CITY OF BLOOMINGTON



November 20, 2025 @ 5:30 p.m. City Hall, 401 N. Morton Street Common Council Chambers, Room #115

https://bloomington.zoom.us/j/82448983657?pwd=enJxcnArK1pLVDlnWGROTU43dEpXdz09

Meeting ID: 824 4898 3657

Passcode: 319455

CITY OF BLOOMINGTON BOARD OF ZONING APPEALS (Hybrid Meeting) November 20, 2025 at 5:30 p.m.

City Hall, 401 N. Morton Street

Common Council Chambers, Room #115 and via Zoom

❖Virtual Meeting: https://bton.in/Zoom

Meeting ID: 824 4898 3657 Passcode: 319455

Petition Map: https://bton.in/G6BiA

ROLL CALL

APPROVAL OF MINUTES: October 23, 2025

PETITIONS CONTINUED TO: December 18, 2025

AA-17-22 **Joe Kemp Construction, LLC & Blackwell**

Construction, Inc.

Summit Woods (Sudbury Farm Parcel O) W. Ezekiel Dr. Parcel(s): 53-08-07-400-008.002-009, 53-08-07-400-

008.004-009

Request: Administrative Appeal of the Notice of Violation

(NOV) issued March 25, 2022. Case Manager: Jackie Scanlan

CU-33-24/ USE2024-11-0068 Hat Rentals, LLC

202 N. Walnut Street

Parcel: 53-05-33-310-028.000-005

Request: Request for conditional use approval of "student housing or dormitory" to allow one four-bedroom unit in the

Mixed-Use Downtown (MD) zoning district.

Case Manager: Jackie Scanlan

V-42-25/ ZR2025-09-0097 Greystar Development Central, LLC

503 N. Rogers Street

Parcel: 53-05-32-100-006.000-005

Request: Variances from tree and forest preservation standards, minimum tree plot width standards, and landscaping standards to allow construction of a "Dwelling, multifamily" use in the Mixed-Use Downtown zoning district within the Showers Technology downtown character overlay (MD-ST). Case Manager: Gabriel

Holbrow

Auxiliary aids for people with disabilities are available upon request with adequate notice. Please call <u>812-349-3429</u> or E-mail <u>human.rights@bloomingto.in.gov</u>.

The City is committed to providing equal access to information. However, despite our efforts, at times, portions of our board and commission packets are not accessible for some individuals. If you encounter difficulties accessing material in this packet, please contact Melissa Hirtzel at hirtzelm@bloomington.in.gov and provide your name, contact information, and a link to or description of the document or web page you are having problems with.

PETITIONS:

CU-33-25/ ZR2025-07-0087 Weihe Engineers (Saint Remy HOA)

3716 E. St Remy Drive

Parcel: 53-08-11-401-029.000-009

Request Variance from Environmental Standards to allow maintenance to a detention pond and wetlands within St. Remy in the Residential Small Lot (R3) zoning district. Also requested is Conditional Use approval to allow a driveway

in the floodplain. Case Manager: Eric Greulich

V-44-25/ ZR2025-09-0099 Foreign Auto Connect

1459 W. Bloomfield Road

Parcel: 53-08-06-100-004.000-009

Request: Variances from front parking setback and landscaping standards to allow the use "Vehicle sales or rental" in the Mixed Use Corridor (MC) district. <u>Case</u>

Manager: Jamie Kreindler

CU/V-45-25/ ZR2025-10-0106 Apostolic Church of Jesus Christ

1100 E. Miller Drive

Parcel: 53-08-09-108-017.000-009

Request: Conditional Use approval for a "Place of Worship" and a variance from minimum sidewalk and tree plot width standards to allow the expansion of a church in the Residential Medium Lot (R2) zoning district. <u>Case</u>

Manager: Eric Greulich

V-48-25/ ZR2025-10-0104 Bledsoe Riggert Cooper James (William Riggert)

422 W. 10th Street

Parcel: 53-05-32-100-035.012-005

Request: Variances from architectural standards and minimum landscape requirements for "Hotel or motel" use in the Mixed-Use Downtown Showers Technology (MD-ST) zoning district. Case Manager: Jamie Kreindler

V-49-25/ ZR2025-10-0103 Jiaoyang Li

2616 S. Paiges Way

Parcel: 53-08-10-300-093.000-009

Request: Variance from rear setback standards to allow construction of an addition to an existing "Dwelling, single-family (detached)" in the Residential Medium Lot (R2)

zoning district. Case Manager: Gabriel Holbrow

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V-50-25/ ZR2025-10-0105

Raina LJS, LLC

3915 W. 3rd Street

Parcel: 53-09-01-100-026.000-016

Request: Variance from maximum parking standards, driveway separation requirements, and signage standards to allow for the construction of a "Restaurant" in the Mixed-Use Medium Scale (MM) zoning district. <u>Case Manager:</u>

David Brantez

Board of Zoning Appeals Members

<u>Member</u>	Appointed By	<u>Term</u>
Tim Ballard	Mayor	1/1/2022-12/31/2025
Flavia Burrell	Plan Commission	1/1/2023-12/31/2026
John Fernandez	Mayor	1/1/2023-12/31/2026
Leslie Kutsenkow	Mayor	1/1/2025-12/31/2028
Jo Throckmorton	Common Council	1/1/2022-12/31/2025

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BLOOMINGTON BOARD OF ZONING APPEALS STAFF REPORT CASE #: CU/V-33-25 ZR2025-07-0087

Location: 3716 E. St. Remy Drive DATE: November 20, 2025

PETITIONER: St. Remy HOA

PO Box 274, Ellettsville, IN 47429

CONSULTANTS: Weihe Engineering (David Counsell)

10505 N. College Ave, Indianapolis, IN 46280

REQUEST: Conditional use approval to allow a driveway in the floodway. Also requested is a variance from Environmental Standards to allow maintenance to a detention pond and wetland within St. Remy in the Residential Small Lot (R3) zoning district.

REPORT: This petition site encompasses two common area lots that are approximately 5.7 acres in size and are owned and maintained by the St. Remy Homeowner's Association. The site located is at 3716 E. St. Remy Drive and is zoned Residential Small Lot (R3). Surrounding land uses are all single family residences. Adjacent properties to the north, east, and south are in the Monroe County Planning jurisdiction and the properties to the west are zoned Residential Medium Lot (R2). The 100-year floodplain of Jackson Creek as well as its regulated riparian buffer run along the south side of this site. This area also contains several sections of wetlands and closed canopy coverage that are subject to the tree preservation requirements of the UDO.

The St. Remy development was approved in 1992 with a series of platted lots that were developed with attached single-family residences (paired patio homes) with a shared common wall. The development also contains three common area lots, one of which contains a stormwater management pond, which was also identified as a wetland with the original approval. The pond has a sanitary sewer line that runs along the south side of the dam that serves the St. Remy development and the single family residences in Hyde Park to the west which has become exposed due to substantial soil erosion. In addition, maintenance work is required to the dam embankment to stabilize areas of erosion and deterioration along the embankment. The petitioner is proposing to move the location of the spillway for the dam to the west and install a new outlet structure. The proposed scope of work would also include stabilizing the exposed sanitary sewer line and installing an access drive from the dam to St. Remy Drive to facilitate access and maintenance to the dam. A portion of the access drive will be located on a property to the south that is not in the City Planning jurisdiction and is therefore not subject to the requirements of the UDO.

The following environmental features are present on the property and are involved with the requested approval:

Wetland- The pond has been identified in both the original approval and current wetland delineation reviews as a regulated wetland. There are also several separate wetlands on the common area lot to the east. The UDO prohibits any land disturbing activity within 25 feet of a wetland. The location of the wetlands to the east prevents any access to the pond without the granting of a variance. The proposed access drive will be going through an area delineated as a wetland. In addition, the proposed work to the dam and spillway area include disturbances to the existing wetlands.

Riparian Buffer- As mentioned previously, Jackson Creek with its associated riparian buffer and floodplain are present on the property. The UDO also prohibits any land disturbing within 75' of the centerline of any intermittent stream, which would include both Jackson Creek as well as two streams that drains from the pond in the common area lots. The presence and location of those riparian buffers also prevent any access to the pond and dam without the granting of a variance.

Tree Preservation- The site also has substantial tree canopy coverage that is subject to the tree preservation standards of the UDO. The existing coverage is calculated at 1.85 acres of the 5.7 acre site which requires a retention of 80% or 1.48 acres. Their proposal includes the removal of 0.636 acres which exceeds the allowed removal by an additional 0.267 acres. The proposed scope of work would involve the removal of a substantial amount of trees and installation of a driveway through the riparian buffer and wetland, as well as the proposed grading around the dam which is a delineated wetland.

Floodplain- Section 20.04.040(e)(1) of the UDO states that transportation facilities, including but not limited to bridges, streets, and drives and buildings/structures are allowed within the floodway and floodway fringe subject to approval under the Conditional Use process. The proposed access driveway is located within the floodway of Jackson Creek and requires conditional use approval. One item of note is that although the adjacent section of Jackson Creek is mapped as a regulated 100-year floodplain, the drainage area at this location is less than one square mile and was erroneously mapped as regulated floodplain. However, since it is shown on the official FEMA floodplain maps, it must be treated as a regulated floodplain.

The petitioner has submitted a mitigation plan to offset the disturbances to the wetlands, riparian buffer, and tree canopy coverage. The mitigation plan includes substantial plantings around the perimeter of the pond as well as around the wetland area on the east side of the site to establish new wetland areas and plantings. Additional tree plantings have also be shown around the south side of the pond as well as along the area of disturbance for the access drive to mitigate tree canopy loss. Plantings have also been shown adjacent to the drive to reestablish riparian buffer vegetation. With this approval a delineated wetland protection area will be defined around the pond for the areas that are within 18" vertical grade from the normal pool elevation of the pond of 783.4' NAVD88. These areas are required to be placed within a wetland easement. Additional tree, wetland, and riparian buffer plantings will be installed throughout the site as part of remediation for the proposed disturbance.

20.06.080(b)(3)(E) Standards for Granting Variances from Development Standards:

A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) The approval will not be injurious to the public health, safety, morals, and general welfare of the community.

PROPOSED FINDING:

Wetland: The granting of the variance to allow the proposed work within and adjacent to the wetland areas is not expected to be injurious to the public health, safety, morals, or general welfare of the community as it allows maintenance to a stormwater management facility to prevent possible failure as well repairs to an exposed sanitary sewer line.

Riparian Buffer: The granting of the variance to allow the proposed work within the riparian buffer is not expected to be injurious to the public health, safety, morals, or general welfare of the community as it allows maintenance to a stormwater management facility to prevent possible failure as well repairs to an exposed sanitary sewer line. A mitigation plan has been submitted showing the reestablishment of vegetation and plantings within the riparian buffer area to offset the proposed disturbance.

Tree Canopy Coverage: The granting of the variance to allow the removal of trees above the allowable amount is not expected to be injurious to the public health, safety, morals, or general welfare of the community as it allows maintenance to a stormwater management facility to prevent possible failure as well repairs to an exposed sanitary sewer line. A mitigation plan has been submitted showing the reestablishment of new trees to offset the increased tree removal.

2) The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.

PROPOSED FINDING:

Wetland: No adverse impacts to the use and value of surrounding properties as a result of the requested variance to allow the work within the wetland areas are found. A mitigation plan has been submitted to reestablish plantings throughout the site and with this approval a protected preservation area will be established around the pond to provide long-term protection.

Riparian Buffer: No adverse impacts to the use and value of surrounding properties as a result of variance to allow the work within the riparian buffer are found. As noted above,

the overall scope of work will allow the repair and protection of a sanitary sewer line as well as stabilize the dam of the stormwater detention pond.

Tree Canopy Coverage: No adverse impacts to the use and value of surrounding properties as a result of variance to allow the additional tree removal are expected. As noted above, the overall scope of work will allow the repair and protection of a sanitary sewer line as well as stabilize the dam of the stormwater detention pond.

3) The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.

PROPOSED FINDING:

Wetland: The strict application of the terms of the Unified Development Ordinance would result in practical difficulties in the use of the property in that would not allow the necessary work to the dam or sanitary sewer line. The practical difficulties are peculiar to the property in that there are no locations along the property to construct an access drive that would avoid the location of the wetlands. The presence of the wetlands around the entire perimeter of the pond and dam prevent any of the necessary work. A mitigation plan has been submitted to mitigate the impacts.

Riparian buffer: The strict application of the terms of the Unified Development Ordinance would result in practical difficulties in the use of the property in that would not allow the work to the necessary work to the dam or sanitary sewer line. The practical difficulties are peculiar to the property in that there are no locations along the property to construct an access drive that would avoid the location of the riparian buffer. The location of the riparian buffer through the south side of the site prevent any of the necessary work without the granting of the variance. A mitigation plan has been submitted to mitigate the impacts.

Tree Canopy Coverage: The strict application of the terms of the Unified Development Ordinance would result in practical difficulties in the use of the property in that it would not allow the necessary work to the dam or sanitary sewer line. The practical difficulties are peculiar to the property in that there are no locations along the property to construct an access drive that would avoid the removal of the trees that are located along the entirety of the dam. The presence of the trees around the site and pond prevent any of the necessary work without the granting of a variance. A mitigation plan has been submitted to mitigate the impacts.

CRITERIA AND FINDINGS FOR CONDITIONAL USE PERMIT

20.06.040(d)(6)(B) General Compliance Criteria: All petitions shall be subject to review and pursuant to the following criteria and shall only be approved if they comply with these criteria.

- *i.* Compliance with this UDO
- ii. Compliance with Other Applicable Regulations
- iii. Compliance with Utility, Service, and Improvement Standards
- iv. Compliance with Prior Approvals

PROPOSED FINDING: With the granting of the requested variances, the proposed scope of work would meet all UDO standards. As mentioned, approval from the Indiana Department of Natural Resources (IDNR) is not required since there is no proposed work within the floodway and this area is not within the jurisdiction of FEMA since the drainage area is less than one square mile. Final compliance with all state and federal requirements is required prior to any site disturbance. Approval from IDEM and any other state and federal agencies is required prior to any disturbance of areas identified as delineated wetlands. Drainage and grading plans will be submitted to City of Bloomington Utilities (CBU) for review. CBU has identified a high need to repair and protect the sanitary line with this proposal. Final acceptance and approval from CBU is required prior to the issuance of any permits. Although the recorded plat identified the area around the pond as a wetland and it was labeled as "Restricted Use", there were no specific conditions or restrictions that were placed on the plat for that area. The wetland area would therefore be regulated to the current UDO restrictions which are the subject of this variance petition.

20.06.040(d)(6)(C) ADDITIONAL CRITERIA APPLICABLE TO CONDITIONAL USES

i. Consistency with Comprehensive Plan and Other Applicable Plans

The proposed use and development shall be consistent with and shall not interfere with
the achievement of the goals and objectives of the Comprehensive Plan and any other
applicable adopted plans and policies.

PROPOSED FINDING: This area is designated as Neighborhood Residential in the Comprehensive Plan which supports the underlying use that currently exists on the property. The Comprehensive Plan has many citations regarding environmental protection and preservation, which will be accomplished through the proposed mitigation plan that will involve the plantings of native species and established a defined protection zone around the pond. The long-term protection of environmentally sensitive areas will be accomplished through the establishment easements throughout the site for the environmental features that are present.

ii. Provides Adequate Public Services and Facilities

Adequate public service and facility capacity shall exist to accommodate uses permitted under the proposed development at the time the needs or demands arise, while maintaining adequate levels of service to existing development. Public services and facilities include, but are not limited to, streets, potable water, sewer, stormwater management structures, schools, public safety, fire protection, libraries, and vehicle/pedestrian connections and access within the site and to adjacent properties.

PROPOSED FINDING: The proposal allows for the protection and repairs necessary to an exposed sanitary sewer line that specifically addresses public service and facility capacity of the City. This approval allows for a long-term solution to ensure the sanitary sewer line has an access drive for future maintenance and inspection.

iii. Minimizes or Mitigates Adverse Impacts

- 1. The proposed use and development will not result in the excessive destruction, loss or damage of any natural, scenic, or historic feature of significant importance.
- 2. The proposed development shall not cause significant adverse impacts on surrounding properties nor create a nuisance by reason of noise, smoke, odors, vibrations, or objectionable lights.
- 3. The hours of operation, outside lighting, and trash and waste collection must not pose a hazard, hardship, or nuisance to the neighborhood.
- 4. The petitioner shall make a good-faith effort to address concerns of the adjoining property owners in the immediate neighborhood as defined in the pre-submittal neighborhood meeting for the specific proposal, if such a meeting is required.

PROPOSED FINDING: There is a portion of the site that lies within the riparian buffer of Jackson Creek and the proposed site plan shows a proposed mitigation plan to establish new riparian buffer plantings within the riparian buffers. No fill or loss of storage capacity within the floodplain is proposed. As mentioned, there is a substantial remediation and mitigation plan proposed to offset the requested variances to allow disturbance within regulated environmental features. No changes to trash and waste collection service are expected. This project has long been a goal of the St. Remy neighborhood association to repair the dam and embankment.

iv. Rational Phasing Plan

If the petition involves phases, each phase of the proposed development shall contain all of the required streets, utilities, landscaping, open space, and other improvements that are required to comply with the project's cumulative development to date and shall not depend upon subsequent phases for those improvements.

PROPOSED FINDING: No phasing is proposed with this plan.

20.06.050(b)(3)(E)(ii) Floodway and Flood Fringe Development

1. No conditional use shall be approved until a permit citing the 100 year flood elevation and the recommended flood protection grade, or a letter stating that no permit is required, has been obtained from the Indiana Department of Natural Resources (DNR) and all conditions and specifications of that permit and other applicable DNR regulations are met.

Proposed Finding: No work is proposed within the floodway and therefore no permit is needed from the Indiana Department of Natural Resources (DNR). A statement from them has been included in the packet to that regard.

2. Development shall not increase the elevation of the regulatory flood beyond the limits allowed by state and federal regulations.

Proposed Finding: The proposal does not include the placement of any fill within the special flood hazard area. The proposed access drive will be constructed at existing finished grade. The site does not technically lie within the 100-year regulated floodplain since the drainage area at this location is less than one square mile and therefore does not meet the jurisdictional requirements of IDNR or FEMA.

3. On-site waste disposal systems such as sewage treatment plants shall be located so as to avoid their impairment and to avoid contamination during the occurrence of the regulatory flood. No septic systems shall be installed within either floodway or flood fringe areas.

Proposed Finding: The location of the sanitary sewer line is not being moved to be placed within the floodplain and is elevated well above the adjacent floodplain elevations.

4. New and replacement sanitary sewer lines and on-site waste disposal systems may be permitted provided that all manholes or other above ground openings are located at or above flood protection grade, or those which are located below the flood protection grade are watertight.

Proposed Finding: As mentioned, the existing sanitary sewer line will be covered with the amount of fill required by CBU and therefore be brought into compliance with applicable standards.

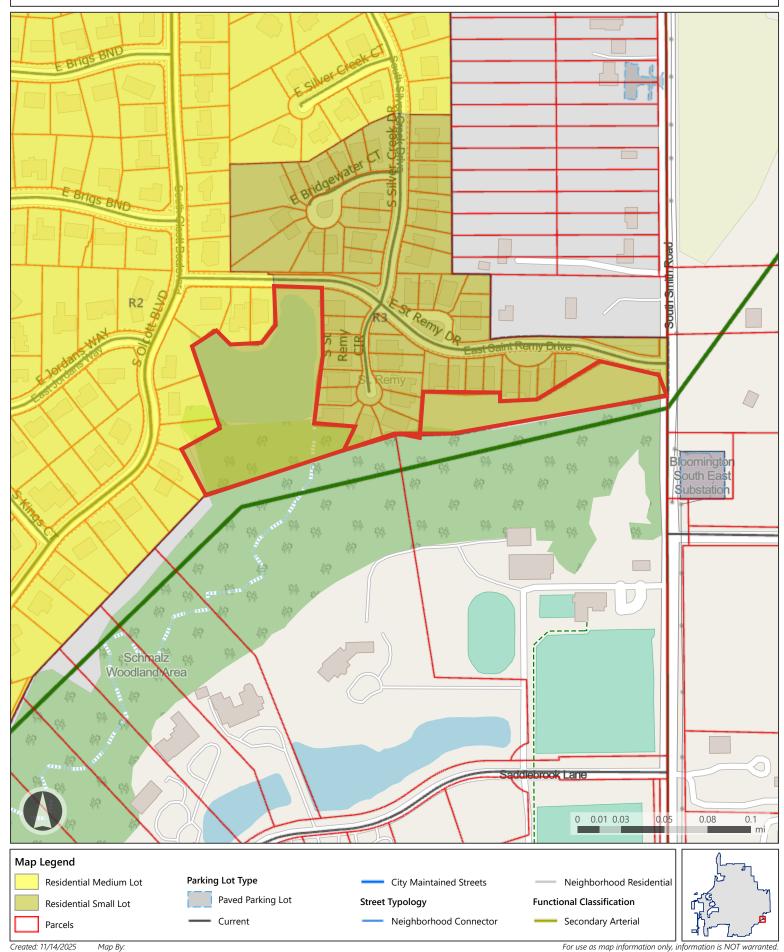
RECOMMENDATION: The Department recommends that the Board of Zoning Appeals adopt the proposed findings and approve the variances with the following conditions:

- 1. The site shall receive and comply with necessary local, state, and federal permits prior to any work commencing. Copies of permits should be provided to Planning and Transportation.
- 2. Wetland restoration should include the area denoted as Wetland #3 on the wetland delineation plan
- 3. Wetland areas that are outside of the construction limits, with a 25 foot buffer, should be protected with silt fencing, tree protection fencing, or both, during the entirety of construction.
- 4. All wetland areas identified should be placed in and recorded as conservancy easements, with the exception of the access road, and comply with conservancy easement regulations per UDO 20.05.040(e)(9), including the required signage.

- 5. Tree preservation easements are required for closed canopy areas, with the edges of such easements delineated 10 feet beyond the driplines of the trees to be preserved. Tree preservation easements must comply with UDO 20.05.040(e)(8), including appropriate signage.
- 6. A riparian buffer easement should be recorded for both streams. Riparian buffer easements should comply with UDO 20.05.040(e)(10), including compliant signage.
- 7. Wetland ponds and wetland conservation areas should not be chemically treated, without permission from the Planning and Transportation Department.
- 8. For preserved trees that are unable to have compliant tree protection fencing, should those trees be damaged or killed as a result of construction, replacement of the canopy will be required.



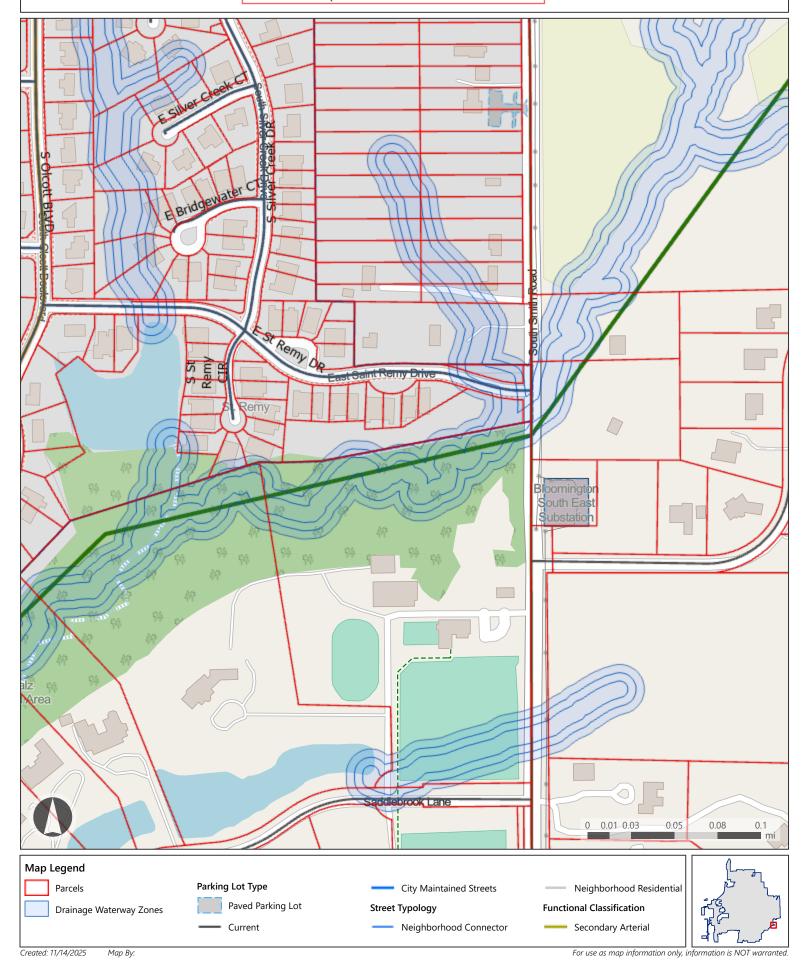
Planning and Transportation Department





Planning and Transportation Department

Riparian Buffer exhibit





Planning and Transportation Department



Street Typology

Neighborhood Connector

Neighborhood Residential

Parcels

Paved Parking Lot

Parking Lot Type

Current

City Maintained Streets

Functional Classification

Secondary Arterial

Secondary Collector



10505 N. College Ave. Indianapolis, IN 46280 317.846.6611 • weihe.net

Variance Request Letter

To:
City of Bloomington, IN
Planning and Transportation Department
401 N Morton St Suite 130
Bloomington IN 47404

Re: St. Remy Dam & Spillway Reconstruction (SDP2025-06-0027 / FDP2025-06-0003 / FD-2025-000020)

Date: 10/13/2025

Introduction:

The key purpose of this project is to rebuild an existing earthen dam and stormwater spillway which are failing and need urgent repair for human and environmental safety as well as the ongoing proper maintenance of stormwater storage for a drainage basin including approximately 62 acres. The dam and spillway repairs will be completed with the minimum practicable land disturbance, and provide an overall improvement to the function, safety and ecology of the site. The total project disturbance area is 1.30 acres.

The scope of work focuses on maintaining dam and downstream safety, managing long-term pond discharge away from residential areas, protecting existing city utility infrastructure, and ensuring permanent access to the dam and downstream area for ongoing maintenance.

Due to the location of the project, several environmental impacts must be considered, and some inevitably require variances to complete this critical project. The environmental impacts as assessed by the City of Bloomington are addressed in this document with specific requests to the pertinent variances requested and the rationale as to the approach and necessity of the work.

A variance is requested to permit essential construction disturbance within these regulated areas. This includes impacts related to (1) stream in riparian buffer alterations, (2) wetland disturbances, and (3) tree and forest preservation, all of which are necessary for the safe and functional repair of the site.

Project Overview:

Existing Conditions & Site History:

The St. Remy Pond receives runoff from a 62-acre watershed. Stormwater enters from the north at two main points—Area B and Area C through the city's municipal stormwater system. Additional inflow comes from adjacent properties. The pond itself spans approximately 2.3 acres, with a maximum depth estimated at 10 feet. Water exits through a concrete spillway located at Area A and flows downstream.

Inspections at Area-A show that the existing spillway and its outfall channel are in poor condition. Significant erosion is present, including head-cutting and signs of piping beneath the concrete structure. Also, there's an exposed city PVC sanitary sewer line at the south end of the spillway. The vertical drop from the spillway to the base of the dam is about 12 feet. The adjacent earthen banks show signs of collapse and ongoing erosion. Below the dam, water has carved ruts and small channels which eventually drain into Jackson Creek.

A dam safety inspection by HydroZōn Engineering shows that the existing spillway is damaged and rated the dam structure as being in "Poor" condition. The dam has a 10-foot crest width and is 270 feet long. Although it does not meet the size threshold for state regulation under IDNR guidelines, it is classified as a "Significant Hazard" due to potential downstream risk in the event of failure. See Attachment C for the full safety inspection report.

Weihe Engineers assessed the pond and existing spillway, then calculated flows from the existing basin feeding the pond, providing further evidence that the existing spillway was not adequate for the large rainfall events that have undoubtedly led to its demise. In addition, a site investigation identified sediment accumulation between 6 and 12 inches deep along the pond's western, eastern and southern edges.

Proposed Site Work:

The project includes limited tree removal on the dam and access route, removal of the failed existing spillway, and installation of a new drop inlet spillway, secondary gravity spillway, settling pond, ditch, and re-establishment of native vegetation in wet areas below the base flood elevation. The project will include lowering normal pool elevation for the pond, and restoration of the dam and spillway's structural function. The plan also includes constructing a permanent maintenance stone access road to support long-term management of the dam and stormwater features.

16 trees will be removed during construction, Additional 47 new tree will be planted to meet the 80% of the calculated closed canopy area. New wetland area around the east edge of St. Remy Pond will be established as part of the restoration plan.

Earthwork on the project includes restoring the dam embankment through grading with maximum slope of 3:1 and stabilizing slopes with permanent grass seeding. As part of the project, the exposed sanitary line will be sufficiently covered and protected.

A new primary drop inlet spillway and a secondary spillway will replace the existing infrastructure. These features will direct flows into a new settling pond built with riprap and stone. Water from the settling pond will then be discharged back to the onsite stream/tributary to Jackson Creek.

See Attachment A for Plan set.



Figure 1 - Site Ariel Image

Requirements:

- (1) City of Bloomington, Indiana Unified Development Ordinance:
 - a. Section 20.04.030 (e)(8)(d) "No alteration to the shoreline or bed of a stream or creek shall be made unless written approval is obtained from the appropriate governmental agencies. Alterations subject to this requirement include, but are not limited to, filling, damming, or dredging of a stream, creek, ditch, or wetland."
- (2) City of Bloomington, Indiana Unified Development Ordinance:
 - a. Section 20.04.030 (g)(4) "No land-disturbing activity, mowing, or temporary or permanent structure shall be allowed within 25 feet of a wetland."
 - b. Section 20.04.030 (g)(5) Wetland Conservancy Easement: "A wetland buffer area extending 25 feet from a delineated wetland shall be placed within a conservancy easement consistent with the standards of Section 20.05.040 (Easements) and shall be protected with silt fencing, tree protection fencing, or both, during the entire period of construction."
 - c. Section 20.04.030 (g)(6) Draining: "Draining of a delineated wetland is prohibited."
- (3) City of Bloomington, Indiana Unified Development Ordinance:
 - a. Section 20.04.030 (h)(1) Tree and Forest Preservation Applicability "This section shall apply to all land-disturbing activities on properties containing closed-canopy."

Variance Request:

- (1) We request permission to alter and relocate the existing spillway channel and stream within the project limits.
- (2) We request approval to disturb land within 25 feet of a wetland (2.a) to partially dredge pond sediments near the dam, repair the dam structure, and construct new stormwater features. We request relief from the requirement to place a wetland buffer easement around the pond (2.b), and request permission to temporarily drain the pond (2.c).
- (3) We request removal of the dam maintenance area as described in (Sheet CD.01 in attachment A, zones 1 to 5) from the applicable area regulated by the closed canopy forest preservation calculation/requirements.

Variance Justification:

- (1) The proposed spillway relocation is necessary because the City Sanitary Sewer pipe that is exposed at the current spillway location cannot be sufficiently covered and protected with the spillway above. There is simply not enough depth to cover it without raising the normal pool of the pond. The spillway should have never been installed in this location for this reason, and due to its closeness to the adjacent residence with a walk-out basement. Shifting the spillway west to about the center of the dam allows for adequate pipe coverage. The new downstream design includes a settling pond and a ditch. These features slow runoff and direct flow back into the stream/tributary that feeds Jackson Creek. This avoids continued erosion and allows water to follow its natural path as it goes offsite.
- (2) This project intention is essential maintenance and repair work, limited to the dam and downstream area. Other project areas such as a previously proposed forebay within the pond have been removed from this project. Based on these limitations, the Wetland Conservancy Easement (2.b) should not be required around the pond, as a man-made earthen dam and retention pond should never be placed in an easement that limits its essential required maintenance and potential need for ongoing repair and dredging to perform its required function. It is our position that the pond and downstream area were incorrectly classified as wetlands on historic documents upon platting of the St. Remy Development. This is most obviously demonstrated in the fact that all of the HOA common areas were noted to have applicable wetland disturbance limitations. Furthermore, disturbance to these areas

- (2.a,c), is necessary to complete the essential project scope. All proposed activities fall within the wetland and/or within 25 feet of it according to the historic documents, which is why the variance is needed. An ecological study has been conducted to determine the existence of wetlands onsite and is included in this submission. The design team has taken care not to disturb the wetland beyond what is essential to the project.
- (3) The dam in this project is a man-made earthen dam. It requires maintenance under the Indiana Department of Natural Resources Dam Safety Inspection Manual. For safety and function, it must remain free of trees and therefore should be excluded from any tree preservation requirements.

Summary:

Granting the requested variances will allow critical maintenance and safety improvements to proceed at St. Remy Dam. The design team has limited the scope of work to only the essential work to limit disturbance as much as possible.

The proposed work addresses a deteriorating spillway, eroding embankments, and exposed City Sanitary Sewer pipe. These issues pose risk to downstream areas, nearby properties, as well as human health and safety. The project is designed to limit environmental disturbance, preserve at least 80% of the existing tree canopy after planting the new trees, and restore affected areas with native vegetation. Also, new wetland area around the east edge of St. Remy Pond will be established.

The proposed design avoids unnecessary impacts to wetlands and buffers, limits all work to areas essential for dam and stormwater management, and maintains long-term access for maintenance. These improvements are vital to restore dam function, manage runoff, protect city utilities and adjacent properties, and prevent adverse downstream impacts.

This request offers a practical solution that aligns with utility and environmental management goals while remaining consistent with the intent of the relevant ordinances. Thus, we respectfully request swift approval of the variances outlined in this letter to allow the project to proceed.

See attached supporting documentation for reference:

Attachment A - Plans Set

Attachment B - Floodway Sheet

Attachment C - Dam Safety Inspection Report

Attachment D - Geotechnical Report

Attachment E - Wetland Delineation Report

Thank you for your consideration, and please contact me directly with any questions,

David Counsell, PE

Vice President, Sustainable Design

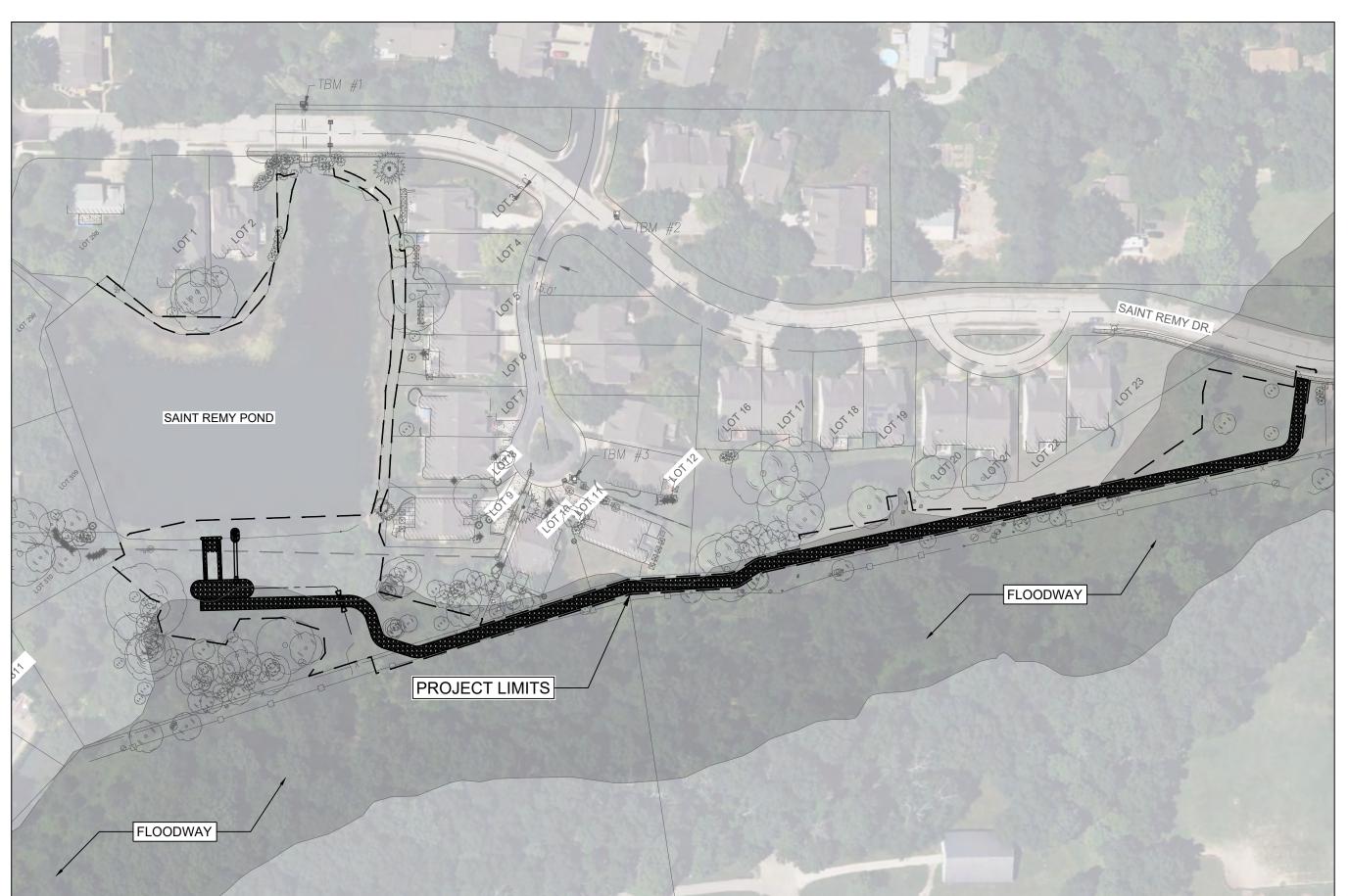
Weihe Engineers, Inc.

counselld@weihe.net

317-771-5975

St Remy Dam & Spillway Reconstruction BLOOMINGTON, INDIANA

90% PERMITTING SET ISSUED: NOVEMBER 12, 2025



PROJECT AREA SCALE: 1" = 100-0"

SITE INFORMATION:

PROJECT AREA = 1.69 ACRES DISTURBANCE AREA = 1.07 ACRES

NO SITE AND/OR SOIL CONTAMINENTS ARE KNOWN OR SUSPECTED TO BE PRESENT WITHIN THE SITE AREA



VICINITY MAP NOT TO SCALE

CONTRACTOR NOTES

ALL PROJECTS WILL REQUIRE A PRE-CONSTRUCTION MEETING WITH THE CITY OF BLOOMINGTON UTILITIES (CBU) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR AND/OR DEVELOPER MUST CONTACT THE UTILITIES TECHNICIAN AT 812-349-3676 TO SCHEDULE THE MEETING. (PLEASE ALLOW A 2-WEEK WINDOW FOR SCHEDULING.)

CONTRACTOR MUST SCHEDULE A WALK-THROUGH INSPECTION WITH CBU PRIOR TO LEAVING THE SITE. CONTACT THE CBU INSPECTOR TO BEGIN THIS PROCESS.

FLOODPLAIN ONSITE:

THE PROJECT IS SUBJECT TO COMPLIANCE WITH FLOODPLAIN REGULATIONS UNDER CHAPTER 20.04 OF THE UNIFIED DEVELOPMENT ORDINANCE AND TITLE 20 OF THE BLOOMINGTON MUNICIPAL CODE.

PORTIONS OF THE PROJECT SITE LIE WITHIN A SPECIAL FLOOD HAZARD AREA (SFHA) AS IDENTIFIED ON THE FLOOD INSURANCE RATE MAP (FIRM) PANEL NO 0163D, EFFECTIVE DATE: DEC, 17,

ALL DEVELOPMENT ACTIVITIES WITHIN THE FLOODPLAIN SHALL CONFORM TO CITY OF BLOOMINGTON REQUIREMENTS AND INDIANA DEPARTMENT OF NATURAL RESOURCES (IDNR) FLOODPLAIN PERMITTING AS APPLICABLE.

B.F.E. = 773.0 TO 785.0 B.F.E. DETERMINED UTILIZING THE FEMA MAP, SEE SHEET CJ.06

PROJECT NAME:

St Remy Dam & Spillway Reconstruction

PROJECT ADDRESS:

3716 E. St. Remy Drive Bloomington, IN 47401

OWNER:

Saint Remy Homeowners Association Inc

Sheet List Table				
Sheet Number	Sheet Title			
CC.00	COVER SHEET			
CC.01	GENERAL NOTES			
CC.02	SITE LAYOUT PLAN AND KEYMAP			
CD.01	EXISTING COND. & DEMO PLAN - AREA A			
CD.02	EXISTING COND. & DEMO PLAN - AREA B			
CS.01	SITE AND UTILITY PLAN - AREA A			
CS.02	DROP STRUCTURE PLAN & PROFILE			
CS.03	SITE & UTILITY DETAILS			
CG.01	GRADING PLAN & SECTIONS - AREA A			
CG.02	GRADING PLAN & SECTIONS - AREA B			
LP.00	PLANTING PLAN - AREA A			
LP.01	PLANTING PLAN - AREA B			
LP.02	PLANTING PLAN - AREA C			
LP.03	PLANTING PLAN DETAILS			
CJ.01	EROSION CONTROL PLAN - AREA A			
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CJ.03	EROSION CONTROL DETAILS			
CJ.04	EROSION CONTROL DETAILS			
CJ.05	SWPPP			
CJ.06	SWPPP			
ES.00	EASEMENT PLAN			
ES.01	EASEMENT PLAN			

STORMWATER INFRASTRUCTURE SUMMARY:

TOTAL PIPE LENGTHS: 57 LF OF 30" PP PIPE, 23 LF OF 24" RCP PIPE.

STRUCTURE COUNT: 1 DROP INLET STRUCTURE, 3 FLARED END SECTIONS



CIVIL ENGINEER: WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280 CC.00

COVER SHEET



GENERAL NOTES

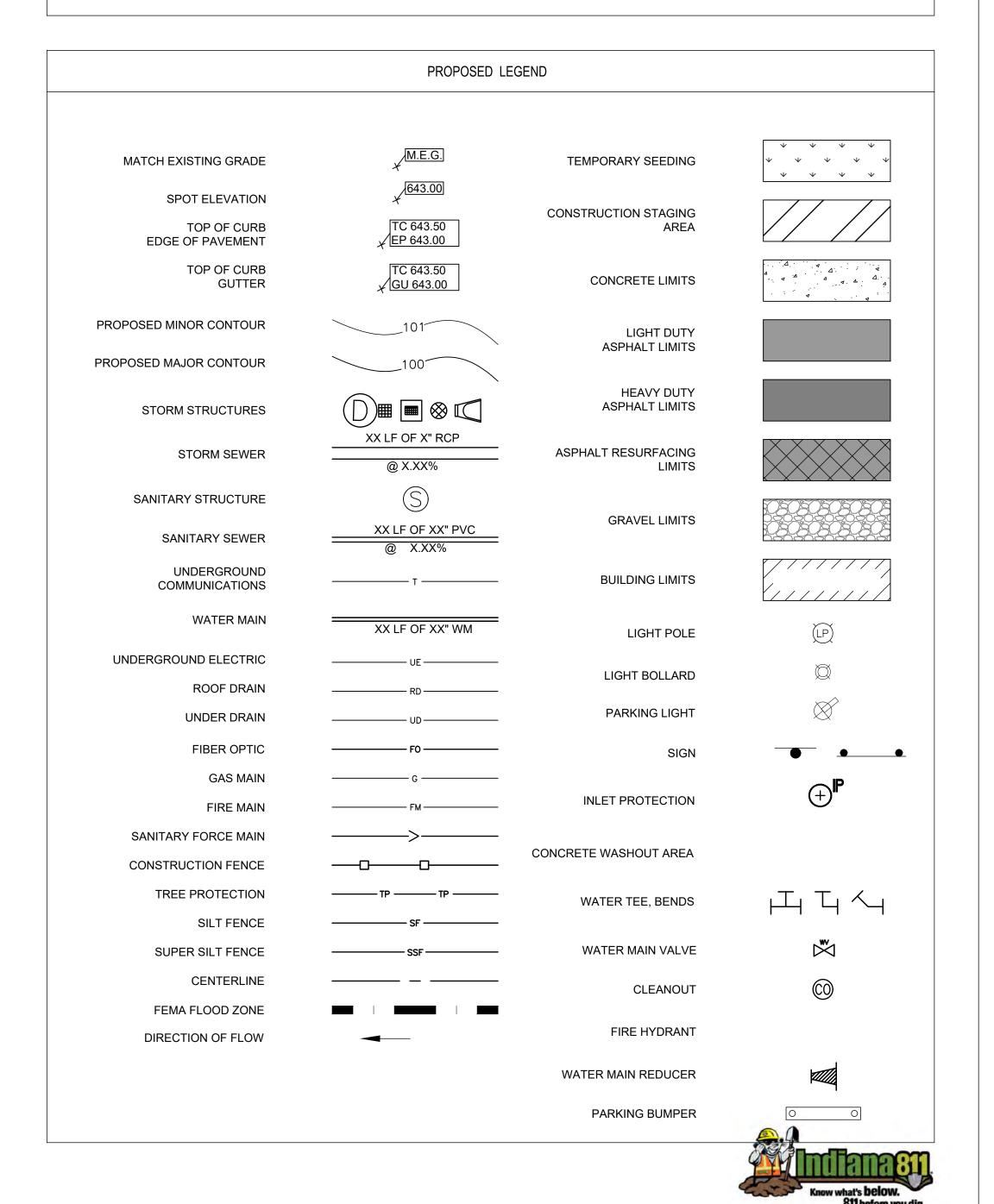
- 1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND VERIFYING THAT ALL PERMITS AND APPROVALS ARE OBTAINED FROM THE RESPECTIVE CITY, COUNTY, AND STATE AGENCIES PRIOR TO STARTING CONSTRUCTION.
- 3. THE UTILITIES INDICATED ON THESE PLANS MAY NOT BE A COMPLETE INVENTORY OF ALL UTILITIES CURRENTLY ON OR NEAR THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PUBLIC AND/OR PRIVATE UTILITY LOCATING SERVICES PRIOR TO STARTING CONSTRUCTION.
- 4. THE SIZE AND LOCATIONS OF THE UTILITIES INDICATED ON THESE PLANS ARE APPROXIMATE. THE CONTRACTOR IS TO DETERMINE AND FIELD VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS PRIOR TO STARTING CONSTRUCTION ACTIVITIES.
- 5. ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION SO THAT REDESIGN OR CLARIFICATION MAY OCCUR.
- 6. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WITH WORK. NOTIFY THE CITY OF BLOOMINGTON OF ANY DISCREPANCY BETWEEN THE PLANS AND ACTUAL SITE CONDITIONS. NO WORK SHALL BE DONE IN AREAS WHERE SUCH DISCREPANCIES EXIST. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- 7. CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY MEASURES DURING CONSTRUCTION OPERATIONS TO PROTECT THE PUBLIC ACCORDING TO ALL APPLICABLE CODES AND RECOGNIZED LOCAL PRACTICES.
- 8. CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THE DRAWINGS AS WELL AS ANY DISCOVERED DURING THE CONSTRUCTION PROCESS.
- 9. THE LIMIT OF CONSTRUCTION LINE SHOWN DEFINES THE LIMITS OF WORK IN THIS CONTRACT. THERE MAY BE INSTANCES WHERE EROSION PROTECTION DEVICES AND UTILITY SYSTEMS EXTEND BEYOND THE PROJECT LIMITS LINE IN ORDER TO SUCCESSFULLY COMPLETE OPERATIONS AND/OR TIE INTO ADJACENT SYSTEMS.
- 10. THE CONTRACTOR SHALL KEEP ALL DRAINAGE FACILITIES AFFECTED BY THE CONSTRUCTION OPERATIONS CLEAN AND FULLY OPERATIONAL AT ALL TIMES.
- 11. MAINTAIN ALL EXISTING EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCE, ORANGE GEO FENCE AND/OR OTHER MEASURES) DURING CONSTRUCTION. PROVIDE ADDITIONAL MEASURES AS NECESSARY TO MINIMIZE ADVERSE IMPACTS TO THE ADJACENT WATER BODIES, SURFACES AND STORM SEWERS ACCORDING TO ALL APPLICABLE FEDERAL/STATE LAWS AND REGULATIONS. SEE CIVIL PLANS FOR FULL EROSION CONTROL MEASURES AND MAINTENANCE DURING CONSTRUCTION.
- 12. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WITH WORK. NOTIFY THE CITY OF BLOOMINGTON OF ANY DISCREPANCY BETWEEN THE PLANS AND ACTUAL SITE CONDITIONS. NO WORK SHALL BE DONE IN AREAS WHERE SUCH DISCREPANCIES EXIST. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- 13. REPORT ALL EXISTING DAMAGE OF EXISTING SITE IMPROVEMENTS PRIOR TO BEGINNING WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUBSEQUENT DAMAGE. CONTRACTOR SHALL PROTECT, BY WHATEVER MEANS NECESSARY, THE EXISTING SITE IMPROVEMENTS TO REMAIN. ALL DAMAGED ITEMS SHALL BE REPLACED OR REPAIRED AT NO ADDITIONAL COST TO THE OWNER. NOTIFY THE CITY OF BLOOMINGTON IMMEDIATELY IF ANY DAMAGE OCCURS.
- 14. ALL AREAS WITHIN 3 FEET OUTSIDE OF DRIPLINES OF EXISTING TREES TO REMAIN FREE OF CONSTRUCTION MATERIALS, DEBRIS, VEHICLES AND FOOT TRAFFIC AT ALL TIMES. SEE EROSION CONTROL, AND DEMOLITION SHEETS FOR TREE PROTECTION INFORMATION.
- 15. CONTRACTORS SHALL COORDINATE ALL WORK WITH RELATED TRADES AND THE GENERAL CONSTRUCTION OF THE PROJECT SO AS NOT TO IMPEDE THE PROGRESS OF THE WORK OF OTHERS OR THE CONTRACTOR'S OWN WORK.
- 16. EACH CONTRACTOR SHALL VERIFY THE CONDITION AND COMPLETENESS OF ALL WORK PERFORMED BY OTHERS IN RELATION TO HIS/HER PROJECT WORK RESPONSIBILITIES INCLUDING THE CHECKING OF EXISTING ELEVATIONS OR STRUCTURES PRIOR TO INITIATING CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CITY OF BLOOMINGTON IF ANY SITE CONDITIONS ARE INCOMPLETE, MISSING OR DAMAGED.
- 17. CONTRACTOR SHALL CLEAN THE WORK AREAS AT THE END OF EACH WORKING DAY. ALL MATERIALS, PRODUCTS AND EQUIPMENT SHALL BE STORED IN AN ORGANIZED FASHION. ALL CONSTRUCTION DEBRIS AND REMOVED ITEMS SHALL BE DISPOSED OF LEGALLY OFF-SITE UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- 18. THE PLANS ASSUME THAT THE LAYOUT AND STAKING WILL BE ACCOMPLISHED USING TOTAL STATIONING / DIGITAL METHODS. ANY INFORMATION PROVIDED IS INTENDED TO SUPPORT INFORMATION ALREADY CONTAINED IN CAD FILES USED FOR DOCUMENTING LAYOUT AND STAKING. CAD FILES DELINEATING ALL GRADING AND HARDSCAPE ELEMENTS SHOWN IN THESE PLANS CAN BE PROVIDED TO THE CONTRACTOR UPON REQUEST.
- 19. CONTRACTOR SHALL EMPLOY SKILLED PERSONNEL AND USE EQUIPMENT NECESSARY TO ENSURE THAT ALL WORK IS PROFESSIONALLY AND PROPERLY INSTALLED AND IN FULL COMPLIANCE WITH THE PLANS AND DETAILS.
- 20. THE CONSTRUCTION SITE WITHIN THE LIMIT OF WORK MUST BE FENCED AND SECURED DURING CONSTRUCTION.

NATURAL GAS OR GAS LINE

GENERAL	SITE	ABBREVIATIONS
----------------	------	---------------

AC	ACRE	GA	GAGE
ABC	AGGREGATE BASE COURSE	GAL	GALLON
ADA	AMERICANS WITH	GEN	GENERATOR
	DISABILITIES ACT	GPD	GALLONS PER DAY
AGGR	AGGREGATE	GT	GREASE TRAP
ALT	ALTERNATE	GV	GATE VALVE
APPROX	APPROXIMATE	GUT	GUTTER
_		GUI	GUTTER
ASPH	ASPHALT		
ASSY	ASSEMBLY	HB	HOSE BIBB
		HC	HANDICAP OR
BC	BACK OF CURB		HANDICAPPED
BLDG	BUILDING	HDPE	HIGH DENSITY
BLT	BUILT		POLYETHYLENE
BM	BENCHMARK	HDWL	HEADWALL
BNRY	BOUNDARY	HH	HAND HOLE
ВО	BLOW OFF	HORIZ	HORIZONTAL
		HP	HIGH POINT
C/C	CENTER TO CENTER	HT	HEIGHT
CB	CATCH BASIN	HWY	HIGHWAY
CCTV	CLOSED CIRCUIT	HYD	HYDRANT
	TELEVISION		
CFS	CUBIC FEET PER SECOND	IE	INVERT ELEVATION
CHKV	CHECK VALVE	INCL	INCLUDED
CI	CAST IRON	INFO	INFORMATION
CIR	CIRCULAR	INV	INVERT
CJ	CONSTRUCTION JOINT OR		
	CONTROL JOINT	LAT	LATITUDE
CL	CENTER LINE	LF	LINEAR FEET (FOOT)
CMP	CORRUGATED METAL PIPE	LOC	LOCATION
CMU	CONCRETE MASONRY UNIT	LONG	LONGITUDE OR
CND	CONDUIT		LONGITUDINAL
CO	CLEANOUT	LOS	LINE OF SIGHT
		LP	LOW POINT OR LIGHT POLE
COMM	COMMUNICATION		
CONC	CONCRETE	LT	LEFT
CONST	CONSTRUCT OR		
	CONSTRUCTION	MAX	MAXIMUM
COR	CORNER	MEG	MEET EXISTING GRADE
CTR	CENTER	MEMO	MEMORANDUM
CTRL	CONTROL	MH	MANHOLE
CTV	CABLE TELEVISION	MIN	MINIMUM
CF	CUBIC FEET	MISC	MISCELLANEOUS
CY	CUBIC YARD	MULT	MULTIPLE
CV	CONTROL VALVE	MUTCD	MANUAL ON UNIFORM
			TRAFFIC CONTROL DEVICES
DA	DRAINAGE AREA		
DAT	DATUM	NA	NOT APPLICABLE
DBL	DOUBLE	NIC	NOT IN CONTRACT
		NO	NUMBER
DDCV	DOUBLE DETECTOR CHECK		_
DE 0	VALVE	NRCP	NON-REINFORCED
DEG	DEGREE		CONCRETE PIPE
DEMO	DEMOLITION	NTP	NOTICE TO PROCEED
DEPT	DEPARTMENT	NTS	NOT TO SCALE
DI	DROP INLET		
DIA	DIAMETER	OC	ON CENTER
DIFF	DIFFERENCE OR		ON OLIVIER
DIFF		PAR	PARALLEL
DIM	DIFFERENTIAL	PAVT	PAVEMENT
DIM	DIMENSION		
DIP	DUCTILE IRON PIPE	PB	PULL BOX
DIST	DISTANCE	PC	POINT OF CURVE
DOM	DOMESTIC	PCC	POINT OF COMPOUND
DOT	DEPARTMENT OF		CURVE
	TRANSPORTATION	PCCP	CONCRETE PAVEMENT
DS	DOWNSPOUT	PE	POLYETHYLENE (PLASTIC)
DW	DOMESTIC WATER	PERF	PERFORATED
D 4 A	DOMESTIC WATER		
		PERIM	PERIMETER
EA	EACH	PERM	PERMANENT
EC	EDGE OF CURB	PERP	PERPENDICULAR
EG	EXISTING GRADE	PG	PROFILE GRADE
EJ	EXPANSION JOINT	PH	PHASE
ELEV	ELEVATION	PI	POINT OF INTERSECTION
EP	EDGE OF PAVEMENT	PIV	POST INDICATOR VALVE
	(PAVING)	PL	PROPERTY LINE
FDΔ	ENVIRONMENTAL	PP	POWER POLE OR
EPA	_	ГΓ	
F01/T	PROTECTION AGENCY	חח	POLYPROPYLENE
ESMT	EASEMENT	PR	PROPOSED
EQ	EQUAL	PREV	PREVIOUS
EQL SP	EQUALLY SPACED	PRC	POINT OF REVERSE CURVE
EQUIP	EQUIPMENT	PRKG	PARKING
EQUIV	EQUIVALENT	PROJ	PROJECT
ES	EDGE OF SHOULDER	PROP	PROPERTY
		PRV	PRESSURE RELIEF VALVE
ESMT	EASEMENT FAIR WALL		
EW	END WALL	PSI	POUNDS PER SQUARE INCH
EX	EXISTING	PSL	PIPE SLEEVE
EXP	EXPANSION	PT	POINT OF TANGENCY
		PVC	POLYVINYL CHLORIDE
F/F	FACE TO FACE		(PLASTIC)
FES	FLARED END SECTION		, ,
FFE	FINISH FLOOR ELEVATION	R	RADIUS
FHA	FIRE HYDRANT ASSEMBLY	RC BCB	REINFORCED CONCRETE
FNC	FENCE	RCB	REINFORCED CONCRETE
FOC	FACE OF CURB		BOX
FPM	FEET PER MINUTE	RCP	REINFORCED CONCRETE
FPS	FEET PER SECOND		PIPE
FPW	FIRE PROTECTION WATER	RD	ROAD OR ROOF DRAIN
· ·	SUPPLY	RDC	REDUCER
FSP	FIRE STANDPIPE	REQ	REQUIRE OR REQUIRED
FT	FEET OR FOOT	RFI	REQUEST FOR
			INFORMATION
G	NATURAL GAS OR GAS LINE	ROW	RIGHT OF WAY

	GENE	RAL SITE ABBREV	IATIONS
RR	RAILROAD	TEMP	TEMPORARY
RT	RIGHT	THK	THICKNESS
		TOB	TOP OF BANK
SAN	SANITARY	TOC	TOP OF CURB
SB	SPLASH BLOCK	TOPO	TOPOGRAPHY
SCH	SCHEDULE	TOS	TOE OF SLOPE
SD	STORM DRAIN	TP	TELEPHONE POLE
SDL	SADDLE	TYP	TYPICAL
SECT	SECTION	TW	TOP OF WALL
SEP	SEPARATE		
SF	SQUARE FOOT (FEET)	UD	UNDERDRAIN
SGL	SINGLE	UP	UTILITY POLE
SHLDR	SHOULDER	UTIL	UTILITY
SOV	SHUT OFF VALVE	USGS	U.S. GEOLOGICAL SURVEY
SPEC	SPECIFICATION		
SF	SQUARE FEET	VAR	VARIES
SS	SANITARY SEWER	VB	VALVE BOX
STA	STATION	VC	VERTICAL CURVE
STD	STANDARD	VERT	VERTICAL
STM	STEAM	VIF	VERIFY IN FIELD
SURF	SURFACE	VOL	VOLUME
SURV	SURVEY		
SW	SIDEWALK	W	WATER LINE
SY	SQUARE YARD	WM	WATER METER OR WATER MAIN
		WT	WATER TABLE
Т	TELEPHONE	WTR	WATER
TBM	TEMPORARY BENCHMARK	WW	WASTE WATER
TB-XX	TEST BORING-XX (E.G., TB-01)	WWF	WELDED WIRE FABRIC
TD	TRENCH DRAIN		
TE	TOP ELEVATION	XFMR	TRANSFORMER





10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

WEIHE ENGINEERS INC.

Saint Remy HOA

PROJECT NAME
Saint Remy Spillway
Mitigation

PROJECT LOCATION

3716 E St. Remy Drive
Bloomington, IN
47401

CERTIFIED BY:

WAYNE COUNTY OF THE STATE OF

PE 11700768
STATE OF

WDIANA ENGLISHING

90% Permitting Set

Not For Construction

NO.	REVISION	DATE
<u></u>		
KEYMAP:		

SHEET NAME

GENERAL NOTES

PROJECT NUMBER

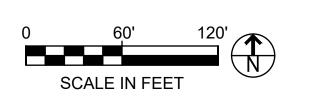
24-053

SHEET NUMBER

ISSUE DATE

11.12.2025

CC.01







WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

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CHILLIAN

OF THE 11700768

STATE OF

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NO. REVISION DATE

ISSUE DATE PROJECT NUMBER 11.12.2025 24-053

SHEET NAME

SITE LAYOUT PLAN AND KEYMAP SHEET NUMBER

CC.02

1 SITE LAYOUT PLAN AND KEYMAP SCALE: 1" = 60'-0"

EXISTING CONDITIONS & DEMOLITION PLAN NOTES

- IN AREAS WHERE PAVING OR CONCRETE SLABS ARE BEING REMOVED AND LAWN OR PLANTING AREAS ARE PROPOSED, CONTRACTOR SHALL EXCAVATE TO SUBGRADE MATERIAL. CONTRACTOR SHALL DISPOSE OF EXCAVATED OF EXISTING CONCRETE AND ASPHALT PAVEMENT INDICATED ON PLANS SHALL INCLUDE ALL AGGREGATE BASE AND SUBGRADE MATERIALS. SAWCUT ALL EXISTING PAVED AREAS TO BE REMOVED. ALL CUTS SHALL BE CLEAN, NEAT AND TRUE TO LINE. WHERE PLANT MATERIAL IS PROPOSED TO REPLACE REMOVED CONCRETE AND ASPHALT, CONTRACTOR SHALL REMOVE ALL NON-ORGANIC OR TOXIC MATTER THAT WOULD INTERFERE WITH PROPOSED PLANT MATERIAL.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL DEBRIS IN A LEGAL MANNER. THE USE OF CHEMICALS IS STRICTLY PROHIBITED.
- ALL UNDERGROUND UTILITIES OR STRUCTURES IN PROPOSED PAVEMENT OR BUILDING AREAS REQUIRING REMOVAL SHALL BE BACKFILLED COMPLETELY WITH APPROVED ENGINEERED GRANULAR MATERIAL SUITABLE TO THE LANDSCAPE DESIGNER/CIVIL ENGINEER
- CATCH BASINS, SEWER INLETS, ETC. ARE TO BE PROTECTED FROM DEBRIS AND SEDIMENTATION DURING DEMOLITION. INSTALL FILTER FABRIC UNDER ANY INLET CASTINGS ON OR OFF SITE THAT RECEIVE STORM WATER FROM THE SITE BEFORE ANY DEMOLITION OR EARTHWORK ACTIVITIES COMMENCE
- IF ANY DISCREPANCIES OCCUR BETWEEN CONSTRUCTION DOCUMENTS AND SITE CONDITION DURING DEMOLITION, CONTACT ENGINEER IMMEDIATELY.
- IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE, VERIFY, AND PROTECT ALL EXISTING UTILITIES WITHIN THE PROJECT AREA.
- ALL DISTURBED AREAS TO RECEIVE GRASS SEED

THE FOLLOWING GUIDELINES FROM INDIANA DEPARTMENT OF NATURAL RESOURCES - DAM SAFETY INSPECTION MANUAL SHOULD BE USED WHEN REMOVING TREES FROM DAMS; THE RECOMMENDED PRACTICES ARE BASED ON THE ZONE WITHIN WHICH THE TREES ARE LOCATED:

ZONE 1:

REMOVE ALL TRESS, STUMPS, ROOTBALLS, AND ROOT SYSTEM; CLEAN ROOTBALL CAVITY; AND BACKFILL WITH PROPERLY PLACED AND COMPACTED SOIL BACKFILL. INSTALL TREE AND WOODY VEGETATION AND WAVE EROSION PROTECTION SYSTEM ON THE UPSTREAM SLOPE FROM ABOUT FOUR FEET BELOW NORMAL POOL ELEVATION TO ABOUT THREE FEET ABOVE NORMAL POOL ELEVATION

ZONE 2:

CUT TREES IN OVERLAP AREA OF ZONE 2 AND ZONE 3 HAVING STUMP TREAT THE STUMP WITH A WATERPROOF SEALANT TO PROLONG STUMP DECAY. COMPLETELY REMOVE TREES HAVING STUMP DIAMETERS OF ABOUT TWELVE INCHES AND GREATER, AND BACKFILL ROOTBALL CAVITY WITH PROPERLY COMPACTED BACKFILL SOIL.

ZONE 3:

CUT TREES HAVING STUMP DIAMETERS OF ABOUT EIGHT INCHES AND LESS LEVEL WITH THE GROUND AND TREAT THE STUMP WITH A WATERPROOF SEALANT TO PROLONG STUMP AND ROOTBALL DECAY. COMPLETELY REMOVE ALL TREES HAVING STUMP DIAMETERS GREATER THAN ABOUT EIGHT INCHES AND BACKFILL THE CLEANED ROOTBALL CAVITY WITH COMPACTED BACKFILL SOIL.

ZONE 4:

CUT ALL TREES HAVING STUMP DIAMETERS OF SIX INCHES OR LESS FLUSH WITH THE GROUND AND TREAT THE STUMP WITH A WATERPROOF SEALANT TO PROLONG STUMP AND ROOTBALL DECAY. REMOVE ALL TREES HAVING STUMP DIAMETERS GREATER THAN ABOUT SIX INCHES, INSTALL SUBDRAIN AND/ OR FILTER SYSTEMS AND BACKFILL WITH PROPERLY COMPACTED SOIL AROUND THE FILTER/ DRAIN SYSTEM.

ZONE 5:

CUT ALL TREES HAVING STUMP DIAMETERS OF ABOUT FOUR INCHES AND SMALLER FLUSH WITH THE GROUND AND TREAT THE STUMP TO PROLONG STUMP AND ROOTBALL DECAY. INSTALL A MAJOR EMBANKMENT TOE DRAIN OR SUBDRAIN SYSTEM TO LOWER THE PHREATIC SURFACE, FILTER, COLLECT, AND DISCHARGE EMBANKMENT SEEPAGE. INCORPORATE MAJOR SUBDRAIN WITH TREE ROOTBALL AND STUMP REMOVAL WHERE POSSIBLE. REMOVE ALL TREES LOCATED BEYOND THE TOE OF THE DOWNSTREAM SLOPE HAVING STUMP DIAMETERS GREATER THAN ABOUT FOUR INCHES INSTALL WEIGHTED FILTERS AND/ DRAIN SYSTEMS IN ROOTBALL CAVITIES WHERE SEEPAGE BOILING AND SOIL PIPING IS LIKELY TO OCCUR

FLOODPLAIN ONSITE:

THE PROJECT IS SUBJECT TO COMPLIANCE WITH FLOODPLAIN REGULATIONS UNDER CHAPTER 20.04 OF THE UNIFIED DEVELOPMENT ORDINANCE AND TITLE 20 OF THE BLOOMINGTON MUNICIPAL CODE.

PORTIONS OF THE PROJECT SITE LIE WITHIN A SPECIAL FLOOD HAZARD AREA (SFHA) AS IDENTIFIED ON THE FLOOD INSURANCE RATE MAP (FIRM) PANEL NO 0163D, EFFECTIVE DATE: DEC, 17,

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B.F.E. = 773.0 TO 785.0

B.F.E.DETERMINED UTILIZING THE FEMA MAP, SEE SHEET CJ.06



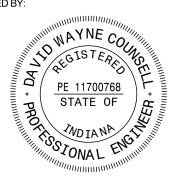
WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA

Saint Remy Spillway Mitigation

PROJECT LOCATION 3716 E St. Remy Drive Bloomington, IN 47401

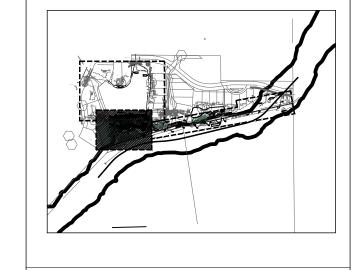
CERTIFIED BY:



90% Permitting Set

Not For Construction

NO		
NO.	REVISION	DATE
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ISSUE DATE 11.12.2025

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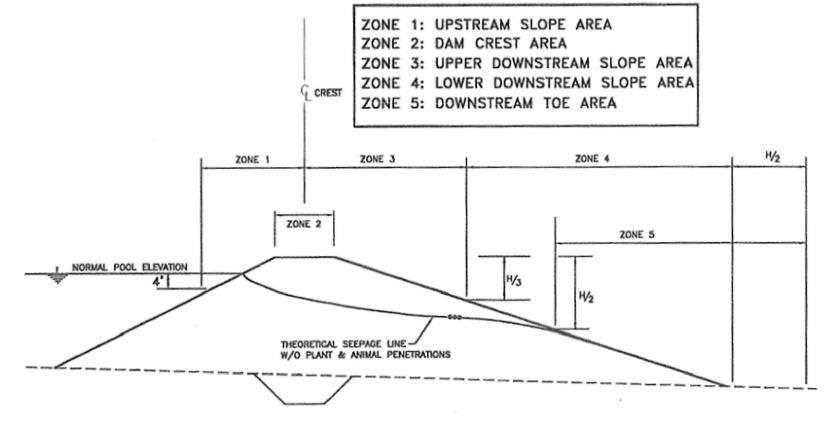
PROJECT NUMBER

SHEET NAME

EXISTING COND. & DEMO PLAN - AREA A SHEET NUMBER

CD.01

- PROJECT LIMITS
- (2) REMOVE EXISTING DAMAGED CONC. SPILLWAY
- (3) REMOVE EXISTING CONC. WALL REMOVE EXISTING RIPRAP, CONCRETE BLOCKS, AND DEBRIS, STORE AND REUSE WHAT IS SALVAGEABLE. DISPOSE OF REMAINDER OFFSITE
- (5) REMOVE EXISTING TREE BASED ON INDIANA DEPARTMENT OF NATURAL RESOURCES - DAM SAFETY INSPECTION MANUAL GUIDANCE (TYP)
- 6 FIELD VERIFY IF PIPE IS ACTIVE AND REPORT TO ENGINEER, REROUTE IF NECESSARY IN COORDINATION WITH ENGINEER
 - (7) PROTECT EXISTING UTILITIES TO REMAIN
 - (8) PROTECT FENCE TO REMAIN
 - (9) REMOVE EXISTING SHRUB
- (10) APPROX. AREA BETWEEN ZONE 1 TO ZONE 5 SEDIMENT REMOVAL AREA WITHIN THE DAM
 - (12) PROTECT EXISTING STONE WALL TO REMAIN
 - (13) REMOVE EXISTING FENCE
 - (14) KEEP SIDEWALK AND CURB IN PLACE DURING CONSTRUCTION. REPLACE AFTER CONSTRUCTION WITH THE ADDITION OF 4" OF NO. 53 STONE BENEATH WALK. SEE DETAILS ON SHEET CS.04



Embankment Sketch Depicting Zones for Tree Removal

INDIANA DEPARTMENT OF NATURAL RESOURCES - DAM SAFETY INSPECTION MANUAL

EXISTING CONDITIONS & DEMOLITION PLAN NOTES

- IN AREAS WHERE PAVING OR CONCRETE SLABS ARE BEING REMOVED AND LAWN OR PLANTING AREAS ARE PROPOSED, CONTRACTOR SHALL EXCAVATE TO SUBGRADE MATERIAL. CONTRACTOR SHALL DISPOSE OF EXCAVATED MATERIAL. CONTRACTOR SHALL DISPOSE OF EXCAVATED MATERIAL OFF-SITE AT APPROVED DISPOSAL SITES ONLY, UNLESS SHOWN OTHERWISE. REMOVAL OF EXISTING CONCRETE AND ASPHALT PAVEMENT INDICATED ON PLANS SHALL INCLUDE ALL AGGREGATE BASE AND SUBGRADE MATERIALS. SAWCUT ALL EXISTING PAVED AREAS TO BE REMOVED. ALL CUTS SHALL BE CLEAN, NEAT AND TRUE TO LINE. WHERE PLANT MATERIAL IS PROPOSED TO REPLACE REMOVED CONCRETE AND ASPHALT, CONTRACTOR SHALL REMOVE ALL NON-ORGANIC OR TOXIC MATTER THAT WOULD INTERFERE WITH PROPOSED PLANT MATERIAL.
- ALL UNDERGROUND UTILITIES OR STRUCTURES IN PROPOSED PAVEMENT OR BUILDING AREAS REQUIRING REMOVAL SHALL BE BACKFILLED COMPLETELY WITH APPROVED ENGINEERED GRANULAR MATERIAL SUITABLE TO THE LANDSCAPE DESIGNER/CIVIL ENGINEER.
- 3. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL DEBRIS IN A LEGAL MANNER.
- CATCH BASINS, SEWER INLETS, ETC. ARE TO BE PROTECTED FROM DEBRIS AND SEDIMENTATION DURING DEMOLITION. INSTALL FILTER FABRIC UNDER ANY INLET CASTINGS ON OR OFF SITE THAT RECEIVE STORM WATER FROM THE SITE BEFORE ANY DEMOLITION OR EARTHWORK ACTIVITIES COMMENCE
- IF ANY DISCREPANCIES OCCUR BETWEEN CONSTRUCTION DOCUMENTS AND SITE CONDITION DURING DEMOLITION, CONTACT ARCHITECT/ENGINEER IMMEDIATELY.
- 6. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE, VERIFY, AND PROTECT ALL EXISTING UTILITIES WITHIN THE PROJECT AREA.
- 7. STORMWATER BMPS MUST BE INSTALLED PRIOR TO ANY DEMO WORK ONSITE.
- ALL DISTURBED AREAS TO RECEIVE GRASS SEED.

EXISTING CONDITIONS & DEMOLITION PLAN LEGEND

■ ■ (1) PROJECT LIMITS

REMOVE EXISTING DAMAGED CONC. SPILLWAY

REMOVE EXISTING CONC. WALL

REMOVE EXISTING RIPRAP, CONCRETE BLOCKS, AND DEBRIS, STORE AND REUSE WHAT IS SALVAGEABLE. DISPOSE OF REMAINDER OFFSITE



REMOVE EXISTING TREE BASED ON INDIANA DEPARTMENT OF NATURAL RESOURCES - DAM SAFETY INSPECTION MANUAL GUIDANCE (TYP)

- $\overline{}$ $^{(6)}$ FIELD VERIFY IF PIPE IS ACTIVE AND REPORT TO ENGINEER, REROUTE IF NECESSARY IN COORDINATION WITH ENGINEER
- (7) PROTECT EXISTING UTILITIES TO REMAIN
- (8) PROTECT FENCE TO REMAIN
- (9) REMOVE EXISTING SHRUB
- (10) APPROX. AREA BETWEEN ZONE 1 TO ZONE 5
- SEDIMENT REMOVAL AREA WITHIN THE DAM
 - PROTECT EXISTING STONE WALL TO REMAIN
 - (13) REMOVE EXISTING FENCE
 - (14) KEEP SIDEWALK AND CURB IN PLACE DURING CONSTRUCTION. REPLACE AFTER CONSTRUCTION WITH THE ADDITION OF 4" OF NO. 53 STONE BENEATH WALK. SEE DETAILS ON SHEET CS.04

FLOODPLAIN ONSITE:

THE PROJECT IS SUBJECT TO COMPLIANCE WITH FLOODPLAIN REGULATIONS UNDER CHAPTER 20.04 OF THE UNIFIED DEVELOPMENT ORDINANCE AND TITLE 20 OF THE BLOOMINGTON MUNICIPAL CODE.

PORTIONS OF THE PROJECT SITE LIE WITHIN A SPECIAL FLOOD HAZARD AREA (SFHA) AS IDENTIFIED ON THE FLOOD INSURANCE RATE MAP (FIRM) PANEL NO 0163D, EFFECTIVE DATE: DEC, 17,

ALL DEVELOPMENT ACTIVITIES WITHIN THE FLOODPLAIN SHALL CONFORM TO CITY OF BLOOMINGTON REQUIREMENTS AND INDIANA DEPARTMENT OF NATURAL RESOURCES (IDNR) FLOODPLAIN PERMITTING AS APPLICABLE.

B.F.E. = 773.0 TO 785.0

PLAN

SCALE IN FEET

B.F.E. DETERMINED UTILIZING THE FEMA MAP, SEE SHEET CJ.06



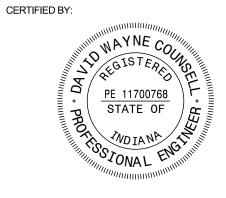


WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA

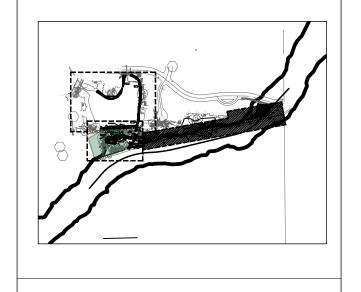
Saint Remy Spillway Mitigation

PROJECT LOCATION 3716 E St. Remy Drive Bloomington, IN 47401



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Not For Construction



ISSUE DATE 11.12.2025

SHEET NAME

EXISTING COND. & DEMO PLAN - AREA B SHEET NUMBER

PROJECT NUMBER

24-053

CD.02

SITE PLAN NOTES

- 1. ALL DIMENSIONS SHOWN ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
- 2. DO NOT SCALE DRAWINGS. UTILIZE DIMENSIONS INDIDICATED ON THE PLANS.
- 3. ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT, FACE OF WALL, OR FACE OF CURB UNLESS OTHERWISE NOTED.
- 4. WALKWAYS AND HARDSCAPE ELEMENTS INDICATED AS CURVILINEAR SHALL HAVE SMOOTH CONTINUOUS CURVES.
- 5. UNLESS INDICATED OTHERWISE, ALL WALKWAYS ABUT AT 90 DEGREE ANGLES.
- 6. ALL CONCRETE CORING SHALL BE PARALLEL, PERPENDICULAR, OR TANGENT TO ADJACENT IMPROVEMENTS UNLESS OTHERWISE NOTED.
- PROVIDE ISOLATION JOINTS WHERE CONCRETE PAVING OR PAVING BASE MEETS A FIXED STRUCTURE (EXISTING AND PROPOSED).
- 8. PROVIDE FLUSH CONDITIONS AT JUNCTURE OF ALL WALKWAYS.
- 9. CONTROL JOINTS SHALL BE EQUALLY DISTRIBUTED ACROSS CONCRETE SURFACE AND SPACED 5 FOOT APART MAX, AS INDIDCATED ON DRAWINGS.
- 10. CONSTRUCTION/MAINTENANCE ACCESS ROAD, SEE SECTION ON SHEET CS.04
- 11. SETTLING POND, SEE SECTION ON THIS SHEET
- 12. LEVEL SPREADER INTEGRATED INTO STONE DRIVE, SEE SECTION ON THIS SHEET
- 13. PRIMARY POND OUTFALL DROP INLET SPILLWAY, SEE DETAILS ON SHEET CS.02
- 14. SECONDARY POND OUTFALL ROCK CHANNEL SPILLWAY, SEE SECTION ON SHEET CG.01
- 15. PROTECT, SUPPORT, AND BURY EXISTING SANITARY PIPE TO REMAIN
- 16. CONTROL JOINTS SHALL BE EQUALLY DISTRIBUTED ACROSS CONCRETE SURFACE AND SPACED 5 FOOT APART MAX, AS INDICATED ON DRAWINGS.

FLOODPLAIN ONSITE:

THE PROJECT IS SUBJECT TO COMPLIANCE WITH FLOODPLAIN REGULATIONS UNDER CHAPTER 20.04 OF THE UNIFIED DEVELOPMENT ORDINANCE AND TITLE 20 OF THE BLOOMINGTON MUNICIPAL CODE.

PORTIONS OF THE PROJECT SITE LIE WITHIN A SPECIAL FLOOD HAZARD AREA (SFHA) AS IDENTIFIED ON THE FLOOD INSURANCE RATE MAP (FIRM) PANEL NO 0163D, EFFECTIVE DATE: DEC, 17, 2010

ALL DEVELOPMENT ACTIVITIES WITHIN THE FLOODPLAIN SHALL CONFORM TO CITY OF BLOOMINGTON REQUIREMENTS AND INDIANA DEPARTMENT OF NATURAL RESOURCES (IDNR) FLOODPLAIN PERMITTING AS APPLICABLE.

B.F.E. = 773.0 TO 785.0

B.F.E.DETERMINED UTILIZING THE FEMA MAP, SEE SHEET CJ.06



WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA

Saint Remy Spillway
Mitigation

PROJECT LOCATION

3716 E St. Remy Drive
Bloomington, IN
47401

CERTIFIED BY

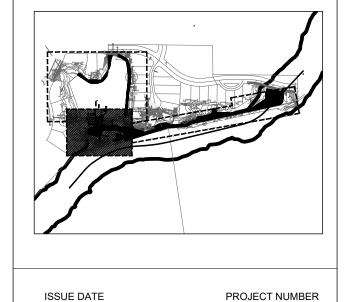


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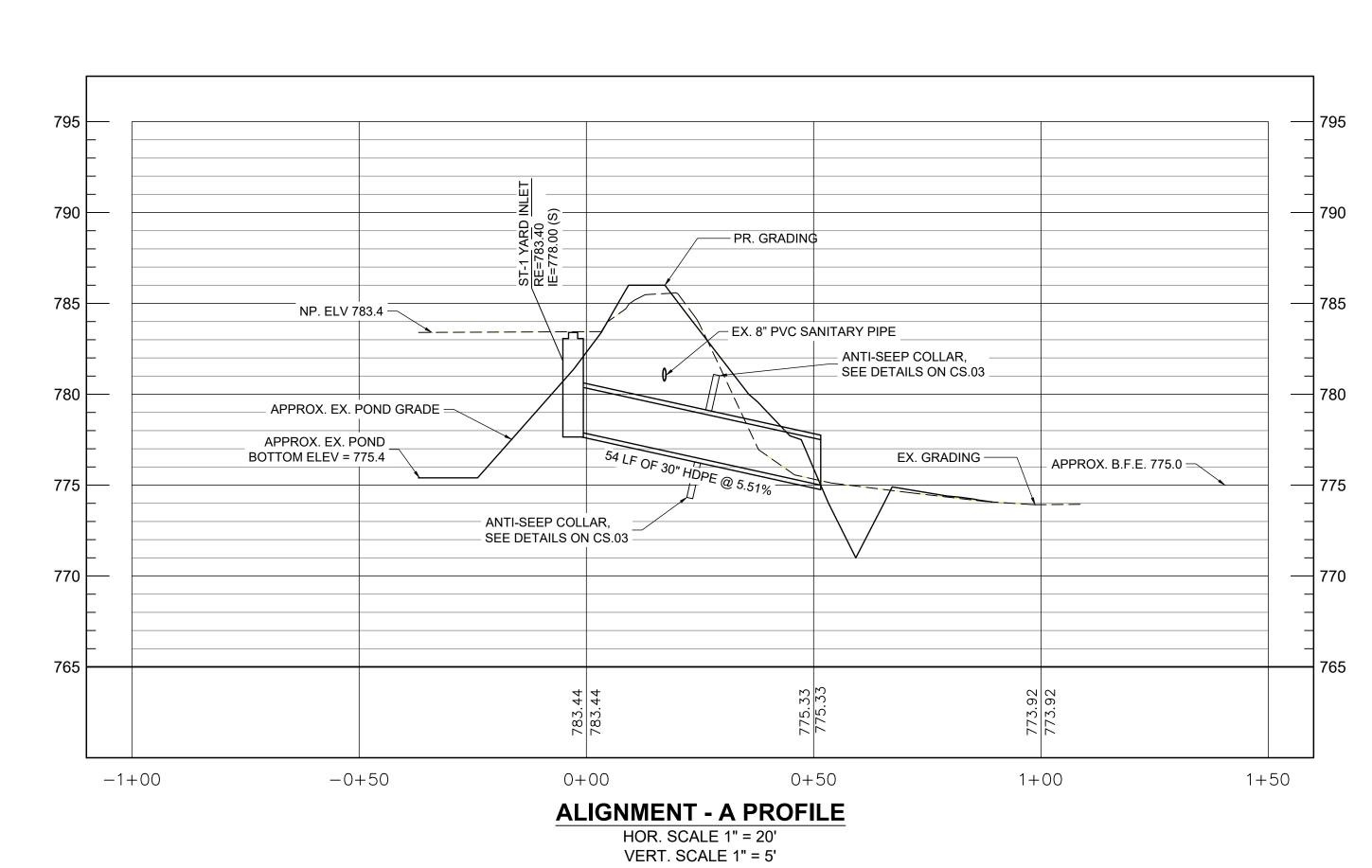
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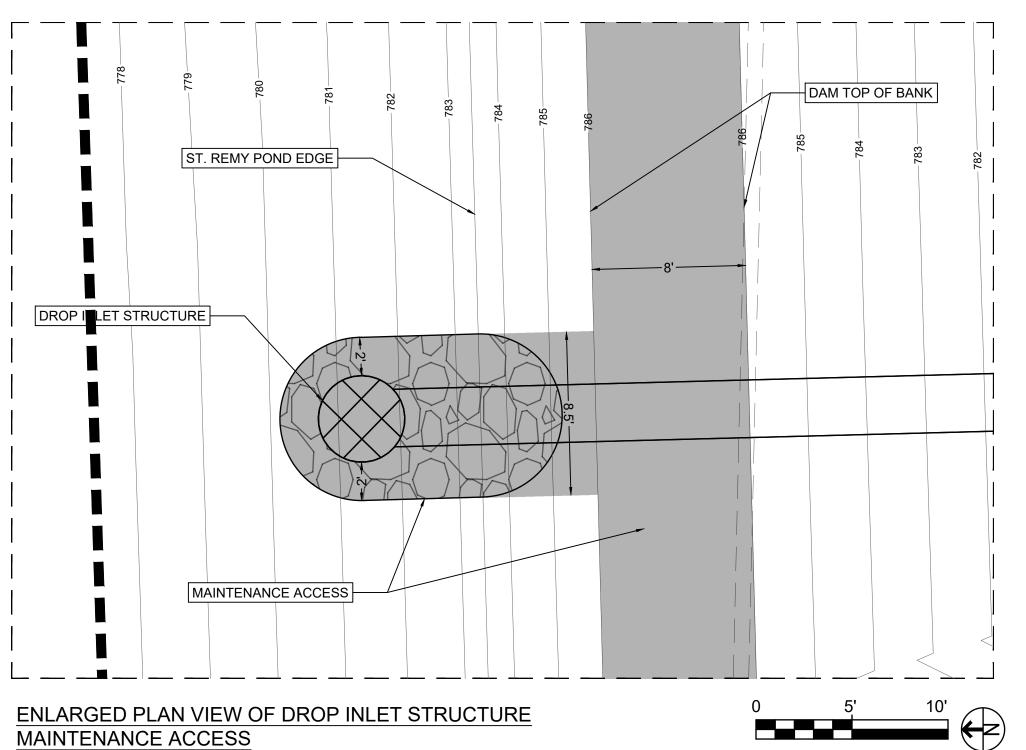
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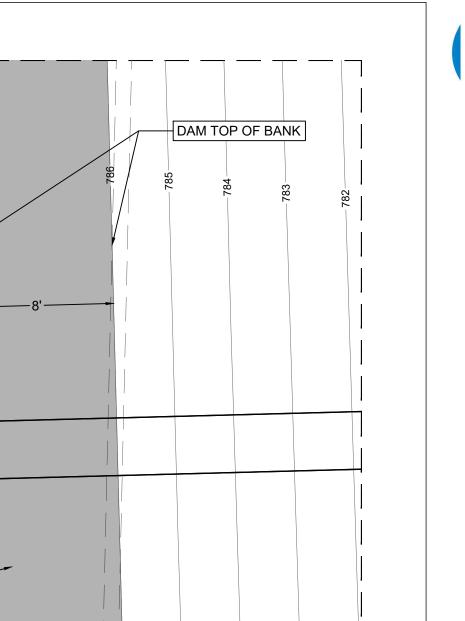
SITE AND UTILITY PLAN -AREA A

CS.01

Know what's below.
811 before you dig.







WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA

Mitigation

3716 E St. Remy Drive Bloomington, IN 47401

PROJECT LOCATION

PROJECT NAME
Saint Remy Spillway

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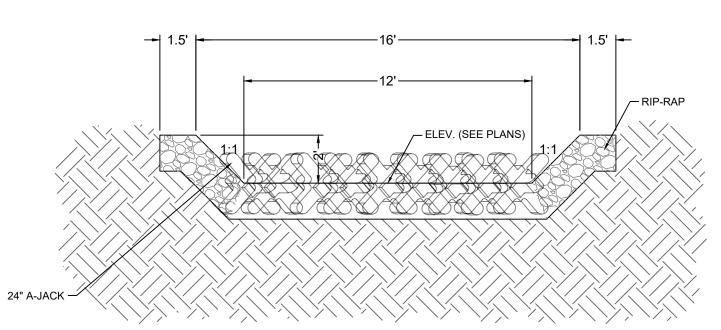
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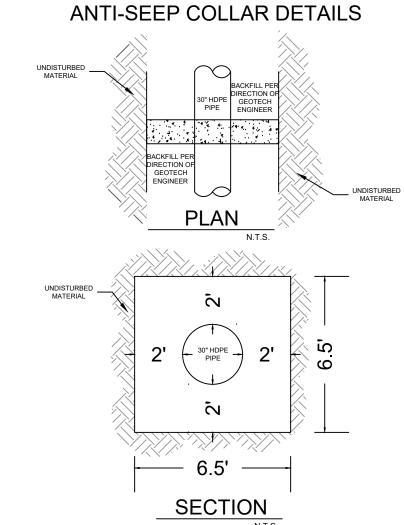
DROP STRUCTURE PLAN & PROFILE SHEET NUMBER

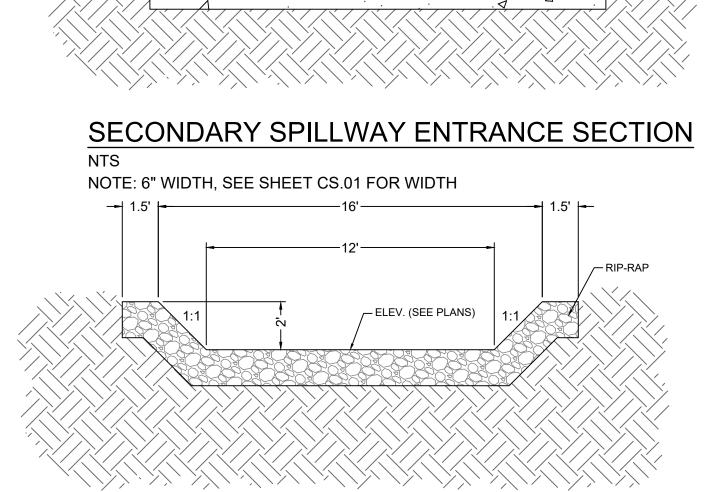




SECONDARY SPILLWAY A-JACK 24" SECTION

NOTE: LONGITUDINAL SLOPES LISTED ON SHEET CS.02





1) SUBGRADE TO BE A FREE DRAINING MATERIAL COMPACTED TO 90% OF MAXIMUM AS

2) CONCRETE TO BE 4000 PSI @ 28 DAYS WITH 5 TO 7% AIR ENTRAINMENT, TYPE B.

LID & FRAME SUPPLIED BY ADS FOR LOADS NOT TO EXCEED HL-93;

SEE STD-414 FOR FURTHER DETAILS OF FRAME & COVER.

ALTERNATE LID & FRAME BY OTHERS AS ALLOWED PER DESIGN

ENGINEER. FRAME TO BE SUPPORTED BY CONCRETE COLLAR.

MIN. AS SPECIFIED

BY OTHERS, BUT

NOT LESS THAN

18" (450mm)

12" - 36" HP PIPE STUB -

& CONNECTION TYPE

48" ADS TRIPLE WALL

BEDDING THICKNESS MUST BE SPECIFIED BY

DESIGN ENGINEER TO BE ADEQUATE SUPPORT

FOR LOADING AND SOIL CONDITIONS, BUT NOT

LESS THAN 6" (150MM)

POLYPROPYLENE RISER

4" - 10" INSERTA-TEE (NOT SHOWN)

NOPPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND

NOT SPECIFIC FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENCEPS RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEETS OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL

(SEE PLANS)

SPECIFY DIAMETER, LOCATION

CONSTRUCTING FACILITIES FOR HANDICAP ACCESSIBILITY. MINIMUM RAMP WIDTH MIN. = 3'

DETERMINED BY ASTM D-698.

12" MIN. TO

TOP OF PIPE

(1) 10' MAXIMUM

5) WIDTH SHALL MATCH APPROACH WALK WIDTH.

CONCRETE SIDEWALK

ASPHALT OR TURF

SECONDARY SPILLWAY RIPRAP SECTION

NOTE: LONGITUDINAL SLOPES LISTED ON SHEET CS.02

EXPANSION AND SCORED JOINT DETAIL

444888888888444

2. ONE-HALF INCH BITUMINOUS JOINT FILLER SHALL BE INSTALLED AT EXPANSION JOINT LOCATIONS AND SHALL EXTEND THE FULL DEPTH OF THE CONCRETE. 1" DEEP CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF APPROXIMATELY 15'

[4572mm] OR AT A SPACING THAT MATCHES THE ADJACENT CURB. FORMED CONTRACTION JOINTS SHALL BE FINISHED WITH A TOOL HAVING A 1/4" [6mm] 3) CONTRACTOR TO COMPLY WITH AMERICANS WITH DISABILITIES ACT REQUIREMENTS WHEN

4) APPLY IPATOP—ARC ABRASION RESISTANT COATING TO ALL SLOPED SURFACES WITH ADA 5. YELLOW COLOR ADDED. INSTALL PER MANUFACTURERS REQUIREMENTS. SCORED JOINTS SHALL BE 1/4" [6mm] DEEP AND PLACED AT THE SPACING INDICATED FOR THE WIDTH OF SIDEWALK OR MATCH SCORED JOINTS OF ADJACENT CURB.

> 6. CONCRETE SHALL BE FINISHED BY MEANS OF A FLOAT, STEEL TROWELLED AND BROOMED WITH A FINE BRUSH IN A TRANSVERSE DIRECTION.

> > CONCRETE SLAB DIMENSIONS ARE FOR GUIDELINE PURPOSES ONLY.

MIN. AS SPECIFIED BY OTHERS,

BUT NOT LESS THAN 8" (200mm)

GRADE 70-50-05.

GRADE 70-50-05.

7009-110-026

CLASS I BACKFILL & BEDDING, PER ASTM D2321, MATERIAL SHALL BE WELL PLACED UNIFORMILY AROUND STRUCTURE AND INLET CONNECTIONS

AND COMPACTED IN 8" MAX LIFTS

VARIES.

6" (150MM) MINIMUM

" POLYPROPYLENE BASIN W/ FLAT

FRAME TOP INSTALLATION (48")

RAWIMG NUMBER STD-403

ACCORDING TO PLAN DETAILS.

1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536

3 - 48" POLYPROPYLENE BASINS ARE TO BE CUSTOM MANUFACTURED

DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO.

4640 TRUEMAN BLVD

HILLIARD, OH 43026

4 - ADAPTERS CAN BE MOUNTED ON ANGLES 0° TO 359°. TO

5 - AVOID CONSTRUCTION LOADING ON REDUCING PLATE AND

STRUCTURE PRIOR TO CONCRETE COLLAR INSTALLATION.

CONSIDERATION LOCAL SOIL CONDITIONS, TRAFFIC LOADING, & OTHER

ACTUAL CONCRETE SLAB MUST BE DESIGNED TAKING INTO

APPLICABLE DESIGN FACTORS.

7. 1/4" DEEP SCORED JOINTS (TYP) SPACED AT 6' [1829mm] OR EQUAL TO SIDEWALK WIDTH.

FRAME AND GRATE

(BY OTHERS). RISER OD

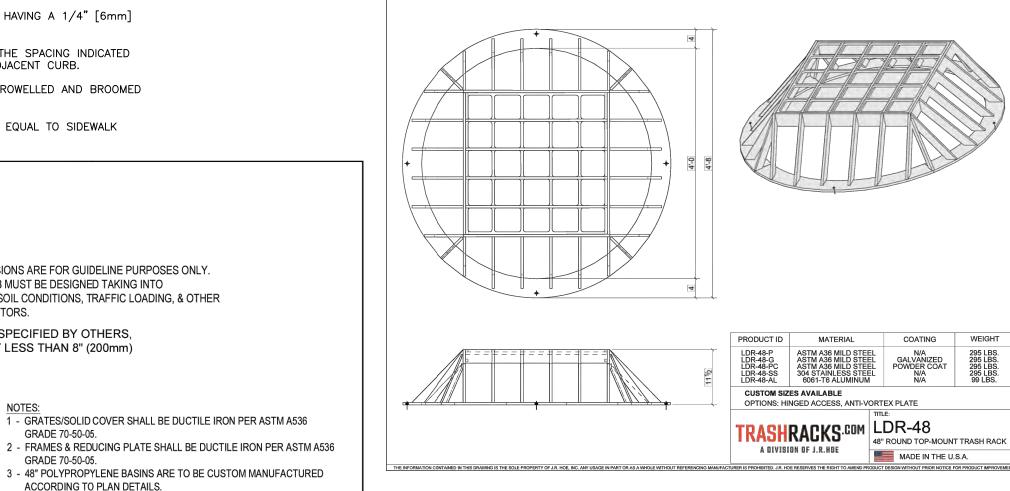
SHALL BE 32.0" (813mm)

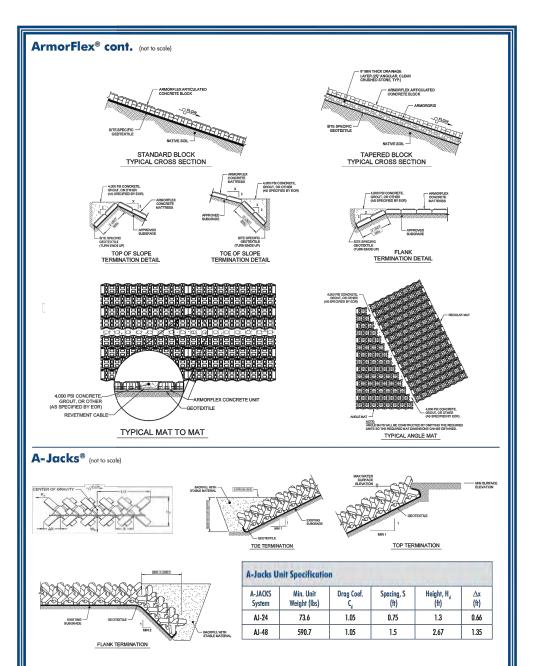
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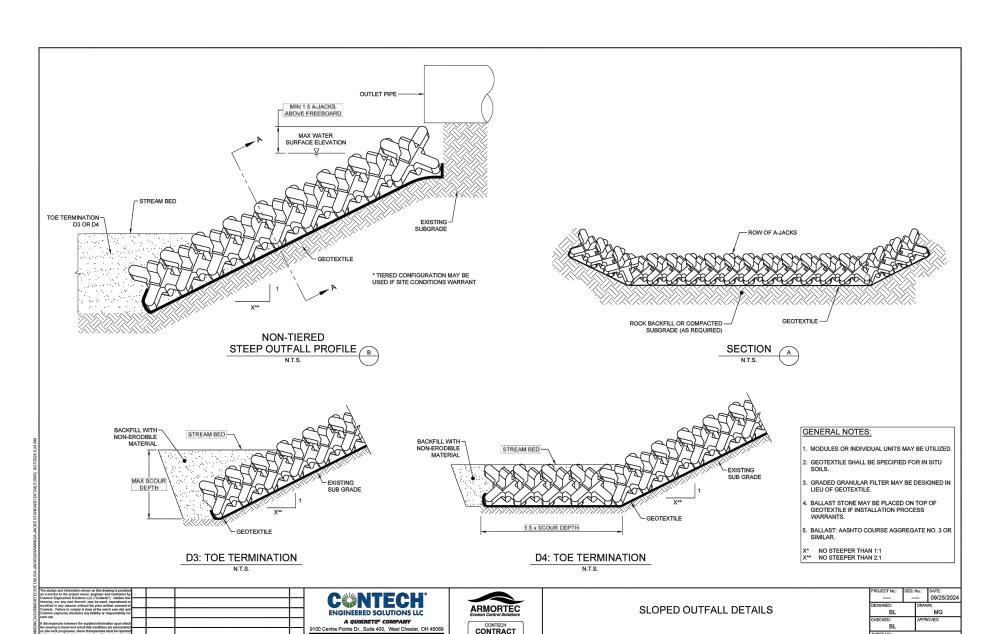
RECOMMENDED

WIDTH OF BACKFILL

— 18" MINIMUM











10505 N COLLEGE AVE

INDIANAPOLIS, IN 46280

Saint Remy HOA

Saint Remy Spillway

PROJECT LOCATION 3716 E St. Remy Drive Bloomington, IN

47401

Mitigation

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NO.	REVISION	DATE
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ISSUE DATE 11.12.2025

SITE & UTILITY DETAILS

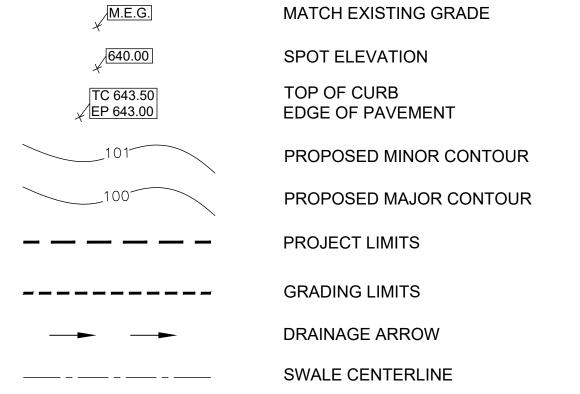
PROJECT NUMBER

24-053

SHEET NUMBER

CS.03

- 1. CONTRACTOR SHALL ENSURE THAT POSITIVE DRAINAGE IN IMPROVED AREAS IS ACHIEVED. CONTRACTOR TO TEST AND CORRECT ANY "BIRD BATH"
- 2. ALL SLOPES SHALL BE 3:1 OR FLATTER, UNLESS OTHERWISE SHOWN.
- 3. ALL GRADES AT THE PROJECT BOUNDARY OR PROPERTY LINE SHALL MEET
- 4. BUILDING PAD AREAS AND PAVED AREAS DESIGNATED FOR FILL SHALL BE CONSTRUCTED OF SUITABLE FILL MATERIAL AND COMPACTED PER SPECIFICATIONS. ALL FILL AREAS ARE TO BE STRIPPED OF TOPSOIL PRIOR
- 5. ANY EXCESS SOIL MATERIAL SHALL BE EXPORTED FROM THE SITE AFTER
- 6. CONTOURS ARE SHOWN AS A REFERENCE TO MEET JURISDICTIONAL REQUIREMENTS. CONTRACTOR SHOULD GRADE SITE PER THE PROPOSED
- 7. CONTRACTOR SHALL REPLACE ANY TREES THAT ARE DAMAGED OR KILLED DUE TO CONSTRUCTION ACTIVITIES AND THAT HAD PROTECTION FENCING

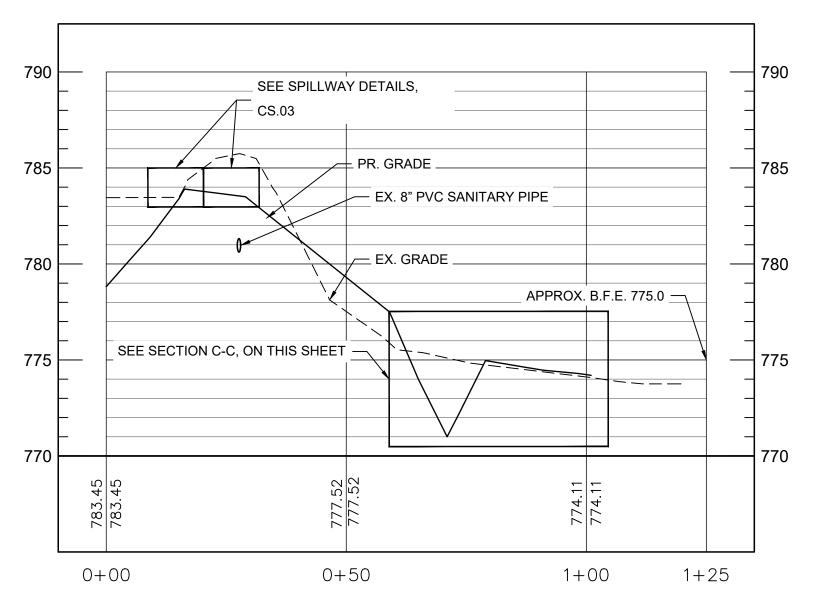


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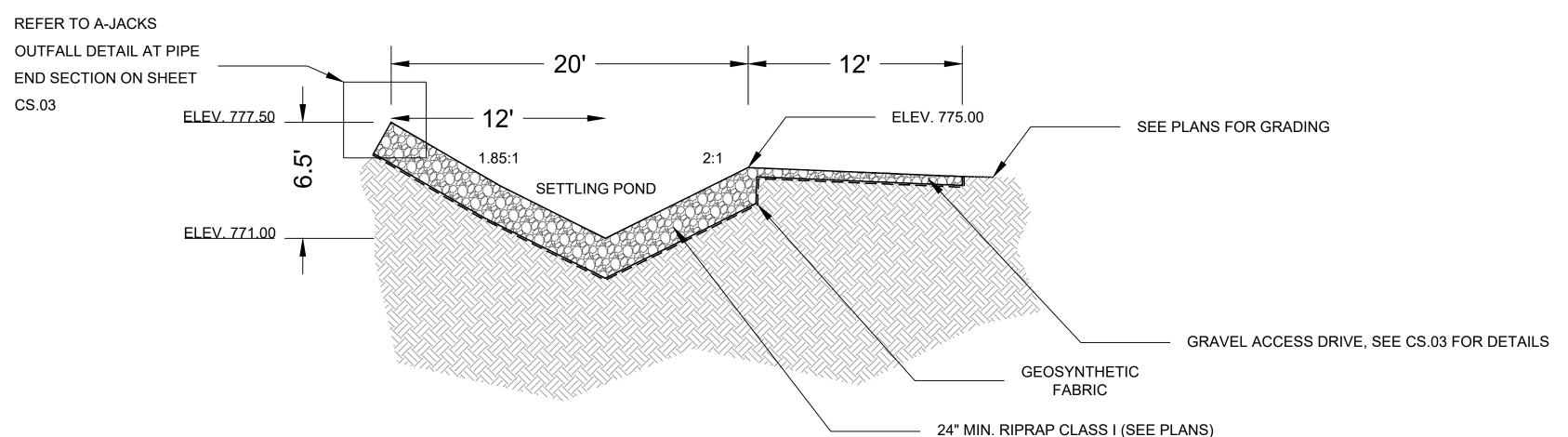
PORTIONS OF THE PROJECT SITE LIE WITHIN A SPECIAL FLOOD HAZARD AREA (SFHA) AS IDENTIFIED ON THE FLOOD INSURANCE RATE MAP (FIRM) PANEL NO 0163D, EFFECTIVE DATE: DEC, 17,

ALL DEVELOPMENT ACTIVITIES WITHIN THE FLOODPLAIN SHALL CONFORM TO CITY OF BLOOMINGTON REQUIREMENTS AND INDIANA DEPARTMENT OF NATURAL RESOURCES (IDNR)

B.F.E. DETERMINED UTILIZING THE FEMA MAP, SEE SHEET CJ.06



ALIGNMENT - B PROFILE HOR. SCALE 1" = 20' VERT. SCALE 1" = 5'



SECTION C-C: SETTLING POND NTS





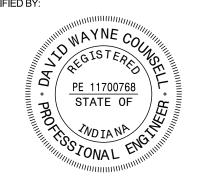
WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA

Saint Remy Spillway Mitigation

PROJECT LOCATION 3716 E St. Remy Drive Bloomington, IN 47401

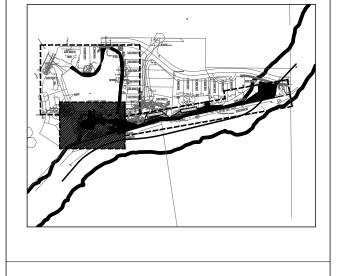
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NO.	REVISION	DATE



ISSUE DATE PROJECT NUMBER 11.12.2025

SHEET NAME

GRADING PLAN & SECTIONS - AREA A SHEET NUMBER

24-053

CG.01

GRADING PLAN NOTES

- 1. CONTRACTOR SHALL ENSURE THAT POSITIVE DRAINAGE IN IMPROVED AREAS IS ACHIEVED. CONTRACTOR TO TEST AND CORRECT ANY "BIRD BATH" CONDITIONS.
- 2. ALL SLOPES SHALL BE 3:1 OR FLATTER, UNLESS OTHERWISE SHOWN.
- 3. ALL GRADES AT THE PROJECT BOUNDARY OR PROPERTY LINE SHALL MEET EXISTING GRADES.
- 4. BUILDING PAD AREAS AND PAVED AREAS DESIGNATED FOR FILL SHALL BE CONSTRUCTED OF SUITABLE FILL MATERIAL AND COMPACTED PER SPECIFICATIONS. ALL FILL AREAS ARE TO BE STRIPPED OF TOPSOIL PRIOR TO PLACEMENT OF FILL.
- 5. ANY EXCESS SOIL MATERIAL SHALL BE EXPORTED FROM THE SITE AFTER CONSTRUCTION IS COMPLETE.
- 6. CONTOURS ARE SHOWN AS A REFERENCE TO MEET JURISDICTIONAL REQUIREMENTS. CONTRACTOR SHOULD GRADE SITE PER THE PROPOSED SPOT GRADE ELEVATIONS.
- 7. CONTRACTOR SHALL REPLACE ANY TREES THAT ARE DAMAGED OR KILLED DUE TO CONSTRUCTION ACTIVITIES AND THAT HAD PROTECTION FENCING LOCATED LESS THAN 3 FEET FROM THE DRIPLINE.

SWALE CENTERLINE

GRADING LEGEND

SCALE IN FEET

MATCH EXISTING GRADE

SPOT ELEVATION

TOP OF CURB
EDGE OF PAVEMENT

PROPOSED MINOR CONTOUR

PROPOSED MAJOR CONTOUR

PROJECT LIMITS

GRADING LIMITS

DRAINAGE ARROW

GRADING IN THIS AREA SHALL BE ACCOMPLISHED WITH CARE TO PROTECT EXISTING TREES. FOR LIMITED CUT USE HAND EQUIPMENT OR AIRSPADING ONLY, USE OF POWER EQUIPMENT IS PROHIBITED. SELECTIVE ROOT PRUNING MAY BE REQUIRED, AND SHALL BE DONE WITH CARE TO ENSURE THE BEST CHANCE OF TREE SURVIVAL.



WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA

Saint Remy Spillway
Mitigation

PROJECT LOCATION

3716 E St. Remy Drive
Bloomington, IN
47401

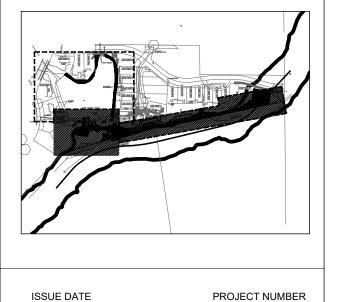


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KEYMAP



ISSUE DATE 11.12.2025

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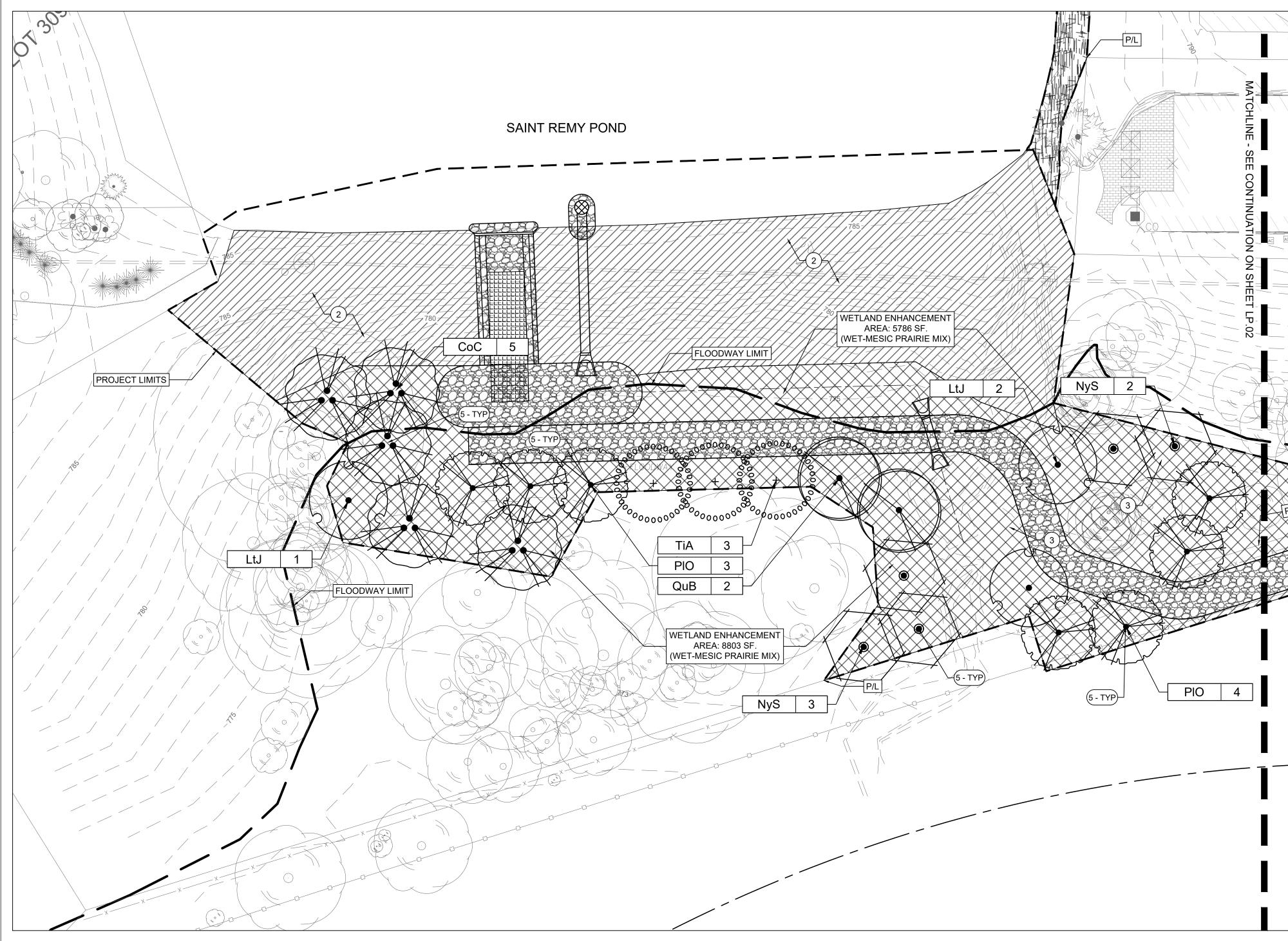
24-053

SHEET NAME

GRADING PLAN & SECTIONS - AREA B

CG.02





PLANTING PLAN - AREA A		0 20	
SCALE: 1" = 20'-0"	PLAN		
		SCALE I	۱F

GENERAL PLANTING NOTES

- ANY CHANGES TO THE LANDSCAPE PLAN SHOULD BE REVIEWED AND APPROVED BY CITY OF BLOOMINGTON PLANNING AND
 TRANSPORTATION PRIOR TO PLANTING. NO SUBSTITUTIONS AS TO TYPE, SIZE, OR SPACING OF PLANT MATERIALS SPECIFIED
 ON THIS PLAN MAY BE MADE WITHOUT CITY OF BLOOMINGTON PLANNING AND TRANSPORTATION APPROVAL.
 VERIFY THAT ALL PLANTING PRODUCTS, PLANT MATERIAL, AND PLANT QUANTITIES DELIVERED TO THE SITE MATCH WHAT IS
- THE CLIENT BEFORE, DURING AND AFTER INSTALLATION.

 3. PROTECT ALL PLANT MATERIAL DURING DELIVERY TO PREVENT DAMAGE TO ROOT BALLS, TRUNKS, BRANCHES AND THE DESICCATION OF LEAVES. PROTECT ALL PLANT MATERIAL DURING SHIPPING WITH SHADE CLOTH OR SHIP WITH ENCLOSED TRANSPORT. MAINTAIN PROTECTIONS AND HEALTH OF PLANT MATERIAL STORED ON SITE. HANDLE ALL TREES WITH NYLON STRAPS. NO CHAINS OR CABLES WILL BE ALLOWED. DAMAGED PLANTS WILL BE REJECTED AND REMOVED IMMEDIATELY FROM

INDICATED ON THE PLANS AND SPECIFICATIONS. ALL PLANT MATERIAL DELIVERED TO THE SITE IS SUBJECT TO THE REVIEW OF

- THE SITE.

 ALL PLANT MATERIAL SHALL BE NURSERY GROWN, WELL-FORMED, TRUE TO SPECIES, HARDENED OFF WITH VIGOROUS ROOT SYSTEMS, FULL CROWN AND CANOPIES, FREE FROM DISEASE, PESTS AND INSECTS, AND DEFECTS SUCH AS KNOTS, SUN SCALD, WINDBURN, LEAF DIS-COLORATION, IRREGULAR BRANCHING OR INJURIES, AND SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.
- 5. ALL PLANT MATERIALS, INCLUDING RELOCATED PLANT MATERIAL, SHALL BE PLANTED IN A PROFESSIONAL MANNER TYPICAL TO THE INDUSTRY STANDARDS OF THE AREA TO ASSURE COMPLETE SURVIVABILITY OF ALL INSTALLED PLANT MATERIALS AS WELL AS TO PROVIDE AN AESTHETICALLY APPROVED PROJECT. CONTRACTOR SHALL REFER TO THE PLANTING DETAILS FOR MINIMUM SIZE AND WIDTH OF PLANTING PITS AND BEDS, GUYING AND STAKING, MULCHING, AND OTHER PLANTING
- REQUIREMENTS.

 6. ALL PLANTING AREAS SHALL BE WEED FREE PRIOR TO PLANTING INSTALLATION.
- 7. REMOVE ALL PLANTING AND LANDSCAPE DEBRIS FROM THE PROJECT SITE AND SWEEP AND WASH CLEAN ALL PAVED AND FINISHED SURFACES AFFECTED BY THE LANDSCAPE INSTALLATION.
- 8. CONTRACTOR SHALL REPLACE ANY TREES THAT ARE DAMAGED OR KILLED DUE TO CONSTRUCTION ACTIVITIES AND THAT HAD PROTECTION FENCING LOCATED LESS THAN 3 FEET FROM THE DRIPLINE.
- 9. SEE ADDITIONAL NOTES ON LP.03 FOR LANDSCAPE INSTALLATION AND PERFORMANCE STANDARDS AND PERMANENT AND NATIVE SEEDING SPECIFICATIONS
- ER PLANTING

 LEAN ALL PAVED AND

BOTANICAL NAME			COMMON	NAME		OZ./ACRE		
PERMANENT GRASSES	S/SEDGES/RUSH	IES:						
BOLBOSCHOENUS FLUVIAT	TILIS		RIVER BULR	USH		1.00		
CAREX CRISTATELLA			CRESTED O	VAL SEDGE		0.50		
CAREX LURIDA			BOTTLEBRU	SH SEDGE		3.00		
CAREX VULPINOIDEA			BROWN FOX	SEDGE		2.00		
ELYMUS VIRGINICUS			VIRGINIA WI	LD RYE		24.00		
GLYCERIA STRIATA			FOWL MANN	A GRASS		1.00		
JUNCUS EFFUSUS			COMMON RU	JSH		1.00		
LEERSIA ORYZOIDES			RICE CUT G	RASS		1.00		
PANICUM VIRGATUM			SWITCH GRA	ASS		2.00		
SCHOENOPLECTUS TABER	NAEMONTANI		GREAT BULF	RUSH		3.00		
SCIRPUS ATROVIRENS			DARK GREE	N RUSH		2.00		
SCIRPUS CYPERINUS			WOOL GRAS	SS		1.00		
				ТОТ	AL	41.50		
TEMPORARY COVER:								
AVENA SATIVA			COMMON OA	AT		360.00		
LOLIUM MULTIFLORUM			ANNUAL RY	≣		100.00		
				ТОТ	AL	460.00		
FORBES & SHRUBS:					+			
ALISMA SUCORDATUM			COMMON WA	ATER PLANTAIN		2.50		
ASCLEPIAS INCARNATA			SWAMP MILE	KWEED		2.00		
BIDENS CEMUA			NODDING BU	JR MARIGOLD		2.00		
EUPATORIUM PERFOLIATU	M		COMMON BO	DNESET		1.00		
HELENIUM AUTUMNALE			SNEEZEWEE	ED		2.00		
IRIS VIRGINICA V. SHREVEI	A V. SHREVEI		BLUE FLAG			4.00		
LYCOPUS AMERICANUS	RICANUS		COMMON WA	ATER HOREHOUND		0.50		
MIMULUS RINGENS			MONKEY FLOWER			1.00		
PENTHORUM SEDOIDES		DITCH STONECROP			0.50			
PERSICARIA VIRGINIANA			VIRGINIA KNOTWEED			2.00		
RUDBECKIA SUBTOMENTO	SA		SWEET BLAC	CK-EYED SUSAN		1.00		
RUDBECKIA TRILOBA			BROWN-EYED SUSAN			1.50		
SAGITTARIA LATIFOLIA			COMMON ARROWHEAD		COMMON ARROWHEAD			1.00
SENNA HEBECARPA			WILD SENNA		WILD SENNA			2.00
SYMPHYOTRICHUM LANCE	MPHYOTRICHUM LANCEOLATUM PANICLED ASTER			0.50				
SYMPHYOTRICHUM NOVAE	SYMPHYOTRICHUM NOVAE-ANGLIAE NEW ENGLAND ASTER			0.50				
THALICTRUM DASYCARPUN	М		PURPLE MEA	ADOW RUE		2.00		
				ТОТ	AL	26.00		
	MIX	X STA	TISTICS					
NATIVE COMPONENT	PLS lbs./ACRE	PLS SI	EEDS/ACRE	PLS SEEDS/SQ FT.	% O	F NATIVE MIX		
		+		1	+-			

WET-MESIC PRAIRIE MIX

	MIX	(STATISTICS		
NATIVE COMPONENT	PLS lbs./ACRE	PLS SEEDS/ACRE	PLS SEEDS/SQ FT.	% OF NATIVE MIX
FORBS	1.63	1,334,949	30.65	32.19%
GRASSES	2.59	2,812,650	64.57	67.81%
TOTAL NATIVES	4.22	4,147,599	95.22	100%
COVER	28.75	4,343,800	99.72	
TOTALS	32.97	8,491,399	194.94	

NO	-MOW GRASS MIX					
BOTANICAL NAME COMMON NAME OZ./ACRE						
NOTES:						
	RY NEW - CROP COMPOSED OF VARIETIES, MI IUM PERCENTAGES OF PURITY AND AS SPECIF					
PERMANENT COVER:						
FESTUCA COMMUTATE	LONGFELLOW II CHEWINGS FESCUE	25.00%				
FESTUCA OVINA	SHEEPS FESCUE	25.00%				
FESTUCA BREVIPILA	CHARIOT HARD FESCUE	13.00%				
FESTUCA RUBRA	SHORELINE SLENDER CREEPING RED FESCUE	12.00%				
FESTUCA RUBRA SUBSPECIES RUBRA	SR 5250 CREEPING RED FESCUE	13.00%				
FESTUCA BREVIPILA	GOTHAM HARD FESCUE	12.00%				
	SEEDING RATE FOR MIX:	250 LBS/ACRE				
	NI OVALAMA INITENIANIOE A DE A O OLIOUI A O DOLIOUI	O OD MATNE				

FINE FESCUE LINKS IS DESIGNED FOR LOW MAINTENANCE AREAS SUCH AS ROUGHS OR NATIVE AREAS ON GOLF COURSES, ORCHARDS, ROADSIDES AND SLOPES. FINE FESCUE LINKS REQUIRES MINIMAL FERTILIZATION AND IS ATTRACTIVE IN AN UN-MOWED STATE BECAUSE OF ITS VERY FINE TEXTURE AND LOW MATURE PLANT HEIGHT. MOWING IS NECESSARY ONCE A YEAR TO REMOVE SEED HEADS. FINE FESCUE LINKS CAN BE GROWN IN SUN OR SHADE AND HAS EXCELLENT WINTER HARDINESS. ALL VARIETIES USED HAVE DARK GREEN COLOR AND IMPROVED DISEASE RESISTANCE AS WELL AS ENDOPHYTE CONTENT WHICH AIDS IN STRESS TOLERANCE AND INSECT RESISTANCE.

			PLANT SCHEDULE						
	PLAN KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	B&B	CONT.	MATURE SIZE	SPECIAL INSTRUCTIONS
		CANOPY DECIDUOUS TREES							
Ly	CoC	CELTIS OCCIDENTALIS 'CHICAGOLAND'	CHICAGOLAND COMMON HACKBERRY	2" cal.	8	Х		55'T x 50'W	
لمح في الم	LtJ	LIRIODENDRON TULIPIFERA 'JFS-OZ'	EMERALD CITY TULIP TREE	2" cal.	8	Х		55'T x 25'W	
	NyS	NYSSA SYLVATICA	BLACK GUM	2" cal.	8	Х		50'T x 30'W	
	PIO	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2" cal.	8	Х		75'T x 75'W	
	QuB	QUERCUS BICOLOR	SWAMP WHITE OAK	2" cal.	8	Х		55'T x 55'W	
+	TiA	TILIA AMERICANA	AMERICAN LINDEN	2" cal.	7	Х		60'T x 45'W	

16,241 SF

17,724 SF

17,312 SF

47 TOTAL

LANDSCAPE PLAN

NOTES

GtS 3

PLANTING PLAN KEYNOTES & LEGEND

NO-MOW GRASS MIX

WET-MESIC PRAIRIE MIX

MESIC POLLINATOR MIX

NEW TREE, 2" MIN CAL.

TURF GRASS, SEE EROSION CONTROL PLANS FOR FULL EXTENTS





WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA

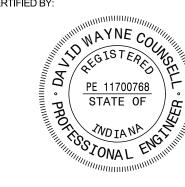
Saint Remy Spillway Mitigation

PROJECT LOCATION

3716 E St. Remy Drive
Bloomington, IN

47401

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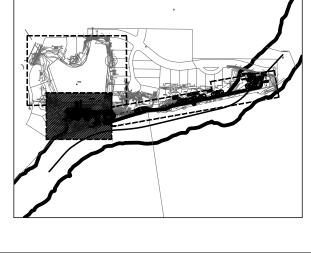


90% Permitting Set

Not For Construct

NO.	REVISION	DATE

KEYMAP:



ISSUE DATE 11.12.2025

SHEET NAME

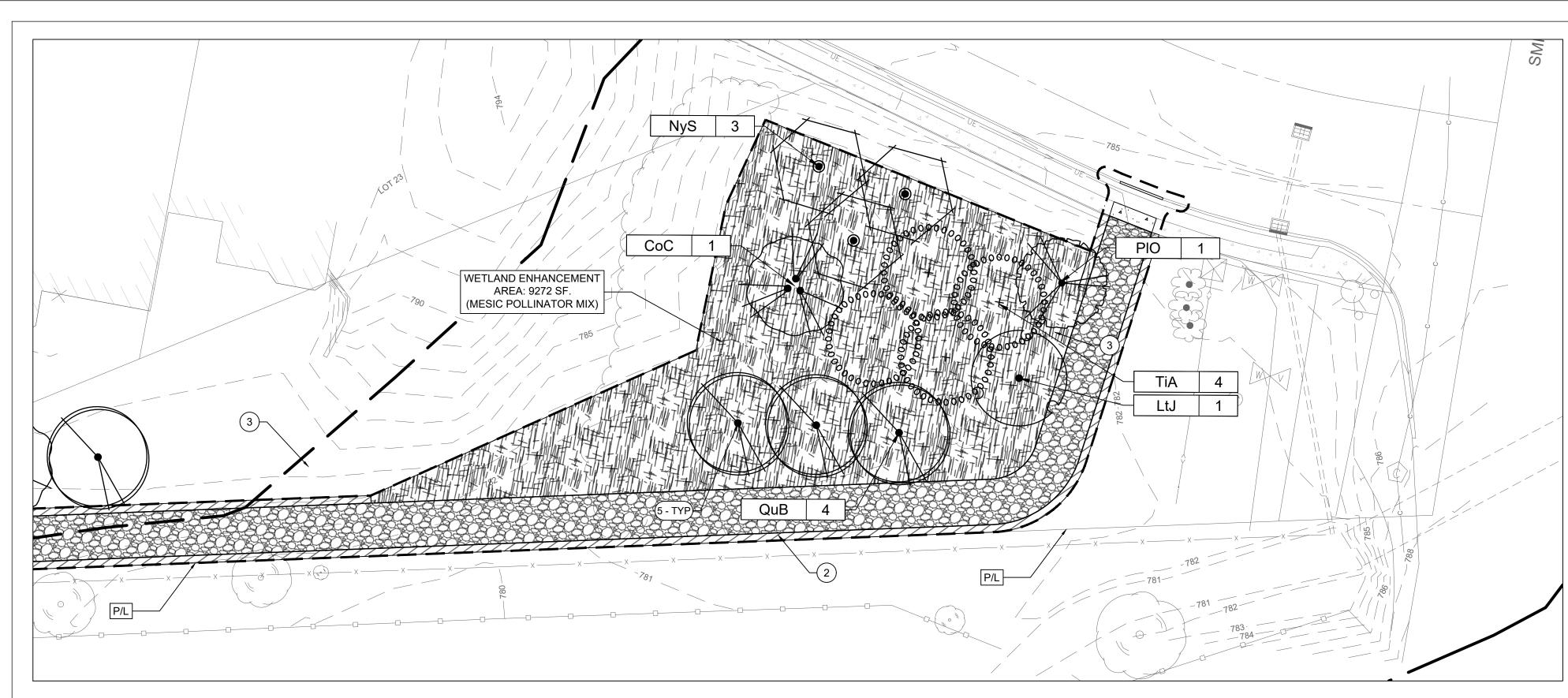
PLANTING PLAN - AREA

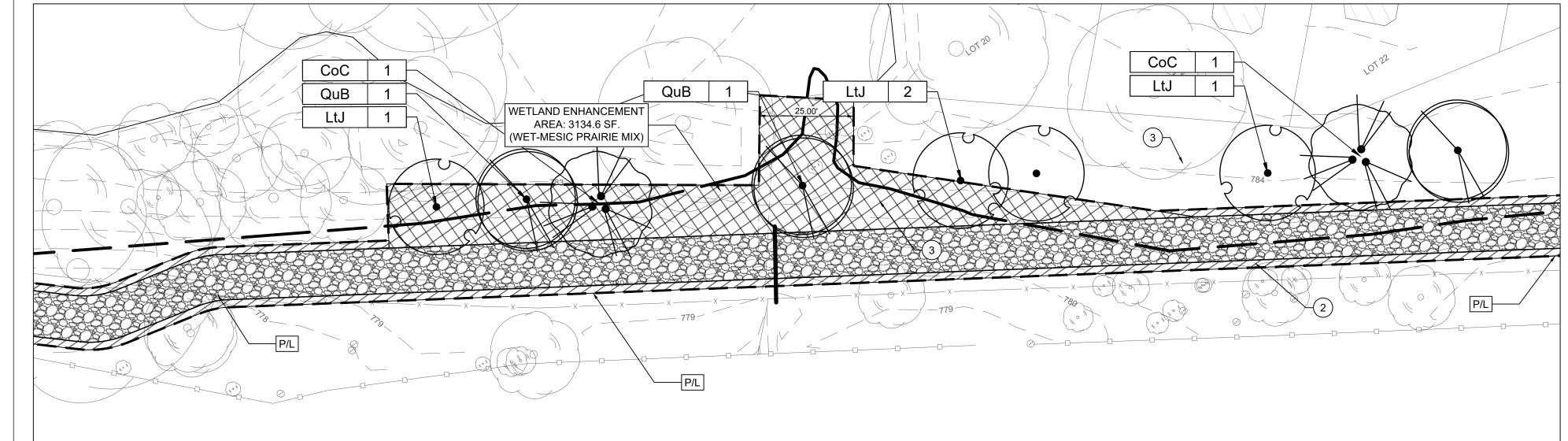
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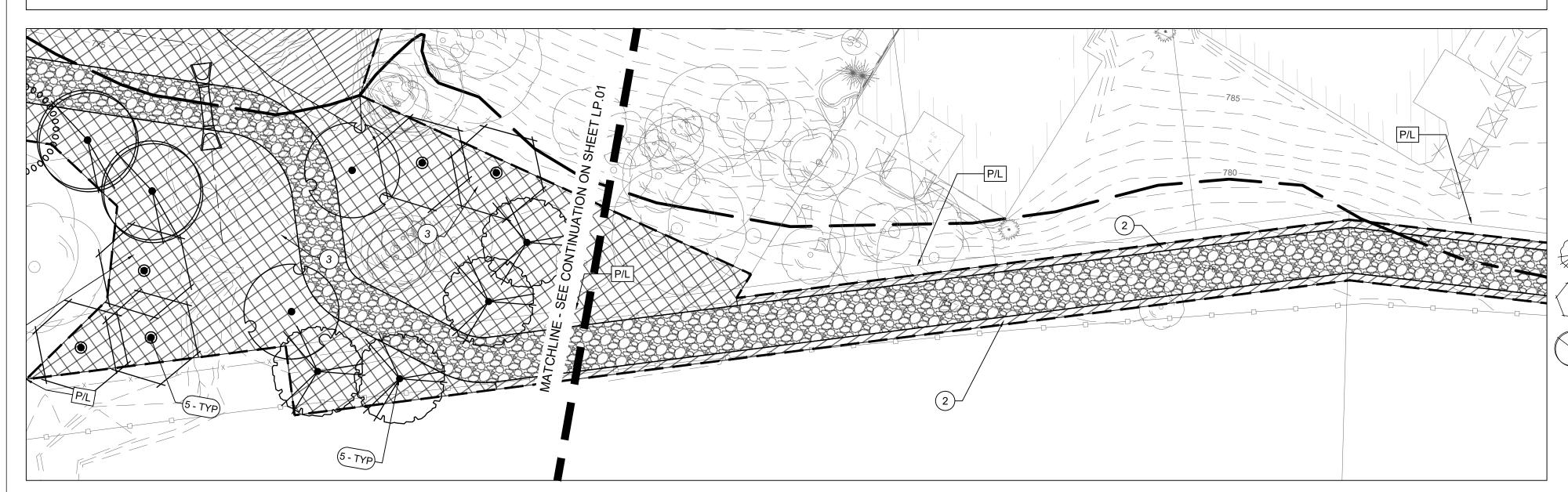
24-053

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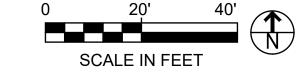
LP.00







1 PLANTING PLAN - AREA B SCALE: 1" = 20'-0"



GENERAL PLANTING NOTES

- 1. ANY CHANGES TO THE LANDSCAPE PLAN SHOULD BE REVIEWED AND APPROVED BY CITY OF BLOOMINGTON PLANNING AND TRANSPORTATION PRIOR TO PLANTING. NO SUBSTITUTIONS AS TO TYPE, SIZE, OR SPACING OF PLANT MATERIALS SPECIFIED ON THIS PLAN MAY BE MADE WITHOUT CITY OF BLOOMINGTON PLANNING AND TRANSPORTATION APPROVAL.
- VERIFY THAT ALL PLANTING PRODUCTS, PLANT MATERIAL, AND PLANT QUANTITIES DELIVERED TO THE SITE MATCH
 WHAT IS INDICATED ON THE PLANS AND SPECIFICATIONS. ALL PLANT MATERIAL DELIVERED TO THE SITE IS SUBJECT TO
 THE REVIEW OF THE CLIENT BEFORE, DURING AND AFTER INSTALLATION.
- DESICCATION OF LEAVES. PROTECT ALL PLANT MATERIAL DURING SHIPPING WITH SHADE CLOTH OR SHIP WITH ENCLOSED TRANSPORT. MAINTAIN PROTECTIONS AND HEALTH OF PLANT MATERIAL STORED ON SITE. HANDLE ALL TREES WITH NYLON STRAPS. NO CHAINS OR CABLES WILL BE ALLOWED. DAMAGED PLANTS WILL BE REJECTED AND REMOVED IMMEDIATELY FROM THE SITE.
- 4. ALL PLANT MATERIAL SHALL BE NURSERY GROWN, WELL-FORMED, TRUE TO SPECIES, HARDENED OFF WITH VIGOROUS ROOT SYSTEMS, FULL CROWN AND CANOPIES, FREE FROM DISEASE, PESTS AND INSECTS, AND DEFECTS SUCH AS KNOTS, SUN SCALD, WINDBURN, LEAF DIS-COLORATION, IRREGULAR BRANCHING OR INJURIES, AND SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.
- 5. ALL PLANT MATERIALS, INCLUDING RELOCATED PLANT MATERIAL, SHALL BE PLANTED IN A PROFESSIONAL MANNER TYPICAL TO THE INDUSTRY STANDARDS OF THE AREA TO ASSURE COMPLETE SURVIVABILITY OF ALL INSTALLED PLANT MATERIALS AS WELL AS TO PROVIDE AN AESTHETICALLY APPROVED PROJECT. CONTRACTOR SHALL REFER TO THE PLANTING DETAILS FOR MINIMUM SIZE AND WIDTH OF PLANTING PITS AND BEDS, GUYING AND STAKING, MULCHING, AND OTHER PLANTING REQUIREMENTS.
- 6. ALL PLANTING AREAS SHALL BE WEED FREE PRIOR TO PLANTING INSTALLATION.
- 7. REMOVE ALL PLANTING AND LANDSCAPE DEBRIS FROM THE PROJECT SITE AND SWEEP AND WASH CLEAN ALL PAVED AND FINISHED SURFACES AFFECTED BY THE LANDSCAPE INSTALLATION.
- 8. CONTRACTOR SHALL REPLACE ANY TREES THAT ARE DAMAGED OR KILLED DUE TO CONSTRUCTION ACTIVITIES AND THAT HAD PROTECTION FENCING LOCATED LESS THAN 3 FEET FROM THE DRIPLINE.
- 9. SEE ADDITIONAL NOTES ON LP.03 FOR LANDSCAPE INSTALLATION AND PERFORMANCE STANDARDS AND PERMANENT AND NATIVE SEEDING SPECIFICATIONS

PLANTING PLAN KEYNOTES & LEGEND						
	1	TURF GRASS, SEE EROSION CONTROL PLANS FOR FULL EXTENTS				
	2	NO-MOW GRASS MIX	16,241 SF			
	3	WET-MESIC PRAIRIE MIX	17,724 SF			
	4	MESIC POLLINATOR MIX	17,312 SF			
+ + 00000000000000000000000000000000000	5	NEW TREE, 2" MIN CAL.	47 TOTAL			

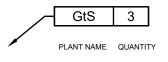
	NO-MOW GRASS MIX	
BOTANICAL NAME	COMMON NAME	OZ./ACRE
NOTES:		
LAWN SEED SHALL BE FRESH, CLEAN,	DRY NEW - CROP COMPOSED OF VARIETIE	ES. MIXED PROPORTIONS, AND

LAWN SEED SHALL BE FRESH, CLEAN, DRY NEW - CROP COMPOSED OF VARIETIES, MIXED PROPORTIONS, AND TESTED FOR MINIMUM PERCENTAGES OF PURITY AND AS SPECIFIED AS FOLLOWS:

PERMANENT COVER:		
FESTUCA COMMUTATE	LONGFELLOW II CHEWINGS FESCUE	25.00%
FESTUCA OVINA	SHEEPS FESCUE	25.00%
FESTUCA BREVIPILA	CHARIOT HARD FESCUE	13.00%
FESTUCA RUBRA	SHORELINE SLENDER CREEPING RED FESCUE	12.00%
FESTUCA RUBRA SUBSPECIES RUBRA	SR 5250 CREEPING RED FESCUE	13.00%
FESTUCA BREVIPILA	GOTHAM HARD FESCUE	12.00%
	SEEDING RATE FOR MIX:	250 LBS/ACRE

FINE FESCUE LINKS IS DESIGNED FOR LOW MAINTENANCE AREAS SUCH AS ROUGHS OR NATIVE AREAS ON GOLF COURSES, ORCHARDS, ROADSIDES AND SLOPES. FINE FESCUE LINKS REQUIRES MINIMAL FERTILIZATION AND IS ATTRACTIVE IN AN UN-MOWED STATE BECAUSE OF ITS VERY FINE TEXTURE AND LOW MATURE PLANT HEIGHT. MOWING IS NECESSARY ONCE A YEAR TO REMOVE SEED HEADS. FINE FESCUE LINKS CAN BE GROWN I SUN OR SHADE AND HAS EXCELLENT WINTER HARDINESS. ALL VARIETIES USED HAVE DARK GREEN COLOR AND IMPROVED DISEASE RESISTANCE AS WELL AS ENDOPHYTE CONTENT WHICH AIDS IN STRESS TOLERANCE AND INSECT RESISTANCE.

LANDSCAPE PLAN NOTES



	PLANT SCHEDULE						
PLAN KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	B&B	MATURE SIZE	
	CANOPY DECIDUOUS TREES						
CoC	CELTIS OCCIDENTALIS 'CHICAGOLAND'	CHICAGOLAND COMMON HACKBERRY	2" cal.	8	Х	55'T x 50'W	
LtJ	LIRIODENDRON TULIPIFERA 'JFS-OZ'	EMERALD CITY TULIP TREE	2" cal.	8	Х	55'T x 25'W	
NyS	NYSSA SYLVATICA	BLACK GUM	2" cal.	8	Х	50'T x 30'W	
PIO	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2" cal.	8	Х	75'T x 75'W	
QuB	QUERCUS BICOLOR	SWAMP WHITE OAK	2" cal.	8	Χ	55'T x 55'W	
TiA	TILIA AMERICANA	AMERICAN LINDEN	2" cal.	7	Х	60'T x 45'W	





WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA

Saint Remy Spillway
Mitigation

PROJECT LOCATION

3716 E St. Remy Drive
Bloomington, IN
47401

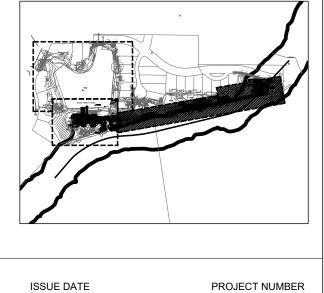


90% Permitting Set

Not For Construction

NO.	REVISION	DATE
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KEYMAP:



ISSUE DATE 11.12.2025

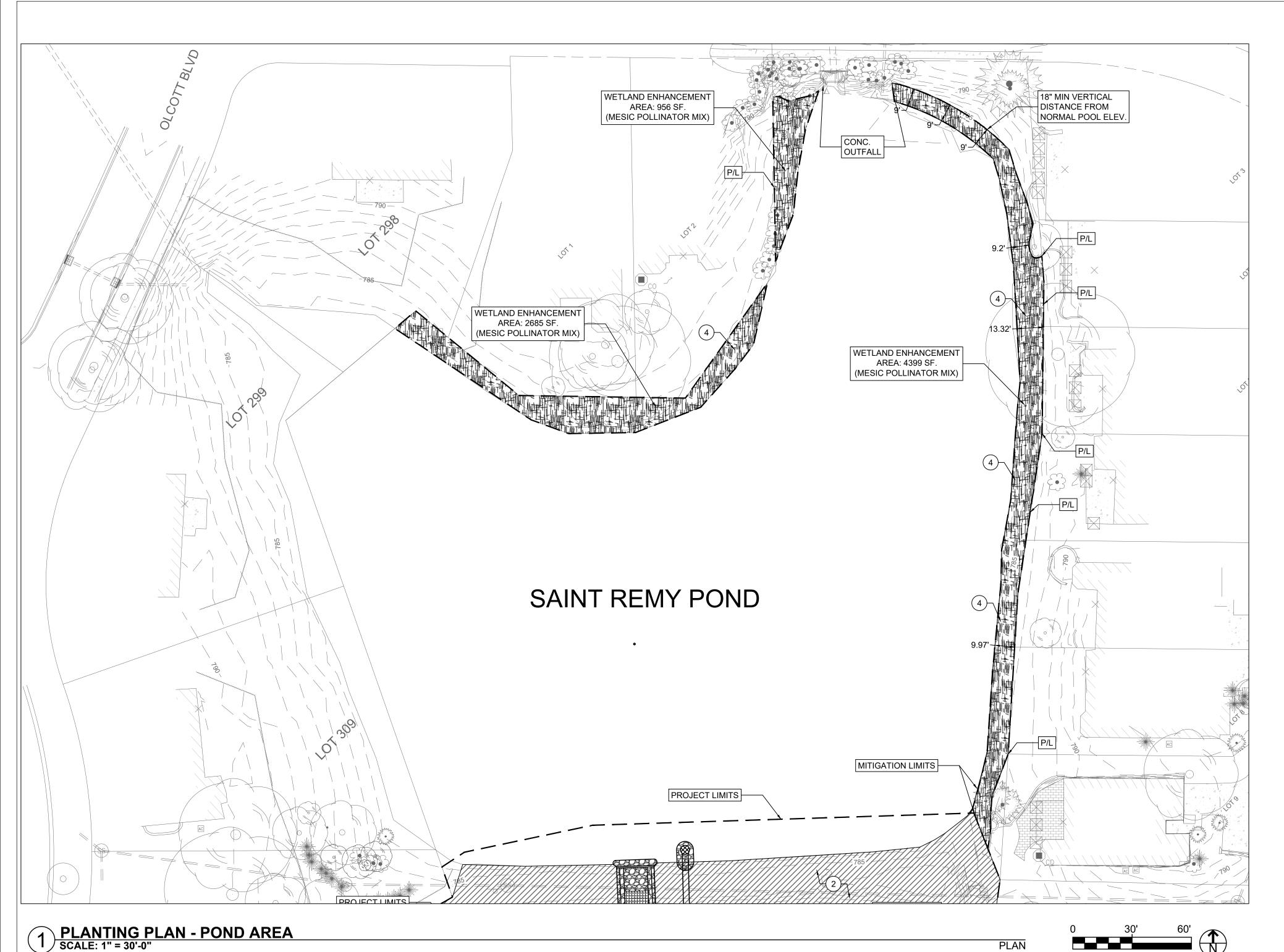
SHEET NAME

PLANTING PLAN - AREA B

24-053

LP.01

SHEET NUMBER



SCHIZACHYRIUM SCOPARIL	JM		LITTLE BLUES	ГЕМ	64.00
SPOROBOLUS HETEROLEPI	S		PRAIRIE DROP	SEED	3.00
				TOTAL	96.00
TEMPORARY COVER:					
AVENA SATIVA			COMMON OAT		512.00
				TOTAL	512.00
FORBES & SHRUBS:					
ALLIUM CERNUUM			NODDING ONK	ON .	6.00
		WILD COLUMB	INE	1.00	
ASCLEPIAS SYRIACA (COMMON MILE	4.00		
CHAMAECRISTA FASCICULA	ATA .		PARTRIDGE PE	ΞA	16.00
COREOPSIS LANCEOLATA			SAND COREOF	PSIS	10.00
DALEA PURPUREA			PURPLE PRAIF	RIE CLOVER	6.00
LIATRIS ASPERA			ROUGH BLAZIN	NG STAR	2.00
LUPINUS PERENNIS V. OCCI	DENTALIS		WILD LUPINE		2.00
MONARDA PUNCTATA			HORSE MINT		1.50
PENSTEMON HIRSUTUS		HAIRY BEARD	1.50		
SOLIDAGO NEMORALIS		OLD-FIELD GO	1.00		
SYMPHYOTRICHUM ERICOI	DES		HEATH ASTER		1.00
ZIZIA AUREA			GOLDEN ALEX	ANDERS	2.00
				TOTAL	54.00
	MIX	STA	TISTICS		
NATIVE COMPONENT	PLS LBS./ACRE	PLS S	SEEDS/ACRE	PLS SEEDS/SQ.FT.	% OF NATIVE MIX
FORBS	3.38		1,153,500	26.48	49.60%
GRASSES	6.00		1,172,177	26.91	50.40%
TOTAL NATIVES	9.38		2,325,677	53.39	100.00%
COVER	32.00		576,000	13.22	

MESIC POLLINATOR SEED MIX

BOTANICAL NAME

CAREX BICKNELLII

TOTALS

LANDSCAPE PLAN NOTES

GtS 3

KOELERIA MACRANTHA

BOUTELOUA CURTIPENDULA

PERMANENT GRASSES/SEDGES/RUSHES:

COMMON NAME

SIDE-OATS GRAMA

JUNE GRASS

COPPER-SHOULDERED OVAL

OZ./ACRE

24.00

3.50

1.50

BOTANICAL NAME COMMON NAME OZ./ACRE NOTES: LAWN SEED SHALL BE FRESH, CLEAN, DRY NEW - CROP COMPOSED OF VARIETIES, MIXED PROPORTIONS, AND TESTED FOR MINIMUM PERCENTAGES OF PURITY AND AS SPECIFIED AS FOLLOWS: PERMANENT COVER: FESTUCA COMMUTATE LONGFELLOW II CHEWINGS FESCUE 25.00% FESTUCA BREVIPILA CHARIOT HARD FESCUE 13.00% FESTUCA RUBRA FESTUCA RUBRA SUBSPECIES RUBRA SR 5250 CREEPING RED FESCUE 12.00% FESTUCA BREVIPILA GOTHAM HARD FESCUE 12.00% SEEDING RATE FOR MIX: 250 LBS/ACRE			
LAWN SEED SHALL BE FRESH, CLEAN, DRY NEW - CROP COMPOSED OF VARIETIES, MIXED PROPORTIONS, AND TESTED FOR MINIMUM PERCENTAGES OF PURITY AND AS SPECIFIED AS FOLLOWS: PERMANENT COVER: FESTUCA COMMUTATE LONGFELLOW II CHEWINGS FESCUE 25.00% FESTUCA OVINA SHEEPS FESCUE 25.00% FESTUCA BREVIPILA CHARIOT HARD FESCUE 13.00% FESTUCA RUBRA SHORELINE SLENDER CREEPING RED FESCUE FESTUCA RUBRA SUBSPECIES RUBRA SR 5250 CREEPING RED FESCUE 13.00% FESTUCA BREVIPILA GOTHAM HARD FESCUE 12.00%	BOTANICAL NAME	COMMON NAME	OZ./ACRE
PROPORTIONS, AND TESTED FOR MINIMUM PERCENTAGES OF PURITY AND AS SPECIFIED AS FOLLOWS: PERMANENT COVER: FESTUCA COMMUTATE LONGFELLOW II CHEWINGS FESCUE 25.00% FESTUCA OVINA SHEEPS FESCUE CHARIOT HARD FESCUE 13.00% FESTUCA RUBRA SHORELINE SLENDER CREEPING RED FESCUE FESTUCA RUBRA SUBSPECIES RUBRA SR 5250 CREEPING RED FESCUE 13.00% FESTUCA BREVIPILA GOTHAM HARD FESCUE 12.00%	NOTES:		
FESTUCA COMMUTATE LONGFELLOW II CHEWINGS FESCUE 25.00% FESTUCA OVINA SHEEPS FESCUE 25.00% FESTUCA BREVIPILA CHARIOT HARD FESCUE 13.00% FESTUCA RUBRA SHORELINE SLENDER CREEPING RED FESCUE FESCUE FESTUCA RUBRA SUBSPECIES RUBRA SR 5250 CREEPING RED FESCUE 13.00% FESTUCA BREVIPILA GOTHAM HARD FESCUE 12.00%	PROPORTIONS, AND TESTED FOR MINIM	•	
FESTUCA OVINA SHEEPS FESCUE 25.00% FESTUCA BREVIPILA CHARIOT HARD FESCUE 13.00% FESTUCA RUBRA SHORELINE SLENDER CREEPING RED FESCUE FESCUE 12.00% FESTUCA RUBRA SUBSPECIES RUBRA SR 5250 CREEPING RED FESCUE 13.00% FESTUCA BREVIPILA GOTHAM HARD FESCUE 12.00%	PERMANENT COVER:		
FESTUCA BREVIPILA CHARIOT HARD FESCUE 13.00% SHORELINE SLENDER CREEPING RED FESCUE FESTUCA RUBRA SUBSPECIES RUBRA SR 5250 CREEPING RED FESCUE 13.00% FESTUCA BREVIPILA GOTHAM HARD FESCUE 12.00%	FESTUCA COMMUTATE	LONGFELLOW II CHEWINGS FESCUE	25.00%
FESTUCA RUBRA SHORELINE SLENDER CREEPING RED FESCUE FESTUCA RUBRA SUBSPECIES RUBRA SR 5250 CREEPING RED FESCUE 13.00% FESTUCA BREVIPILA GOTHAM HARD FESCUE 12.00%	FESTUCA OVINA	SHEEPS FESCUE	25.00%
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FESTUCA BREVIPILA GOTHAM HARD FESCUE 12.00%	FESTUCA RUBRA		12.00%
	FESTUCA RUBRA SUBSPECIES RUBRA	SR 5250 CREEPING RED FESCUE	13.00%
SEEDING RATE FOR MIX: 250 LBS/ACRE	FESTUCA BREVIPILA	GOTHAM HARD FESCUE	12.00%
		SEEDING RATE FOR MIX:	250 LBS/ACRE

NO-MOW GRASS MIX

2,901,677

41.38

66.61

FINE FESCUE LINKS IS DESIGNED FOR LOW MAINTENANCE AREAS SUCH AS ROUGHS OR NATIVE AREAS ON GOLF COURSES, ORCHARDS, ROADSIDES AND SLOPES. FINE FESCUE LINKS REQUIRES MINIMAL FERTILIZATION AND IS ATTRACTIVE IN AN UN-MOWED STATE BECAUSE OF ITS VERY FINE TEXTURE AND LOW MATURE PLANT HEIGHT. MOWING IS NECESSARY ONCE A YEAR TO REMOVE SEED HEADS. FINE FESCUE LINKS CAN BE GROWN IN SUN OR SHADE AND HAS EXCELLENT WINTER HARDINESS. ALL VARIETIES USED HAVE DARK GREEN COLOR AND IMPROVED DISEASE RESISTANCE AS WELL AS ENDOPHYTE CONTENT WHICH AIDS IN STRESS TOLERANCE AND INSECT RESISTANCE.

GENERAL PLANTING NOTES

- 1. ANY CHANGES TO THE LANDSCAPE PLAN SHOULD BE REVIEWED AND APPROVED BY CITY OF BLOOMINGTON PLANNING AND TRANSPORTATION PRIOR TO PLANTING. NO SUBSTITUTIONS AS TO TYPE, SIZE, OR SPACING OF PLANT MATERIALS SPECIFIED ON THIS PLAN MAY BE MADE WITHOUT CITY OF BLOOMINGTON PLANNING AND TRANSPORTATION APPROVAL
- 2. VERIFY THAT ALL PLANTING PRODUCTS, PLANT MATERIAL, AND PLANT QUANTITIES DELIVERED TO THE SITE MATCH WHAT IS INDICATED ON THE PLANS AND SPECIFICATIONS. ALL PLANT MATERIAL DELIVERED TO THE SITE IS SUBJECT TO THE REVIEW OF THE CLIENT BEFORE, DURING AND AFTER INSTALLATION. PROTECT ALL PLANT MATERIAL DURING DELIVERY TO PREVENT DAMAGE TO ROOT BALLS, TRUNKS, BRANCHES AND THE DESICCATION OF LEAVES. PROTECT ALL PLANT MATERIAL DURING SHIPPING WITH SHADE CLOTH OR SHIP WITH ENCLOSED TRANSPORT. MAINTAIN PROTECTIONS AND HEALTH OF PLANT MATERIAL STORED ON SITE. HANDLE ALL TREES WITH NYLON
- STRAPS. NO CHAINS OR CABLES WILL BE ALLOWED. DAMAGED PLANTS WILL BE REJECTED AND REMOVED IMMEDIATELY FROM THE SITE. SYSTEMS, FULL CROWN AND CANOPIES, FREE FROM DISEASE, PESTS AND INSECTS, AND DEFECTS SUCH AS KNOTS, SUN SCALD, WINDBURN, LEAF DIS-COLORATION, IRREGULAR BRANCHING OR INJURIES, AND SHALL COMPLY WITH THE LATEST
- EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK. ALL PLANT MATERIALS, INCLUDING RELOCATED PLANT MATERIAL, SHALL BE PLANTED IN A PROFESSIONAL MANNER TYPICAL TO THE INDUSTRY STANDARDS OF THE AREA TO ASSURE COMPLETE SURVIVABILITY OF ALL INSTALLED PLANT MATERIALS AS WELL AS TO PROVIDE AN AESTHETICALLY APPROVED PROJECT. CONTRACTOR SHALL REFER TO THE PLANTING DETAILS FOR MINIMUM SIZE AND WIDTH OF PLANTING PITS AND BEDS, GUYING AND STAKING, MULCHING, AND OTHER PLANTING
- REQUIREMENTS. ALL PLANTING AREAS SHALL BE WEED FREE PRIOR TO PLANTING INSTALLATION.
- REMOVE ALL PLANTING AND LANDSCAPE DEBRIS FROM THE PROJECT SITE AND SWEEP AND WASH CLEAN ALL PAVED AND
- FINISHED SURFACES AFFECTED BY THE LANDSCAPE INSTALLATION. CONTRACTOR SHALL REPLACE ANY TREES THAT ARE DAMAGED OR KILLED DUE TO CONSTRUCTION ACTIVITIES AND THAT HAD
- PROTECTION FENCING LOCATED LESS THAN 3 FEET FROM THE DRIPLINE. SEE ADDITIONAL NOTES ON LP.03 FOR LANDSCAPE INSTALLATION AND PERFORMANCE STANDARDS AND PERMANENT AND
- NATIVE SEEDING SPECIFICATIONS

	PL	ANTING PLAN KEYNOTES	S & LEGEND
	1	TURF GRASS, SEE EROSION CON	ITROL PLANS FOR FULL EXTENTS
	2	NO-MOW GRASS MIX	16,241 SF
	3	WET-MESIC PRAIRIE MIX	17,724 SF
	4	MESIC POLLINATOR MIX	17,312 SF
+ °° cooodada	5	NEW TREE, 2" MIN CAL.	47 TOTAL

		PLANT SCHEDULE						
PLAN KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	B&B	CONT.	MATURE SIZE	SPECIAL INSTRUCTIONS
	CANOPY DECIDUOUS TREES							
CoC	CELTIS OCCIDENTALIS 'CHICAGOLAND'	CHICAGOLAND COMMON HACKBERRY	2" cal.	8	Х		55'T x 50'W	
LtJ	LIRIODENDRON TULIPIFERA 'JFS-OZ'	EMERALD CITY TULIP TREE	2" cal.	8	Х		55'T x 25'W	
NyS	NYSSA SYLVATICA	BLACK GUM	2" cal.	8	Х		50'T x 30'W	
PIO	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2" cal.	8	Х		75'T x 75'W	
QuB	QUERCUS BICOLOR	SWAMP WHITE OAK	2" cal.	8	Х		55'T x 55'W	
TiA	TILIA AMERICANA	AMERICAN LINDEN	2" cal.	7	Χ		60'T x 45'W	





WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA

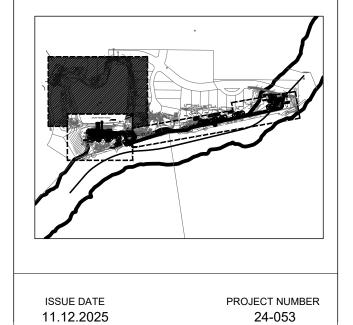
Saint Remy Spillway Mitigation

PROJECT LOCATION 3716 E St. Remy Drive Bloomington, IN



90% Permitting Set

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SHEET NAME

PLANTING PLAN - AREA

SHEET NUMBER

LP.02

GENERAL NOTES

SUBSTITUTIONS BID AWARD.

TO BE PROCURED FROM EACH NURSERY

- I. IN CASE OF DISCREPANCIES BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE. IF IN QUESTION, CONTACT THE LANDSCAPE ARCHITECT.
- PROVIDE QUALITY, SIZE, GENUS, SPECIES, AND VARIETY FOR ALL PLANTS INDICATED, COMPLYING WITH APPLICABLE REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK", LATEST EDITION. SUBMIT A LIST OF NURSERY SOURCES FOR ALL SPECIFIED PLANT MATERIAL INDICATING THE SIZE, GENUS, SPECIES AND VARIETY TO LANDSCAPE ARCHITECT FOR APPROVAL. INCLUDE THE QUANTITY OF PLANT MATERIAL
- 4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PERTAINING TO THEIR PHASE OF WORK. UTILITIES ARE SHOWN TO BE APPROXIMATE. CALL UTILITY LOCATE PRIOR TO ANY PLACEMENT OF PLANT MATERIAL OR OTHER LANDSCAPE MATERIAL
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES THAT MAY BE REQUIRED FOR HIS PORTION OF WORK
- ANY EXISTING TREE(S) AND/OR PLANTINGS THAT MAY REQUIRE REMOVAL BUT ARE NOT SHOWN ON THE PLAN AS BEING REMOVED SHALL BE PROTECTED AND BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT TO DETERMINE IF TREE(S) AND/OR PLANTINGS SHOULD BE 1)REMOVED, 2)SAVED AND INTEGRATED INTO THE LANDSCAPE DESIGN OR 3) RELOCATED
- CONTRACTOR TO REVIEW THE SWPPP SERIES PLANS FOR STABILIZATION (SEEDING/SOD/MULCH)
- 8. PLANTING BEDS AND PLANT MATERIAL SHALL BE LOCATED AS INDICATED ON LANDSCAPE PLAN. IN THE EVENT FIELD CHANGES OR CONDITIONS REQUIRE MODIFICATION TO THE LANDSCAPE DESIGN, THE CONTRACTOR SHALL CONSULT LANDSCAPE ARCHITECT AS TO PROPOSED MODIFICATIONS PRIOR TO PLANTING. THE LANDSCAPE
- ARCHITECT RESERVES THE RIGHT TO ADJUST PLANT LOCATIONS ON SITE IF NECESSARY ALL PLANTS ARE TO MEET OR EXCEED AMERICAN STANDARDS FOR NURSERY STOCK, LATEST EDITION, AS SET FORTH BY AMERICAN ASSOCIATION OF NURSERYMEN.
- 10. PLANTS SHALL BEAR A TAG SHOWING GENUS, SPECIES AND VARIETY. REMOVE AT TIME OF FINAL ACCEPTANCE. 1. PLANTS SHALL BE CERTIFIED BY THE STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES AND FREE FROM
- 12. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IN WRITING PRIOR TO BID DATE OF ANY
- PLANTS THAT HE FEELS MAY NOT SURVIVE IN LOCATIONS NOTED 13. NO SUBSTITUTIONS OF PLANT MATERIAL WILL BE ALLOWED WITHOUT APPROVAL OF THE JURISDICTION HAVING AUTHORITY AND THE LANDSCAPE ARCHITECT. IF PLANTS ARE SHOWN TO BE UNAVAILABLE, THE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT PRIOR TO BID DATE IN WRITING. THE CONTRACTOR SHALL COMPENSATE THE LANDSCAPE ARCHITECT FOR THE TIME REQUIRED FOR REVIEW AND INSPECTION OF PROPOSED PLANT
- 14. ALL PLANT MATERIAL SHALL BE SPECIMEN QUALITY. SUBMIT COLOR PHOTOGRAPHS OF PROPOSED PLANT MATERIAL TAKEN IN THE NURSERY WHERE THEY ARE GROWING. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO INSPECT PLANT MATERIALS AT NURSERY OR CONTRACTOR YARD PRIOR TO DELIVERY TO THE SITE. THE LANDSCAPE ARCHITECT MAY ALSO INSPECT AND APPROVED OR REJECTED PLANT MATERIAL ON THE JOB SITE. IN THE EVENT PLANT MATERIAL IS NOT THE SPECIFIED SIZE OR QUALITY, PLANTS WILL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.
- 15. PLANTS AND OTHER LANDSCAPE MATERIALS TO BE STORED ON SITE WILL BE PLACED WHERE THEY WILL BE PROTECTED AND NOT CONFLICT WITH CONSTRUCTION OPERATIONS
- COMPOST SHALL BE A WELL DECOMPOSED. STABLE. WEED FREE ORGANIC MATTER SOURCE. IT SHALL BE DERIVED FROM: AGRICULTURAL, FOOD, OR INDUSTRIAL RESIDUALS; BIOSOLIDS (TREATED SEWAGE SLUDGE); YARD TRIMMINGS; SOURCE-SEPARATED OR MIXED SOLID WASTE. THE PRODUCT SHALL CONTAIN NO SUBSTANCES TOXIC TO PLANTS AND SHALL BE REASONABLY FREE (< 1% BY DRY WEIGHT) OF MAN-MADE FOREIGN MATTER. THE COMPOST WILL POSSESS NO OBJECTIONABLE ODORS AND SHALL NOT RESEMBLE THE RAW MATERIAL FROM WHICH IT WAS DERIVED
- 17. SHRUB AND PERENNIAL BEDS SHALL BE PREPARED BY PLACING 3" OF APPROVED COMPOST OVER PULVERIZED TOPSOIL AND ROTOTILLING TO A DEPTH OF 6".
- 18. PRE-EMERGENT HERBICIDE SHALL BE APPLIED IN ALL PLANTING AND GROUND COVER BEDS PRIOR TO MULCHING AT RATES SPECIFIED BY MANUFACTURER FOR EACH VARIETY OF PLANT. PRE-EMERGENT HERBICIDE SHALL BE
- APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO APPLICATION. 19. ALL TREE AND SHRUB PLANTING AREAS TO BE COVERED WITH 3" THICK LAYER OF SHREDDED HARDWOOD BARK MULCH. ALL GROUND COVER BEDS SHALL BE COVERED WITH 1" SHREDDED HARDWOOD BARK MULCH. BARK MULCH SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT AND SHALL BE UNIFORM IN TEXTURE AND COLOR AND SHALL BE FREE OF STICKS, LEAVES, SOIL AND FOREIGN MATERIAL. NO UTILITY MULCH OR PROCESSED
- TREE TRIMMINGS WILL BE ALLOWED. 20. CONTRACTOR SHALL MAINTAIN ALL LAWN AREAS AND PLANT MATERIAL UNTIL ALL PUNCH LIST WORK HAS BEEN COMPLETED AND WRITTEN FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT OR OWNER. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS INSTALLED AND SHALL INCLUDE BUT NOT LIMITED TO, WATERING, WEEDING, PRUNING, DISEASE AND INSECT CONTROL, MOWING, RESETTING OF PLANTS TO PROPER

GRADES OR UPRIGHT POSITION, AND ANY OTHER PROCEDURE CONSISTENT WITH GOOD HORTICULTURAL

PRACTICES 21. ALL NEW LANDSCAPE PLANTINGS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FOLLOWING FINAL ACCEPTANCE AS DETERMINED BY LANDSCAPE ARCHITECT OR OWNER. AT THE END OF THIS PERIOD, PLANT MATERIAL DETERMINED TO BE DEAD OR UNSATISFACTORY BY LANDSCAPE ARCHITECT OR OWNER SHALL BE REPLACED AT NO ADDITIONAL CHARGE BY THE CONTRACTOR.

PERMANENT SEEDING NOTES

GRADE THE SITE TO ACHIEVE PROPOSED GRADES AND POSITIVE DRAINAGE. ADD TOPSOIL TO ACHIEVE NEEDED DEPTH FOR ESTABLISHMENT OF VEGETATION.

- TEST SOIL TO DETERMINE PH AND NUTRIENT LEVELS.
- APPLY SOIL AMENDMENTS AS RECOMMENDED BY THE SOIL TEST AND WORK INTO THE UPPER TWO TO FOUR INCHES OF SOIL, IF TESTING IS NOT DONE, APPLY 400 TO 600 POUNDS PER ACRE OF 12-12-12 ANALYSIS FERTILIZER OR FOUIVALENT
- 3. TILL THE SOIL TO OBTAIN A UNIFORM SEEDBED. USE A DISK OR RAKE, OPERATED ACROSS THE SLOPE, TO WORK THE SOIL AMENDMENTS INTO THE UPPER TWO TO FOUR INCHES OF THE SOIL.

OPTIMUM SEEDING DATES: MARCH 1 TO MAY 10 OR AUGUST 10 TO SEPTEMBER 30

PERMANENT SEEDING DONE BETWEEN MAY 10 TO AUGUST 10 - SHALL BE IRRIGATED. SEEDING OUTSIDE OR BEYOND OPTIMUM SEEDING DATES IS STILL POSSIBLE WITH THE UNDERSTANDING THAT RESEEDING OR OVERSEEDING SHALL BE REQUIRED IF ADEQUATE SURFACE COVER IS NOT ACHIEVED. RESEEDING OR OVERSEEDING CAN BE EASILY ACCOMPLISHED IF THE SOIL SURFACE REMAINS WELL PROTECTED WITH MULCH.

- 1. APPLY SEED UNIFORMLY WITH A DRILL OR CULTIPACKER SEEDER OR BY BROADCASTING. PLANT OR COVER THE SEED TO A DEPTH OF ONE-FOURTH TO ONE-HALF INCH. IF DRILLING OR BROADCASTING THE SEED, ENSURE GOOD SEED-TO-SOIL CONTACT BY FIRMING THE SEEDBED WITH A ROLLER OR CUI TIPACKER AFTER COMPLETING SEEDING OPERATIONS. (IF SEEDING IS DONE WITH A HYDROSEEDER, FERTILIZER AND MULCH CAN BE APPLIED WITH THE SEED IN A SLURRY MIXTURE.)
- MULCH ALL SEEDED AREAS AND USE APPROPRIATE METHODS TO ANCHOR THE MULCH IN PLACE. USE EROSION CONTROL BLANKETS ON SLOPING AREAS AND CONVEYANCE CHANNELS. REFER TO SWPPP PLANS EROSION CONTROL BLANKET SPECIFICATIONS.

- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS UNTIL THE VEGETATION IS SUCCESSFULLY ESTABLISHED.
- 2. CHARACTERISTICS OF A SUCCESSFUL STAND INCLUDE VIGOROUS DARK GREEN OR BLUISHGREEN SEEDLINGS WITH A UNIFORM VEGETATIVE COVER DENSITY OF 90 PERCENT OR MORE. 3 CHECK FOR FROSION OR MOVEMENT OF MULCH
- 4. REPAIR DAMAGED, BARE, GULLIED, OR SPARSELY VEGETATED AREAS AND THEN FERTILIZE, RESEED. AND APPLY AND ANCHOR MULCH.
- 5. IF PLANT COVER IS SPARSE OR PATCHY, EVALUATE THE PLANT MATERIALS CHOSEN, SOIL FERTILITY, MOISTURE CONDITION, AND MULCH APPLICATION; REPAIR AFFECTED AREAS EITHER BY OVERSEEDING OR PREPARING A NEW SEEDBED AND RESEEDING. APPLY AND ANCHOR MULCH ON THE NEWLY SEEDED AREAS.
- 6. IF VEGETATION FAILS TO GROW, TEST SOIL TO DETERMINE SOIL PH OR NUTRIENT DEFICIENCY PROBLEMS.
- (CONTACT YOUR SOIL AND WATER CONSERVATION DISTRICT OR COOPERATIVE EXTENSION OFFICE FOR ASSISTANCE.)
- 7. IF ADDITIONAL FERTILIZATION OR SOIL AMENDMENTS ARE NEEDED TO GET A SATISFACTORY STAND, DO SO
- ACCORDING TO SOIL TEST RECOMMENDATIONS. 8. ADD FERTILIZER THE FOLLOWING GROWING SEASON. FERTILIZE ACCORDING TO SOIL TEST
- RECOMMENDATIONS
- FERTILIZE TURF AREAS ANNUALLY, APPLY FERTILIZER IN A SPLIT APPLICATION, FOR COOL-SEASON GRASSES. APPLY ONE-HALF OF THE FERTILIZER IN LATE SPRING AND ONE HALF IN EARLY FALL. FOR WARM-SEASON GRASSES, APPLY ONE-THIRD IN EARLY SPRING, ONE-THIRD IN LATE SPRING, AND THE REMAINING ONE-THIRD IN MIDDLE SUMMER.

NATIVE SEEDING

DESCRIPTION: THIS WORK INCLUDES PREPARATION OF SEEDING BED, MATERIALS, SEED, DELIVERY AND INSTALLATION, AND MAINTENANCE OF SEEDED AREAS AS INDICATED ON DRAWINGS AND SPECIFIED HEREIN.

- REFERENCE DRAWINGS AND COORDINATE WITH ENGINEER FOR PLACEMENT OF NATIVE SEED MIX. A COVER CROP SHALL BE INCORPORATED INTO THE MIX AT THE TIME OF SEEDING AS SPECIFIED. FOR FALL DORMANT SEEDING,
- COVER CROP APPLICATIONS RATES SHALL BE DOUBLED. ALL SEED SHALL COMPLY WITH AND WHERE SPECIFIED, BE TESTED IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE FOLLOWING:
- a. U.S. DEPARTMENT OF AGRICULTURE FEDERAL SEED ACT, CURRENT EDITION. b. ACCEPTANCE SHALL BE BASED ON RECEIPT AND APPROVAL OF CERTIFICATION COVERING TESTS FOR EACH SEED
- LOT SUPPLIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING FOR SEED VIABILITY USING A TEST ACCEPTABLE BY THE ENGINEER UPON RECEIPT OF SEED FROM A SUPPLIER SOURCE QUALITY CONTROL: ALL SEED SHALL BE PROVIDED IN THE SUPPLIER'S SEALED CONTAINERS LABELED IN
- ACCORDANCE WITH THE INDIANA SEED LAW. NATIVE SEED SHALL BE FROM A NATIVE GENOTYPE OF PLANT WITH ITS GENETIC ORIGIN FROM CENTRAL INDIANA. 5. NATIVE LANDSCAPE SEED MIX SHALL BE STRATIFIED PRIOR TO A SPRING SOWING.
- 6. SUBSTITUTIONS: MUST BE APPROVED IN WRITING BY THE ENGINEER FOLLOWING PROOF OF NON-AVAILABILITY AND PROPOSAL FOR USE OF EQUIVALENT MATERIAL. FOR PROOF OF NON-AVAILABILITY, SUBMIT A LIST OF SOURCES
- SEED SHALL BE FRESH, CLEAN, DRY NEW-CROP SEED PROVIDED IN ORIGINAL SEALED PACKAGES BEARING THE PRODUCER'S GUARANTEED ANALYSIS FOR PURITY, GERMINATION, HARD SEED, AND WEED SEED CONTENT 3. SEED MIXTURES SHALL BE PROPORTIONED BY WEIGHT IN PLS (PURE LIVE SEED) FOR GRAMINOID SPECIES. MIXING OF THE INDIVIDUAL VARIETIES OF SEED TO FORM SUCH MIXTURES SHALL BE PERFORMED UNDER THE SUPERVISION OF THE ENGINEER OR SHALL BE COMPLETED BY THE SEED SUPPLIER, WHO SHALL PROVIDE DOCUMENTATION OF THE
- PERCENTAGE OF EACH SPECIES USED TO FORM THE MIX. 9. ALL LEGUMES SHALL BE INOCULATED WITH RHIZOBIUM BACTERIA AT THE RATE SPECIFIED BY THE MANUFACTURER

- RHIZOBIUM BACTERIA INOCULANT OR OTHER APPROVED INOCULANT THAT IS SPECIFICALLY FORMULATED FOR THE LEGUME SEEDS.
- 2. THE MANUFACTURER'S CONTAINER SHALL INDICATE THE SPECIFIC LEGUME SEED TO BE INOCULATED, RATE OF APPLICATION, AND THE EXPIRATION DATE.
- 3. ALL INOCULANT SHALL MEET REQUIREMENTS OF THE INIDIANA SEED LAW.

PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED

- 2. SEED: WITHIN TWO (2) WEEKS FOLLOWING NOTIFICATION TO PROCEED, SUBMIT FOR APPROVAL TO THE ENGINEER A WRITTEN DESCRIPTION OF THE SEED MIXES INDICATING THE FOLLOWING: a. NAME. ADDRESS. AND PHONE NUMBER OF EACH SEED SUPPLIER.
- b. ESTIMATED SEED PER POUND (OR SEED PER OUNCE) OF EACH SPECIES. 3. FOR DELIVERY, STORAGE, AND HANDLING DOCUMENTATION, RECORD AND SUBMIT THE FOLLOWING:

a. DATE OF RECEIPT OF SEED. b. DATE OF RECEIPT OF SEED TEST RESULTS.

- c. VENDOR'S INVOICE FOR EACH SHIPMENT OF SEED MATERIAL SHALL SHOW BOTANICAL NAME, COMMON NAME, QUANTITIES BY SPECIES AND COMPOSITION OF EACH MIXTURE.
- a. CERTIFICATION OF SEED: FROM SEED VENDOR FOR EACH SEED MIXTURE STATING THE BOTANICAL AND COMMON NAME, GEOGRAPHIC ORIGIN AND HARVEST DATE OF EACH SPECIES, DATE TESTED, PERCENTAGE BY WEIGHT OF EACH SPECIES AND VARIETY, AND PERCENTAGE OF PURITY, GERMINATION, AND WEED SEED. INCLUDE THE YEAR OF PRODUCTION AND DATE OF PACKAGING
- b. FOR EACH TYPE OF MANUFACTURED PRODUCT, SIGNED BY PRODUCT MANUFACTURER, AND COMPLYING WITH THE FOLLOWING:
- . MANUFACTURER'S CERTIFIED ANALYSIS FOR STANDARD PRODUCTS. . ANALYSIS OF OTHER MATERIALS BY A RECOGNIZED LABORATORY MADE ACCORDING TO METHODS ESTABLISHED BY THE ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS, WHERE APPLICABLE. QUALIFICATION DATA: PRIOR TO THE START OF THE WORK, CONTRACTOR COMPLETING THE WORK DESCRIBED IN THIS SECTION MUST SUBMIT DOCUMENTATION OF PRIOR EXPERIENCE AND EXPERTISE IN THIS TYPE OF WORK.
- SUBMIT A MINIMUM OF THREE REFERENCES, INCLUDING CONTACT NAMES AND PHONE NUMBERS, WHO CAN VERIFY THESE QUALIFICATIONS. WORK DESCRIBED IN THIS SECTION MAY NOT BEGIN UNTIL THESE QUALIFICATIONS HAVE **BEEN APPROVED** 6. PLANTING SCHEDULE: INDICATING ANTICIPATED INSTALLATION DATES FOR NATURALIZED LANDSCAPE PLANTINGS
- QUALITY ASSURANCE: ALL RELEVANT MATERIALS AND WORK SHALL COMPLY WITH APPLICABLE SECTIONS OF THE
- OLLOWING REFERENCES UNLESS WAIVED IN WRITING: 1. AMERICAN ASSOCIATION OF NURSERYMEN, INC. (AAN) STANDARD: AMERICAN STANDARD FOR NURSERY STOCK (ANSI
- HORTUS THIRD, CORNELL UNIVERSITY, 1976. . AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE "STANDARD PLANT NAMES", SECOND EDITION,
- 4. ASTM: AMERICAN SOCIETY FOR TESTING MATERIALS

- <u>CONTRACTOR'S QUALIFICATIONS:</u> 1. THE WORK OF THIS SECTION SHALL BE PERFORMED BY A QUALIFIED CONTRACTOR SPECIALIZING IN NON-NATIVE
- SPECIES WEED CONTROL. NATIVE SEEDING. AND MAINTENANCE PROCEDURES FOR NATIVE SPECIES 2. CONTRACTOR SHALL HAVE A MINIMUM OF FIVE YEARS EXPERIENCE IN SEEDING AND MAINTAINING SIMILAR
- 3. CONTRACTOR SHALL BE LICENSED FOR THE APPLICATION OF HERBICIDES ACCORDING TO APPLICABLE LAW. ROVAL AND SELECTION OF MATERIALS AND WORK: THE SELECTION OF ALL MATERIALS AND THE EXECUTION OF ALL OPERATIONS REQUIRED UNDER THE SPECIFICATIONS AND DRAWINGS ARE SUBJECT TO THE APPROVAL OF THE

ENGINEER. THE ENGINEER HAS THE RIGHT TO REJECT ANY AND ALL MATERIALS AND ANY AND ALL WORK, WHICH, IN THEIR

OPINION. DOES NOT MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AT ANY STAGE OF THE OPERATIONS. THE

CONTRACTOR SHALL REMOVE REJECTED WORK AND/OR MATERIAL FROM JOB SITE AND REPLACE PROMPTLY. DELIVERY, STORAGE AND HANDLING: CONTRACTOR SHALL BE RESPONSIBLE FOR THE GUARDING AND SAFEKEEPING OF

- ALL SEED MATERIAL PRIOR TO INSTALLATION
- 1. DELIVER SEED IN ORIGINAL SEALED, LABELED, AND UNDAMAGED CONTAINERS, IN ACCORDANCE WITH STANDARD COMMERCIAL PRACTICE.
- 2. ALL SEED SHALL BE KEPT DRY AND PROTECTED FROM TEMPERATURE EXTREMES TO MAINTAIN DORMANCY AND VIABILITY WHILE IN TRANSIT, STORAGE, AND DURING INSTALLATION OPERATIONS. 3. SHIPPING SHALL BE SCHEDULED TO MINIMIZE ON SITE STORAGE OF SEED. DELIVER SEED MATERIAL AFTER PREPARATIONS FOR SEEDING HAVE BEEN COMPLETED AND INSTALL IMMEDIATELY. IF IT IS NECESSARY TO STORE SEED MATERIAL AFTER ARRIVAL TO THE PROJECT SITE. IT SHALL BE STORED IN AN APPROVED COOL. DRY.
- WATERPROOF BUILDING IN SUCH A MANNER AS TO PROTECT THE SEEDS FROM DETERIORATION AND TO PERMIT FASY ACCESS FOR INSPECTION 4. SEED SHALL BE INSPECTED UPON ARRIVAL AT THE PROJECT SITE FOR CONFORMITY TO SPECIES AND QUALITY. SEED THAT IS WET, MOLDY, OR BEARS A TEST DATE FIVE (5) MONTHS OR OLDER SHALL BE REJECTED.
- PACKAGED MATERIALS: DELIVER PACKAGED MATERIALS IN ORIGINAL, UNOPENED CONTAINERS, SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. DURING SHIPMENT AND STORAGE ON SITE, PROTECT MATERIALS FROM BREAKAGE MOISTURE HEAT OR OTHER DAMAGE

NSTALLATION SEASONS AND CONDITIONS: CONTRACTOR SHALL PREP AND INSTALL NATIVE SEED DURING THE FIRST AVAILABLE GROWING SEASON. COORDINATE SEEDING PERIODS WITH MAINTENANCE PERIODS TO PROVIDE REQUIRED MAINTENANCE FROM DATE OF SUBSTANTIAL COMPLETION. THE FOLLOWING OUTLINES THE RECOMMENDED INSTALLATION TIMEFRAME PROVIDED THE CONSTRUCTION SCHEDULE IS COMPLETED ON A TIMELY BASIS

1. NATIVE SEED INSTALLATION: THE PLANTING TIMES SHALL BE APRIL 1 TO JUNE 15 AND AUGUST 1 TO NOVEMBER 1. 2. IF SPECIAL CONDITIONS EXIST WHICH WARRANT INSTALLATION OUTSIDE THESE PROPOSED SEEDING TIMEFRAMES, SUBMIT A WRITTEN REQUEST TO THE ENGINEER DESCRIBING CONDITIONS AND STATING THE PROPOSED VARIANCE. IF APPROVED. THE INSTALLATION CONTRACTOR MAY BE RESPONSIBLE FOR THE SUPPLEMENTAL WATERING AT A FREQUENCY AND DURATION FOR PROPER VEGETATION ESTABLISHMENT AND DEVELOPMENT.

- PROJECT SITE CONDITIONS AND COORDINATION WITH OTHER WORK:

 1. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL EXAMINE AND VERIFY THE ACCEPTABILITY OF THE PROJECT SITE AND NOTIFY THE ENGINEER IN WRITING OF UNSATISFACTORY CONDITIONS. DO NOT PROCEED WITH ANY WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED OR RESOLVED IN WRITING WITH THE ENGINEER.
- 2. WHERE SEEDING OCCURS IN CLOSE PROXIMITY TO OTHER SITE IMPROVEMENTS, ADEQUATE PROTECTIONS SHALL BE GIVEN TO ALL FEATURES PRIOR TO COMMENCEMENT OF WORK. ANY ITEMS DAMAGED DURING SEEDING OPERATIONS SHALL BE PROMPTLY REPAIRED TO THEIR ORIGINAL CONDITION AT NO COST.
- B. CONTRACTOR SHALL HAVE ALL UNDERGROUND UTILITIES LOCATED BY SERVICING AGENCIES PRIOR TO BEGINNING WORK. IN THE VICINITY OF UTILITIES, HAND EXCAVATE TO MINIMIZE POSSIBILITY OF DAMAGE TO UNDERGROUND
- UTILITIES. 4. PROCEED WITH AND COMPLETE WORK AS RAPIDLY AS PORTIONS OF PROJECT SITE BECOME AVAILABLE WORKING WITHIN THE SEASONAL LIMITATIONS FOR EACH KIND OF WORK REQUIRED

WEATHER LIMITATIONS: PROCEED WITH SEEDING ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT. DO NOT SEED WHEN WEATHER CONDITIONS ARE UNFAVORABLE SUCH AS DURING HIGH WINDS. OR EXTREMELY WET, DRY, OR MUDDY CONDITIONS. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED SUCH AS ADVERSE DRAINAGE CONDITIONS OR OBSTRUCTIONS, NOTIFY THE ENGINEER PRIOR TO PLANTING.

ESTABLISHMENT PERIOD: MAINTAIN ALL AREAS TO DEVELOP A HEALTHY STAND OF PLANTINGS AND GUARD AGAINST DEFECTS INCLUDING DEATH, DISEASE OR INFESTATION, WEEDS, AND UNSATISFACTORY GROWTH, EXCEPT FOR DEFECTS RESULTING FROM INCIDENTS THAT ARE BEYOND CONTRACTOR'S CONTROL. PERIOD OF ESTABLISHMENT FOR NATIVE SEEDING SHALL BEGIN UPON COMPLETION OF SEEDING AND MULCHING WORK AND THE WORK IS SUBSTANTIALLY COMPLETE. THE ESTABLISHMENT PERIOD SHALL CONTINUE 24 MONTHS AT WHICH TIME THE PLANTINGS SHALL BE REVIEWED FOR FINAL ACCEPTANCE.

REPLACEMENTS WITHIN ESTABLISHMENT PERIOD: SEEDED AREAS THAT DO NOT CONFORM TO THE PERFORMANCE STANDARDS OF THIS SECTION AS DETERMINED BY THE ENGINEER SHALL BE RESEEDED AT NO ADDITIONAL COST.

ORMANCE STANDARDS: AT THE END OF THE ESTABLISHMENT PERIOD THE FOLLOWING PERFORMANCE 1. THERE SHALL BE NO BARE SPOTS GREATER THAN ONE-HALF (0.5) SQUARE METER: GROUND COVER SHALL CONSIST OF NO LESS THAN 60% COVERAGE OF SEEDED AND NATIVE, NON-WEEDY SPECIES. THERE SHALL BE NO SOLID STANDS OF NON-NATIVE VEGETATION OR NATIVE WEEDY VEGETATION OF

- MORE THAN ONE-HALF (0.5) SQUARE METER WITHIN ALL NATIVE SEEDED AREAS. 2. 50% OF THE SEEDED SPECIES WITHIN EACH CORRESPONDING NATIVE PLANTING ZONES SHALL BE ALIVE AND GROWING IN A HEALTHY CONDITION AT THE END OF THE SPECIFIED MAINTENANCE PERIOD.
- BEGIN MAINTENANCE IMMEDIATELY AFTER EACH AREA IS SEEDED AND CONTINUE UNTIL FINAL ACCEPTANCE AND APPROVAL BY THE ENGINEER AT THE END OF THE ESTABLISHMENT PERIOD.
- MAINTAIN TO ESTABLISH HEALTHY, VIABLE PLANTINGS. COORDINATE WITH ENGINEER FOR APPLICATION OF HERBICIDE INSECTICIDE, FUNGICIDE, FERTILIZER, ETC. a. DO NOT LET WEEDY VOLUNTEER SPECIES EXCEED 10% OF TOTAL GROUND COVER UNLESS A
- DIFFERENT RATE IS AGREED TO IN WRITING PRIOR TO CONTRACT AWARD. b. MOWING HEIGHTS AND DATES SHOULD BE ADJUSTED TO MAXIMIZE WEED CONTROL AND MINIMIZE DAMAGE TO NATIVE PRAIRIE SPECIES. FOR AREAS NOT ACCESSIBLE WITH MOWING EQUIPMENT,
- AREAS SHALL BE CUT WITH A STRING TRIMMER OR EQUIVALENT c. MOW TWO TIMES DURING THE FIRST GROWING SEASON AND ONE TIME DURING THE SECOND GROWING SEASON OF ESTABLISHMENT PERIOD TO CONTROL WEEDS.
- d. DURING THE MAINTENANCE PERIOD, HAND WEED, CUT AND/OR USE OF APPROPRIATE HERBICIDE (BY LICENSED APPLICATOR) A SUFFICIENT NUMBER OF TIMES EACH GROWING SEASON TO KEEP WEEDS FROM SETTING SEED. AND KEEP SEEDED AREAS LOOKING NEAT. MOWING SHOULD BE USED TO CONTROL ANNUAL AND BIANNUAL WEEDS WHEREAS HERBICIDE APPLICATION AND/OR HAND WEEDING WILL BE NECESSARY TO CONTROL PERENNIAL WEEDS.
- e. HAND PULLING SHOULD INCLUDE THE REMOVAL OF ALL ABOVEGROUND AND BELOWGROUND STEMS ROOTS, AND FLOWER MASSES PRIOR TO THE DEVELOPMENT OF SEEDS. CARE SHOULD BE TAKEN TO DISTURB AS LITTLE SOIL AS POSSIBLE DURING HAND PULLING TO AVOID EXPOSURE OF ADDITIONAL WEED SEED IN THE SOIL LAYER, AND PROTECT ADJACENT EMERGING SEEDLINGS. f. SUBMIT DATED TIME SHEETS OF REQUIRED MAINTENANCE OPERATIONS TO ENGINEER.

NO-TILL EQUIPMENT SHALL BE IN GOOD REPAIR AND ADJUSTABLE TO CONTROL TILLAGE DEPTH AND SEEDING RATE. 2. USE NO-TILL SEEDING EQUIPMENT SPECIFICALLY DESIGNED TO UNIFORMLY PLANT HIGHLY DIVERSE MIXTURE OF NATIVE GRASSES AND FORBS (FOR EXAMPLE A TRUAX NO-TILL DRILL). THE DEVICE SHALL LIGHTLY ROLL THE SEED BED TO PROVIDE GOOD CONTACT BETWEEN THE SEED AND THE SOIL. CONTRACTOR MAY SUBMIT PLAN TO HAND BROADCAST AND RAKE SEED IF CONDITIONS ARE NOT

SUITABLE FOR A DRILL. THE ENGINEER HAS THE PREROGATIVE TO ACCEPT, REVIEW, OR MODIFY THE

FOR ALL NATIVE SEED APPLICATION REFER TO PLAN DOCUMENTS FOR PLANTING LOCATIONS. FLAG AND REVIEW AREAS TO BE SEEDED WITH ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL SUPPLY ALL EQUIPMENT, MATERIALS, AND ITEMS NECESSARY FOR CLEAR LAYOUT ACCORDING TO THE PLANS. REVIEW COURSE OF ACTION WITH ENGINEER PRIOR TO PROCEEDING WITH THIS PART. THE ENGINEER RESERVES THE RIGHT TO ADJUST LAYOUT TO MEET FIELD CONDITIONS WITHOUT ADDITIONAL COST TO THE OWNER.

PROPOSED PLANS.

UN-GRADED SEED BED PREPARATION: AREA(S) UNALTERED OR UNDISTURBED BY EXCAVATING, GRADING, OR SURFACE SOIL STRIPPING OPERATIONS, PREPARE SURFACE SOIL AS FOLLOWS:

- a. REMOVE EXISTING HERBACEOUS COVER. DO NOT MIX INTO SURFACE SOIL. h LOOSEN SURFACE SOIL TO A DEPTH OF AT LEAST OF 6 INCHES
- c. REMOVE STICKS, ROOTS, TRASH, AND OTHER EXTRANEOUS MATTER LARGER THAN 1 INCH IN ANY
- d. LEGALLY DISPOSE OF WASTE MATERIAL, INCLUDING GRASS, VEGETATION, AND TURF OFF OWNER'S
- 2. GRADED PLANTING BED PREPARATION AREAS: ALTERED OR DISTURBED BY EXCAVATING, GRADING, OR SURFACE SOIL STRIPPING OPERATIONS, PREPARE PLANTING BED AS FOLLOWS: a. LIMIT SEED BED PREPARATION TO AREAS TO BE SEEDED. DO NOT BEGIN SEED INSTALLATION UNTIL FINISHED GRADES HAVE BEEN APPROVED AND CONDITIONS ARE DEEMED ACCEPTABLE BY THE
- b. FINE GRADE PLANTING AREA TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY
- FINE TEXTURE. GRADE TO WITHIN PLUS/MINUS 1 INCH OF FINISH ELEVATION. LIGHTLY ROLL AND RAKE AREA, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES.

c. REMOVE FROM SEED PLANTING ZONES FOREIGN OBJECTS LARGER THAN 1 INCH IN ANY DIMENSION

AND STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER.

- UNIFORMLY SEED ALL AREAS WITH THEIR APPROPRIATE MIXES AT THEIR DESIGNATED RATES. a. HERBICIDE SEED BED AT LEAST TWICE AT TWO WEEK INTERVALS USING GLYPOSATE HERBICIDE PRIOR TO FINAL SEEDBED PREPARATION. SEEDING SHALL OCCUR NO LESS THAN 14 DAYS AFTER HERBICIDE APPLICATION.
- b. IMMEDIATELY PRIOR TO SEEDING, SCARIFY, LOOSEN, FLOAT AND DRAG UPPER TWO TO THREE INCHES OF TOPSOIL TO A LOOSE, UNIFORM CONDITION. c. ALL AREAS SHALL BE SEEDED IN AT LEAST TWO DIRECTIONS OR WITH EQUIPMENT THAT DROPS

EROSION CONTROL BLANKET: EROSION CONTROL BLANKET SHALL BE S150BN BIO-NET REINFORCEMENT MAT AS MANUFACTURED BY NORTH AMERICAN GREEN. EROSION BLANKET SHALL BE INSTALLED ON ALL SLOPES GREATER THEN 3:1 OR AS INDICATED ON THE PLANS. IMMEDIATELY FOLLOWING SEED INSTALLATION, INSTALL SPECIFIED EROSION BLANKET AS INDICATED ON PLANS FOLLOWING MANUFACTURER'S SPECIFICATIONS AND INSTALLATION PROCEDURES FOR AREAS AS INDICATED ON THE PLANS. EROSION BLANKET SHALL BE INSTALLED THE SAME DAY OF SEEDING: COORDINATE WORK TO ENSURE ALL AREAS SEEDED ARE BLANKETED BY END OF WORK DAY. MANUFACTURER REPRESENTATIVE SHALL BE PRESENT DURING INSTALLATION OF EROSION BLANKET. CONTRACTOR SHALL NOTIFY ENGINEER AND MANUFACTURER REPRESENTATIVE 24 HOURS IN ADVANCE OF EROSION BLANKET, EROSION BLANKET SHALL BE MAINTAINED AS SPECIFIED BY MANUFACTURER AND AS NECESSARY FOR COMPLIANCE WITH STATE AND LOCAL SOIL EROSION AND SEDIMENT CONTROL STANDARDS.

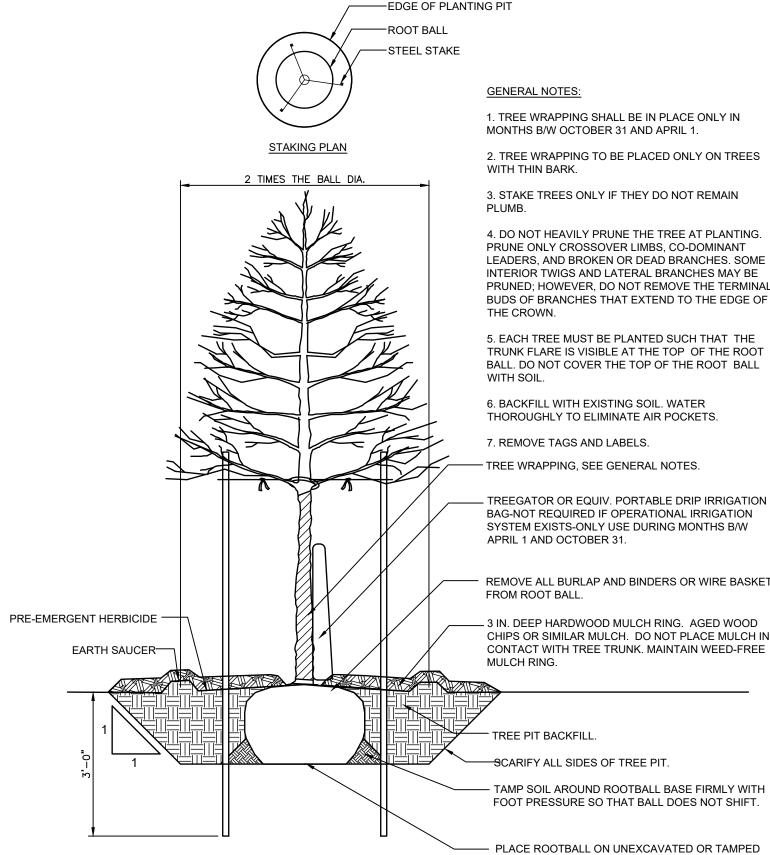
SEED RANDOMLY RATHER THAN IN ROWS. SEED COVER SHALL BE 1/4 INCH.

MULCH: STRAW MULCH SHALL BE INSTALLED ON ALL SLOPES UP TO 3:1 OR AS INDICATED ON THE PLANS. WITHIN 24 HOURS OF SEEDING, INSTALL SPECIFIED MULCH AS INDICATED ON PLAN DOCUMENTS. MULCHING SHALL CONSIST OF HAND OR MACHINE APPLICATION OF STRAW MULCH AT THE RATE OF 2 TONS/ACRE. THE MULCH SHALL BE LOOSE ENOUGH TO PERMIT AIR TO CIRCULATE BUT COMPACT ENOUGH TO REDUCE EROSION. IF BALED MULCH IS USED, CARE SHALL BE TAKEN THAT THE MATERIAL IS IN A LOOSENED CONDITION AND CONTAINS NO LUMPS OR KNOTS OF COMPACTED MATERIAL

SUBSTANTIAL COMPLETION: NOTIFY THE ENGINEER IN WRITING OF THE COMPLETION OF EXTERIOR

- 1. WITHIN 10 DAYS AFTER NOTIFICATION OF COMPLETION OF WORK, THE ENGINEER WILL INSPECT THE WORK AND PREPARE A NOTICE OF SUBSTANTIAL COMPLETION, ALONG WITH A LIST OF ITEMS THAT REQUIRE COMPLETION OR CORRECTION.
- 2. ISSUANCE OF THE "NOTICE OF SUBSTANTIAL COMPLETION" SHALL CONSTITUTE THE START OF THE ESTABLISHMENT PERIOD FOR ANY PORTION ACCEPTED. PERIODIC INSPECTIONS WILL BE MADE FROM TIME TO TIME BY THE ENGINEER TO REVIEW THE QUALITY AND PROGRESS OF THE WORK. WORK FOUND TO BE UNACCEPTABLE MUST BE CORRECTED WITHIN 15

FINAL ACCEPTANCE INSPECTION: THE FINAL INSPECTION OF ALL EXTERIOR SEEDING WILL BE MADE BY THE ENGINEER. BEFORE FINAL ACCEPTANCE SHALL BE MADE, THE TERMS OF THE MAINTENANCE PERFORMANCE REQUIREMENTS SHALL BE MET AND ALL PLANTINGS ARE VIABLE AND VIGOROUS, FREE OF INSECTS AND DISEASES, FIRMLY ROOTED AND REFLECT INDUSTRY STANDARDS OF APPEARANCE. IF THE MAINTENANCE PERFORMANCE REQUIREMENTS ARE MET, THE WORK WILL BE ACCEPTED. IF NOT ACCEPTED AND THE WORK IS DEEMED BY THE ENGINEER TO BE AN INSTALLATION FAILURE, THE CONTRACTOR SHALL RESEED THE APPROPRIATE ZONES AT NO ADDITIONAL COST.



PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF TREEGATOR OR EQUIV. PORTABLE DRIP IRRIGATION REMOVE ALL BURLAP AND BINDERS OR WIRE BASKETS CHIPS OR SIMILAR MULCH. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. MAINTAIN WEED-FREE

TREE PLANTING DETAIL



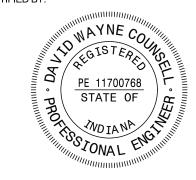
WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS. IN 46280

Saint Remy HOA

Saint Remy Spillway Mitigation PROJECT LOCATION

3716 E St. Remy Drive Bloomington, IN

CERTIFIED BY:



90% Permitting Set

NO.	REVISION	DATE
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PROJECT NUMBER

24-053

SHEET NAME

ISSUE DATE

11.12.2025

KEYMAP:

PLANTING PLAN -DETAILS SHEET NUMBER



603.19 Dewatering

Discharge water from dewatering of ground water from excavations such as but not limited to trenches and foundations shall be directed to an appropriate stormwater quality measure that minimizes the discharge of sediment regardless of discharge location. Dewatering operations:

- Shall not cause erosion from the discharge. Dewatering water shall discharge to stable, erosionresistant surfaces, such as but not limited to clean stone or well-vegetated grassy areas:
- resistant surfaces, such as but not limited to clean stone or well-vegetated grassy areas;
 Shall not have a discharge with a visible sheen, foam and/or pollutants at a level that requires additional treatment and/or an alternate permit;
- Shall route dewatering water through a sediment control (e.g., sediment trap or basin, pumped water filter bag) designed to prevent discharges with visual turbidity;
- Shall not be placed on steep surfaces; and
 Shall not use the receiving water or MS4 as part of the treatment area:
- Shall not use the receiving water or MS4 as part of the treatment area;

All SWPPPs, as required by the CSGP, shall include dewatering practices

603.20 Polymers

Projects may use anionic polymers for erosion and sediment control per IDEM and the manufacturer's guidance. Cationic polymer use is prohibited. If polymers are used on CSGP projects, the permittee must indicate such on the Storm Water Pollution Prevention Plan (SWPPP). If polymer use is added to the project after permits are issued, the SWPPP must be redlined with the applicable information. Polymer use shall be indicated on the erosion and sediment control plan sheet(s) as part of the drainage permit application for projects not subject to the CSGP.

EROSION CONTROL PLAN NOTES

- 1. ALL PROPOSED EROSION AND SEDIMENT CONTROL SHALL BE IN CONFORMANCE WITH THE CITY OF BLOOMINGTON STORMWATER STANDARDS MANUAL, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE MANUAL SHALL NOT ALLEVIATE THE CONTRACTOR FOR ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE MANUAL.
- 2. ADDITION EROSION AND SEDIMENT CONTROL MEASURE MAY BE REQUIRED BY THE CONSTRUCTION INSPECTOR.
- 3. PUBLIC AND PRIVATE ROADWAYS SHALL BE KEPT CLEARED OF ACCUMULATED SEDIMENT. BULK CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING THE AREA WITH WATER. PROJECTS SUBJECT TO IDEM'S CSGP SHALL REMOVE SEDIMENT FROM PUBLIC RIGHTS-OF-WAY NOT EXCLUSIVE OF CONSTRUCTION TRAFFIC AT THE END OF EACH DAY PER THE CSGP REQUIREMENTS.
- 4. WASTEWATER, SUCH AS CONCRETE WASHOUT SHALL BE COMPLETELY CONTAINED AND DISPOSED OF PROPERLY. NO WASTE WATER SHALL BE ALLOWED ON THE GROUND, IN A SEWER, IN A STREAM, OR ANY OTHER LOCATION WHERE IT IS NOT CONTAINED.
- 5. NO FILL MATERIAL, SUCH AS STONE FOR TEMPORARY CROSSINGS, CONSTRUCTION MATERIALS, DEMOLITION DEBRIS OR EQUIPMENT IS ALLOWED IN A WATERWAY WITHOUT THE APPROPRIATE PERMITS.
- 6. INLET PROTECTION MUST BE PROVIDED BY THE CONTRACTOR DURING MILLING OPERATIONS AND UNTIL THE SURFACE COURSE IS PLACED.
- 7. INLET PROTECTION MUST HAVE AN OVERFLOW, BE MAINTAINABLE WITHOUT DROPPING COLLECTED SEDIMENT AND OTHER POLLUTANTS INTO THE STORM SEWER AND NOT IMPEDE ACTIVE TRAFFIC.
- 8. POST CONSTRUCTION WATER QUALITY MEASURES SHALL NOT BE USED AS CONSTRUCTION SEDIMENT CONTROL MEASURES.
- 9. TWO-STAGE DITCH FILTRATION MATERIAL SHALL BE PROTECTED FROM SEDIMENTATION UNTIL SURFACES ARE STABLE.
- 10. SILT FENCE SHALL BE TRENCHED INTO THE GROUND, SHALL NOT BE LOCATED IN CONCENTRATED FLOW AREAS SUCH AS DITCHES AND SHALL BE PLACED PARALLEL TO THE CONTOUR.
- 11. CONSTRUCTION POLLUTION PREVENTION CONTROL SUCH AS EROSION CONTROL, SEDIMENT CONTROL AND STREAM DIVERSION OR PUMP-AROUNDS ARE REQUIRED TO PROTECT THE STORM SEWERS AND WATER BODIES FROM POLLUTANTS DURING ALL PHASES OF CONSTRUCTION.
- DEWATERING WATER SHALL BE FILTERED PRIOR TO DISCHARGE INTO A STORM SEWER OR WATER BODY.
- 13. IF CONTAMINATED SOILS ARE ENCOUNTERED, "CONTAMINATED SOIL, REMOVE" SHALL BE PERFORMED IN ACCORDANCE TO INDOT SPECIFICATION 202
- 14. ALL DIMENSIONS SHOWN ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
- 15. DO NOT SCALE DRAWINGS. UTILIZE DIMENSIONS INDICATED ON THE PLANS.
- 16. PROVIDE FLUSH CONDITIONS AT JUNCTURE OF ALL WALKWAYS.
- 17. SHALL BE PROTECTED AGAINST EROSION AND SCOUR DURING FLOODING BY VEGETATIVE COVER, RIPRAP, OR BULK HEADING. IF VEGETATIVE COVER IS USED, THE SLOPES SHALL BE NO STEEPER THAN 3' HORIZONTAL TO 1' VERTICAL.
- 18. A TREE PROTECTION ZONE SHALL BE INSTALLED PER SECTION 20.04.080(C)(3) AND INSPECTED BY THE PLANNING AND TRANSPORTATION DEPARTMENT PRIOR TO ANY LAND-DISTURBING ACTIVITIES. THE TREE PROTECTION ZONE AND THE TREE PROTECTION BARRIER SHALL REMAIN UNDAMAGED AND UNMOVED DURING THE ENTIRE DURATION OF CONSTRUCTION.
- 19. CONTRACTOR SHALL REPLACE ANY TREES THAT ARE DAMAGED OR KILLED DUE TO CONSTRUCTION ACTIVITIES AND THAT HAD PROTECTION FENCING LOCATED LESS THAN 3 FEET FROM THE DRIPLINE.
- 20. THE USE OF CHEMICALS IS STRICTLY PROHIBITED ON THE PROJECT AND THE

EROSION CONTROL PLAN KEYNOTES & LEGEND

- ——— (1) SILT FENCING, SEE DETAIL SHEET CJ.03
 - (2) CLOSED CANOPY
 - 3 CONCRETE WASHOUT, SEE DETAIL SHEET CJ.03
- PERMANENT GRASS SEEDING
- (5) EROSION CONTROL BLANKET, SEE DETAIL SHEET CJ.03
- 6 CONSTRUCTION STAGING
- 6 CONSTRUCTION STAGING
- CONSTRUCTION ENTRANCE, SEE DETAIL SHEET CJ.03
- PROJECT LIMITS
- ---- SEDIMENT REMOVAL ARE WITHIN THE DAM
 - (10) COIR LOG, 12", SEE DETAIL SHEET CJ.03
- —₩— 11 TREE PROTECTION





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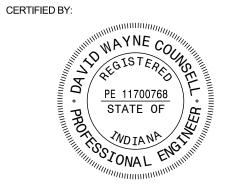
CLIENT / OWNER
Saint Remy HOA
PROJECT NAME

Saint Remy Spillway

PROJECT LOCATION

3716 E St. Remy Drive
Bloomington, IN
47401

Mitigation

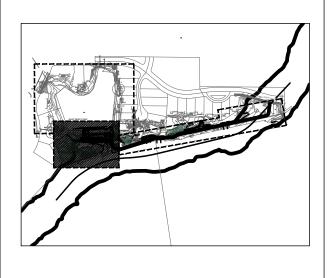


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KEYMAP:



ISSUE DATE 11.12.2025

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PROJECT NUMBER

SHEET NAME

SHEET NUMBER

EROSION CONTROL PLAN - AREA A

CJ.0

EROSION CONTROL PLAN NOTES

- ALL PROPOSED EROSION AND SEDIMENT CONTROL SHALL BE IN CONFORMANCE WITH THE CITY OF BLOOMINGTON STORMWATER STANDARDS MANUAL, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE MANUAL SHALL NOT ALLEVIATE THE CONTRACTOR FOR ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE MANUAL.
- 2. ADDITION EROSION AND SEDIMENT CONTROL MEASURE MAY BE REQUIRED BY THE CONSTRUCTION INSPECTOR.
- 3. PUBLIC AND PRIVATE ROADWAYS SHALL BE KEPT CLEARED OF ACCUMULATED SEDIMENT. BULK CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING THE AREA WITH WATER. PROJECTS SUBJECT TO IDEM'S CSGP SHALL REMOVE SEDIMENT FROM PUBLIC RIGHTS-OF-WAY NOT EXCLUSIVE OF CONSTRUCTION TRAFFIC AT THE END OF EACH DAY PER THE CSGP REQUIREMENTS.
- 4. WASTEWATER, SUCH AS CONCRETE WASHOUT SHALL BE COMPLETELY CONTAINED AND DISPOSED OF PROPERLY. NO WASTE WATER SHALL BE ALLOWED ON THE GROUND, IN A SEWER, IN A STREAM, OR ANY OTHER LOCATION WHERE IT IS NOT CONTAINED.
- 5. NO FILL MATERIAL, SUCH AS STONE FOR TEMPORARY CROSSINGS, CONSTRUCTION MATERIALS, DEMOLITION DEBRIS OR EQUIPMENT IS ALLOWED IN A WATERWAY WITHOUT THE APPROPRIATE PERMITS.
- 6. INLET PROTECTION MUST BE PROVIDED BY THE CONTRACTOR DURING MILLING OPERATIONS AND UNTIL THE SURFACE COURSE IS PLACED.
- 7. INLET PROTECTION MUST HAVE AN OVERFLOW, BE MAINTAINABLE WITHOUT DROPPING COLLECTED SEDIMENT AND OTHER POLLUTANTS INTO THE STORM SEWER AND NOT IMPEDE ACTIVE TRAFFIC.
- 8. POST CONSTRUCTION WATER QUALITY MEASURES SHALL NOT BE USED AS CONSTRUCTION SEDIMENT CONTROL MEASURES.
- 9. TWO-STAGE DITCH FILTRATION MATERIAL SHALL BE PROTECTED FROM SEDIMENTATION UNTIL SURFACES ARE STABLE.
- 10. SILT FENCE SHALL BE TRENCHED INTO THE GROUND, SHALL NOT BE LOCATED IN CONCENTRATED FLOW AREAS SUCH AS DITCHES AND SHALL BE PLACED PARALLEL TO THE CONTOUR.
- 11. CONSTRUCTION POLLUTION PREVENTION CONTROL SUCH AS EROSION CONTROL, SEDIMENT CONTROL AND STREAM DIVERSION OR PUMP-AROUNDS ARE REQUIRED TO PROTECT THE STORM SEWERS AND WATER BODIES FROM POLLUTANTS DURING ALL PHASES OF CONSTRUCTION.
- 12. DEWATERING WATER SHALL BE FILTERED PRIOR TO DISCHARGE INTO A STORM SEWER OR WATER BODY.
- 13. IF CONTAMINATED SOILS ARE ENCOUNTERED, "CONTAMINATED SOIL, REMOVE" SHALL BE PERFORMED IN ACCORDANCE TO INDOT SPECIFICATION 202.
- 14. ALL DIMENSIONS SHOWN ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
- 15. DO NOT SCALE DRAWINGS. UTILIZE DIMENSIONS INDICATED ON THE PLANS.
- 16. PROVIDE FLUSH CONDITIONS AT JUNCTURE OF ALL WALKWAYS.
- 17. SHALL BE PROTECTED AGAINST EROSION AND SCOUR DURING FLOODING BY VEGETATIVE COVER, RIPRAP, OR BULK HEADING. IF VEGETATIVE COVER IS USED, THE SLOPES SHALL BE NO STEEPER THAN 3' HORIZONTAL TO 1' VERTICAL.
- 18. A TREE PROTECTION ZONE SHALL BE INSTALLED PER SECTION 20.04.080(C)(3) AND INSPECTED BY THE PLANNING AND TRANSPORTATION DEPARTMENT PRIOR TO ANY LAND-DISTURBING ACTIVITIES. THE TREE PROTECTION ZONE AND THE TREE PROTECTION BARRIER SHALL REMAIN UNDAMAGED AND UNMOVED DURING THE ENTIRE DURATION OF CONSTRUCTION.
- 19. CONTRACTOR SHALL REPLACE ANY TREES THAT ARE DAMAGED OR KILLED DUE TO CONSTRUCTION ACTIVITIES AND THAT HAD PROTECTION FENCING LOCATED LESS THAN 3 FEET FROM THE DRIPLINE.
- 20. THE USE OF CHEMICALS IS STRICTLY PROHIBITED ON THE PROJECT AND THE POND

EROSION CONTROL PLAN KEYNOTES & LEGEND

- ———— (1) SILT FENCING, SEE DETAIL SHEET CJ.03
- (2) CLOSED CANOPY
- (3) CONCRETE WASHOUT, SEE DETAIL SHEET CJ.03
- PERMANENT GRASS SEEDING
- (5) EROSION CONTROL BLANKET, SEE DETAIL SHEET CJ.03
- 6 CONSTRUCTION STAGING
- 7 CONSTRUCTION ENTRANCE, SEE DETAIL SHEET CJ.03
- = = 8 PROJECT LIMITS

SCALE IN FEET

- - 9 SEDIMENT REMOVAL ARE WITHIN THE DAM
 - COIR LOG, 12", SEE DETAIL SHEET CJ.03





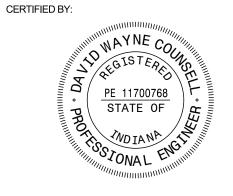
WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA

Saint Remy Spillway
Mitigation

PROJECT LOCATION

3716 E St. Remy Drive
Bloomington, IN
47401

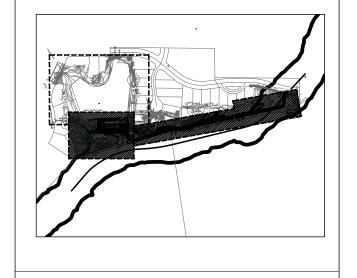


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KEYMAP:



ISSUE DATE 11.12.2025

24-053

PROJECT NUMBER

SHEET NAME

SHEET NUMBER

EROSION CONTROL PLAN - AREA B

CJ.02

1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.

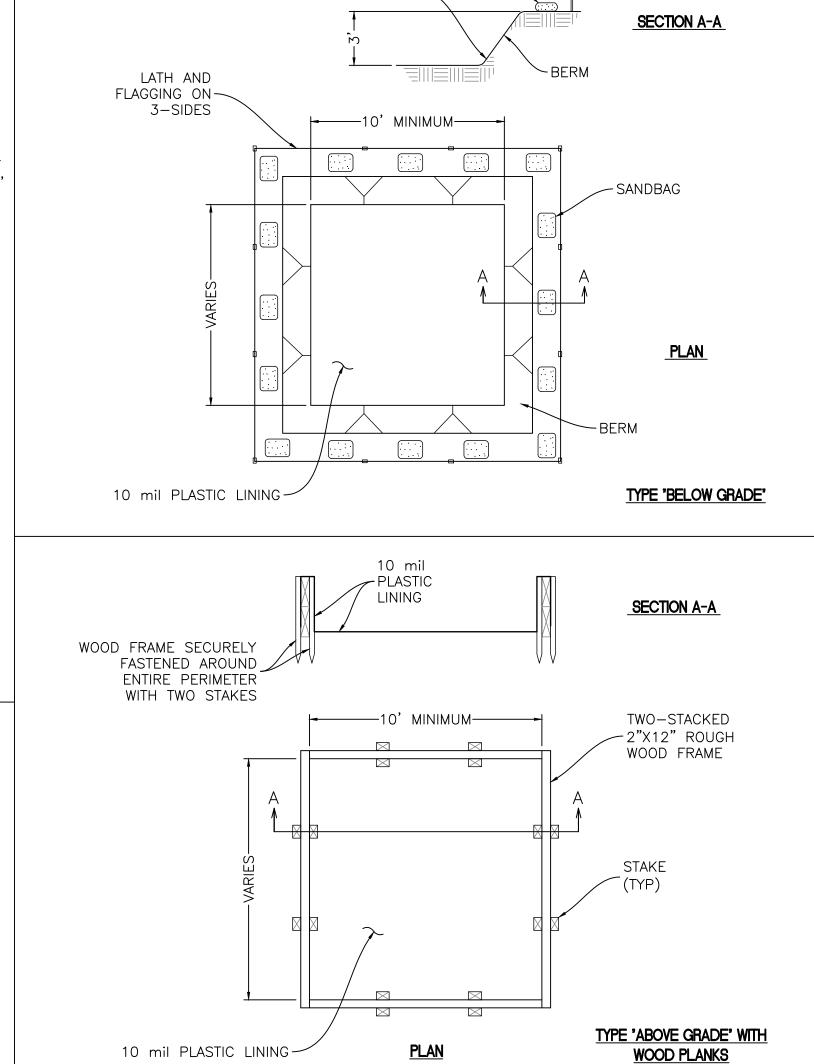
STABILIZED TO PREVENT EROSION.

- 2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
- 3. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
- 4. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITY SHALL BE BACKFILLED, REPAIRED, AND

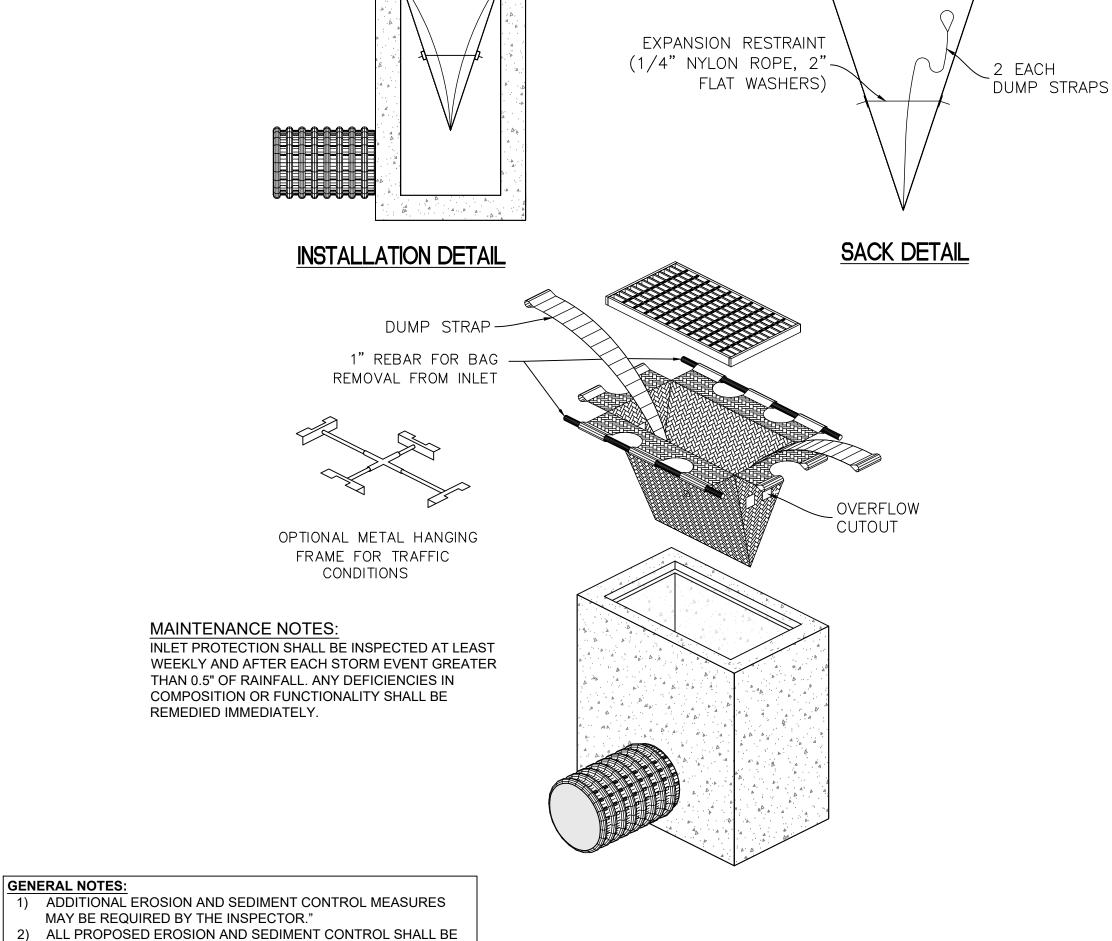
MAINTENANCE

SHOULD BE INSPECTED AT LEAST PRIOR TO EACH USE. ANY DEFICIENCIES IN COMPOSITION OR FUNCTIONALITY SHALL BE REMEDIED IMMEDIATELY.

CONCRETE WASHOUT

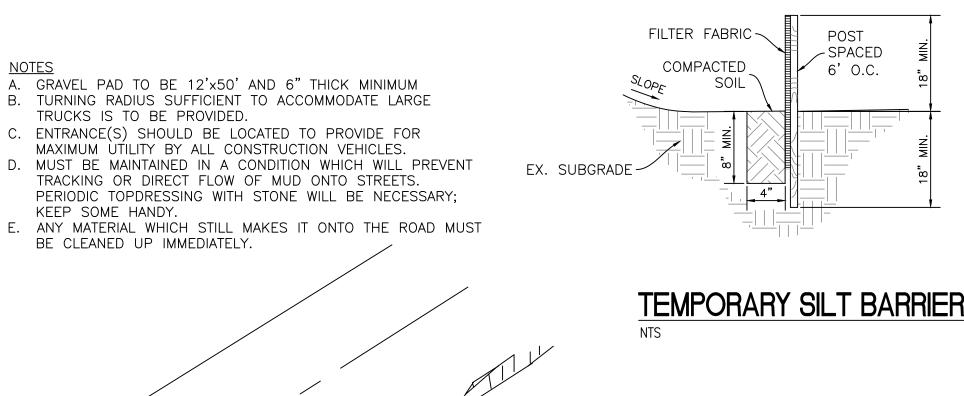


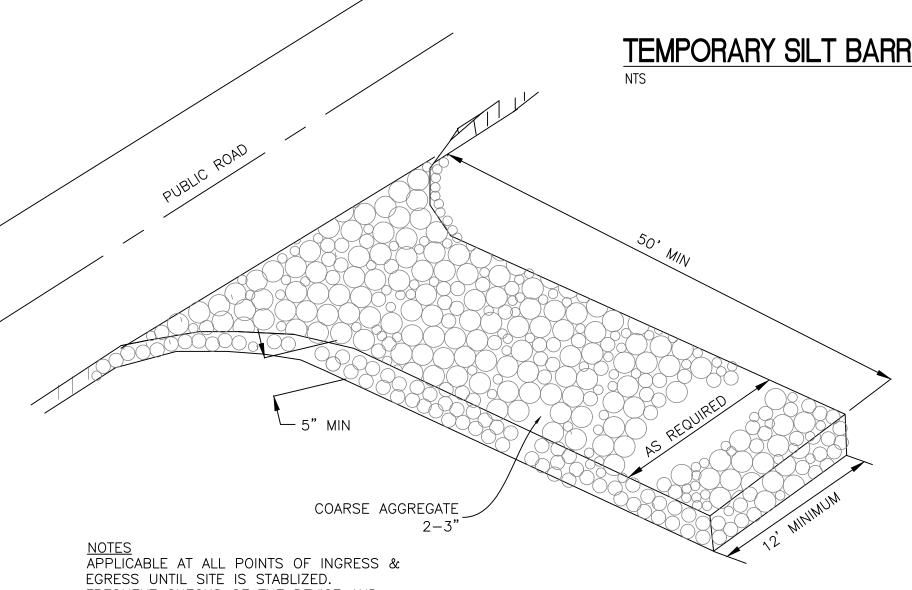
10 mil PLASTIC LINING



2) ALL PROPOSED EROSION AND SEDIMENT CONTROL SHALL BE IN CONFORMANCE WITH CHAPTER 600 OF THE CITY OF INDIANAPOLIS STORMWATER SPECIFICATIONS MANUAL, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE MANUAL SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE MANUAL.

INLET PROTECTION SACK

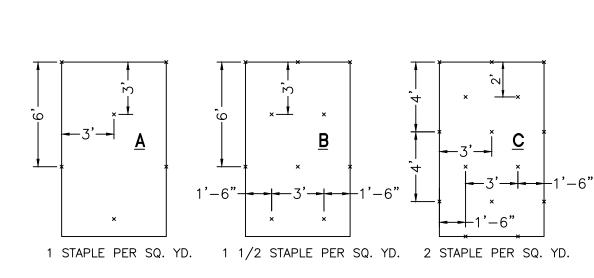




APPLICABLE AT ALL POINTS OF INGRESS & EGRESS UNTIL SITE IS STABLIZED. FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTTENANCE MUST BE PROVIDED. LINED UNDERNEATH WITH A GEOSYNTHETIC FABRIC TO STABILIZE THE SOIL ON SLOPES

CONSTRUCTION/MAINTENANCE ENTRANCE





☐ 275 ☐ 250 225 ☐ 200 <u> 5</u> 150 🛚 125 50 4:1 3:1 2:1 1:1 CHANNEL LINING

CHANNEL LININGS UTILIZE STAPLE PATTERN "C" WITH ADDITIONAL STAPLES ON SIDE SLOPES.

SLOPE GRADIENT

DIRECTED ONTO BLANKETS, STAPLE PATTERN "C" SHOULD BE UTILIZED.

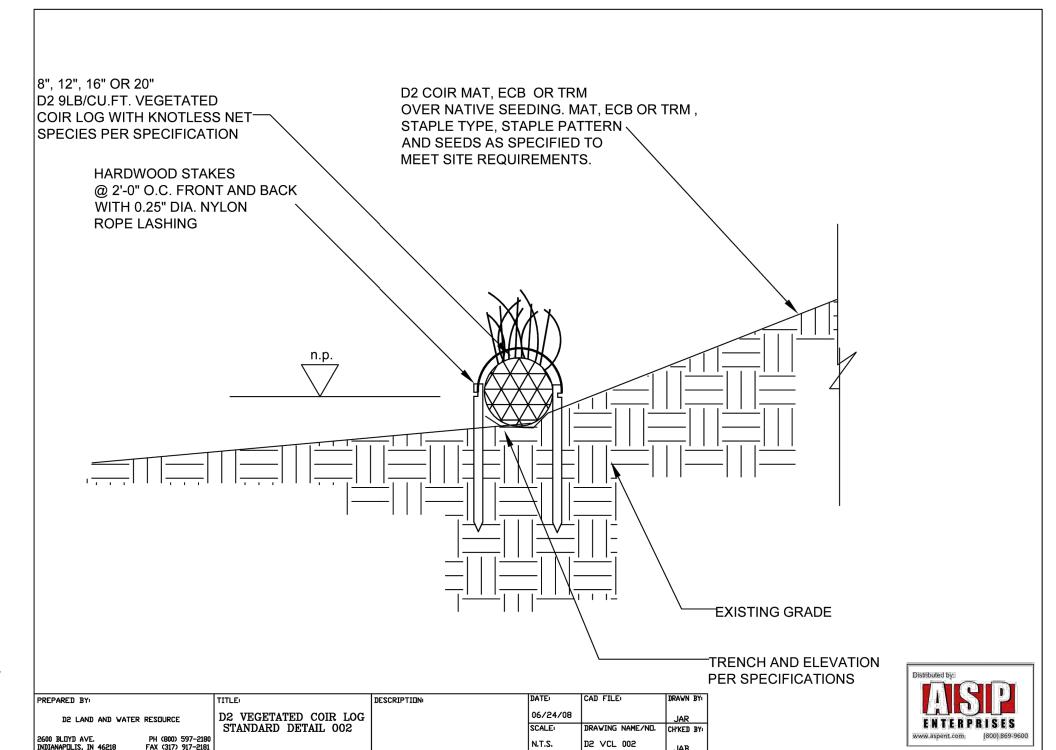
STAPLE PATTERNS (GENERAL STAPLE RECOMMENDATIONS ADDITIONAL STAPLES AS REQUIRED)

- 1. STAPLE PATTERNS APPLY TO ALL NORTH AMERICAN GREEN EROSION BLANKETS. 2. STAPLE PATTERNS MAY VARY DEPENDING UPON SOIL TYPE AND AVERAGE ANNUAL RAINFALL. 3. AT SLOPE LENGTHS GREATER THAN 300 FEET OR WHERE DRAINAGE OVER LARGE AREAS IS
- 4. CHANNEL LININGS REQUIRE A 2' (MIN.) OVERLAP AT LONGITUDINAL JOINTS AND SIDE SLOPES REQUIRE A 6" (MIN.) OVERLAP. WHERE OVERLAPS OCCUR, THE UPSTREAM BLANKET SHALL OVERLAP THE DOWNSTREAM.
- 5. IF OTHER THAN NORTH AMERICAN GREEN EROSION CONTROL BLANKETS ARE INSTALLED FOLLOW THE INSTALLATION DIRECTIONS RECOMMENDED BY THAT MANUFACTURER. 6. BLANKETS CONTAINING PLASTIC ARE NOT ALLOWED IN THE CITY OF BLOOMINGTON

EROSION CONTROL BLANKET

MAINTENANCE NOTES:

BLANKETS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH STORM EVENT GREATER THAN 0.5" OF RAINFALL. ANY DEFICIENCIES IN COMPOSITION OR FUNCTIONALITY SHALL BE REMEDIED IMMEDIATELY.



COIR LOGS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH STORM EVENT GREATER THAN 0.5" OF RAINFALL. ANY DEFICIENCIES IN COMPOSITION OR FUNCTIONALITY SHALL BE REMEDIED IMMEDIATELY THROUGH RE-STAKING OR REPLACING DAMAGED SECTIONS.

BUILD WITH CONFIDENCE SM WEIHE ENGINEERS INC. 10505 N COLLEGE AVE

INDIANAPOLIS, IN 46280 CLIENT / OWNER

Saint Remy HOA Saint Remy Spillway

PROJECT LOCATION 3716 E St. Remy Drive Bloomington, IN 47401

Mitigation

CERTIFIED BY:

90% Permitting Set

Not For Construction

NO.	REVISION	DATE
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		_
		_
1 /\		

KEYMAP:

PROJECT NUMBER ISSUE DATE 11.12.2025 24-053

SHEET NAME

EROSION CONTROL DETAILS SHEET NUMBER

A = KENTUCKY BLUEGRASS 100 LBS/ACRE; CREEPING RED FESCUE 100 LBS/ACRE;PLUS 2 TONS STRAW MULCH/ACRE, OR ADD ANNUAL RYEGRASS 20 LBS/ACRE FERTILIZE AS RECOMMENDED BY SOIL TEST. IF TESTING IS NOT DONE, APPLY 400-600 LBS./ACRE OF 12-12-12 ANALYSIS, OR EQUIVALENT, FERTILIZER.

B = KENTUCKY BLUEGRASS 120 LBS/ACRE; CREEPING RED FESCUE 120 LBS/ACRE;PLUS 2 TONS STRAW MULCH/ACRE, OR ADD ANNUAL RYEGRASS 30 LBS/ACRE FERTILIZE AS RECOMMENDED BY SOIL TEST. IF TESTING IS NOT DONE, APPLY 400-600 LBS./ACRE OF 12-12-12 ANALYSIS, OR EQUIVALENT, FERTILIZER.

C = SPRING OATS 3 BUSHELS/ACRE FERTILIZE AS RECOMMENDED BY SOIL TEST. IF TESTING IS NOT DONE, APPLY 400-600 LBS./ACRE OF 12-12-12 ANALYSIS, OR EQUIVALENT, FERTILIZER.

D = WHEAT OR RYE 2 BUSHELS/ACRE FERTILIZE AS RECOMMENDED BY SOIL TEST. IFTESTING IS NOT DONE, APPLY 400-600 LBS./ACRE OF 12-12-12 ANALYSIS, OR EQUIVALENT, FERTILIZER.

E = ANNUAL RYEGRASS 40 LBS/ACRE (1 LB/1000 SQ. FT.) FERTILIZE ASRECOMMENDED BY SOIL TEST. IF TESTING IS NOT DONE, APPLY 400-600 LBS./ACRE OF 12-12-12 ANALYSIS, OR EQUIVALENT, FERTILIZER.

F = SOD

G = STRAW MULCH 2 TONS/ACRE

* /I/ * = IRRIGATION NEEDED DURING JUNE, JULY, AUGUST AND/OR SEPTEMBER

** = IRRIGATION NEEDED FOR 2 WEEKS AFTER SUPPLYING SOD

1) ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY THE INSPECTOR." 2) ALL PROPOSED EROSION AND SEDIMENT CONTROL SHALL BE IN CONFORMANCE WITH THE CITY OF BLOOMINGTON STORMWATER SPECIFICATIONS MANUAL, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE MANUAL SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE MANUAL

STABILIZATION SHALL BE INITIATED BY THE END OF THE SEVENTH TH) DAY, THE AREA WAS LEFT IDLE. STABILIZATION MUST BE COMPLETED WITHIN FOURTEEN (14) DAYS AFTER INITIATION.



DIRTBAG®

FILTERS SILT, SAND, AND FINES OUT OF PUMPED WATER

Dirtbag® dewatering bags remove silt, sand and other debris from pumped water on construction sites, ponds, dredging locations and more.

The bag easily connects to a pump discharge hose using the 6" neck and sewn-in attachment straps. To increase the effectiveness of Dirtbag's filtration system, Ferguson recommends placing the product on a bed of hay bales or aggregate to maximize water flow through the surface area of the bag. Doing so also helps protect the surrounding area from erosion, sediment displacement, and the pollution of receiving waters. Under most circumstances, a 15' x 15' Dirtbag can pass up to 500 gallons of water per minute.

AVAILABLE LINITS

AVAILABLE UNITS				
•	4' x 6'		10' x 15'	
	5' x 5'	•	15' x 15'	
•	8' x 10'	•	15' x 30'	
	10' x 10'			

Custom Sizes available for long-term or specialty applications 4' x 6' to 15' x 15'2" to 3" hose/pump

 15'x30'.....4" hose/pump Larger custom sizes6" hose/pump

ADVANTAGES

- High flow rate
- 15' x 15' Dirtbag is rated up to 500 GPM pump Built-in neck receives up to 6" discharge hose
- Removes sediment, trash, and debris
- Economical alternative to other methods Custom sizes available upon request







SPECIFICATIONS

Dirtbag is manufactured using nominal 8 oz nonwoven geotextile fabric. 10 oz nonwoven, and woven options, are available

PROPERTY	TEST METHOD	MARV
Grab Strength (Tensile)	ASTM D4632	205 lbs
CBR Puncture	ASTM D6241	500 lbs
UV Resistance	ASTM D4355	70%
Apparent Opening Size (AOS)	ASTM D4751	80 US std. sieve
Flow Rate	ASTM D4491	90 gal/min/ft2
Permittivity	ASTM D4491	1.4 sec-1

INSTALLATION

Place lifting straps (not included) under the unit to facilitate removal after use. Unfold the Dirtbag on a stabilized area over dense vegetation, straw, or other cover. Place bag over the open-graded stone to achieve maximum filtration and drainage. Insert the discharge hose from the pump into the Dirtbag a minimum of six inches and tightly secure it with the attached filtered. If using optional absorbents, place the absorbent boom into the Dirtbag. Clip absorbent boom to tether provided inside

MAINTENANCE

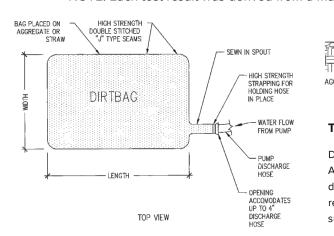
- Dirtbag must be monitored at all times during use (over-filling may cause rupture)
- Flow and removal rates vary based on particle size/sediment
- To increase flow rate, place Dirtbag on aggregate, straw bales or other porous surfaces
- strap to prevent water from flowing out of the unit without being Replace the bag when ½ full of sediment or when sediment has reduced the pump discharge flow rate to an impractical rate. If using an optional oil absorbent, remove and replace the absorbent when near saturation.

DIRTBAG® SEAM TEST RESULTS (ASTM D4884)

NONWOVEN DIRTBAG®

Maximum load 786 lbs Maximum strength 1178 lb/ft

NOTE: Each test result was derived from a material failure rather than a stitch failure



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AGGREGATE OR STRAW UNDERLAYMENT

Dirtbag has been tested under ASTM D-7880 and ASTM-7701. These are standard test methods for determining flow rate of water and suspended solids retention from a closed geosynthetic bag. Testing summary available upon request.

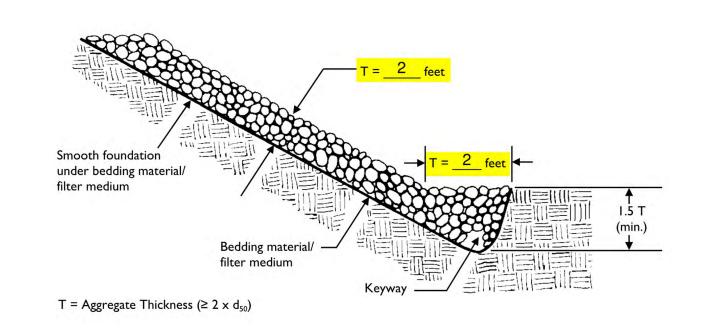
DISCLAIMER: Use of dewatering bags is a standard construction method throughout the U.S. Ferguson is not liable for any damage caused by rupture or over-filling of Dirtbag. If Dirtbag fails to fully pass pumped water, turn off pump and contact Ferguson Waterworks at 800-448-3636.

For more information about Dewatering Devices, contact Inside Sales at **800.448.3636** or infogeo@ferguson.com or visit us at fergusongss.com

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Riprap Slope Protection Worksheet



Source: Adapted from North Carolina Erosion and Sediment Control Planning and Design Manual, 1993

For information on this measure, see Chapter 7, page 69

Appendix B October 2007

<u>NOTES</u> LINED UNDERNEATH WITH A GEOSYNTHETIC FABRIC TO STABILIZE THE SOIL ON SLOPES WITH MIN 6" DEEP STONE ON SLOPES. -INDOT #57 STONE 3" TO 6" DEEP -INDOT #8 STONE, 6" DEEP COMPACTED SUBGRADE PER SPECIFICATIONS

CONSTRUCTION ACCESS GRAVEL SECTION

WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA Saint Remy Spillway

PROJECT LOCATION 3716 E St. Remy Drive Bloomington, IN 47401

Mitigation

CERTIFIED BY:

90% Permitting Set

Not For Construction

NO.	REVISION	DATE
KEYMAP	:	

PROJECT NUMBER ISSUE DATE

11.12.2025

SHEET NAME

EROSION CONTROL DETAILS SHEET NUMBER

24-053

DROP INLET - RIPRAP SLOPE PROTECTION

CONSTRUCTION PLAN - GENERAL PLAN COMPONENTS (SECTION A)

- A1 INDEX OF THE LOCATION OF REQUIRED PLAN ELEMENTS IN THE CONSTRUCTION PLAN SEE SHEET CC.00 FOR **CONSTRUCTION PLAN INDEX OF DRAWINGS.**
- A2 A VICINITY MAP DEPICTING THE PROJECT SITE LOCATION IN RELATIONSHIP TO RECOGNIZABLE LOCAL LANDMARKS, TOWNS, AND MAJOR ROADS - SEE SHEET CC.00.
- A3 NARRATIVE OF THE NATURE AND PURPOSE OF THE PROJECT THIS IS A PROPOSED STORMWATER INFRASTRUCTURE IMPROVEMENTS INCLUDING NEW DROP INLET SPILLWAY, AND SECONDARY SPILLWAY. CONSTRUCTION SHALL CONSIST OF EARTHWORK, GRAVEL ACCESS ROAD, AND STORMWATER INFRASTRUCTURE.
- A4 LATITUDE AND LONGITUDE TO THE NEAREST FIFTEEN (15) SECONDS LAT: 39°08'31.68"N, LONG: 86°28'50.66"W LEGAL DESCRIPTION OF THE PROJECT SITE: 015-30692-15 VILLAGE OF ST REMY PH 2 WETLANDS 5.69THE.
- A6 SEE SHEET CD.01 CD.02 SHOWING BUILDING LOT NUMBERS/BOUNDARIES AND ROAD
- A7 BOUNDARIES OF THE ONE HUNDRED (100) YEAR FLOODPLAINS, FLOODWAY FRINGES, AND FLOODWAYS SEE SHEET CJ.06, FIRM PANEL # 0163D REVISION DATE: DEC 17, 2010.
- A8 LAND USE OF ALL ADJACENT PROPERTIES NORTH: RESIDENTIAL, SOUTH: CASH GRAIN/GENERAL FARM, EAST: RESIDENTIAL. WEST: RESIDENTIAL.
- A9 IDENTIFICATION OF A U.S. EPA APPROVED OR ESTABLISHED TOTAL MAXIMUM DAILY LOAD (TMDL) NOT APPLICABLE PER SEARCH ON IDEM WEBSITE
- A10 NAME(S) OF THE RECEIVING WATER(S) EAST FORK JACKSON CREEK.
- A11 IDENTIFICATION OF DISCHARGES TO A WATER ON THE CURRENT 303(d) LIST OF IMPAIRED WATERS AND THE
- POLLUTANT(S) FOR WHICH IT IS IMPAIRED NOT APPLICABLE. A12 SOILS MAP OF THE PREDOMINANT SOIL TYPE - SEE SHEET CJ.06.
- A13 IDENTIFICATION AND LOCATION OF ALL KNOWN WETLANDS, LAKES, AND WATER COURSES ON OR ADJACENT TO THE PROJECT SITE (CONSTRUCTION PLAN. EXISTING SITE LAYOUT) - ST. REMY POND IS CONSIDERED A WETLAND BASED ON BLOOMINGTON CITY REQUIREMENTS. ADDITIONALLY THIS PROJECT IS ENTERING AN ADJACENT PROPERTY IN WHICH JACKSON CREEK IS PRESENT.
- A14 IDENTIFICATION OF ANY OTHER STATE OR FEDERAL WATER QUALITY PERMITS OR AUTHORIZATIONS THAT ARE REQUIRED FOR CONSTRUCTION ACTIVITIES - CONSTRUCTION IN FLOODWAY IS APPLICABLE (DNR).
- A15 THE EXISTING SITE IS PRIMARILY UNDEVELOPED WOODED AREA AND POND BANK.
- A16 EXISTING SITE TOPOGRAPHY AT AN INTERVAL APPROPRIATE TO INDICATE DRAINAGE PATTERNS SEE SHEET
- CD.01 TO CD.02 A17 LOCATION(S) WHERE RUN-OFF ENTERS THE PROJECT SITE - THROUGH DIRECT RUNOFF FORM SURROUNDING LOTS
- AND PIPES AT NORTH EAST AND NORTH WEST OF ST. REMY POND. A18 LOCATION(S) WHERE RUN-OFF DISCHARGES FROM THE PROJECT SITE PRIOR TO LAND DISTURBANCE - SEE SHEET
- CD.01, CD.02.
- A19 LOCATION OF ALL EXISTING STRUCTURES ON THE PROJECT SITE SEE SHEET CD.01 CD.02. A20 EXISTING PERMANENT RETENTION OR DETENTION FACILITIES, INCLUDING MANMADE WETLANDS, DESIGNED FOR
- THE PURPOSE OF STORMWATER MANAGEMENT SEE SHEET CD.01 CD.02. A21 LOCATIONS WHERE STORMWATER MAY BE DIRECTLY DISCHARGED INTO GROUND WATER, SUCH AS ABANDONED
- WELLS. SINKHOLES. OR KARST FEATURES NOT APPLICABLE
- A22 SIZE OF THE PROJECT AREA EXPRESSED IN ACRES PROJECT AREA IS 1.69 ACRES.
- A23 TOTAL EXPECTED LAND DISTURBANCE EXPRESSED IN ACRES APPROXIMATELY 1.07 ACRES
- A24 PROPOSED FINAL TOPOGRAPHY SEE SHEET CG.01.
- A25 LOCATIONS AND APPROXIMATE BOUNDARIES OF ALL DISTURBED AREAS CJ.01 TO CJ.02.
- A26 LOCATIONS, SIZE, AND DIMENSIONS OF ALL STORMWATER DRAINAGE SYSTEM SUCH AS CULVERTS, STORMWATER SEWER, AND CONVEYANCE CHANNELS - SEE SHEETS CS.01.
- A27 LOCATIONS OF SPECIFIC POINTS WHERE STORMWATER AND NON-STORMWATER DISCHARGES WILL LEAVE THE PROJECT SITE - SEE SHEETS CG.01, CS.01.
- A28 LOCATION OF ALL PROPOSED SITE IMPROVEMENTS, INCLUDING ROADS, UTILITIES, LOT DELINEATION AND IDENTIFICATION, PROPOSED STRUCTURES, AND COMMON AREAS - SEE SHEET CS.01.
- A29 LOCATION OF ALL ON-SITE AND OFF-SITE SOIL STOCKPILES AND BORROW AREAS THE PROJECT INCLUDE
- ON-SITE BORROW AREA SOUTH OF THE GRAVEL MAINTENANCE DRIVE IN AREA-A, SEE SHEET CG.01.
- A30 THIS PROJECT DOES NOT REQUIRE CONSTRUCTION SUPPORT ACTIVITIES A31 THIS PROJECT DOES NOT HAVE ANY IN-STREAM ACTIVITIES
- STORMWATER POLLUTION PREVENTION CONSTRUCTION **COMPONENT (SECTION B)**
- B1 DESCRIPTION OF THE POTENTIAL POLLUTANT GENERATING SOURCES AND POLLUTANTS, INCLUDING ALL POTENTIAL NON-STORMWATER DISCHARGES - POTENTIAL POLLUTANTS FROM CONSTRUCTION ACTIVITY SUCH AS ASPHALT FROM PAVING; CONCRETE FROM CURBING, SIDEWALKS, OIL, GREASE, ANTIFREEZE, GASOLINE AND DIESEL FUEL FROM CONSTRUCTION EQUIPMENT; SOIL EROSION; FERTILIZER AND PESTICIDES FROM LANDSCAPING AND TRASH SHOULD BE PROPERLY STORED AND HANDLED TO REDUCE THE CONTAMINANTS FROM ENTERING THE STORM SYSTEM. TRASH SHOULD BE CLEANED UP TO REDUCE CLOGGING OF STORM SYSTEMS AND REDUCE POTENTIAL BACTERIA AND/OR OTHER BIOLOGICAL AGENTS FROM ENTERING IN THE STORM SYSTEM.
- B2 STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS SEE SHEET CJ.01, CJ.02 AND
- CONSTRUCTION ENTRANCE DETAIL AND SPECIFICATIONS. SEE SEASONAL SOIL PROTECTION CHART ON SHEET CJ.04.
- SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS SEE SHEET(S) CJ.01 TO CJ.04.
- SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS SEE SHEET CJ.01.
- RUN-OFF CONTROL MEASURES SEE SHEETS CS.01, CJ.01.
- B7 STORMWATER OUTLET PROTECTION LOCATION AND SPECIFICATIONS SEE SHEET CS.01, CJ.01 FOR
- LOCATIONS AND PROPOSED METHODS, SEE SHEET CJ.03 FOR DETAILS.
- GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECIFICATIONS NOT APPLICABLE. **DEWATERING APPLICATIONS AND MANAGEMENT METHODS:**
- DISCHARGE WATER FROM DEWATERING OF GROUND WATER FROM EXCAVATIONS SUCH AS BUT NOT LIMITED TO TRENCHES AND FOUNDATIONS SHALL BE DIRECTED TO AN APPROPRIATE STORMWATER QUALITY MEASURE THAT MINIMIZES THE DISCHARGE OF SEDIMENT REGARDLESS OF DISCHARGE LOCATION. DEWATERING OPERATIONS:
- SHALL NOT CAUSE EROSION FROM THE DISCHARGE. DEWATERING WATER SHALL DISCHARGE TO STABLE. EROSION-RESISTANT SURFACES, SUCH AS BUT NOT LIMITED TO CLEAN STONE OR WELL-VEGETATED **GRASSY AREAS:**
- SHALL NOT HAVE A DISCHARGE WITH A VISIBLE SHEEN, FOAM AND/OR POLLUTANTS AT A LEVEL THAT REQUIRES ADDITIONAL TREATMENT AND/OR AN ALTERNATE PERMIT:
- SHALL ROUTE DEWATERING WATER THROUGH A SEDIMENT CONTROL (E.G., SEDIMENT TRAP OR BASIN, PUMPED WATER FILTER BAG) DESIGNED TO PREVENT DISCHARGES WITH VISUAL TURBIDITY;
- SHALL NOT BE PLACED ON STEEP SURFACES; AND
- SHALL NOT USE THE RECEIVING WATER OR MS4 AS PART OF THE TREATMENT AREA

PROVIDE SEDIMENT AND OIL CONTAINMENT WITH THE USE A DEWATERING BAG. REFER TO MANUFACTURER SPECIFICATIONS TO DETERMINE PROPER SIZING FOR PUMP FLOW RATES. ALTERNATE EQUAL MEASURES OF CONTAINMENT MAY BE APPROVED BY THE ENGINEER OR EROSION CONTACT PERSON IF ANOTHER PRODUCT OR METHOD OF CONTAINMENT IS DESIRED.

- **B10 MEASURES UTILIZED FOR WORK WITHIN WATERBODIES NOT APPLICABLE.**
- B11 MAINTENANCE GUIDELINES FOR EACH PROPOSED STORMWATER QUALITY MEASURE INSPECT ALL EROSION CONTROL AND STORMWATER QUALITY MEASURES WEEKLY AND AFTER EACH STORM EVENT OR HEAVY USE. REPAIR AND/OR REPLACE ANY COMPROMISED OR FAILED MEASURE AS REQUIRED. MORE SPECIFIC **GUIDELINES ARE INCLUDED ON INDIVIDUAL DETAILS.**

- B12 PLANNED CONSTRUCTION SEQUENCE THAT DESCRIBES THE IMPLEMENTATION OF STORMWATER QUALITY MEASURES IN RELATION TO LAND DISTURBANCE:
- 1. INSTALL TEMPORARY PERIMETER EROSION CONTROL MEASURES. SILT FENCE. AROUND PROJECT
- 2. INSTALL CONSTRUCTION ENTRANCES, INLET PROTECTION FOR EXISTING STORM DRAINS, BEGIN SITE CLEARING, TREE REMOVAL, AND DEBRIS DISPOSAL. MAINTAIN SILT FENCE. RESEED DISTURBED
- 3. PARTIALLY DEWATER POND USING PUMPS OR GRAVITY METHODS. DIRECT DISCHARGE THROUGH APPROVED FILTER BAGS OR SEDIMENT BASINS. MAINTAIN WATER QUALITY.
- 4. PARTIALLY REMOVE ACCUMULATED SEDIMENT FROM THE EXISTING POND. DISPOSE OF SEDIMENT IN APPROVED OFFSITE LOCATION OR ONSITE CONTAINMENT AREAS
- 5. REMOVE EXISTING SPILLWAY STRUCTURE UNDER DRY CONDITIONS. STABILIZE EXPOSED AREA IMMEDIATELY AFTER REMOVAL.
- 6. INSTALL STAGING AREAS, AND MATERIAL STOCKPILES.
- 7. PROTECT ALL EXISITING UTILITIES. MAINTAIN EXISTING EROSION CONTROL SUPPLEMENT AS NEEDED.
- 8. ROUGH GRADE ENTIRE SITE INCLUDING CHANNELS, POND SIDE SLOPES AS NEEDED. MAINTAIN INLET PROTECTION, SILT FENCE, TEMPORARY SEED AND MULCH
- CONSTRUCT PRIMARY SPILLWAY PER DESIGN INCLUDING RISER, BARREL, OUTLET PROTECTION. CONSTRUCT SECONDARY SPILLWAY PER DESIGN STANDARDS.
- 10. EXCAVATE AND CONSTRUCT NEW SETTLING POND BELOW PRIMARY SPILLWAY OUTFALL.
- 11. PERFORM FINAL GRADING. RESTORE ALL DISTURBED AREAS. APPLY TOPSOIL. PERMANENT SEED MIX. **MULCH, AND EROSION CONTROL BLANKETS**
- 12. INSTALL PERMANENT EROSION CONTROL MEASURES INCLUDING OUTLET RIPRAP, SLOPE STABILIZATION. AND PERMANENT SEEDING PER PLANTING PLAN
- 13. MAINTAIN ACCESS ROADS OR CONSTRUCTION ENTRANCES TO ALLOW PERIODIC INSPECTION AND LONG-TERM MAINTENANCE
- 14. MAINTENANCE MAINTAIN ALL EROSION AND SEDIMENT CONTROL PRACTICES UNTIL ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.
- 15. IN THE EVENT THAT THE NATIONAL WEATHER SERVICE FORECASTS RAIN TO OCCUR WITHIN 24 HOURS OF THE END OF A WORK DAY, THE CONTRACTOR SHALL STABILIZE THE SITE BEFORE LEAVING AT THE END OF THE WORK DAY.
- B13 PROVISIONS THE EROSION AND SEDIMENT CONTROL PRACTICES PERTAIN TO THE ENTIRE PROJECT SITE. THERE ARE NO INDIVIDUAL BUILDING LOTS FOR THIS PROJECT.
- B14 MATERIAL HANDLING AND SPILL PREVENTION AND SPILL RESPONSE PLAN MEETING THE REQUIREMENTS IN327 IAC 2-6.1 - POTENTIAL POLLUTANTS FROM CONSTRUCTION ACTIVITIES INCLUDE: HMA PAVING, CONCRETE FROM CURBS AND SIDEWALKS, CONCRETE WASHOUT AREA, OIL, GREASE, ANTIFREEZE, GASOLINE AND DIESEL FUEL FROM CONSTRUCTION EQUIPMENT. IF A SPILL FROM ANY OF THESE ITEMS OCCURS, IMMEDIATE CLEANUP IS REQUIRED. SOIL EROSION, FERTILIZER AND PESTICIDES FROM LANDSCAPING, AND TRASH SHOULD BE PROPERLY HANDLED AND APPLIED REDUCE THE CONTAMINANTS FROM ENTERING THE STORM SYSTEM. TRASH SHOULD BE CLEANED UP TO REDUCE CLOGGING OF THE STORMSEWER SYSTEMS AND REDUCE POTENTIAL BACTERIA AND/OR OTHER BIOLOGICAL AGENTS FROM ENTERING THE STORMWATER MANAGEMENT SYSTEM. CONTRACTOR SHALL MEET THE REQUIREMENTS OF IAC 2-6.1 AND FOLLOW MATERIAL SAFETY DATA SHEET (MSDS) GUIDELINES FOR CONTAMINANTS PRESENT ON SITE.

MATERIAL HANDLING AND STORAGE ASSOCIATED WITH CONSTRUCTION ACTIVITY TO COMPLY WITH THE SPILL PREVENTION AND SPILL RESPONSE REQUIREMENTS IN 327 IAC 2-6.1. ABOVEGROUND STORAGE TANKS CONTAINING FUELS AND/OR HAZARDOUS MATERIALS ARE TO BE STORED APPROPRIATELY PER 327 IAC 2-10. DISPOSE OF CONTAMINATED SOILS, ABSORBENTS AND SPILL CLEANUP MATERIALS IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. DO NOT USE WATER TO FLUSH SPILLED MATERIAL UNLESS AUTHORIZED BY A FEDERAL. STATE. OR LOCAL AGENCY. CONSULT A SPILL RESPONSE PROFESSIONAL TO ENSURE ALL APPROPRIATE AND REQUIRED STEPS HAVE BEEN TAKEN. DO NOT REMOVE CONTAMINATED MATERIAL FROM THE SITE UNTIL APPROVAL IS GIVEN BY EMERGENCY RESPONSE (WHEN EMERGENCY RESPONSE IS REQUIRED).

CONTACT 911 AND IDEM EMERGENCY RESPONSE (1-888-233-7745) FOR SPILLS.

CONCRETE WASHOUT AREAS WILL BE IN LOCATIONS DESIGNATED BY THE OWNER AND CONTRACTOR. THE CONTRACTOR WILL ENSURE NO WASTE MATERIALS ARE IMPROPERLY DISPOSED OF OR DISCHARGED TO A WATERWAY OR SEWERS. REFER TO INDOT STORM WATER MANAGENENT FIELD GUIDE (2018) FOR MORE DETAIL ON DISPOSAL FOR GENERAL TRASH, CONSTRUCTION DEBRIS, SEDIMENT-LADEN WATER, AND CONCRETE WASHOUTS.

EACH CONTRACTOR IS RESPONSIBLE TO PROVIDE LITTER CONTROL FOR TRASH GENERATED BY THEIR CREW. ALL TRASH INCLUDING BUT NOT LIMITED TO; SOLID WASTE, PAINT CANS, OIL CANS, USED OIL AND FILTERS WILL BE CONTAINED AND DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH THE LAWS AND REGULATIONS OF THE STATE OF INDIANA AND THE CITY OF BLOOMINGTON.

THE CONTRACTOR SHALL FURNISH AND MAINTAIN STORMWTER FACILITIES FOR THIS PROJECT. THE FACILITIES SHALL BE CLEANED AS NECESSARY AND THE WASTE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH THE LAWS AND REGULATIONS OF THE STATE OF INDIANA AND THE CITY OF **BLOOMINGTON.**

B15 MATERIAL HANDLING AND STORAGE PROCEDURES ASSOCIATED WITH CONSTRUCTION ACTIVITY - TO MINIMIZE THE RELEASE OF POTENTIAL POLLUTANTS DURING CONSTRUCTION. THE CONTRACTOR(S) SHALL IMPLEMENT THE MATERIAL HANDLING AND SPILL PREVENTION PLAN. THE CONTRACTOR SHALL REVIEW THIS PLAN WITH ALL SUBCONTRACTORS AND REQUIRE THEY IMPLEMENT THE PLAN AS WELL.

STORMWATER POLLUTION PREVENTION -POST-CONSTRUCTION COMPONENT (SECTION C)

- C1 DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE: FINAL LAND USE NARRATIVE - THIS IS A RESIDENTIAL CONDOMINIUMS COMMON AREAS REDEVELOPMENT CONSIST OF 5.69 LEGAL ACREAGE. PROJECT AREA IS 1.69 ACRES AND DISTURBANCE AREA IS 1.07 ACRES. COMMON POLLUTANTS INCLUDE, OIL, GREASE, ANTIFREEZE, BRAKE FLUID, BRAKE DUST, RUBBER FRAGMENTS. GASOLINE, DIESEL FUEL AND OTHER HYDROCARBONS, METALS FROM VEHICULAR AND OTHER SOURCES, GRIT (SEDIMENT) FROM WEARING OF THE ROAD SURFACE AND FALLING OR WASHING OFF OF VEHICLES. TRASH (INCLUDING BACTERIA AND OTHER BIOLOGICAL AGENTS CONTAINED IN THE TRASH) FROM LITTERING AND OTHER TYPES OF IMPROPER DISPOSAL OR STORAGE. AND ELEVATED RECEIVING WATER TEMPERATURES FROM STORMWATER RUN-OFF CONTACT WITH IMPERVIOUS SURFACES.
- C2 POST- CONSTRUCTION CONTROL MEASURES INCLUDES PERMANENT EROSION CONTROL MEASURES INCLUDING OUTLET RIPRAP, SLOPE STABILIZATION, PERMANENT SEEDING PER PLANTING PLAN, SETTING POND, AND LEVEL SPREADER.
- C3 PLAN DETAILS FOR EACH STORMWATER MEASURES: ALL PROPOSED POST-CONSTRUCTION STORMWATER MEASURES SHOULD BE CLEARLY LOCATED ON THE PLAN, AND INCLUDE DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS. SEE SHEETS CS.01, AND CG.01.
- C4 CONSTRUCT EROSION CONTROL MEASURES BEFORE BEGINNING CONSTRUCTION. AFTER SUBSTANTIAL COMPLETION OF THE PROJECT HAS BEEN MET, THE TEMPORARY STORMWATER QUALITY MEASURES CAN BE REMOVED. THE SITE AND ADJACENT STREETS AND PROPERTY SHOULD BE CLEANED OF CONSTRUCTION DEBRIS AND SEDIMENT, AS NEEDED. SEDIMENT THAT HAS ACCUMULATED WITHIN THE STORMWATER DRAINAGE SYSTEM SHOULD BE REMOVED. ALL SEDIMENT THAT HAS ACCUMULATED SHALL BE FULLY REMOVED.
- C5 MAINTENANCE GUIDELINES FOR PROPOSED POST-CONSTRUCTION STORMWATER MEASURES: PROVIDE AN OPERATION MANUAL AND WHERE APPLICABLE A NARRATIVE DESCRIPTION OF THE MAINTENANCE GUIDELINES FOR ALL POST-CONSTRUCTION STORMWATER MEASURES TO FACILITATE THEIR PROPER LONG-TERM FUNCTION. THIS DOCUMENTATION MUST BE MADE AVAILABLE TO FUTURE PARTIES WHO WILL ASSUME RESPONSIBILITY FOR THE OPERATION AND MAINTENANCE OF THE POST-CONSTRUCTIONSTORMWATER MEASURES. ALL PROPOSED MEASURES MUST BE ACCOMPANIED BY GUIDELINES FOR MONITORING AND MAINTENANCE. IF MANUFACTURED PRODUCTS ARE UTILIZED, THE MANUFACTURERS OPERATION AND MAINTENANCE MANUAL/GUIDANCE MAY BE REFERENCED AND IS ACCEPTABLE.
- C6 THE PROJECT OWNER AND OCCUPANT OF THE PROPERTY SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE POST CONSTRUCTION STORMWATER MEASURES.



WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA Saint Remy Spillway

PROJECT LOCATION 3716 E St. Remy Drive Bloomington, IN 47401

Mitigation



90% Permitting Set

Not For Construction

NO.	REVISION	DATE
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ISSUE DATE

11.12.2025

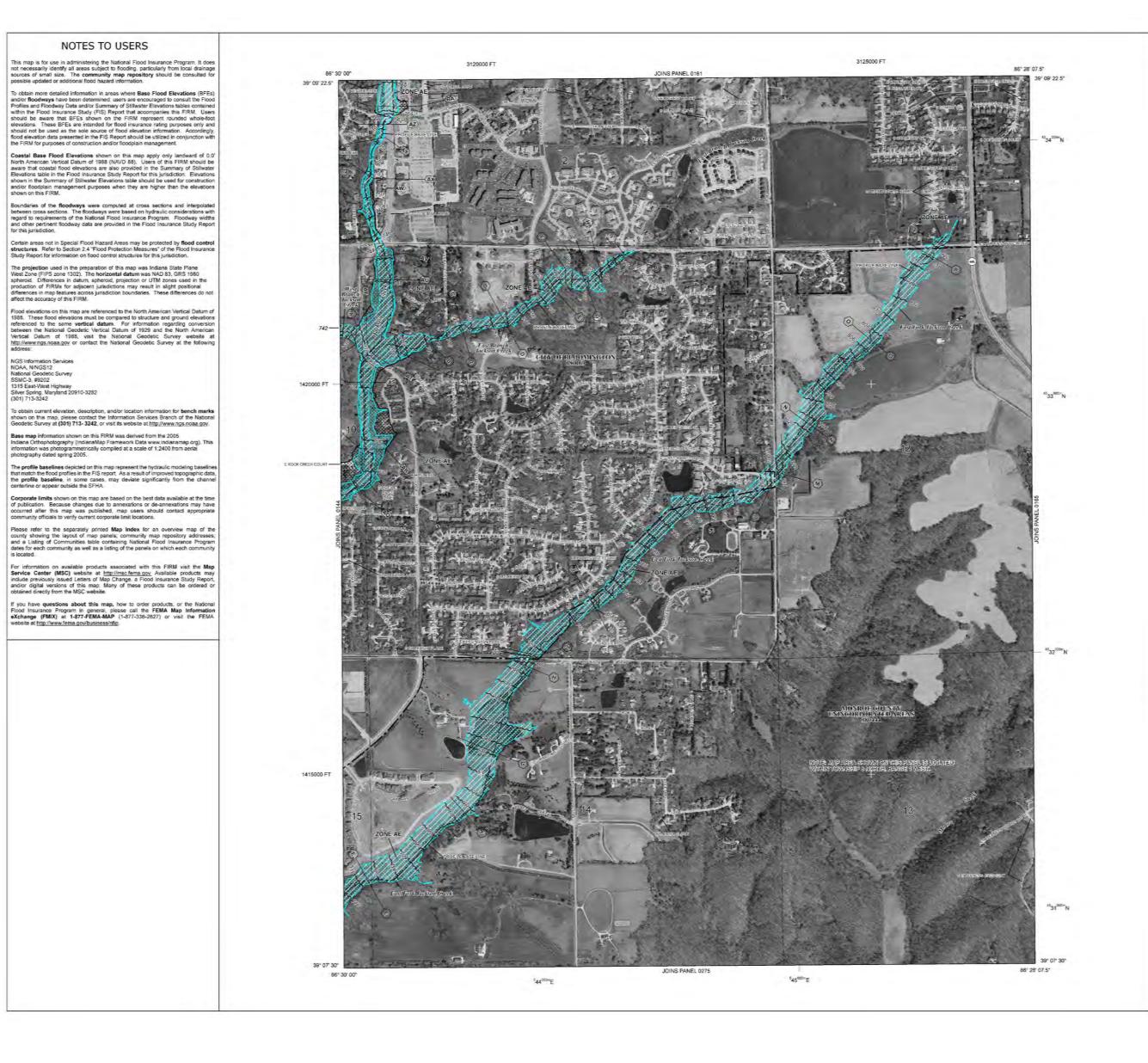
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PROJECT NUMBER

SHEET NAME SWPPP

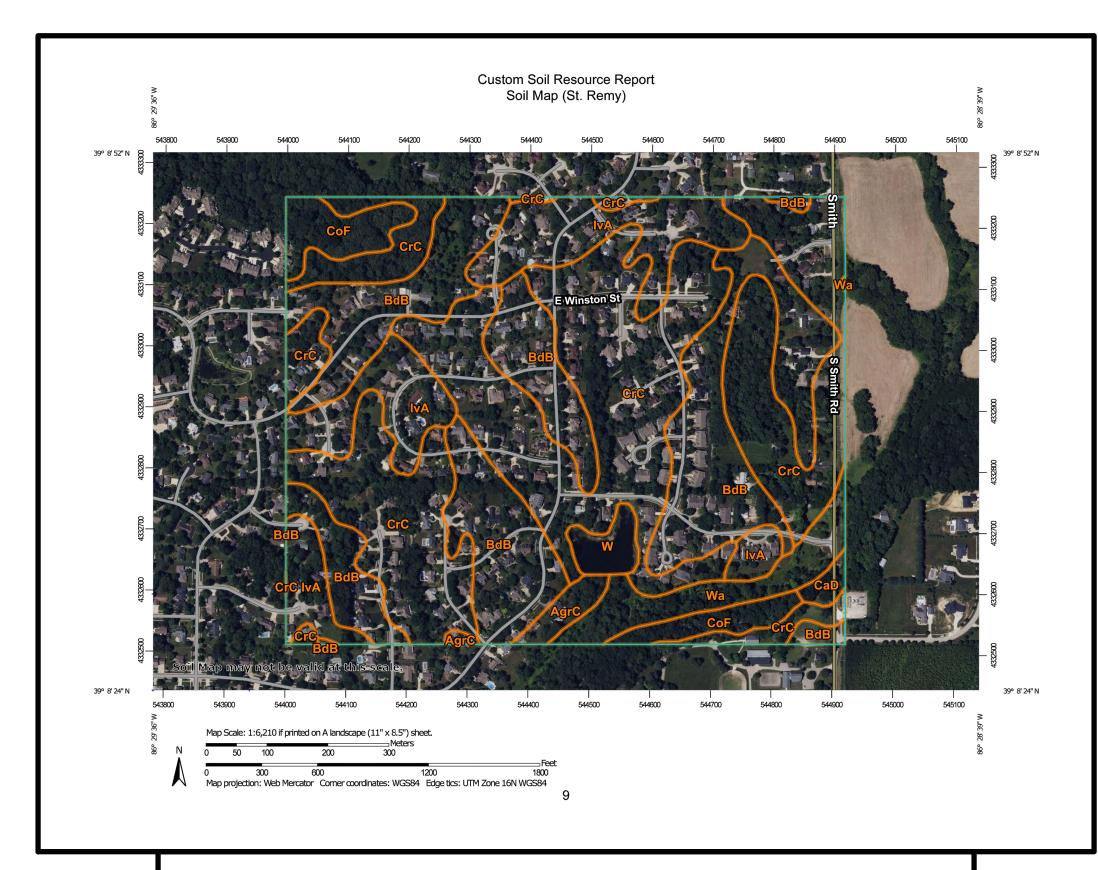
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EROSION CONTROL PLAN NOTES

- 1. ALL PROPOSED EROSION AND SEDIMENT CONTROL SHALL BE IN CONFORMANCE WITH THE CITY OF BLOOMINGTON STORMWATER STANDARDS MANUAL, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE MANUAL SHALL NOT ALLEVIATE THE CONTRACTOR FOR ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE MANUAL.
- 2. ADDITION EROSION AND SEDIMENT CONTROL MEASURE MAY BE REQUIRED BY THE CONSTRUCTION INSPECTOR.
- 3. PUBLIC AND PRIVATE ROADWAYS SHALL BE KEPT CLEARED OF ACCUMULATED SEDIMENT. BULK CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING THE AREA WITH WATER. PROJECTS SUBJECT TO IDEM'S CSGP SHALL REMOVE SEDIMENT FROM PUBLIC RIGHTS-OF-WAY NOT EXCLUSIVE OF CONSTRUCTION TRAFFIC AT THE END OF EACH DAY PER THE CSGP REQUIREMENTS.
- 4. WASTEWATER, SUCH AS CONCRETE WASHOUT SHALL BE COMPLETELY CONTAINED AND DISPOSED OF PROPERLY. NO WASTE WATER SHALL BE ALLOWED ON THE GROUND, IN A SEWER, IN A STREAM, OR ANY OTHER LOCATION WHERE IT IS NOT CONTAINED.
- 5. NO FILL MATERIAL, SUCH AS STONE FOR TEMPORARY CROSSINGS, CONSTRUCTION MATERIALS, DEMOLITION DEBRIS OR EQUIPMENT IS ALLOWED IN A WATERWAY WITHOUT THE APPROPRIATE PERMITS.
- 6. INLET PROTECTION MUST BE PROVIDED BY THE CONTRACTOR DURING MILLING OPERATIONS AND UNTIL THE SURFACE COURSE IS PLACED.
- 7. INLET PROTECTION MUST HAVE AN OVERFLOW, BE MAINTAINABLE WITHOUT DROPPING COLLECTED SEDIMENT AND OTHER POLLUTANTS INTO THE STORM SEWER AND NOT IMPEDE ACTIVE TRAFFIC.
- 8. POST CONSTRUCTION WATER QUALITY MEASURES SHALL NOT BE USED AS CONSTRUCTION SEDIMENT CONTROL MEASURES.
- 9. TWO-STAGE DITCH FILTRATION MATERIAL SHALL BE PROTECTED FROM SEDIMENTATION UNTIL SURFACES ARE STABLE.
- 10. SILT FENCE SHALL BE TRENCHED INTO THE GROUND, SHALL NOT BE LOCATED IN CONCENTRATED FLOW AREAS SUCH AS DITCHES AND SHALL BE PLACED PARALLEL TO THE CONTOUR.
- 11. CONSTRUCTION POLLUTION PREVENTION CONTROL SUCH AS EROSION CONTROL, SEDIMENT CONTROL AND STREAM DIVERSION OR PUMP-AROUNDS ARE REQUIRED TO PROTECT THE STORM SEWERS AND WATER BODIES FROM POLLUTANTS DURING ALL PHASES OF CONSTRUCTION.
- 12. DEWATERING WATER SHALL BE FILTERED PRIOR TO DISCHARGE INTO A STORM SEWER OR WATER BODY.
- 13. IF CONTAMINATED SOILS ARE ENCOUNTERED, "CONTAMINATED SOIL, REMOVE" SHALL BE PERFORMED IN ACCORDANCE TO INDOT SPECIFICATION 202.
- 14. ALL DIMENSIONS SHOWN ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
- 15. DO NOT SCALE DRAWINGS. UTILIZE DIMENSIONS INDICATED ON THE PLANS.
- 16. PROVIDE FLUSH CONDITIONS AT JUNCTURE OF ALL WALKWAYS.
- 17. SHALL BE PROTECTED AGAINST EROSION AND SCOUR DURING FLOODING BY VEGETATIVE COVER, RIPRAP, OR BULK HEADING. IF VEGETATIVE COVER IS USED, THE SLOPES SHALL BE NO STEEPER THAN 3' HORIZONTAL TO 1' VERTICAL.
- 18. A TREE PROTECTION ZONE SHALL BE INSTALLED PER SECTION 20.04.080(C)(3) AND INSPECTED BY THE PLANNING AND TRANSPORTATION DEPARTMENT PRIOR TO ANY LAND-DISTURBING ACTIVITIES. THE TREE PROTECTION ZONE AND THE TREE PROTECTION BARRIER SHALL REMAIN UNDAMAGED AND UNMOVED DURING THE ENTIRE DURATION OF CONSTRUCTION.
- 19. CONTRACTOR SHALL REPLACE ANY TREES THAT ARE DAMAGED OR KILLED DUE TO CONSTRUCTION ACTIVITIES AND THAT HAD PROTECTION FENCING LOCATED LESS THAN 3 FEET FROM THE DRIPLINE.



SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE V Coastal flood ione with velocity hazard (wave action); no Base Rood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Bevalions determined.

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 floot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.
ZONE 0 Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

= 0.2% Annual Chance Foodplain Boundary

513 Sase Flood Elevation line and value; elevation in feet*

Sase Flood Elevation value where uniform within zone; elevation in face*

Geographic coordinates referenced to the North American Datum of 1883 (NAD 83) Western Hemisphere 5000-foot tucks: Incline State Plane West Zone (FIPS Zone 1302), Transverse Mercator projection

Bench mark (see explanation in Notes to Users section of this FRV

PANEL 0163D

FLOOD INSURANCE RATE MAP MONROE COUNTY,

AND INCORPORATED AREAS

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

DECEMBER 17, 2010

INDIANA

PANEL 163 OF 400

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

Floodiney boundary

45" 02" 08", 93" 02" 12"

eggen N

DX5510 X

ZONE AE Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

OTHER AREAS

Map Unit Legend (St. Remy)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AgrC	Apalona-Zanesville silt loams, 6 to 12 percent slopes	2.1	1.2%
BdB	Bedford silt loam, 2 to 6 percent slopes	49.9	29.8%
CaD	Caneyville silt loam, 12 to 18 percent slopes	0.9	0.5%
CoF	Corydon Variant-Caneyville Variant complex, 25 to 70 percent slopes	6.9	4.1%
CrC	Crider silt loam, 6 to 12 percent slopes	76.0	45.4%
IvA	Iva silt loam, 0 to 2 percent slopes	22.2	13.3%
W	Water	2.2	1.3%
Wa	Wakeland silt loam, 0 to 2 percent slopes, frequently flooded	7.2	4.3%
Totals for Area of Interest		167.4	100.0%



WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA

PROJECT NAME
Saint Remy Spillway
Mitigation

PROJECT LOCATION

3716 E St. Remy Drive
Bloomington, IN
47401



90% Permitting Set

Not For Construction

No. REVISION DATE

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KEYMAP:		
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ISSUE DATE

11.12.2025

24-053

PROJECT NUMBER

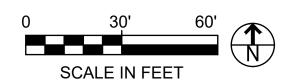
SWPPP

SHEET NUMBER

CJ.06



2 EASEMENT PLAN SCALE: 1" = 30'-0"



PLAN

EASEMENT PLAN LEGEND

(1) WETLAND CONSERVANCY EASEMENT

PROHIBITS ANY LAND-DISTURBING ACTIVITIES INCLUDING THE PLACEMENT OF A FENCE, OR ALTERATION OF ANY VEGETATIVE COVER, INCLUDING MOWING, WITHIN THE EASEMENT AREA.

ALLOWS THE REMOVAL OF DEAD OR DISEASED TREES THAT POSE A SAFETY RISK OR IMPEDE DRAINAGE AS WELL AS ALLOWING THE REMOVAL OF EXOTIC OR INVASIVE SPECIES, ONLY AFTER FIRST OBTAINING WRITTEN APPROVAL FROM THE PLANNING AND TRANSPORTATION DEPARTMENT.

ALL CONSERVANCY EASEMENTS SHALL BE IDENTIFIED WITH PUBLIC SIGNS LOCATED ALONG THE BOUNDARY OF THE EASEMENT. PUBLIC SIGNS SHALL BE PLACED AT INTERVALS OF NO MORE THAN 200 FEET, AND EACH PUBLIC SIGN SHALL BE A MAXIMUM OF ONE AND ONE-HALF SQUARE FEET IN AREA. A MINIMUM OF ONE PUBLIC SIGN IS REQUIRED, REGARDLESS OF EASEMENT SIZE. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING REQUIRED SIGNAGE

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TREE PRESERVATION EASEMENT:

MAINTAINING REQUIRED SIGNAGE.

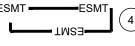
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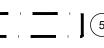
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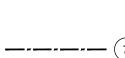
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(6) EX. KNOWN EMERGENT WETLAND (WETLAND DELINEATION AND WATERS REPORT, RESOLUTION GROUP INC, AUGUST 28, 2025)

AUGUST 28, 2025)



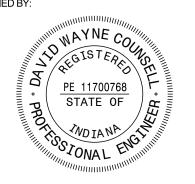


WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA Saint Remy Spillway

PROJECT LOCATION 3716 E St. Remy Drive Bloomington, IN 47401

Mitigation



90% Permitting Set

Not For Construction

NO.	REVISION	DATE
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KEYMAP:

ISSUE DATE PROJECT NUMBER

24-053

EASEMENT PLAN

SHEET NUMBER

11.12.2025

SHEET NAME

ES.00

EASEMENT PLAN LEGEND

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WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA Saint Remy Spillway

PROJECT LOCATION 3716 E St. Remy Drive Bloomington, IN 47401

Mitigation



90% Permitting Set

Not For Construction

NO.	REVISION	DATE

KEYMAP:

ISSUE DATE PROJECT NUMBER 11.12.2025

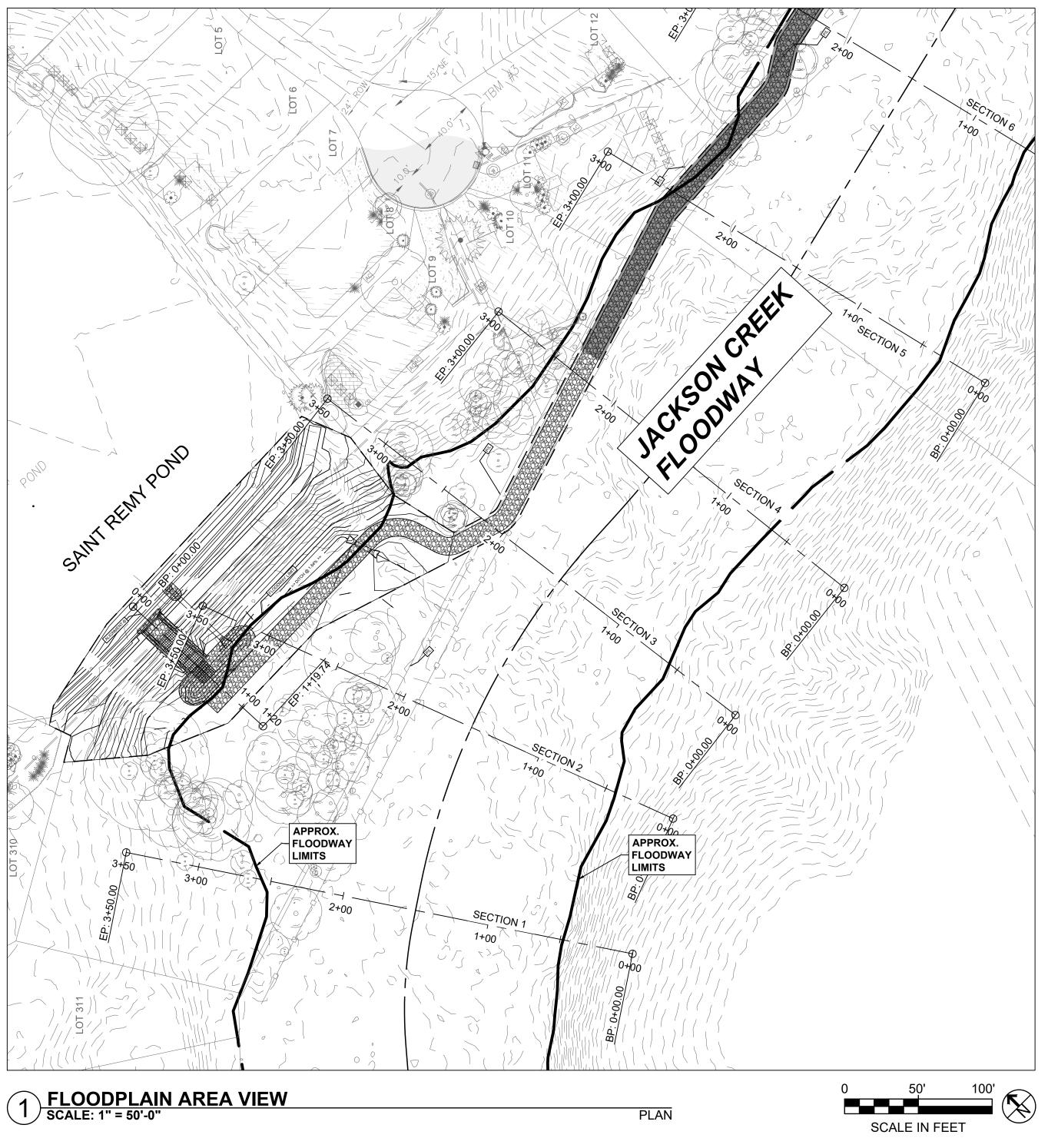
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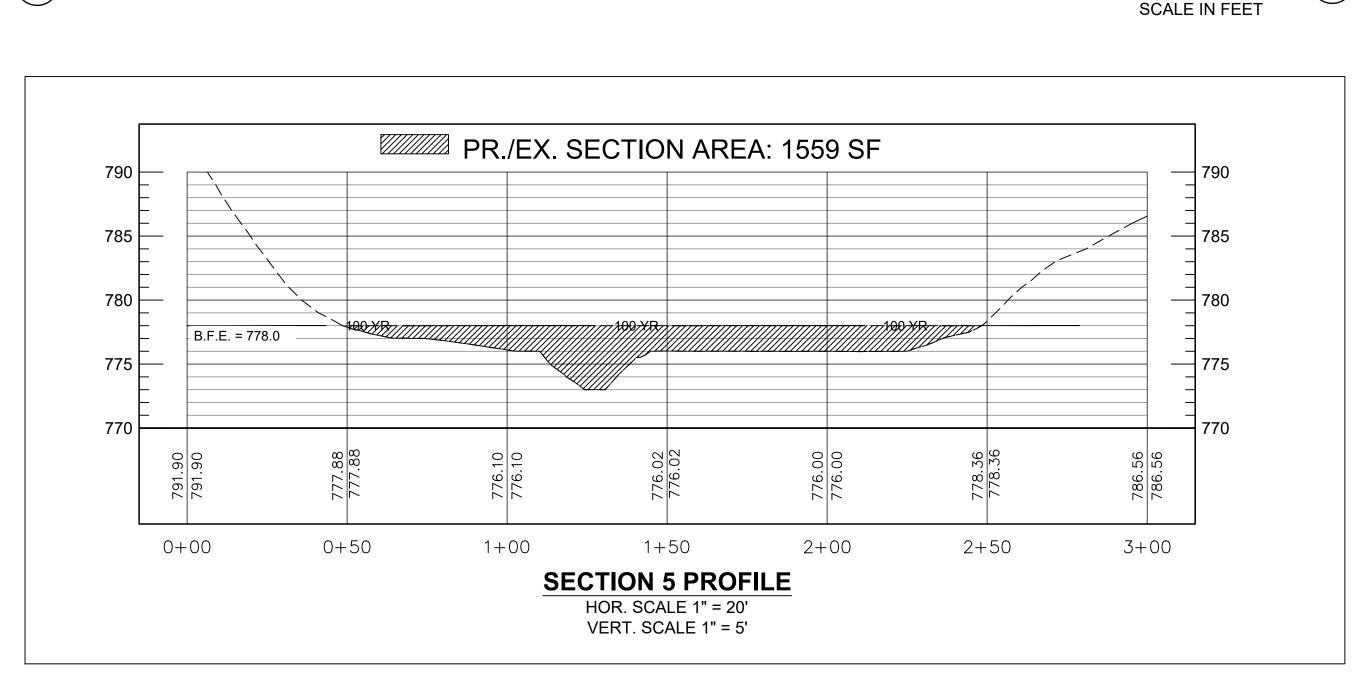
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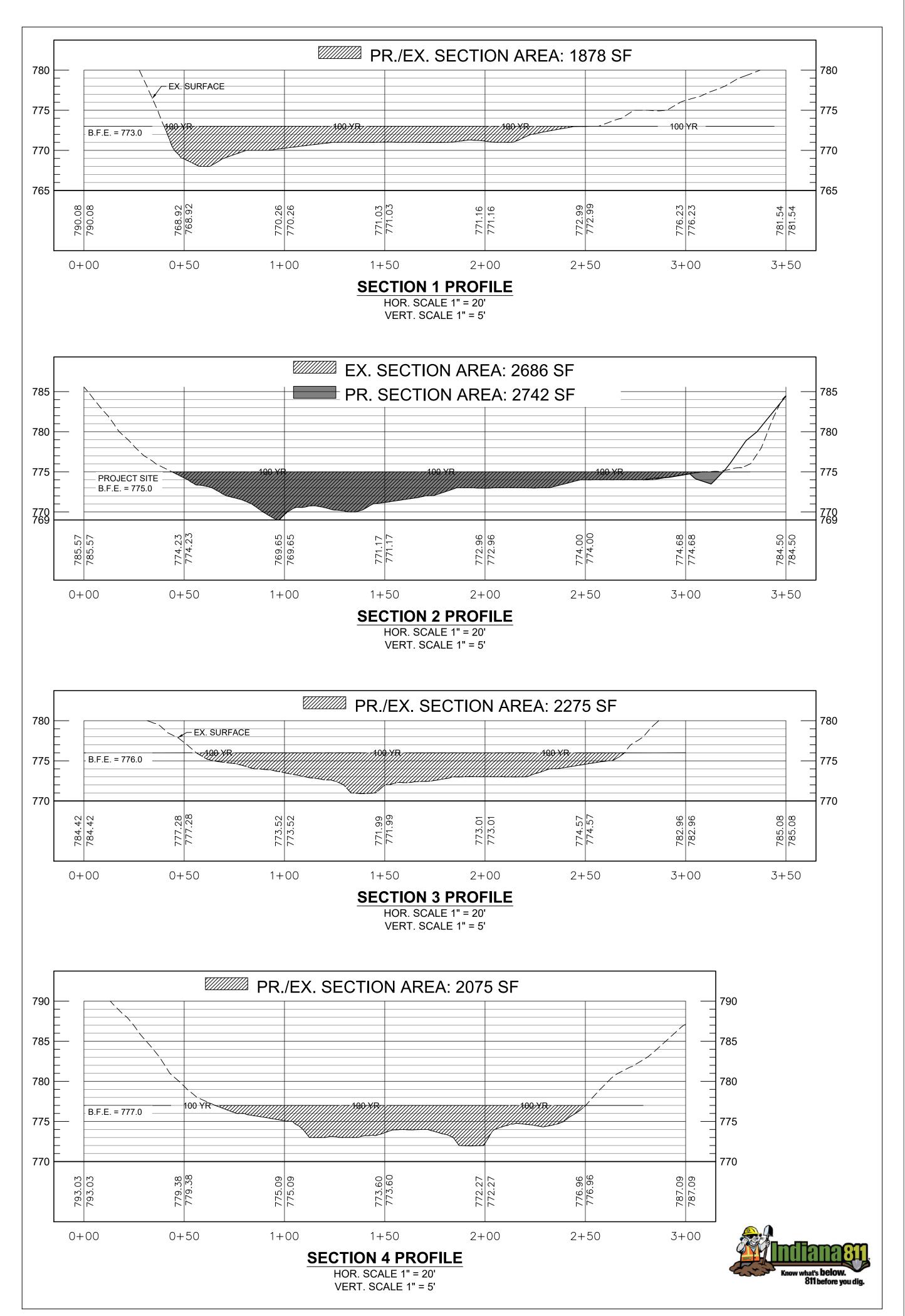
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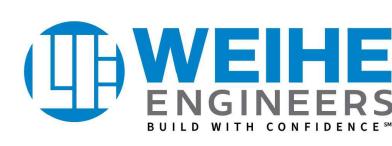
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1 EASEMENT PLAN SCALE: 1" = 40'-0"









WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA

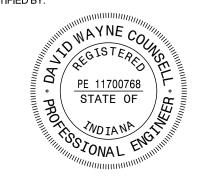
PROJECT NAME
Saint Remy Spillway

PROJECT LOCATION

3716 E St. Remy Drive
Bloomington, IN
47401

Mitigation

CERTIFIED BY:



90% Permitting Set

Not For Construction

NO. REVISION DATE

KEYMAP:



PROJECT NUMBER

24-053

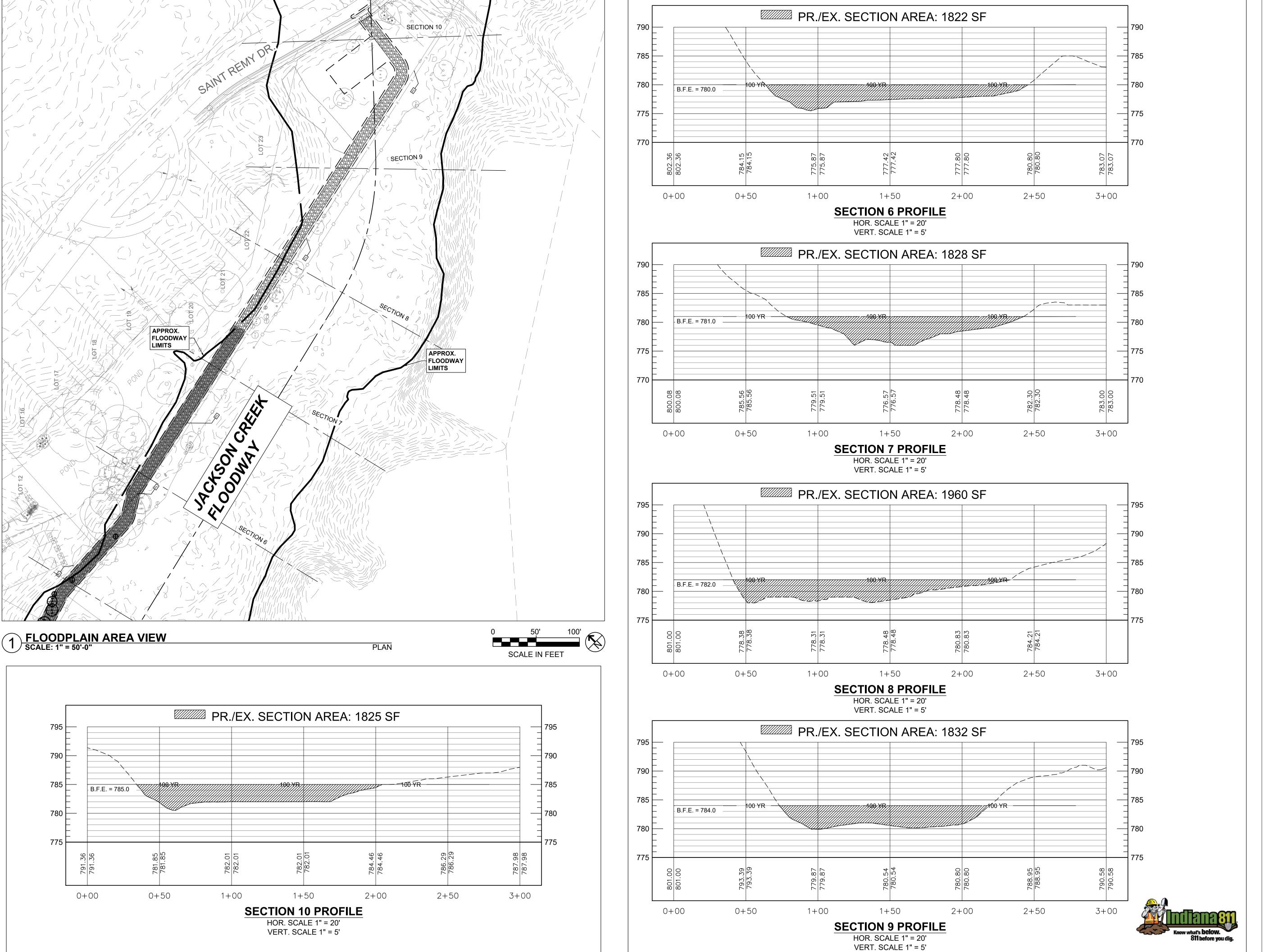
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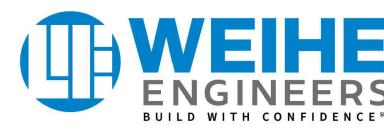
SHEET NUMBER

SHEET NAME
FLOODWAY

SECTIONS

FLD.00





WEIHE ENGINEERS INC. 10505 N COLLEGE AVE INDIANAPOLIS, IN 46280

Saint Remy HOA

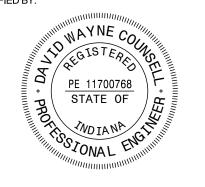
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PROJECT LOCATION

3716 E St. Remy Drive
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Mitigation

CERTIFIED BY:

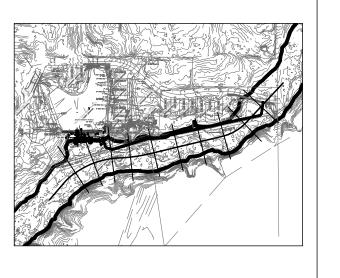


90% Permitting Set

Not For Construction

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KEYMAP:



ISSUE DATE 09.22.2025

SHEET NUMBER

PROJECT NUMBER 24-053

FLOODWAY SECTIONS

FLD.01

St. Remy Pond Dam

Dam Safety Inspection Monroe County, IN

Prepared for: Land Stewards Design Group 5022 Rockville Road Indianapolis, IN 46224

Prepared by:



Executive Summary

Brian W. McKenna, PE of HydroZōn Engineering, LLC (HydroZōn) completed an inspection of the Saint Remy Pond Dam on 1/30/2025. The inspection was completed at the request of the Land Stewards Design Group in support of a project to repair the dam and spillway.

The St. Remy Pond Dam has an approximate height of 12 feet, a crest width of about 10 feet, and an embankment length of roughly 270 feet. Although the dam does not meet the criteria for regulatory oversight under current IDNR guidelines, its failure could pose risks to downstream properties. The dam should be regarded as a "Significant Hazard" structure based on the potential for consequences if the dam were to fail catastrophically.

The inspection included visual observations of the dam slopes, and crest as well as related structures such as the spillways, drains, and abutments. The following table summarizes the condition ratings and noted deficiencies for each component of the dam:

Category	Rating	Noted Deficiencies
Upstream Slope	Deficient	woody vegetation, erosion scarping, animal burrows
Crest	Deficient	narrow, irregular surface, sanitary sewer encroachment
Downstream Slope	Poor	large trees, exposed coarse soils, erosion gullies
Seepage	Poor	seepage and piping failure under spillway slab
Principal Spillway	Poor	undermined concrete chute, eroded outlet channel
Auxiliary Spillway	Poor	no auxiliary spillway found
Maintenance & Repairs	Deficient	trees, brush, weeds, rodent activity, missing drawdown
Overall	Poor	unknown spillway capacity and geotechnical stability

Based on these findings, the dam's overall condition was rated as "Poor." This indicates that "a potential dam safety deficiency is clearly recognized for normal loading conditions. Immediate actions to resolve the deficiency are recommended; reservoir restrictions may be necessary until problem resolution." The following recommendations are provided for improving the St. Remy Pond Dam so that it complies with IDNR guidance for a "Significant Hazard" structure.

- 1. Maintain a lower reservoir level to reduce the risk of a catastrophic breach of the dam.
- 2. Perform a hydrologic and hydraulic analysis to determine the required spillway capacity to safely pass the runoff from 50% of the Probable Maximum Precipitation (PMP) design storm.
- 3. Perform a geotechnical investigation to evaluate the stability and permeability of the dam.
- 4. Perform an assessment of environmentally regulated areas in the vicinity of the dam to identify streams and wetlands that would be impacted by improvements to the dam and spillway system
- 5. Design a new principal spillway using a drop-inlet style consisting of a vertical riser in the lake that connects to an outlet pipe placed under the dam.
- 6. Design an auxiliary spillway using an open-channel style grass-lined spillway through the right abutment of the dam.
- 7. Design improvements to the dam embankment that will correct the noted deficiencies and meet IDNR requirements for seepage and stability.
- 8. Once appropriate designs have been completed and required permits are obtained, proceed with the construction of the improvements to the dam embankment and spillway system.

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Appendix A: Inspection Checklist and Sketch

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1.0 Background

1.1 Location

The St. Remy Pond Dam is located in Monroe County, Indiana. It is located in Section 11, Township 8 North, Range 1 West of the Public Land Survey System (PLSS). It is situated on an Un-Named Tributary (UNT) to Jackson Creek, approximately 5 miles southeast of Bloomington, Indiana as shown in Figure 1 below.

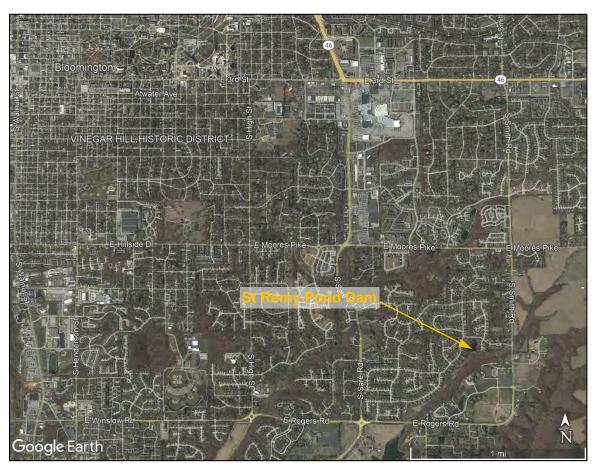


Figure 1: Location Map

1.2 Regulatory Jurisdiction

The Indiana Department of Natural Resources (IDNR) has regulatory jurisdiction over dams that meet certain criteria. According to Indiana Code (IC) 14-27-7.5-1, a dam is not regulated if it:

- "(A) Has a drainage area above the dam of not more than one (1) square mile.
- (B) Does not exceed twenty (20) feet in height.
- (C) Does not impound a volume of more than one hundred (100) acre-feet of water."

The St Remy Pond Dam does not appear to exceed any of these criteria and is therefore unlikely to be regulated by the IDNR. The only mechanism for the IDNR to claim jurisdiction over the dam would be for a downstream property owner to petition the IDNR to take jurisdiction of the dam if they believe the structure "would cause a loss of life or serious

damage to the person's home, industrial or commercial building, public utility, major highway, or railroad if the structure fails." Given the size of the dam, it is unlikely that such a request would be made and accepted.

1.3 Hazard Potential

Although the dam is unlikely to ever be regulated by the IDNR, it would still be prudent to consider the hazard potential of the dam based on IDNR criteria. The hazard level for a dam is assigned based on the potential consequences of a failure and not on the condition of the dam or its likelihood of failure. Some homes downstream of the St. Remy Pond Dam, particularly those along South Olcott Boulevard, are lower than the crest elevation of the dam and therefore could be impacted if the dam were to fail catastrophically. Without a detailed hydraulic model to simulate a dam breach, the potential for damage and/or loss of life associated with these homes is unknown. However, it would seem unlikely that the dam would be considered "High Hazard" based on the limited height and storage capacity of the dam and the topography downstream. The dam would most likely be considered a "Low Hazard" or "Significant Hazard" structure. In the absence of detailed dam breach modeling, it would be pragmatic to consider the dam as a "Significant Hazard" structure and follow appropriate IDNR guidelines for that hazard potential.

1.4 Physical Description

1.4.1 Embankment

The dam embankment is approximately 270 feet long with a height of about 12 feet. The crest is roughly 10 feet wide. Both the upstream and downstream slopes are approximately 2:1 (horizontal:vertical).

1.4.2 Spillway

The principal spillway consists of an open channel concrete chute located at the left abutment of the dam. The chute was roughly 6 feet wide, and the crest elevation of the spillway appeared to only be a foot or two lower than the embankment crest. There does not appear to be an auxiliary spillway for the dam.

1.4.3 Drawdown

There is no drawdown mechanism in place to lower the water level in the reservoir. Dewatering the dam would require a temporary pump or siphon.

1.4.4 Reservoir

The reservoir impounded by the dam is approximately 2.15 acres in area at normal pool. The dam is situated at the south end of the reservoir.

1.4.5 Watershed

The watershed contributing rainfall runoff to the reservoir is approximately 62 acres in area. The land use of the upstream watershed is primarily residential development.

2.0 Visual Inspection

Brian W. McKenna, PE of HydroZōn Engineering, LLC (HydroZōn) completed a dam safety inspection of the St Remy Pond Dam on January 30, 2025. The inspection included visual observations of the dam slopes, and crest as well as related structures such as the spillways, drains, and abutments. The inspection did not include any subsurface investigation or computational analysis and was limited in scope to items pertaining to the safety of the dam. Observations from this inspection were documented with an inspection checklist contained in

Appendix A and are described in the following paragraphs. The "Guidelines for Determining Conditions" was taken from IDNR guidance and is included in the checklist. These guidelines were used to determine the appropriate condition rating for each component of the dam as well as for determining the overall condition rating of the dam.

2.1 Inspection Conditions

The inspection was completed at approximately 10:00 a.m. The temperature was 35 degrees Fahrenheit with calm winds and cloudy skies. The ground was frozen with some snow cover. No rainfall events had been recorded in the five days before the inspection. The lake pool elevation was about 6 inches below the normal pool elevation. All references to left and right ends of the dam refer to the orientation when looking downstream. Typical photos of each feature have been embedded in the text below. Additional photos of the inspection are included in Appendix B.

2.2 Upstream Slope

The upstream slope of the dam was covered in short brush and weeds. There was no evidence of erosion protection along the shoreline. As a result, there was some wave action

erosion and scarping along the upstream slope. There was no evidence of runoff erosion or instabilities such as slides. cracks, bulges, or depressions. The entire upstream slope had hummocky, irregular appearance. Two large animal burrows or sinkholes were observed on the upstream slope near the right end. One was located at the edge of water about 30 feet to the left of a sanitary sewer manhole located on the crest. The other



Figure 2: Upstream Slope of Embankment

hole was located about 20 feet to the right of the same manhole but further up the slope from the edge of water. **The condition of the upstream slope was rated as "Deficient."** Refer to Figure 2 for a typical photo of the upstream slope.

2.3 Crest

The crest of the embankment was covered in short brush and weeds. The crest was relatively narrow which may affect the stability of the embankment under certain loading conditions. There was no evidence of erosion on the crest. There was also no evidence of misalignments or instabilities. The surface of the crest was irregular. There was no evidence of rodent burrows



Figure 3: Crest of Embankment

or vehicle ruts. A sanitary sewer line runs the length of the crest and is exposed where it crosses the spillway. **The condition of the crest was rated as "Deficient."** Refer to Figure 3 for a typical photo of the crest.

2.4 Downstream Slope

The downstream slope of the embankment was covered in large trees, leaves, and, sparse underbrush, and some weeds. There were numerous bare spots with exposed soil along the

downstream slope. The exposed soil in these bare spots was notably coarse with loose stones. Some erosion gullies were formina sporadically on the downstream slope. While there was no evidence of instabilities. such as slides, cracks, bulges, depressions, or the downstream slope had irregular hummocky, appearance. While the brush and leaves made it difficult to inspect fully, there was no evidence of rodent burrows or



Figure 4: Downstream Slope of Embankment

ruts visible on the downstream slope. **The condition of the downstream slope was rated as "Poor."** Refer to Figure 4 for a typical photo of the downstream slope.

2.5 Seepage

While there was no evidence of seepage or soft areas on the downstream slope of the embankment or beyond the toe, a significant seepage area was observed under the spillway The quantity of flow slab. emerging from this area was estimated to be less than a gallon However, there per minute. appeared to have been a significant amount of soil piping in this area which has led to the undermining of the spillway chute. Head-cutting erosion from flows going over the spillway



Figure 5: Seepage Under Spillway Chute

appeared to have exacerbated the erosion and undermining of the spillway chute. A corrugated HDPE drainpipe was exposed by this erosion along the left side of the spillway chute. A second corrugated drainpipe was visible near the right groin of the downstream slope of the embankment. This pipe appeared to intentionally daylight in this area but it was not clear whether the pipe served as an internal embankment drain or as a surface drain for areas adjacent to the dam. There was no flow discharging from this second drainpipe. **The condition of the seepage was rated as "Poor."** Refer to Figure 5 for a photo of the seepage area under the spillway chute.

2.6 Principal Spillway

As mentioned in the previous section, the concrete chute that serves as the principal spillway was severely undermined due to a combination of seepage piping under the chute and erosion from spillway flows in downstream channel. the There was evidence of active erosion in the channel downstream of the concrete chute such as loose, exposed soils and undercutting of the spillway slab and adjacent vegetation. While the failure likely began with seepage



Figure 6: Principal Spillway Outlet Channel

piping loosening the soils under the spillway chute, erosion from flows over the spillway has likely contributed the most to the transport of large volumes of soil material from the spillway channel downstream of the chute. **The condition of the principal spillway was rated as "Poor."** Refer to Figure 6 for a typical photo of the principal spillway outlet channel.

2.7 Auxiliary Spillway

There was no auxiliary spillway found. It is unclear whether the principal spillway has the hydraulic capacity to convey the appropriate design flow. The condition of the auxiliary spillway was rated as "Poor."

2.8 Maintenance and Repairs

The dam and spillway do not appear to have been maintained in accordance with relevant guidance appropriate for dams in Indiana. Specific maintenance items noted during the inspection are described in the following paragraphs.

2.8.1 Vegetation

The dam does not have the appropriate turf grass coverage that is recommended for an earthen dam embankment. Instead, the upstream slope and crest of the dam were covered in brush and weeds while the downstream slope was covered in large trees with sporadic underbrush. Woody vegetation, like trees and brush, should be removed from the dam in accordance with guidance provided in Section 4.2.2 of Part 2 of the *Indiana Dam Safety Inspection Manual*.

2.8.2 Rodent Activity

Two rather large rodent burrows or sinkholes were observed on the upstream slope of the dam. These holes should be properly backfilled and a rodent control program should be implemented to prevent further burrowing from rodents in the dam embankment. Refer to Section 4.13 of Part 2 of the Indiana Dam Safety Inspection Manual for further guidance on rodent control.

2.8.3 Deteriorated Concrete

Concrete spillways need to be properly maintained and repaired to maximize the duration of time that they can remain in service. The concrete spillway on the St Remy Dam showed signs of deterioration and undermining that have significantly impacted its

ability to perform as intended. The spillway structure is likely beyond repair and will have to be replaced with a new spillway structure. The new spillway structure should be maintained in accordance with Section 4.6 of Part 2 of the *Indiana Dam Safety Inspection Manual*.

2.8.4 Drawdown Mechanism

According to Section 4.8 of *General Guidelines for New Dams and Improvements to Existing Dams in Indiana*, "All dams should have an adequately designed drawdown structure to allow maintenance and accommodate the requirements of the Operation Plan and the Emergency Action Plan." No such mechanism was observed on the St Remy Pond Dam. Provisions for such a drawdown structure should be included in the improvement plans for the dam.

2.9 Overall Conditions

Based on the inspection findings and recent file review, the overall surficial condition of the dam was considered to be "Poor." According to IDNR guidelines, this rating indicates the following:

"A potential dam safety deficiency is clearly recognized for normal loading conditions. Immediate actions to resolve the deficiency are recommended; reservoir restrictions may be necessary until problem resolution."

Due to the surficial nature of the inspection, there is the potential for subsurface deficiencies at the time of the inspection that could not be observed visually. Furthermore, observable conditions may deteriorate following the inspection which could affect the ability of the dam to perform under certain loading conditions.

3.0 Conclusions and Recommendations

3.1 Conclusions

Based on the file review and inspection observations described above, the following conclusions have been made regarding the St. Remy Pond Dam:

- 1. The St. Remy Pond dam does not appear to exceed any of the size criteria that would make it regulated by the IDNR. The only mechanism for the dam to become regulated would be the successful petition of a downstream property owner.
- 2. Although the dam is unlikely to be regulated by the IDNR, classifying the hazard potential of the dam and following IDNR guidance appropriate to that hazard potential is advised. While a definitive hazard classification would require dam breach modeling, a conservative assumption would be to classify the dam as a "Significant Hazard" structure.
- 3. The existing spillway structure has been compromised by erosion and seepage piping to the extent that repairing the existing structure would not be advisable or cost-effective. The hydraulic capacity of the existing spillway system has not been determined but it appears unlikely that it meets the capacity requirements for a "Significant Hazard" structure.
- 4. Several deficiencies were observed on the embankment that appear to threaten the safety of the dam. Deficiencies of concern include large trees, weeds, woody vegetation, coarse soils, hummocky slopes, steep slopes, animal burrows, and a sanitary sewer encroachment.
- 5. Based on a surficial inspection, the dam's overall condition was considered "Poor." This rating indicates that "a potential dam safety deficiency is clearly recognized for normal

loading conditions. Immediate actions to resolve the deficiency are recommended; reservoir restrictions may be necessary until problem resolution."

3.2 Recommendations

Based on the conclusions summarized above, the following recommendations are provided for improving the St. Remy Pond Dam so that it complies with IDNR guidance for a "Significant Hazard" structure.

- Due to the current condition of the dam and spillway system, the reservoir level should be lowered to reduce the risk of a catastrophic breach of the dam. This can be initiated through the use of a pump or siphon to lower the reservoir at a safe and controlled rate. Maintaining a lower lake level may be best accomplished with a controlled breach or temporary culvert to allow flow to safely pass through the embankment.
- 2. Perform a hydrologic and hydraulic analysis to determine the required spillway capacity to safely pass the runoff from 50% of the Probable Maximum Precipitation (PMP) design storm. Refer to Section 4 of *General Guidelines for New Dams and Improvements to Existing Dams in Indiana* for specific methods required for performing this analysis. In addition to considering the hydraulic capacity, the new spillway system design should consider the durability of the spillway system under both normal and extreme loading conditions. It should also include provisions for a drawdown mechanism that can be used to lower the reservoir level if needed. A common approach to addressing these considerations for a dam of this size is to design a more durable principal spillway that can safely pass more frequent flows with a higher capacity, less durable auxiliary spillway system that can accommodate the remaining hydraulic capacity needs.
- 3. Perform a geotechnical investigation to evaluate the stability and permeability of the dam. This geotechnical investigation should include subsurface exploration of the existing embankment and foundation materials along with laboratory testing of the subsurface samples to classify the soils and determine shear strength and permeability parameters. Refer to Section 3 of *General Guidelines for New Dams and Improvements to Existing Dams in Indiana* for specific methods required for performing this investigation.
- 4. Perform an assessment of environmentally regulated areas in the vicinity of the dam to identify streams and wetlands that would be impacted by improvements to the dam and spillway system. This assessment can be used in early coordination efforts with agencies that might have regulatory jurisdiction over regulated areas including the Indiana Department of Environmental Management (IDEM), United States Army Corps of Engineers (USACE), City of Bloomington, and/or the Monroe County Soil and Water Conservation District (MCSWCD).
- 5. Design a new principal spillway using a drop-inlet style consisting of a vertical riser in the lake that connects to an outlet pipe placed under the dam. The principal spillway should be designed to accommodate flows up to the 1percent-annual-chance design storm without engaging the auxiliary spillway system. The principal spillway drop-inlet should also have drawdown mechanism that can be used to

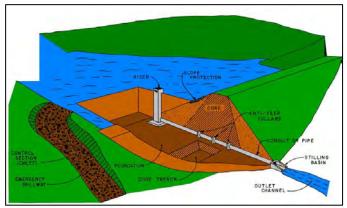


Figure 7: Drop-Inlet Spillway Illustration (Image credit: Indiana Dam Safety Inspection Manual)

lower the reservoir if needed. Refer to Figure 7 for a typical section of a dam depicting a drop-inlet spillway. Note that although anti-seep collars were commonly used in the past, they are no longer recommended for use. Instead, the outlet pipe should be encased in lean concrete with a sand filter on the downstream end of the pipe to reduce the potential for seepage piping.

- 6. Design an auxiliary spillway using an open-channel style grass-lined spillway through the right abutment of the dam. The auxiliary spillway should be designed to only activate for events that exceed the one-percent-annual-chance design storm. The combined capacity of the principal and auxiliary spillways should accommodate the 50% PMP design storm.
- 7. Design improvements to the dam embankment that will correct the noted deficiencies and meet IDNR requirements for seepage and stability. This will include properly removing woody vegetation from the dam, regrading slopes, and establishing turf grass on the embankment slopes. Depending on the results of the geotechnical investigation, it may also include flattening the embankment slopes and/or installing an internal drainage system to address stability and seepage concerns. Consideration should also be given to the sanitary sewer pipe passing through the embankment. While it would be preferable to relocate this pipe outside of the embankment, accommodations could be made to allow it to remain in place with appropriate mitigation and/or monitoring.
- 8. Once appropriate designs have been completed and required permits are obtained, proceed with the construction of the improvements to the dam embankment and spillway system. Appropriate care should be taken during construction to maintain the integrity of the dam and to protect existing infrastructure such as the existing sanitary sewer pipe. Refer to Section 6 of General Guidelines for New Dams and Improvements to Existing Dams in Indiana for specific recommendations related to monitoring the construction of the dam improvements.

4.0 References

Google Earth Pro. Version 7.3.4; Accessed January 28, 2025

Indiana Department of Natural Resources. Indiana Dam Safety Inspection Manual. 2003.

Indiana Department of Natural Resources. *General Guidelines for New Dams and Improvements to Existing Dams in Indiana*. 2001.

Land Stewards Design Group. St. Remy Pond Temporary Spillway Repair Solution. April 30, 2024.

Land Stewards Design Group. *Technical Memorandum: St. Remy Spillway and Inflows – Sedimentation Prevention and Bank Stabilization Investigation.* March 05, 2024.

Appendix A: Inspection Checklist and Sketch

Inspection Conditions

Inspection Representative	Brian W. McKenna, PE
Date	1/30/2025
Time	10:00 AM
Temperature	35 F
Cloud Cover	Cloudy
Wind	Calm
Ground moisture	Snow/frozen
Last rain event	> 5 days
Lake pool level	6" below normal
Drawdown Structure	None
Montioring Equipment	None

UPSTREAM SLOPE

SLOPE	Comments	Location	,	House Mous	Mainte
Estimated slope (H:V)	2H:1V				
VEGETATION		_			
Trees	None		Х		
Brush	Low brush	entire slope		Х	
Ground Cover	Brush and weeds	entire slope		Х	
SLOPE PROTECTION					
None	None visible		Х		
Riprap	N/A		Х		
Other	N/A		Х		
EROSION			1	, ,	
Wave Erosion	Some scarping	entire slope			X
Runoff Erosion	None visible		Х		Щ
INSTABILITIES			T		
Slides	None visible		X		\perp
Longitudinal Cracks	None visible		Х		\perp
Transverse Cracks	None visible	-	Х		$\downarrow \downarrow \downarrow$
Bulges	None visible	1	Х		$\perp \!\!\! \perp \!\!\! \perp$
Depressions	None visible		Х		\perp
Hummocky	Irregular slope	entire slope			X
OTHER			1		
Rodent Burrows	2 animal burrows or sink holes observed	Both near right end; one was 30' left of sanitary manhole at waterline; one was 20' right of sanitary manhole near top of slope			x
Ruts	None visible		Х		
Other	None		Х		
PROBLEMS NOTED:		•			
(A-1) None					
(A-2) Riprap - Missing, Sparse, Displaced, Weathered					
(A-3) Wave Erosion-with Scarps	Some scarping observed along the	edge of water for entire slope.			
(A-4) Cracks-with Displacement					
(A-5) Sinkhole	Two animal burrows or sink holes c embankment.	observed near right end of			
(A-6) Appears Too Steep					
(A-7) Depressions or Bulges					
(A-8) Slides					
(A-9) Animal Burrows					
(A-10) Trees, Brush, Briars	Brush and weeds dominate upstream slope.				
(A-11) Other	Upstream slope is hummocky.				
Upstream Slope Condition	Defi	cient			

Inspection Date: 1/3**6/**12025

CREST						٠.
CNLST	Comments	Location		4	one Mc	dita di di
Length	~ 270 ft				<u> </u>	<u>, , , , , , , , , , , , , , , , , , , </u>
Width	~ 10 ft					
/EGETATION	•					
Trees	None			$\overline{\Box}$		
Brush	Low brush	entire slope			,	₹
Ground Cover	Brush and weeds	entire slope		T	,	₹
EROSION	•	· ·				
Runoff Erosion	None visible			$\overline{\Box}$		
ALIGNMENT	•	<u> </u>	· ·			<u>'</u>
Vertical	None visible			$\overline{\Box}$		
Horizontal	None visible					
INSTABILITIES		,	\\			
Longitudinal Cracks	None visible			$\overline{\Box}$		
Transverse Cracks	None visible			7		
Bulges	None visible			7		
Depressions	None visible			╮		
Hummocky	Irregular surface	entire slope		Ť		Х
OTHER		- Community of		_		
Rodent Burrows	None visible	T T		$\overline{\Box}$	Т	П
Ruts	None visible			Ì		
Other	None visible			Ì		
PROBLEMS NOTED:	Trone visible			`		
B-1) None	Τ					
(B-2) Ruts or Puddles						
(B-3) Erosion						
(B-4) Cracks-with						
Displacement						
(B-5) Sinkholes						
(B-6) Not Wide Enough	Crest may be too narrow to maintain stability.					
(B-7) Low Area						
(B-8) Misalignment						
(B-9) Inadequate Surface Drainage						
(B-10) Trees, Brush, Briars	Brush and weeds dominate crest.					
(B-11) Other	Crest is hummocky. Manhole for sanitary sewer located at right end of crest.					
Crest Condition		Deficient				

DOWNSTREAM

DOWNSTREAM				Agge Mg	"ob
SLOPE	Comments	Location		ADIR AS	ilita airi
Estimated slope (H:V)	2H:1V			<u> </u>	
VEGETATION		_			
Trees	Large trees up to 48" diameter	entire slope	Τ	Π	Тх
Brush	Sparse underbrush	entire slope			Х
Ground Cover	Bare spots w/ brush and weeds	entire slope			T X
ROSION	, ,	<u> </u>			
Runoff Erosion	Some gullies forming	sporadically along slope	Τ	П	Τx
NSTABILITIES	, , ,	, , ,	•		
Slides	None visible		X	П	Т
Longitudinal Cracks	None visible		X		
Transverse Cracks	None visible		Х		
Bulges	None visible		X		
Depressions	None visible		X		+
			+~		_
Hummocky	Slope is hummocky and irregular	entire slope			X
OTHER			•		
Rodent Burrows	Could not inspect fully			Х	
Ruts	None visible		Х		
Other	Coarse soil and rock visible	exposed areas of embankment			х
PROBLEMS NOTED:					
			1		
(C-1) None					
(C-2) Livestock Damage					
(C-3) Erosion or Gullies	Erosion gullies forming sporadicall	Erosion gullies forming sporadically on downstream slope.			
(C-4) Cracks-with Displacement					
(C-5) Sinkholes					
(C-6) Appears Too Steep					
(C-7) Depressions or Bulges					
(C-8) Slides					
(C-9) Soft Areas					
(C-10) Trees, Brush, Briars	Large trees and underbrush domin	ate downstream slope.			
(C-11) Animal Burrows					
(C-12) Other	Exposed soils appear very coarse.				
Downstream Slope Condition	Pe	oor			

SEEPAGE

SEEPAGE	Comments	Location		Andre M	nii nain
Wet Area 1	Comments	Location	`	<u> </u>	M
Flow	Seepage flow visible	Emerging under spillway slab	Т	П	Х
Boil	N/A		T _X		
Sinkhole	N/A		X		
Aquatic Vegetation	N/A		X		
Rust Colored Deposits	None visible			X	
Sediment in Flow	None visible			х	
Other			Х		
Wet Area 2			-		
Flow			Х		
Boil			Х		
Sinkhole			Х		
Aquatic Vegetation			Х		
Rust Colored Deposits			Х		
Sediment in Flow			Х		
Other			Х		
Wet Area 3		•			
Flow			Х		
Boil			Х		
Sinkhole			Х		
Aquatic Vegetation			Х		
Rust Colored Deposits			Х		
Sediment in Flow			Х		
Other			Х		
Embankment Drains					
Туре	CMP outlet observed	right end of downstream slope		Х	
Size	6" diameter		Х		
Number	One (1)		Х		
Flow rate	None		Х		
Turbidity	None		Х		
Other	N/A		Х		
Problems Noted:					
(D. 1) None			7		
(D-1) None			╛		
(D-2) Saturated Embankment					
Area			_		
(D-3) Seepage Exits on					
Embankment			4		
(D-4) Seepage Exits at Point	Seepage exiting under spillway slab.				
Source					
(D-5) Seepage Area at Toe					
(D-6) Flow Adjacent to Outlet					
(D-7) Seepage					
Drain Outfalls Seen (Y/N)	Yes				
(D-8) Flow Clear/Muddy	No flow				
(D-9) Dry/Obstructed	Dry				
(D-10) Other Describe location of drains and amount/quality of discharge.	CMP outlet observed at right	MP outlet observed at right end of downstream slope.			
Seepage Condition	Poor				

PRINCIPAL SPILL WAY

PRINCIPAL			Agus Agu	or stat
SPILLWAY	Comments	Location	alone not	
INLET	Comments	Location	4 4	<u> </u>
Туре	Open channel	Left abutment	T x T	
Material	Concrete		X	
Dimensions	See survey		X	
Trashrack	None		X	
Obstructions	Some logs and debris		T X	
Separation	None visible		X	
Cracks	Minimal cracking of concrete		X	+
Erosion	None visible		X	+
Undermining	Extent unknown		T X	+
Other	N/A		T x	+
CONTROL/MIDDLE	IN/A			
·	lot	In the state of th	<u> </u>	Lv
Туре	Open channel	Left abutment		X
Material	Concrete		-+	X
Dimensions	See survey			Х
Obstructions	Some logs and debris		\rightarrow	X
Separation	None visible		$-\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	Х
Cracks	Some cracking of concrete		\bot	Х
Erosion	None visible			Х
Undermining	Severely undermined			Х
Other	N/A			Х
OUTLET				
Туре	Open channel			X
Material	Exposed bedrock and soil			X
Dimensions	See survey			X
Obstructions	Sanitary sewer exposed			X
Separation	N/A			X
Cracks	N/A		++	X
	•		-+	X
Erosion	Severe erosion			_
Undermining	Severely undermined		-+	X
Other				X
Stilling Basin			 	
Гуре	No stilling basin observed		-	X
Material	N/A			Х
Dimensions	N/A			Х
Obstructions	N/A			Х
Separation	N/A			Х
Cracks	N/A			Х
Erosion	N/A			Х
Undermining	N/A			Х
Other	N/A			Х
PROBLEMS NOTED:	'			
(E-1) None				
(E-2) Deterioration	Concrete spillway chute is deterior. has occurred.	ated at outlet where undermining		
(E-3) Separation				
(E-4) Cracking				
(E-5) Inlet, Outlet Deficiency	Concrete spillway chute has been useepage and erosion.	undermined at outlet due to		
(E-6) Stilling Basin Inadequacies	No stilling basin observed.			
(E-7) Trash Rack				
(E-8) Other				
Principal Spillway Condition	Po	oor		

Auxiliary SPILLWAY

					∳
Comments	Location		,	Morit.	Adin
				<u> </u>	<u>, </u>
No auxiliary spillway observed					Χ
T	T	Г	_	ı	
T	I	Т	Ι	ı	
_	+				
				<u> </u>	
		Т	Г	Γ	
		1			
No auxiliary spillway observed.	No auxiliary spillway observed.				
		1			
	No auxiliary spillway observed	No auxiliary spillway observed	No auxiliary spillway observed	NO duxiliarly spiliway observed	No auxiliary spillway observed

MAINTENANCE AND REPAIRS

Type No drawdown mechanism observed Served S	MAINTENANCE AND REPAIRS				e	ikot «
Material observed	AND KEI AMO	Comments	Location	,	MOUTE !	Noti Main
Material observed	DRAWDOWN					
Dimensions Control Mechanism Access Leakage Condition Wowing practice Integration Mowing practice No grass established on embankment Large trees are pervasive on downstream slope Rodent activity Rodent holes or sinkholes Other None Vandalism Vandalism None Vandalism None Vandalism Vand	Туре					Х
Control Mechanism Access Leakage Condition WEGETATION Mowing practice No grass established on embankment Trees Large trees are pervasive Brush Low brush pervasive on slopes and crest X DAMAGE Rodent activity Rodent holes or sinkholes Other None RG-2) Access Road Needs Maintenance (G-3) Sprillway Obstruction (G-5) Brush, Weeds, Tall Grass Large trees are pervasive on downstream slope at right end None (G-7) Rodent Activity Rodent holes or sinkholes Rodent activity Rodent holes or sinkholes Rodent activity Rodent None ROBLEMS NOTED: (G-1) None (G-2) Access Road Needs Maintenance (G-4) Spillway Obstruction (G-5) Brush, Weeds, Tall Grass Rodent holes or sinkholed observed at right end of upstream slope. Unlet of concrete chute spillway is deteriorated and undermined due to seepage and erosion. No drawdown mechanism observed. Maintenance and Deficient	Material					
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Need Repair (G-10) Other Maintenance and Deficient	(G-8) Deteriorated Concrete					
Maintenance and Deficient	(G-9) Gate and/or Drawdown Need Repair	No drawdown mechanism observed.				
Deticient	(G-10) Other					
Renair Condition	Maintenance and Repair Condition	De	ficient			

Summary	Rating	Deficiencies		
Upstream Slope Rating	Deficient	woody vegetation, erosion scarping, animal burrows		
Crest Rating	Deficient	narrow, irregular surface, sanitary sewer encroachment		
Downstream Slope Rating	Poor	large trees, exposed coarse soils, erosion gullies		
Seepage Rating	Poor	seepage and piping failure under spillway slab		
Principal Spillway Rating	Poor	undermined concrete chute, eroded outlet channel		
Auxiliary Spillway Rating	Poor	no auxiliary spillway found		
Maintenance and Repairs Rating	Deficient	trees, brush, weeds, rodent activity, missing drawdown		
Overall Rating	Poor	unknown spillway capacity and geotechnical stability		

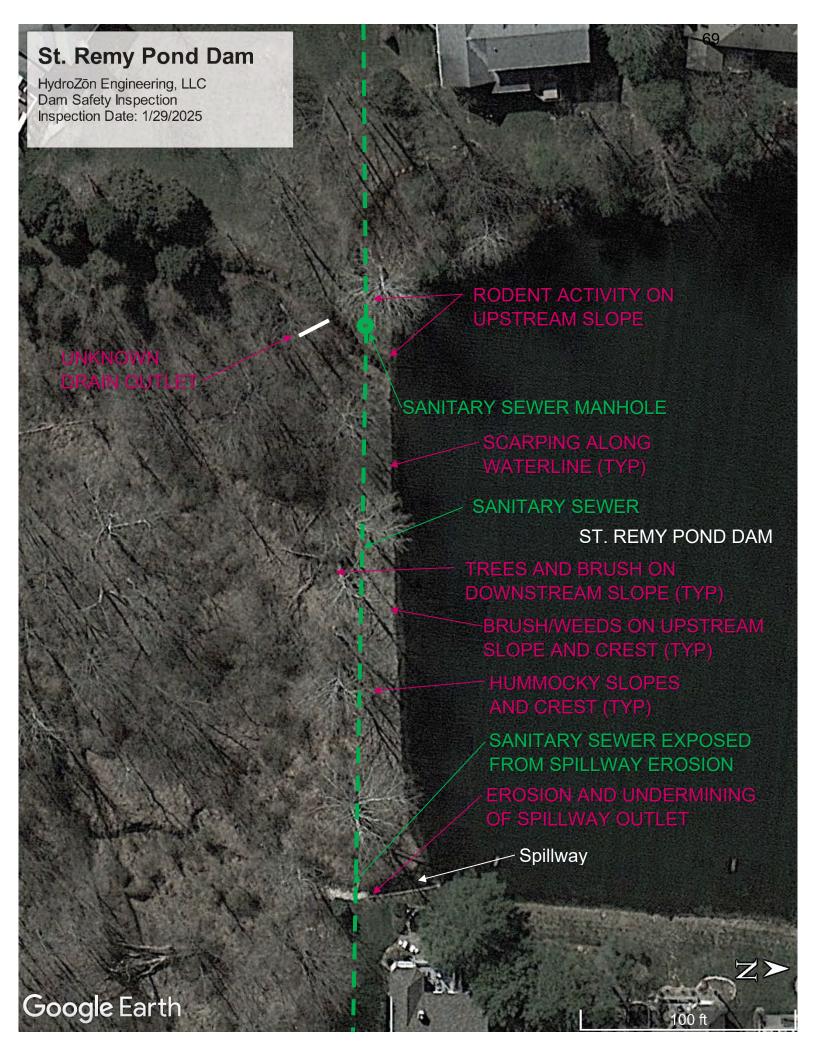
Inspection Date: 1/3**67**2025

IDNR Guidelines for Determining Conditions

Component Ratings	Description for Slopes, Crest, Spillways	Description for Seepage
Good	In general, this part of the structure has a good appearance, and conditions observed in this area do not appear to threaten the safety of the dam.	No evidence of uncontrolled seepage. No unexplained increase in flows from designed drains. All seepage is clear. Seepage conditions do not appear to threaten the safety of the dam.
Acceptable	Although general cross-section is maintained, surfaces may be irregular, eroded, rutted, spalled, or otherwise not in new condition. Conditions in this area do not currently appear to threaten the safety of the dam.	Some seepage exists at areas other than the drain outfalls, or other designed drains. No unexplained increase in flows from designed drains. All seepage is clear. Seepage conditions observed do not currently appear to threaten the safety of the dam.
Deficient	Continued deterioration and/or unusual loading may threaten the safety of the dam.	Excessive seepage exists at areas other than drain outfalls and other designed drains. Seepage needs to be evaluated. Increased flow and/or continued deterioration in seepage conditions may threaten the safety of the dam.
Poor	Conditions observed in this area appear to threaten the safety of the dam. Conditions observed in this area are unacceptable.	Excessive seepage conditions observed appear to threaten the safety of the dam and is unacceptable. Examples: 1) Designed drain or seepage flows have increased without increase in reservoir level. 2) Drain or seepage flows contain sediment. i.e., muddy water or particles in jar samples. 3) Widespread seepage, concentrated seepage or ponding appears to threaten the safety of the dam.

Inspection Date: 1/3682025

Overall Conditions	Description
Satisfactory	No existing or potential dam safety deficiencies recognized. Safe performance is expected under all anticipated loading conditions, including such events as infrequent hydrologic and/or seismic events. Project Files contain necessary hydrologic, and other engineering calculations to verify dam safety and performance.
Fair	No existing dam safety deficiencies are recognized for normal loading conditions. Infrequent hydrologic and/or seismic events would probably result in a dam safety deficiency.
Conditionally Poor	A potential safety deficiency is recognized for unusual loading conditions which may realistically occur during the expected life of the structure. CONDITIONALLY POOR may also be used when uncertainties exist as to critical analysis parameters which identify a potential dam safety deficiency; further investigations and studies are necessary.
Poor	A potential dam safety deficiency is clearly recognized for normal loading conditions. Immediate actions to resolve the deficiency are recommended; reservoir restrictions may be necessary until problem resolution.
Unsatisfactory	A dam safety deficiency exists for normal conditions. Immediate remedial action is required for problem resolution.



Appendix B: Inspection Photographs



Figure B1: View of lake from crest of dam



Figure B2: Upstream slope from right end of dam



Figure B3: Rodent activity and/or sinkhole on upstream slope near edge of water



Figure B4: Rodent activity and/or sinkhole on upstream slope near sanitary sewer



Figure B5: Crest of embankment from right end of dam



Figure B6: Crest of embankment from middle looking left towards spillway



Figure B7: Crest of embankment from left end near spillway



Figure B8: Looking downstream from center of crest



Figure B9: Downstream slope from middle of embankment looking right



Figure B10: Downstream slope near left end looking towards spillway



Figure B11: Downstream slope of embankment (Note: exposed coarse soils and rock)



Figure B12: Downstream slope from beyond toe looking towards right end of dam



Figure B13: Downstream slope from beyond toe looking towards left end of dam



Figure B14: Corrugated pipe daylighting near right, downstream groin



Figure B15: Inlet to spillway channel



Figure B16: Left side wall of spillway at entrance



Figure B17: End of concrete chute for spillway (Note: erosion and exposed sanitary sewer)



Figure B18: End of concrete chute for spillway looking upstream at undermined portion



Figure B19: Undermining of concrete chute for spillway (Note: exposed drainage pipe)



Figure B20: Looking downstream of concrete chute at erosion in spillway outlet channel



Figure B21: Looking upstream at eroded outlet channel with concrete chute in background



Figure B22: Spillway outlet channel looking downstream towards receiving creek



Figure B23: Looking at spillway at left and upstream slope on right from shoreline of pond



Figure B24: Inlet to reservoir looking downstream towards dam and spillway



Figure B25: Entrance to culvert under E. St. Remy Dr. that conveys main tributary to reservoir



Figure B26: Looking upstream of culvert entrance at main tributary contributing flow to reservoir



GEOTECHNICAL EXPLORATION REPORT

SAINT REMY SPILLWAY MITIGATION

Village of Saint Remy Bloomington, Indiana 47401

April 9, 2025



PROJECT: **CGS-25-0007**



April 11, 2025

Mr. David Counsell, PE Co-Founder, President Land Stewards Design Group Inc. 5022 Rockville Road Indianapolis, Indiana, 46224

Re: Geotechnical Exploration Report Saint Remy Spillway Mitigation

> Village of Saint Remy Bloomington, Indiana 47401 Project: **CGS-25-0007**

Dear Mr. Counsell:

Thank you for selecting **Cornerstone Geotech Services LLC (CGS)** as your geotechnical engineering consultant for this project. We appreciate the opportunity to work with you and look forward to being a member of the project team!

CGS is pleased to present this **Geotechnical Exploration Report** to you, and hope that the information provided within proves valuable to you and to the design team. Please contact us if you have any questions about the information or recommendations provided in this report.

Sincerely,

Cornerstone Geotech Services LLC

Donald & Hubbard Ju

Donald J. Hubbard Jr., E.I.

Geotechnical Engineer-in-Training

Adam M. Collins, P.E.

Regional Director of Engineering

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APPENDIX A – Figures

APPENDIX B – Boring Log

APPENDIX C – Laboratory Testing Results

1.0 Introduction

On behalf of Land Stewards Design Group Inc., **CGS** performed a geotechnical exploration and analysis in general accordance with **CGS**'s proposal number 24-020INR, dated December 3, 2024, which was authorized by Mr. David Counsell on December 17, 2024.

This *Geotechnical Exploration Report* describes the existing subsurface conditions and their expected influence on the proposed construction activities at the Site. If any of the information in this report is unclear, or if you have any questions about the contents of this report, please contact us.

2.0 PROJECT INFORMATION

CGS was provided with the following:

- A documented titled *Technical Memorandum: St. Remy Spillway and Inflows Sedimentation Prevention and Bank Stabilization Investigation,* prepared March 5, 2024 by Land Stewards Design Group Inc.
- A documented titled *St. Remy Pond Temporary Spillway Repair Solution*, issued April 30, 2024 by Land Stewards Design Group Inc.
- A topographic survey prepared for *Saint Remy Spillway*, dated February 18, 2025, prepared by Weihe Engineers Inc.
- A document titled *Pond Dam, Spillway, Pond Improvements Concept Layout*, dated October 23, 2024, prepared by Land Stewards Design Group Inc.
- A documented titled *St. Remy Pond Dam: Dam Safety Inspection*, dated February 22, 2025, prepared by HydroZōn Engineering, LLC.

The subject property referred to in this report is the parcel 53-08-11-401-029.000-009, located in the neighborhood *Village of Saint Remy* in Bloomington, Indiana. The portion of this property where borings were carried out (southern side of the western portion of the parcel) is hereinafter referred to as the Site. A vicinity map showing the location of the Site is presented as **Figure 2** in **Appendix A**.

We understand that the project involves the installation of a new spillway to the south of the Saint Remy Pond. This installation includes, but is not limited to, removal of the existing concrete spillway, replacement of the soils within the spillway area and downstream, and construction of the new spillway. It is our understanding that soil south of the dam has been proposed for use as backfill, with its suitability for said use to be determined by **CGS**.

If any of this information is erroneous, or if the information changes during the course of the project, please contact us so that we can re-evaluate the added information with respect to our findings and recommendations.

3.0 REVIEW OF PUBLISHED INFORMATION

3.1 Area Topography and Physiology

Topographic mapping provided to us indicates ground surface elevations at the Site range from about 770 to 785 feet. The reviewed map uses 1-foot contour elevations. The ground surface generally slopes downward from the north to the south.

According to the Physiographic Divisions of Indiana map (H.H. Gray, Indiana Geologic Survey, 2000), the subject site is located in the *Mitchell Plateau*. It is described as an upland of low relief with hills covered in thick red clay (also known as terra rossa), and large areas of karst, entrenched by major valleys cut in the bedrock of limestone.

The following image shows the approximate location of the Site on the referenced map:

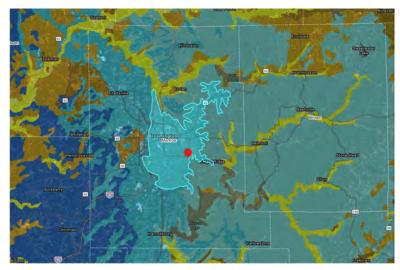


3.2 SITE GEOLOGY

3.2.1 SURFICIAL GEOLOGY

The <u>IndianaMap</u> website (www.indianamap.org, maintained by the Indiana Geographic Information Council) indicates the surficial deposits beneath the Site generally consist of Middle Mississippian-age *terra rossa*.

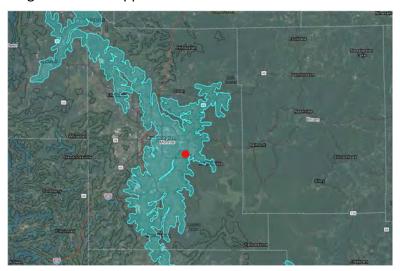
The following image shows the approximate location of the Site on the referenced map:



3.2.2 BEDROCK GEOLOGY

Based on our review of the Bedrock Geology layer of IndianaMap, the Site is underlain by the Mississippian-age *Sanders Group*, which is described as mostly skeletal limestone. Cherty in lower part.

The following image shows the approximate location of the Site on the referenced map:



The Bedrock Surface Contours layer of IndianaMap indicates the bedrock at the Site is at an elevation of approximately 750 to 800 feet NGVD (50-foot contours); we can therefore estimate that bedrock is near the ground surface.

3.3 SOIL SURVEY

The United States Department of Agriculture (USDA) Soil Survey map (USDA website) indicates the soils at the Site consist mainly of *Apalona-Zanesville silt loams*, 6 to 12 percent slopes (AgrC) and Wakeland silt loam, 0 to 2 percent slopes, frequently flooded (Wa).

Information published about these soil units (or their major components) states:

Soil Type	Ag		
Parameter	Apalona and similar soils: 45 percent	Zanesville and similar soils: 40 percent	Wa
Profile	silt loam to clay to loam to bedrock	silt loam to silty clay loam to clay loam to bedrock	silt loam to stratified silt loam to loam to silt loam
Parent Material	fine-silty noncalcareous loess over clayey residuum weathered from shale over loamy residuum weathered from sandstone and shale	thin fine-silty noncalcareous loess over loamy residuum weathered from sandstone and shale	silty alluvium
Natural Drainage Class	moderately well drained	moderately well drained	somewhat poorly drained
Runoff Class	medium	low	negligible
Calcium Carbonate (%)	0*	0*	0*
Gypsum (%)	0*	0*	0*
Frost Action	high	high	high
Corrosion Potential to Steel	high	high	high
Corrosion Potential to Concrete	high	moderate	low

weighted average of upper 6 feet (approximately) of subsurface materials

3.4 WETLANDS

According to data available from the United States Fish and Wildlife Service (USFWS) <u>National Wetlands Inventory</u>, the Site vicinity does contain mapped wetlands.

The Site vicinity contains one freshwater pond (St. Remy Pond) and one blue-line stream (East Fork Jackson Creek), classified as PUBGh and R4SBC, respectively, which decode to:

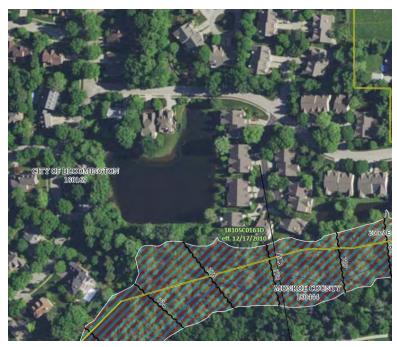
- P Palustrine: Includes nontidal and low-salinity tidal wetlands with specific vegetation or small, shallow, non-vegetated wetlands lacking wave-formed shorelines and with salinity below 0.5 ppt;
- UB Unconsolidated bottoms: Includes all wetlands and deepwater habitats with at least 25 percent cover of particles smaller than stones (less than 6 to 7 cm), and a vegetative cover less than 30 percent;
- G Intermittently exposed : Water covers the substrate throughout the year except in years of extreme drought;
- h Diked/Impounded: These wetlands have been created or modified by a man-made barrier or dam that obstructs the inflow or outflow of water;
- R Riverine: Includes all wetlands and deepwater habitats contained in natural or artificial channels periodically or continuously containing flowing water or which forms a connecting link between the two bodies of standing water;
- 4 Intermittent channels with flowing water only part of the year, but may contain isolated pools when the flow stops;

- SB Streambed : Includes all wetlands contained within the intermittent subsystem of the riverine system, and;
- C Seasonally flooded: Surface water is present for extended periods especially early in the growing season, but is absent by the end of the growing season in most years. The water table after flooding ceases is variable, extending from saturated to the surface to the water table well below the ground surface.

3.5 FLOOD PLAINS

The <u>Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) Viewer</u> (which uses information from published Flood Insurance Rate Map (FIRM) panels), FIRM panel 18105C0163D, dated effective December 17, 2010, was reviewed to determine if the Site is within the immediate vicinity of any identified flood zones. The Site is located in the immediate vicinity of:

- Zone X (unshaded), which is defined as an area determined to be outside of the 0.2 percent annual chance floodplain (100-year flood) and;
- Zone AE (Floodway), which indicates a "Regulatory Floodway." FEMA provides the definition as a "Regulatory Floodway" meaning the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Zone AE is described as a high-risk area within the 100-year floodplain and where base flood elevations are provided. The map indicates the flood elevation in the immediate vicinity of the Site is between approximately 774 and 778, as shown in the following image:



3.6 Online Imagery and Historic Topographic Mapping

Aerial photographs from 1955 to the present were reviewed. Imagery from 1955 seems to show the Site and its immediate vicinity as undeveloped. By 1958, the area to the Site's north was developed into a pond. Between 1960 and 1986, significant changes were not

observed at the Site. Imagery from 1998 onwards shows the general vicinity of the Site as developed into a residential area.

Topographic maps dating back to 1947 were examined. Significant elevation changes were not observed at the Site between 1947 and the latest published topographic map, which was dated 2022.

3.7 GEOLOGICAL HAZARDS

A detailed karst evaluation was not included in this scope of work, but based on the subsurface conditions encountered at the Site, and the published information reviewed, it is **CGS**'s opinion that the risk of formation of sinkholes at the Site due to karst or solution features is high.

A detailed fault study was not included in this scope of work, but a preliminary review of published information indicates the nearest mapped fault is more than ½ mile from the Site. Therefore, it is **CGS**'s opinion that the risk of surface rupture at the Site during a seismic event is low.

A detailed liquefaction analysis was not included in this scope of work but, based on the subsurface conditions encountered in the boring, and a review of other published information, it is **CGS**'s opinion that the risk of liquefaction at the Site during a seismic event is low.

4.0 FIELD EXPLORATION

4.1 Subsurface Exploration Methods

To determine the engineering characteristics of the on-site soils, a subsurface exploration was performed. A total of 6 borings were advanced on March 12, 2025. The locations of the borings are presented in **Figure 1** in **Appendix A**. The borings were located using existing on-site features, and were located to avoid interference with existing structures, visible utilities, and marked underground utilities. The boring locations shown in **Appendix A** should be considered approximate.

Borings B-1 and B-2 were advanced to determine the subsurface conditions beneath the crest of the embankment. Borings B-3 through B-6 were advanced to evaluate the subsurface conditions in the area of the proposed floodplain maintenance area where the project team plans to source backfill materials for the spillway repairs.

The borings were advanced with a drill rig utilizing solid-stem auger equipment. Sampling was performed by driving a 2-inch outside diameter by 1%-inch inside diameter split-spoon sampler with a 140-pound hammer falling 30 inches. The split-spoon sampling was performed in accordance with the <u>Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils (ASTM D1586/D1586-18 $^{\varepsilon 1}$). The SPT resistance value (commonly referred to as the "N-value" or "blow count") can be used as a qualitative indication of the in-place relative density of cohesionless soils, and as a relative indication of consistency in cohesive soils. This indication is qualitative, since many factors can affect the standard penetration resistance value and prevent a direct correlation</u>

between drill crews, drill rigs, drilling procedures, and hammer-rod-sampler assemblies. Therefore, each resistance value determined in the field (N_{field}) was normalized to an N_{60} value to account for variance in field procedures and apparatus. For the remainder of this report, the term "SPT N-value" will refer to the normalized N_{60} values.

Four thin-walled tube samplers (also known as a Shelby tubes) were used to obtain "undisturbed" samples in general accordance with the <u>Standard Practice for Thin-Walled Tube Sampling of Fine-Grained Soils for Geotechnical Purposes</u> (ASTM D1587/1587M-15 (withdrawn 2024, no replacement)).

Recovered soil samples were classified by **CGS** in accordance with the <u>Standard Practice</u> <u>for Description and Identification of Soils (Visual-Manual Method)</u> (*ASTM D2488-17* $^{\varepsilon 1}$). The soil samples were collected in sealed containers, and selected soil samples were set aside for laboratory testing; selected cohesive soil samples were also tested utilizing a pocket penetrometer. Please refer to **Figure 3** in **Appendix A** for a reference to the classification systems used during this exploration, which describes a range of soils and their properties.

The depth to groundwater was measured using a tape measure.

The boreholes for borings B-3 through B-36 were backfilled with auger cuttings after the drilling tools were removed from the borehole; boreholes for borings B-1 and B-2 were backfilled with a mixture of cuttings and grout. Please be aware that the soils used as backfill in the borings may experience settlement over time. **CGS** recommends the boring locations be monitored; if settlement is observed, **CGS** should be contacted to coordinate repairs.

The drilling and sampling operations, relevant observations and measurements, and closure methods were documented on a boring log maintained for each boring. The final versions of these boring logs, which include laboratory test results, are included in **Appendix B**. The boring logs represent our interpretation of the subsurface conditions based on the field logs, visual examination of field samples by **CGS**, and tests of the samples collected. The letters in parentheses following the soil descriptions are the soil classifications in general accordance with the Unified Soil Classification System (USCS) as described in the <u>Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)</u> (ASTM D2487-17^{£1}). It should be noted that the stratification lines shown on the boring logs represent approximate transitions between material types. In-situ stratum changes could occur gradually or at slightly different depths.

4.2 Subsurface Exploration Results

The subsurface exploration encountered materials consistent with the geology and apparent history of the Site. In general, the subsurface materials encountered appear to be stratified, or layered, in the following order: surficial materials, natural soils, and refusal materials.

4.2.1 SURFICIAL MATERIALS

Topsoil was encountered at the ground surface of borings B-1, B-2, B-3, and B-5. The topsoil was encountered to a depth of about 5 to 7 inches.

4.2.2 NATURAL SOILS

Natural soils were encountered beneath the surficial materials in borings B-1, B-2, B-3, and B-5 and at the ground surface in borings B-4 and B-6. These natural soils were encountered to a maximum approximate depth of 13¾ feet below ground surface (bgs). These soils can generally be separated into the categories of clayey soils and silty soils.

The clayey soils were encountered at or near the ground surface of borings B-2, B-4, B-5, and B-6, and extended to a depth of approximately 3½ feet bgs (except at boring B-6, where they extended to a depth of approximately 5 feet). These clayey soils were generally described as bluish-gray, brown, dark gray, gray, orange, tan, very dark gray, or a combination thereof, and were classified as clayey sand (SC), lean clay (CL), and sandy lean clay (CL).

Where obtained, standard penetration test N-Values (SPT N-values) in the clayey soils were 5 and 7 blows per foot (bpf), indicating a medium stiff consistency.

Laboratory test results indicate the moisture contents within these clayey materials ranged from 13.5 to 33.1 percent, with an average moisture content of about 20.2 percent.

The silty soils were encountered at or near the ground surface of borings B-1 and B-3, and beneath the clayey soils in borings B-2, B-4, and B-5. These soils were encountered to a depth of about 13¾ feet bgs in borings B-1 and B-2 and to a depth of about 6 feet bgs in borings B-3, B-4, and B-5. These silty soils were generally described as black, brown, dark brown, dark gray, gray, grayish-brown, orangish-brown, red, tan, or a combination thereof, and were classified as silt (ML), sandy silt (ML), and silt with sand (ML).

Where obtained, SPT N-values in the silty soils ranged from 3 to 18 bpf, with an average value of about 7 bpf, indicating a soft to very stiff, but generally medium stiff, consistency.

Laboratory test results indicate the moisture contents within these silty materials ranged from 13.7 to 34.4 percent, with an average moisture content of about 21.4 percent.

4.2.3 WEATHERED ROCK

Weathered rock was encountered beneath the natural soils in boring B-2. The weathered rock was described as siltstone. For simplicity the rock will only be described as "weathered" in this report. The weathered rock was described as gray and dry, with a moisture content of 8.0 percent.

4.2.4 REFUSAL MATERIALS

Borings B-1 and B-2 encountered auger refusal materials at an approximate depth of 13¾ feet bgs, and borings B-3 through B-6 encountered auger refusal materials at an approximate depth of 5 to 6 feet bgs. Auger refusal occurs when the powered drilling

equipment encounters a material that it cannot penetrate. Typical refusal materials include concrete, steel, boulders, and bedrock. Auger refusal materials are typically penetrated with coring equipment or blasting. Based on our understanding of the Site and the surrounding vicinity, it is our opinion that the refusal materials encountered in our borings are most likely bedrock.

Based on the Site's topography, position of borings, and depths of refusal, CGS estimates bedrock to be at an elevation of approximately 770 feet (NAVD88).

4.3 GROUNDWATER CONDITIONS

Groundwater is defined as the water present beneath the Earth's surface in soil pore spaces and in the fractures of rock formations. Groundwater includes overland flow that permeates through a given depth of soil, perched water, and water that occurs below the "water table," or a zone that remains saturated and water-bearing year-round.

If water is observed on the drilling or sampling tools, or in the open borehole above the collapse depth after the removal of augers, the static water level is measured and recorded on the individual boring logs. Measurable groundwater was encountered in each boring after drilling at depths ranging from approximately 5 to 8 feet bgs.

It should be noted that observed groundwater levels depend on variations in seasonal and short-term precipitation and surface runoff, and may be different at the time of construction. The actual static groundwater level can only be determined through observations and measurements made in cased holes (wells) over a long period of time, the installation and observation of which was beyond this scope of work.

If groundwater conditions are encountered at levels higher than those recorded at the time of drilling, **CGS** should be contacted.

5.0 LABORATORY TESTING

Laboratory test results were presented, where applicable, in the soil descriptions. Some of the test results are also included on the boring log in **Appendix B**. A copy of the laboratory test results is included in **Appendix C**.

Each of the laboratory tests performed as part of this exploration are described in the following sections.

5.1 Moisture (Water) Content

Each soil sample collected in the field was tested for moisture content in general accordance with ASTM D2216-19.

5.2 PLASTICITY

Multiple samples of the natural cohesive soils were tested in the laboratory to determine the plasticity characteristics of the soil. The plasticity index (PI) is the range of moisture content over which the soil deforms as a plastic material. It is bracketed by the liquid limit (LL) and the plastic limit (PL). The liquid limit is the moisture content at which the soil becomes sufficiently "wet" to flow as a heavy viscous fluid. The plastic limit is the lowest moisture content at which the soil is sufficiently plastic to be manually rolled into tiny threads. Liquid and plastic limits are determined in accordance with *ASTM D4318-17* $^{\varepsilon 1}$. The test results are summarized in the following table:

Sample Location	LL	PL	PI	Classification	Suitable as Fill?
B-1 from 1 to 2½ feet bgs	29	23	6	ML	no
B-2 from 1 to 2½ feet bgs	33	22	11	CL	YES
B-3 from 1 to 3 feet bgs	32	27	5	ML	no
B-4 from 1 to 2½ feet bgs	36	21	15	CL	YES
B-4 from 3 to 4⅓ feet bgs	32	24	8	ML	no
B-5 from 1 to 3 feet bgs	35	23	12	CL	YES
B-6 from 2 to 3½ feet bgs	40	21	19	CL	YES

Based on the determined plasticity index, the tested soils generally have a low to moderate potential for shrinking and swelling with changes in soil moisture content.

6.0 RECOMMENDATIONS

6.1 ENGINEERED FILL

CGS recommends that all areas to receive new engineered fill (also called grade raise fill or structural fill) be properly prepared prior to placement of the new fill materials. The proposed engineered fill subgrade should be cut nearly level and horizontal with vertical benches or sidewalls to allow changes in subgrade surface elevation. The surface should be cleared of debris, large rock fragments, or other deleterious materials, then compacted using equipment deemed suitable by **CGS**'s geotechnical engineer. The extent, duration, and compactive effort utilized during the subgrade's compaction shall be determined at the time of compaction by **CGS**'s geotechnical engineer on a case-by-case basis.

Based on the subsurface materials encountered and the results of the laboratory testing, **CGS** anticipates that the natural clayey soils will most likely be suitable for re-use as an engineered fill. However, the natural silty soils will most likely be unsuitable for re-use as an engineered fill due to their low plasticity.

Prior to using any material as engineered fill, representative samples should be obtained in order to determine the material's classification (using ASTM D4318 and/or C136) and

moisture-density relationship (using ASTM D698 or D1157). Engineered fill should be free of organics or other deleterious substances. It is recommended that engineered fill material should have a liquid limit less than 40 percent, a plasticity index between 9 and 22, and a maximum particle size of three inches. Sand and gravel fill materials should be limited to less than 15 percent fines (passing the No. 200 sieve). Cohesive and granular fill materials should be stored in separate stockpiles.

After the subgrade has been approved to receive engineered fill, placement may commence with the following procedures and guidelines recommended:

- Fill operations should commence at the lowest part of the proposed fill areas. The
 engineered fill should be placed in horizontal lifts and should be adequately benched
 into the underlying and adjacent materials. The purpose of these construction
 benches is to allow placement of fill on a horizontal surface and integrate the new fill
 into the existing features.
- No concentration of large fragments should be permitted.
- Engineered fill should be placed in lifts of uniform thickness. In general, six-inch loose
 lifts for cohesive soils should be suitable, provided the proper compaction equipment
 is available and sufficient compaction effort is expended. Prior to placement of fill
 materials, CGS's geotechnical engineer should be provided the make and model of the
 compaction equipment proposed to compact the engineered fill so these general lift
 thickness can be modified, as necessary.
- Each fill lift should be witnessed, tested, and documented by a representative of **CGS**, and approved prior to placing subsequent lifts.
- Density testing should be performed during placement of the engineered fill as a means to control percent compaction and moisture content.
- Maintain the moisture content of compacted fill within 3 percent of optimum moisture, unless directed otherwise by CGS's geotechnical engineer (for examples, some granular materials will have a narrower range of allowable moisture content, and many high-silt-content soils will need to be placed on the "dry side" of optimum).
- Suitable equipment for either aerating wet materials or adding water to dry materials should be available during earthwork operations.
- Fill lifts should be compacted to at least **98 percent** of the soil's theoretical maximum dry density (ASTM D698).
- Use equipment deemed acceptable to CGS's geotechnical engineer to place and compact the engineered fill materials. Use a sheepsfoot roller to compact engineered fill materials.
- Soils should not be "overcompacted" and construction traffic should be kept to a minimum to ensure compaction is achieved and that the soil is not allowed to "break down."
- Use tracked vehicles whenever offroad.
- Fill compaction requirements should extend to at least 5 feet outside the proposed fill

area. If massive cuts are required, the excavation should extend at least 1 foot horizontally for each vertical foot of depth below the massive cut's footprint. Thus, a 15-foot undercut would require that fill compaction extend 15 feet beyond the surficial footprint. For localized undercuts, the excavation of the unsuitable materials should extend at least ½ foot horizontally for each vertical foot removed below the design subgrade elevation.

In confined areas, placement of engineered fill materials poses a different set of challenges, and typically cannot be placed in full compliance with the previous recommendations. Because the use of smaller compaction equipment (such as a plate compactor, trench compactor, or similar) will be required to compact the engineered fill materials in confined areas, the lift thickness should not exceed 4 inches, and vibratory action should be kept to a minimum during placement. The compaction percentages, moisture range, and density testing requirement remains the same as the previous recommendations.

6.2 TEMPORARY EXCAVATIONS

Due to the anticipated groundwater levels at the Site, excavations may be challenging. It may be necessary to slope the sidewalls shallower than required by state or federal regulations to achieve stable conditions. Alternatively, temporary shoring may need to be installed to prevent sidewall instability or movements. **Your project budget should include contingency costs to create a stable excavation.**

Based on the open nature of the Site, it is our opinion that open-cut excavations should be feasible. We recommended that all open-cut excavations deeper than four feet be performed in accordance with OSHA's Construction Standards for Excavations (29 CFR, part 1926, Subpart P).

According to OSHA's regulations, the excavation contractor is solely responsible for designing and constructing stable, temporary excavations and shall shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. The contractor's "competent person," as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal regulations.

CGS provides this information solely as a service to our client. **CGS** does not assume responsibility for construction site safety or the contractors' or other parties' compliance with local, state, and federal safety or other regulations.

If the contractor's "competent person" identifies or suspects an unsafe condition, **CGS** should be contacted for additional guidance, or to provide retention system design recommendations, as necessary.

7.0 LIMITATIONS

The recommendations in this report are based on the conceptual information and data available to **CGS** at the time of this geotechnical exploration. Should new information become available, please provide it to **CGS**, as it may affect the conclusions and recommendations outlined in this report.

We strongly recommend that the complete report be shared with all members of the design team, contractors, and the project Owner. Contractors should be made aware of this report through the "Instructions to Bidders" section in the bid documents. A geotechnical exploration uses widely spaced borings to attempt to model the subsurface conditions at the Site. Because no exploration contains complete data or a complete model, there is always a possibility that conditions between borings will be different from those at specific boring locations. Thus, it is possible that some subsurface conditions will not be as anticipated by the project team or contractor. If this report is included or referenced in the actual contract documents, it shall be explicitly understood that this report is for informational purposes only. **CGS** shall not be responsible for the opinions of, or conclusions drawn by, others.

During site activity, it is common for soil conditions to be disturbed, and unforeseen changes may occur. Consequently, modifications to our recommendations might be necessary. We advise that **CGS** geotechnical personnel be engaged to observe and document site activity and conditions. Any unanticipated conditions should be promptly reported to the design team, along with timely recommendations to address these issues. We recommend that the Owner retain **CGS** for this service, given our familiarity with the project, subsurface conditions, and intent of our recommendations.

This report should be used in its entirety. No single section or portion should be used in isolation to make changes or assumptions. All sections, including appendices, are intended to serve as a complete resource.

Our geotechnical scope of work does not include environmental assessments or investigations for hazardous or toxic materials in the soil, groundwater, or surface water within or beyond the site boundaries. Any comments regarding odors, soil staining, or unusual conditions noted in this report or on the boring logs are for the client's information only. If no comprehensive environmental data for the site is available, we recommend conducting an environmental assessment prior to site development.

The professional services and engineering recommendations provided in this report have been prepared in accordance with generally accepted geotechnical engineering practices and principles in the project's geographical area at the time of this report. No other warranties, expressed or implied, are provided.

Finally, **CGS** will store the collected samples for up to 30 days after the report's issuance. After this period, the samples will be discarded unless you request otherwise within this 30-day window. Please inform us if you wish to retain any of the samples obtained during this exploration.

8.0 CLOSING

It has been our pleasure to provide you with this information. We appreciate the opportunity to work with you, and we look forward to working with other members of the project team! Please do not hesitate to contact us if you have any questions or require additional information.

Sincerely,

Cornerstone Geotech Services LLC

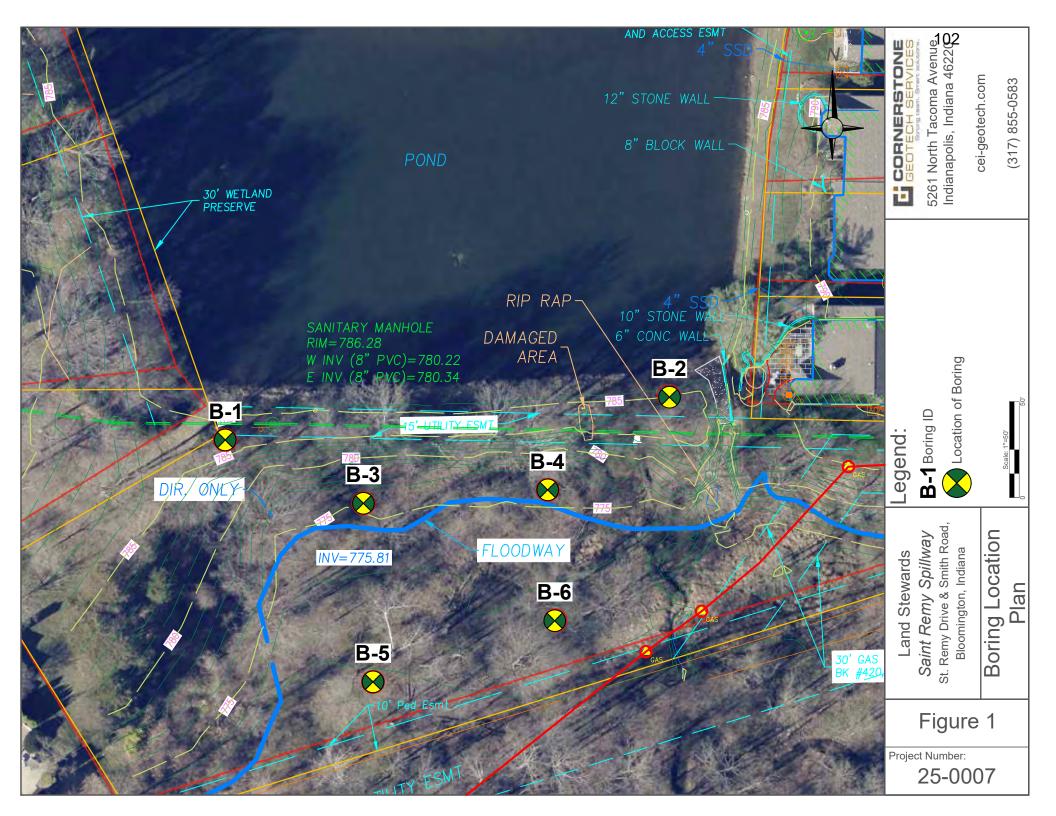
Donald J Hubbard Jr, E.I.

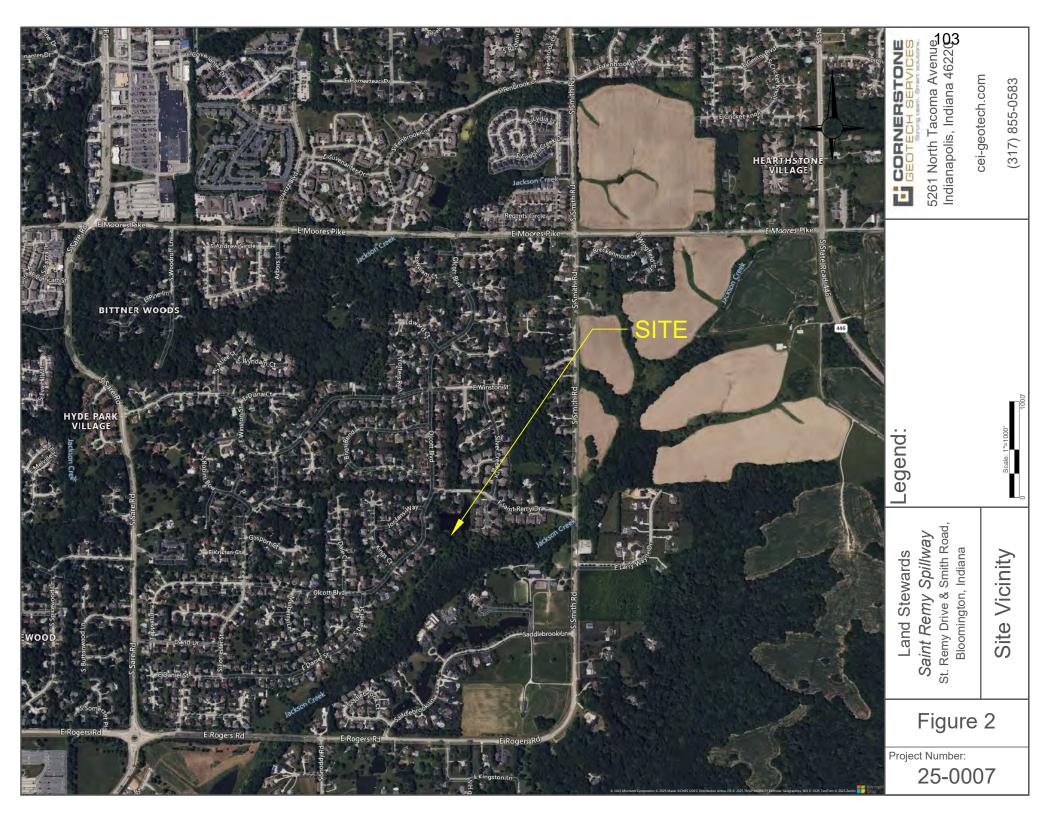
Geotechnical Engineer-in-Training

Adam M. Collins, P.E.

Regional Director of Engineering

Licensed IN PE11600278





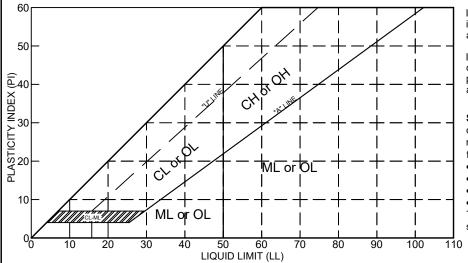
	STRENGTH TERMS							
	AINED SOILS ned on No. 200 sieve)		NE-GRAINED SOI or more <i>passing</i> No. 200		BEDROCK			
RELATIVE DENSITY	Non blows/ff		N ₆₀ , blows/ft	UNCONFINED COMPRESSIVE STRENGTH, Qu, tsf	CONSISTENCY	N ₆₀ , blows/ft		
VERY LOOSE ≤ 3		VERY SOFT	≤ 2	≤ 0.25	WEATHERED	≤ 19		
LOOSE	LOOSE 4 to 9		3 to 4	0.25 to 0.50	FIRM	20 to 29		
MEDIUM 10 to 29		MEDIUM STIFF	5 to 8	0.50 to 1.00	MEDIUM HARD	30 to 49		
DENSE	30 to 50	STIFF	9 to 15	1.00 to 2.00	HARD	50 to 79		
VERY DENSE	≥ 51	VERY STIFF	16 to 30	2.00 to 4.00	VERY HARD	≥ 80		
		HARD	≥ 31	≥ 4.00				

PARTICLE	PARTICLE SIZE IDENTIFICATION				
DESIGN	DESIGNATION				
BOUL	.DER	≥ 12-inch			
COB	COBBLE 3 to 12-inch				
GRAVEL	COARSE	0.75 to 3-inch			
GIVAVEL	FINE	4.75 mm to 0.75-inch			
	COARSE	2 to 4.75 mm			
SAND	MEDIUM	425 μm to 2 mm			
	FINE	75 to 425 μm			
SII	SILT				
CL	AY	≤ 2 µm			

ROCK QUALITY					
DESIGNATION	$RQD^{^\star}$				
VERY POOR	0 to 25				
POOR	25 to 50				
FAIR	50 to 75				
GOOD	75 to 90				
EXCELLENT	90 to 100				

PLASTICITY					
DESCRIPTION	PI				
NON-PLASTIC	0				
SLIGHTLY PLASTIC	0 to 7				
MEDIUM PLASTIC	7 to 17				
HIGHLY PLASTIC	> 17				

^{*} calculated by ASTM D6032/D6032M



NOTES

Classifications by Cornerstone Geotech Services LLC (CGS) utilize the Unified Soil Classification System (USCS) standard, in general accordance with ASTM D2487 and, when enough laboratory data is available, ASTM D2488.

Standard Penetration Test (ASTM D1586) - Driving a 2-inch O.D., 1-3/8-inch I.D. sampler into undisturbed soil with a 140-pound hammer free-falling a distance of 30 inches for three consecutive intervals of 6 inches. The number of hammer blows for each 6 inches of penetration on the field drill log. The sum of the number of blows required for the second and third 6 inches of penetration is termed the "standard penetration resistance," or the "N-value." The N-value recorded within the field drill log is termed the "N $_{\rm field}$." To account for variance in field procedures and apparatus, the $N_{\rm field}$ is normalized to an " $N_{\rm 60}$." The $N_{\rm 60}$ is then used to define the strength characteristics of the corresponding sample.

In the event that the sampler is unable to fully penetrate any of the intervals of 6 inches, the amount of penetration, to the nearest inch, and number of blows to achieve this penetration is recorded in place of that interval's number of blows.

In the event that the sampler penetrates one or more of the intervals under the weight of the sampler rods and/or hammer, with no blows taking place, the depth of penetration and applied weight (i.e. weight of rods (WoR) or weight of hammer (WoH)) are recorded in the place of that interval's number of blows.

Soil Moisture - The terms and criteria for describing moisture condition used by CGS differ from that shown in ASTM D2488. Terms used by CGS for describing the moisture condition of a soil include "dry," "damp," "moist," and "wet;" with the criteria for the use of these tems being the following:

- Dry: moisture content is below the shinkage limit;
- Damp: moisture content is above the shinkage limit and below the plastic limit;
- Moist: moisture content is above the plastic limit and below the liquid limit, and;
- Wet: moisture content is above the liquid limit.

The moisture condition stated by CGS is based on visual-manual inspection of the soil, unless sufficient laboratory data is available.

ystem | 5261 North Tacoma Avenue | Indianapolis, Indiana 46220

cei-geotech.com

(317)855-0583

CORNERSTONE GEOTECH SERVICES

Classification System and Related Notes

Land Stewards
Saint Remy Spillway
St. Remy Drive & Smith Road.
Bloomington, Indiana

Figure 3

Project Number:

25-0007



2214 Plantside Drive, Louisville, KY, USA Office: +1 (502) 361-8447

St. Remy Pond Dam

Lat/Lon: 39.141603/-86.485207 SOIL BORING: B-1

Date Started: 03/12/2025 Date Completed: 03/12/2025 Lat Lng: 39.1416, -86.48521

Location Accuracy: Maps Project Number: CGS-25-0007 Client Name: Land Stewards

Drilling Firm: Cornerstone Geotech Services LLC Driller: Zach Method: Auger

Hammer Type:AutoHammer Weight:140 poundsHammer Drop:30 inchesDepth:13.6'Logged By:D. HubbardChecked By:A. Collins

l Dob.				ou by.						_ , .	7.1. 00		
					Lab)			Sam	ples			
Depth (ft)	Graphic Log	Water Levels	Visual Classification and Remarks	SSON	Atterberg Limits (LL-PL-PI)	Moisture Content (%)	Depth of Sample (ft)	Sample Number	Sample Graphic	Blow Counts	09N	Pocket Penetrometer (tsf)	◆ N60 0 12.5 25 37.5
935			Topsoil 0.4	ML			1 ft						
			plasticity, moist, Silt (ML)		29-23-6	25.7	110	S-1	X	2-2-2	5	3	♦ 5
			3.5				3.5 ft						
5 -			Medium stiff, dark brown, moist, Silt (ML)			25.4		S-2	X	2-2-3	6	3	♦ 6
			6.0				6 ft						
_			Medium stiff, dark brown, gray, & red, moist, Silt (ML)			27.5		S-3	X	2-2-3	6	1.25	
	-	3-12-25	8.5				8.5 ft						
10 -		3-12-;	Medium stiff, brown & gray, damp, Silt (ML)			16.1		S-4	X	2-2-5	8	>4.5	◆8
-													
			13.0										
	* * * * * * * * * * * * * * * * * * *		Hard, gray, damp, Silt (ML) 13.7				13.5 ft						
			Refusal Encountered at 13 feet 8		-	16.4		S-5		50/2"			

Refusal Encountered at 13 feet 8 inches

✓ After Drilling (AD)	∭ ML
☐ ML	SPT - Standard Penetration
Topsoil	-

Depth	Comment
8	Water encountered @ 8' on 03/12
-	-

 ∇



5

10

2214 Plantside Drive, Louisville, KY, USA Office: +1 (502) 361-8447

St. Remy Pond Dam

Lat/Lon: 39.141666/-86.484264 **SOIL BORING: B-2** 03/12/2025 39.14167, -86.48426 Date Started: Date Completed: 03/12/2025 Lat Lng: Estimated from Google Location Project Number: CGS-25-0007 Client Name: Land Stewards Accuracy: Maps Cornerstone Geotech Driller: Drilling Firm: Zach Method: Auger Services LLC Hammer Weight: 140 pounds Hammer Type: Auto Hammer Drop: 30 inches Depth: 13.81 Logged By: D. Hubbard Checked By: A. Collins Lab Samples Moisture Content (%) Atterberg Limits (LL-PL-PI) Water Levels Depth of Sample (ft) Graphic Log Sample Number Sample Graphic Depth (ft) **Blow Counts** JSCS Penetrometer ♠ N60 Pocket 09N Visual Classification and Remarks 12.5 25 37.5 5 Topsoil Medium stiff, brown, gray, & CL 1 ft tan, medium plasticity, damp, 4-3-3 >4.5 Lean Clay (CL) 33-22-11 20.3 **◆**7 3.5 ft Soft, dark brown, dark gray, & 1-2-1 MLblack, moist, Silt (ML) **♦**3 22.7

6 ft

8.5 ft

22.7

14.4

S-3

Hard, grayish-brown, damp, Silt (ML)

Soft, grayish-brown, wet,

Silt (ML)

Hard, gray, dry, **Siltstone** 13.4 Refusal Encountered at 13 feet 9 inches

After Drilling (AD)	Topsoil
ML	Siltstone
CL	SPT - Standard Penetration

Depth	Comment	
6	Water encountered @ 6' on 03/12]:
-	-	Ĭ

1-2-1

27-50/1

50/3"

3



2214 Plantside Drive, Louisville, KY, USA Office: +1 (502) 361-8447

St. Remy Pond Dam

Lat/Lon: 39.141494/-86.484919 SOIL BORING: B-3

03/12/2025 39.14149, -86.48492 Date Started: Date Completed: 03/12/2025 Lat Lng: Location Estimated from Google Project Number: CGS-25-0007 Client Name: Land Stewards Accuracy: Maps Cornerstone Geotech Drilling Firm: Driller: Method: Zach Auger Services LLC Hammer Weight: 140 pounds Hammer Type: Auto Hammer Drop: 30 inches 5.8' Depth: Logged By: D. Hubbard Checked By: A. Collins

					Lab	1			Sam	ples			
Depth (ft)	Graphic Log	Water Levels		nscs	Atterberg Limits (LL-PL-PI)	ture Content (%)	Depth of Sample (ft)	Sample Number	Sample Graphic	Blow Counts	N60	Pocket Penetrometer (tsf)	♦ N60
			Visual Classification and Remarks		At	Moisture	De	Ss	Š			Per	0 12.5 25 37.5 50
			Topsoil 0.6										
-			Black & gray, low plasticity, wet, Sandy Silt (ML)	ML			1 ft	S-1					
_			nos, canay on (me)		32-27-5	34.4							
		\subseteq	3.5				3.5 ft						
5 -		3-12-25	Very stiff, gray & orangish-brown, damp, Silt (ML)			20.4		S-2	\times	4-4-12	18	>4.5	♦ 18
			5.8										

Refusal Encountered at 5 feet 10 inches

✓ After Drilling (AD)	ST - Shelby Tube
ML ML	SPT - Standard Penetration
Topsoil	-

Depth	Comment				
3.5	Water encountered @ 3.5' on 03/12				
-	-				



2214 Plantside Drive, Louisville, KY, USA Office: +1 (502) 361-8447

St. Remy Pond Dam

Lat/Lon: 39.141496/-86.484513 SOIL BORING: B-4

Date Started: 03/12/2025 Date Completed: 03/12/2025 Lat Lng: 39.1415, -86.48451

Location Estimated from Google Accuracy: Maps Project Number: CGS-25-0007 Client Name: Land Stewards

Drilling Firm: Cornerstone Geotech Services LLC Driller: Zach Method: Auger

Hammer Type: Auto Hammer Weight: 140 pounds Hammer Drop: 30 inches

Depth: 6.2' Logged By: D. Hubbard Checked By: A. Collins

		деа Бу.	D. Huk	bara			TICCKCU	Dy.	7. Oom	113			
					Lab)		Samples					
Depth (ft)	Graphic Log	Water Levels	Visual Classification and Remarks	nscs	Atterberg Limits (LL-PL-PI)	Moisture Content (%)	Depth of Sample (ft)	Sample Number	Sample Graphic	Blow Counts	N60	Pocket Penetrometer (tsf)	◆ N60 0 12.5 25 37.5 5
			Medium stiff, brown, gray, & orange, medium plasticity,	CL			1 ft						
_			damp, Lean Clay (CL)		36-21-15	13.9		S-1	X	WOH-1-3	5	3	♦ 5
_			3.0				3 ft						
_			Brown & gray, medium plasticity, damp, Silt with Sand (ML)	ML	32-24-8	20.4		ST-1					
5 -		3-12-25	6.0				6 ft						
		3	Hard, brown, damp, Silt	- /		13.7		S-3		50/2"		3.5	

Refusal Encountered at 6 feet 2 inches

✓ After Drilling (AD)	SPT - Standard Penetration			
☐ ML	ST - Shelby Tube			
CL	-			

Depth	Comment			
5	Water encountered @ 5' on 03/12			
-	-			

A. Collins



Depth:

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St. Remy Pond Dam

Lat/Lon: 39.141283/-86.48492 **SOIL BORING: B-5**

Checked By:

03/12/2025 39.14128, -86.48492 Date Started: Date Completed: 03/12/2025 Lat Lng:

Location Estimated from Google Project Number: CGS-25-0007 Client Name: Land Stewards Accuracy: Maps

Cornerstone Geotech Driller: Drilling Firm: Zach Method: Auger Services LLC

Hammer Weight: 140 pounds Hammer Type: Auto Hammer Drop: 30 inches 5.8'

D. Hubbard

Logged By: Lab Samples Moisture Content (%) Atterberg Limits (LL-PL-PI) Water Levels Depth of Sample (ft) Pocket Penetrometer (tsf) Number Graphic Log Sample Graphic Depth (ft) **Blow Counts USCS** ♠ N60 Sample N Visual Classification and Remarks 12.5 25 37.5 5 Topsoil 1 ft Bluish-gray & brown, medium CL ST-1 plasticity, moist, Sandy 35-23-12 33.1 Lean Clay (CL) 3.5 ft Hard, brown, damp to moist, S-2 12-26-50/4" 3.5 ML3-12-25 18.4 Silt (ML) 5

> Refusal Encountered at 5 feet 9 inches

After Drilling (AD)	CL
ML	ST - Shelby Tube
Topsoil	SPT - Standard Penetration

Depth	Comment
3.5	Water encountered @ 3.5' on 03/12
-	-



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St. Remy Pond Dam

Lat/Lon: 39.141347/-86.484518 **SOIL BORING: B-6**

03/12/2025 39.14135, -86.48452 Date Started: Date Completed: 03/12/2025 Lat Lng: Location Estimated from Google Project Number: CGS-25-0007 Client Name: Land Stewards Accuracy: Maps Cornerstone Geotech Driller: Drilling Firm: Zach Method: Auger Services LLC Hammer Weight: 140 pounds Hammer Type: Auto Hammer Drop: 30 inches 15' Depth: Logged By: D. Hubbard Checked By: A. Collins Lab Samples 8 Atterberg Limits (LL-PL-PI) Water Levels Depth of Sample (ft) Graphic Log Sample Number Sample Graphic Moisture Content Depth (ft) **USCS** ♠ N60 Visual Classification and Remarks 12.5 25 37.5 5 Dark gray, orange, & very SC dark gray, high plasticity, damp, Clayey Sand (SC), Ferromagnesian nodule 2 ft ST-1 40-21-19 13.5 Note: In the above context, 3-12-25

> Refusal Encountered at 5 feet 1 inches

"high plasticity" only refers to the portion of the sample passing the No. 40 sieve.

Z	✓ After Drilling (AD)	■ ST - Shelby Tube
	SC	-

	Depth	Comment
	3.0833	Water encountered @ 3.0833' on 03/12
ĺ	-	-



Laboratory Results Summary

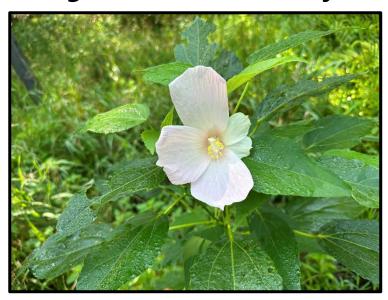
PROJECTSt. Remy Pond DamPROJECT NO.CGS-25-0007CLIENTLand StewardsLOCATIONBloomington, IN

		<u> </u>					
Boring ID	Sample ID	Depth (ft)	Moisture Content (%)	LL	PL	P	
B-1	S-1	1-2.5	25.7	29	23	-	
B-1	S-2	3.5-5	25.4				
B-1	S-3	6-7.5	27.5				
B-1	S-4	8.5-10	16.1				
B-1	S-5	13.5-13.7	16.4				
B-2	S-1	1-2.5	20.3	33	22		
B-2	S-2	3.5-5	22.7				
B-2	S-3	6-7.5	22.7				
B-2	S-4	8.5-9.1	14.4				
B-2	S-5	13.5-13.8	8				
B-3	ST-1	1	34.4	32	27		
B-3	S-2	3.5-5	20.4				
B-4	S-1	1-2.5	13.9	36	21		
B-4	ST-1	3	20.4	32	24		
B-4	S-3	6-6.2	13.7				
B-5	ST-1	1	33.1	35	23	Г	
B-5	S-2	3.5-3.6	18.4				
B-6	ST-1	2	13.5	40	21		
B-6	S-2	3.5					



Wetland Delineation and Waters Report

St. Remy Dam Spillway Repair Project 2812 Saint Remy Circle, Bloomington, Monroe County, Indiana



Prepared By: Maryssa Engstrom Reviewed By: Shannon Bonifacio August 28, 2025



Resolution Group, Inc.



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RGI Project No. 20250105,00 Wetland and Waterbody Delineation St. Remy Dam Spillway Repair Bloomington, Monroe County, Indiana

APPENDICES

Appendix A: Project Photographs

Appendix B: USACE Wetland Datasheets

INTRODUCTION

1.1 **Project Information**

St. Remy Dam Spillway Repair

Dates of Field Reconnaissance: August 14, 2025 Location:

Section 11; Township 8N; Range 1W

Unionville Quadrangles (1965)

Monroe County, Indiana 39.1420637, -86.4847350

HUC

Jackson Creek-Clear Creek (051202080801) 12 Digit Hydrologic Unit (HUC).

1.2 **Project Description**

The project will involve removing and replacing a failed spillway in the southeastern corner of a private pond, installing a new inlet structure, and constructing an access road from Smith Road to the pond forebay. The area of investigation includes the forebay of the private pond (Pond 1), a man-made residential pond (Pond 2), and approximately 0.23 mile of undeveloped land east to Smith Road, for a total investigated area of approximately 3.07 acres.

In preparation for the project construction, a wetland and waterway delineation was conducted at the investigated area. The general project vicinity is shown in Exhibit 1, and the location and study limits of the investigated area are shown on Exhibits 2-8.

Land use within the investigated area is primarily undeveloped land, residential yards, and woods. Beyond the investigated area, land use is primarily suburban residential communities, forest, and agricultural land. The project area is almost entirely within the Bloomington city limits. Aerial photography showing land in the immediate vicinity of the investigated area can be found in Exhibit 7.

2 **DESKTOP RECONNAISSANCE**

Prior to conducting field work, Resolution Group, Inc. staff reviewed the U.S. Geological Survey (USGS) topographic mapping (Exhibit 2), U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) Map (Exhibit 3), USGS National Hydrography Dataset (NHD) (Exhibit 3), Indiana Department of Natural Resources (IDNR) Floodplain Analysis Regulatory Assessment (FARA) (Exhibit 4), U.S. Department of Agriculture (USDA) Web Soil Survey (Exhibit 5), 2011 LiDAR Map



(Exhibit 6), and current and historical aerial photography (Exhibit 7a-c). These resources were used to identify potential wetlands and waterways within the investigated area and establish historic conditions.

1.1 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database for Marion County, Indiana, four soil types are present within the investigated area. Table 1 summarizes the soil types, the drainage class, flooding and ponding frequencies, the depth to water table, and the hydric classification of each soil type. Exhibit 5 shows the orientation of the soils mapped across the investigated area.

Table 1. Soil Survey Data Regarding Hydrology and Hydric Soil

Soil Name	Soil Symbol	Drainage Class	Flooding Frequency	Ponding Frequency	Depth to Water Table (in)	Hydric Rating	Hydric Classification
Apalona-Zanesville silt loams, 6 to 12 percent slopes	AgrC	Somewhat excessively drained	None	None	22	0	Non-hydric
Crider silt loam, 6 to 12 percent slopes	CrC	Moderately well drained	None	None	>79	0	Non-hydric
lva silt loam, 0 to 2 percent slopes	IvA	Moderately well drained	None	None	6	5	Predominantly non-hydric
Wakeland silt loam, 0 to 3 percent slopes, frequently flooded	Wa	Well drained	None	None	6	3	Predominantly non-hydric

1.2 National Wetland Inventory (NWI) Information

There are three NWI mapped wetlands located within or adjacent to the investigated area. One PUBGh (palustrine, unconsolidated bottom, intermittently exposed, diked/impounded) and one PUBF (palustrine, unconsolidated bottom, semipermanently flooded) are located within the investigated area. These features were field verified as St. Remy Pond (Pond 1) and a man-made residential Pond (Pond 2), respectively. One R4SBC (riverine, intermittent, stream bed, seasonally flooded) wetland is adjacent to the investigated area and was field verified as Jackson Creek (outside of the investigated area). Please see Exhibit 3 for the locations of these features.

1.3 Additional Information

A review of the USGS topo maps (Exhibit 2) shows one open water feature just north of the investigated area and one intermittent (dashed blue line) stream flowing south of the investigated area. The open water feature is within the investigated area as Pond 1. The mapped stream is associated with Jackson Creek, which is outside of the investigated area. The NHD map (Exhibit 3) shows one unclassified flowline within the investigated area. This flowline was field verified as



UNT2 to Jackson Creek. The IDNR floodplain map (Exhibit 4) shows one flood zone crosses the investigated area associated with Jackson Creek.

Photographs of the investigated area can be found in Appendix A. Wetland Data Sheets are included in Appendix B. locations of all photo points, data points, and mapped features are shown on Exhibit 8.

3 FIELD RECONNAISSANCE

Onsite data collection was conducted on August 14, 2025 by Maryssa Engstrom and Corben Andrews. Local precipitation data was reviewed to provide context for observations of hydrology. Precipitation data on the Community Collaborative Rain, Hail, and Snow Network website (Cocorahs.org) for the rain gauge station at station Bloomington 1.5 S showed the area received approximately 1.13 inches of precipitation in the 2 weeks prior to the August 2025 site visit. A significant rain event occurred August 13, 2025, resulting in 1.10 inches of precipitation prior to the site visit. Field data collection was based on the technical criteria presented in the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual (1987 Corps Manual) and 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region Version 2.0 (Regional Supplement). Field methods did not deviate from standard methods found in the 1987 Corps Manual or the Regional Supplement. The locations of identified streams, wetlands, and data points were mapped using sub-meter accurate GPS.

Any applicable jurisdictional wetland and stream determinations were based on the definitions of Waters of the U.S. included in the Clean Water Act, as clarified by Supreme Court rulings in the *Solid Waste Association of Northern Cook County (SWANCC), Rapanos, Carabell*, and *Sackett* cases, and in conformance with US Army Corps of Engineers (USACE) regulatory guidance dated March 12, 2025.

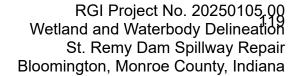
3.1 Waterways

All runoff in the investigated area drains into Jackson Creek immediately south of the investigated area. Jackson Creek drains to Clear Creek, a traditional navigable waterway (TNW), approximately 3.37 miles southwest of the investigated area. Two intermittent waterways were identified within the investigated area. None of the channels onsite are named and therefore are referred to in this report as unnamed tributaries (UNT).

All waterways identified onsite are shown on Exhibit 8, and photos are included in Appendix A.

3.1.1 UNT1 to Jackson Creek

UNT1 to Jackson Creek flows south for approximately 55 feet before exiting the investigated area. UNT1 to Jackson Creek is not shown on the USGS Topographic Map or the NHD map (Exhibit 3), however, it is visible on the LiDAR map (Exhibit 6). UNT1 to Jackson Creek flows to Jackson Creek immediately south of the investigated area. Jackson Creek then flows southwest





to Clear Creek, a TNW. Therefore, it is anticipated that UNT1 to Jackson Creek would be considered a Water of the US.

UNT1 to Jackson Creek receives drainage from the surrounding area and overflow from Pond 2, and is conveyed through a private structure for approximately 55 linear feet within the investigated area. The stream has primarily mud and cobble substrate. The stream lacked sinuosity, but contained riffle/pool complexes and 100% riparian cover. The ordinary high-water mark (OHWM) at stream assessment point 1 (SAP1) was measured as 3.25' wide and 0.33' deep. UNT1 to Jackson Creek appears to be intermittent as it has defined bed and banks, OHWM, and water was flowing in the stream at the time of the site visits. The Cowardin Classification of UNT1 to Jackson Creek is R4SB5 (riverine, intermittent, streambed, mud). UNT1 to Jackson Creek is average quality due to its riparian cover, sinuosity, and riffle-pool complexes.

3.1.2 UNT2 to Jackson Creek

UNT2 to Jackson Creek flows south for approximately 209 feet before exiting the investigated area. A concrete spillway has been constructed along both banks of the northern portion of UNT2 to Jackson Creek adjacent to Pond 1. UNT2 to Jackson Creek is not shown on the USGS Topographic Map, however it is shown as an unclassified flowline on the NHD map (Exhibit 3), and is visible on the LiDAR map (Exhibit 6). UNT2 to Jackson Creek flows to Jackson Creek immediately south of the investigated area. Jackson Creek then flows southwest to Clear Creek, a TNW. Therefore, it is anticipated that UNT2 to Jackson Creek would be considered a Water of the US.

UNT2 to Jackson Creek has primarily mud and riprap substrate. The stream has moderate sinuosity, no riffle/pool complexes and moderate riparian cover. The OHWM was taken at two points along the stream. The OHWM at SAP2 was measured as 4.67' wide and 0.42' deep, and 7.92' wide by 0.67' deep at SAP3. UNT2 to Jackson Creek appears to be intermittent as it has defined bed and banks, OHWM, and water was flowing in the stream at the time of the site visits. The Cowardin Classification of UNT2 to Jackson Creek is R4SB5 (riverine, intermittent, streambed, mud). UNT2 to Jackson Creek is average quality due to its riparian cover, sinuosity, and riffle-pool complexes.

3.2 Wetlands

Three potential wetland areas were investigated during the site visit. Six data points (DP) were collected to determine the presence or absence of wetland conditions, and to delineate wetland boundaries. Wetland boundaries were generally defined by the change in elevation and change in plant community. Data point locations are shown on Exhibit 8. Vegetation is characterized by its indicator status, which reflects the plants' ability to occur in a wetland or upland. Indicator statuses obligate (OBL), facultative wet (FACW), facultative (FAC), facultative upland (FACU), and upland (UPL). Photos are included in Appendix A. The wetland data sheets are included in Appendix B. Unless otherwise noted below, vegetation throughout the



remainder of the project area was not hydrophytic, and soils and hydrology were not investigated further.

3.2.1 Wetland 1

Wetland 1 is a wetland complex that runs the length of the investigated area and extends beyond the investigated area to Jackson Creek. Current and historical aerial imagery of the site shows the area has remained saturated for many years (Exhibit 7a-c). Wetland 1 is separated by a berm at UNT1 to Jackson Creek, and is labeled as Wetland 1A and 1B on Exhibit 8.

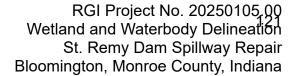
DP1 was collected within a low lying area near St. Remy Drive. Dominant vegetation consisted of river birch (*Betula nigra* – FACW), rice cutgrass (*Leersia oryzoides* – OBL), yellow nutsedge (*Cyperus esculentus* – FACW), and Kentucky bluegrass (*Poa pratensis* – FACU). The vegetation passed the dominance and prevalence tests, therefore, the hydrophytic vegetation criterion was met. Two primary and four secondary hydrologic indicators were found; high water table (A2, at 10"), saturation (A3, at surface), drainage patterns (B10), geomorphic position (D2), microtopographic relief (D4), and FAC-neutral test (D5). Therefore, the wetland hydrology criterion was met. The soil was found to be hydric, meeting the depleted matrix (F3) hydric soil indicator. DP1 meets all three wetland criteria and is representative of conditions within Wetland 1.

DP2 is located upslope of DP1. Dominant vegetation consisted of smooth crabgrass (*Digitaria ischaemum* – UPL) and fowl bluegrass (*Poa palustris* – FACW). The vegetation did not pass any hydrophytic vegetation test. One secondary hydrologic indicator was observed, FAC-neutral test (D5), however, this does not meet the wetland hydrology criterion, and wetland hydrology was not met. The soil was found to be non-hydric. This data point does not meet all three wetland criteria, therefore, DP2 is not located within a wetland and is characteristic of the upland area surrounding Wetland 1 (Wetland 1A and 1B).

Wetland 1A is approximately 0.189 acre and Wetland B is approximately 0.43 acre in size, for a total of 0.619 acre within the investigated area. Wetland 1 extends beyond the investigated area in all directions. The boundary of Wetland 1 is clearly defined by a change in elevation, plant community, and the loss of wetland hydrology indicators. The wetland is considered average quality due to moderate species diversity but runoff from the nearby roadway. Wetland 1 is a palustrine emergent (PEM) wetland that has a continuous surface connection to a Waters of the U.S. Wetland 1 connects directly to UNT2 to Jackson Creek which flows to Jackson Creek, which ultimately flows to Clear Creek, a TNW. Therefore, it is anticipated that Wetland 1 would be considered a Water of the US.

3.2.2 Wetland 2

Wetland 2 is located along the fringe of Pond 1. Current and historical aerial imagery of the site shows the area has remained saturated for many years (Exhibit 7a-c). Wetland 2 can be found on Exhibit 8.





DP3 was collected along the edge of Pond 1. Dominant vegetation consisted of rice cutgrass (*Leersia oryzoides* – OBL) and floating leaved pondweed (*Potamogeton natans* – OBL). The vegetation passed the rapid, dominance and prevalence tests, therefore, the hydrophytic vegetation criterion was met. Five primary and two secondary hydrologic indicators were found; surface water (A1, to 20"), high water table (A2, at surface), saturation (A3, at surface), algal mat or crust (B4), true aquatic plants (B14), geomorphic position (D2), and FAC-neutral test (D5). Therefore, the wetland hydrology criterion was met. The soil was found to be hydric, meeting the depleted matrix (F3) hydric soil indicator. DP3 meets all three wetland criteria and is representative of conditions within Wetland 2.

DP4 is located upslope of DP3. Dominant vegetation consisted of Russian olive (*Elaeagnus angustifolia* – FACU), amur honeysuckle (*Lonicera maackii* – UPL), (*Muhlenbergia schreberi* – FAC), and (*Eupatorium serotinum* – FAC). The vegetation did not pass any hydrophytic vegetation test. No hydrologic indicators were observed, and the soil was found to be non-hydric. This data point does not meet all three wetland criteria, therefore, DP4 is not located within a wetland and is characteristic of the upland area surrounding Wetland 2.

Wetland 2 is approximately 0.044 acre in size. It is a fringe wetland of Pond 1 that extends beyond the investigated area to the east and west. The boundary of Wetland 2 is clearly defined by a change in elevation, plant community, and the loss of wetland hydrology indicators. The wetland is considered average quality. Wetland 2 is a palustrine emergent (PEM) wetland that has a continuous surface connection to a Waters of the U.S. Wetland 2 connects directly to UNT2 to Jackson Creek which flows to Jackson Creek, which ultimately flows to Clear Creek, a TNW. Therefore, it is anticipated that Wetland 2 would be considered a Water of the US.

3.2.3 Wetland 3

Wetland 3 is located along the edge of Pond 2. Current and historical aerial imagery of the site shows the area has remained saturated for many years (Exhibit 7ab-c). Wetland 3 can be found on Exhibit 8.

DP5 was collected along the edge of Pond 2. Dominant vegetation consisted of floating leaved pondweed (*Potamogeton natans* – OBL). The vegetation passed the rapid, dominance and prevalence tests, therefore, the hydrophytic vegetation criterion was met. Seven primary and two secondary hydrologic indicators were found; surface water (A1, to 30"), high water table (A2, at surface), saturation (A3, at surface), algal mat or crust (B4), inundation visible on aerial imagery (B7), aquatic fauna (B13), true aquatic plants (B14), geomorphic position (D2), and FAC-neutral test (D5). Therefore, the wetland hydrology criterion was met. The soil was found to be hydric, meeting the depleted matrix (F3) hydric soil indicator. DP5 meets all three wetland criteria and is representative of conditions within Wetland 3.



DP6 is located upslope of DP5. Dominant vegetation consisted of sugar maple (*Acer saccharinum* – FACW), Eastern redbud (Cercis canadensis – FACU), coralberry (Symphoricarpos orbiculatus – FACU), smooth crabgrass (*Digitaria ischaemum* – UPL), common lespedeza (*Kummerowia striata* – FACU), and Kentucky bluegrass (*Poa pratensis* – FACU). The vegetation did not pass any hydrophytic vegetation test. No hydrologic indicators were observed, and the soil was found to be non-hydric. This data point does not meet all three wetland criteria, therefore, DP6 is not located within a wetland and is characteristic of the upland area surrounding Wetland 3.

Wetland 3 is approximately 0.059 acre in size. It is a fringe wetland of Pond 2 that extends beyond the investigated area to the east. The boundary of Wetland 3 is clearly defined by a change in elevation, plant community, and the loss of wetland hydrology indicators. The wetland is considered average quality. Wetland 3 is a palustrine emergent (PEM) wetland that has a continuous surface connection to a Waters of the U.S. Wetland 3 connects directly to UNT1 to Jackson Creek which flows to Jackson Creek, which ultimately flows to Clear Creek, a TNW. Therefore, it is anticipated that Wetland 3 would be considered a Water of the US.

3.3 Open Water

Two open water features are partially located within the investigated area (Pond 1 and Pond 2). Pond locations are shown on Exhibit 8.

The edge of Pond 1, (0.069 acre) is located along the northeastern border of the investigated area. Pond 1 is an impounded intermittent tributary of Jackson Creek, which ultimately flows to Clear Creek, A TNW. Therefore, it is anticipated that Wetland 3 would be considered a Water of the US.

Pond 2 is located entirely within the investigated area. Pond 2 is a man-made detention pond constructed within a residential housing development, designed to catch stormwater. It is constructed in what was formerly upland and is not a stream impoundment. It is not anticipated that Pond 2 would be considered a Water of the US.

4 SUMMARY & CONCLUSIONS

A meander survey of the project area found two relatively permanent waterways, three wetlands, and two ponds that would be potentially impacted by the St. Remy Dam improvement.

UNT1 and UNT2 to Jackson Creek are intermittent waterways which eventually drain to Clear Creek, a TNW. As such, UNT1 and UNT2 to Jackson Creek are anticipated to be Waters of the US.

Wetlands 1-3 are PEM wetlands that meet the definition of adjacent wetlands as outlined by current definitions. Wetlands 1-3 are anticipated to be Waters of the U.S.

Pond 1 is an impounded tributary of Jackson Creek, which ultimately flows to Clear Creek, a TNW. Therefore, it is anticipated that Wetland 3 would be considered a Water of the US.



RGI Project No. 20250105,00 Wetland and Waterbody Delineation St. Remy Dam Spillway Repair Bloomington, Monroe County, Indiana

Pond 2 is a man-made detention pond constructed within a residential housing development, designed to catch stormwater. It is constructed in what was formerly upland and is not a stream impoundment. It is not anticipated that Pond 2 would be considered a Water of the US.

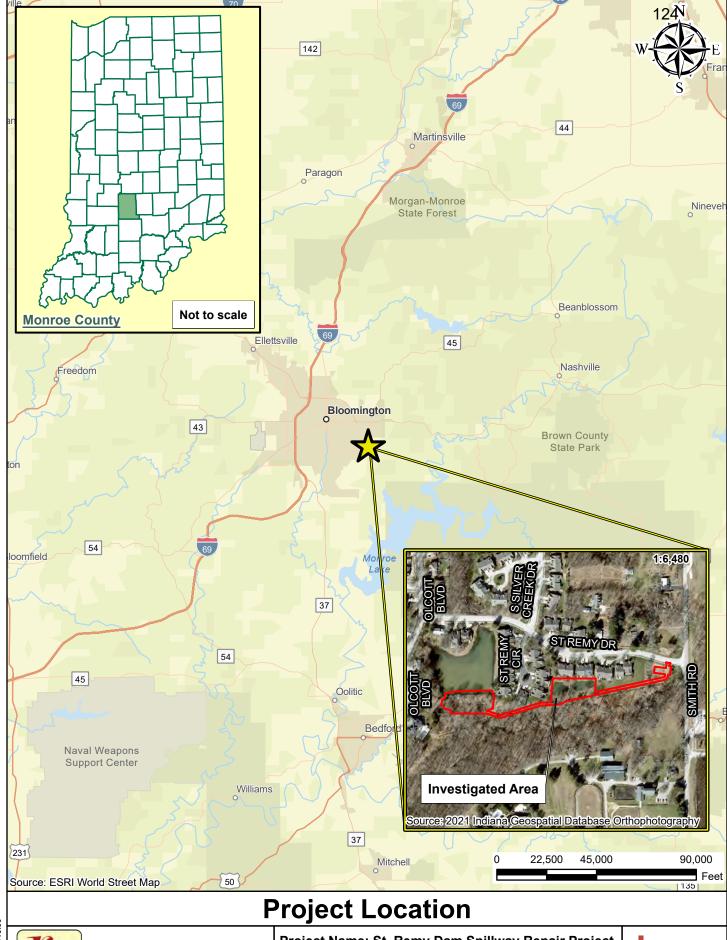
UNT1 to Jackson Creek, UNT2 to Jackson Creek, Wetland 1, Wetland 2, Wetland 3, and Pond 1 should be presumed to fall under the jurisdiction of the USACE. Every effort should be made to avoid and minimize impacts to the streams and wetlands. Clean Water Act Section 404/401 Permits will be required if impacts occur. If stream impacts exceed 300 linear feet, or 150 feet of encapsulation of stream, mitigation will be required. Additionally, if total impacts to Waters of the US (streams and wetlands combined) exceed 0.1-acre, mitigation will be required.

The final determination of jurisdictional waters is ultimately made by the USACE and IDEM. This report is our best judgement based on the guidelines set forth by USACE and IDEM.

5 ACKNOWLEDGEMENT

This waters determination has been prepared based on the best available information, interpreted in the light of the investigator's training, experience and professional judgement in conformance with the 1987 *Corps of Engineers Wetlands Delineation manual*, the appropriate regional supplement, the USACE *Jurisdictional Determination Form Instructional Guidebook*, and other appropriate agency guidelines.

Printed Name: <u>Maryssa Engstrom</u>	
Signature, Title:	8/28/2025
Environmental Scientist II	
Resolution Group, Inc.	



Created: August 13, 2025 By: Maryssa Engstrom Project No: 20250015.00

Resolution Group, Inc.



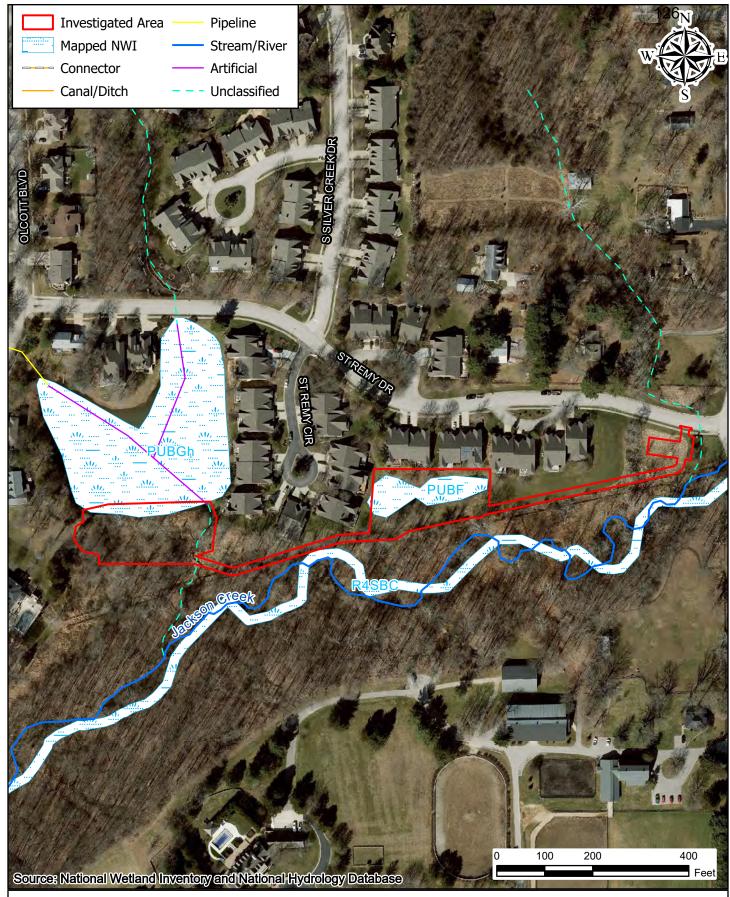
Project Nan

Project Name: St. Remy Dam Spillway Repair Project Location: Bloomington, Monroe County, Indiana



Created: August 13, 2025 By: Maryssa Engstrom Project No: 20250015.00

Resolution Group, Inc.



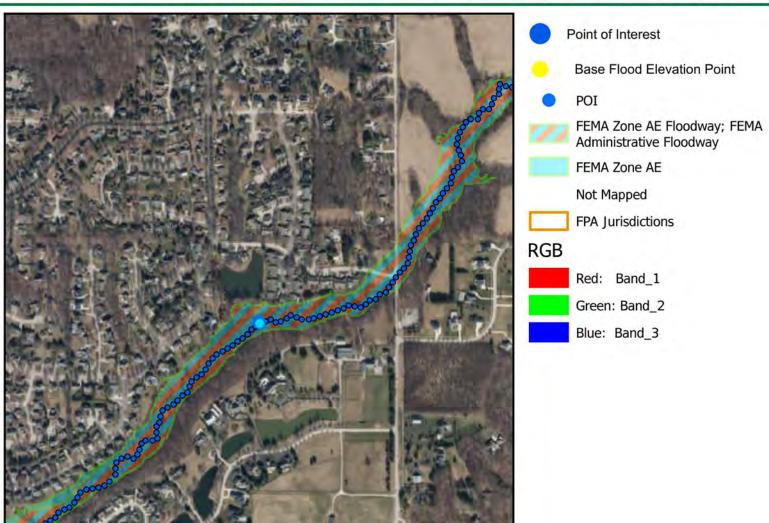
Wetland and Flowline Mapping







Floodplain Alalysis & Regulatory Assessment (FARA)



Long: -86.48429511772144 Lat: 39.14114317885822

The information provided below is based on the point of interest shown in the map above.

County: Monroe Approximate Ground Elevation: 769.8 feet (NAVD88)

Stream Name: Base Flood Elevation: 775.1 Feet (NAVD88)

East Fork Jackson Creek Drainage Area: Not Available

Best Available Flood Hazard Zone: **FEMA Zone AE Floodway**

National Flood Hazard Zone: FEMA Zone AE Floodway

Is a Flood Control Act permit from the DNR needed for this location? yes

Is a local floodplain permit needed for this location? yes-

Floodplain Administrator: Tammy Behrman, Senior Planner

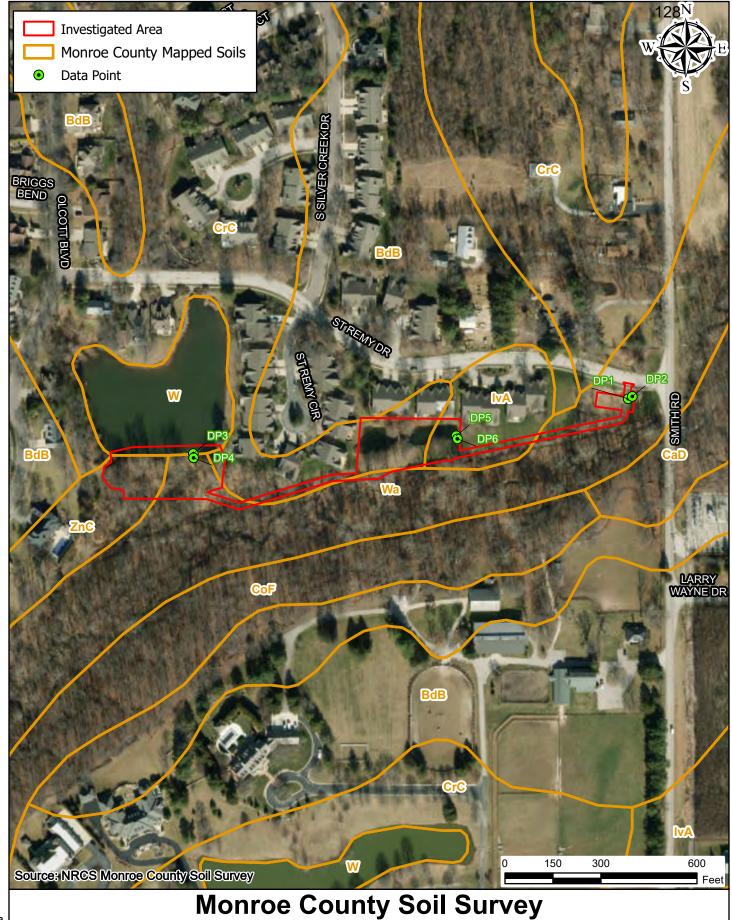
Community Jurisdiction: Monroe County, County proper

Phone: (812) 349-2560

Email: tbehrman@co.monroe.in.us

US Army Corps of Engineers District: Louisville

Date Generated: 8/13/2025



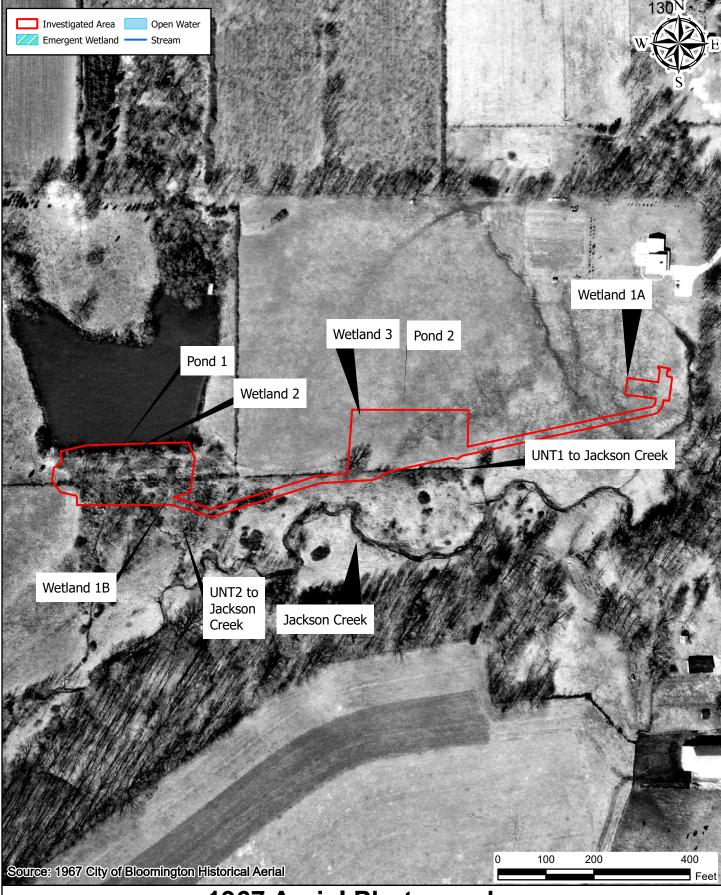
Resolution Group, Inc.



2011 LiDAR Color Hillshade







1967 Aerial Photography





2005 Aerial Photography

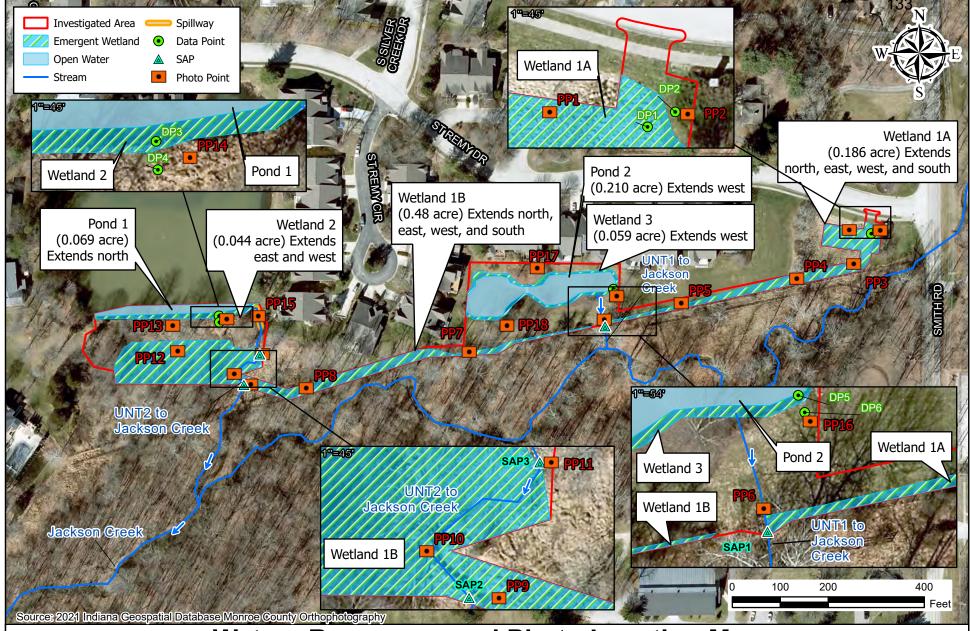




2021 Aerial Photography







Waters Resources and Photo Location Map



Resolution Group, Inc.

Project Name: St. Remy Dam Spillway Repair Project

Location: Bloomington, Monroe County, Indiana



Photopoint 1 – Looking south in Wetland 1A at interspersed vegetation communities.



Photopoint 1 – Looking west in Wetland 1A. Notice microtopography (red arrow as example).



Photopoint 1 – Looking east at Wetland 1A.



Photopoint 2 – Looking west toward DP1 (red arrow) and DP2 (shovel).





DP1 – Soil Pit taken to 21". Notice high water table.



DP2 - Soil Pit taken to 19".



DP1 – Soil Profile, soil is hydric.



DP2 - Soil Profile, soil is not hydric.



Photopoint 3 – Looking west in Wetland 1A.



Photopoint 4 – Looking west in Wetland 1A.



Photopoint 3 – Looking east in Wetland 1A.



Photopoint 4 – Looking north in Wetland 1A



Photopoint 4 – Looking south at drainage patterns (red arrow) in Wetland 1A.



Photopoint 5 – Looking east in Wetland 1A.



Photopoint 4 – Looking east in Wetland 1A.



Photopoint 6 – Looking south at Stream Assessment Point 1 (SAP1, white line) in UNT1 to Jackson Creek.





Photopoint 6 – Looking north from SAP1 at culvert carrying UNT1 to Jackson Creek from an adjacent pond under the residential property.



Photopoint 7 – Looking east within Wetland 1B.



Photopoint 7 – Looking west within Wetland 1B.



Photopoint 8 – Looking north at the start of an underground seep within Wetland 1B (red arrow).



Photopoint 8 – Looking south at drainage patterns and standing water (red arrow) in Wetland 1B.



Photopoint 9 – Looking west (upstream) at SAP2 (white line) in UNT2 to Jackson Creek. Wetland 1B is located on both sides.



Photopoint 8 – Looking east in Wetland 1B.



Photopoint 9 – Looking south (downstream) in UNT2 to Jackson Creek. Wetland 1B is located on both sides.



Photopoint 10 – Looking northeast (upstream) in UNT2 to Jackson Creek. Wetland 1B is located on both sides.



Photopoint 11 – Looking west from the east bank of UNT2 to Jackson Creek at the end of Wetland 1B (red boundary) and at the woody debris within the stream channel (red arrow).



Photopoint 10 – Looking southeast (downstream) in UNT2 to Jackson Creek. Wetland 1B is located on both sides.



Photopoint 11 – Looking east from UNT2 to Jackson Creek. Spillway can be seen in the background. Notice the extreme erosion (red arrow).



Photopoint 11 – Looking north (upstream) at SAP3 (white line) in UNT2 to Jackson Creek. Wetland 1B is located on both sides.



Photopoint 12 – Looking west in Wetland 1B.



Photopoint 11 – Looking south (downstream) in UNT2 to Jackson Creek at woody debris lodge in channel.



Photopoint 12 – Looking north in Wetland 1B.



Photopoint 12 – Looking south in Wetland 1B.



Photopoint 13 – Looking east at upland area surrounding Pond 1.



Photopoint 12 – Looking east in Wetland 1B.



Photopoint 13 – Looking south. Upland.



Photopoint 13 – Looking north toward Pond 1 and Wetland 2 (red arrow).



Photopoint 14 – Looking west. Upland.



Photopoint 13 – Looking west toward Pond 1 and Wetland 2 (red arrow).



Photopoint 14 – Looking south. Upland.



Photopoint 14 – Looking north toward DP3 (shovel) and DP4 (red arrow).



DP3 – Soil Profile, soil is hydric.



DP3 – Soil Pit. Notice high water table.



DP4 – Soil Pit, taken to 16".



DP4 – Soil Profile, soil is not hydric.



Photopoint 15 – Looking east along UNT2 to Jackson Creek from the spillway.



Photopoint 15 – Looking east along UNT2 to Jackson Creek from the spillway. Note the extreme erosion (red arrow).



Photopoint 15 – Looking north toward Pond 1 and Wetland 2 (red arrow).



Photopoint 16 – Looking west toward DP5 (red arrow) and DP6 (shovel).



DP5 – Soil Profile, soil is hydric.



DP5 – Soil Pit taken to 12". Notice high water table.



DP6 - Soil Pit taken to 16".



DP6 – Soil Profile. Soil is not hydric.



PP17 - Looking southeast at Pond 2 and Wetland 3.



PP16 - Looking west, just south of PP16. Upland.



PP17 - Looking west toward Pond 2 and Wetland 3 (red arrow).



PP18 - Looking northeast toward Pond 2 and Wetland 3 (red arrow).



PP18 - Looking southwest toward Wetland 1B (red arrow).



PP18 - Looking northwest toward Pond 2 and Wetland 3 (red arrow).



WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: St. Remy Dam Spillway Rep	pair	City/County: Bloomin	gton/Monroe County Sa	ampling Date: 2025-08-14
Applicant/Owner: Weihe Engineers Inc.	•		State: Indiana Sa	ampling Point: DP1
Investigator(s): M. Engstrom, C. Andrews	S	ection, Township, Range	: S11 T8N R1W	
Landform (hillside, terrace, etc.): Depression		I relief (concave, convex,		Slope (%): 1
Subregion (LRR or MLRA): N 120C	Lat: 39.14207		-86.480736	Datum: WGS 84
Soil Map Unit Name: Wa - Wakeland silt lo				_
Are climatic / hydrologic conditions on the site type	-			ain in Remarks.)
, ,	•		Circumstances" present?	Yes V No
Are Vegetation, Soil, or Hydrology				
Are Vegetation, Soil, or Hydrology			plain any answers in Rema	
SUMMARY OF FINDINGS – Attach sit	te map showing sa	mpling point locati	ons, transects, impo	rtant features, etc.
Hydrophytic Vegetation Present? Yes	s 🗸 No	Is the Sampled Area		
• • • •		within a Wetland?	Yes 🗸 N	o
Wetland Hydrology Present? Yes	s No No			
Remarks:				
DP1 is representative of Wetla	and 1			
DF 1 is representative of Wetla 	iliu I.			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators (mir	nimum of two required)
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil Cracks (
Surface Water (A1)	True Aquatic Plants (B	14)		Concave Surface (B8)
✓ High Water Table (A2)	 Hydrogen Sulfide Odor 	r (C1)	✓ Drainage Patterns (B	10)
Saturation (A3)	 Oxidized Rhizospheres 	s on Living Roots (C3)	Moss Trim Lines (B16	6)
Water Marks (B1)	Presence of Reduced I	Iron (C4)	Dry-Season Water Ta	able (C2)
Sediment Deposits (B2)	Recent Iron Reduction	in Tilled Soils (C6)	Crayfish Burrows (C8	3)
Drift Deposits (B3)	Thin Muck Surface (C7	7)	Saturation Visible on	Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Rema		Stunted or Stressed F	=
Iron Deposits (B5)	_ ` '	,	Geomorphic Position	` '
Inundation Visible on Aerial Imagery (B7)			Shallow Aquitard (D3	
Water-Stained Leaves (B9)			✓ Microtopographic Rel	•
Aquatic Fauna (B13)			FAC-Neutral Test (D5	` '
Field Observations:				-,
	o V Depth (inches);		
	o Depth (inches	· 		
Saturation Present? Yes V		· ——	Hydrology Present?	Yes V No
(includes capillary fringe)		,, <u>- </u>	,	
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, p	previous inspections), if a	vailable:	
Remarks:				
Drainage patterns have helped	d create microt	opography. Max	depth of water 6	6 inches.
			•	

Sampling Point: DP1 SOIL

Profile Description: (Describe	to the de	pth needed to doc	ument tl	he indica	ator or c	onfirm the absence o	of indicators.)
Depth Matrix		Redo	x Featur	es			
(inches) Color (moist)	%	Color (moist)	%_	Type ¹	Loc ²	Texture	Remarks
0 - 4 10YR 5/2	100					Clay	
4 - 10 10YR 5/2	70	10YR 4/6	25	<u>c</u>	<u>M</u>	Clay	Prominent redox concentrations
		10YR 2/1	5	<u>C</u>	<u>M</u>		Prominent redox concentrations
10 - 21 10YR 5/2	60	10YR 5/6	30	<u>C</u>	<u>M</u>	Clay	Prominent redox concentrations
	- —	10YR 3/2	<u>10</u>	<u>D</u>	<u>M</u>		
¹ Type: C=Concentration, D=De _l	oletion, RN	/I=Reduced Matrix, N	MS=Mas	ked San	d Grains		: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface Thick Dark Surface (A12) Iron Monosulfide (A18) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7)	ce (A11)	Polyvalue Barthin Dark Silloamy Muckle Loamy Gley Depleted Marked Depleted Darked Depleted Darked Darked Darked Darked Darked Darked Darked Surfalloam MLRA 136 Umbric Surfalloam Red Parent	urface (Sky Minera ed Matrix etrix (F3) Surface ark Surfa essions nese Mas 6) ace (F13 oodplain	S9) (MLR al (F1) (N x (F2) (F6) ce (F7) (F8) sses (F1: 3) (MLRA Soils (F	A 147, 1 ILRA 13 2) (LRR 4 122, 13 19) (MLF	147, 148) 2 48) 6 6) F N, 6 RA 148)	cators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Red Parent Material (F21) (outside MLRA 127, 147, 148) /ery Shallow Dark Surface (F22) Other (Explain in Remarks) cators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if observed)	:					I	·
Type:	•						
Depth (inches):						Hydric Soil Prese	ent? Yes <u> </u>
Remarks:							

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: St. Remy Dam Spillway F	≀epair	City/County: Bloomin	gton/Monroe County Sam	pling Date:	2025-08-14
Applicant/Owner: Weihe Engineers I	nc.		State: Indiana Sam	npling Point:	DP2
Investigator(s): M. Engstrom, C. Andre	 ws	Section, Township, Range	: S11 T8N R1W		
Landform (hillside, terrace, etc.): Hill Top		cal relief (concave, convex,		Slope (%):	3
Subregion (LRR or MLRA): N 120C	Lat: 39.142089		-86.480693		WGS 84
Soil Map Unit Name: Wa - Wakeland sil				-	
Are climatic / hydrologic conditions on the site	•		No (If no, explain	•	- \
					
Are Vegetation, Soil, or Hydro			Circumstances" present?	Yes	NO
Are Vegetation, Soil, or Hydro	logynaturally probl	ematic? (If needed, ex	plain any answers in Remark	s.)	
SUMMARY OF FINDINGS – Attach	site map showing s	sampling point locati	ons, transects, import	ant featur	es, etc.
Hydrophytic Vegetation Present?	Yes No 🗸	Is the Sampled Area			
Hydric Soil Present?	Yes No V	within a Wetland?	Yes No	✓	
Wetland Hydrology Present?	Yes No 🗸				
Remarks:					
DD2 is representative of the	unland area aus	rounding Motlan	d 1		
DP2 is representative of the	upiano area sur	rounding wellan	a 1.		
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (minir	mum of two r	equired)
Primary Indicators (minimum of one is requir	ed: check all that apply)		Surface Soil Cracks (B6		<u>cquircu</u>
Surface Water (A1)	True Aquatic Plants	(B14)	Sparsely Vegetated Co		ce (B8)
High Water Table (A2)	Hydrogen Sulfide Oc	` '	Drainage Patterns (B10)C (BO)
Saturation (A3)		res on Living Roots (C3)	Moss Trim Lines (B16)		
Water Marks (B1)	Presence of Reduce	= : :	Dry-Season Water Table		
Sediment Deposits (B2)		on in Tilled Soils (C6)	Crayfish Burrows (C8)	IE (O2)	
Drift Deposits (B3)	Thin Muck Surface (Saturation Visible on A	orial Imagery	, (CQ)
Algal Mat or Crust (B4)	Other (Explain in Re	·	Stunted or Stressed Pla		(03)
Iron Deposits (B5)	— Other (Explain in Re	marks)		• •	
l — ' ' '	7)		Geomorphic Position (E	12)	
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)	f (D4)	
Water-Stained Leaves (B9)			Microtopographic Relie	r (D4)	
Aquatic Fauna (B13)			FAC-Neutral Test (D5)		
Field Observations: Surface Water Present? Yes	No. V Donath / to all	00)			
	No Depth (inch				
Water Table Present? Yes	No Depth (inch		H	V	N = 1/
Saturation Present? Yes (includes capillary fringe)	No _ Depth (inch	es): wetland	Hydrology Present?	Yes	No
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	previous inspections) if a	vailable:		
	g, ac.ia. piicios	s, promodo moposiiono), m c			
Remarks:					

Sampling Point:	DP2

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
3.				Total Number of Dominant Species Across All Strata: 2 (B)
5.				(b)
				Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)
7.				Prevalence Index worksheet:
		Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species <u>55</u> x 2 = <u>110</u>
1				FAC species $\frac{0}{x^2}$ $x^2 = \frac{0}{x^2}$
2				FACU species $\frac{0}{1}$ $x = 0$
3				UPL species $\frac{55}{410}$ $\times 5 = \frac{275}{905}$
4				Column Totals: 110 (A) 385 (B)
5				Prevalence Index = B/A = 3.50
6.				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
8.				2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹
9		=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:		of total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5x2 ft)		or total cover.		Problematic Hydrophytic Vegetation ¹ (Explain)
1. Digitaria ischaemum	55	~	UPL	
2. Poa palustris	45	<u> </u>	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. Euphorbia serpens	10		FACW	Definitions of Four Vegetation Strata:
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
6.				height.
7.				Sapling/Shrub – Woody plants, excluding vines, less
8				than 3 in. DBH and greater than or equal to 3.28 ft
9				(1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11	110			of size, and woody plants less than 3.28 ft tall.
		=Total Cover	00.00	Woody Vine – All woody vines greater than 3.28 ft in height.
50% of total cover: 55.00	20%	of total cover:	22.00	neight
Woody Vine Stratum (Plot size: 30 ft r)				
1.				
2. 3.				
5.				
		Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation Present? Yes No
Remarks: (Include photo numbers here or on a sepa				
Vegetation sample plot excludes	orname	ntal land	scape s	pecies.

ENG FORM 6116-4, SEP 2024

Sampling Point: DP2 SOIL

Depth Marrix Redox Features Color (moles) % Color (moles) % Type Loc Texture Remarks			to the de				ator or c	onfirm the absence	of indicators.)	
Q - 4	Depth (inches)	Matrix Color (moist)	0/2				Loc ²	Tevture	Remarks	
4 - 10 10YR 4/4 40 10YR 5/8 20 C M Clay Loam Prominent redox concentrations 4 - 10 10YR 3/3 40 - - Clay Loam Mixed Matrix 10 - 19 10YR 5/3 60 5YR 3/4 20 C M Clay Loam Prominent redox concentrations - 10YR 5/8 10 C M Prominent redox concentrations 1'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 2*Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils³: Histic Soil (A1) Polyvalue Below Surface (S8) (MLRA 147, 148) 2 cm Muck (A10) (MLRA 147) 4 coast Prairie Redox (A16) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Red Parent Material (F21) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) (Putricate MLRA 127, 147, 148) Very Shallow Dark Surface (F22) Other (Explain in Remarks) Very Shallow Dark Surface (F22) Other (Exp				Color (moist)		Туре				
4 - 10			40	10YR 5/8	20	<u></u>	<u>—</u>		Prominent redox cor	ncentrations
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. To Mill Matrix Sand Grains. Prominent redox concentrations Thick Soil Indicators: Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) 2 cm Muck (A10) (MLRA 147, 148) Coast Prairie Redox (A16) (MLRA 147, 148) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Red Parent Material (F21) (Outside MLRA 127, 147, 148) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR N, Other (Explain in Remarks) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 128) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 127, 147, 148) Type: Dark Surface (S7) Restrictive Layer (if observed): Type: Depth ((inches): Hydric Soil Present? Yes No Y	4 - 10	10YR 3/3	40					Clay Loam	Mixed Matrix	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Prominent redox concentrations 1 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Polyvalue Below Surface (S8) (MLRA 147, 148) Histosol (A1) Polyvalue Below Surface (S9) (MLRA 147, 148) Histic Epipedon (A2) Thin Dark Surface (S9) (MLRA 147, 148) Black Histic (A3) Loamy Mucky Mineral (F1) (MLRA 136) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Q cm Muck (A10) (LRR N) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Yery Shallow Dark Surface (F22) Iron Monosulfide (A18) Sandy Mucky Mineral (S1) Sandy Redox (S5) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 122, 136) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No PL=Pore Lining, M=Matrix. 2 Location: PL=Pore Lining, M=Matrix. 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Red Parent Material (F21) (LRR N, Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 122, 136) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 127, 147, 148) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 127, 147, 148) Hydric Soil Present? Yes No Piedmont Floodplain Soils (F19) (MLRA 127, 147, 148)	10 - 19	10YR 5/3	60	5YR 3/4	20	C	M	Clay Loam	Prominent redox cor	ncentrations
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (MLRA 147, 148) Polyvalue Below Surface (S9) (MLRA 147, 148) Polyvalue Below Surface (F19) (MLRA 136) Polyvalue Below Surface (F19) (MLRA 126, 147) Polyvalue Below Surface (F19) (MLRA 126, 147) Polyvalue Below Surface (F19) (MLRA 126, 147) Polyvalue Below Surface (F19) (MLRA 127, 147, 148) Polyvalue Below Surface (F19) (MLRA 122, 136) Polyvalue Below Surface (F19) (MLRA 122, 136) Polyvalue Below Surface (F19) (MLRA 127, 147, 148) Polyvalue Below Surface (F19) (MLRA 127, 147, 148) Polyvalue Below Surface (F19) (MLRA 122, 136) Polyvalue Below Surface (F19) (MLRA 122, 136) Polyvalue Below Surface (F19) (MLRA 127, 147, 148) Polyvalue Below Surface (F19) (MLRA 122, 136) Polyvalue Below Surface (F19) (MLRA 127, 147, 148) Polyvalue Below Surface (F19) (MLRA 122, 136) Polyvalue Below Surface	-			10YR 6/1	10	D	М			
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (MLRA 147, 148) Pistic Epipedon (A2) Thin Dark Surface (S9) (MLRA 147, 148) Dark Surface (S9) (MLRA 147, 148) Pistic Epipedon (A2) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Red Parent Material (F21) (outside MLRA 127, 147, 148) Potential (F				10YR 5/8	10	c	М		Prominent redox cor	ncentrations
Histosol (A1)	¹Type: C=Co	ncentration, D=Dep	oletion, RI	M=Reduced Matrix,	MS=Mas	ked San	d Grains	Locatio	n: PL=Pore Lining, M=Ma	ntrix.
Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No V	Histic Ep Black His Hydrogel Stratified 2 cm Mu Depleted Thick Da Iron Mon Sandy M Sandy G Sandy R Stripped	ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) ck (A10) (LRR N) Below Dark Surface rk Surface (A12) osulfide (A18) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6)	e (A11)	Thin Dark S Loamy Muc Loamy Gley Depleted M Redox Dark Depleted Dark Redox Depi Iron-Manga MLRA 13 Umbric Surf	surface (\$ ky Miner ved Matri atrix (F3) c Surface ark Surfa ressions nese Ma 66) face (F13 loodplain	S9) (MLR ral (F1) (N x (F2)) c (F6) cce (F7) (F8) sses (F1 3) (MLRA o Soils (F	2) (LRR 122, 13	48) 6) N, 6) RA 148)	Coast Prairie Redox (A16 (MLRA 147, 148) Piedmont Floodplain Soils (MLRA 136, 147) Red Parent Material (F21 (outside MLRA 127, 14 Very Shallow Dark Surfact Other (Explain in Remark	etation and per present,
Type:								1	unless disturbed or proble	ematic.
Depth (inches): Hydric Soil Present? Yes No V		.ayer (if observed)	:							
Bopar (money).	-	iches).						Hydric Soil Pres	eent? Ves	No 🗸
	- '							1 Tryuno dom r rec		

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: St. Remy Dam Spillway I	Repair	City/County: Blooming	gton/Monroe County _{Sai}	mpling Date: 202	:5-08-14
Applicant/Owner: Weihe Engineers	inc.		State: Indiana Sa	mpling Point: DP	_' 3
Investigator(s): M. Engstrom, C. Andre	ws	Section, Township, Range:	S11 T8N R1W		
Landform (hillside, terrace, etc.): Pond		al relief (concave, convex,		Slope (%): 0	
Subregion (LRR or MLRA): N 120C	Lat: 39.141706	•	86.484457		GS 84
Soil Map Unit Name: W - Water			NWI classification:	- '' -	
Are climatic / hydrologic conditions on the site	a typical for this time of year	r? Yes ✔		ain in Remarks.)	
•			ircumstances" present?	Yes 🗸 No	
Are Vegetation, Soil, or Hydro			•		′——
Are Vegetation, Soil, or Hydro			olain any answers in Remar		
SUMMARY OF FINDINGS – Attach	site map showing sa	ampling point location	ons, transects, impor	tant features,	, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes / No	Is the Sampled Area within a Wetland?	Yes No)	
Remarks:	100				
DP3 is representative of We	etland 2, a fringe	wetland of Pond	1.		
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (min	imum of two requ	<u>ıired)</u>
Primary Indicators (minimum of one is requi			Surface Soil Cracks (E	*	
Surface Water (A1)	True Aquatic Plants (E	,	Sparsely Vegetated C		B8)
High Water Table (A2)	— Hydrogen Sulfide Odd		Drainage Patterns (B1	*	
Saturation (A3)		es on Living Roots (C3)	Moss Trim Lines (B16	•	
Water Marks (B1)	Presence of Reduced		Dry-Season Water Tal		
Sediment Deposits (B2)	Recent Iron Reduction	·	Crayfish Burrows (C8)		0)
☐ Drift Deposits (B3) ✓ Algal Mat or Crust (B4)	Thin Muck Surface (C	•	Saturation Visible on A		9)
Iron Deposits (B5)	Other (Explain in Rem	iaiks)	Stunted or Stressed P Geomorphic Position (
Inundation Visible on Aerial Imagery (B	7)		Shallow Aquitard (D3)		
Water-Stained Leaves (B9))		Microtopographic Reli		
Aquatic Fauna (B13)			FAC-Neutral Test (D5		
Field Observations:				,	
Surface Water Present? Yes	No Depth (inche	_{(S):} 20			
Water Table Present? Yes	No Depth (inches	· 			
Saturation Present? Yes	No Depth (inche	· 	Hydrology Present?	Yes 🗸 No)
(includes capillary fringe)					
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos,	previous inspections), if av	/ailable:		
Remarks:					

Sampling Point:	DP3

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2.				That Are OBL, FACW, or FAC: 2 (A)
3				Total Number of Dominant Species Across All Strata: (B)
5.				(5)
6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species 90 x 1 = 90
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species 5 x 2 = 10
1				FAC species $0 \times 3 = 0$
2				FACU species $\frac{0}{x}$ $x = \frac{0}{x}$
3				UPL species 10
4				Column Totals: (A) 150 (B)
5				Prevalence Index = B/A = 1.42
6.				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0 ¹
500/ of total account		=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
50% of total cover: <u>Herb Stratum</u> (Plot size: 5 ft r)	20%	of total cover:		Problematic Hydrophytic Vegetation ¹ (Explain)
1. Leersia oryzoides	35	/	OBL	I—
2. Potamogeton natans	35	·	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. Lemna minor	20		OBL	Definitions of Four Vegetation Strata:
4. Bidens connata	10		UPL	_
5. Bidens frondosa	5		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
6.				height.
7.				Sapling/Shrub – Woody plants, excluding vines, less
8.				than 3 in. DBH and greater than or equal to 3.28 ft
9.				(1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
	105	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 52.50	20%	of total cover:	21.00	height.
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2				
3				
4				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes No No
Remarks: (Include photo numbers here or on a sepa	arate sheet.)			

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Sampling Point: DP3 SOIL

Depth	Matrix		-	x Featu			onfirm the absence	oi mulcators.j
(inches)	Color (moist)	<u>%</u>	Color (moist)	%_	Type ¹	Loc ²	Texture	Remarks
0 - 3	N /	100					Muck	High amount of gravel. Gley 1 2.5Y/N
3 - 11	10YR 4/1	60	10YR 5/6	40	<u>C</u>		Clay	Prominent redox concentrations
-								
_								
- ¹ Type: C=C	oncentration, D=Dep	letion, RI	 M=Reduced Matrix, N	 MS=Mas	ked San	 d Grains	. ² Location	n: PL=Pore Lining, M=Matrix.
	Indicators:						Indi	cators for Problematic Hydric Soils ³ :
Histosol			Polyvalue Bo	elow Su	rface (S8	B) (MLRA		2 cm Muck (A10) (MLRA 147)
Histic E	pipedon (A2)		Thin Dark S	urface (S	S9) (MLF	RA 147, 1		Coast Prairie Redox (A16)
— Black Hi	stic (A3)		Loamy Muck	ky Miner	al (F1) (I	VILRA 13	6)	(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matri	x (F2)			Piedmont Floodplain Soils (F19)
Stratified	d Layers (A5)		✓ Depleted Ma	atrix (F3))			(MLRA 136, 147)
2 cm Mu	ıck (A10) (LRR N)		Redox Dark	Surface	(F6)			Red Parent Material (F21)
Deplete	d Below Dark Surfac	e (A11)	Depleted Da	ırk Surfa	ice (F7)			(outside MLRA 127, 147, 148)
	ark Surface (A12)		Redox Depr		` '			Very Shallow Dark Surface (F22)
	nosulfide (A18)		Iron-Mangar		sses (F1	2) (LRR	N,	Other (Explain in Remarks)
'	Mucky Mineral (S1)		MLRA 130) (141 D.	100 10	0)	
	Gleyed Matrix (S4)		Umbric Surfa	•			3	cators of hydrophytic vegetation and
	Redox (S5) I Matrix (S6)		Piedmont Fleed Parent		•		u ,	wetland hydrology must be present,
	rface (S7)		Ned Falelit	Materiai	(FZ1) (IV	ILNA 12	, , , , , , , , , , , ,	unless disturbed or problematic.
	Layer (if observed):	<u> </u>						
Type:								
Depth (i	nches):						Hydric Soil Pres	ent? Yes_ ✔ No
Remarks:	<u> </u>							
	ple only take		3					

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: St. Remy Dam Spillway F	łepair	City/County: Blooming	gton/Monroe County _{Sar}	mpling Date:	2025-08-14
Applicant/Owner: Weihe Engineers I	nc.		State: Indiana Sar	mpling Point:	DP4
Investigator(s): M. Engstrom, C. Andrew	ws :	Section, Township, Range:	S11 T8N R1W		
Landform (hillside, terrace, etc.): Hillslope		al relief (concave, convex,	none): Convex	Slope (%):	2
Subregion (LRR or MLRA): N 120C	Lat: 39.141678	*	86.484455	-	WGS 84
Soil Map Unit Name: Wa - Wakeland silt				-	
	•				- \
Are climatic / hydrologic conditions on the site	•		No (If no, explain		
Are Vegetation, Soil, or Hydrol			ircumstances" present?	Yes_	- ^{No}
Are Vegetation, Soil, or Hydrol	ogynaturally proble	ematic? (If needed, exp	olain any answers in Remark	ks.)	
SUMMARY OF FINDINGS – Attach	site map showing sa	ampling point location	ons, transects, import	tant featu	res, etc.
[, , , , , , , , , , , , , , , , , , ,				
Hydrophytic Vegetation Present?	Yes No V	Is the Sampled Area	V N-	./	
Hydric Soil Present? Wetland Hydrology Present?	Yes No V	within a Wetland?	Yes No		
	165100				
Remarks:					
DP4 is representative of the	upland area sur	rounding Wetland	d 2.		
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (mini	mum of two	required)
Primary Indicators (minimum of one is requir	ed; check all that apply)		Surface Soil Cracks (B	66)	
Surface Water (A1)	True Aquatic Plants (E	B14)	Sparsely Vegetated Co	oncave Surfa	ıce (B8)
— High Water Table (A2)	Hydrogen Sulfide Odd		Drainage Patterns (B10	-	
Saturation (A3)		es on Living Roots (C3)	Moss Trim Lines (B16)		
Water Marks (B1)	Presence of Reduced		Dry-Season Water Tab		
Sediment Deposits (B2)	Recent Iron Reduction		Crayfish Burrows (C8)		(00)
Drift Deposits (B3)	Thin Muck Surface (C	·	Saturation Visible on A		y (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)	Other (Explain in Rem	ilaiks)	Stunted or Stressed PI Geomorphic Position (I		
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)	<i>D2)</i>	
Water-Stained Leaves (B9)	,		Microtopographic Relie	ef (D4)	
Aquatic Fauna (B13)			FAC-Neutral Test (D5)	` '	
Field Observations:					
Surface Water Present? Yes	No _ ✓ Depth (inche	es):			
Water Table Present? Yes	No Popth (inche				
Saturation Present? Yes	No V Depth (inche		Hydrology Present?	Yes	No 🗸
(includes capillary fringe)					·
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos,	, previous inspections), if av	vailable:		
Develope					
Remarks:					

Sampling Point:	DP4

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1.				Number of Dominant Species
2				That Are OBL, FACW, or FAC: 2 (A)
3				Total Number of Dominant
4				Species Across All Strata: 5 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 40.00 (A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species $\frac{0}{1-x}$ $x = 0$
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species $\frac{15}{2}$ $\times 2 = \frac{30}{2}$
1. Elaeagnus angustifolia	10		FACU	FAC species 85 x 3 = 255
2. Lonicera maackii	5		UPL	FACU species 34
3				UPL species 10
4				Column Totals: <u>144</u> (A) <u>471</u> (B)
5				Prevalence Index = B/A = 3.27
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	15	=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 7.50	20%	of total cover:	3.00	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Muhlenbergia schreberi	50		FAC	¹ Indicators of hydric soil and wetland hydrology must be
2. Eupatorium serotinum	35	~	FAC	present, unless disturbed or problematic.
3. Symphyotrichum lateriflorum	10		FACW	Definitions of Four Vegetation Strata:
4. Onoclea sensibilis	5		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Pyrus calleryana	5		UPL	more in diameter at breast height (DBH), regardless of
6. Rosa multiflora	5		FACU	height.
7. Agrimonia gryposepala	2		FACU	Sapling/Shrub – Woody plants, excluding vines, less
8. Solanum carolinense	2		FACU	than 3 in. DBH and greater than or equal to 3.28 ft
9.				(1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
	114	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 57.00	20%	of total cover:	22.80	height.
Woody Vine Stratum (Plot size: 30 ft r)				
Lonicera japonica	15	~	FACU	
2.				
3.				
4.	-			
5.				
	15	=Total Cover		Hydrophytic
50% of total cover: 7.50	20%	of total cover:	3.00	Vegetation Present? Yes No
30 % of total cover. 7.30		or total cover.		rieseitt: iesio
Remarks: (Include photo numbers here or on a sepa	arate sheet.)			

Sampling Point: DP4 SOIL

		to the de				ator or c	onfirm the absence	of indicators.)
Depth (inches)	Matrix	%		x Featur		Loc ²	Texture	Domonto
(inches) 0 - 3	Color (moist) 10YR 4/3	100	Color (moist)		Type ¹	Loc	Clay Loam	Remarks
3 - 16	10YR 5/4	40	10YR 5/8	 15	C	M	Clay	Prominent redox concentrations
3 - 16	10YR 6/2	30	10YR 3/4	<u></u> 15	c	<u>—</u>	Clay	Mixed Matrix, Prominent redox concentrations
	· ·		· ·					
¹ Type: C=Co	oncentration, D=Depl	etion, RN	 ∕/=Reduced Matrix, M	 MS=Mas	ked San	d Grains	 . ² Location	n: PL=Pore Lining, M=Matrix.
Black His Hydroger Stratified 2 cm Mur Depleted Thick Da Iron Mon Sandy M Sandy G	(A1) ipedon (A2)	e (A11)	Polyvalue Bo Thin Dark So Loamy Muck Loamy Gleyo Depleted Ma Redox Dark Depleted Da Redox Depro Iron-Mangar MLRA 130 Umbric Surfa	urface (S xy Minera ed Matrix atrix (F3) Surface ark Surfa essions nese Mat 6)	S9) (MLR al (F1) (N x (F2) (F6) ce (F7) (F8) sses (F1	A 147, 1 ILRA 13 2) (LRR 122, 13	.147, 148) 48) 6) N, 6) RA 148) ³ Indi	cators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Red Parent Material (F21) (outside MLRA 127, 147, 148) Very Shallow Dark Surface (F22) Other (Explain in Remarks)
Stripped	Matrix (S6)		Red Parent	-	-		7, 147, 148)	wetland hydrology must be present,
Dark Sur							1	unless disturbed or problematic.
Type:	.ayer (if observed):							
Depth (in	ches):						Hydric Soil Prese	ent? Yes No ✔
Remarks:							1 -	

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: St. Remy Dam Spillway I	Repair P <u>roject</u>	City/County: Bloomin	gton/Monroe County San	npling Date: 2025-08-14	
Applicant/Owner: Weihe Engineers	Inc.		State: Indiana San	mpling Point: DP5	
Investigator(s): M. Engstrom, C. Andre	ws	Section, Township, Range:	: S11 T8N R1W	<u>—</u>	
Landform (hillside, terrace, etc.): Pond		ocal relief (concave, convex,		Slope (%): 1	
Subregion (LRR or MLRA): N 120C	Lat: 39.141824		-86.482208	Datum: WGS 84	
Soil Map Unit Name: IvA - Iva silt Ioam,			NWI classification:	-	
Are climatic / hydrologic conditions on the site				in in Remarks.)	
Are Vegetation, Soil, or Hydro			Circumstances" present?	Yes V No	
			plain any answers in Remark		
Are Vegetation, Soil, or Hydro	<u> </u>				
SUMMARY OF FINDINGS – Attach	Site map snowing s	samping point location	ons, transects, import	tant reatures, etc.	
Hydrophytic Vegetation Present?	Yes No	Is the Sampled Area	•		
Hydric Soil Present?	Yes No No	within a Wetland?	Yes No		
Wetland Hydrology Present?	Yes No				
Remarks:					
DP 5 is representative of W	etland 3, a fringe	e wetland of Pond	l 2.		
<u>-</u> 					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (mini		
Primary Indicators (minimum of one is required in the control of t			Surface Soil Cracks (B	<i>'</i>	
✓ Surface Water (A1)	✓ True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8				
High Water Table (A2)	Hydrogen Sulfide Od		Drainage Patterns (B10	•	
Saturation (A3) Water Marks (B1)	Presence of Reduce	res on Living Roots (C3)	Moss Trim Lines (B16)		
Sediment Deposits (B2)		on in Tilled Soils (C6)	Dry-Season Water Table (C2) Crayfish Burrows (C8)		
Drift Deposits (B3)	Thin Muck Surface (· ·	Saturation Visible on A	erial Imagery (C9)	
✓ Algal Mat or Crust (B4)	Other (Explain in Rei	*	Stunted or Stressed Pla		
Iron Deposits (B5)		,	Geomorphic Position (I		
✓ Inundation Visible on Aerial Imagery (B	7)		Shallow Aquitard (D3)	,	
Water-Stained Leaves (B9)			Microtopographic Relie	` '	
Aquatic Fauna (B13)			FAC-Neutral Test (D5)		
Field Observations:					
Surface Water Present? Yes	No Depth (inche				
Water Table Present? Yes	No Depth (inche	· 			
Saturation Present? Yes V	No Depth (inche	es): 0 Wetland	Hydrology Present?	Yes No	
(includes capillary fringe) Describe Recorded Data (stream gauge, mo			vailable		
Describe Necorded Data (stream gauge, mo	TIIIOTIII Well, actial priolos	s, previous inspections, ir a	vallable.		
Remarks:					
Fish present.					

Sampling Point:	DP5
, ,	

<u>Tree Stratum</u> (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2.				That Are OBL, FACW, or FAC: 1 (A)
3. 4.				Total Number of Dominant Species Across All Strata: (B)
5				(b)
6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:	:	OBL species 60 x 1 = 60
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species $\frac{10}{2}$ $\times 2 = \frac{20}{2}$
1				FAC species $\frac{0}{0}$ $\times 3 = \frac{0}{0}$
2				FACU species $\frac{0}{0}$ $x = 4 = \frac{0}{0}$ UPL species $x = \frac{0}{0}$
3.				·
4 5.				
6				Prevalence Index = B/A = 1.14 Hydrophytic Vegetation Indicators:
7				✓ 1 - Rapid Test for Hydrophytic Vegetation
				✓ 2 - Dominance Test is >50%
				✓ 3 - Prevalence Index is ≤3.0 ¹
9	-	=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:		of total cover:	:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Potamogeton natans	60		OBL	¹ Indicators of hydric soil and wetland hydrology must be
2. Bidens connata	10		FACW	present, unless disturbed or problematic.
3				Definitions of Four Vegetation Strata:
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of height.
6				Height.
7				Sapling/Shrub – Woody plants, excluding vines, less
8				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9.				
10 11.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
···	70	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 35.00		of total cover:	14.00	height.
Woody Vine Stratum (Plot size: 30 ft r)				
1.				
2.				
3.				
4				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:	·	Present? Yes No No
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

Sampling Point: DP5 SOIL

(inches)	Matrix			c Featur				
(11101103)	Color (moist)	%	Color (moist)		Type ¹	Loc ²	Texture	Remarks
0 - 4	10YR 2/2	100					Muck	Pebbles present throughout sample
4 - 12	N /	100					Clay	Gley 1 6/N
			_					
_								
- Type: C=Cc	oncentration, D=Dep	letion, RM	=Reduced Matrix, N	—— IS=Mas	—— ked San	—— d Grains.	² Locatio	n: PL=Pore Lining, M=Matrix.
lydric Soil I	Indicators:						Indi	cators for Problematic Hydric Soils ³
Histosol			Polyvalue Be	low Sur	face (S8) (MLRA		2 cm Muck (A10) (MLRA 147)
Histic Ep	pipedon (A2)		Thin Dark Su	ırface (S	9) (MLR	A 147, 1	48)	Coast Prairie Redox (A16)
Black His	stic (A3)		Loamy Muck	y Miner	al (F1) (N	ILRA 13	6)	(MLRA 147, 148)
Hydroger	n Sulfide (A4)		<u>✓</u> Loamy Gleye	ed Matri	x (F2)			Piedmont Floodplain Soils (F19)
	l Layers (A5)		Depleted Ma	trix (F3)				(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark		` '			Red Parent Material (F21)
	l Below Dark Surfac	e (A11)	Depleted Da		` '			(outside MLRA 127, 147, 148)
	irk Surface (A12)		Redox Depre		` '	o) (I DD		Very Shallow Dark Surface (F22)
	Monosulfide (A18) Iron-Manganese Masses (F12) (LRR N, Other (Explain in Remark y Mucky Mineral (S1) MLRA 136)						Other (Explain in Remarks)	
	lucky Mineral (S1) leyed Matrix (S4)		Umbric Surfa) (MI RA	122 13	6)	
	edox (S5)		Piedmont Flo				3 .	icators of hydrophytic vegetation and
	Matrix (S6)		Red Parent I					wetland hydrology must be present,
Dark Surface (S7)					•	unless disturbed or problematic.		
Restrictive L	_ayer (if observed):	:						
Type:								
_	nches):						Hydric Soil Pres	ent? Yes No No
Depth (in								
Depth (in								
Depth (in	ple only take	en to 12	" due to hig	n wat	ter tal	ole.		
Depth (in		en to 12	" due to hig	n wat	ter tal	ole.		
Depth (in		en to 12	" due to hig	n wat	ter tal	ole.		
Depth (in		en to 12	" due to hig	n wat	ter tal	ole.		
Depth (in		en to 12	" due to hig	n wat	ter tal	ole.		
Depth (in		n to 12	" due to hig	n wat	ter tal	ole.		
Depth (in		en to 12	" due to hig	n wat	ter tal	ole.		
Depth (in		en to 12	" due to hig	n wat	ter tal	ole.		
Depth (in		en to 12	" due to hig	n wat	er tal	ole.		
Depth (in		en to 12	" due to hig	n wat	ter tal	ole.		
Depth (in		en to 12	" due to hig	n wat	er tal	ole.		
Depth (in		en to 12	" due to hig	n wat	er tal	ole.		
Depth (in		en to 12	" due to hig	n wat	er tal	ole.		
Depth (in		en to 12	" due to hig	n wat	er tal	ole.		
Depth (in		en to 12	" due to hig	n wat	er tal	ole.		
Depth (in		en to 12	" due to hig	n wat	er tal	ole.		
Depth (in		en to 12	" due to hig	n wat	er tal	ole.		
Depth (in		en to 12	" due to hig	n wat	er tal	ole.		

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: St. Remy Dam Spillway F	Repair	City/County: Blooming	gton/Monroe County _{San}	npling Date: 2025-08-	-14
Applicant/Owner: Weihe Engineers I	nc.		State: Indiana San	npling Point: DP6	
Investigator(s): M. Engstrom, C. Andre		Section, Township, Range:	 S11 T8N R1W		
Landform (hillside, terrace, etc.): Hill Top		cal relief (concave, convex,		Slope (%): 5	_
Subregion (LRR or MLRA): N 120C	Lat: 39.141804			Datum: WGS 8	<u></u>
			86.482198		
Soil Map Unit Name: CrC - Crider silt lo			NWI classification:		
Are climatic / hydrologic conditions on the site	typical for this time of yea	ar? Yes	No (If no, explai	in in Remarks.)	
Are Vegetation, Soil, or Hydro	logysignificantly dis	sturbed? Are "Normal C	ircumstances" present?	Yes No No	_
Are Vegetation, Soil, or Hydro	logy naturally proble	ematic? (If needed, ex	olain any answers in Remark	s.)	
SUMMARY OF FINDINGS – Attach	site map showing s	sampling point location	ons, transects, import	ant features, etc	;.
Hydrophytic Vogotation Procent?	Yes No 🗸	Is the Sampled Area			
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes No V	Is the Sampled Area within a Wetland?	Yes No	✓	
Wetland Hydrology Present?	Yes No V	within a wettana.	103 110	-	
Remarks:					—
DP6 is representative of the	upland area sur	rounding Wetland	d 3.		
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (minis		
Primary Indicators (minimum of one is requir			Surface Soil Cracks (B		
Surface Water (A1)	True Aquatic Plants	' '	Sparsely Vegetated Co		
High Water Table (A2)	— Hydrogen Sulfide Od		Drainage Patterns (B10	•	
Saturation (A3) Water Marks (B1)	Presence of Reduce	res on Living Roots (C3)	Moss Trim Lines (B16) Dry-Season Water Tab		
Sediment Deposits (B2)		on in Tilled Soils (C6)	Crayfish Burrows (C8)		
Drift Deposits (B3)	Thin Muck Surface (
Algal Mat or Crust (B4)	Other (Explain in Rei	•	Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)		
Iron Deposits (B5)		,	Geomorphic Position (D2)		
Inundation Visible on Aerial Imagery (B7	')		Shallow Aquitard (D3)	,	
Water-Stained Leaves (B9)			Microtopographic Relie	ef (D4)	
Aquatic Fauna (B13)			FAC-Neutral Test (D5)		
Field Observations:					
Surface Water Present? Yes	No _ Depth (inch	es):			
Water Table Present? Yes	No Pepth (inche	es):			
Saturation Present? Yes	No _ Depth (inche	es): Wetland	Hydrology Present?	Yes No _	
(includes capillary fringe)					
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	s, previous inspections), if a	vailable:		
Remarks:					_
Nemarks.					

Sampling Point: DP6

VEGETATION (Four Strata) – Use scientific names of plants.

Trop Charters / Dist size, 20 ft r	Absolute % Cover	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)	40	Species?	Status	
1. Acer saccharinum	10		FACU	Number of Dominant Species That Are ORL FACW or FAC: 1 (A)
2. Cercis canadensis	10		FACU	That Are OBL, FACW, or FAC: 1 (A)
3.				Total Number of Dominant Species Across All Strata: 7 (B)
4.				Species Across All Strata: 7 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 14.28 (A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover: 25.00	20%	of total cover:	10.00	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: 15 ft r)			FACW species 40 x 2 = 80
1. Sassafras albidum	5		FACU	FAC species $0 \times 3 = 0$
2. Symphoricarpos orbiculatus	2		FACU	FACU species 67 x 4 = 268
3				UPL species 50 x 5 = 250
4				Column Totals: 157 (A) 598 (B)
5				Prevalence Index = B/A = 3.80
6.				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
8.				2 - Dominance Test is >50%
9.				3 - Prevalence Index is ≤3.0 ¹
	7	=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 3.50	20%	of total cover:	1.40	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Digitaria ischaemum	50	~	UPL	<u> </u>
2. Kummerowia striata	30		FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. Poa pratensis	20		FACU	Definitions of Four Vegetation Strata:
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
6.				height.
7.	-			Sapling/Shrub – Woody plants, excluding vines, less
8.				than 3 in. DBH and greater than or equal to 3.28 ft
9.				(1 m) tall.
· -	-			Hawk All howhoods us (non-woods) plants, regardless
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	100	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50.0		of total cover	20.00	height.
	20 /6	or total cover.		3
Woody Vine Stratum (Plot size: 30 ft r)				
1.				
2.				
3.				
4				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes No
Remarks: (Include photo numbers here or on a sepa	arate sheet.)			
				l l

Sampling Point: DP6 SOIL

		to the dep				ator or c	onfirm the absence	of indicators.)
Depth (inches)	Matrix	 .	Color (moist)	K Featur		1002	Toyturo	Domostro
(inches) 0 - 4	Color (moist) 10YR 5/3	100	Color (moist)		Type ¹	Loc ²	Clay Loam	Remarks
4 - 16	10YR 6/4	60					Clay	Mixed Matrix
4 - 16	10YR 5/3	40	_				Clay	Mixed Matrix
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, N	 1S=Mas	ked San	d Grains.	² Locatio	n: PL=Pore Lining, M=Matrix.
Black His Hydroge Stratified 2 cm Mu Depleted Thick Da Iron Mor Sandy M Sandy G Sandy R Stripped	(A1) ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) ck (A10) (LRR N) I Below Dark Surface irk Surface (A12) iosulfide (A18) lucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6)	e (A11)	Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Iron-Mangan MLRA 136 Umbric Surfa Piedmont Flo	urface (Sy Mineraced Matrix (F3) Surface rk Surface rk Surface essions esse Mas si) ace (F13	89) (MLR 8al (F1) (N x (F2) (F6) ce (F7) (F8) sses (F12 8) (MLRA Soils (F	A 147, 1 ILRA 13 2) (LRR 122, 13 19) (MLF	147, 148) 48) 6) N, 6) RA 148) ³ Ind	cators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Red Parent Material (F21) (outside MLRA 127, 147, 148) Very Shallow Dark Surface (F22) Other (Explain in Remarks) icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
	face (S7) -ayer (if observed):						I	unless disturbed of problematic.
Type:	Layer (II observed).							
Depth (ir	nches):						Hydric Soil Pres	ent? Yes No ✔
Remarks:								





Termination Notice

Appplication #: FW-33340-0

This Termination Notice is issued under the authority of the Indiana Flood Control Act, IC 14-28-1 with 312 IAC 10 as administered by the Department of Natural Resources.

Termination Issued To: Saint Remy Homeowners Association Inc, PO Box 274, Ellettsville, IN 47429

Termination Issued By: Amanda McCollum, Division of Water **Mail Date:** 8/1/2025

Cimanda McCollum

PROJECT INFORMATION:

Waterbody: Unknown County: Monroe

Project Description Narrative: The St. Remy Dam will have maintenance activities preformed. Work will include removing and repairing the failed spillway, adding a new drop inlet structure, removing trees and root balls from the dam and along the back of the dam, repairing and compacting exposed dam embankment areas. Total impact will be approximately 1.135 acres.

Project Location: Beginning directly behind 2905 South Olcott Boulevard and extending east approximately 1,300' near Bloomington

TERMINATION REASONS:

- 1) A permit under the Flood Control Act, IC 14-28-1 or IC 14-27-7.5 Regulation of Dams, is not required since, the upstream drainage area of the project site is less than one square mile and the dam does not meet any of the following criteria:
- A drainage area above the dam equal or above than one square mile.
- Reaches or exceed twenty feet in height from the original stream bed to the crest (top) of the dam.
- Impounds a volume of one hundred acre-feet of water or above.

RIGHT TO ADMINISTRATIVE REVIEW:

A party may appeal this Department of Natural Resources Action through the administrative review procedures found in the Administrative Orders and Procedures Act, IC 4-21.5. If an appeal is filed, the final agency determination will be made following a legal proceeding conducted before an Administrative Law Judge. The Department of Natural Resources will be represented by legal counsel at all stages of administrative review.

In order to obtain an administrative review, a written petition must be filed within 18 days of the Mail Date of the Action. The petition must contain specific reasons for the appeal and indicate the portion or portions of the project to which the appeal pertains. The petition can be submitted online by selecting the appropriate File a Petition for Review tile at: in.gov/oalp/file-a-petition-for-review/, or by mail at: Office of Administrative Law Proceedings, 100 N. Senate Avenue, Suite N802, Indianapolis, IN 46204.

SERVICE LIST:

Applicant(s):

Saint Remy Homeowners Association Inc, PO Box 274, Ellettsville, IN 47429

Agent(s):

Weihe Engineers, David Counsell, 10505 North College Avenue, Indianapolis, IN 46280

Adjacent Landowners and Interested Parties:

Monroe County Drainage Board, County Surveyor, Health Services Building, 2nd Floor 119 West 7th Street, Bloomington, IN 47404

Monroe County SWCD, Martha Miller, 1931 South Liberty Drive, Bloomington, IN 47403

Monroe County Planning Department, Tammy Behrman, 501 North Morton Street, Suite 224, Bloomington, IN 47404 US Army Corps of Engineers, Louisville District, PO Box 59, Louisville, KY 40201

Christie Stanifer, 402 West Washington Street, Room W264, Indianapolis, IN 46204

Indiana Department of Natural Resources, Division of Law Enforcement District 6 Headquarters PO Box 282, Nineveh, IN 46164

David Ormstedt, 2905 South Olcott Boulevard, Bloomington, IN 47401

James Madison, 2901 South Olcott Road, Bloomington, IN 47401

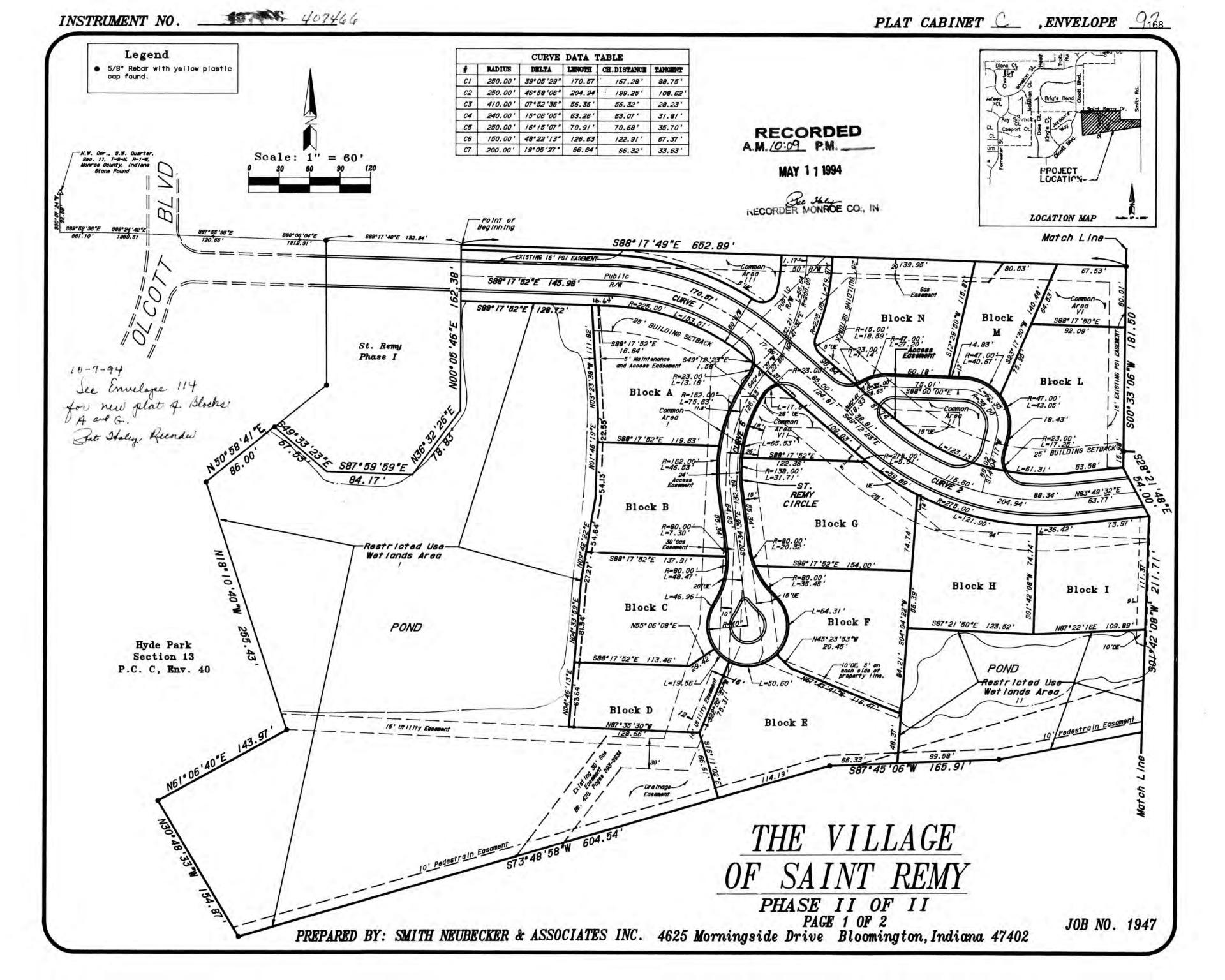
Courtesy Notification:

Christie Stanifer, 402 West Washington Street, Room W264, Indianapolis, IN 46204

ADDITIONAL PERMITTING AGENCIES:

This is not a waiver of any local ordinance or other state or federal law and does not relieve the permittee of any liability for the effects which the project may have upon the safety of the life or property of others.

This does not relieve the permittee of the responsibility of obtaining permits, approvals, easements, etc. under other regulatory programs administered by, but not limited to, the U.S. Army Corps of Engineers, County Drainage Board, Indiana Department of Environmental Management and local, city, or county floodplain management, planning or zoning commissions.



Area V

588° 17 '52"W 528.00

129.32

CURVE 4

47.81

S88º 17 '52"E

Restricted Use

Wet lands Area

111

S78° 53 '30 "W

PROJECT SQUARE FOOTAGE

-16' EXISTING PSI EASEMENT

588* 17 '52*E

81.51

L=70.52

-506°06'30°W 6.20'

Block K

Public

50' R/W Dedicated

to the Public

573-11:47 % 128.417

Restricted Use-

Wet lands Area

70.91 Public 35.14" CURVE 5 RAW SAS' 26'84"

Dedicated R/W

RECAP

ACREAGE

1.66

5.69

0.91

4.55

12.81

159.

90,

R

0

5

DESCRIPTION FOR THE VILLAGE OF ST. REMY, PHASE II JOB NUMBER 1947

A part of the Southeast Quarter of Section 11. Township 8 North. Range 1 West, Monroe County, Indiana, being more particularly described as follows:

COMMENCING at the northwest corner of the Southwest Quarter of said section marked by a stone; thence SOUTH 00 degrees 07 minutes 24 seconds West along the west line of said Southwest Quarter 38.59 feet; thence SOUTH 89 degrees 52 minutes 36 seconds East 661.10 feet to a railroad spike in the centerline of Sare Road; thence SOUTH 88 degrees 24 minutes 42 seconds East along a fence line marking the north line of the said Southwest Quarter 1959.51 feet to the northwest corner of the Southeast Quarter of the said section and marked by a fence corner; thence along the north line of the Southeast Quarter of the said section SOUTH 87 degrees 55 minutes 35 seconds East 120.55 feet; thence continuing along said north line SOUTH 88 degrees 06 minutes 04 seconds East 1212.31 feet to the northwest corner of the Village of St. Remy, Phase I, as recorded in Plat Cabinet C. Envelope 92, in the office of the Recorder of Monroe County, Indiana; thence along the north line of said Phase I, SOUTH 88 degrees 17 minutes 49 seconds East 132.94 feet to the Point of Beginning; thence SOUTH 88 degrees 17 minutes 49 seconds East 652.89 feet to the northwest corner of Sinn property, as recorded in Deed Record 135, Page 367, in the office of the Recorder of Monroe County; thence SOUTH 00 degrees 33 minutes 06 seconds West 181.50 feet along the south line of said property; thence along the east line of said property, SOUTH 88 degrees 17 minutes 52 seconds East 528.00 feet to the east line of the Southeast Quarter; thence SOUTH along said line 00 degrees 33 minutes 06 seconds West 159.72 feet; thence leaving said line SOUTH 78 degrees 53 minutes 30 seconds West 659.66 feet; thence SOUTH 87 degrees 45 minutes 06 seconds West 165.91 feet; thence SOUTH 73 degrees 48 minutes 58 seconds West 604.54 feet; thence NORTH 30 degrees 48 minutes 33 seconds West 154.87 feet; thence NORTH 61 degrees 48 minutes 48 percentage of the second Seconds West 154.87 feet; thence NORTH 61 degrees 65 minutes 40 seconds Se 61 degrees 06 minutes 40 seconds East 143.97 feet; thence NORTH 18 degrees 10 minutes 40 seconds West 255.43 feet; thence NORTH 50 degrees 58 minutes 41 seconds East 86.00 feet to the southwest corner of The Village of St. Remy, Phase I; thence along the south line of The Village of St. Remy, Phase I, SOUTH 49 degrees 33 minutes 23 seconds East 67.53 feet; thence SOUTH 87 degrees 59 minutes 59 seconds East 84.17 feet; thence NORTH 36 degrees 32 minutes 26 seconds East 78.83 feet; thence NORTH 00 degrees 05 minutes 46 seconds East 162.38 feet to the Point of Beginning, containing 12.81

I hereby certify that the survey work performed on the project shown hereon was performed either by me or under my direct supervision and control and that all information shown is true and correct to the best of my knowledge and bellef.

Certified this 4th day of May , 1994.

Stephen L. Smith Registered Land Surveyor No. S0427 State of Indiana

PLAN COMMISSION AND BOARD OF PUBLIC WORKS

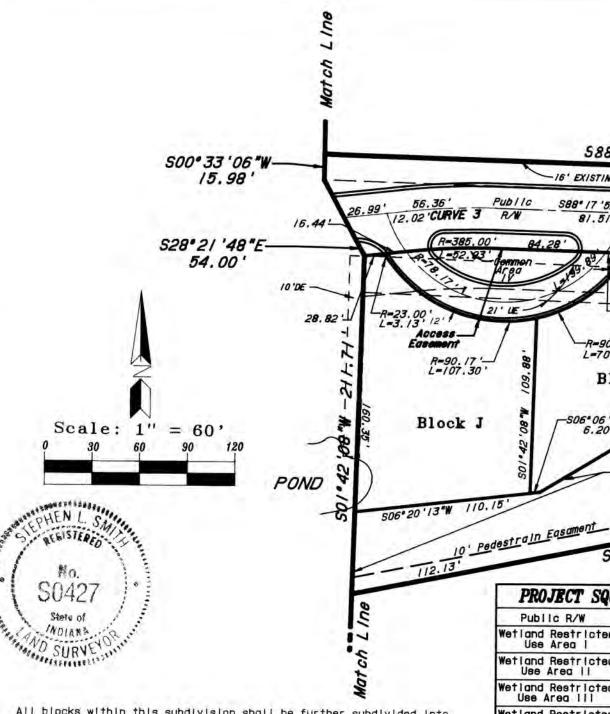
Under the authority provided by Chapter 174, Acts of 1947 enacted by the General Assembly of the State of Indiana and ordinance adopted by the common council of the City of Bloomington, Indiana, this plat was given approval by the City of Bloomington as fallows:

Approved by the Board of Public Works at a meeting held:

Frank N. Hrisomalos, M.D., President

Approved by the City Plan Commission at a meeting held:

Voung



All blocks within this subdivision shall be further subdivided into a maximum of two residential lots each with attached and/or detached residential structures.

Subject to the Declaration of Covenants, Conditions and Restriction as recorded in Miscellaneous Record 224, Pages 157-203, in the office of the Recorder of Monroe County, Indiana.

The undersigned, ST. Remy Development Company, inc., by Eric C. Stalberg, Vice President, being the owner of the described real estate does hereby layoff, plat and subdivide the same into lots and common area in accordance with the described plat. The within plat shall be known and designated as The Village of ST. Remy, Phase II

an Indiana Corporation, by Eric Stolberg, Vice President, has hereunto executed this ______ day of ______

Eric C. Stolberg, Vice Aresident Saint Remy Development Corporation

STATE OF INDIANA)

COUNTY OF MONROE)

Before me, a Notary Public in and for the State of Indiana and Monroe County, personally appeared Eric C. Stalberg, personally known to me to be Vice President of ST. Remy Development Corporation, an Indiana Corporation, and who acknowledged the execution of the foregoing plat for the Real Estate known as The VIIIage of ST. Remy, Phase II, as his

WITNESS my hand and Notarial Seal this

My Commission Expires: October 9, 1997

> Marlys E. Alien, NOTARY PUBLI a Resident of Monroe County

Public R/W 72,423 Wetland Restricted Use Area i Wetland Restricted 27,868 Use Area II Wetland Restricted Use Area III 35,567 Wetland Restricted Use Area IV 6,227 Common Area I 10,619 Common Area 11 8,680 Common Area !!! 4,347 Common Area IV 4,891 Common Area V 1,223 Common Area VI 4,800 Common Area VII 4,926 Block A 16,855 Block B 13,490 14,317 Block D 9,334 Block E 17,514 Block F 14,932 16,759 Block H 13,869 11,857 Block J 13,940 Block K 16,030 Block L 15,952 Block M 8,084 Block N 15,384

Total Area

TOTAL TIME	CT ARE
	SQ, FT.
Public R/W	72,423
Watiand Restricted Use Area	247,849
Common Area	39,486
Blocks A Thru N	199,317
DULY ENTER	588,075
FOR TAXATIO MAY 11 1994	IN.
11 1994	
Margaret Cone	,

558,075

II OF II

PAGE 2 OF 2

JOB NO. 1947



To the members of the Bloomington Board of Zoning Appeals,

The Bloomington Environmental Commission Planning Committee (ECPC) appreciates that the variance request aims to minimize environmental disturbance while making important improvements for dam and stormwater management. However, given that the scope of the project necessitates encroaching on parcels not owned by the Saint Remy Homeowners Association, the ECPC would encourage the petitioner to consider an alternative path for the long-term access maintenance road. The current proposal appears to run about 1,300 feet westward, briefly entering 2552 S Smith Rd and 2550 S Smith Rd parcels before returning to Homeowners Association property and attaching to E St Remy Dr. It runs in very close proximity to Wetlands and crosses two tributaries of Jackson Creek, necessarily disturbing approximately 1.1 acres of land. If the maintenance road were to instead run eastward about 325 feet through the 2915 S Olcott Blvd parcel and attach to S Olcott, it would impact fewer Wetlands, cross zero tributaries, and require the removal of far fewer trees. It is the recommendation of the ECPC that this alternative path be considered before approval of variance requests.

If running the maintenance road to Olcott Blvd is unfeasible, we recommend that the wetland enhancement area extend around the entirety of Saint Remy Pond rather than just along the east side of the pond. This would roughly triple the wetland enhancement area, which would make the total area of the wetland enhancement roughly equal to the area being permanently disturbed by the access road. This would make the enhancement project closer to a true 1:1 offset of the wetland removed by this project.

Thank you for your consideration,

The City of Bloomington Environmental Commission Planning Committee



Eric Greulich <greulice@bloomington.in.gov>

BZA CU-33-25 / ZR2025-07-0087

orms47@comcast.net <orms47@comcast.net>

Mon, Nov 10, 2025 at 3:01 PM

To: Eric Greulich <greulice@bloomington.in.gov>

Cc: DLWelchSaintRemy@proton.me, David Counsell <counselld@weihe.net>

November 10, 2025

RE: Board of Zoning Appeals

CU-33-25 / ZR2025-07-0087

Saint Remy HOA, Petitioner

Dear Mr. Greulich,

We own and reside at property abutting the subject property to the west (Lot 309). We thank you for sending us on October 23 the material supporting the petition. Our review of the same prompted some questions that we addressed to David Counsell of Weihe Engineers, to which he responded on November 3. Attached is a copy of the email containing our questions and Mr. Counsell's reply. Based on the foregoing, and assuming no material site plan change that affects our property, we are unaware of a reason for concern.

Also attached is a copy of a November 3 email message from us to Dave Welch of the St. Remy HOA. It is self-explanatory.

David and Sharon Ormstedt

2905 S. Olcott Blvd

Bloomington 47401

2 attachments

BZA St. Remy HOA #1.pdf 465K

BZA St. Remy HOA #2.pdf 258K

BLOOMINGTON BOARD OF ZONING APPEALS
STAFF REPORT
CASE#: V-44-25
ZR2025-09-0099

LOCATION: 1459 W. Bloomfield Road DATE: November 20, 2025

PETITIONER: Daniel Im – Foreign Auto Connect

1292 S Walnut Street Bloomington, IN 47401

REQUEST: The petitioner is requesting variances from the front parking setback and landscaping standards to allow the use "Vehicle sales or rental" in the Mixed-Use Corridor (MC) zoning district.

REPORT: The 2.21 acre property is located off W. Bloomfield Road and zoned Mixed-Use Corridor (MC) district. The properties across the street and to the north of the site are not within the City of Bloomington's jurisdiction. To the east, the properties are a mix of MC and Residential Medium Lot (R2) zoning. To the south is R2 zoning, and the properties to the west are zoned Mixed-Use Medium Scale (MM). The site is surrounded by a mix of residential and business uses. The property is currently vacant and was formerly occupied by Sowders Landscaping.

Foreign Auto Connect is a current business in the City of Bloomington, presently located at 1202 S. Walnut Street. The company is proposing to move to the subject address to have more space for the inventory of their used car sales. The property has been vacant for more than one year and therefore any establishment of a new use on the property is considered a change in use and the site is required to come into compliance with the Limited Compliance standards of Unified Development Ordinance (UDO) Section 20.06.090(f)(2)(B).

The petitioner is requesting multiple variances from the front parking setback and landscaping standards to allow the use "Vehicle sales or rental" in the MC zoning district. The minimum front parking setback in the MC zoning district is 20 feet behind the primary structure's front building wall. There are existing buildings on the east and west sides of the site, and the petitioner is requesting variances to allow parking spaces to encroach in the minimum front yard setback both along W. Bloomfield Road and S. Peach Tree Lane.

As for the landscaping variances, these relate to the parking lot perimeter trees, parking lot perimeter shrubs, and parking lot landscape islands. The requested variances along with the applicable UDO sections are outlined in the table below.

UDO Section	UDO Standard	Requested Variance
20.02.020(d)(2)(F)	Front parking setback	W. Bloomfield Road: There
	(minimum): 20 feet behind	are 2 parking spaces
	the primary structure's front	encroaching in the minimum
	building wall	front parking setback on the
		west side of the site.
		S. Peach Tree Lane: There
		are 9 parking spaces

20.04.080(h)(1)(B)	 i. Number: Parking lot perimeter areas shall contain a minimum of one tree per four parking spaces. ii. Type: A minimum of 75 percent of the required trees shall be large, canopy trees. iii. Location: Trees shall be planted within 10 feet of the parking lot edge. 	encroaching in the minimum front parking setback on the east side of the site. There are 101 display vehicle spaces and 8 customer parking spaces for a total of 109 parking spaces. Based on this, a minimum of 28 trees are required on the perimeter of the parking area with a minimum of 21 large canopy trees included.
20.04.080(h)(1)(C)	i. Number: Parking lot perimeter areas shall contain a minimum of three shrubs per one parking space. ii. Location: Shrubs shall be planted within five feet of the parking lot edge. In situations where there is a sidewalk immediately adjacent to a parking area, the required shrubs must be within 5' of the edge of the sidewalk. iii. Height: Shrubs planted in parking lot perimeter areas shall be selected from species that grow to a minimum height of four feet.	A minimum of 327 shrubs are required on the perimeter of the parking area. On the submitted plan, the number and species of shrubs are not clearly identified to determine the level of compliance with this landscaping requirement. Furthermore, some of the identified existing vegetation are prohibited species.
20.04.080(h)(2)	A. Number: Parking lots with 12 or more parking spaces shall provide one landscape bumpout, island, or endcap per every 10 parking spaces. B. Minimum Area: The width and length of each required landscape bumpout, island, or endcap shall be equal to the width and length of the adjacent parking space.	11 landscape islands are required, and none are shown on the submitted site plan.

C. Minimum Planting: Each landscape bumpout, island, or endcap shall contain at least one large canopy tree and four shrubs or native grasses. Where a bumpout, island, or endcap area is equal to the width and length of two parking spaces, a minimum of two large canopy trees and eight shrubs or native grasses shall be provided. Required trees within bumpouts, islands, or endcaps do not count toward required street tree totals, required parking lot perimeter area tree totals, or required interior plantings tree totals.

D. Stormwater Filtration: Parking lot bumpouts, islands, or endcaps shall be installed in order to meet Title 13 (Stormwater) of the Bloomington Municipal Code.

E. Placement: Landscape bumpouts, islands, or endcaps shall be installed to control vehicular circulation and define major drives. Such islands shall be placed at intervals of no more than 10 consecutive spaces.

CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE

20.06.080(b)(3)(E)(i) Standards for Granting Variances from Development Standards: A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) The approval will not be injurious to the public health, safety, morals, and general welfare of the community.

PROPOSED FINDING:

Front Parking Setback (W. Bloomfield Road): The approval of the requested parking setback variance on W. Bloomfield Road is expected to be injurious to the public health, safety, morals, and general welfare of the community. As shown on the petitioner's submitted site plan, there are 2 parking spaces encroaching in the minimum front parking setback on the west side of the site. These 2 parking spaces could be relocated to an alternate location on the site, which would offer greater protection to pedestrians and bicyclists in the community and allow the petitioner to meet Section 20.02.020(d)(2)(F) of the UDO without a variance. The City of Bloomington highly prioritizes pedestrian and bicyclist safety, and the purpose of Section 20.02.020(d)(2)(F) is to minimize conflicts between vehicular and non-vehicular users.

Front Parking Setback (S. Peach Tree Lane): Portions of S. Peach Tree Lane that are adjacent to the subject property are unbuilt. Due to the lack of development and connectivity in this area, the approval of the requested parking setback variance on S. Peach Tree Lane is not expected to be injurious to the public health, safety, morals, and general welfare of the community. Furthermore, a determinate sidewalk variance was granted in case #V-17-10 from the sidewalk requirement along S. Peach Tree Lane. The zoning commitment was recorded with the Monroe County Recorder on 6/3/2010 and is included as an attachment for reference.

Landscaping (Parking Lot Perimeter Trees & Shrubs): The approval of the requested variances from parking lot perimeter trees and shrubs is expected to be injurious to the public health, safety, morals, and general welfare of the community. Parking lot perimeter trees and shrubs offer many aesthetic, environmental, and safety benefits, and the intent of UDO Sections 20.04.080(h)(1)(B) and 20.04.080(h)(1)(C) is consistent with the City's Climate Action Plan. The benefit of the required landscaping increases biomass within the City as a whole and benefits the entire community.

Landscaping (Parking Lot Landscape Islands): Section 20.04.080(h)(2) of the UDO requires that 11 landscaping islands are installed. However, the petitioner is requesting a variance to not install any landscaping islands as a part of their proposal. The approval of the requested variance from parking lot landscape islands is expected to be injurious to the public health, safety, morals, and general welfare of the community. The purpose of UDO Section 20.04.080(h)(2) is to reduce the overall impervious surface on the site and add vegetation to meet the goals of the City's Climate Action Plan.

2) The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.

PROPOSED FINDING:

Front Parking Setback (W. Bloomfield Road): The adjacent properties along W. Bloomfield Road are zoned MC, Mixed-Use Corridor and MM, Mixed-Use Medium Scale. In the event of a change of use, the adjacent commercial properties would be held to the same standard of requiring the front parking setback to be a minimum of 20 feet behind the primary structure's

front building wall. As a result, the granting of a front parking setback variance along W. Bloomfield Road is expected to impact the use and value of the area adjacent to the property in a substantially adverse manner. In addition, the visual impacts effect residents and members of the community as a whole along this corridor by allowing a site design that is not desired with the goals of UDO's standards.

Front Parking Setback (S. Peach Tree Lane): The granting of the front parking setback variance along S. Peach Tree Lane is not expected to impact the use and value of the area adjacent to the property in a substantially adverse manner. There are not many adjoining properties on the east side of the site, and the existing parking areas are not visible from the adjacent residential properties. In addition, the petitioner intends to preserve the existing privacy fence as a buffer between the subject property and the adjoining residential homes on S. Peach Tree Lane.

Landscaping (Parking Lot Perimeter Trees & Shrubs): The granting of the parking lot perimeter trees and shrubs variances is expected to impact the use and value of the area adjacent to the property in a substantially adverse manner. Landscaping can help to improve the overall appearance of a site and increase property values.

Landscaping (Parking Lot Landscape Islands): The granting of the parking lot landscape islands variance is expected to impact the use and value of the area adjacent to the property in a substantially adverse manner. In addition to the environmental benefits, landscape islands can enhance the overall visual appeal of the site, which has a positive impact on property values.

3) The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.

PROPOSED FINDING:

Front Parking Setback (W. Bloomfield Road): The strict application of the terms of the UDO will not result in practical difficulties in the use of the property. There are 2 parking spaces that are encroaching in the minimum front parking setback along W. Bloomfield Road, and these 2 parking spaces could be relocated to an alternate location on the 2.21 acre property. The petitioner states that they need a total of 8 customer parking spaces to help their business to flourish, and this could be achieved by an alternate site design while meeting Section 20.02.020(d)(2)(F) of the UDO without a variance. There are many locations within the site where customer parking can be provided, and there is no minimum parking requirement for this use.

Front Parking Setback (S. Peach Tree Lane): The strict application of the terms of the UDO will result in practical difficulties in the use of the property. There are 9 parking spaces encroaching in the minimum front parking setback on the east side of the site. From a site design perspective, it would be challenging to relocate these 9 parking spaces while still

meeting the petitioner's need for parking spaces for their vehicle inventory. Moreover, these 9 parking spaces along S. Peach Tree Lane are not highly visible since they are located behind a privacy fence that is unique to this site. Granting the Development Standards Variance for the front parking setback on S. Peach Tree Lane will relieve the practical difficulties in this case.

Landscaping (Parking Lot Perimeter Trees & Shrubs): The strict application of the terms of the UDO will not result in practical difficulties in the use of the property as there is ample area around the parking areas where landscaping can be installed and meet the requirements of the UDO. There are no peculiar conditions that are present on the site that prevent landscaping from being installed as required. The installation of the required landscaping will not result in practical difficulties in the use of the property as most of the area for vehicle display is located within an enclosed area, and the landscaping will therefore not change the visibility of that area. The purpose of the landscaping requirements is not only for visual buffering, but it very important to have living biomass and plantings on a site proportional to the amount of asphalt that takes away greenspace.

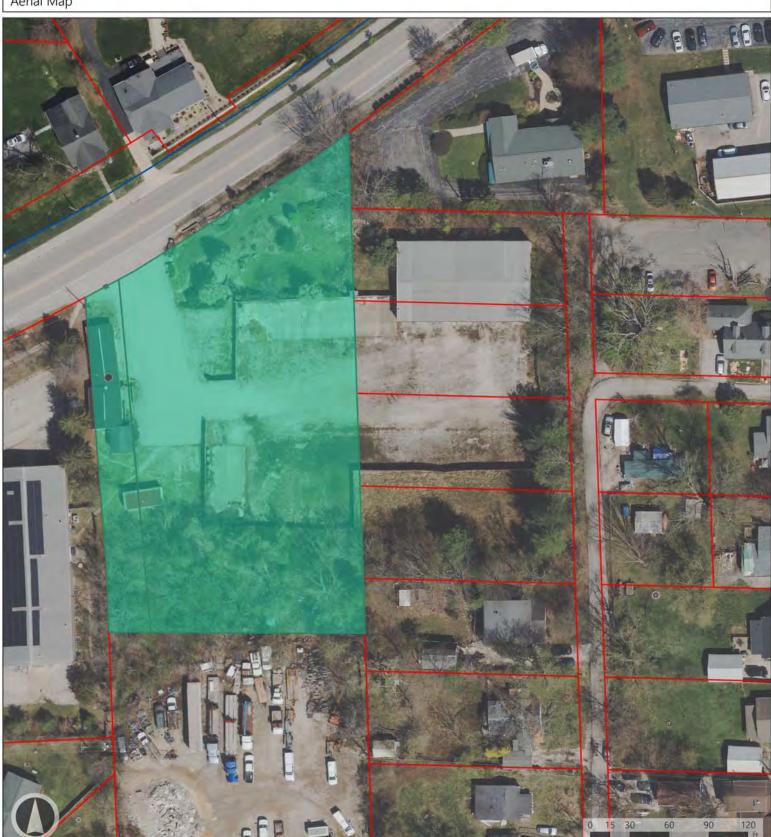
Landscaping (Parking Lot Landscape Islands): The strict application of the terms of the UDO will not result in practical difficulties in the use of the property. There appears to be sufficient room on the site plan to install parking lot landscape islands as required by UDO Section 20.04.080(h)(2). The proposed site plan shows several areas of the parking and display areas that could easily be converted to islands and allow for areas for vehicle display.

RECOMMENDATION: The Department has considered feasible alternatives, the goals of the petitioner, and the goals of the City that were the basis of the standards within the Unified Development Ordinance in reaching the Department's recommendation. The Department recommends that the Board of Zoning Appeals adopt the proposed findings and approve the variance from the front parking setback along S. Peach Tree Lane but deny the variances from the front parking setback along W. Bloomfield Road, parking lot perimeter trees, parking lot perimeter shrubs, and parking lot landscape islands.

- 1. The variance approval is limited to the design shown and discussed in the packet.
- 2. Street trees are required along the front with the spacing required in the UDO.
- 3. Site plan approval is required prior to issuance of any permits.
- 4. Any species listed as prohibited or invasive must be removed.



Planning and Transportation Department 1459 W Bloomfield Rd







Planning and Transportation Department 1459 W Bloomfield Rd





ARCHITECTURE
CIVIL ENGINEERING
PLANNING

September 26, 2025

City of Bloomington Planning and Transportation Department And City of Bloomington Board of Zoning Appeals 401 N. Morton Street, Suite 130 Bloomington, Indiana 47404

SUBJECT: Foreign Auto Connect – 1459 West Bloomfield Rd, Bloomington, IN ***Variances Letter***

Board of Zoning Appeals or To Whom It May Concern:

Foreign Auto Connect is a current business here in Bloomington currently at 1202 South Walnut Street. The company wishes to move to the subject address. The subject address is currently zoned, 'MC: Mixed Use Corridor'. Foreign Auto Connect wishes to have more space for inventory for used car sales. They would like to utilize a property that is currently vacant. Foreign Auto Connect would only be at the subject address and not utilize both properties.

On behalf of Foreign Auto Connect, Bynum Fanyo & Associates, Inc. would like to request three (3) variances from the following design standards for utilizing existing property with existing conditions:

- 1. Front yard parking (existing and proposed) setback (required 20' behind front building edge) according to UDO standard 20.02.020 Mixed-Use Zoning Districts MC zoning
- 2. Parking Lot Perimeter Treatment around eastern existing lot according to UDO standard 20.04.080 Landscaping, Buffering, and Fences
- 3. Landscape Bumpouts, Islands, and Endcaps around eastern existing lot according to UDO standard 20.04.080 Landscaping, Buffering, and Fences includes the placement of bumpouts, islands, and endcaps along with any plantings associated with those

The provided findings of facts for the variances listed above are summarized below:

A) The approval will not be injurious to the public health, safety, morals and general welfare of the community.

Findings:

- 1. Front yard parking (existing and proposed) setback This variance is mainly dealing with the existing parking fields that are in front or a little behind the buildings along Peachtree and Bloomfield Road. The goal of this project is to re-utilize an existing site and its layout currently. Keeping the existing layout means keeping the current extents of parking lot and buildings. This will not be injurious or a detriment to the public due an existing fence that will hide headlights along Peachtree. Also, the parking along Bloomfield will be shielded behind an existing building to still achieve the spirit of the setback to hide and make parking less visible.
- 2. Parking lot requirements The stated purpose of landscaping standards is to reduce emissions, mitigate heat islands, and filter dust. This property and surrounding areas already include mature trees and vegetation that achieve these purposes without additional canopy trees or interior plantings. The site already has many trees, shrubs and other vegetation. Also, the existing fence around the eastern lot will be maintained and repaired to act as the 'parking lot perimeter' to make sure headlights pollution and privacy for adjacent lot owners are sustained.
 - B) The use and value of the areas adjacent to the property included in the variance will not be affected in a substantially adverse manner.

Findings:

- 1. Front yard parking (existing and proposed) setback See previous finding. A combination of existing fencing and buildings will shield neighboring properties from seeing vehicles in evening and day hours.
- 2. Parking Lot requirements See previous finding. The amount of plantings, trees and vegetation on the existing site are substantial. The existing fencing will work as a shield from adjacent property visibility in place of parking lot perimeter plantings.
 - C) The strict application of the terms of the zoning ordinance will result in practical difficulties in the use of the property.

Findings:

1. Front yard parking (existing and proposed) setback – The parking is already in the front yard setback, as exists today, along Peachtree and Bloomfield Road. The movement of the parking on either frontage would result in less customer and inventory parking. The

business moved to this new site to be able to add more inventory and customer parking. The ideal to help this particular business flourish is 8 customer parking spots and 100 inventory spots. We measured the eastern parking area with allowable parking spacing per the UDO to achieve minimum 100 spaces.

- 2. Parking Lot requirements Due to the nature of the use on this property it is undesirable to have vegetation in the display vehicle parking lot because of falling leaves, branches, and debris landing on the display vehicles. Adding islands and enough room around the perimeter of the eastern lot would be a substantial amount of extra cost. This would require the following if islands and parking lot perimeter would be required:
 - a. 690 re-located fence OR 5,520 sq. ft. pavement to be removed for parking lot perimeter plantings area
 - b. Add 10 parking curbed islands remove and replace 1,904 sq. ft. pavement with concrete islands/endcaps.
 - c. Add 14 trees and 56 shrubs for islands/endcaps
 - d. Add 16 trees and 183 shrubs for parking lot perimeter

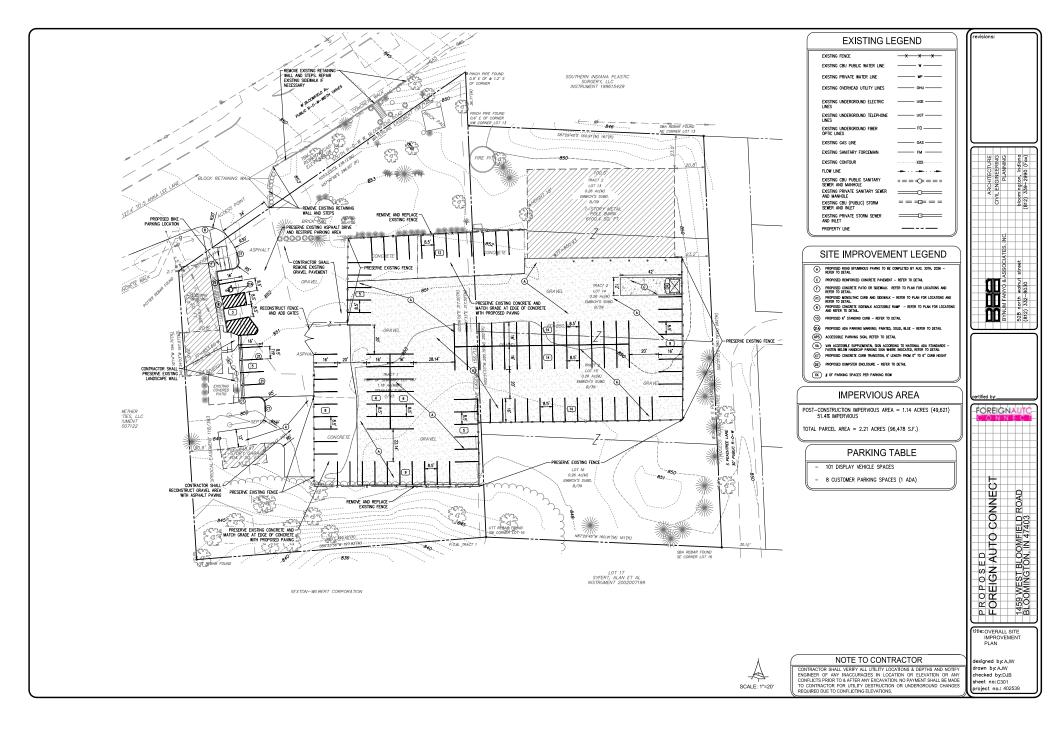
All listed above would be the requested variance due to existing eastern secured parking area for display/inventory vehicles only

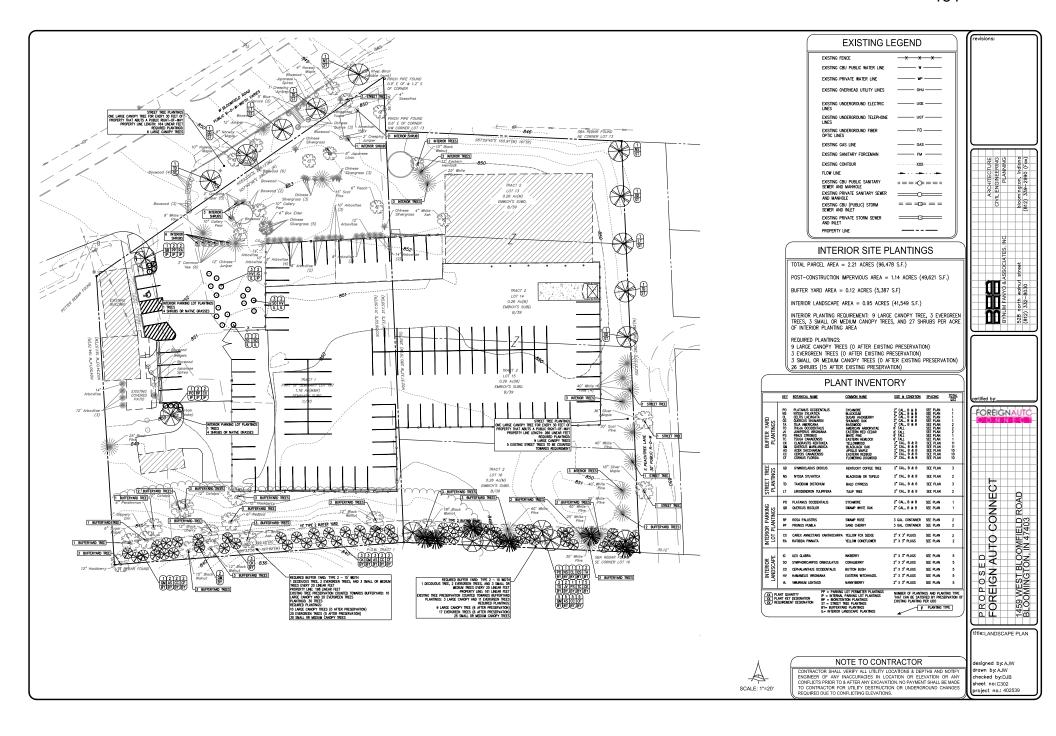
Thank you for taking the time to hear these requests for this property development.

Sincerely,

Bynum Fanyo & Associates, Inc.

Daniel Butler, PE, Project Engineer





2010007468 MIS \$15.00 06/03/2010 08:36:59A 2 PGS Monroe County Recorder IN Recorded as Presented

ZONING COMMITMENT

This Commitment is being made in connection with the approval of Hearing Officer case #V-17-10 and for a building permit and the issuance of certificate of zoning compliance number C10-213 to allow for an addition to an existing office building on real estate located at 1461 W Bloomfield Road, Bloomington, Monroe County, Indiana, which real estate has a parcel number of 015-25885-00, 015-09285-00, 015-09245-00, 015-09255-00, 015-09265-00, and 015-09275-00 and is owned by Gerald Sowders ("Owner") pursuant to a deed recorded in the Office of the Recorder of Monroe County, Indiana (the "Real Estate") under Instrument Number 2006000126.

The approval of the certificate of zoning compliance to allow the addition to the building on the Real Estate is conditioned upon the acceptance of determinate sidewalk variance by the Owner.

The Owner hereby commits, on its own behalf and on behalf of its successors and assigns, that:

That this Real Estate, its owners, and successors thereof shall remain financially responsible for the future installation of a sidewalk on the Peachtree Lane right-of-way located on the Real Estate. Agents of the City of Bloomington may require sidewalk installation on the Peachtree Lane right-of-way on the Real Estate at any future date and the Owner of this Real Estate shall install the required sidewalk when its installation is required.

This Commitment shall be recorded in the office of the Recorder of Monroe County and shall be binding on the Owner and upon any subsequent owner or other person acquiring an interest in the Real Estate and shall run with the land.

Prior to the issuance of any permits, a copy of this recorded Commitment shall be transmitted to the City of Bloomington Planning Department.

This Commitment may be modified or terminated only by action of the City of Bloomington's Plan Commission. This Commitment shall be enforceable by the City of Bloomington, any adjacent property owner or other interested party as defined by the Plan Commission's Rules and Procedures.

Failure to honor this Commitment shall subject the person then obligated hereby to revocation of occupancy permits and other legal action, including but not limited to the power of the City of Bloomington to have work done at the expense of the property owner. Failure to honor this Commitment shall also constitute a violation of the City of Bloomington Zoning Ordinance and shall be subject to all penalties and remedies provided thereunder.

Patricia M.

Gerald Sowders		11		
By: I neld fourdas [461 W. Blantie Street Address	1d 2d	Date Date	0/2010	
Starte and Zip Code	1			
STATE OF INDIANA COUNTY OF MONROE)) SS:)			
Personally appeared or her voluntary act and deed	before me, a Notary Pul who acknowledged	blic in and for said C execution of the abo	County and State, pe ove and foregoing in	rsonally appeared astrument to be his
WITNESS my hand a Carmen Lillar Printed Name of Notary Pub	and Notorial Seal this solic	3rd day of Caune Signature of Notary	Public 2010.	
Resident of Moural	County	MB!	MEN LILLARD Troe County Wilston Expires	
My Commission Expires:		A Section Acres	18t 50, 2014	

I affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security number in this document, unless required by law. Mulvihill

This instrument prepared by Patricia M. Mulvihill, Attorney at Law, City of Bloomington, P.O. Box 100, Bloomington, Indiana 47402.

BLOOMINGTON BOARD OF ZONING APPEALS
STAFF REPORT
CASE#: CU-V-45-25
ZR2025-10-0106

STAFF REPORT ZR2025-10-0106 LOCATION: 1100 E Miller Drive DATE: November 20, 2025

PETITIONER: Apostolic Church

1100 E. Miller Drive

CONSULTANT: Bynum Fanyo

528 N. Walnut Street

REQUEST: The petitioner is requesting Conditional Use approval for a "Place of Worship" and a variance from minimum sidewalk and tree plot width standards to allow the expansion of a church in the Residential Medium Lot (R2) zoning district.

REPORT: This 1.82 acre property is located at the southeast corner of East Miller Drive and South Olive Street and is zoned Residential Medium Lot (R2). Adjacent properties are also zoned R2 and contain single family residential dwellings and a daycare. There is one lot to the east, located at 1240 East Miller Drive that is zoned Mixed-Use Neighborhood Scale (MN). The overall petition site extends south along South Olive Street and east to South Highland Avenue and contains an existing church building, multiple parking areas, and two single-family residences. The two single-family residences located at 1807 and 1809 South Olive Street will be removed for the proposed project. There are no known regulated environmental features on the site.

The property has been developed with an approximate 4,500 square foot church and associated surface parking areas. The parking areas are accessed by one drive cut on Miller Dr and one drive cut on Highland Ave. A Conditional Use for a "Place of Worship" was granted by the Hearing Officer on July 16, 2025 per CU-25-25/ZR2025-06-0077 to facilitate the planned expansion. That approval had a condition that required a compliant sidewalk and tree plot along Highland Avenue. The Transportation Plan calls for a seven-foot wide sidewalk with eight-foot tree plot along Highland Avenue. Due to engineering and design difficulties encountered with the existing drainage system and topography for a compliant sidewalk along Highland Avenue, the petitioner is now requesting a Variance from those sidewalk and tree plot standards for the Highland Avenue frontage which also necessitates a new Conditional Use approval since there was a condition of approval with the original Conditional Use approval regarding a compliant sidewalk. The petitioner is requesting instead to replace the existing approximate five-foot monolithic sidewalk with a six-foot wide monolithic sidewalk. Street trees are proposed on the "back" side of the sidewalk in place of the tree plot.

With CU-25-25/ZR2025-06-0077, the petitioner proposed to construct an approximately 14,000 square foot expansion to the south side of the church for a multipurpose gymnasium, offices and meeting rooms, and storage space for the church. Since the proposed addition to the building expanded the gross floor area by more than 10%, the proposal also required the site to come into compliance with the Limited Compliance standards of Section 20.06.090(f)(2)(B). This includes new landscaping throughout the property, installation of bike racks, and construction of pedestrian facilities with street trees along the property frontages. Onsite parking will ultimately result in a total of 41 parking spaces, which does not exceed the maximum allowed 43 spaces per the

established 175 assembly seats in the sanctuary. Per the accessibility standards of Americans with Disabilities Act (ADA), the parking area for the nonresidential use must include at least two van accessible parking spaces based on the total 41 spaces provided. From the proposed configuration of the parking area, a bicycle parking area shall be provided with a minimum six bicycle parking spaces. The bicycle parking area is proposed at the entrance to the existing historical church building at the corner of Olive Street and Miller Drive.

The church's plans for expansion allow the historic elements of the existing church building to remain while incorporating a new structure that incorporates varying architectural elements and provides an additional gathering space and amenity space for the surrounding community with the multipurpose gymnasium and various offices for Staff and outreach programs. It furthermore provides new and refurbished sidewalks for pedestrian connectivity and landscaping to promote connection with the natural elements as well as provide some buffering aspect to the use. The parking lots will be updated to meet UDO requirements.

The church held a neighborhood meeting on site the evening of June 25, 2025 in which approximately 50 people were in attendance. The church discussed its history and presence in the neighborhood, its vision for future growth (including building plans and outreach programs and community support), and reviewed the expansion project development plans in more detail. An opportunity for attendees to review printed schematics and ask questions followed. The primary concerns related to light intensity of any planned fixtures, the existing mature trees along Olive Street being removed for the sidewalk installation, and traffic generation/control. Each concern seemed to be appropriately addressed and assuaged by the church's responses. Additional trees and landscaping are to be planted per their landscaping plan. No large-scale lighting was proposed and any lighting must meet the UDO requirements. Only a small number of exterior lights near entrances are being proposed. The parking and traffic are controlled in a manner that there would no vehicular traffic on Olive Street as entrances to the parking areas are on Highland Avenue and Miller Drive. Pedestrian access to the site and buildings are provided along all three frontages.

All the elements discussed above have been reviewed through a subsequent minor site plan approval per SP2025-09-0087. The only change to note from the previous Conditional Use approval and Minor Site Plan approval is the design of the sidewalk and tree plot along the Highland Avenue frontage.

The UDO allows the use "Place of Worship" only as a conditional use within this zoning district. To allow the church to expand the footprint of the building, the petitioners are requesting conditional use approval for the use "Place of Worship" and a variance from sidewalk and tree plot standards along the Highland Avenue frontage as presented.

CRITERIA AND FINDINGS FOR CONDITIONAL USE PERMIT

20.06.040(d)(6)(B) General Compliance Criteria: All petitions shall be subject to review and pursuant to the following criteria and shall only be approved if they comply with these criteria.

- i. Compliance with this UDO
- ii. Compliance with Other Applicable Regulations
- iii. Compliance with Utility, Service, and Improvement Standards
- iv. Compliance with Prior Approvals

PROPOSED FINDING: The petition complies with the UDO, including the underlying R2 zoning district. As such, the proposed building meets the R2 District Dimensional Standards including the maximum 40' height for primary structures and all setback requirements. The maximum 40% impervious surface coverage is not met per plans, however a minor modification was approved by the Director of Planning and Transportation per Table 06-2 of the UDO (5% of allowed impervious surface allowing an additional 1588 ft² for total impervious surface allowance of 33,346 ft²). A landscaping plan provides for a landscape buffer and fencing between the "Place of Worship" use and adjacent dwelling unit uses. The existing and proposed church buildings are to utilize existing utilities and services and shall comply with utility, service, and improvement standards. The proposed changes to the parking areas will satisfy requirements set in the UDO. There are no other applicable regulations and no other prior approvals other than already discussed for this petition.

20.06.040(d)(6)(C) ADDITIONAL CRITERIA APPLICABLE TO CONDITIONAL USES

i. Consistency with Comprehensive Plan and Other Applicable Plans
The proposed use and development shall be consistent with and shall not interfere with
the achievement of the goals and objectives of the Comprehensive Plan and any other
applicable adopted plans and policies.

PROPOSED FINDING: This proposal is consistent with the goals of the Comprehensive Plan for facilitating religious assembly within Neighborhood Residential. A church building has been present at this site for many decades and the uses of the planned expansion allow for continued and expanded services for the surrounding community and its residents. The Comprehensive Plan section regarding land use intent for the Neighborhood Residential area (page 87) states that other land use activities, including places of religious assembly, can be appropriate within this area. In regards to building massing, the Comprehensive Plan states that buildings are no more than three, but most often two stories or less and have natural or landscaped front, side, and rear yards. The architectural building styles vary greatly within and between neighborhoods and/or subdivisions for this district. The wide range of architectural styles is a characteristic that should be maintained for this district. Public streets, sidewalks, and other facilities provide good access to other uses within the district, to area parks and schools, and to adjacent districts. The Comprehensive Plan also provides additional land development policy guidance criteria per the Land Use Development Approvals section (Page 88), "Optimize street, bicycle, and pedestrian connectivity to adjacent neighborhoods..." and "Create neighborhood focal points, gateways, and centers. These could include such elements as a...neighborhood-serving land use. These should convey a welcoming and open-to-the-general-public environment..." Additional guidance criteria include "Ensure that appropriate linkages to neighborhood destinations are provided..." and "Respect historic and environmental assets through site design, transportation networks, and architectural design strategies."

ii. Provides Adequate Public Services and Facilities

Adequate public service and facility capacity shall exist to accommodate uses permitted under the proposed development at the time the needs or demands arise, while maintaining adequate levels of service to existing development. Public services and facilities include, but are not limited to, streets, potable water, sewer, stormwater

management structures, schools, public safety, fire protection, libraries, and vehicle/pedestrian connections and access within the site and to adjacent properties.

PROPOSED FINDING: Adequate public service capacity exists. The church expansion plans to utilize existing water connections from the homes to be demolished as part of this project. The existing water main and pressure are sufficient to meet the sprinkling requirements of the project. Sewer capacity is sufficient to meet demands of the expansion. The expansion will install new, and refurbish existing, sidewalks which will improve pedestrian connectivity. The planned alternate design for the Highland Avenue frontage provides adequate pedestrian and street tree capacity while mitigating the engineering and design complexity that would exist with a traditionally met design for the standard sidewalk and tree plot called for in the Transportation Plan and UDO. Any changes to utility service will be reviewed and approved by the City of Bloomington Utilities Department. No problems with providing utility service to the addition have been identified to date.

iii. Minimizes or Mitigates Adverse Impacts

- 1. The proposed use and development will not result in the excessive destruction, loss or damage of any natural, scenic, or historic feature of significant importance.
- 2. The proposed development shall not cause significant adverse impacts on surrounding properties nor create a nuisance by reason of noise, smoke, odors, vibrations, or objectionable lights.
- 3. The hours of operation, outside lighting, and trash and waste collection shall not pose a hazard, hardship, or nuisance to the neighborhood.
- 4. The petitioner shall make a good-faith effort to address concerns of the adjoining property owners in the immediate neighborhood as defined in the pre-submittal neighborhood meeting for the specific proposal, if such a meeting is required.

PROPOSED FINDING: There are no known regulated environmental features on the site. Although the church is listed as a Contributing structure, the proposed addition will not trigger Demolition Delay. No nuisance regarding noise, smoke, odors, vibrations, lighting, or hours of operation is found. Notable concerns from residents and attendees regarding lighting, parking, and disturbed natural features were discussed at a pre-submittal neighborhood meeting and appeared to be addressed satisfactorily.

iv. Rational Phasing Plan

If the petition involves phases, each phase of the proposed development shall contain all of the required streets, utilities, landscaping, open space, and other improvements that are required to comply with the project's cumulative development to date and shall not depend upon subsequent phases for those improvements.

PROPOSED FINDING: There is no phasing plan for this proposal.

CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE

20.06.080(b)(3)(E)(i) Standards for Granting Variances from Development Standards: A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) The approval will not be injurious to the public health, safety, morals, and general welfare of the community.

PROPOSED FINDING: The approval of the requested variance pertaining to the standards for the sidewalk and tree plot along the Highland Avenue frontage is not expected to be injurious to the general welfare of the neighborhood and community. There will be little impact to the overall safety to the public as a result of the requested variance as the proposed design will meet pedestrian capacity and be an improvement with a wider sidewalk than the current facility. The need for the variance is due to the result of a complex drainage layout along the Highland Avenue frontage of which designing and installing a fully compliant sidewalk and tree plot would cause a substantial and unreasonable burden on the project for the petitioner to meet land use requirements for a "Place of Worship" and for which this land use is protected under the Religious Land Use and Institutionalized Persons Act of 2000.

2) The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.

PROPOSED FINDING: The granting of the variance is not expected to impact the use and value of the area adjacent to the property in a substantially adverse manner. The petitioner designed the sidewalk and tree plot to be compatible with the character and needs of the neighborhood to the maximum extent practicable without being an undue or impractical financial burden on the owner.

3) The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.

PROPOSED FINDING: The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property in that it would require substantial engineering and costs to install a fully compliant sidewalk and tree plot along the Highland Avenue frontage. The peculiar conditions associated with the property in this case are the existing complex drainage system and current topography along the Highland Avenue frontage. The variance further meets language and requirements within the Religious Land Use and Institutionalized Persons Act that prohibits zoning laws that would "unreasonably limit religious assemblies, institutions, or structures" and would accomplish this "via the least restrictive means of furthering a compelling governmental interest".

RECOMMENDATION: The Department recommends that the Board of Zoning Appeals adopt the proposed findings and approve CU-V-45-25/ZR2025-10-0106 with the following conditions:

- 1. The conditional use and variance approvals are limited to the design shown in the packet.
- 2. A Staff Level Minor Site Plan and Site Development Permit are required prior to any site disturbance.
- 3. This approval is for the general site and landscape plans and petition as submitted and approved. Any future construction or work must meet all UDO requirements.

BLOOMINGTON BOARD OF ZONING APPEALS STAFF REPORT

LOCATION: 422 W. 10th Street

477 W. Maker Way 617 N. Madison Street CASE#: V-48-25 ZR2025-10-0104

DATE: November 20, 2025

PETITIONER: William S. Riggert

1351 W. Tapp Road Bloomington, IN 47403

REQUEST: The petitioner is requesting Variances from architectural standards and minimum landscape requirements for "Hotel or motel" use in the Mixed-Use Downtown Showers Technology (MD-ST) zoning district.

REPORT: The property is zoned Mixed-Use Downtown Showers Technology (MD-ST) district and is part of the Downtown Overlay District as well as the Bloomington Trades District. The total site is slightly under 1.5 acres in size, and the Trades District Hotel is planned to be located on lots bound by W. Maker Way to the north, N. Madison Street to the east, W. 10th Street to the south, and N. Rogers Street to the west. The surrounding properties to the north, east, and west are also zoned MD-ST, and the adjacent properties to the south are zoned Mixed-Use Downtown Core (MD-DC). Notable nearby sites include the Forge, the Mill, and City Hall.





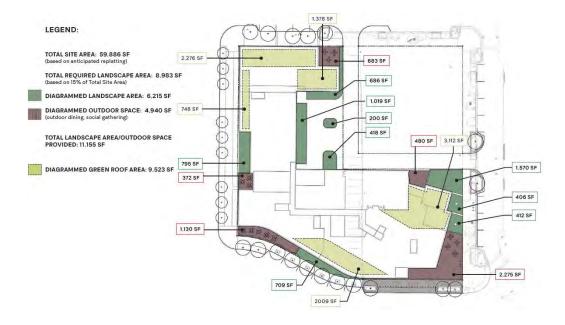
The proposed Trades District Hotel is a 4 story tall, full service boutique hotel with 160-170 guestrooms and 5,500 square feet of meeting space. Along W. 10th Street to the south, the hotel lobby and primary hotel entry will be located on the eastern portion of the first level. A restaurant to serve guests and the public will be located on the western half of W. 10th Street as well as the southern corner of the façade along N. Rogers Street to the west. Hotel administrative offices will face N. Rogers Street, and there will be third party retail spaces at the corner of N. Rogers Street and W. Maker Way. The second, third, and fourth levels of the hotel will consist of guestrooms and guest amenity spaces. A rooftop bar and outdoor patio that is open to the public is proposed on the southeast corner of the fourth level of the Trades District Hotel.

As far as the proposed architecture, the first level of the hotel will consist of masonry and glass with limestone accents. The upper levels of the Trades District Hotel will consist of glass, phenolic or similar rain screen paneling and metal accents. The petitioner is requesting a variance from UDO Section 20.02.050(a)(5) which relates to the upper floor façade stepbacks. Parts of the west and south façades are unable to comply with this stepback regulation, and the petitioner is

requesting a variance from this architectural requirement for the "Hotel or motel" use in the Mixed-Use Downtown Showers Technology (MD-ST) zoning district.



In addition, the petitioner is requesting a variance from the minimum landscape area regulation. Table 04-4 regulates the Downtown Character Overlay Dimensional Standards, and the minimum landscape area required in the MD-ST zoning district is 15%. The petitioner's Open Space Diagram shows that compliance with the 15% minimum landscape area requirement would require 8,983 square feet of landscape area. Provided on their Open Space Diagram is 6,215 square feet of landscape area, 4,940 square feet of outdoor space, and 9,523 square feet of green roof area. The petitioner's submitted plan also identifies locations for public art, a green wall, garden spaces, bicycle parking, outdoor patios, a hotel pick up/drop off area for cars, and more features.



CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE

20.06.080(b)(3)(E)(i) Standards for Granting Variances from Development Standards: A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) The approval will not be injurious to the public health, safety, morals, and general welfare of the community.

PROPOSED FINDING:

Upper Floor Stepbacks (West & South Facades): The approval of the requested variance from the upper floor stepbacks on portions of the west and south façades of the proposed Trades District Hotel is not expected to be injurious to the public health, safety, morals, and general welfare of the community. The extent of the requested zoning relief is not very substantial as shown in the image below. On the west façade along N. Rogers Street, upper floor stepbacks are included on the south and north ends. In the middle of the west elevation, there is a 90 foot section of the façade that does not stepback, and this necessitates a variance from UDO Section 20.02.050(a)(5). This allows for an open space area including plantings and an outdoor dining space that can benefit the public.

On the south façade along W. 10th Street, there is a 65 foot wide section of the elevation that steps back 2'-6" at the fourth level. This does not meet the 15' stepback requirement as outlined in UDO Section 20.02.050(a)(5), and thus a variance is required. As stated by the petitioner, "the project proposes to use this space for an outdoor plaza that is oriented toward and has straight visual access to the B-Line trail 150 feet from the project. While the project site is not directly on the B-Line, the project sees value in creating outdoor spaces that can be easily seen and utilized by users of this public amenity." The granting of this variance does not impact building safety.



Minimum Landscape Area: The approval of the requested variance from the minimum landscape area requirement is not expected to be injurious to the public health, safety, morals, and general welfare of the community. As shown in the petitioner's Open Space Diagram, 6,215 square feet of landscape area is provided, which is approximately 10% of the total project area. While this does not fully comply with the UDO's minimum landscape area regulation of 15%, green roof areas are included with the design that will provide additional plantings to support sustainability goals and enhance the overall character of the Trades District Hotel.

2) The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.

PROPOSED FINDING:

Upper Floor Stepbacks (West & South Facades): The granting of the upper floor stepback variance along portions of W. 10th Street and N. Rogers Street is not expected to impact the use and value of the area adjacent to the property in a substantially adverse manner. The Trades District Hotel is expected to add value to this currently undeveloped part of the Bloomington Trades District. The Trades District Hotel was designed to fit with the character of the existing Forge building in the northeastern portion of this block. Furthermore, the Trades District Hotel will provide overflow conference space which was expressed as a need for the community.

Minimum Landscape Area: The granting of the variance from the minimum landscape area regulation is not expected to impact the use and value of the area adjacent to the property in a substantially adverse manner. The proposed Trades District Hotel will provide 6,215 square feet of landscape area, 4,940 square feet of outdoor space, and 9,523 square feet of green roof area, and this is intended to have a positive impact on adjacent properties.

3) The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.

PROPOSED FINDING:

Upper Floor Stepbacks (West & South Facades): The strict application of the terms of the UDO will result in practical difficulties in the use of the property. The site for the proposed Trades District Hotel is unique because it has four frontages along W. Maker Way to the north, N. Madison Street to the east, W. 10th Street to the south, and N. Rogers Street to the west. Additionally, W. 10th Street is a curved road, and the proposed building roughly follows this curve, which is a peculiar condition to this property. Stepbacks and other architectural features have been incorporated throughout the remainder of the building to meet all UDO requirements.

Minimum Landscape Area: The strict application of the terms of the UDO will result in practical difficulties in the use of the property because it would limit a building design that is able to accomplish the intentions of the UDO in a different way. As mentioned in the petitioner's statement, "Portions of the open space not occupied by building footprint are designed to be pedestrian entryways, patios, and/or plaza spaces. These outdoor amenity spaces will support the overall character and use of the project by the public in conjunction with the Landscape Areas that are included. The outdoor spaces will include opportunities for dining and public use and include items such as tables and chairs, benches, in-grade plantings, abovegrade planters, and the like. The provided Landscape Areas and outdoor spaces combined exceed the 15% requirement by being in the spirit of the intent."

RECOMMENDATION: The Department recommends that the Board of Zoning Appeals adopt

the proposed findings and approve of V-48-25/ZR2025-10-0104 with the following conditions:

- 1. The variances approval is limited to the design shown and discussed in the packet.
- 2. Street trees with appropriate spacing are required per the UDO.
- 3. Major site plan approval from Plan Commission is required prior to issuance of any permits.



Planning and Transportation Department 422 W 10th St



Red: Band_1

Green: Band_2

Other

Board of Zoning Appeals

Parcels

Bloomington Municipal Boundary



Planning and Transportation Department 422 W 10th St



Bledsoe Riggert Cooper James

LAND SURVEYING . CIVIL ENGINEERING . GIS

October 23, 2025

Eric Greulich, Development Services Manager Jamie Kreindler, Senior Zoning Planner City of Bloomington Planning and Transportation 401 N. Morton Street, Suite 130 Bloomington, IN 47404

via email greuliche@bloomington.in.gov jamie.kreindler@bloomington.in.gov

RE: Trades District Hotel

Board of Zoning Appeals - Request for Variances

Dear Eric and Jamie:

On behalf of Alluinn IU Trades District Hotel, LLC, we respectfully request a hearing for the Trades District Hotel Project at the Bloomington Board of Zoning Appeals (BZA) meeting scheduled for November 20th, 2025. The Trades District Hotel is planned to be placed on lots bound by Maker Way to the north, Madison Street to the east, 10th Street to the south, and Rogers Street to the west. The area of the site is just under 1.5 acres and located in the Showers Technology Downtown Character Overlay District.

The Trades District Hotel is proposed to be a four-level structure. The full service, boutique hotel will have between 160-170 guestrooms and 5,500 square feet of meeting space. The meeting space and associated prefunction area will line the eastern portion of the first level and consist of glazing and masonry with limestone accents. Along 10th street, the lobby and primary hotel entry will occupy the eastern portion of the first level, while a restaurant to serve guests and the public will be located on the western half. The restaurant will also occupy the southern corner of the façade along Rogers street. To the north of the restaurant, hotel administrative offices will look out onto Rogers before turning into 3rd party retail space at the corner of the Rogers and Maker. This retail space will continue to front the balance of the façade along Maker. Levels 2-4 of the hotel consist of the guestrooms and guest amenity spaces with the exception of a rooftop bar and outdoor patio. This space is open to the public, and will be located on the southeast corner of the property on the fourth level. The first level of the hotel will consist of masonry, glass and limestone. The upper levels will consist of glass, phenolic or similar rainscreen paneling and metal accents. To realize the proposed vision for the Trades District Hotel, Alluinn requires the following variances from the Unified Development Ordinance.

Variance 1:

20.02.050 Downtown Overlay Districts Item 5 – Upper Floor Façade Stepbacks.

West Façade.

The west façade along Rogers Street includes stepbacks at the south and north ends of the elevation at the third and first levels, respectively. However, there is a 90 foot long and four level high section in the middle of the elevation that does not step back. This section is in line with the step-backed areas to the north and south and contains the guestroom stacks for the hotel. To comply with this requirement, the first level of the building could extend out towards the street, but this square footage is not required for the building program. Instead, the project proposes to continue the stepback to the ground. This keeps full mass of the building off the pedestrian way, while also creating an open space area for the project for plantings and a limited outdoor dining plaza.

Variance 2:

20.02.050 Downtown Overlay Districts Item 5 - Upper Floor Façade Stepbacks.

South Façade.

The south façade fronts 10th street. This section of 10th street includes a curved section that shifts the throughline of the street approximately 50 feet to the north. The proposed building roughly follows this curve and incorporates stepbacks at the third level on the west and east ends and at the first level in the middle. However, there is a section of 65 feet in width along the southern façade that steps back only 2'-6" at the fourth level. This section contains

Bloomington · Bedford · Paoli

Trades District Hotel BZA Filing - Request for Variances October 23, 2025 Page 2 of 2

guestroom stacks on levels two through four. Stepping back these spaces the full 15 feet from the first level of the building could pull out along the property line to meet the requirement. However, the project proposes to use this space for an outdoor plaza that is oriented toward and has straight visual access to the B-Line trail 150 feet from the project. While the project site is not directly on the B-Line, the project sees value in creating outdoor spaces that can be easily seen and utilized by users of this public amenity.

Variance 3:

20.04.020 Development Standards & Incentives; Table 04-4: Downtown Character Overlay Dimensional Standards.

Landscape Area.

As currently designed, the project cannot meet the requirements of Table 04-4: Downtown Character Overlay Dimension Standards, specifically the minimum Landscape Area of 15% of the total site area. Portions of the open space not occupied by building footprint are designed to be pedestrian entryways, patios, and/or plaza spaces. These outdoor amenity spaces will support the overall character and use of the project by the public in conjunction with the Landscape Areas that area included. The outdoor spaces will include opportunities for dining and public use and include items such as tables and chairs, benches, in-grade plantings, above-grade planters, and the like. The provided Landscape Areas and outdoor spaces combined exceed the 15% requirement by being in the spirit of the intent. Furthermore, greenroof areas on building structure will provide additional plant material to support sustainability goals and further enhance the overall character of the project.

Thank you for your consideration.

Sincerely,

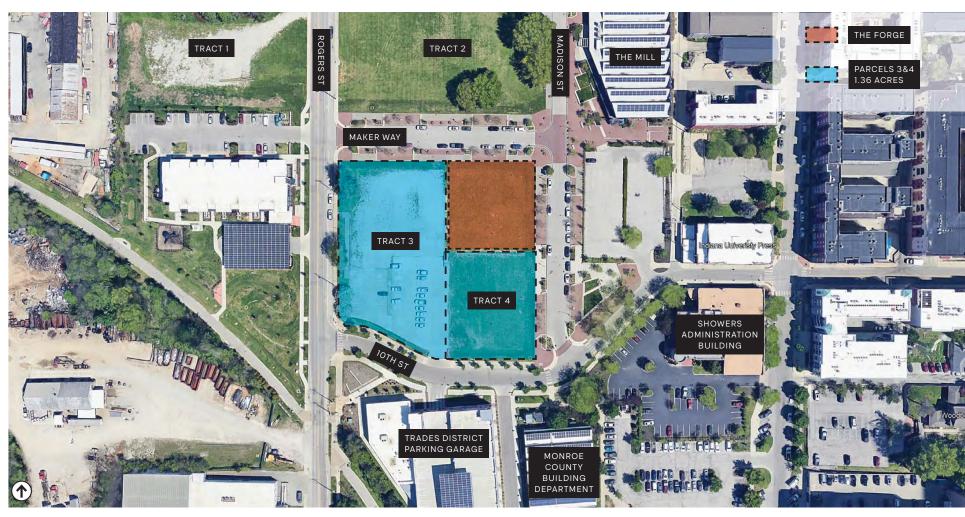
William S. Riggert, PE Principal Engineer



ALLUINN / TRADES DISTRICT HOTEL

BZA SUBMISSION

NOVEMBER 10, 2025



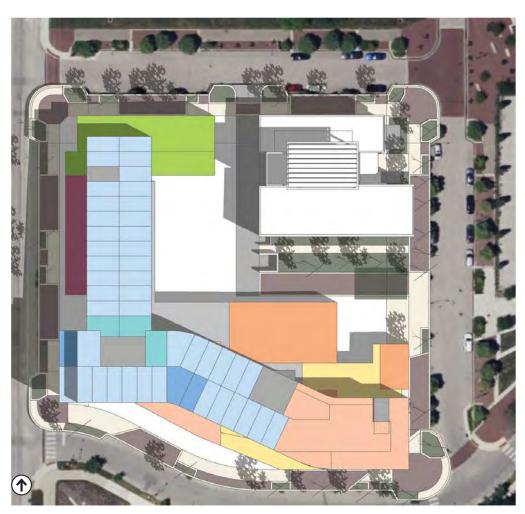
ALLUINN / TRADES DISTRICT HOTEL BZA SUBMISSION



PROGRAM BASELINES AND PLANNING BENCHMARKS

- 150 Hotel Rooms,
- Target 350SF for Typical Key
- Market-appropriate Meetings and Event Space (~5000 SF)
- Robust F&B Program with a Rooftop Component
- Fitness Area





ALLUINN / TRADES DISTRICT HOTEL BZA SUBMISSION

MASSING SCHEME

- 4 Stories (3 over 1)
- Curbside drop-off along 10th Street
- Lobby and F&B Space Line 10th Street
- 4th Level Rooftop Bar and Terrace
- 3rd Party Retail along Makers Way









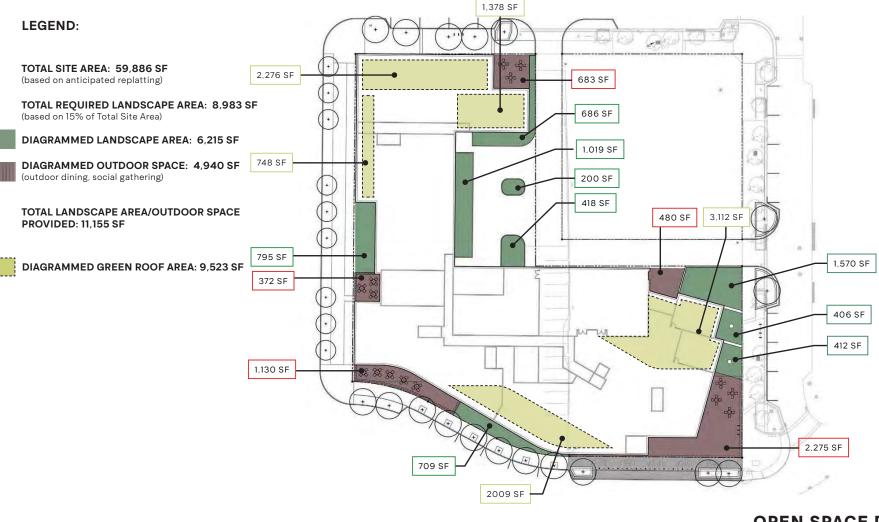






ALLUINN / TRADES DISTRICT HOTEL BZA SUBMISSION



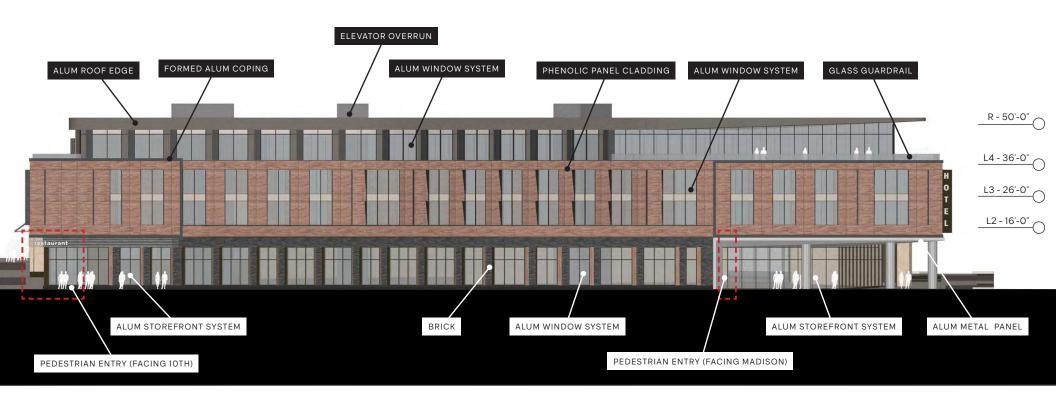


OPEN SPACE DIAGRAM



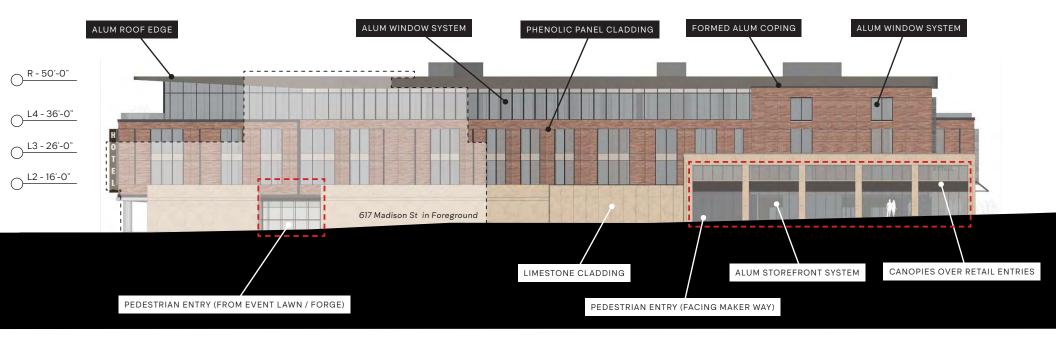
SITE PLAN











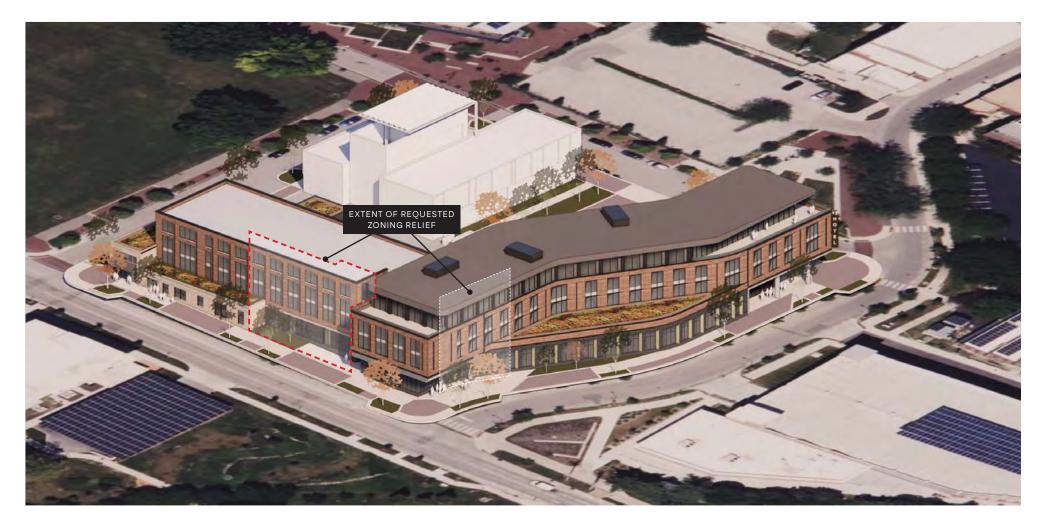
0' 5' 10' 20'

























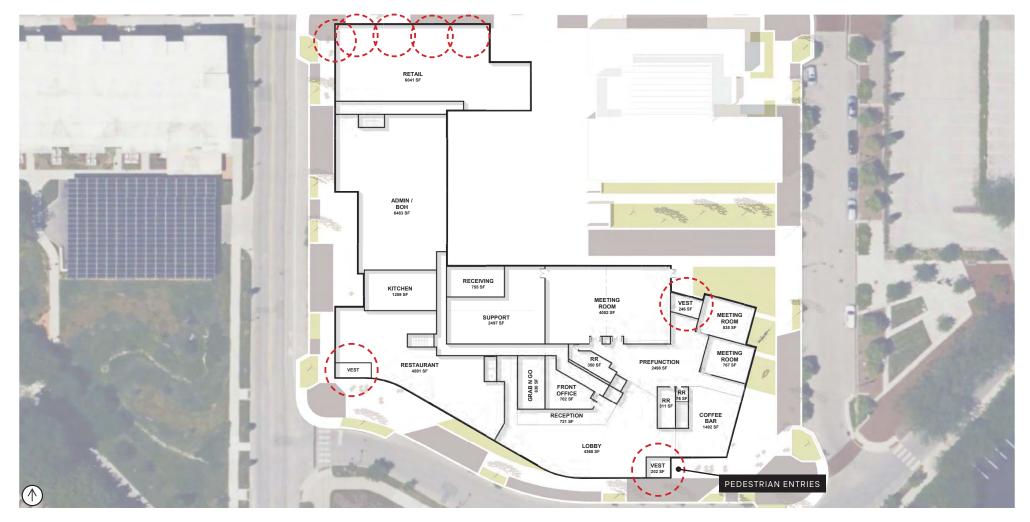












FLOOR PLAN - GROUND LEVEL





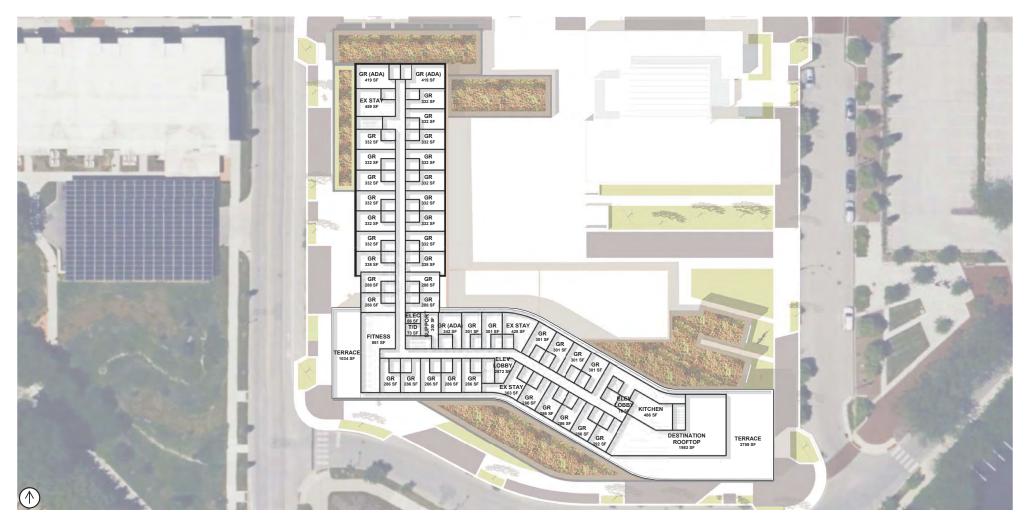
FLOOR PLAN - SECOND LEVEL





FLOOR PLAN - THIRD LEVEL
0' 8' 16' 32' 64'





FLOOR PLAN - FOURTH LEVEL



BLOOMINGTON BOARD OF ZONING APPEALS CASE #: V-49-25 / ZR2025-10-0103

STAFF REPORT

Location: 2616 South Paiges Way DATE: November 20, 2025

PETITIONER/OWNER: Jiaoyang Li

2616 South Paiges Way Bloomington, IN

REQUEST: Petitioner is requesting a variance from rear setback standards to allow construction of an addition to an existing "Dwelling, single-family (detached)" in the Residential Medium Lot (R2) zoning district.

REPORT: The property contains a detached single-family dwelling on the end of the cul-de-sac of Paiges Way, just west of South High Street. The property and all surrounding properties are located in the Residential Medium Lot (R2) zoning district. Surrounding properties to the east, west, and south contain single-family dwellings. The abutting property to the north contains a place of worship, Faith Lutheran Church.

The petitioner proposes to construct a rear addition containing a bedroom and an enclosed sunroom on the first story main level and another bedroom on the basement level. The house currently contains five bedrooms, comprising one in the basement and four on the second floor. The proposed addition would add two bedrooms, including one bedroom on the first story main level for the first time, for a total of seven bedrooms. The existing rear (north) wall of the house is approximately 31 feet from the north property line. There is also an existing deck that is approximately 16 feet from the north property line. The proposed addition would have a wall located 16 feet 1 3/4 inches from the rear (north) property line. In the R2 zoning district, the minimum rear setback is 25 feet. Because the proposed 16-foot rear setback is less than the minimum 25 feet, the petitioner is requesting a variance from the rear setback standard.

The property also contains several existing lawful nonconformities that do not meet the standards in current code, including a west side setback that is less than the minimum. The petition is not proposing any changes to these existing nonconformities, and there is no requirement to resolve these lawful nonconformities at this time.

CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE

20.06.080(b)(3)(E)(i) Standards for Granting Variances from Development Standards: A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

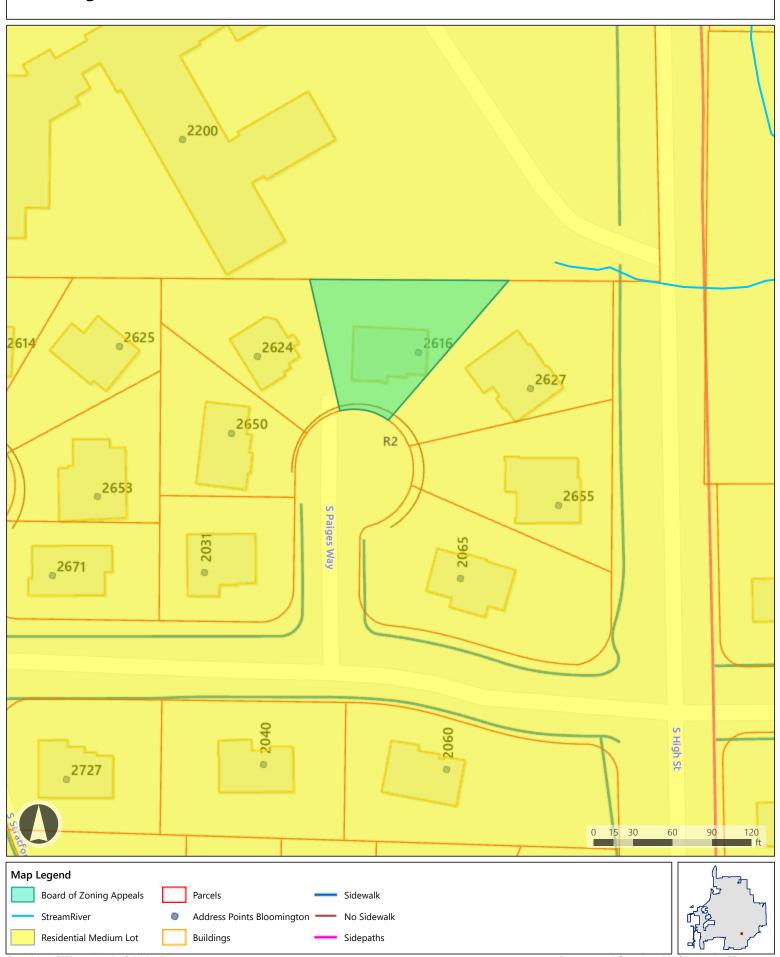
1) The approval will not be injurious to the public health, safety, morals, and general welfare of the community.

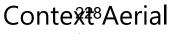
PROPOSED FINDING: Allowing the proposed addition will not be injurious to the public health, safety, morals, and general welfare of the community. The abutting property to the north does not contain any residential uses and there is no buildings of any kind current in the

- area of the abutting property immediately adjacent to the rear yard of 2616 South Paiges Way. A reduced setback will not comproprise privacy, light, or access.
- 2) The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.
 - **PROPOSED FINDING:** Allowing the proposed addition will not substantially affect the use and value of adjacent properties. The abutting property to the north does not contain any residential uses and there is no buildings of any kind current in the area of the abutting property immediately adjacent to the rear yard of 2616 South Paiges Way. If the abutting property were ever redeveloped with single-family dwellings or other residential uses allowed in the R2 zoning district, the proposed rear setback of 2616 South Paiges Way would provide less aesthetic visual separation between buildings than desirable for this location based on the setback standards for this zoning district. However, the overall effect on the use and value of the property would be minimal even in that case.
- 3) The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.
 - **PROPOSED FINDING:** There do not appear to be any peculiar conditions to the property that result in a practical difficulty in the use of the property. The property exceeds the minimum lot size for this zoning district and is similar in size and shape to all surrounding properties within this subdivision, including other lots along the cul-de-sacs. The inability to add the desired space on the ground floor does not result in practical difficulties in the use of the property. The property has already been developed with a three-story residence and provides living space and bedrooms that are consistent with other dwellings in the surrounding area and consistent with reasonable expectations of current and future owners or occupants.

RECOMMENDATION: The Department has considered feasible alternatives, the goals of the petitioner, and the goals of the City that were the basis of the standards within the Unified Development Ordinance in reaching the Department's recommendation. Based upon the written findings above, the Department recommends that the Board of Zoning Appeals adopt the proposed findings for V-49-25, ZR2025-10-0103 and deny the requested variance.

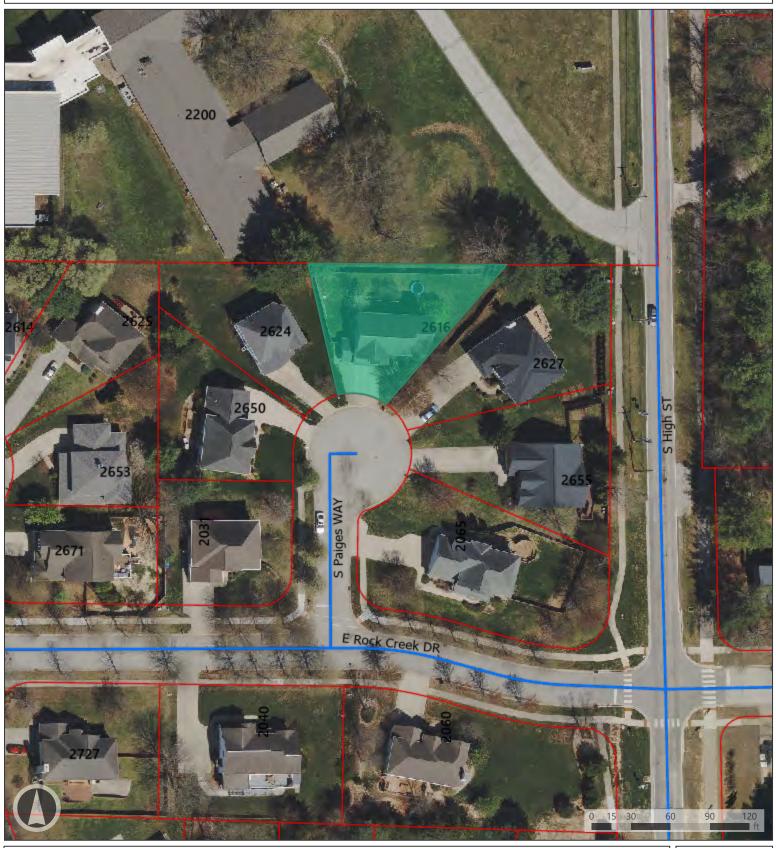
Locati²³ħ Map 2616 South Paiges Way





2616 South Paiges Way





Map Legend



Petitioner's Statement

Address: 2616 S. Paiges Way, Bloomington, IN 47401

Zoning District: R2 – Residential Medium Lot

Petitioner: Li, Jiaoyang

Prepared for: City of Bloomington Board of Zoning Appeals

1. Project Description

The petitioner seeks approval of a rear-yard setback variance to allow construction of a residential addition at the rear of the existing single-family home located at 2616 S. Paiges Way in the Regents Park subdivision. The proposed addition would extend approximately 15 feet 11¾ inches from the existing rear wall of the residence, resulting in a rear setback of approximately 16 feet from the rear property line, rather than the 25-foot minimum required in the R2 zoning district.

The addition is designed to complement the existing residence in style and materials, using matching roof shingles and horizontal siding consistent with Unified Development Ordinance (UDO) Sections 20.04.070(d)(3)(B) and (E). The project will not alter the existing drainage pattern, tree cover, or character of the neighborhood.

2. Justification for Variance

(1) Practical Difficulty and Minimum Relief

The property is located at the end of a cul-de-sac, creating a unique and irregular lot shape that leaves limited buildable depth at the rear once modern interior layouts and structural requirements are considered. This condition is not self-imposed by the owner, but rather a legacy of the original subdivision design and subsequent UDO updates. While the existing home was constructed under a prior 30-foot rear setback standard, strict compliance with the current 25-foot setback would leave only a few feet of allowable depth—insufficient for functional, livable space. The requested variance represents the minimum relief necessary to make reasonable use of the property.

(2) No Adverse Impact on Public Welfare or Adjacent Properties

The proposed addition will not be injurious to public health, safety, or welfare, nor will it negatively affect adjacent properties. Because the rear of the lot abuts a large open area owned by the Faith Lutheran Church rather than residential backyards, the reduced setback will not compromise privacy, light, or access. The addition will remain visually consistent with the neighborhood and will not alter drainage patterns or increase impervious surface area significantly.

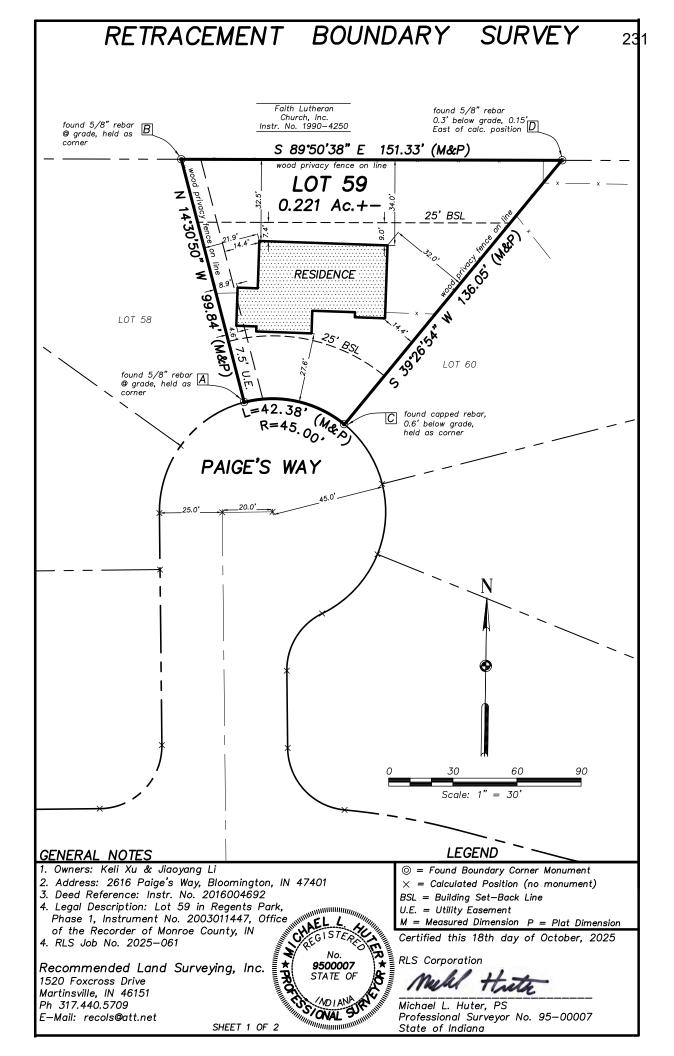
(3) Consistency with Neighborhood Character and Intent of the Ordinance

The addition is modest in scale and uses materials identical to the existing residence, ensuring architectural compatibility with surrounding homes. The variance preserves the intent of the UDO by maintaining adequate open space, avoiding congestion, and ensuring the residential character of the property remains intact. The project balances reasonable property use with the goals of the development standards.

3. Conclusion

For the reasons stated above, the petitioner respectfully requests approval of a variance from UDO Section 20.04.070(c) to reduce the rear-yard setback from 25 feet to approximately 16 feet. The proposed addition provides essential living space in a way that is architecturally compatible, minimally intrusive, and fully aligned with the public interest and the established character of the Regents Park neighborhood.

10/18/2025



CERTIFICATE OF SURVEY

I, Michael L. Huter, a Professional Surveyor of the State of Indiana, do hereby certify that this represents a true and correct survey made on the ground under my direct supervision on October 17, 2025. A current Title Commitment was not provided by the client for review of any easements, restrictions, or covenants encumbering the subject real estate. To the best of my knowledge and belief, the survey of the subject real estate depicted hereon has been prepared in accordance with IAC Title 865 Article 1 Rule 12 Sections 9–13, and represents a survey of the following described Parcel per Instrument Number 2016004692:

Lot Number 59 in Regents Park, Phase 1 as shown by the recorded plat thereof recorded in Plat Cabinet C, Envelope 331, as Instrument Number 2003011447, in the Office of the Recorder of Monroe County, Indiana.

Certified this 18th day of October, 2025

RLS Corporation

Michael L. Huter, PS Professional Surveyor No. 9500007 State of Indiana



SURVEYOR'S REPORT

The purpose of this project was to conduct a Retracement Boundary Survey of the above—described Parcel. Research for this Survey was conducted in the Office of the Monroe County Recorder.

There may be differences between deed dimensions versus measured dimensions along the boundary lines of the subject real estate and there may be found survey markers near but not precisely at the same boundary corners. In cases where the magnitude of these differences in location of found survey markers is less than the uncertainty due to random errors in measurements and less than the uncertainty identified for the Reference Monumentation, said differences may be considered insignificant and are only for purposes of mathematical closure.

In accordance with the IAC Title 865 Article 1 Rule 12 the following observations and opinions are submitted regarding the various uncertainties in the location of the lines and corners of the subject real estate due to Availability and Condition of Reference Monumentation, Record Documents, Evidence of Occupation and Possession, and random errors in measurements (Relative Positional Accuracy) There may be unwritten rights associated with these uncertainties. The client should presume there is an amount of uncertainty along any line equal in magnitude to the discrepancy in the location of these lines of possession from the surveyed lines.

UNCERTAINTY DUE TO AVAILABILITY AND CONDITION OF REFERENCE MONUMENTATION & THEORY OF LOCATION

Reference Monumentation recovered for this project consisted of the found monuments depicted herein as Points A, B, C, and D. The found monuments were called for in the plat of Regents Park, Phase 1. Points A—D agreed with plat dimensions between 0.0' to 0.15' of the Plat dimensions. Said found monuments were the controlling monuments for this survey.

The Plat bearings and distances were held to re—trace the lines and corners of Lot 59. The Plat geometry was translated and rotated to fit the found monuments depicted herein. The bearings along the lines of Lot 59 are referenced to Indiana State Plane Coordinates East Zone NAD83. The monuments found or set during this survey were at or near ground level unless otherwise noted herein.

UNCERTAINTY DUE TO RECORD DOCUMENTS

There were no discrepancies found between the legal description of Lot 59 and the legal descriptions of the adjoining parcels.

Therefore, there is estimated to be no uncertainty in the location of the lines and corners of Lot 59 due to Record Documents.

UNCERTAINTY DUE TO EVIDENCE OF OCCUPATION OR POSSESSION

A wood privacy fence from Lot 59 lies generally along the Western, North, and Eastern boundary lines.

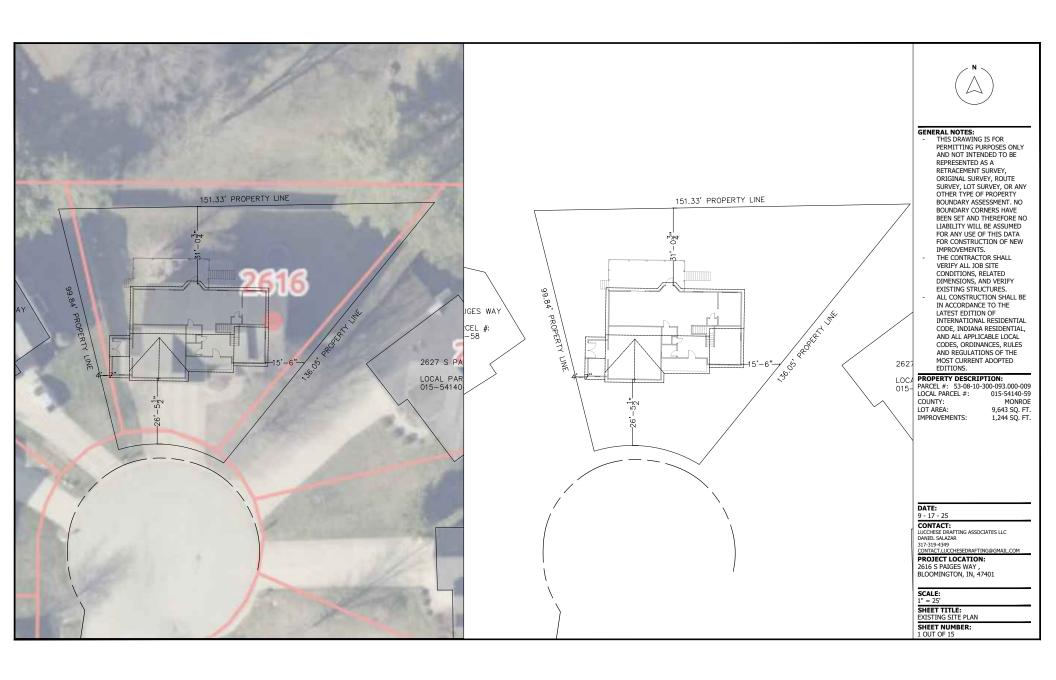
At the time of this survey there was no visible, conflicting, above—ground Evidence of Occupation or Possession along the remaining lines of Lot 59.

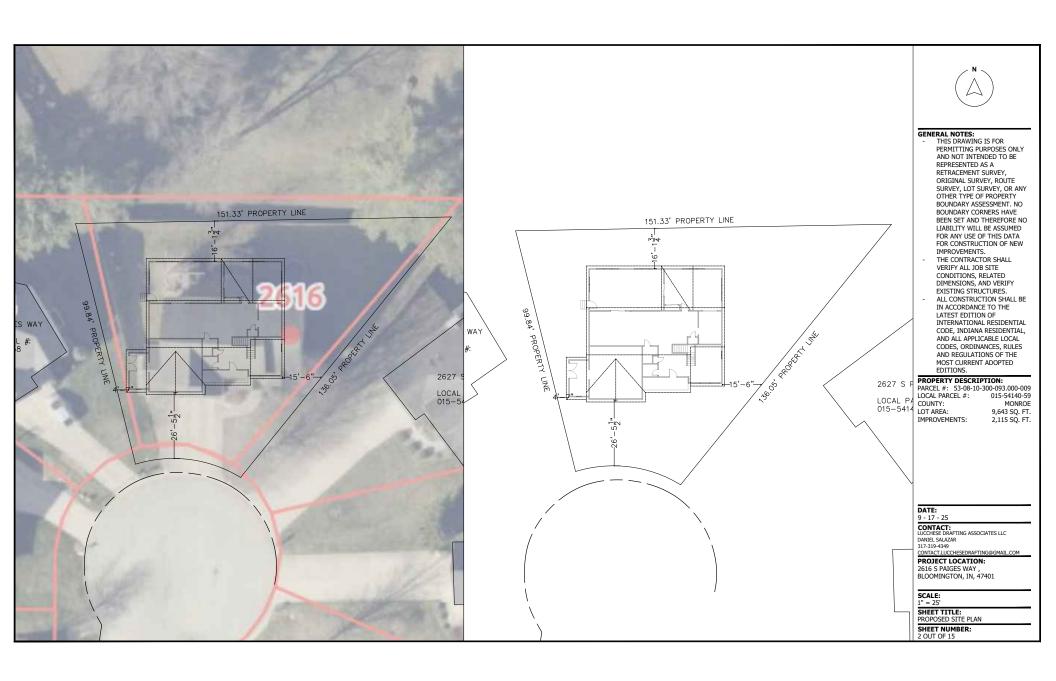
RELATIVE POSITIONAL ACCURACY OF MEASUREMENTS

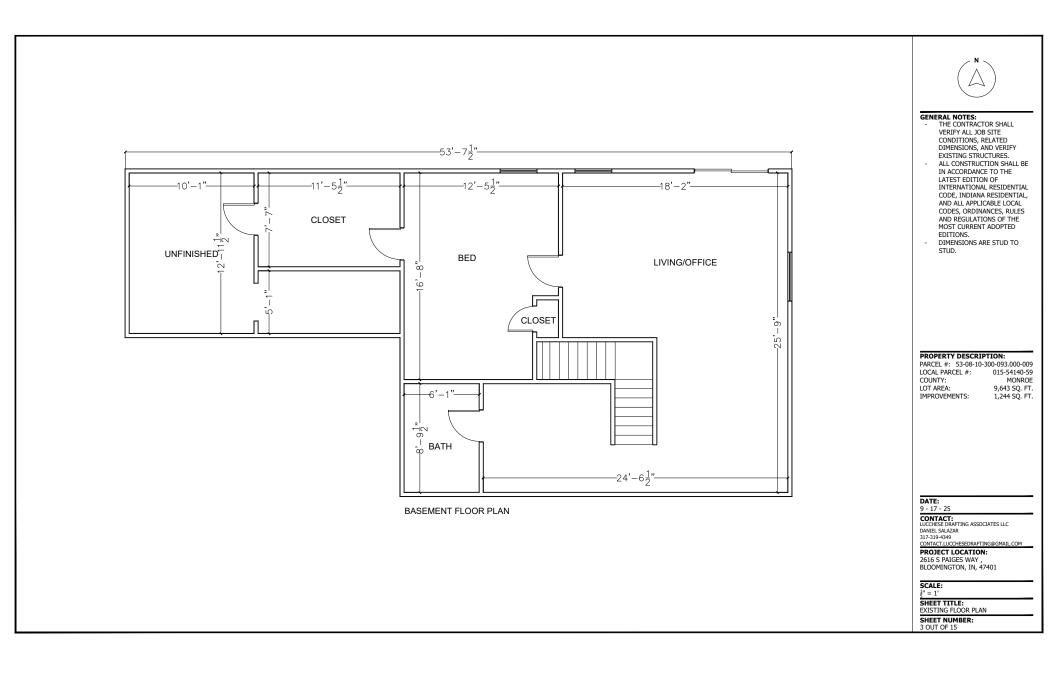
The Relative Positional Accuracy of Measurements of the corners of the subject real estate is within specifications for a Suburban Class Survey (0.13 feet) as defined in Title 865, Article 1, Rule 12, Section 7 of the Indiana Administrative Code.

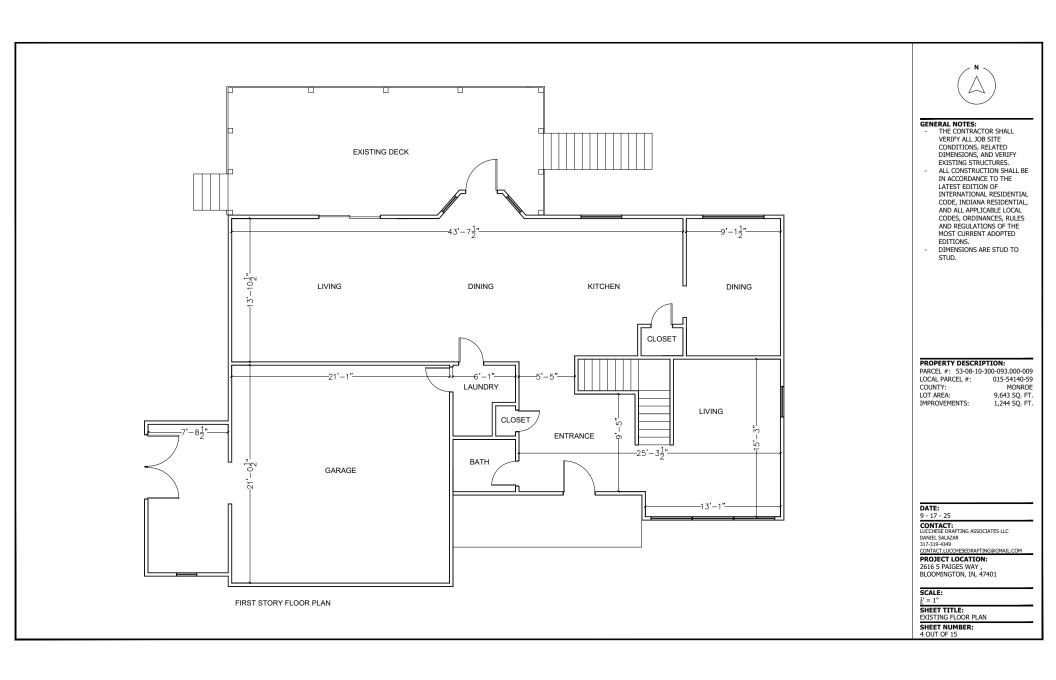
FLOOD ZONE NOTE

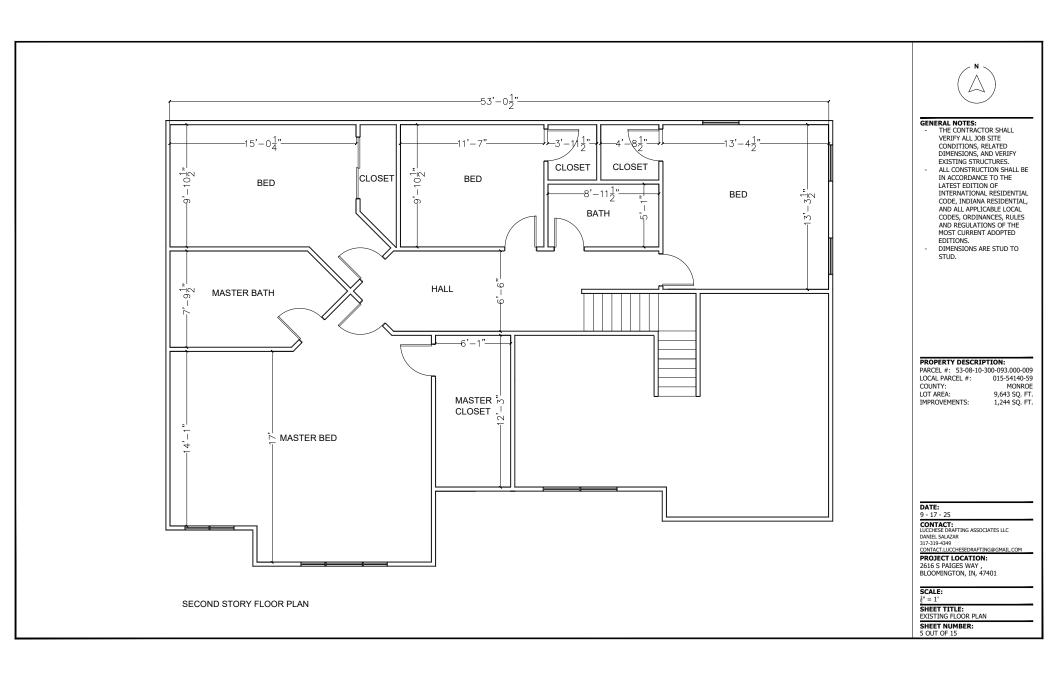
Lot 59 lies within Flood Hazard Zone X (500 year flood zone), as scaled from FEMA FIRM Map 18105 C 0144 D, dated December 17, 2010.

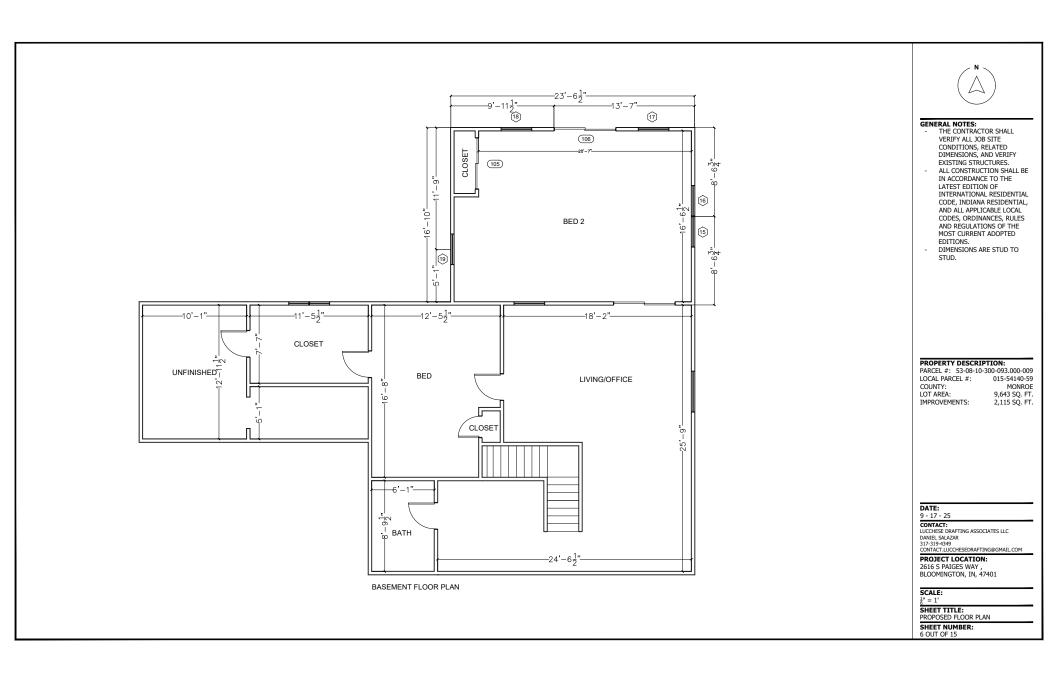


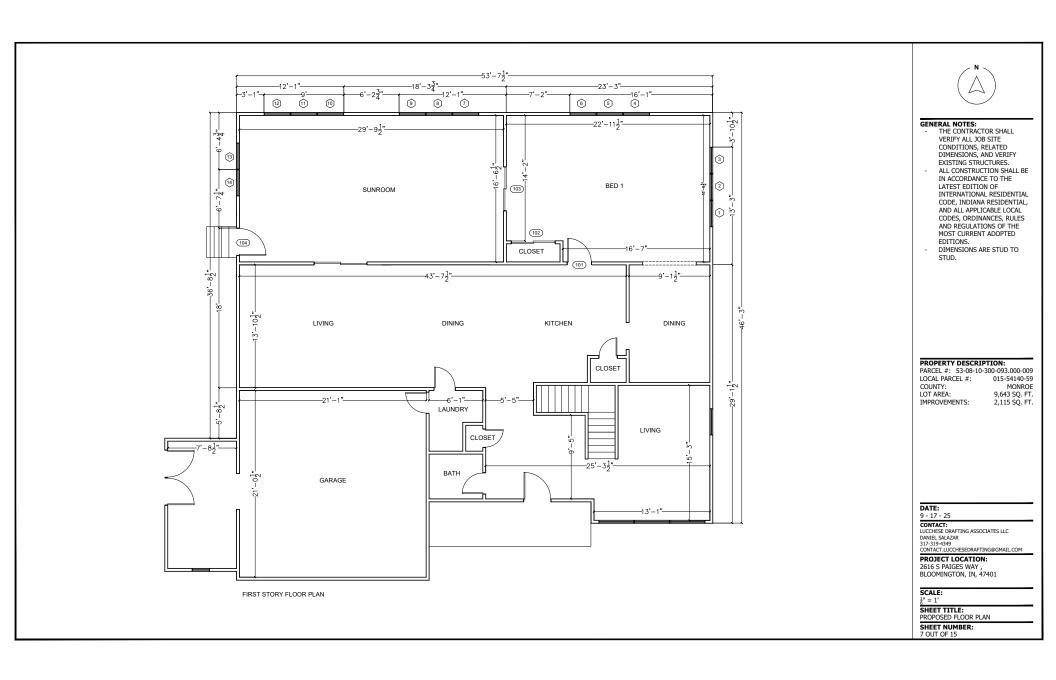












	DOOR SCHEDULE											
MARK	TYPE	WIDTH	HEIGHT	FAMILY	HEAD HEIGHT	LEVEL	COMMENTS					
	2/2 2/2	a. a.	a. a.			I						
101	2/8 x 6/8	2' - 8"	6' - 8"	LEFT HAND SWING	6' - 8"	MAIN LEVEL F.F.	ENTRANCE DOOR					
102	5/0 x 6/8	5' - 0"	6' - 8"	SLIDING DOOR	6' - 8"	MAIN LEVEL F.F.	BED 1					
103	5/0 x 6/8	5' - 0"	6' - 8"	SLIDING DOOR	6' - 8"	MAIN LEVEL F.F.	CLOSET					
104	3/0 x 6/8	3' - 0"	6' - 8"	RIGHT HAND SWING	6' - 8"	MAIN LEVEL F.F.	BED 2					
105	5/0 x 6/8	5' - 0"	6' - 8"	SLIDING DOOR	6' - 8"	MAIN LEVEL F.F.	CLOSET					
106	5/0 x 6/8	6' - 0"	6' - 8"	SLIDING DOOR	6' - 8"	MAIN LEVEL F.F.	CLOSET					

WINDOW SCHEDULE											
MARK	TYPE	WIDTH	HEIGHT	FAMILY	Sill Height	Head Height	Level	Comments			
1	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	BED 1			
2	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	BED 1			
3	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	BED 1			
4	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	BED 1			
5	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	BED 1			
6	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	BED 1			
7	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	SUNROOM			
8	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	SUNROOM			
9	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	SUNROOM			
10	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	SUNROOM			
11	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	SUNROOM			
12	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	SUNROOM			
13	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	SUNROOM			
14	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	SUNROOM			
15	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	BED 2			
16	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	BED 2			
17	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	BED 2			
18	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	BED 2			
19	3/0 x 5/0	3' - 0"	5' - 0"	SINGLE HUNG	1' - 8"	6' - 8"	MAIN LEVEL F.F.	BED 2			

- GENERAL NOTES:

 THE CONTRACTOR SHALL
 VERIFY ALL JOB SITE
 CONDITIONS, RELATED
 DIMENSIONS, AND VERIFY
 EXISTING STRUCTURES.

 ALL CONSTRUCTION SHALL BE
 IN ACCORDANCE TO THE
 LATEST EDITION OF
 INTERNATIONAL RESIDENTIAL,
 CODE, INDIANA RESIDENTIAL,
 AND ALL APPLICABLE LOCAL
 CODES, ORDINANCES, RULES
 AND REGULATIONS OF THE
 MOST CURRENT ADOPTED
 EDITIONS. EDITIONS.
 - DIMENSIONS ARE STUD TO
- STUD.

PROPERTY DESCRIPTION:
PARCEL #: 53-08-10-300-093.000-009
LOCAL PARCEL #: 015-54140-59 MONROE 9,643 SQ. FT. 2,115 SQ. FT. COUNTY: LOT AREA: IMPROVEMENTS:

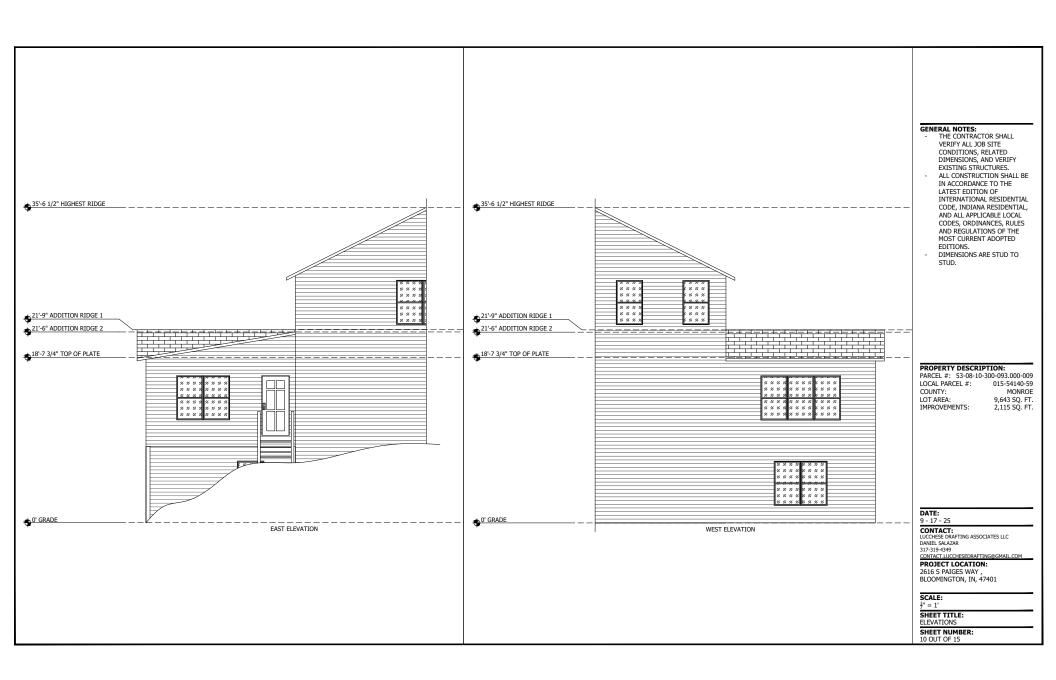
DATE:
9 - 17 - 25

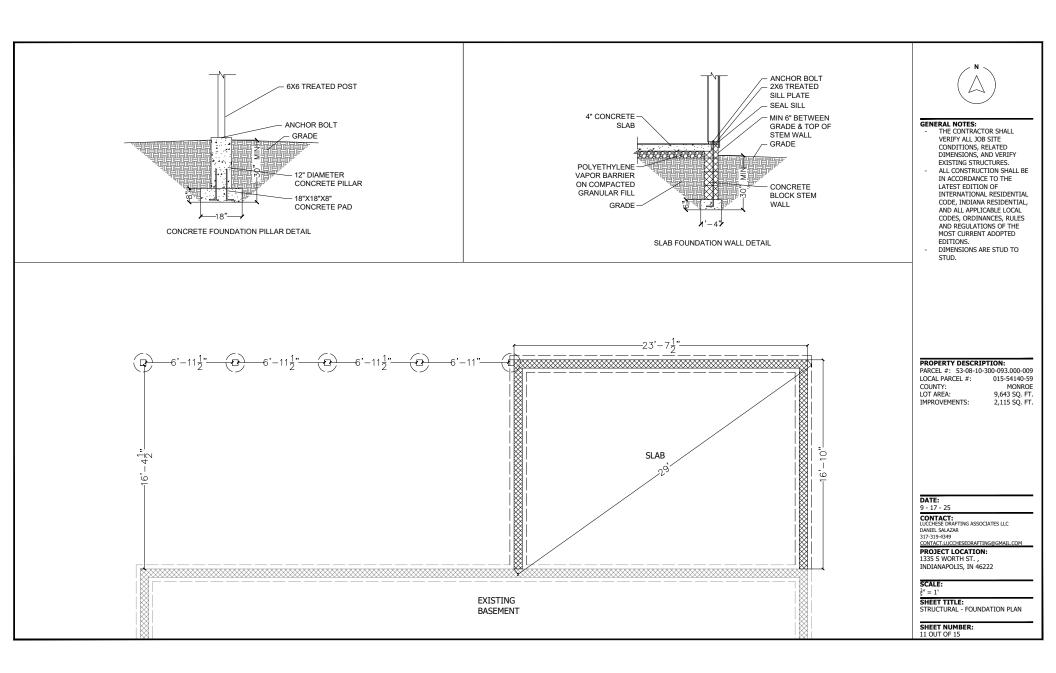
CONTACT:
LUCCHES PRAFTING ASSOCIATES LLC
DANIEL SALAZAR
317-319-439
CONTACT.LUCCHESEDRAFTING@GMAIL.COM
PROJECT LOCATION:
2616 S PAIGES WAY,
BLOOMINGTON, IN, 47401

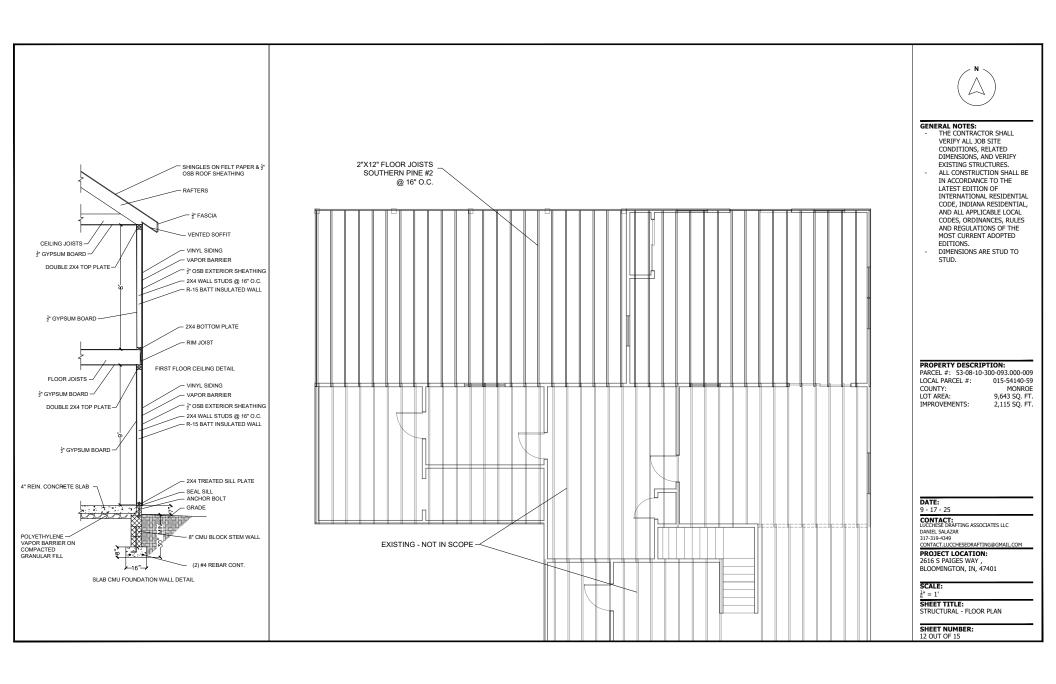
SCALE:

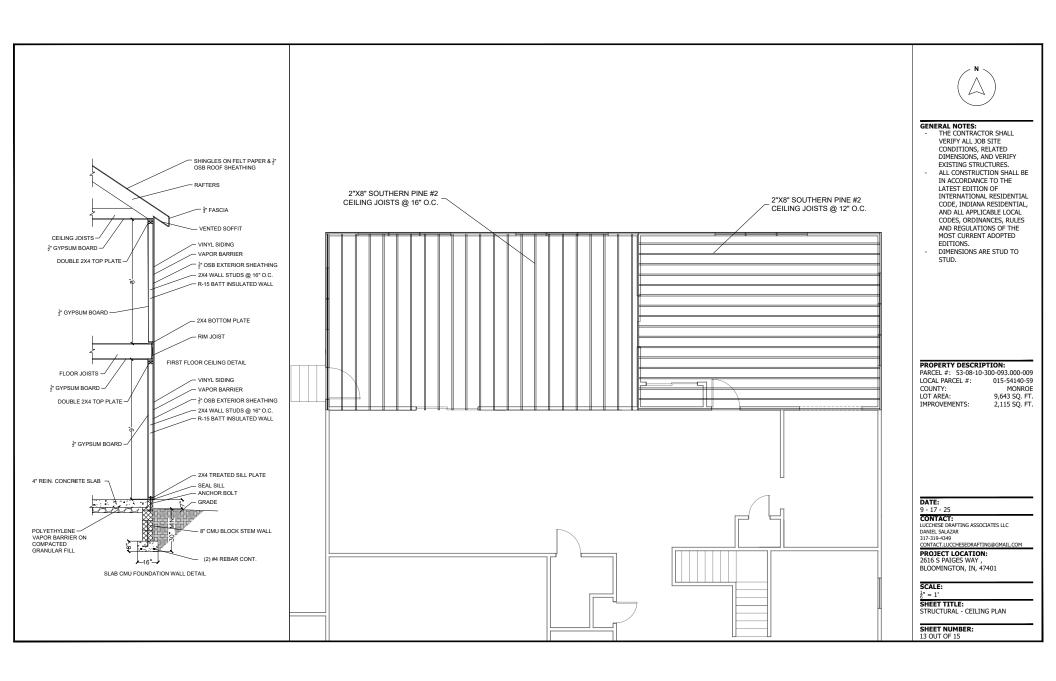
SHEET TITLE: DOOR & WINDOW SCHEDULE SHEET NUMBER: 8 OUT OF 15

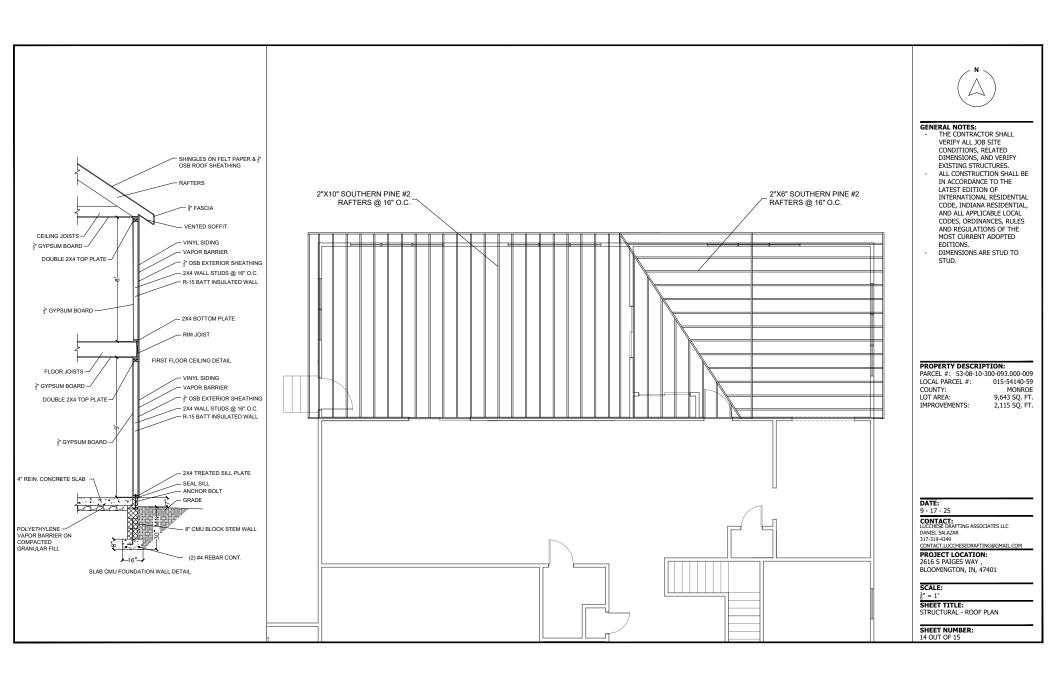


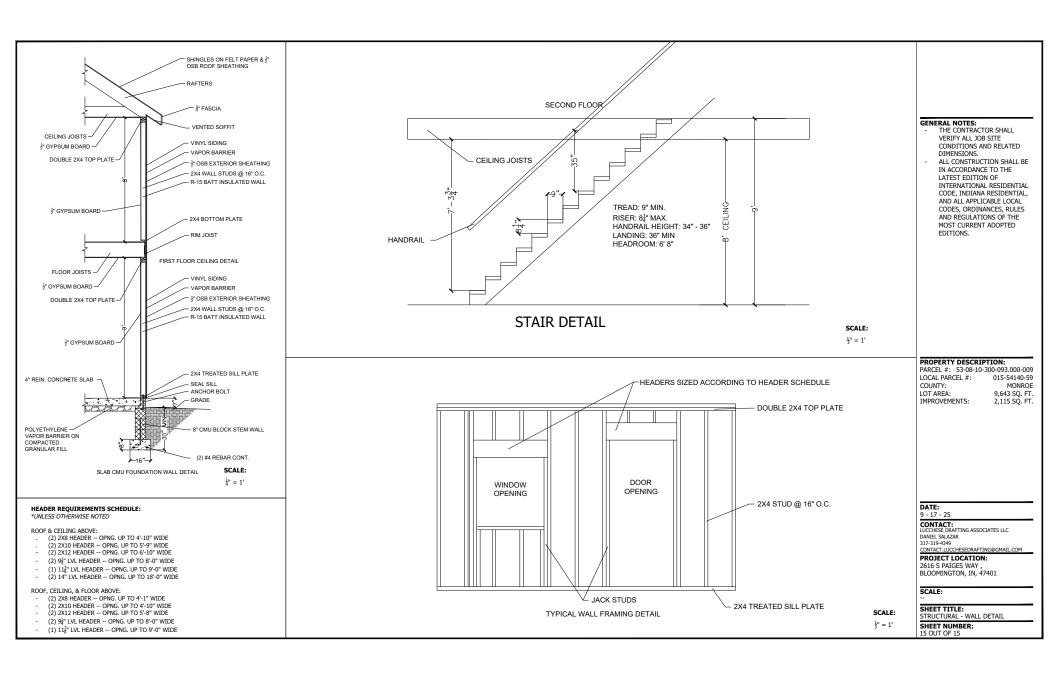












CASE #: V-50-25

BLOOMINGTON BOARD OF ZONING APPEALS

STAFF REPORT ZR2025-10-0105 Location: 3915 W 3rd ST DATE: Nov 20, 2025

PETITIONER: Nick Scarlatis & Associates LLC

3915 W 3rd ST

Bloomington, IN 47404

REQUEST: Variance from maximum parking standards, driveway separation requirements, and signage standards to allow for the construction of a "Restaurant" in the Mixed-Use Medium Scale (MM) zoning district.

REPORT: This ~0.45 acre/ 19,602 square foot property is located on the south side of West 3rd Street. The property and those to the East and West are zoned Mixed-use Medium Scale (MM). The property to the north is zoned Mixed-Use Corridor (MC), and to the south is Residential High-Density Multifamily (RH). Surrounding used include a vehicle fuel station to the west, a restaurant to the east, multi-family residences to the south, and commercial uses to the north.

The property is currently vacant. The petitioner proposes to construct a 2,285 square foot restaurant with a drive-through and surface parking lot. The proposed plan includes a 10' wide sidewalk, 8' tree plot, and 5 large street trees as required. The plan features parking for 6 bikes and includes a 15 foot wide Type 2 buffer yard along the southern property line. Based on the 600 square foot interior dining space, the maximum number of parking spaces allowed is 6. The petitioner is requesting a variance from Section 20.04.060(e) regarding the maximum parking allowance to allow for 10 parking spaces. An analysis of parking needs was performed by the petitioner and is outlined in their petitioner statement. The petitioner states that 4-6 employees would be typical for a shift at this location.

The petitioner requests a variance from Section 20.04.050(c)(2)(D)(ii)[b]) of the Entrances and Drive standards which require entrances or drives along an arterial or collector street to be 100' from each other. The proposed plan includes two new drive cuts that would be approximately 70' from the drive to the west, 66' from the two proposed drives on this property, and approximately 31' from the drive to the east. For this use the UDO allows a maximum freestanding sign of 45 square feet.

The petitioner requests a variance from Section 20.04.100(j)(6)(C) for signs associated with a drive-through use which establishes maximum signage square footage of 12 square feet and max height of 5', to allow a 20.2 square foot and 6' tall sign. The petitioner is requesting a variance from Section 20.04.100(j)(6)(B) which permits two additional freestanding signs with maximum signage square footage of 4 square feet and max height of 4', to allow for two 4.7 square foot signs measuring 4' 10" tall.

Based on the width of the building proposed, the UDO would allow a maximum of 54.5 square feet square footage of wall signage. The petitioner is requesting a variance to allow 98.5 square feet of wall signage.

CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE

20.06.080(b)(3)(E)(i) Standards for Granting Variances from Development Standards: A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) The approval will not be injurious to the public health, safety, morals, and general welfare of the community.

PROPOSED FINDINGS:

Maximum Parking number: The granting of the variance to allow for additional parking spaces is not expected to be injurious to the public health, safety, morals, or general welfare of the community. The low number of parking spaces allowed by the UDO would not allow for adequate parking for this use based on the number of employees and number of waiting rooms, plus space for clients during transition times.

Driveway Separation: The approval of the requested variance from separation of drives is expected to be injurious to the general welfare of the neighborhood and community, because it is not as safe as a code-compliant drive configuration. The proposal for two driveways increases the number of conflict points between drivers and people on the sidewalk in an area that already has many drive cuts along that frontage. The western drive cut is two-way, which also creates a safety concern because it also increases crossing distances.

Freestanding Signage for drive-through: The approval of the requested variance from maximum freestanding signage is not expected to be injurious to the public health, safety, morals or general welfare of the community.

Wall Signage: The approval of the requested variance from maximum wall signage is not expected to be injurious to the public health, safety, morals, or general welfare of the community.

2) The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.

PROPOSED FINDING:

Maximum Parking number: No adverse impacts to the use and value of surrounding properties as a result of the requested variance to have more parking spaces are found. The granting of this variance would allow an appropriate number of parking spaces to serve this use and could therefore reduce potential impacts on adjacent properties by being able to serve the parking needs of this use on the property.

Driveway separation: Approval of the variance from driveway separation standards is not expected to create a substantially adverse impact on the area adjacent to the property.

Freestanding Signage for drive-through: Approval of the variance from freestanding signage standards is not expected to create a substantially adverse impact on the area adjacent to the property.

Wall Signage: Approval of the variance from maximum parking standards is not expected to create a substantially adverse impact on the area adjacent to the property.

3) The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.

PROPOSED FINDING:

Maximum Parking number: The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property in that limiting the number of parking spaces would create a practical difficulty in the use of this property since the number of spaces allowed by the UDO would not adequately serve this use. The practical difficulties are peculiar to the property in question in that the standards within the TRO Overlay district were written envisioning the use of the parking garage, however that building is not useable and there is a tenant that is seeking to occupy the building now. The amount of parking allowed by the UDO (including the TRO overlay district) is substantially below the amount needed based on the number of employees and waiting rooms. The granting of the variance will relieve these difficulties by allowing an appropriate number of spaces for this specific use.

Driveway separation: No practical difficulty is found in the strict application of the terms of the Unified Development Ordinance at this property. The parcel exceeds the minimum lot size and width of the Mixed-Use Medium Scale (MM) zoning district and is not irregular in size. There are no topographic, environmental, or utility constraints present. No peculiar conditions are therefore found on the property. The property's frontage of 140ft exceeds the zoning district's minimum lot width of 50ft and could be developed with one drivecut. Only allowing one drivecut on this property does not result in a practical difficulty in the use of the property and does not unduly limit the development of the lot in a manner consistent with the standards of the UDO.

Freestanding Signage for drive-through: No practical difficulty is found in the strict application of the terms of the Unified Development Ordinance at this property. In BMC 20.04.100(j)(6), the Unified Development Ordinance creates allowances for an additional four signs specifically for Drive-Through Uses. The petitioner's plan prioritizes compliance with the Dunkin brand standards (ex: Dunkin Standard Directional sign and Dunkin Standard Digital Menu Board) over following codified signage standards from the Bloomington UDO by proposing signage larger than is permitted. The preference for this signage is inherently tied to the petitioner and the request for a variance from signage standards is not due to a peculiar condition on this property.

Wall Signage: No practical difficulty is found in the strict application of the terms of the Unified Development Ordinance at this property. The petitioner's plan for wall signage prioritizes compliance with the Dunkin brand standards over following codified signage standards from the Bloomington UDO.

The preference for this signage follows the petitioner and the request for a variance from signage standards is not due to a peculiar condition on this property. According to BMC 20.04.100(j)(2)(A)(i), the wall signage allowance is dependent on the building's frontage. That being the case, this is a self-imposed hardship that the petitioner could relieve by changing their design of the building.

RECOMMENDATION: The Department has considered feasible alternatives, the goals of the petitioner, and the goals of the City that were the basis of the standards within the Unified Development Ordinance in reaching the Department's recommendation. Based upon the written findings above, the Department recommends that the Board of Zoning Appeals adopt the proposed findings for V-50-25 / ZR2025-10-0105 and approve the variance from maximum parking number and deny the variances from driveway separation and signage standards with the following condition:

- 1. The variance from maximum parking number is valid for this use and petitioner only as submitted.
- 2. Parking spaces in excess of the maximum parking number must be constructed of permeable pavers.
- 3. No other variances from any development stanards are approved.
- 4. Staff level minor site plan is required before the property is developed.

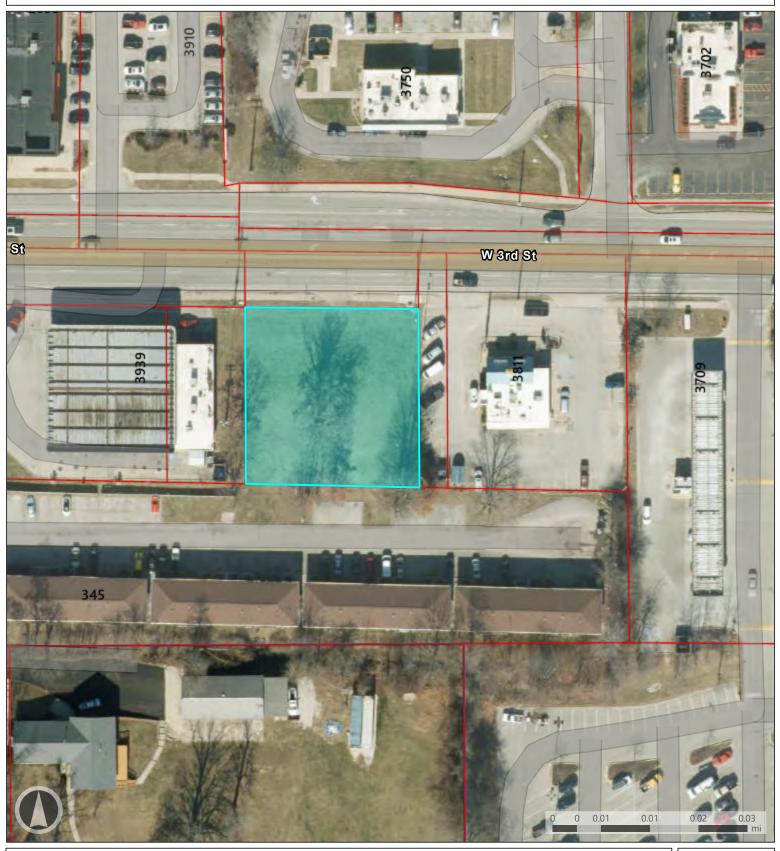


Planning and Transportation Department





Planning and Transportation Depætment



Map Legend

Created: 11/14/2025

Parcels

Pavement

Bloomington Municipal Boundary

NICK SCARLATIS & ASSOCIATES, LTD.

Architecture

Planning

Engineering

5405 West 127th Spect Crestwood, Illinois 60418 Telephone: 708 653-5200

Fax: 708 653-5202 Email: nick@scarlatis.com

October 24, 2025

City of Bloomington 401 N Morton St Bloomington, IN 47404

RE: Proposed Dunkin/Baskin Robbins Combo

Development Standard Variance Request

Parcel # 53-09-01-100-026.000-016

Property 3915 W 3RD Street

Zone: MM - Mixed-Use Medium Scale

Dear BZA Representatives,

On behalf of Raina LJS, LLC., we respectfully request review and acceptance of the attached Development Variance Application and supporting documents for the development of the proposed Dunkin restaurant.

Project Narrative:

Raina LJS, LLC is proposing to develop approximately 0.45 acres of currently undeveloped land into a Dunkin'/Baskin Robbins Combo restaurant (further referred to as Dunkin) with drive-thru located at 3915 W 3RD Street. The project area consists of one parcel # 53-09-01-100-026.000-016 that is zoned as MM - Mixed-Use Medium Scale. Please refer to the site plan provided as a part of this petition for a depiction of the proposed improvements.

Development standards variances are being requested for four standards; 1) Increase in Maximum Parking from 6 to 10, 2) Driveways, 3) Site Signs, 4) Building Signage. The provided findings of facts for each variance listed above are summarized below:

1 – Maximum Parking Allowance

We respectfully request variance from: Bloomington Indiana Unified Development Ordinance, 20.04.060 Parking and Loading, Table 4-10 Maximum Vehicle Parking Allowance for a Restaurant

The petitioner requests to be permitted to develop the site with additional parking spaces that exceed the defined maximum allowable. The proposed Dunkin would provide approximately 600 SF of interior seating space. Per the UDO, Restaurant use is allowed to provide 10 spaces for every 1,000 SF of interior seating space. Per these ratios the proposed Dunkin would be permitted to provide 6 parking spaces. We are requesting that the proposed Dunkin be permitted to provide 10 parking spaces for their employees and customers all within the Dunkin property.

There are several key reasons why the proposed increase in the permissible parking is

necessary. The typical employee shift for a Dunkin is 4-6 employees and approximately 600 SF of indoor seating space accommodates 14 total seats at various table sizes. To provide adequate parking options for Dunkin customers, parking spaces more than the permitted 6 spaces need to be provided. Dunkin restaurants typically like to provide 20-24 parking spaces for their new restaurants. This proposed project has 10 parking spaces proposed. A parking study has been completed at existing Dunkin restaurants in Bloomington, Indiana and Chicago, IL to demonstrate the need for these additional parking spaces. In summary, the parking study demonstrates that the peak parking demand on a Monday – Friday at a typical, similar Dunkin is approximately 14-16 vehicles. Please refer to the provided parking study for additional details.

Development Standards Variance Criteria:

1. The approval will not be injurious to the public health, safety, morals, and general welfare of the community:

The variance will not be injurious to the public health, safety, morals, and general welfare of the community because the additional parking spaces will provide enough spots to safely accommodate the public. Without additional parking, traffic may create a safety hazard to the traveling public. Additionally, the adjacent properties may be adversely impacted by the additional traffic if customers use their parking facilities as overflow.

2. The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner:

Without additional parking there may be overflow traffic, which would create an adverse impact to the adjacent properties. The variance will reduce the potential for vehicles backing up into W 3rd St.

3. The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties:

The requested additional parking will reduce the potential traffic issues within the site, along W 3rd Street, overflow onto adjacent properties, and alleviate the pressure on the drive thru.

2 – Driveways

We respectfully request variance from: Bloomington Indiana Unified Development Ordinance, - 20.04.050 - Access and connectivity (c) Driveways and Access (2)(D)(ii).

The petitioner requests to be allowed to have 2 driveway access points for one street frontage and within 100' of another driveway. The adjacent properties have driveways that make it impossible to have any driveway exceeding the required 100' distance. Additionally, to allow for one access point to accommodate the proposed drive thru, the petitioner would be required to have a drive between the building and the street. Per discussions with zoning planner, it was determined that since it is possible

to have 2 drives to accommodate drive thru use of the site, with no left turn possible, that this was the preferred approach.

Development Standards Variance Criteria:

1. The approval will not be injurious to the public health, safety, morals, and general welfare of the community:

The variance will not be injurious to the public health, safety, morals, and general welfare of the community because it will allow for the safe and efficient flow of traffic through the site and drive thru facility. The proposed driveways are designed to be right in and right out only as limited by the median in the middle of W 3rd Street. No left turns will be permitted or physically allowed. The property east of the proposed Dunkin development occupied by Long John Silver's will modify their west drive to be an ingress only, further minimizing any conflict from our proposed exit only driveway.

2. The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner:

No impact on the neighboring properties or reduction in value will result from this variance request. The addition of the proposed Dunkin development will bring use to an otherwise empty parcel of commercial land and will improve the commercial viability of the area.

3. The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties:

The requested additional driveway will reduce the potential traffic issues within the site, along W 3rd Street, and improve the overall circulation of vehicles and pedestrians on the site. Without the proposed drive, the applicant will be required to circulate a drive between the front of the proposed building and W 3rd Street. This will increase the distance from the front of our building to the street, making the building less visible and potentially further than the max allowed distance from the street per the UDO resulting in a variance. It will additionally require a reduced landscape area variance request. Approving the proposed variance for 2 driveway within 100' of an adjacent driveway will relieve the practical difficulties that would otherwise occur without it.

3 - Site Signs

We respectfully request variance from: Bloomington Indiana Unified Development Ordinance, - 20.04.100 Signs (j)(6)(A, B and C).

The petitioner requests to be allowed to use the Dunkin Standard Directional Signs that are 4.75 SF each and 58" high in lieu of the UDO allowable 4 SF and 48" tall maximum size, and to use the

Dunkin Standard Digital Menu Board that is 20.2 SF and 4'-7" tall (6'-0" tall total with base) in lieu of the UDO allowable 12 SF and 5'tall maximum.

1. The approval will not be injurious to the public health, safety, morals, and general welfare of the community:

The variance will not be injurious to the public health, safety, morals, and general welfare of the community because it will allow for the safe and efficient flow of traffic through the site and drive thru facility.

2. The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner:

No impact on the neighboring properties or reduction in value will result from this variance request. It will provide increased visibility that will encourage safe and efficient flow of traffic through the property. This will reduce the need for vehicles to use the adjacent properties to redirect access to the site and will not have a substantially adverse impact on the adjacent area.

3. The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties:

The requested Dunkin standard directional signs will reduce the potential traffic issues within the site, along W 3rd Street and at the adjacent properties, and it will improve the overall circulation of vehicles and pedestrians on the site. The requested menu board will allow for the most efficient ordering and flow of traffic through the drive-through that might otherwise cause delays. Additionally, the strict application of the UDO will require custom signage that is not readily available.

4 - Building Signage

We respectfully request variance from: Bloomington Indiana Unified Development Ordinance, - 20.04.100 - signs (j)(2)(A)(i).

The petitioner requests to be allowed to have 98.5 SF of building signage in lieu of the maximum allowed 54.5 SF per code to allow for the signage for a drive through Dunkin restaurant.

1. The approval will not be injurious to the public health, safety, morals, and general welfare of the community:

The variance will not be injurious to the public health, safety, morals, and general welfare of the Community. It will provide visibility for the W 3rd Street traffic that will encourage safe and efficient flow of traffic through the property and it will maintain the standards that are expected for a Dunkin restaurant.

2. The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner:

Having signage that in keeping with standards of a typical Dunkin drive thru restaurant will not adversely affect the adjacent properties. No impact on the neighboring properties or reduction in value will result from this variance request. It will provide increased visibility that will encourage safe and efficient flow of traffic through the property.

3. The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties:

The requested Dunkin standard signage will provide increased visibility from W 3rd Street and will maintain the brand identity that is recognized by the public and provides aesthetic variation to the building. Additionally, the strict application of the UDO would require custom signage that is not readily available.

Thank you for taking the time to hear these requests for this property development.

Sincerely, Nikoletta Scarlatis, RA, NCARB, LEED AP Project Architect Nick Scarlatis & Associated, LTD.

PARKING STUDY MEMORANDUM

DIYA & RAISHAAN HOLDINGS

October 24, 2025

City of Bloomington 401 N Morton St Bloomington, IN 47404

Re: Parking Study Memorandum
Proposed Dunkin' / Baskin Robbins Combo
Parcel # 53-09-01-100-026.000-016
Property 3915 W 3rd Street

Zone: MM - Mixed-Use Medium Scale

Purpose

This memorandum supplements the development-standards variance request submitted for the proposed Dunkin' / Baskin Robbins Combo at 3915 West 3rd Street in Bloomington, IN. It provides observed parking-demand data from two existing Dunkin' locations to demonstrate the operational need to increase the maximum number of permitted parking spaces from six (6) to ten (10).

Methodology

Parking-utilization data were gathered from:

- Dunkin' 300 S College Mall Dr, Bloomington IN 47401
 Using on-site security cameras covering the full lot.
 Observations: Friday 10/17/25 & Saturday 10/18/25 (6 AM 6 PM).
- 2. Dunkin' 8753 S Stony Island Ave, Chicago IL 60617

 No external cameras available; a store team member manually recorded hourly parking counts.

Observations: Wednesday 10/22/25 & Thursday 10/23/25 (6 AM – 6 PM).

Drive-thru queues were excluded to reflect only true on-site parking demand from customers and employees.

Observation Results

Bloomington (300 S College Mall Dr)

Time Fri 10/17 Sat 10/18

6 AM	4	4
7 AM	6	5
8 AM	9	9
9 AM	13	13
10 AM	14	14
11 AM	14	14
12 PM	11	13
1 PM	8	8
2 PM	7	7
3 PM	4	4
4 PM	4	5
5 PM	5	4
6 PM	4	4

Peak Occupancy: 14 vehicles (10–11 AM).

Chicago (8753 S Stony Island Ave)

Time	Wed 10/22	Thu 10/23
6 AM	3	5
7 AM	7	8
8 AM	10	16
9 AM	13	13
10 AM	9	11
11 AM	4	5
12 PM	4	5
1 PM	3	3
2 PM	3	3
3 PM	3	3

4 PM	3	3
5 PM	3	3
6 PM	3	3

Peak Occupancy: 16 vehicles (8 AM Thursday).

Employee Staffing Per Shift

Location	Time Range	Employees on Shift
Bloomington	5 AM - 12 PM	6
Bloomington	12 PM – 3 PM	4
Bloomington	3 PM - 8 PM	2
Stony Island	4 AM – 12 PM	6
Stony Island	12 PM – 6 PM	3
Stony Island	6 PM – 8 PM	2

Analysis

Both sites exhibit similar morning-peak behavior, with parking demand climbing sharply between 8 AM and 11 AM due to commuter traffic and overlapping employee shifts. Observed demand exceeded 10 vehicles during these periods at both stores, validating the operational requirement for at least 10 parking spaces at the proposed Bloomington site.

Additional spaces will:

- Accommodate employees and short-duration customers simultaneously.
- Prevent overflow onto neighboring parcels.
- Maintain safe circulation and drive-thru efficiency.

Conclusion

Based on field observations at both Bloomington and Chicago locations, the proposed 10 parking spaces for the 3915 West 3rd Street Dunkin'/Baskin Robbins site represent an appropriate and necessary allocation to meet real-world operational demand. We respectfully request the City's consideration and approval of this variance.

Respectfully submitted,

Vick Patel

VP – Acquisitions & Real Estate Development Diya & RaiShaan Holdings 630.577.7391 | vic@diyaholdings.com

10 20

SCALE: 1"=20'

URVE REET NA

SHEET

OF

ALTA/NSPS

LAND TITLE

SURVEY

LEGAL DESCRIPTION FLOOD NOTE PARKING LAND AREA A part of the Northeast Quarter of Section One, Township Eight North, Range Two West, described as SR 48 / W3RD ST BASED UPON A SCALED INTERPRETATION OF THE FLOOD INSURANCE RATE MAP 18105C0137D FOR MONROE COUNTY, INDIANA, DATED DECEMBER 17, 2010, THE SUBJECT PROPERTY IS LOCATED WITHIN (UNSHADED) ZONE X. follows, to-wit: Beginning at a point that is 244.40 feet East and 40.00 feet South of the Northwest corner of the REGULAR SPACES 19,810 SQUARE FEET HANDICAP SPACES said Northeast Quarter and on the South right-of-way of State Road 48, thence East on South right-of-way of 0.455 ACRES TOTAL SPACES State Road 48 for 140.00 feet; thence South for 141.50 feet; thence West for 140.00 feet; thence North 141.50 feet and to the point of beginning. Containing in all 0.45 acres, more or less. elle AVE NE COR NE/4 -SEC 1-T8N-R2W MAG NAIL FROM PRIOR SURVEY OBLITERATED BY I-69 CONSTRUCTION W 3RD STREET (W SR 48) S89°44'41"E 2610.93 (PUBLIC, R/W VARIES) S89°44'41"E 244.50 __Van Buren 01 RIM=863.20 8N-2W (E) 10" VCP IE=857.05 E) 10"VCP IE=853.95 (W) 10"VCP IE=857.10 S(S) 8"VCP IE=854.35 RIGHT-OF-WAY LINE 유(W) 10"VCP IE=853.95 NW COR NE/4 - RIM=862.86 SEC 1-T8N-R2W (N) 15"RCP IE=859.41 NO MONUMENT FOUND (FULL DEBRI) (E) 6"CPP IE=859.66 CALCULATED (W) 6"CPP IE=859.66 FROM PRIOR SURVEYS - FMAG JOB 5018 FRB/BTAPP -0.61' E **VICINITY MAP** OHW OHW OHW - FRB/BTAPP PROJECT LOCATION GUY -0.2 BG INDIANA BELL EASEMENT ANCHOR DB 372, PG 483 CONC. CONC. POSSIBLE 2.9' DEED GAP **SURVEYORS REPORT** JOB NUMBER: 6781.B2 (FROM JOB 6781.B1, OCTOBER 2023) TYPE OF SURVEY: RETRACEMENT SURVEY MEETING THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS 1 STORY BRICK/WOOD CLASS OF SURVEY: URBAN SURVEY (865 IAC 1-12) SPEEDWAY RESTAURANT FIELD WORK COMPLETED: OCTOBER 7, 2025 SUPERAMERICA LLC EXISTING FOOTPRINT=2,386 SFT LOCATION OF SURVEY: WEST OF 3811 W 3RD STREET, BLOOMINGTON, INDIANA BUILDING INST 2006000451 53-09-01-100-026.000-016 IN ACCORDANCE WITH TITLE 865, ARTICLE 1, CHAPTER 12 (RULE 12) OF THE INDIANA ADMINISTRATIVE CODE (IAC), THE BLDG HT=16.9' FOLLOWING OBSERVATIONS AND OPINIONS ARE SUBMITTED REGARDING THE UNCERTAINTY IN THE POSITION OF THE LINES MDC ENDEAVOUR 1 LLC AND CORNERS ESTABLISHED AND/OR REESTABLISHED ON THIS SURVEY AS A RESULT OF: INST 2025009370 1) AVAILABILITY AND CONDITION OF REFERENCE MONUMENTS; 2) CLARITY AND/OR AMBIGUITY OF THE RECORD DESCRIPTION(S) USED AND/OR THE ADJOINER'S DESCRIPTIONS: 3) OCCUPATION OR POSSESSION LINES; 50.62 4) MEASUREMENTS (RELATIVE POSITIONAL ACCURACY) NOTE: THERE MAY EXIST UNWRITTEN RIGHTS ASSOCIATED WITH THESE UNCERTAINTIES. THE CLIENT SHOULD ASSUME THERE IS AN AMOUNT OF UNCERTAINTY ALONG ANY LINE EQUAL IN MAGNITUDE TO THE RAINA LJS, LLC DISCREPANCY IN THE LOCATION OF THE LINES OF POSSESSION FROM THE SURVEYED LINES. INST 2022010251 - SURVEY LINE ASPHALT THERE MAY BE DIFFERENCES IN RECORD DIMENSIONS VERSUS MEASURED DIMENSIONS ALONG THE BOUNDARY LINES JOB 5018 **ASPHALT** SHOWN HEREON. LIKEWISE, THERE MAY BE FOUND SURVEY MARKERS NEAR, BUT NOT PRECISELY AT, SOME BOUNDARY CORNERS. IN CASES WHERE THE MAGNITUDE OF THESE DIFFERENCES IS LESS THAN THE RELATIVE POSITIONAL THE DIFFERENCES MAY BE CONSIDERED INSIGNIFICANT AND ARE SHOWN ONLY FOR PROPOSES OF MATHEMATICAL CLOSURE. SUCH DIFFERENCES GREATER THAN THE RELATIVE POSITIONAL ACCURACY AND THE UNCERTAINTY IN REFERENCE MONUMENTATION SHOULD BE CONSIDERED WORTHY OF NOTICE AND ARE THEREFORE DISCUSSED BELOW. FRB/BTAPP -1) AVAILABILITY AND CONDITION OF REFERENCE MONUMENTS - FRB BE∕NT IN TREE MONUMENTS USED IN PERFORMANCE OF THIS SURVEY ARE LABELED HEREON. UP TO 3.2 FEET OF UNCERTAINTY. 2) CLARITY AND/OR AMBIGUITY OF THE RECORD DESCRIPTION(S) N89°44'41"W 140.00 POSSIBLE 2.9 FOOT DEED GAP WITH WEST ADJOINER. 3) OCCUPATION OR POSSESSION LINES OCCUPATION AND POSSESSION LINES AT THE TIME OF THIS SURVEY ARE SHOWN HEREON. UP TO 1.7 FEET OF PARR REAL ESTATE HOLDINGS, LLC 4) MEASUREMENTS (RELATIVE POSITIONAL ACCURACY) ÚRBAN SURVEY (+/- 0.07 FOOT PLUS 50 PARTS PER MILLÍON) AS DEFINED IN 865 IAC 1-12, EFFECTIVE MAY 4, 2006. ASPHALT ASPHALT THEORY OF LOCATION THE NORTHEAST CORNER OF SECTION 1, T8N, R2W CORNER WAS OBLITERATED BY CONSTRUCTION AND WAS ESTABLISHED THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SECTION 1,T8N, R2W WAS NOT FOUND AND WAS CALCULATED FROM PREVIOUS SURVEYS **ASPHALT** THE NORTHEAST CORNER AND NORTHWEST CORNER OF THE SUBJECT PROPERTY WAS ESTABLISHED AT RECORD DISTANCE FROM THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SECTION 1. BLEDSOE TAPP CAPPED REBARS WERE FOUND AND HELD FOR THE WEST LINE OF THE SUBJECT PROPERTY THE REMAINING CORNER WERE SET AT RECORD DISTANCE AND PARALLEL TO THE SECTION LINE AND THE WEST LINE. THE BLEDSOE TAPP SURVEY WAS NEVER RECORDED AND MONUMENTS WHERE NOT KNOWN OR FOUND DURING THE SURVEY OF JOB#5018. GIVEN THE NEW EVIDENCE THE EAST LINE WAS FOUND TO DISAGREE WITH THE WEST LINE OF JOB#5018, CREATING A GAP OF 3.22 FEET. **GENERAL NOTES** 1) UNDERGROUND UTILITIES WERE LOCATED FROM ABOVE GROUND OBSERVATIONS ONLY AND SHOULD NOT BE CONSIDERED COMPLETE. 2) THE SUBJECT PROPERTY CONTAINS 0 MARKED PARKING SPACES AND 0 HANDICAPPED SPACES. 3) ALL MONUMENTS FOUND IN PERFORMANCE OF THIS SURVEY WERE FOUND FLUSH WITH THE EXISTING GROUND UNLESS OTHERWISE NOTED, AND THE AGE AND ORIGIN OF SAID FOUND MONUMENTS ARE UNKNOWN UNLESS **SURVEYORS CERTIFICATE** OTHERWISE NOTED. 4) ALL MONUMENTS SET IN PERFORMANCE OF THIS SURVEY ARE 24-INCH x 5/8" REBAR WITH "SDG INC FIRM 0101" YELLOW CAP OR MAG NAILS SET FLUSH WITH THE EXISTING GROUND UNLESS OTHERWISE NOTED. 5) ALL DIMENSIONS SHOWN HEREON ARE IN FEET AND DECIMALS THEREOF UNLESS OTHERWISE LABELED. **LEGEND** 6) REFERENCE IS MADE TO THE FOLLOWING SURVEYS OR PLATS. THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE R/W MONUMENT 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED SMITH BREHOB AND ASSOCIATES, JOB 5018.B, INST 2014012802. BY ALTA AND NSPS, AND INCLUDES ITEMS 1-5, 7(a)(b1)(c), 8, 9, 11 AND 13 OF TABLE A THEREOF. THE FIELD WORK WAS (7) PARKING COUNT RR SPIKE Y YARD INLET BLEDSOE TAPP & RIGGERT, JOB 5271, UNRECORDED, DATED SEPTEMBER 20, 2005 COMPLETED ON OCTOBER 7, 20253. (12) SCHEDULE 'B' ITEM WATER VALVE STONE SMITH DESIGN GROUP, JOB 6781, OCTOBER 2023 THIS SURVEY WAS PERFORMED UNDER THE DIRECTION OF THE UNDERSIGNED, AND TO THE BEST OF THIS SURVEYOR'S BLEDSOE RIGGERT COOPER JAMES, INST 2025009091 REBAR POST INDICATOR VALVE KNOWLEDGE AND BELIEF WAS EXECUTED ACCORDING TO SURVEY REQUIREMENTS IN 865 IAC 1.12 FOR THE STATE OF INDIANA. F FIRE DEPARTMENT CONECTION O IRON PIPE —— OHW —— OVERHEAD WIRES MM WATER MASTER METER SANITARY SEWER ____s__ WATER METER UNDERGROUND GAS LINE Ø UTILITY POLE -∰- LIGHT POLE UNDERGROUND ELECTRIC LINE FIRE HYDRANT (AC) AIR CONDITIONER UNDERGROUND COMMUNICATION LINE — C — C — C ← GUY WIRE E ELECTRIC METER GAS METER WATER LINE E ELECTRIC MANHOLE _____ ST ____ M GAS VALVE STORM SEWER _X__X__X__ E ELECTRIC VAULT 의 FIBER OPTIC VAULT FENCE I AFFIRM, UNDER THE PENALTIES FOR PERJURY, THAT I HAVE TAKEN REASONABLE CARE TO REDACT EACH SOCIAL SECURITY (B) CONCRETE BOLLARD E ELECTRIC HANDHOLE NUMBER IN THIS DOCUMENT, UNLESS REQUIRED BY LAW. (SCOTT P. PARDUE) BTAPP BLEDSOE TAPP TR ELECTRIC TRANSFORMER TELEPHONE RISER PLATTED CONC. CONCRETE LS LANDSCAPING (S) SANITARY MANHOLE FO FIBER OPTIC RISER FRB FOUND REBAR SET REBAR © CLEAN OUT C COMMUNICATION MANHOLE FOUND IRON PIPE

FOUND RAILROAD SPIKE

BASIS OF BEARING

INDIANA STATE PLANE

WEST ZONE

VERTICAL DATUM

NAVD 88

BUILDING CORNER

P.D.O. POSSIBLE DEED OVERLAP

RWM RIGHT OF WAY MONUMENT

B.S.L. BUILDING SETBACK LINE

P.D.G. POSSIBLE DEED GAP

SMAG SET MAG NAIL

B.G. BELOW GRADE

A.G. ABOVE GRADE

FND FOUND

- SIGN

(FP) FLAG POLE

(GT) GREASE TRAP

HANDICAPPED PARKING

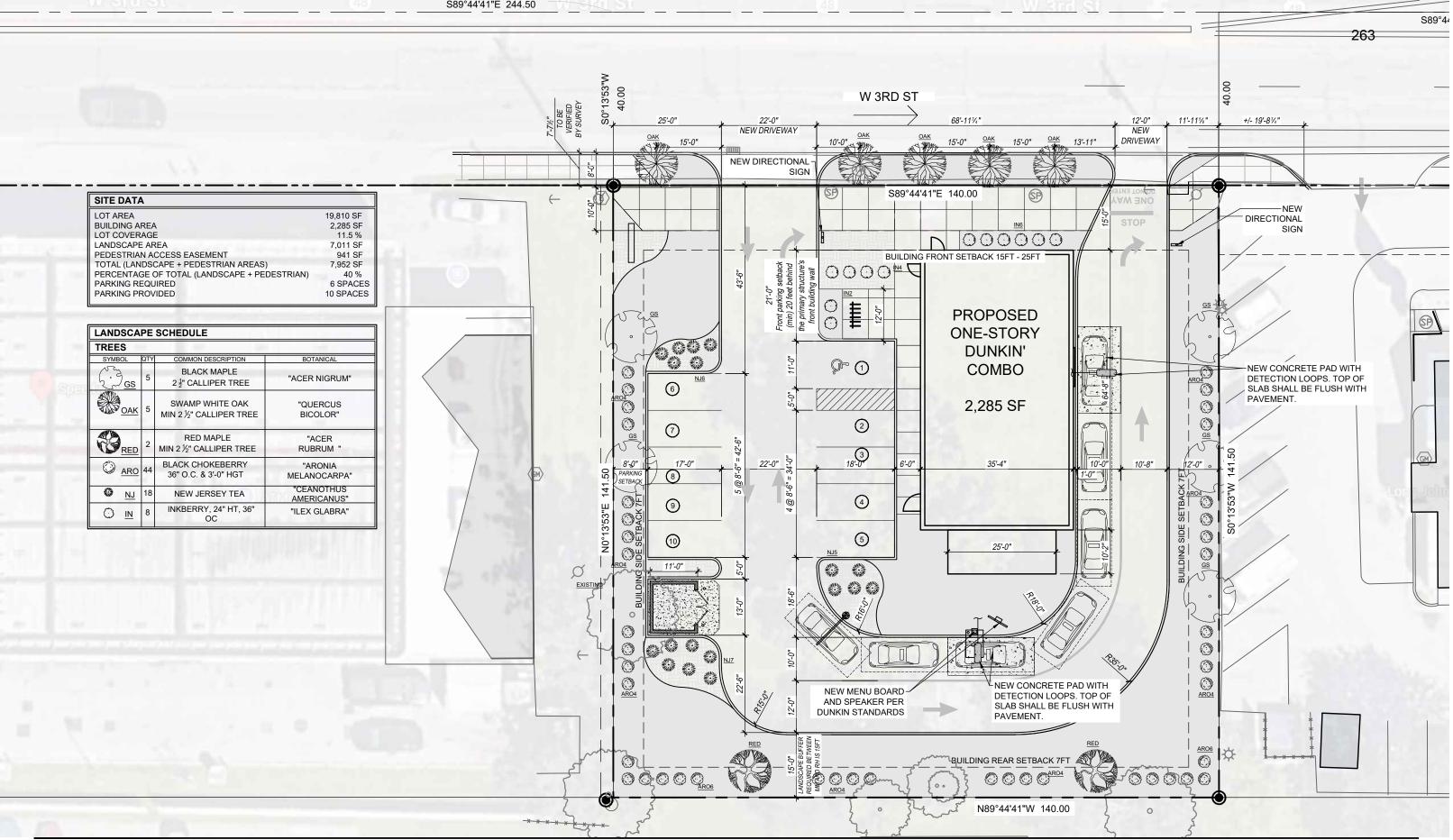
D STORM MANHOLE

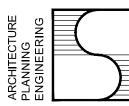
CURB INLET

INLET ROUND

INLET SQUARE

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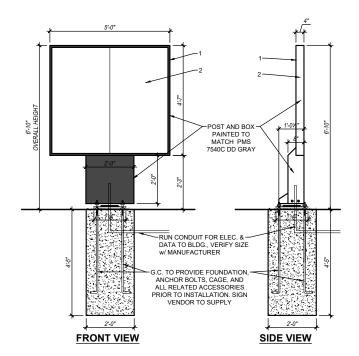




NICK SCARLATIS & ASSOCIATES, LTD.

5405 West 127th Street Crestwood, Illinois 60418 tel 708.653.5200 fax 708.653.5202 email: nick@ scarlatis.com PRELIMINARY SITE PLAN #7
SCALE: 1" = 20'-0"

DUNKIN' NEW CONSTRUCTION



MULTIPLE PANEL DIGITAL MENU BOARDS

NOTES:

1. MENUBOARD IS POWDER COATED TO MATCH PMS 7540C (CABINET, BASE CLADDING, DOOR FRAMES & EXTENDER FRAMES). SAMSUNG OHF SERIES DISPLAY MENUBOARDS,

ADDITIONAL NOTES:

ARTWORK FONT: DUNKIN SANS DISPLAY

NOTE: SEE DUNKIN' BRANDS WEBSITE,

http://extranet.dunkinbrands.com,
FOR COMPLETE INFORMATION AND DETAILS

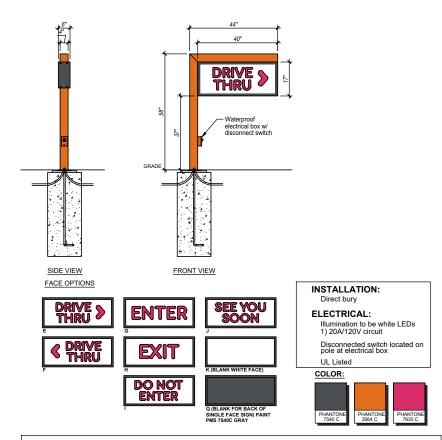
DIGITAL MENU BOARD

BLOOMINGTON CODE VS PROVIDED FOR ORDERING BOARD:

CODE REQUIREMENT (SECTION 20.04.100 - SIGNS (j)(6): (C) STRUCTURES WITH A DRIVE-THROUGH SHALL BE PERMITTED ONE ADDITIONAL SIGN AT THE ORDERING LOCATION OF EACH DRIVE-THROUGH, PROVIDED THAT THE SIGN(S) HAS ONLY ONE FACE, THE MAXIMUM AREA OF THAT SIGN FACE DOES NOT EXCEED TWELVE SQUARE FEET, AND THE HEIGHT DOES NOT EXCEED FIVE

FEET. These signs shall be allowed to have one hundred percent as electronic reader board and shall be exempt from the landscaping requirements of Section 20.04.100(g)(1)(E).

PROVIDED: AREA = 20.2 SQ.FT. HEIGHT (BOARD + BASE) = 6'-10" HEIGHT OF BOARD = 4'-7"



GENERAL SPECIFICATIONS:

6" x 1" x . 063" aluminum extrusion frame; 1" aluminum face retainer; 4" x 4" x .075" sq. tube support; Flat polycarbonate faces

Cabinet Depth:

Faces:
.118 flat clear solar grade polycarbonate w/ 2nd surface decoration:
-PMS 3564C Orange
-PMS 7635C Pink
-3M 220-41 Gray (Face Option P only)
-Background is 403 translucent white back-spray

Pole and Top trim: Painted PMS 3564C Orange

Font: DUNKIN' is custom font All other copy faces is Dunkin' San Medium

Cabinet Color: Painted PMS 7540C Gray; Interior finish to be reflective

Wind Load: Standard Wind load - Wind Speed / 35 PSF

DIRECTIONAL SIGN DETAILS

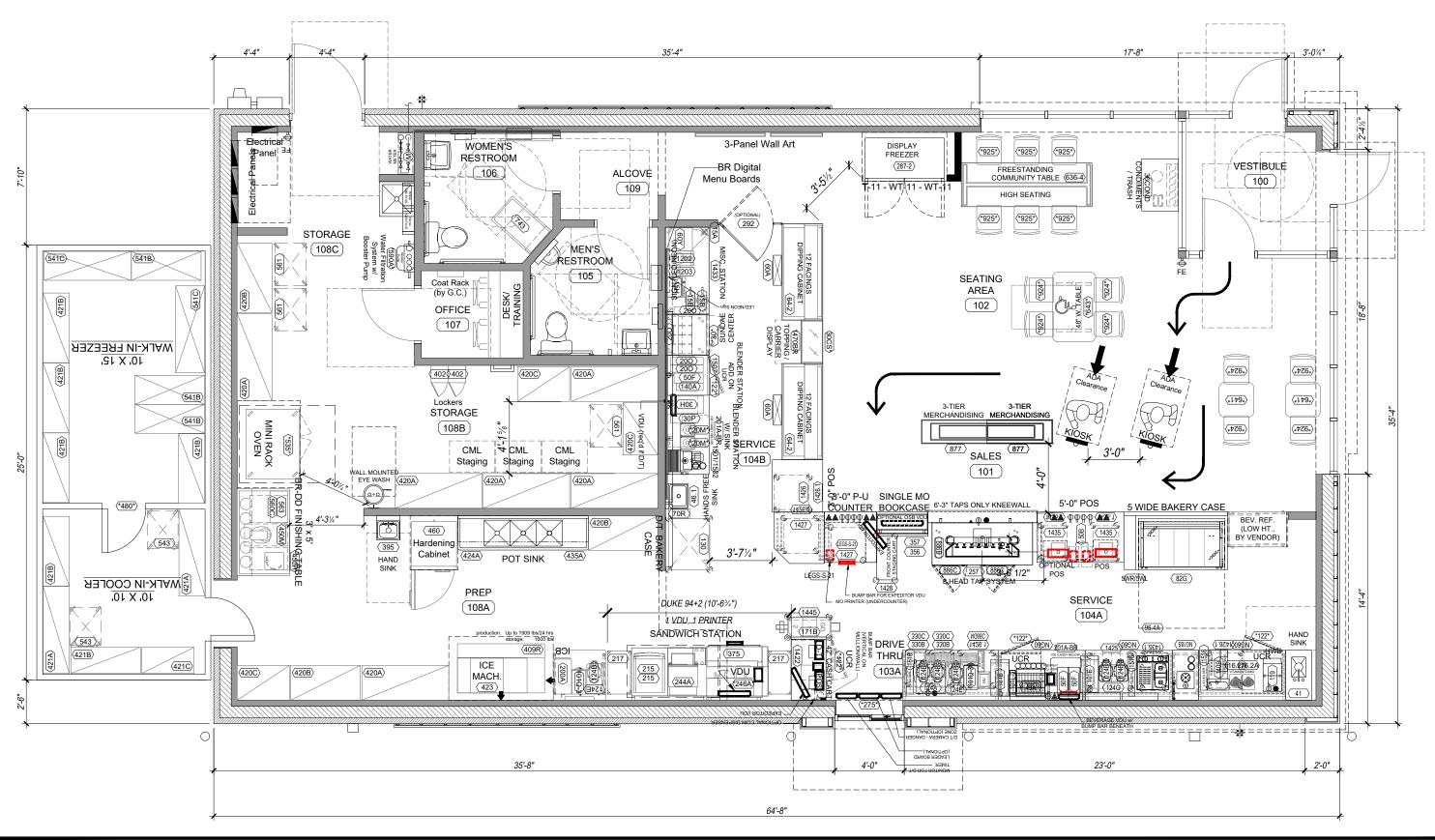
BLOOMINGTON CODE VS PROVIDED FOR DIRECTIONAL SIGN: CODE REQUIREMENT SECTION 20.04.100-SIGNS (j)(6): (B) STRUCTURES WITH A DRIVE-THROUGH SHALL BE PERMITTED TWO ADDITIONAL FREESTANDING SIGNS, WITH A MAXIMUM SIGN FACE AREA THAT DOES NOT EXCEED FOUR SQUARE FEET, AND THE HEIGHT OF THE SIGN DOES NOT EXCEED FOUR FEET.

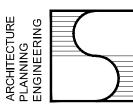
PROVIDED: NUMBER = 2 AREA = 4.7 SQ.FT.HEIGHT = 58"

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5405 West 127th Street Crestwood, Illinois 60418 tel 708.653.5200 fax 708.653.5202 email: nick@ scarlatis.com SITE DETAILS **SCALE: NTS**

DUNKIN' NEW CONSTRUCTION



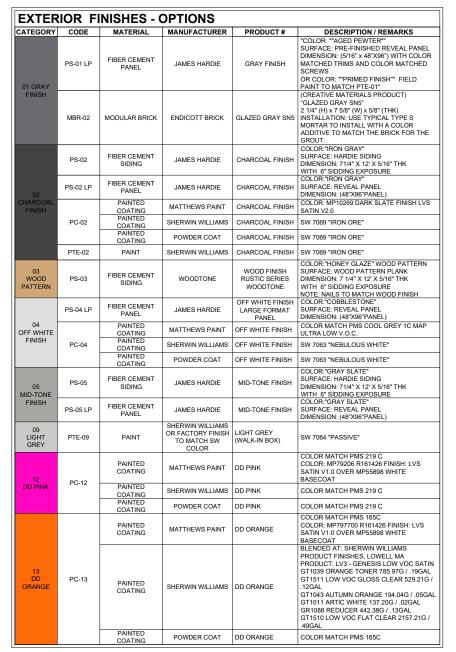


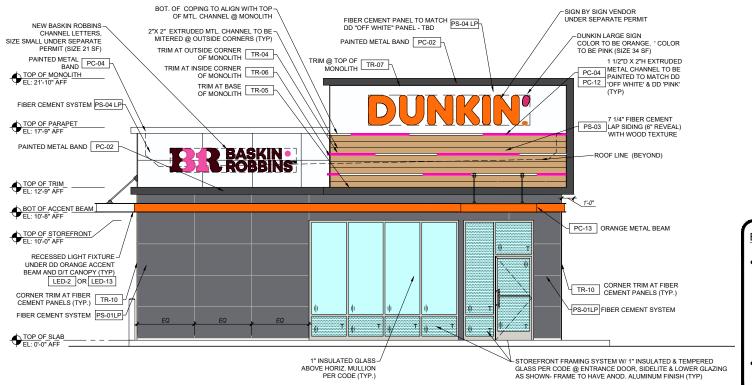
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EQUIPMENT PLAN SCALE: 3/16" = 1'-0"

DUNKIN' NEW CONSTRUCTION

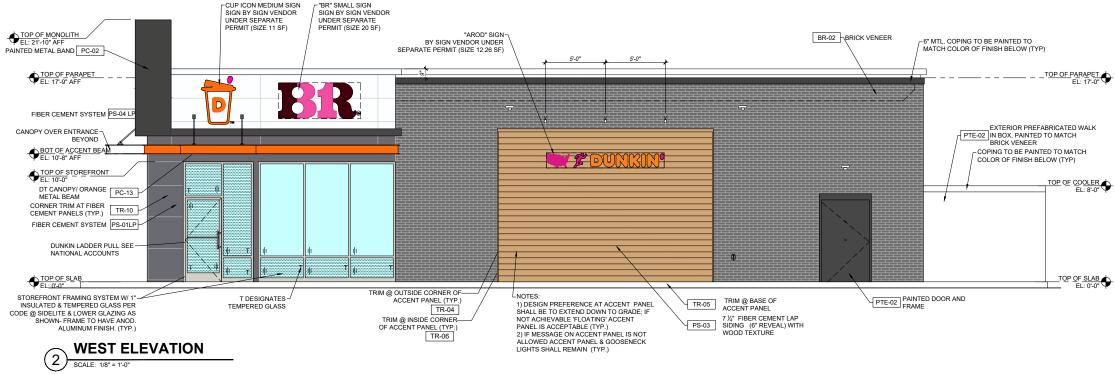




BUILDING SIGNAGE PER CODE:

- CODE REQUIREMENT SECTION 20.04.100-SIGNS (j) (2) (A) (i):
 INDIVIDUAL NONRESIDENTIAL USES: THE CUMULATIVE
 SQUARE FOOTAGE OF ALL WALL SIGNS SHALL NOT EXCEED
 ONE AND ONE-HALF SQUARE FEET PER LINEAL FOOT OF
 PRIMARY FACADE FACING A PUBLIC OR PRIVATE STREET.
 ASSUMING NORTH ELEVATION IS PRIMARY FACADE AREA =
 54.5 SQ.FT.
- PROVIDED: TOTAL SIGNAGE AREA = 98.5 SQ.FT.

NORTH ELEVATION SCALE: 1/8" = 1'-0"



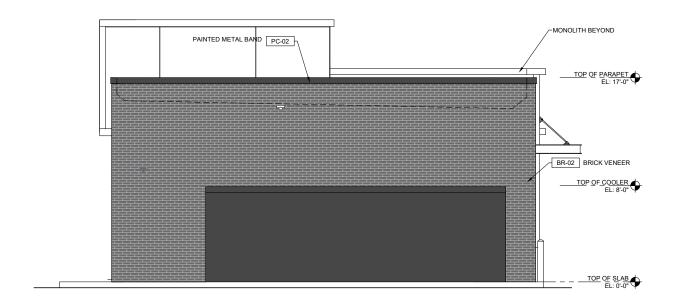


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DUNKIN' NEW CONSTRUCTION

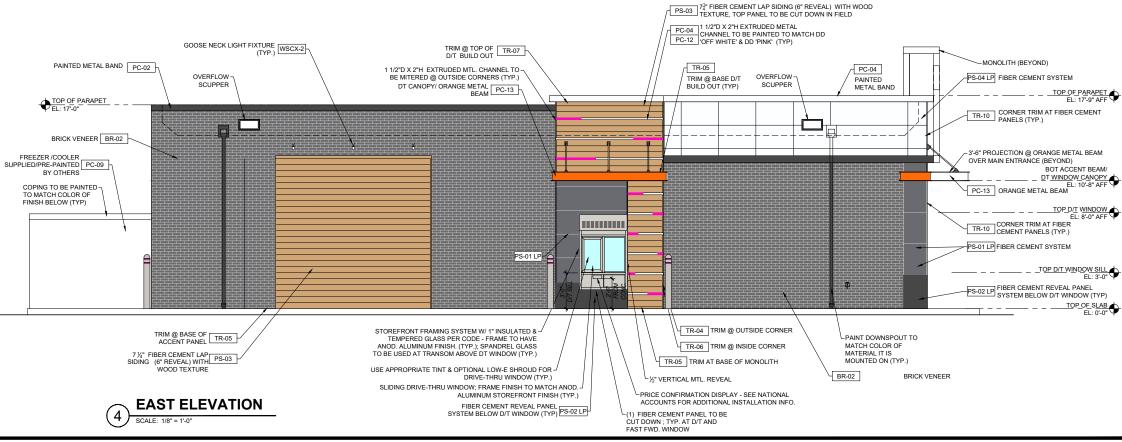
EXTER	IOR F	INISHES - (PHONS		
CATEGORY	CODE	MATERIAL	MANUFACTURER	PRODUCT#	DESCRIPTION / REMARKS
01 GRAY	PS-01 LP	FIBER CEMENT PANEL	JAMES HARDIE	GRAY FINISH	"COLOR: ""AGED PEWTER"" SURFACE: PRE-FINISHED REVEAL PANEL DIMENSION: (5/16" x 48"X96") WITH COLOR MATCHED TRIMS AND COLOR MATCHED SCREWS OR COLOR: ""PRIMED FINISH" FIELD PAINT TO MATCH PTE-01"
FINISH	MBR-02	MODULAR BRICK	ENDICOTT BRICK	GLAZED GRAY SN5	(CREATIVE MATERIALS PRODUCT) "GLAZED GRAY SNS" 2 1/4" (H) x 7 5/8" (W) x 5/8" (THK) INSTALLATION: USE TYPICAL TYPE S MORTAR TO INSTALL WITH A COLOR ADDITIVE TO MATCH THE BRICK FOR THE GROUT.
	PS-02	FIBER CEMENT SIDING	JAMES HARDIE	CHARCOAL FINISH	COLOR: "IRON GRAY" SURFACE: HARDIE SIDING DIMENSION: 71/4" X 12' X 5/16" THK WITH 6" SIDDING EXPOSURE
02	PS-02 LP	FIBER CEMENT PANEL	JAMES HARDIE	CHARCOAL FINISH	COLOR:"IRON GRAY" SURFACE: REVEAL PANEL DIMENSION: (48"X96"PANEL)
CHARCOAL FINISH		PAINTED COATING	MATTHEWS PAINT	CHARCOAL FINISH	COLOR: MP10269 DARK SLATE FINISH LVS SATIN V2.0
	PC-02	PAINTED COATING	SHERWIN WILLIAMS	CHARCOAL FINISH	SW 7069 "IRON ORE"
		PAINTED COATING	POWDER COAT	CHARCOAL FINISH	SW 7069 "IRON ORE"
	PTE-02	PAINT	SHERWIN WILLIAMS	CHARCOAL FINISH	SW 7069 "IRON ORE"
03 WOOD PATTERN	PS-03	FIBER CEMENT SIDING	WOODTONE	WOOD FINISH RUSTIC SERIES WOODTONE	COLOR:"HONEY GLAZE" WOOD PATTERN SURFACE: WOOD PATTERN PLANK DIMENSION: 7 1/4" X 12' X 5/16" THK WITH 6" SIDDING EXPOSURE NOTE: NAILS TO MATCH WOOD FINISH
	PS-04 LP	FIBER CEMENT PANEL	JAMES HARDIE	OFF WHITE FINISH LARGE FORMAT PANEL	COLOR:"COBBLESTONE" SURFACE: REVEAL PANEL DIMENSION: (48"X96"PANEL)
04 OFF WHITE		PAINTED COATING	MATTHEWS PAINT	OFF WHITE FINISH	COLOR MATCH PMS COOL GREY 1C MAP ULTRA LOW V.O.C.
FINISH	PC-04	PAINTED COATING	SHERWIN WILLIAMS	OFF WHITE FINISH	SW 7063 "NEBULOUS WHITE"
		PAINTED COATING	POWDER COAT	OFF WHITE FINISH	SW 7063 "NEBULOUS WHITE"
05 MID-TONE	PS-05	FIBER CEMENT SIDING	JAMES HARDIE	MID-TONE FINISH	COLOR: "GRAY SLATE" SURFACE: HARDIE SIDING DIMENSION: 71/4" X 12' X 5/16" THK WITH 6" SIDDING EXPOSURE COLOR: "GRAY SLATE"
FINISH	PS-05 LP	FIBER CEMENT PANEL	JAMES HARDIE	MID-TONE FINISH	SURFACE: REVEAL PANEL DIMENSION: (48"X96"PANEL)
09 LIGHT GREY	PTE-09	PAINT	SHERWIN WILLIAMS OR FACTORY FINISH TO MATCH SW COLOR	LIGHT GREY (WALK-IN BOX)	SW 7064 "PASSIVE"
12 DD PINK	PC-12	PAINTED COATING	MATTHEWS PAINT	DD PINK	COLOR MATCH PMS 219 C COLOR: MP79206 R161426 FINISH: LVS SATIN V1.0 OVER MP55898 WHITE BASECOAT
	PC-12	PAINTED COATING	SHERWIN WILLIAMS	DD PINK	COLOR MATCH PMS 219 C
		PAINTED COATING	POWDER COAT	DD PINK	COLOR MATCH PMS 219 C
13 DD ORANGE		PAINTED COATING	MATTHEWS PAINT	DD ORANGE	COLOR MATCH PMS 165C COLOR: MP797700 R161426 FINISH: LVS SATIN V1.0 OVER MP55898 WHITE BASECOAT
	PC-13	PAINTED COATING	SHERWIN WILLIAMS	DD ORANGE	BLENDED AT: SHERWIN WILLIAMS PRODUCT FINISHES, LOWELL MA PRODUCT FINISHES, LOWELL MA PRODUCT FINISHES, LOWELL MA GTIO39 ORANGE TONER 785.976 / 19GAL GT1511 LOW VOC GLOSS CLEAR 529.21G / 12GAL GT1043 AUTUMN ORANGE 194.04G / .05GAL GT1011 ARTIC WHITE 137.20G / .02GAL GR1088 REDUCER 442.38G / .13GAL GT1510 LOW VOC FLAT CLEAR 2157.21G / 49GAL
		PAINTED COATING	POWDER COAT	DD ORANGE	COLOR MATCH PMS 165C

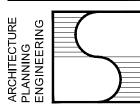


3 SCALE: 1/8" = 1'-0"

BUILDING SIGNAGE PER CODE:

- CODE REQUIREMENT SECTION 20.04.100-SIGNS (j) (2) (A) (i):
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DUNKIN' NEW CONSTRUCTION