Roles & Challenges

CONCEPT

CONSULTING ENGINEER

PRODUCT

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Roles & Challenges

“Include Sustainable Concepts”

“Provide for Greening of the Project”

“Consider Life-Cycle Costs in your Design”

“Implement Best Practice in Engineering”
What’s Missing?

- Define Standards
- Track
- Calculate
- Report
What’s Missing?

- Define Standards
- Track
- Calculate
- Report
What's Missing?

- Define Standards
- Track
- Calculate
- Report
### Context & Specificity

- **Socio-Economics**
- **Community Involvement**
- **Project Requirements**
- **Environment & Water**
- **Access & Equity**
- **Construction Activities**
- **Materials & Resources**
- **Pavement Technologies**
- **Custom Credits**

### Greenroads Rating System

**List of Credits (v1.5)**

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>PR-1</td>
<td>Environmental Review Process</td>
<td>Complete a comprehensive environmental review</td>
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<tr>
<td>PR-2</td>
<td>Lifecycle Cost Analysis (LCCA)</td>
<td>Perform LCC for pavement section</td>
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<td>PR-3</td>
<td>Lifecycle Inventory (LCI)</td>
<td>Have a formal contractor quality control plan</td>
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<td>PR-4</td>
<td>Quality Control Plan</td>
<td>Have a construction noise mitigation plan</td>
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<td>PR-5</td>
<td>Noise Mitigation Plan</td>
<td>Have a plan to divert C&amp;D waste away from landfill</td>
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<td>PR-6</td>
<td>Waste Management Plan</td>
<td>Have a TESC/WWPP</td>
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<td>PR-7</td>
<td>Pollution Prevention Plan</td>
<td>Complete a LID feasibility study</td>
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<td>PR-8</td>
<td>Low Impact Development (LID)</td>
<td>Have a pavement management plan</td>
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<td>PR-9</td>
<td>Pavement Management System</td>
<td>Publicize sustainability performance for project</td>
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<td>PR-10</td>
<td>Site Maintenance Plan</td>
<td></td>
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<td>PR-11</td>
<td>Educational Outreach</td>
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### Environment & Water

- **Up to 21 Points**
  - EW-1 Environmental Management System
  - EW-2 Runoff Flow Control
  - EW-3 Runoff Quality
  - EW-4 Stormwater Cost Analysis
  - EW-5 Site Vegetation
  - EW-6 Habitat Restoration
  - EW-7 Ecological Connectivity
  - EW-8 Light Pollution

### Access & Equity

- **Up to 30 Points**
  - AE-1 Safety Audit
  - AE-2 Institutional Transportation Systems (ITS)
• Job Creation
• Skills Development
• Road Safety Education
• Maintenance Plans
• Pedestrian-Friendly Roads

Speedy R.O.I.
Context & Specificity

Infrastructure

Buildings  Transportation  Spatial Planning  Energy  Water  Etc.

council

PROJECTS

PROJECT REQUIREMENTS

Does NOT comply with minimum standards

MINIMUM level of compliance with regulations

THIRD-PARTY ACCREDITATION

CERTIFIED and done

SSI A DHV COMPANY CESA
Greenroads Council of South Africa

Please consider this a FIRST CALL for interested groups not 'Starting Soon'.

Already

Not 'Starting Soon'

Stakeholders
Thank you