

SEEDING NOTES

PLANTING PREPARATION

PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES, TREES, SHRUBS, AND PLANTINGS FROM DAMAGE CAUSED BY PLANTING OPERATIONS.

PROVIDE EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.

UNLESS NO-TILL DRILLING INTO AN APPROVED COVER CROP ELIMINATE COMPETING GRASS VEGETATION IN ALL AREAS TO BE IMPROVED WITH "ROUNDUP" OR AN APPROVED EQUAL ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. SEVERAL APPLICATIONS MAY BE NECESSARY. WORK TO REMOVE COMPETING VEGETATION, PARTICULARLY BERMUDA GRASS, IF PRESENT, SHALL BEGIN SEVERAL MONTHS BEFORE SEEDING OPERATIONS COMMENCE.

TEMPORARY COVER CROP FOR NATIVE SEED AREAS (IF APPLICABLE):

TEMPORARY COVER CROPS SHALL ONLY BE PLANTED WHEN THE SEEDING DATES ARE OUTSIDE OF THE NATIVE PRAIRIE ACCEPTABLE PLANTING DATE PERIOD. THE TEMPORARY COVER CROP SHALL BE ESTABLISHED WITH THE FOLLOWING:

- OATS @ 45 LBS./ACRE
- "REGREEN" STERILE WHEAT @ 45 LBS./ACRE
- CANADA WILD RYE @ 20 LBS./ACRE
- 110 LBS./ACRE TOTAL
- SLOW RELEASE FERTILIZER @ 150 LBS./ACRE

PERMANENT NATIVE SHORT MIX:

ALL DISTURBED AREAS (WITH EXCEPTION OF THE DRAINAGE CHANNEL) AS SHOWN ON THE EROSION CONTROL PLAN SHALL RECEIVE PERMANENT NATIVE SHORT MIX SEED AND FERTILIZED AFTER GRADING OPERATIONS ARE COMPLETE:

- 25% LITTLE BLUESTEM
- 25% BLUE GRAMA
- 25% BUFFALO GRASS, SHARP'S IMPROVED PRIMED
- 25% SIDE OATS GRAMA

AREA QUANTITIES SHOWN ON EROSION CONTROL PLAN ARE APPROXIMATE. ANY ADDITIONAL SEEDING SHALL BE SUBSIDIARY TO SEEDING.

PERMANENT NATIVE PRAIRIE:

ALL DISTURBED AREAS SHALL RECEIVE PERMANENT NATIVE SHORT MIX SEED.

AREA QUANTITIES SHOWN ON EROSION CONTROL PLAN ARE APPROXIMATE. ANY ADDITIONAL SEEDING SHALL BE SUBSIDIARY TO SEEDING.

PLANTING DATES

PLANT SEED BETWEEN MARCH 25TH AND APRIL 10TH (PREFERRED) BETWEEN FEBRUARY 15TH AND MAY 1ST (ACCEPTABLE).

SEEDING RATES

REFER TO SUPPLIERS RECOMMENDATIONS. GENERALLY THE RATE WILL RANGE BETWEEN 15-20LBS PLS (PURE LIVE SEED) PER ACRE.

ESTABLISH A FIRM SEED BED

MULCHING

PRAIRIE HAY SHALL BE CERTIFIED. IT SHALL NOT CONTAIN WEED SEED SUCH AS JOHNSON GRASS OR BERMUDA GRASS. PRAIRIE HAY SHALL BE SPREAD AT A RATE OF 2 TONS/ACRE. ALL MULCH SHALL BE ANCHORED BY CRIMPING INTO TOPSOIL WITH SUITABLE MECHANICAL EQUIPMENT. ANCHORING OF MULCH SHALL BE SUFFICIENT TO PREVENT BLOWING OR WASHING OF MATERIAL PLACED.

PLANTING ACCESSORIES

HERBICIDES: EPA REGISTERED AND APPROVED, OF TYPE RECOMMENDED BY MANUFACTURER FOR APPLICATION. HERBICIDES ARE NOT RECOMMENDED. IF NECESSARY HERBICIDES MAY BE APPLIED USING A WICK APPLICATOR.

EXAMINATION

EXAMINE AREAS TO RECEIVE NATIVE PRAIRIE FOR COMPLIANCE WITH REQUIREMENTS AND OTHER CONDITIONS AFFECTING PERFORMANCE. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

NATIVE PRAIRIE PREPARATION, SEEDING AND ESTABLISHMENT (BARE SOIL)

LIMIT SEED PREPARATION TO AREAS TO BE PLANTED.

PREPARE SURFACE SOIL AS FOLLOWS:

1. REMOVE EXISTING GRASS, VEGETATION, AND TURF. DO NOT MIX INTO SURFACE SOIL.
2. LOOSEN SURFACE SOIL TO A DEPTH OF AT LEAST OF 6 INCHES. TILL SOIL TO A HOMOGENEOUS MIXTURE OF FINE TEXTURE.
3. REMOVE STONES LARGER THAN 1 INCH IN ANY DIMENSION AND STICKS, ROOTS, TRASH, AND OTHER EXTRANEIOUS MATTER.
4. LEGALLY DISPOSE OF WASTE MATERIAL, INCLUDING GRASS, VEGETATION, AND TURF, OFF OWNER'S PROPERTY.

A FIRM WEED-FREE SEEDBED IS PREFERRED.

FINISH GRADING: GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN PLUS OR MINUS 2 INCHES OF FINISH ELEVATION. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES. LIMIT FINE GRADING TO AREAS THAT CAN BE PLANTED IN THE IMMEDIATE FUTURE.

RESTORE AREAS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.

DRILL NATIVE SEED INTO EXISTING COVER CROP AT SPECIFIED RATES. USE A DRILL SPECIFICALLY SUITED FOR FLUFFY NATIVE SEED. USE A NATIVE GRASS DRILL WITH A PACKER WHEELS OR A CULTIPACKER ROLLER BEHIND THEM TO FIRM THE SOIL AFTER THE SEED IS PLANTED. A CONVENTIONAL DRILL WILL NOT WORK AND SHOULD NOT BE USED. BROADCAST AND RAKE INTO BARE SOILS IN AREAS INACCESSIBLE TO A DRILL.

1. SEEDING DEPTH SHOULD BE 1/4 INCH.
2. DO NOT APPLY FERTILIZER.
3. APPLY PRAIRIE HAY MULCH IMMEDIATELY AFTER DRILLING/BROADCASTING.

ONCE SOIL TEMPERATURES REACH 60 DEGREES GERMINATION SHOULD BEGIN TO OCCUR.

NATIVE PRAIRIE PREPARATION, SEEDING AND ESTABLISHMENT (NO-TILL INTO EXISTING COVER CROP)

LIMIT SEED PREPARATION TO AREAS TO BE PLANTED. SEEDBED GRADES SHOULD CONFORM TO CRITERIA IN SECTION ABOVE IN ORDER TO UTILIZE THIS METHOD.

MOW COVER CROP DURING PREVIOUS GROWING SEASON TO ENSURE NO SEED IS PRODUCED THAT WILL GERMINATE THE FOLLOWING SEASON AND COMPETE WITH NATIVE SEEDING.

APPROVED SHORT-TERM HERBICIDES MAY BE USED IF WEED GROWTH BEGINS BEFORE SEEDING.

A MINIMUM OF 14 DAYS BEFORE PLANTING THE NATIVE PRAIRIE SEED APPLY ROUND-UP HERBICIDE TO THE COVER CROP. WAIT AS NECESSARY FOR THE COVER CROP TO GREEN UP BEFORE SPRAYING TO GET A GOOD KILL SO THAT IT POSES NO COMPETITION TO THE PERMANENT NATIVE PRAIRIE SEED BY COMPETING FOR MOISTURE AND NUTRIENTS.

MOW EXCESS COVER CROP (4 INCHES HIGH).

NO-TILL DRILL NATIVE SEED INTO EXISTING COVER CROP AT SPECIFIED RATES. USE A NO-TILL DRILL SPECIFICALLY SUITED FOR FLUFFY NATIVE SEED. USE A NATIVE GRASS NO-TILL DRILL WITH A PACKER WHEELS OR A CULTIPACKER ROLLER BEHIND THEM TO FIRM THE SOIL AFTER THE SEED IS PLANTED. A CONVENTIONAL DRILL WILL NOT WORK AND SHOULD NOT BE USED. BROADCAST AND RAKE INTO BARE SOILS IN AREAS INACCESSIBLE TO A DRILL.

1. SEEDING DEPTH SHOULD BE 1/4 INCH.
2. DO NOT APPLY FERTILIZER.
3. APPLY PRAIRIE HAY MULCH IMMEDIATELY AFTER DRILLING.

ONCE SOIL TEMPERATURES REACH 60 DEGREES GERMINATION SHOULD BEGIN TO OCCUR.

NATIVE PRAIRIE ESTABLISHMENT & MAINTENANCE

INITIAL MANAGEMENT DURING ESTABLISHMENT

BEGIN MAINTENANCE IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL ACCEPTABLE STAND IS ESTABLISHED, BUT FOR NOT LESS THAN THROUGH ONE COMPLETE GROWING SEASON INCLUDING A LATE WINTER MOWING THE FOLLOWING YEAR.

THE CONTRACTOR INSTALLING THE NATIVE SEED IS RESPONSIBLE FOR MAINTENANCE FOR ONE FULL GROWING SEASON (APRIL 15TH THROUGH OCTOBER 15TH) AFTER SUBSTANTIAL COMPLETION. THEREAFTER MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE DESIGNATED LEGAL ENTITY OF OWNERSHIP (DEVELOPER AND/OR ESTABLISHED HOME OWNER'S ASSOCIATION).

MAINTAIN AND ESTABLISH NATIVES BY, WEEDING, MOWING, REPLANTING, AND OTHER OPERATIONS. REGRADE, PREP, AND REPLANT BARE OR ERODED AREAS TO PRODUCE A UNIFORM STAND.

REVIEW AND INSPECT VEGETATION WITHIN THE PLANTING AREA ON A MONTHLY BASIS DURING THE SPRING AND SUMMER MONTHS. INSPECTION SHOULD BE PERFORMED TO DETERMINE HEALTH AND TO IDENTIFY WEEDS AND INVASIVE SPECIES. INSPECTIONS SHOULD BE PERFORMED BY A PERSON TRAINED IN PLANT IDENTIFICATION AND CHARACTERISTICS. VEGETATION SHOULD ONLY INCLUDE PLANT SPECIES AS IDENTIFIED IN THE SEED MIX SPECIFIED. ALL OTHER PLANT SPECIES NOT IDENTIFIED IN SEED MIX ARE TO BE REMOVED DURING MAINTENANCE.

WEED CONTROL THE FIRST TWO YEARS IS ESSENTIAL. WEED COMPETITION IS THE NUMBER ONE CAUSE OF FAILURE. WEED CONTROL IS NECESSARY IN NEW SEEDINGS TO REDUCE COMPETITION FOR MOISTURE, NUTRIENTS AND SUNLIGHT. MOW BROADLEAF WEEDS AND ALL AREAS WITH WEED COMPETITION WHEN WEED HEIGHTS REACH 8 INCHES OR SOONER AS NEEDED TO PREVENT ANNUAL GRASS SEED PRODUCTION. DO NOT SCALP GROUND OR MOW SHORTER THAN 3 INCHES. MINIMUM MOW HEIGHT SHALL BE 3 INCHES. MOW REGULARLY THE FIRST YEAR TO COMPLY WITH DEFINED CRITERIA ABOVE. EARLY SPRING MOWING DURING THE FIRST TWO YEARS OF ESTABLISHMENT IS MOST CRITICAL. HERBICIDES ARE NOT RECOMMENDED, AS THEY WILL HARM THE WILDFLOWER STAND. IF NECESSARY, HERBICIDES MAY BE APPLIED USING A WICK APPLICATOR BUT SOME DAMAGE TO THE NATIVES WILL RESULT. AT THE BEGINNING OF EACH GROWING SEASON (MARCH 1 - APRIL 1), THE NATIVES SHALL BE MOWN TO THE GROUND. DO NOT MOW AFTER AUGUST 1 DURING THE FIRST TWO YEARS.



STORM WATER SEWER PLANS FOR
KELLOGG CROSSING ADDITION
 PHASE 1

©2019
 MKEC Engineering
 All Rights Reserved
 www.mkec.com
 These drawings and their contents, including, but not limited to, all concepts, designs, & ideas are the exclusive property of MKEC Engineering (MKEC), and may not be used or reproduced in any way without the express consent of MKEC.

SEEDING NOTES

PROJECT NO.	472-2019-085525	
DATE	APR. 2019	
SCALE	N/A	
DESIGNED	DRAWN	CHECKED
SLF	CRM	SLF
NO.	REVISION	DATE

SHEET NO.
 14 OF 24

PLOTTED: Monday, April 22, 2019 @ 11:21AM
 J:\PROJECTS\2017\171010465 - KELLOGG CROSSING - 17465 CAD\SH1505 CIVIL\PAV\17465-05-1100.DWG