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Karijini National Park Northern Recreation Area

Master Development Plan

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**Department of Conservation and Land
Management**
Recreation Planning and Design Section

February, 1997

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1.0 Introduction

The **Draft Management Plan** for Karijini National Park, prepared under the CALM Act 1984, was released in March 1996 for public comment. The submissions to the draft plan are currently under review. In the interim the Draft Plan provides direction, goals and objectives for the assessment and development of recreation and tourism sites and facilities in Karijini National Park.

Formulation of this recreation and tourism facilities Master Plan included a comprehensive review of CALM's policy and strategic direction and consideration of the Draft Management Plan.

The primary management goal for national parks as stated in the CALM Act 1984 is *"to fulfil so much of the demand for recreation by members of the public as is consistent with the proper maintenance and restoration of the natural environment, the protection of indigenous flora and fauna and the preservation of any feature of archaeological, historic or scientific interest."*

In addition, CALM has established a specific objective in relation to its recreation mission. The aim of recreation management is *"to facilitate the public enjoyment of the natural attributes of public lands in a manner that does not compromise conservation and other management objectives."*

A **Master Plan** should provide an effective framework within which public and privately funded development projects may be evaluated, approved and implemented. While more detailed than the Draft Management Plan, it does not include development or construction detailing which should be part of documentation for each development project.

Of critical concern to an effective Master Plan for Karijini National Park is the sensitivity, contribution and support of the Aboriginal traditional owners of the Park. The Karijini Aboriginal Corporation (KAC) is the endorsed body representing traditional owners in this planning procedure. The stated responsibilities of KAC include heritage, culture, conservation of natural values, management and recreation - specifically *"to promote the Aboriginal significance of the Park to enhance the public education and appreciation of its natural and cultural resources and values."*

1.1 Management Philosophy

"It must be remembered that in the national park, the highest values are protecting an irreplaceable resource and exposing the visitor to the surrounding natural environment without creating harmful intrusions. If the environment is harmed or if visitors are separated from the outdoors, the main purpose of the park will be defeated." Architectural Character Guidelines - Sequoia and Kings Canyon National Parks

CALM is committed to responsible management of recreation and tourism on more than 20 million hectares of the State's lands and waters. Development planning is guided by The CALM Act (1994), Policy Statement No. 18 - Recreation, Tourism and Visitor Services, May 1991, and the Recreation and Tourism Strategy 1996-2000.

CALM's recreation and tourism development strategy is *"to identify and provide opportunities and services to the community which allows them to enjoy the wildlife, lands, waters and resources entrusted to the Department without compromising conservation values and other management objectives"*.

To help achieve this objective, developments in the Karijini National Park will be required to maintain natural and cultural values of the land. The natural systems (biota, landscape, hydrologic) of the Park must be able to sustain any proposed alterations without loss of value.

The CALM Act requires the Department to manage the lands covered by the Act in accordance with management plans. During the planning process, it is common that a park character is identified which is responsive to cultural, biophysical and geographic factors. This desired image or overall perception of a park helps determine the suitability of development and level of acceptable change.

While no park classification system has been implemented by CALM, there is a spectrum upon which parks can be placed ranging from those with major wilderness character and few facility developments to parks with a more urban character and intensive facilitation. Accessibility and remoteness are important factors in identification of character.

Maintaining the full spectrum of Park types for the present and future users of National Parks is essential. All parks can not service the needs of all visitors.

Karijini National Park is one of the most significant of the accessible 'remote' parks in Western Australia which retains a wilderness character. Finding the right balance between developing visitor facilities and services and protecting of the less tangible and yet essential character should be the uncompromised commitment of CALM and developers alike.

A fundamental requirement of any development in Karijini National Park is retention of the established natural wilderness/remoteness character which is unique to the Park. The sense of arrival should not be the arrival at a facility, but rather an arrival to a natural special place largely unaffected by human intrusion. Part of the challenge and enjoyment of a visit to Karijini NP is the effort required to gain special rewards due to distance travelled and landscapes explored.

Facilities provided should be the 'means' to encourage enjoyment of the environment, not the focal attraction in their own right. Visitor facilities should be confined to a small number of discrete places to minimise intrusion and to ensure that the majority of the Park is guaranteed a natural 'sense of place'.

While a range of accommodation types suited to a broad visitor spectrum may be suited to the Park, provision of low cost basic camping areas with minimal facilities will continue to be an essential management requirement.

Vigilance must ensure that essential values of the Park are not compromised.

2.0 Background Information and Terminology

The target area of the Master Plan (referred to as the Planning Area) is approximately one third of the total area of the Park. The Planning Area includes the lands north of the east-west highway (currently under construction) running approximately between Mt Bruce and Mt Windell and the immediate surrounds of Mt Bruce to the south of the highway.

2.1 Zoning

The Planning Area has been zoned into management categories based on interactions between natural values and visitor use. (Appendix 1) The zones provide one of the broad parameters within which development suitability can be judged. These zones are:

Wilderness - land in this category will be maintained as near as possible to its natural condition. Recreation and accommodation facilities will not be provided. Access will not be encouraged.

Locations: Mt Frederick area to the west, Mt George to the east.

Natural Environment - land in this category will be managed to preserve the abundance and diversity of plant and animal species. Recreation and accommodation facilities will not be provided. Vehicular access will be permitted on identified tracks. Walking trails may be provided.

Locations: Mt Stevenson and Mt Vigors area, Mt King and Hamersley Gorge areas.

Recreation - land in this category will be managed for public recreation and for conservation of flora and fauna. It is further divided into **Intensive and Intermediate subzones**. Access, accommodation and other facilities will be provided in this zone as appropriate.

Locations: roads, camping areas, most visited gorges, Mt Bruce, Mt Meharry and other established sites.

Park Services - land in this category will be managed for service activities which are either permanently or temporarily off-limits to public visitation.

Locations: CALM staff headquarters, quarries, utility towers, construction sites.

Visitor facilities, such as small buildings, tables, bbqs and bins are allowable in the Recreation Zone only. Restrictions apply in the Wilderness and Natural Environment Zones.

A Recreation Facilities Development Plan was prepared and included in the Draft Management Plan for public review. The principal components of the Development Plan are included in this Master Plan

3.0 Review of the Draft Management Plan

3.1 Objectives and Strategies

A summary of management objectives and strategies noted in the Draft Management Plan which provide direction and guidance to this Master Plan follows:

The objective is to ensure that all developments are consistent with the environmental and cultural values of the Park.

- Developments include all activities other than minor maintenance. These activities include construction and upgrading of roads, pits, walk tracks, buildings and associated infrastructure.
- Developments in the Park can adversely impact on landscape, cultural heritage, drainage and soil.
- Some developments require energy resources which can impact on the environment through air or noise pollution, others require the use of structural materials from outside the Park.
- Developments must be consistent with Park values and related strategies in the Management Plan, including design, siting and environmental criteria for commercial accommodation.

The objectives are to contain and minimise soil erosion, especially in areas of heavy use due to Park operations and visitor use.

- Assess any proposed development of Park facilities to determine impacts on soils.
- Avoid developments on alluvial soils and in other erosion prone areas.

The objectives are to conserve ground and surface water resources; to provide for a safe and sustainable water supply for Park residents and visitors, and to protect the ecosystems from any adverse effects resulting from water use.

- The sustainable yield of most aquifers is unproven.
- Groundwater reserves maintain the ecologically important surface pools.
- Effluent disposal and leachate from solid waste disposal sites are a potential source of groundwater contamination.
- Roads and other developments can disrupt surface flow, resulting in degradation of plant communities.

The objectives are to minimise impact on the landscapes of the Park by ensuring that all uses and management activities complement the established landscape values.

- Visual landscape management will involve extensive broad scale and on-site analysis, project impact evaluation, and sensitive site planning, design and construction methods.

- Whether visual changes are perceived to be positive or negative depends on numerous factors including viewer position, view duration, view distance, landform, soils, aspect and type of landscape alteration.

The objectives are to conserve the native flora of the Park.

- Many restricted species in the Park occur in areas of high recreational potential such as gorges and hill tops.

The objectives are to conserve native fauna.

- Development on Park facilities may have unintended impacts upon fauna.

The objectives are to protect community and environmental resources and values from damage or destruction by wildfire.

- CALM has statutory obligations to comply with the Bush Fires Act and CALM Act in relation to the prevention and control of wildfire's.
- Development of all Park facilities will require an internal assessment procedure in the context of fire protection.

The objectives are to recognise, protect and promote Aboriginal cultural resources and values, promote visitor awareness of cultural heritage and assist in the protection, preservation and management of Aboriginal sites.

- Some sites may be at risk because of their age or because they are located near existing or proposed developments or associated activities.

The objective is to provide road, air and pedestrian access which is consistent with the maintenance of conservation and cultural values, and with the diverse range of visitor needs.

The objective is to ensure that public use is sustainable and in accordance with statutory regulations.

The objectives are to encourage appropriate recreational use in the Park and to provide facilities to increase visitor awareness and enjoyment of the values of the Park.

- The principal recreational opportunities in the Park are camping, sightseeing, bushwalking and photography.
- Increasing visitor use may lead to adverse environmental impacts and conflicts between user groups.
- Visitors prefer to camp near major attractions.
- There is a need to rationalise and upgrade existing camping and day-use facilities to provide for increases in visitor numbers.
- The Park allows for the development of a range of walks which can focus on eco systems, Aboriginal culture and landscapes.
- The development of commercial accommodation facilities may be proposed for locations within the Park.

The objective is to ensure that commercial operation in the Park are encouraged, but conducted in such a way as to promote and enhance visitor experiences while maintaining Park values.

The objective is to allow suitable housing and service arrangements to support the needs of residents in the Park.

The objective is to provide adequate health, education and communication facilities for Park visitors and residents.

- A communications system may require the construction of towers and dishes near service points.
- All development planning will provide for the safety of visitors and residents.

3.2 Commercial Visitor Accommodation

A summary of management objectives and strategies noted in the Draft Management Plan which provide direction and guidance to the Master Plan follow:

Development of commercial accommodation facilities may be proposed for locations within the Park or for areas that adjoin the Park.

- Identify demand for accommodation and its most suitable location. If in the Park developments must reflect the Park's natural values.
- Any proposals will be referred to the Park Council and the Advisory Committee for comment. Proposals shall satisfy design, siting and environmental criteria.
- Once siting criteria have been satisfied, the proposal may be referred for independent environmental assessment. Any assessment will include public review process.
- If a proposal satisfies the siting criteria and environmental assessment, consideration will be given to leasing the site under the terms of the CALM Act.
- Fire management and control of introduced plants and animals will apply to any developments.
- In the event of a commercial accommodation facility in the Park, CALM will liaise closely with the developer/operator to ensure that facilities and activities are integrated with the goals of the Park.
- In preparation of development plans consider flexible design and appropriate location of facilities.

4.0 The Master Plan

4.1 Access and Circulation - Rooding

The CALM preferred rooding plan for the Park is a result of extensive negotiation and discussion with multiple stakeholders as part of on-going management operations as well as Park planning procedures. (Appendix 2) Those involved include: CALM staff, Karijini Aboriginal Corporation (KAC), the Shires of East Pilbara and Ashburton, the Main Roads Department (MRD), Pilbara Development Commission (PDC) and other stakeholders such as tourist bureaux, operators and visitors.

Improvements in the Pilbara regional rooding network in recent years have had a significant impact on ease of access to the Park and current and projected visitor numbers. Upgrading of roads into other national parks has invariably resulted in dramatic rises in visitation, revenue raised and usage impacts. It is anticipated that a similar pattern will effect Karijini.

Use patterns, prior to the construction of the Mt Bruce-Mt Windell Highway (possibly to be called Karijini Road), suggest that the majority of winter visitors entered the Park via the Yampire Gorge Road while the majority of summer visitors arrived from the southern access roads. Fortescue Falls, Circular Pool - Dales Gorge and Oxer Lookout are the favoured destinations. Changing patterns will be carefully monitored.

Internal Road System

Principles

The road system in the Park should be part of a comprehensive Transportation Plan which ensures that visual resource, conservation, environmental protection, economic, engineering and user safety values are maintained.

Road design standards should be established by CALM in association with MRD and the Shire of Ashburton.

The total number of roads in the Park should be the minimum number possible to service visitor and management needs.

Road locations should be selected and designed to complement unique Park characteristics by borrowing elements of form, line and colour from the surrounding landscape.

Roads in the Park should strive to be enjoyable in their own right by focusing alignments on positive features and providing a diversity of scenic opportunities.

Level 1 Roads

Minimum design speed:	110 km/hr
Seal width:	7.0 m
Unsealed shoulder width	1.5 m
Clearing width	3.0 m outside limit of earthworks
Drainage corridor	50 m each side of road centreline

Mt Bruce - Mt Windell Highway; rest areas chosen at the eastern jump-up, Chinamans Cap and at a central location.

Level 2 Roads

Minimum design speed: 80 km/hr
 Seal width: 7.0 m (entry stations - 3.5 m)
 Unsealed shoulder width: 1.0 m (entry stations - .5 m)
 Clearing width: 3.0 m outside limit of earthworks. (reduced if practical)
 Drainage corridor: 50 m each side of road centreline. Catch drains to be avoided.

Joffre Falls Road Loop from Mt Bruce Highway to Yampire Gorge Road.

Yampire Gorge Road from Joffre Road to Mt Bruce Highway.

Note: It is proposed that this main park loop be renamed Gorge Drive.

Level 3 Roads

Minimum design speed: 60 km/hr
 Seal width: 6.0 m
 Unsealed shoulder width: .5 m
 Clearing width: 2.0 outside limit of earthworks. (reduced of practical)
 Drainage corridor: 30 m each side of road centreline. Use of catch drains parallel to road alignment generally not permitted.

Joffre Rd, Yampire Gorge Rd (part), Dales Rd, Kalamina Rd, Bee Gorge Road (also called Oxer-Weano Rd), Mt Bruce Rd, Hamersley Gorge Rd.

Level 4 Roads

Width: 6.0 m
 Clearing width: No clearing outside earthworks.
 Drainage corridor: Minimal use of diversion drains only.

Mt Vigors Track, Juna Downs Track, Dinner Hill Track, Old Marandoo Track, Yampire Gorge Road (northern portion), Bee Gorge - Cat Walk, VHF Tower Track.

Roads to be closed

Knox Gorge Road from Joffre Falls to Knox Gorge

External Road System

Level 1 Roads - Primary Access Routes to the Park

Great Northern Highway (sealed)
 Tom Price to Karratha (proposed)
 Tom Price to Marandoo (sealed)
 Nanutarra-Wittenoom Road (partially sealed)

4.2 Access and Circulation - Aircraft Services

Principles

Airstrips and helipads in the Park must comply with Civil Aviation Authority standards and management regulations.

Location of airstrips should be selected to ensure convenient access and the minimum acceptable level of disturbance to conservation, cultural and visitor sensitivity values in the Park.

Areas of greatest sensitivity to aircraft noise, such as major visitor sites and culturally sensitive zones should be defined as 'no fly or restricted fly zones'.

Location of airstrips must provide for emergency situations and be responsive to the needs and requirements of neighbouring communities.

The CALM position on location, number and suitability of aircraft landing sites is currently being formulated and therefore remains flexible and responsive to community attitudes and needs.

Interest in commercial fly-drive and heli-flights into and over the Park has been expressed. These activities are likely to increase in popularity as visitation increases resulting in functional, safety, noise and aesthetic concerns. No-fly zones are currently established over all campgrounds, Dignams Gorge, Circular Pool, Dales Gorge and an area encompassing Kalamina Springs, Knox Gorge and Joffre Falls. A restricted-fly zone is located over the Oxer Lookout - Gorge Junction area.

Helicopter Aircraft

A scenic helicopter venture utilized a temporary helipad adjacent to Weano Road during the winter season in 1996. The commercial viability of the operation is currently being evaluated.

A CALM visitor survey conducted in 1996 suggests that a very small percentage of Park visitors actually took a flight over the Park. Responses to questions of aircraft impacts on their enjoyment of the Park experience were inconclusive with about equal numbers indicating significant amounts of distraction and no distraction at all.

Helicopters operations have specific site requirements which require careful environmental, cultural and social consideration. Developed base sites providing visitor parking, fuel storage, shelters and toilets, etc will require approval through CALM site development planning procedures while undeveloped landing sites without services will require approval of the Regional Manager only.

Applications for helicopter base and landing sites will be assessed on their merits and evaluated according to parameters determined by the Regional Manager in consultation with the Ranger in Charge. The CALM preferred base site is located in the vicinity of the currently established landing strip directly across Joffre Falls Road from the proposed Visitor Centre site.

Fixed Wing Aircraft

CALM supports construction of an airport designed for commercial fixed wing aircraft servicing visitors to Karijini National Park and other needs of the Pilbara Region. A site north of Tom Price is currently preferred.

A suitable landing strip for small fixed wing aircraft is located at Munjana and a potential development site is located north of Mt Windell and south of the Park boundary adjacent to the new highway in what is called the Windell Block.

Potential airstrip sites in the Park have been assessed and rejected on safety, environmental or functional grounds.

4.3 Access and Circulation - Pedestrians

Principles

Provision of walking tracks in the Park should be encouraged. Tracks should meet current and projected user demands and provide a diversity of opportunities, track length and standard to appeal to the broadest possible spectrum of user types including those with disabilities.

Walking tracks should ensure adequate resource protection and attempt to minimise management and visitor safety problems.

Walking tracks should be maintained to a safe and attractive standard.

Walking opportunities in the Park are currently provided in association with feature attractions and are rated according to the CALM classification system. (Appendix 2)

Unrealised longer opportunities for visitors to explore diverse Karijini ecosystems and appreciate the uniqueness of the Wilderness and Natural Environment Zones abound which would appeal to people of varying interests, ages and levels of fitness and mobility.

Established Short Walks

Joffre Falls Car park to the lookout (50m)
 Kalamina Spring car park to the pool (50m)
 Circular Pool Rim (500m)
 Mt Bruce car park to Marandoo Lookout (250m)

Established Tracks

Red Gorge Lookout (750m)
 Hamersley Gorge car park to the Waterfall (200m)
 Hamersley Gorge carpark to the lookout point (25m)
 Oxer car park to the lookout (150m)
 Weano-Handrail Pool (300m)
 Kalamina Gorge (1.5 km)
 Knox Lookout (150m)
 Fortescue Falls (400m)
 Mt Bruce car park to Honey Hakea (2.3 km)
 Dales Gorge to Fortescue Falls (500m)

Established Routes

Mt Bruce car park to the Summit (4.5 km)
 Circular Pool (400m)
 Dales Gorge (750m)
 Knox Gorge 1 km
 Joffre Falls (1.5 km), Hancock Gorge (750m)
 Hamersley Gorge (500m)

Planned additions to the walking track system - Proposals to expand the walking system in the Park are intended to broaden the opportunities available to a wider range of visitors, to disperse usage away from the principal focus sites, to provide educational, interpretive and cultural opportunities currently unavailable and to provide longer wilderness style treks with bush camps into portions of the Park which are currently inaccessible.

The Draft Management Plan specifies that pedestrian access into the Wilderness Zones would be subject to a permit and that no facilities, such as structures, would be acceptable. There would be no new roads.

Note: The permit requirement may not appear in the final plan.

Specific Proposals - Mulga View Walk (300m loop)
 Mulga Valley Walk, Track and Route (200m, 500m and 4 km loops)
 Yampire Gorge Rim Track (10 km)
 Dales to Knox Gorge Route (40 km) with two links to Kalamina Springs (10 km)
 Mt Windell Wayside interpreted Walk (500m)
 Chinamans Cap Wayside interpreted Walk (250m)
 Weano Campground to Hamersley Gorge Wilderness Route (50 km)
 Entry Station to Entry Station Route (50 km)

4.4 Visitor Facilities - Day Use Sites

Principles

Day use sites and facilities will be provided where they encourage, promote and facilitate public awareness and enjoyment of the unique attractions and natural systems of the Park.

Sites will be selected and developed according to criteria and plans approved by CALM which guarantee their ability to withstand planned levels of use without environmental damage (sustainability).

The recreation management philosophy for the Park is to provide low-key low cost facilities and services which minimise changes to the natural and cultural environment and yet provide for basic human needs for education, comfort, recreation and safety. (Appendix 3)

All visitors to the Park use the day use facilities. Public surveys suggest that the vast majority prefer a basic unobtrusive level of facilitation.

Established Feature Day Use Sites

Hamersley Gorge - car park, toilet, trail head, access to water feature
Mt Bruce - trail head, information, interpretation, vista points
Joffre Falls - car park, information, toilet, lookout platform, gorge access
Oxer Lookout - car park, trail head information, toilet, emergency phone
Weano and Hancock Gorges - car parks, trail heads, gorge access
Knox Gorge - car park, trail head, information, lookout platform
Kalamina Springs - car park, information, toilet, trail head, picnic table, gorge access
Karijini Visitor Centre - car park, information, Aboriginal contact point, sales of merchandise, toilet
Fortescue Falls - car park, trail head, toilet, information, picnic tables and shelter, gorge access
Circular Pool - car park, trail head, information, interpreted walk, gorge access
Dales Gorge - car park, trail head

Proposed Feature Day Use Site Developments

Yampire Gorge Picnic Site - road terminus, car park, information, trail head picnic tables
Mulga View - car park, interpreted walk
Mulga Valley - car park, trail head, small amphitheatre, picnic tables, toilet

Knox Gorge - remove vehicle based facilities and restructure for pedestrian access.

4.5 Visitor Facilities - Accommodation

Principles

Camping in the Park should be encouraged in designated vehicle accessible locations and in remote areas associated with back-packing.

All accommodation facilities should be carefully planned, well sited and designed to be sustainable and minimise impacts. The land area disturbed must be the minimum needed to meet other objectives.

All camping sites should provide a minimum level of facilities - to include toilets, car parking, basic information and rubbish collection sites. In addition picnic facilities, interpretation, bbqs, showers and group gathering sites may be appropriate.

Commercial partnerships may be beneficial in provision of suitable accommodation in the Park. Appropriate accommodation styles may include safari-units, cabins or serviced lodge.

Developments must reflect and complement the unique natural values of the Park and encourage visitors to appreciate those values.

Visitor accommodation in the Park is currently limited to minimum facility camping in three formalised locations. Bush camping occurs in the Park in locations such as the Hamersley Gorge area and back-pack camping occurs by permit. (Appendix 3)

Established Camping Locations

Dales Recreation Area - 82 individual and 5 group sites are located in 5 pods catering to a range of visitor preferences and options. Facilities provided include defined bays, toilets, gas bbqs and tables in communal areas, information, registration and fee collection, rubbish collection trailer, trail to Circular Pool with loop to Fortescue Falls. Water and showers are not currently provided.

Joffre Camp - A large fenced area devoid of vegetation provides for an indeterminant number of individual and group camp sites. Facilities provided include toilets, gas bbqs and tables and a fee collection station. Visitors with generators and caravans are welcome in this camp. The camp is proposed for closure when a replacement facility is built in the Weano area.

Weano Camp - A large post and rail defined area devoid of vegetation provides for a large number of individual and group sites. Facilities provided include toilets, gas bbqs and tables, trail head to Weano and Hancock Gorges and a fee collection station. This camp is proposed for closure when a replacement facility is built in the Weano area.

Hamersley Gorge Plain - This recent addition to the Park is actively used by commercial truck drivers, local Tom Price residents and visitors to the Gorge for resting, camping and road train assembly. No sites are specifically designated and no facilities are currently provided. The disturbed area/s are significant and signs of environmental degradation are evident.

Remote Camping - Back-packer style camping is acceptable upon request to the Park ranger staff. This activity is not presently encouraged or discouraged, but is approved if the visitor can demonstrate bushcraft skills, has adequate base materials and maps and understands the Karijini conditions. Management concerns include visitor safety, potable water, culturally sensitive sites and areas, fire risk and sanitation.

Note: There are numerous known sites such as Milli Milli and Coppins Pool south of the Karijini Road which are accessible by 4-WD vehicles and by foot. They are outside the area of this Master Plan and are not discussed in this document.

Proposed Camping and other Accommodation Facilities

The Draft Management Plan supports development of an expanded range of accommodation types in and adjacent to the Park. While not type or site specific, the intent of the plan suggests that provision for tents, caravans, safari - style units, cabins and lodges could be appropriate. Assessment criteria for selection of suitable sites have been prepared.

CALM prefers that visitor accommodation be integrated into '**bedroom precincts**' rather than be scattered throughout the northern portion of the Park. This would help ensure cost effective provision of infrastructure, management, fire protection, maintenance and retention of the natural remote undisturbed character of as much of the Park as possible.

Open **fires** would be approved only in defined communal sites at campgrounds with a resident supervisor and only if wood is provided from a source outside the Park. Camp kitchens, gathering areas or amphitheatres and showers would be considered.

No **store or public restaurant** would be allowed in association with any accommodation. Meals may be provided, however in association with accommodation packages. Sale of essential items, such as film, batteries and cool drinks, would be approved in association with camp offices or in a mobile van. The list of approved items would be negotiable.

Provision of some **powered sites** in the primary base camps would be supported, but not to the exclusion of the unpowered option.

Fire protection will be a major issue in planning and design of all accommodation facilities in the Park. Facilities in remote sites must be sacrificable.

The need to provide upgraded camping facilities in the Weano area is urgent. Closure of the existing **Weano and Joffre Camp Sites** is desirable at the earliest possible time. The projected requirement for the number of camp sites in the Weano area is 100 to 120 to be located in pods of approximately 20.

The **Dales Camping Area** is working well and will be retained. Expansion of the Dales site to include other styles of accommodation may be desirable.

Provision of an accommodation facility, to include tent and caravan camping, in the **Hamersley Gorge Area** is essential to service an established use and to protect values of the Park.

Safari units and cabins would be acceptable in association with the camping areas. Clusters of units dispersed throughout the Recreation Zone of the Park

would be undesirable due to loss of perceived naturalness and remoteness, two primary attributes of the Park.

The fully serviced **lodge** style of accommodation would be appropriate in the Park. Two suitable sites have been identified, one near Kalamina Springs and one near Mt Vigors. Site selection criteria for a park lodge have been produced.

Remote back-packer style camp sites will be an essential component of an expanded walking system into the Natural Environment Zones. These sites would be carefully located on the network and could include cleared areas, water tanks, toilet and huts. Road access would not be acceptable except where there is an established management track nearby.

4.6 Visitor Facilities - Park Orientation and Information

Principles

Any visit to the Park is improved by having an understanding of its resources and values.

The visitor should have access to information on locations of major services and attraction, standards of behaviour, potential hazards, natural features, activities and cultural history.

Provision of information, interpretation and education in and outside the Park requires cooperation between numerous government agencies and stakeholders including CALM, tourist bureaux, traditional Aboriginal owners, PDC, PTA and commercial partners.

Communication techniques used by CALM in the Park are as follows:

Entry Stations - Three stations are currently in place to welcome visitors, provide orientation maps, brochures and general information on feature sites, camping areas and to collect fees. Each station is located on a one - way road in an attractive setting. The stations have been in place for 2 seasons and appear to be functioning satisfactorily.

Visitor Centre - A temporary Visitor Centre is located on the Yampire Road near the Joffre Road junction. The Centre is managed as a partnership between CALM and KAC and has recently completed its third season. The purpose of the Centre is to provide a focus for personalized Park information, sales of essential non-perishable goods, CALM merchandise, crafts and Aboriginal artefacts and contact with Aboriginal people.

Note: The preferred site chosen for a permanent Visitor Centre is close to the temporary location directly across Joffre Falls Road (to become Gorge Drive) from the airstrip.

Highway Waysides - Three visitor wayside stops along the Mt Bruce-Mt Windell Road have been planned to provide information on the Park to 'entice' travellers to learn more about Karijini and perhaps visit the attractions and participate in the activities on offer in the Park. Each will have an information shelter, a short interpreted walk and a toilet. The eastern site is partially complete and functioning.

Information Displays - Small shelters are used to display appropriate site specific information at all heavily visited sites and attractions within the Park.

Subjects commonly featured include geology, visitor safety, plants and animals, Aboriginal heritage, landscape and management issues.

Signing - Timber and processed graphic signs are used throughout the Park to welcome, inform, direct and warn visitors as appropriate. Sign standards are guided by the CALM Sign Manual and Park Sign Plan.

Off-site Information - Pre-visit advice and assistance to prospective visitors is an important part of the Park Communications Plan. Brochures, pamphlets, maps and newspapers should be readily available. Tourist Bureaux in Perth, Karratha, Tom Price and Newman play an important role in 'marketing' the Park and must be involved in all aspects of Park communication.

Communication Opportunities - Effective location, design and function of the permanent Visitor Centre is essential if the Park visitor communications plan is to be successful. The new Centre is currently the focus of a design and construction initiative and will not be discussed in detail in this Master Plan.

The Centre is to provide:

- a focus for Park information
- contact with Aboriginal people
- lectures and cultural events
- an amphitheatre
- a CALM office
- a merchandising area
- a commercial area and booking service
- administration office
- accommodation for caretaker and core staff

The Centre is not to provide:

- a park lodge or other public accommodation
- a food service
- a park store selling perishable foodstuffs

An expanded program of guided cultural or general nature walks, talks and evening corroborees conducted by Aboriginals or ranger staff would be welcomed by CALM and the Park visitors. Such activities may be located in proximity to the Visitor Centre or more focused at the accommodation areas or feature sites.

CALM is keen to establish more opportunities for the public to have direct contact with Ranger staff and will work closely with Visitor Centre management and any commercial operations in the Park to help meet this objective.

5.0 Park Services

5.1 Park Services - Communications

Principles

Communication links should be provided which assist efficient and safe management of the Park and provide a minimum service to visitors.

Towers and other visible elements of the communications network should be minimised and sited in a manner which does not unduly detract from the unique qualities of the Park landscape character.

The Park is currently linked to the outside world by way of a multiple link telephone line and both HF and VHF radio systems. A public phone is available to visitors at Park Headquarters and at the Visitor Centre. The remaining communication devices assist Park managers. (Appendix 4)

Established Communication Sites

Utility **towers** have been placed in the Park at the following sites:

- on the hill north of the Park Headquarters - telephone.
- on the hill south of Mulga View - VHF

5.2 Visitor Services - Water and Power

Electrical **power** in the Park is restricted to CALM staff and management requirements at the Headquarters and to the Visitor Centre. Generation is by diesel and petrol respectively. No supply is currently available to visitors.

CALM's position is that proposals to generate power in association with future developments will be considered favourably if acceptable standards of environmental impact are met. Above ground transmission lines will not be acceptable anywhere in the Park.

Potable **water** is available to the public in the Park at two bore sites. These are located adjacent to the Yampire Road Visitor Centre and near the junction of Joffre Falls and Weano Roads. A number of additional proven bores are located in the Park including the supply at the Headquarters but are currently not developed for public use.

CALM's position is that potable water should be available at all major accommodation sites. Remote bush camps may include tanks or be dry sites depending on zoning and management objectives.

5.3 Park Services - Accommodation

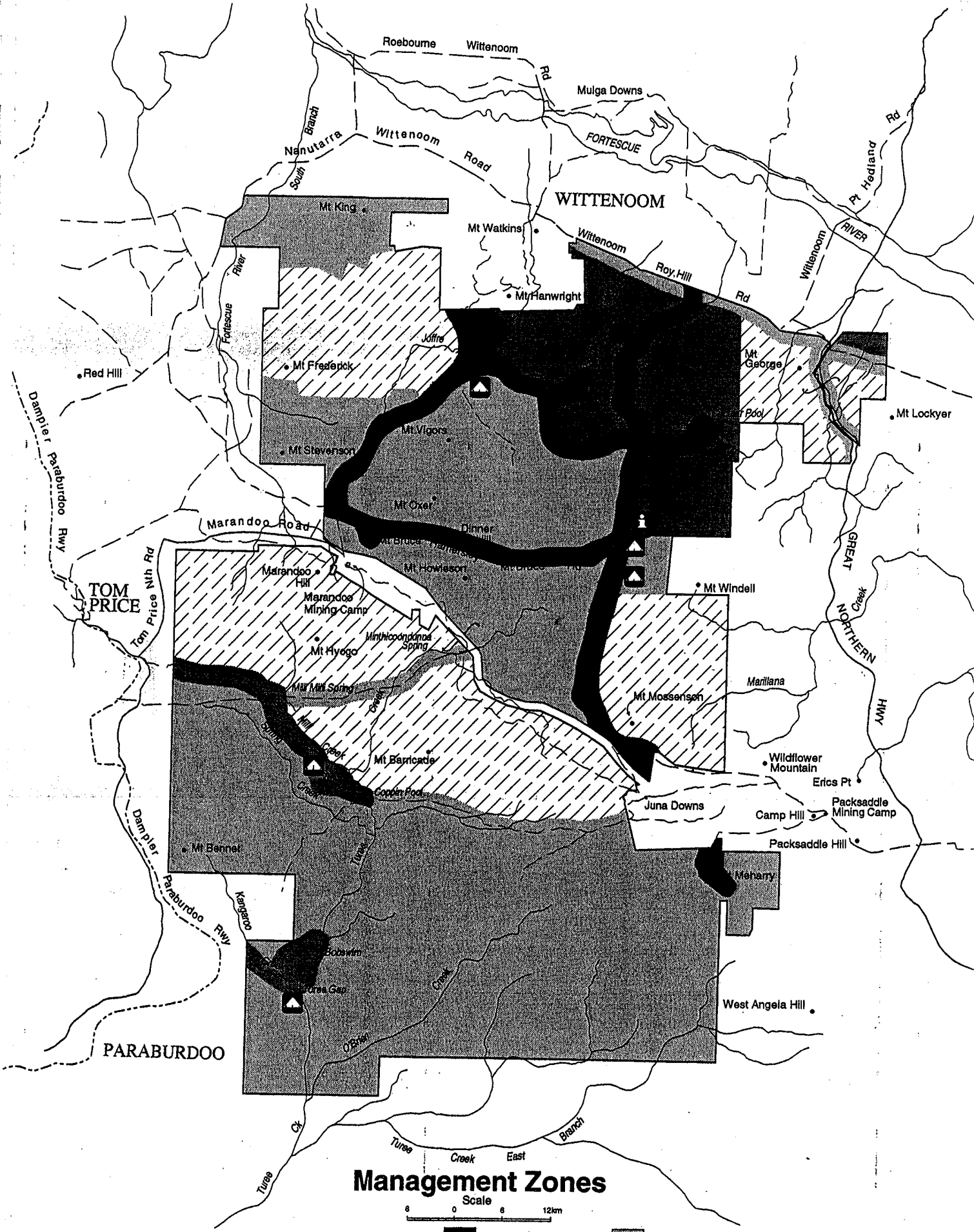
The issue of permanent and temporary staff accommodation in or near the Park has yet to be fully resolved. The ease of access to existing towns via sealed highways will make a major difference to travel times and potentially make commuting more viable.

The current CALM position is as follows:

- Temporary construction crews will be required to set up camp in the Yampire Road Quarry Site or negotiate an alternative with CALM.
 - Campground caretakers may reside in purpose built units within the facility.
 - A manager only may reside at the Visitor Centre and proposed Park Lodge.
- Service staff will live away from the Visitor Centre or accommodation units.

It is CALM's position that a **Service Centre** may be required in or adjacent to the Park to supply essential services to visitors and service staff. Services may include a full service store, fuel, banking agency, postal service, accommodation and other commercial functions.

Preliminary judgement of site suitability based on defined selection criteria suggests that the Yampire Road quarry site may be suited to a small service centre. A site at Marillana Creek near the junction of Mt Bruce Highway and the Great Northern Highway has also been assessed and considered favourably.

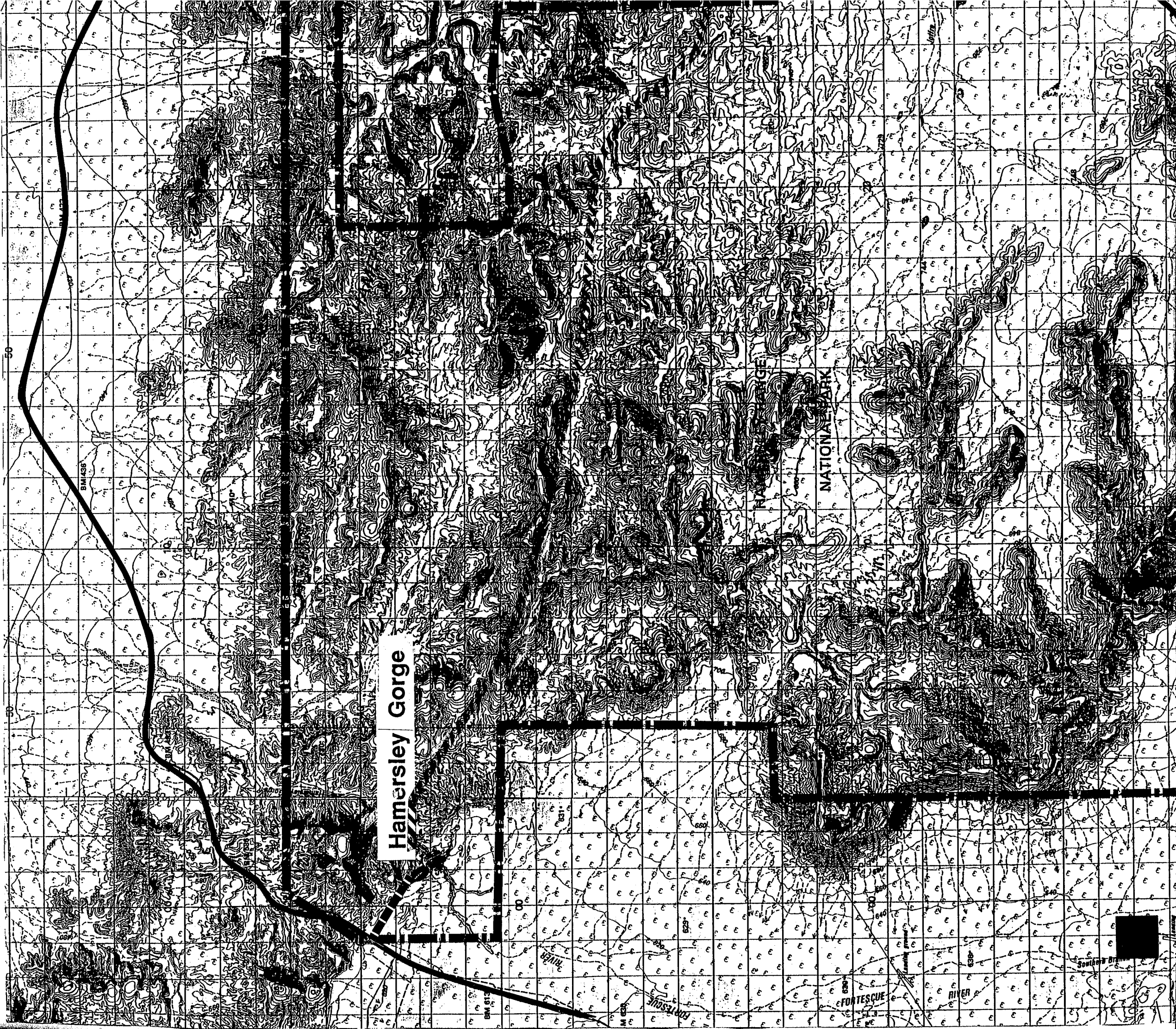


Management Zones

Scale 0 6 12km

- Intensive Recreation Natural Environment
- Intermediate Recreation Wilderness
- Possible Aboriginal Living Areas Ranger Station

Footnote: Living Area locations are approximate, 3 of which will be subject to formal lease arrangements between KAC and Executive Director, CALM.



Hamersley Gorge

NATIONAL PARK

FORTESCUE RIVER

SOUTHERN CROSS



Yampire Gorge s

Weano Campground

Oxer Lookout

Knox Gorge

Joffre Falls

Joffre Campground

Kalina Springs

Yampire

Moby Well

Calamina Well

Gorge Bone

Whitstone Gorge

Whitstone

Abundant

BM 415

MEET

Yampire

50

30

415

415

50

405

411

428

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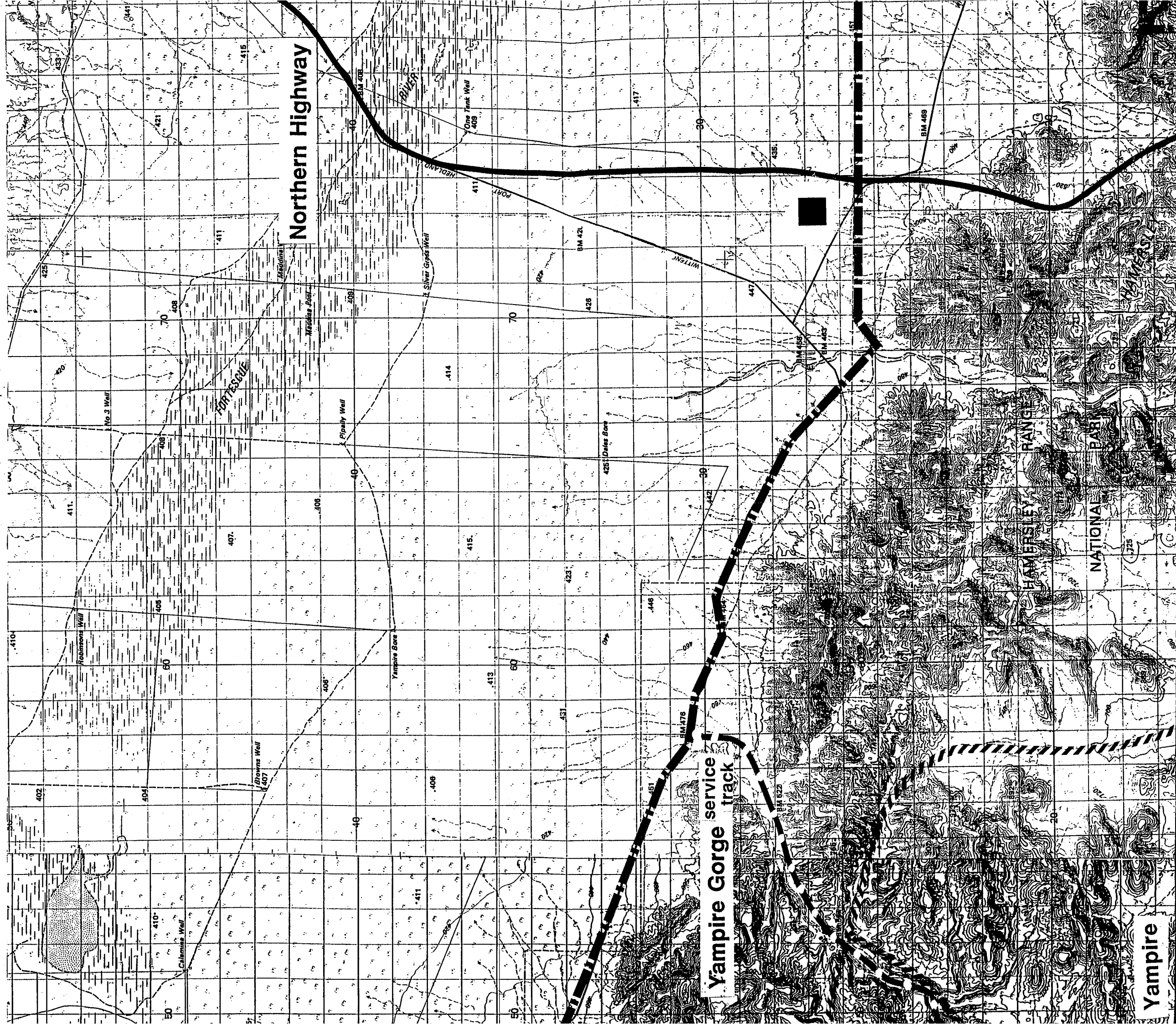
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411

428

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Northern Highway

Yampire Gorge service track

Yampire

HAMPSHIRE RANGELAND

NATIONAL PARK

PORT ESCOVE

Silver Gages Well

One Tank Well

Robinsons Well

Shovens Well

Columbus Well

Yampire Bore

Ripshly Well

No 3 Well

Dales Bore

WATERFALL

BM 469

BM 428

BM 476

BM 522

BM 458

BM 453

BM 431

BM 446

BM 425

BM 426

BM 411

BM 408

BM 408

BM 406

BM 410

BM 402

BM 444

BM 415

BM 411

BM 410

BM 406

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BM 435

BM 471

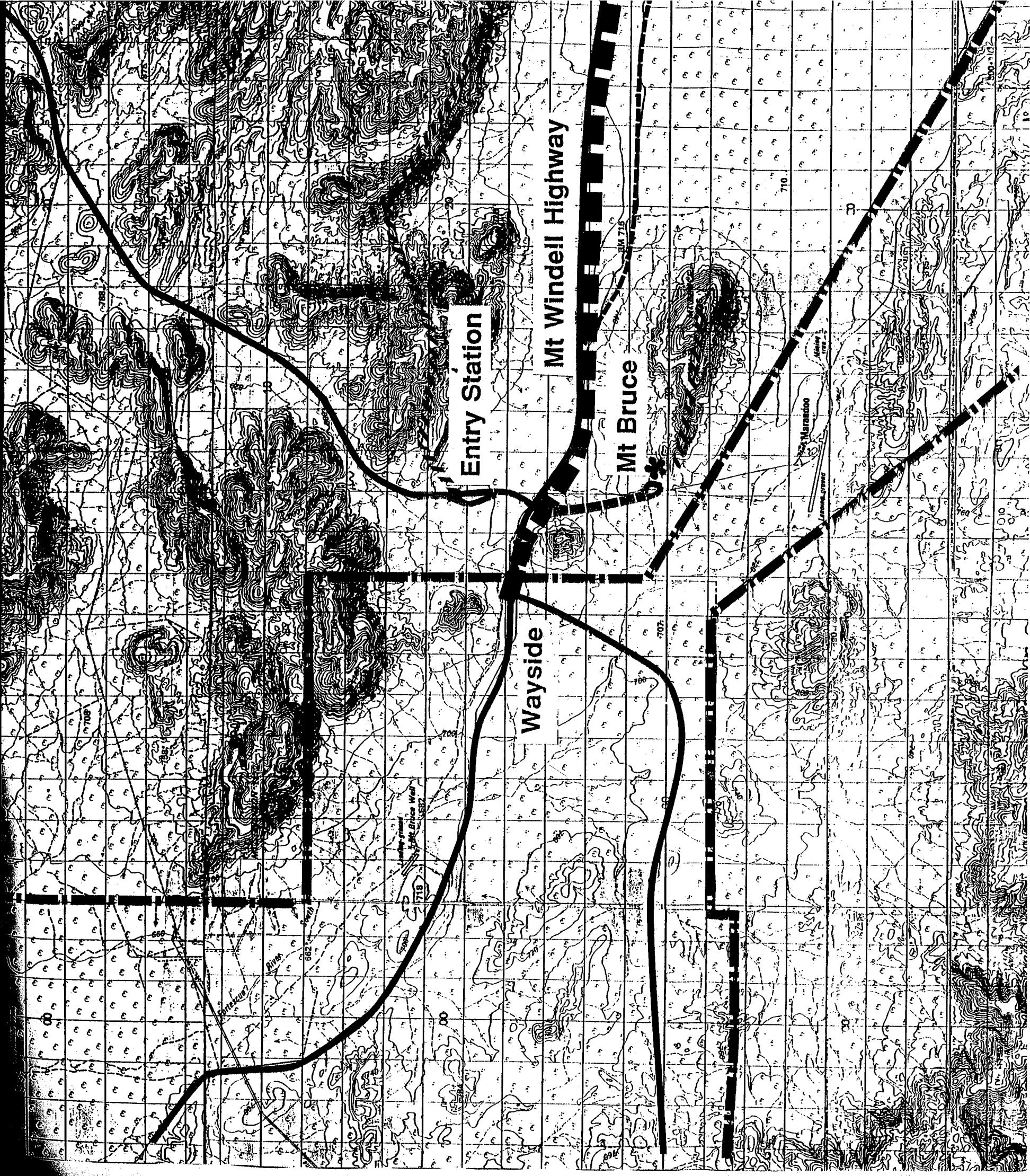
BM 420

BM 475

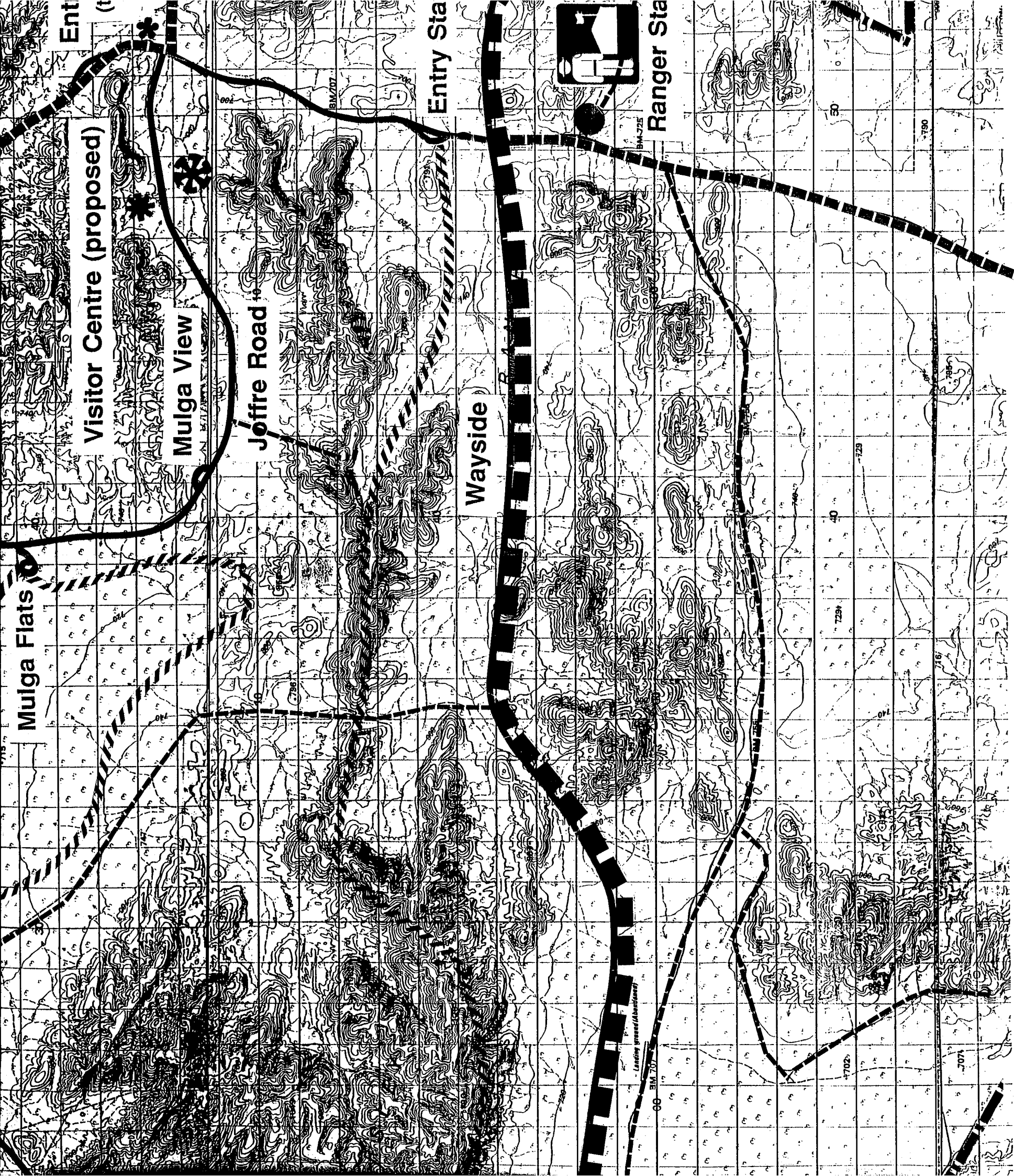
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BM 468







BM 460



Karijini National Park Northern Recreation Area Master Plan

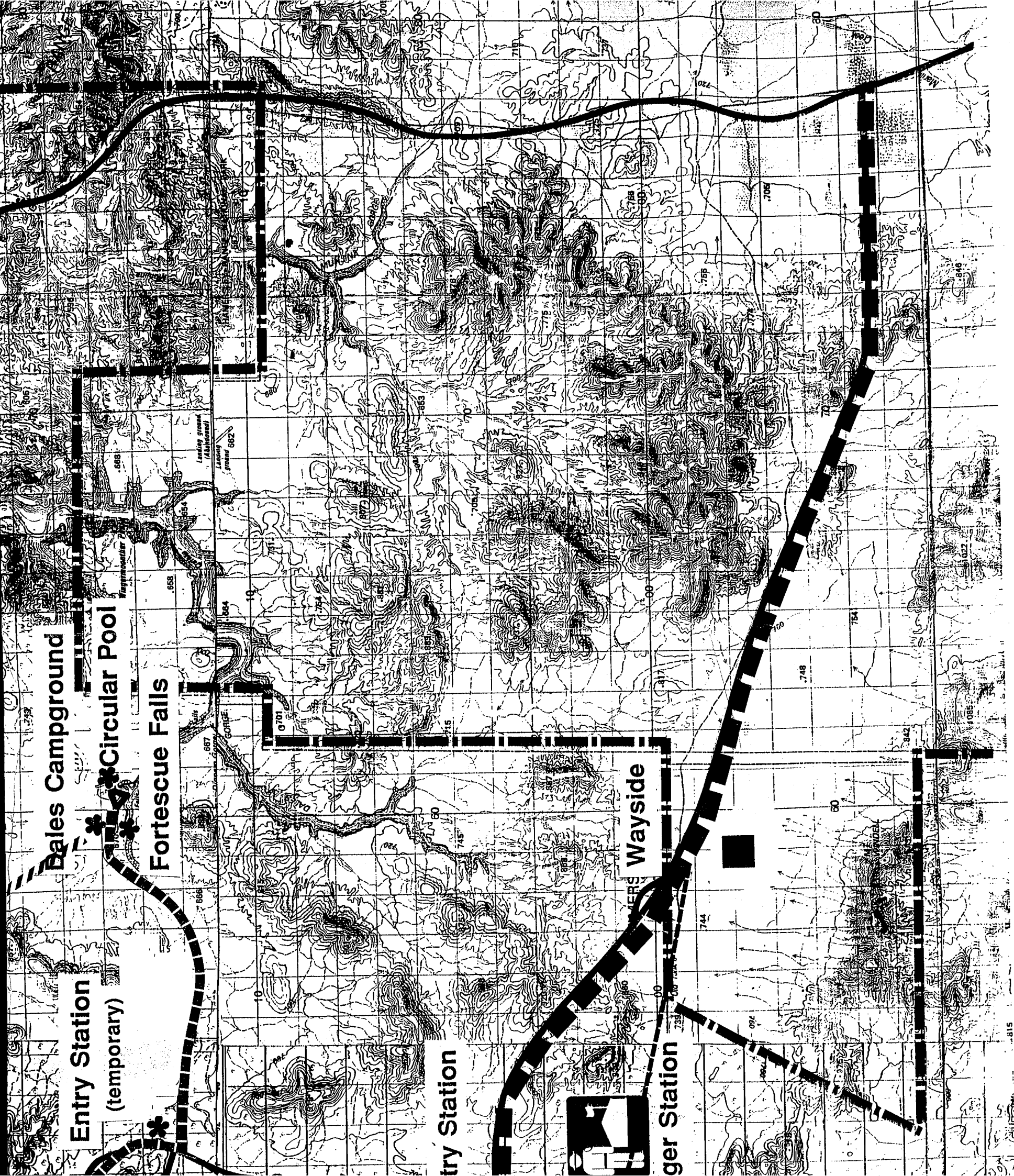


-  potential airport site
-  potential light aircraft landing strip
-  helipad

-  Level 1 - highway
-  Level 2 - main access
-  Level 3 - spur access
-  Level 4 - managed roads
-  roads to delete
-  long distance way

Legend

Scale 1 : 50000



highway

main access

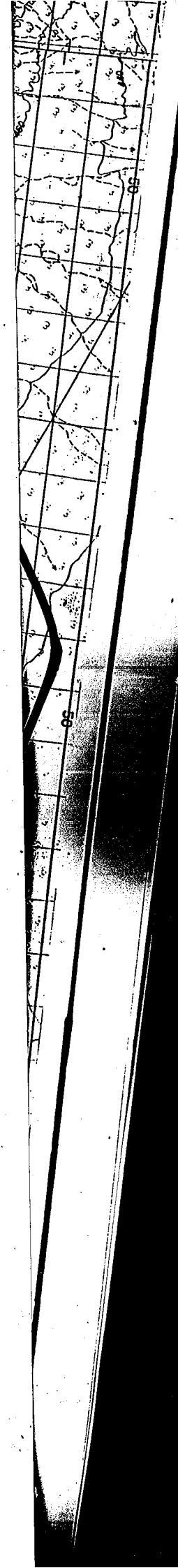
spur access

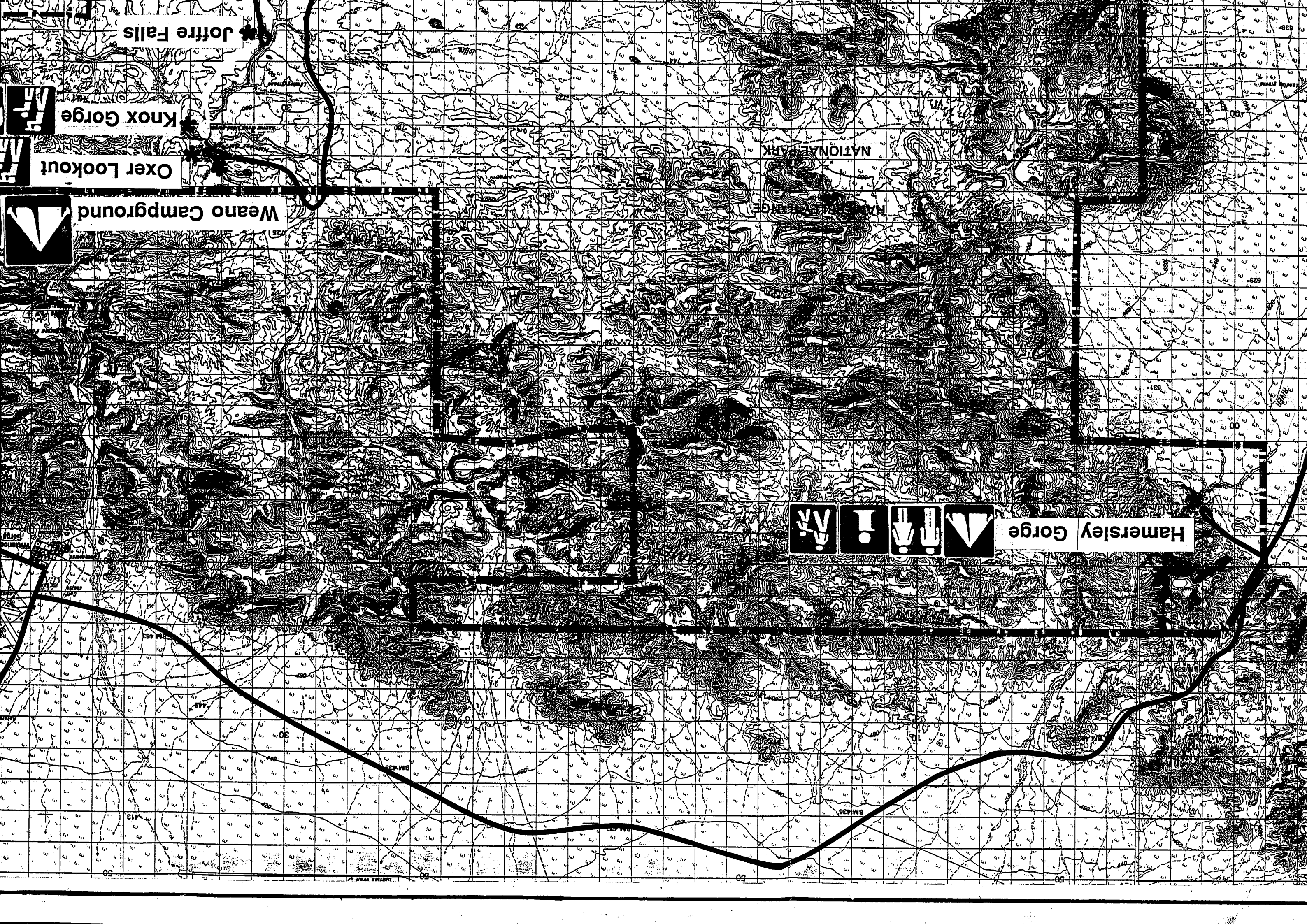
management

delete

ance walking

Access and Circulation





Joffre Falls

Knox Gorge

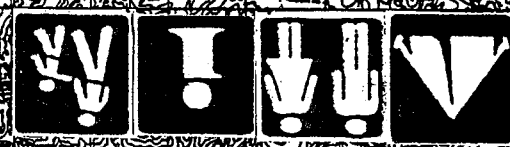
Oxer Lookout

Weano Campground

NATIONAL PARK

HAMERSLEY GORGE

Hamersley Gorge

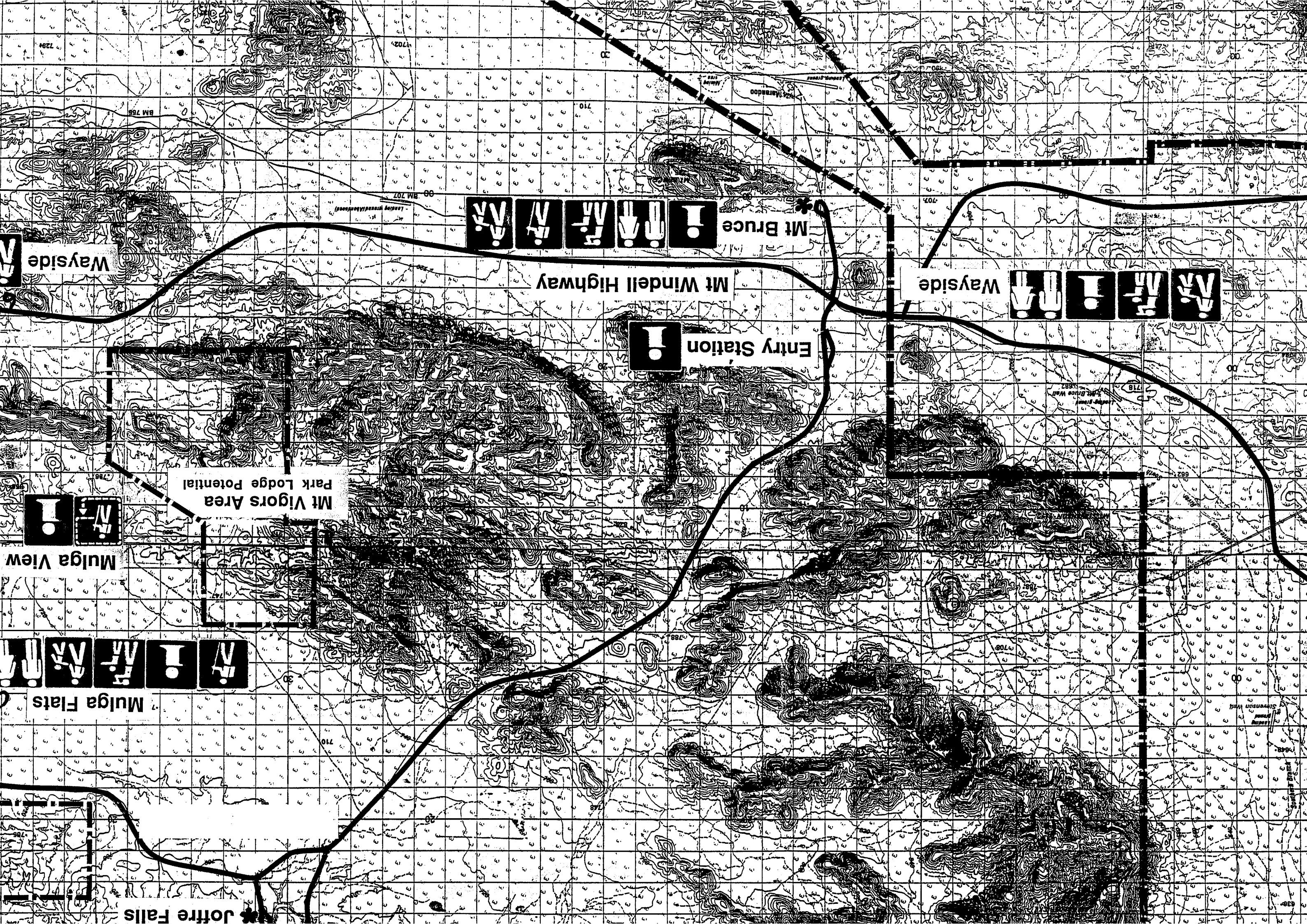


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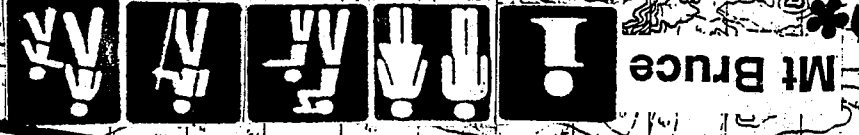
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Wayside

Mt Bruce

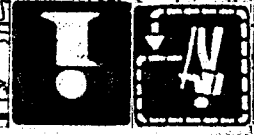


Mt Windell Highway

Entry Station



Mt Vigors Area
Park Lodge Potential




Mulga View





Mulga Flats

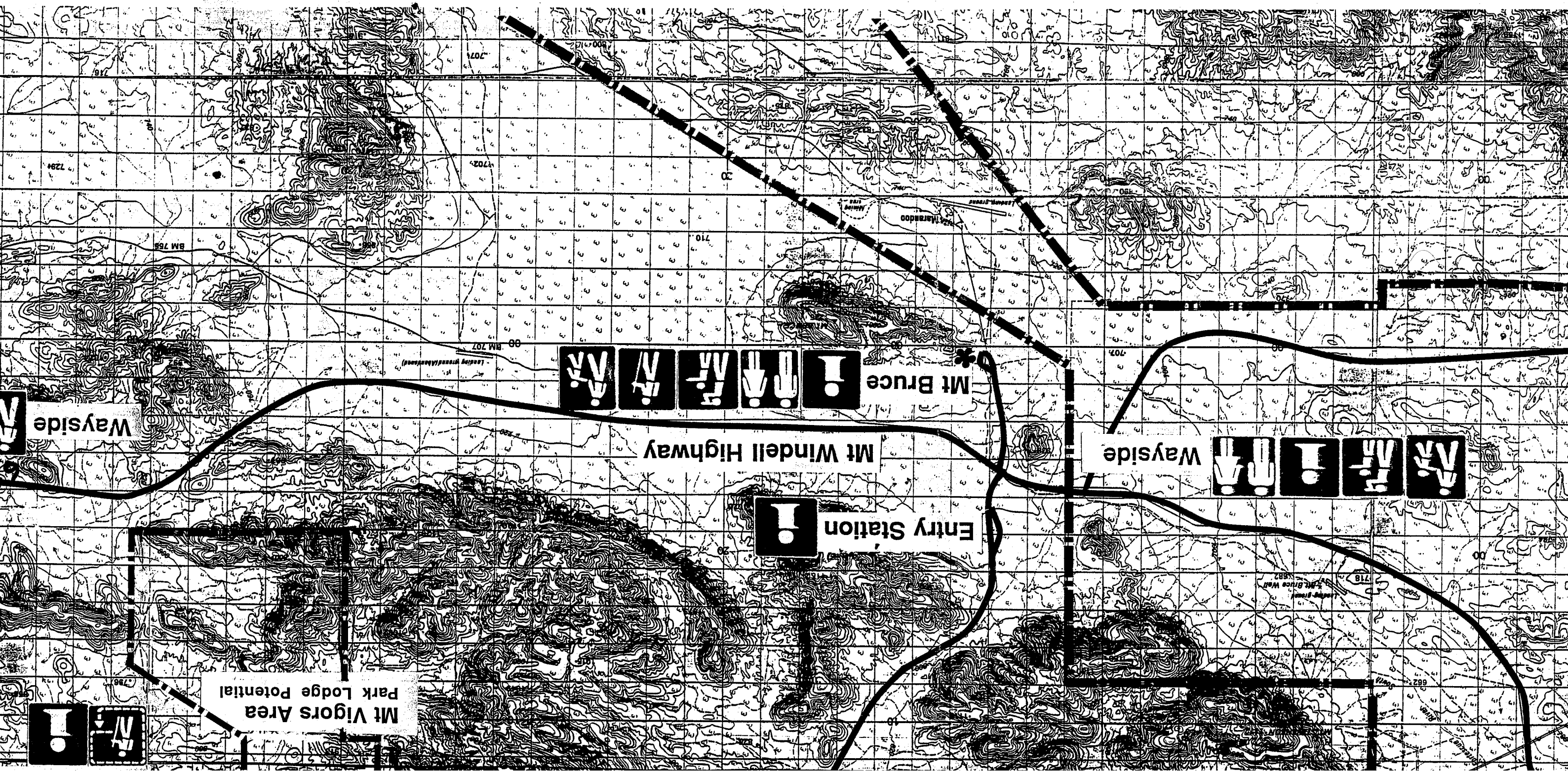
Mt Joffre Falls

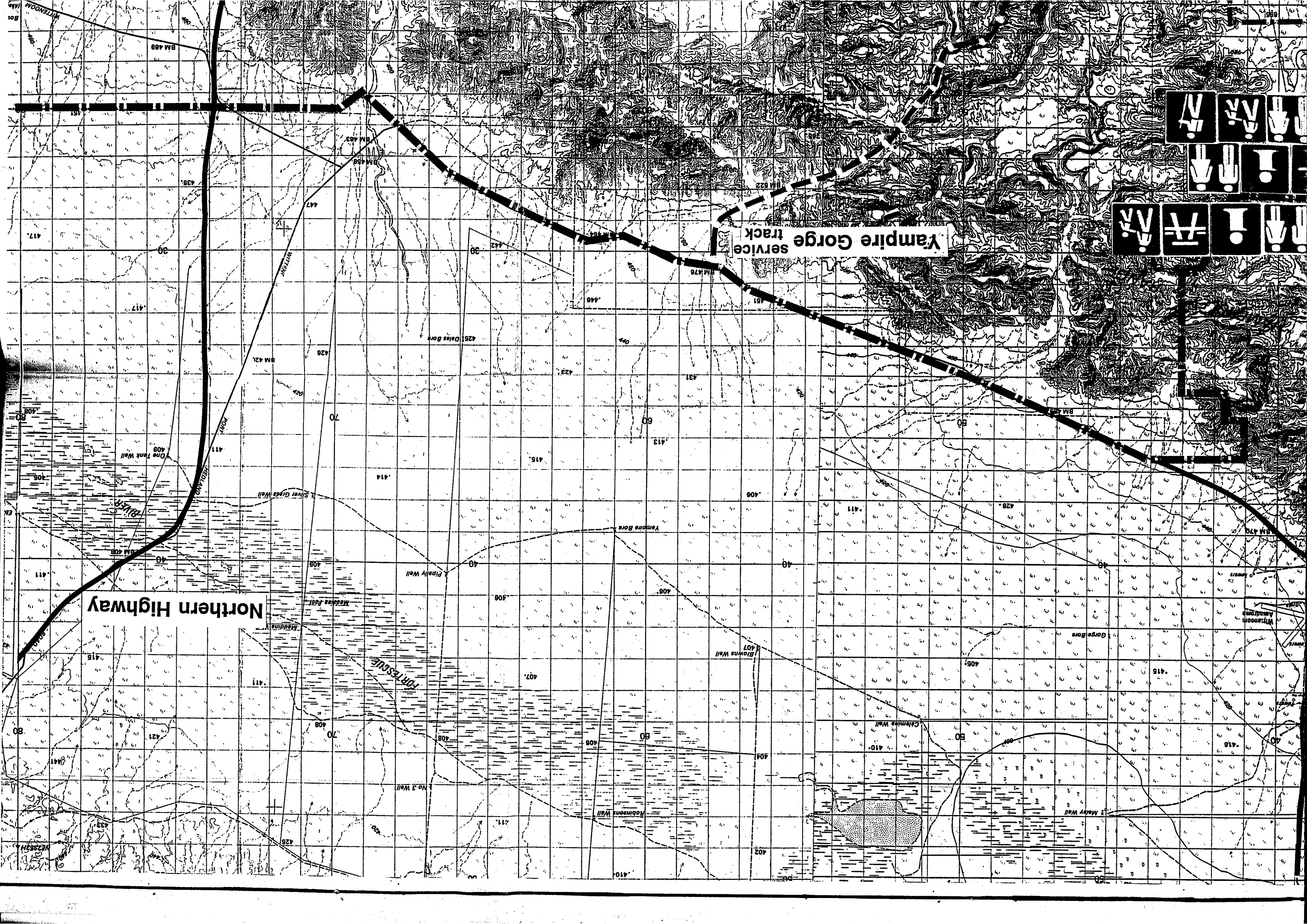
Karijini National Park Northern Recreation Area Master Plan

Information 

lookout 

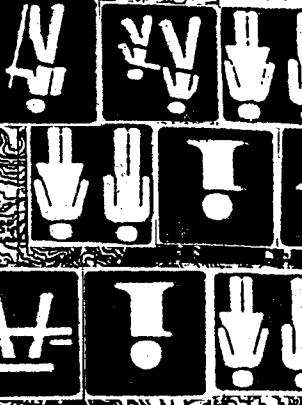
picnic site 





Northern Highway

Vampire Gorge service track



FORRESQUE

BLIVER

One Tank Well

Pipaly Well

Robinsons Well

Blowns Well

Calmine Well

No 3 Well

Gorge Bore

Silver Gorge Well

Maddina Pool

Dales Bore

WATERLOO

BM 459

BM 458

BM 457

BM 421

BM 408

BM 411

BM 415

BM 433

BM 453

BM 456

BM 422

BM 422

BM 422

BM 422

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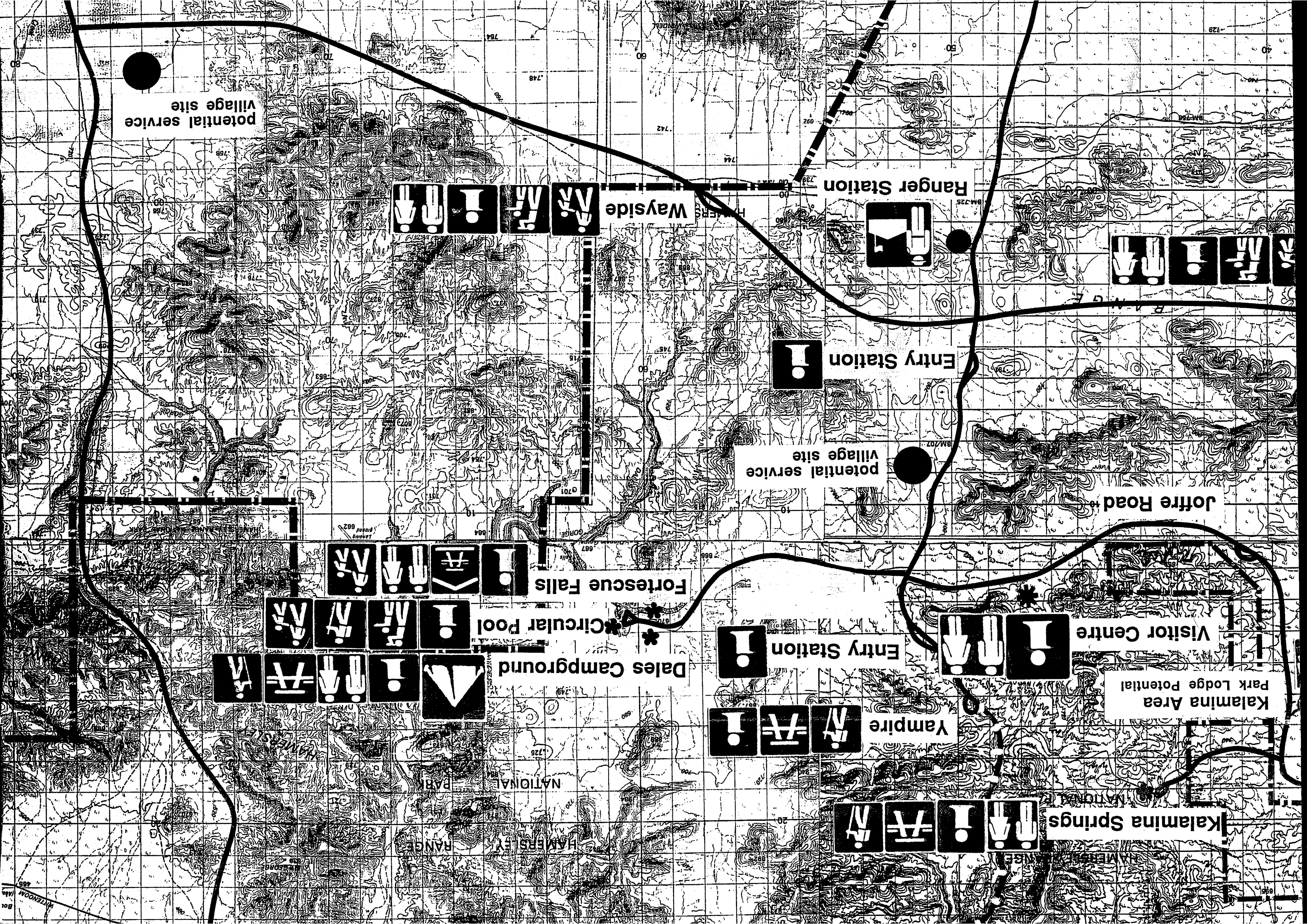
BM 422

BM 422

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Kalamina Springs

Kalamina Area
Park Lodge Potential

Visitor Centre

Yampire

Entry Station

Dales Campground

Circular Pool

Fortescue Falls

Entry Station

potential service
village site

Joffre Road

Wayside

Ranger Station

potential service
village site

PABI RANGE

HAMMERSLEY NATIONAL PARK

Visitor Facilities

: 50000
000100

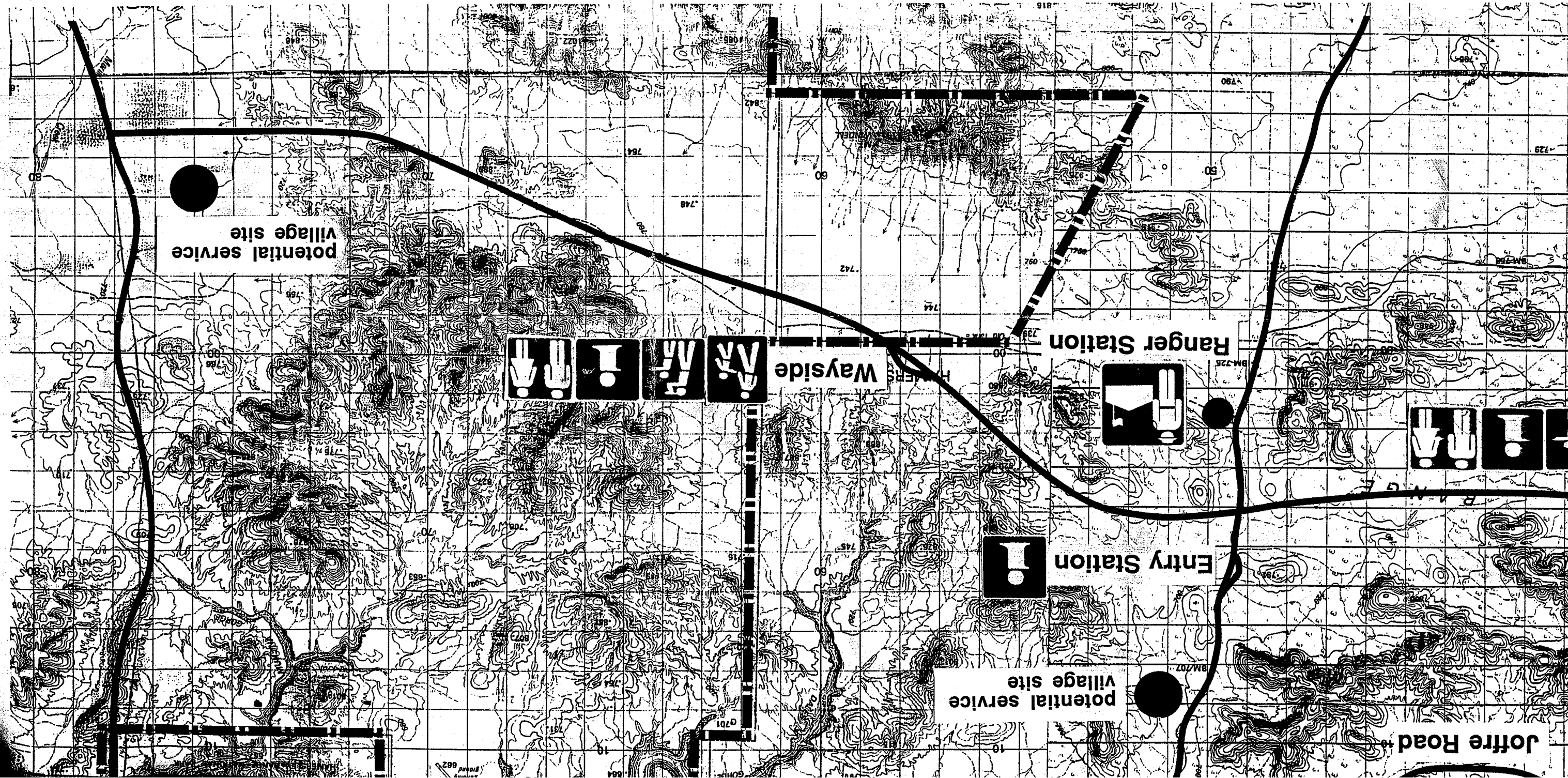
end

accommodation

toilet

walk

track or route



potential service village site

Ranger Station

Wayside

Entry Station

potential service village site

Joffre Road