

REQUIRED STORMWATER CONTROLS ON INDIVIDUAL BUILDING LOTS



**DEPARTMENT OF COMMUNITY SERVICES
CARMEL, INDIANA
www.carmel.in.gov**

FOR COMPLIANCE WITH CITY CODE CHAPTER 6 ARTICLE 7 (§ 6 -200)

THE INDIVIDUAL LOT OWNER OR OPERATOR IS **RESPONSIBLE** FOR THE INSTALLATION AND MAINTENANCE OF STORMWATER POLLUTION PREVENTION CONTROLS UNTIL THE ENTIRE LOT IS COMPLETE AND 100% STABILIZED.

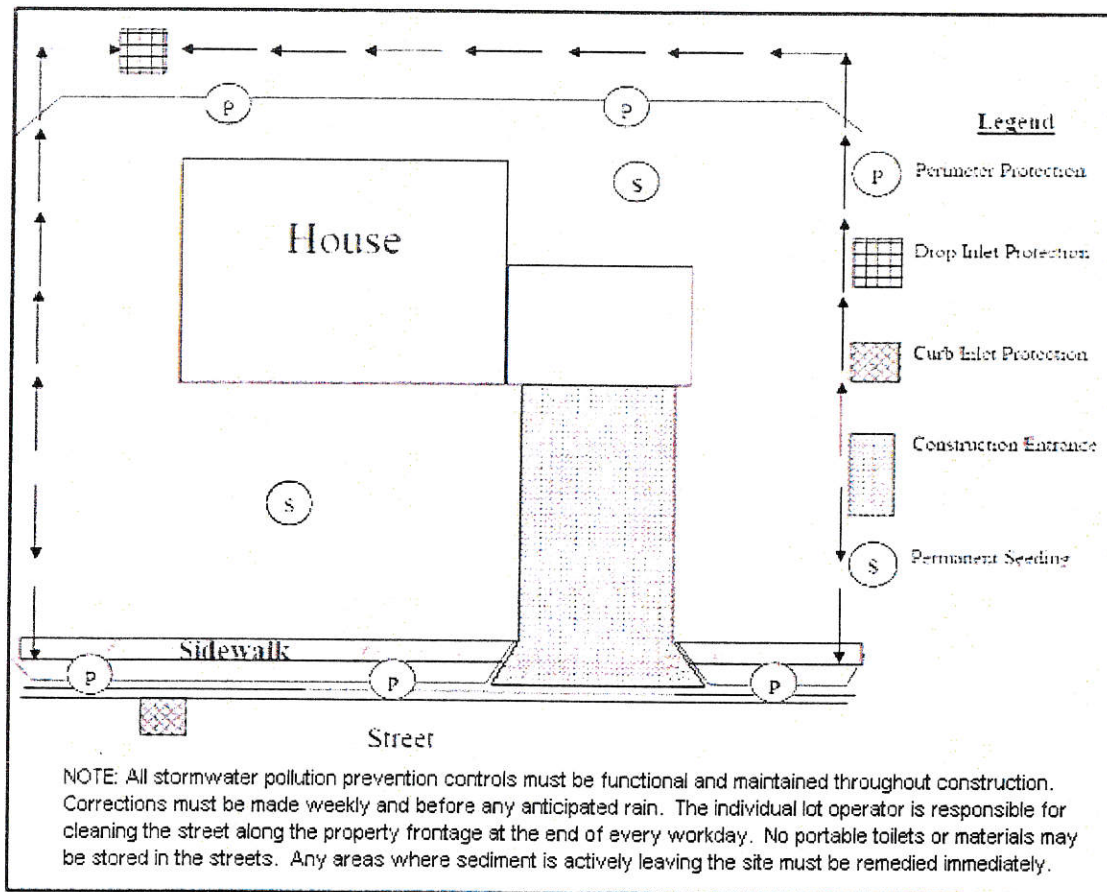
- Initial stormwater controls such as, construction entrances, curbside and rear of lot storm inlet protection (geo-textile wrapped under grate is prohibited), and perimeter controls (typically silt fence) must be in place **BEFORE ANY LOT DISTURBANCE** begins.
- All construction materials must be staged off of the street and on the lot behind perimeter controls.
- Portable toilets must be kept off of the street and should be placed on even ground on the lot behind perimeter controls.
- All lots must provide and utilize appropriate trash containment for site waste.
- Contractors must use appropriate areas for concrete, mortar, and paint washout. These materials must **NOT** enter the storm drains.
- Any off site tracking of sediment into the street, or off site sedimentation into swales or drains **MUST** be cleaned as soon as possible and by no later than the end of the day.
- Lot frontage should be cleaned and acceptable in appearance at the end of every business day.
- Areas where operations have impacted adjacent lots or rear yard swales **MUST** be repaired to design condition and 100% stabilized.

PLEASE NOTE: ANY INSPECTION **WILL FAIL** IF THE CORRECT STORMWATER POLLUTION PREVENTION CONTROLS ARE NOT IN PLACE.

Please direct any questions regarding storm water pollution prevention requirements to:

Stormwater Inspector
City of Carmel Department of Engineering
One Civic Square
Carmel, IN 46032
317-571-2441
317-571-2439 fax

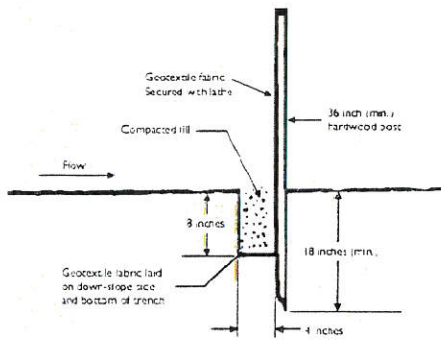
Stormwater Pollution Prevention Controls on Individual Lots



Construction Sequence

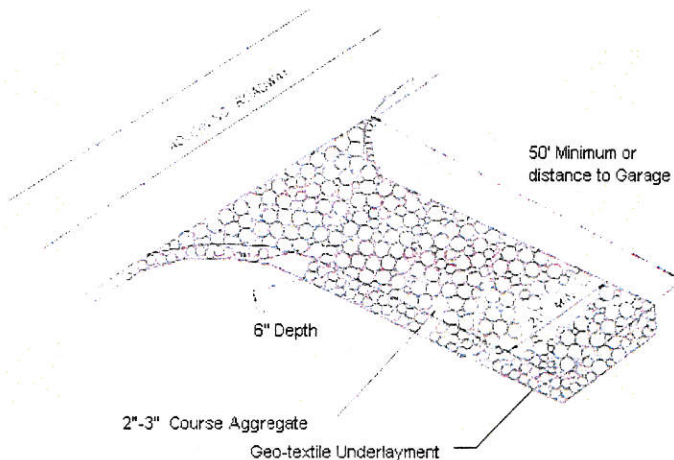
1. Install construction entrance.
 - a. Use #2 stone. Flare entrance at street so it can handle vehicle turn radius. See Detail.
2. Install perimeter protection.
 - a. Protection along the sides of the lot is only necessary if the adjacent lot is built out or if storm water runoff will drain in that direction.
 - b. Make sure perimeter protections are turned into the lot where they terminate to create a ponding area. See above diagram.
 - c. Rear of lot perimeter protection should be installed to protect the rear yard swale.
3. Install protections on storm inlets at curbside and at rear of lot.
 - a. Geo-textile or "fabric" wrapped underneath the grate is **PROHIBITED**.
 - b. Make sure curbside inlet protection leaves the top 3-4 inches of the storm grate exposed to allow for overflow to enter the storm inlet, preventing ponding.
4. Lot disturbance may begin once the controls listed above are in place.
5. Maintain lot controls at all times and repair as soon as possible when a correction is needed.
 - a. If sediment is actively leaving the site due to a failing control such as tracking or an operation such as dewatering, it must be corrected **IMMEDIATELY**.
6. Stabilize all exposed soils with vegetation, mulch, or stone when construction is complete.
 - a. Lot is considered stabilized once vegetation has reached 100% coverage and 70 % density.
7. Remove temporary storm water pollution prevention controls.
 - a. These may be removed when exposed soils have been stabilized with vegetation, sod, or mulch.
 - b. Seed alone is not a stabilization measure until it germinates and achieves proper coverage.

BMP DETAILS



Silt Fence

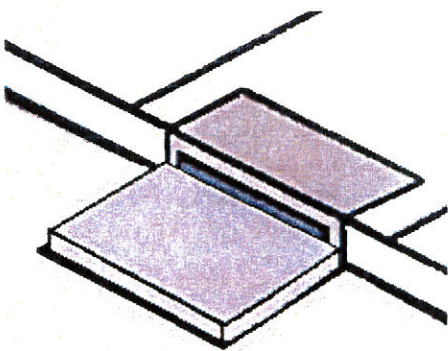
1. Install silt fence parallel to the contour of the land.
2. Extend ends of silt fence upslope 3-4 feet to allow for ponding areas behind the fence.
3. Excavate trench 8 inches deep and 4 inches wide.
4. Install with stakes on the down slope side of fence.
5. Bury 12 inches of fabric in the trench, extending the bottom 4 inches toward the upslope side.
6. Backfill trench on both sides of fence and compact.
7. Join silt fence sections by wrapping two posts and driving them in together. Do not use any other method of joining.
8. Inspect weekly and within 24 hrs of a ½" of rain. Silt fence should be cleaned out when the sediment has reached 1/3 the height of the exposed fencing. Repair silt fence where torn or damaged. Complete repairs before the next anticipated rain and by no later than one week from the date they are noticed.



Construction Entrance

1. Install construction entrance from street to face of proposed building or at a 50' minimum length. Use #2 stone at a 6" minimum depth.
2. A geo-textile is required underneath the entrance to extend its functionality.
3. Flare out entrance where it meets the street so that vehicle turn radiuses do not travel over disturbed ground.
4. Perimeter Controls (silt fence) should be turned into the lot for a few feet where they meet the construction entrance.
5. Inspect weekly and within 24 hrs of a ½"

of rain. Freshen or replace stone as needed to prevent off site tracking. If offsite tracking is occurring, clean up immediately, and correct the reason why the drive is failing as soon as possible. Complete repairs before the next anticipated rain and by no later than one week from the date they are noted.



Inlet Protection

1. Install inlet protection on all curbside and rear of lot storm inlets within the flow line of the active lot.
2. Curbside inlet protection should be installed so that 3 – 4 inches of the top of the casting is exposed to allow for overflow, preventing excessive ponding.
3. Wrapping geo-textile underneath the grate for protection or straw bale barriers are **PROHIBITED** practices.
4. Make sure inlet protection is securely fastened to the storm grate and installed per the manufacturer's recommendations.
5. Inspect weekly and within 24 hrs of a ½" of rain. Sediment accumulation or standing water around the inlet can indicate the need for maintenance. Clean protection when clogged with sediment or when it reaches ½ of the storage capacity or height of the control. Replace protection if torn or worn. Clean sediment from street around the storm inlet and place back onto lot behind perimeter controls. Complete repairs before the next anticipated rain and by no later than one week from the day they are noted.