

SECTION 31 23 13
SUBGRADE PREPARATION

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Grading, shaping, and compacting subgrade prior to placing a base or surface course.
- B. Related Sections:
 - 1. Section 31 23 00 - Excavation and Fill.

1.02 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Subgrade Preparation. This item shall be incidental to the common excavation item.

1.03 REFERENCES

- A. Minnesota Department of Transportation "Standard Specifications for Construction" 2020 Edition (MnDOT Spec.):
 - 1. 2106 - Excavation and Embankment.
 - 2. 2111 - Test Rolling.
 - 3. 2112 - Subgrade Preparation.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 GENERAL

- A. Subgrade preparations shall be performed to produce the required density, grade, and cross-section.
- B. Aggregate base preparations shall be performed to produce the required density, grade, and cross-section.
- C. Once the subgrade has been test rolled and accepted by the Engineer, no traffic or construction equipment shall be permitted to operate directly on the subgrade without the prior approval of the Engineer. The subgrade shall be relatively smooth prior to the placement of aggregate base. All equipment shall be restricted to operating only in areas where the aggregate base has been installed to its full design depth.

3.02 PREPARATION

- A. Adhere to MnDOT specification section 2106 – Excavation and Embankment for preparation of street subgrade.

- B. Shape and re-compact existing aggregate base in areas of driveway and sidewalk work. This shall be incidental to the Work.
- C. Test rolling of compacted aggregate base using a fully loaded aggregate truck (tandem).
Specifications:
 - 1. MnDOT Specification Section 2211 shall apply to the construction of aggregate base, except as modified herein.
 - 2. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

3.03 QUALITY CONTROL

- A. All embankment shall be compacted using the Specified Density Method:
 - 1. Under areas with proposed paved or structural improvements:
 - a. 100% Standard Proctor from the proposed pavement subgrade elevation down 3 feet.
 - b. 95% Standard Proctor from the bottom of excavation up to 3 feet below the subgrade elevation.
 - 2. Under areas with no proposed paved or structural improvements:
 - a. 95% Standard Proctor.

END OF SECTION