

**GENERAL NOTES**

Unless shown or stated otherwise on these drawings, all materials, and construction shall be in accordance with City of Wichita Standard Specifications.

Contractor will be required to provide a minimum advance notice of seventy-two (72) hours to utility companies prior to starting any excavation as follows:  
 Kansas One-call 1-800-344-7233  
 or local Wichita 687-2470

The Contractor must notify the following in case of an emergency:

AT&T (telephone) 1-800-870-8390  
 Cox Communications (cable) 262-0661  
 Westar (electric) 383-8600  
 Kansas Gas Service (gas) 1-888-482-4950  
 City of Wichita Water & Sewer Maint. 262-6000  
 Black Hills (gas) 946-0096

The Contractor shall be responsible for preserving existing property irons shown on plans that are to remain. The Contractor will be required to reestablish any shown property irons which are damaged or destroyed by his construction operations. Such irons shall be reestablished at the Contractor's expense by a licensed land surveyor in accordance with state laws.

All construction staking shall be performed by the Contractor.

Project surveys were performed on the NAD83 State Plane Coordinate System, South Zone. No coordinates were modified to ground. Elevations are in USGS Mean Sea Level Datum. (NAVD 88).

Utility service lines, poles, valve boxes, meters, etc... are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. Some utilities have been relocated and may not reflect so on the plans. Location information has been obtained from the various utility companies and is either from company record drawings or company provided field locations. The plan locations shown are not guaranteed. Additional existing utilities may also be encountered. The Contractor shall field verify all existing utilities prior to construction. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archeological investigations unless buried in a previously approved borrow location.

Any removal and resetting of fences that are within the project construction limits will be Subsidiary to the bid item "Site Clearing and Restoration".

Contractor is responsible for maintaining access control along the project corridor throughout construction.

**SITE RESTORATION NOTES:**

Repair or replace damaged items not part of the project at no additional cost to the City of Wichita.

Place topsoil to a minimum compacted depth of 6 inches or as specified on the drawings. The finished grade on Drawings indicates the surface elevation after placement of the prescribed topsoil thickness. Offsite topsoil borrow shall be fertile natural topsoil, typical of the locality, obtained from well-drained areas. Stockpiled topsoil may be used. It shall be without admixture of subsoil or slag and shall be free of stones, lumps, sticks, plants, or their roots, toxic substances or other extraneous matter that may be harmful to plant growth or would interfere with future maintenance. Topsoil pH range shall be 5.5 to 7.0. Engineer shall approve topsoil prior to placement.

Rake all gravel or other similar debris larger than 1/2 inch in diameter and remove during final grade preparation.

**Seeding Operations**

Substitute the following for City of Wichita Specification Section 902.2 and Table 902-1.

Provide seed in standard containers that is new crop seed complying with and labeled in accordance with U.S. Department of Agriculture rules and regulations under the Federal Seed Act in effect at the time of purchase. Furnish a statement certifying the purity percent, germination percent, and the sproutable seed percent for the seed. Store the seed in a cool, dry place. Seed that is moldy, wet or otherwise damaged will not be accepted.

Water seeded areas with a deep soaking every two (2) weeks during dry periods until a mature stand of grass is obtained.

Seeding shall be accomplished per the following rates and specifications:

COMMON NAME	RATE(PLSibs/acre)*
Smooth Brome	75
K-31 Fescue	300
Annual Rye	100
Fertilizer (10-20-10)	350

\*Pounds of pure live seed per acre

The Seeding process shall include in order:

1. Furnish topsoil
2. Finish grading
3. Prepare seedbed
4. Seed and maintain areas as required.

Cover all seeded areas with a 6:1 or steeper Slope with an Erosion Control Blanket (North American Green SC-150), or approved equivalent. Cover all other seeded areas with a prairie hay mulch, or equivalent. No bare ground shall be visible in the seeded area. Thick clumps of mulch are not permissible, provide uniform coverage. Apply mulch at a minimum of 4,000 lbs. per acre.

Seeding shall not be performed in windy weather. Seeding shall be done in two (2) directions at right angles to each other. A 3-ft wide strip shall be sodded along sidewalks, roadways, and parking areas to prevent washing and erosion. Following initial soil disturbance or redistribution, permanent or temporary erosion control measures shall be installed within seven days. The erosion control measures shall be installed on all perimeter slopes and all other disturbed or graded areas on the project site.

All costs for this work shall be subsidiary to "Site Clearing and Site Restoration" bid item. Erosion Control Blanket will be paid for separately.

**TRAFFIC CONTROL AND CONSTRUCTION SEQUENCING NOTES:**

The contractor is responsible for preparing and submitting a construction sequence plan prior to construction.

The contractor is responsible for erecting and maintaining traffic control. All other traffic control necessary due to construction activity on or near local or private streets will be the responsibility of the Contractor.

The contractor will maintain adequate drainage within the project limits throughout all construction activities. Any temporary grading or storm collection/distribution necessary to provide adequate drainage that is not outlined in the plans will be the contractor's responsibility and subsidiary to the bid item "Traffic Control".

The contractor is responsible for locating acceptable fill material sources, determining haul routes to and from the construction site and establishing staging on or near the construction site.

Levee Surfacing with RAP shall not be started until all other earthwork and grading is completed.

**TREE REMOVAL NOTES:**

Removal of all woody vegetation and trees with the specified clear zone is required to provide access for periodic inspection, regular maintenance, and flood fighting if required. Take Caution near or around any existing public utilities and overhead power lines.

**GRADING NOTES:**

Levee construction usually occurs in narrow strip with limited access for equipment to transport, place, spread, and compact the fill. To assure that the levee is stable and resistant to the forces of water, it is critical that the foundation be properly prepared, good materials be used, and that satisfactory compaction be accomplished. Because the construction usually takes place in a narrow strip, conventional mass grading techniques and testing frequencies are usually not appropriate.

**Preparation**

Clear the Work area by complete removal of all objectionable matter and/or obstructions above the ground surface. Objectionable matter includes trees, fallen timber, brush, vegetation, loose stone, abandoned structures, fencing, and similar debris. Clear the entire foundation area under the proposed levee and berms prior following construction operations. Dispose of objectionable matter and/or obstructions in approved disposal area.

Within the Work area, grub all stumps, roots, buried logs, old piling, old paving, drains, and other objectionable matter. Remove roots or other intrusions over 1-1/2 inches diameter within the levee foundation area to a depth of 5 ft below existing ground surface. Slope the sides of all holes and depressions caused by grubbing operations no steeper than 1.5:1.0 (H:V) before backfilling. Dispose of grubbed material in approved disposal area.

**Engineered Fill**

In general, soil excavated in Work areas is suitable for use as engineered fill if it is free of organic matter and other objectionable material (i.e. roots, rocks, and debris) is of suitable moisture content, and it meets the requirements of an approved USC classified soil as approved by the Engineer.

Maintain construction slopes and grades to provide positive drainage during all grading operations; if necessary, install sumps and provide pumps to maintain the Work free of standing water.

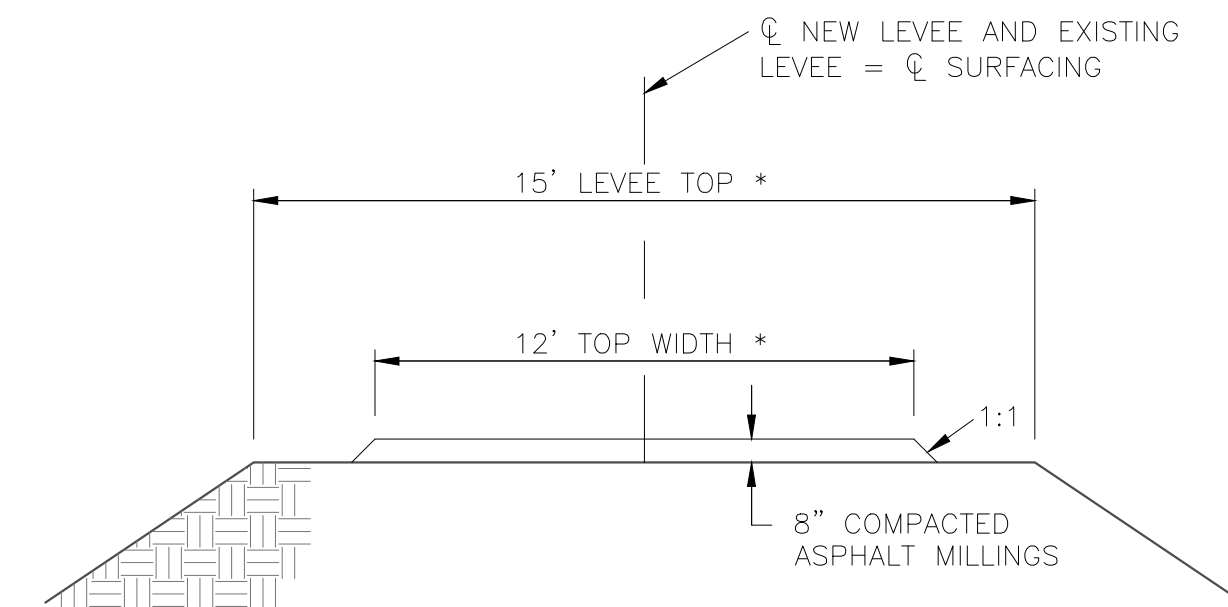
**Compaction & Moisture Control**

Placed approved engineered fill in maximum 8-inch thick, loose lifts and compact to at least 95% of its MDD within the levee embankment slopes and crown. Maintain engineered fill moisture content between -1% and +2% of its OMC prior to and during compaction.

Outside the levee embankment, place approved backfill material in maximum 8-inch, loose lifts and compact to at least 90% of its MDD. Maintain engineered fill moisture content between -3% to +2% of its OMC prior to and during construction.

**LEVEE SURFACING NOTES:**

The top width of the flood control and ramps, drives and levees shall consist of delivery and placement of Recycled Asphalt Pavement (RAP) a nominal 8" thick as a granular pavement as depicted on the plans. All ruts shall be filled with RAP or compacted fill prior to the placement of the 8" RAP to establish a level driving surface. The cost to level the existing levee top is incidental to L.S. Bid Item "Levee Surfacing (8" Recycled Asphalt Pavement)". RAP shall consist of 100% Recycled Asphalt Millings, either millings or crushed, with a maximum particle size of 3". RAP shall be placed at a nominal compacted depth of 8" thick and rolled with a large steel drum roller or approved equivalent to provide 95% theoretical maximum density and a smooth finished roll.



\* WHERE EXISTING LEVEE TOPS ARE 10' WIDE, ASPHALT MILLING WIDTH SHALL BE 8'.  
**TYPICAL LEVEE SURFACING SECTION**  
 NOT TO SCALE

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<b>SWS IMPROVEMENTS Pump Station #11 Access Roads, Ditch &amp; Pad</b>		
<b>STORM WATER ENGINEER Scott Lindebak, P.E.</b>		
PROJECT # 468-84684	OCA NUMBER 660809	DATE 05/10
DESIGN TD/KSF	DRAWN KSF	SHEET 2 OF 11
STORM WATER MANAGEMENT CITY HALL - EIGHTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4369 (316) 337-9027 FAX		