



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, August 21, 2024

Agenda Item

Item 4. A. – Report on LMRWD Permit Inspections

Prepared By

Linda Loomis, Administrator

Summary

We had planned to have the interns present the findings of their inspections of LMRWD permits. Both interns have conflicts that prevent their attendance at the Board meeting. Since the interns were the inspectors, the team at Young Environmental Consulting Group didn't think they should step up and make the presentation in their stead.

The report is attached for the Board's information and members of the Young Environmental Consulting Group team will be present to answer any questions the Board may have.

Attachments

Technical Memorandum – Lower Minnesota River Watershed District (LMRWD) 2024 Permitted Project Inspections dated August 14, 2024

Recommended Action

Motion to receive and file inspection report

Technical Memorandum



To: Linda Loomis, Administrator
Lower Minnesota River Watershed District (LMRWD)

From: Josephine Khan, Water Resources Intern
Ashley Weihs, Water Resources Intern
Erica Bock, Water Resources Scientist
Rachel Kapsch, Water Resources Scientist

Date: August 14, 2024

Re: Lower Minnesota River Watershed District (LMRWD) 2024 Permitted Project
Inspections

In February 2020, the LMRWD adopted rules to govern soil erosion and sediment control (Rule B), floodplain and drainage alteration (Rule C), stormwater management (Rule D), and development on steep slopes (Rule F) within the boundaries of the LMRWD. Since May 1, 2020, the LMRWD, through its technical consultant and district engineering team at Young Environmental Consulting Group, LLC (Young Environmental), has been reviewing construction projects and issuing permits to ensure compliance with LMRWD rules. The first year of LMRWD on-site project inspections occurred in the summer of 2022. In 2024, Young Environmental continued project inspections to ensure project compliance with LMRWD rules. Inspections are conducted in accordance with the LMRWD's Administrative and Procedural Requirements (Rule A), under which LMRWD reserves the right to conduct periodic audits, inspections, or both. The project review and permit approval processes are thorough; however, on-site inspections confirm compliance with the LMRWD's rules during and after the construction of a permitted project.

Team members involved in this project include the following:

- Inspection Team: Josephine Khan and Ashley Weihs
- Project Manager: Hannah LeClaire
- Deputy Project Managers: Erica Bock and Rachel Kapsch
- Senior GIS Analyst: Chris Ross

PREPARATION

To ensure the project team was well equipped and prepared to safely conduct their site inspections, they completed the 10-hour Occupational Safety and Health Administration (OSHA) General Industry Outreach training. This training provided the project team with insight to safely conduct fieldwork, specifically within construction sites. In addition to the OSHA training, the project team had previous Stormwater Pollution Prevention Plan (SWPPP) inspection training from the University of Minnesota and underwent an erosion and sediment control training with Young Environmental.

The project was initiated by creating a project schedule (Attachment A) using the LMRWD permits database. The permits database is a geodatabase that Young Environmental created in 2022 to reduce inefficiencies within the permitting program. Prior to the creation of the permits database, several spreadsheets and other documents were required to maintain permitting program activities. The permits database houses information such as permittee contact information, project size and status, rules triggered, permit issue and renewal dates, inspection data, and associated geographic location for each project.

After creating a schedule and route for inspections, the inspection team reviewed each site's permit, applicable rules, project SWPPP, and previous inspections. The inspection team compiled their review notes into an outline of important inspection points to verify at each site.

SUMMARY OF RESULTS

During the 2024 inspection season, the inspection team inspected a total of 19 project sites between July 23 and August 8 to confirm compliance with LMRWD Rules.

Project Status Summary

Of the 19 project sites inspected, 17 sites were construction-complete and 2 were active construction sites. Construction-complete sites are sites that no longer have active construction. These sites have the potential for permit closure post-inspection, assuming the project meets all closeout requirements outlined in Attachment B. Active sites have ongoing construction and will be reinspected the following year to confirm continued compliance. If the site is under construction, not fully stabilized, or if violations are found on-site, follow-up from the LMRWD will be required. Attachment C shows the locations and violation status of all 2024 inspection sites.

Post-Inspection Notification Summary

The inspection team sent emails describing the violations observed when a construction-complete project did not meet the requirements for permit closeout. Table 1 describes all sites that required follow-up emails as well as the description of the violation or missing closeout task. It is important to note that the LMRWD does not consider less than 70% vegetation establishment to be a violation. However, for consistency, it is denoted as a violation throughout this technical memorandum. Figure 1 shows a quantitative summary of violations. The most common violation or closeout task logged for project sites was a less than 70% vegetation establishment. If initial violation notices go unanswered, Young Environmental will send a follow up email.

Table 1: Violation Notices Sent to Permittees

Permit Number	Project Name	Violation(s)	Permittee Response
2023-002	Eagle Creek Bridge	<ul style="list-style-type: none"> • <70% vegetation establishment¹ • Erosion observed on construction access road 	<ul style="list-style-type: none"> • No response.
2023-029	Tarnhill Pond	<ul style="list-style-type: none"> • <70% vegetation establishment 	<ul style="list-style-type: none"> • Permittee was aware that less than 70% vegetation was established. • Permittee will email photos when vegetation is established.
2021-033	MN MASH	<ul style="list-style-type: none"> • Need to remove all temporary best management practices (BMPs)² 	<ul style="list-style-type: none"> • Permittee has responded about removing BMPs and will send photo confirmation upon completion.
2022-010	Quarry Lake Trail and Pedestrian Bridge	<ul style="list-style-type: none"> • < 70% vegetation establishment • Sediment in stormwater conveyances 	<ul style="list-style-type: none"> • No response.
2021-035	I35W Frontage Trail	<ul style="list-style-type: none"> • <70% vegetation establishment 	<ul style="list-style-type: none"> • Permittee asked to close out permit and work with city on vegetation establishment. • Inspection team did not grant closeout request.
2022-015	Xcel Driveway	<ul style="list-style-type: none"> • <70% vegetation establishment • Sediment present in outlet of southwest basin • Removal of staging area with stockpiles • Sediment deposited on road crossings from bike trail 	<ul style="list-style-type: none"> • Permittee is sending a representative out to overseed and clean sediment from basin outlet. • Stockpiles belong to city to help maintain bike trail and do not belong to the permittee. • Permittee will send photo confirmation of vegetation and outlet upon completion.

¹ <70% vegetation establishment is not a violation, but an inspection item to follow-up with the permittee about and needs to be completed prior to permit close out.

² Remaining temporary BMPs is not a violation, but needed prior to permit close out.

Permit Number	Project Name	Violation(s)	Permittee Response
2023-015	City of Bloomington Storm Sewer Maintenance – Site D	<ul style="list-style-type: none"> • <70% vegetation establishment 	<ul style="list-style-type: none"> • No response.
2023-015	City of Bloomington Storm Sewer Maintenance – Site F	<ul style="list-style-type: none"> • <70% vegetation establishment • Asphalt chunk left on site 	<ul style="list-style-type: none"> • No response.
2022-005	Chaska West Creek Apt	<ul style="list-style-type: none"> • Sediment tracking in parking lot and road • Infiltration basin not functioning • <70% vegetation establishment • Silt fence needs replacing • Large sticks/trash in basin outlet 	<ul style="list-style-type: none"> • No response.
2022-014	TH41 & CSAH61 Improvements	<ul style="list-style-type: none"> • <70% vegetation establishment 	<ul style="list-style-type: none"> • Permittee stated that areas of <70% vegetation establishment are related to their irrigation contract with the City of Chaska

Permit Number	Project Name	Violation(s)	Permittee Response
2022-016	ORF Relocation	<ul style="list-style-type: none"> • Noted sediment tracking in paved areas and requested sweeping • Photo of holding basins after liner is installed • Energy dissipation installation is required at infiltration basin • Perimeter control is required around stockpiles that are not in use/near floodplain • Silt fence repair • Trash pickup required 	<ul style="list-style-type: none"> • Permittee's response said that they will get items corrected in a timely manner.
2023-008	Chaska Tech Center	<ul style="list-style-type: none"> • Washout occurring in swale slope • Infiltration basin not functioning 	<ul style="list-style-type: none"> • Follow-up in progress.
2021-025	TH13/Dakota Ave Improvement	<ul style="list-style-type: none"> • Need to remove all temporary BMPs 	<ul style="list-style-type: none"> • Follow-up in progress.

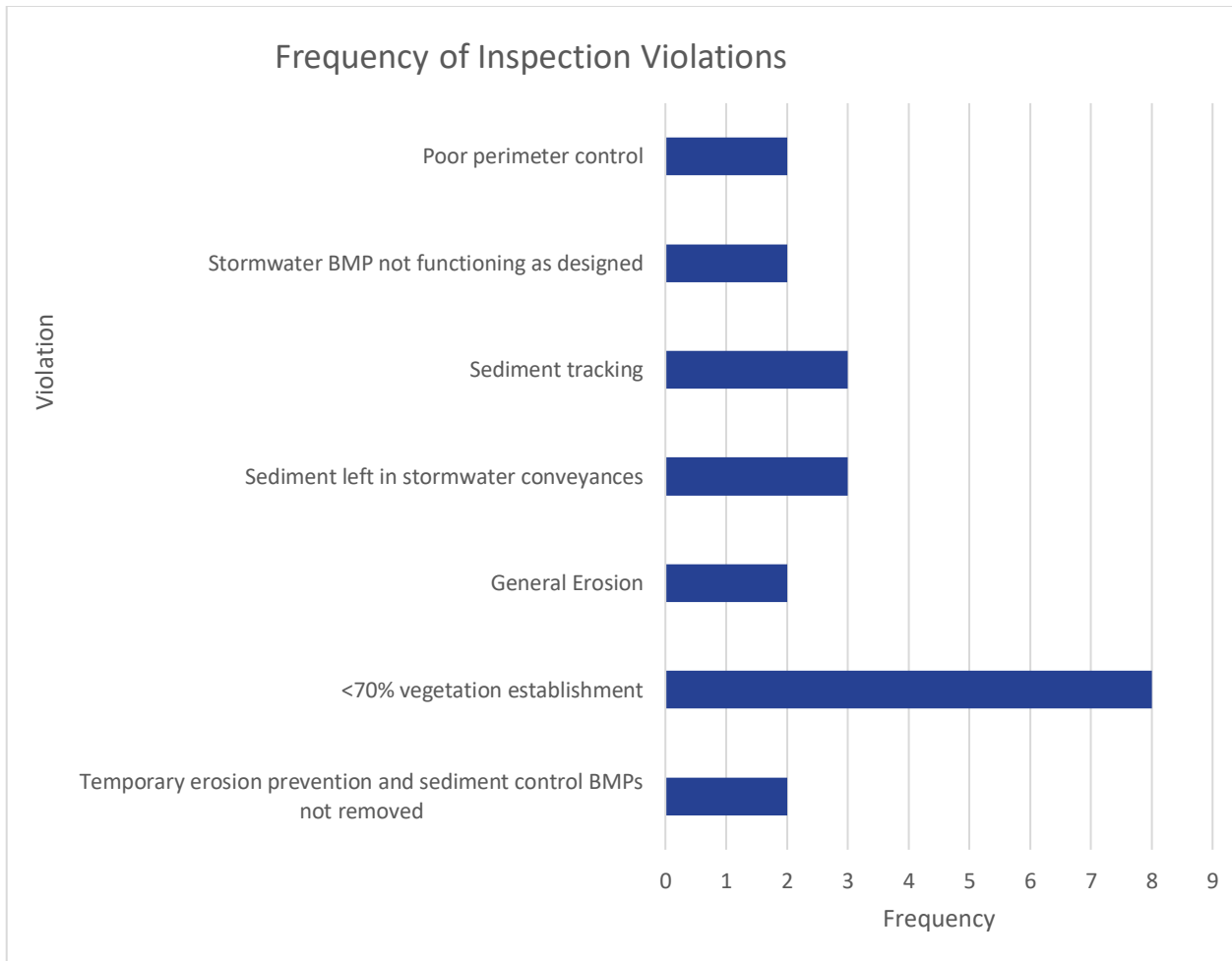


Figure 1: Frequency of Inspection Violation Notices Sent to Permittees



Figure 3: Eroding Slope at Eagle Creek Bridge



Figure 2: <70% Vegetation Establishment at I35W Frontage Trail



Figure 4: Sediment in Stormwater Outlet at Xcel Driveway

2024 INSPECTION SEASON SUCCESSES

Despite encountering project violations throughout the inspection season, numerous successes, or wins were observed. Project successes are noted below and in the accompanying photos (Attachment D):

- Ivy Brook Northeast (2022-027) – Permittee regraded pavement toward curb cuts to promote drainage, riprap at each curb cut removed debris and sediment and added additional riprap.
- Former Knox Site (2022-039) – Permittee applied erosion control blanket along the exterior of the pond in areas lacking vegetation establishment.
- Ace Rent-A-Car (2022-022) – Permittee hydroseeded in areas lacking vegetation
- Building Renovation Park Jeep (2021-030) – Permittee installed rock drainage (dry creek) leading to catch basin in grassy area along Dupont Avenue and applied grass seed in washout areas.

NEXT STEPS

The following steps will be completed to close out the 2024 inspection season:

1. Young Environmental will continue inspections through the summer and fall to complete inspections for the remaining six projects.
2. If initial violation notices go unanswered, Young Environmental will send a follow up email.
3. If the additional email goes unanswered, Young Environmental will send a follow-up email or complete re-inspections two to three weeks after the initial inspection.
4. If permittees remain unresponsive to violation notices, Young Environmental will notify the appropriate city to determine whether the city is aware of the violation. After coordination with the city, the LMRWD can consider a stop work order for permittees that fail to correct violations.
5. For project sites with completed construction, final vegetative stabilization, and no violations found (or corrected), the permit closeout process can continue. Young Environmental will request as-built drawings and complete an as-built review. Of the 19 projects inspected to date, 6 have been recommended for permit close-out procedures and are listed in Table 2.
6. Young Environmental will develop a list of projects from the 2024 inspection season that will require another inspection in 2025. Of the 19 projects inspected thus far, 13 will require

an inspection in 2025 and are listed in Table 3.

Table 2: Projects Recommended for Permit Close-out

Permit Number	Project Name
2021-040	Omry Independent Living
2021-045	Triple Crown Residences Phase II
2021-057	Cliff Road Ramps
2023-014	KTI Fencing
2022-041	35W SP 2782-352
2022-007	Engineered Hillside

Table 3: Projects Requiring Additional Follow-ups/Inspections

Permit Number	Project Name	Permit Status
2023-020	Tramore Heights Addition	Active
2022-016	ORF Relocation	Active
2023-029	Tarnhill Pond	Construction Complete
2023-002	Eagle Creek Bridge	Construction Complete
2021-033	MN MASH	Construction Complete
2022-015	Xcel Driveway	Construction Complete
2022-010	Quarry Lake Trail and Pedestrian Bridge	Construction Complete
2021-035	I35W Frontage Trail	Construction Complete
2023-015	City of Bloomington Storm Sewer Maintenance	Construction Complete
2022-005	Chaska's West Creek Apartments	Construction Complete
2022-014	TH141 & CSAH61 Improvements	Construction Complete
2023-008	Chaska Tech Center Amendment	Construction Complete
2021-025	TH13/Dakota Ave Improvement	Construction Complete

CONCLUSION

Young Environmental will continue to keep an open line of communication with each permittee, informing them of inspection dates and violations in a timely manner and maintaining organized records of each site's status and documentation. The Young Environmental team is working to continuously improve the permitting program and inspection process to make the process more efficient and effective and continue to protect the LMRWD water and natural resources.

Attachments

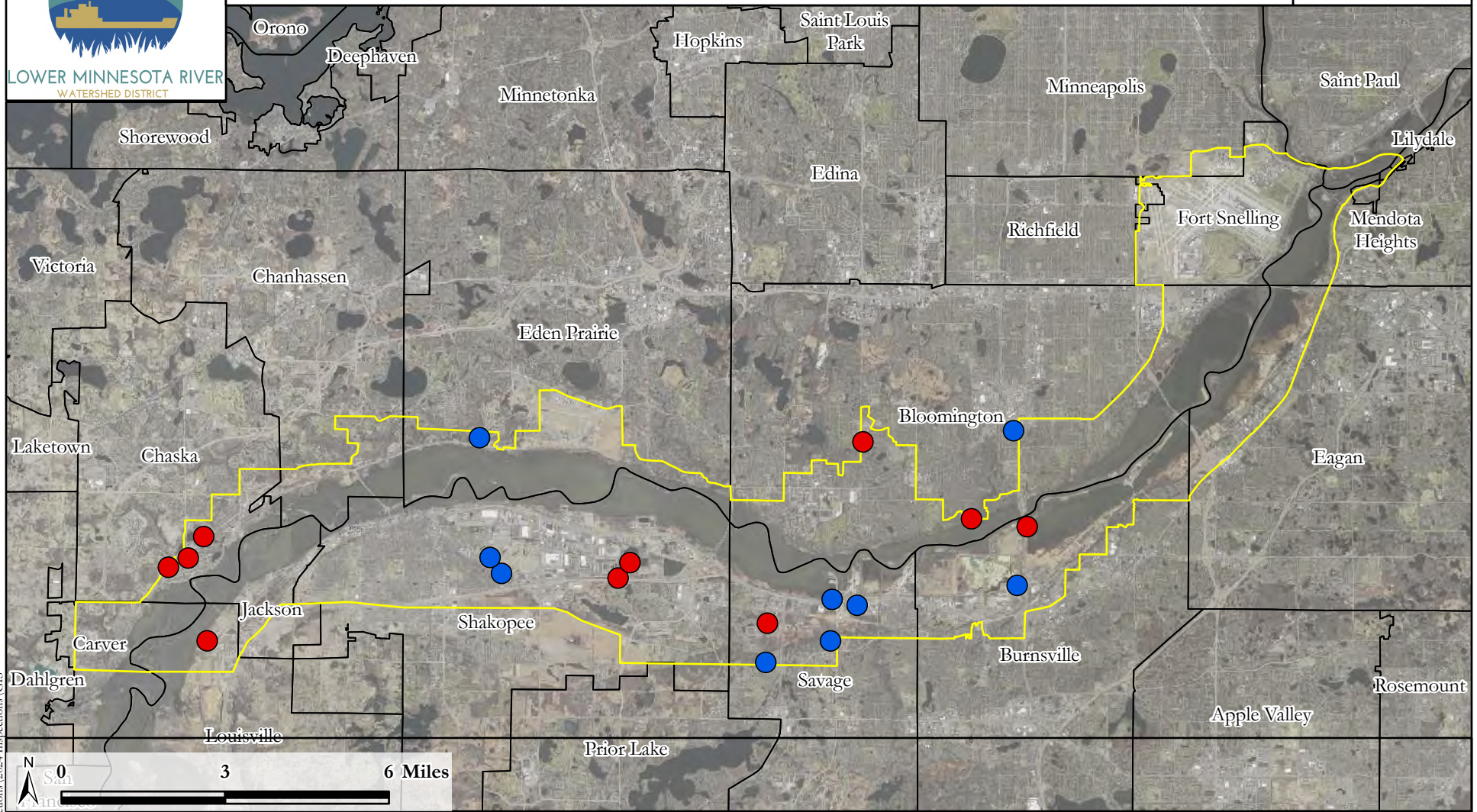
- Attachment A – Project Inspection Schedule
- Attachment B – Project Inspection Map
- Attachment C – LMRWD Permitting Program Inspection Process
- Attachment D – Inspection Season Successes Photo Log

2024 PROJECT INSPECTION SCHEDULE

Date Inspected	Permit Number	Project Name
July 23, 2024	2023-002	Eagle Creek Bridge
July 23, 2024	2023-020	Tramore Heights Addition
July 23, 2024	2021-033	MN MASH
July 23, 2024	2023-014	KTI Fencing Property
July 23, 2024	2023-029	Tarnhill Pond
July 30, 2024	2021-045	Triple Crown Residences Phase II
July 30, 2024	2021-040	Omry Independent Living
July 30, 2024	2022-015	Xcel Driveway
July 30, 2024	2022-010	Quarry Lake Trail and Pedestrian Bridge
July 30, 2024	2021-057	Cliff Road Ramps
July 30, 2024	2021-035	I35W Frontage Trail
July 30, 2024	2023-015	City of Bloomington Storm Sewer Maintenance – Site D and F
August 8, 2024	2022-005	Chaska's West Creek Apartments
August 8, 2024	2022-014	TH141 & CSAH61 Improvements
August 8, 2024	2023-008	Chaska Tech Center Amendment
August 8, 2024	2022-016	ORF Relocation
August 8, 2024	2022-007	Engineered Hillside
August 8, 2024	2021-025	TH13/Dakota Ave Improvement
August 8, 2024	2022-041	35W SP 278-352
August 13, 2024	2023-022	Safety and Security Center Phase II
August 13, 2024	2022-019	1494 SP 2785-433
August 13, 2024	2022-040	Burnsville Sanitary Landfill
August 13, 2024	2021-016	Whispering Waters
August 13, 2024	2020-015	Canterbury Crossings
August 13, 2024	2023-009	AT&T Bloomington to Eureka Fiber



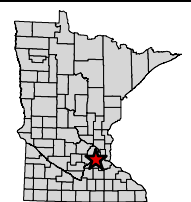
Summary of 2024 Project Inspections



Legend

- LMRWD Boundary
- No violations found
- Violations found

Location Map



Projects\LMRWD\Project_Reviews\06_Inspections\2024_Inspections\GIS

Note: Map depicts inspections conducted from July 23, 2024, through August 8, 2024.

ATTACHMENT C: LMRWD PERMITTING PROGRAM – INSPECTION PROCESS

Task 1: In-Office Preparation

Young Environmental Consulting Group LLC (Young Environmental) staff began the Lower Minnesota River Watershed District's (LMRWD) project inspections with in-office preparation. This preparation included using the Permits Database to locate projects to develop an inspection route. It also included reviewing a project's permit application, rules review, permit, storm water pollution prevention plan (SWPPP), construction plans, and previous inspections conducted at the site.

Prior to field inspections, Young Environmental staff notified permittees of upcoming inspections. If a project is in active construction, staff request any relevant updates to the construction or stormwater management plans. Alternatively, if the construction is complete, staff request record drawings for a comprehensive review.

Task 2: Field Inspections

To ensure safety, Young Environmental staff are accompanied by the contractor or erosion and sediment control inspector during inspections of active sites. Inspections of completed construction sites may be done with or without the contractor or erosion and sediment control inspector.

Field inspections are completed in the Survey123 program in a survey format. Two distinct surveys are used for inspections of construction complete and active projects. These surveys consist of multiple-choice toggle questions that can be easily answered in the field. The questions focus on confirming compliance with items identified during pre-inspection preparation. In addition to the multiple-choice questions, the survey allows the inspector to insert images and notes from the site.

Task 3: Post Inspection

Following field inspections, staff download results from Survey123 for review. Projects with and without violations are notified of inspection outcomes via email indicating one of the following:

- No LMRWD rule violations were found on-site, and no further action is required at this time.
- Violations were found on-site (all violations are listed). Permittee is referred to the NPDES permit compliance requirements to determine the time frame for correcting the violations.

Projects with on-site violations are required to send erosion and sediment control inspection and maintenance records if not previously requested and received. Permittees are allowed to correct violations and provide photo confirmation of a correction. If Young Environmental staff do not receive photo confirmation, a follow-up inspection will be conducted within two to three weeks of the initial inspection to confirm compliance. If violations persist, Young Environmental staff will coordinate with the appropriate city authorities to address ongoing violations and potential enforcement actions.

Staff thoroughly record information developed and acquired during the inspection in the permits database. Subsequently, the database generates automated technical memorandums for each inspected project. These technical memorandums are shared with the LMRWD board and contain information on inspection results and recommendations. Project sites with active construction, without final site stabilization, and/or with violations are recommended for inspection the following year. Project sites with final site stabilization are recommended for permit close-out procedures, including the review of project as-built drawings. As-built drawings allow for inspection of grading and structure elevations that cannot be easily confirmed in the field.

**Ivy Brook Northeast (LMRWD Permit No.
2022-027)**



Photo 1 Violation - Rip rap at northeast curb cut clogged with sediment and debris, preventing drainage



Photo 2 Violation - Rip rap at northwest curb cut clogged with sediment and debris



Photo 3 Violation - Rip rap at southwest curb cut clogged with sediment and debris



Photo 4 Correction - Rip rap cleaned, additional rip rap installed, and regrading at northeast curb cut



Photo 5 Correction - Rip rap cleaned, additional rip rap installed, and regrading at northwest curb cut



Photo 6 Correction - Rip rap cleaned, additional rip rap installed, and regrading at southwest curb cut

Former Knox Site (LMRWD Permit No. 2022-039)



Photo 1 Violation - Lack of vegetation establishment throughout pond exterior



Photo 2 Violation - Erosion and gulying adjacent to rip rap channel leading to pond



Photo 3 Violation - Erosion and lack of vegetation establishment leading from southwest corner of site to pond



Photo 4 Correction - Rip rap channel widened and erosion control blanket applied



Photo 5 Correction - Erosion control blanket applied to southwest corner of pond



Photo 6 Correction - Erosion control blanket applied

Ace Rent A Car (LMRWD Permit No. 2022-022)



Photo 1 Violation - Exposed soils on west side of project site



Photo 2 Violation - Exposed soils on west side of project site



Photo 3 Correction - Hydroseeding on west side of project



Photo 4 Correction - Hydroseeding on west side of project

**Building Renovation Park Jeep (LMRWD
Permit No. 2021-030)**



Photo 1 Violation - Erosion and exposed soils from curb cut to catch basin.



Photo 2 Violation - Gully erosion observed downslope from catch basin



Photo 3 Violation - Temporary BMPs and hillslope erosion



Photo 4 Violation - Undermining of erosion control blanket and subsequent hillslope erosion



Photo 5 Correction - Rock drainage (dry creek) installed