

## ORDINANCE NO. 23-045

**AN ORDINANCE AUTHORIZING AND DIRECTING THE CITY MANAGER TO ENTER INTO AN AGREEMENT FOR PROFESSIONAL DESIGN SERVICES WITH IBI GROUP OF CANTON, OHIO, FOR THE BUTLER STREET RECONSTRUCTION PROJECT; AND DECLARING THAT THIS ORDINANCE SHALL TAKE IMMEDIATE EFFECT IN ACCORDANCE WITH SECTION 14 OF THE CITY CHARTER.**

**WHEREAS**, Butler Street, from Cleveland Road to the U.S. 250 off-ramp is beyond repair and needs reconstruction; and

**WHEREAS**, the Butler Street Reconstruction Project involves the removal of concrete, excavation, stone installation, and a full depth asphalt cross section to accommodate the traffic this portion has from industry, tourism and local traffic; and

**WHEREAS**, a Request for Qualifications (RFQ) was issued for the Butler Street Reconstruction Project in which four (4) submittals were received, evaluated and ranked by a selection committee and based upon the firm's expertise, professional knowledge, and past experience with the preliminary design phase, it was determined IBI Group was the most qualified; and

**WHEREAS**, IBI Group will be providing professional design services for the Butler Street Reconstruction Project which includes detailed engineering design and is more fully described in the Scope of Services, which is attached to this Ordinance and marked Exhibit "A" and specifically incorporated herein; and

**WHEREAS**, the total cost of the professional design services is \$139,435.00 and will be paid with Capital Projects Funds; and

**WHEREAS**, this Ordinance should be passed as an emergency measure under suspension of the rules in accordance with Section 14 of the City Charter in order to immediately proceed with the design services so the City can plan for construction in late 2023 and complete prior to the Cleveland Road Safety Project in the spring of 2024; and

**WHEREAS**, in that it is deemed necessary in order to provide for the immediate preservation of the public peace, property, health, and safety of the City of Sandusky, Ohio, and its citizens, and to provide for the efficient daily operation of the Municipal Departments, including the Department of Public Works, of the City of Sandusky, Ohio, the City Commission of the City of Sandusky, Ohio finds that an emergency exists regarding the aforesaid, and that it is advisable that this **Ordinance** be declared an emergency measure which will take immediate effect in accordance with Section 14 of the City Charter upon its adoption; and NOW, THEREFORE,

BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF SANDUSKY, OHIO, THAT:

Section 1. The City Manager is authorized and directed to enter into an agreement with IBI Group of Canton, Ohio, for Professional Design Services for the Butler Street Reconstruction Project substantially in the same form as attached to this Ordinance, marked Exhibit "1", and specifically incorporated as if fully

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rewritten herein, together with any revisions or additions as are approved by the Law Director as not being substantially adverse to the City and consistent with carrying out the terms of this Ordinance, at an amount **not to exceed** One Hundred Thirty-Nine Thousand Four Hundred Thirty-Five and 00/100 Dollars (\$139,435.00).

Section 2. If any section, phrase, sentence, or portion of this Ordinance is for any reason held invalid or unconstitutional by any Court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

Section 3. This City Commission finds and determines that all formal actions of this City Commission concerning and relating to the passage of this Ordinance were taken in an open meeting of this City Commission and that all deliberations of this City Commission and of any of its committees that resulted in those formal actions were in meetings open to the public in compliance with the law.

Section 4. That for the reasons set forth in the preamble hereto, this Ordinance is hereby declared to be an emergency measure which shall take immediate effect in accordance with Section 14 of the City Charter after its adoption and due authentication by the President and the Clerk of the City Commission of the City of Sandusky, Ohio.



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RICHARD R. BRADY  
PRESIDENT OF THE CITY COMMISSION



ATTEST: 

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CATHLEEN A. MYERS  
CLERK OF THE CITY COMMISSION

Passed: February 27, 2023

AGREEMENT  
FOR  
PROFESSIONAL DESIGN SERVICES

This Agreement for Professional Design Services (this "Agreement"), made as of \_\_\_\_\_, 2023, by and between the City of Sandusky (the "City"), whose contact person shall be the Director of Public Works designated below or successor (the "City Engineer"), and \_\_\_\_\_ (the "Architect/Engineer"), whose contact person and address are set forth below.

WHEREAS, the City is operating under its Charter, ordinances, and regulations, and it is the intention of the City, in the exercise of its powers, to obtain professional design services for the following project (the "Project"):

Project Name: Butler Street Reconstruction Design

Director of Public Works: Aaron Klein, P.E.  
Address: Department of Public Works  
City of Sandusky  
240 Columbus Ave  
Sandusky, Ohio 44870

Architect/Engineer: IBI Group  
Contact: Kyle Koppes, P.E.  
Address: 4150 Belden Village Street  
Suite 104  
Canton, OH 44718

WHEREAS, the compensation of the Architect/Engineer set forth herein is determined to be fair and reasonable to the City and the Architect/Engineer; and

WHEREAS, the Architect/Engineer desires, and is licensed and capable, to provide professional design services for the Project;

WHEREAS, the Architect/Engineer has previously provided certain professional design services for the Project;

NOW, THEREFORE, in consideration of the mutual promises herein contained, the City and the Architect/Engineer agree as follows:

## **ARTICLE 1. RESPONSIBILITIES OF ARCHITECT/ENGINEER**

### **1.1. Architect/Engineer's Services**

1.1.1. Scope of Services; Applicable Law. The Architect/Engineer shall provide professional design services, including, without limitation, services customarily furnished in accordance with generally-accepted architectural or engineering services, for the Project in accordance with the terms of this Agreement. The Architect/Engineer shall provide such services in accordance with the applicable Sections of the Ohio Revised Code and any applicable state rules and regulations, any applicable federal and local statutes, ordinances, rules and regulations and the Contract Documents.

1.1.2. Timeliness; Standard of Care. The Project Schedule shall be established by mutual agreement between the City and the Architect/Engineer within thirty (30) days after the execution hereof. The Architect/Engineer shall perform the Architect/Engineer's services in accordance with professional standards of skill, care, and diligence in a timely manner in accordance with the Project Schedule so as to cause no delay, interference, disruption, or hindrance in the Work, and so that the Project shall be completed as expeditiously and economically as possible within the Construction Budget and in the best interests of the City.

1.1.3. Non-Discrimination. The Architect/Engineer represents that the Architect/Engineer is in compliance with all applicable equal employment opportunity requirements under law, if required by Section 153.59 of the Ohio Revised Code or any other applicable state or federal law.

1.1.4. Consultants. The Architect/Engineer may provide services through one or more consultants employed by the Architect/Engineer (the "Consultants"); provided, however, the Architect/Engineer shall remain responsible to the City for all duties and obligations of the Architect/Engineer under this Agreement. Unless waived or otherwise modified in writing by the City upon written request of the Architect/Engineer, no Consultant shall be retained upon terms inconsistent with this Agreement. The Architect/Engineer shall provide the City Engineer with the names and qualifications of any other proposed Consultant, together with a description of the services to be provided by such Consultant for approval. Once approved by the City Engineer, the identity of any Consultant and the extent of such Consultant's participation in performing the Architect/Engineer's services shall not be altered without the written consent of the City Engineer. Upon the request of the City, the Architect/Engineer shall terminate the employment of any Consultant. The City may communicate with any Consultant either through the Architect/Engineer or directly to the Consultant with notice to the Architect/Engineer.

1.1.5. Ethics Laws. The Architect/Engineer represents that it is familiar with all applicable ethics law requirements, including without limitation Sections 102.04 and 3517.13 of the Ohio Revised Code, and certifies that it is in compliance with such requirements.

1.1.6. Limitation of Authority. The Architect/Engineer shall not have any authority to bind the City for the payment of any costs or expenses without the express written approval of the City.



The Architect/Engineer shall have authority to act on behalf of the City only to the extent provided herein. The Architect/Engineer's authority to act on behalf of the City shall be modified only by an amendment in accordance with Subparagraph 9.5.2.

## **ARTICLE 2. SCOPE OF ARCHITECT/ENGINEER'S BASIC SERVICES**

### **2.1. General**

2.1.1. Basic Services to be provided by the Architect/Engineer shall consist of the services set forth in Exhibit A attached hereto and incorporated by reference herein as if fully rewritten.

## **ARTICLE 3. ADDITIONAL SERVICES**

### **3.1. General**

3.1.1. Any services related to the Project not included in Basic Services are Additional Services. Additional Services shall be provided only if requested by the City in writing. Additional Services shall be paid for as provided in this Agreement in addition to the compensation for Basic Services; provided, however, the Architect/Engineer shall not be compensated for any of the following services made necessary by the act or omission of the Architect/Engineer or any Consultant. Unless waived by the City in writing, authorization to provide Additional Services must be obtained prior to providing the Additional Services.

## **ARTICLE 4. RESPONSIBILITIES OF THE CITY**

4.1. **Required Actions.** The City shall review, approve, or take such actions as are required of the City by this Agreement and applicable law in a reasonable and timely manner.

4.2. **Instructions to Contractors.** All instructions of the City to Contractors shall be through, or in consultation with, the Architect/Engineer.

4.3. **City's Requirements.** The City shall provide full information regarding its requirements for the Project, any agreements related to the Project, and any design and construction standards and work rules which set forth the City's use, design, time and financial objectives, constraints and criteria, including space requirements and relationships, flexibility and expandability, time constraints imposed by fiscal and budgetary considerations, special equipment, systems and site requirements. The Architect/Engineer shall be entitled to rely upon the accuracy and completeness of information provided by the City under this paragraph which the City represents in writing is complete and accurate; provided, however, the City makes no representation for, and the Architect/Engineer may not rely upon, information from third parties.

4.4. **Authorized Representative.** The City has designated the City Engineer or successor to be the City's Authorized Representative, i.e., a person authorized to act on the City's behalf with respect to the Project to the extent provided in the Contract Documents. If the City Engineer is absent or unavailable, the City's Project Engineer shall serve as the City's Authorized Representative.

**4.5. Notice to Architect/Engineer.** If the City observes or otherwise becomes aware of any Defective Work or other fault or defect in the Project, prompt notice thereof shall be given to the Architect/Engineer.

**4.6. Legal Representation.** The City shall not be responsible to provide, or pay for, any legal representation of the Architect/Engineer.

## **ARTICLE 5. COMPENSATION**

### **5.1. Direct Personnel Expense**

**5.1.1. Definition.** Direct Personnel Expense shall mean the portion of direct salaries and wages of all personnel of the Architect/Engineer or any Consultants, as applicable, including professional, technical, management, administrative and clerical employees, and principals engaged on the Project related to their time devoted to the Project and the portion of the cost of their mandatory and customary contributions and benefits related thereto such as employment taxes and other statutory employee benefits, social security contributions, insurance, sick leave, holidays, vacations, pension and profit sharing pursuant to plans qualified under federal law and similar benefits related to their time devoted to the Project. Direct Personnel Expense shall not include any bonus or similar plan or arrangement related to the Architect/Engineer's performance on, or profit from, the Project.

**5.1.2. Records.** Direct Personnel Expense for the Architect/Engineer's employees for such hours of their time as are devoted to performing services to the Project shall be evidenced by time records certified by the Architect/Engineer.

**5.1.3. Limit.** The Architect/Engineer shall use all reasonable means to minimize Direct Personnel Expense.

### **5.2. Reimbursable Expenses**

**5.2.1. Definition.** Reimbursable Expenses means actual expenditures incurred by the Architect/Engineer or its Consultants in the interest of the Project approved by the City for travel (if approved in advance) in accordance with City policies, transportation between the office of the Architect/Engineer and the Project, long-distance telephone, facsimile communications, reproduction, mailing, computer time, supplies and materials and Consultants. No other expenditures shall be Reimbursable Expenses unless so provided in an amendment in accordance with Subparagraph 9.5.2.

**5.2.2. Limits.** The Architect/Engineer shall use all reasonable means to minimize Reimbursable Expenses.

### **5.3. Basis of Compensation**

**5.3.1. Basic Fee.** For Basic Services provided by the Architect/Engineer and all Consultants, the City shall pay the Architect/Engineer a Basic Fee in accordance with Paragraph 5.4 hereof in the

amount of \_\_\_\_\_ A change in the Basic Fee may be made only by an amendment in accordance with Subparagraph 9.5.2.

5.3.2. Additional Fees. For Additional Services provided by the Architect/Engineer and any Consultants in accordance with Article III, the City shall pay the Architect/Engineer Additional Fees in an amount negotiated to the mutual reasonable satisfaction of the City and the Architect/Engineer, but in all events, such Additional Fees shall not exceed two and half (2.5) times the Direct Personnel Expense and any applicable Consultant in providing those Additional Services. Additional Fees may be approved only by an amendment in accordance with Subparagraph 9.5.2.

5.3.3. Extent of Basic Fee. The Architect/Engineer's Basic Fee includes all compensation for Basic Services, including without limitation, for salaries or other compensation of the Architect/Engineer's employees at the principal office, branch offices and the field office, general operating expenses of the Architect/Engineer's principal office, branch offices and the field office, any part of the Architect/Engineer's capital expenses, including interest on the Architect/Engineer's capital employed for the Project, overhead or expenses of any kind, except Reimbursable Expenses, any costs incurred due to the negligence of the Architect/Engineer, the Architect/Engineer's general advertising, federal, state or local income, sales or other taxes, state franchise taxes and qualification fees, and membership in trade, business or professional organizations.

5.3.4. Total Compensation. The total compensation of the Architect/Engineer and all Consultants shall consist of the Basic Fee, any Additional Fees, and Reimbursable Expenses.

#### **5.4. Method and Terms of Payment**

5.4.1. Basic Fee. Payment of the Basic Fee shall be made monthly upon invoice of actual services performed. The Basic Fee shall be subject to all setoffs in favor of the City for claims against the Architect/Engineer.

5.4.2. Additional Fees, Reimbursable Expenses. Payments of Additional Fees for Additional Services in accordance with Article III and Subparagraph 5.3.2 and for Reimbursable Expenses as set forth in Paragraph 5.2 shall be made monthly based upon services performed or expenses incurred, as applicable, and as shown by a properly completed and supported invoice of the Architect/Engineer. Invoices shall be sufficiently detailed and supported to permit review by the City for approval or disapproval of any amounts set forth in the invoice.

5.4.3. Payments by Architect/Engineer. Within ten (10) business days of receipt of payment made pursuant to this Agreement, the Architect/Engineer shall pay all portions thereof due to Consultants and to persons who provided items the expenses of which are Reimbursable Expenses.

5.4.4. Compensation for Extension of Project Time. If the Architect/Engineer notifies the City not less than thirty (30) days prior to the time for completion of the Project set by the Project Schedule established pursuant to Subparagraph 1.1.2, that such time for completion is

reasonably expected to be exceeded by more than ten percent (10%) through no fault of the Architect/Engineer, the compensation, if any, for Basic Services to be rendered during such extended period shall be negotiated to the mutual reasonable satisfaction of the City and the Architect/Engineer. If, as a result of such negotiation, the City agrees that the Architect/Engineer shall be paid additional compensation, an amendment to that effect shall be executed in accordance with Subparagraph 9.5.2 before the Architect/Engineer renders any services made necessary by such extension of the time of completion, unless otherwise agreed in writing by the City.

## **ARTICLE 6. INSURANCE AND INDEMNIFICATION**

### **6.1. Insurance**

6.1.1. Casualty Insurance. Except when a modification is requested in writing by the Architect/Engineer and approved in writing by the City, the Architect/Engineer shall carry and maintain at the Architect/Engineer's cost, with companies authorized to do business in Ohio, all necessary liability insurance (which shall include as a minimum the requirements set forth below) during the term of this Agreement:

- a. Workers' Compensation and employer's liability insurance to the full extent as required by applicable law;
- b. Commercial general liability coverage for bodily injury and property damage, including limited contractual liability coverage, in not less than the following amounts:
  - i. General Aggregate Limit: \$2,000,000
  - ii. Each Occurrence Limit: \$1,000,000 each occurrence;
- c. Commercial automobile liability coverage, including non-owned and hired, in an amount not less than \$1,000,000.

6.1.2. Professional Liability Insurance. Subject to the City's waiver or modification of Professional Liability Insurance upon written request of the Architect/Engineer, the Architect/Engineer shall maintain insurance to protect against claims arising from the performance of the Architect/Engineer's services caused by any negligent acts, errors, or omissions for which the Architect/Engineer is legally liable ("Professional Liability Insurance"). Except when a waiver is approved by the City upon written request of the Architect/Engineer, such Professional Liability Insurance shall be in an amount not less than \$1,000,000 per claim and in the annual aggregate. The Architect/Engineer shall endeavor to keep such insurance in effect for so long as the Architect/Engineer may be held liable for its performance of services for the Project. If the Professional Liability Insurance is written on a claims-made basis, such insurance shall have a retroactive date no later than the date on which the Architect/Engineer commenced to perform services relating to the Project. The insurance company issuing the

Professional Liability Insurance policy must be authorized to do business in Ohio and have a rating of at least A status as noted in the most recent edition of the Best's Insurance Reports.

6.1.3. Certificates. The Architect/Engineer shall provide the City with certificates of insurance evidencing the required coverages and amounts, including without limitation any certificates of renewal of insurance. The certificates of insurance shall contain a provision that the policy or policies will not be canceled without thirty (30) days' prior written notice to the City.

## **6.2. Indemnification**

6.2.1. Indemnification by Architect/Engineer Generally. To the fullest extent permitted by law, the Architect/Engineer shall and does agree to indemnify and hold harmless the City and its members, officers, officials, employees, and representatives from and against insurable damages, losses, and expenses (including reasonable attorney's fees and other reasonable costs of defense), of any nature, kind or description, which (a) arise out of, are caused by, or result from performance of the Architect/Engineer's services hereunder and (b) are attributable to bodily injury, personal injury, sickness, disease or death of any person, or to damage to or destruction of property, including the loss of use resulting therefrom, but (c) only to the extent they are caused by any negligent acts, errors, or omissions of the Architect/Engineer, anyone directly or indirectly employed by the Architect/Engineer or anyone for whose acts the Architect/Engineer is legally liable. This Subparagraph is intended to be, and shall be construed as consistent with, and not in conflict with, Section 2305.31 of the Ohio Revised Code, to the fullest extent permitted.

6.2.2. Intellectual Property Indemnification. To the fullest extent permitted by law, the Architect/Engineer shall and does agree to indemnify and hold harmless the City and its members, officials, officers, employees, and representatives from and against insurable damages, losses, and expenses (including reasonable attorney's fees and other reasonable costs of defense), of any nature, kind or description, which result from infringement of any copyright, patent, or other intangible property right to the extent caused by the negligent act, errors, or omissions of the Architect/Engineer, anyone directly or indirectly employed by the Architect/Engineer or anyone for whose acts the Architect/Engineer is legally liable. The Architect/Engineer shall not be required to indemnify and hold harmless such persons for such matters when the claimed infringement occurs in materials provided by the City.

## **ARTICLE 7. DISPUTE RESOLUTION PROVISIONS**

7.1. Mediation. Instead of, or in addition to, the procedures set forth below, the City and the Architect/Engineer may, by written agreement, submit any claims, requests, disputes, or matters in question between or among them to mediation upon such terms as shall be mutually reasonably agreeable.

7.2. Notice and Filing of Requests. Any request by the Architect/Engineer for additional fees or expenses shall be made in writing to the Authorized Representative and filed prior to the final payment of the Basic Fee. Failure of the Architect/Engineer to timely make

such a request shall constitute a waiver by the Architect/Engineer of any request for such fees and expenses.

**7.3. Request Information.** In every written request filed pursuant to Paragraph 7.2, the Architect/Engineer shall provide the nature and amount of the request; identification of persons, entities and events responsible for the request; activities on the Project Schedule affected by the request or new activities created by any delay and the relationship with existing activities; anticipated duration of any delay; and recommended action to avoid or minimize any future delay.

**7.4. Meeting with Authorized Representative.** If the Architect/Engineer files a written request with the Authorized Representative pursuant to Paragraph 7.2, the Authorized Representative shall, within thirty (30) days of receipt of the request, schedule a meeting in an effort to resolve the request and render a decision on the request promptly thereafter or render a decision on the request without a meeting, unless a mutual agreement is made to extend such time limit. The meeting scheduled by the Authorized Representative shall be attended by Persons expressly and fully authorized to resolve the request on behalf of the Architect/Engineer. The Authorized Representative shall render a decision on the request within thirty (30) days of the meeting unless a mutual agreement is made to extend the time for decision.

**7.5. Appeal to City Manager.** If the efforts of the Authorized Representative do not lead to resolution of the request within sixty (60) days of receipt of the request provided pursuant to Paragraph 7.2 the Architect/Engineer may appeal to the City Manager by written notice to the Authorized Representative who shall provide the Architect/Engineer an opportunity to present the claim to the City Manager. The City Manager shall render a decision on the request within thirty (30) days of receipt of the claim unless a mutual agreement is made to extend the time for decision. The decision of the City Manager shall be final and conclusive, subject to litigation in a court of competent jurisdiction.

**7.6. Delegation.** No provision of this Paragraph shall prevent the Authorized Representative or the Commission from delegating the duties or authorities of the Authorized Representative or the City to any other Person selected at the discretion of the Authorized Representative.

**7.7. Performance.** The Architect/Engineer shall proceed with the Architect/Engineer's performance of this Agreement during any dispute resolution process, unless otherwise agreed by the Architect/Engineer and the City in writing. The City shall continue to make payment, in accordance with this Agreement, of any amounts not in dispute pending final resolution of any dispute in accordance with this Paragraph.

## **ARTICLE 8.     TERMINATION AND REMEDIES**

### **8.1.             Termination of Agreement**

8.1.1. Means of Termination. This Agreement may be terminated by either party upon seven (7) days written notice should the other party fail to perform in accordance with the terms of this Agreement; provided, however, the Architect/Engineer shall not terminate this Agreement for non-payment if the City initiates the payment process by preparing, executing, and submitting a voucher for all reasonably undisputed amounts due to the Architect/Engineer within ten (10) days of receipt of the Architect/Engineer's written notice to terminate. This Agreement may be terminated by the City in whole or in part, without cause upon fifteen (15) days written notice to the Architect/Engineer. This Agreement may be terminated in whole or in part, at any time upon the mutual consent of the City and the Architect/Engineer.

8.1.2. Architect/Engineer's Remedies Upon Termination by City Without Cause or Upon Termination by Architect/Engineer. In the event of a termination which is not due to the failure of the Architect/Engineer to perform in accordance with the terms of this Agreement, the Architect/Engineer shall be compensated for all Basic Services of a completed phase performed prior to the termination date in accordance with the percentages set forth in Subparagraph 5.4.1, together with Reimbursable Expenses incurred prior to the termination date. In such event, for services rendered prior to the termination date in an uncompleted Part and for Additional Services, the Architect/Engineer shall receive compensation based on the percentages of completion of that Part or those Additional Services, as applicable, and as reasonably determined by the City, together with Reimbursable Expenses incurred prior to the termination date.

8.1.3. Architect/Engineer's Remedies Upon Termination by City for Cause. In the event of a termination which is due to the failure of the Architect/Engineer to perform in accordance with the terms of this Agreement, the Architect/Engineer shall be compensated only for Basic Services performed and paid for prior to the termination date in accordance with the actual time at billing rates as set forth in 5.3.1., together with Additional Services completely performed prior to the termination date. In such event, the Architect/Engineer shall be reimbursed only for Reimbursable Expenses incurred prior to the date of the notice of termination, unless the City consents in writing to the payment of Reimbursable Expenses incurred after that date.

8.1.4. Architect/Engineer's Remedies Upon Termination by Mutual Consent. In the event of a termination upon the mutual consent of the City and the Architect/Engineer, any compensation for Basic Services or for Additional Services or payment of Reimbursable Expenses shall be negotiated and set forth in an amendment to this Agreement in accordance with Subparagraph 9.5.2 prior to such termination.

8.1.5. Post-Termination Matters. If the City and the Architect/Engineer agree that any services are to be performed for the Project by the Architect/Engineer after any termination date, the amount of any compensation and the method and terms of payment of such compensation or any Reimbursable Expenses related to such services shall be negotiated and set forth in an

amendment to this Agreement in accordance with Subparagraph 9.5.2 prior to the commencement of such services. Such amendment and any relevant provisions of this Agreement shall survive termination of this Agreement.

## **8.2. Remedies**

8.2.1. Cumulative Remedies. No remedy conferred upon the City by the terms of this Agreement is intended to be exclusive of any other remedy provided at law or in equity. Each and every remedy of the City shall be cumulative and shall be in addition to any other remedy given to the City hereunder or now or hereafter existing. Except as otherwise provided in this Agreement, no remedy conferred upon the Architect/Engineer by the terms of this Agreement is intended to be exclusive of any other remedy provided at law or in equity. Except as otherwise provided in this Agreement, each and every remedy of the Architect/Engineer shall be cumulative and shall be in addition to any other remedy given to the Architect/Engineer hereunder or now or hereafter existing.

8.2.2. Remedies Not Waived. No delay, omission, or forbearance to exercise any right, power, or remedy accruing to the City or the Architect/Engineer hereunder shall impair any such right, power, or remedy or shall be construed to be a waiver of any breach hereof or default hereunder. Every such right, power, or remedy may be exercised from time to time and as often as deemed expedient.

## **ARTICLE 9. MISCELLANEOUS PROVISIONS**

### **9.1. Ownership and Use of Documents**

9.1.1. Property of City. Drawings and other documents prepared by, or with the cooperation of, the Architect/Engineer or any Consultant pursuant to this Agreement, including all copyrights, are the property of the City whether or not the Project for which they are prepared is commenced or completed. The Architect/Engineer or Consultant, as applicable, may retain copies, including reproducible copies of such drawings and other documents for information and reference. Such drawings or other documents may be used by the City or others employed by the City for reference in any completion, construction, correction, remodeling, renovation, reconstruction, alteration, modification of or addition to the Project, without compensation to the Architect/Engineer or Consultant. Such drawings or other documents shall not be used by the City, or be given or sold by the City to be used by others, on other projects except by agreement in writing and with agreed upon appropriate compensation to the Architect/Engineer or Consultant, as applicable. If an event occurs for which the Architect/Engineer or Consultant may be liable, the City shall notify the Architect/Engineer or Consultant of such event as soon as practical after such event and shall provide access to the Project to the Architect/Engineer or Consultant and their representatives. This Subparagraph shall survive termination of this Agreement.

9.1.2. Architect/Engineer's Intellectual Property. All inventions, patents, design patents, and computer programs acquired or developed by the Architect/Engineer in connection with or relation to the Project shall remain the property of the Architect/Engineer and shall be



protected by the City from use by others except by agreement in writing with appropriate and agreed upon compensation to the Architect/Engineer.

**9.2. Public Relations.** Prior to completion of the Project, any public relations or publicity about the Project shall be solely within the control and with the consent of the City. The Architect/Engineer shall not use the City's name or seal, nor any adaptation thereof, for any advertising or trade purposes, including without limitation press releases, without the express written consent of the City.

**9.3. Records.** The records of all of the Architect/Engineer's Direct Personnel Costs, Reimbursable Expenses and payments to Consultants pertaining to the Project shall be kept on a generally recognized accounting basis and shall be available to the City at all times and shall be maintained for seven (7) years after final acceptance of the Project by the City. All other records kept by the Architect/Engineer related to the Project shall be available to the City at all times and shall be maintained for six (6) years after final acceptance of the Project by the City. Records related to any claim or dispute shall be retained for any longer period necessary to finally resolve the claim or dispute.

**9.4. Successors and Assigns.** The City and the Architect/Engineer, each bind themselves, their successors, assigns and legal representatives, to the other party to this Agreement and to the successors, assigns and legal representatives of the other party with respect to all terms of this Agreement. The Architect/Engineer shall not assign, or transfer any right, title or interest in this Agreement without the prior written consent of the City.

**9.5. Extent of Agreement**

9.5.1. Entire Agreement. This Agreement represents the entire and integrated agreement between the City and the Architect/Engineer and supersede all prior negotiations, representations or agreements, either written or oral.

9.5.2. Amendments. This Agreement may be amended only by an amendment prepared by the City and signed by both the Architect/Engineer and the City.

9.5.3. Multiple Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be regarded as an original and all of which shall constitute but one and the same instrument.

9.5.4. Captions. The captions or headings in this Agreement are for convenience only and in no way define, limit, or describe the scope or intent of any provisions or sections hereof.

9.5.5. Conditions to Validity. None of the rights, duties, and obligations contained in this Agreement shall be binding on any party until all legal requirements have been complied with.

**9.6. Governing Law**

9.6.1. Law of Ohio. This Agreement shall be governed by the law of the State of Ohio to the exclusion of the law of any other jurisdiction and the Erie County, Ohio Court of Common Pleas

shall have jurisdiction over any action hereunder or related to the Project to the exclusion of any other forum.

9.6.2. Capitalized Terms. Capitalized terms in this Agreement shall have the same meaning as those in the Standard Conditions, unless otherwise defined herein or unless another meaning is indicated by the context.

## **9.7.           Notices**

9.7.1. Addresses. All notices, certificates, requests, or other communications hereunder shall be in writing and shall be deemed to be given if delivered in person to the individual or to a member of the company or organization for whom the notice is intended, or if delivered at or mailed by registered or certified mail, postage prepaid, to the appropriate address listed on the first page hereof.

9.7.2. Facsimiles. For convenience of communication only, notices, certificates, requests, or other communications hereunder of fewer than ten (10) pages, except requests for payment, may be sent by facsimile transmission to the City at (419) 627-5933 and to the Architect/Engineer at \_\_\_\_\_. Notices, certificates, requests, or other communications sent by facsimile transmission shall not be deemed to be given unless a counterpart is received or mailed in accordance with Subparagraph 9.7.1. Requests for payment may be sent to the City by facsimile transmission only upon specific direction from the City.

9.7.3. Emergencies. In the event of an emergency involving the Project, including, without limitation, a fatality, serious injury, fire, collapse, flood, utility or power loss to occupied facilities, explosion, or environmental damage, the Architect/Engineer shall immediately notify the City by telephone.

9.7.4. Change of Address. The City or the Architect/Engineer may, by notice given hereunder, designate any further or different addresses telephone numbers or facsimile numbers to which subsequent notices, certificates, requests, or communications shall be sent.

**9.8.           Severability**. If any provision of this Agreement, or any covenant, obligation or agreement contained herein is determined by a court of competent jurisdiction to be invalid or unenforceable, such determination shall not affect any other provision, covenant, obligation or agreement, each of which shall be construed and enforced as if such invalid or unenforceable provision were not contained herein. Such invalidity or unenforceability shall not affect any valid and enforceable application thereof, and each such provision, covenant, obligation or agreement, shall be deemed to be effective, operative, made, entered into, or taken in the manner and to the full extent permitted by law.

**9.9.           Independent Contractor**. The Architect/Engineer and any Consultant is an independent contractor with respect to any services performed hereunder. Neither the Architect/Engineer, nor any Consultant, shall be deemed to be servants, employees, or agents of the City.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

Firm Name

By: \_\_\_\_\_

By: \_\_\_\_\_

CITY OF SANDUSKY, OHIO

By: \_\_\_\_\_

John Orzech  
Interim City Manager

APPROVAL:

The legal form and correctness of the within instrument is hereby approved.

\_\_\_\_\_  
Brendan Heil  
Law Director

EXHIBIT "1"

CERTIFICATE OF FUNDS

In the matter of: \_\_\_\_\_

IT IS HEREBY CERTIFIED that the moneys required to meet the obligations of the City of Sandusky, Ohio under the foregoing Agreement have been lawfully appropriated for such purposes and are in the treasury of the City of Sandusky or are in the process of collection to the appropriate fund, free from any previous encumbrances. This certificate is given in compliance with Sections 5705.41 and 5705.44, Ohio Revised Code (ORC)

Dated: \_\_\_\_\_, 2022

**EXHIBIT "1"**  
CITY OF SANDUSKY, OHIO

By: \_\_\_\_\_  
Michelle Reeder, CPA  
Finance Director

\_\_\_\_\_  
Account Number

\_\_\_\_\_  
Not to Exceed Amount



IBI GROUP  
4150 Belden Village Street, Suite 104  
Canton OH 44718 USA  
tel 330 491 9000  
[ibigroup.com](http://ibigroup.com)

February 15, 2023

Mr. Joshua R. Snyder, P.E., CPSWQ  
Assistant City Engineer  
City of Sandusky  
240 Columbus Avenue  
Sandusky, OH 44870

Re: **Butler Street Reconstruction - Final Design Fee Proposal**

Dear Mr. Snyder:

IBI Group Engineering Services (USA) Inc. ("IBI") is pleased to submit our fee proposal to assist the City of Sandusky with final design engineering services for the proposed reconstruction project located along Butler Street between the US-250 (Milan Road) frontage roads and US-6 (Cleveland Road). The pavement reconstruction will permit continued connectivity primarily servicing Cedar Point and adjacent property owners.

IBI will perform all tasks per ODOT standards (2023 C&MS) with the exception of City preferences and standard drawings (to be identified during design). Bentley Open Roads Designer software will be used for this project. A CADD submittal will be developed at the end of the project with all files in AutoCAD dwg format. Alignments and geometry will be submitted in LandXML format.

Please refer to **Appendix A** for documentation of City's/IBI's scoping meeting and **Appendix B** for the Conceptual Alternatives Study that were used to estimate the tasks required and effort needed to design and manage the project.

### **1. Scope of Services**

IBI proposes the tasks listed in **Appendix C** to complete the Final Design services. To calculate allotted hours, IBI used ODOT's consultant fee guidance (in most cases we used below the low rate). In addition to the items discussed at the scoping meeting, below are several assumptions that were used to develop this fee proposal.

### **Assumptions**

- Environmental Services including Public Involvement are not required.

- Geotechnical Services are not required. The City will work with PS Construction Fabrics for evaluation of the existing subgrade and development of a proposed pavement design.
- IBI will develop the project in accordance with the Conceptual Alternatives Study preferred alternative, Alternative 3 “Hybrid”, with the following adjustments:
  - Provide two northbound lanes at the intersection with Cleveland Road
  - Provide a Lump Sum bid item for \$100,000 as-directed Frontage Road C concrete pavement replacement
  - Provide an Optional Bid Item for \$25,000 additional Frontage Road C concrete pavement replacement
  - Lighting and traffic signal work are not anticipated
  - Recently reconstructed curb ramps at Cleveland Road will be salvaged
  - Butler Street storm sewer connections into combined sewers will be investigated for separation potentially through modified median ditch grading or longitudinal pipe. Impervious reduction and additional infiltration will reduce flow to downstream combined.
- All existing plans have been provided by the City.
- IBI will not perform traffic counts. Traffic volumes for the corridor will be based on existing traffic studies and counts provided by the City.
- The City and IBI will research adjacent survey control.
- IBI will provide a complete topographic basemap including surface utilities and OUPS markings.
- All work is anticipated to take place inside existing R/W.
- The establishment of property lines is not part of this scope other than those provided by Erie County GIS.
- Research of all deeds, surveys, plats of record, owners, easements and/or other encumbrances throughout the survey corridor is not part of this scope.
- IBI will submit an OUPS plan and marking request prior to field survey. It is assumed the utilities will be surveyed in.
- No SUL will be performed.

- IBI intends to submit plan submittals to utility companies as part of utility coordination.
- Maintenance of Traffic is assumed to be a one-way (southbound) detour, however, IBI will evaluate if a full detour (potential for an Alternate Bid) will have more benefit to cost and construction schedule. Access to private and hotel drives will be maintained at all times as directed by the City. Part-width MOT will increase scope/fee.
- Scope does not include specifications or bid documents development.

## **2. Schedule**

Based on our discussions with the City during the scoping meeting, the project will be bid in late summer of 2023. Based on that assumption, a tentative schedule for City consideration follows. These dates will be modified as the project progresses.

| <b>Butler Street Reconst.</b> | <b>Date</b> | <b>Day of Week</b> | <b>Duration<br/>Calendar<br/>Days</b> |
|-------------------------------|-------------|--------------------|---------------------------------------|
| NTP                           | 2023-02-28  | (Tue)              | --                                    |
| Stage 1/2 Plans - Submitted   | 2023-05-22  | (Mon)              | 83                                    |
| Stage 1/2 Plans - Completed   | 2023-06-05  | (Mon)              | 14                                    |
| Stage 3 Plans - Submitted     | 2023-07-03  | (Mon)              | 28                                    |
| Stage 3 Plans - Completed     | 2023-07-17  | (Mon)              | 14                                    |
| Tracings - Submitted          | 2023-07-31  | (Mon)              | 14                                    |
| Tracings - Completed          | 2023-08-07  | (Mon)              | 7                                     |
| Estimated Begin Construction  | 2023-10-02  | (Mon)              | 56                                    |
| Estimated End Construction    | 2024-05-31  | (Fri)              | 242                                   |

Note: the above schedule assumes a 2023-02-27 Commission meeting

## **3. Fee**

IBI's lump sum fee to complete the "authorized tasks" listed in **Appendix C** is **\$134,555**.

IBI's lump sum fee to complete the "if-authorized tasks" listed in **Appendix C** is **\$4,880**.

Please refer to **Appendix C** for the detailed breakdown of the proposed total hours, personnel categories and hourly rates used to develop the fee. Each month we will provide a progress report detailing work completed during the previous billing cycle.

**Closing**

If the scope of work meets your approval, IBI will commence work immediately upon receipt of written NTP in the form of a Purchase Order referencing this proposal which subsequently can be emailed, faxed or mailed to our office at your convenience.

Designated Representatives:

City of Sandusky's designated representative is:

Joshua R. Snyder, P.E., CPSWQ  
 Assistant City Engineer  
 City of Sandusky  
 240 Columbus Avenue  
 Sandusky, OH 44870  
 Office: 419.627.5875  
 Email: [jsnyder1@cityofsandusky.com](mailto:jsnyder1@cityofsandusky.com)


The IBI designated representative is:


Kyle Koppes, P.E.  
 Associate Manager - Office Lead  
 4150 Belden Village Street, Suite 104  
 Canton, Ohio 44718  
 Office: 330.491.9000  
 Cell: 614-657-6140  
 Email: [kyle.koppes@ibigroup.com](mailto:kyle.koppes@ibigroup.com)

We appreciate the opportunity to assist the City of Sandusky with this important project and look forward to your authorization. Please contact our PM, Matt Philips, at 330.285.5744 or Kyle Koppes at 614.657.6140, should you have any questions.

Sincerely,

**IBI Group**

By:   
 Name: Kyle Koppes  
 Title: Associate Manager -  
Office Lead

By:   
 Name: Jeff Hackenbracht  
 Title: Principal



---

# EXHIBIT "A"

## APPENDIX A KICK-OFF MEETING MINUTES



IBI GROUP  
Suite 104  
4150 Belden Village Street  
Canton, OH 44718 USA  
fax 330 491 9001

# Meeting Minutes

## Butler Street Reconstruction Design; Project 22-ENG-96-A Project Kick-Off Meeting

|   |   |  |
|---|---|--|
| <b>Meeting name</b><br>Design Kick-Off Meeting                            | <b>Meeting Date</b><br>February 7, 2023 | <b>Attendees</b><br>Josh Snyder<br>Kyle Koppes<br>Matt Philips |
| <b>Time</b><br>1:30pm   | <b>Location</b><br>City of Sandusky     |  |
| <b>Project name</b><br>Butler Street Reconstruction Design<br>22-ENG-96-A |   |  |

### 1. Discussion of final study – Any modifications or comments?

- a. \$100k as directed for Frontage Road C for concrete pavement replacement
- b. \$25k additional optional bid to be selected if under engineer's estimate
- c. Make NB two lanes near intersection: left lane is left/right turn; right lane is right turn only
  - Likely little to no signal work required at Cleveland
- d. Revise pavement design per PS recommendation

### 2. Status Update of ERI-6 Corridor Project

- a. Design status
  - S2 was just submitted around last meeting in October
  - Working towards S3 and starting acquisition
  - Just awarded a waterline project near RAB
- b. Anticipated bid?
  - March 2024 → hope to have Butler constructed before Cedar Point busy season and ERI-6 construction starts

### 3. Project Scope

- a. Survey
- b. Maintenance of Traffic
  - Potential for restricted traffic and/or signing to route around Butler?
  - Potential for SB detour, maintain both NB access points (Frontage Roads & U250)
  - For MOT, might need a 1-way detour just for drainage control if we invert crown
- c. Pavement Design – Geotech, City standard or other?
  - City has worked with PS Construction Fabrics in past. City/PS will core then scan subgrade → pavement design and CBR
- d. Utility Coordination – **OUPS** or **SUL**?
- e. Traffic Control
- f. Traffic Signals
  - Potentially a non-work item if we keep 2 NB lanes. Just eliminate variable
- g. No lighting needed, leave ex. as is
- h. Salvage Cleveland curb ramps to stay in R/W
- i. CADD Standards and Specifications
  - ODOT C&MS with City supplement for specific items
  - **Design in ORD** for efficiency and software capabilities
  - Convert to dwg for record drawings

## 4. Miscellaneous

- a. Overpass was built in '60s
- b. All local/Cedar Point \$ → no ODOT involvement

## 5. Schedule

- a. **S1/2 | S3 | Tracings** OR
- ~~b. Final | Tracings~~
- c. Goal to bid Aug '23
- d. Award Sept/Oct '23
- e. Start work right after HalloWeekends (early Nov)
  - Potential to even start const in Oct to work
  - HalloWeekends are Th-Sun → see website schedule
    - 1. Th 6p-12a
    - 2. F 11a-12a
    - 3. S 11a-12a
    - 4. Sun 11a-8p
- f. Wrap construction early '24 (end of May?)

## 6. Wrap-up/Final Thoughts

- a. Turnaround likely 2 weeks to go to council once we submit scope/fee

## 7. Action Items:

|   | Question or Action   | Answer or Response           | Responsibility |
|---|--|------------------------------|----------------|
| 1 | Investigate downstream storm. Tie into combined?           | Done, see email dated 230207 | IBI & City     |
| 2 | Review records and plans for nearby control/survey info?   |                              | IBI & City     |
| 3 | Need to keep 2-way access to southern drive along SB lane? |                              | City           |
| 4 | Work w/ PS Const. Fabrics for pavement design              |                              | City           |
| 5 | Provide updated City standards                             | Done, see email dated 230207 | City           |

---

**APPENDIX B**  
**CONCEPTUAL ALTERNATIVES STUDY**

# CITY OF SANDUSKY BUTLER STREET RECONSTRUCTION

## Conceptual Alternatives Study

Project 22-ENG-96-A

Butler Street from US 250 to Cleveland Road (US 6)



Submitted to *City of Sandusky Public Works*  
January 2023



IBI GROUP  
4150 Belden Village Street, Suite 104  
Canton OH 44718 USA  
tel 330 491 9000  
[ibigroup.com](http://ibigroup.com)



CITY OF SANDUSKY PUBLIC WORKS  
240 Columbus Avenue  
Sandusky, Ohio 44870 USA  
tel 419 627 5844  
[ci.sandusky.oh.us](http://ci.sandusky.oh.us)

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# EXHIBIT "A"

---

## INTRODUCTION

This Conceptual Alternatives Study will develop three (3) conceptual alternatives for the reconstruction of Butler Street between US 250 (Milan Road) and US 6 (Cleveland Road) in the City of Sandusky, Ohio. Butler Street is a low-speed (35mph), urban, major collector (6,052 ADT per ODOT TIMS data from 2021). Please refer to **Appendix A** for the study limits. The study will require coordination with the ERI-6-9.07 (PID 114056) corridor design project that is currently under design. Butler Street currently functions as a single lane northbound and southbound with a variable lane to accommodate seasonal surges (historically as high as 17,000 ADT) into or out of the adjacent Cedar Point amusement park. In recent years the usage of Butler Street has dropped off primarily due to park visitors and tour buses being rerouted by mobile mapping application algorithms. The primary goal of the Butler Street project is reconstruction of the failing existing concrete pavement that was built in 1990. Secondary goals of the project include:

1. Accommodate future traffic demands
  - a. Two-lane corridor (one lane per bound)
  - b. Remove excess pavement and variable lane infrastructure
2. Maintain existing access
  - a. Upgrade wrong-way traffic control for the US 250 ramp to current standards
3. Minimize/control construction costs
  - a. Investigate innovative short- and long-term cost savings
4. Reduce runoff and improve water quality
  - a. Reduce impervious
  - b. Investigate options for quality water treatment
5. Aesthetic & quality-of-life improvements
  - a. Landscaping and/or trees
  - b. Lighting upgrades
  - c. Sidewalk connectivity
  - d. Future parcel development
6. Reduce future maintenance

The reconstruction of this roadway will permit continued connectivity between US 250 and US 6, primarily servicing Cedar Point and adjacent property owners. Additionally, there has been substantial local support of updating Butler Street functionality, condition and appearance.

## STUDY FORMAT AND BASIS OF EVALUATION

The study utilizes the most up-to-date GIS and aerial information available from the Ohio Geographically Referenced Information Program (OGRIP) for development of the alternatives. A site visit was performed October 3, 2022, to verify and confirm existing conditions. Topographic survey was not performed as part of this Study. The study was developed in general conformance with ODOT design standards and references the ODOT 2019 Construction and Materials Specifications (C&MS).

Items developed as part of this study:

- Typical sections (see **Appendix C**)
- Plan exhibits (see **Appendix C**)

- 
- Conceptual engineer's estimates (see **Appendix D**)

Exceptions and items not included in this study:

- Topographic survey
- Research of deeds, surveys, plats of record, owners, easements and/or other encumbrances throughout the study corridor
- SUL services
- Geotechnical investigation
- Utility coordination is limited to review of existing plans to identify major conflicts
- Maintenance of Traffic plans

## CONCEPTUAL ALTERNATIVES

The following assumptions and conditions apply to all alternatives:

1. Existing pavement from US 250 and Frontage Road E to approximately Williams Alley was found to be in good shape and will be salvaged. See **Appendix C** for salvage limits.
2. Optional Bid Items for 3,000sy pavement replacement along Frontage Road C will be added to all alternatives. The Conceptual Engineer's Estimate for this additional work is \$365,049 in 2024 dollars (see **Appendix D** for more information).
3. Provide a "No Through Trucks" sign for eastbound Frontage Road C traffic heading towards Parish Street and Lakeshore Road.
4. Relocate the portable barrier along US 250 westbound to the "off-season" position to prohibit dual exit lanes to Butler Street.
5. Remove or abandon all advance variable lane infrastructure along US 250. Any abandoned infrastructure shall be set to the "off-season" condition. Optional Bid Items for removal of variable lane infrastructure will be added to Alternatives 1 and 3. The Conceptual Engineer's Estimate for this additional work is \$32,347 in 2024 dollars (see **Appendix D** for more information).
6. Williams Alley will continue to function as right-in/right-out.
7. Space for landscaping (to be designed with the final project) is provided.
8. Magnuson Hotel East Sandusky driveways:
  - a. Southern driveway will remain full access
  - b. Northern driveway will be made northbound right-in only
9. All utilities depicted in **Appendix C** are from existing plans. No OUPS call, topographic survey or SUL have been performed.
10. The ERI-6 project will eliminate the Avondale/Cleveland signal and extend the Cleveland westbound left-turn bay.
11. Butler/Cleveland signal modifications:
  - a. Butler northbound signal heads will require modification for a single lane.
  - b. Westbound Cleveland variable left-turn lane shall be striped out and retractable bollards shall be abandoned.
  - c. Westbound Cleveland left-turn lane signal heads and variable lane infrastructure shall be modified for a single left-turn lane to Butler.
12. All existing castings (storm, sanitary, water, etc.) within limits of pavement reconstruction shall be adjusted to grade unless modified elsewhere.



- 
13. Temporary R/W easements or work agreements will be required for reconstruction or removal of existing sidewalk that is outside of the public R/W:
- a. Sidewalk just north of Williams Alley
  - b. Curb ramps at intersection of Butler and Cleveland
  - c. Northwest return at intersection of Butler and Cleveland

#### ALTERNATIVE 1 “BARE-BONES”

Alternative 1 is anticipated to be a bare-bones reconstruction to restore the condition and functionality of Butler Street pavement while maintaining access and capacity, the primary goals and Purpose and Need. This alternative will constantly focus on cost-savings throughout the development process including walk condition evaluation and spot reconstruction, maintenance of existing lighting, abandonment of variable lane infrastructure, reuse of existing storm sewers, etc. The existing curbs were evaluated for condition during the site visit with the intention of salvaging. Significant segments of the curb will be salvaged by sawcutting along the face of curb and removing adjacent pavement or gutter pan as applicable. Approximately 120' of curb is anticipated to require replacement based upon site evaluation and condition. New 13' lanes with a 10' vegetated at-grade median will also be provided. The median will provide impervious reduction as well as some infiltration and treatment of runoff. Sidewalk will be reconstructed where condition and/or gaps warrant as reflected in **Appendix C**. Existing drive aprons will remain in place with the exception of the northern Magnuson Hotel drive which requires reconstruction to meet current ADA standards. It is recommended to include Optional Bid items for removal of the variable lane infrastructure along Butler Street for City selection if funding is available at the time of bid.

The Conceptual Engineer's Estimate for this alternative is \$895,528 in 2024 dollars (see **Appendix D** for more information).

#### ALTERNATIVE 2 “UPGRADE”

Alternative 2 will be a reimagining of the corridor. In addition to pavement reconstruction, this alternative will focus on the secondary goals of the project: aesthetics, quality of life and innovative concepts. Betterments for the corridor would include elimination of variable lane infrastructure for a cleaner viewscape, light pole and/or luminaire upgrades (coordinated with Ohio Edison), sidewalk reconstruction continuing along Williams Alley to Parish Street for neighborhood connectivity and landscaping. This alternative will hold the southbound curbline to allow two 12' lanes and a 2' low-side shoulder with cross slopes draining east to a vegetated swale and sidewalk along the east side. Catch basins will be reduced compared to the existing system while outfalls can be mimicked to simplify reconnection. The northbound swale also provides easier access to the existing waterline for future maintenance. As the roadway nears the northern end, the low-side shoulder will transition to a curbed section which will eliminate the need for drive pipes or a conveyance sewer under the hotel drives.

The Conceptual Engineer's Estimate for this alternative is \$1,563,639 in 2024 dollars (see **Appendix D** for more information).

---

### ALTERNATIVE 3 “HYBRID”

Alternative 3 will provide a scope and plan layout similar to Alternative 1 with inverted lanes and a depressed median. The depressed median will provide additional runoff reduction and pre-treatment but will require additional earthwork and proposed storm sewer work to provide collection and conveyance. It is anticipated to provide doghouse ditch catch basins to tie into the existing storm sewer. Existing catch basins could be adjusted to grade or abandoned in-place to maintain conveyance. Additional detail to be coordinated with the City during design.

The Conceptual Engineer’s Estimate for this alternative is \$947,869 in 2024 dollars (see **Appendix D** for more information).

### NO BUILD

A No Build alternative will not meet the purpose and need of pavement reconstruction between the US 250 and US 6.

### POST-CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs)

Earth disturbance for this project is expected to exceed the one-acre threshold for PC-BMPs regardless of alternative. The Ohio EPA General Permit “encourages the redevelopment of previously graded, paved or built upon sites through a reduction of the WQv treatment requirement.” The study alternatives will reduce impervious area through the elimination of the variable lane. Preliminary calculations (see **Appendix E**) reveal that the 20% net reduction threshold can be met and PC-BMPs will not be required as part of the reconstruction. The transition from a fully curbed roadway to an open drainage system will also increase infiltration and filtration of runoff prior to entering downstream storm sewers.

### MAINTENANCE OF TRAFFIC (MOT)

This study does not include an in-depth analysis of MOT concepts for the alternatives, however, reconstruction of pavement should be easily achieved through part-width phasing and utilization of the wide existing pavement. A one-way or full detour is not anticipated with the potential exception for large vehicles such as tractor-trailers and tour buses. Access to adjacent properties shall be maintained at all times.

### PUBLIC INVOLVEMENT

Public outreach and notification of construction will be coordinated during detailed design.

### COMPARISON OF ALTERNATIVES AND CONCLUSION

The Butler Street Reconstruction Conceptual Alternatives Study was performed to identify a preferred alternative to eliminate the variable lane infrastructure and replace failing concrete pavement between US 250 (Milan Road) and Cleveland Road (US 6) in Sandusky, Ohio. Preliminary alternative typical sections, plan exhibits, a site visit and conceptual engineer’s estimates have been developed to investigate the pros and cons for three alternatives. The

alternatives will meet the primary and secondary goals of the project as is reflected in the Evaluation Matrix (see next page). Additionally, there are no safety concerns with any alternative.

| Alternatives Evaluation Matrix |                                 |                           |                 |                |
|--------------------------------|---------------------------------|---------------------------|-----------------|----------------|
| Alternative                    |                                 | Alt 1 "Bare-Bones"        | Alt 2 "Upgrade" | Alt 3 "Hybrid" |
| Purpose & Need                 | Pavement Replacement            | ✓                         | ✓               | ✓              |
|                                | Eliminate Variable Lane         | !                         | ✓               | !              |
| Secondary Goals                | Two-Lane Corridor               | ✓                         | ✓               | ✓              |
|                                | Maintain Access                 | ✓                         | ✓               | ✓              |
|                                | Control Costs                   | Short-Term                | ✓               | !              |
|                                |                                 | Long-Term                 | !               | ✓              |
|                                | Water Quality                   | Reduce Impervious         | ✓               | ✓              |
|                                |                                 | Water Treatment           | !               | ✓              |
|                                | Quality of Life                 | Landscaping               | ✓               | ✓              |
|                                |                                 | Lighting Upgrades         | !               | !              |
|                                |                                 | Sidewalk Connectivity     | ✓               | ✓              |
|                                |                                 | Future Parcel Development | ✓               | !              |
|                                | Reduce Future Maintenance       | !                         | ✓               | ✓              |
| Legend:                        |                                 |                           |                 |                |
| ✓                              | Good - Selection Factor Met     |                           |                 |                |
| !                              | Fair - Selection Factor Met     |                           |                 |                |
| ✗                              | Poor - Selection Factor Not Met |                           |                 |                |

Based upon the conceptual engineer's estimates and the evaluation matrix, it is recommended to select Alternative 3 "Hybrid" for the final design with the Optional Bid Items to selectively add removal of variable lane infrastructure and reconstruction of Frontage Road C pavement.

The Conceptual Engineer's Estimate for the preferred alternative is **\$947,869**.

The Conceptual Engineer's Estimate for the preferred alternative with Optional Bid Item for removal of variable lane infrastructure is **\$980,216**.

The Conceptual Engineer's Estimate for the preferred alternative with Optional Bid Items for Frontage Road C pavement reconstruction is **\$1,312,918**.

The Conceptual Engineer's Estimate for the preferred alternative with all Optional Bid Items is **\$1,345,265**.

All values are in 2024 dollars (see **Appendix D** for more information).

---

## APPENDICES

APPENDIX A - STUDY LIMITS

APPENDIX B - PROJECT DESIGN DESIGNATION WORKSHEET

APPENDIX C - TYPICAL SECTIONS AND PLAN EXHIBITS

APPENDIX D - CONCEPTUAL ENGINEER'S ESTIMATES

APPENDIX E - IMPERVIOUS AREA REDUCTION CALCULATIONS

# EXHIBIT "A"

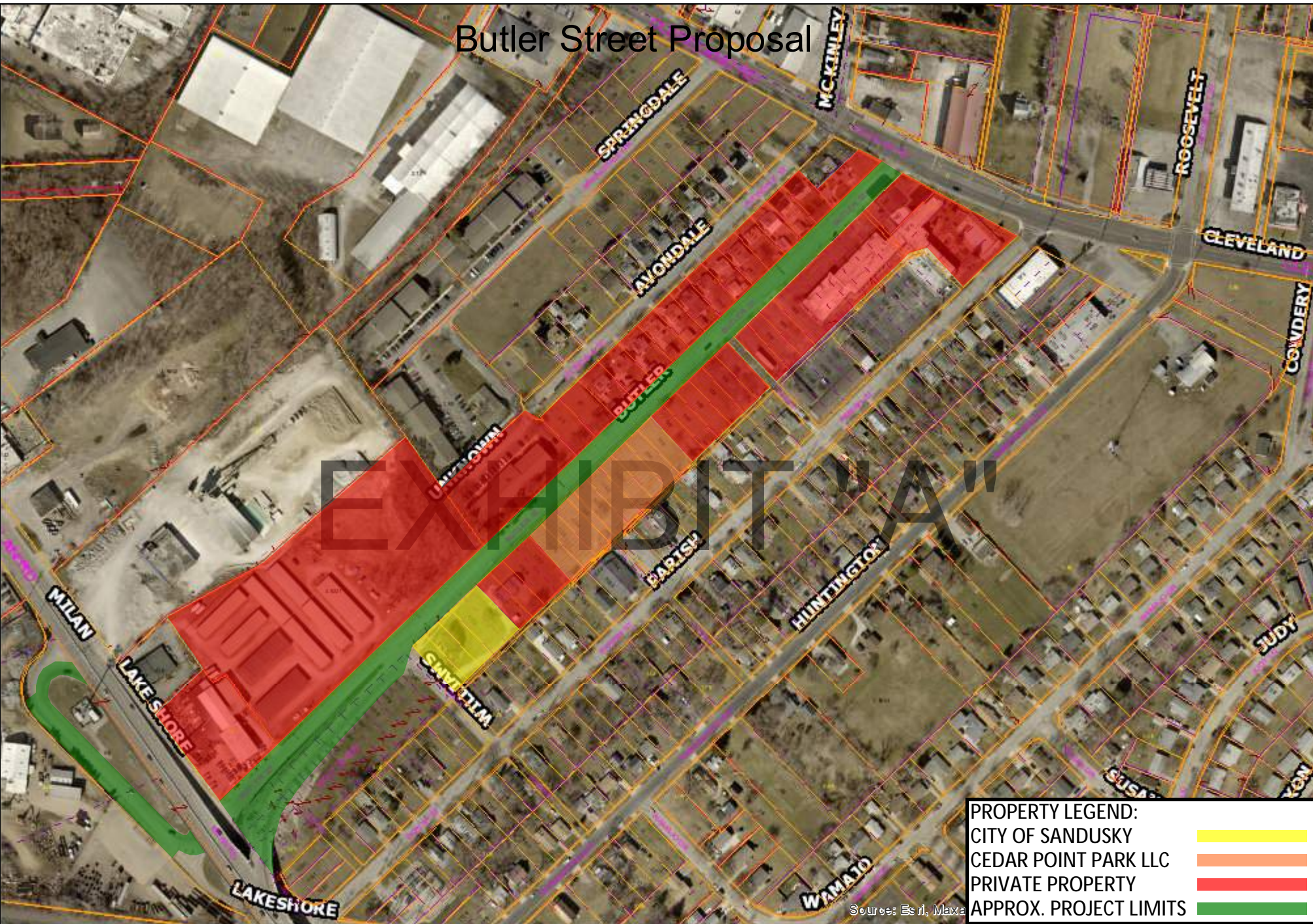
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# EXHIBIT "A"

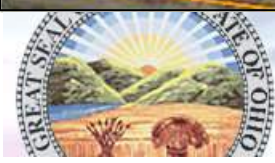
## APPENDIX A STUDY LIMITS



# Butler Street Proposal



| PROPERTY LEGEND:       |  |
|------------------------|--|
| CITY OF SANDUSKY       |  |
| CEDAR POINT PARK LLC   |  |
| PRIVATE PROPERTY       |  |
| APPROX. PROJECT LIMITS |  |



Richard H. Jeffrey  
ERIE COUNTY AUDITOR | ERIE COUNTY, OHIO

Date: 7/15/2022  
1 inch = 376 feet





---

**APPENDIX B**  
**PROJECT DESIGN DESIGNATION WORKSHEET**

| PROJECT DESIGN DESIGNATION WORKSHEET |   |               |              |      |              |      |             |      |         |      |
|--------------------------------------|---|---------------|--------------|------|--------------|------|-------------|------|---------|------|
| 1A                                   | Enter the PID:  | 22-ENG-96-A   |              |      |              |      |             |      |         |      |
| 1B                                   | Enter the County-Route-Log or other identifier:   | Butler Street |              |      |              |      |             |      |         |      |
| 2A                                   | Enter the Existing ADT (Total Vehicles):  | 6,052         |              |      |              |      |             |      |         |      |
| 2B                                   | Enter 24-hour B&C (commercial) volume if available:   | --            |              |      |              |      |             |      |         |      |
| 2C                                   | Enter the Existing Year:  | 2021          |              |      |              |      |             |      |         |      |
| 3                                    | Enter the Opening Year:   | 2024          |              |      |              |      |             |      |         |      |
| 4                                    | Enter the Design Year:  | 2044          |              |      |              |      |             |      |         |      |
| 5A                                   | Enter the number of years from the Existing Year to the Opening Year: <b>(3) - (2C) =</b>   | 3             |              |      |              |      |             |      |         |      |
| 5B                                   | Enter the number of years from the Existing Year to the Design Year: <b>(4) - (2C) =</b>  | 23            |              |      |              |      |             |      |         |      |
| 6                                    | Select a growth rate from the following ranges of rates:  | 0.0050        |              |      |              |      |             |      |         |      |
|                                      | Stable 0.0025 - 0.0050      Moderate 0.0100 - 0.0200  |               |              |      |              |      |             |      |         |      |
|                                      | Low 0.0050 - 0.100      High 0.0200 - 0.0300  |               |              |      |              |      |             |      |         |      |
| 7                                    | Enter the Opening Year Factor: <b>[(6) x (5A)] + 1 =</b>  | 1.015         |              |      |              |      |             |      |         |      |
| 8                                    | Enter the Design Year Factor: <b>[(6) x (5B)] + 1 =</b>   | 1.115         |              |      |              |      |             |      |         |      |
| 9                                    | Enter the Opening Year ADT: <b>(2A) x (7) =</b>   | 6,100         |              |      |              |      |             |      |         |      |
|                                      | Round to nearest 100 vehicles (nearest 10 vehicles if <1000)  |               |              |      |              |      |             |      |         |      |
| 10                                   | Enter the Design Year ADT: <b>(2A) x (8) =</b>  | 6,700         |              |      |              |      |             |      |         |      |
|                                      | Round to nearest 100 vehicles (nearest 10 vehicles if <1000)  |               |              |      |              |      |             |      |         |      |
| 11A                                  | Enter K, selected from the following table of Design Year ADT:  | 0.10          |              |      |              |      |             |      |         |      |
|                                      | <table border="0"> <tr> <td>&lt; 1000</td> <td>0.12</td> <td>5001 - 15000</td> <td>0.10</td> </tr> <tr> <td>1001 - 5000</td> <td>0.11</td> <td>15001 &lt;</td> <td>0.09</td> </tr> </table> |               | < 1000       | 0.12 | 5001 - 15000 | 0.10 | 1001 - 5000 | 0.11 | 15001 < | 0.09 |
| < 1000                               | 0.12  |               | 5001 - 15000 | 0.10 |              |      |             |      |         |      |
| 1001 - 5000                          | 0.11  | 15001 <       | 0.09         |      |              |      |             |      |         |      |
|                                      |   |               |              |      |              |      |             |      |         |      |
| 11B                                  | Enter the DHV: <b>(10) x (11A) =</b>  | 670           |              |      |              |      |             |      |         |      |
| 12                                   | Enter the D Factor (for DHV):   | 0.60          |              |      |              |      |             |      |         |      |
|                                      | within an MPO area: 0.60  |               |              |      |              |      |             |      |         |      |
|                                      | outside an MPO area: 0.55   |               |              |      |              |      |             |      |         |      |
|                                      | any one-way bridge: 1.00  |               |              |      |              |      |             |      |         |      |
| 13                                   | Enter the T24 factor (the proportion of B&C vehicles in ADT):   | 0.03          |              |      |              |      |             |      |         |      |
|                                      | <b>[(2B)/(2A)]</b> or <b>0.03</b> if (2B) is blank  |               |              |      |              |      |             |      |         |      |
| 14                                   | Enter the TD factor (the proportion of B&C vehicles in the design hour): <b>(13) x 0.6 =</b>  | 0.018         |              |      |              |      |             |      |         |      |
| 15                                   | Comments  |               |              |      |              |      |             |      |         |      |

| Design Designation: |               |
|---------------------|---------------|
| PID                 | 22-ENG-96-A   |
| County-Route-Log    | Butler Street |
| Opening Year ADT =  | 6,100         |
| Design Year ADT =   | 6,700         |
| K =                 | 0.1           |
| D =                 | 0.60          |
| T24 =               | 0.03          |
| TD =                | 0.018         |



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# EXHIBIT "A"

## APPENDIX C

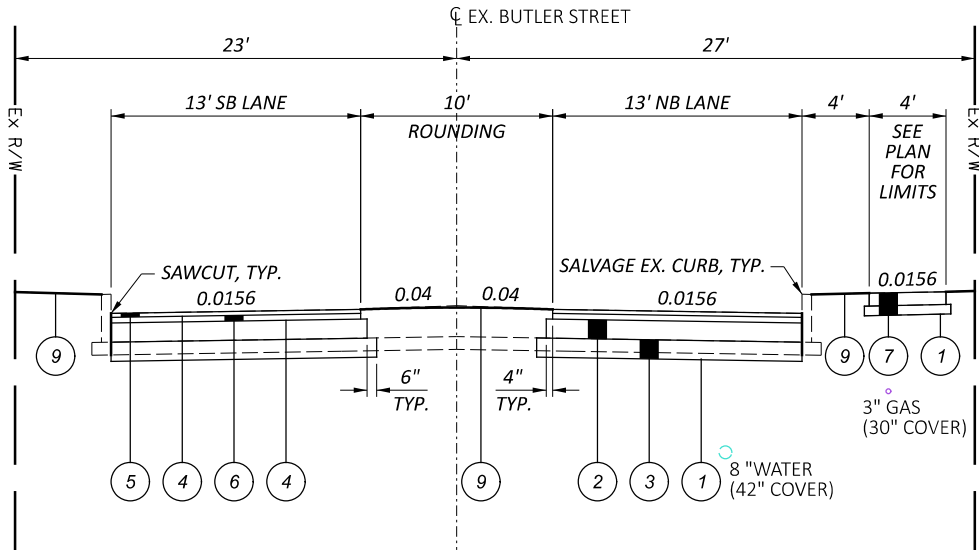
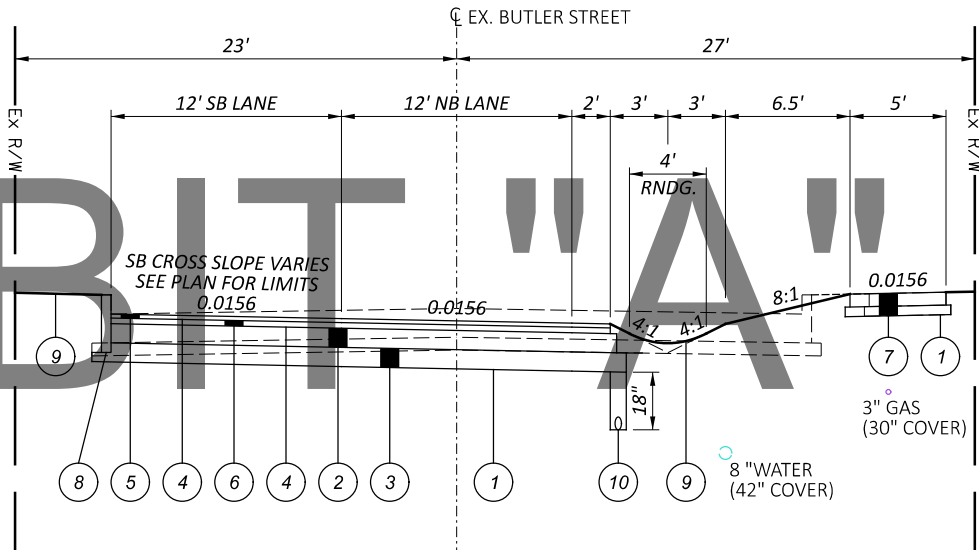
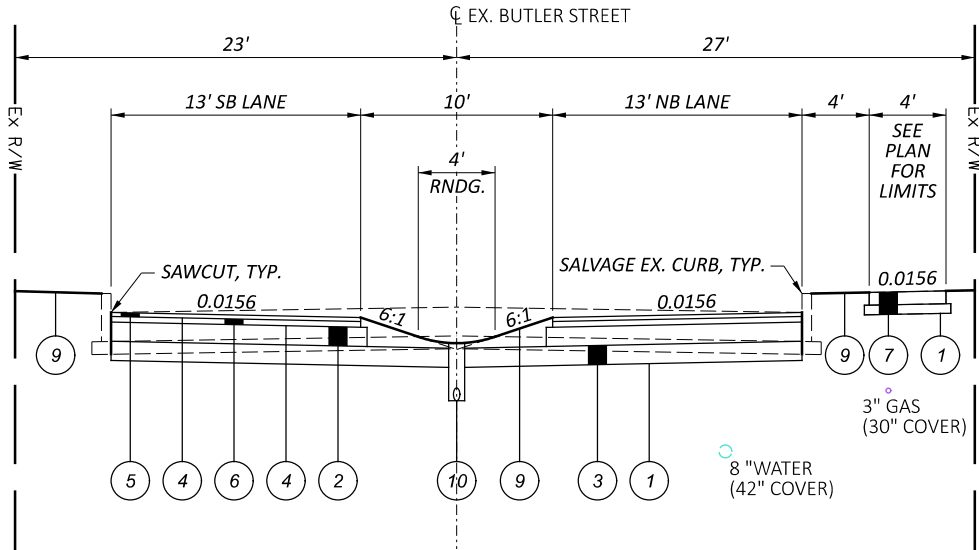
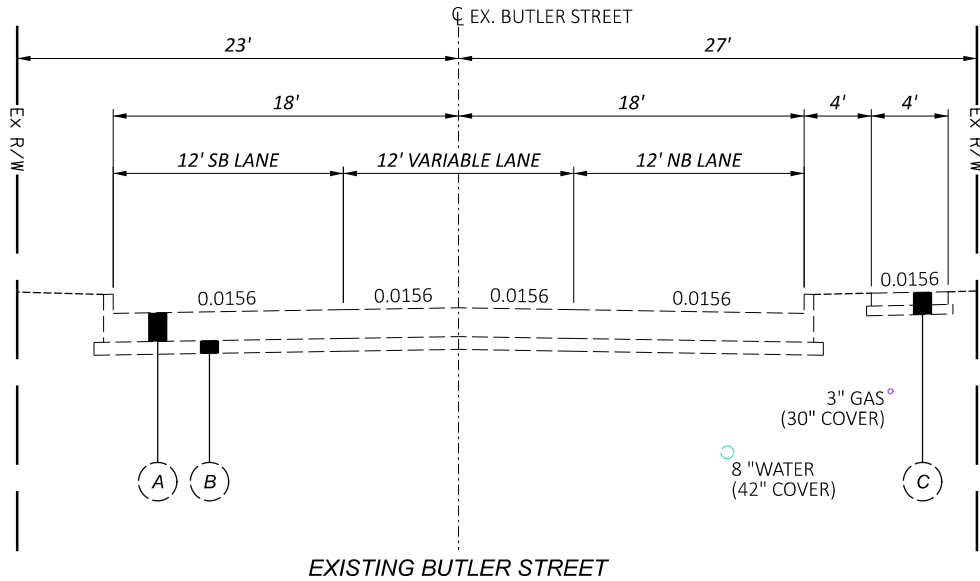
### TYPICAL SECTIONS AND PLAN EXHIBITS

EXISTING LEGEND

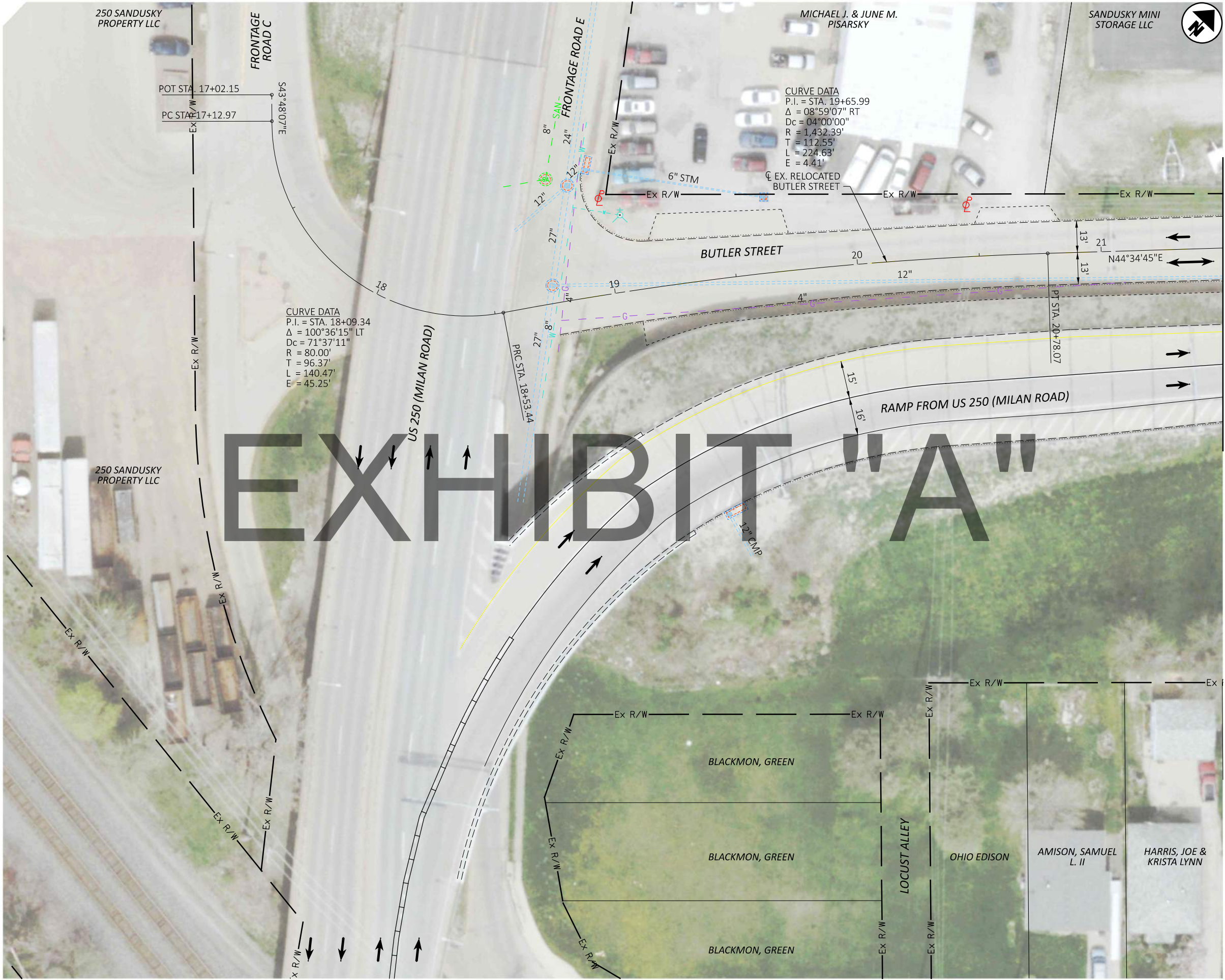
- (A) EXISTING 9" CONCRETE PAVEMENT WITH INTEGRAL CURB
- (B) EXISTING 4" AGGREGATE BASE
- (C) EXISTING 4" CONCRETE WALK ON 3" AGGREGATE BASE

PROPOSED LEGEND

- 1 ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING
- 2 ITEM 301 - ASPHALT CONCRETE BASE, PG64-22, (449) [T = 6"]
- 3 ITEM 304 - AGGREGATE BASE [T = 6"]
- 4 ITEM 407 - NON-TRACKING TACK COAT
- 5 ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 [T = 1.25"]
- 6 ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) [T = 1.75"]
- 7 ITEM 608 - 4" CONCRETE WALK ON ITEM 411 - STABILIZED CRUSHED AGGREGATE
- 8 ITEM 609 - CURB, TYPE 6
- 9 ITEM 659 - SEEDING AND MULCHING, CLASS 2
- 10 ITEM 605 - 4" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC



NOTES:



BUTLER STREET - EXISTING CONDITIONS  
FRONTAGE ROADS TO RAMP FROM US 250

DESIGN AGENCY



DESIGNER  
MEP

REVIEWER

KMK 01-18-23

PROJECT ID  
22-ENG-96-A

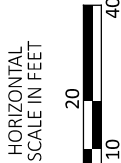
SHEET  
P.2

TOTAL  
13





NOTES:



BUTLER STREET - EXISTING CONDITIONS  
RAMP FROM US 250 TO STA. 41+50.00

DESIGN AGENCY



DESIGNER

MEP

REVIEWER

KMK 01-18-23

PROJECT ID

22-ENG-96-A

SHEET

P.3

TOTAL

13



NOTES:



BUTLER STREET - EXISTING CONDITIONS  
STA. 41+50.00 TO US 6 (CLEVELAND ROAD)

DESIGN AGENCY



DESIGNER  
MEP

REVIEWER

KMK 01-18-23

PROJECT ID  
22-ENG-96-A

SHEET  
P.4

TOTAL  
13

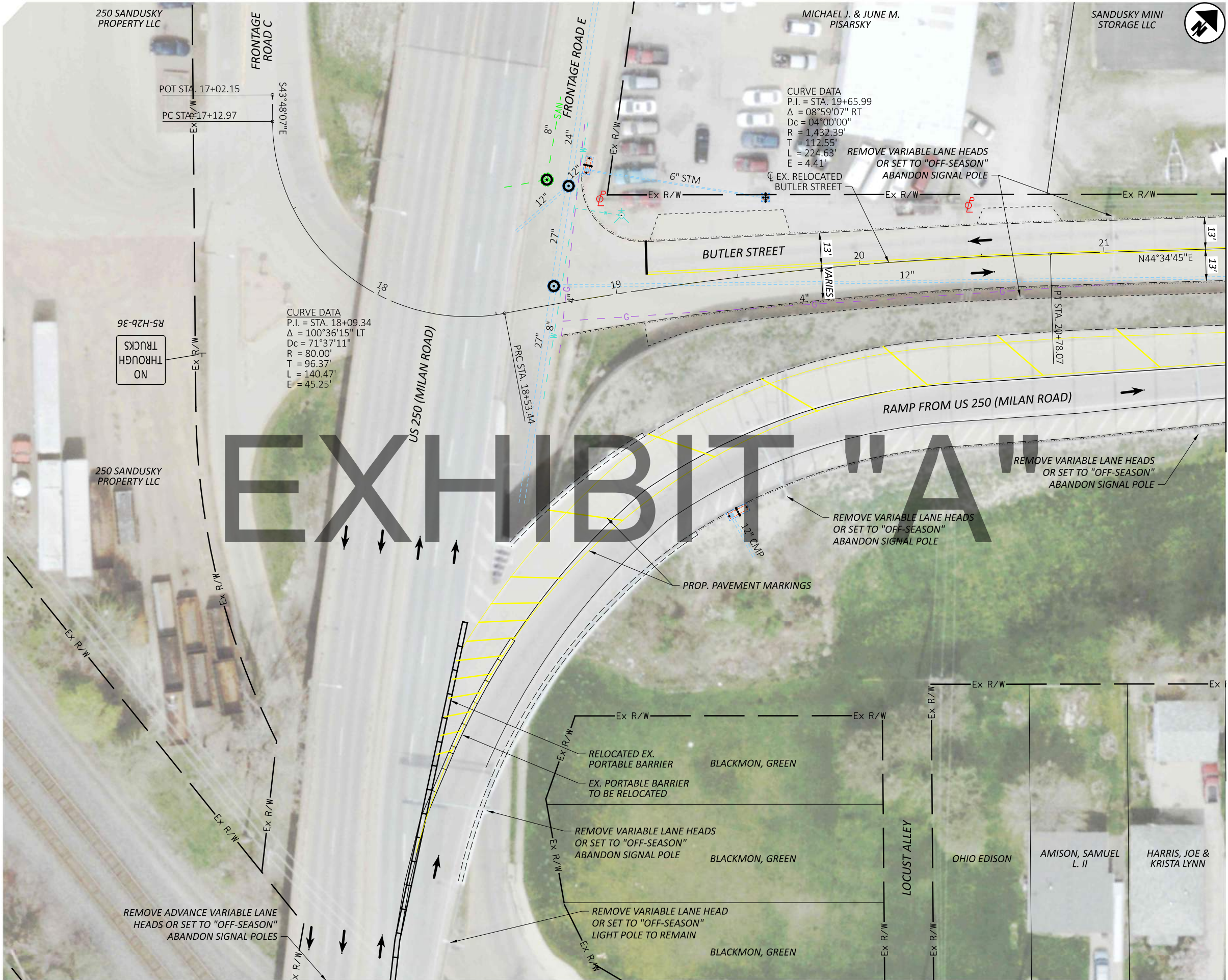




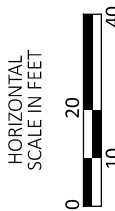
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J:\140896 Butler St\6.0 Technical\6.04 Design-Analysis\22-ENG-96-A BP001.dgn

*MAINTAIN EX. LIGHTING*



BUTLER STREET - ALTERNATIVE 1 "BARE-BONES"  
FRONTAGE ROADS TO RAMP FROM US 250



DESIGN AGENCY



DESIGNER

ME

REVIEWER

KMK 01-18-23

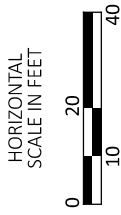
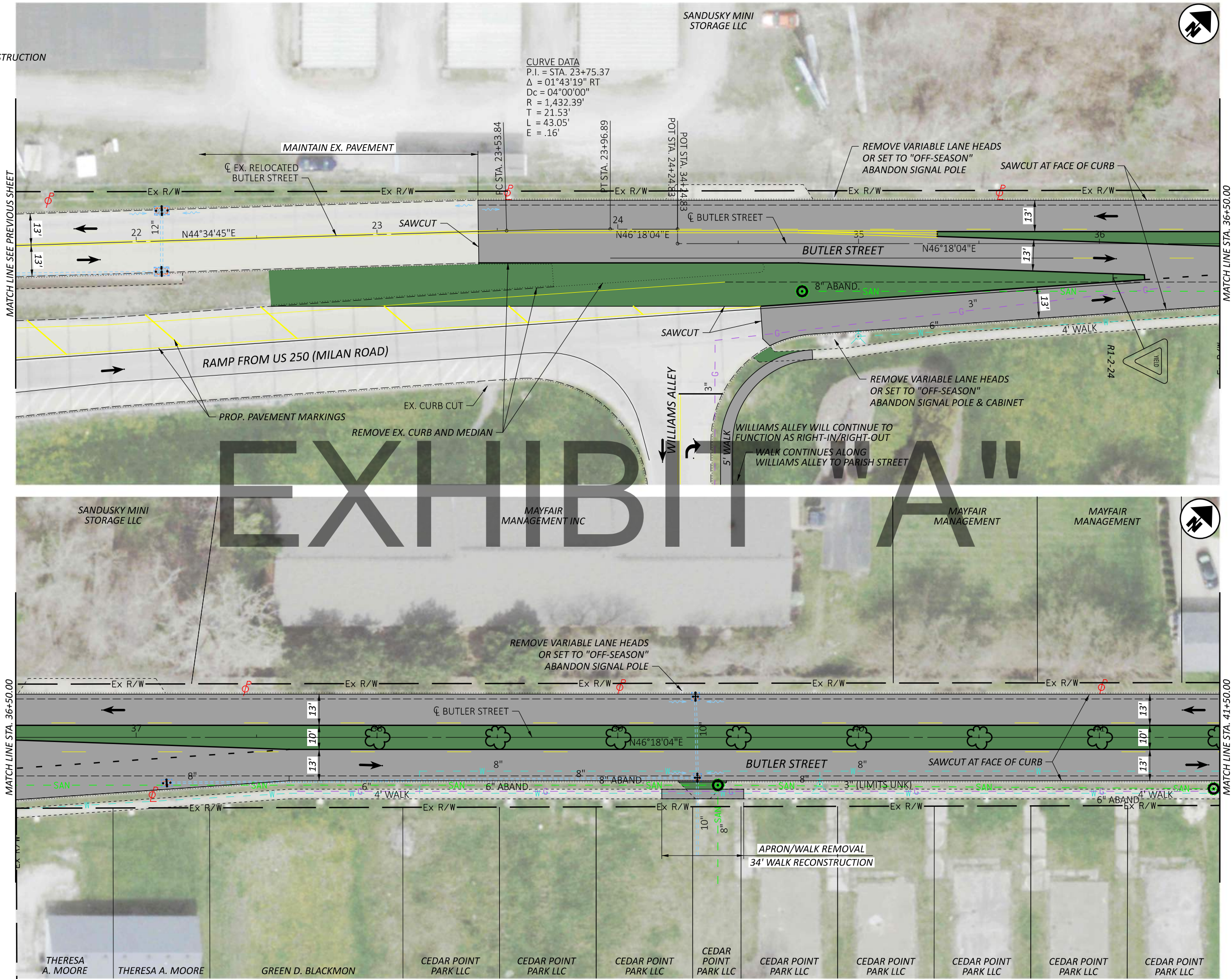
PROJECT ID  
22-ENG-96-A

| SHEET | TOTAL |
|-------|-------|
| P.5   | 13    |



- LEGEND:
- VEGETATED AREA
  - PAVEMENT RECONSTRUCTION

NOTES:  
ALL EX. CASTINGS IN THE PAVEMENT SHALL BE ADJUSTED TO GRADE  
MAINTAIN EX. LIGHTING  
LANDSCAPING IS GENERIC AND WILL BE DESIGNED LATER



BUTLER STREET - ALTERNATIVE 1 "BARE-BONES"  
RAMP FROM US 250 TO STA. 41+50.00

DESIGN AGENCY





|            |              |
|------------|--------------|
| DESIGNER   | MEP          |
| REVIEWER   | KMK 01-18-23 |
| PROJECT ID | 22-ENG-96-A  |
| SHEET      | P.6          |
| TOTAL      | 13           |



# BUTLER STREET RECONSTRUCTION - CONCEPTUAL ALTERNATIVES STUDY

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 \140896 Butler St\6.0 Technical\6.04 Design-Analysis\22-ENG-96-A BP001.dgn

**LEGEND:**

-  **VEGETATED AREA**  
 **PAVEMENT RECONSTRUCTION**

**NOTES:**

ALL EX. CASTINGS IN THE  
PAVEMENT SHALL BE  
ADJUSTED TO GRADE  
MAINTAIN EX. LIGHTING  
LANDSCAPING IS  
GENERIC AND WILL  
BE DESIGNED LATER



BUTLER STREET - ALTERNATIVE 1 "BARE-BONES"  
STA. 41+50.00 TO US 6 (CLEVELAND ROAD)

DESIGN AGENCY



DESIGNER

MEP

REVIEWER

KMK 01-18-23

PROJECT ID  
22-ENG-96-A

|       |       |
|-------|-------|
| SHEET | TOTAL |
| P.7   | 13    |

HORIZONTAL  
SCALE IN FEET

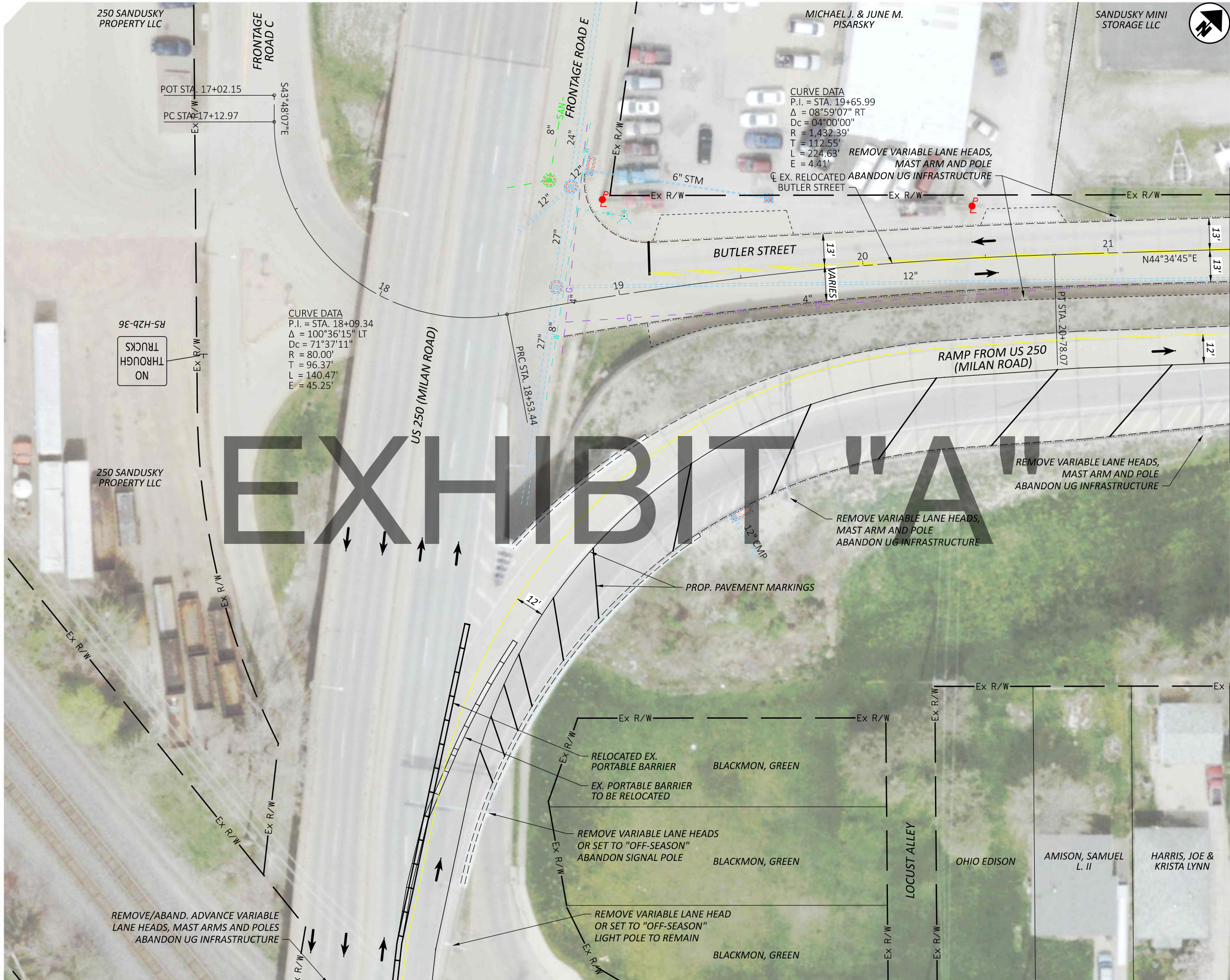
A horizontal scale bar with markings at 0, 10, 20, and 40 feet. The bar is divided into segments: a solid black segment from 0 to 10, a white segment from 10 to 20, a solid black segment from 20 to 30, a white segment from 30 to 40, and a solid black segment from 40 to 50.



# BUTLER STREET RECONSTRUCTION - CONCEPTUAL ALTERNATIVES STUDY

MODEL: CLX\_BUTLER - Plan 1 [Sheet] PAPERSIZE: 17x11 (in.) DATE: 2023-01-18 TIME: 12:12:37 PM USER: matt.phillips  
\\140896 Butler St\6.0 Technical\6.04 Design-Analysis\22-ENG-96-A\_BP002.dgn

**NOTES:**  
COORDINATE LIGHTING  
UPGRADES WITH  
OHIO EDISON



HORIZONTAL  
SCALE IN FEET



A horizontal scale bar with alternating black and white segments. It is marked with '0' at the left end, '10' at the midpoint, and '20' at the right end.

BUTLER STREET - ALTERNATIVE 2 "UPGRADE"  
FRONTAGE ROADS TO RAMP FROM US 250

DESIGN AGENCY



DESIGNER

MEP

REVIEWER

KMK 01-18-23

PROJECT ID  
22-ENG-96-A

|       |       |
|-------|-------|
| SHEET | TOTAL |
| P.8   | 13    |



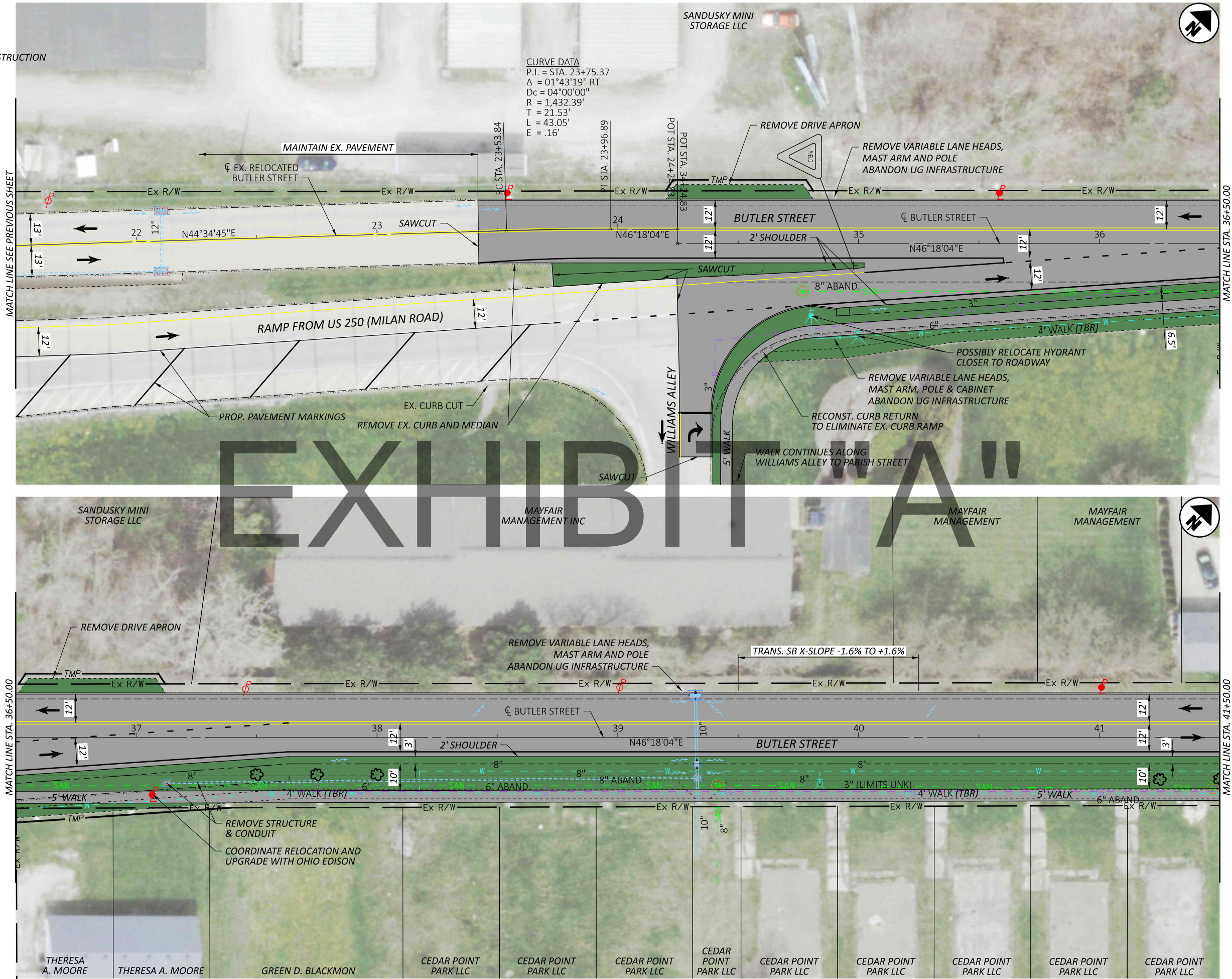
LEGEND:

VEGETATED AREA

PAVEMENT RECONSTRUCTION

NOTES:

ALL EX. CASTINGS IN THE PAVEMENT SHALL BE ADJUSTED TO GRADE COORDINATE LIGHTING UPGRADES WITH OHIO EDISON LANDSCAPING IS GENERIC AND WILL BE DESIGNED LATER



BUTLER STREET - ALTERNATIVE 2 "UPGRADE"

RAMP FROM US 250 TO STA. 41+50.00

DESIGN AGENCY



DESIGNER

MEP

REVIEWER

KMK 01-18-23

PROJECT ID

22-ENG-96-A

SHEET

P.9

TOTAL



13



# BUTLER STREET RECONSTRUCTION - CONCEPTUAL ALTERNATIVES STUDY

MODEL: CLX\_BUTLER - Plan 4 [Sheet] PAPERSIZE: 17x11 (in.) DATE: 2023-01-18 TIME: 12:12:40 PM USER: matt.philips  
J:\140896\_Butler St\6.0 Technical\6.04 Design-Analysis\22-ENG-96-A\_BP002.dgn

**LEGEND:**

-  *VEGETATED AREA*  
 *PAVEMENT RECONSTRUCTION*

**NOTES:**

ALL EX. CASTINGS IN THE  
PAVEMENT SHALL BE  
ADJUSTED TO GRADE  
COORDINATE LIGHTING  
UPGRADES WITH  
OHIO EDISON  
LANDSCAPING IS  
GENERIC AND WILL  
BE DESIGNED LATER



HORIZONTAL  
SCALE IN FEET



A horizontal scale bar with alternating black and white segments. It is marked with '0' at the left end, '10' at the first tick mark, '20' at the second tick mark, and '40' at the right end.

BUTLER STREET - ALTERNATIVE 2 "UPGRADE"  
STA. 41+50.00 TO US 6 (CLEVELAND ROAD)

DESIGN AGENCY



DESIGNER

MEP

REVIEWER

KMK 01-18-23

PROJECT ID  
22-ENG-96-A

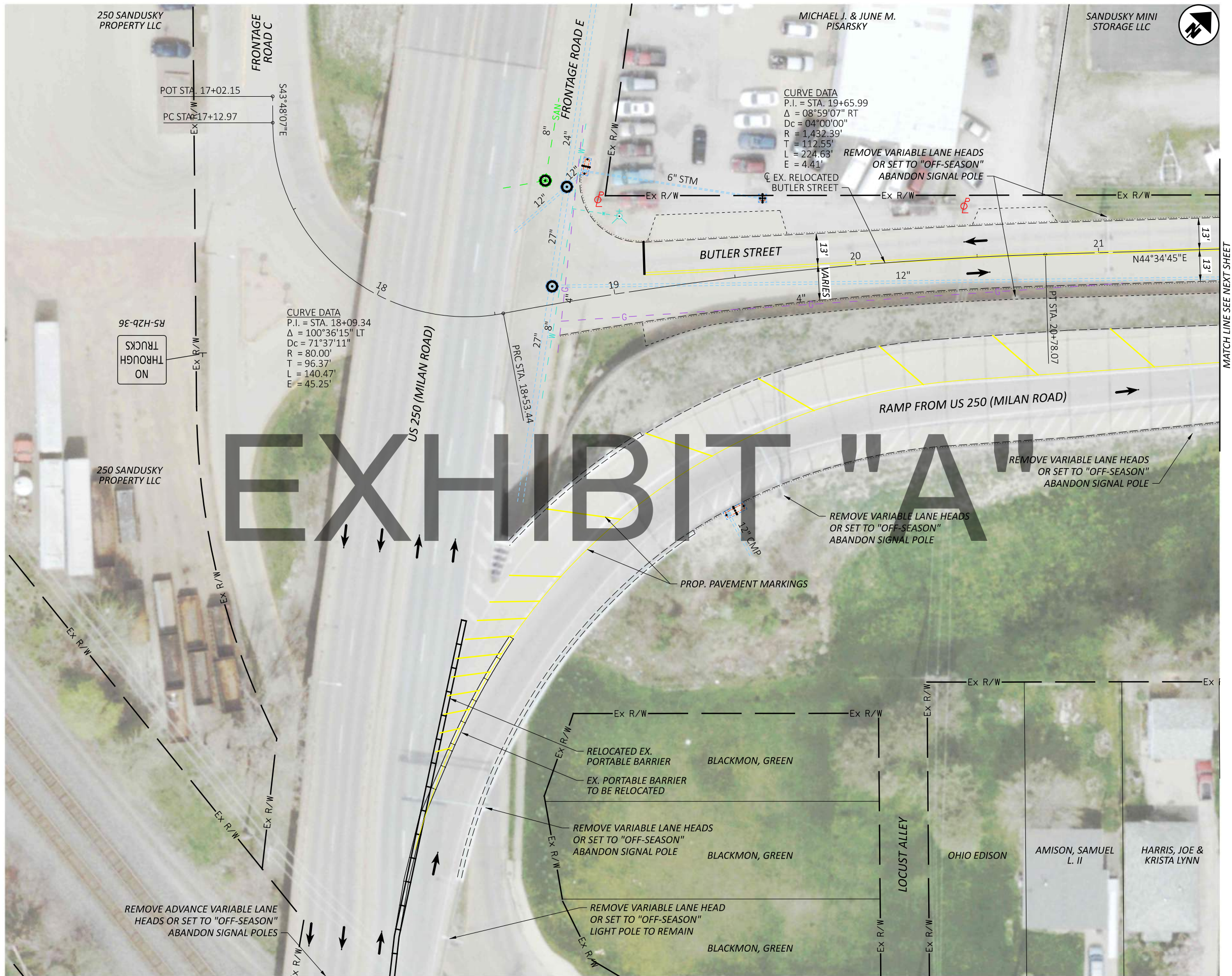
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|-------|-------|
| SHEET | TOTAL |
| P.10  | 13    |



## BUTLER STREET RECONSTRUCTION - CONCEPTUAL ALTERNATIVES STUDY

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J:\140896\_Butler St\6.0\_Technical\6.04\_Design-Analysis\22-ENG-96-A\_BP003.dgn

NOTES:  
MAINTAIN EX. LIGHTING



HORIZONTAL  
SCALE IN FEET



A horizontal scale bar with alternating black and white segments. It is marked with the numbers 0, 10, 20, and 40.

BUTLER STREET - ALTERNATIVE 3 "HYBRID"  
FRONTAGE ROADS TO RAMP FROM US 250

DESIGN AGENCY



DESIGNER

MEP

REVIEWER

KMK 01-18-23

PROJECT ID  
22-ENG-96-A

|       |       |
|-------|-------|
| SHEET | TOTAL |
| P.11  | 13    |



LEGEND:

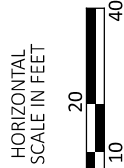
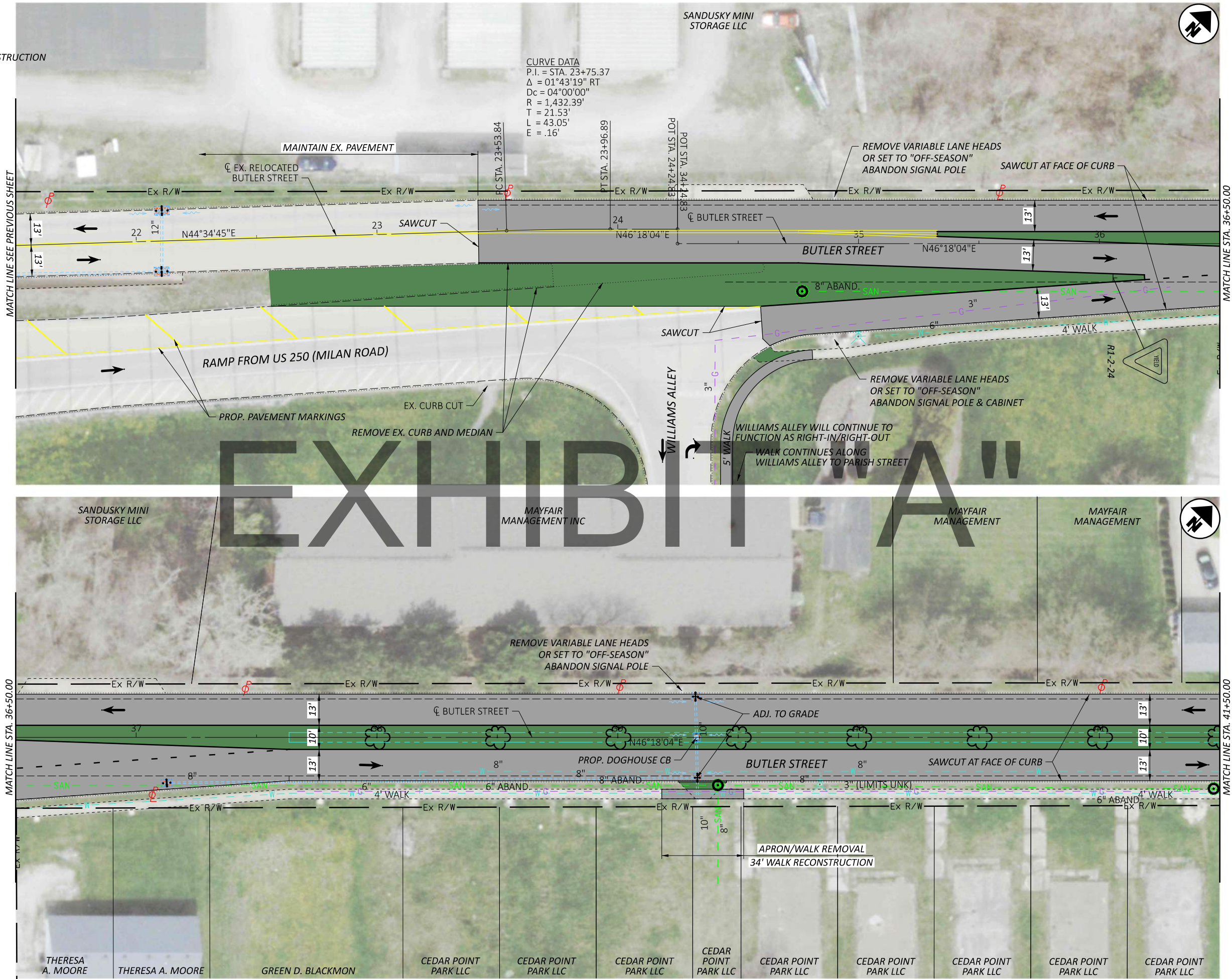
VEGETATED AREA

PAVEMENT RECONSTRUCTION

NOTES:

ALL EX. CASTINGS IN THE PAVEMENT SHALL BE ADJUSTED TO GRADE

MAINTAIN EX. LIGHTING LANDSCAPING IS GENERIC AND WILL BE DESIGNED LATER



BUTLER STREET - ALTERNATIVE 3 "HYBRID"

RAMP FROM US 250 TO STA. 41+50.00

DESIGN AGENCY



|            |              |
|------------|--------------|
| DESIGNER   | MEP          |
| REVIEWER   | KMK 01-18-23 |
| PROJECT ID | 22-ENG-96-A  |
| SHEET      | TOTAL        |
| P.12       | 13           |



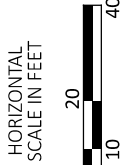
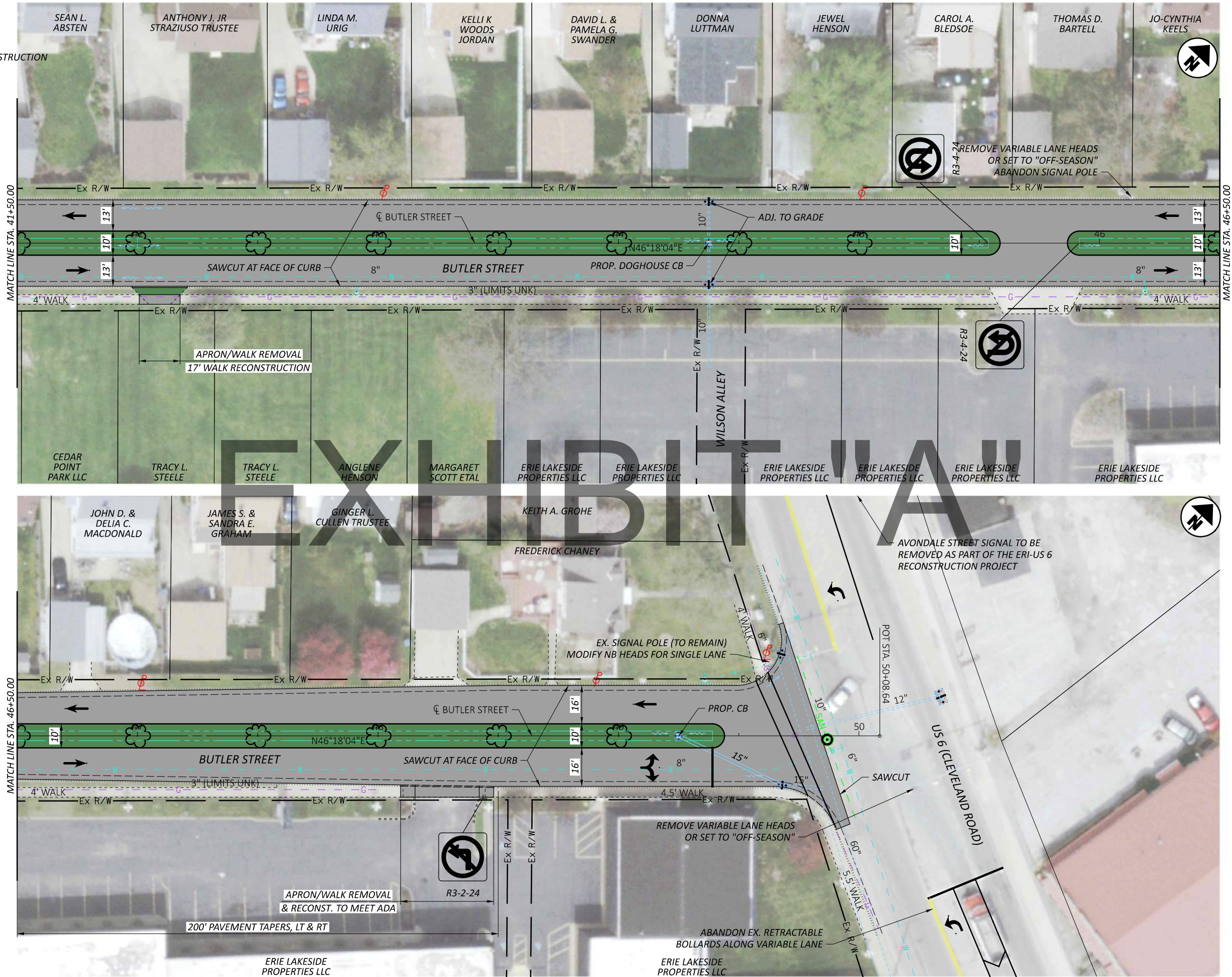
LEGEND:

VEGETATED AREA

PAVEMENT RECONSTRUCTION

NOTES:

ALL EX. CASTINGS IN THE PAVEMENT SHALL BE ADJUSTED TO GRADE MAINTAIN EX. LIGHTING LANDSCAPING IS GENERIC AND WILL BE DESIGNED LATER



BUTLER STREET - ALTERNATIVE 3 "HYBRID"  
STA. 41+50.00 TO US 6 (CLEVELAND ROAD)

DESIGN AGENCY



DESIGNER

MEP

REVIEWER

KMK 01-18-23

PROJECT ID

22-ENG-96-A

SHEET

P.13

TOTAL

13

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# EXHIBIT "A"

## APPENDIX D

### CONCEPTUAL ENGINEER'S ESTIMATES

**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
ENGINEER'S ESTIMATE - ALTERNATIVE 1 "BARE-BONES"  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



**IBI GROUP**  
4150 Belden Village Street, Suite 104  
Canton OH 44718 USA  
tel 330 491 9000  
ibigroup.com

| REF      | ITEM | DESCRIPTION                                     | UNIT | UNIT PRICE  | TOTAL      |              |
|----------|------|---|------|-------------|------------|--------------|
|          |      |   |      |             | EQ         | COST         |
| ROADWAY  |      |   |      | \$          | 159,686.50 |              |
| 1        | 202  | Pavement Removed                                | SY   | \$ 10.50    | 7,264      | \$ 76,272.00 |
| 2        | 202  | Walk Removed                                    | SF   | \$ 12.00    | 232        | \$ 2,784.00  |
| 3        | 202  | Curb Removed                                    | FT   | \$ 5.50     | 350        | \$ 1,925.00  |
| 4        | 202  | Pipe Removed, 24" and Under                     | FT   | \$ 20.00    |            | \$ -         |
| 5        | 202  | Catch Basin Removed                             | EACH | \$ 500.00   |            | \$ -         |
| 6        | 203  | Excavation                                      | CY   | \$ 25.00    | 850        | \$ 21,250.00 |
| 7        | 203  | Embankment                                      | CY   | \$ 21.00    | 425        | \$ 8,925.00  |
| 8        | 204  | Subgrade Compaction                             | SY   | \$ 2.50     | 5,873      | \$ 14,682.50 |
| 9        | 204  | Proof Rolling                                   | HOUR | \$ 250.00   | 3          | \$ 750.00    |
| 10       | 608  | 4" Concrete Walk                                | SF   | \$ 18.00    | 1,561      | \$ 28,098.00 |
| 11       | 608  | Curb Ramp                                       | SF   | \$ 26.00    |            | \$ -         |
| 12       | 622  | Barrier, Misc.: Relocate Ex. Portable Barrier   | LS   | \$ 5,000.00 | 1          | \$ 5,000.00  |
| DRAINAGE |      |   |      | \$          | 6,477.00   |              |
| 13       | 605  | 4" Base Pipe Underdrains with Geotextile Fabric | FT   | \$ 13.50    | 182        | \$ 2,457.00  |
| 14       | 611  | 4" Conduit, Type F for Underdrain Outlet        | FT   | \$ 26.00    | 20         | \$ 520.00    |
| 15       | 611  | 10" Conduit, Type B                             | FT   | \$ 75.00    |            | \$ -         |
| 16       | 611  | 10" Conduit, Type C                             | FT   | \$ 65.00    |            | \$ -         |
| 17       | 611  | 15" Conduit, Type B                             | FT   | \$ 135.00   |            | \$ -         |
| 18       | 611  | Catch Basin Adjusted to Grade                   | EACH | \$ 500.00   | 7          | \$ 3,500.00  |
| 19       | 611  | Catch Basin, No. 3                              | EACH | \$ 4,000.00 |            | \$ -         |
| 20       | 611  | Catch Basin, No. 3A                             | EACH | \$ 3,000.00 |            | \$ -         |
| 21       | 611  | Catch Basin, No. 6                              | EACH | \$ 2,500.00 |            | \$ -         |
| 22       | 611  | Catch Basin, No. 2-2A                           | EACH | \$ 2,500.00 |            | \$ -         |



**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
ENGINEER'S ESTIMATE - ALTERNATIVE 1 "BARE-BONES"  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



**IBI GROUP**  
4150 Belden Village Street, Suite 104  
Canton OH 44718 USA  
tel 330 491 9000  
ibigroup.com

| REF   | ITEM | DESCRIPTION   | UNIT | UNIT PRICE    | TOTAL      |               |
|---|------|---|------|---------------|------------|---------------|
|   |      |   |      |               | EQ         | COST          |
| PAVEMENT                                      |      |   |      | \$            | 358,762.00 |               |
| 23  | 252  | Full Depth Pavement Sawing  | FT   | \$ 5.00       | 3,161      | \$ 15,805.00  |
| 24  | 301  | Asphalt Concrete Base, PG64-22, (449) [T = 6"]                      | CY   | \$ 180.00     | 917        | \$ 165,060.00 |
| 25  | 304  | Aggregate Base [T - 6"]   | CY   | \$ 68.00      | 947        | \$ 64,396.00  |
| 26  | 407  | Non-Tracking Tack Coat  | GAL  | \$ 3.75       | 592        | \$ 2,220.00   |
| 27  | 411  | Stabilized Crushed Aggregate [T = 3"]                               | CY   | \$ 110.00     | 14         | \$ 1,540.00   |
| 28  | 441  | Asphalt Concrete Surface Course, Type 1, (448), PG64-22 [T = 1.25"] | CY   | \$ 262.00     | 187        | \$ 48,994.00  |
| 29  | 441  | Asphalt Concrete Intermediate Course, Type 2, (448) [T = 1.75"]     | CY   | \$ 211.00     | 262        | \$ 55,282.00  |
| 30  | 452  | 8" Non-Reinforced Concrete Pavement, Class QC 1P [Driveways]        | SY   | \$ 75.00      | 19         | \$ 1,425.00   |
| 31  | 452  | 9" Non-Reinforced Concrete Pavement, Class QC 1P                    | SY   | \$ 80.00      |            | \$ -          |
| 32  | 609  | Curb, Type 6  | FT   | \$ 20.00      | 202        | \$ 4,040.00   |
| LIGHTING                                      |      |   |      | \$            | -          |               |
| 33  | 625  | Lighting, Misc.:  | LS   | \$ 100,000.00 |            | \$ -          |
| TRAFFIC CONTROL                               |      |   |      | \$            | 36,275.15  |               |
| 34  | 630  | Signing, Misc.:   | LS   | \$ 15,000.00  | 1          | \$ 15,000.00  |
| 35  | 630  | Signing, Misc.: Removal of Variable Lane Control Signage            | LS   | \$ 2,000.00   | 1          | \$ 2,000.00   |
| 36  | 642  | Edge Line, 6" Type 1  | MILE | \$ 10,000.00  | 0.74       | \$ 7,400.00   |
| 37  | 642  | Center Line, Type 1   | MILE | \$ 15,000.00  | 0.19       | \$ 2,850.00   |
| 38  | 642  | Channelizing Line, 8", Type 1                                       | FT   | \$ 2.65       | 553        | \$ 1,465.45   |
| 39  | 642  | Stop Line, Type 1   | FT   | \$ 7.20       | 90         | \$ 648.00     |
| 40  | 642  | Crosswalk Line, 12" Type 1  | FT   | \$ 8.60       | 122        | \$ 1,049.20   |
| 41  | 642  | Transverse/Diagonal Line, Type 1                                    | FT   | \$ 3.30       | 405        | \$ 1,336.50   |
| 42  | 642  | Chevron Marking, Type 1   | FT   | \$ 3.00       | 127        | \$ 381.00     |
| 43  | 642  | Lane Arrow, Type 1  | EACH | \$ 500.00     | 6          | \$ 3,000.00   |
| 44  | 642  | Wrong Way Arrow, Type 1   | EACH | \$ 500.00     | 2          | \$ 1,000.00   |
| 45  | 642  | Dotted Line, 6", Type 1   | FT   | \$ 1.00       | 145        | \$ 145.00     |
| TRAFFIC SIGNALS                               |      |   |      | \$            | 15,000.00  |               |
| 46  | 632  | Signalization, Misc.: Butler/Cleveland Modifications                | LS   | \$ 15,000.00  | 1          | \$ 15,000.00  |
| LANDSCAPING                                   |      |   |      | \$            | 20,000.00  |               |
| 47  | 661  | Planting, Misc.:  | LS   | \$ 20,000.00  | 1          | \$ 20,000.00  |
| (TOTAL CONSTRUCTION COST WITHOUT INCIDENTALS) |      |   |      |               | \$         | 596,200.65    |

**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
ENGINEER'S ESTIMATE - ALTERNATIVE 1 "BARE-BONES"  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



**IBI GROUP**  
4150 Belden Village Street, Suite 104  
Canton OH 44718 USA  
tel 330 491 9000  
[ibigroup.com](http://ibigroup.com)

| REF                                       | ITEM | DESCRIPTION                              | UNIT | UNIT PRICE    | TOTAL    |               |
|---|------|--|------|---------------|----------|---------------|
|   |      |  |      |               | EQ       | COST          |
| INCIDENTALS                               |      |  |      |               | \$       | 179,000.00    |
| 48  | 614  | Maintaining Traffic                      | LS   | \$ 20,000.00  | 1        | \$ 20,000.00  |
| 49  | 623  | Construction Layout Stakes and Surveying | LS   | \$ 10,000.00  | 1        | \$ 10,000.00  |
| 50  | 624  | Mobilization                             | LS   | \$ 20,000.00  | 1        | \$ 20,000.00  |
| 51  | --   | Design Contingency (20%)                 | LS   | \$ 129,000.00 | 1        | \$ 129,000.00 |
| SUBTOTAL                                  |      |  |      |               | SUBTOTAL |               |
| (W/ INCIDENTALS)                          |      |  |      |               | \$       | 775,201.00    |
| INFLATION (5.02%)                         |      |  |      |               | \$       | 38,915.00     |
| CONSTRUCTION TOTAL (2024 COST)            |      |  |      |               | \$       | 814,116.00    |
|   |      |  |      |               |          |               |
| CONSTRUCTION CONTINGENCY (10%)            |      |  |      |               | \$       | 81,412.00     |
| ESTIMATED TOTAL w/ CONTIGENCY (2024 COST) |      |  |      |               | \$       | 895,528.00    |

**EXHIBIT "A"**

**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
ENGINEER'S ESTIMATE - ALTERNATIVE 2 "UPGRADE"  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



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| REF      | ITEM | DESCRIPTION                                     | UNIT | UNIT PRICE  | TOTAL      |               |
|----------|------|---|------|-------------|------------|---------------|
|          |      |   |      |             | EQ         | COST          |
| ROADWAY  |      |   |      | \$          | 397,810.00 |               |
| 1        | 202  | Pavement Removed                                | SY   | \$ 10.50    | 7,464      | \$ 78,372.00  |
| 2        | 202  | Walk Removed                                    | SF   | \$ 12.00    | 5,909      | \$ 70,908.00  |
| 3        | 202  | Curb Removed                                    | FT   | \$ 5.50     | 3,287      | \$ 18,078.50  |
| 4        | 202  | Pipe Removed, 24" and Under                     | FT   | \$ 20.00    | 302        | \$ 6,040.00   |
| 5        | 202  | Catch Basin Removed                             | EACH | \$ 500.00   | 6          | \$ 3,000.00   |
| 6        | 203  | Excavation                                      | CY   | \$ 25.00    | 1,336      | \$ 33,400.00  |
| 7        | 203  | Embankment                                      | CY   | \$ 21.00    | 243        | \$ 5,103.00   |
| 8        | 204  | Subgrade Compaction                             | SY   | \$ 2.50     | 6,505      | \$ 16,262.50  |
| 9        | 204  | Proof Rolling                                   | HOUR | \$ 250.00   | 3          | \$ 750.00     |
| 10       | 608  | 4" Concrete Walk                                | SF   | \$ 18.00    | 8,800      | \$ 158,400.00 |
| 11       | 608  | Curb Ramp                                       | SF   | \$ 26.00    | 96         | \$ 2,496.00   |
| 12       | 622  | Barrier, Misc.: Relocate Ex. Portable Barrier   | LS   | \$ 5,000.00 | 1          | \$ 5,000.00   |
| DRAINAGE |      |   |      | \$          | 58,764.00  |               |
| 13       | 605  | 4" Base Pipe Underdrains with Geotextile Fabric | FT   | \$ 13.50    | 2,264      | \$ 30,564.00  |
| 14       | 611  | 4" Conduit, Type F for Underdrain Outlet        | FT   | \$ 26.00    | 80         | \$ 2,080.00   |
| 15       | 611  | 10" Conduit, Type B                             | FT   | \$ 75.00    | 29         | \$ 2,175.00   |
| 16       | 611  | 10" Conduit, Type C                             | FT   | \$ 65.00    | 20         | \$ 1,300.00   |
| 17       | 611  | 15" Conduit, Type B                             | FT   | \$ 135.00   | 27         | \$ 3,645.00   |
| 18       | 611  | Catch Basin Adjusted to Grade                   | EACH | \$ 500.00   | 1          | \$ 500.00     |
| 19       | 611  | Catch Basin, No. 3                              | EACH | \$ 4,000.00 | 2          | \$ 8,000.00   |
| 20       | 611  | Catch Basin, No. 3A                             | EACH | \$ 3,000.00 | 1          | \$ 3,000.00   |
| 21       | 611  | Catch Basin, No. 6                              | EACH | \$ 2,500.00 | 1          | \$ 2,500.00   |
| 22       | 611  | Catch Basin, No. 2-2A                           | EACH | \$ 2,500.00 | 2          | \$ 5,000.00   |

**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
ENGINEER'S ESTIMATE - ALTERNATIVE 2 "UPGRADE"  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



**IBI GROUP**  
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ibigroup.com

| REF   | ITEM | DESCRIPTION   | UNIT | UNIT PRICE    | TOTAL      |               |
|---|------|---|------|---------------|------------|---------------|
|   |      |   |      |               | EQ         | COST          |
| PAVEMENT                                      |      |   |      | \$            | 399,243.00 |               |
| 23  | 252  | Full Depth Pavement Sawing  | FT   | \$ 5.00       |            | \$ -          |
| 24  | 301  | Asphalt Concrete Base, PG64-22, (449) [T = 6"]                      | CY   | \$ 180.00     | 898        | \$ 161,640.00 |
| 25  | 304  | Aggregate Base [T - 6"]   | CY   | \$ 68.00      | 952        | \$ 64,736.00  |
| 26  | 407  | Non-Tracking Tack Coat  | GAL  | \$ 3.75       | 588        | \$ 2,205.00   |
| 27  | 411  | Stabilized Crushed Aggregate [T = 3"]                               | CY   | \$ 110.00     | 82         | \$ 9,020.00   |
| 28  | 441  | Asphalt Concrete Surface Course, Type 1, (448), PG64-22 [T = 1.25"] | CY   | \$ 262.00     | 186        | \$ 48,732.00  |
| 29  | 441  | Asphalt Concrete Intermediate Course, Type 2, (448) [T = 1.75"]     | CY   | \$ 211.00     | 260        | \$ 54,860.00  |
| 30  | 452  | 8" Non-Reinforced Concrete Pavement, Class QC 1P [Driveways]        | SY   | \$ 75.00      | 138        | \$ 10,350.00  |
| 31  | 452  | 9" Non-Reinforced Concrete Pavement, Class QC 1P                    | SY   | \$ 80.00      |            | \$ -          |
| 32  | 609  | Curb, Type 6  | FT   | \$ 20.00      | 2,385      | \$ 47,700.00  |
| LIGHTING                                      |      |   |      | \$            | 100,000.00 |               |
| 33  | 625  | Lighting, Misc.:  | LS   | \$ 100,000.00 | 1          | \$ 100,000.00 |
| TRAFFIC CONTROL                               |      |   |      | \$            | 66,724.05  |               |
| 34  | 630  | Signing, Misc.:   | LS   | \$ 15,000.00  | 1          | \$ 15,000.00  |
| 35  | 630  | Signing, Misc.: Removal of Variable Lane Control                    | LS   | \$ 30,000.00  | 1          | \$ 30,000.00  |
| 36  | 642  | Edge Line, 6" Type 1  | MILE | \$ 10,000.00  | 0.55       | \$ 5,500.00   |
| 37  | 642  | Center Line, Type 1   | MILE | \$ 15,000.00  | 0.45       | \$ 6,750.00   |
| 38  | 642  | Channelizing Line, 8", Type 1                                       | FT   | \$ 2.65       | 669        | \$ 1,772.85   |
| 39  | 642  | Stop Line, Type 1   | FT   | \$ 7.20       | 104        | \$ 748.80     |
| 40  | 642  | Crosswalk Line, 12" Type 1  | FT   | \$ 8.60       | 78         | \$ 670.80     |
| 41  | 642  | Transverse/Diagonal Line, Type 1                                    | FT   | \$ 3.30       | 482        | \$ 1,590.60   |
| 42  | 642  | Chevron Marking, Type 1   | FT   | \$ 3.00       | 127        | \$ 381.00     |
| 43  | 642  | Lane Arrow, Type 1  | EACH | \$ 500.00     | 6          | \$ 3,000.00   |
| 44  | 642  | Wrong Way Arrow, Type 1   | EACH | \$ 500.00     | 2          | \$ 1,000.00   |
| 45  | 642  | Dotted Line, 6", Type 1   | FT   | \$ 1.00       | 310        | \$ 310.00     |
| TRAFFIC SIGNALS                               |      |   |      | \$            | 15,000.00  |               |
| 46  | 632  | Signalization, Misc.: Butler/Cleveland Modifications                | LS   | \$ 15,000.00  | 1          | \$ 15,000.00  |
| LANDSCAPING                                   |      |   |      | \$            | 20,000.00  |               |
| 47  | 661  | Planting, Misc.:  | LS   | \$ 20,000.00  | 1          | \$ 20,000.00  |
| (TOTAL CONSTRUCTION COST WITHOUT INCIDENTALS) |      |   |      |               | \$         | 1,057,541.05  |

**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
ENGINEER'S ESTIMATE - ALTERNATIVE 2 "UPGRADE"  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



**IBI GROUP**  
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| REF  | ITEM | DESCRIPTION                              | UNIT | UNIT PRICE    | TOTAL    |               |
|--|------|--|------|---------------|----------|---------------|
|  |      |  |      |               | EQ       | COST          |
| INCIDENTALS                                |      |  |      |               | \$       | 296,000.00    |
| 48   | 614  | Maintaining Traffic                      | LS   | \$ 20,000.00  | 1        | \$ 20,000.00  |
| 49   | 623  | Construction Layout Stakes and Surveying | LS   | \$ 10,000.00  | 1        | \$ 10,000.00  |
| 50   | 624  | Mobilization                             | LS   | \$ 40,000.00  | 1        | \$ 40,000.00  |
| 51   | --   | Design Contingency (20%)                 | LS   | \$ 226,000.00 | 1        | \$ 226,000.00 |
| SUBTOTAL                                   |      |  |      |               | SUBTOTAL |               |
| (W/ INCIDENTALS)                           |      |  |      |               | \$       | 1,353,542.00  |
| INFLATION (5.02%)                          |      |  |      |               | \$       | 67,948.00     |
| CONSTRUCTION TOTAL (2024 COST)             |      |  |      |               | \$       | 1,421,490.00  |
|  |      |  |      |               |          |               |
| CONSTRUCTION CONTINGENCY (10%)             |      |  |      |               | \$       | 142,149.00    |
| ESTIMATED TOTAL w/ CONTINGENCY (2024 COST) |      |  |      |               | \$       | 1,563,639.00  |

**EXHIBIT "A"**

**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
ENGINEER'S ESTIMATE - ALTERNATIVE 3 "HYBRID"  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



**IBI GROUP**  
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| REF      | ITEM | DESCRIPTION                                     | UNIT | UNIT PRICE  | TOTAL      |              |
|----------|------|---|------|-------------|------------|--------------|
|          |      |   |      |             | EQ         | COST         |
| ROADWAY  |      |   |      | \$          | 168,258.50 |              |
| 1        | 202  | Pavement Removed                                | SY   | \$ 10.50    | 7,264      | \$ 76,272.00 |
| 2        | 202  | Walk Removed                                    | SF   | \$ 12.00    | 232        | \$ 2,784.00  |
| 3        | 202  | Curb Removed                                    | FT   | \$ 5.50     | 350        | \$ 1,925.00  |
| 4        | 202  | Pipe Removed, 24" and Under                     | FT   | \$ 20.00    |            | \$ -         |
| 5        | 202  | Catch Basin Removed                             | EACH | \$ 500.00   |            | \$ -         |
| 6        | 203  | Excavation                                      | CY   | \$ 25.00    | 1,397      | \$ 34,925.00 |
| 7        | 203  | Embankment                                      | CY   | \$ 21.00    | 182        | \$ 3,822.00  |
| 8        | 204  | Subgrade Compaction                             | SY   | \$ 2.50     | 5,873      | \$ 14,682.50 |
| 9        | 204  | Proof Rolling                                   | HOUR | \$ 250.00   | 3          | \$ 750.00    |
| 10       | 608  | 4" Concrete Walk                                | SF   | \$ 18.00    | 1,561      | \$ 28,098.00 |
| 11       | 608  | Curb Ramp                                       | SF   | \$ 26.00    |            | \$ -         |
| 12       | 622  | Barrier, Misc.: Relocate Ex. Portable Barrier   | LS   | \$ 5,000.00 | 1          | \$ 5,000.00  |
| DRAINAGE |      |   |      | \$          | 35,213.00  |              |
| 13       | 605  | 4" Base Pipe Underdrains with Geotextile Fabric | FT   | \$ 13.50    | 1,198      | \$ 16,173.00 |
| 14       | 611  | 4" Conduit, Type F for Underdrain Outlet        | FT   | \$ 26.00    | 60         | \$ 1,560.00  |
| 15       | 611  | 10" Conduit, Type B                             | FT   | \$ 75.00    |            | \$ -         |
| 16       | 611  | 10" Conduit, Type C                             | FT   | \$ 65.00    |            | \$ -         |
| 17       | 611  | 15" Conduit, Type B                             | FT   | \$ 135.00   | 48         | \$ 6,480.00  |
| 18       | 611  | Catch Basin Adjusted to Grade                   | EACH | \$ 500.00   | 7          | \$ 3,500.00  |
| 19       | 611  | Catch Basin, No. 3                              | EACH | \$ 4,000.00 |            | \$ -         |
| 20       | 611  | Catch Basin, No. 3A                             | EACH | \$ 3,000.00 |            | \$ -         |
| 21       | 611  | Catch Basin, No. 6                              | EACH | \$ 2,500.00 |            | \$ -         |
| 22       | 611  | Catch Basin, No. 2-2A                           | EACH | \$ 2,500.00 | 3          | \$ 7,500.00  |

**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
ENGINEER'S ESTIMATE - ALTERNATIVE 3 "HYBRID"  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



**IBI GROUP**  
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Canton OH 44718 USA  
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ibigroup.com

| REF   | ITEM | DESCRIPTION   | UNIT | UNIT PRICE    | TOTAL      |               |
|---|------|---|------|---------------|------------|---------------|
|   |      |   |      |               | EQ         | COST          |
| PAVEMENT                                      |      |   |      | \$            | 358,762.00 |               |
| 23  | 252  | Full Depth Pavement Sawing  | FT   | \$ 5.00       | 3,161      | \$ 15,805.00  |
| 24  | 301  | Asphalt Concrete Base, PG64-22, (449) [T = 6"]                      | CY   | \$ 180.00     | 917        | \$ 165,060.00 |
| 25  | 304  | Aggregate Base [T - 6"]   | CY   | \$ 68.00      | 947        | \$ 64,396.00  |
| 26  | 407  | Non-Tracking Tack Coat  | GAL  | \$ 3.75       | 592        | \$ 2,220.00   |
| 27  | 411  | Stabilized Crushed Aggregate [T = 3"]                               | CY   | \$ 110.00     | 14         | \$ 1,540.00   |
| 28  | 441  | Asphalt Concrete Surface Course, Type 1, (448), PG64-22 [T = 1.25"] | CY   | \$ 262.00     | 187        | \$ 48,994.00  |
| 29  | 441  | Asphalt Concrete Intermediate Course, Type 2, (448) [T = 1.75"]     | CY   | \$ 211.00     | 262        | \$ 55,282.00  |
| 30  | 452  | 8" Non-Reinforced Concrete Pavement, Class QC 1P [Driveways]        | SY   | \$ 75.00      | 19         | \$ 1,425.00   |
| 31  | 452  | 9" Non-Reinforced Concrete Pavement, Class QC 1P                    | SY   | \$ 80.00      |            | \$ -          |
| 32  | 609  | Curb, Type 6  | FT   | \$ 20.00      | 202        | \$ 4,040.00   |
| LIGHTING                                      |      |   |      | \$            | -          |               |
| 33  | 625  | Lighting, Misc.:  | LS   | \$ 100,000.00 |            | \$ -          |
| TRAFFIC CONTROL                               |      |   |      | \$            | 36,275.15  |               |
| 34  | 630  | Signing, Misc.:   | LS   | \$ 15,000.00  | 1          | \$ 15,000.00  |
| 35  | 630  | Signing, Misc.: Removal of Variable Lane Control Signage            | LS   | \$ 2,000.00   | 1          | \$ 2,000.00   |
| 36  | 642  | Edge Line, 6" Type 1  | MILE | \$ 10,000.00  | 0.74       | \$ 7,400.00   |
| 37  | 642  | Center Line, Type 1   | MILE | \$ 15,000.00  | 0.19       | \$ 2,850.00   |
| 38  | 642  | Channelizing Line, 8", Type 1                                       | FT   | \$ 2.65       | 553        | \$ 1,465.45   |
| 39  | 642  | Stop Line, Type 1   | FT   | \$ 7.20       | 90         | \$ 648.00     |
| 40  | 642  | Crosswalk Line, 12" Type 1  | FT   | \$ 8.60       | 122        | \$ 1,049.20   |
| 41  | 642  | Transverse/Diagonal Line, Type 1                                    | FT   | \$ 3.30       | 405        | \$ 1,336.50   |
| 42  | 642  | Chevron Marking, Type 1   | FT   | \$ 3.00       | 127        | \$ 381.00     |
| 43  | 642  | Lane Arrow, Type 1  | EACH | \$ 500.00     | 6          | \$ 3,000.00   |
| 44  | 642  | Wrong Way Arrow, Type 1   | EACH | \$ 500.00     | 2          | \$ 1,000.00   |
| 45  | 642  | Dotted Line, 6", Type 1   | FT   | \$ 1.00       | 145        | \$ 145.00     |
| TRAFFIC SIGNALS                               |      |   |      | \$            | 15,000.00  |               |
| 46  | 632  | Signalization, Misc.: Butler/Cleveland Modifications                | LS   | \$ 15,000.00  | 1          | \$ 15,000.00  |
| LANDSCAPING                                   |      |   |      | \$            | 20,000.00  |               |
| 47  | 661  | Planting, Misc.:  | LS   | \$ 20,000.00  | 1          | \$ 20,000.00  |
| (TOTAL CONSTRUCTION COST WITHOUT INCIDENTALS) |      |   |      |               | \$         | 633,508.65    |

**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
ENGINEER'S ESTIMATE - ALTERNATIVE 3 "HYBRID"  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



**IBI GROUP**  
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| REF  | ITEM | DESCRIPTION                              | UNIT | UNIT PRICE    | TOTAL    |               |
|--|------|--|------|---------------|----------|---------------|
|  |      |  |      |               | EQ       | COST          |
| INCIDENTALS                                |      |  |      |               | \$       | 187,000.00    |
| 48   | 614  | Maintaining Traffic                      | LS   | \$ 20,000.00  | 1        | \$ 20,000.00  |
| 49   | 623  | Construction Layout Stakes and Surveying | LS   | \$ 10,000.00  | 1        | \$ 10,000.00  |
| 50   | 624  | Mobilization                             | LS   | \$ 20,000.00  | 1        | \$ 20,000.00  |
| 51   | --   | Design Contingency (20%)                 | LS   | \$ 137,000.00 | 1        | \$ 137,000.00 |
| SUBTOTAL                                   |      |  |      |               | SUBTOTAL |               |
| (W/ INCIDENTALS)                           |      |  |      |               | \$       | 820,509.00    |
| INFLATION (5.02%)                          |      |  |      |               | \$       | 41,190.00     |
| CONSTRUCTION TOTAL (2024 COST)             |      |  |      |               | \$       | 861,699.00    |
|  |      |  |      |               |          |               |
| CONSTRUCTION CONTINGENCY (10%)             |      |  |      |               | \$       | 86,170.00     |
| ESTIMATED TOTAL w/ CONTINGENCY (2024 COST) |      |  |      |               | \$       | 947,869.00    |

**EXHIBIT "A"**



**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
OPTIONAL BID - REMOVAL OF VARIABLE LANE INFRASTRUCTURE  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



**IBI GROUP**  
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| REF      | ITEM | DESCRIPTION                                     | UNIT | UNIT PRICE  | TOTAL |      |
|----------|------|---|------|-------------|-------|------|
|          |      |   |      |             | EQ    | COST |
| ROADWAY  |      |   |      | \$ -        |       |      |
| 1        | 202  | Pavement Removed                                | SY   | \$ 10.50    |       | \$ - |
| 2        | 202  | Walk Removed                                    | SF   | \$ 12.00    |       | \$ - |
| 3        | 202  | Curb Removed                                    | FT   | \$ 5.50     |       | \$ - |
| 4        | 202  | Pipe Removed, 24" and Under                     | FT   | \$ 20.00    |       | \$ - |
| 5        | 202  | Catch Basin Removed                             | EACH | \$ 500.00   |       | \$ - |
| 6        | 203  | Excavation                                      | CY   | \$ 25.00    |       | \$ - |
| 7        | 203  | Embankment                                      | CY   | \$ 21.00    |       | \$ - |
| 8        | 204  | Subgrade Compaction                             | SY   | \$ 2.50     |       | \$ - |
| 9        | 204  | Proof Rolling                                   | HOUR | \$ 250.00   |       | \$ - |
| 10       | 608  | 4" Concrete Walk                                | SF   | \$ 18.00    |       | \$ - |
| 11       | 608  | Curb Ramp                                       | SF   | \$ 26.00    |       | \$ - |
| 12       | 622  | Barrier, Misc.: Relocate Ex. Portable Barrier   | LS   | \$ 5,000.00 |       | \$ - |
| DRAINAGE |      |   |      | \$ -        |       |      |
| 13       | 605  | 4" Base Pipe Underdrains with Geotextile Fabric | FT   | \$ 13.50    |       | \$ - |
| 14       | 611  | 4" Conduit, Type F for Underdrain Outlet        | FT   | \$ 26.00    |       | \$ - |
| 15       | 611  | 10" Conduit, Type B                             | FT   | \$ 75.00    |       | \$ - |
| 16       | 611  | 10" Conduit, Type C                             | FT   | \$ 65.00    |       | \$ - |
| 17       | 611  | 15" Conduit, Type B                             | FT   | \$ 135.00   |       | \$ - |
| 18       | 611  | Catch Basin Adjusted to Grade                   | EACH | \$ 500.00   |       | \$ - |
| 19       | 611  | Catch Basin, No. 3                              | EACH | \$ 4,000.00 |       | \$ - |
| 20       | 611  | Catch Basin, No. 3A                             | EACH | \$ 3,000.00 |       | \$ - |
| 21       | 611  | Catch Basin, No. 6                              | EACH | \$ 2,500.00 |       | \$ - |
| 22       | 611  | Catch Basin, No. 2-2A                           | EACH | \$ 2,500.00 |       | \$ - |

**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
OPTIONAL BID - REMOVAL OF VARIABLE LANE INFRASTRUCTURE  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



**IBI GROUP**  
4150 Belden Village Street, Suite 104  
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| REF   | ITEM | DESCRIPTION   | UNIT | UNIT PRICE    | TOTAL     |              |
|---|------|---|------|---------------|-----------|--------------|
|   |      |   |      |               | EQ        | COST         |
| PAVEMENT                                      |      |   |      | \$            | -         |              |
| 23  | 252  | Full Depth Pavement Sawing  | FT   | \$ 5.00       |           | \$ -         |
| 24  | 301  | Asphalt Concrete Base, PG64-22, (449) [T = 6"]                      | CY   | \$ 180.00     |           | \$ -         |
| 25  | 304  | Aggregate Base [T - 6"]   | CY   | \$ 68.00      |           | \$ -         |
| 26  | 407  | Non-Tracking Tack Coat  | GAL  | \$ 3.75       |           | \$ -         |
| 27  | 411  | Stabilized Crushed Aggregate [T = 3"]                               | CY   | \$ 110.00     |           | \$ -         |
| 28  | 441  | Asphalt Concrete Surface Course, Type 1, (448), PG64-22 [T = 1.25"] | CY   | \$ 262.00     |           | \$ -         |
| 29  | 441  | Asphalt Concrete Intermediate Course, Type 2, (448) [T = 1.75"]     | CY   | \$ 211.00     |           | \$ -         |
| 30  | 452  | 8" Non-Reinforced Concrete Pavement, Class QC 1P [Driveways]        | SY   | \$ 75.00      |           | \$ -         |
| 31  | 452  | 9" Non-Reinforced Concrete Pavement, Class QC 1P                    | SY   | \$ 80.00      |           | \$ -         |
| 32  | 609  | Curb, Type 6  | FT   | \$ 20.00      |           | \$ -         |
| LIGHTING                                      |      |   |      | \$            | -         |              |
| 33  | 625  | Lighting, Misc.:  | LS   | \$ 100,000.00 |           | \$ -         |
| TRAFFIC CONTROL                               |      |   |      | \$            | 28,000.00 |              |
| 34  | 630  | Signing, Misc.:   | LS   | \$ 15,000.00  |           | \$ -         |
| 35  | 630  | Signing, Misc.: Removal of Variable Lane Control                    | LS   | \$ 28,000.00  | 1         | \$ 28,000.00 |
| 36  | 642  | Edge Line, 6" Type 1  | MILE | \$ 10,000.00  |           | \$ -         |
| 37  | 642  | Center Line, Type 1   | MILE | \$ 15,000.00  |           | \$ -         |
| 38  | 642  | Channelizing Line, 8", Type 1                                       | FT   | \$ 2.65       |           | \$ -         |
| 39  | 642  | Stop Line, Type 1   | FT   | \$ 7.20       |           | \$ -         |
| 40  | 642  | Crosswalk Line, 12" Type 1  | FT   | \$ 8.60       |           | \$ -         |
| 41  | 642  | Transverse/Diagonal Line, Type 1                                    | FT   | \$ 3.30       |           | \$ -         |
| 42  | 642  | Chevron Marking, Type 1   | FT   | \$ 3.00       |           | \$ -         |
| 43  | 642  | Lane Arrow, Type 1  | EACH | \$ 500.00     |           | \$ -         |
| 44  | 642  | Wrong Way Arrow, Type 1   | EACH | \$ 500.00     |           | \$ -         |
| 45  | 642  | Dotted Line, 6", Type 1   | FT   | \$ 1.00       |           | \$ -         |
| TRAFFIC SIGNALS                               |      |   |      | \$            | -         |              |
| 46  | 632  | Signalization, Misc.: Butler/Cleveland Modifications                | LS   | \$ 5,000.00   |           | \$ -         |
| LANDSCAPING                                   |      |   |      | \$            | -         |              |
| 47  | 661  | Planting, Misc.:  | LS   | \$ 20,000.00  |           | \$ -         |
| (TOTAL CONSTRUCTION COST WITHOUT INCIDENTALS) |      |   |      |               | \$        | 28,000.00    |

**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
OPTIONAL BID - REMOVAL OF VARIABLE LANE INFRASTRUCTURE  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



**IBI GROUP**  
4150 Belden Village Street, Suite 104  
Canton OH 44718 USA  
tel 330 491 9000  
[ibigroup.com](http://ibigroup.com)

| REF                                       | ITEM | DESCRIPTION                              | UNIT | UNIT PRICE  | TOTAL    |             |
|---|------|--|------|-------------|----------|-------------|
|   |      |  |      |             | EQ       | COST        |
| INCIDENTALS                               |      |  |      |             | \$       | 6,000.00    |
| 48  | 614  | Maintaining Traffic                      | LS   |             |          | \$ -        |
| 49  | 623  | Construction Layout Stakes and Surveying | LS   |             |          | \$ -        |
| 50  | 624  | Mobilization                             | LS   |             |          | \$ -        |
| 51  | --   | Design Contingency (20%)                 | LS   | \$ 6,000.00 | 1        | \$ 6,000.00 |
| SUBTOTAL                                  |      |  |      |             | SUBTOTAL |             |
| (W/ INCIDENTALS)                          |      |  |      |             | \$       | 34,000.00   |
| INFLATION (5.02%)                         |      |  |      |             | \$       | 1,707.00    |
| CONSTRUCTION TOTAL (2024 COST)            |      |  |      |             | \$       | 35,707.00   |
|   |      |  |      |             |          |             |
| CONSTRUCTION CONTINGENCY (10%)            |      |  |      |             | \$       | 3,571.00    |
| ESTIMATED TOTAL w/ CONTIGENCY (2024 COST) |      |  |      |             | \$       | 39,278.00   |

**EXHIBIT "A"**

**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
OPTIONAL BID - FRONTAGE ROAD RECONSTRUCTION  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



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4150 Belden Village Street, Suite 104  
Canton OH 44718 USA  
tel 330 491 9000  
ibigroup.com

| REF      | ITEM | DESCRIPTION                                     | UNIT | UNIT PRICE  | TOTAL |              |
|----------|------|---|------|-------------|-------|--------------|
|          |      |   |      |             | EQ    | COST         |
| ROADWAY  |      |   |      |             | \$    | 39,500.00    |
| 1        | 202  | Pavement Removed                                | SY   | \$ 10.50    | 3,000 | \$ 31,500.00 |
| 2        | 202  | Walk Removed                                    | SF   | \$ 12.00    |       | \$ -         |
| 3        | 202  | Curb Removed                                    | FT   | \$ 5.50     |       | \$ -         |
| 4        | 202  | Pipe Removed, 24" and Under                     | FT   | \$ 20.00    |       | \$ -         |
| 5        | 202  | Catch Basin Removed                             | EACH | \$ 500.00   |       | \$ -         |
| 6        | 203  | Excavation                                      | CY   | \$ 25.00    |       | \$ -         |
| 7        | 203  | Embankment                                      | CY   | \$ 21.00    |       | \$ -         |
| 8        | 204  | Subgrade Compaction                             | SY   | \$ 2.50     | 3,000 | \$ 7,500.00  |
| 9        | 204  | Proof Rolling                                   | HOUR | \$ 250.00   | 2     | \$ 500.00    |
| 10       | 608  | 4" Concrete Walk                                | SF   | \$ 18.00    |       | \$ -         |
| 11       | 608  | Curb Ramp                                       | SF   | \$ 26.00    |       | \$ -         |
| 12       | 622  | Barrier, Misc.: Relocate Ex. Portable Barrier   | LS   | \$ 5,000.00 |       | \$ -         |
| DRAINAGE |      |   |      |             | \$    | -            |
| 13       | 605  | 4" Base Pipe Underdrains with Geotextile Fabric | FT   | \$ 13.50    |       | \$ -         |
| 14       | 611  | 4" Conduit, Type F for Underdrain Outlet        | FT   | \$ 26.00    |       | \$ -         |
| 15       | 611  | 10" Conduit, Type B                             | FT   | \$ 75.00    |       | \$ -         |
| 16       | 611  | 10" Conduit, Type C                             | FT   | \$ 65.00    |       | \$ -         |
| 17       | 611  | 15" Conduit, Type B                             | FT   | \$ 135.00   |       | \$ -         |
| 18       | 611  | Catch Basin Adjusted to Grade                   | EACH | \$ 500.00   |       | \$ -         |
| 19       | 611  | Catch Basin, No. 3                              | EACH | \$ 4,000.00 |       | \$ -         |
| 20       | 611  | Catch Basin, No. 3A                             | EACH | \$ 3,000.00 |       | \$ -         |
| 21       | 611  | Catch Basin, No. 6                              | EACH | \$ 2,500.00 |       | \$ -         |
| 22       | 611  | Catch Basin, No. 2-2A                           | EACH | \$ 2,500.00 |       | \$ -         |

**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
OPTIONAL BID - FRONTAGE ROAD RECONSTRUCTION  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



**IBI GROUP**  
4150 Belden Village Street, Suite 104  
Canton OH 44718 USA  
tel 330 491 9000  
ibigroup.com

| REF   | ITEM | DESCRIPTION   | UNIT | UNIT PRICE    | TOTAL      |               |
|---|------|---|------|---------------|------------|---------------|
|   |      |   |      |               | EQ         | COST          |
| PAVEMENT                                      |      |   |      | \$            | 274,000.00 |               |
| 23  | 252  | Full Depth Pavement Sawing  | FT   | \$ 5.00       |            | \$ -          |
| 24  | 301  | Asphalt Concrete Base, PG64-22, (449) [T = 6"]                      | CY   | \$ 180.00     |            | \$ -          |
| 25  | 304  | Aggregate Base [T - 6"]   | CY   | \$ 68.00      | 500        | \$ 34,000.00  |
| 26  | 407  | Non-Tracking Tack Coat  | GAL  | \$ 3.75       |            | \$ -          |
| 27  | 411  | Stabilized Crushed Aggregate [T = 3"]                               | CY   | \$ 110.00     |            | \$ -          |
| 28  | 441  | Asphalt Concrete Surface Course, Type 1, (448), PG64-22 [T = 1.25"] | CY   | \$ 262.00     |            | \$ -          |
| 29  | 441  | Asphalt Concrete Intermediate Course, Type 2, (448) [T = 1.75"]     | CY   | \$ 211.00     |            | \$ -          |
| 30  | 452  | 8" Non-Reinforced Concrete Pavement, Class QC 1P [Driveways]        | SY   | \$ 75.00      |            | \$ -          |
| 31  | 452  | 9" Non-Reinforced Concrete Pavement, Class QC 1P                    | SY   | \$ 80.00      | 3,000      | \$ 240,000.00 |
| 32  | 609  | Curb, Type 6  | FT   | \$ 20.00      |            | \$ -          |
| LIGHTING                                      |      |   |      | \$            | -          |               |
| 33  | 625  | Lighting, Misc.:  | LS   | \$ 100,000.00 |            | \$ -          |
| TRAFFIC CONTROL                               |      |   |      | \$            | 2,500.00   |               |
| 34  | 630  | Signing, Misc.:   | LS   | \$ 15,000.00  |            | \$ -          |
| 35  | 630  | Signing, Misc.: Removal of Variable Lane Control                    | LS   | \$ 2,000.00   |            | \$ -          |
| 36  | 642  | Edge Line, 6" Type 1  | MILE | \$ 10,000.00  | 0.1        | \$ 1,000.00   |
| 37  | 642  | Center Line, Type 1   | MILE | \$ 15,000.00  | 0.1        | \$ 1,500.00   |
| 38  | 642  | Channelizing Line, 8", Type 1                                       | FT   | \$ 2.65       |            | \$ -          |
| 39  | 642  | Stop Line, Type 1   | FT   | \$ 7.20       |            | \$ -          |
| 40  | 642  | Crosswalk Line, 12" Type 1  | FT   | \$ 8.60       |            | \$ -          |
| 41  | 642  | Transverse/Diagonal Line, Type 1                                    | FT   | \$ 3.30       |            | \$ -          |
| 42  | 642  | Chevron Marking, Type 1   | FT   | \$ 3.00       |            | \$ -          |
| 43  | 642  | Lane Arrow, Type 1  | EACH | \$ 500.00     |            | \$ -          |
| 44  | 642  | Wrong Way Arrow, Type 1   | EACH | \$ 500.00     |            | \$ -          |
| 45  | 642  | Dotted Line, 6", Type 1   | FT   | \$ 1.00       |            | \$ -          |
| TRAFFIC SIGNALS                               |      |   |      | \$            | -          |               |
| 46  | 632  | Signalization, Misc.: Butler/Cleveland Modifications                | LS   | \$ 5,000.00   |            | \$ -          |
| LANDSCAPING                                   |      |   |      | \$            | -          |               |
| 47  | 661  | Planting, Misc.:  | LS   | \$ 20,000.00  |            | \$ -          |
| (TOTAL CONSTRUCTION COST WITHOUT INCIDENTALS) |      |   |      |               | \$         | 316,000.00    |

**BUTLER STREET RECONSTRUCTION  
CONCEPTUAL ALTERNATIVES STUDY  
OPTIONAL BID - FRONTAGE ROAD RECONSTRUCTION  
FINAL SUBMITTAL COST ESTIMATE - 1/18/2022**



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| REF                                       | ITEM | DESCRIPTION                              | UNIT | UNIT PRICE | TOTAL    |            |
|---|------|--|------|------------|----------|------------|
|   |      |  |      |            | EQ       | COST       |
| INCIDENTALS                               |      |  |      |            | \$       | -          |
| 48  | 614  | Maintaining Traffic                      | LS   |            |          | \$ -       |
| 49  | 623  | Construction Layout Stakes and Surveying | LS   |            |          | \$ -       |
| 50  | 624  | Mobilization                             | LS   |            |          | \$ -       |
| 51  | --   | Design Contingency (20%)                 | LS   |            |          | \$ -       |
| SUBTOTAL                                  |      |  |      |            | SUBTOTAL |            |
| (W/ INCIDENTALS)                          |      |  |      |            | \$       | 316,000.00 |
| INFLATION (5.02%)                         |      |  |      |            | \$       | 15,863.00  |
| CONSTRUCTION TOTAL (2024 COST)            |      |  |      |            | \$       | 331,863.00 |
|   |      |  |      |            |          |            |
| CONSTRUCTION CONTINGENCY (10%)            |      |  |      |            | \$       | 33,186.00  |
| ESTIMATED TOTAL w/ CONTIGENCY (2024 COST) |      |  |      |            | \$       | 365,049.00 |

**EXHIBIT "A"**

## FY 2023-2027 Business Plan Inflation Calculator:

[Not sure if you have the latest calculator? Click here.](#)

Last Modified: 7/25/2022

Today's Date:  
January 10, 2023

Please Enter Values in the Yellow Areas Only:

**Estimation Start Date:**

Less than or Equal to Today's Date  
(mm/dd/yyyy)

2023-01-10

Start Date:

**Enter Construction Mid-Point Date:**

(cannot exceed 01/10/2048)  
(mm/dd/yyyy)

2024-01-01

Construction Mid-Point Date:

**Present-Day Estimated Cost:**

\$100.00

Estimated Dollar Amount:

Estimate Start Date to Construction Mid-Point Date:

12

Months

Inflation - Start to Mid-Point of Construction:

(compounded growth rate)

Inflated Dollar Amount:

Business Plan

5.0%

\$105.02

**Estimator's Name:**

**County - Route - Section:**

Butler Street Reconstruction - Conceptual Alternatives Study

**PID:**

--

**Estimator's Notes:**

Final Study Submittal

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**APPENDIX E**  
**EXHIBIT "A"**  
**IMPERVIOUS AREA REDUCTION CALCULATIONS**



## BUTLER STREET RECONSTRUCTION - IMPERVIOUS AREA REDUCTION CALCULATIONS

### ALTERNATIVE 1 - "BARE-BONES"

#### Ohio EPA General Permit Part III.G.2.e:

##### Previously Developed Areas:

Ohio EPA encourages the redevelopment of previously graded, paved or built upon sites through a reduction of the WQv treatment requirement. For a previously developed area, one or a combination of the following two conditions shall be met:

- A 20 percent net reduction of the site's volumetric runoff coefficient through impervious area reduction with soil restoration or replacing impervious roof area with green roof area (for these purposes green roofs shall be considered pervious surface) or
- Treatment of 20 percent of the WQv for the previously developed area using a practice meeting Table 4a/4b criteria.

##### OEPA General Permit Equation 2:

Rv = Volumetric Runoff Coefficient

$$Rv = 0.05 + 0.9i$$

i = fraction of impervious area

#### Alternative 1 - "Bare-Bones"

##### Project EDA

$$EDA = 68,500sf = 1.57 \text{ Ac}$$

##### Existing Volumetric Runoff Coefficient (Rve) Calculations:

$$R/W \text{ Area} = 106,436sf = 2.44 \text{ Ac}$$

$$\text{Pre-Construction Impervious} = 77,485sf = 1.78 \text{ Ac}$$

$$Rve = 0.05 + 0.9 * (1.78 / 2.44) = 0.707$$

##### Proposed Volumetric Runoff Coefficient (Rvp) Calculations:

$$R/W \text{ Area} = 106,436sf = 2.44 \text{ Ac}$$

$$\text{Post-Construction Impervious} = 54,992sf = 1.26 \text{ Ac}$$

$$Rvp = 0.05 + 0.9 * (1.26 / 2.44) = 0.515$$

##### Volumetric Runoff Coefficient Reduction

$$(Rve - Rvp) / Rve = (0.707 - 0.515) / 0.707 = 27.2\% \text{ <-- Meets OEPA Impervious Reduction Threshold of 20\%}$$

EXHIBIT "A"

## BUTLER STREET RECONSTRUCTION - IMPERVIOUS AREA REDUCTION CALCULATIONS

### ALTERNATIVE 2 - "UPGRADE"

#### Ohio EPA General Permit Part III.G.2.e:

##### Previously Developed Areas:

Ohio EPA encourages the redevelopment of previously graded, paved or built upon sites through a reduction of the WQv treatment requirement. For a previously developed area, one or a combination of the following two conditions shall be met:

- A 20 percent net reduction of the site's volumetric runoff coefficient through impervious area reduction with soil restoration or replacing impervious roof area with green roof area (for these purposes green roofs shall be considered pervious surface) or
- Treatment of 20 percent of the WQv for the previously developed area using a practice meeting Table 4a/4b criteria.

##### OEPA General Permit Equation 2:

Rv = Volumetric Runoff Coefficient

$$Rv = 0.05 + 0.9i$$

i = fraction of impervious area

#### Alternative 2 - "Upgrade"

##### Project EDA

$$EDA = 76,750sf = 1.76 \text{ Ac}$$

##### Existing Volumetric Runoff Coefficient (Rve) Calculations:

$$R/W \text{ Area} = 106,436sf = 2.44 \text{ Ac}$$

$$\text{Pre-Construction Impervious} = 77,485sf = 1.78 \text{ Ac}$$

$$Rve = 0.05 + 0.9 * (1.78 / 2.44) = 0.707$$

##### Proposed Volumetric Runoff Coefficient (Rvp) Calculations:

$$R/W \text{ Area} = 106,436sf = 2.44 \text{ Ac}$$

$$\text{Post-Construction Impervious} = 58,431sf = 1.34 \text{ Ac}$$

$$Rvp = 0.05 + 0.9 * (1.34 / 2.44) = 0.544$$

##### Volumetric Runoff Coefficient Reduction

$$(Rve - Rvp) / Rve = (0.707 - 0.544) / 0.707 = 23.1\% \text{ <-- Meets OEPA Impervious Reduction Threshold of 20\%}$$

EXHIBIT "A"

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# EXHIBIT "A"

## APPENDIX C TASK BREAKDOWN

DETAILED BREAKDOWN OF PROPOSED TOTAL HOURS, PERSONNEL CATEGORIES AND HOURLY RATES FOR CITY OF SANDUSKY  
Butler Street Reconstruction

CONSULTANT: IBI Group

PROJECT DESCRIPTION: Assist City of Sandusky with engineering services for the proposed reconstruction along Butler Street.

| HOURLY RATES         |          | Proposal Date: | 2023-02-15 |
|----------------------|----------|----------------|------------|
| Project Manager      | \$170.00 |                |            |
| Sr. Traffic Engineer | \$160.00 |                |            |
| Roadway Engineer     | \$135.00 |                |            |
| Design Technician    | \$100.00 |                |            |
| Surveyor             | \$135.00 |                |            |
| Survey Crew (2-man)  | \$160.00 |                |            |

| Task Description  | No. Shts   | Project Manager | Sr. Traffic Engineer | Roadway Engineer | Design Technician | Surveyor | Survey Crew (2-man) | Overall Total Hours | Direct Costs | Sub Costs | Total Costs | Justification - ODOT Fee Guidance Low Rate unless noted otherwise  |
|---|--|-----------------|----------------------|------------------|-------------------|----------|---------------------|---------------------|--------------|-----------|-------------|--|
| Authorized Services   |  |                 |                      |                  |                   |          |                     |                     |              |           |             |  |
| 2.3 Field Survey & Basemapping  |  |                 |                      |                  |                   |          |                     |                     |              |           |             |  |
| 2.3.A.A - Project Control, Benchmarks and Reference Points                      | 0  | 0               | 0                    | 0                | 0                 | 4        | 28                  | 32                  | \$0          | \$0       | \$5,020     | 2.3.A.A - 16 hours per monument; 2 monuments estimated   |
| 2.3.A.B.1 - Monumentation Recovery - Ex Centerline and R/W                      | 0  | 0               | 0                    | 0                | 0                 | 2        | 8                   | 10                  | \$0          | \$0       | \$1,550     | 2.3.A.B.1 - 40 hours per mile; estimate 0.5 miles  |
| 2.3.A.B.2 - Monumentation Recovery - Property Lines                             | 0  | 0               | 0                    | 0                | 0                 | 2        | 8                   | 10                  | \$0          | \$0       | \$1,550     | 2.3.A.B.2 - 16 hours per 1 owner; 24 owners x 16 = 384; assume that property lines will be drawn in from the Auditor's website with minimal field check; R/W is not anticipated. |
| 2.3.A.C - Base Mapping (incl. field verify.)                                    | 0  | 1               | 0                    | 8                | 31                | 5        | 48                  | 93                  | \$0          | \$0       | \$12,705    | 2.3.A.C - 16 hours per 0.1 mile of project length; assume 0.5 miles @ 8 hours/0.1 mile   |
| 2.3.G.A Utility Coordination and Documentation                                  | 0  | 0               | 0                    | 8                | 0                 | 0        | 0                   | 8                   | \$0          | \$0       | \$1,080     | Assume 8 hours/project   |
| 2.3 Field Survey & Basemapping  | 0  | 1               | 0                    | 16               | 31                | 13       | 92                  | 153                 | \$0          | \$0       | \$21,905    |  |
| 2.7 Stage 1 Design  | Note: first submittal will be combined S1/2. All tasks still are included. |                 |                      |                  |                   |          |                     |                     |              |           |             |  |
| 2.7.A.A - Title Sheet   | 1  | 0               | 0                    | 2                | 6                 | 0        | 0                   | 8                   | \$0          | \$0       | \$870       | 2.7.A.A 8 hours  |
| 2.7.A.B - Schematic Plan  | 1  | 1               | 0                    | 3                | 16                | 0        | 0                   | 20                  | \$0          | \$0       | \$2,175     | 2.7.A.B 20 hours/sheet; assume 1 100-scale sheet   |
| 2.7.A.C - General Notes   | 3  | 1               | 0                    | 3                | 8                 | 0        | 0                   | 12                  | \$0          | \$0       | \$1,375     | 2.7.A.C 4 hours/sheet  |
| 2.7.A.D - Typical Sections  | 2  | 1               | 0                    | 4                | 25                | 0        | 0                   | 30                  | \$0          | \$0       | \$3,210     | 2.7.A.D 6/section; assume 5 typical: existing, median w/ inverted lanes, median w/ normal lanes, 3 lanes @ Cleveland, walk along Williams Alley                                  |
| 2.7.A.E - Cross Sections  | 18   | 2               | 0                    | 24               | 82                | 0        | 0                   | 108                 | \$0          | \$0       | \$11,780    | 2.7.A.E 2 hours/section; assume 5-scale sections for 2,600' project @ 50' spacing --> 52 sections + 2 existing = 54 sections @ 3/sheet --> 18 sheets                             |
| 2.7.A.F - Plan and Profile Sheets   | 6  | 2               | 0                    | 16               | 126               | 0        | 0                   | 144                 | \$0          | \$0       | \$15,100    | 2.7.A.F 24 hours/sheet; assume 20-scale P&Ps for 3,000' project (covering Frontage Road and U250 ramp also) --> 6 sheets   |
| 2.7.A.I - Superelevation Table  | 2  | 1               | 0                    | 3                | 20                | 0        | 0                   | 24                  | \$0          | \$0       | \$2,575     | 2.7.A.I 12 hours/sheet; assume 2 sheets to transition from bifurcated section to inverted section & inverted to normal 3-lane  |
| 2.7.A.J - Intersection Details  | 1  | 1               | 0                    | 3                | 20                | 0        | 0                   | 24                  | \$0          | \$0       | \$2,575     | 2.7.A.J 12 hours/intersection; assume one 10-scale sheet to cover Williams Alley and Cleveland Road intersections  |
| 2.7.A.L - Driveway Details  | 2  | 1               | 0                    | 3                | 12                | 0        | 0                   | 16                  | \$0          | \$0       | \$1,775     | 2.7.A.L 4 hours/drive; assume 4 drives   |
| 2.7.A.N - Traffic Control   | 3  | 1               | 14                   | 3                | 0                 | 0        | 0                   | 18                  | \$0          | \$0       | \$2,815     | 2.7.A.N 5-8 hours/sheet; assume 20-scale double plan view sheets for 3,000' project (covering Frontage Road and U250 ramp also) --> 3 sheets                                     |
| 2.7.B.A - Storm Sewer Profiles  | 0  | 1               | 0                    | 3                | 9                 | 0        | 0                   | 13                  | \$0          | \$0       | \$1,475     | 2.7.B.A 0.5 hours/station; assume 2,600' project --> 26 stations   |
| 2.7.B.D.2 - Drainage Calculations - Ditches                                     | 0  | 0               | 0                    | 4                | 9                 | 0        | 0                   | 13                  | \$0          | \$0       | \$1,440     | 2.7.B.D.2 0.5 hours/station; assume 2,600' project --> 26 stations   |
| 2.7.B.D.3 - Drainage Calculations - Storm Sewer                                 | 0  | 0               | 0                    | 4                | 9                 | 0        | 0                   | 13                  | \$0          | \$0       | \$1,440     | 2.7.B.D.3 0.5 hours/station; assume 2,600' project --> 26 stations   |
| 2.7.C.A - Utility Coordination and Documentation                                | 0  | 0               | 0                    | 8                | 0                 | 0        | 0                   | 8                   | \$0          | \$0       | \$1,080     | 2.7.C.A 8 hours/project  |
| 2.7.C.D - Add Utilities to Plan/Profile Sheets                                  | 0  | 1               | 0                    | 3                | 8                 | 0        | 0                   | 12                  | \$0          | \$0       | \$1,375     | 2.7.C.D 2 hours/sheet for P&Ps   |
| 2.7.G.C - Finalize Pavement Build up and subsurface drainage requirements       | 0  | 1               | 0                    | 3                | 0                 | 0        | 0                   | 4                   | \$0          | \$0       | \$575       | 2.7.G.C assume 4 hours to coordinate pavement design and subgrade drainage with PS Construction Fabrics and City   |
| 2.7.H.A - Roadway Costs   | 0  | 1               | 0                    | 3                | 20                | 0        | 0                   | 24                  | \$0          | \$0       | \$2,575     | 2.7.H.A 24 hours/project   |
| 2.7.J.A - Detour Plan   | 0  | 1               | 2                    | 0                | 5                 | 0        | 0                   | 8                   | \$0          | \$0       | \$990       | 2.7.J.A 8 hours/detour; assume southbound Butler detour  |
| 2.7.J.D - MOT Coordination Discussions  | 0  | 7               | 7                    | 0                | 0                 | 0        | 0                   | 14                  | \$0          | \$0       | \$2,310     | 2.7.J.D 14 hours/meeting; assume 1 meeting   |
| 2.7 Stage 1 Design  | 39   | 23              | 23                   | 92               | 375               | 0        | 0                   | 513                 | \$0          | \$0       | \$57,510    |  |
| 2.8 - Project Management for Preliminary Engineering Phase                      |  |                 |                      |                  |                   |          |                     |                     |              |           |             |  |
| 2.8.A - Meetings  | 0  | 4               | 0                    | 4                | 0                 | 0        | 0                   | 8                   | \$0          | \$0       | \$1,220     | Assume 1 meeting with 2 people for in-person plan review   |
| 2.8.B - General Oversight (3 months)  | 0  | 15              | 0                    | 15               | 0                 | 0        | 0                   | 30                  | \$0          | \$0       | \$4,575     | 2.8.B 10 hours/month   |
| 2.8 - Project Management for Preliminary Engineering Phase                      | 0  | 19              | 0                    | 19               | 0                 | 0        | 0                   | 38                  | \$0          | \$0       | \$5,795     |  |
| 3. Environmental Engineering Phase  |  |                 |                      |                  |                   |          |                     |                     |              |           |             |  |
| 3.3 Stage 2 Design & 3.8 Cost Estimate  |  |                 |                      |                  |                   |          |                     |                     |              |           |             |  |
| 3.3.A - Stage 2 Design & 3.8 Cost Estimate                                      |  |                 |                      |                  |                   |          |                     |                     |              |           |             | See Section 2.7 for assumptions  |
| 3.3.A.C - General Notes   | 3  | 1               | 0                    | 1                | 10                | 0        | 0                   | 12                  | \$0          | \$0       | \$1,305     | 3.3.A.C 8 hours/sheet; 4 hours/sheet used  |
| 3.3.A.D - Typical Sections  | 2  | 0               | 0                    | 2                | 3                 | 0        | 0                   | 5                   | \$0          | \$0       | \$570       | 3.3.A.D 2 hours/section; 1 hour/section used   |
| 3.3.A.E - Plan and Profile Sheets   | 6  | 1               | 0                    | 2                | 21                | 0        | 0                   | 24                  | \$0          | \$0       | \$2,540     | 3.3.A.E 8 hours/sheet; 4 hours/sheet used  |
| 3.3.A.H - Cross Sections  | 18   | 1               | 0                    | 4                | 22                | 0        | 0                   | 27                  | \$0          | \$0       | \$2,910     | 3.3.A.H 1 hour/section; 1/2 hour/section used  |
| 3.3.A.I - Intersection Details  | 1  | 0               | 0                    | 2                | 10                | 0        | 0                   | 12                  | \$0          | \$0       | \$1,270     | 3.3.A.I 12 hours/intersection; 6 hours/intersection used   |
| 3.3.B - Drainage  |  |                 |                      |                  |                   |          |                     |                     |              |           |             |  |
| 3.3.B.A - Storm Sewer Profiles  | 0  | 1               | 0                    | 1                | 4                 | 0        | 0                   | 6                   | \$0          | \$0       | \$705       | 3.3.B.A 0.25 hours/station   |
| 3.3.B.D - Underdrain details  | 0  | 1               | 0                    | 1                | 4                 | 0        | 0                   | 6                   | \$0          | \$0       | \$705       | 3.3.B.D 0.25 hours/station   |
| 3.3.C - Traffic Control   |  |                 |                      |                  |                   |          |                     |                     |              |           |             |  |
| 3.3.C.A - Pavement Marking Plan & Signing Plan                                  | 3  | 2               | 14                   | 8                | 0                 | 0        | 0                   | 24                  | \$0          | \$0       | \$3,660     | 3.3.C.A 5-7 hours/sheet; assume 8 hours/sheet for combined signing & marking plans   |
| 3.3.E - Maintenance of Traffic  |  |                 |                      |                  |                   |          |                     |                     |              |           |             |  |
| 3.3.E.A - MOT General Notes   | 2  | 1               | 5                    | 2                | 0                 | 0        | 0                   | 8                   | \$0          | \$0       | \$1,240     | 3.3.E.A 4 hours/sheet; assume 2 sheets   |
| 3.3.E.G.1 - Temporary Signal Details - Adjustments of Heads, Timing & Detection | 1  | 1               | 10                   | 1                | 0                 | 0        | 0                   | 12                  | \$0          | \$0       | \$1,905     | 3.3.E.G.1 20 hours/signal/phase; assume Butler/Cleveland heads will need shifted; use 4 hours per  |
| 3.3.E.J - MOT Coordination Discussions  | 0  | 7               | 7                    | 0                | 0                 | 0        | 0                   | 14                  | \$0          | \$0       | \$2,310     | 3.3.E.J 14 hours/meeting; assume 1 meeting   |
| 3.3.G - Landscape Plan and Details  |  |                 |                      |                  |                   |          |                     |                     |              |           |             |  |
| 3.3.G.A - Landscape Plan and Details  | 0  | 1               | 0                    | 8                | 0                 | 0        | 0                   | 9                   | \$0          | \$0       | \$1,250     | Assume landscaping will be detailed in P&P sheets; additional time added for detailing; coordination w/ City will be required for plan/tree selections                           |
| 3.3.A - Stage 2 Design & 3.8 Cost Estimate                                      | 36   | 17              | 36                   | 32               | 74                | 0        | 0                   | 159                 | \$0          | \$0       | \$20,370    |  |
| 3.9 - Project Management for Environmental Engineering Phase                    |  |                 |                      |                  |                   |          |                     |                     |              |           |             |  |
| 3.9.A - Meetings  | 0  | 4               | 0                    | 4                | 0                 | 0        | 0                   | 8                   | \$0          | \$0       | \$1,220     | Assume 1 meeting with 2 people for in-person plan review   |
| 3.9.B - General Oversight (1 month)   | 0  | 5               | 0                    | 5                | 0                 | 0        | 0                   | 10                  | \$0          | \$0       | \$1,525     | 3.9.B 10 hours/month   |
| 3.9 - Project Management for Environmental Engineering Phase                    | 0  | 9               | 0                    | 9                | 0                 | 0        | 0                   | 18                  | \$0          | \$0       | \$2,745     |  |

Total 2 & 3. Preliminary & Environmental Engineering Phases 69 59 168 480 13 92 881 \$0 \$0 \$108,325

DETAILED BREAKDOWN OF PROPOSED TOTAL HOURS, PERSONNEL CATEGORIES AND HOURLY RATES FOR CITY OF SANDUSKY  
Butler Street Reconstruction

CONSULTANT: IBI Group

PROJECT DESCRIPTION: Assist City of Sandusky with engineering services for the proposed reconstruction along Butler Street.

| HOURLY RATES         |          | Proposal Date: | 2023-02-15 |
|----------------------|----------|----------------|------------|
| Project Manager      | \$170.00 |                |            |
| Sr. Traffic Engineer | \$160.00 |                |            |
| Roadway Engineer     | \$135.00 |                |            |
| Design Technician    | \$100.00 |                |            |
| Surveyor             | \$135.00 |                |            |
| Survey Crew (2-man)  | \$160.00 |                |            |

| Task Description | No. Shts | Project Manager | Sr. Traffic Engineer | Roadway Engineer | Design Technician | Surveyor | Survey Crew (2-man) | Overall Total Hours | Direct Costs | Sub Costs | Total Costs | Justification - ODOT Fee Guidance Low Rate unless noted otherwise |
|------------------|----------|-----------------|----------------------|------------------|-------------------|----------|---------------------|---------------------|--------------|-----------|-------------|---|
|------------------|----------|-----------------|----------------------|------------------|-------------------|----------|---------------------|---------------------|--------------|-----------|-------------|---|

|   |    |    |    |    |    |   |   |     |     |     |          |  |
|---|----|----|----|----|----|---|---|-----|-----|-----|----------|--|
| 4. Final Engineering Phase                              |    |    |    |    |    |   |   |     |     |     |          |  |
| 4.2 - Stage 3 Detailed Design Plans & 4.3 Cost Estimate |    |    |    |    |    |   |   |     |     |     |          |  |
| 4.2.A - Quantities and Notes                            |    |    |    |    |    |   |   |     |     |     |          |  |
| 4.2.A.A - Pavement Subsummary                           | 1  | 0  | 0  | 4  | 8  | 0 | 0 | 12  | \$0 | \$0 | \$1,340  | 4.2.A.A 12 hours/sheet   |
| 4.2.A.B - Drainage Subsummary                           | 1  | 0  | 0  | 4  | 4  | 0 | 0 | 8   | \$0 | \$0 | \$940    | 4.2.A.B 8 hours/sheet; 4 hours/sheet used                      |
| 4.2.A.C - Roadway Subsummary                            | 1  | 0  | 0  | 6  | 12 | 0 | 0 | 18  | \$0 | \$0 | \$2,010  | 4.2.A.C 18 hours/sheet   |
| 4.2.A.F - Pavement Marking Subsummary                   | 1  | 0  | 4  | 0  | 13 | 0 | 0 | 17  | \$0 | \$0 | \$1,940  | 4.2.A.F 17 hours/subsummary sheet                              |
| 4.2.A.G - Signing Subsummary                            | 1  | 0  | 4  | 0  | 13 | 0 | 0 | 17  | \$0 | \$0 | \$1,940  | 4.2.A.G 17 hours/subsummary sheet                              |
| 4.2.A.L - Landscape Subsummary                          | 1  | 0  | 0  | 2  | 6  | 0 | 0 | 8   | \$0 | \$0 | \$870    | 4.2.A.L 8 hours/subsummary sheet                               |
| 4.2.A.M - General Summary Sheet                         | 3  | 4  | 0  | 50 | 0  | 0 | 0 | 54  | \$0 | \$0 | \$7,430  | 4.2.A.M 18 hours/sheet; assume 3 sheets                        |
| 4.2.A.P - General Notes                                 | 3  | 1  | 0  | 3  | 8  | 0 | 0 | 12  | \$0 | \$0 | \$1,375  | 4.2.A.P 4 hours/sheet  |
| 4.2.A.Q - Driveway Subsummary or Driveway Details       | 2  | 0  | 0  | 2  | 8  | 0 | 0 | 10  | \$0 | \$0 | \$1,070  | 4.2.A.Q 8 hours + 0.5 hours/drive                              |
| 4.2.C - Signing Plans                                   |    |    |    |    |    |   |   |     |     |     |          |  |
| 4.2.C.A - Signing Plans                                 | 3  | 1  | 6  | 2  | 0  | 0 | 0 | 9   | \$0 | \$0 | \$1,400  | 4.2.C.A 3 hours/sheet; assume combined signing & marking plans |
| 4.2.D - Miscellaneous                                   |    |    |    |    |    |   |   |     |     |     |          |  |
| 4.2.D.G - Title Sheet                                   | 1  | 1  | 0  | 3  | 4  | 0 | 0 | 8   | \$0 | \$0 | \$975    | 4.2.D.G 8 hours  |
| 4.3 - Prepare Cost Estimates and Revise Milestone       |    |    |    |    |    |   |   |     |     |     |          |  |
| 4.3.A - Roadway Costs                                   | 0  | 4  | 0  | 12 | 0  | 0 | 0 | 16  | \$0 | \$0 | \$2,300  | 4.3.A 16 hours/project   |
| 4.2 - Stage 3 Detailed Design Plans & 4.3 Cost Estimate | 18 | 11 | 14 | 88 | 76 | 0 | 0 | 189 | \$0 | \$0 | \$23,590 |  |
| 4.4 - Final Plan Package                                |    |    |    |    |    |   |   |     |     |     |          |  |
| 4.4.A - Submission of Final Tracings and Documentation  | 0  | 4  | 0  | 10 | 0  | 0 | 0 | 14  | \$0 | \$0 | \$2,030  | 4.4.A 0.25 hours/sheet   |
| 4.4 - Final Plan Package                                | 0  | 4  | 0  | 10 | 0  | 0 | 0 | 14  | \$0 | \$0 | \$2,030  |  |
| 4.5 - Project Management for Final Engineering Phase    |    |    |    |    |    |   |   |     |     |     |          |  |
| 4.5.B - General Oversight (1 month)                     | 0  | 2  | 0  | 2  | 0  | 0 | 0 | 4   | \$0 | \$0 | \$610    | 4.5.B 3-5 hours/month  |
| 4.5 - Project Management for Final Engineering Phase    | 0  | 2  | 0  | 2  | 0  | 0 | 0 | 4   | \$0 | \$0 | \$610    |  |

|                                  |    |    |     |    |   |   |   |     |     |     |          |
|----------------------------------|----|----|-----|----|---|---|---|-----|-----|-----|----------|
| Total 4. Final Engineering Phase | 17 | 14 | 100 | 76 | 0 | 0 | 0 | 207 | \$0 | \$0 | \$26,230 |
|----------------------------------|----|----|-----|----|---|---|---|-----|-----|-----|----------|

|                           |    |    |     |     |    |    |       |     |     |           |
|---------------------------|----|----|-----|-----|----|----|-------|-----|-----|-----------|
| TOTAL AUTHORIZED SERVICES | 86 | 73 | 268 | 556 | 13 | 92 | 1,088 | \$0 | \$0 | \$134,555 |
|---------------------------|----|----|-----|-----|----|----|-------|-----|-----|-----------|

|   |   |   |   |   |   |   |   |    |     |     |         |  |
|---|---|---|---|---|---|---|---|----|-----|-----|---------|--|
| If-Authorized Services                      |   |   |   |   |   |   |   |    |     |     |         |  |
| 4.6 - Pre-Bid Activities                    |   |   |   |   |   |   |   |    |     |     |         |  |
| 4.6.A - Pre-Bid Questions                   | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 16 | \$0 | \$0 | \$2,440 | Placeholder amount provided for City of Sandusky consideration |
| 4.6 - Pre-Bid Activities                    | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 16 | \$0 | \$0 | \$2,440 |  |
| 5 - Construction Phase                      |   |   |   |   |   |   |   |    |     |     |         |  |
| 5.1 - On-going Services during Construction | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 16 | \$0 | \$0 | \$2,440 | Placeholder amount provided for City of Sandusky consideration |
| 5 - Construction Phase                      | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 16 | \$0 | \$0 | \$2,440 |  |

|                              |    |   |    |   |   |   |   |    |     |     |         |
|------------------------------|----|---|----|---|---|---|---|----|-----|-----|---------|
| TOTAL IF-AUTHORIZED SERVICES | 16 | 0 | 16 | 0 | 0 | 0 | 0 | 32 | \$0 | \$0 | \$4,880 |
|------------------------------|----|---|----|---|---|---|---|----|-----|-----|---------|