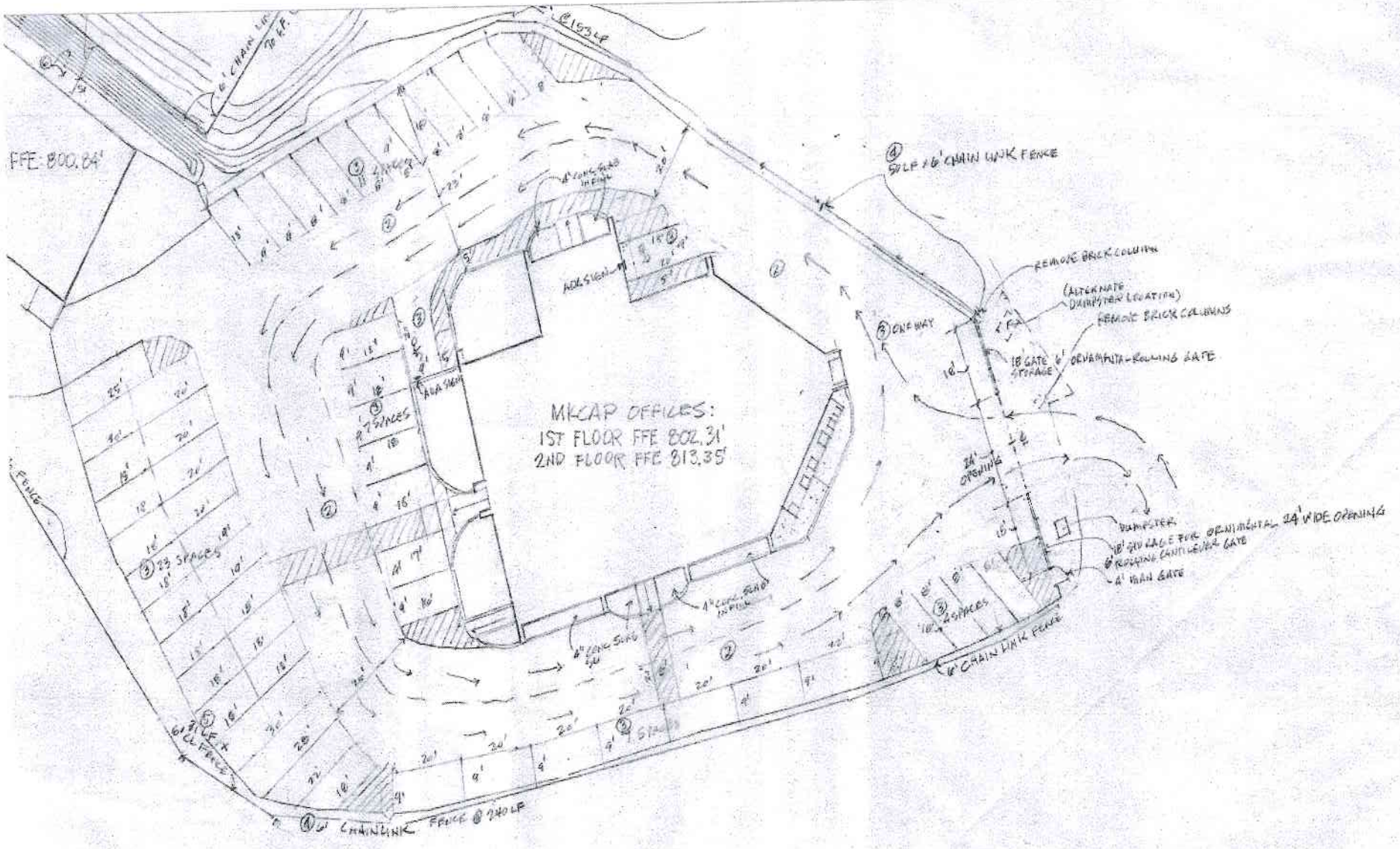

SITE PLAN

1"=20'-0"

① PARKING - 52 SPACES
- 2 ADA VAN SPACES W/SIGN
- DUMPSTER PAD

② PREP EXISTING ASPHALT FOR 2" FINISH COURSE. GRIND DOWN ASPHALT @ RAMPS FOR ADA ACCESS.

③ ADD PAINTED LINES AS SHOWN

SECTION 02513 - ASPHALT CONCRETE PAVING

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Special Conditions and other Division-1 Specification sections, apply to work of this section.

DESCRIPTION OF WORK

Install 2" asphalt surface course as shown on the drawings.

At entrances to Lobby #7, Vestibule #11, & Door #109 grind asphalt down 1 1/2" at ramp to allow for ADA access.

Extent of asphalt concrete paving and aggregate subbase work is shown on drawings.

Excavation to subgrade included in Earthwork, Section 02200.

SUBMITTALS

Material Certificates: Provide copies of materials certificates signed by material producer and Contractor, certifying that each material item complies with, or exceeds, specified requirements.

QUALITY ASSURANCE

Codes and Standards: Comply with state highway or transportation department standard specifications, latest edition, and with local governing regulations if more stringent than herein specified.

SITE CONDITIONS

Weather Limitations: Apply prime and tack coats when ambient temperature is above 50° F, and when temperature has not been below 35° F for 12 hours immediately prior to application. Do not apply when base is wet or contains an excess of moisture.

Construct asphalt concrete surface course when atmospheric temperature is above 40° F and when base is dry. Base course may be placed when air temperature is above 30° F and rising.

This Contractor shall proof roll the subgrade prior to placement of aggregrate subbase.

Grade Control: Establish and maintain required lines and elevations.

PART 2 - PRODUCTS

MATERIALS

General: Use locally available materials and gradations which exhibit a satisfactory record of previous installations.

Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, crushed slag, and natural or crushed sand conforming to Kentucky Highway Standard Specifications, Section 303.

Base Course Aggregate: Sound, angular crushed stone, crushed gravel, or crushed lag, sand, stone or slag screenings.

Uncrushed gravel may be used in base course mixture if required to suit local material availability.

Surface Course Aggregate: Crushed stone, crushed gravel, crushed slag, and sharp-edged natural sand.

Sand prepared from stone, blast-furnace slag, or gravel, or combinations thereof may be used if required to suit local material availability.

Mineral Filler: Rock or slab dust, hydraulic cement, or other inert material and with AASHTO M 17 (ASTM D 242).

Asphalt Cement: AASHTO M 226 (ASTM D 3381) for viscosity-graded material and AASHTO M 20 (ASTM D 946) for penetration-graded material.

Tack Coat: Emulsified asphalt, AASHTO M 140 (ASTM D 997) or M 208 (D2397); SS-1, SS-1h, CSS-1 or CSS-1h, diluted with one part water to one part emulsified asphalt.

Lane Marking Paint: Chlorinated rubber-alkyd type, AASHTO M 248 (FS TT-P-115) Type III.

ASPHALT AGGREGATE MIXTURE

Provide plant-mixed, hot-laid asphalt-aggregate mixture complying with ASTM D 3515 and as recommended by local paving authorities to suit project conditions.

PART 3 - EXECUTION

PAVEMENT SUBBASE COURSE

General: Subbase course consists of placing subbase material, in layers of specified thickness, over subgrade surface to support a pavement base course. One layer of filter fabric is required for all drives.

Grade Control: The Contractor shall proof roll the subgrade prior to placement of aggregate subbase. During construction, maintain lines and grades including crown and cross-slope of subbase course.

Shoulders: Place shoulders along edges of subbase course to prevent lateral movement. Construction shoulders of acceptable soil materials, placed in such quantity to compact to thickness of each subbase course layer. Compact and roll at least a 12" width of shoulder simultaneous with the compaction and rolling of each layer of subbase course.

Placing: Place subbase course material on prepared subgrade in layersof uniform thickness, conforming to indicated cross-section and thickness.

Maintain optimum moisture content for compacting subbase material during placement operation.

When a compacted subbase course is indicated to be 6" thick or less, place material in a single layer. When indicated to be more than 6" thick, place material in equal layers, except no single layer more than 6" or less than 3" in thickness when compacted.

SURFACE PREPARATION

Remove loose material from compacted subbase surface immediately before applying filter fabric. Proof roll prepared subbase surface to check for unstable areas and areas requiring additional compaction.

Notify Contractor of unsatisfactory conditions. Do not begin paving work until deficient subbase areas have been corrected and are ready to receive paving.

Tack Coat: Apply to contact surfaces of previously constructed asphalt or Portland cement concrete and surfaces abutting or projecting into asphalt concrete pavement. Distribute at rate of 0.05 to 0.15 gallon per square yard of surface.

Allow to dry at proper condition to receive paving.

Exercise care in applying bituminous materials to avoid smearing of adjoining concrete surfaces. Remove and clean damaged surfaces.

PLACING MIX

General: Place asphalt concrete mixture on prepared surface, spread and strike-off. Spread mixture at minimum temperature of 225° F (107° C). Place inaccessible and small areas by hand. Place each course to required grade, cross-section, and compacted thickness.

Minimum thickness all areas: 2" (See drawings for other thickness requirements.)

Paver Placing: Place in strips not less than 10' wide, unless otherwise acceptable to Architect. After first strip has been placed and rolled, place succeeding strips and extend rolling to overlap previous strips. Complete base course for a section before placing surface course.

Joints: Make joints between old and new pavements or between successive days' work, to insure continuous bond between adjoining work. Construction joints to have same texture, density and smoothness as other sections of asphalt concrete course. Clean contact surfaces and apply tack coat.

Curbs: Construct curbs over compacted pavement surfaces. Apply a light tack coat unless pavement surface is still tack and free from dust.

Place curb materials to cross-section indicated or, if not indicated, to local standard shapes, by machines or by hand in wood or metal forms. Tamp hand-placed materials to smooth finish. Remove forms as soon as material is cooled.

ROLLING

General: Begin rolling when mixture will bear roller weight without excessive displacement.

Compact mixture with hot hand tampers or vibrating plate compactors in areas inaccessible to rollers.

Breakdown Rolling: Accomplish breakdown or initial rolling immediately following rolling of joints and outside edge. Check surface after breakdown rolling, and repair displaced areas by loosening and filling, if required, with hot material.

Second Rolling: Follow breakdown rolling as soon as possible, while mixture is hot. Continue second rolling until mixture has been thoroughly compacted.

Finish Rolling: Perform finish rolling while mixture is still warm enough for removal of roller marks. Continue rolling until roller marks are eliminated and course has attained maximum density.

Patching: Remove and replace paving areas mixed with foreign materials and defective areas. Cut-out such areas and fill with fresh, hot asphalt concrete. Compact by rolling to maximum surface density and smoothness.

Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.

Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

TRAFFIC AND LANE MARKINGS

Cleaning: Sweep and clean surface to eliminate loose material and dust.

Striping: The Asphalt Paving Contractor shall stripe the parking spaces, the walkway hatching, and Handicap special markings. Use chlorinated-rubber base traffic lane-marking paint, factory-mixed, quick-drying, and non-bleeding.

Color: White.
Handicap stenciled paving markings shall be blue.

Do not apply traffic, lane marking and handicap marking paint until layout and placement has been verified with Architect.

Apply paint with mechanical equipment to produce uniform straight edges. Apply in 2 coats at manufacturer's recommended rates.

FIELD QUALITY CONTROL

General: Test in-place asphalt concrete courses for compliance with requirements for thickness and surface smoothness. Repair or remove and replace unacceptable paving as directed by Architect.

Thickness: In-place compacted thickness will not be acceptable if exceeding following allowable variation from required thickness.

Base Course: 1/2" ±
Surface Course: 1/4" ±

Surface Smoothness: Test finished surface of each asphalt concrete course for smoothness, using 10' straightedge applied parallel with, and at right angles to centerline of paved area. Surfaces will not be acceptable if exceeding the following tolerances for smoothness.

Base Course Surface: 1/4".

Wearing Course Surface: 3/16".
Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template, 1/4".

Check surface areas at intervals as directed by Architect.

END OF SECTION 02513