

Request for Proposals

Engineering Design Services & Construction Contractor, **Urban Ditch Retrofits, Norfolk, Virginia**

December 19, 2017

PROJECT DESCRIPTION

The non-profit Elizabeth River Project seeks proposals for engineering and design-build construction services to prepare designs and construct urban ditch retrofits in Norfolk, Virginia. The ditch retrofits are part of a larger initiative to restore the health of Broad Creek, one of the tributaries of the Elizabeth River. The goal of this urban ditch retrofit project, 1,170 linear feet in total, is to bolster water quality, abate or reduce flooding, and enhance stormwater management within the Broad Creek watershed. This project will involve retrofits of three ditches, all with differing designs and characteristics, including an Institutional Ditch, a Residential Ditch, and an Industrial Ditch retrofit.

Institutional Ditch: A 280 linear foot section of roadside ditch along Ingleside Road, adjacent to Ingleside Church, will be widened to include a floodplain bench, and compost or other amendments will be incorporated into the existing soils. The existing ditch is approximately 3 feet wide by 2 feet deep on the road side, with a slightly lower bank on the side closer to the church. Maintenance scouring currently contributes significant sediment loading to water flowing through the ditch. The ditch has a drainage area of 1.12 acres which includes roadways, the church parking lot, and residential properties. A soil amendment, such as biochar or woodchips, will be incorporated into the underlying soil makeup, providing improved treatment along the entire length of the ditch. Along a 50-foot section of the ditch, a 10-foot wide section of existing turf will be converted to a floodplain bench. The existing turf will be excavated approximately 2.5 feet below its existing elevation, backfilled with a bio-retention media, and graded to a depth just higher than the existing ditch bottom. The created floodplain bench will be planted with appropriate wetland grasses and wildflowers. The additional storage area will help reduce flooding and provide additional treatment for waters entering the ditch. Reductions of 0.76 lbs/yr phosphorus, 3.18 lbs/yr nitrogen, and 274.84 lbs/yr of total suspended solids are expected. Volume reductions are anticipated, but cannot be estimated at this time. See Exhibit A, Figure 1 for ditch location. See Exhibit B, Figure 1 for a conceptual model of the ditch design.

Residential Ditch: Adjacent to several residences within the Ingleside community, the project will install stone dry wells along a 400 linear foot section of ditch. The ditch is approximately 3 feet in width and 1.5 feet in depth. The drainage area is 1.24 acres, which includes roadways and residential properties. Sections of the ditch will be excavated to a depth of two feet. Subsequently, #57 stone will be placed in the excavated sections, covered with topsoil, and reseeded with turf grass able to survive the shallow soil. The project will reduce runoff, providing pollution reduction while also reducing flooding into the adjacent road and yards. Reductions of 0.86 lbs/yr phosphorus, 5.66 lbs/yr nitrogen, and 293.76 lbs/yr of total suspended solids are expected. Volume reductions of 1,096 cubic feet in a 24 hour, 1-inch storm event are

anticipated. See Exhibit A, Figure 2 for ditch locations. See Exhibit B, Figure 2 for a conceptual model of the ditch design.

Industrial Ditch: A 500 foot in length by 25 foot in width ditch within the Norfolk Industrial Park will be converted to a bio-swale. The ditch has a drainage area of 1.3 acres, which includes roadways, turf open space, and a large parking lot. The center 10-foot portion of the ditch bottom will be excavated to a depth of 2 feet. An appropriate bio-retention soil media will be backfilled to return the ditch bottom to the existing grade. Appropriate wet-footed wildflowers and grasses will be planted in the amended soils. The improved ditch will provide additional pollutant reduction and will alleviate flooding within the project area. Reductions of 0.84 lbs/yr phosphorus, 6.97 lbs/yr nitrogen, and 330.86 lbs/yr of total suspended solids are expected. Volume reductions of 970 cubic feet in a 24 hour, 1-inch storm event are anticipated. See Exhibit A, Figure 3 for ditch locations. See Exhibit B, Figure 3 for a conceptual model of the ditch design.

PROJECT FUNDING

Funding for the completion of this work is provided by a National Fish and Wildlife Foundation grant. Awarded to the Elizabeth River Project in October of 2017, the grant is titled “Restoring Broad Creek While Advancing the Science of Urban Ditch ‘Re-Plumbing’”.

MANDATORY SITE VISIT & PRE-PROPOSAL MEETING

The mandatory site visit and pre-proposal meeting will occur on December 19, 2017 at 10:30 AM at Ingleside Baptist Church, 925 Ingleside Road, Norfolk, VA. Proposers may ask questions at the site visit and pre-proposal meeting for information only. Only written answers to formal questions submitted to Project Manager may be relied upon by Proposers.

SCOPE OF WORK AND DELIVERABLES

The selected firm will work with the client to finalize designs that meet the project description above and fits the needs of the Elizabeth River Project and the City of Norfolk.

Task 1 - *Initial meeting with client to clarify expectations.* The Engineer and Construction Contractor will meet with the client and City of Norfolk for a project kick-off meeting to clarify expectations. The meeting will be held at the Elizabeth River Project conference room in Portsmouth, Virginia.

Task 2 - *Site evaluation and resource analysis.* The Engineer and Construction Contractor will assess existing site conditions and available resources on the area. The Elizabeth River Project and the City of Norfolk have checked the areas for utility lines. A natural gas line is present roughly 7 feet from the institutional ditch, on the same side as the Ingleside church.

Task 3 - *Prepare and present a minimum of three design alternatives per each ditch type for review.* Using the overarching design goals for *each* ditch-type listed above, prepare design concepts with conceptual drawings, preliminary cost estimates, and benefits for each option.

Provide design documents prior to meeting with the client and the City of Norfolk. The client will provide feedback and guidance on which design, or combined design, to carry forward to final design.

Task 4 - Prepare an intermediate design. Incorporate the client’s feedback, conduct additional research as needed, and prepare an intermediate design and cost estimate for the selected design. Submit the intermediate design to the client for approval.

Task 5 - Prepare final engineering design and construction plans. Prior to finalizing construction plans and specifications, the firm will be responsible for submitting the plans to the City of Norfolk for building and site-plan review, in addition to any supplemental City review requirements. Incorporate client and City feedback and give documentation to construction contractor. The final design will include scaled drawings, with explanatory narrative including:

- Final Design drawing with engineer stamp (10 C-size copies)
- Project specifications (10 copies)
- Itemized, bracketed cost estimates for construction
- Contractor bid package
- Preliminary project schedule for completing construction planning and implementing construction.
- Identified permit requirements.
- Site grading plan
- Site erosion and control plan
- Native plant lists for landscaping using only native plant species selected for habitat value specific to Elizabeth River watershed
- Copies of all project files in electronic format, to include Word .DOCX, Adobe .PDF, and Autocad .DWG/DXF formats. All narrative documents to be provided in both .DOCX and PDF format. Data files will be provided in Excel .XLSX format. All drawings will be provided in both PDF and DWG/DXF format.

Task 6 – Construction.

This Task consists of the construction of the ditch retrofits in accordance with the approved and accepted designs. This task may also require additional geotechnical investigation or wetlands delineation, depending on the design. We have therefore broken down Task 6 into the following sub-tasks:

- Task 6A Construction
- Task 6B Geotechnical investigation and report (if required)
- Task 6C Wetlands delineation (if required)

SCHEDULE FOR THE WORK

- The selection process is to be completed by February 12, 2018.
- Tasks 1 through 5, comprising the design work, are to be completed by May 4, 2018.
- Task 6, construction of the ditch retrofits, is to be completed by August 1, 2018.

PROPOSAL FORMAT

Proposals are requested from engineering and construction firms with demonstrated experience in ditch retrofits that exemplify state-of-the-art practices and a track record for excellent client relationships.

Proposals may be submitted for either the Design Tasks 1 through 5, only, or for a Design-Build Option inclusive of Tasks 1 through 6. Proposers should clearly identify in their Proposal if they are proposing the Design-Build option.

Proposals must address all of the following elements:

A) COVER LETTER

- Should reference in the subject line: Request for Proposals: Engineering Design Services and Construction Contractor, Urban Ditch Retrofits- Norfolk, Virginia
- Should identify the Contractor's point of contact ("POC") and include the POC title, address, phone and fax numbers, and email addresses.
- Should be signed by an authorized representative of the Contractor's organization
- Should provide a statement that the Contractor is not currently listed on the General Service Administration's List of Parties Excluded from Federal Procurement or Nonprocurement Programs in accordance with Executive Order 12549 and 12689 (Debarment and Suspension).
- Should provide a statement that the Contractor is aware the work will be subject to the provisions of the Davis-Bacon Act (40 U.S.C. 276a to a-7) as supplemented by Department of Labor regulations (29 CFR part 5, "Labor Standards Provision Applicable to Contracts Governing Federal Financed and Assisted Construction").

B) PROPOSED APPROACH & EXPERIENCE WITH SIMILAR PROJECTS

Describe the firm's general proposed approach to complete this project. Describe the firm's experience with designing and constructing ditch retrofits for three to five past or active projects that are similar to the institutional, residential, and/or industrial ditches involved in this Project. For each project submitted for the proposer's experience, please prepare a succinct summary including the following information: project owner or developer, project name, location, description, illustrations, and reference contact information. Please indicate whether the project has been successfully constructed or has not yet progressed to the construction phase.

C) PROJECT TEAM ORGANIZATION AND QUALIFICATIONS

- Present a project team organization matrix, which include all engineering or construction companies that would perform substantial parts of the Project work.
- Provide summaries of team member professional qualifications including education, training, experience, professional licenses, and relevant certifications held by key team personnel. Emphasis should be placed on professional qualifications and experience in relatable settings. Indicate percent allocation of overall work and price/cost anticipated for each team member.
- Describe how the overall qualifications of the proposed Engineer and Construction Contractor will assure the success of this project.
- Describe how you will achieve design and construction cost efficiencies.
- Describe any potential conflicts of interest in conducting this project.

- Identify whether any team member company is a woman-owned business enterprise or minority business enterprise certified or registered with a state or federal agency.
- DPOR license details for any individual offering to practice professional engineering or architectural services in Virginia as part of the proposed work. Such information shall include the name, address, registration type, registration number, and expiration date.
- DPOR registration information for each office practicing or offering to practice any professional services in Virginia. Provide the business name, address, registration type, registration number, and expiration date.
- DPOR (Board for Contractors) license details for any contractors proposing to perform part of this work.

D) PROJECT SCHEDULE

Each Proposal must address the Proposer's ability to meet the Project Schedule listed in this RFP. If a Proposer cannot meet the schedule in this RFP, the Proposal must identify an alternative project schedule and any cost or efficiency advantages that may result from the alternative schedule.

E) USE OF SMALL AND DISADVANTAGED BUSINESSES

ERP encourages the use of small, woman-owned, and disadvantaged businesses in the performance of this work. Proposers should include with their Proposal a statement of whether they are a small business, woman-owned business, or other disadvantaged business as those terms are used by the US Environmental Protection Agency's Office of Small and Disadvantaged Business Utilization (OSDBU). Information on obtaining certification from EPA as a Disadvantaged Business Enterprise (DBE) is available at the following website:

<https://www.epa.gov/resources-small-businesses>

Proposers who are not small business or are not DBEs should address any opportunities for small or disadvantaged businesses to participate in this project as subcontractors or suppliers to the successful Proposer.

F) COST

Include a fee schedule for the firm's standard unit rates and also complete the project cost table below. A project Contract Agreement will negotiate with the selected firms and will incorporate a final time and material "Not to Exceed" price for the performance of the entire Scope of Work. Pricing of additive or deductive changes to the Project Scope of Work will be based on the Engineer's and Construction Contractor's proposed hourly unit rate schedule to be included in the project proposal.

| Urban Ditch Retrofits: Design Cost | | |
|---|--|------|
| Task | Description | Cost |
| 1 | Initial meeting with client to clarify expectations | |
| 2 | Site evaluation and resource analysis | |
| 3 | Prepare and present a minimum of three conceptual design alternatives for review | |
| 4 | Prepare intermediate design | |
| 5 | Prepare final engineering design and couple with construction plan | |
| | Proposed Time and Material Not to Exceed Total | |

Engineer's proposed time and material NTE amount _____ Dollars

| Urban Ditch Retrofits: Construction Cost | | |
|---|--|------|
| Task | Description | Cost |
| 6A | Construction | |
| 6B | Geotechnical evaluation (construction area only) | |
| 6C | Wetland delineation (construction area only) | |
| | Proposed Firm Fixed Price Cost | |

Selection Schedule

| | |
|---|---|
| RFP issued | December 8, 2017 |
| Mandatory site visit & pre-proposal meeting | December 19, 2017 (10:30 AM EST) 925 Ingleside Road, Norfolk, VA |
| All questions submitted by | January 5, 2018 |
| Questions answered by | January 9, 2018 |
| RFP due date | January 23, 2018 |
| Potential Engineer/Contractor interviews | January 30, 2018 |
| Execute Engineering Design Agreement | February 12, 2018 |

(Selection process schedule subject to change without notice.)

Preferred Project Schedule

| | |
|---|----------------|
| Task 1 - Initial meeting | March 1, 2018 |
| Task 2 - Complete site and resource analysis | March 16, 2018 |
| Task 3 - Present three conceptual design alternatives | April 4, 2018 |
| Task 4 - Complete intermediate design | April 20, 2018 |
| Task 5 - Complete final design | May 4, 2018 |
| Task 6 – Complete Construction | August 1, 2018 |

RFP SUBMITTAL INFORMATION

The final submittal should not exceed 16 single-sided pages or 8 double-sided pages. Submit 3 hard copies of the proposal and one electronic file on CD or thumb drive by January 23, 2018. All proposals must be received by 4:00 PM EST and should be submitted to:

Grace Saunders
Project Manager
The Elizabeth River Project
475 Water Street, Suite C103A
Portsmouth, Virginia 23704
Email: gsaunders@elizabethriver.org
ERP Office: 757-399-7487

SELECTION PROCESS

A selection committee comprised of non-technical members and technical experts will review and evaluate the Engineer/Construction proposals based on the following evaluation criteria:

1. Proposed Approach to this Project.
2. Experience with Similar Projects.
3. Project Team Organization and Qualifications.
4. Ability to meet the Project Schedule, and advantages to ERP of any alternative proposed schedule.
5. Cost of Design.
6. Cost of Construction, if proposed.
7. Exceptions taken, if any, to ERP's proposed contract documents.
8. Small and Disadvantaged Business status or utilization.

ERP may, in its sole discretion, request one or more Proposers to conduct a presentation and interview concerning their Proposal.

OTHER TERMS AND CONDITIONS OF THIS RFP

This RFP is not a contract document and may not be relied upon to determine contract rights. Submission of a proposal by a Proposer shall not create any contractual rights in behalf of the Proposer nor any contractual obligations upon the Elizabeth River Project.

Sample contract documents will be provided to all Proposers on request submitted to the Project Manager.

The Elizabeth River Project specifically reserves these rights:

- The right to hold meetings and conduct discussions and correspondence with one or more of the Proposers responding to this RFP to seek an improved understanding and evaluation of the responses to this RFP.
- The right to seek or obtain data from any source that has the potential to improve the understanding and evaluation of the responses to the RFP, including the right to seek clarifications from Proposers.
- The right to add or delete Proposer responsibilities from the information contained in this RFP.
- The right to waive deficiencies, informalities and irregularities in a Proposal, accept and review a non-conforming Proposal, or seek clarifications or supplements to a Proposal.
- To reject any or all Proposals at its sole discretion.
- To issue a new RFP.
- To cancel, withdraw, postpone or extend this RFP in whole or in part at any time prior to the execution of the agreement, without incurring any obligations or liabilities.

It will be a term of any contract issued by ERP to the successful Proposer that, upon completion of any or all Design Tasks (Tasks 1 through 5) and payment by ERP for such work, that ERP will be granted and will own all intellectual property rights, to include without limitation patent, copyright, trade secret, or other similar protectable rights in the contract documents, specifications, designs and drawings or other documents produced as part of this Project.

If a Proposer submits a Design-Build Proposal to include both Design Tasks 1 through 5 and Construction Task 6, ERP may enter into either a contract for only the Design Tasks or it may enter into a Design-Build Contract for Tasks 1 through 6. In the event that ERP enters into a Design-Build Contract, it will nevertheless reserve the option to terminate the contract for its convenience and in its sole discretion following completion of Tasks 1 through 5.

QUESTIONS

Questions concerning this RFP may be submitted by email to the Project Manager, Grace Saunders, by mail or by e-mail, at the following addresses:

Grace Saunders
Project Manager
The Elizabeth River Project
475 Water Street, Suite C103A
Portsmouth, Virginia 23704
Email: gsaunders@elizabethriver.org
ERP Office: 757-399-7487

ALL QUESTIONS MUST BE SUBMITTED TO THE PROJECT MANAGER NOT LATER THAN 4:00 PM, EASTERN TIME, JANUARY 5, 2018.

Answers to questions will be distributed by email not later than January 9, 2018, to all persons who have requested a copy of this RFP.

**Exhibit A:
Ditch Locations**

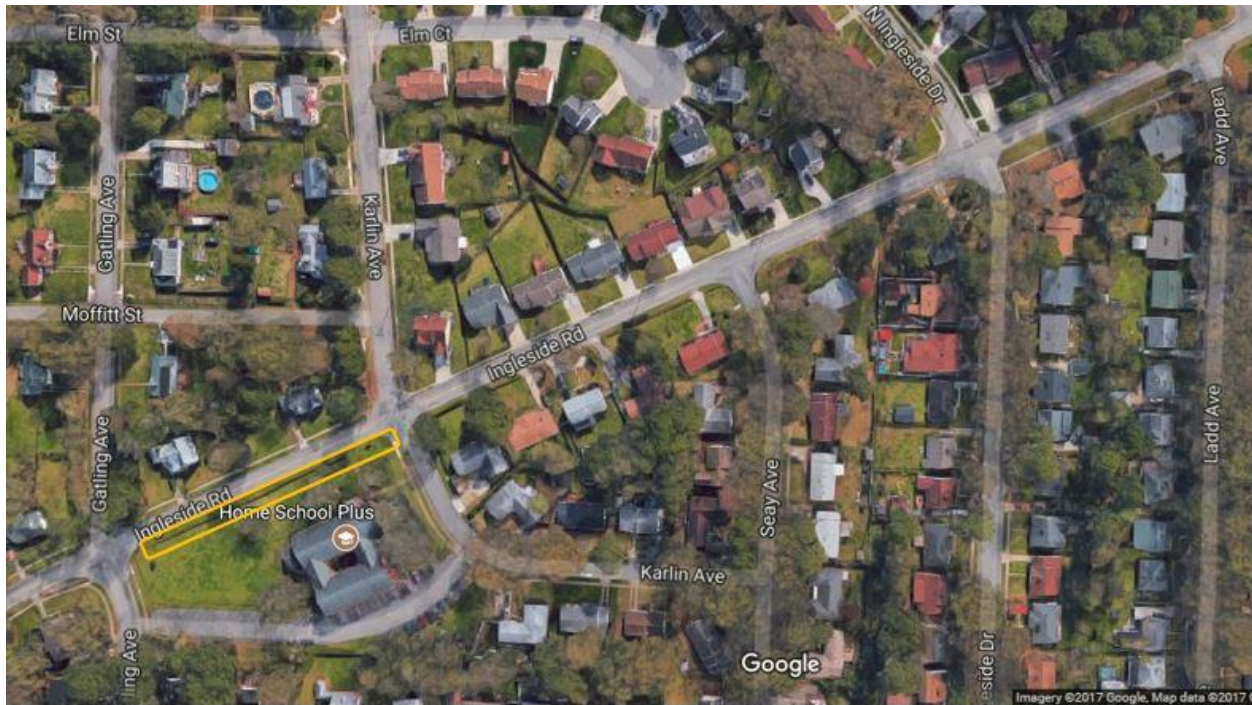


Figure 1: Location of Institutional Ditch



Figure 2: Location of Residential Ditches

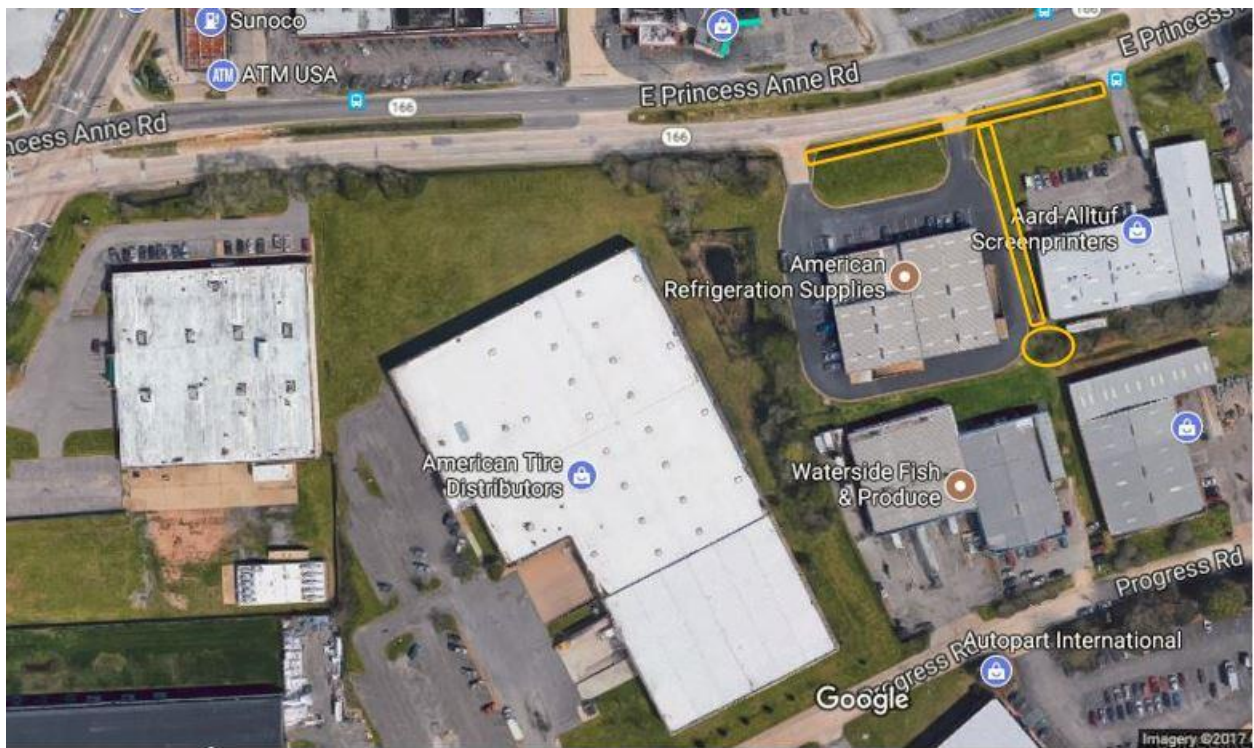


Figure 3: Location of Industrial Ditches

Exhibit B: Ditch Design Models

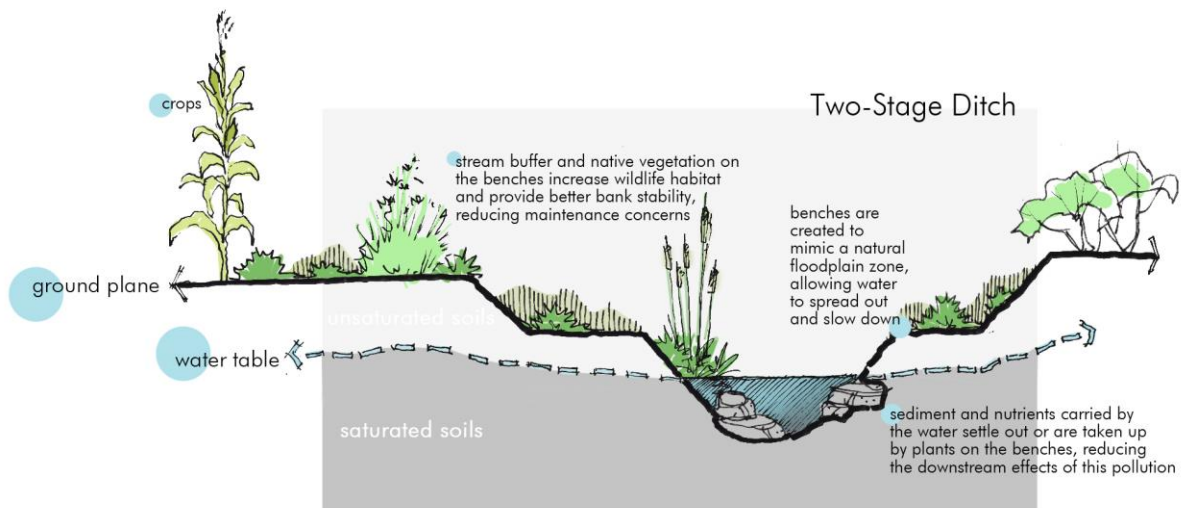


Figure 1: Example of a Floodplain Bench

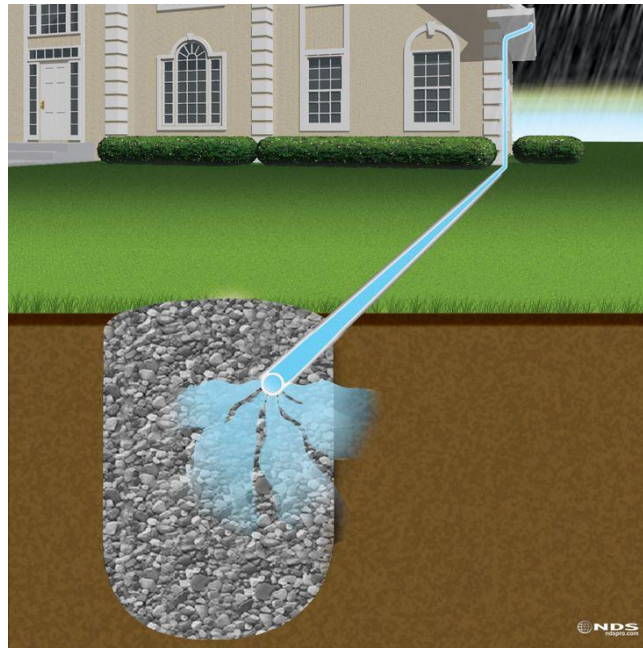


Figure 2: Example of a Dry Well

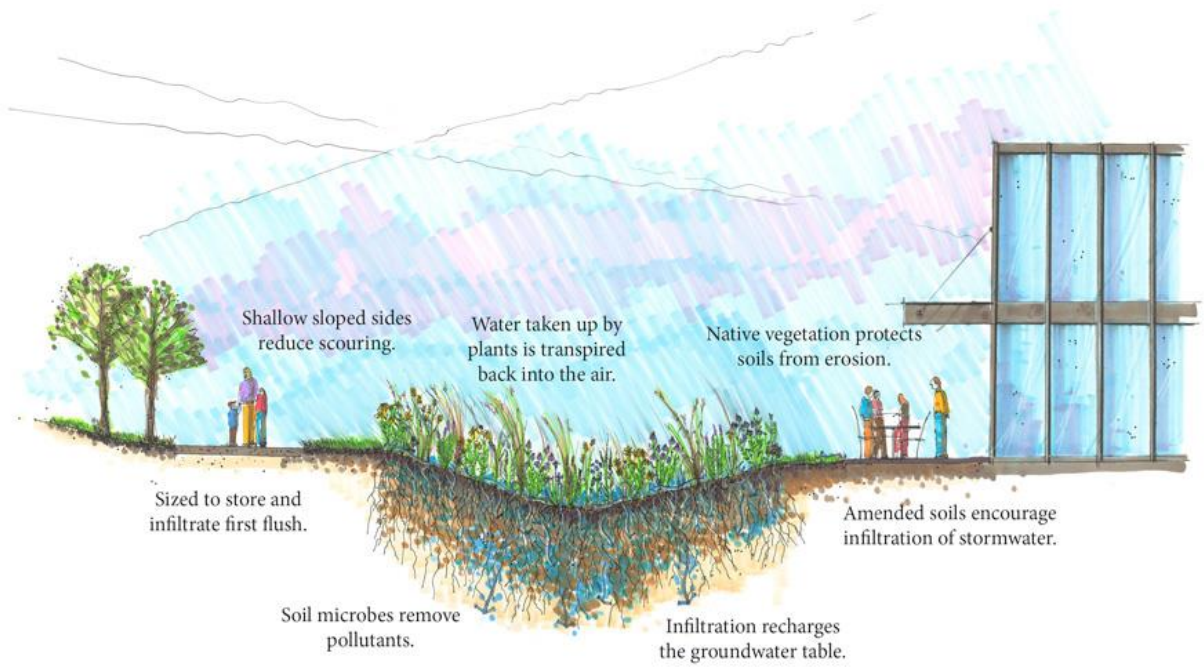


Figure 3: Example of a Bio-swale