ET034 LINCOLN ST./E MAPLE ST. SIGNAL & NON-MOTORIZED IMPROVEMENTS
CITY OF BELLINGHAM, WASHINGTON

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60% REVIEW
GENERAL NOTES

ALLOWS FOR THE REVISION OF SPECIFICATIONS TO COUNTER AND CORRECT EROSION CONTROL LEGEND

SURVEY NOTES

CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO LOCATE AND MARK THE EXISTING CURB AND GUTTER, CURB, SIDEWALK, AND STREET. ALL SURVEYED POINTS AND LOCATIONS ON THE SITE SHALL BE IDENTIFIED AND MARKED FOR THE CONTRACTOR TO USE. THE CONTRACTOR SHALL PROPERLY USE THE ONE-CALL NUMBER FOR UNDERGROUND UTILITIES AND NOTIFY THE CITY ENGINEER PROMPTLY OF ANY CONFLICT. ALL EXISTING OR NEWLY CONSTRUCTED UTILITIES ARE KNOWN TO EXIST IN THE AREA OF CONSTRUCTION.

EROSION CONTROL LEGEND

Stabilization of Construction Areas shall be completed before the next phase of construction begins. All control measures shall be maintained for the duration of the project.

SPECIFICATION'S GENERAL PROVISIONS. ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH RECOGNIZED SURVEYING PRACTICES BY A LICENSED LAND SURVEYOR PROVIDED BY THE CONTRACTOR. CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTS DURING CONSTRUCTION. ALL SURVEY MONUMENTS THAT MAY BE DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE IDENTIFIED, REFERENCED AND REPLACED IN ACCORDANCE WITH RECOGNIZED SURVEYING PRACTICES BY A LICENSED LAND SURVEYOR.

Erosion Control Requirements will prevail. All references to “Specification’s General Provisions” and “Reinforcement Standards” will be controlled by construction equipment, vehicles or personnel shall be removed. All trench backfill shall be compacted to 95% of maximum density (modified proctor). The bedding for PVC pipe shall be to City of Bellingham Standard Plan No. SS-720.

Demolition Legend

- Sand & Gravel
- Run gravel for trench backfill and shall be compacted to 95% of maximum density (modified proctor). The bedding for PVC pipe shall be to City of Bellingham Standard Plan No. SS-720.

Public and private drainage ways shall be protected from materials are to be swept and removed with a vacuum sweeper. Materials deposited on roadways, the material shall be promptly removed. Public rights-of-way shall be kept in a clean and serviceable condition at all times. In the event materials are inadvertently deposited on roadways, the material shall be promptly removed. If required, the contractor shall notify residents and businesses 48 hours in advance of any work affecting access or services and shall minimize interruptions to residents and businesses adjacent to the project.

All existing or newly constructed utilities are known to exist in the area of construction. The contractor shall be responsible for constructing, maintaining, protecting and keeping in good working order all public and private drainage systems that may result in violation of state or Federal water quality standards. Drainage systems shall be installed and connected to the new drainage system under the direction of the Engineer. The contractor shall be responsible for constructing, maintaining, protecting and keeping in good working order all public and private drainage systems that may result in violation of state or Federal water quality standards. Drainage systems shall be installed and connected to the new drainage system under the direction of the Engineer.

Stormwater Pollution Prevention Plan and stormwater permit application shall be submitted by the contractor. The Engineer’s review and approval of the SWPPP plan and stormwater permit application shall be required prior to the issuance of any permits. Any special bonded storage vessels found will be required to be removed or connected to the new drainage system under the direction of the Engineer.

Stormwater pollution prevention Plan and stormwater permit application (SWPPP) shall be submitted by the contractor. The Engineer’s review and approval of the SWPPP plan and stormwater permit application shall be required prior to the issuance of any permits. Any special bonded storage vessels found will be required to be removed or connected to the new drainage system under the direction of the Engineer.

Irregular: Construction operations are subject to extension. The supply and provide shall be removed and approved by the City prior to commencement of work.
SURVEYOR'S NOTES:

1. **HORIZONTAL DATUM**: RELATED TO WASHINGTON COORDINATE SYSTEM (NAD83/98), NORTH ZONE
   
   **BASIS OF BEARINGS**: CITY OF BELLINGHAM SURVEY WORKSHEET #5403 (SIDEWALK IMPROVEMENT PROGRAM E5-054)
   
   **LINE HELD**: N16°48'25"E 2624.58' (2624.67' MEAS.) BETWEEN FOUND BRASS DISK (COB 967) AT THE INTERSECTION OF LINCOLN ST. AND E. MAPLE ST., AND FOUND BRASS PIN (COB 3223) AT LINCOLN ST. P.I.

2. **VERTICAL DATUM**: NAVD88
   
   **METHOD**: CLOSED LOOP DIFFERENTIAL LEVELING
   
   **PROJECT BENCHMARKS**:
   
   - COB 5915: BRASS DISK BM EL=162.34' (PT #916)
   - COB 967: BRASS DISK C/L INTERSECTION EL=170.86' (PT #908)
   - COB 5916: BRASS DISK BM EL=161.48'

3. **DATE OF SURVEY**: FEBRUARY 6-7, 13, 15-17, 23, & 28, AND MARCH 3, 2023

4. **PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET FORTH BY WAC 332-130-145: TOPOGRAPHIC ELEMENTS ON MAPS.**

5. **THE PURPOSE OF THIS SURVEY WAS TO COLLECT TOPOGRAPHIC DATA WITHIN THE RIGHT OF WAY OF THE Scoped Area.**

6. **THIS SURVEY WAS ACCOMPLISHED USING A COMBINATION OF RELATIVE GNSS OBSERVATIONS WITH A BASE/ROVER RTK CONFIGURATION AND STANDARD FIELD TRAVERSE PROCEDURES WITH A TOTAL STATION. VERTICAL CONTROL WAS ESTABLISHED USING CLOSED LOOP DIFFERENTIAL LEVELING. ALL MONUMENTS SHOWN WERE VISITED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.**

7. **SURFACE CONTOURS DEPICTED WITH 1' (MINOR) AND 5' (MAJOR) INTERVALS WERE GENERATED FROM FIELD OBSERVATIONS USING AUTOCAD CIVIL 3D (VERSION 2019) AND ARE TYPICALLY ACCURATE TO WITHIN APPROXIMATELY 0.5'±.**

8. **JEPSON AND ASSOCIATES ASSUMES NO LIABILITY FOR ANY SUBSURFACE CONDITIONS OR FEATURES THAT MAY EXIST WHICH WERE UNDETECTABLE OR NOT VISIBLE AT THE TIME OF THIS SURVEY AND THEREAFTER.**

9. **THIS IS NOT A BOUNDARY SURVEY AND IS NOT INTENDED TO BE USED AS SUCH, SEE A RECORD OF SURVEY OR PLAT MAP.**
**Temporary Erosion/Sediment Control**

The following erosion and sediment control requirements shall be implemented by the contractor to reduce off-site erosion and sedimentation from the project site.

**Temporary Erosion/Sediment Control**

**1. Prior to Beginning Land Disturbing Activities (including Clearing, Grading, and Other Soil Disturbance):**

1.1. Exposed and Unworked Soils shall be stabilized by application of a mineral-based soil conditioning agent covering the soil surface. The selected stabilization material shall be applied at a rate sufficient to ensure the strength of the stabilized material is equal to or greater than that of the original soil. The stabilization material shall be applied according to the manufacturer's instructions.

1.2. All disturbed areas beyond 20 feet from the temporary erosion control measures shall be protected by silt fences or other temporary erosion control measures.

1.3. All storm drains shall be protected from erosion by the use of catch basins or other erosion control measures.

1.4. All temporary erosion control measures shall be maintained as necessary to ensure their continued effectiveness.

**2. During Land Disturbing Activities:**

2.1. Exposed and Unworked Soils shall be protected from erosion by the use of silt fences or other temporary erosion control measures.

2.2. All disturbed areas beyond 20 feet from the temporary erosion control measures shall be protected by silt fences or other temporary erosion control measures.

2.3. All storm drains shall be protected from erosion by the use of catch basins or other erosion control measures.

2.4. All temporary erosion control measures shall be maintained as necessary to ensure their continued effectiveness.

**3. Post Project Completion:**

3.1. All temporary erosion control measures shall be removed or stabilized on site. Disturbed soils shall be permanentized or stabilized to the minimum extent necessary for the use of the site.
Note: Remove all lane markings.
NOTE FOR 60% REVIEWERS:
THE FOLLOWING WILL BE SHOWN ON THE 90% PLANS:
THERE WILL BE THREE SIDEWALK CONDITIONS ALONG THE E. MAPLE ST SECTION.

CONDITION 1 (APPROX. STA 10+15 TO STA 11+50 & STA 13+00 TO STA 14+75):
5-FT SIDEWALK W/ REVERSE SLOPE
STANDARD CURB AND GUTTER
1.5-FT FILL SECTION AT SIDEWALK SLOPE
2:1 CATCH SLOPE FROM 1.5-FT WIDE SECTION TO EXISTING GRADE

CONDITION 2 (APPROX. STA 11+50 TO STA 13+00):
5.5-FT SIDEWALK W/ REVERSE SLOPE
STANDARD CURB AND GUTTER
THICKENED EDGE AT BACK OF WALK
PEDESTRIAN HANDRAIL AT BACK OF WALK

CONDITION 3 (APPROX. STA 14+75 TO LINCOLN INTERSECTION):
5-FT SIDEWALK W/ STANDARD SLOPE (SLOPE TOWARD ROADWAY)
Install 5.5' sidewalk width with pedestrian handrail.

Note to Reviewers:
Curb bulb-out to be adjusted to 12' off center line.

Just on curve
TYPICAL SECTION W/ THICKENED EDGE SIDEWALK

VALLEY GUTTER AT BUS STOP (PLACEHOLDER)
SIGN DETAIL NOTES:

1. RRRF details shown on this page and the plans shall be provided by the contractor.
2. Complete expansion joint shall be provided by the City of Bellingham.
3. Observe manufacturer's recommended.

RECTANGULAR RAPID FLASHING BEACON (RRFB) AND SIGN DETAIL

TYPICAL INSTALLATION

CURB BASE TYPE INSTALLATION
### ANGLES TO ATTACHMENT POINTS OF POLE APPURTENANCES

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### TRAFFIC SIGNAL DETAILS

#### LINCOLN / E. MAPLE SIGNAL & N.M.I.

**Preliminary**

- **Signal Display Notes**:
  1. All functional drawings are approximate. Final sizes shall be as per construction in the field. Their installation shall be by contractor. Drawings are for assistance in the preparation of the signals.
  2. The pole manufacturer shall install the signals as required for the installation of the signal phase. The installer shall ensure that the signals are properly aligned with the signal pole.
  3. The pole manufacturer shall ensure that the signals are properly positioned to remain in the proper signal position at all times.
  4. Each signal shall be equipped with a maintenance component for the maintenance of the signal.

- **.signal display**:
  - **Signal Phase**:
    - **Red**
    - **Yellow**
    - **Green**
    - **Amber**
  - **Phase Duration**:
    - **Phase I**: 10s
    - **Phase II**: 20s
    - **Phase III**: 30s
    - **Phase IV**: 40s

- **Traffic Signal Details**:
  - **Traffic Signal Details**:
    - **Phase 1**: 10s
    - **Phase 2**: 20s
    - **Phase 3**: 30s
    - **Phase 4**: 40s
  - **Installed Details**:
    - **Red Light**: 12
    - **Yellow Light**: 12
    - **Green Light**: 12
    - **Amber Light**: 12
  - **Mounted Details**:
    - **Pedestrian Signal**: Installed as per specifications.

- **Contact Information**:
  - **Contact Person**: PROJECT ENGINEER AT 778-7900