

CITY	OF GRAND PRAIRIE LANDSCAPE	REQUIREMENTS			
AREA					
MIN. LANDSCAPE AREA	10% OF SITE REQUIRED TO BE LAND	SCAPE			
74124	REQUIRED	PROVIDED			
	39,150 SF X 10% = 3,915 SF	12,119 SF (30%)			
MIN FRONT YARD LANDSCAPE	75% OF REQUIRED LANDSCAPE IN F	RONT YARD			
Delboore C	REQUIRED	PROVIDED			
	3,915 SF X 75% = 2,936 SF	10,495 SF (100%)			
STREET TREES	1 TREE PER EACH 50 LF OF STREET 373 LF / 50 = 8 STREET TREES	FRONTAGE			
	REQUIRED	PROVIDED			
HWY 161	8 TREES	8 NATIVE TREES			
SITE TREES	1 TREE PER EACH 500 SF OF REQ LANDSCAPE 3,915 SF / 500 = 8 SITE TREES				
	REQUIRED	PROVIDED			
	8 TREES	8 NATIVE TREES			
INTERIOR PARKING TREES	PARKING LOT TREE FOR 10 SPACES 47 SPACES / 10 = 5 PARKING LOT TREES				
	REQUIRED	PROVIDED			
	5 TREES	5 NATIVE TREES			
SITE SHRUBS	1 SHRUB PER EACH 50 SF OF REQ LANDSCAPE 3,915 SF / 50 = 78 SITE SHRUBS				
	REQUIRED	PROVIDED			
	78 5-GAL SHRUBS	(86) 10-GAL NATIVE SHRUBS 100% OF REQ. SHRUBS ARE NATIVE			
SEASONAL PLANTINGS	15% OF REQUIRED SHRUBS				
- Datintoo	REQUIRED	PROVIDED			

78 x 5 = 390 x (.15) = 59 GAL 91 (1-GAL) 142 POLLINATOR PLANTS

SITE WILL INCLUDE AN UNDERGROUND, AUTOMATIC IRRIGATION SYSTEM, COMPLETE WITH RAIN, WIND & FREEZE SENSOR, DESIGNED AND INSTALLED BY A TEXAS LICENSED IRRIGATO

ALL LAWN AREA SHALL BE SOLID BERMUDA SOD

PLANTING NOTES:

- PLANT SIZE. TYPE. AND CONDITION SUBJECT TO APPROVAL OF OWNER'S REPRESENTATIVE. ALL PLANT MATERIAL TO BE NURSERY GROWN STOCK.
 CONTRACTOR RESPONSIBLE FOR MAINTENANCE OF ALL PLANT MATERIAL UNTIL PROJECT ACCEPTANCE.
- ACCEPTANCE.
 ALL CONTAINER GROWN PLANTS TO HAVE FULL, VIGOROUS ROOT SYSTEM, COMPLETELY ENCOMPASSING CONTAINER
 ALL PLANTS WELL ROUNDED AND FULLY BRANCHED ALL TREES WITH SPREAD 28 OF HEIGHT.
 CONTRACTOR TO PROVIDE OWNER WITH PREFERRED MAINTENANCE SCHEDULE OF ALL PLANTS
- MAINTAIN/PROTECT VISIBILITY TRIANGLE WITH PLANT MATERIAL PER CITY STANDARDS AT ALL

- AMANTAMEROTECT VISIBILITY TRIANGLE WITH PLANT MATERIAL PER CITY STANDARDS AT ALL ENTRANCES TO SITE.

 8. PREP ENTIRE WIGHT OF ALL DEFINED PLANTING BEDS WITH MIX AS OUTLINED IN SPECS. WHERE SHRUBS ARE LOCATED ALONG CURS, BET SHRUBS BACK FROM CURS B FT.

 9. SEE DETAIL SHEET FOLLOWING FOR PLANTING DETAILS.

 10. CONTRACTOR RESPONSIBLE FOR LOCATION OF ALL UTILITIES, INCLUDING BUT NOT LIMITED TO TELEPHONE, "FLECABLE ELECTRIC, GAS, WATER AND SEWER, ANY DAMAGE TO UTILITIES TO BE LEXIFICIAL FREE ARE SHOWN TO FEMAL NOTHING TOR SHALL PRINC ONLY ON APPOVAL OF CITY ARBORIST, WORK TO INCLUDE REMOVAL OF ALL SUCKER GROWTH: DEAD AND DISEASED BRANCHES AND LIMISE, VINES BRIRISRA AND OTHER INVASIVE GROWTH, AND ALL INTERFERING BRANCHES MACE ALL CUTS FLUSH TO REMAINING LIMIS RETAIN NATURAL SHAPE OF PLANT. ALL WORK SUBJECT TO APPROVIDE OF AS A COUNTESY AND NOT INTEROEP FOR BID PURPOSES.

 12. CUANTITIES ARE PROVIDED AS A COUNTESY AND NOT INTENDED FOR BID PURPOSES.

 13. INISTALL EGIGN DE STYME AND AND PLANTING BEDS. REFER TO SPECIFICATIONS, FILE ALL CORNERS SMOOTH.

- CORNERS SMOOTH.

 I. NISTALL CURLEX BLANKET (OR EQUAL) PER MANUFACTURES INSTRUCTIONS ON ALL
 GROUNDCOVERSHRUB BEDS WITH A SLOPE OF 41 OR GREATER.

 I. AT TIME OF PLAN PREPARATION, SEASONAL PLANT AVAILABILITY CANNOT BE DETERMINED. IT IS
 THE RESPONSIBILITY OF THE CONTRACTOR TO SECURE AND RESERVE ALL BASE PLANTS WHEN
 AVAILABLE IN CASE ACTULA INSTALLATION COLORS DURING THE OFF-SEASON. PURCHASE AND
 HOLD BAS PLANTS FOR LATE SEASON INSTALLATION.

 BERNAL PARKING LOT ISLANDA OS AS SHOWN ON ENCLOSED DETAIL SHEET, (BERMS MAY NOT BE
 STOWN ON GRADING FLAN).

 17. PRIOR TO PLANTING, CONTRACTOR SHALL STAKE TREE LOCATIONS FOR APPROVAL BY OWNER.

NOTE:
ALL REQUIRED LANDSCAPE AREAS SHALL BE PERMANENTLY MAINTAINED AND SHALL HAVE AN IRRIGATION SYSTEM INSTALLED MEETING ALL APPLICABLE CITY CODES AND APPROVED BY THE

IN CASE OF CONFLICT WITH OTHER NOTES OR SPECIFICATIONS, CITY REQUIREMENTS OVER RULE.

PLANT SCHEDULE

LAN SO		•						
TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	SPACING	REMARKS
\odot	LAG PTM	10	Lagerstroemia indica 'Natchez'	Natchez Crape Myrtle	45 gal.	8.	As Shown	
)	QUE SHU	4	Quercus shumardii	Shumard Red Oak	3* Cal.	12' Height Min	As Shown	Slingle Straight Trunk, Native
$\widehat{}$	QUE VIR	4	Quercus virginiana	Southern Live Oak	3* Cal.	12' Height Min	As Shown	Single Straight Trunk, Native
)	ULM CRA	5	Ulmus crassifolia	Cedar Elm	3* Cal.	12' Height Min	As Shown	Single Straight Trunk, Native
HRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	SPACING	REMARKS
*	HES PAR	14	Hesperaloe parviflora	Red Yucca	3 gal.	18"-24"	48" O.C.	Native Pollinator
0	LEU SI3	86	Leucophyllum frutescens 'Silverado'	Texas Sage	10 gal.	36* Min	36" O.C.	Native
0	MUH AU2	8	Muhlenbergia capillaris 'Autumn Blush'	Pink Muhly	3 gal.	18"-24"	36" O.C.	Native
0	MUH AUT	11	Muhlenbergia lindheimeri 'Autumn Glow' TM	Lindheimer's Muhly	3 gal.	18"-24"	48" O.C.	Native
0	MYR CER	9	Myrica cerifera	Wax Myrtle	30 gal.	6.	48" O.C.	Native /
\odot	SAL GRE	37	Salvia greggii	Autumn Sage	1 gal.	18"-24"	36" O.C.	Native Polinator
ROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	SPACING	REMARKS
	CYN DAC	13,464 sf	Cynodon dactylon	Bermuda Grass	sod			
	NAS PON	661	Nassella tenuissima 'Pony Tails'	Mexican Feathergrass	4"	Pot	18° O.C.	
	SAL AUG	54	Salvia farinacea 'Augusta Duelberg'	Mealy White Sage	1 gal.	Pot	24" O.C.	Native Polinator
II II II II	SAL HEN	37	Salvia farinacea 'Henry Duelberg'	Henry Duelberg Sage	1 gal.	Pot	24" O.C.	Native Polinator

CAUTIONIII CAUTIONILI
UNDERFORMOD UTILITES ARE LOCATED IN
THIS AREA. 48 HOURS PROR TO ANY
UNDERFORMOD ACTIVITIES, CONTACT LIBE
CONSTRUCTION ACTIVITIES, CONTACT LIBE
CONTROLLED ACTIVITIES, CONTACT
LABORATION AND ACTIVITIES OF THE ACTIVITIES ACCOUNTS ACTIVITIES
1-600-246-4545
LONE STAR HOTIFICATION CENTER
1-600-246-4545
LONE STAR HOTIFICATION CENTER
1-600-648-4545
LONE STAR HOTIFICATION CENTER
1-600-648-645
LONE 1



- NO LANDSCAPE PLANTINGS WITHIN 18" OF PARKING LOT CURBS. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR AND
- SHALL MAINTAIN THE LANDSCAPING FOR 90 DAYS PAST THE FINAL INSPECTION.



LANDSCAPE PLAN CASE # S 190603

Winkelmann & Associates, Inc

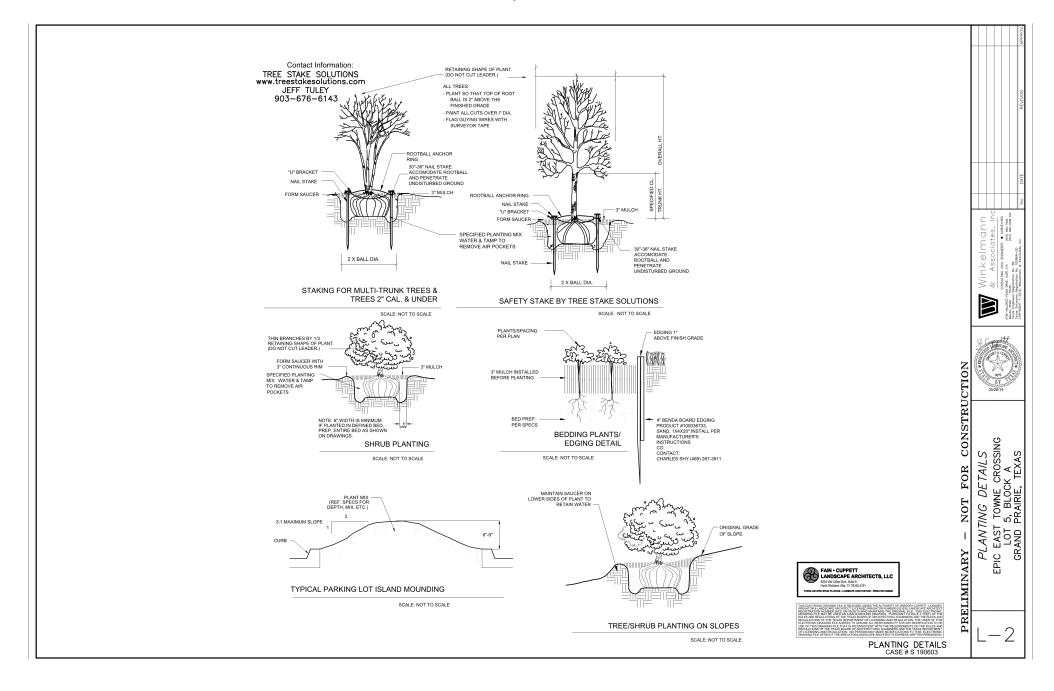




SCAPE PLAN
T TOWNE CROSSING
5, BLOCK A
PRAIRIE, TEXAS LANDSCAPE IC EAST LOT (

FOR

NOT



SECTION 02830

TREES, SHRUBS, AND GROUNDCOVERS

PART I GENERAL

1.01 DESCRIPTION OF WORK

A. Scope

- Bed prep

 2. Metal edging
 3. Topsoil
 4. Planting
 5. Mulching
 6. Guarantee

B. Related Work Specified Elsewhere

- General Requirements All locations
 Section 02740 Irrigation Trenching
 Section 02750 Irrigation
 Section 02800 Lawns

1.02 QUALITY ASSURANCE

A Contractor Qualifications

Minimum of three (3) years experience on projects of similar characteristics and size.

B Reference Standards:

- American Joint Committee Of Horticultural Nomenclature: Standardized Plant Names, Second Edition, 1942; American Association Of Nurserymen: American Standard For Nursery Stock, 1973

C. Substitutions

- Substitutions accepted only upon written approval of Landscape Architect and Owner.
 Submit substitutions possessing same characteristics as indicated on plans and specifications.

- The project Owner's representative reserves the right to inspect and tag plants at the place of growth with the Centractor.
 Inspection at place of growth owners on preclude the right of rejection due to improper diging or handling.
 Owner's representative reserves the right to request soil samples and analysis of soil and plant mix. Remove or correct unacceptable soil. Cost of testing by Contract.

- Submit State and Federal certificates of inspection with invoice.
- (Only if required by Landscape Architect.)

 File certificates with Owner's representative prior to material acceptance.

1.04 PRODUCT DELIVERY, STORAGE, & HANDLING

- Balled & Burlaped (B&B) Plants
 - Dig and prepare for shipment in manner that will not damage roots, branches, shape, and future development after

 - replanting.

 b. Ball with firm, natural ball of soil, wrapped tightly with burtap covering entire ball. Ball size and ratios: conform to American Association of Nurserymen standards unless otherwise shown on plant list.

- Pack plant material to protect against climatic & seasonal damage, as well as breakage injuries during transit.
 Securely core plant tops with ventillated tarpaulin or carries to minimize wind-whipping and drying in transit.
 Pack and ventillate to prevent seasoning of plants during transit. Give special alteriotics to incure prompt delivery and careful handling to point of cellways a jab dies.

- Deliver fertilizer, fertilizer tablets, peat, mulch, soil additives, and amendment materials to site in original, unopened containers, bearing manufacturer of guaranteed chemical enalysis, name, tradename, and conformance is Ostate law.
 Deliver patrias with registle deminification and size labels on example plants.
 Protect during delivery to prevent damage to root ball or desicoation.

- of leaves.

 Notify Owner's representative of delivery schedule in advance so plant material may be inspected upon arrival at job site.

 5. Deliver plants to job site only when areas are prepared.

- Protect roots of plant material from drying or other possible injury with wetted mulch or other acceptable material.
 Protect from weather.
 Maintain and protect plant material not to be planted immediately upon delivery.

- Do not drop plants.
 Do not damage ball, trunk, or crown.
 Lift and handle plants from bottom of container or ball.

1.05 JOB CONDITIONS

- Planting Season Perform actual planting only when weather and soil conditions are suitable in accordance with locally acceptable practices
- conditions are suitable in accordance with locally acceptable practices.

 Protection Before excavations are made, take precautionary measures to protect areas trucked over and where soil is temporarily stacked.

- A. Guarantee new plant material for one year after acceptance of final installation (ie. Final Acceptance of project).

 Make replacement (one per jaint) during one year guarantee period at appropriate season with original plant type, size and planting mixture.

 Repair damage to other plants, sims, & irrigation cuased during plant replacement at no cost to Owner.

 Use only plant replacements of indicated size and species.

PART II PRODUCTS 2.01 MATERIALS

- Hardy under climatic conditions similar to locality of project. True to botanical and common name variety. Sound, healthy, vigorous, well branched, and densely foliated when in leaf; with healthy well-developed root system. Free from disease, insects, and defects such as knots, sun-scald, windburn, injuries, disfigurement, or abracious. Conform to measurements after pruning with branches in normal
- positions.

 Conform to American Association of Nurserymen standards unless shown differently on plant list.

- Single, straight trunks, unless indicated otherwise Trees with weak, thin trunks not capable of support will not be
- accepated.

 All multi-stem trees are to have a minimum of three stems, similar in size and shape, with a spread of approximately 2/3 of the height. All yaupons to be female. Crape myrtle color selection by Landscape Architect.
- Nursery grown stock only.
 Subject to approval of Landscape Architect.

- Seasonal color:
 a. Annuals in 4" pots or as specified
 b. Perennials in 4" pots, clumps, bulbs as specified

B Topsoil

- Natural Fertile, finishe seits having stechant desetfication of from or sondy favor possessing of parameteristics of seits in vicinity which services the properties of t
- operations.
 Presence of vegetative parts of Bermuda grass (Cynodon dactylon), Johnson grass, nut grass (Cyperus rotundus), and other hard to eradicate weeds or grass will be cause for rejection of
- 4. Test topsoil (cost by Contractor):

 - Available nitrogen Available phosphorus Available potash
 - Iron Ph: 5.5 to 7.0
- ed organic matter: 6-10%

- Top Dressing Mulch Shredded cypress or hard wood only
 Soil prep 3 Parts native soil to 1 Part composted landscape mix.
 In pre-packaged bags only; bulk shredded material is unacceptable
- D. Peat Moss Commercially available balled peat moss or approved

E. Staking Material

- Construction grade yellow pine, stain brown
 Size as noted on plans

- Padded with rubbed hose to protect tree
 Balvanized
- Galvanized
 With galvanized turnbuckle
 Evenly tighten turnbuckles with plant in vertical position.
- F Water

- 1. Free of oils, acids, alkali, salt, and other substances harmful to plant growth
 2. Location: Furnish temporary hoses and connections on site.
- G Sand Washed builders sand

- H. Antidesicant "Wilt-proof" or equal.
- I. Edging 3/16" X 4" green, new and unused; with stakes

2.02 MIXES

- Existing topsoil = 50%
 Shredded pine bark = 50%
 Fertilizer 10:20:10 at 30 lb./1000 SF
- B. Planting Mix for Annuals/Perennials
- drainage.

 Japanese maple, dogwood, camellias: Provide 50/50 peat moss to topsoil mix, raise for drainage.

PART III - EXECUTION

3.01 UTILITIES - verify location of all utilities prior to initiating construction; repair any damage caused by construction at no cost to owner

3.02 INSPECTION

- Inspect plants for injury and insect infestation; prune prior to installation.
 Inspect site to verify suitable job conditions.

3.03 FIELD MEASUREMENTS

- A. Location of all trees and shrubs to staked in the field and approved by
- Owner's representative prior to installation.

 B. Location of all groundcover and seeding limits as shown on plans.

3.04 EXCAVATION FOR PLANTING

- greater.
 Size for shrubs Size of planting bed as shown on drawings.
 Rotolll soil mix thoroughly, full depth.
 NOTE: If beds are proposed beneath drip line of existing tree canopy, pocket prep plants. Do not roto-til beneath existing trees.

B. Obstructions Below Ground

- Remove rock or underground obstructions to depth necessary to
- permit planting.

 If underground obstructions cannot be removed, notify Owner's representative for instruction.
- Excess Soil Dispense of unacceptable or excess soil away from the project site at Contractor's expense.

3 05 PLANTING

- Set plants 2" above existing grade to allow for settling.
 Set plants plumb and rigidly braced in position until planting mixture has been tamped solidly around ball.
 Apply soil in accordance with standard industry practice for the

- region.

 Thoroughly settle by water jetting and tamping soil in 6" lifts.

 Prepare 3" dish outside root ball after planting.

 Thoroughly water all beds and plants.

 Stake trees and large shrubs as indicated on plans.

 An
- Stake trees and large strutus as indicated on praints.
 Apply amil-desicant according to manufacturer's instruction.
 Apply commercially manufactured root stimulator as dire printed instruction.
 Plant and fertilize bedding plants per trade standards.
 Apply 3" mulch top dressing.

- Place in pit of planting mixture that has been hand tamped prior to
- Place in pit of planting mixture that his seem nano sampsoup ware as placing plant.
 Place with burlap intext to ground line. Top of ball to be 2' above surrounding soil to allow for settling.
 Remove binding at top of ball and lay top of burlap back 6'.
 Do not pull wrapping from under ball, but cut all binding cord.
 Do not plant if ball is cracked or broken before or during planting
- process or if stem or trunk is loose.

 6. Backfill with planting mixture in 6" lifts.

C. Container Grown Plants

- 1. Place in pit on planting mixture that has been hand tamped prior to
- Price of pit or plearing research
 placing plant.
 Cut cans or two sides with an acceptable can cutter, and remove
 root ball from can. Do not injure root ball.
 Caefully remove plants without lejury or damage to root balls.
 Backfill with planting mixture in 6 lifts.

- Cover planting bed evenly with 3" of mulch.
 Water immediately after mulching.
 Where mulch has settled, add additional mulch to regain
- 3" thickness. Hose down planting area with fine spray to wash leaves of plants

D. Pruning

Prune minimum necessary to remove injured twigs and branches, dead wood, and success; remove approximately 1/3 of twig growth as directed by landscape architect, do not cut leaders or other major branches of jahru luriess directed by landscape architect. Make cuts flush, leaving no stubs.
Paint cuts over 1" diameter with approved tree wound paint. Do not purse vergreens except to remove injured branches.

- A Stake edging alignment with string line prior to installation. Use framing square to insure right angles are true.

 Installal edging stagingt and true as indicated on drawings. Where edging layout is circular in design, maintain true and constant radi as shown to be considered to the control of the cont

- Install with all stakes on inside of planting bed. Remove, file off all sharp corners and burrs.

3.07 CLEAN-UP

Sweep and wash all paved surfaces.

3.08 MAINTENANCE

- Contractor responsible for routine, and regular maintenance of site until Final Acceptance is awarded by Owner. Work includes:

- B. Provide Owner and Landscape Architect with preferred maintenance schedule in writing. Schedule shall include the above-listed tasks and shall address all frequencies, rates, times, levels, etc.



GNN es, Inc

939

CONSTRUCTION

; SPECIFICATIONS T TOWNE CROSSING 5, BLOCK A PRAIRIE, TEXAS PLANTING SEPIC EAST COT 5 CRAND P

FOR NOT RELIMINARY

FAIN • CUPPETT LANDSCAPE ARCHITECTS, LLC

PLANTING SPECIFICATIONS CASE # S 190603

SECTION 02800

FINISH GRADING, LAWN WORK, WILD FLOWERS

1.01 DESCRIPTION

- A. Work includes turf establishment (sod, hydromulch, etc.) as described on
- Make required analysis and material tests for topsoil, fertilizers, and other materials of similar character per current methods of the Association of Official Agricultural Chemists, when required.
- The turf contractor shall have a stand of grass established prior to substantial completion of the project. If this is not possible due to time of year or schedule, he shall maintain and protect the seeded areas until the grass is established.

PART II - PRODUCTS

- Topsoil material (stockpiled, as specified in Specifications) has been saved for use in finish grading. After slifting out all plant growth, rubbish, and stones, use for areas designated to receive grass. If stockpiled topsoil is not sufficient quantity to complete work, furnish acceptable topsoil from another approved source to provide four inches (47) of topsoil for grass areas unless otherwise noted on drawings. Grass areas shall be defined as the graded areas disturbed during construction not to be paved or built upon.
- Acceptable topsoil material shall be defined as natural, fertile, agricultural soil, capable of sustaining vigorous plant growth, uniform composition throughout admixture of subsoil, free of stones, tumps, plants, and their roots, sticks, or other extraneous matter; do not deliver while in a frozen or matdy condition.

2 02 FERTILIZER

- A. Provide a commercial balanced fertilizer delivered to the job in bags labeled with manufacturer's guaranteed analysis. Store in weatherproof storage, place in such a manner that its effectiveness will not be impaired.
- Fertilizer shall be a grade containing the percentages of plant food elements by weight as specified elsewhere in these specifications.
- Availability of various elements shall be per Standards of the Association of Official Agricultural Chemists.

- Grass seed shall be of the previous season's crop and the date of analysis shown on each bag shall be within nine (9) months of the time of delivery to the project. When requested by the Owner or Representative, the seeding contractor shall furnish a sample of seed from each bag for testing.
- The seed shall comply with all provisions of the U.S. Department of Agriculture as to labeling, purity, and germination.

2.04 MULCHING

- Dry straw or hay of good quality, free of seeds of competing plants and at such rate of 1 1/2 2 tons per acre; or,
- Wood cellulose or cane fiber mulch at a rate of 1,000 pounds per acre when the slope is 3/4:1 and stepper: or.
- C. A combination of good quality dry straw or hay free of seeds of competing plants at a rate of 2 1/2 tons per acre and wood cellulose or cane fiber mulch at a rate of 500 pounds per acre. This combination shall be used when the slope is flatter than 3/4:1; or,
- Sericea lespedza seed bearing hay at a rate of 3 tons per acre. This mulch may be applied green or air dried, but must contain mature seed.
- Manufactured mulch materials, such as soil retention blankets, erosion control netting, or others that may be required on special areas of high water concentration or unstable soils. When these materials are used, follow the manufacturer's recommendations for installation.

2.05 HYDRO-MULCHING

Wood cellulose fiber or cane fiber mulch will be applied with hydraulic seeding and fertilizing equipment. All slurry ingredients shall be mixed to form a homogeneous slurry and spray applied within one hour after the mixture is made.

When wood cellulose or cane fiber mulch is used at the 500 pound per acre

Wood cellulose or cane fiber mulch at the 1,000 pound per acre rate is used alone where other mulch material will not stick.

Wood cellulose or cane fiber mulch is self anchoring

PART III - EVECUTION

3.01 RESPONSIBILITY

The site grading contractor will be responsible to stockpile acceptable topsoil in a sufficient quantity to provide four inches (4) minimum cover for all grass areas, including but not limited to all curbed islands, and topsoil planting moundablemms at the appropriate height and width as defined and shown on the landscaping and/or planting drawings. The topsoil and grass areas shall be further defined as any area disturbed during the grading and construction.

The site grading contractor, shall be responsible to spread the topsoil within all perimeter graded areas and future building areas only.

The site grading contractor shall be responsible for backfilling of all curbed islands and planting mounds/berns. They shall also be responsible for removal of all stones, rocks, and raking of all cuttle seeded and/or planted. It will also be the slope state are to be seeded and/or planted. It will also be the sliet grading contractor's responsibility to provide fertilizer, grass seed, and any additional topsoil required and mulching.

3.02 GRASS SEEDING

- Remove stones, roots, rubbish and other deleterious materials from topsoiled areas that are to be seeded.
- Immediately prior to sowing seed, scarify ground as necessary; rake until surface is smooth and friable. Sow seed eventy, lightly wood rake into ground, then roll ground with suitable forlow water throughly with fine spray. During any weather, keep lawn watered with sprinkers or other approved methods. Re-seed any areas not down yeel or damaged. All thervals as may be required according to seasonal conditions, mov and water grass and execute necessary weeding until acceptable and full stand of grass has been
- Provide permanent grass seeding for lawn areas so indicated. Seed in accordance with the following schedule (unless otherwise directed by Owner or Owner's Representative::
 - Sow areas ready for seeding between March 1 and October 1 with Hulled Common Bermuda at a rate of 85 pounds per acre.
 - 2 Sow areas ready for seeding between October 1 and March 1 with Unhulled Common Bermuda at a rate of 90 pounds per acre, and Annual Rye Grass at the rate of 50 pounds per acre.
 - Apply fertilizer at a rate of 20/25 pounds per 1,000 square feet.

- Areas indicated on plans to receive wild flower coverage shall br fine graded, fertilized, and prepared in a manner similar to traditional turf establishment.
- B. Area to be hydromulched with seed mix as follows:

Tickseed Cosmos Ox-Eyed Daisy Side Oats Grama Showy Primrose Plains Coreopsis Black Eyed Susan Indian Blanket Texas Bluebonnet Little Bluestem 10 pounds/acre
15 pounds/acre
5 pounds/acre
4 pounds/acre
0.5 pounds/acre
2 pounds/acre
10 pounds/acre
4 pounds/acre
4 pounds/acre
4 pounds/acre

- All areas to be seeded shall be mulched.
- Mulch materials shall be applied uniformly over the seeded area. Mulch shall be straw and shall be at the rate of 1 1/2 2 tons per acre
- C. Mulch shall be anchored with an emulsified asphalt binder at the rate of 10

Provide, at no additional cost to Owner, fencing, railing, wire or other types of protection for topsoiled and seeded areas against trespassing and damage. If lawns are damaged prior to Final Acceptance, treat or replace them as directed. Remove protection when so directed.

3.06 MAINTENANCE

Provide maintenance from start of work until Final Acceptance. Maintenance includes watering of lawns, weeding, mowing, edging, repairs of wash-outs and guilles, repairs to protection, and other necessary work of maintenance. Maintain slopes against erosion.

2 07 DEHYDDOMIII CHING

The Owner's representative will designate areas to be replanted. Areas on which a stand of growing grass is not present in a reasonable length of time, and the stand of growing grass is not present in a reasonable length of time, and the standard of the standard as the plants from seed occurring at a rate of not less than 1.000 growing plants per square foot. Replanting required because of flushy operations or negligence on the part of the Contractor stall set performed without octs to Former.

- At time of final inspection of work, and before final acceptance, clean payer areas that are solled or stained by operations of work of this section. Clean by sweeping or washing, and remove all defacements or stains.
- Remove construction equipment, excess material and tools. Carl away from site any debris resulting from work of this section and dispose of as directed.

END OF SECTION

SECTION 02922 SODDING

PART I - GENERAL

1.01 DESCRIPTION

- A. Work Included

- Sodding
 Miscellaneous management practices
- B. Related Work Specified Elsewhere

Finish Grading, Section 02800 Lawns and Grasses, Section 02930

1.02 REFERENCE STANDARDS A. Standardized Plant Names

American Joint Committee of Horticultural Nomenclature, Second Edition, 1942.

1.03 SURMITTALS

- A. Vendors Certification That Sod Meets Texas State Sod Law
 - Include labeling requirements. Include purity and type.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- Previous season's crop with date of analysis on each bag. Furnish and deliver each variety in separate bags or cor Sod to be cut no more than three days before delivery.
- Unopened bags labeled with the analysis.
 Conform to Texas Fertilizer Law.

1.05 JOB CONDITIONS A. Planting Season:

- Only during suitable weather and soil conditions.

 As specifically authorized by the Owner's Representative.
- B. Schedule Only after all other construction is complete
- C. Protect and Maintain Sodded Areas
 - From traffic and all other use.
 Until sodding is complete and accepted.

PART II - PRODUCTS

- Sod: As specified on drawings, weed, insect, and disease free having a minimum of 1 inch of topsoil attached to the roots and cut no more than three days prior to install
- The sod shall be cut in strips of at least 1/2 sq. vd. and not more than 1 sq. yd. Sod shall be cut into strips not less than 12" in width or more than 9' in length. At the time of harvest, the top growth shall
- on tot exceed 3" in length.

 All sod shall conform to the laws of the State and shall be obtained from sources meeting the approval of the Department of Agriculture, Division of Entomology.

- Uniform in composition, free flowing.
 Suitable for application in approved equipment.
 Analysis of 16-20-0, 16-8-8 or as directed.
- 1. Free of oil, acid, alkali, salts or other substances harmful to growth

PART III - EXECUTION

3.01 SOD BED PREPARATION

- A. Cultivate to a depth of four (4") inches by disking and tilling with a power
- B. Clear surfaces of all materials:
- Stumps, stones, and other objects larger than one inch (1"). Roots, brush, wire, stakes, etc. Any objects that may interfere with sodding or maintenance.
- C. Prepare sod bed:

 - Remove soil clods larger than one inch (1*). Grade areas to smooth, even surface, removing ridges and filling depressions. Final grade to be below finish grade of curbing and edging as shown on details. All grades shall meet approval of Owner's Representative before sodding.

3 02 SODDING

A. Sodding:

- Lightly water prepared grade, lay sod with staggered joints and with edges touching. Topdress with topsoil at edges if necessary to provide smooth surface. On stopes of 2 to 1 and greater, fasters and in place with wood pegs (two each piece) or other approved method. Sod damaged by storage or during installation shall be rejected. Following settling, topdress: with screened, approved.
- Nater and fertilize at 5 lbs ner 1 000 so ft Sod shall not be placed during a drought, nor during periods when sod is not normally placed in the area, and shall not be placed on
- frozen ground. No dry or frozen sod is acceptable. The contractor shall keep all keep all sodded areas moist and growing until Final Acceptance. All areas shall be maintained in an acceptable condition until acceptance by Owner.

- After placing sod, roll with a hand roller, weighing not more than 100 lbs. per foot of width, in two directions.

Eliminate all air pockets; finished surface should be free of excessive undulations.

3.05 MAINTENANCE AND MANAGEMENT

- B. Resodding:

 - Resod damaged or unacceptable areas.
 Ruts, ridges, and other surface irregularities shall be corrected.

FAIN • CUPPETT
LANDSCAPE ARCHITECTS, LLC



UCTION

NSTR

SPECIFICATIONS
AST TOWNE CROSSING
OT 5, BLOCK A
ND PRAIRIE, TEXAS co_{0} FORNOT EAST LOT SR.

TURF ELIMINARY EPIC

TURF SPECIFICATIONS

CASE # S 190603

-4