

STORM WATER POLLUTION PREVENTION PLAN NARRATIVE

for

QuikTrip Store #0183

***1001 SW Blue Parkway
Lee's Summit, Jackson County, Missouri 64063***

***Prepared For:
QuikTrip Corporation
5725 Foxridge Drive
Mission, Kansas 66202***

***Prepared By:
Midwest Design Group
P.O. Box 860015
Shawnee, Kansas 66286-0015
913.248.9385***

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**POLLUTION PREVENTION PLAN
CERTIFICATION**

SWPPP DESIGNER

Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or 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.

SWPPP DESIGNER



Signature

03/16/2025

Date

Jonathon Smith, P.E.

Name Printed

Midwest Design Group

Company

P.O. Box 860015

Address

Shawnee, KS 66286-0015

City, State, Zip Code

913-248-9385

Telephone

**POLLUTION PREVENTION PLAN
CERTIFICATION**

SWPPP INSPECTOR/GENERAL CONTRACTOR

Certification Statement

I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with commercial activity from the construction site as part of this certification. Further, by my signature, I understand that I am becoming a co-permittee, along with the OWNER(S) and other contractors and subcontractors signing such certifications, to the Department of Natural Resources NPDES General Permit for "Land Disturbance Stormwater General Operating Permit" at the identified site. As a co-permittee, I understand that I, and my company, are legally required under the Clean Water Act and the Code of Missouri, 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.

SWPPP INSPECTOR		GENERAL CONTRACTOR	
_____ Signature	_____ Date	_____ Signature	_____ Date
_____ Name Printed		_____ Name Printed	
_____ Company		_____ Company	
_____ Address		_____ Address	
_____ City, State, Zip Code		_____ City, State, Zip Code	
_____ Telephone	_____ Fax	_____ Telephone	_____ Fax

**POLLUTION PREVENTION PLAN
CERTIFICATION**

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SUB-CONTRACTOR		SUB-CONTRACTOR	
Signature _____	Date _____	Signature _____	Date _____
Name Printed _____		Name Printed _____	
Company _____		Company _____	
Address _____		Address _____	
City, State, Zip Code _____		City, State, Zip Code _____	
Telephone _____	Fax _____	Telephone _____	Fax _____

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_____ Company		_____ Company	
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_____ City, State, Zip Code		_____ City, State, Zip Code	
_____ Telephone	_____ Fax	_____ Telephone	_____ Fax

**POLLUTION PREVENTION PLAN
CERTIFICATION**

SUB-CONTRACTOR(S)

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SUB-CONTRACTOR		SUB-CONTRACTOR	
_____ Signature	_____ Date	_____ Signature	_____ Date
_____ Name Printed		_____ Name Printed	
_____ Company		_____ Company	
_____ Address		_____ Address	
_____ City, State, Zip Code		_____ City, State, Zip Code	
_____ Telephone	_____ Fax	_____ Telephone	_____ Fax

SECTION 1 - SITE DESCRIPTION

1.1 Project Name and Location

<u>QuikTrip Store #0183</u>		<u>1001 SW Blue Parkway</u>		
Project Name		Address		
<u>QuikTrip Store No. 0183</u>		<u>Lee's Summit</u>	<u>Jackson</u>	
Subdivision Name		City	County	
<u>S6</u>	<u>T47N</u>	<u>R31W</u>	<u>Missouri</u>	<u>64063</u>
Section	Township	Range	State	Zip Code

1.2 Owner/Applicant

<u>QuikTrip Corporation</u>		<u>5725 Foxridge Drive</u>		
Company Name		Address		
<u>Tara Limbach</u>	<u>Real Estate Project Manager</u>	<u>Mission</u>	<u>Kansas</u>	
Company Contact	Title	City	State	
<u>(913)905-2070</u>	<u>tlimbach@quiktrip.com</u>	<u>66202</u>		
Telephone	Email	Zip Code		

1.3 Construction Project Description

This SWPPP has been prepared for the construction of a QuikTrip convenience store and the public improvements associated with the QuikTrip project. The QuikTrip convenience store will include gasoline offerings and associated improvements.

Soil disturbing activities for this project will include: building removal, pavement removal, utility removal/relocation, erosion and sediment control installation, clearing & grubbing, excavation & embankment, final grading, utility construction, building and pavement construction, and preparation for landscaping and sod.

1.4 Existing Site Conditions

The QuikTrip property (114,748 square feet) is currently developed with an existing QuikTrip convenience store and a Squeaky Clean Car Wash. The QuikTrip property currently contains 73,616 square feet of impervious surfaces.

1.5 Sequence of Major Construction Activities

Install perimeter sediment control devices & temporary construction entrance
Building & Pavement removal
Utility removal and relocation
Clear & grub construction limits
Complete site grading
Construct building/canopy footings/ retaining walls
Install utilities & storm sewer systems
Install storm sewer sediment control devices
Construct building
Construct curb & gutter & pavement
Construct canopy
Place topsoil
Install permanent sod and landscaping
Remove sediment control devices

1.6 Name of Receiving Waters

Cedar Creek

1.7 Soil Information

According to the Soil Survey of Jackson County, Missouri by the United States Department of Agriculture (USDA) and the Natural Resources Conservation Service (NRCS), issued in 2000; the proposed subdivision lies within the following soil group:

10082 – Arisburg-Urban Land Complex, 1-5% slopes, HSG C

1.8 Floodplain Certification

As shown on the Flood Insurance Rate Map (FIRM) panel number 29095C0417G with the effective date of January 20, 2017, this site is located in Zone X, which is defined as areas of 0.2% annual chance flood.

1.9 Wetlands

According to the US Fish and Wildlife National Wetland Inventory mapping system, this property does not contain any recorded wetlands.

1.10 Adjacent Areas

The adjacent commercial property (Diamond Vogel Paint Store) will be an area of potential concern. Erosion control measures along the west property line will need to be maintained properly to prevent adverse impacts to the adjacent property and infrastructure. If required, additional erosion control measures are to be installed to protect the adjacent property.

1.11 Off-Site Areas

Erosion control measures are to be provided within SW Blue Parkway and SW 2nd Street to protect the existing storm sewer infrastructure.

1.12 Critical Areas

None.

1.13 Industrial Activities

None

1.14 Site Data

Total Project Area (Acres)	2.63	Estimated Permit Duration (Months)	18
Disturbed Area (Acres)	2.96	Cut Volume (C.Y.)	5,767
Undisturbed Area (Acres)	0.00	Fill Volume (C.Y.)	435
Impervious Area % (Exist)	64.2	Runoff Coefficient (Exist)	0.69
Impervious Area % (Prop)	56.1	Runoff Coefficient (Prop)	0.64

1.15 Pollution Sources

Potential sources of pollution from the construction site may include: sedimentation from land disturbing activities (including airborne), construction debris, portable toilets, concrete truck washout, concrete pavement curing compound, paints and solvents, and plumbing epoxy.

1.16 Operators

General Contractor – coordinates all subcontractors, in charge of SWPPP
Demolition Contractor – Site Demolition
Grading Contractor – Site Grading
Commercial Building & Canopy Contractors – Building & Canopy Construction
MEP Contractors – Building MEP Construction
Utility Contractor – Storm/Sanitary Sewer Construction
Gas Contractor – Gasoline Tank/Piping Construction
Concrete Contractor – Site Paving
Landscape Contractor – Site Irrigation, Landscaping and Sodding

SECTION 2 – CONTROLS TO REDUCE POLLUTION

2.1 Control Measures

The GENERAL CONTRACTOR will be responsible for installing the perimeter silt fence and constructing the temporary construction entrance prior to beginning demolition operations. The GENERAL CONTRACTOR will be responsible for maintaining perimeter silt fence and all other BMP's during the remaining construction activities.

Storm drain inlet protection will be installed by the GENERAL CONTRACTOR after the Utility Contractor has installed the storm inlet and the Paving Contractor has completed pavement construction adjacent to curb inlets.

The GENERAL CONTRACTOR will be responsible for coordinating the landscaping and sodding immediately after final site grading has been completed.

The GENERAL CONTRACTOR will be responsible for removing the erosion control measures after sodding and landscaping has been completed.

The Grading Contractor will be responsible for implementing an irrigation program during grading operations if dust becomes a problem.

2.2 Interim and Permanent Stabilization Practices

- A temporary construction entrance is to be constructed to minimize tracking onto adjacent public streets prior to beginning demolition operations.
- Silt fence is to be installed along the low sides of the site perimeter prior to beginning demolition operations.
- Storm drain inlet protection is to be installed around storm inlets immediately after construction of the inlets and adjacent pavement.
- Temporary seeding is to be applied on exposed soil surfaces where construction is expected to cease for more than 21 days. Temporary seeding is to be installed within 14 days of the last construction activity (except when precluded by snow cover).
- Dust control will be required if dust becomes a problem.
- Permanent stabilization will be installed in remaining pervious areas (sod or landscaping areas with mulch).

2.3 Construction Activity Record Keeping

The SWPPP INSPECTOR will be responsible for keeping a weekly log (as part of the weekly inspection reports) as to when all major grading activities occur, when construction activities temporarily or permanently cease in areas of the site, and when sedimentation and stabilization measures are constructed, repaired or maintained. The INSPECTOR'S construction activity log is to be included on his weekly inspection report.

2.4 Structural Practices

The structural practices used to reduce pollutants from exposed areas will be:

- Perimeter silt fencing
- Storm drain inlet protection
- Stabilized temporary construction entrance

2.5 Post-Construction Storm Water Management Controls

For the QuikTrip private development, an on-site storm water detention facility and private on-site proprietary water quality treatment unit(s) will be installed to control storm water runoff from the improved site and treat the water quality storm.

2.6 Measures/Waste Disposal Practices

The GENERAL CONTRACTOR will be responsible for ensuring that all construction debris at the job site is disposed of on a daily basis. A dumpster is to be on-site at all times for construction waste material disposal. All waste materials (including Demolition waste) are to be disposed of in accordance with Local, State, and Federal regulations.

The GENERAL CONTRACTOR will be responsible for providing and properly maintaining portable sanitary waste systems on the job site at all times.

Fueling methods will be performed in accordance with the attached specification.

Concrete truck cleanout will only be allowed within pavement subgrade limits or at a designated washout pit.

Paint and sealant equipment are not to be cleaned on-site where washout runoff can flow to storm water drainage systems. The GENERAL CONTRACTOR will be responsible for the proper cleaning of this equipment in accordance with Local, State and Federal regulations.

2.7 Sediment Track-out Prevention Practices

A temporary stabilized construction entrance is to be installed prior to beginning demolition operations. The construction entrance is to be installed in accordance with the attached specifications. If tracking is still a problem after the entrance is installed, the GENERAL CONTRACTOR will be required to set up a washing station for construction vehicles. If a washing station is required, water runoff from the station shall be contained by erosion control in the form of berms, dikes, silt fence, etc.

Tracked sediment and debris will be swept from adjacent roadways as necessary (flushing will not be allowed).

2.8 Waste or Construction Materials Storage Practices

A majority of the construction materials are to be either installed the day of delivery, stored off-site, or stored on-site within enclosed secure trailers (removed from the elements). Exceptions include: building brick, pavement and canopy steel, and storm pipe. Material stock piles are to be placed where they will not be affected by storm water runoff and secured from wind to prevent materials from becoming airborne.

Construction waste materials are to be disposed of in a dumpster located on-site, or hauled off-site daily to a licensed landfill.

The GENERAL CONTRACTOR will be responsible for having a Spill Prevention and Response Plan that addresses fueling, maintenance or storage areas on-site. The plan will comply with the requirements of Chapter 18 of NDEQ Title 126 – Rules and Regulations Pertaining to the Management of Wastes. The GENERAL CONTRACTOR will be responsible for cleaning up and removing contaminated material in accordance with City, State, and Federal regulations.

2.9 Pollutants from Sources Other Than Construction

No other pollutants from sources other than construction operations are anticipated for this site.

2.10 Toxic or Hazardous Substances

Toxic or hazardous substances such as petroleum products, pesticides and herbicides, and building materials such as paints, sealants, solvents, etc. are not to be stored on-site when possible. If these materials are to be stored on-site they will be stored in secured trailers, with proper labeling, in their original containers.

SECTION 3 – NON-STORM WATER DISCHARGE MANAGEMENT

3.1 Pollution Prevention for Non-Storm Water Discharges

If a washing station is established the runoff from this station is to be treated in accordance with the attached specifications.

3.2 Hazardous Condition Reporting

Missouri law requires that as soon as possible but not more than six hours after the onset of a hazardous condition the MoDNR and local sheriff's office or the office of the sheriff of the affected county be notified. The SWPPP must be modified within 14 calendar days of a hazardous condition. The SWPPP will describe the release and the circumstances leading to the release. Steps to prevent the reoccurrence of such releases are to be identified in the plan and implemented.

SECTION 4 – ENDANGERED SPECIES

4.1 Endangered Species

According to the US Fish and Wildlife Service's Information for Planning and Consultation (IPaC) system, the following species were determined to be potentially within the project limits:

Gray Bat - Endangered
Indiana Bat – Endangered
Northern Long-Eared Bat – Endangered
Tricolored Bat - Endangered
Monarch Butterfly – Candidate
Bald & Golden Eagles

Contractor to coordinate with Missouri Ecological Services Field Office prior to start of demolition/construction.

Phone: (573) 234-2132

SECTION 5 – APPLICABLE PROGRAMS & REQUIREMENTS

5.1 Erosion Control & Storm Water Management Requirements

This Storm Water Pollution Prevention Plan appears to fulfill the City's technical criteria for erosion control requirements. It is understood that erosion control measures may be needed if unforeseen erosion problems arise or if the submitted plan does not function as intended. The requirements of this plan will run with the land and be the obligation of the landowner until such time as the plan is properly completed, modified or voided.

The SWPPP appears to comply with the Missouri Department of Natural Resources NPDES General Permit for "Land Disturbance Stormwater General Operating Permit".

SECTION 6 – INSPECTIONS

6.1 Inspection Schedule, Procedures, and Frequency

The SWPPP INSPECTOR will be responsible for providing inspection of all disturbed areas of the site, areas for material storage locations, locations where vehicles enter or exit the site, all erosion and sediment controls that are specified as part of the SWPPP, and all accessible discharge locations. Controls must be in good operating condition until the construction activity is complete and final stabilization has been reached. The SWPPP INSPECTOR will be responsible for filling out the inspection reports (See Appendix). The SWPPP INSPECTOR will also be responsible for keeping the weekly construction log as detailed in Section 2.3.

The following inspection and maintenance practices will be used to maintain erosion and sediment controls:

All control measures are to be inspected at least once every 7 calendar days AND within 48 hours after any storm event equal or greater than a 2-yr, 24-hr storm (3.5 inches) has stopped during normal workday or within 72 hours if it stops during a non-workday. Controls must be in good operating condition until the areas they protect have been completely stabilized and the construction activity is complete. If a repair is necessary, it must be initiated within 24 hours of the report. See attached specifications for specific inspection and maintenance requirements.

Adjacent and on-site storm water drainage systems must be inspected for sediment. Any sediment discovered in existing storm water drainage systems must be removed immediately.

6.2 Personnel Performing Inspections

The GENERAL CONTRACTOR is responsible for designating a SWPPP INSPECTOR that will be responsible for the implementation of the Storm Water Pollution Prevention Plan. The designated SWPPP INSPECTOR must be knowledgeable of all Local, State and Federal regulations regarding storm water pollution prevention and the project's SWPPP Program. The designated SWPPP INSPECTOR will be required to sign the SWPPP certification included in the SWPPP documents.

6.3 Report Format

The weekly and 0.5-inch storm event inspection reports will document the date of inspection, the conditions of each BMP and whether or not maintenance/repair is required. The BMP maintenance/repair date must be added to the report upon completion of the maintenance/repair. The report must also summarize the scope of the inspection; provide the name and qualifications of the person making the inspection; and identify actions taken to modify pollution control practices. All reports are to be kept on-site at all times. The attached form is to be used.

The SWPPP INSPECTOR will also be responsible for keeping records of the construction activity on the site. The following records must be kept:

- The dates when major grading activities occur

- The dates when construction activities cease, temporarily or permanently.

- The dates when an area has been stabilized, temporarily or permanently.

The GENERAL CONTRACTOR will be responsible for retaining SWPPP documents for 3 years after the completion of final site stabilization, and must be made available upon request to the Department of Natural Resources or local authorities.

SECTION 7 – OPERATOR RESPONSIBILITY & NOTIFICATION

7.1 Responsibility

The GENERAL CONTRACTOR is ultimately responsible for ensuring the implementation and maintenance of the SWPPP. It will be the GENERAL CONTRACTOR'S responsibility to delegate BMP construction and maintenance to the subcontractors, as agreed to in their contracts.

7.2 Notification

The SWPPP is to be distributed to all Contractors during the bidding process. The SWPPP will be explained at the Pre-Bid meeting. A mandatory Pre-Construction meeting will be held prior to construction at which time the OWNER/APPLICANT will obtain each OPERATOR'S signature and certification of the SWPPP. A copy of the OPERATORS' signatures and certification will be kept on-site with the SWPPP documents.

SECTION 8 – MAINTENANCE OF CONTROLS

8.1 Procedures and Activities

Erosion and Sediment Controls are to be maintained in accordance with the attached specifications.

8.2 SWPPP Modifications

If the SWPPP INSPECTOR observes that the proposed controls are not operating effectively, the INSPECTOR will notify the SWPPP DESIGNER immediately. The SWPPP DESIGNER may choose to modify the plan to improve the performance of the controls. In the event the SWPPP DESIGNER implements additional erosion control measures, the CONTRACTOR will be issued a change order to perform the additional work.

SECTION 9 – MANAGEMENT PRACTICES

9.1 Control Measure Management Practices

Silt fence and inlet protection barriers are to be installed in accordance with the attached specifications and manufacturer's specifications. The GENERAL CONTRACTOR will be responsible for working with local suppliers to ensure that all materials conform to project specifications.

9.2 Off-Site Management Practices

Adjacent and on-site storm water drainage systems will be inspected at least once every 7 calendar days AND within 48 hours after any storm event equal or greater than a 2-yr, 24-hr storm (3.5 inches) has stopped during normal workday or within 72 hours if it stops during a non-workday for sediment by the SWPPP INSPECTOR. Any sediment discovered in existing storm water drainage systems must be removed immediately.

Adjacent rights of way and private property must be inspected daily for construction materials and sedimentation being washed, blown or tracked off-site by the GENERAL CONTRACTOR. Any material found off-site must be removed immediately.

Open-bed trucks hauling material from the construction site must be covered with a tarpaulin.

The Contractor is responsible for providing erosion control measures (i.e. sediment fence, berms, swales, ditch checks, etc.) at the designated borrow site (if applicable) in accordance with applicable erosion control ordinances. The contractor will provide erosion control at the borrow site(s) until 90% groundcover has been established.

9.3 Litter, Debris and Chemical Management Practices

In addition to the structural BMP's used to capture sedimentation, litter and debris; the GENERAL CONTRACTOR will be responsible for ensuring that all construction litter and debris is disposed of properly on the site daily.

A majority of all construction materials are to be stored off-site or on-site in trailers, removed from the elements. Materials stored outside at the site must be protected from storm water runoff and wind. Construction waste materials are to be disposed of in a dumpster located on-site.

The GENERAL CONTRACTOR will be responsible for having a Spill Prevention and Response Plan that addresses fueling, maintenance or storage areas on-site. The plan will comply with the requirements of Chapter 18 of NDEQ Title 126 – Rules and Regulations Pertaining to the Management of Wastes. The GENERAL CONTRACTOR will be responsible for cleaning up and removing contaminated material in accordance with City, State, and Federal regulations.

9.4 Stabilization Management Practices

Stabilization measures (e.g., Temporary Seeding and Permanent Sod) must be initiated as soon as practical in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days, after the construction activity in that portion of the site has temporarily or permanently cease. The SWPPP INSPECTOR is required to keep a weekly construction log of the construction activities performed at the site. The SWPPP INSPECTOR will be responsible for including their construction logs on the weekly inspection reports. The logs will document when construction activities have ceased in certain areas and when certain areas are ready for temporary or permanent stabilization measures.

9.5 Maximum Pollutant Removal Management Practices

The site's size was the major determining factor in the design of sediment and erosion control measures.

9.6 Velocity Dissipation Management Practices

Not applicable.

SECTION 10 – FINAL STABILIZATION AND NOTICE OF DISCONTINUATION

10.1 Final Stabilization

Final stabilization has been reached once a uniform vegetative cover for unpaved areas has been established or permanent stabilization measures (i.e. sod, mulch, etc.) have been employed.

10.2 Notice of Discontinuation (NOD)

Within 30 days after final stabilization has been reached the GENERAL CONTRACTOR or OWNER shall submit the Notice of Discontinuation (See Appendix C) to:

Missouri Department of Natural Resources
Water Protection Program
Attention: Division of Environmental Quality
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-1300

**STORM WATER POLLUTION
PREVENTION PLAN
NARRATIVE**

APPENDIX A

**EROSION AND
SEDIMENT
CONTROL
SPECIFICATIONS**

FOR

**QUIKTRIP STORE #0183
1001 SW BLUE PARKWAY
LEE'S SUMMIT, MISSOURI 64063**

TEMPORARY CONSTRUCTION ENTRANCE

A. Installation:

1. Avoid locating on steep slopes or at curves on public roads. If possible, locate where permanent roads will eventually be constructed.
2. Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
3. If slope towards the public road exceeds 2%, construct a 6- to 8-inch high ridge with 3H:1V side slopes across the foundation approximately 15-feet from the edge of the public road to divert runoff away from roadway.
4. Install pipe under the entrance if needed to maintain drainage ditches along public roads.
5. Place stone to dimensions and grade as shown on plans. Leave surface smooth and sloped for drainage. Stone shall be 2- to 3-inch clean rock placed a minimum of 6" thick. Minimum width is 20-feet. Minimum length is 50-feet.
6. Divert all surface runoff and drainage from the entrance to a sediment control device.
7. If wet conditions are anticipated, place non-woven geotextile fabric on the graded foundation to improve stability.

B. Inspection and Maintenance

1. Inspect stone pad and sediment disposal area weekly and after 0.5-inch or greater storm events.
2. Inspect adjacent public roadway daily.
3. Reshape pad as needed for proper drainage and runoff control.
4. Topdress with clean 2- and 3-inch stone as needed.
5. Immediately remove mud or sediment tracked or washed onto public road by sweeping (flushing is not allowed). Repair any broken roadway pavement immediately.
6. Removed sediment shall be deposited in a suitable area so that it will not erode.
7. Remove all temporary construction entrance materials from areas where permanent vegetation will be established.

SODDING

A. Installation:

1. The sod shall be densely rooted, nursery grown, and a perennial grass as specified on the Landscape Plan. The sod shall contain a growth of not more than 10 percent of other grasses, shall be free from all prohibited and noxious weeds, and shall be cut in strips of uniform thickness. The range of acceptable thickness shall be $\frac{1}{2}$ to $1\frac{1}{2}$ inch, with each strip containing at least one (1) square yard. Sod shall be cut in strips not less than 12 inches wide.
2. Fertilizer shall be inorganic 12-12-12 or 13-13-13 grade, uniform in composition, free flowing, suitable for application with approved equipment, and delivered to the site in convenient containers, each fully labeled. Labels shall conform to applicable state fertilizer laws and bearing the name, trade name or trademark, and warranty of the producer.
3. Before tilling operations, fertilizer shall be spread uniformly at the rate of 300 pounds per acre. Fertilizing rate is equivalent to 3.5 pounds per 500 square feet.
4. The sod bed shall have a uniform surface free from washes and depressions. It shall conform to the finished grade profile and cross section shown on the plans. The soil, except where fresh top soil has been applied and compacted, shall be thoroughly tilled to a depth of 2-inches.
5. Freshly graded areas which have set long enough to become dry and crusted over shall be tilled, as specified above, before placing the sod.
6. Sod shall not be placed during a drought or on frozen ground unless authorized by the Engineer.
7. Sod shall be moist when it is placed. Sod strips shall be laid along contour lines, commencing at the lowest point of the area and working upward. The transverse joints of sod strips shall be staggered and the sod carefully placed to produce tight joints. The sod shall be firmed and watered immediately after it is placed. The firming shall be accomplished by application of a roller weighing between 60 and 90 pounds per lineal foot of roller.
8. On 3H:1V slopes or steeper the sod shall be anchored with $\frac{1}{2}$ -inch square by 8-inch long wooden pegs driven into the ground, 3 pegs to the square yard or other approved configuration. Pegging shall be done immediately after sod is firmed. The area shall then be cleared of loose sod, excess or broken anchors, excessive soil, and other foreign materials.

B. Inspection and Maintenance

1. Permanent sod will be inspected for bare spots, washouts, and healthy growth. Repair will be required at bare spots and washouts. Washouts must be re-graded prior to re-sodding.
2. The sodded area shall be thoroughly watered daily for a period of fifteen days after placing except when thoroughly wetted by rain. Any portion of the sod that is not in good growing condition following the first full growing season (Spring to Fall), shall be replaced with fresh live sod.

SEDIMENT/SILT FENCE

A. Installation:

1. The height of sediment fence shall be a minimum of 24-inches above the original ground surface and shall not exceed 34-inches above the ground surface.
2. The fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are unavoidable, create fabric joints by overlapping fabric and extending fabric to the next post and securing each end of the fabric at the support posts.
3. Dig a trench at least 6-inches deep and 6-inches wide along the fence alignment.
4. Posts shall be either "T" or "U" type (1.33 lb/linear foot) steel posts or 2"X2" hardwood posts. Drive posts at least 24-inches into the ground on the downslope side of the trench. Space posts a maximum of 8-feet apart.
5. Filter fabric shall have: an 85% minimum filtering efficiency; a tensile strength at 20% maximum elongation; standard strength of 30 lb/linear inch; high strength of 50 lb/linear inch; minimum design life of 6 months; and must contain ultraviolet light inhibitors and stabilizers. The sediment fabric shall be fastened securely to the upslope side of the posts using a minimum of one inch long, heavy-duty wire staples or tie-wires, and 12-inches of the fabric shall be extended into the trench.
6. Place the bottom 12-inches of fabric in the 6-inch deep trench, lapping toward the upslope side, backfill with compacted earth or gravel.
7. If a sediment fence is to be constructed across a drainage channel, it must be of sufficient length to eliminate endflow, and placed on an arch with the ends oriented upslope. Extra-strength sediment fabric shall be used with a maximum 3-foot post spacing. Wire mesh may be required to further support the fence (9-14 gauge, 6X6) between the posts and fabric.
8. To reduce maintenance, excavate a shallow sediment storage area on the upslope side of the fence where possible. Provide good access in areas of heavy sedimentation for clean out and maintenance.
9. Sediment fences shall not be removed before the upslope area has been permanently stabilized.

B. Inspection and Maintenance

1. Inspect sediment fences at least once a week and after 0.5-inch or greater storm events. Make any required repairs immediately.
2. Silt fence will be inspected for depth of sediment, tears, fabric attachment, post/anchor stability, and deterioration. Remove sediment from behind the fence when the depth of the sediment has built up to 1/3 the height of the fence above grade or when it affects the structural stability of the fence. Avoid damaging or undermining the fence during cleanout. Inspect the base of the fence to ensure that no gaps have developed and re-trench as necessary. Inspect fence posts to ensure that they are properly supporting the fence. Straighten, reset and add posts if necessary. If filter fabric is ripped, damaged or deteriorated, replace it in accordance with the original specifications and details.
3. Remove all fencing materials and unstable sediment deposits, and bring the area to grade and stabilize it after the contributing drainage area has been properly stabilized.
4. Removed sediment shall be deposited in a suitable area so that it will not erode.

BLOCK AND GRAVEL INLET PROTECTION

A. Installation:

1. Concrete blocks are to be placed around the inlet opening. One block is to be placed on its side in the bottom row for drainage on each side.
2. A 2'X4' stud shall be cut and placed through the outer holes of each spacer block to help keep the front blocks in place.
3. Wire mesh webbing or hardware cloth shall be placed over the outside vertical face of the concrete blocks to prevent stone from being washed through the holes in the blocks. Wire mesh with ½-inch openings shall be used.
4. Coarse aggregate shall be piled against the wire to the top of the barrier. Aggregate shall be ½- to ¾-inch in diameter. Place aggregate around the blocks on a 2:1 slope or flatter, 2-inches below the top of the blocks, and smooth to an even grade.
5. If the stone becomes clogged with sediment so that it no longer adequately performs its function, the stone must be pulled away from the blocks and cleaned or replaced.
6. Other methods of inlet protection, i.e. gutter buddies, etc. may be used if approved by the Engineer.

B. Inspection and Maintenance

1. The structure shall be inspected at least once a week and after 0.5-inch or greater storm events. Make any required repairs immediately.
2. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to one-half of the design depth of the trap. Removed sediment shall be deposited in a suitable area so that it will not erode.
3. If de-watering of the storage volume is not occurring; clean or replace the filter stone. Clean the filter stone surface the first few times by raking. Repeated sediment build-up will require filter stone replacement.
4. Removed sediment shall be deposited in a suitable area so that it will not erode.

**STORM WATER POLLUTION
PREVENTION PLAN
NARRATIVE**

APPENDIX B

**BEST
MANAGEMENT
PRACTICES**

FOR

**QUIKTRIP STORE #0183
1001 SW BLUE PARKWAY
LEE'S SUMMIT, MISSOURI 64063**

DUST CONTROL

A. Description and Purpose

The GENERAL CONTRACTOR is responsible for preventing airborne sediment from leaving the construction site.

B. Implementation:

In the event that dust becomes a problem, the GENERAL CONTRACTOR will be responsible for controlling the dust by implementing an irrigation plan.

SANITARY WASTE MANAGEMENT

A. Description and Purpose:

The GENERAL CONTRACTOR is responsible for providing a convenient, well-maintained, temporary, portable sanitary facility during the duration of the project.

B. Implementation:

- The facility is to be placed at a safe and convenient location, away from drainage facilities, watercourses, and from traffic circulation.
- The facility is to be well-maintained. The GENERAL CONTRACTOR is to arrange for regular maintenance of the facility and disposal of the wastes by a licensed service that disposes of or treats the waste in accordance with state and local requirements.
- Temporary sanitary facilities shall be secured to prevent overturning.
- Wastewater shall not be discharged or buried within the project site.

C. Inspection and Maintenance:

- Inspect and verify that temporary sanitary facilities are in place prior to the commencement of construction activities. During construction activities, inspect weekly.
- Arrange for regular waste collection.
- After high winds, inspect securing devices for stability.

SOLID WASTE MANAGEMENT

A. Description and Purpose:

The GENERAL CONTRACTOR is responsible overseeing and enforcing proper solid waste management procedures and practices.

B. Implementation:

- Provide designated waste collection containers with regular disposal pickup by a licensed service.
- Use only watertight dumpsters on site.
- Provide an adequate number of containers with lids or covers to keep rain out and to prevent loss of wastes when it is windy.
- Collect site litter regularly, especially during rainy and windy conditions.
- Arrange for regular waste collection before containers overflow.
- Clean up immediately if a container does spill.
- Locate dumpsters away from drainage facilities, water courses, and areas prone to flooding or ponding.
- Dispose of all solid and hazardous wastes in accordance with Local, State and Federal regulations.
- The GENERAL CONTRACTOR is responsible for ensuring that toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris.

C. Inspection and Maintenance:

- Inspect and verify that designated dumpsters are in place prior to the commencement of construction activities. During construction activities, inspect daily.
- Arrange for regular waste collection.

TEMPORARY SURFACE RESTORATION

SEED

A. Description and Purpose:

The GENERAL CONTRACTOR is responsible for temporary surface restoration when construction operations will cease in an area for more than 21 days. The temporary surface restoration must be installed within 14 days from when construction activity was last performed in that area.

B. Implementation:

Temporary seed shall be certified (within the past 9 months) and consist of a mix of Lespedeza plus Tall Fescue. The Lespedeza shall be applied at a rate of 12 lbs. per acre, and the tall fescue shall be applied at 35 lbs. per acre. A 13-13-13 N-P-K starter fertilizer shall be broadcast prior to seeding at a rate of 50 lbs. per acre. Seed and fertilizer shall then be incorporated into the soil by raking or dragging a chain prior to mulching. Mulch shall be straw applied at a rate of 1 ½-2 ½ tons per acre.

C. Inspection and Maintenance:

- Inspect temporary seed and mulch at least once a week and after 0.5-inch or greater storm events. Make any required repairs immediately.
- Temporary seed will be inspected for bare spots, washouts, and healthy growth. Repair will be required at bare spots and washouts. Washouts must be re-graded prior to re-seeding.

SURFACE ROUGHENING

A. Implementation:

- On 3:1 slopes or steeper the slopes shall be roughened during grading operations to retain water, increase infiltration and promote vegetative growth.
- Surface roughening may be achieved by discing, harrowing, or raking perpendicular to the slope.
- Surface roughing shall not be performed with heavy machinery.

B. Inspection and Maintenance:

- Inspect slopes 3:1 or steeper at least once a week and after 0.5-inch or greater storm events.
- Inspect for washouts, gullies and rills. Repair by re-roughening perpendicular to the slope.

MATERIAL DELIVERY AND STORAGE

A. Description and Purpose:

The GENERAL CONTRACTOR is responsible for preventing the discharge of pollutants from material delivery and storage.

B. Implementation:

- Deliveries are to be located away from traffic, storm drainage systems, waterways and areas of ponding or flooding.
- If possible delivery areas are to be located within paved areas.
- Chemicals, drums or bagged materials are to be stored on pallets, inside secondary containment (trailers, earthen dikes, troughs, wading pools, etc.).
- Chemicals are to be stored in their original containers with proper labels.
- An up-to-date inventory of all stored materials shall be kept.
- An ample supply of appropriate spill clean up material shall be kept near storage areas.
- Stockpiles shall be located away from areas of concentrated flows and shall have erosion control by use of berms, dikes, silt fence or other appropriate control. If the stockpile is in-active it shall be temporarily seeded or tarped.

C. Inspection and Maintenance:

- Inspect storage areas at least once a week and after 0.5-inch or greater storm events to ensure that all control measures are in place and functioning.
- Repair and/or replace controls and covers as needed.

STREET CLEANING / SWEEPING

A. Description and Purpose:

The GENERAL CONTRACTOR is responsible for removing tracked sediment from adjacent streets and paved surfaces to prevent sediment from entering storm drains and receiving streams.

B. Implementation:

- Visible sediment tracking is to be cleaned and swept daily. Flushing sediment off of the surface into the storm system will never be allowed.
- Access points onto the site are to be limited to the designated temporary construction entrance.
- If sediment is not mixed with debris or trash, it shall be incorporated back into the project site.

C. Inspection and Maintenance:

- Entrance points are to be inspected daily for track-out.
- When tracked or spilled sediment is found on adjacent paved surfaces, it will be removed daily by sweeping. During times of heavy track-out, such as during rains, cleaning may be required several times throughout the day.
- Unknown spills or objects shall not be mixed with the sediment.
- If sediment is mixed with other pollutants, it shall be disposed of properly at an authorized landfill.

VEHICLE AND EQUIPMENT FUELING

A. Description and Purpose:

The GENERAL CONTRACTOR is responsible for preventing fuel spills and leaks from entering waterways by designating a fueling area at the construction site.

B. Implementation:

- Mobile construction equipment is to be transported to designated fueling areas.
- Offsite fueling stations shall be used as much as possible.
- “Topping-off” fuel tanks shall be discouraged.
- Absorbent spill cleanup materials and spill kits shall be available in fueling areas or on fueling trucks, and shall be disposed of properly after use.
- Drip pans or absorbent pads shall be used during fueling, unless the fueling is performed over an impermeable surface in a dedicated fueling area.
- Absorbent materials shall be used on small spills. Spills shall not be hosed down or buried. Used absorbent materials shall be removed promptly and disposed of in accordance with Local, State and Federal regulations.
- Fueling shall take place in areas protected from stormwater run-on and runoff by berms or dikes, and will be located away from waterways. Designated fueling areas shall be added to the SWPPP.
- Nozzles used in fueling shall be equipped with an automatic shutoff to control drips. Fueling operations shall not be left unattended.

C. Inspection and Maintenance:

- Vehicles and equipment shall be routinely inspected for leaks. Leaks shall be repaired immediately. Problem vehicles or equipment shall be removed from the project site.
- An ample supply of spill cleanup materials shall be available on-site.
- Spills shall be immediately cleaned up, and contaminated soil and cleanup materials shall be properly disposed of off-site in accordance with Local, State and Federal regulations.

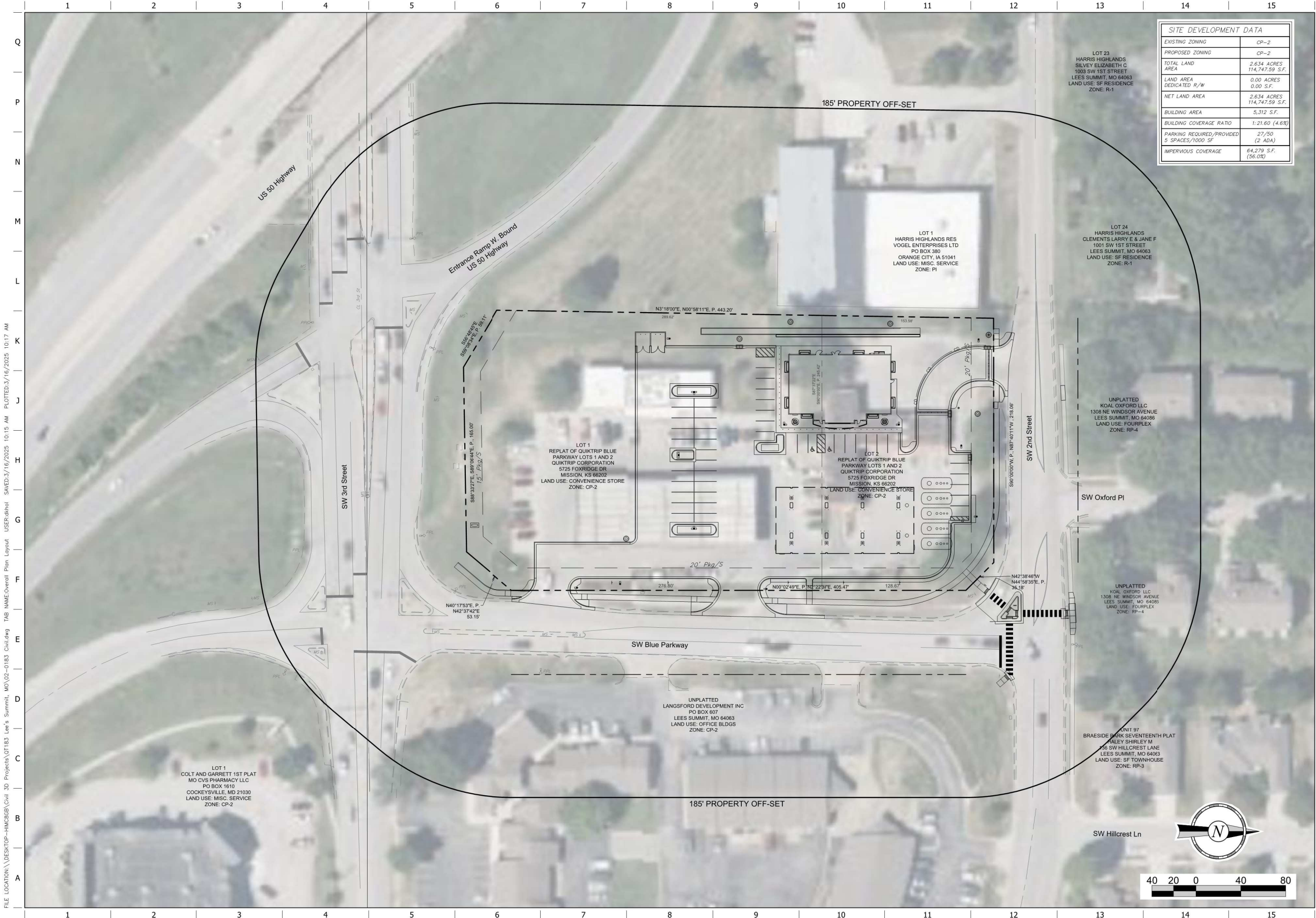
**STORM WATER POLLUTION
PREVENTION PLAN
NARRATIVE**

APPENDIX C

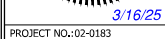
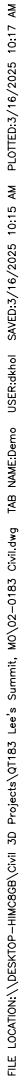
**FORMS
PERMITS & PLANS**

FOR

**QUIKTRIP STORE #0183
1001 SW BLUE PARKWAY
LEE'S SUMMIT, MISSOURI 64063**



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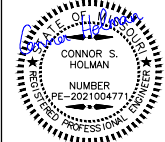
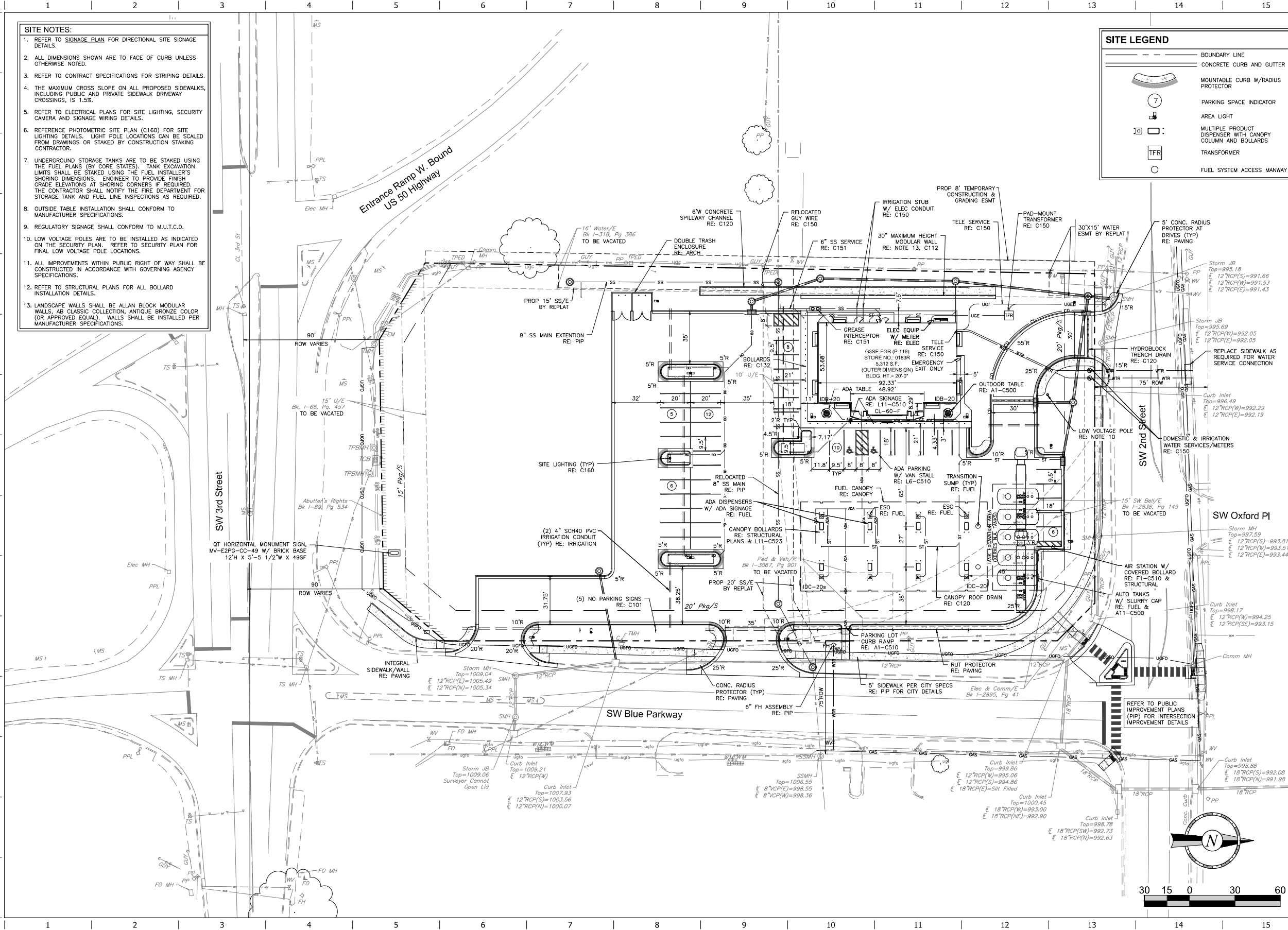
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- SITE NOTES:**
1. REFER TO SIGNAGE PLAN FOR DIRECTIONAL SITE SIGNAGE DETAILS.
 2. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
 3. REFER TO CONTRACT SPECIFICATIONS FOR STRIPING DETAILS.
 4. THE MAXIMUM CROSS SLOPE ON ALL PROPOSED SIDEWALKS, INCLUDING PUBLIC AND PRIVATE SIDEWALK DRIVEWAY CROSSINGS, IS 1.5%.
 5. REFER TO ELECTRICAL PLANS FOR SITE LIGHTING, SECURITY CAMERA AND SIGNAGE WIRING DETAILS.
 6. REFERENCE PHOTOMETRIC SITE PLAN (C160) FOR SITE LIGHTING DETAILS. LIGHT POLE LOCATIONS CAN BE SCALED FROM DRAWINGS OR STAKED BY CONSTRUCTION STAKING CONTRACTOR.
 7. UNDERGROUND STORAGE TANKS ARE TO BE STAKED USING THE FUEL PLANS (BY CORE STATES). TANK EXCAVATION LIMITS SHALL BE STAKED USING THE FUEL INSTALLER'S SHORING DIMENSIONS. ENGINEER TO PROVIDE FINISH GRADE ELEVATIONS AT SHORING CORNERS IF REQUIRED. THE CONTRACTOR SHALL NOTIFY THE FIRE DEPARTMENT FOR STORAGE TANK AND FUEL LINE INSPECTIONS AS REQUIRED.
 8. OUTSIDE TABLE INSTALLATION SHALL CONFORM TO MANUFACTURER SPECIFICATIONS.
 9. REGULATORY SIGNAGE SHALL CONFORM TO M.U.T.C.D.
 10. LOW VOLTAGE POLES ARE TO BE INSTALLED AS INDICATED ON THE SECURITY PLAN. REFER TO SECURITY PLAN FOR FINAL LOW VOLTAGE POLE LOCATIONS.
 11. ALL IMPROVEMENTS WITHIN PUBLIC RIGHT OF WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH GOVERNING AGENCY SPECIFICATIONS.
 12. REFER TO STRUCTURAL PLANS FOR ALL BOLLARD INSTALLATION DETAILS.
 13. LANDSCAPE WALLS SHALL BE ALLAN BLOCK MODULAR WALLS, AB CLASSIC COLLECTION, ANTIQUE BRONZE COLOR (OR APPROVED EQUAL). WALLS SHALL BE INSTALLED PER MANUFACTURER SPECIFICATIONS.

SITE LEGEND

- BOUNDARY LINE
- CONCRETE CURB AND GUTTER
- MOUNTABLE CURB W/RADIUS PROTECTOR
- PARKING SPACE INDICATOR
- AREA LIGHT
- MULTIPLE PRODUCT DISPENSER WITH CANOPY COLUMN AND BOLLARDS
- TRANSFORMER
- FUEL SYSTEM ACCESS MANWAY



PROJECT NO. 02-0183

MG
Midwest Design Group
Kansas City
PO Box 850015
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QuikTrip No. 0183R
1001 SW BLUE PARKWAY
LEES SUMMIT, JACKSON CO., MO 64063



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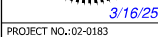
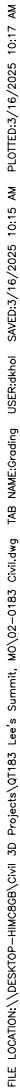
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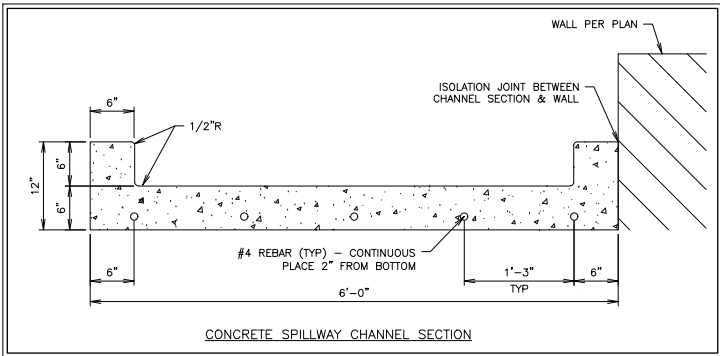
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STORM SEWER NOTES:

1. GAS CANOPY INSTALLER SHALL INSTALL THE CANOPY COLUMN DRAIN PIPE AND OVERFLOW FITTING. THE STORM WATER INSTALLER SHALL CONNECT THEIR PIPING TO THE GAS INSTALLER'S OVERFLOW FITTING.
2. PRIVATE STORM SEWER PIPE AND TRENCHING SHALL CONFORM TO CONTRACT SPECIFICATIONS.
3. PRIOR TO THE CONSTRUCTION OF, OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, OR ANY OTHER ELEVATION SENSITIVE UTILITY, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTIONS AND ALL UTILITY CROSSINGS. THE CONTRACTOR SHALL INFORM THE ENGINEER AND THE OWNER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THE ENGINEER IS NOT NOTIFIED OF A DESIGN CONFLICT.
4. CARE MUST BE TAKEN WHEN INSTALLING THE BUILDING ROOF DRAINAGE SYSTEMS TO AVOID UTILITY/FUEL CROSSING CONFLICTS, BUILDING FOOTINGS, AND BOLLARDS. UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL FITTINGS REQUIRED FOR INSTALLATION. ROOF DRAINAGE LAYOUT SHOWN IS SCHEMATIC AND DOES NOT REPRESENT ALL FITTINGS REQUIRED FOR CONSTRUCTION.
5. STORM SEWER STRUCTURES ON-GRADE ARE TO MATCH GRADE. ELEVATION CALLOUTS ARE TO CENTER OF STRUCTURE. STRUCTURES ON GRADE ARE TO BE CAST IN PLACE AS NECESSARY.
6. ALL STORM SEWER CLEANOUTS ARE TO BE 4" DIAMETER UNLESS OTHERWISE NOTED. REFER TO C500 & PROJECT SPECIFICATIONS FOR DETAILS.
7. ALL EXTERIOR PVC STORM PIPE SHALL BE SDR35 WITH WATERTIGHT FITTINGS.
8. REFER TO REMAINING C120 SHEETS FOR STORM SEWER PROFILES AND DETENTION DETAILS.
9. REFER TO C540 SHEETS FOR STORM SEWER CONSTRUCTION DETAILS.
10. RCP STORM SEWER PIPE SHALL BE CLASS III (WALL B).
11. TRENCH DRAINS SHALL BE 12" HYDROBLOCK TRENCH DRAINS. NO SUBSTITUTIONS ARE ALLOWED. REFER TO C540 SHEETS FOR DETAILS.
12. ALL TRENCH DRAIN LENGTHS ARE SCHEMATIC AND ARE SUBJECT TO CHANGE PER MANUFACTURER. MANUFACTURER TO MINIMIZE TRENCH DRAIN LENGTH ADJUSTMENTS TO AVOID PLAN CONFLICTS.
13. ALL TRENCH DRAIN RUNS SHALL RECEIVE MAINTENANCE SECTIONS AT 50' MAXIMUM INTERVALS AND/OR PER MANUFACTURER RECOMMENDATIONS.
14. REFER TO THE LANDSCAPE PLANS FOR LANDSCAPE BED DRAIN INSPECTION PORT DETAILS.



DRAINAGE CALCULATIONS TO SPILLWAY CHANNEL
A=27,357 SF (0.628 AC)
IMPERVIOUS AREA=21,872 SF
PERVIOUS AREA=5,485 SF
C=0.78
100 YR = 12.60*1.25=15.75 IN/HR
Q=cA=0.78*15.75*0.628
Q=7.71 CFS

SPILLWAY CHANNEL CAPACITY CALCULATIONS
CHANNEL WIDTH (W)=5 FEET
CHANNEL HEIGHT (H)=0.5 FEET
MIN SLOPE (S)=0.009 FT/FT
n=0.013

MANNING'S CHANNEL FLOW EQUATION
 $Q=(1.49/n)*((W*H)^{(5/3)})/((W+2H)^{(2/3)})]*S^{(1/2)}$
Q=15.17 CFS

STORM SEWER LEGEND

- | | |
|------|-----------------------------|
| ST | STORM PIPE (< 10" NEW) |
| BD | LANDSCAPE BED DRAIN |
| CD | BACK OF CURB DRAIN |
| --- | STORM PIPE (> 12" NEW) |
| --- | STORM PIPE (> 12" EXISTING) |
| XXXX | MAJOR CONTOUR (NEW) |
| XXXX | MINOR CONTOUR (NEW) |
| --- | MAJOR CONTOUR (EXISTING) |
| --- | MINOR CONTOUR (EXISTING) |
| --- | STORM GRATE (NEW) |
| □ | STORM SEWER JUNCTION BOX/MH |



PROJECT NO.: 02-0183

MDG
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Kansas City

PO Box 860015
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QuikTrip No. 0183R
1001 SW BLUE PARKWAY
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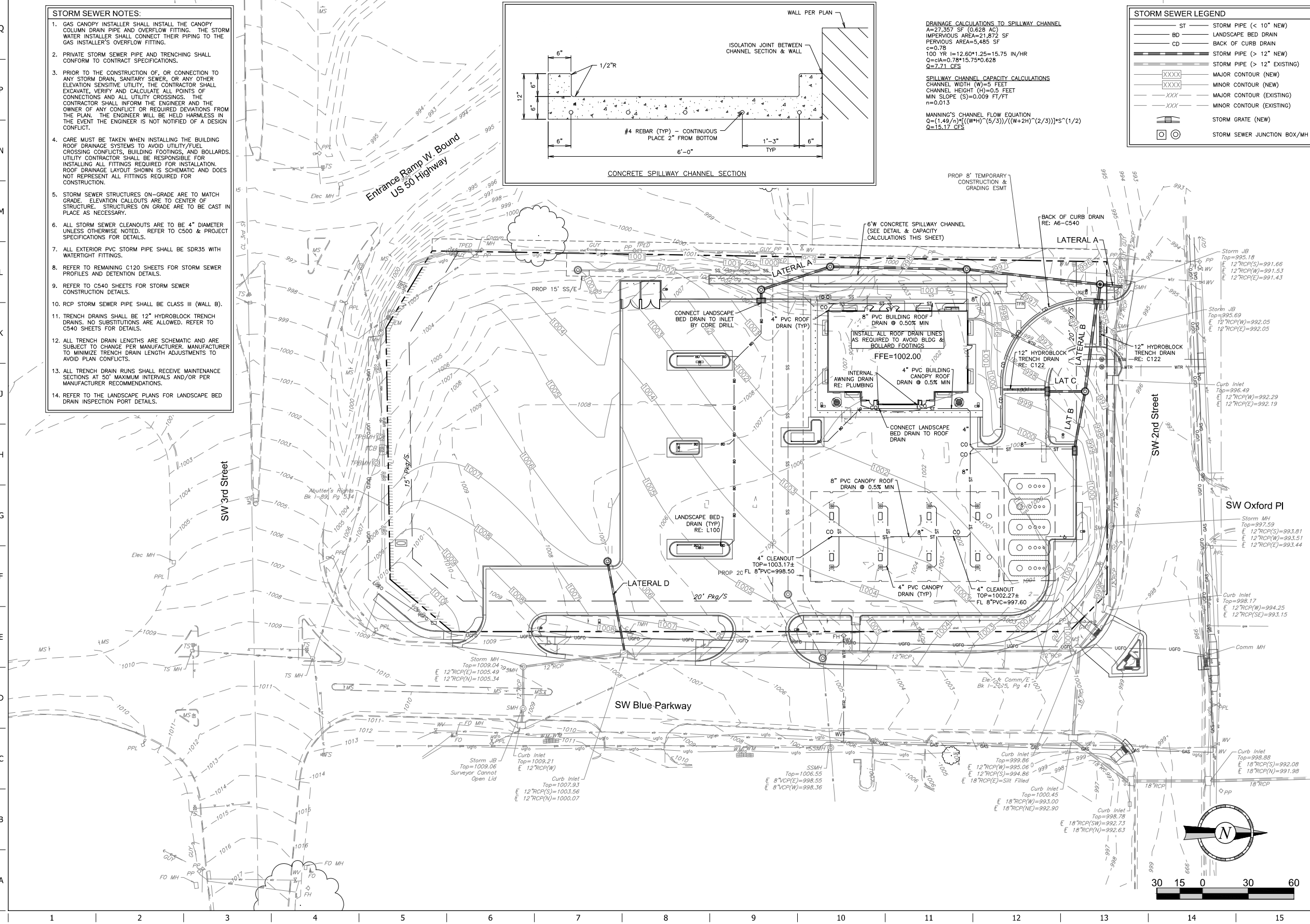
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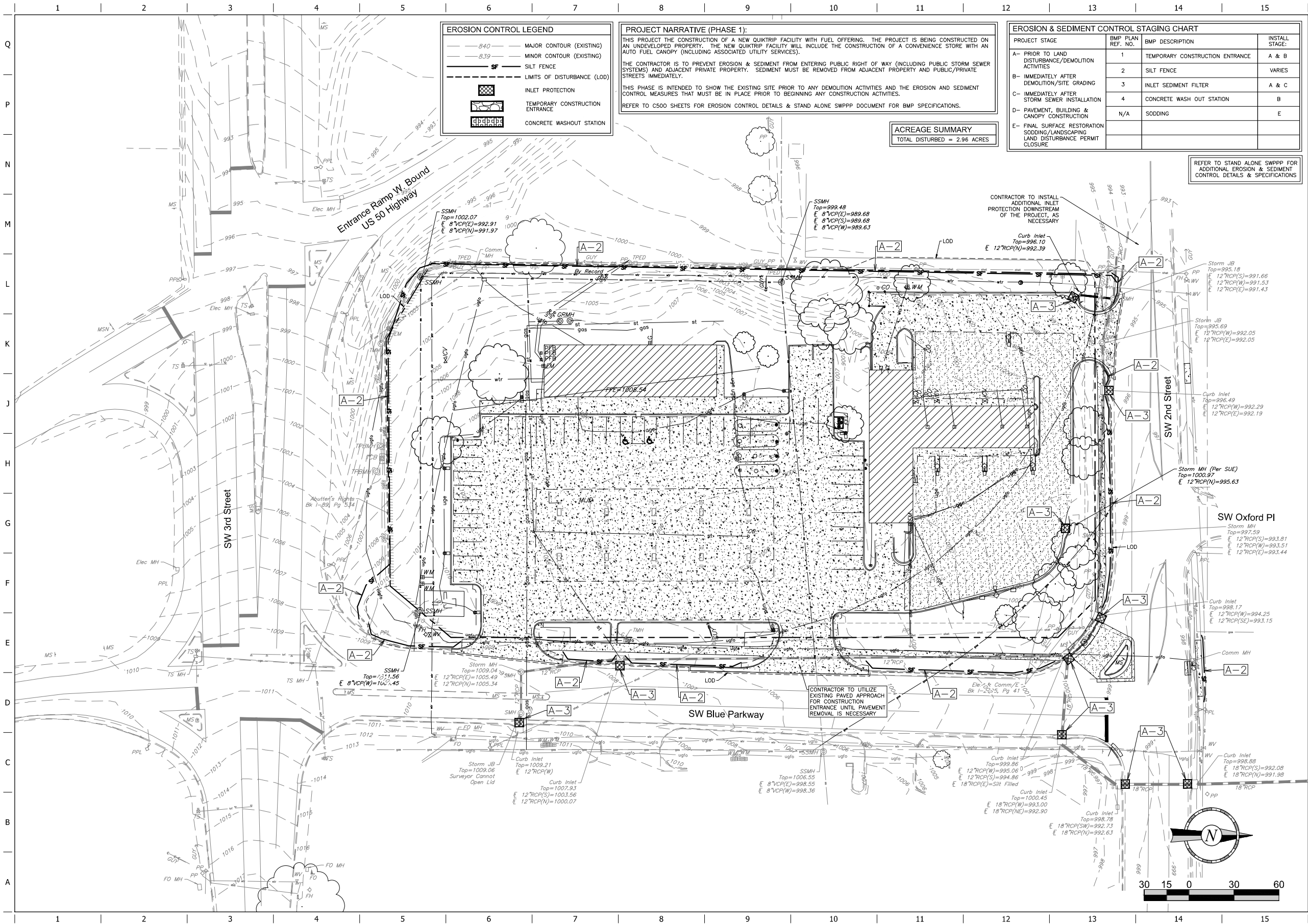
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OVERALL STORM
SEWER PLAN

SHEET NUMBER:

C120



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EROSION CONTROL LEGEND	
	MAJOR CONTOUR (EXISTING)
	MINOR CONTOUR (EXISTING)
	SILT FENCE
	LIMITS OF DISTURBANCE (LOD)
	INLET PROTECTION
	TEMPORARY CONSTRUCTION ENTRANCE
	CONCRETE WASHOUT STATION

PROJECT NARRATIVE (PHASE 1):

THIS PROJECT THE CONSTRUCTION OF A NEW QUIKTRIP FACILITY WITH FUEL OFFERING. THE PROJECT IS BEING CONSTRUCTED ON AN UNDEVELOPED PROPERTY. THE NEW QUIKTRIP FACILITY WILL INCLUDE THE CONSTRUCTION OF A CONVENIENCE STORE WITH AN AUTO FUEL CANOPY (INCLUDING ASSOCIATED UTILITY SERVICES).

THE CONTRACTOR IS TO PREVENT EROSION & SEDIMENT FROM ENTERING PUBLIC RIGHT OF WAY (INCLUDING PUBLIC STORM SEWER SYSTEMS) AND ADJACENT PRIVATE PROPERTY. SEDIMENT MUST BE REMOVED FROM ADJACENT PROPERTY AND PUBLIC/PRIVATE STREETS IMMEDIATELY.

THIS PHASE IS INTENDED TO SHOW THE EXISTING SITE PRIOR TO ANY DEMOLITION ACTIVITIES AND THE EROSION AND SEDIMENT CONTROL MEASURES THAT MUST BE IN PLACE PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES.

REFER TO C500 SHEETS FOR EROSION CONTROL DETAILS & STAND ALONE SWPPP DOCUMENT FOR BMP SPECIFICATIONS.

ACREAGE SUMMARY	
TOTAL DISTURBED =	2.96 ACRES

EROSION & SEDIMENT CONTROL STAGING CHART			
PROJECT STAGE	BMP PLAN REF. NO.	BMP DESCRIPTION	INSTALL STAGE:
A- PRIOR TO LAND DISTURBANCE/DEMOLITION ACTIVITIES	1	TEMPORARY CONSTRUCTION ENTRANCE	A & B
B- IMMEDIATELY AFTER DEMOLITION/SITE GRADING	2	SILT FENCE	VARIES
C- IMMEDIATELY AFTER STORM SEWER INSTALLATION	3	INLET SEDIMENT FILTER	A & C
D- PAVEMENT, BUILDING & CANOPY CONSTRUCTION	4	CONCRETE WASH OUT STATION	B
E- FINAL SURFACE RESTORATION SODDING/LANDSCAPING LAND DISTURBANCE PERMIT CLOSURE	N/A	SODDING	E

REFER TO STAND ALONE SWPPP FOR ADDITIONAL EROSION & SEDIMENT CONTROL DETAILS & SPECIFICATIONS

PROJECT NO.:02-0183

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DIVISION: 02
VERSION: 001
DESIGNED BY: CSH
DRAWN BY: CSH
REVIEWED BY: TRW

REV	DATE	DESCRIPTION

ORIGINAL ISSUE DATE: 03/16/2025

SHEET TITLE:
EROSION CONTROL PLAN
PHASE 1

SHEET NUMBER:
C140

