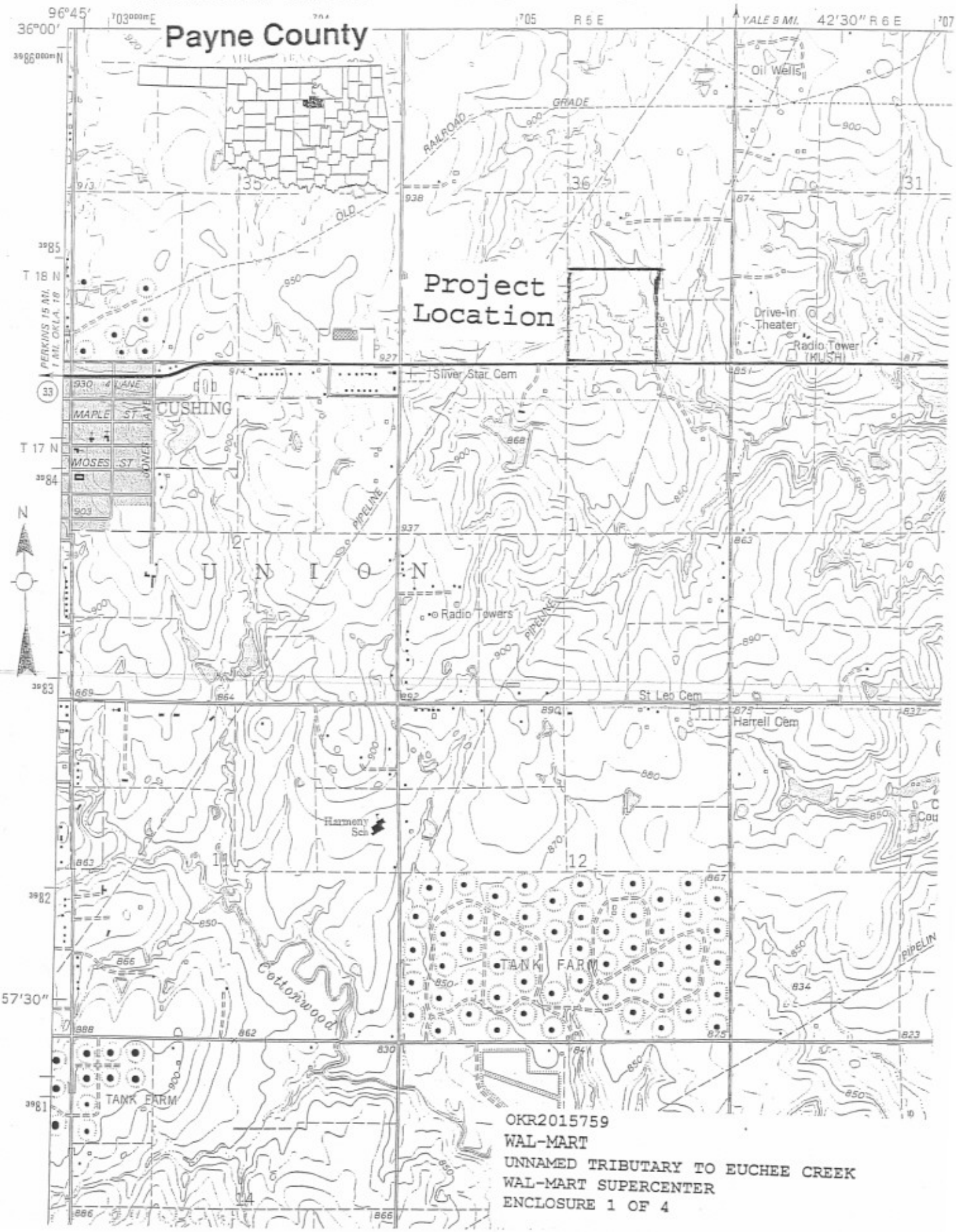
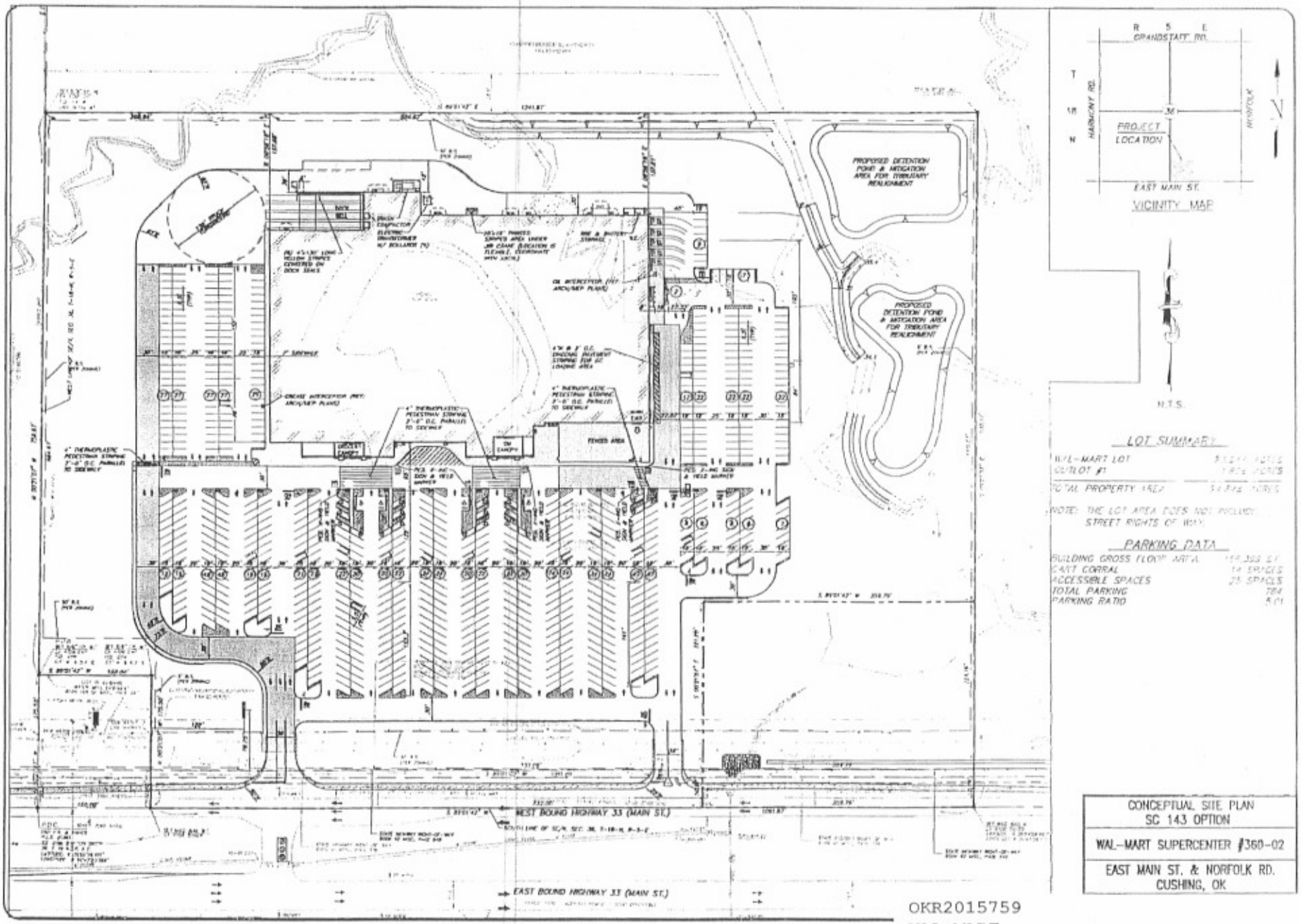
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



OKR2015759
WAL-MART
UNNAMED TRIBUTARY TO EUCHEE CREEK
WAL-MART SUPERCENTER
ENCLOSURE 1 OF 4



OKR2015759
WAL-MART
UNNAMED TRIBUTARY TO EUCHEE CREEK
WAL-MART SUPERCENTER
ENCLOSURE 2 OF 4

MITIGATION PLAN

WAL-MART SUPERCENTER #360-02

E. MAIN ST. & NORFOLK RD.
CUSHING, OK

OKR2015759
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ENCLOSURE 3 OF 4

PLANT MATERIAL SCHEDULE

Symbol	Quantity	Common Name	Botanical Name	Size	Planting Dates	Comments
TREES:						
	12	Black Willow	Salix nigra	1.5" cal	September - June	Straight trunk, balanced branching.
	35	Eastern Redcedar	Juniperus virginiana	4'-5' ht	September - June	Strong central leader, branched to ground.
	17	Hackberry	Celtis occidentalis	1.5" cal	September - June	Straight trunk, balanced branching.
	17	Red Mulberry	Morus rubra	1.5" cal	September - June	Straight trunk, balanced branching.
	20	Persimmon South Buffer - 20, Southeast Buffer - 5, Riparian Zone - 98	Diospyros virginiana	1.5" cal	September - June	Straight trunk, balanced branching.
	11	Burr Oak South Buffer - 13, Southeast Buffer - 3, Riparian Zone - 83 West Island - 17, East Island - 10, Center Island - 3, North Island - 3	Quercus macrocarpa	1.5" cal	September - June	Straight trunk, balanced branching.
	13	Pecan South Buffer - 13, Southeast Buffer - 3, Riparian Zone - 87	Carya illinoisensis	1.5" cal	September - June	Straight trunk, balanced branching.
SHRUBS:						
	28	Buttonbush West Island - 37, East Island - 23, Center Island - 5, North Island - 5 Pond/Channel Edges - 110	Cephalanthus occidentalis	5 gal	September - June	Plant where shown. Plant randomly at waters edge around Pond/Channel.
	21	Rough Leaf Dogwood West Island - 17, East Island - 10, Center Island - 3, North Island - 3	Cornus drummondi	4'-5' ht	September - June	Plant where shown.
	20	Red Osier Dogwood West Island - 14, East Island - 9, Center Island - 2, North Island - 2 Riparian Zone - 280	Cornus stolonifera	4'-5' ht	September - June	Plant where shown. In Riparian Zone plant in groups of 5 to 10 on approx. 8' centers.
	25	Swamp Privet West Island - 31, East Island - 19, Center Island - 5, North Island - 5,	Forestiera acuminata	5 gal	September - June	Plant where shown.
WETLAND PLANTS:						
	16	Water Willow	Dianthera americana	1 gal	April - June	Plant randomly in water 6" to12" deep.
	25	Arrowhead	Sagitaria latifolia	1 gal or field dug.	April - June	Plant randomly in water 2'-0" deep.
	16	Smartweed	Polygonum amphibium	1 gal or field dug.	April - June	Plant randomly at waters edge.
	20	Bullrush	Scirpus validus	1 gal or field dug.	April - June	Plant randomly in water 6" to 12" deep
	15	Mildrush	Juncus effusus	1 gal or field dug.	April - June	Plant randomly at waters edge.
	15	Spikerush	Eleocharis spp.	1 gal or field dug.	April - June	Plant randomly above water's edge.
	23	Broomsedge	Andropogon viginicus	1 gal or field dug.	April - June	Plant randomly above water's edge.
GRASSES:						
		Native Grass Mix:		Seeding Rate (Lbs per acre)		
		Little Bluestem	Schizachyrium scoparium 'Cimmaron'	0 PLS		
		Big Bluestem	Andropogon gerardi 'Kaw'	1.0 PLS		
		Switchgrass	Panicum virgatum 'Alamo'	1.0 PLS		
		Indiangrass	Sarghastrum nutans 'Cheyenne'	1.0 PLS		
		Buffalograss	Buchloe dactyloides 'Texoka'	1.0 PLS		
		Sideoats gramma	Altheropogon curtipendulus 'Haskell'	1.0 PLS		
		Sand Lovegrass	Eragrostis spp	0.5 PLS		
		Berms - 0.42 acres				
		Wetland Grass Mix:				
		Indiangrass /Switchgrass Pond Bottoms - 3.42 acres	Panicum virgatum 'Kanlow' Mix	3.0 PLS		
	20	Common Reedgrass Pond/Channel Edges - 150	Calamagrostis	rhizome		Plant rhizomes randomly at waters edge.

MITIGATION PLANTING NOTES

TREE PLANTING NOTES:

1. REFER TO NOTES ON SHEET L-2 FOR PLANT SPECIFICATIONS, WORKMANSHIP, PLANT PROTECTION, INSTALLATION, AND MAINTENANCE.
2. INSTALL TREES ACCORDING TO TREE PLANTING PLAN. TREES SHALL BE NO.1 FIELD GROWN WITH STRAIGHT TRUNKS, HEALTHY TERMINAL LEADER, WITH A FULLY SYMMETRICAL CANOPY, FREE OF DISFIGURED OR DAMAGED BARK AND FREE OF BAD CROTCHES. INSTALL PER DETAILS AS SHOWN ON SHEET L -2 AND L-3.
3. STAKING OF TREES SHALL BE AT THE CONTRACTOR'S DIRECTION. CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL TREES IN AN UPRIGHT AND NORMAL HABIT THROUGHOUT THE CONSTRUCTION AND MAINTENANCE PERIOD. LEANING TREES SHALL BE RIGHTED IMMEDIATELY BY THE CONTRACTOR. TREES WITH LOOSE OR BROKEN ROOT BALLS SHALL BE REPLACED IMMEDIATELY.
4. THOROUGHLY WATER IN ALL TREES AND APPLY HARDWOOD BARK MULCH TO A 3'-0" RADIUS UNDER TREES AT A DEPTH OF 4 INCHES.

SHRUB PLANTING NOTES:

1. REFER TO THE PLANT MATERIAL SCHEDULE ON SHEET L -3 AND WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING PLANT SPECIFICATIONS, WORKMANSHIP, PLANT PROTECTION, INSTALLATION, SCHEDULING, AND MAINTENANCE.
2. REFER TO SHRUB PLANTING DETAIL ON SHEET L -3.
3. THOUROUGHLY WATER IN ALL SHRUBS AND APPLY HARDWOOD BARK MULCH TO A 3'-0" RADIUS UNDER SHRUBS AT A DEPTH OF 4 INCHES.

WETLAND PLANT NOTES:

1. REFER TO THE PLANT MATERIAL SCHEDULE ON SHEET L -3 AND WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING PLANT SPECIFICATIONS, WORKMANSHIP, PLANT PROTECTION, INSTALLATION, SCHEDULING, AND MAINTENANCE.
2. INSTALL WETLAND PLANTS AROUND PONDS AND CHANNELS AS DESCRIBED ON THE PLANT SCHEDULE. RANDOMLY PLACE PLANTS IN GROUPINGS OF 3 TO 5 PLANTS PER GROUP. GROUPS SHALL BE RANDOMLY PLACED AROUND POOLS AND CHANNELS.
3. CARE SHALL BE TAKEN TO INSTALL PLANTS ACCORDING TO THEIR DEPTH REQUIREMENTS AS SHOWN ON THE POND AND CHANNEL PLANTING DETAIL ON SHEET L-3. REFER TO THE DEPTH REQUIREMENTS FOR EACH WETLAND PLANT IN THE PLANT MATERIAL SCHEDULE ON SHEET L -3.

SEEDING NOTES:

1. SEEDING OF NATIVE GRASSES SHALL OCCUR ON THE LANDSCAPE BUFFERS, BERMS, ISLANDS, AND RIPARIAN ZONES. REFER TO SEED PLANTING AREAS ON SHEET L -3.
2. SEEDING OF WETLAND MIX GRASSES SHALL OCCUR IN THE WETLAND PLANTING ZONE AS SHOWN ON SHEET L -3.
3. SEEDING OPERATIONS SHALL OCCUR BETWEEN THE MONTHS OF FEBRUARY AND JUNE. REFER TO PLANT MATERIAL SCHEDULE ON SHEET L-4 FOR SEED MIXES, AND APPLICATION RATES.
4. PREPARE A FIRM FINE TEXTURED SEEDBED. ROLL, CULTIPACK OR HARROW TO FIRM BEFORE PLANTING. PLANT SEED ¼" TO ½" DEEP. DO NOT PLANT DEEPER. IF SOME SEED REMAINS ON TOP AFTER DRILLING, DO NOT DISK OR HARROW. UP TO 30% OF SEED ABOVE GROUND IS ACCEPTABLE.
5. SOW ANNUAL, TEMPORARY, COOL WEATHER GRASSES (ANNUAL RYE GRASS OR WINTER WHEAT), FOR EROSION CONTROL WHEN ANY SLOPED AREA MUST REMAIN WITHOUT COVER FOR MORE THAN TWO WEEKS.

LANDSCAPE DETAILS

WAL-MART SUPERCENTER #360-02

E. MAIN ST. & NORFOLK RD.
CUSHING, OK

SMC CONSULTING ENGINEERS, P.C.
SMC

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