

EROSION CONTROL NOTES

- INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONDUCTED BY CONTRACTOR ONCE PER WEEK PRIOR TO ANY FORECAST PRECIPITATION EVENTS AND AFTER EVERY PRECIPITATION EVENT OF 1/2-INCH OR GREATER. CONTRACTOR SHALL PREPARE REPORTS USING STANDARD DNR INSPECTION FORM FOR EACH INSPECTION AND PROVIDE COPIES OF REPORTS TO OWNER AND ENGINEER.
- CONTRACTOR SHALL REPAIR DEFICIENT EROSION AND SEDIMENT CONTROL MEASURES WITHIN 24-HOURS AFTER INSPECTION. ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES NOT SHOWN ON DRAWINGS MAY BE NECESSARY AS DIRECTED BY OWNER AND/OR ENGINEER.
- ADDITIONAL EROSION AND/OR SEDIMENT CONTROL MEASURES MAY BE NECESSARY AS A RESULT OF CONTRACTORS METHODS.
- CONTRACTOR SHALL NOTIFY AND OBTAIN WRITTEN ACCEPTANCE FROM ENGINEER OF PROPOSED CHANGES TO THE EROSION CONTROL PLAN AND/OR SEQUENCE PRIOR TO IMPLEMENTING THE CHANGE. MAY REQUIRE DNR APPROVAL
- ENGINEER IS UNDER NO OBLIGATION TO ALTER EROSION CONTROL PLAN AND/OR SEQUENCE.
- CONTRACTOR SHALL SWEEP ADJACENT ROADWAYS DAILY TO REMOVE TRACKED SEDIMENT AND DEBRIS.
- CONSTRUCT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH LATEST WISCONSIN DNR TECHNICAL STANDARDS AND EROSION CONTROL SPECIFICATIONS SECTION 01 57 13 OF THE PROJECT MANUAL.
- CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE CONSTRUCTION SEQUENCE, AND FOR MAINTAINING AND REPAIRING EROSION AND SEDIMENT CONTROL DEVICES.
- EXCESS MATERIAL THAT IS HAULED OFF SITE SHALL BE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR SHALL NOTIFY OWNER OF ALL FILL AND BORROW SITES. CONTRACTOR IS SOLELY RESPONSIBLE FOR OBTAINING AND COMPLYING WITH NECESSARY EROSION CONTROL PERMITS AND FOR MAINTAINING PROPER EROSION CONTROL MEASURES ON THOSE SITES. DISPOSAL LOCATION(S) WILL NEED DNR APPROVAL PRIOR TO COMMENCING WORK.
- EXCESS FILL/BORROW MATERIAL OR SOILS KEPT ON SITE SHOULD BE STOCKED IN UPLAND AREAS AN ADEQUATE DISTANCE AWAY FROM WETLANDS AND THE WATERWAYS. PILES OF STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION AND SHALL NOT CREATE NUISANCE DUST EMISSIONS.
- CONTRACTOR SHALL HAVE WATER TRUCK READILY AVAILABLE ON-SITE TO PREVENT DUST EROSION ON THE SITE.

TRENCH DEWATERING NOTES:

- IF TRENCH DEWATERING IS NECESSARY, CONTRACTOR SHALL PROVIDE PROPER DEWATERING SEDIMENT CONTROL DEVICE. DISCHARGE OF SEDIMENT LADEN TRENCH WATER TO DITCHES, STORM SEWER, OR SURFACE WATER IS PROHIBITED
- IF TRENCH DEWATERING IS NECESSARY, CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO OWNER, ENGINEER, AND DNR PRIOR TO CONTRUCTION FOLLOWING REQUIREMENTS WITHIN SECTION 01 57 13 AND 01 57 23 OF THE PROJECT MANUAL AND DNR TECHNICAL STANDARD 1061.
- CONTRACTOR WILL BE REQUIRED TO OBTAIN AND FOLLOW REQUIREMENTS OF DNR WATER SUPPLY SECTION FOR WELLS AND DEWATERING IN EXCESS OF 70 GPM.
- CONTRACTOR SHALL UTILIZE SILT BAGS OR BOXES OF APPROPRIATE SIZE AND PROVIDE ADDITIONAL MEASURES AS NECESSARY TO DISCHARGE CLEAN WATER BASED UPON CONDITIONS AND CONTRACTOR'S OPERATIONS. MEASURES EMPLOYED FOR DEWATERING SHALL NOT BE PLACE IN LOCATIONS THAT BLOCK SITE DRAINAGE, OR VEHICLE/PEDESTRIAN TRAFFIC. DEWATERING DISCHARGE SHALL BE DIRECTED ONTO GRASS AREAS WHERE POSSIBLE AND NOT IMPACT ADJACENT STRUCTURES, PRIVATE PROPERTY, WETLANDS, WATERWAYS, OR BE DIRECTED TO SANITARY SEWERS.
- THE DEWATERING PLAN AND NOTES SHALL SERVE AS A GUIDELINE FOR CONTRACTOR'S DEWATERING OPERATIONS.
- IF MODIFICATIONS TO THE DEWATERING PLAN ARE NEEDED, CONTRACTOR SHALL PREPARE A WRITTEN REQUEST THAT DETAILS NECESSARY MODIFICATIONS AND OBTAIN APPROVAL FROM THE OWNER AND DNR PRIOR TO IMPLEMENTING THE MODIFICATION IN THE FIELD.
- THE USE OF SILT BAGS OR BOXES SHALL BE CONSIDERED THE MINIMUM MEASURE NECESSARY, OTHER MEASURES NEEDED TO MAINTAIN CLEAR DISCHARGE SHALL BE IMPLEMENTED AS NECESSARY AND IMPLEMENTED IMMEDIATELY UPON OWNER APPROVAL. DEWATERING ACTIVITIES MAY NEED TO BE REDUCED OR ELIMINATED UNTIL APPROVALS HAVE BEEN OBTAINED. DEWATERING EFFLUENT SHALL REMAIN CLEAR AT ALL TIMES.
- IT IS ANTICIPATED THAT THE LINEAR CONTRUCTION ACTIVITIES WILL CREATE DISTURBED SOIL WITHIN EXISTING DRAINAGE SWALES AND DITCHES. CONTRACTOR SHALL CONTINUOUSLY MONITOR DEWATERING EFFLUENT QUALITY DOWNSTREAM OF THE SEDIMENTATION BASIN TO ENSURE THAT THE FLOW OF WATER IS NOT PRODUCING EROSION. CONTRACTOR SHALL WORK TO ELIMINATE EROSION FORCES OF DEWATERING EFFLUENT TO ENSURE CLEAR DISCHARGE.
- DEWATERING OPERATIONS, IF NEEDED, SHALL PROGRESS WITH CONSTRUCTION OPERATIONS. IT IS ANTICIPATED THAT MULTIPLE DEWATERING MEASURES WILL BE SPREAD THROUGHOUT THE PROJECT IF DEWATERING IS NEEDED.
- CONTRACTOR SHALL MONITOR THE PERFORMANCE AND EFFECTIVENESS OF THE DEWATERING SEDIMENTATION DEVICE. PERIODIC REPLACEMENT OF SILT BAGS WILL BE NECESSARY. SEDIMENT WITHIN SILT BAGS MAY BE SPREAD-OUT WITHIN SPOIL BACKFILL TRENCHES OR SHALL OTHERWISE BE DISPOSED OF PROPERLY OFFSITE. USE OF DEWATERED SEDIMENT WITHIN SPOIL BACKFILL TRENCHES MUST NOT COMPROMISE TRENCH COMPACTION. PERIODIC REPLACEMENT OF BALES AND FILTER FABRIC MAY ALSO BE REQUIRED.
- USE OF OTHER DEWATERING SEDIMENTATION DEVICES SUCH AS STONE FILLED TRENCH BOXES OR STONE TRAPS MAY BE ACCEPTABLE, HOWEVER, OWNER APPROVAL IS REQUIRED PRIOR TO USE. USE OF OTHER DEWATERING SEDIMENTATION DEVICES SHALL COMPLY WITH THE REQUIREMENTS SET FORTH ABOVE.

TREE REMOVAL AND CLEARING

- TREES AND UNDERBRUSH IN WOODED AREAS LESS THAN 4" IN DIAMETER NOT SHOWN ON DRAWINGS.
- LANDSCAPE PLANTINGS LESS THAN 1" IN DIAMETER NOT SHOWN ON DRAWINGS.
- TREE REMOVAL, CLEARING AND GRUBBING SHOULD INCLUDE REMOVAL OF TREES AND UNDERBRUSH LESS THAN 4" LANDSCAPE PLANTINGS LESS THAN 1" IN DIAMETER, IN CONFLICT WITH CULVERT REPLACEMENT OR PROPOSED GRADING.

CONSTRUCTION SEQUENCE

- INSTALL TRAFFIC CONTROL AND DETOUR ROUTES AS NECESSARY PRIOR TO COMMENCING WORK IN VARIOUS STAGES.
- BYPASS WATER AROUND DISTURBED AREAS. PROVIDE DEWATERING AND BYPASSING PROCEDURES TO OWNER AND ENGINEER. NO WORK ON CULVERT, GRADING OR DITCH RESTORATION TO BE PERFORMED DURING HIGH FLOW CONDITIONS.
- INSTALL AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE DRAWINGS OR AS NECESSARY TO COMPLY WITH WDNR STANDARDS.
- STAGE CONSTRUCTION BY LOCATION. FOLLOW MILESTONES IN AGREEMENT. SUBSEQUENT STEPS MAY BE COMPLETED IN ALTERNATE SEQUENCE DEPENDING UPON CONTRACTOR OPERATIONS.
- REMOVE TREES AND BRUSH AS INDICATED ON DRAWINGS AND WITHIN GRADING LIMITS.
- REMOVE EXISTING PAVEMENT AND CULVERTS
- INSTALL NEW BEDDING, CULVERT PIPE, COVER AND BACKFILL.
- GRADE SITE TO PROPOSED ELEVATIONS AND INSTALL RETAINING WALLS.
- PREPARE HIGHLAND DRIVE TO SUBGRADE AND INSTALL CRUSHED AGGREGATE BASE COURSE.
- INSTALL NEW ASPHALT PAVEMENT AND BEAM GUARD.
- RESTORE DISTURBED AREAS PROMPTLY AS WORK PROGRESSES IF FURTHER DISTURBANCE IN THESE AREAS WILL NOT OCCUR. THE INTENT IS TO RESTORE AREAS AS MUCH AS PRACTICABLE AS CONSTRUCTION PROGRESSES.
- COMPLETE ANY REMAINING SITE IMPROVEMENTS.
- INSTALL PAVEMENT MARKINGS.
- COMPLETE FINAL RESTORATION OF ALL AREAS WITH RESTORATION TYPE SHOWN ON DRAWINGS.
- AREAS PLANNED TO BE INACTIVE FOR LONGER THAN 7 DAYS SHALL BE TEMPORARILY STABILIZED FOLLOWING DNR TECHNICAL STANDARD 1059 SEEDING.
- AREAS BROUGHT TO FINAL GRADE SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS.
- REMOVE TRAFFIC CONTROL DEVICES ONCE WORK IS COMPLETE AND ROADWAY IS IN CONDITION FOR SAFE MOTOR VEHICLE OPERATION.
- REMOVE TEMPORARY EROSION CONTROL DEVICES AFTER 80% GROWTH DENSITY HAS OCCURRED IN 100% OF AREA TRIBUTARY TO EROSION CONTROL DEVICE. CONTRACTOR SHALL OBTAIN OWNER AND ENGINEER APPROVAL PRIOR TO REMOVING THE MEASURE(S). RESTORE DISTURBED AREAS AROUND REMOVED DEVICES AND CLEAN SITE.

GENERAL NOTES

- PROVIDE POSITIVE DRAINAGE IN ALL SWALES AND DITCHES.
- MAINTAIN SITE DRAINAGE AT ALL TIMES DURING CONSTRUCTION

Table 1 - Prescriptive Compliance Area Soil Stabilization

Prescriptive Compliance Areas	Bare Soil	Slope & Channel Management	Periods of Inactivity	Final Grade
Soil stockpiles that will exist for more than 7 days	<u>Areas that Do Not Drain to Sediment Basins or Traps</u>	<u>General</u> Design and implement approved soil stabilization practices per DNR technical standards.	<u>Planned Inactivity</u> Stabilize immediately if area will be left inactive for more than 14 days.	<u>Permanent Features</u> Stabilize area immediately after reaching final grade.
Utility trench backfills	Limit the duration of soil exposure to no more than 30 days,	Refer to WISDOT Slope & Channel Matrices for appropriate slope and slope length conditions.	<u>Unplanned Inactivity</u> Stabilize area immediately if period of inactivity reaches 14 days.	<u>Temporary Features</u> Stabilize area immediately after establishment of temporary feature or reaching specified temporary grade.
Temporary ditches/swales that will exist for more than 7 days	<u>Areas that Drain to Sediment Basins or Traps</u>	<u>Slope Steeper than 20%</u>		
Permanent ditches/swales	Limit the duration of soil exposures to no more than 90 days. However, use the duration from the soil loss and sediment discharge calculations for the other areas of the site if less than 90 days.	Provide stable diversion of off-site runoff around the slope.		
Small Areas - Less than 1 acre and less than 1% of site		Provide slope interruption devices in accordance with Manufactured Perimeter Control & Slope Interruption Products technical Standard 1071 or equivalent methods to reduce uninterrupted slope length.		
Discrete Areas - Less than 1 acre				
Storm water practice side slopes				
Slopes Steeper than 20%				

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HIGHLAND DRIVE CULVERT REPLACEMENT

GENERAL NOTES

VILLAGE OF ELM GROVE

WAUKESHA COUNTY, WISCONSIN

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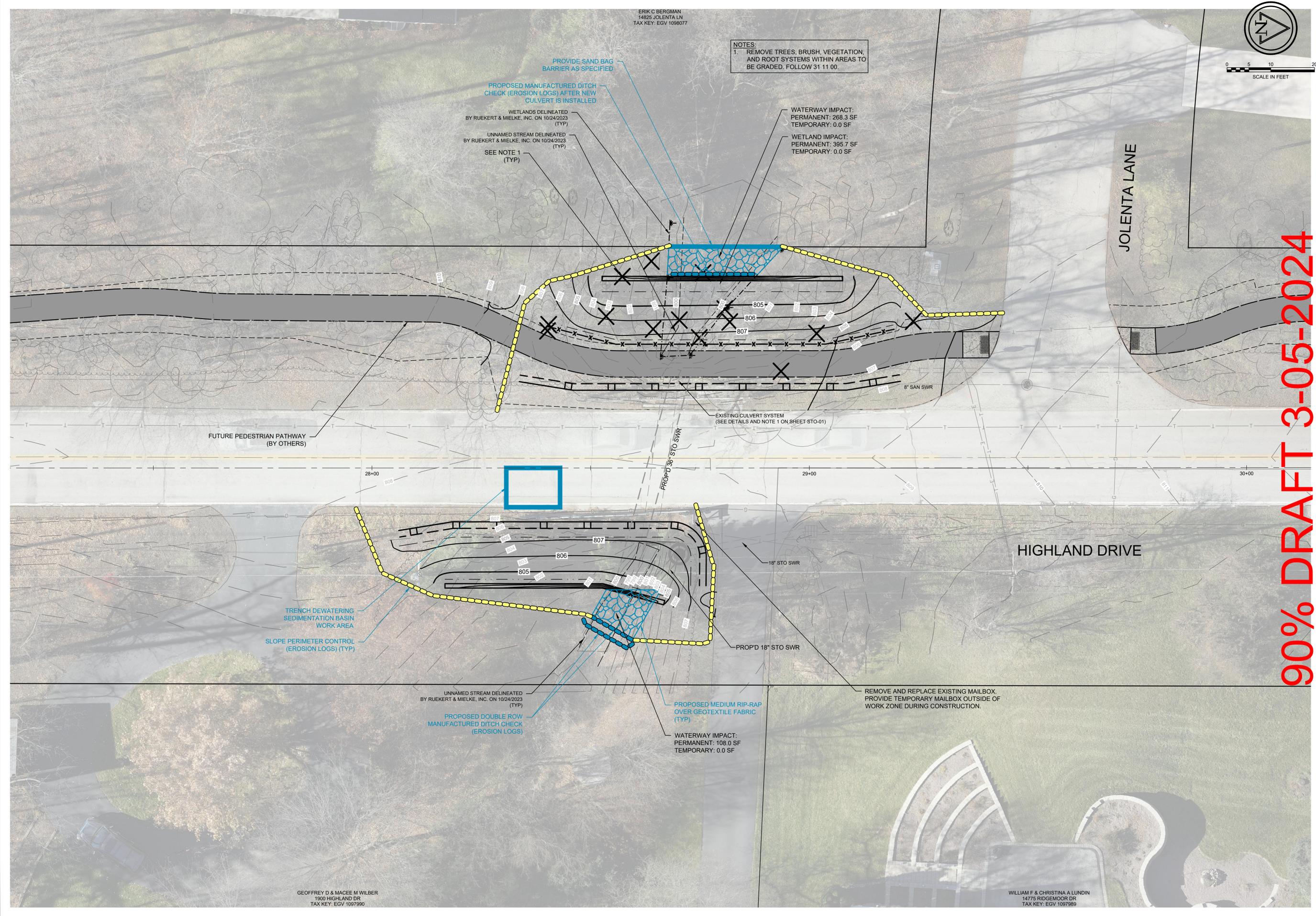
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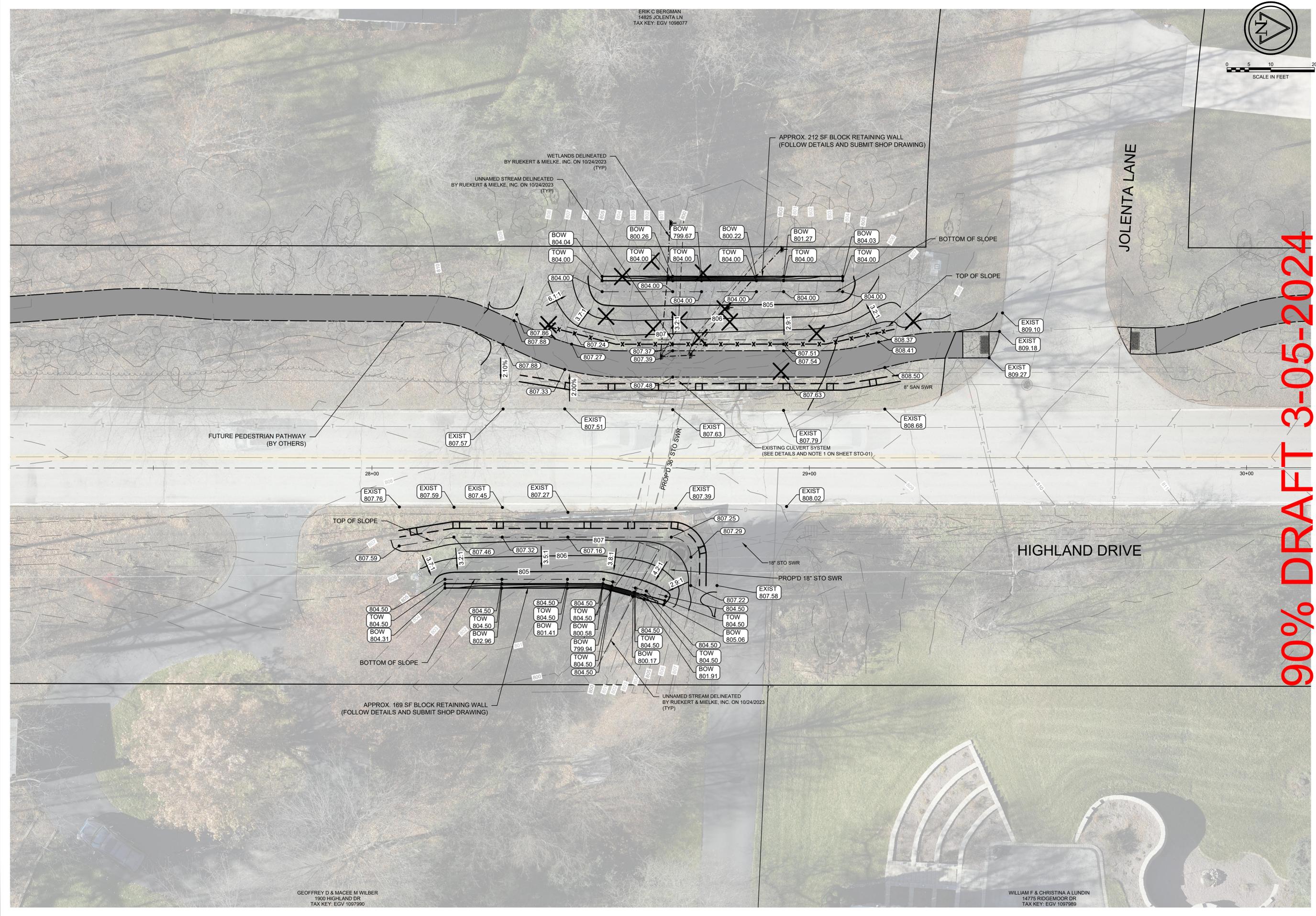
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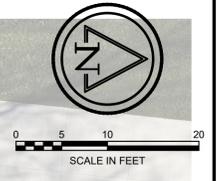
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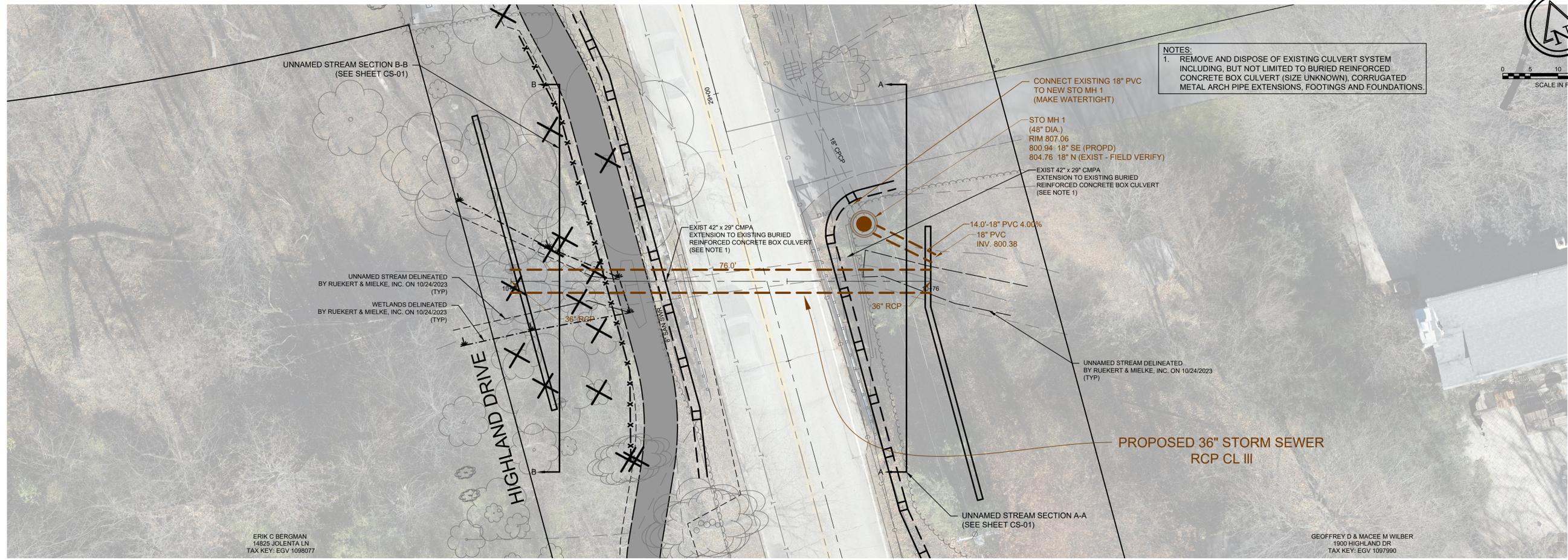
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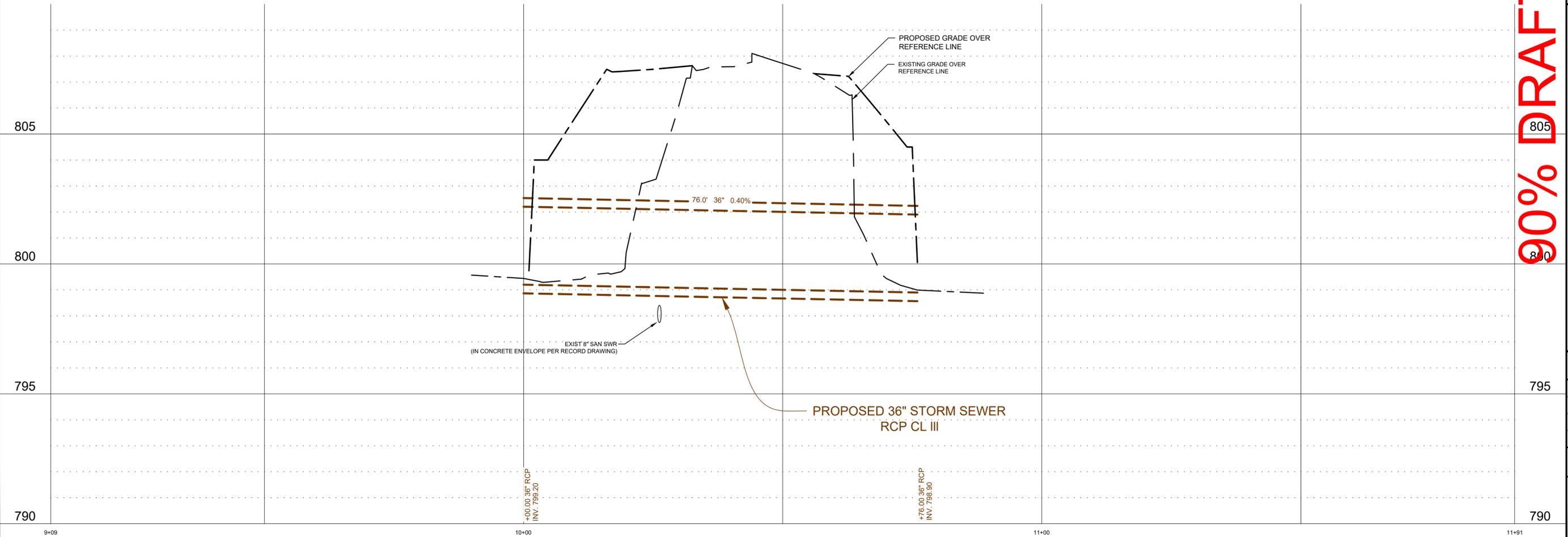
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NOTES:
 1. REMOVE AND DISPOSE OF EXISTING CULVERT SYSTEM INCLUDING, BUT NOT LIMITED TO BURIED REINFORCED CONCRETE BOX CULVERT (SIZE UNKNOWN), CORRUGATED METAL ARCH PIPE EXTENSIONS, FOOTINGS AND FOUNDATIONS.

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HIGHLAND DRIVE CULVERT REPLACEMENT

PROPOSED CULVERT REPLACEMENT PLAN & PROFILE

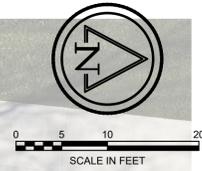
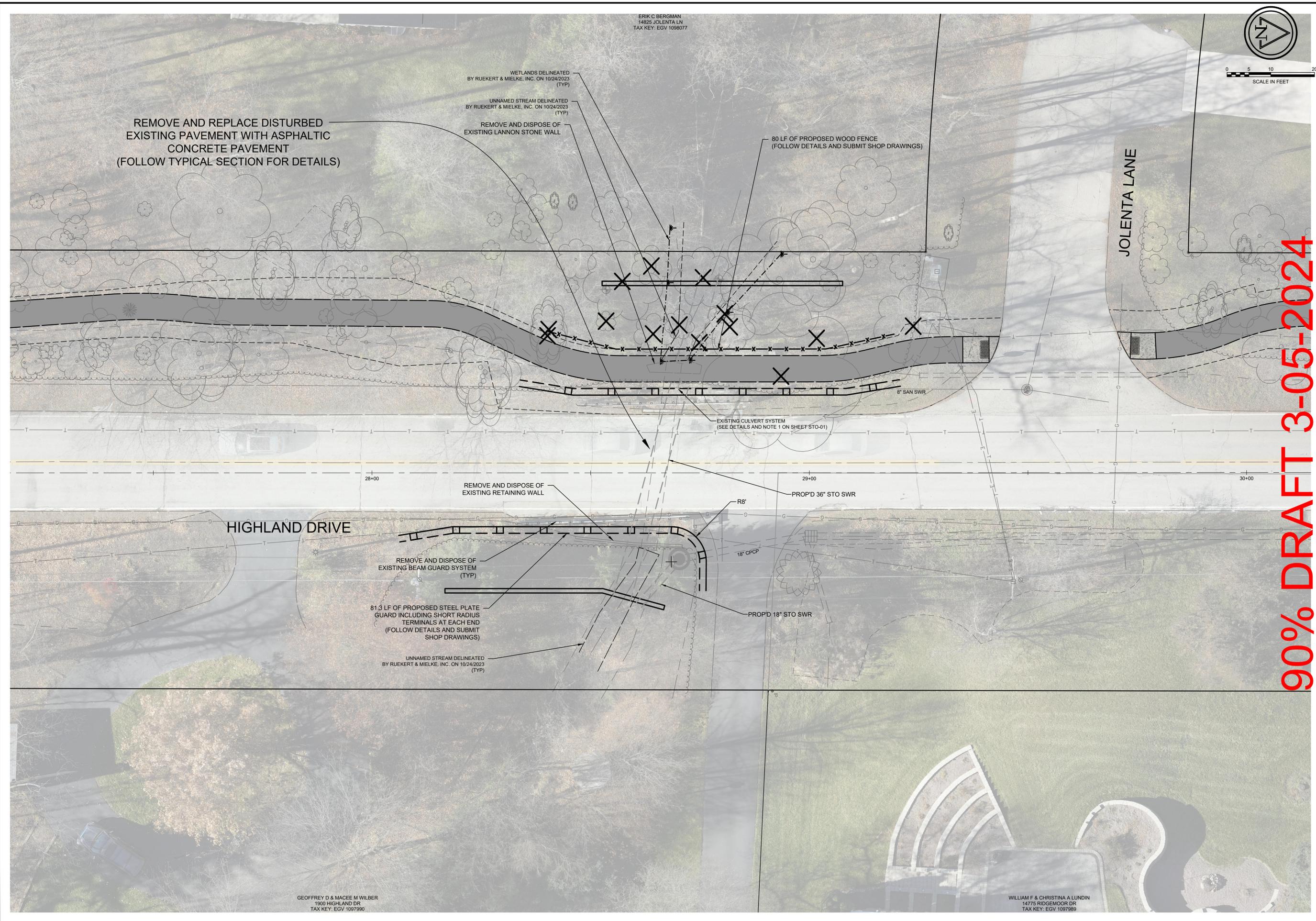
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HIGHLAND DRIVE CULVERT REPLACEMENT

PROPOSED BEAM GUARD AND PAVEMENT REPLACEMENT PLAN

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