

November 5, 2020

ADDENDUM 1 – JOB 26

TO: All prospective bidders on Project NH-4-002(125)905, Job No. 26 scheduled for the November 13, 2020 bid opening.

The following plans and request for proposal revision shall be made:

Plan Revisions:

See attached summaries from Paul Benning, P.E. dated November 4, 2020 for an explanation.

Request for Proposal Revisions:

Remove and replace pages 5 thru 9 of 11 of the Proposal pages located at the beginning of the Request for Proposal with pages revised 11/4/2020.

Bid Item Changes are summarized in the Plan Addendum Summary and Approval.

This addendum is to be incorporated into the bidder's proposal for this project. AASHTOWare Project Bids files should be updated by downloading the addendum file from the Bid Express on-line bidding exchange at http://www.bidx.com/ and load it into the AASHTOWare Project Bids program.

PHILLIP MURDOFF, P.E. – CONSTRUCTION SERVICES ENGINEER

80: dch Enclosure





PLAN ADDENDUM SUMMARY AND APPROVAL

| | PROJECT INFORMATION | | | | | | | | |
|------------------------------|--|-----------------------|------------|------|-------|--|--|--|--|
| Project: | NHU-4-002(131)906 | | | PCN: | 22446 | | | | |
| Location: | US 2B (Burdick Expy) – 1st S | t SW to Valley Street | | | | | | | |
| Date: | te: 11/03/2020 Lead Designer: Apex Engineering Group | | | | | | | | |
| Bid Opening Date: 11/13/2020 | | JOB#: 26 | Addendum#: | 1 | | | | | |

| | PLAN SHEET CHANGES | | | | | | | |
|---------|---------------------------|--|--|--|--|--|--|--|
| Section | Section Sheet Description | | | | | | | |
| 6 | 2 | Revised Plan Note 704-P03 | | | | | | |
| 6 | 5 | Revised Plan Note 772-P03 | | | | | | |
| 6 | 8 | Revised Plan Note 772-P21 | | | | | | |
| 8 | 1 | Revised quantities for Flat Sheet for Signs – Type XI and Flat Sheet for Signs – Type IV | | | | | | |
| 100 | 4 | Removed "NE" from the 2 nd St listings in upper left corner | | | | | | |
| 150 | 14 | Removed transformer base from Pushbutton #1 Post | | | | | | |
| 150 | 15 | Removed transformer base from Pushbutton #3/#4 Post and #4/#3 Post; Revised labeling for Pushbutton Post #4/#3 to #7/#8 | | | | | | |
| 150 | 23 | Removed transformer base from Pushbutton #5 Post | | | | | | |
| 150 | 24 | Removed transformer base from Pushbutton #3 Post; Removed transformer base from Pushbutton #7/#8 Post | | | | | | |
| 150 | 32 | Added transformer base to signal poles | | | | | | |

| | CHANGES MADE TO BID ITEMS FOR JOB | | | | | | | | | |
|------|-----------------------------------|--|------|----------------------|---------------------|--|--|--|--|--|
| Spec | Code | Description | Unit | Previous Quantity | Revised Quantity | | | | | |
| 754 | 0110 | Flat Sheet for Signs-Type XI Refl Sheeting | SF | 235 | 234.8 | | | | | |
| 754 | 0112 | Flat Sheet for Signs-Type IV Refl Sheeting | SF | 242 | 290 | | | | | |
| | | | | | | | | | | |

APPROVAL

| Should the revisions described above be pr | rocessed as a p | plan addendum? |
|--|-----------------|----------------|
|--|-----------------|----------------|

| X Yes | No | |
|---------------------------|------------------------|-----------|
| Paul m. Paui | | 11/4/2020 |
| Paul Benning, P.E. – Loca | al Government Engineer | Date |

BID OPENING: November 13, 2020

0 Job 026

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BID ITEMS

Projects: NHU-4-002(131)906 (PCN-22446) and NH-4-002(125)905 (PCN-22216)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

| | total. Do not carry unit prices further than three (3) decimal places. | | | | | | | | | | |
|------|--|------|-----------------------------------|-------|----------|------------|-----|------------|----|--|--|
| Item | Spec | Code | | | Approx. | Unit Price | | Amount | | | |
| No. | No. | No. | Description | Unit | Quantity | \$\$\$\$\$ | 000 | \$\$\$\$\$ | 00 | | |
| 001 | 103 | 0100 | CONTRACT BOND | L SUM | 1. | | | | | | |
| 002 | 202 | 0114 | REMOVAL OF CONCRETE PAVEMENT | SY | 2,091. | | | | | | |
| 003 | 202 | 0130 | REMOVAL OF CURB & GUTTER | LF | 3,004. | | | | | | |
| 004 | 202 | 0132 | REMOVAL OF BITUMINOUS SURFACING | SY | 1,540. | | | | | | |
| 005 | 261 | 0200 | WEIGHTED FIBER ROLLS | LF | 640. | | | | | | |
| 006 | 261 | 0201 | REMOVE WEIGHTED FIBER ROLLS | LF | 640. | | | | | | |
| 007 | 302 | 0121 | AGGREGATE BASE COURSE CL 5 | CY | 10. | | | | | | |
| 800 | 401 | 0050 | TACK COAT | GAL | 720. | | | | | | |
| 009 | 411 | 0114 | MILLING PAVEMENT SURFACE - 2 INCH | SY | 14,434. | | | | | | |
| 010 | 430 | 0045 | SUPERPAVE FAA 45 | TON | 1,603. | | | | | | |
| 011 | 430 | 1000 | CORED SAMPLE | EA | 14. | | | | | | |
| 012 | 430 | 2000 | PATCHING | TON | 469. | | | | | | |
| 013 | 430 | 5806 | PG 58H-28 ASPHALT CEMENT | TON | 97. | | | | | | |
| 014 | 550 | 0113 | 8IN REINF CONCRETE PAVEMENT CL AE | SY | 60. | | | | | | |
| 015 | 624 | 0119 | REMOVE PEDESTRIAN RAILING | LF | 6. | | | | | | |
| 016 | 624 | 0121 | RESET PEDESTRIAN RAILING | LF | 12. | | | | | | |

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Job 026

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BID ITEMS

Projects: NHU-4-002(131)906 (PCN-22446) and NH-4-002(125)905 (PCN-22216)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

| | total. Do not carry unit prices further than three (3) decimal places. | | | | | | | | | | |
|------|--|------|----------------------------------|-------|----------|------------|-----|------------|----|--|--|
| Item | Spec | Code | | | Approx. | Unit Price | | Amount | | | |
| No. | No. | No. | Description | Unit | Quantity | \$\$\$\$\$ | 000 | \$\$\$\$\$ | 00 | | |
| 017 | 702 | 0100 | MOBILIZATION | L SUM | 1. | | | | | | |
| 018 | 704 | 0100 | FLAGGING | MHR | 150. | | | | | | |
| 019 | 704 | 1000 | TRAFFIC CONTROL SIGNS | UNIT | 2,591. | | | | | | |
| 020 | 704 | 1052 | TYPE III BARRICADE | EA | 6. | | | | | | |
| 021 | 704 | 1058 | PEDESTRIAN WALKWAY | LF | 1,425. | | | | | | |
| 022 | 704 | 1060 | DELINEATOR DRUMS | EA | 417. | | | | | | |
| 023 | 704 | 1067 | TUBULAR MARKERS | EA | 203. | | | | | | |
| 024 | 704 | 1086 | SEQUENCING ARROW PANEL-TYPE B | EA | 1. | | | | | | |
| 025 | 704 | 1087 | SEQUENCING ARROW PANEL-TYPE C | EA | 3. | | | | | | |
| 026 | 704 | 1500 | OBLITERATION OF PAVEMENT MARKING | SF | 2,240. | | | | | | |
| 027 | 704 | 2108 | TEMPORARY CURB RAMP | EA | 38. | | | | | | |
| 028 | 706 | 0550 | BITUMINOUS LABORATORY | EA | 1. | | | | | | |
| 029 | 706 | 0600 | CONTRACTOR'S LABORATORY | EA | 1. | | | | | | |
| 030 | 708 | 1540 | INLET PROTECTION-SPECIAL | EA | 68. | | | | | | |
| 031 | 708 | 1541 | REMOVE INLET PROTECTION-SPECIAL | EA | 68. | | | | | | |
| 032 | 722 | 3455 | CASTING INLET-TYPE 1 | EA | 15. | | | | | | |

Projects: NHU-4-002(131)906 (PCN-22446) and NH-4-002(125)905 (PCN-22216)

BID OPENING: November 13, 2020

BID ITEMS

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| Bidder must type or neatly print unit prices in numerals, make extensions for each ite | m, and |
|--|--------|
| total. Do not carry unit prices further than three (3) decimal places. | |

| | total. Do not carry unit prices further than three (3) decimal places. | | | | | | | | | |
|-----|--|------|--------------------------------|------|----------|------------|-----|------------|----|--|
| | Spec | Code | | | Approx. | Unit Price | • | Amount | | |
| No. | No. | No. | Description | Unit | Quantity | \$\$\$\$\$ | 000 | \$\$\$\$\$ | 00 | |
| 033 | 722 | 3460 | CASTING INLET-TYPE 2 | EA | 6. | | | | | |
| 034 | 722 | 6140 | ADJUST GATE VALVE BOX | EA | 19. | | | | | |
| 035 | 722 | 6160 | ADJUST INLET | EA | 9. | | | | | |
| 036 | 722 | 6200 | ADJUST MANHOLE | EA | 22. | | | | | |
| 037 | 722 | 6240 | ADJUST UTILITY APPURTENANCE | EA | 9. | | | | | |
| 038 | 724 | 0270 | REMOVE GATE VALVE & BOX | EA | 1. | | | | | |
| 039 | 724 | 0300 | GATE VALVE & BOX 6IN | EA | 1. | | | | | |
| 040 | 724 | 0411 | 6IN HYDRANT | EA | 1. | | | | | |
| 041 | 724 | 0430 | REMOVE HYDRANT | EA | 1. | | | | | |
| 042 | 748 | 0100 | CURB & GUTTER | LF | 2,634. | | | | | |
| 043 | 748 | 0120 | CURB & GUTTER MOUNTABLE-TYPE I | LF | 333. | | | | | |
| 044 | 748 | 0520 | CURB-TYPE I | LF | 493. | | | | | |
| 045 | 748 | 1030 | VALLEY GUTTER 72IN | SY | 63. | | | | | |
| 046 | 750 | 0030 | PIGMENTED IMPRINTED CONCRETE | SY | 138. | | | | | |
| 047 | 750 | 0115 | SIDEWALK CONCRETE 4IN | SY | 2,020. | | | | | |
| 048 | 750 | 2115 | DETECTABLE WARNING PANELS | SF | 1,120. | | | | | |

BID OPENING: November 13, 2020

BID ITEMS

Projects: NHU-4-002(131)906 (PCN-22446) and NH-4-002(125)905 (PCN-22216)

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| Bidder must type or neatly print unit prices in numerals, make extensions for each item, and |
|--|
| total. Do not carry unit prices further than three (3) decimal places. |

| Item | Spec | Code | | | Approx. | Unit Price | | Amount | |
|------|------|------|---|------|----------|------------|-----|------------|----|
| No. | | No. | Description | Unit | Quantity | \$\$\$\$\$ | 000 | \$\$\$\$\$ | 00 |
| 049 | 754 | 0110 | FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING | SF | 234.800 | | | | |
| 050 | 754 | 0112 | FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING | SF | 290. | | | | |
| 051 | 754 | 0170 | FLEXIBLE DELINEATORS | EA | 11. | | | | |
| 052 | 754 | 0206 | STEEL GALV POSTS-TELESCOPING PERFORATED TUBE | LF | 392. | | | | |
| 053 | 754 | 0592 | RESET SIGN PANEL | EA | 27. | | | | |
| 054 | 754 | 0593 | RESET SIGN SUPPORT | EA | 1. | | | | |
| 055 | 762 | 0110 | EPOXY PVMT MK 4IN LINE-GROOVED | LF | 5,285. | | | | |
| 056 | 762 | 0112 | EPOXY PVMT MK MESSAGE | SF | 128. | | | | |
| 057 | 762 | 0430 | SHORT TERM 4IN LINE-TYPE NR | LF | 5,285. | | | | |
| 058 | 762 | 1307 | PREFORMED PATTERNED PVMT MK 6IN LINE-GROOVED | LF | 3,976. | | | | |
| 059 | 762 | 1309 | PREFORMED PATTERNED PVMT MK 8IN LINE-GROOVED | LF | 268. | | | | |
| 060 | 762 | 1325 | PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED | LF | 1,527. | | | | |
| 061 | 770 | 4525 | REVISE LIGHTING SYSTEM | EA | 1. | | | | |
| 062 | 772 | 2145 | FLASHING BEACON-MA MOUNTED | EA | 1. | | | | |
| 063 | 772 | 3150 | REMOVE FLASHING BEACON SYSTEM | EA | 1. | | | | |
| 064 | 772 | 9811 | TRAFFIC SIGNAL SYSTEM - SITE 1 | EA | 1. | | | | |

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BID ITEMS

Projects: NHU-4-002(131)906 (PCN-22446) and NH-4-002(125)905 (PCN-22216)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

| | total. Do not carry unit prices further than three (3) decimal places. | | | | | | | | | |
|------|--|------|--------------------------------|------|---------------------|------------|-----|------------|----|--|
| Item | Spec | Code | | | Approx. Quantity | Unit Price | | Amount | | |
| No. | No. | No. | Description | Unit | Quantity | \$\$\$\$\$ | 000 | \$\$\$\$\$ | 00 | |
| 065 | 772 | 9812 | TRAFFIC SIGNAL SYSTEM - SITE 2 | EA | 1. | | | | | |
| 066 | 772 | 9813 | TRAFFIC SIGNAL SYSTEM - SITE 3 | EA | 1. | | | | | |
| 067 | 772 | 9814 | TRAFFIC SIGNAL SYSTEM - SITE 4 | EA | 1. | | | | | |
| 068 | 970 | 0008 | LANDSCAPE PREPARATION | SY | 361. | | | | | |
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| | | | TOTAL SUM BID | | | | | | | |

704-P01 TRAFFIC CONTROL PHASING: The traffic control details, as indicated on the plans, have been developed on the basis that this project will be constructed in phases as described below. The work zone traffic control summary lists include the required number of devices for each phase of work. Devices will be moved as required for each phase. The following traffic control phasing for the construction of pedestrian ramps, new curb and gutter, signals, lighting, and mill & overlay has been developed for this project:

Phase 1: Construct proposed ADA Ramps on South Side of Burdick Expressway.

- Work area is restricted to a maximum of two quadrants of an intersection at one time. Multiple intersections can be worked on concurrently, no more than three intersections can be worked on concurrently. No two consecutive signalized intersections can be worked on concurrently.
- (1) Lane closure adjacent to the curb and gutter.
- Maintain two lanes of traffic at all times.
- Provide temporary curb ramps, pedestrian channelization, and temporary pedestrian surfacing.
- Construct proposed pedestrian ADA ramps at all intersections, including new curb and gutter, ramps, landings (upper and lower landings), signal foundations (where applicable), and full depth pavement replacement (where applicable).
- Provide temporary pedestrian surfacing to transition proposed sidewalk into existing sidewalk. If the cross slope of the existing sidewalk exceeds 2%, transition the temporary pedestrian surfacing at a maximum rate of 0.5% per 1 linear foot of surfacing.

Phase 2: Construct proposed ADA Ramps on North Side of Burdick Expressway using the same requirements as Phase 1.

Phase 3: Mill and overlay pavement on Burdick Expressway, install permanent pavement markings, signals, and lighting utilizing lane closures and flagging.

- Complete Phase 1 & 2 prior to starting Phase 3.
- Work area limited to exterior lanes adjacent to curbs.
- Two lanes closures are provided in this phase.

Phase 4: Mill and overlay pavement on Burdick Expressway and install permanent pavement markings utilizing lane closures and flagging.

- Work area limited to interior (2) middle lanes.
- Two lanes closures are provided in this phase.

| Revised 11/3/2020 | STATE | ATE PROJECT NO. | | SHEET NO. |
|-------------------|-------|-------------------|---|--------------|
| | ND | NHU-4-002(131)906 | 6 | 2 |

704-P02 TRAFFIC CONTROL DEVICES: The traffic control devices list has been developed using the layouts shown in the plans and the following layouts shown on the Standard Drawings:

D-704-25 Type X, D-704-34 Lane closure

704-P03 TRAFFIC CONTROL DEVICES: Traffic control devices have been provided for a single full lane closure of multiple sites simultaneously, as listed in the phase descriptions in Note 704-P02. Lane closures must remain at all times if there are drop offs within the work zone.

During milling and paving operations, lane closures will be permitted during daylight hours while construction is active. Remove temporary lane closures at the end of each working day. If ordinary operation of intersections is not restored, provide 24-hour flagger operations until normal traffic operation can be restored. No additional payments will be made for flagging if ordinary traffic operation is not restored at the end of each working day.

The following devices remain in place for the duration a construction site is active:

- 1. W20-1-48 Road Work Ahead
- 2. G20-2-48 End Road Work
- 3. All pedestrian signing devices See Section 100
- 4. All lane narrowing devices
- 5. Devices adjacent to active work zones
- 6. Pedestrian temporary railings and curb ramps See Section 100
- 706-P01 LABORATORY: Supply a copy machine, with reduction capabilities, and toner for the Bituminous Laboratory. Include the cost for these items in the contract unit price bid for "Bituminous Laboratory".
- 708-P01 INLET PROTECTION: Furnish, install and maintain (clean) drainage inlet filter assemblies to collect sediment in surface storm water runoff. Dispose of debris or silt that has accumulated in the bag. Periodic cleaning of the filter is needed as necessary. Remove drainage inlet filter when vegetation has established.

Provide Wimco, Lange IPD, Flexstorm, Danady Curbsack, or an approved equal.

Keep filter in place until after the gradient surfaces are stabilized and the surrounding street is clean of debris. Include all costs related to the material, installation, maintenance, replacement and removal in the price bid for "Inlet Protection-Special".

This document was originally issued and sealed by Derek Anderson, Registration Number PE-7107, on 11/3/2020 and the original document is stored at the North Dakota Department of Transportation.

SECTION 150

772-009 PADLOCKS: Obtain padlocks for feed points from the City of Minot.

772-P01 TRAFFIC SIGNAL SYSTEM: Include in the price bid for "Traffic Signal System – Site _" all labor and equipment necessary for the signal system to be fully operational as shown in the plans upon construction completion. This includes but is not limited to, the installation of the following features where applicable; traffic signal standards and foundation, vehicular heads, video detection system, traffic signal controller and all ancillary hardware (conflict monitor, load switch, flasher, etc.), controller cabinet and foundation, and all cable, conduit, junction boxes, and appurtenances to install the traffic signal system completely.

772-P02 SIGNAL POLES AND COMBINATION LIGHT AND SIGNAL STANDARDS: Provide signal poles with rotatable mast arms.

772-P03 TRAFFIC SIGNAL STANDARDS BASE: Provide traffic signal standards with "T" transformer base type standards. Include all costs, labor, materials and equipment necessary for furnishing and installing this item in the price bid for "Traffic Signal System – Site _" and "Flashing Beacon-MA Mounted".

772-P04 TRAFFIC SIGNAL CONTROLLER: Provide Econolite ATC Cobalt G controllers for all intersections. The controllers will be NEMA Standard ATC volume density controllers with the traffic counting capability operational. This also includes any programming and data entry (i.e. signal timing plans) necessary to provide fully functional traffic signal controllers. Coordinate with the City of Minot Traffic Engineer, Stephen Joersz, at 701-857-4100 for signal timing plans to be programmed into the controllers. Include all costs, labor, materials and equipment necessary for programming installing this item in the price bid for "Traffic Signal System – Site _".

772-P05 TRAFFIC SIGNAL CABINET: Provide Econolite Super R 65 cabinet for all intersections. Provide all equipment required to install a fully functioning operational cabinet. This includes but is not limited to the cabinet, battery back-up, detector amplifiers (furnished and installed), other ancillary signal components (such as load switches, conflict monitors, etc.), concrete foundation, and controller cabinet components connected as required to make the new controller equipment operational with the proposed signal equipment. Provide a GFCI receptacle in each controller cabinet. Include all costs, labor, materials and equipment necessary for programming installing this item in the price bid for "Traffic Signal System – Site _".

772-P06 BATTERY BACK-UP: Equip the traffic signal cabinets with an "on-line" type Uninterruptible Power Supply (UPS) that provides power conditioning in both normal and backup mode. Provide UPS that are ethernet capable. Size the UPS to provide backup power to the system for a minimum of 8 hours in full signalized operation with a 450-watt load. Provide aux contacts to put the system into flash operation. The UPS will incorporate full power management and diagnostic function.

| Revised 11/3/20 | STATE | PROJECT NO. | SECTION NO. | SHEET NO. |
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| | ND | NHU-4-002(131)906 | 6 | 5 |

The UPS will automatically provide battery back-up power to the controller system with no interruption when the electric utility power supply de-energizes. The UPS will operate such that it does not provide power to the de-energized incoming electric utility service conductors.

Install the UPS in a temperature and humidity controlled environment. Install the UPS in a separate enclosure on the same pad as the signal controller cabinet., Include all materials, labor and equipment necessary to furnish and install the battery back-up in the price bid for "Traffic Signal System – Site".

772-P07 TRAFFIC SIGNAL CABINET FOUNDATION: Construct a concrete foundation as shown on standard drawing D770-1 along with three spare 2" conduit sweeps.

Extend the controller cabinet pad mount foundation so there is a minimum of 3" of clearance from the outside edge of the cabinets to the outside edge of the foundation on any side.

When setting traffic signal cabinet enclosures directly on the concrete foundation, sealant is to be placed on the concrete foundation prior to setting the enclosure. Also, caulk the concrete/enclosure interface both inside and outside of the enclosure.

Furnishing and installing the cabinet foundation is included in the price bid for "Traffic Signal System – Site _".

772-P08 CONTROLLER WORKING SLAB: Install 4" thick controller working slabs that are 6 feet wide and extend a minimum of 4 feet from the face of the controller foundations. Reinforce the slabs with 6" x 6" x 10 GA welded wire fabric and tie the slabs to the controller foundations with 18-inch long #3 rebar spaced 18 inches on center. Provide a slope of .25 inches per foot away from the controller cabinet foundations. Install the slabs to be 2" higher than the closest point of the top of the slab to finished grade. Furnishing and installing the working slabs is included in the price bid for "Traffic Signal System – Site _".

This document was originally issued and sealed by Stephen R. Joersz, Registration Number PE-27822, on 11/3/2020 and the original document is stored at the North Dakota Department of Transportation.

772-P21 FATIGUE CATEGORY: The contractor is to provide traffic signal standards that meet or exceed the fatigue categories listed below for each traffic signal standard. Include all costs associated with fatigue categories in the price bid for "Traffic Signal System – Site _" and "Flashing Beacon-MA Mounted".

| Location of Signal | Fatigue Category | | | | |
|---|--------------------------|--|--|--|--|
| Standard | | | | | |
| Site 1 – Burdick Expwy and | S Main St | | | | |
| - Northeast Signal | Category I | | | | |
| - Southwest Signal | Category I | | | | |
| Site 2 – E Burdick Expwy ar | nd 3 rd St SE | | | | |
| - Northwest Signal | Category II | | | | |
| - Southeast Signal | Category II | | | | |
| - Northeast Signal | Category II | | | | |
| - Southwest Signal | Category II | | | | |
| Site 3 – E Burdick Expwy ar | nd Valley St/Front St | | | | |
| - Northwest Signal | Category II | | | | |
| - Southeast Signal | Category II | | | | |
| - Northeast Signal | Category I | | | | |
| - Southwest Signal | Category III | | | | |
| Flashing Beacon – Burdick Expwy and 1st St SE | | | | | |
| - Northeast Signal | Category II | | | | |
| - Southeast Signal | Category II | | | | |

772-P22 PROTECTIVE BOLLARDS: The contractor is to provide and install hour (4) protective bollards near the E Burdick and 3rd Street SE traffic signal cabinet. The protective bollard is to follow the detail shown on Section 150 Sheet 11. Include all labor and materials associated with the protective bollards in the price bid for "Traffic Signal System – Site 2".

SECTION NO.

PROJECT NO.

NHU-4-002(131)906

Revised 11/3/20

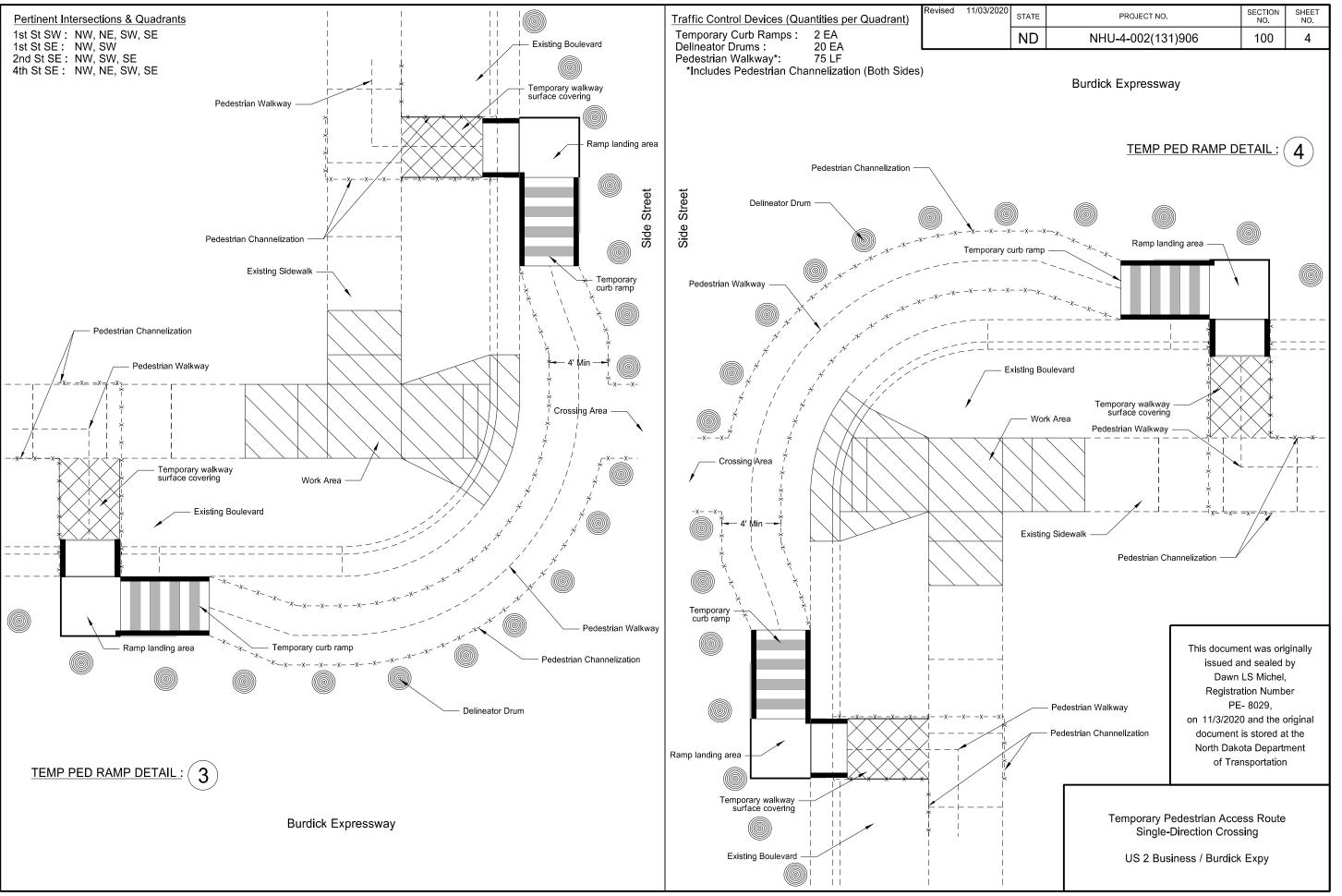
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Revised 11/3/2020 STATE PROJECT NO. SECTION NO. SHEET NO. ND NHU-4-002(131)906 8 1

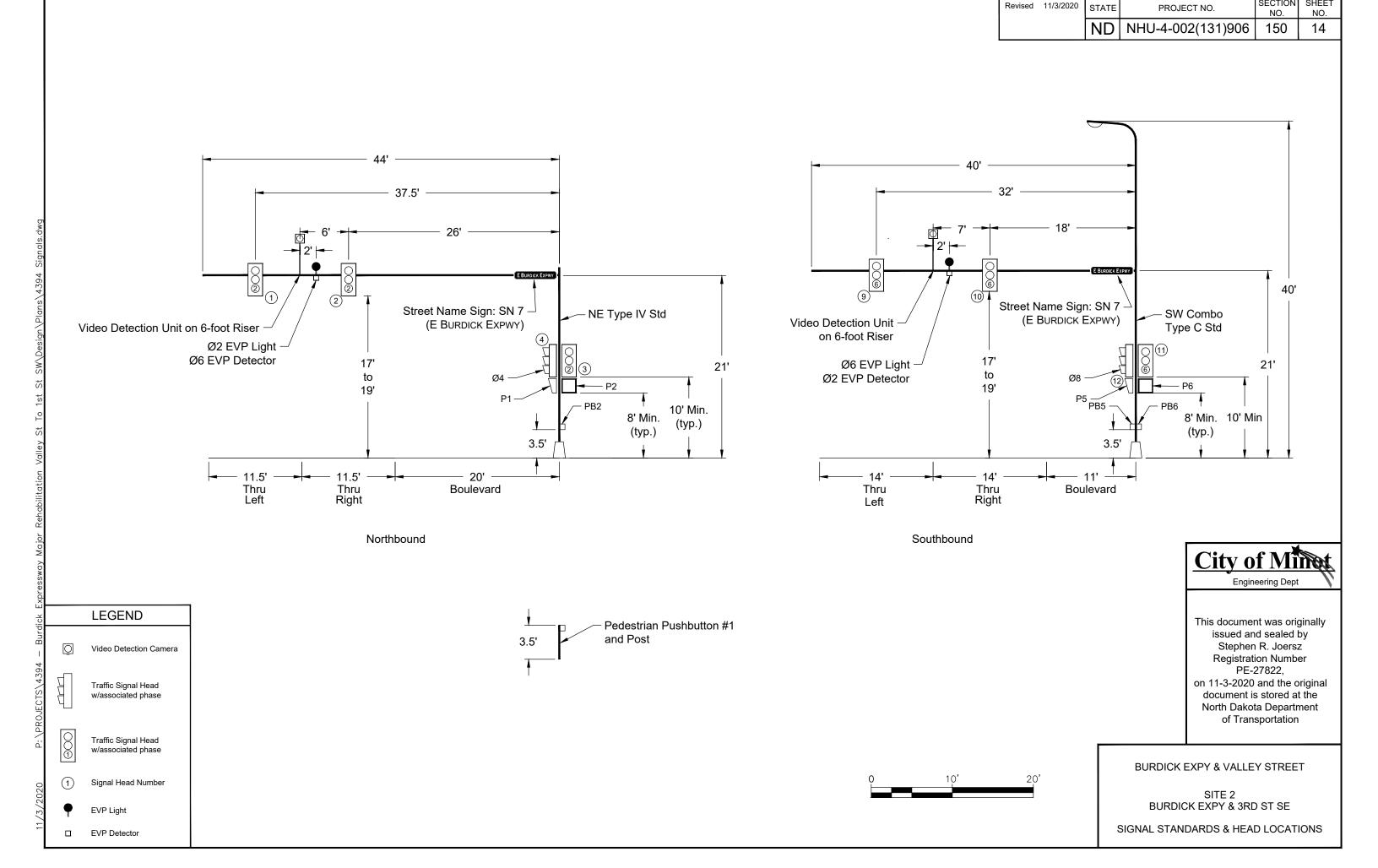
Estimated Quantities

| V | H-4 | 4-0 | 020 | 12 | 5)9(|)5 |
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| | | | | NHU Funding | City Funding | |
|------|------|--|----------|-------------|--------------|-------|
| SPEC | CODE | ITEM DESCRIPTION | UNIT | | | TOTAL |
| 103 | 0100 | CONTRACT BOND | L SUM | 0.7 | | 0.7 |
| 202 | 0114 | REMOVAL OF CONCRETE PAVEMENT | SY | 854 | | 854 |
| 202 | 0130 | REMOVAL OF CURB & GUTTER | LF | 1032 | | 1032 |
| 202 | 0132 | REMOVAL OF BITUMINOUS SURFACING | SY | 957 | | 957 |
| 261 | 0200 | WEIGHTED FIBER ROLLS | LF | 130 | | 130 |
| 261 | 0201 | REMOVE WEIGHTED FIBER ROLLS | LF | 130 | | 130 |
| 302 | 0121 | AGGREGATE BASE COURSE CL 5 | CY | 10 | | 10 |
| 401 | 0050 | TACK COAT | GAL | 720 | | 720 |
| 411 | 0114 | MILLING PAVEMENT SURFACE - 2 INCH | SY | 14434 | | 14434 |
| 430 | 0045 | SUPERPAVE FAA 45 | TON | 1603 | | 1603 |
| 430 | 1000 | CORED SAMPLE | EA | 14 | | 14 |
| 430 | 2000 | PATCHING | TON | 311 | | 311 |
| 430 | 5806 | PG 58H-28 ASPHALT CEMENT | TON | 97 | | 97 |
| 550 | 0113 | 8IN REINF CONCRETE PAVEMENT CL AE | SY | 60 | | 60 |
| 624 | 0113 | RESET PEDESTRIAN RAILING | LF | 12 | | 12 |
| | 0121 | MOBILIZATION | L SUM | 0.7 | | 0.7 |
| 702 | | | | | | |
| 704 | 0100 | FLAGGING | MHR | 150 | | 150 |
| 704 | 1000 | TRAFFIC CONTROL SIGNS | UNIT | 1622 | | 1622 |
| 704 | 1058 | PEDESTRIAN WALKWAY | LF FA | 450 | | 450 |
| 704 | 1060 | DELINEATOR DRUMS | EA | 270 | | 270 |
| 704 | 1067 | TUBULAR MARKERS | EA - | 130 | | 130 |
| 704 | 1087 | SEQUENCING ARROW PANEL-TYPE C | EA - | 2 | | 2 |
| 704 | 2108 | TEMPORARY CURB RAMP | EA | 12 | | 12 |
| 706 | 0550 | BITUMINOUS LABORATORY | EA | 1 | | 1 |
| 706 | 0600 | CONTRACTOR'S LABORATORY | EA | 1 | | 1 |
| 708 | 1540 | INLET PROTECTION-SPECIAL | EA | 26 | | 26 |
| 708 | 1541 | REMOVE INLET PROTECTION-SPECIAL | EA | 26 | | 26 |
| 722 | 3455 | CASTING INLET-TYPE 1 | EA | | 15 | 15 |
| 722 | 3460 | CASTING INLET-TYPE 2 | EA | | 6 | 6 |
| 722 | 6140 | ADJUST GATE VALVE BOX | EA | 19 | | 19 |
| 722 | 6200 | ADJUST MANHOLE | EA | 21 | | 21 |
| 724 | 0270 | REMOVE GATE VALVE & BOX | EA | 1 | | 1 |
| 724 | 0300 | GATE VALVE & BOX 6IN | EA | 1 | | 1 |
| 724 | 0411 | 6IN HYDRANT | EA | 1 | | 1 |
| 724 | 0430 | REMOVE HYDRANT | EA | 1 | | 1 |
| 748 | 0100 | CURB & GUTTER | LF | 1031 | | 1031 |
| 748 | 0520 | CURB-TYPE I | LF | 190 | | 190 |
| 750 | 0030 | PIGMENTED IMPRINTED CONCRETE | SY | 12 | | 12 |
| 750 | 0115 | SIDEWALK CONCRETE 4IN | SY | 832 | | 832 |
| 750 | 2115 | DETECTABLE WARNING PANELS | SF | 322 | | 322 |
| 754 | 0110 | FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING | SF | 234.8 | | 234.8 |
| 754 | 0112 | FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING | SF | 290 | | 290 |
| 754 | 0206 | STEEL GALV POSTS-TELESCOPING PERFORATED TUBE | LF | 138 | | 138 |
| 754 | 0592 | RESET SIGN PANEL | EA | 9 | | 9 |
| 754 | 0593 | RESET SIGN SUPPORT | EA | 1 | | 1 |
| 762 | 0110 | EPOXY PVMT MK 4IN LINE-GROOVED | LF | 5285 | | 5285 |
| | | EPOXY PVMT MK MESSAGE | | 0_00 | | 0200 |



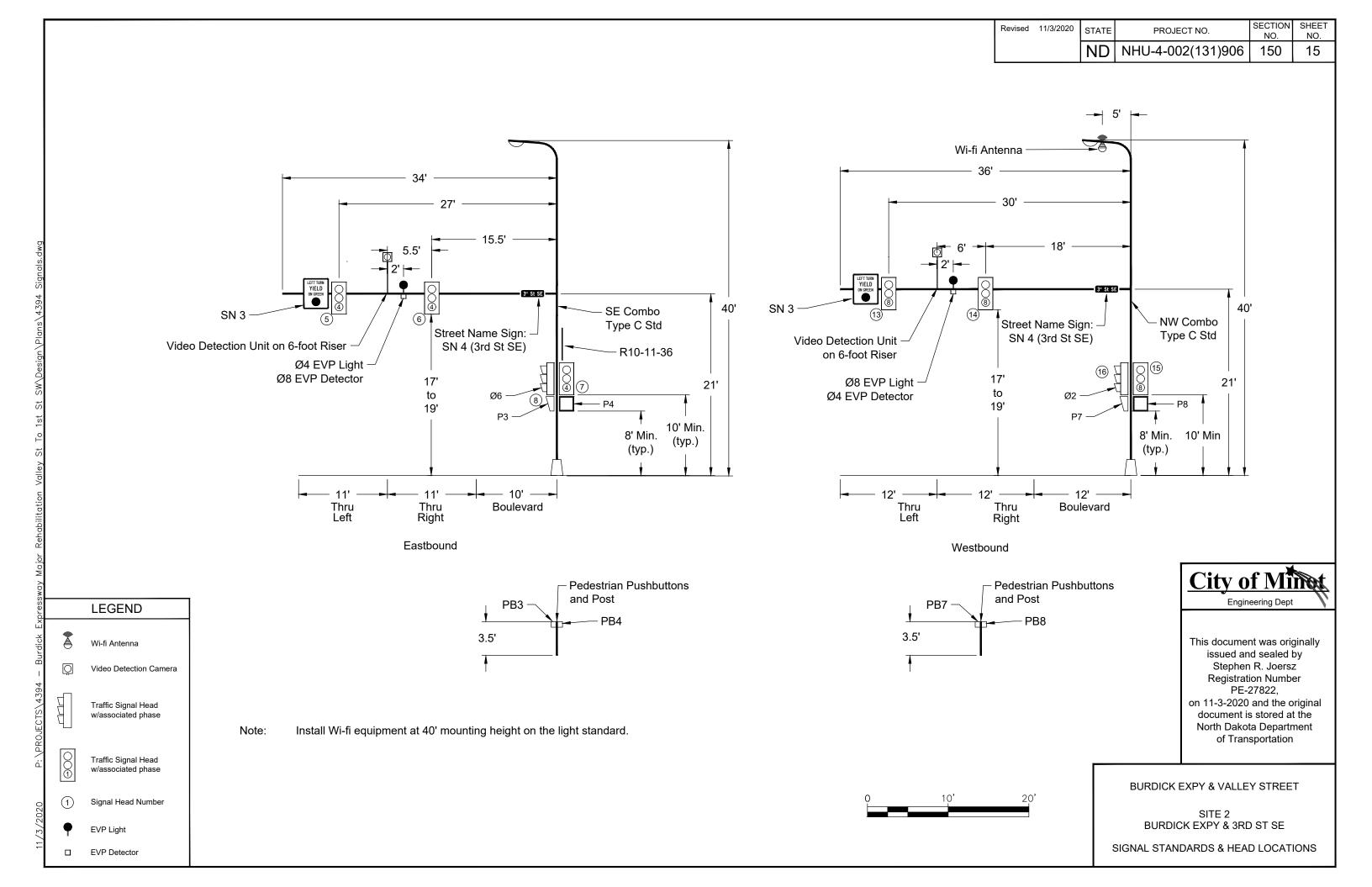
11/3/2020

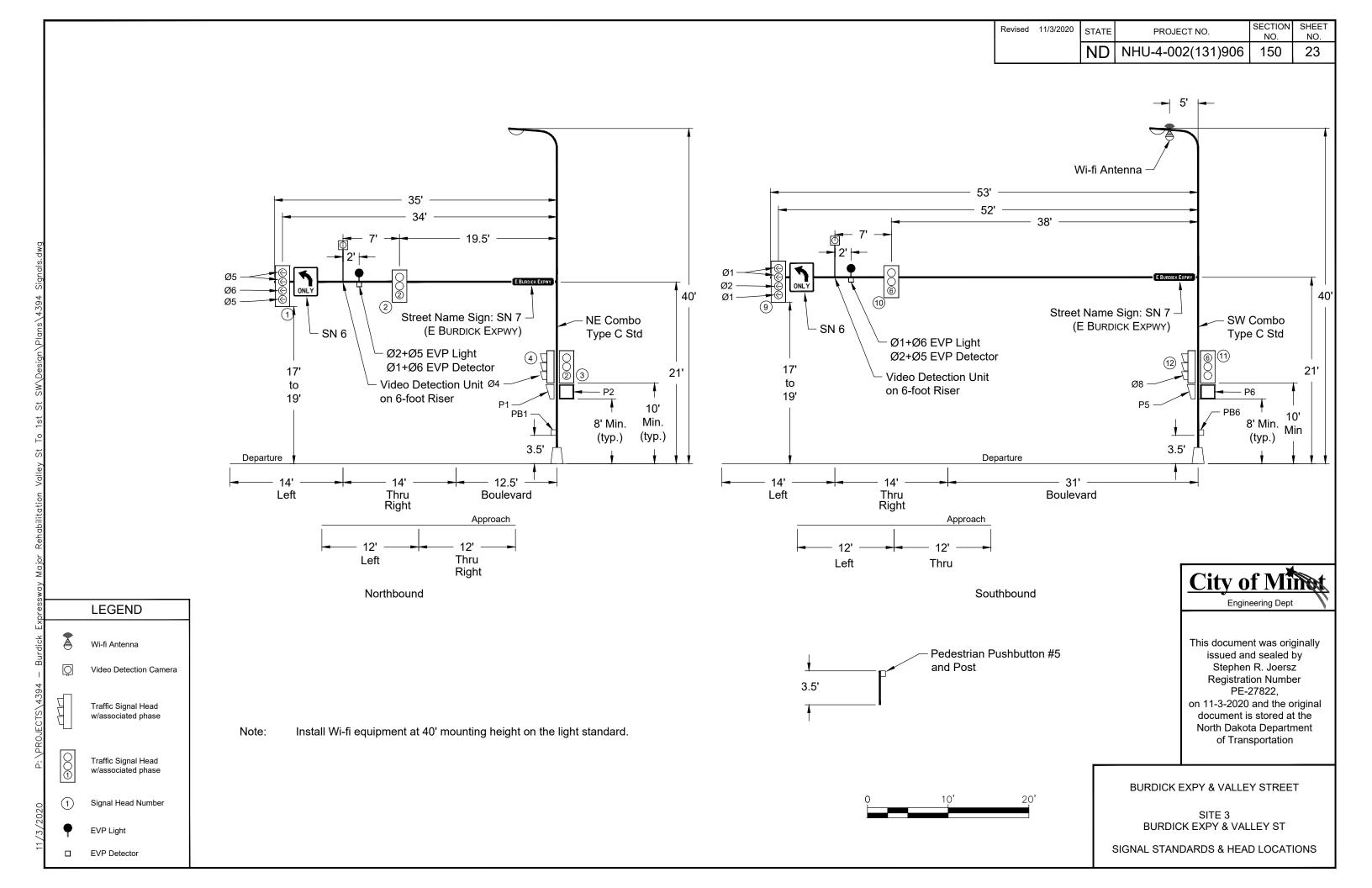


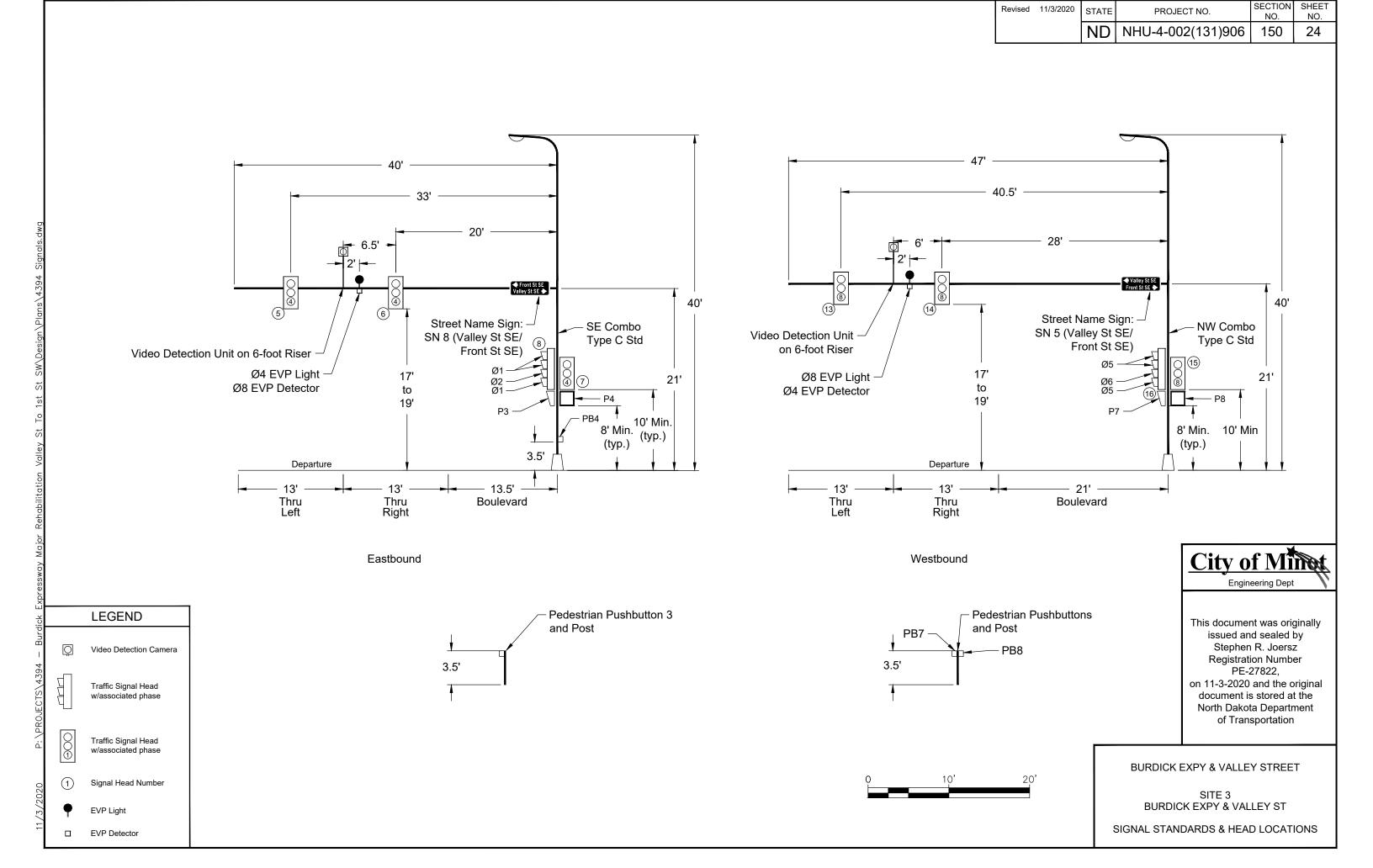
SECTION

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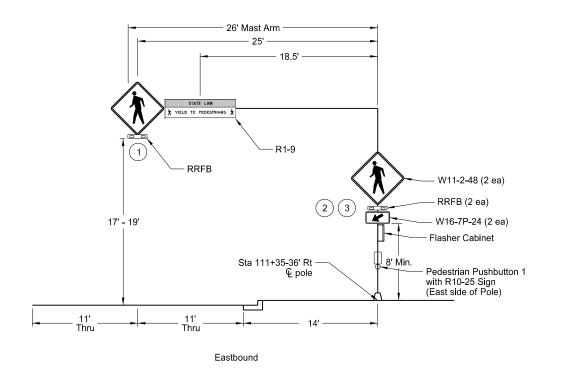
SHEET

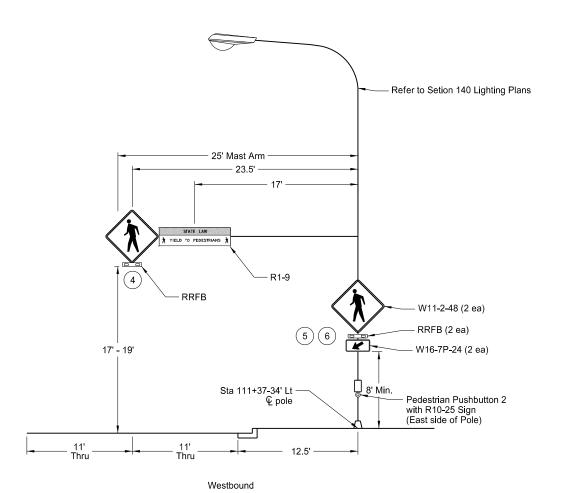






| T | Revised | 11/3/2020 | STATE PROJECT NO. | | SECTION NO. | SHEET NO. |
|---|---------|-----------|-------------------|-------------------|----------------|--------------|
| | | | ND | NHU-4-002(131)906 | 150 | 32 |





This document was originally issued and sealed by Brent Muscha, Registration Number PE- 7123, on 11/3/2020 and the original document is stored at the North Dakota Department of Transportation

Signal Standards and Head Locations

US 2 Business / Burdick Expy

1st St SE

PLAN ADDENDUM SUMMARY AND APPROVAL

| | PROJECT INFORMATION | | | | | | | |
|-------------|--|-------------|-------------------|--|--|--|--|--|
| Project: | NH-4-002(125)905 | | PCN: 22216 | | | | | |
| Location: | US 2B (Burdick Expy) – 16 th St SW to S Broadway (US 83) & 16 th St SE to 27 th St SE | | | | | | | |
| Date: | Date: 11/03/2020 Lead Designer: Apex Engineering Group | | | | | | | |
| Bid Opening | g Date: 11/13/2020 | JOB#: 26 Ac | ddendum#: 1 | | | | | |

| | PLAN SHEET CHANGES | | | | | | |
|---------|---------------------------|---|--|--|--|--|--|
| Section | Section Sheet Description | | | | | | |
| 6 | 2 | Revised Plan Note 704-P03 | | | | | |
| 8 | 1 | Revised quantity for Steel Galv Posts-Telescoping Perforated Tube | | | | | |

| | CHANGES MADE TO BID ITEMS FOR JOB | | | | | | | | | |
|------|-----------------------------------|--|------|----------------------|---------------------|--|--|--|--|--|
| Spec | Code | Description | Unit | Previous Quantity | Revised Quantity | | | | | |
| 754 | 0206 | Steel Galv Posts-Telescoping Perforated Tube | LF | 181.7 | 254 | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
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| | | | | | | | | | | |

APPROVAL

| Should the revisions described above be processed as a plan addendum? | |
|---|-----------|
| | |
| Pan M. Pour | 11/4/2020 |
| Paul Benning, P.E. – Local Government Engineer | Date |

704-P01 TRAFFIC CONTROL PHASING: The traffic control details, as indicated on the plans, have been developed on the basis that this project will be constructed in phases as described below. The work zone traffic control summary lists include the required number of devices for each phase of work. Devices will be moved as required for each phase. The following traffic control phasing for the construction of pedestrian ramps, new curb and gutter, and other items has been developed for this project:

Phase 1: Construct proposed ADA Ramps at 16th St SW, MHS Entrance, Maple St SW, and 8th St SW. Construct proposed valley gutter at Maple St SW and 8th St SW.

- Work area is restricted to a maximum of two quadrants of an intersection at one time. Multiple intersections can be worked on concurrently.
- Start work on the MHS entrance after May 28, 2021.
- (1) Lane closure adjacent to the curb and gutter.
- Maintain two lanes of traffic at all times.
- Provide temporary curb ramps, pedestrian channelization, and temporary pedestrian surfacing.
- Construct proposed pedestrian ADA ramps at all intersections, including new curb and gutter, ramps, landings (upper and lower landings), signal foundations (where applicable), and full depth pavement replacement (where applicable).
- Provide temporary pedestrian surfacing to transition proposed sidewalk into existing sidewalk. If the cross slope of the existing sidewalk exceeds 2%, transition the temporary pedestrian surfacing at a maximum rate of 0.5% per 1 linear foot of surfacing.
- Construct valley gutter at Maple St SW and 8th St SW one-half at a time, so that vehicles can still pass through the other half of the intersection.

Phase 2a: Construct proposed ADA Ramps on north side of Burdick Expressway at 6th St SW, 5th St SW, Park St SW, 4th St SW, and 3rd St SW, using same requirements as Phase 1. Construct proposed pedestrian pushbutton poles on north side at 6th St SW.

Phase 2b: Construct proposed ADA Ramps on south side of Burdick Expressway at 6th St SW, 5th St SW, Park St SW, 4th St SW, and 3rd St SW, using same requirements as Phase 1. Construct proposed pedestrian pushbutton poles on south side at 6th St SW.

Phase 3: Construct proposed ADA Ramps, pigmented imprinted concrete, and flexible delineators at the South Broadway (US 83) intersection, in the following subphases and as shown in Section 100:

- 3a: NE Quad, SW Quad, SE Quad
- 3b: NW Quad, NE Island, E Median
- 3c: SE Island, SW Island
- 3d: W Median

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| | ND | NH-4-002(125)905 | 6 | 2 |

Lane closures are as shown in Section 100. Each subphase shall be completed before the next subphase begins. Provide temporary curb ramps, pedestrian channelization, and temporary pedestrian surfacing. Provide temporary pedestrian surfacing to transition proposed sidewalk into existing sidewalk. If the cross slope of the existing sidewalk exceeds 2%, transition the temporary pedestrian surfacing at a maximum rate of 0.5% per 1 linear foot of surfacing.

Phase 4a: Construct proposed ADA Ramps on north side of Burdick Expressway at 16th St SE, 19th St SE, 20th St SE, 8th Ave SE, and Fairgrounds Entrance, using same requirements as Phase 1. Close north crossing at Fairgrounds Entrance and 20th St SE during construction.

Phase 4b: Construct proposed ADA Ramps on south side of Burdick Expressway at 18th St SE, 19th St SE, 20th St SE, 8th Ave SE, Souris Dr, Fairgrounds Entrance, and 27th St SE using same requirements as Phase 1.

704-P02 TRAFFIC CONTROL DEVICES: The traffic control devices list has been developed using the layouts shown in the plans and the following layouts shown on the Standard Drawings:

D-704-23 Type P D-704-34 Lane closure

704-P03 TRAFFIC CONTROL DEVICES: Traffic control devices have been provided for a single full lane closure of multiple sites simultaneously, as listed in the phase descriptions in Note 704-P01. Lane closures must remain at all times if there are drop-offs within the work zone.

The following devices remain in place for the duration a construction site is active:

- 1. W20-1-48 Road Work Ahead
- 2. G20-2-48 End Road Work
- 3. All pedestrian signing devices See Section 100
- 4. All lane narrowing devices
- 5. Devices adjacent to active work zones
- 6. Pedestrian temporary railings and curb ramps See Section 100

This document was originally issued and sealed by Matthew T. Kinsella, Registration Number PE-5692, on 11/3/2020 and the original document is stored at the North Dakota Department of Transportation.

Estimated Quantities

| Revised | Revised 11/3/2020 STATE | | PROJECT NO. | SECTION NO. | SHEET NO. |
|---------|-------------------------|----|------------------|----------------|--------------|
| | | ND | NH-4-002(125)905 | 8 | 1 |

NHU-4-002(131)906

| | | | | NH Funding | City Funding | |
|------|------|---|-------|------------|--------------|-------|
| SPEC | CODE | ITEM DESCRIPTION | UNIT | | | TOTAL |
| 103 | 0100 | CONTRACT BOND | L SUM | 0.3 | | 0.3 |
| 202 | 0114 | REMOVAL OF CONCRETE PAVEMENT | SY | 1237 | | 1237 |
| 202 | 0130 | REMOVAL OF CURB & GUTTER | LF | 1972 | | 1972 |
| 202 | 0132 | REMOVAL OF BITUMINOUS SURFACING | SY | 583 | | 583 |
| 261 | 0200 | WEIGHTED FIBER ROLLS | LF | 510 | | 510 |
| 261 | 0201 | REMOVE WEIGHTED FIBER ROLLS | LF | 510 | | 510 |
| 430 | 2000 | PATCHING | TON | 158 | | 158 |
| 624 | 0119 | REMOVE PEDESTRIAN RAILING | LF | 6 | | 6 |
| 702 | 0100 | MOBILIZATION | L SUM | 0.3 | | 0.3 |
| 704 | 1000 | TRAFFIC CONTROL SIGNS | UNIT | 969 | | 969 |
| 704 | 1052 | TYPE III BARRICADE | EA | 6 | | 6 |
| 704 | 1058 | PEDESTRIAN WALKWAY | LF | 975 | | 975 |
| 704 | 1060 | DELINEATOR DRUMS | EA | 147 | | 147 |
| 704 | 1067 | TUBULAR MARKERS | EA | 73 | | 73 |
| 704 | 1086 | SEQUENCING ARROW PANEL-TYPE B | EA | 1 | | 1 |
| 704 | 1087 | SEQUENCING ARROW PANEL-TYPE C | EA | 1 | | 1 |
| 704 | 1500 | OBLITERATION OF PAVEMENT MARKING | SF | 2240 | | 2240 |
| 704 | 2108 | TEMPORARY CURB RAMP | EA | 26 | | 26 |
| 708 | 1540 | INLET PROTECTION-SPECIAL | EA | 42 | | 42 |
| 708 | 1541 | REMOVE INLET PROTECTION-SPECIAL | EA | 42 | | 42 |
| 722 | 6160 | ADJUST INLET | EA | 9 | | 9 |
| 722 | 6200 | ADJUST MANHOLE | EA | 1 | | 1 |
| 722 | 6240 | ADJUST UTILITY APPURTENANCE | EA | 9 | | 9 |
| 748 | 0100 | CURB & GUTTER | LF | 1603 | | 1603 |
| 748 | 0120 | CURB & GUTTER MOUNTABLE-TYPE I | LF | 333 | | 333 |
| 748 | 0520 | CURB-TYPE I | LF | 303 | | 303 |
| 748 | 1030 | VALLEY GUTTER 72IN | SY | | 63 | 63 |
| 750 | 0030 | PIGMENTED IMPRINTED CONCRETE | SY | | 126 | 126 |
| 750 | 0115 | SIDEWALK CONCRETE 4IN | SY | 1188 | | 1188 |
| 750 | 2115 | DETECTABLE WARNING PANELS | SF | 798 | | 798 |
| 754 | 0170 | FLEXIBLE DELINEATORS | EA | | 11 | 11 |
| 754 | 0206 | STEEL GALV POSTS-TELESCOPING PERFORATED TUBE | LF | 254 | | 254 |
| 754 | 0592 | RESET SIGN PANEL | EA | 18 | | 18 |
| 762 | 1307 | PREFORMED PATTERNED PVMT MK 6IN LINE-GROOVED | LF | 1961 | | 1961 |
| 762 | 1325 | PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED | LF | 1010 | | 1010 |
| 772 | 9814 | TRAFFIC SIGNAL SYSTEM - SITE 4 | EA | | 1 | 1 |
| 970 | 8000 | LANDSCAPE PREPARATION | SY | 247 | | 247 |
| | | | | | | |