

Iowa City VA Healthcare System
400 Car Parking Garage

Description of Deductive Alternates

Deduct Alternate 5

Sketches and a new specification section relating to Deduct Alternate 5 follow this page.

Item 17 Division 32 – Exterior Improvements

Delete all concrete paving outside of the structural footprint and substitute with asphalt.
Refer to new specification section: 32 12 16, for additional information.
Refer to sketch: C-SK 02 HMA Paving_0637, for additional information

Item 18 Division 32 – Exterior Improvements

Delete 15 surface parking spaces, located to the East of the parking structure.
Refer to sketch: C-SK 01 Eliminate Surface Parking_6037

SECTION 32 12 16
ASPHALT PAVING

PART 1 - GENERAL

1.1 DESCRIPTION

This work shall cover the composition, mixing, construction upon the prepared subgrade, and the protection of hot asphalt concrete pavement. The hot asphalt concrete pavement shall consist of an aggregate or asphalt base course and asphalt surface course constructed in conformity with the lines, grades, thickness, and cross sections as shown. Each course shall be constructed to the depth, section, or elevation required by the drawings and shall be rolled, finished, and approved before the placement of the next course.

1.2 RELATED WORK

- A. Laboratory and field testing requirements: Section 01 45 29, TESTING LABORATORY SERVICES.
- B. Subgrade Preparation: Paragraph 3.3 and Section 31 20 00, EARTH MOVING.
- C. Pavement Markings: Section 32 17 23, PAVEMENT MARKINGS.

1.3 INSPECTION OF PLANT AND EQUIPMENT

The Project Manager shall have access at all times to all parts of the material producing plants for checking the mixing operations and materials and the adequacy of the equipment in use.

1.4 ALIGNMENT AND GRADE CONTROL

The Contractor's Registered Professional Land Surveyor shall establish and control the pavement (aggregate or asphalt base course and asphalt surface course) alignments, grades, elevations, and cross sections as shown on the Drawings.

1.5 SUBMITTALS

- A. In accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES, furnish the following:
- B. Data and Test Reports:
 - 1. Aggregate Subbase Course: Sources, gradation, liquid limit, plasticity index, percentage of wear, and other tests required by the Iowa Statewide Urban Design and Specifications (SUDAS) and Iowa DOT Standard Specifications for Highway and Bridge Construction.
 - 2. Asphalt Base/Surface Course: Aggregate source, gradation, soundness loss, percentage of wear, and other tests required by Iowa SUDAS and Iowa DOT Standard Specifications.
 - 3. Job-mix formula.

C. Certifications:

1. Asphalt prime and tack coat material certificate of conformance to Iowa DOT requirements.
2. Asphalt cement certificate of conformance to Iowa DOT requirements.
3. Job-mix certification - Submit plant mix certification that mix equals or exceeds the State Highway Specification.

D. Provide MSDS (Material Safety Data Sheets) for all chemicals used on ground.

PART 2 - PRODUCTS

2.1 GENERAL

A. Aggregate base and asphalt concrete materials shall conform to the requirements of the following and other appropriate sections of the latest version of the State Highway Material Specifications, including amendments, addenda and errata. Where the term "Engineer" or "Commission" is referenced in the State Highway Specifications, it shall mean the VA Project Manager.

2.2 GRANULAR SUBBASE

- A. Provide aggregates consisting of crushed stone, gravel, sand, or other sound, durable mineral materials processed and blended, and naturally combined.
- B. Granular Subbase: In accordance with Section 2010 of the Iowa SUDAS and Sections 2111 and 4121 of the Iowa DOT Standard Specifications.

2.3 HOT MIX ASPHALT PAVEMENT

- A. Hot Mix Asphalt Pavement: In accordance with Section 7020 of the Iowa SUDAS and Section 2303 of the Iowa DOT
 1. HMA Surface Course: SUDAS 7020.01: HMA 100K S-1.
 2. HMA Intermediate Course: Iowa SUDAS 7020.01: HMA 100K B.
 3. Tack Coat: Section 2303 of the Standard Specifications.

PART 3 - EXECUTION

3.1 GENERAL

The Asphalt Concrete Paving equipment, weather limitations, job-mix formula, mixing, construction methods, compaction, finishing, tolerance, and protection shall conform to the requirements of the appropriate sections of the Iowa SUDAS and Iowa DOT Standard Specifications for the type of material specified.

3.2 MIXING ASPHALTIC CONCRETE MATERIALS

- A. In accordance with Section 7020 of the Iowa SUDAS and Section 2303 of the Iowa DOT Standard Specifications.

3.3 SUBGRADE

- A. Shape to line and grade and compact with self-propelled rollers.

- B. All depressions that develop under rolling shall be filled with acceptable material and the area re-rolled in accordance with specification section 312000.
- C. Soft areas shall be removed and filled with acceptable materials and the area re-rolled in accordance with specification section 312000.
- D. Should the subgrade become rutted or displaced prior to the placing of the subbase, it shall be reworked to bring to line and grade in accordance with specification section 312000.
- E. Proof-roll the subgrade in accordance with specification section 312000.

3.4 GRANULAR SUBBASE

- A. Granular Subbase
 - 1. Spread and compact to the thickness shown on the drawings.
 - 2. Construct in accordance with the requirements of Section 2010 of the Iowa SUDAS and Section 2111 of the Iowa DOT Standard Specifications.
 - 3. After completion of the subbase rolling there shall be no hauling over the base other than the delivery of material for the top course.
- B. Thickness tolerance: Provide the compacted thicknesses shown on the Drawings within a tolerance of minus 0.0mm (0.0") to plus 12.7mm (0.5").
- C. Smoothness tolerance: Provide the lines and grades shown on the Drawings within a tolerance of 5mm in 3m (3/16 inch in ten feet).
- D. Moisture content: Use only the amount of moisture needed to achieve the specified compaction.

3.5 PLACEMENT OF ASPHALTIC CONCRETE PAVING

- A. Remove all loose materials from the compacted base.
- B. Apply the specified tack coat and allow to dry in accordance with the manufacturer's recommendations as approved by the Architect or Engineer.
- C. Receipt of asphaltic concrete materials:
 - 1. Do not accept material unless it meets the temperature requirements of Section 2303 of the Iowa DOT Standard Specifications.
 - 2. Do not commence placement of asphaltic concrete materials when conditions do not meet the requirements of Section 2303 of the Iowa DOT Standard Specifications.
- D. Placement and Compaction:
 - 1. Place and compact in accordance with Section 7020 of the Iowa SUDAS and 2303 of the Iowa DOT Standard Specifications.
 - 2. After the material has been spread to the proper depth, roll until the surface is hard, smooth, unyielding, and true to the thickness and elevations shown on the drawings.
 - 3. Roll in at least two directions until no roller marks are visible.
 - 4. Finished paving smoothness tolerance:
 - a. No depressions which will retain standing water.

b. No deviation greater than 3mm in 1.8m (1/8" in six feet).

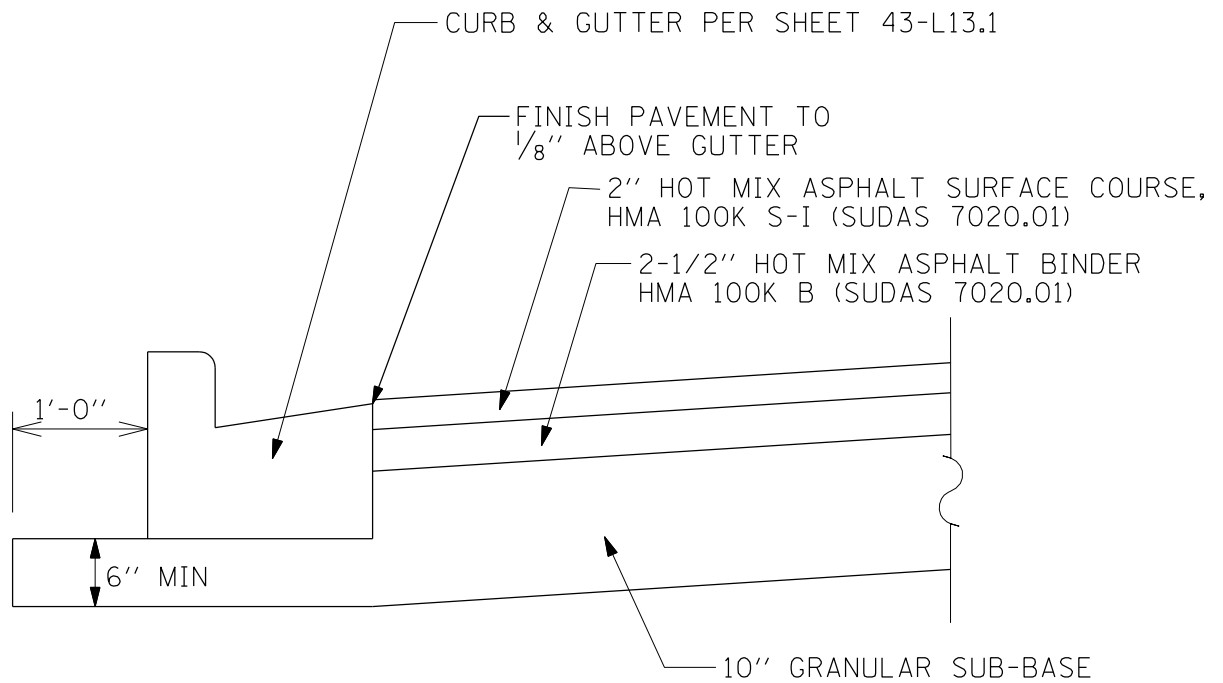
3.6 PROTECTION

Protect the asphaltic concrete paved areas from traffic until the sealer is set and cured and does not pick up under foot or wheeled traffic.

3.7 FINAL CLEAN-UP

Remove all debris, rubbish, and excess material from the work area.

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③ HOT MIX ASPHALT PAVEMENT SECTION

N.T.S.

SCOPE REVISIONS:

- DELETE APPROX. 1150 SQ YDS CONCRETE PAVEMENT AND GRANULAR BASE, INCLUDING GUTTER TIE BARS
- ADD APPROX. 1150 SQ YDS HMA PAVEMENT AND GRANULAR BASE PER THE TYPICAL SECTION ABOVE

NOTE: THESE AREAS ASSUME THAT 280 SQ YDS OF SURFACE PARKING HAS ALREADY BEEN ELIMINATED, PER C-SK 01

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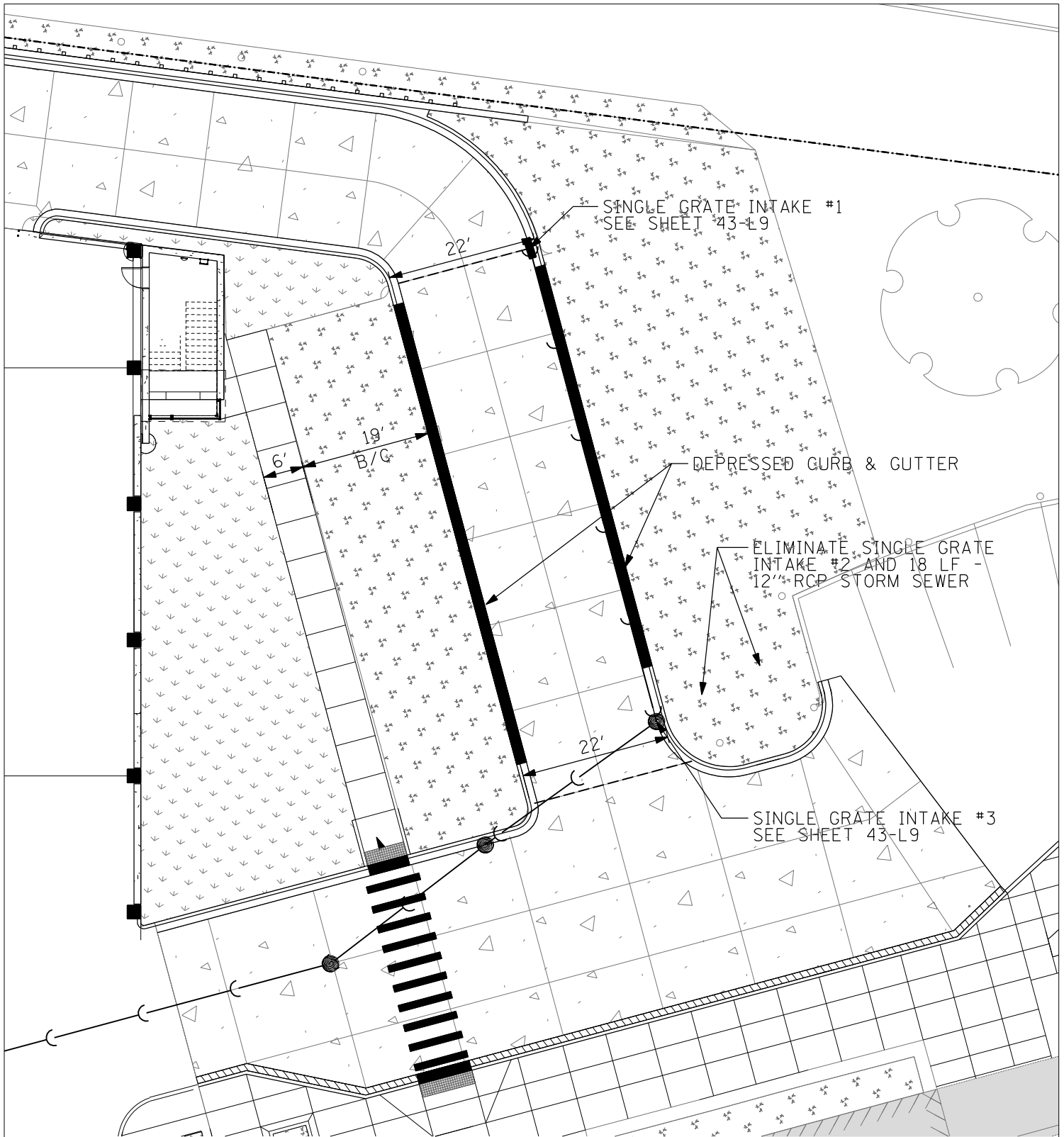
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PARKING STRUCTURE 400 CAR PARKING GARAGE

IOWA CITY, IA
PROJECT ADDRESS

Date: 10.1.13
Sheet Rvsd: 43-L13.1
Scale: AS NOTED
Drawn By: MAY
Project No.: 636-402

Sketch No.: C-SK 02



SITE PLAN

SCALE: 1"=20'-0"

SCOPE REVISIONS:

- DELETE APPROX. 280 SQ YDS CONCRETE PAVEMENT AND GRANULAR BASE.
- DELETE APPROX. 72 LF CURB & GUTTER
- DELETE 1 - SINGLE GRATE INTAKE STRUCTURE
- DELETE 18 LF - 12" STORM SEWER
- ADD APPROX. 290 SQ YDS TOPSOIL & SEED

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PARKING STRUCTURE 400 CAR PARKING GARAGE

IOWA CITY, IA
PROJECT ADDRESS

Date: 10.1.13
Sheet Rvsd: 43-L7, 43-L9
Scale: AS NOTED
Drawn By: MAY
Project No.: 636-402

Sketch No.: C-SK 01