



City of Springfield

Public Works

Engineering Division

225 Fifth Street

Springfield, OR 97477

541.726.5849

www.ci.springfield.or.us

Land & Drainage Alteration Program

Getting Ready for Your Inspection

Fact Sheet 1.0

Overview

You've applied for a building permit (or other construction-related permit), and the City has determined that you need a Land & Drainage Alteration Permit (LDAP). This fact sheet is designed to help you prepare for your LDAP inspection.

If you need information on why the permit is necessary, the permit process, or more detail on the LDAP process discussed here, fact sheets are available at the Public Works front counter, 225 Fifth Street in City Hall. Or call our office at (541)726-5849.

Before you call for you inspection...

Prior to an initial LDAP inspection this permit only authorizes you to install the erosion prevention measures as indicated on your approved plans. The permit should be posted at the construction site where the inspector can see it from the street.

Your site plan will state your plans to prevent sediments, muddy water, and construction related materials from leaving your site. Before you call for an inspection, your LDAP plan needs to be implemented. That means that if your site plan indicated the installation of a sediment fence, that fence needs to be in place when the inspector arrives. If your erosion plan is as simple as covering an excavation stockpile, then the materials needed for that coverage should be on site when the inspector arrives. Your approved LDAP needs to be on-site at the time of the initial inspection and is required to remain on-site through out the construction project.

You are Ready

When your LDAP has been implemented, call the City's inspection request line at 726-5849. In most cases, if you call before 7:00 a.m., Monday - Friday, we can complete your inspection that day.

Assistance is Available

The LDAP Program is here to help you. As mentioned above, we have prepared fact sheets to assist you in completing your application and plans. Let's keep Springfield's waterways full of life and keep pollutants in their place. Staff is available from 8:00 a.m. to 5:00 p.m. weekdays to answer your questions by phone (541)726-5849, and 8:00 a.m. to 12:00 p.m. and 1:00 p.m. to 3:00 pm at City Hall, Public Works Department counter to help meet this goal.



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Overview

To protect local waterways, all construction sites located in Springfield that disturb land need to comply with grading, public safety, and water quality standards.

All sites must protect water quality but not all sites will be required to obtain a Land & Drainage Alteration Permit (LDAP). All single family dwellings or construction sites that disturb 50 cubic yards of soil or greater must be permitted by the City.

What's affected?

All construction activities that will cause land disturbance or otherwise negatively impact storm water quality are affected. Construction activities that do not disturb the land such as interior remodeling and emergency-related circumstances such as those caused by floods and fires are excluded.

Are permits required?

An LDAP is required for all single family dwellings or any construction sites that disturb 50 cubic yards of soil or greater.

For all other conditions, permits are not required but property owners must protect water quality for these situations. Fact sheets on Best Management Practices (BMP's) are available at City Hall, Public Works front counter.

What are examples of land disturbing activities?

Land disturbance including, but not limited to grading, grubbing, logging, excavating or filling.

What does the LDAP require?

If the project meets certain criteria (See back side of fact sheet) you may be issued an over the counter LDAP. In this case you will fill out an application and will be issued a blue permit card. If your project doesn't meet the over-the-counter LDAP criteria, you will be required to submit an application packet that will be taken in by staff for review and approval.

Are there special qualifications to prepare these plans?

For some sites, yes. For permitting of one single-family dwelling or duplex dwelling, an LDAP application is provided by the City and completed by the applicant. For other construction projects, an LDAP application packet is provided. This packet requires a professional design be submitted by a person licensed in Oregon as a: civil engineer, environmental engineer, landscape architect, geologist, or a certified professional in erosion and sediment control (CPESC); or any other qualified person determined by the City Public Works Director.



Are fees required?

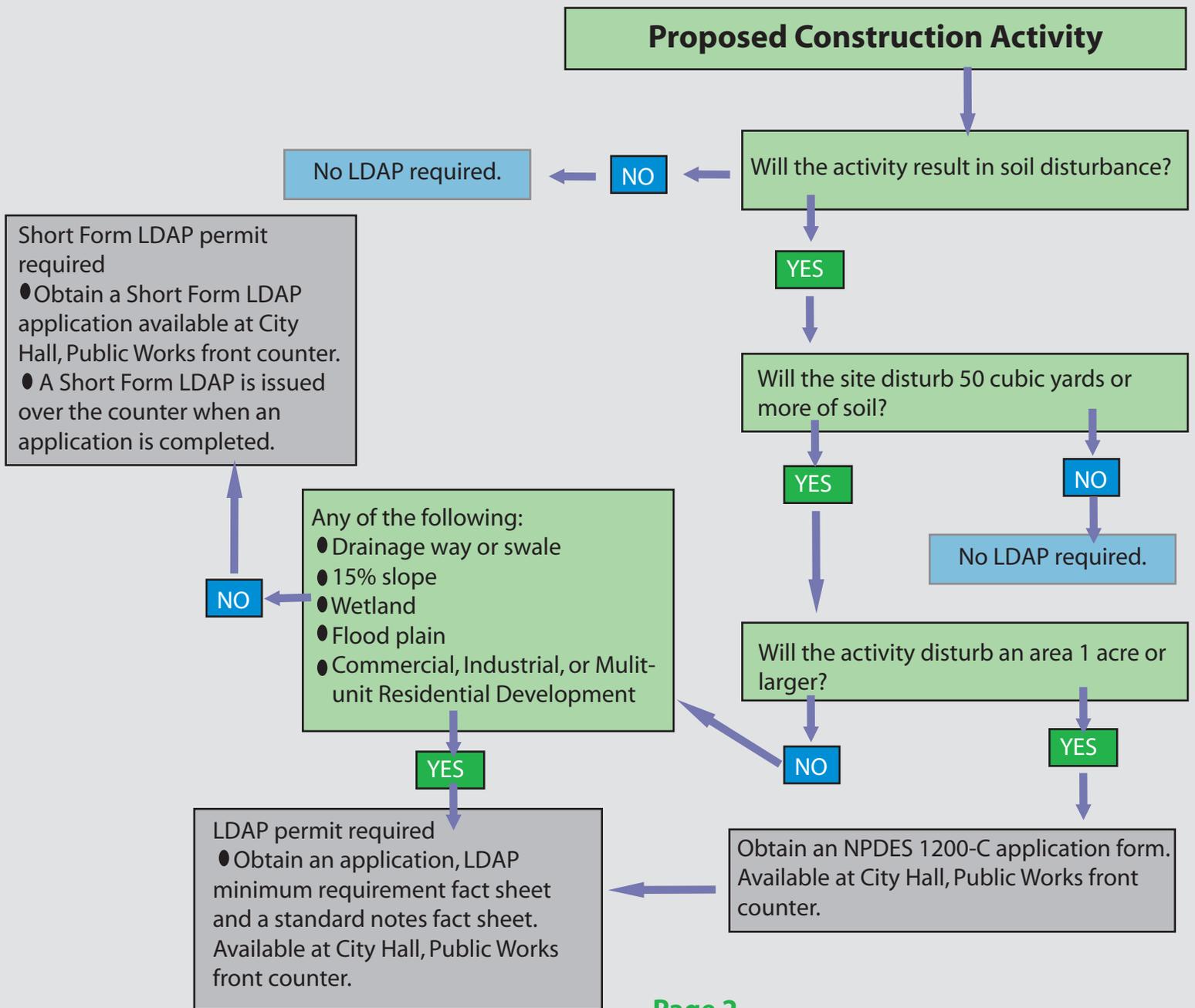
Yes, the amount varies depending on the type of permit and the size of the disturbance.

What are examples of stormwater pollutants?

Anything other than rain that enters the stormwater system is considered a pollutant. These include soil sediment, fertilizer, paint, solvents, concrete-washout, and any other garbage, trash or debris.

Why are construction sites a problem?

The City's storm water system consists of open channels, creeks, wetlands, and pipes that carry untreated runoff to the McKenzie and Willamette Rivers. Construction activities can cause erosion and sedimentation which reduces the capacity of the storm water system to convey water away from homes and businesses and reduces water quality. This can lead to drainage and flood problems, polluted drinking water sources, can harm fish and other aquatic life, and otherwise reduce beneficial uses.





Minimum Requirements

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Contents

At a minimum, the LDAP plan (two sets need to be provided) shall address the following factors. Please use the check boxes below to assure that you have addressed all of the below information on your plans.

- Site location and vicinity map.
- A site development drawing containing the following:
 - a) Soil types and areas subject to flooding or landslides (include 100 year floodplain boundaries).
 - b) Existing and proposed contour lines.
 - c) Property lines, easements and north arrow.
 - d) Building pad floor elevations and retaining walls.
 - e) Foundation type and foundation drains.
 - f) Identify threatened or endangered species habitat (if applicable).
 - g) Surface drainage patterns, riparian areas, top of bank and wetlands.
 - h) Existing vegetation type & trees over 5 inches in DBH and greater.
- Delineate areas where ground clearing or ground disturbing activities are prohibited such as but not limited to conservation zones, wetlands, public or private drainage easements, open waterways, natural resource sites, buffer areas, roadside ditches, water features and other protected areas.
- Identify measures which will be implemented to physically protect areas where ground disturbance is prohibited.
- Show measures for preventing, and/or controlling erosion, sedimentation and other pollutants into the City's stormwater system and related natural resources.
- Vegetation specifications for temporary and permanent stabilization (include a planting plan).
- Access for all vehicles including:
 - a) Areas where a construction entrance/exit will be constructed.
 - b) Location of vehicle's wheel wash area (if applicable).
- All storm drainage facilities, such as but not limited to catch basins, curb inlets, ditches, and outfalls.
- Disposal locations and methods of containment for the following:
 - a) Debris and Garbage
 - b) Stockpiles
 - c) Concrete Wash Out
- If a geotechnical report is attached, reference it on the site plan.
- Construction Schedule:
 - a) Haul routes
 - b) Schedule construction

Unless the following information is to be provided by the contractor please indicate them on the LDAP. If the information is to be provided by the contractor indicate that in a note on the plans.



Standard Notes

(To be included on plan)

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1. Prior to any ground disturbance on the site one inspection with LDAP staff is required. Issuance of this plan does not relieve the permit holder and or the contractor from all other permitting requirements. Prior to beginning construction activities, all other necessary approvals shall be obtained.

2. The erosion and sediment control measures shown on the plan are the minimum requirements for anticipated site conditions. During the construction period, these measures shall be upgraded as needed for unexpected storm events and to ensure that sediment and sediment-laden water does not leave the site.

3. The implementation of the ESCP and the construction, maintenance, replacement, and upgrading of the erosion and sediment control measures is the responsibility of the permit holder and or the contractor until all construction is completed and accepted and vegetation / landscaping is established.

4. The boundaries of the clearing limits shown on this plan shall be clearly flagged in the field by the engineer prior to construction. During the construction period, no disturbance beyond the flagged clearing limits shall be permitted. The flagging shall be maintained by the permit holder and or the contractor for the duration of construction.

5. The erosion and sediment control measures on active sites shall be inspected and maintained daily and within the 24 hours after any storm event of greater than 0.5 inches of rain per 24 hour period. Measures shall be inspected by the permit holder and or the contractor after each rainfall and at least daily during prolonged rainfall. Any required repairs or adjustments shall be made immediately. The erosion and sediment control measures on inactive sites shall be inspected a minimum of once every two (2) weeks or within 48 hours following a storm event.

6. All erosion and sediment control measures shall be protected from damage at all times. Control measures shall remain in place until permanent re-vegetation has been stabilized. Any measure that is damaged or destroyed shall be repaired or replaced immediately.

7. Any areas of exposed soils, including roadway embankments, that will not be disturbed for two days during the wet season (October 1 to April 30) or seven days during the dry season (May 1 to September 30) shall be immediately stabilized with an approved ESC method (seeding & mulching with straw, bark, compost, or plastic covering, ect.).

8. Street sweeping shall be performed as needed or when directed by the City inspector to insure public right-of-ways are kept clean and free of debris. Street flushing is prohibited.

9. When trucking saturated soils from the site, either water-tight trucks shall be used or loads shall be drained on site until dripping has been reduced to no more than one gallon per hour. Sediment laden water will not be allowed to enter the storm water system

10. Extracted ground water from excavated trenches shall be disposed of in a suitable manner without damage to adjacent property, City's storm water system, water features, and related natural resources. Approval of a dewatering system does not guarantee that it will meet compliance or be acceptable for use in all situations. Modifications to the dewatering system will be required if compliance can not be met. At no time will sediment laden water be allowed to leave the construction site.

11. A supply of materials necessary to meet compliance and implement the LDAP or other best management erosion practices under all weather conditions shall be maintained at all times on the construction site.

12. No hazardous substances, such as paints, thinners, fuels and other chemicals shall be released onto the site, adjacent properties, or into water features, the City's storm water system, or related natural resources.

13. The ESC facilities shall be inspected daily by the contractor and maintained to ensure continued proper functioning. Written records shall be kept of weekly reviews of the ESC facilities during the wet season (October 1 to April 30) and of monthly reviews during the dry season (May1 to September 30).

Notes to be included on plan.



Fee Schedule

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Single Family/Duplex Residential

“Short Form” fee (Non-sensitive areas: i.e. lot slope less than 15%; no work in or near a drainage way or swale; no wetlands on site; not in a flood plain) = flat fee of \$300.

“LDAP” fee (Work within sensitive areas: i.e. any of the following: lot slope equal to or greater than 15%; work in or near a drainage way or swale; adjacent to wetlands; site in flood plain) = flat fee of \$600.

Commercial/Industrial/Multifamily/Other

PLAN CHECK FEE: \$300 + Volume Fee per following schedule:

Up to 100 cubic yards	\$150
101 to 1,000 cubic yards.....	\$150 + \$30 per 100 cubic yards over 100
1,001 to 25,000 cubic yards.....	\$420 + \$50 per 1,000 cubic yards over 1,000
Greater than 25,000 cubic yards.....	Actual recorded staff costs, overhead and project expenses
\$1700 minimum + \$3000 deposit and additional deposits as required – (Greater than 25,000 cubic yards).	

PLUS PERMIT ADMINISTRATION/INSPECTION FEE:

Up to 100 cubic yards.....	\$150
101 to 1,000 cubic yards.....	\$150 + \$50 per 100 cubic yards over 100
1,001 to 25,000 cubic yards.....	\$600 + \$100 per 1,000 cubic yards over 1,000
Greater than 25,000 cubic yards.....	Actual recorded staff costs, overhead and project expenses
\$3000 minimum + \$3000 deposit and additional deposits as required – (Greater than 25,000 cubic yards).	

CORRECTIVE LDAP: Any LDAP processed after work is conducted without required City approvals is considered a corrective LDAP. In addition to the normal LDAP fees, calculated based on an estimate of the work performed at the time of the corrective LDAP, the corrective LDAP shall also pay for actual recorded staff costs, overhead and project expenses in the administration of the corrective LDAP. The initial deposits for the corrective LDAP, in addition to the standard LDAP fees, shall be \$2,000 for parcels less than one acre and \$2,000 + \$1,000 per acre for parcels more than one acre. If the deposit is insufficient to cover City expenses for the project, additional deposits will be required.

REINSPECTION FEE: \$75.00



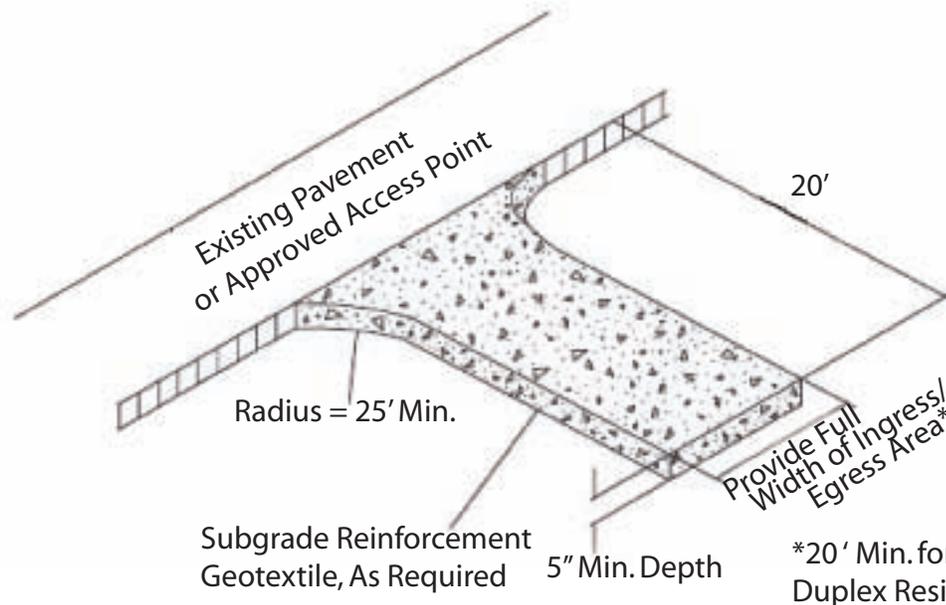
Residential Construction Entrance/Exit

Recommended Purpose:

Protect adjoining roads and waterways from vehicle trackout off of the site.

INSTALLATION STEPS:

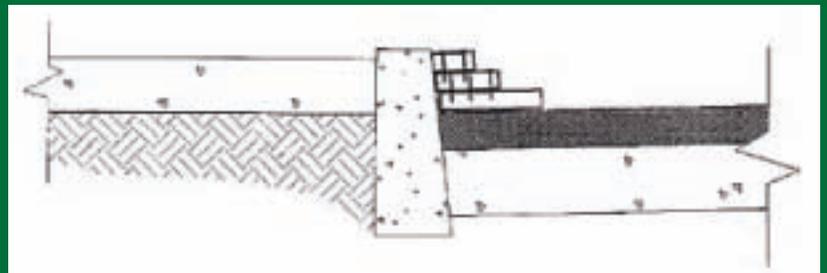
1. Install as soon as vehicle traffic will be entering and exiting the site.
2. Place sub grade geotextile fabric on the ground prior to crushed rock placement.
3. Use ¾ minus clean rock or larger.
4. Construct the entrance/exit a minimum of 20 feet wide and extend from the roadway to the foundation or a minimum of 20'.
5. Monitor and maintain a minimum 8" depth. Watch for track out and make corrections if necessary.



NOTES:

Dimensions

Single Family
 20' Long by 20' wide
 8" Deep pf ¾" Minus
 Clean Rock



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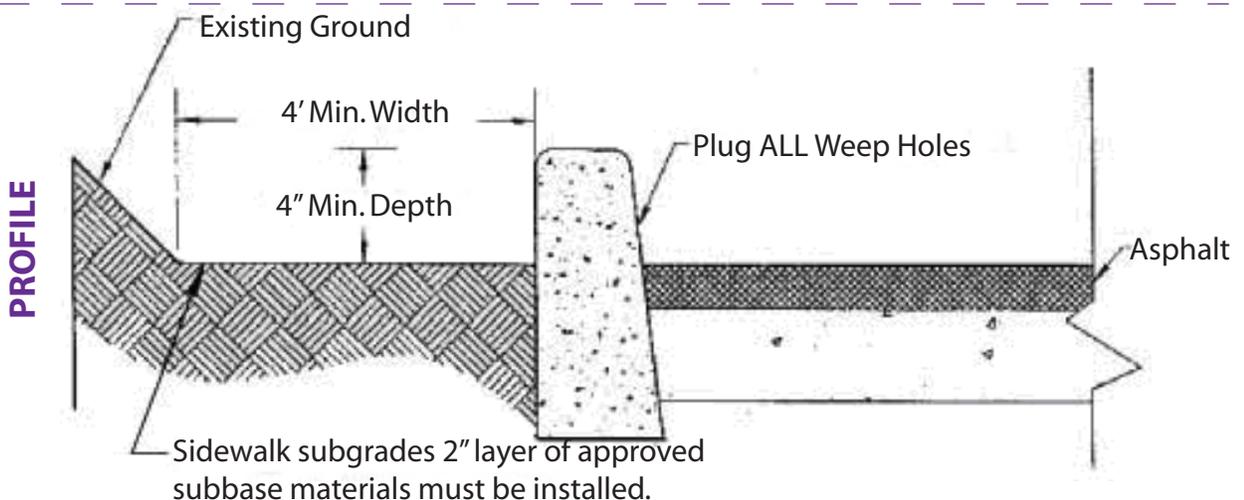
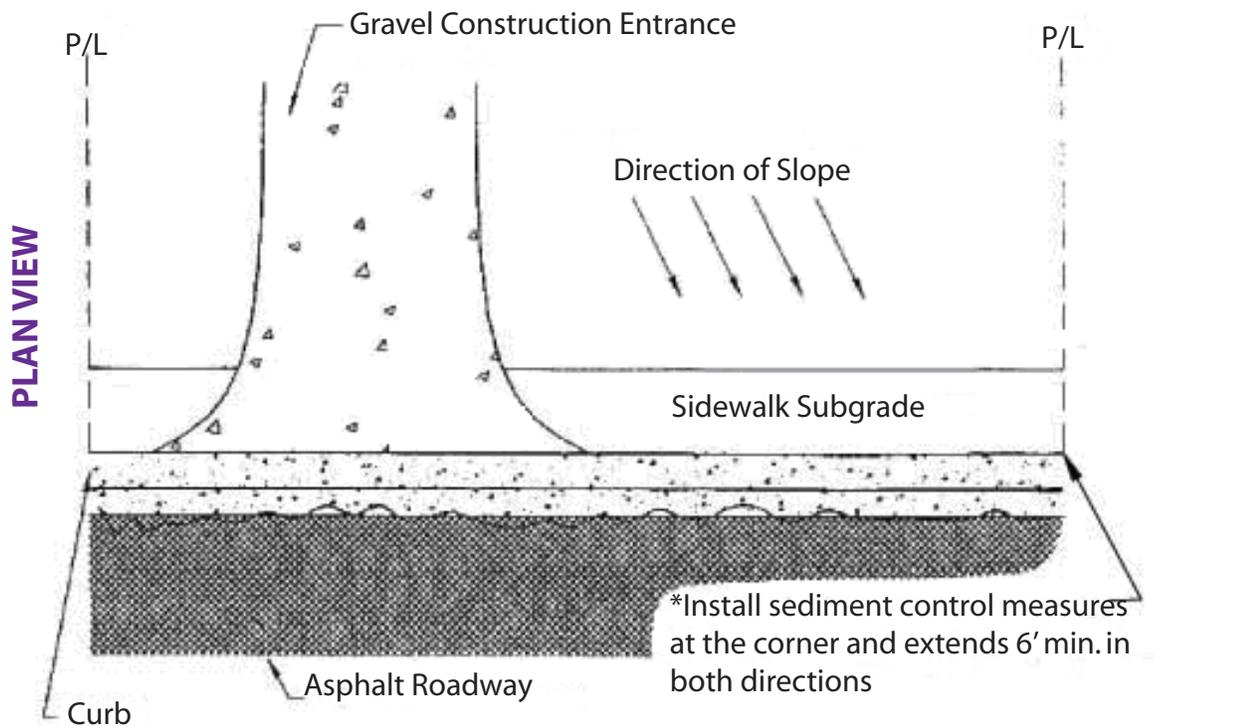
Excavated Sidewalk

Recommended Purpose:

Provide storage and filtration from site runoff.

INSTALLATION STEPS:

1. Install prior to grading the site.
2. Excavate 6 inches in depth and 5 foot in width.
3. A 2 inch layer of approved rock must be installed.
4. A gravel filter berm may need to be installed along the inside edge, or toe of slope depending on steepness of slope.





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Soil Coverage

Recommended Purpose:

To reduce runoff and erosion; conserve moisture, prevent surface compaction; to control undesirable vegetation; to increase biological activity in the soil.

INSTALLATION STEPS:

For temporary protection of critical areas. This standard applies to grades or cleared areas which may be subjected to erosion for six months or less, where seeding may not have a suitable growing season to produce an erosion retardant cover, but which can be stabilized with a mulch cover.

SITE PREPARATION:

1. Grade to permit the use of equipment to apply and anchor mulch.
2. Install needed erosion control measures prior to grading to prevent sediment from leaving the site. Measures such as dikes, diversions, berms, terraces and sediment barriers.
3. Loosen compact soil to a minimum depth of 3".

MULCHING MATERIALS:

1. Dry straw or hay, spread at a rate of 2 to 3 tons per acre.
2. Wood waste, chips, sawdust or bark, spread 2-3" deep.
3. Hydro-seeding - Slope 1:1.5 or flatter. 1 ton per acre, based on dry fiber weight.

APPLYING & ANCHORING MULCH:

1. Apply straw or hay mulch uniformly by hand or mechanically. Anchor as needed.
2. Spread mulch (bark, compost, wood chips) uniformly on slopes that are 3:1 and flatter. No anchoring needed. A minimum of 2-3 inches thick.
3. Commercial matting and netting. Follow manufacturer's specifications.



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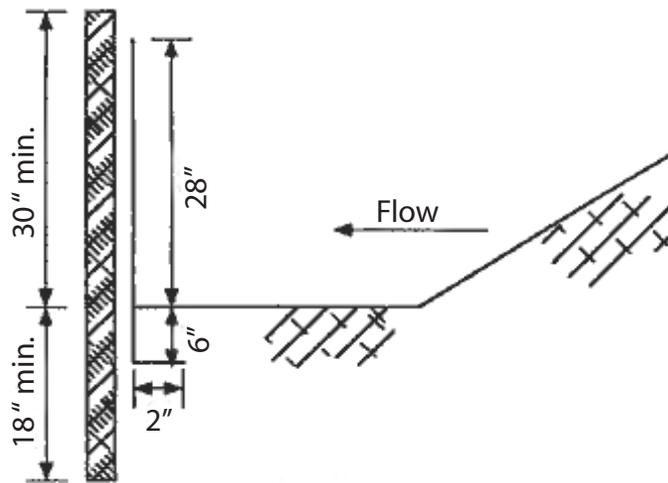
Sediment Fence

Recommended Purpose:

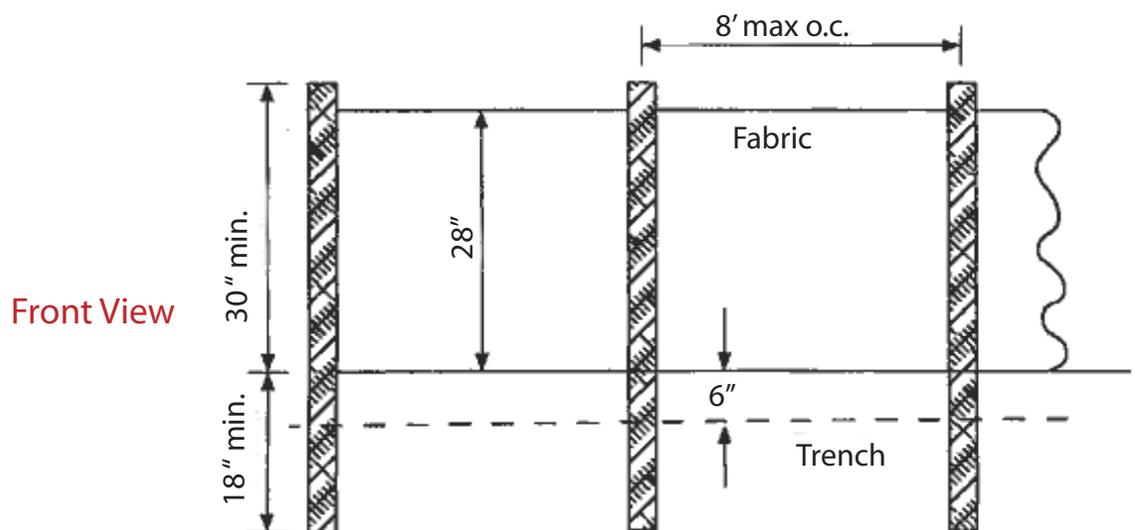
Slows sheet flows from a site and catches large sediment particles. Use for light flows.

INSTALLATION STEPS:

1. Excavate a 2" x 6" trench along the contour.
2. Stake the sediment fence on the Down Slope side of the trench. Extend a minimum of 6" of fabric into the trench.
3. When joints are necessary, overlap the stakes and give two full twists (this creates one continuous fence).
4. Backfill the trench on the uphill side of the fence and compact the trenched area.



Side View



Front View



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Best Management Practices

When it rains...exposed soils turn to mud!

Rain is the driving factor behind most erosion in this area. Eroded sediments can affect adjacent properties and clog catch basins and storm systems. When sediments enter waterways, they block sunlight, limit plant growth, harm aquatic life, and interfere with recreational use and enjoyment. Sediments remove oxygen from the water making it hard for fish to breathe, feed, and may smother salmon and trout eggs. Other pollutants, including nutrients, bacteria, metals, and some toxic substances, attach to sediments and are carried into the waterway.

The City of Springfield stormwater system includes publicly maintained pipes, culverts, gutters, catch basins, ditches, channels, ponds, wetlands, natural resources and other related waterways. Storm drains in Springfield flow directly to local waterways, including the McKenzie and Willamette Rivers.

Now is the time to implement required Wet Weather Best Management Practices (Wet Weather Season is Oct. 1- April 30)

Best Management Practices (BMP's)

Protect all stormwater systems, water features and natural resources.

To ensure water quality

1. Identify site characteristics and properly install erosion prevention measures.
2. Save as much existing vegetation cover as possible.
3. For sediment control use sediment fence, mulch berms, check dams, bio-bags, curb inlet sedimentation dams, drop in sediment inserts, or other approved BMP's.

Sediment, soil, or construction related material shall be removed immediately from right-of-way/adjoining property & natural resources.

Wet Weather season increases run-off and tracking from construction sites

1. Maintain good construction entrance/exit.
2. Sweep and remove any off site tracking immediately.
3. Maintain and monitor sediment collection devices and keep all work areas clean.
4. All violations that occur shall have corrective action taken immediately.

Best Management Practices (BMP's) Continued

Construction site entrances (open grade crushed rock).

Protect adjoining roads and waterways from vehicle tracking off of the site

Residential

1. Construct the entrance/exit to the foundation or minimum of 50 feet.
2. Use open grade crushed rock.
3. Place a geotextile fabric under the rock when fine sediment under the entrance could pump up into the rock.

Commercial

1. Minimum Length:
 - a. 50 feet for sites having less than one acre of exposed soil.
 - b. 100 feet for sites having more than one acre of exposed soil.
2. Use 2-3 inch open rock or larger.
3. Place geotextile fabric under the rock.
4. Minimum depth of eight inches.

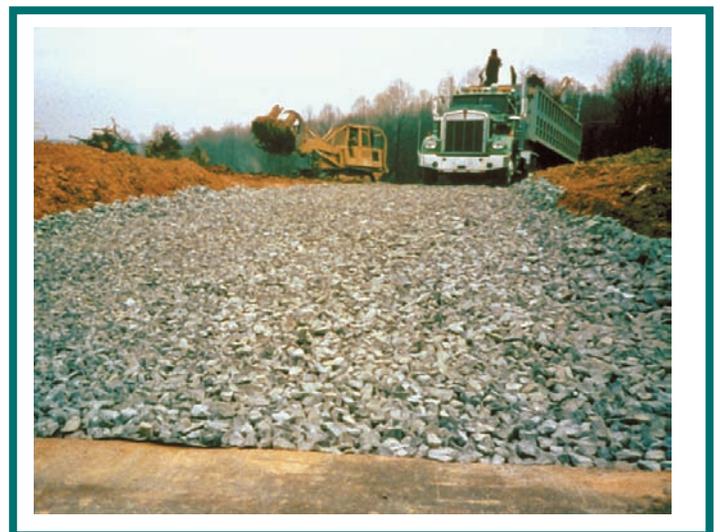
Cover all exposed soil.

Protect all exposed soil

1. Stabilize all exposed soils with seeding and mulching with straw, bark, compost or plastic sheeting with anchors. On slopes greater than 2:1 use erosion blankets or matting such as excelsior, jute, textile and plastic matting and netting, applied in accordance with manufacturer's recommendations.
2. Use berms or swales to divert runoff from exposed soils.



Erosion Blankets



Construction Site Entrance



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Why is concrete a problem?

Concrete work creates wastes that can harm people, waterways, plants, fish and other wildlife if handled or discarded improperly. When these wastes solidify or build up in the stormwater lines, they block the drainage flow and cause localized flooding which results in property damage and unsafe driving conditions.

When fresh concrete and cement-related mortars enter the stormwater collection system, they're carried untreated directly into local streams and rivers. Here they can harm aquatic animals, fish, plants, as well as affecting downstream drinking water sources.

Most concrete workers manage wastes responsibly, but sometimes disposal options can be confusing. This brochure is designed to help you protect water quality and avoid penalties for your business. The result will be happier customers who appreciate your concern for their property and a safer environment.

Why should you care?

Aside from causing environmental damage, improper disposal of concrete, cement-related mortars and concrete/cement wastes violates state and local laws and could lead to costly fines and penalties. It is against federal, state and local law to discharge non-stormwater substances, including biodegradable substances, into the stormwater collection system, which includes street gutters, storm drains and open channels.

What can you do?

Plan ahead

- Pour concrete, asphalt and seal coat during dry weather, if possible, so they can cure before stormwater flows across them, picking up pollutants and wastes, on its way to local creeks and waterways.
- Both at the yard and the construction site, store dry and wet materials under cover, protected from wind, rainfall and runoff.
- Securely close bags of cement after they are open. Keep wind-blown cement powder away from gutters, storm drains, rainfall and runoff.
- Check with the general contractor to see if there is a designated wash out area located on-site.
- Place straw bales or other erosion prevention methods down slope to capture runoff carrying mortar or cement before it can reach a storm drain or waterway.
- If you're mixing your own materials, mix up only the amount of fresh concrete or cement that you will use in a day. If you're using a concrete delivery service, encourage them to practice methods to protect water quality as described in this brochure.

What can you do? (Continued)

Prepare the site

- Cover catch basins and manholes when applying seal coat, slurry seal, fog seal, etc., or when performing saw cut operations.
- Discard the spilled material in the trash. Be prepared to contain all washwater on soil, preferably in a bowl-shaped area, to prevent it from leaving the washout area.
- Set up and operate small mixers on tarps or heavy plastic drop cloths to collect spills. Discard the spilled material in the trash.
- Designate an appropriate washout area on site and brief all concrete workers on its location and use.

During Construction

- Shovel or vacuum saw-cut slurry and remove from the site. Do not allow it to flow into stormwater drains or open drainage ways where it ends up in local waterways.
- Wash down exposed aggregate concrete only when the wash water can flow onto a dirt area or drain onto a bermed surface from which it can be pumped and disposed of properly.
- Never wash sweepings from exposed aggregate concrete into a street or storm drain. Collect and return to aggregate base stockpile or dispose in trash.
- When breaking asphalt or concrete, control excess dust using a small amount of water and control runoff. Remove all chunks and pieces from the site and recycle as fill or pay dumping fees at Lane County's Glenwood Central Receiving Station for small amounts. Left in the street or pushed over a bank into a creek bed or stream, concrete debris may cause major problems for flood control, storm drain maintenance and the health of our environment.

Clean Up

- Place all excess concrete in a form, box, or designated washout area where it may be removed when it is hardened. Clean all finishing tools in the washout area.
- Use the minimum amount of water to wash the chute, finishing tools and any other equipment.
- Wash out concrete mixers, pumping equipment and concrete finishing tools only in designated washout areas where the water will flow into containment ponds or onto dirt. Whenever possible, recycle washout by pumping it back into mixers for reuse. Never dispose of washout into the street, storm drains, drainage ditches or streams.
- After driveway or sidewalk construction, wash fine particles onto dirt areas, not down the driveway or into the street or storm drain.
- Dispose of small amounts of excess dry concrete, grout and mortar in the trash.
- Never bury waste material where it can leach into groundwater and contaminate drinking water sources.