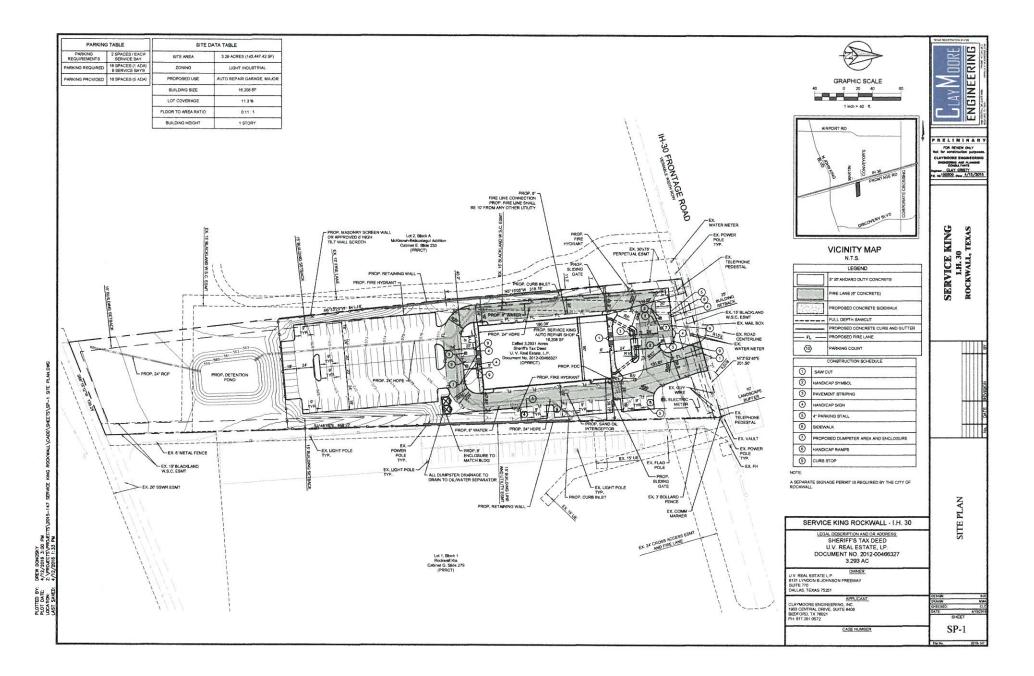


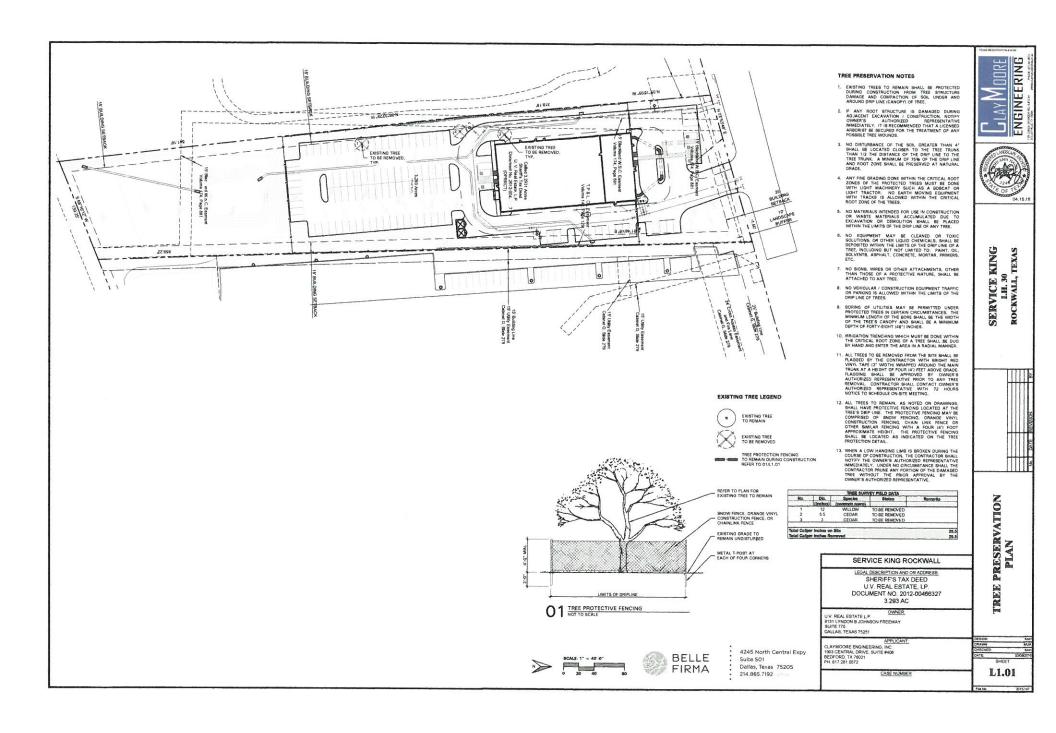


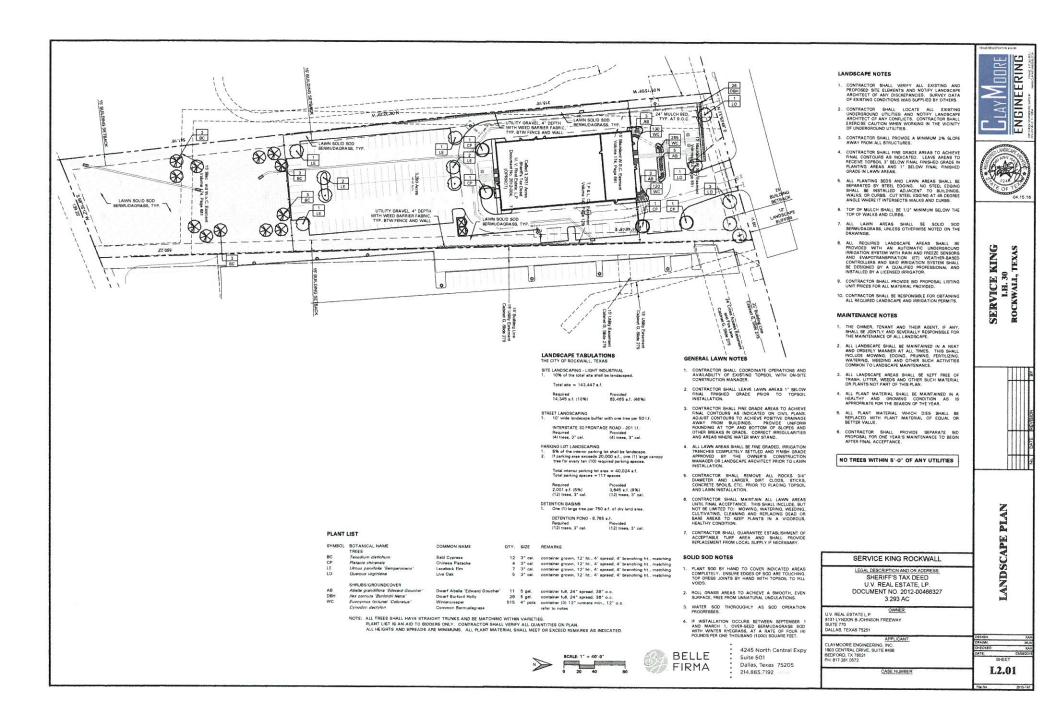
City of Rockwall

Planning & Zoning Department 385 S. Goliad Street Rockwall, Texas 75032 (P): (972) 771-7745 (W): www.rockwall.com The City of Rockwall GIS maps are continually under development and therefore subject to change without notice. While we endeavor to provide timely and accurate information, we make no guarantees. The City of Rockwall makes no warranty, express or implied, including warranties of merchantability and fitness for a particular purpose. Use of the information is the sole responsibility of the user.









SECTION 32 9300 - LANDSCAPE

PART 1 - GENERAL

1.1 REFERENCED DOCUMENTS

- A. Work included: Furnish all supervision, labor, materials, services, equipment and appliances required to complete the work covered in conjunction with the landscaping covered in these specifications and landscaping plans, including:
- 1. Planting (trees, strubs and grasses)
- 2. Bed preparation and fertilization

- American Joint Committee on Hortkultural Nomenclature: 1942
 Edition of Standardized Plant Names.

1.4 NOTIFICATION OF SOURCES AND SUBMITTALS

1.5 JOB CONDITIONS

- General Contractor to complete the following sunch first: Prior to Landscape Contractor inflating any portion of landscape healthfully claimed Contractor shall have planting fixed mass results as the contractor of the contractor of the contractor of the such as shown on the diswings. All lives areset to encoive solid soci shall be list too set? Inch body the fixed first paste of advantable, drives and curbs. All construction doubte shall be removed prior to Landscape Contractor beginning my work.

1.6 MAINTENANCE AND GUARANTEE

A. Maintenance:

- The Landscape Contractor shall be hald responsible for the insinterance of all work from the time of planting until final acceptance by the Cherck. No trees, shrubs, groundcover or grass will be accepted unless they show healthy growth and satisfactory foliage conditions.
- Maintenance shall include watering of trees and plants cultivation, weeding spraying, edging, pruning of trees mowing of grass, cleaning up and all other work necessary of maintenance.
- A written notice requesting final inspection and acceptance should be submitted to the Owner at least seven (7) days prior to completion. An on-site inspection by the Owner's Authorized Representative will be completed prior to written acceptance.

- Trees, shrubs and groundcover shall be gustanteed for a twelve (12) month period after final acceptance. The Contractor shall replace all dead materials as soon as weather permits and upon notification of the Gware. Plants, including trees, which have perially died on that shape, size, or symmetry have been damaged, shell be considered subject to replacement. In such cases, the opinion of the
- a. Plants used for replacement shall be of the same size and kind as those originally planted and shall be planted as originally specified. All work, including materials, labor and equipment used in replacements, shall carry a towley 11/2 menthy quarestime. Any damage, including rule in lawn or bed areas, incurred as a result of making replacements shall be immostiately replaced.
- At the direction of the Owner, plants new to replaced at the start of the next year's planting season. In such cases, deed plants shall be removed from the premises immediately.
- The Owner agrees that for the guarantee to be effective, he wift water plants at least twice a week during dry periods and cultivate bads once a month after final acceptance.
- Acceptance for all landscape work shall be given after final sepaceton by the Owner provided the job is in a complete, undamaged condition and there is a stand of grees in all lawn areas. At that time, the Owner will sesume maintenance on the scoopted work.
- Repairs: Any necessary repairs under the Guerantee must be made within tan (10) days after receiving notice, weather penalting, in the west the Landscape Contractor does not make regain accordingly, the Owner, without for

1.7 QUALITY ASSURANCE

- General: Comply with applicable federal, state, county and local regulations governing landscape materials and work.
- Personnel: Employ only experienced personnel who are familiar with the required work. Provide full time supervision by a qualified foremen acceptable to Landecape Architect.
- election of Plant Materials:
 Make contact with suppliers immediately upon obtaining motion of continuous acceptance to select and book materials. Develop a program of mahintenance (prumip and fertilization which will ensure the purchased materials will meet sed / or exceed project specifications.
- Substitutions: Do not make plant meterial substitutions. If the shellfall landlecape natural is not obtainable, submit the shellfall landlecape shelled in the shell submit to Landlecape Aprillact, regulator with some final plant of the shell shel
- Measurements: Measure trees with branches and trunks or cares in their normal position. Do not prize to obtain required sizes. Eaks calige measurements eth inches above ground for trees up to and including 4" caligor size. Measure main body of all plant material of highest and speed dimensions;

- do not messure from branch or root tip-to-tip.
- Owner's Authorized Representative shall inspect all plan material with requirements for genus, specials, cultivar i variety size and quality.
- Owner's Authorized Reproposite the interior the right to further inspect all plant installed upon serval to the ele-during installation for sites and condition of into bale and root systems, limbs, branching habit, insects, injuries and fatter deplication.
- 7. Owner's Authorized Representative may reject unastalisationy or defective resterial at any time during the process work. Remove rejected materials immediately from the site and replace with scopetible material an editional cost to the Owner. Planta damaged in traviti or at job etts shall be rejected.

1.8 PRODUCT DELIVERY, STORAGE AND HANDLING

- Belled and Burlapped (B&B) Plants: Dig and propare eligment is a manner that will not demarge roots, branches, shape and future development.

- Deliver packaged materials in seeled containers showing weight, analysis and name of manufactures. Protect materials from deterioration during delivery and white stored on situs.

- Protect plants during delivery to prevent damage to root balls or deviacation of leaves. Keep plants most at all tense. Cover 48 materials during transport.
 Notify Owner's Authorized Representative of delivery schedule? 27 hours in advance plants.
- 6. Remove rejected plant material immediately from job site.

2.1 PLANTS

- General: Well-formed No. 1 grade or better nursery grown stock. Listed plant heights are from tops of not balls to nominal tops of plants. Faint spread raties to nominal outer width of the plant, not to the outer last spe. Plants will be individually approved by the General's Authorized Representative and his decision se to their acceptability shall for first.
- Quantities: The drawings and spocifications are complimentary.

 Anything called for on one and not the other is as binding as if shown end called for on both. The plant calledder is an end to bidders only. Confirm all quentities on plant.
- Quality and size: Plant materials shall conform to the size given on the plan, and shall be healthy, symmetrical, well-shaped, full hearthest and well rooted. The plants shall be free from injurious insects, diseases, injuries to the bark or roots, bottom branches, object-bottom disfigurements, insect eggs and larves, and are to be of a positions quality. Approvat: All plants which are found unsuitable in growth, or are in any unhealthy, beilly shaped or undereized condition will be resisted by the Owner's Authorized Representative inthe before or after planting and shall be removed at the expense of the Landespee Contractor and replaced with acceptable plant as

- These shall be invasively, (soft-standard, well-shaped, and shall meet from shall be invasively (soft-standard) and shall meet seriodice. Bith shall be firm, near, slightly spread and only seriodic below. Any time (soon in the last of which a brain regressed to bothy. Any time (soon in the last of which a brain (10°) mobile in dissense for each one (17) sociol of track, disense, second (so (17) inches above but 10 belowned/thus conferes to measured (so (17) inches above but 10 belowned/thus conferes to measured shall be sh
- F. Pruning: All pruning of trees and shrubs, as directed by the Landesspe Architect prior to final acceptance, shall be executed by the Landesspe Contractor at no additional cost to the Owner. 2.2 SOIL PREPARATION MATERIALS

- Frieble, fertife, dark, learny soil, free of clay lumps, subsoil stories and other extransous material and reseccably free of weeds and tonigh gressey. Learn containing Delisagrase or Nutgrisse shall be rejected.
- Physical properties as follows:
 Clay between 7-27 percent
 Sit between 15-25 percent
 Gand leas then 52 percent
- Organic matter shall be 3%-10% of total dry weight.
- If requested, Landscape Contractor shall provide a certified and analysis conducted by an approved soil testing laboratory verifying that sandy loam meets the above requirements.
- Organic Material: Compost with a mixture of 80% vegetative metter and 20% animal weate. Ingredients should be a mix of course and fine textured material.
- Promised Swidting Soil as supplied by Vital Earth Resources Gladimenter, Texas: Professional Swidting Soil as supplied by Living Sarth Technology, Dellas, Texas or Acid Glo Municipalities as supplied by Soil Statiding Systems, Dallas, Texas or approved equal.
- D. Sharp Sand: Sharp sand must be free of seeds, soil particles and wreads.
- Mulch: Double Shredded Hardwood Mulch, partially decomposed dark brown: Living Earth Technologies or approved squal.
- Organis Fertilizer: Fertilats, Sustane, or Green Sense or equal as recommended for required applications. Fertilizer shall be delivered to the set in original unopered containers, each bearing the manufacturer's guaranteed statement of analysis.
- Commercial Fertilizer: 10-20-10 or similar enalysis. Nitrogen source to be a minimum 50% slow relinace organic Nitrogen (SCU or UF) with a minimum 8% scillur and 4% iron, plus icronutrients.

2.3 MISCELLANEOUS MATERIALS

- Staking Material for Shede Trees; refer to details.
- C. Gravel: Washed native pea gravel, graded 1 inch to 1-1/2 inch. Filter Fabric: "Mirati Miracape" by Mirati Construction Products evaluable at Lone Star Products, Inc., (489) 523-0444 or approved equal.

F. Decomposed Granite: Base material shall consist of a natural material mix of granite aggregate not to exceed 1/8" diameter in size and shall be composed of various stages of decomposed and the composed of various stages of decomposed.

PART 3 - EXECUTION 3.1 BED PREPARATION & FERTILIZATION

- Landecape Contractor to inepect all extetting conditions and report any deficiencies to the Owner.
- All planting areas shall be conditioned as follows:
- Proprio new planting bads by straping away existing grass and weeds as necessary. Till existing sail to a depth of els (5) linches proc to pfocing connects and furthers. Apply femilies as per Manufacture's recommendators. All of the control of the process of the process of the con-of the topsoid. Apply cogains fertilizer such as Statems or Girsen Sense at the rate of twenty (201 pounds per one thousand 1,000 equals lest.
- All planting areas shall receive a two (2") inch layer of agecified mulch.

C. Grass Areas:

Blocks of ead should be laid joint to joint (staggared joints) after fertilizing the ground liest. Roll grees areas to achieve a smooth, even surface. The joints between the blocks of soil should be filed with soproll where they are evidently apped open, then wasted biscoughly.

3.2 INSTALLATION

- Construction has been advantationly accompanies.

 Plant instantial belief in discharged to the all only after the beds are proported and enses are noder for planting. All alignments of white proportions are proportionally alignment of the proportion of the plant and only after delivery to the abs, after belief among the plant and are considered against the proportion of the plantial formation of the plantial formation of the plantial formation of the plantial formation of the property of the Contactor until final electropistors.

- exposes or a polarizing or pain measure of Excepting piles with vertical sizes and horizontal bottom. Trop pits shall be large enough to permit handling and plenting which tiply to bell a of earth or roots and shall has not such dispot but, who takes delibed, the crown of the plant shall been the same relativeship to the femili grade as it did to soit surface in original place of growth.
- Shrub and tree pits shall be no less then twenty-four (24") stockes vider than the lateral disease or of the surfix belt and size in from size all rocks and stones over thereupotate (91") soft in disease. Plants should be thoroughly most before convolving containers.

- tree planting detail as approved by the Landscape Architect if the percolation tost fails.
- Backfill only with 5 parts existing and or sendy form and 1 part bod preparation. When the hole is dug in solid rook, topeoil from the same arcs should not be used. Carriefly sertile by watering to prevent all pockets. Remove the buildip from the top //g of the bulk, as well as all hylor, plastic string and wire. Contained tree will suitely be not both, it is not follow student nursery practice.

- M. All plant birds and trees to be mulched with a minimum settled thickness of two (2") inches over the entire bad or pit.
- Introduce of two ICI inches owe the entire ted or pit. Observation below grands: In the event that mosk, or undergoard construction when or observations are encountered in any pited of encentivation with or observations are successful and the encountered of the encountered obstructions when the encountered of the encountered of the countered of the encountered of the countered of the encountered of the encoun
- Pruning and Mulching: Pruning shall be directed by the Landsoppe Architect and shall be pruned in accordance with standard horticultural practice following Fine Pruning, Clase I pruning standards provided by the National Arborist Association.

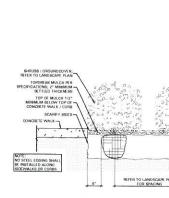
- Immediability after plenting operations are completed, all tree
 pits shall be covered with a leyer of organic material two
 (2°) incline in depth. The limit of the organic material for
 tree shall be the disense of the plant pit.

O. Steel Curbing Installation:

- Curbing shell be eligned as indicated on plans. Stake out limits of steel curbing and obtain Owners approval prior to installation.
- 2. All steel curbing shall be free of kinks and abrupt bonds.
- 3. Top of curbing shall be \mathbb{X}^{\bullet} maximum height above final finished grade.
- Stakes are to be installed on the planting bed side of the ourbring, as opposed to the grass side.
- 5. Do not install steel edging along sidewalks or curbs.
- Cut about adging at 45 dagnse angle where adging meets sidewalks or curbs.

3.3 CLEANUP AND ACCEPTANCE

A. Cleanup: Duting the work, the premises shall be kept near orderly at all times. Storage areas for all materials shall be organized so that they, so, are near and orderly. All trash others what be removed from this after averts progresses. It pavoid snear clean by sweeping of hosing them at and of event day.



02 SHRUB / GROUNDCOVER DETAIL

4245 North Central Expy Suite 501

SERVICE KING ROCKWALL

LEGAL DESCRIPTION AND OR ADDRESS SHERIFF'S TAX DEED U.V. REAL ESTATE, LP. DOCUMENT NO. 2012-00466327

3.293 AC U.V. REAL ESTATE L.P. 8131 LYNDON B JOHNSON FREEWAY SUITE 770 DALLAS, TEXAS 75251

APPLICANT CLAYMOORE ENGINEERING INC 1903 CENTRAL DRIVE, SUITE #406 BEDFORD, TX 76021 PH: 817.281.0572

CASE NUMBER

ENGINEERING J LAY •

DORE

KING TEXAS SERVICE

LANDSCAPE SPECIFICATIONS A DETAILS

L2.02

01 TREE PLANTING DETAIL

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(8)

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1

TREE PLANTING DETAIL LEGEND AND NOTES

A. TREE: TREES SHALL CONFORM LATEST AMERICAN STANDARD NURSERY STOCK, www.enis.org B. TREE PIT: WADTH TO BE AT LEAST TWO
(2) TIMES THE DIAMETER OF THE ROOT
BALL CENTER THEE IN HOLE & REST
ROOT BALL ON UNDISTURBED NATIVE
SOR.

C. ROOT BALL: REMOVE TOP 1/2 BURLAP AND ANY OTHER FOREIGN OBJECT; CONTAINER GROWN STOCK TO BE INSPECTED FOR GIRDUNG ROOTS.

D. ROOT FLARE: ENSURE THAT ROOT FLARE IS EXPOSED, FREE FROM MUICH, AND AT LEAST TWO INCHES ABOVE GRADE. TREES SHALL BE REJECTED WHEN GIROLING ROOTS ARE PRESENT & ROOT FLARE IS NOT APPARE M.

E. ROOTBALL ANCHOR RING: REFER TO MANUFACTURER'S GURDELINES FOR SIZING. PLACE ROOTBALL ANCHOR RING ON BASE OF ROOTBALL, TRUNK SHOULD BE IN THE CENTER OF THE RING.

F. 'U' BRACKET. G. MAIL STAKE: REFER TO MANUFACTURER'S CURELINES FOR SZINCO. INSTALL MAIL STAKES WITH HAMMER OR MALLET FRANKLY INTO STAKES FLUSH WITH "U" BRACKET ADJACENT TO ROOTBALL (DO NOT DISTURE ROOTBALL). H. BACKFILL: USE EXISTING NATIVE SOIL for amendmental WATER THOROUGHLY TO ELIMINATE AIR POCKETS.

MULCIH DOUBLE SHIREDDED HARDWOOD MULCH 2 INCH SETTLEND THECKNESS, WITH 2 " HT. WATERING RING; ENSURE THAT ROOT FLARE IS EXPOSED. BELOW GROUND STAKE SHOULD NOT BE VISIBLE.

OR APPROVED EQUAL. TREES SHALL BE STAKED BELOW GROUND WHERE NECESSARY; ABOVE GROUND STAKING IS EXPRESSLY PROHIBITED.

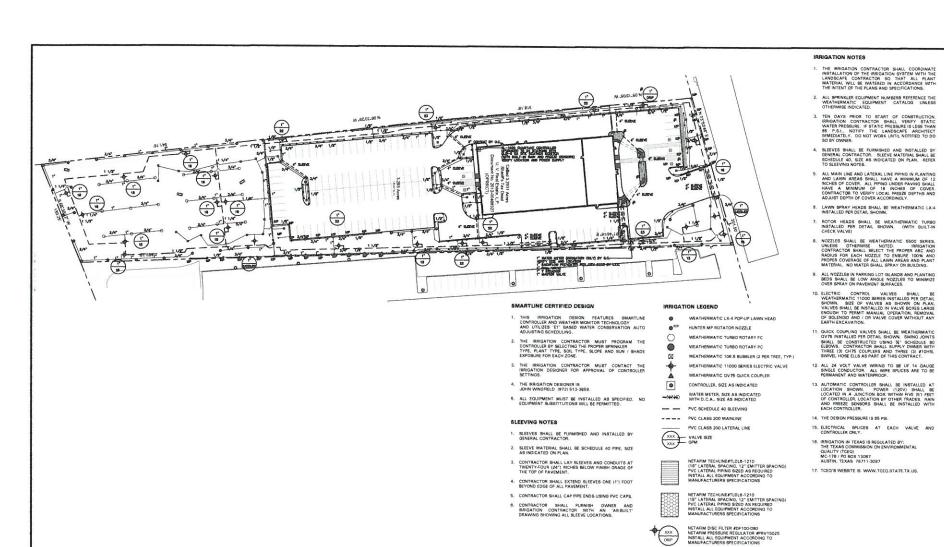
THE STAKE SOLUTIONS SAFETY STAKE BELOW GROUND MODEL AVAILABLE FROM: THE STAKE SOLUTIONS AFTER THE STAKE SOLUTIONS MODEL AVAILABLE FROM: THE STAKE SOLUTIONS (90) 976-0144 JHTB trees lakes outside so the New Yorks and STAKE

STATEMENT OF THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN A COPY OF THE MANUACCIUREN'S SECRETATIONS PROOF STATEMENT OF THE MANUACCIUREN'S SECRETATIONS OF STATEMENT OF STATE

3/16" X 4" BLACK EDGING, STAKES ON INSIDE; EDGING SHALL BE 1/2" MAXIMUM HEIGHT ABOVE FINISH GRADE -LAWN / FINISH GRADE REFER TO LANDSCAPE PLAN ROOTBALL, DO NOT DISTURB

> BELLE FIRMA

Dallas, Texas 75205 214.865.7192



SERVICE KING ROCKWALL

LEGAL DESCRIPTION AND OR ADDRESS SHERIFF'S TAX DEED U.V. REAL ESTATE, LP. DOCUMENT NO. 2012-00466327 3 293 AC

U.V. REAL ESTATE L.P. B131 LYNDON B JOHNSON FREEWAY SUITE 770 DALLAS, TEXAS 75251

BUBBLER PIPING CHART

SIZE OF PIPE

4245 North Central Expy

Dallas, Texas 75205

Suite 501

214.865.7192

NUMBER OF BUBBLERS

BELLE

FIRMA

SCALE: 1" = 40'.0"

APPLICANT CLAYMOORE ENGINEERING INC 1903 CENTRAL DRIVE, SUITE #406 BEDFORD, TX 76021 PH: 817.281.0572

CASE NUMBER

SHEET

IRRIGATION

L3.01

ENGINEERING

04.15.

ROCKWALL, SERVICE

KING TEXAS

SECTION 32 8423 - UNDERGROUND IRRIGATION SLEEVES AND UTILITY COMDUTS

PART 1 - GENERAL 1.1 DESCRIPTION

Provide underground intigation eleeves as indicated on the drawings.

1.2 RELATED WORK SPECIFIED ELSEWHERE

ASTM - D2441 Poly (Vinyl Chloride) (PVC) Plastic Pipe (SD 8-PR) ASTM - D2469 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Societal Type, Schodide 40. ASTM - D2564 Solvent Comenta for Poly Vinyl Chloride Plastic Pipe and Fittings.

2.1 DEFINITIONS

- Sleave A pipe within which another pipe is placed for carrying water or other utilities to be installed.
- 2.2 GENERAL
- Polyvkryl Chloride Pipe (PVC) Manufactured in accordance with standards noted horein:
- Masking and Identification Permanently marked with SOR number, ASTM standard number, and the NSF (Nistonal Seriotoins Foundation) seed.
 Solvan 1 As recommended by manufacture to make solvant-weided joints. Thoroughly clean pipe and fittings before applying solvant.

- A. Coverage Provide twenty-four inches (24*) minimum cover over top of eleeve from finish grade.
- Sleave Extensions Extend absense one foot [11] gast edge of personnent or concrete walks. Install 90 degree allow on each stews and and add additional langer of same stop sipe to extend above timish grade by twelve inches [127]. Cap prise and susing duct tops.

- Compection Place backfill over elevine in six (6") inch lifts.
 Temp firmly into place taking care not to derauge elevin.
 Compete backfill and competetion to prevent any future extrement. Compect to 95% Standard Proctor,

SECTION 32 8424 - IRRIGATION SYSTEM

PART 1 - GENERAL 1.1 SCOPE

A. Provide complete sprinkler installation as detailed and specified herein, includes furnishing all labor, material, tools, equipment, and related items for the complete and proper

0 1 SLEEVE DETAIL

talistion of the irrigation system as indicated by the rivings. All costs associated with this installation, losing fees for teeting and inspections of the system spontents are the responsibility of the installer of the

B. Work includes but is not limited to:

- Tranching and backfill. Installation of automatic controlled system. Upon conspliction of installation, supply as-built drawings showing details of construction including location of maintening planty, menual and automatic velves, electrical supply to velves, and specifically the exact location of automatics.
- All sleaves as shown on plane shall be furnished by General Contractor. Meter and power source shall be provided by General Contractor.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Refer to Irrigation Plans for controller, head, and valve locations.
- Section 32 8423 Underground Irrigation Sleevee and Utility Conduits
- D. Refer to Landscape Plane, notes, details, bidding requirements, special provisions, and schodules for additional requirements.

1.3 APPLICABLE STANDARDS

- America Stendard for Teeting and Materials (ASTM) Latest edition.

- A. The Contractor shall guarantee materials and workmanship for one (1) calendar year after final acceptance by Owner.
- C. Provide maintenance of system, including rateling and lowering of heads to components for fawm growth, cleaning, and adjustment of brods, and raising and lowering of shuts heads to components for shind growth for one (1) year after completion of installation.

1.5 SUBMITTALS

18° COVER BETWEEN SCHEDULE 40 PVC.

- 0. Project Date. The Contractor phila addrest the 180 opinion requirement resolutioners' to submit and enter discovering for approved by Dower Authorised Representative pilot to institutions, another, but not institute to the bollowing institution, and opinion of the contractive properties of the project devices, valve boxes, vivin, conduct, fittings, and all other types of fittings reproduct to the restated on the bottom representative proposed to be restated on the bottom recommendations, if applicable, he seed proposed transitions are commendations, if applicable, he seed proposed transitions.

- Operating and Maintenance Minimuse:

 1. Proceeds these (Cit individuals) bound manuals disabling operating and maintenance requirements for the insignition operating and maintenance requirements for the insignition.

 2. Manuals shall be delibered to the Owner Authorised Representation in later than the ICD days give to operating the Committee of the Installation of Installati

- - Comply with Dahasin I requirements.
 2. Looks by written dimension, reading of majaline piping.
 2. Looks by written dimension, reading of majaline piping.
 2. Looks by written dimension, reading the pipeling of the p
- When dimensioning is complete, transpose.
 Submit. these (3) copies of the completed as-built drawings, stein with PDF files of the same, to the Owner Authorized Representative price to first acceptance of the work. Mark drawings Timod Prints Showing Significant Changes." Date and sign drawings.
- Quick Coupler Keys: Provide three (3) coupler keys with boiler drains ettached using brass reducer.
- Controller Keye: Provide three (3) sets of keys to controller enclosusels).
- Use of materials differing in quality, size, or performance from these specified shall now be allowed upon written approval of the Landscape Architect. The decisions shall be based on comparative ability of material or article to perform tuly all purposes of mechanics and general design considered to be possessed by these specified.
- Bidders dearing to make a substitution for specified sprinklers shall suftent menufacturer's catalog sheet whowing full specification of each type sprinkler proposed as a substitute, including decharge in OPM maximum allowable operating pressure at sprinkler.
- Approval of substitute sprinkler shell not refleve linigation Contractor of his responsibility to demonstrate that final installed sprinkler systems shall operate according to intent of originally designed and specified system.
- It is the responsibility of the firigation Contractor to demonstrate that fine installed spinkkin system shall operate according to intent of originally designed and specific system. If firigation Contractor notes any problems in basepacing or potential owerage, it is his tesponsibility to not the Landesspecial Architect in writing, before proceeding with - SPECIFIED SPRAY NOZZLE & BODY

CLASS 200 PVC LATERAL LINE

S X S X 7 PVC SCHEDULE 40 OUTLET TEE OR ELBOW

- FINISH GRADE

2.6 SCHEDULE 80 PVC NIPPLES

A. Composed of Standard Schedule 40 PVC Fittings and PVC

Type UF with 4/94" thick waterproof insulation which is Underwriter's Laboratory approved for direct underground burst when used in a National Electric Code Class II Circuit (30 volts AC or less).

work. Irrigation Contractor guarantees 100% coverage of all areas to be irrigated.

A. Perform testing required with other trades, including sarrhwork, paving, plumbing, electrical, etc., to avoid unnecessary cutting, patching, and boring.

Water Pressure: This irrigation system has been designed to control with a minimum statio water pressure indicated on Drawlays. The Contractor state take a pressure reading at each water mater paid to bigliering construction. Confirm station of the pressure of the press

A. Coordinate installation with other trades, including earthwork, paving, and plumbing to avoid unnecessary cutting, patching and beging.

B. Coordinate to ensure that electrical power source is in place.

C. Coordinate system installation with work specified in other sections and coordinate with Landscape Contractor to ensure plant material is uniformly watered in accordance with inten-shown on drawings.

A. Mainline: Mainlines are the piping from water source to operating valves. This portion of piping is subject to surges, tents a closed portion of spinkles system. Hydrant lines are considered a part of sprinkles main.

PVC pipe shall be manufactured in accordance with commercial standards noted herein.

B. Marking and identification: PVC pipe shall be continuously and permanently marked with the following information: manufacture's name, pipe size, type of pipe, and meterial, SDR number, product standard number, and the NSF (National Smittetion Foundation) seal.

Hard, straight lengths of domestic manufacture only. Do no use copper tube of foreign extrusion or any so-called irrigation tubing (thin wall).

A. Cast brase or wrought copper, await - solder type.

1.8 TESTING

1.7 COORDINATION

PART 2 - PRODUCTS

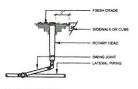
Z.3 COPPER TUBING

2.5 WIRE

2.4 COPPER TUBE FITTINGS

2.2 POLY VINYL CHLORIDE PIPE (PVC PIPE)

2.1 GENERAL



03 ROTARY HEAD

meeting noted etandards. No clamps or wires may be used. Nipples for heads and ehrub risers to be nominal one-half inch U(*) diameter by eight (6") inches long, where applicable.

- Polyethylens nipples six (6*) inches long shall be used on all pop-up spray heads.
- 2.7 MATERIALS SEE IRRIGATION PLAN
- A. Sprinkler heads in fewn area as specified on plan
- B. PVC Pipe: Clase 200, SDR 21
- C. Copper Tubing (City Connection): Type "M"
- D. 24V Wire: Size 14. Type UF
- Electric valves: Shell be all plactic construction as indicated on plans.

PART 3 - EXECUTION

3.1 INSTALLATION - GENERAL

- Staking: Before installation is started, place a stake where each sprinkler is to be located, in accordance with drawing. Staking shall be approved by Owner Authorized Representative before proceeding with work.
- Expositions: Expositions are unclearlied and include earth, loses rock, rock or any combination thereof. In wer or divided tests. Recall's franches with material recovery, provided that the sent'h is suitable for compection and contains no humps, cloder lock, debts, etc. Special backfull apportications, if furnished take preference over this general specification.
- better condition then botton sixulations. Route piping around trees and should be asuch a nutriend as to evoid derived in acuth a nutriend as to evoid derived in acuth a nutriend as to evoid derived be attracted. It is even whom a satisfig time as of present, before a fail to adjust of on-site to provide a minimum colerance of the adjusted on-site to provide a minimum colerance of the adjusted on-site to provide a minimum colerance of the adjusted on-site to provide a minimum colerance of the adjusted on-site to provide a minimum colerance of the adjusted on-site to provide and adjusted on-site to provide a minimum colerance of the adjusted on-site to provide a minimum colerance on the discovery of the adjusted on-site to provide a minimum colerance on the discovery of the adjusted on-site to provide a minimum colerance on the discovery of the adjusted on the discovery of the discovery of the adjusted of the adjusted on the discovery of the discovery o

3.2 PIPE INSTALLATION

- Sprinkler Mains: Install a four (4") inch wide minimum trench with a minimum of eighteen (18") inches of cover.
- Lateral Piping: Install a four (4") inch wide minimum trench deep mough to allow for installation of sprinkler heads and valves, but in no case, with less than twelve (12") of cover.
- Tranching: Remove Jumber, rubbish, and large rocks from tranching: Remove Jumber, rubbish, and large rocks from tranchine. Provide Irin, uniform beaver for entire length of each lipic files to prevent uneven estimates. Wedging or matter or dist from leads of lipid belief wellings, in large picking claral by approved means during and after laying of sign.

- PVC to metal connection: Work matal connections first. Use a non-hardening pipe dope such as Perhadex No. 2 on threaded PVC adapters into which pipe may be wolded.
- 3.4 COPPER TUBING AND FITTING ASSEMBLY

A. Clean pipe and fitting thoroughly and lightly sand pipe connections to remove residue from pipe. Attach fittings to tubing in an approved manner using 50-50 soft solid core solide.

3.5 POP-UP SPRAY HEADS

A. Supply pop-up agray heads in accordance with materials list and plan. Attach spirisher to lateral piping with a semi-feable polyethylose rippls not less than three [3") inches or more then eix (8") inches long.

3.7 WIRING

3.8 AUTOMATIC SPRINKLER CONTROLS

Supply in accordance with Irrigation Plan. Install according to manufacturer's recommendations.

3.9 TESTING

Sprinkler Mains: Test sprinkler main only for a period of twelve (12) to fourteen (14) hours under normal preseure. If leaks occur, replace joint or joints and repeat test.

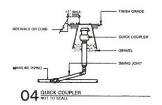
- Complete tosts prior to backfilling. Softicions backfill material may be placed in transfers between fittings to caseurs stability of line under presents. In sech case, leave fittings and couplings open to visual expection for full paried of the

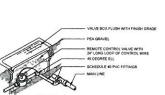
3.10 FINAL ADJUSTMENT

- A. After installation has been completed, make final adjustment of sprinkler system in properation for Dwner Authorized Representative's final inspection.
- Completely flush system to remove debris from lines by removing nozzle from heade on end of lines and turning on system.
- Check sprinklors for proper operation and proper alignment for direction of throw.
- Check each eaction of spray heads for operating pressure and balance to other sections by use of flow adjustment on top of each valve.
- Obeck nozzlány for proper coverage. Provating wind conditions may indicate that each of angle of spray should be other than shown on disavings. In this case, change nozzles to provide correct coverage and furnish date to Owner Authorized Representative with each change.

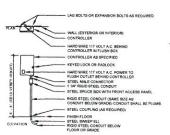
3.11 SYSTEM DEMONSTRATION

Instruct Owner's percentel in operation and maintenance of eyetem including adjusting of sprinkler heads. Use operation and maintenance manual for basis of demonstration.



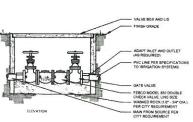


05 REMOTE CONTROL VALVE



06 WALL MOUNTED CONTROLLER

02 POP-UP LAWN SPRAY ASSEMBLY



07 BACKFLOW PREVENTER



4245 North Central Expy Suite 501 Dallas, Texas 75205 214.865.7192

SERVICE KING ROCKWALL

LEGAL DESCRIPTION AND OR ADDRESS. SHERIFF'S TAX DEED U.V. REAL ESTATE, LP. DOCUMENT NO. 2012-00466327 3.293 AC

U.V. REAL ESTATE L.P. 8131 LYNDON B JOHNSON FREEWAY SUITE 770 DALLAS, TEXAS 75251

APPLICANT LAYMOORE ENGINEERING INC 1903 CENTRAL DRIVE, SUITE #406 BEDFORD, TX 76021 PH: 817 281 0572

CASE NUMBER

ENGINEERING *

DOR

KING TEXAS SERVIC



IRRIGATION SPECIFICATIONS A DETAILS

L3.02

