

Subject: Resolution #796 Authorizing Contract Award for Electrical Undergrounding Project to MB Electric, LLC for 49th Street Conversion

Proposed Council Action:

Pass Resolution #796.

Dept. Origin: Ruston Power

Prepared by: Jennifer Robertson
City Attorney's Office

For Agenda of: July 16, 2024

Exhibits: Resolution #796 with attached contract

	Initial & Date
Concurred by Mayor:	_____
Approved/form by City Atty:	<u>JSR/7-11-24</u>
Approved by _____ Director:	_____
Approved by Department Head:	_____

INFORMATION / BACKGROUND

The City is in the process of undergrounding electrical distribution lines as funding becomes available. 49th Street is next location the City desires to underground the electrical lines. Using the small works roster process as adopted by the City under the small works roster bidding process, the City solicited bids from qualified contractors who are on the MRSC Small Works Roster. MB Electric, LLC was determined to be the lowest responsible bidder with a bid of \$160,000.00, tax not included. The bids received were:

Bidder	Contract Price
MB Electric, LLC	\$160,000.00 (tax not included)
Tercom Construction, Inc.	\$481,507.40 (tax included)
Cannon Constructors, LLC	\$532,630.00 (tax included)

A copy of the scope of work, project plan set, and the bid are both attached to the public works contract. MB Electric, LLC has executed the City's contract and the Mayor seeks authorization to (1) award the bid to MB Electric, LLC; and (2) execute the contract on behalf of the City.

FISCAL CONSIDERATION

The maximum contract price is of \$160,000.00, tax not included.

RECOMMENDATION / MOTION

Pass Resolution #796.

MOTION: I move to approve Resolution #796 awarding this public works contract to MB Electric, LLC and authorizing the Mayor to sign the agreement.

RESOLUTION NO. 796

**A RESOLUTION OF THE CITY OF RUSTON,
WASHINGTON, AWARDED A PUBLIC WORKS
CONTRACT TO MB ELECTRIC, LLC FOR
UNDERGROUNDING ELECTRICAL LINES ON RUST
WAY IN ACCORDANCE WITH THE SMALL WORKS
ROSTER PROCESS ALLOWED UNDER RCW 39.04.155.**

WHEREAS, the City has adopted a Small Works Roster process under Resolution No. 503; and

WHEREAS, the City is in the process of undergrounding electrical distribution lines as funding becomes available and N. 49th Street is next location the City desires to underground the electrical lines; and

WHEREAS, using the small works roster process as adopted by the City under the small works roster bidding process, the City solicited bids from qualified contractors who are on the MRSC Small Works Roster; and

WHEREAS, MB Electric, LLC was determined to be the lowest responsible bidder with a bid of \$160,000.00, tax not included; and

WHEREAS, in accordance state law, after this award is made, all quotations received under this process shall be open to public inspection and available by electronic request; **NOW, THEREFORE,**

THE CITY COUNCIL OF THE CITY OF RUSTON HEREBY RESOLVES AS FOLLOWS:

Section 1. Bid Award. The City Council hereby awards the public works contract for the work described on Exhibit “A” to the attached Contract to MB Electric, LLC as the lowest responsible bidder.

Section 2. Agreement Authorized. The Mayor is authorized to execute the contract with MB Electric, LLC in substantially the form attached hereto, such execution to take place after MB Electric, LLC has the required bonding and insurance in place and has executed the contract.

Section 3. Mayor Authorized to Implement the Contract. The Mayor is further authorized to take all actions necessary and consistent with this contract and legislation in order to implement the contract, including approving invoices, approving any change order that either lowers the contract price or does not increase the contract price beyond ten percent (10%), to take other administrative actions necessary to ensure the work is completed.

Section 4. Direction to Clerk. In accordance with state law, after this award is made the City Clerk is directed to make the quotations open to public inspection and available by telephone inquiry or electronic request.

PASSED by the City Council of the City of Ruston, signed by the Mayor and attested by the City Clerk in authentication of such passage on this 16th day of July, 2024.

Bruce Hopkins, Mayor

ATTEST/AUTHENTICATED:

Judy Grams, City Clerk

FILED WITH THE CITY CLERK: _____
PASSED BY THE CITY COUNCIL: _____
RESOLUTION NO.: 796

PUBLIC WORKS AGREEMENT

**Between the City of Ruston
and**

MB Electric, LLC
(49th Street Conversion Project)

THIS AGREEMENT is made by and between the City of Ruston, a Washington municipal corporation (hereinafter the "**City**"), and MC Electric, LLC organized under the laws of the State of Washington, located and doing business 7520 Evelyn Ln NE, Lacey, WA, 98516-4508 (hereinafter the "**Contractor**"). The City and Contractor are each a "**Party**" and together they are the "**Parties**."

AGREEMENT

The Parties agree as follows:

I. DESCRIPTION OF WORK.

Contractor shall perform the following services for the City in accordance with the following described purpose, plans and/or specifications:

The purpose of this contract is to underground the electrical power along N. 49th Street. The Project is known as "**49th Street Conversion**" or "**Project**". The plans for the project are attached to this Agreement as **Exhibit A** and incorporated herein by this reference as if set forth in full. The listing of work components is further included in Contractor's bid which is attached to this Agreement as **Exhibit B** and incorporated herein by this reference as if set forth in full.

Contractor further represents that the services furnished under this Agreement will be performed in accordance with generally accepted professional practices within the Puget Sound region in effect at the time such services are performed and will be in compliance with the Ruston City Code and with the City of Ruston public works standards. The Ruston City Code and City public works standards are incorporated into this Agreement as if set forth herein.

Contractor shall do all work and furnish all tools, materials, and equipment to perform the above described work. The Contractor shall provide and bear the expense of all equipment, work, and labor of any sort whatsoever that may be required for the transfer of materials and for constructing and completing of the work provided for in this Agreement, exhibits thereto and standards incorporated herein, except those items mentioned therein to be furnished by the City.

II. TIME OF COMPLETION. The Parties agree that work will begin on the tasks described in Section I above immediately upon execution of this Agreement. Upon the effective date of this Agreement, Contractor shall complete the work described in Section I on or before November 1, 2024.

III. COMPENSATION. The City shall pay the Contractor a total amount not to exceed \$160,000.00. Applicable Washington State Retail Sales Tax on this contract shall be governed by WAC 458-20-171 and its related rules for the work contemplated in this Agreement. The Contractor shall invoice the City monthly. The City will pay for the portion of the work described in the invoice that has been completed by the Contractor and approved by the City but shall hold back retainage as described below. The City's payment shall not constitute a waiver of the City's right to final inspection and acceptance of the project.

A. Performance Bond. The Contractor is required to provide a performance bond for one hundred percent (100%) of the project costs. Such bond shall be in a form acceptable to the City Attorney and shall ensure that the Contractor faithfully performs all provisions of the Agreement and changes authorized by City in the manner and within the time specified as may be extended under the Agreement; that Contractor fully pays all laborers, mechanics, subcontractors, lower tier subcontractors, material persons, and all other persons or agents who supply labor, equipment, or materials to the Project; that Contractor pays the taxes, increases and penalties incurred on the Project as required by law; and that the Contractor posts a one-year warranty/maintenance bond to secure the Project. The bond shall remain in full force and effect until released in writing by the City at the request of the Surety or Principal.

B. Retainage. The City shall hold back a retainage in the amount of five percent (5%) of any and all payments made to contractor for a period of thirty (30) days after the date of final acceptance, or until receipt of all necessary releases from the State Department of Revenue, the Employment Security Department, and the State Department of Labor & Industries and until settlement of any liens filed under Chapter 60.28 RCW, whichever is later. In addition, the maintenance/warranty bond required by this Agreement must be in place prior to the City's release of the retainage. The amount retained shall be placed in a fund by the City pursuant to RCW 60.28.011(4)(a), unless otherwise instructed by the Contractor within fourteen (14) calendar days of Contractor's signature on the Agreement.

C. Defective or Unauthorized Work. The City reserves its right to withhold payment from Contractor for any defective or unauthorized work. Defective or unauthorized work includes, without limitation: work and materials that do not conform to the requirements of this Agreement; and extra work and materials furnished without the City's written approval. If Contractor is unable, for any reason, to satisfactorily complete any portion of the work, the City may complete the work by contract or otherwise, and Contractor shall be liable to the City for any additional costs incurred by the City. "Additional costs" shall mean all reasonable costs, including legal costs and attorney fees, incurred by the City beyond the maximum Contract price specified above. The City further reserves its right to deduct the cost to complete the Contract work, including any Additional Costs, from any and all amounts due or to become due the Contractor.

D. Final Payment: Waiver of Claims. THE CONTRACTOR'S ACCEPTANCE OF FINAL PAYMENT (EXCLUDING WITHHELD RETAINAGE) SHALL CONSTITUTE A WAIVER OF CONTRACTOR'S CLAIMS, EXCEPT THOSE PREVIOUSLY AND PROPERLY MADE AND IDENTIFIED BY CONTRACTOR AS UNSETTLED AT THE TIME FINAL PAYMENT IS MADE AND ACCEPTED.

IV. INDEPENDENT CONTRACTOR. The Parties intend that an Independent Contractor-Employer Relationship will be created by this Agreement and that the Contractor has the ability to control and direct the performance and details of its work, the City being interested only in the results obtained under this Agreement.

V. TERMINATION. The City may terminate this Agreement for good cause. "Good cause" shall include, without limitation, any one or more of the following events:

A. The Contractor's refusal or failure to supply a sufficient number of properly skilled workers or proper materials for completion of the Contract work.

B. The Contractor's failure to complete the work within the time specified in this Agreement.

C. The Contractor's failure to make full and prompt payment to subcontractors or for material or labor.

D. The Contractor's persistent disregard of federal, state or local laws, rules or regulations, including laws against discrimination.

E. The Contractor's filing for bankruptcy or becoming adjudged bankrupt.

F. The Contractor's breach of any portion of this Agreement.

If the City terminates this Agreement for good cause, the Contractor shall not receive any further money due under this Agreement until the Contract work is completed. After termination, the City may take possession of all records and data within the Contractor's possession pertaining to this project which may be used by the City without restriction.

VI. PREVAILING WAGES. Contractor shall file a "Statement of Intent to Pay Prevailing Wages," with the State of Washington Department of Labor & Industries prior to commencing the Contract work. Contractor shall pay prevailing wages in effect on the date the bid is accepted or executed by Contractor, and comply with Chapter 39.12 of the Revised Code of Washington, as well as any other applicable prevailing wage rate provisions. The latest prevailing wage rate revision issued by the Department of Labor and Industries is attached.

VII. CHANGES. The City may issue a written change order for any change in the Contract work during the performance of this Agreement. If the Contractor determines, for

any reason, that a change order is necessary, Contractor must submit a written change order request to the person listed in the notice provision section of this Agreement, section XV(D), within fourteen (14) calendar days of the date Contractor knew or should have known of the facts and events giving rise to the requested change. If the City determines that the change increases or decreases the Contractor's costs or time for performance, the City will make an equitable adjustment. The City will attempt, in good faith, to reach agreement with the Contractor on all equitable adjustments. However, if the Parties are unable to agree, the City will determine the equitable adjustment as it deems appropriate. The Contractor shall proceed with the change order work upon receiving either a written change order from the City or an oral order from the City before actually receiving the written change order. If the Contractor fails to require a change order within the time specified in this paragraph, the Contractor waives its right to make any claim or submit subsequent change order requests for that portion of the contract work. If the Contractor disagrees with the equitable adjustment, the Contractor must complete the change order work; however, the Contractor may elect to protest the adjustment as provided in subsections A through E of Section VIII, Claims, below.

The Contractor accepts all requirements of a change order by: (1) endorsing it, (2) writing a separate acceptance, or (3) not protesting in the way this section provides. A change order that is accepted by Contractor as provided in this section shall constitute full payment and final settlement of all claims for contract time and for direct, indirect and consequential costs, including costs of delays related to any work, either covered or affected by the change.

VIII. CLAIMS. If the Contractor disagrees with anything required by a change order, another written order, or an oral order from the City, including any direction, instruction, interpretation, or determination by the City, the Contractor may file a claim as provided in this section. The Contractor shall give written notice to the City of all claims within fourteen (14) calendar days of the occurrence of the events giving rise to the claims, or within fourteen (14) calendar days of the date the Contractor knew or should have known of the facts or events giving rise to the claim, whichever occurs first. Any claim for damages, additional payment for any reason, or extension of time, whether under this Agreement or otherwise, shall be conclusively deemed to have been waived by the Contractor unless a timely written claim is made in strict accordance with the applicable provisions of this Agreement.

At a minimum, a Contractor's written claim shall include the information set forth in subsections A, items 1 through 5 below.

**FAILURE TO PROVIDE A COMPLETE, WRITTEN NOTIFICATION OF CLAIM
WITHIN THE TIME ALLOWED SHALL BE AN ABSOLUTE WAIVER OF ANY
CLAIMS ARISING IN ANY WAY FROM THE FACTS OR EVENTS
SURROUNDING THAT CLAIM OR CAUSED BY THAT DELAY.**

A. Notice of Claim. Provide a signed written notice of claim that provides the following information:

1. The date of the Contractor's claim;
2. The nature and circumstances that caused the claim;
3. The provisions in this Agreement that support the claim;
4. The estimated dollar cost, if any, of the claimed work and how that estimate was determined; and
5. An analysis of the progress schedule showing the schedule change or disruption if the Contractor is asserting a schedule change or disruption.

B. Records. The Contractor shall keep complete records of extra costs and time incurred as a result of the asserted events giving rise to the claim. The City shall have access to any of the Contractor's records needed for evaluating the protest.

The City will evaluate all claims, provided the procedures in this section are followed. If the City determines that a claim is valid, the City will adjust payment for work or time by an equitable adjustment. No adjustment will be made for an invalid protest.

C. Contractor's Duty to Complete Protested Work. In spite of any claim, the Contractor shall proceed promptly to provide the goods, materials and services required by the City under this Agreement.

D. Failure to Protest Constitutes Waiver. By not protesting as this section provides, the Contractor also waives any additional entitlement and accepts from the City any written or oral order (including directions, instructions, interpretations, and determination).

E. Failure to Follow Procedures Constitutes Waiver. By failing to follow the procedures of this section, the Contractor completely waives any claims for protested work and accepts from the City any written or oral order (including directions, instructions, interpretations, and determination).

IX. LIMITATION OF ACTIONS. CONTRACTOR MUST, IN ANY EVENT, FILE ANY LAWSUIT ARISING FROM OR CONNECTED WITH THIS AGREEMENT WITHIN 120 CALENDAR DAYS FROM THE DATE THE CONTRACT WORK IS COMPLETE OR CONTRACTOR'S ABILITY TO FILE THAT CLAIM OR SUIT SHALL BE FOREVER BARRED. THIS SECTION FURTHER LIMITS ANY APPLICABLE STATUTORY LIMITATIONS PERIOD.

X. WARRANTY. Upon acceptance of the contract work, Contractor must provide the City a one-year warranty bond in a form and amount acceptable to the City. Such bond must be in place prior to the City's release of retainage. The Contractor shall correct all defects in workmanship and materials within one (1) year from the date of the City's acceptance of the Contract work. In the event any parts are repaired or replaced, only original replacement parts shall be used—rebuilt or used parts will not be acceptable. When defects are corrected, the warranty for that portion of the work shall extend for one (1) year from the date such correction is completed and accepted by the City. The Contractor shall begin to correct any defects within seven (7) calendar days of its receipt of notice from the

City of the defect. If the Contractor does not accomplish the corrections within a reasonable time as determined by the City, the City may complete the corrections and the Contractor shall pay all costs incurred by the City in order to accomplish the correction.

XI. DISCRIMINATION. In the hiring of employees for the performance of work under this Agreement or any sub-contract, the Contractor, its sub-contractors, or any person acting on behalf of the Contractor or sub-contractor shall not, by reason of race, religion, color, sex, age, sexual orientation, national origin, or the presence of any sensory, mental, or physical disability, discriminate against any person who is qualified and available to perform the work to which the employment relates.

XII. INDEMNIFICATION. Contractor shall defend, indemnify and hold the City, its officers, officials, employees, agents and volunteers harmless from any and all claims, injuries, damages, losses or suits, including all legal costs and attorney fees, arising out of or in connection with the Contractor's performance of this Agreement, except for that portion of the injuries and damages caused by the sole negligence of the City.

The City's inspection or acceptance of any of Contractor's work when completed shall not be grounds to avoid any of these covenants of indemnification.

Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Contractor and the City, its officers, officials, employees, agents and volunteers, the Contractor's liability hereunder shall be only to the extent of the Contractor's negligence.

IT IS FURTHER SPECIFICALLY AND EXPRESSLY UNDERSTOOD THAT THE INDEMNIFICATION PROVIDED HEREIN CONSTITUTES THE CONTRACTOR'S WAIVER OF IMMUNITY UNDER INDUSTRIAL INSURANCE, TITLE 51 RCW, SOLELY FOR THE PURPOSES OF THIS INDEMNIFICATION. THE PARTIES FURTHER ACKNOWLEDGE THAT THEY HAVE MUTUALLY NEGOTIATED THIS WAIVER.

THE PROVISIONS OF THIS SECTION SHALL SURVIVE THE EXPIRATION OR TERMINATION OF THIS AGREEMENT.

XIII. INSURANCE. The Contractor shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, its agents, representative, employees or subcontractors.

No Limitation. Contractor's maintenance of insurance as required by the agreement shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

A. Minimum Scope of Insurance. Contractor shall obtain insurance of the types described below:

1. Automobile Liability insurance covering all owned, non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
2. Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, stop gap liability, independent contractors, products-completed operations, personal injury and advertising injury, and liability assumed under an insured contract. The Commercial General Liability insurance shall be endorsed to provide the Aggregate Per Project Endorsement ISO form CG 25 03 11 85. There shall be no endorsement or modification of the Commercial General Liability insurance for liability arising from explosion, collapse or underground property damage. The City shall be named as an insured under the Contractor's Commercial General Liability insurance policy with respect to the work performed for the City using ISO Additional Insured endorsement CG 20 10 10 01 and Additional Insured-Completed Operations endorsement CG 20 37 10 01 or substitute endorsements providing equivalent coverage.
3. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.
4. Builders Risk insurance covering interests of the City, the Contractor, Subcontractors, and Sub-subcontractors in the work. Builders Risk insurance shall be on a all-risk policy form and shall insure against the perils of fire and extended coverage and physical loss or damage including flood and earthquake, theft, vandalism, malicious mischief, collapse, temporary buildings and debris removal. This Builders Risk insurance covering the work will have a deductible of \$5,000 for each occurrence, which will be the responsibility of the Contractor. Higher deductibles for flood and earthquake perils may be accepted by the City upon written request by the Contractor and written acceptance by the City. Any increased deductibles accepted by the City will remain the responsibility of the Contractor. The Builders Risk insurance shall be maintained until final acceptance of the work by the City.

B. Minimum Amounts of Insurance. Contractor shall maintain the following insurance limits:

1. Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.

2. Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate and a \$2,000,000 products-completed operations aggregate limit.
3. Builders Risk insurance shall be written in the amount of the completed value of the project with no coinsurance provisions.

C. Other Insurance Provisions. The insurance policies are to contain, or be endorsed to contain, the following provisions for Automobile Liability, Commercial General Liability and Builders Risk insurance:

1. The Contractor's insurance coverage shall be primary insurance as respect the City. Any insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.
2. The Contractor's insurance shall be endorsed to state that coverage shall not be cancelled by either Party, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City.

D. Contractor's Insurance For Other Losses. The Contractor shall assume full responsibility for all loss or damage from any cause whatsoever to any tools, Contractor's employee owned tools, machinery, equipment, or motor vehicles owned or rented by the Contractor, or the Contractor's agents, suppliers or contractors as well as to any temporary structures, scaffolding and protective fences.

E. Waiver of Subrogation. The Contractor and the City waive all rights against each other any of their Subcontractors, Sub-subcontractors, agents and employees, each of the other, for damages caused by fire or other perils to the extend covered by Builders Risk insurance or other property insurance obtained pursuant to the Insurance Requirements Section of this Contract or other property insurance applicable to the work. The policies shall provide such waivers by endorsement or otherwise.

F. Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.

G. Verification of Coverage. Contractor shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the Automobile Liability and Commercial General Liability insurance of the Contractor before commencement of the work. Before any exposure to loss may occur, the Contractor shall file with the City a copy of the Builders Risk insurance policy that includes all applicable conditions, exclusions, definitions, terms and endorsements related to this project.

H. Subcontractors. Contractor shall ensure that each subcontractor of every tier obtain at a minimum the same insurance coverage and limits as stated herein for the Public Works Agreement - 8

Contractor (with the exception of Builders Risk insurance). Upon request the City, the Contractor shall provide evidence of such insurance.

XIV. WORK PERFORMED AT CONTRACTOR'S RISK. Contractor shall take all necessary precautions and shall be responsible for the safety of its employees, agents, and subcontractors in the performance of the contract work and shall utilize all protection necessary for that purpose. All work shall be done at Contractor's own risk, and Contractor shall be responsible for any loss of or damage to materials, tools, or other articles used or held for use in connection with the work.

XV. PUBLIC RECORDS ACT CHAPTER 42.56 RCW. Contractor understands that her/his bid response documents, and any contract documents may be subject to release under the Public Records Act Chapter 42.56 RCW and the City may be required to disclose such documents upon a request. Contractor acknowledges that s/he has been advised to mark any records believed to be trade secrets or confidential in nature as "confidential." If records marked as "confidential" are found to be responsive to the request for records, the City as a courtesy to the Contractor, may elect to give notice to Contractor of the request so as to allow Contractor to seek a protective order from a Court. Contractor acknowledges and agrees that any records deemed responsive to a public records request may be released at the sole discretion of, and without notice by, the City.

XVI. EMPLOYMENT OF STATE RETIREES. The City is a "DRS-covered employer" which is an organization that employs one or more members of any retirement system administered by the Washington State Department of Retirement Systems (DRS). Pursuant to RCW 41.50.139(1) and WAC 415-02-325(1), the City is required to elicit on a written form if any of the Contractor's employees providing services to the City retired using the 2008 Early Retirement Factors (ERFs), or if the Contractor is owned by an individual who retired using the 2008 ERFs, and whether the nature of the service and compensation would result in a retirement benefit being suspended. Failure to make this determination exposes the City to significant liability for pension overpayments. As a result, before commencing work under this Agreement, Contractor shall determine whether any of its employees providing services to the City or any of the Contractor's owners retired using the 2008 ERFs, and shall immediately notify the City and shall promptly complete the form provided by the City after this notification is made. This notification to DRS could impact the payment of retirement benefits to employees and owners of Contractor. Contractor shall indemnify, defend, and hold harmless the City from any and all claims, damages, or other liability, including attorneys' fees and costs, relating to a claim by DRS of a pension overpayment caused by or resulting from Contractor's failure to comply with the terms of this provision. This provision shall survive termination of this Agreement.

XVII. MISCELLANEOUS PROVISIONS.

A. Non-Waiver of Breach. The failure of the City to insist upon strict performance of any of the covenants and agreements contained in this Agreement, or to exercise any option conferred by this Agreement in one or more instances shall not be construed to be a waiver or relinquishment of those covenants, agreements or options, and the same shall be and remain in full force and effect.

B. Resolution of Disputes and Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Washington. If the Parties are unable to settle any dispute, difference or claim arising from the Parties' performance of this Agreement, the exclusive means of resolving that dispute, difference or claim, shall only be by filing suit exclusively under the venue, rules and jurisdiction of the Pierce County Superior Court, Pierce County, Washington, unless the Parties agree in writing to an alternative dispute resolution process. In any claim or lawsuit for damages arising from the Parties' performance of this Agreement, each Party shall pay all its legal costs and attorney's fees incurred in defending or bringing such claim or lawsuit, including all appeals, in addition to any other recovery or award provided by law; provided, however, nothing in this paragraph shall be construed to limit the City's right to indemnification under Section XII of this Agreement.

C. Written Notice. All communications regarding this Agreement shall be sent to the Parties at the addresses listed on the signature page of the Agreement, unless notified to the contrary. Any written notice hereunder shall become effective three (3) business days after the date of mailing by registered or certified mail, and shall be deemed sufficiently given if sent to the addressee at the address stated in this Agreement or such other address as may be hereafter specified in writing.

D. Assignment. Any assignment of this Agreement by either Party without the written consent of the non-assigning Party shall be void. If the non-assigning Party gives its consent to any assignment, the terms of this Agreement shall continue in full force and effect and no further assignment shall be made without additional written consent.

E. Modification. No waiver, alteration, or modification of any of the provisions of this Agreement shall be binding unless in writing and signed by a duly authorized representative of the City and Contractor.

F. Entire Agreement. The written provisions and terms of this Agreement, together with any Exhibits attached hereto, shall supersede all prior verbal statements of any officer or other representative of the City, and such statements shall not be effective or be construed as entering into or forming a part of or altering in any manner this Agreement. All of the above documents are hereby made a part of this Agreement. However, should any language in any of the Exhibits to this Agreement conflict with any language contained in this Agreement, the terms of this Agreement shall prevail.

H. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall constitute an original, and all of which will together constitute this one Agreement.

CONTRACTOR:	CITY OF RUSTON:
By: _____ <i>(signature)</i>	By: _____ <i>(signature)</i>
Print Name: _____	Print Name: <u>Bruce Hopkins</u>
Its _____ <i>(title)</i>	Its <u>Mayor</u>
DATE: _____	DATE: _____
NOTICES TO BE SENT TO:	NOTICES TO BE SENT TO:
CONTRACTOR:	CITY OF RUSTON:
Mardy Betschart MB Electric, LLC P.O. Box 5758 Lacey WA 98509-5758	Mayor of Ruston City of Ruston 5117 N. Winnifred Ruston WA 98408
Email: (360) 455-1025 (telephone) (253) 405-9800 (cellular) (360) 455-1026 (facsimile)	Email: TownClerk@RustonWA.org (253) 759-3544 (telephone) (253) 752-3754(facsimile)
	ATTEST: _____ Judy Grams, Ruston City Clerk
	APPROVED AS TO FORM: _____ Jennifer Robertson, Ruston City Attorney

Exhibit A

Plan Set for N. 49th Street Conversion (26 pages)

CITY OF RUSTON - PUBLIC WORKS DEPARTMENT

49TH ST CONVERSION

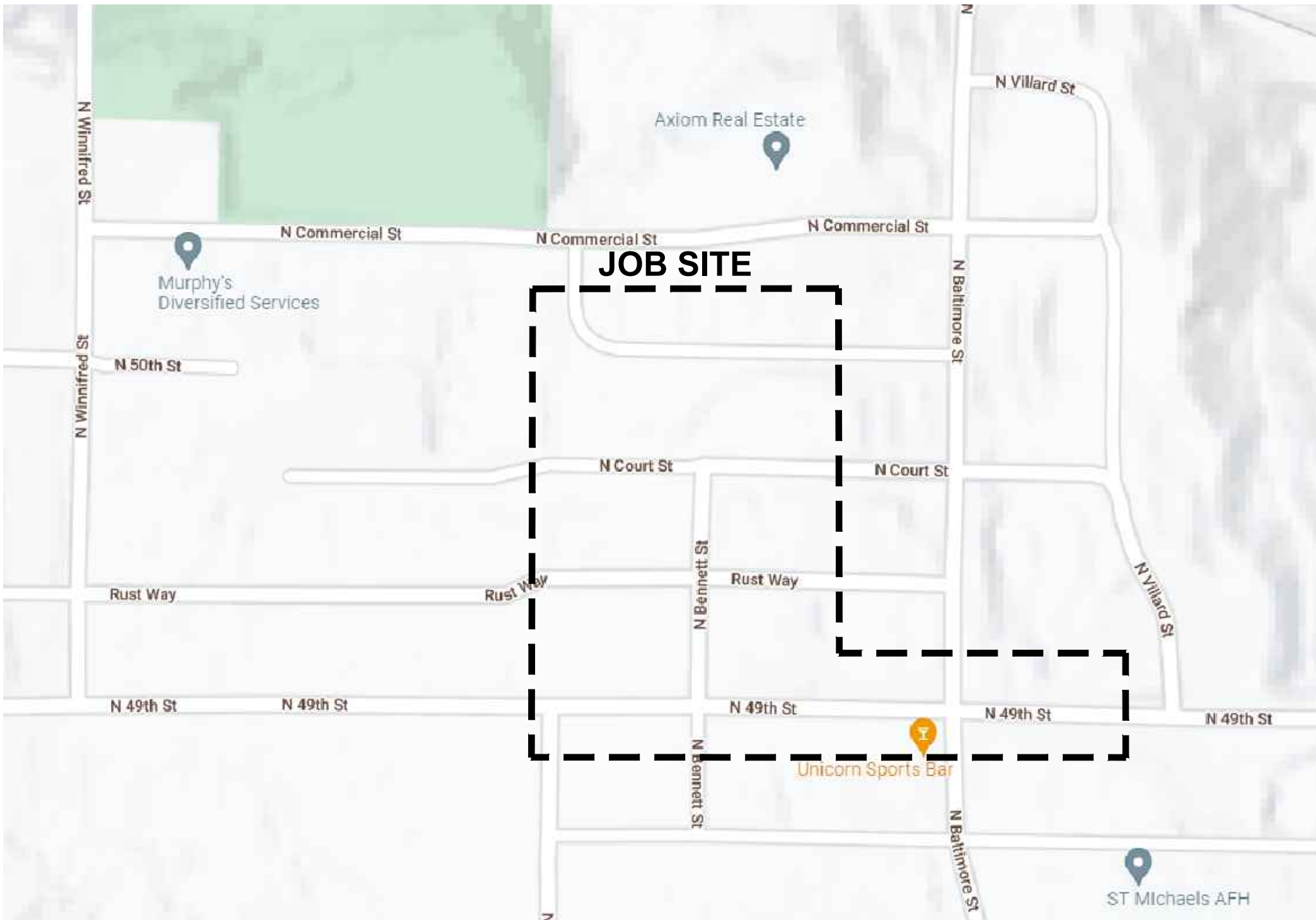
CITY OF RUSTON

MAYOR

Bruce Hopkins

COUNCIL MEMBERS

Jim Hedrick
Bradley Huson
Jenn Jensen
Deb Kristovich
Lynn Syler



SITE PLAN OVERVIEW

NOT TO SCALE



SITE PLAN OVERVIEW

NOT TO SCALE



CONTACT LIST

CITY OF RUSTON - PROJECT TEAM

Project Manager

Contact: Kevin Moser - (253) 370-5224

Electrical Superintendent

Contact: Mark Roach - (253) 224-5264

Electrical Engineers

Contact: Clint Thayer - (425) 864-0566

Contact: Shaun Baumchen - (253) 250-0633

LUMEN

Contact: Rob Bair - (253) 831-2059

COMCAST

Contact: Brian Hoback - (253) 254-1366

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P2-06&07	WORKZONE 3
P2-08&09	WORKZONE 4
P2-10&11	WORKZONE 5
P2-12&13	WORKZONE 6
P2-14&15	WORKZONE 7
P3-01	POWER CONDUIT DIAGRAM
P3-02	POWER CONDUIT DIAGRAM
P3-03	POWER REMOVAL DIAGRAM
P3-04	LUMEN CONDUIT DIAGRAM
P3-05	COMCAST CONDUIT DIAGRAM
P3-06	COMCAST CONDUIT DIAGRAM
T1-01&02	SCHEDULES
T2-01	DETAILS
T2-02	DETAILS

LEGEND

	Fuse
	New Pole Riser
	Existing Pole Riser
	Pole
	Meter
	Duct Intercept Point (DIP)
	Conduit Only - Duct Stub Point (DSP)
	Existing Pole Mounted Street Light
	Small Service Box
	Concrete Service Box
	Street Light Box
	Junction Box or Manhole
	Submersible Transformer - 1Ø
	Padmount Transformer - 1Ø
	Right of Way
	Property Line
	Existing OH Primary Conductor
	Existing OH Secondary Conductor
	Existing UG Primary Conductor
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	Proposed UG Comcast Fiber

GENERAL CONSTRUCTION NOTES

PRE-CONSTRUCTION:

- A PRE CONSTRUCTION MEETING IS REQUIRED PRIOR TO THE START OF CONSTRUCTION. THE PROJECT ENGINEER WILL BE SCHEDULED TO ATTEND THIS MEETING TO PROVIDE INPUT AND CLARIFICATION.
- PRIOR TO CONSTRUCTION, THE ELECTRICAL CONTRACTOR SHALL SECURE ALL NECESSARY ELECTRICAL CONSTRUCTION PERMITS IN ADDITION TO ANY OTHERS DEEMED NECESSARY PRIOR TO CONSTRUCTION START.
- CONTRACTOR AND THEIR EMPLOYEES SHALL ADHERE TO ALL SAFETY STANDARDS FOR ELECTRICAL WORKERS AS DEFINED IN WAC 296-45, SAFETY STANDARDS FOR ELECTRICAL WORKERS AND THE NATIONAL ELECTRICAL SAFETY CODE.
- LOCATE & MARK ALL UTILITIES PRIOR TO CONSTRUCTION, UTILIZING THE LOCAL "ONE-CALL" SYSTEM AND ANY UTILITIES WHICH DO NOT PARTICIPATE OR "PRIVATE LOCATORS".
- HAND EXCAVATE (POTHOLE) ALL MARKED UTILITIES WITHIN CONSTRUCTION ROUTE, PRIOR TO START OF CONSTRUCTION.

WORKING DRAWINGS:

- LOCATIONS OF EXISTING FEATURES AND FACILITIES ARE BASED ON DRAWINGS PROVIDED BY THE OWNER. FIELD VERIFICATION SHOULD BE MADE BEFORE STARTING PROJECT.
- MAINTAIN ON SITE, IN GOOD CONDITION, A COMPLETE FILE OF CONSTRUCTION DRAWINGS.
- THESE DRAWINGS SHALL BE AVAILABLE AT ALL TIMES TO THE OWNER'S SITE REPRESENTATIVE, AND THE ELECTRICAL INSPECTOR.
- CORRECTIONS AND CHANGES MADE DURING CONSTRUCTION SHALL BE RECORDED CONTINUOUSLY ON THESE DRAWINGS.
- ALL CHANGES IN SCOPE WILL REQUIRE CITY OF RUSTON'S APPROVAL PRIOR TO MAKING CHANGES.

MATERIAL:

- ALL MATERIALS SHALL BE RATED IN COMPLIANCE WITH IEEE AND ANSI STANDARDS AND BE UL LISTED WHERE POSSIBLE.

EQUIPMENT, VAULTS, ETC.:

- EQUIPMENT, VAULTS, PADS, ETC. SHALL BE INSTALLED PLUMB AND TRUE, AND SHALL BE SQUARE WITH THE ADJACENT STREETS, SIDEWALKS, PROPERTY LINES, ETC. THE LOCATION OF SIMILAR ITEMS SHALL BE CONSISTENT.
- EQUIPMENT, VAULTS, PADS, ETC., BEDDING MATERIAL SHALL CONSIST OF A MINIMUM OF 3 TO 6 INCHES. BACKFILL SHALL BE GOOD COMPATIBLE MATERIAL WITHOUT LARGE ROCKS, CHUNKS OR STICKS. BACKFILL SHALL BE PROGRESSIVELY COMPACTED FROM THE BOTTOM TO THE TOP SURFACE, AND SHALL BE WITHOUT VOIDS.
- CONDUIT AND CABLE ENTRANCES, ETC. SHALL BE SUITABLY SEALED AND/OR GROUTED TO MAINTAIN THE INTEGRITY OF THE CONDUIT SYSTEM.
- ALL VAULTS SHALL BE PRECAST CONCRETE, WITH ONE-PIECE COVER, LOCKING GALVANIZED STEEL ENTRANCE HATCH, KNOCKOUTS, DRAINS, EMBEDDED CHANNELS, ETC.
- ALL COVERS SHALL BE PRECAST CONCRETE, SIZE AS REQUIRED WITH CABLE ENTRANCE OPENING(S) TO MATCH EQUIPMENT.
- GROUND TERMINALS SHALL BE A #2 AWG BARE COPPER CABLE AROUND THE ENTIRE PERIMETER OF THE VAULT. SUPPORT AS REQUIRED. TAP CONNECTIONS TO NEUTRAL AND GROUND CABLES SHALL BE WITH COPPER COMPRESSION TYPE C-TAPS.
- ALL PADMOUNTED EQUIPMENT TO HAVE FIVE SIDED (PENTAHEAD) "TAMPERPROOF" BOLTS ON ALL ACCESS DOORS AND LIDS.
- ALL PADMOUNTED EQUIPMENT SHALL BE MECHANICALLY SECURED TO THE CONCRETE PAD FOR SECURITY AND SAFETY.
- PADMOUNTED OIL-FILLED OUTDOOR TYPE TRANSFORMERS SHALL MEET MINIMUM CLEARANCE REQUIREMENTS FROM BUILDING WALLS AND ROOF OVERHANGS IN ACCORDANCE WITH WAC (296-46B-450) REQUIREMENTS; AND SHALL MEET THE CLEARANCE REQUIREMENTS BY THE INSPECTING JURISDICTION, CITY OF RUSTON.

CONDUITS:

- ALL MATERIALS SHALL BE RATED IN COMPLIANCE WITH ANSI STANDARDS.
- CONDUITS SHALL BE SCHEDULE 40 PVC OR BETTER, FLAME RETARDANT, SUITABLE FOR USE WITH 105°C CABLE, SHALL NOT DISTORT FROM HEAT IT WILL NORMALLY ENCOUNTER AND SHALL BE RESISTANT TO LOW TEMPERATURE AND SUNLIGHT EFFECTS, IMPACT AND CRUSHING.
- MULTIPLE CONDUIT DUCTS SHALL BE INSTALLED IN A CONDUIT SPACER RACK OR SEPARATED MANUALLY TO ACHIEVE A MINIMUM SPACING SEPARATION BETWEEN CONDUITS TO ACHIEVE BETTER BACKFILL FLOW AROUND CONDUITS.
- MEDIUM VOLTAGE CONDUITS SHALL BE INSTALLED WITH A MINIMUM 36" COVER UNLESS OTHERWISE NOTED IN THIS DESIGN.
- LOW VOLTAGE CONDUITS SHALL BE INSTALLED WITH A MINIMUM 24" COVER UNLESS OTHERWISE NOTED IN THIS DESIGN.
- JOINTS IN THE UNDERGROUND PVC CONDUIT SYSTEM SHALL BE SOLVENT WELDED TO PREVENT THE ENTRANCE OF MOISTURE. PRIOR TO APPLYING SOLVENT, CONDUIT ENDS SHALL BE PREPPED WITH PURPLE ETCHING PRIMER.
- CONDUIT BENDS SHALL BE A MINIMUM 48 INCH RADIUS WHEN CONTAINING 15KV CABLES AND A MINIMUM 24 INCH RADIUS WHEN CONTAINING 600V CABLES.
- CONDUIT ENTRIES INTO VAULTS TO BE MORTAR GROUTED AND SMOOTHLY FINISHED. CONDUITS TO ENTER AT A PERPENDICULAR (90) ANGLE TO VAULT FACE.
- CONDUITS SHALL BE FIELD TESTED USING A 90% HARD MANDREL PRIOR TO INSTALLATION OF NEW CABLE OR CAPPING OF SPARE CONDUITS.
- SPARE CONDUITS:
 - PLUG ALL SPARE CONDUITS IDENTIFIED FOR FUTURE USE (WITHOUT CABLES) WITH RUBBER EXPANSION PLUGS.
 - PROVIDE PULL ROPES IN ALL SPARE CONDUITS. PULL ROPE SHALL BE TWISTED POLYPROPYLENE TREATED WITH ULTRAVIOLET STABILIZERS, MINIMUM 1/4" DIAMETER AND MINIMUM 200 POUNDS TENSION STRENGTH. ROPE SHALL BE RESISTANT TO ROT AND MILDEW AND SHALL NOT DETERIORATE WHEN EXPOSED TO OIL, GREASE, ETC.
- DETECTABLE 6" WIDE WARNING TAPE, PRINTED WITH THE WORDS "CAUTION, ELECTRIC LINE BELOW" (MAGNETIC, OR APPROVED EQUAL) SHALL BE DIRECT BURIED 18" ABOVE THE TOPMOST MEDIUM VOLTAGE CONDUITS.

MEDIUM VOLTAGE POWER CABLES:

- CABLE PULLING LUBRICANTS SHALL BE OF THE BEST QUALITY AND BE SUITABLE TO THE CABLE MANUFACTURER SPECIFICATIONS AND SHALL HAVE NO DAMAGING EFFECT ON THE INSULATION, SHIELDING, CONCENTRIC NEUTRAL WIRES OR JACKET.
- INSTALLATION OF ALL NEW MEDIUM VOLTAGE CABLES SHALL BE MEASURED AND RECORDED WITH A CALIBRATED TENSION DEVICE, AND SHALL NOT EXCEED THE MANUFACTURER'S MAXIMUM ALLOWABLE PULLING TENSION, SIDEWALL PRESSURE AND BENDING RADIUS. THE RECORDED TENSIONS CAN BE DIGITAL AND OR MANUAL.

GROUNDING:

- BEFORE GROUNDING CONNECTIONS ARE MADE, CONTACT SURFACES SHALL BE THOROUGHLY CLEANED. CONNECTIONS SHALL BE BOTH MECHANICALLY AND ELECTRICALLY SECURE.
- GROUND RODS SHALL BE DRIVEN AT OPPOSITE CORNERS AT EACH VAULT AND VISIBLE FOR INSPECTION. THE SEPARATION DISTANCE BETWEEN GROUND RODS TO BE A MINIMUM 6 FEET.
- CONNECTIONS AT GROUND RODS SHALL BE INSTALLED PER MECHANICAL CONNECTIONS WITH A #2 CU BARE GROUND WIRE ENTERING EACH VAULT AND BONDED TO THE GROUND LOOP INSIDE.



DAVID EVANS
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49TH ST CONVERSION

COVER SHEET

CK SB SB
BY SB SB SB

REVISION
DATE
1/27/23 30% PRELIMINARY DESIGN
2/17/23 60% PRELIMINARY DESIGN
7/25/23 90% PRELIMINARY DESIGN

NO. A B C

NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENT

CHECKED BY: S BAUMCHEN
DESIGNED BY: S BAUMCHEN
DRAWN BY: P LANE

SUBMITTAL DATE: 07/25/23

PROJECT NO.
RUST00000002

SHEET NO. P1-01

Plot Date: 9/13/2023 8:28 AM
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SITE PLAN
SCALE: 1"=50'

NOTE: TYPICAL PVC CONDUIT SIZES

RUSTON- POWER (RED)
1-4" FROM JUNCTION VAULT TO JUNCTION VAULT
1-3" FROM TRANSFORMER TO HANDHOLE
1-2" FROM JUNCTION VAULT TO TRANSFORMER

COMCAST - COMMUNICATIONS (BLUE)
1-4" FROM STRUCTURE TO STRUCTURE
1-2" FROM EXST DUCT TO STRUCTURE

LUMEN - COMMUNICATIONS (GREEN)
1-4" FROM STRUCTURE TO STRUCTURE
1-2" FROM STRUCTURE TO LOT

49TH ST CONVERSION

SITE PLAN

NO.	DATE	REVISION
A	1/27/23	30% PRELIMINARY DESIGN
B	2/17/23	60% PRELIMINARY DESIGN
C	7/25/23	90% PRELIMINARY DESIGN

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SHEET NO. **P2-01**

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NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING

WORK ZONE 1
Scale: 1" = 20'

49TH ST CONVERSION

WORK ZONE 1 - SHEET 2

NO.	DATE	REVISION	BY	CK
A	1/27/23	30% PRELIMINARY DESIGN	SB	SB
B	2/17/23	60% PRELIMINARY DESIGN	SB	SB
C	7/25/23	90% PRELIMINARY DESIGN	SB	SB

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FOR REVIEW AND COMMENT**

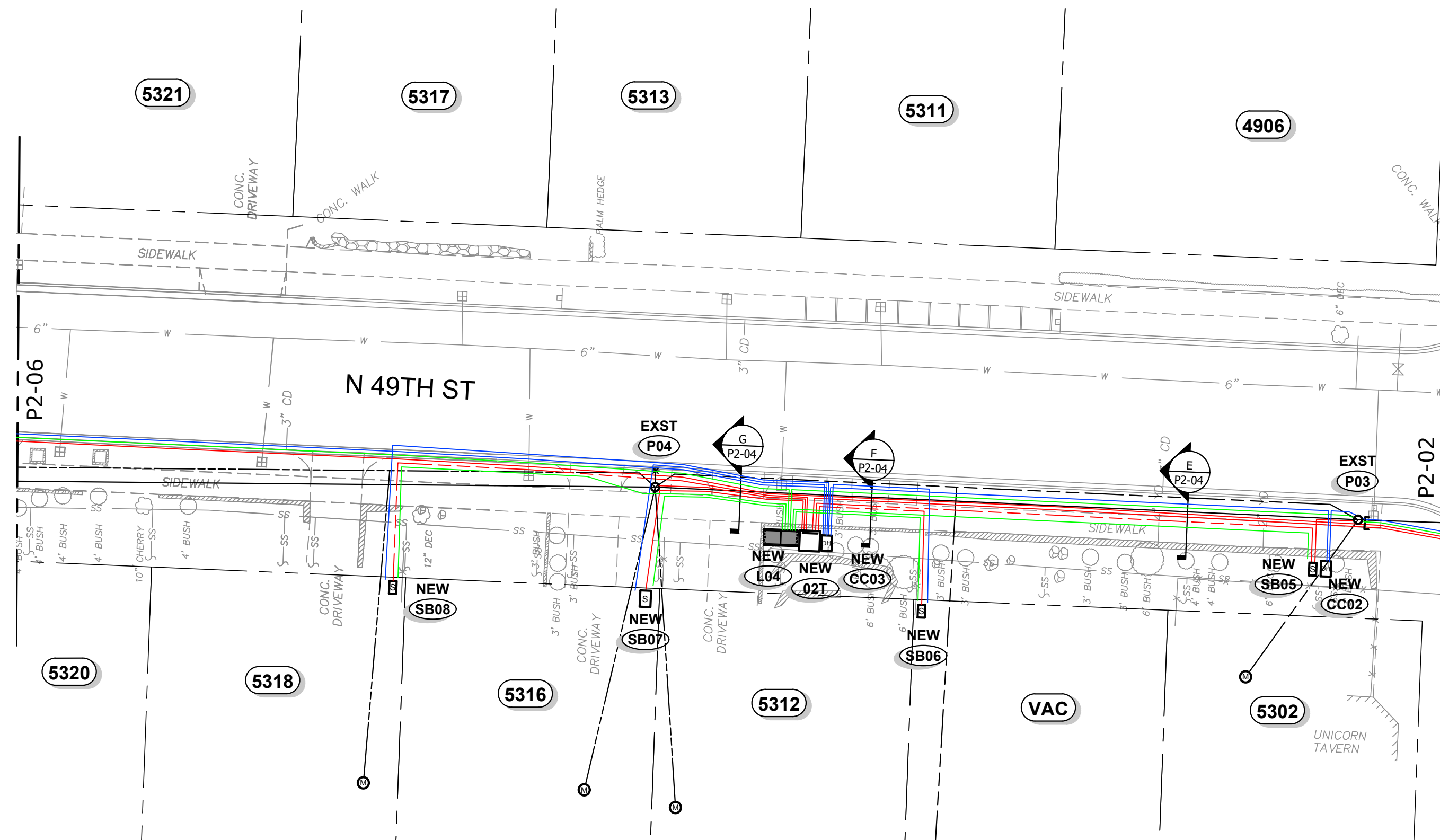
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DRAWN BY: P LANE

SUBMITTAL DATE: 07/25/23

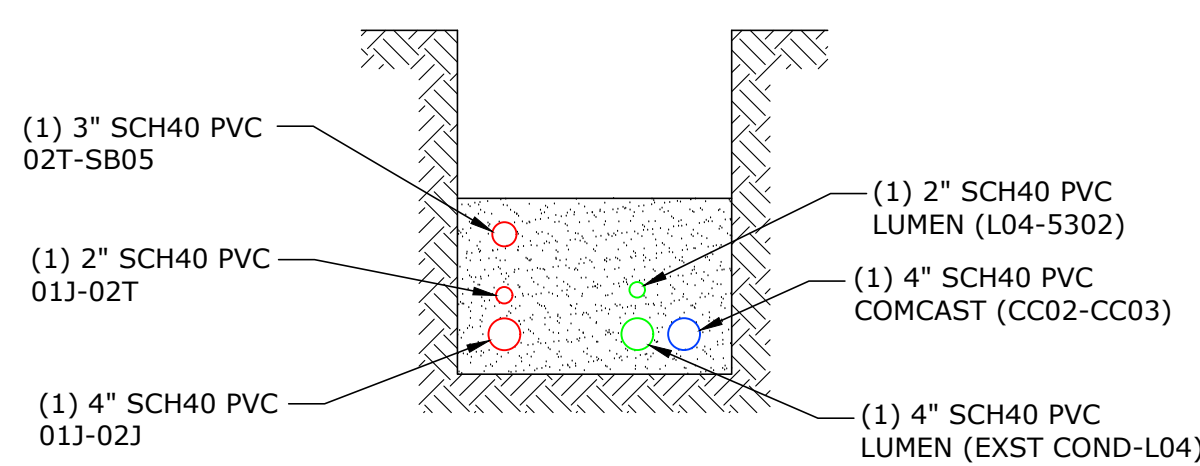
PROJECT NO.
RUST00000002

SHEET NO. P2-03

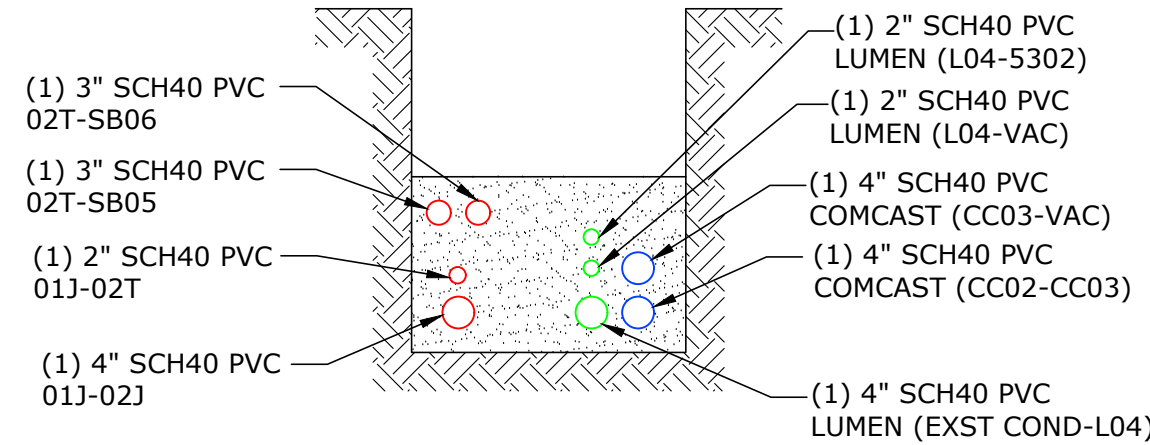
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By: Shaun Baumen
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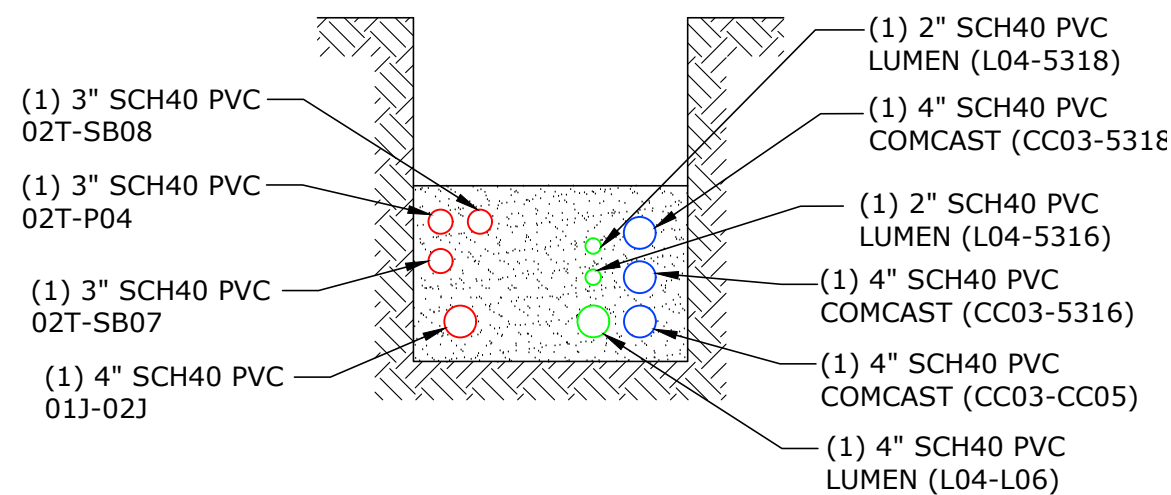
WORK ZONE 2
Scale: 1" = 20'



TRENCH DETAIL E
NTS



TRENCH DETAIL F
NTS



TRENCH DETAIL G
NTS

NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING

RUSTON STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves SB # (Lots)	Served From	Comments
SB05	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcels "5302"	230202T	
SB06	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Vacant Lot	230202T	Placed for Future Occupancy
230202T	-	4'-0"X4'-0"X6" Cover w/ 28"X12" Access Hole	1Ø - 37.5kVA Padmount Xfmr 7,200V - 240/120V	(1) Load Break Elbows (1) Insulated Dust Covers	SB05 - Lot - "5302" SB06 - Lot - "Vacant" SB07 - Lot - "5312" & "5316" SB08 - Lot - "5318" SB09 - Lot - "5320"	230201J	
SB07	2'-8"X3'-8"X3'-2" Concrete Handhole w/ 3'-0"X2'-0" DIA Plate Door	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5312" Parcel "5316"	230202T	Oldcastle # 233-2436P Inverted
SB08	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5318"	230202T	

RUSTON LV CABLE & CONDUIT SCHEDULE

Location		CONDUIT			CONDUCTORS (600V Rated)			Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	
230202T	SB05	3	1	Sch40 PVC	115	1	350-4/0-350 Aluminum	
230202T	SB06	3	1	Sch40 PVC	45	1	350-4/0-350 Aluminum	
SB05	P03	3	1	Sch40 PVC	20	1	350-4/0-350 Aluminum	
230202T	P04	3	1	Sch40 PVC	35	1	350-4/0-350 Aluminum	
230202T	SB07	3	1	Sch40 PVC	55	1	350-4/0-350 Aluminum	
230202T	SB08	3	1	Sch40 PVC	115	1	350-4/0-350 Aluminum	

LUMEN STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves structure # or (Lots)	Served From	Comments
L04	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2" Cover w/ (2) 30"X24" Doors	-	-	Parcel "VAC" Parcel "5302" Parcel "5312" L05 Parcel "5316" Parcel "5318"	L03	Oldcastle 25-TA Handhole Vault

LUMEN CONDUIT & CABLE SCHEDULE

Location		CONDUIT			FIBER CABLE			Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	
L04	5302	2	1	Sch40 PVC	115	1		130
L04	VAC	2	1	Sch40 PVC	50	1		65
L04	Exst Cond	4	1	Sch40 PVC	125	1		140
L04	L06	4	1	Sch40 PVC	260	1		290
L04	5316	2	1	Sch40 PVC	50	1		65
L04	5318	2	1	Sch40 PVC	105	1		120

COMCAST STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves structure # or (Lots)	Served From	Comments
CC02	Dog House	-	-	-	CC01 - Lot - "5224" CC03	-	Existing Dog House
CC03	Dog House	-	-	-	Parcel "VAC" Parcel "5316" Parcel "5318" CC05	CC02	Dog House

COMCAST CONDUIT & CABLE SCHEDULE

Location		CONDUIT			FIBER CABLE			Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	
CC02	Exst Cond	2	2	Sch40 PVC	20	2		45
CC02	CC03	4	1	Sch40 PVC	120	1		130
CC03	VAC	4	1	Sch40 PVC	55	1		60
CC03	CC05	4	1	Sch40 PVC	275	1		285
CC03	5318	4	1	Sch40 PVC	125	1		130
CC03	5316	4	1	Sch40 PVC	70	1		75

CK
SB
SB
SB

BY
SB
SB
SB

REVISION
1/27/23 30% PRELIMINARY DESIGN
2/17/23 60% PRELIMINARY DESIGN
7/25/23 90% PRELIMINARY DESIGN

NO.
A B C

NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENT

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DRAWN BY: P LANE

SUBMITTAL DATE: 07/25/23

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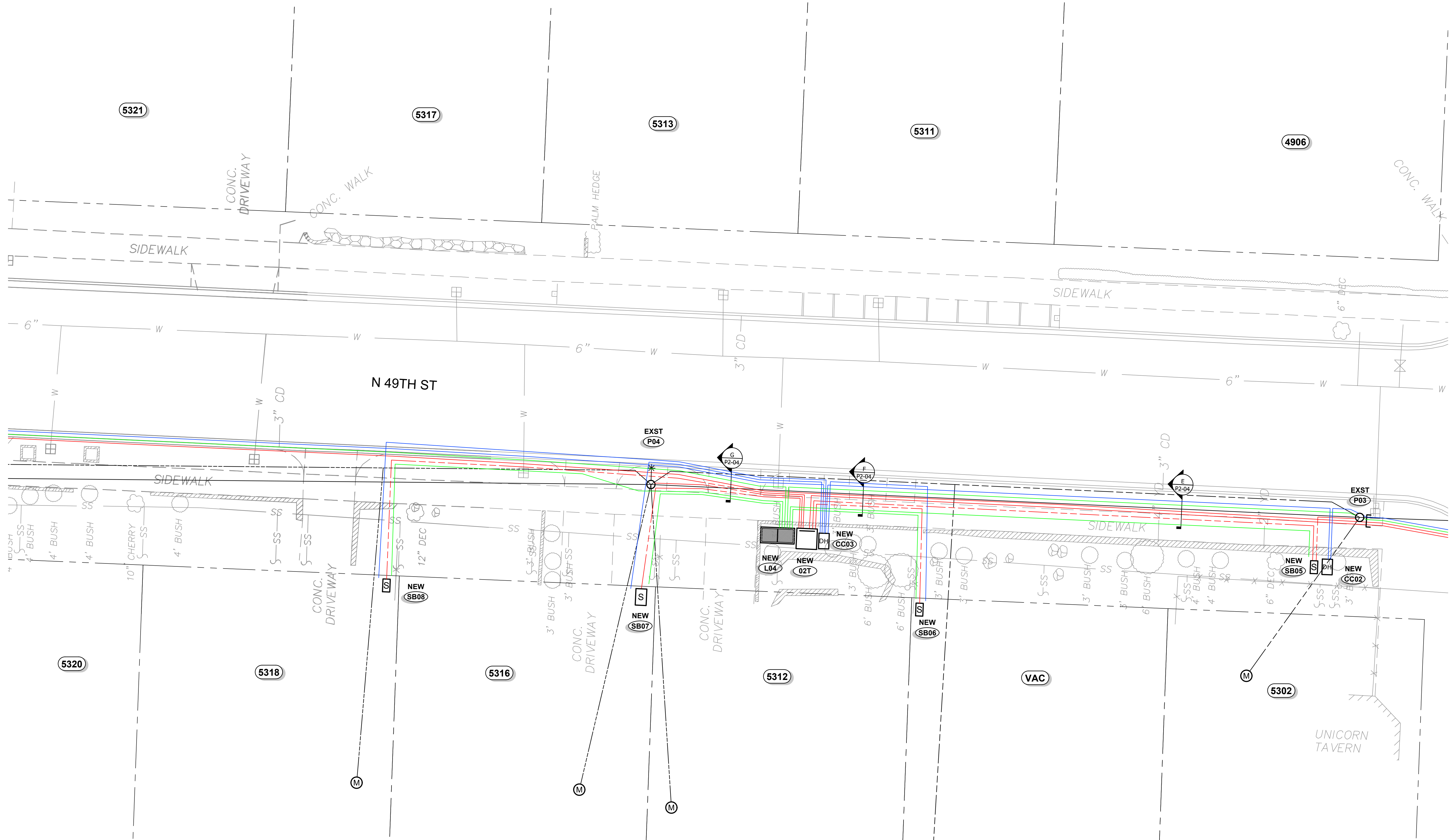
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49TH ST CONVERSION

WORK ZONE 2 - SHEET 1

**DAVID EVANS
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WORK ZONE 2
Scale: 1" = 20'

NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING

49TH ST CONVERSION

WORK ZONE 2 - SHEET 2

NO.	DATE	REVISION	BY	CK
A	1/27/23	30% PRELIMINARY DESIGN	SB	SB
B	2/17/23	60% PRELIMINARY DESIGN	SB	SB
C	7/25/23	90% PRELIMINARY DESIGN	SB	SB

**NOT FOR CONSTRUCTION
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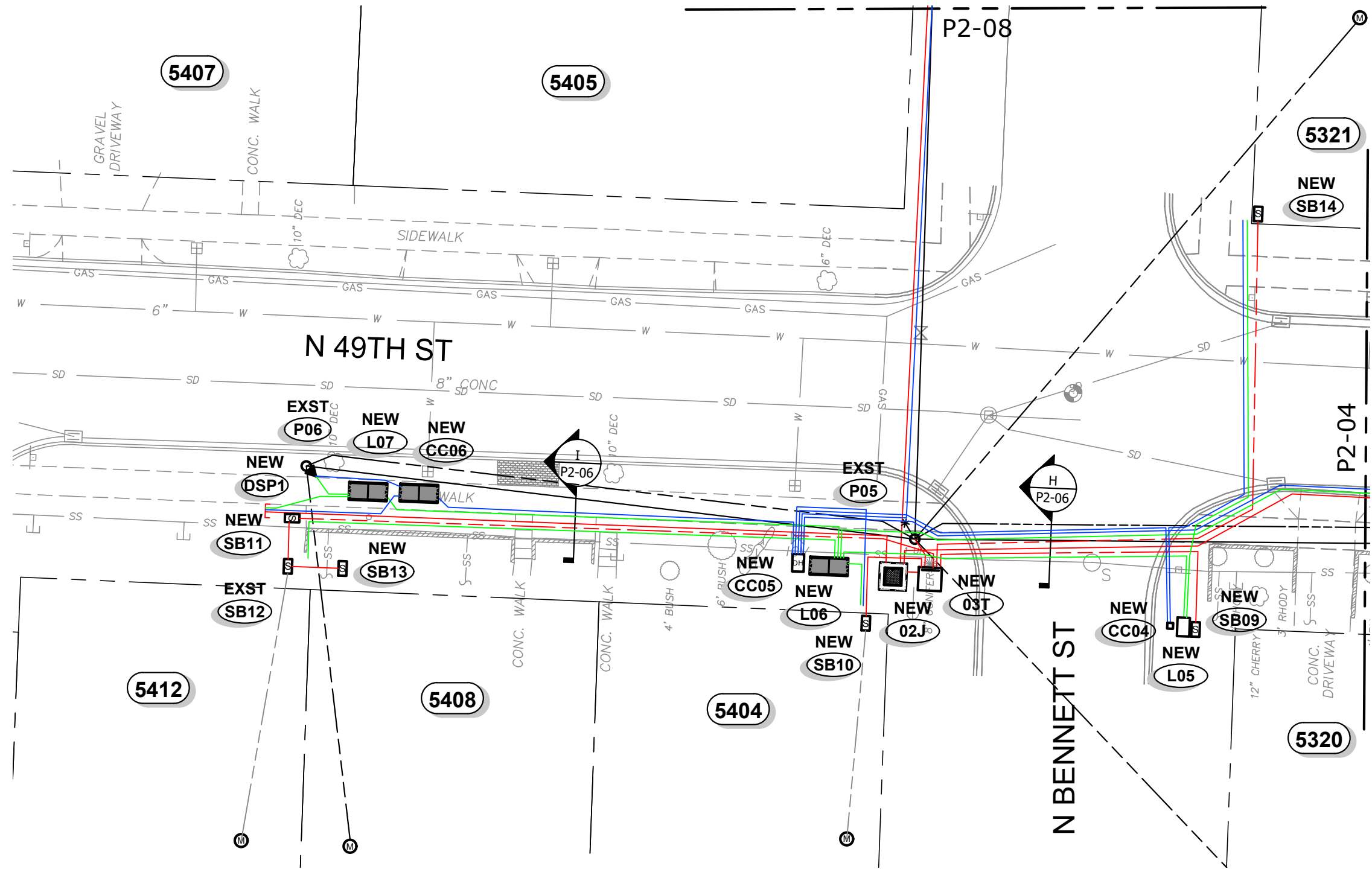
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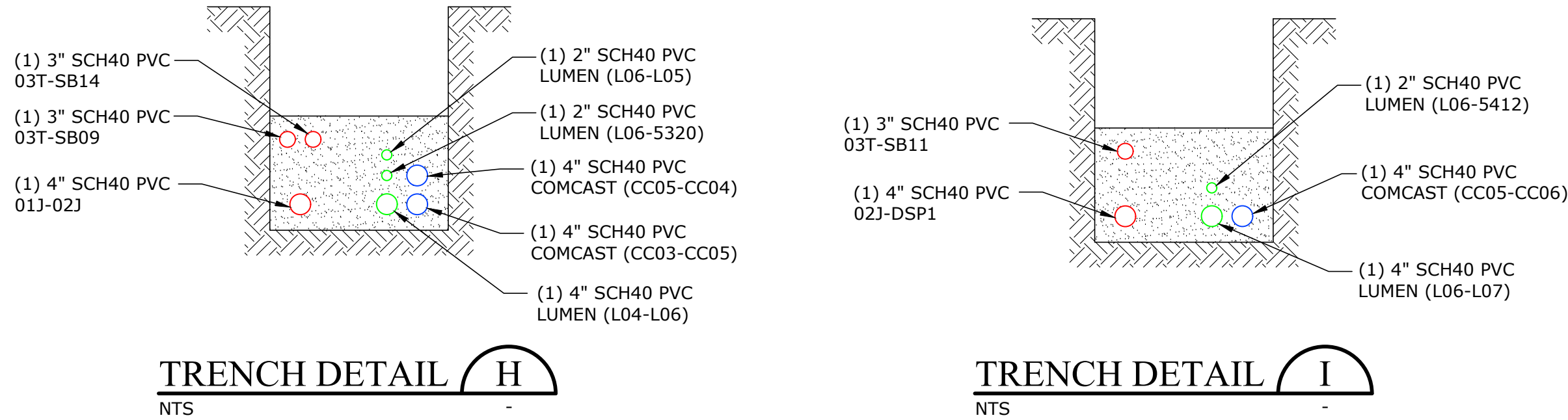
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WORK ZONE 3
Scale: 1" = 20'



COMCAST STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves structure # or (Lots)	Served From	Comments
CC04	Tap Pedestal	-	-	-	Parcel "5321" Parcel "5320"	CC05	
CC05	Dog House	-	-	-	CC04 - Lot - "5320" Parcel "5404"	CC03	
CC06	5'-2"x2'-3"x2'-7" Concrete Handhole	5'-2"x2'-3"x2'-7" (2) 30"x24" Doors	-	-	CC06 CC07 P06 DSP1	CC05	Oldcastle 25-TA Handhole Vault

COMCAST CONDUIT & CABLE SCHEDULE

Location		CONDUIT				FIBER CABLE			Remarks
From	To	Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
CC03	CC05	4	1	Sch40 PVC	275	1		285	
CC04	5321	4	1	Sch40 PVC	80	1		85	
CC05	CC04	4	1	Sch40 PVC	90	1		100	
CC05	CC07	4	1	Sch40 PVC	215	1		225	
CC05	CC06	4	1	Sch40 PVC	70	1		80	
CC06	P06	4	1	Sch40 PVC	15	1		45	
CC06	DSP1	4	1	Sch40 PVC	25	1		30	
CC05	5404	4	1	Sch40 PVC	40	1		45	

NOTE:
SEE SHEET T2-01 FOR
TYPICAL TRENCH
CONDUIT SPACING

RUSTON STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves SB # (Lots)	Served From	Comments
SB09	24"x30"x17" Handhole w/ 22-5/8"x14-5/8"x2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5320"	230203T	
230202J	4'-8"x4'-8"x3'-6" Vault (554)	4'-8"x4'-8"x6" Cover w/ (1) 3' Sq DIA Plate Door	(1) - 4 Position Lateral (Junction Bus)	(3) Load Break Elbows (0) Insulated Dust Covers	-	230201J	Lid to have Anti-Skid Door
230203T	-	4'-0"x4'-0"x6" Cover w/ 28"x12" Access Hole	1Ø - 25kVA Padmount Xfmr 7,200V - 240/120V	(1) Load Break Elbows (1) Insulated Dust Covers	SB09 - Lot - "5320" SB10 - Lot - "5404" SB11 - Lot - "5412" & "5408" SB14 - Lot - "5321"	230202J	-
SB10	24"x30"x17" Handhole w/ 22-5/8"x14-5/8"x2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5404"	230203T	
SB11	24"x30"x17" Handhole w/ 22-5/8"x14-5/8"x2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	SB12 - Lot - "5412" SB13 - Lot - "5408"	230203T	
SB12	-	-	-	-	Parcel "5412" SB13 - Lot - "5408"	SB11	Existing SB
SB13	24"x30"x17" Handhole w/ 22-5/8"x14-5/8"x2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5408"	SB12	
SB14	24"x30"x17" Handhole w/ 22-5/8"x14-5/8"x2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5321"	230203T	

RUSTON MV CABLE & CONDUIT SCHEDULE

Location		CONDUIT				PRIMARY CABLE (15kV Rated)						Remarks	
		Size (in)	Qty	Type	Est. Length (ft)	Cable Size	Cable Type	Est. Length (ft)	Cable Numbers				
A	B								C				
230202J	DSP1	4	1	Sch40 PVC	115	Conduit only at this Time							Intercept conduit at P07
230202J	190203J	2	1	Sch40 PVC	220	(1) #2	CU-EPR / 133% Insulation		230202J-190203J - A				
230202J	230203T	2	1	Sch40 PVC	10	(1) #2	CU-EPR / 133% Insulation		230202J-230203T - A				

RUSTON LV CABLE & CONDUIT SCHEDULE

Location		CONDUIT				CONDUCTORS (600V Rated)			Remarks
From	To	Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
230203T	SB09	3	1	Sch40 PVC	65	1	350-4/0-350 Aluminum		
230203T	P05	3	1	Sch40 PVC	10	1	350-4/0-350 Aluminum		
230203T	SB10	3	1	Sch40 PVC	25	1	350-4/0-350 Aluminum		
230203T	SB11	3	1	Sch40 PVC	115	1	350-4/0-350 Aluminum		
SB11	SB12	3	1	Sch40 PVC	10	1	350-4/0-350 Aluminum		
SB12	SB13	3	1	Sch40 PVC	10	1	350-4/0-350 Aluminum		
230203T	SB14	3	1	Sch40 PVC	110	1	350-4/0-350 Aluminum		

LUMEN STRUCTURES

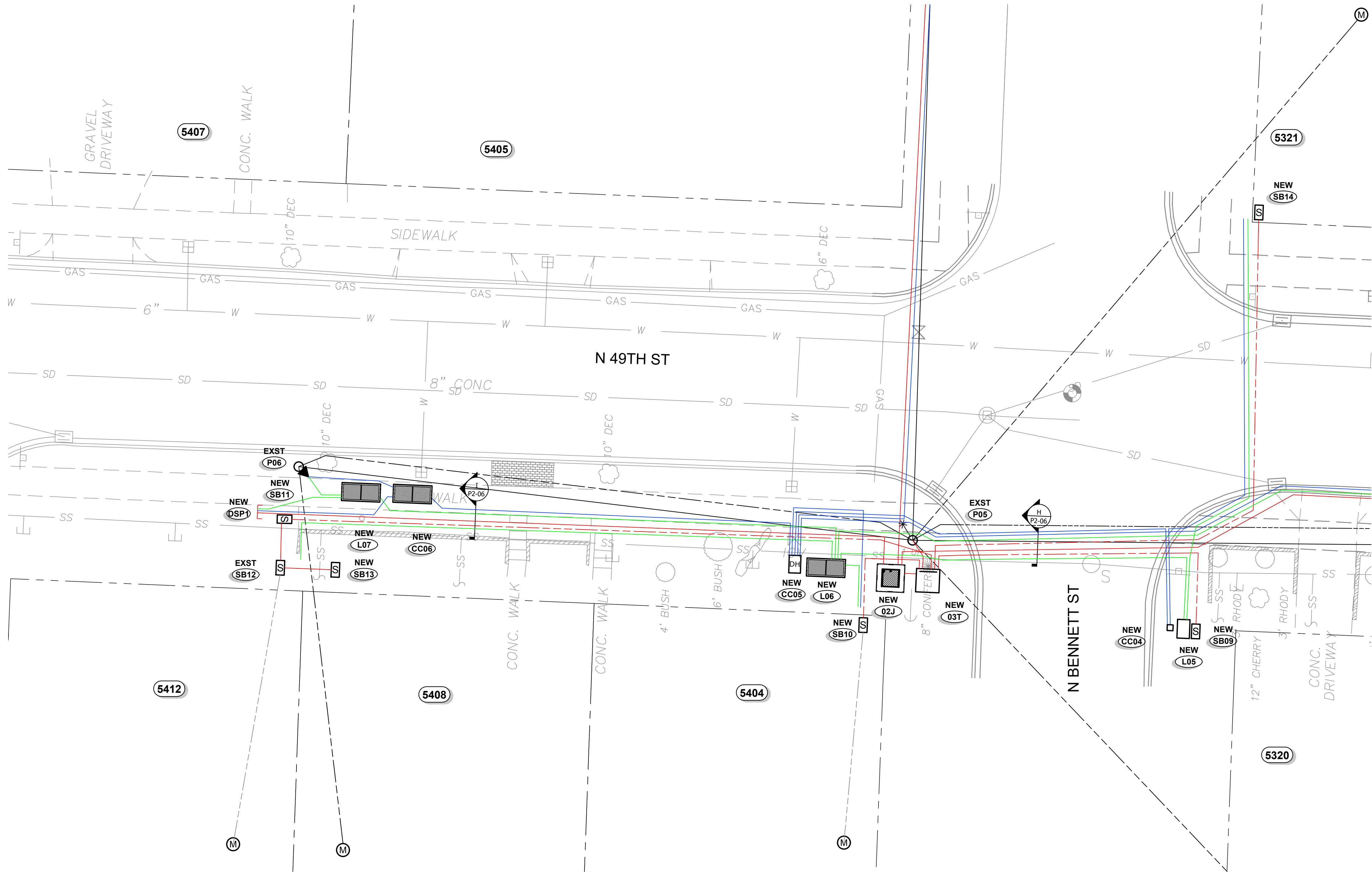
Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves structure # or (Lots)	Served From	Comments
CC05	Dog House	-	-	-	CC04 - Lot - "5320" Parcel "5404"	CC03	
CC06	5'-2"x2'-3"x2'-7" Concrete Handhole	5'-2"x2'-3"x2'-7" (2) 30"x24" Doors	-	-	CC06 CC07 P06 DSP1	CC05	Oldcastle 25-TA Handhole Vault
CC07	Dog House	-	-	-	EXST Intcpt for CC08 - Lot - "5407" EXST Intcpt for CC09 - Lot - "4917"	CC05	

LUMEN CONDUIT & CABLE SCHEDULE

Location		CONDUIT				FIBER CABLE			Remarks
From	To	Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
L04	L06	4	1	Sch40 PVC	260	1		290	
L06	5404	2	1	Sch40 PVC	10	1		25	
L06	L05	2	1	Sch40 PVC	75			105	
L05	5321	2	1	Sch40 PVC	80	1		95	
L06	5412	2	1	Sch40 PVC	100	1		115	
L06	L07	4	1	Sch40 PVC	85	1		115	
L07	P06	2	1	Sch40 PVC	10	1		50	
L07	DSP1	4	1	Sch40 PVC	15	1		30	

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NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING



WORK ZONE 3
Scale: 1" = 20'

49TH ST CONVERSION

WORK ZONE 3 - SHEET 2

NO.	DATE	REVISION	BY	CK
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B	2/17/23	60% PRELIMINARY DESIGN	SB	SB
C	7/25/23	90% PRELIMINARY DESIGN	SB	SB

**NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENT**

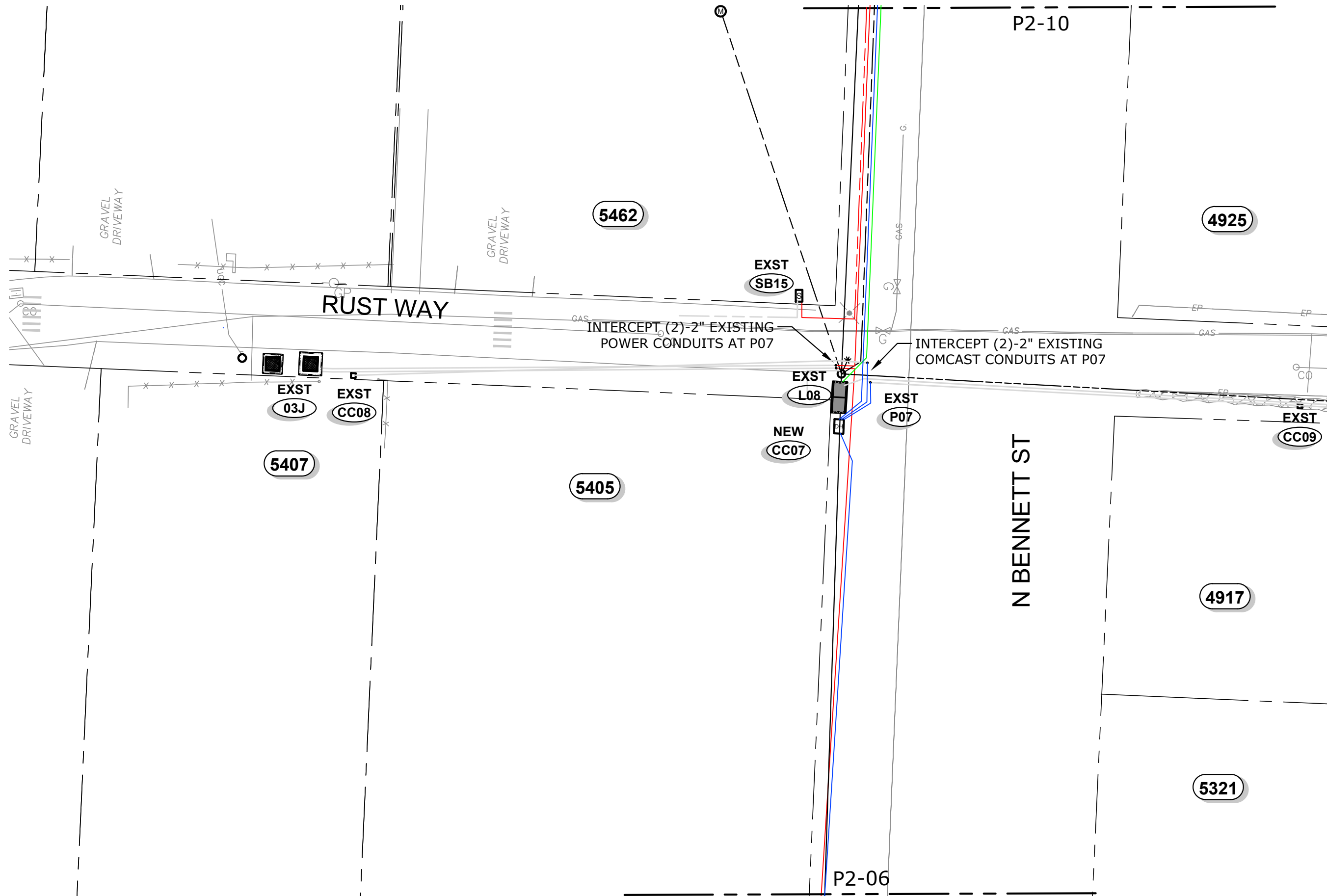
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DESIGNED BY: S BAUMCHEN
DRAWN BY: P LANE

SUBMITTAL DATE: 07/25/23

PROJECT NO.
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SHEET NO. P2-07

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By: Shaun Baumchen
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WORK ZONE 4
Scale: 1" = 20'

NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING

RUSTON STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves SB # (Lots)	Served From	Comments
190203J	-	-	-	(2) Load Break Elbows (0) Insulated Dust Covers	-	230202J	Existing Junction Box
SB15	-	-	-	-	Parcel "5462"	-	Existing SB

RUSTON LV CABLE & CONDUIT SCHEDULE

Location		CONDUIT				CONDUCTORS (600V Rated)			Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
SB15	SB16	1.5	1	Sch40 PVC	155	1	2-2-2 Aluminum		

RUSTON MV CABLE & CONDUIT SCHEDULE

Location		CONDUIT				PRIMARY CABLE (15kV Rated)						Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Cable Size	Cable Type	Est. Length (ft)	Cable Numbers			
From	To								A	B	C	
190203J	230204J	2	1	Sch40 PVC	150	(1) #2	CU-EPR / 133% Insulation		190203J-230204J - A			Intercept conduit at P07

LUMEN STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves structure # or (Lots)	Served From	Comments
L08	-	-	-	-	L09	-	Exst 264TA Handhole

LUMEN CONDUIT & CABLE SCHEDULE

Location		CONDUIT				FIBER CABLE			Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
L08	L09	4	1	Sch40 PVC	135	1		165	

COMCAST STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves structure # or (Lots)	Served From	Comments
CC07	Dog House	-	-	-	EXST Intcpt for CC08 - Lot - "5407" EXST Intcpt for CC09 - Lot - "4917" CC10	CC05	
CC08	Tap Pedestal	-	-	-	-	-	Existing Pedestal
CC09	Tap Pedestal	-	-	-	-	-	Existing Pedestal

COMCAST CONDUIT & CABLE SCHEDULE

Location		CONDUIT				FIBER CABLE			Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
CC05	CC07	4	1	Sch40 PVC	215	1		225	
CC07	CC10	4	1	Sch40 PVC	140	1		150	
CC07	CC09	2	2	Sch40 PVC	15	2		35	
CC07	CC08	2	2	Sch40 PVC	15	2		35	

49TH ST CONVERSION

WORK ZONE 4 - SHEET 1

NO.	DATE	REVISION
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B	2/17/23	60% PRELIMINARY DESIGN
C	7/25/23	90% PRELIMINARY DESIGN

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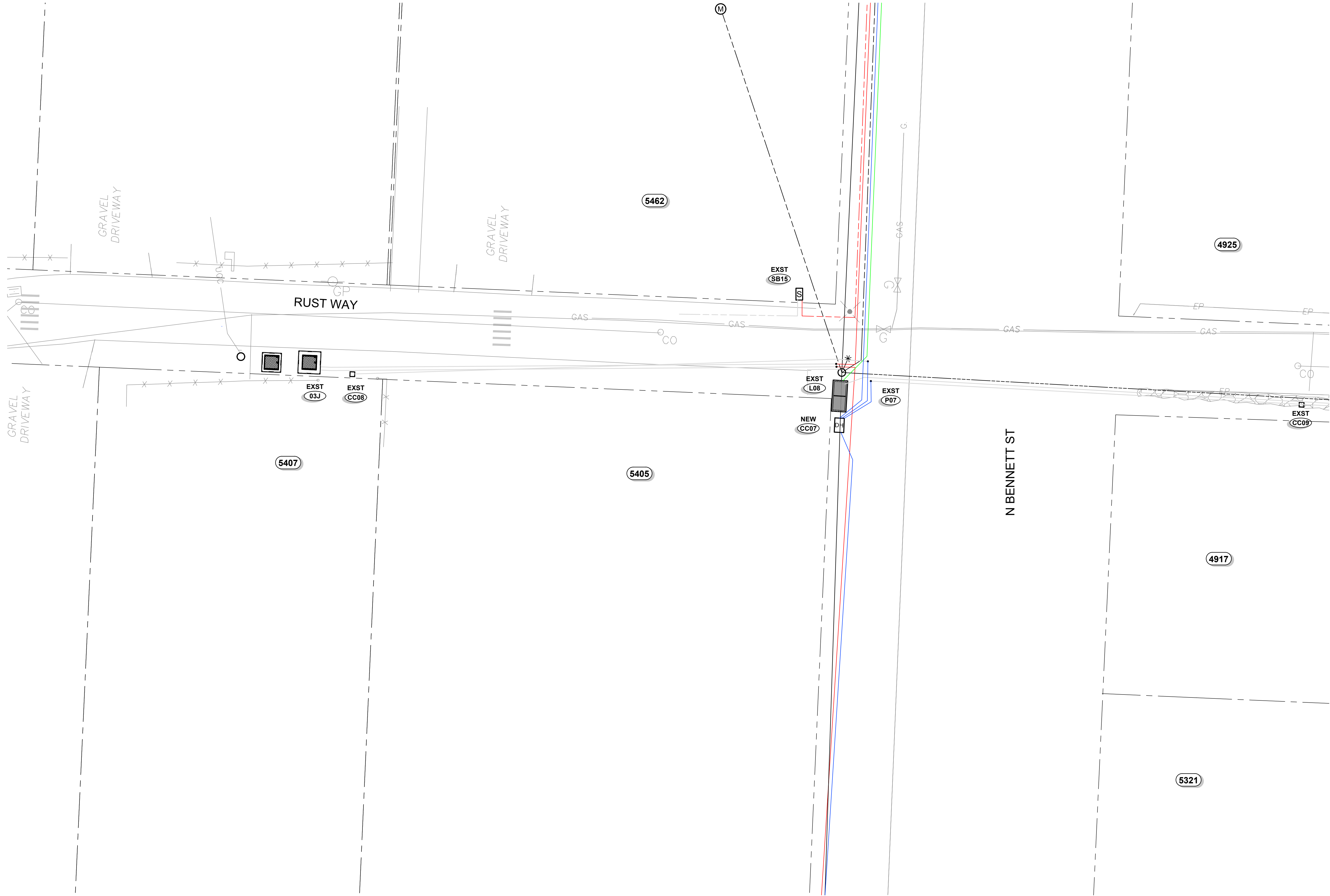
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SUBMITTAL DATE: 07/25/23

PROJECT NO.
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SHEET NO. P2-08

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NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING

WORK ZONE 4
Scale: 1" = 20'



49TH ST CONVERSION

WORK ZONE 4 - SHEET 2

NO.	DATE	REVISION	BY	CK
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B	2/17/23	60% PRELIMINARY DESIGN	SB	SB
C	7/25/23	90% PRELIMINARY DESIGN	SB	SB

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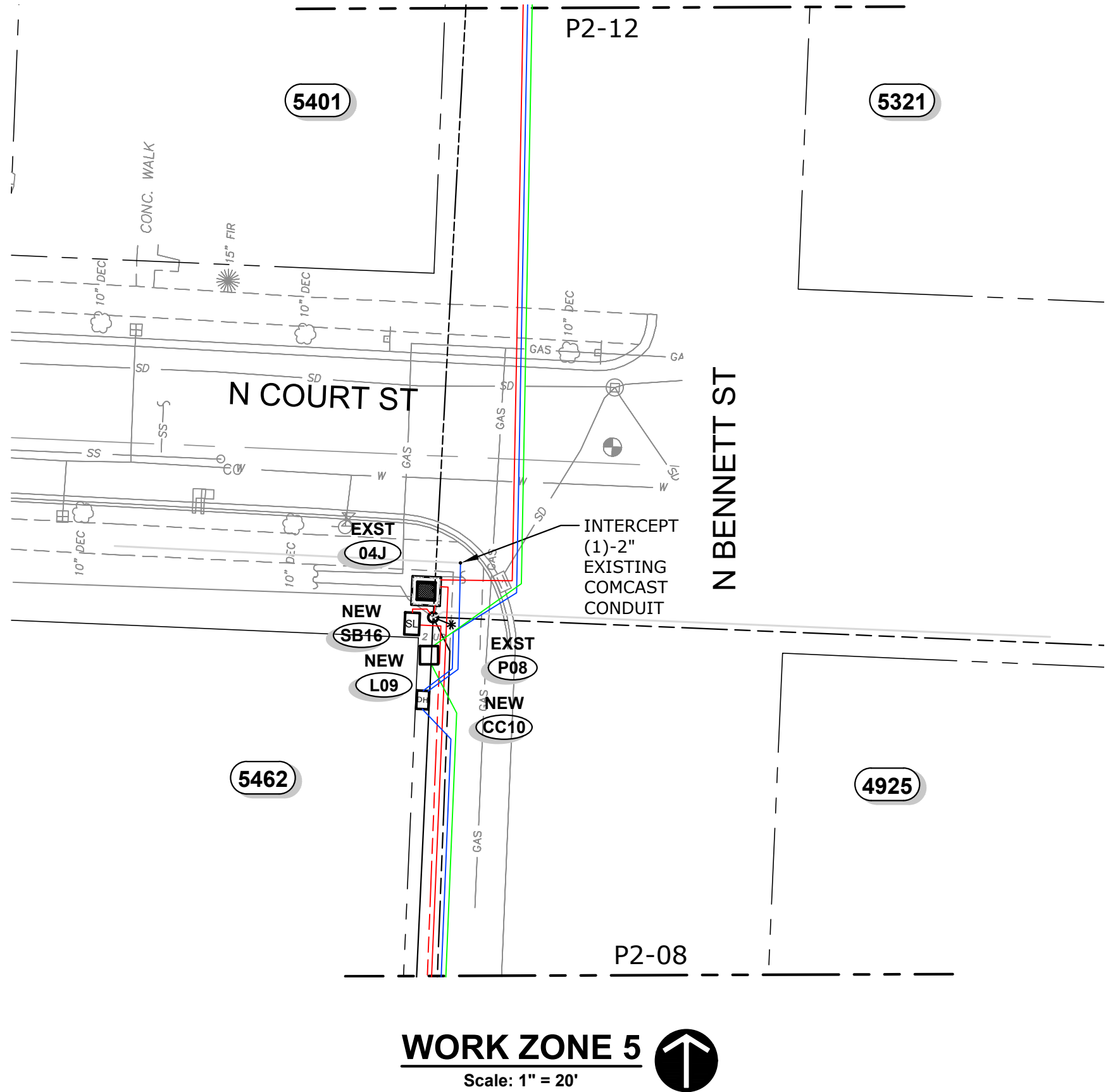
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PROJECT NO.
RUST00000002

SHEET NO. P2-09

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NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING



RUSTON STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves SB # (Lots)	Served From	Comments
SB16	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Streetlights	SB15	Streetlight SB
04J	-	-	-	(2) Load Break Elbows (0) Insulated Dust Covers	-	190203J	Existing Junction Box

RUSTON LV CABLE & CONDUIT SCHEDULE

Location		CONDUIT			CONDUCTORS (600V Rated)			Remarks
From	To	Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	
SB16	P08	1.5	1	Sch40 PVC	35	1	2-2-2 Aluminum	

RUSTON MV CABLE & CONDUIT SCHEDULE

Location		CONDUIT				PRIMARY CABLE (15kV Rated)						Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Cable Size	Cable Type	Est. Length (ft)	Cable Numbers			
A	B								C			
04J	230205J	2	1	Sch40 PVC	185	(1) #2	CU-EPR / 133% Insulation		04J-230205J - A			

LUMEN STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves structure # or (Lots)	Served From	Comments
L09	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2'-7" Cover w/ (2) 30"X24" Doors	-	-	L10	L08	Oldcastle 25-TA Handhole Vault

LUMEN CONDUIT & CABLE SCHEDULE

Location		CONDUIT				FIBER CABLE			Remarks
From	To	Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
L08	L09	4	1	Sch40 PVC	135	1		165	
L09	L10	4	1	Sch40 PVC	185	1		215	

COMCAST STRUCTURES

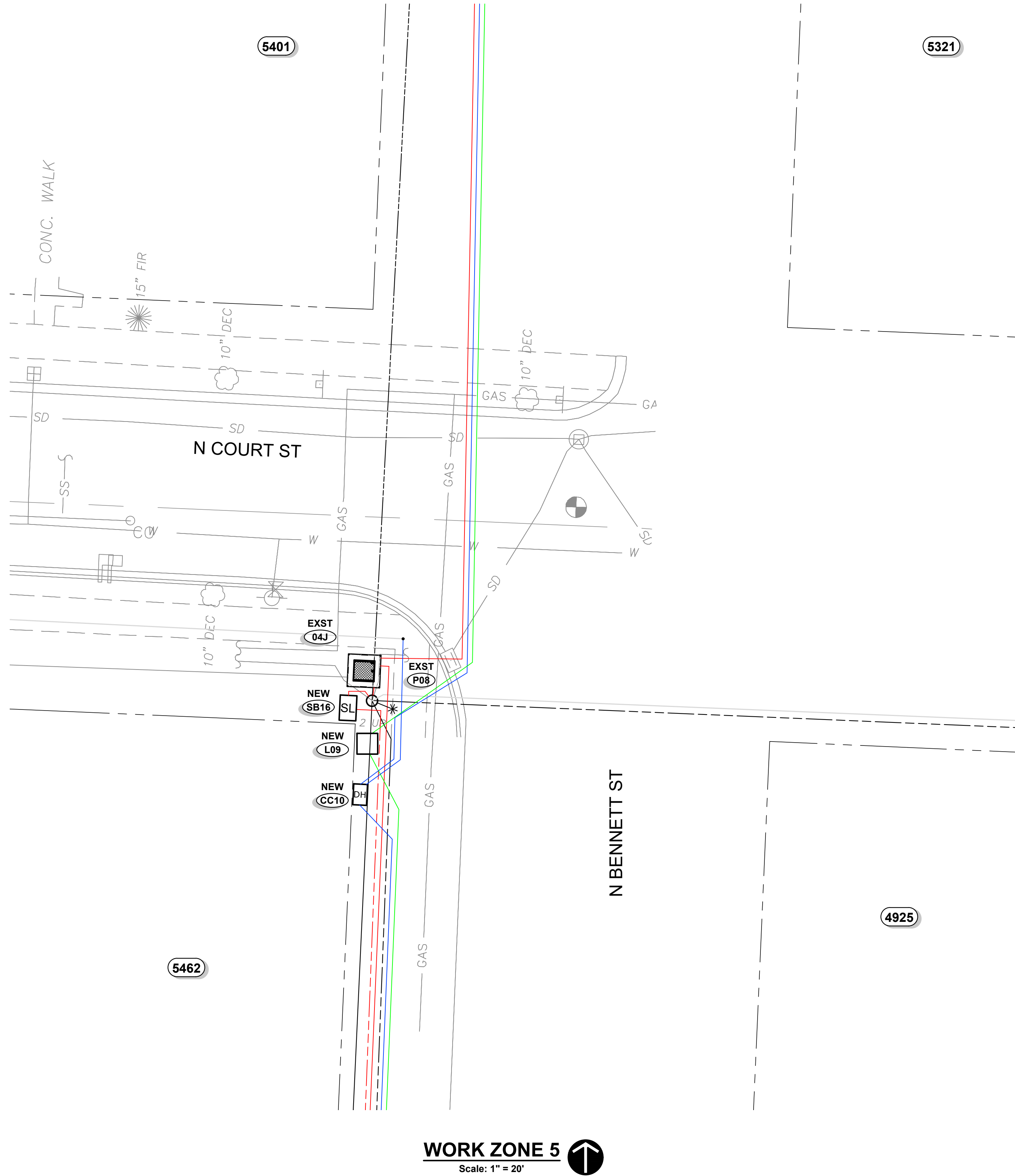
Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves structure # or (Lots)	Served From	Comments
CC10	Dog House	-	-	-	CC11 EXST Conduit Intercept	CC07	

COMCAST CONDUIT & CABLE SCHEDULE

Location		CONDUIT				FIBER CABLE			Remarks
From	To	Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
CC07	CC10	4	1	Sch40 PVC	140	1		150	
CC10	CC11	4	1	Sch40 PVC	200	1		210	
CC10	EXST	2	1	Sch40 PVC	25	1		30	

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NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING



WORK ZONE 5
Scale: 1" = 20'

49TH ST CONVERSION

WORK ZONE 5 - SHEET 2

NO.	DATE	REVISION	BY	CK
A	1/27/23	30% PRELIMINARY DESIGN	SB	SB
B	2/17/23	60% PRELIMINARY DESIGN	SB	SB
C	7/25/23	90% PRELIMINARY DESIGN	SB	SB

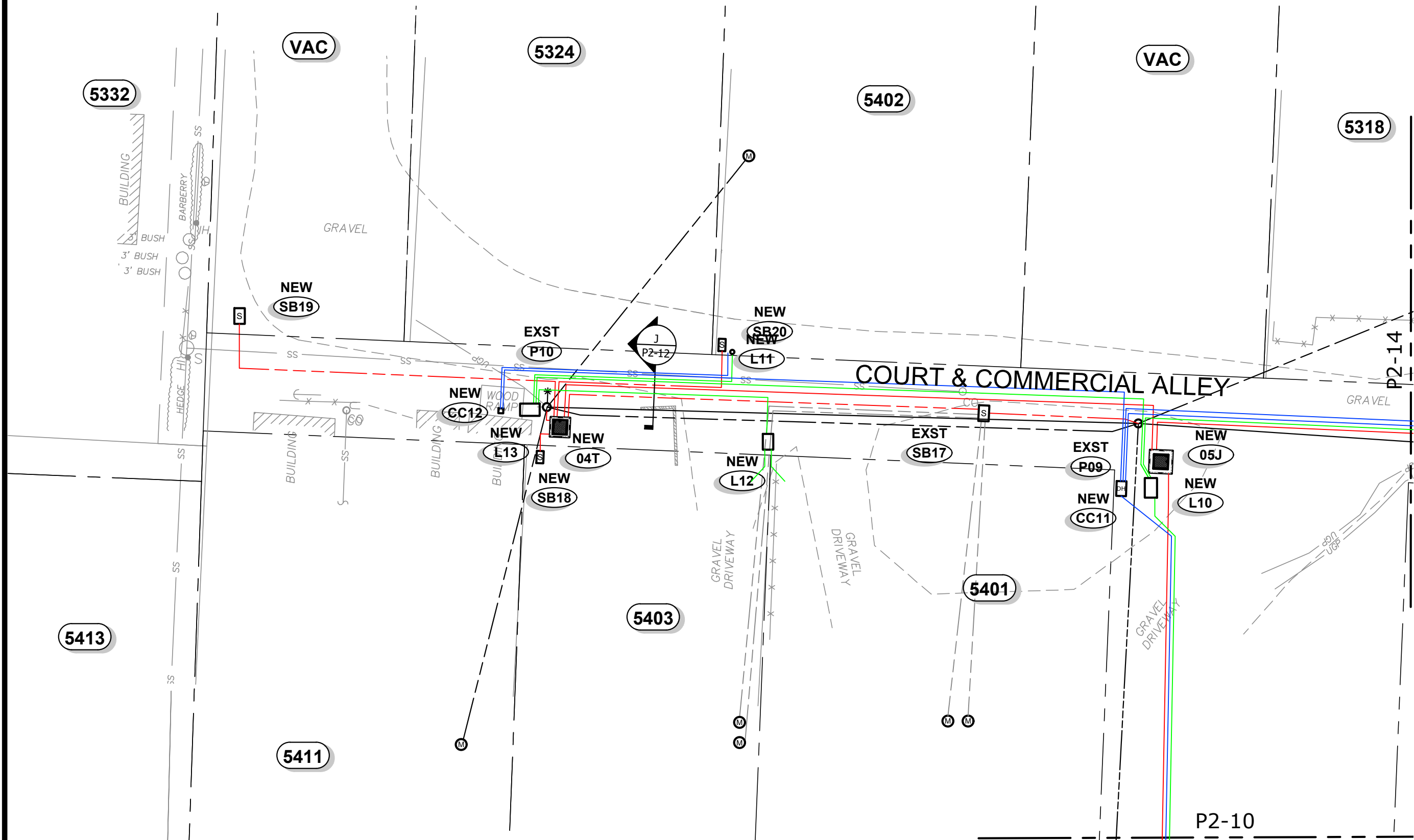
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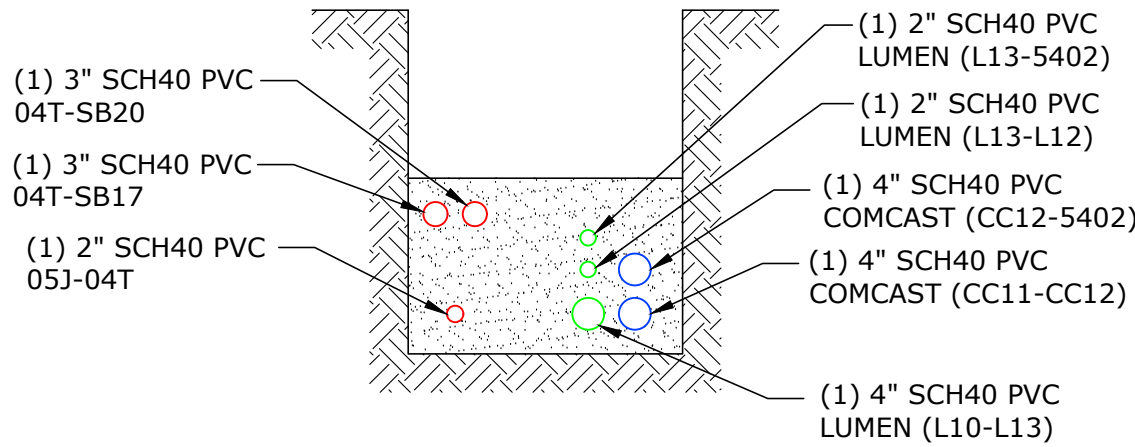
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SHEET NO. **P2-11**



WORK ZONE 6
Scale: 1" = 20'



TRENCH DETAIL J
NTS

RUSTON STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Series SB # (Lots)	Served From	Comments
230205J	4'-8"X4'-8"X3'-8" Vault (554)	4'-8"X4'-8"X6" Cover w/ (1) 3' Sq DIA Plate Door	(1) - 4 Position Lateral (Junction Bus)	(3) Load Break Elbows (1) Insulated Dust Covers	-	04J	Lid to have Anti-Skid Door
230204T	4'-0"X4'-0"X3'-8" Vault (444)	4'-0"X4'-0"X6" Cover w/ 28"X12" Access Hole	1Ø - 25kVA PM Xfmr 7,200V - 240/120	(1) Load Break Elbows (1) Insulated Dust Covers	SB17 - Lot - "5401" & "5403" SB18 - Lot - "5411" SB19 - Lot - "VAC" SB20 - Lot - "5324" & "5402"	230205J	
SB17	2'-8"X3'-8"X3'-2" Concrete Handhole w/ 3'-0"X2'-0" DIA Plate Door	-	-	-	Parcel "5401" Parcel "5403"	230204T	Oldcastle # 233-2436P Inverted
SB18	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5411"	230204T	
SB19	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "VAC"	230204T	
SB20	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5324" Parcel "5402"	230204T	

RUSTON LV CABLE & CONDUIT SCHEDULE

Location		CONDUIT			CONDUCTORS (600V Rated)				Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
SB17	P09	3	1	Sch40 PVC	35	1	350-4/0-350 Aluminum		
230204T	P10	3	1	Sch40 PVC	5	1	350-4/0-350 Aluminum		
230204T	SB17	3	1	Sch40 PVC	90	1	350-4/0-350 Aluminum		
230204T	SB18	3	1	Sch40 PVC	10	1	350-4/0-350 Aluminum		
230204T	SB19	3	1	Sch40 PVC	80	1	350-4/0-350 Aluminum		
230204T	SB20	3	1	Sch40 PVC	40	1	350-4/0-350 Aluminum		

RUSTON MV CABLE & CONDUIT SCHEDULE

Location		CONDUIT			PRIMARY CABLE (15kV Rated)					Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Cable Size	Cable Type	Est. Length (ft)	Cable Numbers	
230205J	230204T	2	1	Sch40 PVC	135	(1) #2	CU-EPR / 133% Insulation		230205J-230204T - A	
230205J	230205T	2	1	Sch40 PVC	160	(1) #2	CU-EPR / 133% Insulation		230205J-230205T - A	

LUMEN STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Series structure # or (Lots)	Served From	Comments
L10	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2" Cover w/ (2) 30"X24" Doors	-	-	L13 L14 L11 - Lot - "5401"	L09	Oldcastle 25-TA Handhole Vault
L11	32"X19"X24" Polymer Concrete Handhole	30"X17"X2" Polymer Concrete Cover	-	-	Parcel "5401"	L10	Oldcastle Polymer 1730
L12	32"X19"X24" Polymer Concrete Handhole	30"X17"X2" Polymer Concrete Cover	-	-	Parcel "5403"	L13	Oldcastle Polymer 1730
L13	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2" Cover w/ (2) 30"X24" Doors	-	-	Parcel "5324" Parcel "5402" Parcel "5403" Parcel "5411"	L10	Oldcastle 25-TA Handhole Vault

LUMEN CONDUIT & CABLE SCHEDULE

Location		CONDUIT				FIBER CABLE			Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
L09	L10	4	1	Sch40 PVC	185	1		215	
L10	L11	2	1	Sch40 PVC	45	1		75	
L10	L13	4	1	Sch40 PVC	150	1		180	
L10	L14	4	1	Sch40 PVC	180	1		210	
L13	5402	2	1	Sch40 PVC	50	1		65	
L13	L12	2	1	Sch40 PVC	60	1		90	

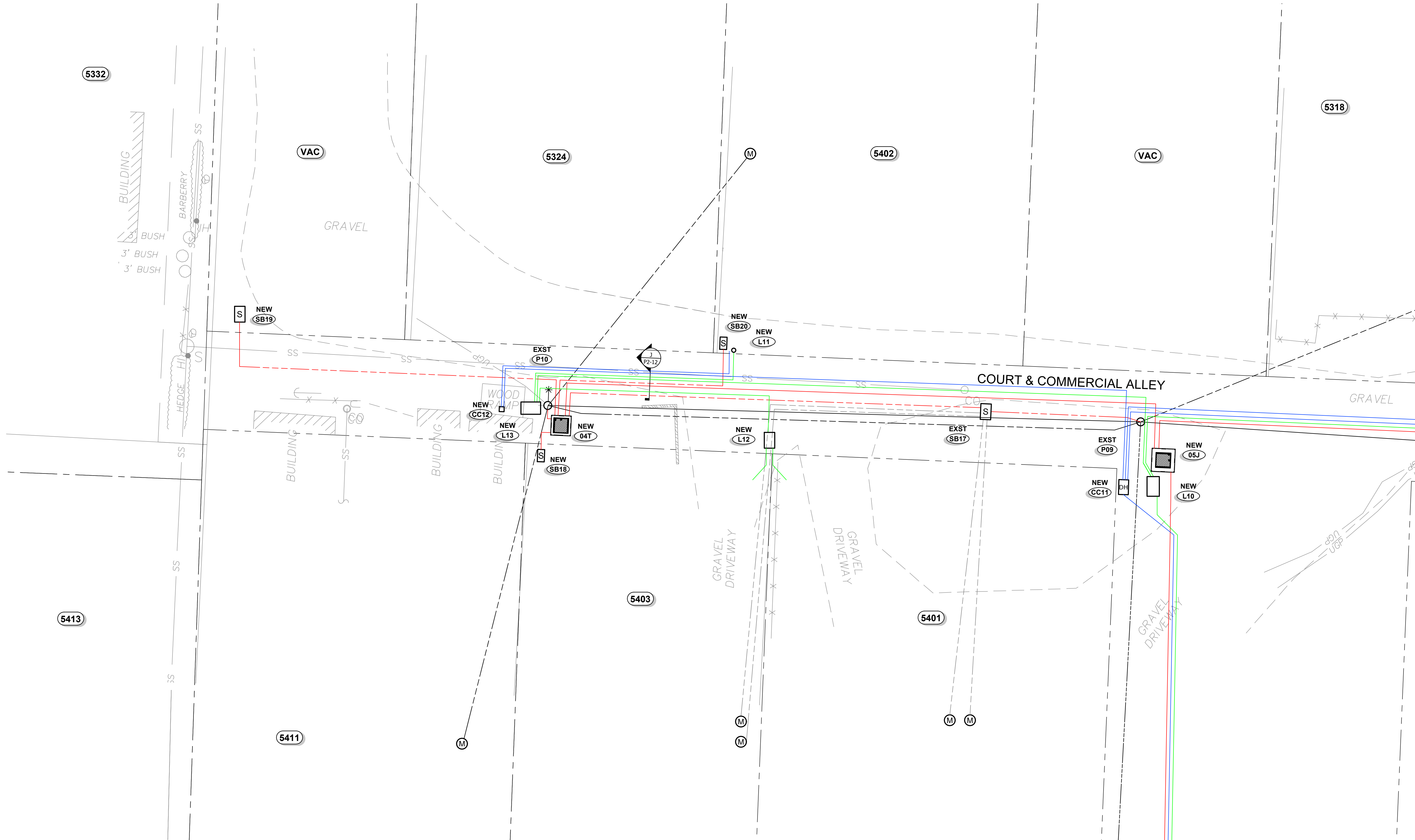
COMCAST STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Series structure # or (Lots)	Served From	Comments
CC11	Dog House	-	-	-	CC12 - Lot - "5402" CC13 - Lots "5321" & "5318" CC14	CC10	
CC12	Tap Pedestal	-	-	-	Parcel "5403" Parcel "5411" Parcel "5402" Parcel "5324"	CC11	

COMCAST CONDUIT & CABLE SCHEDULE

Location		CONDUIT				FIBER CABLE			Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
CC10	CC11	4	1	Sch40 PVC	200	1		210	
CC11	CC12	4	1	Sch40 PVC	155	1		165	
CC11	CC13	4	1	Sch40 PVC	95	1		105	
CC11	CC14	4	1	Sch40 PVC	200	1		210	
CC12	5402	4	1	Sch40 PVC	60	1		65	

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WORK ZONE 6
Scale: 1" = 20'

NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING

**DAVID EVANS
AND ASSOCIATES INC.**
2100 S. River Parkway, Suite 100
Portland Oregon 97201
Phone: 503.223.6663

49TH ST CONVERSION

WORK ZONE 6 - SHEET 2

NO.	DATE	REVISION	BY	CK
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B	2/17/23	60% PRELIMINARY DESIGN	SB	SB
C	7/25/23	90% PRELIMINARY DESIGN	SB	SB

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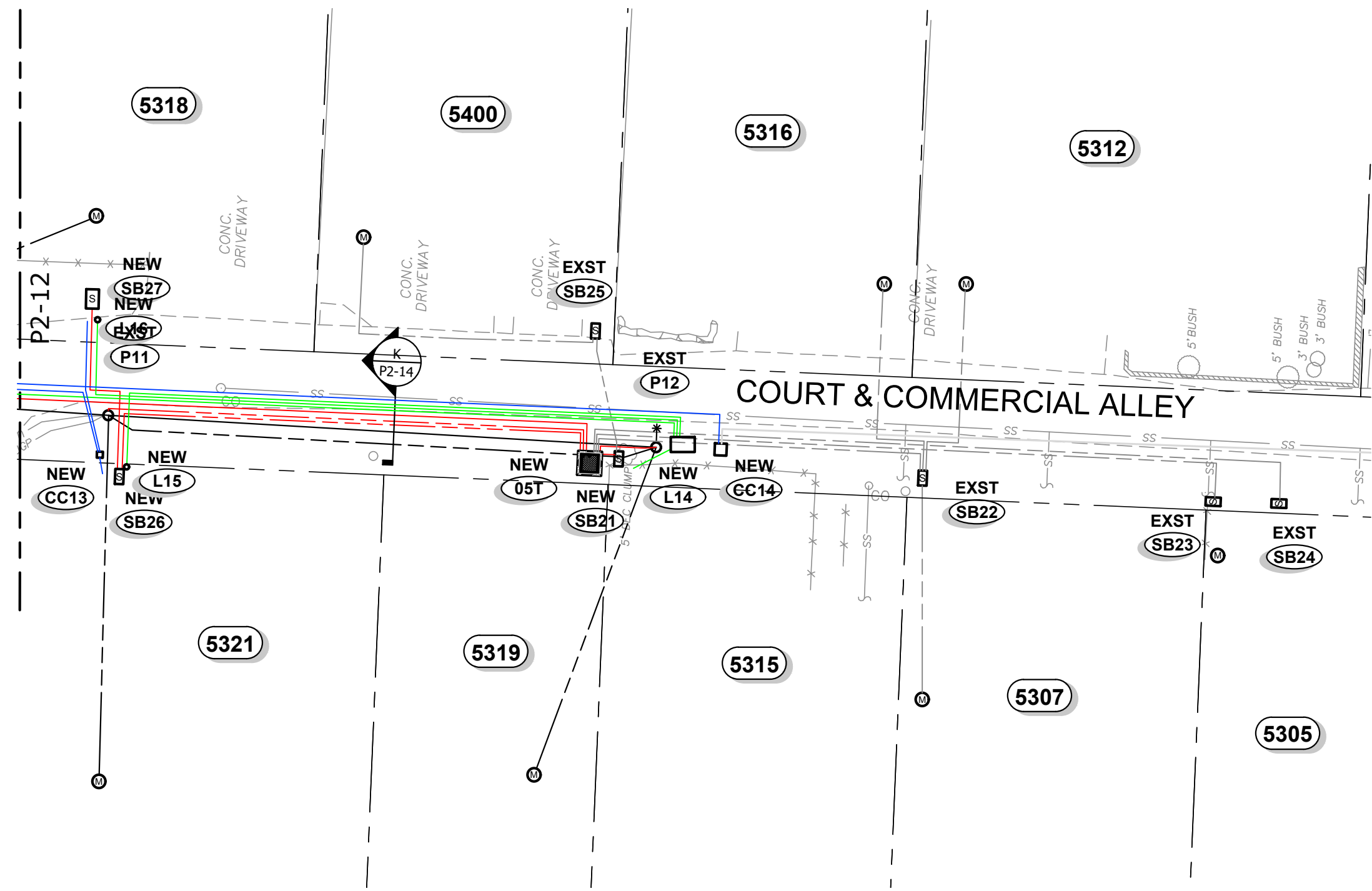
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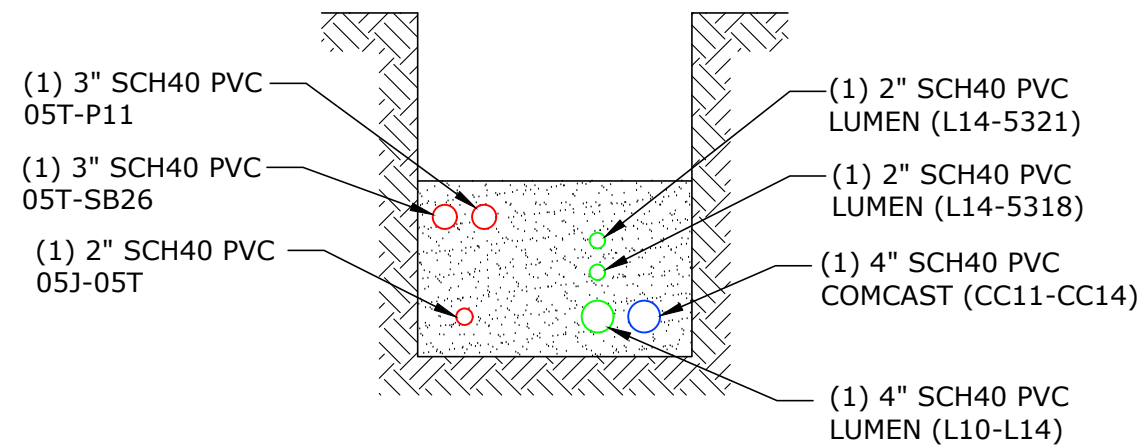
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SHEET NO. P2-13

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WORK ZONE 7
Scale: 1" = 20'



TRENCH DETAIL K
NTS

NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING

RUSTON STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves SB # (Lots)	Served From	Comments
230205T	4'-0"X4'-0"X3'-6" Vault (444)	4'-0"X4'-0"X8" Cover w/ 28"X12" Access Hole	1Ø - 25kVA PM Xfmr 7,200V - 240/120	(1) Load Break Elbows (1) Insulated Dust Covers	SB21 - Lot - "5315" & "5319" SB22 - Lot - "5307" & "5312" & "5316" SB23 - Lots - "" SB24 - Lots - "" SB25 - Lots - "5400" SB26 - Lots - "5321" SB27 - Lot - "5318"	230205J	
SB21	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5315" Parcel "5319" SB25 - Lot - "5400"	230205T	
SB22	-	-	-	-	Parcel "5307" Parcel "5312" Parcel "5316" SB23 - Lot - "" SB24 - Lot - ""	230205T	Existing SB
SB23	-	-	-	-	Parcel ""	230205T	Existing SB
SB24	-	-	-	-	Parcel ""	230205T	Existing SB
SB25	-	-	-	-	Parcel "5400"	SB21	Existing SB
SB26	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5321"	230205T	
SB27	2'-8"X3'-8"X3'-2" Concrete Handhole w/ 3'-0"X2'-0" DIA Plate Door	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5318"	SB26	Oldcastle # 233-2436P Inverted

RUSTON LV CABLE & CONDUIT SCHEDULE

Location		CONDUIT				CONDUCTORS (600V Rated)			Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
230205T	P11	3	1	Sch40 PVC	85	1	350-4/0-350 Aluminum		
230205T	SB21	3	1	Sch40 PVC	10	1	350-4/0-350 Aluminum		
230205T	P12	3	1	Sch40 PVC	15	1	350-4/0-350 Aluminum		
230205T	SB26	3	1	Sch40 PVC	100	1	350-4/0-350 Aluminum		
SB26	SB27	3	1	Sch40 PVC	35	1	350-4/0-350 Aluminum		

LUMEN STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves structure # or (Lots)	Served From	Comments
L14	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2" Cover w/ (2) 30"X24" Doors	-	-	Parcel "5315" Parcel "5318" Parcel "5319" Parcel "5321"	L10	Oldcastle 25-TA Handhole Vault

LUMEN CONDUIT & CABLE SCHEDULE

Location		CONDUIT				FIBER CABLE			Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
L10	L14	4	1	Sch40 PVC	180	1		210	
L14	5321	2	1	Sch40 PVC	110	1		125	
L14	5315	2	1	Sch40 PVC	10	1		25	
L14	5318	2	1	Sch40 PVC	115	1		130	

COMCAST STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves structure # or (Lots)	Served From	Comments
CC13	Tap Pedestal	-	-	-	Parcel "5321" Parcel "5318"	CC11	
CC14	12X12 Pedestal	-	-	-	Parcel "5315"	CC11	

COMCAST CONDUIT & CABLE SCHEDULE

Location		CONDUIT				FIBER CABLE			Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
CC11	CC13	4	1	Sch40 PVC	95	1		105	
CC13	5318	4	1	Sch40 PVC	25	1		30	
CC13	5321	4	1	Sch40 PVC	5	1		10	
CC11	CC14	4	1	Sch40 PVC	200	1		210	

NO.	DATE	REVISION	BY	CK
A	1/27/23	30% PRELIMINARY DESIGN	SB	SB
B	2/17/23	60% PRELIMINARY DESIGN	SB	SB
C	7/25/23	90% PRELIMINARY DESIGN	SB	SB

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DESIGNED BY: S BAUMCHEN
DRAWN BY: P LANE

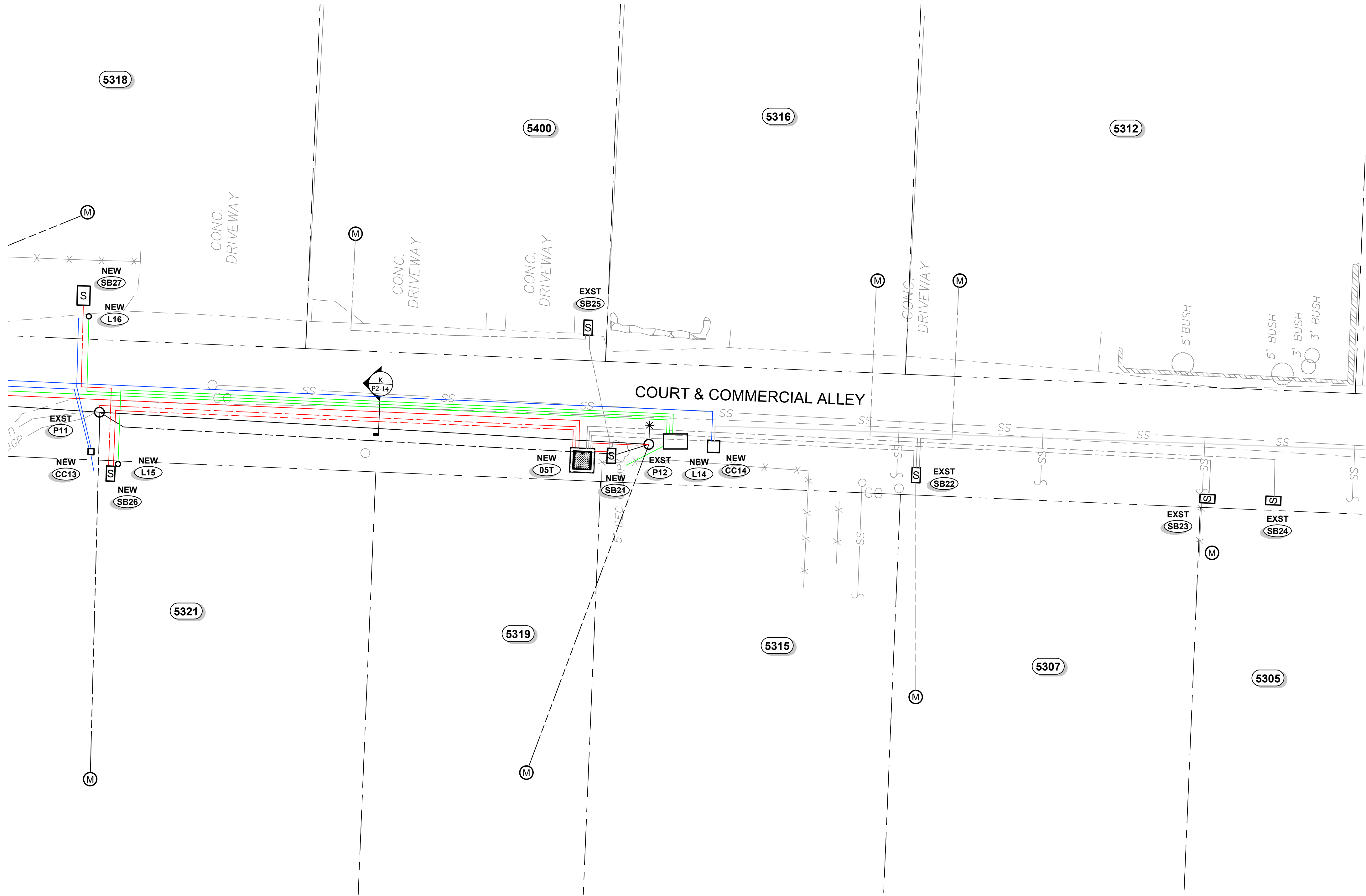
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SHEET NO. P2-14

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NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING



WORK ZONE 7
Scale: 1" = 20'

49TH ST CONVERSION

WORK ZONE 7 - SHEET 2

NO.	DATE	REVISION	BY	CK
A	1/27/23	30% PRELIMINARY DESIGN	SB	SB
B	2/17/23	60% PRELIMINARY DESIGN	SB	SB
C	7/25/23	90% PRELIMINARY DESIGN	SB	SB

**NOT FOR CONSTRUCTION
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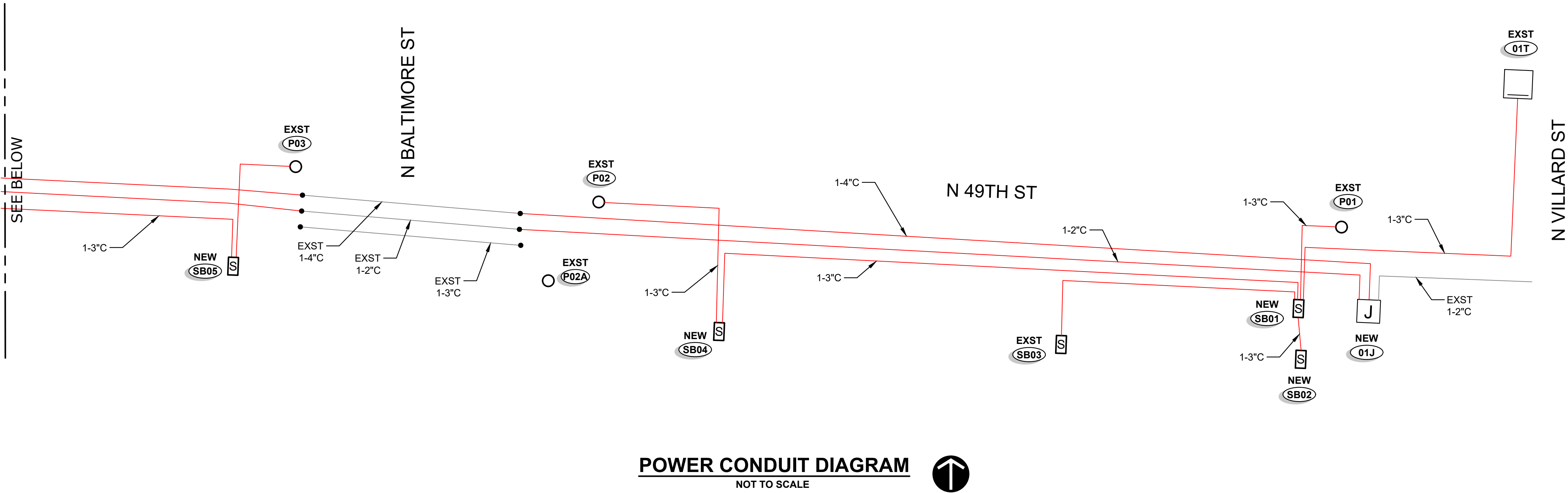
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SUBMITTAL DATE: 07/25/23

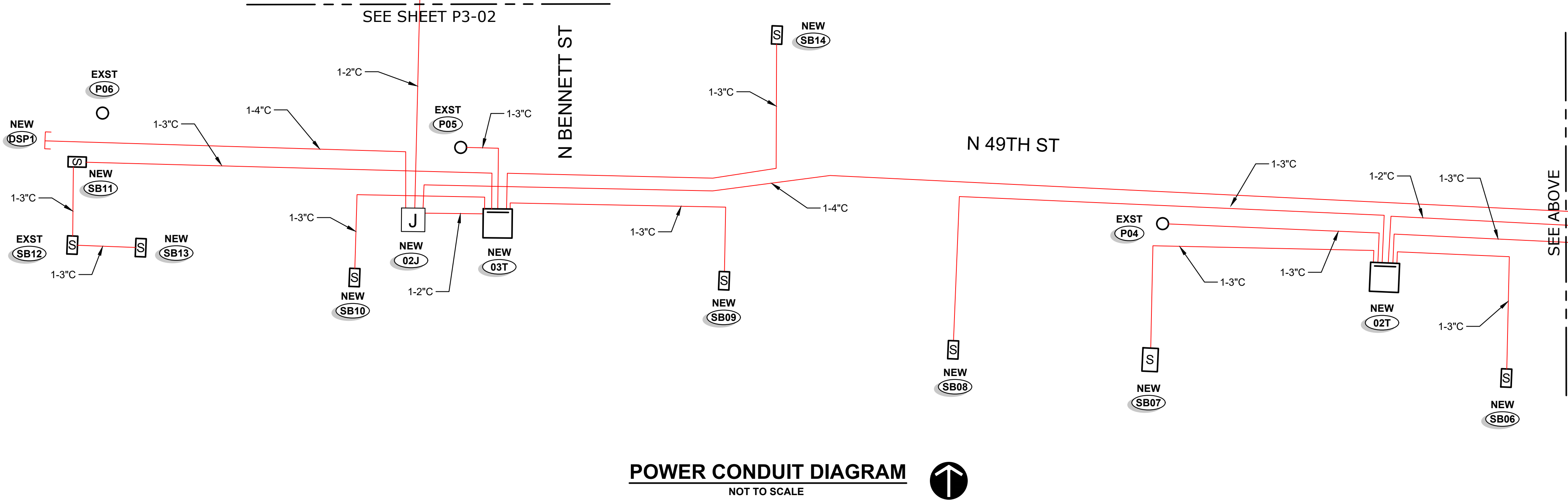
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SHEET NO. P2-15

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SB01	3.1	2.0
SB02	3.2	2.1
SB03	3.5	2.7
SB04	3.7	3.1
SB05	3.5	3.3
SB06	3.3	2.9
SB07	3.4	3.0
SB08	3.5	3.3
SB09	3.3	3.0
SB10	3.2	2.7
SB11	3.7	3.3
SB12	3.8	3.4
SB13	3.8	3.5
SB14	3.5	3.3



NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING

49TH ST CONVERSION

POWER CONDUIT DIAGRAM - SHEET 1

CK	SB	SB	SB
BY	SB	SB	SB
REVISION	30% PRELIMINARY DESIGN	60% PRELIMINARY DESIGN	90% PRELIMINARY DESIGN
DATE	1/27/23	2/17/23	7/25/23
NO.	A	B	C

NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENT

CHECKED BY: S BAUMCHEN
DESIGNED BY: S BAUMCHEN
DRAWN BY: P LANE
SUBMITTAL DATE: 07/25/23
PROJECT NO.
RUST00000002
SHEET NO. P3-01

	%VD	%FL
SB15	N/A	N/A
SB16	N/A	N/A
SB17	3.6	3.2
SB18	3.1	2.7
SB19	3.4	3.1
SB20	3.4	2.9
SB21	2.9	1.9
SB22	3.3	2.4
SB23	3.4	2.9
SB24	3.5	3.0
SB25	3.0	2.1
SB26	3.3	2.4
SB27	3.5	2.7

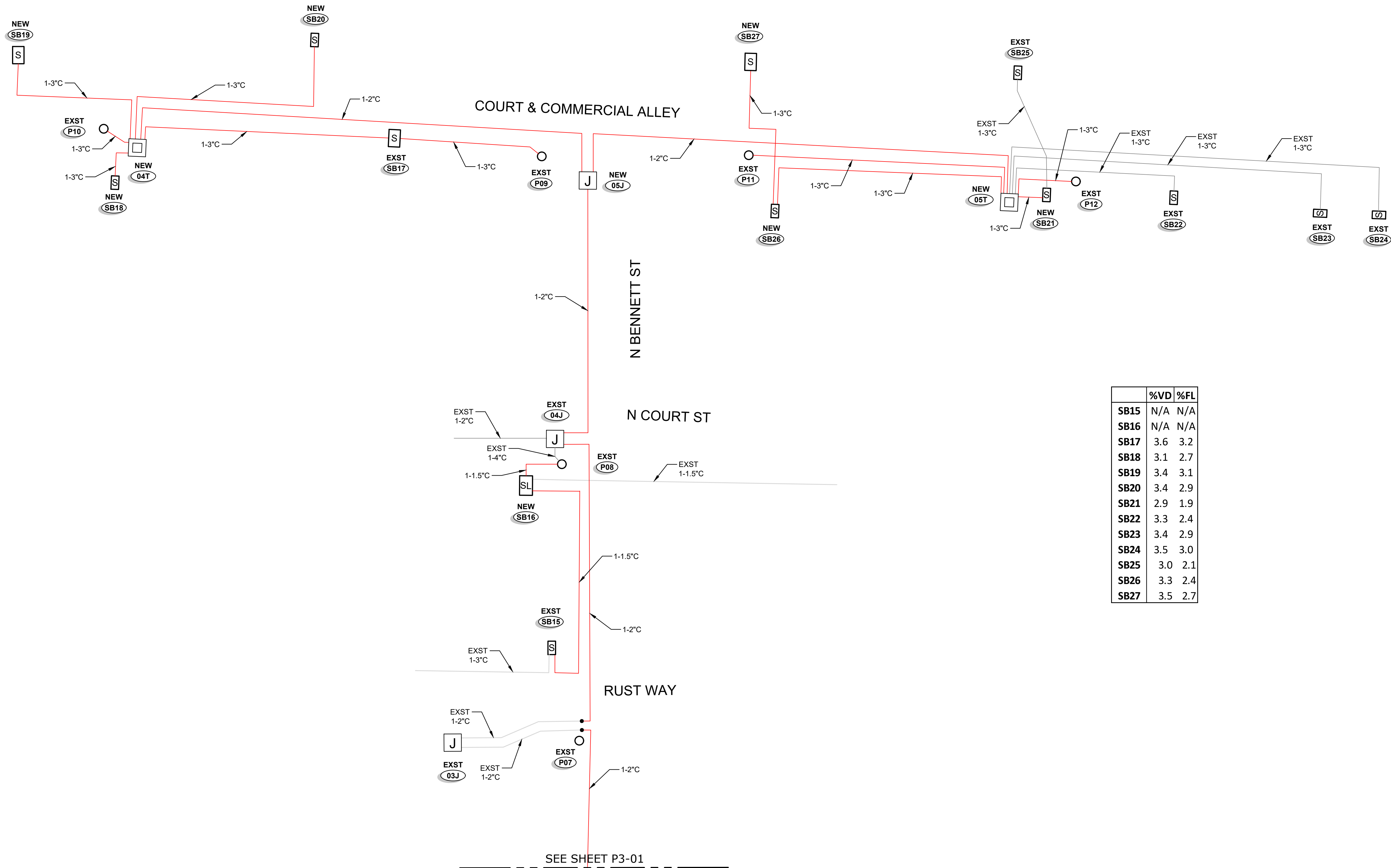
NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENT

CHECKED BY: S BAUMCHEN
DESIGNED BY: S BAUMCHEN
DRAWN BY: P LANE

SUBMITTAL DATE: 07/25/23

PROJECT NO.
RUST00000002

SHEET NO. P3-02



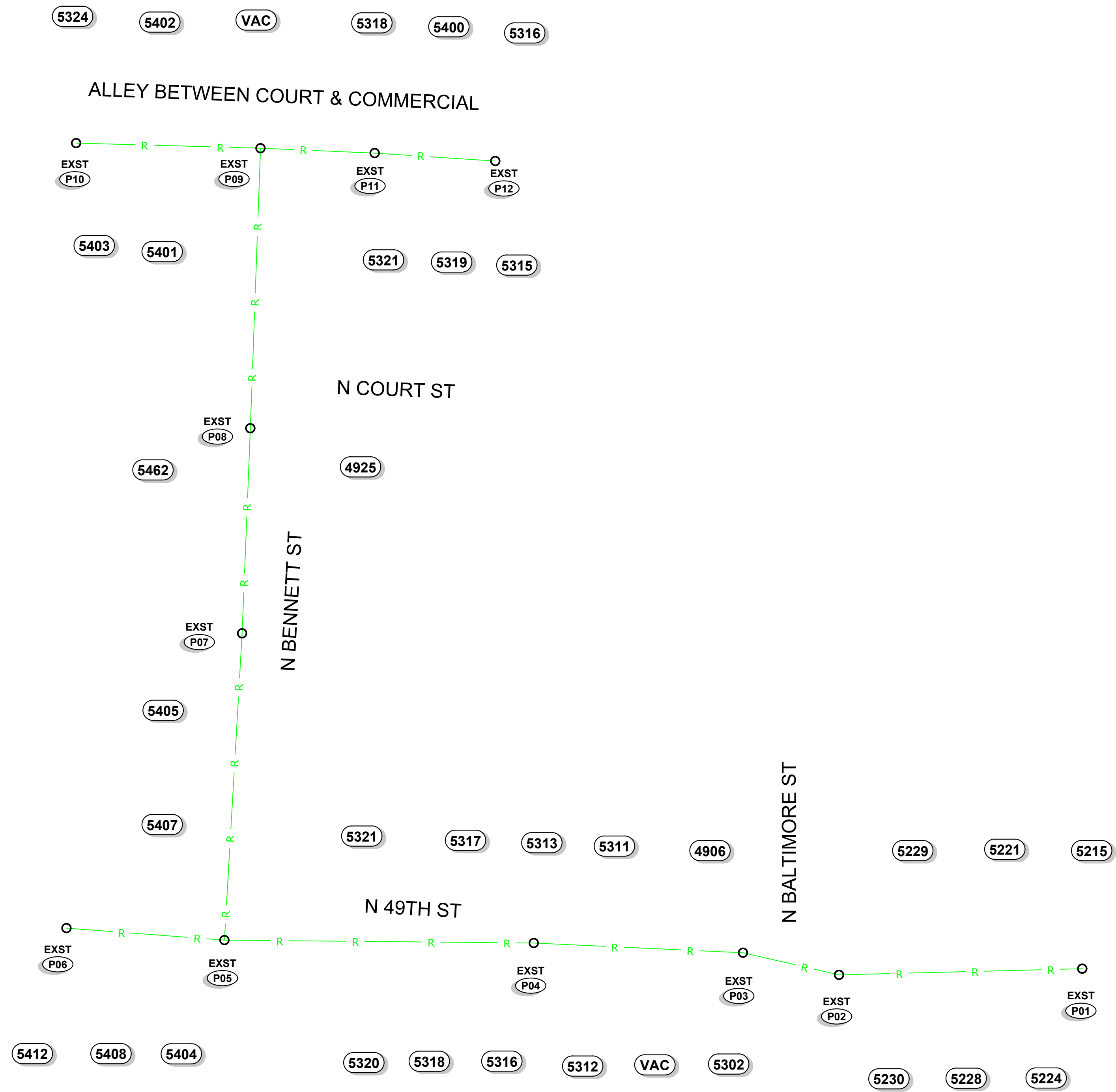
POWER CONDUIT DIAGRAM

NOT TO SCALE



NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING

Plot Date: 9/13/2023 8:28 AM
Save Date: 8/8/2023 7:16 AM
By: Shaun Baumchen
File: P:\RUST\00000002\040CAD\EN\SH\ETS\2023\0803_49Th St Conversion.dwg



POWER REMOVAL DIAGRAM
NOT TO SCALE



49TH ST CONVERSION

POWER REMOVAL DIAGRAM

NO.	DATE	REVISION	BY	CK
A	1/27/23	30% PRELIMINARY DESIGN	SB	SB
B	2/17/23	60% PRELIMINARY DESIGN	SB	SB
C	7/25/23	90% PRELIMINARY DESIGN	SB	SB

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FOR REVIEW AND COMMENT**

CHECKED BY: S BAUMCHEN
DESIGNED BY: S BAUMCHEN
DRAWN BY: P LANE

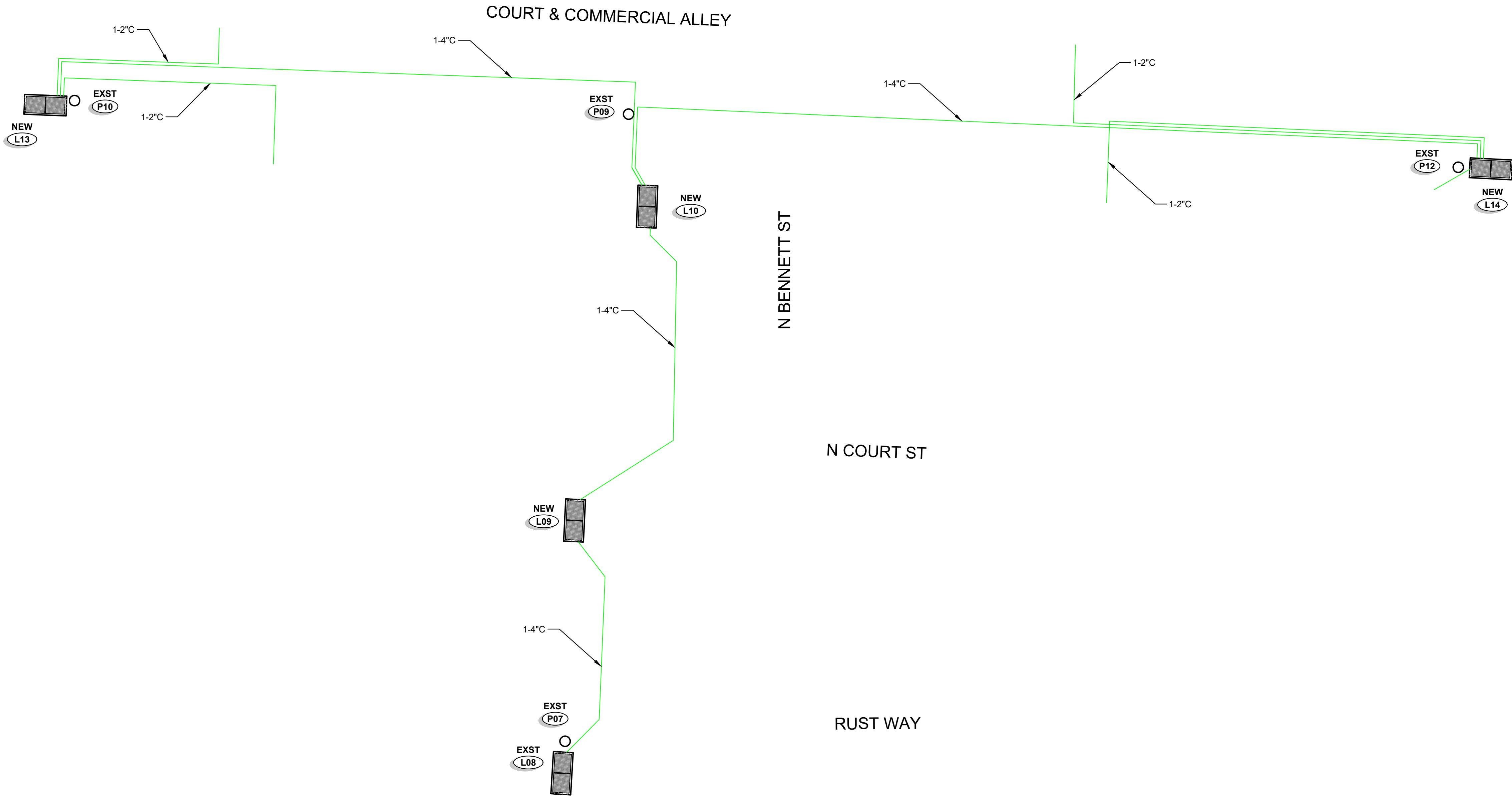
SUBMITTAL DATE: 07/25/23

PROJECT NO.
RUST00000002

SHEET NO. **P3-03**

Plot Date: 9/13/2023 8:28 AM By: Shaun Baumchen
Save Date: 8/8/2023 7:16 AM File: P:\RUST\T000000002\040CAD\EN\SH\T0230803_49Th St Conversion.dwg

NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING



LUMEN CONDUIT DIAGRAM
NOT TO SCALE

49TH ST CONVERSION

LUMEN CONDUIT DIAGRAM - SHEET 2

NO.	DATE	REVISION	BY	CK
A	1/27/23	30% PRELIMINARY DESIGN	SB	SB
B	2/17/23	60% PRELIMINARY DESIGN	SB	SB
C	7/25/23	90% PRELIMINARY DESIGN	SB	SB

**NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENT**

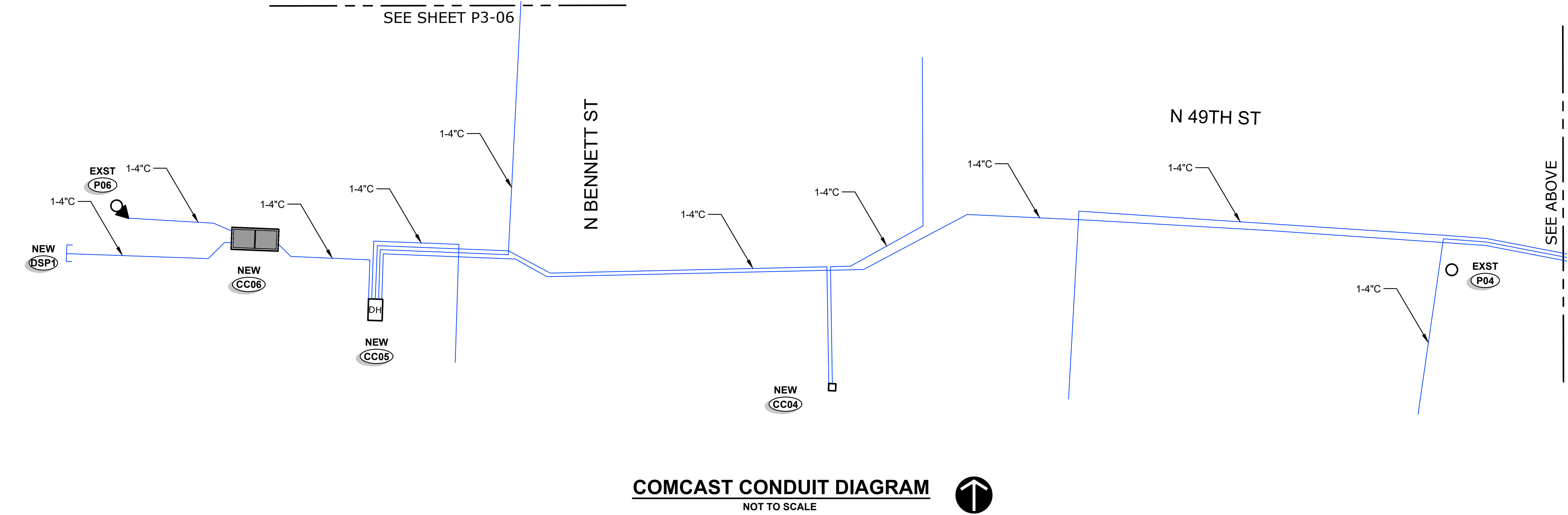
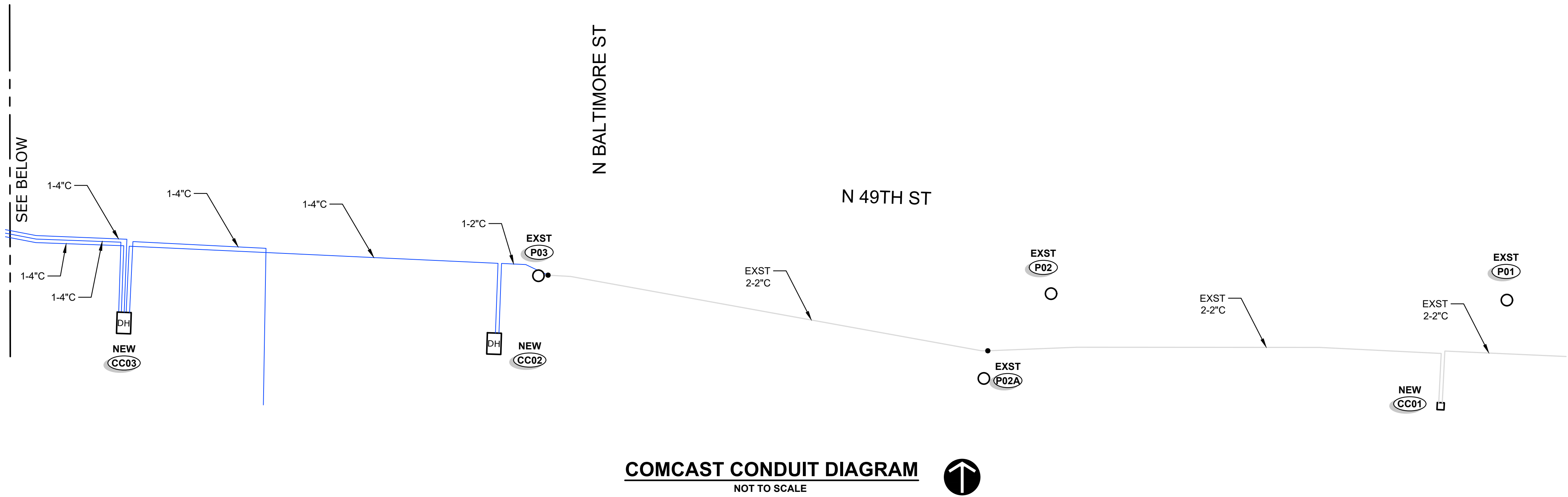
CHECKED BY: S BAUMCHEN
DESIGNED BY: S BAUMCHEN
DRAWN BY: P LANE

SUBMITTAL DATE: 07/25/23

PROJECT NO.
RUST00000002

SHEET NO. **P3-04**

Plot Date: 9/13/2023 8:28 AM By: Shaun Baumchen
Save Date: 8/8/2023 7:16 AM File: P:\RUST\T00000002\040CAD\EN\SHETS\20230803_49Th St Conversion.dwg



NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING

49TH ST CONVERSION

COMCAST CONDUIT DIAGRAM -SHEET 1

NO.	DATE	REVISION	BY	CK
A	1/27/23	30% PRELIMINARY DESIGN	SB	SB
B	2/17/23	60% PRELIMINARY DESIGN	SB	SB
C	7/25/23	90% PRELIMINARY DESIGN	SB	SB

**NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENT**

CHECKED BY: S BAUMCHEN
DESIGNED BY: S BAUMCHEN
DRAWN BY: P LANE

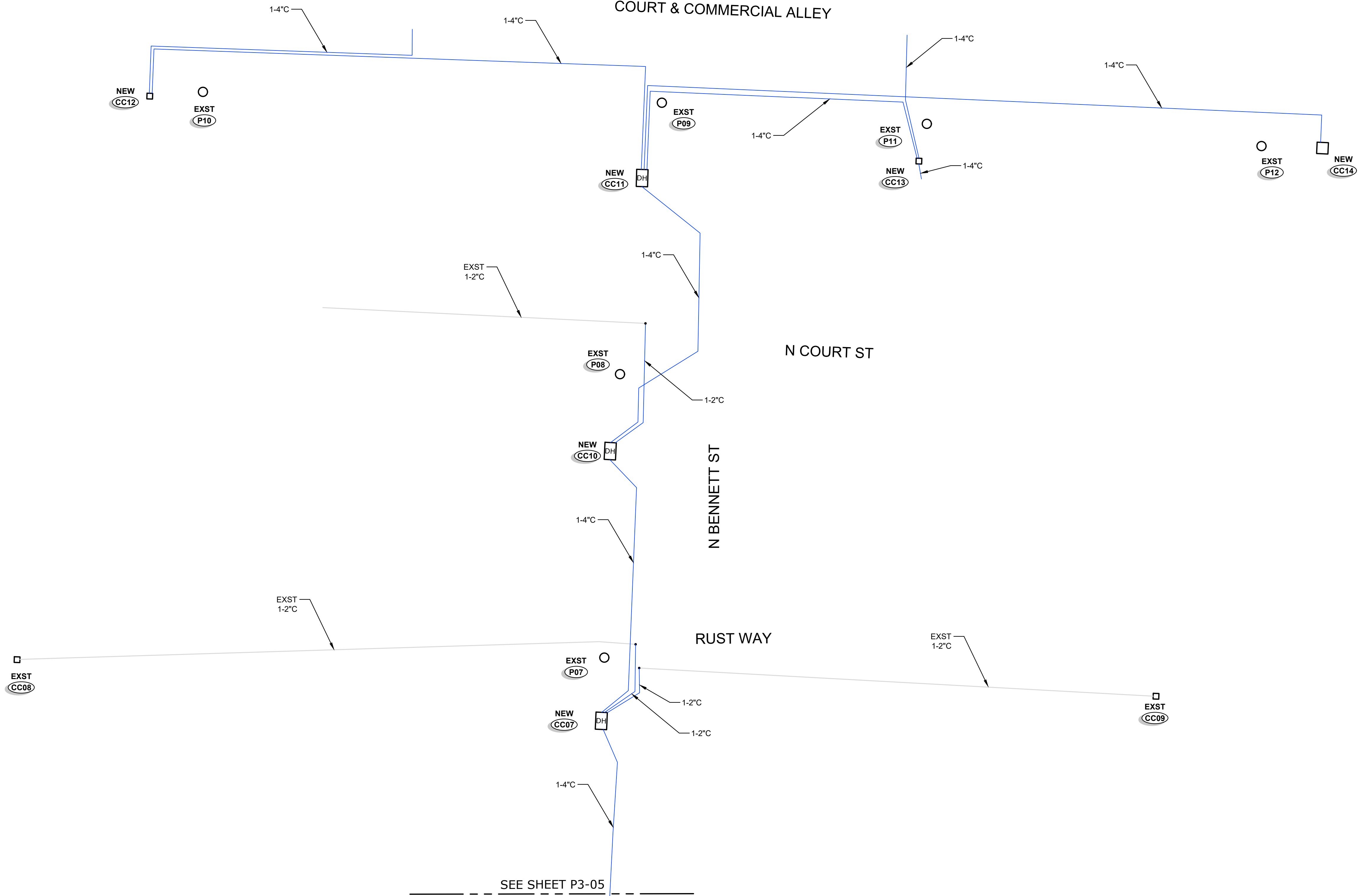
SUBMITTAL DATE: 07/25/23

PROJECT NO.
RUST00000002

SHEET NO. P3-05

Plot Date: 9/13/2023 8:28 AM
Save Date: 8/8/2023 7:16 AM
By: Shaun Baumchen
File: P:\RUST\T000000002\040CAD\EN\SHETS\2023\0803_49Th St Conversion.dwg

NOTE:
SEE SHEET T2-01 FOR TYPICAL TRENCH CONDUIT SPACING



COMCAST CONDUIT DIAGRAM
NOT TO SCALE



49TH ST CONVERSION

COMCAST CONDUIT DIAGRAM - SHEET 2

NO.	DATE	REVISION	BY			CK		
			A	B	C	SB	SB	SB
	1/27/23	30% PRELIMINARY DESIGN						
	2/17/23	60% PRELIMINARY DESIGN						
	7/25/23	90% PRELIMINARY DESIGN						

**NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENT**

CHECKED BY: S BAUMCHEN
DESIGNED BY: S BAUMCHEN
DRAWN BY: P LANE

SUBMITTAL DATE: 07/25/23

PROJECT NO.
RUST00000002

SHEET NO. **P3-06**

RUSTON STRUCTURES (1/2)

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Series SB # (Lots)	Served From	Comments
230201J	4'-8"X4'-8"X3'-6" Vault (554)	4'-8"X4'-8"X6" Cover w/ (1) 3' Sq DIA Plate Door	(1) - 4 Position Lateral (Junction Bus)	(3) Load Break Elbows (1) Insulated Dust Covers	-	-	Lid to have Anti-Skid Door
01T	-	-	-	-	SB01	-	Existing Padmount XFMR
SB01	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 8 Position Submersible Rubberized Secondary Connectors	-	SB02 - Lots - "5220 & 5224" SB03 - Lot - "5228" SB04 - Lot - "5230"	01T	
SB02	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5220" Parcel "5224"	SB01	
SB03	-	-	-	-	SB04 - Lot - "5230" Parcel "5228"	SB01	Existing SB
SB04	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5230"	SB01	
SB05	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcels "5302"	230202T	
SB06	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Vacant Lot	230202T	Placed for Future Occupancy
230202T	-	4'-0"X4'-0"X6" Cover w/ 28"X12" Access Hole	1Ø - 37.5kVA Padmount Xfmr 7,200V - 240/120V	(1) Load Break Elbows (1) Insulated Dust Covers	SB05 - Lot - "5302" SB06 - Lot - "Vacant" SB07 - Lot - "5312" & "5316" SB08 - Lot - "5318" SB09 - Lot - "5320"	230201J	
SB07	2'-8"X3'-8"X3'-2" Concrete Handhole w/ 3'-0"X2'-0" DIA Plate Door	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5312" Parcel "5316"	230202T	Oldcastle # 233-2436P Inverted
SB08	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5318"	230202T	
SB09	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5320"	230203T	
230202J	4'-8"X4'-8"X3'-6" Vault (554)	4'-8"X4'-8"X6" Cover w/ (1) 3' Sq DIA Plate Door	(1) - 4 Position Lateral (Junction Bus)	(3) Load Break Elbows (0) Insulated Dust Covers	-	230201J	Lid to have Anti-Skid Door
230203T	-	4'-0"X4'-0"X6" Cover w/ 28"X12" Access Hole	1Ø - 25kVA Padmount Xfmr 7,200V - 240/120V	(1) Load Break Elbows (1) Insulated Dust Covers	SB09 - Lot - "5320" SB10 - Lot - "5404" SB11 - Lot - "5412" & "5408" SB14 - Lot - "5321"	230202J	-
SB10	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5404"	230203T	
SB11	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	SB12 - Lot - "5412" SB13 - Lot - "5408"	230203T	
SB12	-	-	-	-	Parcel "5412" SB13 - Lot - "5408"	SB11	Existing SB
SB13	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5408"	SB12	
SB14	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5321"	230203T	
190203J	-	-	-	(2) Load Break Elbows (0) Insulated Dust Covers	-	230202J	Existing Junction Box

RUSTON MV CABLE & CONDUIT SCHEDULE

Location		CONDUIT				PRIMARY CABLE (15kV Rated)						Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Cable Size	Cable Type	Est. Length (ft)	Cable Numbers			
From	To								A	B	C	
230201J	230202J	4	1	Sch40 PVC	515	(1) #2	CU-EPR / 133% Insulation		230201J-230202J - A			
230201J	01T	2	1	Sch40 PVC	100	Conduit only at this Time						
230201J	230202T	2	1	Sch40 PVC	280	(1) #2	CU-EPR / 133% Insulation		230201J-230202T - A			
230201J	P01	Laydown Existing Riser				Utilize Existing Single-Phase Cable From East						
230202J	DSP1	4	1	Sch40 PVC	115	Conduit only at this Time						
230202J	190203J	2	1	Sch40 PVC	220	(1) #2	CU-EPR / 133% Insulation		230202J-190203J - A			Intercept conduit at P07
230202J	230203T	2	1	Sch40 PVC	10	(1) #2	CU-EPR / 133% Insulation		230202J-230203T - A			
190203J	04J	2	1	Sch40 PVC	150	(1) #2	CU-EPR / 133% Insulation		190203J-04J - A			Intercept conduit at P07
04J	230205J	2	1	Sch40 PVC	185	(1) #2	CU-EPR / 133% Insulation		04J-230205J - A			
230205J	230204T	2	1	Sch40 PVC	135	(1) #2	CU-EPR / 133% Insulation		230205J-230204T - A			
230205J	230205T	2	1	Sch40 PVC	160	(1) #2	CU-EPR / 133% Insulation		230205J-230205T - A			

RUSTON STRUCTURES (2/2)

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Series SB # (Lots)	Served From	Comments
SB15	-	-	-	-	Parcel "5462"	-	Existing SB
SB16	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Streelights	SB15	Streelight SB
04J	-	-	-	(2) Load Break Elbows (0) Insulated Dust Covers (3) Load Break Elbows (1) Insulated Dust Covers	-	190203J	Existing Junction Box
230205J	4'-8"X4'-8"X3'-6" Vault (554)	4'-8"X4'-8"X6" Cover w/ (1) 3' Sq DIA Plate Door	(1) - 4 Position Lateral (Junction Bus)	(1) Load Break Elbows (1) Insulated Dust Covers	-	04J	Lid to have Anti-Skid Door
230204T	4'-0"X4'-0"X3'-6" Vault (444)	4'-0"X4'-0"X6" Cover w/ 28"X12" Access Hole	1Ø - 25kVA PM Xfmr 7,200V - 240/120	(1) Load Break Elbows (1) Insulated Dust Covers	SB17 - Lot - "5401" & "5403" SB18 - Lot - "5411" SB19 - Lot - "VAC" SB20 - Lot - "5324" & "5402"	230205J	
SB17	2'-8"X3'-8"X3'-2" Concrete Handhole w/ 3'-0"X2'-0" DIA Plate Door	-	-	-	Parcel "5401" Parcel "5403"	230204T	Oldcastle # 233-2436P Inverted
SB18	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5411"	230204T	
SB19	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "VAC"	230204T	
SB20	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5324" Parcel "5402"	230204T	
230205T	4'-0"X4'-0"X3'-6" Vault (444)	4'-0"X4'-0"X6" Cover w/ 28"X12" Access Hole	1Ø - 25kVA PM Xfmr 7,200V - 240/120	(1) Load Break Elbows (1) Insulated Dust Covers	SB21 - Lot - "5315" & "5319" SB22 - Lot - "5307" & "5312" & "5316" SB23 - Lots - "" SB24 - Lots - "" SB25 - Lots - "5400" SB26 - Lots - "5321" SB27 - Lot - "5318"	230205J	
SB21	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5315" Parcel "5319" SB25 - Lot - "5400"	230205T	
SB22	-	-	-	-	Parcel "5307" Parcel "5312" Parcel "5316" SB23 - Lot - "" SB24 - Lot - ""	230205T	Existing SB
SB23	-	-	-	-	Parcel ""	230205T	Existing SB
SB24	-	-	-	-	Parcel ""	230205T	Existing SB
SB25	-	-	-	-	Parcel "5400"	SB21	Existing SB
SB26	24"X30"X17" Handhole w/ 22-5/8"X14-5/8"X2" Cover (SMALL)	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5321"	230205T	
SB27	2'-8"X3'-8"X3'-2" Concrete Handhole w/ 3'-0"X2'-0" DIA Plate Door	-	(3) - 4 Position Submersible Rubberized Secondary Connectors	-	Parcel "5318"	SB26	Oldcastle # 233-2436P Inverted

RUSTON LV CABLE & CONDUIT SCHEDULE

Location		CONDUIT				CONDUCTORS (600V Rated)			Remarks
		Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
230101T	SB01	3	1	Sch40 PVC	115	1	350-4/0-350 Aluminum		
SB01	SB02	3	1	Sch40 PVC	15	1	350-4/0-350 Aluminum		
SB01	P01	3	1	Sch40 PVC	15	1	350-4/0-350 Aluminum		
SB01	SB03	3	1	Sch40 PVC	80	1	350-4/0-350 Aluminum		
SB03	SB04	3	1	Sch40 PVC	90	1	350-4/0-350 Aluminum		
SB04	P02	3	1	Sch40 PVC	70	1	350-4/0-350 Aluminum		
230102T	SB06	3	1	Sch40 PVC	45	1	350-4/0-350 Aluminum		
SB06	SB05	3	1	Sch40 PVC	115	1	350-4/0-350 Aluminum		
SB05	P03	3	1	Sch40 PVC	15	1	350-4/0-350 Aluminum		
230102T	P04	3	1	Sch40 PVC	35	1	350-4/0-350 Aluminum		
230102T	SB07	3	1	Sch40 PVC	50	1	350-4/0-350 Aluminum		
230102T	SB08	3	1	Sch40 PVC	105	1	350-4/0-350 Aluminum		
SB08	SB09	3	1	Sch40 PVC	140	1	350-4/0-350 Aluminum		
230103T	P05	3	1	Sch40 PVC	15	1	350-4/0-350 Aluminum		
230103T	SB10	3	1	Sch40 PVC	15	1	350-4/0-350 Aluminum		
230103T	SB11	3	1	Sch40 PVC	100	1	350-4/0-350 Aluminum		
SB11	SB12	3	1	Sch40 PVC	20	1	350-4/0-350 Aluminum		
SB12	SB13	3	1	Sch40 PVC	10	1	350-4/0-350 Aluminum		
230103T	SB14	3	1	Sch40 PVC	125	1	350-4/0-350 Aluminum		
230104T	P09	3	1	Sch40 PVC	115	1	350-4/0-350 Aluminum		
230104T	P10	3	1	Sch40 PVC	5	1	350-4/0-350 Aluminum		
230104T	SB15	3	1	Sch40 PVC	70	1	350-4/0-350 Aluminum		
230104T	SB16	3	1	Sch40 PVC	10	1	350-4/0-350 Aluminum		
230104T	SB17	3	1	Sch40 PVC	80	1	350-4/0-350 Aluminum		
230104T	SB18	3	1	Sch40 PVC	40	1	350-4/0-350 Aluminum		
230105T	P11	3	1	Sch40 PVC	85	1	350-4/0-350 Aluminum		
230105T	SB19	3	1	Sch40 PVC	90	1	350-4/0-350 Aluminum		
230105T	P12	3	1	Sch40 PVC	15	1	350-4/0-350 Aluminum		
230105T	SB20	3	1	Sch40 PVC	15	1	350-4/0-350 Aluminum		
SB20	SB21	3	1	Sch40 PVC	40	1	350-4/0-350 Aluminum		
SB20	SB22	3	1	Sch40 PVC	95	1	350-4/0-350 Aluminum		
SB20	SB23	3	1	Sch40 PVC	105	1	350-4/0-350 Aluminum		
230105T	SB24	3	1	Sch40 PVC	70	1	350-4/0-350 Aluminum		
230105T	SB25	3	1	Sch40 PVC	75	1	350-4/0-350 Aluminum		
SB25	SB26	3	1	Sch40 PVC	35	1	350-4/0-350 Aluminum		

NO.	DATE	REVISION	BY	CK
			A	SB
	1/27/23	30% PRELIMINARY DESIGN	SB	SB
	2/17/23	60% PRELIMINARY DESIGN	SB	SB
	7/25/23	90% PRELIMINARY DESIGN	SB	SB

NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENT

CHECKED BY: S BAUMCHEN
DESIGNED BY: S BAUMCHEN
DRAWN BY: P LANE

SUBMITTAL DATE: 07/25/23

PROJECT NO.
RUST00000002

SHEET NO. T1-01

Plot Date: 9/13/2023 8:29 AM
Save Date: 8/8/2023 7:16 AM
By: Shaun Baumchen
File: P:\RUST00000002\040CAD\ENSH\HEETS\20230803_49Th St Conversion.dwg

LUMEN STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves structure # or (Lots)	Served From	Comments
L01	32"X19"X24" Polymer Concrete Handhole	30"X17"X2" Polymer Concrete Cover	-	-	Parcel "5215"	L02	Oldcastle Polymer 1730
L02	32"X19"X24" Polymer Concrete Handhole	30"X17"X2" Polymer Concrete Cover	-	-	L01 - Lot - "5215" Parcel "5228" Parcel "5230"	L03	Oldcastle Polymer 1730
L03	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2" Cover w/ (2) 30"X24" Doors	-	-	P02A L02 L04	-	Oldcastle 25-TA Handhole Vault
L04	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2" Cover w/ (2) 30"X24" Doors	-	-	Parcel "VAC" Parcel "5302" Parcel "5312" L05 Parcel "5316" Parcel "5318"	L03	Oldcastle 25-TA Handhole Vault
L05	32"X19"X24" Polymer Concrete Handhole	30"X17"X2" Polymer Concrete Cover	-	-	Parcel "5321" Parcel "5320"	L06	Oldcastle Polymer 1730
L06	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2" Cover w/ (2) 30"X24" Doors	-	-	L05 - Lot - "5320" Parcel "5404" Parcel "5408" Parcel "5412" L07	L04	Oldcastle 25-TA Handhole Vault
L07	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2" Cover w/ (2) 30"X24" Doors	-	-	DSP1 P06	L06	Oldcastle 25-TA Handhole Vault
L08	-	-	-	-	L09	-	Exst 264TA Handhole
L09	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2" Cover w/ (2) 30"X24" Doors	-	-	L10	L08	Oldcastle 25-TA Handhole Vault
L10	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2" Cover w/ (2) 30"X24" Doors	-	-	L13 L14 L11 - Lot - "5401"	L09	Oldcastle 25-TA Handhole Vault
L11	32"X19"X24" Polymer Concrete Handhole	30"X17"X2" Polymer Concrete Cover	-	-	Parcel "5401"	L10	Oldcastle Polymer 1730
L12	32"X19"X24" Polymer Concrete Handhole	30"X17"X2" Polymer Concrete Cover	-	-	Parcel "5403"	L13	Oldcastle Polymer 1730
L13	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2" Cover w/ (2) 30"X24" Doors	-	-	Parcel "5324" Parcel "5402" Parcel "5403" Parcel "5411"	L10	Oldcastle 25-TA Handhole Vault
L14	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2" Cover w/ (2) 30"X24" Doors	-	-	Parcel "5315" Parcel "5318" Parcel "5319" Parcel "5321"	L10	Oldcastle 25-TA Handhole Vault

LUMEN FIBER CABLE & CONDUIT SCHEDULE

Location		CONDUIT				FIBER CABLE			Remarks
From	To	Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
L01	L02	4	1	Sch40 PVC	115	1		145	
L02	L03	4	1	Sch40 PVC	165	1		195	
L02	5230	2	1	Sch40 PVC	110	1		125	
L02	5228	2	1	Sch40 PVC	60	1		75	
L03	P02A	2	1	Sch40 PVC	10	1		50	
L03	Exst Cond	4	1	Sch40 PVC	10	1		25	
L04	VAC	2	1	Sch40 PVC	50	1		65	
L04	5302	2	1	Sch40 PVC	115	1		130	
L04	Exst Cond	4	1	Sch40 PVC	125	1		140	
L04	L06	4	1	Sch40 PVC	260	1		290	
L04	5318	2	1	Sch40 PVC	105	1		120	
L04	5316	2	1	Sch40 PVC	50	1		65	
L05	5321	2	1	Sch40 PVC	80	1		95	
L06	L05	2	1	Sch40 PVC	75			105	
L07	P06	2	1	Sch40 PVC	10	1		50	
L06	5404	2	1	Sch40 PVC	10	1		25	
L06	5412	2	1	Sch40 PVC	100	1		115	
L07	DSP1	4	1	Sch40 PVC	15	1		30	
L06	L07	4	1	Sch40 PVC	85	1		115	
L08	L09	4	1	Sch40 PVC	135	1		165	
L09	L10	4	1	Sch40 PVC	185	1		215	
L10	L11	2	1	Sch40 PVC	45	1		75	
L10	L13	4	1	Sch40 PVC	150	1		180	
L13	L12	2	1	Sch40 PVC	60	1		90	
L13	5402	2	1	Sch40 PVC	50	1		65	
L14	5321	2	1	Sch40 PVC	110	1		125	
L14	5315	2	1	Sch40 PVC	10	1		25	
L14	5318	2	1	Sch40 PVC	115	1		130	
L10	L14	4	1	Sch40 PVC	180	1		210	

COMCAST STRUCTURES

Site	Vault Size	Vault Cover Size	Type & Size of Apparatus	Equipment Required	Serves structure # or (Lots)	Served From	Comments
CC01	Tap Pedestal	-	-	-	Parcel "5224"	-	Existing Pedestal
CC02	Dog House	-	-	-	CC01 - Lot - "5224" CC03	-	Existing Dog House
CC03	Dog House	-	-	-	Parcel "VAC" Parcel "5316" Parcel "5318" CC05	CC02	Dog House
CC04	Tap Pedestal	-	-	-	Parcel "5321" Parcel "5320"	CC05	
CC05	Dog House	-	-	-	CC04 - Lot - "5320" Parcel "5404" CC06 CC07	CC03	
CC06	5'-2"X2'-3"X2'-7" Concrete Handhole	5'-2"X2'-3"X2" Cover w/ (2) 30"X24" Doors	-	-	P06 DSP1	CC05	Oldcastle 25-TA Handhole Vault
CC07	Dog House	-	-	-	EXST Intcpt for CC08 - Lot - "5407" EXST Intcpt for CC09 - Lot - "4917" CC10	CC05	
CC08	Tap Pedestal	-	-	-	-	-	Existing Pedestal
CC09	Tap Pedestal	-	-	-	-	-	Existing Pedestal
CC10	Dog House	-	-	-	CC11 EXST Conduit Intercept	CC07	
CC11	Dog House	-	-	-	CC12 - Lot - "5402" CC13 - Lots "5321" & "5318" CC14	CC10	
CC12	Tap Pedestal	-	-	-	Parcel "5403" Parcel "5411" Parcel "5402" Parcel "5324"	CC11	
CC13	Tap Pedestal	-	-	-	Parcel "5321" Parcel "5318"	CC11	
CC14	12X12 Pedestal	-	-	-	Parcel "5315"	CC11	

COMCAST FIBER CABLE & CONDUIT SCHEDULE

Location		CONDUIT				FIBER CABLE			Remarks
From	To	Size (in)	Qty	Type	Est. Length (ft)	Number of Runs	Cable Type	Length (ft)	
CC02	Exst Cond	2	2	Sch40 PVC	20	2		45	
CC02	CC03	4	1	Sch40 PVC	120	1		130	
CC03	VAC	4	1	Sch40 PVC	55	1		60	
CC03	CC05	4	1	Sch40 PVC	275	1		285	
CC03	5316	4	1	Sch40 PVC	70	1		75	
CC03	5318	4	1	Sch40 PVC	125	1		130	
CC04	5321	4	1	Sch40 PVC	80	1		85	
CC05	CC04	4	1	Sch40 PVC	90	1		100	
CC05	5404	4	1	Sch40 PVC	40	1		45	
CC05	CC07	4	1	Sch40 PVC	215	1		225	
CC05	CC06	4	1	Sch40 PVC	70	1		80	
CC06	P06	4	1	Sch40 PVC	15	1		45	
CC06	DSP1	4	1	Sch40 PVC	25	1		30	
CC07	CC09	2	2	Sch40 PVC	15	2		35	
CC07	CC08	2	2	Sch40 PVC	15	2		35	
CC07	CC10	4	1	Sch40 PVC	140	1		150	
CC10	EXST	2	1	Sch40 PVC	25	1		30	
CC10	CC11	4	1	Sch40 PVC	200	1		210	
CC11	CC12	4	1	Sch40 PVC	155	1		165	
CC11	CC14	4	1	Sch40 PVC	200	1		210	
CC11	CC13	4	1	Sch40 PVC	95	1		105	
CC12	5402	4	1	Sch40 PVC	60	1		65	
CC13	5318	4	1	Sch40 PVC	25	1		30	
CC13	5321	4	1	Sch40 PVC	5	1		10	

NO.	DATE	REVISION	BY	CK
				SB
A	1/27/23	30% PRELIMINARY DESIGN	SB	SB
				SB
				SB
B	2/17/23	60% PRELIMINARY DESIGN	SB	SB
				SB
C	7/25/23	90% PRELIMINARY DESIGN	SB	SB
				SB

NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENT

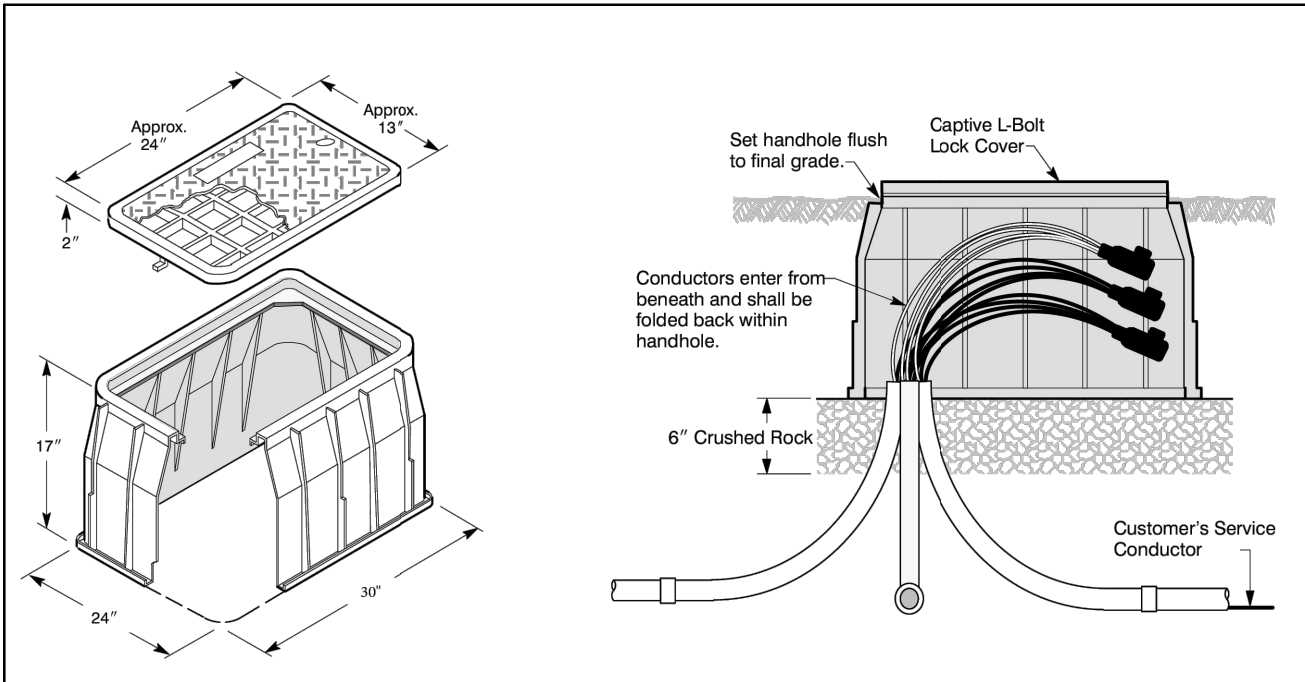
CHECKED BY: S BAUMCHEN
DESIGNED BY: S BAUMCHEN
DRAWN BY: P LANE

SUBMITTAL DATE: 07/25/23

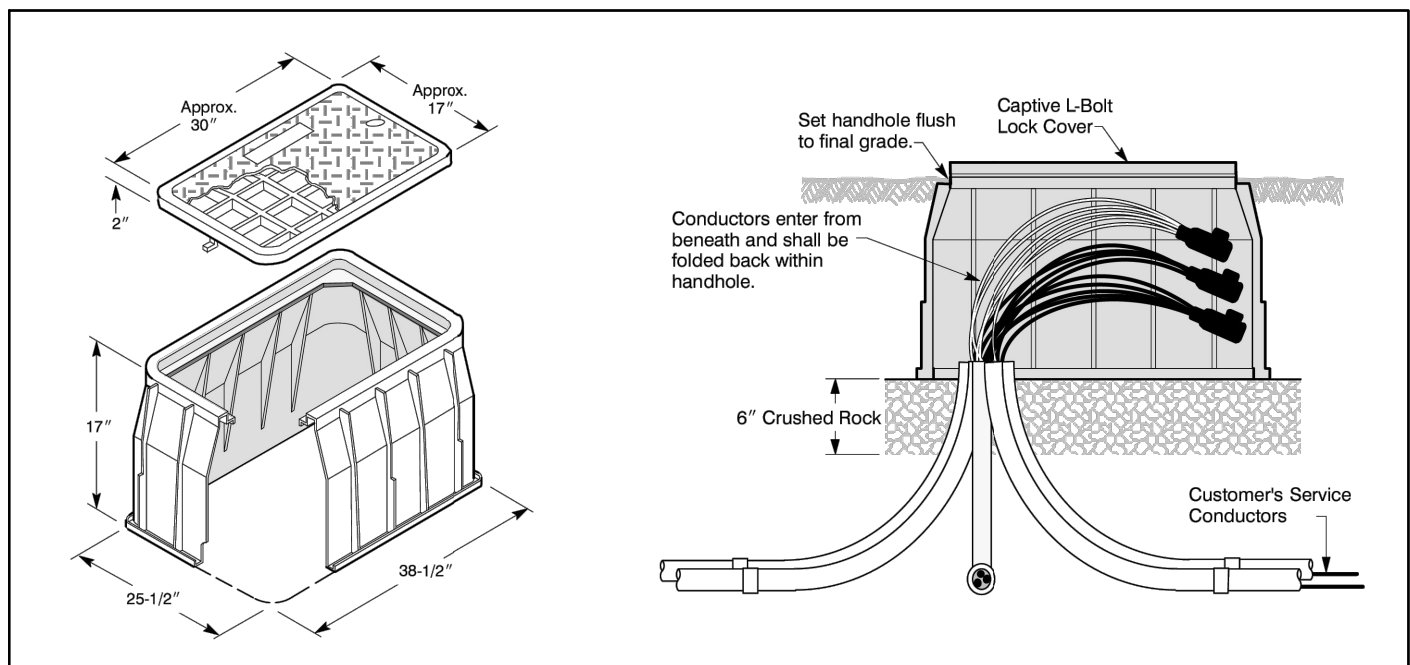
PROJECT NO.
RUST00000002

SHEET NO. T1-02

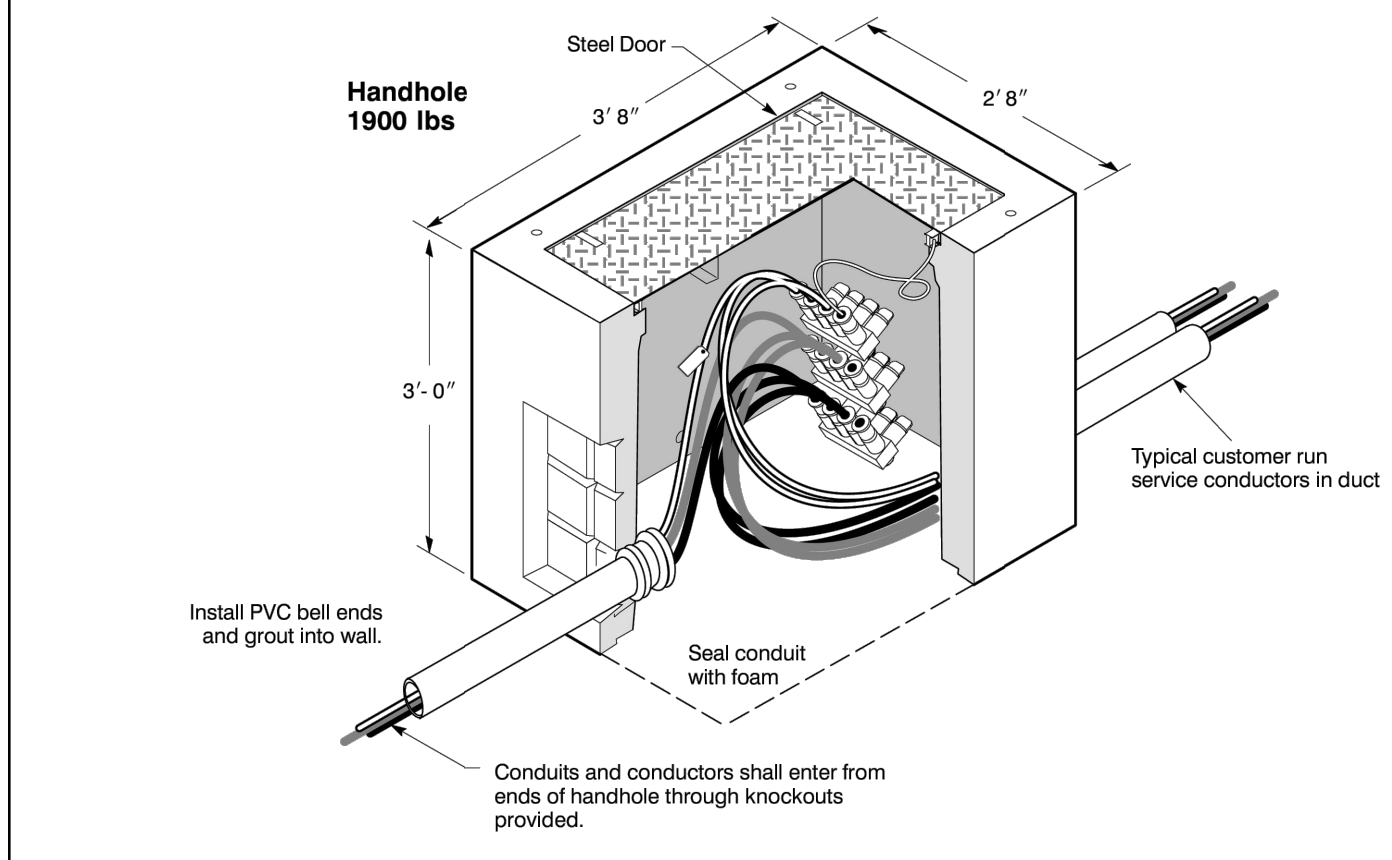
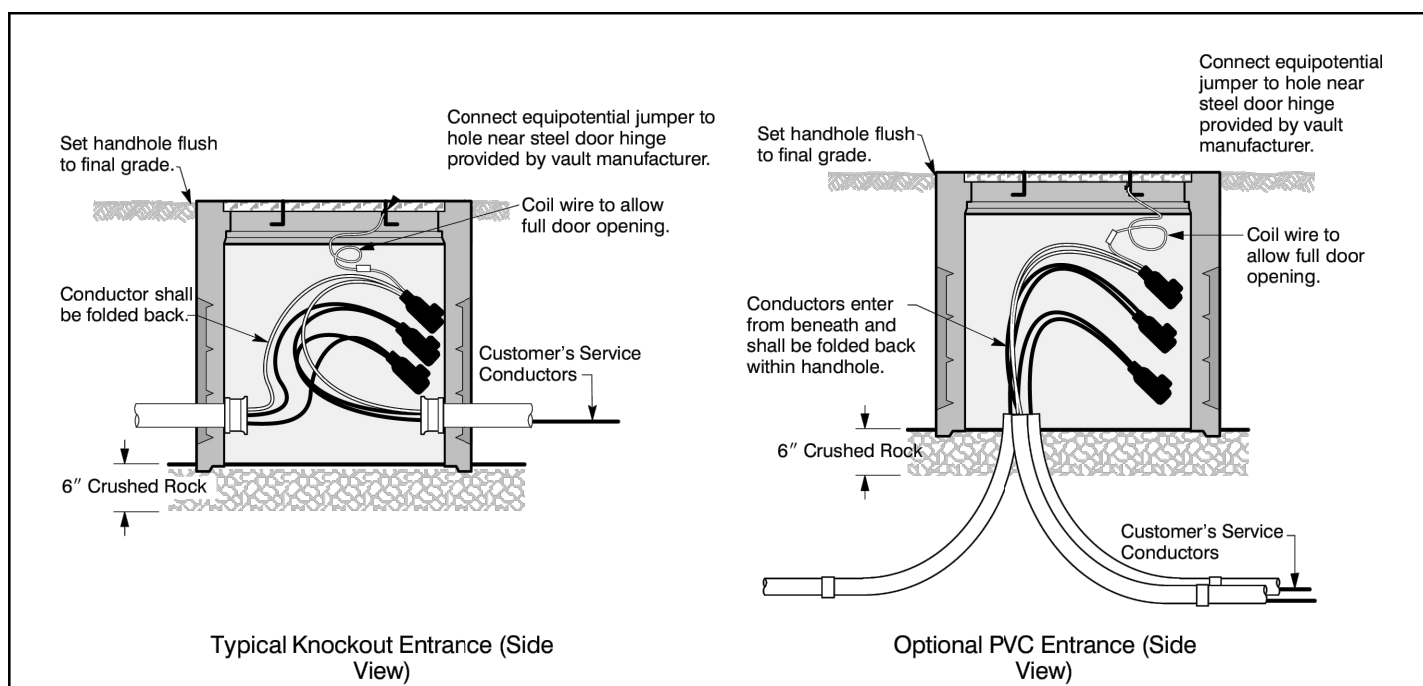
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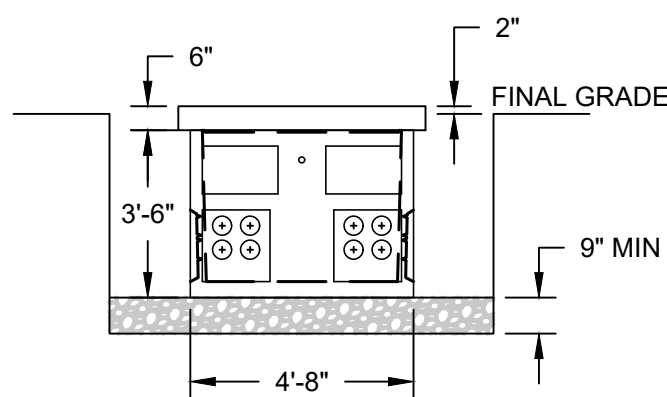
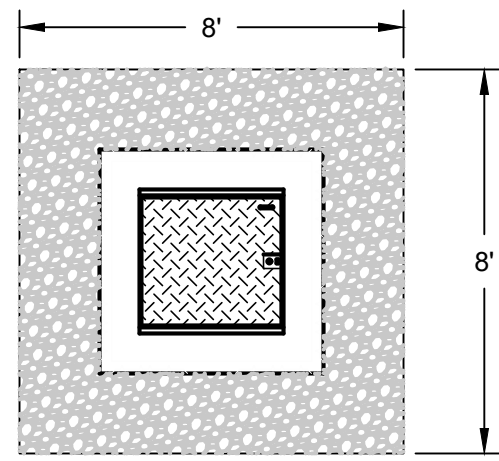
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NOT TO SCALE



LARGE SECONDARY SERVICE BOX
NOT TO SCALE

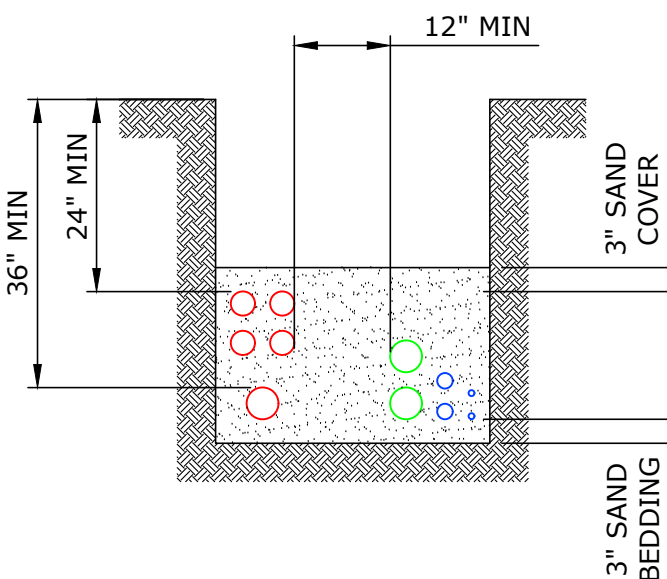


233 INVERTED HANDHOLE
NOT TO SCALE



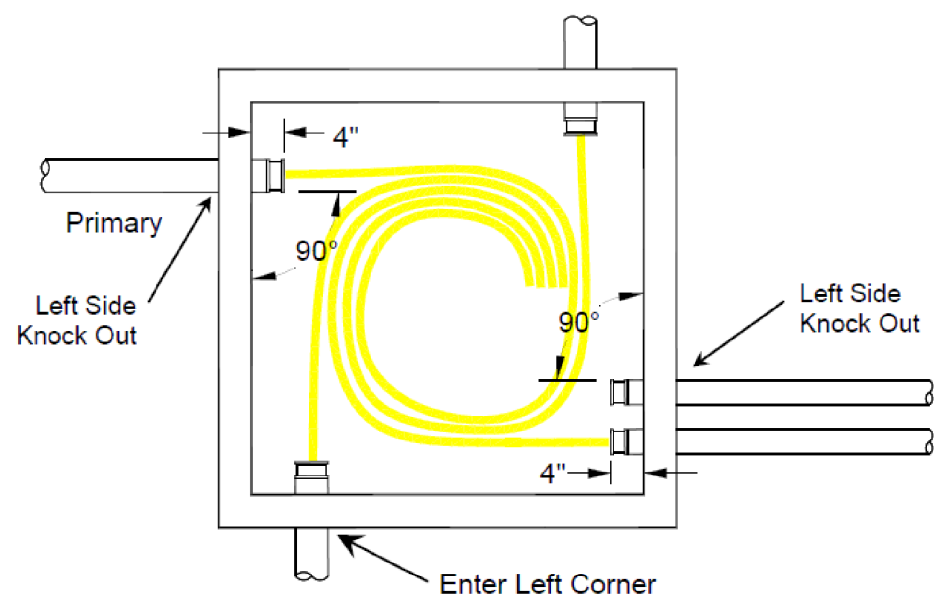
554 VAULT EXCAVATION
NOT TO SCALE

- NOTE:
1. VAULT BASE MINIMUM OF 9" OF 5/8" MINUS CRUSHED ROCK WELL COMPACTED.
 2. VAULT LID IN LANDSCAPE AREA TO BE 2" ABOVE FINAL GRADE.
 3. VAULT LID IN HARDSCAPE AREA TO BE FLUSH WITH FINAL GRADE.



TYPICAL TRENCH CONDUIT SPACING
NOT TO SCALE

- NOTE:
1. MEDIUM VOLTAGE SHALL BE INSTALLED WITH A MINIMUM 36" COVER UNLESS OTHERWISE NOTED.
 2. LOW VOLTAGE SHALL BE INSTALLED WITH A MINIMUM 24" COVER UNLESS OTHERWISE NOTED.



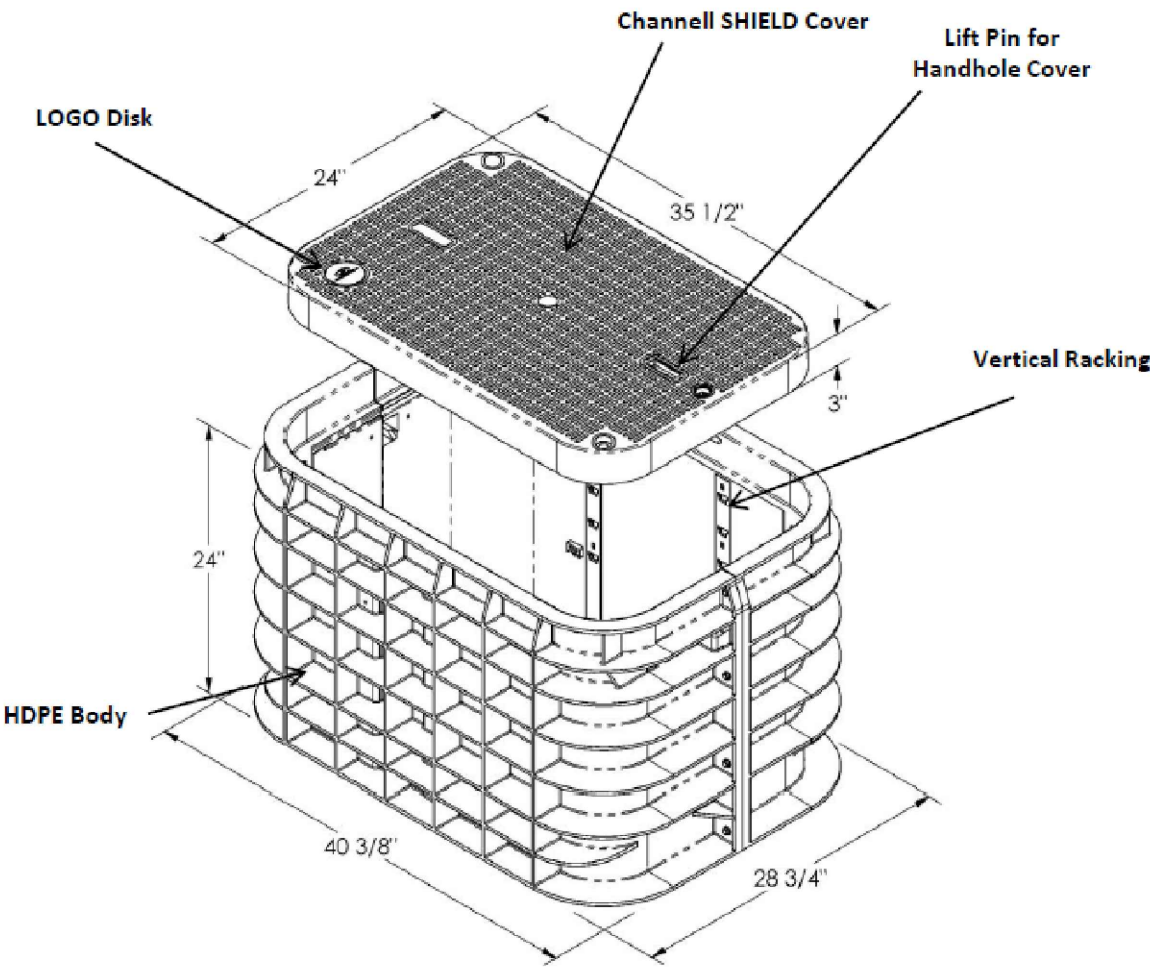
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TYPICAL / NOT TO SCALE



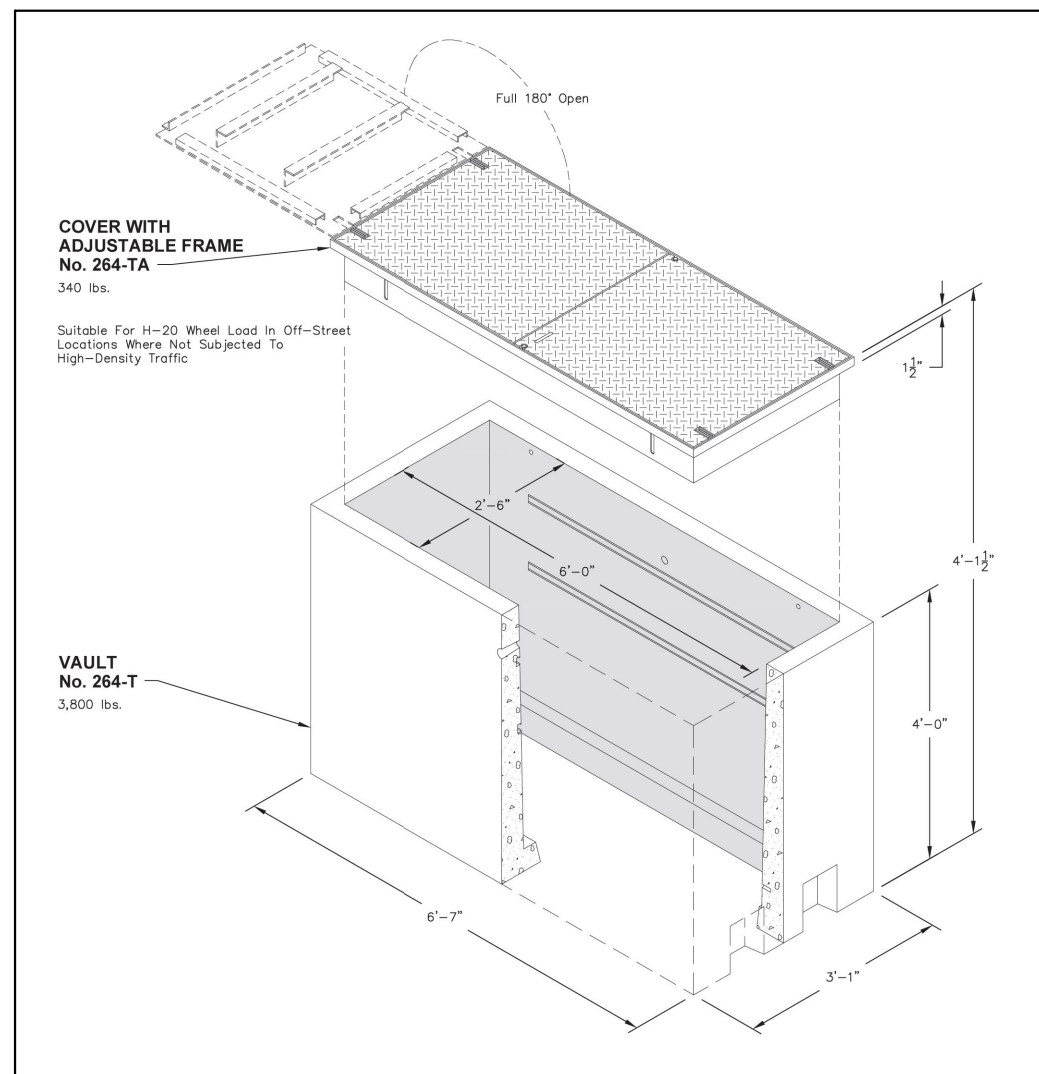
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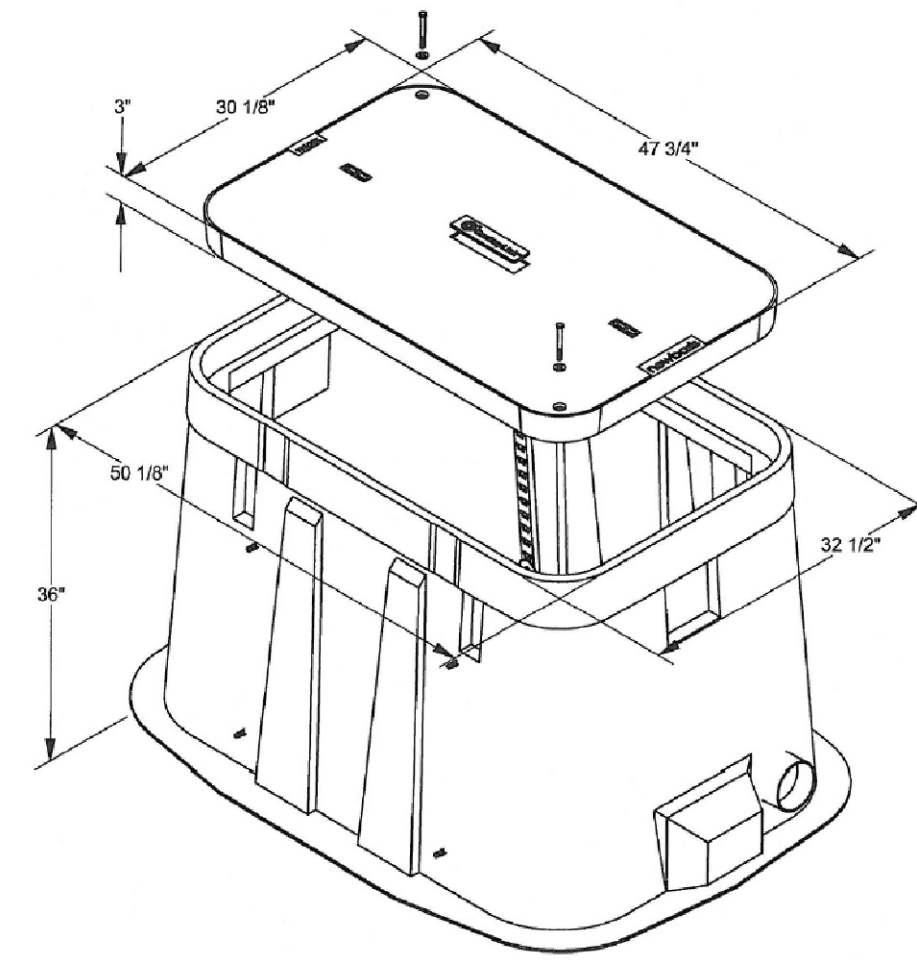
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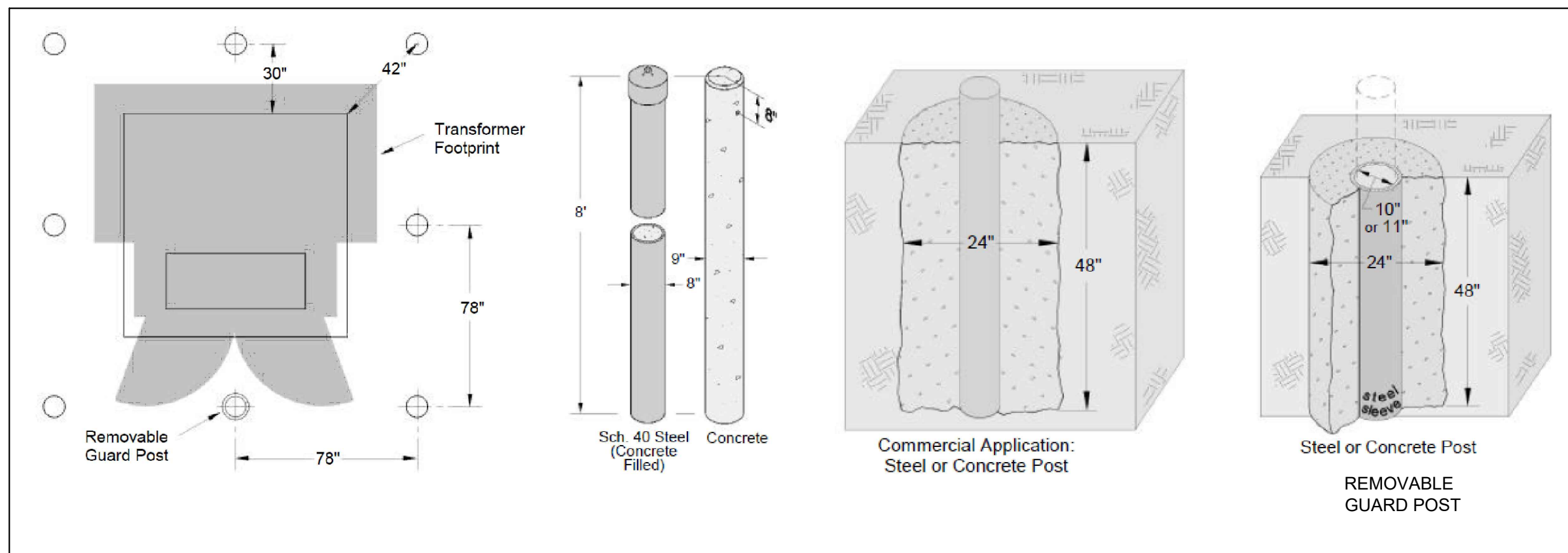
DATA SHEET SHIELD BULK
COMCAST / NOT TO SCALE



264 VAULT
CENTURY LINK / NOT TO SCALE



3048 HANDHOLE
CENTURY LINK / NOT TO SCALE



BOLLARD DETAIL
NOT TO SCALE

- NOTE:
1. WAC REQUIREMENTS STATES THAT ALL TRANSFORMERS THAT ARE INSTALLED IN AN AREA WHICH IS SUBJECT TO VEHICULAR TRAFFIC TO BE PROVIDED WITH ADEQUATE PROTECTION. IF A MINIMUM OF 5' CANNOT BE OBTAINED FROM THE EDGE OF VAULT TO A PARKING OR DRIVING SURFACE; BOLLARDS WILL BE REQUIRED

NO.	DATE	REVISION	BY	CK
A	1/27/23	30% PRELIMINARY DESIGN	SB	SB
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C	7/25/23	90% PRELIMINARY DESIGN	SB	SB

NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENT

Plot Date: 9/13/2023 8:29 AM
Save Date: 8/8/2023 7:16 AM
By: Shaun Baumchen
File: P:\RUST00000002\040CAD\ENSH\DETAILS\20230803_49Th St Conversion.dwg

NOTES

1. All pavement restoration work shall also meet the requirements of the City of Tacoma's Right of Way Restoration Policy. See Standard Plan SU-15B for any streets exempt from this policy.

2. Temporary Surface Restoration:
Arterials, industrial areas and/or roads with bus traffic: Temporary patches shall be compacted and leveled to a minimum of 3-inches of hot-mix asphalt (HMA).
Residential and alleys: Temporary patches shall be compacted and leveled to a minimum of 2-inches of either HMA or cold-mix asphalt. Temporary patches between October 1st and March 31st shall be made with HMA unless otherwise approved.

3. All permanent final patches shall be rectangular in shape and constructed parallel and perpendicular to the road centerline.

4. Where existing pavement defects are in close proximity to the new cut, the inspector may require additional pavement removal to eliminate the pavement defect.

5. The final cut edge of paved surfaces shall be smooth and straight, consistent with grinding or saw cutting devices. No jagged, broken or undermined edges are allowed. Cutting wheel run-out beyond the limits of the opening shall be filled in accordance with WSDOT Standard Specification 5-05.3(8)B for cement concrete surfaces and 5-04.3(5)C for asphalt concrete surfaces.

6. Final compaction of HMA shall be 91% of maximum density.
Isolated patches: Minimum 1 test per patch up to 150 square feet, and 1 test required every additional 300 square feet, thereafter.
Trench patches: 1 test every 150 linear feet of trench with a minimum of 2 tests per trench.
Testing shall be performed by a certified independent testing laboratory or certified tester, as approved by the City's Construction Division. Tests shall be completed and reports identifying the project number submitted to the City Construction Division within 48 hours of test.

7. All joints between the new and original asphalt pavement shall be sealed with hot asphalt or asphalt emulsion and covered with dry paving sand before the asphalt solidifies. Existing surfaces shall be prepared in accordance with WSDOT Standard Specification 5-04.3(5)A prior to placing any new pavement surfaces.

8. Longitudinal construction joints shall only be located at the center or edge of affected lanes.
Streets and courts 20 feet or less in width and all alleys are considered one-lane streets. Non-arterial streets and courts greater than 20 feet in width with no traffic channelization are considered two-lane streets with one-lane either side of the centerline of the street.
Non-arterial streets greater than 32 feet in width with no traffic channelization may be considered three lane streets upon prior approval from the City Engineer.

9. Transverse construction joints terminate at the edge of the 2' cut back.

10. HMA pavement shall not be placed over CDF until approved by the City.

TABLE 1
PAVEMENT REPLACEMENT DEPTH
IN CUT BACK ZONE

	MIN.	MAX.
ARTERIALS, INDUSTRIAL AREAS & ROADS WITH BUS TRAFFIC	MATCH EXISTING +1", OR 4", WHICHEVER IS GREATER	6"
RESIDENTIALS AND ALLEYS	MATCH EXISTING +1", OR 3", WHICHEVER IS GREATER	4"

The diagram illustrates a cross-section of a pavement restoration project. It shows a 'CUT BACK ZONE' on the left, followed by 'HMA PAVEMENT CL. 1/2" PG 64-22. SEE TABLE 1'. Below the HMA is a 'CRUSHED SURFACING TOP COURSE (CSTC), MATCH EXISTING THICKNESS, 8" MIN'. To the right of the cut back zone is a 'CONSTRUCTION JOINT, SEE NOTES 8 & 9'. Further right is 'EXISTING ASPHALT OR OIL MAT PAVEMENT'. A '2" MIN.' dimension is shown for the joint area. A '2' MIN. CUT BACK OVER UNDISTURBED SOIL' dimension is shown for the cut back zone.

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

APPROVED FOR PUBLICATION

James P. [Signature] 12 Jun 2009
CITY ENGINEER DATE

TYPICAL PAVEMENT RESTORATION
FOR ASPHALT CONCRETE/OIL MAT
PAVEMENT

STANDARD PLAN NO. SU-15A

PAVEMENT RESTORATION DETAIL

**DAVID EVANS
AND ASSOCIATES INC.**
2100 S. River Parkway, Suite 100
Portland Oregon 97201
Phone: 503.223.6663

49TH ST CONVERSION

DETAILS - SHEET 2

NO.	DATE	REVISION	BY	CK
A	1/27/23	30% PRELIMINARY DESIGN	SB	SB
B	2/17/23	60% PRELIMINARY DESIGN	SB	SB
C	7/25/23	90% PRELIMINARY DESIGN	SB	SB

NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENT

CHECKED BY: S BAUMCHEN
DESIGNED BY: S BAUMCHEN
DRAWN BY: P LANE
SUBMITTAL DATE: 07/25/23
PROJECT NO.
RUST00000002
SHEET NO. T2-02

Exhibit B

MB Electric, LLC Proposal (1 page)



PROPOSAL

Date: April 1, 2024

To: Clint Thayer and Kevin Moser

From: Mardy Betschart - Cell: 253-405-9800

RE: 49th St Underground Project

Please accept my **proposal** for the following electrical per plan and specs Dated 7/25/23;

1. Install City of Ruston supplied vaults, conduit, fittings, glue and other electrical materials needed for power.
2. Install Lumen supplied vaults, conduit, fittings, glue and other electrical materials needed.
3. Install Comcast supplied vaults, conduit, fittings, glue and other electrical materials needed.
4. MB to excavate all ditches, vault holes, crossings for materials above per plans.
5. Vac truck included.
6. Traffic Control included
7. Asphalt cutting and patching as needed.
8. Concrete cutting and repouring as required .
9. Disposal of brush, spoils, concrete and asphalt included.
10. Importing of 5/8 crushed for vaults and crossings as needed.

TOTAL COST \$160,000.00

Exclusions: Power Company fees or hookup cost, temp power

Survey or staking, Testing Fees, Permits or Bonds

Sales Tax or Use Tax

Acceptance of Proposal: The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified.

Date of Acceptance_____

Signature_____

Print Name [or Title]_____

P.O. Box 5758, Lacey, WA 98509-5758
Telephone (360) 455-1025 Fax (360) 455-1026

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