

EDUSION FOUTTIOL AND SOIL PREFARATION:
THE CONTRACTION IS REPERVISIBLE FOR MAINTAINING TOP SOIL AT THE
THE CONTRACTOR IS REPERVISIBLE FOR MAINTAINING TOP SOIL AT THE
THE CONTROLES AS SECCIFIED FOR CIVIL PLANS, ALL CONTROLES SHOULD
ACHIEVE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND STRUCTURES.
WATER SHOULD NOT BE ABLE TO POOL IN MAY AREAS UNLESS SPECIFIED
OTHERWISE, EROSION FABRIC SUCH AS JUTE MATTING OR OPEN WEAVE TO
BE USED WHERE NECESSARY TO PREVENT SOIL EROSION.

ANY LOSS OF TOPSOIL OR GRASS DUE TO EROSION IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL IT IS 100% ESTABLISHED.

CONTRACTOR TO REMOVE ANY ROCKS 3/4" AND LARGER, STICKS AND DEBRIS PRIOR TO INSTALLATION OF TOPSOIL AND SOD.

FOUR (4') OF TOPSOIL SHALL BE APPLIED TO AREAS DISTURBED BY CONSTRUCTION RECEIVING SOD. IF TOPSOIL IS NOT AVAILABLE ON SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL AS APPROVED BY THE OWNER OR OWNERS REPRESENTATIVE.

TOPSOIL SHALL BE FRIABLE, NATURAL LOAM, FREE OF ROCKS, WEEDS, BRUSH, CLAY LUMPS, ROOTS, TWIGS, LITTER AND ENVIRONMENTAL CONTAMINANTS

SOLID SOD: SHALL BE PLACED ALONG ALL IMPERVIOUS EDGES, AT A MINIMUM. THIS SHALL INCLUDE CURBS, WALKS, INLETS, MANHOLES AND PLAYTING BED ARRES, SOD SHALL COVER OTHER AREAS COMPLETELY AS INDICATED BY PLAN.

SOD SHALL BE STRONGLY ROOTED DROUGHT RESISTANT SOD, NOT LESS AND THAN 2 YEARS OLD, FREE OF WEEDS AND UNDESIRABLE NATIVE GRASS AND MACHINE CUT! TO PAD THICKNESS OF 3/4 (+1/4). EXCLUDING TOP GROWTH AND THATCH. PROVIDE ONLY SOD CAPABLE OF VIGOROUS GROWTH AND DEVELOPMENT WHEN PLANTED.

DO NOT INSTALL SOD IF IT IS DORMANT OR GROUND IS FROZEN. LAY SOD WITH TIGHTLY FITTING JOINTS, NO OVERLAPS WITH STAGGERED STRIPS TO OFFSET JOINTS.

SOD SHALL BE ROLLED TO CREATE A SMOOTH EVEN SURFACE. SOD SHOULD BE WATERED THOROUGHLY DURING INSTALLATION PROCESS.

SHOULD INSTALLATION OCCUR BETWEEN OCTOBER 1ST AND MARCH 1ST, SOD SHALL INCLUDE AN OVER-SEED OF ANNUAL RYE OR WINTER RYEGRAS AT A RATE OF FOUR FOUNDS SEED OF ONE THOUSAND SOLARE FEET AGROWN HAPEARANCE CONTRACTOR SHALL ENSURE CONFORMANCE TO \$115.0 OF THE 7, PART XIOK, MORTICULTURE COMMISSION CHAPTE.

HYDROMULCH:

SCARIFY SURFACE TO A MINIMUM OF 2° DEPTH PRIOR TO THE IMPORT TOPSOIL APPLICATION. TOP SOIL SHALL BE PLACED 2° IN DEPTH IN ALL AREAS TO BE SEDEDE. CONTRACTOR TO SUPPLY HIGH QUALITY IMPORTED TOPSOIL HIGH IN HUMAS AND ORGANIC CONTENT FROM A LOCAL SUPPLY. IMPORTED TOPSOIL SHALL BE REASONABLY FREE OF CLAY LUMPS, COARSE SANDS, STONES, ROOTS AND OTHER FOREIGN DEBRIS.

IF INADEQUATE MOISTURE IS PRESENT IN SOIL, APPLY WATER AS NECESSARY FOR OPTIMUM MOISTURE FOR SEED APPLICATION.

ALL SEED SHALL BE HIGH QUALITY, TREATED LAWN TYPE SEED AND IS FREE OF NOXIOUS GRASS SEEDS. THE SEED APPLICATION SHALL BE UNIFORMLY DISTRIBUTED ON THE AREAS INDICATED ON PLANS. HYDROMALCH WITH BERMILDIA GRASS SEED AT A RATE OF TWO POUNDS PER ONE THOUGHAND SQUARE FEET.

IF INSTALLATION OCCURS BETWEEN OCTOBER 1ST AND APRIL 1ST, ALL HYDORMULCH AREAS SHALL BE OVER-SEEDED WITH ANNUAL RYE GRASS AT A RATE OF FOUR POUNDS PER ONE THOUSAND SOUARE FEEL CONTRACTOR TO RE-HYDROMULCH WITH BERMUDA GRASS AT THE END OF THE ANNUAL RYE GROWING SEASON.

AFTER APPLICATION, NO EQUIPMENT SHALL OPERATE OVER APPLIED AREAS. WATER SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO SATURATION.

ALL LAWN AREAS TO BE HYDROMULCHED SHALL ACHIEVE 100% COVERAGE PRIOR TO FINAL ACCEPTANCE.

REFERENCE SITEWORK AND SPECIFICATIONS FOR INFORMATION NEEDED FOR LANDSCAPE WORK.

CONTRACTOR TO VERIFY AND LOCATE ALL PROPOSED AND EXISTING STRUCTURES. NOTIFY LANDSCAPE ARCHITECT OR DESIGNATED REPRESENTATIVE FOR ANY LAVOLD DISCREPANCIES OR ANY CONDITION THAT WOULD PROHIBIT THE INSTALLATION AS SHOWN.

CONTRACTOR SHALL CALL 811 TO VERIFY AND LOCATE ANY AND ALL UTILITIES ON SITE PRIOR TO COMMENCING WORK. LANDSCAPE ARCHITECT SHOULD BE NOTIFIED OF ANY CONFLICTS.

A MINIMUM OF 2% SLOPE SHALL BE PROVIDED AWAY FROM ALL STRUCTURES. LANDSCAPE ISLANDS SHALL BE CROWNED, AND UNIFORM THROUGHOUT THE SITE

ALL PLANTING AREAS SHALL BE GRADED SMOOTH TO ACHIEVE FINAL CONTOURS AS INDICATED ON PLAN WITH 3" OF TOPSOIL AND 3" OF FOMPOST AND CONSISTENTLY BLENDED TO A DEPTH OF! ALL BEDS SHALL BE CROWNED TO ANTICIPATE SETTLEMENT AND ENSURE PROPER DRAINAGE.

PLANTING AREAS AND SOD TO BE SEPARATED BY STEEL EDGING, EDGING TO BE GREEN IN COLOR AND A MINIMUM OF 3/16" THICK, EDGING SHALL BE STAKED FROM THE INSIDE OF BED, EDGING NOT TO BE MORE THAN 1/2" ABOVE FINISHED GRADE.

MULCH SHALL BE INSTALLED AT 1/2" BELOW THE TOPS OF SIDEWALKS AND CURBING.

QUANTITIES ON THESE PLANS ARE FOR REFERENCE ONLY. THE SPACING OF PLANTS SHOULD BE AS INDICATED ON PLANS OR OTHERWISE NOTED. ALL TREES AND SHRUBS SHALL BE PLANTED PER DETAILS.

CONTAINER GROWN PLANT MATERIAL IS PREFERRED HOWEVER BALL AND BURLAP PLANT MATERIAL CAN BE SUBSTITUTED IF NEED BE AND IS APPROPRIATE TO THE SIZE AND QUALITY INDICATED ON THE PLANT MATERIAL LIST.

TREES SHALL BE PLANTED AT A MINIMUM OF 5' FROM ANY UTILITY LINE, SIDEWALK OR CURB. TREES SHALL ALSO BE 10' CLEAR FROM FIRE HYDRANTS.

"OF SHREDDED HARDWOOD MULCH (2" SETTLED THICKNESS) SHALL BE PLACED OVER 4.1 02 WOVEN, WEED BARRIER FABRIC OR APPROVED EQUAL WEED BARRIER FABRIC SHALL BE USED IN PLANT BEDS AND AROUND ALL TREES AND SHALL BE DE WITT WEED BARRIER OF APPROVED EQUAL. MULCH SHALL BE CHITT WEED BARRIER OF APPROVED EQUAL. MULCH SHALL BE SHREDDED BARR OR RUBBER LANDSCAPE MULCH, PINE STRAW MULCH IS PROHIBITED.

IRRIGATION:
IN THE ABSENCE OF AN IRRIGATION SYSTEM OR AREAS BEYOND THE
COVERAGE LIMITS OF A PERMANENT IRRIGATION SYSTEM, CONTRACTOR SHALL
WATER SOD TEMPORARILLY, BY ANY MEANS AVAILABLE, TO DEVLOP ADEQUATE
GROWTH. TURF SHALL BE IN 100% ESTABLISHMENT AT THE TIME OF
ACCEPTANCE.

MOWING, TRIMMING, EDGING AND SUPERVISION OF WATER APPLICATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE OWNER OR OWNER'S REPRESENTATIVE ACCEPTS AND ASSUMES REGULAR MAINTENANCE.

STEEL EDGING SHALL BE 3/16" X 4 X 16' DARK GREEN DURAEDGE STEEL LANDSCAPE EDGING.

WATAUGA RD.	MID CITIES BLVD.
RUFE SNOW,	S/TE
NE LOOP 820	

LOCATION MAP

QTY	LABEL	COMMON NAME	SCIENTIFIC NAME	SIZE	NOTES
		SHADE TREES			
2	LE	Lacebark Elm	Ulmus parvifolia 'Sempervirens'	3" cal.	12' ht., 4' spread
		SHRUBS			
3	DHG	Dwarf Hamlin Grass	Pennisetum alopecuroides 'Hameln'	5 gal.	full, 18" sprd, 20" ht., 24" o.c
11	GM	Gulf Muhly	Muhlenbergia capillaris	3 gal.	full, 30" o.c.
10	IH	Indian Hawthorn 'Ballerina'	Rhaphiolepis indica 'Ballerina'	5 gal.	full, 18" sprd, 24" o.c.
5	NRS	Nellie R Stevens Holly	Illex x 'Nellie R. Stevens'	7 gal.	full, 40" o.c.
		GROUNDCOVER/VINES/G			
90	AJ	Asian Jasmine	Trachelosperum asiaticum	4" pots	full, 18" o.c.
30	GL	Giant Lirope	Liriope gigantea	1 gal.	full, 18" o.c.
20	SC	Seasonal Color		4" pots	full, 12" o.c.

Plant list is an aid to bidders only. Contractor shall verify all quantities on plan. All heights and spreads are minimums. Trees shall have a strong central leader and be of matching specimens. All plant material shall meet or exceed remarks as indicated.

	NORTH RICHLAND HILLS LANDSCAPING AND BUFFERING STANDARDS						
TOTALS	SITE AREA: 12,450 S.F. (ARTIFICIAL LOT BOUNDARY)	REQUIRED	PROVIDED				
TOTAL S	TOTAL SITE LANDSCAPE AREA						
A)	AT LEAST 15% OF SITE MUST BE MAINTAINED IN LANDSCAPE AREA	1,867 S.F. (15%)	1,193 S.F. (9.6%)				
PARKIN	G LOT REQUIREMENTS						
A)	PARKING SPACES MUST BE SCREENED FROM VIEW	NA	NA				
B)	ALL PARKING LOTS MUST CONTAIN AT LEAST 5% LANDSCAPE AREA 750SF X 5% = 38 S.F.	38 S.F.	789 S.F.				
C)	1 LARGE CANOPY TREE PER 20 PARKING SPACES						
D)	12 SPACES / 20 SPACES = 1 TREE ALL PARKING SPACES MUST BE LOCATED 100' FROM CANOPY TREE	1 TREE	2 TREES PROVIDED				
D)	ALL I ANNING OF ACLO MIGGI BE ESCATED TOO TROW CANOT I TREE	REQUIRED	PROVIDED				

ADDITIONAL NOTES:

RAIN AND FREEZE SENSORS ARE REQUIRED ON IRRIGATION SYSTEM.

SUP 2016-05





1"=20'

Sheet No.

L1.2

DESIGN DRAWN DATE SCALE

AWR

AWR

NOV, 08 2016

SECTION 32 9300 - LANDSCAPE

PART 1 - GENERAL

1.1 QUALIFICATIONS OF THE LANDSCAPE CONTRACTOR.

1.2 REFERENCE DOCUMENTS

REFER TO LANDSCAPE PLANS, NOTES, AND DETAILS FOR ADDITIONAL REQUIREMENTS

1.3 SCOPE OF WORK / DESCRIPTION OF WORK

- A WORK COVERED BY THESE SECTIONS INCLUDES THE FURNISHING AND PAYMENT OF ALL MATERIALS, LABOR, SERVICES, EQUIPMENT, LICENESS, TAXES AND ANY OTHER ITEMS THAT ARE NECESSARY FOR THE EXECUTION, INSTALLATION AND COMPLETION OF ALL WORK, SPECIFIED HERBIN AND O'O SHOWN ON THE LANDSCAPE FLANS.
- B. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION OF MATERIALS.
- C. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF ANY WORK
- ANY WORK

 D. FURNISH ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY TO PROVIDE ALL WORK, COMPLETE IN PLACE AS SHOWN AND SPECIFIED. WORK SHOULD INCLUDE:
- E. PLANTING OF TREES, SHRUBS AND GRASSES

- D. WORK GUARANTEE 1.4 REFERENCES
- A. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) Z60.1 NURSERY STOCK
 B. TEXAS STATE DEPARTMENT OF AGRICULTURE
- C. TEXAS ASSOCIATION OF NURSERYMEN, GRADES AND STANDARDS
- A. PROVIDE REPRESENTATIVE QUANTITIES OF EACH SOIL, MULCH, BED MIX, GRAVEL AND STONE BEFORE INSTALLATION. SAMPLES TO BE APPROVED BY OWNER'S REPRESENTATIVE BEFORE USE.
- B. SOIL AMENDMENTS AND FERTILIZERS SHOULD BE RESEARCHED AND BASED ON THE SOILS IN THE AREA.
- BASED ON THE SOILS IN THE AREA.

 C. BEFORE INSTALLATION, SUBMIT DOCUMENTATION THAT PLANT MATERIALS ARE AVAILABLE AND HAVE BEEN RESERVED. FOR ANY PLANT MATERIAL NOT AVAILABLE, SUBMIT REQUEST FOR

1.6 JOB CONDITIONS, DELIVERY, STORAGE AND HANDLING

- A GENERAL CONTRACTOR TO COMPLETE WORK BEFORE LANDSCAPE CONTRACTOR TO COMMENCE ALL PLANTING BED AREAS SHALL BE LEFT THREE INCHES BELOW FINAL GRADE OF SIDEWALKS, DRIVES AND CURBS. ALL AREAS TO RECEIVE SOLD SOD SHALL BE LEFT ONE INCH BELOW THE FINAL GRADE OF WALKS, DRIVES AND CURBS. CONSTRUCTION DEBRIS SHALL BE REMOVED PRIOR TO LANDSCAPE CONTRACTOR BEGINNING WORK.
- B. ALL PACKAGED MATERIALS SHALL BE SEALED IN CONTAINERS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. ALL MATERIALS SHALL BE POTECTED FROM DETERIORATION IN TRANSIT AND WHILE STORED ON SITE.
- DELIVER PLANT MATERIALS IMMEDIATELY PRIOR TO INSTALLATION. PLANT MATERIALS IMMEDIATELY PRIOR TO INSTALLATION. PLANT MATERIALS SHOULD BE INSTALLED ON THE SAME DAY AS DELIVERED. IF PLANTING CANNOT BE INSTALLED ON THE SAME DAY, PROVIDE ADDITIONAL PROTECTION TO MAINTAIN PLANTS IN A HEALTHY, VIGRORUS CONDITION.
- D. STORE PLANT MATERIALS IN SHADE, PROTECT FROM FREEZING AND
- E. KEEP PLANT MATERIALS MOIST AND PROTECT FROM DAMAGE TO

- ROOT BALLS, TRUNKS AND BRANCHES
- F. PROTECT ROOT BALLS BY HEELING WITH SAWDUST OR OTHER MOISTURE RETAINING MATERIAL IF NOT PLANTED WITHIN 24 HOURS
- NOTIFY OWNER'S REPRESENTATIVE OF DELIVERY SCHEDULE 72
- HOURS IN ADVANCE. FOR BALLED AND BURLAPPED PLANTS DIG AND PREPARE SHIPMENT IN A MANNER THAT WILL NOT DAMAGE ROOTS, BRANCHES, SHAPE, AND FUTURE DEVELOPMENT.
- I. CONTAINER GROWN PLAMS: DELIVER PLAMS IN CONTAINER TO HOLD BALL SHAPE AND PROTECT NOT MASS.

 J. STORAGE OF ALL MATERIALS AND EQUIPMENT WILL BE AT THE RISK OF THE LANDSCAPE CONTRACTOR. OWNER WILL NOT BE HELD RESPONSIBLE FOR THEFT OR DAMAGE.

- A. INSTALL TREES, SHRUBS, AND LINER STOCK PLANT MATERIALS PRIOR TO INSTALLATION OF LAWN/SOLID SOD.
- TO INSTALLATION OF LAWN/SOLID SOD.

 B. WHERE EXISTING TURF AREAS ARE BEING CONVERTED TO PLANTING BEDS, THE TURF SHALL BE CHEMICALLY ERADICATED TO MINIMIZE RE-GROWTH IN THE FUTURE. AREAS SHALL BE PROPERLY PREPARED

1.8 WARRANTIES PERIOD, PLANT GUARANTEE, REPLACEMENTS

- A. PROVIDE A MINIMUM OF (2) COPIES OF RECORD DRAWINGS TO THE OWNER UPON COMPLETION OF WORK. A RECORD DRAWING IS A RECORD OF ALL CHANGES THAT OCCURRED IN THE FIELD AND THAT ARE DOCUMENTED THROUGH CHANGE ORDERS, ADDENDA, OR CONTRACTOR/CONSULTANT DRAWING MARKUPS.
- CONTRACTOR/CONSULTANT DRAWING MARKUPS.

 FURNISH WRITTEN WARRANTY THAT PLANT MATERIALS WILL BE IN A HEALTHY, WGOROUS GROWING CONDITION FOR ONE YEAR (TWEE MONTHS) AFTER FINAL ACCEPTANCE. DAMAGE DUE TO ACTS OF GOD, VANDALISM, OR REGLEGRECE BY OWNER! BE SECLUPED.

 REPLACE DEAD, UNIVERLITHY, AND UNSIGHTLY PLANT MATERIAL WITHIN WARRANTY PERIOD UPON NOTIFICATION BY OWNER ON OWNERS REPRESENTATIVE. PLANTS USED FOR REPLACEMENT SHALL BE OF THE SAME SIZE AND KIND AS THOSE ORIGINALLY PLANTED OR SPECIFIED.
- D. THE OWNER AGRESS THAT FOR THE ONE YEAR WARRANTY PERIOD TO BE EFFECTIVE, HE WILL WATER PLANTS AT LEAST TWICE A WEEK DURING DRY PERIODS.
- NOTIFY OWNER OR OWNER'S REPRESENTATIVE SEVEN DAYS PRIOR TO THE EXPIRATION OF THE WARRANTY PERIOD.
- REMOVE DEAD. UNHEALTHY AND UNSIGHTLY PLANTS
- B. REMOVE GUYING AND STAKING MATERIALS.

1.9 MAINTENANCE

- A. MAINTAIN PLANT LIFE AND PLANTING BEDS IMMEDIATELY AFTER PLACEMENT AND FOR MINIMUM 30 DAYS AFTER FINAL ACCEPTANCE.
- B. ALL LANDSCAPE MUST BE MAINTAINED AND GRASS MOWED/EDGED ON A WEEKLY SCHEDULE UNTIL ACCEPTANCE BY OWNER.

 C. REPLACE DEAD OR DYING PLANTS WITH PLANTS OF SAME SIZE AND SPECIES AS SPECIFIED.
- REMOVE TRASH, DEBRIS, AND LITTER. WATER, PRUNE, RESTAKE TREES, FERTILIZE, WEED AND APPLY HERBICIDES AND FUNGICIDES
- REMOVE CLIPPINGS AND DEBRIS FROM SITE PROMPTLY.
- COORDINATE WITH OPERATION OF IRRIGATION SYSTEM TO ENSURE THAT PLANTS ARE ADEQUATELY WATERED. HAND WATER AREAS NOT RECEIVING ADEQUATE WATER FROM AN IRRIGATION SYSTEM.
- RECEIVING ADEQUATE WATER FROM AN IRRIGATION SYSTEM.

 G. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN ACCORDANCE TO THE MAINTENANCE SERVICE TO ENSURE THE SYSTEM IS IN PROPER WORKING ORDER WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER
- RESET SETTLED PLANTS

U-BRACKET ON SAFETY STAKE - SAFETY STAKE

- NAII STAKES

ALL CONF

BRACKET ON SAFETY STAKE

NAIL STAKE INSTALLED FIRMLY

- REAPPLY MULCH TO BARE AND THIN AREAS.
- SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL, HEALTHY STAND OF GRASS AT NO ADDITIONAL
- K. TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD. ALL OF THE FOLLOWING CONDITIONS MUST OCCUR:
- THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH

- (WITH EXCEPTIONS MADE FOR SEASONAL DORMANCY). ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE.

1.10 QUALITY ASSURANCE

PART 2 - PRODUCTS

2.1 PLANT MATERIALS

- C. PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED, EXCEPT THE PLANTS LARGER THAN THOSE SPECIFIED MAY BE USED USE OF LARGER PLANTS SHALL NOT INCREASE THE CONTRACT
- E. PLANT SCHEDULE ON DRAWING IS FOR CONTRACTOR'S INFORMATION ONLY AND NO GUARANTEE IS EXPRESSED OR IMPLIED THAT OLANITIES THEREIN ARE CORRECT. THE CONTRACTOR SHALL ENSURE THAT ALL PLANT MATERIALS SHOWN ON THE DRAWINGS ARE INCLUDED IN HIS OR HER BY
- SHALL BE FREE OF DISEASE, INSECT INFESTATION, DEFECTS INCLUDING WEAK OR BROKEN LIMBS, CROTCHES, AND DAMAGED TRUNKS, ROOTS OR LEAVES, SUN SCALD, FRESH BARK ABRASIONS, EXCESSIVE ABRASIONS, OBJECTIONABLE DISPIGUREMENT, INSECT EGGS AND LATIVAE.
- . ROOT SYSTEMS SHALL BE HEALTHY, DENSELY BRANCHED, FIBROUS ROOT SYSTEMS, NON-POT-BOUND, FREE FROM ENCIRCLING ANDIOR GIRDLING ROOTS, AND FREE FROM ANY OTHER ROOT DEFECTS (SUCH AS J-SHAPED ROOTS).
- ANY PLANT DEEMED UNACCEPTABLE BY THE LANDSCAPE ARCHITEC ANY PLANT DEEMED VIRACCEPTABLE BY THE LANDISCEP ARTCHILED! OR OWNERS REPRESENTATIVE SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND SHALL BE REPLACED WITH AN ACCEPTABLE DANT OF LIVE TYPE AND SHALE BY THE CONTRACTORS OWN EXPENSE. ANY PLANTS APPEARING TO BE UNHEALTHY, EVEN IF DETERMINED TO STULBALLY SHALL NOT BE ACCEPTED. THE LANDSCAPE ARCHITECT AND OWNERS REPRESENTATIVE SHALL BE THE SOLE JUDGES AS TO THE ACCEPTABLITY OF PLANT MATERIAL.
- TREE TRUNKS TO BE STURDY, EXHIBIT HARDENED SYSTEMS AND VIGOROUS AND FIBROUS ROOT SYSTEMS, NOT ROOT OR POT BOUND. L TREES WITH DAMAGED OR CROOKED LEADERS, BARK ABRASIONS, SUNSCALD, DISFIGURING KNOTS, OR\INSECT DAMAGE WILL BE

- - COMPOSITION OF THE SOO.

2.2 ACCESSORIES/MISCELLANEOUS MATERIALS

2 ACCESSORIESMISCELLANEOUS MATERIALS A MULCH - DOUBLE SHREDDED HARDWOOD MULCH. PARTIALLY DECOMPOSED BY LVINNG EARTH TECHNOLOGIES OR APPROVED SUSTITUTE. MULCH SHOULD BE FREE OF STICKS, STONES, CLAY, GROWTH AND GERMINATION IN-HIBITING INGREDIENTS. FERTILIZET - COMMERCIAL FERTILIZER CONTAINING 19-20-10 OR SIMILAR ANALYSIS. SOIL PREPARATION - SHALL BE FERTILE, LOAMY SOIL ORGANIC MATTER SHALL ENCOMPASS BETWEEN 3% AND 10% OF THE TOTAL DRY WEIGHT. SOIL SHALL BE FREE FROM BUSSOIL, REFUSE, ROOTS, HEAVY OR STIFF CLAY, STONES LARGER THAN 1", NOXIOUS WEEDS, STICKS, BRISH, LITTER AND OTHER SUSTANCES. IT SHOULD BE SUITABLE FOR THE GERMINATION OF SEEDS AND THE SUPPORT OF VEGETATIVE GROWTH. THE PHY VALUE SHOULD BE BETWEEN A AND 7.

APPROXIMATE PARTICLE DISTRIBUTION FOR TOPSOIL

CLAY BETWEEN 15% AND 25%

SILT BETWEEN 15% AND 25% SAND LESS THAN 50%

GRAVEL LESS THAN 10%

- EXISTING TOPSOIL MAY BE USED IF IT MEETS THE REQUIREMENTS FOR THE IMPORTED TOPSOIL OR IF APPROVED BY THE LANDSCAPE ARCHITECTOR OWNERS REPRESENTATIVE. TOPSOIL SHALL NOT BE STRIPPED, TRANSPORTED OR GRADED IF MOISTURE CONTENT EXCEEDS RIED CAPACITY. TOPSOIL STOCKPILES SHALL BE PROTECTED FROM EROSION OR CONTAINIMATION. ALL NEW TUPE AREAS LOCATED ON THE FRONT, SIDES, REAR, AND INSIDE THE FIRE LANE SHALL BE SOUDED AND SHALL BE AMENDED WITH QUALITY OFFOIL AT A MINIMUM DEPTH OF FOUR INCRES.
- STEEL EDGING SHALL BE 3/16" X 4" X 16" DARK GREEN LANDSCAPE EDGING.
- EDGING.

 G. TREE STAKING TREE STAKING SOLUTIONS OR APPROVED SUBSTITUTE; REFER TO DETAILS.

 H. FILTER FABRIC MIRAFI 1405 BY MIRAFI INC. OR APPROVED SUBSTITUTE.
- SAND UNIFORMLY GRADED, WASHED, CLEAN, BANK RUN SAND. DECOMPOSED GRANITE BASE MATERIAL OF NATURAL MATERIA OF GRANITE AGGREGATE NOT TO EXCEED 1/8" IN DIAMETER.
- RIVER ROCK LOCALLY AVAILABLE RIVER ROCK BETWEEN 2"-4" IN DIAMETER. DIAMETER.

 PRE-EMERGENT HERBICIDES: ANY GRANULAR, NON-STAINING PRE-EMERGENT HERBICIDE THAT IS LABELED FOR THE SPECIFIC ORNAMENTALS OR TUPF ON WHICH IT WILL BE UTILIZED. PRE-EMERGENT HERBICIDES SHALL BE APPLIED PER THE MANUFACTURERS LABELED PATES.

PART 3 - EXECUTION

3.1 PREPARATION

- SHALL HAVE SOLL SAMPLES TESTED BY AN ESTABLISHED SOLL SERTING LABORATORY FOR THE FOLLOWING SOLD ESTURAL GAS EGENERAL SOLD FERTILITY, PH. ORGANIC MATTER CONTENT SAST, (CEC). LIME, SODIUM ADSORPTION RATIO (SAR) AND BORON CONTENT, EACH SAMPLE SUBMITTED SHALL CONTAIN NO LESS THAN ONE QUART OF SOIL.
- ONE GUART OF SOIL.

 SOME STATE OF SOIL.

 CONTRACTOR SHALL ALSO SUBMIT THE PROJECTS PLANT LIST TO THE LABORATORY ALONG WITH THE SOIL SAMPLES.

 THE SOIL REPORT PRODUCED BY THE LABORATORY SHALL CONTAIN RECOMMENDATIONS FOR THE FOLLOWING (AS APPROPRIATE) GENERAL SOIL PREPARATION AND BACKFILL MIXES, PREPARATIFE FERTILIZER APPLICATIONS, AND ANY OTHER SOIL RELATED ISSUES. THE REPORT SHALL ALSO PROVIDE A FERTILIZER PROGRAM FOR THE ESTABLISHMENT PERIOD AND FOR LOWS-TERM MAINTENANCE.

 THE CONTRACTOR SHALL INSTALL SOIL. AMENDMENTS AND FERTILIZERS PER THE SOILS REPORT RECOMMENDATIONS. ANY SHALL RESTALL SHALL BE SUBMITTED TO THE OWNER WITH THE REPORT.
- OWNER WITH THE NEPORT D. IF WEEDS ARE GROWING IN PLANTING AREAS, APPLY HERBICIDE RECOMMENDED BY MANUFACTURER AND APPLIED BY AN APPROVED LICENSED APPLICATOR. ALLOW WEEDS TO DIE, AND THEN GRUB OUT ROOTS TO A MINIMUM OF 1/2 INCH DETH.
- PREPARE NEW PLANTING BEDS BY TILLING EXISTING SOIL TO A DEPTH OF SIX INCHES PRIOR TO PLACING COMPOST AND FERTILIZER. ADD SIX INCHES OF COMPOSE AND TILL INTO A DEPTH OF SIX INCHES OF

3.2 EXCAVATING

- SHRUB AND TREE PITS SHALL BE NO LESS THAN 24" WIDER THAN THE ROOT BALL AND 6" DEEPER THAN ITS VERTICAL DIMENSION. HOLES SHOULD BE ROUGH, NOT SMOOTH OR GLAZED.

3.3 PLANTING

- REMOVE CONTAINERS WITHOUT DAMAGE TO ROOTS.
 REMOVE BOTTOM OF PLANT BOXES PRIOR TO PLACING PLANTS.
 REMOVE SIDES AFTER PLACEMENT AND PARTIAL RACKELLING.
- E. PLACE PLANT UPRIGHT AND PLUMB IN CENTER OF HOLE. ORIENT PLANTS FOR BEST APPEARANCE.
- F. SET PLANTS WITH TOP OF ROOT BALLS FLUSH WITH ADJACENT GRADE AFTER COMPACTION. ADJUST PLANT HEIGHT IF SETTLEMENT OCCURS AFTER BACKFILLING. G. BACKFILL HOLES IMMEDIATELY AFTER PLANT IS PLACED USING
- BACKFILL MIX. BACKFILL TO ONE HALF DEPTH, FILL HOLE WITH WATER AND LIGHTLY TAMP SOIL TO REMOVE VOIDS AND AIR POCKETS.
- H. TRIM PLANTS TO REMOVE DEAD AND INJURED BRANCHES ONLY. BRACE PLANTS OVER 65 GALLONS IN SIZE.
- DO NOT WRAP TREES
- BLOCKS OF SOD SHOULD BE LAID JOINT TO JOINT AFTER FERTILIZING THE GROUND FIRST. ROLL GRASS AREAS TO ACHIEVE A SMOOTH, EVEN SURFACE. THE JOINTS BETWEEN BLOCKS SHOULD BE FILLED WITH TOPSOIL AND THEN WATERED THOROUGHLY.

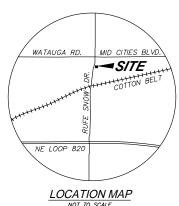
3.4 STEEL EDGING

- PLANS. OWNER'S REPRESENTATIVE TO APPROVE THE STAKED OR PAINTED LOCATION OF STEEL EDGE PRIOR TO INSTALLATION
- B. ALL STEEL EDGING SHALL BE FREE OF BENDS OR KINKS. . TOP OF EDGING SHALL BE 1/2" MAXIMUM HEIGHT ABOVE FINAL FINISHED GRADE
- D. STAKES ARE TO BE INSTALLED ON THE PLANTING BED SIDE OF THE EDGING, NOT THE GRASS SIDE.
- E. STEEL EDGING SHALL NOT BE INSTALLED ALONG SIDEWALKS OR

- REMOVE CONTAINERS, TRASH, RUBBISH AND EXCESS SOILS FROM SITE AS WORK PROGRESSES. REPAIR RUTS. HOLES AND SCARES IN GROUND SURFACES.
- PREMISES SHALL BE KEPT NEAT AT ALL TIMES AND ORGANIZED ALL PAVED AREAS SHOULD BE CLEANED AT THE END OF EACH WORK DAY.

- A ENSURE THAT WORK IS COMPLETE AND PLANT MATERIALS ARE IN VIGOROUS AND HEALTHY GROWING CONDITION.

 JUPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE SITE CLEAN, FREE OF DEBRIS AND TRASH, AND SUITABLE FOR USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTABILITY.
- DETERMINE HINGA ACCEPTABILITY.
 WHENJET THE INSPECTED PLANTING WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE LANDSCAPE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNER'S SATISFACTION WITHIN 24 HOURS.
- THE LANDSCAPE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE LANDSCAPE WORK HAS BEEN RE-INSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME, A WRITTEN NOTICE OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND GUARANTE PERIODS WILL COMMENCE.



3/16" X 4" X 16" STEEL EDGING WITH 4 STEEL EDGING DETAIL

SHOULD BE 2" MIN 4.4 STURBED SUBGRADE / NATIVE SOIL 2 SHRUB PLANTING

3 SHRUB SPACING AND PLANTING AT B.O.C.

SUP 2016-05

Civil Engineers - Designers - Planners Southlake, Tx 76092 (817) 552-6210 Engineering Firm Registration Number F-9007

151 COFFEE NORTH RICHLAND HILLS SHOPPING CENTER

Consulting Engineers, Inc. 2840 W. Southlake Blvd., Suite 110

BY DATE

NORTH RICHLAND HILLS, TX LANDSCAPE SPECS AND DETAILS

DESIGN DRAWN DATE SCALE Sheet No. AWR L1.3 AWR 1"=20 2016

PIT TO BE AT LEAST 2 TIME
THE DIA. OF ROOT BALL TI
TO BE CENTERED IN HOLE
AND REST ON NATIVE SOII BACK FILL / PLANTING SOIL MIX. TILL IN
WITH PARTS EXISTING SOIL, EXCLUDING
LARGE CLODS AND ROCKS.

ROOTBALL: REMOVE BURLAP AND

1 TREE PLANTING

. ALL HARDSCAPE SHALL BE CLEANED PRIOR TO FINA ACCEPTANCE.

AUCEPIANCE.

SODED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2 INCHES BEFORE FIRST REACH AND AND AREA BASE AREAS LARGER THAN TWELVE SOLIARE INCHES MUST BE RESODDED OR RESEEDE (AS APROPRIATE) PRIOR TO FINAL ACCEPTANCE. ALL SODDED

A COMPLY WITH ALL FEDERAL, STATE, COUNTY AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK.

B. EMPLOY PERSONNEL EXPERIENCED AND FAMILIAR WITH THE REQUIRED WORK AND SUPERVISION BY A FOREMAN.

C. DO NOT MAKE PLANT MATERIAL SUBSTITUTIONS. IF THE LANDSCAPE MATERIAL SPECIFIED IS NOT READLY AVAILABLE, SUBMIT PROOF TO LANDSCAPE ARCHITECT ALONG WITH THE PROPOSED MATERIAL TO BE USED IN BLUE OF THE STECHIED FLANT.

BE USED IN LIEU OF THE SPECIFIED PLANT.

OWNER'S REPRESENTATIVE SHALL INSPECT ALL PLANT MATERIAL AND RETAINS THE RIGHT TO INSPECT MATERIALS UPON ARRIVAL TO THE SITE AND DURING INSTALLATION. THE OWNERS REPRESENTATIVE MAY ALSO REJECT ANY MATERIALS HEIGHE FEELS TO BE UNSATISFACTORY OF DEFECTIVE DURING THE WORK PROCESS. ALL PLANTS DAMAGED IN TRANSIT OR AT THE JOB SITE SHALL BE REJECTED.

- A. ALL PLANTS SHALL BE CERTIFIED IN ACCORDANCE THE AMERICAN STANDARD FOR NURSERY STOCK. B. ALL TREES SHALL BE OBTAINED FROM SOURCES WITHIN 200 MILES OF THE PROJECT SITE, AND WITH SIMILAR CLIMACTIC CONDITIONS.
- D. WHERE MATERIALS ARE PLANTED IN MASSES, PROVIDE PLANTS OF

- ALL TREES SHALL BE STANDARD IN FORM, UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS AFTER PLANTING

- MULTI-TRUNK TREES SHALL BE MEASURED BY THEIR OVERALL HEIGHT, MEASURED FROM THE TOP OF THE ROOT BALL.
- O. ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT BALL, SO THAT THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE REJECTED.

F. POSITION TREES AND SHRUBS AS DESIGNED ON PLAN. OBTAIN OWNERS REPRESENTATIVES APPROVAL PRIOR TO PROCEEDING.

G. ALL PLANTING AREAS SHALL RECEIVE A MINIMUM OF 2 INCH LAYER OF MULCH (SETTLED THICKNESS).

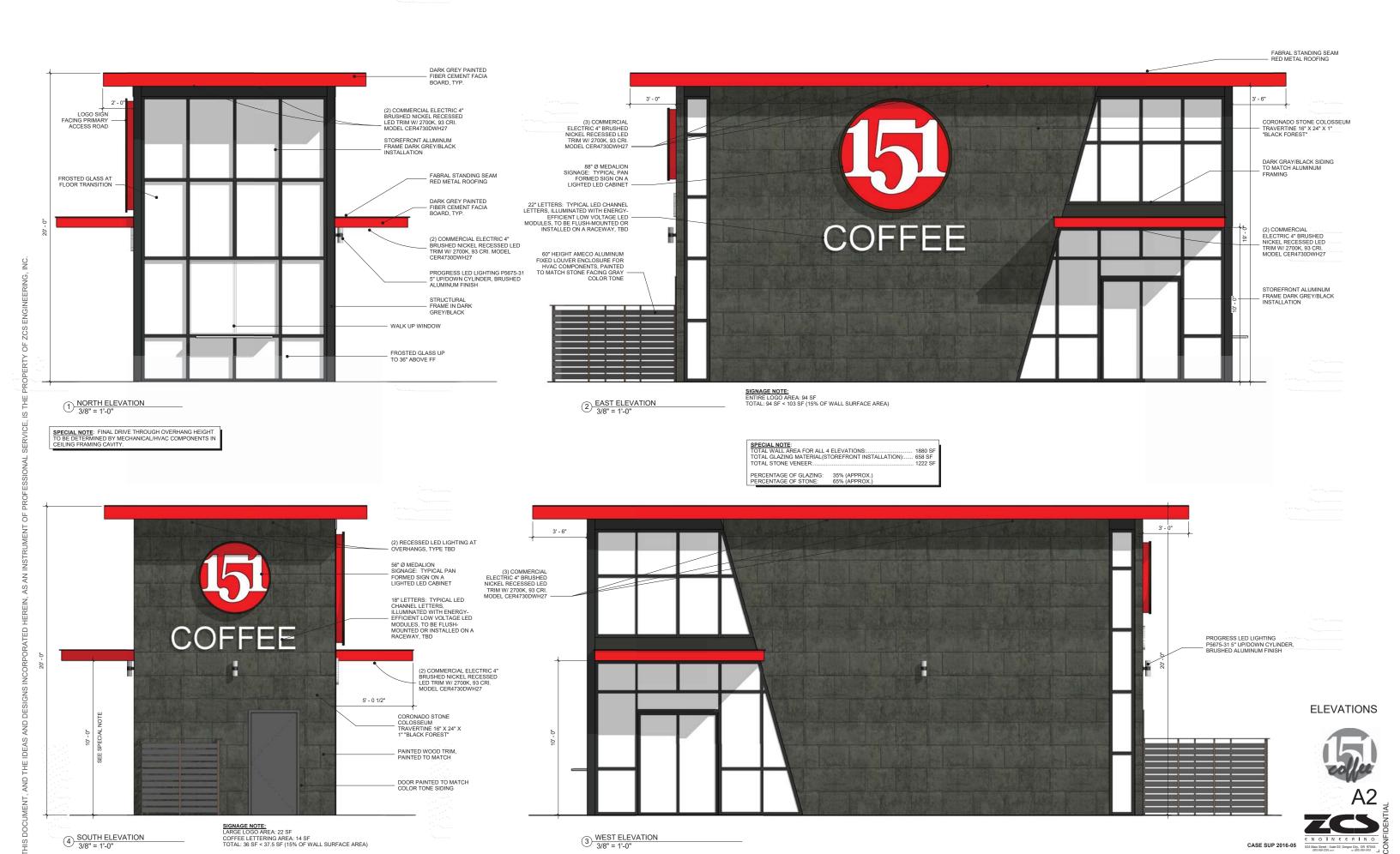
- EXCAVATING

 A EXCAVATE PITS FOR PLANTING, TREE PITS SHALL BE LARGE ENOUGH
 TO PERMIT THE HANDLING OF THE ROOT BALL WITHOUT DAMAGE TO
 THE ROOTS, TREES SHALL BE PLANTED AT A DEPTH THAT WHEN
 SETTLED, THE CROWN OF THE PLANT SHALL BEAR THE SAME
 RELATIONSHIP TO THE RINISH GRADE AS IT DID TO THE SOIL
 SURFACE IN ORIGINAL PLACE OF GROWTH.

 TORSE DIFFERENCE AND ALL OF THE PLANTED AND ALL OW TO.
- SURFACE IN ORIGINAL PLACE OF GROWTH.

 TREE PITS PERCOLATION TEST: FILL PIT WITH WATER AND ALLOW TO
 STAND FOR 24 HOURS. IF PIT DOES NOT DRAIN, THE TREE NEEDS TO
 BE MOVED TO ANOTHER LOCATION OR HAVE DRAINAGE ADDED.
- . REMOVE NURSERY TAGS AND STAKES FROM ALL PLANTS
- REMOVE UPPER THIRD OF BURLAP FROM BALLED AND BURLAPPED TREES AFTER PLACEMENT.

- MULCH TO THE TOP OF THE ROOT BALL. DO NOT PLANT GRASS ALL THE WAY TO TRUNK OF THE TREE. MULCH WITH AT LEAST 2" OF SPECIFIED MULCH.



DARK GREY PAINTED FIBER CEMENT FACIA BOARD, TYP. 3' - 0" (2) COMMERCIAL ELECTRIC 4" LOGO SIGN FACING PRIMARY ACCESS ROAD BRUSHED NICKEL RECESSED LED TRIM W/ 2700K, 93 CRI. MODEL CER4730DWH27 (3) COMMERCIAL ELECTRIC 4" BRUSHED NICKEL RECESSED LED TRIM W/ 2700K, 93 CRI. MODEL CER4730DWH27 STOREFRONT ALUMINUM FRAME DARK GREY/BLACK INSTALLATION FABRAL STANDING SEAM RED METAL ROOFING FROSTED GLASS AT FLOOR TRANSITION DARK GREY PAINTED FIBER CEMENT FACIA BOARD, TYP. 22" LETTERS: TYPICAL LED CHANNEL LETTERS, ILLUMINATED WITH ENERGY-EFFICIENT LOW VOLTAGE LED -MODULES, TO BE FLUSH-MOUNTED OR INSTALLED ON A RACEWAY, TBD COFFEE (2) COMMERCIAL ELECTRIC 4" BRUSHED NICKEL RECESSED LED TRIM W/ 2700K, 93 CRI. MODEL CER4730DWH27 60" HEIGHT AMECO ALUMINUM FIXED LOUVER ENCLOSURE FOR HVAC COMPONENTS, PAINTED TO MATCH STONE FACING GRAY COLOR TONE PROGRESS LED LIGHTING P5675-31 5" UP/DOWN CYLINDER, BRUSHED ALUMINUM FINISH STRUCTURAL FRAME IN DARK GREY/BLACK WALK UP WINDOW FROSTED GLASS UP SIGNAGE NOTE: ENTIRE LOGO AREA: 94 SF TOTAL: 94 SF < 103 SF (15% OF WALL SURFACE AREA) 1 NORTH ELEVATION
3/8" = 1'-0"

SPECIAL NOTE: FINAL DRIVE THROUGH OVERHANG HEIGHT TO BE DETERMINED BY MECHANICAL/HVAC COMPONENTS IN CEILING FRAMING CAVITY.

2 EAST ELEVATION 3/8" = 1'-0"

 SPECIAL NOTE:
 1880 SF

 TOTAL WALL AREA FOR ALL 4 ELEVATIONS:
 1880 SF

 TOTAL GLAZING MATERIAL(STOREFRONT INSTALLATION):
 658 SF

 TOTAL STONE VENEER:
 1222 SF
 PERCENTAGE OF GLAZING: 35% (APPROX.) PERCENTAGE OF STONE: 65% (APPROX.)

FABRAL STANDING SEAM - RED METAL ROOFING

CORONADO STONE COLOSSEUM TRAVERTINE 16" X 24" X 1" "BLACK FOREST"

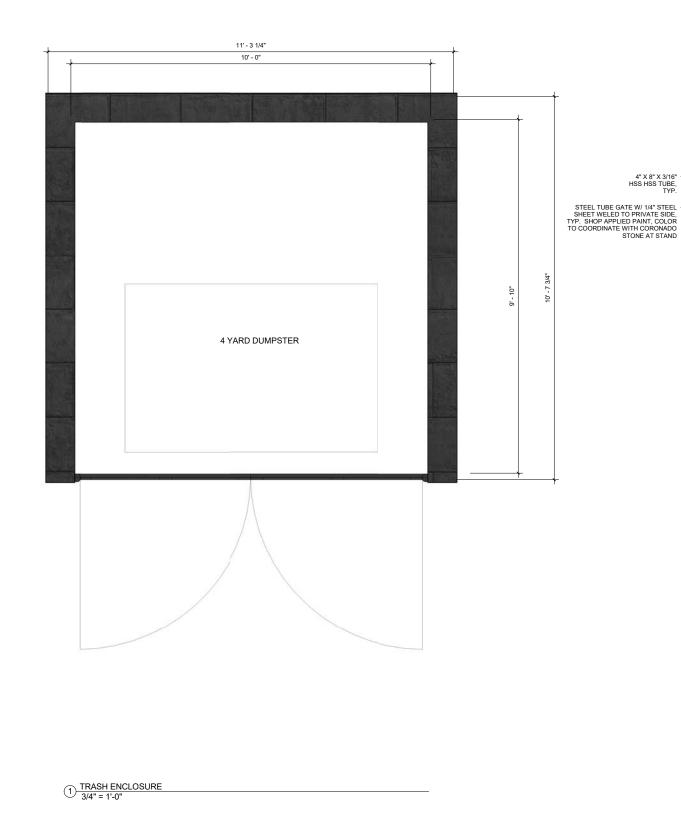
DARK GRAY/BLACK SIDING TO MATCH ALUMINUM

(2) COMMERCIAL ELECTRIC 4" BRUSHED NICKEL RECESSED LED TRIM W/ 2700K, 93 CRI. MODEL CER4730DWH27

STOREFRONT ALLIMINUM

FRAMING

3' - 6" (2) RECESSED LED LIGHTING AT OVERHANGS, TYPE TBD 56" Ø MEDALION SIGNAGE: TYPICAL PAN FORMED SIGN ON A LIGHTED LED CABINET (3) COMMERCIAL ELECTRIC 4" BRUSHED NICKEL RECESSED LED TRIM W/ 2700K, 93 CRI. MODEL CER4730DWH27 18" LETTERS: TYPICAL LED CHANNEL LETTERS, ILLUMINATED WITH ENERGY-EFFICIENT LOW VOLTAGE LED MODULES, TO BE FLUSH-MOUNTED OR INSTALLED ON A COFFEE RACEWAY, TBD PROGRESS LED LIGHTING P5675-31 5" UP/DOWN CYLINDER, BRUSHED ALUMINUM FINISH (2) COMMERCIAL ELECTRIC 4" BRUSHED NICKEL RECESSED LED TRIM W/ 2700K, 93 CRI. MODEL CER4730DWH27 5' - 0 1/2" **ELEVATIONS** CORONADO STONE COLOSSEUM TRAVERTINE 16" X 24" X 1" "BLACK FOREST" PAINTED WOOD TRIM, PAINTED TO MATCH DOOR PAINTED TO MATCH COLOR TONE SIDING SOUTH ELEVATION
3/8" = 1'-0" 3 WEST ELEVATION
3/8" = 1'-0" COFFEE LETTERING AREA: 14 SF TOTAL: 36 SF < 37.5 SF (15% OF WALL SURFACE AREA)



4" X 8" X 3/16"
HSS HSS TUBE,
TYP.
HASP & BOLT

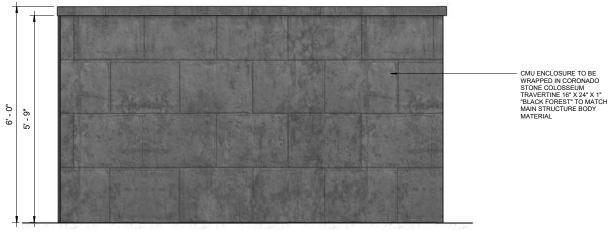
TEW // 1/4" STEEL
O PRIVATE SIDE,
ED PAINT, COLOR
STONE COLOSSEUM
TRAVERTINE BLACK FOREST CAP
STONE, TYP

HASP & BOLT

CMU ENCLOSURE TO BE
WRAPPED IN CORONADO
STONE COLOSSEUM
TRAVERTINE 16" X 24" X 1"
"BLACK FOREST" TO MATCH
MAIN STRUCTURE BODY
MATERIAL

SLIDE BOLT WITH SLEEVE
IMBEDOED IN CONCRETE
(CLOSED POSITION), AND
AC(OPEN POSITION), TYP.

2 TRASH ENCLOSURE - FRONT VIEW 3/4" = 1'-0"



3/4" = 1'-0"

- SIDE VIEW

