



Stormwater Pollution Prevention Plan

Client

Clayton Properties Group 120 SE 30th Street Lee's Summit, MO 64082

Project

Cobey Creek – 2nd Plat Lee's Summit, MO 66083



Report Prepared By:

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I. EXECUTIVE SUMMARY

The Stormwater Pollution Prevention Plan (SWPPP) includes, but is not limited to, this SWPPP with appendices, the erosion control plans included in the Construction Drawings with the Detail Sheets from Civil Sitework Plans, General Permit, all records of inspections and activities which are created during the course of the project, and other documents as may be included by reference to this SWPPP. Changes, modifications, revisions, additions, or deletions shall become part of this SWPPP as they occur.

The general contractor and all subcontractors involved with a construction activity that disturbs site soil or who implement a pollutant control measure identified in the Stormwater Pollution Prevention Plan (SWPPP) must comply with the following requirements of the National Pollution Discharge Elimination Systems (NPDES) General Permit and any local governing agency having jurisdiction concerning erosion and sedimentation control:

A. General Permit Information

Construction may not begin until authorization of the Application for General Permit and the Application for Stormwater Permit has been approved by the Missouri Department of Natural Resources (MDNR). Permit Information: The owner (Clayton Properties Group) must apply for coverage to discharge stormwater from construction activities under the general permit. A copy of the General Permit is located in Appendix J. The MDNR permit cannot be transferred.

B. Public Posting

The contractor shall post a copy of the public notification sign described by the MDNR at the main entrance to the site. The public notification sign must be visible from the public road that provides access to the site's main entrance. The public notification sign must remain posted at the site until the permit has been terminated.

C. Contractor/Sub-Contractor Notification

The General Contractor shall be responsible for notifying each contractor or entity (including utility crews and city employees or their agents) who will perform work at the site of the existence of the SWPPP and what action or precautions shall be taken while on site to minimize the potential for erosion and the potential for damaging any BMP. The General Contractor is responsible for any damage their subcontractors may do to established BMPs and any subsequent water quality violation resulting from the damage.

D. Site Superintendent

The contractor shall designate a site superintendent which shall be an individual responsible for environmental matters. Additionally, the site superintendent must either be someone empowered to implement modifications to this SWPPP and the pollutant control devices, if needed, in order to increase effectiveness to an acceptable level, or someone with the authority to cause such things to happen. The individual responsible for environmental matters shall have a thorough and demonstrable knowledge of the site's SWPPP and sediment and erosion control practices in general. The individual responsible for



environmental matters or a designated inspector knowledgeable in erosion, sediment, and stormwater control principles, shall periodically inspect all structures that function to prevent pollution of waters of the state. See inspection requirements later in this section.

E. Retention of Records Onsite and Post Construction

A complete copy of the SWPPP, including copies of all inspection reports, plan revisions, etc., must be retained at the project site at all times during working hours and kept in the permanent project records for at least three years following submission of the Notice of Termination (NOT). The SWPPP must be made available to the MDNR upon request.

F. Site Inspection Requirements

The site superintendent or a designated inspector working under the supervision of the site superintendent, shall conduct regular inspections at the site at least once per 7 calendar days. The frequency of regular inspections should be proportional to the amount of construction activity and may include inspections performed in response to precipitation events which occur within the scheduled inspection frequency. The permittee should increase the frequency of inspections when construction activity increases. For disturbed areas that have not been finally stabilized, all installed BMPs and other pollution control measures shall be inspected for proper installation, operation and maintenance. All stormwater outfalls shall be inspected for evidence of erosion or sediment deposition. Any structural or maintenance problem shall be noted in an inspection report and corrected within seven calendar days of the inspection. If weather conditions prevent the repair of BMP for longer than 7 days, a detailed report, including photos, must be filed with the regular inspections.

The permittee shall ensure the entire construction site including but not limited to disturbed areas, BMPs, waste and construction storage areas, drainage areas, locations where stormwater can flow from the construction site, and temporarily stabilized areas is inspected on a regular schedule and, with the exception of Saturdays, Sundays, established Federal Holidays and the day after Thanksgiving, within twenty-four hours of the end of a precipitation event which results in a cumulative precipitation total of 0.5 inches or greater during either a single or two consecutive monitoring days. A rain gauge shall be kept onsite to monitor rainfall activities. If the gauge indicates that a rainfall of 1/2 inch or more rain has fallen within a 24-hour period, the site superintendent, or a designated inspector, shall be contacted to perform a site BMP inspection.

G. Modifications to this SWPPP

This SWPPP must be updated each time there are significant modifications to the pollutant prevention system. This SWPPP must be amended as necessary during the course of construction in order to keep it current with the pollutant control measures utilized on the site. Amending the SWPPP does not mean that it has to be reprinted. It is acceptable to add addenda, sketches, new sections, and/or revised drawings. The Site Map showing the locations of all stormwater controls must be posted on the site and updated to reflect the progress of construction and changes to the SWPPP. Additional requirements are outlined in the general permit.



H. Discharges of Petroleum Products or Hazardous Substance

Discharge of petroleum products or other hazardous substances into stormwater or the stormwater (storm sewer) system is subject to reporting and clean up requirements. See Section Spill Prevention and response plan in the Appendix of this SWPPP for state and local information on reporting spills. Refer to the General Permit for additional information. A copy of the spill form is located in Appendix G and the General Permit is located in Appendix J.

I. Notice of Termination of a General Permit

Once the site reaches final stabilization as defined in the General Permit, with all permanent erosion and sedimentation controls installed and all temporary erosion and sedimentation controls removed, the site will be ready for termination of the general permit. The owner (Ad Astra Land Holdings, LLC) must complete and submit the NOT (Notice of Termination) located in Appendix I. A form ready for signature and site-specific permit number is included in Appendix I. If the permit is not terminated at the end of the permit period, the owner must apply for and obtain a permit extension.

J. General Contractors Responsibility

This SWPPP intends to control water-borne and liquid pollutant discharges by some combination of interception, filtration, and containment. The general contractor and subcontractors implementing this SWPPP must remain alert to the need to periodically refine and update the SWPPP in order to accomplish the intended goals. The General Contractor is ultimately responsible for all site conditions and permit compliance.

K. Log of Construction Activity

A record of dates when major ground-disturbing activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated or completed must be maintained until NOT (Notice of Termination) is filed. A log for keeping such records is included in Appendix H. Controls must be in place down gradient of any ground-disturbing activities prior to the commencement of construction and noted on the Site Map and Record of Stabilization and Construction Activity Dates.



II. INTRODUCTION

The SWPPP has been prepared for the following operations:

The development of Cobey Creek -2^{nd} Plat in Lee's Summit, Missouri. This project includes clearing, grubbing, grading, utility installations and paving.

This SWPPP, including the applicable General Permit, includes the elements necessary to comply with the Missouri General Permit administered by the Missouri Department of Natural Resources (MDNR) under the National Pollutant Discharge Elimination System (NPDES) program and all local governing agency requirements. This SWPPP must be implemented at the start of construction.

The primary goal of pollution prevention efforts during project construction is to control soil and pollutants that originate on the site and prevent them from flowing to surface waters. This SWPPP provides guidelines for achieving that goal. Inspection and maintenance are also an integral part of this SWPPP.

III. SCOPE OF SWPPP

This SWPPP not only addresses the impact of storm rainfall and runoff on areas of the ground surface disturbed during the construction process, but also includes recommendations for controlling other sources of pollution that could accompany major construction activities. The SWPPP will terminate when disturbed areas are stabilized and a Notice of Termination is filed with MDNR, see Project Termination.

The General Permit for Stormwater Discharges Associated with Construction Activities prohibits most non-stormwater discharges during the excavation activities. Allowable non-stormwater discharges that occur during excavation on this project, which are covered by the General Permit, include:

- 1. Flushing water hydrants and potable water lines provided appropriate sediment and erosion controls are implemented,
- 2. Water used for rinsing streets or structures that does not contain cleansers, detergents, solvents or additives;
- 3. Irrigation to establish vegetation; and
- 4. Discharges of uncontaminated non-turbid groundwater provided appropriate sediment and erosion controls are implemented;
- 5. Discharges from emergency fire-fighting activities;
- 6. Water used to control dust;
- 7. Uncontaminated air conditioning or compressor condensate;



- 8. Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated groundwater; and
- 9. Uncontaminated construction dewatering wastewaters that have been treated by an appropriate control. Wastewaters that have been treated by an appropriate control but still contain trace amounts of sediment, are not considered contaminated; and
- 10. Discharges of stormwater listed above, or authorized non-stormwater commingled with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES permit authorization.

Best Management Practices (BMPs) must be implemented for the above allowable foreseeable discharges for the duration of the permit. Each non-stormwater discharge should be noted in the SWPPP and have proper erosion and sedimentation controls in place with the exception of discharges from firefighting activities.

IV. PROJECT OWNER

Clayton Properties Group 120 SE 30th Street Lee's Summit. MO 64082

V. PROJECT DESCRIPTION

Clayton Properties Group proposes to construct a planned residential development with 87 lots in Lee's Summit, Jackson County, Missouri. The time frame for excavation and embankment operation is anticipated to be over an approximate 1-year window period beginning in Spring 2025. The general contractor will be required to maintain BMP's in working order throughout the project. All disturbed areas will be stabilized with pavements, turf, or other landscaping cover at project completion.

VI. RECEIVING WATER

All storm water from the site is captured by a detention basin which drains to Big Creek.

VII. MAJOR ACTIVITIES FOR POLLUTION CONTROL PRACTICES

The contractor shall keep a record of all major construction activities. See appendix H for log of construction activities sheet.

A. Install perimeter $Siltsoxx^{TM}$ and inlet protection where indicated on the site plans in locations that will be downhill from areas to be graded.



- B. Strip and stockpile topsoil in accessible areas and protect topsoil stockpile with perimeter SiltsoxxTM.
- C. Install SiltsoxxTM check dams where indicated on the site plans in locations that will be under heavy flow in storm events.
- D. Install sediment basin(s) and controls where indicated on the site plans.
- E. Begin mass excavation and embankment. As work progresses ensure proper erosion control measures are in place.
- F. As work in an area is completed seed and fertilize all disturbed areas per project specifications. It is possible that sub-areas will remain idle waiting on locations to receive excavated material. It is the general contractor's responsibility to maintain all erosion BMP's during idle periods over 14 days.

NOTICE OF TERMINATION SHALL BE SUBMITTED WHEN ALL WORK IS COMPLETE AND SITE IS STABILIZED. SITE WILL BE CONSIDERED STABILIZED WHEN VEGETATIVE COVER HAS REACHED A DENSITY OF 70 PERCENT ACROSS THE ENTIRE CONSTRUCTION PROJECT.

VIII. EROSION AND SEDIMENT CONTROLS

A. Type of Controls

- 1. Permanent stabilization practices for this project shall include (see site plan for locations):
 - a. Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed.
 - b. Vegetation preservation.
 - c. Final stabilization through seeding operations

2. Temporary stabilization practices for this project shall include:

- a. The time period for disturbed areas without vegetative cover shall be minimized to the maximum extent practicable but may be extended due to the timing of earth moving activities.
- b. Soil Roughening.
- c. Dust Control (frequent watering to minimize wind erosion during construction).

3. Permanent structural practices for this project shall include (see site plans for locations):

a. Re-establishment of turf ground cover at completion of excavation operations and placement of hard surfaces for paving operations.

4. Temporary Structural practices for this project include (see site plan for locations):

- a. Stabilized construction entrance/exit points (surge rock)
- b. Siltsoxx™
- c. Erosion Control Blankets
- d. Sediment Basin
- e. Concrete Washout



f. Inlet Protection

B. OTHER CONTROLS

1. Off-Site Vehicle Tracking

A stabilized construction entrance/exit will be provided to help reduce vehicle tracking of sediments. The paved streets adjacent to the site entrance will be inspected daily and swept as necessary to remove any excess mud, dirt, or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin. The job Contractor's Superintendent will be responsible for seeing that these procedures are followed.

2. Excavation Spoil Materials

Excavated spoil materials generated from earthwork operations will be properly managed to prevent them from contributing to stormwater discharges. All material excavated from onsite will be hauled to other on-site locations unless hauled to an approved site.

3. Dust Control

Minimizing wind erosion and controlling dust will be accomplished by one or more of the following methods:

- a. Roughening the soil to produce ridges perpendicular to the prevailing wind. Ridges should be about six (6) inches in height.
- b. Frequent watering of excavated and fill areas.
- c. Providing gravel or paving at entrance/exit drives, parking areas and transit paths.

4. Equipment Service Area

The Contractor shall identify an area on the construction plans for equipment cleaning, maintenance and repair. This area shall be protected by a temporary perimeter berm preventing all surface runoff from leaving the area, or equivalent measure. External washing of trucks and other construction vehicles must be confined to this area. No engine degreasing or tool washing is permitted.

5. Material Stockpiles

Stormwater runoff to and from material stockpiles shall be controlled to prevent materials from creating a diversion of surface water to disturbed soils or from entering the surface water. Topsoil stockpiles shall be surrounded with perimeter sediment control measures [such as $Siltsoxx^{TM}$] and be covered with non-erosive material when applicable. Non-erosive material may include temporary seeding with straw mulch and tackifier, mulch, or other material providing suitable cover.



6. Dewatering Erosion Control

If dewatering activities are required all outfalls for dewatering shall be protected from erosion and export of sediment by a combination of either a filtration sack placed (i.e. dirt bag) on the ends of the discharge pipe or allowing the release to flow out at a non-eroding velocity to an existing detention basin which will allow some settlement of suspended solids.

IX. COMPLIANCE WITH OTHER STATE AND LOCAL REGULATIONS

At a minimum, the Contractor will obtain copies of any and all local and state regulations which are applicable to stormwater management, erosion control, and pollution minimization at this Project and will comply fully with such regulations. The Contractor will submit written evidence of such compliance if requested by the Owner or any agent of a regulatory body. The Contractor will comply with all conditions of the Missouri Department of Natural Resources, General Permit, including the conditions related to maintaining the SWPPP and evidence of compliance with the SWPPP at the Project and allowing regulatory personnel access to the project and to records in order to determine compliance. The Contractor shall also comply with any additional or more stringent requirements imposed by the permit issued by an approved state stormwater program.

X. TIMING OF CONTROLS/MEASURES

As indicated in the sequence of major activities, controls will be in place prior to clearing, stripping and excavation. Once excavation activities permanently cease in an area, permanent stabilization will be installed. The construction site will be considered stabilized when all construction activity ceases and uniform perennial vegetative cover with a density of 70% of the area has been established. There may be instances when excavation operations remain idle for extended periods of time when seeding will not occur but erosion control BMP's will remain in place.

XI. SITE DESCRIPTION

A. SITE LOCATION

The site is located just to the east of Route 291 and north of Route 150 in Lee's Summit, Jackson County, Missouri. The disturbed area during the construction is approximately 73.3 acres. All storm water from the site is captured by a detention basin which drains to Big Creek. A Vicinity Map is included in Appendix D.

B. SITE TOPOGRAPHY

Existing site elevations range from 600' to 1,300' for the project (NAVD 1983 Datum). The slope within the construction limits on the site predominately ranges between 1% to 9%.



C. RAINFALL INFORMATION

The 24-hour rainfall depth for a 2-year, 10-year, and 100-year recurrence interval for Lee's Summit, Missouri are as follows: 3.69 inches, 5.63 inches, and 9.21 inches per NOAA – National Weather Service. The average annual rainfall for the Lee's Summit, Missouri area is approximately 33" to 41".

D. SITE SOILS

The soil survey of Jackson County, Missouri, published by the United States Department of Agriculture depicted the site as being located in an area with Arisburg silt loam and Sampsel silty clay loam. Sampsel Silty clay loam, which is the most limiting layer, has a Ksat value (capacity to transmit water) of 0.06 to 0.2 in/hr.

E. Total Site Area, Area to be Disturbed, and Runoff Coefficient

The area to be disturbed by grading activity is anticipated to be approximately 73.3 acres. Impervious areas will be constructed by means of Buildings and Pavements.

- Pre-Construction Runoff Curve Number: "CN" = 70
- Post-Construction Runoff Curve Number: "CN" = 83 (after revegetation)

F. EROSION CONTROL AND SEDIMENTATION PLAN

The "Cobey Creek – 2nd Plat Erosion & Sediment Control Plans" for the project are hereby incorporated as a part of this SWPPP. These plans and details address minimum erosion and sediment control requirements that are anticipated at this time. The City of Lee's Summit, Owner, MDNR or Contractor has the right to make modifications to this SWPPP and/or require additional erosion and sedimentation control measures to address situations that may arise during excavation operations.

G. HISTORIC PROPERTIES

If any cultural materials are encountered during excavation operations, all excavation must cease and appropriate information must be provided to MDNR State Historic Preservation Office for review.

H. CORPS OF ENGINEERS PERMITS

This project is not authorized by a nationwide permit (NWP). For projects that are authorized by a nationwide permit, the contractor shall make themselves aware of the contents of the permit and shall abide by all regulations and requirements noted within.



XII. SITE INSPECTIONS

The general contractor shall designate a site superintendent which shall be an individual responsible for environmental matters. Additionally, the site superintendent must either be someone empowered to implement modifications to this SWPPP and the pollutant control devices, if needed, in order to increase effectiveness to an acceptable level, or someone with the authority to cause such things to happen. The individual responsible for environmental matters shall have a thorough and demonstrable knowledge of the site's SWPPP and sediment and erosion control practices in general. The individual responsible for environmental matters or a designated inspector knowledgeable in erosion, sediment, and stormwater control principles, shall periodically inspect all structures that function to prevent pollution of waters of the state.

Between the time this SWPPP is implemented and final NOT (Notice of Termination) has been submitted, all disturbed areas and pollutant controls must be inspected a minimum of at least once per seven calendar days, and by the end of the next day following a rain event which results in a rainfall total of 0.5 inches or greater. Rainfall totals shall be determined from a rain gauge which shall be installed onsite which shall be monitored daily at 8am or another frequency as noted by the contractor. A site inspection is required whenever a rainfall total of 0.5 inches or greater is observed based on a single monitoring event; or based on the cumulative total of two consecutive monitoring events when the rainfall total of the first monitoring event is less than 0.5 inches. The purpose of site inspections is to assess performance of pollutant controls. The inspections will be conducted by the General Contractor's Site Superintendent or a qualified inspector working directly under the site superintendent. Based on these inspections, the General Contractor will decide whether it is necessary to modify this SWPPP, add or relocate controls, or revise or implement additional Best management Practices in order to prevent pollutants from leaving the site via stormwater runoff. The General Contractor has the duty to cause pollutant control measures to be repaired, modified, supplemented, or take additional steps as necessary in order to achieve effective pollutant control.

Examples of specific items to evaluate during site inspections are listed below. This list is not intended to be comprehensive. During each inspection, the inspector must evaluate overall pollutant control system performance as well as particular details of individual system components. Additional factors should be considered as appropriate to the circumstances.

A. Construction Exit and Track Out

Locations where vehicles enter and exit the site must be inspected for evidence of offsite sediment tracking. A stabilized construction exit shall be constructed where vehicles enter and exit. Exits shall be maintained or supplemented with additional rock as necessary to prevent the release of sediment from vehicles leaving the site. Any sediment deposited on the roadway shall be swept as necessary throughout the day or at the end of every day and disposed of in an appropriate manner. Sediment shall **NOT** be washed into storm sewer systems.



B. Sediment Control Devices

Sediment barriers, traps and basins must be inspected and they must be cleaned out at such time as their original capacity has been reduced by 50 percent. All material excavated from behind sediment barriers or in traps and basins shall be incorporated into on-site soils or spread out on an upland portion of the site and stabilized. Additional sediment barriers must be constructed as needed which include but are not limited to SiltsoxxTM and inlet protection.

C. Equipment Storage Areas

Inspections shall evaluate disturbed areas and areas used for storing equipment that are exposed to rainfall for evidence of, or the potential for, pollutants entering the drainage system or discharging from the site. Protective berms must be constructed, if needed, in order to contain runoff from Equipment storage areas. All state and local regulations pertaining to equipment storage areas will be adhered to.

D. Vegetation

At completion of excavation operations, all areas shall be seeded and inspected to confirm that a healthy stand of grass is maintained. The site has achieved final stabilization once all areas have a stand of grass with a minimum of 70 percent density or greater over the entire vegetated area in accordance with the General Permit requirements. The vegetative density must be maintained to be considered stabilized.

E. Discharge Points

All discharge points must be inspected to determine whether erosion and sediment control measures are effective in preventing discharge of sediment from the site or impacts to receiving waters.

The Inspection Report Form (Appendix F) must identify all deficiencies, any corrections, whether they are identified during the current inspection or have occurred since the previous inspection, and any additional comments. Based on inspection results, any modification necessary to increase effectiveness of this SWPPP to an acceptable level must be made within 48 hours of the inspection. The inspection reports must be complete and additional pages should be included if needed to fully describe a situation. An important aspect of the inspection report is the description of additional measures that need to be taken to enhance plan effectiveness. The inspection report must identify whether the site was in compliance with the SWPPP at the time of inspection and specifically identify all incidents of non-compliance.

Inspection reports must be retained by the General Contractor as an integral part of this SWPPP for at least three years from the date of submission of the Notice of Termination of a General Permit (NOT).

Ultimately, it is the responsibility of the General Contractor to assure the adequacy of site pollutant discharge controls. Actual physical site conditions or contractor practices could make it necessary to install more structural controls than are shown on the plans. For example, localized concentrations of runoff could make it necessary



to install additional sediment barriers. Assessing the need for additional controls and implementing them or adjusting existing controls will be a continuing aspect of this SWPPP until the site achieves final stabilization.

XIII. PROJECT TERMINATION

Once the site reaches final stabilization as defined in the General Permit, with all permanent erosion and sedimentation controls installed and all temporary erosion and sedimentation controls removed, the site will be ready for termination of the general permit. The owner (Clayton Properties Group) must complete and submit the NOT (Notice of Termination). A completed form ready for signature and site-specific permit number is included in Appendix I.



APPENDIX A Waste Management and Pollution Prevention Plan

APPENDIX B Spill Prevention and Response Plan

APPENDIX C Above-Ground Storage Tank Guidelines for Construction

APPENDIX D Vicinity Map

APPENDIX E Form E and Form G

APPENDIX F Stormwater Inspection Report

APPENDIX G Spill Report Form

APPENDIX H Records of Stabilization & Construction Activity Dates

APPENDIX I Notice of Termination of a General Permit

APPENDIX J Missouri General Permit

APPENDIX K Erosion Control Plans and Schedule

APPENDIX L Sediment Basin Calculations



Appendix A

Waste Management and Pollution Prevention Plan



Waste Management and Pollution Prevention Plan

A construction site waste management plan is an important part of preventing contamination of stormwater runoff. Water pollutants that may be generated on the construction site include gasoline, oils, grease, paints, concrete, sand, solvents, paper, plastic, styrofoam, aluminum cans, glass bottles, and other forms of liquid and solid wastes.

The following procedures shall be followed by all construction subcontractors. It is the responsibility of the construction general subcontractor to ensure that all lower tier subcontractors follow the procedures in this plan as well.

General Housekeeping

- The subcontractor shall designate a specific area for equipment maintenance and repair.
- All equipment maintenance shall be performed over plastic sheeting to prevent soil contamination. All waste fluids shall be collected.
- The subcontractor shall provide appropriate receptacles for spent oils, gasoline, grease, and solvents in this area. These items will be removed from the site for future use by the subcontractor.
- Subcontractor shall recycle all used oil if possible.
- Other construction debris (e.g. metals, wood, corrugated cardboard) shall be recycled whenever possible.
- 55-gallon drums of oils and hazardous materials shall be stored in secondary containment.
- All drums shall be placed on skids or pallets to prevent rusting and to allow easy inspection for leaks.
- A storage area shall be established by the subcontractor for storage of hazardous materials for example paints, solvents, adhesives, pesticides, fertilizers, and chemicals. Secondary containment will be used whenever possible, and is required for containers larger than 10 gallons. This hazardous material storage area will be protected from rain and snow and will be located away from high traffic areas and away from the natural drainage.
- Equipment washdown areas shall be located only in areas which are contained and do not drain to any natural drainages.
- All containers, both full and empty, shall be securely closed (i.e. water tight) and stored in an upright fashion.
- All containers, with both hazardous and non-hazardous contents, shall be labeled to indicate container contents.
- All containers shall be labeled with the owner's (i.e. construction company) name.
- Liquid materials and hazardous materials shall not be placed in dumpsters. This includes paints, oils, sealants, adhesives, etc.
- If materials are blown from waste receptacles, such materials shall be picked up daily by the subcontractor.
- Waste receptacles shall not be filled above level full.
- Sanitary facilities shall be adequately maintained.



Waste Disposal

- All waste materials produced by the construction project will be disposed of in accordance with the provisions of the Missouri solid waste management statutes and regulations and applicable local rules.
- All non-regulated waste shall be disposed of or recycled by the contractor if possible.
 This includes materials such as concrete, paper, plastic, styrofoam, aluminum cans, glass, scrap building materials, etc.
- Hazardous materials that can be reused shall be removed from the site for future use by the subcontractor.
- The Project Manager shall be contacted prior to any activity that will generate hazardous waste.
- The Project Manager will coordinate with the project engineers.
- Sub-contractor shall not store more than 55 gallons of each waste type on site.
- All waste containers shall be stored in an area protected from the weather and must be placed on skids or pallets to prevent rusting.
- Adequately sized and located waste receptacles for non-hazardous materials shall be provided by the subcontractor. The subcontractor shall prevent waste from being
- blown out of receptacles by wind. Accumulated waste in these receptacles shall be
- collected and disposed of regularly by the subcontractor.



Appendix B

Spill Prevention and Response Plan



Spill Prevention and Response Plan

This plan is intended to help protect the health and safety of those working onsite as well as the environment. It outlines procedures to help prevent fuel and chemical spills as well as response procedures if a spill does occur.

SPILL PREVENTION

To help reduce the risk of chemical spills and ensure safe chemical handling, the following storage and handling procedures will be practiced by all subcontractors:

- Store chemicals in secondary containers (recommended for containers less than 10 gal; required for containers greater than 10 gal).
- Do not store incompatible materials in the same secondary containment basin.
- Avoid transferring chemicals from one container to another. If a transfer is necessary, perform the transfer in secondary containment.
- Ensure that all chemical containers are properly labeled, indicating the contents and hazards involved.
- Store chemicals in an area protected from weather.
- Inspect all containers for damage or leaks at least weekly and before attempting to move them.
- Each employee should look for damaged or leaking containers each time they use a chemical from the storage area or add to the chemical stock.
- When working with hazardous materials, protect the ground or flooring with a suitable covering (one which is resistant to penetration by the material being used and that will contain small drips and spills).

To prevent fuel spills, the practices listed below should be followed:

- Pay attention when refueling vehicles/equipment so that they are not overfilled.
- If a leak is detected in a vehicle or piece of equipment, repair the leak as soon as possible; place plastic sheeting, or other receptacle of sufficient size to contain all leaking fluid, under the leak until the repair is made. If repairs cannot be made within 24 hours or if the leaking fluid cannot be contained, then the leaking equipment must be removed from the site immediately.

SPILL RESPONSE

If a hazardous material spill should occur, it must be cleaned up immediately as follows:

Any spills of petroleum products or hazardous materials in excess of Reportable
Quantities as defined by EPA or the state or local agency regulations, shall be
immediately reported to the MDNR's Environmental Emergency Response (573-6342436) and the EPA National Response Center (1-800-424-8802). The reportable
quantity for petroleum products should be in compliance with the Clean Water Act
which says that any quantity that "Causes a film or sheen upon or discoloration of



the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines" should be reported. The reportable quantity for hazardous materials can be found in 40 CFR 302. For more information visit:

http://www.access.gpo.gov/nara/cfr/waisidx_04/40cfr302_04.html .

- Place all contaminated soil on an adequately-sized sheet of plastic.
- If a hazardous material spill occurs on pavement, it shall be absorbed with sand or other inert material, then placed on plastic sheeting. This includes spills of vehicle fluids. Pavement will not be washed where a hazardous material spill has occurred (including vehicle fluids) until all spilled material has been cleaned up.
- Cover contaminated soil or inert absorbent material with plastic to prevent runoff contamination and to prevent the material from becoming airborne in wind.
- Provide the Project Manager with a Material Safety Data Sheet for the type of spilled material to determine whether or not the material is hazardous.
- The project engineer will make a determination as to the proper method of disposal required and will coordinate with the Project Manager. The subcontractor shall arrange for disposal according to the guidelines and requirements provided by the Project Manager.



Appendix C

Above-Ground Storage Tank Guidelines For Construction



ABOVE-GROUND STORAGE TANK GUIDELINES FOR CONSTRUCTION

- **A.** All tanks must be designed and operated in accordance with NFPA 30 and the Rules of Department of Natural Resources Above Ground Storage Tanks- Release Response (10 CSR 20-15).
- **B.** Tanks and piping must be designed and built and maintained (i.e. in good condition) in accordance with recognized good engineering standards for the material of construction, and must be of steel or other noncombustible material. It is recommended that all temporary AST's be FM or UL approved. If a non-FM or UL approved tank is used, all provisions of the Aboveground Storage Tank Management Plan must be met.
- **C.** Tanks must be operated at atmospheric pressures. Liquid shall not be dispensed by gravity flow or pressurization of the tank.
- **D.** All tanks and piping subject to corrosion must be properly protected (e.g. paint or cathodic protection) to ensure leaks do not occur. This includes tanks and piping placed upon the ground, a pad, or any steel, masonry, or concrete foundation or pipe/tank stand, as this is the location at which accelerated corrosion is most likely to occur. Bare steel tanks will not be allowed.
- **E.** Tanks must rest on foundations or supports made of concrete, masonry, or steel. The foundations must be designed to minimize the possibility of uneven settling of the tank, and to minimize corrosion to any part of the tank resting on the foundation.
- **F.** To protect from spills and overfills associated with product transfer to and from the AST system, the following protection methods must be used: fixed or movable equipment (reservoirs, pans, catchment basins, etc.) around the fill pipe or entire tank that will contain the release of product when the transfer hose is detached from the fill pipe or the tank is overfilled. Spills or overfills to the reservoir or catchment basin must be removed and cleaned-up immediately. Additionally, the transfer operator must be physically present to monitor the entire transfer process.
- **G.** To prevent overfilling associated with product transfer to the AST system, available tank capacity must first be determined, and automatic or manual overfill prevention methods must be used (e.g. equipment that will automatically shut off flow into the tank when the tank is no more than 95 percent full, or a visual gauge of adequate accuracy and response time located near the AST system that is monitored by the transfer operator for the duration of the transfer process).
- **H.** Tanks must be located in such a way as to minimize the danger of fire from the following ignition sources: open flames, smoking, hot surfaces, radiant heat, cutting and welding, frictional heat or sparks, lightning, static electricity, electrical sparks, and stray currents. Provisions must also be made for the control of static electricity at installations where flammable or combustible liquids are transferred or dispensed.
- I. Tanks must be located in such a way as to minimize the hazards associated with venting, releases, and fire to: buildings and their occupants, other tanks, roadways, pedestrian walkways, adjoining property, congested areas, waterways, streams, and ditches.
- **J.** Tanks must be anchored, as necessary, to prevent blow-over in high winds or floating away in lowland flood areas.



- K. Secondary containment is required for all AST's on property. Should there be a catastrophic or undetected AST leak, secondary containment provides health and environmental protection. All secondary containment systems must be impervious to the tank contents for at least 72 hours (nonporous), compatible with the tank contents, resistant to normal environmental conditions (heat, cold, hail, ultraviolet (uv) radiation, etc.), of sufficient strength and durability to resist tearing, cracking, crumbling, eroding, collapsing, etc. for the operational lifetime of the tank, easily maintainable, of sufficient size to contain 110% of the volume of the tank (tank contents plus fire-fighting or rain water), of sufficient size to contain all critical piping, fittings, and valves (fill pipe, overfill pipe, spill protection equipment, etc.), and fitted with a normally closed valve or plug by which collected rainwater and tank product can be removed. The following permanent or temporary containment systems are allowed: steel catchment basins or spill skids, or earthen, masonry, or concrete berms when used in conjunction with an appropriate liner or coating ('visqueen' or other non-reinforced plastic sheeting with a thickness of 40 mils (0.75mm) or less is not appropriate).
- **L.** At least one portable fire extinguisher with a minimum 20B:C rating must be within 25 feet of any tank containing a flammable or combustible liquid.
- **M.** Emergency information (location of nearest telephone, dialing instructions, who to contact, equipment owner/area landlord etc.) must be placed between 10 and 50 feet from the tank.
- **N.** All tanks must have a sign stating the tank contents and shall be marked in accordance with NFPA 704, Identification of Fire Hazards of Materials.
- **O.** All tanks must have a locking mechanism to prevent vandalism and unauthorized additions or withdrawals.
- **P.** <u>All</u> releases shall be reported in accordance with the Spill Prevention and Control Plan. Any AST found to be leaking must immediately be repaired, replaced, or permanently closed.



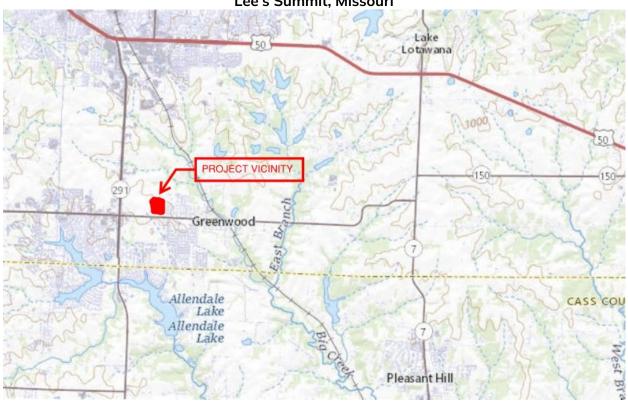
Appendix D

Vicinity Map



SITE LOCATION MAP

Section 29, Township 47N, Range 31W Lee's Summit, Missouri





Appendix E

NOI



Appendix F

Stormwater Inspection Form



Stormwater Pollution Prevention Plan

INSPECTION REPORT (Page 1 of 3)

Clayton Properties Group Cobey Creek – 2nd Plat Lee's Summit, MO

Inspections/reports must be completed A MINIMUM OF ONCE PER 7 DAY PERIOD & as specified on page 9 of this SWPPP.

Inspection Type: Routine (every 7 calendar days) Pre-Storm (where required)	☐ During Storm ☐ Post-Storm	Date:	
Weather information for period since last inspection:	Weather during inspec	tion:	
Storm Start Time:			
Storm Duration:	Description of any disc	harge during inspect	ion:
Amount of Rainfall (in inches):			
Based on the results of the inspection, necessary control modification within 48 hours. These reports shall be kept on file as part of the (3) years from the date of completion and submission of the File Notice of Termination. A copy of the SWPPP shall be kept at the	e Stormwater Pollution I nal Stabilization Certific	Prevention Plan for a cation/Termination Cl	t least three
Certification Statement: "I certify under penalty of perjury that I personally conducted to summary report noting the deficiencies in BMPs and the correct report is true, accurate, and complete. I am aware that there concluding fines and imprisonment for knowing violations"	ctive actions taken. I ce	ertify that the inform	ation in this
Name of Inspector: Title of I	nspector:		
Qualifications of Inspector:			
Inspector's Signature:			
Construction phasing/sequencing is consistent with the SWP	PP and Erosion Control	Plans: ¹ Yes	^ſ No
Compliance Certification I certify that, based on no incidents of non-compliance identif with the SWPPP and the Construction General Permit	ied during the inspection	on, the site is in comp	oliance
Name of Site Superintendent (Printed):			
Signature of Site Superintendent:			
Date:			



Form C-1 Continued Date: _____

	Satisfactory				Maintenance Needed	Implementation
Inspection Areas	Yes	No	N/A	Location	Indicate if BMP is Inadequate For The Location	Date of Corrective Action
Points of Discharge (if inaccessible inspect nearby downstream locations)						
Construction Entrance/Exit						
Perimeter Control Measures						
Temporary Sediment Basins, Gravel and Rip-rap Basins and Sediment Traps						
Inlet Protection						
Outlet Stabilization						
Material Laydown and Staging Area						
Storm Drainage Culverts						
Curb and Gutter						
Stormwater Detention/Retention Facility						
Vehicle Service Area Berm						
Concrete Washout						
Slope Stabilization						
Stormwater channels						



ronn c-i conunuea	Form	C-1	Continue	d
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orm C-1 Continued				Date:	 ,	
Inspection Areas	Satisfactory			Location	Maintenance Needed	Implementation Date of Corrective
inspection Areas	Yes	No	N/A	Location	Indicate if BMP is Inadequate For The Location	Action
Temporary or Permanent Seeding, Sodding, Mulching or Landscaping						
Pipe Slope Drains						
Material Management and Storage						
Solid and Construction Waste						
Sanitary Wastes						
Non-Stormwater Discharges						
Location(s) Where Additional BMP is Needed That Was Not Shown On The Plan						

"I certify under penalty of perjury that I personally conducted this inspection and I personally prepared this inspection summary report noting the deficiencies in BMPs and the
corrective actions taken. I certify that the information in this report is true, accurate, and complete. I am aware that there are significant penalties for submitting false information,
including fines and imprisonment for knowing violations."

Signature of Site Superintendent	_ Date
----------------------------------	--------

<u>Page 3 of 3</u>



Appendix G

Spill Report Form

Spill Report Form



Clayton Properties Group:	
Spill Reported by:	
Date/Time Spill:	
Describe spill location and events leading to spill:_	
Source of spill:	
Amount spilled:	Amount spilled to waterway:
Containment or clean up action:	
Approximate depth of soil excavation:	
List Injuries or Personal Contamination:	
Action to be taken to prevent future spills:	
Modifications to the SWPPP necessary due to this	spill:
supervision in accordance with a system designed the information submitted. Based on my inquiry of persons directly responsible for gathering the infor	nd all attachments were prepared under my direction or to assure that qualified personnel properly gather and evaluate the person or persons who manage the system, or those rmation, the information submitted is, to the best of my e. I am aware that there are significant penalties for submitting and imprisonment for knowing violations.
Contractor Superintendent	Date



Appendix H

Records Of Stabilization & Construction Activity Dates



Site Stabilization and Construction Activity Dates

A record of dates when BMPs are installed or removed, stabilization measures are initiated, major grading activities occur, and construction activities temporarily or permanently cease on a portion of the site shall be maintained until final site stabilization is achieved and the Notice of Termination (NOT) is filed. This form must be updated continuously throughout the project until the NOT is filed.

MAJOR STABILIZATION AND GRADING ACTIVITIES

Description of Activity:			
Site Contractor:		End(date):	
Location:			
Description of Activity:			
Site Contractor:	_	End(date):	
Location:			
Description of Activity:			
Site Contractor:		End(date):	
Location:			
Description of Activity:			
Site Contractor:	Begin (date):	End(date):	
Location:			
Description of Activity:			
Site Contractor:	Begin (date):	End(date):	
Location:	_		
Description of Activity:			
Site Contractor:	Begin (date):	End(date):	
Location:	_		
Description of Activity:			
Site Contractor:		End(date):	
Location:	_		
Description of Activity:			
Site Contractor:			
Location:			
Description of Activity:			
Site Contractor:		End(date):	
Location:			
Description of Activity:			
Site Contractor:			
Location:			
Description of Activity:			
Site Contractor:			
Location:	<u> </u>	· 	



Appendix I

Notice of Termination of a General Permit



Appendix J

General Permit



Appendix K

Erosion Control Plans