

COUNCIL POLICY:	SECTION 94 CONTRIBUTION PLAN (now S7.11 EPA Act)
Ref:	13/9956

Contact Officer	Director Civil & Environmental Services
Approval Date	14 December 1992
Approval Authority	Council
Amended	23 August 2005 (Res 210/05)
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Policy statement

That Council adopt a Section 94 Contribution Plan.

1. The Purpose of this Plan.

1.1 This plan contains Council's policy on Section 94 Contributions. It will include details of anticipated increased demand as a result of a new development, and link this to an increased demand for public services and amenities for which developer contributions will be sought. This link, or "nexus" is fundamental to the levying of developer contributions, and is the key to deciding whether or not a contribution can be levied.

2. Aims of the Plan.

- 2.1 To establish a "nexus" between a new development and an increased demand for public services and amenities.
- 2.2 To have a flexible plan which will be able to respond to the changing needs of the public and will allow for the planned, efficient provision of services and amenities likely to be required as a result of, or to facilitate, new development.
- 2.3 To inform the public and those involved in development, as to current contribution levels and information on the nature and timing of the provision of services and amenities.

3. Objectives of the Plan.

- 3.1 Establish the "nexus" the likely anticipated increase in, and nature of demand for services and amenities as a result of the new development.
- 3.2 Determine precisely which services and/or amenities are to be provided by Council and to what level.

- 3.3 To determine the formulae for the calculation of contribution rates.
- 3.4 To identify other funding sources, other than Section 94 Contributions and decide what proportion of actual costs are to be met by Section 94 Contributions.
- 3.5 Determine contribution rates and make clear what other types of contributions will be acceptable.
- 3.6 Ensure compliance with financial accountability requirements.
- 3.7 That this plan be reviewed on an annual basis.
- 4. Land To Which This Plan Applies.
- 4.1 This plan applies to all the land in the Inverell Shire, as covered by the Inverell Local Environmental Plan, 1988 (as amended).

5. The Nexus

- 5.1 Determining the Nexus
- 5.1.1 A nexus must be established between the proposed development and the need for increased amenities and services. If Council fails to demonstrate an increased demand for amenities and services, it cannot charge a Section 94 Contribution.
- 5.1.2 The following are necessary for the establishment of the nexus between a development and the need for additional amenities and services:
 - i) determination of the additional population/tenements generated by the development; and
 - ii) determination of the increased demand for amenities and services and where and when they will be needed.
- 5.1.3 Nexus can be identified as causal, physical or temporal, that is:
 - i) the need for the service or facility being levied for must be a direct result of the development being levied;
 - ii) the service or facility must be near enough in physical terms to provide benefit to the development, and
 - iii) the service or facility must be provided within a "reasonable time".
- 5.2 Determination of Anticipated Development

Before Council is able to consider the nexus between individual developments and the demand for amenities and services it is necessary to consider development at an area-wide level. This will require an assessment of likely future development trends. The following types of factors should be taken into account.

- i) predicted growth of population/commercial or industrial floor space;
- ii) the potential current zoning, to accommodate new development;
- iii) development pressures on the area being examined;
- iv) environmental constraints; and

- v) council or government policy at that time.
- 5.3 Assessment of Required Amenities and Services

An assessment of the required level of amenities and services is based on the determination of the anticipated development and the provision of Council's standard services. Standards may be determined by studies and/or by reference to standards provided by government departments and organisations.

Where there is spare capacity in existing infrastructure, it will not be necessary to levy Section 94 Contributions, unless the capacity has been provided in anticipation of future development.

6. Types of Development For Which Contributions May Be Required

- 6.1 The following types of development are those for which Section 94 Contributions may be required;
- 6.2 Aged accommodation, commercial development, commercial subdivision, dual occupancy development, industrial development, industrial subdivision, intensive keeping of livestock, mining and extractive industries, places of assembly, places of public worship, residential flat development, subdivision <u>of land</u>, recreation facilities, tourist facilities, traffic generating development, warehouses. Council reserves the right to prepare one off Section 94 Contribution Plans for unforeseen major developments which may occur.
- 7. Types of Services for Which Contributions Will be Levied.
- 7.1 a) Carparking
 - b) Child Care
 - c) Drainage
 - d) Library
 - e) Parks
 - f) Public Privies
 - g) Roads
 - h) Sewer
 - i) Sporting Fields
 - j) Traffic Management Measures
 - k) Water Supply
 - I) Waste Disposal

8. Formulae Used in the Calculation of Contributions

- 8.1 Community Services
- 8.1.1 Where Council considers that, as a consequence of anticipated development, additional demand will be created for community facilities already provided by Council and for which provision has been made for future expansion, a contribution will be levied on the developer.
- 8.1.2 Where Council considers that, as a consequence of anticipated development additional demand will be created for community facilities and that Council will be involved in future capital expenditure to meet such demand, a contribution will be levied on the developer.
 - i) Playgrounds/Parks Future Works Proposed Capital Expenditure (Over next 5 years)

= Contribution

Number of Tenements in Inverell

ii) Sporting Fields Future Works

Proposed Capital Expenditure (Over next 5 years)

= Contribution

Number of Tenements in Inverell

iii) Library

Amount Spent on Upgrade (Designed for the next 20 years)

= Contribution

Number of Dwellings in Shire

iv) Public Privies

Proposed Capital Expenditure (Over next 5 years)

= Contribution

Number of Dwellings in Inverell

- 8.1.3 **Note:** The contribution may be rounded up or down a dollar to allow for easier figure for the final calculation of the total contribution.
- 8.2 Technical Services
- 8.2.1 Water Supply Recoupment of Past Capital Costs

For the Inverell and Ashford Water Supply Schemes, which have had recent major augmentations, it is proposed to recoup past costs of provision of headworks, treatment, transfer and storage works.

It is not proposed to recoup past costs of the Delungra or Yetman Water Supplies, or of the distribution/reticulation pipework of the Inverell or Ashford Water Supplies.

Developer Contribution for Equivalent Tenement (ET).

AH	DS
NH	NS

where

- A_H = Asset value of headworks, treatment works, transfer works and storage works.
- N_H = Number of existing equivalent tenements served by headworks, treatment works, transfer works and storage works.
- Ds = Net outstanding debt for Shire wide water supply scheme.
- Ns = Present number of equivalent tenements supplied by Shire wide water supply scheme.

8.2.2 Water Supply Future Augmentation

=

* Headworks, Treatment, Transfer and Storage Capital Works.

At present, Council's Water Supply Headworks, Treatment Transfer and Storage Works have spare capacity, and it is not proposed to levy a contribution for future augmentation. However, if as a consequence of gradual or extraordinary development, the spare capacity is used and Council determines that augmentation will be required within five (5) years, a contribution will be levied on developers.

Developer Contribution per Equivalent Tenement (ET).

A_A --N_H where A_A = Asset Value of Augmentation of Headworks, Treatment, Transfer and Storage Works. N_H = Number of Equivalent Tenements served by

- Headworks, Treatment, Transfer and Storage Works.
- * Distribution/Reticulation Capital Works

Where Council determines that, as a consequence of anticipated development, water distribution/reticulation systems will need to be augmented within five (5) years, a contribution will be levied on developers in the subject area.

Developer Contribution for Equivalent Tenement (ET).

= Sum P _(1,2)	A _(1,2) +1.Sum A _(1,2) .	(1 – N _(1,2))
C(1,2)	Np	(C _{(1,2}))
Where			
^A (1,2) =	Asset value of distribution pip	e No. (1,2)	
^N (1,2) =	Present demand (in equivaler No. (1,2) inclusive of subject	nt tenements to b development.	e supplied by distribution pipe
NP	 Number of equivale network. 	nt tenements se	erved by total distribution pipe
C _(1,2) P _(1,2)	Capacity of ComporFraction of Supply to	nent (1,2) o new developme	ent provided by pipe (1, 2…)

Council has been introducing these charges on a progressive basis. For 1993 the figures calculated in accordance with the above formulae are to be two thirds of the resultant figure. For 1994 the full figure calculated will be levied.

P(1,2..) = Fraction of total supply to subject development to be supplied by Distribution Pipe No. (1, 2)

C(1,2..) = Capacity of Distribution Pipe No. (1,2..) in Equivalent Tenements.

8.2.3 Sewerage Recoupment of Past Capital Costs.

For the Inverell Sewerage Scheme, which has had a recent augmentation, it is proposed to recoup past costs of provision of bulk transfer, treatment and disposal works.

It is not proposed to recoup past costs of the Delungra or Ashford sewerage schemes, or of the collection pipework and minor transfer systems of the Inverell Sewerage Scheme.

Developer Contribution per Equivalent Tenement (ET).

= A_T DS -- --N_T NS

where

- AT = Asset value of bulk transfer, treatment and disposal works.
- NT = Number of existing Equivalent Tenements served by bulk transfer, treatment and disposal works.
- D_S = Net outstanding debt of Shire wide sewerage scheme.
- NS = Present number of Equivalent Tenements served by Shire wide sewerage scheme.
- 8.2.4 Sewerage Future Augmentation.
 - Bulk Transfer, Treatment and Disposal Capital Works.

At present, Council's Sewerage Bulk Transfer, Treatment and Disposal Works have spare capacity, and it is not proposed to levy a contribution for future augmentation.

However, if as a consequence of gradual or extraordinary development, the spare capacity is used, and Council determines that augmentation will be required within five (5) years, a contribution will be levied on developers.

Developer Contribution for Equivalent Tenement (ET).

А_А

=

--

NT

Where

- ^AA = Asset value of augmentation of Bulk Transfer, Treatment and Disposal Works.
- NT = Number of Equivalent Tenements served by Bulk Transfer, Treatment and Disposal Works.
- * Sewerage Collection/Transfer Works.

Where Council determines that, as a consequence of anticipated development, sewerage collection/transfer works will need to be augmented within five (5) years, a contribution will be levied on developers in the subject area.

Developer Contributions per Equivalent Tenement (ET).

8.2.5 Major Drainage - Future Augmentation.

Where Council considers that, as a consequence of anticipated development, augmentation of major drainage infrastructure is likely to be required within five (5) years, a contribution will be levied on developers who will use the drainage system.

"Major Drainage" means the trunk and associated collector drainage system excluding those pipes, and facilities which are primarily provided to collect road and roadside runoff.

Developer Contribution per Equivalent Tenement (ET).

where

- D = Area of "developable land" within the subject development site, in square metres.
- A = Total area of "developable land" within the catchment of the Drainage system, in square metres.
- C = Current total (estimated or actual) cost of construction of the trunk drainage work, in \$ for the subject catchment area.
- R = Total area of land reserved and/or to be acquired for trunk Drainage works within the catchment of the drainage system, in square metres.
- V = The average current (estimated or actual) value of the land in "r" above, in \$/square metre.
- L = Number of equivalent tenements to be created in the subject development site.
- 8.2.6 Waste Disposal Future Augmentation.

Where Council considers that, as a consequence of anticipated development, augmentation of waste disposal facilities of a capital nature (eg. landfill sites) is likely to be required within five (5) years, a contribution will be levied on developers within the garbage service area and other developers whose development would utilise waste disposal facilities.

Developer Contribution per Equivalent Tenement (ET).

where

- C = Current total cost of Solid Waste Infrastructure Augmentation in \$.
- R = Total area of land to be acquired for Solid Waste Infrastructure Augmentation in hectares.
- V = Average current value of the land to be acquired in \$/ha.
- L = Number of equivalent tenements to be serviced.

8.2.7 Roads

Where Council considers that, as a consequence of anticipated significant traffic generating development, additional wear and tear above and beyond that which has been provided for in Council's engineering design will occur to any of Council's roads, a contribution will be levied on the developer to meet that additional maintenance cost.

- a = AADT
- b = Heavy vehicles
- c = b x 1.5 = ESA/day
- e = Increase in heavy vehicles due to development
- f = e x 2.3 = ESA/day
- g = Design life of pavement
- j = C x g x 300 = ESA life of pavement (assuming usage on 300 days/year)
- m = j (Cx300)+(Fx250)= Life with development p = C₀ + Mi x g Where Co is reconstruction
- ----- cost \$/km m m

^Mi is current maintenance cost in \$/km and p is cost with development

Contribution = (p - s) x km for route/year

+ a capital contribution to bring the route to a standard suitable for the intended use.

Capital Contribution = Cost x Number of lots ------No of potential lots

8.2.8 Carparking Future Provision

Where Council considers that, as a consequence of anticipated development for which on site car parking would normally be provided but cannot, a contribution will be levied on the developer.

Cost of provision of 1 car park x number of spaces required but not provided = contribution required.

Contribution Rate = $3050 \times X$

where X = number of spaces required but not provided.

Please Note: In general circumstances it is Council's expectation that on site carparking should be provided as per Roads and Traffic Authority guidelines. The contributions above will only be permitted in special circumstances.

Note: As at 1 July 2005 the Base rate of \$3050.00 will be increased by the CPI rate and rounded up to the nearest \$5.00.

8.2.9 Upgrading of Roads Pursuant to Clause 12 of the Inverell Local Environmental Plan, 1988 (Amendment No.1).

This clause applies to subdivisions pursuant to Clause 12 and to approvals for dwellings on existing Crown allotments, which could not be built on other than for the implementation of Clause 12.

Where pursuant to the above Clause, Council accepts that a road fronting a development need not have bitumen surface to Inverell, it will still require a Section 94 Contribution to the upgrading of that road. Such contribution will be calculated in accordance with the following formula which is designed to ensure that when full potential development occurs the total cost of improving the road to a bitumen standard has been recovered from the developers involved. All contributions will be rounded to the next highest \$5.00.

- C = Section 94 Contribution per allotment/dwelling
- T = Total estimated cost of upgrading road to Council's bitumen standard
- N = Number of additional allotments which could be created by Subdivision (pursuant to Clause 12) with frontage to the road in question plus number of additional sole dwellings which could be erected on existing Crown allotments with frontage to the road in question.

<u>Formula</u>

8.2.10 Roads and Rural Subdivision

Council is of the opinion and has determined that increasing subdivision in rural areas creates additional demands on both rural road upgrading and maintenance requirements. As a consequence of this increasing demand Council is constantly required to improve the standard of roads provided and to upgrade the maintenance levels of those roads.

Accordingly Council will levy section 94 contributions in respect of each new lot created by rural subdivision. The level of contribution will be calculated in accordance with the following formula.

- Where C = section 94 contribution per new allotment being created
 - C = Annual maintenance grading vote in current estimates in \$ + annual ACRD funded bitumen reseal vote in \$

20 x number of new rural lots created in a three year period prior to lodgement of application*

* Calculated to the lower whole number

Based on current figures applicable to the above formula the quantum of levy for the 2003/2004 period will be \$1625 per new lot. To reflect Council's increasing road maintenance costs, this figure will be updated on a quarterly basis in accordance with the CPI increases.

8.2.11 CPI

Due to the rising costs of road construction and maintenance, Council is in the opinion that all contributions levied for proposed work under clauses 8.2.7, 8.2.9 and 8.2.10 should be levied a quarterly CPI increase rounded up to the nearest \$5.00, from the date of approval. This should cover any shortfall over the 5 year lifespan of the development approval.

The CPI rate will be the All Groups rate as released by the ABS on a quarterly basis. The applicable CPI rate will be as per the previous quarter to ensure there is an available CPI rate at time of calculation.

9. Contribution Rates

- 9.1 The following contributions have been calculated per allotment/tenements.
- 9.1.1 Community Services

i)	Playgrounds/Pa	arks	3
\$ 50,00	0	=	\$14.28 rounded down = \$14.00
3,500			therefore contribution = \$14.00
ii)	Sporting Fields		
\$ 50,00	0	=	\$14.28 rounded down = \$14.00
3,500			therefore contribution = \$14.00
iii)	Library		
\$320,00	00	=	\$66.66 rounded down = \$71.00
4,500			therefore contribution = \$71.00
iv)	Public Privies		
\$ 40,00 	0	=	\$11.42 rounded down = \$11.00

3,500

therefore contribution = \$11.00

The total Section 94 Contribution for Community Services = \$100.00

Other community services planned for or provided by Council in the future will be included in the above calculation of the next annual review after Council's decision has been made.

9.1.2 Technical Services

9.1.2.1 Water Supply Recoupment of Past Costs

* Inverell Water Supply

Contribution	=	\$ 9.54m	\$ 3.79m
	38	00 44	00
	=	2510	- 861
	=	\$ 1689	per ET

* Ashford Water Supply

Contribution	=	\$ 0.31m	\$ 3.79m
		310	4400
	=	\$ 1000 -	\$ 861
	=	\$ 139 per	ET

9.1.2.2 Water Distribution/Reticulation Augmentation.

* Fernhill Road Augmentation Area.

= \$ 1000 per ET

* Other areas to be included when defined.

9.1.2.3 Sewerage Recoupment of Past Costs

* Inverell Sewerage

Contribution	=	\$ 2.20m	\$ 1.65m
		3500	4000
	=	\$ 629	- \$ 413
	=	\$ 216	

9.1.2.4 Sewerage Collection/Transfer Augmentation.

- * Areas to be included when defined.
- 9.1.2.5 Major Drainage Future Augmentation

Developer contributions to be calculated for specific catchment areas when defined.

9.1.2.6 Waste Disposal - Future Augmentation

Developer contributions to be calculated for specific garbage service areas when defined.

9.1.3 Upgrading of Roads Pursuant to Clause 12 of the Inverell Local Environmental Plan, 1988 (Amended No.1).

Example Calculation

тс	=	\$75000
Ν	=	12
С	=	75000 12

= \$6250 additional allotment

10. Method and Timing of Payment

- 10.1 Council requires payment in the form of a cash payment. The timing for these payments are as follows:
 - a) development applications involving subdivision prior to the release of the linen plan;
 - b) development applications involving building work prior to building approval being given; and
 - c) development applications where no building work is required within thirty (30) days of development consent.
- 10.2 In special circumstances, deferred payments may be acceptable but only after special application to Council and subject to a bank guarantee being lodged.
- 10.3 The Section 94 Contributions will be spent by Council within five (5) years of collection.

11. Establishment and Maintenance of Section 94 Register.

- 11.1 Council is required to establish and maintain a Section 94 Register. This is to maintain separate records which show the contribution received and expended including interest, for each service or amenity to be provided. Records must clearly indicate money held and expended according to each category of public amenity or service being levied for.
- 11.2 All contributions held and levied before 17 December, 1992, together with any interest from their investment, must be clearly distinguished in Council's accounting records from all other income and expenditure of Council. Section 94(3) requires that such monies already held must be spent on the purpose for which they were levied.

11.3 An annual statement will be prepared at the end of each financial year. Required information from this report will be included in the notes to Council's annual financial report.

12. Investment of Contributions

12.1 Council is able to invest Section 94 (3) money in "authorised investments" (as prescribed by the Local Government Act, 1993). All interest earned on contributions must be used for the public service or amenity for which the contributions were levied, and not used for general council purposes.

13. Recoupment of Contributions

- 13.1 Under Section 94(2A), Council can recoup the cost of services and facilities provided in preparation for or to facilitate the carrying out of development. Water, sewerage and drainage headworks charges can be recouped as per the formulae contained elsewhere.
- 13.2 Recoupment of costs related to the services will not be recovered for those services where expenditure occurred prior to 17th December, 1992. Any expenditure incurred after 17 December, 1992 and identified as providing for future development can be recouped in accordance with the provisions of this plan.

14. Refunds

14.1 Each application for refund will be considered by Council on its merits. Council reserves the right to seek legal advice on all matters dealing with refunds. Refunds will usually only be granted where work, the subject of a development application does not proceed or where surplus funds have been levied.

15. Schedule of Works - Future Works Only

15.1 Community Services

Туре	Timing	Cost
Playground/Parks Sporting Fields Public Privies	1993 – 1997 1993 – 1997	1993 – 1997 \$ 50,000 \$ 50,000 \$ 40,000
Technical Services Water Fernhill Road	1993 – 1994	\$170,000

Other works to be incorporated as they are calculated and provided for in Council's forward plan.

16. Details of Public Availability of Financial Information

- 16.1 Council is required to be accountable to the public with regard to the use of Section 94 Contributions. The accountability requirements are set out in:
 - a) the new Regulation to the Environmental Planning and Assessment Act, 1979 (see attachment);
 - b) the Local Government Act, 1993; and

15.2

- c) the Local Government Code of Accounting Practice and Financing Reporting.
- 16.2 According to the Regulation, accountability with regard to Section 94 Contributions require the precise registration of all contributions and separate accounting records for contributions to allow "tracking" and identification of shortfalls and surpluses of Section 94 monies. Records must clearly indicate money held and expended according to each category of public amenity or service being levied for. This is to enable the effectiveness of Council's Section 94 policy to be evaluated.

17. Methods to be Used by Council to Monitor and Update Formulae for the Calculation of Contributions.

17.1 Generally all contributions are to be updated annually either according to recalculated figures based on actual or estimated costs or by increases according to adjusted CPI figures.

18. **Crown Development**

- 18.1 Certain types of Crown development often create less demand on facilities and services than private developers. To determine this a statement of public benefit can be requested by Council to accompany a development application. If Council determines that there is an increased demand on existing facilities and services, a Section 94 Contribution may be required, having regard to the benefit to the users and the financial costs to the community.
- 18.2 In the case of a dispute with Crown Development, the Minister for Planning is the final arbiter.

19. Council as Developer

- 19.1 Where Council acts as the developer, then a contribution under Section 94 is also applicable in the same format as a private developer.
- 20. Levying when Council will not actually do the work
- 20.1 Council can only require contributions for those services and amenities that it has a responsibility to provide, whether or not it will carry out the work or provide that service itself.
- 20.2 Council may levy a contribution towards the cost of a service or amenity and the work may be contracted out to another agency.

21. Dual Occupancy

- 21.1 Under Section 94A, a contribution can be levied for dual occupancies on vacant lots.
- 21.2 Where the development is on a lot with an existing dwelling, a contribution can be levied for water and sewage facilities only.
- 21.3 Water and Sewerage Contributions for each dual occupancy will be levied on the basis of ET's in excess of one ET, as follows:
 - a) Servicing two (2) water and one (1) sewer service. Separate metering of water supply shall be provided by the developer.
 - b) Contributions Water 1 $\frac{1}{3}$ ET 1 ET = $\frac{1}{3}$ ET

Sewer
$$1^{2/3}$$
 ET - 1 ET = $2^{2/3}$ ET

c) At time of subdivision, the developer shall be responsible for the creation of the necessary easements for sewer services.

22. Residential Flat Development

- 22.1 Council requires contributions for water facilities, sewer facilities and community services for all residential flat development.
- 22.2 Water and sewerage contributions will be levied on the basis of ET's in excess of one ET per allotment as follows:
 - a) Servicing one sewer service and one water service per unit. Separate water metering per unit shall be provided by the developer.
 - b) Contributions Water $1^{1/3}$ ET 1 ET = $1^{1/3}$ ET - Sewer - $1^{2/3}$ ET - 1 ET = $2^{1/3}$ ET
 - c) At the time of subdivision, the developer is responsible for the creation of necessary easements for sewer service.
- 22.3 Community Services will be levied on a 50% reduction per unit as follows:

Contribution - $1^{1/2}$ unit - 1 unit = $1^{1/2}$ per unit increase

- 23. Discounts
- 23.1 Depending on the nature, scale, type and circumstances of an individual application, Council may discount the level of contribution as it deems suitable.
- 24. Aged and Disabled Accommodation
- 24.1 Under Section 94A a contribution can be levied for water and sewerage headworks for aged and disabled accommodation. Council will retain the right to waive the contribution from community funded projects.

25. Appeal

- 25.1 The applicant may lodge an appeal with the Land and Environment Court in response to a condition of consent that is imposed in accordance with this plan.
- 25.2 Any matter relating to the actual procedure followed by Council in the making of a contribution plan cannot normally be challenged except within the first three (3) months after the plan has been made.

WATER SUPPLY DEMANDS

Water Supply Demands shall be expressed as equivalent tenements (ET's).

The ET rating of a development may be assessed by Council from the parameters of the individual development, or alternatively will be assessed on the basis of Public Works Department guidelines/criteria.

Table A1 Standard Water Supply Demands shows water supply demands for a range of typical developments, based on Public Works Department guidelines.

TABLE A1

STANDARD WATER SUPPLY DEMANDS

Classification	Module	Unit Adopted	ET/Unit
Residential	House	Tenement	1
	Flat/Unit/Townhouse	Unit	1/3
	Dual Occupancy	Unit	1/3
Non Residential	Hospital	Bed	1
	Hospital/Lawns/garde ns(watered)	На	10
	Day Schools School Lawns/gardens	Pupil Ha	1/8 10
	Nursing Homes Lawns/gardens (watered)	Bed Ha	³⁄₄ 10
	Caravan Parking/Camps	Site	1 1/2
	Offices/Shops	На	25
	Industrial	Individual Assessment	
	Parks, Ovals (watered)	На	12

SEWAGE LOADINGS

Sewage loadings shall be expressed as equivalent tenements (ET's).

The ET rating of a development may be assessed by Council from the parameters of the individual development, or alternatively will be assessed on the basis of Public Works Department guidelines/criteria.

Public Works Department Standard Non-Residential sewage loadings are presented in Table B1 PWD Standard Sewage Loadings.

For an assessment of contributions for industrial and commercial developments, Fixture Unit ratings can be adopted. Table B2 - Fixture Unit Ratings - Commercial and Industrial Development summarizes the fixture unit rating for various fixtures.

For conversion of Fixture unit rating to ET's, the following equation is provided.

No. of ETs = $\frac{\text{Total Fixture Unit Rating}}{6}$

PWD STANDARD SEWAGE LOADING SHEET 1

CLASSIFICATION	MODULE	UNIT ADOPTED	E.T./UNIT	STORM ALLOWANCE (L/s)
Residential	Single Cottage	Tenement	1	0.058 Unit
(Unit Basis)	Flat, Unit, Town House (Individual allotment thereof)	Flat	2/3	0.058 Module
Residential (Area Basis)	Single Dwelling Zone (30-50) persons/ha)	Gross Hectare	10	0.58/Unit
	Medium Density Zone (60-150) persons/ha)	Gross Hectare	25	0.58/Unit
	High Density Zone (150-250 persons/ha)	Gross Hectare	50	0.58/Unit
	Abnormal Density Zone (250-500 persons/ha)	Gross Hectare	100	0.58/Unit
	Intensive Density Zone (500 persons/ha)	Gross Hectare	150	0.58/Unit

Gross Hectare - total area of zone

Built-up Hectare - floor area of building Net Hectare - area of land not including that set aside as public road or park.

PWD STANDARD SEWAGE LOADINGS SHEET 2

CLASSIFICATION	MODULE	UNIT ADOPTED	E.T./UNIT	STORM ALLOWANCE (L/s)
Non-Residential	Hospital	Bed	1	0.58/Module
	Military Camp	Soldier	1/6	0.58/Module
	Hostel	Bed	1/8	0.58/Module
	Day School	Pupil	1/25	0.58/Module
	Boarding School	Pupil	1/6	0.58/Module
	Boarding School	Pupil	1/6	0.58/Module
	Hotel	Built-up Hectare	100	0.58/Module
	Motel	Bed	1/8	0.58/Module
	Club (licensed)	Occupant	1/25	0.58/Module
	Public Toilets	W.C. or Urinal	1/2	0.58/Module
Commercial				
(i) Unit Basis	Shops etc.	Occupant	1/25	0.58/Module
(ii) Area Basis	High Density Zone	Built-up Hectare	10	0.58/Net Ha
		(floor area for		multi-storey)
		multi-storey)		
Entertainment	Showground	Visitor	1/100	0.58/Module
	Racecourse, etc			
	Caravan Park	Van Lot	1/2	0.58/Module
	Swimming Pool	Complex	15-25	0.58/Module
Industrial	Multi Purpose	Gross Hectare	30-50	0.58/Unit
	Future use			
	unknown			
				0.50/11.1/
	Clean Dry Trades	Gross Hectare	2-4	0.58/Unit
	(no snowers)			
	District Days Tree days	Crease Liesters	4.10	0.50/1.1+;+
	Uity Dry Trades	Gross Hectare	4-10	0.58/Unit
	(with shwers)			

PWD STANDARD SEWAGE LOADINGS SHEET 3

CLASSIFICATION	MODULE	UNIT ADOPTED	E.T./UNIT	STORM ALLOWANCE (L/s)
Wet Industrial				
(a) Meal Preparation	Restaurant)	Built-up Hectare	80	058 Module
•	Cafeteria)			
	Canteen)			
	Caterers)			
(b) Food Manufacture:				
(i) Dairy	Milk	Built-up Hectare	1400	0.58/Net Hectare
	Cheese		850	
	Ice-Cream		350	
(ii) Fruit & Vegetables	Cannery)	Built-up Hectare	550	0.58/Net Hectare
	Condiments)			
	Sauces)			
(iii) Meat	Abattoir	Built-up Hectare	550	0.58/Net Hectare
	Rendering Tallow		300	
	Gelatine & Glue		850	
	Poultry		1100	
	Small Goods		550	
(iv) Grain	Flour Milling	Built-up Hectare	15	0.58/Net Hectare
	Starch		850	
	Edible Oils & Fat		1100	
	Cereals		150	
	Bakery		15	
	Biscuits & Cakes		150	
(v) Beverages	Beer	Built-up Hectare	550	0.58/Net Hectare
	Soft Drinks &		300	
	Cordials			
(vi) Othere	Veeet	Duilt un Lleatere	1100	0 50/Net Lleet-
(vi) Others	reast	Built-up Hectare	1100	U.SO/NET HECTARE
	Conlectionary		80	
1	Sait		300	

PWD STANDARD SEWAGE LOADINGS SHEET 4

CLASSIFICATION	MODULE	UNIT ADOPTED	E.T./UNIT	STORM
				ALLOWANCE
	T	Duilter Herri	550	(L/s)
(c) Textiles & Leather	Tannery & Hides	Built-up Hectare	550	0.58/Net Hectare
	Wool Scour		1100	
	Felt & Carpet		300	
	Wool Dyeing & Spinning		300	
	Cotton & Synthetic		550	
	Dyeing & Spinning			
(d) Chemicals	Oil Refinery	Net Hectare	15	0.58/Net Hectare
`	Pharmaceutical	Built-up Hectare	150	0.58/Net Hectare
	Organic Liquids		300	
	Resins, Polymers & Plastics		300	
	Adhesives		300	
	Soaps & Detergents		150	
	Paint Manufacturing		80	
	Ŭ			
(e) Metal Processing	Electroplating	Built-up Hectare	300	
	Anodising		300	
	Galvanising		300	
	Batteries		150	
(f) Non-Metallic Manufacture	Paper	Built-up Hectare	80	0.58/Net Hectare
	Wood		80	
	Glass		80	
	Asbestos Cement		40	
(g) Services	Laundries		2100	
	Laboratories		550	
	Film Processing		300	
Dry Industrial	Clean Trade	Employee	1/25	0.58/Module
	(no showers)			
	Dirty Trade	Employee	1/10	0.58/Module
	(with showers			