

Road & Recreation Asset Management Section

Point Score System & Program for Urban Drainage Construction

2005/2006

Urban Drainage Construction

Objective: to construct storm water drainage systems within the Shire's towns and villages.

Strategy: to meet existing demands with regards to:

1. Minimizing flooding and risk to public safety
2. Addressing current concerns regarding the environment
3. Is in accordance with Council's stormwater management plan

Purpose

To provide a logical method of prioritising the large number of projects in the program.

Benefits

- Delivers a logical, transparent and equitable system of allocating funds.
- Allows forward planning and time to carry out investigation & design.
- Provides stakeholders with knowledge of when projects will be constructed.

Methodology

- **Criteria:** set assessment criteria that are relevant and can be easily scored.
 - **Weighting Factor:** assign a weighting factor to each element of criteria to reflect its importance
(E.g. properties affected have a higher weighting than maintenance benefit).
1. **Points Score:** allocate an easily measurable score for each criteria for each project
(E.g. location in catchment bottom=5 points, middle=3 points, top= 1 point).
 2. **Total Score:** multiply *weighting factor x points score* and sum all these products for each project. The total score prioritises/ranks the project in the program.

Implementation Strategy

3. Compile a comprehensive list of projects and calculate the total point score for each.
4. List all projects in priority order, as per their points score, and prepare a preliminary estimate for each.
5. Schedule works according to expected annual budgets.
6. Lock in Year 1 as the current construction program.
7. Lock in Year 2 as the current design program.
8. Conduct an annual rolling review with update. Roll forward Year 3 to become Year 2 and so forth.

Urban Street Construction

The 10 Weighting Factors

1. **Property Damage:** weighting = 10
(points score major = 5 points, minor = 3 points, Nil = 1 point)
2. **Properties Affected:** weighting = 8
(points score 4 or more = 5 points, 1 to 4 = 3points, none = 1 point)
3. **Health/Safety:** weighting = 8
(points score: high = 5, moderate = 3, low = 1)
4. **% Development along road or drainage line:** weighting = 7
(points score: 100%/CDB = 5 point, 50% = 3 point, 10% = 1 point)
5. **Location in catchment:** weighting = 5
(points score: bottom = 5, middle = 3, top = 1)
6. **Environment:** weighting = 5
(points score: Erosion/Siltation = 5 points, Odour = 3 points, Nil = 1 point)
7. **Missing Link:** weighting = 5
(points score yes = 5, no =1)
8. **Degree of Difficulty:** weighting = 4
(points score: Easy = 5 points, Hard = 3 points, Rock/Problem driveways = 1 point)
9. **Aesthetics:** weighting = 4
(points score: yes = 5, no = 1)
10. **Maintenance Benefit:** weighting = 3
(points score: yes = 5, no = 1)

Summary and maximum possible point score

| Criteria | Damage | Affected | Safety | % Dev | Catchment | Enviro | Missing Link | Difficulty | Aesthetics | Maint Benefit | Total |
|-----------|--------|----------|--------|-------|-----------|--------|--------------|------------|------------|---------------|------------|
| Weight | 10 | 8 | 8 | 7 | 5 | 5 | 5 | 4 | 4 | 3 | Max |
| Max Score | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | Score |
| Product | 50 | 40 | 40 | 35 | 25 | 25 | 25 | 20 | 20 | 15 | 295 |

Urban Drainage Construction Program

2005/06