#### NPDES GENERAL PERMIT No. MORA09315

### STORM WATER POLLUTION PREVENTION PLAN FOR

### WHISPERING WOODS 2ND PLAT City of Lee's Summit, Jackson County, Missouri

**November 11, 2020** 

**Snyder Project No. 120.0484.11** 

Prepared by:

SNYDER & ASSOCIATES, INC. 802 Francis St. St. Joseph, MO 64501 (816) 364-5222

### IMPORTANT NOTICE

This Storm Water Pollution Prevention Plan (SWPPP) shall be retained on the construction site from the date the construction activities begin to the date of final stabilization. In addition, all contractors shall be supplied with a copy of the SWPPP and shall certify their role as co-permittee by signing the appropriate form in Part 5. It shall be the duty of the OWNER to see that these requirements are met and that the SWPPP is maintained up to date.

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### PART 1 SITE DESCRIPTION / SITE MAP

### **SITE INFORMATION:**

<b>Project Name</b>	WHISPERING WOODS 2ND PLAT
Project Location (address, latitude/longitude or Section-Township-Range)	3923 SSW Pryor Road City of Lee's Summit, Jackson County, Missouri
Owner Name	Whispering Woods Land LLC
Representative / Title	Rick Frye, Owner
Owner Address/Phone	803 PCA Road Warrensburg, MO 64093 816-564-2230
Site Area	5.20 Ac.
Disturbed Area	5.84 Ac.
Final Runoff Coefficient	0.66
Soil type / characteristics	66.8% Sampsel silty clay loam, 5 to 9 percent slopes 33.2% Arisburg-Urban land complex, 1 to 5 percent slopes (per NRCS Soil Survey of [county] Co., Missouri &/or soils report)
Receiving Waters	Runoff discharged to Mouse Creek which ultimately disharges into Longview Lake
Description (purpose and types of soil disturbing activities)	Project consists of construction of second phase of subdivision Including street paving and utility installation  Soil disturbing activities include clearing and grubbing, stabilized construction entrance, site grading, utility installation and street paving.
Expected Sequence of Major Construction Activities (subject to change; any deviations shall be noted on this plan)	<ol> <li>Install DNR permit sign at construction entrance</li> <li>Install stabilized construction entrance, staging area controls &amp; perimeter silt barrier</li> <li>Clear and grub for earthwork operations</li> <li>Continue grading operations beginning with topsoil stockpiling (interior silt barrier installation)</li> <li>Stabilize denuded areas and stockpiles within 14 days of last construction activity in that area</li> <li>Install utilities &amp; storm sewer</li> <li>Install curb &amp; gutter, paving</li> <li>Backfill / finish grading</li> <li>Permanent seeding/stabilization</li> <li>Final completion, removal of temporary erosion control measures</li> </ol>



**VICINITY MAP** 

# PART 2 CONTROLS

### **Erosion and Sediment Controls**

Measures to be used for controlling erosion and sediment throughout the construction project. Includes stabilization measures for limiting soil erosion from disturbed areas and structural controls to divert runoff and remove sediment. Contractor/subcontractor is responsible for the implementation and management of control measures specific to this site. As work progresses, field investigation may indicate additional erosion control measures may be required as determined by the contractor, owner, engineer, city or other governmentally regulated agencies.

#### 1. Stabilization

- a. Preserve existing vegetation in areas not disturbed during construction
- b. The total area of soil disturbed by construction operations at any time shall be held to a minimum.
- c. Soil Compaction compaction of soils in areas to be seeded or sodded will be kept to a minimum to increase infiltration of storm water runoff into the groundwater, reducing the amount of runoff.
- d. Temporary Stabilization areas where construction activity is not planned to occur for at least 21 days will be stabilized within 14 days of ceasing construction activities in that area by one or more of the following temporary erosion control measures.
  - Topsoil stockpiles and disturbed portions of the site will be stabilized with temporary seed and mulch.
  - Areas of the site to be paved will be temporarily stabilized with geotextile and stone sub-base until pavement can be installed.
  - Frequent watering during construction in dry weather shall minimize wind erosion from exposed soil.
  - Winter Stabilization shall occur between November 15 and Mach 15 and shall consist of seeding, erosion control blanketing or geotextile fabric.
  - Seeding shall occur during favorable weather conditions and normal and acceptable planting seasons when satisfactory growing conditions occur.
  - Planting operations shall not be performed during times of extreme drought, when ground is frozen or during times of other unfavorable climatic conditions.
- e. Permanent Stabilization areas where construction activity has permanently ended will be stabilized within 14 days of ceasing construction activities in that area by one or more of the following permanent erosion control measures.
  - Sodding or permanent seeding/mulch and mulch in all unpaved areas where final grading is complete.
  - Permanently seed drainage swales and install erosion control matting where required immediately upon reaching final grades to decrease erosion and facilitate sediment deposition in surface runoff.
  - Permanent Seeding:
    - Spring seeding shall occurring between February 1 and April 15.
    - Fall seeding shall occurring between August 15 and October 15.
- f. Protection of Trees and Natural Vegetation
  - Undisturbed areas will utilize existing vegetation as a natural buffer zone

to increase infiltration and sediment deposition by reducing runoff velocity.

### g. Dust control

 Mulch or surface watering will be utilized to control wind erosion of susceptible soils during and/or immediately after mass site grading operations.

### h. Outlet Stabilization

- Rock / riprap and engineering fabric installed at storm sewer outlets to prevent erosion.
- Non-rock stabilization installed at storm sewer outlets to prevent erosion.
- Concrete drainage flume installed at storm sewer outlets to prevent erosion.

#### i. Geotextiles

• Erosion control matting placed over seeded areas on bare slopes where rill or gully erosion is evident or likely in order to establish vegetation growth and prevent erosion.

### 2. Structural Controls

- a. At all areas where runoff can move offsite, silt fence or approved equal will be installed along the perimeter of the project downstream of soil disturbing activities and storm water discharge points prior to site clearing and grading operations as required and/or shown on the plans.
- b. Silt barrier enclosures will be installed around all area intakes and flared end section inlets to protect storm sewers from sediment immediately after construction of inlet.
- c. All storm water street intakes will be protected from silt with filter socks or equivalent sediment protection measures after paving.
- d. Silt fence will be installed along concentrated drainageways to control flow velocity and encourage sediment deposition.
- e. Curb & gutter will divert storm water once installed.
- f. Drainage swales
  - Permanently seeded immediately upon reaching final grade to facilitate sediment deposition in surface runoff.
  - Convey runoff to sediment basins/acceptable outlet.
- g. Surface roughening temporarily roughen the surface of graded slopes perpendicular to the slope as an end of day practice and in conjunction with other stabilization measures. Reduces runoff velocity, traps sediment, increases infiltration and aids in establishment of vegetative cover.
- h. Subsurface drains
- i. Additional erosion control measures may be required on embankments, stockpiles and other areas to ensure runoff control.
- j. **Silt Fence**: A temporary barrier of synthetic fabric embedded in the ground and supported by posts used to divert water or to maintain a trap for settlement.
  - 1) Materials, Construction Requirements and Maintenance: Refer to the APWA Standard Drawings.

- k. **Construction Entrance**: A stabilized layer of large aggregate and other features, located in areas of high traffic and at the construction entrance and exit, intended to remove mud and silt embedded in tires, to prevent tracking sediments off the site.
  - 1) Materials, Construction and Maintenance: See APWA Standard Drawings.
- 1. **Inlet Protection**: Any one of a variety of devices or procedures used to allow water to enter a stormwater inlet while filtering or temporarily impeding the flow sufficiently to reduce the quantity of sediment carried.
  - 1) Materials: When used, biodegradable logs, compost filter socks, synthetic sediment barriers, silt fence, or rock ditch checks shall meet the material requirements given by other items of this specification. All other material specifications are as shown in the Standard Details or on the plans. Straw wattles are not allowed for curb inlet protection. Unless otherwise restricted in the plans, the Contractor may also use any applicable inlet protection system allowed by MoDOT Specification 806 and Standard Plans under the category "Inlet Checks".
  - 2) Construction Requirements: Use the inlet protection systems shown on the plan, as appropriate. Provide the given system in accordance with the Standard Drawings. Alternate inlet protection methods may be approved or specified by the Engineer. The appropriate details for a given inlet will change during the progress of the job and adjustments shall be made as inlet construction progresses. Each inlet shall be protected continuously from initial construction until final stabilization. The ultimate test of acceptability is performance in preventing the migration of sediments through the inlet. When surrounding conditions are such that protection of the inlet would lead to an increased risk of flooding of adjacent structures or produce a hazard to motorists, the barriers shall be adjusted or eliminated to avoid such impacts. In those cases, extra attention shall be paid to minimize the degree of sediment carried in the flow that reaches the inlet.
  - 3) All Inlets at Sump Conditions: Inlets at sump conditions shall remain accessible for flow at all times. Small barriers, depressions and/or filters are used to screen larger sediments and initiate settlement of the water prior to it entering the inlet by creating a ponding zone. Generally, stormwater will enter the inlet via weir flow over the top of the barrier. Such water is generally the least-sediment laden as it is decanted from the top of the ponded area.
  - 4) Street Inlets on Grade: On-grade inlet shall be converted into a localized sump condition by installing a barrier downstream and around the inlet of sufficient height to produce ponding and prevent bypass, while a barrier, depression, and/or filter in front of the inlet induces settlement of solids. Bypassing of water

#### **B.** Other Controls

Measures for controlling other sources of potential pollution that may exist on the construction site. During the course of construction, it is possible that situations may arise where unknown materials will be encountered. When such situations occur, they will be handled according to all applicable federal, state, and local regulations in effect at the time.

### 1. Waste materials

a. Disposal of unused construction materials and construction material wastes shall comply with applicable state and local waste disposal, sanitary sewer, or septic system regulations. In the event of a conflict with other governmental laws, rules and regulations, the more restrictive laws, rules or regulations shall apply.

#### 2. Hazardous waste

- a. Hazardous waste materials will be disposed of in accordance with applicable local, State, and/or Federal regulations.
- b. Equipment refueling and maintenance operations will be carried out in such a manner so as to prevent any spills and contamination to the soil and groundwater.
- c. Potentially hazardous materials will be used with great care to prevent spillage in any volume.

### 3. Sanitary waste

A portable restroom facility may be located onsite at the contractor's discretion. Wastes will be collected and disposed of in complete compliance with local, state and federal regulations. This facility will be located in an area where contact with the storm water discharge is minimal.

#### 4. Vehicle tracking

- a. Stabilized construction entrances and/or vehicle washing racks will be installed at all site access points to reduce vehicle tracking of sediment offsite.
- b. Paved streets adjacent to the site will be inspected daily and cleaned as necessary to remove any excess mud, dirt or rock tracked from the site.
- c. Dump trucks hauling material from the site will be properly covered with a tarpaulin.
- d. Dust control measures will be utilized as necessary.

### 5. Non-storm water discharges

- a. Expected sources of non-storm water discharges from the site during construction may include:
  - Potable water sources including water line flushings, irrigation drainage and fire fighting activities.
  - Pavement/building wash waters where no spills or leaks of toxic or hazardous materials have occurred and excluding detergents.
  - Uncontaminated groundwater from de-watering excavation.
  - Natural springs, wetland, water sources.

- Foundation or footing drains where flows have not been exposed to solvents.
- b. Non-storm water discharges will be directed to the sediment basin or other appropriate control measure prior to discharging off-site.

### C. Storm Water Management

Post-construction storm water drainage will be facilitated by curb and gutter, storm sewer, intake structures, and established drainage swales for the developed areas. Runoff will be directed to onsite storm water management controls and the City of Lee's Summit public storm sewer/drainage ditch.

Measures implemented to control pollution of storm water after construction is complete include the following:

- 1. Open channels
  - Vegetated Swales and natural depressions will reduce storm water runoff by increasing infiltration and increase sedimentation by reducing runoff velocity.
- 2. Undeveloped areas will be graded at the slopes indicated and have permanent seeding and/or landscaping designed to reduce runoff velocities and increase infiltration.
- 3. Approximately 0 acres of the site will remain undisturbed and in its original vegetative state, limiting the amount of exposed soil and providing a continuous vegetation buffer zone that will reduce runoff velocities and increase infiltration.
- 4. Outlets of all storm sewer systems and culverts will be stabilized with riprap aprons underlain by engineering fabric or non-rock outlet protection measures to dissipate flow velocities and prevent erosion.

## PART 3 CONSTRUCTION / IMPLEMENTATION

### A. State and Local Requirements

- 1. The storm water pollution prevention plan reflects the provisions of the Missouri Clean Water Law (Chapter 644 R.S. Mo.) and the Federal Water Pollution Control Act (Public Law 92-500).
- 2. Prior to initiating a land disturbing activity, a person engaged in land disturbing activity shall file a signed affidavit with the soil and water conservation district that the project will not exceed the soil loss limits.
- 3. Code Compliance: The contractor shall comply with the soil erosion control requirements of the Missouri Code, the Missouri DNR NPDES permit and all local ordinances.

### **B.** Timing of Controls/Measures

- 1. Install down-slope and side-slope perimeter silt fence prior to commencing land-disturbing activity.
- 2. Install construction entrance and vehicle tracking controls.
- 3. Construct temporary sediment basins or detention basin as sediment basin and route all runoff from disturbed areas to the basin and/or erosion control measures at storm water discharge points sediment traps/basins, riprap channel lining, erosion control mat.
- 4. Do not disturb an area until necessary for construction to proceed.
- 5. Install interior silt fences, earthen dikes, sediment traps, etc. as grading progresses.
- 6. Cover or stabilize disturbed areas and stockpiles as soon as possible and no later than 14 days after ceasing construction for more than 21 days or permanently.
- 7. Place swale control measures (erosion control mats, silt traps, ditch checks, seed & mulch) in drainageways as soon as final grades are achieved and before storm sewer is installed where possible.
- 8. Construct outlet stabilization measures at storm outlets and place silt barriers at storm sewer inlets immediately after storm sewer is installed.
- 9. As areas reach their final grade, provide additional silt fence, sediment traps, earthen dikes, ditch checks or filter sock as necessary.
- 10. Complete permanent stabilization seeding/mulch or sod stabilization as soon as possible after work is complete in an area.
- 11. Remove temporary sediment controls and accumulated sediment once entire site is stabilized. Re-seed/mulch any areas disturbed during removal.

### PROJECTED CONSTRUCTION SCHEDULE / CONSTRUCTION PROGRESS:

PHASE A – GRADING	Anticipated Start-End	
Initial control measure installation		
(sediment basin, construction entrance, perim	neter silt fence)	
Operator Responsible		
Anticipated Start Date	Anticipated End Date	
Actual Start Date	Actual End Date	
Initial Grading Operations		
(clearing/grubbing, topsoil stripping/stockpili	ing/stabilization)	
Operator Responsible		
Anticipated Start Date	Anticipated End Date	
Actual Start Date	Actual End Date	
Major Grading Operations (mass grading, sediment/detention basins, po	nd. interior silt barrier, temporary stabiliz	zation)
Operator Responsible	, , ,	
Anticipated Start Date	Anticipated End Date	
Actual Start Date	Actual End Date	
PHASE B – UNDERGROUND UTILITIES	Anticipated Start-End	
	-	
Sewer / Water installation (sanitary sewer, water main)		
Operator Responsible		
Anticipated Start Date	Anticipated End Date	
Actual Start Date	Actual End Date	
-		
Storm System (storm sewer/structures, culverts, outlet struc	fures)	
Operator Responsible	uu voj	
Anticipated Start Date	Anticipated End Date	
Actual Start Date	Actual End Date	

HASE C – PAVING / FINE GRADING	Anticipated Start-End	
Paving		
(subgrade prep, curb & gutter, street, sidew	valk, drive, parking lot paving)	
Operator Responsible		
Anticipated Start Date	Anticipated End Date	
Actual Start Date	Actual End Date	
E I HOPA		
Franchise Utilities	`	
(electric, gas, telephone, cable,	,)  theets listing utility companies working	4 4
Operator Responsible Attach additional s	sneets listing utility companies working	on the site
Anticipated Start Date	Anticipated End Date	
Actual Start Date	Actual End Date	
,		
Finish Grading		
(backfill, finish grading, temporary seed sta	abilization)	
Operator Responsible		
Anticipated Start Date	Anticipated End Date	
Actual Start Date	Actual End Date	
HASE D – BUILDING CONSTRUCTION	Anticipated Start-End	
	1	
Building Construction (basement excavation, building construction)	n driveyyey neving god stobiliz	ation)
	sheets listing any individual lot ownersh	
Operator responsible		p umisiois
Anticipated Start Date	Anticipated End Date	
Actual Start Date	Actual End Date	
HASE E – FINAL STABILIZATION	Anticipated Start-End	
Permanent Stabilization (final seeding / seed stabilization temporary	y aragian gantral maggura ramay	·a1)
(final seeding / sod stabilization, temporary Operator Responsible	y crosion condoi measure remov	ai)
Anticipated Start Date	Anticipated End Date	
Actual Start Date	Actual End Date	

### C. Inspection & Maintenance

- 1. All documents related to the storm water discharge permit shall be kept on site at all times and must be presented to the Missouri DNR or EPA upon request. Including but not limited to the Storm Water Pollution Prevention Plan, Notice of Intent, and project inspection diary.
- 2. The contractor will be responsible for selecting a "qualified" inspector to conduct the inspections. "Qualified" is defined as a person knowledgeable in the principles and practices of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity.
- 3. The project area and control devices will be inspected by personnel assigned by the contractor a minimum of every seven calendar days. The findings and any actions taken as a result of this inspection shall be recorded in the project diary with a copy submitted weekly to the owner or owner's representative during the project.
  - a. Inspect silt fence for depth of sediment, tears, fabric securely attached to posts and posts firmly in the ground.
  - b. Inspect sediment basins for depth of sediment.
  - c. Inspect diversion dikes for any breaches.
  - d. Inspect seeding for bare spots, washouts and healthy growth.
  - e. Inspect site for any other conditions or deficiencies which may allow or contribute to polluted runoff discharging offsite.
  - f. Inspect site within 48 hours after any storm event equal or greater than a 2-year, 24-hour storm (3.4 inches) has ceased during a normal work day and within 72 hours if the rain event ceases during a non-work day such as a weekend or holiday.
- 4. This pollution prevention plan shall be revised as construction progresses to reflect current ownership, responsibilities, operations and findings.
  - a. The plan will be revised due to any deficiencies in the plan or changes in conditions noted during an inspection and the contractor will implement any and all revisions as soon as practical but no later than 3 business days after the inspection.
  - b. Maintain record of major construction operations start and ending dates and operators responsible for the various phases.
  - c. The plan will be modified within 14 calendar days of a hazardous condition, describing the release, the date of release and the circumstances leading to the release. Steps to prevent the reoccurrence of such releases will be identified in a plan revision and implemented.
- 5. Maintain all temporary and permanent erosion control measures in good working order by cleaning, repairing, replacement and sediment removal throughout the permit period. Any necessary repairs will be initiated within 24 hours of report.
  - a. Built up sediment will be removed from silt barrier or the silt barrier replaced when it has reached 1/2 the height of the barrier.

- b. Accumulation of earth, silt or debris on adjoining properties or streets will be minimized. Remove any accumulation of earth, silt or debris immediately and take remedial actions for prevention.
- c. Minor spills of potentially hazardous materials will be cleaned up by removing and disposing of contaminate soils properly. Major spills shall be reported in accordance with Part D of NPDES Permit No. MORA09315 with clean up procedures dependant on the severity of the spill.
- 6. Hazardous substance spill prevention and response
  - a. The contractor is responsible for training all personnel in the proper handling and cleanup of spilled materials. No spilled hazardous materials or wastes will be allowed to come into contact with storm water discharges. If contact does occur, the storm water discharge will be contained on site until appropriate measures in compliance with all Federal, State, and local regulations are followed to dispose of the hazardous substance.
  - b. In addition to Good Housekeeping and material management practices, the following practices shall be done to minimize the potential for hazardous material spills and to reduce the risk of the spill coming in contact with storm water.
    - Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be trained regarding these procedures and the location of the information and cleanup supplies.
    - Materials and equipment necessary for spill control, containment and cleanup will be provided onsite in a material storage area. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers.
  - c. In the event of a spill, the following procedures will be followed:
    - All spills will be cleaned up immediately following discovery.
    - The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with the hazardous substance.
    - Spill of toxic or hazardous material will be reported to the appropriate state or local governmental agency and to the project manager and engineer, regardless of the size of the spill.
  - d. In the event the construction site has a release of a hazardous substance or oil in an amount which exceeds a reportable quantity (RQ) as defined at 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 then the permittee shall:
    - Person in charge of the site at the time of the spill shall call the EPA National Response Center to report the spill (800-424-8802, or 202-426-2675).
    - Modify the Pollution Prevention Plan accordingly within 14 days of the spill including the items mentioned below.
    - Within 14 days of the release, submit a written description of the release including: a description of the release, type of material, estimated amount of spill, date of release, explanation of why the spill happened, and a description of the steps taken to prevent and control

future releases.

### D. Materials Management

Site sources of pollution generated as a result of this work related to silts and sediment which may be transported as a result of a storm event. However, this SWPPP provides conveyance for other (non-project related) operations. These other operations have storm water runoff, the regulation of which is beyond the control of this SWPPP.

- 1. Materials or substances expected to be present onsite during construction:
  - a. Concrete
  - b. Detergents
  - c. Paints
  - d. Tar
  - e. Soil stabilization additives
  - f. Fertilizers
  - g. Petroleum based additives
  - h. Cleaning solvents
  - i. Wood
  - j. Solids and construction wastes
  - k. Pesticides
- 2. Material Management Practices the following is a list of practices that will be used onsite to minimize the risk of spills or other accidental exposure of materials and substances to storm water runoff.
  - a. Good Housekeeping
    - An effort will be made to store onsite only enough products required to complete the job.
    - All materials stored onsite will be kept in a neat, orderly manner and in their appropriate containers. If possible, products shall be kept under a roof or other enclosure.
    - Materials will be kept in their original containers with the original manufacturer's label.
    - Substances will not be mixed with one another unless recommended by the manufacturer.
    - Whenever possible, all of a product will be used up before disposing of the container.
    - Manufacturer's recommendations for proper use and disposal will be followed.
    - The job site superintendent will be responsible for daily inspections to ensure proper use and disposal of materials.
  - b. Hazardous Products
    - Products will be kept in their original containers with the original manufacturer's label.
    - The original labels and material safety data will be kept for each of the materials as they contain important product information.
    - Disposal of any excess product will be done in a manner that follows all

manufacturers', federal, local and state recommended methods for proper disposal.

- 3. Product Specific Practices the following is a list of potential sources of pollution and specific practices to reduce pollutant discharges from materials or sources expected to be present during construction.
  - a. Petroleum Storage Tanks
    - All onsite vehicles shall be inspected and monitored for leaks and receive preventative maintenance to reduce the chance of leakage.
    - Steps will be taken by the contractor to eliminate contaminants from storage tanks from entering ground soil. Any petroleum storage tanks kept onsite will be located with an impervious surface between the tank and the ground.
  - b. Fertilizers shall be applied in minimal amounts as recommended by the manufacturer. It shall be worked into the soil as to minimize the contact with storm water discharge.
  - c. Paints, paint solvents and cleaning solvents Excess paints and solvents shall not be discharged into the storm sewer system. The contractor shall refer to the manufacturer's instructions and federal regulations on the proper disposal techniques.
  - d. Concrete wastes
    - Concrete trucks will be allowed to washout or discharge excess concrete
      only in specifically designated areas which have been prepared to
      minimize contact between the concrete and storm water discharge from the
      site.
    - The hardened product from the concrete washout areas will be disposed of as other non-hazardous waste materials or may be broken up and used on the site for other appropriate uses.
  - e. Solid and construction wastes All trash and construction debris shall be deposited into a dumpster that will be emptied as necessary. No construction waste materials will be buried on site. The dumpsters must be put in a location where the contact with storm water discharge is minimized.

## PART 4 FINAL STABILIZATION / DISCONTINUATION

### A. Final Stabilization / Discontinuation

- 1. The storm water discharge from a construction activity is no longer considered to be a discharge subject to the storm water permit requirements when final stabilization has been reached and temporary erosion and sediment controls have been or will be removed. A permittee must submit a Notice of Termination (NOT) to inform the DNR that storm water discharge from the site will no longer need to be covered by the general permit.
- 2. "Final Stabilization" the point at which all soil disturbing activities are complete, and a uniform perennial vegetative cover with a density of 70% of the cover for unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures have been employed.
- 3. Notice of Discontinuation should be submitted to the Missouri DNR using the e-permitting process (http://www.dnr.mo.gov/env/wpp/epermit/help.htm)
- 4. All plans, inspection reports and other related documents must be retained for a period of three years after project completion. The contractor shall retain a record copy and provide the original documents to the owner upon issuance of the NOT.

# PART 5 CERTIFICATION

### A. Storm Water Pollution Prevention Plan Certification

- 1. This project is subject to section 402(b) of the Clean Water Act (projects disturbing one or more total acres) and requires inclusion in the National Pollutant Discharge Elimination System (NPDES) General Permit No. MORA09315 or individual NPDES Permit for storm water discharge associated with industrial activity for construction activities. The Contractor shall perform all pollution prevention measures as identified in the plans and specifications. A copy of the Storm Water Pollution Prevention Plan (SWPPP) must be kept at the construction site from the time construction begins until the site has reached final stabilization.
- 2. The owner and prime contractor must sign the NPDES Certification Statement. The prime contractor must identify which contracting entity will be responsible for each portion of the pollution prevention plan and maintain the site in compliance with the SWPPP, Pollution Prevention Plan drawings and NPDES Permit. The certification must be signed in accordance with the signatory requirements found in the general permit; i.e., principal executive officer, vice president, general partner, proprietor, elector official, and will be incorporated into the pollution prevention plan.
- 3. All subcontractors, including short-term contractors and subcontractors, prior to approval, must sign the NPDES Certification Statement before conducting any work at the site. The certification must be signed in accordance with the signatory requirements found in the general permit; i.e., principal executive officer, vice president, general partner, proprietor, elector official, and will be incorporated into the pollution prevention plan.
- 4. Upon signing the certification, the contractor or subcontractor becomes a co-permittee with the owner and other co-permittee contractors. In signing the plan, the authorized representative certifies that the information is true and assumes liability for the plan and its implementation. Note that Section 309 of the Clean Water Act provides for significant penalties where information is false or the permittee violates, either knowingly or negligently, the permit requirements.
- 5. A copy of the NPDES Certification Statement of the Owner, Prime Contractor and all Subcontractors shall be filed in and become a part of the project SWPPP.

### NPDES CERTIFICATION STATEMENT

(Owner certification)

Project	WHISPERING WOODS 2ND PLAT
Project Location (address, lat./long., SecT-R)	3923 SSW Pryor Road City of Lee's Summit, Jackson County, Missouri

I certify under penalty of law that this document and all attachments were prepared under my direction of supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (MORA09315) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification. As a co-permittee, I understand that I, and my company, are legally required under the Clean Water Act to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under this NPDES permit and the terms of this NPDES permit.

Owner	Whispering Woods Land LLC	
Address	803 PCA Road Warrensburg, MO 64093	Phone 816-564-2230
Representative	Rick Frye	Title Owner
Signature		Date

### NPDES CERTIFICATION STATEMENT

(for contractors with authority to modify SWPPP)

Project	WHISPERING WOODS 2ND PLAT
Project Location	3923 SSW Pryor Road
(address, lat./long., SecT-R)	City of Lee's Summit, Jackson County, Missouri

I certify under penalty of law that this document and all attachments were prepared under my direction of supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (MORA09315) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification. As a co-permittee, I understand that I, and my company, are legally required under the Clean Water Act to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under this NPDES permit and the terms of this NPDES permit.

Contractor / Sub-	
contractor	
Responsible for	
Address	Phone
Representative	Title
Signature	Date

### NPDES CERTIFICATION STATEMENT

(for contractors with NO authority to modify SWPPP)

Project	WHISPERING WOODS 2ND PLAT
Project Location (address, lat./long., SecT-R)	3923 SSW Pryor Road City of Lee's Summit, Jackson County, Missouri

I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (MORA09315) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification. As a co-permittee, I understand that I, and my company, are legally required under the Clean Water Act to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under this NPDES permit and the terms of this NPDES permit.

Contractor / Sub- contractor	
Responsible for	
Address	Phone
Representative	Title
Signature	Date

## APPENDIX A NPDES GENERAL PERMIT No. MORA09315

### APPENDIX B

**CHECKLISTS** 

### EPA BASELINE CONSTRUCTION GENERAL PERMIT REQUIREMENTS PRE-CONSTRUCTION CHECKLIST

			Storm Water Pollution Prevention Plans	
1.	A si	site description, including:		
		The	e nature of the activity?	
		Inte	ended sequence of major construction activities	
		The	e total area of the site	
		The	e area of the site that is expected to undergo excavation	
		The	runoff coefficient of the site after construction is complete	
		Exi	sting soil or storm water data	
		A s	site map with:	
			Drainage patterns	
			Approximate slopes after major grading	
			Area of soil disturbance	
			Outline of areas which won't be disturbed	
			Location of major structural and non-structural controls	
			Areas where stabilization practices are expected to occur	
			Surface waters	
			Storm water discharge locations	
			e name of the receiving water(s)	
2.	A d	escr	iption of controls:	
	2.1	Ero	sion and sediment controls, including:	
			· · · · · · · · · · · · · · · · · · ·	
			Structural practices for all drainage/discharge locations	
	2.2	Sto	orm water management controls, including:	
			Measures used to control pollutants occurring in storm water discharges after construction activities are complete.	
			Velocity dissipation devices to provide nonerosive flow conditions from the discharge point along the length of any outfall channel.	
	2.3	Oth	ner controls including:	
			Waste disposal practices which prevent discharge of solid materials to waters of the U.S.?	
			Measures to minimize offsite tracking of sediments by construction vehicles	
			Measures to ensure compliance with State or local waste disposal, sanitary sewer, or septic system regulations	
	2.4		Description of the timing during the construction when measures will be implemented.	
3.		Are	e State or local requirements incorporated into the plans?	
4.		Are	e maintenance procedures for control measures identified in the plan?	
5.			ntification of allowable non-storm water discharges and pollution prevention assures.	
6.		Co	ntractor certification.	
7.		Pla	n certification.	

### **EPA BASELINE CONSTRUCTION GENERAL PERMIT CHECKLIST**

		Storm Water Pollution Prevention Plan Construction/Implementation Checklist
1.	Mai	ntain Records of Construction Activities, including:
		Dates when major grading activities occur
		Dates when construction activities temporarily cease on a portion of the site
		Dates when construction activities permanently cease on a portion of the site
		Dates when stabilization measures are initiated on the site
2.	Prep	pare Inspection reports summarizing:
		Name of inspector
		Qualifications of inspector
		Measures/areas inspected
		Observed conditions
		Changes necessary to the SWPPP
3.	Rep	ort Releases of Reportable Quantities of Oil or Hazardous Materials (if they occur):
		Notify National Response Center 800/424-8802 immediately
		Notify permitting authority in writing within 14 days
		Modify the pollution prevention plan to include:
		- the date of release
		- circumstances leading to the release
		- steps taken to prevent reoccurrence of the release
4.	Mod	lify Pollution Prevention Plan as necessary to:
		Comply with minimum permit requirements when notified by EPA that the plan does not comply
		Address a change in design, construction operation or maintenance which has an effect on the potential for discharge of pollutants
		Prevent reoccurrence of reportable quantity releases of a hazardous material or oil

### **EPA BASELINE CONSTRUCTION GENERAL PERMIT CHECKLIST**

	Storm Water Pollution Prevention Plan Final Stabilization/Termination Checklist
1.	All soil disturbing activities are complete
2.	Temporary erosion and sediment control measures have been removed or will be removed at an appropriate time
3.	All areas of the construction site not otherwise covered by a permanent pavement or structure have been stabilized with a uniform perennial vegetative cover with a density of 70% or equivalent measures have been employed

### POLLUTION PREVENTION PLAN FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES EROSION AND SEDIMENT CONTROL SELECTION CHECKLIST

INSTRUCTIONS: THIS CHECKLIST LISTS THE MINIMUM SEDIMENT EROSION CONTROL REQUIREMENTS UNDER

THE USEPA GENERAL PERMIT. CHECK [/] EACH ITEM AND FILL IN THE BLANKS BELOW TO EVALUATE COMPLIANCE FOR EACH DRAINAGE AREA AND LOCATION. NOTE: THIS CHECKLIST WAS PREPARED FOR THE USEPA GENERAL PERMIT. REQUIREMENTS FOR STATE GENERAL PERMITS MAY VARY.					
	Stabilization Practices  Stabilization will be initiated on all disturbed areas where construction activity will not occur for a period of more than 21 calendar days by the 14th day after construction activity has permanently or temporarily ceased.				
Stabilization measures to be used include:					
		Temporary Seeding		Sod Stabilization	
		Permanent Seeding		Geotextiles	
		Mulching		Other	
Structural Practices					
	Flows from upstream areas will be diverted from exposed soils. Measures to be used include:				
		Earth Dike		Pipe Slope Drain	
		Drainage Swale		Other	
		Interceptor Dike and Swale			
Drainage locations serving less than 10 disturbed acres			Drainage locations serving 10 or more disturbed acres		
	Sedim	Sediment controls will be installed		A Sediment Basin will be installed	
	Sediment controls include:  Sediment Basin			A Sediment Basin is not attainable on the site; therefore, the following sediment controls will be installed:	
		Sediment Trap		Sediment Trap	
		Silt Fence or equivalent controls along all sideslope and downslope boundaries		Silt Fence or equivalent controls along the sideslope and downslope boundaries	
Sediment Basin Runoff Storage Calculation					
acres area draining to the sediment basin					
	X 3,600 cubic feet of storage/acre				
cubic feet of storage required for the basin.				sin.	

# APPENDIX C INSPECTION REPORTS

Project:				_Date of Inspe	ection:	
Prime Contractor:				Permit No:		
Inspector:				_Project No: _		
Reason for Inspection:	Weekly	☐ Rainfall Event	( in.)			
EROSION AND SEDIME	NT CONTROL	. MONITORING				
Area Inspected:						
Inspection of Best Manage	ement Practice	es:				
	Control	Maintenance/			Control	Maintenance/
DMD	Practice	Modification	DMD		Practice	Modification
BMP	Effective Y N N/A	•	BMP		Effective Y N N/A	Required Y N N/A
Silt Fencing Ditch Checks Rip Rap Inlet Protection Drainage Swales Construction Site Exits Project Schedule Grading Practices Good Housekeeping			Stockpile Sta Mulching Erosion Matti Temporary S Permanent S Sodding Staging Area Other	ng eeding eeding		
comments, recomm dated, and initialed	ee Effective' box lended improvel on the drawing	checked 'N' or 'Mair ments, and date imp included with the Po COMMENDED IMP	lemented. Any Ilution Preventic	modifications mon Plan.	ust be sketched	Y' must have d, described, PLEMENTED
See reverse side for s	ketches or ad	ditional comments	/recommendat	ions		
CERTIFICATION		_			_	
Copy to: Onsite Po	ollution Preven	tion Plan 🔲 Ow	ner 🗌 Proje	ect Engineer [	☐ Project Ob	server
"I certify under penalty of law that system designed to assure that of person or persons who manage the best of my knowledge and be information, including the possib	qualified personne the system, or the elief, true, accurat	el properly gathered an ose persons directly res te and complete. I am	d evaluated the in sponsible for gathe aware that there a	formation submitte ering the informati	ed. Based on my on, the information	inquiry of the on submitted is, to

Project:				_Date of Inspe	ection:	
Prime Contractor:				Permit No:		
Inspector:				_Project No: _		
Reason for Inspection:	Weekly	☐ Rainfall Event	( in.)			
EROSION AND SEDIME	NT CONTROL	. MONITORING				
Area Inspected:						
Inspection of Best Manage	ement Practice	es:				
	Control	Maintenance/			Control	Maintenance/
DMD	Practice	Modification	DMD		Practice	Modification
BMP	Effective Y N N/A	•	BMP		Effective Y N N/A	Required Y N N/A
Silt Fencing Ditch Checks Rip Rap Inlet Protection Drainage Swales Construction Site Exits Project Schedule Grading Practices Good Housekeeping			Stockpile Sta Mulching Erosion Matti Temporary S Permanent S Sodding Staging Area Other	ng eeding eeding		
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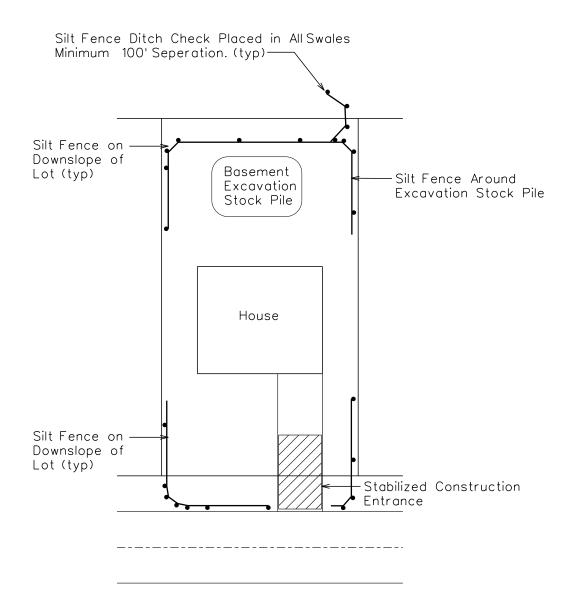
Project:				_Date of Inspe	ection:	
Prime Contractor:				Permit No:		
Inspector:				_Project No: _		
Reason for Inspection:	Weekly	☐ Rainfall Event	( in.)			
EROSION AND SEDIME	NT CONTROL	. MONITORING				
Area Inspected:						
Inspection of Best Manage	ement Practice	es:				
	Control	Maintenance/			Control	Maintenance/
DMD	Practice	Modification	DMD		Practice	Modification
BMP	Effective Y N N/A	•	BMP		Effective Y N N/A	Required Y N N/A
Silt Fencing Ditch Checks Rip Rap Inlet Protection Drainage Swales Construction Site Exits Project Schedule Grading Practices Good Housekeeping			Stockpile Sta Mulching Erosion Matti Temporary S Permanent S Sodding Staging Area Other	ng eeding eeding		
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See reverse side for s	ketches or ad	ditional comments	/recommendat	ions		
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Prime Contractor:				Permit No:		
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Reason for Inspection:	Weekly	☐ Rainfall Event	( in.)			
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Area Inspected:						
Inspection of Best Manage	ement Practice	es:				
	Control	Maintenance/			Control	Maintenance/
DMD	Practice	Modification	DMD		Practice	Modification
BMP	Effective Y N N/A	•	BMP		Effective Y N N/A	Required Y N N/A
Silt Fencing Ditch Checks Rip Rap Inlet Protection Drainage Swales Construction Site Exits Project Schedule Grading Practices Good Housekeeping			Stockpile Sta Mulching Erosion Matti Temporary S Permanent S Sodding Staging Area Other	ng eeding eeding		
comments, recomm dated, and initialed	ee Effective' box lended improvel on the drawing	checked 'N' or 'Mair ments, and date imp included with the Po COMMENDED IMP	lemented. Any Ilution Preventic	modifications mon Plan.	ust be sketched	Y' must have d, described, PLEMENTED
See reverse side for s	ketches or ad	ditional comments	/recommendat	ions		
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Copy to: Onsite Po	ollution Preven	tion Plan 🔲 Ow	ner 🗌 Proje	ect Engineer [	☐ Project Ob	server
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Project:				_Date of Inspe	ection:	
Prime Contractor:				Permit No:		
Inspector:				_Project No: _		
Reason for Inspection:	Weekly	☐ Rainfall Event	( in.)			
EROSION AND SEDIME	NT CONTROL	. MONITORING				
Area Inspected:						
Inspection of Best Manage	ement Practice	es:				
	Control	Maintenance/			Control	Maintenance/
DMD	Practice	Modification	DMD		Practice	Modification
BMP	Effective Y N N/A	•	BMP		Effective Y N N/A	Required Y N N/A
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comments, recomm dated, and initialed	ee Effective' box lended improvel on the drawing	checked 'N' or 'Mair ments, and date imp included with the Po COMMENDED IMP	lemented. Any Ilution Preventic	modifications mon Plan.	ust be sketched	Y' must have d, described, PLEMENTED
See reverse side for s	ketches or ad	ditional comments	/recommendat	ions		
CERTIFICATION		_			_	
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## APPENDIX D TYPICAL LOT SEDIMENT/EROSION CONTROL PLAN

### SUGGESTED EROSION CONTROL MEASURES FOR A TYPICAL LOT SEDIMENT/EROSION CONTROL PLAN



### **NOTES**

Suggested erosion control measures shown are typical and for informational purposes. Site conditions will dictate the amount and type of erosion control measures necessary. The contractor shall be responsible for installing and maintaining any and all appropriate control measures.

- 1. Potentially hazardous materials shall be stored within an enclosed or controlled structure.
- 2. Note temporary sanitary facilities on plan if individually provided.
- 3. Keep roadways and adjacent properties free of silt and other debris.
- 4. Permanent stabilization by seeding and mulching and/ or sod shall be completed within 14 days of final disturbance.

		SHEET OF
		PN:
		FN:
Snyder & Associates	501 S.W. ORALABOR ROAD	DATE: 4/19/05
Engineers and Planners	ANKENY, IA 50021 (515) 964-2020	TECH: SDB

## APPENDIX E GRADING & EROSION CONTROL PLAN