



NOTICE OF AWARD

Date: April 19, 2019

Company: Oldcastle SW Group, Inc. dba United Companies

Project: 2019 Contract Street Maintenance – Asphalt Overlays IFB-4622-19-DH

You have been awarded the City of Grand Junction 2019 Contract Street Maintenance – Asphalt Overlays IFB-4622-19-DH for a total price of **\$2,182,380.25**.

Please notify Eric Mocko, City of Grand Junction, Project Engineer 970-256-4017 for project scheduling and return to the City Purchasing Division an acknowledged copy of this Notice of Award, signed Contract, Payment & Performance Bonds, and Certificate of Insurance.

CITY OF GRAND JUNCTION, COLORADO

DocuSigned by:

Duane Hoff Jr., Senior Buyer - City of Grand Junction

9F789E7D50F24BC...

Duane Hoff Jr., Senior Buyer

SUPPLIER ACKNOWLEDGEMENT

Receipt of this Notice to Award is hereby acknowledged:

Company: Oldcastle SW Group, Inc. dba United Companies

DocuSigned by:

Kyle Alpha - General Manager, Oldcastle SW Group, Inc. dba United Companies

47D35294AE0F4D0...

By:

Title: General Manager

Date: 4/22/2019 | 11:58 MDT



CITY OF GRAND JUNCTION, COLORADO

CONTRACT

This CONTRACT made and entered into this 19th day of April, 2019 by and between the **City of Grand Junction, Colorado**, a government entity in the County of Mesa, State of Colorado, hereinafter in the Contract Documents referred to as the "Owner" and **Oldcastle SW Group, Inc, dba United Companies** hereinafter in the Contract Documents referred to as the "Contractor."

WITNESSETH:

WHEREAS, the Owner advertised that sealed Bids would be received for furnishing all labor, tools, supplies, equipment, materials, and everything necessary and required for the Project described by the Contract Documents and known as **2019 Contract Street Maintenance – Asphalt Overlays IFB-4622-19-DH**.

WHEREAS, the Contract has been awarded to the above named Contractor by the Owner, and said Contractor is now ready, willing and able to perform the Work specified in the Notice of Award, in accordance with the Contract Documents;

NOW, THEREFORE, in consideration of the compensation to be paid the Contractor, the mutual covenants hereinafter set forth and subject to the terms hereinafter stated, it is mutually covenanted and agreed as follows:

ARTICLE 1

Contract Documents: It is agreed by the parties hereto that the following list of instruments, drawings, and documents which are attached hereto, bound herewith, or incorporated herein by reference constitute and shall be referred to either as the "Contract Documents" or the "Contract", and all of said instruments, drawings, and documents taken together as a whole constitute the Contract between the parties hereto, and they are fully a part of this agreement as if they were set out verbatim and in full herein:

The order of contract document governance shall be as follows:

- a. The body of this contract agreement
- b. Solicitation Documents for the Project; **2019 Contract Street Maintenance – Asphalt Overlays;**
- c. Notice of Award
- d. Contractors Response to the Solicitation

- e. Work Change Requests (directing that changed work be performed);
- f. Field Orders
- g. Change Orders.

ARTICLE 2

Definitions: The clauses provided in the Solicitation apply to the terms used in the Contract and all the Contract Documents.

ARTICLE 3

Contract Work: The Contractor agrees to furnish all labor, tools, supplies, equipment, materials, and all that is necessary and required to complete the tasks associated with the Work described, set forth, shown, and included in the Contract Documents as indicated in the Solicitation Document.

ARTICLE 4

Contract Time and Liquidated Damages: Time is of the essence with respect to this Contract. The Contractor hereby agrees to commence Work under the Contract on or before the date specified in the Solicitation from the Owner, and to achieve Substantial Completion and Final Completion of the Work within the time or times specified in the Solicitation. In the event the Work is not completed in the times set forth and as agreed upon, the Contractor further agrees to pay Liquidated Damages to the Owner as set forth in the Solicitation. The Contractor acknowledges and recognizes the delays, expenses and difficulties involved in proving in a legal proceeding the actual losses suffered by the Owner if the work is not completed on time. Accordingly, instead of requiring any such proof, the Owner and the Contractor agree that as Liquidated Damages for delay, but not as a penalty, the Contractor shall pay to the Owner the amounts specified in the Solicitation.

ARTICLE 5

Contract Price and Payment Procedures: The Contractor shall accept as full and complete compensation for the performance and completion of all of the Work specified in the Contract Documents, the sum of **Two Million One Hundred Eighty-Two Thousand Three Hundred Eighty and 25/100 Dollars (\$2,182,380.25)**. If this Contract contains unit price pay items, the Contract Price shall be adjusted in accordance with the actual quantities of items completed and accepted by the Owner at the unit prices quoted in the Solicitation Response. The amount of the Contract Price is and has heretofore been appropriated by the Grand Junction City Council for the use and benefit of this Project. The Contract Price shall not be modified except by Change Order or other written directive of the Owner. The Owner shall not issue a Change Order or other written directive which requires additional work to be performed, which work causes the aggregate amount payable under this Contract to exceed the amount appropriated for this Project, unless and until the Owner provides Contractor written assurance that lawful appropriations to cover the costs of the additional work have been made.

Unless otherwise provided in the Solicitation, monthly partial payments shall be made as the Work progresses. Applications for partial and Final Payment shall be prepared by the Contractor and approved by the Owner in accordance with the Solicitation.

Upon Final Completion of the Work under the Contract and before the Contractor shall receive final payment, the Owner shall publish at least twice in a newspaper of general circulation published in the County a notice that: 1. the Owner has accepted such Work as completed according to the Contract Documents; 2. the Contractor is entitled to final payment therefore; 3. thirty days after the first publication, specifying the exact date, the Owner shall pay the full balance due under the Contract; and 4. persons having claims for labor, materials, team hire, sustenance, provisions, provender, or other supplies used or consumed by the Contractor or a subcontractor shall file a verified statement of the amount due and unpaid on account of such claim prior to the date specified for such payment. Nothing herein shall be construed as relieving the Contractor and the Sureties on the Contractor's Bonds from any claim or claims for work or labor done or materials or supplies furnished in the execution of the Contract.

ARTICLE 6

Bonds: The Contractor shall furnish currently herewith the Bonds required by the Contract Documents, such Bonds being attached hereto. The Performance Bond shall be in an amount not less than one hundred percent (100%) of the Contract Price set forth in Article 5. The Payment Bond shall be in an amount not less than one hundred (100%) of the Contract Price set forth in Article 5.

ARTICLE 7

Contract Binding: The Owner and the Contractor each binds itself, its partners, successors, assigns and legal representatives to the other party hereto in respect to all covenants, agreements and obligations contained in the Contract Documents. The Contract Documents constitute the entire agreement between the Owner and Contractor and may only be altered, amended or repealed by a duly executed written instrument. Neither the Owner nor the Contractor shall, without the prior written consent of the other, assign or sublet in whole or in part its interest under any of the Contract Documents and specifically, the Contractor shall not assign any moneys due or to become due without the prior written consent of the Owner.

ARTICLE 8

Severability: If any part, portion or provision of the Contract shall be found or declared null, void or unenforceable for any reason whatsoever by any court of competent jurisdiction or any governmental agency having the authority thereover, only such part, portion or provision shall be effected thereby and all other parts, portions and provisions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, City of Grand Junction, Colorado, has caused this Contract to be subscribed and sealed and attested in its behalf; and the Contractor has signed this Contract the day and the year first mentioned herein.

The Contract is executed in two counterparts.

CITY OF GRAND JUNCTION, COLORADO

DocuSigned by:
By: Duane Hoff Jr., Senior Buyer - City of Grand Junction 4/23/2019 | 13:47 MDT
Duane Hoff Jr., Senior Buyer Date

Oldcastle SW Group, Inc. dba United Companies

DocuSigned by:
By: Kyle Alpha - General Manager, Oldcastle SW Group, Inc. dba United Companies 4/23/2019 | 13:58 MDT
Kyle Alpha - General Manager, Oldcastle SW Group, Inc., dba United Companies Date



Purchasing Division

Invitation for Bid

IFB-4622-19-DH

2019 Contract Street Maintenance – Asphalt Overlays

Responses Due:

April 3, 2019 prior to 3:30PM

Accepting Electronic Responses Only

Responses Only Submitted Through the Rocky Mountain E-Purchasing System (RMEPS)

<https://www.rockymountainbidsystem.com/default.asp>

(Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor MUST contact RMEPS to resolve issue prior to the response deadline. 800-835-4603)

Purchasing Representative:

Duane Hoff Jr., Senior Buyer

duaneh@gjcity.org

970-244-1545

This document has been developed specifically to solicit competitive responses for this solicitation, and may not be the same as previous City of Grand Junction/Mesa County solicitations. All vendors are urged to thoroughly review this solicitation prior to responding. Submittal by **FAX, EMAIL or HARD COPY IS NOT ACCEPTABLE** for this solicitation.

Invitation for Bids

Table of Contents

Section 1	Instruction to Bidders
Section 2	General Contract Conditions
Section 3	Statement of Work
Section 4	Contractor's Bid Form
	Price Proposal/Bid Schedule Form
	Appendix A
	Appendix B
	Appendix C
	Appendix D
	Attachments

1. Instructions to Bidders

- 1.1. Purpose:** The City of Grand Junction is soliciting competitive bids from qualified and interested companies for all labor, equipment, and materials required to complete the project, which includes approximately 69,380 square yards of asphalt milling, a new 2 inch overlay of hot mix asphalt, approximately 1,060 tons of grading SX 75 (PG 76-28), and approximately 15,046 tons of grading SX 75 (PG 64-22), and 4,600 SY of shoulder widening (bike lanes on Redlands Parkway and S. Camp Road), 2,405 linear feet of guardrail replacement, and 400 linear feet of curb, gutter, and drainage replacement on existing streets within the City of Grand Junction. All dimensions and scope of work should be verified by Contractors prior to submission of bids.

IFB Questions:

Duane Hoff Jr., Senior Buyer
duaneh@gjcity.org

The City would like to remind all Contractors, Sub-Contractors, Vendors, Suppliers, Manufacturers, Service Providers, etc. that (with the exception of Pre-Bid or Site Visit Meetings) all questions, inquiries, comments, or communication pertaining to any formal solicitation (whether process, specifications, scope, etc.) must be directed (in writing) to the Purchasing Agent assigned to the project, or Purchasing Division. Direct communication with the City assigned Project Managers/Engineers is not appropriate for public procurement, and may result in disqualification.

- 1.2. Mandatory Pre-Bid Meeting:** Prospective bidders are required to attend a mandatory pre-bid meeting on March 22, 2019 at 10:00am. Meeting location shall be in the Auditorium at City Hall, located at 250 N. 5th Street, Grand Junction, CO. The purpose of this visit will be to inspect and to clarify the contents of this Invitation for Bids (IFB).
- 1.3. The Owner:** The Owner is the City of Grand Junction and/or Mesa County, Colorado and is referred to throughout this Solicitation. The term Owner means the Owner or his authorized representative.
- 1.4. Prequalification Requirement:** Although the City no longer requires pre-qualification, Contractors are expected to have all of the proper equipment and training to perform the tasks include within this solicitation.
- 1.5. Submission:** Each bid shall be submitted in electronic format only, and only through the Rocky Mountain E-Purchasing website (<https://www.rockymountainbidsystem.com/default.asp>). This site offers both “free” and “paying” registration options that allow for full access of the Owner’s documents and for electronic submission of proposals. (Note: “free” registration may take up to 24 hours to process. Please Plan accordingly.) Please view our “**Electronic Vendor Registration Guide**” at <http://www.gjcity.org/BidOpenings.aspx> for details. (Purchasing Representative does not have access or control of the vendor side of RMEPS. If website

or other problems arise during response submission, vendor **MUST** contact RMEPS to resolve issue prior to the response deadline. **800-835-4603**)

- 1.6. Modification and Withdrawal of Bids Before Opening.** Bids may be modified or withdrawn by an appropriate document stating such, duly executed and submitted to the place where Bids are to be submitted at any time prior to Bid Opening.
- 1.7. Printed Form for Price Bid:** All Price Bids must be made upon the Price Bid Schedule attached, and should give the amounts both in words and in figures, and must be signed and acknowledged by the bidder.

The Offeror shall specify a unit price in figures for each pay item for which a quantity is given and shall provide the products (in numbers) of the respective unit prices and quantities in the Extended Amount column. The total Bid price shall be equal to the sum of all extended amount prices. When an item in the Price Bid Schedule provides a choice to be made by the Offeror, Offeror's choice shall be indicated in accordance with the specifications for that particular item and thereafter no further choice shall be permitted.

Where the unit of a pay item is lump sum, the lump sum amount shall be shown in the "extended amount" column and included in the summation of the total Bid.

All blank spaces in the Price Bid Schedule must be properly filled out.

Bids by corporations must be executed in the corporate name by the president or vice president or other corporate office accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown below the signature.

Bids by partnerships must be executed in the partnership name and signed by a partner whose title must appear under the signature and the official address of the partnership must be shown below the signature.

All names must be typed or printed below the signature.

The Offeror's Bid shall contain an acknowledgement of receipt of all Addenda, the numbers of which shall be filled in on the Contractor's Bid Form.

The contact information to which communications regarding the Bid are to be directed must be shown.

- 1.8. Exclusions:** No oral, telephonic, emailed, or facsimile bid will be considered
- 1.9. Contract Documents:** The complete IFB and bidder's response compose the Contract Documents. Copies of bid documents can be obtained from the City Purchasing website, <http://www.gjcity.org/BidOpenings.aspx>.
- 1.10. Additional Documents:** The July 2010 edition of the "City Standard Contract Documents for Capital Improvements Construction", Plans, Specifications and other Bid Documents are available for review or download on the Public Works &

Planning/Engineering page at www.gjcity.org. Electronic copies may be obtained on a CD format at the Department of Public Works and Planning at City Hall.

- 1.11. Definitions and Terms:** See Article I, Section 3 of the General Contract Conditions in the *Standard Contract Documents for Capital Improvements Construction*.
- 1.12. Examination of Specifications:** Bidders shall thoroughly examine and be familiar with the project Statement of Work. The failure or omission of any Offeror to receive or examine any form, addendum, or other document shall in no way relieve any Offeror from any obligation with respect to his bid. The submission of a bid shall be taken as evidence of compliance with this section. Prior to submitting a bid, each Offeror shall, at a minimum:
- a. Examine the *Contract Documents* thoroughly;
 - b. Visit the site to familiarize themselves with local conditions that may in any manner affect cost, progress, or performance of the Work;
 - c. Become familiar with federal, state, and local laws, ordinances, rules, and regulations that may in any manner affect cost, progress or performance of the Work;
 - d. Study and carefully correlate Bidder's observations with the *Contract Documents*, and;
 - e. Notify the Engineer of all conflicts, errors, ambiguities or discrepancies in or among the *Contract Documents*

On request, the Owner will provide each Offeror access to the site to conduct such investigations and tests as each Bidder deems necessary for submission of a Bid. It shall be the Offeror's responsibility to make or obtain any additional examinations, investigations, explorations, tests and studies and obtain any additional information and data which pertain to the physical conditions (including without limitation, surface, subsurface and underground utilities) at or contiguous to the site or otherwise which may affect cost, progress or performance of the work and which the Offeror deems necessary to determine its Bid for performing the work in accordance with the time, price and other terms and conditions of the Contract Documents. Location of any excavation or boring made by Offeror shall be subject to prior approval of Owner and applicable agencies. Offeror shall fill all holes, restore all pavements to match the existing structural section and shall clean up and restore the site to its former condition upon completion of such exploration. The Owner reserves the right to require the Offeror to execute an access agreement with the Owner prior to accessing the site.

The lands upon which the Work is to be performed, rights of way, and access thereto, and other lands designated for use by Contractor in performing the Work, are identified on the Drawings.

Information and data reflected in the *Contract Documents* with respect to underground utilities at or contiguous to the site are based upon information and data furnished to

the Owner and the Engineer by the owners of such underground utilities or others, and the Owner does not assume responsibility for the accuracy or completeness thereof, unless it is expressly provided otherwise in the *Contract Documents*.

By submission of a Bid, the Offeror shall be conclusively presumed to represent that the Offeror has complied with every requirement of these Instructions to Bidders, that the *Contract Documents* are not ambiguous and are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

- 1.13. Questions Regarding Statement of Work:** Any information relative to interpretation of Scope of Work or specifications shall be requested of the Purchasing Representative, in writing, in ample time prior to the response time.
- 1.14. Addenda & Interpretations:** If it becomes necessary to revise any part of this solicitation, a written addendum will be posted electronically on the City's website at <http://www.gjcity.org/BidOpenings.aspx>. The Owner is not bound by any oral representations, clarifications, or changes made in the written specifications by Owner, unless such clarification or change is provided in written addendum form from the City Purchasing Representative.
- 1.15. Taxes:** The Owner is exempt from State retail and Federal tax. The bid price must be net, exclusive of taxes.
- 1.16. Sales and Use Taxes:** The Contractor and all Subcontractors are required to obtain exemption certificates from the Colorado Department of Revenue for sales and use taxes in accordance with the provisions of the General Contract Conditions. Bids shall reflect this method of accounting for sales and use taxes on materials, fixtures and equipment.
- 1.17. Offers Binding 60 Days:** Unless additional time is required by the Owner, or otherwise specified, all formal offers submitted shall be binding for sixty (60) calendar days following opening date, unless the Bidder, upon request of the Purchasing Representative, agrees to an extension.
- 1.18. Collusion Clause:** Each bidder by submitting a bid certifies that it is not party to any collusive action or any action that may be in violation of the Sherman Antitrust Act. Any and all bids shall be rejected if there is evidence or reason for believing that collusion exists among bidders. The Owner may, or may not, accept future bids for the same services or commodities from participants in such collusion.
- 1.19. Disqualification of Bidders:** A Bid will not be accepted from, nor shall a Contract be awarded to, any person, firm, or corporation that is in arrears to the Owner, upon debt or contract, or that has defaulted, as surety or otherwise, upon any obligation to the Owner, or that is deemed irresponsible or unreliable.

Bidders may be required to submit satisfactory evidence that they are responsible, have a practical knowledge of the project bid upon and that they have the necessary financial and other resources to complete the proposed Work.

Either of the following reasons, without limitation, shall be considered sufficient to disqualify a Bidder and Bid:

- a. More than one Bid is submitted for the same Work from an individual, firm, or corporation under the same or different name; and
- b. Evidence of collusion among Bidders. Any participant in such collusion shall not receive recognition as a Bidder for any future work of the Owner until such participant has been reinstated as a qualified bidder.

1.20. Public Disclosure Record: If the bidder has knowledge of their employee(s) or sub-contractors having an immediate family relationship with a City/County employee or elected official, the bidder must provide the Purchasing Representative with the name(s) of these individuals. These individuals are required to file an acceptable "Public Disclosure Record", a statement of financial interest, before conducting business with the City/County.

2. General Contract Conditions for Construction Projects

- 2.1. The Contract:** This Invitation for Bid, submitted documents, and any negotiations, when properly accepted by the City/County, shall constitute a contract equally binding between the City/County and Contractor. The contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral. The contract may be amended or modified with Change Orders, Field Orders, or Addendums.
- 2.2. The Work:** The term Work includes all labor necessary to produce the construction required by the Contract Documents, and all materials and equipment incorporated or to be incorporated in such construction.
- 2.3. Execution, Correlation, Intent, and Interpretations:** The Contract Documents shall be signed in not less than triplicate by the Owner (City/County) and Contractor. City/County will provide the contract. By executing the contract, the Contractor represents that he/she has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the requirements of the Contract Documents. The Contract Documents are complementary, and what is required by any one, shall be as binding as if required by all. The intention of the documents is to include all labor, materials, equipment and other items necessary for the proper execution and completion of the scope of work as defined in the technical specifications and drawings contained herein. All drawings, specifications and copies furnished by the City/County are, and shall remain, City/County property. They are not to be used on any other project, and with the exception of one contract set for each party to the contract, are to be returned to the owner on request at the completion of the work.
- 2.4. The Owner:** The Owner is the City of Grand Junction and/or Mesa County, Colorado and is referred to throughout the Contract Documents. The term Owner means the Owner or his authorized representative. The Owner shall, at all times, have access to the work wherever it is in preparation and progress. The Contractor shall provide

facilities for such access. The Owner will make periodic visits to the site to familiarize himself generally with the progress and quality of work and to determine, in general, if the work is proceeding in accordance with the contract documents. Based on such observations and the Contractor's Application for Payment, the Owner will determine the amounts owing to the Contractor and will issue Certificates for Payment in such amounts, as provided in the contract. The Owner will have authority to reject work which does not conform to the Contract documents. Whenever, in his reasonable opinion, he considers it necessary or advisable to insure the proper implementation of the intent of the Contract Documents, he will have authority to require the Contractor to stop the work or any portion, or to require special inspection or testing of the work, whether or not such work can be then be fabricated, installed, or completed. The Owner will not be responsible for the acts or omissions of the Contractor, and sub-Contractor, or any of their agents or employees, or any other persons performing any of the work.

- 2.5. Contractor:** The Contractor is the person or organization identified as such in the Agreement and is referred to throughout the Contract Documents. The term Contractor means the Contractor or his authorized representative. The Contractor shall carefully study and compare the General Contract Conditions of the Contract, Specifications and Drawings, Scope of Work, Addenda and Modifications and shall at once report to the Owner any error, inconsistency or omission he may discover. Contractor shall not be liable to the Owner for any damage resulting from such errors, inconsistencies or omissions. The Contractor shall not commence work without clarifying Drawings, Specifications, or Interpretations.
- 2.6. Sub-Contractors:** A sub-contractor is a person or organization who has a direct contract with the Contractor to perform any of the work at the site. The term sub-contractor is referred to throughout the contract documents and means a sub-contractor or his authorized representative.
- 2.7. Award of Sub-Contractors & Other Contracts for Portions of the Work:** As soon as practicable after bids are received and prior to the award of the contract, the successful Contractor shall furnish to the Owner, in writing for acceptance, a list of the names of the sub-contractors or other persons or organizations proposed for such portions of the work as may be designated in the proposal requirements, or, if none is so designated, the names of the sub-contractors proposed for the principal portions of the work. Prior to the award of the contract, the Owner shall notify the successful Contractor in writing if, after due investigation, has reasonable objection to any person or organization on such list. If, prior to the award of the contract, the Owner has a reasonable and substantial objection to any person or organization on such list, and refuses in writing to accept such person or organization, the successful Contractor may, prior to the award, withdraw their proposal without forfeiture of proposal security. If the successful Contractor submits an acceptable substitute with an increase in the proposed price to cover the difference in cost occasioned by the substitution, the Owner may, at their discretion, accept the increased proposal or may disqualify the Contractor. If, after the award, the Owner refuses to accept any person or organization on such list, the Contractor shall submit an acceptable substitute and the contract sum shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate Change Order shall be issued. However, no increase in the contract sum shall be allowed for any such

substitution unless the Contractor has acted promptly and responsively in submitting a name with respect thereto prior to the award.

- 2.8. Quantities of Work and Unit Price:** Materials or quantities stated as unit price items in the Bid are supplied only to give an indication of the general scope of the Work, and are as such, estimates only. The Owner does not expressly or by implication agree that the actual amount of Work or material will correspond therewith, and reserves the right after award to increase or decrease the quantity of any unit item of the Work without a change in the unit price except as set forth in Article VIII, Section 70 of the *General Contract Conditions*. The City also reserves the right to make changes in the Work (including the right to delete any bid item in its entirety or add additional bid items) as set forth in Article VIII, Sections 69 through 71 of the *General Contract Conditions*.
- 2.9. Substitutions:** The materials, products and equipment described in the *Solicitation Documents* shall be regarded as establishing a standard of required performance, function, dimension, appearance, or quality to be met by any proposed substitution. No substitution will be considered prior to receipt of Bids unless the Offeror submits a written request for approval to the City Purchasing Division at least ten (10) days prior to the date for receipt of Bids. Such requests for approval shall include the name of the material or equipment for which substitution is sought and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for evaluation, including samples if requested. The Offeror shall set forth changes in other materials, equipment, or other portions of the Work including changes of the work of other contracts, which incorporation of the proposed substitution would require to be included. The Owner's decision of approval or disapproval of a proposed substitution shall be final. If the Owner approves a proposed substitution before receipt of Bids, such approval will be set forth in an Addendum. Offerors shall not rely upon approvals made in any other manner.
- 2.10. Supervision and Construction Procedures:** The Contractor shall supervise and direct the work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the work under the contract.
- 2.11. Warranty:** The Contractor warrants to the Owner that all materials and equipment furnished under this contract will be new unless otherwise specified, and that all work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All work not so conforming to these standards may be considered defective. If required by Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If within ten (10) days after written notice to the Contractor requesting such repairs or replacement, the Contractor should neglect to make or undertake with due diligence to the same, the City may make such repairs or replacements. All indirect and direct costs of such correction or removal or replacement shall be at the Contractor's expense. The Contractor will also bear the expenses of making good all work of others destroyed or damaged by the correction, removal or replacement of his defective work.
- 2.12. Permits, Fees, & Notices:** The Contractor shall secure and pay for all permits, governmental fees and licenses necessary for the proper execution and completion of

the work. The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and orders of any public authority bearing on the performance of the work. If the Contractor observes that any of the Contract Documents are at variance in any respect, he shall promptly notify the Owner in writing, and any necessary changes shall be adjusted by approximate modification. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Owner, he shall assume full responsibility and shall bear all costs attributable.

- 2.13. Responsibility for Those Performing the Work:** The Contractor shall be responsible to the Owner for the acts and omissions of all his employees and all sub-contractors, their agents and employees, and all other persons performing any of the work under a contract with the Contractor.
- 2.14. Use of the Site:** The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents, and shall not unreasonably encumber the site with any materials or equipment.
- 2.15. Cleanup:** The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of work he shall remove all his waste materials and rubbish from and about the project, as well as all his tools, construction equipment, machinery and surplus materials.
- 2.16. Insurance:** The Contractor shall secure and maintain such insurance policies as will provide the coverage and contain other provisions specified in the General Contract Conditions, or as modified in the Special Contract Conditions.

The Contractor shall file a copy of the policies or Certificates of Insurance acceptable to the City with the Engineer within ten (10) Calendar Days after issuance of the Notice of Award. These Certificates of Insurance shall contain a provision that coverage afforded under the policies shall not be canceled unless at least thirty (30) Calendar Days prior written notice has been given to the City.

- 2.17. Indemnification:** The Contractor shall defend, indemnify and save harmless the Owner, and all its officers, employees, insurers, and self-insurance pool, from and against all liability, suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the Contractor, or of any Contractor's agent, employee, sub-contractor or supplier in the execution of, or performance under, any contract which may result from proposal award. Contractor shall pay any judgment with cost which may be obtained against the Owner growing out of such injury or damages.
- 2.18. Miscellaneous Conditions:** **Material Availability:** Contractors must accept responsibility for verification of material availability, production schedules, and other pertinent data prior to submission of bid. It is the responsibility of the bidder to notify the Owner immediately if materials specified are discontinued, replaced, or not available for an extended period of time. **OSHA Standards:** All bidders agree and warrant that services performed in response to this invitation shall conform to the standards declared

by the US Department of Labor under the Occupational Safety and Health Act of 1970 (OSHA). In the event the services do not conform to OSHA standards, the Owner may require the services to be redone at no additional expense to the Owner.

- 2.19. Time:** Time is of the essence with respect to the time of completion of the Project and any other milestones or deadline which are part of the Contract. It will be necessary for each Bidder to satisfy the City of its ability to complete the Work within the Contract Time set forth in the Contract Documents. The Contract Time is the period of time allotted in the Contract Documents for completion of the work. The date of commencement of the work is the date established in a Notice to Proceed. If there is no Notice to Proceed, it shall be the date of the Contract or such other date as may be established therein, or as established as entered on the Bid Form. The Date of Substantial Completion of the work or designated portions thereof is the date certified by the Owner when construction is sufficiently complete, in accordance with the Contract Documents.
- 2.20. Progress & Completion:** The Contractor shall begin work on the date of commencement as defined in the Contract, and shall carry the work forward expeditiously with adequate forces and shall complete it within the contract time.
- 2.21. Payment & Completion:** The Contract Sum is stated in the Contract and is the total amount payable by the Owner to the Contractor for the performance of the work under the Contract Documents. Upon receipt of written notice that the work is ready for final inspection and acceptance and upon receipt of application for payment, the Owner's Project Manager will promptly make such inspection and, when he finds the work acceptable under the Contract Documents and the Contract fully performed, the Owner shall make payment in the manner provided in the Contract Documents.
- 2.22. Bid Bond:** Each Bid shall as a guaranty of good faith on the part of the Bidder be accompanied by a Bid Guaranty consisting of: a certified or cashier's check drawn on an approved national bank or trust company in the state of Colorado, and made payable without condition to the City; or a **Bid Bond** written by an approved corporate surety in favor of the City. The amount of the Bid Guaranty shall not be less than 5% of the total Bid amount. Once a Bid is accepted and a Contract is awarded, the apparent successful bidder has ten calendar days to enter into a contract in the form prescribed and to furnish the bonds with a legally responsible and approved surety. Failure to do so will result in forfeiture of the Bid Guaranty to the City as Liquidated Damages.

Each bidder shall guaranty its total bid price for a period of sixty (60) Calendar Days from the date of the bid opening.

- 2.23. Performance & Payment Bonds:** Contractor shall furnish a Performance and a Payment Bond, each in an amount at least equal to that specified for the contract amount as security for the faithful performance and payment of all Contractor's obligations under the Contract Documents. These bonds shall remain in effect for the duration of the Warranty Period (as specified in the Special Conditions). Contractor shall also furnish other bonds that may be required by the Special Conditions. All bonds shall be in the forms prescribed by the Contract Documents and be executed by such sureties as (1) are licensed to conduct business in the State of Colorado and (2) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on

Federal Bonds and as Acceptable Reinsuring Companies” as published in Circular 570 (amended) by the Audit Staff, Bureau of Accounts, U.S. Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of the Authority Act. If the surety on any bond furnished by the Contractor is declared bankrupt, or becomes insolvent, or its rights to do business in Colorado are terminated, or it ceases to meet the requirements of clauses (1) and (2) of this section, Contractor shall within five (5) days thereafter substitute another bond and surety, both of which shall be acceptable to the City.

2.24. Retention: The Owner will deduct money from the partial payments in amounts considered necessary to protect the interest of the Owner and will retain this money until after completion of the entire contract. The amount to be retained from partial payments will be five (5) percent of the value of the completed work, and not greater than five (5) percent of the amount of the Contract. When the retainage has reached five (5) percent of the amount of the Contract no further retainage will be made and this amount will be retained until such time as final payment is made.

2.25. Liquidated Damages for Failure to Enter Into Contract: Should the Successful Bidder fail or refuse to enter into the Contract within ten Calendar Days from the issuance of the Notice of Award, the City shall be entitled to collect the amount of such Bidder's Bid Guaranty as Liquidated Damages, not as a penalty but in consideration of the mutual release by the City and the Successful Bidder of all claims arising from the City's issuance of the Notice of Award and the Successful Bidder's failure to enter into the Contract and the costs to award the Contract to any other Bidder, to readvertise, or otherwise dispose of the Work as the City may determine best serves its interest.

2.26. Liquidated Damages for Failure to Meet Project Completion Schedule: If the Contractor does not achieve Final Completion by the required date, whether by neglect, refusal or any other reason, the parties agree and stipulate that the Contractor shall pay liquidated damages to the City for each such day that final completion is late. As provided elsewhere, this provision does not apply for delays caused by the City. The date for Final Completion may be extended in writing by the Owner.

The Contractor agrees that as a part of the consideration for the City's awarding of this Contract liquidated damages in the daily amount of **\$500.00** is reasonable and necessary to pay for the actual damages resulting from such delay. The parties agree that the real costs and injury to the City for such delay include hard to quantify items such as: additional engineering, inspection and oversight by the City and its agents; additional contract administration; inability to apply the efforts of those employees to the other work of the City; perceived inefficiency of the City; citizens having to deal with the construction and the Work, rather than having the benefit of a completed Work, on time; inconvenience to the public; loss of reputation and community standing for the City during times when such things are very important and very difficult to maintain.

The Contractor must complete the Work and achieve final completion included under the Bid Schedule in the number of consecutive calendar days after the City gives is written Notice to Proceed. When the Contractor considers the entire Work ready for its intended use, Contractor shall certify in writing that the Work is substantially complete. In addition to the Work being substantially complete, Final Completion date is the date by which the Contractor shall have fully completed all clean-up, and all items that were identified by

the City in the inspection for final completion. Unless otherwise stated in the Special Conditions, for purposes of this liquidated damages clause, the Work shall not be finished and the Contract time shall continue to accrue until the City gives its written Final Acceptance.

If the Contractor shall fail to pay said liquidated damages promptly upon demand thereof after having failed to achieve Final Completion on time, the City shall first look to any retainage or other funds from which to pay said liquidated damages; if retainage or other liquid funds are not available to pay said liquidated damages amounts, the Surety on the Contractor's Performance Bond and Payment Bond shall pay such liquidated damages. In addition, the City may withhold all, or any part of, such liquidated damages from any payment otherwise due the Contractor.

Liquidated damages as provided do not include any sums to reimburse the City for extra costs which the City may become obligated to pay on other contracts which were delayed or extended because of the Contractor's failure to complete the Work within the Contract Time. Should the City incur additional costs because of delays or extensions to other contracts resulting from the Contractor's failure of timely performance, the Contractor agrees to pay these costs that the City incurs because of the Contractor's delay, and these payments are separate from and in addition to any liquidated damages.

The Contractor agrees that the City may use its own forces or hire other parties to obtain Substantial or Final Completion of the work if the time of completion has elapsed and the Contractor is not diligently pursuing completion. In addition to the Liquidated Damages provided for, the Contractor agrees to reimburse the City for all expenses thus incurred.

2.27. Contingency/Force Account: Contingency/Force Account work will be authorized by the Owner's Project Manager and is defined as minor expenses to cover miscellaneous or unforeseen expenses related to the project. The expenses are not included in the Drawings, Specifications, or Scope of Work and are necessary to accomplish the scope of this contract. Contingency/Force Account Authorization will be directed by the Owner through an approved form. Contingency/Force Account funds are the property of the Owner and any Contingency/Force Account funds, not required for project completion, shall remain the property of the Owner. Contractor is not entitled to any Contingency/Force Account funds, that are not authorized by Owner or Owner's Project Manager.

2.28. Protection of Persons & Property: The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. Contractor shall erect and maintain, as required by existing safeguards for safety and protection, and all reasonable precautions, including posting danger signs or other warnings against hazards promulgating safety regulations and notifying owners and users of adjacent utilities. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct by the Contractor in the execution of the work, or in consequence of the non-execution thereof by the Contractor, he shall restore, at his own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring as may be directed, or it shall make good such damage or injury in an acceptable manner.

- 2.29. Changes in the Work:** The Owner, without invalidating the contract, may order changes in the work within the general scope of the contract consisting of additions, deletions or other revisions, the contract sum and the contract time being adjusted accordingly. All such changes in the work shall be authorized by Change Order and shall be executed under the applicable conditions of the contract documents. A Change Order is a written order to the Contractor signed by the Owner issued after the execution of the contract, authorizing a change in the work or an adjustment in the contract sum or the contract time. The contract sum and the contract time may be changed only by Change Order.
- 2.30. Claims for Additional Cost or Time:** If the Contractor wishes to make a claim for an increase in the contract sum or an extension in the contract time, he shall give the Owner written notice thereof within a reasonable time after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the work, except in an emergency endangering life or property in which case the Contractor shall precede in accordance with the regulations on safety. No such claim shall be valid unless so made. Any change in the contract sum or contract time resulting from such claim shall be authorized by Change Order.
- 2.31. Minor Changes in the Work:** The Owner shall have authority to order minor changes in the work not involving an adjustment in the contract sum or an extension of the contract time and not inconsistent with the intent of the contract documents.
- 2.32. Field Orders:** The Owner may issue written Field Orders which interpret the Contract Documents in accordance with the specifications, or which order minor changes in the work in accordance with the agreement, without change in the contract sum or time. The Contractor shall carry out such Field Orders promptly.
- 2.33. Uncovering & Correction of Work:** The Contractor shall promptly correct all work rejected by the Owner as defective or as failing to conform to the contract documents whether observed before or after substantial completion and whether or not fabricated installed or completed. The Contractor shall bear all costs of correcting such rejected work, including the cost of the Owner's additional services thereby made necessary. If within one (1) year after the date of completion or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the contract documents, any of the work found to be defective or not in accordance with the contract documents, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discover of condition. All such defective or non-conforming work under the above paragraphs shall be removed from the site where necessary and the work shall be corrected to comply with the contract documents without cost to the Owner. The Contractor shall bear the cost of making good all work of separate Contractors destroyed or damaged by such removal or correction. If the Owner prefers to accept defective or non-conforming work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect an appropriate reduction in the payment or contract sum, or, if the amount is determined after final payment, it shall be paid by the Contractor.

- 2.30. Amendment:** No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All amendments to the contract shall be made in writing by the Owner.
- 2.31. Assignment:** The Contractor shall not sell, assign, transfer or convey any contract resulting from this IFB, in whole or in part, without the prior written approval from the Owner.
- 2.32. Compliance with Laws:** Bids must comply with all Federal, State, County and local laws governing or covering this type of service and the fulfillment of all ADA (Americans with Disabilities Act) requirements.
- 2.33. Confidentiality:** All information disclosed by the Owner to the Contractor for the purpose of the work to be done or information that comes to the attention of the Contractor during the course of performing such work is to be kept strictly confidential.
- 2.34. Conflict of Interest:** No public official and/or City/County employee shall have interest in any contract resulting from this IFB.
- 2.35. Contract Termination:** This contract shall remain in effect until any of the following occurs: (1) contract expires; (2) completion of services; (3) acceptance of services or, (4) for convenience terminated by either party with a written *Notice of Cancellation* stating therein the reasons for such cancellation and the effective date of cancellation.
- 2.36. Employment Discrimination:** During the performance of any services per agreement with the Owner, the Contractor, by submitting a Bid, agrees to the following conditions:
- 2.36.1.** The Contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, handicap, or national origin except when such condition is a legitimate occupational qualification reasonably necessary for the normal operations of the Contractor. The Contractor agrees to post in conspicuous places, visible to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- 2.36.2.** The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, shall state that such Contractor is an Equal Opportunity Employer.
- 2.36.3.** Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- 2.37. Affirmative Action:** In executing a Contract with the City, the Contractor agrees to comply with Affirmative Action and Equal Employment Opportunity regulations presented in the General Contract Conditions.
- 2.38. Immigration Reform and Control Act of 1986 and Immigration Compliance:** The Offeror certifies that it does not and will not during the performance of the contract employ

illegal alien workers or otherwise violate the provisions of the Federal Immigration Reform and Control Act of 1986 and/or the immigration compliance requirements of State of Colorado C.R.S. § 8-17.5-101, *et.seq.* (House Bill 06-1343).

- 2.39. Ethics:** The Contractor shall not accept or offer gifts or anything of value nor enter into any business arrangement with any employee, official, or agent of the Owner.
- 2.40. Failure to Deliver:** In the event of failure of the Contractor to deliver services in accordance with the contract terms and conditions, the Owner, after due oral or written notice, may procure the services from other sources and hold the Contractor responsible for any costs resulting in additional purchase and administrative services. This remedy shall be in addition to any other remedies that the Owner may have.
- 2.41. Failure to Enforce:** Failure by the Owner at any time to enforce the provisions of the contract shall not be construed as a waiver of any such provisions. Such failure to enforce shall not affect the validity of the contract or any part thereof or the right of the Owner to enforce any provision at any time in accordance with its terms.
- 2.42. Force Majeure:** The Contractor shall not be held responsible for failure to perform the duties and responsibilities imposed by the contract due to legal strikes, fires, riots, rebellions, and acts of God beyond the control of the Contractor, unless otherwise specified in the contract.
- 2.43. Independent Contractor:** The Contractor shall be legally considered an Independent Contractor and neither the Contractor nor its employees shall, under any circumstances, be considered servants or agents of the Owner. The Owner shall be at no time legally responsible for any negligence or other wrongdoing by the Contractor, its servants, or agents. The Owner shall not withhold from the contract payments to the Contractor any federal or state unemployment taxes, federal or state income taxes, Social Security Tax or any other amounts for benefits to the Contractor. Further, the Owner shall not provide to the Contractor any insurance coverage or other benefits, including Workers' Compensation, normally provided by the Owner for its employees.
- 2.44. Nonconforming Terms and Conditions:** A bid that includes terms and conditions that do not conform to the terms and conditions of this Invitation for Bid is subject to rejection as non-responsive. The Owner reserves the right to permit the Contractor to withdraw nonconforming terms and conditions from its bid prior to a determination by the Owner of non-responsiveness based on the submission of nonconforming terms and conditions.

Items for non-responsiveness may include, but not be limited to:

- a. Submission of the Bid on forms other than those supplied by the City;
- b. Alteration, interlineation, erasure, or partial detachment of any part of the forms which are supplied herein;
- c. Inclusion of unauthorized additions conditional or alternate Bids or irregularities of any kind which may tend to make the Bid incomplete, indefinite, or ambiguous as to its meaning;

- d. Failure to acknowledge receipt of any or all issued Addenda;
- e. Failure to provide a unit price or a lump sum price, as appropriate, for each pay item listed except in the case of authorized alternative pay items;
- f. Failure to list the names of Subcontractors used in the Bid preparation as may be required in the Solicitation Documents;
- g. Submission of a Bid that, in the opinion of the Owner, is unbalanced so that each item does not reasonably carry its own proportion of cost or which contains inadequate or unreasonable prices for any item;
- h. Tying of the Bid with any other bid or contract; and
- i. Failure to calculate Bid prices as described herein.

2.45. Evaluation of Bids and Offers: The Owner reserves the right to:

- reject any and all Bids,
- waive any and all informalities,
- negotiate final terms with the Successful Bidder, and
- disregard any and all nonconforming, nonresponsive or conditional Bids.

Discrepancies between words and figures will be resolved in favor of words. Discrepancies between Unit Prices and Extended Prices will be resolved in favor of the Unit Prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. The corrected extensions and totals will be shown in the tabulation of Bids.

The Owner may consider the qualifications and experience of Subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the work as to which the identity of Subcontractors and other persons and organizations must be submitted. Operating costs, maintenance considerations performance data, and guarantees of materials and equipment may also be considered by the Owner.

The Owner will conduct such investigations as deemed necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of the Offeror, proposed Subcontractors and other persons and organizations to do the Work in accordance with the *Contract Documents* to the City's satisfaction within the Contract Time.

The Offeror shall furnish the Owner all information and data requested by the Owner to determine the ability of the Offeror to perform the Work. The Owner reserves the right to reject the Bid if the evidence submitted by, or investigation of such Offeror fails to satisfy the Owner that such Offeror is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated therein.

By submitting a Bid, each Offeror authorizes the Owner to perform such investigation of the Offeror as the Owner deems necessary to establish the responsibility, qualifications and financial ability of the Offeror and, by its signature thereon, authorizes the Owner to obtain reference information concerning the Offeror and releases the party providing such information and the Owner from any and all liability to the Offeror as a result of such reference information so provided.

The Owner reserves the right to reject the Bid of any Offeror who does not pass any evaluation to the Owner's satisfaction.

If the Contract is to be awarded, it will be awarded to the Offeror who, by evaluation, the Owner determines will best meet the Owner's interests.

The Owner reserves the right to accept or reject the Work contained in any of the Price Bid Schedules or alternates, either in whole or in part.

- 2.46. Award of Contract:** Unless otherwise indicated, a single award will be made for all the bid items in an individual bid schedule. In the event that the Work is contained in more than one Bid Schedule, the City may award Schedules individually or in combination. In the case of two Bid Schedules which are alternative to each other, only one of such alternative Schedules will be awarded. Within forty-five (45) Calendar Days of Bid Opening, the City will issue a Notice of Award to the Successful Bidder which will be accompanied by four (4) unsigned copies of the Contract and the Performance and Payment Bond forms. Within ten (10) Calendar Days thereafter, the Successful Bidder shall sign and deliver four (4) copies of the Contract, Performance Bond, Payment Bond and Certificates of Insurance to the City. Within ten (10) Calendar Days thereafter, the City will deliver two (2) fully executed counterparts of the Contract to the Contractor. No contract shall exist between the Successful Bidder and the City and the Successful Bidder shall have no rights at law or in equity until the Contract has been duly executed by the City.

The Successful Bidder's failure to sign and submit a Contract and other documents set forth in this Paragraph within the prescribed time shall be just cause of annulment of the award, and forfeiture of the Bid Guaranty. The award of Contract may then be made to the next qualified Bidder in the same manner as previously prescribed.

- 2.47. Ownership:** All plans, prints, designs, concepts, etc., shall become the property of the Owner.
- 2.48. Oral Statements:** No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in this document and/or resulting agreement. All modifications to this request and any agreement must be made in writing by the Owner.
- 2.49. Patents/Copyrights:** The Contractor agrees to protect the Owner from any claims involving infringements of patents and/or copyrights. In no event shall the Owner be liable to the Contractor for any/all suits arising on the grounds of patent(s)/copyright(s) infringement. Patent/copyright infringement shall null and void any agreement resulting from response to this IFB.

- 2.50. Remedies:** The Contractor and Owner agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.
- 2.51. Venue:** Any agreement as a result of responding to this IFB shall be deemed to have been made in, and shall be construed and interpreted in accordance with, the laws of the City of Grand Junction, Mesa County, Colorado.
- 2.52. Expenses:** Expenses incurred in preparation, submission and presentation of this IFB are the responsibility of the company and cannot be charged to the Owner.
- 2.53. Sovereign Immunity:** The Owner specifically reserves its right to sovereign immunity pursuant to Colorado State Law as a defense to any action arising in conjunction to this agreement.
- 2.54. Non-Appropriation of Funds:** The contractual obligation of the Owner under this contract is contingent upon the availability of appropriated funds from this fiscal year budget as approved by the City Council or Board of County Commissioners from this fiscal year only. State of Colorado Statutes prohibit obligation of public funds beyond the fiscal year for which the budget was approved. Anticipated expenditures/obligations beyond the end of the current Owner's fiscal year budget shall be subject to budget approval. Any contract will be subject to and must contain a governmental non-appropriation of funds clause.
- 2.55. Cooperative Purchasing:** Purchases as a result of this solicitation are primarily for the City/County. Other governmental entities may be extended the opportunity to utilize the resultant contract award with the agreement of the successful provider and the participating agencies. All participating entities will be required to abide by the specifications, terms, conditions and pricings established in this Bid. The quantities furnished in this bid document are for only the City/County. It does not include quantities for any other jurisdiction. The City or County will be responsible only for the award for its jurisdiction. Other participating entities will place their own awards on their respective Purchase Orders through their purchasing office or use their purchasing card for purchase/payment as authorized or agreed upon between the provider and the individual entity. The City/County accepts no liability for payment of orders placed by other participating jurisdictions that choose to piggy-back on our solicitation. Orders placed by participating jurisdictions under the terms of this solicitation will indicate their specific delivery and invoicing instructions.
- 2.56. Keep Jobs in Colorado Act:** Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, Colorado Revised Statutes requiring 80% Colorado labor to be employed on public works. Contractor shall, upon reasonable notice provided by the Owner, permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17-101(2)(a). If Contractor claims it is entitled to a waiver pursuant to C.R.S. §8-17-101(1), Contractor shall state that there is insufficient Colorado labor to perform the work such that compliance with Article 17 would create an undue burden that would substantially prevent a project from proceeding to completion, and shall include evidence demonstrating the insufficiency and undue burden in its response.

Unless expressly granted a waiver by the Owner pursuant to C.R.S. §8-17-101(1), Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, Colorado Revised Statutes requiring 80% Colorado labor to be employed on public works. Contractor shall, upon reasonable notice provided by the Owner, permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17-101(2)(a).

2.56.1. "Public project" is defined as:

- (a) any construction, alteration, repair, demolition, or improvement of any land, building, structure, facility, road, highway, bridge, or other public improvement suitable for and intended for use in the promotion of the public health, welfare, or safety and any maintenance programs for the upkeep of such projects
- (b) for which appropriate or expenditure of moneys may be reasonably expected to be \$500,000.00 or more in the aggregate for any fiscal year
- (c) except any project that receives federal moneys.

3. Statement of Work

3.1. GENERAL: The work request is for improvements to selected roads within the City of Grand Junction. The improvements will include mill and fill operations, concrete removal and replacement, and shoulder improvements.

3.2. PROJECT DESCRIPTION: The project includes approximately 69,380 square yards of asphalt milling, a 2-inch overlay of hot mix asphalt utilizing approximately 1,060 tons of grading SX 75 (PG 76-28), and approximately 7,631 tons of grading SX 75 (PG 64-22), and 13,640 SY of shoulder widening (bike lanes on Redlands Parkway and S. Camp Road), 2,405 linear feet of guardrail replacement, and 400 linear feet of curb and gutter replacement on existing streets within the City of Grand Junction. All dimensions and scope of work should be verified by Contractors prior to submission of bids.

3.3. SPECIAL CONDITIONS & PROVISIONS:

3.3.1 Mandatory Pre-Bid Meeting: Prospective bidders are required to attend a mandatory pre-bid meeting on March 22, 2019 at 10:00am. Meeting location shall be in the Auditorium at City Hall, located at 250 N. 5th Street, Grand Junction, CO. The purpose of this visit will be to inspect and to clarify the contents of this Invitation for Bids (IFB).

3.3.2 QUESTIONS REGARDING SOLICITATION PROCESS/SCOPE OF WORK:

Duane Hoff Jr., Senior Buyer
City of Grand Junction
duaneh@gjcity.org

3.3.3 Project Manager: The Project Manager for the Project is Eric Mocko, Project Engineer, who can be reached at (970)256-4017. During Construction, all notices, letters, submittals, and other communications directed to the City shall be addressed and mailed or delivered to:

City of Grand Junction
Department of Public Works
Attn: Eric Mocko, Project Engineer
333 West Ave Building C
Grand Junction, CO 81501

3.3.4 Affirmative Action: The Contractor is not required to submit a written Affirmative Action Program for the Project.

3.3.5 Pricing: Pricing shall be all inclusive to include but not be limited to: all labor, equipment, supplies, materials, freight (F.O.B. Destination – Freight Pre-paid and Allowed to each site), travel, mobilization costs, fuel, set-up and take down costs, and full-time inspection costs, and all other costs related to the successful completion of the project.

The Owner shall not pay nor be liable for any other additional costs including but not limited to: taxes, shipping charges, insurance, interest, penalties, termination payments, attorney fees, liquidated damages, etc.

3.3.6 Freight/Shipping: All freight/shipping shall be F.O.B. Destination – Freight Pre-Paid and Allowed to the project site(s), Grand Junction, CO.

Contractor must meet all federal, state, and local rules, regulations, and requirements for providing such services.

3.3.7 Contract: A binding contract shall consist of: (1) the IFB and any amendments thereto, (2) the bidder's response (bid) to the IFB, (3) clarification of the bid, if any, and (4) the City's Purchasing Department's acceptance of the bid by "Notice of Award" or by "Purchase Order". All Exhibits and Attachments included In the IFB shall be incorporated into the contract by reference.

A. The contract expresses the complete agreement of the parties and, performance shall be governed solely by the specifications and requirements contained therein.

B. Any change to the contract, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the bidder and the City Purchasing Division or by a modified Purchase Order prior to the effective date of such modification. The bidder expressly and explicitly understands and agrees that no other method and/or no other document, including acts and oral communications by or from any person, shall be used or construed as an amendment or modification to the contract.

3.3.8 Time of Completion: The scheduled time of Completion for the Project is 90 Calendar Days from the starting date specified in the Notice to Proceed.

Completion is achieved when site cleanup and all punch list items (resulting from the final inspection) have been completed. Completion shall have the meaning set forth in Article I, Section 3 (Definitions and Terms) of the General Contract Conditions.

3.3.9 Working Days and Hours: The working days and hours shall be as stated in the General Contract Conditions or as mutually agreed upon in the preconstruction Meeting with the following exception:

The following streets shall have all work performed between the hours of 10:00PM to 6:00AM:

- 24 ½ Rd

No traffic control shall be in place, other than prestaging, prior to 10:00PM and all traffic control shall be removed prior to 6:00AM. In the event that traffic control is not removed by the time set above, the contractor shall be subjected to a \$500/hour penalty.

3.3.10 Licenses and Permits: Contractor is responsible for obtaining all necessary licenses and permits required for Construction, at Contractors expense. See Section 2.13. Contractor shall supply to Owner all copies of finalized permits.

3.3.11 Permits: The following permits are required for the Project and will be obtained by the City at no cost to the Contractor:
None

The following permits are required for the Project and shall be obtained and paid for by the Contractor, with the costs included in the total bid price for the Project:

- CDOT Permits for 23 Rd and 24 ½ Rd
- UPRR Permit for 9th Street Crossing. Maintenance Consent Letters will be obtained by the City at these locations. An example has been provided herein for reference (not specific to 9th Street). Once the specific maintenance consent letter has been obtained, the Contractor will be required to execute the Right of Entry Agreement associated with this letter. See Appendix C.
- The work along the 4th Avenue railway for 9th Street will not require a permit, but will require coordination (by the Contractor) with UPRR.

3.3.12 City Furnished Materials: The City will furnish the following materials for the Project:

- Door-hanger notices informing residents of the upcoming overlay work, planned dates of the work, and parking restrictions. These shall be hung on doors at least two, but not more than 7 days prior to the work at each location. In the event that door hangers are not distributed as per these special conditions and a vehicle needs to be removed from the project site the Contractor shall be responsible for the costs associated with the relocation of the vehicle.

- Damaged or outdated manhole ring and covers and Water Valve boxes and lids that need to be replaced. The City will furnish the above mentioned. The Contractor shall be responsible for picking up the materials from Castings Inc.

3.3.13 Project Newsletters: A newsletter for the Project will be prepared and distributed by the City as necessary. It will include general information about the Project including interruptions in utility services, street closures, parking restrictions, project schedule, and the names and telephone numbers of the contacts for the City and Contractor. The newsletter will be mailed approximately one week before the Contractor commences work.

The Contractor will be responsible for notifying all businesses and / or residents located adjacent to the work. Door hanger notifications shall be distributed at least two (2) working days prior to the day the Milling work is scheduled to begin. A second door hanger notification shall be distributed at least two (2) working days prior to the day the Overlay work is scheduled to begin.

3.3.14 Project Sign: Project signs, if any, will be furnished and installed by the City.

3.3.15 Authorized Representatives of the City: Those authorized to represent the City shall include Purchasing Agent, Engineers, and Inspectors employed by the City, only.

3.3.16 Stockpiling Materials and Equipment: All stockpiling/storage shall be in accordance with General Contract Condition Section 51.

When approved by the Project Engineer, the Contractor may stockpile and store materials and equipment within public right-of-way. The Contractor shall be responsible for obtaining written permission to use private property for storage of materials and equipment. Copies of the above-mentioned agreements shall be submitted to the Project Engineer prior to use of the property.

3.3.17 Traffic Control: The Contractor shall provide and maintain traffic control in accordance with the approved Traffic Control Plan and the Manual on Uniform Traffic Control Devices. A Traffic Control Plan shall be prepared by the Contractor and reviewed by the City two days prior to the pre-construction meeting. Traffic control will be paid as lump sum and shall include all associated signs, cones, traffic control supervisor, assistant to the traffic control supervisor, set up and tear down.

3.3.18 Clean-Up: The Contractor is responsible for cleaning up all loose materials that have been deposited or swept into gutters, and onto sidewalks and driveways as a result of construction operations. The costs for all clean-up work shall be considered incidental and will not be paid for separately.

3.3.19 Quality Control Testing:

Supplier shall perform Quality Control (QC) testing on the Asphalt. The Contractor shall provide QC throughout the Contract, with the use of their own QC Technicians or the use of a certified laboratory. In accordance with Section 401.06.3 of the City of

Grand Junction Standard Specifications for Road and Bridge Construction, results of all QC tests shall be submitted to the Project Engineer and the City's Quality Assurance (QA) Technician within 4 hours of the time of sampling. Failure to do so may require that paving be suspended until all sampling results have been received, reviewed, and approved. The Contractor shall supply QC Lab personnel for night work for comparison of test data. If lab personnel is not supplied paving operations will be suspended until one is available. QC Field personnel shall remain on site during the duration of the paving operation or until in-place density are met.

The Contractor/Supplier shall perform QC testing on all concrete. The City will perform QA testing for concrete.

The Contractor, at their own discretion, may elect to forgo the soils QC field testing (in-place soils density) for placement of Embankment and Aggregate Base Course. QA testing for these items will be performed by the City, and laboratory results for submittal purposes will be provided by the contractor. However, if a sufficient number of failed test results are observed by the City and/or its QA testing representatives, written notification will be provided to the contractor, and back payment to the City for failed location re-tests will be required.

3.3.20 Schedule of Submittals: Contractor shall deliver these submittals at least two days prior to the pre-construction meeting:

- Traffic Control Plans
- Project Schedule
- Hourly rate tables for Labor and Equipment to be used on this project
- Asphalt Mix Designs for SX mix.
- Concrete Mix Designs for Structural Concrete
- Tack Coat
- Emulsified Asphalt
- Retaining Wall Block
- Guard Rail and End Treatments

3.3.21 Special Equipment: Auger extensions shall be used when the screed is extended to a width greater than two feet beyond the auger. The auger extensions shall be installed to ensure a constant head of material.

Asphalt Material Transfer Vehicle: The contractor shall use a materials transfer vehicle in conjunction with belly dump to reduce irregularities in the paving. On the following street sections:

- S. Camp Road – S. Broadway to Rimrock Road
- Redlands Parkway – Colorado River Bridge to Riverside Parkway Bridge

3.3.22 Arterial and Collector Streets: All paving shall be completed a maximum of 7 calendar days after the milling at ALL locations.

3.3.23 Excess Material: All excess materials shall be disposed in accordance with General Contract Condition Section 50. All asphalt millings shall be delivered to City Shops, located at 333 West Avenue, and become the property of the City of Grand Junction.

3.3.24 Asphalt Paper Joints: The Contractor shall install asphalt paper joints at all locations where milling the roadway creates a vertical edge greater than 1" in height in the direction of travel. The paper joints shall be installed immediately following milling operations. The asphalt used in the paper joint shall be removed prior to placing the overlay. The cost of the paper joints shall be included in the unit price for the asphalt items and will not be measured or paid for separately.

3.3.25 Existing Utilities and Structures: Utilities were not potholed during design of this project, except where indicated on the plans. The locations of existing utilities and structures shown on the plans are approximate with the information gathered during design. It is the responsibility of the Contractor to pothole/locate and protect all structures and utilities in accordance with General Contract Condition Section 37.

3.3.26 Incidental Items: Any item of work not specifically identified or paid for directly, but which is necessary for the satisfactory completion of any paid items of work, will be considered as incidental to those items, and will be included in the cost of those items.

3.3.27 Tack Coat: Tack Coat will be required between the existing asphalt and the leveling asphalt, existing asphalt and new overlay, and between leveling asphalt and new overlay asphalt. The tack coat shall meet the requirements of Section 407 of the *Standard Specifications for Road and Bridge Construction*, as modified, herein. The cost of the tack coat will be considered incidental to the work and will not be paid for separately.

3.3.28 Milling at Drainage Inlets: When milling adjacent to inlets that have a concrete edge protruding into the street, it shall be the Contractor's responsibility to provide an approved marker or barricade to protect vehicle tires from damage until the overlay is placed. **It shall be the Contractors responsibility to ensure millings, tack coat and/or HMA do not enter the storm drain system.**

3.3.29 Painted Lane Lines: The Contractor shall be responsible for recording the location of all existing striping, and shall place longitudinal paving joints on or immediately adjacent to said striping. Locations where striping will differ from existing locations are indicated on the project plans, and longitudinal paving joints shall be placed on or immediately adjacent to proposed striping locations.

3.3.30 Temporary Pavement Marking Tape: The Contractor shall be responsible for furnishing and placing temporary pavement marking tape in the event that existing stripes were removed during milling operation. The Contractor shall be responsible for furnishing and placing temporary pavement marking tape prior to the final roller pass. Pavement marking tape shall be placed on the seams of the new asphalt as determined by the record of existing striping or new striping locations per provided project plans. The cost of the marking tape and labor to install will be considered incidental to the work and will not be paid for separately.

3.3.31 Transverse Milling: Butt joints (Transverse Milling) shall be placed in all locations where new asphalt will be joined to existing pavement. The location and width of all butt joints will be designated by the Project Engineer or his representative.

3.3.32 Pavement Cross Slope: Each paving machine shall be equipped with a 4' carpenter's level. On those occasions when the paving foreman determines that an existing street has little or no cross slope, the Contractor shall advise the Engineer of his observations rather than overlaying the street as is. The Engineer or his representative will then determine how best to correct the inadequate cross slope.

3.3.33 Payment for Hot Mix Asphalt: The Contractor is reminded that Section 401.07.1 of the City of Grand Junction Standard Specifications for Road and Bridge Construction will be used to determine Pay Factors for calculating the basis of payment for Hot Bituminous Pavement with the following modifications:

The pay factor (PF) should be calculated for mat density (excluding joint density), air voids, and VMA daily. An average daily pay factor (DPF) should then be calculated/weighted in the following proportion:

- Mat Density (excluding joint density) – 50%
- Air Voids – 25%
- VMA – 25%

The incentive payment will then be based on a weighted average project pay factor (PPF). The PPF shall be calculated/weighted per the DPFs and accepted quantities placed for each day's production of each pay item. This PPF will then be applied to the total accepted quantities for each pay item, as applicable.

3.3.34 Manholes and Water Valves: It shall be the contractors' responsibility to accurately record and adjust all manholes, valve boxes and survey monuments final grade. In the event that a utility is paved over it shall be the contractors' responsibility to expose and adjust to final grade within 2 days. In all other cases utilities shall be raised to final grade within 7 days after completion of paving street segment, and shall be the contractors' responsibility to expose the affected utility during the event of an emergency.

3.3.35 Survey: The Contractor shall give the City survey crew a minimum of 72 hours notice prior to milling to allow for all survey monuments to be adjusted.

The cost of any survey necessary for the completion of the project will be considered incidental to the work and will not be paid for separately.

3.3.36 Existing Concrete Sidewalks, Pans, Fillets, Curbs and Gutters: The existing sidewalks, pans, fillets, curb and gutter are in good serviceable condition. In most instances the installation of new sidewalk and pavement will be adjacent to existing concrete. The Contractor will need to protect all concrete adjacent to construction. If the concrete is damaged during construction the Contractor will be responsible for its replacement at no cost to the City. The Contractor, the City Project Inspector, and/or the City Project Engineer/Manager will walk and record any concrete that is deemed to be damaged before construction has started.

3.3.37 Materials: In the event that excavation of the manholes grade rings are disturbed or removed and replaced due to damage the Contractor is instructed to follow these guidelines:

The annular area beneath the bottom of the uppermost grade ring shall either be filled with a self-consolidating material, i.e. $\frac{3}{4}$ " screened rock or engineer approved equal or shall be completely filled with Quikrete's Rapid Road Repair or Engineer approved equal. No other means will be considered.

3.3.38 Work By Others / Coordination

The following locations will have sanitary sewer work completed as part of the 2019 Sewer and Water Line replacement projects:

- 9th Street – Sanitary Sewer and Water replacements including services
- 15th Street – Sanitary Sewer replacement including services
- 27 Road/H Road - Water replacement (Ute Water)

It is anticipated that the City work will begin in May. In the event that this work is not able to be accommodated into the contractor's schedule, the contractor or the City may opt for a revised start date.

3.4. SCOPE OF WORK:

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION:

The *City of Grand Junction Standard Specifications for Road and Bridge Construction* are hereby modified or supplemented for this Project by the following modifications to *The Standard Specifications for Road and Bridge Construction*, State Department of Highways, Division of Highways, State of Colorado:

SP-1 SECTION 202 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Section 202 of the Standard Specifications is hereby revised for this project as follows:

Section 202.07, shall include the following:

All concrete removal required for installation of new will be considered incidental and will not be measured or paid for separately.

Section 210.10, Adjust Structure, shall include the following:

(1) The following shall apply to adjusting manhole rings in traveled through lanes:

- (a) Manholes shall be paved over during the overlay. Sand or paper will be used to prevent the asphalt from adhering to the manhole cover. After paving, the manhole ring shall be adjusted to grade by the use of concrete grade rings. The cut area around the manhole shall then be patched with

Grading-SX, Hot Mix Asphalt to the same thickness as the adjacent pavement. When adjusting the manhole ring to match the cross slope of the street, the Contractor shall fill the space between the concrete grade ring and the cast iron ring with Rapid Road Repair or Engineer approve equal. In the event that grade rings are removed and or replaced as part of the adjustment the contractor shall fill the annular area below the uppermost grade ring with a self-consolidating media such as 3/4" washed rock or completely fill the area with Rapid Road Repair or Engineer approved equal.

- (b) Manhole adjustment tolerance: all manholes adjusted as part of this project shall meet the following criteria: level with the adjacent asphalt or $(-)\frac{1}{8}"$. Manholes set outside of this tolerance will be rejected.

- (2) Valve boxes can be adjusted by the use of cast iron valve box extensions or by digging the valve box out after paving and raising the existing box. After adjusting the height of the valve box, the area around the valve box shall be filled with Grading-SX, Hot Mix Asphalt to the same thickness as the adjacent pavement. Water valve tolerance will be the same as section 1 b with the exception of $(-)\frac{1}{4}"$

Subsection 202.12, shall include the following:

Locations of saw cuts shall be determined and directed by the Construction Inspector or the Engineer. Saw cuts shall be incidental to work.

SP-2 SECTION 203 – EXCAVATION AND EMBANKMENT

Section 203 of the Standard Specifications is hereby revised for this project as follows:

Section 203.03 shall include the following:

Unclassified Excavation shall consist of the materials removed (see plans for S. Camp Road and Redlands Parkway) and placed to facilitate the construction of the shoulder widening (new bike lanes). It is anticipated that the removed materials will be generally suitable for placement as part of the new embankment sections on these roads. This item will be paid for as cubic yards exported per plan, including the materials placed and compacted per plan as an incidental cost to this item. All placed embankment material shall be free of trash and organic materials. Any unsuitable materials identified by the contractor and/or representative of the City shall be brought to the attention of the Project Engineer and, once confirmed by the Engineer, will be considered excess materials incidental to this pay item.

Note: The Engineer estimates the materials cut from Redlands Parkway will generate approximately 240 cubic yards of net excess material and the materials cut from S. Camp Road will generate approximately 1,036 cubic yards of net excess material. See Appendix B for Cut/Fill Quantities for both roads. The excess materials shall be hauled and stockpiled at the City Riverside Parkway Yard located off Hale Avenue.

Section 203.07 shall be revised, where applicable, to include the following:

Soil embankment materials shall be tested for compaction. Materials classified as AASHTO A-1 through A-4 soils shall be compacted at ± 2 percent of Optimum Moisture Content (OMC) and to at least 95 percent of the maximum dry density determined in accordance with AASHTO T 180. Materials classified as AASHTO A-5 through A-7 Materials shall be compacted at a moisture content ranging from minus 1 percent to plus 3 percent of OMC and to at least 95 percent of the maximum dry density determined in accordance with AASHTO T 99.

Section 203.14 shall include the following:

Payment for work shall be made under Excavation and Embankment and will be measured by cubic yards exported per plan, and shall include the materials placed and compacted per plan for the widening as an incidental cost. Unsuitable material generated from utility construction will not be measured or paid for separately and will be considered excess materials incidental to this pay item.

Pay Item
Excavation and Embankment

Pay Unit
CY

SP-3 SECTION 304 – AGGREGATE BASE COURSE

Section 304 of the Standard Specifications is hereby revised for this project as follows:

Subsection 304.01 shall include the following:

In areas of asphalt overlay where there is no curb and gutter and/or a drainage pan, the Contractor shall backfill the shoulder with Class-6 Aggregate Base Course immediately following the overlay. The shoulder shall have a slope of 12:1 or flatter, and shall extend a maximum 4' from the edge of asphalt. The aggregate base course shall be brought level to the new pavement surface and compacted. An exception to this will be made in areas where shoulder material would extend into existing yards or landscaping adjacent to the roadway. In these locations, it will be necessary to provide materials that match the existing landscape.

SP-4 SECTION 401 – PLANT MIX PAVEMENTS - GENERAL

REVISION OF SECTION 401 PLANT MIX PAVEMENTS

Section 401 of the Standard Specifications are hereby revised for this project as follows:

401.01 Description.

Add the following:

This work shall consist of providing a Hot Mix Asphalt (HMA) to be placed as shown on the plans, or as directed by the Owner. The Contractor shall be responsible for Process Control (PC) of the HMA; including the design, and control of the quality of the material incorporated into the project.

401.02 Composition of Mixtures.

Delete subparagraph (a) *Mix Design* and replace with the following:

A Job Mix Formula (JMF) design shall be submitted for each mixture required, at least 10 calendar days prior to placing any mix on the project, for acceptance by the Owner. JMF's previously approved by CDOT within the past six months may be utilized. The JMF design shall be determined using AASHTO T-312 or CP-L 5115 for the Method of Mixture Design. Grading ST, SX, and S shall be designed using 100mm molds. The job mix gradation shall be wholly within the Master Range Table in subsection 703.04 before the tolerances shown in Section 401 are applied.

Designs shall be developed and performed in a materials laboratory that meets the requirements set forth by AASHTO Materials Reference Laboratory (AMRL) for all testing procedures. The design shall be stamped and signed by a Professional Engineer licensed in the State of Colorado. In addition, the Contractor shall submit, as part of the mixture design, laboratory data documents to verify the following:

- Gradation, specific gravity, source and description of individual aggregate and properties, and the final blend.
- Aggregate physical properties.
- Source and Grade of the Performance Graded Binder.
- Proposed Design Job Mix: aggregate and additive blending, final gradation, optimum binder content.
- Mixing and compaction temperatures used.
- Mixture properties shall be determined with a minimum of four binder contents.

The JMF for each mixture shall establish a single percentage of aggregate passing each required sieve size, a single percentage of asphalt cement to be added to the aggregate, and a single temperature for the mixture at the discharge point of the plant.

The Owner reserves the right to verify the asphalt supplier's mix design for each JMF design utilizing materials produced and stockpiled. The asphalt supplier shall provide, at no cost, a sufficient quantity of each aggregate, mineral filler, Recycled Asphalt Pavement (RAP), and additive for the required laboratory tests, as well as all Certificates of Conformance/ Compliance at any time on any material used. The Asphalt Supplier shall provide copies of quality control testing results during the production of HMA used within one business day from the sampling date.

Mixture design of HMA shall meet the requirements of Table 403-1 and Table 403-2 in the Revision to Section 403. For mixes requiring a design gyration of 100 (ESALs greater than 3 million) the Project Special Conditions should be used. This gyration is not recommended for the majority of roads within Mesa County.

Delete subparagraph (b) *Mixtures Furnished to the Project* and replace with the following:

Production verification shall occur prior to, or during, the start of the project. Volumetric properties of the mix shall be verified by LabCAT Level C Certified Technicians. If the mix was produced for another project within the last 90 days, data from that project can be submitted for verification. All mixtures furnished for the project shall conform within the ranges of tolerance listed in Table 401.02A. The mix verification test reports shall be submitted to the Owner prior to mix placement.

TABLE
401.02A
Production Mix
Tolerances

<u>Property</u>	<u>Tolerance</u>
<u>Asphalt Cement Content</u>	<u>± 0.3%</u>
<u>VMA</u>	<u>± 1.2%</u>
<u>Air Voids</u>	<u>± 1.2%</u>

Verification testing for binder content, gradation and physical properties shall be performed at the frequencies listed in Table 401.23-1.

There shall be no substitutions of materials allowed during production, unless approved in advance by the Owner. All substitutions will require checkpoint verification. If the checkpoint differs from the Job Mix Formula (JMF), a new mix design will be required. Upon request of the Owner, the binder grade may be changed by one available binder grade level without requiring a new mix design.

Should a change in the source of any material used in the production of HMA (aggregate, mineral filler, lime, or performance graded asphalt binder) occur, a one point verification test (at optimum binder content) of the mix must be performed to verify that the applicable criteria shown on Table 403-1 (HMA) and Table 403-2 (VMA) of Revision to Section 403 are still met. If this testing shows noncompliance, the Contractor shall establish a new job mix design and obtain approval by the Owner before the new HMA is used.

Add the following new subparagraphs:

(c) *Reclaimed Asphalt Pavement (RAP)*. RAP shall be allowed in HMA up to a maximum binder replacement of 23 percent, unless otherwise specified in the contract, and provided that all the specifications for the HMA are met. Fine Aggregate Angularity requirements shall apply only to the virgin fraction of the fine aggregate. RAP shall be of uniform quality and gradation with a maximum size no greater than the nominal aggregate size of the mix. RAP shall not contain clay balls, vegetable matter, or other deleterious substances.

The Contractor shall have an approved mix design for the amount of RAP to be used. The AC content of the RAP utilized in the Contractor RAP mix design shall be the average AC content determined in accordance with 1B or 1C, below, or alternatively, a minimum of five samples of the Contractors RAP stockpile may be sampled and the average AC content of the RAP be determined using AASHTO T-164, Method A or B, or in accordance with 1C below. The Contractor shall determine the total binder replaced by the binder in the RAP pursuant to the following equation:

Total Binder Replaced = $(A \times B) \times 100/E$

Where:

A = RAP % Binder Content *

B = RAP % in Mix *

E = Total Effective Binder Content *

* in decimal format (i.e. 2% is 0.02)

The Total Binder Replaced by the binder in the RAP shall not exceed 23 percent of the effective binder content of either the mix design or the produced mix.

The Contractor shall have an approved Quality Control (QC) Plan that details how the RAP will be processed and controlled. The QC plan shall address the following:

1. RAP Processing Techniques. This requires a schematic diagram and narrative that explains the processing (crushing, screening, and rejecting) and stockpile operation for this specific project.
2. Control of RAP Asphalt Binder Content (AASHTO T-164, Method A or B). RAP Asphalt Binder Content may also be determined in accordance with CP-L 5120, provided an RAP AC content correction factor is determined through correlation testing with AASHTO T-164, Method A or B. The correction factor shall be determined by performing correlation testing on the first five samples of the RAP AC content, then at a frequency of one for every five AC content tests thereafter. The correction factor shall be determined by calculating the average difference in AC content between CP-L 5120 and AASHTO T-164, Method A or B, and applying the correction to the AC content determined in accordance with CP-L 5120 :
Frequency: 1 per 1000 tons of processed RAP material (minimum five tests)
3. (Alternate) The Contractor may propose a RAP asphalt content correction factor to be used in conjunction with CP-L 5120. The proposed CP-L 5120 RAP asphalt content correction factor shall be used with all RAP asphalt contents tested for the mixture design and quality control sampling and testing. The methodology of the proposed CP-L 5120 RAP asphalt content correction factor shall be outlined in detail in the approved RAP QC Plan. At a minimum, the proposed CP-L 5120 correction factor shall identify the principal source locations of the RAP aggregate, gradation of the material tested, and specific ignition oven serial number used in all the RAP asphalt content testing. The RAP source locations, material gradation, and specific equipment used shall substantiate the CP-L 5120 asphalt content correction factor used for the testing. The substantiation must be from data gathered from historical information or specific asphalt content correction data obtained from tests performed on similar virgin aggregate sources, virgin material gradations, and the specific equipment used.
4. Control of RAP Gradation (CP31 or AASHTO T-30):
Frequency: 1 per 1000 tons of processed RAP material (minimum three tests, sampling from belt feed and not stockpile)
5. Process Control Charts shall be maintained for binder content and each screen listed in Table 401.2C, during addition of any RAP material to the stockpile. The Contractor shall maintain separate control charts for each RAP stockpile. The control charts shall be displayed and shall be made available, along with RAP AC extraction testing laboratory reports to the Engineer upon request

The processed RAP must be 100 percent passing the 31.5 mm (1¼ inch) sieve. The aggregate obtained from the processed RAP shall be 100 percent passing the 25.0 mm (1 inch) sieve. The

aggregate and binder obtained from the processed RAP shall be uniform in all the measured parameters in accordance with the following:

**Table 401.2C
RAP Binder & Aggregate Uniformity Tolerances**

Element	Standard Deviation
Binder Content	0.5
% Passing 3/4"	4.0
% Passing 1/2"	4.0
% Passing 3/8"	4.0
% Passing #4	4.0
% Passing #8	4.0
% Passing #30	3.0
% Passing #200	1.5

(d) *Warm Mix Asphalt (WMA) Technology*. The Contractor may choose to use a WMA Technology that is included on the CDOT approved products list (<https://www.codot.gov/business/apl/asphalt-warm-mix.html>).

WMA technologies (additive or foaming) used shall be identified on the mix design, indicating usage as a workability additive and/or anti-strip additive. WMA shall be submitted and approved by the Owner for use on a project.

The addition of WMA additives during production, including foaming, shall be controlled by a calibrated metering system interlocked with the plant's controls per the manufacturers' recommendation. Additives may be added at the asphalt terminal at the dosage rate recommended by the WMA technology provider. The foaming process mixes water and binder to create microscopic steam bubbles. Typical water injection rate is $\leq 2\%$ of binder flow rate or per manufacturers' recommendation.

(e) *Anti-Strip Additives*. Anti-Strip shall be added into the HMA. Anti-Strip agents may be liquids (added to the binder), lime (added to the aggregates) or other products, and shall be submitted for approval by the Owner.

The minimum value for Tensile Strength Ratio (TSR) tested in accordance with Table 401.21-1 shall be 80% for the mix design and 70% during production.

There are various types of liquid Anti-Strips. Amine and Organo-silane type liquid Anti-Strip additives are physically mixed with the asphalt binder. Liquid Anti-Strip agents shall be added per the manufactures recommendations. Typical product dosages are provided in Table 401.2E-1.

**TABLE 401.2E-1
Liquid Anti-Strip Dosage Rates**

Type	Typical Dosage Rate
------	---------------------

Amine	0.4% to 0.8%
Organo-silane	0.05% to 0.15%

WMA chemical products which display Anti-Stripping characteristics will be classified, and identified on the mix design, as a liquid Anti-Strip additive.

When a liquid Anti-Strip additive is used, the Contractor shall include the following information with the mix design submission:

- Information on the type of liquid Anti-Strip additive to be supplied, including product name, product manufacturer/supplier
- Additive rate
- TSR values for the treated mixes
- The proposed method for incorporating the additive into the plant produced mix

401.03 Aggregates.

Add the following:

The percentage of fractured faces shall be as shown in Table 403.1 of the Revision to Section 403.

Grading ST (3/8" nominal) mixes may be used for leveling, maintenance, bike paths, sidewalks and thin lift overlays. Grading SX (1/2" nominal) mixes shall be used on top and bottom lifts and for patching. Grading S (3/4" nominal) mixes may be used for bottom lifts.

401.05 Hydrated Lime.

Add the following:

When used in the HMA, hydrated lime shall be added at the rate of 1% by dry weight of the aggregate and shall be included in the amount of material passing the No. 200 sieve.

401.06 Asphalt Cement.

Revise the second paragraph to read as follows:

The asphalt cement shall meet the applicable requirements of subsection 702.01.

Add the following:

The Contractor shall provide to the Owner acceptable 'Certifications of Compliance' of each applicable asphalt binder grade from the supplier. Should testing or certificate show nonconformance with the specifications, the asphalt binder may be rejected. When production begins, the Contractor shall, upon request, provide to the Owner a one quart can of each specified asphalt binder for analysis. Additionally, the Contractor shall provide the refinery test results that pertain to the asphalt binders used during production.

Based on climatic conditions and reliability, binder grades approved for use in Mesa County are as follows in Table 401.06A-1:

**TABLE
401.06A-1
Recommended Performance Graded
Binders**

Condition	Non-modified Binder	Modified Binder
Free flowing traffic loads and 300,000 to 1 million 18K ESAL	PG 64-22	
Free flowing traffic loads and 300,000 to 1 million 18K ESAL, plus above 6000 elevation	PG 58-28	
Slow moving or standing trucks, major street intersections and/or 10,000,000 18K ESAL		PG 76-28 (top lift only)

Binder grades other than those shown above shall not be used unless the proposed binder and the mix design are approved in writing by the OWNER. The asphalt cement shall meet the requirements of subsection 702.01

401.07 Weather Limitations and Placement Temperatures.

Revise as follows:

Surface temperatures shall be used to determine placement of APM. APM produced with documented WMA will be allowed a reduction in minimum surface temperatures for placement as provided in Table 401.07A-1. Ambient temperatures and other weather conditions shall be considered prior to placement.

**TABLE 401.07A-1
Minimum Surface Temperatures for placement of APM**

Compacted Layer Thickness (in.)	Minimum Surface Temperature (°F)			
	Top Layer		Layers Below the Top Layer	
Product	APM	with WMA	APM	with WMA
<1½	60	50	50	40
1½ - <3	50	45	40	35
3 or more	45	40	35	35

If the Contractor modifies the placement and compaction processes when ambient temperatures are below minimum surface temperatures in Table 401.07A-1, they shall demonstrate to the Owner the

required in-place density has been achieved. APM cooling software such as PaveCool, or MultiCool can be used to determine placement and compaction times available.

401.08 Asphalt Mixing Plant.

Delete the last paragraph of the subsection.

401.09 Hauling Equipment.

Add the following:

The Owner may reject any HMA which demonstrates it has been contaminated from a petroleum distillate release agent. The Owner may reject any uncovered HMA which demonstrates it has been impacted by contamination and/or weather.

401.10 Asphalt Pavers.

Delete the twelve paragraph and replace with the following:

Contractor shall submit for and receive approval of the screed control devices to be utilized on the paver prior to use for placing HMA on the project.

Add the following:

A Material Transfer Vehicle (MTV) or Material Transfer Device (MTD) may be required for placement of the HMA when specified in the contract documents. The MTV shall be a self-propelled unit with on board storage of material. An MTD is a non-self-propelled unit. Both MTV and MTD are capable of receiving material from trucks or from the ground, transferring the material from the unit to a paver hopper insert via a conveyor system.

401.11 Tack Coat.

Delete and replace with the following:

A tack coat shall be applied between pavement course and to all existing concrete and asphalt surfaces per Section 407. Tack coat is considered incidental to the cost of the HMA.

401.15 Mixing.

Add the following:

If a WMA technology (additive or foaming) is used, the discharge temperatures may be lowered during production at the discretion of the Contractor provided all specifications are achieved. Mix design is to indicate revised allowable discharge temperatures with WMA usage.

401.16 Spreading and Finishing.

Revise as follows:

Joints in the top layer of new pavement shall be located on lane lines unless otherwise shown on the plans. Longitudinal joints shall be minimized with wide paving pulls. Transverse joints shall be formed by cutting back on the previous run to expose the full depth of the course. Tack coat material shall be applied to contact surfaces of all joints before additional mixture is placed against the previously compacted material.

401.17 Compaction.

Revise as follows:

Equipment used for compaction of the HMA will be at the discretion of the Contractor. The number, weight, and type of rollers furnished shall be sufficient to obtain the required density and surface texture.

All joints shall be compacted to 92% of maximum theoretical specific gravity (Rice), taken six inches offset from the joint. The allowable variance shall be $\pm 2\%$. Joint density will be determined using nuclear density equipment.

Delete paragraphs six through eight, and paragraphs eleven to the end of the subsection and replace with the following:

Cores may be used to verify compaction results. The Contractor shall core the pavement, as required by the Owner; in accordance with AASHTO T 230, Method B, or for field calibration of nuclear density equipment in accordance with the ASTM D 2950. At a minimum, cores for nuclear density equipment correlation shall be taken at the beginning of placement of each project or change of mixture materials or gradation, unless otherwise approved by the Engineer. If the correlation cores were produced for another project within the last 90 days, data from that project can be submitted for verification, if no change in materials or gradation has occurred. When cores are used, the Contractor shall provide all labor and equipment for the coring and repair of the holes.

Along forms, curbs, headers, walls, and all other places not accessible to the rollers, the mixture shall meet all project compaction specifications. Any mixture that is defective, shall be corrected to meet the project specifications at the expense of the Contractor.

401.20 Surface Smoothness.

Delete and replace with the following:

The finish transverse and longitudinal surface elevation of the pavement shall be measured using a 10-foot straightedge. Surface smoothness shall be verified following the finish roller pass. Surface variation shall not exceed 3/16 inch in 10 feet for full lane width paving. For patching, the variation shall not exceed 3/8 inch in 10 feet. The final pavement surface shall not vary from the specified cross section by more than one inch at any point. Transverse measurements for variations shall exclude breaks in the crown sections. If the surface tolerance exceeds 3/16" across transverse joints, measured in at least three locations, the Contractor shall make corrections to the joint before proceeding. All corrections shall be made at the Contractor's expense.

The final surface pavement adjacent to curb and gutter shall be finished from 1/8-inch to 3/8- inches above the lip for catch curb and shall not extend above the lip for spill curb.

The Contractor shall adjust all manholes, valve boxes, and survey range boxes 1/8 to 1/4- inch below final grade and adjusted to match the slope of the roadway. Valve boxes and manholes are to be maintained fully accessible at all times for emergency and maintenance operations. The cost of adjusting valve boxes, manholes, and survey range boxes shall be included in the work, unless otherwise specified. The Contractor shall be responsible for any cost incurred by the Owner to provide access to the covered manholes or valve boxes. Final adjustment of all utility access points shall be completed within seven days of from the time the HMA was placed.

Add the following new subsections:

401.23 Testing and Inspection

The Contractor shall assume full responsibility for controlling all operations and processes to meet the Specifications. The Contractor shall perform all tests necessary for process control purposes on all elements at the frequency listed in Table 401.23-1. The Contractor shall maintain a log of all process control testing. Test results that have sampling or testing errors shall not be used. Process control testing shall be performed at the expense of the Contractor.

Laboratories shall be accredited by AASHTO Materials Reference Laboratory (AMRL) for the tests being performed. Technicians obtaining samples and conducting compaction tests must have a LabCAT Level A certification. Technicians conducting tests of asphalt content and gradation must have a LabCAT Level B certification. Technicians performing volumetric testing must have a LabCAT Level C certification. Equivalent NICET certification for all technicians is acceptable.

When requested by the Owner, the Contractor shall submit a quality control plan that addresses production, sampling, testing, and qualifications of testing personnel, timing, and methods for making adjustments to meet the specifications. The Contractor will provide a process or schedule for making corrections for material that was placed but does not meet specifications as well as obtain a follow up sample immediately after corrective actions are taken to assess the adequacy of the corrections. In the event the follow-up process control sample also fails to meet Specification requirements; the Contractor shall cease production of the asphalt mixture until the problem is adequately resolved to the satisfaction of the Owner.

**TABLE
401.23-1
Minimum Materials Sampling and Testing
for Process Control and Owners
Acceptance**

Test	Standard	Minimum Frequency
Sampling	AASHTO T168, ASTM D 979 and ASTM D3665, CP 41	1/1000 tons or fraction thereof (not less than one test per day)
In-Place Density	AASHTO T 166, T 238, T 230, CP 81 (nuclear), CP 44 (coring)	One test for each 250 lineal feet per lane and one test per 1,000 lineal feet of joint per lift
Thickness (Core) (when called for in Project specs.)	ASTM D3549	One test for each 1000 lineal feet per lane
Air Voids & VMA	CP-L 5115 A.I. SP-2	1/1000 tons or fraction thereof (not less than one test per day)
Gradation	AASHTO T 27/T 11, CP 31	1/1000 tons or fraction thereof (not less than one test per day)
Hveem/Marshall Stability As Applicable	CP-L 5016	One per project per mix used
Binder Content	CP-L 5120, AASHTO T 164 or other methods agreed upon between Owner and Contractor	1/1000 tons or fraction thereof (not less than one test per day)
Maximum Theoretical Specific Gravity (Rice)	AASHTO T 209 (Rice), CP-L 51	1/1000 tons or fraction thereof (not less than one test per day)
Lottman Stripping, TSR & Dry Density	CP-L 5109	One per project per mix used.

Field control testing of dense graded asphalt mixes for the above tests shall meet the requirements of Table 403-1 and Table 403-2 in the Revision to Section 403.

401.24 Acceptance

If any materials furnished, or work performed, fails to meet the specification requirements, such deficiencies shall be documented and reported to the Owner. Copies of all process control tests shall

be delivered to the Owner within one business day. Test results that cannot be completed within one day shall be provided to the Owner no later than three days after the sample was obtained.

Owners Acceptance (OA) test results, if any, and/or Process Control (PC) test results will be evaluated to determine acceptability. If the Contractor does not meet the project specifications, but acceptable work has been produced, the Owner shall determine the extent of the work to be accepted. If the Owner determines the work is not acceptable, the Contractor shall correct the work, as approved by the Owner, at the expense of the Contractor.

SP-5 SECTION 403 – HOT MIX ASPHALT

REVISION OF SECTION 403 HOT MIX ASPHALT

Section 403 of the Standard Specifications is hereby revised for this project as follows:

403.02 Materials

Delete and replace with the following:

The materials shall conform to the requirements of subsections 401.2 of the Revised Section 401 above.

The design mix for hot mix asphalt (HMA) shall conform to the following Table 403-1 and Table 403-2:

**Table 403-1
Mixture Properties for Hot Mix Asphalt**

Property	Test Method	Value
Air Voids, percent at: N (design)	AASHTO T-132, CPL 5115	3.0 – 4.0
Lab Compaction (Revolutions): N (design)	CPL 5115	75
Hveem Stability, (Grading ST, SX & S only)	CPL 5106	28 min.
Aggregate Retained on the 4.75 mm (No. 4) Sieve for S, SX and SG, and on the 2.36mm (No. 8) Sieve for ST and SF with at least 2 Mechanically Induced fractured faces	CP 45	60% min.
Accelerated Moisture Susceptibility Tensile Strength Ratio (Lottman)(for S & SX mixes)	AASHTO T-283 Method B, CPL 5109 Method B	80 min.
Minimum Dry Split Tensile Strength, kPa (psi)	CPL 5109 Method B	205 (30) min.
Voids in the Mineral Aggregate (VMA) % minimum	CP 48, AI-SP2	See Table 403-2
Voids Filled with Asphalt (VFA)	AI MS-2	65-80%

Property	Test Method	Value
Dust to Asphalt Ratio:		
Fine Gradation	CP 50	0.6 – 1.2
Coarse Gradation		0.8 – 1.6
<p>Note: AI MS-2 = Asphalt Institute Manual Series 2</p> <p>Note: Mixes with gradations having less than 40% passing the 4.75 mm (No. 4) sieve shall be approached with caution because of constructability problems.</p> <p>Note: Gradations for mixes with a nominal maximum aggregate size of one-inch or larger are considered a coarse gradation if they pass below the maximum density line at the #4 screen.</p> <p>Gradations for mixes with a nominal maximum aggregate size of 3/4" to 3/8" are considered a coarse gradation if they pass below the maximum density line at the #8 screen.</p> <p>Gradations for mixes with a nominal maximum aggregate size of #4 or smaller are considered a coarse gradation if they pass below the maximum density line at the #16 screen.</p>		

Table 403-2
Minimum Voids in Mineral Aggregate (VMA)

Nominal Maximum Size*, mm (inches)	***Design Air Voids **		
	3.5%	4.0%	4.5%
37.5 (1½)	11.6	11.7	11.8
25.0 (1)	12.6	12.7	12.8
19.0 (¾)	13.6	13.7	13.8
12.5 (½)	14.6	14.7	14.8
9.5 (⅜)	15.6	15.7	15.8
4.75 (No. 4)	16.6	16.7	16.8
<p>* The Nominal Maximum Size is defined as one sieve larger than the first sieve to retain more than 10%.</p> <p>** Interpolate specified VMA values for design air voids between those listed.</p> <p>*** Extrapolate specified VMA values for production air voids beyond those listed.</p>			

403.03 Construction Requirements

Delete the first paragraph and replace with the following:

The construction requirements shall be as prescribed in subsections 401.3 through 401.14 of the Revised Section 401 above.

403.04 Method of Measurement

Delete and replace with the following:

Hot Mix Asphalt will be measured by the ton or the square yard. Batch weights will not be permitted as a method of measurement when measured by the ton. The tonnage shall be the weight used in the accepted pavement.

403.05 Basis of Payment

Delete and replace with the following:

The accepted quantities of hot mix asphalt will be paid for in accordance with subsection 401.22, at the contract unit price per ton or square yard for the asphalt mixture.

Payment will be made under:

Pay Item	Pay Unit
Hot Mix Asphalt (Grading __)(PG __)	Ton
Hot Mix Asphalt (Grading __)(PG __)	Square Yard
Hot Mix Asphalt (Patching)	Square Yard

Aggregate, asphalt cement, asphalt recycling agent, additives, hydrated lime, tack coat, and all other work necessary to complete each hot mix asphalt items will not be paid for separately but shall be included in the unit price bid.

Excavation, preparation, and tack coat of areas to be patched will not be measured and paid for separately, but shall be included in the work.

SP-6 BID ADD ALT: SECTION 403 – HOT MIX ASPHALT (GRADING SX-75) (WITH FIBER)

Section 403 of the Standard Specifications is hereby revised for this project as follows:

In Subsection 403.02 after the first paragraph, add the following paragraphs.

In addition, the Hot Mix Asphalt (Grading SX) (75) (With Fiber) shall include reinforcement fiber strands with virgin aramids that meet the following requirements:

Property	Requirement
Nominal Specific Gravity	0.91 to 1.44
Minimum Length	0.75 inches

Only reinforcing fiber strands that are not detrimental to the pavement will be allowed. The Contractor shall store and maintain reinforcing fiber strands in accordance with the manufacturer's recommendations and shall ensure that the fiber blend corresponds with the manufacturer's recommendations for the hot mix asphalt materials being used on the project. The Contractor shall follow the manufacturer's recommended procedures for placement of fiber strand reinforced warm or hot mix asphalt pavement.

Acceptable products are:

- ACE FIBERTM,
- FORTA-FI®, or
- An approved equivalent.

The Contractor shall ensure there is a manufacturer's representative experienced in incorporating reinforcing fibers and placing fiber reinforced warm or hot mix asphalt present on the project when placement of the fiber reinforced mix begins. The manufacturer's representative shall have past experience with fiber reinforced pavements on the basis of the support of at least three projects previously constructed in the United States. This representative may be a representative of the fiber supplier, the asphalt mix designer, or a private consultant, able to provide sufficient documentation including applicable projects and experience. The representative's name, qualifications, and previous experience shall be provided to the Engineer for approval at least 5 working days before the fiber reinforced paving operation begins. The representative shall remain on site for the first two days of placing fiber reinforced pavement, at a minimum, and until an acceptable production sequence is established. Any changes to the asphalt mix or fiber material beyond the allowed tolerances during production shall be disclosed by the representative and submitted in writing to the Engineer by the Contractor as a change in mix design.

The Contractor shall inject reinforcement fiber strands through the Recycled Asphalt Pavement collar, or prior to the addition of liquid asphalt cement, with a metered blower system. The Contractor shall ensure that reinforcement fiber strands are added at the specified rate per the mix design. The Contractor shall ensure that virgin aramid fibers are introduced at a minimum dosage rate of 2.1 ounces per ton of hot or warm mix asphalt pavement. If there is evidence of fiber balls at the discharge chute, the Contractor shall immediately adjust operations according to the manufacturer's recommendation to correct the problem. The Contractor shall also remove all observed fiber balls during placement. The Engineer may require the Contractor to cease operations if fiber balls are present, until a correction plan has been submitted and approved. Any delays due to shutting down due to the presence of fiber balls shall be considered non-excusable and non-compensable.

The Contractor shall provide the Engineer with documentation detailing total reinforcement fiber strands added to the warm or hot mix asphalt at the end of each day's production. The documentation shall include total reinforcement fiber strands added and the percentage of total reinforcing fibers that are virgin aramid fibers.

If the Engineer determines that the hot mix asphalt with fiber is not beneficial to the project, the Engineer may require the Contractor to cease production of the Hot Mix Asphalt (Grading SX) (With Fiber) and continue production with Hot Mix Asphalt (Grading SX) without fiber. If this occurs, there shall be no additional compensation to the Contractor for the cost of deleting a portion or all of the Hot Mix Asphalt (Grading SX) (With Fiber) and the mix without fiber will be paid for at original contract unit prices for the mix and binder, with no adjustment made for the changed quantities. The Engineer shall not eliminate the requirement for Hot Mix Asphalt with fibers for the convenience of the Contractor.

Section 403.05 shall include the following:

Pay Item

Pay Unit

Hot Mix Asphalt (Grading SX) (With Fiber)

Ton

Aramid fibers will be paid for separately and shall be quantified as the additional cost to the base cost (per ton) to produce Hot Mix Asphalt (Grading SX).

SP-7 SECTION 407 – PRIME COAT, TACK COAT, AND REJUVINATING AGENT

**REVISIONS OF SECTION 407
PRIME COAT, TACK COAT, AND REJUVENATING AGENT**

Section 407 of the Standard Specifications is hereby revised for this project as follows:

407.01 Description

Add the following:

Prior to placement of APM, a tack coat shall be applied to all existing concrete and asphalt surfaces.

407.02 Asphalt Material.

Add the following:

The tack coat shall meet the specification for emulsified asphalt, consisting of CSS-1h or SS-1h, and conform to AASHTO M208 or M140.

407.07 Application of Asphalt Material.

Add the following:

The tack coat shall be applied at the rates specified in Table 407-1. The surface receiving the tack coat shall be dry and clean, and dust, debris, and foreign matter shall be removed. Tack coat shall be applied uniformly. The Contractor shall allow the tack coat to cure (dehydrate) prior to the placement of APM. If the tack becomes contaminated during construction, it shall be cleaned, and if necessary, additional tack coat shall be reapplied and allowed to cure before paving resumes.

**TABLE 407-1
Tack Coat Application
Rates**

Pavement Condition	Application Rate (gal/yd ²)		
	Residual	Undiluted	Diluted (1:1)
New asphalt	0.03 - 0.04	0.05 – 0.07	0.10 – 0.13
Oxidized asphalt	0.04 – 0.06	0.07 – 0.10	0.13 – 0.20
Milled Surface (asphalt)	0.06 – 0.08	0.10 – 0.13	0.20 – 0.30
Milled Surface (PCC)	0.06 – 0.08	0.10 – 0.13	0.20 – 0.30
Portland Cement Concrete	0.04 – 0.06	0.07 – 0.10	0.13 – 0.20

407.09 Method of Measurement and Basis of Payment.

Delete and replace the following:

Tack Coat will not be measured and paid separately but shall be considered included in the work for Section 401 – Asphalt Pavement Materials.

SP-8 SECTION 601 – STRUCTURAL CONCRETE

Section 601 of the Standard Specifications is hereby revised for this project as follows:

Subsection 601.02, Classification:

CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS:

- 4,500 PSI Compressive at 28 Days
- 6% air $\pm 1.5\%$
- Slump 4", Loads exceeding 4 ½" shall be rejected
- Maximum Water Cement Ratio no greater than 0.45.

Subsection 601.06, Batching:

This CDOT Specification has been added to this Project:

The Contractor shall furnish a batch ticket (delivery ticket) with each load for all concrete. Concrete delivered without a batch ticket containing complete information as specified shall be rejected. The Contractor shall collect and complete the batch ticket at the placement site and deliver all batch tickets to the Engineer or his representative at the end of each day. The Engineer or his representative shall have access to the batch tickets at any time during the placement. The following information shall be provided on each ticket:

1. Suppliers name and date
2. Truck number
3. Project name and location
4. Concrete class and designation number
5. Cubic yards batched
6. Type brand and amount of each admixture
7. Type, brand, and amount of cement and fly ash
8. Weights of fine and course aggregates
9. Moisture of fine and course aggregates
10. Gallons of batch water

The contractor shall add the following information to the batch ticket at time of placement:

1. Gallons of water added by the truck operator.
2. Number of revolutions of the drum for mixing
3. Discharge time

SP-9 SECTION 608 – CURBS, GUTTERS, SIDEWALKS, AND TRAILS

Section 608 of the Standard Specifications is hereby revised for this project as follows:

Subsections 608.06, Basis of Payment shall include the following:

The Contract Unit Price for the various concrete items shall be full compensation for all equipment, labor, materials, and incidentals required for the complete installation. Incidental items include subgrade compaction, cutting and removal of asphalt in areas where concrete will be installed; removal of existing concrete, removal of existing base course, disposal of excavated and removed materials; furnishing, placement and compaction of Class 6 Aggregate Base Course; forming, furnishing and placement, finishing, curing and protection of the concrete; reinforcing steel and joint filler.

SP-10 SECTION 630 - CONSTRUCTION ZONE TRAFFIC CONTROL

Section 630 of the Standard Specifications are hereby revised for this project as follows:

Subsection 630.09, Traffic Control Plan, shall include the following:

The following guidelines and limitations shall apply to the traffic control:

1. Two way traffic shall be maintained on all streets (unless otherwise approved).
2. Concrete activities shall be coordinated so that concrete trucks and other vehicles do not block the traffic lanes.
3. All incidental costs shall be included in the original contract price for the project.
4. Sidewalks that are obstructed or under construction shall be barricaded, as required for pedestrian safety.

Subsection 630.14, Method of Measurement, shall include the following:

Distribution of door-hanger notices to all businesses and / or residents located adjacent to the overlay work will not be paid for separately but shall be included in the pay item for Traffic Control (Complete in Place). The City will provide the door hangers for distribution.

3.5. Attachments:

Appendix A: Project Submittal Form
Appendix B: Individual Street Quantities and Extents
Appendix C: EXAMPLE - UPRR Maintenance Consent Letter
Appendix D: 2019 Overlay Plans

3.6. Contractor Bid Documents: For Contractor's convenience, the following is a list of forms/items to be submitted with the Contractor's bid response. However, should a form/item not be listed in this section, but required in the solicitation documents, it is the Contractor's responsibility to ensure all forms/items are submitted.

- **Contractor's Bid Form**
- **Price Bid Schedule**
- **References**

3.7. IFB TENTATIVE TIME SCHEDULE:

Invitation For Bids available	March 15, 2019
Mandatory Pre-Bid Meeting	March 22, 2019
Inquiry deadline, no questions after this date	March 28, 2019
Addendum Posted	March 29, 2019
Submittal deadline for proposals	April 3, 2019
City Council Approval	April 17, 2019
Notice of Award & Contract execution	April 18, 2019
Bonding & Insurance Cert due	April 26, 2019
Preconstruction meeting	May 8, 2019
Work begins no later than	June 3, 2019
Final Completion	August 31, 2019
Holidays:	
Memorial Day	May 28, 2018
Independence Day	July 4, 2018

4. Contractor's Bid Form

Bid Date: _____

Project: IFB-4622-19-DH "2019 Contract Street Maintenance – Asphalt Overlays"

Bidding Company: _____

Name of Authorized Agent: _____

Email _____

Telephone _____ **Address** _____

City _____ **State** _____ **Zip** _____

The undersigned Bidder, in compliance with the Invitation for Bids, having examined the Instruction to Bidders, General Contract Conditions, Statement of Work, Specifications, and any and all Addenda thereto, having investigated the location of, and conditions affecting the proposed work, hereby proposes to furnish all labor, materials and supplies, and to perform all work for the Project in accordance with Contract Documents, within the time set forth and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this Contractor's Bid Form is a part.

The undersigned Contractor does hereby declare and stipulate that this offer is made in good faith without collusion or connection to any person(s) providing an offer for the same work, and that it is made in pursuance of, and subject to, all terms and conditions of the Instructions to Bidders, the Specifications, and all other Solicitation Documents, all of which have been examined by the undersigned.

The Contractor also agrees that if awarded the Contract, to provide insurance certificates within ten (10) working days of the date of Notification of Award. Submittal of this offer will be taken by the Owner as a binding covenant that the Contractor will be prepared to complete the project in its entirety.

The Owner reserves the right to make the award on the basis of the offer deemed most favorable, to waive any formalities or technicalities and to reject any or all offers. It is further agreed that this offer may not be withdrawn for a period of sixty (60) calendar days after closing time. Submission of clarifications and revised offers automatically establish a new thirty day (30) period.

Prices in the bid proposal have not knowingly been disclosed with another provider and will not be prior to award.

- Prices in this bid proposal have been arrived at independently, without consultation, communication or agreement for the purpose of restricting competition.
- No attempt has been made nor will be to induce any other person or firm to submit a bid proposal for the purpose of restricting competition.
- The individual signing this bid proposal certifies they are a legal agent of the offeror, authorized to represent the offeror and is legally responsible for the offer with regard to supporting documentation and prices provided.
- Direct purchases by the City of Grand Junction are tax exempt from Colorado Sales or Use Tax. Tax exempt No. 98-903544. The undersigned certifies that no Federal, State, County or Municipal tax will be added to the above quoted prices.
- City of Grand Junction payment terms shall be Net 30 days.
- Prompt payment discount of _____ percent of the net dollar will be offered to the Owner if the invoice is paid within _____ days after the receipt of the invoice.

RECEIPT OF ADDENDA: the undersigned Contractor acknowledges receipt of Addenda to the Solicitation, Specifications, and other Contract Documents.

State number of Addenda received: _____.

It is the responsibility of the Bidder to ensure all Addenda have been received and acknowledged.

By signing below, the Undersigned agree to comply with all terms and conditions contained herein.

Company: _____

Authorized Signature: _____

Title: _____

Bid Schedule: 2019 Contract Street Maintenance - Asphalt Overlays

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	108.2	48" Storm Drain Pipe (SDR 35 or approved equal)	28.	LF	\$ _____	\$ _____
2	108.5	Storm Sewer Basic Manhole 72" I.D.)	1.	EA	\$ _____	\$ _____
3	202	Asphalt Removal (Planing)(Thickness Varies)	69,380.	SY	\$ _____	\$ _____
4	202	Removal of Type 3 Guardrail	2,405.	LF	\$ _____	\$ _____
5	203	Excavation and Embankment (Potholing) (See SP-2)	Lump Sum		---	\$ _____
6	203	Excavation and Embankment (New Bike Lanes - See SP-2)(Export)	1,300.	CY	\$ _____	\$ _____
7	208	Erosion Control	60.	Days	\$ _____	\$ _____
8	209	Dust Abatement	60.	Days	\$ _____	\$ _____
9	210	Adjust Valve Box (Price to Include adjustment of Survey Monuments)	81.	EA	\$ _____	\$ _____
10	210	Adjust Manhole Ring and Cover (Sanitary and Storm Sewer)	73.	EA	\$ _____	\$ _____
11	210	Reset Mailbox Structures	9.	EA	\$ _____	\$ _____
12	212	Seeding	0.48 Acres		\$ _____	\$ _____
13	304	Aggregate Base Course (Class 6) - Shoulder Edging Gravel	2,688.	Tons	\$ _____	\$ _____
14	304	Aggregate Base Course (Class 6) - Bike Lane	3,040.	Tons	\$ _____	\$ _____
15	304	Subgrade Stabilization (Class 3 Aggregate Base Course - 24" Thick)(Complete in Place)	156.	Tons	\$ _____	\$ _____
16	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 64-22)	14,170.	Tons	\$ _____	\$ _____
17	401	Hot Mix Asphalt (3" thick) (Grading SX, Binder Grade 64-22) - Bottom Lift Bike Lane	775.	Tons	\$ _____	\$ _____
18	401	Hot Mix Asphalt (Patching - Up to 5" thick) (To Include 6" of Class 6 Aggregate Base Course)(Grading SX, Binder Grade 64-22)	101.	Tons	\$ _____	\$ _____
19	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 76-28)	1,060.	Tons	\$ _____	\$ _____
20	420	Geosynthetics - Geogrid	120.	SY	\$ _____	\$ _____
21	608/304	Concrete Drainage Pan (3' Wide) To Include 6" of Class 6 Aggregate Base Course	400.	LF	\$ _____	\$ _____
22	606	Guardrail Type 3 (6-3 Post Spacing)	2,405.	LF	\$ _____	\$ _____
23	606	Transition Type 3G	4.	EA	\$ _____	\$ _____
24	614	End Anchorage (Nonflared)	4.	EA	\$ _____	\$ _____
25	620	Sanitary Facility	Lump Sum		---	\$ _____
26	625	Construction Surveying	Lump Sum		---	\$ _____
27	626	Mobilization	Lump Sum		---	\$ _____

Bid Schedule: 2019 Contract Street Maintenance - Asphalt Overlays

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
28	627-00002	Thermoplastic Pavement Marking	20.	SF	\$ _____	\$ _____
29	627-30405	Preformed Thermoplastic Pavement Marking (Word/Symbol)	1,564.	SF	\$ _____	\$ _____
30	627-30410	Preformed Plastic Pavement Marking (X-Walk/Stopline)	943.	SF	\$ _____	\$ _____
31	630	Traffic Control (Complete In Place)	Lump Sum		---	\$ _____
32	630	Flagging	3,460.	HR	\$ _____	\$ _____
33	SP - 1	REDI ROCK Reinforced Wall to include all Appurtenances. See Plan for details.	Lump Sum		---	\$ _____
34	SP - 2	Collar for Storm Drain and Culvert	Lump Sum		---	\$ _____
197	BID ALT 1	Hot Mix Asphalt (Grading SX, Binder Grade 64-22) (with Fiber)	1,940.	Tons	\$ _____	\$ _____
INC		Incentive HMA 64-22	---	---	---	\$ 30,000.00
INC		Incentive HMA 76-28	---	---	---	\$ 5,000.00
MCR		Minor Contract Revisions	---	---	---	\$ 150,000.00
Bid Amount:					\$	_____

Bid Amount:

dollars

The undersigned Bidder proposes to subcontract the following portion of Work:

<u>Name & address of Sub-Contractor</u>	<u>Description of work to be performed</u>	<u>% of Contract</u>

The undersigned Bidder acknowledges the right of the City to reject any and all Bids submitted and to waive informalities and irregularities therein in the City's sole discretion.

By submission of the Bid, each Bidder certifies, and in the case of a joint Bid each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without collusion, consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

APPENDIX A

Project Submittal Form

PROJECT SUBMITTAL FORM

PROJECT: **2019 Asphalt Overlays**

CONTRACTOR:

PROJECT ENGINEER: Eric Mocko

Description	Date Received	Resubmittal Requested	Resubmittal Received	Date Accepted
-------------	---------------	-----------------------	----------------------	---------------

STREET CONSTRUCTION

Asphalt mix designs				
Base course gradation, Proctor curve				
Concrete Mix Designs				
Guard Rail				
Retaining Wall Materials				

EROSION CONTROL / STORMWATER MANAGEMENT

Inlet Protection				
Concrete Washout				

PERMITS, PLANS, OTHER

Traffic Control Plan				
CDOT Special Use Permit				
UPRR Right of Entry Agreement				

APPENDIX B

Individual Street Quantities and Extents

2019 ASPHALT OVERLAY PROJECT

2019 Selected Streets for Overlay

1. Redlands Parkway – Colorado River Bridge to River Road Bridge including Ramps to River Road
2. S. Camp Road – S. Broadway to Rimrock Road
3. 9th Street – RR Crossing to Riverside Parkway
4. 15th Street – D Road to Winters Avenue
5. 23 Road – Hwy 6&50 to G Road
6. 24 ½ Road – Hwy 6&50 to Patterson Road
7. 27 Road – Crossroads to H Road
8. H Road – 26 ½ Road to 27 ¼ Road

LOCATION: Redlands Parkway

Colorado River Bridge to River Road Bridge
including Ramps to River Road
36,068 SY

AREA: 6,400' X Varies

MAT THICKNESS:

2" Overlay + Shoulder Widening

<u>Quantitiy Information</u>			<u>Plan</u>		<u>Field</u>
1	108.2	48" Storm Drain Pipe (SDR 35 or approved equal)		LF	LF
2	108.5	Storm Sewer Basic Manhole 72" I.D.)		EA	EA
3	202	Asphalt Removal (Planing)(Thickness Varies)	15,015.	SY	SY
4	202	Removal of Type 3 Guardrail	2,405.	LF	LF
5	203	Excavation and Embankment (Potholing) (See SP-2)	0.5	Sum	Sum
6	203	Excavation and Embankment (New Bike Lanes - See SP-2)(Export)	250.	CY	CY
7	208	Erosion Control	30.	Days	Days
8	209	Dust Abatement	30.	Days	Days
9	210	Adjust Valve Box (Price to Include adjustment of Survey Monuments)	4.	EA	EA
10	210	Adjust Manhole Ring and Cover (Sanitary and Storm Sewer)	3.	EA	EA
11	210	Reset Mailbox Structures		EA	EA
12	212	Seeding	0.34	Acres	Acres
13	304	Aggregate Base Course (Class 6) - Shoulder Edging Gravel	710.	Tons	Tons
14	304	Aggregate Base Course (Class 6) - Bike Lane	830.	Tons	Tons
15	304	Subgrade Stabilization (Class 3 Aggregate Base Course - 24" Thick)(Complete in Place)	81.	Tons	Tons
16	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 64-22)	4,010.	Tons	Tons
17	401	Hot Mix Asphalt (3" thick) (Grading SX, Binder Grade 64-22) - Bottom Lift Bike Lane	225.	Tons	Tons
18	401	Hot Mix Asphalt (Patching - Up to 5" thick) (To Include 6" of Class 6 Aggregate Base Course)(Grading SX, Binder Grade 64-22)	81.	Tons	Tons
20	420	Geosynthetics - Geogrid	60.	SY	SY
22	606	Guardrail Type 3 (6-3 Post Spacing)	2,405.	LF	LF
23	606	Transition Type 3G	4.	EA	EA
24	614	End Anchorage (Nonflared)	4.	EA	EA
28	627-00002	Thermoplastic Pavement Marking	14.	SF	SF
29	627-30405	Preformed Thermoplastic Pavement Marking (Word/Symbol)	626.	SF	SF
30	627-30410	Preformed Plastic Pavement Marking (X-Walk/Stopline)	336.	SF	SF
31	630	Traffic Control (Complete In Place)		Sum	Sum
32	630	Flagging	1,080.	HR	HR

COMMENTS:

- 1) Full Width Mill (FWM) from S. Approach slab on River Road Bridge and continue to 75' west of median islands.
- 2) FWM 60'N and 65'S beyond the median islands
- 3) FWM from W. Ramp to/from Riverside and continue 200'S
- 4) FWM from E. Ramp to/from Riverside and continue 350'W
- 5) FWM from NE approach slab of CO River Bridge and continue 200'E
- 6) FWM driveway entrance to Boat Ramp - S. of white line
- 7) 12' Edge Mill at Curb and Gutter, Paved Driveways, Street Intersections

LOCATION: S. Camp Road
 AREA: 10,675' X Varies
 MAT THICKNESS:

S. Broadway to Rimrock Road
 46,275 SY
 2" Overlay + Shoulder Widening

		<u>Quantitiy Information</u>	<u>Plan</u>	<u>Field</u>
1	108.2	48" Storm Drain Pipe (SDR 35 or approved equal)	28. LF	LF
2	108.5	Storm Sewer Basic Manhole 72" I.D.)	1. EA	EA
3	202	Asphalt Removal (Planing)(Thickness Varies)	20,450. SY	SY
4	202	Removal of Type 3 Guardrail	LF	LF
5	203	Excavation and Embankment (Potholing) (See SP-2)	0.5 Sum	Sum
6	203	Excavation and Embankment (New Bike Lanes - See SP-2)(Export)	1,050. CY	CY
7	208	Erosion Control	30. Days	Days
8	209	Dust Abatement	30. Days	Days
9	210	Adjust Valve Box (Price to Include adjustment of Survey Monuments)	21. EA	EA
10	210	Adjust Manhole Ring and Cover (Sanitary and Storm Sewer)	32. EA	EA
11	210	Reset Mailbox Structures	9. EA	EA
12	212	Seeding	0.14 Acres	Acres
13	304	Aggregate Base Course (Class 6) - Shoulder Edging Gravel	815. Tons	Tons
14	304	Aggregate Base Course (Class 6) - Bike Lane	2,010. Tons	Tons
15	304	Subgrade Stabilization (Class 3 Aggregate Base Course - 24" Thick)(Complete in Place)	Tons	Tons
16	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 64-22)	5,150. Tons	Tons
17	401	Hot Mix Asphalt (3" thick) (Grading SX, Binder Grade 64-22) - Bottom Lift Bike Lane	550. Tons	Tons
18	401	Hot Mix Asphalt (Patching - Up to 5" thick) (To Include 6" of Class 6 Aggregate Base Course)(Grading SX, Binder Grade 64-22)	Tons	Tons
19	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 76-28)	Tons	Tons
20	420	Geosynthetics - Geogrid	SY	SY
25	620	Sanitary Facility	Sum	Sum
26	625	Construction Surveying	Sum	Sum
27	626	Mobilization	Sum	Sum
28	627-00002	Thermoplastic Pavement Marking	SF	SF
29	627-30405	Preformed Thermoplastic Pavement Marking (Word/Symbol)	464. SF	SF
30	627-30410	Preformed Plastic Pavement Marking (X-Walk/Stopline)	126. SF	SF
31	630	Traffic Control (Complete In Place)	Sum	Sum
32	630	Flagging	1,480. HR	HR
33	SP - 1	REDI ROCK Reinforced Wall to include all Appurtenances. See Plan for details.	1. Sum	Sum
34	SP - 2	Collar for Storm Drain and Culvert	1. Sum	Sum

COMMENTS:

- 1) FWM from S. Gutter line of S. Broadway and continue 200'S
- 2) FWM from 200'N of median island in front of school to 200'S of median island
- 3) FWM from Rimrock Rd. N Gutter line to 200'N
- 4) 12' Edge Mill at Curb and Gutter, Paved Driveways, Street Intersections

LOCATION: 9th Street
 AREA: 2,210 X varies
 MAT THICKNESS:

Railroad Crossing to Riverside Pkwy
 9,075 SY
 2" Overlay

<u>Quantitiy Information</u>			<u>Plan</u>	<u>Field</u>
1	108.2	48" Storm Drain Pipe (SDR 35 or approved equal)	LF	LF
2	108.5	Storm Sewer Basic Manhole 72" I.D.)	EA	EA
3	202	Asphalt Removal (Planing)(Thickness Varies)	7,690. SY	SY
4	202	Removal of Type 3 Guardrail	LF	LF
5	203	Excavation and Embankment (Potholing) (See SP-2)	Sum	Sum
6	203	Excavation and Embankment (New Bike Lanes - See SP-2)	CY	CY
7	208	Erosion Control	Days	Days
8	209	Dust Abatement	Days	Days
9	210	Adjust Valve Box (Price to Include adjustment of Survey Monuments)	18. EA	EA
10	210	Adjust Manhole Ring and Cover (Sanitary and Storm Sewer)	14. EA	EA
11	210	Reset Mailbox Structures	EA	EA
12	212	Seeding	Acres	Acres
13	304	Aggregate Base Course (Class 6) - Shoulder Edging Gravel	90. Tons	Tons
14	304	Aggregate Base Course (Class 6) - Bike Lane	Tons	Tons
15	304	Subgrade Stabilization (Class 3 Aggregate Base Course - 24" Thick)(Complete in Place)	Tons	Tons
16	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 64-22)	1,010. Tons	Tons
17	401	Hot Mix Asphalt (3" thick) (Grading SX, Binder Grade 64-22) - Bottom Lift Bike Lane	Tons	Tons
18	401	Hot Mix Asphalt (Patching - Up to 5" thick) (To Include 6" of Class 6 Aggregate Base Course)(Grading SX, Binder Grade 64-22)	Tons	Tons
19	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 76-28)	Tons	Tons
20	420	Geosynthetics - Geogrid	SY	SY
21	608/304	Concrete Drainage Pan (3' Wide) To Include 6" of Class 6 Aggregate Base Course	LF	LF
22	606	Guardrail Type 3 (6-3 Post Spacing)	LF	LF
23	606	Transition Type 3G	EA	EA
24	614	End Anchorage (Nonflared)	EA	EA
25	620	Sanitary Facility	Sum	Sum
26	625	Construction Surveying	Sum	Sum
27	626	Mobilization	Sum	Sum
28	627-00002	Thermoplastic Pavement Marking	SF	SF
29	627-30405	Preformed Thermoplastic Pavement Marking (Word/Symbol)	31. SF	SF
30	627-30410	Preformed Plastic Pavement Marking (X-Walk/Stopline)	15. Sum	Sum
31	630	Traffic Control (Complete In Place)	HR	HR
32	630	Flagging	150. Sum	Sum

COMMENTS:

- 1) FWM from Riverside Pkwy N. Gutter line to N. Gutter line of Kimball Ave (approx. 200 LF)
- 2) FWM from RR Tracks to N Edge of Pavement on Winters Ave. (include in between tracks at 4th Ave)
- 3) 12' Edge Mill at Curb and Gutter, Drainage Pans, Paved Driveways, Street Intersections

LOCATION: 15th Street
 AREA: 1,602' X 46'
 MAT THICKNESS:

D Road to Winters Avenue
 8,350 SY
 2" Overlay

<u>Quantitiy Information</u>			<u>Plan</u>	<u>Field</u>
1	108.2	48" Storm Drain Pipe (SDR 35 or approved equal)	LF	LF
2	108.5	Storm Sewer Basic Manhole 72" I.D.)	EA	EA
3	202	Asphalt Removal (Planing)(Thickness Varies)	8,350. SY	SY
4	202	Removal of Type 3 Guardrail	LF	LF
5	203	Excavation and Embankment (Potholing) (See SP-2)	Sum	Sum
6	203	Excavation and Embankment (New Bike Lanes - See SP-2)	CY	CY
7	208	Erosion Control	Days	Days
8	209	Dust Abatement	Days	Days
9	210	Adjust Valve Box (Price to Include adjustment of Survey Monuments)	11. EA	EA
10	210	Adjust Manhole Ring and Cover (Sanitary and Storm Sewer)	8. EA	EA
11	210	Reset Mailbox Structures	EA	EA
12	212	Seeding	Acres	Acres
13	304	Aggregate Base Course (Class 6) - Shoulder Edging Gravel	Tons	Tons
14	304	Aggregate Base Course (Class 6) - Bike Lane	Tons	Tons
15	304	Subgrade Stabilization (Class 3 Aggregate Base Course - 24" Thick)(Complete in Place)	Tons	Tons
16	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 64-22)	930. Tons	Tons
17	401	Hot Mix Asphalt (3" thick) (Grading SX, Binder Grade 64-22) - Bottom Lift Bike Lane	Tons	Tons
18	401	Hot Mix Asphalt (Patching - Up to 5" thick) (To Include 6" of Class 6 Aggregate Base Course)(Grading SX, Binder Grade 64-22)	Tons	Tons
19	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 76-28)	Tons	Tons
20	420	Geosynthetics - Geogrid	SY	SY
21	608/304	Concrete Drainage Pan (3' Wide) To Include 6" of Class 6 Aggregate Base Course	400. LF	LF
22	606	Guardrail Type 3 (6-3 Post Spacing)	LF	LF
23	606	Transition Type 3G	EA	EA
24	614	End Anchorage (Nonflared)	EA	EA
25	620	Sanitary Facility	Sum	Sum
26	625	Construction Surveying	Sum	Sum
27	626	Mobilization	Sum	Sum
28	627-00002	Thermoplastic Pavement Marking	SF	SF
29	627-30405	Preformed Thermoplastic Pavement Marking (Word/Symbol)	SF	SF
30	627-30410	Preformed Plastic Pavement Marking (X-Walk/Stopline)	Sum	Sum
31	630	Traffic Control (Complete In Place)	HR	HR
32	630	Flagging	150. Sum	Sum

COMMENTS:

- 1) FWM from Winters Ave N. Gutter line and continue 200'N
- 2) FWM from D Rd. S. Gutter line and continue 200'S
- 3) 12' Edge Mill at Curb and Gutter, Drainage Pans, Paved Driveways, Street Intersections

LOCATION: 23 Road
 AREA: 1,845' X Varies
 MAT THICKNESS:

HWY 6&50 to G Road
 5,490 SY
 2" Overlay

<u>Quantitiy Information</u>			<u>Plan</u>	<u>Field</u>
1	108.2	48" Storm Drain Pipe (SDR 35 or approved equal)	LF	LF
2	108.5	Storm Sewer Basic Manhole 72" I.D.)	EA	EA
3	202	Asphalt Removal (Planing)(Thickness Varies)	2,500. SY	SY
4	202	Removal of Type 3 Guardrail	LF	LF
5	203	Excavation and Embankment (Potholing) (See SP-2)	Sum	Sum
6	203	Excavation and Embankment (New Bike Lanes - See SP-2)	CY	CY
7	208	Erosion Control	Days	Days
8	209	Dust Abatement	Days	Days
9	210	Adjust Valve Box (Price to Include adjustment of Survey Monuments)	1. EA	EA
10	210	Adjust Manhole Ring and Cover (Sanitary and Storm Sewer)	6. EA	EA
11	210	Reset Mailbox Structures	EA	EA
12	212	Seeding	Acres	Acres
13	304	Aggregate Base Course (Class 6) - Shoulder Edging Gravel	235. Tons	Tons
14	304	Aggregate Base Course (Class 6) - Bike Lane	Tons	Tons
15	304	Subgrade Stabilization (Class 3 Aggregate Base Course - 24" Thick)(Complete in Place)	75. Tons	Tons
16	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 64-22)	610. Tons	Tons
17	401	Hot Mix Asphalt (3" thick) (Grading SX, Binder Grade 64-22) - Bottom Lift Bike Lane	Tons	Tons
18	401	Hot Mix Asphalt (Patching - Up to 5" thick) (To Include 6" of Class 6 Aggregate Base Course)(Grading SX, Binder Grade 64-22)	20. Tons	Tons
19	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 76-28)	Tons	Tons
20	420	Geosynthetics - Geogrid	60. SY	SY
21	608/304	Concrete Drainage Pan (3' Wide) To Include 6" of Class 6 Aggregate Base Course	LF	LF
22	606	Guardrail Type 3 (6-3 Post Spacing)	LF	LF
23	606	Transition Type 3G	EA	EA
24	614	End Anchorage (Nonflared)	EA	EA
25	620	Sanitary Facility	Sum	Sum
26	625	Construction Surveying	Sum	Sum
27	626	Mobilization	Sum	Sum
28	627-00002	Thermoplastic Pavement Marking	SF	SF
29	627-30405	Preformed Thermoplastic Pavement Marking (Word/Symbol)	31. SF	SF
30	627-30410	Preformed Plastic Pavement Marking (X-Walk/Stopline)	12. Sum	Sum
31	630	Traffic Control (Complete In Place)	HR	HR
32	630	Flagging	150. Sum	Sum

COMMENTS:

- 1) FWM from concrete at G Rd round-a-bout and continue 200'S
- 2) FWM from seam that intersects median island @ HWY 6&50 and continue 200'N
- 3) 12' Edge Mill at Curb and Gutter, Drainage Pans, Paved Driveways, Street Intersections

LOCATION: 24 ½ Road
 AREA: 1,412' X 63'
 MAT THICKNESS:

HWY 6&50 to Patterson Road
 10,040 SY
 2" Overlay

<u>Quantity Information</u>			<u>Plan</u>	<u>Field</u>
1	108.2	48" Storm Drain Pipe (SDR 35 or approved equal)	LF	LF
2	108.5	Storm Sewer Basic Manhole 72" I.D.)	EA	EA
3	202	Asphalt Removal (Planing)(Thickness Varies)	9,400. SY	SY
4	202	Removal of Type 3 Guardrail	LF	LF
5	203	Excavation and Embankment (Potholing) (See SP-2)	Sum	Sum
6	203	Excavation and Embankment (New Bike Lanes - See SP-2)	CY	CY
7	208	Erosion Control	Days	Days
8	209	Dust Abatement	Days	Days
9	210	Adjust Valve Box (Price to Include adjustment of Survey Monuments)	8. EA	EA
10	210	Adjust Manhole Ring and Cover (Sanitary and Storm Sewer)	9. EA	EA
11	210	Reset Mailbox Structures	EA	EA
12	212	Seeding	Acres	Acres
13	304	Aggregate Base Course (Class 6) - Shoulder Edging Gravel	Tons	Tons
14	304	Aggregate Base Course (Class 6) - Bike Lane	Tons	Tons
15	304	Subgrade Stabilization (Class 3 Aggregate Base Course - 24" Thick)(Complete in Place)	Tons	Tons
16	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 64-22)	Tons	Tons
17	401	Hot Mix Asphalt (3" thick) (Grading SX, Binder Grade 64-22) - Bottom Lift Bike Lane	Tons	Tons
18	401	Hot Mix Asphalt (Patching - Up to 5" thick) (To Include 6" of Class 6 Aggregate Base Course)(Grading SX, Binder Grade 64-22)	Tons	Tons
19	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 76-28)	1,060. Tons	Tons
20	420	Geosynthetics - Geogrid	SY	SY
21	608/304	Concrete Drainage Pan (3' Wide) To Include 6" of Class 6 Aggregate Base Course	LF	LF
22	606	Guardrail Type 3 (6-3 Post Spacing)	LF	LF
23	606	Transition Type 3G	EA	EA
24	614	End Anchorage (Nonflared)	EA	EA
25	620	Sanitary Facility	Sum	Sum
26	625	Construction Surveying	Sum	Sum
27	626	Mobilization	Sum	Sum
28	627-00002	Thermoplastic Pavement Marking	SF	SF
29	627-30405	Preformed Thermoplastic Pavement Marking (Word/Symbol)	186. SF	SF
30	627-30410	Preformed Plastic Pavement Marking (X-Walk/Stopline)	256. Sum	Sum
31	630	Traffic Control (Complete In Place)	HR	HR
32	630	Flagging	150. Sum	Sum

COMMENTS:

- 1) FWM entire length from Patterson to HWY 6&50

LOCATION: 27 Road
 AREA: 1,740' X 36'
 MAT THICKNESS:

I-70 to H Road
 6,890 SY
 2" Overlay

<u>Quantitiy Information</u>			<u>Plan</u>	<u>Field</u>
1	108.2	48" Storm Drain Pipe (SDR 35 or approved equal)	LF	LF
2	108.5	Storm Sewer Basic Manhole 72" I.D.)	EA	EA
3	202	Asphalt Removal (Planing)(Thickness Varies)	2,090. SY	SY
4	202	Removal of Type 3 Guardrail	LF	LF
5	203	Excavation and Embankment (Potholing) (See SP-2)	Sum	Sum
6	203	Excavation and Embankment (New Bike Lanes - See SP-2)	CY	CY
7	208	Erosion Control	Days	Days
8	209	Dust Abatement	Days	Days
9	210	Adjust Valve Box (Price to Include adjustment of Survey Monuments)	4. EA	EA
10	210	Adjust Manhole Ring and Cover (Sanitary and Storm Sewer)	1. EA	EA
11	210	Reset Mailbox Structures	EA	EA
12	212	Seeding	Acres	Acres
13	304	Aggregate Base Course (Class 6) - Shoulder Edging Gravel	212. Tons	Tons
14	304	Aggregate Base Course (Class 6) - Bike Lane	Tons	Tons
15	304	Subgrade Stabilization (Class 3 Aggregate Base Course - 24" Thick)(Complete in Place)	Tons	Tons
16	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 64-22)	770. Tons	Tons
17	401	Hot Mix Asphalt (3" thick) (Grading SX, Binder Grade 64-22) - Bottom Lift Bike Lane	Tons	Tons
18	401	Hot Mix Asphalt (Patching - Up to 5" thick) (To Include 6" of Class 6 Aggregate Base Course)(Grading SX, Binder Grade 64-22)	Tons	Tons
19	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 76-28)	Tons	Tons
20	420	Geosynthetics - Geogrid	SY	SY
21	608/304	Concrete Drainage Pan (3' Wide) To Include 6" of Class 6 Aggregate Base Course	LF	LF
22	606	Guardrail Type 3 (6-3 Post Spacing)	LF	LF
23	606	Transition Type 3G	EA	EA
24	614	End Anchorage (Nonflared)	EA	EA
25	620	Sanitary Facility	Sum	Sum
26	625	Construction Surveying	Sum	Sum
27	626	Mobilization	Sum	Sum
28	627-00002	Thermoplastic Pavement Marking	SF	SF
29	627-30405	Preformed Thermoplastic Pavement Marking (Word/Symbol)	56. SF	SF
30	627-30410	Preformed Plastic Pavement Marking (X-Walk/Stopline)	Sum	Sum
31	630	Traffic Control (Complete In Place)	HR	HR
32	630	Flagging	150. Sum	Sum

COMMENTS:

- 1) FWM from H Rd S edge of pavement and continue 200'S
- 2) FWM from N. approach slab on I70 Bridge and continue 200'N
- 3) 12' Edge Mill at Curb and Gutter, Drainage Pans, Paved Driveways, Street Intersections

LOCATION: H Road

AREA: 3,905' X Varies

MAT THICKNESS:

26 ½ Road to 27 ¼ Road

15,160 SY

2" Overlay

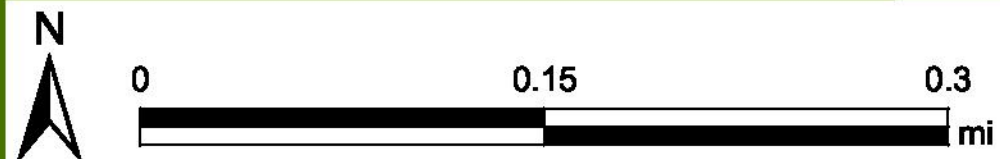
Quantity Information			Plan	Field
1	108.2	48" Storm Drain Pipe (SDR 35 or approved equal)	LF	LF
2	108.5	Storm Sewer Basic Manhole 72" I.D.)	EA	EA
3	202	Asphalt Removal (Planing)(Thickness Varies)	3,885. SY	SY
4	202	Removal of Type 3 Guardrail	LF	LF
5	203	Excavation and Embankment (Potholing) (See SP-2)	Sum	Sum
6	203	Excavation and Embankment (New Bike Lanes - See SP-2)	CY	CY
7	208	Erosion Control	Days	Days
8	209	Dust Abatement	Days	Days
9	210	Adjust Valve Box (Price to Include adjustment of Survey Monuments)	14. EA	EA
10	210	Adjust Manhole Ring and Cover (Sanitary and Storm Sewer)	EA	EA
11	210	Reset Mailbox Structures	EA	EA
12	212	Seeding	Acres	Acres
13	304	Aggregate Base Course (Class 6) - Shoulder Edging Gravel	450. Tons	Tons
14	304	Aggregate Base Course (Class 6) - Bike Lane	Tons	Tons
15	304	Subgrade Stabilization (Class 3 Aggregate Base Course - 24" Thick)(Complete in Place)	Tons	Tons
16	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 64-22)	1,690. Tons	Tons
17	401	Hot Mix Asphalt (3" thick) (Grading SX, Binder Grade 64-22) - Bottom Lift Bike Lane	Tons	Tons
18	401	Hot Mix Asphalt (Patching - Up to 5" thick) (To Include 6" of Class 6 Aggregate Base Course)(Grading SX, Binder Grade 64-22)	Tons	Tons
19	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 76-28)	Tons	Tons
20	420	Geosynthetics - Geogrid	SY	SY
21	608/304	Concrete Drainage Pan (3' Wide) To Include 6" of Class 6 Aggregate Base Course	LF	LF
22	606	Guardrail Type 3 (6-3 Post Spacing)	LF	LF
23	606	Transition Type 3G	EA	EA
24	614	End Anchorage (Nonflared)	EA	EA
25	620	Sanitary Facility	Sum	Sum
26	625	Construction Surveying	Sum	Sum
27	626	Mobilization	Sum	Sum
28	627-00002	Thermoplastic Pavement Marking	SF	SF
29	627-30405	Preformed Thermoplastic Pavement Marking (Word/Symbol)	88. SF	SF
30	627-30410	Preformed Plastic Pavement Marking (X-Walk/Stopline)	108. Sum	Sum
31	630	Traffic Control (Complete In Place)	HR	HR
32	630	Flagging	150. Sum	Sum

COMMENTS:

- 1) FWM from E Gutter line of 26 ½ Rd and continue 200'E
- 2) FWM from 27 ¼ Rd and continue approx. 200'W
- 3) 12' Edge Mill at Curb and Gutter, Drainage Pans, Paved Driveways, Street Intersections

2019 City of Grand Junction Overlays			
Tabulation of Pavement Marking			
Location	(627-00002) Thermoplastic Pavement Marking	(627-30405) Preformed Thermoplastic Pavement Marking (Word/Symbol)	(627-30410) Preformed Thermoplastic Pavement Marking (X-Walk/Stopline)
Redlands Parkway			
3 EA @ 52 feet - 12 inch STOP BAR (125 mil)			156
90 LF - 24 inch CROSSWALK (125 mil)			180
5 EA - LEFT ARROW (12ft Elongated)(90 mil)		78	
4 EA - RIGHT ARROW (12ft Elongated)(90 mil)		62	
7 EA - LANE DROP ARROW (Merge Left) (18ft x 5'8") (125 mil)		406	
10 EA - BIKE SYMBOL (6ft x 3'4") (Facing Left)(90 mil)		80	
53 LF - LANE EXTENSION (4 inch x 18 inch)(125 mil)	14		
Total	14	626	336
9th Street			
1 EA @ 15 feet - 12 inch STOP BAR (125 mil)			15
2 EA - LEFT ARROW (12ft Elongated)(90 mil)		31	
Total	0	31	15
23 Road			
1 EA @ 12 feet - 12 inch STOP BAR (125 mil)			12
2 EA - RIGHT ARROW (12ft Elongated)(90 mil)		31	
Total	0	31	12
27 Road			
7 EA - BIKE SYMBOL (6ft x 3'4") (Facing Left)(90 mil)		56	
Total	0	56	0
S. Camp Road			
63 LF - 24 inch CROSSWALK (125 mil)			126
16 EA - LEFT ARROW (12ft Elongated)(90 mil)		248	
27 EA - BIKE SYMBOL (6ft x 3'4") (Facing Left)(90 mil)		216	
Total	0	464	126
24 1/2 Road			
1 EA @ 40 feet - 12 inch STOP BAR (125 mil)			40
108 LF - 24 inch CROSSWALK (125 mil)			216
12 EA - LEFT ARROW (12ft Elongated)(90 mil)		186	
Total	0	186	256
H Road			
54 LF - 24 inch CROSSWALK (125 mil)			108
11 EA - BIKE SYMBOL (6ft x 3'4") (Facing Left)(90 mil)		88	
Total	0	88	108
Total (SF)	14	1482	853
Contingency	6	82	90
Project Total (SF)	20	1564	943

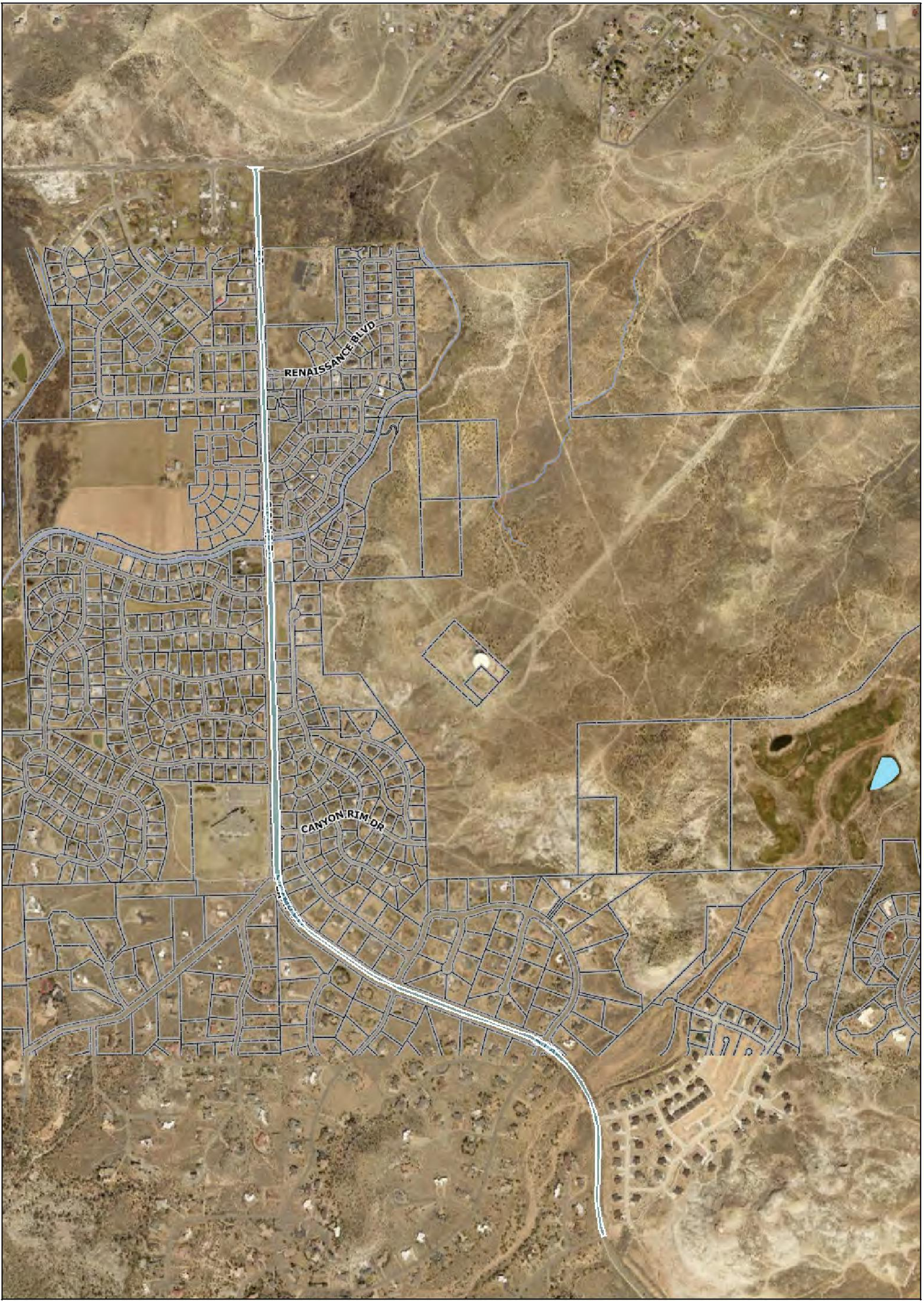
Redlands Parkway Extents



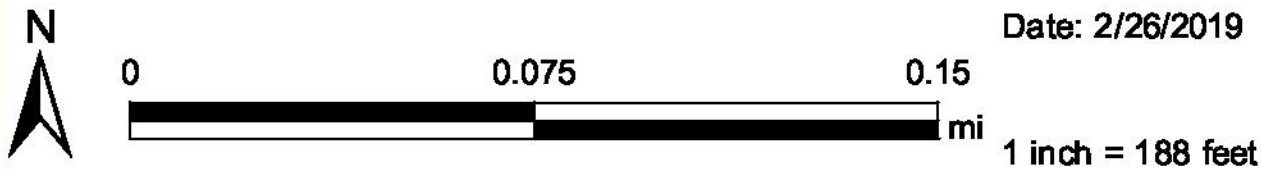
Date: 2/26/2019

1 inch = 376 feet

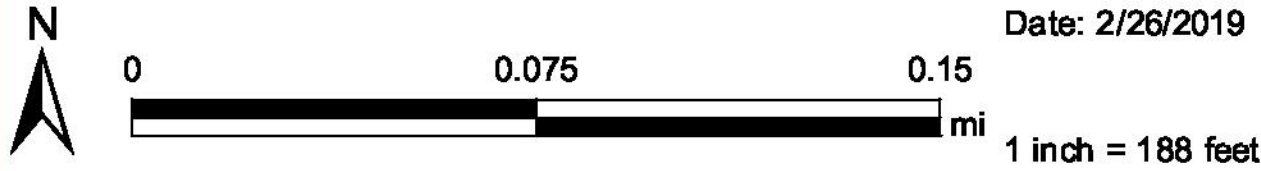
S. Camp Road Extents



9th Street Extents

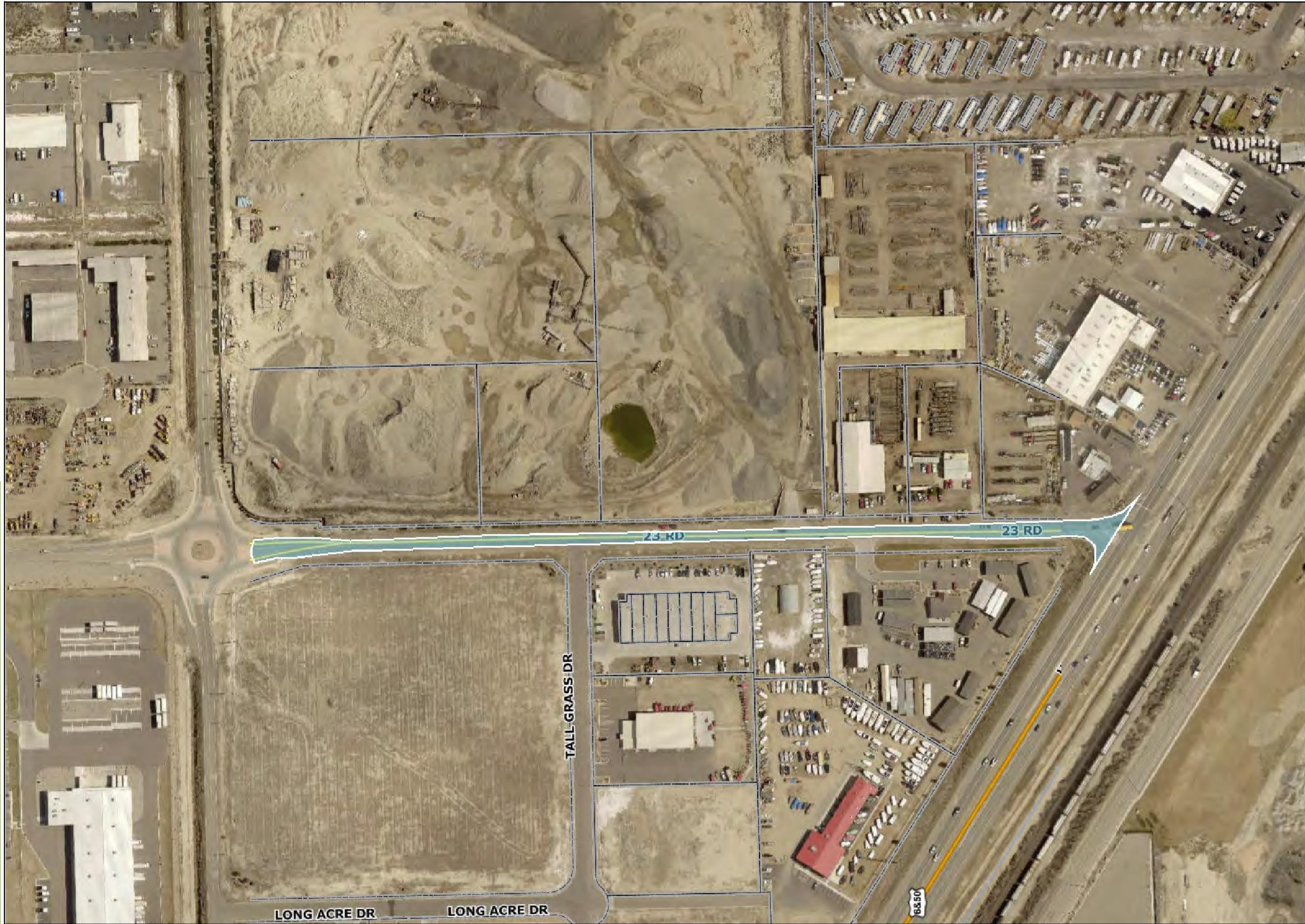


15th Street Extents



Date: 2/26/2019

23 Rd Extends



0

0.075

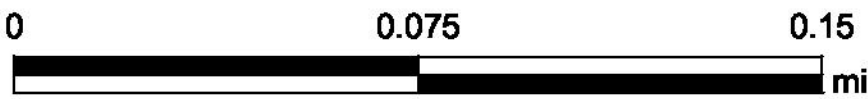
0.15

mi

1 inch = 188 feet

Date: 2/26/2019

24 1/2 Rd Extents



Date: 2/26/2019

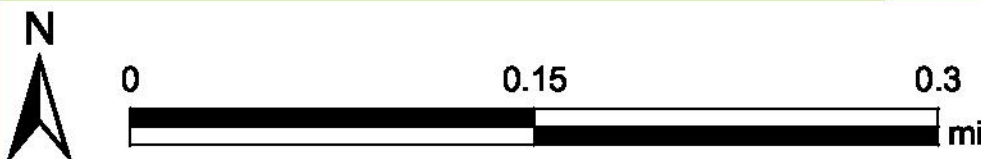
1 inch = 188 feet

27 Rd Extents



Date: 2/26/2019

H Rd Extents



Date: 2/26/2019

1 inch = 376 feet

Cut/Fill Report

Generated: 2019-03-06 09:35:31

By user: hannac

Drawing: N:\Landproj\Contract Street Maintenance\2019 Contract Street Maintenance\Overlays\dwg\N:\Landproj\Contract Street Maintenance\2019 Contract Street Maintenance\Overlays\dwg\Redlands Overlay.dwg

Volume Summary							
Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Vol_EMBANKMENT	full	1.000	1.000	14378.92	0.05	189.24	189.19<Fill>
Vol_BASECOURSE	full	1.000	1.000	9392.53	444.98	0.00	444.98<Cut>
Vol_GRAVEL	full	1.000	1.000	3018.00	4.68	21.04	16.36<Fill>

Totals				
	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Total	26789.45	449.71	210.28	239.43<Cut>

* Value adjusted by cut or fill factor other than 1.0

Cut/Fill Report

Generated: 2019-03-07 11:38:29

By user: hannac

Drawing: N:\Landproj\Contract Street Maintenance\2019 Contract Street Maintenance\Overlays\dwg\N:\Landproj\Contract Street Maintenance\2019 Contract Street Maintenance\Overlays\dwg\South Camp.dwg

Volume Summary							
Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Vol_BASECOURSE	full	1.000	1.000	20431.79	995.99	0.00	995.99<Cut>
Vol_GRAVEL	full	1.000	1.000	9050.74	83.80	0.00	83.80<Cut>
Vol_EMBANKMENT	full	1.000	1.000	5802.26	1.95	45.82	43.87<Fill>

Totals				
	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Total	35284.79	1081.74	45.82	1035.92<Cut>

* Value adjusted by cut or fill factor other than 1.0

APPENDIX C

EXAMPLE - UPRR Maintenance Consent Letter

UNION PACIFIC RAILROAD
1400 Douglas Street Omaha, Nebraska 68179
Mail Stop 1690
Danielle Allen
danielleallen@up.com
402-544-8020

AUDIT 287959

MAINTENANCE CONSENT LETTER

February 6, 2018
Folder No.: 3076-45

ERIC MOCKO
CITY OF GRAND JUNCTION
333 WEST AVENUE, BUILDING C
GRAND JUNCTION, CO 81501

Dear Mr. Mocko:

RE: Proposed asphalt overlay work at the existing South 7th Street at-grade public road crossing at or near Railroad Mile Post 448.935 on the Glenwood Springs Sub., at or near Grand Junction, Mesa County, Colorado

Please refer to an application notifying the Railroad Company of the above subject project regarding the City of Grand Junction's ("Public Entity's") intention to install an asphalt overlay at the existing South 7th Street, at-grade public road crossing at Railroad Mile Post 448.935 (DOT 253778A) on the Glenwood Springs Subdivision in or near Grand Junction, Mesa County, Colorado. This letter serves as an acceptance of the proposed work to be performed. Attached hereto is a Railroad Location Print marked **Exhibit A**, which respectively illustrates the general location of the public road crossing work.

This consent is provided as a courtesy to the Public Entity in order for it to conduct simple surface maintenance to the South 7th Street, at-grade public road crossing as an agreement could not be located for this public road crossing. The Public Entity agrees to enter into an agreement for the at-grade public road crossing when future improvement or a reconstruction is requested in the future.

If a contractor is to do any of the work performed on or about the Railroad Company's trackage (including substantial maintenance and repair work), then the Public Entity shall require its contractor to execute the Railroad Company's form Contractor's Right of Entry Agreement. Public Entity acknowledges receipt of a copy of Contractor's Right of Entry Agreement and understanding its term, provisions and requirements, and will inform its contractor of the need to execute the Agreement. Under no circumstances will Public Entity's contractor be allowed on or



about the Railroad Company's trackage without first executing the Contractor's Right of Entry Agreement.

In order to protect the property as well as for safety reasons, it is imperative that the Public Entity notify the Railroad Company's Representative(s) at least 48-hours in advance prior to the proposed work to be conducted at the subject crossing. The following information is furnished with regard to the local contact for the Railroad Company:

Telecommunications ("Call Before You Dig"): 1-800-336-9193

Lance Kippen
Analyst Industry & Public Proj
303-405-5039
lkippen@up.com

Regards,



Danielle Allen
Manager-Real Estate

EXAMPLE

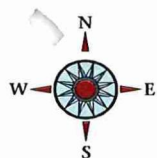
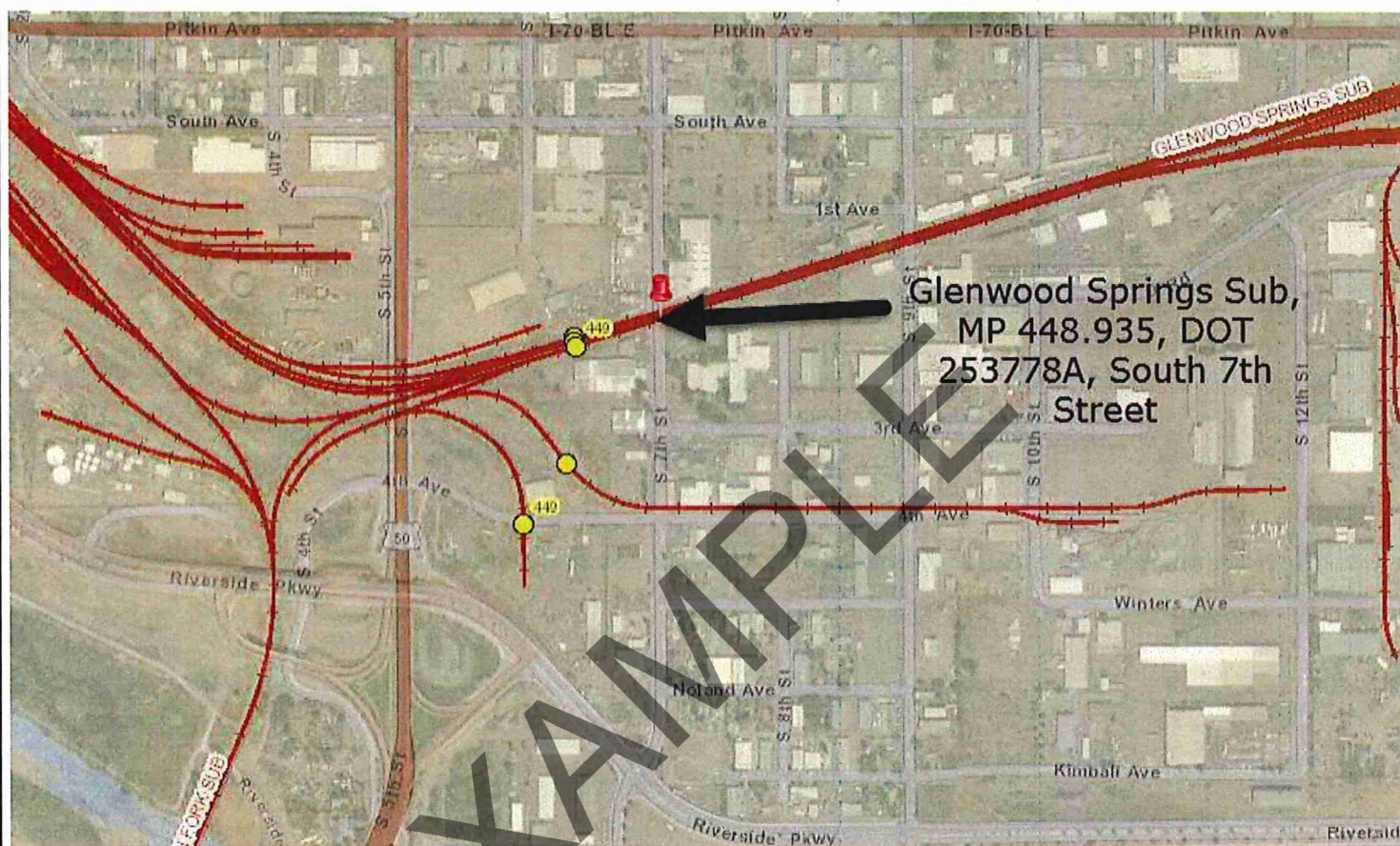


EXHIBIT "A"
RAILROAD LOCATION PRINT
ACCOMPANYING A
MAINTENANCE CONSENT/CONTRACTOR'S
RIGHT OF ENTRY AGREEMENT





Folder No.: 3076-45

UPRR Audit No.:

CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

THIS AGREEMENT is made and entered into as of the ____ day of _____, 20__, by and between **UNION PACIFIC RAILROAD COMPANY**, a Delaware corporation ("Railroad"); and

(Name of Contractor)
a _____ corporation ("Contractor").

RECITALS:

Contractor has been hired by the City of Grand Junction ("Public Entity") to perform asphalt overlay work at the existing South 7th Street at-grade public road crossing with all or a portion of such work to be performed on property of Railroad in the vicinity of the Railroad's Mile Post 448.935 (DOT 253778A) on its Glenwood Springs Subdivision in or near Grand Junction, Mesa County, Colorado, as such location is in the general location shown on the Railroad Location Print marked **Exhibit A**, attached hereto and hereby made a part hereof, which work is the subject of a contract dated February 6, 2018, between the Railroad and the Public Entity.

The Railroad is willing to permit the Contractor to perform the work described above at the location described above subject to the terms and conditions contained in this Agreement

AGREEMENT:

NOW, THEREFORE, it is mutually agreed by and between Railroad and Contractor, as follows:

ARTICLE 1 - DEFINITION OF CONTRACTOR.

For purposes of this Agreement, all references in this agreement to Contractor shall include Contractor's contractors, subcontractors, officers, agents and employees, and others acting under its or their authority.

ARTICLE 2 - RIGHT GRANTED; PURPOSE.

Railroad hereby grants to Contractor the right, during the term hereinafter stated and upon and subject to each and all of the terms, provisions and conditions herein contained, to enter upon and have ingress to and egress from the property described in the Recitals for the purpose of performing the work described in the Recitals above. The right herein granted to Contractor is limited to those portions of Railroad's property specifically described herein, or as designated by the Railroad Representative named in Article 4.



ARTICLE 3 - TERMS AND CONDITIONS CONTAINED IN EXHIBITS B, C & D.

The General Terms and Conditions contained in **Exhibit B**, the Insurance Requirements contained in **Exhibit C**, and the Minimum Safety Requirements contained in **Exhibit D**, each attached hereto, are hereby made a part of this Agreement.

ARTICLE 4 - ALL EXPENSES TO BE BORNE BY CONTRACTOR; RAILROAD REPRESENTATIVE.

- A. Contractor shall bear any and all costs and expenses associated with any work performed by Contractor, or any costs or expenses incurred by Railroad relating to this Agreement.
- B. Contractor shall coordinate all of its work with the following Railroad representative or his or her duly authorized representative (the "Railroad Representative"):

Seth Frazee
Asst Mgr Track Mntce
970-248-4254
skfrazee@up.com

- C. Contractor, at its own expense, shall adequately police and supervise all work to be performed by Contractor and shall ensure that such work is performed in a safe manner as set forth in Section 7 of **Exhibit B**. The responsibility of Contractor for safe conduct and adequate policing and supervision of Contractor's work shall not be lessened or otherwise affected by Railroad's approval of plans and specifications involving the work, or by Railroad's collaboration in performance of any work, or by the presence at the work site of a Railroad Representative, or by compliance by Contractor with any requests or recommendations made by Railroad Representative.

ARTICLE 5 - SCHEDULE OF WORK ON A MONTHLY BASIS.

The Contractor, at its expense, shall provide on a monthly basis a detailed schedule of work to the Railroad Representative named in Article 4B above. The reports shall start at the execution of this Agreement and continue until this Agreement is terminated as provided in this Agreement or until the Contractor has completed all work on Railroad's property.

ARTICLE 6 - TERM; TERMINATION.

- A. The grant of right herein made to Contractor shall commence on the date of this Agreement, and continue until _____, unless sooner terminated as herein
(Expiration Date)



provided, or at such time as Contractor has completed its work on Railroad's property, whichever is earlier. Contractor agrees to notify the Railroad Representative in writing when it has completed its work on Railroad's property.

- B. This Agreement may be terminated by either party on ten (10) days written notice to the other party.

ARTICLE 7 - CERTIFICATE OF INSURANCE.

- A. Before commencing any work, Contractor will provide Railroad with the (i) insurance binders, policies, certificates and endorsements set forth in **Exhibit C** of this Agreement, and (ii) the insurance endorsements obtained by each subcontractor as required under Section 12 of **Exhibit B** of this Agreement.
- B. All insurance correspondence, binders, policies, certificates and endorsements shall be sent to:

*Union Pacific Railroad Company
Real Estate Department
1400 Douglas Street, MS 1690
Omaha, NE 68179-1690
UPRR Folder No. 3076-45*

ARTICLE 8 - DISMISSAL OF CONTRACTOR'S EMPLOYEE.

At the request of Railroad, Contractor shall remove from Railroad's property any employee of Contractor who fails to conform to the instructions of the Railroad Representative in connection with the work on Railroad's property, and any right of Contractor shall be suspended until such removal has occurred. Contractor shall indemnify Railroad against any claims arising from the removal of any such employee from Railroad's property.

ARTICLE 9 - CROSSINGS.

No additional vehicular crossings (including temporary haul roads) or pedestrian crossings over Railroad's trackage shall be installed or used by Contractor without the prior written permission of Railroad.

ARTICLE 10 - CROSSINGS; COMPLIANCE WITH MUTCD AND FRA GUIDELINES.

- A. No additional vehicular crossings (including temporary haul roads) or pedestrian crossings over Railroad's trackage shall be installed or used by Contractor without the prior written permission of Railroad.
- B. Any permanent or temporary changes, including temporary traffic control, to crossings must conform to the Manual of Uniform Traffic Control Devices (MUTCD) and any applicable Federal Railroad Administration rules, regulations and guidelines, and must be reviewed by the Railroad prior to any changes being implemented. In the event the Railroad is found to be out of compliance with federal safety regulations due to the Contractor's modifications, negligence, or any other reason arising from the Contractor's presence on the Railroad's property, the Contractor agrees to assume liability for any civil penalties imposed upon the Railroad for such



noncompliance.

ARTICLE 11 - EXPLOSIVES.

Explosives or other highly flammable substances shall not be stored or used on Railroad's property without the prior written approval of Railroad.

IN WITNESS WHEREOF, the parties hereto have duly executed this agreement in duplicate as of the date first herein written.

UNION PACIFIC RAILROAD COMPANY
(Federal Tax ID #94-6001323)

By: _____
Danielle Allen
Manager-Real Estate

(Name of Contractor)

By _____

Printed Name: _____

Title: _____

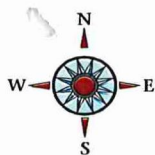


EXHIBIT "A"
RAILROAD LOCATION PRINT
ACCOMPANYING A
MAINTENANCE CONSENT/CONTRACTOR'S
RIGHT OF ENTRY AGREEMENT



UNION PACIFIC RAILROAD COMPANY

GLENWOOD SPRINGS SUB
RAILROAD MILE POSTS 448.935
GRAND JUNCTION, MESA COUNTY, COLORADO

To accompany an agreement with the
CITY OF GRAND JUNCTION and/or CONTRACTORS

UPRR Folder No. 3076-45 Date: February 6, 2018

WARNING

IN ALL OCCASIONS, U.P. COMMUNICATIONS DEPARTMENT MUST BE CONTACTED IN ADVANCE OF
ANY WORK TO DETERMINE EXISTENCE AND LOCATION OF FIBER OPTIC CABLE.

PHONE: 1-(800) 336-9193

EXHIBIT B

TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

GENERAL TERMS & CONDITIONS

Section 1. NOTICE OF COMMENCEMENT OF WORK - FLAGGING.

- A. Contractor agrees to notify the Railroad Representative at least thirty (30) working days in advance of Contractor commencing its work and at least ten (10) working days in advance of proposed performance of any work by Contractor in which any person or equipment will be within twenty-five (25) feet of any track, or will be near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach to within twenty-five (25) feet of any track. No work of any kind shall be performed, and no person, equipment, machinery, tool(s), material(s), vehicle(s), or thing(s) shall be located, operated, placed, or stored within twenty-five (25) feet of any of Railroad's track(s) at any time, for any reason, unless and until a Railroad flagman is provided to watch for trains. Upon receipt of such ten (10)-day notice, the Railroad Representative will determine and inform Contractor whether a flagman need be present and whether Contractor needs to implement any special protective or safety measures. If flagging or other special protective or safety measures are performed by Railroad, Railroad will bill Contractor for such expenses incurred by Railroad, unless Railroad and a federal, state or local governmental entity have agreed that Railroad is to bill such expenses to the federal, state or local governmental entity. If Railroad will be sending the bills to Contractor, Contractor shall pay such bills within thirty (30) days of Contractor's receipt of billing. If Railroad performs any flagging, or other special protective or safety measures are performed by Railroad, Contractor agrees that Contractor is not relieved of any of its responsibilities or liabilities set forth in this Agreement.
- B. The rate of pay per hour for each flagman will be the prevailing hourly rate in effect for an eight-hour day for the class of flagmen used during regularly assigned hours and overtime in accordance with Labor Agreements and Schedules in effect at the time the work is performed. In addition to the cost of such labor, a composite charge for vacation, holiday, health and welfare, supplemental sickness, Railroad Retirement and unemployment compensation, supplemental pension, Employees Liability and Property Damage and Administration will be included, computed on actual payroll. The composite charge will be the prevailing composite charge in effect at the time the work is performed. One and one-half times the current hourly rate is paid for overtime, Saturdays and Sundays, and two and one-half times current hourly rate for holidays. Wage rates are subject to change, at any time, by law or by agreement between Railroad and its employees, and may be retroactive as a result of negotiations or a ruling of an authorized governmental agency. Additional charges on labor are also subject to change. If the wage rate or additional charges are changed, Contractor (or the governmental entity, as applicable) shall pay on the basis of the new rates and charges.
- C. Reimbursement to Railroad will be required covering the full eight-hour day during which any flagman is furnished, unless the flagman can be assigned to other Railroad work during a portion of such day, in which event reimbursement will not be required for the portion of the day during which the flagman is engaged in other Railroad work. Reimbursement will also be required for any day not actually worked by the flagman following the flagman's assignment to work on the project for which Railroad is required to pay the flagman and which could not reasonably be avoided by Railroad by assignment of such flagman to other work, even though Contractor may not be working during such time. When it becomes necessary for Railroad to bulletin and assign an employee to a flagging position in compliance with union collective bargaining agreements, Contractor must provide Railroad a minimum of five (5) days notice prior to the cessation of the need for a flagman. If five (5) days notice of cessation is not given, Contractor will still be required to pay flagging charges for the five (5) day notice period required by union agreement to be given to the employee, even though flagging is not required for that period. An additional ten (10) days notice must then be given to Railroad if flagging services are needed again after such five day cessation notice has been given to Railroad.

Section 2. LIMITATION AND SUBORDINATION OF RIGHTS GRANTED

- A. The foregoing grant of right is subject and subordinate to the prior and continuing right and obligation of the Railroad to use and maintain its entire property including the right and power of Railroad to construct, maintain, repair, renew, use, operate, change, modify or relocate railroad tracks, roadways, signal, communication, fiber optics, or other wirelines, pipelines and other facilities upon, along or across any or all parts of its property, all or any of which may be freely done at any time or times by Railroad without liability to Contractor or to any other party for compensation or damages.

- B. The foregoing grant is also subject to all outstanding superior rights (including those in favor of licensees and lessees of Railroad's property, and others) and the right of Railroad to renew and extend the same, and is made without covenant of title or for quiet enjoyment.

Section 3. NO INTERFERENCE WITH OPERATIONS OF RAILROAD AND ITS TENANTS.

- A. Contractor shall conduct its operations so as not to interfere with the continuous and uninterrupted use and operation of the railroad tracks and property of Railroad, including without limitation, the operations of Railroad's lessees, licensees or others, unless specifically authorized in advance by the Railroad Representative. Nothing shall be done or permitted to be done by Contractor at any time that would in any manner impair the safety of such operations. When not in use, Contractor's machinery and materials shall be kept at least fifty (50) feet from the centerline of Railroad's nearest track, and there shall be no vehicular crossings of Railroads tracks except at existing open public crossings.
- B. Operations of Railroad and work performed by Railroad personnel and delays in the work to be performed by Contractor caused by such railroad operations and work are expected by Contractor, and Contractor agrees that Railroad shall have no liability to Contractor, or any other person or entity for any such delays. The Contractor shall coordinate its activities with those of Railroad and third parties so as to avoid interference with railroad operations. The safe operation of Railroad train movements and other activities by Railroad takes precedence over any work to be performed by Contractor.

Section 4. LIENS.

Contractor shall pay in full all persons who perform labor or provide materials for the work to be performed by Contractor. Contractor shall not create, permit or suffer any mechanic's or materialmen's liens of any kind or nature to be created or enforced against any property of Railroad for any such work performed. Contractor shall indemnify and hold harmless Railroad from and against any and all liens, claims, demands, costs or expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials furnished. If Contractor fails to promptly cause any lien to be released of record, Railroad may, at its election, discharge the lien or claim of lien at Contractor's expense.

Section 5. PROTECTION OF FIBER OPTIC CABLE SYSTEMS.

- A. Fiber optic cable systems may be buried on Railroad's property. Protection of the fiber optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. Contractor shall telephone Railroad during normal business hours (7:00 a.m. to 9:00 p.m. Central Time, Monday through Friday, except holidays) at 1-800-336-9193 (also a 24-hour, 7-day number for emergency calls) to determine if fiber optic cable is buried anywhere on Railroad's property to be used by Contractor. If it is, Contractor will telephone the telecommunications company(ies) involved, make arrangements for a cable locator and, if applicable, for relocation or other protection of the fiber optic cable. Contractor shall not commence any work until all such protection or relocation (if applicable) has been accomplished.
- B. In addition to other indemnity provisions in this Agreement, Contractor shall indemnify, defend and hold Railroad harmless from and against all costs, liability and expense whatsoever (including, without limitation, attorneys' fees, court costs and expenses) arising out of any act or omission of Contractor, its agents and/or employees, that causes or contributes to (1) any damage to or destruction of any telecommunications system on Railroad's property, and/or (2) any injury to or death of any person employed by or on behalf of any telecommunications company, and/or its contractor, agents and/or employees, on Railroad's property. Contractor shall not have or seek recourse against Railroad for any claim or cause of action for alleged loss of profits or revenue or loss of service or other consequential damage to a telecommunication company using Railroad's property or a customer or user of services of the fiber optic cable on Railroad's property.

Section 6. PERMITS - COMPLIANCE WITH LAWS.

In the prosecution of the work covered by this Agreement, Contractor shall secure any and all necessary permits and shall comply with all applicable federal, state and local laws, regulations and enactments affecting the work including, without limitation, all applicable Federal Railroad Administration regulations.

Section 7. SAFETY.

- A. Safety of personnel, property, rail operations and the public is of paramount importance in the prosecution of the work performed by Contractor. Contractor shall be responsible for initiating, maintaining and supervising all safety, operations and programs in connection with the work. Contractor shall at a minimum comply with Railroad's safety standards listed in



Exhibit D, hereto attached, to ensure uniformity with the safety standards followed by Railroad's own forces. As a part of Contractor's safety responsibilities, Contractor shall notify Railroad if Contractor determines that any of Railroad's safety standards are contrary to good safety practices. Contractor shall furnish copies of **Exhibit D** to each of its employees before they enter the job site.

- B. Without limitation of the provisions of paragraph A above, Contractor shall keep the job site free from safety and health hazards and ensure that its employees are competent and adequately trained in all safety and health aspects of the job.
- C. Contractor shall have proper first aid supplies available on the job site so that prompt first aid services may be provided to any person injured on the job site. Contractor shall promptly notify Railroad of any U.S. Occupational Safety and Health Administration reportable injuries. Contractor shall have a nondelegable duty to control its employees while they are on the job site or any other property of Railroad, and to be certain they do not use, be under the influence of, or have in their possession any alcoholic beverage, drug or other substance that may inhibit the safe performance of any work.
- D. If and when requested by Railroad, Contractor shall deliver to Railroad a copy of Contractor's safety plan for conducting the work (the "Safety Plan"). Railroad shall have the right, but not the obligation, to require Contractor to correct any deficiencies in the Safety Plan. The terms of this Agreement shall control if there are any inconsistencies between this Agreement and the Safety Plan.

Section 8. INDEMNITY.

- A. To the extent not prohibited by applicable statute, Contractor shall indemnify, defend and hold harmless Railroad, its affiliates, and its and their officers, agents and employees (individually an "Indemnified Party" or collectively "Indemnified Parties") from and against any and all loss, damage, injury, liability, claim, demand, cost or expense (including, without limitation, attorney's, consultant's and expert's fees, and court costs), fine or penalty (collectively, "Loss") incurred by any person (including, without limitation, any Indemnified Party, Contractor, or any employee of Contractor or of any Indemnified Party) arising out of or in any manner connected with (i) any work performed by Contractor, or (ii) any act or omission of Contractor, its officers, agents or employees, or (iii) any breach of this Agreement by Contractor.
- B. The right to indemnify under this Section 8 shall accrue upon occurrence of the event giving rise to the Loss, and shall apply regardless of any negligence or strict liability of any Indemnified Party, except where the Loss is caused by the sole active negligence of an Indemnified Party as established by the final judgment of a court of competent jurisdiction. The sole active negligence of any Indemnified Party shall not bar the recovery of any other Indemnified Party.
- C. Contractor expressly and specifically assumes potential liability under this Section 8 for claims or actions brought by Contractor's own employees. Contractor waives any immunity it may have under worker's compensation or industrial insurance acts to indemnify the Indemnified Parties under this Section 8. Contractor acknowledges that this waiver was mutually negotiated by the parties hereto.
- D. No court or jury findings in any employee's suit pursuant to any worker's compensation act or the Federal Employers' Liability Act against a party to this Agreement may be relied upon or used by Contractor in any attempt to assert liability against any Indemnified Party.
- E. The provisions of this Section 8 shall survive the completion of any work performed by Contractor or the termination or expiration of this Agreement. In no event shall this Section 8 or any other provision of this Agreement be deemed to limit any liability Contractor may have to any Indemnified Party by statute or under common law.

Section 9. RESTORATION OF PROPERTY.

In the event Railroad authorizes Contractor to take down any fence of Railroad or in any manner move or disturb any of the other property of Railroad in connection with the work to be performed by Contractor, then in that event Contractor shall, as soon as possible and at Contractor's sole expense, restore such fence and other property to the same condition as the same were in before such fence was taken down or such other property was moved or disturbed. Contractor shall remove all of Contractor's tools, equipment, rubbish and other materials from Railroad's property promptly upon completion of the work, restoring Railroad's property to the same state and condition as when Contractor entered thereon.

Section 10. WAIVER OF DEFAULT.

Waiver by Railroad of any breach or default of any condition, covenant or agreement herein contained to be kept, observed and performed by Contractor shall in no way impair the right of Railroad to avail itself of any remedy for any subsequent breach or default.

Section 11. MODIFICATION - ENTIRE AGREEMENT.

No modification of this Agreement shall be effective unless made in writing and signed by Contractor and Railroad. This Agreement and the exhibits attached hereto and made a part hereof constitute the entire understanding between Contractor and Railroad and cancel and supersede any prior negotiations, understandings or agreements, whether written or oral, with respect to the work to be performed by Contractor.

Section 12. ASSIGNMENT - SUBCONTRACTING.

Contractor shall not assign or subcontract this Agreement, or any interest therein, without the written consent of the Railroad. Contractor shall be responsible for the acts and omissions of all subcontractors. Before Contractor commences any work, the Contractor shall, except to the extent prohibited by law; (1) require each of its subcontractors to include the Contractor as "Additional Insured" in the subcontractor's Commercial General Liability policy and Business Automobile policies with respect to all liabilities arising out of the subcontractor's performance of work on behalf of the Contractor by endorsing these policies with ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage; (2) require each of its subcontractors to endorse their Commercial General Liability Policy with "Contractual Liability Railroads" ISO Form CG 24 17 10 01 (or a substitute form providing equivalent coverage) for the job site; and (3) require each of its subcontractors to endorse their Business Automobile Policy with "Coverage For Certain Operations In Connection With Railroads" ISO Form CA 20 70 10 01 (or a substitute form providing equivalent coverage) for the job site.

EXAMPLE

EXHIBIT C

TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

INSURANCE REQUIREMENTS

Contractor shall, at its sole cost and expense, procure and maintain during the course of the Project and until all Project work on Railroad's property has been completed and the Contractor has removed all equipment and materials from Railroad's property and has cleaned and restored Railroad's property to Railroad's satisfaction, the following insurance coverage:

A. COMMERCIAL GENERAL LIABILITY INSURANCE. Commercial general liability (CGL) with a limit of not less than \$5,000,000 each occurrence and an aggregate limit of not less than \$10,000,000. CGL insurance must be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage).

The policy must also contain the following endorsement, which must be stated on the certificate of insurance:

- Contractual Liability Railroads ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Railroad Company Property" as the Designated Job Site.
- Designated Construction Project(s) General Aggregate Limit ISO Form CG 25 03 03 97 (or a substitute form providing equivalent coverage) showing the project on the form schedule.

B. BUSINESS AUTOMOBILE COVERAGE INSURANCE. Business auto coverage written on ISO form CA 00 01 10 01 (or a substitute form providing equivalent liability coverage) with a combined single limit of not less than \$5,000,000 for each accident and coverage must include liability arising out of any auto (including owned, hired and non-owned autos).

The policy must contain the following endorsements, which must be stated on the certificate of insurance:

- Coverage For Certain Operations In Connection With Railroads ISO form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Property" as the Designated Job Site.
- Motor Carrier Act Endorsement - Hazardous materials clean up (MCS-90) if required by law.

C. WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY INSURANCE. Coverage must include but not be limited to:

- Contractor's statutory liability under the workers' compensation laws of the state where the work is being performed.
- Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 disease policy limit \$500,000 each employee.

If Contractor is self-insured, evidence of state approval and excess workers compensation coverage must be provided.

Coverage must include liability arising out of the U. S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.

The policy must contain the following endorsement, which must be stated on the certificate of insurance:

- Alternate Employer endorsement ISO form WC 00 03 01 A (or a substitute form providing equivalent coverage) showing Railroad in the schedule as the alternate employer (or a substitute form providing equivalent coverage).

D. RAILROAD PROTECTIVE LIABILITY INSURANCE. Contractor must maintain Railroad Protective Liability insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of Railroad as named insured, with a limit of not less than \$2,000,000 per occurrence and an aggregate of \$6,000,000. A binder stating the policy is in place must be submitted to Railroad before the work may be commenced and until the original policy is forwarded to Railroad.

E. UMBRELLA OR EXCESS INSURANCE. If Contractor utilizes umbrella or excess policies, these policies must "follow form" and afford no less coverage than the primary policy.

F. POLLUTION LIABILITY INSURANCE. Pollution liability coverage must be written on ISO form Pollution Liability Coverage Form Designated Sites CG 00 39 12 04 (or a substitute form providing equivalent liability coverage), with limits of at least

\$5,000,000 per occurrence and an aggregate limit of \$10,000,000.

If the scope of work as defined in this Agreement includes the disposal of any hazardous or non-hazardous materials from the job site, Contractor must furnish to Railroad evidence of pollution legal liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting the materials, with coverage in minimum amounts of \$1,000,000 per loss, and an annual aggregate of \$2,000,000.

OTHER REQUIREMENTS

- G.** All policy(ies) required above (except worker's compensation and employers liability) must include Railroad as "Additional Insured" using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage). The coverage provided to Railroad as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26, and CA 20 48 provide coverage for Railroad's negligence whether sole or partial, active or passive, and shall not be limited by Contractor's liability under the indemnity provisions of this Agreement.
- H.** Punitive damages exclusion, if any, must be deleted (and the deletion indicated on the certificate of insurance), unless the law governing this Agreement prohibits all punitive damages that might arise under this Agreement.
- I.** Contractor waives all rights of recovery, and its insurers also waive all rights of subrogation of damages against Railroad and its agents, officers, directors and employees. This waiver must be stated on the certificate of insurance.
- J.** Prior to commencing the work, Contractor shall furnish Railroad with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements in this Agreement.
- K.** All insurance policies must be written by a reputable insurance company acceptable to Railroad or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the state where the work is being performed.
- L.** The fact that insurance is obtained by Contractor or by Railroad on behalf of Contractor will not be deemed to release or diminish the liability of Contractor, including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad from Contractor or any third party will not be limited by the amount of the required insurance coverage.



EXHIBIT D

TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

MINIMUM SAFETY REQUIREMENTS

The term "employees" as used herein refer to all employees of Contractor as well as all employees of any subcontractor or agent of Contractor.

I. CLOTHING

- A. All employees of Contractor will be suitably dressed to perform their duties safely and in a manner that will not interfere with their vision, hearing, or free use of their hands or feet.

Specifically, Contractor's employees must wear:

- i. Waist-length shirts with sleeves.
 - ii. Trousers that cover the entire leg. If flare-legged trousers are worn, the trouser bottoms must be tied to prevent catching.
 - iii. Footwear that covers their ankles and has a defined heel. Employees working on bridges are required to wear safety-toed footwear that conforms to the American National Standards Institute (ANSI) and FRA footwear requirements.
- B. Employees shall not wear boots (other than work boots), sandals, canvas-type shoes, or other shoes that have thin soles or heels that are higher than normal.
- C. Employees must not wear loose or ragged clothing, neckties, finger rings, or other loose jewelry while operating or working on machinery.

II. PERSONAL PROTECTIVE EQUIPMENT

Contractor shall require its employees to wear personal protective equipment as specified by Railroad rules, regulations, or recommended or requested by the Railroad Representative.

- i. Hard hat that meets the American National Standard (ANSI) Z89.1 – latest revision. Hard hats should be affixed with Contractor's company logo or name.
- ii. Eye protection that meets American National Standard (ANSI) for occupational and educational eye and face protection, Z87.1 – latest revision. Additional eye protection must be provided to meet specific job situations such as welding, grinding, etc.
- iii. Hearing protection, which affords enough attenuation to give protection from noise levels that will be occurring on the job site. Hearing protection, in the form of plugs or muffs, must be worn when employees are within:
 - 100 feet of a locomotive or roadway/work equipment
 - 15 feet of power operated tools
 - 150 feet of jet blowers or pile drivers
 - 150 feet of retarders in use (when within 10 feet, employees must wear dual ear protection – plugs and muffs)
- iv. Other types of personal protective equipment, such as respirators, fall protection equipment, and face shields, must be worn as recommended or requested by the Railroad Representative.

III. ON TRACK SAFETY

Contractor is responsible for compliance with the Federal Railroad Administration's Roadway Worker Protection regulations – 49CFR214, Subpart C and Railroad's On-Track Safety rules. Under 49CFR214, Subpart C, railroad contractors are responsible for the training of their employees on such regulations. In addition to the instructions contained in Roadway Worker Protection regulations, all employees must:

- i. Maintain a distance of twenty-five (25) feet to any track unless the Railroad Representative is present to authorize movements.



- ii. Wear an orange, reflectorized workwear approved by the Railroad Representative.
- iii. Participate in a job briefing that will specify the type of On-Track Safety for the type of work being performed. Contractor must take special note of limits of track authority, which tracks may or may not be fouled, and clearing the track. Contractor will also receive special instructions relating to the work zone around machines and minimum distances between machines while working or traveling.

IV. EQUIPMENT

- A. It is the responsibility of Contractor to ensure that all equipment is in a safe condition to operate. If, in the opinion of the Railroad Representative, any of Contractor's equipment is unsafe for use, Contractor shall remove such equipment from Railroad's property. In addition, Contractor must ensure that the operators of all equipment are properly trained and competent in the safe operation of the equipment. In addition, operators must be:
 - i. Familiar and comply with Railroad's rules on lockout/tagout of equipment.
 - ii. Trained in and comply with the applicable operating rules if operating any hy-rail equipment on-track.
 - iii. Trained in and comply with the applicable air brake rules if operating any equipment that moves rail cars or any other railbound equipment.
- B. All self-propelled equipment must be equipped with a first-aid kit, fire extinguisher, and audible back-up warning device.
- C. Unless otherwise authorized by the Railroad Representative, all equipment must be parked a minimum of twenty-five (25) feet from any track. Before leaving any equipment unattended, the operator must stop the engine and properly secure the equipment against movement.
- D. Cranes must be equipped with three orange cones that will be used to mark the working area of the crane and the minimum clearances to overhead powerlines.

V. GENERAL SAFETY REQUIREMENTS

- A. Contractor shall ensure that all waste is properly disposed of in accordance with applicable federal and state regulations.
- B. Contractor shall ensure that all employees participate in and comply with a job briefing conducted by the Railroad Representative, if applicable. During this briefing, the Railroad Representative will specify safe work procedures, (including On-Track Safety) and the potential hazards of the job. If any employee has any questions or concerns about the work, the employee must voice them during the job briefing. Additional job briefings will be conducted during the work as conditions, work procedures, or personnel change.
- C. All track work performed by Contractor meets the minimum safety requirements established by the Federal Railroad Administration's Track Safety Standards 49CFR213.
- D. All employees comply with the following safety procedures when working around any railroad track:
 - i. Always be on the alert for moving equipment. Employees must always expect movement on any track, at any time, in either direction.
 - ii. Do not step or walk on the top of the rail, frog, switches, guard rails, or other track components.
 - iii. In passing around the ends of standing cars, engines, roadway machines or work equipment, leave at least 20 feet between yourself and the end of the equipment. Do not go between pieces of equipment if the opening is less than one car length (50 feet).
 - iv. Avoid walking or standing on a track unless so authorized by the employee in charge.
 - v. Before stepping over or crossing tracks, look in both directions first.
 - vi. Do not sit on, lie under, or cross between cars except as required in the performance of your duties and only when track and equipment have been protected against movement.
- E. All employees must comply with all federal and state regulations concerning workplace safety.

UNION PACIFIC RAILROAD

1400 Douglas Street Omaha, Nebraska 68179
Mail Stop 1690
Danielle Allen
danielleallen@up.com
402-544-8020

AUDIT 287960

MAINTENANCE CONSENT LETTER

February 6, 2018
Folder No.: 3076-70

ERIC MOCKO
CITY OF GRAND JUNCTION
333 WEST AVENUE, BUILDING C
GRAND JUNCTION, CO 81501

Dear Mr. Mocko:

RE: Proposed asphalt overlay work at the existing River Road at-grade public road crossing at or near Railroad Mile Post 454.14 on the Green River Sub., at or near Grand Junction, Mesa County, Colorado

Please refer to an application notifying the Railroad Company of the above subject project regarding the City of Grand Junction's ("Public Entity's") intention to install an asphalt overlay at the existing River Road, at-grade public road crossing at Railroad Mile Post 454.14 (DOT 254295W) on the Green River Subdivision in or near Grand Junction, Mesa County, Colorado. This letter serves as an acceptance of the proposed work to be performed. Attached hereto is a Railroad Location Print marked **Exhibit A**, which respectively illustrates the general location of the public road crossing work.

This consent is provided as a courtesy to the Public Entity in order for it to conduct simple surface maintenance to the CR-G, at-grade public road crossing as an agreement could not be located for this public road crossing. The Railroad Company maintains the gates through this public road crossing. The Public Entity should also contact and obtain approval from the industry track owner at this location.

If a contractor is to do any of the work performed on or about the Railroad Company's trackage (including substantial maintenance and repair work), then the Public Entity shall require its contractor to execute the Railroad Company's form Contractor's Right of Entry Agreement. Public Entity acknowledges receipt of a copy of Contractor's Right of Entry Agreement and understanding its term, provisions and requirements, and will inform its contractor of the need to execute the Agreement. Under no circumstances will Public Entity's contractor be allowed on or



about the Railroad Company's trackage without first executing the Contractor's Right of Entry Agreement.

In order to protect the property as well as for safety reasons, it is imperative that the Public Entity notify the Railroad Company's Representative(s) at least 48-hours in advance prior to the proposed work to be conducted at the subject crossing. The following information is furnished with regard to the local contact for the Railroad Company:

Telecommunications ("Call Before You Dig"): 1-800-336-9193

Lance Kippen
Analyst Industry & Public Proj
303-405-5039
lkippen@up.com

Regards,

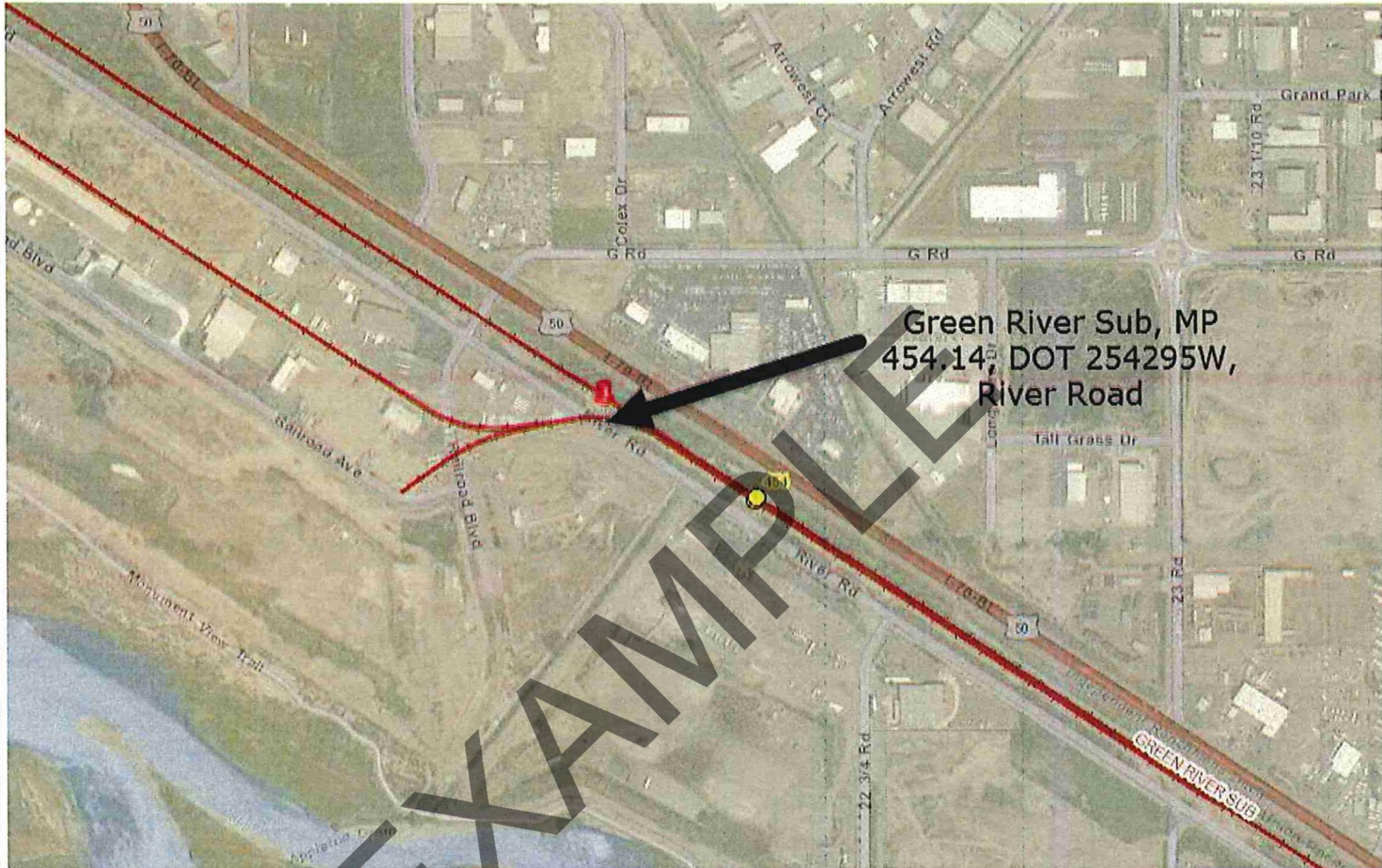


Danielle Allen
Manager-Real Estate

EXAMPLE



EXHIBIT "A"
RAILROAD LOCATION PRINT
ACCOMPANYING A
MAINTENANCE CONSENT/CONTRACTOR'S
RIGHT OF ENTRY AGREEMENT



UNION PACIFIC RAILROAD COMPANY

GREEN RIVER SUB
RAILROAD MILE POSTS 454.14
GRAND JUNCTION, MESA COUNTY, COLORADO

To accompany an agreement with the
CITY OF GRAND JUNCTION and/or CONTRACTORS

UPRR Folder No. 3076-70 Date: February 6, 2018

WARNING

IN ALL OCCASIONS, U.P. COMMUNICATIONS DEPARTMENT MUST BE CONTACTED IN ADVANCE OF ANY WORK TO DETERMINE EXISTENCE AND LOCATION OF FIBER OPTIC CABLE.

PHONE: 1-(800) 336-9193



Folder No.: 3076-70

UPRR Audit No.:

CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

THIS AGREEMENT is made and entered into as of the ____ day of _____, 20__, by and between **UNION PACIFIC RAILROAD COMPANY**, a Delaware corporation ("Railroad"); and

(Name of Contractor)

a _____ corporation ("Contractor").

RECITALS:

Contractor has been hired by the City of Grand Junction ("Public Entity") to perform asphalt overlay work at the existing River Road at-grade public road crossing with all or a portion of such work to be performed on property of Railroad in the vicinity of the Railroad's Mile Post 454.14 (DOT 254295W) on its Green River Subdivision in or near Grand Junction, Mesa County, Colorado, as such location is in the general location shown on the Railroad Location Print marked **Exhibit A**, attached hereto and hereby made a part hereof, which work is the subject of a contract dated February 6, 2018, between the Railroad and the Public Entity.

The Railroad is willing to permit the Contractor to perform the work described above at the location described above subject to the terms and conditions contained in this Agreement

AGREEMENT:

NOW, THEREFORE, it is mutually agreed by and between Railroad and Contractor, as follows:

ARTICLE 1 - DEFINITION OF CONTRACTOR.

For purposes of this Agreement, all references in this agreement to Contractor shall include Contractor's contractors, subcontractors, officers, agents and employees, and others acting under its or their authority.

ARTICLE 2 - RIGHT GRANTED; PURPOSE.

Railroad hereby grants to Contractor the right, during the term hereinafter stated and upon and subject to each and all of the terms, provisions and conditions herein contained, to enter upon and have ingress to and egress from the property described in the Recitals for the purpose of performing the work described in the Recitals above. The right herein granted to Contractor is limited to those portions of Railroad's property specifically described herein, or as designated by the Railroad Representative named in Article 4.



ARTICLE 3 - TERMS AND CONDITIONS CONTAINED IN EXHIBITS B, C & D.

The General Terms and Conditions contained in **Exhibit B**, the Insurance Requirements contained in **Exhibit C**, and the Minimum Safety Requirements contained in **Exhibit D**, each attached hereto, are hereby made a part of this Agreement.

ARTICLE 4 - ALL EXPENSES TO BE BORNE BY CONTRACTOR; RAILROAD REPRESENTATIVE.

- A. Contractor shall bear any and all costs and expenses associated with any work performed by Contractor, or any costs or expenses incurred by Railroad relating to this Agreement.
- B. Contractor shall coordinate all of its work with the following Railroad representative or his or her duly authorized representative (the "Railroad Representative"):

Seth Frazee
Asst Mgr Track Mntce
970-248-4254
skfrazee@up.com

- C. Contractor, at its own expense, shall adequately police and supervise all work to be performed by Contractor and shall ensure that such work is performed in a safe manner as set forth in Section 7 of **Exhibit B**. The responsibility of Contractor for safe conduct and adequate policing and supervision of Contractor's work shall not be lessened or otherwise affected by Railroad's approval of plans and specifications involving the work, or by Railroad's collaboration in performance of any work, or by the presence at the work site of a Railroad Representative, or by compliance by Contractor with any requests or recommendations made by Railroad Representative.

ARTICLE 5 - SCHEDULE OF WORK ON A MONTHLY BASIS.

The Contractor, at its expense, shall provide on a monthly basis a detailed schedule of work to the Railroad Representative named in Article 4B above. The reports shall start at the execution of this Agreement and continue until this Agreement is terminated as provided in this Agreement or until the Contractor has completed all work on Railroad's property.

ARTICLE 6 - TERM; TERMINATION.

- A. The grant of right herein made to Contractor shall commence on the date of this Agreement, and continue until _____, unless sooner terminated as herein
(Expiration Date)



provided, or at such time as Contractor has completed its work on Railroad's property, whichever is earlier. Contractor agrees to notify the Railroad Representative in writing when it has completed its work on Railroad's property.

- B. This Agreement may be terminated by either party on ten (10) days written notice to the other party.

ARTICLE 7 - CERTIFICATE OF INSURANCE.

- A. Before commencing any work, Contractor will provide Railroad with the (i) insurance binders, policies, certificates and endorsements set forth in **Exhibit C** of this Agreement, and (ii) the insurance endorsements obtained by each subcontractor as required under Section 12 of **Exhibit B** of this Agreement.
- B. All insurance correspondence, binders, policies, certificates and endorsements shall be sent to:

*Union Pacific Railroad Company
Real Estate Department
1400 Douglas Street, MS 1690
Omaha, NE 68179-1690
UPRR Folder No. 3076-70*

ARTICLE 8 - DISMISSAL OF CONTRACTOR'S EMPLOYEE.

At the request of Railroad, Contractor shall remove from Railroad's property any employee of Contractor who fails to conform to the instructions of the Railroad Representative in connection with the work on Railroad's property, and any right of Contractor shall be suspended until such removal has occurred. Contractor shall indemnify Railroad against any claims arising from the removal of any such employee from Railroad's property.

ARTICLE 9 - CROSSINGS.

No additional vehicular crossings (including temporary haul roads) or pedestrian crossings over Railroad's trackage shall be installed or used by Contractor without the prior written permission of Railroad.

ARTICLE 10 - CROSSINGS; COMPLIANCE WITH MUTCD AND FRA GUIDELINES.

- A. No additional vehicular crossings (including temporary haul roads) or pedestrian crossings over Railroad's trackage shall be installed or used by Contractor without the prior written permission of Railroad.
- B. Any permanent or temporary changes, including temporary traffic control, to crossings must conform to the Manual of Uniform Traffic Control Devices (MUTCD) and any applicable Federal Railroad Administration rules, regulations and guidelines, and must be reviewed by the Railroad prior to any changes being implemented. In the event the Railroad is found to be out of compliance with federal safety regulations due to the Contractor's modifications, negligence, or any other reason arising from the Contractor's presence on the Railroad's property, the Contractor agrees to assume liability for any civil penalties imposed upon the Railroad for such



noncompliance.

ARTICLE 11 - EXPLOSIVES.

Explosives or other highly flammable substances shall not be stored or used on Railroad's property without the prior written approval of Railroad.

IN WITNESS WHEREOF, the parties hereto have duly executed this agreement in duplicate as of the date first herein written.

UNION PACIFIC RAILROAD COMPANY
(Federal Tax ID #94-6001323)

By: _____
Danelle Allen
Manager-Real Estate

(Name of Contractor)

By _____

Printed Name: _____

Title: _____

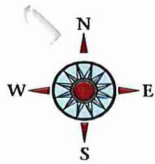
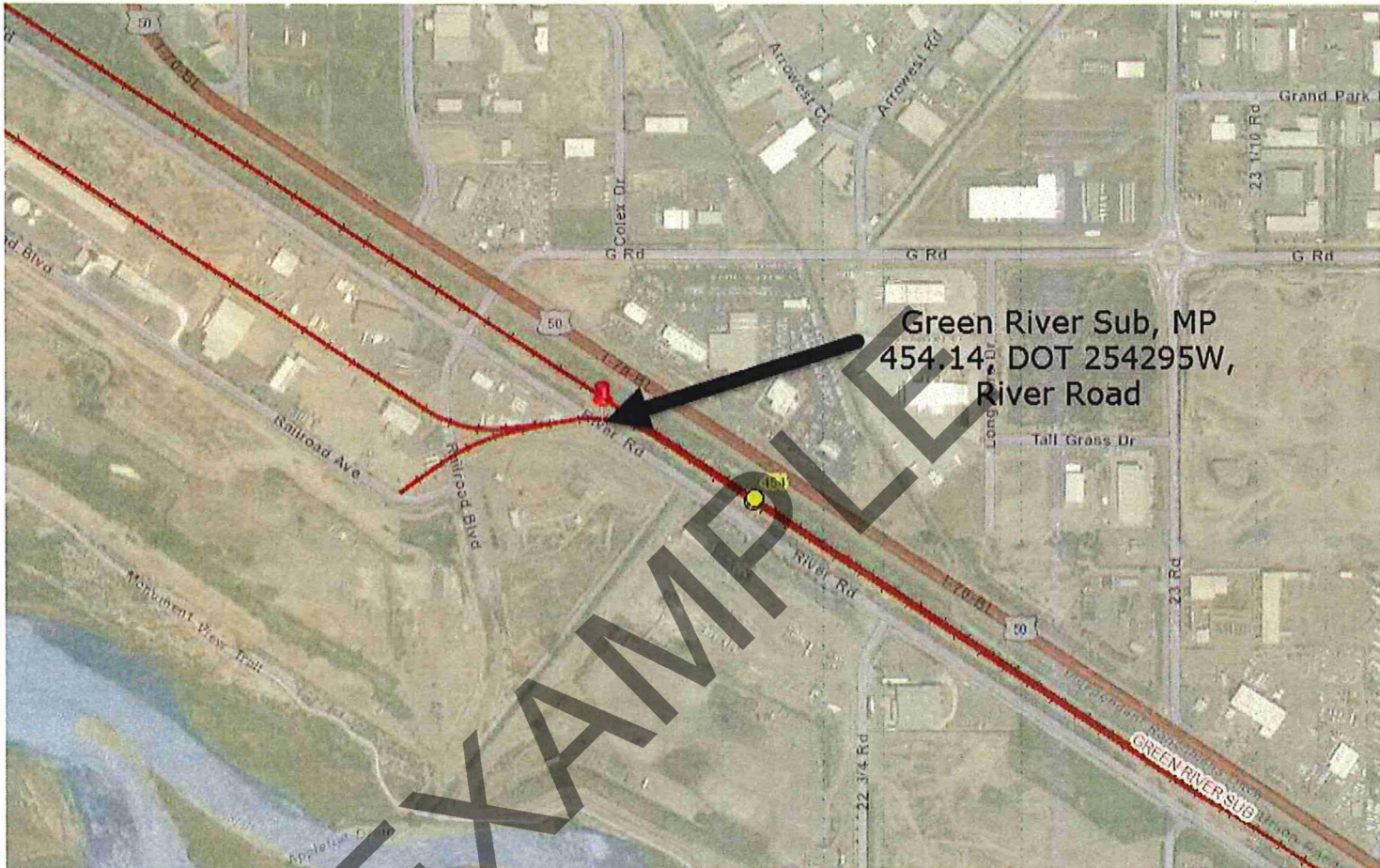


EXHIBIT "A"
RAILROAD LOCATION PRINT
ACCOMPANYING A
MAINTENANCE CONSENT/CONTRACTOR'S
RIGHT OF ENTRY AGREEMENT



UNION PACIFIC RAILROAD COMPANY

GREEN RIVER SUB
RAILROAD MILE POSTS 454.14
GRAND JUNCTION, MESA COUNTY, COLORADO

To accompany an agreement with the
CITY OF GRAND JUNCTION and/or CONTRACTORS

UPRR Folder No. 3076-70 Date: February 6, 2018

WARNING

IN ALL OCCASIONS, U.P. COMMUNICATIONS DEPARTMENT MUST BE CONTACTED IN ADVANCE OF
ANY WORK TO DETERMINE EXISTENCE AND LOCATION OF FIBER OPTIC CABLE.

PHONE: 1-(800) 336-9193

EXHIBIT B

TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

GENERAL TERMS & CONDITIONS

Section 1. NOTICE OF COMMENCEMENT OF WORK - FLAGGING.

- A. Contractor agrees to notify the Railroad Representative at least thirty (30) working days in advance of Contractor commencing its work and at least ten (10) working days in advance of proposed performance of any work by Contractor in which any person or equipment will be within twenty-five (25) feet of any track, or will be near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach to within twenty-five (25) feet of any track. No work of any kind shall be performed, and no person, equipment, machinery, tool(s), material(s), vehicle(s), or thing(s) shall be located, operated, placed, or stored within twenty-five (25) feet of any of Railroad's track(s) at any time, for any reason, unless and until a Railroad flagman is provided to watch for trains. Upon receipt of such ten (10)-day notice, the Railroad Representative will determine and inform Contractor whether a flagman need be present and whether Contractor needs to implement any special protective or safety measures. If flagging or other special protective or safety measures are performed by Railroad, Railroad will bill Contractor for such expenses incurred by Railroad, unless Railroad and a federal, state or local governmental entity have agreed that Railroad is to bill such expenses to the federal, state or local governmental entity. If Railroad will be sending the bills to Contractor, Contractor shall pay such bills within thirty (30) days of Contractor's receipt of billing. If Railroad performs any flagging, or other special protective or safety measures are performed by Railroad, Contractor agrees that Contractor is not relieved of any of its responsibilities or liabilities set forth in this Agreement.
- B. The rate of pay per hour for each flagman will be the prevailing hourly rate in effect for an eight-hour day for the class of flagmen used during regularly assigned hours and overtime in accordance with Labor Agreements and Schedules in effect at the time the work is performed. In addition to the cost of such labor, a composite charge for vacation, holiday, health and welfare, supplemental sickness, Railroad Retirement and unemployment compensation, supplemental pension, Employees Liability and Property Damage and Administration will be included, computed on actual payroll. The composite charge will be the prevailing composite charge in effect at the time the work is performed. One and one-half times the current hourly rate is paid for overtime, Saturdays and Sundays, and two and one-half times current hourly rate for holidays. Wage rates are subject to change, at any time, by law or by agreement between Railroad and its employees, and may be retroactive as a result of negotiations or a ruling of an authorized governmental agency. Additional charges on labor are also subject to change. If the wage rate or additional charges are changed, Contractor (or the governmental entity, as applicable) shall pay on the basis of the new rates and charges.
- C. Reimbursement to Railroad will be required covering the full eight-hour day during which any flagman is furnished, unless the flagman can be assigned to other Railroad work during a portion of such day, in which event reimbursement will not be required for the portion of the day during which the flagman is engaged in other Railroad work. Reimbursement will also be required for any day not actually worked by the flagman following the flagman's assignment to work on the project for which Railroad is required to pay the flagman and which could not reasonably be avoided by Railroad by assignment of such flagman to other work, even though Contractor may not be working during such time. When it becomes necessary for Railroad to bulletin and assign an employee to a flagging position in compliance with union collective bargaining agreements, Contractor must provide Railroad a minimum of five (5) days notice prior to the cessation of the need for a flagman. If five (5) days notice of cessation is not given, Contractor will still be required to pay flagging charges for the five (5) day notice period required by union agreement to be given to the employee, even though flagging is not required for that period. An additional ten (10) days notice must then be given to Railroad if flagging services are needed again after such five day cessation notice has been given to Railroad.

Section 2. LIMITATION AND SUBORDINATION OF RIGHTS GRANTED

- A. The foregoing grant of right is subject and subordinate to the prior and continuing right and obligation of the Railroad to use and maintain its entire property including the right and power of Railroad to construct, maintain, repair, renew, use, operate, change, modify or relocate railroad tracks, roadways, signal, communication, fiber optics, or other wirelines, pipelines and other facilities upon, along or across any or all parts of its property, all or any of which may be freely done at any time or times by Railroad without liability to Contractor or to any other party for compensation or damages.

- B. The foregoing grant is also subject to all outstanding superior rights (including those in favor of licensees and lessees of Railroad's property, and others) and the right of Railroad to renew and extend the same, and is made without covenant of title or for quiet enjoyment.

Section 3. NO INTERFERENCE WITH OPERATIONS OF RAILROAD AND ITS TENANTS.

- A. Contractor shall conduct its operations so as not to interfere with the continuous and uninterrupted use and operation of the railroad tracks and property of Railroad, including without limitation, the operations of Railroad's lessees, licensees or others, unless specifically authorized in advance by the Railroad Representative. Nothing shall be done or permitted to be done by Contractor at any time that would in any manner impair the safety of such operations. When not in use, Contractor's machinery and materials shall be kept at least fifty (50) feet from the centerline of Railroad's nearest track, and there shall be no vehicular crossings of Railroads tracks except at existing open public crossings.
- B. Operations of Railroad and work performed by Railroad personnel and delays in the work to be performed by Contractor caused by such railroad operations and work are expected by Contractor, and Contractor agrees that Railroad shall have no liability to Contractor, or any other person or entity for any such delays. The Contractor shall coordinate its activities with those of Railroad and third parties so as to avoid interference with railroad operations. The safe operation of Railroad train movements and other activities by Railroad takes precedence over any work to be performed by Contractor.

Section 4. LIENS.

Contractor shall pay in full all persons who perform labor or provide materials for the work to be performed by Contractor. Contractor shall not create, permit or suffer any mechanic's or materialmen's liens of any kind or nature to be created or enforced against any property of Railroad for any such work performed. Contractor shall indemnify and hold harmless Railroad from and against any and all liens, claims, demands, costs or expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials furnished. If Contractor fails to promptly cause any lien to be released of record, Railroad may, at its election, discharge the lien or claim of lien at Contractor's expense.

Section 5. PROTECTION OF FIBER OPTIC CABLE SYSTEMS.

- A. Fiber optic cable systems may be buried on Railroad's property. Protection of the fiber optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. Contractor shall telephone Railroad during normal business hours (7:00 a.m. to 9:00 p.m. Central Time, Monday through Friday, except holidays) at 1-800-336-9193 (also a 24-hour, 7-day number for emergency calls) to determine if fiber optic cable is buried anywhere on Railroad's property to be used by Contractor. If it is, Contractor will telephone the telecommunications company(ies) involved, make arrangements for a cable locator and, if applicable, for relocation or other protection of the fiber optic cable. Contractor shall not commence any work until all such protection or relocation (if applicable) has been accomplished.
- B. In addition to other indemnity provisions in this Agreement, Contractor shall indemnify, defend and hold Railroad harmless from and against all costs, liability and expense whatsoever (including, without limitation, attorneys' fees, court costs and expenses) arising out of any act or omission of Contractor, its agents and/or employees, that causes or contributes to (1) any damage to or destruction of any telecommunications system on Railroad's property, and/or (2) any injury to or death of any person employed by or on behalf of any telecommunications company, and/or its contractor, agents and/or employees, on Railroad's property. Contractor shall not have or seek recourse against Railroad for any claim or cause of action for alleged loss of profits or revenue or loss of service or other consequential damage to a telecommunication company using Railroad's property or a customer or user of services of the fiber optic cable on Railroad's property.

Section 6. PERMITS - COMPLIANCE WITH LAWS.

In the prosecution of the work covered by this Agreement, Contractor shall secure any and all necessary permits and shall comply with all applicable federal, state and local laws, regulations and enactments affecting the work including, without limitation, all applicable Federal Railroad Administration regulations.

Section 7. SAFETY.

- A. Safety of personnel, property, rail operations and the public is of paramount importance in the prosecution of the work performed by Contractor. Contractor shall be responsible for initiating, maintaining and supervising all safety, operations and programs in connection with the work. Contractor shall at a minimum comply with Railroad's safety standards listed in

Exhibit D, hereto attached, to ensure uniformity with the safety standards followed by Railroad's own forces. As a part of Contractor's safety responsibilities, Contractor shall notify Railroad if Contractor determines that any of Railroad's safety standards are contrary to good safety practices. Contractor shall furnish copies of **Exhibit D** to each of its employees before they enter the job site.

- B. Without limitation of the provisions of paragraph A above, Contractor shall keep the job site free from safety and health hazards and ensure that its employees are competent and adequately trained in all safety and health aspects of the job.
- C. Contractor shall have proper first aid supplies available on the job site so that prompt first aid services may be provided to any person injured on the job site. Contractor shall promptly notify Railroad of any U.S. Occupational Safety and Health Administration reportable injuries. Contractor shall have a nondelegable duty to control its employees while they are on the job site or any other property of Railroad, and to be certain they do not use, be under the influence of, or have in their possession any alcoholic beverage, drug or other substance that may inhibit the safe performance of any work.
- D. If and when requested by Railroad, Contractor shall deliver to Railroad a copy of Contractor's safety plan for conducting the work (the "Safety Plan"). Railroad shall have the right, but not the obligation, to require Contractor to correct any deficiencies in the Safety Plan. The terms of this Agreement shall control if there are any inconsistencies between this Agreement and the Safety Plan.

Section 8. INDEMNITY.

- A. To the extent not prohibited by applicable statute, Contractor shall indemnify, defend and hold harmless Railroad, its affiliates, and its and their officers, agents and employees (individually an "Indemnified Party" or collectively "Indemnified Parties") from and against any and all loss, damage, injury, liability, claim, demand, cost or expense (including, without limitation, attorney's, consultant's and expert's fees, and court costs), fine or penalty (collectively, "Loss") incurred by any person (including, without limitation, any Indemnified Party, Contractor, or any employee of Contractor or of any Indemnified Party) arising out of or in any manner connected with (i) any work performed by Contractor, or (ii) any act or omission of Contractor, its officers, agents or employees, or (iii) any breach of this Agreement by Contractor.
- B. The right to indemnity under this Section 8 shall accrue upon occurrence of the event giving rise to the Loss, and shall apply regardless of any negligence or strict liability of any Indemnified Party, except where the Loss is caused by the sole active negligence of an Indemnified Party as established by the final judgment of a court of competent jurisdiction. The sole active negligence of any Indemnified Party shall not bar the recovery of any other Indemnified Party.
- C. Contractor expressly and specifically assumes potential liability under this Section 8 for claims or actions brought by Contractor's own employees. Contractor waives any immunity it may have under worker's compensation or industrial insurance acts to indemnify the Indemnified Parties under this Section 8. Contractor acknowledges that this waiver was mutually negotiated by the parties hereto.
- D. No court or jury findings in any employee's suit pursuant to any worker's compensation act or the Federal Employers' Liability Act against a party to this Agreement may be relied upon or used by Contractor in any attempt to assert liability against any Indemnified Party.
- E. The provisions of this Section 8 shall survive the completion of any work performed by Contractor or the termination or expiration of this Agreement. In no event shall this Section 8 or any other provision of this Agreement be deemed to limit any liability Contractor may have to any Indemnified Party by statute or under common law.

Section 9. RESTORATION OF PROPERTY.

In the event Railroad authorizes Contractor to take down any fence of Railroad or in any manner move or disturb any of the other property of Railroad in connection with the work to be performed by Contractor, then in that event Contractor shall, as soon as possible and at Contractor's sole expense, restore such fence and other property to the same condition as the same were in before such fence was taken down or such other property was moved or disturbed. Contractor shall remove all of Contractor's tools, equipment, rubbish and other materials from Railroad's property promptly upon completion of the work, restoring Railroad's property to the same state and condition as when Contractor entered thereon.

Section 10. WAIVER OF DEFAULT.

Waiver by Railroad of any breach or default of any condition, covenant or agreement herein contained to be kept, observed and performed by Contractor shall in no way impair the right of Railroad to avail itself of any remedy for any subsequent breach or default.

Section 11. MODIFICATION - ENTIRE AGREEMENT.

No modification of this Agreement shall be effective unless made in writing and signed by Contractor and Railroad. This Agreement and the exhibits attached hereto and made a part hereof constitute the entire understanding between Contractor and Railroad and cancel and supersede any prior negotiations, understandings or agreements, whether written or oral, with respect to the work to be performed by Contractor.

Section 12. ASSIGNMENT - SUBCONTRACTING.

Contractor shall not assign or subcontract this Agreement, or any interest therein, without the written consent of the Railroad. Contractor shall be responsible for the acts and omissions of all subcontractors. Before Contractor commences any work, the Contractor shall, except to the extent prohibited by law; (1) require each of its subcontractors to include the Contractor as "Additional Insured" in the subcontractor's Commercial General Liability policy and Business Automobile policies with respect to all liabilities arising out of the subcontractor's performance of work on behalf of the Contractor by endorsing these policies with ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage; (2) require each of its subcontractors to endorse their Commercial General Liability Policy with "Contractual Liability Railroads" ISO Form CG 24 17 10 01 (or a substitute form providing equivalent coverage) for the job site; and (3) require each of its subcontractors to endorse their Business Automobile Policy with "Coverage For Certain Operations In Connection With Railroads" ISO Form CA 20 70 10 01 (or a substitute form providing equivalent coverage) for the job site.

EXAMPLE

EXHIBIT C

TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

INSURANCE REQUIREMENTS

Contractor shall, at its sole cost and expense, procure and maintain during the course of the Project and until all Project work on Railroad's property has been completed and the Contractor has removed all equipment and materials from Railroad's property and has cleaned and restored Railroad's property to Railroad's satisfaction, the following insurance coverage:

- A. COMMERCIAL GENERAL LIABILITY INSURANCE.** Commercial general liability (CGL) with a limit of not less than \$5,000,000 each occurrence and an aggregate limit of not less than \$10,000,000. CGL insurance must be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage).

The policy must also contain the following endorsement, which must be stated on the certificate of insurance:

- Contractual Liability Railroads ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Railroad Company Property" as the Designated Job Site.
- Designated Construction Project(s) General Aggregate Limit ISO Form CG 25 03 03 97 (or a substitute form providing equivalent coverage) showing the project on the form schedule.

- B. BUSINESS AUTOMOBILE COVERAGE INSURANCE.** Business auto coverage written on ISO form CA 00 01 10 01 (or a substitute form providing equivalent liability coverage) with a combined single limit of not less \$5,000,000 for each accident and coverage must include liability arising out of any auto (including owned, hired and non-owned autos).

The policy must contain the following endorsements, which must be stated on the certificate of insurance:

- Coverage For Certain Operations In Connection With Railroads ISO form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Property" as the Designated Job Site.
- Motor Carrier Act Endorsement - Hazardous materials clean up (MCS-90) if required by law.

- C. WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY INSURANCE.** Coverage must include but not be limited to:

- Contractor's statutory liability under the workers' compensation laws of the state where the work is being performed.
- Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 disease policy limit \$500,000 each employee.

If Contractor is self-insured, evidence of state approval and excess workers compensation coverage must be provided.

Coverage must include liability arising out of the U. S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.

The policy must contain the following endorsement, which must be stated on the certificate of insurance:

- Alternate Employer endorsement ISO form WC 00 03 01 A (or a substitute form providing equivalent coverage) showing Railroad in the schedule as the alternate employer (or a substitute form providing equivalent coverage).

- D. RAILROAD PROTECTIVE LIABILITY INSURANCE.** Contractor must maintain Railroad Protective Liability insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of Railroad as named insured, with a limit of not less than \$2,000,000 per occurrence and an aggregate of \$6,000,000. A binder stating the policy is in place must be submitted to Railroad before the work may be commenced and until the original policy is forwarded to Railroad.

- E. UMBRELLA OR EXCESS INSURANCE.** If Contractor utilizes umbrella or excess policies, these policies must "follow form" and afford no less coverage than the primary policy.

- F. POLLUTION LIABILITY INSURANCE.** Pollution liability coverage must be written on ISO form Pollution Liability Coverage Form Designated Sites CG 00 39 12 04 (or a substitute form providing equivalent liability coverage), with limits of at least

\$5,000,000 per occurrence and an aggregate limit of \$10,000,000.

If the scope of work as defined in this Agreement includes the disposal of any hazardous or non-hazardous materials from the job site, Contractor must furnish to Railroad evidence of pollution legal liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting the materials, with coverage in minimum amounts of \$1,000,000 per loss, and an annual aggregate of \$2,000,000.

OTHER REQUIREMENTS

- G.** All policy(ies) required above (except worker's compensation and employers liability) must include Railroad as "Additional Insured" using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage). The coverage provided to Railroad as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26, and CA 20 48 provide coverage for Railroad's negligence whether sole or partial, active or passive, and shall not be limited by Contractor's liability under the indemnity provisions of this Agreement.
- H.** Punitive damages exclusion, if any, must be deleted (and the deletion indicated on the certificate of insurance), unless the law governing this Agreement prohibits all punitive damages that might arise under this Agreement.
- I.** Contractor waives all rights of recovery, and its insurers also waive all rights of subrogation of damages against Railroad and its agents, officers, directors and employees. This waiver must be stated on the certificate of insurance.
- J.** Prior to commencing the work, Contractor shall furnish Railroad with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements in this Agreement.
- K.** All insurance policies must be written by a reputable insurance company acceptable to Railroad or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the state where the work is being performed.
- L.** The fact that insurance is obtained by Contractor or by Railroad on behalf of Contractor will not be deemed to release or diminish the liability of Contractor, including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad from Contractor or any third party will not be limited by the amount of the required insurance coverage.

EXHIBIT D

TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

MINIMUM SAFETY REQUIREMENTS

The term "employees" as used herein refer to all employees of Contractor as well as all employees of any subcontractor or agent of Contractor.

I. CLOTHING

- A. All employees of Contractor will be suitably dressed to perform their duties safely and in a manner that will not interfere with their vision, hearing, or free use of their hands or feet.

Specifically, Contractor's employees must wear:

- i. Waist-length shirts with sleeves.
 - ii. Trousers that cover the entire leg. If flare-legged trousers are worn, the trouser bottoms must be tied to prevent catching.
 - iii. Footwear that covers their ankles and has a defined heel. Employees working on bridges are required to wear safety-toed footwear that conforms to the American National Standards Institute (ANSI) and FRA footwear requirements.
- B. Employees shall not wear boots (other than work boots), sandals, canvas-type shoes, or other shoes that have thin soles or heels that are higher than normal.
- C. Employees must not wear loose or ragged clothing, neckties, finger rings, or other loose jewelry while operating or working on machinery.

II. PERSONAL PROTECTIVE EQUIPMENT

Contractor shall require its employees to wear personal protective equipment as specified by Railroad rules, regulations, or recommended or requested by the Railroad Representative.

- i. Hard hat that meets the American National Standard (ANSI) Z89.1 – latest revision. Hard hats should be affixed with Contractor's company logo or name.
- ii. Eye protection that meets American National Standard (ANSI) for occupational and educational eye and face protection, Z87.1 – latest revision. Additional eye protection must be provided to meet specific job situations such as welding, grinding, etc.
- iii. Hearing protection, which affords enough attenuation to give protection from noise levels that will be occurring on the job site. Hearing protection, in the form of plugs or muffs, must be worn when employees are within:
 - 100 feet of a locomotive or roadway/work equipment
 - 15 feet of power operated tools
 - 150 feet of jet blowers or pile drivers
 - 150 feet of retarders in use (when within 10 feet, employees must wear dual ear protection – plugs and muffs)
- iv. Other types of personal protective equipment, such as respirators, fall protection equipment, and face shields, must be worn as recommended or requested by the Railroad Representative.

III. ON TRACK SAFETY

Contractor is responsible for compliance with the Federal Railroad Administration's Roadway Worker Protection regulations – 49CFR214, Subpart C and Railroad's On-Track Safety rules. Under 49CFR214, Subpart C, railroad contractors are responsible for the training of their employees on such regulations. In addition to the instructions contained in Roadway Worker Protection regulations, all employees must:

- i. Maintain a distance of twenty-five (25) feet to any track unless the Railroad Representative is present to authorize movements.



- ii. Wear an orange, reflectorized workwear approved by the Railroad Representative.
- iii. Participate in a job briefing that will specify the type of On-Track Safety for the type of work being performed. Contractor must take special note of limits of track authority, which tracks may or may not be fouled, and clearing the track. Contractor will also receive special instructions relating to the work zone around machines and minimum distances between machines while working or traveling.

IV. EQUIPMENT

- A. It is the responsibility of Contractor to ensure that all equipment is in a safe condition to operate. If, in the opinion of the Railroad Representative, any of Contractor's equipment is unsafe for use, Contractor shall remove such equipment from Railroad's property. In addition, Contractor must ensure that the operators of all equipment are properly trained and competent in the safe operation of the equipment. In addition, operators must be:
 - i. Familiar and comply with Railroad's rules on lockout/tagout of equipment.
 - ii. Trained in and comply with the applicable operating rules if operating any hy-rail equipment on-track.
 - iii. Trained in and comply with the applicable air brake rules if operating any equipment that moves rail cars or any other railbound equipment.
- B. All self-propelled equipment must be equipped with a first-aid kit, fire extinguisher, and audible back-up warning device.
- C. Unless otherwise authorized by the Railroad Representative, all equipment must be parked a minimum of twenty-five (25) feet from any track. Before leaving any equipment unattended, the operator must stop the engine and properly secure the equipment against movement.
- D. Cranes must be equipped with three orange cones that will be used to mark the working area of the crane and the minimum clearances to overhead powerlines.

V. GENERAL SAFETY REQUIREMENTS

- A. Contractor shall ensure that all waste is properly disposed of in accordance with applicable federal and state regulations.
- B. Contractor shall ensure that all employees participate in and comply with a job briefing conducted by the Railroad Representative, if applicable. During this briefing, the Railroad Representative will specify safe work procedures, (including On-Track Safety) and the potential hazards of the job. If any employee has any questions or concerns about the work, the employee must voice them during the job briefing. Additional job briefings will be conducted during the work as conditions, work procedures, or personnel change.
- C. All track work performed by Contractor meets the minimum safety requirements established by the Federal Railroad Administration's Track Safety Standards 49CFR213.
- D. All employees comply with the following safety procedures when working around any railroad track:
 - i. Always be on the alert for moving equipment. Employees must always expect movement on any track, at any time, in either direction.
 - ii. Do not step or walk on the top of the rail, frog, switches, guard rails, or other track components.
 - iii. In passing around the ends of standing cars, engines, roadway machines or work equipment, leave at least 20 feet between yourself and the end of the equipment. Do not go between pieces of equipment if the opening is less than one car length (50 feet).
 - iv. Avoid walking or standing on a track unless so authorized by the employee in charge.
 - v. Before stepping over or crossing tracks, look in both directions first.
 - vi. Do not sit on, lie under, or cross between cars except as required in the performance of your duties and only when track and equipment have been protected against movement.
- E. All employees must comply with all federal and state regulations concerning workplace safety.

UNION PACIFIC RAILROAD
1400 Douglas Street Omaha, Nebraska 68179
Mail Stop 1690
Danielle Allen
danielleallen@up.com
402-544-8020

AUDIT 287961

MAINTENANCE CONSENT LETTER

February 6, 2018
Folder No.: 3076-44

ERIC MOCKO
CITY OF GRAND JUNCTION
333 WEST AVENUE, BUILDING C
GRAND JUNCTION, CO 81501

Dear Mr. Mocko:

RE: Proposed asphalt overlay work at the existing CR-G at-grade public road crossing at or near Railroad Mile Post 454.27 on the Green River Sub., at or near Grand Junction, Mesa County, Colorado

Please refer to an application notifying the Railroad Company of the above subject project regarding the City of Grand Junction's ("Public Entity's") intention to install an asphalt overlay at the existing CR-G, at-grade public road crossing at Railroad Mile Post 454.27 (DOT 253787Y) on the Green River Subdivision in or near Grand Junction, Mesa County, Colorado. This letter serves as an acceptance of the proposed work to be performed. Attached hereto is a Railroad Location Print marked **Exhibit A**, which respectively illustrates the general location of the public road crossing work.

This consent is provided as a courtesy to the Public Entity in order for it to conduct simple surface maintenance to the CR-G, at-grade public road crossing as an agreement could not be located for this public road crossing. The Public Entity agrees to enter into an agreement for the at-grade public road crossing when future improvement or a reconstruction is requested in the future.

If a contractor is to do any of the work performed on or about the Railroad Company's trackage (including substantial maintenance and repair work), then the Public Entity shall require its contractor to execute the Railroad Company's form Contractor's Right of Entry Agreement. Public Entity acknowledges receipt of a copy of Contractor's Right of Entry Agreement and understanding its term, provisions and requirements, and will inform its contractor of the need to execute the Agreement. Under no circumstances will Public Entity's contractor be allowed on or



about the Railroad Company's trackage without first executing the Contractor's Right of Entry Agreement.

In order to protect the property as well as for safety reasons, it is imperative that the Public Entity notify the Railroad Company's Representative(s) at least 48-hours in advance prior to the proposed work to be conducted at the subject crossing. The following information is furnished with regard to the local contact for the Railroad Company:

Telecommunications ("Call Before You Dig"): 1-800-336-9193

Lance Kippen
Analyst Industry & Public Proj
303-405-5039
lkippen@up.com

Regards,

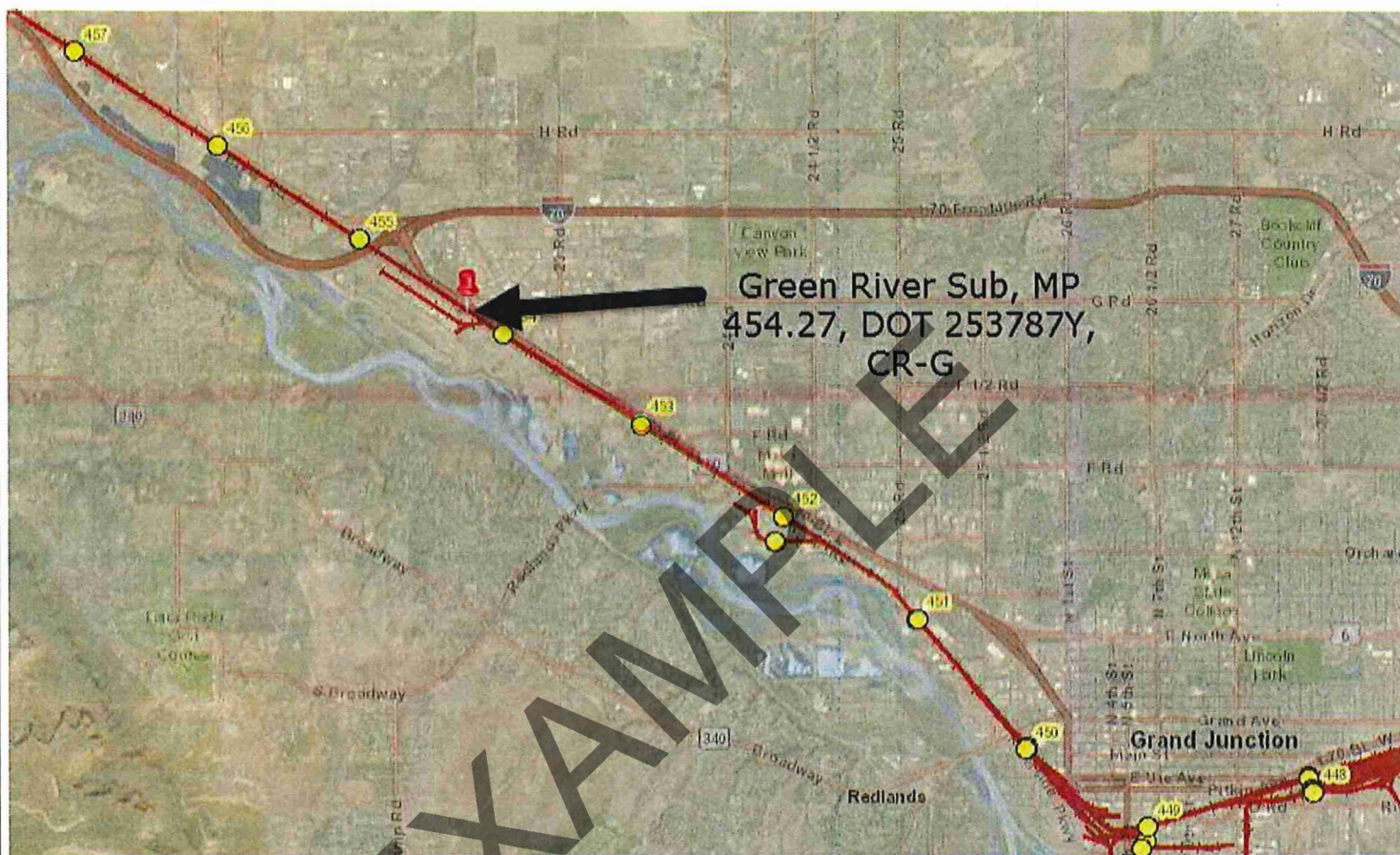


Danielle Allen
Manager-Real Estate

EXAMPLE



EXHIBIT "A"
RAILROAD LOCATION PRINT
ACCOMPANYING A
MAINTENANCE CONSENT/CONTRACTOR'S
RIGHT OF ENTRY AGREEMENT



UNION PACIFIC RAILROAD COMPANY

GREEN RIVER SUB
RAILROAD MILE POSTS 454.27
GRAND JUNCTION, MESA COUNTY, COLORADO

To accompany an agreement with the
CITY OF GRAND JUNCTION and/or CONTRACTORS
UPRR Folder No. 3076-44 Date: February 6, 2018

WARNING

IN ALL OCCASIONS, U.P. COMMUNICATIONS DEPARTMENT MUST BE CONTACTED IN ADVANCE OF ANY WORK TO DETERMINE EXISTENCE AND LOCATION OF FIBER OPTIC CABLE.

PHONE: 1-(800) 336-9193



Folder No.: 3076-44

UPRR Audit No.:

CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

THIS AGREEMENT is made and entered into as of the ____ day of _____, 20__, by and between **UNION PACIFIC RAILROAD COMPANY**, a Delaware corporation ("Railroad"); and

(Name of Contractor)

a _____ corporation ("Contractor").

RECITALS:

Contractor has been hired by the City of Grand Junction ("Public Entity") to perform asphalt overlay work at the existing CR-G at-grade public road crossing with all or a portion of such work to be performed on property of Railroad in the vicinity of the Railroad's Mile Post 454.27 (DOT 253787Y) on its Green River Subdivision in or near Grand Junction, Mesa County, Colorado, as such location is in the general location shown on the Railroad Location Print marked **Exhibit A**, attached hereto and hereby made a part hereof, which work is the subject of a contract dated February 6, 2018, between the Railroad and the Public Entity.

The Railroad is willing to permit the Contractor to perform the work described above at the location described above subject to the terms and conditions contained in this Agreement

AGREEMENT:

NOW, THEREFORE, it is mutually agreed by and between Railroad and Contractor, as follows:

ARTICLE 1 - DEFINITION OF CONTRACTOR.

For purposes of this Agreement, all references in this agreement to Contractor shall include Contractor's contractors, subcontractors, officers, agents and employees, and others acting under its or their authority.

ARTICLE 2 - RIGHT GRANTED; PURPOSE.

Railroad hereby grants to Contractor the right, during the term hereinafter stated and upon and subject to each and all of the terms, provisions and conditions herein contained, to enter upon and have ingress to and egress from the property described in the Recitals for the purpose of performing the work described in the Recitals above. The right herein granted to Contractor is limited to those portions of Railroad's property specifically described herein, or as designated by the Railroad Representative named in Article 4.



ARTICLE 3 - TERMS AND CONDITIONS CONTAINED IN EXHIBITS B, C & D.

The General Terms and Conditions contained in **Exhibit B**, the Insurance Requirements contained in **Exhibit C**, and the Minimum Safety Requirements contained in **Exhibit D**, each attached hereto, are hereby made a part of this Agreement.

ARTICLE 4 - ALL EXPENSES TO BE BORNE BY CONTRACTOR; RAILROAD REPRESENTATIVE.

- A. Contractor shall bear any and all costs and expenses associated with any work performed by Contractor, or any costs or expenses incurred by Railroad relating to this Agreement.
- B. Contractor shall coordinate all of its work with the following Railroad representative or his or her duly authorized representative (the "Railroad Representative"):

Seth Frazee
Asst Mgr Track Mntce
970-248-4254
skfrazee@up.com

- C. Contractor, at its own expense, shall adequately police and supervise all work to be performed by Contractor and shall ensure that such work is performed in a safe manner as set forth in Section 7 of **Exhibit B**. The responsibility of Contractor for safe conduct and adequate policing and supervision of Contractor's work shall not be lessened or otherwise affected by Railroad's approval of plans and specifications involving the work, or by Railroad's collaboration in performance of any work, or by the presence at the work site of a Railroad Representative, or by compliance by Contractor with any requests or recommendations made by Railroad Representative.

ARTICLE 5 - SCHEDULE OF WORK ON A MONTHLY BASIS.

The Contractor, at its expense, shall provide on a monthly basis a detailed schedule of work to the Railroad Representative named in Article 4B above. The reports shall start at the execution of this Agreement and continue until this Agreement is terminated as provided in this Agreement or until the Contractor has completed all work on Railroad's property.

ARTICLE 6 - TERM; TERMINATION.

- A. The grant of right herein made to Contractor shall commence on the date of this Agreement, and continue until _____, unless sooner terminated as herein
(Expiration Date)



provided, or at such time as Contractor has completed its work on Railroad's property, whichever is earlier. Contractor agrees to notify the Railroad Representative in writing when it has completed its work on Railroad's property.

- B. This Agreement may be terminated by either party on ten (10) days written notice to the other party.

ARTICLE 7 - CERTIFICATE OF INSURANCE.

- A. Before commencing any work, Contractor will provide Railroad with the (i) insurance binders, policies, certificates and endorsements set forth in **Exhibit C** of this Agreement, and (ii) the insurance endorsements obtained by each subcontractor as required under Section 12 of **Exhibit B** of this Agreement.
- B. All insurance correspondence, binders, policies, certificates and endorsements shall be sent to:

*Union Pacific Railroad Company
Real Estate Department
1400 Douglas Street, MS 1690
Omaha, NE 68179-1690
UPRR Folder No. 3076-44*

ARTICLE 8 - DISMISSAL OF CONTRACTOR'S EMPLOYEE.

At the request of Railroad, Contractor shall remove from Railroad's property any employee of Contractor who fails to conform to the instructions of the Railroad Representative in connection with the work on Railroad's property, and any right of Contractor shall be suspended until such removal has occurred. Contractor shall indemnify Railroad against any claims arising from the removal of any such employee from Railroad's property.

ARTICLE 9 - CROSSINGS.

No additional vehicular crossings (including temporary haul roads) or pedestrian crossings over Railroad's trackage shall be installed or used by Contractor without the prior written permission of Railroad.

ARTICLE 10 - CROSSINGS; COMPLIANCE WITH MUTCD AND FRA GUIDELINES.

- A. No additional vehicular crossings (including temporary haul roads) or pedestrian crossings over Railroad's trackage shall be installed or used by Contractor without the prior written permission of Railroad.
- B. Any permanent or temporary changes, including temporary traffic control, to crossings must conform to the Manual of Uniform Traffic Control Devices (MUTCD) and any applicable Federal Railroad Administration rules, regulations and guidelines, and must be reviewed by the Railroad prior to any changes being implemented. In the event the Railroad is found to be out of compliance with federal safety regulations due to the Contractor's modifications, negligence, or any other reason arising from the Contractor's presence on the Railroad's property, the Contractor agrees to assume liability for any civil penalties imposed upon the Railroad for such



noncompliance.

ARTICLE 11 - EXPLOSIVES.

Explosives or other highly flammable substances shall not be stored or used on Railroad's property without the prior written approval of Railroad.

IN WITNESS WHEREOF, the parties hereto have duly executed this agreement in duplicate as of the date first herein written.

UNION PACIFIC RAILROAD COMPANY
(Federal Tax ID #94-6001323)

By: _____
Danielle Allen
Manager-Real Estate

(Name of Contractor)

By _____

Printed Name: _____

Title: _____

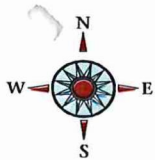
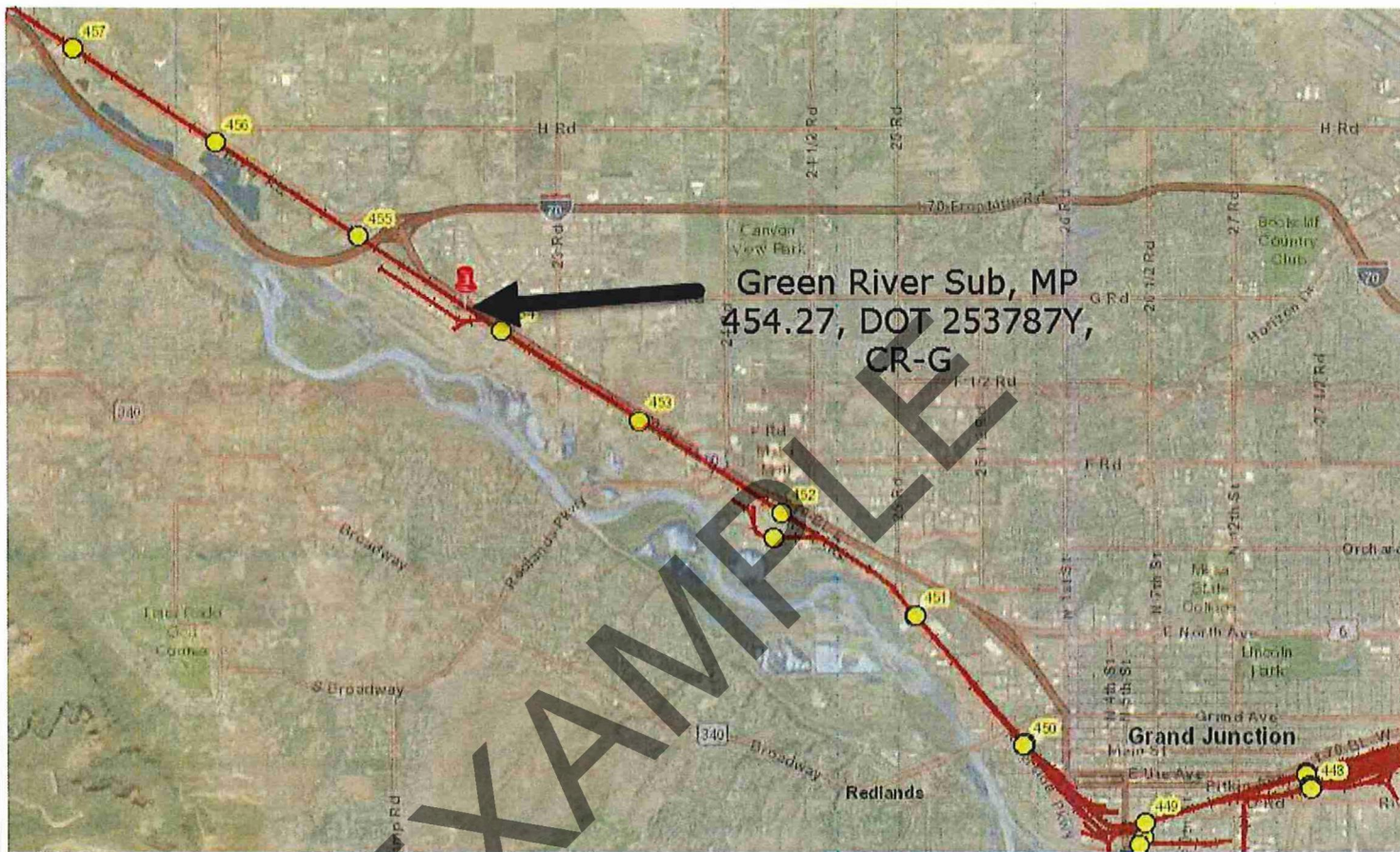


EXHIBIT "A"
RAILROAD LOCATION PRINT
ACCOMPANYING A
MAINTENANCE CONSENT/CONTRACTOR'S
RIGHT OF ENTRY AGREEMENT



UNION PACIFIC RAILROAD COMPANY

GREEN RIVER SUB
RAILROAD MILE POSTS 454.27
GRAND JUNCTION, MESA COUNTY, COLORADO

To accompany an agreement with the
CITY OF GRAND JUNCTION and/or CONTRACTORS

UPRR Folder No. 3076-44 Date: February 6, 2018

WARNING

IN ALL OCCASIONS, U.P. COMMUNICATIONS DEPARTMENT MUST BE CONTACTED IN ADVANCE OF ANY WORK TO DETERMINE EXISTENCE AND LOCATION OF FIBER OPTIC CABLE.

PHONE: 1-(800) 336-9193



EXHIBIT B

TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

GENERAL TERMS & CONDITIONS

Section 1. NOTICE OF COMMENCEMENT OF WORK - FLAGGING.

- A. Contractor agrees to notify the Railroad Representative at least thirty (30) working days in advance of Contractor commencing its work and at least ten (10) working days in advance of proposed performance of any work by Contractor in which any person or equipment will be within twenty-five (25) feet of any track, or will be near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach to within twenty-five (25) feet of any track. No work of any kind shall be performed, and no person, equipment, machinery, tool(s), material(s), vehicle(s), or thing(s) shall be located, operated, placed, or stored within twenty-five (25) feet of any of Railroad's track(s) at any time, for any reason, unless and until a Railroad flagman is provided to watch for trains. Upon receipt of such ten (10)-day notice, the Railroad Representative will determine and inform Contractor whether a flagman need be present and whether Contractor needs to implement any special protective or safety measures. If flagging or other special protective or safety measures are performed by Railroad, Railroad will bill Contractor for such expenses incurred by Railroad, unless Railroad and a federal, state or local governmental entity have agreed that Railroad is to bill such expenses to the federal, state or local governmental entity. If Railroad will be sending the bills to Contractor, Contractor shall pay such bills within thirty (30) days of Contractor's receipt of billing. If Railroad performs any flagging, or other special protective or safety measures are performed by Railroad, Contractor agrees that Contractor is not relieved of any of its responsibilities or liabilities set forth in this Agreement.
- B. The rate of pay per hour for each flagman will be the prevailing hourly rate in effect for an eight-hour day for the class of flagmen used during regularly assigned hours and overtime in accordance with Labor Agreements and Schedules in effect at the time the work is performed. In addition to the cost of such labor, a composite charge for vacation, holiday, health and welfare, supplemental sickness, Railroad Retirement and unemployment compensation, supplemental pension, Employees Liability and Property Damage and Administration will be included, computed on actual payroll. The composite charge will be the prevailing composite charge in effect at the time the work is performed. One and one-half times the current hourly rate is paid for overtime, Saturdays and Sundays, and two and one-half times current hourly rate for holidays. Wage rates are subject to change, at any time, by law or by agreement between Railroad and its employees, and may be retroactive as a result of negotiations or a ruling of an authorized governmental agency. Additional charges on labor are also subject to change. If the wage rate or additional charges are changed, Contractor (or the governmental entity, as applicable) shall pay on the basis of the new rates and charges.
- C. Reimbursement to Railroad will be required covering the full eight-hour day during which any flagman is furnished, unless the flagman can be assigned to other Railroad work during a portion of such day, in which event reimbursement will not be required for the portion of the day during which the flagman is engaged in other Railroad work. Reimbursement will also be required for any day not actually worked by the flagman following the flagman's assignment to work on the project for which Railroad is required to pay the flagman and which could not reasonably be avoided by Railroad by assignment of such flagman to other work, even though Contractor may not be working during such time. When it becomes necessary for Railroad to bulletin and assign an employee to a flagging position in compliance with union collective bargaining agreements, Contractor must provide Railroad a minimum of five (5) days notice prior to the cessation of the need for a flagman. If five (5) days notice of cessation is not given, Contractor will still be required to pay flagging charges for the five (5) day notice period required by union agreement to be given to the employee, even though flagging is not required for that period. An additional ten (10) days notice must then be given to Railroad if flagging services are needed again after such five day cessation notice has been given to Railroad.

Section 2. LIMITATION AND SUBORDINATION OF RIGHTS GRANTED

- A. The foregoing grant of right is subject and subordinate to the prior and continuing right and obligation of the Railroad to use and maintain its entire property including the right and power of Railroad to construct, maintain, repair, renew, use, operate, change, modify or relocate railroad tracks, roadways, signal, communication, fiber optics, or other wirelines, pipelines and other facilities upon, along or across any or all parts of its property, all or any of which may be freely done at any time or times by Railroad without liability to Contractor or to any other party for compensation or damages.

- B. The foregoing grant is also subject to all outstanding superior rights (including those in favor of licensees and lessees of Railroad's property, and others) and the right of Railroad to renew and extend the same, and is made without covenant of title or for quiet enjoyment.

Section 3. NO INTERFERENCE WITH OPERATIONS OF RAILROAD AND ITS TENANTS.

- A. Contractor shall conduct its operations so as not to interfere with the continuous and uninterrupted use and operation of the railroad tracks and property of Railroad, including without limitation, the operations of Railroad's lessees, licensees or others, unless specifically authorized in advance by the Railroad Representative. Nothing shall be done or permitted to be done by Contractor at any time that would in any manner impair the safety of such operations. When not in use, Contractor's machinery and materials shall be kept at least fifty (50) feet from the centerline of Railroad's nearest track, and there shall be no vehicular crossings of Railroads tracks except at existing open public crossings.
- B. Operations of Railroad and work performed by Railroad personnel and delays in the work to be performed by Contractor caused by such railroad operations and work are expected by Contractor, and Contractor agrees that Railroad shall have no liability to Contractor, or any other person or entity for any such delays. The Contractor shall coordinate its activities with those of Railroad and third parties so as to avoid interference with railroad operations. The safe operation of Railroad train movements and other activities by Railroad takes precedence over any work to be performed by Contractor.

Section 4. LIENS.

Contractor shall pay in full all persons who perform labor or provide materials for the work to be performed by Contractor. Contractor shall not create, permit or suffer any mechanic's or materialmen's liens of any kind or nature to be created or enforced against any property of Railroad for any such work performed. Contractor shall indemnify and hold harmless Railroad from and against any and all liens, claims, demands, costs or expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials furnished. If Contractor fails to promptly cause any lien to be released of record, Railroad may, at its election, discharge the lien or claim of lien at Contractor's expense.

Section 5. PROTECTION OF FIBER OPTIC CABLE SYSTEMS.

- A. Fiber optic cable systems may be buried on Railroad's property. Protection of the fiber optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. Contractor shall telephone Railroad during normal business hours (7:00 a.m. to 9:00 p.m. Central Time, Monday through Friday, except holidays) at 1-800-336-9193 (also a 24-hour, 7-day number for emergency calls) to determine if fiber optic cable is buried anywhere on Railroad's property to be used by Contractor. If it is, Contractor will telephone the telecommunications company(ies) involved, make arrangements for a cable locator and, if applicable, for relocation or other protection of the fiber optic cable. Contractor shall not commence any work until all such protection or relocation (if applicable) has been accomplished.
- B. In addition to other indemnity provisions in this Agreement, Contractor shall indemnify, defend and hold Railroad harmless from and against all costs, liability and expense whatsoever (including, without limitation, attorneys' fees, court costs and expenses) arising out of any act or omission of Contractor, its agents and/or employees, that causes or contributes to (1) any damage to or destruction of any telecommunications system on Railroad's property, and/or (2) any injury to or death of any person employed by or on behalf of any telecommunications company, and/or its contractor, agents and/or employees, on Railroad's property. Contractor shall not have or seek recourse against Railroad for any claim or cause of action for alleged loss of profits or revenue or loss of service or other consequential damage to a telecommunication company using Railroad's property or a customer or user of services of the fiber optic cable on Railroad's property.

Section 6. PERMITS - COMPLIANCE WITH LAWS.

In the prosecution of the work covered by this Agreement, Contractor shall secure any and all necessary permits and shall comply with all applicable federal, state and local laws, regulations and enactments affecting the work including, without limitation, all applicable Federal Railroad Administration regulations.

Section 7. SAFETY.

- A. Safety of personnel, property, rail operations and the public is of paramount importance in the prosecution of the work performed by Contractor. Contractor shall be responsible for initiating, maintaining and supervising all safety, operations and programs in connection with the work. Contractor shall at a minimum comply with Railroad's safety standards listed in

- Exhibit D**, hereto attached, to ensure uniformity with the safety standards followed by Railroad's own forces. As a part of Contractor's safety responsibilities, Contractor shall notify Railroad if Contractor determines that any of Railroad's safety standards are contrary to good safety practices. Contractor shall furnish copies of **Exhibit D** to each of its employees before they enter the job site.
- B. Without limitation of the provisions of paragraph A above, Contractor shall keep the job site free from safety and health hazards and ensure that its employees are competent and adequately trained in all safety and health aspects of the job.
- C. Contractor shall have proper first aid supplies available on the job site so that prompt first aid services may be provided to any person injured on the job site. Contractor shall promptly notify Railroad of any U.S. Occupational Safety and Health Administration reportable injuries. Contractor shall have a nondelegable duty to control its employees while they are on the job site or any other property of Railroad, and to be certain they do not use, be under the influence of, or have in their possession any alcoholic beverage, drug or other substance that may inhibit the safe performance of any work.
- D. If and when requested by Railroad, Contractor shall deliver to Railroad a copy of Contractor's safety plan for conducting the work (the "Safety Plan"). Railroad shall have the right, but not the obligation, to require Contractor to correct any deficiencies in the Safety Plan. The terms of this Agreement shall control if there are any inconsistencies between this Agreement and the Safety Plan.

Section 8. INDEMNITY.

- A. To the extent not prohibited by applicable statute, Contractor shall indemnify, defend and hold harmless Railroad, its affiliates, and its and their officers, agents and employees (individually an "Indemnified Party" or collectively "Indemnified Parties") from and against any and all loss, damage, injury, liability, claim, demand, cost or expense (including, without limitation, attorney's, consultant's and expert's fees, and court costs), fine or penalty (collectively, "Loss") incurred by any person (including, without limitation, any Indemnified Party, Contractor, or any employee of Contractor or of any Indemnified Party) arising out of or in any manner connected with (i) any work performed by Contractor, or (ii) any act or omission of Contractor, its officers, agents or employees, or (iii) any breach of this Agreement by Contractor.
- B. The right to indemnity under this Section 8 shall accrue upon occurrence of the event giving rise to the Loss, and shall apply regardless of any negligence or strict liability of any Indemnified Party, except where the Loss is caused by the sole active negligence of an Indemnified Party as established by the final judgment of a court of competent jurisdiction. The sole active negligence of any Indemnified Party shall not bar the recovery of any other Indemnified Party.
- C. Contractor expressly and specifically assumes potential liability under this Section 8 for claims or actions brought by Contractor's own employees. Contractor waives any immunity it may have under worker's compensation or industrial insurance acts to indemnify the Indemnified Parties under this Section 8. Contractor acknowledges that this waiver was mutually negotiated by the parties hereto.
- D. No court or jury findings in any employee's suit pursuant to any worker's compensation act or the Federal Employers' Liability Act against a party to this Agreement may be relied upon or used by Contractor in any attempt to assert liability against any Indemnified Party.
- E. The provisions of this Section 8 shall survive the completion of any work performed by Contractor or the termination or expiration of this Agreement. In no event shall this Section 8 or any other provision of this Agreement be deemed to limit any liability Contractor may have to any Indemnified Party by statute or under common law.

Section 9. RESTORATION OF PROPERTY.

In the event Railroad authorizes Contractor to take down any fence of Railroad or in any manner move or disturb any of the other property of Railroad in connection with the work to be performed by Contractor, then in that event Contractor shall, as soon as possible and at Contractor's sole expense, restore such fence and other property to the same condition as the same were in before such fence was taken down or such other property was moved or disturbed. Contractor shall remove all of Contractor's tools, equipment, rubbish and other materials from Railroad's property promptly upon completion of the work, restoring Railroad's property to the same state and condition as when Contractor entered thereon.

Section 10. WAIVER OF DEFAULT.

Waiver by Railroad of any breach or default of any condition, covenant or agreement herein contained to be kept, observed and performed by Contractor shall in no way impair the right of Railroad to avail itself of any remedy for any subsequent breach or default.

Section 11. MODIFICATION - ENTIRE AGREEMENT.

No modification of this Agreement shall be effective unless made in writing and signed by Contractor and Railroad. This Agreement and the exhibits attached hereto and made a part hereof constitute the entire understanding between Contractor and Railroad and cancel and supersede any prior negotiations, understandings or agreements, whether written or oral, with respect to the work to be performed by Contractor.

Section 12. ASSIGNMENT - SUBCONTRACTING.

Contractor shall not assign or subcontract this Agreement, or any interest therein, without the written consent of the Railroad. Contractor shall be responsible for the acts and omissions of all subcontractors. Before Contractor commences any work, the Contractor shall, except to the extent prohibited by law; (1) require each of its subcontractors to include the Contractor as "Additional Insured" in the subcontractor's Commercial General Liability policy and Business Automobile policies with respect to all liabilities arising out of the subcontractor's performance of work on behalf of the Contractor by endorsing these policies with ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage; (2) require each of its subcontractors to endorse their Commercial General Liability Policy with "Contractual Liability Railroads" ISO Form CG 24 17 10 01 (or a substitute form providing equivalent coverage) for the job site; and (3) require each of its subcontractors to endorse their Business Automobile Policy with "Coverage For Certain Operations In Connection With Railroads" ISO Form CA 20 70 10 01 (or a substitute form providing equivalent coverage) for the job site.

EXAMPLE

EXHIBIT C

TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

INSURANCE REQUIREMENTS

Contractor shall, at its sole cost and expense, procure and maintain during the course of the Project and until all Project work on Railroad's property has been completed and the Contractor has removed all equipment and materials from Railroad's property and has cleaned and restored Railroad's property to Railroad's satisfaction, the following insurance coverage:

A. COMMERCIAL GENERAL LIABILITY INSURANCE. Commercial general liability (CGL) with a limit of not less than \$5,000,000 each occurrence and an aggregate limit of not less than \$10,000,000. CGL insurance must be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage).

The policy must also contain the following endorsement, which must be stated on the certificate of insurance:

- Contractual Liability Railroads ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Railroad Company Property" as the Designated Job Site.
- Designated Construction Project(s) General Aggregate Limit ISO Form CG 25 03 03 97 (or a substitute form providing equivalent coverage) showing the project on the form schedule.

B. BUSINESS AUTOMOBILE COVERAGE INSURANCE. Business auto coverage written on ISO form CA 00 01 10 01 (or a substitute form providing equivalent liability coverage) with a combined single limit of not less \$5,000,000 for each accident and coverage must include liability arising out of any auto (including owned, hired and non-owned autos).

The policy must contain the following endorsements, which must be stated on the certificate of insurance:

- Coverage For Certain Operations In Connection With Railroads ISO form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Property" as the Designated Job Site.
- Motor Carrier Act Endorsement - Hazardous materials clean up (MCS-90) if required by law.

C. WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY INSURANCE. Coverage must include but not be limited to:

- Contractor's statutory liability under the workers' compensation laws of the state where the work is being performed.
- Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 disease policy limit \$500,000 each employee.

If Contractor is self-insured, evidence of state approval and excess workers compensation coverage must be provided.

Coverage must include liability arising out of the U. S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.

The policy must contain the following endorsement, which must be stated on the certificate of insurance:

- Alternate Employer endorsement ISO form WC 00 03 01 A (or a substitute form providing equivalent coverage) showing Railroad in the schedule as the alternate employer (or a substitute form providing equivalent coverage).

D. RAILROAD PROTECTIVE LIABILITY INSURANCE. Contractor must maintain Railroad Protective Liability insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of Railroad as named insured, with a limit of not less than \$2,000,000 per occurrence and an aggregate of \$6,000,000. A binder stating the policy is in place must be submitted to Railroad before the work may be commenced and until the original policy is forwarded to Railroad.

E. UMBRELLA OR EXCESS INSURANCE. If Contractor utilizes umbrella or excess policies, these policies must "follow form" and afford no less coverage than the primary policy.

F. POLLUTION LIABILITY INSURANCE. Pollution liability coverage must be written on ISO form Pollution Liability Coverage Form Designated Sites CG 00 39 12 04 (or a substitute form providing equivalent liability coverage), with limits of at least

\$5,000,000 per occurrence and an aggregate limit of \$10,000,000.

If the scope of work as defined in this Agreement includes the disposal of any hazardous or non-hazardous materials from the job site, Contractor must furnish to Railroad evidence of pollution legal liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting the materials, with coverage in minimum amounts of \$1,000,000 per loss, and an annual aggregate of \$2,000,000.

OTHER REQUIREMENTS

- G. All policy(ies) required above (except worker's compensation and employers liability) must include Railroad as "Additional Insured" using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage). The coverage provided to Railroad as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26, and CA 20 48 provide coverage for Railroad's negligence whether sole or partial, active or passive, and shall not be limited by Contractor's liability under the indemnity provisions of this Agreement.
- H. Punitive damages exclusion, if any, must be deleted (and the deletion indicated on the certificate of insurance), unless the law governing this Agreement prohibits all punitive damages that might arise under this Agreement.
- I. Contractor waives all rights of recovery, and its insurers also waive all rights of subrogation of damages against Railroad and its agents, officers, directors and employees. This waiver must be stated on the certificate of insurance.
- J. Prior to commencing the work, Contractor shall furnish Railroad with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements in this Agreement.
- K. All insurance policies must be written by a reputable insurance company acceptable to Railroad or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the state where the work is being performed.
- L. The fact that insurance is obtained by Contractor or by Railroad on behalf of Contractor will not be deemed to release or diminish the liability of Contractor, including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad from Contractor or any third party will not be limited by the amount of the required insurance coverage.

EXHIBIT D

TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

MINIMUM SAFETY REQUIREMENTS

The term "employees" as used herein refer to all employees of Contractor as well as all employees of any subcontractor or agent of Contractor.

I. CLOTHING

- A. All employees of Contractor will be suitably dressed to perform their duties safely and in a manner that will not interfere with their vision, hearing, or free use of their hands or feet.

Specifically, Contractor's employees must wear:

- i. Waist-length shirts with sleeves.
 - ii. Trousers that cover the entire leg. If flare-legged trousers are worn, the trouser bottoms must be tied to prevent catching.
 - iii. Footwear that covers their ankles and has a defined heel. Employees working on bridges are required to wear safety-toed footwear that conforms to the American National Standards Institute (ANSI) and FRA footwear requirements.
- B. Employees shall not wear boots (other than work boots), sandals, canvas-type shoes, or other shoes that have thin soles or heels that are higher than normal.
- C. Employees must not wear loose or ragged clothing, neckties, finger rings, or other loose jewelry while operating or working on machinery.

II. PERSONAL PROTECTIVE EQUIPMENT

Contractor shall require its employees to wear personal protective equipment as specified by Railroad rules, regulations, or recommended or requested by the Railroad Representative.

- i. Hard hat that meets the American National Standard (ANSI) Z89.1 – latest revision. Hard hats should be affixed with Contractor's company logo or name.
- ii. Eye protection that meets American National Standard (ANSI) for occupational and educational eye and face protection, Z87.1 – latest revision. Additional eye protection must be provided to meet specific job situations such as welding, grinding, etc.
- iii. Hearing protection, which affords enough attenuation to give protection from noise levels that will be occurring on the job site. Hearing protection, in the form of plugs or muffs, must be worn when employees are within:
 - 100 feet of a locomotive or roadway/work equipment
 - 15 feet of power operated tools
 - 150 feet of jet blowers or pile drivers
 - 150 feet of retarders in use (when within 10 feet, employees must wear dual ear protection – plugs and muffs)
- iv. Other types of personal protective equipment, such as respirators, fall protection equipment, and face shields, must be worn as recommended or requested by the Railroad Representative.

III. ON TRACK SAFETY

Contractor is responsible for compliance with the Federal Railroad Administration's Roadway Worker Protection regulations – 49CFR214, Subpart C and Railroad's On-Track Safety rules. Under 49CFR214, Subpart C, railroad contractors are responsible for the training of their employees on such regulations. In addition to the instructions contained in Roadway Worker Protection regulations, all employees must:

- i. Maintain a distance of twenty-five (25) feet to any track unless the Railroad Representative is present to authorize movements.

- ii. Wear an orange, reflectorized workwear approved by the Railroad Representative.
- iii. Participate in a job briefing that will specify the type of On-Track Safety for the type of work being performed. Contractor must take special note of limits of track authority, which tracks may or may not be fouled, and clearing the track. Contractor will also receive special instructions relating to the work zone around machines and minimum distances between machines while working or traveling.

IV. EQUIPMENT

- A. It is the responsibility of Contractor to ensure that all equipment is in a safe condition to operate. If, in the opinion of the Railroad Representative, any of Contractor's equipment is unsafe for use, Contractor shall remove such equipment from Railroad's property. In addition, Contractor must ensure that the operators of all equipment are properly trained and competent in the safe operation of the equipment. In addition, operators must be:
 - i. Familiar and comply with Railroad's rules on lockout/tagout of equipment.
 - ii. Trained in and comply with the applicable operating rules if operating any hy-rail equipment on-track.
 - iii. Trained in and comply with the applicable air brake rules if operating any equipment that moves rail cars or any other railbound equipment.
- B. All self-propelled equipment must be equipped with a first-aid kit, fire extinguisher, and audible back-up warning device.
- C. Unless otherwise authorized by the Railroad Representative, all equipment must be parked a minimum of twenty-five (25) feet from any track. Before leaving any equipment unattended, the operator must stop the engine and properly secure the equipment against movement.
- D. Cranes must be equipped with three orange cones that will be used to mark the working area of the crane and the minimum clearances to overhead powerlines.

V. GENERAL SAFETY REQUIREMENTS

- A. Contractor shall ensure that all waste is properly disposed of in accordance with applicable federal and state regulations.
- B. Contractor shall ensure that all employees participate in and comply with a job briefing conducted by the Railroad Representative, if applicable. During this briefing, the Railroad Representative will specify safe work procedures, (including On-Track Safety) and the potential hazards of the job. If any employee has any questions or concerns about the work, the employee must voice them during the job briefing. Additional job briefings will be conducted during the work as conditions, work procedures, or personnel change.
- C. All track work performed by Contractor meets the minimum safety requirements established by the Federal Railroad Administration's Track Safety Standards 49CFR213.
- D. All employees comply with the following safety procedures when working around any railroad track:
 - i. Always be on the alert for moving equipment. Employees must always expect movement on any track, at any time, in either direction.
 - ii. Do not step or walk on the top of the rail, frog, switches, guard rails, or other track components.
 - iii. In passing around the ends of standing cars, engines, roadway machines or work equipment, leave at least 20 feet between yourself and the end of the equipment. Do not go between pieces of equipment if the opening is less than one car length (50 feet).
 - iv. Avoid walking or standing on a track unless so authorized by the employee in charge.
 - v. Before stepping over or crossing tracks, look in both directions first.
 - vi. Do not sit on, lie under, or cross between cars except as required in the performance of your duties and only when track and equipment have been protected against movement.
- E. All employees must comply with all federal and state regulations concerning workplace safety.

APPENDIX D

2019 Overlay Plans

PROJECT NO. _____

2019 ASPHALT OVERLAYS
SOUTH CAMP ROAD & REDLANDS PARKWAY
MARCH, 2019

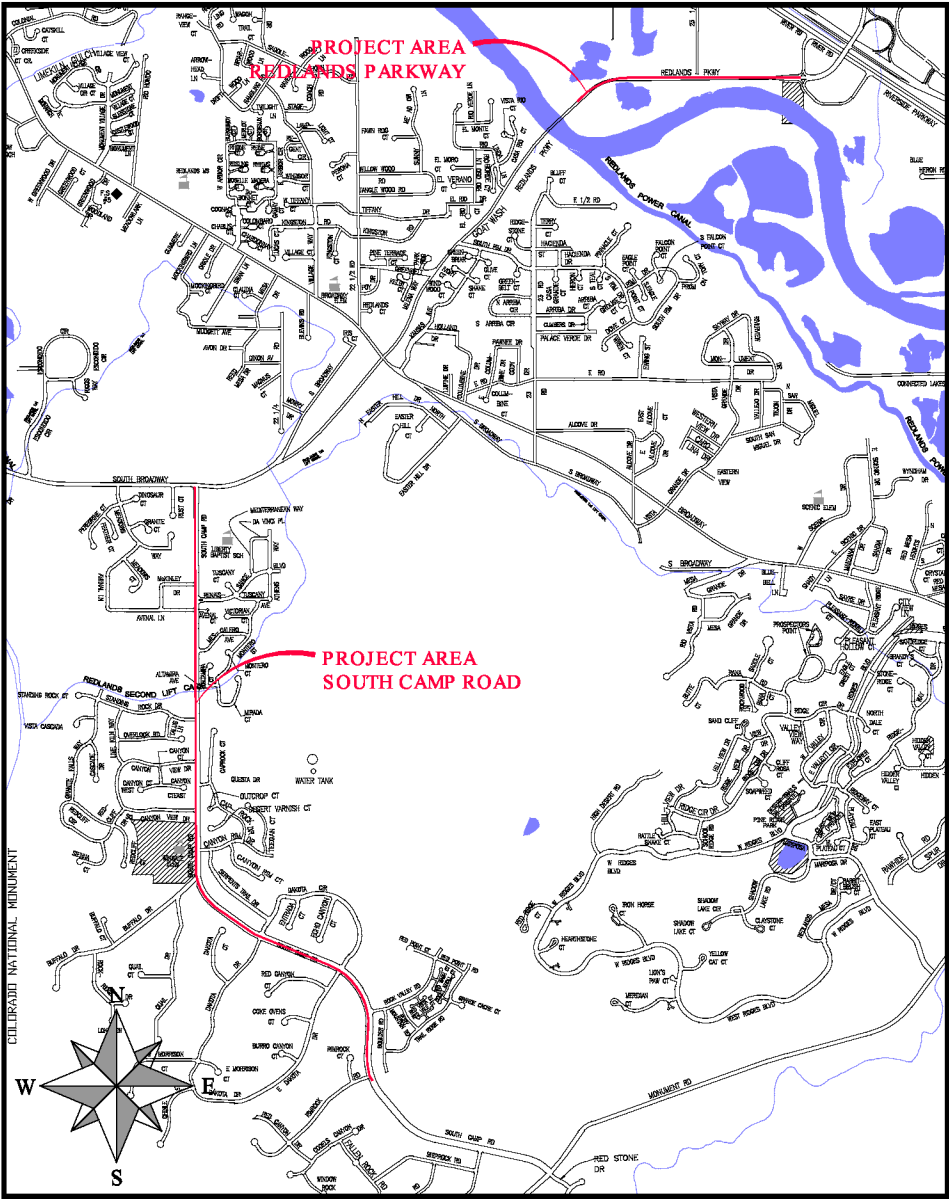
1—Cover Sheet		26—South Camp Road Plan & Profile	Sta 65+00 — 67+50
2—Standard Abbreviations, Legend and Symbols		27—South Camp Road Plan & Profile	Sta 67+50 — 70+00
3—Summary of Approximate Quantities		28—South Camp Road Plan & Profile	Sta 70+00 — 72+50
4—Keymap South Camp Road		29—South Camp Road Plan & Profile	Sta 72+50 — 75+00
5—South Camp Road Plan & Profile	Sta 0+00 — 2+50	30—South Camp Road Plan	Sta 75+00 — 80+00
6—South Camp Road Plan & Profile	Sta 2+50 — 5+00	31—South Camp Road Plan	Sta 80+00 — 85+00
7—South Camp Road Plan & Profile	Sta 5+00 — 7+50	32—South Camp Road Plan	Sta 85+00 — 90+00
8—South Camp Road Plan & Profile	Sta 7+50 — 10+00	33—South Camp Road Plan	Sta 90+00 — 95+00
9—South Camp Road Plan & Profile	Sta 10+00 — 12+50	34—South Camp Road Plan	Sta 95+00 — 100+00
10—South Camp Road Plan & Profile	Sta 12+50 — 15+00	35—South Camp Road Plan	Sta 100+00 — 105+00
11—South Camp Road Plan & Profile	Sta 15+00 — 17+50	36—South Camp Road Plan	Sta 105+00 — 107+50
12—South Camp Road Plan & Profile	Sta 17+50 — 20+00	37—Keymap South Camp Road	
13—South Camp Road Plan & Profile	Sta 20+00 — 22+50	38—Redlands Parkway Road Plan	Sta 0+00 — 5+00
14—South Camp Road Plan & Profile	Sta 22+50 — 25+00	39—Redlands Parkway Road Plan	Sta 5+00 — 10+00
15—South Camp Road Plan & Profile	Sta 25+00 — 27+50	40—Redlands Parkway Road Plan	Sta 10+00 — 15+00
16—South Camp Road Plan & Profile	Sta 27+50 — 30+00	41—Redlands Parkway Road Plan & Profile	Sta 15+00 — 17+50
17—South Camp Road Plan & Profile	Sta 30+00 — 32+50	42—Redlands Parkway Road Plan & Profile	Sta 17+50 — 20+00
18—South Camp Road Plan & Profile	Sta 32+50 — 35+00	43—Redlands Parkway Road Plan & Profile	Sta 20+00 — 22+50
19—South Camp Road Plan	Sta 35+00 — 40+00	44—Redlands Parkway Road Plan & Profile	Sta 22+50 — 25+00
20—South Camp Road Plan	Sta 40+00 — 45+00	45—Redlands Parkway Road Plan & Profile	Sta 25+00 — 27+50
21—South Camp Road Plan	Sta 45+00 — 50+00	46—Redlands Parkway Road Plan & Profile	Sta 27+50 — 30+00
22—South Camp Road Plan	Sta 50+00 — 55+00	47—Redlands Parkway Road Plan & Profile	Sta 30+00 — 32+50
23—South Camp Road Plan	Sta 55+00 — 60+00	48—Redlands Parkway Road Plan	Sta 32+50 — 37+50
24—South Camp Road Plan & Profile	Sta 60+00 — 62+50	49—Details	
25—South Camp Road Plan & Profile	Sta 62+50 — 65+00		

UTILITIES AND AGENCIES								
AGENCY	NAME	POSITION	ROLE	MAILING ADDRESS	STREET ADDRESS	CITY, STATE	VOICE-WK	FAX
CITY OF GRAND JUNCTION	ERIC MOCKO	PROJECT ENGINEER	PROJECT ENGINEER	333 WEST AVE BLDG C	333 WEST AVE BLDG C	GRAND JCT., CO 81501	(970) 256-4017	(970) 256-4022
CITY OF GRAND JUNCTION	LEE COOPER	PROJECT ENGINEER	SANITARY SEWER	333 WEST AVE BLDG C	333 WEST AVE BLDG C	GRAND JCT., CO 81501	(970) 256-4155	(970) 256-4022
GRAND VALLEY IRRIGATION CO.	PHIL BERTRAND	MANAGER	IRRIGATION	688 26 RD	688 26 RD	GRAND JCT., CO 81506	(970) 242-2762	
SPECTRUM	JEFF VALDEZ	MANAGER	CABLE TV	2502 FORESIGHT CIRCLE	2502 FORESIGHT CIRCLE	GRAND JCT., CO 81504	(970) 245-8750	(970) 245-6803
CENTURYLINK	CHRIS JOHNSON	ENGINEER	TELEPHONE	2524 BLICHMANN AVE	2524 BLICHMANN AVE	GRAND JCT., CO 81504	(970) 244-4311	(970) 240-4349
UTE WATER	JUSTIN BATES	SUPERVISOR	WATER	PO BOX 460	2190 H ¼ RD	GRAND JCT., CO 81502	(970) 242-7491	(970) 242-9189
XCEL	STEVE PIBURN	UNIT MANAGER	ELECTRIC	2538 BLICHMANN AVE	2538 BLICHMANN AVE	GRAND JCT., CO 81506	(970) 244-2664	(970) 244-2664
XCEL	SARAH BARRICAU	UNIT MANAGER	GAS	2538 BLICHMANN AVE	2538 BLICHMANN AVE	GRAND JCT., CO 81506	(970) 244-2656	(970) 244-2656

REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		
REVISION		

CITY OF
Grand Junction
COLORADO

Public Works
Engineering Division



VICINITY MAP

DRAWING STATUS:	● PROGRESS
	○ FINAL CONSTRUCTION DRAWINGS
	○ ASBUILT
DESIGNED BY:	
ERIC MOCKO, PROJECT ENGINEER	2019
REVIEWED BY:	
TRENT C. PRALL, PUBLIC WORKS DIRECTOR	2019
AUTHORIZED FOR CONSTRUCTION	
TRENT C. PRALL, PUBLIC WORKS DIRECTOR	2019
ACCEPTED AS CONSTRUCTED	
ERIC MOCKO, PROJECT ENGINEER	2019



N:\Landproj\Contract Street Maintenance\2019 Contract Street Maintenance\Overlays\dwg\Title.dwg, 02, 3/12/2019 4:42:45 PM

ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS
ABC	AGGREGATE BASE COURSE
AC	ASBESTOS CEMENT
AP	ANGLE POINT
ASB	ANCHORED STRAW BALES
ASP	ALUMINIZED STEEL PIPE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
BC	BACK OF CURB
BF	BUTTERFLY VALVE
BOW	BACK OF WALK
BCR	BEGIN CURB RETURN
BOT	BOTTOM
BSWMP	BETTER STORM WATER MANAGEMENT PRACTICES
CH	CHORD
CAP	CORRUGATED ALUMINUM PIPE
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CI	CAST IRON
C,G,& SW	CURB, GUTTER & SIDEWALK
C	CENTER LINE
CL	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COMB	COMBINATION (AS IN STORM SEWER AND SANITARY SEWER)
CONC	CONCRETE
CSM	CITY SURVEY MONUMENT
CSP	CORRUGATED STEEL PIPE
CU	COPPER
DI	DUCTILE IRON
DWY	DRIVEWAY
E	ELECTRIC
ECR	END CURB RETURN
EG	EDGE OF GUTTER
EL	ELEVATION
EP	EDGE OF PAVEMENT
EX	EXISTING
FB	FULL BODY
FC	FACE OF CURB
FG	FINISHED GRADE
F	FLOW LINE
FL	FLANGE
FM	FORCE MAIN
FO	FIBER OPTICS
FS	FAR SIDE
FTG	FOOTING
G	GAS
GB	GRADE BREAK
GM	GAS METER
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
IRR	IRRIGATION
L	LENGTH OF ARC
LC	LONG CHORD
LF	LINEAR FEET
LL	LONG ARC
LS	SHORT ARC
LT	LEFT
MB	MAILBOX
MCSM	MESA COUNTY SURVEY MONUMENT
MH	MANHOLE
MJ	MECHANICAL JOINT
MW	MILL WRAP
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOP	NO ONE PERSON
NRCP	NON-REINFORMATIONRCD CONCRETE PIPE
NS	NEAR SIDE
NTS	NOT TO SCALE
OHP	OVERHEAD POWER
OHT	OVERHEAD TELEPHONE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PE	POLYETHYLENE
PERF	PERFORATED
PI	POINT OF INTERSECTION
PIP	PLASTIC IRRIGATION PIPE
POC	POINT ON CURVE
POT	POINT ON TANGENT
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORMATIONRCD CONCRETE PIPE
REQ'D	REQUIRED
RG	RESTRAINED GLANDS
RL	LONG RADIUS
ROW	RIGHT OF WAY
RP	RADIUS POINT
RR	RAIL ROAD
RS	SHORT RADIUS
RT	RIGHT
S	SLOPE
SAN	SANITARY
SC	SHORT CHORD
SCH	STANDARD CONTRACT DOCUMENTS
SF	SCHEDULE
SL	SILT FENCE
SL	SECTION LINE
SSRB	STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION
SSUU	STANDARD SPECIFICATIONS FOR CONSTRUCTION OF UNDERGROUND UTILITIES
STA	STATION
STL	STEEL
STM	STORM
T	TELEPHONE
TAN	LENGTH OF TANGENT
TC	TOP OF CURB
TH	TEST HOLE
TV	TELEVISION
(TYP)	TYPICAL
UU	UNDERGROUND UTILITIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPCC	VERTICAL POINT OF COMPOUND CURVATURE
VPRC	VERTICAL POINT OF REVERSE CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WATER
Δ	DELTA ANGLE

LEGEND

BSWMP	
DRAINAGE BASIN BOUNDARY	---
BSWMP	
ANCHORED STRAW BALES	ASB ASB ASB ASB ASB ASB ASB ASB
BSWMP	
SILT FENCE	SF SF SF SF SF SF SF SF
BUILDING	
CONCRETE CURB AND GUTTER	2' CURB AND GUTTER
CONCRETE CURB,GUTTER, & SIDEWALK	7' C, G, & SW
CONCRETE DITCH	CONCRETE
CONCRETE SIDEWALK	4' SW
CULVERT	18" RCP
EARTH DITCH	EARTH EARTH EARTH
EDGE OF GRAVEL	---
EDGE OF PAVEMENT	---
FENCE (BARBED WIRE)	* * *
FENCE (CHAIN LINK)	* * *
FENCE (IRON)	* * *
FENCE (PLASTIC)	* * *
FENCE (TEMPORARY CONSTRUCTION)	* * *
FENCE (WOOD)	* * *
FENCE (WOVEN WIRE)	* * *
GUARD RAIL	9' 9'
HATCHING: INDICATES ASPHALT REMOVAL	
HATCHING: INDICATES CONCRETE REMOVAL	
HATCHING: INDICATES STAGING AREA	+ + + STAGING AREA + + +
LINE (CENTER OF IMPROVEMENTS)	CENTERLINE
LINE (CITY LIMITS)	CITY LIMITS
LINE (CONTROL)	CONTROL LINE
LINE (EASEMENT)	---
LINE (MONUMENT/SECTION)	MONUMENT/SECTION LINE
LINE (PROPERTY)	---
LINE (RIGHT OF WAY)	---
MATCH LINE	MATCH LINE SEE SHEET NO ?
PIPE (IRRIGATION)	4" IRR
PIPE (SIPHON)	4" SIPHON

PROPOSED CONCRETE CURB AND GUTTER	=====
PROPOSED CONCRETE CURB,GUTTER,& SIDEWALK	=====
PROPOSED CONCRETE SIDEWALK	=====
PROPOSED "WET" UTILITIES (CONSTRUCTION NOTE WILL INDICATE TYPE, SIZE, AND MATERIAL OF NEW MAIN)	8" PVC SANITARY SEWER
ALL PROPOSED FEATURES NOT SHOWN IN LEGEND WILL BE SHOWN THE SAME AS THEIR EXISTING COUNTERPART, BUT INDICATED BY BOLDER LINETYPE	
RAIL ROAD	
RETAINING WALL	1' RETAINING WALL
STRIPING (CONTINUOUS WHITE)	WHITE
STRIPING (DASHED WHITE)	WHITE
STRIPING (CONTINUOUS YELLOW)	YELLOW
STRIPING (DASHED YELLOW)	YELLOW
TOP OF SLOPE	4570 4580
CONTOUR LINES (SHOWN BETWEEN TOP & TOE)	4570 4570
TOE OF SLOPE	4570 4570
TRAFFIC DETECTOR LOOP	
UTILITY LINE (ABANDON) (THIS CASE A WATER LINE)	W (ABANDON) 8" W
UTILITY LINE (CABLE TV)	TV TV
UTILITY LINE (ELECTRIC)	E E
UTILITY LINE (FIBER OPTIC)	FO QUEST-FO
UTILITY LINE (GAS)	G 1 1/4" MG G
UTILITY LINE (HIGH VOLTAGE OVERHEAD POWER)	HVCHP
UTILITY LINE (OVERHEAD POWER)	OHP
UTILITY LINE (OVERHEAD TELEPHONE)	OHT
UTILITY LINE (SANITARY SEWER)	8" SAN
UTILITY LINE (SANITARY SEWER FORCE MAIN)	8" FM
UTILITY LINE (SANITARY SEWER SERVICE)	8" STM
UTILITY LINE (STORM SEWER)	8" PERF
UTILITY LINE (STORM SEWER, PERFORATED)	8" PERF
UTILITY LINE (STORM/SANITARY SEWER SEWER COMBINATION)	18" COMB
UTILITY LINE (TELEPHONE)	T T
UTILITY LINE (WATER)	W 8" W

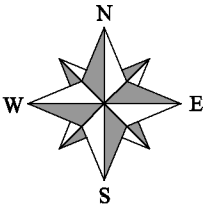
SYMBOLS

BENCH MARK	
CATCH BASIN	
CLEAN OUT	
CURB STOP	
FIRE HYDRANT	
GUY WIRE ANCHOR	
HEADGATE	
IRRIGATION PUMP	
MAILBOX	
MANHOLE (ELECTRIC)	
MANHOLE (GAS)	
MANHOLE (SANITARY/STORM)	
MANHOLE (TELEPHONE)	
MANHOLE (TV)	
MANHOLE (WATER)	
METER (GAS)	
METER (WATER)	
PEDESTAL (TELEPHONE)	
PEDESTAL (TV)	
PROPERTY PIN	
PULL BOX	
REDUCER FITTING	
SIGN OR POST (SIGN TYPE NOTED)	
SPRINKLER HEAD	
STREET LIGHT	
SURVEY MONUMENT (CITY)	
SURVEY MONUMENT (TYPE NOTED)	
TEST HOLE	
TRAFFIC PAINT MARKING	
TRAFFIC SIGNAL POLE AND MAST ARM	
UTILITY POLE	
VALVE (GAS)	
VALVE (IRRIGATION)	
VALVE (WATER)	
VEGETATION (HEDGE OR BUSH)	
VEGETATION (TREE STUMP)	
VEGETATION (TREE) (CALIPER SIZE NOTED)	
WATER HYDRANT	
WEIR	
YARD LIGHT	

PROJECT NO. _____

BAR SCALE:
0 5 10 20
(IN FEET)
1 inch = 20 feet

NORTH ARROW:



REVISION Δ	DESCRIPTION	DATE
REVISION Δ		
REVISION Δ		
REVISION Δ		

DRAWN BY	JCS	DATE	4-02
DESIGNED BY		DATE	
CHECKED BY		DATE	
APPROVED BY		DATE	

SCALES: PLAN & PROFILE
HORIZONTAL: 1" =
VERTICAL: 1" =



PUBLIC WORKS
ENGINEERING DIVISION

CITY OF GRAND JUNCTION
STANDARD ABBREVIATIONS, LEGEND,
AND SYMBOLS

REVISION	DESCRIPTION	DATE
REVISION	_____	_____
REVISION	_____	_____
REVISION	_____	_____
REVISION	_____	_____

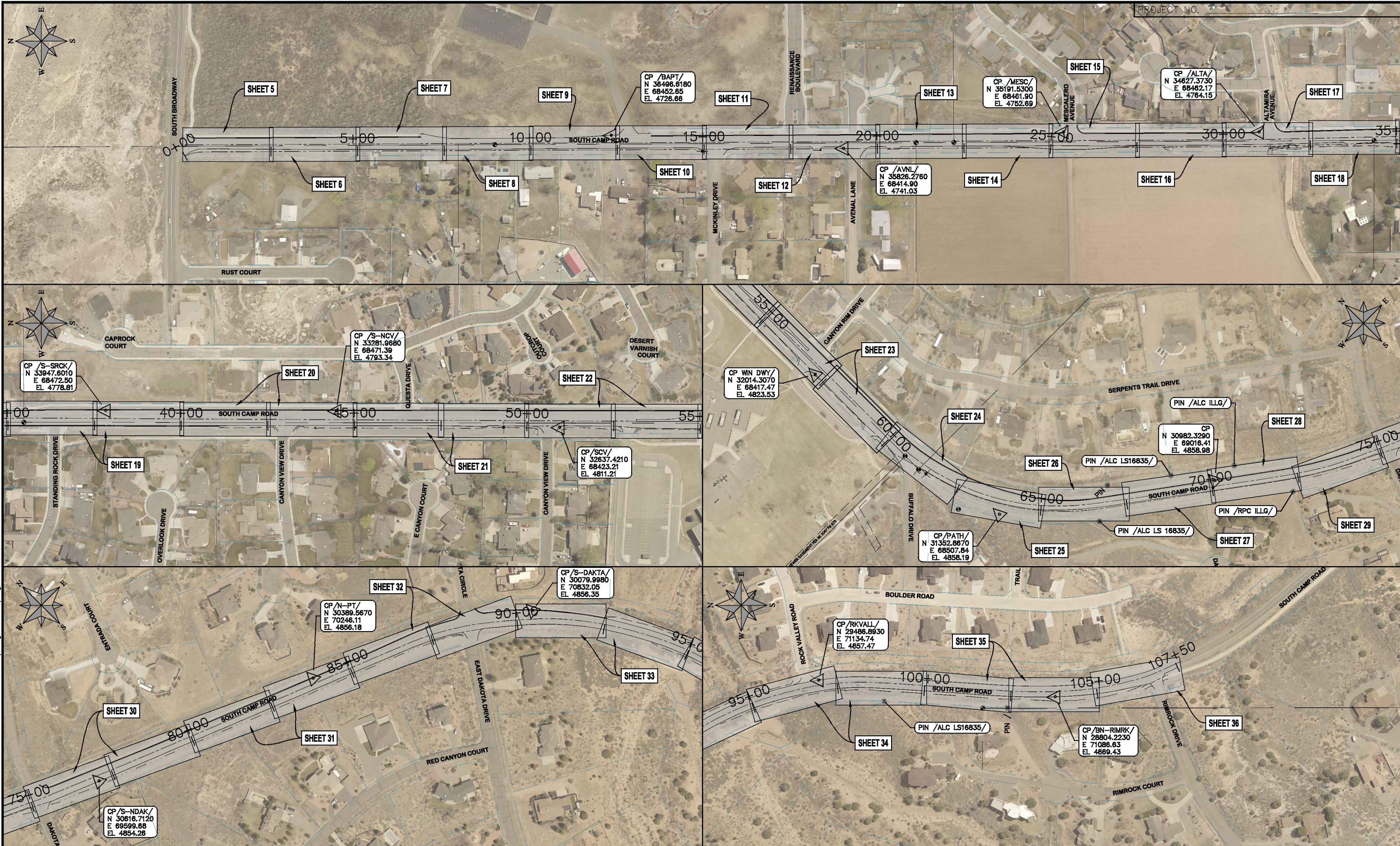
DRAWN BY	_____	DATE	201X
DESIGNED BY	XXX	DATE	201X
CHECKED BY	XXX	DATE	201X
APPROVED BY	XXX	DATE	201X

SIZES: PLAN & PROFILE	
HORIZONTAL: 1" = 40'	40
VERTICAL: 1" = 10'	10



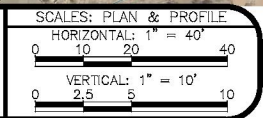
PUBLIC WORKS
ENGINEERING DIVISION

PROJECT TITLE
SUMMARY OF APPROXIMATE QUANTITIES



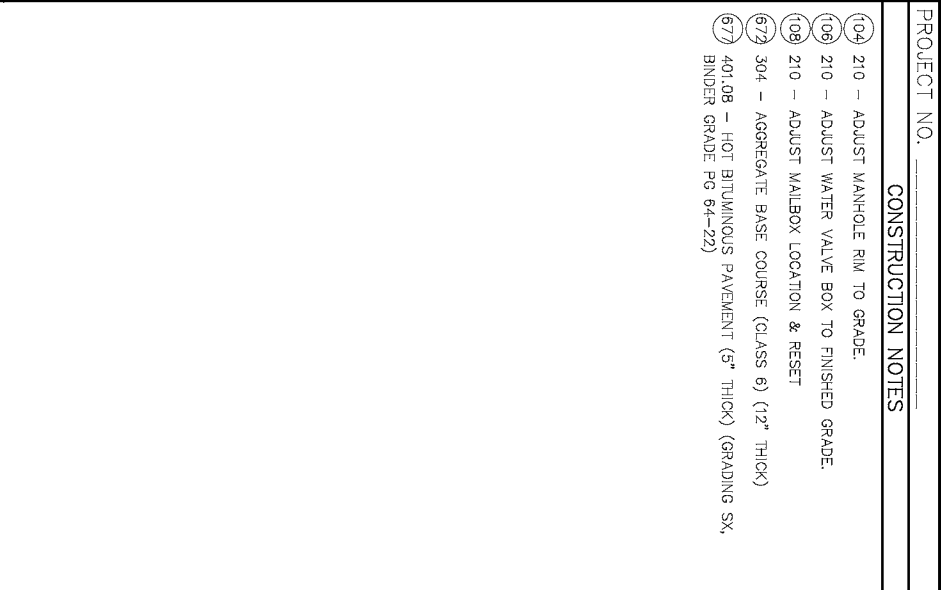
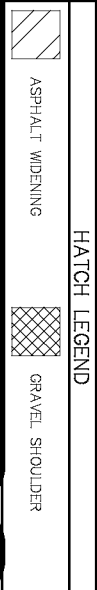
REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
KEYMAP SOUTH CAMP ROAD



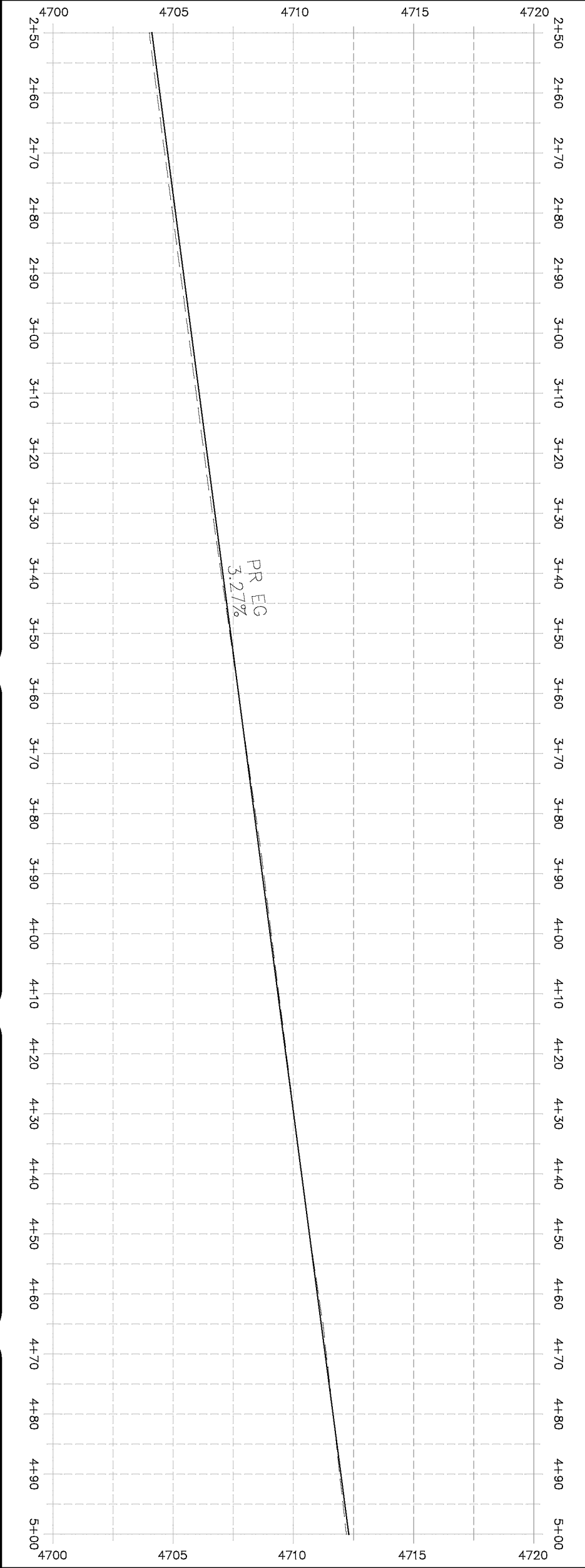
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE
REVISION			DESIGNED BY	ECM	DATE
REVISION			CHECKED BY	ECM	DATE
REVISION			APPROVED BY	ECM	DATE

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5

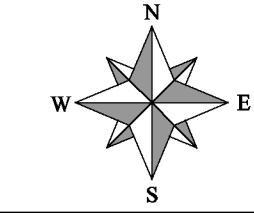
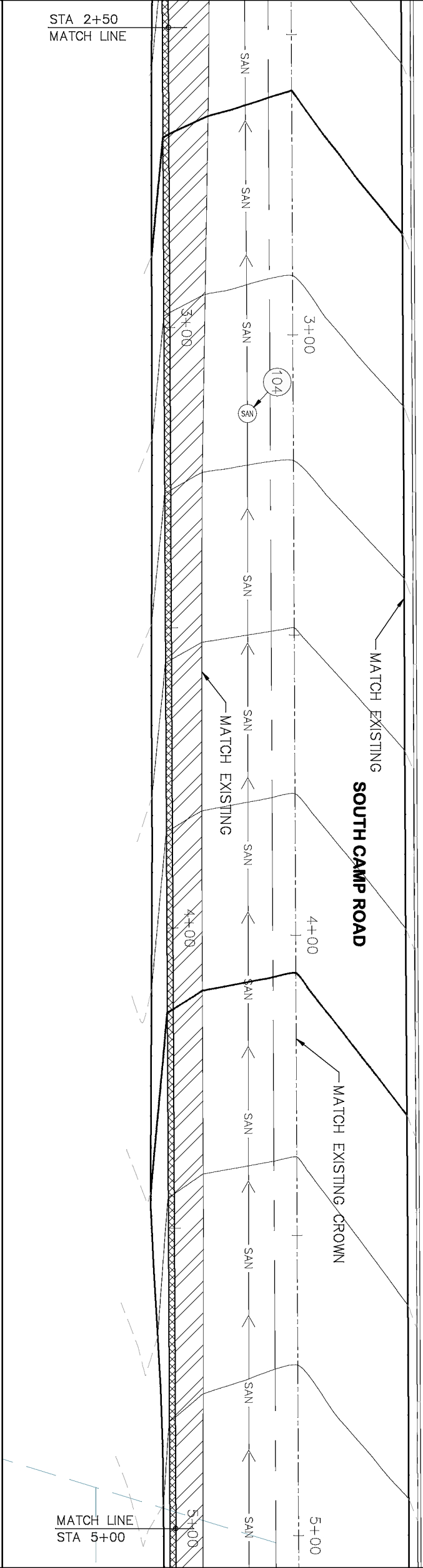


PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 2+50 TO STA 5+00



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

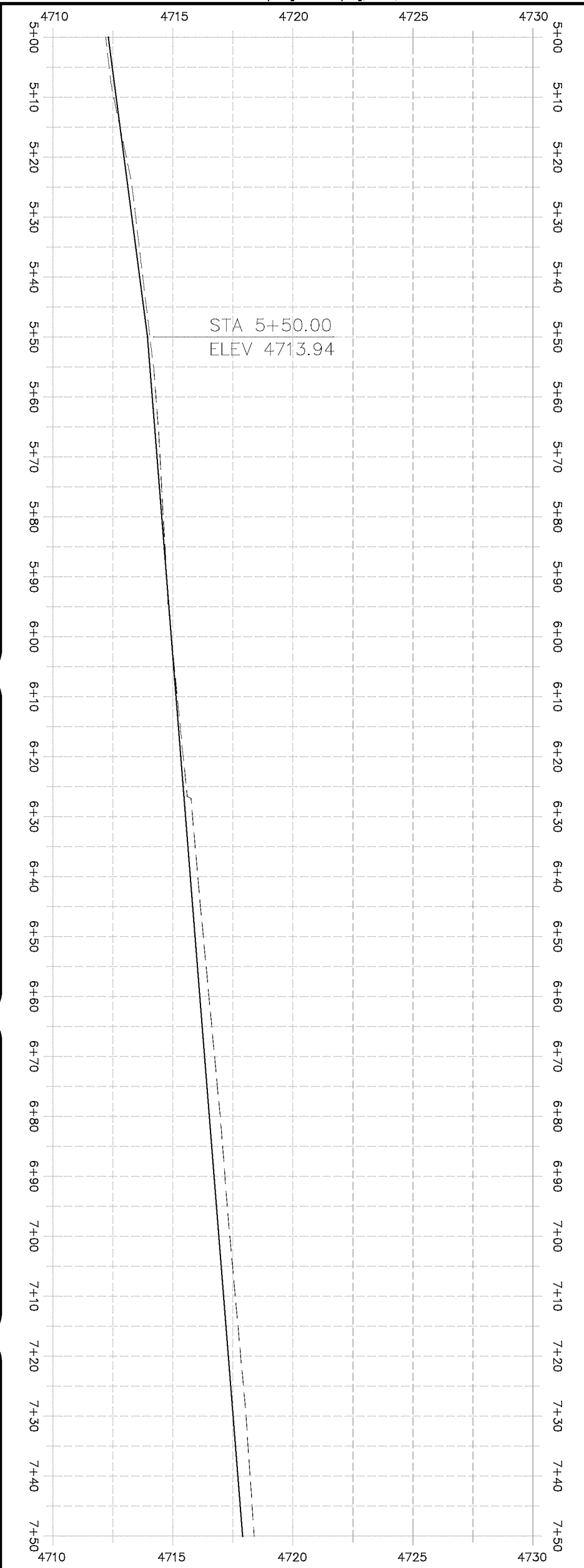
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE
REVISION			DESIGNED BY	ECM	DATE
REVISION			CHECKED BY	ECM	DATE
REVISION			APPROVED BY	ECM	DATE

SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

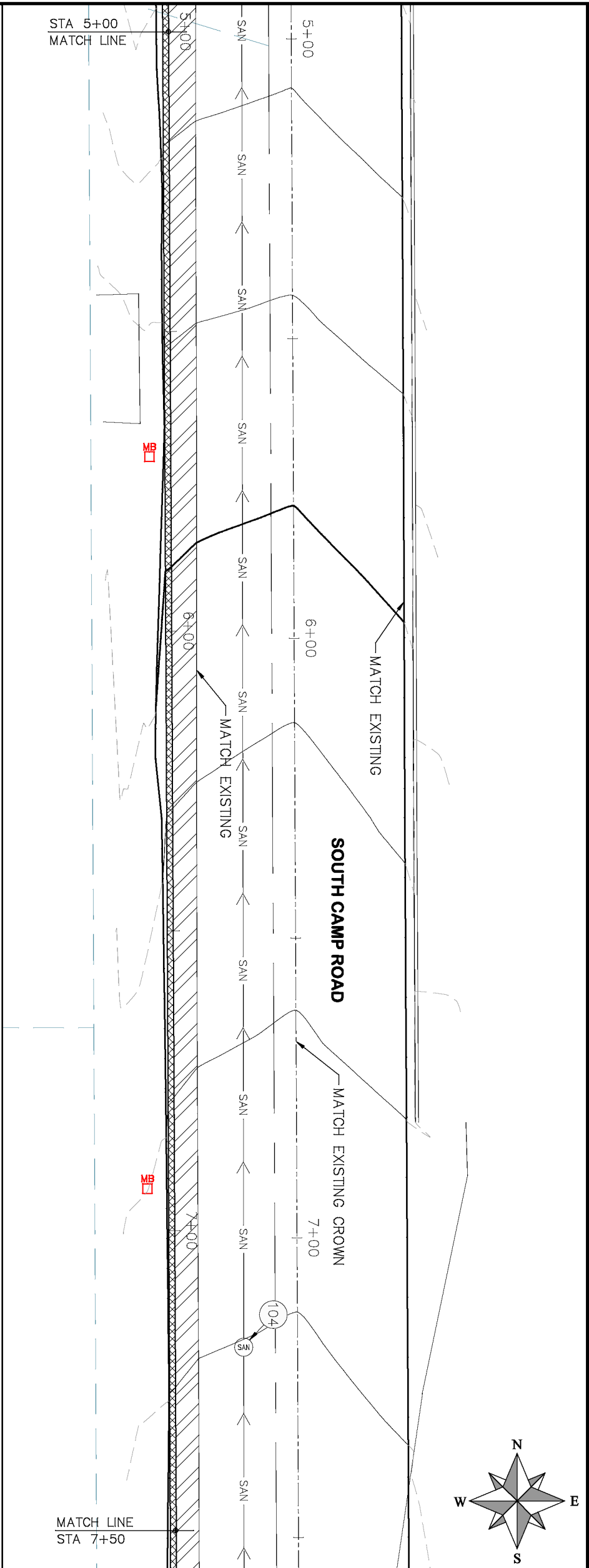


PUBLIC WORKS
ENGINEERING DIVISION

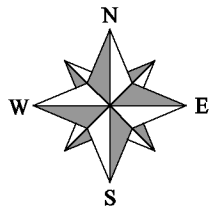
2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 5+00 TO STA 7+50

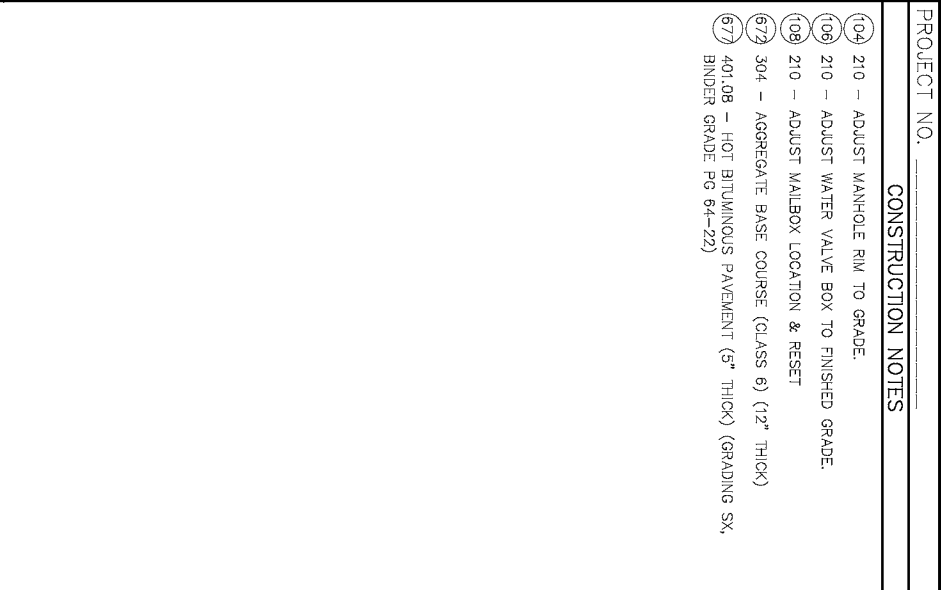


HATCH LEGEND
ASPHALT WIDENING
GRAVEL SHOULDER



PROJECT NO.
CONSTRUCTION NOTES
(104) 210 - ADJUST MANHOLE RIM TO GRADE.
(106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
(108) 210 - ADJUST MAILBOX LOCATION & RESET
(672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
(677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)





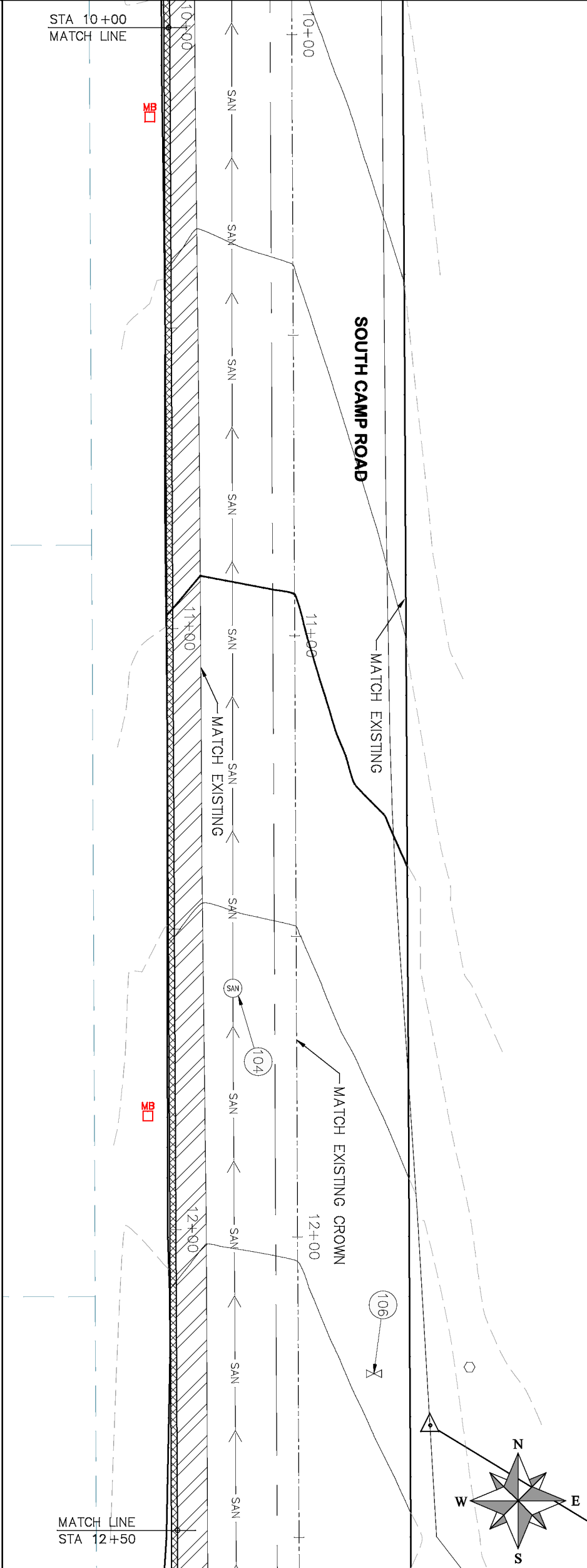
REVISION Δ _____ - _____
 REVISION Δ _____ - _____
 REVISION Δ _____ - _____
 REVISION Δ _____ - _____

DESIGNED BY ECM DATE 2019
 CHECKED BY ECM DATE 2019
 APPROVED BY ECM DATE 2019



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 10+00 TO STA 12+50



- | PROJECT NO. _____ | |
|--------------------|---|
| CONSTRUCTION NOTES | |
| 104 | 210 - ADJUST MANHOLE RIM TO GRADE. |
| 106 | 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE. |
| 108 | 210 - ADJUST WALKBOX LOCATION & RESET |
| 672 | 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK) |
| 677 | 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22) |

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

REVISION Δ	DESCRIPTION	DATE
REVISION Δ		
REVISION Δ		
REVISION Δ		

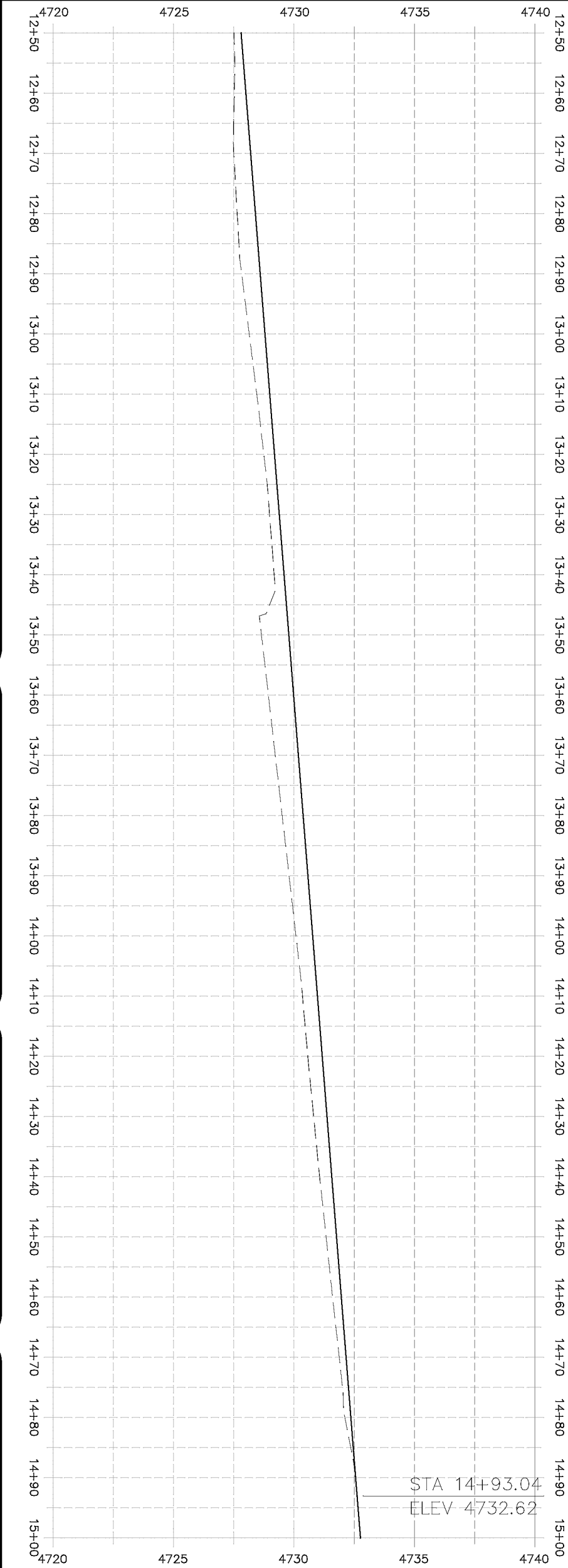
DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5



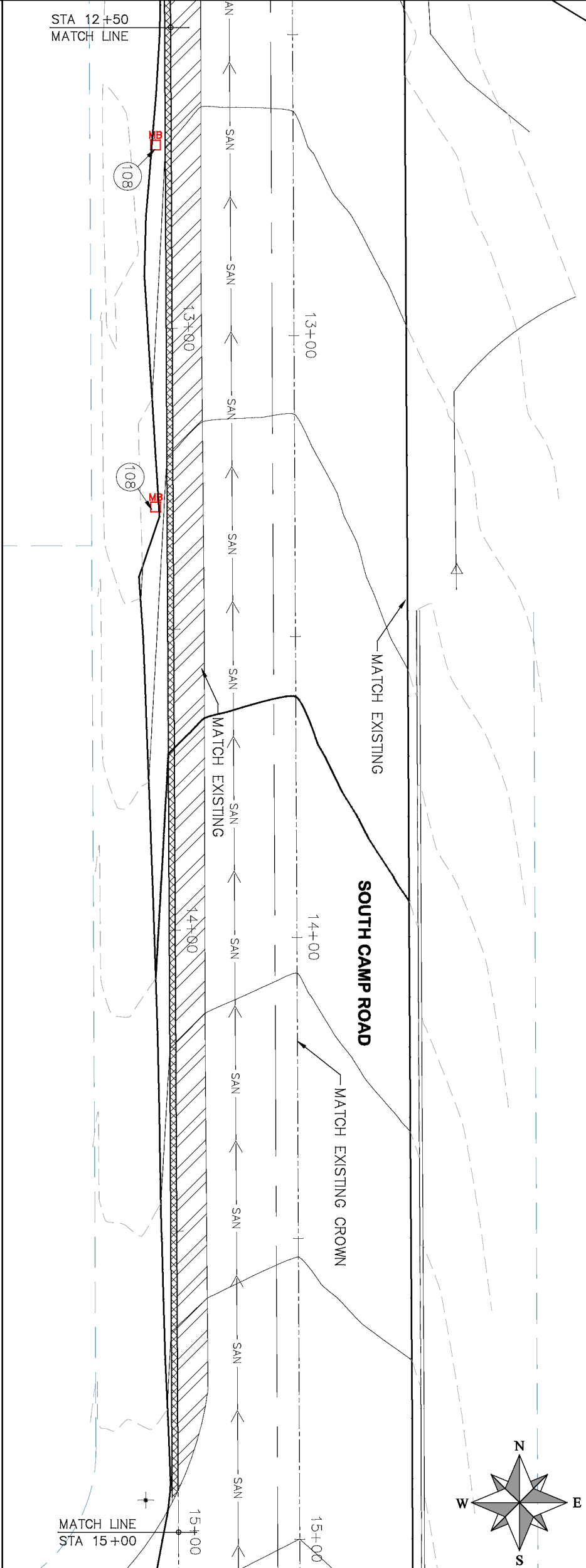
PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 12+50 TO STA 15+00

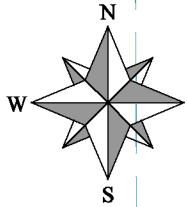


	ASPHALT WIDENING
	GRAVEL SHOULDER

HATCH LEGEND



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 – ADJUST MAILBOX LOCATION & RESET
 - (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



- PROJECT NO. _____
- CONSTRUCTION NOTES
- 104

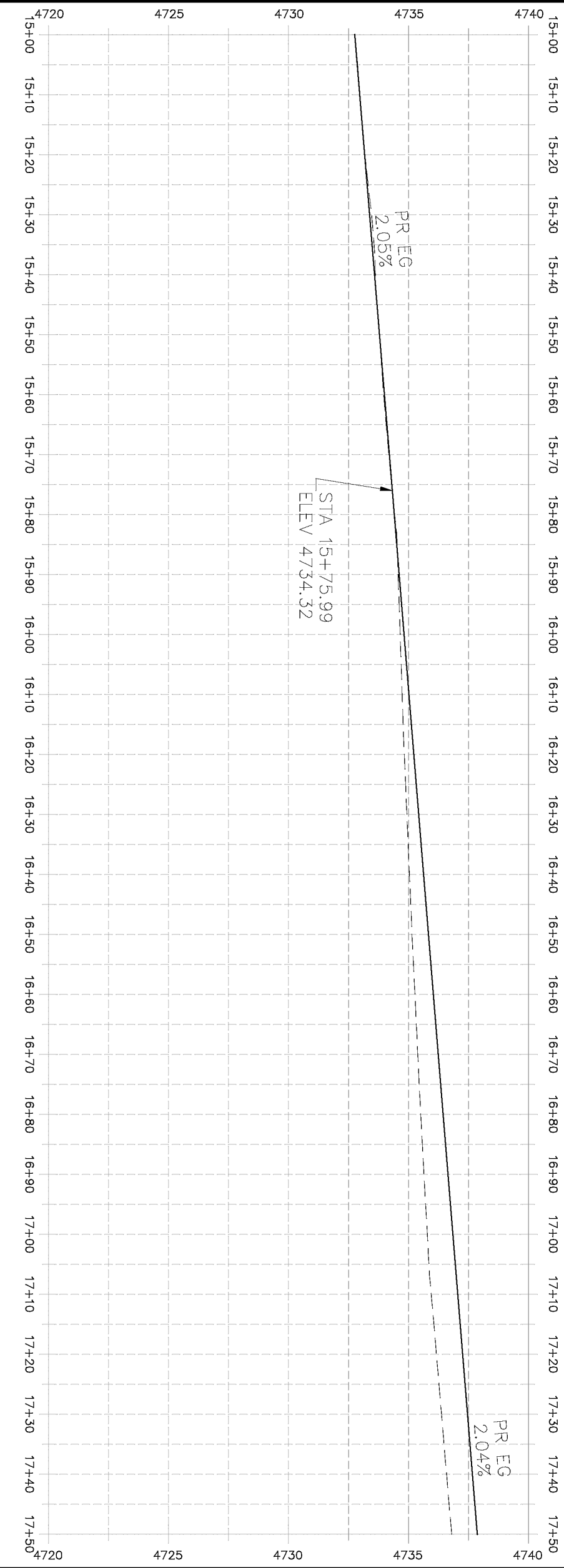
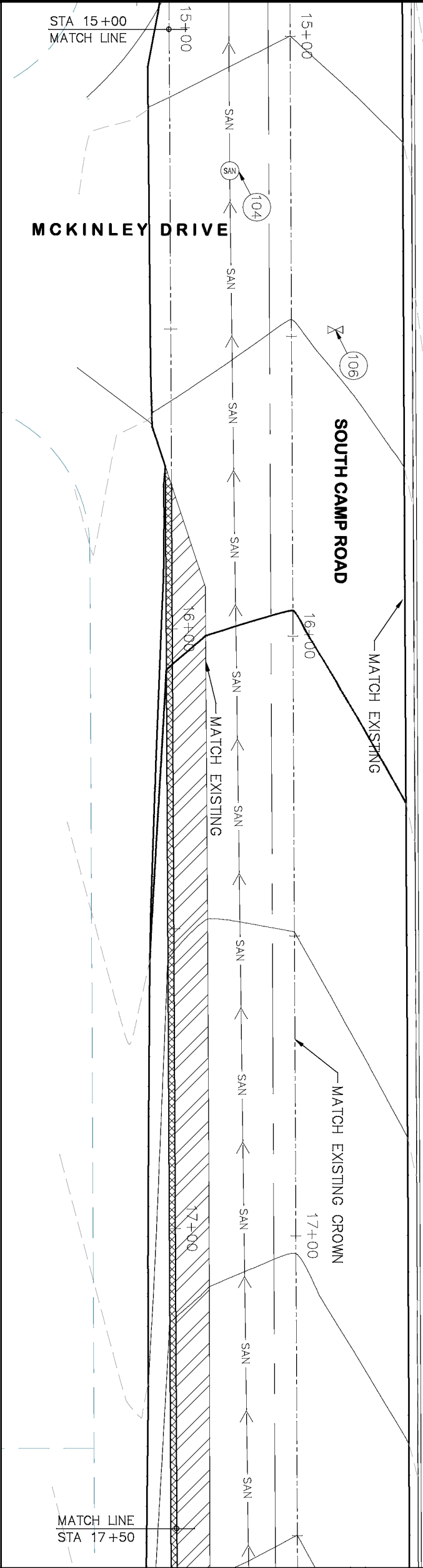
210 – ADJUST MANHOLE RIM TO GRADE.
- 106

210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- 108

210 – ADJUST MAILBOX LOCATION & RESET
- 672

304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- 677

401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)



REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		
REVISION		
REVISION		

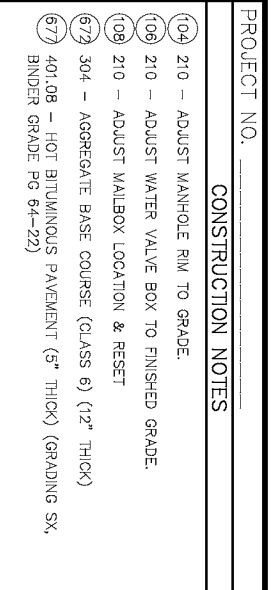
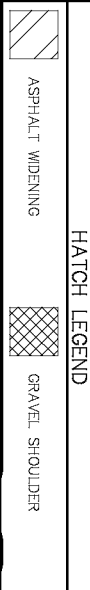
DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

0	HORIZONTAL: 1" = 20'
0	VERTICAL: 1" = 5'
0	1/2" = 2.5'
0	1/2" = 2.5'



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 15+00 TO STA 17+50



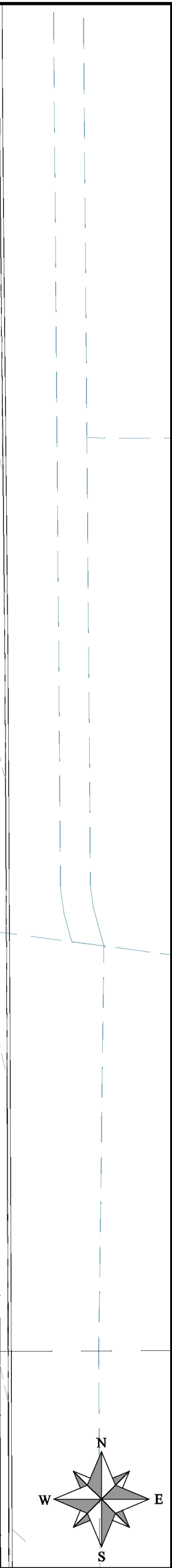
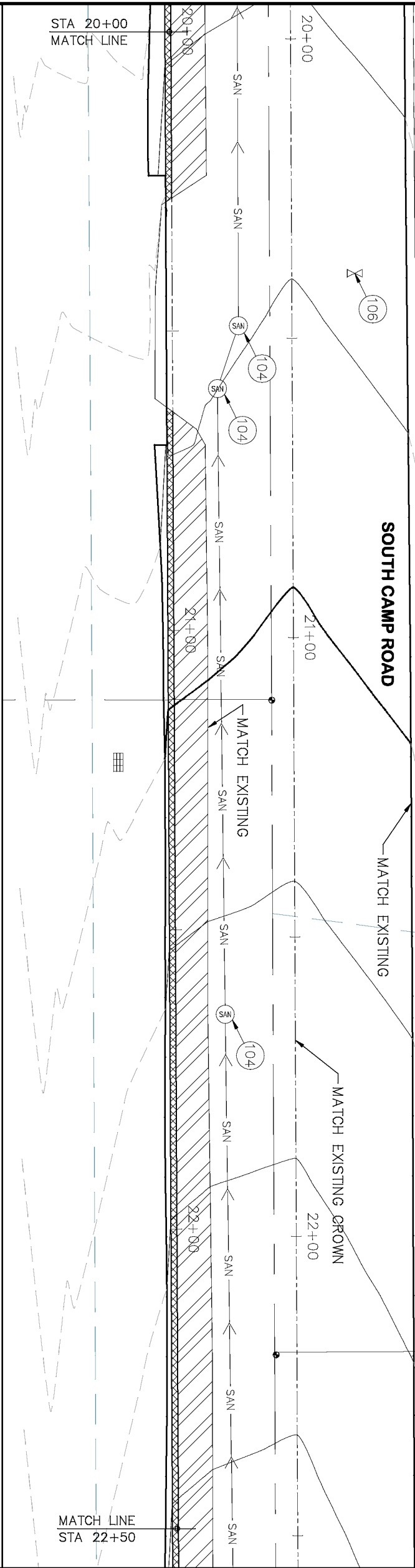
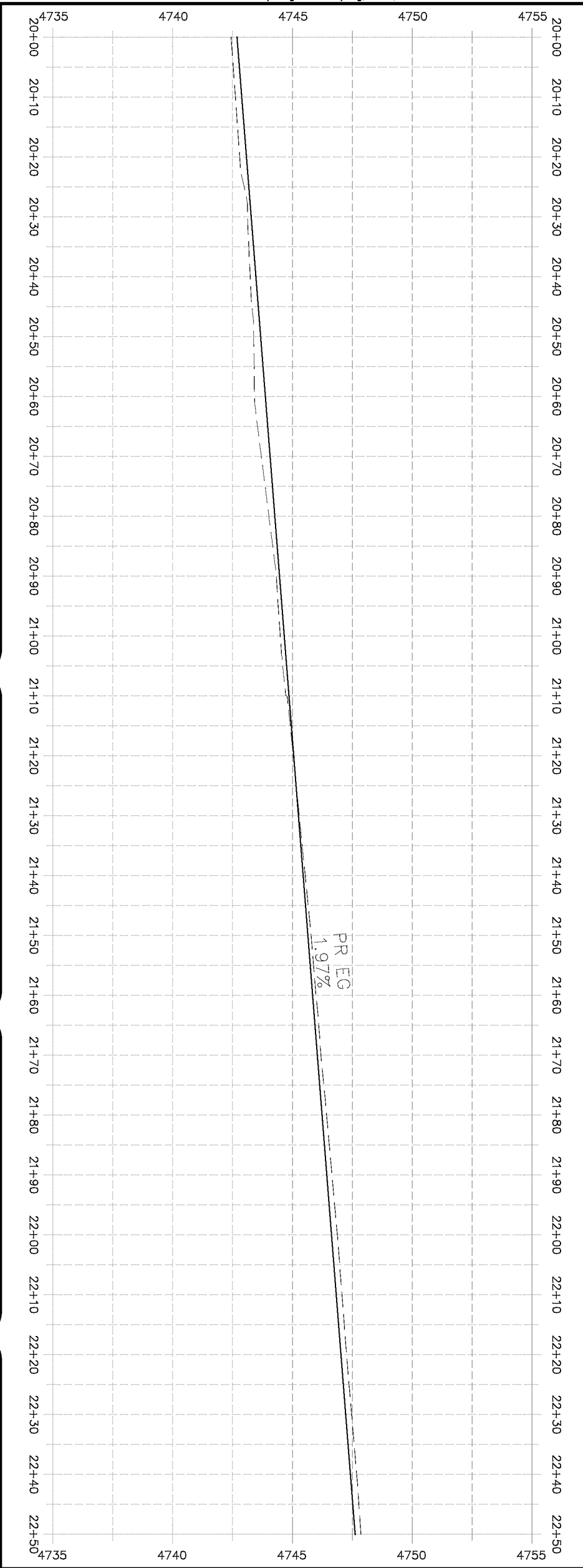


Grand Junction
CITY OF
COLORADO



2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 20+00 TO STA 22+50

13



- | PROJECT NO. _____ | |
|--------------------|---|
| CONSTRUCTION NOTES | |
| (104) | 210 - ADJUST MANHOLE RIM TO GRADE. |
| (106) | 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE. |
| (108) | 210 - ADJUST MAILBOX LOCATION & RESET |
| (672) | 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK) |
| (677) | 401.0B - HOT BITUMINOUS PAYEMENT (5" THICK) (GRADING SK, BINDER GRADE PG 64-22) |

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

REVISION Δ	DESCRIPTION	DATE
REVISION Δ		
REVISION Δ		
REVISION Δ		

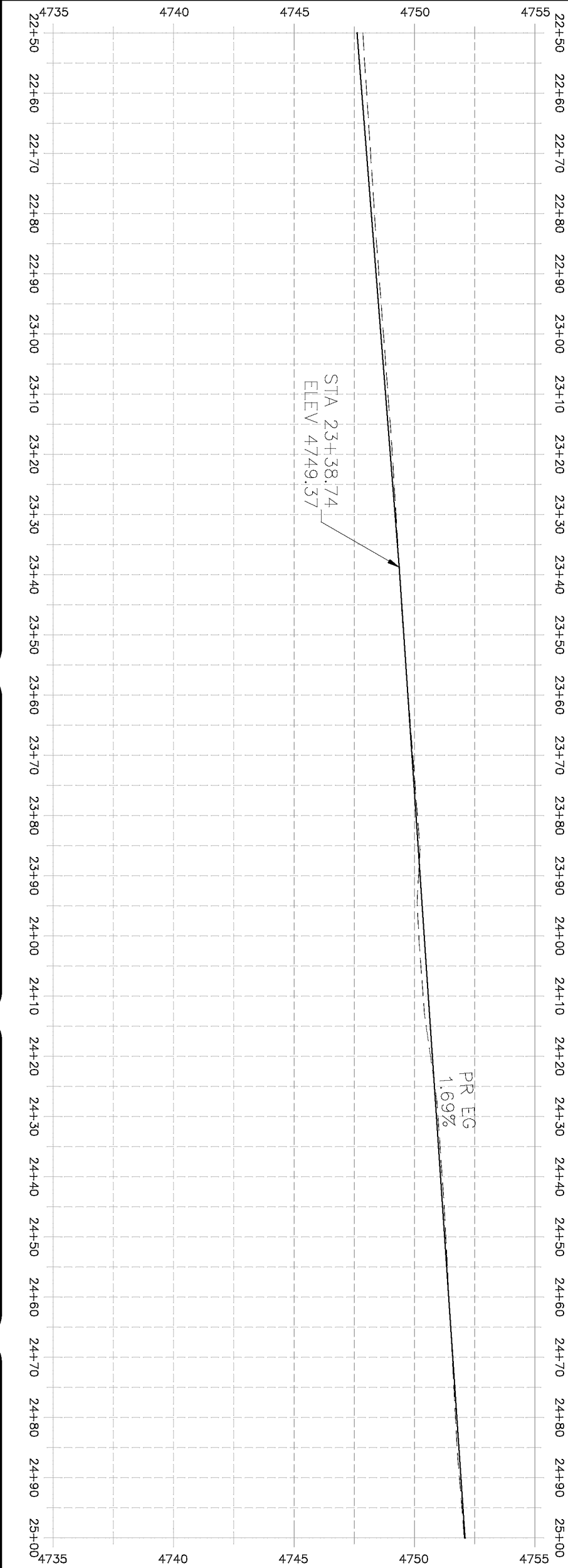
DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5

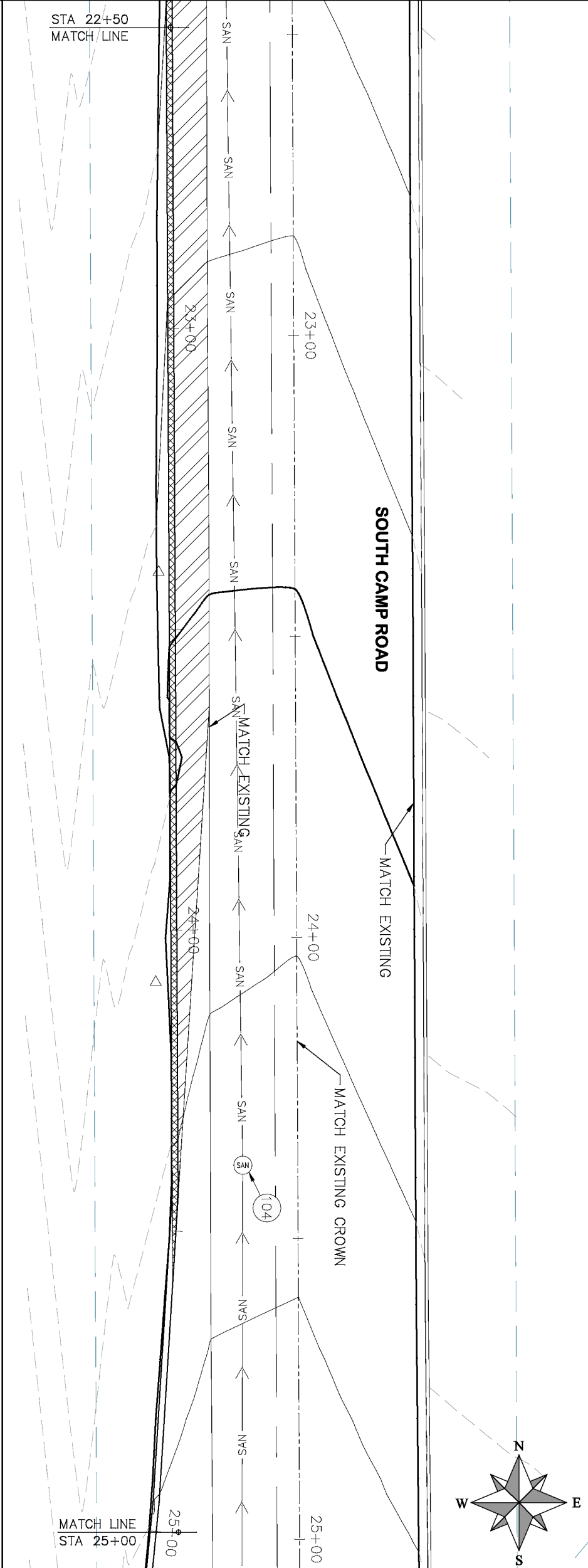


PUBLIC WORKS
ENGINEERING DIVISION

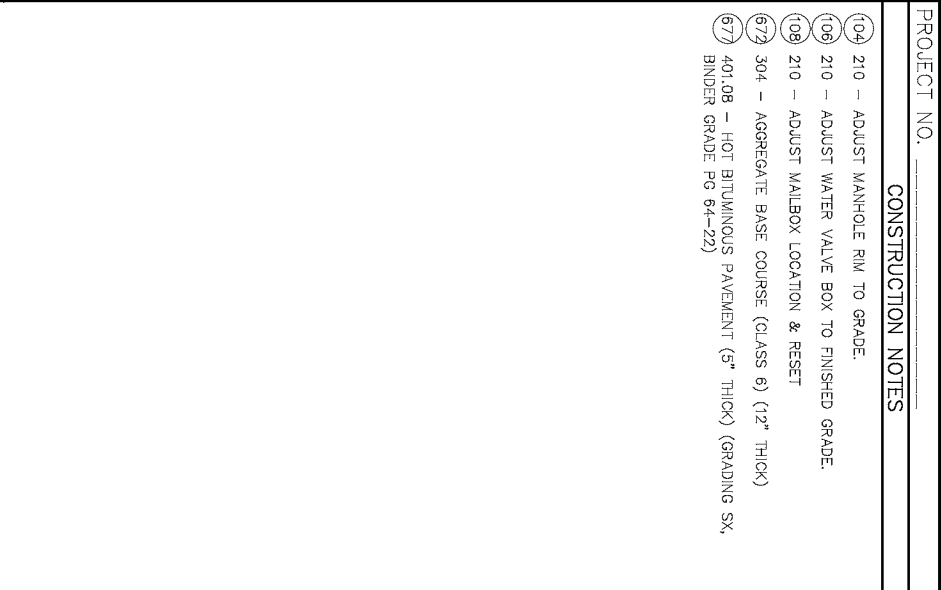
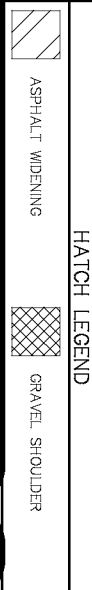
2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 20+00 TO STA 22+50

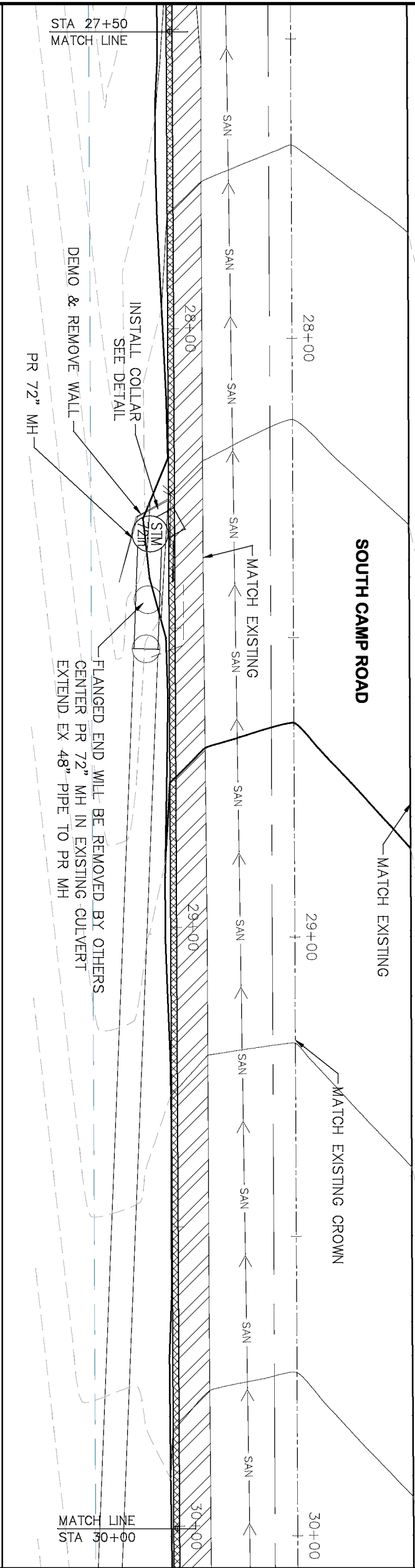
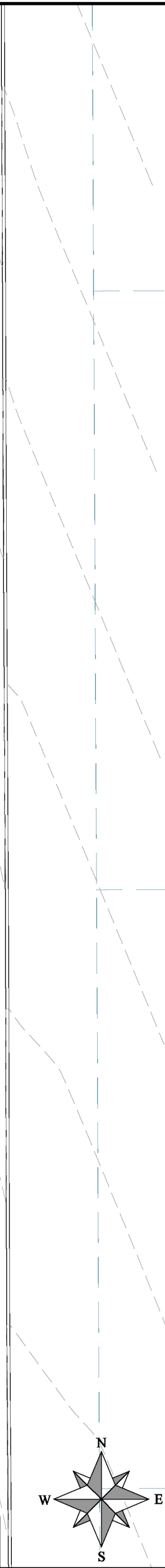


	HAATCH LEGEND	
ASPHALT WIDENING		GRAVEL SHOULDER

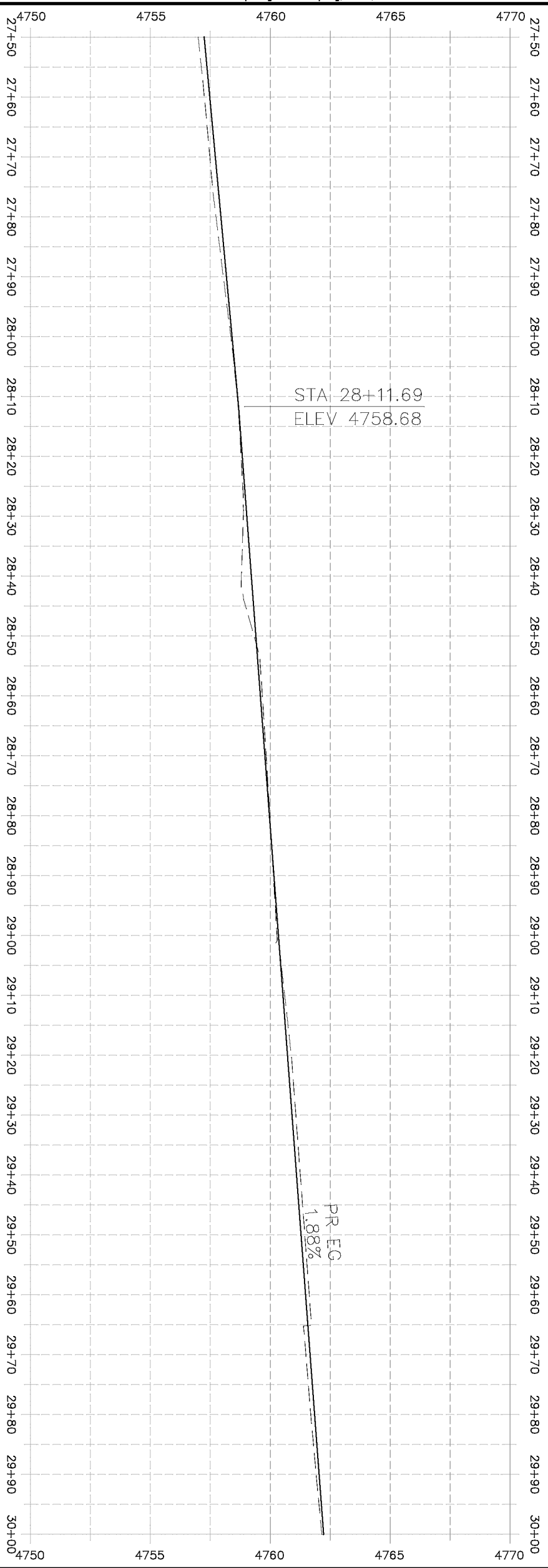


- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 – ADJUST MAILBOX LOCATION & RESET
 - (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)





- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		
REVISION		
REVISION		

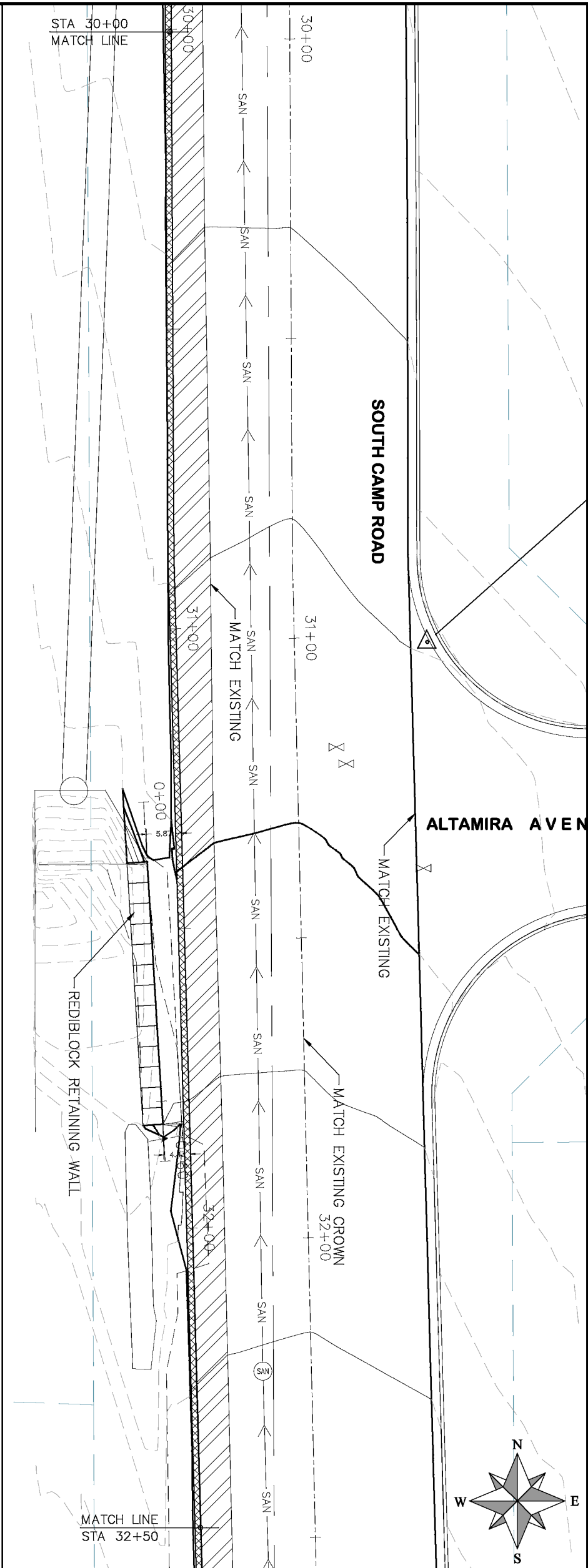
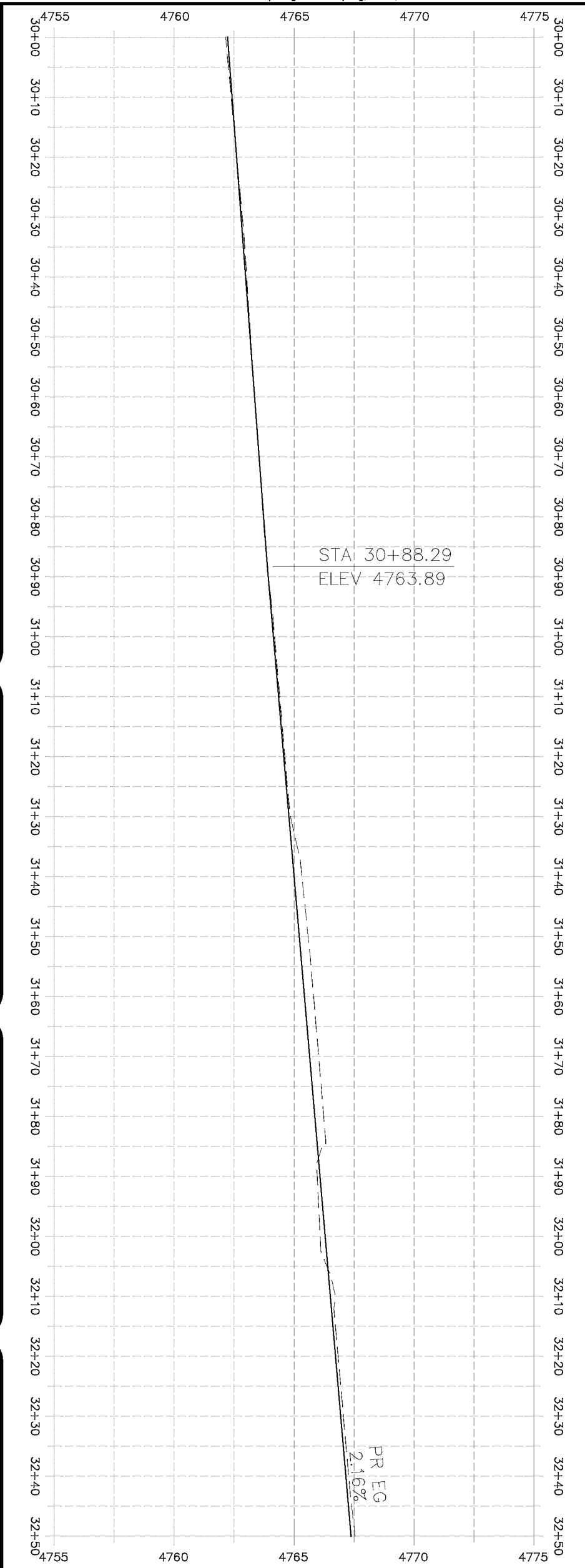
DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5





PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 27+50 TO STA 30+00

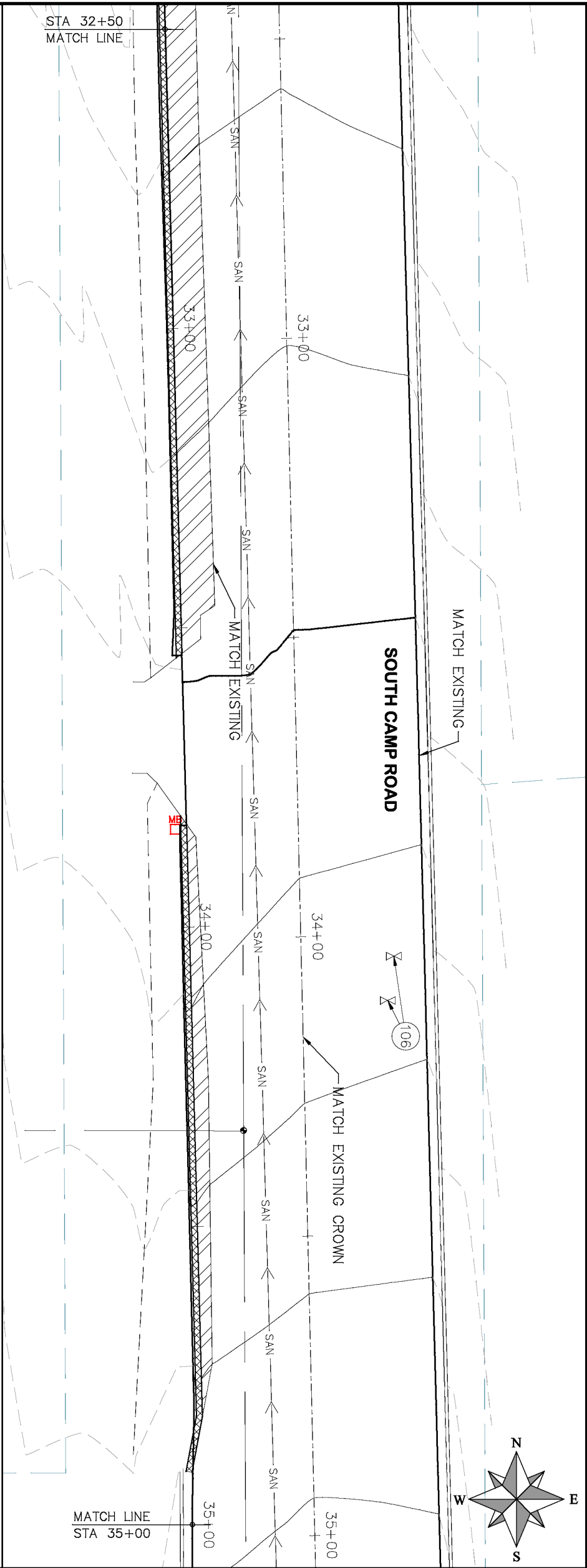


PROJECT NO.	CONSTRUCTION NOTES
(104) 210 -	ADJUST MANHOLE RIM TO GRADE.
106 210 -	ADJUST WATER VALVE BOX TO FINISHED GRADE.
108 210 -	ADJUST MAILBOX LOCATION & RESET
672 304 -	AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
677 401.08 -	HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND

	ASPHALT WIDENING		GRAVEL SHOULDER
---	------------------	---	-----------------

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 30+00 TO STA 32+50



- | PROJECT NO. _____ | CONSTRUCTION NOTES |
|-------------------|--|
| 104 210 - | ADJUST MANHOLE RIM TO GRADE. |
| 106 210 - | ADJUST WATER VALVE BOX TO FINISHED GRADE. |
| 108 210 - | ADJUST MAILBOX LOCATION & RESET |
| 672 304 - | AGGREGATE BASE COURSE (CLASS 6) (1/2" THICK) |
| 677 401.08 - | HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SK, BINDER GRADE PG 64-22) |

Profile view of a road segment. The vertical axis represents elevation in feet, ranging from 4760 to 4780. The horizontal axis represents stationing, ranging from 32+50 to 35+00. The profile shows a solid line for the existing ground (PR EG) and a dashed line for the proposed grade. A vertical curve is indicated with a 3.14% grade. Key points are labeled: STA 33+92.06 ELEV 4770.44 and STA 34+81.75 ELEV 4773.26.

HATCH LEGEND

	ASPHALT WIDENING
	GRAVEL SHOULDER

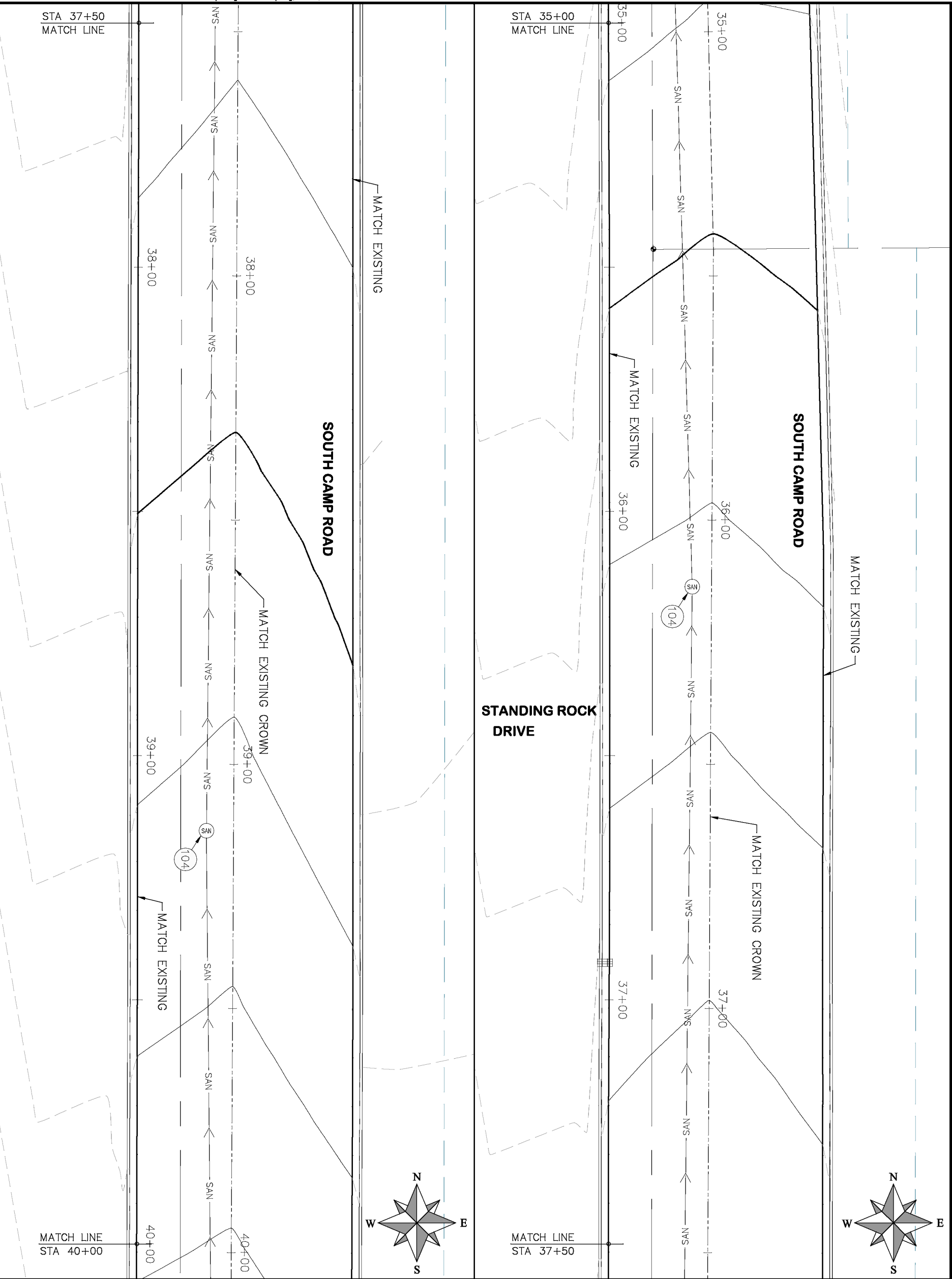
REVISION Δ	DESCRIPTION	DATE	DRAIN BY HMC	DATE 2019	SCALES: PLAN & PROFILE HORIZONTAL: 1" = 20' 0 5 10 20 VERTICAL: 1" = 5' 0 1.25 2.5 5
REVISION Δ	---	---	DESIGNED BY ECM	DATE 2019	
REVISION Δ	---	---	CHECKED BY ECM	DATE 2019	
REVISION Δ	---	---	APPROVED BY ECM	DATE 2019	
REVISION Δ	---	---			



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 32+50 TO STA 35+00

18



PROJECT NO. _____

CONSTRUCTION NOTES

(104) 210 – ADJUST MANHOLE RIM TO GRADE.

(106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.

(108) 210 – ADJUST MAILBOX LOCATION & RESET

(672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)

(677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)

ASPHALT WIDENING

GRAVEL SHOULDER

HATCH LEGEND

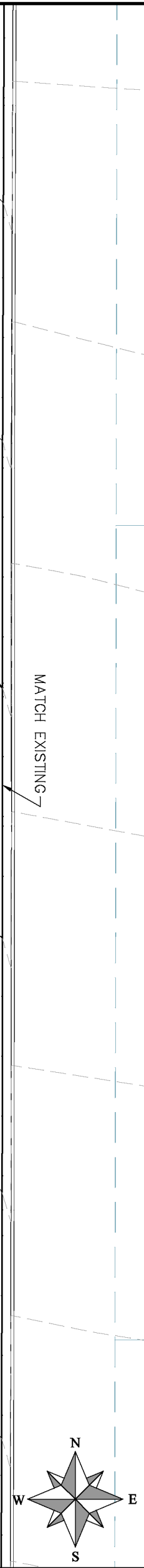
REVISION	DESCRIPTION	DATE
Δ		
Δ		
Δ		
Δ		
Δ		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

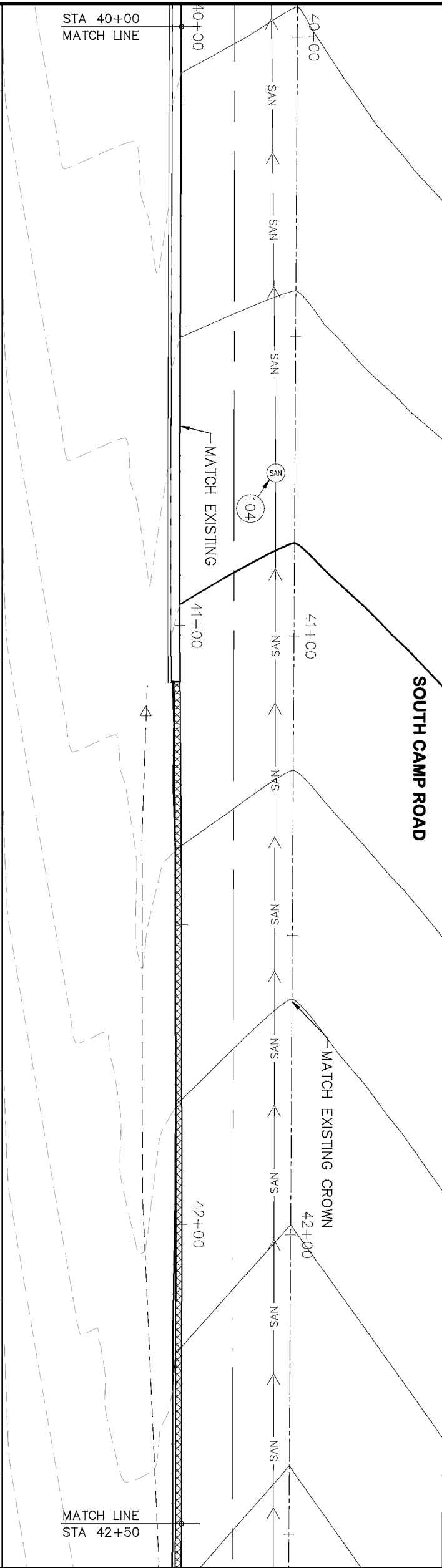
SCALES: PLAN & PROFILE	
HORIZONTAL:	1" = 20'
VERTICAL:	1" = 5'
PLAN:	1/2" = 5'
PROFILE:	1/2" = 5'



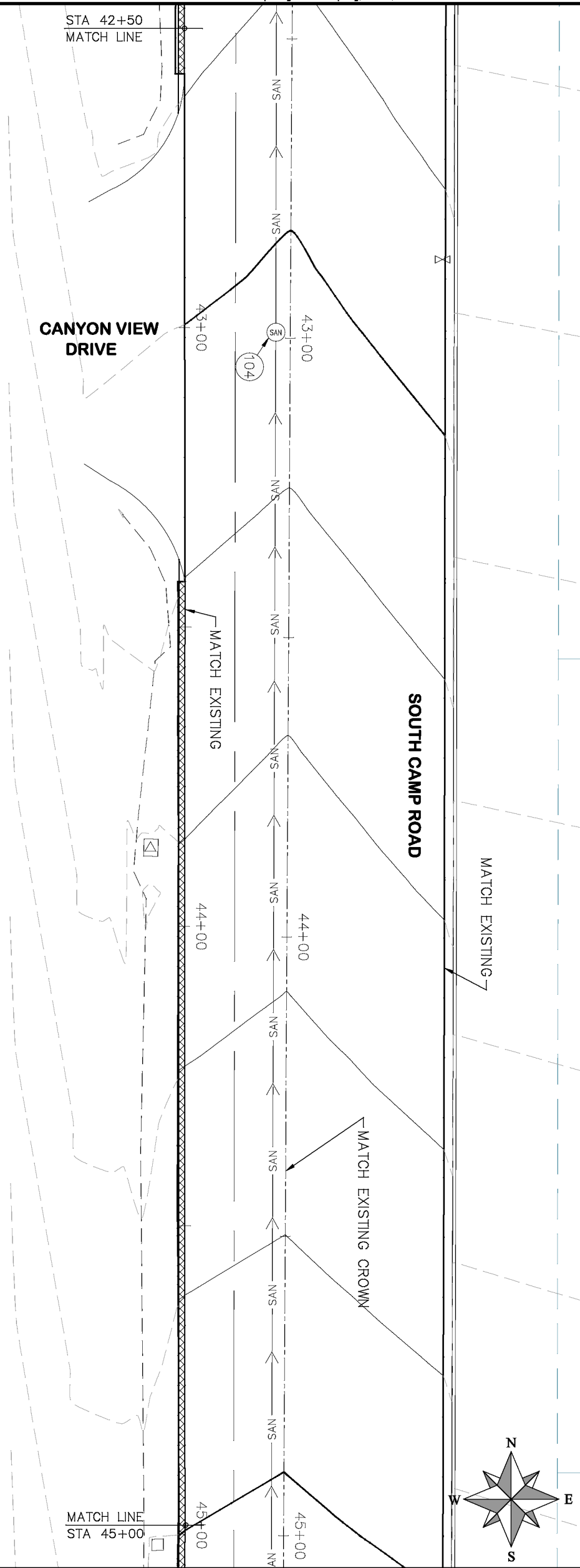
PUBLIC WORKS
ENGINEERING DIVISION



PROJECT NO. _____
CONSTRUCTION NOTES
(104) 210 - ADJUST MANHOLE RIM TO GRADE.
(106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
(108) 210 - ADJUST MAILBOX LOCATION & RESET
(672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
(677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



ASPHALT WIDENING
GRAVEL SHOULDER



ASPHALT WIDENING
GRAVEL SHOULDER

REVISION	DESCRIPTION	DATE
Δ		
Δ		
Δ		
Δ		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

0	HORIZONTAL: 1" = 20'
0	VERTICAL: 1" = 5'
0	1/2" = 2.5'
0	5'



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 40+00 TO STA 45+00

RENSON Δ _____

RENSON Δ _____

RENSON Δ _____

RENSON Δ _____

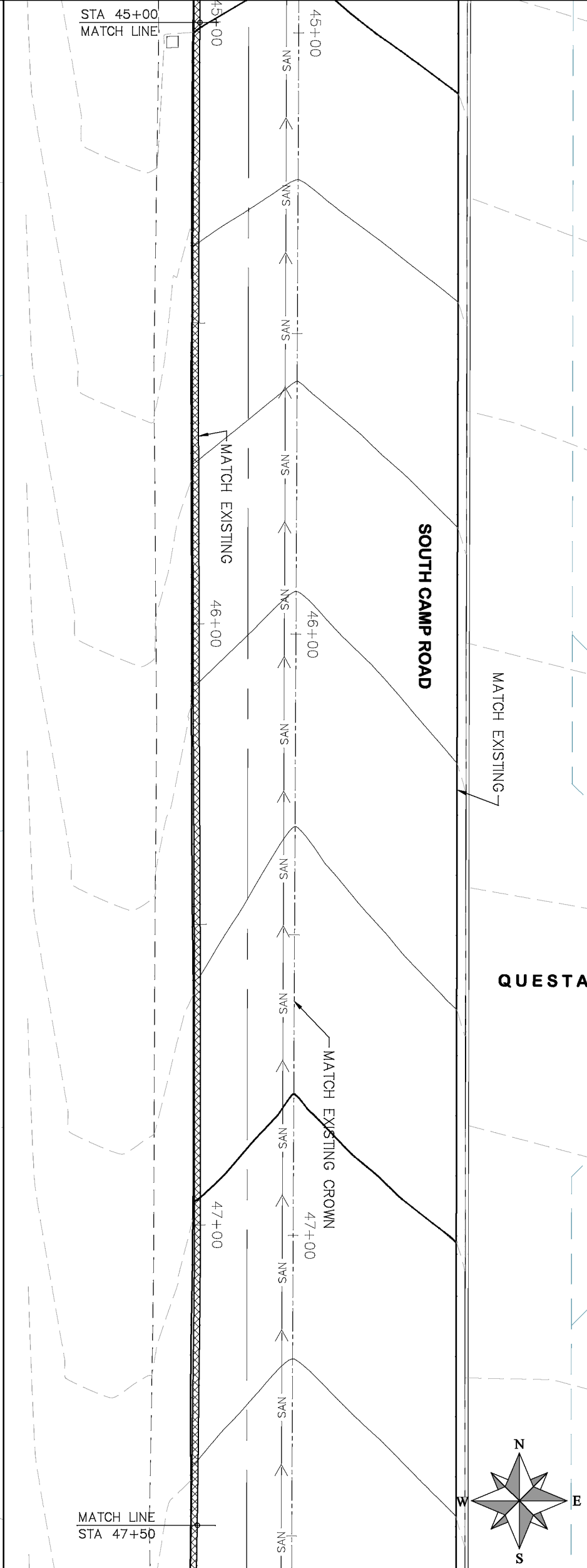
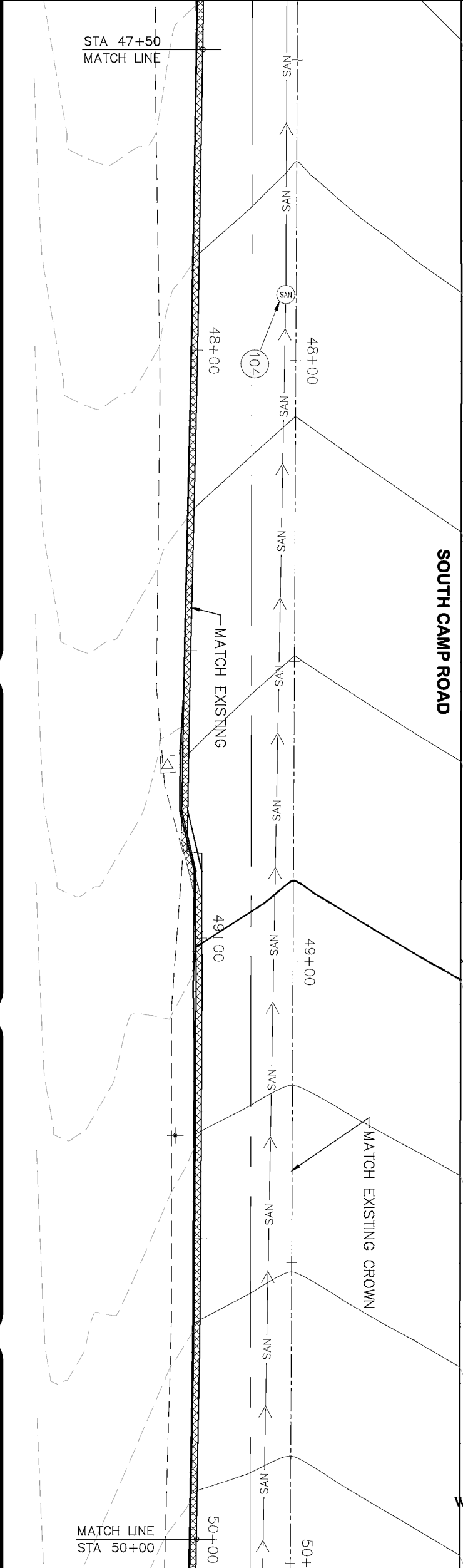
DRAWN BY	_____	DATE	_____
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 45+00 TO STA 50+00

21



- | PROJECT NO. _____ | |
|--------------------|--|
| CONSTRUCTION NOTES | |
| 104 | 210 - ADJUST MANHOLE RIM TO GRADE. |
| 106 | 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE. |
| 108 | 210 - ADJUST MAILBOX LOCATION & RESET |
| 672 | 304 - AGGREGATE BASE COURSE (CLASS 6) (1 1/2" THICK) |
| 677 | 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX,
BINDER GRADE PG 64-22) |

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

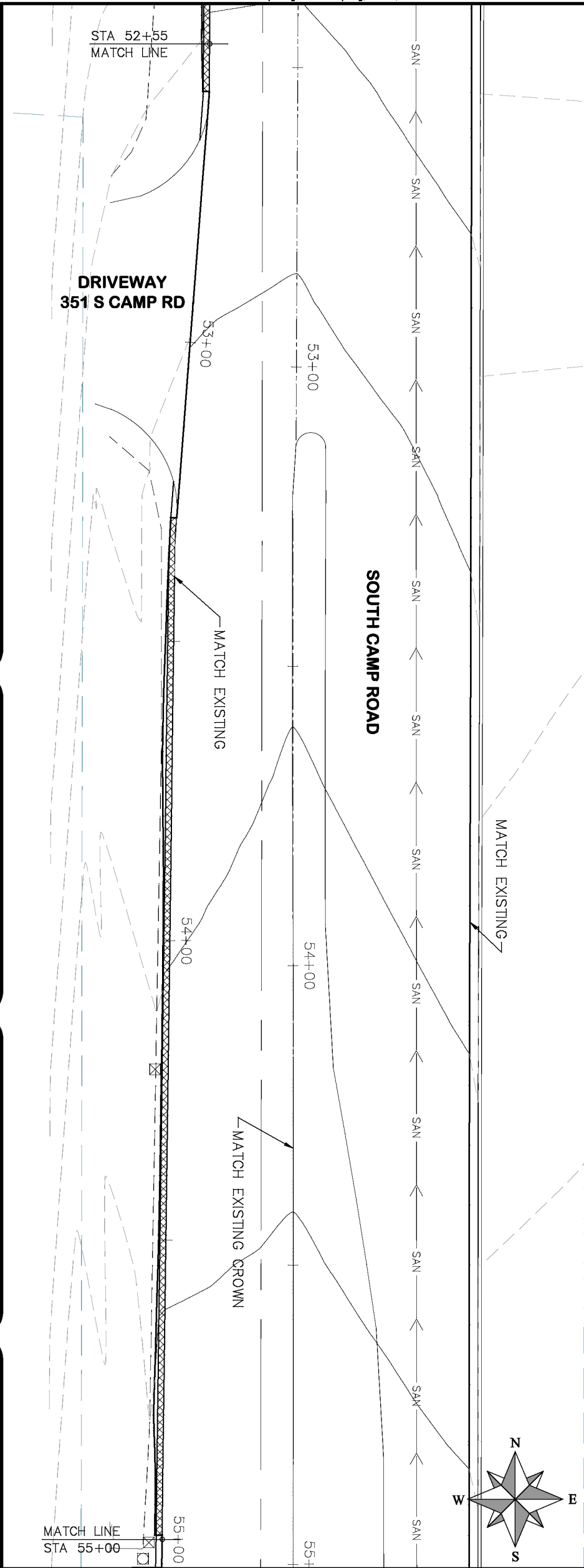
REVISION Δ	DESCRIPTION	DATE	DRAWN BY HMC	DATE 2019
REVISION Δ			DESIGNED BY ECM	DATE 2019
REVISION Δ			CHECKED BY ECM	DATE 2019
REVISION Δ			APPROVED BY ECM	DATE 2019

Scales: Plan & Profile	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5

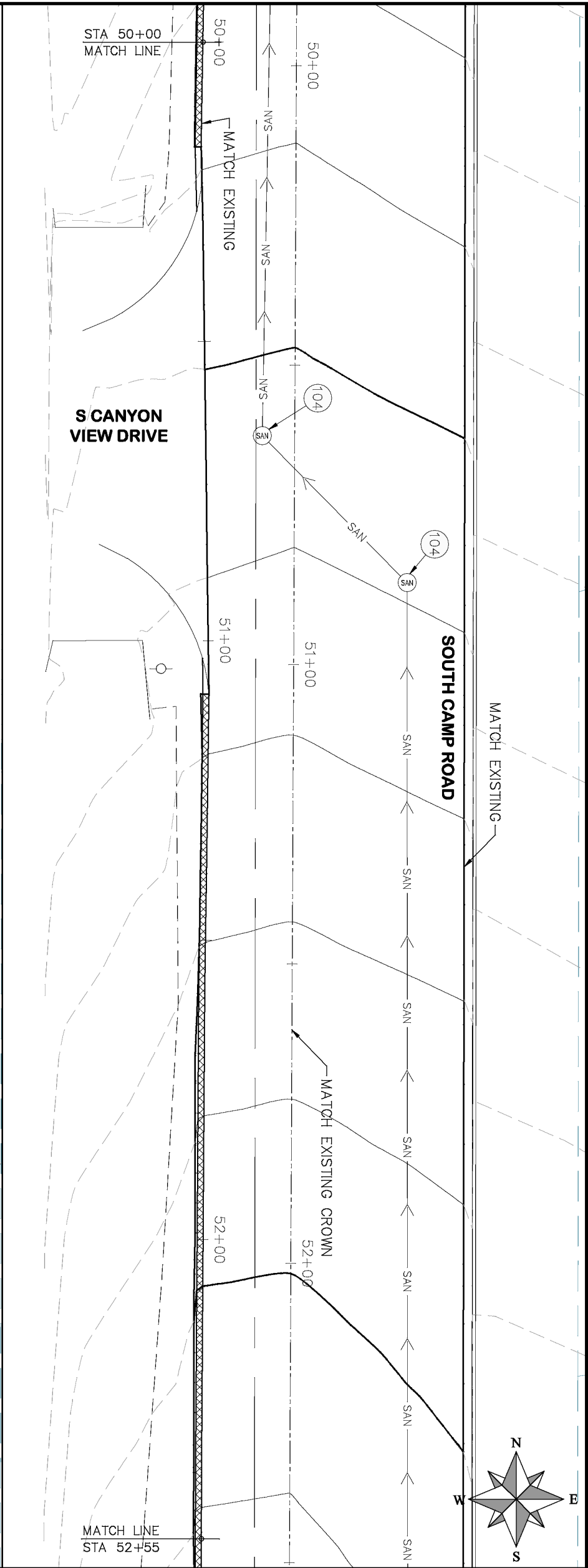


PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 50+00 TO STA 55+00



ASPHALT WIDENING	GRAVEL SHOULDER
------------------	-----------------



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

REVISION	DESCRIPTION	DATE
Δ		
Δ		
Δ		
Δ		
Δ		
Δ		

REVISION	DESCRIPTION	DATE
Δ		
Δ		
Δ		
Δ		
Δ		
Δ		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

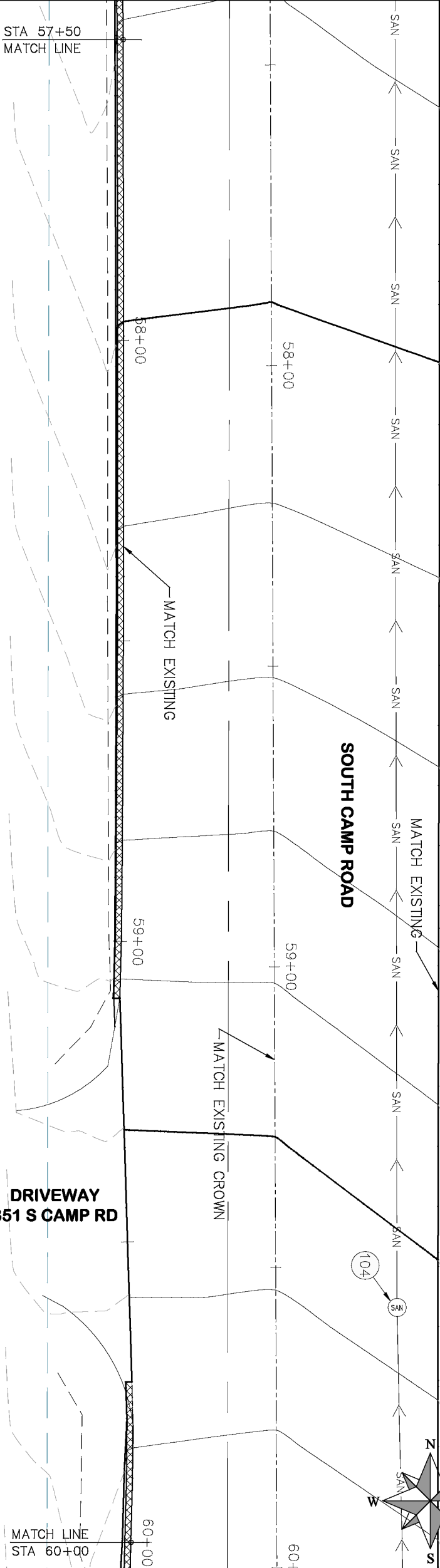
SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'



PUBLIC WORKS
ENGINEERING DIVISION

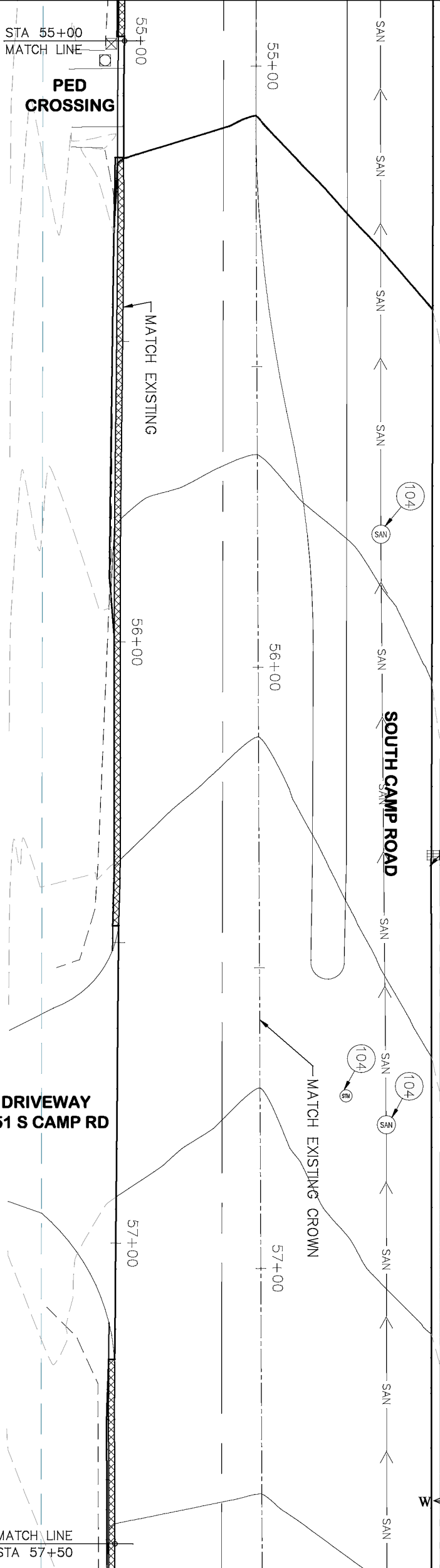
2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 55+00 TO STA 60+00

STA 57+50
MATCH LINE



MATCH LINE
STA 60+00

STA 55+00
MATCH LINE



MATCH LINE
STA 57+50

- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



ASPHALT WIDENING



GRAVEL SHOULDER

HATCH LEGEND

REVISION Δ	DESCRIPTION	DATE
REVISION Δ		
REVISION Δ		
REVISION Δ		

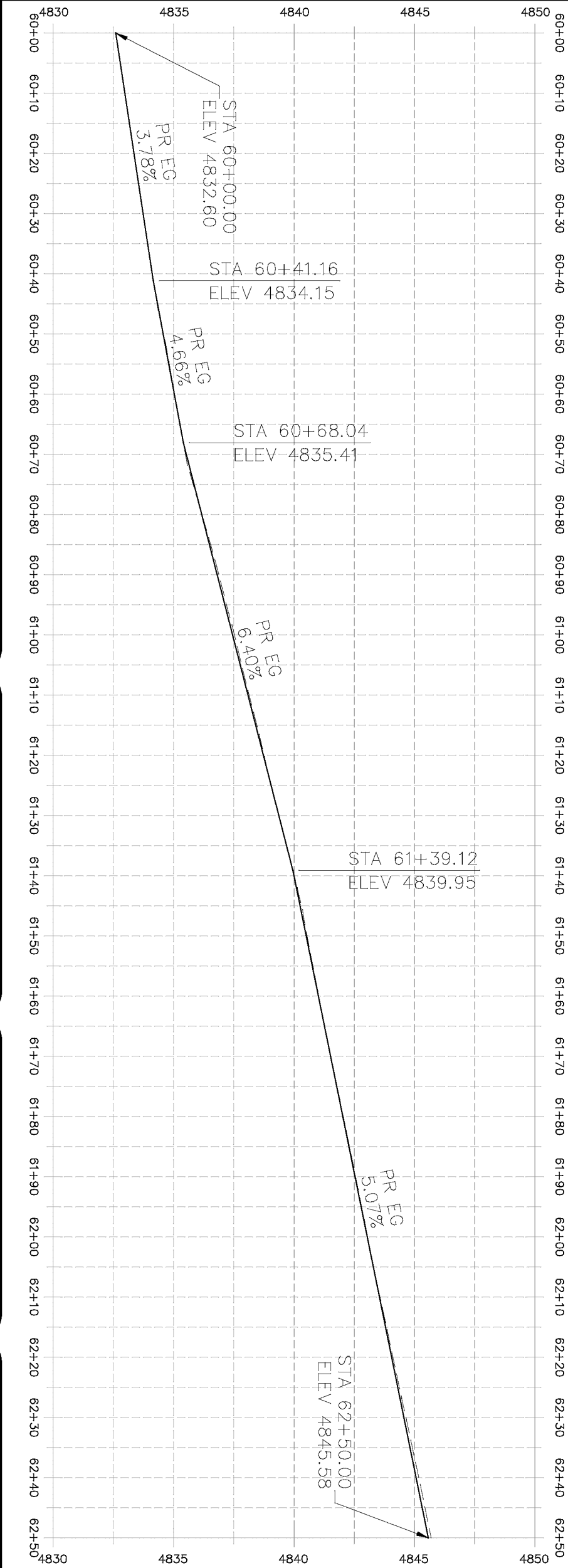
DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

0	5	10	20
HORIZONTAL: 1" = 20'			
0	1.25	2.5	5
VERTICAL: 1" = 5'			

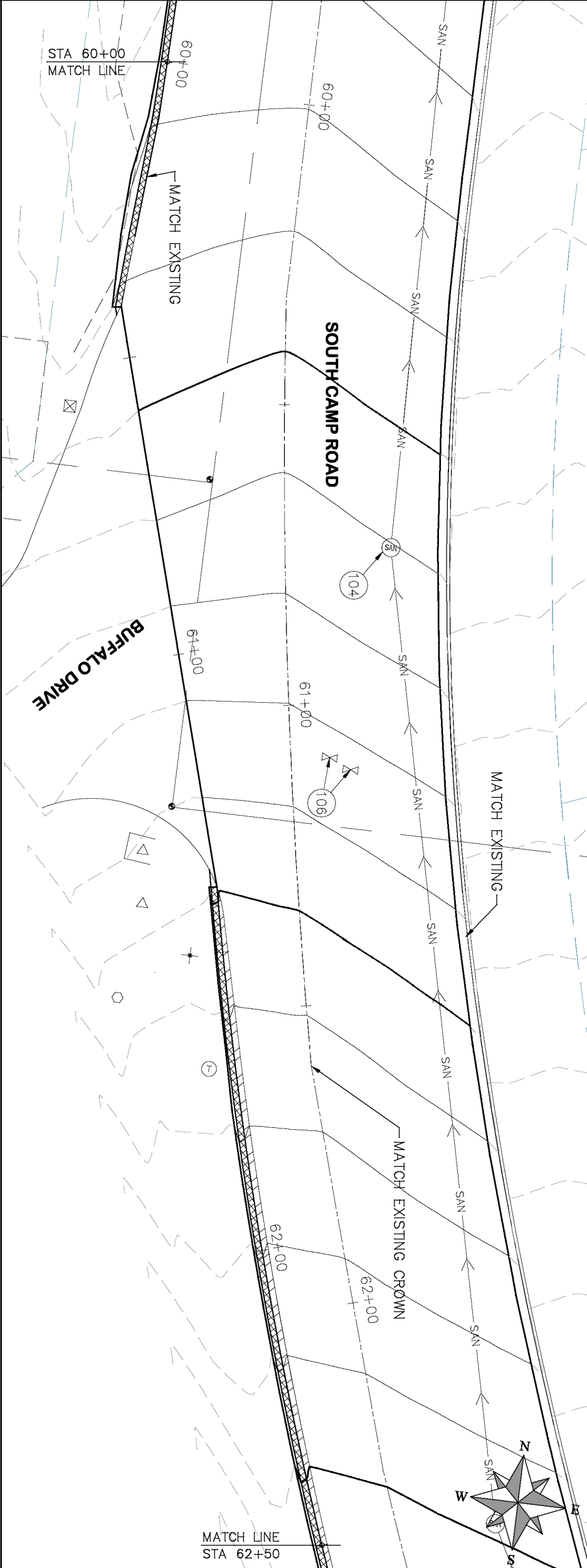


PUBLIC WORKS
ENGINEERING DIVISION

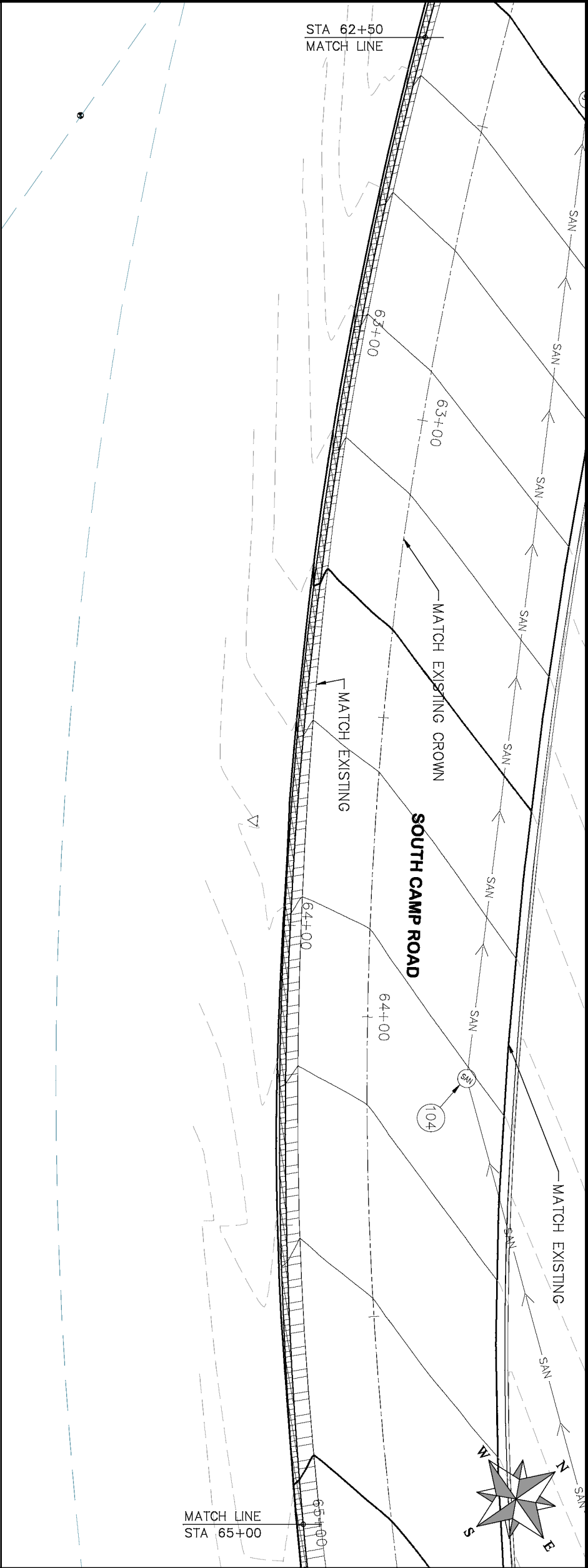
2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 60+00 TO STA 62+50



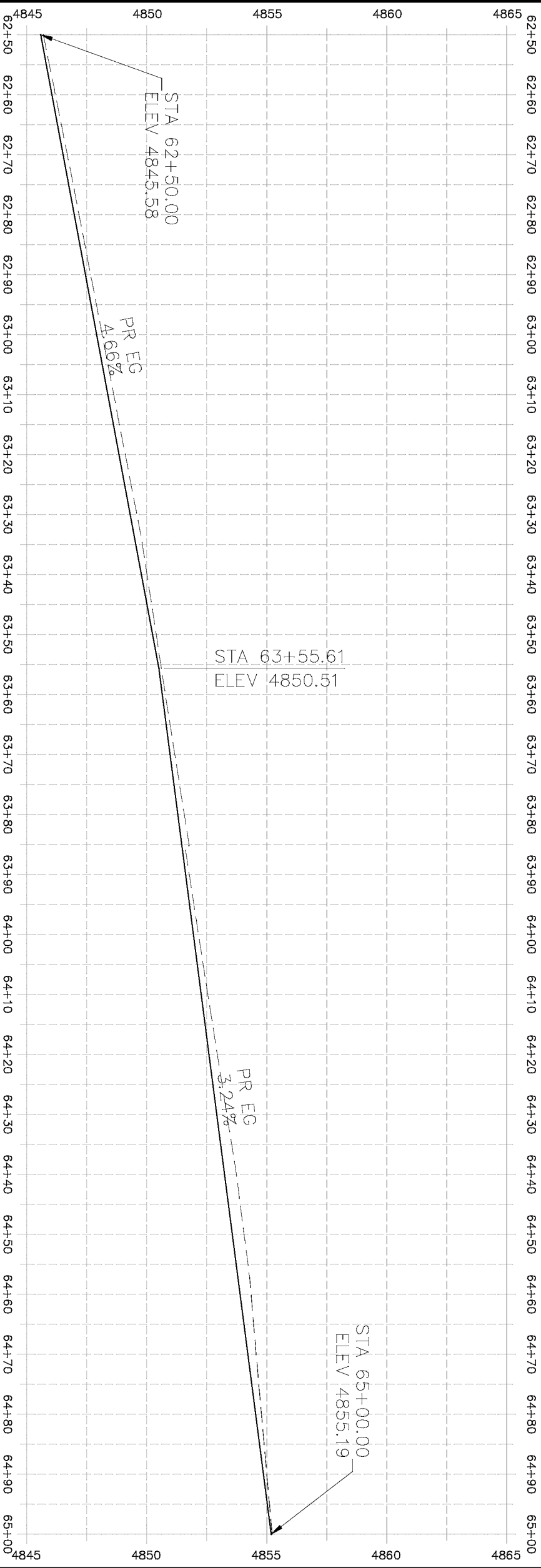
HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 – ADJUST MAILBOX LOCATION & RESET
 - (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (401.08) – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



- PROJECT NO. _____
- CONSTRUCTION NOTES
- 104 210 - ADJUST MANHOLE RIM TO GRADE.
 - 106 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - 108 210 - ADJUST MAILBOX LOCATION & RESET
 - 672 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - 677 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



REVISION	DESCRIPTION	DATE
Δ		
Δ		
Δ		
Δ		
Δ		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10
VERTICAL: 1" = 5'	0 1.25 2.5 5

CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

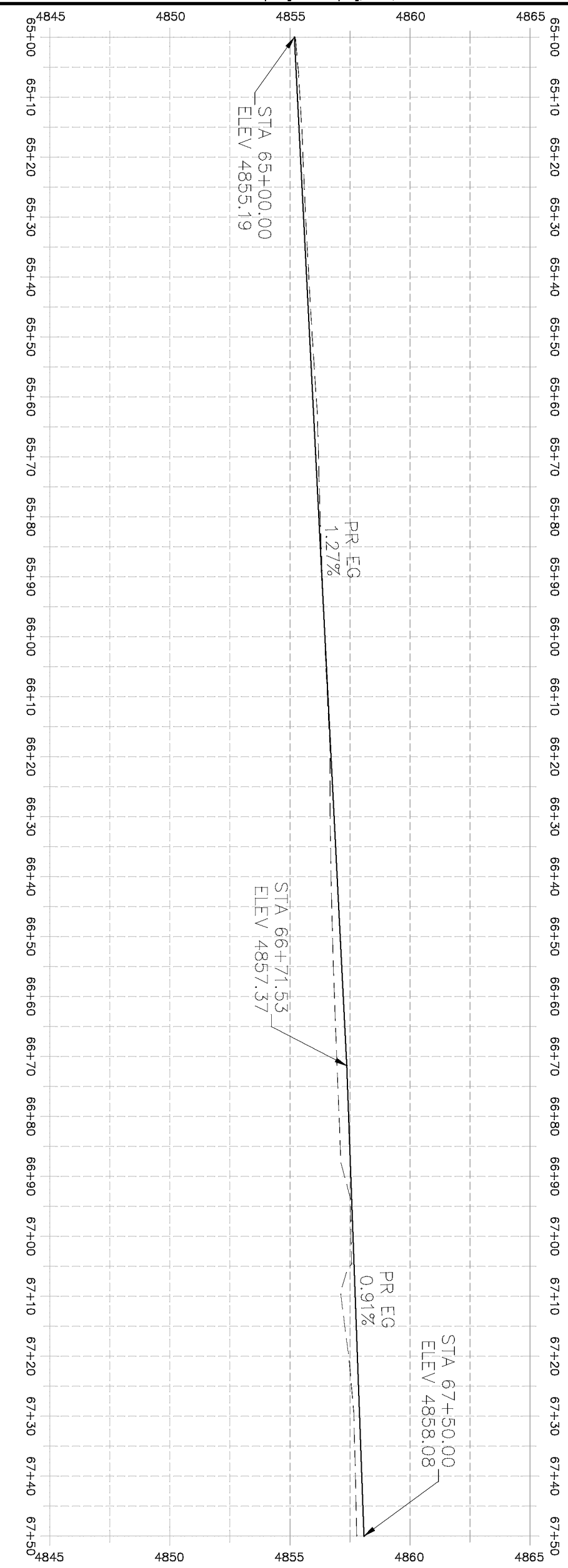
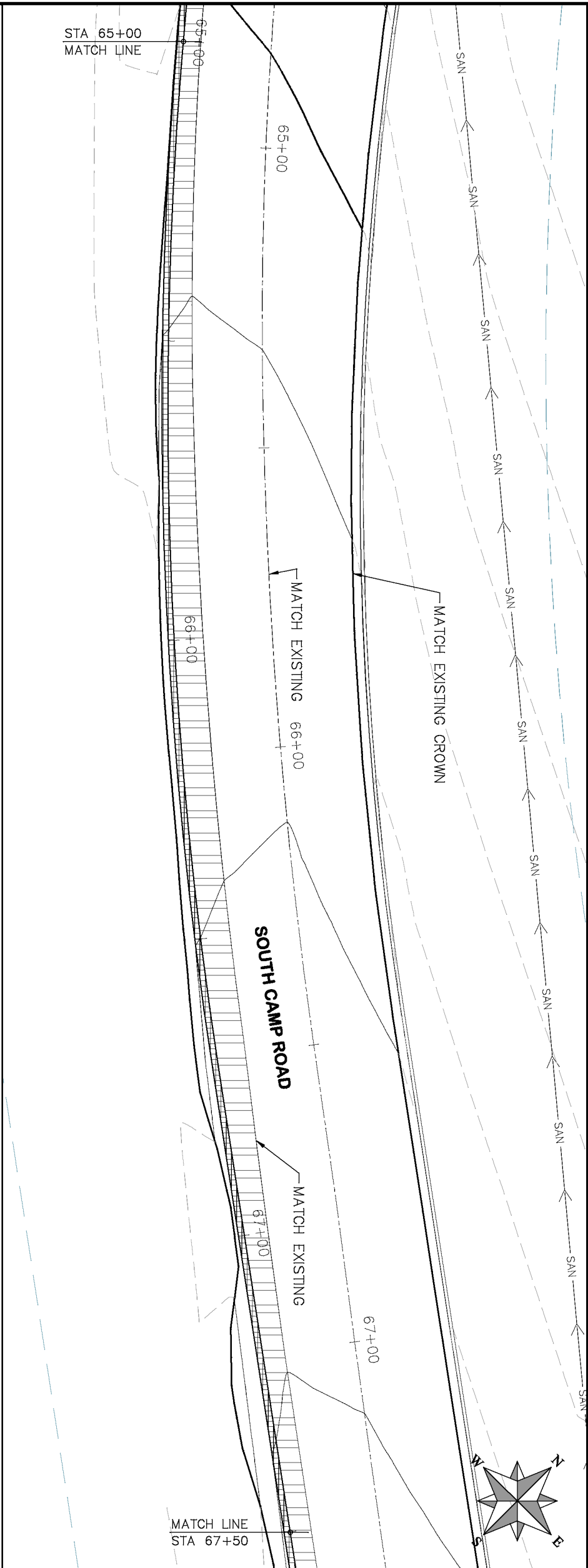
2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 62+50 TO STA 65+00

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

PROJECT NO. _____

CONSTRUCTION NOTES

- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
- (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 – ADJUST MAILBOX LOCATION & RESET
- (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		
REVISION		
REVISION		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALE: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'



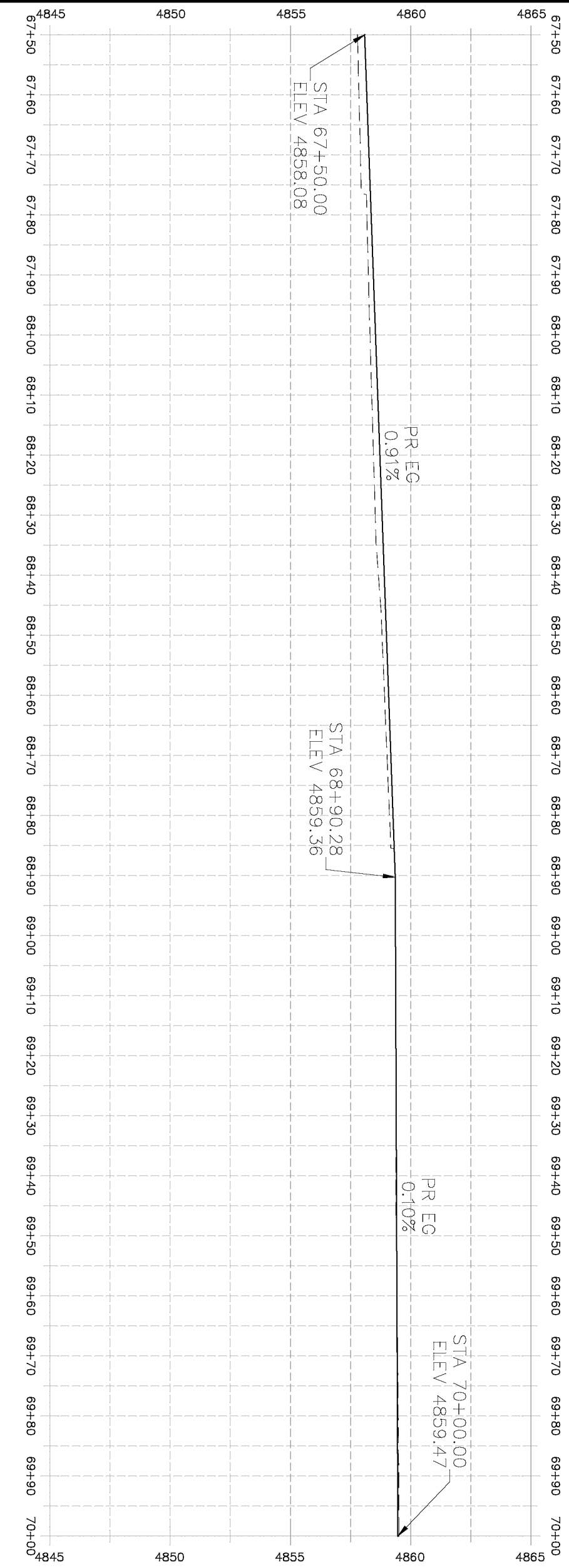
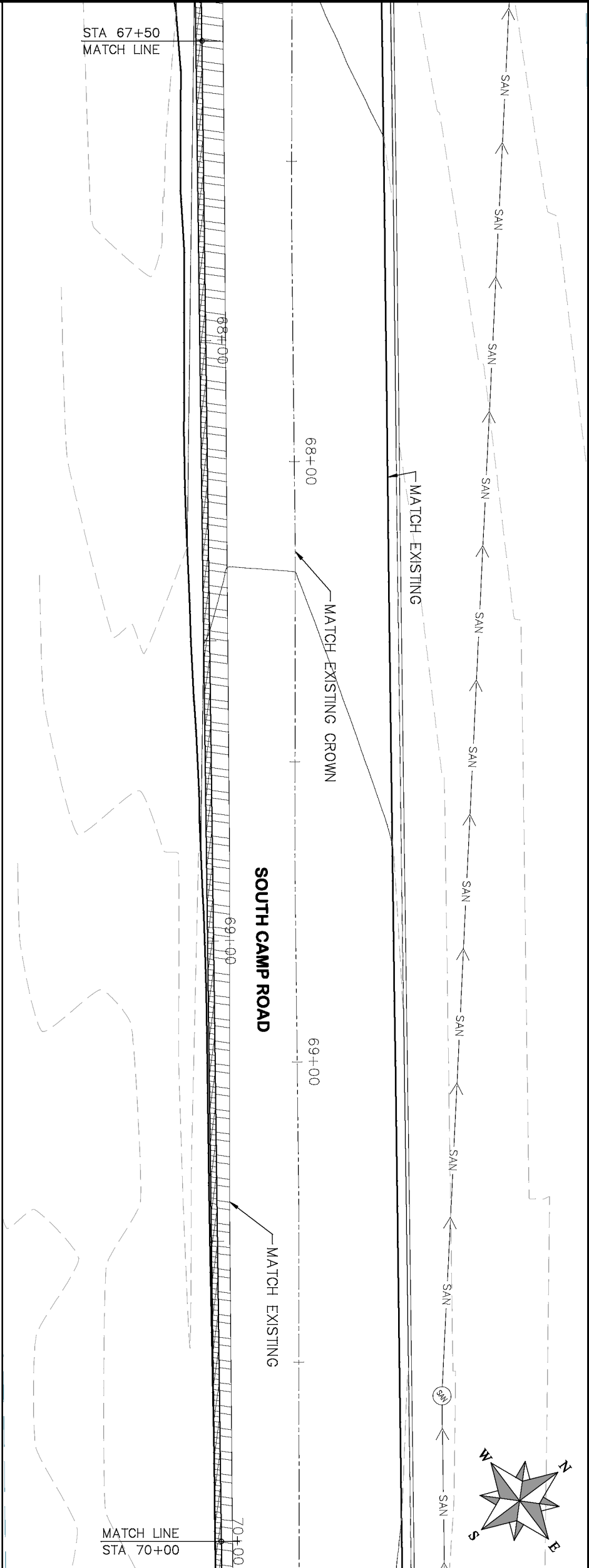
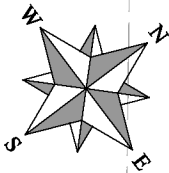
PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 65+00 TO STA 67+50

PROJECT NO. _____

CONSTRUCTION NOTES

- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
- (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 – ADJUST MAILBOX LOCATION & RESET
- (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

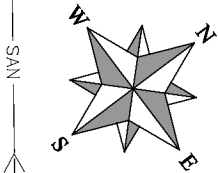
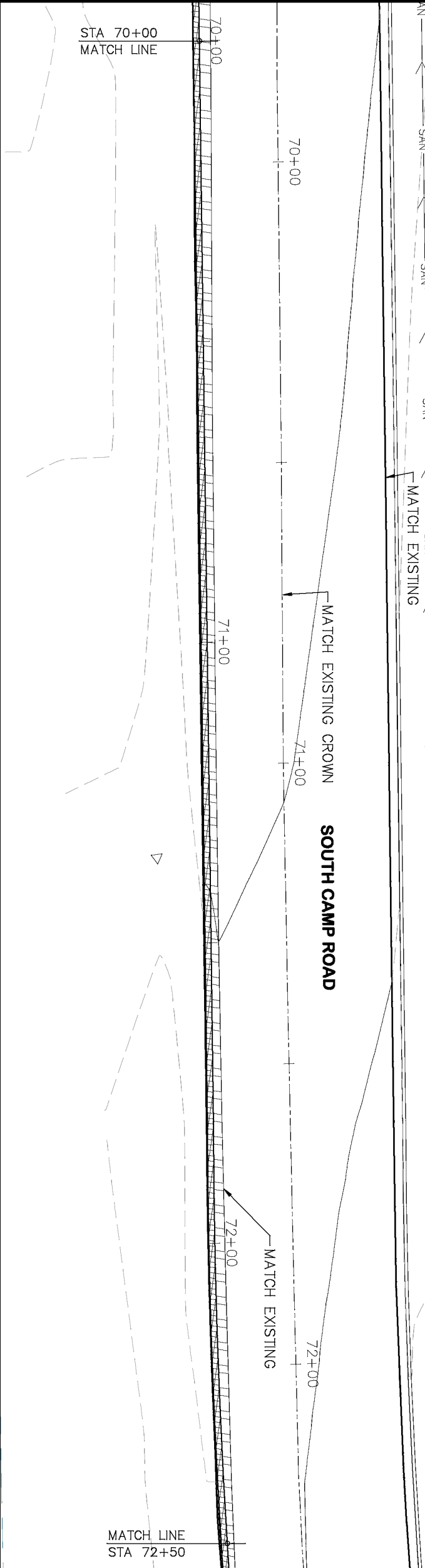
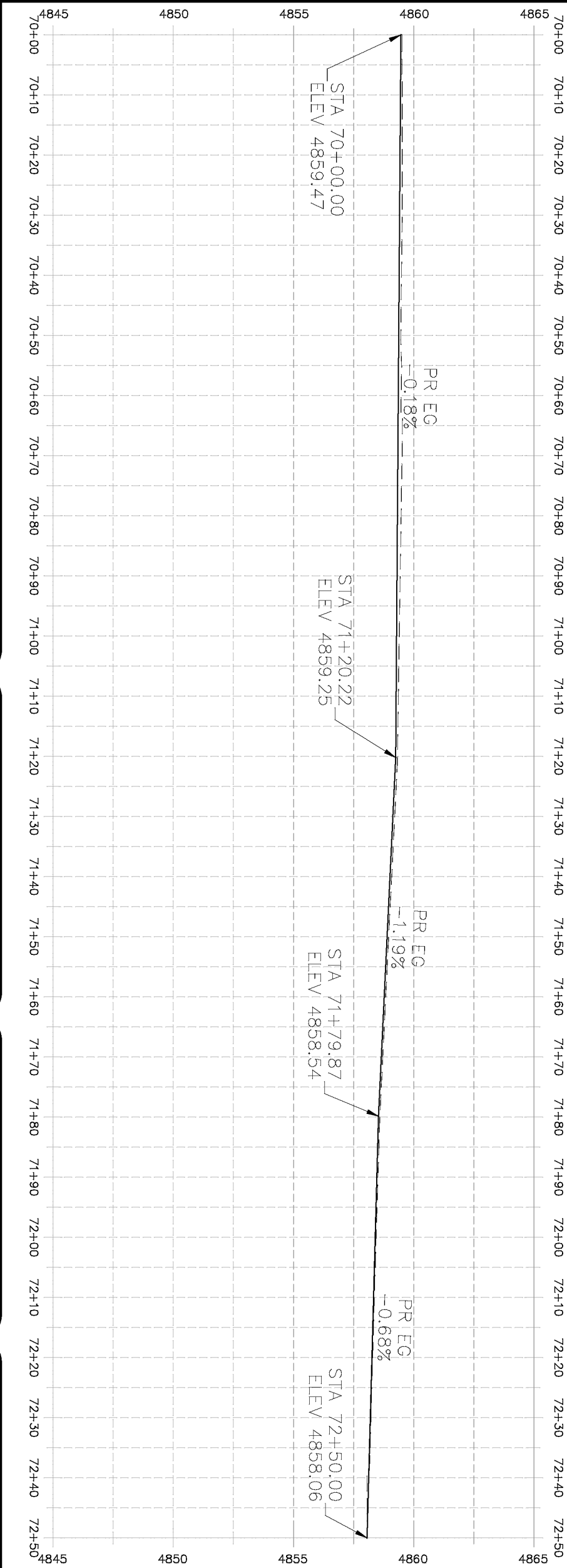
REVISION		DESCRIPTION	DATE
REVISION	Δ		
REVISION	Δ		
REVISION	Δ		
REVISION	Δ		
DRAWN BY		HMC	DATE 2019
DESIGNED BY		ECM	DATE 2019
CHECKED BY		ECM	DATE 2019
APPROVED BY		ECM	DATE 2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10
VERTICAL: 1" = 5'	0 1.25 2.5 5



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 67+50 TO STA 70+00



- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
- (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 - ADJUST MAILBOX LOCATION & RESET
- (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

PROJECT NO. _____

CONSTRUCTION NOTES

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

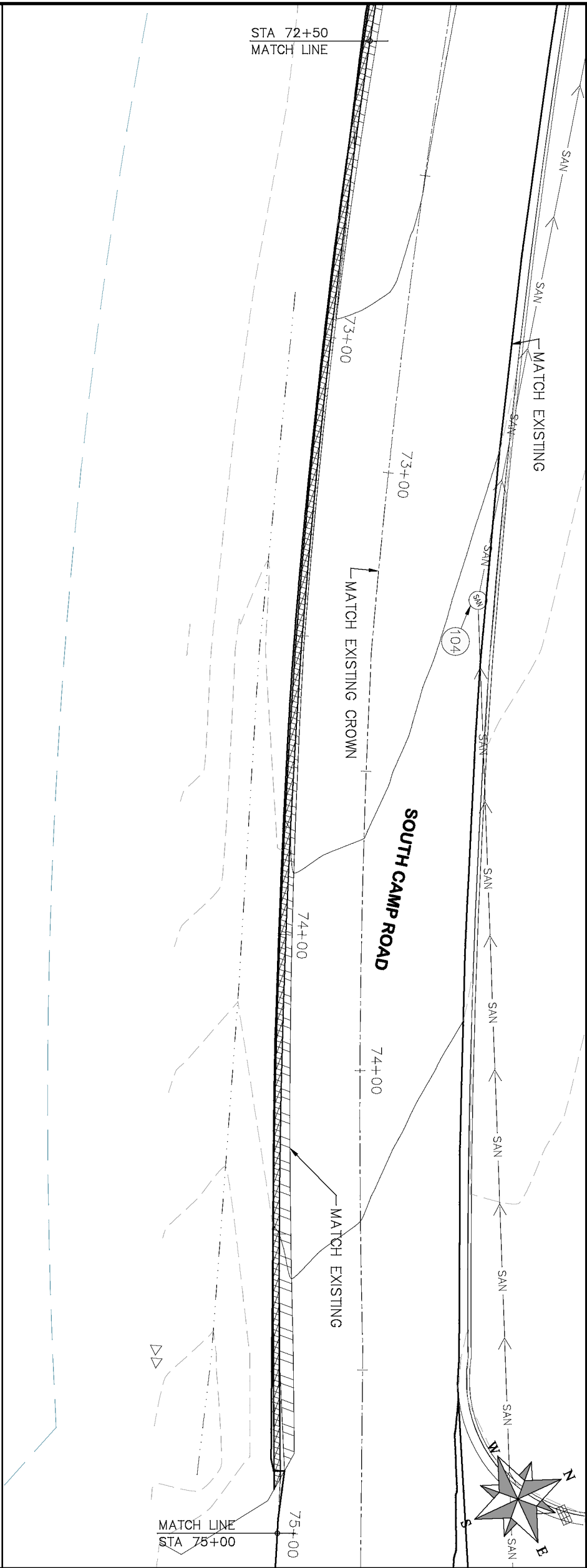
REVISION	DESCRIPTION	DATE
REVISION	DRAWN BY HMC	DATE 2019
REVISION	DESIGNED BY ECM	DATE 2019
REVISION	CHECKED BY ECM	DATE 2019
REVISION	APPROVED BY ECM	DATE 2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5

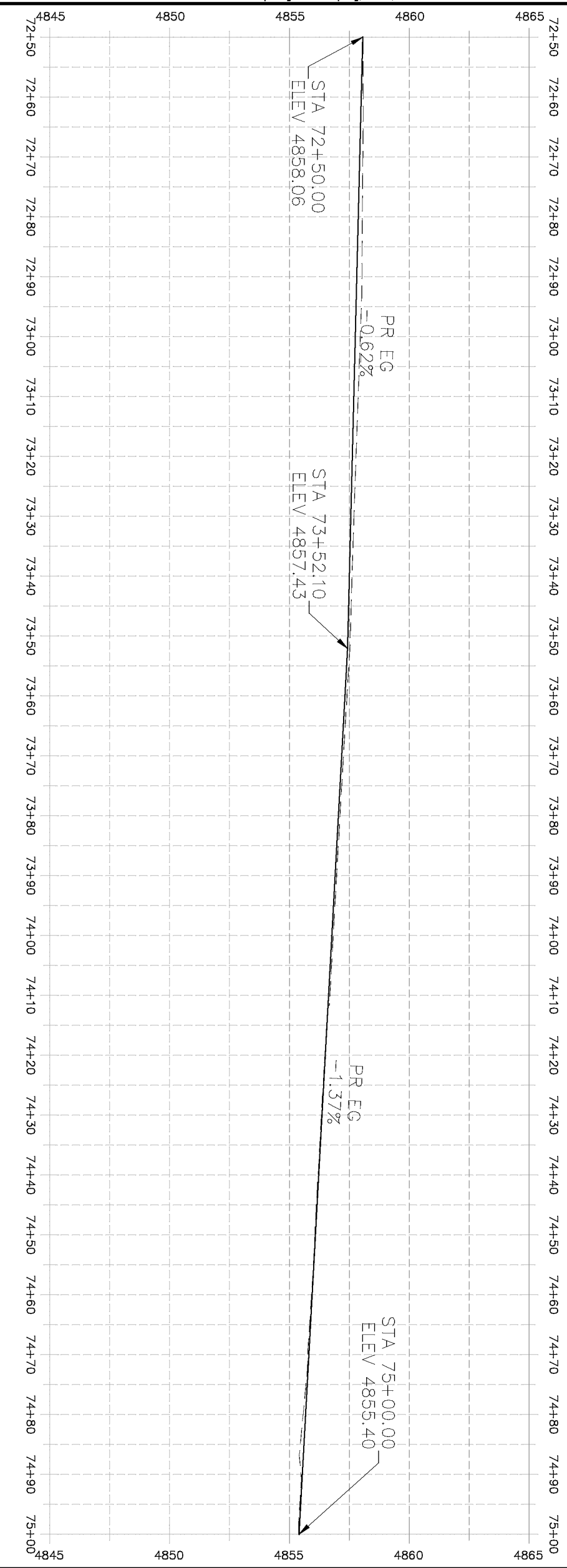


PUBLIC WORKS
ENGINEERING DIVISION


2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 70+00 TO STA 72+50



- | PROJECT NO. _____ | |
|--------------------|---|
| CONSTRUCTION NOTES | |
| (104) | 210 - ADJUST MANHOLE RIM TO GRADE. |
| (106) | 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE. |
| (108) | 210 - ADJUST MAILBOX LOCATION & RESET |
| (672) | 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK) |
| (677) | 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22) |



HATCH LEGEND

	ASPHALT WIDENING
	GRAVEL SHOULDER

DESCRIPTION		DATE	DRAWN BY		HMC	DATE	2019
REVISION	△	—	DESIGNED BY	ECM	DATE	2019	0
REVISION	△	—	CHECKED BY	ECM	DATE	2019	5
REVISION	△	—	APPROVED BY	ECM	DATE	2019	0
REVISION	△	—					5

SCALES: PLAN & PROFILE

HORIZONTAL: 1" = 20'

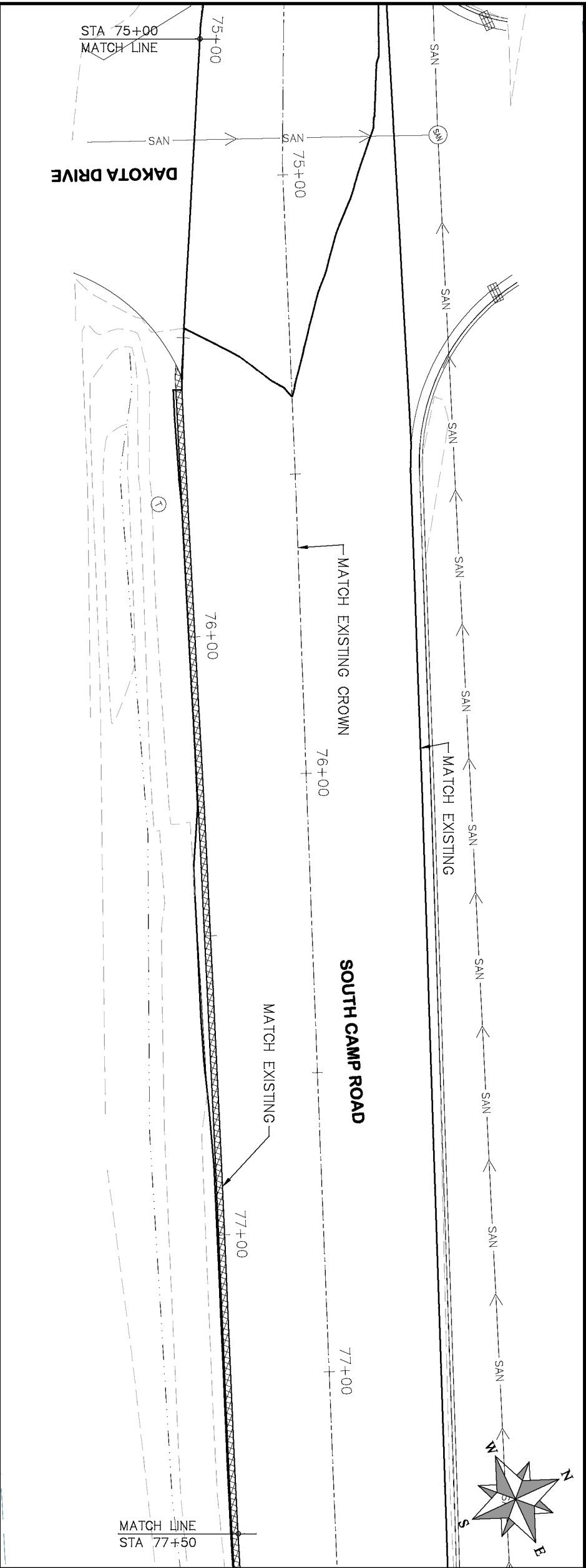
VERTICAL: 1" = 5'



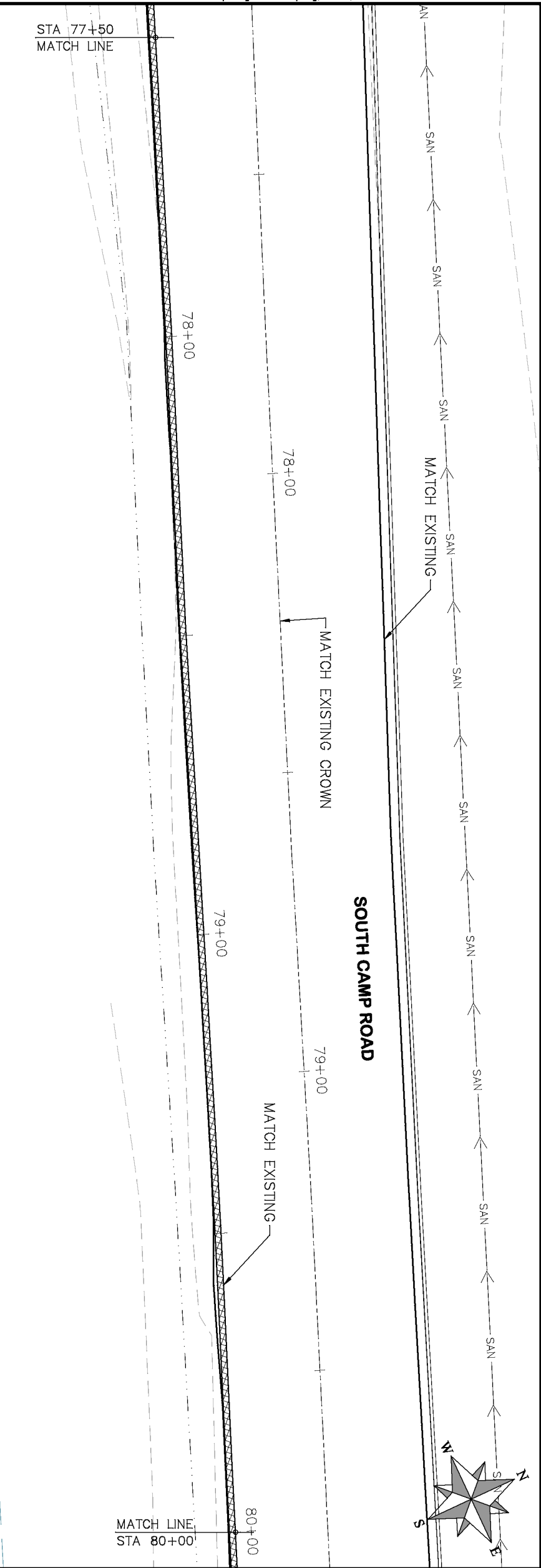
PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 72+50 TO STA 75+00

29



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

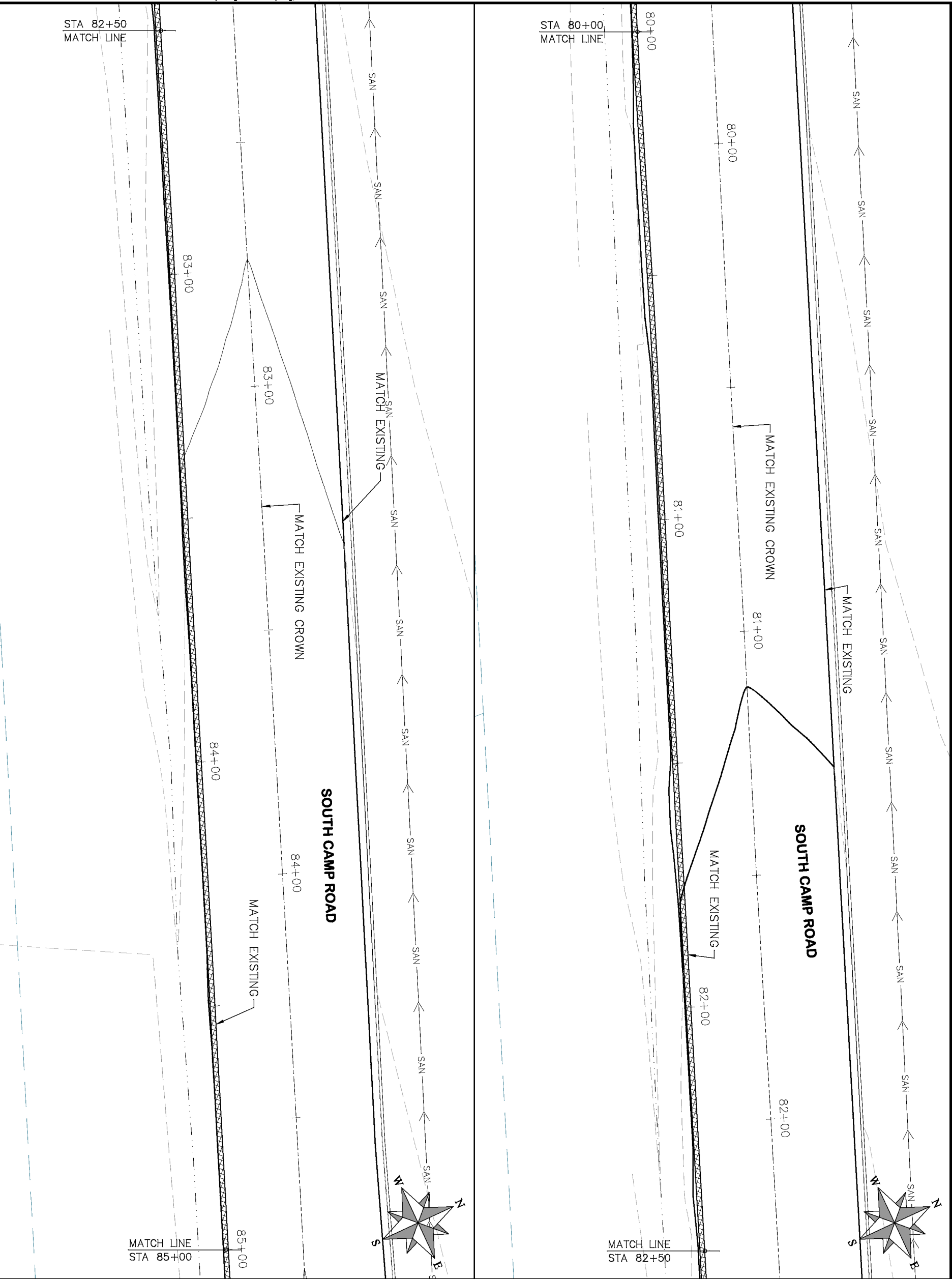
DESCRIPTION		DATE	DRAWN BY	HMC	DATE	2019
REVISION Δ	_____	_____	_____	_____	DATE	2019
REVISION Δ	_____	_____	DESIGNED BY	ECM	DATE	2019
REVISION Δ	_____	_____	CHECKED BY	ECM	DATE	2019
REVISION Δ	_____	_____	APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 75+00 TO STA 80+00



PROJECT NO. _____

CONSTRUCTION NOTES

(104) 210 – ADJUST MANHOLE RIM TO GRADE.

(106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.

(108) 210 – ADJUST MAILBOX LOCATION & RESET

(672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)

(677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

ASPHALT WIDENING

GRAVEL SHOULDER

HATCH LEGEND

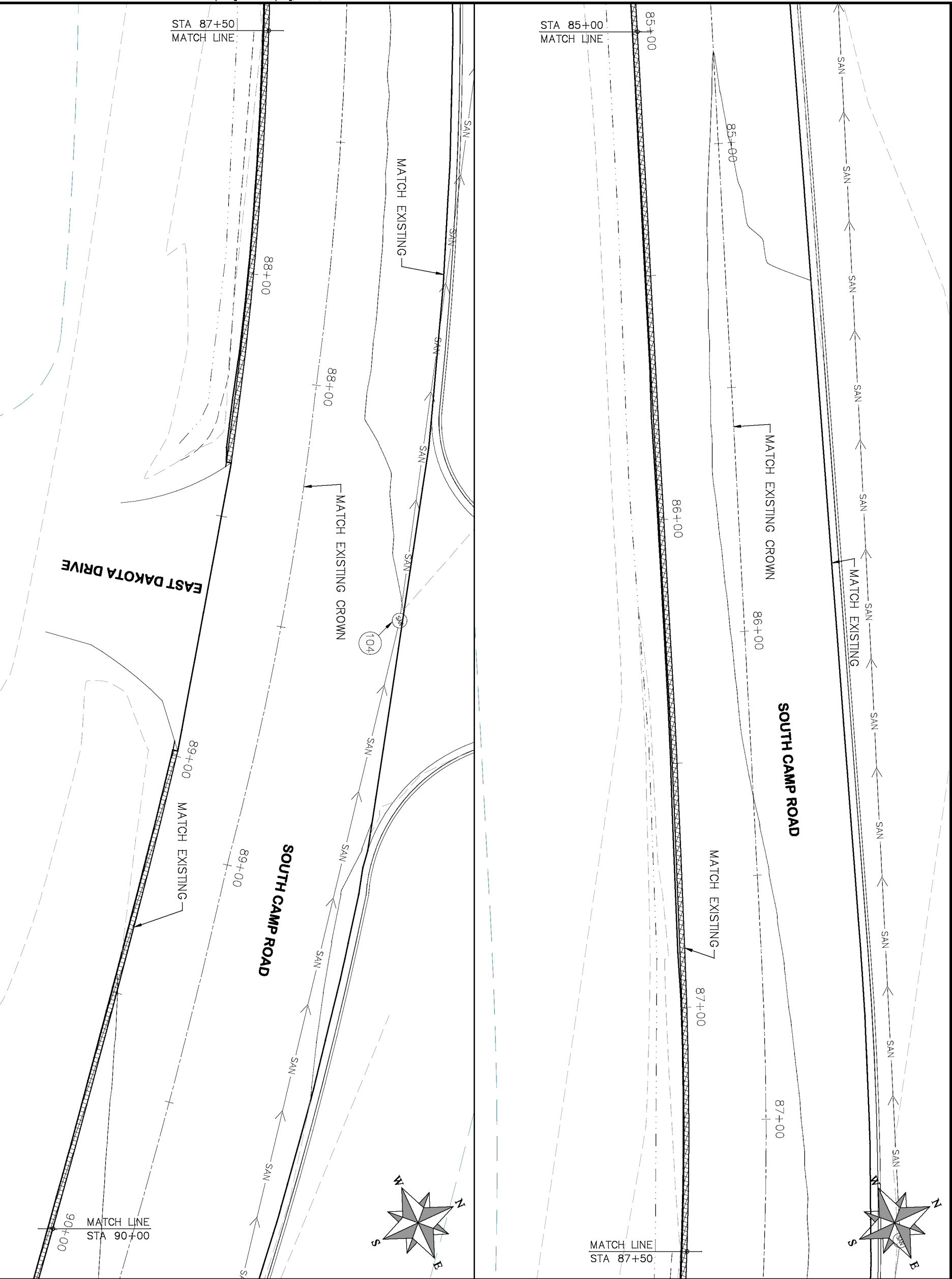
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE	2019
REVISION			DESIGNED BY	ECM	DATE	2019
REVISION			CHECKED BY	ECM	DATE	2019
REVISION			APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 80+00 TO STA 85+00



PROJECT NO. _____

CONSTRUCTION NOTES

(104) 210 – ADJUST MANHOLE RIM TO GRADE.

(106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.

(108) 210 – ADJUST MAILBOX LOCATION & RESET

(672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)

(677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)

ASPHALT WIDENING

GRAVEL SHOULDER

HATCH LEGEND

REVISION	DESCRIPTION	DATE
Δ		
Δ		
Δ		
Δ		

Scales: Plan & Profile	
HORIZONTAL: 1" = 20'	VERTICAL: 1" = 5'
0 5 10 20	0 1.25 2.5 5

CITY OF

Grand Junction

COLORADO

PUBLIC WORKS

ENGINEERING DIVISION

2019 ASPHALT OVERLAYS

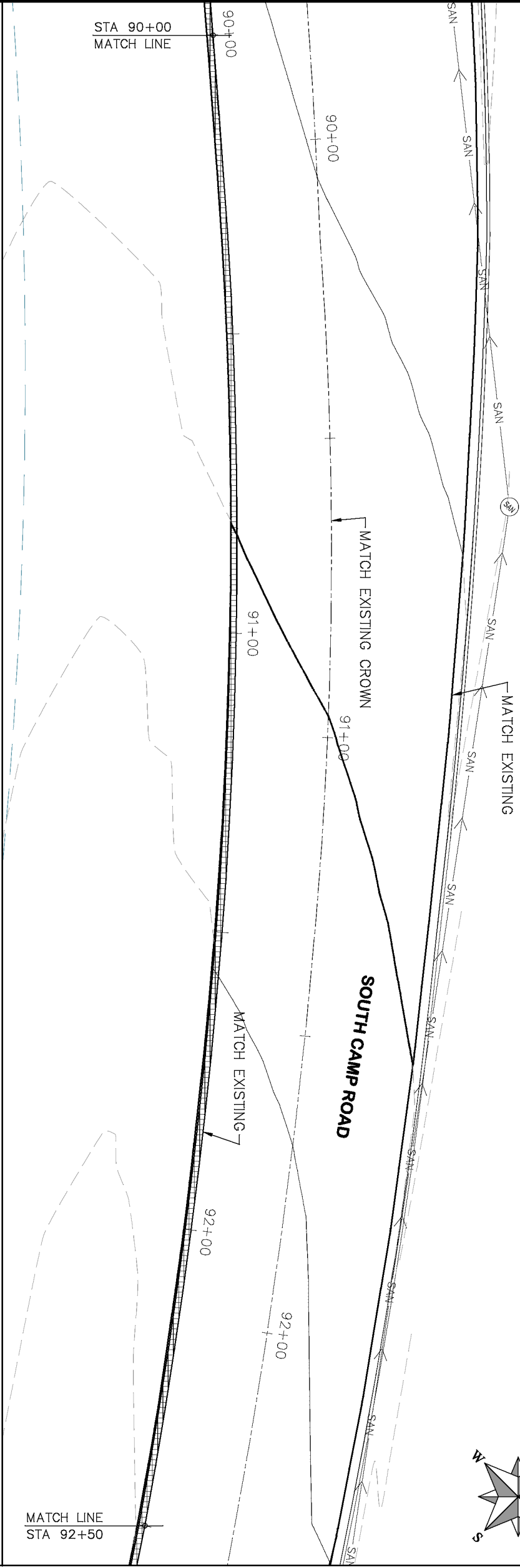
ROAD PLAN – SOUTH CAMP ROAD

STA 85+00 TO STA 90+00

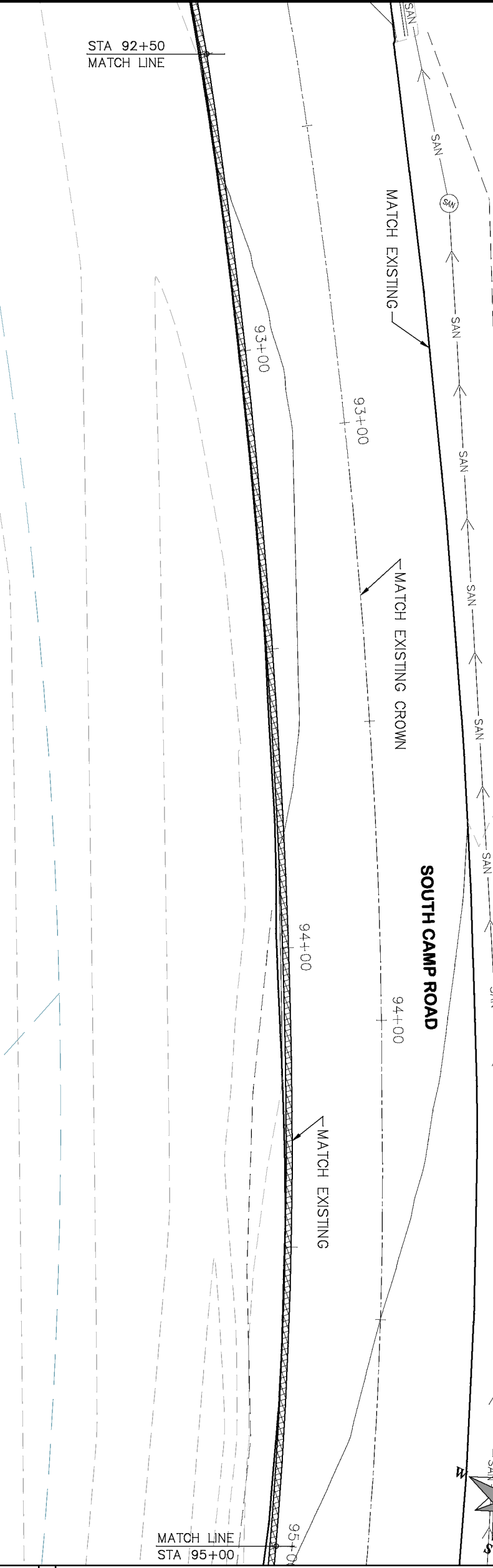
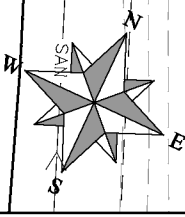
PROJECT NO. _____

CONSTRUCTION NOTES

- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
- (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 – ADJUST MAILBOX LOCATION & RESET
- (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



MATCH LINE
STA 92+50



MATCH LINE
STA 95+00

STA 92+50
MATCH LINE

REVISION	DESCRIPTION	DATE
REVISION	DRAWN BY HMC	DATE 2019
REVISION	DESIGNED BY ECM	DATE 2019
REVISION	CHECKED BY ECM	DATE 2019
REVISION	APPROVED BY ECM	DATE 2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5



PUBLIC WORKS
ENGINEERING DIVISION

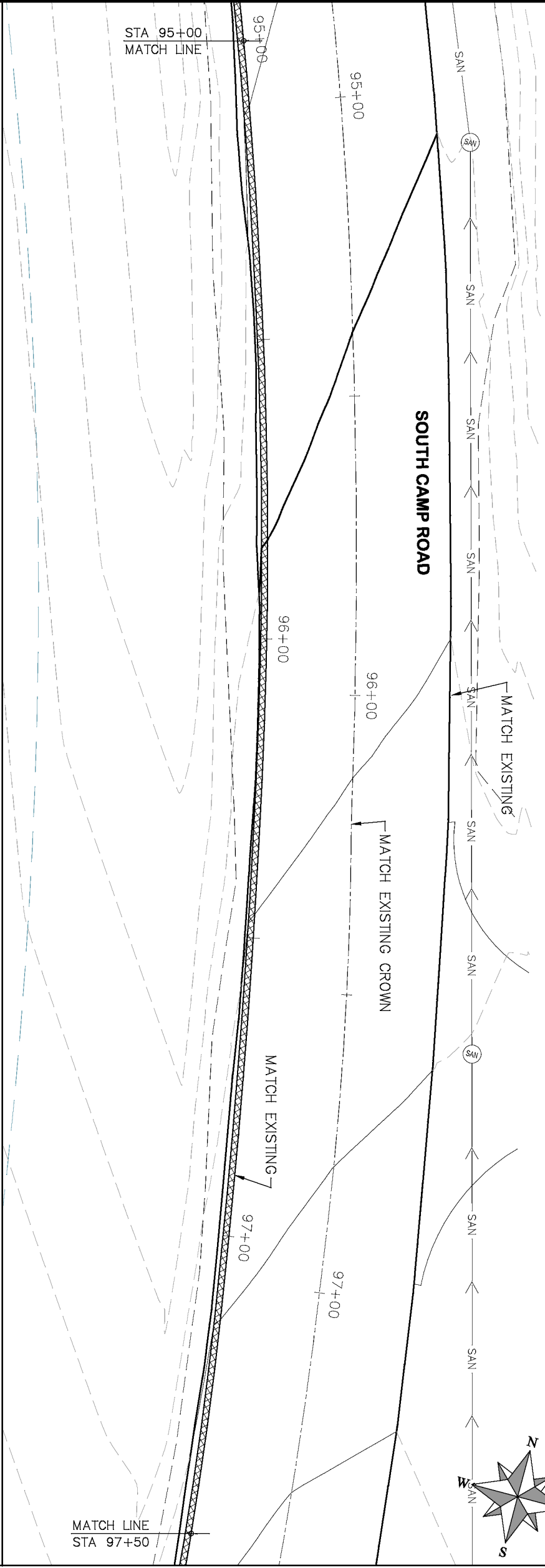
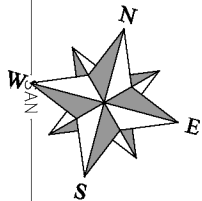
2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 90+00 TO STA 95+00

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

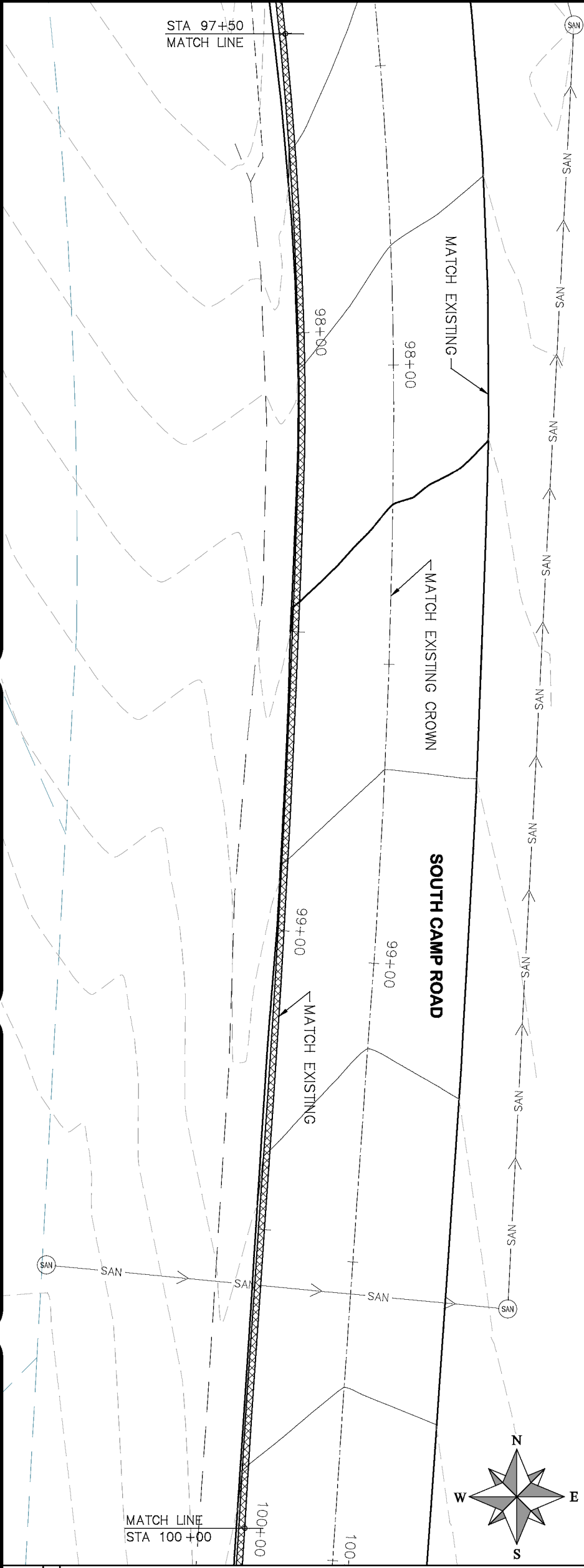
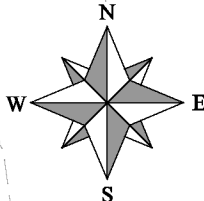
PROJECT NO. _____

CONSTRUCTION NOTES

- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
- (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 – ADJUST MAILBOX LOCATION & RESET
- (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)



MATCH LINE
STA 97+50



MATCH LINE
STA 100+00

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

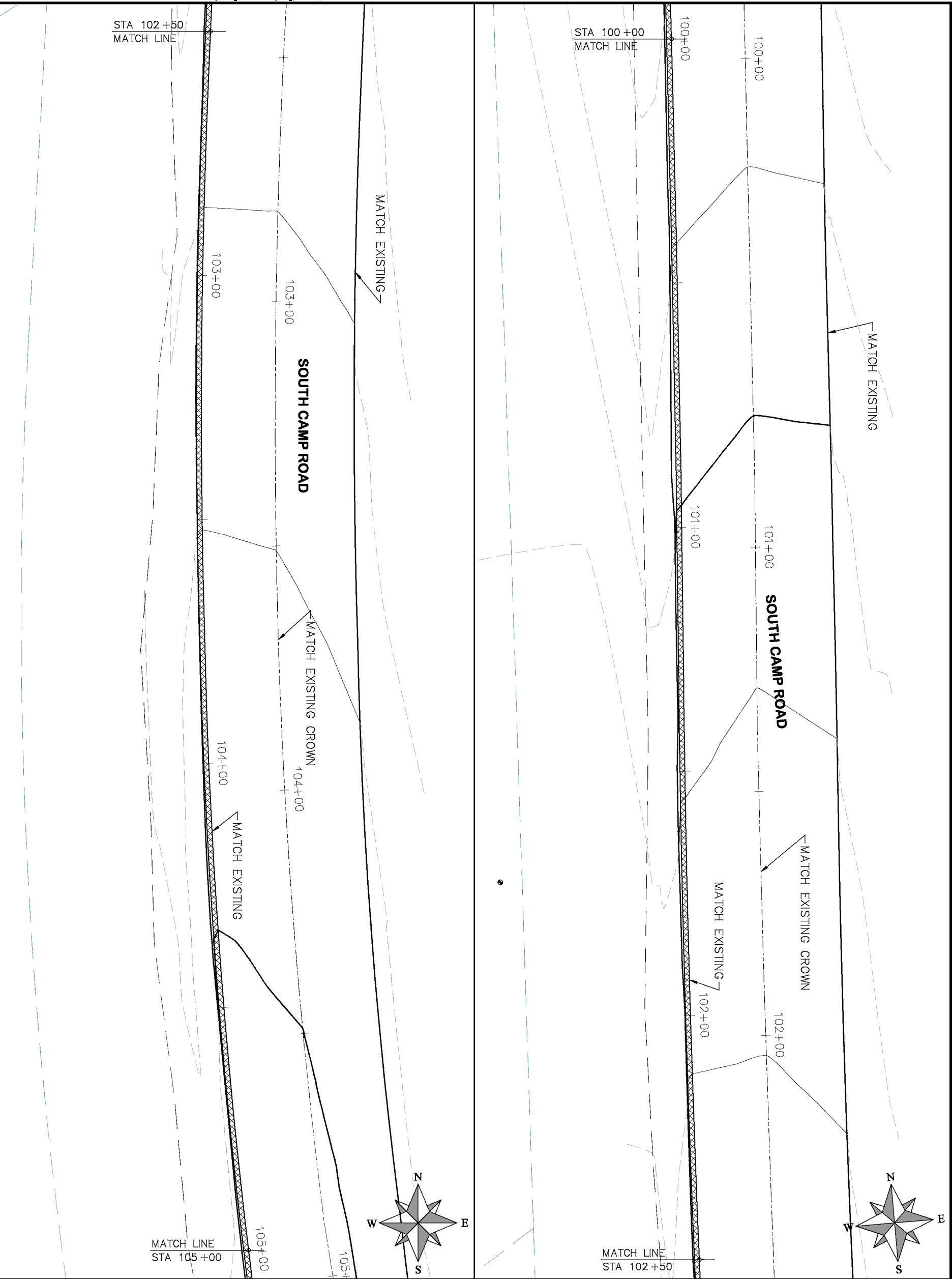
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE	2019
REVISION	DESIGNED BY	ECM	DATE	2019		
REVISION	CHECKED BY	ECM	DATE	2019		
REVISION	APPROVED BY	ECM	DATE	2019		

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5

CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 95+00 TO STA 100+00



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104)

210 – ADJUST MANHOLE RIM TO GRADE.
- (106)

210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108)

210 – ADJUST MAILBOX LOCATION & RESET
- (672)

304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677)

401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)

HATCH LEGEND	
<div></div>	ASPHALT WIDENING
<div></div>	GRAVEL SHOULDER

REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE	2019
REVISION			DESIGNED BY	ECM	DATE	2019
REVISION			CHECKED BY	ECM	DATE	2019
REVISION			APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5

CITY OF

Grand Junction

COLORADO

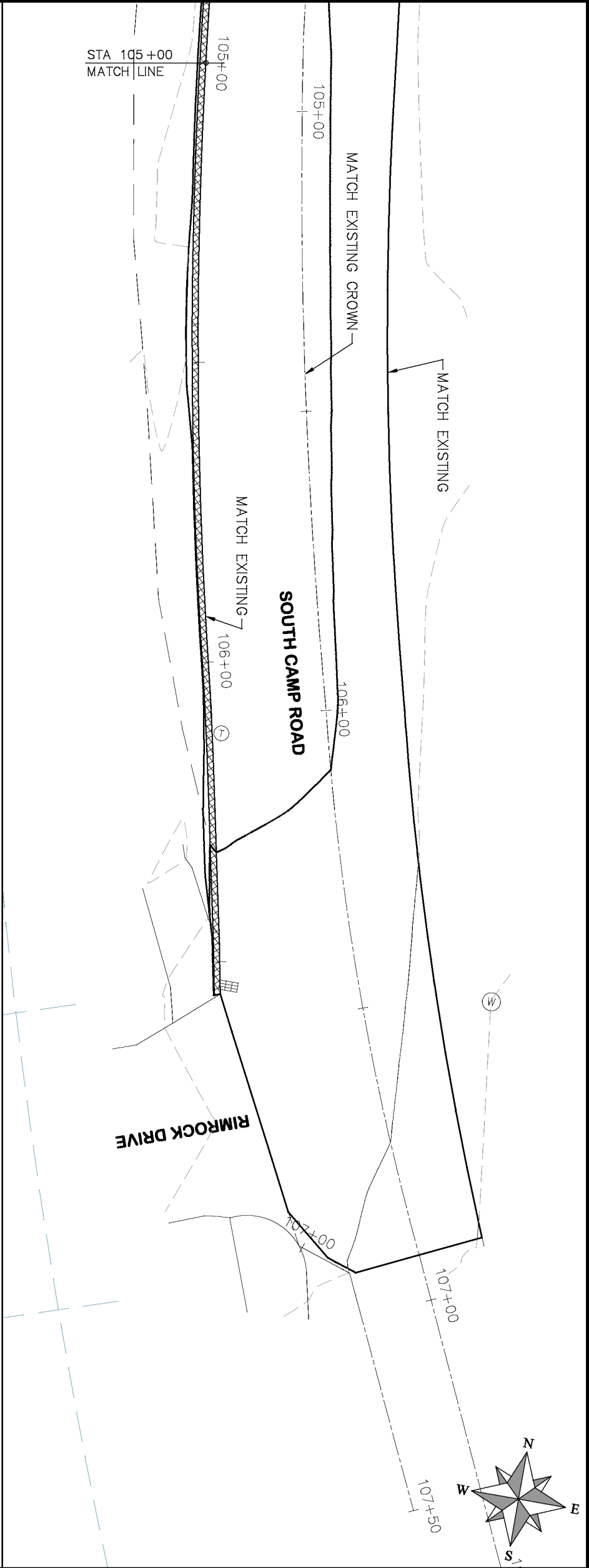
PUBLIC WORKS

ENGINEERING DIVISION

2019 ASPHALT OVERLAYS

ROAD PLAN – SOUTH CAMP ROAD

STA 100+00 TO STA 105+00



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

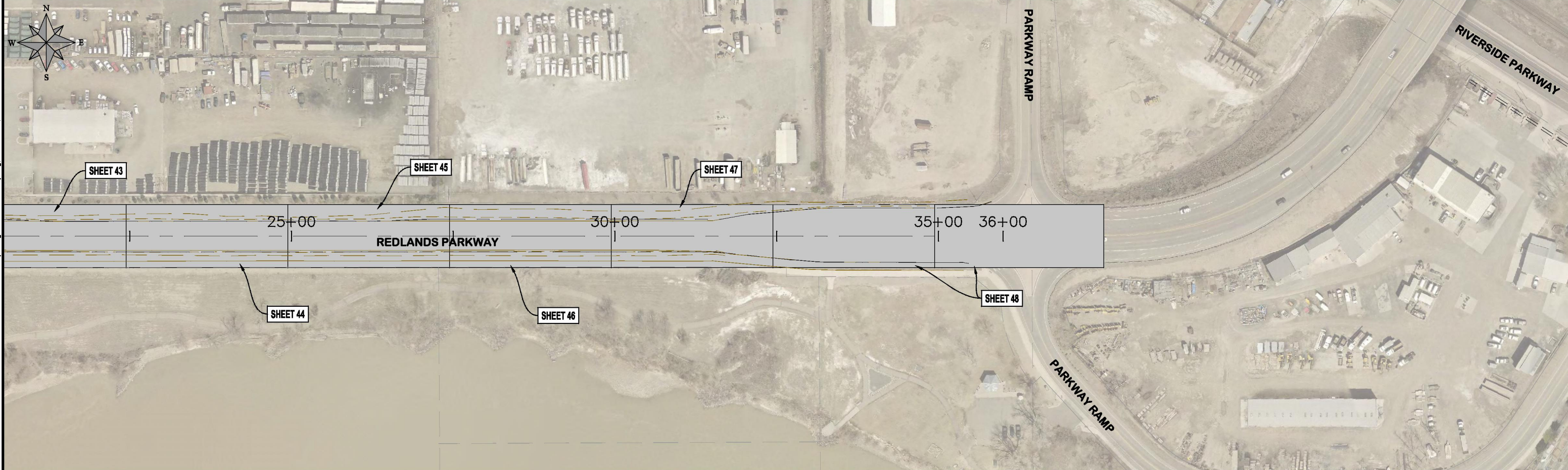
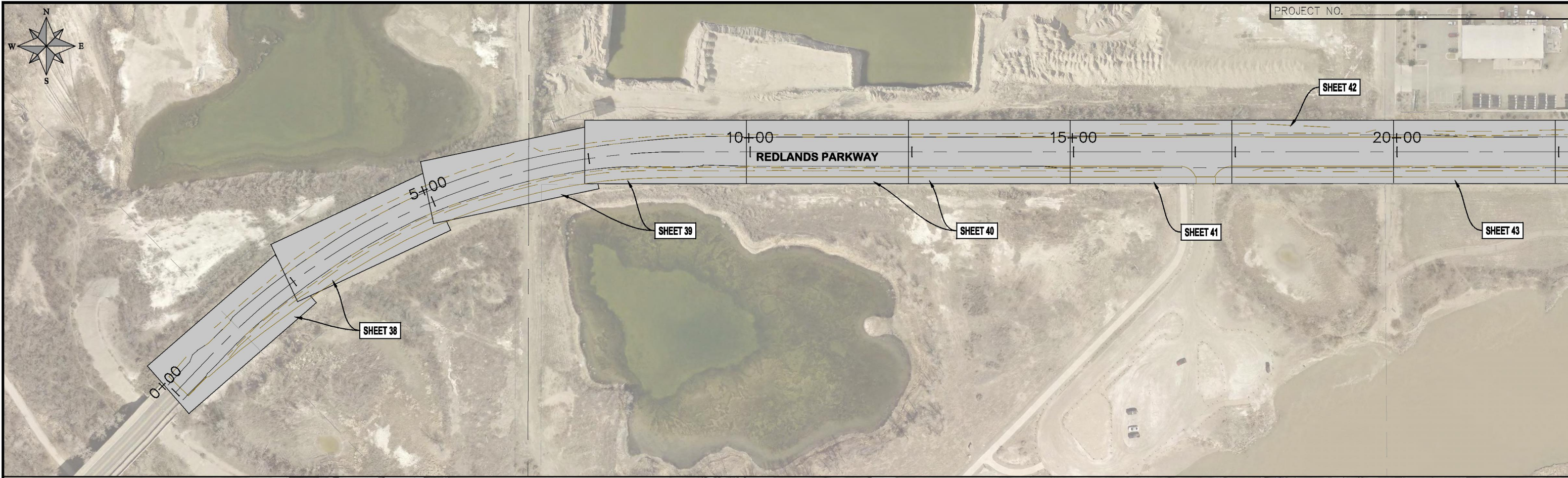
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE	2019
REVISION			DESIGNED BY	ECM	DATE	2019
REVISION			CHECKED BY	ECM	DATE	2019
REVISION			APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 105+00 TO STA 107+50



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
1			HMC	2019
2			ECM	2019
3			ECM	2019
4			ECM	2019

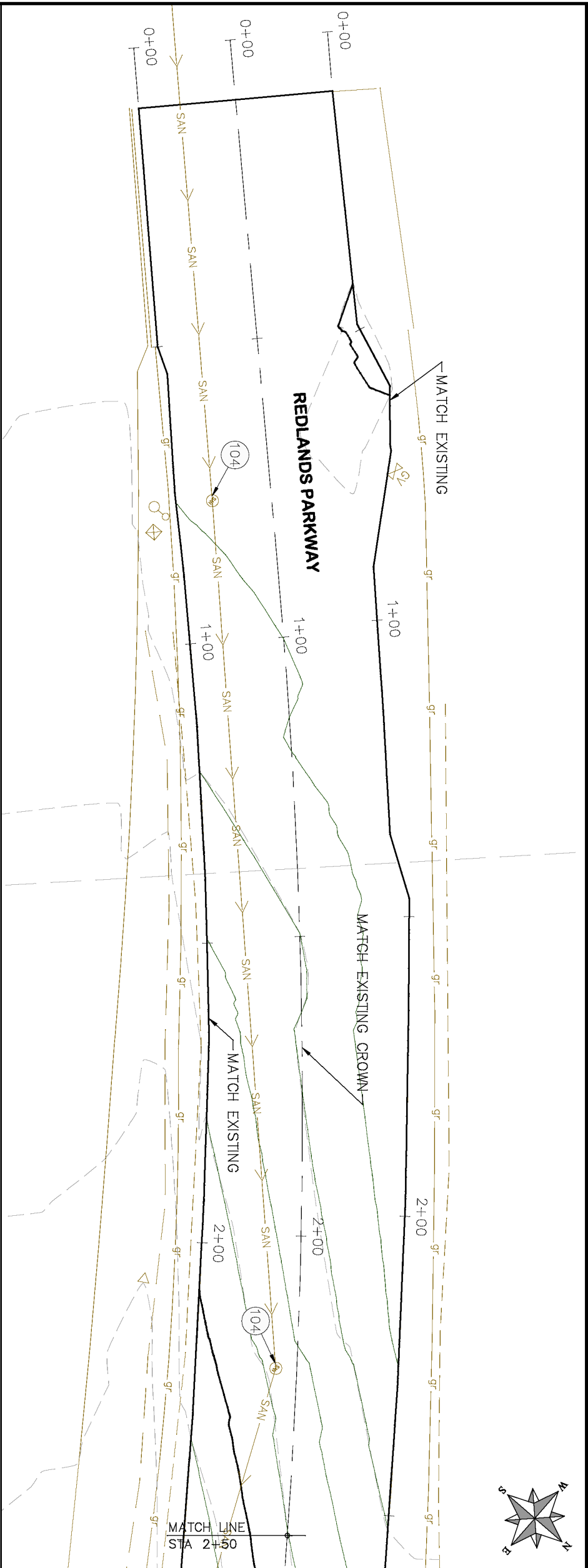
SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
KEY MAP REDLANDS PARKWAY

N:\Landproj\Contract Street Maintenance\2019 Contract Street Maintenance\Overlays\dwg\Redlands Overlay.dwg, 37 KEYMAP, 3/12/2019 4:51:10 PM



PROJECT NO. _____

- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
- (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 – ADJUST MAILBOX LOCATION & RESET
- (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND

-  ASPHALT WIDENING
-  GRAVEL SHOULDER

REVISION	DESCRIPTION	DATE
REVISION	DRAWN BY HMC	DATE 2019
REVISION	DESIGNED BY ECM	DATE 2019
REVISION	CHECKED BY ECM	DATE 2019
REVISION	APPROVED BY ECM	DATE 2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5

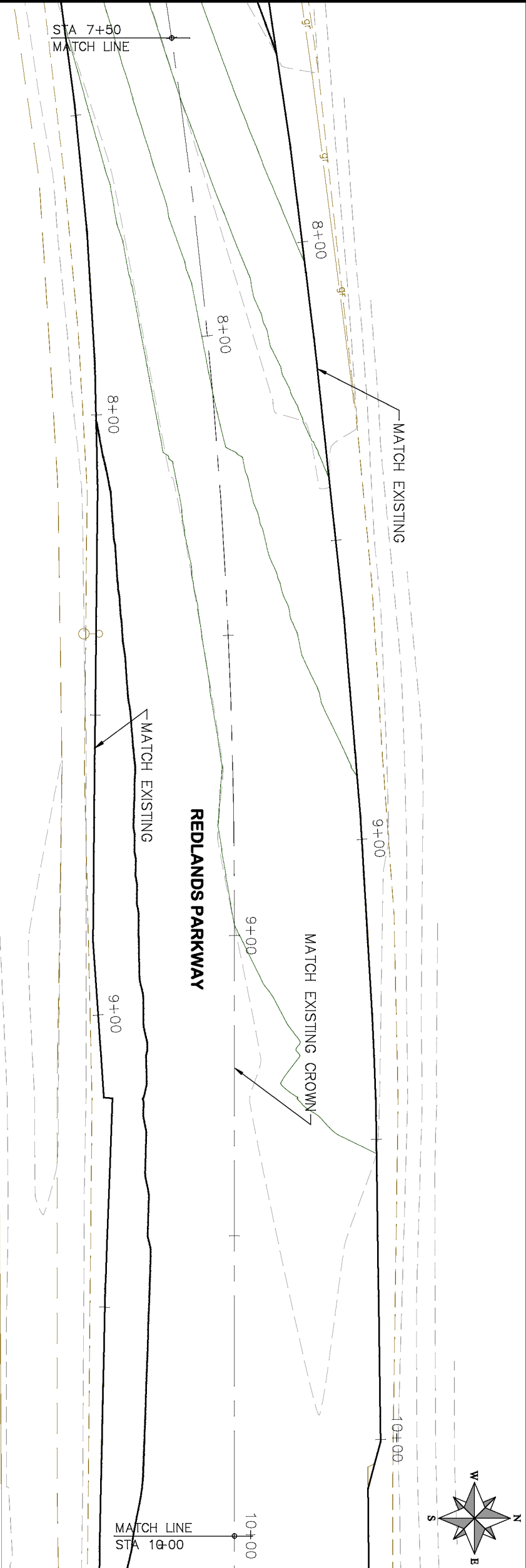
CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – REDLANDS PARKWAY
STA 0+00 TO STA 5+00



- PROJECT NO. _____
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

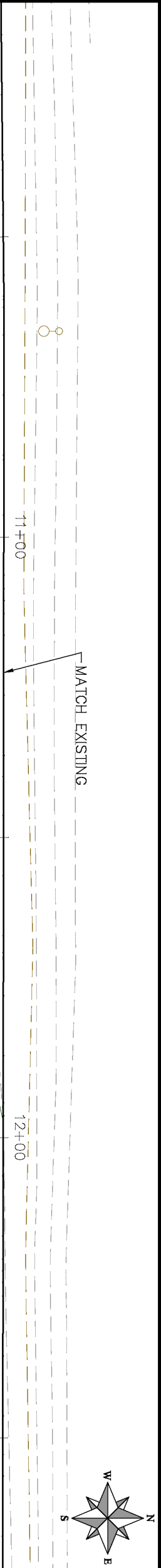
REVISION	DESCRIPTION	DATE
REVISION	DRAWN BY HMC	DATE 2019
REVISION	DESIGNED BY ECM	DATE 2019
REVISION	CHECKED BY ECM	DATE 2019
REVISION	APPROVED BY ECM	DATE 2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5

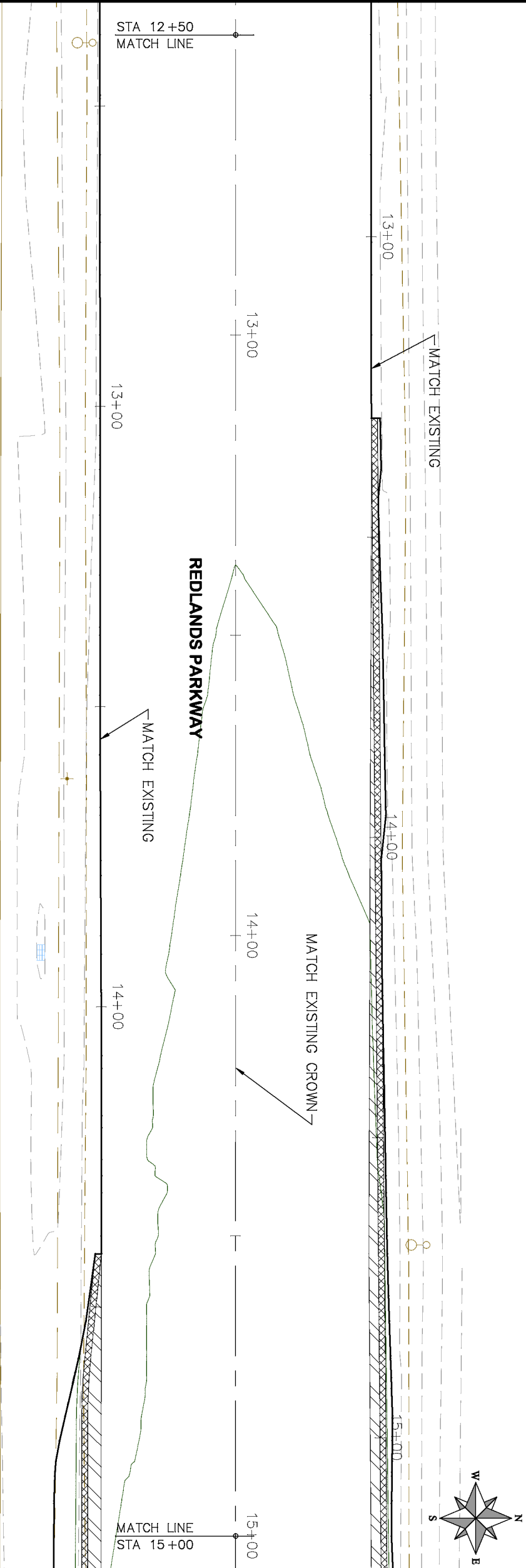
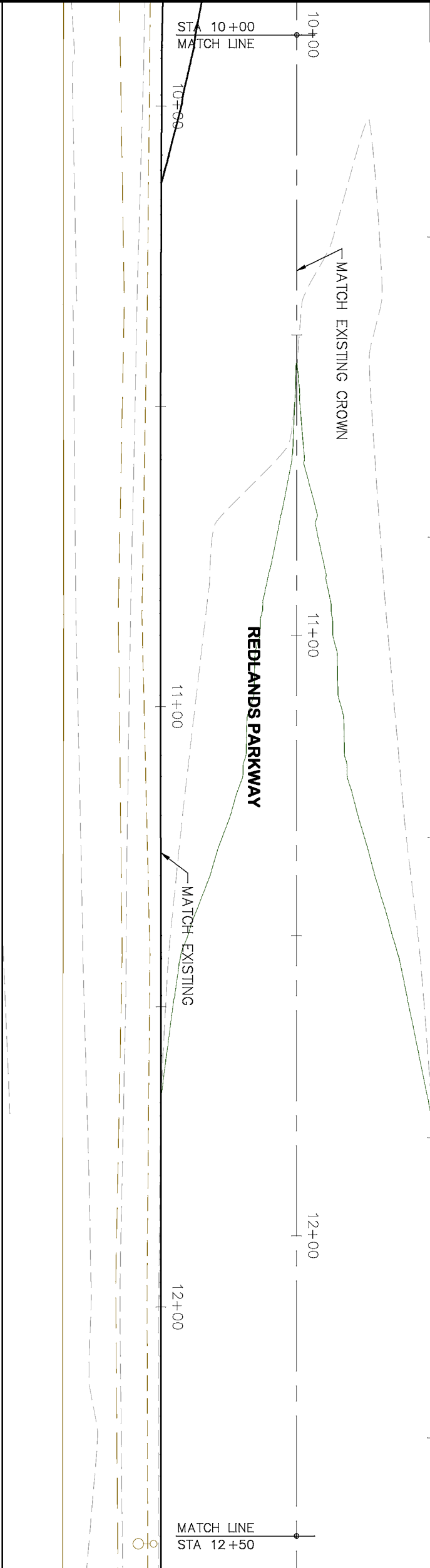
CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 5+00 TO STA 10+00



- PROJECT NO. _____
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

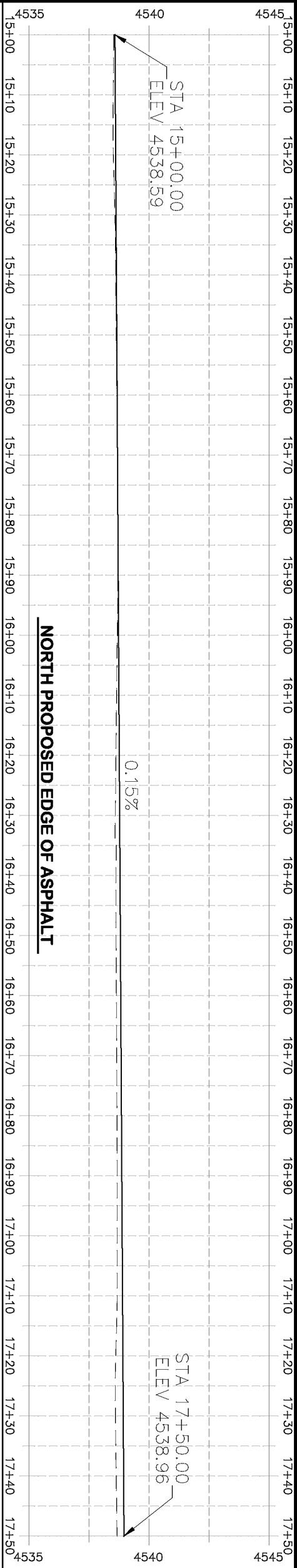
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE	2019
REVISION			DESIGNED BY	ECM	DATE	2019
REVISION			CHECKED BY	ECM	DATE	2019
REVISION			APPROVED BY	ECM	DATE	2019

Scales: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20'
VERTICAL: 1" = 5'	5'



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 10+00 TO STA 15+00



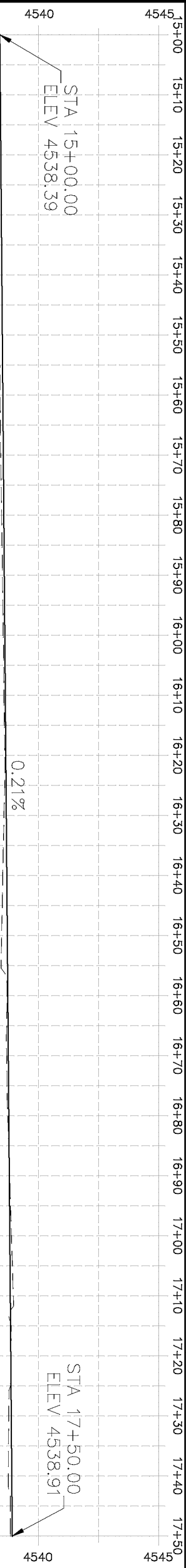
NORTH PROPOSED EDGE OF ASPHALT

MATCH EXISTING

MATCH EXISTING CROWN

MATCH EXISTING

MATCH LINE
STA 17+50



SOUTH PROPOSED EDGE OF ASPHALT

REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE
1		2019			2019
2		2019			2019
3		2019			2019
4		2019			2019
5		2019			2019

SCALE	PLAN & PROFILE
HORIZONTAL	1" = 20'
VERTICAL	1" = 5'

Grand Junction
CITY OF
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 15+00 TO STA 17+50

- PROJECT NO. _____
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

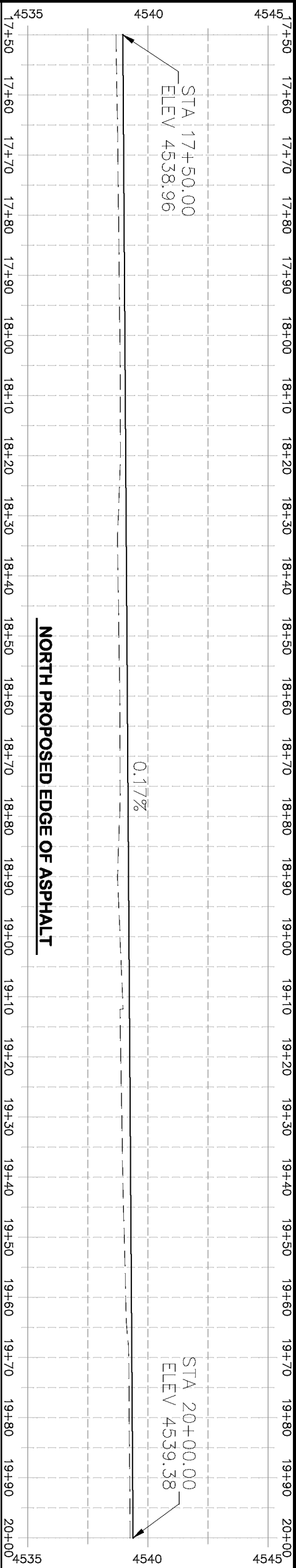
HATCH LEGEND



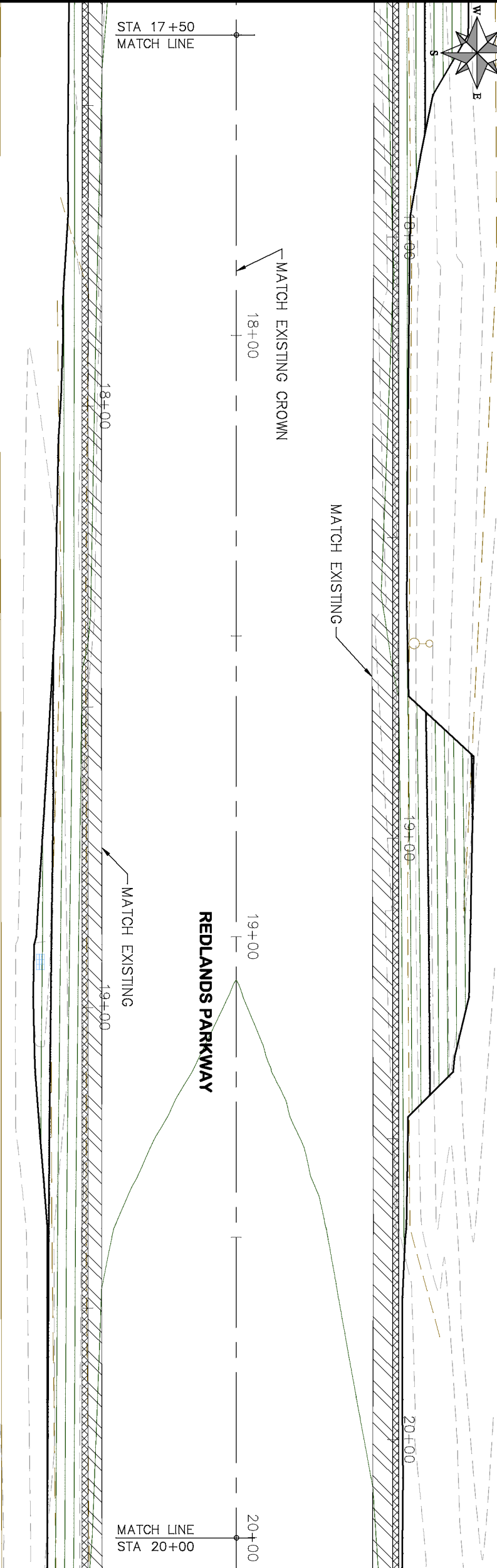
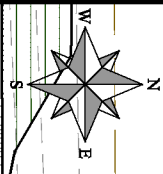
ASPHALT WIDENING



GRAVEL SHOULDER



NORTH PROPOSED EDGE OF ASPHALT



SOUTH PROPOSED EDGE OF ASPHALT

REDLANDS PARKWAY

REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		
REVISION		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5



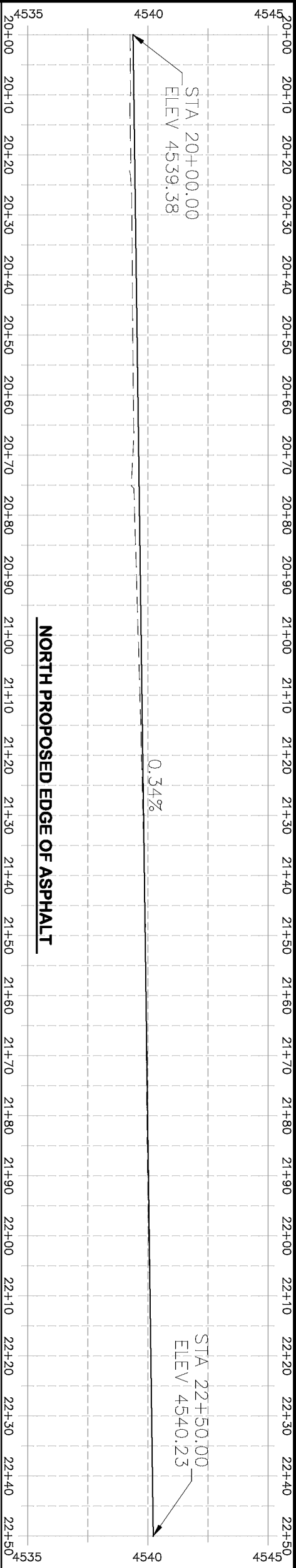
PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – REDLANDS PARKWAY
STA 17+50 TO 20+00

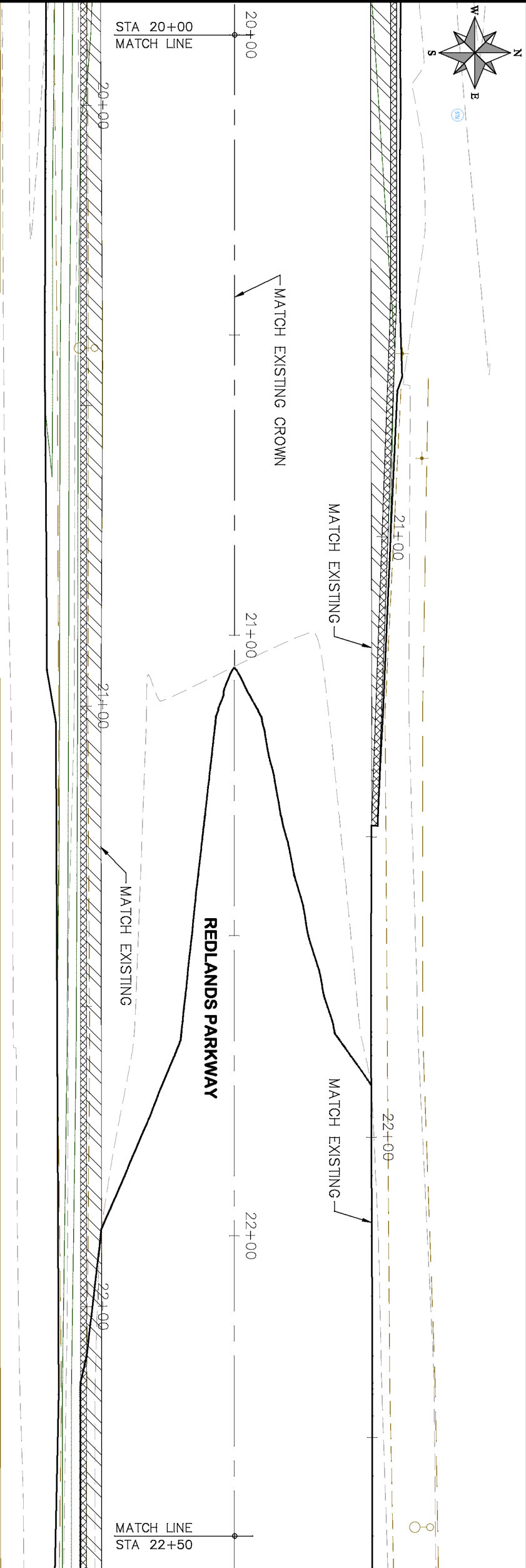
- PROJECT NO. _____
- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 – ADJUST MAILBOX LOCATION & RESET
 - (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)

HATCH LEGEND

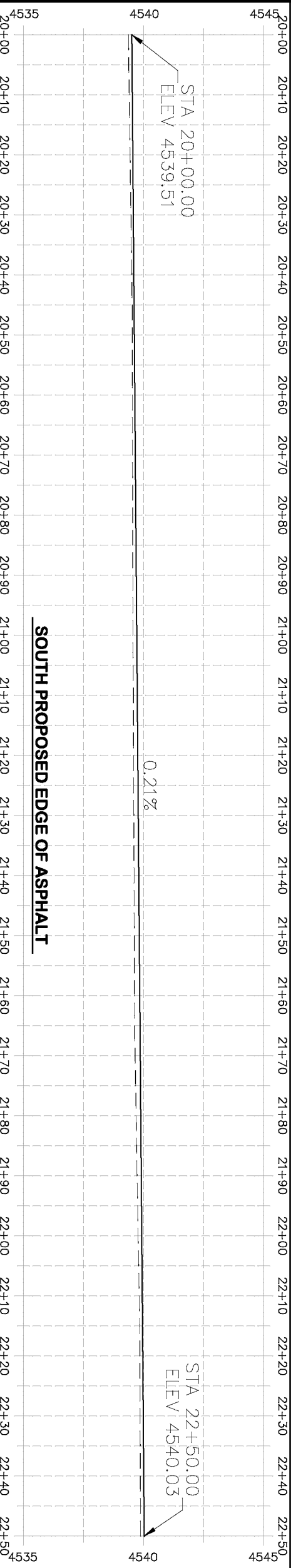
- ASPHALT WIDENING
- GRAVEL SHOULDER



NORTH PROPOSED EDGE OF ASPHALT



REDLANDS PARKWAY



SOUTH PROPOSED EDGE OF ASPHALT

- PROJECT NO. _____
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND

- ASPHALT WIDENING
- GRAVEL SHOULDER

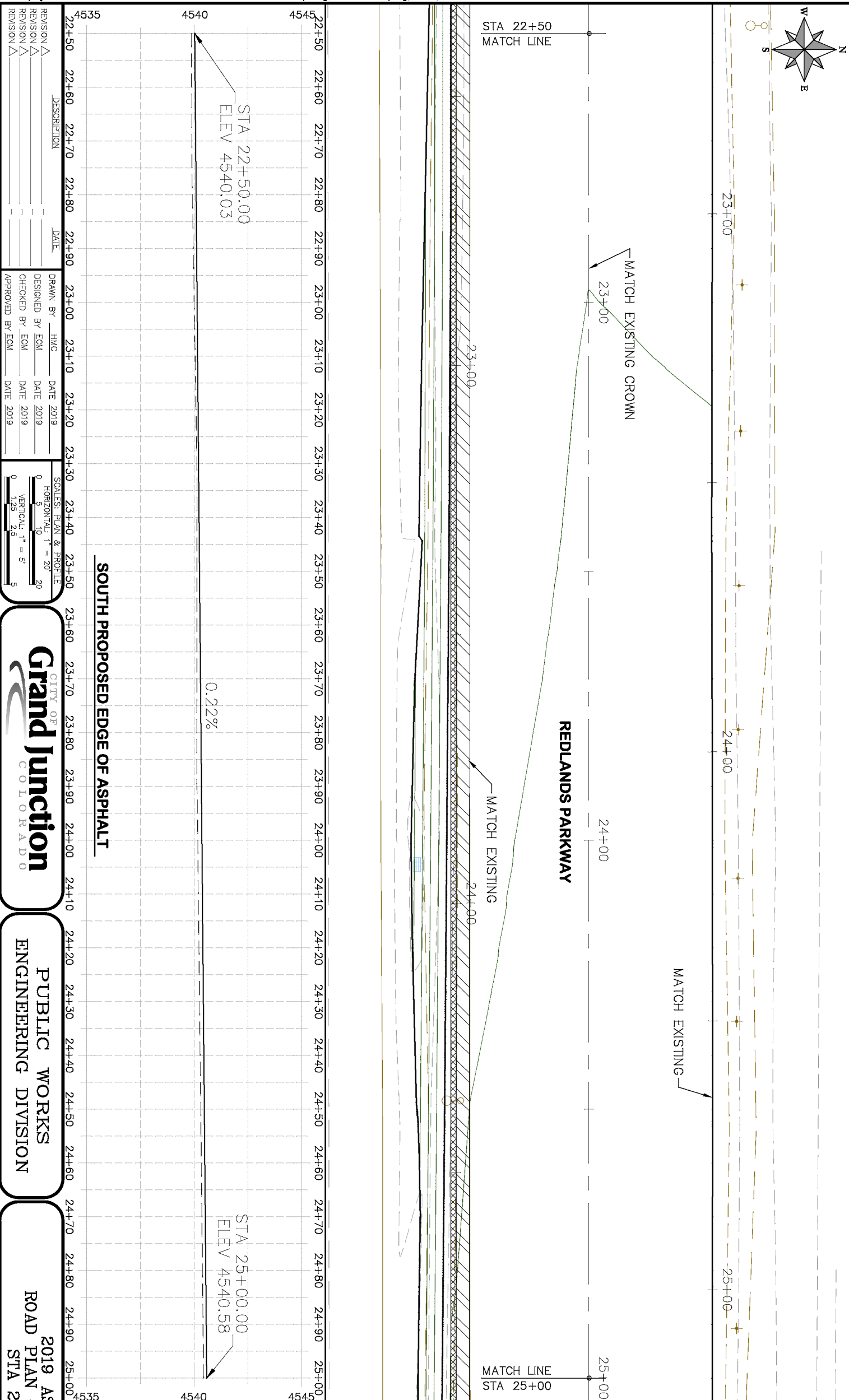
REVISION	DESCRIPTION	DATE
REVISION	DRAWN BY HMC	DATE 2019
REVISION	DESIGNED BY ECM	DATE 2019
REVISION	CHECKED BY ECM	DATE 2019
REVISION	APPROVED BY ECM	DATE 2019



SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

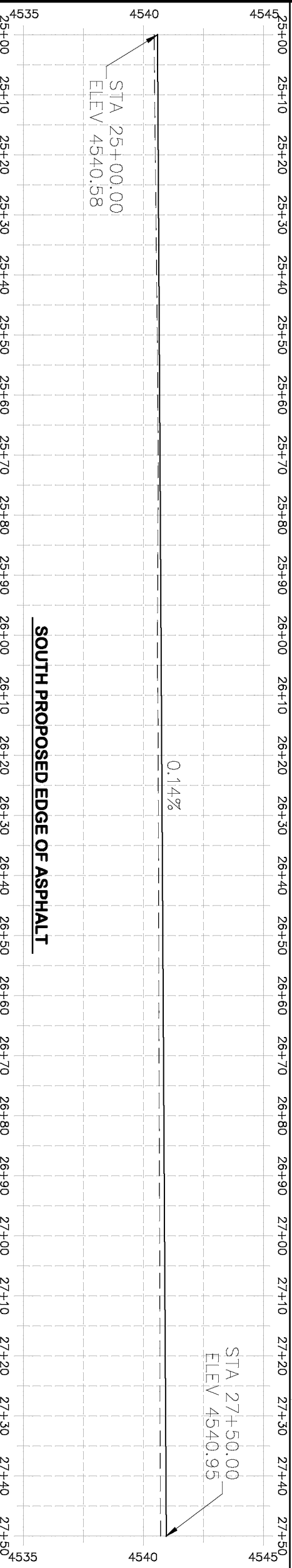
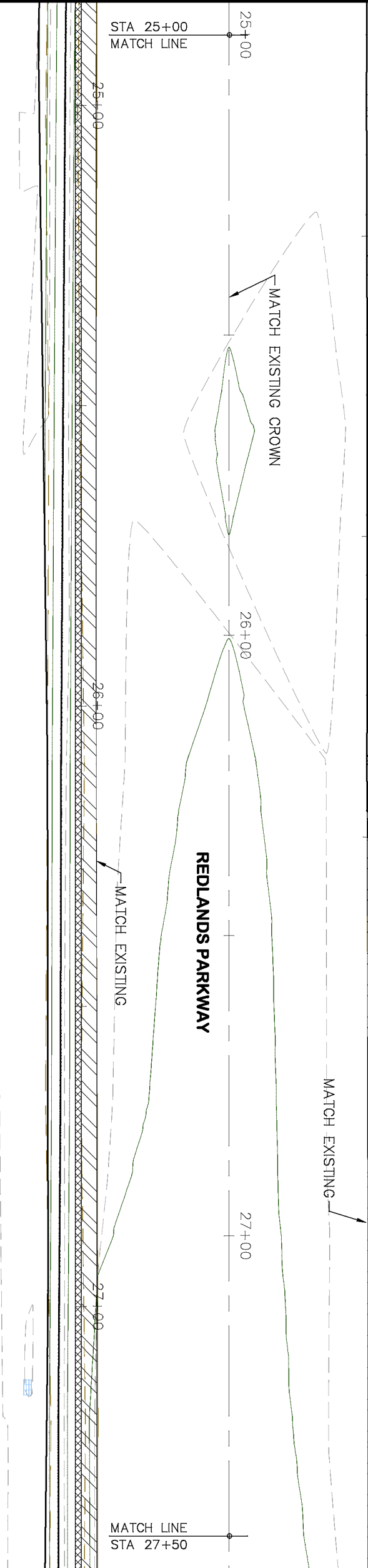
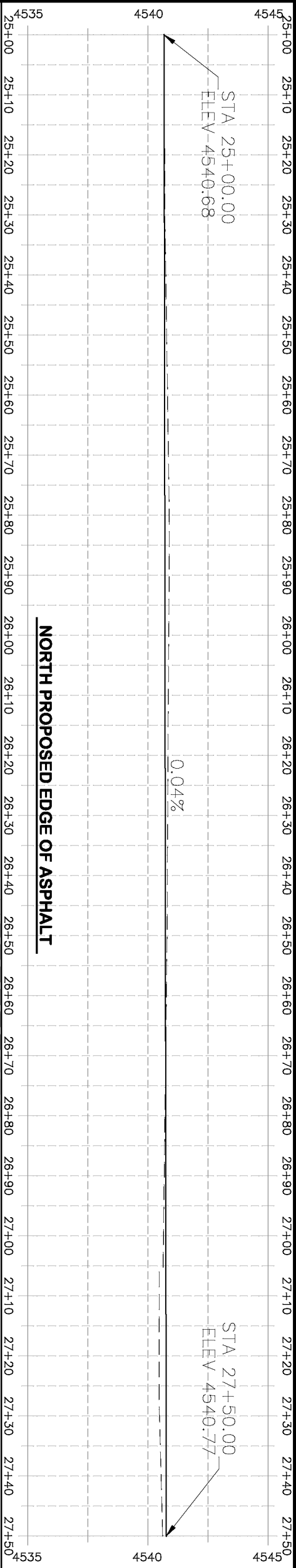
CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 20+00 TO 22+50



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER



- PROJECT NO. _____
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND

- ASPHALT WIDENING
- GRAVEL SHOULDER

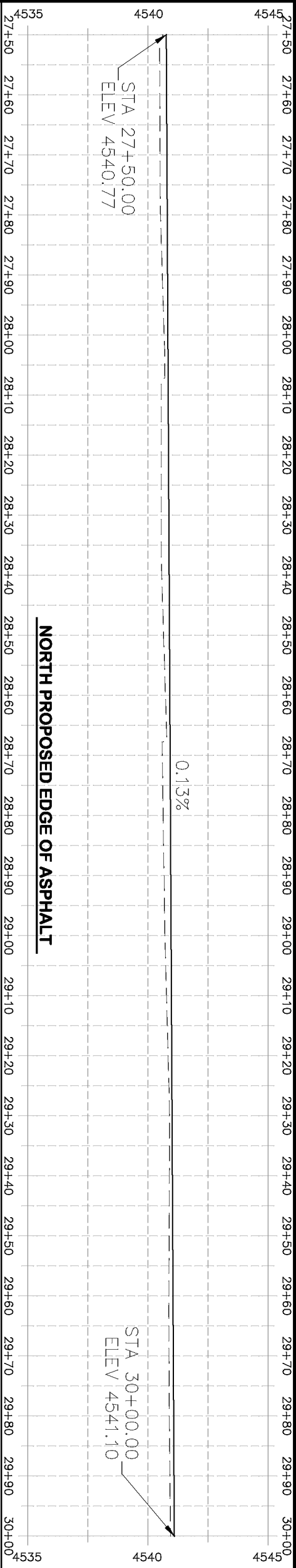
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE
REVISION			DESIGNED BY	ECM	DATE
REVISION			CHECKED BY	ECM	DATE
REVISION			APPROVED BY	ECM	DATE

SCALE: PLAN & PROFILE	SCALE: VERTICAL
HORIZONTAL: 1" = 20'	VERTICAL: 1" = 5'
0 5 10 20	0 1.25 2.5 5

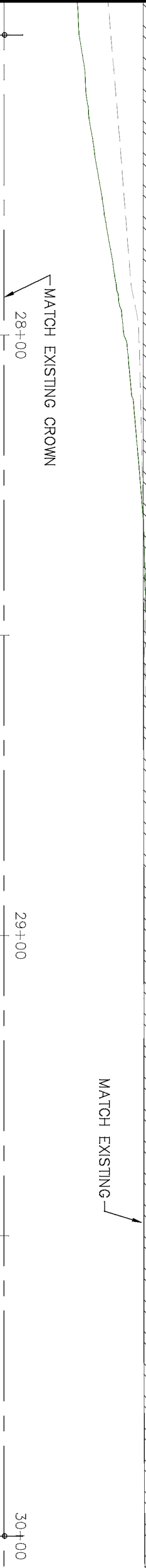
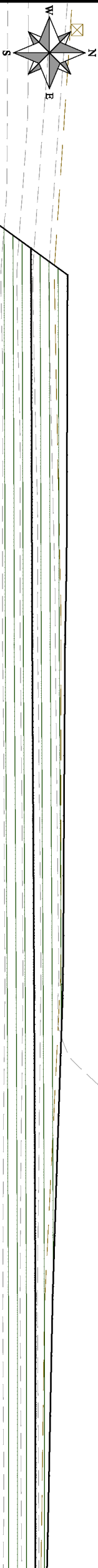
CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

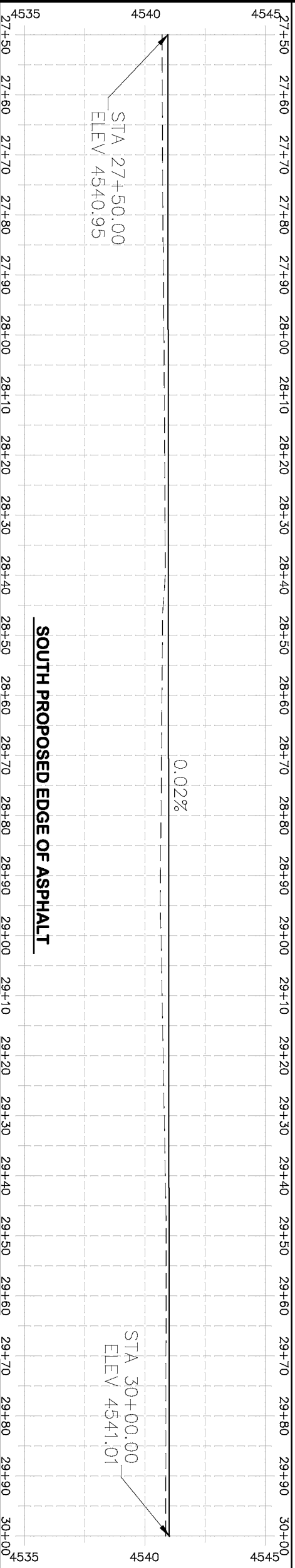
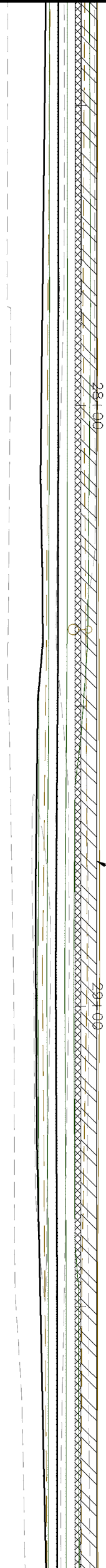
2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 25+00 TO 27+50



NORTH PROPOSED EDGE OF ASPHALT



REDLANDS PARKWAY



SOUTH PROPOSED EDGE OF ASPHALT

- PROJECT NO. _____
- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 – ADJUST MAILBOX LOCATION & RESET
 - (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND

- ASPHALT WIDENING
- GRAVEL SHOULDER

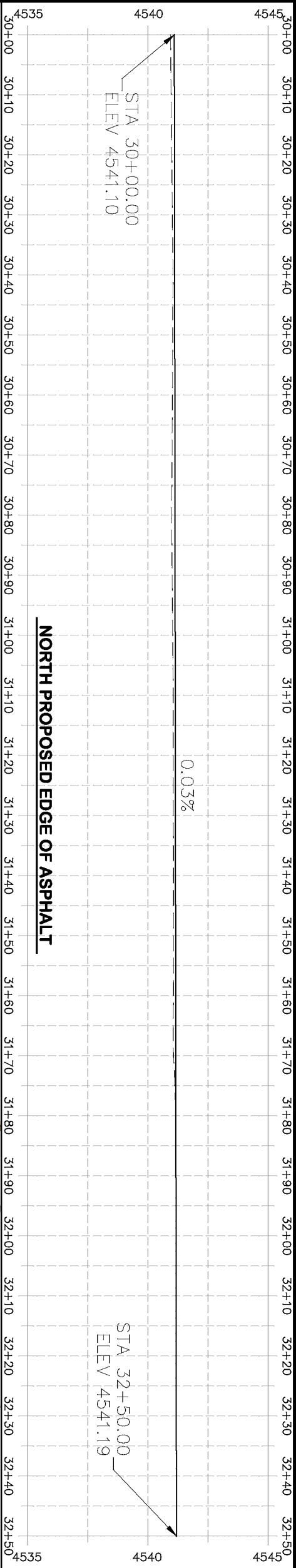
REVISION	DESCRIPTION	DATE
REVISION	DRAWN BY	HMC
REVISION	DESIGNED BY	ECM
REVISION	CHECKED BY	ECM
REVISION	APPROVED BY	ECM

SCALE: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

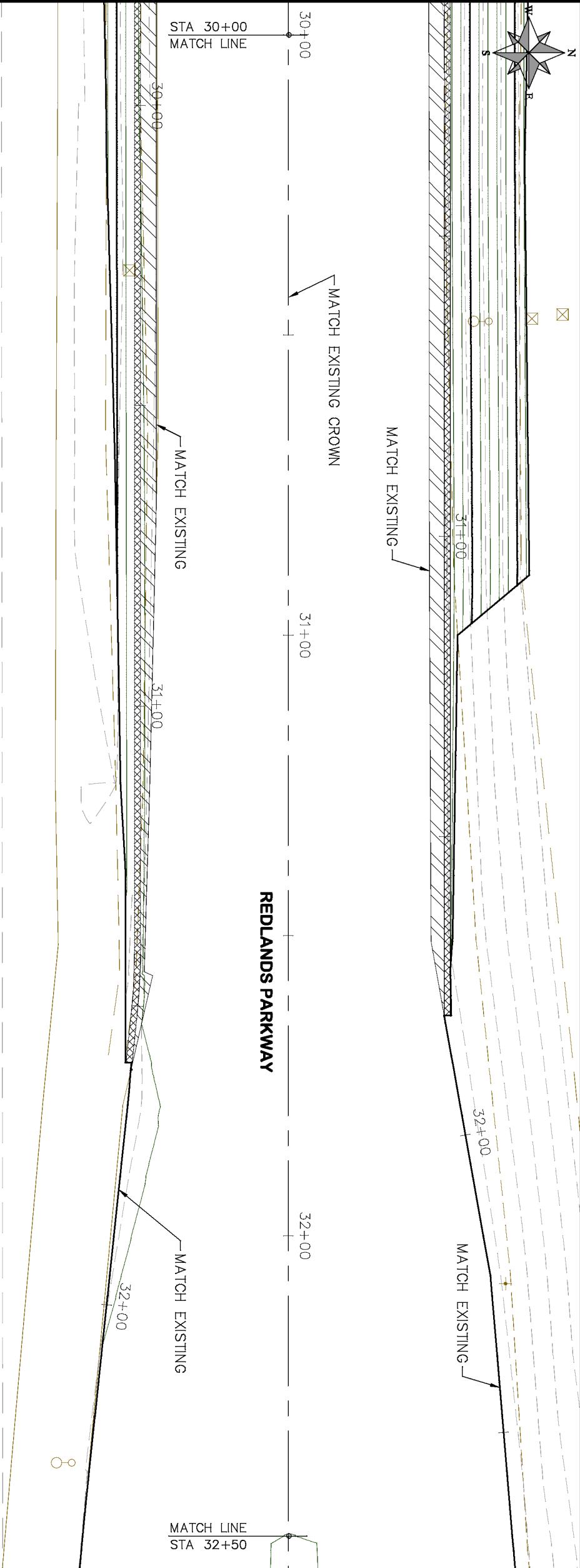
CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

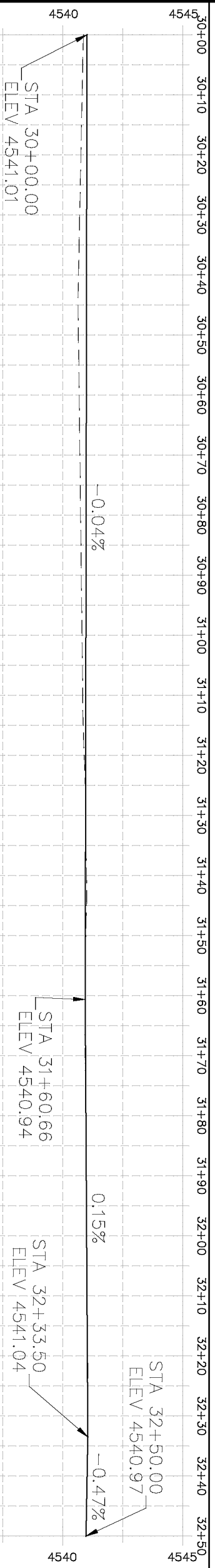
2019 ASPHALT OVERLAYS
ROAD PLAN – REDLANDS PARKWAY
STA 27+50 TO 30+00



NORTH PROPOSED EDGE OF ASPHALT



REDLANDS PARKWAY



SOUTH PROPOSED EDGE OF ASPHALT

- PROJECT NO. _____
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND

- ASPHALT WIDENING
- GRAVEL SHOULDER

REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE	2019
REVISION			DESIGNED BY	ECM	DATE	2019
REVISION			CHECKED BY	ECM	DATE	2019
REVISION			APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF
Grand Junction
COLORADO

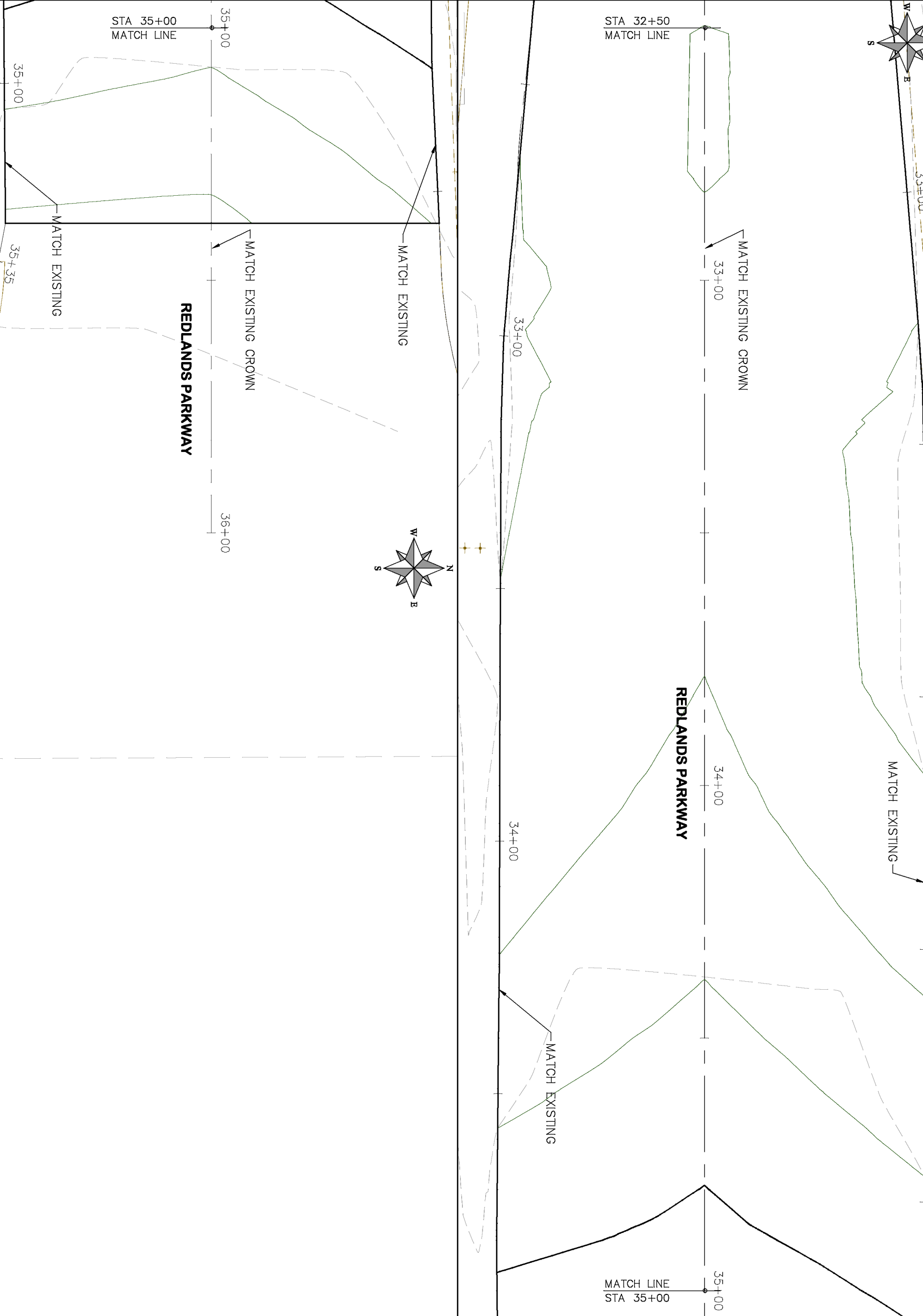
PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 30+00 TO 32+50



PROJECT NO. _____

- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
- (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 - ADJUST MAILBOX LOCATION & RESET
- (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		
REVISION		
REVISION		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

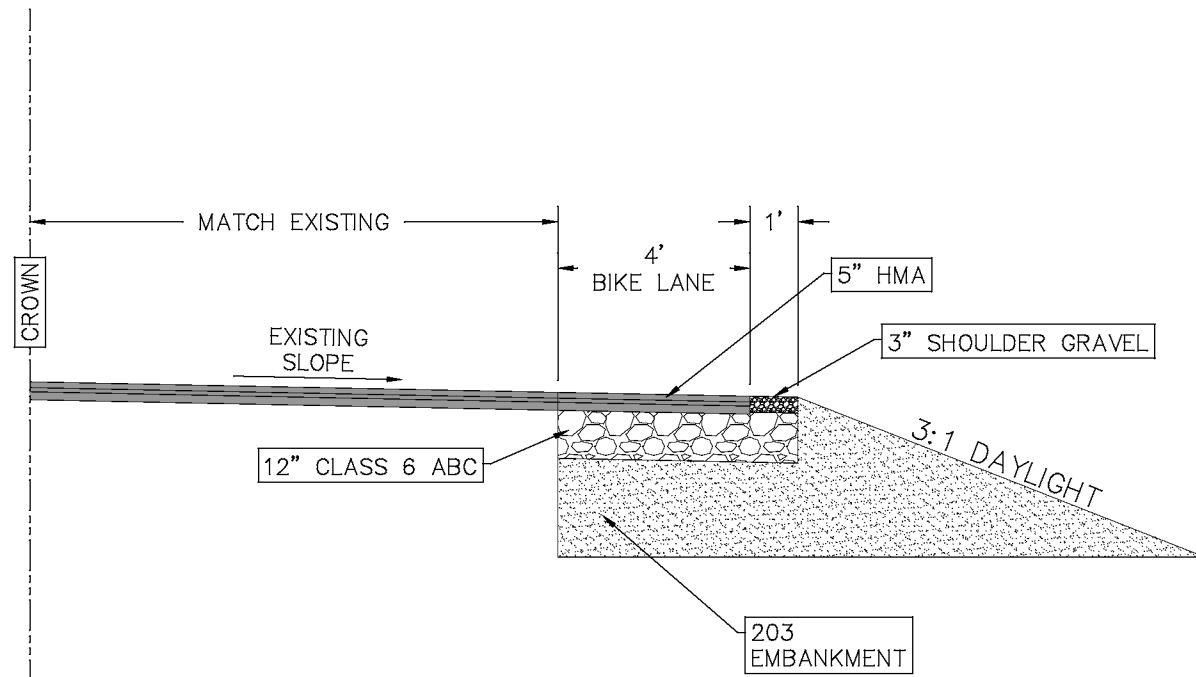
SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	VERTICAL: 1" = 5'
0 5 10 20	0 1.25 2.5 5



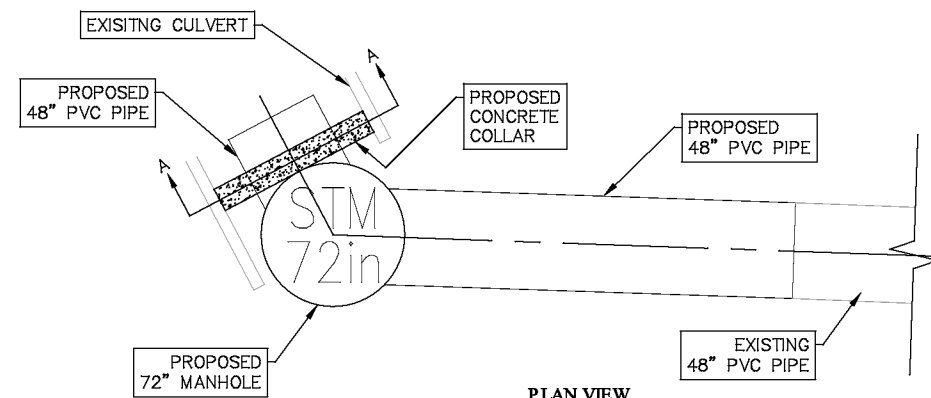
PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 32+50 TO 37+50

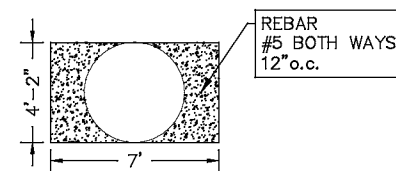
HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER



TYPICAL BIKE LANE
N.T.S.



PLAN VIEW

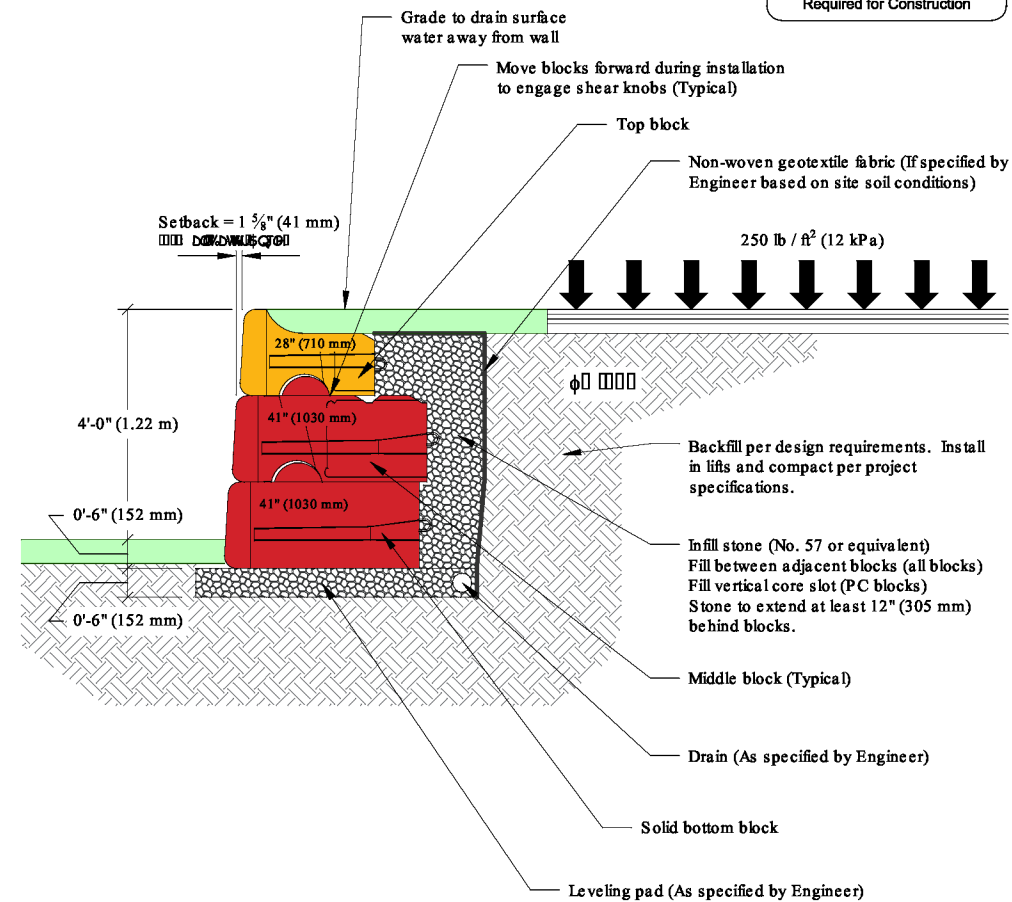


SECTION AA

CULVERT COLLAR
N.T.S.

3 BLOCK HIGH SECTION

- (1) 28" (710 mm) Block
(2) 41" (1030 mm) Blocks



Retaining Wall Detail
N.T.S.

DESCRIPTION		DATE	DRAWN BY		DATE
REVISION	△	-	DRAWN BY	HMC	2019
REVISION	△	-	DESIGNED BY	ECM	2019
REVISION	△	-	CHECKED BY	ECM	2019
REVISION	△	-	APPROVED BY	ECM	2019

SCALES: PLAN & PROFILE
NOT TO SCALE



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS DETAILS

N:\Landpro\Contract Street Maintenance\2019 Contract Street Maintenance\Overlays\Detail.dwg, 49 Detail, 3/12/2019 4:52:37 PM



Purchasing Division

ADDENDUM NO. 1

DATE: March 29, 2019
FROM: City of Grand Junction Purchasing Division
TO: All Offerors
RE: 2019 Contract Street Maintenance – Asphalt Overlays IFB-4622-19-DH

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:

1. Q. SP-2:

Is indicating that there is to be approximately 1,276 CY of material to be hauled offsite and disposed of at the City Riverside Park Yard. Similar verbiage was used in last years contract and the City allowed the contractor to waste the material on site. Will this be allowed for this year's contract?

A. The excess materials cannot be wasted on-site due to grading restrictions in most locations. These excess materials should be exported to the City Riverside Park Yard as indicated in the bid documents.

2. Q. SP-4 Clarification

The specification is calling out two options for the anti-strip material a liquid or hydrated lime. In past projects with the City, Contractors generally provide a liquid anti-strip. Is this still the case or is the City wanting to go towards the utilization of hydrated lime?

A. Either liquid anti-strip or hydrated lime will be acceptable.

3. Q. Guardrail

Are we installing the MGS guardrail system on this project?

A. Yes, MGS guardrails in compliance with current CDOT/MASH standards should be installed.

4. Q. on the City Overlay project you are calling out a 72" Dia. manhole for a 48" line, City spec calls for a 90" manhole for this size of pipe, which size of manhole do we need to quote? Please advise.

A. Please utilize a 72" manhole.

5. See attached updated project plans.

6. Contractor shall utilize the attached updated Price Bid Schedule when submitting their bid response.

The original solicitation for the project noted above is amended as noted.

All other conditions of subject remain the same.

Respectfully,

A handwritten signature in black ink, appearing to read "Duane Hoff Jr.", written in a cursive, stylized script.

Duane Hoff Jr., Senior Buyer
City of Grand Junction, Colorado

Bid Schedule: Addendum #1 - 2019 Contract Street Maintenance - Asphalt Overlays

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	108.2	48" Storm Drain Pipe (HDPE or approved equal)	28.	LF	\$ _____	\$ _____
2	108.5	Storm Sewer Basic Manhole 72" I.D.)	1.	EA	\$ _____	\$ _____
3	202	Asphalt Removal (Planing)(Thickness Varies)	69,380.	SY	\$ _____	\$ _____
4	202	Removal of Type 3 Guardrail	2,405.	LF	\$ _____	\$ _____
5	203	Excavation and Embankment (Potholing) (See SP-2)	Lump Sum		---	\$ _____
6	203	Excavation and Embankment (New Bike Lanes - See SP-2)(Export)	1,300.	CY	\$ _____	\$ _____
7	208	Erosion Control	60.	Days	\$ _____	\$ _____
8	209	Dust Abatement	60.	Days	\$ _____	\$ _____
9	210	Adjust Valve Box (Price to Include adjustment of Survey Monuments)	81.	EA	\$ _____	\$ _____
10	210	Adjust Manhole Ring and Cover (Sanitary and Storm Sewer)	73.	EA	\$ _____	\$ _____
11	210	Reset Mailbox Structures	9.	EA	\$ _____	\$ _____
12	212	Seeding	0.48 Acres		\$ _____	\$ _____
13	304	Aggregate Base Course (Class 6) - Shoulder Edging Gravel	2,688.	Tons	\$ _____	\$ _____
14	304	Aggregate Base Course (Class 6) - Bike Lane	3,040.	Tons	\$ _____	\$ _____
15	304	Subgrade Stabilization (Class 3 Aggregate Base Course - 24" Thick)(Complete in Place)	156.	Tons	\$ _____	\$ _____
16	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 64-22)	14,170.	Tons	\$ _____	\$ _____
17	401	Hot Mix Asphalt (3" thick) (Grading SX, Binder Grade 64-22) - Bottom Lift Bike Lane	775.	Tons	\$ _____	\$ _____
18	401	Hot Mix Asphalt (Patching - Up to 5" thick) (To Include 6" of Class 6 Aggregate Base Course)(Grading SX, Binder Grade 64-22)	101.	Tons	\$ _____	\$ _____
19	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 76-28)	1,060.	Tons	\$ _____	\$ _____
20	420	Geosynthetics - Geogrid	120.	SY	\$ _____	\$ _____
21	608/304	Concrete Drainage Pan (3' Wide) To Include 6" of Class 6 Aggregate Base Course	400.	LF	\$ _____	\$ _____
22	606	Guardrail Type 3 (6-3 Post Spacing)	2,405.	LF	\$ _____	\$ _____
23	606	Transition Type 3G	4.	EA	\$ _____	\$ _____
24	614	End Anchorage (Nonflared)	4.	EA	\$ _____	\$ _____
25	620	Sanitary Facility	Lump Sum		---	\$ _____
26	625	Construction Surveying	Lump Sum		---	\$ _____
27	626	Mobilization	Lump Sum		---	\$ _____

Bid Schedule: Addendum #1 - 2019 Contract Street Maintenance - Asphalt Overlays

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
28	627-00002	Thermoplastic Pavement Marking	20.	SF	\$ _____	\$ _____
29	627-30405	Preformed Thermoplastic Pavement Marking (Word/Symbol)	1,564.	SF	\$ _____	\$ _____
30	627-30410	Preformed Plastic Pavement Marking (X-Walk/Stopline)	943.	SF	\$ _____	\$ _____
31	630	Traffic Control (Complete In Place)	Lump Sum		---	\$ _____
32	630	Flagging	3,460.	HR	\$ _____	\$ _____
33	SP - 1	REDI ROCK Reinforced Wall to include all Appurtenances. See Plan for details.	Lump Sum		---	\$ _____
34	SP - 2	Collar for Storm Drain and Culvert	Lump Sum		---	\$ _____
197	BID ALT 1	Hot Mix Asphalt (Grading SX, Binder Grade 64-22) (with Fiber)	1,940.	Tons	\$ _____	\$ _____
INC		Incentive HMA 64-22	---	---	---	\$ 30,000.00
INC		Incentive HMA 76-28	---	---	---	\$ 5,000.00
MCR		Minor Contract Revisions	---	---	---	\$ 150,000.00

Bid Amount: \$ _____

Bid Amount:

dollars

PROJECT NO. _____

2019 ASPHALT OVERLAYS
SOUTH CAMP ROAD & REDLANDS PARKWAY
MARCH, 2019

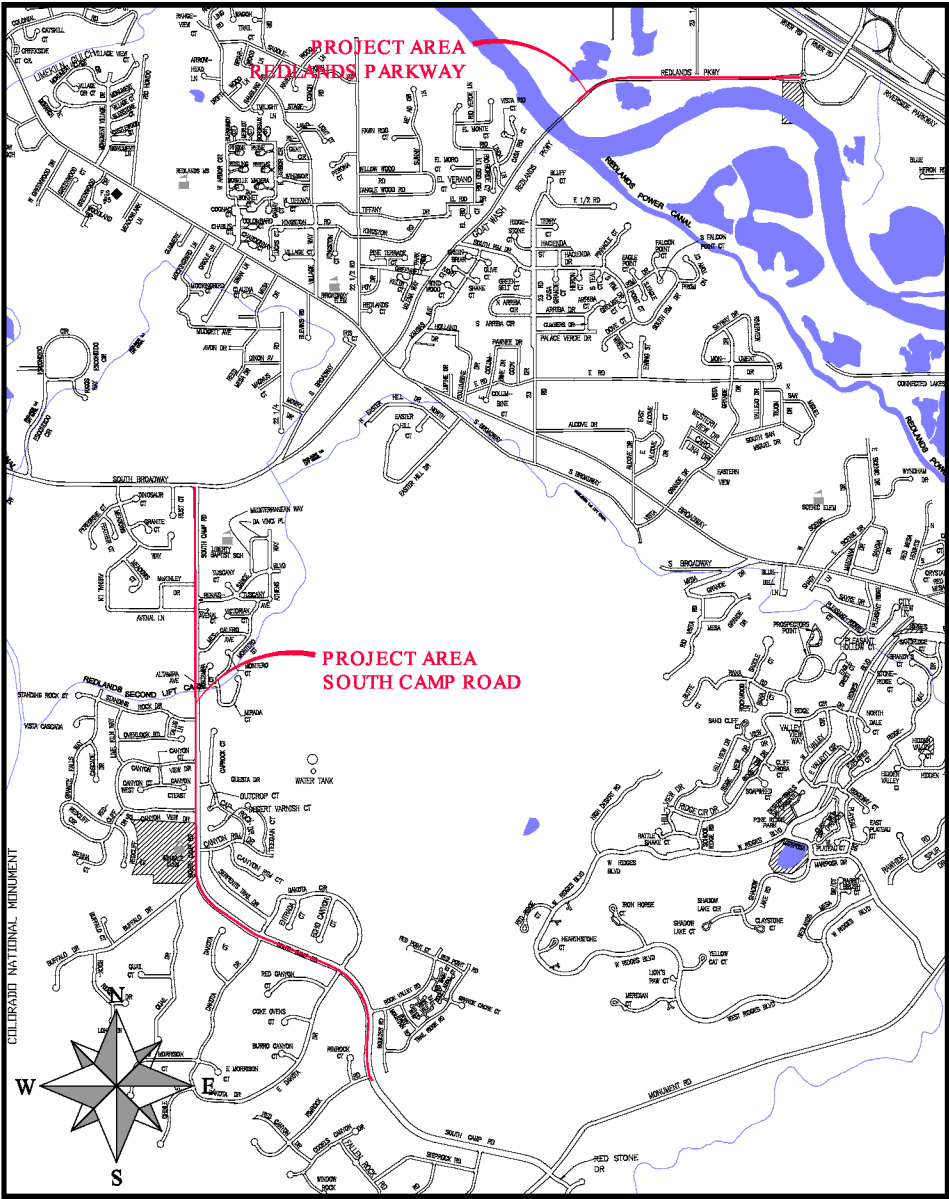
1—Cover Sheet		26—South Camp Road Plan & Profile	Sta 65+00 — 67+50
2—Standard Abbreviations, Legend and Symbols		27—South Camp Road Plan & Profile	Sta 67+50 — 70+00
3—Summary of Approximate Quantities		28—South Camp Road Plan & Profile	Sta 70+00 — 72+50
4—Keymap South Camp Road		29—South Camp Road Plan & Profile	Sta 72+50 — 75+00
5—South Camp Road Plan & Profile	Sta 0+00 — 2+50	30—South Camp Road Plan	Sta 75+00 — 80+00
6—South Camp Road Plan & Profile	Sta 2+50 — 5+00	31—South Camp Road Plan	Sta 80+00 — 85+00
7—South Camp Road Plan & Profile	Sta 5+00 — 7+50	32—South Camp Road Plan	Sta 85+00 — 90+00
8—South Camp Road Plan & Profile	Sta 7+50 — 10+00	33—South Camp Road Plan	Sta 90+00 — 95+00
9—South Camp Road Plan & Profile	Sta 10+00 — 12+50	34—South Camp Road Plan	Sta 95+00 — 100+00
10—South Camp Road Plan & Profile	Sta 12+50 — 15+00	35—South Camp Road Plan	Sta 100+00 — 105+00
11—South Camp Road Plan & Profile	Sta 15+00 — 17+50	36—South Camp Road Plan	Sta 105+00 — 107+50
12—South Camp Road Plan & Profile	Sta 17+50 — 20+00	37—Keymap South Camp Road	
13—South Camp Road Plan & Profile	Sta 20+00 — 22+50	38—Redlands Parkway Road Plan	Sta 0+00 — 5+00
14—South Camp Road Plan & Profile	Sta 22+50 — 25+00	39—Redlands Parkway Road Plan	Sta 5+00 — 10+00
15—South Camp Road Plan & Profile	Sta 25+00 — 27+50	40—Redlands Parkway Road Plan	Sta 10+00 — 15+00
16—South Camp Road Plan & Profile	Sta 27+50 — 30+00	41—Redlands Parkway Road Plan & Profile	Sta 15+00 — 17+50
17—South Camp Road Plan & Profile	Sta 30+00 — 32+50	42—Redlands Parkway Road Plan & Profile	Sta 17+50 — 20+00
18—South Camp Road Plan & Profile	Sta 32+50 — 35+00	43—Redlands Parkway Road Plan & Profile	Sta 20+00 — 22+50
19—South Camp Road Plan	Sta 35+00 — 40+00	44—Redlands Parkway Road Plan & Profile	Sta 22+50 — 25+00
20—South Camp Road Plan	Sta 40+00 — 45+00	45—Redlands Parkway Road Plan & Profile	Sta 25+00 — 27+50
21—South Camp Road Plan	Sta 45+00 — 50+00	46—Redlands Parkway Road Plan & Profile	Sta 27+50 — 30+00
22—South Camp Road Plan	Sta 50+00 — 55+00	47—Redlands Parkway Road Plan & Profile	Sta 30+00 — 32+50
23—South Camp Road Plan	Sta 55+00 — 60+00	48—Redlands Parkway Road Plan	Sta 32+50 — 37+50
24—South Camp Road Plan & Profile	Sta 60+00 — 62+50	49—Details	
25—South Camp Road Plan & Profile	Sta 62+50 — 65+00		

UTILITIES AND AGENCIES								
AGENCY	NAME	POSITION	ROLE	MAILING ADDRESS	STREET ADDRESS	CITY, STATE	VOICE-WK	FAX
CITY OF GRAND JUNCTION	ERIC MOCKO	PROJECT ENGINEER	PROJECT ENGINEER	333 WEST AVE BLDG C	333 WEST AVE BLDG C	GRAND JCT., CO 81501	(970) 256-4017	(970) 256-4022
CITY OF GRAND JUNCTION	LEE COOPER	PROJECT ENGINEER	SANITARY SEWER	333 WEST AVE BLDG C	333 WEST AVE BLDG C	GRAND JCT., CO 81501	(970) 256-4155	(970) 256-4022
GRAND VALLEY IRRIGATION CO.	PHIL BERTRAND	MANAGER	IRRIGATION	688 26 RD	688 26 RD	GRAND JCT., CO 81506	(970) 242-2762	
SPECTRUM	JEFF VALDEZ	MANAGER	CABLE TV	2502 FORESIGHT CIRCLE	2502 FORESIGHT CIRCLE	GRAND JCT., CO 81504	(970) 245-8750	(970) 245-6803
CENTURYLINK	CHRIS JOHNSON	ENGINEER	TELEPHONE	2524 BLICHMANN AVE	2524 BLICHMANN AVE	GRAND JCT., CO 81504	(970) 244-4311	(970) 240-4349
UTE WATER	JUSTIN BATES	SUPERVISOR	WATER	PO BOX 460	2190 H ¼ RD	GRAND JCT., CO 81502	(970) 242-7491	(970) 242-9189
XCEL	STEVE PIBURN	UNIT MANAGER	ELECTRIC	2538 BLICHMANN AVE	2538 BLICHMANN AVE	GRAND JCT., CO 81506	(970) 244-2664	(970) 244-2664
XCEL	SARAH BARRICAU	UNIT MANAGER	GAS	2538 BLICHMANN AVE	2538 BLICHMANN AVE	GRAND JCT., CO 81506	(970) 244-2656	(970) 244-2656

REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		
REVISION		

CITY OF
Grand Junction
COLORADO

Public Works
Engineering Division



VICINITY MAP

DRAWING STATUS:	● PROGRESS
	○ FINAL CONSTRUCTION DRAWINGS
	○ ASBUILT
DESIGNED BY:	
ERIC MOCKO, PROJECT ENGINEER	2019
REVIEWED BY:	
TRENT C. PRALL, PUBLIC WORKS DIRECTOR	2019
AUTHORIZED FOR CONSTRUCTION	
TRENT C. PRALL, PUBLIC WORKS DIRECTOR	2019
ACCEPTED AS CONSTRUCTED	
ERIC MOCKO, PROJECT ENGINEER	2019



LEGEND

[illegible][illegible]

PROPOSED CONCRETE CURB AND GUTTER	
PROPOSED CONCRETE CURB, GUTTER, & SIDEWALK	
PROPOSED CONCRETE SIDEWALK	
PROPOSED "WET" UTILITIES (CONSTRUCTION NOTE WILL INDICATE TYPE, SIZE, AND MATERIAL OF NEW MAIN)	
RAIL ROAD	
RETAINING WALL	
STRIPING (CONTINUOUS WHITE)	
STRIPING (DASHED WHITE)	
STRIPING (CONTINUOUS YELLOW)	
STRIPING (DASHED YELLOW)	
TOP OF SLOPE	
CONTOUR LINES (CONSTRUCTION NOTE WILL SHOW BETWEEN TOP & TOE OF SLOPE)	
TRAFFIC DETECTOR LOOP	
UTILITY LINE (ABANDON) (THIS CASE A WATER LINE)	
UTILITY LINE (CABLE TV)	
UTILITY LINE (ELECTRIC)	
UTILITY LINE (FIBER OPTIC)	
UTILITY LINE (GAS)	
UTILITY LINE (HIGH VOLTAGE OVERHEAD POWER)	
UTILITY LINE (OVERHEAD POWER)	
UTILITY LINE (OVERHEAD TELEPHONE)	
UTILITY LINE (SANITARY SEWER)	
UTILITY LINE (SANITARY SEWER FORCE MAIN)	
UTILITY LINE (SANITARY SEWER SERVICE)	
UTILITY LINE (STORM SEWER)	
UTILITY LINE (STORM SEWER, PERFORATED)	
UTILITY LINE (STORM/SANITARY SEWER COMBINATION)	
UTILITY LINE (TELEPHONE)	
UTILITY LINE (WATER)	

SYMBOLS

BENCH MARK	
CATCH BASIN	
CLEAN OUT	
CURB STOP	
FIRE HYDRANT	
GUY WIRE ANCHOR	
HEADGATE	
IRRIGATION PUMP	
MAILBOX	
MANHOLE (ELECTRIC)	
MANHOLE (GAS)	
MANHOLE (SANITARY/STORM)	
MANHOLE (TELEPHONE)	
MANHOLE (TV)	
MANHOLE (WATER)	
METER (GAS)	
METER (WATER)	
METER (WATER)	
PEDESTAL (TELEPHONE)	
PEDESTAL (TV)	
PROPERTY PIN	
PULL BOX	
REDUCER FITTING	
SIGN OR POST (SIGN TYPE NOTED)	
SPRINKLER HEAD	
STREET LIGHT	
SURVEY MONUMENT (CITY)	
SURVEY MONUMENT (TYPE NOTED)	
TEST HOLE	
TRAFFIC PAINT MARKING	
TRAFFIC SIGNAL POLE AND MAST ARM	
UTILITY POLE	
VALVE (GAS)	
VALVE (IRRIGATION)	
VALVE (WATER)	
VEGETATION (HEDGE OR BUSH)	
VEGETATION (TREE STUMP)	
VEGETATION (TREE) (CALIPER SIZE NOTED)	
WATER HYDRANT	
WEIR	
WIRE LIGHT	

PROJECT NO. _____

REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		
REVISION		

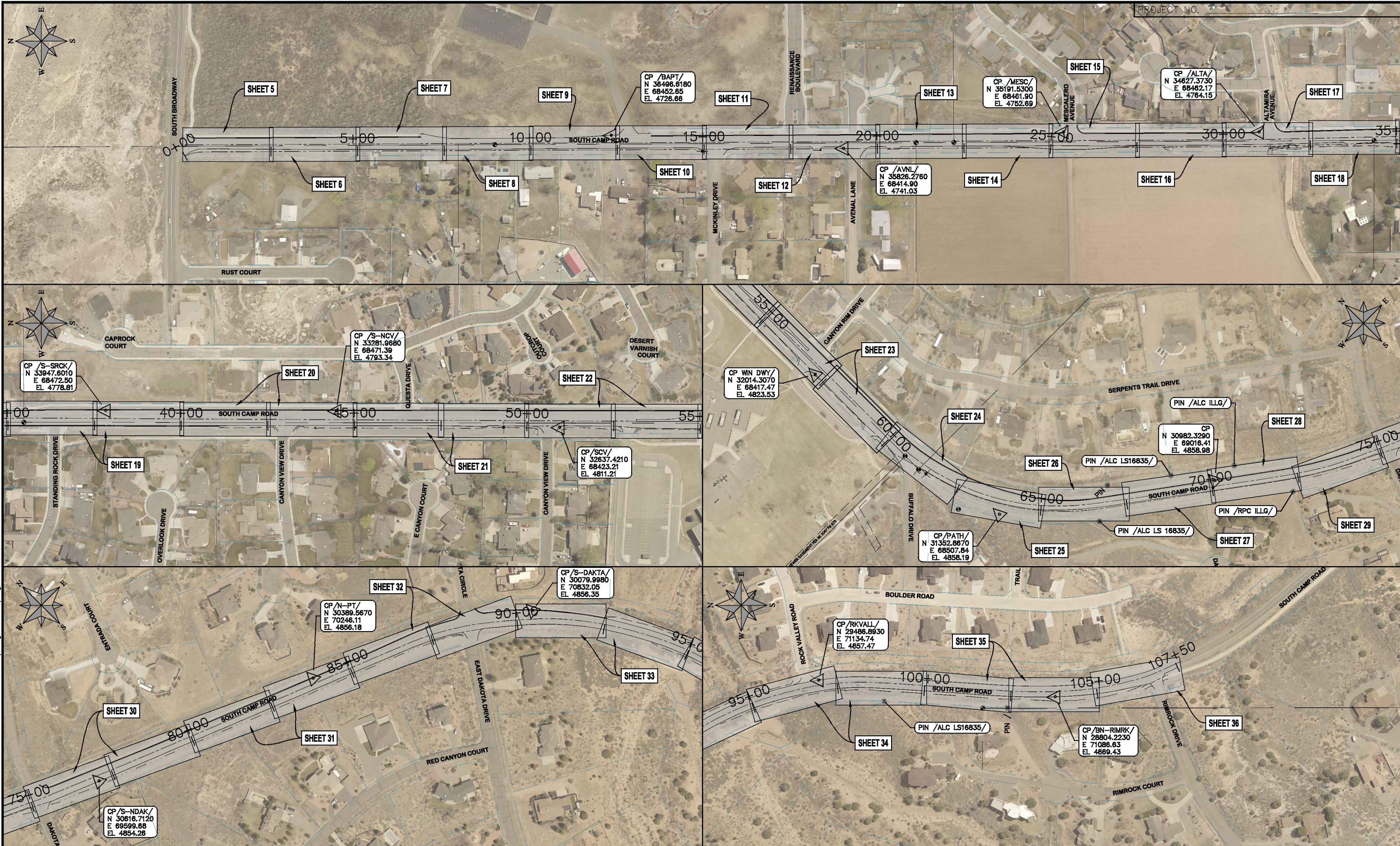
DRAWN BY	XXX	DATE	201X
DESIGNED BY	XXX	DATE	201X
CHECKED BY	XXX	DATE	201X
APPROVED BY	XXX	DATE	201X

SIZES: PLAN & PROFILE	
HORIZONTAL: 1" = 40'	40
VERTICAL: 1" = 10'	10



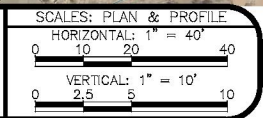
PUBLIC WORKS
ENGINEERING DIVISION

PROJECT TITLE
SUMMARY OF APPROXIMATE QUANTITIES



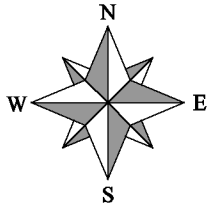
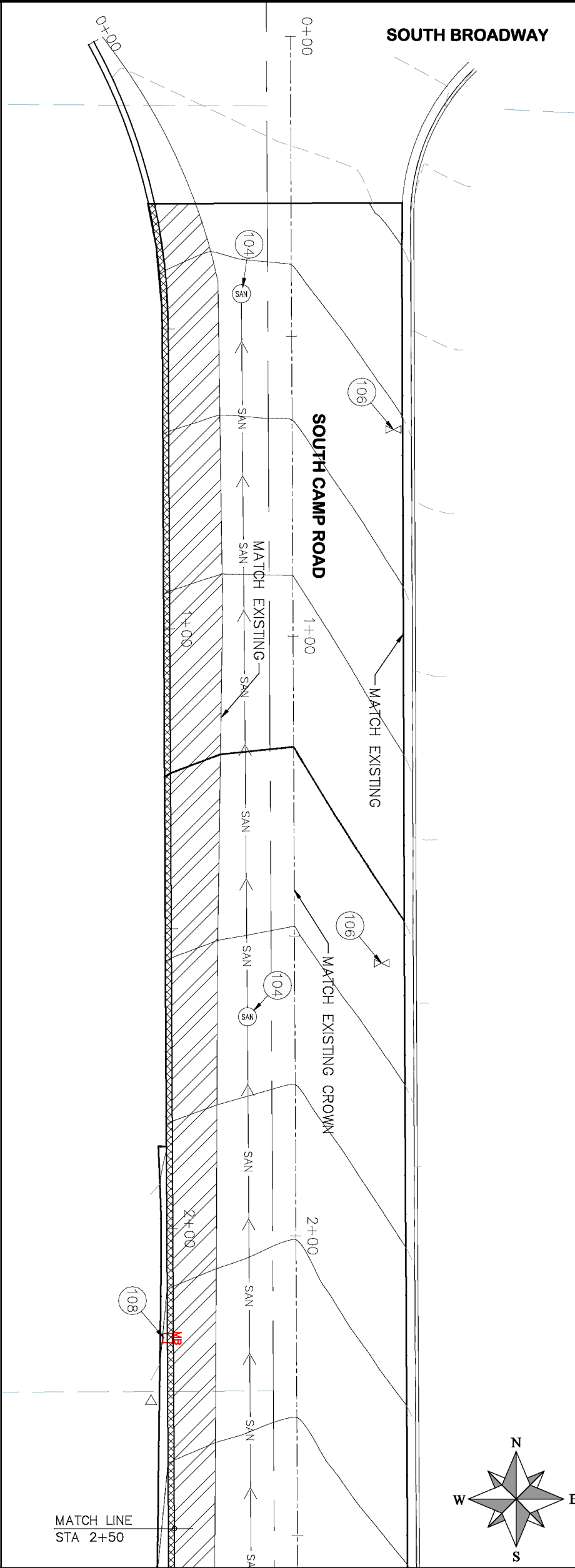
REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		
REVISION		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

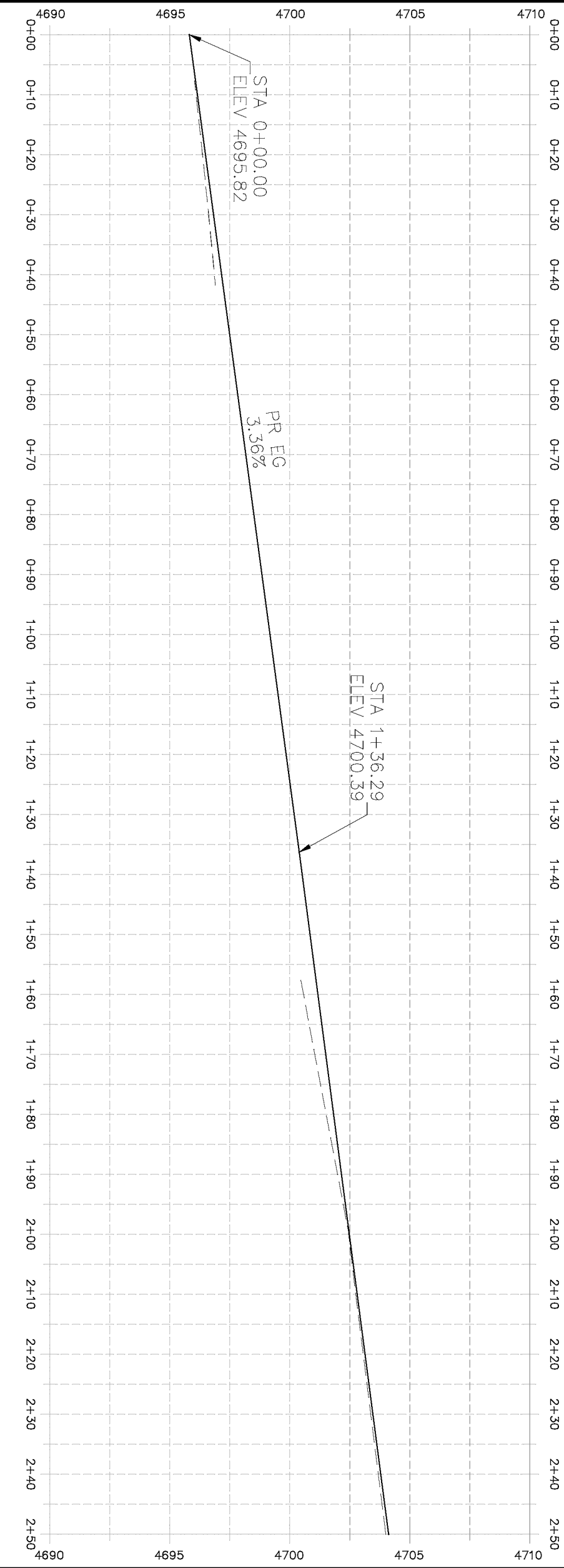


PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
KEYMAP SOUTH CAMP ROAD



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (401.08) - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

REVISION	DESCRIPTION	DATE
Δ		
Δ		
Δ		
Δ		
Δ		
DRAWN BY HMC DATE 2019		
DESIGNED BY ECM DATE 2019		
CHECKED BY ECM DATE 2019		
APPROVED BY ECM DATE 2019		

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5

CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 0+00 TO STA 2+50

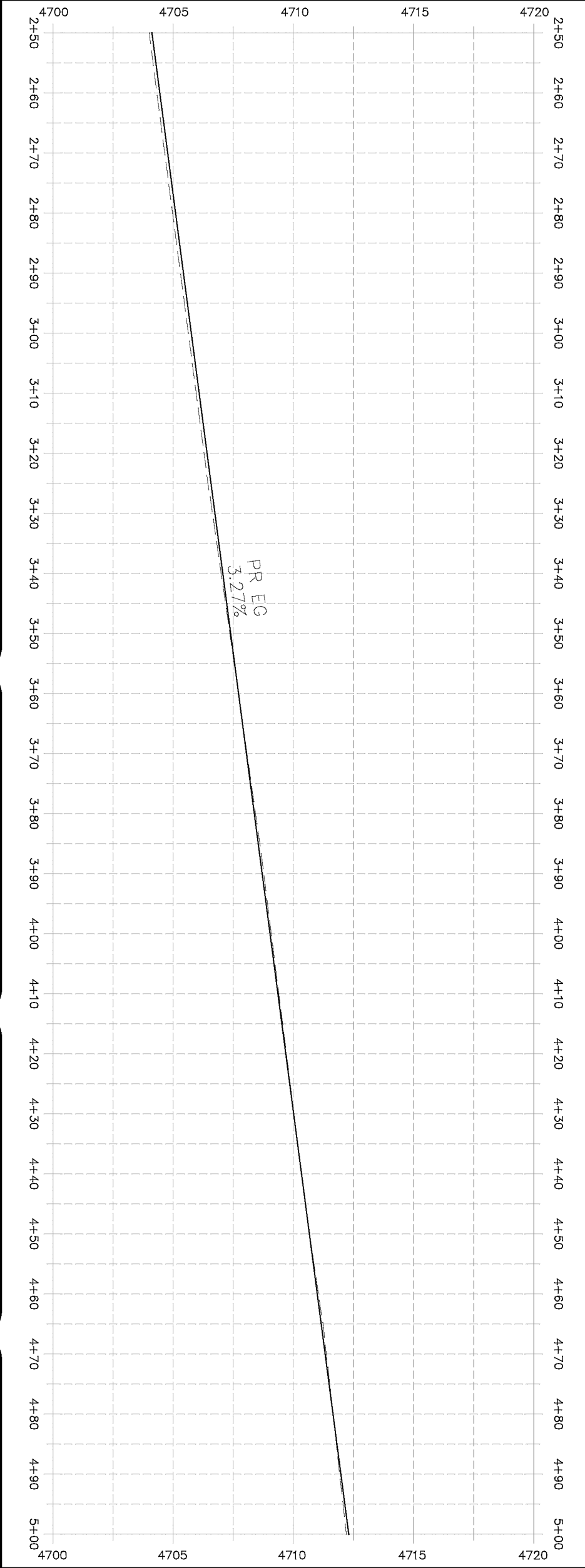
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE
REVISION			DESIGNED BY	ECM	DATE
REVISION			CHECKED BY	ECM	DATE
REVISION			APPROVED BY	ECM	DATE

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5

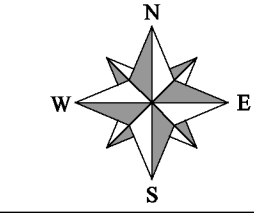
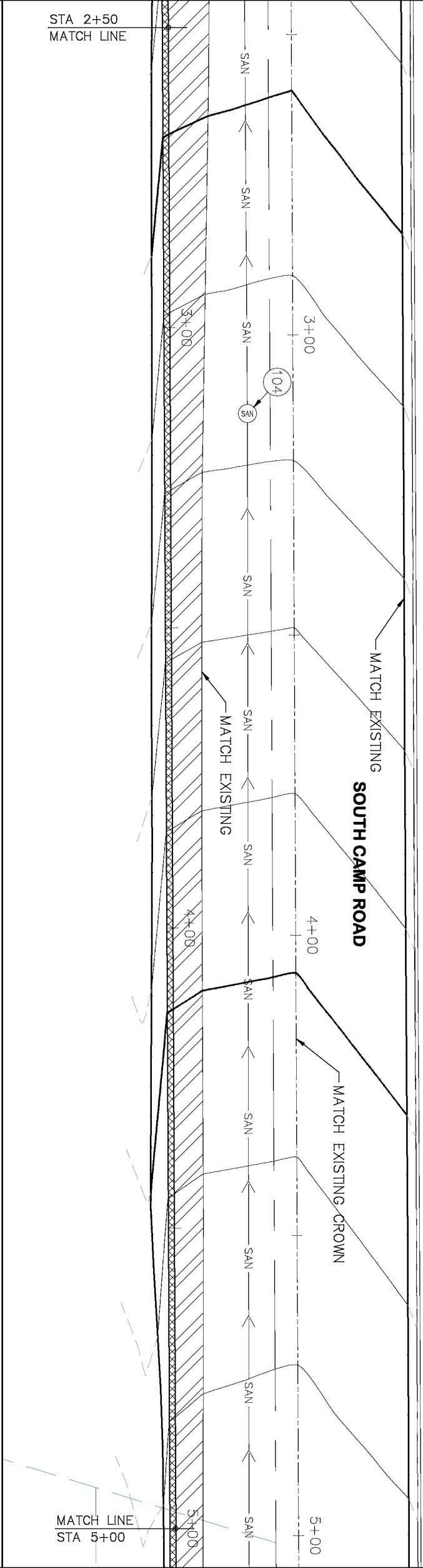


PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 2+50 TO STA 5+00



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

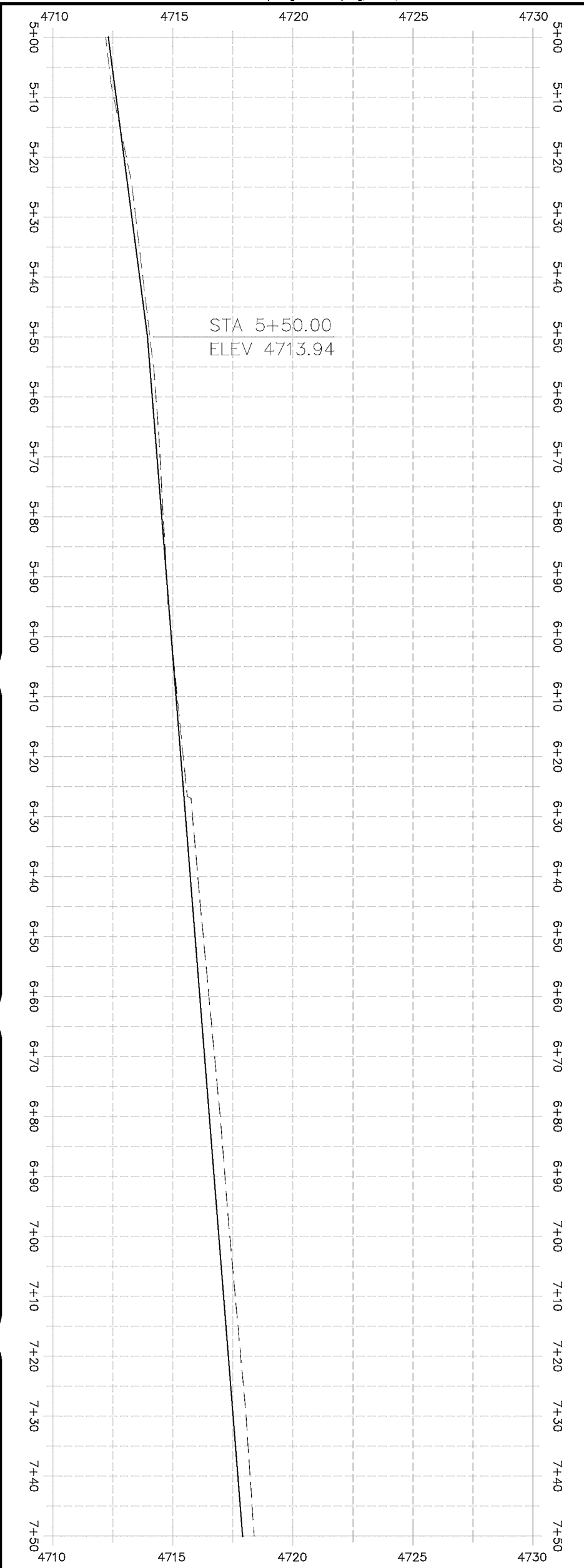
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE
REVISION			DESIGNED BY	ECM	DATE
REVISION			CHECKED BY	ECM	DATE
REVISION			APPROVED BY	ECM	DATE

SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

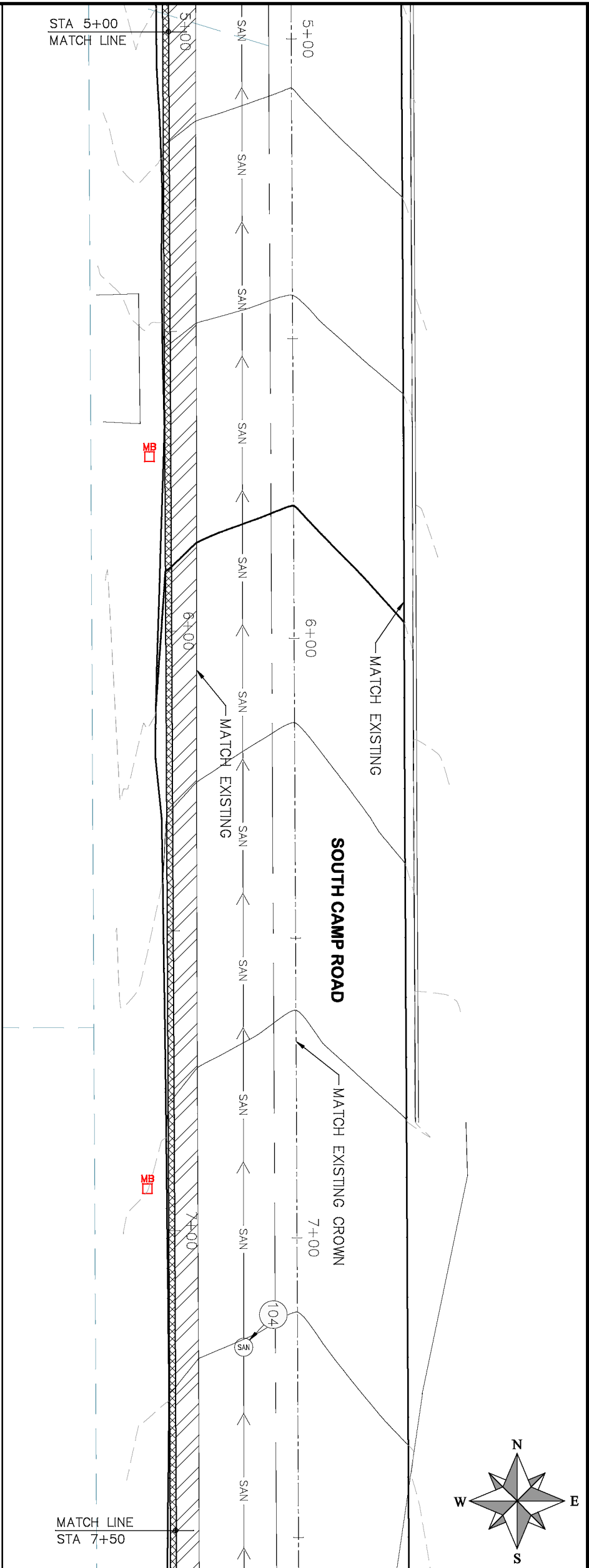


PUBLIC WORKS
ENGINEERING DIVISION

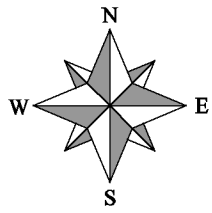
2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 5+00 TO STA 7+50



HATCH LEGEND
ASPHALT WIDENING
GRAVEL SHOULDER



PROJECT NO.
CONSTRUCTION NOTES
(104) 210 - ADJUST MANHOLE RIM TO GRADE.
(106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
(108) 210 - ADJUST MAILBOX LOCATION & RESET
(672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
(677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



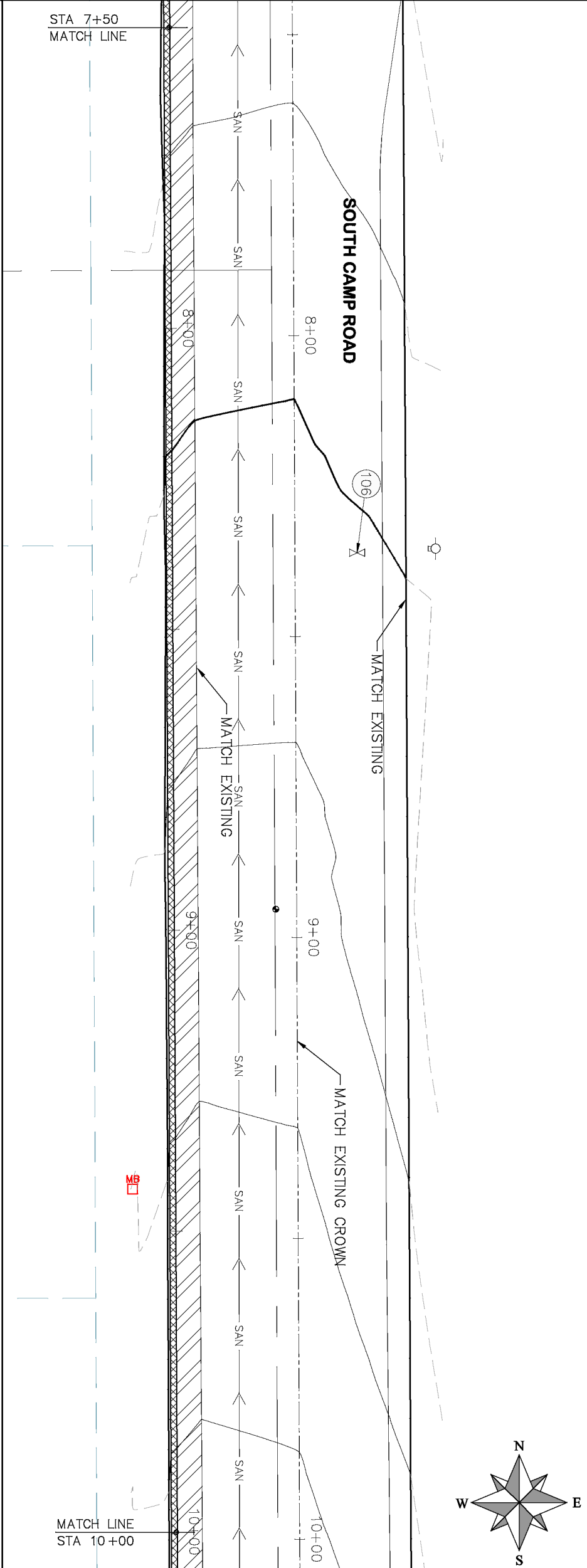
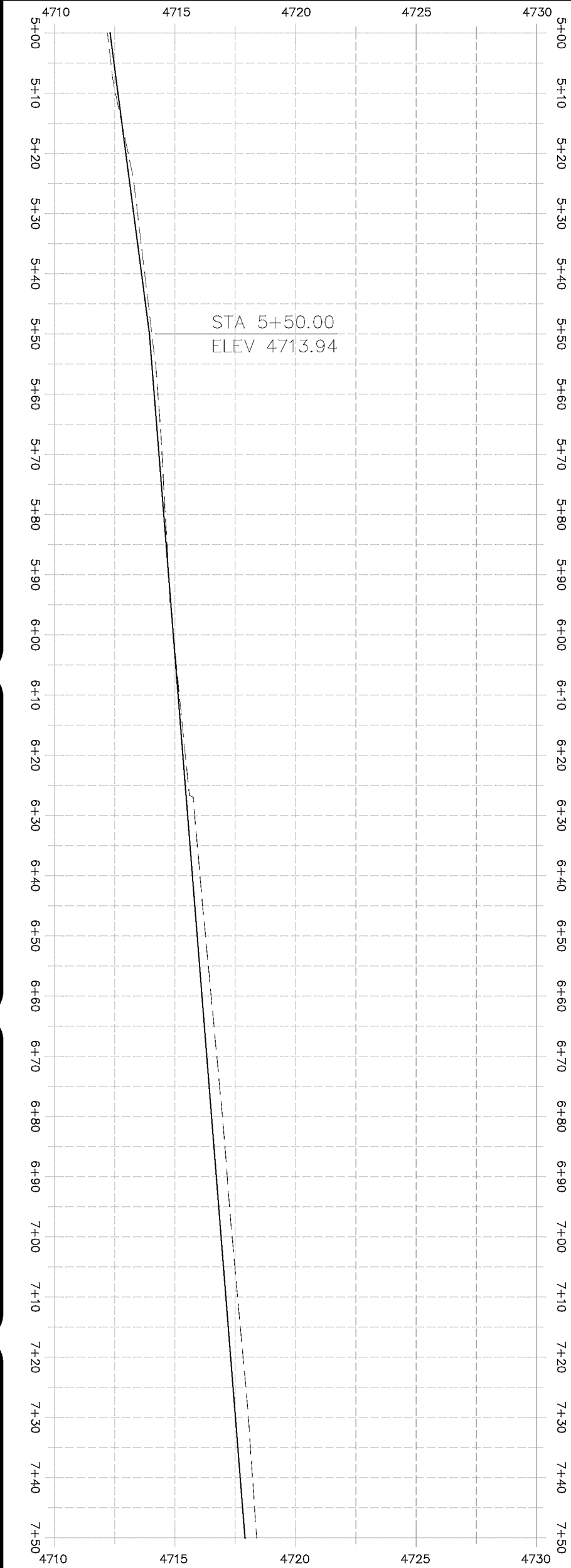
REVISION Δ _____ - _____
 REVISION Δ _____ - _____
 REVISION Δ _____ - _____
 REVISION Δ _____ - _____

DRAWN BY	DATE
DESIGNED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 7+50 TO STA 10+00



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

PROJECT NO. _____	CONSTRUCTION NOTES
104	210 - ADJUST MANHOLE RIM TO GRADE.
106	210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
108	210 - ADJUST MAILBOX LOCATION & RESET
679	304 - AGGREGATE BASE COURSE (CLASS 6) (1/2" THICK)
677	401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SK, BINDER GRADE PG 64-22)

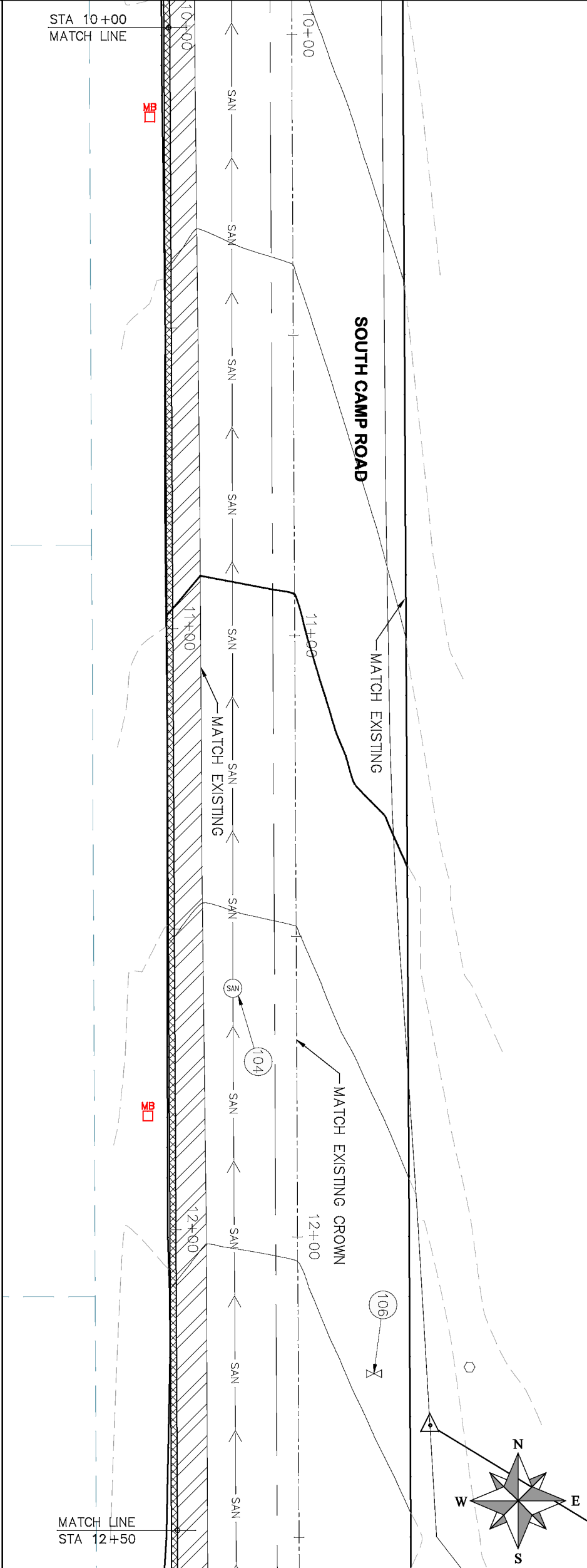
REVISION Δ _____ - _____
 REVISION Δ _____ - _____
 REVISION Δ _____ - _____
 REVISION Δ _____ - _____

DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 10+00 TO STA 12+50



- | PROJECT NO. _____ | |
|--------------------|---|
| CONSTRUCTION NOTES | |
| 104 | 210 - ADJUST MANHOLE RIM TO GRADE. |
| 106 | 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE. |
| 108 | 210 - ADJUST WALKBOX LOCATION & RESET |
| 672 | 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK) |
| 677 | 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22) |

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

REVISION Δ	DESCRIPTION	DATE
REVISION Δ		
REVISION Δ		
REVISION Δ		

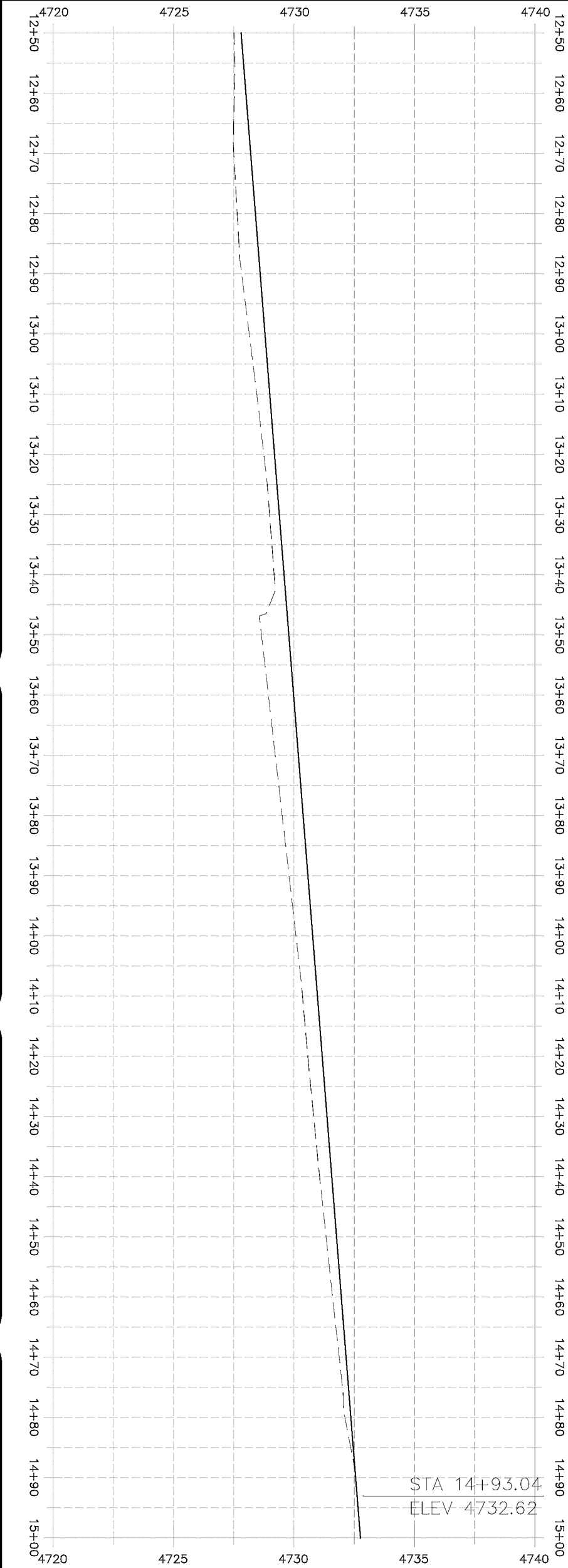
DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5

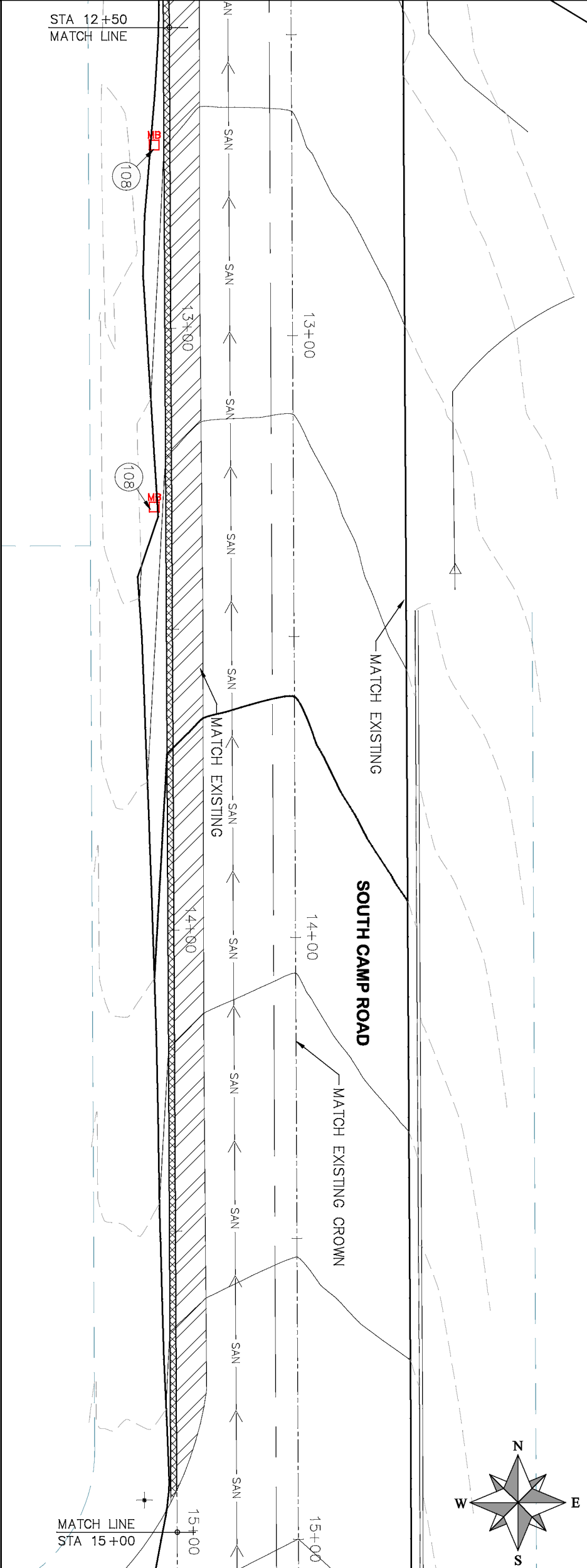


PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 12+50 TO STA 15+00

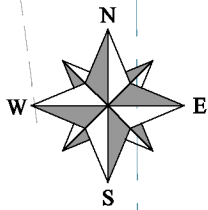


STA 14+93.04
ELEV 4732.62



STA 12+50
MATCH LINE

MATCH LINE
STA 15+00

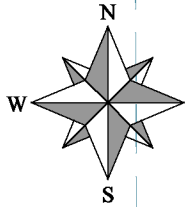


- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
- (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 – ADJUST MAILBOX LOCATION & RESET
- (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

PROJECT NO. _____
CONSTRUCTION NOTES

	ASPHALT WIDENING		GRAVEL SHOULDER
--	------------------	--	-----------------

HATCH LEGEND



- PROJECT NO. _____
- CONSTRUCTION NOTES
- 104

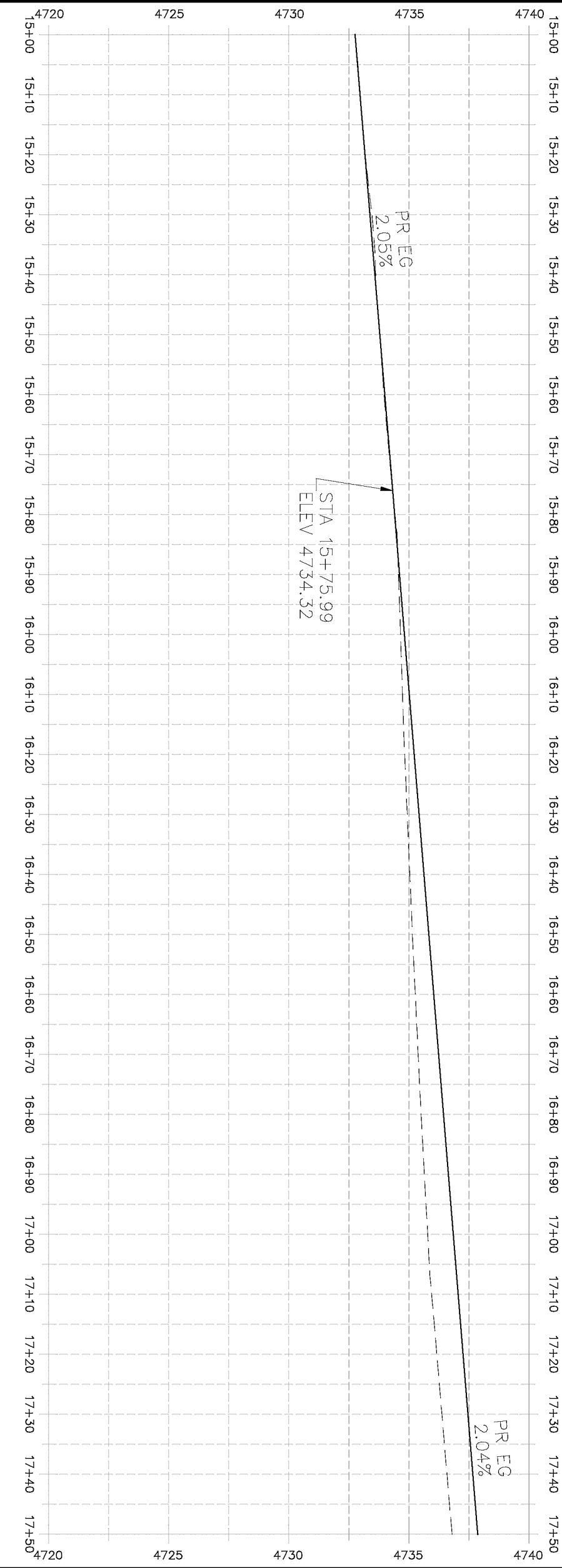
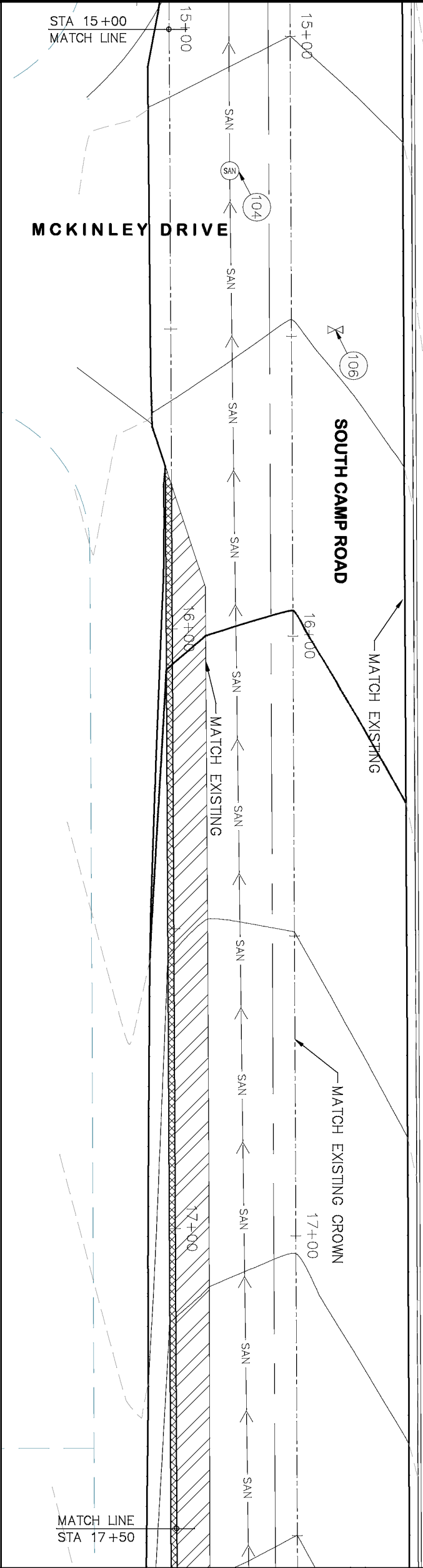
210 – ADJUST MANHOLE RIM TO GRADE.
- 106

210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- 108

210 – ADJUST MAILBOX LOCATION & RESET
- 672

304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- 677

401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

REVISION	DESCRIPTION	DATE
Δ		
Δ		
Δ		
Δ		
Δ		
DRAWN BY HMC DATE 2019		
DESIGNED BY ECM DATE 2019		
CHECKED BY ECM DATE 2019		
APPROVED BY ECM DATE 2019		

SCALES: PLAN & PROFILE

HORIZONTAL: 1" = 20'

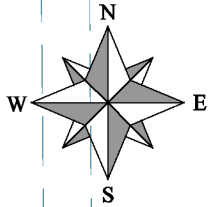
VERTICAL: 1" = 5'



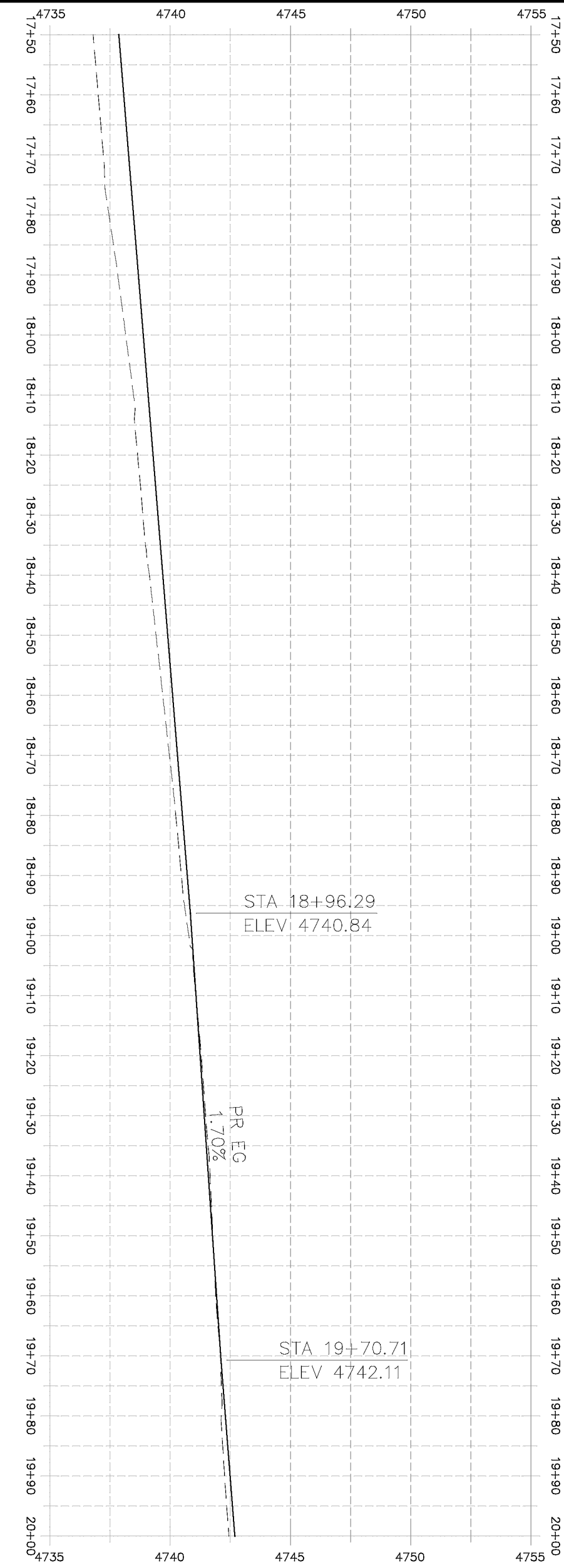
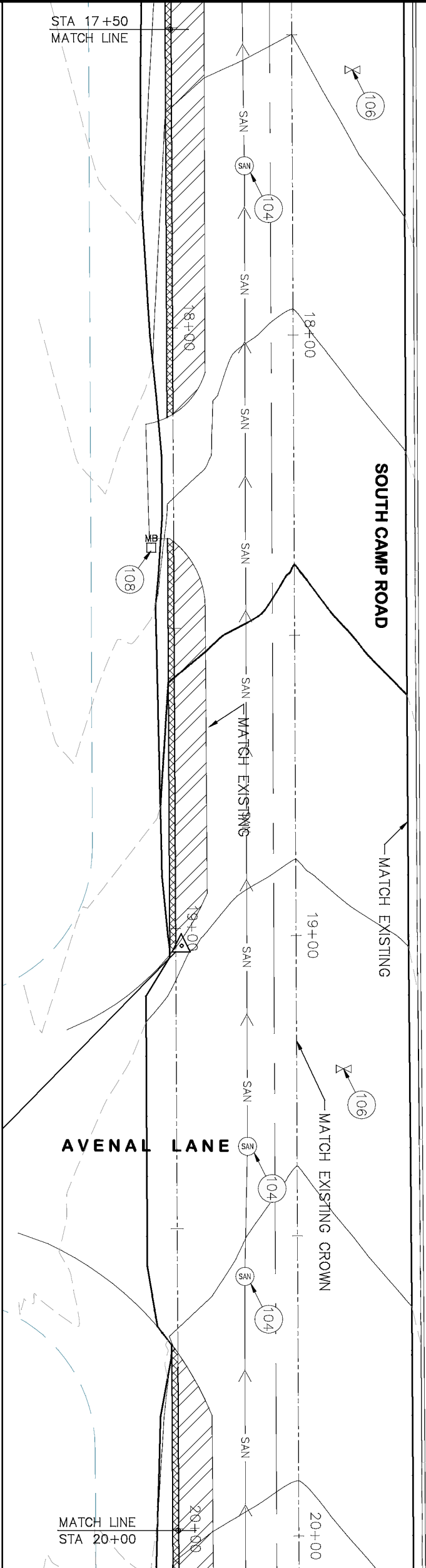
PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 15+00 TO STA 17+50

RENAISSANCE

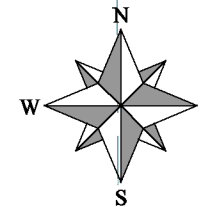


- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 – ADJUST MAILBOX LOCATION & RESET
 - (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

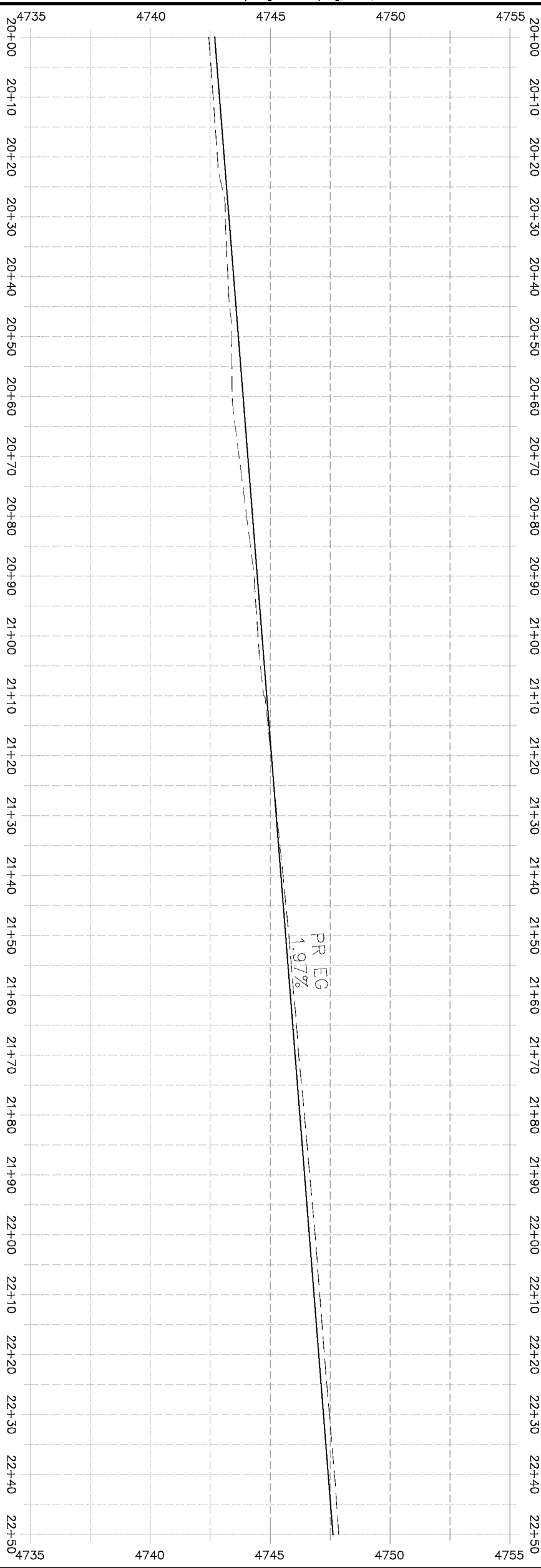
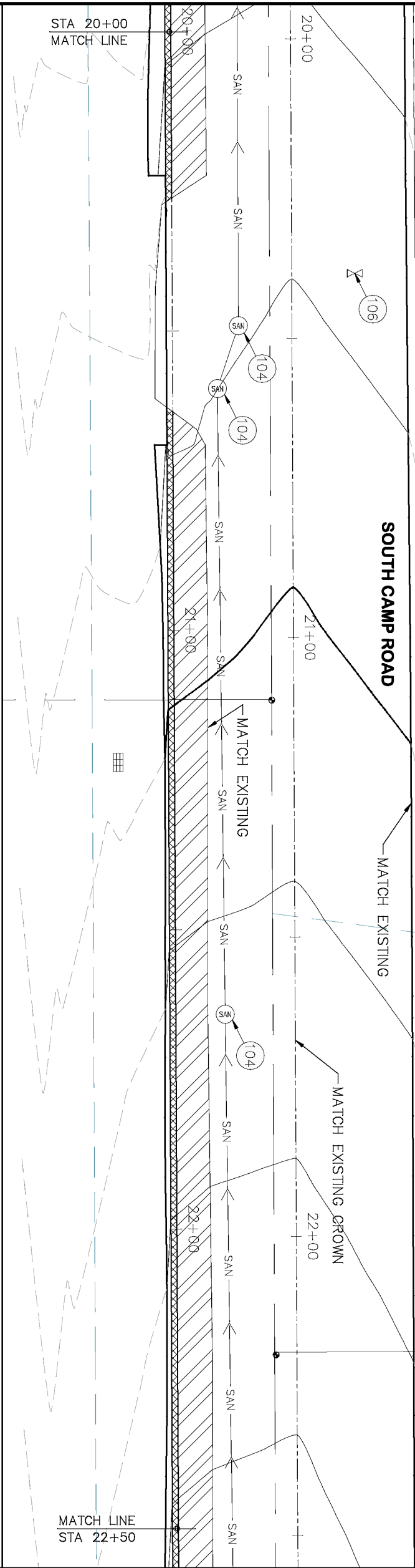


HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

REVISION	
REVISION	DESCRIPTION
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	
101	
102	
103	
104	
105	
106	
107	
108	
109	
110	
111	
112	
113	
114	
115	
116	
117	
118	
119	
120	
121	
122	
123	
124	
125	
126	
127	
128	
129	
130	
131	
132	
133	
134	
135	
136	
137	
138	
139	
140	
141	
142	
143	
144	
145	
146	
147	
148	
149	
150	
151	
152	
153	
154	
155	
156	
157	
158	
159	
160	
161	
162	
163	
164	
165	
166	
167	
168	
169	
170	
171	
172	
173	
174	
175	
176	
177	
178	
179	
180	
181	
182	
183	
184	
185	
186	
187	
188	
189	
190	
191	
192	
193	
194	
195	
196	
197	
198	
199	
200	
201	
202	
203	
204	
205	
206	
207	
208	
209	
210	
211	
212	
213	
214	
215	
216	
217	
218	
219	
220	
221	
222	
223	
224	
225	
226	
227	
228	
229	
230	
231	
232	
233	
234	
235	
236	
237	
238	
239	
240	
241	
242	
243	
244	
245	
246	
247	
248	
249	
250	
251	
252	
253	
254	
255	
256	
257	
258	
259	
260	
261	
262	
263	
264	
265	
266	
267	
268	
269	
270	
271	
272	
273	
274	
275	
276	
277	
278	
279	
280	
281	
282	
283	
284	
285	
286	
287	
288	
289	
290	
291	
292	
293	
294	
295	
296	
297	
298	
299	
300	
301	
302	
303	
304	
305	
306	
307	
308	
309	
310	
311	
312	
313	
314	
315	
316	
317	
318	
319	
320	
321	
322	
323	
324	
325	
326	
327	
328	
329	
330	
331	
332	
333	
334	
335	
336	
337	
338	
339	
340	
341	
342	
343	
344	
345	
346	
347	
348	
349	
350	
351	
352	
353	
354	
355	
356	
357	
358	
359	
360	
361	
362	
363	
364	
365	
366	
367	
368	
369	
370	
371	
372	
373	
374	
375	
376	
377	
378	
379	
380	
381	
382	
383	
384	
385	
386	
387	
388	
389	
390	
391	
392	
393	
394	
395	
396	
397	
398	
399	
400	
401	
402	
403	
404	
405	
406	
407	
408	
409	
410	
411	
412	
413	
414	
415	
416	
417	
418	
419	
420	
421	
422	
423	
424	
425	
426	
427	
428	
429	
430	
431	
432	
433	
434	
435	
436	
437	
438	
439	
440	
441	
442	
443	
444	
445	
446	
447	
448	
449	
450	
451	
452	
453	
454	
455	
456	
457	
458	
459	
460	
461	
462	
463	
464	
465	
466	
467	
468	
469	
470	
471	
472	
473	
474	
475	
476	
477	
478	
479	
480	
481	
482	
483	
484	
485	
486	
487	
488	
489	
490	
491	
492	
493	
494	
495	
496	
497	
498	
499	
500	
501	
502	
503	
504	
505	
506	
507	
508	
509	
510	
511	
512	
513	
514	
515	
516	
517	
518	
519	
520	
521	
522	
523	
524	
525	
526	
527	
528	
529	
530	
531	
532	
533	
534	
535	
536	
537	
538	
539	
540	
541	
542	
543	
544	
545	
546	
547	
548	
549	
550	
551	
552	
553	
554	
555	
556	
557	
558	
559	
560	
561	
562	
563	
564	
565	
566	
567	
568	
569	
570	
571	
572	
573	
574	
575	
576	
577	
578	
579	
580	
581	
582	
583	
584	
585	
586	
587	
588	
589	
590	
591	
592	
593	
594	
595	
596	
597	
598	
599	
600	
601	
602	
603	
604	
605	
606	
607	
608	
609	
610	
611	
612	
613	
614	
615	
616	
617	
618	
619	
620	
621	
622	
623	
624	
625	
626	
627	
628	
629	
630	
631	
632	
633	
634	
635	
636	
637	
638	
639	
640	
641	
642	
643	
644	
645	
646	
647	
648	
649	
650	
651	
652	
653	
654	
655	
656	
657	
658	
659	
660	
661	
662	
663	
664	
665	
666	
667	
668	
669	
670	
671	
672	
673	
674	
675	
676	
677	
678	
679	
680	
681	
682	
683	
684	
685	
686	
687	
688	
689	
690	
691	
692	
693	
694	
695	
696	
697	
698	
699	
700	
701	
702	
703	
704	
705	
706	
707	
708	
709	
710	
711	
712	
713	
714	
715	
716	
717	
718	
719	
720	
721	
722	
723	



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

REVISION	
REVISION	DESCRIPTION
1	
2	
3	
4	
5	

DATE	
DATE	DATE

DRAWN BY	
	HMC
DESIGNED BY ECM	
CHECKED BY ECM	
APPROVED BY ECM	

DATE	
	2019
	2019
	2019
	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5
PLAN: 1/2" = 25'	25



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 20+00 TO STA 22+50

REVISION Δ	DESCRIPTION	DATE
REVISION Δ		
REVISION Δ		
REVISION Δ		

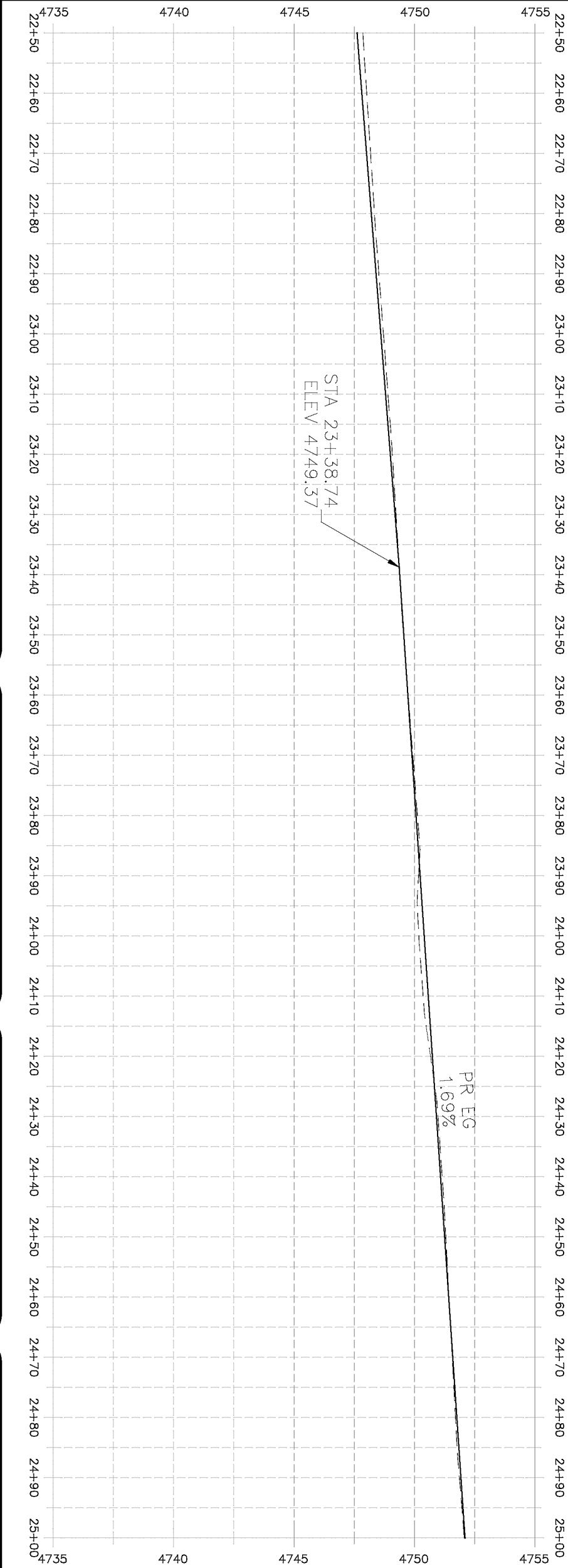
DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5
0 1/2 2 5	

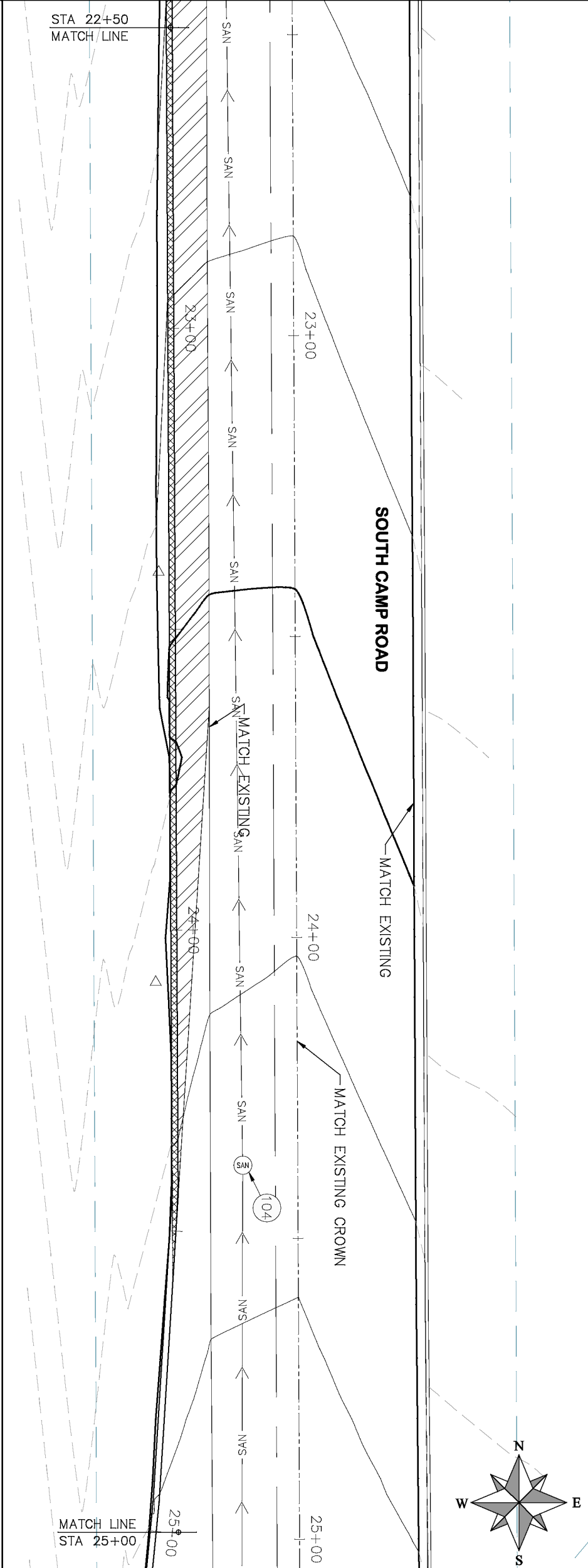


PUBLIC WORKS
ENGINEERING DIVISION

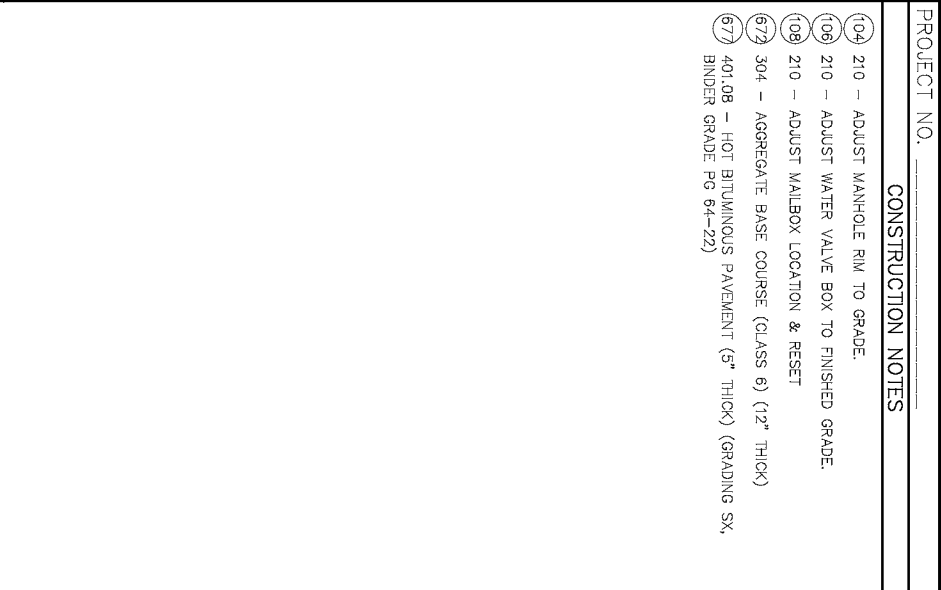
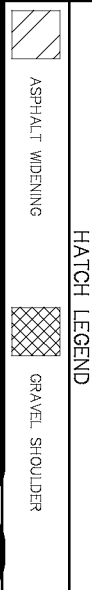
2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 20+00 TO STA 22+50

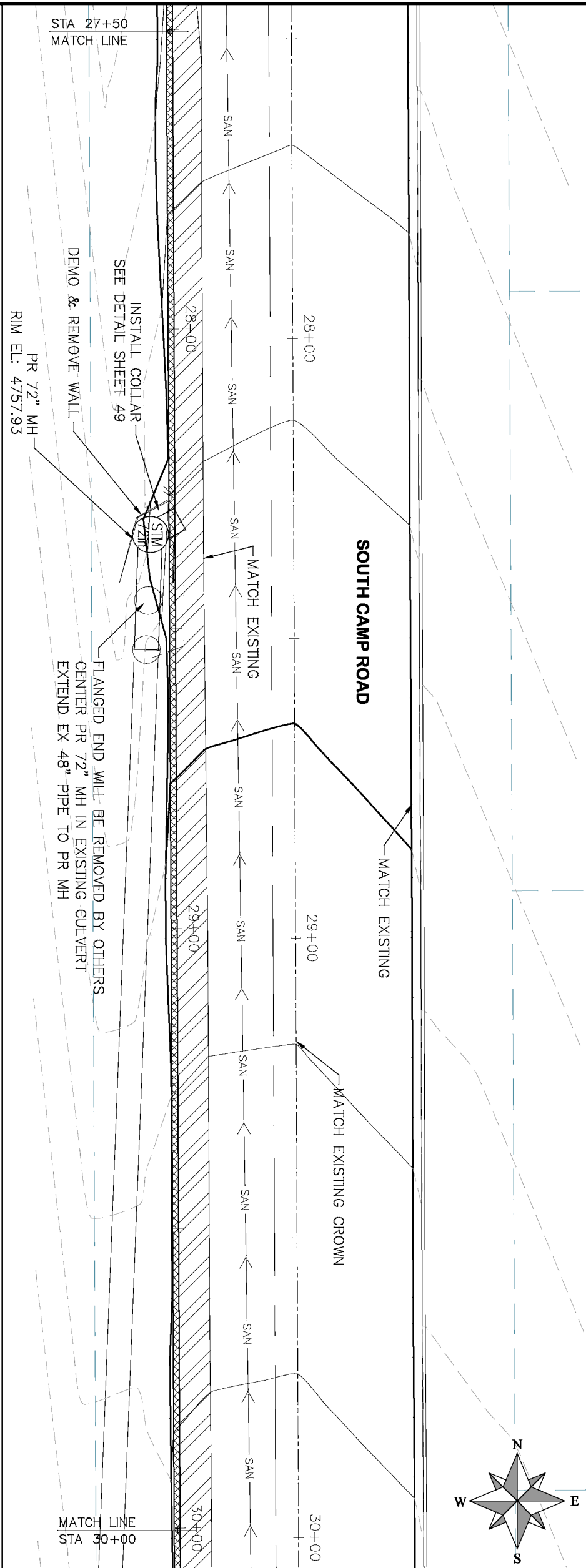


	ASPHALT WIDENING
	GRAVEL SHOULDER



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 – ADJUST MAILBOX LOCATION & RESET
 - (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)





- | PROJECT NO. _____ | |
|--------------------|---|
| CONSTRUCTION NOTES | |
| 104 | 210 - ADJUST MANHOLE RIM TO GRADE. |
| 106 | 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE. |
| 108 | 210 - ADJUST MAILBOX LOCATION & RESET |
| 679 | 304 - AGGREGATE BASE COURSE (CLASS 6) (1/2" THICK) |
| 677 | 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SK, BINDER GRADE PG 64-22) |

DESCRIPTION	DATE	SCALES: PLAN & PROFILE	
REVISION Δ	—	DRAWN BY HMC DATE 2019	
REVISION Δ	—	DESIGNED BY ECM DATE 2019	
REVISION Δ	—	CHECKED BY ECM DATE 2019	
REVISION Δ	—	APPROVED BY ECM DATE 2019	

HORIZONTAL: 1" = 20'

VERTICAL: 1" = 5'



SCALES: PLAN & PROFILE

HORIZONTAL: 1" = 20'

VERTICAL: 1" = 5'

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 27+50 TO STA 30+00

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

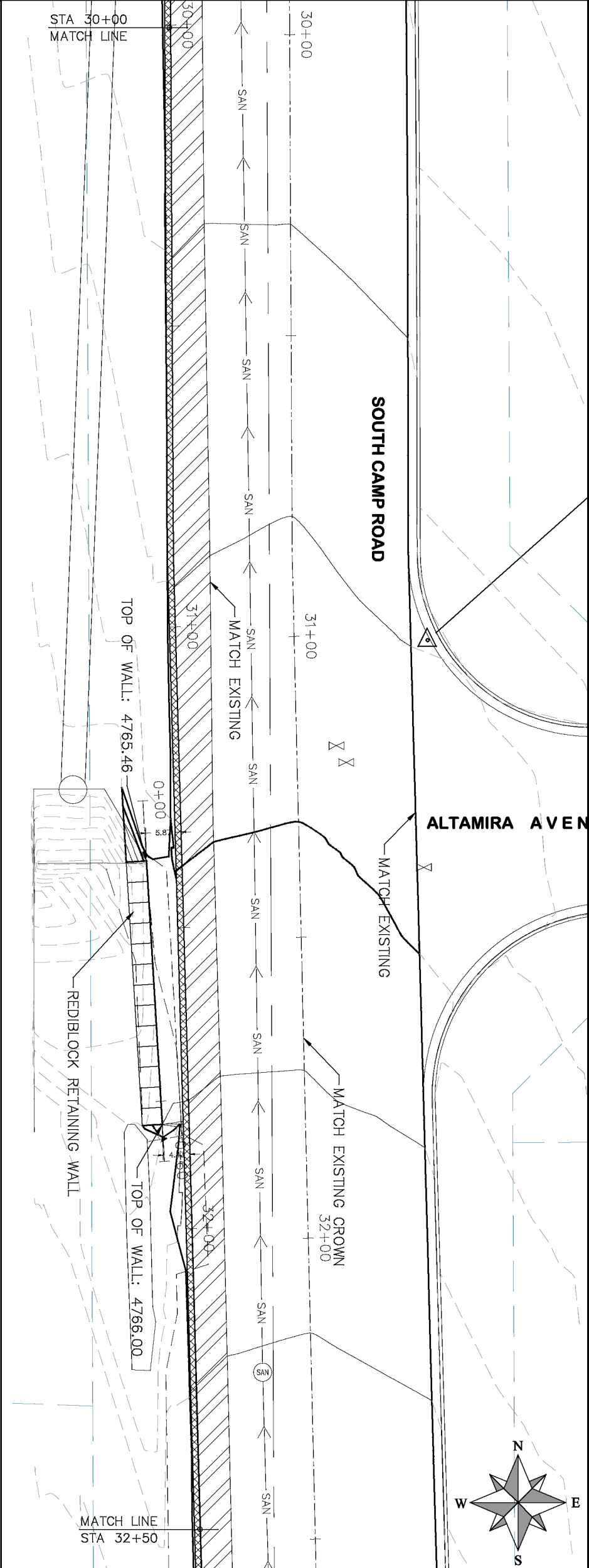
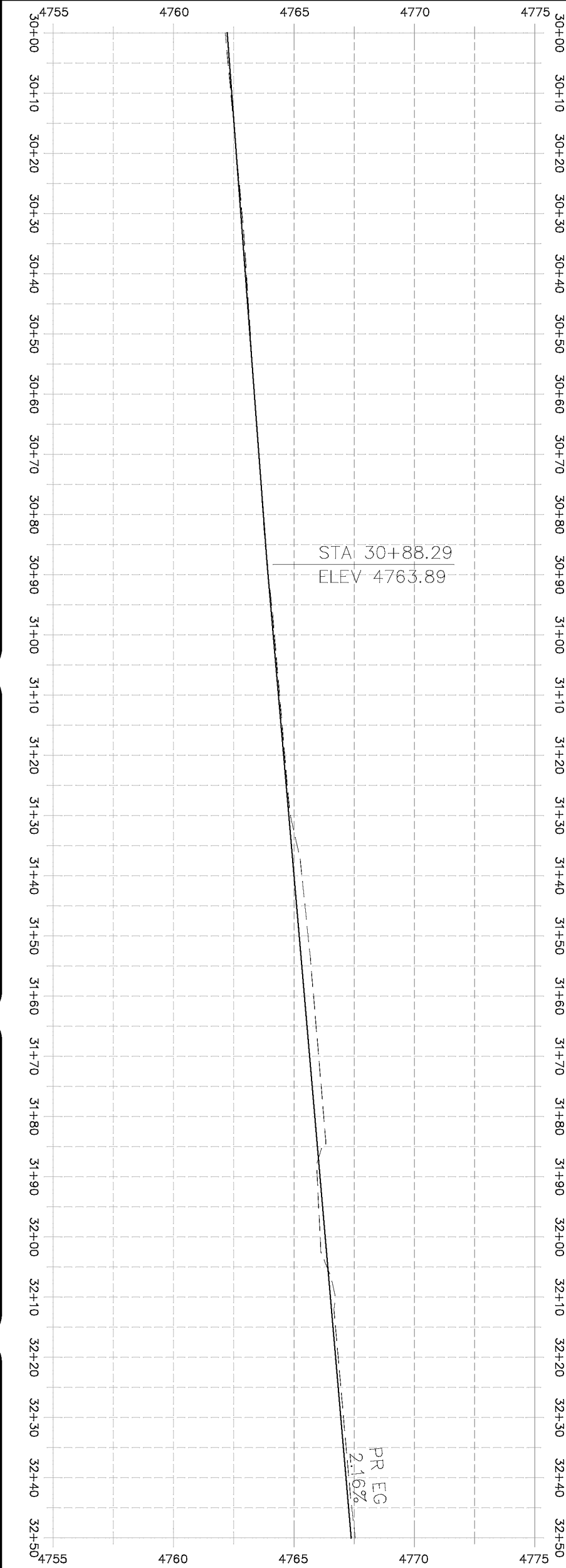
REVISION Δ	DESCRIPTION	DATE	DRAWN BY	HMC	DATE	2019
REVISION Δ			DESIGNED BY	ECM	DATE	2019
REVISION Δ			CHECKED BY	ECM	DATE	2019
REVISION Δ			APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5
0 1/2 2 5	



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 30+00 TO STA 32+50



- PROJECT NO. _____
- CONSTRUCTION NOTES
- 104 210 – ADJUST MANHOLE RIM TO GRADE.
 - 106 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - 108 210 – ADJUST MAILBOX LOCATION & RESET
 - 672 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - 677 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

REVISION Δ _____

REVISION Δ _____

REVISION Δ _____

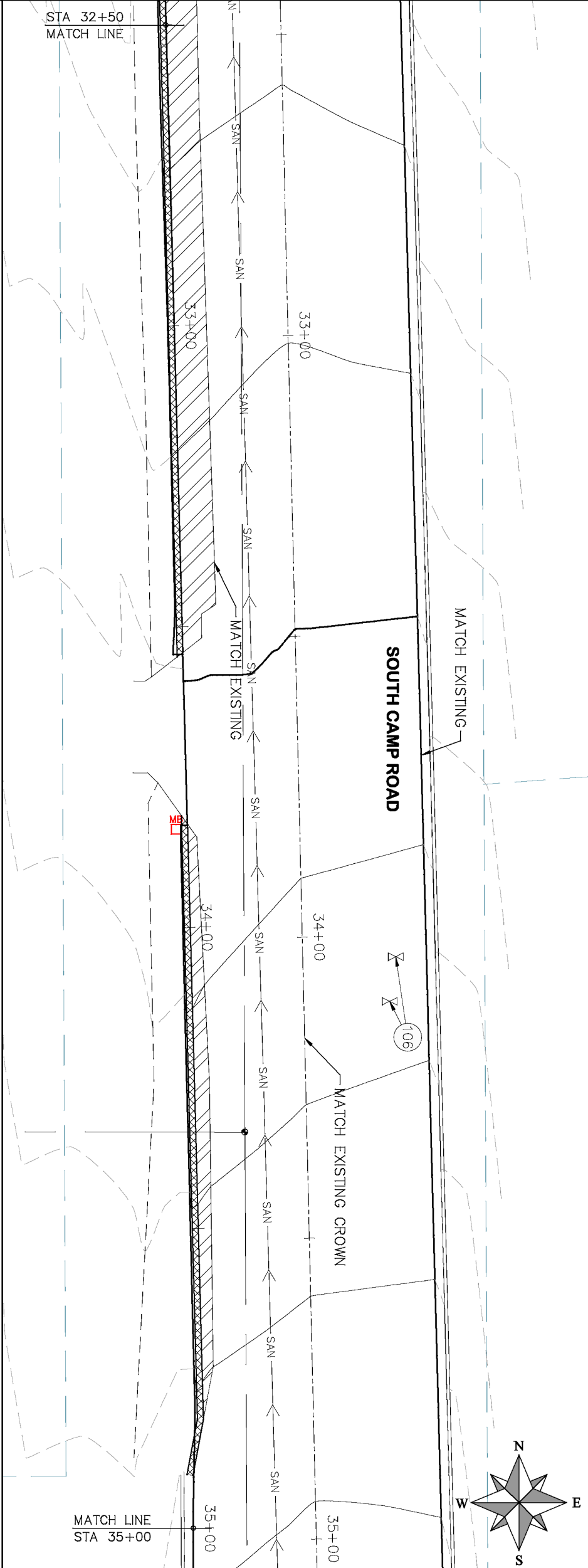
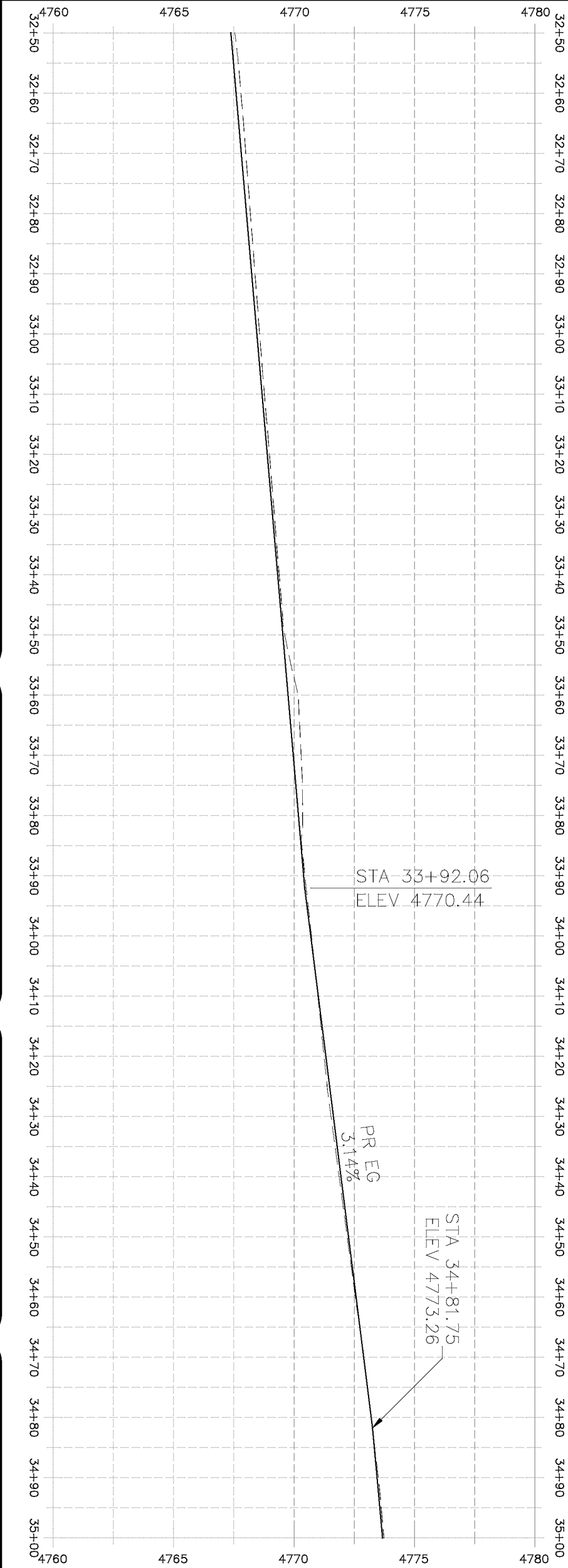
REVISION Δ _____

DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019





PUBLIC WORKS
ENGINEERING DIVISION

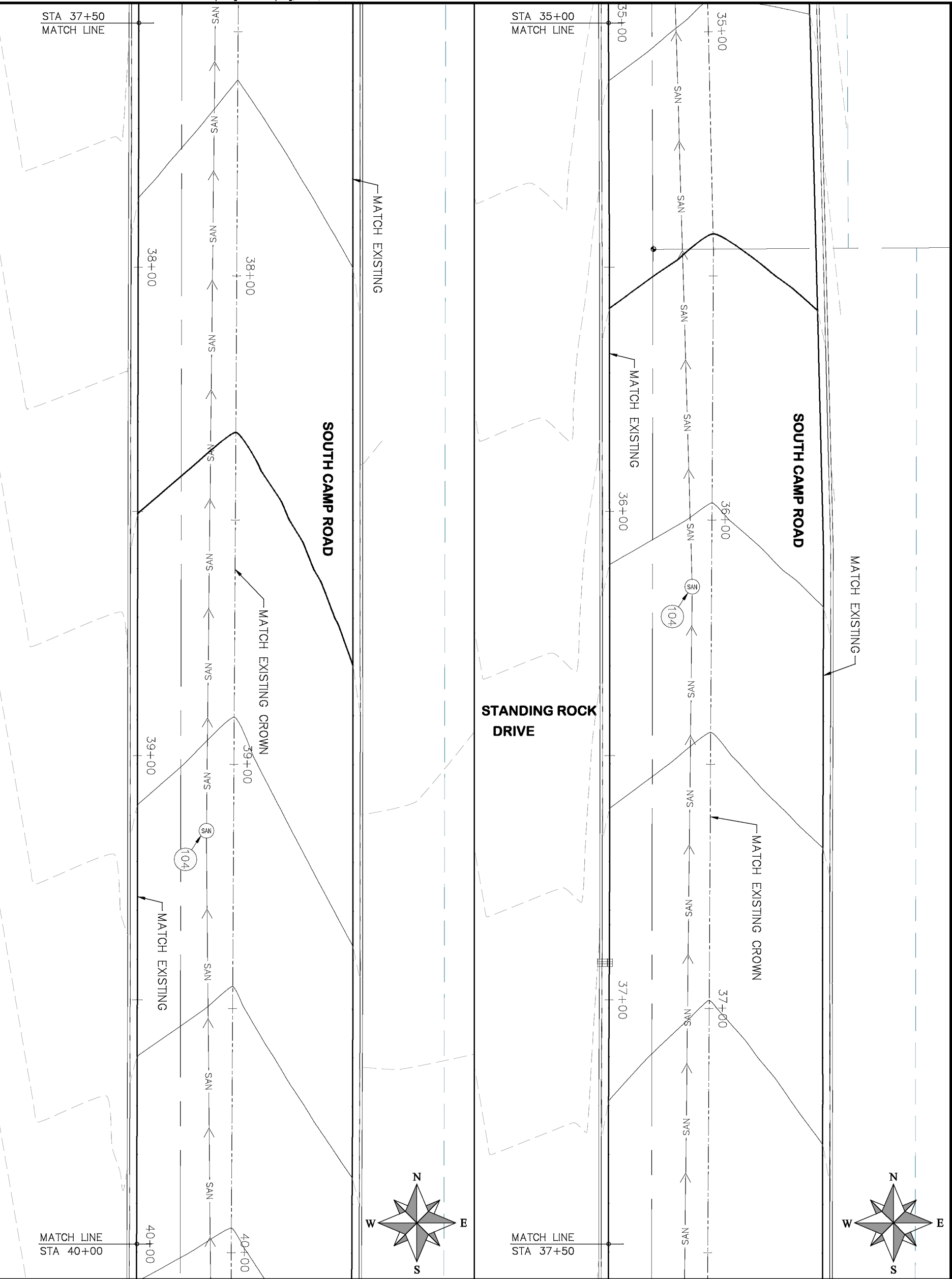
2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 32+50 TO STA 35+00



HATCH LEGEND

	ASPHALT WIDENING
	GRAVEL SHOULDER

PROJECT NO. _____	
CONSTRUCTION NOTES	
104	210 - ADJUST MANHOLE RIM TO GRADE.
106	210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
108	210 - ADJUST MAILBOX LOCATION & RESET
672	304 - AGGREGATE BASE COURSE (CLASS 6) (1/2" THICK)
677	401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SK, BINDER GRADE PG 64-22)



PROJECT NO. _____

CONSTRUCTION NOTES

(104) 210 – ADJUST MANHOLE RIM TO GRADE.

(106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.

(108) 210 – ADJUST MAILBOX LOCATION & RESET

(672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)

(677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)

ASPHALT WIDENING

GRAVEL SHOULDER

HATCH LEGEND

REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE	2019
REVISION	DESIGNED BY	ECM	DATE	2019		
REVISION	CHECKED BY	ECM	DATE	2019		
REVISION	APPROVED BY	ECM	DATE	2019		

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10
VERTICAL: 1" = 5'	0 1.25 2.5 5



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 35+00 TO STA 40+00

- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104)

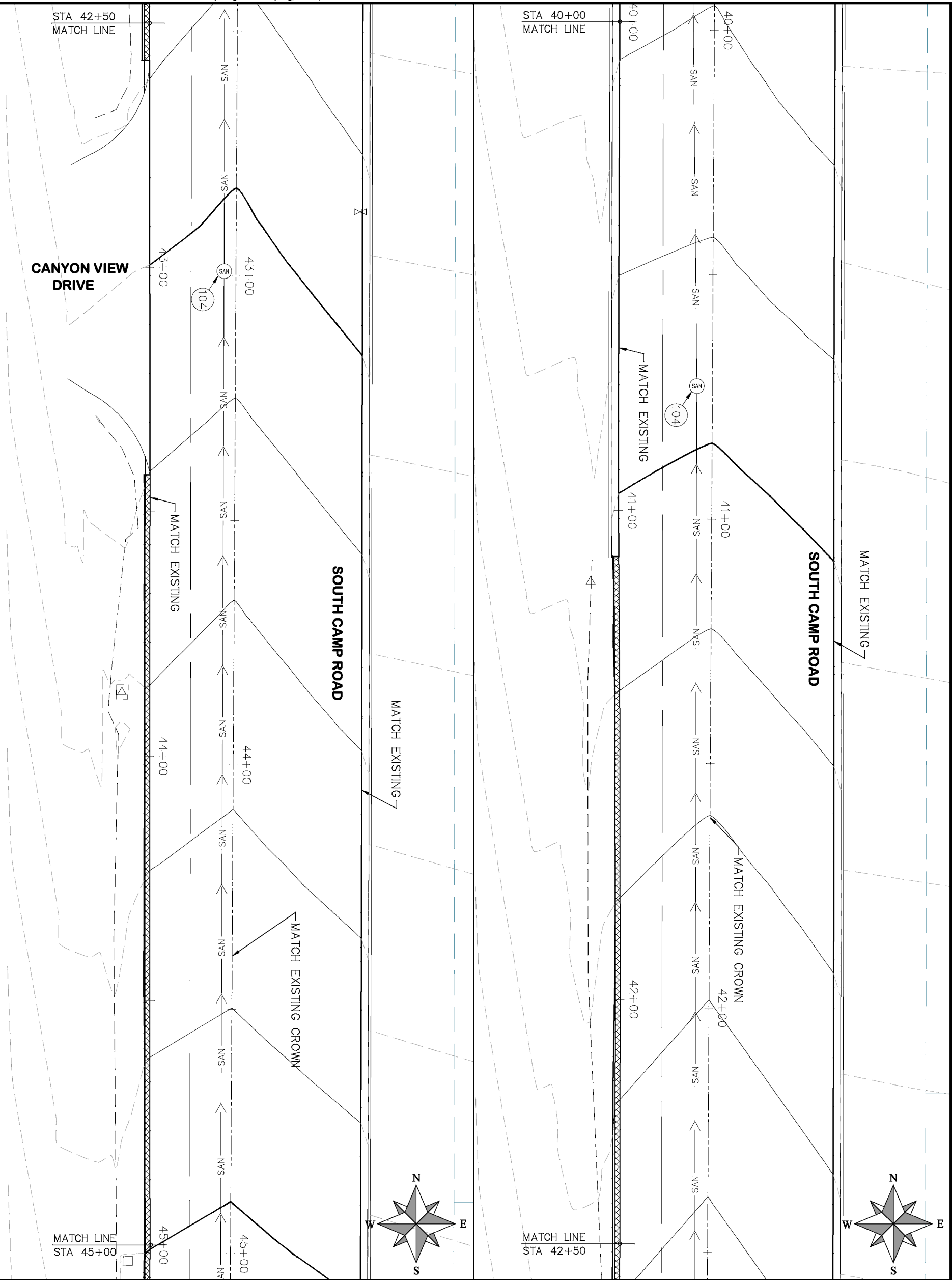
210 – ADJUST MANHOLE RIM TO GRADE.
- (106)

210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108)

210 – ADJUST MAILBOX LOCATION & RESET
- (672)

304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677)

401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

REVISION		DESCRIPTION	DATE
Δ	1	DRAWN BY HMC	DATE 2019
Δ	2	DESIGNED BY ECM	DATE 2019
Δ	3	CHECKED BY ECM	DATE 2019
Δ	4	APPROVED BY ECM	DATE 2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5



PUBLIC WORKS
ENGINEERING DIVISION

RE/SON Δ _____

RE/SON Δ _____

RE/SON Δ _____

RE/SON Δ _____

DRAWN BY _____ DATE _____
DESIGNED BY ECM DATE 2019
CHECKED BY ECM DATE 2019
APPROVED BY ECM DATE 2019

HORIZONTAL: 1" = 20'

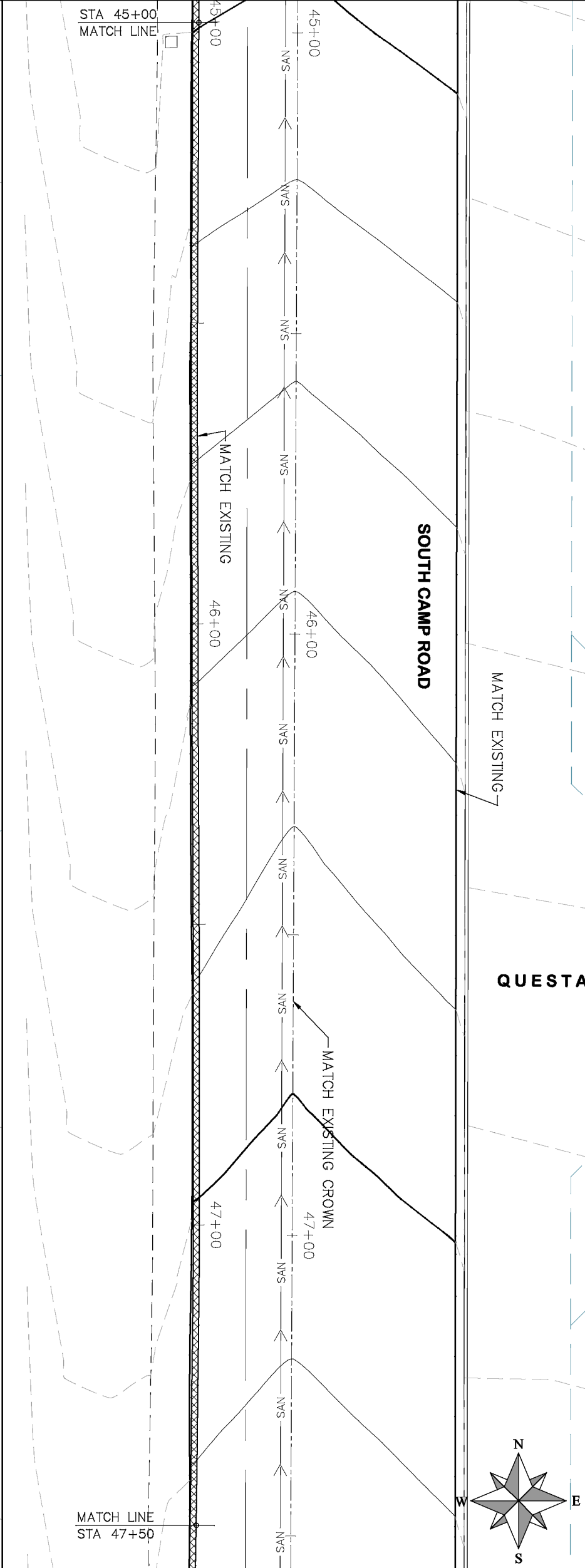
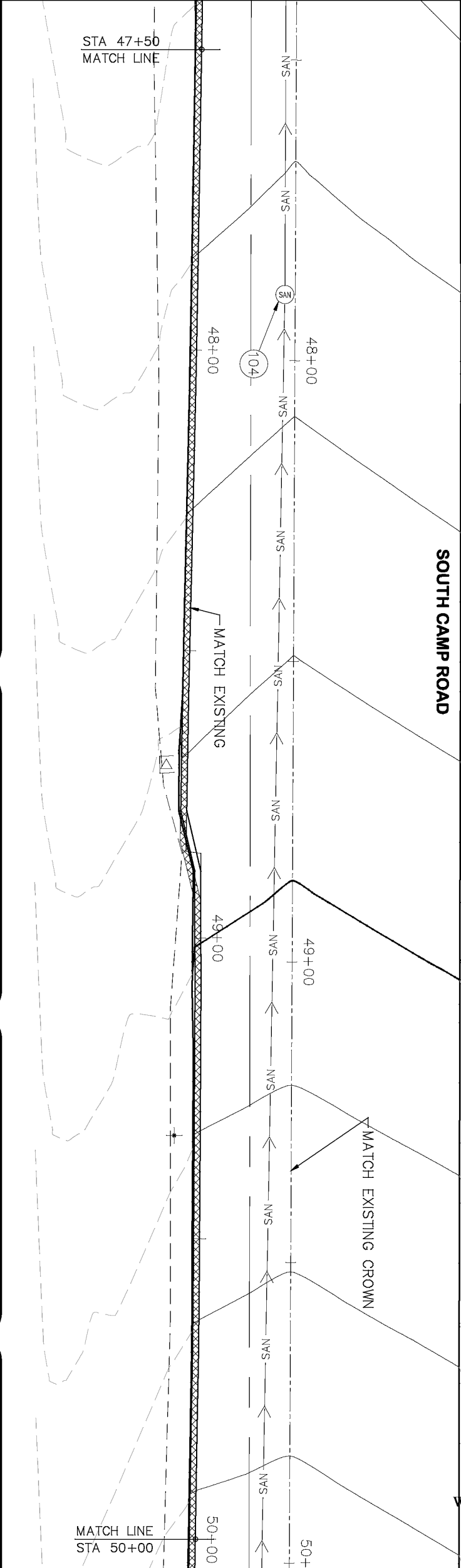
VERTICAL: 1" = 5'



PUBLIC WORKS
ENGINEERING DIVISION


2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 45+00 TO STA 50+00

21

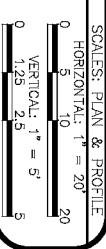


- | CONSTRUCTION NOTES | |
|--------------------|---|
| 104 | 210 - ADJUST MANHOLE RIM TO GRADE. |
| 106 | 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE. |
| 108 | 210 - ADJUST WALLBOX LOCATION & RESET |
| 673 | 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK) |
| 677 | 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22) |

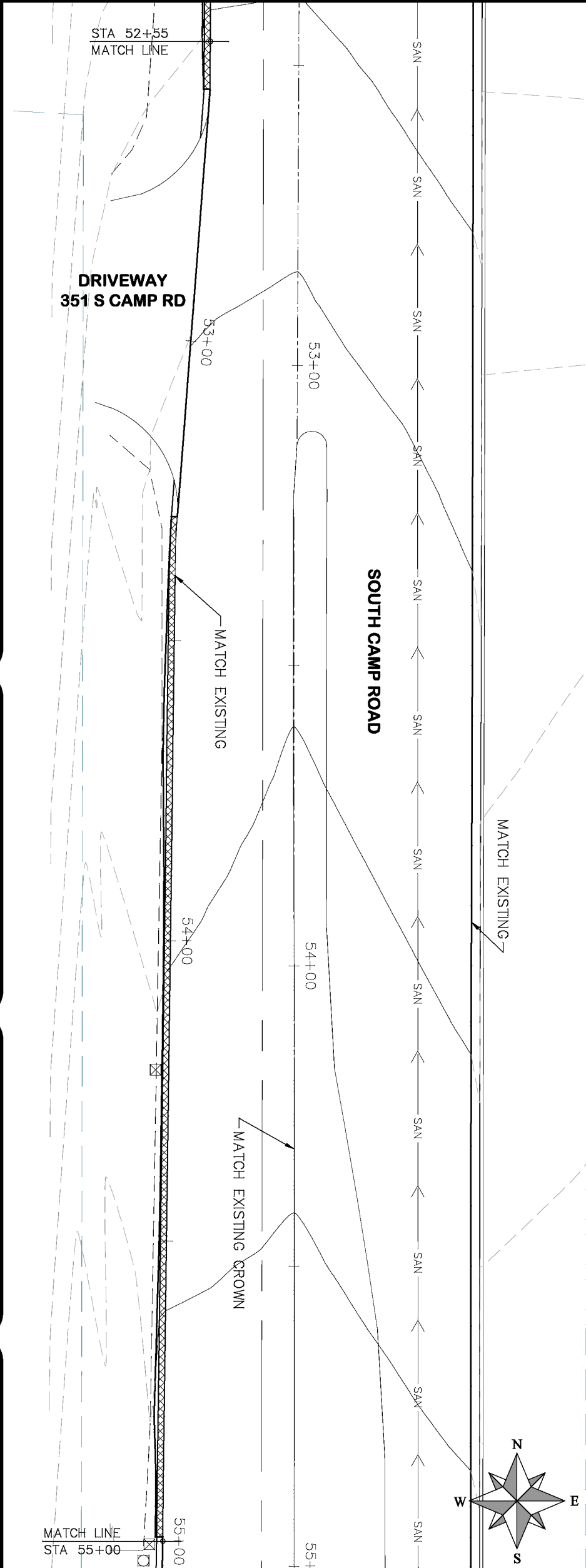
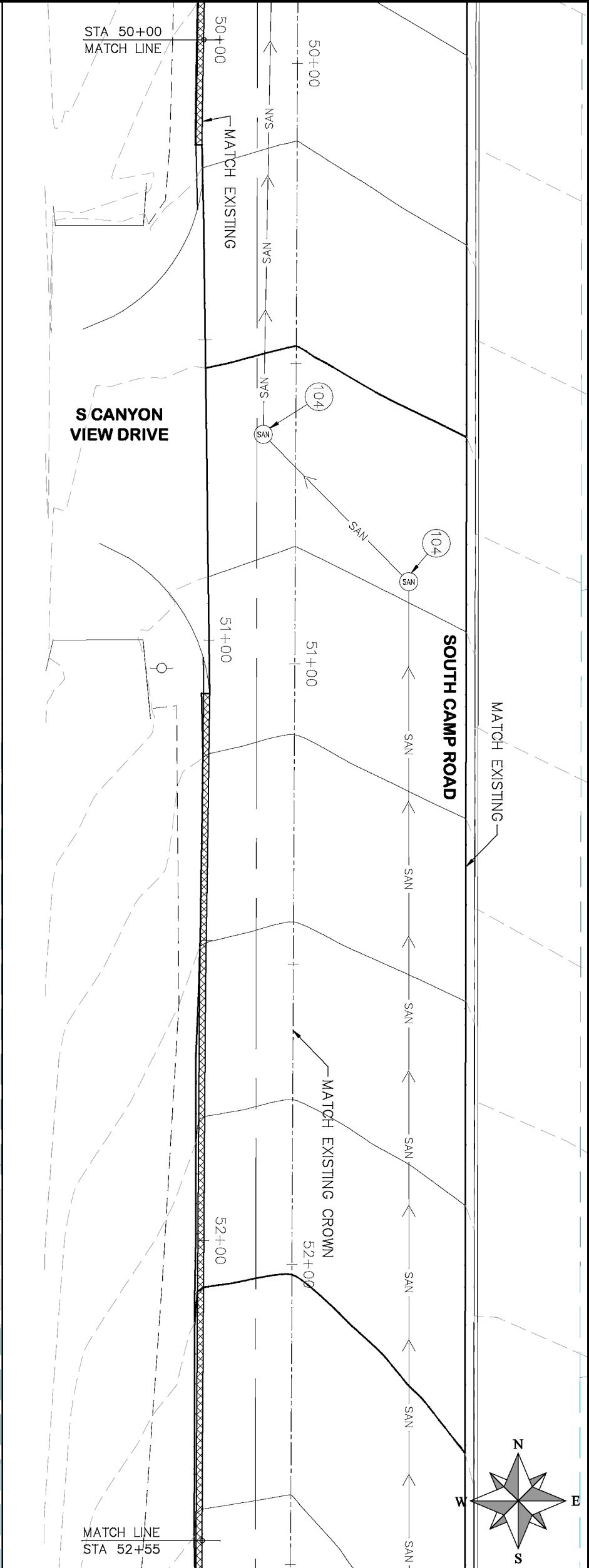
HATCH LEGEND

	ASPHALT WIDENING
	GRAVEL SHOULDER

DESCRIPTION	DATE	DRAWN BY	HMC	DATE	SCALES: PLAN & PROFILE	
					HORIZONTAL: 1" = 20'	VERTICAL: 1" = 5'
REVISION Δ	—	—	—	2019	0	20
REVISION Δ	—	DESIGNED BY	ECM	DATE	5	10
REVISION Δ	—	CHECKED BY	ECM	DATE	0	2.5
REVISION Δ	—	APPROVED BY	ECM	DATE	0	5

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 50+00 TO STA 55+00



HATCH LEGEND

	ASPHALT WIDENING
	GRAVEL SHOULDER

- | PROJECT NO. _____ | |
|--------------------|--|
| CONSTRUCTION NOTES | |
| (104) | 210 - ADJUST MANHOLE RIM TO GRADE. |
| (106) | 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE. |
| (108) | 210 - ADJUST MAILBOX LOCATION & RESET |
| (672) | 304 - AGGREGATE BASE COURSE (CLASS 6) (1/2" THICK) |
| (677) | 401.01B - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SK, BINDER GRADE PG 64-22) |

REVISION	DESCRIPTION	DATE
Δ		
Δ		
Δ		
Δ		
Δ		
Δ		

REVISION	DESCRIPTION	DATE
Δ		
Δ		
Δ		
Δ		
Δ		
Δ		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

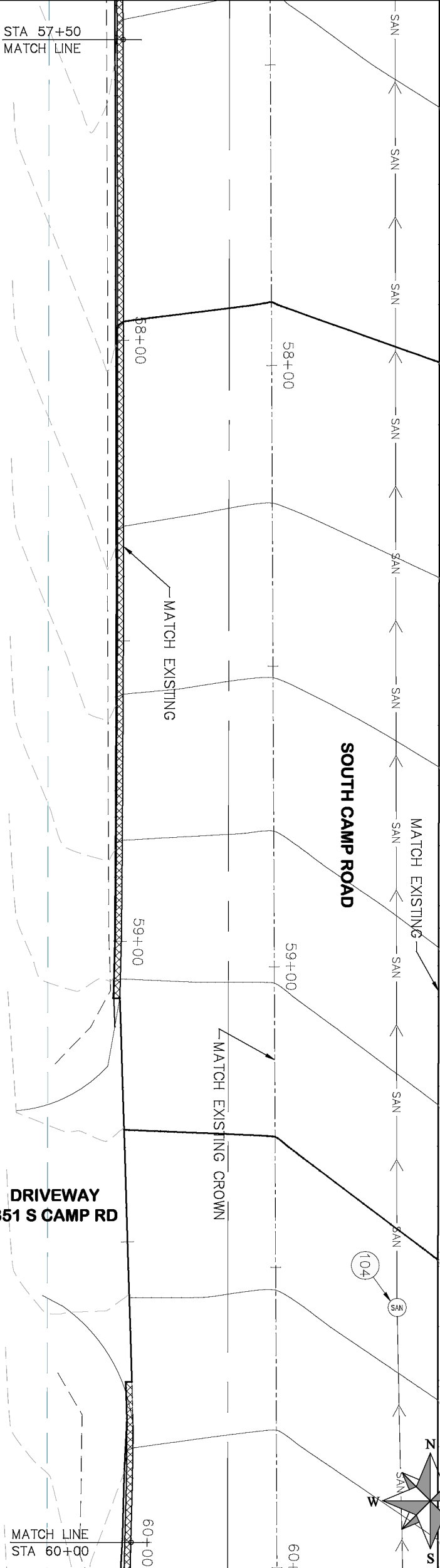
SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'



PUBLIC WORKS
ENGINEERING DIVISION

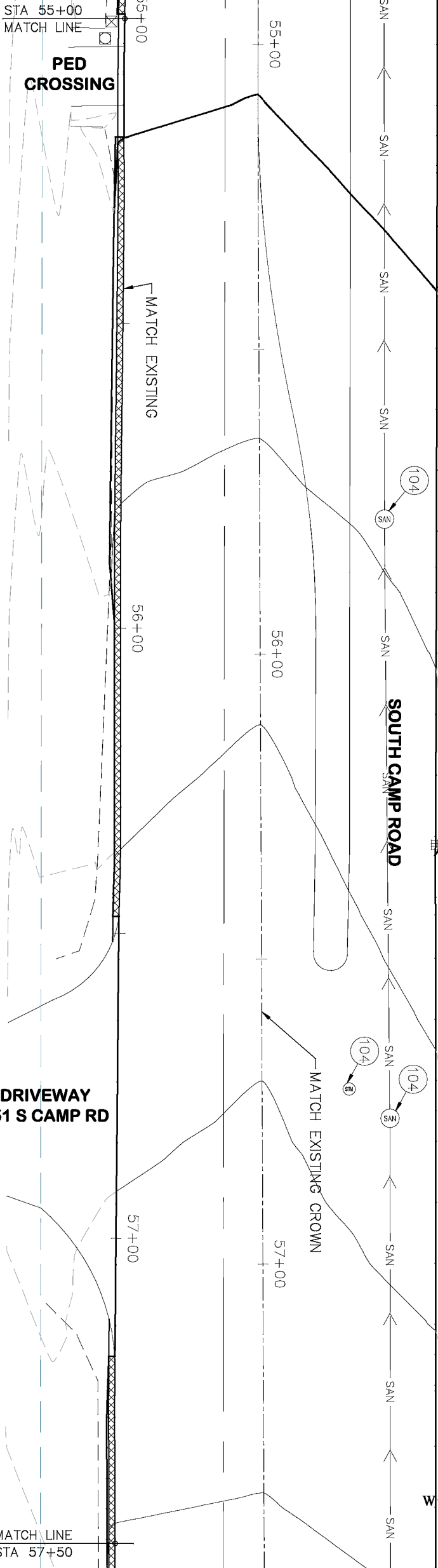
2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 55+00 TO STA 60+00

STA 57+50
MATCH LINE



MATCH LINE
STA 60+00

STA 55+00
MATCH LINE



MATCH LINE
STA 57+50

- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



ASPHALT WIDENING



GRAVEL SHOULDER

HATCH LEGEND

REVISION Δ	DESCRIPTION	DATE
REVISION Δ		
REVISION Δ		
REVISION Δ		

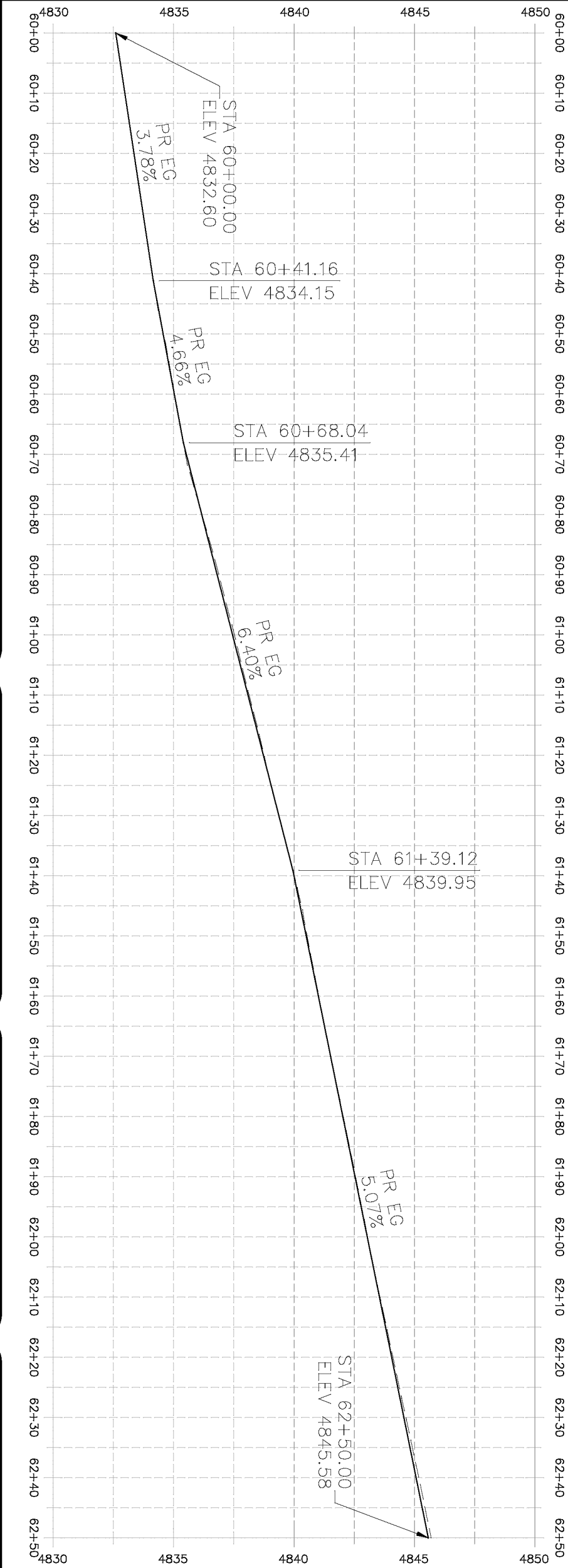
DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

0	5	10	20
HORIZONTAL: 1" = 20'			
0	1.25	2.5	5
VERTICAL: 1" = 5'			

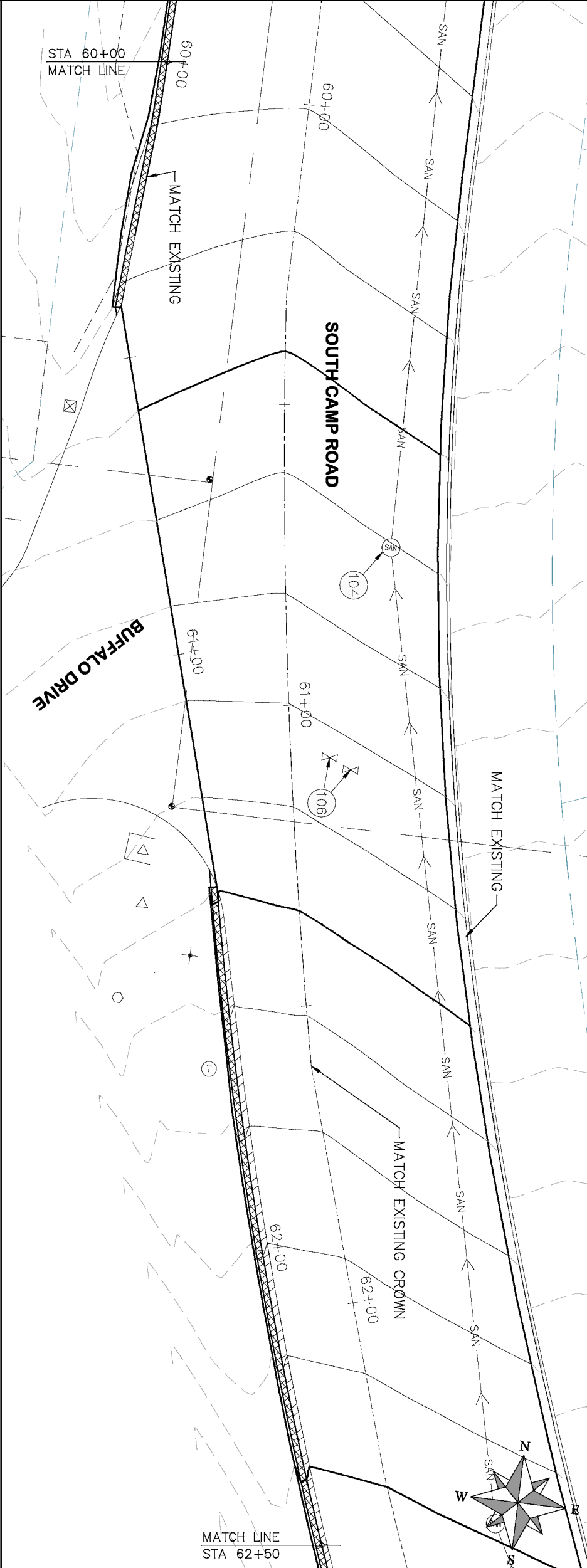


PUBLIC WORKS
ENGINEERING DIVISION

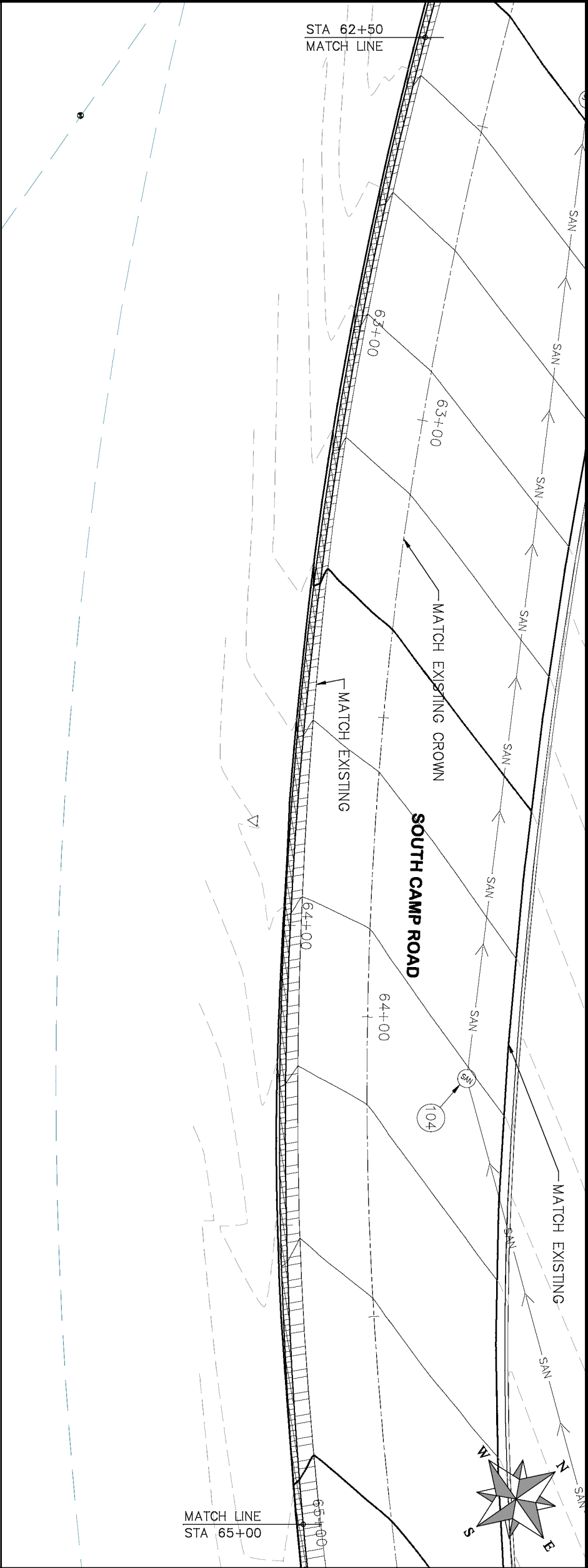
2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 60+00 TO STA 62+50



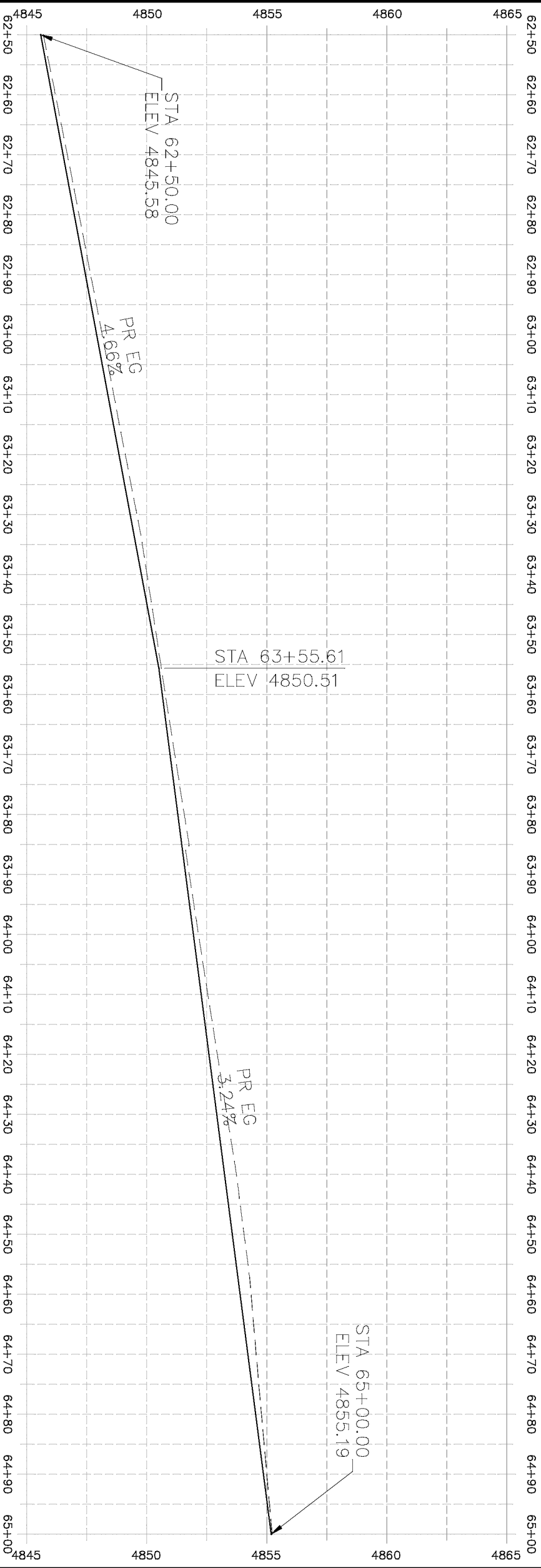
HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 – ADJUST MAILBOX LOCATION & RESET
 - (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (401.08) – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)



- PROJECT NO. _____
- CONSTRUCTION NOTES
- 104 210 - ADJUST MANHOLE RIM TO GRADE.
 - 106 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - 108 210 - ADJUST MAILBOX LOCATION & RESET
 - 672 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - 677 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



REVISION	DESCRIPTION	DATE
Δ		
Δ		
Δ		
Δ		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

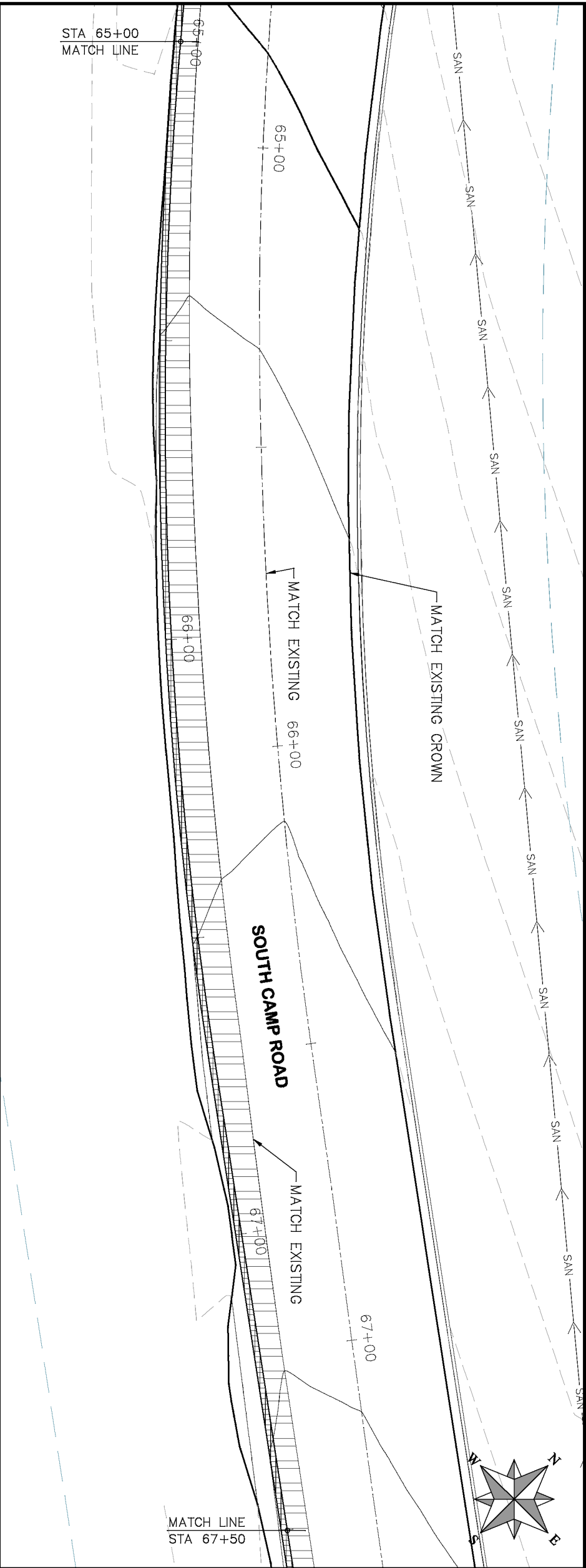
SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10
VERTICAL: 1" = 5'	0 1.25 2.5 5

CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 62+50 TO STA 65+00

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER



- | PROJECT NO. _____ | |
|--------------------|---|
| CONSTRUCTION NOTES | |
| 104 | 210 - ADJUST MANHOLE RIM TO GRADE. |
| 106 | 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE. |
| 108 | 210 - ADJUST MAILBOX LOCATION & RESET |
| 679 | 304 - AGGREGATE BASE COURSE (CLASS 6) (1/2" THICK) |
| 677 | 401.08 - HOT BITUMINOUS PAYEMENT (5" THICK) (GRADING SK, BINDER GRADE PG 64-22) |

DESCRIPTION	DATE	DRAWN BY	HMC	DATE	2019
REVISION Δ	—	DESIGNED BY	ECM	DATE	2019
REVISION Δ	—	CHECKED BY	ECM	DATE	2019
REVISION Δ	—	APPROVED BY	ECM	DATE	2019
REVISION Δ	—				

SCALES: PLAN & PROFILE

HORIZONTAL: 1" = 20'

VERTICAL: 1" = 5'

0 5 10 20

0 1.25 2.5 5



SCALES: PLAN & PROFILE

HORIZONTAL: 1" = 20'	0	5	10	20
VERTICAL: 1" = 5'	0	1.25	2.5	5

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 65+00 TO STA 67+50

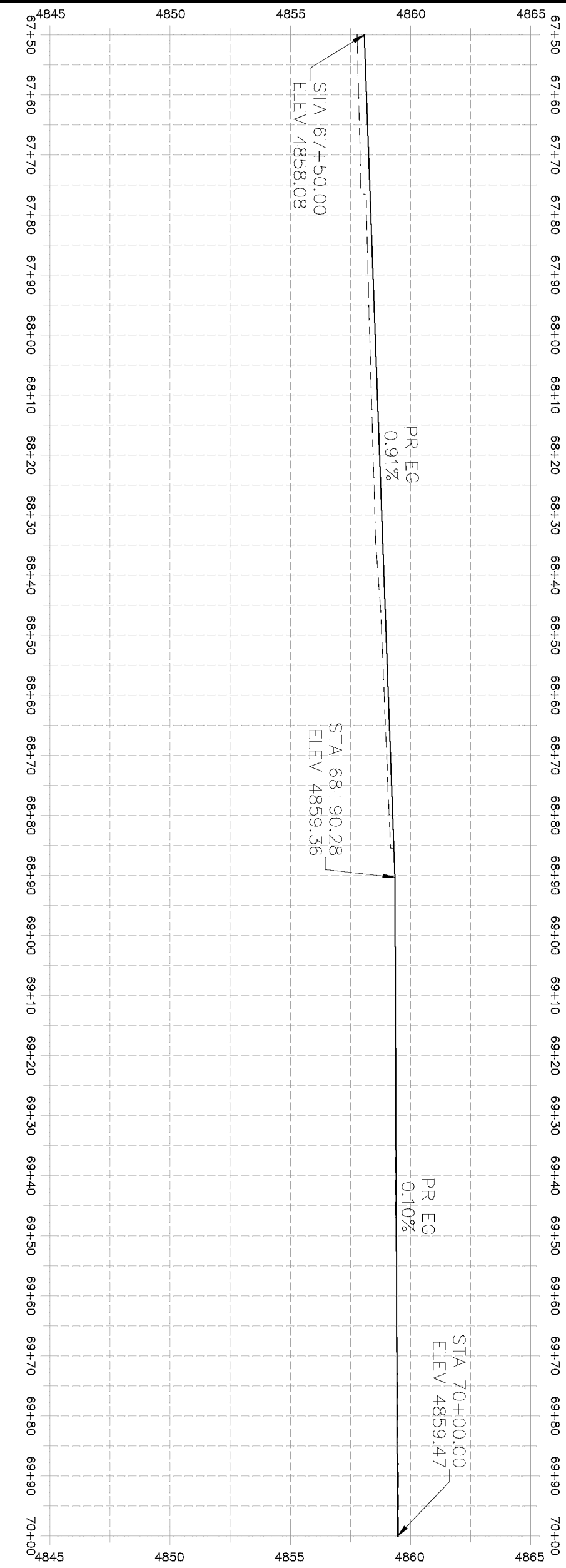
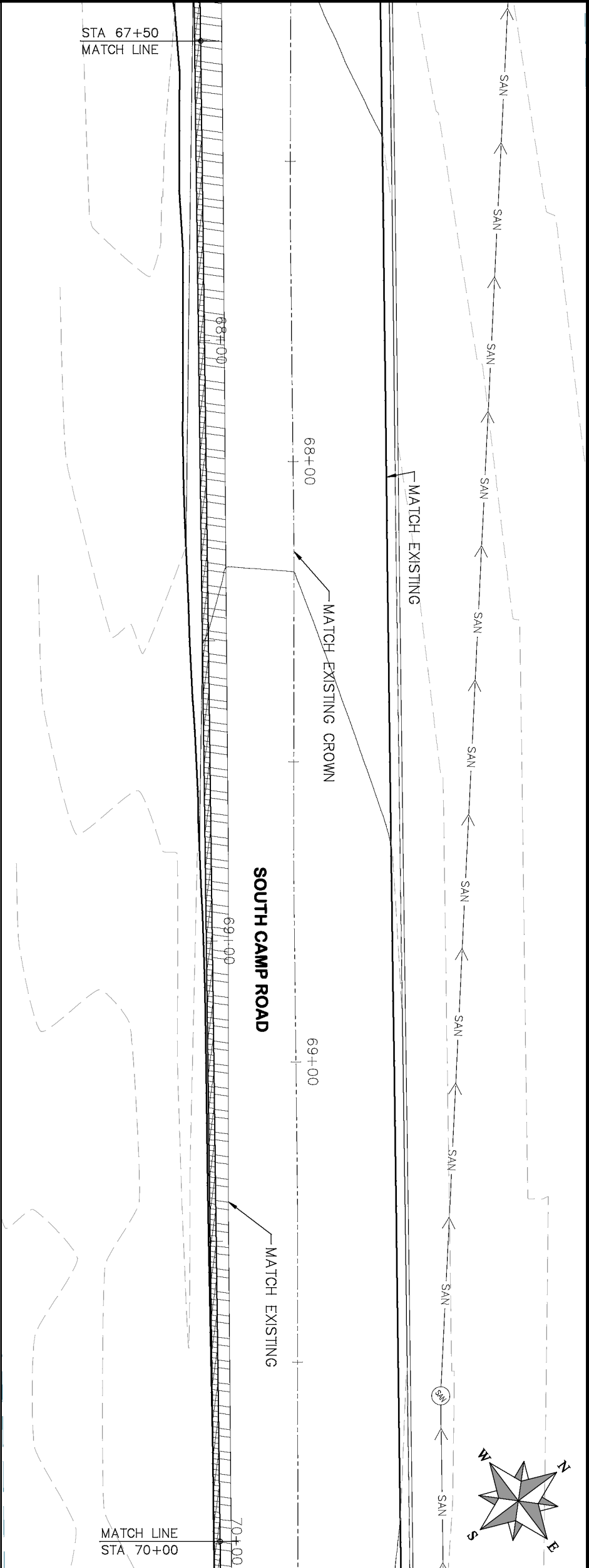
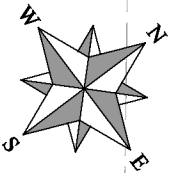
HATCH LEGEND

	ASPHALT WIDENING		GRAVEL SHOULDER
---	------------------	---	-----------------

PROJECT NO. _____

CONSTRUCTION NOTES

- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
- (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 – ADJUST MAILBOX LOCATION & RESET
- (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

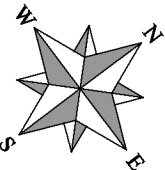
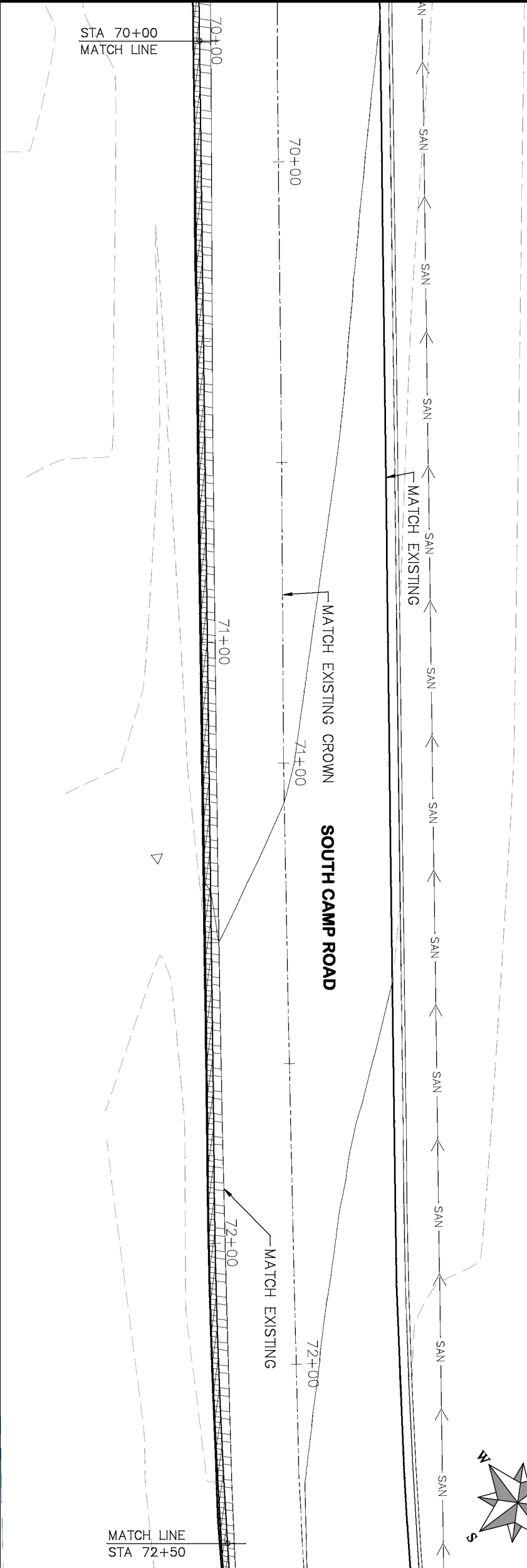
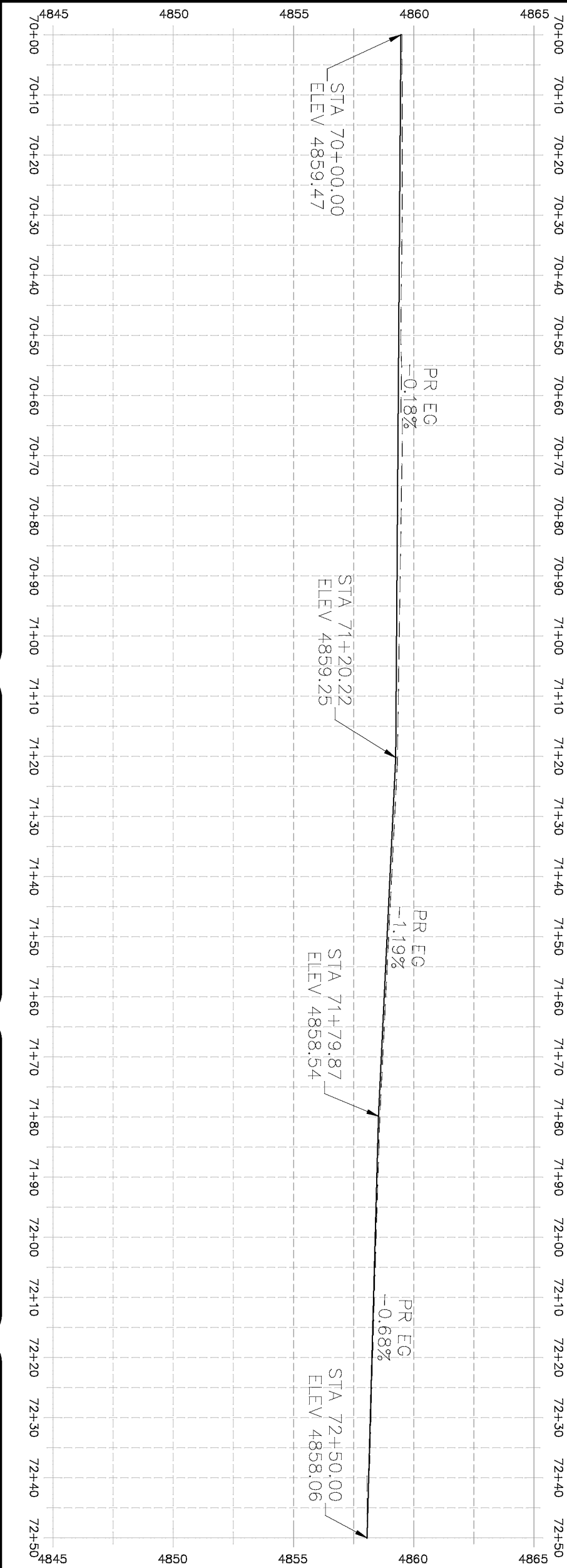
REVISION		DESCRIPTION	DATE
REVISION	Δ		
REVISION	Δ		
REVISION	Δ		
REVISION	Δ		
DRAWN BY		HMC	DATE 2019
DESIGNED BY		ECM	DATE 2019
CHECKED BY		ECM	DATE 2019
APPROVED BY		ECM	DATE 2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 67+50 TO STA 70+00



- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
- (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 - ADJUST MAILBOX LOCATION & RESET
- (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

PROJECT NO. _____

CONSTRUCTION NOTES

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

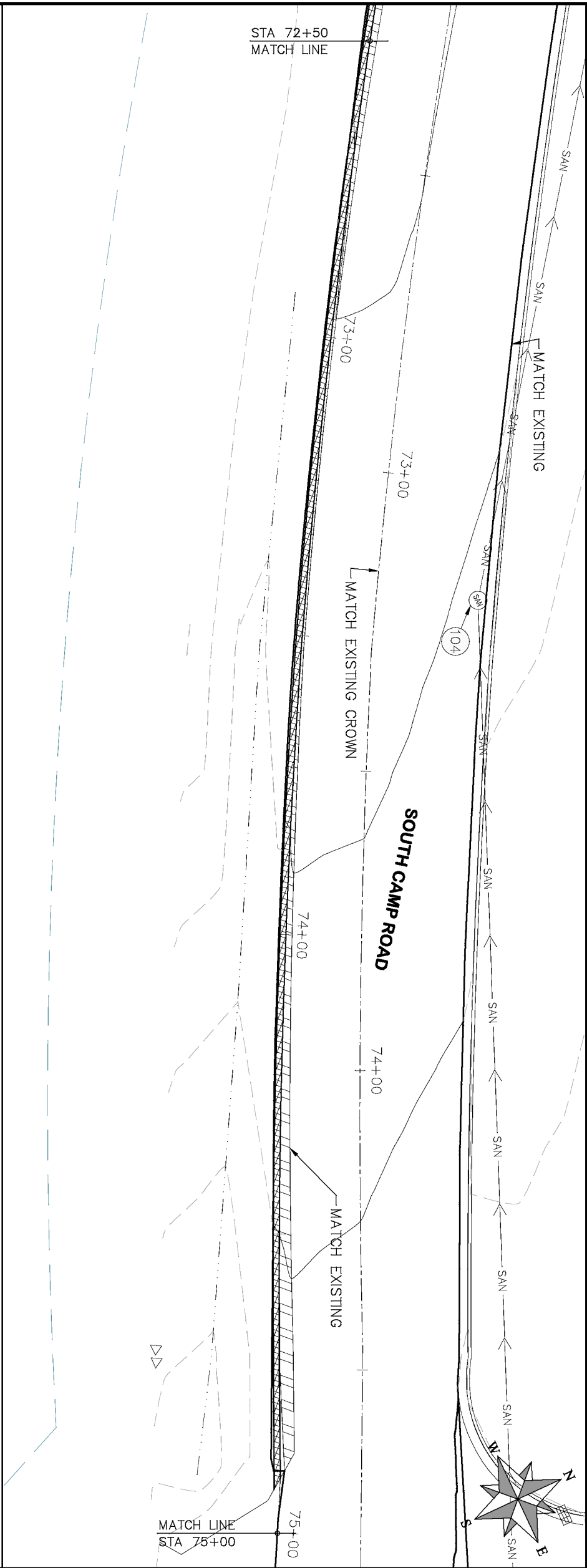
REVISION	DESCRIPTION	DATE
REVISION	DRAWN BY HMC	DATE 2019
REVISION	DESIGNED BY ECM	DATE 2019
REVISION	CHECKED BY ECM	DATE 2019
REVISION	APPROVED BY ECM	DATE 2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5

CITY OF
Grand Junction
COLORADO

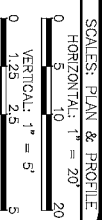
PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 70+00 TO STA 72+50



- | PROJECT NO. _____ | |
|--------------------|---|
| CONSTRUCTION NOTES | |
| 104 | 210 - ADJUST MANHOLE RIM TO GRADE. |
| 106 | 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE. |
| 108 | 210 - ADJUST MAILBOX LOCATION & RESET |
| 679 | 304 - AGGREGATE BASE COURSE (CLASS 6) (1/2" THICK) |
| 677 | 401.08 - HOT BITUMINOUS PAYEMENT (5" THICK) (GRADING SK, BINDER GRADE PG 64-22) |



DESCRIPTION		DATE	DRAWN BY	HMC	DATE	2019	SCALE: PLAN & PROFILE	
REVISION Δ	—	—	DESIGNED BY	ECM	DATE	2019	HORIZONTAL: 1" = 20'	0 5 10 20
REVISION Δ	—	—	CHECKED BY	ECM	DATE	2019	VERTICAL: 1" = 5'	0 1/20 2/5 5
REVISION Δ	—	—	APPROVED BY	ECM	DATE	2019		

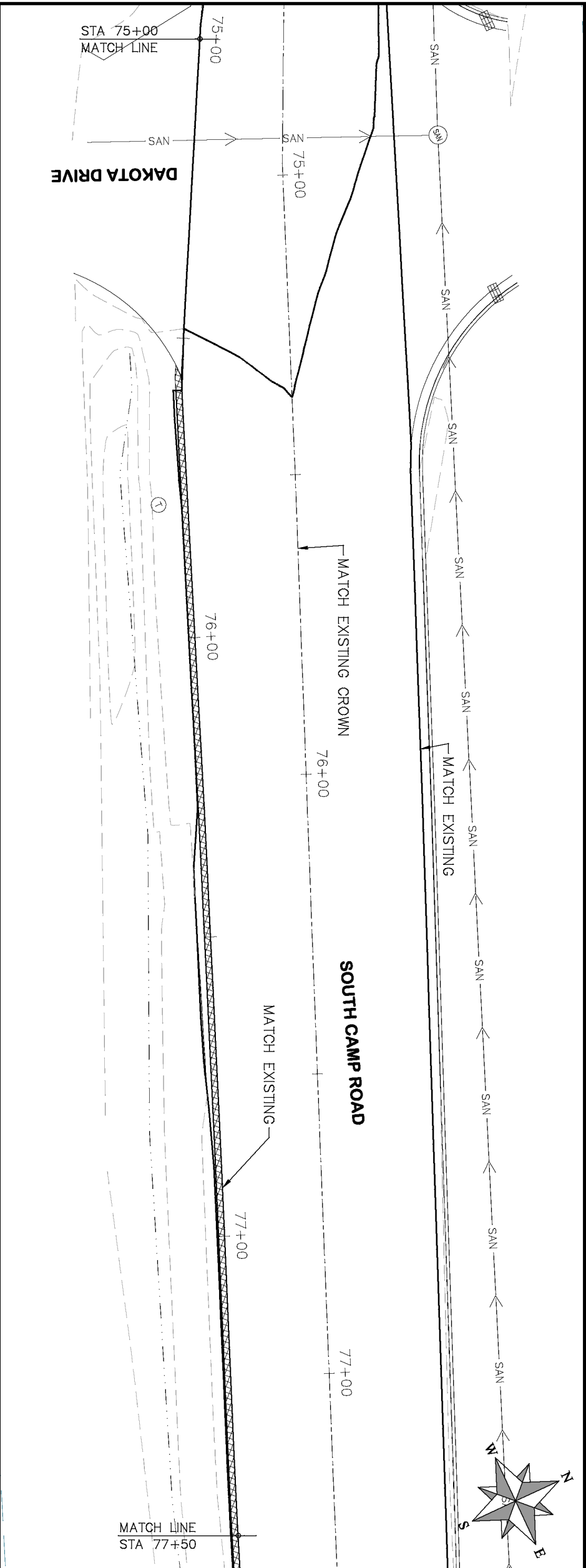


PUBLIC WORKS
ENGINEERING DIVISION

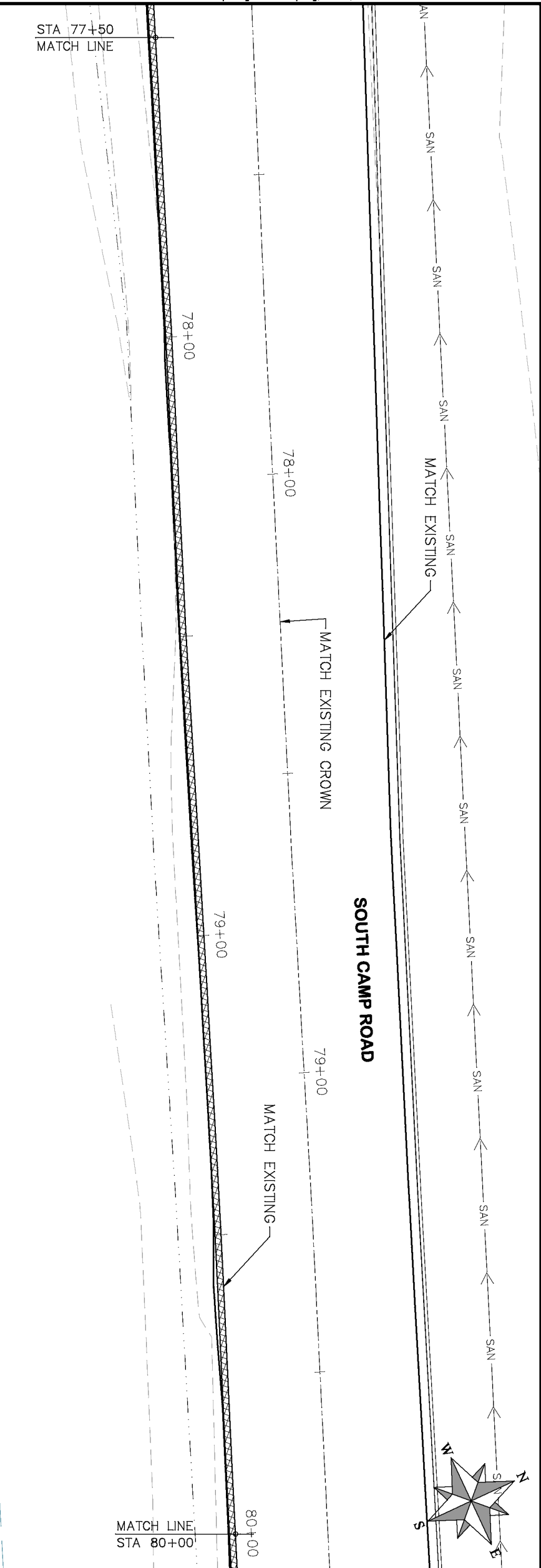
2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 72+50 TO STA 75+00

HATCH LEGEND

	ASPHALT WIDENING		GRAVEL SHOULDER
---	------------------	---	-----------------



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

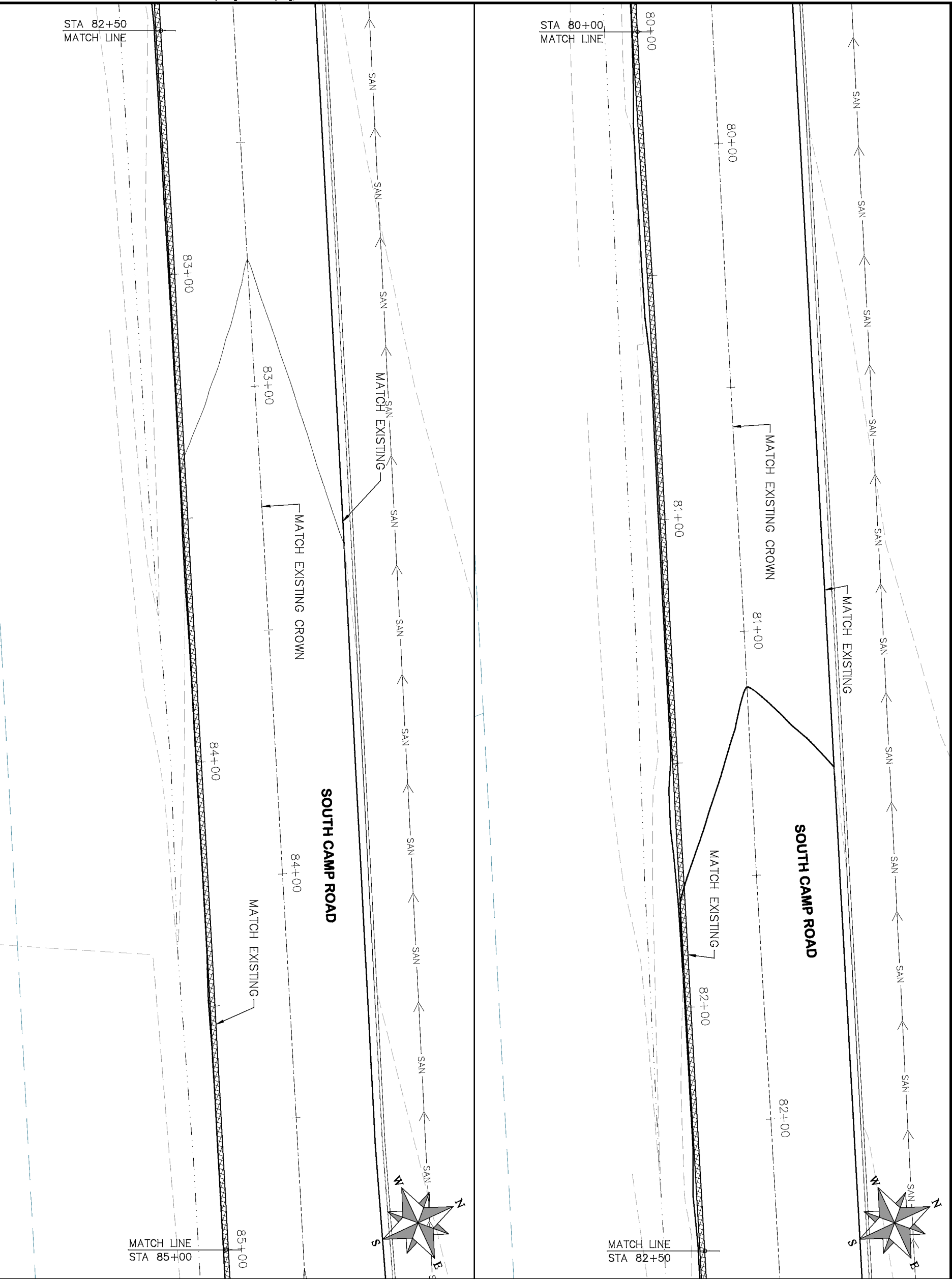
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE	2019
REVISION			DESIGNED BY	ECM	DATE	2019
REVISION			CHECKED BY	ECM	DATE	2019
REVISION			APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 75+00 TO STA 80+00



PROJECT NO. _____

CONSTRUCTION NOTES

(104) 210 – ADJUST MANHOLE RIM TO GRADE.

(106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.

(108) 210 – ADJUST MAILBOX LOCATION & RESET

(672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)

(677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

ASPHALT WIDENING

GRAVEL SHOULDER

HATCH LEGEND

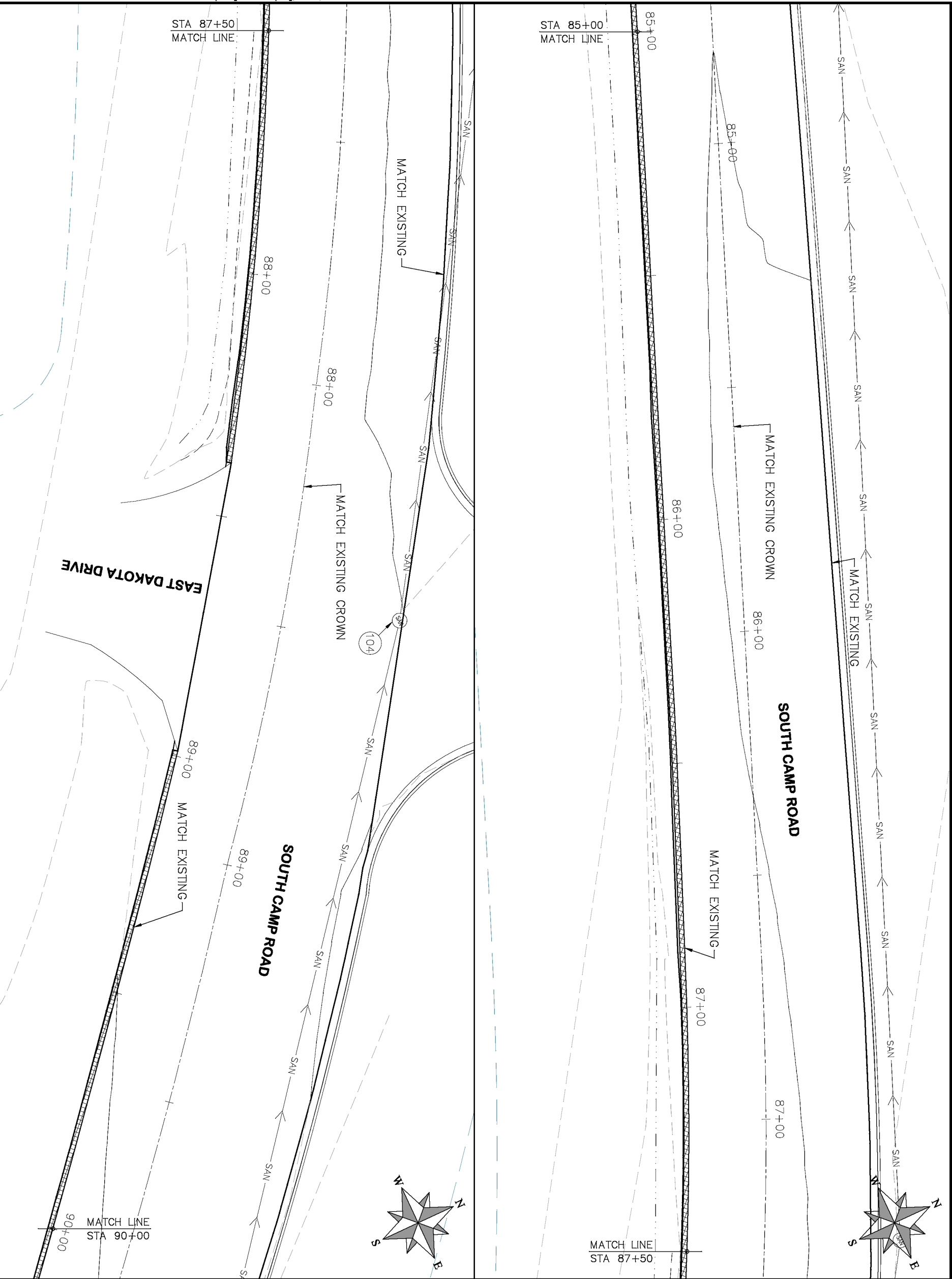
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE	2019
REVISION			DESIGNED BY	ECM	DATE	2019
REVISION			CHECKED BY	ECM	DATE	2019
REVISION			APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 80+00 TO STA 85+00



PROJECT NO. _____	
CONSTRUCTION NOTES	
(104) 210 – ADJUST MANHOLE RIM TO GRADE.	
(106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.	
(108) 210 – ADJUST MAILBOX LOCATION & RESET	
(672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)	
(677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)	
HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		
REVISION		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5
0 1/2 2 5	



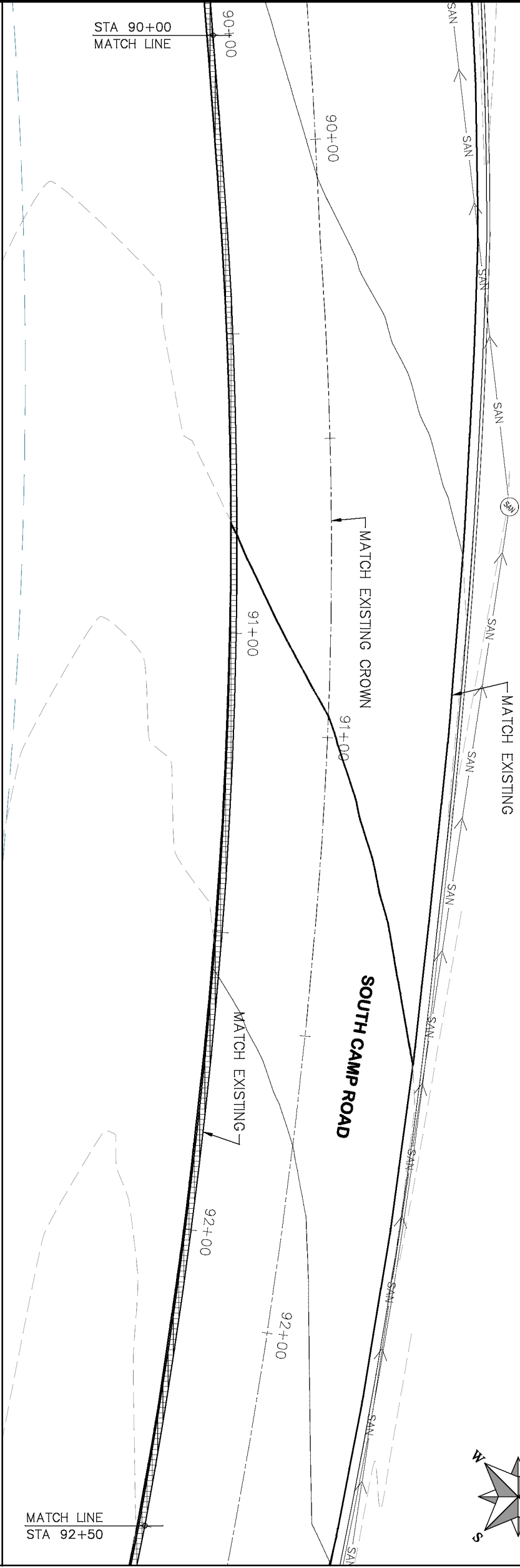
PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 85+00 TO STA 90+00

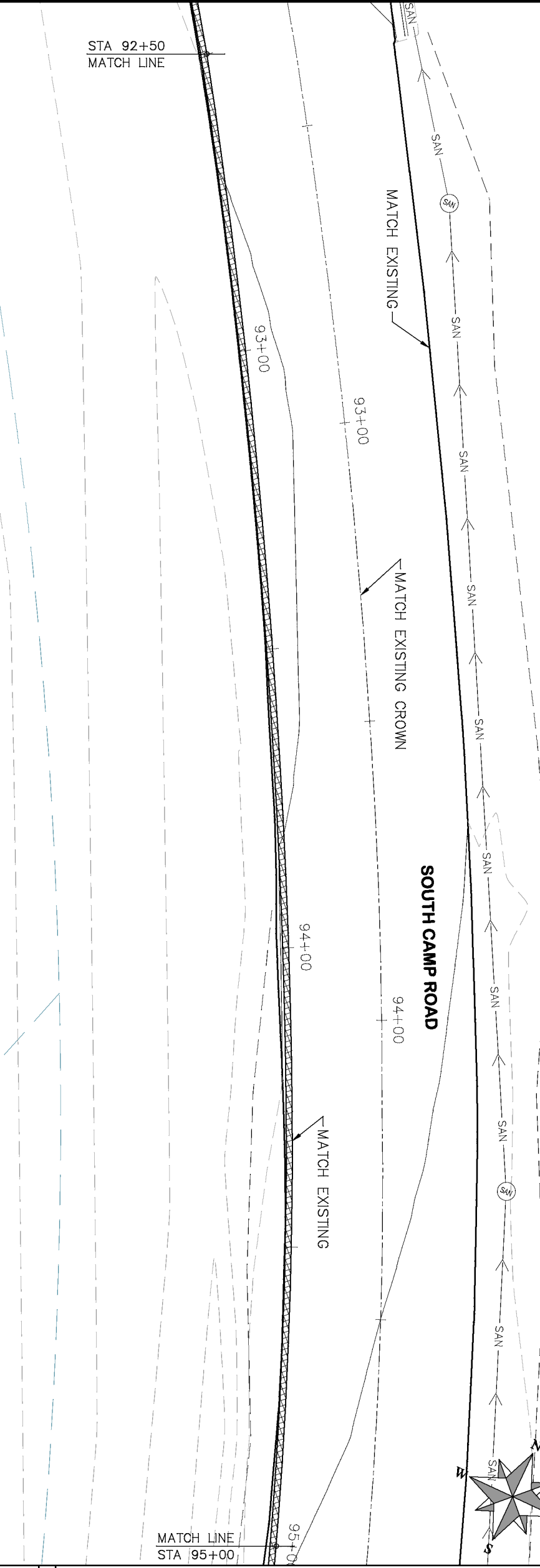
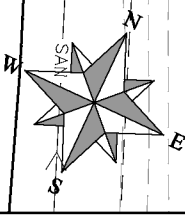
PROJECT NO. _____

CONSTRUCTION NOTES

- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
- (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 – ADJUST MAILBOX LOCATION & RESET
- (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



MATCH LINE
STA 92+50



MATCH LINE
STA 95+00

HATCH LEGEND

- ASPHALT WIDENING
- GRAVEL SHOULDER

REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5

CITY OF
Grand Junction
COLORADO

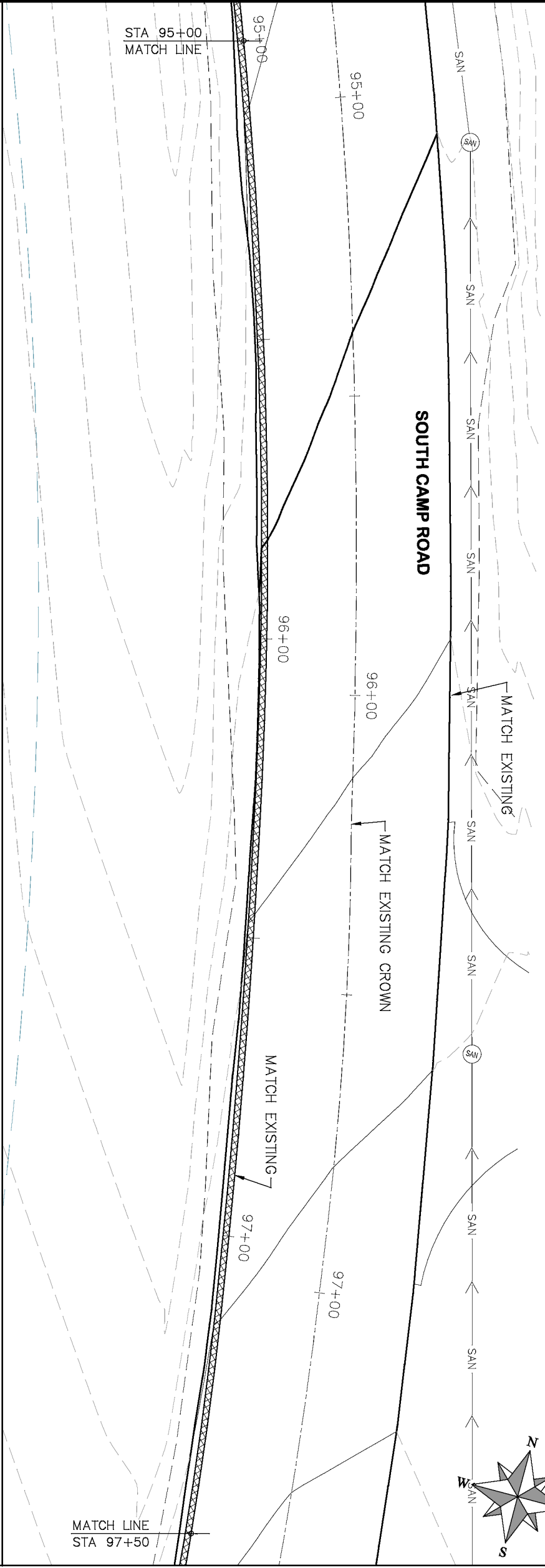
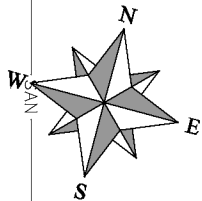
PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 90+00 TO STA 95+00

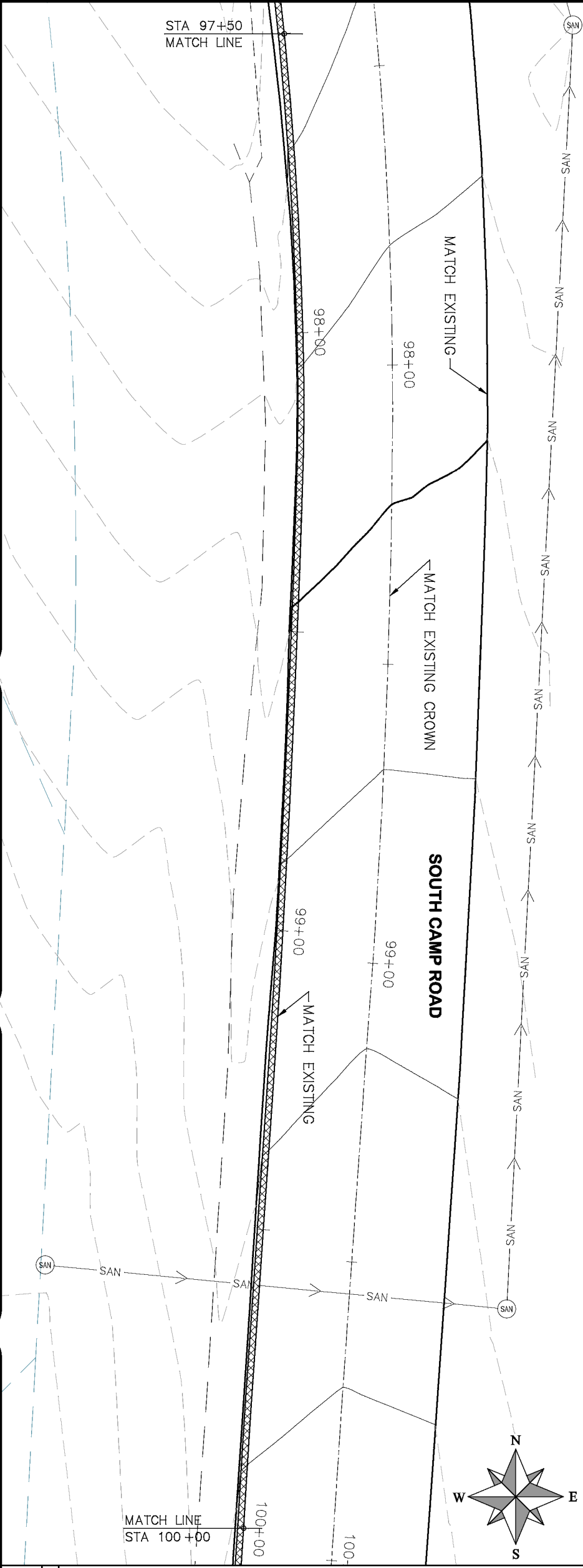
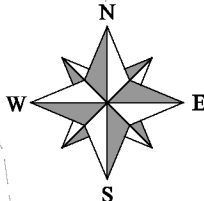
PROJECT NO. _____

CONSTRUCTION NOTES

- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
- (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 – ADJUST MAILBOX LOCATION & RESET
- (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)



MATCH LINE
STA 97+50



MATCH LINE
STA 100+00

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

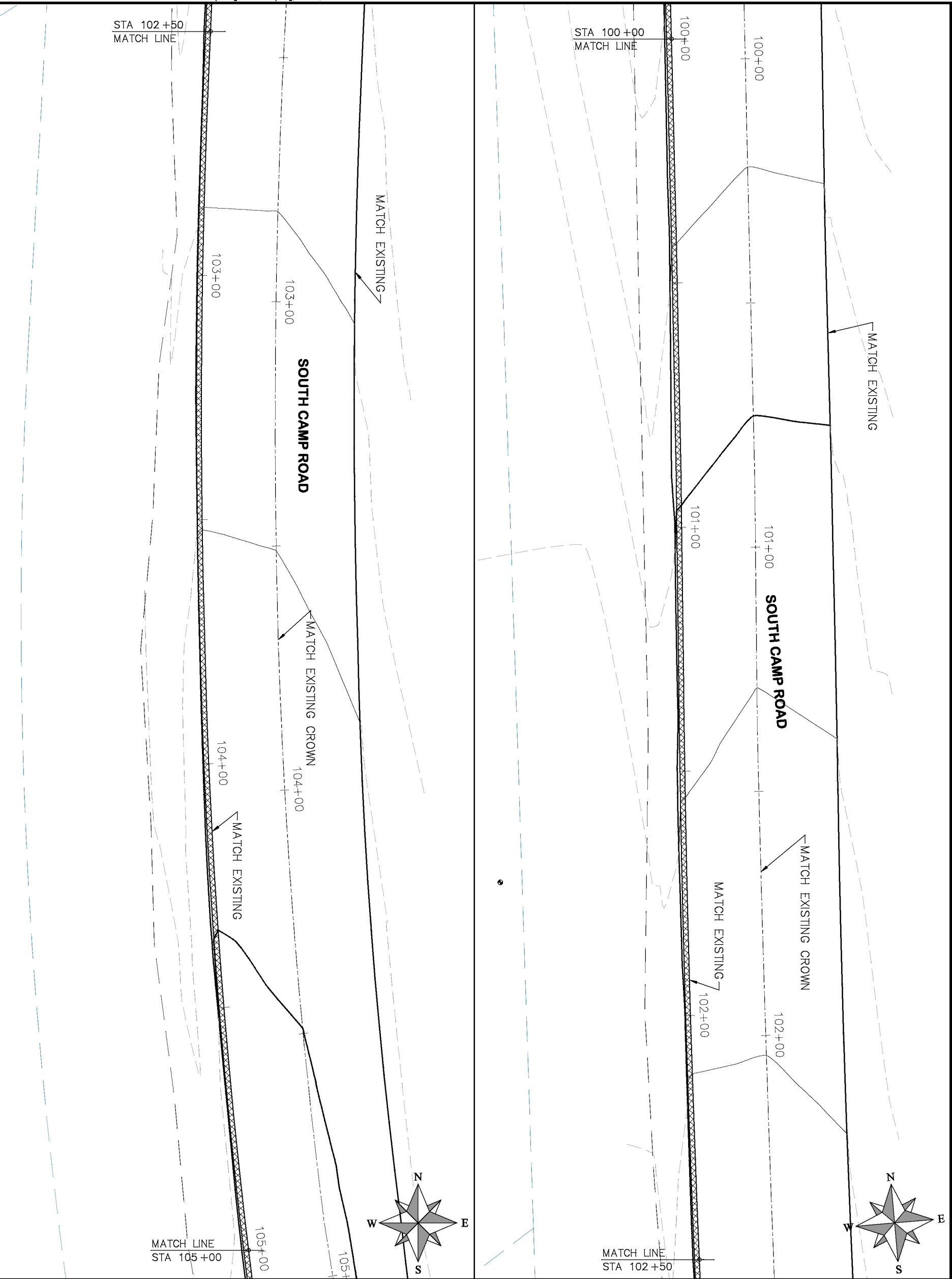
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE	2019
REVISION	DESIGNED BY	ECM	DATE	2019		
REVISION	CHECKED BY	ECM	DATE	2019		
REVISION	APPROVED BY	ECM	DATE	2019		

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5

CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – SOUTH CAMP ROAD
STA 95+00 TO STA 100+00



PROJECT NO. _____	
CONSTRUCTION NOTES	
(104) 210 - ADJUST MANHOLE RIM TO GRADE.	
(106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.	
(108) 210 - ADJUST MAILBOX LOCATION & RESET	
(672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)	
(677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)	
HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

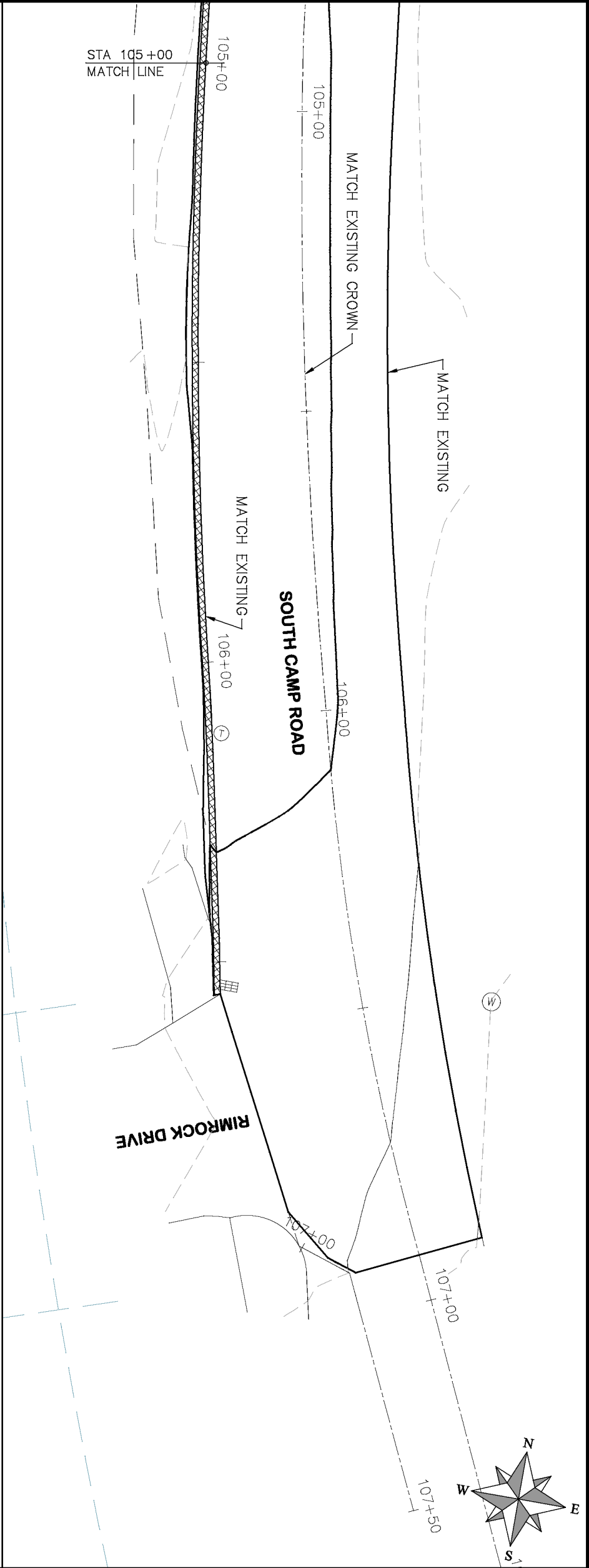
REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		
REVISION		
REVISION		

SCALE: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 100+00 TO STA 105+00



- PROJECT NO. _____
- CONSTRUCTION NOTES
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

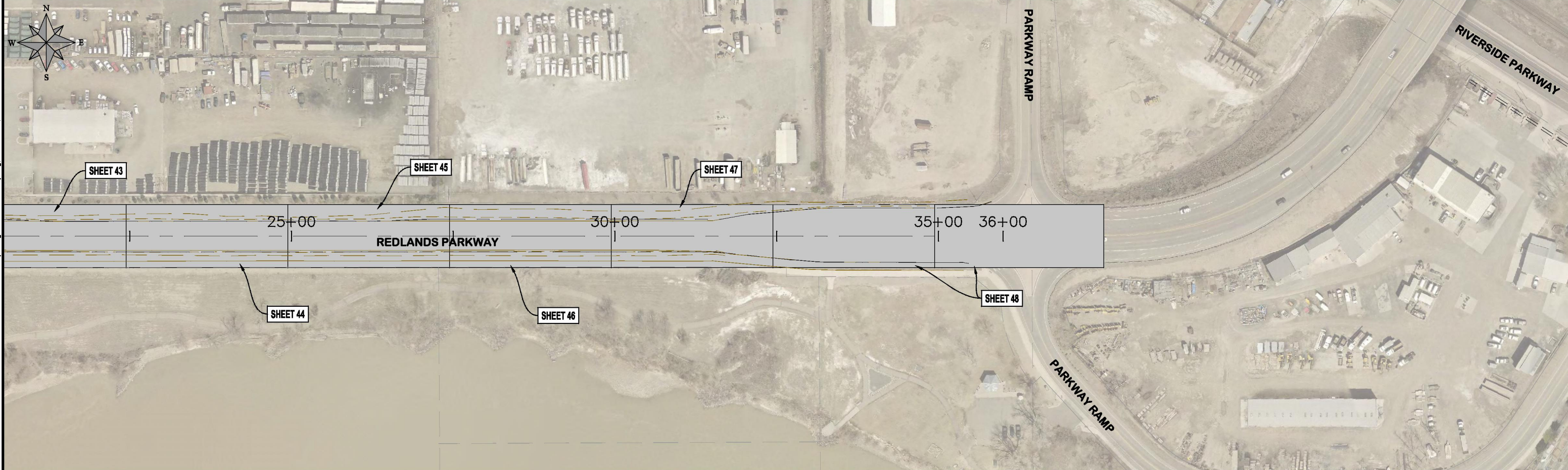
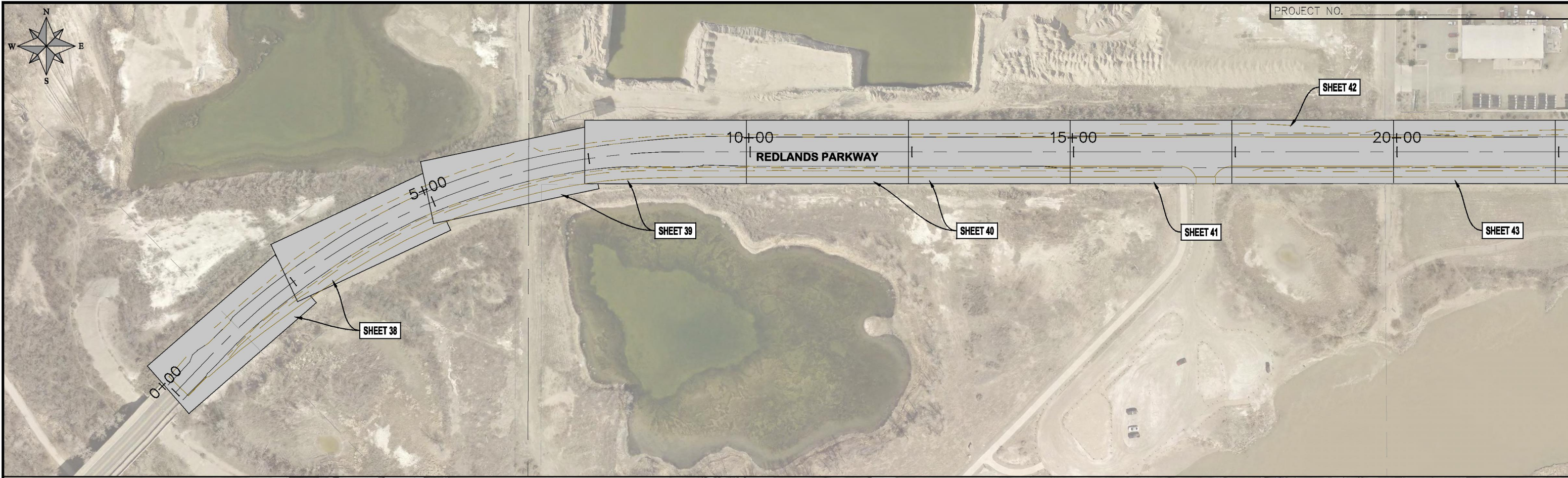
REVISION	DESCRIPTION	DATE
REVISION	DRAWN BY HMC	DATE 2019
REVISION	DESIGNED BY ECM	DATE 2019
REVISION	CHECKED BY ECM	DATE 2019
REVISION	APPROVED BY ECM	DATE 2019

Scales: Plan & Profile	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - SOUTH CAMP ROAD
STA 105+00 TO STA 107+50



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
1			HMC	2019
2			ECM	2019
3			ECM	2019
4			ECM	2019

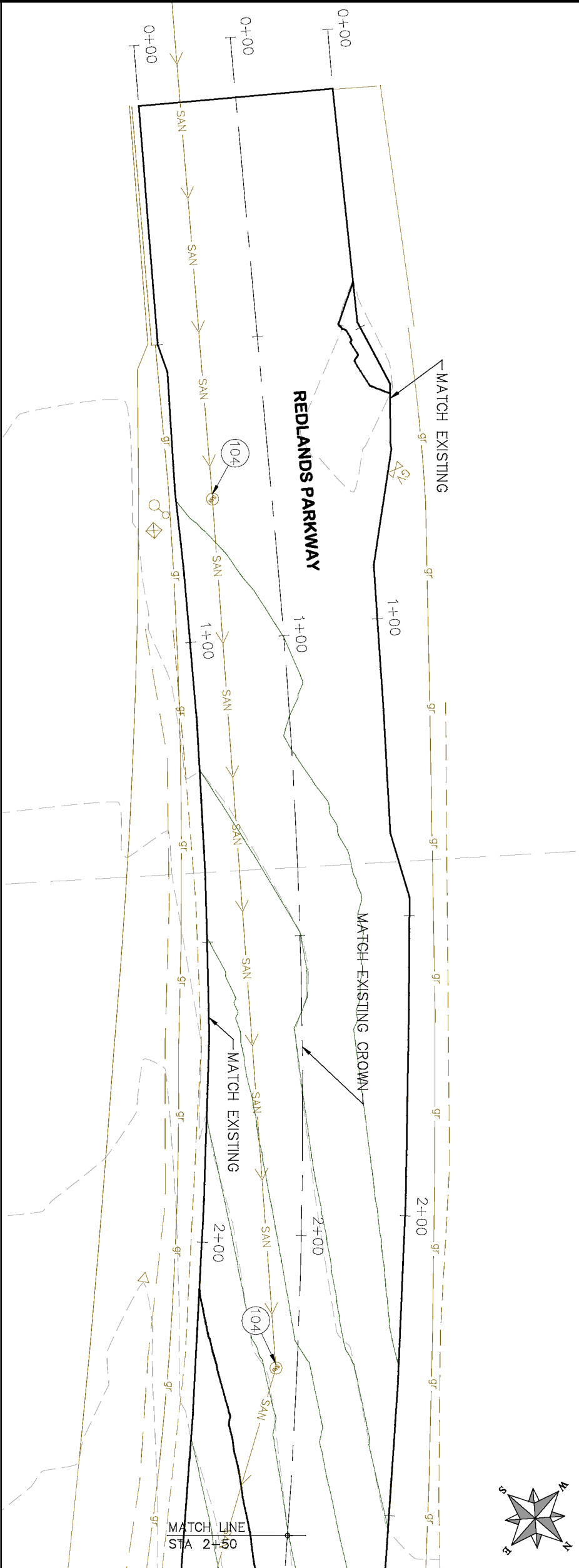
SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
KEY MAP REDLANDS PARKWAY

N:\Landproj\Contract Street Maintenance\2019 Contract Street Maintenance\Overlays\dwg\Redlands Overlay.dwg, 37 KEYMAP, 3/12/2019 4:51:10 PM



- PROJECT NO. _____
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND

-  ASPHALT WIDENING
-  GRAVEL SHOULDER

REVISION	DESCRIPTION	DATE
REVISION	DRAWN BY HMC	DATE 2019
REVISION	DESIGNED BY ECM	DATE 2019
REVISION	CHECKED BY ECM	DATE 2019
REVISION	APPROVED BY ECM	DATE 2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5

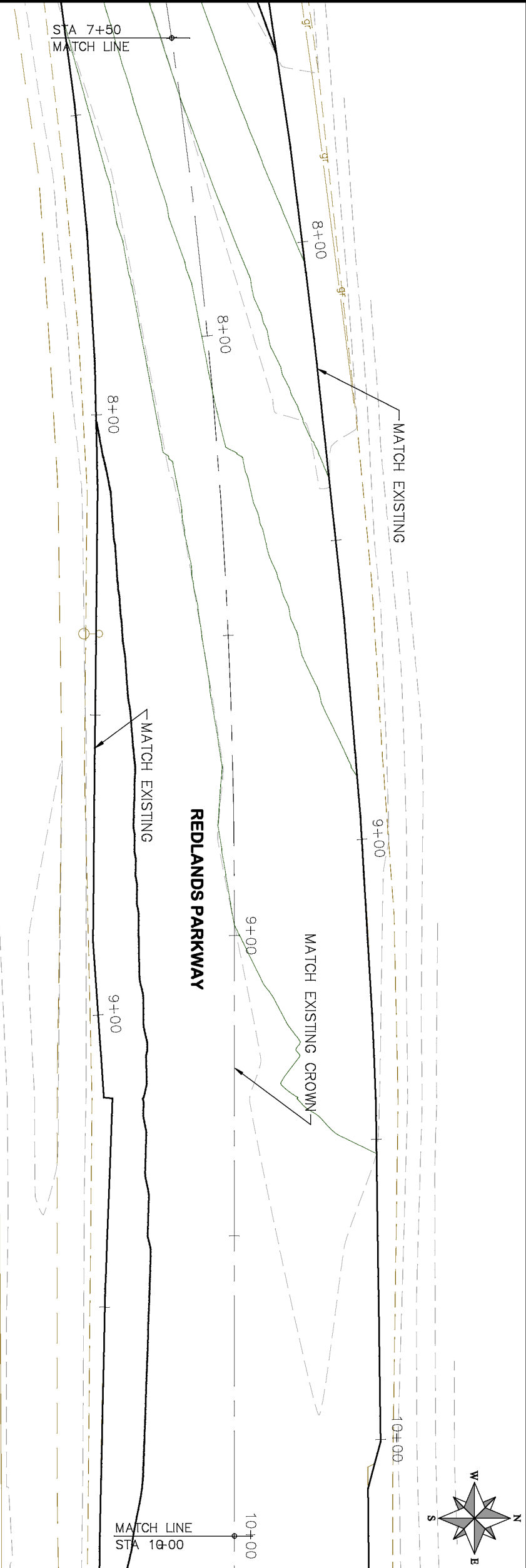
CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 0+00 TO STA 5+00



- PROJECT NO. _____
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

REVISION	
DESCRIPTION	DATE
REVISION	
REVISION	
REVISION	
REVISION	
REVISION	

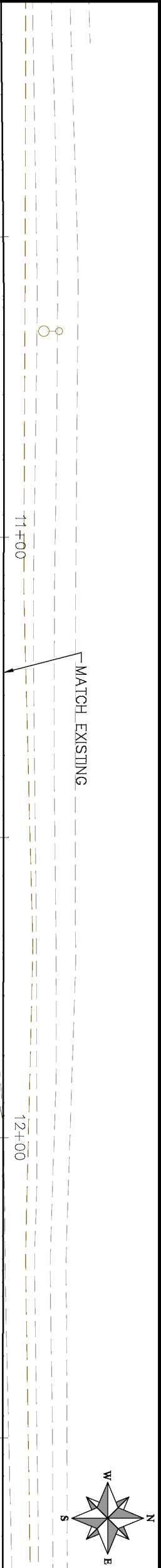
DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5

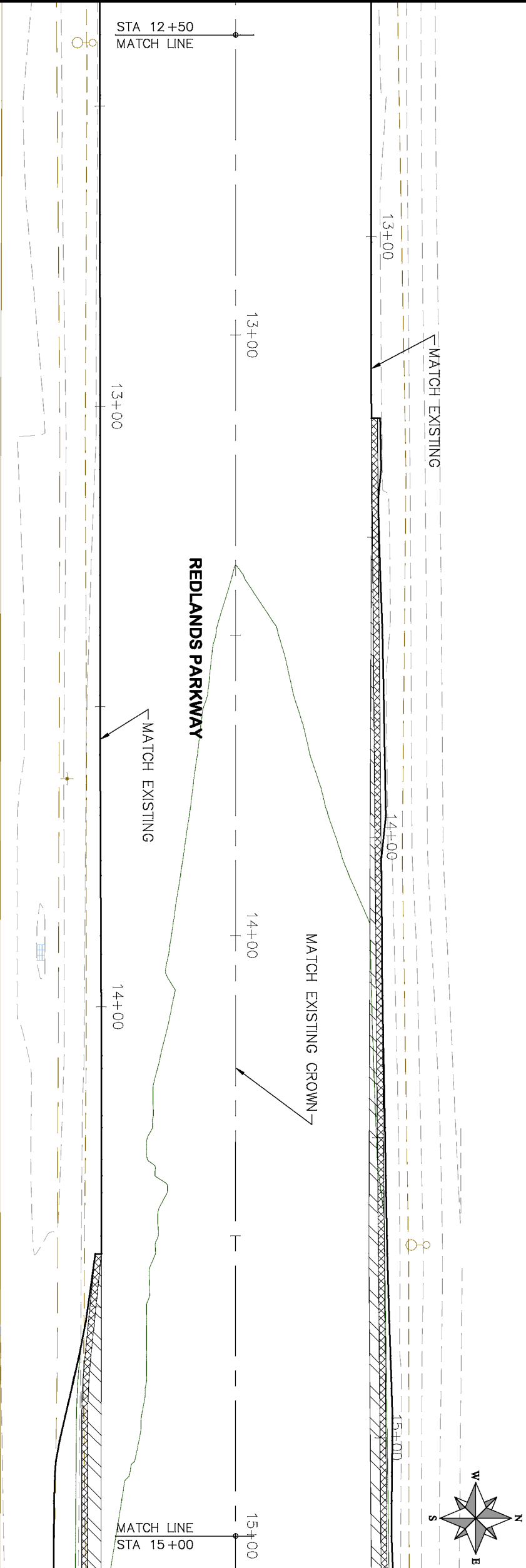
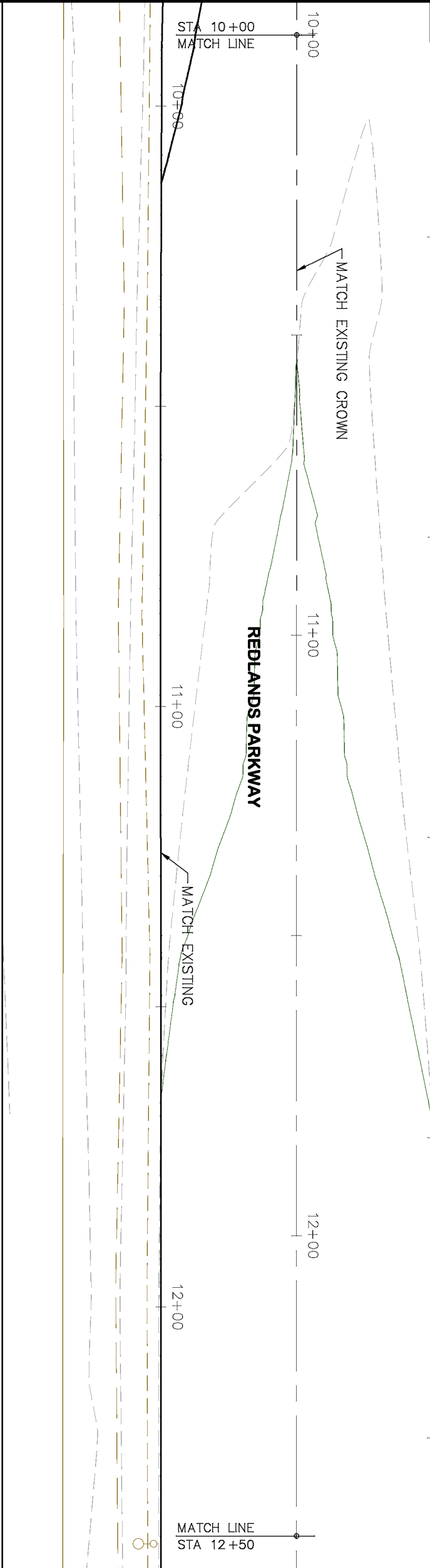
CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 5+00 TO STA 10+00



- PROJECT NO. _____
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)



HATCH LEGEND	
	ASPHALT WIDENING
	GRAVEL SHOULDER

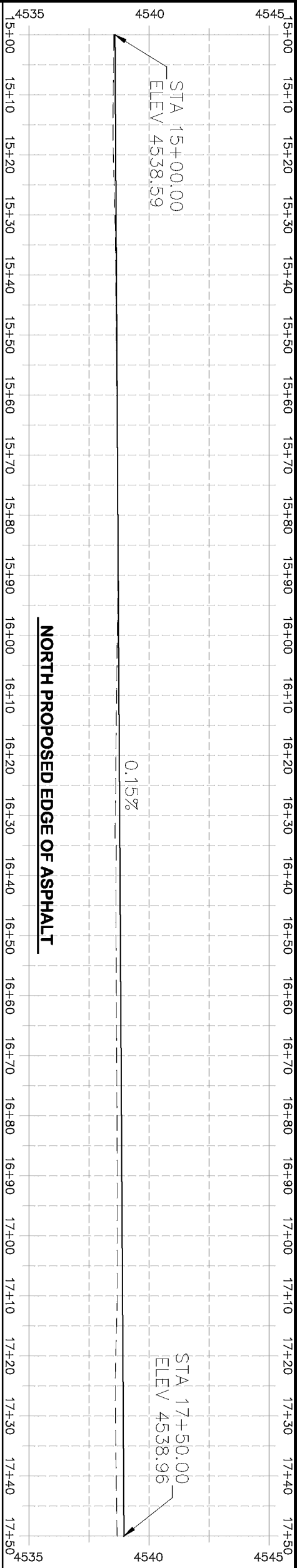
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE	2019
REVISION			DESIGNED BY	ECM	DATE	2019
REVISION			CHECKED BY	ECM	DATE	2019
REVISION			APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	20
VERTICAL: 1" = 5'	5



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 10+00 TO STA 15+00



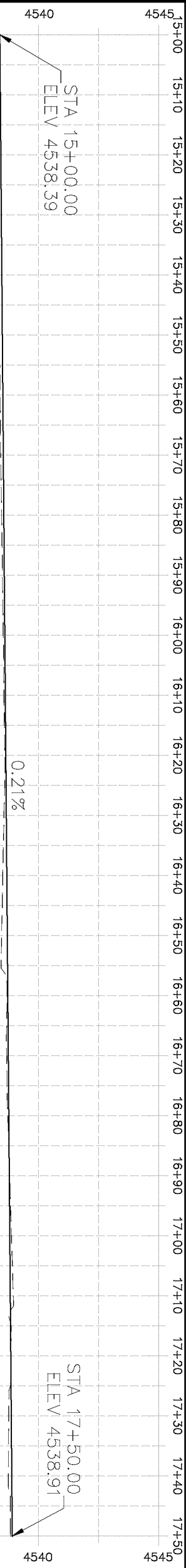
NORTH PROPOSED EDGE OF ASPHALT

MATCH EXISTING

MATCH EXISTING CROWN

MATCH EXISTING

MATCH LINE
STA 17+50



SOUTH PROPOSED EDGE OF ASPHALT

REVISION	DESCRIPTION	DATE
Δ		
Δ		
Δ		
Δ		
Δ		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	0 5 10 20
VERTICAL: 1" = 5'	0 1.25 2.5 5

CITY OF
Grand Junction
COLORADO

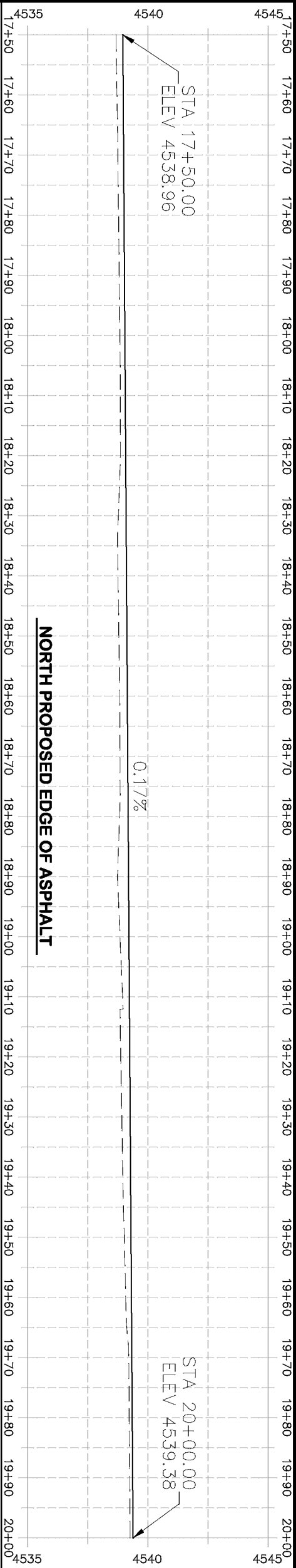
PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – REDLANDS PARKWAY
STA 15+00 TO STA 17+50

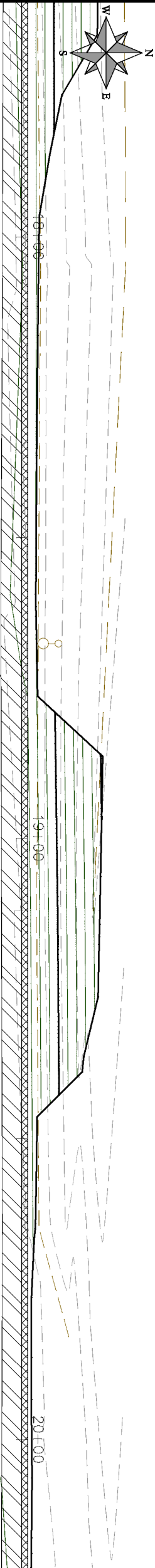
- PROJECT NO. _____
- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 – ADJUST MAILBOX LOCATION & RESET
 - (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)

HATCH LEGEND

	ASPHALT WIDENING
	GRAVEL SHOULDER



NORTH PROPOSED EDGE OF ASPHALT



MATCH EXISTING

MATCH EXISTING CROWN

18+00

19+00

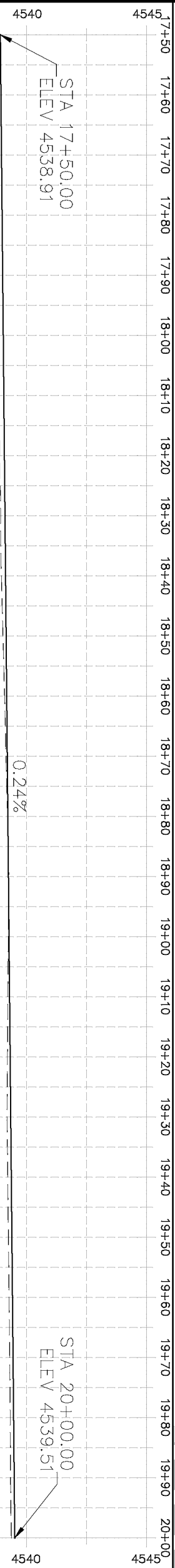
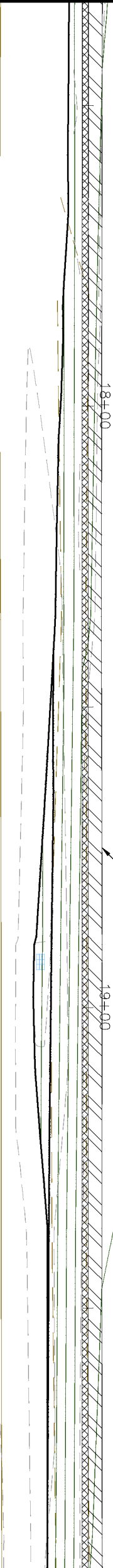
20+00

REDLANDS PARKWAY

STA 17+50
MATCH LINE

MATCH EXISTING

MATCH LINE
STA 20+00



SOUTH PROPOSED EDGE OF ASPHALT



ASPHALT WIDENING



GRAVEL SHOULDER

HATCH LEGEND

- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
- (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 - ADJUST MAILBOX LOCATION & RESET
- (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

PROJECT NO. _____

REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		

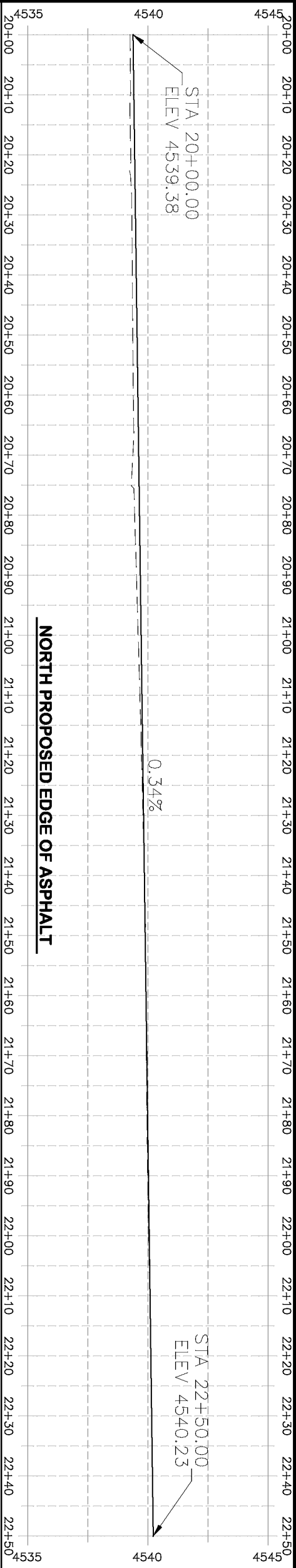
DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'	

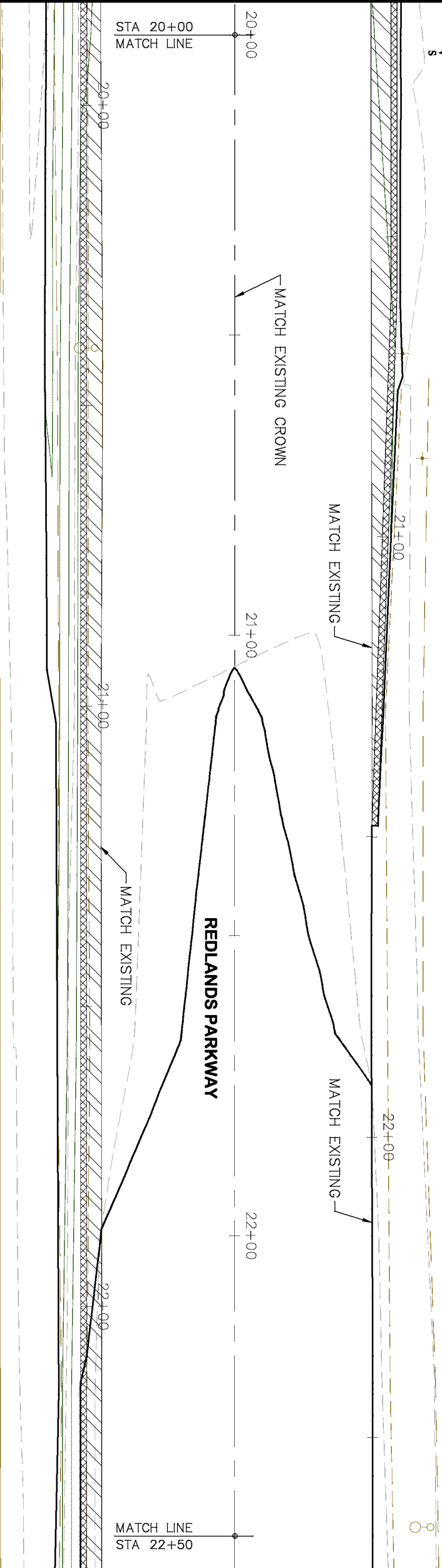
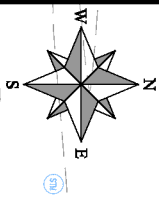
CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

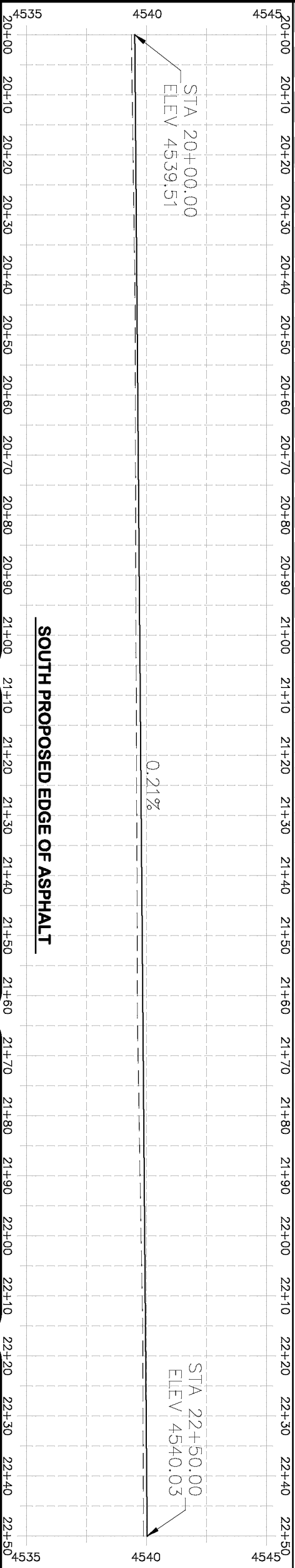
2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 17+50 TO 20+00



NORTH PROPOSED EDGE OF ASPHALT



REDLANDS PARKWAY



SOUTH PROPOSED EDGE OF ASPHALT

- PROJECT NO. _____
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND

- ASPHALT WIDENING
- GRAVEL SHOULDER

REVISION	DESCRIPTION	DATE
REVISION		
REVISION		
REVISION		
REVISION		

DRAWN BY	HMC	DATE	2019
DESIGNED BY	ECM	DATE	2019
CHECKED BY	ECM	DATE	2019
APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'	

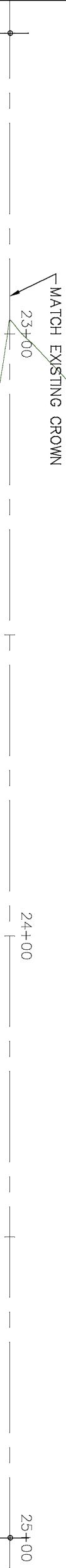
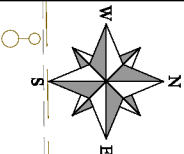
CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 20+00 TO 22+50

PROJECT NO. _____

- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
- (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
- (108) 210 – ADJUST MAILBOX LOCATION & RESET
- (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64–22)



STA 22+50
MATCH LINE

REDLANDS PARKWAY

MATCH EXISTING

MATCH LINE
STA 25+00

STA 22+50.00
ELEV 4540.03

0.22%

STA 25+00.00
ELEV 4540.58

SOUTH PROPOSED EDGE OF ASPHALT

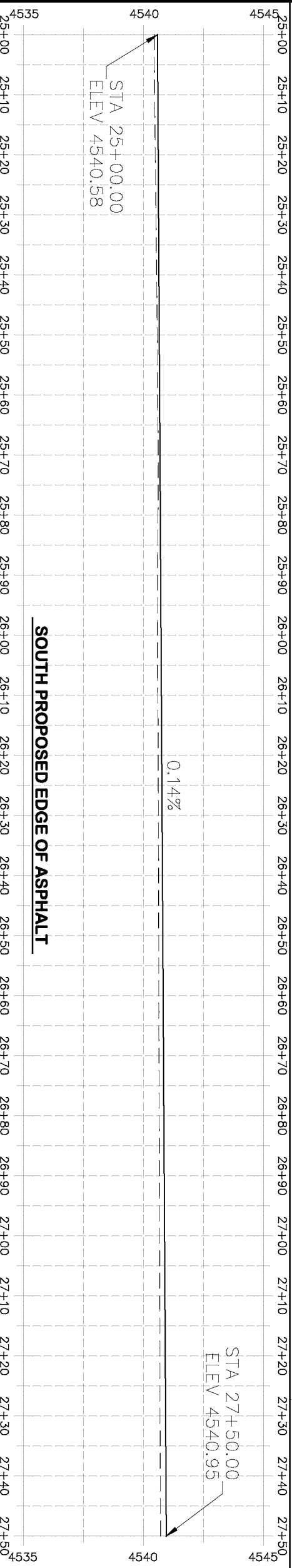
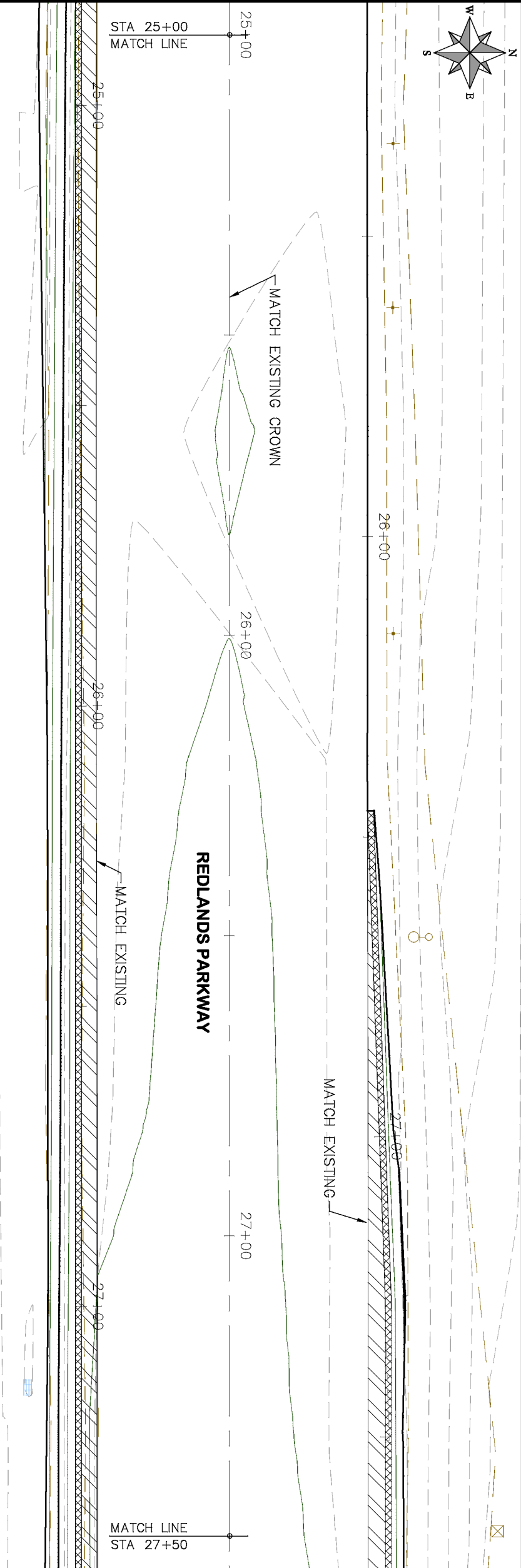
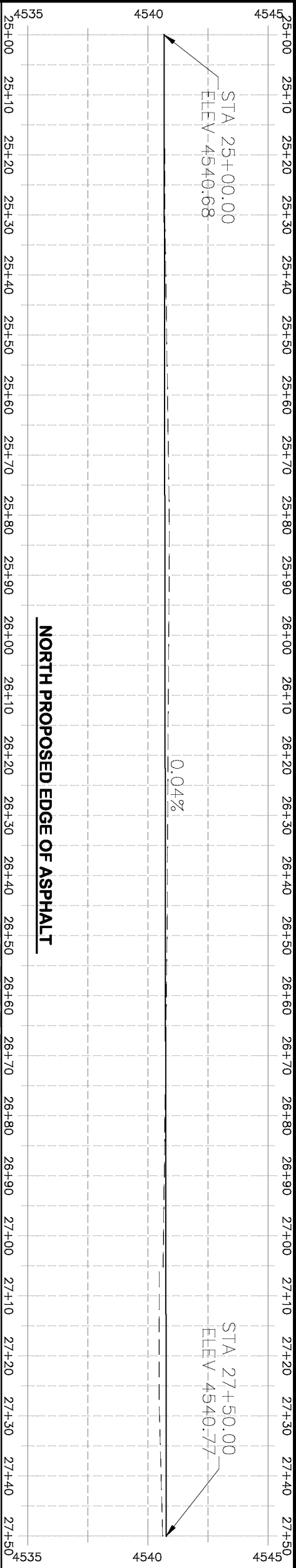
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE
REVISION			DESIGNED BY	ECM	DATE
REVISION			CHECKED BY	ECM	DATE
REVISION			APPROVED BY	ECM	DATE

SCALE: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN – REDLANDS PARKWAY
STA 22+50 TO 25+00



- PROJECT NO. _____
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND

- ASPHALT WIDENING
- GRAVEL SHOULDER

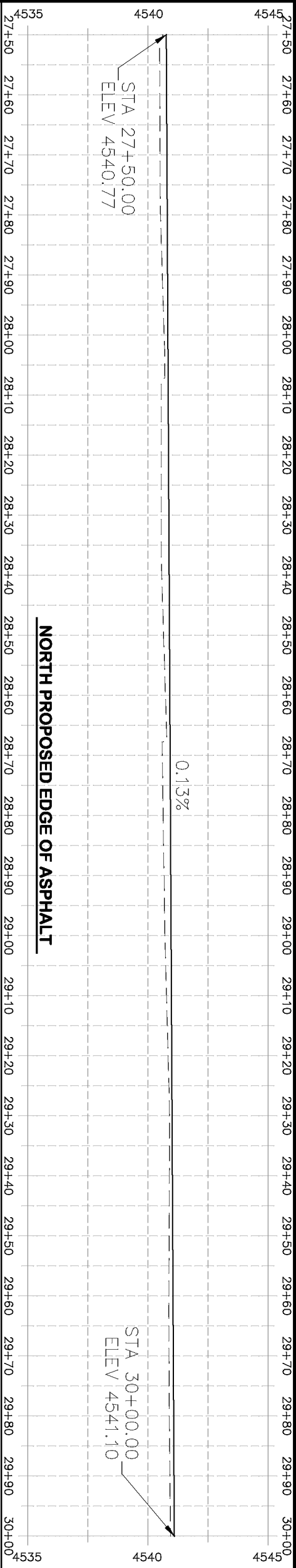
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE
REVISION			DESIGNED BY	ECM	DATE
REVISION			CHECKED BY	ECM	DATE
REVISION			APPROVED BY	ECM	DATE

SCALE: PLAN & PROFILE	SCALE: VERTICAL
HORIZONTAL: 1" = 20'	VERTICAL: 1" = 5'
0 5 10 20	0 1 2 3 4 5

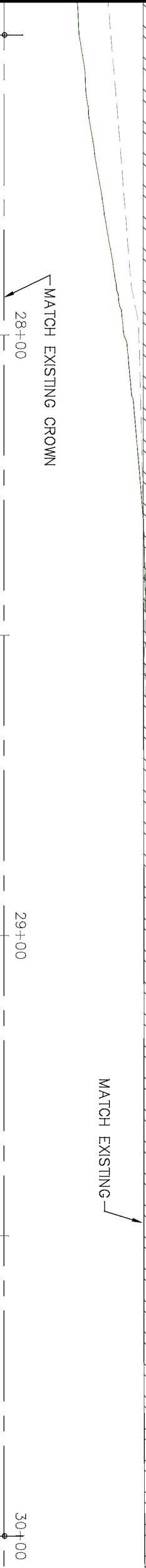
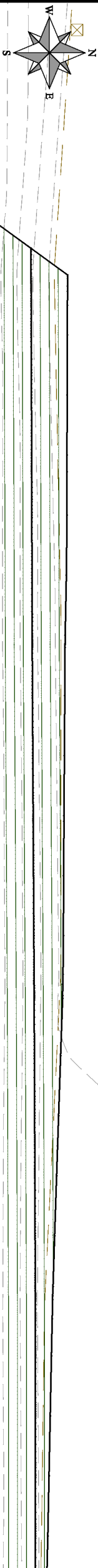
CITY OF
Grand Junction
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

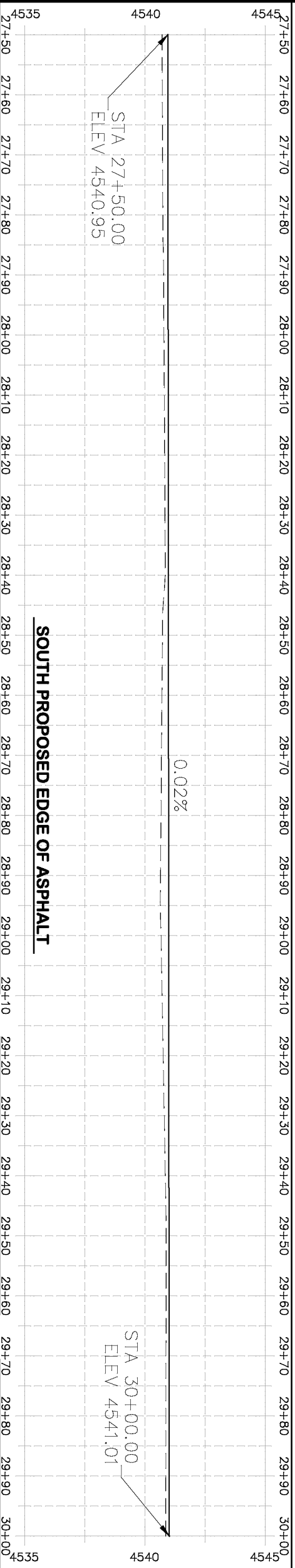
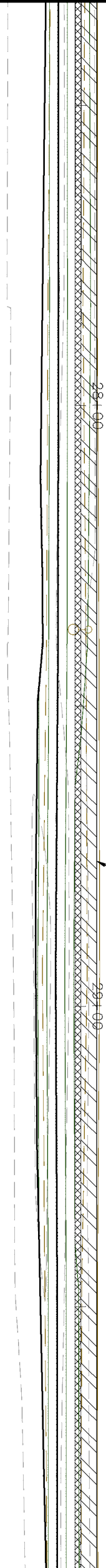
2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 25+00 TO 27+50



NORTH PROPOSED EDGE OF ASPHALT



REDLANDS PARKWAY



SOUTH PROPOSED EDGE OF ASPHALT

- PROJECT NO. _____
- (104) 210 – ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 – ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 – ADJUST MAILBOX LOCATION & RESET
 - (672) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 – HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND

- ASPHALT WIDENING
- GRAVEL SHOULDER

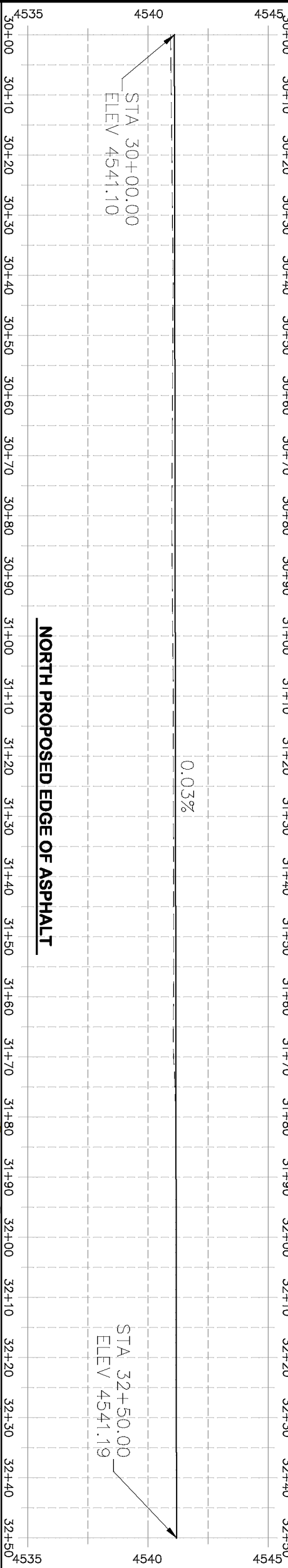
REVISION	DESCRIPTION	DATE	DRAWN BY	HMC	DATE
REVISION	DESIGNED BY ECM	DATE	CHECKED BY ECM	DATE	APPROVED BY ECM
REVISION					
REVISION					

SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

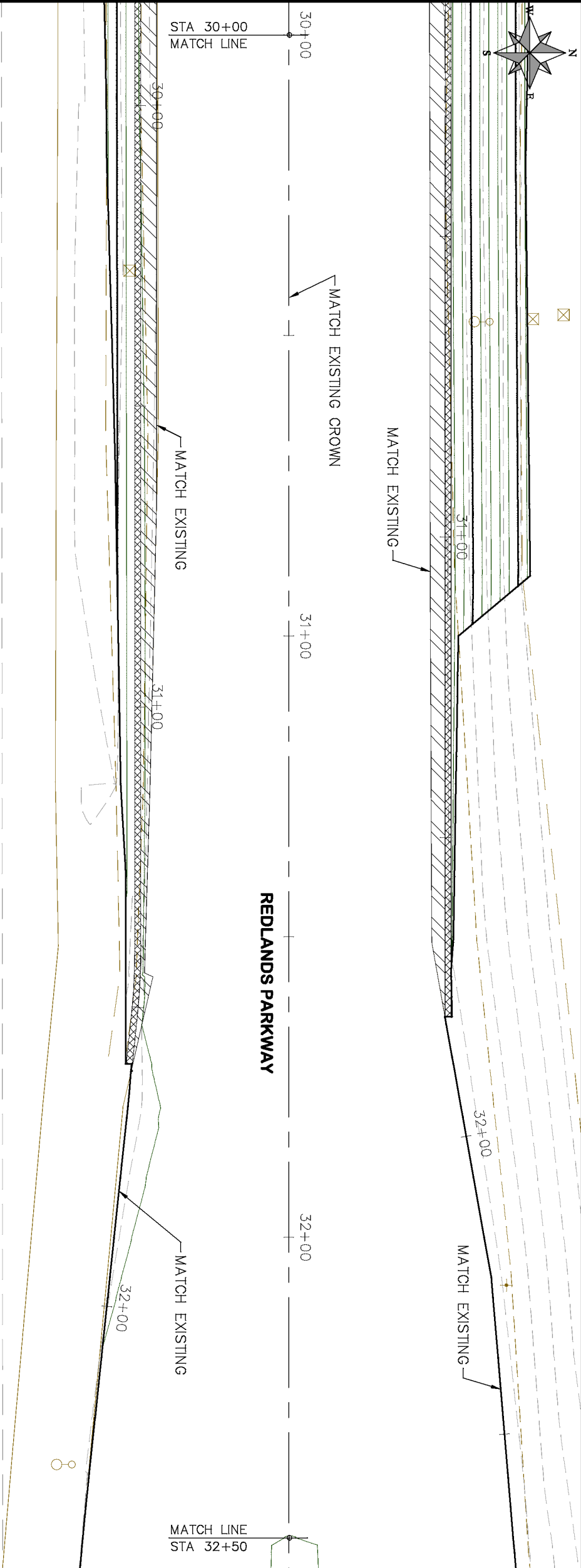
Grand Junction
CITY OF
COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

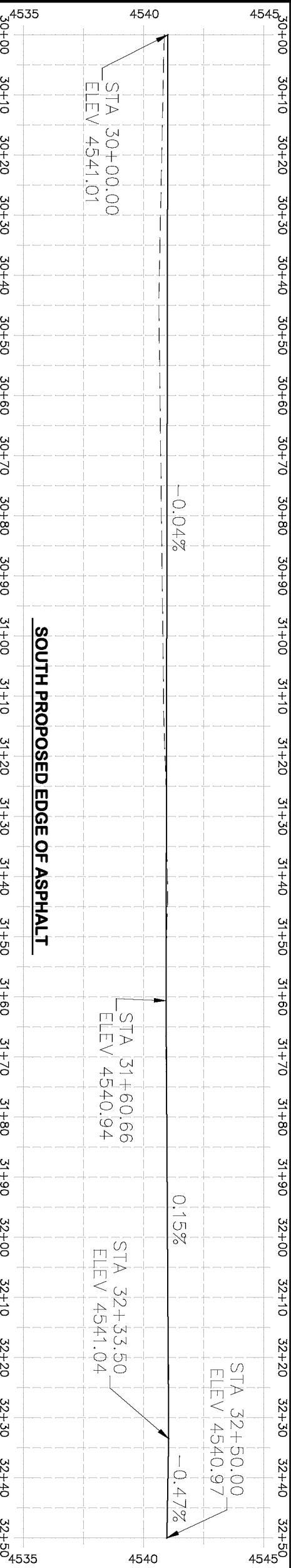
2019 ASPHALT OVERLAYS
ROAD PLAN – REDLANDS PARKWAY
STA 27+50 TO 30+00



NORTH PROPOSED EDGE OF ASPHALT



REDLANDS PARKWAY



SOUTH PROPOSED EDGE OF ASPHALT

- PROJECT NO. _____
- (104) 210 - ADJUST MANHOLE RIM TO GRADE.
 - (106) 210 - ADJUST WATER VALVE BOX TO FINISHED GRADE.
 - (108) 210 - ADJUST MAILBOX LOCATION & RESET
 - (672) 304 - AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
 - (677) 401.08 - HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BINDER GRADE PG 64-22)

HATCH LEGEND



ASPHALT WIDENING



GRAVEL SHOULDER

REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
REVISION			HMC	2019
REVISION			ECM	2019
REVISION			ECM	2019
REVISION			ECM	2019

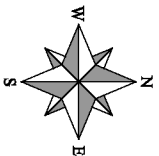
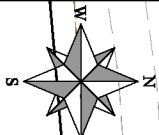
DESIGNED BY	CHECKED BY	APPROVED BY
ECM	ECM	ECM

SCALE: PLAN & PROFILE	SCALE: VERTICAL
HORIZONTAL: 1" = 20'	VERTICAL: 1" = 5'
0 5 10	0 1.25 2.5

CITY OF
Grand Junction
COLORADO

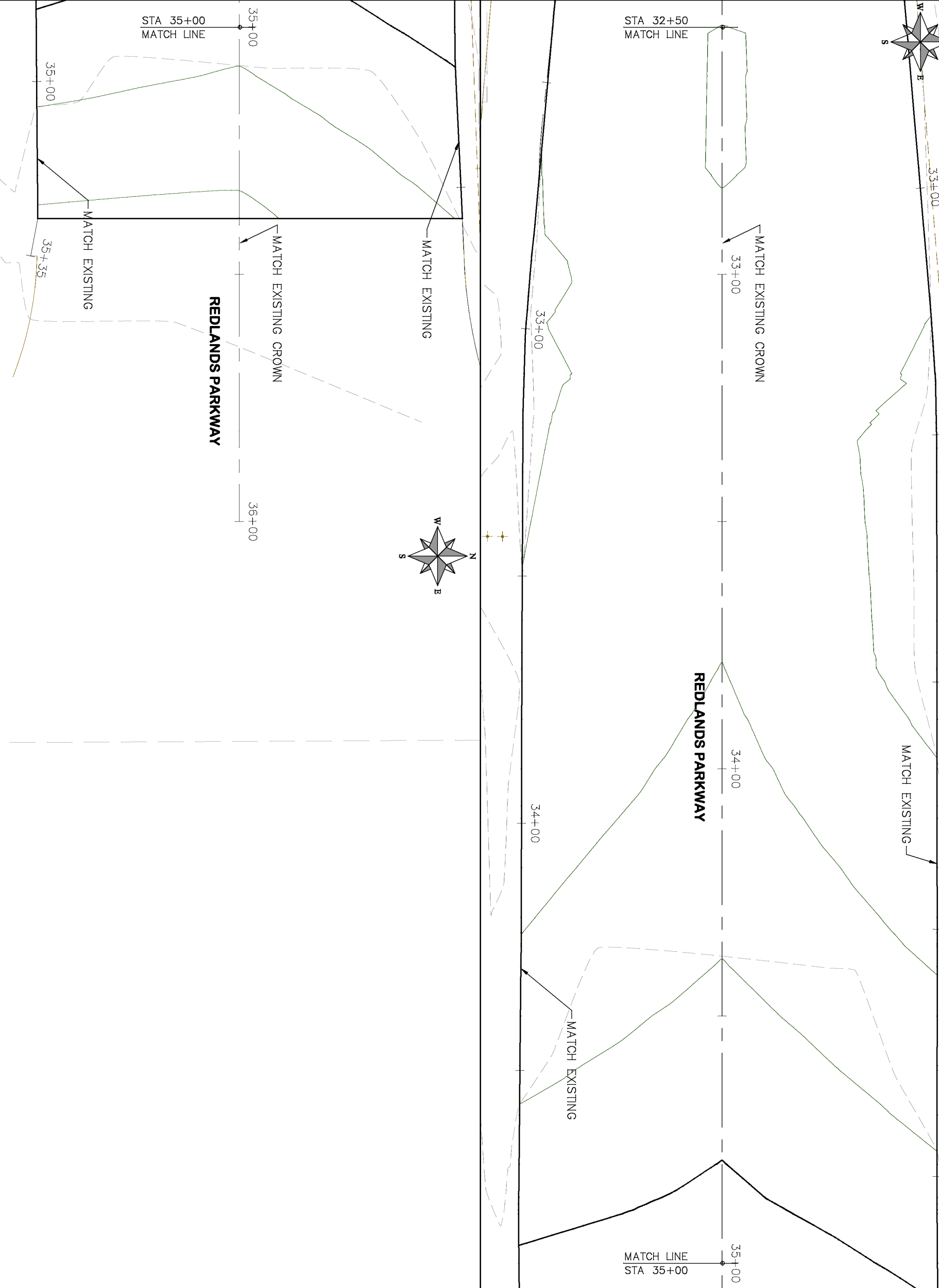
PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 30+00 TO 32+50



PROJECT NO. _____

- | | | |
|-----|--------|---|
| 104 | 210 | ADJUST MANHOLE RIM TO GRADE. |
| 106 | 210 | ADJUST WATER VALVE BOX TO FINISHED GRADE. |
| 108 | 210 | ADJUST VALVEBOX LOCATION & RESET |
| 677 | 304 | AGGREGATE BASE COURSE (CLASS 6) (12" THICK) |
| 677 | 401.08 | HOT BITUMINOUS PAVEMENT (5" THICK) (GRADING SX, BRIDGER GRADE PG 64-22) |



DESCRIPTION	DATE	DRAWN BY	HWC	DATE	2019
REVISION Δ	—				
REVISION Δ	—	DESIGNED BY	ECM	DATE	2019
REVISION Δ	—	CHECKED BY	ECM	DATE	2019
REVISION Δ	—	APPROVED BY	ECM	DATE	2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	
0	5 10 20
VERTICAL: 1" = 5'	
0	1.25 2.5 5

SCALES: PLAN & PROFILE

HORIZONTAL: 1" = 20'	0	5	10	20
VERTICAL: 1" = 5'	0	1.25	2.5	5



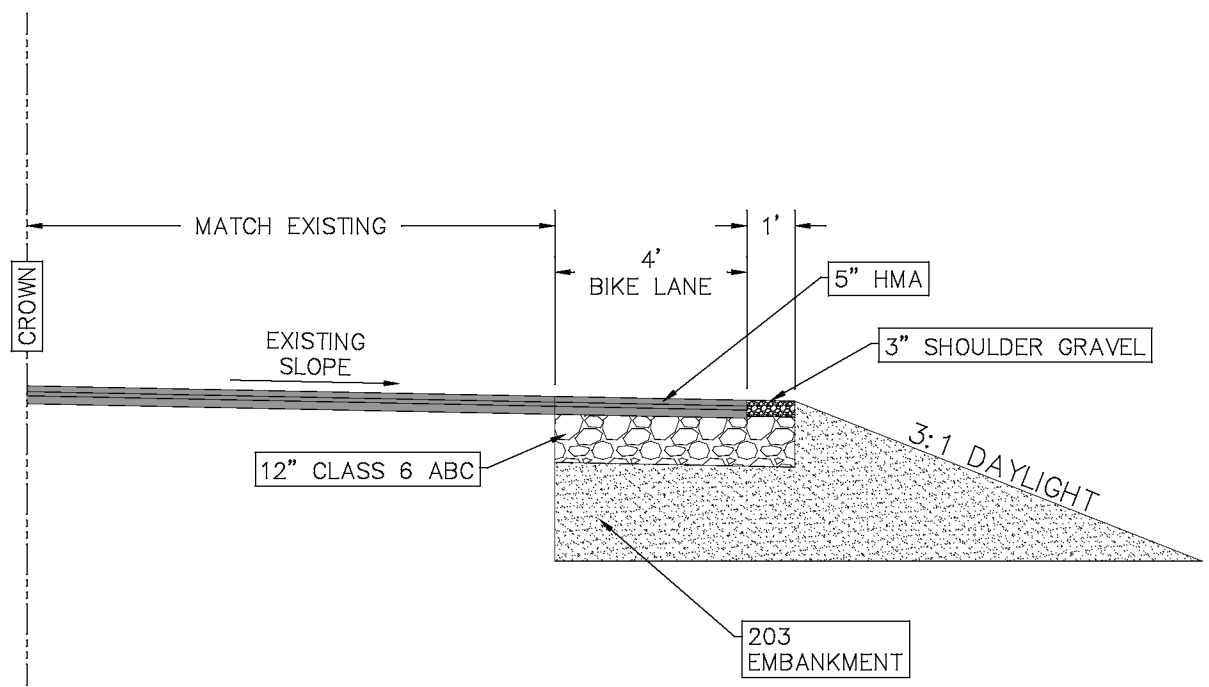
PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
ROAD PLAN - REDLANDS PARKWAY
STA 32+50 TO 37+50

48

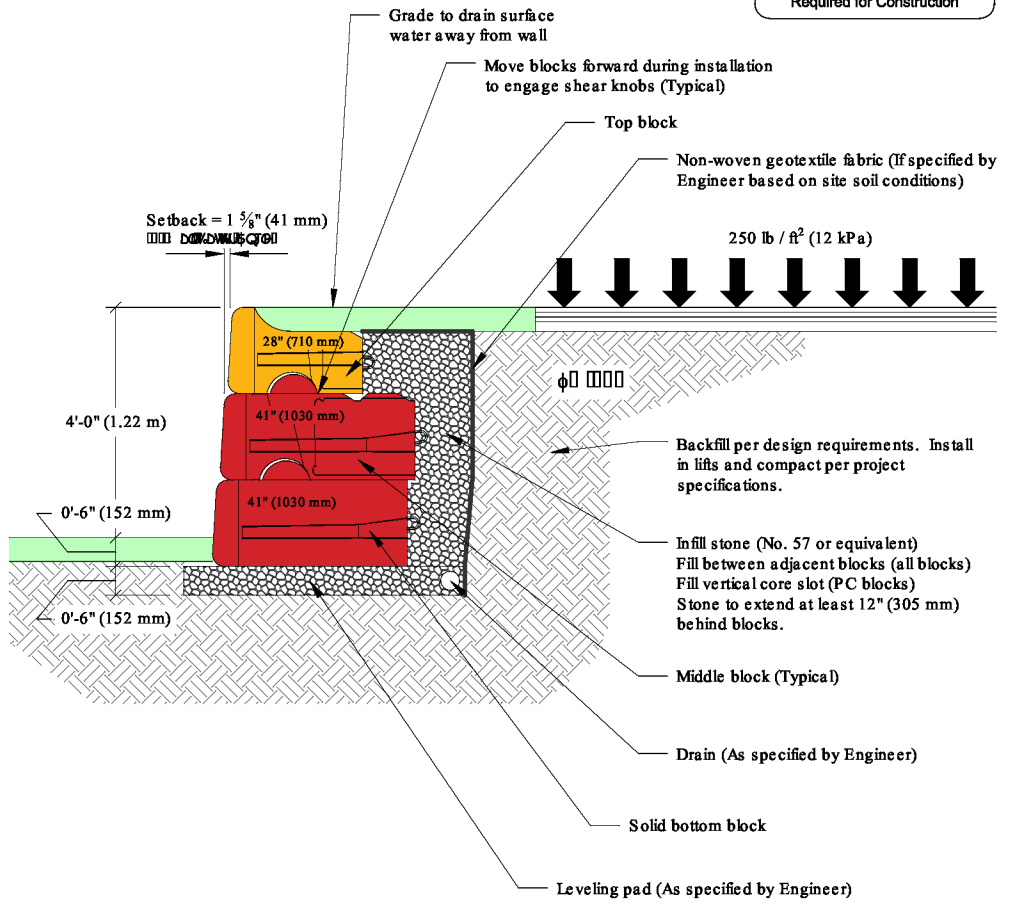
HATCH LEGEND

	ASPHALT WIDENING
	GRAVEL SHOULDER

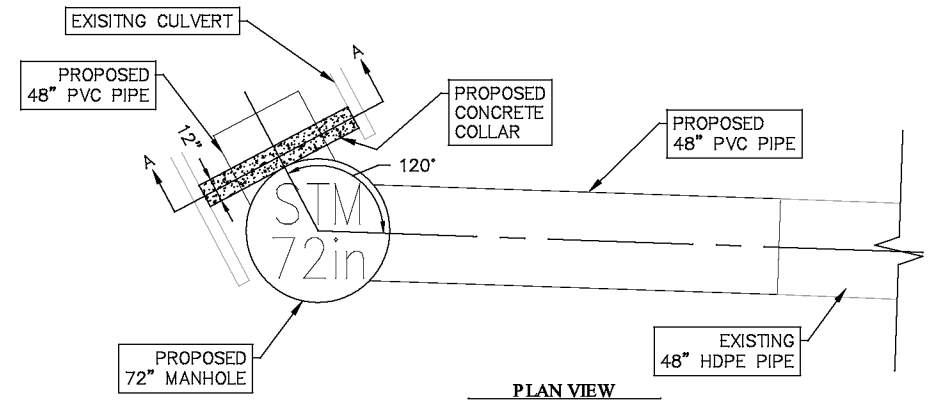


TYPICAL BIKE LANE
N.T.S.

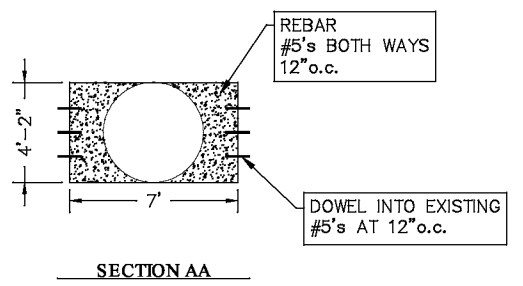
3 BLOCK HIGH SECTION
(1) 28" (710 mm) Block
(2) 41" (1030 mm) Blocks



Retaining Wall Detail
N.T.S.



PLAN VIEW



SECTION AA

CULVERT COLLAR
N.T.S.

REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
1			HMC	2019
2			ECM	2019
3			ECM	2019
4			ECM	2019

SCALES: PLAN & PROFILE
NOT TO SCALE



PUBLIC WORKS
ENGINEERING DIVISION

2019 ASPHALT OVERLAYS
DETAILS

4. Contractor's Bid Form

Bid Date: April 3, 2019

Project: **IFB-4622-19-DH "2019 Contract Street Maintenance – Asphalt Overlays"**

Bidding Company: Oldcastle SW Group, Inc. dba United Companies

Name of Authorized Agent: Justin Vensel

Email: justin.vensel@unitedco.com

Telephone: 970-243-4900 Address: 2273 River Road

City: Grand Junction State: CO Zip: 81505

The undersigned Bidder, in compliance with the Invitation for Bids, having examined the Instruction to Bidders, General Contract Conditions, Statement of Work, Specifications, and any and all Addenda thereto, having investigated the location of, and conditions affecting the proposed work, hereby proposes to furnish all labor, materials and supplies, and to perform all work for the Project in accordance with Contract Documents, within the time set forth and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this Contractor's Bid Form is a part.

The undersigned Contractor does hereby declare and stipulate that this offer is made in good faith without collusion or connection to any person(s) providing an offer for the same work, and that it is made in pursuance of, and subject to, all terms and conditions of the Instructions to Bidders, the Specifications, and all other Solicitation Documents, all of which have been examined by the undersigned.

The Contractor also agrees that if awarded the Contract, to provide insurance certificates within ten (10) working days of the date of Notification of Award. Submittal of this offer will be taken by the Owner as a binding covenant that the Contractor will be prepared to complete the project in its entirety.

The Owner reserves the right to make the award on the basis of the offer deemed most favorable, to waive any formalities or technicalities and to reject any or all offers. It is further agreed that this offer may not be withdrawn for a period of sixty (60) calendar days after closing time. Submission of clarifications and revised offers automatically establish a new thirty day (30) period.

Prices in the bid proposal have not knowingly been disclosed with another provider and will not be prior to award.

- Prices in this bid proposal have been arrived at independently, without consultation, communication or agreement for the purpose of restricting competition.
- No attempt has been made nor will be to induce any other person or firm to submit a bid proposal for the purpose of restricting competition.
- The individual signing this bid proposal certifies they are a legal agent of the offeror, authorized to represent the offeror and is legally responsible for the offer with regard to supporting documentation and prices provided.
- Direct purchases by the City of Grand Junction are tax exempt from Colorado Sales or Use Tax. Tax exempt No. 98-903544. The undersigned certifies that no Federal, State, County or Municipal tax will be added to the above quoted prices.
- City of Grand Junction payment terms shall be Net 30 days.
- Prompt payment discount of _____ percent of the net dollar will be offered to the Owner if the invoice is paid within _____ days after the receipt of the invoice.

RECEIPT OF ADDENDA: the undersigned Contractor acknowledges receipt of Addenda to the Solicitation, Specifications, and other Contract Documents.

State number of Addenda received: 1

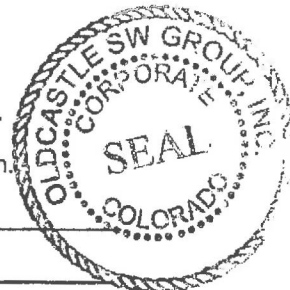
It is the responsibility of the Bidder to ensure all Addenda have been received and acknowledged.

By signing below, the Undersigned agree to comply with all terms and conditions contained herein.

Company: Oldcastle SW Group, Inc. dba United Companies

Authorized Signature: 

Title: Richard Umbel, President



Bid Schedule: Addendum #1 - 2019 Contract Street Maintenance - Asphalt Overlays

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	108.2	48" Storm Drain Pipe (HDPE or approved equal)	28.	LF	\$ 240.00	\$ 6,720.00
2	108.5	Storm Sewer Basic Manhole 72" I.D.)	1.	EA	\$ 3,500.00	\$ 3,500.00
3	202	Asphalt Removal (Planing)(Thickness Varies)	69,380.	SY	\$ 1.50	\$ 104,070.00
4	202	Removal of Type 3 Guardrail	2,405.	LF	\$ 3.00	\$ 7,215.00
5	203	Excavation and Embankment (Potholing) (See SP-2)	Lump Sum		---	\$ 2,000.00
6	203	Excavation and Embankment (New Bike Lanes - See SP-2)(Export)	1,300.	CY	\$ 20.00	\$ 26,000.00
7	208	Erosion Control	60.	Days	\$ 55.00	\$ 3,300.00
8	209	Dust Abatement	60.	Days	\$ 50.00	\$ 3,000.00
9	210	Adjust Valve Box (Price to Include adjustment of Survey Monuments)	81.	EA	\$ 33.25	\$ 2,693.25
10	210	Adjust Manhole Ring and Cover (Sanitary and Storm Sewer)	73.	EA	\$ 500.00	\$ 36,500.00
11	210	Reset Mailbox Structures	9.	EA	\$ 200.00	\$ 1,800.00
12	212	Seeding	0.48 Acres		\$ 3,700.00	\$ 1,776.00
13	304	Aggregate Base Course (Class 6) - Shoulder Edging Gravel	2,688.	Tons	\$ 17.00	\$ 45,696.00
14	304	Aggregate Base Course (Class 6) - Bike Lane	3,040.	Tons	\$ 20.00	\$ 60,800.00
15	304	Subgrade Stabilization (Class 3 Aggregate Base Course - 24" Thick)(Complete in Place)	156.	Tons	\$ 15.00	\$ 2,340.00
16	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 64-22)	14,170.	Tons	\$ 80.00	\$ 1,133,600.00
17	401	Hot Mix Asphalt (3" thick) (Grading SX, Binder Grade 64-22) - Bottom Lift Bike Lane	775.	Tons	\$ 90.00	\$ 69,750.00
18	401	Hot Mix Asphalt (Patching - Up to 5" thick) (To Include 6" of Class 6 Aggregate Base Course)(Grading SX, Binder Grade 64-22)	101.	Tons	\$ 150.00	\$ 15,150.00
19	401	Hot Mix Asphalt (2" thick) (Grading SX, Binder Grade 76-28)	1,060.	Tons	\$ 90.00	\$ 95,400.00
20	420	Geosynthetics - Geogrid	120.	SY	\$ 5.00	\$ 600.00
21	608/304	Concrete Drainage Pan (3' Wide) To Include 6" of Class 6 Aggregate Base Course	400.	LF	\$ 37.00	\$ 14,800.00
22	606	Guardrail Type 3 (6-3 Post Spacing)	2,405.	LF	\$ 23.00	\$ 55,315.00
23	606	Transition Type 3G	4.	EA	\$ 2,850.00	\$ 11,400.00
24	614	End Anchorage (Nonflared)	4.	EA	\$ 2,935.00	\$ 11,740.00
25	620	Sanitary Facility	Lump Sum		---	\$ 450.00
26	625	Construction Surveying	Lump Sum		---	\$ 5,000.00
27	626	Mobilization	Lump Sum		---	\$ 65,000.00

Bid Schedule: Addendum #1 - 2019 Contract Street Maintenance - Asphalt Overlays

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
28	627-00002	Thermoplastic Pavement Marking	20.	SF	\$ 10.00	\$ 200.00
29	627-30405	Preformed Thermoplastic Pavement Marking (Word/Symbol)	1,564.	SF	\$ 15.00	\$ 23,460.00
30	627-30410	Preformed Plastic Pavement Marking (X-Walk/Stopline)	943.	SF	\$ 10.00	\$ 9,430.00
31	630	Traffic Control (Complete In Place)	Lump Sum		---	\$ 64,000.00
32	630	Flagging	3,460.	HR	\$ 24.00	\$ 83,040.00
33	SP - 1	REDI ROCK Reinforced Wall to include all Appurtenances. See Plan for details.	Lump Sum		---	\$ 18,000.00
34	SP - 2	Collar for Storm Drain and Culvert	Lump Sum		---	\$ 1,025.00
197	BID ALT 1	Hot Mix Asphalt (Grading SX, Binder Grade 64-22) (with Fiber)	1,940.	Tons	\$ 6.50	\$ 12,610.00
INC		Incentive HMA 64-22	---	---	---	\$ 30,000.00
INC		Incentive HMA 76-28	---	---	---	\$ 5,000.00
MCR		Minor Contract Revisions	---	---	---	\$ 150,000.00
Bid Amount:						\$ 2,182,380.25

Bid Amount:

Two Million One Hundred Eighty Two Thousand Three Hundred Eighty Dollars & Twenty Five Cents **dollars**

The undersigned Bidder proposes to subcontract the following portion of Work:

<u>Name & address of Sub-Contractor</u>	<u>Description of work to be performed</u>	<u>% of Contract</u>
<u>Traffic Control Specialists LLC - Grand Junction, Co</u>	<u>Traffic Control</u>	<u>6.3%</u>
<u>High Desert Surveying LLC - Grand Junction, Co</u>	<u>Surveying</u>	<u>0.33%</u>
<u>TY Striping - Grand Junction, Co</u>	<u>Pavement Marking</u>	<u>1.58%</u>
<u>Mountain Valley Contracting- Grand Junction, Co</u>	<u>Milling</u>	<u>2.12%</u>

The undersigned Bidder acknowledges the right of the City to reject any and all Bids submitted and to waive informalities and irregularities therein in the City's sole discretion.

By submission of the Bid, each Bidder certifies, and in the case of a joint Bid each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without collusion, consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

Deep Creek Landscaping - Grand Junction, Co	Seeding/Retaining Wall	0.70%
Gonzales Construction - Delores, Co	Guardrail	4.51%
Mays Concrete - Grand Junction, Co	Concrete	0.52%



Purchasing Division

ADDENDUM NO. 1

DATE: March 29, 2019
FROM: City of Grand Junction Purchasing Division
TO: All Offerors
RE: 2019 Contract Street Maintenance – Asphalt Overlays IFB-4622-19-DH

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:

1. Q. SP-2:

Is indicating that there is to be approximately 1,276 CY of material to be hauled offsite and disposed of at the City Riverside Park Yard. Similar verbiage was used in last years contract and the City allowed the contractor to waste the material on site. Will this be allowed for this year's contract?

A. The excess materials cannot be wasted on-site due to grading restrictions in most locations. These excess materials should be exported to the City Riverside Park Yard as indicated in the bid documents.

2. Q. SP-4 Clarification

The specification is calling out two options for the anti-strip material a liquid or hydrated lime. In past projects with the City, Contractors generally provide a liquid anti-strip. Is this still the case or is the City wanting to go towards the utilization of hydrated lime?

A. Either liquid anti-strip or hydrated lime will be acceptable.

3. Q. Guardrail

Are we installing the MGS guardrail system on this project?

A. Yes, MGS guardrails in compliance with current CDOT/MASH standards should be installed.

4. Q. on the City Overlay project you are calling out a 72" Dia. manhole for a 48" line, City spec calls for a 90" manhole for this size of pipe, which size of manhole do we need to quote? Please advise.

A. Please utilize a 72" manhole.

5. See attached updated project plans.

6. Contractor shall utilize the attached updated Price Bid Schedule when submitting their bid response.

The original solicitation for the project noted above is amended as noted.

All other conditions of subject remain the same.

Respectfully,

A handwritten signature in black ink, appearing to read "Duane Hoff Jr.", written in a cursive, stylized script.

Duane Hoff Jr., Senior Buyer
City of Grand Junction, Colorado

BID BOND

KNOW ALL BY THESE PRESENTS, That we, Oldcastle SW Group, Inc. dba United Companies of Mesa County

of 2273 River Road, Grand Junction, CO 81502

(hereinafter called the Principal), as Principal, and Fidelity and Deposit Company of Maryland

(hereinafter called the Surety), as Surety are held and firmly bound unto

City of Grand Junction

(hereinafter called the Obligee) in the penal sum of

Five Percent of Amount Bid Dollars (5%)

for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, That WHEREAS, the Principal has submitted or is about to submit a proposal to the Obligee on a contract for

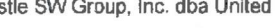

IFB-4622-19-DH 2019 Contract Street Maintenance - Asphalt Overlays

NOW, THEREFORE, If the said Contract be timely awarded to the Principal and the Principal shall, within such time as may be specified, enter into the Contract in writing, and give bond, if bond is required, with surety acceptable to the Oblige for the faithful performance of the said Contract, then this obligation shall be void; otherwise to remain in full force and effect.

Signed and sealed this 3rd day of April, 2019


Dorothy Feil, Assistant Secretary

Oldcastle SW Group, Inc. dba United Companies of Mesa County

 { 

Richard UmbeI, President Title

Fidelity and Deposit Company of Maryland


Lindsey Plattner

By Tina Davis Attorney-in-Fact

State of UT
County of Salt Lake } ss:

On April 03, 2019 , before me, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared

Tina Davis

known to me to be Attorney-in-Fact of Fidelity and Deposit Company of Maryland the corporation described in and that executed the within and foregoing instrument, and known to me to be the person who executed the said instrument in behalf of the said corporation, and he duly acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year stated in this certificate above.

My Commission Expires 11/18/2020 _____


Lindsey Plattner Notary Public



**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Illinois, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Illinois (herein collectively called the "Companies"), by **Robert D. Murray, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Tina Davis, Lisa Hall, Lindsey Plattner and Linda Nipper, all of Salt Lake City, Utah, EACH**, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed; **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 6th day of March, A.D. 2019.



ATTEST:
**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND**

By: **Robert D. Murray**
Vice President

By: **Dawn E. Brown**
Secretary

**State of Maryland
County of Baltimore**

On this 6th day of March, A.D. 2019, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **Robert D. Murray, Vice President and Dawn E. Brown, Secretary** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.



Constance A. Dunn, Notary Public
My Commission Expires: July 9, 2019

ACTION BY WRITTEN CONSENT
IN LIEU OF AN ANNUAL MEETING OF
THE BOARD OF DIRECTORS
OF
OLDCASTLE SW GROUP, INC.

The undersigned, being all of the members of the Board of Directors of Oldcastle SW Group, Inc., a Colorado corporation (the "*Corporation*"), do hereby, pursuant to §7-108-202 of the Colorado Business Corporation Act, give this written consent (a) to the dispensation of an annual meeting of the Board of Directors of the Corporation and (b) to the taking of the following actions, such actions to have the same force and effect had a meeting been duly called and held:

I. ELECTION OF OFFICERS

RESOLVED, that effective January 1, 2017 all previous elections of officers are terminated, and the following persons be, and hereby are, elected to serve as officers of the Corporation (each individually, an "*Officer*" and collectively, the "*Officers*") in the capacities set forth opposite their respective names until such time as their successors shall be elected and qualified:

Richard Umbel	President
Martin Merx	Controller, Treasurer & Secretary
Dorothy Feil	Assistant Secretary
Peter Siegmund	Assistant Secretary

FURTHER RESOLVED, that the Officers be, and each of them hereby is, authorized to execute and deliver agreements, contracts, documents, certificates, and other instruments, under the seal of the Corporation if required, for the purpose of conducting the Corporation's business, including without limitation, selling products and securing construction work, and to take such other action, as they may deem necessary, advisable, convenient, or appropriate to carry out and fully perform duties incident to the office or offices so appointed, and such other duties as may be prescribed by the Board of Directors from time to time;

FURTHER RESOLVED, that the following persons are hereby designated officers solely for the purpose of attesting signatures of other officers on behalf of the Corporation, and for executing and attesting various corporate documents, tax returns, affidavits, and similar such instruments as may be necessary from time to time:

Charles Brown	Assistant Secretary	David M. Toolan	Assistant Secretary
Gary P. Hickman	Assistant Secretary	Michael G. O'Driscoll	Assistant Secretary
M. Craig Hall	Assistant Secretary	William B. Miller	Assistant Secretary

FURTHER RESOLVED, that the President of the Corporation may, from time to time, without further action by the Board of Directors, appoint other persons to serve as authorized employees, or remove any individuals from this capacity, and to direct those appointed to take such action, as he may deem necessary, advisable, convenient or appropriate to carry out and fully perform the duties incident to the office of President.

II. REMOVALS

RESOLVED, that any current officers of the Corporation not elected in the foregoing resolution are hereby removed.

III. AUTHORIZATION OF TRADE AND DIVISIONAL NAMES

RESOLVED, that the activities and operations of the Corporation may be carried on in any of the following manners or styles as may from time-to-time be deemed necessary or appropriate:

B&B Excavating
Delta Sand & Gravel Co.
Four Corners Materials
Telluride Gravel
United Companies of Mesa County
United Paving, Incorporated
United Redi-Mix, Inc.
United Sand and Gravel Company, Inc.

FURTHER RESOLVED, that the President of the Corporation may, from time to time, without further action by the Board of Directors, authorize the use of additional trade names, and to deem unauthorized any trade name previously authorized, as he may deem necessary, advisable, convenient or appropriate.

IV. MISCELLANEOUS

RESOLVED, that all actions previously taken by any Officer of the Corporation appointed hereunder in his/her capacity as such Officer be, and each of them hereby is, adopted, ratified, confirmed and approved in all respects as the authorized acts and deeds of the Corporation;

FURTHER RESOLVED, that each undersigned agrees that electronic signatures, whether digital or encrypted, of the Board of Directors are intended to authenticate this consent and to have the same force and effect as manual signatures. As used in the previous sentence, the term "electronic signatures" means any electronic sound, symbol or process attached to or logically associated with this consent and executed and adopted by a member of the Board of Directors with the intent to sign such consent, including, but not limited to, e-mail electronic signatures executed through Adobe® Sign; and

FURTHER RESOLVED, that this Consent, following execution by all of the members of the Board of Directors, be filed in appropriate order in the minute book of the Corporation.

Signature: 
Scott W. Parson (Apr 25, 2017)

Email: scott.parson@stakerparson.com

Signature: 
John Parson (Apr 25, 2017)

Email: john.parson@oldcastlematerials.com