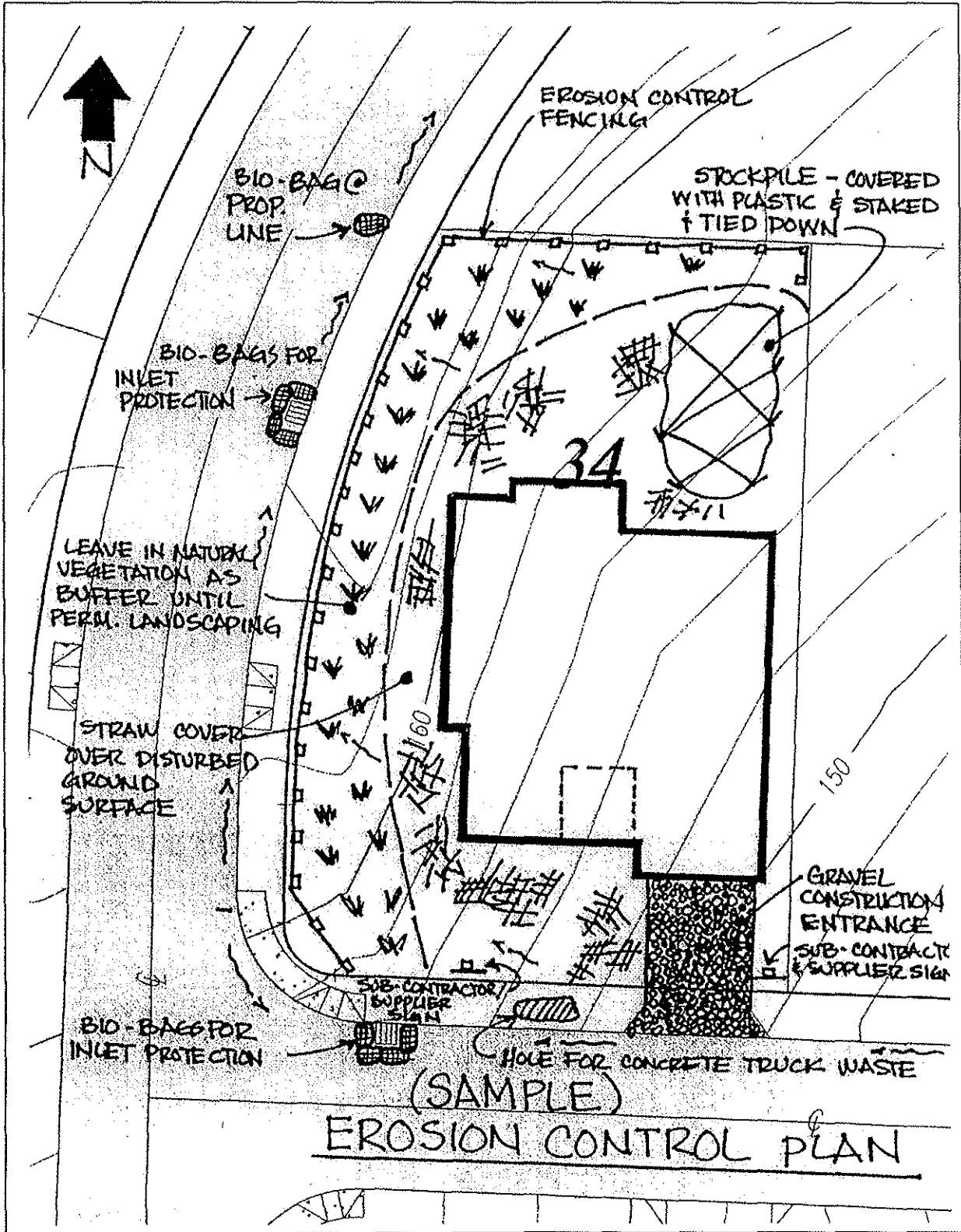


SITE PLAN



C1: STORM DRAIN INLET PROTECTION

Purpose

Prevent sediment from entering inlets while construction activities are occurring.

Location

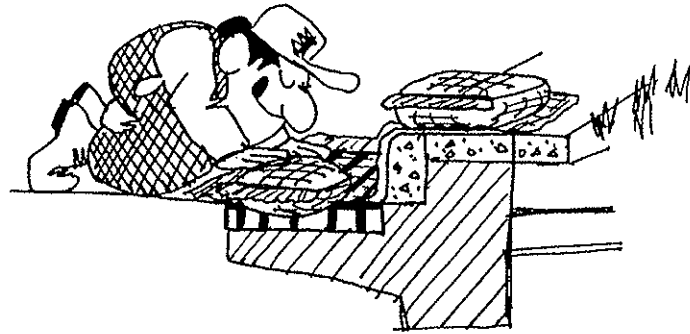
- Adjacent to and in the flow path to all existing catch basins and curb inlets in the vicinity of the project.
- Extra bags may be needed on steep grades along curb lane.

Construction Guidelines

- Many of the agencies prefer the use of *Inlet Protection Pillows*. Other products may also be available and approved for use, such as straw wattles. You need to check with your local agency prior to using any product.
- Bags should be laid adjacent to the grate of a catch basin and in the flow path to a curb inlet.

Maintenance

- The bags need to be checked after every significant rain event to determine if sediment is getting around the bags and into the inlet.
- Sediment trapped by the bags needs to be removed, or replaced, after any significant accumulation.



**Remember - Prevention Before Control
IT'S THE RESULTS THAT COUNT!**

STORM DRAIN INLET PROTECTION



Photo courtesy of CSI

Builder Al wants to remind you to:

- Check bags periodically for sediment build-up;
- Check bags for position against the curb and adjacent to the grate.

GRAVEL CONSTRUCTION ENTRANCE

This B.M.P.'s works best when you:

- Keep gravel pad clean and free of mud;
- Ensure that all vehicles use the pad when entering and exiting the site;
- Clean any mud off roadways immediately, either with shovels or with rubber tired equipment.



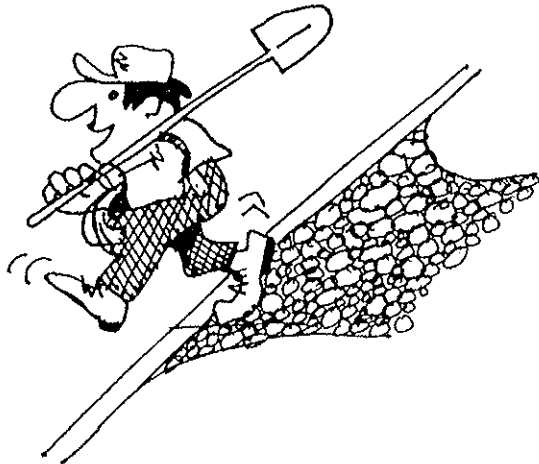
Photo courtesy of MacKay & Sposito Inc.

Builder Al is sure that you are fully prepared when onsite. That is why he knows that you carry a shovel and a broom everywhere you go....just in case!

C2: GRAVEL CONSTRUCTION ENTRANCE

Purpose

Reduce the amount of mud and dirt tracked onto streets by running vehicles over a gravel pad prior to leaving the site.



Location

All construction site locations where vehicle traffic will be leaving the site and entering paved areas.

Construction Guidelines

- Construction vehicle access shall be, whenever possible, limited to one route. Access points shall be stabilized with quarry spall or crushed rock to minimize the tracking of sediment onto public roads.
- The gravel pad should extend to the structure and should be of adequate depth (4" min).
- The pad should extend the full width of the ingress and egress area (20' min).
- If the pad is to be located on a future driveway the existing ground can be excavated deep enough before installation so that the final rock and pavement can be applied over the top.
- Larger rock is preferred (2 1/2" - 0").
- Additional rock should be added periodically to maintain a clean surface, or use a geotextile fabric as a separation medium between the rock and subsurface.

Maintenance

- The intent is to prevent tracking of mud and debris into the streets. The responsible erosion control individual should ensure that all vehicles *MUST* use this entrance, and it *MUST* be kept clean at all times.

KEEP IT ON-SITE!

C3: SILT FENCES

Purpose

Silt fences are designed to intercept and detain sediment before it leaves the site.

Location

- Silt fence should be installed on the downhill side of any disturbed area and where runoff can leave the property.
- At the toe of stockpiles.
- Silt fence is effective in sheet flow conditions only.
- Silt fences should not be installed across streams or other concentrated flow sources.

Construction Guidelines

- Silt fence must be trenched and back filled at least 6" into the ground on the down stream on the back of the slope. The use of a "ditch witch" (as shown above) or other mechanical means is helpful.
- The silt fence must be stretched tight between the posts.
- More than one row of silt fence may be required. The number of rows of silt fence required should be based on length, slope and soil conditions on your site.



Photo courtesy of ECS, Inc.

Maintenance

- Sediment must be removed when it reaches one-third the height of the fence.
- The fence must remain tightly stretched between the posts.
- Any broken fence posts must be replaced immediately.

C4: UNDISTURBED BUFFER ZONE



Purpose

Provide a natural filter to reduce soil erosion and runoff velocities. Buffer zones can be used to supplement silt fences.

Location

Adjacent to property lines on the downslope side of the site, and all areas where existing vegetation can remain.

Guidelines for effective use as a filter

- The buffer zone will not protect against concentrated flows. A level spreader must be used to disperse concentrated flows.
- Don't remove any vegetation unless absolutely necessary.
- The buffer zone must be an undisturbed grassy area covered with dense vegetation.
- All steep, unstable slopes should have vegetation left whenever possible.
- Local jurisdictions may require buffer zones adjacent to streams, lakes, or other waterways.
- Identify buffer areas, with stakes and fencing, to prevent equipment or vehicle entry.

**Remember - Prevention Before Control
IT'S THE RESULTS THAT COUNT!**

UNDISTURBED BUFFER ZONE

Using all the appropriate B.M.P.'s on your site makes Builder Al very happy!

Silt fence protects soil from eroding and entering the buffer zone.



Photo courtesy of CCHBA

Undisturbed buffer zones filter sediment out of runoff and protects adjacent property.

Straw mulch helps to reduce the energy of rain from eroding the soil and moving it into the buffer zone.

WETLAND AND STREAM PROTECTION

It is helpful to protect your site by identifying sensitive areas by installing a wetland and buffer sign on your job site.



Photo courtesy of CCHBA

SLOPE STABILIZATION

This Erosion Control blanket protects the steep slope from eroding and causing severe damage downslope.



Builder Al prefers to stay on top of the slope where he can't be damaged!

Silt fence is placed perpendicular to the slope.

Photo courtesy of ECS, Inc.

Builder Al wants to remind you to check for rips or locations where the plastic is no longer in place.

PLASTIC COVER



Mulching and seeding the area around the stockpile is always a good idea!

Don't forget to hold down the plastic cover with stakes, rope, tires, sand bags, etc.

Photo courtesy of CCHBA

D5: PLASTIC COVER

Purpose

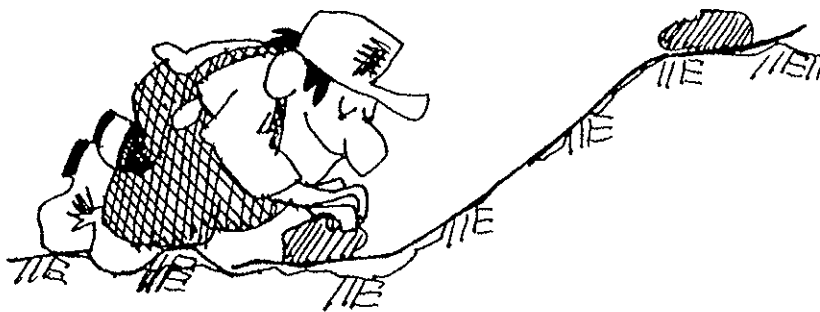
To cover exposed areas for immediate protection from erosion.

Location

- Disturbed areas that need immediate protection.
- Moderate to steep slopes prone to erosion.
- Stockpiles exposed to winter weather conditions.

Construction Guidelines

- Plastic should have a minimum thickness of 6 mil.
- Covering shall be held tightly in place with stakes, rope, tires, sand bags, etc. Tying with rope and/or holding it down with tires or sand bags is essential to keeping it from blowing away.
- Sheeting should be toed in at the top of the slope to keep water from running underneath the plastic.



**Remember - Prevention Before Control
IT'S THE RESULTS THAT COUNT!**

D6: STREET CLEANING

Purpose

To clean tracked mud and debris from existing roads and keep it out of storm facilities.

Location

All existing roads used by construction traffic to access the site.

Construction Guidelines

- Streets should be swept, not washed.
- Mud and dirt should be collected and stabilized on site, not swept into storm facilities.
- Large deposits of mud should be scooped up prior to sweeping.
- Clean the top of the curb.



Photo courtesy of ECS, Inc.

Builder Al says to:

- Clean streets often;
- Use a broom to sweep mud and dirt to one location.

Remember **NOT TO**:

- Wash streets without the approval of the local jurisdiction;
- Allow mud and dirt to enter any storm facilities.

STRAW WATTLES

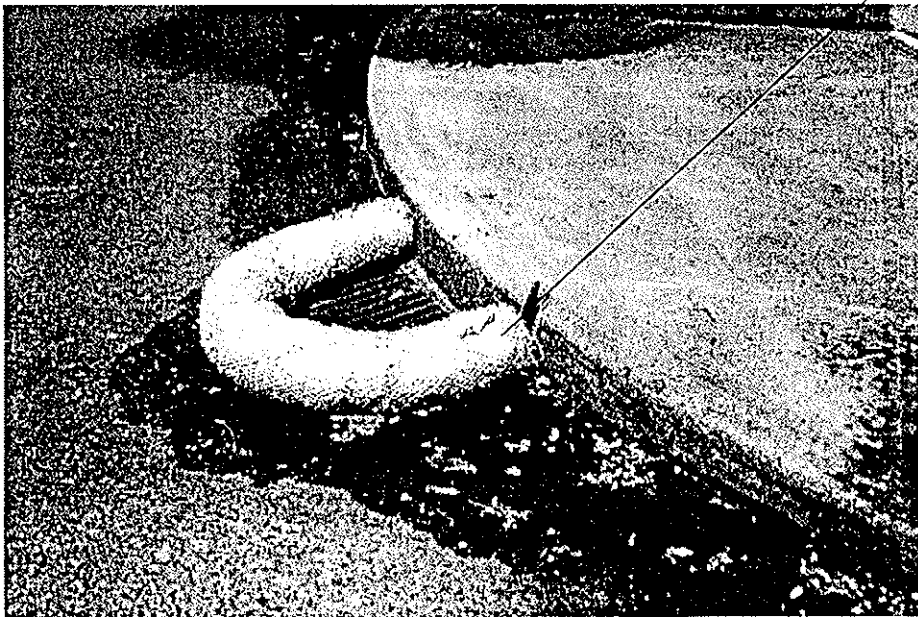
Purpose

Straw wattles are a new erosion control measure that works similarly to silt fence. They can be used to help stabilize a slope, and they'll help retain sediment on your site. Straw wattles have been approved in some agencies for use as an Inlet Protection device. Consult with your local agency to determine whether straw wattles are approved for the purpose in which you wish to use them.

Location

- Across a hillside for slope stabilization and sediment control
- Along the back of a curb or sidewalk to keep sediment on-site.
- As an Inlet Protection Device (Subject to agency approval).

Remember to consult occasionally with your local supplier for new ideas or products on solving your erosion control problems.



Straw wattles can be stabilized by attaching wire clips to the catch basin.

Photo courtesy of Hobbs & Hopkins, LTD.