural, Forestry and Fishing industry sector employs the whole of the non-Indigenous workforce;
- Most workers are employed on a part-time basis. According to the ABS 2016 Census, only three older workers worked 35 hours or more in the period before the census;
- The median weekly income for Aboriginal households is lower than the median for non-Indigenous households. The median weekly individual income is almost 40% lower than for non-Indigenous persons.

5 COMMUNITY HOUSING PROFILE

5.1 Weilmoringle housing generally

Data for Weilmoringle State Suburb (SSC) is used wherever possible. Where data for the SSC geography is not available, data from the Brewarrina surrounds Indigenous location (ILOC) or Brewarrina LGA (A) are used. The ILOC geography extends over all of Brewarrina LGA excluding Brewarrina town and Goodooga village.

Table 5.1: Number of dwelling types (Weilmoringle (SSC))

Total number	26	
Separate houses	26	100%
Terraces, town houses	0	0%
Apartments	0	0%
Other dwelling types	0	0%

Table 5.2: Private dwellings unoccupied on census night (Weilmoringle (SSC))

	n=26	
Dwellings unoccupied	0	0%
Murdi Paaki Region	19%	
New South Wales	9%	

4 people were counted elsewhere on Census night

Table 5.3: Households counted in a dwelling on census night (Weilmoringle (SSC))

Resident households	19
Visitor households	0
Non-classifiable	0

Table 5.4: Number of bedrooms per dwelling (Weilmoringle (SSC))

0 or 1 bedrooms	0	0%
2 bedrooms	3	16%
3 bedrooms	13	68%
4 bedrooms	3	16%
5 bedrooms and more	0	0%

Figure 5.1: Dwelling size by number of bedrooms

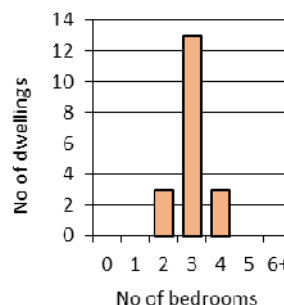


Table 5.5: Building approvals, 2019 (Brewarrina (A))

Total building approvals	14
Private sector houses	-
Private other dwelling	-
Other dwelling units	14

Source: ABS Data by Region, 2011-19, Economy and Industry

Table 5.6: Median residential property price, 2019 (Brewarrina (A))

Median price	\$67,500
No of transfers	8

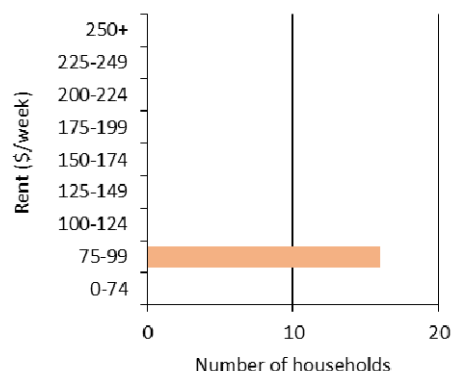
Source: ABS, Data by Region, 2011-19, Economy and Industry

5.2 A statistical comparative snapshot

Population fraction	Aboriginal	Non-Indigenous
Table 5.7: Average household size (Brewarrina surrounds (ILOC))		
Persons	3.0	2.1
N-W NSW IREG	3.0	2.1
New South Wales	3.1	2.6

Population fraction	Aboriginal	Non-Indigenous
Table 5.8: Average number of persons per bedroom (Brewarrina surrounds (ILOC))		
Persons	1.0	0.7
N-W NSW IREG	0.9	0.7
New South Wales	1.0	0.9
Table 5.9: Households enumerated (Weilmoringle (SSC))		
One family household	16	4
Multiple family household	0	0
Non-family household	8	0
Non-classifiable	0	0
Not applicable	0	0
Table 5.10: Occupancy (Weilmoringle (SSC))		
One person	7	0
Two people	7	0
Three people	4	0
Four people	6	0
Five people and greater	0	0
Table 5.11: Proportion of all households renting (Weilmoringle (SSC))		
Proportion of all households	100%	0%
Real estate agent	0%	0%
NSW housing authority	0%	0%
Community housing provider	100%	0%
Other	0%	0%
Murdi Paaki Region	62%	24%
New South Wales	56%	32%

Figure 5.2: Weekly rent payable by Aboriginal households, social housing rentals (Weilmoringle (SSC))



Population fraction	Aboriginal	Non-Indigenous
Table 5.12: Median rent (Brewarrina surrounds (ILOC))		
\$/week	80	-
N-W NSW IREG	160	150
New South Wales	270	390
Table 5.13: Percentage of all households with rent equal to or greater than 30% of household income, 2016 (Brewarrina (A))		
Renting	10.8%	
Table 5.14: Home ownership (including owned with a mortgage) (Weilmoringle (SSC))		
	n=0	n=4
Proportion of all households	0%	100%
Murdi Paaki Region	38%	76%
New South Wales	44%	68%
Table 5.15: Change in Aboriginal home ownership (Weilmoringle (SSC))		
	2016	2011
Proportion of all Aboriginal households	0%	12%

Table 5.16: Persons accommodated in non-private dwellings (Weilmoringle (SSC))

All types	0	0
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5.3 Population mobility

Population fraction	Aboriginal	Non-Indigenous
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Table 5.17: One-year residential mobility (Weilmoringle (SSC))

	n=21	n=4
Residents in the household aged one year and over with a different address one year ago		
All residents	0%	0%
Some of the residents	0%	0%
No resident	100%	100%
Murdi Paaki Region		
	12%	10%
New South Wales		
	16%	13%

Residents in the household aged five years and over with a different address five years ago

All residents	0%	0%
Some of the residents	19%	0%
No resident	81%	100%

Table 5.18: Access and mobility (Weilmoringle (SSC))

No motor vehicles	60%	0%
One motor vehicle	40%	0%
Two motor vehicles	0%	0%
Three motor vehicles	0%	100%
Four or more motor vehicles	0%	0%
Not stated	0%	0%

Table 5.19: Number of Aboriginal persons with a different address at stated location 1 year ago and five years ago (Weilmoringle (SSC))

Place of residence	1 year ago	5 years ago
Within Brewarrina LGA	0	3
Bourke or Walgett LGAs	0	0
Elsewhere in the MPR	0	0
Elsewhere in NSW	3	0
Other	0	0

5.4 The local housing market

Being a small community, Weilmoringle does not have a residential housing market. Rural properties change hands rarely. At the time of writing, no properties were advertised for sale.

5.5 Building activity

No new residential single dwellings were approved for construction in the FY2020/21.

5.6 Aboriginal social housing property details

All Aboriginal social housing in Weilmoringle is located at the Wyaliba Community to which the Weilmoringle Local Aboriginal Land Council has title. The total number of properties within the Weilmoringle LALC portfolio is twenty-one. All are managed by Mid Lachlan Aboriginal Housing Management Cooperative (MLahmc) under a Build and Grow headlease arrangement with the NSW Aboriginal Housing Office (AHO).

Property details for land holdings which comprise the Wyaliba Community are shown at Table 5.21.

Figure 5.3: Wyaliba Community – north



Figure 5.4: Wyaliba Community – south



Figure 5.5: Weilmoringle Post Office and store



Table 5.20: Weilmoringle LALC residential property schedule

Lot	Section	DP	Title holder	Property Address	Bedrooms	Managing Organisation
12	-	752007	WLALC	1 Brown Street	3	MLAHMC
12	-	752007	WLALC	2 Brown Street	3	MLAHMC
12	-	752007	WLALC	3 Brown Street	3	MLAHMC
12	-	752007	WLALC	4 Brown Street	Demolished	-
12	-	752007	WLALC	6 Brown Street	4	MLAHMC
12	-	752007	WLALC	6B Brown Street	4	MLAHMC
12	-	752007	WLALC	7 Brown Street	3	MLAHMC
12	-	752007	WLALC	8 Brown Street	4	MLAHMC
12	-	752007	WLALC	9 Brown Street	2	MLAHMC
12	-	752007	WLALC	10 Brown Street	3	MLAHMC
12	-	752007	WLALC	11 Brown Street	3	MLAHMC
12	-	752007	WLALC	12 Brown Street	3	MLAHMC
12	-	752007	WLALC	13 Brown Street	4	MLAHMC
12	-	752007	WLALC	14 Brown Street	3	MLAHMC
12	-	752007	WLALC	15 Brown Street	4	MLAHMC
12	-	752007	WLALC	16 Brown Street	3	MLAHMC
12	-	752007	WLALC	17 Brown Street	3	MLAHMC
12	-	752007	WLALC	18 Brown Street	4	MLAHMC
12	-	752007	WLALC	19 Brown Street	3	MLAHMC
12	-	752007	WLALC	20 Brown Street	2	MLAHMC
12	-	752007	WLALC	21 Brown Street	2	MLAHMC
12	-	752007	WLALC	22 Brown Street	2	MLAHMC

Table 5.21: Property mix

	Number of bedrooms					
	Studio	2	3	4	5	6
Number of dwellings	-	4	11	6	-	-

Table 5.22: Weilmoringle LALC property holdings

Lot	Section	DP	Title holder	Purpose
12	-	752007	WLALC	Wyaliba Community
10	-	752007	WLALC	River intake – water supply
11	-	752007	WLALC	Weilmoringle weir – water supply

Figure 5.6: Wyaliba Community from above



Courtesy of Lands SIX, NSW Department of Customer Service, Spatial Services

5.7 Murdi Paaki household survey findings

A data gathering exercise was undertaken in 2016-2017 under the guidance of the Murdi Paaki Regional Assembly to provide the evidence for reform of the Aboriginal social housing sector in the Murdi Paaki Region. Over 1,400 households took part across the Region with 20 of 21 Weilmoringle households contributing the experiences and views of a small, very remote community. Findings are charted in Figures 5.7 to 5.20 inclusive.

Figure 5.7: Housing mix (All households participating in the survey)

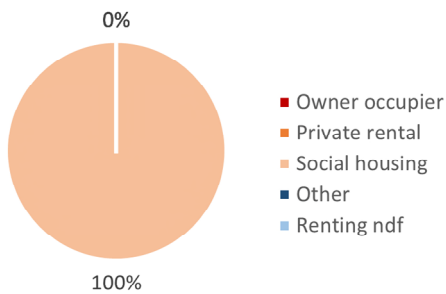


Figure 5.8: Managing organisation (Social housing tenants)

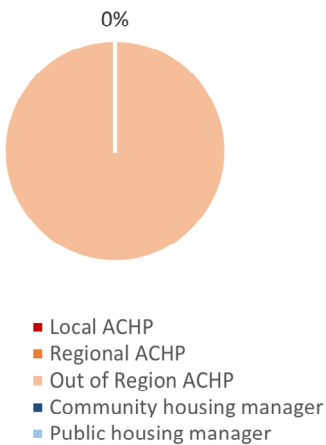


Figure 5.9: Level of satisfaction with housing manager

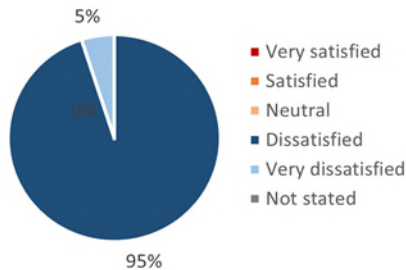


Figure 5.10: Preferred manager of Aboriginal social housing (Social housing tenants)

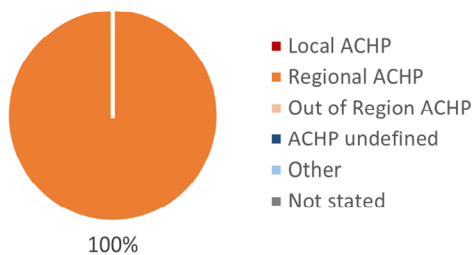


Figure 5.11: Social housing tenants with a tenancy agreement

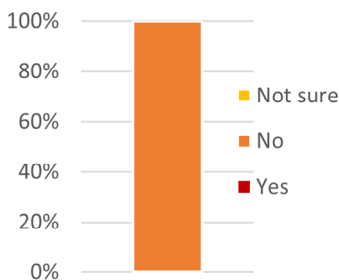


Figure 5.12: Social housing tenants claiming Commonwealth Rent Assistance

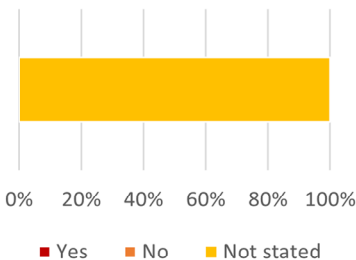


Figure 5.13: Rent levels 2016-2017

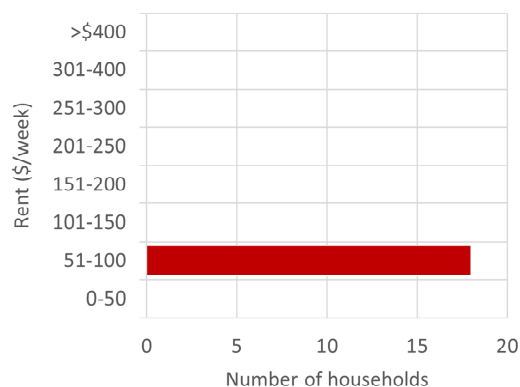


Figure 5.14: Household size range (All households)

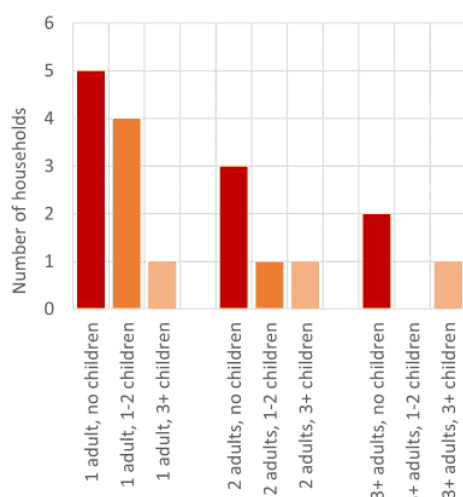


Figure 5.15: Address of household 5 years ago

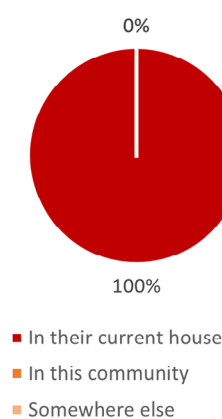


Figure 5.16: Households feeling crowded

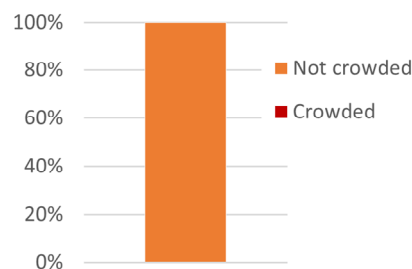
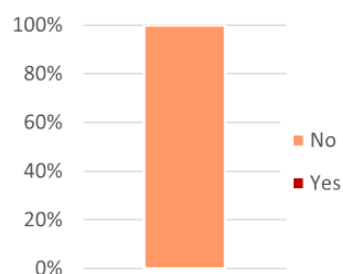


Figure 5.17: Households providing shelter to one or more homeless persons



KEY FINDINGS

- All respondents to the survey were renting social housing, none were in private rentals and none were homeowners. No respondents reported being homeless;
- Of Aboriginal social housing tenants, all rented through an Out of Region (OoR) Aboriginal community-controlled housing manager;
- All respondents were dissatisfied or very dissatisfied with their housing manager;
- All tenants stated a preference for a Regionally based Aboriginal community-controlled housing manager, perhaps recognising that management by the Land Council was not a realistic option;
- Of the twelve households that responded to the question, all respondents said they were renting Aboriginal social housing because they could not afford to buy their own house;
- When asked about their reasons for living in Weilmoringle, most respondents stated that they were either born in the community or their families had been resident for a long time. A strong feeling of belonging, wanting to live on Country and/or being part of the community and around family and friends

were important considerations. Having employment was not a factor;

- No renter had entered into a formal tenancy agreement and no respondent reported being aware of the limit on occupancy imposed by the agreement;
- At the time of the MPRH&BC household survey, social housing tenants indicated rent levels to be exclusively in the range \$51-\$100/week. All thought this to be a fair rent;
- Surprisingly, no respondent reported they were claiming Commonwealth Rent Assistance (CRA);
- Half of households stated they were adult households with or without children;
- Four out of five households reported their house never felt crowded. Of the 20% that indicated feeling crowded at times, three said that crowding was often a cause of stress while one crowding was always a stressful experience;
- No household was providing shelter at the time of the survey to one or more persons who would otherwise be homeless. Similarly, no household had visitors staying at the time of the survey;
- The community is very settled, there being no residents living at a different address 1 year ago and 5 years ago. Median duration of a tenancy was 21 years;
- Most tenants (84%) had no intention of moving if their circumstances changed. Only three thought they might consider relocating if their needs changed;
- Almost all tenants (94%) responding to the question (n=16), reported trouble meeting their electricity bills;
- Of those tenants who responded to the question (n=18), none indicated a preference for social housing tenancies to be passed down within the family.

5.8 Housing need

At the time of the household survey, four young people expressed a wish for their own accommodation. Being aware that the prospects of obtaining a tenancy was negligible, none had applied to be placed onto a waiting list for accommodation in Weilmoringle. Similarly, no

older persons were seeking accommodation in Weilmoringle. No one interviewed was seeking to move out of the community into rented accommodation elsewhere. In view of the stability in tenancies, waiting time for a house would be expected to be measured in years. Table 5.23 summarises need as expressed by respondents to the household survey.

Table 5.23: Need for new housing as recorded by the MPRH&BC household survey

Cohort	Applications	Household size
Young persons	4	4 x 1 persons
Older persons	-	-
Families	-	-
Persons homeless	-	-

Occupancy levels were assessed against the Canadian National Occupancy Standard (CNOS) for crowding. At the time of the survey, two dwellings exceeded the threshold criteria for additional bedrooms and required extension. Some survey responses could not be adequately assessed because of a lack of information.

CNOS adopts the following criteria to determine the number of bedrooms required by a household:

Canadian National Occupancy Standard criteria

- There should be no more than 2 persons per bedroom;
- Children less than 5 years of age of different sexes may share a bedroom;
- Children 5 years of age or older of opposite sex should have separate bedrooms;
- Children less than 18 years of age and of the same sex may share a bedroom;
- Single household members 18 years or older should have a separate bedroom; and
- Couples share a bedroom.

Table 5.24 details the number of additional bedrooms required to satisfy CNOS criteria based on answers to the household survey.

Table 5.24: Number of properties requiring extension

Extension of	
1 extra bedroom	2
2 extra bedrooms	0
3 extra bedrooms	0
4 extra bedrooms	0

Similarly, based on responses to the household survey, no respondents requested modification of their properties to meet the needs of a household member(s) with a disability.

Table 5.25 assesses the degree of utilisation of existing properties based on household occupancy as recorded by the household survey.

Table 5.25: Number of bedrooms required to accommodate permanent residents

Size of house No. of bedrooms	Number of households using			
	1	2	3	4
	bedrooms			
2	2			
3	3	3		
4	1	0	1	0
All	6	3	1	0

5.9 Asset condition

The MPRH&BC household survey invited respondents to give their perceptions of the condition of the property rented and advise of the impacts of living conditions and surroundings on health and safety. Findings are shown in Figures 5.18 to 5.20.

Figure 5.18: Respondents reporting need for urgent repairs

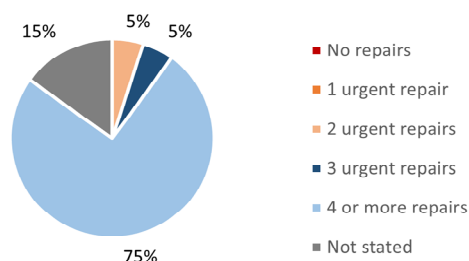


Figure 5.19: Respondents reporting negative health impacts from living conditions

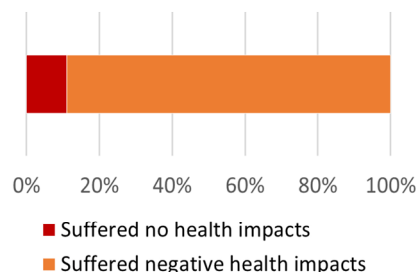
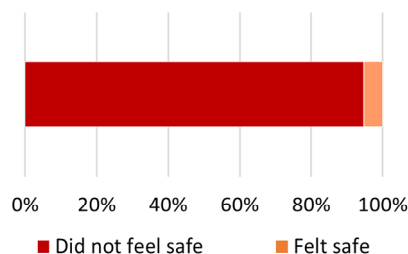


Figure 5.20: Respondents reporting feeling unsafe at home



A method of analysis similar to that employed by the National Social Housing Survey (NSHS) conducted by AIHW (Australian Institute of Health and Welfare 2018) has been used to characterise asset condition based on information self-reported by tenants about dwelling condition, defects and facilities. The basis of this assessment is the judgment that a house is deemed to be of acceptable standard if it has no more than two major specified structural, electrical and/or plumbing problems and has at least six working facilities. In this context, facilities are those comprising 'health hardware' in the Housing for Health terminology which characterise safety and nine healthy living practices (HLPs):

- HLP 1: Washing people
- HLP 2: Washing clothes and bedding
- HLP 3: Removing wastewater safely
- HLP 4: Improving nutrition – the ability to store, prepare and cook food
- HLP 5: Reducing the negative impacts of over-crowding (treated separately in this Plan)
- HLP 6: Reducing the negative effects of animals, insects and vermin
- HLP 7: Reducing the health impacts of dust

- HLP 8: Controlling the temperature of the living environment
- HLP 9: Reducing hazards that cause trauma

The household survey sought to establish observance of the healthy living practices using the indicators shown in Table 5.26.

Table 5.26: Indicators for meeting safety and HLPs

Practice	Represented by a functional:
HLP 1	Bath or shower, and hot water heater
HLP 2	Laundry tub
HLP 3	Toilet and wastewater disposal/ septic
HLP 4	Cooking stove and oven, kitchen sink
HLP 6	Flyscreens and site drainage
HLP 7	Glazed windows
HLP 8	Heating and cooling devices
HLP 9	Electrical installations

The single divergence from the NSHS methodology adopted is to increase the number of working facilities specified to seven through the addition of air-conditioning which MPRA and HLP 8 consider to be essential to managing the health of residents at risk from heat: particularly children, older people, and those with long term health conditions. A means of heating the home is also included. It should be noted that all Aboriginal social housing in Weilmoringle benefitted from the installation of 5 kW residential solar systems and 3 kW split system air conditioning in 2020 as a pilot project under RAHLA auspice so no reference is made to feedback in this HEHP to non- or poorly functioning evaporative coolers since superseded. Table 5.27 summarises the findings.

Table 5.27: Social housing condition as expressed by tenants

Condition	
No structural problems, and 7 working facilities	0%
No more than 2 structural problems, and 6 or more working facilities	0%
3 or more structural problems, and 6 or more working facilities	100%
None, 1 or 2 structural problems, and 5 or fewer working facilities	0%
3 or more structural problems, and 5 or fewer working facilities	0%

Table 5.28 defines the structural, major services and facilities defects used to describe asset condition while Table 5.29 indicates compliance with HLPs.

Table 5.28: Social housing principal structural, electrical, plumbing and facilities problems (%)

Problem area	Houses affected
Structural and major services	
Sinking/moving foundations	100%
Uneven/sagging floors	100%
Major cracks in wall and/or ceiling	95%
Termite damage	95%
Roof leaking inside	10%
Major electrical faults	85%
Major plumbing faults	45%
Major air conditioning problems	-
Septic/sewerage problems	10%
Non-functional facilities	
Kitchen stove/oven	0%
Electric hot water heater	0%
Kitchen sink	6%
Shower	0%
Toilet	0%
Laundry tub	0%
Air conditioning	-

Table 5.29: Social housing observance of the HLPs (%)

Practice	Meeting the standard
HLP 1	Washing people 71%
HLP 2	Washing clothes and bedding 100%
HLP 3	Wastewater disposal 90%
HLP 4	Improving nutrition 94%
HLP 6	Pest control 10%
HLP 7	Reducing impact of dust 20%
HLP 8	Temperature control (heating) 88%
HLP 8	Temperature control (cooling) -
HLP 9	Free of electrical hazards 15%

Whereas Table 5.28 indicates the proportion of installed systems, appliances and fixtures which are non-functional, Table 5.29 captures those households which do not have the benefit of some appliances, primarily wood or electric heaters or, at the time, air conditioners. For example, two households reported they had neither a wood

heater or electric heating and fifteen households stated their properties were not provided with any means of effective cooling.

Sixteen respondents stated their living environment impacted negatively upon their health as indicated by Figure 5.19, in thirteen of these cases were due to the fear of being made homeless. As shown in Figure 5.20, almost all respondents indicated that they did not feel safe: reasons quoted were a lack of security and curtilage (door and window locks, and fencing), the condition of their housing, or safety hazards within the house due to the presence of, for example, vermin and electrical faults.

In respect of HLP 2 and HLP 4, provision of whitegoods is a tenant responsibility. The percentage of household survey respondents stating access to a working washing machine and fridge were 76% and 76% respectively.

5.10 Asset preservation

As discussed previously, and in answer to a series of objective, closed questions, tenants reported a range of structural, building fabric and facilities defects in response to the household survey. Unlike the original HEHP investigations of the early 2000's, no independent scoping of properties has been carried out to determine the scale of repairs needed to restore properties to a fully serviceable state and develop a schedule of planned maintenance. This Plan relies on the household survey to generate a profile of asset condition.

In the absence of detailed scopes of work, this HEHP has adopted an analysis of previous repair and maintenance projects to derive an 'order of probable cost'. The sample totals 98 properties spread across seven communities in the Region, large and small, and includes properties requiring little or no work to those in need of major refurbishment. The sample is grouped into five bands (quintiles) of increasing scope to generate median values for each band. No adjustment has been made for the average age of properties or type of construction, but values have been revised to account for remoteness as per Rawlinsons cost guide.

For Weilmoringle, band medians are listed in Table 5.30.

Band	Median value (\$)
One	9,310
Two	28,330
Three	43,810
Four	65,490
Five	98,080

The median values for repair and maintenance quoted in Table 5.30 allow for minor routine works or responsive works in the case of Band 1 and Band 2 properties progressing through Band 3 to Bands 4 and 5 which include elements of works categorised as planned: cyclical and life cycle (preventative) maintenance, but which have not been attended to, by and large, under the *Build & Grow* policy regime. Band 4 and Band 5 works would include internal and external repainting; replacement of floor coverings; replacement of kitchens, bathrooms and/or laundries; replacing appliances, fixtures and fittings where these are no longer serviceable; and ensuring roofing, gutters and downpipes are brought to a satisfactory condition.

The values quoted in Table 5.30 are median values so it is possible that repairs on the more distressed properties could exceed \$100,000 at which point the value question arises as to whether it is more cost effective to replace rather than refurbish.

The probable order of cost for repairs and maintenance is given by Table 5.31. Information about any expenditures between the time of the household survey and the preparation of this HEHP which might influence cost projections is not available.

To derive an order of probable cost for all repairs and maintenance, the number of properties has been factored up in the inverse of the ratio of household survey respondents providing detailed information on asset condition to the total number of social housing properties in the community; in the case of Weilmoringle, the factor is 21/17 or 1.24.

Table 5.31: Repair and maintenance, probable order of cost

Band	Number of properties assessed in band from survey	Total number of properties for repair	Probable order of cost (\$)
One	0	0	-
Two	0	0	-
Three	17	21	920,000
Four	0	0	-
Five	0	0	-
Total	17	21	920,000
Average spend/property = \$43,810			

It is stressed that the cost projections are based on tenant responses to the MPRH&BC household survey and the actual scale of repair and maintenance work will be identified through scoping once regional priorities have been established.

5.11 Replacement

No existing properties have been identified for replacement but allowance is made for the replacement of one five-bedroom dwelling lost to fire. The tenant is currently living in a refuge at Bourke.

6 THE ROLE OF LOCAL GOVERNMENT

6.1 Council strategic interests

Brewarrina Shire Council's Community Strategic Plan 2026 (CSP) outlines key challenges confronting the community and the community's aspirations to create an economic and socially sustainable community for future generations.

The action areas proposed by the CSP which are relevant to Weilmoringle are:

- Access to a greater range of local quality services and facilities, principally education and health;
- Economic prosperity through innovation and education;
- Better transport options and safer roads;
- Higher standards and performance of utility infrastructure;
- Protection and improvement of natural places and waterways; and
- A safe environment.

These action areas address the aspirations of the Aboriginal community of Brewarrina Shire as a whole as expressed in the consultation process which emphasised the need for a greater focus on young people, enterprise development and employment creation. It is notable that many contributors to the CSP were employed in the tiers of government, with few in private business. In terms of industry sector growth, activities in agricultural value-add and food retailing ranked as the strongest suggestions.

Consultations with the broader Weilmoringle community focused on improved roads, telecommunications security and fast internet access for the school and community.

Council's Local Strategic Planning Statement (LSPS), which defines land-related medium-term economic, social and environmental development proposals, including guiding any amendment of Council's Local Environmental Plan 2012 (LEP), only capitalises on the potential of cultural tourism as an area of common interest. Little ambition to

work with the Aboriginal community around other areas of growth is visible. Rather, in responding to the Directions in the NSW Government *Far West Regional Plan 2036*, the LSPS acknowledges that the challenges of a changing climate, changing demographics, and transformations in rural industry are significant. The LSPS does acknowledge and endorse the work of the RAHLA and the initiative to improve social housing outcomes for Aboriginal residents more broadly.

6.2 Planning controls

Brewarrina Shire Council LEP 2012 sets out the planning controls applicable to residential development in the Shire and the DCP further requirements in relation to planning and design. Key controls for Weilmoringle are shown at Figure 6.1 which identifies zoning and Figure 6.2 which indicates minimum lot size, if it were to be subdivided, of 2,500 m² for Wyaliba.

6.3 Municipal rates and charges

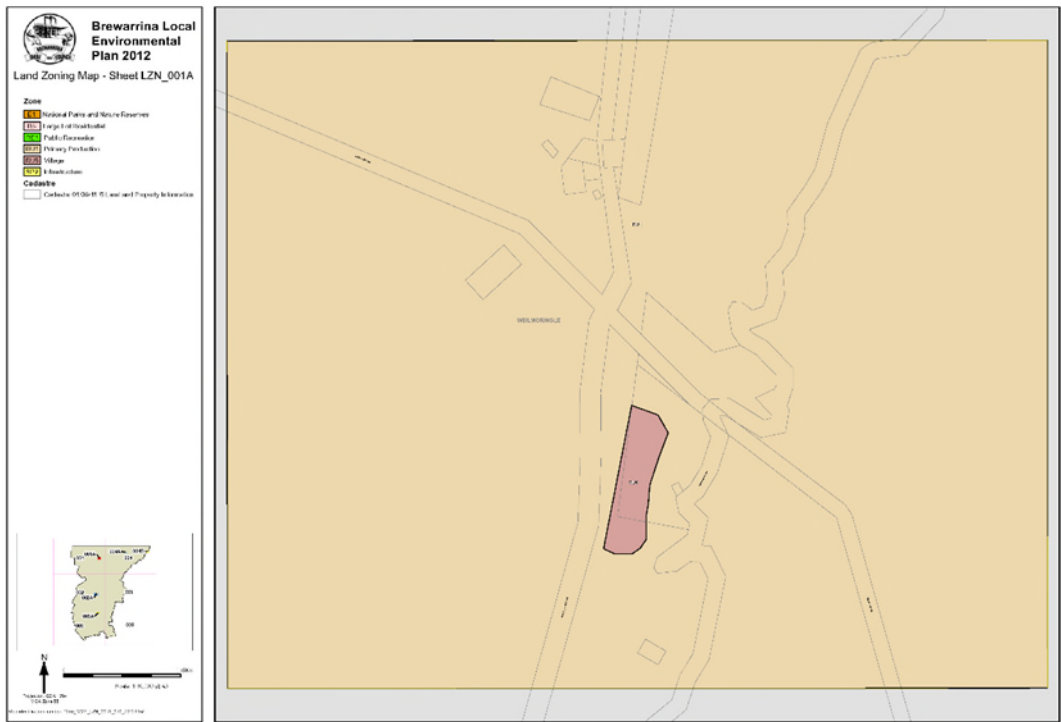
Council does not provide municipal services to the Wyaliba community and, in consequence, does not levy rates and charges on the community.

Council is responsible for water and sewerage services to the Wyaliba community under the NSW Department of Planning, Industry and Environment Aboriginal Water and Sewerage Programme which ensures the community's infrastructure remains operational, is monitored and supply is of an acceptable quality.

6.4 Financial assistance grants

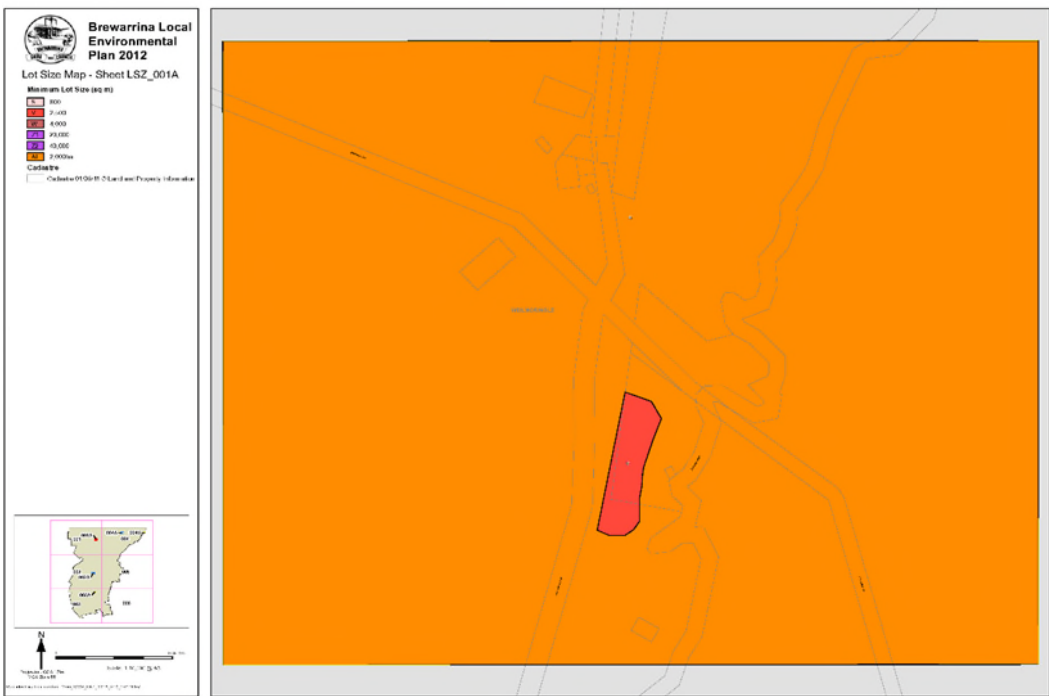
The Commonwealth Government's grant funding is incorporated into Council's general revenue. Council advise that services are provided on an agreed priority basis, or at an appropriate service level where so obligated. It is Council's view that the Aboriginal community is its most significant demographic and as such benefits from services provided.

Figure 6.1: Land zoning map



Source: Brewarrina LEP 2012, 1200_COM_LZN_001A_010_20121107

Figure 6.2: Lot size



Source: Brewarrina LEP 2012, 1200_COM_LSZ_001A_010_20121107

7 ENVIRONMENTAL HEALTH INFRASTRUCTURE

7.1 Infrastructure asset schedule

INFRASTRUCTURE ASSET SCHEDULES		
Table 7.1: Water supply		Responsible Authority: WLALC and Brewarrina Shire Council
Works	Description	Details
Source	Groundwater abstraction for potable water by way of twin bores Ref: GW039436 and GW021262. Transfer main 5,500m x DN50 PE C19 to high level storage Surface water abstraction from rock protected double wall sheet piled weir, crest width 15.8 m, downstream of Wyaliba community. Raw water intake with duty and standby vertical spindle pumpsets with close coupled 240V 1ph electric motors on DOL starters and pressure vessel. DN32 pe suction from floating pontoon	GW039436 (West Ram bore) drilled 1989 and GW021262 (Village Bore) drilled 1966 to depths of approximately 620 m. Minimum reliable yields 0.78 and 0.19 L/s respectively Quality is historically acceptable except that pH is close to 8.5 and sodium levels exceed NHMRC Australian Drinking <i>Water Guidelines</i> taste threshold. Occasional faecal coliform contamination
Treatment	Nil	
Storage	Potable water: 3 x circular roofed steel tanks of 4.0m ϕ and 1.8m water depth on 9m high tank stands, total capacity 67.5 kL Raw water: circular roofed steel tank of 4.0m ϕ and 1.8m water depth on 14.4m high tank stand 2.96 m sq, capacity 22.5 kL	Storage capacity likely to be insufficient to meet sustained peak levels of demand and short-term restrictions apply
Distribution	Potable water: DN50 pe Raw water: DN100 uPVC ring main	
Operation and maintenance		By Brewarrina Shire Council funded through NSW Government <i>Aboriginal Water and Sewerage Programme</i>

Table 7.2: Wastewater		Responsible Authority: WLALC and Brewarrina Shire Council
Works	Description	Details
Collection	DN150 gravity system at grades of about 1%; circular precast concrete manholes at ≤ 55 m crs	
Transport	Wet well sewage pumping station comprising concrete chamber 1.8m diameter x 6.2m deep in covered fenced compound. Duty and standby grinder units	
Rising main	DN50 pe	
	Facultative lagoons: eight pond system of $>7,000$ m ³ capacity designed for zero discharge; operating depth about 700 mm	
Operation and maintenance		By Brewarrina Shire Council funded through NSW Government <i>Aboriginal Water and Sewerage Programme</i>

Table 7.3: Flood protection		Responsible Authority: WLALC	
Works	Description	Details	
Perimeter levee	Perimeter levee bank to design crest height of RL 127.340 m AHD. Batter angles generally around 2H:1V with some steeper sections Twin gated 450 ϕ RC piped stormwater outlets to control backflow during floods	Constructed directly on natural surface (sandy topsoil) with little to no subgrade/foundation preparation. Embankment is a combination of free draining silty sand and high plasticity, dispersive silty sandy clay in a poorly graded matrix poorly compacted - compaction of between 78.5% and 91% standard	

Table 7.4: Stormwater drainage		Responsible Authority: WLALC	
Works	Description	Details	
Trunk and local drainage	Roll kerb and guttering throughout Wyaliba community and open drains beyond levee bank. 450 ϕ RC piped drainage system connecting double grated kerb inlet pits discharging through levee. DN150 uPVC common drainage lines connecting yards to grated outlets		

Table 7.5: Internal roads		Responsible Authority: WLALC	
Works	Description	Details	
Roads	455 m of internal sealed carriageway and 95 m sealed access from Bourke Road. Carriageway width of 5.6 m approx with 3% single crossfall in 17.0 m road reserve. Design speed is 30 km/hr. Construction is 10 mm single coat seal over 125 mm graded granular roadbase material		

Table 7.6: Environmental amenity		Responsible Authority: WLALC	
Works	Description	Details	
Streetscape	A few street trees exist of assorted species in grassed verge		
Public spaces	Lawned area to playground		
Air quality	No issues reported except for dust generated by vehicles travelling unmade tracks over friable soils		

Table 7.7: Fire control		Responsible Authority: NSW Rural Fire Service	
Works	Description	Details	
Mobile plant	Uncovered 36m x 19mm hose reels located post mounted at shared property boundaries.		
Fixed plant			
Fire safety			

Table 7.8: Power and lighting		Responsible Authority: Essential Energy
Works	Description	Details
Service	Pole mounted cabling distributed throughout village; LV distributed as single and three phase power	Community report frequent outages, now mitigated to some extent by solar generated 'behind the meter' power
Connection	Dwellings connected via aerial cabling	
Outage	Frequency and duration not known	
Street lighting	Pole mounted solar powered lamps	Responsibility of Weilmoringle LALC but not functional

Table 7.9: Communications		Responsible Authority: Telstra and others			
Works	Description				Details
Digital service		Telstra	Optus	Vodafone	Service reported to be patchy. This is an issue in the case of an emergency
	3G	✓	-	-	
	4G	-	-	-	
	5G	-	-	-	
NBN	Satellite				All properties available for connection
TV satellite	VAST satellite TV and Foxtel satellite TV				Free to air and pay TV services

Table 7.10: Solid waste disposal		Responsible Authority: WLALC	
Works	Description	Details	
Collection	Individual household responsibility		
Disposal	Fenced but unmanned single cell approx. 60 m long		
Recycling	Nil		
Clean up	-		
Safety	-		

Table 7.11: Animal control		Responsible Authority: Brewarrina Shire Council and WLALC	
Works	Description	Details	
Services	-		
Facilities	-		
Domestic pets	Action in respect of dangerous and menacing dogs, restricted dogs, and nuisance dogs and cats		

7.2 Infrastructure improvements

Service	Improvement
Roads and drainage	Improvement works generally to fall within the NSW Government Roads2Home project. New works to be construction of footpath/cycleway between the Wyaliba community and the school and shop to provide a safe, hard surface across natural ground

8 COMMUNITY HEALTH PROFILE

8.1 Community health profile summary

Weilmoringle is a small community in the Brewarrina Local Government Area. Brewarrina Shire is considered remote and very remote on all remoteness scales. It is one of twenty-three local government areas in the Western NSW Local Health District (LHD).

Quantitative data for the Weilmoringle community is not available due to its small size so a mixed-methods approach has been used to describe the health of the community. In summary, although the Aboriginal population of Brewarrina Shire does not enjoy good health when compared to counterparts in the NSW and Australian population, the Weilmoringle community is reasonably healthy.

8.2 Health status – qualitative assessment

Qualitative evidence gathered by interviewing local health care providers underpins an assessment of the perceived health status of the Weilmoringle community. Evidence indicates that the health of the Aboriginal population is considered to be good. There are few infectious and transmittable conditions and the older adult population is managing well. Interviewees made the following observations:

- There are no crowded households in the community;
- Some houses are vacant, remaining unoccupied after older people pass away and/or residents leave Wyaliba;
- Infectious and transmittable diseases are identified and acted upon quickly. Aboriginal health workers provide education in the school to raise awareness of preventative measures so outbreaks of infectious diseases are rare;
- The teacher and staff are aware of the health of each child attending school and engage with

family and health workers in the case of illness or lice to advocate for treatment;

- Due to the limited health services available in Weilmoringle, residents must travel 100 km to either Bourke or Brewarrina to access chronic disease care (including diabetes complication screening), allied health, doctors and specialists;
- Individuals and families must arrange their own transport into Bourke, Brewarrina or other centre to obtain health care;
- The nearest ambulance is stationed at Brewarrina, at least one hour away. Brewarrina Multi-purpose Centre has a limited accident and emergency capability;
- The safety of the children walking between the Wyaliba community and school poses one of the greatest risks of physical harm.

8.3 Available health services

Weilmoringle is an outpost of the Brewarrina Multi-purpose Service. Such health services as there are in Weilmoringle are provided by the Western NSW LHD including:

- Weekly visiting registered nurse
- Weekly visiting Aboriginal health worker
- Access to medical specialists and allied health services in Brewarrina and Bourke

Community members can obtain primary health care through General Practitioners and the Aboriginal health and medical services in Brewarrina and Bourke. Pharmacies are also located in both towns.

9 HUMAN SERVICES

9.1 Human services target population

The sectors of the Aboriginal population which should be the target of human services are identified in Table 9.1 together with the corresponding population numbers. The figures are for 2016.

Table 9.1: Service age groups, 2016					
Total persons (Usual residence)	Aboriginal		Non-Indigenous		
Service age group (years)	Number	%	Number	%	Ratio
Babies and pre-schoolers (0-4)	4	7.5	3	33.3	0.2
Primary schoolers (5-11)	14	26.4	0	0	-
Secondary schoolers (12-17)	3	5.7	0	0	-
Tertiary education and independence (18-24)	7	13.2	0	0	-
Young workforce (25-34)	8	15.1	3	33.3	0.5
Parents and homebuilders (35-49)	14	26.4	3	33.3	0.8
Older workers and pre-retirees (50-59)	0	0.0	0	0	-
Empty nesters and retirees (60-69)	3	5.7	0	0	-
Seniors (70-84)	0	0	0	0	-
Elderly aged (85 and over)	0	0	0	0	-
Total	53	100.0	9	100.0	-
Source: ABS Tablebuilder with age classifications as .id Consultants					

The proportion of the Aboriginal population of Weilmoringle requiring assistance in the core activity areas of self-care, mobility and communication because of disability, long term health condition or old age cannot reliably be defined from the ABS 2016 Census for such a small population but Table 9.2 provides an indication of need for the Aboriginal and non-Indigenous population of Brewarrina.

Population fraction	Aboriginal	Non-Indigenous
Table 9.2: Core activity need for assistance		
	n=657	n=315
Of cohort population	7.3%	4.4%
Murdi Paaki Region	7%	7%
New South Wales	8%	6%

9.2 Human services in the community

Human services available to the Aboriginal community to cater for a range of needs are shown at Table 9.3 and the features of home care services are described at Table 9.4. Table 9.5 lists the NSW government principal agencies providing services readily accessible by Weilmoringle residents. All services provided in the community are drive in,

drive out.

It is known that National Disability Insurance Scheme (NDIS) is funding a total of 14 NDIS packages across Brewarrina LGA as a whole and the total Aboriginal population requiring assistance across Brewarrina LGA is 52 persons.

Table 9.3: Human service providers and service mix

Sector	Provider	Principal services	Resident office	Target population	Funding agency
Health services	Brewarrina Aboriginal Medical Service	Primary health care outreach clinic	Brewarrina	Aboriginal community	-
	Royal Flying Doctor Service	Primary health care outreach clinic and dental	Broken Hill	Aboriginal community	-
	Western NSW Local Health District	Brewarrina Multi-Purpose Service	Brewarrina	General population	-
	Orana Haven Aboriginal Corporation	Drug and alcohol service	Gongolgon	Aboriginal community	-
Social housing services	Weilmoringle Local Aboriginal Land Council	Aboriginal social housing	Weilmoringle	Aboriginal community	NSWALC
	Mid-Lachlan Aboriginal Housing Management Co-op	Aboriginal social housing	Dubbo	Aboriginal community	-
Tenant support	Murdi Paaki Services Ltd	Tenant education and support programme	Cobar	Aboriginal community	DPIE/AHO
Homelessness services	CatholicCare Wilcannia-Forbes	Youth at risk of homelessness	Brewarrina	Youth population	DCJ
	Mission Australia	Homelessness and Housing Support/ Women's Safe House	Brewarrina	General population	DCJ
Early childhood services	Mackillop Family Services Ltd	Brewarrina Mobile Children's Service	Brewarrina	Young children	-
Family support services	CatholicCare Wilcannia-Forbes Ltd	FamilyCare Service	Brewarrina	General population	DCJ
	Mackillop Family Services Ltd	Family Strengthening Service	Brewarrina	General population	DCJ
	Mission Australia	Family Preservation Service Upper Western Community DFV Project	Brewarrina	General population	DCJ
Social support	REDI.E	Centrelink service	Brewarrina	General population	-
Aged care services	Western NSW LHD	Brewarrina Multi-Purpose Centre residential aged care	Brewarrina	General population	-
Home care and home support	Australian Unity Home Care – Aboriginal Home Care	Home care packages community services	Bourke	Aboriginal community	HCP/CHSP
	Live Better Services Ltd	Aboriginal home care services	Bourke	General population	NDIS

Table 9.3: Human service providers and service mix

Sector	Provider	Principal services	Resident office	Target population	Funding agency
services					

Cultural Services	Weilmoringle Local Aboriginal Land Council	Culture and heritage, land management	Weilmoringle	Aboriginal community	NSWALC
Disability services	Lifestyle Solutions (Aust) Ltd	Plan development, support coordination and support services	Bourke	General population	NDIS
	Flourish Australia		Brewarrina	General population	NDIS
	Live Better		Bourke	Aboriginal community	NDIS
	Mackillop Family Services		Brewarrina	General population	NDIS
	Ability Links		Brewarrina	Aboriginal community	-

Table 9.4: Home care and support services

Services	Transport	Meals	Other food services	Home maintenance	Home modifications	Social support individual	Flexible respite	Personal care	Domestic assistance	Social support group	Nursing	Centre-based respite	Specialised support services	Allied health and therapy services	Assistance with care and housing	Transition care
	Y	Y				Y	Y	Y	Y	Y			Y		Y	
Australian Unity Home Care – Ngangana Community Options																
Live Better Services Ltd	Y				Y	Y		Y		Y					Y	Y

Table 9.5: Government agencies

Cluster	Principal department and agencies	Responsibilities	Service access
Stronger Communities	Department of Communities and Justice	Families, communities and disability services; public housing and homelessness services; law and justice; child protection; sport, seniors and veterans	Bourke

10 COMMUNITY PERSPECTIVES

10.1 Authority for change

The way Aboriginal social housing is managed has changed markedly since the first Murdi Paaki HEHPs were produced; that change being very much to the detriment of the Region. There has been a sustained centralisation of decision-making and depreciated scope of authority and autonomy within Regional and locally managed ACHPs. This has adversely impacted management services, enfranchisement of tenants, and asset condition and preservation.

The integrity of physical infrastructure on discrete settlements such as the Wyaliba Community at Weilmoringle has declined and self-determination has been compromised as housing management services moved from local ACHPs and LALCs to third party, out-of-Region ACHPs without adequate provision for recurrent expenditure. The relative contribution of the AHO *Build and Grow* policy within Murdi Paaki has been the increased fragility of local services, marked decline in the condition of community housing assets, and feeble tenancy support from out-of-Region ACHPs. Aboriginal social housing tenants in Weilmoringle have experienced poor service from their housing manager: inspections are not undertaken, repairs and maintenance, including urgent repairs, are not carried out or, if they are, are unduly delayed, and promises are broken. Owning ACHPs experience the lack of an effective mechanism for communication with, and reporting by, the managing provider in the coercive AHO head lease/sub-lease agreement. This has rendered the Weilmoringle LALC powerless to have a say in the management of their own assets

The CWP appreciates that it is not practical for housing management services to have a permanent, full-time presence in Weilmoringle but is determined that housing management services be reformed such that tenants' rights are respected; timely, responsive services are delivered; and effective communication channels are in place. Service design must reflect the needs, and be driven primarily by the best interests, of the

community, taking account of cultural norms and desire to become self-reliant.

10.2 Community priorities

The Weilmoringle CWP has set out its aspirations and priorities for improved community wellbeing in its Community Action Plan (CAP), advocating for improved service delivery across the full spectrum of health and safety, employment, children's education, and energy and infrastructure. The CAP priorities and key actions which relate to this Plan are set out in Table 10.1 and the issues which give rise to the action areas are summarised in Table 10.2.

10.3 Community observations

Critical housing and human service issues covered in this HEHP continue to be at the forefront of planning and advocacy by the Weilmoringle CWP. Issues related to housing management and condition were raised frequently by tenants who participated in the MPRH&BC household survey, but human services received little comment.

The Weilmoringle CWP has reported concerns regarding the level of support from their current out-of-Region property manager. Communication is very poor and tenants are increasingly frustrated by the lack of support. It is reported that the property manager "never comes to town" and the tenants would like to see personnel located in the Shire, regularly visiting and forming a relationship and living closer to the community:

"They need to get out of their office and visit community to see what is really going on with the tenants' needs."

"Bad, bad management. No field staff visit, they tell lies to tenants."

"Mlahmc do not do frequent visits – been a few years since last visit and then they come out, it's just a band-aid fix."

At the time of the household survey, no households which responded had a current Residential Tenancy Agreement.

Current arrangements are not satisfactory and much repair and maintenance work remains outstanding:

“Housing is not up to a quality standard, they have received a band-aid fix, but major repair issues remain outstanding”

“There is poor communication and the planning and coordination of repairs and maintenance is difficult to understand, as a result there are a lot of works outstanding”

The CWP believes the programme for routine inspections and maintenance is grossly inadequate; many houses need major upgrades and repairs to bring them to a standard acceptable to tenants. Even when repair work is undertaken, tenants are often unclear about the process for inspection of completed work. Many jobs have not been completed to a reasonable standard.

Employment and training outcomes are not currently a feature of repair and maintenance programmes. The CWP sees this as a critical priority; training and employment opportunities for community members cannot be realised within the current work planning and approval process.

Three vacant blocks are currently available at Wyaliba. The CWP wishes to develop additional housing to introduce more flexibility in managing tenant succession, especially for Elders and younger people, and to meet the needs of former Weilmoringle residents who wish to return. Community members wish to have input into design of any new housing.

Access to home modifications for Elders and people with disabilities has been reported to be extremely difficult and several homes have outstanding issues that urgently need to be addressed.

In addition to concerns regarding the condition of houses, there are long-standing concerns regarding the adequacy of local infrastructure. During summer months, lack of water can result in loss of green areas and excessive dust. Raw water for irrigation is available only if the Culgoa River is flowing and if the pump is operating. The bore has

insufficient yield to supply irrigation; investigation of an alternative water source for irrigation supply for the community park and other public recreational areas could be of benefit. The CWP has also highlighted concerns regarding the inadequacy of street lighting and the lack of footpaths (including walking and exercise tracks).

The community enjoys a good working relationship with Brewarrina Shire Council and the CWP is keen to continue collaboration and advocacy to help solve a number of local issues including:

- Town beautification priorities
- Assistance with pool management
- Rubbish removal and management
- Improved storm water drainage
- More local employment opportunities.

With limited access to fuel and most households without a registered motor vehicle in working order, access to an affordable, regular transport service is a crucial issue for Weilmoringle. There is no public transport and this can result in significant barriers to access for residents. This is particularly the case in relation to health-related transport during emergencies, for admission to hospital or when needing to access routine primary care in Brewarrina, Dubbo or Orange. Arranging return travel after hospital discharge is particularly problematic. Lack of transport also affects food security and nutrition, with limited local availability of fresh food and packaged ingredients.

The community feels the current level of service from most human service providers is deficient and service levels, programmes and personnel have been decreasing over the years. Residents would like to see a greater commitment to regular GP and multidisciplinary health team outreach to the community clinic, and provision of better access to health assessments and preventative strategies. Providing local community members with skills to assist in clinic activities and health promotion is also a priority and is expected to improve the quality of health services.

“Health just comes in and leaves. RDFS come in monthly – doctor does referral and dentist sometimes comes – mobile clinic”.

Despite some providers claiming to deliver service to Weilmoringle, community members are most often unaware of the existence of these services, let alone how to obtain access. The need for improved support for Elders and people with disabilities has been highlighted: eligible community members are frustrated by difficulties in understanding and obtaining support from programmes such as the NDIS. The CWP believes that improved service provider communication and co-ordination, coupled with family-centred service provision, would result in a better service and clients would be better able to understand and manage their conditions:

“We need to ensure that all organisations are working together and delivering the services they are meant to be”.

More broadly, the CWP is seeking greater accountability from service providers, and closer engagement to ensure greater awareness of services and a better understanding of provider roles and capabilities.

Access to reliable power and communications technology compounds the remoteness of the Wytaliba Community. Digital and online services are unreliable, and mobile network reception poor. Frequent power outages are experienced. Homes have recently been provided with PV solar installations and reverse cycle air conditioning; this should help to address reliability of power supply during daylight hours, and to reduce energy costs.

Growth in employment opportunities is a long-standing CWP priority. The community aspires to be resourced to put in place targeted training, skills development and employment programmes. The long-term aim is to ensure that local community members can be more self-sufficient and independently able to manage a range of housing, environmental health, land management, social services and other activities that create greater sustainability for Weilmoringle and financial security and independence for families.

A pressing issue for the community is an inability for community members without a vehicle, or unable to afford the costs of private travel, to leave Weilmoringle to shop at the Brewarrina

supermarket, to attend health appointments or to carry out other personal business including getting access to human services. From its modest income, the Land Council is not able to operate a community bus and an alternative means of transport is required if a basic level of service is to be provided.

“The community needs support to do basic things like shopping –petrol and groceries cost a lot – need to get transport out of the community – at least fortnightly”.

Table 10.1: Community Action Plan (CAP) objectives and actions

Goal	Objective
1	Making our community safer and healthier
	1.1 Ensure our community members are receiving adequate and regular health care
	1.2 Introduce measures for preventative health care so our community members increase general health and wellbeing
	1.3 Make our streets safer
	1.4 Ensure housing and home utilities provide safe and healthy living conditions for community members
	1.5 Upgrade and regularly maintain town infrastructure
2	Getting our adults into work
	2.1 Increase available activities within the Remote Jobs and Communities Programme (RJCP) so local people can work on much-needed local projects
	2.2 Provide opportunities for training and education with guaranteed successful qualifications being the result
	2.3 Increase opportunity for local labour and employment
4	Weilmoringle Energy Project
	4.1 Address infrastructure needs

Table 10.2: Summary of housing and housing-related issues

Issue	Description
Housing management	<ul style="list-style-type: none"> Local access to housing managers is required for improved communication, services and accountability All tenants require a current Residential Tenancy Agreement Housing managers do not visit the community
Housing repair and maintenance	<ul style="list-style-type: none"> Most houses need major R&M but processes for actioning requests are poorly understood, and timeframes are excessive Routine inspections by property managers do not take place Training and employment of a local Aboriginal handyman to support trades to undertake repair and maintenance works is desired
Housing affordability	<ul style="list-style-type: none"> Rent setting should be considered in the context of cost-of-living pressures and remoteness Tenants are not accessing CRA
Housing need	<ul style="list-style-type: none"> Additional housing is required to meet the needs of young people at the stage of household formation Extensions are required to a small number of houses to provide additional bedrooms to address crowding Housing needs to be upgraded around disability access Tenants should be involved in design of new housing and additions
Safe and healthy communities	<ul style="list-style-type: none"> The quality of drinking water can be poor Street lighting does not work No household garbage or bulky rubbish services are in place Most houses are overdue for comprehensive pest control services. Measures are required to address the problem of ingress to housing by snakes Irrigated landscaping is required for dust control. An alternative water source for irrigation supply should be investigated

Table 10.3: Summary of human services-related issues

Issue	Description
Accountability and accessibility	<ul style="list-style-type: none"> A review of human services funded and services actually received in Weilmoringle is required, followed by negotiation of a realistic framework for co-ordinated service delivery
Elders' services	<ul style="list-style-type: none"> Need for home care and other aged care community-based programmes should be investigated and services procured to meet needs identified
Service needs for people with disabilities	<ul style="list-style-type: none"> Need for NDIS services and programmes should be investigated and services procured to meet needs identified
Employment	<ul style="list-style-type: none"> There are few opportunities for local employment; training being provided does not translate to employment outcomes The CWP is seeking support for creation of employment opportunities for local Aboriginal people in housing maintenance, in cemetery maintenance, tip management, pool management and small business
Mental and physical health	<ul style="list-style-type: none"> Health services in the community are inadequate. A minimum once-weekly health clinic service is required; health outreach services should be co-ordinated and integrated; and improved access to programmes and services provided to support lifestyle risk factor management for chronic diseases
Transport	<ul style="list-style-type: none"> Inadequate transport services impact on community members' ability to manage health and wellbeing A regular transport service to and from Brewarrina and a school bus are required to improve access A regional health related transport service is needed to assist travel out of region to Dubbo and Orange
Food security	<ul style="list-style-type: none"> Inadequate supply of fresh food is impacting on health and wellbeing Food stress is exacerbated by inability of tenants to keep food stored safely

11 MASTER PLAN

11.1 Aspiration

Development of this HEHP ends the second round of MPRA's approach to sector strategic planning at community scale. The HEHP makes clear the factors which are at play in the sector; documents an evidence base of the community's housing and infrastructure needs; and estimates the scale of sector investment. The lead time and long life of housing infrastructure requires a long-term view so identifying, planning and prioritising a package of measures to ensure the sector delivers sustainable long-term outcomes for the community is vital.

Connections between the housing and human services sectors add to complexity and uncertainty in the strategic planning process. Learning lessons is a central part of any project so with the RAHLA now firmly established and evidence provided, the community expects informed policy-setting and decision-making to lead to positive change.

11.2 Cultural influences on decision-making

The *NSW Aboriginal Housing and Infrastructure Programmes Implementation Manual* was an initiative of MPRA and the NSW Department of Aboriginal Affairs (as was) flowing from the successful Australian Government National Aboriginal Health Strategy projects. Written in 1999, the manual placed the concept of effective community management of capital works and associated housing and infrastructure projects into a more practical local context. Working with a community-selected professional Project Manager, CWP's demonstrated ample capacity to set community objectives, and to control and co-ordinate overall programme delivery on behalf of, and in the best interests of, their communities. The agreed negotiated system of rules governing projects roll out was formal acknowledgement of the ongoing position of CWP's as the local decision-making body. The Regional and local governance structures remain in place and CWP's remain positioned to bring their local knowledge and cultural perspectives to inform the shape and

configuration of housing and infrastructure developments. This Master Plan evidences this decision-making in practice.

11.3 Master Plan

The master planning process adopted by this HEHP aims to create an integrated process of change at community level, reaching across the built environment, and social and economic issues within a cultural context. Jointly with the community's Community Action Plan, this Plan is about taking the initiative in terms of planning for, and design of, improvements to the living environment, job creation, and coordination and integration of a raft of human services. It aims also to give renewed life to the principles of self-determination and self-management. This approach challenges stakeholders to be open and willing to change the way business with the community is conducted.

The Weilmoringle CWP Master Plan is set out at Table 11.1. It brings together the relevant aspirations as documented in the Community Action Plan and the views of the community as obtained from survey and consultation. The proposed actions are those which matter to people.

Implementation will take time. Ongoing engagement between the community through the CWP, stakeholders and decision makers is vital to ensure the strategic focus is maintained. Change will happen and, with this expectation, there is a need to foster a strong collaboration between all parties to ensure that the objective of bringing about positive improvement in the lived experiences of Aboriginal people is achieved.

Table 11.1.: Master Plan

Strategy	Chapter reference	Action area	Strategy	Justification
WYT-01	5.7	Sector governance	<ul style="list-style-type: none"> Return Aboriginal social housing management services of all properties to a local or Regional ACHP to be more directly under the governance and influence of the local community 	The CWP and tenants are universally dissatisfied with the quality of service provided by the housing manager, who is headquartered more than five hours' drive away from the community. The housing manager is never seen in the community; the level of disconnection is manifest in the fact that no tenants reported having a RTA in place.
WYT-02	5.7 T10.2 10.3	Housing management	<ul style="list-style-type: none"> Work with the managing ACHP(s) to establish a way of working which satisfies community ways of doing business Develop a communication strategy with relevant stakeholders to ensure the efficient and timely flow of information, including regular reporting to the CWP on matters relating to housing management and emerging issues As part of the MPRH&BC project, co-design rent setting policies which prescribe fair and affordable rents 	The Wyalaliba Community at Weilmoringle has unique characteristics and is ill-served by generic business models. The aspiration is for a culturally adapted housing management model which takes account of remoteness and inaccessibility of services, the specific lifestyle attributes which result from the community's history of living on Country on a station camp, the community's almost universal reliance on Centrelink income, and the familial obligations and linkages which define use of housing and communal space. The CWP requires reliable, formal channels of communication to be put in place with their ACHP to ensure accountability for service provision and responsive decision-making.
WYT-03	5.8 5.11 T10.2 10.3	Housing need	<ul style="list-style-type: none"> Increase supply to meet demand arising from young persons wishing to live independently and for frail aged residents living in the community or who may wish to return to allow them to live independently in purpose-built accessible accommodation Engage the CWP in the planning and design process for all new developments Extend existing houses where judged to be crowded with the addition of bedrooms and bathrooms Arrange with the housing manager(s) to negotiate with the Aged Care Assessment Team, registered Home Modifications providers, and funding body where necessary, to audit properties for accessibility, and arrange home modifications where found necessary 	The Aboriginal population of Weilmoringle is growing, and is experiencing structural ageing. Former Weilmoringle residents who have located elsewhere wish to move home but there is insufficient housing available to permit this. Crowding in some existing houses is a potential cause of ill-health, and increases the maintenance burden for property managers. Demand exists for purpose-built smaller dwellings to accommodate young people at the point of household formation, and older people for whom living in the family home is no longer desirable for and access and mobility reasons. CWP involvement in design is essential because of the importance of cultural 'fit' for a community living a relatively traditional lifestyle. Access to home modifications is more difficult in Weilmoringle than in most communities because of isolation; extensive delays are experienced in securing ACAT and OT assessments and in arranging for prescribed home modifications to be carried out.
WYT-04	5.9 5.10 T10.2 10.3	Asset condition and serviceability	<ul style="list-style-type: none"> Arrange with managing ACHP(s) to determine the extent of all work necessary to restore structural soundness, functionality, amenity, safety and security to social housing properties, secure adequate investment, and carry out repairs and upgrades 	Properties are dilapidated as a result of poor housing manager response to R&M requests; time elapsed since the most recent R&M programme; and issues with quality of workmanship, materials and inclusions arising from a poorly conceived R&M programme

Table 11.1.: Master Plan

Strategy	Chapter reference	Action area	Strategy	Justification
			<ul style="list-style-type: none"> Develop a replacement programme as part of each Property Management Plan 	undertaken at the commencement of Build and Grow. Assets are ageing; a comprehensive R&M programme is required to provide for tenant health, safety and amenity and to preserve asset value, but some properties will also be approaching the end of their service life and planned replacement is necessary to ensure that housing continues to be available to meet tenant needs.
WYT-05	10.3	Tenant support	<ul style="list-style-type: none"> Assist all Aboriginal social housing tenants not claiming CRA through the application process 	No tenants reported in the household survey that they were receiving CRA. If no arrangements are in place for claiming CRA, then tenants' incomes are adversely impacted.
WYT-06	T7.12 T10.1 T10.2 10.3	Infrastructure	<ul style="list-style-type: none"> Negotiate with the Department of Planning, Industry and Environment under the Roads2Home programme for upgrading of all roads and drainage, levee, streetlighting: <ul style="list-style-type: none"> Including a footpath/cycleway between the Wyaliba community and the school and shop to provide a safe, hard surface across natural ground Advocate with Brewarrina Shire Council and other responsible agencies for: <ul style="list-style-type: none"> Works to raise the visual and environmental amenity of the village streetscape to make a positive contribution to the quality of life of residents Assistance with swimming pool management A small water park for use by the children at the pool Efficient street lighting to all parts of the village which complies with the relevant Australian Standard Assistance with a request to Telstra for improved telecommunications security and advocacy for fast internet access for the school and community A kerbside domestic waste service and regular bulky waste clean up community-wide Upgrading of the village bore and river water supplies to provide an adequate supply for all uses including irrigation and firefighting 	<p>Weilmoringle has been allocated funding under the Roads2Home programme. No major infrastructure R&M has been undertaken since ACDP, almost twenty years ago. The degraded condition of existing infrastructure has been exacerbated by the absence of financial provision for upgrades over the period during which housing has been head leased to AHO. Scoping of Roads2Home-funded works requires to be as broad as possible given that no municipal services are provided within the Wyaliba Community.</p> <p>Because of the isolation of the community, it is important that social infrastructure is provided and maintained so that community members can remain socially engaged. Improved information and communications technology is vital for safety reasons and to ensure that children can maximise their achievements at school.</p> <p>Safety-related infrastructure improvements are required to ensure that access throughout the village and between the village and the school and shop is as safe as possible for residents.</p> <p>Adequacy and quality of water supply is a long-standing issue for the community. Residents complain periodically of chironomid infestation in the bore water supply. Availability of water for irrigation is essential to allow for plantings for streetscape amenity, communal outdoor recreation space, and dust suppression to thrive.</p>

Table 11.1.: Master Plan

Strategy	Chapter reference	Action area	Strategy	Justification
WYT-07	9.2 10.3 T10.3	Human services improvement, reach and accessibility	<ul style="list-style-type: none"> Engage with MPRA, DCJ and other agencies to advance the actions in the Wellmoringle Community Action Plan in conjunction with the Housing and Environmental Health Plan to advance community priorities in early childhood, education and youth services Establish a close working relationship between the CWP, MPS and Council to jointly drive improvements in human services including a greater focus on provider coordination, performance, cost-effectiveness and cultural safety Audit and review human services to confirm that services promised are being received, that gaps are identified and can be addressed, and protocols established which increase awareness, transparency and accountability 	Of the services listed at Table 9.3, only Mackillop Rural Community Services and the Murdi Paaki TSEP team were said to visit the community. Need for other human services is not currently met; organisations which are funded to deliver services to clients across the Brewarrina Shire Council footprint are generally not providing outreach to Wellmoringle, and this represents an issue of access and equity.
WYT-08	10.3 T10.1 T10.3	Community wellbeing	<ul style="list-style-type: none"> Improve the community's ability to access family-centred health care services through regular and frequent outreach services in Wellmoringle Increase the cultural safety, quality and accessibility of health services by employing and training a young resident as an Allied Health Assistant as a service coordinator for the outreach service Develop a long term transport solution which will allow community members without a vehicle, or unable to afford the price to travel, to attend health appointments locally and in Brewarrina, Bourke, Dubbo and Orange, and shop at the nearest supermarket in Brewarrina Assess the presence and capabilities of funded NDIS registered providers, the level of care delivered against clients' funded package, and package availability and inequalities of care of Aboriginal people with disability 	<p>No permanent health service personnel are located within the community; weekly registered nurse and Aboriginal Health Worker visits to the Wellmoringle Community Health Outpost are the only primary health care services available within the community.</p> <p>Residents must travel 100 km to either Bourke or Brewarrina for appointments with GPs and visiting specialists; allied health professionals and chronic disease care; patients must arrange their own transport to access these services, and the level of vehicle ownership in Wellmoringle is low.</p> <p>A Wellmoringle-based allied health assistant who is a community member would be able to maximise the benefit that community members derive from existing visiting services, and would offer the potential to support the expansion of outreach to include GP and allied health visits. Complex chronic conditions within the community would be better managed, and the role would support culturally safe service delivery by functioning as a conduit for community needs and opinions to service managers.</p> <p>The community is poorly served by NDIS providers who are funded to deliver services on a LGA-wide basis. Inability to access services in Wellmoringle is a cause of community members being forced to move away to larger population centres.</p>
WYT-9	10.3 T10.3	Employment	<p>With MPS support, negotiate a package of economic initiatives relating to:</p> <ul style="list-style-type: none"> Transition from school to work and further learning 	Economic engagement has been a priority area for the CWP for many years. Need has long been expressed for targeted training, skills development and employment programmes to allow the community

Table 11.1.: Master Plan

Strategy	Chapter reference	Action area	Strategy	Justification
			<div>▪ Targeted training and related employment initiatives tailored to a rural, remote community and areas of interest</div> <div>▪ Tourism industry infrastructure and promotion to link with the Goodooga bore bath initiative</div>	to become be more self-sufficient, so that families and individuals are able to be financially secure and independent, and so that the community as a whole is better placed to maintain its assets, meet its needs for human services, and manage its land.

11.4 Defining need for growth

At the time of the MPRH&BC household survey, the Weilmoringle community demonstrated a waiting list for Aboriginal social housing. The age profile of the community is such that those in search of their own housing are young people or couples without children. The estimate of housing need shown at Table 5.23 and Table 11.2 is derived by extending the findings of the MPRH&BC household survey across all Aboriginal households to estimate need arising from those that did not participate.

Table 11.2 puts an order of cost against increased supply based on new builds.

Table 11.2: Estimated cost of new builds (GST excl)

Number of bedrooms	GFA (m2)	Unit cost (\$/m2)	No	Estimate (\$)
2	120	3,470	4	1,665,600
3	160	2,850	-	-
4	185	2,850	-	-
5 and more	200	2,850	-	-
Total				1,665,600

The Land Council has confirmed the need for four two-bedroom dwellings to add to the housing portfolio and indicated that two families are on the waiting list for four-bedroom houses. Table 11.2 is revised to provide for the additional need by Table 11.3.

Table 11.3: Revised estimated cost of new builds (GST excl)

Number of bedrooms	GFA (m2)	Unit cost (\$/m2)	No	Estimate (\$)
2	120	3,470	4	1,665,600
3	160	2,850	-	-
4	185	2,850	2	1,054,500
5 and more	200	2,850	-	-
Total				2,720,100

The MPRH&BC household survey did not record any social housing respondents describing their properties as 'condemned' or 'unliveable'. This HEHP takes the position that scoping of properties

is unlikely to reveal any existing houses beyond economic repair that will require a decision on serviceability. Only one larger dwelling lost to fire is therefore identified for replacement. Estimated order of cost for replacement housing is given by Table 11.4.

Table 11.4: Estimated cost of replacement housing (GST excl)

Number of bedrooms	GFA (m2)	Unit cost (\$/m2)	No	Estimate (\$)
2	120	3,600	-	-
3	160	2,900	-	-
4	185	2,900	-	-
5 and more	200	2,900	1	580,000
Total				580,000

11.5 Housing extensions and modifications

Expressed need for extensions projected across all properties, is stated in Table 11.5. A budget of \$35,000/extension is allowed for extension and \$4,000 for each home modification.

Table 11.5: Requirement for housing extensions and modifications

Extensions (Factor 21/17)	Bedrooms		
	1	2	3
Number of extensions	2	-	-
Total number of bedrooms	2	-	-
Modifications			
Number of dwellings			
-			

Estimated budget to attend to extensions and modifications listed in Table 11.5 is given in Table 11.6.

Table 11.6: Estimated budget for housing extensions and modifications

	Estimate (\$)
Extensions	70,000
Modifications	-
Total	234,000

11.6 Asset preservation

Estimated costs for routine repair and maintenance including planned maintenance, and for any works such as roof replacement, foundation packing and releveling if any, required to attend to immediate restoration and asset preservation are summarised in Table 11.7.

Table 11.7: Repair and maintenance, probable order of cost

	Cost (\$)
Property repair, maintenance and upgrade	920,000
Particular works	
Total	920,000

Average expenditure is \$43,800 per property. It should be noted that most of these houses are old and have experienced a good life but are approaching the end of their serviceability.

11.7 Infrastructure

Table 7.12 itemises infrastructure elements of concern to the CWP. The Wyaliba community is included into the NSW Government Roads2Home programme and should benefit from upgrades to:

- Road surfaces and kerb, guttering and footpaths;
- Stormwater drainage;
- Street and public space lighting;
- Community transport.

Additionally, Brewarrina Shire Council is responsible for water and sewerage services to the Wyaliba community under the NSW Department of Planning, Industry and Environment Aboriginal Water and Sewerage Programme which ensures these essential services remain operational.

In consequence, no allowance is made for works of any infrastructure item.

11.8 Probable order of cost

Probable orders of cost for each strategy are summarised in Table 11.8. The estimates were prepared on the following basis:

- Costs for building-related work are derived from industry standard cost information and/or for project costs for similar work in the Murdi Paaki Region;
- Prices are current to September 2020;
- An index appropriate to locality is applied;
- Building costs assume that construction takes place in accordance with MPS procurement practice. Projections may need to be re-evaluated if training schemes are integrated;
- Allowance for project management has been assumed to be generally between 10% and 15% of the construction budget depending upon the nature of the work involved and the degree of investigative work required; and
- Estimates are stated as GST exclusive.

Table 11.8: Probable orders of cost, housing and environmental health infrastructure

Description	Order of cost (\$)
Planning and development	21,000
Land acquisition	-
Site infrastructure	-
New housing supply	2,720,100
Replacement housing	580,000
Housing extensions	70,000
Housing modifications	-
Repair and maintenance	920,000
Infrastructure	-
Sub-total	4,311,100
Unquantified risk allowance (5%)	214,500
Project management (12.5%)	536,300
Programme admin (3%)	128,700
Total	5,190,600

No costs have been assigned to improvement in human services because these services are already the subject of government programme planning

and resource allocation processes. Performance monitoring of government services is a key area of focus under the OCHRE Murdi Paaki LDM Accord II and Accord processes should be brought to bear on areas of underperformance. With consistent themes emerging across the Murdi Paaki Region, many recommendations will have regional application and universal application locally.

11.9 Funding sources

Funding for works and measures proposed by Table 11.1 and Table 11.8 will need to be negotiated through the RAHLA as the principal decision-maker on matters of Aboriginal social housing in the Region. Neither ACHP is in a financial position to contribute to these extraordinary costs from revenue derived from property rents and subsidies so realising a solution is dependent upon grant funding from governments.

11.10 Staging of works

Repair and maintenance work should be programmed to proceed as one integrated contract following scoping. Programming may be subject to building sector interest, and to the capacity which can be mobilised in a market environment where there is likely to be activity in other communities. It may be practical to link the repair and maintenance work with new builds and extensions to create a complete and substantial works package as was the case with ACDP but a decision can only be made once the level and timing of financial investment is known. At this stage, the option of using the project as a vehicle for an Aboriginal training and/or employment scheme will become clearer thereby requiring a balance between the need to satisfy community housing needs with the benefits of skills acquisition. A skills audit and assessment of interest has not been attempted so conceptualisation of a training and employment strategy remains to be carried out.

12 APPENDIX 1: INFRASTRUCTURE DETAILS

Weilmoringle Aboriginal Communities Development Programme Infrastructure Works

Handover Manual (For Reference Only)

Section	Page
Introduction	1
Infrastructure works generally	1
Water supply – Potable water	3
Water supply – Raw water	6
Wastewater	8
Stormwater	11

Figures

- 1 Location Plan
- 2 Potable water supply – Headworks and storage
- 3 Potable water supply – Storage compound
- 4 Potable water reticulation
- 5 Raw water supply – Headworks and storage
- 6 Raw water reticulation
- 7 Sewerage
- 8 Wastewater treatment lagoons

Technical manuals

Sewer sump pump – Installation and operating instructions

Borehole pumps – 4" submersible borehole pumps J and SR series

INTRODUCTION

1 GENERAL

Installation manual

General: This manual identifies the details of the hydraulic-related infrastructure upgraded under the NSW Department of Aboriginal Affairs *Aboriginal Communities Development Programme* during the period 2005 to 2006.

Construction

Contractor:

- Contractor: Mathews Civil and Asphalt Pty Ltd.
- Telephone: (02) 6884 9007.
- Contact: Mark Mathews.

Local participation: The Contractor was ably assisted for the duration of the construction works by the two Weilmoringle Healthy Housing Workers. The workers are familiar with the details of all installations.

Suppliers

Pump installations:

- Hydraulics: Outwest Pumps, Dubbo.
- Electrical switchgear: R N Baker Switchboards, Dubbo.

Scope of Works

The Contractor undertook refurbishment work to improve the condition and reliability of essential community infrastructure:

- Potable water supply to improve security of supply and quality.
- Raw water supply to improve security of supply.
- Wastewater to remove pipe blockages, replace failing mechanical/electrical plant and ensure effective treatment processes.
- Road and drainage works to provide a completely reconstructed road access and to fully remove stormwater from within the perimeter levee.
- Levee realignment to create additional space for housing development.

2 EXECUTION

Work on infrastructure

Caution: Before attempting work on any infrastructure components, seek the advice of the Contractor.

Services

Other infrastructure components: Power and telecommunications services are present on the site adjacent to hydraulic services.

INFRASTRUCTURE WORKS GENERALLY

1 GENERAL

Condition of pre-existing

A survey of community infrastructure at the time of preparation of the Community housing and Environmental Plan (CH&EHP) in 2000 revealed serious deficiencies with all assets. The CH&EHP recommended a programme of replacement and refurbishment to restore amenity and safety. With the exception of levee reconstruction, all works have been funded and carried out in accordance with the CH&EHP.

2 IMPROVEMENT WORKS

Extent

The main elements of the final works are:

Potable Water Supply

- Laying of a new gravity transfer main from the West Ram bore to the town storage tanks as the primary supply.
- Refurbishment of Weilmoringle Town bore headworks, including new submersible pumpset.
- Laying of upvc distribution main and reticulation, and associated valves and fittings to the Wyaliba Community.
- Upgrading of service connections as demand management measure to reduce external usage.

Raw water supply

- Sealing of Weilmoringle weir.
- Replacement of raw water pumping station complete with stand and electrical and control gear, and river abstraction pump(s).
- Replacement of elevated bolted steel tank with smaller of 22.5 kL capacity, and jacking of tower to vertical.
- Provision of fire hydrants.

Sewerage

- Construction of manholes to assist in rodding.
- Construction of sewer extension to service new development.

Sewage Transfer System

- Demolition of existing pump station and construction of new package type pump station.
- Cleaning and repair of collection chamber.
- Construction of overflow storage tank.

Sewage Treatment Plant

- Replacement of inlet structure.
- Refurbishment of oxidation and maturation ponds, and of two evaporation ponds.

Levee Reconstruction

- Realignment of levee at northern end of Wyaliba Community to provide space for new housing development.
- Overhaul of outlet culvert floodgates.

INSTALLATION DETAILS

- Formation of stormwater drainage channel at inner toe of levee along eastern side connecting to levee outfall.

Road and Drainage Reconstruction

- Reconstruction of bitumen sealed road pavement, including basecourses.
- Reconstruction of roll kerb and gutter to eastern side, and providing a flush kerb on the high side.
- Cleaning existing drainage pipes in Brown Street where re-useable, and laying RCP to improved falls where required, reconstructing kerb inlet pit inlets and introduction of sediment control structure to reduce sediment build up in pipes.

Solid waste management

- Filling of existing cell and excavation of a new cell, including erecting a flank litter fence.

Details

Details of individual elements are contained in the following sections.

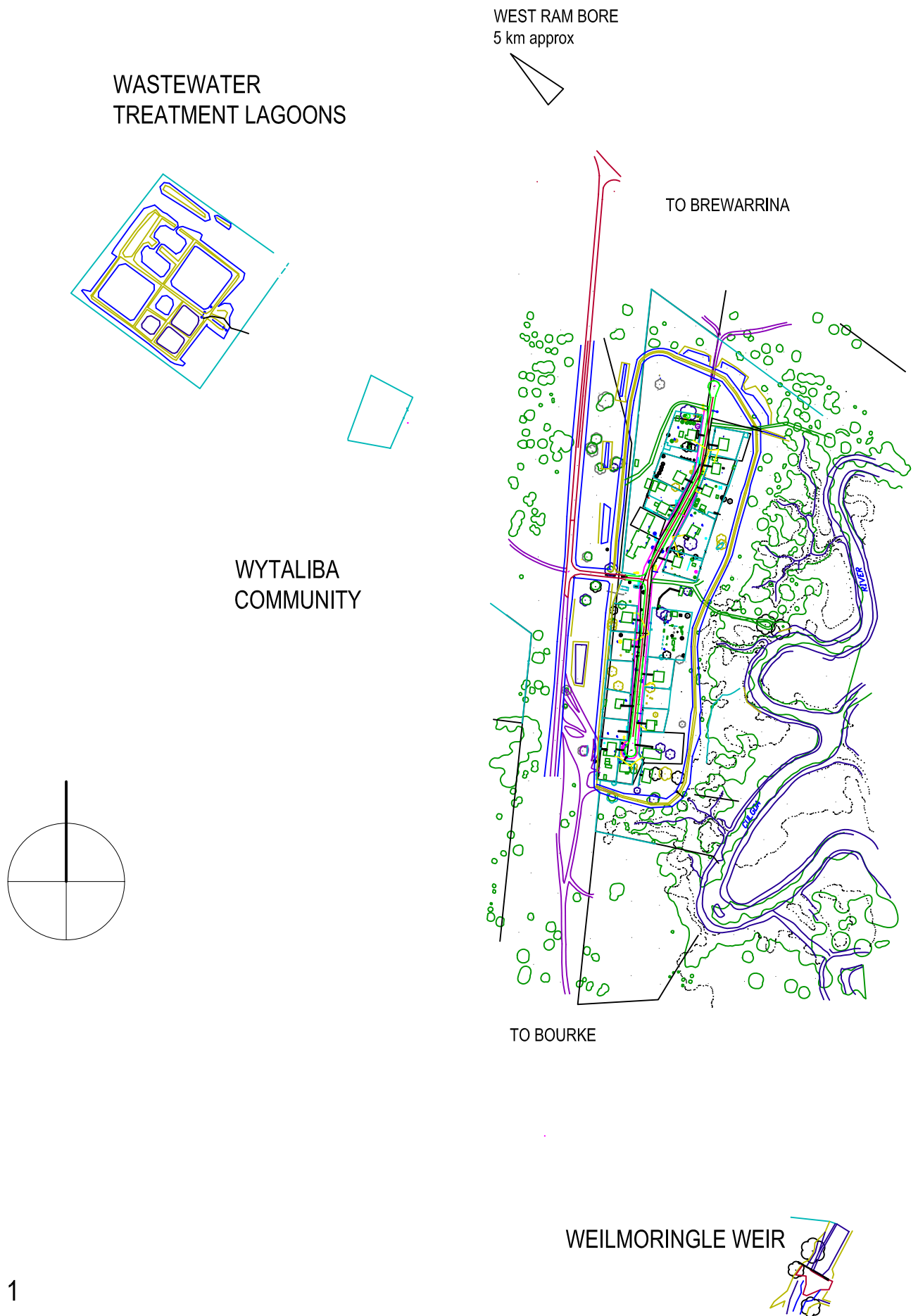


FIGURE 1
WEILMORINGLE INFRASTRUCTURE
LOCATION PLAN
Diagrammatic

INSTALLATION DETAILS

WATER SUPPLY – POTABLE WATER

Works	Item	Specification	Details	Comments
Headworks	Groundwater abstraction (West Ram Bore)	Single borehole GW039436 drilled to 617 m depth Drilled 1989	Minimum reliable yield of 0.78 L/s Pressure 675 kPa	Artesian flow
	Groundwater abstraction (Weilmoringle Town Bore)	Single borehole GW021262 drilled to 617 m depth Drilled 1966	Minimum reliable yield of 0.19 L/s Salinity 500 – 1,000 ppm	Submersible pump installed as back up supply to town system
	Transfer main	5,500m x DN75 PE C6.3 SDR21 5,500m x DN50 PE Class 9	To AS 4130	For town water supply purposes For stock watering purposes
	Treatment Plant	Nil		
Pumping plant	Weilmoringle Town Bore	Submersible unit	Unit: Davey N760D Rating: 60 L/min Power: 0.56kW 240V	Pump installed at 20 m depth on screwed pipe string
Storage	High level storage	3 x circular roofed steel tanks of 4.0m ϕ and 1.8m water depth on 9m high tank stands	Capacity 67.5 kL interconnected	Sealing of hatches requires to be monitored periodically to ensure that contamination of supply does not arise from entry of external vectors
Distribution	Distribution and reticulation	DN100 PVC-M Class 12 RRJ	To AS/NZS 4765	Gate valves incorporated for sectional isolation of reticulation

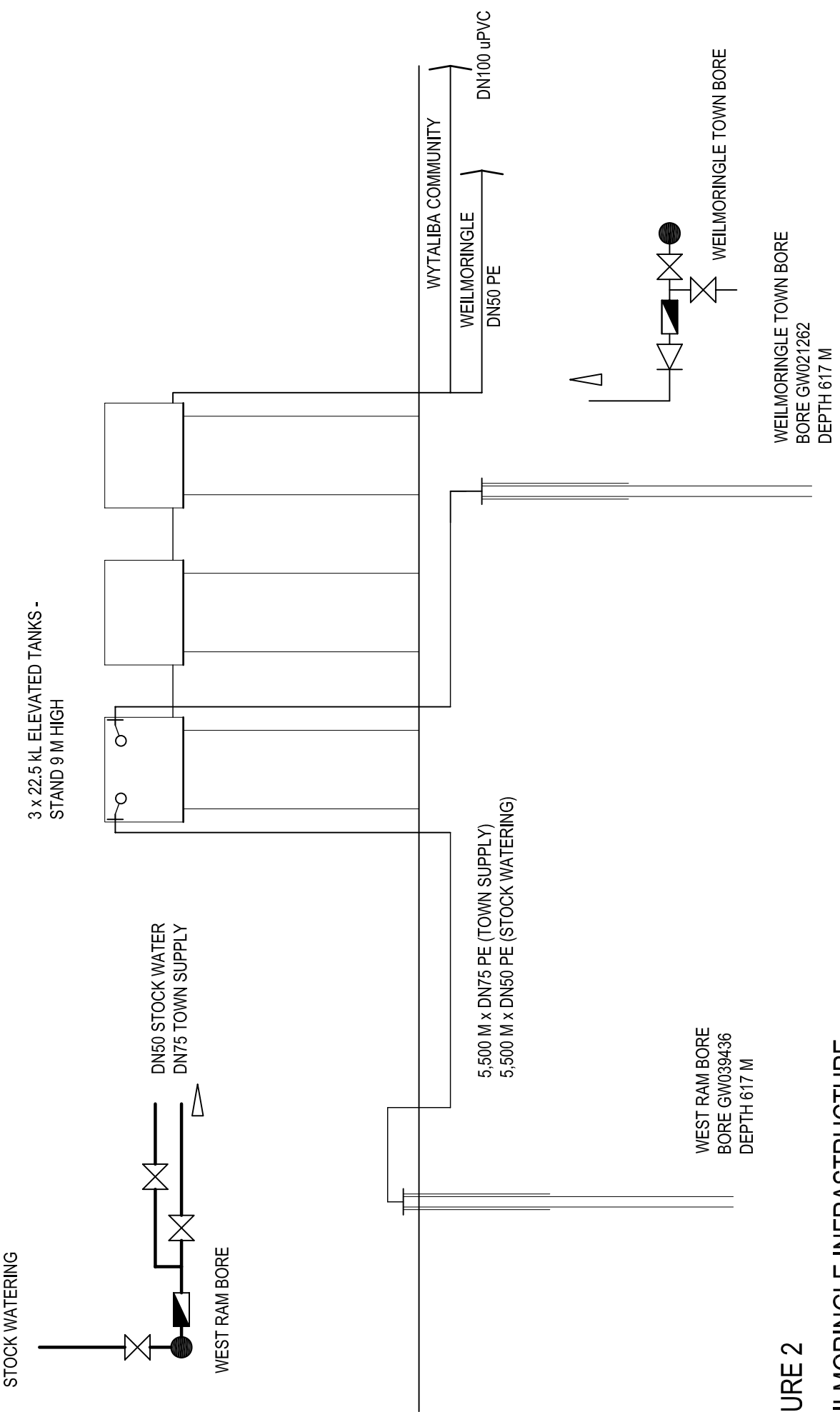


FIGURE 2
WEILMORINGLE INFRASTRUCTURE
POTABLE WATER SUPPLY - HEADWORKS and STORAGE
Diagrammatic

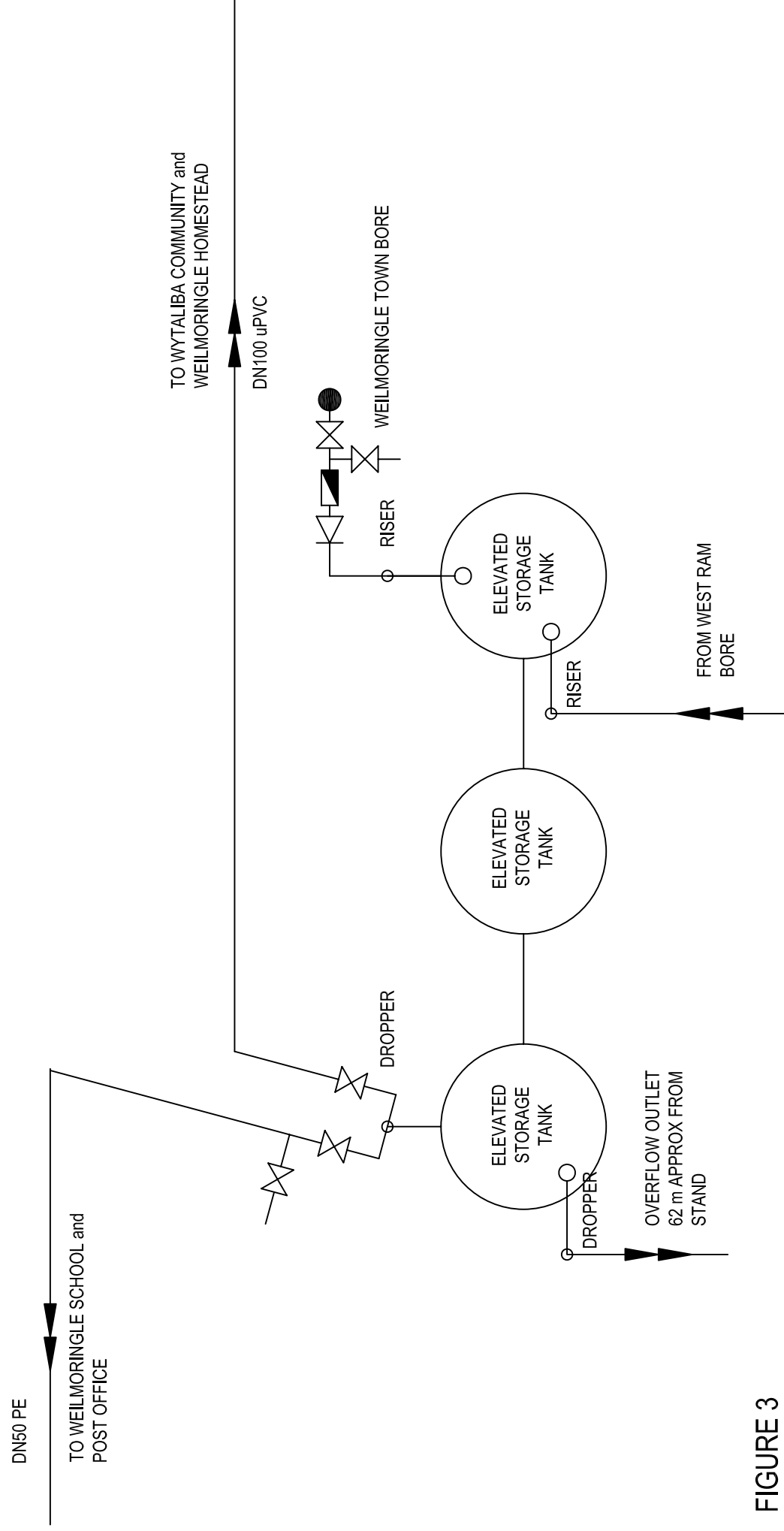
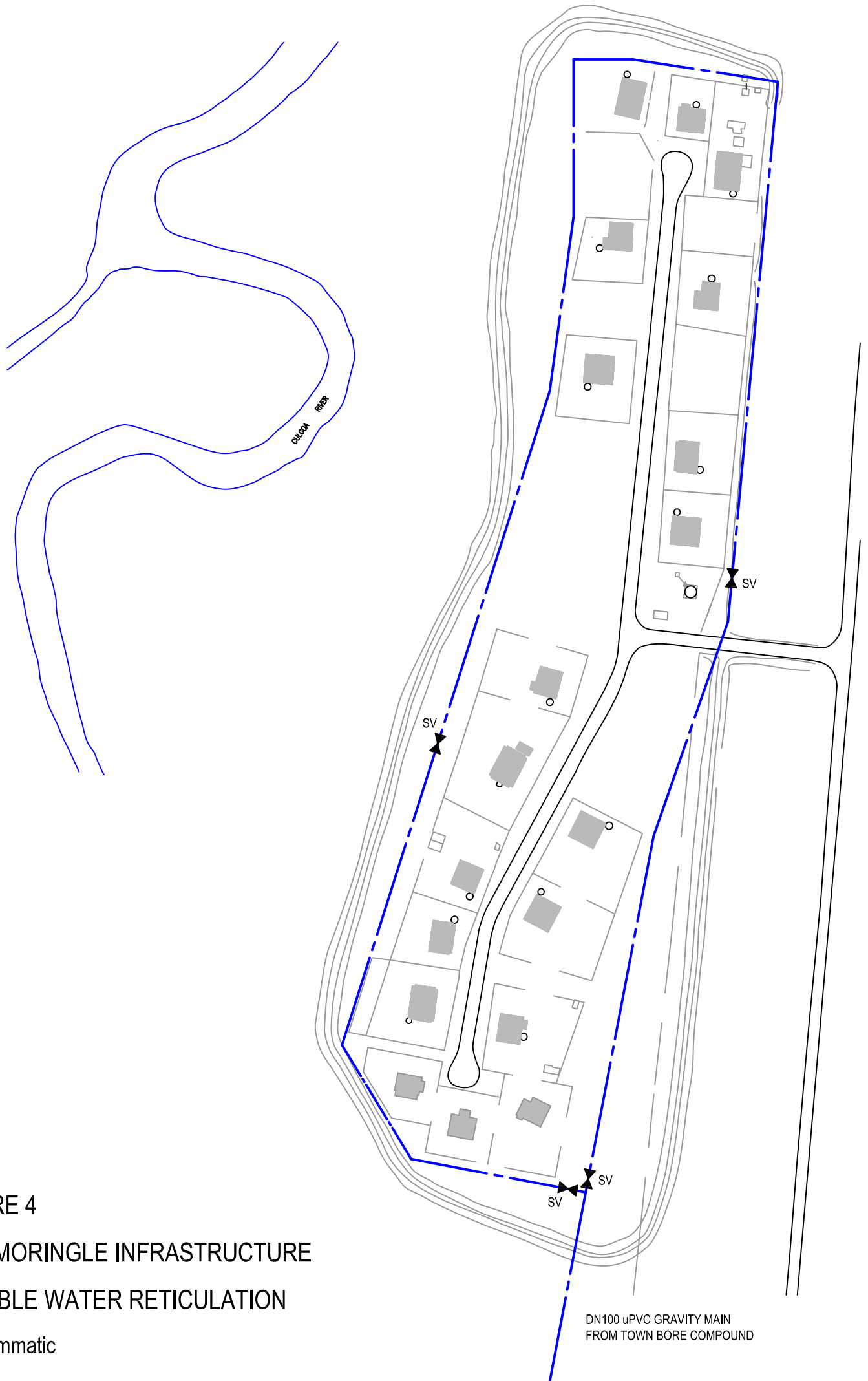


FIGURE 3

WEILMORINGLE INFRASTRUCTURE

POTABLE WATER SUPPLY - STORAGE COMPOUND

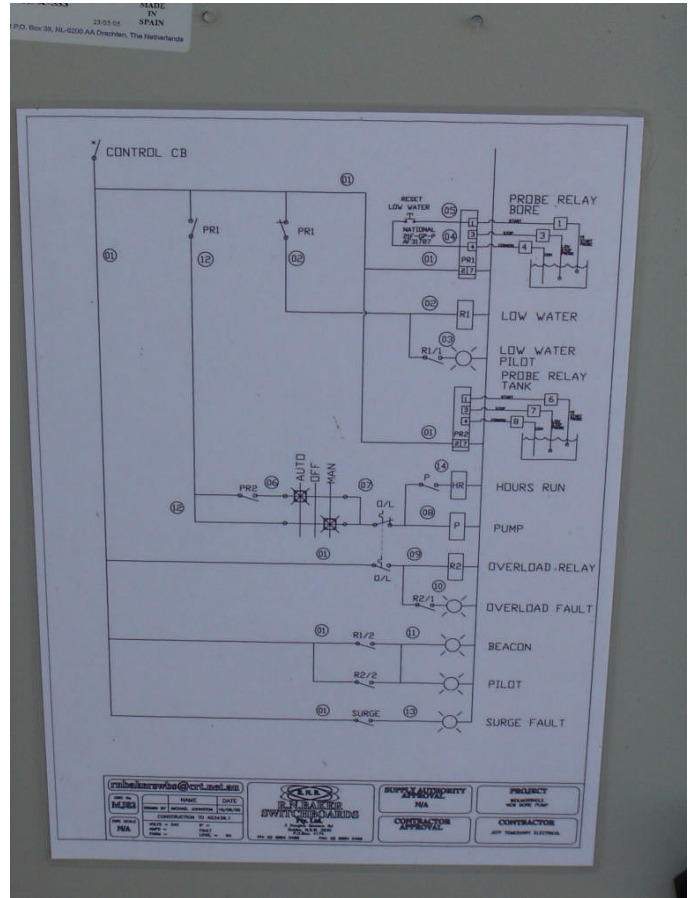
Diagrammatic



DN100 uPVC GRAVITY MAIN
FROM TOWN BORE COMPOUND

FIGURE 4
WEILMORINGLE INFRASTRUCTURE
POTABLE WATER RETICULATION
Diagrammatic

INSTALLATION DETAILS



Left top: West Ram bore compound

Right top: West Ram bore

Left upper centre: Weilmoringle Town bore

Right centre: Weilmoringle Town bore control panel diagrammatic

Left lower centre: Weilmoringle Town bore control panel



Left top: Weilmoringle town storage

Left centre: Outlet from Weilmoringle town storage

INSTALLATION DETAILS

WATER SUPPLY – RAW WATER

Works	Item	Specification	Details	Comments
Headworks	Weir	Rock protected double wall sheet piled structure Crest width 15.8m	U/s face Larssen 4B piling D/s face trench sheeting Core 1.0m wide rockfill concrete capped	Piling is tied back by wrapped 20 mm steel rod to anchors located at about 1.2 m depth in upstream clay shoulder. Bypass valve located in abutment is serviced and operable. Wire basket filter inlet to bypass line refurbished
	Raw water pumping station	Single submersible unit installed horizontally under pontoon assembly	Unit: Davey J30250D-2 Serial No: 0404GG73111 Rating: 250L/min @ 20 m hd Power: 2.2 kW 240V Johnson Controls PENN electronic pressure control system with display	Pump operation controlled by pressure switch at control housing Standby unit located in CDEP shed Period of operation controlled by availability and adequacy of river flows
	Rising main (river) Rising main (in ground) High level storage	DN63 Class 10 SDR 17 PE DN100 uPVC Circular roofed steel tank of 1.8m water depth on 14.4m high tank		Strapped to old steel riser
Storage			Capacity 22.5 kL	Avoid leakage from associated pipework. Tower was jacked vertical as part of works following consolidation of saturated foundation (200 out of plumb)
Distribution	Reticulation	DN100 uPVC spur main		Hydrants provide on the premise that the Weilmoringle fire tender was to be repaired and made operational. Unit has been sold and will not be replaced until a secure purpose-built shed is provided
	Irrigation reticulation	DN 50 PE ring main at rear of kerb		

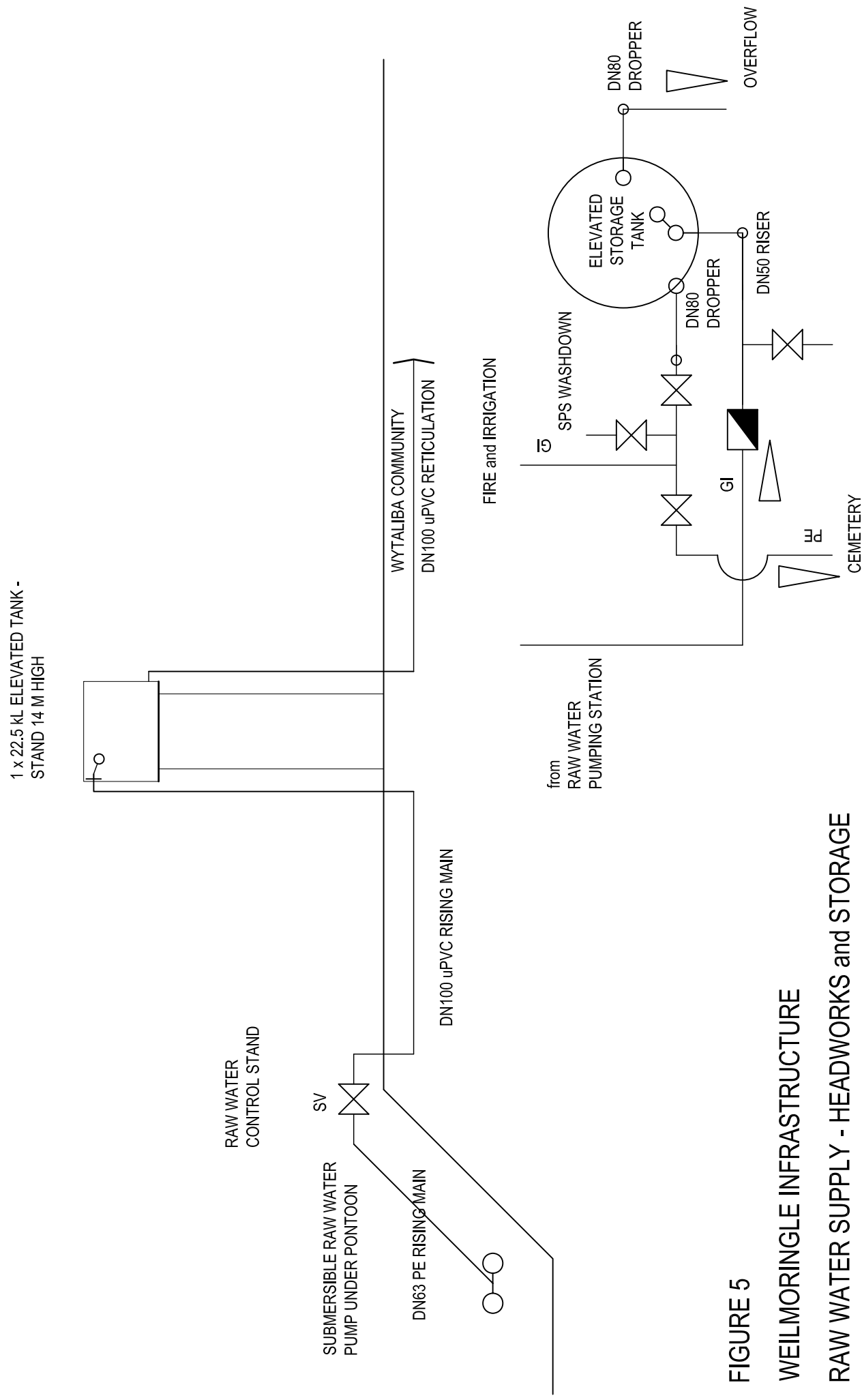


FIGURE 5
WEILMORINGLE INFRASTRUCTURE
RAW WATER SUPPLY - HEADWORKS and STORAGE
 Diagrammatic

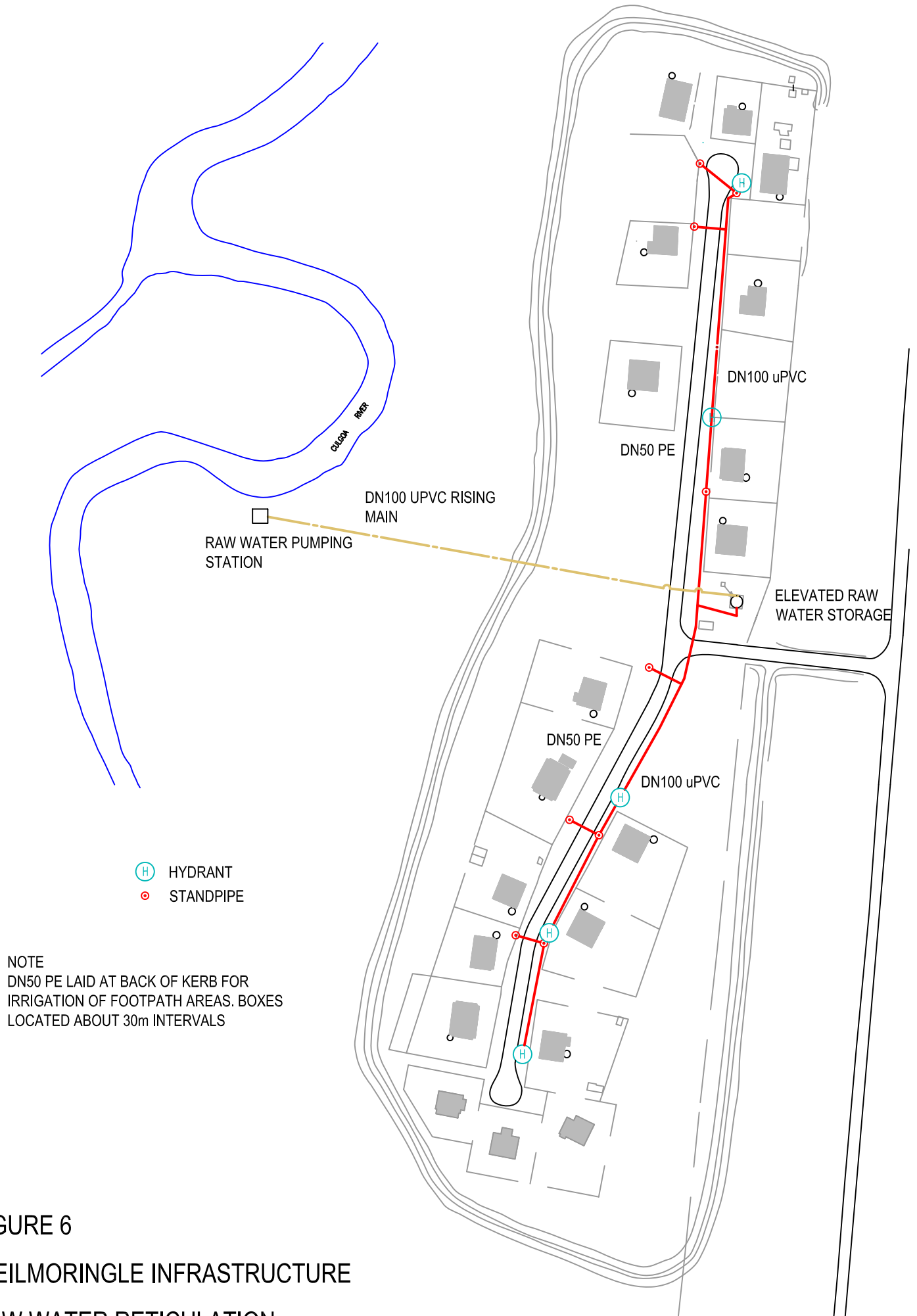


FIGURE 6

WEILMORINGLE INFRASTRUCTURE

RAW WATER RETICULATION

Diagrammatic



Left top: River abstraction plant on dry river bed

Left centre: River abstraction pumps control platform

Left bottom: Wyaliba Community raw water storage pipework connections

Above top: River abstraction plant in operational mode

Above centre: Wyaliba Community raw water storage tank



Opposite: Weilmoringle weir



INSTALLATION DETAILS

WASTEWATER

Works	Item	Specification	Details	Comment
Collection	Reticulation	150 gravity sewerage at about 1% grade Circular precast concrete manholes at ≤55m c/s		Occasional blockage arising from backup from collection well
Transport	Sewage pumping station	Standard twin grinder wet well assembly comprising precast concrete pump well 1.80m dia and 6.18m deep Upstream collection well Overflow chamber 3.0m dia and 4.18m deep	Units: Davey D150G duty/standby grinders Rating: 120 L/min @ 16 m head Power: 1.5 kW 240V	Float switches to pump well occasionally restricted by heavier than normal scum layer. Periodic jetting required to break down scum
Treatment	Rising Main Facultative Lagoons	DN50 PE Four pond facultative lagoon system	Original Oxidation pond Maturation pond Duty and standby evaporation ponds	System is conservatively designed and under normal flow conditions only the oxidation pond fills. No overflow to maturation pond occurs. Pumped inflow can be directed to maturation pond by resetting stop logs and operating control valves if it is necessary to evacuate the oxidation pond for cleaning. Stop logs direct maturation pond overflow to either or both evaporation ponds

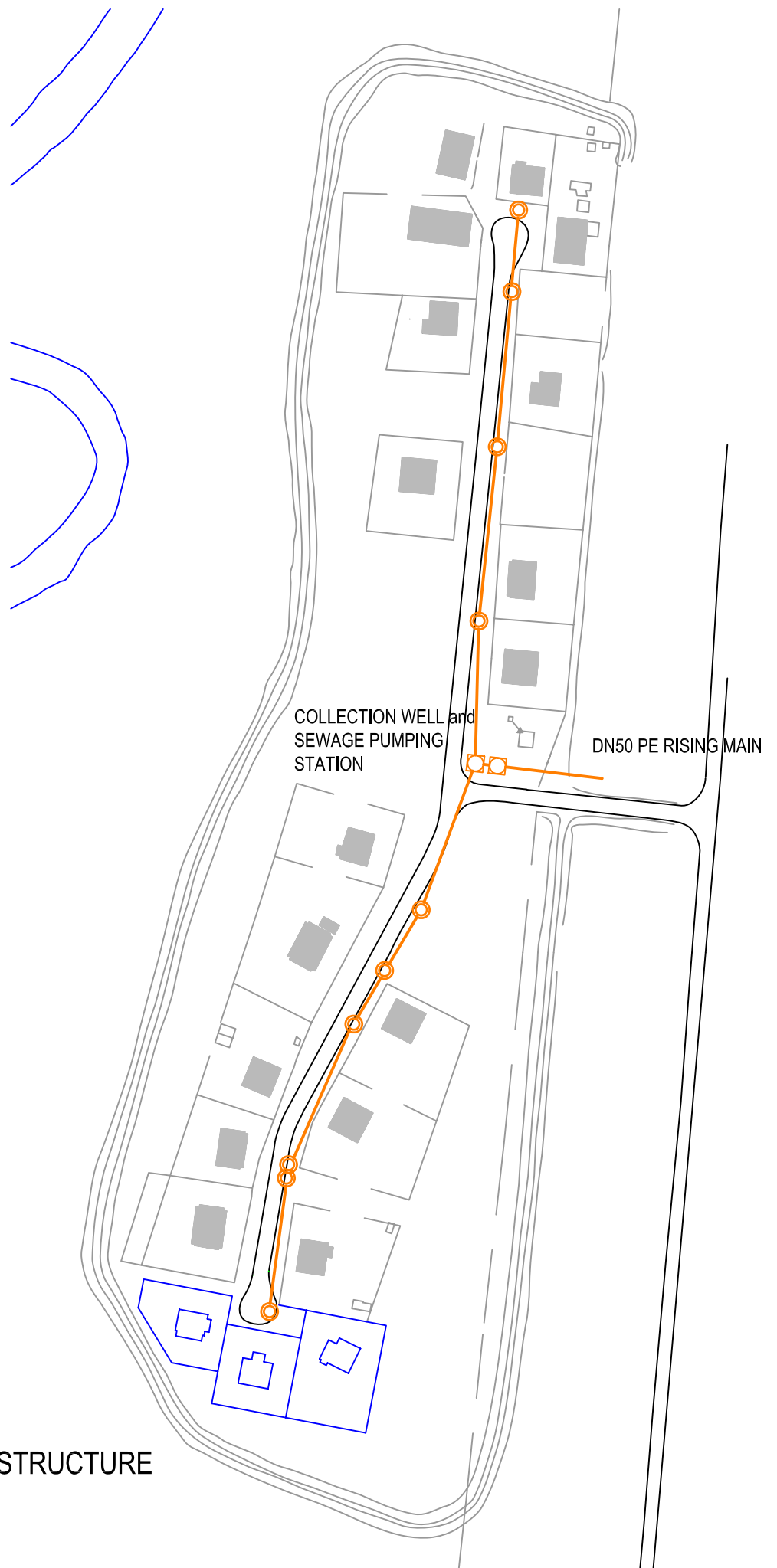


FIGURE 7

WEILMORINGLE INFRASTRUCTURE

SEWERAGE

Diagrammatic

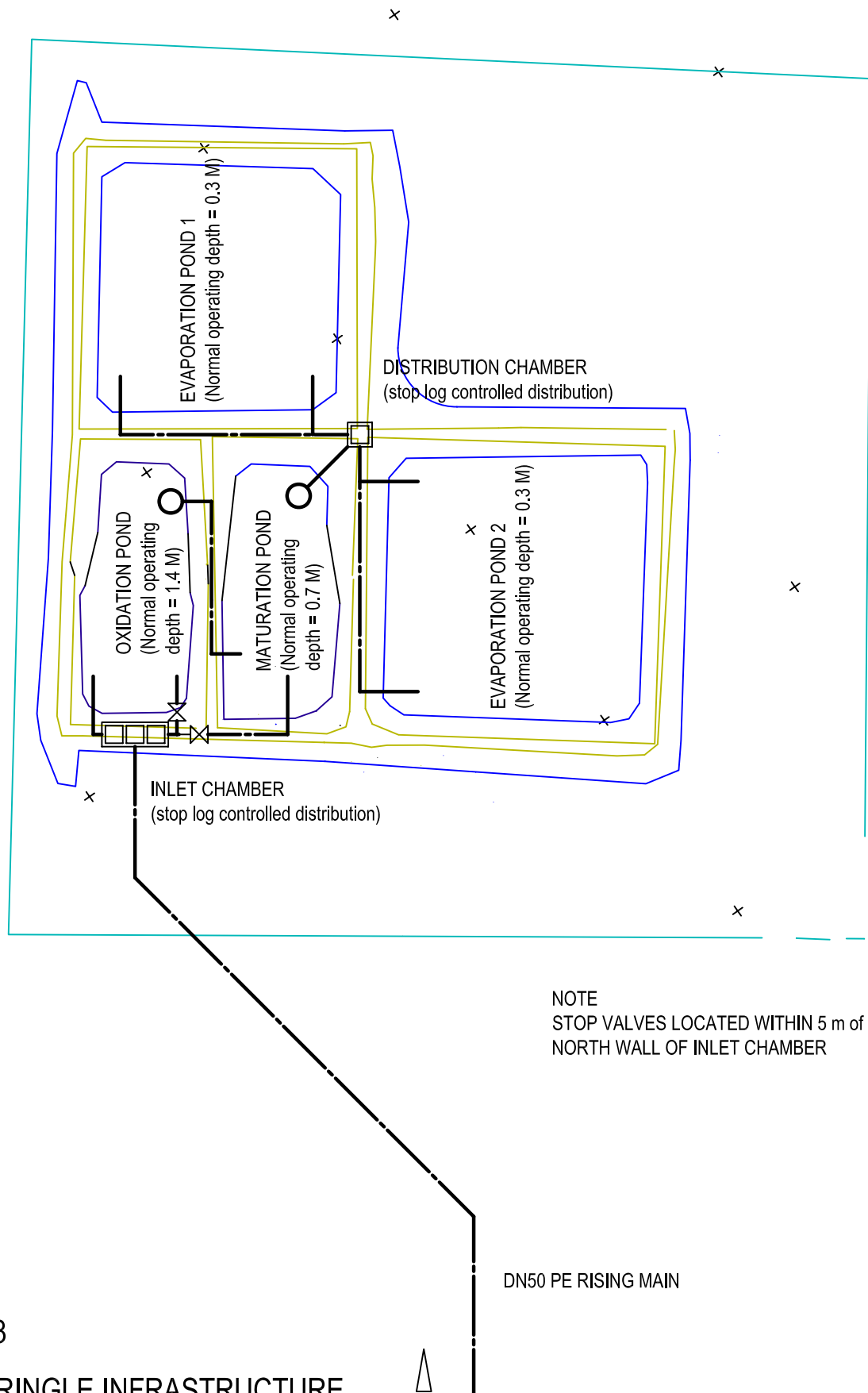


FIGURE 8
WEILMORINGLE INFRASTRUCTURE
WASTEWATER TREATMENT LAGOONS
Diagrammatic

INSTALLATION DETAILS



Left top: SPS pump well

Left upper centre: SPS pump well surround

Left lower centre: SPS rising main pipework

Left bottom: Pump well connection to overflow chamber

Below: SPS installation comprising pump well with control panel, collection well and overflow chamber (nearest)





Left top: Facultative lagoons inlet structure

Left upper centre: Oxidation pond inlets

Left lower centre: Oxidation and maturation pond baffled outlet structure

Left bottom: Oxidation pond in use

STORMWATER

1 GENERAL

Description

Levee: Northern and southern manually operated penstocks always in open position except in time of flood. Culverts are 450 RCP.

Kerb and gutter: Graded in 'saw tooth' profile to improve falls into adjacent kerb inlet.

Road drainage: Single 450 RCP to low side of road falling from south to north. Pipe runs in fenced laneway to the north of 19 Brown Street to discharge through the levee at the northern gated outlet.

Roof drainage: DN100 stormwater road crossings from yards on high side connecting to pits.

Sediment control: Trap located opposite 7 Brown Street.

Left upper centre: Kerb inlet, reconstructed on existing chamber

Left lower centre: RCP connection to northern gated outlet culvert

Below: Northern control penstock



4" SUBMERSIBLE BOREHOLE PUMPS J & SR SERIES

DEPEND ON
DAVEY

WATER PRODUCTS

4" BOREHOLE PUMPS

PRODUCT DESCRIPTION

Slimline submersible borehole pumps suitable for 4" or larger bore holes. Manufactured from corrosion & abrasion resistant materials. Close coupled to a submersible electric motor. Designed for flow rates up to 375 lpm & heads up to 275 metres.

APPLICATIONS

- Domestic water supply
- Turf watering
- Irrigation
- Stock watering
- Dewatering
- Water treatment

FEATURES & BENEFITS

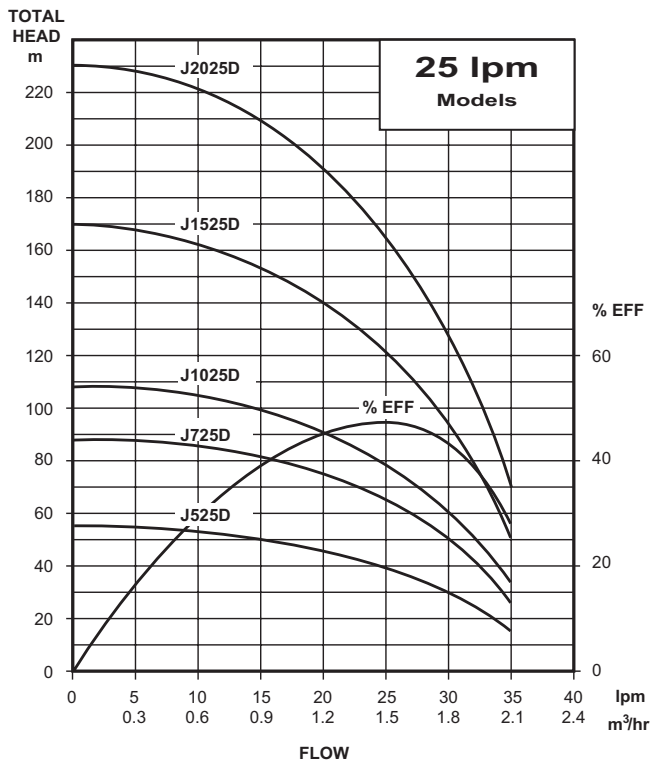
- Proven & reliable design for harsh Australian conditions
- Manufactured from quality corrosion resistant materials for long life
- Specific impeller material selection ensures optimal performance in sandy bores
- 25, 40 & 60 lpm models feature independently floating centrifugal (radial) impellers to provide easy starting and long life - automatically adjusting to pumping conditions for each application
- 80, 110, 160, 250 & 300 lpm models feature locked stack partial mixed flow impellers with open waterways to provide easy starting and long life
- Heavy duty stainless steel outer casing shell providing protection and accurate alignment of internal components
- High quality shaft bearings providing low friction and high wear resistance
- Pump & motor are easily serviceable
- Heavy duty cast stainless steel discharge bowl with large durable lifting eye and built-in check valve for long life and ease of installation
- Strong hexagonal section drive shaft of premium stainless steel ensures positive impeller drive and longer life
- Standard 2 pole speed motor (2850rpm) limits internal velocities for longer life

OPERATING LIMITS

Nominal flows	25, 40, 60, 80, 110, 160, 250 & 300 lpm
Maximum flow	375 lpm (22.5m ³ /hr)
Heads	275 metres
Motors	0.37kW (1/2hp) to 7.5kW (10hp)
Maximum water temperature	Up to 30°C after which special motor cooling and derating applies up to 55°C (see page 8)

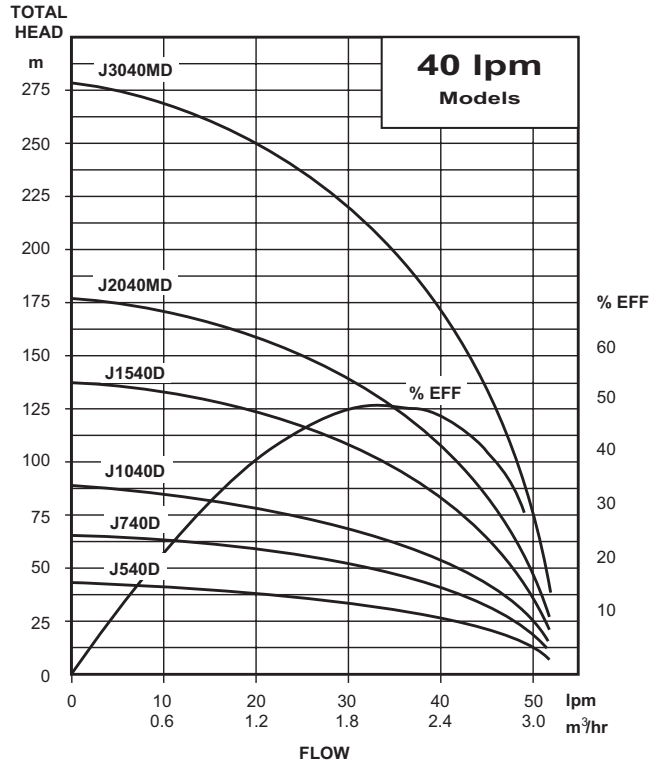
PERFORMANCE CURVES - 25, 40, 60 & 80 lpm

25 lpm MODELS



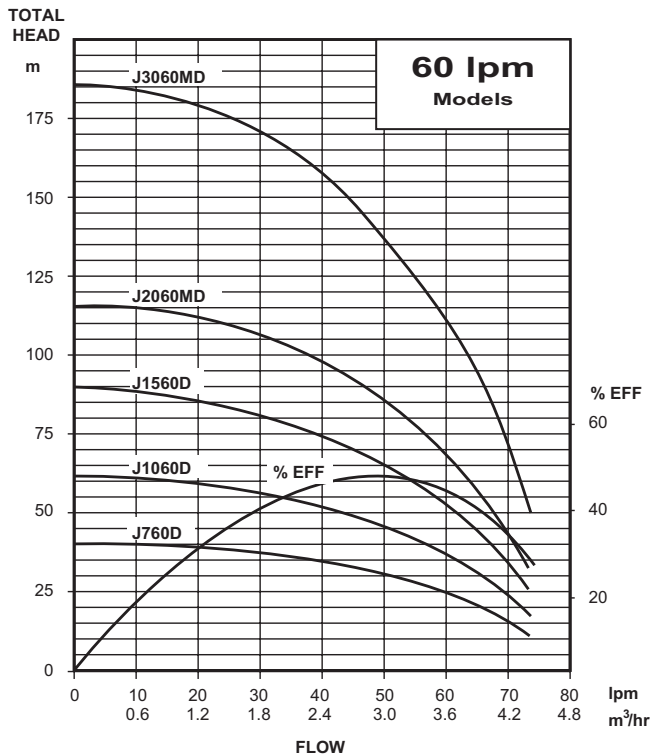
	Motor kW (P ₂)				
	0.37	0.56	0.75	1.1	1.5
Model	J525D	J725D	J1025D	J1525D	J2025D

40 lpm MODELS



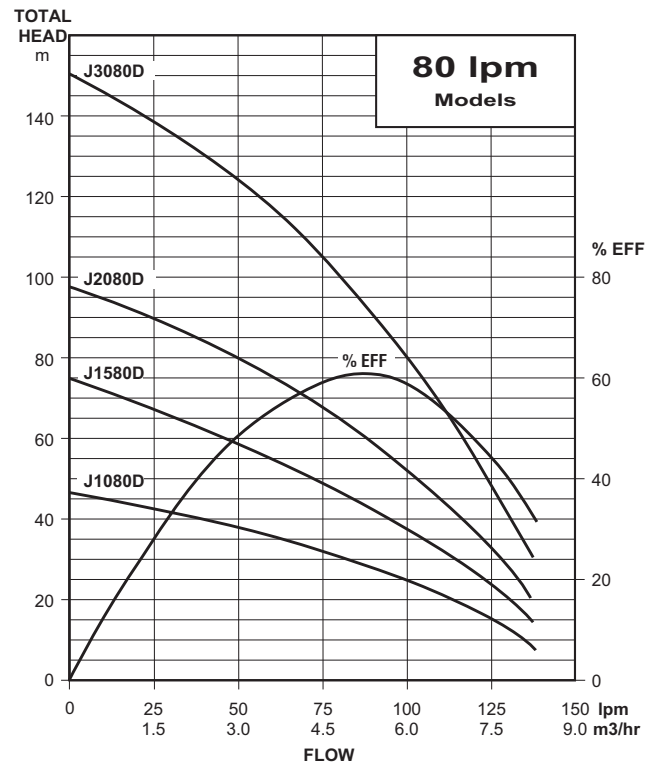
	Motor kW (P ₂)					
	0.37	0.56	0.75	1.1	1.5	2.2
Model	J540D	J740D	J1040D	J1540D	J2040MD	J3040MD

60 lpm MODELS



	Motor kW (P ₂)				
	0.56	0.75	1.1	1.5	2.2
Model	J760D	J1060D	J1560D	J2060MD	J3060MD

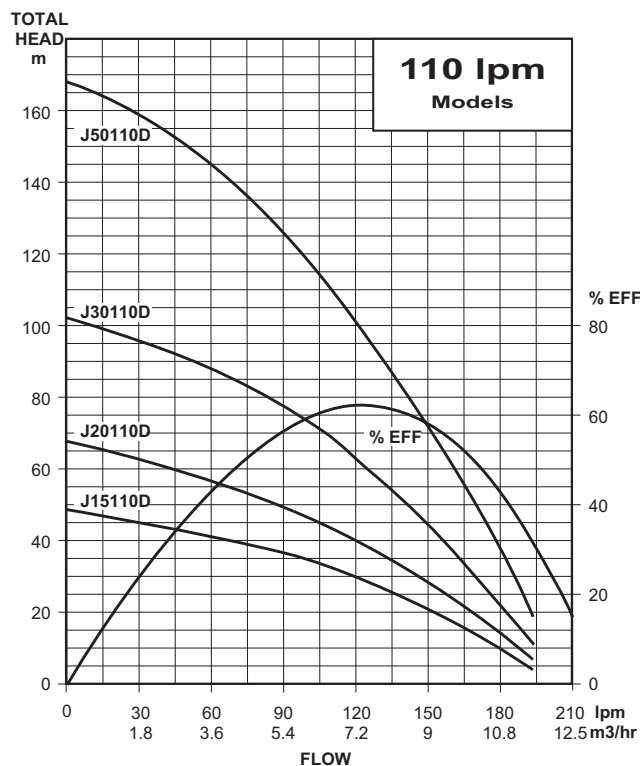
80 lpm MODELS



	Motor kW (P ₂)			
	0.75	1.1	1.5	2.2
Model	J1080D	J1580D	J2080D	J3080D

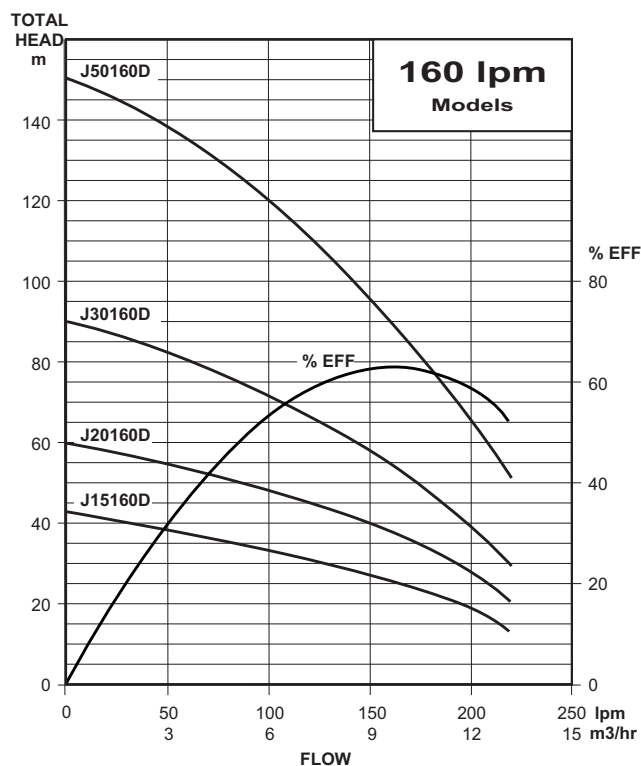
PERFORMANCE CURVES - 110, 160, 250 & 300 lpm

110 lpm MODELS



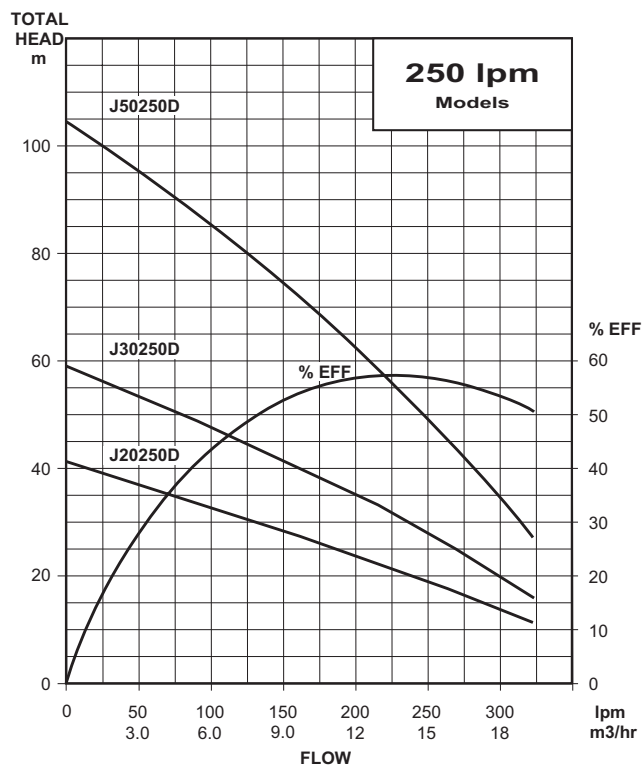
	Motor kW (P ₂)			
	1.1	1.5	2.2	3.7
Model	J15110D	J20110D	J30110D	J50110D

160 lpm MODELS



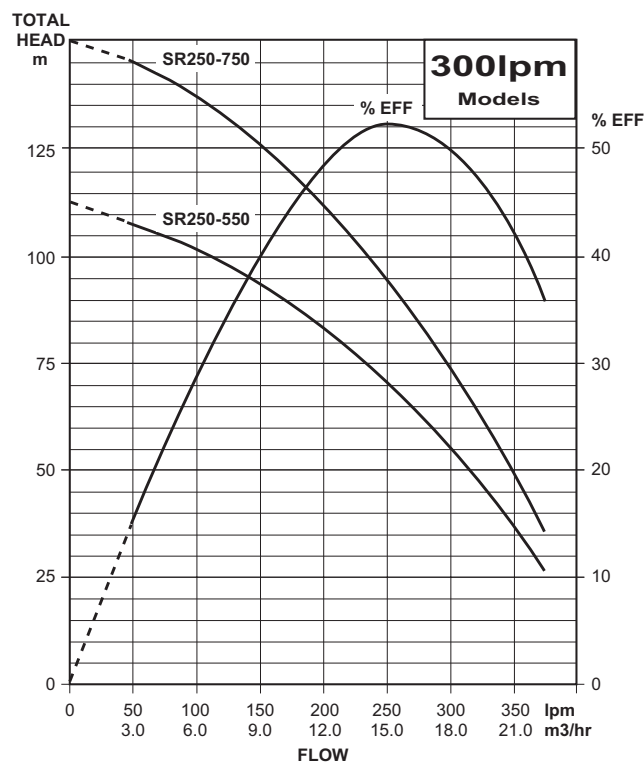
	Motor kW (P ₂)			
	1.1	1.5	2.2	3.7
Model	J15160D	J20160D	J30160D	J50160D

250 lpm MODELS



	Motor kW (P ₂)		
	1.5	2.2	3.7
Model	J20250D	J30250D	J50250D

300 lpm MODELS



	Motor kW (P ₂)	
	5.5	7.5
Model	SR250-550	SR250-750

TECHNICAL SPECIFICATIONS

MATERIALS OF CONSTRUCTION

25, 40 & 60 lpm MODELS

PART	MATERIAL
Discharge	303 Stainless Steel
Impeller	Polyester with Teflon fill
Diffuser	Polyester with Teflon fill
Shaft guide bearing	Buna-N
Pump casing	304 Stainless Steel
Shaft & Coupling	303 Stainless Steel
Wear rings	304 Stainless Steel
Check valve	Polyester with Teflon fill
Cable guard	304 Stainless Steel
Thrust washer (ea. stage)	Phenolic
Fasteners	302-304 Stainless Steel
Lower mounting bracket	SS reinforced Composite for up to 1.1kW
	Full SS 1.5 & 2.2kW
Suction strainer	304 Stainless Steel
Design Features	
Impellers	Floating
Check valve	Internal non-spin

80, 110, 160 & 250 lpm MODELS

PART	MATERIAL
Discharge	303 Stainless Steel
Impeller	Glass-filled Polycarbonate
Diffuser	Glass-filled Polycarbonate
Shaft guide bearing	Buna-N
Pump casing	304 Stainless Steel
Shaft & Coupling	303 Stainless Steel
Wear rings	304 Stainless Steel
Check valve	303 Stainless Steel&Acetal
Cable guard	304 Stainless Steel
Thrust washer (ea. stage)	Nyloil
Fasteners	302-304 Stainless Steel
Lower mounting bracket	Stainless Steel
Suction strainer	Stainless Steel
Design Features	
Impellers	Fixed
Check valve	External

300 lpm MODELS

PART	MATERIAL
Discharge	304 Stainless Steel
Impeller	Glass filled Polycarbonate
Diffuser	Noryl
Shaft guide bearing	Rulon
Pump casing	304 Stainless Steel
Shaft	304 Stainless Steel
Coupling	316L Stainless Steel
Check valve	304 Stainless Steel
Cable guard	304 Stainless Steel
Fasteners	304 Stainless Steel
Lower mounting bracket	304 Stainless Steel
Suction strainer	304 Stainless Steel
Design Features	
Impellers	Fixed
Check valve	External

RECOMMENDED FLOW RANGE

Model	Minimum flow		Maximum flow	
	lpm	gpm	lpm	gpm
J25	15	3.3	31	6.8
J40	30	6.6	45	9.9
J60	44	9.7	70	15.4
J80	50	11.0	100	22.0
J110	80	17.6	140	30.8
J160	100	22.0	210	46.3
J250	150	33.0	310	68.3
SR250-550	175	38.5	350	77
SR250-750	200	44	375	82

TECHNICAL SPECIFICATIONS

DIMENSIONS & WEIGHTS

Model	Discharge BSP Female	Motor Power (P ₂)		Stages	Pump Details		Assembled Units *			
		kW	hp		Length	Weight	Single Phase		Three Phase	
J525D	1 ¹ / ₄ "	0.37	1/2	8	432	4.1	674	12.2	655	11.2
J725D	1 ¹ / ₄ "	0.56	1/2	13	532	5.5	803	15	774	13.4
J1025D	1 ¹ / ₄ "	0.75	1	16	584	6.4	883	17	855	15.4
J1525D	1 ¹ / ₄ "	1.1	1 ¹ / ₂	25	826	8.2	1210	21.4	1125	19.2
J2025D	1 ¹ / ₄ "	1.5	2	33	990	11.8	1346	25.5	1318	23.8
J540D	1 ¹ / ₄ "	0.37	1/2	6	327	4.1	569	12.2	550	11.2
J740D	1 ¹ / ₄ "	0.56	1/2	9	396	4.8	667	14.3	638	12.7
J1040D	1 ¹ / ₄ "	0.75	1	12	466	5.4	765	16	737	14.4
J1540D	1 ¹ / ₄ "	1.1	1 ¹ / ₂	19	618	7	1002	20.2	917	18
J2040MD	1 ¹ / ₄ "	1.5	2	24	736	8.6	1092	22.3	1064	20.6
J3040MD	1 ¹ / ₄ "	2.2	3	38	1075	12.7	1536	30.4	1431	25.7
J760D	1 ¹ / ₄ "	0.56	1/2	6	352	4.3	623	13.8	594	12.2
J1060D	1 ¹ / ₄ "	0.75	1	9	431	5	730	15.6	702	14
J1560D	1 ¹ / ₄ "	1.1	1 ¹ / ₂	13	537	5.9	921	19.1	836	16.9
J2060MD	1 ¹ / ₄ "	1.5	2	17	646	7.3	1002	21	974	19.3
J3060MD	1 ¹ / ₄ "	2.2	3	27	929	10.9	1390	28.6	1285	23.9
J1080D	2"	0.75	1	8	513	6.1	812	16.7	784	15.1
J1580D	2"	1.1	1 ¹ / ₂	11	665	7.6	1049	20.8	964	18.6
J2080MD	2"	1.5	2	15	819	9.1	1175	22.8	1147	21.1
J3080MD	2"	2.2	3	23	1128	12.2	1589	29.9	1484	25.2
J15110D	2"	1.1	1 ¹ / ₂	8	618	8.2	1002	21.4	917	19.2
J20110D	2"	1.5	2	11	761	10	1117	23.7	1089	22
J30110D	2"	2.2	3	17	1040	13.7	1501	31.4	1396	26.7
J50110D	2"	3.7	5	28	1554	28.5	2252	57.5	2100	48.5
J15160D	2"	1.1	1 ¹ / ₂	7	652	7.6	1036	20.8	951	18.6
J20160D	2"	1.5	2	10	838	9.4	1194	23.1	1166	21.4
J30160D	2"	2.2	3	15	1148	12.5	1609	30.2	1504	25.5
J50160D	2"	3.7	5	25	1765	27.6	2463	56.6	2311	47.6
J20250D	2"	1.5	2	8	943	9	1299	22.7	1271	21
J30250D	2"	2.2	3	12	1293	20	1754	37.7	1649	33
J50250D	2"	3.7	5	21	2080	27.2	2778	56.2	2626	47.2
SR250-550	2"	5.5	7 ¹ / ₂	18	1173	11	N/A	N/A	1870	38.5
SR250-750	2"	7.5	10	24	1522	14	N/A	N/A	2296	46

All dimensions in mm and weights in kg unless otherwise stated.

* Standard motor options shown.

TECHNICAL SPECIFICATIONS

FRANKLIN MOTOR SPECIFICATIONS

SINGLE PHASE - 4" MOTORS

Motor Size kW	Motor Type		Diameter		Full Load Current Amps @ Voltage			LRC Amps	Efficiency @ Full Load	Thrust N	Weight kg	Length mm
			Nom	mm	220V	230V	240V					
0.37	SS	2W	4"	96	3.9	4	4.3	26.1	62.0%	1500	8.1	242
0.55	SS	2W	4"	96	6	6.4	7	36.6	63.0%	1500	9.5	271
0.75	SS	2W	4"	96	7.3	7.6	8.3	43.9	64.5%	1500	10.6	299
1.1	SS	2W	4"	96	10.6	10.7	10.9	52.9	64.0%	3000	13.2	384
1.5	SS	PSC	4"	96	10.6	10.2	9.8	35.2	68.0%	3000	13.7	356
0.75	SS	3W	4"	96	7.6	7.3	7.7	30.4	64.5%	1500	10.6	299
1.1	SS	3W	4"	96	9.6	8.9	9.3	42.4	68.0%	3000	13.2	356
1.5	SS	3W	4"	96	11.6	11.1	11.3	56.8	68.0%	3000	14.2	384
2.2	SS	3W	4"	96	16.7	15.9	17	84	70.5%	3000	17.7	461
2.2	HT	3W	4"	96	16.7	15.9	17	84	70.0%	6500	20	599
3.7	HT	3W	4"	96	23.7	22.7	22.5	123	76.0%	6500	29	752

THREE PHASE - 4" MOTORS

Motor Size kW	Motor Type	Diameter		Full Load Current Amps @ Voltage	LRC Amps	Efficiency @ Full Load	Thrust N	Weight kg	Length mm
		Nom	mm	415V					
0.37	SS	4"	96	1.1	5	65.5%	1500	7.1	223
0.55	SS	4"	96	1.5	7.1	66.0%	1500	7.9	242
0.75	SS	4"	96	1.9	9.3	68.0%	1500	9	271
1.1	SS	4"	96	3.5	17.4	72.0%	3000	11	299
1.5	SS	4"	96	4.1	20.2	72.0%	3000	12	328
2.2	SS	4"	96	6.3	30.8	73.5%	3000	13	356
2.2	HT	4"	96	6.3	30.8	73.5%	6500	15.2	441
3	HT	4"	96	8.2	43.3	75.0%	6500	18.2	507
3.7	HT	4"	96	9.9	51.7	76.5%	6500	20	546
4	HT	4"	96	10.3	60	77.0%	6500	23.2	583
5.6	HT	4"	96	14.2	79	75.5%	6500	28.5	698
7.5	HT	4"	96	17	96	77.0%	6500	32.1	774

KEY

- SS - Super Stainless
- HT - High Thrust
- 2W - 2 Wire
- PSC - Permanently Split Capacitor
- 3W - 3 Wire x requires control box

TECHNICAL SPECIFICATIONS

ELECTRICAL DATA - DROP CABLE DATA

SINGLE PHASE: 240V 50Hz 2 Wire Motor

4" Submersible Pumps								
Motor kW	Cable Size in mm ² - 2 core plus earth							
	1.5	2.5	4.0	6.0	10.0	16.0	25.0	35.0
0.37	100	160	280	410	680	1000	1715	2200
0.55	70	110	185	265	450	700	1200	1540
0.75	50	85	135	205	340	540	920	1185
1.1	40	65	100	150	250	400	700	900

SINGLE PHASE: 240V 50Hz 3 Wire Motor

4" Submersible Pumps								
Motor kW	Cable Size in mm ² - 3 core plus earth							
	1.5	2.5	4.0	6.0	10.0	16.0	25.0	35.0
0.75	60	100	170	250	430	670	1010	1380
1.1	40	70	120	180	300	470	710	980
1.5	30	60	90	130	230	360	550	760
2.2	20	40	60	90	150	230	350	490
3.7	-	20	40	60	100	160	250	340

THREE PHASE: 415V 50Hz

4" Submersible Pumps								
Motor kW	Cable Size in mm ² - 3 core plus earth							
	1.5	2.5	4.0	6.0	10.0	16.0	25.0	35.0
1.1	270	470	730	1100	1800	2260	2860	4970
1.5	210	360	560	840	1400	1750	2990	3850
2.2	140	240	380	570	950	1320	2260	2900
3.7	80	150	230	350	590	800	1400	1900
5.5	54	90	140	210	355	560	960	1230
7.5	0	71	115	173	290	461	730	1005

- Cable size and length indicated in the above chart are based on the motor manufacturers requirements and provided for maximum voltage drop of + or -5% of 240 volts for single phase and 415 volts for three phase.
- The lengths indicated in the above charts are the maximum cable length from the service entrance through control box to the motor terminal.
- The above charts have been calculated in accordance with AS3008.1 - 1989.

TECHNICAL SPECIFICATIONS

HYDRAULIC PERFORMANCE

Reduced motor loading in water over 30°C (86°F)

Water Temperature	Approximate Allowable % of Maximum Nameplate Amps		
	Through 3 hp (2.2 kW)	5-15 hp (3.7-11 kW)	Over 15 hp (11 kW)
35°C	100%	100%	90%
40°C	100%	90%	80%
45°C	90%	80%	70%
50°C	80%	70%	60%
55°C	70%	60%	45%

Do not use submersible motors in water over 55°C (130°F).

With proper water flow past the motor, Franklin submersible motors are designed to operate up to nameplate amperage rating in water as hot as 30°C. If the water temperature exceeds 30°C, reduce the load by changing pumps or throttling the pump discharge.

FREQUENCY OF STARTS

The average number of starts per day over a period of months or years influences the life of a submersible pumping system. Excessive cycling affects the life of control components such as pressure switches, starters, relays and capacitors, plus splines and bearings. Rapid cycling can also cause motor overheating and winding failures.

The pump size, tank size and other controls should be selected to keep the starts per day as low as practical for longest life. The maximum allowable number of starts per 24 hour day, are shown in the table below.

Motors should be allowed to run a minimum of one minute to dissipate heat build up from starting current.

Motor Rating		Average Number of Starts per 24 Hr. Day	
kW	hp	Single Phase	Three Phase
Up to .55	Up to $\frac{3}{4}$	300	300
.75 to 4.0	1 to $5\frac{1}{2}$	100	300
5.5 to 22	$7\frac{1}{2}$ to 30	50	100

PUMP MOUNTING POSITION

Motors are suitable for operation in mounting positions from vertical shaft to horizontal. If 4 inch motors are started more than 10 times per day, it is recommended the shaft be tilted up at least 15° from horizontal to minimise coast-down wear of the up thrust washer.

This literature is not a complete guide to product usage. Further information is available from your Davey dealer, Davey Customer Service Centre and from the relevant product Installation and Operating Instructions. This data sheet must be read in conjunction with the relevant product Installation and Operating Instructions and all applicable statutory requirements. Product specifications may change without notice.

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DEPEND ON
DAVEY

WATER PRODUCTS

COOLING REQUIREMENTS @ 30°C

4" Franklin Motors				
Bore size		Minimum Flow Rate		
Inch	mm	lpm	gpm	m³/hr
4	101.6	4.5	1.0	0.27
5	127	26.5	5.8	1.59
6	152.4	49.2	10.8	2.952
8	203.2	113.5	25.0	6.81
10	254	189.2	41.7	11.352

With proper water flow past the motor, Franklin submersible motors are designed to operate up to nameplate amperage rating in water as hot as 30°C. If the water temperature exceeds 30°C, reduce the load by changing pumps or throttling the pump discharge.

USE OF CHECK VALVES

All Davey submersible pumps are fitted with a check valve.

It is recommended that check valves be used in all submersible pump installations. A check valve should be installed in the discharge pipe within 7 metres of the pump, if the built-in check valve is not used.

Immediate motor or pump failure, or shortened service life can be the result of the following conditions:

Backspin: When no check valve is used or when a check valve becomes defective, the water in the drop pipe can flow back down when the pump stops. This back flow can keep thrust on the motor while it comes to a stop which can cause excessive thrust bearing wear.

Up thrust: When no check valve is used or the valve leaks the pump starts each time at no head. Many pumps exert an upward thrust on the impeller stack at low heads which can lift the rotor of the motor until the developing water column causes down thrust. Repeated up thrust at each start can cause wear and failure.

Water hammer: If the lowest check valve is more than 9 metres above the bore water level, the weight of the falling water column draws a vacuum or evacuates a void below the check valve when the pump stops. On the next pump start, water moving at a high velocity fills this void and strikes the closed valve and the stationary water in the pipe causing a hydraulic shock. This shock can split pipes, break joints or damage the pump and motor.



Visit Davey on-line for further information
www.davey.com.au

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DEPEND ON
DAVEY

Sewer

Sump Pump

INSTALLATION AND OPERATING INSTRUCTIONS

D150G 1.5 kW 240V

2 LPS @ 16m head.



These instructions must be delivered with the pump to the operator.

MODELS

DEWATERING:	D75, DT08, DT15, DT22, DT37.
SEWAGE:	D75S, DT08S, DT15S, DT22S, DT37S.
CUTTER:	D75K, DT08K, DT15K, DT22K, DT37K.
VORTEX:	D75V, DT08V.
GRINDER:	D120G, <u>D150G</u> , DT12G, DT15G.

Suffix: A = Automatic Float Switch Fitted
M = Manual (D75 Models only)

Voltage: 220/250V 50Hz Single Phase
380/440V 50Hz Three Phase

Installation & Operating Instructions

The Davey range of Submersible Sump Pumps are suitable for small to medium Dewatering (or recirculating) applications. Sewage & Cutter models are suitable for pumping soft solids in fluid suspension up to 80% of the discharge diameter. Cutter & Grinder models are also suited to pump soft string-like materials such as hair, lint, straw etc. In addition, Grinder models can pump cloth, rubber gloves, sanitary products etc. While both Dewatering and Sewage models can pass some hard solids with little or no damage, Cutter & Grinder models should not pump hard solids as these may damage the cutter faces. All models are extremely quiet in operation which makes them ideal for applications within residential areas for sullage pits, waterfalls and general drainage.

Other Ideal Applications are:

Lift Wells	Car Park Sumps	Sewage Pumping -
Basements	Cable Pits, etc.	Grinder & Vortex models

This Submersible pump has been factory checked prior to delivery; however, please check for any damage during transport. After Sales Service is available from Davey or Special Davey Authorised Service Dealers.



DO NOT:
Run the pump dry.
Attempt electrical repairs, unless qualified to do so.
Run the pump with the motor fully exposed for long periods.
Install the pump on soft or loose ground.
Operate the pump if the inlet is submersed by sand or debris.
Lift or carry the pump by the power cable.

Suitable Fluids

This pump is designed to pump waste water, clean water and water containing mild pollutants at ambient temperatures. It is **not suitable** for pumping flammable or corrosive fluids, nor fluids at elevated temperatures. If you are unsure as to the suitability of the fluids, contact your Davey dealer for advice.



This pump is not a slurry pump, it is not designed to pump hard solids (eg stones) nor fluids containing excessive amounts of abrasive materials.

Installation

This Davey pump is completely submersible up to 10 metres and should be placed on a solid flat surface (if not available, sit the pump on timber or house bricks) in the vertical position. Pump should always be installed so that it will be clear of settled silt or debris. It is recommended to fit the biggest diameter hose possible, to obtain the best flow from the pump. To remove or lift the pump from deep wells or pits connect a rope to the handle during installation. Automatic versions should be placed in a sump which has adequate dimensions so as not to restrict the movement of the float switch.

Automatic controlled pump units have float switches factory set to provide the correct high (ON) and low (OFF) liquid levels. Quick connect rail kits are available for SEWAGE, CUTTER and GRINDER models. Contact your Davey Dealer for details.

Power Connection

A power connection point should be provided by a qualified electrician, in compliance with the requirements of AS 3000 (1991). Single phase models are rated for 220/250 Volts, 50Hz operation, and up to 750 Watt may be connected to a standard 10 amp power outlet. 1500 Watt models may be connected to a 15 amp power outlet.

All models have automatic reset thermal overload protection built in, i.e. should overload on motor cause thermal to open circuit and switch motor off, it will automatically reset and switch motor on when motor has cooled down sufficiently, usually within a few minutes.

Three phase models are rated for 380/440 Volts, 50Hz operation. **All three phase models must be wired in by an authorised electrician.** If used in conjunction with a contactor we suggest the installation of correctly set additional quick trip or M10 rated overloads.

3Ø Motor kW	Overload Settings
0.75	1.7 amps
1.2	2.3 amps
1.5	3.3 amps
2.2	4.8 amps
3.7	7.4 amps

**NOTE:**

1. Long extension leads should be avoided as they often have insufficient current carrying capacity to run electric motors, hence they can cause substantial voltage drop and operating problems.
2. Minimum voltage at the electric motor must not fall below 216 Volts for single phase, otherwise motor damage may result which is not claimable under guarantee.
3. If the electrical fittings in your country make it necessary to remove the plug (where fitted) from the lead fitted to the motor, care should be taken to ensure that the earth conductor green/yellow in the lead is properly connected to a good earth. This work should be undertaken by a suitably qualified person.
4. Expansion and contraction inside the motor due to heating and cooling is vented via the lead. The lead end must never be sealed off, but must always be open to the atmosphere.
5. Three phase installations **MUST** always be phase balanced to within 5% variation.
6. Ensure all three phase models rotate anti-clockwise when viewed from the bottom or pump end.



GRINDER MODEL comes with in-built seal cavity sensors fitted. These sensors may be connected to a sensor relay to provide motor protection in the event of seal failure. If you do not require the seal sensor function, simply fix and isolate the sensor lead in a weatherproof enclosure.

Fault Checks

(A) Pump will not start:**(1) Manual Type**

- Check to ensure power is available and the outlet is switched ON.
- Blown fuse or tripped circuit breaker (replace/reset or call an electrician).
- If an extension lead is fitted, check connection.

**NOTE:**

If fitting an extension lead a **QUALIFIED ELECTRICIAN** should be consulted to ensure correct rating is provided. Extension leads are not allowed for permanent installations.

- Impeller jammed - **disconnect from power supply**, and ensure impeller is free to rotate.
 - Thermal cut-out switch has not reset (wait until reset or reset overload for 30).
 - If pump does not start from new then the seal has possibly stuck due to the length of time it has been standing since it was manufactured. In this case, disconnect from power supply, remove bottom strainer and turn the impeller nut clockwise, this will release the initial friction on the seal and once the power is connected will allow the pump to work.
- (2) Auto Type (with float switch)**
- Check all in (1) above.
 - Float switch jammed against sump side wall.
 - Insufficient liquid to place the float switch in the ON position, i.e. higher than the horizontal.

(B) Pump runs, but does not pump water or pumps insufficient water:

- Check for correct direction of rotation (30 only).
- Insufficient liquid in sump.
- Strainer, impeller and/or discharge pipework blocked.
- Impeller damaged.
- Air lock in discharge pipework. Ensure pump is filled with water.
- Excessive back pressure or lift.

(C) Pump will not stop:**(1) Manual Type**

- Must be switched off at the power supply.

(2) Auto Type (with float switch)

- Float switch is prevented from moving to the fully down position.
- Float switch may be faulty.

(D) Pump runs for short periods only (the overload protection has tripped):

- Some foreign body is clogging the impeller.
- The liquid temperature is too high.
- Electrical fault.

Do not run the pump dry as this will damage the seal and reduce the life of the pump.

Where hair, lint or other string-like material may be in the water, the pump should be regularly checked. It might become necessary sometimes to clean the suction strainer, impeller and/or discharge pipework.

With simple cleaning and regular examination this pump should give reliable service.

Maintenance

The oil in the seal chamber should be periodically checked and replaced. This work should be done by a suitably qualified Davey Service Dealer every 2,000hrs of operation or every 12 months, whichever occurs first.

DAVEY PRODUCT GUARANTEE FOR AUSTRALIA & NEW ZEALAND

This Davey product is guaranteed to be free of material or manufacturing defects at the time of original purchase. Should any part fail as a result of such defects within one year of original purchase, the product will be repaired free of charge.

TERMS AND CONDITIONS

1. This guarantee applies to all states and territories of Australia and New Zealand only and is subject to the provisions of the Trade Practices Act (Aust.), the Goods and Consumer Protection Legislation of the various Australian states and the Consumers Guarantee Act 1993 (NZ) as applicable.
2. The guarantee period commences on the date of original purchase of the equipment. Evidence of this date of original purchase must be provided when claiming repairs under guarantee. It is recommended you retain all receipts in a safe place.
3. This guarantee covers parts and workshop labour only. Goods should be forwarded, with proof of date of original purchase, to an Authorised Davey Service Centre freight paid.
4. This guarantee is subject to due compliance by the original purchaser with all directions and conditions set out in the Installation and Operating Instructions. Failure to comply with these instructions, damage or breakdown caused by fair wear and tear, negligence, misuse, incorrect installation, chemical or additives in the water, inadequate protection against freezing, rain or other adverse weather conditions, corrosive or abrasive water, lightning or high voltage spikes or through unauthorised persons attempting repairs are not covered under guarantee. The product must only be connected to the voltage shown on the nameplate.
5. Continuous operation or operation with impure water or with abrasive materials in the water will accelerate wear and reduce the life of the product. Failure from these causes is excluded from repair under guarantee.
6. Without limiting the original purchaser's entitlements under the Trade Practices Act (Aust.), the Goods & Consumer Protection Legislation of the various Australian states, or the Consumers Guarantee Act 1993 (NZ), Davey shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever arising directly or indirectly from the product or any defect.
7. Where the Trade Practices Act (Aust.), the Goods and Consumer Protection Legislation of the various Australian states and the Consumers Guarantee Act 1993 (NZ) does not apply, Davey shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever suffered by the purchaser arising directly or indirectly from the product or any defect and the purchaser shall indemnify Davey against any claim by any other person whatsoever in respect of any such loss, damage or injury.
8. Nothing in this guarantee is intended to have the effect of contracting out of the provisions of the Trade Practices Act (Aust.), the Goods and Consumer Protection Legislation of the various Australian states and Consumers Guarantee Act 1993 (NZ) except to the extent permitted by the various Acts and this guarantee is to be modified to the extent necessary to give effect to that intention.

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DEPEND ON
DAVEY

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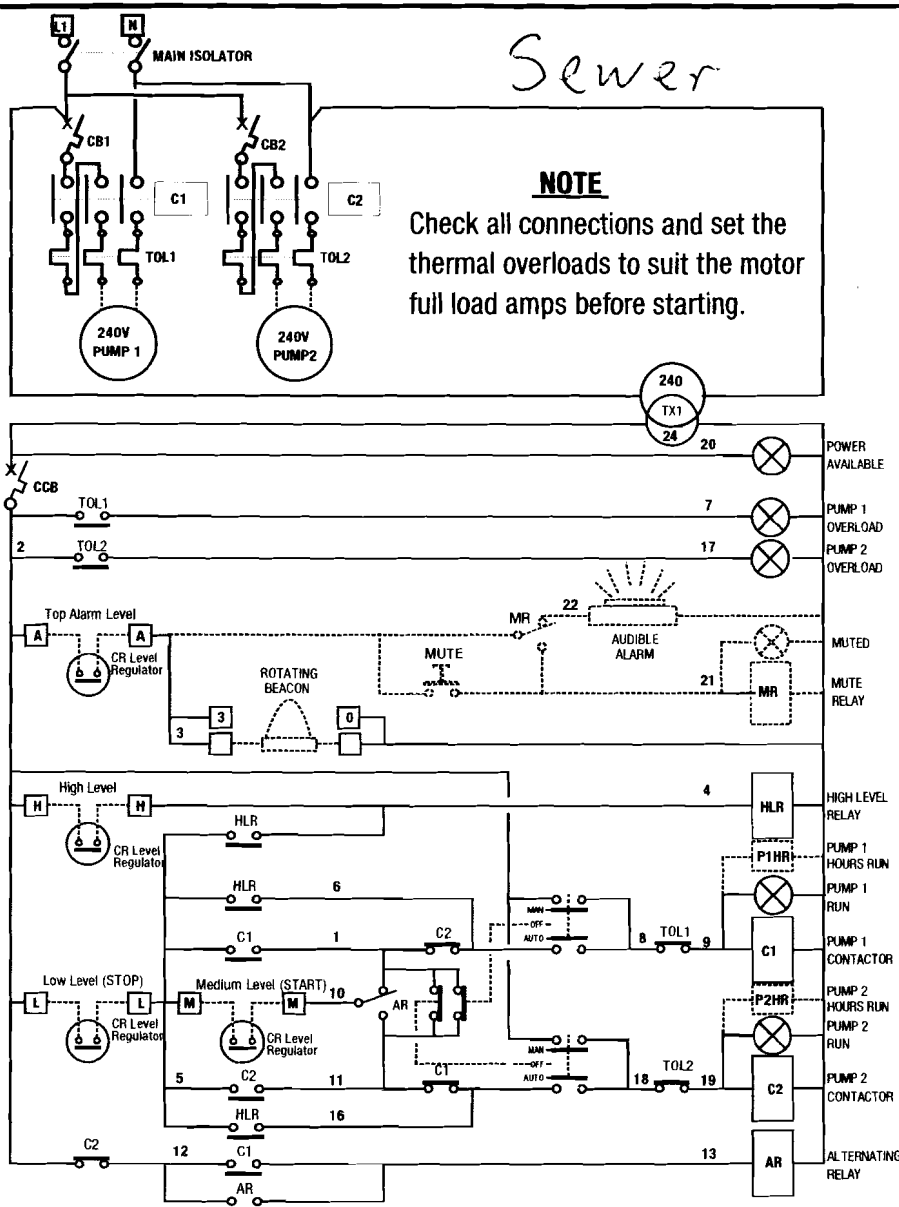
Sewer



KWIKFLO
POLLUTION SERVICES

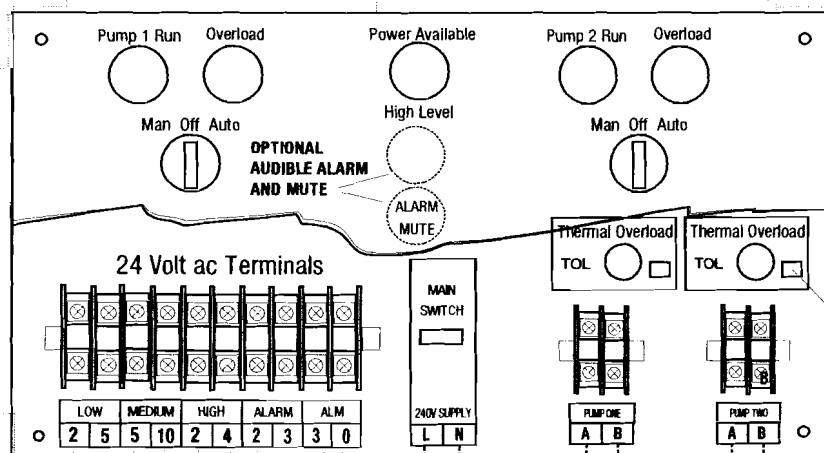
NOTE

Check all connections and set the thermal overloads to suit the motor full load amps before starting.



OPTIONAL EXTERNAL
ROTATING LIGHT

OPTIONAL EXTERNAL
MOUNTING FEET



240V
SUPPLY

24 Volt ac remote alarm
may be connected to
terminals 3 and 0
(20 Watts Maximum)

OPTIONAL

KENRAHN remote ALM
style Alarm panel with
Mute button & Indicator

TOL
RESETS

PUMP
1

PUMP
2

INSTALLATION

Mount the starter in a vertical vibration free position in a manner to prevent the ingress of moisture. The external feet may be used in many combinations. Conduit holes may be made in the sides, back & bottom of the enclosure. However the bottom is preferred, and care must be taken when drilling to prevent internal damage & stop particles from entering components. Connect the 240 Volt power supply cables to the main isolator terminals L and N.

Connect pump 1 motor cables to Pump 1 terminals A & B.

Connect pump 2 motor cables to Pump 2 terminals A & B.

Connect all earth wires to the earth terminal.

Connect the stop level regulator to the 24V ac terminals marked "LOW" level (2 & 5). All pumps stop.

Connect the start level regulator to the 24V ac terminals marked "MEDIUM" level (5 & 10).

Lead pump starts.

Connect the standby level regulator to the 24V ac terminals marked "HIGH" level (2 & 4).

Standby pump (second pump) starts.

Connect the alarm level regulator to the 24V ac terminals marked "ALARM" level (2 & 3). Alarm starts.

A remote alarm of no more than 20 Watts may be connected to the 24 Volt ac terminals 3 and 0

OPERATION

AUTO: Both in Auto:-

When the level in the pit rises above the medium level switch the duty pump will start.

When the level in the pit falls to the low level switch the duty pump will stop.

On the next cycle, pump 2 will become the duty pump and pump 1 will be the standby.

If the level rises to the high level switch the standby pump will start and assist the duty pump to restore the level to the low level switch.

If the level rises to the alarm level switch the alarm will be activated to indicate an abnormal inflow of water or a pump malfunction.

The alarm can be wired to be activated each time the level reaches the high level switch by linking terminals 4 & 3 and only using three level switches. With this method a pump malfunction may be determined at an early stage.

OFF: Pump will not start. Also if one pump is in the "off" position the alternation is cancelled

MAN: This is an emergency position to allow the pump to run continuously until turned off. This position can be used for service to pump the level down below the level switches to expose the pump. Do not leave the pumps unattended in Manual

If an audible alarm with mute button is fitted, it can be silenced by pushing the mute button. This will automatically reset if the level is restored.

Warning
Pumps automatically
alternate on each cycle
of operation in the
automatic position.

TITLE: TPS2-LEV TWIN PUMPING SYSTEM	
Standard 240 Volt twin pump alternating dewatering panel	
DATE DRAWN: 09/09/98	ISSUE: 002
LAST REVISION: 29/01/99	Standard
DRAWING NUMBER: AP/TPS04/3	AP/TPS04/5

