Siting Board 1-1:

Submit a copy of the lease or purchase agreements, including options, separate agreements, or deeds which Kentucky Municipal Energy has entered into in connection with the proposed merchant generating facility, including the agreements for each of the parcels of the project.

Response: A copy of the Purchase Agreement Between KYMEA and City of Madisonville is attached hereto as Attachment 1-01.

Witness: Doug Buresh

REAL ESTATE SALE AND PURCHASE AGREEMENT

THIS REAL ESTATE SALE AND PURCHASE AGREEMENT (this "Agreement") is made and entered into as of the 1st day of August, 2024, by and between **CITY OF MADISONVILLE, KENTUCKY**, a municipality and political subdivision of the Commonwealth of Kentucky ("Seller") and **KENTUCKY MUNICIPAL ENERGY AGENCY**, an interlocal and public agency established under the laws of the Commonwealth of Kentucky ("Purchaser"). The "Effective Date" of this Agreement shall be the date on which the last party hereto executes this Agreement.

W I T N E S S E T H:

In consideration of the mutual covenants hereinafter set forth, and intending to be legally bound, Seller and Purchaser hereby agree as follows:

1. Agreement to Sell and to Purchase. Seller agrees to sell to Purchaser and Purchaser agrees to purchase from Seller, in accordance with the terms and conditions hereinafter set forth, that certain parcel of real estate comprising approximately 25 acres, being a portion of MAP Parcel 66.9, located directly east of the Seller's Wastewater Treatment Plant at 1757 A.C. Slaton Road, Madisonville, Kentucky 42431, as more particularly described on Exhibit A attached hereto, together with all improvements and fixtures located thereon (the "Property"), all easements (including, without limitation, easement rights over any access road or driveway which is not located in its entirety within the Property), privileges and appurtenances thereto, all licenses, permits and governmental approvals and entitlements associated therewith, all rents and income therefrom arising from and after the date of Closing (as hereinafter defined). Purchaser intends to construct, equip and operate a 75 MW Natural Gas Reciprocating Internal Combustion Engine Generating Facility to serve its member utilities (the "Project"). Purchaser is assuming no liability of Seller pursuant to this Agreement, except as expressly set forth herein or in the exhibits hereto. If the survey referred to in Section 20 of this Agreement provides a revised legal description of the real estate, such revised legal description shall, upon mutual agreement of the parties, be substituted for the description contained in Exhibit A hereto.

2. Purchase Price. The purchase price ("Purchase Price") for the Property shall be calculated at Ten Thousand Dollars ($10,000) per acre. The Purchase Price shall be payable by wire transfer of immediately available funds or by Purchaser's check at the Closing (adjusted by the amount of any prorations, allowances or credits provided for in this Agreement).

3. Earnest Money Deposit. Seller has agreed that Purchaser shall not be required to deposit earnest money

4. Closing. The Closing shall occur at a mutually agreeable location of the Seller and the Purchaser or at the offices of Rubin & Hays in Louisville, Kentucky, on or before June 30, 2025. The Closing may also be extended if agreed to in writing by the Seller and the Purchaser. At the Closing, the following shall occur:

A. Conveyance of Title. Seller shall convey to Purchaser, unencumbered, marketable fee simple title to the Property by deed containing special warranty covenants and in recordable form (the "Deed") subject to the following exceptions only (i) applicable zoning rules and regulations affecting the Property, (ii) real estate taxes and assessments which may be a lien on the Property but which are not yet due and payable, (iii) easements, restrictions and stipulations of record as of the date of this Agreement affirmatively approved, or not objected to, by Purchaser subsequent to the date of this Agreement, which do not interfere with the use of the Property by Purchaser, do not materially impair the value of the Property, have not been violated and which do not contain any reversionary clause, and (iv) the coal mineral rights in and underlying the real estate which has previously been severed from the surface estate.

B. Payment of Purchase Price. On the date of Closing, Purchaser shall pay to Seller the amount of the Purchase Price, adjusted as provided in this Agreement.

C. Expenses of Closing. Seller shall pay (i) the cost and expense of preparing the Deed and (ii) the transfer tax, if any, (and documentary stamp taxes and surtaxes, if any) and document recording fees imposed upon the conveyance of the Property to Purchaser. Purchaser shall pay the cost and expense incurred for (i) Purchaser's title examination of the Property and any title insurance policy purchased by Purchaser, (ii) the survey referred to in Section 20 of this Agreement, (iii) financing fees, charges and expenses (if any), and (iv) any inspections of the Property made by Purchaser or on Purchaser's behalf during the Due Diligence Period. Seller and Purchaser shall each bear their own attorneys' fees and other fees and expenses incurred in connection with this transaction.

D. Prorations. Seller represents that to its knowledge there are no taxes, assessments or impositions relating to the Property other than ad valorem real estate taxes, and Seller agrees that to the extent there are taxes, assessments or impositions relating to the Property other than ad valorem real estate taxes, Seller shall be responsible for payment of such taxes, assessments and impositions assessed against the Property for periods prior to the Closing. Seller shall be responsible for payment of all real property taxes assessed against the Property for periods prior to the Closing (including, without limitation, any roll-back or deferred taxes). All taxes, assessments and impositions payable for the calendar year of Closing shall be prorated between Seller and Purchaser on a calendar year basis using the most recent bills for such taxes, assessments and impositions available for the Property. If the actual bills for taxes, assessments and impositions, when issued, differ from the amounts assumed for the proration, each party's prorated amount shall be adjusted and payment made by the party owing an additional prorated payment to the other party within thirty (30) days of determination thereof. Notwithstanding the foregoing, any request to re-prorate such taxes must be made by the requesting party no later than ninety (90) days after the issuance of the actual tax bill. The terms of this paragraph shall survive closing.

E. Possession. Seller shall deliver exclusive possession of the Property to Purchaser on the date of Closing.

F. Other Documents. Seller shall deliver to Purchaser and Purchaser's title insurance company [i] an affidavit sufficient to have Purchaser's title insurance company remove

any exceptions for mechanic's and materialmen's liens and parties in possession and other "pre-printed" title exceptions, [ii] a "FIRPTA" affidavit to the effect that Seller is not a foreign corporation or other foreign entity within the meaning of Section 1445 of the Internal Revenue Code of 1986 (as amended), [iii] any documentation or information required by Kentucky or local law or information or documentation required by Purchaser's title insurance company to delete any "gap" exception covering the effective date of the last updated title commitment and the actual recording of the deed and to otherwise satisfy its other Schedule B, Section 1 requirements, and [iv] such other information and documentation as Purchaser, Purchaser's title insurance company, or Purchaser's lender may require.

5. Access and Cooperation. Purchaser and its agents, employees, contractors and designees, at any time after the Effective Date, shall have the right to enter upon the Property at their sole risk for the purposes of satisfying the contingencies set forth in Section 20 and conducting inspections, studies and investigations of the Property, including the right to take and remove subsoil and vegetation samples therefrom, and the right to inspect and examine reports, records and plans and specifications relating to the Property. Purchaser's exercise of its right of entry and inspection shall in no event release the Seller from its warranties and representations as set forth herein. Seller agrees to cooperate with Purchaser in Purchaser's attempt to satisfy the contingencies set forth in Section 20. Purchaser shall indemnify and hold Seller harmless from and against any and all cost, expense (including reasonable attorneys' fees), liability or damage arising out of any third party claims or mechanics liens filed against the Property as a result of Purchaser's investigations and inspections, or claims or demands made in connection with work performed by or on the behalf of Purchaser.

6. Maintenance, Utilities and Insurance. Until the date of Closing, Seller shall, at Seller's sole cost and expense: [i] maintain the Property (including any structures which may be constructed on the Property) in good condition and repair and fully comply with all obligations of Seller under any contracts affecting the Property, [ii] pay for all water, gas, electricity, and other utilities used or consumed in connection with the Property which are not the responsibility of the Purchaser, [iii] insure the Property against damage or destruction by fire and all other risks covered by an extended coverage insurance policy, and [iv] obtain, or cause to be obtained, and keep in force and effect comprehensive public liability and property damage insurance providing coverage for injury to person (including death) and property damage (including the loss of use thereof) with reasonable limits of liability, and [v] keep in force and effect any other insurance coverage Seller has relating to the Property.

7. Condemnation and Casualty. If, prior to the date of Closing: [i] the Property, or any portion thereof, is taken or appropriated by virtue of eminent domain or similar proceedings, or [ii] any improvement on the Property is damaged by fire or other casualty and not restored to its former condition by the date of Closing, Purchaser in either such event may rescind and terminate this Agreement or continue the same in full force and effect, at Purchaser's sole discretion. If Purchaser terminates this Agreement, then Seller shall be entitled (as between Seller and Purchaser) to receive all insurance proceeds or condemnation proceeds paid for that portion of the Property damaged or taken. If Purchaser elects to maintain this Agreement in full force and effect, then (a) Purchaser shall be entitled to receive all insurance proceeds or condemnation

proceeds paid for that portion of the Property damaged or taken and not expended for repairs, or (b) if the insurance proceeds or condemnation proceeds have been paid to Seller, then Purchaser shall receive a credit against the Purchase Price equal to the amount of insurance proceeds or condemnation proceeds paid to Seller and not expended for repairs. If Purchaser elects to rescind this Agreement by reason of such condemnation or casualty, neither party shall have any further liability hereunder.

8. Notices. All notices required or permitted by this Agreement shall be deemed given if delivered in writing by email, hand delivery or by overnight courier service, to the address hereinafter set forth for the recipient of such notices or to such other address as shall be designated by either Purchaser or Seller in accordance with this Section, and shall be deemed given the date such notice was given as to email and hand delivery, and shall be deemed given one (1) day after delivered if delivered by overnight courier.

If to Seller:

City of Madisonville, Kentucky
Attn: Mayor Kevin Cotton
67 North Main Street
Madisonville, Kentucky 42461
Email: kcotton@madisonvillegov.com

If to Purchaser:

Kentucky Municipal Energy Agency
Attn: Doug Buresh
1700 Eastpoint Parkway, Suite 220
Louisville, Kentucky 40223
Email: dburesh@kymea.org

9. Brokers. Seller and Purchaser each hereby represents and warrants to the other that they have not dealt with any broker, consultant, finder or like agent who might be entitled to any compensation in connection with the sale of the Property to Purchaser.

10. Covenants, Representations and Warranties of Seller. Seller covenants, represents and warrants to Purchaser that:

A. Seller currently has, and on the date of Closing will have, good and marketable title to the Property, subject to no liens or encumbrances other than those permitted in Section 4A hereof or which will otherwise be satisfied on or before the date of Closing;

B. This Agreement constitutes the legal, valid and binding obligation of Seller, enforceable in accordance with its terms;

C. Seller has no knowledge of, and Seller has not received nor given any notice of, (i) any existing and/or uncorrected violation of any fire, zoning, building, environmental, or health law or regulation, or any other federal, state or local law or regulation affecting the Property, or (ii) any notice of taking or condemnation, or intent to take or condemn all or any portion of the Property;

D. Seller has full power and authority, and has taken, or shall take by the Effective Date, all required governmental action, to authorize the execution, delivery and performance of this Agreement by Seller, and this Agreement does not conflict with any agreement to which Seller is a party;

E. Seller has not received any notice of any action, suit, litigation or proceeding of any nature pending, threatened, against or affecting the Property, or any portion thereof, which could result in the obtaining of a lien or other interest in the Property by any third party, in any court or before or by any federal, state, county or municipal department, commission, board, bureau, agency or other governmental instrumentality;

F. The current use of the Property and improvements thereon by Seller fully complies with all applicable codes and other applicable laws, regulations and ordinances (including without limitation applicable environmental, zoning, building and land use laws, regulations and ordinances;

G. On the date of Closing there will be no unpaid claims of contractors, materialmen or laborers which could give rise to a lien against the Property and Seller shall and hereby does indemnify Purchaser against any loss, cost (including reasonable attorneys' fees), claim, or liability incurred or asserted against Purchaser by reason of any mechanic's or materialman's lien filed against the Property for work performed at the request of or for the benefit of Seller;

H. Except as specifically disclosed in the Environmental Reports (as hereinafter defined), no underground or above-ground storage tank is located on the Property;

I. Except with respect to matters reported in those certain environmental assessment reports described on Exhibit B hereto, if any, complete copies of which (if any) Seller represents and warrants have been furnished to Purchaser (the "Environmental Reports"), the Seller, except as set forth on Exhibit B, has not caused or permitted any Hazardous Material (hereinafter defined) to be discharged or disposed of on, under or at the Property or any part thereof, and, to the best of Seller's knowledge, neither the Property nor any part thereof contains any Hazardous Material, and neither the Property nor any part thereof has ever been used (whether by the Seller or, by any other person) as a dump site or storage (whether permanent or temporary) site for any Hazardous Material. For the purposes of this Agreement, "Hazardous Material" means and includes asbestos and petroleum products and any other hazardous, toxic or dangerous waste, substance or material defined as such in, or for purposes of, the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") (42 U.S.C. 9601 et seq.), any so-called "Superfund" or "Superlien" law, or any other federal, state or local statute, law, ordinance, code, rule, regulation, order or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic or dangerous waste, substance or material;

J. Seller is not in default under any indenture, mortgage, deed of trust, loan agreement, or other agreement to which Seller is a party and which affects any portion of the Property.

K. Seller agrees to restate, ratify and confirm the foregoing representations and warranties in writing as of the date of Closing to the full extent Seller is able to do so as of such date.

11. Default. If Purchaser fails to carry out the material terms of this Agreement or refuses to perform its respective obligations hereunder after no less than fifteen (15) days written notice and a right to cure the same and upon performance by Seller of the obligations of Seller hereunder as a condition to Closing, Seller may terminate this Agreement. If Seller fails to carry out the terms of this Agreement or refuses to perform its respective obligations hereunder upon performance by Purchaser of the obligations of Purchaser hereunder as a condition to Closing Purchaser may pursue any remedy available at law or in equity.

12. Entirety of Agreement. This Agreement constitutes the final, complete and exclusive understanding of the parties with respect to the matters set forth herein, and supersedes all prior and contemporaneous oral and written agreements or understandings as to its subject matter. This Agreement may not be modified or amended except in writing, signed by each of the parties hereto.

13. Gender; Number; Captions. The use of the masculine, feminine or neuter gender, or the singular or plural word or number, shall be deemed to apply to any other gender or word or number as the context of any provisions of this Agreement may require. The term "person" shall include individuals, partnerships, corporations, and all other legal entities. The several captions of this Agreement are inserted for convenience only, and shall be ignored in interpreting the provisions of this Agreement.

14. Assignment and Succession. The covenants, conditions and agreements made and entered into by the parties to this Agreement shall be binding upon and inure to the benefit of Seller and Purchaser and their respective successors and assigns.

15. No Third Party Beneficiary. No person, firm, partnership, corporation, joint venture or other legal entity (except for Seller and Purchaser, and their respective successors and assigns) is intended to be or shall be deemed to be a beneficiary of any of the terms, conditions and provisions of this Agreement, except under a separate agreement signed by Seller and Purchaser.

16. Risk of Loss. Until the delivery of the Deed, all risk of loss with respect to the Property shall continue to be borne by Seller.

17. Time of the Essence. Time shall be of the essence in the performance by Seller and Purchaser of all of their respective obligations under this Agreement.

18. Governing Law. The provisions of this Agreement shall be construed, enforced and governed in all respects by the laws of the Commonwealth of Kentucky.

19. Survival of Representations, Warranties and Covenants. All representations, warranties and covenants of Seller and Purchaser set forth in this Agreement shall survive the Closing for a period of one (1) year and shall not be merged into the Deed.

20. Contingencies. The obligations of Purchaser under this Agreement are contingent upon satisfaction of the following conditions established for Purchaser's benefit, on or before the Closing Date (unless any such contingency has been waived in writing by Purchaser):

A. Purchaser (at Purchaser's sole expense) obtaining an environmental report of the Property, from an individual selected by Purchaser, which shall not disclose any condition rendering the Property unsuitable for its intended use, as determined by Purchaser in its reasonable discretion;

B. Purchaser obtaining (at Purchaser's sole expense) an approval from the Kentucky Siting Board for the construction, equipping and operation of the proposed Project;

C. Purchaser obtaining (at Purchaser's sole expense) a title insurance commitment (with such affirmative insurance and endorsements as may be reasonably requested by Purchaser) in form and substance satisfactory to Purchaser and containing exceptions to title only that Purchaser is willing to accept (or, in the case of monetary liens, those which Seller shall remove at or prior to Closing);

D. Purchaser obtaining (at Purchaser's sole expense) an ALTA survey of the Property in form and substance satisfactory to Purchaser prepared by a land surveyor duly licensed in the state in which the Property is located acceptable to Purchaser, which shall include Purchaser's required survey certification and which shall disclose that the proposed Project shall not be situated in a flood plain or flood hazard area, and which shall not disclose any condition rendering the Property unsuitable for its intended use, as determined by Purchaser in its reasonable discretion;

E. Purchaser's title insurance company's receipt of appropriate evidence of the Seller authorizing the Seller's execution, delivery and performance of this Agreement and the documents to be delivered at Closing contemplated herein;

F. Purchaser's receipt of Seller's written certification that all of the representations and warranties of Seller set forth in Section 11 of this Agreement remain true, accurate and complete in every respect as of the date of Closing;

G. Purchaser's is able to build or contract with a natural gas distributor to build a six-inch natural gas line to fuel the Project with natural gas. If requested by the Purchaser the Seller agrees to provide an easement across its property east of Bean Cemetery Road for a natural gas transmission line from Texas Gas Transmission to the Project;

H. Purchaser is able to acquire (at its expense) any easements across private property that may be needed to complete the transmission line from the Project's substation to be built on the Property to the KU 69 kV transmission lines directly across therefrom on AC Slayton Road;

I. Seller will provide Purchaser with taps to Seller's water and wastewater system and connection to the Seller's electric system (the "City's Utilities"). If capital

improvements are required to be made to the City's Utilities to provide the required level of service for operation of the Project, Purchaser will reimburse the Seller for those expenditures made to provide those service levels needed for the Project;

J. Purchaser is able to obtain any necessary changes in zoning classification needed for the operation of the Project and any necessary building, construction and operating permits issued by Madisonville or Hopkins County, Kentucky in order for Purchaser to construct and operate the Project;

K. Purchaser is able to obtain permission to cross the adjacent railroad tracks with the proposed natural gas line and proposed transmission line connecting the Project to the LGE/KU substation serving the Project; and

L. Purchaser has full power and authority, and has taken, or shall take by the Effective Date, all required action by its Board of Directors, to authorize the execution, delivery and performance of this Agreement by Purchaser, and this Agreement does not conflict with any agreement to which Purchaser is a party.

21. Seller and Purchaser acknowledge that Purchaser is a Kentucky public agency and not subject to ad valorem taxation. Purchaser understands that ongoing services provided by the City of Madisonville, Kentucky will be needed for the operation and safety of the Project. Those ongoing services shall include fire protection, emergency medical services, law enforcement and public road access and maintenance. Purchaser agrees to enter into a PILOT Agreement with the City of Madisonville, Kentucky whereby Purchaser will pay to the City of Madisonville, Kentucky an annual payment of $100,000 per year in lieu of taxes.

[The remainder of this page is intentionally left blank; signature page follows.]

WITNESS the signatures of Seller and Purchaser as of the above date, but actually on the dates set forth below.

SELLER:

CITY OF MADISONVILLE, KENTUCKY

By: _____
Name: Kevin Cotton
Title: Mayor
Date: August 1, 2024

PURCHASER:

KENTUCKY MUNICIPAL ENERGY AGENCY

By: _____
Name: Doug Buresh
Title: President and CEO
Date: August 1, 2024

EXHIBIT A

(Legal Description of Property)

TRACT I – (Plant Site)

A certain tract of land located in the City of Madisonville, Hopkins County, Kentucky, and more particularly described as follows:

Beginning at iron pin and be a point in the new division line in which this tract is a part in the north line of AC Slaton Road and having Kentucky State Plane Coordinates N:2004223.25 and E:1116433.65; thence, running with said new division line N 08°01'21" E for a distance of 275.00' to an iron pin set this survey; thence, S 81°38'36" E for a distance of 884.90' to an iron pin set this survey, also being a point in the west right of way of CSX Railroad; thence, running with said right of way S 22°14'27" W for a distance of 116.63' to a point; thence, running with a curve to the right having an arc distance of 996.47, radius of 1236.69, chord bearing of S 46°13'02" W for a chord distance of 969.73' to an iron pin set this survey, also being a point in the north right of way of AC Slaton Road; thence, running with said right of way N 80°47'09" W for a distance of 256.68' to the point of beginning, having an area of 13.513 acres and subject to any easements recorded or unrecorded, according to a survey conducted by Thomas W. Crabtree with Ronald Johnson and Associates, PSC on August 8th, 2024 and being a part of Deed Book 531, Page 293 Tract 1 as recorded in the Hopkins County Clerk's Office.

TRACT II -- (Substation Site)

A certain tract of land located in the City of Madisonville, Hopkins County, Kentucky, and more particularly described as follows:

Beginning at a point, said point being an iron pin in the intersection of the right of way lines A.C. Slaton Road and Bean Cemetery Road, thence running with the North right of way line of said A.C. Slaton Road South 85° 01' 02" West for a distance of 759.94 feet to a point, said point being an iron pin, and also being a point in the intersection of the right of way lines of A.C. Slaton Road and the CSXT Railroad, thence running in a Northeasterly direction with a curve having a radius of 1,327.65 feet and a chord of North 26° 05' 09" East for a distance of 912.33 feet to a point, said point being an iron pin and also being a point in the East right of way line of said CSXT Railroad, thence running North 05° 59' 24" East for a distance of 105.95 feet to a point, said point being an iron pin and also being a corner to Richard D. Cates, thence running North 86° 41' 59" East for a distance of 226.15 feet to a point, said point being an iron pin and also being a point in the West right of way line of said Bean Cemetery Road, thence running South 05° 26' 09" East for a distance of 136.22 feet to a point, said point being an iron pin, thence running South 08° 12' 23" East for a distance of 743.79 feet to the point of beginning, containing 8.4279 acres.

Being the same property described as Tract II in Deed Book 531, Page 293 as recorded in the Hopkins County Clerk's Office.

EXHIBIT B

to Real Estate Sale and Purchase Agreement

(Environmental Reports)

None provided

Siting Board 1-2:

Detail any contracts for which Kentucky Municipal Energy has paid, has negotiated to pay, or any compensation paid to non-participating landowners, whether cash or otherwise, near the project. Include the terms of the agreements and which properties are involved in terms of distance to the project boundaries.

Response: No contracts have been made with non-participating landowners.

Witness: Doug Buresh

Siting Board 1-3:

Explain whether the natural gas transmission line will be located in an existing right-of-way. If not, provide information about any agreements in place with affected landowners.

Response: The natural gas transmission line will not be located in an existing right-of-way. Texas Gas Transmission is currently completing a Stage II estimate to identify the final interconnect point. The preliminary route crosses property owned by the City of Madisonville east of Bean Cemetery Road and will require at least one additional easement to reach the final interconnection point.

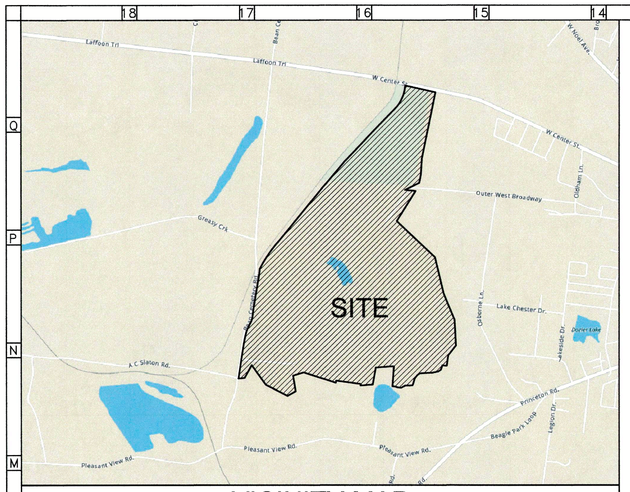
Witness: Doug Buresh

Siting Board 1-4:

Explain whether the natural gas transmission line is fully located within the Madisonville city limits. If not, explain what Hopkins County development regulations would apply to the construction and operation of that transmission line.

Response: The Plant and Substation Site were already in the Madisonville city limits and the property owned by the City of Madisonville east of Bean Cemetery Road (see Attachment 1-04 – Annexation Plat) was recently annexed into the Madisonville city limits; however, the final interconnection point at the east end of the pipeline will not be in the Madisonville city limits. The parcels where the Texas Gas line runs are between the City property and Osborne Lane to the east. These parcels are in the county, but the county has no development regulations which would apply to the construction and operation of the gas line.

Witness: Doug Buresh.



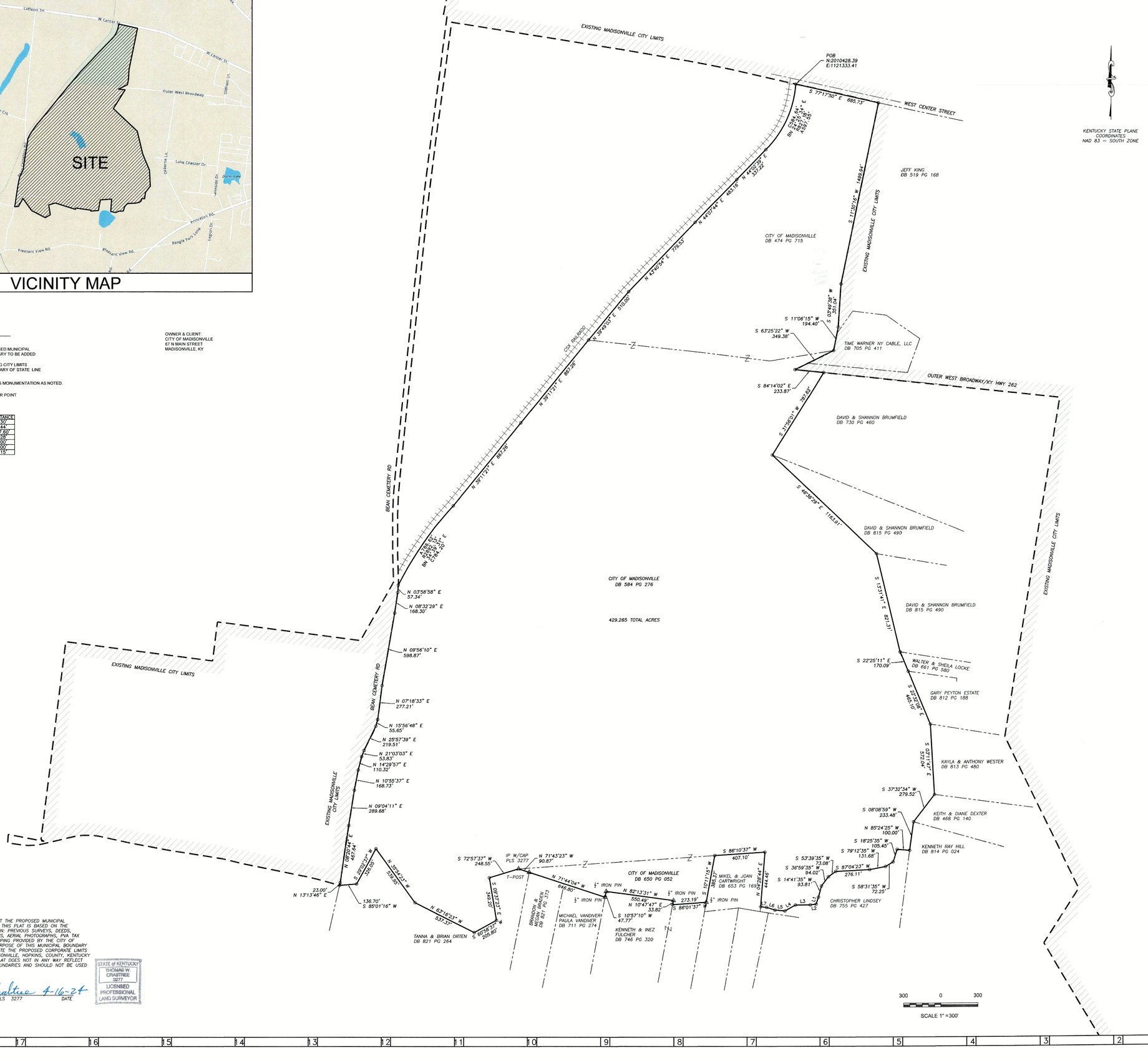
VICINITY MAP

LEGEND

- PROPOSED MUNICIPAL BOUNDARY TO BE ADDED
- EXISTING CITY LIMITS SECRETARY OF STATE LINE
- EXISTING MONUMENTATION AS NOTED.
- MEANDER POINT

LINE	BEARING	DISTANCE
L1	S 19°09'55" W	60.30'
L2	S 82°58'39" W	47.44'
L3	S 89°38'35" W	117.60'
L4	S 60°29'35" W	98.28'
L5	N 84°40'25" W	82.00'
L6	N 72°00'25" W	71.00'
L7	N 65°05'25" W	49.15'

OWNER & CLIENT:
CITY OF MADISONVILLE
67 N MAIN STREET
MADISONVILLE, KY



I HEREBY CERTIFY THAT THE PROPOSED MUNICIPAL BOUNDARY SHOWN ON THIS PLAT IS BASED ON THE FOLLOWING INFORMATION: PREVIOUS SURVEYS, DEEDS, PREVIOUS DESCRIPTIONS, AERIAL PHOTOGRAPHS, PVA TAX MAPS AND OTHER MAPPING PROVIDED BY THE CITY OF MADISONVILLE. THE PURPOSE OF THIS MUNICIPAL BOUNDARY SURVEY IS TO DELINEATE THE PROPOSED CORPORATE LIMITS OF THE CITY OF MADISONVILLE, HOPKINS, COUNTY, KENTUCKY TO BE ADDED. THIS PLAT DOES NOT IN ANY WAY REFLECT INDIVIDUAL PARCEL BOUNDARIES AND SHOULD NOT BE USED FOR THAT PURPOSE.

Thomas W Crabtree 4-16-24
THOMAS CRABTREE, PLS 3277 DATE

STATE of KENTUCKY
THOMAS W. CRABTREE
3277
LICENSED PROFESSIONAL LAND SURVEYOR

RJA RONALD JOHNSON & ASSOCIATES, P.S.C.
ENGINEERING • LAND SURVEYING • ENVIRONMENTAL
24 W Center St Madisonville, KY 42431 (270) 821-6392

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVAL
1			

ANNEXATION PLAT FOR THE CITY OF MADISONVILLE, KY 67 N MAIN STREET MADISONVILLE, KY 42431

DATE APRIL 14 2024
DRAWN BY TWC
CHECKED BY
APPROVED BY

DRAWING TITLE
ANNEXATION

ENGINEER PRJ. NO. 24-060
DRAWING NO. 1.00

Siting Board 1-5:

Refer to the Application, Description of Proposed Site at 4. Provide a legal description of the Substation Site (described in the Application as 9.5 acres).

Response: "Beginning at a point, said point being an iron pin in the intersection of the right of way lines A.C. Slaton Road and Bean Cemetery Road, thence running with the North right of way line of said A.C. Slaton road South 85 degrees 01' 02" West for a distance of 759.94 feet to a point, said point being an iron pin, and also being a point in the intersection of the right of way lines of A.C. Slaton Road and the CSXT Railroad, thence running in a Northeasterly direction with a curve having a radius of 1,327.65 feet and a chord of North 26 degrees 05' 09" East for a distance of 912.33 feet to a point, said point being an iron pin and also being a point in the East right of way line of said CSXT Railroad, thence running North 05 degrees 59' 24" East for a distance of 105.95 feet to a point, said point being an iron pin and also being a corner to Richard D. Cates, thence running North 86 degrees 41' 59" East for a distance of 226.15 feet to a point, said pint being an iron pin and also being a point in the West right of way line of said Bean Cemetery Road, thence running South 05 degrees 26' 09" East for a distance of 136.22 feet to a point, said point being an iron pin, thence running South 08 degrees 12' 23" East for a distance of 743.79 feet to the point of beginning, containing 8.4279 acres."

While this full tract is under option with the City of Madisonville, Louisville Gas & Electric/Kentucky Utilities (LGE/KU) only requires a site of approximately five acres for the substation. Final substation configuration will not be known until after completion of the interconnection study in May 2025. Civil/Site engineering is just underway by Paterson & Dewar Engineers based on the largest potential configuration. The property will be bound by the railroad to the west, A C Slaton Road to the south and Bean Cemetery Road to the east. The

north boundary is currently unknown and will be subject to approval by LGE/KU following the interconnection study.

Witness: Doug Buresh

Siting Board 1-6:

State the total number of months which construction of the Project will occur, including construction of the plant, substation sites, and construction of the natural gas transmission line. Identify any potential deviations to that schedule.

Response: Construction is anticipated to run for 27 months starting in April 2025 through May 2027 including plant, substation site, and natural gas transmission line including commissioning activities. Site clearing and excavation work is targeted to occur in February or March 2025 prior to bat roost season which begins April 1. In addition, the construction of the substation site is currently on the critical path due to the timeline required for completion of the interconnection study and completion of a large generator interconnect agreement forecast for October 2025. LGE/KU projects typical construction period for interconnection facilities of 24 months which would place project completion at the end of 2027 including commissioning, which is 6 months beyond the current schedule. KYMEA is currently working with LGE/KU on options to accelerate their typical schedule to meet the June 1, 2027 Commercial Operations Date.

Witness: Doug Buresh

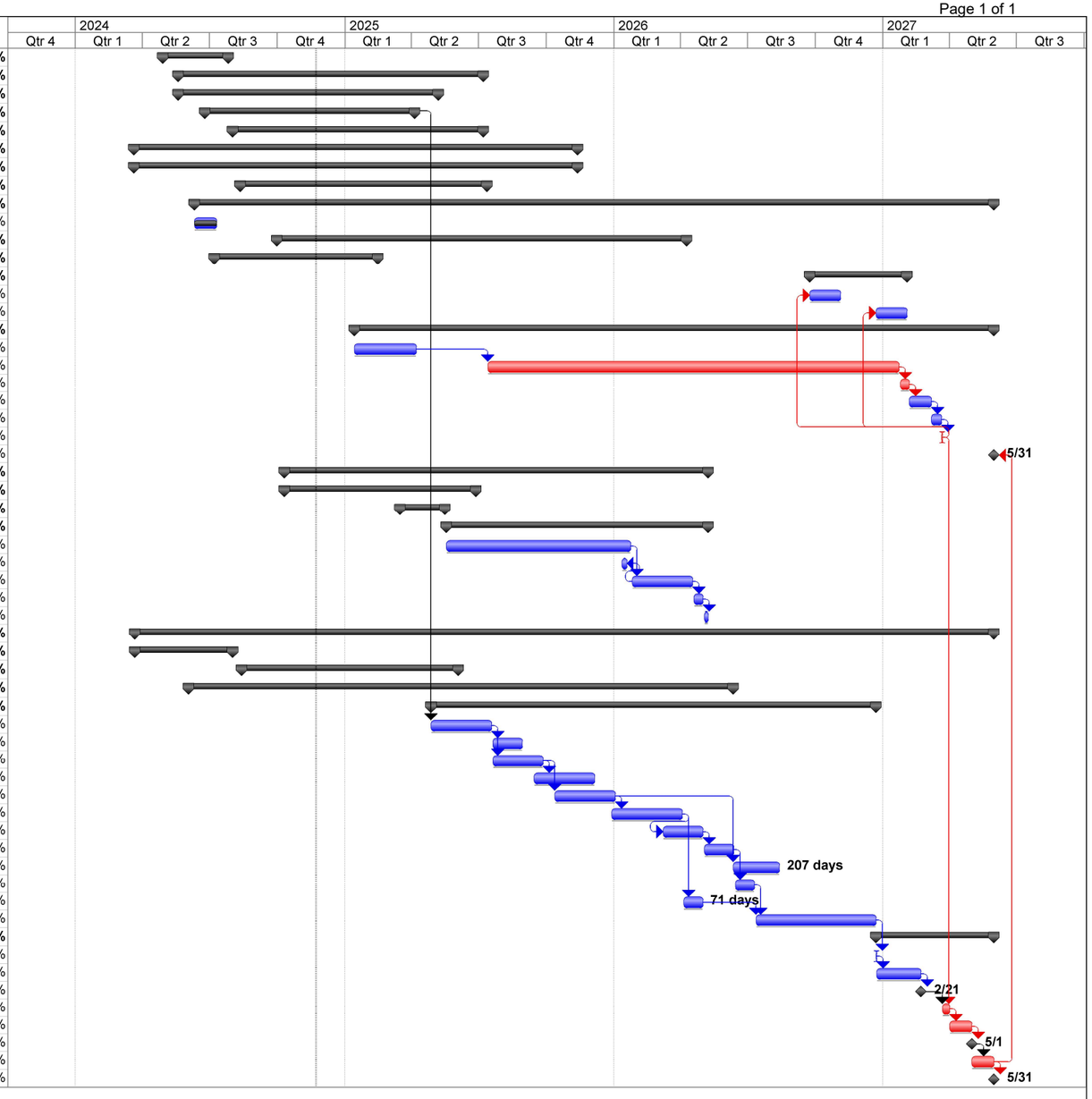
Siting Board 1-7:

Provide a detailed description of construction activities, including a construction timeline and schedule by activity, accounting for construction of all Project components (plant site, substation site, and natural gas transmission line).

Response: Early Finish Gantt chart is provided with details shown for construction activities. (See Attachment 1-07 – RICE Project Schedule 112224.)

Witness: Doug Buresh

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names	% Comp.
1	**Site Related Tasks**	**65 days**	**Mon 4/29/24**	**Fri 7/26/24**			**69%**
9	**Permitting**	**296 days**	**Mon 5/20/24**	**Mon 7/7/25**			**33%**
10	**Siting Board Petition**	**253 days**	**Mon 5/20/24**	**Wed 5/7/25**			**62%**
40	**401/404 Corps of Engineers Permit**	**204 days**	**Tue 6/25/24**	**Sat 4/5/25**			**12%**
53	**Ky DAQ Title V Permit**	**242 days**	**Fri 8/2/24**	**Mon 7/7/25**			**14%**
60	**LGIA Process**	**430 days**	**Thu 3/21/24**	**Wed 11/12/25**			**25%**
61	**Cluster Study**	**430 days**	**Thu 3/21/24**	**Wed 11/12/25**			**29%**
76	**Provisional Interconnection Service Request/Study**	**240 days**	**Mon 8/12/24**	**Sat 7/12/25**			**18%**
90	**LGE/KU Substation - SCHEDULE UNDER DEVELOPMENT**	**775 days**	**Tue 6/11/24**	**Mon 5/31/27**			**15%**
91	Injection Study	30 edays	Tue 6/11/24	Thu 7/11/24	149		100%
92	**HV Breakers (8/9+1/2)**	**398 days**	**Tue 10/1/24**	**Thu 4/9/26**			**2%**
98	**Preliminary Design**	**160 days**	**Mon 7/8/24**	**Fri 2/14/25**			**48%**
108	**Detailed Design**	**94 days**	**Thu 9/24/26**	**Tue 2/2/27**	**105**		**0%**
109	Initial Specifications including Sys Prot TO review	30 days	Thu 9/24/26	Wed 11/4/26	117FS-180 edays		0%
110	Final Specifications TO review	30 days	Wed 12/23/26	Tue 2/2/27	117FS-90 edays		0%
111	**Substation Construction**	**620 days**	**Tue 1/14/25**	**Mon 5/31/27**			**0%**
112	Construct Entry Road/Site Prep	60 days	Tue 1/14/25	Mon 4/7/25	38FF		0%
113	Construct Substation	20 mons	Mon 7/14/25	Fri 1/22/27	38,89,112		0%
114	Float	2 wks	Mon 1/25/27	Fri 2/5/27	113		0%
115	Commission Substation	30 edays	Fri 2/5/27	Sun 3/7/27	114		0%
116	In Service Date (backfeed power to GSU)	14 edays	Sun 3/7/27	Sun 3/21/27	115		0%
117	Initial Sync Date	1 day	Mon 3/22/27	Mon 3/22/27	116		0%
118	Trial Operation ends/COD	0 days	Mon 5/31/27	Mon 5/31/27	253FF		0%
119	**Gas Line**	**411 days**	**Fri 10/11/24**	**Fri 5/8/26**			**3%**
120	**Engineering**	**186 days**	**Fri 10/11/24**	**Fri 6/27/25**			**6%**
134	**Procurement**	**45 days**	**Mon 3/17/25**	**Fri 5/16/25**			**0%**
138	**Construction**	**255 days**	**Mon 5/19/25**	**Fri 5/8/26**	**137**		**0%**
139	Material deliveries	9 mons	Mon 5/19/25	Fri 1/23/26			0%
140	Pre-construction staking	5 days	Mon 1/12/26	Mon 1/19/26	141SF-5 days		0%
141	Construction	3 mons	Mon 1/26/26	Fri 4/17/26	139		0%
142	Line blows	2 wks	Mon 4/20/26	Fri 5/1/26	141		0%
143	Commissioning	1 wk	Mon 5/4/26	Fri 5/8/26	142		0%
144	**RICE Plant**	**832 days?**	**Fri 3/22/24**	**Mon 5/31/27**			**12%**
145	**Contracting**	**95 days**	**Fri 3/22/24**	**Thu 8/1/24**			**100%**
153	**Engineering**	**210 days**	**Wed 8/14/24**	**Tue 6/3/25**			**24%**
183	**Procurement/Deliveries**	**529 days?**	**Mon 6/3/24**	**Thu 6/11/26**			**2%**
233	**Construction - PRELIMINARY SCHEDULE**	**432 days**	**Mon 4/28/25**	**Tue 12/22/26**			**0%**
234	Site Balance & Bathtub	60 days	Mon 4/28/25	Fri 7/18/25	38,40,229,56		0%
235	Site UG Utilities	30 days	Mon 7/21/25	Fri 8/29/25	234		0%
236	Piling	50 days	Mon 7/21/25	Fri 9/26/25	234		0%
237	Electrical UG	60 days	Mon 9/15/25	Fri 12/5/25	236FS-10 days		0%
238	Concrete Foundations	60 days	Mon 10/13/25	Fri 1/2/26	236FS+10 days		0%
239	Building Erection	70 days	Mon 12/29/25	Fri 4/3/26	238FS-5 days,222,232		0%
240	Building Systems - Interior/Roof Elevation	40 days	Mon 3/9/26	Fri 5/1/26	239FS-20 days		0%
241	Engine Support Modules - Rough Set	30 days	Mon 5/4/26	Fri 6/12/26	240,189,198		0%
242	GSU & 13.8/69kV Systems	45 days	Fri 6/12/26	Thu 8/13/26	205,238		0%
243	Set Engines	20 days	Mon 6/15/26	Fri 7/10/26	241,184		0%
244	Set Switchgear	20 days	Mon 4/6/26	Fri 5/1/26	239,226		0%
245	MEP system Install	117 days	Mon 7/13/26	Tue 12/22/26	244,243		0%
246	**Startup & Commissioning**	**114 days**	**Wed 12/23/26**	**Mon 5/31/27**			**0%**
247	Back-up power from City	1 day	Wed 12/23/26	Wed 12/23/26	245		0%
248	Pre-commissioning	60 edays	Wed 12/23/26	Sun 2/21/27	247		0%
249	Installation Certificate	0 days	Sun 2/21/27	Sun 2/21/27	248		0%
250	Start Engines	10 edays	Mon 3/22/27	Thu 4/1/27	117,249		0%
251	Engine Break In & Load Tests	30 edays	Thu 4/1/27	Sat 5/1/27	250		0%
252	Start-Up Certificate	0 days	Sat 5/1/27	Sat 5/1/27	251		0%
253	Performance Tests	30 edays	Sat 5/1/27	Mon 5/31/27	252		0%
254	Provisional Acceptance/COD	0 days	Mon 5/31/27	Mon 5/31/27	253		0%



Project: RICE Project Schedule 12092
Date: Fri 11/22/24

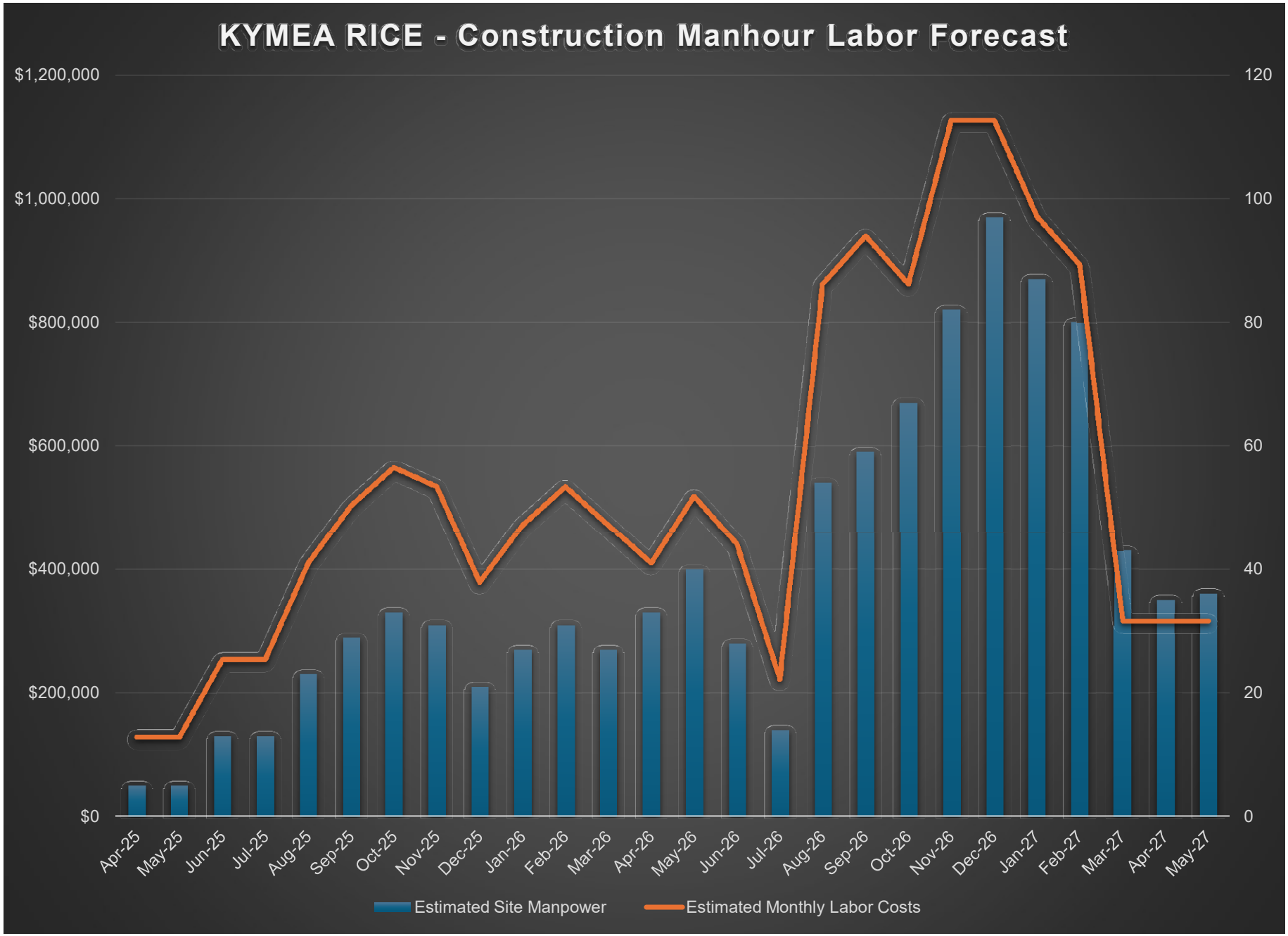
Task	Milestone	Rolled Up Critical Task	Split	Group By Summary
Critical Task	Summary	Rolled Up Milestone	External Tasks	Deadline
Progress	Rolled Up Task	Rolled Up Progress	Project Summary	

Siting Board 1-8:

Provide the average number of construction workers on-site each day over the course of the construction period, accounting for construction of all Project components (plant site, substation site, and natural gas transmission line).

Response: Manpower is expected to average 29 persons over the construction period. (See Attachment 1-08 – Construction Manhour Labor Forecast.)

Witness: Doug Buresh


KYMEA RICE - Construction Manhour Labor Forecast
$1,200,000
$1,000,000
$800,000
$600,000
$400,000
$200,000
$0
120
100
80
60
40
20
0
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25
Jan-26
Feb-26
Mar-26
Apr-26
May-26
Jun-26
Jul-26
Aug-26
Sep-26
Oct-26
Nov-26
Dec-26
Jan-27
Feb-27
Mar-27
Apr-27
May-27
Estimated Site Manpower
Estimated Monthly Labor Costs

Siting Board 1-9:

Provide the number of construction workers on-site during the peak construction period, accounting for construction of all Project components (plant site, substation site, and natural gas transmission line).

Response: Construction is expected to peak at 97 persons in December 2026. (See previous Attachment 1-08 – Construction Manhour Labor Forecast.)

Witness: Doug Buresh

Siting Board 1-10:

Refer to Application, Section 4, Compliance with Local Ordinances and Regulations. Per the Madisonville Code of Ordinances 156.031 for General Industrial zones, explain the difference between "minimum development setbacks" and "minimum lot setbacks".

Response: The minimum development setback standard (40') only applies to multi-lot developments such as a business park's main entrance. Our project is considered a single lot; therefore, only the minimum lot setback (20') applies.

Witness: Doug Buresh

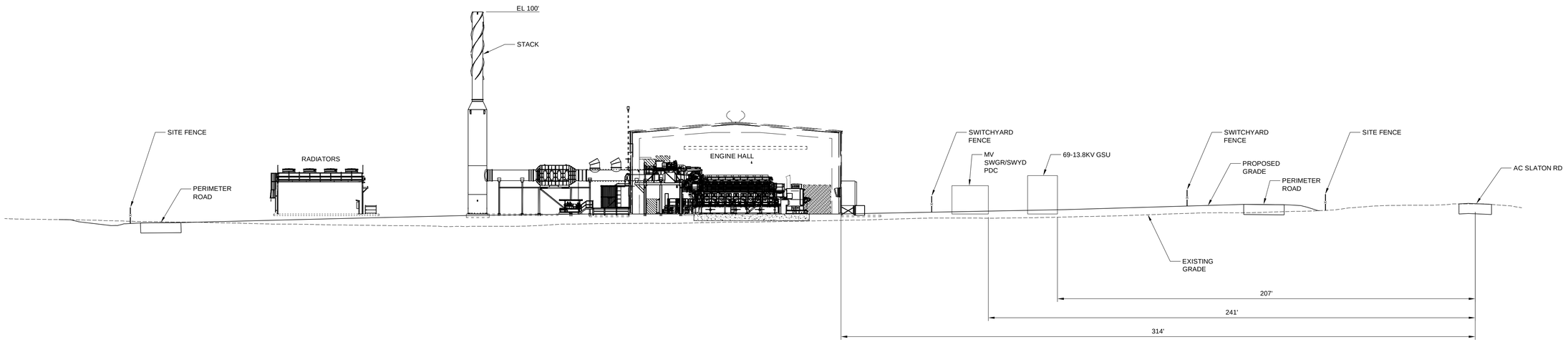
Siting Board 1-11

Provide the distance between the Plant building and AC Slaton Road.

Response: The Engine Hall housing the engines and the Administration Building are 314 feet from A C Slaton Road. (See Attachment 1-11 Cross Section Sketch.)

Witness: Doug Buresh

NOTES:



LOOKING EAST

1"=25' 0' 25' 50' 75' 100'

PRELIMINARY ISSUE
FOR REVIEW
NOT FOR CONSTRUCTION

11-20-24

NO.	REVISIONS	DSGN	CHKD	APVD	DATE
B					11/25/24

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225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CHRISTMAN SINCE 1994

KYMEA

KENTUCKY MUNICIPAL ENERGY AGENCY
KYMEA ENERGY CENTER I
MADISONVILLE, KENTUCKY

CROSS SECTION SKETCH

DESIGNED
DRAWN S.L. ROENFELDT
CHECKED
APPROVED
APPROVED
DATE

SCALE: 1"=25'
NO. 31825.01
REV. B
SK100

CADD D1-R6

Siting Board 1-12:

Provide the distance between:

a. The Substation and AC Slaton Road.

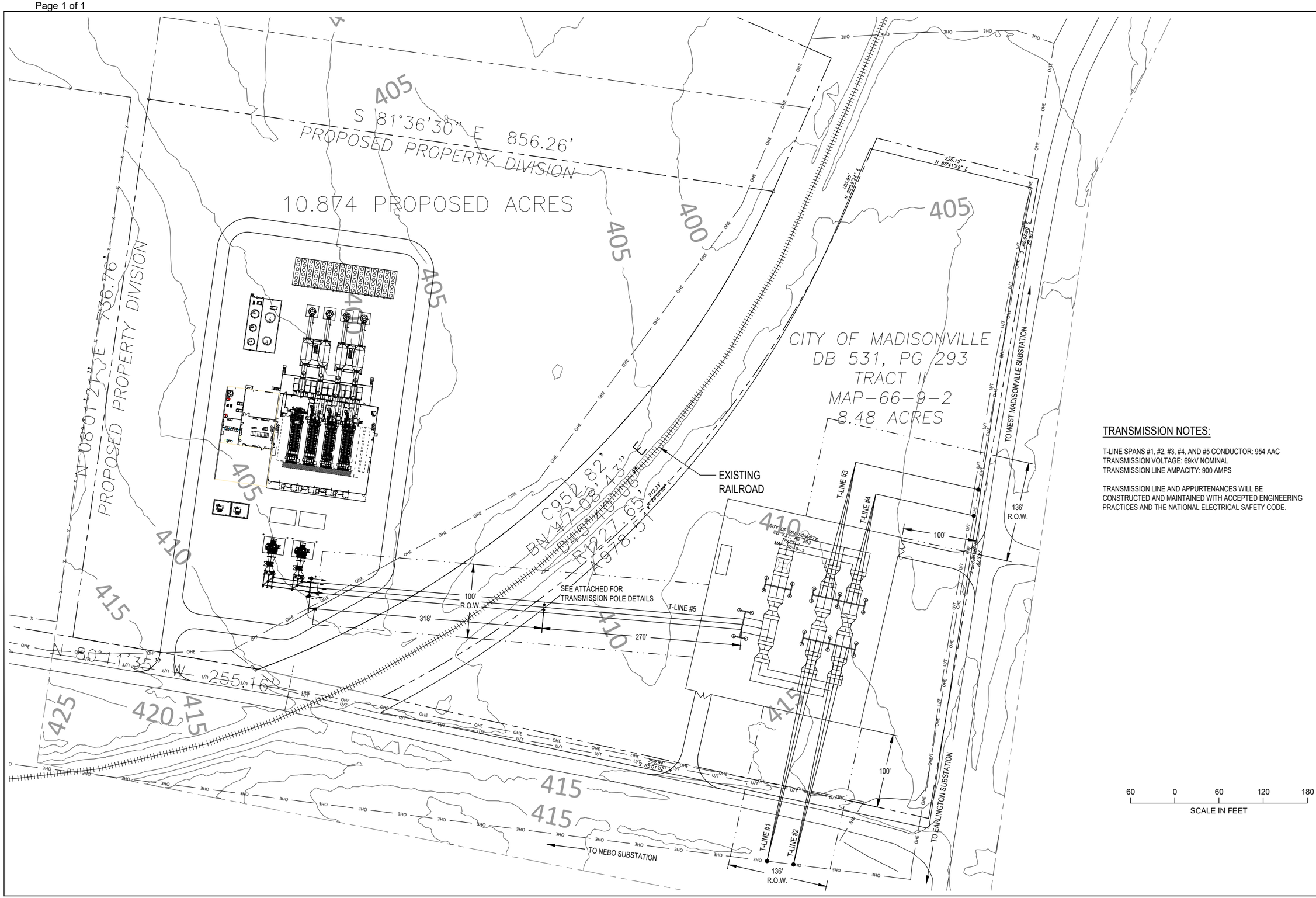
b. The Substation and Bean Cemetery Road.

Response:

a. Final substation configuration will not be known until after completion of the interconnection study in May 2025. Civil/Site engineering is underway by Paterson & Dewar Engineers based on the largest potential configuration. The substation fence is currently proposed to be 100 feet from A C Slaton Road subject to final approval by LGE/KU. (See Attachment 1-12 Site Layout.)

b. Final substation configuration will not be known until after completion of the interconnection study in May 2025. Civil/Site engineering is underway by Paterson & Dewar Engineers based on the largest potential configuration. The substation fence is currently proposed to be 100 feet from Bean Cemetery Road subject to final approval by LGE/KU. (See Attachment 1-12 Site Layout.)

Witness: Doug Buresh



TRANSMISSION NOTES:

T-LINE SPANS #1, #2, #3, #4, AND #5 CONDUCTOR: 954 AAC
TRANSMISSION VOLTAGE: 69kV NOMINAL
TRANSMISSION LINE AMPACITY: 900 AMPS

TRANSMISSION LINE AND APPURTENANCES WILL BE CONSTRUCTED AND MAINTAINED WITH ACCEPTED ENGINEERING PRACTICES AND THE NATIONAL ELECTRICAL SAFETY CODE.

No.	DATE	REVISION	BY
A	11-22-24	ISSUED FOR REVIEW.	PAH

Designed By: PAH | Drawn By: EED | Checked By: PAH

KENTUCKY MUNICIPAL ELECTRIC AGENCY
MADISONVILLE, KENTUCKY

RICE GENERATION STATION - MADISONVILLE
SITE LAYOUT

patterson & dewar ENGINEERS
850 CENTER WAY, NORCROSS, GEORGIA 30071
(770) 453-1410 | pdengineers.com
ENGINEERS - SURVEYORS

DATE	11-22-24
SCALE	NONE
DRAWING NO.	KYKYMRICSK7
REV.	A

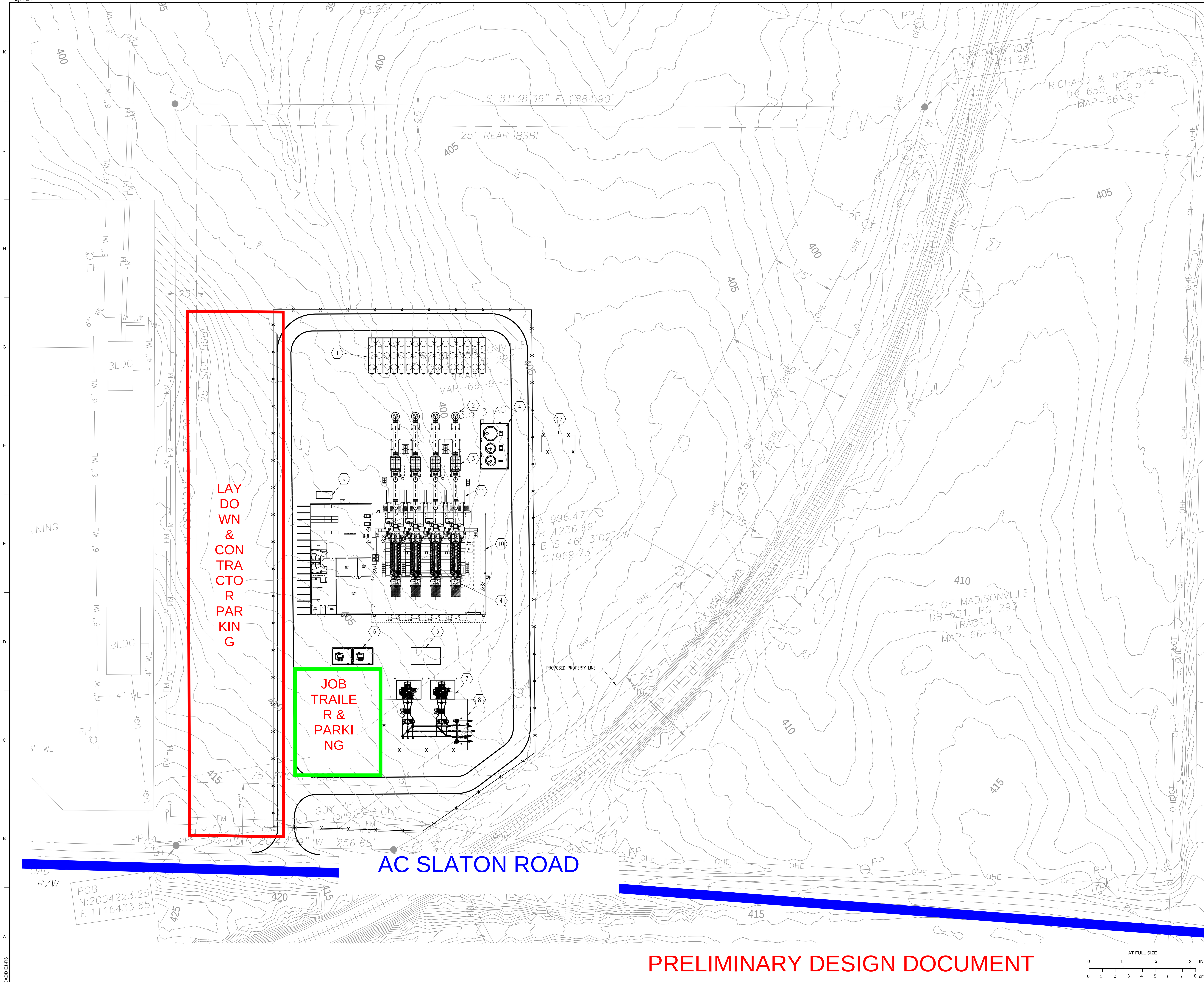
PLOTTED: 11/22/2024 12:38 PM BY EDURHAM
FILE LOCATION: U:\OTHER\KYMEA\SUBS\2024 RICE GEN STATION MADISONVILLE\CAD\KYKYMRICSK7.DWG

Siting Board 1-13:

Provide a narrative description of the location of each laydown area to be used during construction.

Response: The plant site, substation site, and natural gas transmission line will each have their own construction laydown areas as generally shown on the attachments. Power plant construction laydown will be incorporated fully into the plant site. (See Attachment 1-13a Site General Arrangement markup.) Substation construction laydown will utilize the fenced and graveled switchyard area (see previous Attachment 1-12 Site Layout). The gas transmission line construction laydown will use an area off landfill road (see Attachment 1-13b Gas Transmission Line laydown and parking sketch).

Witness: Doug Buresh



LEGEND OF EQUIPMENT

1. RADIATORS
2. STACK (TYP)
3. SCR (TYP)
4. ENGINE-GENERATOR (TYP)
5. MV SWITCHGEAR
6. AUXILIARY TRANSFORMER
7. GSU
8. SWITCHYARD
9. OIL-WATER SEPARATOR
10. ENGINE HALL
11. INTAKE AIR FILTER
12. GAS YARD

LEGEND

FENCE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

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KENTUCKY MUNICIPAL ENERGY AGENCY
KYMEA ENERGY CENTER I
MADISONVILLE, KENTUCKY

SITE GENERAL ARRANGEMENT

AT FULL SIZE

DESIGNED
DRAWN SL ROENFELDT
CHECKED
APPROVED
APPROVED
DATE

SCALE: 1"=40'
NO. X020
REV. D

CADD E1-R6


Parking and Laydown area for gas pipeline construction
Bean Cemetery Rd
A C Slaton Rd
Madisonville Wastewater Treatment
Recently viewed
Wimpy's Shine
Osborne Ln
Frank Hill Rd
Faith Missionary Baptist
70

Siting Board 1-14:

Explain where the construction parking for the workers will be located within the Project site during construction

Response: The plant site, substation site, and natural gas transmission line will each have their own construction parking areas as generally shown on the attachments. Power plant construction parking will be incorporated fully into the plant site. (See previous Attachment 1-13 Site General Arrangement markup.) Substation construction parking will utilize the fenced and graveled switchyard area. (See previous Attachment 1-13a Site Layout.) The gas transmission line construction parking will use an area off landfill road. (See previous Attachment 1-13b Gas Transmission Line laydown and parking sketch.)

Witness: Doug Buresh

Siting Board 1-15:

Explain whether the construction and operational entrances will be locked outside of normal working hours.

Response: Early site preparation activities for the plant site and substation site will include construction of temporary or permanent fencing. Gates will be locked outside of construction working hours. During operation, Plant Site access will be by a gated security fence which will be monitored and operated from the plant control room or by card access after the plant is operational. During operation of the plant, the substation will be unmanned except for maintenance and access will be via locked gate. The gas line meter station will be unmanned except for maintenance and access will be via locked gate.

Witness: Doug Buresh

Siting Board 1-16:

Explain who will control access to the site during construction and operations.

Response: Plant construction site access will be controlled by Christman Company, the EPC contractor and Connsulting acting as KYMEA's Owner engineer. Substation construction site access will be controlled by the substation constructor and Connsulting acting as KYMEA's Owner engineer. Gas pipeline construction site access will be controlled by the gas line constructor, the City of Madisonville public works department, and Connsulting acting as KYMEA's Owner engineer. Plant operations site access will be controlled by KYMEA plant personnel. Substation operations site access will be controlled by LGE/KU. Gas meter station access will be controlled by Texas Gas Transmission.

Witness: Doug Buresh

Siting Board 1-17:

Clarify whether any existing structures on the Project site will be demolished or removed in order to accommodate the Project. If so, identify each structure and its location within the site project boundary

Response: No structures exist or will be impacted by the project.

Witness: Doug Buresh

Siting Board 1-18:

Explain whether the perimeter security will be installed according to National Electrical Safety Code (NESC) standards. Include in the response whether the fencing will be installed before any electrical work begins.

Response: The site perimeter security fencing will be permanent but may contain some temporary fencing for a period depending on final site construction sequencing. The fence design will meet any NESC requirements. The switchyard permanent fencing will be installed before the switchyard medium and high voltage equipment is energized and will meet NESC requirements.

Witness: Doug Buresh

Siting Board 1-19:

If vegetative screening is anticipated, provide a detailed vegetative screening plan, including locations of proposed vegetation, types of vegetation, heights at planting and plan for long-term maintenance.

Response: KYMEA anticipates having a landscaped sign at the plant entrance in compliance with the City's ordinance to be maintained by lawn maintenance contractor. Limited small trees (less than 25- foot mature height, e.g., dogwoods) are planned between the east-west perimeter road and the south fence pending approval and clearance with local utilities. Any vegetative screening of the substation is subject to its final layout and overhead line design. Specific location of vegetation will not be finalized until the final substation configuration is set, which will be after completion of the interconnection study in May 2025.

Witness: Doug Buresh

Siting Board 1-20:

Provide a narrative description of any vegetative clearing that will occur across the project. Include the acreage and a list of any permits that will be required.

Response: All trees are projected to be removed from the site accounting for 8.3 acres of trees to avoid leaf plugging concerns with engine radiator field. 4.8 acres of trees fall within the Corps of Engineer jurisdiction and are included in the current 404 application. No tree clearing is expected to be required for the substation site as it is generally clear except for vegetation in the planned easement for the generator lead line across the railroad. Vegetative clearing requirements for the gas pipeline have not been defined yet, but the proposed route avoids wooded areas to the greatest extent possible.

Witness: Doug Buresh

Siting Board 1-21:

Provide any sketches of the proposed transmission line support structure(s).

Response: Final substation configuration will not be known until after completion of the interconnection study in May 2025. Preliminary reviews indicate that potential configurations can be accomplished by setting an additional free-standing pole (similar to single pole in foreground of picture below) mid span on the existing LGE/KU transmission lines in the confines of the existing right-of-way.

Witness: Doug Buresh

Siting Board 1-22:

Explain how the proposed transmission route was determined. Provide any supporting siting reports or documentation.

Response: No routing study was required due to close proximity of interconnect points being at edge of substation site or across A C Slaton Road.

Witness: Doug Buresh

Siting Board 1-23:

Explain whether the 69kV generator lead line connecting the plant to the substation will be above ground or underground.

Response: The 69 kV generation lead line will be overhead construction with preliminary plans calling for 60-foot steel poles with fiberglass crossarms and suspension insulators.

Witness: Doug Buresh

Siting Board 1-24:

Describe the hazard detection systems that will be used within the facility.

Response: The hazard detection systems include fire alarm system, heat sensing system, engine hall fire eyes, gas detection equipment, SCADA controls. All systems are integrated into the plant control system and have the ability to report outside the power plant.

Witness: Doug Buresh

Siting Board 1-25:

Describe alert systems that will be in place and who will monitor and maintain those systems. Include in the description whether those systems provide remote alert and annunciation to offsite personnel and a fire department.

Response: The hazard detection system will alarm in the plant control room which will be continuously staffed. The plant operator on duty will be responsible for notifying emergency personnel.

Witness: Doug Buresh

Siting Board 1-26:

Refer to Attachment K, Cumulative Environmental Assessment Report, Section 3.4. Describe what possible problems could occur leading to a shut off in the gas supply.

Response: Gas supply to the plant could be shut down due to fire detection system activation, hazardous gas detection, and electrical/grid issues.

Witness: Doug Buresh

Siting Board 1-27:

Refer to Attachment K, Cumulative Environmental Assessment Report, Section 4. Provide an update as to which permits Kentucky Municipal Energy has secured.

Response: A permit application for a Title V Construction/Operation Permit (KYEIS ID # 2110700212; AI # 184265; Activity # APE20240001) was submitted to Kentucky Division of Air Quality on October 25, 2024 and is currently undergoing a review for administrative completeness. A permit application for Section 404 was submitted to the U.S. Army Corps of Engineers on October 15, 2024 and revised on November 7, 2024 and is currently undergoing review. A permit application for 401 Water Quality Certification (AI # 184265; Activity # APE20240002) was submitted to Kentucky Division of Water on November 8, 2024 and is currently undergoing deficiency review and remedy.

Witness: Doug Buresh.

Siting Board 1-28:

Explain where the reciprocating internal combustion engines (RICE) generation units be located.

Response: The four RICE engines will be located within the engine hall. See Appendix D of the Site Assessment Report.

Witness: Doug Buresh

Siting Board 1-29:

Explain if the RICE generation units will be located inside of an engine hall to provide sound attenuation. If yes, provide the design of the proposed engine hall.

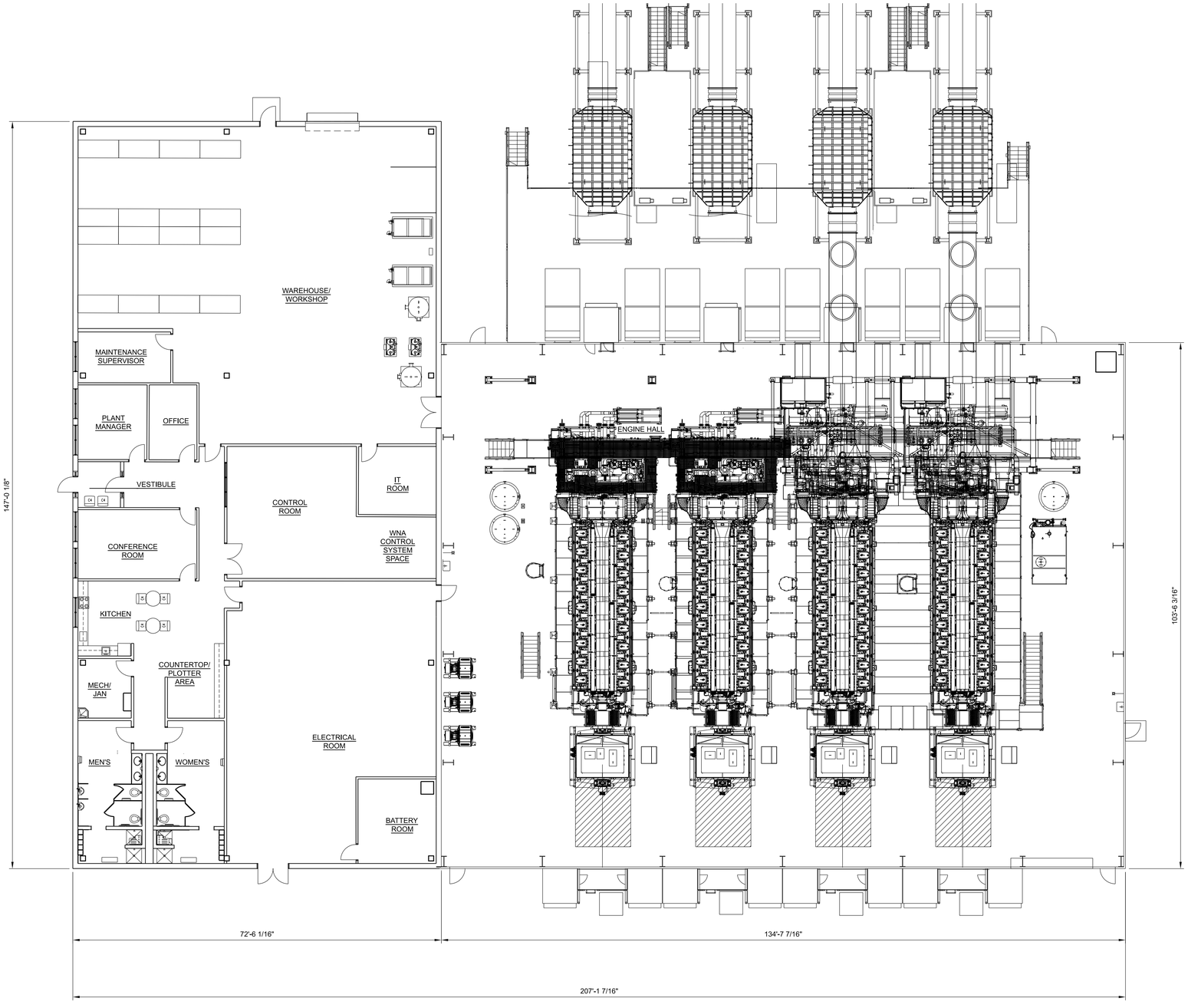
Response: Yes, the RICE engines will be inside a fully enclosed engine hall with noise mitigation/sound attenuation; however, we are still in the conceptual design phase of the building and its systems. The engine hall will be a pre-engineered metal building. The Preliminary Floor Plan is attached for information but is shown in the early design stages (see Attachment 1-29 Floor Plan). The elevation design is not available yet, but a concept sketch is shown in previous Attachment 1-11 Cross Section Sketch. The wall and roof systems are currently under evaluation but are expected to be a combination of insulated metal panel, batt insulation and perforated interior metal liner panel. The engine hall will be equipped with silencers on the building air intake fans and the ridge vent.

Witness: Doug Buresh

NOTES:

1. THIS FLOOR PLAN IS FOR REVIEW OF THE LAYOUT OF THE ADMIN AREAS ONLY. IT DOES NOT INCLUDE INFORMATION ON WALL TYPES OR FIRE RATINGS.

TRUE NORTH
PROJECT NORTH



FLOOR PLAN

SCALE: 3/32"=1'-0"

PRELIMINARY ISSUE
FOR REVIEW
NOT FOR CONSTRUCTION

11-15-24

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

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CHRISTMAN SINCE 1894
KYMEA

KENTUCKY MUNICIPAL ENERGY AGENCY
KYMEA ENERGY CENTER I
MADISONVILLE, KENTUCKY

FLOOR PLAN

DESIGNED	A. BAHARANI
DRAWN	S.L. ROENFELDT
CHECKED	
APPROVED	
APPROVED	
DATE	

SCALE: 3/32"=1'-0"
NO. 31825.01
REV. A
AE101

CADD D1-R6

Siting Board 1-30:

Explain whether the RICE generation units be run on a continuous cycle or only in the case of emergencies.

Response: The RICE generators will be permitted as non-emergency engines subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) and will be permitted for continuous operation.

Witness: Jeremy James.

Siting Board 1-31:

Explain if the RICE generation units be categorized as emergency engines.

Response: No, the RICE generators will be permitted as non-emergency engines subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) and will be permitted for continuous operation.

Witness: Jeremy James.

Siting Board 1-32:

Provide a summary of what would constitute emergency use of the RICE generation units.

Response: NESHAP 40 CFR 63 Subpart ZZZZ § 63.6675 defines an emergency stationary RICE as an engine that would only provide electrical power or mechanical work during an emergency situation such as producing power for critical networks or equipment when electric power from the local utility is interrupted. This does not apply to our installation as we are permitting engines as non-emergency stationary engines.

Witness: Jeremy James.

Siting Board 1-33:

Explain if there a time limit (hours) on non-emergency use of the generation units per calendar year.

Response: There will be no time limit on non-emergency operations.

Witness: Jeremy James.

Siting Board 1-34:

Explain if the RICE generation units could be considered stationary engines. If so, explain how they will be mounted.

Response: The engines are stationary engines installed on dedicated base frames that are flexibly mounted on steel spring elements to isolate vibration from the concrete foundation.

Witness: Jeremy James.

Siting Board 1-35:

Provide the horsepower (HP) of each Wartsila engine.

Response: 25,574 HP.

Witness: Jeremy James.

Siting Board 1-36:

Explain if there be a backup fuel source available onsite.

Response: No, the engines are not designed for dual fuel operation.

Witness: Jeremy James.

Siting Board 1-37:

Explain how Kentucky Municipal Energy will comply with RICE MACT (Maximum Achievable Control Technology) rules and regulations.

Response: The facility will comply with NESHAP ZZZZ by installing a Catalytic Oxidation (CO) catalyst to meet the applicable emission limits. The facility will install a Continuous Parameter Monitoring System to continuously monitor catalyst inlet temperature. The facility will comply with the applicable recordkeeping requirements in 40 CFR 63.6655(a), (b), and (d), and 40 CFR 63.6660. The facility will submit semi-annual monitoring reports as required and will conduct initial performance testing and subsequent testing as required by NESHAP ZZZZ.

Witness: Jeremy James

Siting Board 1-38:

Explain how Kentucky Municipal Energy will comply with New Source Performance Standards (NSPS) regulations.

Response: The facility will comply with NSPS JJJJ emission limitations by installing a CO catalyst and a Selective Catalytic Reduction (SCR) to control nitrogen oxides (NOx). The facility will perform all required maintenance on the engines as specified. The facility will conduct an initial performance test and conduct subsequent performance testing every 8,760 hours of operation or after 3 calendar years, whichever comes first.

Witness: Jeremy James.

Siting Board 1-39:

Explain whether Kentucky Municipal Energy has had any contact with the Environmental Protection Agency (EPA) regarding the proposed project. If so, provide any documentation that any communication that has occurred.

Response: No, the Kentucky Division for Air Quality is responsible for air permitting in Hopkins County.

Witness: Jeremy James.

Siting Board 1-40:

Provide how many tons of hazardous air pollutants (HAP) are expected to be emitted each year.

Response: The Title V Operating Permit application includes a potential-to-emit of 39.96 tons/yr of HAPs.

Witness: Jeremy James.

Siting Board 1-41:

Explain whether the facility be subject to emission limits.

Response: According to NESHAP ZZZZ, the facility will be required to limit the concentration of formaldehyde to 14 parts per million by volume, dry (ppmvd) or less. According to NSPS JJJJ, the facility will be required to limit the concentration of NOx to 82 ppmvd or less, CO to 270 ppmvd or less, and volatile organic compounds (VOC) to 60 ppmvd or less.

Witness: Jeremy James.

Siting Board 1-42:

Describe which emission standards the facility will be required to comply with.

Response: According to NESHAP ZZZZ, the facility will be required to limit the concentration of formaldehyde to 14 ppmvd or less. According to NSPS JJJJ, the facility will be required to limit the concentration of NOx to 82 ppmvd or less, CO to 270 ppmvd or less, and VOC to 60 ppmvd or less.

Witness: Jeremy James.

Siting Board 1-43:

Explain how often performance testing of the RICE engines will occur and who will conduct said testing.

Response: The facility will conduct an initial performance test within 180 days of operation, and conduct subsequent tests as required by NESHAP ZZZZ. The testing will be performed by a licensed and certified emissions testing firm selected by the owner.

Witness: Jeremy James.

Siting Board 1-44:

Explain whether there are run time limitations on the generation units while in emergency use.

Response: This does not apply to our installation as we are permitting engines as non-emergency stationary engines.

Witness: Jeremy James.

Siting Board 1-45:

Explain who will be responsible for recordkeeping and reporting for the project.

Response: KYMEA will be responsible for all recordkeeping and reporting for the project.

Witness: Doug Buresh.

Siting Board 1-46:

Explain how Kentucky Municipal Energy will coordinate with local law enforcement regarding security and emergency protocols during construction and operations.

Response: The construction contractor will generate a site-specific safety plan for activities on the project site including emergency procedures. The local law enforcement and fire department will be invited to the project to be briefed on site activities, working schedule, and any conditions on the jobsite they should be aware of. After operations begin, the plant operator on duty will be responsible for notifying emergency personnel.

Witness: Doug Buresh

Siting Board 1-47:

Refer to Site Assessment Report (SAR), Appendix A, Property Value Impact Study at 7.

Provide a map to accompany the list of adjoining properties.

Response:

Adjoining Uses

#	MAP ID	Owner	GIS Data Acres	Present Use	Adjoin Acres	Adjoin Parcels	Distance (ft) RICE	Distance (ft) Switchyard	Assesed Value Land	Assesed Value Buildings	Total Assesed Value
1	MAP-66-9B	Warrior Coal	21.00	Agricultural	3.56%	11.11%	N/A	N/A	$63,000	$0.00	$63,000.00
2	MAP-79-10	Madisonville	331.00	Agricultural	56.11%	11.11%	N/A	N/A	$234,500.00	$0.00	$234,500.00
3	MAP-66-9A	Cates	1.00	Residential	0.17%	11.11%	N/A	N/A	$1,500.00	$0.00	$1,500.00
4	MAP-66-9-1	Cates	0.70	Residential	0.12%	11.11%	N/A	N/A	$6,000.00	$0.00	$6,000.00
5	MAP-79-25B	Orten	34.11	Agricultural	5.78%	11.11%	N/A	N/A	$169,000.00	$0.00	$169,000.00
6	MAP-66-23-1	Hendricks	20.00	Agri/Res	3.39%	11.11%	765	280	$60,000.00	$10,000.00	$70,000.00
7	MAP-66-23	French	121.07	Agricultural	20.52%	11.11%	N/A	N/A	$0.00	$0.00	$0.00
8	MAP-66-10	Madisonville	29.00	Industrial	4.92%	11.11%	N/A	N/A	$0.00	$0.00	$0.00
9	MAP-66-10A	Warrior Coal	32.00	Agricultural	5.42%	11.11%	N/A	N/A	$96,000.00	$0.00	$96,000.00

Witness: Rich Kirkland.

Siting Board 1-48:

Refer to SAR, Appendix A, Property Value Impact Study at 7. Explain whether the list of adjoining properties presented on page 7 accounts for both the Plant site and the Substation site. If necessary, provide a revised list and accompanying map accounting for all adjoining parcels surrounding both the plant and substation site.

Response: The map in the original impact analysis only addressed the plant and not the switchyard. The updated map and list of adjoining uses included for 1-47 shows the adjoining uses to the plant and switchyard/substation site.

Witness: Rich Kirkland.

Siting Board 1-49:

Provide the values of residential structures on properties adjoining the Project site

Response: The updated excel chart shown for 1-47 has this chart. I have pasted the same chart here as well.

Adjoining Uses

#	MAP ID	Owner	GIS Data Acres	Present Use	Adjoin Acres	Adjoin Parcels	Distance (ft) RICE	Distance (ft) Switchyard	Assesed Value Land	Assesed Value Buildings	Total Assesed Value
1	MAP-66-9B	Warrior Coal	21.00	Agricultural	3.56%	11.11%	N/A	N/A	$63,000	$0.00	$63,000.00
2	MAP-79-10	Madisonville	331.00	Agricultural	56.11%	11.11%	N/A	N/A	$234,500.00	$0.00	$234,500.00
3	MAP-66-9A	Cates	1.00	Residential	0.17%	11.11%	N/A	N/A	$1,500.00	$0.00	$1,500.00
4	MAP-66-9-1	Cates	0.70	Residential	0.12%	11.11%	N/A	N/A	$6,000.00	$0.00	$6,000.00
5	MAP-79-25B	Orten	34.11	Agricultural	5.78%	11.11%	N/A	N/A	$169,000.00	$0.00	$169,000.00
6	MAP-66-23-1	Hendricks	20.00	Agri/Res	3.39%	11.11%	765	280	$60,000.00	$10,000.00	$70,000.00
7	MAP-66-23	French	121.07	Agricultural	20.52%	11.11%	N/A	N/A	$0.00	$0.00	$0.00
8	MAP-66-10	Madisonville	29.00	Industrial	4.92%	11.11%	N/A	N/A	$0.00	$0.00	$0.00
9	MAP-66-10A	Warrior Coal	32.00	Agricultural	5.42%	11.11%	N/A	N/A	$96,000.00	$0.00	$96,000.00

Witness: Rich Kirkland.

Siting Board 1-50:

Refer to SAR, Appendix A, Property Value Impact Study. Explain whether the conclusions regarding impacts to property values included in the report would change when accounting for the presence of the substation.

Response: No, the distances indicated by the substation only has one home at 280 feet away and that home is already in proximity to other uses with potential externalities. Furthermore, I have considered the following study:

Property Value Impacts from Transmission Lines, Subtransmission Lines, and Substations, The Appraisal Journal, Summer 2016 – Ted Tatos, Mark Glick, PhD, JD, and Troy A. Lunt, MAI

This study looked into the issues of transmission lines and substations on property value impacts. They cite numerous other studies in the article, but they focused on 125,000 home sales to identify property value impacts and found impacts but that they diminished with distance and that there are some positive impacts that they found as well. In regards to substations they found a -3% impact on homes within 50 meters (164 feet) of a substation and only a 1% impact on homes between 50 and 100 meters (165 to 328 feet). A 1% impact on homes starting at 165 feet is not a practical impact on home values given the wide disparity in home values that often appraise at differences of +/-5% based on comparables even in tight markets. These levels of impacts are very minor and they are for much more sensitive residential uses in close proximity to the equipment. The adjoining uses at the subject property includes only one home and it is 280 feet away.

Witness: Rich Kirkland.

Siting Board 1-51:

Provide descriptions of land uses and ownership of parcels adjacent to the natural gas transmission line.

Response:

Adjoining Uses

#	MAP ID	Owner	GIS Data Acres	Present Use	Adjoin Acres	Adjoin Parcels	Distance (ft)	Assesed Value Land	Assesed Value Buildings	Total Assesed Value
1	MAP-79-25B	Orten	34.11	Agricultural	22.98%	8.33%	N/A	$169,000.00	$0.00	$169,000.00
2	MAP-79-25-3	Braden	7.16	Residential	4.82%	8.33%	N/A	$41,800.00	$0.00	$41,800.00
3	MAP-79-25A	Vandiver	10.00	Residential	6.74%	8.33%	1265	$18,000.00	$95,100.00	$113,100.00
4	MAP-79-24A	Fulcher	11.89	Residential	8.01%	8.33%	N/A	$0.00	$0.00	$0.00
5	MAP-79-23	Fulcher	22.12	Agri/Res	14.90%	8.33%	1,130	$70,000.00	$144,312.00	$214,312.00
6	MAP-79-22	Cartwright	12.37	Residential	8.33%	8.33%	765	$45,000.00	$188,200.00	$233,200.00
7	MAP-79-10C	Cartwright	4.37	Residential	2.94%	8.33%	N/A	$0.00	$0.00	$0.00
8	MAP-79-19	Lindsey	22.71	Agri/Res	15.30%	8.33%	1235	$32,600.00	$102,400.00	$135,000.00
9	M-12-1-13A	Hill	12.00	Residential	8.08%	8.33%	190	$55,000.00	$40,000.00	$95,000.00
10	M-12-1-6B	Dexter	2.50	Residential	1.68%	8.33%	605	$30,000.00	$95,100.00	$125,100.00
11	M-12-1-6A	Dexter	2.16	Residential	1.46%	8.33%	N/A	$25,900.00	$0.00	$25,900.00
12	M-12-1-7-4	Jones	7.06	Residential	4.76%	8.33%	570	$35,300.00	$198,500.00	$233,800.00

Witness: Rich Kirkland.

Siting Board 1-52:

Provide the values of residential structures on properties adjacent to the natural gas transmission line.

Response: The chart from prior page coied again here.

Adjoining Uses

#	MAP ID	Owner	GIS Data Acres	Present Use	Adjoin Acres	Adjoin Parcels	Distance (ft)	Assesed Value Land	Assesed Value Buildings	Total Assesed Value
1	MAP-79-25B	Orten	34.11	Agricultural	22.98%	8.33%	N/A	$169,000.00	$0.00	$169,000.00
2	MAP-79-25-3	Braden	7.16	Residential	4.82%	8.33%	N/A	$41,800.00	$0.00	$41,800.00
3	MAP-79-25A	Vandiver	10.00	Residential	6.74%	8.33%	1265	$18,000.00	$95,100.00	$113,100.00
4	MAP-79-24A	Fulcher	11.89	Residential	8.01%	8.33%	N/A	$0.00	$0.00	$0.00
5	MAP-79-23	Fulcher	22.12	Agri/Res	14.90%	8.33%	1,130	$70,000.00	$144,312.00	$214,312.00
6	MAP-79-22	Cartwright	12.37	Residential	8.33%	8.33%	765	$45,000.00	$188,200.00	$233,200.00
7	MAP-79-10C	Cartwright	4.37	Residential	2.94%	8.33%	N/A	$0.00	$0.00	$0.00
8	MAP-79-19	Lindsey	22.71	Agri/Res	15.30%	8.33%	1235	$32,600.00	$102,400.00	$135,000.00
9	M-12-1-13A	Hill	12.00	Residential	8.08%	8.33%	190	$55,000.00	$40,000.00	$95,000.00
10	M-12-1-6B	Dexter	2.50	Residential	1.68%	8.33%	605	$30,000.00	$95,100.00	$125,100.00
11	M-12-1-6A	Dexter	2.16	Residential	1.46%	8.33%	N/A	$25,900.00	$0.00	$25,900.00
12	M-12-1-7-4	Jones	7.06	Residential	4.76%	8.33%	570	$35,300.00	$198,500.00	$233,800.00

Witness: Rich Kirkland

Siting Board 1-53:

Provide any observations and conclusions regarding impacts to property values for properties located along the natural gas transmission line.

Response: The parcels where the gas line will cross will be compensated for any impact associated with the loss of utility in the land or isolated areas from the layout of the gas pipeline. In appraising utility easements and gas lines in other areas, I have never seen negative impacts on adjoining parcels from proximity to a gas line. As noted in the measurements shown on the prior pages, all of the homes will be located over 500 feet away from the proposed gas line except for one which will be 190 feet away as shown as Parcel 9 in the adjoining parcel list. For comparison, I will note that I recently appraised a home located at 4832 Jessie Drive, Apex, NC where a natural gas line crossed the rear corner as shown in the image below. We found no evidence of any negative impact on property value on this home from that gas line, which is much closer. The only effective impact is a limitation on where a pool or fence could be placed on the property, which did not effect the value based on our analysis.

Witness: Rich Kirkland.

Siting Board 1-54:

Refer to SAR, Appendix H, Traffic Impact Report, Zoning Map 2. Define the "Other" category of roads, marked in yellow on the map legend.

Response: The reference to "other" has been eliminated in the revised Report. (See Attachment 1-54.) There were no roads of this class being shown on the Zoning Map.

Witness: Josh Coburn.

Proposed RICE Development
Traffic Impact Study
Madisonville, KY

Prepared for

KYMEA

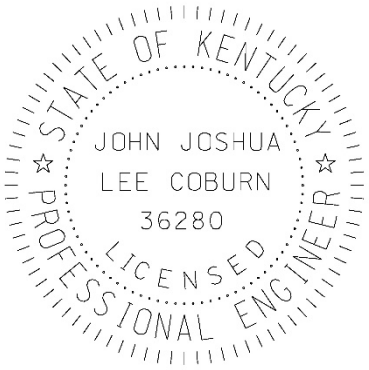
August 2024
Updated November 2024

Palmer ENGINEERING

Traffic Impact Study Certification

I John Coburn certify that this Traffic Impact Study has been prepared under my direct supervision and that I am a Professional Engineer registered in the State of Kentucky and have successfully completed the Traffic Impact Study Requirements training course required by KYTC. Furthermore, I certify that this study has been completed in accordance with the KYTC Traffic Impact Study Requirements and in accordance with engineering standards of practice. The results presented have been determined to be accurate representations of existing and anticipated conditions based on the assumptions and methodologies presented in this report.

John Coburn
KY PE No. 36280



College of Engineering
Kentucky Transportation Center

TECHNOLOGY TRANSFER PROGRAM

TRAFFIC IMPACT STUDY COURSE
Certificate of Completion (3.5 PDH)

John Coburn
KY PE License No. 36280

Completed: 08/12/2022
Expires: 08/12/2026
Company: University of Kentucky

TIM THARPE
Tim Tharpe, KYTC
Director of Traffic Operations

Adam Kirk, Instructor

The official status of this certificate can be verified with the KYTC Division of Traffic Operations

EXECUTIVE SUMMARY

A natural gas electric generating facility is proposed in Hopkins County, KY and will take up three parcels of unused agricultural land that has recently been rezoned for industrial uses. The project site will have a primary access point along AC Slaton Road near the intersection with Bean Cemetery Road. Construction of the plant is expected to occur in 2027.

This traffic study analyzes the traffic conditions of AC Slaton Road and Bean Cemetery Road for the construction year no build and build scenarios. Both the AM and PM peak hour were evaluated to determine if the trips generated during construction will have a significant impact on the roadway's traffic conditions.

Based on the results of the analysis, the following conclusions were developed:

- All highway segments are anticipated to operate at acceptable level of service (LOS) standards during both the peak hours for the build and no build scenarios. Therefore, the construction for this project will not adversely affect traffic operations on Bean Cemetery or AC Slaton Road.
- All roadways provide adequate sight distance for passenger cars and trucks to enter and exit the facility.
- No turn lanes are warranted based on low traffic volumes along AC Slaton Road and Bean Cemetery Road.

Table of Contents

INTRODUCTION

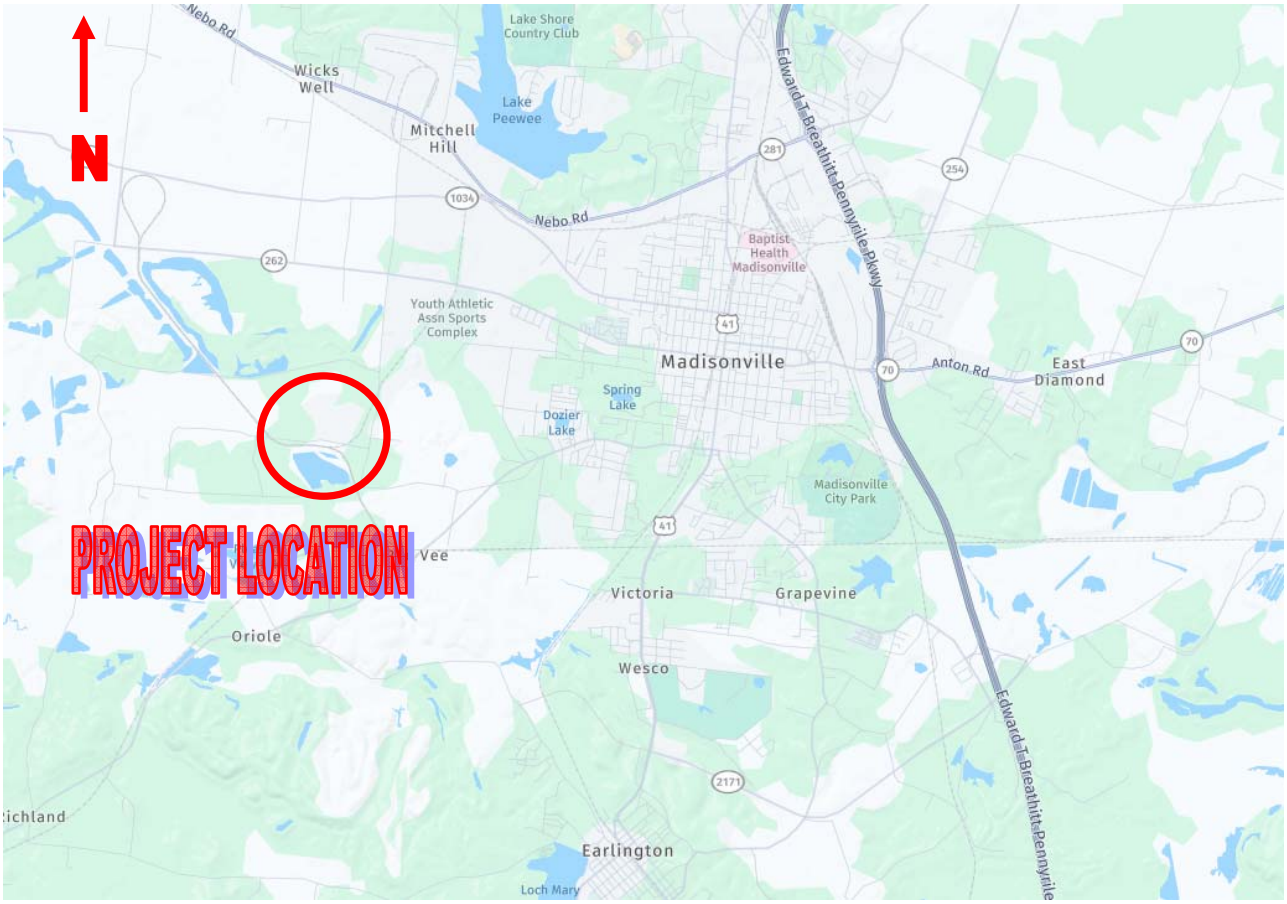
This traffic impact study has been completed for a proposed development in Hopkins County, Kentucky, in the city of Madisonville, KY. The majority of the development will be located within AC Slaton Road and Bean Cemetery Road. The vicinity map (Map 1) displays the location of the proposed development and study area.

The proposed development is a natural gas electric generating facility to be built on three empty parcels located adjacent to an existing water treatment plant. This traffic impact study analyzes two roadways in the area that will be impacted by the trips the development generates. These roadways include the following:

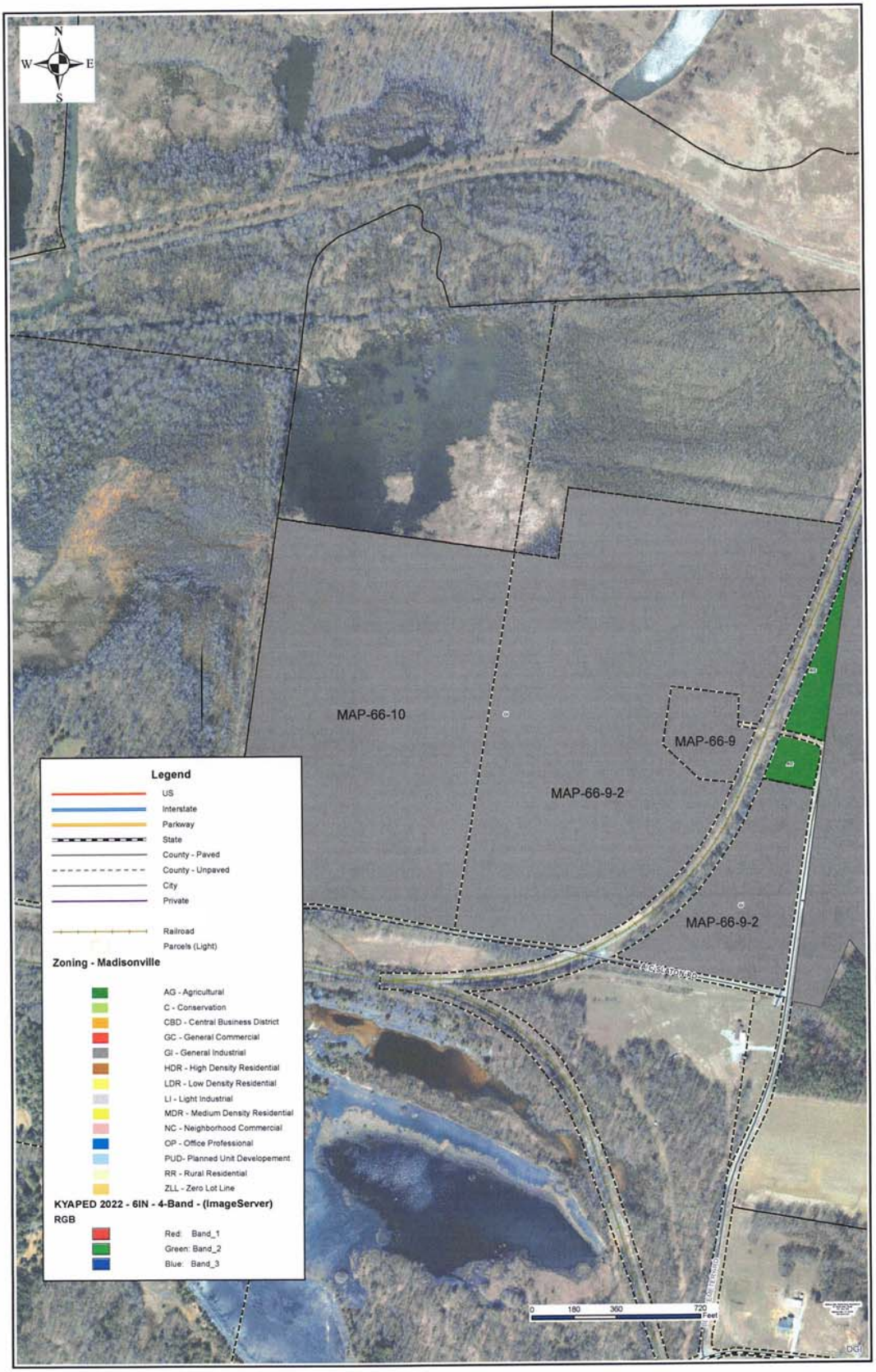
- AC Slaton Road
- Bean Cemetery Road

In the vicinity of the proposed development, the surrounding area consist of farmland and single family housing. The site of the proposed development has recently been rezoned to General Industrial (GI). Map 2 provides the updated zoning map for the three parcels.

Bean Cemetery Road near AC Slaton Road



Map 1. **Vicinity Map**



***Map 2.* Zoning Map**

EXISTING CONDITIONS

Regional and Local Access

The proposed development can be accessed from AC Slaton Road and Bean Cemetery Road. AC Slaton Road will provide local access into the site and Bean Cemetery Road will provide regional and local access into the site. A brief description of the surrounding roadways follows:

AC Slaton Road – AC Slaton Road is a local road that provides local access to the project site and generally runs in an east to west direction in the study area. The roadway measures approximately 16 feet wide without any striping. The current speed limit along this roadway is 25 mph.

Bean Cemetery Road – Bean Cemetery Road is a local road that provides regional and local access to the project site and generally runs in a north to south direction in the study area. The roadway measures 20 feet wide without any striping. The current speed limit along this roadway is posted at 35 mph.

LEVEL OF SERVICE AND DELAY

Level of Service (LOS) was used as the measure of effectiveness for each roadway. According to the Highway Capacity Manual, the level of service is defined in terms of average travel speed, percent time spent following and percent of free-flow speed for two lane highways (See Table 1). The average travel speed (ATS) reflects mobility on a two-way highway. The percent time spent following (PTSF) represents the maneuverability on the highway along with comfort and convenience of travel. The percent free-flow speed (PFFS) represents the ability of the vehicle to travel at or near the posted speed limit. A Level of Service C is desirable, and D is acceptable in an urban setting.

LOS	CLASS I HIGHWAYS		CLASS II HIGHWAYS	CLASS III HIGHWAYS
	AVG TRAVEL SPEED (MPH)	PERCENT TIME SPENT FOLLOWING (%)	PERCENT TIME SPENT FOLLOWING (%)	PERCENT FREE-FLOW SPEED (%)
A	>55	≤35	≤40	>91.7
B	>50-55	>35-50	>40-55	>83.3-91.7
C	>45-50	>50-65	>55-70	>75.0-83.3
D	>40-45	>65-80	>70-85	>66.7-75.0
E	≤40	>80	>85	≤66.7
F	Demand exceeds capacity			

Table 1. Two-Lane Highway Level of Service

Base Traffic Volumes (existing condition)
Manual traffic counts were taken using traffic tubes for four consecutive days. Traffic counts at AC Slaton Road and Bean Cemetery Road were taken August 15th, 2024 through August 18th, 2024, Thursday through Sunday. The traffic tubes were placed in sections of the roadways that will be affected by trips generated for the proposed development. All traffic volumes can be found in the Appendix.

Background Traffic Volumes
The estimated completion date for the proposed development is by the end of 2027. The Kentucky Transportation Cabinet (KYTC) does not have historical traffic data for AC Slaton Road or Bean Cemetery Road. To determine the traffic growth in this area, Pleasant View Road historical traffic data was analyzed. Pleasant View Road is a local road that is connected to both AC Slaton Road and Bean Cemetery Road. The historic traffic volumes along Pleasant Valley Road has shown a flat growth rate over the nine years between 2014 and 2023 (KYTC Count Station 054533).

Based on this data, this analysis assumes that there is no growth rate for both roadways. The KYTC count station data for station 054533 can be found in the Appendix.

METHODOLOGY

Level of Service, average speed, and travel time were measures of effectiveness analyzed using the highway capacity software (HCS2024).

Trips were generated for the proposed development and then distributed to the roadway system based on the existing traffic patterns and engineering judgment. For the analysis, the study uses traffic volumes from the current year, as well as a future build out year in which the traffic volumes were grown at a rate determined by historic traffic counts in the area. Based on the historic traffic growth, the expected growth of the background traffic is flat. Therefore, the opening year (2027) background traffic is the same as the existing counts (2024 No Build). The assigned volumes from the proposed development and the background traffic volumes combined to produce the total proposed traffic volumes for existing and build out conditions. HCS2024 was used to analyze the roadway network for existing and proposed conditions in both the current year and build out year (2027). The 2024 background, level-of-service, and travel times can be found in the Appendix along with 2024 No Build (Fig 1) and 2027 Build (Fig 3).

TRIP GENERATION AND PROJECTED TRAFFIC VOLUMES

Natural gas electric generating facilities are not included in the *Trip Generation, 11th Edition,* a nationally recognized resource of trip generation rates published by the Institute of Transportation Engineers. Therefore, trip estimates were based on information provided by the client and engineering judgement.

SITE TRIP GENERATION

The proposed site will consist of a natural gas electric generating facility. The proposed energy center will require construction equipment and workers to travel to and from the site throughout the construction phases. The client provided information for man-hours during construction. The highest estimated manpower during construction is 97. Heavy trucks were assumed to be an additional 10% of the estimated manpower. The trips generated during both peak hours was assumed to be 110 trips. It is expected that this would be a conservative number of trips generated during the construction process. Once construction is complete, the manpower required to maintain the facility is drastically lower than the manpower of construction.

LEVEL OF SERVICE AND DELAY ANALYSIS

All roadway traffic volumes, average vehicle speeds, and level of service information can be found in the Appendix. The 2027 base traffic volume information will be the focus upon comparisons between the projected background traffic and the proposed traffic volumes (full build out). The 2027 No-Build volumes would exist on the roadway system in the absence of the proposed development and the 2027 Build volumes are the volumes with the proposed development included.

INTERSECTION ANALYSIS

2024 No Build Analysis

The HCS analysis reveals that all roadways operate with a level of service (LOS) “A” for both peak hours of the day. Travel times for AC Slaton Road are 2.72 minutes per mile of roadway and the average speed is 22.1 mph. Travel times for Bean Cemetery Road are 1.75 minutes per mile of roadway and the average speed is around 34 mph.

2027 Build Analysis

The HCS analysis shows that the build conditions are similar to the 2024 no build. AC Slaton experiences minor degrading, operating with a level of service (LOS) “B” for both peak hours of the day. Travel times increase from 2.72 minutes to 2.79 minutes per mile of roadway along AC Slaton Road and the average speed drops from 22.1 to 21.5 mph. Bean Cemetery Road continues to operate at a LOS “A” during both peak hours. Travel times increase from 1.75 minutes to 1.83 minutes per mile of roadway. The average speed decreases from 34 mph to 32.8 mph.

2024 EXISTING COUNTS (NO BUILD)					
AM PEAK	Average Speed mph	Percent Followers %	Travel Time to Travel 1 mile, min	Followers Density Foll/min/ln	Vehicle LOS
AC SLATON RD	22.1	7.50%	2.72	0	A
BEAN CEMETERY RD	34.4	17.00%	1.75	0.3	A
PM PEAK	Average Speed mph	Percent Followers %	Travel Time to Travel 1 mile, min	Followers Density Foll/min/ln	Vehicle LOS
AC SLATON RD	22.1	8.20%	2.72	0	A
BEAN CEMETERY RD	33.9	19.70%	1.77	0.4	A

Table 2. 2024 No Build Summary

2027 BUILD					
AM PEAK	Average Speed mph	Percent Followers %	Travel Time to Travel 1 mile, min	Followers Density Foll/min/ln	Vehicle LOS
AC SLATON RD	21.5	35.20%	2.79	2.7	B
BEAN CEMETERY RD	32.8	37.20%	1.83	2.2	A
PM PEAK	Average Speed mph	Percent Followers %	Travel Time to Travel 1 mile, min	Followers Density Foll/min/ln	Vehicle LOS
AC SLATON RD	21.5	35.30%	2.79	2.8	B
BEAN CEMETERY RD	32.8	38.50%	1.83	2.5	A

Table 3. 2027 Build Summary

ADDITIONAL STUDY ITEMS

Turn Lane Analysis

Kentucky Transportation Cabinet's "*Warrant Calcs Interactive*" spreadsheet was used to determine if turn lanes were warranted along AC Slaton Road and Bean Cemetery Road where the study assumed traffic would be added for the proposed development. Due to the low volumes existing on AC Slaton Road and Bean Cemetery, the minimum threshold of through volumes required to warrant turn lanes were not met. Therefore, turn lanes were not warranted. Turn lane warrants for AC Slaton Road and Bean Cemetery Road can be found in the Appendix of this report.

Sight Distance Analysis

Sight distance triangles were determined utilizing AASHTO's *Geometric Design of Highways and Streets, 7th Edition*. The amount of recommended sight distances for the roads with access to the proposed development are summarized in Table 4 below. Figure 4 in the Appendix of this report provides a plan view of the sight triangles. The sight distance for the roadways were evaluated based on the posted speed limit. From Figure 4, in the Appendix of this report, it is evident that all roadways provide adequate sight distance for all traffic entering the roadways from the development.

REQUIRED SIGHT DISTANCE (FT)				
ROADWAY	RIGHT TURNING CAR SIGHT DISTANCE	LEFT TURNING CAR SIGHT DISTANCE	RIGHT TURNING TRUCK SIGHT DISTANCE	LEFT TURNING TRUCK SIGHT DISTANCE
AC Slaton	240	280	390	425
Beans Cemetery	335	390	545	595

Table 4. Sight Distance Requirements

CONCLUSIONS AND RECOMMENDATIONS

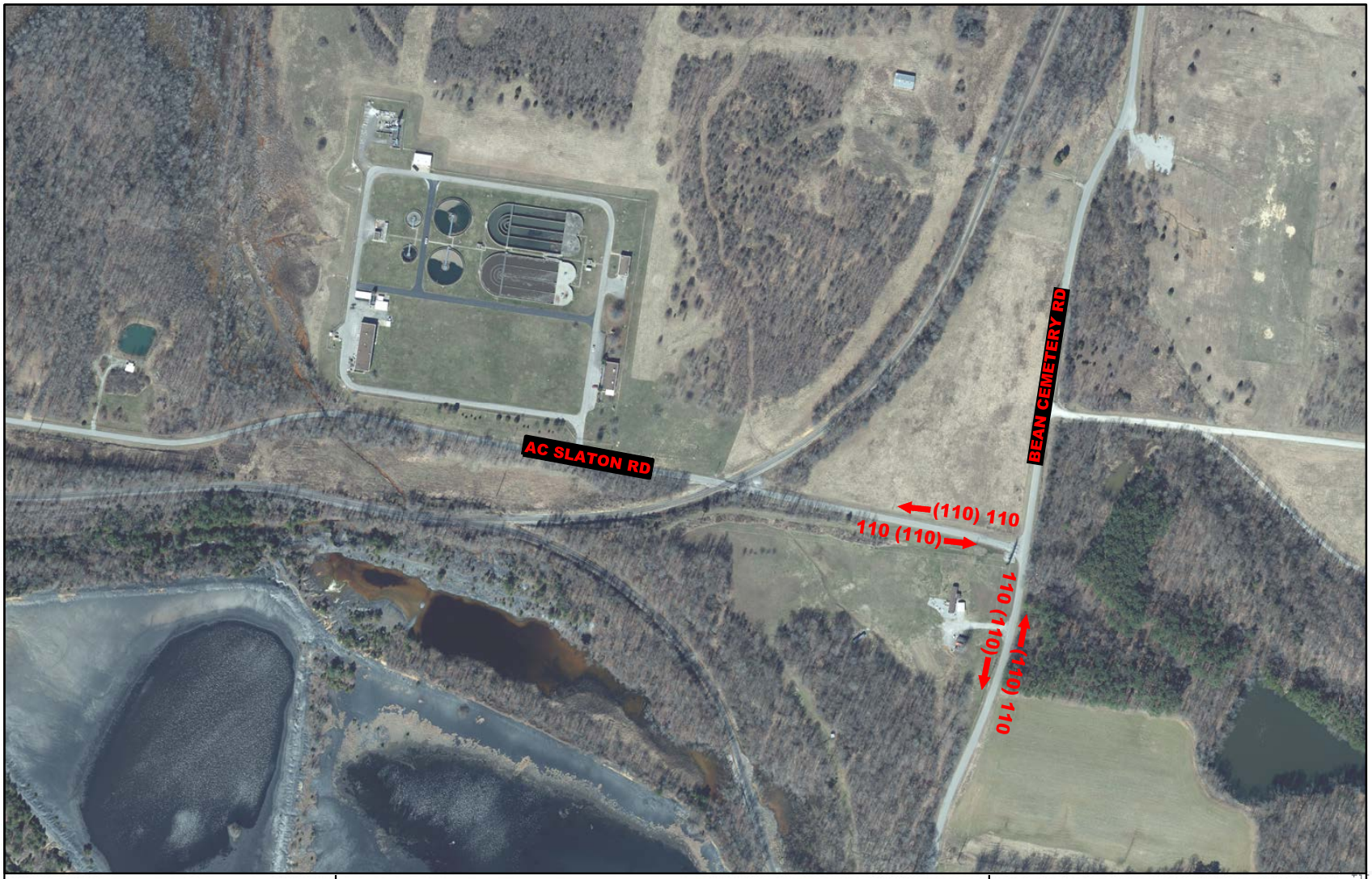
When comparing the no build analysis to the build analysis it was determined that the roadways in the study area will continue to operate at a LOS similar to existing conditions. The analysis determined that under proposed conditions AC Slaton Road experience minor degrading to a LOS "B" and Bean Cemetery Road will continue to operate at a LOS "A". The turn lane analysis determined that no additional turn lanes are warranted for any roadways based on the traffic volumes on the road. The sight distance analysis determined that passenger cars and trucks entering the roadways from the development can do so safely.

Based on the analyses performed, no changes to the roadway network are recommended within the study area in order for traffic conditions to operate within acceptable conditions.

APPENDIX

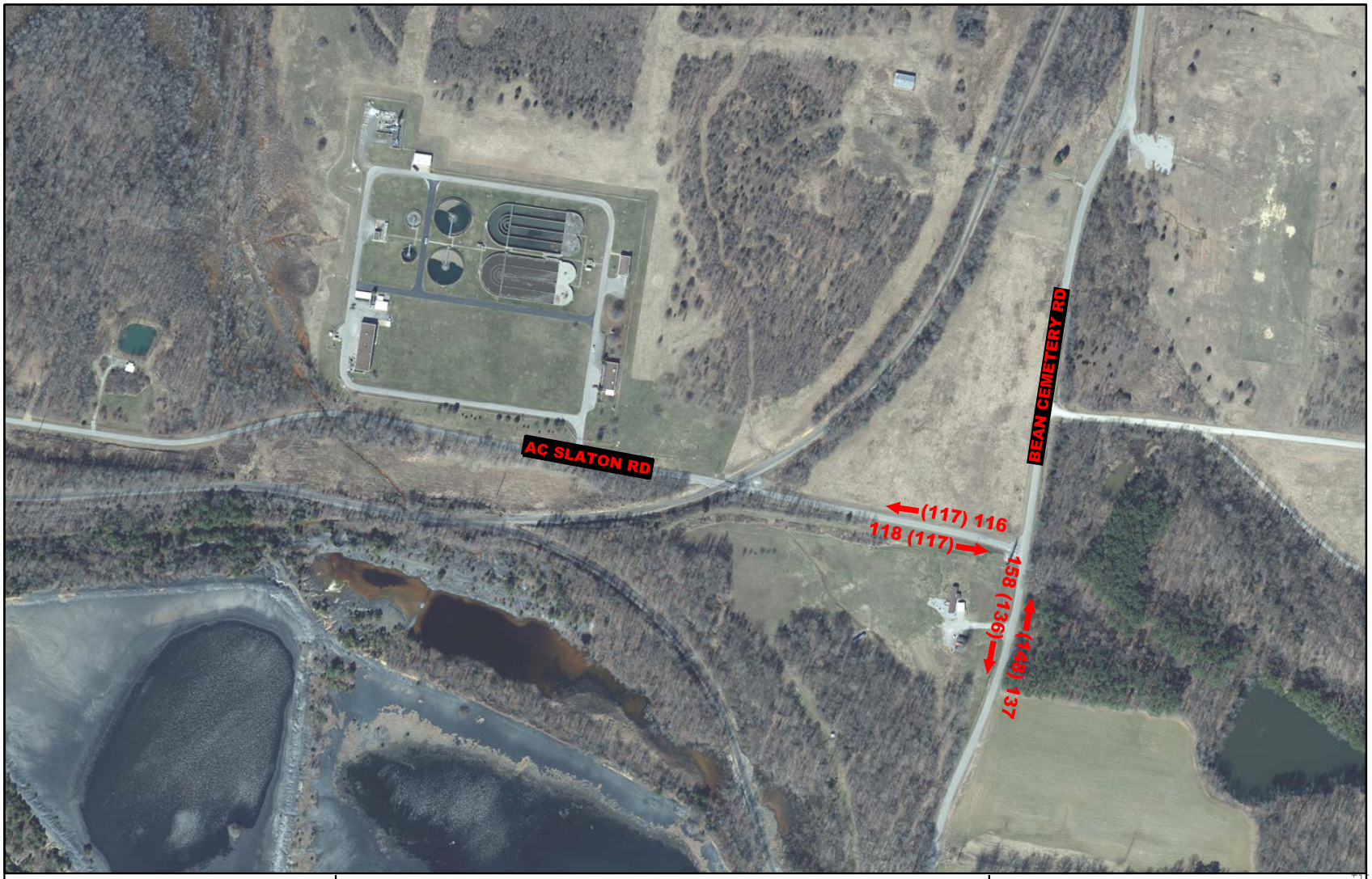
PROPOSED KYMEA ENERGY CENTER I
HOPKINS COUNTY, KENTUCKY

FIGURE 1
2024 EXISTING COUNTS
(AM) PM



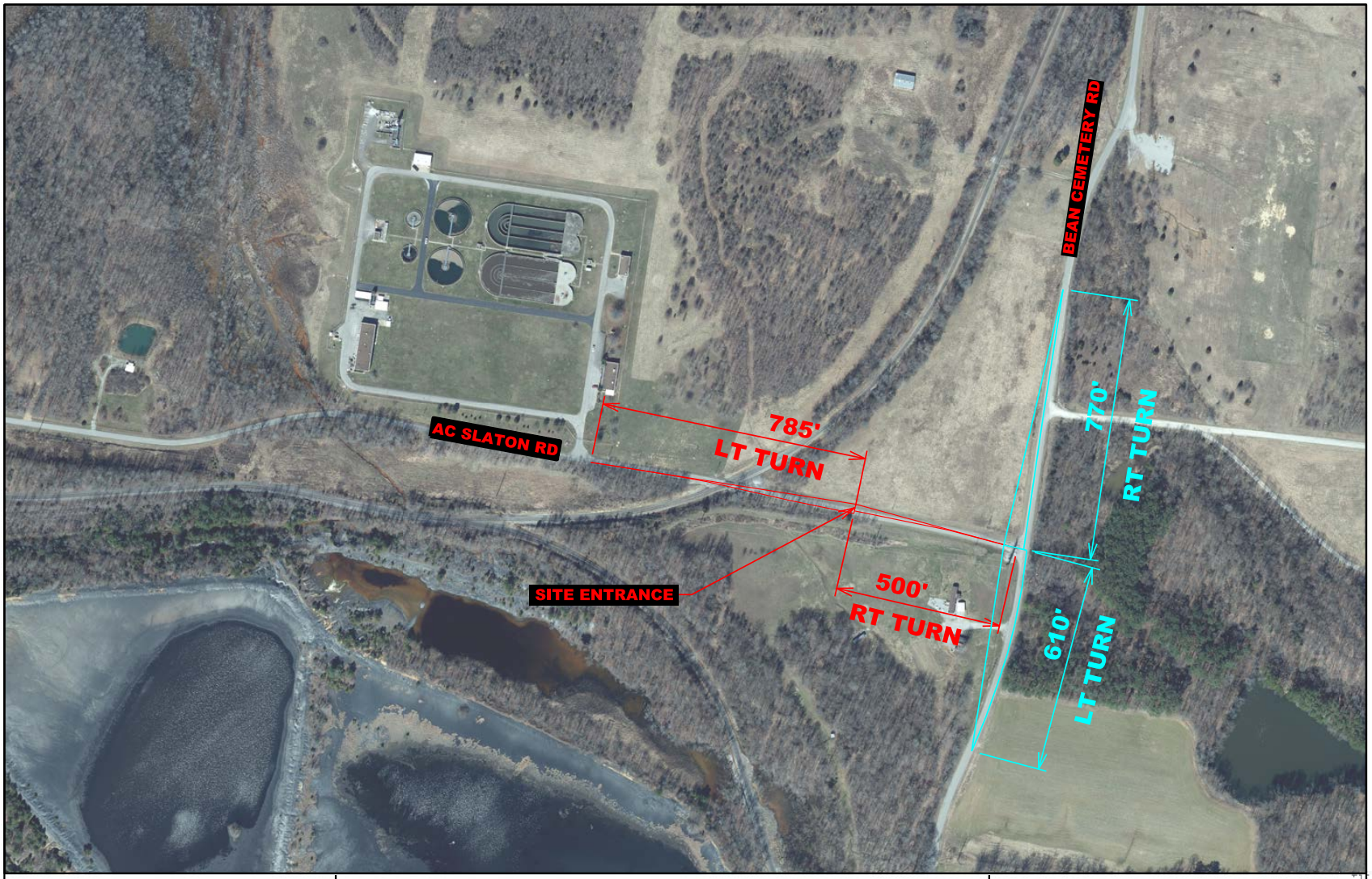
PROPOSED KYMEA ENERGY CENTER I
HOPKINS COUNTY, KENTUCKY

FIGURE 2
TRIPS GENERATED
(AM) PM



PROPOSED KYMEA ENERGY CENTER I
HOPKINS COUNTY, KENTUCKY

FIGURE 3
2027 BUILD
(AM) PM



PROPOSED KYMEA ENERGY CENTER I
HOPKINS COUNTY, KENTUCKY

FIGURE 4
SIGHT DISTANCE TRIANGLES

HCS Two-Lane Highway Report

Project Information			
Analyst	BH	Date	8/22/2024
Agency	PEC	Analysis Year	2024
Jurisdiction		Time Analyzed	AM
Project Description	AC SLATON RD NO BUILD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	9	Shoulder Width, ft	0
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	10	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.70	Total Trucks, %	5.10
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	22.1
Speed Slope Coefficient (m)	1.75692	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.28486	PF Power Coefficient (p)	0.60712
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	22.1

Vehicle Results			
Average Speed, mi/h	22.1	Percent Followers, %	7.5
Segment Travel Time, minutes	2.72	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

Facility Results

T	VMT veh-mi/AP	VHD veh-h/p	Follower Density, followers/ mi/ln	LOS
1	2	0.00	0.0	A

HCS Two-Lane Highway Report

Project Information			
Analyst	BH	Date	8/22/2024
Agency	PEC	Analysis Year	2024
Jurisdiction		Time Analyzed	PM
Project Description	AC SLATON RD NO BUILD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	9	Shoulder Width, ft	0
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	11	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.70	Total Trucks, %	5.10
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	22.1
Speed Slope Coefficient (m)	1.75692	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.28486	PF Power Coefficient (p)	0.60712
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	22.1

Vehicle Results			
Average Speed, mi/h	22.1	Percent Followers, %	8.2
Segment Travel Time, minutes	2.72	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

Facility Results

T	VMT veh-mi/AP	VHD veh-h/p	Follower Density, followers/ mi/ln	LOS
1	2	0.00	0.0	A

HCS Two-Lane Highway Report

Project Information			
Analyst	BH	Date	8/22/2024
Agency	PEC	Analysis Year	2024
Jurisdiction		Time Analyzed	AM
Project Description	BEAN CEMETERY RD NO BUILD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	35	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	51	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.75	Total Trucks, %	3.80
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	34.4
Speed Slope Coefficient (m)	2.42321	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38708	PF Power Coefficient (p)	0.67322
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	34.4

Vehicle Results			
Average Speed, mi/h	34.4	Percent Followers, %	17.0
Segment Travel Time, minutes	1.75	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

Facility Results

T	VMT veh-mi/AP	VHD veh-h/p	Follower Density, followers/ mi/ln	LOS
1	10	0.00	0.3	A

HCS Two-Lane Highway Report

Project Information			
Analyst	BH	Date	8/22/2024
Agency	PEC	Analysis Year	2024
Jurisdiction		Time Analyzed	PM
Project Description	BEAN CEMETERY RD NO BUILD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	35	Access Point Density, pts/mi	1.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	64	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.75	Total Trucks, %	3.80
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	33.9
Speed Slope Coefficient (m)	2.39882	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38545	PF Power Coefficient (p)	0.67109
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	33.9

Vehicle Results			
Average Speed, mi/h	33.9	Percent Followers, %	19.7
Segment Travel Time, minutes	1.77	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

Facility Results

T	VMT veh-mi/AP	VHD veh-h/p	Follower Density, followers/ mi/ln	LOS
1	12	0.00	0.4	A

HCS Two-Lane Highway Report

Project Information			
Analyst	BH	Date	8/22/2024
Agency	PEC	Analysis Year	2027
Jurisdiction		Time Analyzed	AM
Project Description	AC SLATON RD BUILD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	9	Shoulder Width, ft	0
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	167	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.70	Total Trucks, %	5.10
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	22.1
Speed Slope Coefficient (m)	1.75692	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.28486	PF Power Coefficient (p)	0.60712
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	21.5

Vehicle Results			
Average Speed, mi/h	21.5	Percent Followers, %	35.2
Segment Travel Time, minutes	2.79	Adj. Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

Facility Results

T	VMT veh-mi/AP	VHD veh-h/p	Follower Density, followers/ mi/ln	LOS
1	29	0.04	2.7	B

HCS Two-Lane Highway Report

Project Information			
Analyst	BH	Date	8/22/2024
Agency	PEC	Analysis Year	2027
Jurisdiction		Time Analyzed	PM
Project Description	AC SLATON RD BUILD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	9	Shoulder Width, ft	0
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	169	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.70	Total Trucks, %	5.10
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	22.1
Speed Slope Coefficient (m)	1.75692	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.28486	PF Power Coefficient (p)	0.60712
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	21.5

Vehicle Results			
Average Speed, mi/h	21.5	Percent Followers, %	35.3
Segment Travel Time, minutes	2.79	Adj. Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

Facility Results

T	VMT veh-mi/AP	VHD veh-h/p	Follower Density, followers/ mi/ln	LOS
1	30	0.04	2.8	B

HCS Two-Lane Highway Report

Project Information			
Analyst	BH	Date	8/22/2024
Agency	PEC	Analysis Year	2027
Jurisdiction		Time Analyzed	AM
Project Description	BEAN CEMETERY RD BUILD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	35	Access Point Density, pts/mi	1.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	197	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.75	Total Trucks, %	10.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	33.7
Speed Slope Coefficient (m)	2.38763	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38384	PF Power Coefficient (p)	0.67097
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	32.8

Vehicle Results			
Average Speed, mi/h	32.8	Percent Followers, %	37.2
Segment Travel Time, minutes	1.83	Adj. Follower Density, followers/mi/ln	2.2
Vehicle LOS	A		

Facility Results

T	VMT veh-mi/AP	VHD veh-h/p	Follower Density, followers/ mi/ln	LOS
1	37	0.03	2.2	A

HCS Two-Lane Highway Report

Project Information			
Analyst	BH	Date	8/22/2024
Agency	PEC	Analysis Year	2027
Jurisdiction		Time Analyzed	PM
Project Description	BEAN CEMETERY RD BUILD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	35	Access Point Density, pts/mi	1.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	211	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.75	Total Trucks, %	10.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	33.7
Speed Slope Coefficient (m)	2.38763	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38384	PF Power Coefficient (p)	0.67097
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	32.8

Vehicle Results			
Average Speed, mi/h	32.8	Percent Followers, %	38.5
Segment Travel Time, minutes	1.83	Adj. Follower Density, followers/mi/ln	2.5
Vehicle LOS	A		

Facility Results

T	VMT veh-mi/AP	VHD veh-h/p	Follower Density, followers/ mi/ln	LOS
1	40	0.03	2.5	A

Left Turn Lane Warrants

Bean Cemetery 2027 AM Build

Input Fields

Left Turn Volume (vph)	110	Speed Limit (mph)	35
Advancing Volume (vph)	148	No. of through lanes	1
Opposing Volume (vph)	136	Percent Heavy Vehicles (decimal percent)	0.1

Left Turn Lane NOT Warranted

Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

Left Turn Lane Warrants

Bean Cemetery 2027 PM Build

Input Fields

Left Turn Volume (vph)	110	Speed Limit (mph)	35
Advancing Volume (vph)	137	No. of through lanes	1
Opposing Volume (vph)	158	Percent Heavy Vehicles (decimal percent)	0.1

Left Turn Lane NOT Warranted

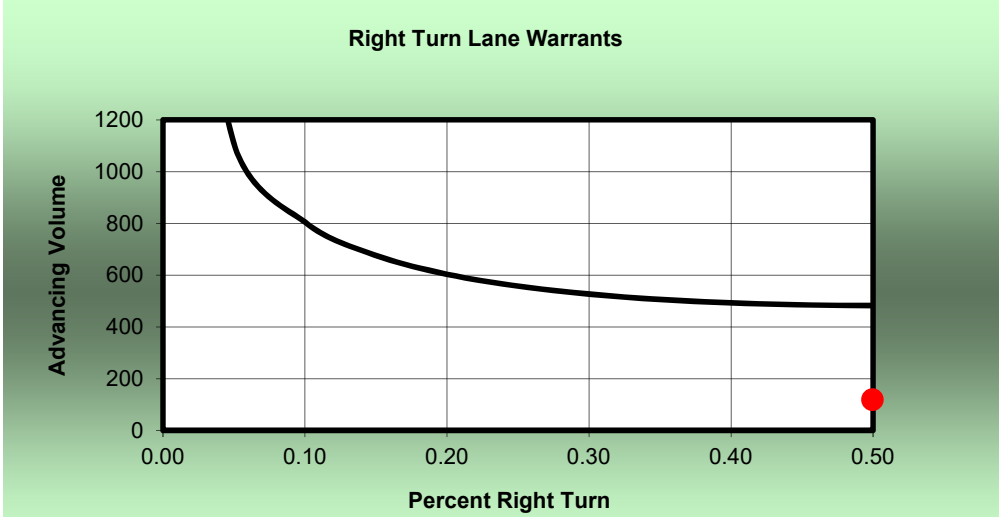
Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

Right Turn Lane Warrants

Bean Cemetery 2027 AM Build

Input Fields

Right Turn Volume (vph)	110	Speed Limit (mph)	35
Advancing Volume (vph)	136		



Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

Right Turn Lane Warrants

Bean Cemetery 2027 PM Build

Input Fields

Right Turn Volume (vph)	110	Speed Limit (mph)	35
Advancing Volume (vph)	158		

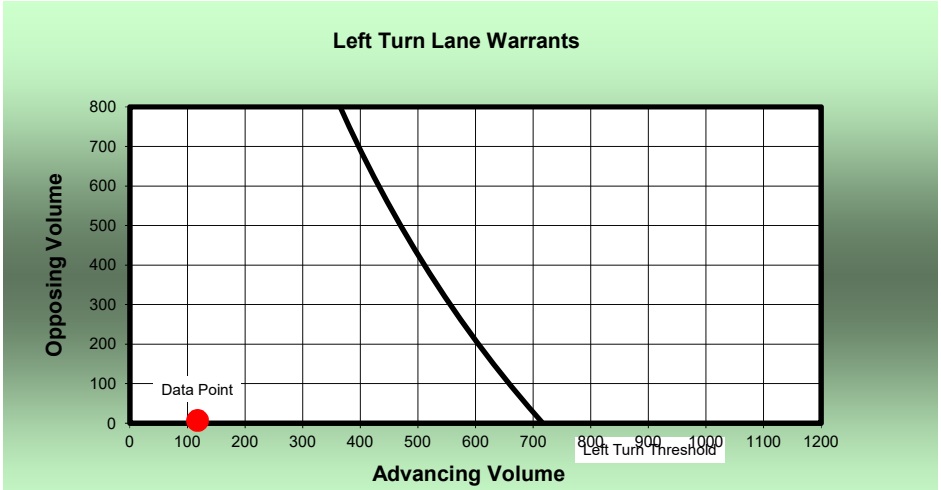
Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

Left Turn Lane Warrants

AC Slaton 2027 AM Build

Input Fields

Left Turn Volume (vph)	110	Speed Limit (mph)	35
Advancing Volume (vph)	117	No. of through lanes	1
Opposing Volume (vph)	7	Percent Heavy Vehicles (decimal percent)	0.1



Left Turn Lane NOT Warranted

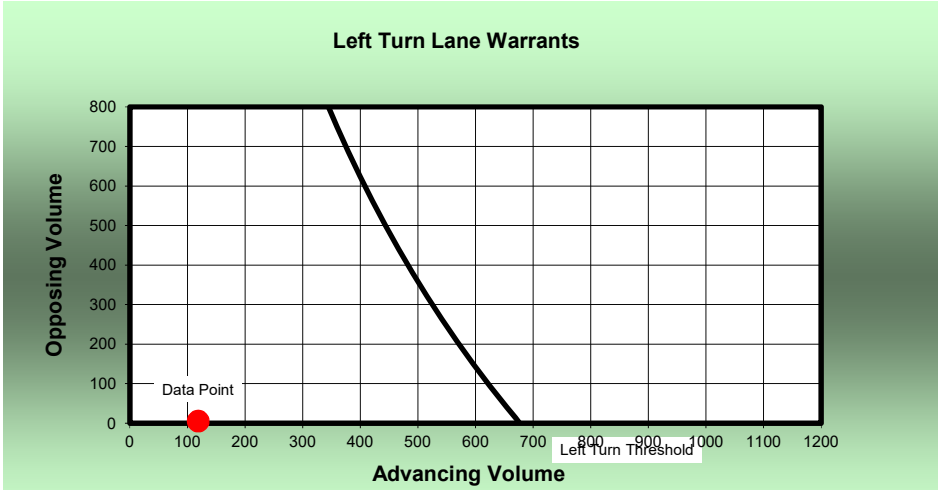
Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

Left Turn Lane Warrants

AC Slaton 2027 PM Build

Input Fields

Left Turn Volume (vph)	110	Speed Limit (mph)	35
Advancing Volume (vph)	118	No. of through lanes	1
Opposing Volume (vph)	6	Percent Heavy Vehicles (decimal percent)	0.1



Left Turn Lane NOT Warranted

Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

Right Turn Lane Warrants

AC Slaton Rd 2027 AM Build

Input Fields

Right Turn Volume (vph)	110	Speed Limit (mph)	25
Advancing Volume (vph)	117		

Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

Right Turn Lane Warrants

AC Slaton Rd 2027 PM Build

Input Fields

Right Turn Volume (vph)	110	Speed Limit (mph)	25
Advancing Volume (vph)	116		

Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

Historical Traffic Volume Summary

Station Details:

Sta ID:	054533
Sta Type:	Full Coverage
Map:	MapIt
District:	2
County:	Hopkins
Route:	054-KY-1302 -000
Route Desc:	PLEASANT VIEW RD

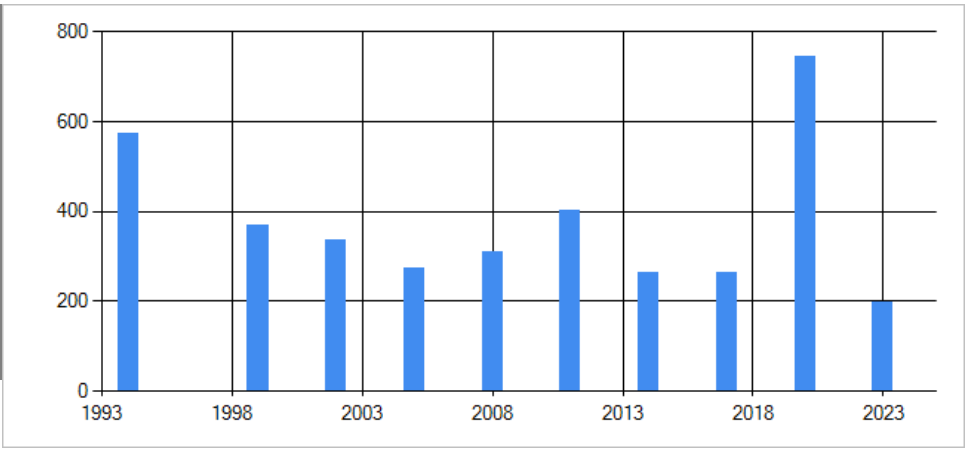
Begin MP:	0
Begin Desc:	JOHN HARDY ROAD
End Mp:	1.8630
End Desc:	PLEASANT VIEW ROAD BRIDGE
Impact Year:	
Year Added:	

Newest Count:

AADT:	198
Year:	2023
% Single:	
% Combo:	
K Factor:	12.60
D Factor:	56

Definitions:
Sta. ID - Three digit county number + station number
MP - milepoint
Impact Year – year of significant change to traffic pattern within station segment
AADT – Annual Average Daily Traffic – the annualized average 24-hour volume of vehicles on a segment of roadway
% Single – single unit truck volume as a percentage of the AADT
% Combo – combination truck volume as a percentage of the AADT
K Factor – peak hour volume as a percentage of the AADT
D Factor – percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2024		2014	265	2004	
2023	198	2013		2003	
2022		2012		2002	338
2021		2011	401	2001	
2020	744	2010		2000	
2019		2009		1999	370
2018		2008	309	1998	
2017	265	2007		1997	
2016		2006		1996	
2015		2005	275	1995	



AC Slaton
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/15/2024 Time	Eastbound, None Specified	Westbound, None Specified	Total
12:00 AM	*	*	0
12:15	*	*	0
12:30	*	*	0
12:45	*	*	0
1:00	2	0	2
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	1	1
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	2	0	2
6:00	0	0	0
6:15	0	0	0
6:30	1	0	1
6:45	0	0	0
7:00	1	1	2
7:15	0	0	0
7:30	1	0	1
7:45	2	0	2
8:00	2	0	2
8:15	1	1	2
8:30	1	0	1
8:45	2	1	3
9:00	1	0	1
9:15	2	0	2
9:30	1	0	1
9:45	0	3	3
10:00	2	2	4
10:15	0	1	1
10:30	3	2	5
10:45	2	2	4
11:00	0	0	0
11:15	0	0	0
11:30	0	2	2
11:45	2	1	3
Total	28	17	45
Percent	62.2%	37.8%	
Peak	10:00	9:45	10:00
Volume	7	8	14
Peak Factor	0.583	0.667	0.700

AC Slaton
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/15/2024 Time	Eastbound, None Specified	Westbound, None Specified	Total
12:00 PM	2	4	6
12:15	1	3	4
12:30	1	1	2
12:45	0	1	1
1:00	2	2	4
1:15	1	2	3
1:30	0	1	1
1:45	1	1	2
2:00	2	1	3
2:15	0	0	0
2:30	1	1	2
2:45	0	1	1
3:00	0	1	1
3:15	0	0	0
3:30	0	1	1
3:45	2	1	3
4:00	1	2	3
4:15	2	1	3
4:30	0	1	1
4:45	1	3	4
5:00	1	0	1
5:15	1	4	5
5:30	0	2	2
5:45	0	0	0
6:00	1	2	3
6:15	0	1	1
6:30	0	0	0
6:45	1	2	3
7:00	0	1	1
7:15	1	0	1
7:30	1	1	2
7:45	0	1	1
8:00	2	3	5
8:15	0	0	0
8:30	2	0	2
8:45	0	0	0
9:00	0	1	1
9:15	0	0	0
9:30	0	1	1
9:45	0	1	1
10:00	0	0	0
10:15	1	0	1
10:30	0	0	0
10:45	0	0	0
11:00	0	0	0
11:15	0	0	0
11:30	0	0	0
11:45	0	0	0
Total	28	48	76
Percent	36.8%	63.2%	
Peak	3:30	12:00 PM	12:00 PM
Volume	5	9	13
Peak Factor	0.625	0.563	0.542

AC Slaton
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/16/2024 Time	Eastbound, None Specified	Westbound, None Specified	Total
12:00 AM	0	0	0
12:15	0	0	0
12:30	0	0	0
12:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	1	1
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	2	0	2
6:00	0	0	0
6:15	0	1	1
6:30	1	0	1
6:45	1	0	1
7:00	1	0	1
7:15	1	0	1
7:30	1	1	2
7:45	1	0	1
8:00	1	0	1
8:15	2	0	2
8:30	3	0	3
8:45	1	1	2
9:00	2	1	3
9:15	0	1	1
9:30	2	1	3
9:45	0	1	1
10:00	1	0	1
10:15	0	1	1
10:30	1	1	2
10:45	1	1	2
11:00	0	0	0
11:15	0	1	1
11:30	1	1	2
11:45	3	0	3
Total	26	13	39
Percent	66.7%	33.3%	
Peak	8:15	8:45	8:15
Volume	8	4	10
Peak Factor	0.667	1.000	0.833

AC Slaton
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/16/2024 Time	Eastbound, None Specified	Westbound, None Specified	Total
12:00 PM	0	1	1
12:15	2	2	4
12:30	0	3	3
12:45	2	0	2
1:00	0	0	0
1:15	2	1	3
1:30	2	2	4
1:45	1	1	2
2:00	0	0	0
2:15	1	0	1
2:30	1	0	1
2:45	2	2	4
3:00	0	2	2
3:15	2	1	3
3:30	4	1	5
3:45	0	0	0
4:00	2	3	5
4:15	0	1	1
4:30	0	1	1
4:45	1	2	3
5:00	1	2	3
5:15	1	2	3
5:30	0	0	0
5:45	1	2	3
6:00	0	1	1
6:15	3	2	5
6:30	0	2	2
6:45	0	0	0
7:00	1	2	3
7:15	1	0	1
7:30	1	0	1
7:45	0	0	0
8:00	0	1	1
8:15	0	0	0
8:30	0	1	1
8:45	0	1	1
9:00	2	1	3
9:15	0	0	0
9:30	1	2	3
9:45	0	0	0
10:00	0	0	0
10:15	1	2	3
10:30	0	0	0
10:45	0	0	0
11:00	0	1	1
11:15	0	0	0
11:30	0	0	0
11:45	0	0	0
Total	35	45	80
Percent	43.8%	56.3%	
Peak	2:45	4:00	2:45
Volume	8	7	14
Peak Factor	0.500	0.583	0.700

AC Slaton
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/17/2024 Time	Eastbound, None Specified	Westbound, None Specified	Total
12:00 AM	0	0	0
12:15	0	0	0
12:30	0	0	0
12:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	1	0	1
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	1	0	1
6:45	0	0	0
7:00	0	0	0
7:15	1	0	1
7:30	0	0	0
7:45	1	0	1
8:00	0	0	0
8:15	2	1	3
8:30	1	0	1
8:45	0	1	1
9:00	0	0	0
9:15	0	0	0
9:30	0	0	0
9:45	2	1	3
10:00	1	0	1
10:15	2	0	2
10:30	0	1	1
10:45	0	0	0
11:00	2	0	2
11:15	2	0	2
11:30	2	0	2
11:45	1	0	1
Total	19	4	23
Percent	82.6%	17.4%	
Peak	11:00	8:00	9:45
Volume	7	2	7
Peak Factor	0.875	0.500	0.583

AC Slaton
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/17/2024 Time	Eastbound, None Specified	Westbound, None Specified	Total
12:00 PM	0	1	1
12:15	2	3	5
12:30	3	1	4
12:45	1	1	2
1:00	2	1	3
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	2	2	4
2:15	1	0	1
2:30	1	2	3
2:45	0	0	0
3:00	0	0	0
3:15	1	1	2
3:30	0	1	1
3:45	0	1	1
4:00	3	1	4
4:15	0	1	1
4:30	2	2	4
4:45	1	1	2
5:00	0	1	1
5:15	1	3	4
5:30	0	1	1
5:45	0	0	0
6:00	0	1	1
6:15	0	1	1
6:30	2	0	2
6:45	0	0	0
7:00	0	0	0
7:15	1	1	2
7:30	1	0	1
7:45	0	2	2
8:00	0	0	0
8:15	1	0	1
8:30	1	0	1
8:45	0	1	1
9:00	0	2	2
9:15	0	0	0
9:30	0	0	0
9:45	0	0	0
10:00	0	0	0
10:15	0	0	0
10:30	0	0	0
10:45	0	0	0
11:00	0	0	0
11:15	0	0	0
11:30	0	0	0
11:45	0	1	1
Total	26	33	59
Percent	44.1%	55.9%	
Peak	12:15	4:30	12:15
Volume	8	7	14
Peak Factor	0.667	0.583	0.700

AC Slaton
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/18/2024 Time	Eastbound, None Specified	Westbound, None Specified	Total
12:00 AM	0	0	0
12:15	0	0	0
12:30	0	0	0
12:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	1	1
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	0	0	0
7:15	0	0	0
7:30	0	0	0
7:45	0	0	0
8:00	0	0	0
8:15	0	0	0
8:30	0	0	0
8:45	0	0	0
9:00	0	0	0
9:15	1	0	1
9:30	0	0	0
9:45	1	0	1
10:00	1	0	1
10:15	0	1	1
10:30	1	2	3
10:45	0	4	4
11:00	2	0	2
11:15	2	1	3
11:30	1	1	2
11:45	0	0	0
Total	9	10	19
Percent	47.4%	52.6%	
Peak	10:30	10:00	10:30
Volume	5	7	12
Peak Factor	0.625	0.438	0.750

AC Slaton
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/18/2024 Time	Eastbound, None Specified	Westbound, None Specified	Total
12:00 PM	0	3	3
12:15	1	0	1
12:30	1	1	2
12:45	0	2	2
1:00	9	0	9
1:15	7	1	8
1:30	0	0	0
1:45	0	1	1
2:00	0	0	0
2:15	2	2	4
2:30	0	1	1
2:45	1	1	2
3:00	1	1	2
3:15	0	1	1
3:30	0	0	0
3:45	0	0	0
4:00	0	2	2
4:15	0	1	1
4:30	1	3	4
4:45	0	0	0
5:00	0	1	1
5:15	1	1	2
5:30	0	1	1
5:45	2	0	2
6:00	0	0	0
6:15	0	0	0
6:30	4	0	4
6:45	1	1	2
7:00	2	0	2
7:15	0	2	2
7:30	0	2	2
7:45	1	0	1
8:00	0	2	2
8:15	0	0	0
8:30	0	0	0
8:45	1	0	1
9:00	2	0	2
9:15	0	0	0
9:30	0	0	0
9:45	0	1	1
10:00	*	*	0
10:15	*	*	0
10:30	*	*	0
10:45	*	*	0
11:00	*	*	0
11:15	*	*	0
11:30	*	*	0
11:45	*	*	0
Total	37	31	68
Percent	54.4%	45.6%	
Peak	12:30	12:00 PM	12:30
Volume	17	6	21
Peak Factor	0.472	0.500	0.583
Grand Total	208	201	409
Percent	50.9%	49.1%	
AADT		ADT: 103	AADT: 103

Bean Cemetary
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/15/2024 Time	Southbound, None Specified	Northbound, None Specified	Total
12:00 AM	0	2	2
12:15	1	2	3
12:30	0	1	1
12:45	1	3	4
1:00	1	1	2
1:15	4	0	4
1:30	1	0	1
1:45	1	0	1
2:00	0	0	0
2:15	1	0	1
2:30	0	0	0
2:45	1	1	2
3:00	2	1	3
3:15	2	0	2
3:30	1	0	1
3:45	3	0	3
4:00	1	0	1
4:15	0	1	1
4:30	0	1	1
4:45	2	0	2
5:00	0	4	4
5:15	0	1	1
5:30	0	2	2
5:45	0	6	6
6:00	0	1	1
6:15	0	3	3
6:30	0	3	3
6:45	2	3	5
7:00	4	6	10
7:15	4	3	7
7:30	3	10	13
7:45	11	14	25
8:00	5	7	12
8:15	7	7	14
8:30	4	7	11
8:45	4	14	18
9:00	6	7	13
9:15	4	6	10
9:30	4	5	9
9:45	6	4	10
10:00	8	8	16
10:15	7	7	14
10:30	5	7	12
10:45	8	10	18
11:00	2	2	4
11:15	2	1	3
11:30	5	4	9
11:45	10	5	15
Total	133	170	303
Percent	43.9%	56.1%	
Peak	10:00	7:30	7:30
Volume	28	38	64
Peak Factor	0.875	0.679	0.640

Bean Cemetary
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/15/2024 Time	Southbound, None Specified	Northbound, None Specified	Total
12:00 PM	3	6	9
12:15	5	6	11
12:30	5	6	11
12:45	3	5	8
1:00	8	11	19
1:15	11	3	14
1:30	7	4	11
1:45	7	9	16
2:00	6	8	14
2:15	3	5	8
2:30	7	3	10
2:45	9	2	11
3:00	6	11	17
3:15	3	13	16
3:30	4	5	9
3:45	4	8	12
4:00	10	10	20
4:15	7	8	15
4:30	12	6	18
4:45	17	6	23
5:00	14	3	17
5:15	15	12	27
5:30	13	5	18
5:45	12	6	18
6:00	7	8	15
6:15	13	3	16
6:30	6	7	13
6:45	3	9	12
7:00	4	3	7
7:15	7	14	21
7:30	4	5	9
7:45	7	0	7
8:00	9	7	16
8:15	2	4	6
8:30	9	5	14
8:45	2	2	4
9:00	3	6	9
9:15	1	4	5
9:30	2	4	6
9:45	2	2	4
10:00	2	3	5
10:15	1	1	2
10:30	0	4	4
10:45	1	5	6
11:00	1	1	2
11:15	1	4	5
11:30	1	1	2
11:45	2	2	4
Total	281	265	546
Percent	51.5%	48.5%	
Peak	4:45	3:00	4:30
Volume	59	37	85
Peak Factor	0.868	0.712	0.787

Bean Cemetary
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/16/2024 Time	Southbound, None Specified	Northbound, None Specified	Total
12:00 AM	1	1	2
12:15	3	0	3
12:30	0	1	1
12:45	0	2	2
1:00	2	0	2
1:15	4	0	4
1:30	0	0	0
1:45	2	0	2
2:00	0	0	0
2:15	2	0	2
2:30	0	1	1
2:45	3	0	3
3:00	1	2	3
3:15	0	0	0
3:30	1	0	1
3:45	0	0	0
4:00	0	0	0
4:15	0	1	1
4:30	0	1	1
4:45	0	2	2
5:00	0	2	2
5:15	1	2	3
5:30	0	0	0
5:45	0	4	4
6:00	0	2	2
6:15	2	2	4
6:30	2	2	4
6:45	0	7	7
7:00	2	7	9
7:15	1	1	2
7:30	3	9	12
7:45	3	10	13
8:00	3	7	10
8:15	5	6	11
8:30	4	4	8
8:45	6	11	17
9:00	5	5	10
9:15	7	11	18
9:30	8	6	14
9:45	2	4	6
10:00	2	3	5
10:15	5	4	9
10:30	4	4	8
10:45	3	5	8
11:00	4	9	13
11:15	10	5	15
11:30	4	3	7
11:45	5	7	12
Total	110	153	263
Percent	41.8%	58.2%	
Peak	8:45	8:45	8:45
Volume	26	33	59
Peak Factor	0.813	0.750	0.819

Bean Cemetary
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/16/2024 Time	Southbound, None Specified	Northbound, None Specified	Total
12:00 PM	5	7	12
12:15	9	7	16
12:30	7	9	16
12:45	1	6	7
1:00	1	5	6
1:15	4	9	13
1:30	7	12	19
1:45	7	6	13
2:00	3	9	12
2:15	7	7	14
2:30	7	4	11
2:45	9	5	14
3:00	11	7	18
3:15	6	6	12
3:30	12	4	16
3:45	7	10	17
4:00	11	11	22
4:15	8	10	18
4:30	8	3	11
4:45	16	4	20
5:00	7	6	13
5:15	18	7	25
5:30	7	10	17
5:45	6	8	14
6:00	7	5	12
6:15	11	5	16
6:30	8	7	15
6:45	2	7	9
7:00	7	7	14
7:15	5	3	8
7:30	7	3	10
7:45	6	9	15
8:00	7	5	12
8:15	5	5	10
8:30	3	3	6
8:45	5	4	9
9:00	4	4	8
9:15	3	7	10
9:30	7	1	8
9:45	3	4	7
10:00	0	4	4
10:15	5	2	7
10:30	1	1	2
10:45	3	1	4
11:00	2	3	5
11:15	1	4	5
11:30	2	0	2
11:45	3	2	5
Total	291	268	559
Percent	52.1%	47.9%	
Peak	4:30	1:15	4:45
Volume	49	36	75
Peak Factor	0.681	0.750	0.750

Bean Cemetary
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/17/2024 Time	Southbound, None Specified	Northbound, None Specified	Total
12:00 AM	1	0	1
12:15	2	0	2
12:30	5	0	5
12:45	1	1	2
1:00	0	1	1
1:15	6	0	6
1:30	1	1	2
1:45	0	1	1
2:00	1	2	3
2:15	1	0	1
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	1	0	1
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	1	1
5:00	0	0	0
5:15	0	0	0
5:30	0	1	1
5:45	0	0	0
6:00	0	1	1
6:15	1	1	2
6:30	0	4	4
6:45	2	2	4
7:00	2	0	2
7:15	0	0	0
7:30	1	3	4
7:45	2	4	6
8:00	0	1	1
8:15	3	3	6
8:30	3	4	7
8:45	4	4	8
9:00	1	7	8
9:15	4	7	11
9:30	4	5	9
9:45	7	4	11
10:00	3	5	8
10:15	2	8	10
10:30	4	4	8
10:45	4	5	9
11:00	7	5	12
11:15	6	5	11
11:30	3	7	10
11:45	4	6	10
Total	86	103	189
Percent	45.5%	54.5%	
Peak	10:30	8:45	11:00
Volume	21	23	43
Peak Factor	0.750	0.821	0.896

Bean Cemetary
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/17/2024 Time	Southbound, None Specified	Northbound, None Specified	Total
12:00 PM	3	6	9
12:15	7	7	14
12:30	10	6	16
12:45	5	4	9
1:00	3	5	8
1:15	6	5	11
1:30	4	8	12
1:45	2	2	4
2:00	7	6	13
2:15	6	8	14
2:30	4	9	13
2:45	3	7	10
3:00	2	8	10
3:15	5	4	9
3:30	7	1	8
3:45	4	6	10
4:00	5	10	15
4:15	4	7	11
4:30	6	5	11
4:45	6	5	11
5:00	7	5	12
5:15	9	4	13
5:30	4	1	5
5:45	1	3	4
6:00	10	3	13
6:15	4	6	10
6:30	2	3	5
6:45	2	4	6
7:00	6	4	10
7:15	7	3	10
7:30	2	8	10
7:45	4	3	7
8:00	6	0	6
8:15	4	4	8
8:30	4	8	12
8:45	6	4	10
9:00	6	2	8
9:15	2	2	4
9:30	4	9	13
9:45	4	3	7
10:00	1	1	2
10:15	1	3	4
10:30	1	1	2
10:45	3	3	6
11:00	1	1	2
11:15	4	1	5
11:30	0	2	2
11:45	2	1	3
Total	206	211	417
Percent	49.4%	50.6%	
Peak	4:30	2:15	2:00
Volume	28	32	50
Peak Factor	0.778	0.889	0.893

Bean Cemetary
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/18/2024 Time	Southbound, None Specified	Northbound, None Specified	Total
12:00 AM	3	1	4
12:15	3	1	4
12:30	0	1	1
12:45	1	1	2
1:00	0	1	1
1:15	1	1	2
1:30	1	1	2
1:45	0	0	0
2:00	1	0	1
2:15	0	1	1
2:30	1	1	2
2:45	1	0	1
3:00	1	0	1
3:15	0	0	0
3:30	0	1	1
3:45	0	1	1
4:00	1	0	1
4:15	0	0	0
4:30	0	0	0
4:45	1	0	1
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	1	1
6:45	2	1	3
7:00	0	1	1
7:15	0	1	1
7:30	1	2	3
7:45	2	1	3
8:00	4	0	4
8:15	1	3	4
8:30	2	1	3
8:45	1	1	2
9:00	1	1	2
9:15	0	3	3
9:30	0	5	5
9:45	2	3	5
10:00	1	2	3
10:15	1	2	3
10:30	5	4	9
10:45	10	9	19
11:00	7	4	11
11:15	6	2	8
11:30	10	6	16
11:45	6	7	13
Total	77	71	148
Percent	52.0%	48.0%	
Peak	10:45	10:45	10:45
Volume	33	21	54
Peak Factor	0.825	0.583	0.711

Bean Cemetary
Madisonville, KY
KYMEA RICE Site

Site Code:
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 0.000000
Longitude: 0.000000

8/18/2024 Time	Southbound, None Specified	Northbound, None Specified	Total
12:00 PM	4	2	6
12:15	5	6	11
12:30	10	6	16
12:45	8	7	15
1:00	5	6	11
1:15	10	11	21
1:30	3	4	7
1:45	2	6	8
2:00	4	8	12
2:15	6	9	15
2:30	5	3	8
2:45	5	7	12
3:00	3	6	9
3:15	3	9	12
3:30	3	8	11
3:45	5	6	11
4:00	4	9	13
4:15	3	7	10
4:30	11	6	17
4:45	5	8	13
5:00	3	4	7
5:15	7	5	12
5:30	5	4	9
5:45	3	6	9
6:00	2	6	8
6:15	5	4	9
6:30	9	10	19
6:45	1	1	2
7:00	6	4	10
7:15	5	5	10
7:30	5	3	8
7:45	0	4	4
8:00	7	4	11
8:15	3	1	4
8:30	6	5	11
8:45	2	3	5
9:00	3	2	5
9:15	3	1	4
9:30	4	5	9
9:45	1	1	2
10:00	1	0	1
10:15	2	2	4
10:30	3	4	7
10:45	2	4	6
11:00	2	1	3
11:15	0	3	3
11:30	1	1	2
11:45	0	0	0
Total	195	227	422
Percent	46.2%	53.8%	
Peak	12:30	3:15	12:30
Volume	33	32	63
Peak Factor	0.825	0.889	0.750
Grand Total	1379	1468	2847
Percent	48.4%	51.6%	
AADT		ADT: 712	AADT: 712

Palmer ENGINEERING

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P.O. Box 747
Winchester, KY 40392
859-744-1218
www.palmernet.com

Siting Board 1-55:

Identify the roadways which will or may be used by heavy trucks traveling from Interstate 69 to reach the Project.

Response: For traffic traveling southbound along I-69 the following roadways would be used by truck traffic:

- KY 281 (Nebo Road)
- Rose Creek Road
- Lovers Lane/ Bean Cemetery Road
- AC Slaton Road

For traffic travelling northbound along I-69 the following roadway would be used by truck traffic:

- KY 2171 (Hubert Reid Rd)
- KY 336 (Grapevine Road)
- KY 481 (Grapevine Road)
- KY 70 (McLaughlin Ave/ Princeton Rd/ Beulah Rd)
- KY 1302 (Pleasant View Rd)
- Bean Cemetery Road
- AC Slaton Road

Witness: Josh Coburn.

Siting Board 1-56:

Refer to SAR, Appendix H, Traffic Impact Report, Vicinity Map 1. Provide weight limit ratings for the following roadways shown on the Project Vicinity Map:

a. Interstate 69/Pennyrile Parkway.

b. KY 281/Nebo Road.

c. KY 1034/Rose Creek Road.

d. KY 1302/Pleasant View Road.

e. KY 70/Princeton Road.

f. US 41/S Main Street.

g. Bean Cemetery Road.

h. AC Slaton Road

Response: The following are the weight limit ratings for the roadways listed above:

a. Interstate 69 – 80,000 lbs gross vehicle weight

b. KY 281/Nebo Road. - 80,000 lbs gross vehicle weight

c. KY 1034/Rose Creek Road. - 44,000 lbs gross vehicle weight

d. KY 1302/Pleasant View Road. - 44,000 lbs gross vehicle weight

e. KY 70/Princeton Road. - 44,000 lbs gross vehicle weight

f. US 41/S Main Street. - 80,000 lbs gross vehicle weight

g. Bean Cemetery Road. - 20,000 lbs gross vehicle weight

h. AC Slaton Road - 20,000 lbs gross vehicle weight

Witness: Josh Coburn.

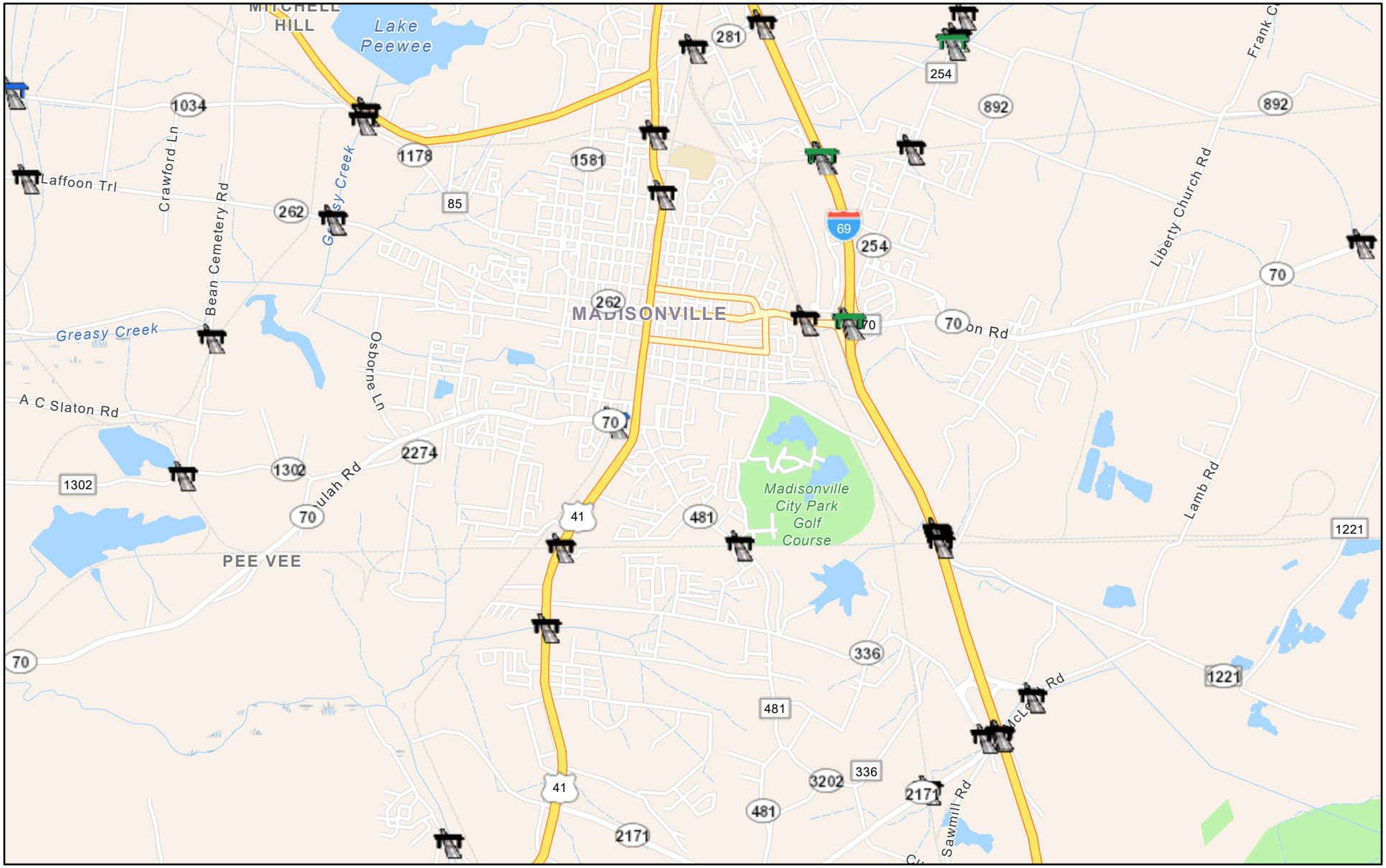
Siting Board 1-57:

Refer to SAR, Appendix H, Traffic Impact Report, Vicinity Map 1. Provide the location and weight limit ratings for any bridges shown within the Project Vicinity Map area. Indicate which bridges will or might be used by Project construction traffic.

Response: A map has been provided that shows all bridges in the vicinity and their weight restrictions (see Attachment 1-57 KYTC Bridge Weight Limits). Any bridges labeled as "No Restrictions" exceeds the weight restrictions of the roads. If a permit is required for overweight loads on the roadway, then the bridges will be addressed within the same permit.

Witness: Josh Coburn.

KYTC - Bridge Weight Limits



11/25/2024

Recommended or Closed Bridge Locations

- Posting Recommended
- Closed
- Gross Posted or EVs Restricted
- Other Posted
- Open, No Restrictions

1:65,814

0 0.45 0.9 1.8 mi

0 0.5 1 2 km

Source KYTC, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, KYTC

Siting Board 1-58:

Refer to SAR, Appendix H, Traffic Impact Report, Methodology: Level of Service and Delay Analysis. Provide a further explanation of the "proposed improvements to the roadway system."

Response: The purpose of this paragraph was to explain that the No-Build Scenarios assume that no changes have occurred to the roadway from the time of the initial traffic counts regardless of the year being analyzed. This paragraph has been eliminated in the revised Report to avoid confusion. (See Attachment 1-54.)

Witness: Josh Coburn.

Siting Board 1-59:

Refer to SAR, Appendix H, Traffic Impact Report, Sight Distance Analysis and Figure 4: Sight Distance Triangles. Update this Analysis and Figure to include sight distance data for the entrance to the Plant site on AC Slaton Rd., as shown in SAR Appendix E (Site Layout Map).

Response: Figure 4 of the revised Report has been updated to show the location of the entrance. The sight triangles were identified with the red text and red triangles. The Blue text and sight triangles show the sight distance turning off AC Slaton onto Bean Cemetery. (See Attachment 1-54.)

Witness: Josh Coburn.

Siting Board 1-60:

Refer to SAR, Appendix H, Traffic Impact Report. Explain whether the site trip generation, level of service and delay, intersection, and turn lane analyses account for construction of both the Plant site and the Substation site. If necessary, provide revised analyses that account for both sites.

Response: The site trip generation includes both the construction of the Plant site and Substation site. The study used the month with the highest anticipated manpower for the trip generation numbers.

Witness: Josh Coburn.

Siting Board 1-61:

Refer to SAR, Appendix H, Traffic Impact. Revise the figure titled "Right Turn Lane Warrants AC Slaton Rd 2027 AM Build" to include the data point as shown in the Figure titled "Left Turn Lane Warrants Bean Cemetery 2027 AM Build".

Response: The red data point has been added in the revised Report to the right turn lane warrant. (See Attachment 1-54.)

Witness: Josh Coburn.

Siting Board 1-62:

Refer to SAR, Appendix H, Traffic Impact. Provide the figure for "Right Turn Lane Warrants AC Slaton Rd 2027 PM Build", which is missing.

Response: There was a typo where both right turn lane warrants were labeled as AM. The second warrant was corrected in the revised Report to read "AC Slaton Rd 2027 PM Build". (See Attachment 1-54.)

Witness: Josh Coburn.

Siting Board 1-63:

Refer to SAR, Appendix H, Traffic Impact. Provide figures for the following:

a. AM/PM Build Right Turn Lane Warrants for Bean Cemetery Road.

b. AM/PM Build Left Turn Lane Warrants for AC Slaton Road.

Response: These turn lane warrants have been added to the appendix of the revised Report and show that turn lanes are not warranted. (See Attachment 1-54.)

Witness: Josh Coburn.

Siting Board 1-64:

Provide the average daily number of construction vehicles accessing the Project site by vehicle type (i.e., number of worker vehicles, delivery trucks, water trucks [if utilized], other) for plant and substation construction.

Response: Expected average daily vehicles for the following:

Passenger Vehicles: 30

Delivery Vehicles: 3 per day

Concrete/Gravel Trucks/Specialty Vehicles: Highly dependent on the daily operation. Not expected to exceed 2/3 total delivery vehicles on-site at any given time.

Witness: Josh Coburn.

Siting Board 1-65:

Provide the maximum expected truck weights and load weights for each type of delivery for plant and substation construction, including cement and water trucks (if utilized), heavy equipment, gravel for access roads, transformers, RICE generators, etc.

Response: This information is not yet available; however, all vehicle loads will follow applicable Federal, State of Kentucky Department of Transportation, Hopkins County, and City of Madisonville Regulations.

Witness: Josh Coburn.

Siting Board 1-66:

Provide the peak daily number of construction vehicles accessing the Project site by vehicle type (i.e., number of worker vehicles, delivery trucks, cement trucks, water trucks [if utilized], other) for plant and substation construction.

Response: Expected peak daily vehicles for the following:

Passenger Vehicles: 75

Delivery Vehicles: 10 per day

Concrete/Gravel Trucks/Specialty Vehicles: Highly dependent on the daily operation. Not expected to exceed 2 or 3 total delivery vehicles on-site at any given time.

Witness: Josh Coburn.

Siting Board 1-67:

Explain whether any oversize or overweight deliveries for the Project Plant or Substation will require special permits.

Response: There will be a number of oversize and overweight deliveries for the project. These include but are not limited to the RICE engines, generators, and generator step-up (GSU) transformers. These deliveries will be coordinated with and will follow Federal, State of Kentucky Department of Transportation, Hopkins County, and City of Madisonville Regulations.

Witness: Josh Coburn.

Siting Board 1-68:

Explain the plan for repairing Project-related damage to any roadways, railway crossings, or bridges.

Response: Permitted loads will be coordinated with and will follow applicable Federal, State of Kentucky Department of Transportation, Hopkins County, and City of Madisonville Regulations. Inspections of roads/railway crossing/bridges will be completed as required by Authority having Jurisdiction in advance of movement. Assessed damage shall be repaired.

Witness: Doug Buresh

Siting Board 1-69:

Explain whether any traffic stoppages will be necessary to accommodate large truck deliveries for constructing the Project Plant, Substation, and/or transmission lines (natural gas/electric). If yes, provide the expected location(s), frequency, and length of those stoppages.

Response: Yes, traffic stoppages will be required to accommodate deliveries of the four engines and the two main power transformers. The engines will be coming by rail to Madisonville and then moved to site using specialized hydraulic platform trailers (e.g., Goldhofer). Coordination with State and Local officials will be required and shall include short-term traffic stoppages and limited line overhead lifting over the nine-mile transport to site based on a preliminary route survey. Engine deliveries are expected to occur during a one-week period with individual road segment blockages limited to one hour per day. A route survey has not been conducted for the delivery of the main power transformers, but similar coordination is anticipated with state and local officials. Transformer deliveries are expected to occur over two days with individual road segment blockages limited to one hour per day.

Witness: Doug Buresh

Siting Board 1-70:

Explain any specific traffic management strategies to be employed during plant and substation construction.

Response: As stated in response to item 1-8, the site constructions labor load is relatively low. If traffic congestion becomes an issue to the local community, start times can be staggered to reduce traffic flow. All parking will be on-site so no constriction to local roads is expected.

Witness: Doug Buresh

Siting Board 1-71:

Describe any additional access roads to be developed for construction of the natural gas transmission line. For those access roads:

a. Include on a map and identify the transmission line access roads.

b. Provide details about the proposed access roads, including total length, width(s) and material(s) used.

Response: No additional access roads will be constructed for construction of the natural gas transmission line. The meter station at the point of interconnect may require an access road for maintenance depending on its final location; however, engineering is currently waiting on Texas Gas Transmission to determine the final tie-in point.

Witness: Doug Buresh.

Siting Board 1-72:

Explain whether the Applicant has had any conversations with representatives of CSX Transportation regarding this Project. If so, describe the nature of those conversations, any concerns, and resolutions from those interactions.

Response: Contact was made with Anthony Gilmore, Track Analyst of Corridor Services, Business Development & Real Estate – FL, GA, KY, MD, SC, DC & Towers. He directed us to their website for required construction standards for utility encroachments and the CSX Property Portal for submitting permit applications. Discussions were also held with local employees regarding activity on the spur. Typical activity is limited to Warrior Coal which could vary from 1-3 coal unit trains per week.

Witness: Doug Buresh.

Siting Board 1-73:

Describe any additional access roads to be developed for construction of the natural gas transmission line. For those access roads:

a. Include on a map and identify the transmission line access roads.

b. Provide details about the proposed access roads, including total length, width(s) and material(s) used.

Response: See response to item 1-71 above.

Witness: Doug Buresh

Siting Board 1-74:

Refer to SAR, Appendix H, Traffic Impact Report, Vicinity Map 1. Provide the location and weight limit ratings for any railroad crossing on roadways which will or may be used by Project construction traffic.

Response: Weight limit ratings for railroad crossings exceed those of the roadway.

Witness: Josh Coburn.

Siting Board 1-75:

Provide the schedule of CSX trains traveling on the rail line that crosses Bean Cemetery and AC Slaton Roads.

Response: The railroad crossing is on a CSX spur which connects with the Paducah & Louisville railroad receiving limited use. CSX does not make their train schedules available as public information. Typical activity is limited to Warrior Coal which could vary from 1-3 coal unit trains per week. KYMEA will coordinate any required interruptions to service with the local office.

Witness: Josh Coburn.

Siting Board 1-76:

State whether a plan to coordinate delivery times around the CSX Railway schedule has been or will be devised. Provide that plan, if available.

Response: The railroad crossing is on a CSX spur which connects with the Paducah & Louisville railroad receiving limited use. Typical activity is limited to Warrior Coal which could vary from 1-3 coal unit trains per week. Deliveries will be sporadic to the construction site and no impacts are anticipated. For any heavy haul deliveries which could impact traffic, KYMEA will coordinate with the local CSX office or utilize the CSX Property Portal for submitting permit applications and coordinating any required interruptions to service.

Witness: Doug Buresh

Siting Board 1-77:

Explain how the natural gas transmission line construction will be coordinated with the railroad crossings and train operations. Include in the explanation whether the construction of the transmission line will require delays in train schedules and if so, provide the anticipated duration of train delays.

Response: The railroad crossing is on a CSX spur which connects with the Paducah & Louisville railroad receiving limited use. Typical activity is limited to Warrior Coal which could vary from 1-3 coal unit trains per week. A boring plan will be submitted to CSX prior to the work and requirements for the bore relating to train operations will be provided as part of the review. Train traffic disruptions, if any, are expected to be limited to a four-hour period. A construction monitor is required to monitor the ground and track for movement during the drilling, reaming, and pullback processes.

Witness: Doug Buresh

Siting Board 1-78:

Refer to the SAR, Appendix G, Noise Analysis Report. Confirm whether the Project will include the Base or the Low Noise Option design for the RICE facility. If that decision has not been finalized, provide an explanation of what will drive that decision and when it will be made.

Response: The Project will utilize the Low Noise Option design for the RICE facility.

Witness: Doug Buresh.

Siting Board 1-79:

Refer to the SAR, Appendix G, Noise Analysis Report, Section 8. Provide tables and figures similar to Table 8.1 and Figure F8-1 for the equipment used in construction of:

a. The project substation.

b. The natural gas transmission line.

Response:

The noise values for construction of the project substation and natural gas transmission line will be similar to the power plant construction noise information; however, the duration of construction of those facilities will be much shorter.

Witness: Dave Parzych.

Siting Board 1-80:

Refer to the SAR, Appendix G, Noise Analysis Report. Provide the daytime and nighttime sound levels generated by operation of the Project Substation at a distance of 50 feet and for each of the six monitoring locations.

Response: The substation site is just a switching station with no transformers and no substantial noise contribution.

Witness: Dave Parzych.

Siting Board 1-81:

Refer to the SAR, Appendix G, Noise Analysis Report, 6.4 Low Frequency Infrasound. Explain if any mitigation measures will be implemented to reduce infrasound induced vibrations for receptors M-5 and/or M-6.

Response: Low frequency sound (infrasound) is omni-directional and therefore specific noise abatement cannot be provided to address specific locations (i.e., M-5 and M-6). However, infrasound is being controlled by supplying a building wall and ceiling design that significantly reduces low frequency noise. The RICE units are provided with substantial exhaust silencers. These items will help to reduce low frequency noise at all locations.

Witness: Dave Parzych.

Siting Board 1-82:

Explain what days of the week construction activities will take place.

Response: Construction work is generally planned for Monday to Friday, 7 AM to 5 PM. Limited work outside of these days and hours may take place when deemed necessary for the project schedule.

Witness: Doug Buresh.

Siting Board 1-83:

Explain whether a plan to coordinate construction activities around Faith Missionary Baptist Church's schedule has been or will be developed. Provide that plan, if developed.

Response: No plan has been developed; however, construction work is generally planned for Monday to Friday, 7 AM to 5 PM. This construction schedule and the relatively small number of construction employees on the jobsite is not anticipated to have any effect on Faith Missionary Baptist Church

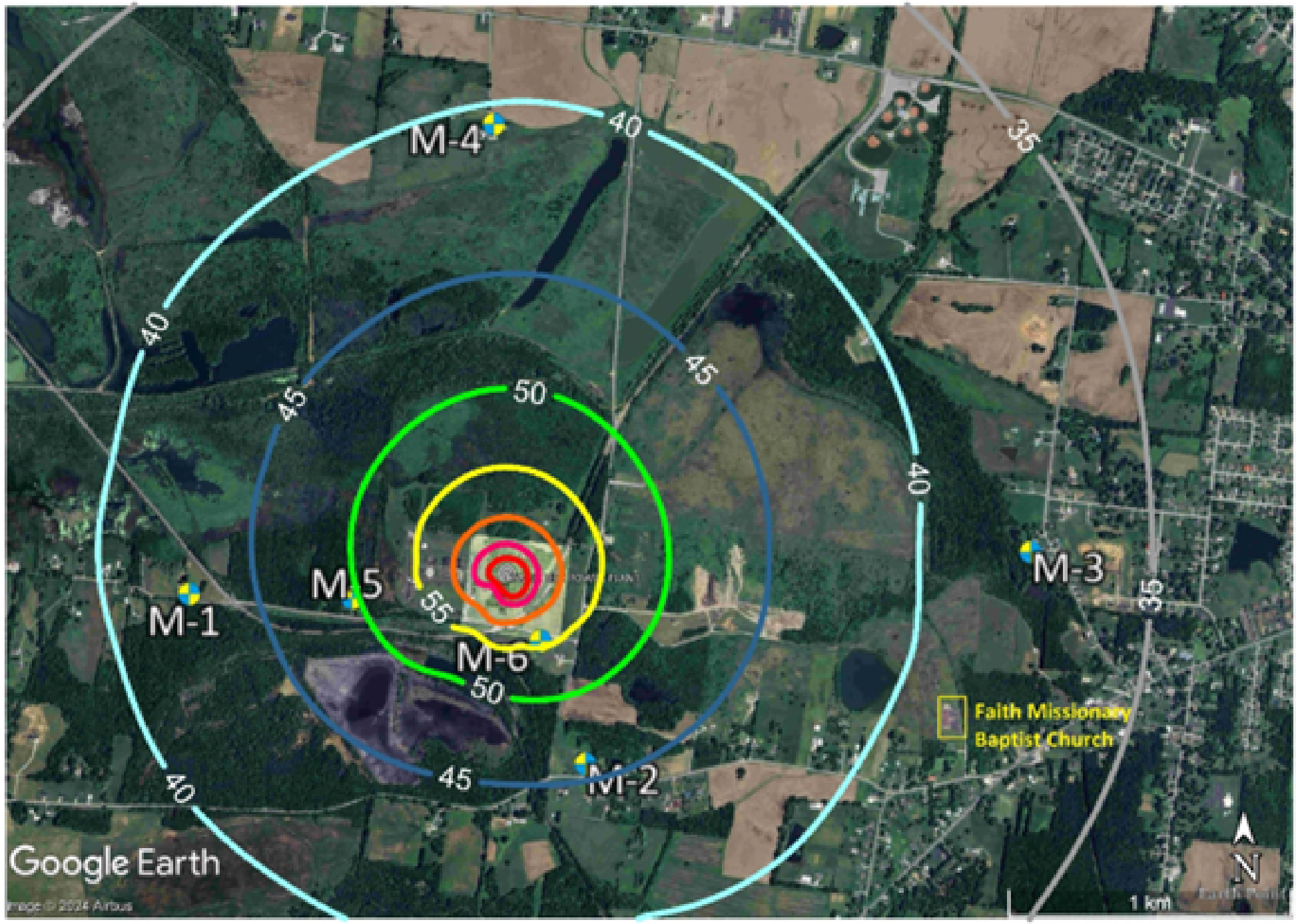
Witness: Doug Buresh.

Siting Board 1-84:

Provide the cumulative noise levels at the Faith Missionary Baptist Church, to account for the ambient noise level and operating noise levels for both the plant and substation.

Response: Sound levels from the RICE facility are estimated to be approximately 37 dB(A) at the Faith Missionary Baptist Church on 102 Pleasant View Rd. The existing LA90 (quietest 10% of the time) ambient sound is estimated to be between 28-33 dB(A). The sum of the RICE facility plus ambient sound is estimated to be approximately 38 dB(A). The substation (switching station) will not add to the total RICE facility sound level. (See Attachment 1-84 Faith Missionary Expected Noise Level.)

Witness: Dave Parzych.


M-4
M-1
M-5
M-6
M-2
M-3
40
45
50
55
35
Faith Missionary Baptist Church
Google Earth
1 km
N

Siting Board 1-85:

Refer to the SAR, Appendix G, Noise Analysis Report. Provide a table stating the cumulative construction noise levels at each noise sensitive area receptor within 2,000 ft of the Project boundary, to account for the ambient noise level and construction noise levels for both the Plant and Substation.

Response:

Distance	Location	Worst Case Sound Level	Ambient LA90	TOTAL
800 ft (nearest home)	L-6	69.5 dB(A)	28 dB(A)	69.5 dB(A)
1600 ft	L-5	63.5 dB(A)	31 dB(A)	63.5 dB(A)
2000 ft	L-2	61.6 dB(A)	27 dB(A)	61.6 dB(A)

Witness: Dave Parzych.

Siting Board 1-86:

Describe the physical characteristics of the power plant (engine hall building), to include the four RICE generators and associated infrastructure, i.e., footprint acreage, height.

Response: A sketch of the cross section of the site is provided (Attachment 1-11 Cross Section Sketch). The KYMEA plant general arrangement was previously provided as Appendix D to the original report. The building has a footprint of approximately 24,000 square feet (10,000 - Office and 14,000 - Engine Hall). The engine hall will utilize a pre-engineered building with an eve height of approximately 40 feet. The admin building is to be a stick-built building with structural steel columns and a flat roof design. The roof is expected to be flat with a parapet - height 25-30 feet. The area inside the fence for development is approximately 6 acres.

Witness: Doug Buresh

Siting Board 1-87:

Provide a visual rendering of the power plant (engine hall building) or a photo of a similar type of structure in another location.

Response: See Attachments 1-87a and 1-87b for some photos of previously constructed plants showing general fit and finish of the expected construction.

Witness: Doug Buresh

Siting Board 1-88:

Describe the physical characteristics of the Project Substation, i.e., footprint acreage, height.

Response: Final substation configuration will not be known until after completion of the interconnection study in May 2025. The configuration could range from a 3-breaker ring bus to an 8 or 9-breaker configuration as shown on previous Attachment 1-12 Site Layout. Civil/Site engineering is just underway by Paterson & Dewar Engineers based on the largest potential configuration. Preliminary fenced and graveled area would be 250 feet by 275 feet. Typical busswork and breaker would be 24-feet high with the incoming and outgoing dead-end structures approximately 45-feet high.

Witness: Doug Buresh

Siting Board 1-89:

Describe the physical characteristics of the generator lead line connecting the Plant to the Substation, including length, number of poles, height.

Response: The 69 kV generation lead line extension will consist of approximately 500 feet of 954 AAC conductor rated at 900A. The line will be a horizontal construction and will be supported by 60-foot steel poles with fiberglass crossarms and suspension insulators. While final design has not been completed, a set of poles is only anticipated on each side of the railroad.

Witness: Doug Buresh

Siting Board 1-90:

Describe the physical characteristics of the transmission lines connecting the Substation to existing transmission lines along:

a. The south side of AC Slaton Road.

b. The west side of Bean Cemetery Road, including length, number of poles, and height.

Response: Final substation configuration will not be known until after completion of the interconnection study in May 2025. The configuration could range from a 3-breaker ring bus tying into a single LGE/KE transmission circuit to an 8 or 9-breaker configuration connecting into both LGE/KU transmission circuits as shown on previous Attachment 1-12 Site Layout. Preliminary reviews indicate that potential configurations can be accomplished by setting an additional free-standing pole mid span on the existing LGE/KU transmission lines in the confines of the existing right-of-way. In addition, for the tie along Bean Cemetery Road, a turning pole would also be required before entering the substation. It is anticipated that the lines would utilize 954 AAC conductor rated at 900 amps.

Witness: Doug Buresh

Siting Board 1-91:

Refer to Attachment I of the Application (Decommissioning Plan), Section 3. Explain the statement "KYMEA agrees to communicate with each affected Landowner at the end of the facility's useful life" given that "KYMEA will retain ownership and continue to be the Landowner of this site after decommissioning efforts have been completed." In that explanation, identify the other affected landowners.

Response: "Affected landowners" was intended to capture the City of Madisonville, who is down gradient of site runoff, as well as utilities (including water, sewer, fiber optic and electricity) that are providing service to the facility.

Witness: Doug Buresh

Siting Board 1-92:

Provide any additional information or details about the decommissioning of the Substation Site, including associated decommissioning costs.

Response: LGE/KU will be responsible for any decommissioning of the substation site, but we would expect the facility to remain in service. This site is just a switching station with no transformation, it is expected that it will remain in service due to its proximity with the Madisonville West Loop feeds. This is consistent with the statutes governing merchant electric generating facilities, which provides a default for switching stations to remain in place: "Unless otherwise requested by the landowner, leave any interconnection or other facilities in place for future use at the completion of the decommissioning process." KRS 278.704(2)(m)(4).

Witness: Doug Buresh / Counsel

Siting Board 1-93:

Refer to the SAR, Appendix A, Property Value Impact Analysis. Regarding the statement that "supplemental vegetation is proposed to enhance the areas where the existing trees do not currently provide a proper screen", explain and provide a map illustrating the locations where landscape screening would be planted as a visual buffer.

Response: KYMEA anticipates having a landscaped sign at the plant entrance in compliance with the City's ordinance. Limited small trees (less than 25-foot mature height, e.g., dogwoods) are planned between the east-west perimeter road and the south fence pending approval and clearance with local utilities. Until final utility locations are known, a detailed plan cannot be provided for enhancing screening. Any vegetative screening of the substation is subject to its final layout and overhead line design. Specific location of vegetation will not be finalized until the final substation configuration is set, which will be after completion of the interconnection study in May 2025.

Witness: Doug Buresh

Siting Board 1-94:

Provide any available transcripts of the public meetings and any written or oral comments offered by the public or government agencies, from public meetings or through other avenues, including those comments on the Project website, if that exists.

Response: The July 1, 2024, RICE Project Public Meeting Summary has been attached hereto as Attachment 1-94.

Witness: Doug Buresh

7/1/2024 RICE Project Public Meeting Summary

The public meeting took place at the City Council Chambers on the second floor of the Madisonville Municipal Utilities building, located at 77 North Main Street, Madisonville, KY 42341. Attendees included local elected officials, City staff, KYMEA staff and consultants, representatives from local community organizations, and several adjoining residential property owners. It started at 10:00 AM with a welcome from Doug Buresh of KYMEA, followed by an introduction to KYMEA and a review of the project utilizing the attached display boards. Doug opened the floor for a Q&A session and solicited comments on the Project. Questions included the following; Who will be on the siting board? Is KYMEA adding new members? Where is the source of the natural gas, how big will the line be and will it cross private property? How does this site size and generation capacity compare with the Ashwood solar project? Where will this power flow? How do power prices compare with other utilities? Will the city realize tax revenue or receive other economic benefits from the project? Why did KYMEA choose Hopkins County? Attendees were provided three handouts; *KYMEA Energy Center Fact Sheet*, *KYMEA Energy Center Q&A*, and *Kentucky's Electric Generation and Transmission Siting Process*. The meeting concluded, and attendees were dismissed at 11:00 AM.

List of Attendees:

Mayor Kevin Cotton, Lincoln Fugal (City Engineer), Frank Wallace(Building Official), Mandy Todd (Planning and Zoning), Kim Blue (City Clerk), Rob Saint (City Administrator), Brad Porter (Electric Department Superintendent), Jody Groves (Electric Department), Lisa Miller, Hopkins County Judge Executive Jack Whitfield, Michelle Hixon (KYMEA Dir of Administrative Services & Communications), Doug Buresh (President/CEO KYMEA), Stan Conn (KYMEA Owner's Engineer), Charles Musson (KYMEA Outside Legal Counsel), Tony Space (City Council), Larry Noffsinger (City Council), Frank Stevenson (City Council), Chad Menser (City Council), Bill Rudd, Jason Pollard, Kelly Forbes, Katie Wyatt, Allan Todd, Joe Evans, Devi Thorp, Chris Lindsey, Diana Philips, Amy Keith, Amy Frogue, Keith and Diane Dexter.

Who Are We

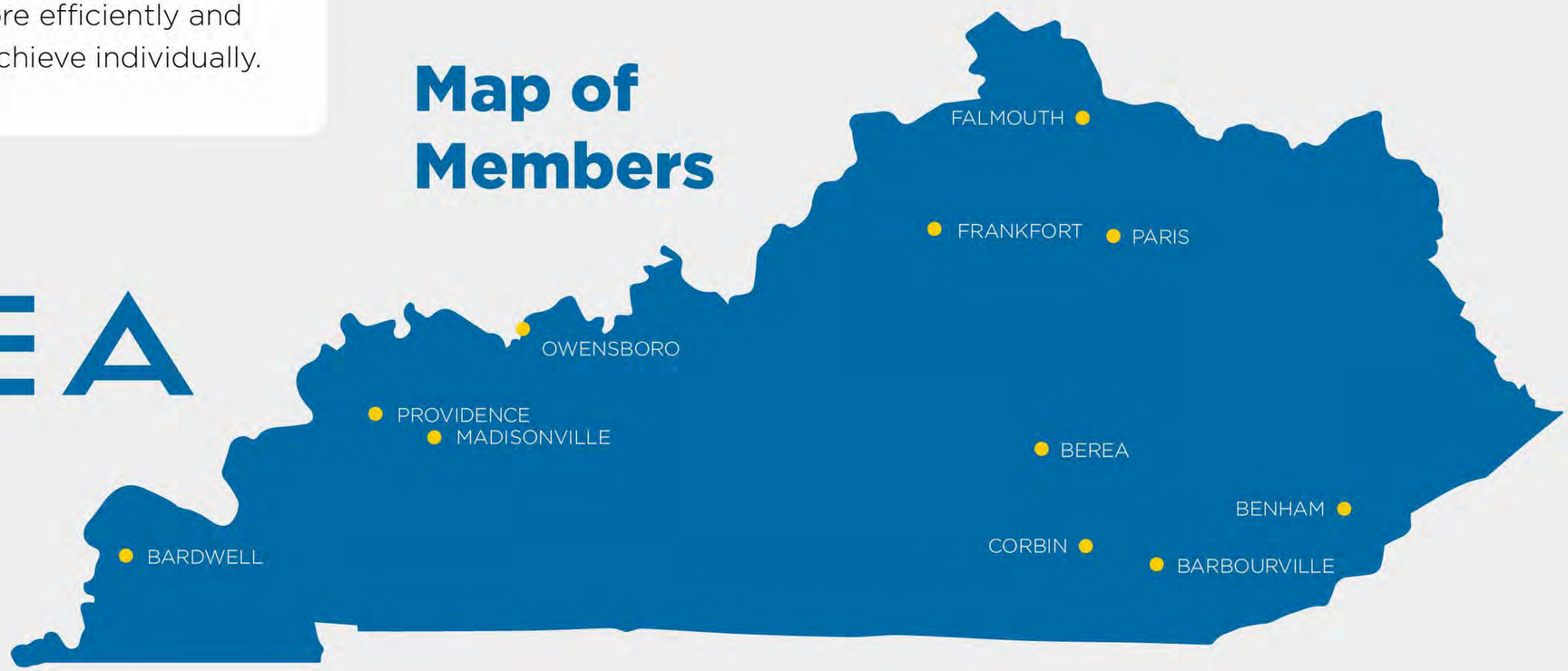
KYMEA exists to serve its members. Members may choose to enter into contracts with KYMEA for power supply or other services. Members also have the flexibility to establish projects for the benefit of one or more members, such as the All Requirements Project (AR Project), which has been created to acquire power supply resources to serve the needs of ten participating all requirements members. The business model objective of KYMEA is to provide cost-effective resources and services for the benefit of its members to enable them to achieve objectives they have set for themselves more efficiently and at lower costs than they could achieve individually.

What We Do

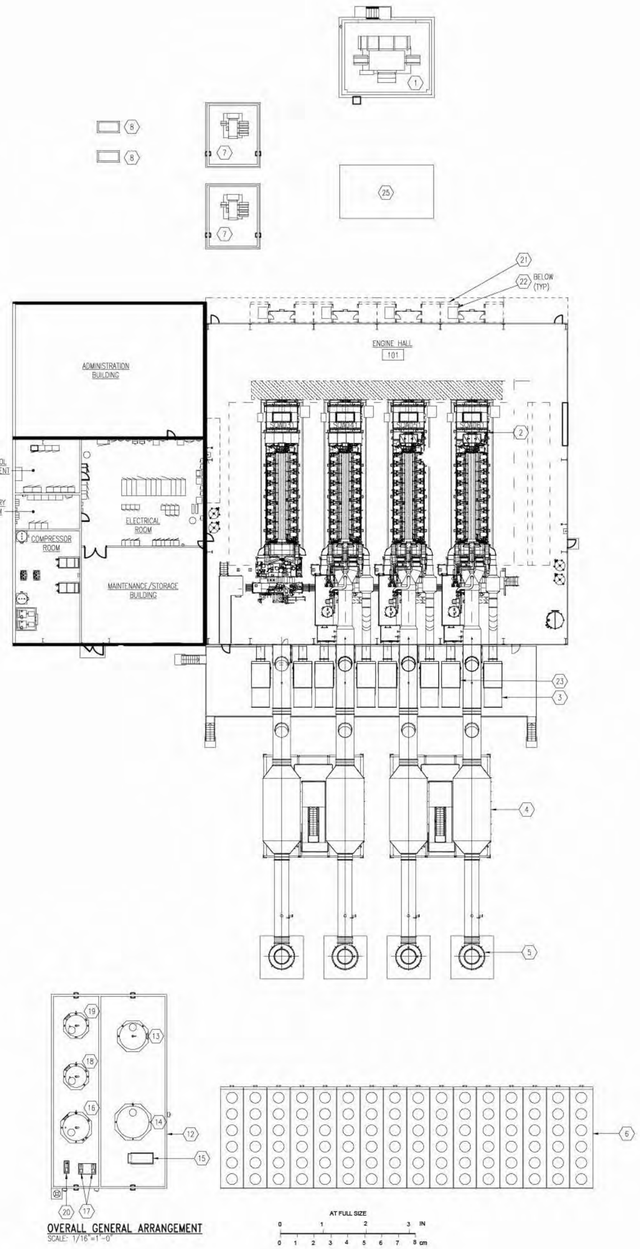
In September of 2015, after 18 months of study and discussion, eleven municipal electric utilities entered into an Interlocal Cooperation Agreement creating the Kentucky Municipal Energy Agency (KYMEA), a joint public agency. KYMEA was formed to facilitate effective collaboration among its members to do all things necessary or convenient to serve the current and future electric power and energy requirements of the members and to provide assistance to the members related to their electric power and energy utility systems.

KYMEA

Map of Members



KYMEA Energy Center I



LEGEND OF EQUIPMENT & STRUCTURES

1 GSU TRANSFORMER
2 ENGINE GENERATOR (TYP)
3 CHARGE AIR FILTER VENTILATION UNIT (TYP)
4 SCR AND CO CATALYST (TYP)
5 EXHAUST GAS SILENCER (TYP)
6 RADIATORS (TYP)
7 UNIT AUXILIARY TRANSFORMER (TYP)
8 HVAC UNIT
9 ENGINE HALL DRAINS SUMP
10
11
12 TANK FARM
13 WASTE WATER COLLECTION TANK
14 UREA STORAGE TANK
15 UREA FORWARDING PUMPS
16 CLEAN LUBE OIL TANK
17 LUBE OIL FORWARDING PUMPS
18 SERVICE LUBE OIL TANK
19 USED LUBE OIL TANK
20 LUBE OIL UNLOADING PUMP
21 VENTILATION UNIT (TYP)
22 NEUTRAL GROUNDING RESISTOR (TYP)
23 VENTILATION UNIT (TYP)
24 MAINTENANCE WATER TANK (TYP FOR 2)
25 MEDIUM VOLTAGE BUILDING

Site Layout

- Zoned General Industrial
- Former coal mined area
- Located next to the Madisonville Wastewater Treatment Plant
- 25,000 SF Plant, Admin, & Maintenance Space
- 9-acre Site Development
- New 69 KV Transmission Substation

FOUR WÄRTSILÄ 50SG ENGINES

The Wärtsilä 50SG is a four-stroke, spark-ignited natural gas engine generating set. High efficiency in a small footprint combined with great reliability and flexibility makes this solution ideal for flexible baseload and balancing applications. It offers unique fast-starting capability, which enables rapid response to fluctuations inherent to renewable generation. Wärtsilä 50SG also supports you towards decarbonisation with its low greenhouse gas emissions and capability of hydrogen blending.

- Low greenhouse gas emissions
- Fast-starting capability which enables rapid response to fluctuations typical to renewable generation
- Minimal water consumption
- Runs on natural gas, biogas, synthetic methanol and is capable of hydrogen blending

2
Minutes to full load

99.1%
Availability

18.86
MW per engine

Benefits

Local job creation and economic impact

- 100 construction jobs created
- 15 full-time jobs created
- Planned bidding of local subcontractors under Christman as the EPC Manager.
- $130M local investment

Improved energy reliability and efficiency

- 75 MW of reliable power production
- Low cost, natural gas powered
- Power produced in Kentucky for Kentucky communities

Enviromental Benefits

- Low emissions & minimal water consumption
- Fast and flexible dispatchability to support the Ashwood Solar I and Barkley Dam hydropower projects.
- Reduces KYMEA's carbon footprint

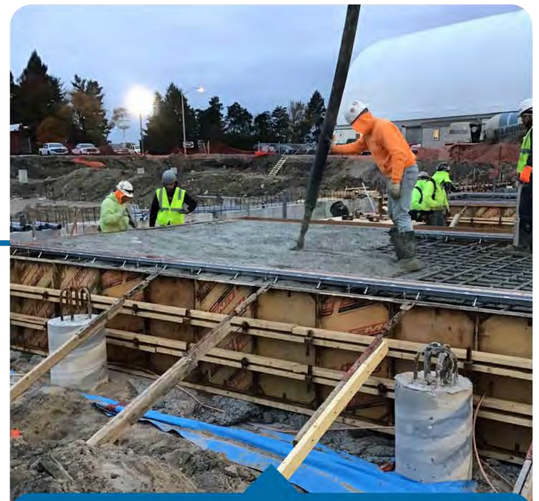
KYMEA

Construction Process

Engineering + Permitting
12 months

Earthwork
4 months

Deep Foundations
2 months



Foundations
3 months

Building Erection
3 months

Equipment Setting
2 months

Mechanical + Electrical
8 months

Start-Up + Commissioning
6 months

Stanley Consultants

CHRISTMAN
BUILDING SINCE 1894

WÄRTSILÄ

Siting Board 1-95:

Describe any plans to coordinate with local landowners or others in case of complaints or other issues that might arise during the course of construction or operations.

Response: The public meeting process was an effort to proactively gather concerns from the community, including local landowners. KYMEA answered all questions and communicated its commitment to being a good neighbor and partner to the City of Madisonville. KYMEA will consider and address all concerns that may arise throughout the construction and operation of the plant. KYMEA will provide a project website that includes updated construction events with a Q&A section in addition to a form to file any complaints. KYMEA will hold regular construction meetings with the construction manager and equipment provider to ensure any concerns from landowners or the public are addressed.

Witness: Doug Buresh

Siting Board 1-96:

Refer to the Application, Attachment H, Economic Impact at 7. Explain whether the $130 million investment includes the development of both the Plant and the Substation sites and the construction of the one-mile-long gas transmission line. If not, provide the total amount of investment for the Project, including both the plant site, the substation site, and the natural gas transmission line by project item.

Response: The $130 million investment includes the plant, the gas transmission line and KYMEA's portion of substation costs. LGE/KU will bear 85-90% of the substation/switching station costs.

Witness: Paul Coomes

Siting Board 1-97:

Refer to the Application, Attachment H, Economic Impact at 7. Provide the text for footnote 3.

Response: The report erroneously included that footnote. The reference number should not have been included, as there is no corresponding text to be included in the footnote.

Witness: Paul Coomes

Siting Board 1-98:

Refer to the Application, Attachment H, Economic Impact at 7. If necessary, provide a revised table "Economic Impact of Construction Phase, Hopkins County" that reflects the full Project, including both the Plant and Substation sites and the natural gas transmission line.

Response: No changes are necessary.

Witness: Paul Coomes

Siting Board 1-99:

Refer to the Application, Attachment H, Economic Impact at 8. If necessary, provide a revised table "Annual Economic Impact of Operations Phase, Hopkins County" that reflects the full Project, including both the plant and substation sites and the natural gas transmission line.

Response: No changes are necessary.

Witness: Paul Coomes

Siting Board 1-100:

Refer to the Application, Attachment H, Economic Impact at 9. Explain whether the portion of the Project site that will be deeded to Louisville Gas & Electric/Kentucky Utilities (LG&E/KU) (the substation site) will be exempt from property taxes. If not, provide the annual and total (over the Project life) taxes to be paid to individual entities from that portion of the Project site.

Response: The LG&E substation will not be exempt from property taxation. Final substation configuration will not be known until after completion of the interconnection study in May 2025, but LG&E's share could amount to $5-15 million depending on the configuration. The substation is expected to be classified for tax purposes as manufacturer's machinery, which is exempt from local property taxes. The Commonwealth of Kentucky taxes manufacturer's machinery at a rate of 0.15%, so the state could receive between $7,500 and $22,500 annually in property taxes. LG&E will also own a few acres of land for the substation, but the taxable value will be only around $50,000, meaning that related local and state real estate property tax revenues will be less than $1,000 per year.

Witness: Paul Coomes

Siting Board 1-101:

Refer to the Application, Attachment E, Public Meeting Information, Response to Question 6. Define the location meant by the term "local investment" as it relates to the geographic area in which materials and supplies would be acquired.

Response: $130 million represents the anticipated construction costs for the plant, the gas transmission line and KYMEA's portion of substation costs. It was not intended to reflect the local expenditures related to the project.

Witness: Doug Buresh

Siting Board 1-102:

Refer to the Application, Attachment I, Decommissioning Plan. Explain which corporate entity, i.e. LG&E/KU, will be responsible for the decommissioning of the substation site.

Response: LGE/KU will be responsible for any decommissioning of the substation site. Consistent with KRS 278.704(2)(m)(4) that states, "Unless otherwise requested by the landowner, leave any interconnection or other facilities in place for future use at the completion of the decommissioning process," the switching station may be left in place. Since this site is just a switching station with no transformation, it is expected that it will remain in service due to its proximity with the Madisonville West Loop feeds.

Witness: Doug Buresh

COMMONWEALTH OF KENTUCKY
BEFORE THE KENTUCKY STATE BOARD
ON ELECTRIC GENERATION AND TRANSMISSION SITING

In the Matter of:

Electronic Application of Kentucky Municipal Energy Agency for a Certificate of Construction for an Approximately 75-Megawatt Merchant Electric Generating KYMEA Energy Center I and Transmission Line in Madisonville, Kentucky, Pursuant to KRS 278.700 and 807 KAR 5:110	)))))	Case No. 2024-00290

CERTIFICATION

This is to certify that I have supervised the preparation of the KYMEA's responses to the Siting Board Staff's First Request for Information and that the responses on which I am identified as a sponsoring witness are true and accurate to the best of my knowledge, information, and belief after reasonable inquiry.

11/25/2024
Date

Doug Buresh
Doug Buresh

COMMONWEALTH OF KENTUCKY
BEFORE THE KENTUCKY STATE BOARD
ON ELECTRIC GENERATION AND TRANSMISSION SITING

In the Matter of:

Electronic Application of Kentucky Municipal Energy Agency for a Certificate of Construction for an Approximately 75-Megawatt Merchant Electric Generating KYMEA Energy Center I and Transmission Line in Madisonville, Kentucky, Pursuant to KRS 278.700 and 807 KAR 5:110	)))))	Case No. 2024-00290

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11/25/2024
Date

Josh Coburn

COMMONWEALTH OF KENTUCKY
BEFORE THE KENTUCKY STATE BOARD
ON ELECTRIC GENERATION AND TRANSMISSION SITING

In the Matter of:

Electronic Application of Kentucky Municipal Energy Agency for a Certificate of Construction for an Approximately 75-Megawatt Merchant Electric Generating KYMEA Energy Center I and Transmission Line in Madisonville, Kentucky, Pursuant to KRS 278.700 and 807 KAR 5:110	)))))	Case No. 2024-00290

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11-25-2024

Date

Paul Coomes

COMMONWEALTH OF KENTUCKY
BEFORE THE KENTUCKY STATE BOARD
ON ELECTRIC GENERATION AND TRANSMISSION SITING

In the Matter of:

Electronic Application of Kentucky Municipal Energy Agency for a Certificate of Construction for an Approximately 75-Megawatt Merchant Electric Generating KYMEA Energy Center I and Transmission Line in Madisonville, Kentucky, Pursuant to KRS 278.700 and 807 KAR 5:110	)))))	Case No. 2024-00290

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12/02/2024
Date

Jeremy James
Jeremy James

COMMONWEALTH OF KENTUCKY
BEFORE THE KENTUCKY STATE BOARD
ON ELECTRIC GENERATION AND TRANSMISSION SITING

In the Matter of:

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___11/26/24_____
Date

Richard Kirkland

COMMONWEALTH OF KENTUCKY
BEFORE THE KENTUCKY STATE BOARD
ON ELECTRIC GENERATION AND TRANSMISSION SITING

In the Matter of:

Electronic Application of Kentucky Municipal Energy Agency for a Certificate of Construction for an Approximately 75-Megawatt Merchant Electric Generating KYMEA Energy Center I and Transmission Line in Madisonville, Kentucky, Pursuant to KRS 278.700 and 807 KAR 5:110	)))))	Case No. 2024-00290

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11/25/2024
Date

Dave Parzych