APPENDICES

DATCP #4463

Whitewater Lateral Natural Gas Pipeline Project

Walworth County

WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

PUBLISHED NOVEMBER 22, 2022

APPENDIX A: ADDITIONAL FIGURES

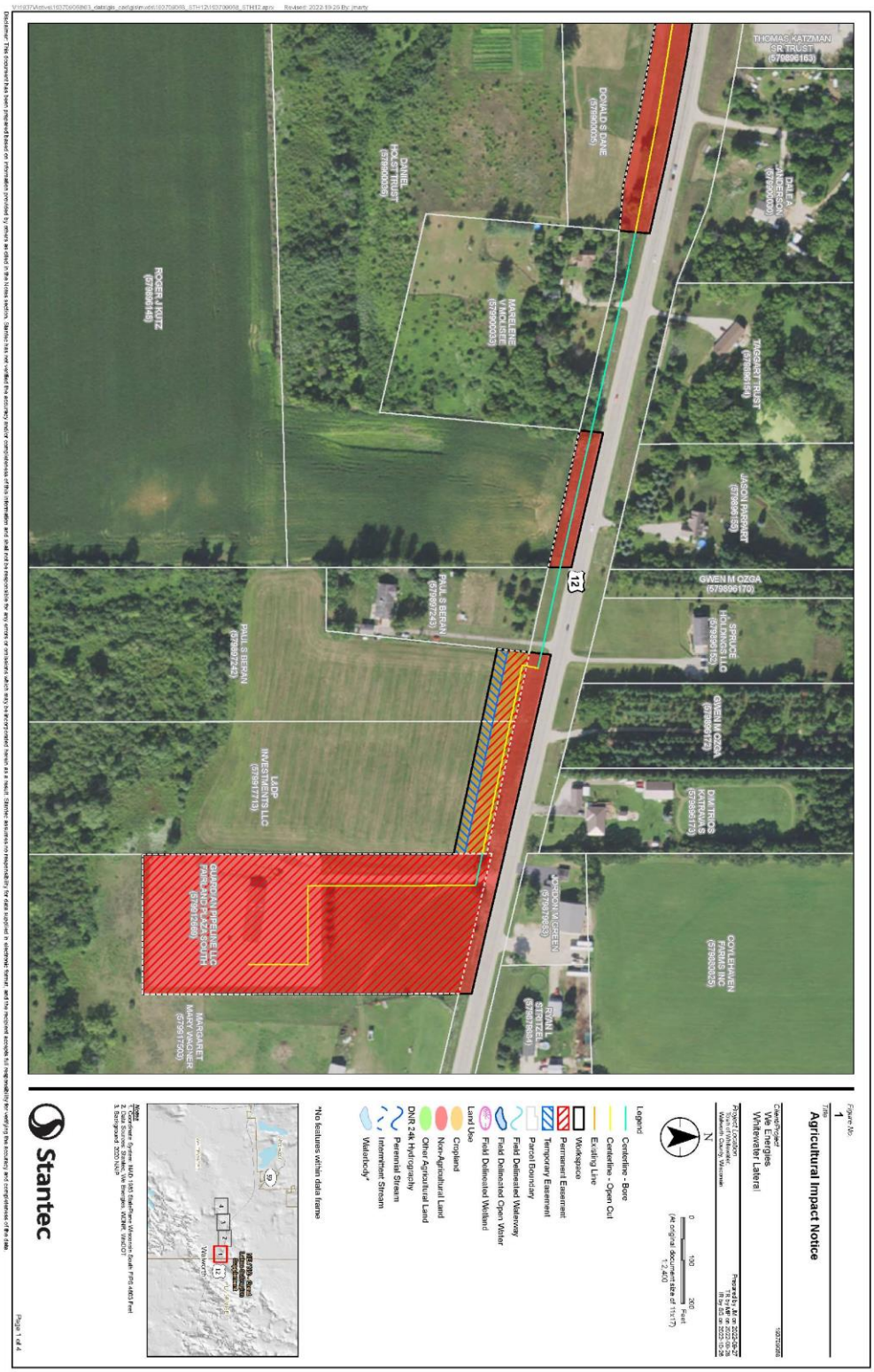


Figure 1a: Whitewater Lateral Pipeline Project route in Walworth County WI, pg 1-4 (DATCP, 2022a).

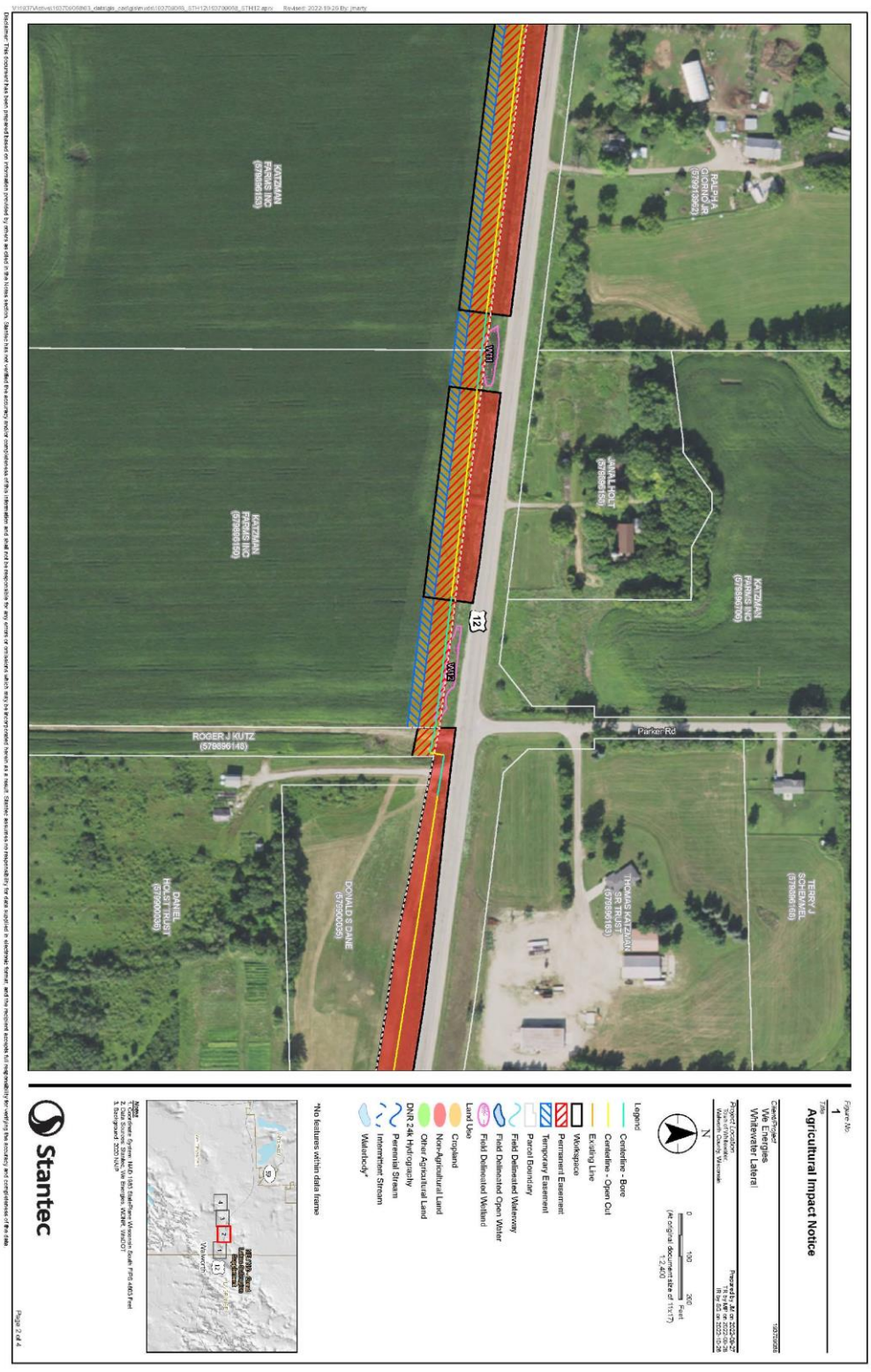


Figure 1b: Whitewater Lateral Pipeline Project route in Walworth County WI, pg 2-4 (DATCP, 2022a).

Figure 1c: Whitewater Lateral Pipeline Project route in Walworth County WI, pg 3-4 (DATCP, 2022a).

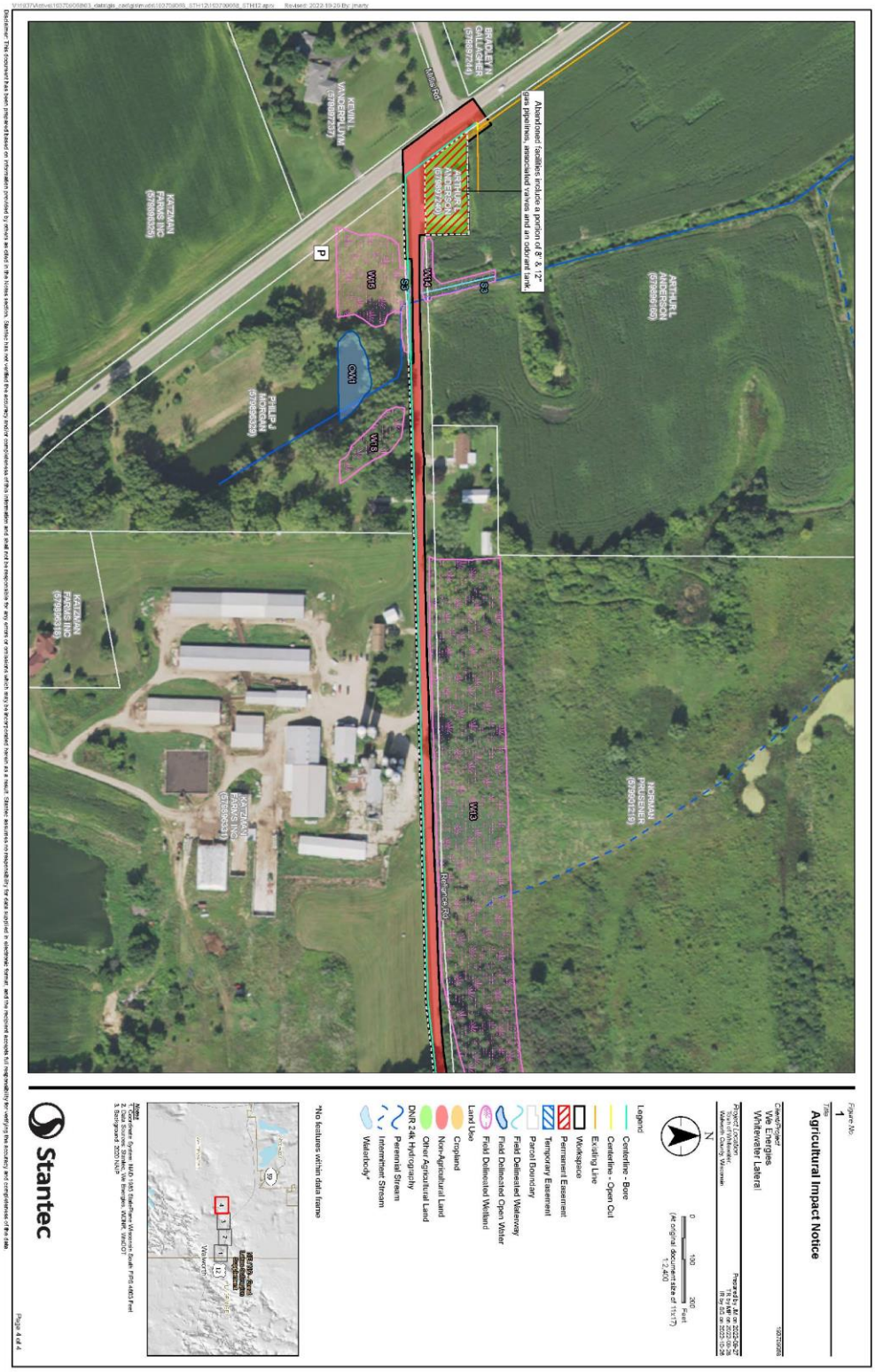


Figure 1d: Whitewater Lateral Pipeline Project route in Walworth County WI, pg 4-4 (DATCP, 2022a).

APPENDIX B: WEPCO WHITEWATER LATERAL PROJECT AMP

WHITEWATER LATERAL PROJECT AGRICULTURAL MITIGATION PLAN

INTRODUCTION

Wisconsin Electric Gas Operations, dba We Energies ("the Company"), proposes to install approximately 2 miles of 12-inch steel 650 psig maximum allowable operating pressure distribution main. The Project is located in the Town of Whitewater, Walworth County, WI. This project will be called the "Whitewater Lateral Project" ("the Project").

The Company has a longstanding commitment to working with landowners who may be affected by construction of various utility projects throughout the State of Wisconsin. The Company has a vested interest in working with landowners within the Project to ensure their satisfaction with utility project construction and post-construction restoration.

The Company continues to be committed to restoring construction areas to pre-construction conditions with all our construction projects. We believe this Agricultural Mitigation Plan (AMP) will help to assure this outcome within agricultural areas in the proposed gas main replacement corridor. The Company has prepared this AMP specifically to prevent or mitigate potential adverse impacts of the project on agricultural productivity, using construction and restoration procedures from other Company projects and modifying them as necessary.

PURPOSE

The purpose of this AMP is to:

- provide a description of effective agricultural construction mitigation and restoration methods to be used on the Project;
- establish personalized communication with agricultural landowners to ensure their unique concerns are addressed;
- provide agricultural landowners and tenants with a hotline for convenient contact access to the Company Representative; and
- describe the job duties of the Company Agricultural Inspector (AI).

SCOPE OF AGRICULTURAL MITIGATION

This AMP applies to those activities occurring on agricultural lands (tilled land row crops). "Agricultural land" as used here is understood to include rotated pastureland (except permanent pasture), all presently cultivated land including cropland, haylands, truck gardens, specialty crops, and land in government agricultural set-aside programs.

"Permanent pasture" as used here includes land devoted exclusively to pasture use, and not suited to tillage or crop rotation, as determined by the lack of any sustained crop history. "Construction area(s)" as used here includes all permanent or temporary workspace areas to be used by the Company for the purpose of constructing and operating the project, as well as lands on which aboveground facilities or other appurtenances related to the project will be located.

AGRICULTURAL INSPECTOR ROLE AND QUALIFICATIONS

The Company will have a project Construction Manager (CM) and an Environmental Manager (EM) for the project. To assist with on-site inspection and monitoring, the Company may also have one or more individuals designated as the project Agricultural Inspector (AI).

WEPCO Whitewater Lateral Pipeline Project Agricultural Mitigation Plan (DATCP, 2022a).

The person(s) designated as the AI will be a qualified individual who will monitor the implementation of the AMP. The AI will have familiarity with agricultural operations and general construction, as well as knowledge of agronomy and soil conservation.

The AI will be thoroughly familiar with the following:

- Agricultural Mitigation Plan; and
- gas lateral construction sequences and processes in agricultural lands.

They also will:

- be familiar with techniques of soil conservation;
- possess good oral and written communication skills; and
- be able to work closely with the agricultural landowners, tenants and applicable agencies.

Contractors will be required to structure their construction activities to be consistent with the AMP.

AGRICULTURAL MITIGATION: PLANNING AND PRE CONSTRUCTION PHASE

The Company will communicate as needed with affected landowners and tenants of agricultural land to keep them informed of overall progress, explain mitigation actions, and to learn of any additional problems noted by landowners. No later than 30 days prior to the start of construction, the Company will provide landowners with a telephone number and address that can be used to contact the Company (also known as the Hotline Number). The phone number will include provisions for taking calls on evenings and weekends by use of an answering machine or voicemail system. The Company will respond promptly to calls or correspondence from landowners or tenants along the utility easement and/or right-of-way. Where the Company needs to consult or obtain concurrence from both the landowner and tenant of a property, they will make a good faith effort to do so. In the event, there is a disagreement between landowner and tenant with regards to a decision, the Company's obligation will be satisfied by securing an agreement with the landowner.

Prior to the start of construction, the Company will provide the Wisconsin Department of Agriculture, Trade, and Consumer Protection (WDATCP) with any information about the project corridor or the location of project facilities that is substantially different from the information submitted as part of the Agricultural Impact Notice (AIN), including:

- Different agricultural land uses (cropland, pasture, specialty crops);
- Previously unknown locations of fields with irrigation or drainage systems that could be impacted by the project;
- New impacts to agricultural buildings or field access; and
- Different or new temporary access roads and laydown/storage areas.

This information will be provided to WDATCP in a timely manner with the understanding that additional changes to project facilities and/or impacts may become necessary during construction due to site-specific conditions.

The Company will work with landowners to ascertain existing agricultural operations that may require special attention, such as conservation practices, location of above and below ground structures or obstructions, such as drain tile, irrigation systems, fencing, livestock, certified organic lands, proposed new drainage systems or other farm technology.
During the pre-construction phase, the Company will:

- Contact each landowner to obtain property specific information (such as drain tiles, conservation practices, etc.) to ensure these structures/operation practices are noted on construction documents;
- Review agricultural related project documents such as descriptions or maps of leased lands, permits, draft construction alignment sheets, and relevant plans prior to construction;
- Review information supplied by affected farm operators, conservation districts, agricultural extension agents, and others;
- Educate construction crews through an environmental training session, to ensure they are familiar with AMP, agricultural concerns and issues that may occur; and
- Negotiate with the farmland owner/operators to avoid the spreading manure over all areas within the proposed construction area prior to construction.

If any construction activities occur on a Certified Organic Farm, the Company will work with the landowner or tenant, the landowner and/or tenant's certifying agent to identify site-specific construction practices that will minimize the potential for decertification as a result of construction activities. Possible practices may include: surveying/staking methods prior to construction (specifically non paint methods), equipment cleaning, use of drop cloths during welding and coating activities; removal and storage of additional topsoil; planting a deep-rooted cover crop in lieu of mechanical decompaction; applications of composted manure; or similar measures. The Company recognizes that Organic System Plans are proprietary in nature and will respect the need for confidentiality.

If any construction activities occur within a drainage district, the Company will work with the appropriate county drainage board to ascertain existing drainage district operations that may require special attention. Examples of these include above and below ground district drains, district ditches, drain tiles or other facilities, and locations of district corridors.

During the pre-construction phase, the Company will:

- Contact each county drainage board to obtain district specific information (such as district ditches, district tiles, and district corridors) to ensure these structures and district operation locations are noted on construction documents;
- Review DATCP-approved drainage district specifications prior to construction;
- Educate construction crews through an environmental training session to ensure they are familiar with AMP, agricultural concerns and issues that may occur;
- Avoid any alterations to district drains; and
- Negotiate with county drainage boards to avoid drainage district maintenance activities within the proposed construction area prior to construction.

If any planned construction activities would modify any district drain or install or modify any structure in a district drain, the Company will work the appropriate county drainage board to obtain DATCP's written approval as required under Subchapter V, ATCP 48, for alterations within drainage districts.

AGRICULTURAL MITIGATION: CONSTRUCTION AND RESTORATION PHASE

During construction and restoration, the AI's role is to monitor the implementation of the Company AMP to avoid negative impacts to agricultural lands by advising the appropriate Company representative, either the EM or the CM, in the event incorrect construction methods are being used. The AI will generally be present on-site during construction, and will have access to all work areas in

agricultural lands. The AI will travel between various construction activities in agricultural lands and spot check construction operations. If the AI discovers actions that do not appear to meet the AMP requirements, he may stop-work at that location if necessary and will immediately contact the EM or the CM who will determine if site-specific restoration action is necessary. They will also ensure that the erring contractors are trained in the appropriate construction methods.

In the event adverse weather conditions cause soil conditions to become unfavorable for construction or restoration activities at a given site, the AI will consult with the EM or the CM to temporarily halt activity at that location and will confer with them as to when activities should be resumed at the site.

In the event that construction activities cause an unintended modification (i.e. damage) to a drainage district drain, the AI will consult with the county drainage board to temporarily halt activity at that location and will confer with them to obtain DATCP's written approval as required under Subchapter V, ATCP 48, for alterations within drainage districts.

AGRICULTURAL MITIGATION: CROP COMPENSATION

The Company will compensate the landowner for crop loss; compensation will be based on crop prices and yields for the County at the time of construction. Crop loss will occur during the construction of the project, which, depending on the timing of construction activities, may include one or two growing seasons. Payments will be made to landowners as soon as possible after construction is completed.

If the landowner rents or leases out the land to a tenant farmer (renter), the landowner may designate that the renter be compensated directly.

BEST CONSTRUCTION MANAGEMENT PRACTICES

The Company requires those working on the project to research, plan, implement, monitor, and assure the proposed results are obtained. The Company relies on these methods to identify agricultural concerns and implement measures to maintain agricultural productivity throughout construction and restoration. Appropriate use of these measures are assured by key field personnel such as the AI and the Company EM, CM, and Construction Inspector (CI). Additionally, the Company seeks to only use contractors with a consistent favorable history of installing and maintaining measures according to the best management practices (BMPs). Thus, permit conditions, landowner satisfaction, and natural resources are preserved. The Company will incorporate the applicable provisions of this AMP and accompanying BMPs into all bid documents and contracts with each contractor retained on this Project by the Company for construction, restoration, mitigation or post-restoration monitoring. Each contractor retained by the Company for the Project must also incorporate the applicable provisions of the AMP into their contracts with each subcontractor.

The Company utilizes construction techniques within agricultural areas that will insure future agricultural productivity. The following construction methods are to be utilized in agricultural areas:

a. Topsoil Segregation

During construction of the gas main, topsoil will be removed from the construction area and stockpiled separately from any other excavated soils. This will preserve the topsoil resource by eliminating the potential for topsoil/subsoil mixing. Topsoil is defined to include the upper most portion of the soil commonly referred to as the plow layer, the A horizon, or its equivalent in uncultivated soils. It is the surface layer of the soil that has the darkest color or the highest

content of organic matter. All of the topsoil to a depth of 12 inches, or the entire original topsoil depth if it is less than 12 inches, will be removed from excavated areas; however, topsoil will not be removed from under the topsoil storage piles. The Company has the option to remove amounts of topsoil in excess of 12 inches at its discretion.

The gas main will be installed via open cut trench and directional boring. The plow method of installation consists of using a vibratory plow which slices the soil open, allows installation of the pipe into the trench, and then replaces the soil into its original location. The horizontal directional bore method consists of pipe installation using an auger to drill an underground tunnel, into which the pipe is drawing. The plow and bore method do not disturb the soil horizons. Open cut trenching will require separation of top and subsoils during excavation. For all excavations, top and subsoils will be replaced in their original soil horizons when backfilling. Landowners will be asked to refrain from manure spreading prior to topsoil removal. Erosion control measures will be used as necessary.

b. Temporary Access Road

The Company will attempt to utilize existing farm roads for access to and from the right-of-way where possible. In places where temporary access roads are constructed over agricultural land, topsoil will be stripped and temporarily stockpiled. If the temporary roads in agricultural lands require gravel stabilization, geotextile construction fabric will be placed below imported rock material for additional stability and to provide a distinct barrier between imported rock material and the subsoil surface.

Temporary roads will be designed to accommodate existing surface drainage patterns and to minimize soil erosion. During the restoration phase, both temporary and pre-existing access roads will be removed and the areas will be restored as close as reasonably possible to its pre-construction conditions. In the event the landowner wants the road left intact, a written mutual agreement between the Landowner and the Company will be established.

c. Clearing of Brush and Trees from the Easement

The Company will work with each landowner for the cutting of merchantable timber necessary for construction of the gas distribution system. Timber may be cut and left along the edge of the utility right-of-way for the landowner's use or disposed of in various methods. Methods of disposal of trees, brush, and stumps may include off-site burning, burial, chipping, or removal. Vegetation from cherry and walnut trees can be toxic to livestock. All debris from these trees will be removed from areas that are actively pastured such that it will not be allowed to come into contact with livestock and may not be stockpiled on site.

d. Fencing

Prior to construction, the Company will work with landowners to determine if fences may be in the way of access for construction equipment. If necessary, existing fences may be removed and temporary fencing will be installed. Wire tension on temporary fences must be adequate to prevent sagging. Bracing of fences to trees or vegetation is prohibited. Fence materials, such as paint, must not be used as it is toxic to livestock.

Where livestock graze adjacent lands to construction areas, arrangements will be made with the landowner prior to construction to determine if temporary fences are necessary. The Company's contractors will be responsible to close any gates as used throughout the workday.

Existing fence crossings removed due to construction activities will be repaired. Following construction, any temporary gates and fences installed for use by construction crews must be removed, unless the landowner approves otherwise. Permanent fences will be restored as closely as reasonably possible to their pre-construction condition.

e. Irrigation Systems
If project construction intersects an operational irrigation system on agricultural land, the Company and the landowner will establish a mutually acceptable amount of time that the affected irrigation systems may be taken out of service during construction. Water flow in irrigation systems on agricultural land is not to be disrupted by construction without first notifying affected landowners. Any damage to an irrigation system caused by construction will be repaired as soon as reasonably possible.

f. Erosion Control and Dewatering
Erosion controls such as silt fence, staked hay bales, and erosion matting will be used to prevent surface runoff from carrying sediment laden water onto adjacent lands. Dewatering may be required to remove standing water from trench or bore pit areas. Erosion control and dewatering technical standards are described on the Wisconsin Department of Natural Resources website (http://dnr.wi.gov/topic/stormwater/standards/). These standards will be met or exceeded at all times. It is not permissible to allow soil or water runoff to occur from non-organically farmed fields onto organically farmed fields at any time even if both fields are owned by the same landowner.

g. Drain Tile
The Company will work with each landowner and appropriate county drainage boards through the pre-construction process to determine location of known drain tiles. If a drain tile is damaged or severed in the course of construction, the tile will be repaired. A temporary repair with solid tubing to allow drainage while construction activities are completed may be used, or a permanent repair immediately installed.

Prior to backfilling soils at that location, the drain tile will be permanently repaired. Repairs may include support of the tile to maintain proper drainage gradient, replacement of tile and placement of subsoils free of large rocks and clumps around the tile to cushion it, and/or placement of filter cloths. Each repair will be documented to show proper actions have been taken to ensure future drainage and GPS coordinates of the repair location recorded.

h. Weed Control
Where the AI sees evidence that weed growth on stockpiled topsoil could present a problem to adjacent cultivated fields the AI will consult with the Company Representative to have the weeds removed or killed prior to topsoil replacement. If the Company chooses to spray the topsoil pile with herbicide, the landowner will be consulted in regard to the choice of herbicide to be used, taking into account their preference for cover crop and plans for the next year's crop. If any herbicide spraying is completed, it will be done by a state licensed applicator.

i. Repair of Existing Agricultural Erosion Control Facilities
Existing agricultural facilities, such as diversion terraces, grassed or lined waterways, outlet ditches, water and sediment control basins, vegetated filter strips, etc., damaged due to

construction activities will be restored to pre-construction conditions. Photographs and elevation surveys may be taken as necessary prior to construction activities at the site to ensure final restoration is satisfactory.

j. Repair of Existing Drainage District Features (drains, ditches, tiles and other facilities)
Existing drainage district features, such as above and below ground drains, ditches, tiles and other facilities in district corridors, damaged due to construction activities will be restored to pre-construction conditions. The Company will address questions relating to district drain, ditch or tile repair/restoration with the appropriate county drainage board to reach a mutually agreeable resolution. Photographs and elevation surveys may be taken as needed and where applicable, prior to construction activities at the site to ensure final restoration is satisfactory.

k. Soil Restoration
The purpose of soil restoration is to ensure that soil strata are replaced in the proper order, decompacted, and that rock content of the upper 24 inches of soil is not increased. The Company will discuss rock and excess soil disposal with the landowner to determine acceptable disposal location(s) on the property. Heavy equipment will not be allowed to cross those agricultural areas that have been decompacted and restored.

<u>De-compacting the Subsoil:</u>
De-compaction of the subsoil will only be done when the subsoil condition is friable/tillable in the top 18 inches of the subsoil profile, using the Atterbeg Field Test as guidance (Attachment A). The AI may recommend to the Company specific locations for the decompaction of the subsoil in locations where soils appear to be either predominantly wet or in low lying areas where water ponding has occurred due to the "trench effect" as a result of topsoil removal. In these cases, the Company may consult with the landowner to determine the appropriate decompaction needs.

Equipment that can be used for soil decompaction may include a v-ripper, chisel plow, paraplow, or equivalent. Typical spacing of the shanks varies with equipment but is typically in the 8 to 24 inch range. The normal depth of tillage is 18 inches. The type of equipment used and the depth of rip may be adjusted as appropriate for different soil types or for a deeply and severely compacted area.

Subsoil compaction will normally be alleviated with three passes of the decompaction equipment. Multiple passes refers to the implement passing over the same soil band. That is, three passes of a 10 foot wide implement will treat a 10 foot wide band of soil, not a 30 foot wide band. Passes must be made in multiple directions. This can be achieved in the narrow areas by having the implement weave back and forth across the area being ripped.

<u>Topsoil Replacement:</u>
The topsoil will be replaced to its original depth across the spoil storage, trench, work, and traffic areas. The layer of replaced topsoil should be uniform across the right-of-way width, including any crowning. Topsoil should be replaced with wide tracked machinery or equivalent light loaded equipment to avoid compaction of the topsoil and subsoil layers. Rubber tired motor graders may be used to spread and level topsoil to address unevenness in the field. In

areas where minimal tillage, no-till, or level land farming practices are employed, a tracked machine will be required to establish final grades.

De-compacting Through the Topsoil:
De-compaction through the topsoil may be necessary, if the subsoil and/or topsoil are compacted during topsoil replacement activities. A penetrometer will be used to determine if additional decompaction is necessary through the topsoil.

Final Rock Removal:
Replacing the topsoil (or de-compacting through the topsoil) may free some rocks and bring them to the surface. The size, density and distribution of rock remaining on the construction work area should be the same as adjacent areas not disturbed by construction.

Final Cleanup:
All previously restored construction area should not be traversed by unnecessary equipment traffic. All construction related debris, including litter generated by the construction crews, will be removed from the landowner's property and disposed of appropriately. Final clean-up begins immediately after all the other above-mentioned sequence of restoration activities operations are completed, and not before. Final clean-up includes installation of permanent erosion control measures if necessary and disposal of construction debris and will be completed as soon as practicably possible (weather permitting), or as soon as possible thereafter. If final clean-up is delayed, temporary erosion controls will be installed as necessary.

ATTACHMENT A

Purpose: To determine when soil is suitable for tillage operations.

Process: The Agricultural Inspector will determine the soil's consistency using the following:

1. Pull a sample soil plug at the maximum depth to be tilled, or from within the topsoil pile.

2. Roll a portion of the sample between the palms of the hands to form a wire with a diameter of one-eighth inch.

3. The soil consistency is:
    a. Tillable if the soil wire breaks into segments not exceeding 3/8 of an inch in length.
    b. Plastic (not tillable) if the segments are longer than 3/8 of an inch before breaking.

4. This procedure is to be used prior to decompacting the subsoil; on the topsoil pile prior to stripping and stockpiling; on the topsoil prior to replacement; and prior to decompacting through the topsoil.

5. One determination of soil consistency is adequate until the next rain event.

Best Management Practices for Construction within Agricultural Lands
BMP 01 - Right-of-Way Width

Purpose: To define the locations and limits of rights-of-way and additional temporary workspaces, in order to minimize the impacts to agricultural lands.

Organization: WISCONSIN ELECTRIC GAS OPERATIONS onsite construction inspection personnel will monitor and enforce the measures described, in concert with the Agricultural Inspector (AI), for pipeline construction operations within agricultural lands.

Installation Planning

1. WISCONSIN ELECTRIC GAS OPERATIONS will determine the required right-of-way widths over the length of lands traversed by the pipeline, including extra workspaces.
2. WISCONSIN ELECTRIC GAS OPERATIONS will show the specific limits of rights-of-way on alignment sheet drawings which will be provided to the construction contractor, environmental consultants and inspection personnel.
3. WISCONSIN ELECTRIC GAS OPERATIONS will provide the construction contractor, environmental consultants and inspection personnel with the right-of-way configuration drawings and other figures referred to by the BMPs developed for the project.
4. WISCONSIN ELECTRIC GAS OPERATIONS will obtain the appropriate environmental and right-of-way clearances prior to entry on any land affected by construction of the pipeline, or notify all parties of areas of special concern or areas for which clearance is withheld.

Construction

1. The limits of the right-of-way and all additional temporary workspaces will be staked prior to work commencing at that location.
2. For Construction Easements in Agriculture Lands a right-of-way width of 100 foot is required and topsoil stripping will be the complete right-of-way width excluding the topsoil stockpile area. This consists of a 50 foot temporary construction easement and a 50 foot permanent easement. The running centerline of the pipeline will generally be 15' from one side of the 50 foot permanent easement. See Construction Figures, Detail 27.
3. For Construction Easements in non-cultivated Wooded Lands or Wetlands a right-of-way width of 75 feet is required. This consists of a 25 foot temporary construction easement and a 50 foot permanent easement. Where feasible, existing corridors are being utilized to reduce the impact of tree clearing. In areas where the gas main will be installed by horizontal directional drilling a 50 foot permanent easement will be required but the 25 foot temporary easement will not be necessary.
4. Additional temporary workspace will be required for stream crossings, road bore crossing areas, uplands on either side of wetlands, and equipment turnaround areas. WISCONSIN ELECTRIC GAS OPERATIONS will determine the amount of additional right-of-way needed for construction and restoration on agricultural land as per these BMPs.
5. Should a situation arise where the approved workspace is not adequate to implement the agricultural BMPs, work will be stopped at the respective location until WISCONSIN ELECTRIC GAS OPERATIONS determines an appropriate course of action. For example, triple lift soil segregation may require an additional 25 feet in the temporary construction easement as necessary to allow separation of the three stockpile areas.

Best Management Practices for Construction within Agricultural Lands
BMP 02 - Topsoil Segregation

Purpose: To preserve the topsoil resources by eliminating the potential for topsoil/subsoil mixing in agricultural lands.

Installation Planning

1. During right-of-way negotiations for easements on agricultural lands, WISCONSIN ELECTRIC GAS OPERATIONS will identify full topsoil removal as the only alternative.

2. The topsoil is defined to include the upper most portion of the soil commonly referred to as the plow layer, the A horizon, or its equivalent in uncultivated soils. It is the surface layer of the soil that has the darkest color or the highest content of organic matter.

Construction

Full Topsoil Removal

1. The WISCONSIN ELECTRIC GAS OPERATIONS operator or construction contractor will oversee determination of the topsoil depth. This will be completed as construction progresses.

2. All of the topsoil to a depth of 12 inches, or the entire original topsoil depth if it is less than 12 inches, will be removed from the subsoil storage area, the trench area, and the rest of the temporary right-of-way (work and traffic areas); however, topsoil will not be removed from under the topsoil storage piles or areas where construction mats are laid on the surface for material storage or equipment travel. WISCONSIN ELECTRIC GAS OPERATIONS has the option to remove amounts of topsoil in excess of 12" at its discretion.
3. All subsoil material removed from the pipeline trench will be stockpiled separate from the topsoil stockpile. The subsoil material will be stockpiled in the subsoil storage area.
4. Additionally, all topsoil to a depth of 12-inches will be stripped from newly constructed temporary access roads, temporary storage areas, and temporary construction areas associated with stations, mainline valves, and pig launchers located on agricultural land. It is intended that existing field access roads will not be stripped of any existing cover.
5. Topsoil will be removed prior to cut/fill grading operations.

Partial Topsoil Removal

1. There will be no Partial Topsoil Removal on agricultural lands.

Best Management Practices for Construction within Agricultural Lands
BMP 03 - Erosion Control

Purpose: To minimize the effects of erosion to lands affected by construction, and adjacent properties, and to prevent silts and sediments from being transported off the right-of-way or into natural resources.

Installation Planning

1. WISCONSIN ELECTRIC GAS OPERATIONS will conduct training of inspection personnel and contractors to ensure all parties have a thorough understanding of the erosion control requirements to be utilized on the project. The training will include a review of the requirements of WISCONSIN ELECTRIC GAS OPERATIONS Lakeshore Lateral Project Construction Diagrams AMP, and BMPs. Such training will identify the authorities of the inspection personnel, the criteria for placement of the particular erosion structures, and the procedure to be followed in the event that a violation of these practices appears to have occurred.

2. WISCONSIN ELECTRIC GAS OPERATIONS will advise the construction contractor of all known areas of special concern.

3. WISCONSIN ELECTRIC GAS OPERATIONS will require its construction contractor to structure its work in a manner that is consistent with the requirements of the documents listed in Paragraph 1 above, and to maintain an adequate supply of approved erosion control materials necessary for providing an appropriate level of control.

Construction

Temporary Erosion Control

1. Temporary erosion controls will be constructed after initial disturbance of the soil, and will be properly maintained throughout construction. The erosion control structures will be inspected as described below and reinstalled as necessary (such as after backfilling of the trench) until they are either replaced by permanent erosion controls or restoration is complete.

2. Temporary slope breakers will be constructed where necessary to reduce runoff velocity and divert water off of the construction right-of-way. Temporary slope breakers may be constructed of materials such as soil, silt fence, staked hay or straw bales, sand bags, or wattles.

3. Unless otherwise specified as a permit condition, temporary slope breakers will generally be installed using the following spacing:

Slope %	Spacing (feet)
5 - 15	300
>15 - 30	200
>30	100

4. The outfall of each temporary slope breaker will be directed off the construction right-of-way to a stable, well-vegetated area or energy-dissipating device at the end of the slope breaker and off the construction right-of-way. Discharge of water shall not be made in a way that can runoff from non-organic farm operations onto adjacent organic farm operations.

5. The integrity of slope breakers will be confirmed, during active construction on a daily basis and during inactive construction on a weekly basis. In areas with no construction or equipment

operation, integrity of slope breakers will be confirmed within 24 hours of each 0.5-inch of rainfall. Slope breakers found to be ineffective will be repaired within 24 hours of identification.

6. The placement of temporary slope breakers will be coordinated with the placement of trench/ditch plugs. Trench/ditch plugs will be installed at the boundaries of certified organic farming to ensure that the pipeline does not provide a surface or subsurface drainage path from the surrounding area to the certified organic farm during construction.

7. Slope breakers will be of adequate height and width to contain and divert a significant rain event. Additionally, slope breakers will be constructed with a two to eight percent outslope to a stable area. In the absence of a stable area, appropriate energy-dissipating devices will be used to direct the flow off of the construction right-of-way. The slope breaker will be compacted during its construction to prevent the water from eroding through the berm. The inlet end of the berm will be located to prevent water from traveling around the berm.

8. The outlet of the slope breaker will be stable enough to filter sediment from the water and retain the sediment within the existing vegetation.

Sediment Barriers

1. Sediment barriers will be installed to stop the flow of sediment. They may be constructed of materials such as silt fence, staked hay or straw bales, sand bags, wattles, or equivalent.

2. Temporary sediment barriers will be installed at the base of slopes adjacent to road crossings until disturbed vegetation has been reestablished and at appropriate locations to prevent siltation into water bodies or wetlands crossed by, or near, the construction work area.

3. Temporary sediment barriers will be maintained until permanent revegetation measures are successful or the upland areas adjacent to wetlands, water bodies, or roads are stabilized. Temporary sediment barriers will be removed from an area when that area is successfully restored

Mulch

1. In general, mulch will not be used as an erosion control measure in agricultural lands. In the event mulch is required by WISCONSIN ELECTRIC GAS OPERATIONS in consultation with the landowner in agricultural lands, the mulch will be applied according to We Energies Erosion Control Standards and Procedures.

Permanent Erosion Control Devices

1. To prevent subsurface flow of water through the pipe trench, trench breakers will be installed.

2. The following reference table can be used to locate trench breaker spacing on areas with slopes greater than 5%.

Slope (%)	Spacing Recommendations (feet)
5 – 15	300
>15 - 30	200
> 30	100

3. When permanent trench breakers are installed in the trench prior to backfilling, they will consist of sandbags, earth-filled sacks or other approved material. Topsoil will not be used for trench breakers. Trench breakers are required to have a minimum bottom width of two sacks wide.

4. Trench breakers will be installed to a minimum elevation of one-foot above the top of the pipe. The top of the trench breaker must be two feet or more below the restored surface on agricultural land.

Best Management Practices for Construction within Agricultural Lands
BMP 04 - Drain Tile

Purpose: To ensure that any tile line damaged during construction is repaired to a condition that is functionally equivalent to its condition prior to construction and to avoid adverse impacts to planned or proposed drainage systems.

Installation Planning

1. Identify fields containing drain tiles through contact with landowners, appropriate county drainage board, the local Land Conservation District, and the USDA-Natural Resources Conservation Service staff. All drain tiles will be photographed and GPS documented pre-construction and post-construction.

2. Flag all identified drain tiles within the right-of-way after clearing and grading, and prior to trenching.

3. WISCONSIN ELECTRIC GAS OPERATIONS will document proposed drain tile plans that the landowner may plan to install within the three years following construction.

4. WISCONSIN ELECTRIC GAS OPERATIONS will identify local drain tile installation contractors and consult with the landowner to determine whether the landowner would prefer repair/replacement services (if necessary) be provided by a local contractor.

5. WISCONSIN ELECTRIC GAS OPERATIONS will document existing moisture content.

Construction

1. The excavated pipeline trench shall provide a minimum of 12 inches clearance, where practicable, between the pipe and the drainage tile.

<u>General Conditions</u>

1. WISCONSIN ELECTRIC GAS OPERATIONS will use the construction contractor or their sub-contractor to replace, relocate or reconfigure existing tile lines as may be required.

2. WISCONSIN ELECTRIC GAS OPERATIONS will take the necessary actions to ensure the functioning of the tile lines will be equivalent to its prior condition where tile lines adjacent to the pipeline's right-of-way are adversely affected by the construction of the pipeline. This may include the relocation, reconfiguration, and replacement of the existing tile lines within the construction corridor. The repaired drain tile will be verified that it was installed correctly and WISCONSIN ELECTRIC GAS OPERATIONS will make an effort to understand the existing conditions within the limited pipeline ROW.

3. The quality of all clay and concrete drain tile and corrugated polyethylene tubing to be installed shall be appropriate for the work as determined by the AI and/or a qualified drain tile repair

contractor. Material to be installed will meet American Society of Testing Materials (ASTM) standards.

4. Any drain tile removed from the pipeline trench will not be reused.

5. WISCONSIN ELECTRIC GAS OPERATIONS will repair or correct tile or drainage problems caused by construction of the pipeline immediately, upon written notice from the landowner or appropriate county drainage board to WISCONSIN ELECTRIC GAS OPERATIONS of such a problem, unless WISCONSIN ELECTRIC GAS OPERATIONS can demonstrate that the problem identified by the landowner or appropriate county drainage board was not caused by actions performed during such construction or restoration. WISCONSIN ELECTRIC GAS OPERATIONS may arrange a pay settlement to the landowner or county drainage board.

Locating Damaged Drains

1. All drains found during trenching will be flagged.

2. Drains that are located within the right-of-way, but are not located within the trench, will be probed (examined) for damage.

Temporary Repairs

1. All exposed tiles will be capped or screened with window screen or equivalent to protect against soil intrusion when the trench is dug, whether repaired immediately or later.

2. Any flowing tile line will be repaired as soon as practicable with solid tubing, until permanent repairs can be made.
3. Temporary repairs are needed if a flowing drain will be stopped for longer than 24 hours.

Permanent Repairs

1. All permanent tile line damaged within the trench area will be repaired prior to backfilling at the respective location.

2. Where tile lines are severed by construction of the pipeline trench, angle iron, three-sided steel channel iron, I-beams, full round slotted pipe, perforated plastic pipe or half pipe will be used to support the repaired tile line. The support members must extend a minimum of 2-feet into previously undisturbed soil. If the tile repairs involve clay tile, the support member will extend to the first tile joint beyond the minimum 2-foot distance.

3. Each tile drain's slope (gradient) will be maintained by providing sufficient support to prevent the drain line from sagging. Sandbags, bags of concrete, Sakrete, or equivalent can be used as support under repaired tile lines. The grade of the tile line should remain unchanged.

BMP 04 - Drain Tile - continued

4. If the tile is clay, ceramic or concrete, any connection with new material must be made with commercially available connectors, or wrapped with plastic or effectively sealed to prevent soil intrusion.

5. To avoid the risk of damaging (crushing) the tile lines with large soil clumps or stones during backfilling loosened native subsoil free of large soil clumps and stones should be placed on top of, and to the sides of, the tile line. Where appropriate native subsoil is not available, imported subsoil free of clumps and stones, or pea gravel, can be used to cushion the tile line.

6. Filter-covered drain tiles will be used where the existing tile line is covered with a filter.

Best Management Practices for Construction within Agricultural Lands
BMP 05 - Trench Dewatering

Purpose: Pump water from an open trench or other excavated area while controlling the rate of discharge to avoid:

- Permanent or temporary erosion and scour;
- Damage to adjacent agricultural land, crops, or pastureland;
- Inundating crops for more than 24 hours, including rainfall;
- Depositing sand, silt, or sediment in or near a wetland or waterbody;
- Depositing gravel in fields, pastures, or watercourses; and
- Damaging cultural resources sites, locations of sensitive plant species and organic farming operations.

Typically, the trench will need to be dewatered for purposes of, but not limited to, tie-ins, measuring the trench for bends, lowering-in pipe, trench inspection, and back-filling the trench. Water discharge from hydrostatic testing following backfilling shall follow the same protocols described here when applicable.

Installation Planning

1. Water will be discharged in an upland area so any sediment, stones, and silt-laden water will not deposit material in a sensitive area adversely impacting the hydrology or plant communities. The contractor should have sufficient intake or outlet hose (250 - 350 feet) to reach the nearest appropriate upland area.

2. WISCONSIN ELECTRIC GAS OPERATIONS and their construction contractors will identify during construction activities:

    - Low areas along the pipeline route that are likely to collect water during construction, and
    - Suitable areas for the discharge of water accumulated within the pipe trench or other excavated area
    - Identify accumulated water that needs to be discharged as construction progresses

3. WISCONSIN ELECTRIC GAS OPERATIONS will require its construction contractors to obtain:

    - WISCONSIN ELECTRIC GAS OPERATIONS approval of all off-right-of-way and on-right-of-way discharge locations and techniques, and all trench dewatering discharge locations and techniques
    - WISCONSIN ELECTRIC GAS OPERATIONS may obtain voluntary permissions with landowners

4. WISCONSIN ELECTRIC GAS OPERATIONS will require its construction contractors to structure the work to minimize the accumulation of water within the trench.

5. In the event it is not possible to avoid water-related damages as described above, WISCONSIN ELECTRIC GAS OPERATIONS will:

    - Reasonably compensate the landowner for the damages, and
    - Restore the cropland and crops, pastureland, water courses, and any other damaged lands to their pre-construction condition.

BMP 05 - Trench Dewatering - continued
Construction

1. All dewatering activities will be conducted in compliance with current drainage laws, local ordinances relating to such activities, WDNR permit conditions, and the provisions of the Clean Water Act.

2. Rainwater or groundwater that collects in the trench will be pumped:

    - Onto a well-vegetated area that will prevent the water from returning to the right-of-way, or
    - Into a filter bag or a settling basin constructed of straw bales when adequate vegetation is absent or when in the vicinity of a wetland or waterbody.

    Additionally, sediment barriers or similar erosion control measures may be used as necessary to divert the flow of pumped water.

3. To minimize the extraction of silt or sediment from the trench the intake will be prevented from touching the bottom or side of the trench. A flotation device or a support will be attached to the intake of the suction line to prevent sucking up soil and other debris from the trench.

4. All structures will be located in a stabilized and vegetated area with a minimum buffer width of 100 feet between it and any adjacent water body or wetland area. Sediment barriers or similar erosion control measure will be installed if an adequate buffer is not available.

5. Preferably, dewatering efforts will not deliver water onto cropland. If it is absolutely necessary to do so, the crops will be inundated (flooded) less than 24 hours.

6. The dewatering activities will not deposit gravel, sediment (mud) or other debris in fields, pastures, or watercourses.

7. Dewatering sites will be selected, and structures and slope breakers will be installed, to ensure that water is not directed into known cultural resources sites or locations of sensitive plant communities.

8. Backfill activities will begin as soon as possible after pipe installation to prevent the trench from refilling with water in high water table conditions. Attempts to dewater as far from the back-filling activity as possible will be made.

9. Dewatering will be monitored and stopped, if necessary, to correct conditions and practices that do not comply with this best management practice.

10. Discharge of water from the trench of non-organic farm operations and hydrostatic testing shall not be made in a way that can runoff onto adjacent organic farm operations.

Best Management Practices for Construction within Agricultural Lands
BMP 06 - Soil Restoration

Purpose: To restore the contour and to ensure the quality and agricultural productivity of the soil by:

- Avoiding the mixing of the topsoil with the subsoil, and
- Eliminating compaction from the subsoil and topsoil layers, and
- Assuring the rock content of the upper 12-inches of topsoil and subsoil is not increased after completion of the construction and restoration process.

Installation Planning

1. WISCONSIN ELECTRIC GAS OPERATIONS will identify, through consultation with the landowner, all rock disposal location(s) on the ROW or adjacent to the ROW. This location can be on the construction right-of-way of the landowner's property. Written permission from the landowner is required for disposal at another site on the farm.

2. WISCONSIN ELECTRIC GAS OPERATIONS will consult the landowner about properly disposing of excess excavated material to maintain agricultural productivity.

3. Successful restoration of the soil requires that the proper equipment be used, in the proper sequence, under the correct soil moisture content conditions. Each step in the restoration process is completed before moving to the next step. De-compaction will occur as determined necessary by the Agricultural Inspector (AI) and in consultation with the contractor and landowner.

4. Heavy equipment will not be allowed to cross those agricultural areas that have been de-compacted. In the event any area of previously restored right-of-way that is traversed by equipment for any reason (e.g. to reach a hydrostatic test location) which results in further compaction, the area will be appropriately restored.

Construction

Backfilling

1. After installation of the pipeline is complete, the trench materials will be backfilled in the order in which they were removed.

Crowning the Trench

1. Crowning the trench area will compensate for ground settling or subsidence. The crown shall be constructed with native topsoil material. Topsoil from adjacent ROW areas will be used (if needed) for crowning to avoid the potential for mixing of subsoil and topsoil in the event settling is overestimated. The AI will determine the height of the crown will be determined based on soil type and moisture content. Breaks will be left in the crown to accommodate existing surface drainage systems while the crown settles over the first year post construction.

2. Crowning the trench will be used when necessary and performed per WISCONSIN ELECTRIC GAS OPERATIONS standards.

3. If in the first growing season post-construction the landowner determines that the crown area may have settled too much or too little and is causing a problem with agricultural activity, WISCONSIN ELECTRIC GAS OPERATIONS will consult with the landowner to determine what corrective action may be needed to restore the crown area to its pre-construction topography and productivity.

BMP 06 - Soil Restoration - continued

De-compacting the Subsoil

1. Deep subsoil ripping shall be carried out on all traffic and work areas of agricultural right-of-way where full corridor stripping of topsoil occurred. This includes the pipeline workspaces, temporary workspaces, and temporary access roads. It does not include the area over the trench.

2. De-compaction of the subsoil will only be done when the subsoil condition is friable/tillable in the top 18-inches of the subsoil profile as determined by the AI. The AI, using their best judgment, may need to allow the De-compaction of the subsoil may need to be allowed in areas where soils appear to be either predominantly wet or in low lying areas where water ponding has occurred due to the "trench effect" as a result of topsoil removal. In these cases the AI will consult withconsultation with the land owner will occur to receive approval from the landowner or tenant.

3. Ripping equipment to be used will be selected based on successful use on previous pipeline projects such as the v-ripper, chisel plow, paraplow, or an equivalent. WISCONSIN ELECTRIC GAS OPERATIONS may, at their discretion, choose to compensate the landowner to chisel plow his impacted land(s).

4. The normal depth of tillage is 18-inches. The AI will provide guidance on the appropriate depth of rip in special situations or soil types. For example, a depth of 6 to 8-inches may be appropriate on intensively drained mineral (lacustrine/alluvial) soils. A depth of 22-inches may be appropriate for a deeply and severely compacted area.

5. The optimal spacing of the shanks will depend on the ripping equipment, soil type and moisture content, but will typically be in the range of 8 to 24-inches. Shanks are at their optimum spacing when the implement shatters the soil area between the shanks. Shatter is evidenced by the soil lifting between the shanks as the implement passes.

6. The AI can assist the contractor in selecting the appropriate shank spacing.

7. Subsoil compaction will normally be alleviated with three passes of the de-compaction equipment. Multiple passes refers to the implement passing over the same soil band. That is, three passes of a 10-foot wide implement will treat a 10-foot wide band of soil, not a 30-foot wide band.

8. Passes must be made in multiple directions. This can be achieved in the narrow pipeline right-of-way by weaving the implement back and forth across the area being ripped.

9. If de-compaction was not successful, the de-compaction effort will continue. The contractor is required to make as many passes as necessary to alleviate compaction. If the de-compaction effort is not successful after additional passes, a change in the de-compaction equipment used would be appropriate, and determined. with guidance from the AI.

Topsoil Replacement

1. The topsoil will be replaced to its original depth across the spoil storage, trench, work, and traffic area. The layer of replaced topsoil should be uniform across the right-of-way width, including the crown over the trench.

2. Topsoil should be replaced with small tracked machinery or equivalent light loaded equipment to avoid compaction of the topsoil and subsoil layers. Rubber tired motor graders may be used to spread and level topsoil to address unevenness in the field due to pipeline construction. In areas where minimal tillage, no-till, or level land farming practices are employed, a motor grader will be required to establish final ROW grades.

De-compacting Through the Topsoil

1. De-compaction through the topsoil may be necessary if the subsoil and/or topsoil are compacted during topsoil replacement activities.

Final Rock Removal

1. Replacing the topsoil (or de-compacting through the topsoil) may free some rocks and bring them to the surface.

2. The size, density and distribution of rock remaining on the construction work area should be the same as adjacent areas not disturbed by construction

Final Cleanup

1. Any area of previously restored right-of-way should not be traversed by unnecessary equipment traffic. All construction-related debris, including litter generated by the construction crews, will be removed from the landowner's property and disposed of appropriately.

2. Final clean-up begins immediately after all the other above-mentioned sequence of restoration activities operations are completed, and not before. Final clean-up includes installation of permanent erosion control measures and disposal of construction debris and will be completed within 14 days after backfilling in the area, weather permitting, or as soon as possible thereafter. Final clean-up shall not be delayed until the end of the next seeding season. If final clean-up is not completed within the 14-day time period, temporary erosion controls will be installed.

Best Management Practices for Construction within Agricultural Lands
BMP 07 - Seeding and Seed Bed Preparation

Purpose:

1. To place the seed into the soil at the correct time and proper depth to promote sufficient seed-soil contact on cropland or pasture requiring seeding.
2. To prepare the soil surface of an exposed area by natural or artificial means, such as tilling and fertilizing.
3. To minimize topsoil erosion on disturbed agricultural areas.

Installation Planning

1. The entire right-of-way will be reseeded following final clean up. WISCONSIN ELECTRIC GAS OPERATIONS will attempt to identify properties during the pre-construction phase where cropland seeding procedures or pasture seeding procedures will be used.
2. During recommended seeding periods, seedbed preparation should immediately follow soil restoration as soon as weather conditions and individual right-of-way requirements permit.
3. Seeding will be completed immediately after finishing seedbed preparation, weather permitting. Temporary erosion control measures will be used if this timeframe cannot be met.
4. For seeding outside of the recommended seeding periods, temporary erosion control methods will be used.
5. WISCONSIN ELECTRIC GAS OPERATIONS will consult with the landowner to determine the preferred option for vegetation restoration on agricultural lands.

   Option 1 – WISCONSIN ELECTRIC GAS OPERATIONS will enter into an agreement with the landowner to perform their own seeding following final clean up and seedbed preparation.

   Option 2 – WISCONSIN ELECTRIC GAS OPERATIONS will complete the seeding following final cleanup and seedbed preparation. Under this option, the seed mix will be determined in consultation with the landowner.

Construction

Seed Selection

1. An annual oat, wheat, or similar grain will be used for erosion control on crop land and a special pasture seeding mix will be used for all pastures.

Seedbed Preparation for Conventional, Broadcast and Hydroseeding

1. The ideal condition for conventional seeding is a smooth, firm, clod-free soil for optimum seed placement with drills or cultipacker seeders, if appropriate for that type of seed. The soil should be firm enough at planting for an adult footprint to sink no deeper than 3/8-inch. Avoid overworking the soil because rainfall following seeding may crust the surface, preventing seedling emergence.
2. If the area to be seeded has been recently loosened, and will provide an adequate seedbed, no additional tillage will be required.
3. If the area to be seeded has been compacted or crusted, the top layer of soil will be tilled.

BMP 07 – Seeding and Seed Bed Preparation – continued

4. Spike–toothed harrows may also be used during seedbed preparation. The spikes of the harrow will dig lightly into the soil to break up soil masses. Harrows may also be used to cover broadcast seed.
5. The seedbed will be scarified to create sites for seed to lodge and germinate where broadcasting the seed or hydroseeding will be used.

Seeding

1. Seeding of permanent cover will be done, whenever possible, during the recommended seeding date ranges for southeast Wisconsin.
2. If seeding cannot be accomplished before the recommended October 15 seeding deadline, it will be done in conformity with the Critical Area Planting conservation practice standard of the NRCS, or temporary erosion controls will be implemented and the seeding of permanent cover done at the beginning of the next seeding season.
3. Any soil disturbance occurring outside of the recommended October 15 seeding deadline date, or any bare soil left unstabilized by vegetation, will be treated as a winter construction condition and appropriate erosion controls will be installed to minimize erosion over winter and spring thaw.
4. After seedbed preparation, the seed mixes of all the permanent grasses or legume plantings will be applied at the rate determined from the Agricultural Inspector, landowner or recommended by the USDA-Natural Resources Conservation Service (NRCS).
5. In areas where a different seed mix is proposed, seeding will conform to the Critical Area Planting conservation practice standard of the NRCS, Conservation Reserve Program or any other similar federal program.
6. Grass waterways and terraces will be seeded to reestablish grass cover similar to preconstruction conditions. Erosion control measures, such as mulch or erosion control fabric, will be used in conjunction with seeding.
7. If a Certified Organic Farm will be impacted by construction, WISCONSIN ELECTRIC GAS OPERATIONS will coordinate with the affected landowner to ensure that an appropriate seed mix and planting methods are used as required by the farm's Certification Plan.

Best Management Practices for Construction within Agricultural Lands BMP 08 - Crop Compensation

Purpose: To ensure that agricultural landowners are fairly compensated for loss of crop production due to the pipeline project.

Planning

1. WISCONSIN ELECTRIC GAS OPERATIONS will compensate the landowner for crop loss once at the beginning or the end of the project. If the landowner rents or leases out the land to a renter, then the renter will be compensated in lieu of the landowner. There will be an attempt to communicate the agreement of compensation to both the renter as well as the landowner.

2. The value of the crop will be determined by the Payment Worksheet in the Easement Agreement Package. Crop compensation will be based on September/October 2019 futures and will be adjusted upward in year of construction if crop prices increase, but will not change if crop prices decline.

3. The landowner/renter will be compensated a total of 200% of the value of the crop based on the calculation in Item 2 above. 100% of the value of the crop during the year of construction, 60% the first year after construction, and 40% the second year after construction.

4. The landowner/renter would signify agreement by signing a damage release form.

Best Management Practices for Construction within Agricultural Lands
BMP 09 - Three-Lift Soil Handling

Purpose: To maintain the root zone over the trench area to the extent practicable through management of the topsoil, and subsoil layers in areas where the subsoil qualifies for this three-lift protocol.

Organization: The contractor will be responsible for implementing the three-lift soil-handling method. The Agricultural Inspectors (AI) will be available to assist in making "field calls" such as identifying boundaries between soil layers and to monitor compliance with this BMP.

Installation Planning

1. In areas where the AI determines the need to apply the triple-lift soil handling practice during trenching operations, an attempt will be made in preconstruction planning to ensure that adequate construction right-of-way space is made available. WISCONSIN ELECTRIC GAS OPERATIONS will compile a list of potentially affected farmland owners whose land is eligible for triple lift soil handling during excavation of the trench. This will be obtained from NRSC Soil Maps and/or original soil maps for each county. This list of qualifying "candidate" soils and parcels will be provided to the Wisconsin Department of Agriculture, Trade, & Consumer Protection (WDATCP) and to the Agricultural Inspectors (AI).

2. The criteria for soils qualifying as "candidates" for the three-lift soil handling procedure are determined by WDATCP on lands that involve cultivated croplands, rotated pastureland, or government set-aside program land. Locations of tree-lift soil handling will be confirmed by the AI.

3. Where applicable, WISCONSIN ELECTRIC GAS OPERATIONS will inform landowners possessing lands containing soils within the construction right-of-way (ROW) that meet the three-lift soil handling criteria and offer landowners the option of implementing the three-lift soil trenching procedure on their property during construction.

4. WISCONSIN ELECTRIC GAS OPERATIONS will include in the construction bid documents explanation of the three-lift soil handling procedure along with the potential locations. WISCONSIN ELECTRIC GAS OPERATIONS will also review the process and the potential locations with the bidders during the pre-bid job showing to ensure the potential contractor is well acquainted with the expectations. WISCONSIN ELECTRIC GAS OPERATIONS will also review this process and the potential locations with the selected construction contractor during the construction "kick-off" meeting. The three-lift soil handling process will also be included in WISCONSIN ELECTRIC GAS OPERATIONS's environmental training sessions required for all field personnel prior to working on the construction right-of-way.

Construction

1. WISCONSIN ELECTRIC GAS OPERATIONS may perform additional soil sampling to confirm the depth and extent of soil layers.

2. All topsoil up to a depth of at least 12 inches of will be stripped and stockpiled along the edge of the working side of the construction ROW.

BMP 09 - Three-Lift Soil Handling - continued

3. After topsoil has been removed (first lift) and trenching begins, a backhoe will remove the upper portion of the subsoil (second lift) and place this layer as far from the trench as the reach of the equipment permits on side of the construction ROW.

4. Where the subsoil material changes the backhoe operator will place this underlying material (third lift) between the trench and the second-lift pile on the side of the right-of-way. Since the depth at which the underlying material is encountered will vary from location to location, the boundary between the upper subsoil and the underlying material will be determined visually by the construction and inspection team, with the advice of the AI when necessary.

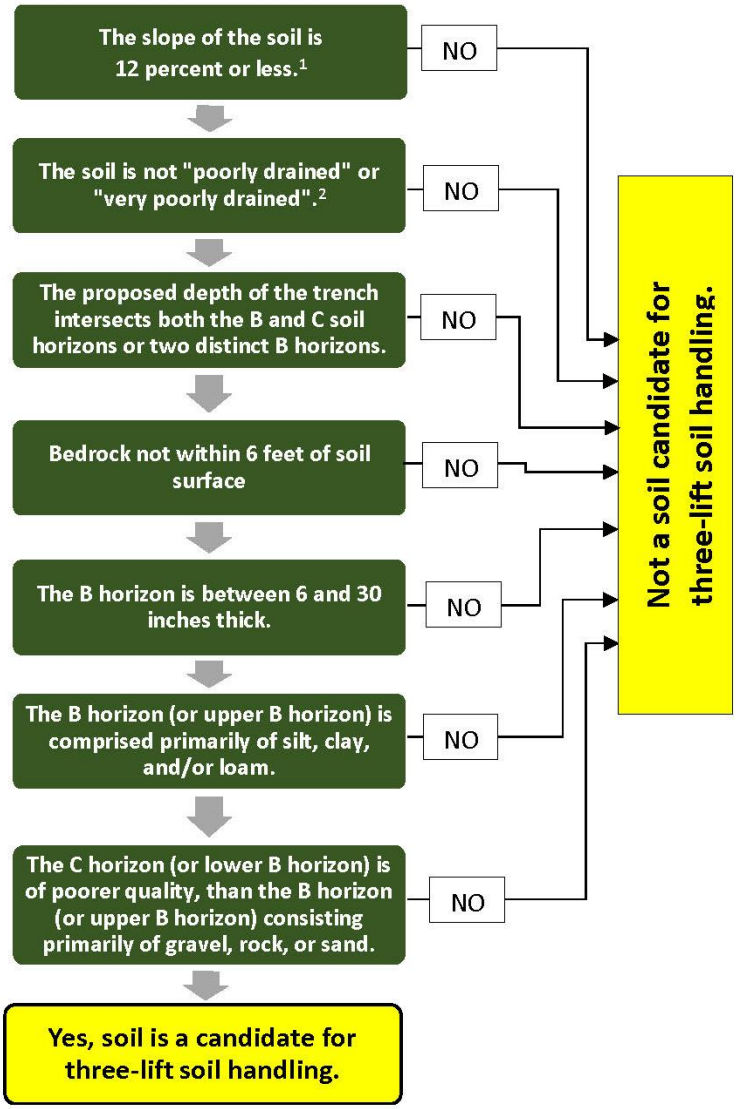
5. WISCONSIN ELECTRIC GAS OPERATIONS will attempt to maintain separation between the two piles. Depending on the available workspace and the volume of soil involved, maintaining complete separation between these two piles may not be possible.

6. During backfilling, the operator will make every effort to place the lower subsoil pile material (third layer) of the spoil material in the trench first, and will only then replace the upper subsoil layer (second layer) of the spoil material in the trench.

7. WISCONSIN ELECTRIC GAS OPERATIONS will perform field adjustments as necessary in conjunction with the contractor and AI to ensure lower subsoil or parent material does not become mixed with the upper subsoil by the proper placement of the spoil piles to the extent practicable.

APPENDIX C: THREE-LIFT SOIL CANDIDATE KEY

This key is applicable to soil profiles with distinct B and C horizons or alternatively to soil profiles with distinct upper and lower B horizons.



1. Soils with a slope greater than 12 percent are Class IV soils, likely to be eroded with shallow topsoil, and marginally suited for crop production. As such, they are unlikely to meet the criteria for soils that would benefit from three-lift soil handling.
2. Poorly drained soils tend to be too wet to use three-lift soil handling successfully. They are also likely to be deep soils.

APPENDIX D: APPRAISAL AND COMPENSATION PROCESS

The acquisition of land by entities including but not limited to departments, municipalities, boards, commissions, public officers, and business with eminent domain authority in Wisconsin, is stipulated under Wis. Stat. §32.06. If the entity (the condemnor) actualizes their powers of eminent domain by exercising condemnation, the condemnor shall first provide an appraisal of the affected property to each landowner prior to the start of land acquisition negotiations. An appraisal is an estimate of fair market value, additional information about the appraisal process and landowners rights can be found in the Wisconsin Department of Administration publication, "The Rights of Landowners under Wisconsin Eminent Domain Law," also listed in Appendix E.

The condemnor may conduct a market study to determine current area property values of affected property. If the landowner signs an appraisal waiver form, the market study will be the basis for the condemnor's offer of compensation and no individual property appraisal will be conducted. The condemnor may also offer additional compensation to landowners who choose to sign the appraisal waiver form.

Landowners have the right to obtain their own appraisal of their property under Wisconsin's eminent domain law (Wis. Stat. §32.06) and will be compensated for the cost of this appraisal if the following conditions are met:

- The appraisal must be submitted to the condemnor or its designated real estate contractor within 60 days after the landowner receives the initial appraisal
- The appraisal fee must be reasonable
- The appraisal must be a full, narrative appraisal
- The appraisal must be completed by a qualified appraiser

Through the process of condemnation, a jurisdictional offer made to the landowner in accordance with Wis. Stat. §32.06(3) will include an appraisal of the fair market value for the land acquisition or easement and any anticipated damages to the property. The fair market value means the price that a willing buyer would pay to a willing seller in the market. This will be based on at least one full narrative appraisal for each property the condemnor intends to acquire. The appraisal must be presented to the landowner. The amount of compensation is based on the appraisal(s) and is established during the negotiation process between condemnor and the individual landowners.

The condemnor is required to provide landowners with information about their rights in this process before negotiations begin. Wis. Stat. § 32.035(4)(d) additionally stipulates that if the condemnor actualizes their condemnation authority, the condemnor cannot negotiate with a landowner or make a jurisdictional offer until 30 days after the AIS is published.

APPENDIX E: WISCONSIN STATUTES

The Department of Agriculture, Trade and Consumer Protection (the Department) is required to prepare an AIS whenever more than five acres of land from at least one farm operation will be acquired for a public project if the agency/company acquiring the land has the authority to use eminent domain for property acquisitions. The Department has the option to prepare an AIS for projects affecting five or fewer acres from each farm if the proposed project would have significant effects on a farm operation. The entity proposing a Project is required to provide the Department with the necessary details of the project so that the potential impacts and effects of the project on farm operations can be analyzed. DATCP has 60 days to make recommendations and prepare the AIS. DATCP shall publish the AIS upon receipt of the fee required to prepare the AIS. The Department provides the AIS to affected farmland owners, various state and local officials, local media and libraries, and any other individual or group who requests a copy. Thirty days after the date of publication, the project initiator may begin negotiating with the landowner(s) for the property.

I. AGRICULTURAL IMPACT STATEMENT STATUTE

Wisconsin Statute § 32.035 is provided below and describes the Wisconsin Agricultural Impact Statement procedure and content.

(1) DEFINITIONS. In this section:

(a) "Department" means department of agriculture, trade, and consumer protection.

(b) "Farm operation" means any activity conducted solely or primarily for the production of one or more agricultural commodities resulting from an agricultural use, as defined in s. 91.01 (2), for sale and home use, and customarily producing the commodities in sufficient quantity to be capable of contributing materially to the operator's support.

(2) EXCEPTION. This section shall not apply if an environmental impact statement under s. 1.11 is prepared for the proposed project and if the department submits the information required under this section as part of such statement or if the condemnation is for an easement for the purpose of constructing or operating an electric transmission line, except a high voltage transmission line as defined in s. 196.491(1) (f).

(3) PROCEDURE. The condemnor shall notify the department of any project involving the actual or potential exercise of the powers of eminent domain affecting a farm operation. If the condemnor is the department of natural

resources, the notice required by this subsection shall be given at the time that permission of the senate and assembly committees on natural resources is sought under s. 23.09(2)(d) or 27.01(2)(a). To prepare an agricultural impact statement under this section, the department may require the condemnor to compile and submit information about an affected farm operation. The department shall charge the condemnor a fee approximating the actual costs of preparing the statement. The department may not publish the statement if the fee is not paid.

(4) IMPACT STATEMENT.

(a) *When an impact statement is required*; *permitted*. The department shall prepare an agricultural impact statement for each project, except a project under Ch. 82 or a project located entirely within the boundaries of a city or village, if the project involves the actual or potential exercise of the powers of eminent domain and if any interest in more than 5 acres from any farm operation may be taken. The department may prepare an agricultural impact statement on a project located entirely within the boundaries of a city or village or involving any interest in 5 or fewer acres of any farm operation if the condemnation would have a significant effect on any farm operation as a whole.

(b) *Contents*. The agricultural impact statement shall include:

1. A list of the acreage and description of all land lost to agricultural production and all other land with reduced productive capacity, whether or not the land is taken.

2. The department's analyses, conclusions, and recommendations concerning the agricultural impact of the project.

(c) *Preparation time; publicatio*n. The department shall prepare the impact statement within 60 days of receiving the information requested from the condemnor under sub. (3). The department shall publish the statement upon receipt of the fee required under sub. (3).

(d) *Waiting period*. The condemnor may not negotiate with an owner or make a jurisdictional offer under this subchapter until 30 days after the impact statement is published.

(5) PUBLICATION. Upon completing the impact statement, the department shall distribute the impact statement to the following:

(a) The governor's office.

(b) The senate and assembly committees on agriculture and transportation.

(c) All local and regional units of government that have jurisdiction over the area affected by the project. The department shall request that each unit post the statement at the place normally used for public notice.

(d) Local and regional news media in the area affected.

(e) Public libraries in the area affected.

(f) Any individual, group, club, or committee that has demonstrated an interest and has requested receipt of such information.

(g) The condemnor.

II. Statutes Governing Eminent Domain

The details governing eminent domain as it relates to WisDOT projects are included in Wis. Stat. Ch. 32 (http://docs.legis.wisconsin.gov/statutes/statutes/32.pdf).

The Department recommends that farmland owners concerned about eminent domain powers and the acquisition of land should review this statute in its entirety. Landowners may also wish to consult with an attorney who should have expertise in eminent domain proceedings. In addition, any Wisconsin licensed appraiser that landowners employ regarding a project where eminent domain could be used should be knowledgeable in partial takings.

***Section 32.09 of the* Wisconsin Statutes describes the compensation provided for property acquisition and certain damages:**

(6) In the case of a partial taking of property other than an easement, the compensation to be paid by the condemnor shall be the greater of either the fair market value of the property taken as of the date of evaluation or the sum determined by deducting from the fair market value of the whole property immediately before the date of evaluation, the fair market value of the remainder immediately after the date of evaluation, assuming the completion of the public improvement and giving effect, without allowance of offset for general benefits, and without restriction because of enumeration but without duplication, to the following items of loss or damage to the property where shown to exist:

(a) Loss of land including improvements and fixtures actually taken.

(b) Deprivation or restriction of existing right of access to highway from abutting land, provided that nothing herein shall operate to restrict the power of the state or any of its

subdivisions or any municipality to deprive or restrict such access without compensation under any duly authorized exercise of the police power.

(c) Loss of air rights.

(d) Loss of a legal nonconforming use.

(e) Damages resulting from actual severance of land including damages resulting from severance of improvements or fixtures and proximity damage to improvements remaining on condemnee's land. In determining severance damages under this paragraph, the condemnor may consider damages which may arise during construction of the public improvement, including damages from noise, dirt, temporary interference with vehicular or pedestrian access to the property and limitations on use of the property. The condemnor may also consider costs of extra travel made necessary by the public improvement based on the increased distance after construction of the public improvement necessary to reach any point on the property from any other point on the property.

(f) Damages to property abutting on a highway right of way due to change of grade where accompanied by a taking of land.

(g) Cost of fencing reasonably necessary to separate land taken from remainder of condemnee's land, less the amount allowed for fencing taken under par. (a), but no such damage shall be allowed where the public improvement includes fencing of right of way without cost to abutting lands.

Section 32.19 of the *Wisconsin Statutes* outlines payments to be made to displaced tenant occupied businesses and farm operations.

(4m) BUSINESS OR FARM REPLACEMENT PAYMENT. **(a)** Owner-occupied business or farm operation. In addition to amounts otherwise authorized by this subchapter, the condemnor shall make a payment, not to exceed $50,000, to any owner displaced person who has owned and occupied the business operation, or owned the farm operation, for not less than one year prior to the initiation of negotiations for the acquisition of the real property on which the business or farm operation lies, and who actually purchases a comparable replacement business or farm operation for the acquired property within two years after the date the person vacates the acquired property or receives payment from the condemnor, whichever is later. An owner displaced person who has owned and occupied the business operation, or owned the farm operation, for not less than one year prior to the initiation of negotiations for the acquisition of the real property on which the business or farm operation lies may elect to receive the payment under par. (b) 1. in lieu of the payment under this paragraph, but the amount of payment under par. (b) 1. to such an owner displaced person may not exceed the amount the owner displaced person is eligible to

receive under this paragraph. The additional payment under this paragraph shall include the following amounts:

1. The amount, if any, which when added to the acquisition cost of the property, other than any dwelling on the property, equals the reasonable cost of a comparable replacement business or farm operation for the acquired property, as determined by the condemnor.

2. The amount, if any, which will compensate such owner displaced person for any increased interest and other debt service costs which such person is required to pay for financing the acquisitions of any replacement property, if the property acquired was encumbered by a bona fide mortgage or land contract which was a valid lien on the property for at least one year prior to the initiation of negotiations for its acquisition. The amount under this subdivision shall be determined according to rules promulgated by the department of administration.

3. Reasonable expenses incurred by the displaced person for evidence of title, recording fees and other closing costs incident to the purchase of the replacement property, but not including prepaid expenses.

(b) Tenant-occupied business or farm operation. In addition to amounts otherwise authorized by this subchapter, the condemnor shall make a payment to any tenant displaced person who has owned and occupied the business operation, or owned the farm operation, for not less than one year prior to initiation of negotiations for the acquisition of the real property on which the business or operation lies or, if displacement is not a direct result of acquisition, such other event as determined by the department of commerce, and who actually rents or purchases a comparable replacement business or farm operation within 2 years after the date the person vacates the property. At the option of the tenant displaced person, such payment shall be either:

1. The amount, not to exceed $30,000, which is necessary to lease or rent a comparable replacement business or farm operation for a period of 4 years. The payment shall be computed by determining the average monthly rent paid for the property from which the person was displaced for the 12 months prior to the initiation of negotiations or, if displacement is not a direct result of acquisition, such other event as determined by the department of administration and the monthly rent of a comparable replacement business or farm operation and multiply the difference by 48; or

2. If the tenant displaced person elects to purchase a comparable replacement business or farm operation, the amount determined under subd. 1 plus expenses under par. (a) 3.

(5) EMINENT DOMAIN. Nothing in this section or ss. 32.25 to 32.27 shall be construed as creating in any condemnation proceedings brought under the power of eminent domain, any element of damages.

Section 32.25 of the *Wisconsin Statutes* delineates steps to be followed when displacing persons, businesses, and farm operations.

(1) Except as provided under sub.(3) and s. 85.09 (4m), no condemnor may proceed with any activity that may involve the displacement of persons, business concerns or farm operations until the condemnor has filed in writing a relocation payment plan and relocation assistance service plan and has had both plans approved in writing by the department of administration.

(2) The relocation assistance service plan shall contain evidence that the condemnor has taken reasonable and appropriate steps to:

(a) Determine the cost of any relocation payments and services or the methods that are going to be used to determine such costs.

(b) Assist owners of displaced business concerns and farm operations in obtaining and becoming established in suitable business locations or replacement farms.

(c) Assist displaced owners or renters in the location of comparable dwellings.

(d) Supply information concerning programs of federal, state and local governments which offer assistance to displaced persons and business concerns.

(e) Assist in minimizing hardships to displaced persons in adjusting to relocation.

(f) Secure, to the greatest extent practicable, the coordination of relocation activities with other project activities and other planned or proposed governmental actions in the community or nearby areas which may affect the implementation of the relocation program.

(g) Determine the approximate number of persons, farms or businesses that will be displaced and the availability of decent, safe and sanitary replacement housing.

(h) Assure that, within a reasonable time prior to displacement, there will be available, to the extent that may reasonably be accomplished, housing meeting the standards established by the department of administration for decent, safe and sanitary dwellings. The housing, so far as practicable, shall be in areas not generally less desirable in regard to public utilities, public and commercial facilities and at rents or prices within the financial means of the families and individuals displaced and equal in number to the number of such displaced families or individuals and reasonably accessible to their places of employment.

(i) Assure that a person shall not be required to move from a dwelling unless the person has had a reasonable opportunity to relocate to a comparable dwelling.

(3) (a) Subsection (1) does not apply to any of the following activities engaged in by a condemnor:

1. Obtaining an appraisal of property.

2. Obtaining an option to purchase property, regardless of whether the option specifies the purchase price, if the property is not part of a program or project receiving federal financial assistance.

III. Statutes Governing Access

Section 86.05 of the *Wisconsin Statutes* states that access shall be provided to land which abuts a highway:

Entrances to highway restored. Whenever it is necessary, in making any highway improvement to cut or fill or otherwise grade the highway in front of any entrance to abutting premises, a suitable entrance to the premises shall be constructed as a part of the improvements, and if the premises are divided by the highway, then one such entrance shall be constructed on each side of the highway. Thereafter, each entrance shall be maintained by the owner of the premises. During the time the highway is under construction, the state, county, city, village or town shall not be responsible for any damage that may be sustained through the absence of an entrance to any such premises.

Section 84.25 of the *Wisconsin Statutes* describes access restrictions concerning a controlled-access highway.

(3) CONSTRUCTION; OTHER POWERS OF DEPARTMENT. In order to provide for the public safety, convenience and the general welfare, the department may use an existing highway or provide new and additional facilities for a controlled-access highway and so design the same and its appurtenances, and so regulate, restrict or prohibit access to or departure from it as the department deems necessary or desirable. The department may eliminate intersections at grade of controlled-access highways with existing highways or streets, by grade separation or service road, or by closing off such roads and streets at the right-of-way boundary line of such controlled-access highway and may divide and separate any controlled-access highway into separate roadways or lanes by raised curbings, dividing sections or other physical separations or by signs, markers, stripes or other suitable devices, and may execute any construction necessary in the development of a controlled-access highway including service roads or separation of grade structures.

(4) CONNECTIONS BY OTHER HIGHWAYS. After the establishment of any controlled-access highway, no street or highway or private driveway, shall be opened into or connected with any

controlled-access highway without the previous consent and approval of the department in writing, which shall be given only if the public interest shall be served thereby and shall specify the terms and conditions on which such consent and approval is given.

(5) USE OF HIGHWAY. No person shall have any right of entrance upon or departure from or travel across any controlled-access highway, or to or from abutting lands except at places designated and provided for such purposes, and on such terms and conditions as may be specified from time to time by the department.

(6) ABUTTING OWNERS. After the designation of a controlled-access highway, the owners or occupants of abutting lands shall have no right or easement of access, by reason of the fact that their property abuts on the controlled-access highway or for other reason, except only the controlled right of access and of light, air or view.

(7) SPECIAL CROSSING PERMITS. Whenever property held under one ownership is severed by a controlled-access highway, the department may permit a crossing at a designated location, to be used solely for travel between the severed parcels, and such use shall cease if such parcels pass into separate ownership.

IV. Statutes Governing Drainage

Section 88.87(2) of the *Wisconsin Statutes* describes regulations concerning rights of drainage:

> (a) Whenever any county, town, city, village, railroad company or the department of transportation has heretofore constructed and now maintains or hereafter constructs and maintains any highway or railroad grade in or across any marsh, lowland, natural depression, natural watercourse, natural or man-made channel or drainage course, it shall not impede the general flow of surface water or stream water in any unreasonable manner so as to cause either an unnecessary accumulation of waters flooding or water-soaking uplands or an unreasonable accumulation and discharge of surface water flooding or water-soaking lowlands. All such highways and railroad grades shall be constructed with adequate ditches, culverts, and other facilities as may be feasible, consonant with sound engineering practices, to the end of maintaining as far as practicable the original flow lines of drainage. This paragraph does not apply to highways or railroad grades used to hold and retain water for cranberry or conservation management purposes.
>
> (b) Drainage rights and easements may be purchased or condemned by the public authority or railroad company having control of the highway or railroad grade to aid in the prevention of damage to property owners which might otherwise occur as a result of failure to comply with par. (a).

(c) If a city, village, town, county, or railroad company or the department of transportation constructs and maintains a highway or railroad grade not in accordance with par. (a), any property owner damaged by the highway or railroad grade may, within 3 years after the alleged damage occurred, file a claim with the appropriate governmental agency or railroad company. The claim shall consist of a sworn statement of the alleged faulty construction and a description, sufficient to determine the location of the lands, of the lands alleged to have been damaged by flooding or water-soaking. Within 90 days after the filing of that claim, the governmental agency or railroad company shall either correct the cause of the water damage, acquire rights to use the land for drainage or overflow purposes, or deny the claim. If the agency or company denies the claim or fails to take any action within 90 days after the filing of the claim, the property owner may bring an action in inverse condemnation under ch. 32 or sue for such other relief, other than damages, as may be just and equitable.

WisDOT specification 205.3.3 further describes its policies concerning drainage:

(1) During construction, maintain roadway, ditches, and channels in a well-drained condition at all times by keeping the excavation areas and embankments sloped to the approximate section of the ultimate earth grade. Perform blading or leveling operations when placing embankments and during the process of excavation except if the excavation is in ledge rock or areas where leveling is not practical or necessary. If it is necessary in the prosecution of the work to interrupt existing surface drainage, sewers, or under drainage, provide temporary drainage until completing permanent drainage work.

(2) If storing salvaged topsoil on the right-of-way during construction operations, stockpile it to preclude interference with or obstruction of surface drainage.

(3) Seal subgrade surfaces as specified for subgrade intermediate consolidation and trimming in 207.3.9.

(4) Preserve, protect, and maintain all existing tile drains, sewers, and other subsurface drains, or parts thereof that the engineer judges should continue in service without change. Repair, at no expense to the department, all damage to these facilities resulting from negligence or carelessness of the contractor’s operations.

APPENDIX F: ADDITIONAL INFORMATION SOURCES

Wisconsin State Statutes

- Wisconsin Statute Chapter 91: Farmland Preservation
  - Subchapter 91.46(4): Conditional Uses
- Wisconsin Statute Chapter 32: Eminent Domain
  - Subchapter 32.035: Agricultural Impact Statement

Department of Agriculture, Trade and Consumer Protection Website Links

- DATCP (datcp.wi.gov)
- Farmland Preservation
- Agricultural Impact Statements
- Wisconsin Farm Center (Information on services provided to Wisconsin farmers including financial mediation, stray voltage, legal, vocational, and farm transfers)
- Drainage Districts

Department of Administration (DOA) Website Links

- DOA (doa.wi.gov)
- Relocation Assistance (Publications on landowner rights under Wisconsin's eminent domain law)
- Wisconsin Relocation Rights Residential
- Wisconsin Relocation Rights for Businesses, Farm and Nonprofit Organizations
- The Rights of Landowners under Wisconsin Eminent Domain Law, Procedures under sec. 32.06 Wis. Stats. (Condemnation procedures in matters other than highways, streets, storm & sanitary sewers, watercourses, alleys, airports and mass transit facilities)

Department of Natural Resources (facility plan) Website Links

- DNR (dnr.wi.gov)
- Managed Forest Law

U.S. Department of Agriculture (USDA)

- USDA (usda.gov)
- National Agricultural Statistics Service
- Web Soil Survey
- Soil Quality – Urban Technical Note No. 1, Erosion and Sedimentation on Construction Sites

Wisconsin Department of Safety and Professional Services (DSPS)

- DSPS (dsps.wi.gov)
- Real Estate Appraisers (Look-up for state certification status of different types of real estate appraisers)

State Bar of Wisconsin

- State Bar of Wisconsin (www.wisbar.org)
- For general legal information and assistance in finding a lawyer

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