

GENERAL
THE REQUIREMENTS LISTED BELOW ARE INTENDED TO SERVE AS AN OUTLINE OF GENERAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE SET FORTH IN THESE DRAWINGS.

EROSION CONTROL
INSTALL ALL CONSTRUCTION ENTRANCE, SILT FENCE AND EROSION CONTROL BERMS AND SEDIMENT RETENTION FACILITIES PRIOR TO THE START OF GRADING AS REQUIRED BY THE TDEC, THE SWPPP AND MAINTENANCE FORMS MUST BE AVAILABLE ON SITE UNTIL AFTER FINAL SITE STABILIZATION IS COMPLETED.

CLEARING AND GRUBBING
COMPLY WITH LOCAL AND STATE ORDINANCES REGARDING DISPOSAL OF DEBRIS. NO BURIAL OF DEBRIS UNLESS APPROVED BY IDEAL ENGINEERING SOLUTIONS, INC.

EXCAVATION PREPARATION
VERIFY LOCATION OF EXISTING ON—SITE UTILITIES. PROTECT AND MAINTAIN EXISTING UTILITIES AS REQUIRED. ESTABLISH AND VERIFY EXISTING LINES, GRADE, AND DIMENSIONS AS SHOWN ON THE DRAWING. REPORT ANY ERRORS OR INCONSISTENCIES TO IDEAL ENGINEERING SOLUTIONS, INC., BEFORE COMMENCEMENT OF WORK.

TEMPORARY DIVERSION SWALES
TEMPORARY DIVERSION SWALES SHALL BE CONSTRUCTED PRIOR TO STRIPPING OR ANY
OTHER GRADING ACTIVITY, AS SHOWN ON THIS DRAWING. ALSO TEMPORARY SEDIMENT TRAPS AND/OR
PERMANENT DETENTION BASINS SHALL BE CONSTRUCTED PRIOR TO STRIPPING OR OTHER GRADING ACTIVITY.

SEDIMENT CONTROL
PERMANENT AND TEMPORARY DIVERSION SWALES SHALL BE CONSTRUCTED PRIOR TO STRIPPING OR ANY OTHER GRADING ACTIVITY. ALSO, PERMANENT STORM DETENTION BASINS AND TEMPORARY SEDIMENT TRAPS WHERE CALLED FOR SHALL BE CONSTRUCTED PRIOR TO STRIPPING OR OTHER GRADING ACTIVITY.

EXISTING TOPO ACCURACY
EXISTING CONTOURS SHOWN ARE INTENDED TO FORM A GENERAL DESCRIPTION OF SURFACE GROUND ELEVATIONS. TOPOGRAPHIC INFORMATION SHOWN HEREIN SHALL BE CONSIDERED TO HAVE NOT MORE THAN THE FOLLOWING PLUS OR MINUS LIMITS OF ACCURACY: 0.10 FEET AT BENCHMARKS, 0.25 FEET AT SPOT GRADES, 1.0 FEET AT CONTOUR LINES. CONTRACTOR IS CAUTIONED THAT STRAIGHT LINE INTERPOLATION BETWEEN CONTOURS MAY NOT EXACTLY REFLECT EXISTING CONDITIONS. AREAS OF RELATIVELY QUICK CHANGES IN CONTOURS SHOULD NOT BE ALLOWED TO UNDULY INFLUENCE INTERPRETATION OF CONTOURS. REPORT ANY ERRORS OR INCONSISTENCIES TO IDEAL ENGINEERING SOLUTIONS, INC. BEFORE COMMENCEMENT OF WORK. ANY ERROR NOT SO REPORTED CANNOT BE CONSIDERED FOR ADJUSTMENT IN CONTRACT PRICE.

STRIPPING AND SPREADING TOPSOIL
TOPSOIL SHALL BE STRIPPED AND TEMPORARILY STOCK PILED FOR LATER REUSE. IF NO STOCK PILE AREA IS NOTED ON GRADING PLAN, STOCK PILE SHALL BE IN SUCH PLACE TO PROVIDE FOR READY ACCESS TO NECESSARY AREAS OF SITE BY OTHER TRADES THROUGHOUT PROGRESS OF WORK. PARTICULAR ATTENTION SHALL BE PAID TO FINELY TEXTURED TOPSOIL THAT WILL BE REUSED BY LANDSCAPE CONTRACTOR. GENERAL TOPSOIL RESPREADING WILL BE BY GRADING CONTRACTOR TO A MINIMUM DEPTH OF 6" AT ANY POINT EXCEPT ON SLOPE OF 2-1/2 TO 1 OR STEEPER, WHERE TOPSOIL DEPTH SHALL BE 2" MIN. AT ANY POINT.

PROOF—ROLLING
ALL AREAS TO RECEIVE NEW STRUCTURAL FILL OR OTHER NEW CONSTRUCTION SHALL BE PROOF
ROLLED WITH A 10,000# VIBRATORY DRUM ROLLER IN PRESENCE OF SOILS TESTING AGENT
BEFORE COMMENCING ANY CONSTRUCTION ACTIVITY. ALL AREAS TO BE COMPACTED SHALL RECEIVE 8 PASSES WITH COMPACTION ROLLER. OWNER'S REPRESENTATIVE SHALL NOTIFY IDEAL ENGINEERING SOLUTIONS, INC. THAT ALL AREAS HAVE PASSED PROOF ROLL INSPECTION PRIOR TO COMMENCEMENT CUT AND FILL OF GRADING. DO NOT COMMENCE GRADING PRIOR TO SUCH NOTIFICATION.

STRUCTURAL FILL
STRUCTURAL FILL SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY WITH MOISTURE CONTENT ± 1.0% OF OPTIMUM. UNSUITABLE OR QUESTIONABLE SOILS SHALL BE REMOVED FROM AREAS RECIEVING STRUCTURAL BACKFILL. ANY OFF SITE BORROW AREAS SHALL BE APPROVED BY IDEAL ENGINEERING SOLUTIONS, INC. PLACE FILL AND BACKFILL IN 12" LAYERS. USE NO DELETERIOUS MATERIAL, ORGANIC, OR ROCK LARGER THAN 6". IN—SITU SOILS MAY REQUIRE ADDITIONAL DRYING TO REACH OPTIMUM MOISTURE CONTENT FOR COMPACTION.

GRADING TOLERANCE
GRADING CONTRACTOR SHALL BRING SUBGRADE TO WITHIN AN AVERAGE OF 1/10 OF ONE FOOT OF
REQUIRED ELEVATION TO OBTAIN FINISHED GRADE INDICATED ON DRAWINGS EXCEPT AT LOCATIONS WHERE SPOT ELEVATIONS ARE SHOWN AND WHERE FLOOR ELEVATIONS ARE SHOWN WHICH SHALL BE WITHIN 1/10 OF 1 FOOT OF REQUIRED ELEVATIONS. FINAL SUBGRADE SHALL BE SPOT CHECKED BY A LICENSED SURVEYOR WITH NOT LESS THAN 10 SHOTS PER ACRE AND AT FACH FINISHED FLOOR ELEVATION AND A DRAWING PREPARED AND FORWARDED TO IDEAL ENGINEERING SOLUTIONS INC. FOR APPROVAL PRIOR TO COMMENCING FINAL GRADE OR PAVING OR BUILDING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR MINOR ADJUSTMENTS IN GRADES AS DIRECTED BY IDEAL ENGINEERING SOLUTIONS, INC. SUCH CHANGES SHALL BE LIMITED TO 1500 CUBIC YARDS TOTAL. NO ADDITIONAL COST WILL BE ALLOWED FOR THIS WORK.

TESTING
CONTRACTOR SHALL INCLUDE PRICE FOR TWO PROCTOR DENSITY ANALYSES FROM SAMPLES COLLECTED AT LOCATIONS SPECIFIED BY IDEAL ENGINEERING SOLUTIONS, INC., AND A TOTAL OF 20 INSITU SOIL DENSITY DETERMINATIONS BY USE OF NUCLEAR DENSITOMETER, TO BE PERFORMED BY AN INDEPENDENT QUALIFIED GEOTECHNICAL TESTING AGENT SUITABLE TO IDEAL ENGINEERING SOLUTIONS, INC. TEST REPORTS MUST USE GRAPHIC LOCATION MAP AT 1"=50' SCALE FOR LOCATION OF DENSITY TESTS. ORIGINAL COPIES OF ALL TESTS SHALL BE FORWARDED DIRECTLY TO IDEAL ENGINEERING SOLUTIONS, INC. FROM TESTING AGENT. ALL TESTS SHALL SPECIFICALLY STATE THAT THE TEST EITHER PASSES OR FAILS TO MEET SPECIFICATIONS. CONTRACTOR SHALL INCLUDE IN HIS BASE BID 10 INSITU (NUCLEAR DENSITOMETER) SOIL DENSITY DETERMINATION TESTS AFTER COMPLETION OF THE WORK, LOCATED PER IDEAL ENGINEERING SOLUTIONS, INC.

STORMWATER RUNOFF
THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO KEEP THE WORK FREE OF WATER EITHER FROM SURFACE SOURCES OR FROM UNDERGROUND SOURCES OR BOTH, SELECTION OF THE CONTRACTOR AND THE CONTRACTOR OF EQUIPMENT AND METHODS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE INCURRED IN HANDLING WATER CONDITIONS. ADDITIONALLY, THE CONTRACTOR SHALL PROVIDE MEANS NECESSARY TO AVOID RUN-OFF FROM THIS PROJECT DISCHARGING ONTO ADJACENT

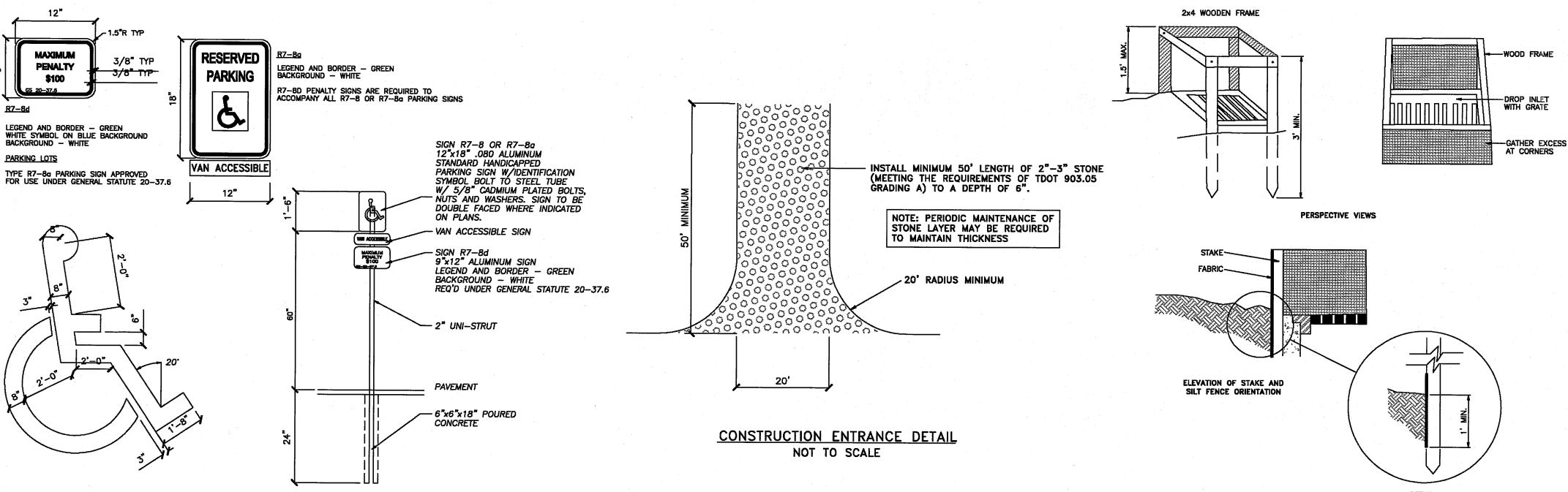
GRASSING
GRASSING AND MULCHING OF ALL DISTURBED AREAS NOT PAVED OR BUILT UPON SHALL BE THE RESPONSIBILITY OF THE GRADING CONTRACTOR UNLESS NOTED OTHERWISE. HARDENED SOIL SHALL BE LOOSENED TO A DEPTH OF 6" AND TOPSOIL RESPREAD AS NOTED BEFORE SEEDING. SEED/STRAW ALL CONTRACTOR OF MENTION SEED/STRAW ALL SEEDING SEEDING SE DISTURBED AREAS (10#/1000 SF KENTUCKY 31 FESCUE, 15#/1000 SF OF 10/10/10 GRANULAR TYPE FERTILIZER, STRAW 2" THICKNESS, 5#/1000 SF OF AGRICULTURAL GROUND LIMESTONE).

EROSION CONTROL
EXPOSE MINIMUM AMOUNT OF SUBGRADE POSSIBLE AT ONE TIME TO ALLOW FOR EFFICIENT PROCEEDING OF THE WORK. GRASSING AND OTHER EROSION CONTROL MEANS SHALL BE EMPLOYED, MAINTAINED AND RECONSTRUCTED AS REQUIRED IF DESTROYED BY EROSION. GRASSING OF SWALES SHALL BE PERFORMED AS SOON AS ROUGH GRADING IS COMPLETED. GRASSING OF

OTHER AREAS SHALL BE PERFORMED AS SOON AS FINE GRADING IS COMPLETED. IN ALL CASES GRASSING SHALL BE PERFORMED TWO MONTHS PRIOR TO COMPLETION. TEMPORARY SEDIMENT TRAPS, TEMP. DIVERSION SWALES, AND TEMP. SEDIMENT FENCES SHALL BE CONSTRUCTED AND/OR INSTALLED PRIOR TO STRIPPING OF TOPSOIL. PERMANENT AND/OR TEMPORARY STORM WATER DETENTION BASINS SHALL BE CONSTRUCTED DURING INITIAL PHASE OF CONSTRUCTION. EROSION CONTROL FABRIC SHALL BE INSTALLED USING A MINIMUM OF TOP SOIL ON SLOPES STEEPER THAN 2:1. EROSION CONTROL FABRIC SHALL BE NORTH AMERICAN GREEN S—150 OR EQUAL. NOMINAL TOP SOIL SHALL BE TWO INCHES AT SUCH EMBANKMENT. EROSION CONTROL FABRIC SHALL BE INSTALLED OVER THE SOIL. GRASS SHALL BE SOWN THROUGH EROSION CONTROL FABRIC. PROVIDE AND MAINTAIN INLET PROTECTION AROUND CATCH BASINS AND INLET HEADWALLS TO PREVENT SILTATION THROUGHOUT CONSTRUCTION. PROVIDE AND MAINTAIN CHECK DAMS IN NEWLY CONSTRUCTED TEMPORARY AND PERMANENT DIVERSION SWALES TO SLOW RUNOFF VELOCITIES TO PREVENT EROSION. RE-TOPSOIL OR REWORK TOPSOIL AND RESEED IN AREAS THAT EXPERIENCE EROSION THROUGHOUT CONSTRUCTION. DO NOT REMOVE EROSION CONTROL MEASURES UNTIL ENTIRE SITE IS STABILIZED

SAFETY BARRIERS
SAFETY BARRIERS HAVING A MAXIMUM OPENING OF 4" SHALL BE PROVIDED FOR ANY PIPE, OPENING OR EXCAVATION TO PREVENT CHILDREN OR LARGE ANIMALS FROM CRAWLING INTO THE STRUCTURES. SCREENS SHALL BE WELDED 3/8" BARS @ 4" O.C. BOTH WAYS.

CONTRACTOR SHALL PAY ALL GRADING PERMIT FEES AND POST GRADING BOND, IF REQUIRED.

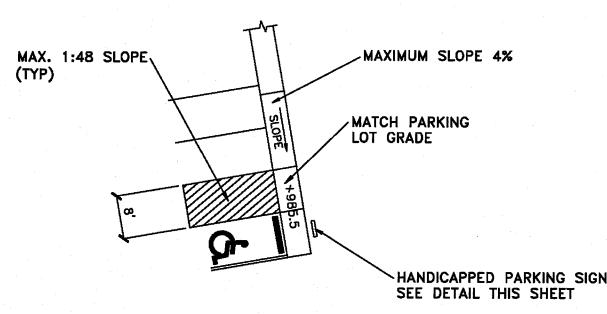


SURFACE SIGN

HANDICAPPED PARKING SIGNS

ABOVE GRADE SIGN

"HANDICAPPED PARKING" SIGN SHALL CONFORM TO CURRENT STATE AND LOCAL CODES AND REQUIREMENTS.

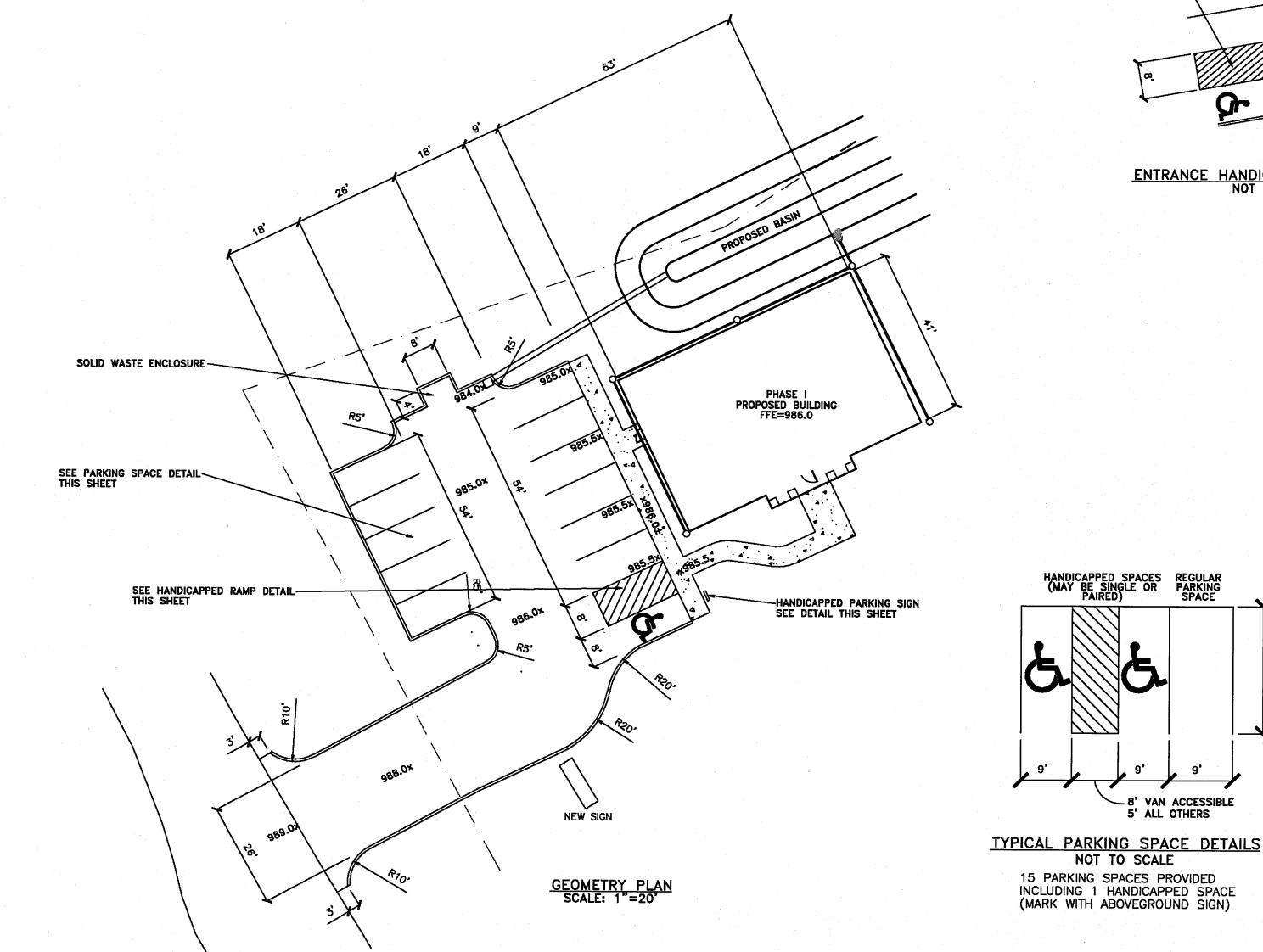


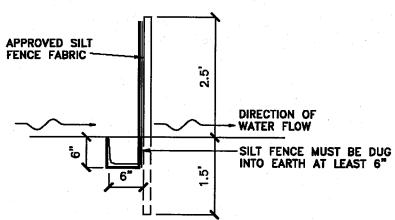
HANDICAPPED SPACES REGULAR (MAY BE SINGLE OR PARKING SPACE

8' VAN ACCESSIBLE

5' ALL OTHERS

NOT TO SCALE





CATCH BASIN PROTECTION DETAIL

TEMPORARY SILT FENCE DETAIL

BEFORE YOU

STOP

CALL

1-800-351-1111

TENNESSEE ONE CALL

IT'S THE LAW

1. ACCEPTABLE SILT FENCE FABRICS INCLUDE "AMOCO SILTSTOP", "MIRAFI 100X" AND "TREVIRA 1115".

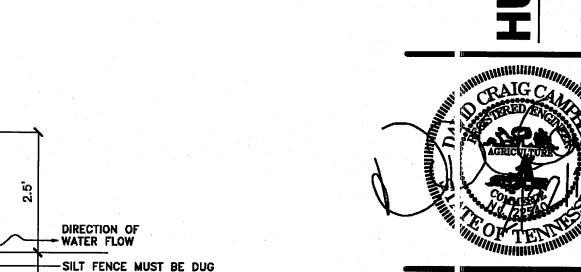
2. SILT FENCE SHALL BE MAINTAINED IN SATISFACTORY CONDITION FOR THE DURATION OF THE PROJECT. 3. POSTS SHALL BE SPACED NO GREATER THAN 6' APART.

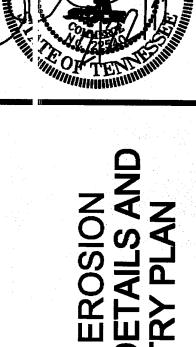
3-E-11-UR

CONTRACTOR IS RESPONSIBLE FOR ALL TRENCH SAFETY Contractor shall shore and brace all open cut trenches as required by State and Federal Laws and Local rdinances; to conform with recommendations set forth in AGC Manual of Accident Prevention in Construction: to protect life, property, or work; to avoid excessively wide cuts in unstable material.

OSHA RULES SHALL BE ABIDED BY

PRO ESTROS 10087 PRO BOTMERS STUART





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GEORGE ARMOUR

EWART

404 E earden Park Circle

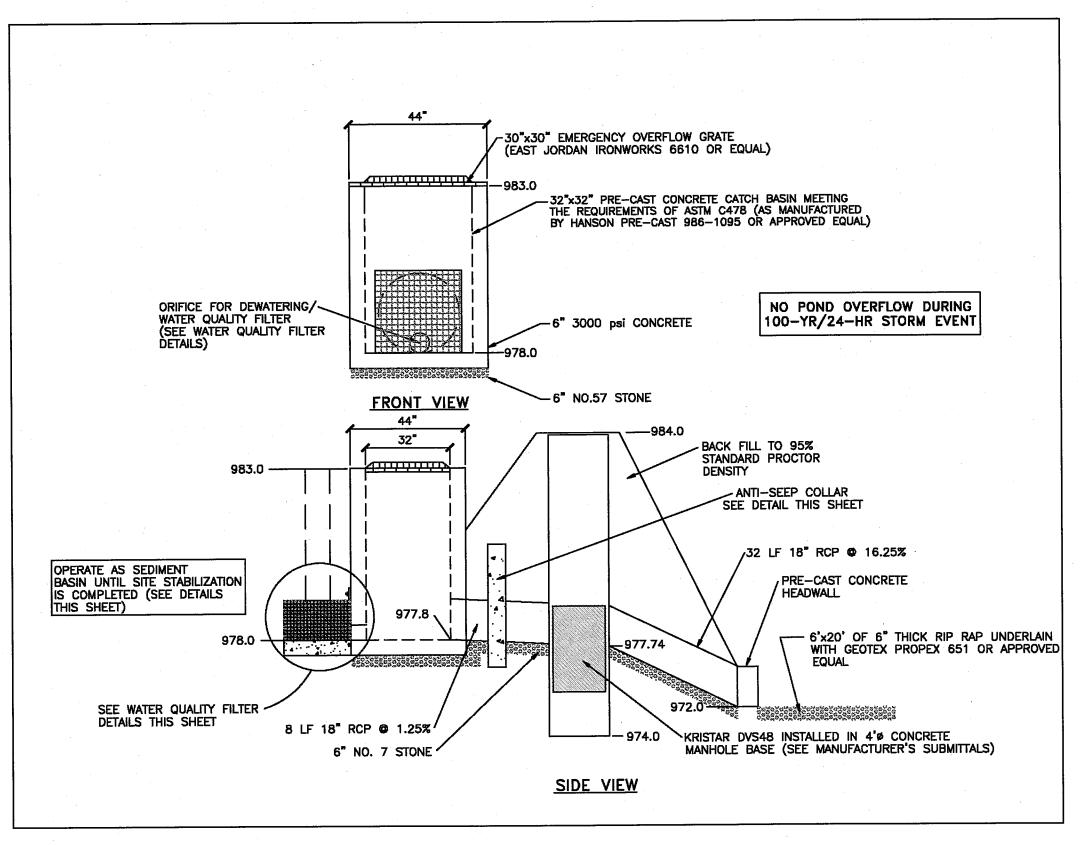
www. jeorgeewart.com

Knox ille, TN 37919

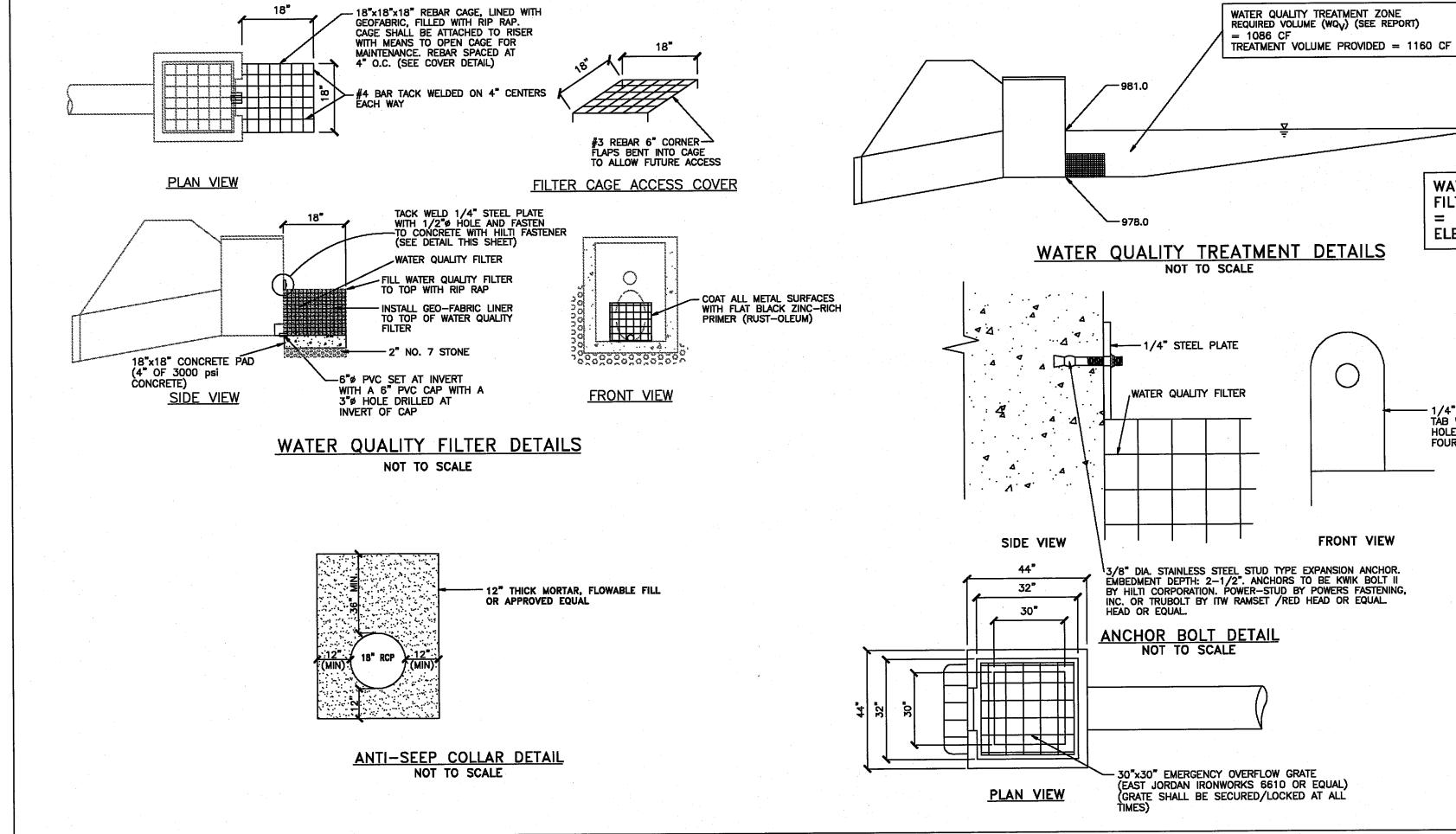
865 502-7771

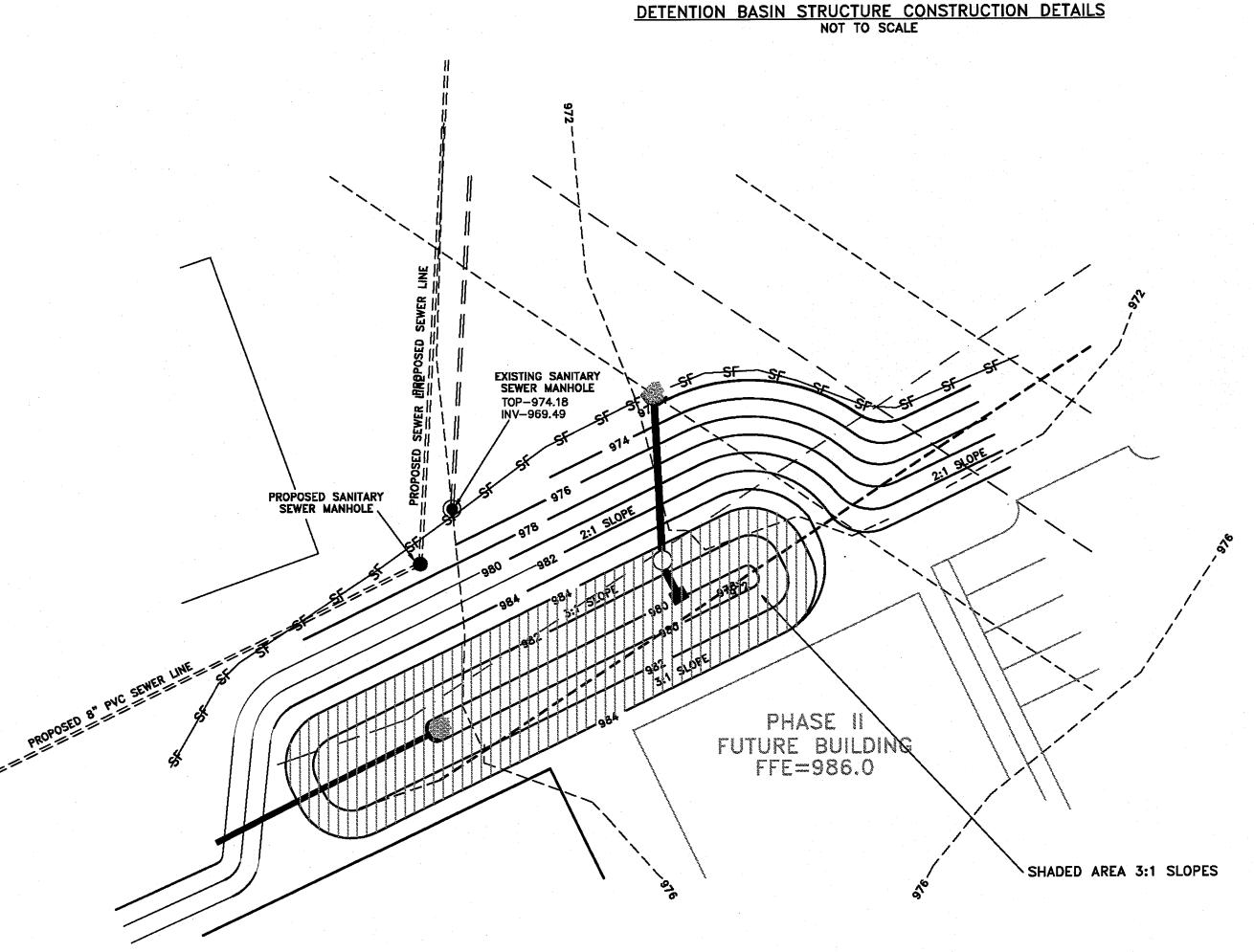
Fax E 35-601-7742

22 FEB 2011



DETENTION BASIN STRUCTURE DETAILS NOT TO SCALE





DETENTION/SEDIMENT BASIN PLAN

SCALE: 1"=20'

THIS IS A PRIORITY CONSTRUCTION **ACTIVITY** BEFORE YOU

Ordinances; to conform with recommendations set forth in AGC Manual of Accident Prevention in Construction; to

protect life, property, or work; to avoid excessively wide cuts in unstable material.

OSHA RULES SHALL BE ABIDED BY

3-E-11-UR 1-800-351-1111 TENNESSEE ONE CALL IT'S THE LAW 2-23-11 CONTRACTOR IS RESPONSIBLE FOR ALL TRENCH SAFETY Contractor shall shore and brace all open cut trenches as required by State and Federal Laws and Local

22 FEB 2011 **FI DISCTINGS** 10087 PI DABOTMER: STUART

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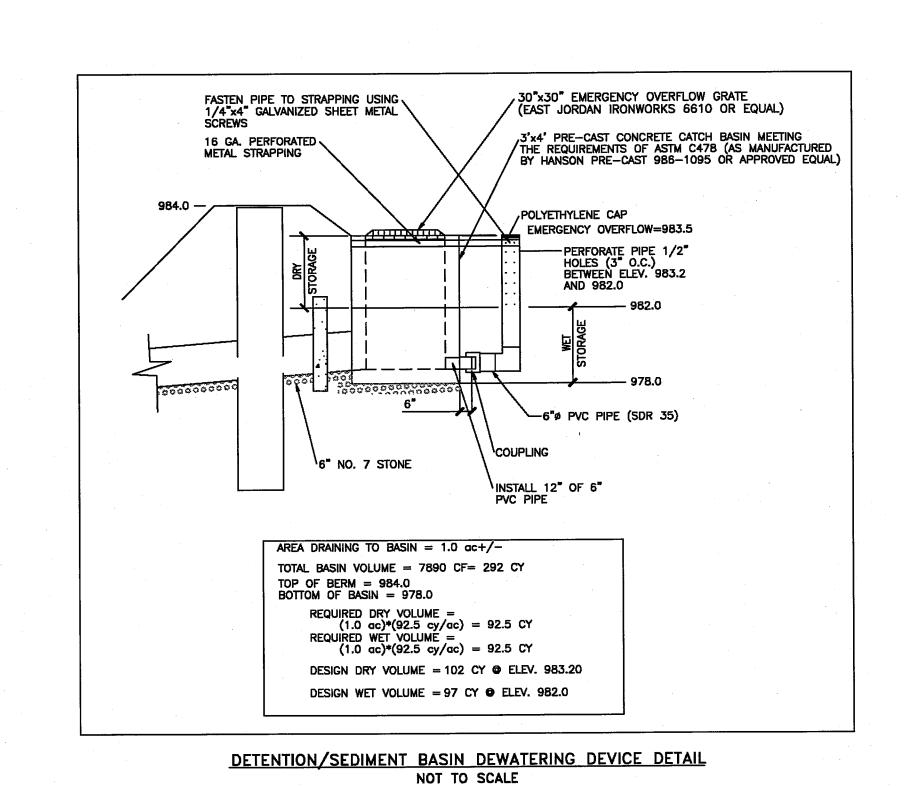
WATER QUALITY

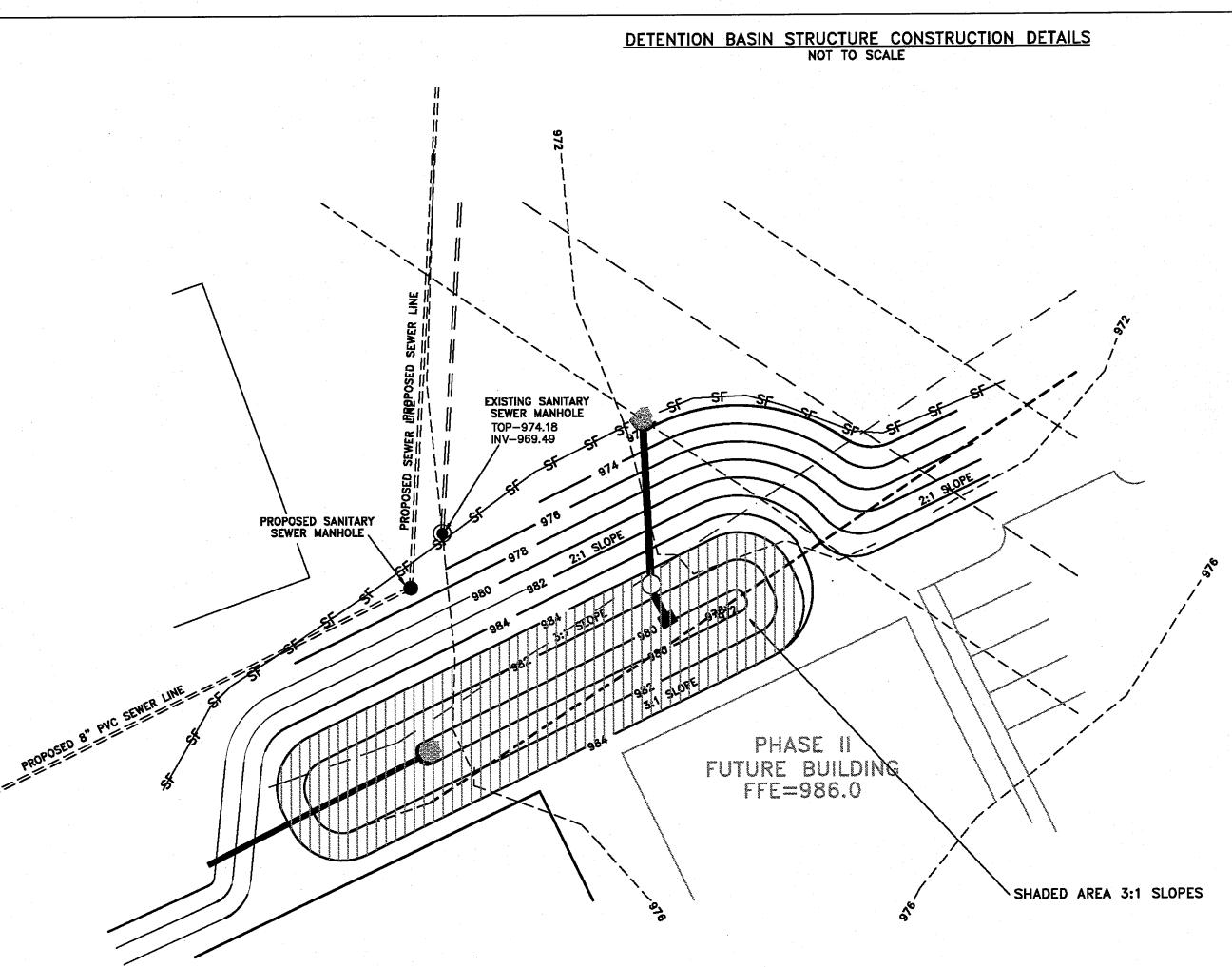
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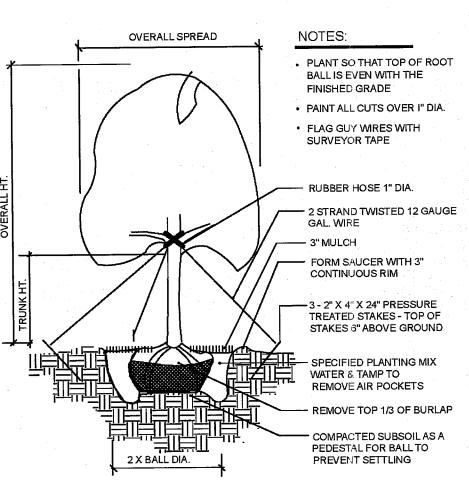
TAB WITH 1/2" HOLE (TYPICAL OF

ELEVATION 981.0

FILTRATION VOLUME



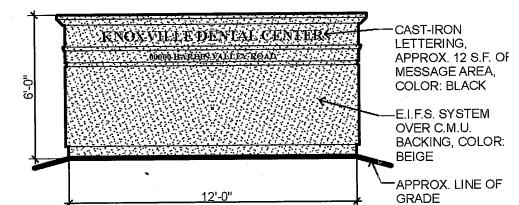




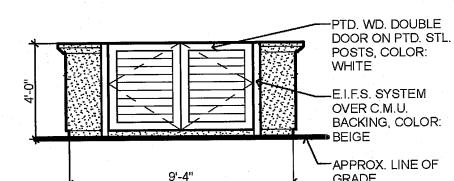


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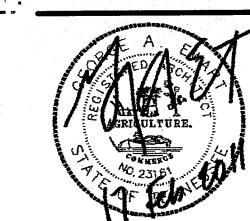










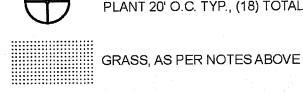


LANDSCAPE PLAN

A. AT LEAST 5% OF THE PARKING LOT AREA SHALL BE

B. SEED ALL AREAS DISTURBED BY GRADING W/ KENTUCKY #31 FESCUE - SOW GRASS SEED UNIFORMLY IN TWO DIRECTIONS & PROTECT W/ STRAW TO A LOOSE DEPTH OF 1 TO 1/2" MIN., SOD AREAS WHERE SLOPE IS GREATER

C. TREES SHALL NOT BE LESS THAN 2" CALIPER MEASURED 6" ABOVE GROUND AND SHALL BE NO LESS THAN 8'-0" HIGH AT TIME OF PLANTING D. TREES TO BE PLANTED SHALL BE PROPERLY MAINTAINED TO ENSURE SURVIVAL FOR A PERIOD OF 18 MONTHS MIN. FROM DATE OF PLANTING - SEE DTL. 2/A0. E. EXISTING VEGETATION SHOULD BE PRESERVED AND NEW TREES PLANTED TO SEEK TO PRESERVE THE NATURAL ENVIRONMENT AS PER GUIDELINES OF TENNESSEE TECHNOLOGY CORRIDOR DEVELOPMENT AUTHORITY.



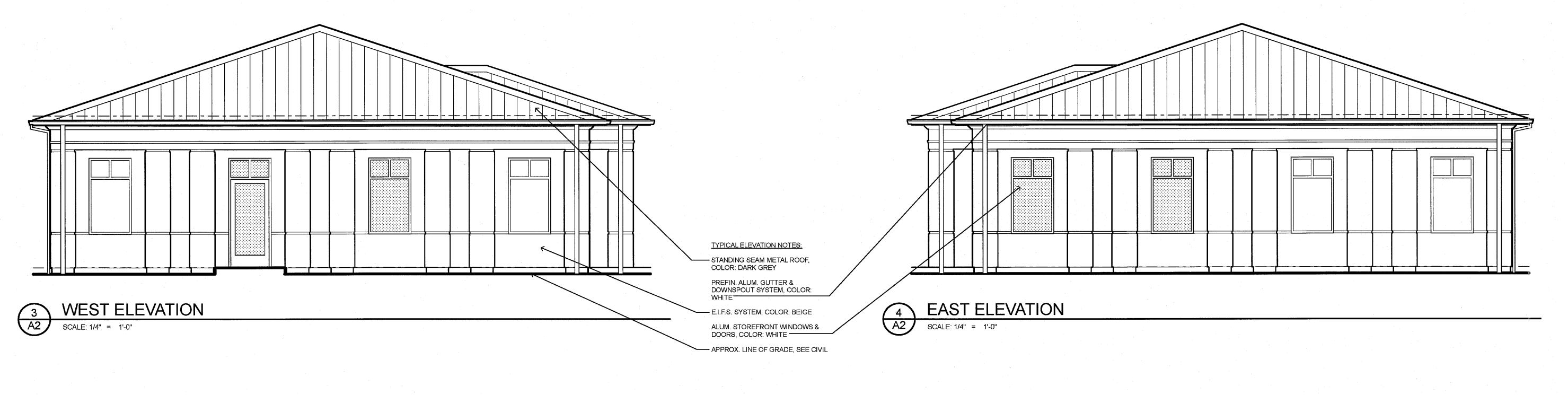
MULCH BEDS FOR ANNUALS

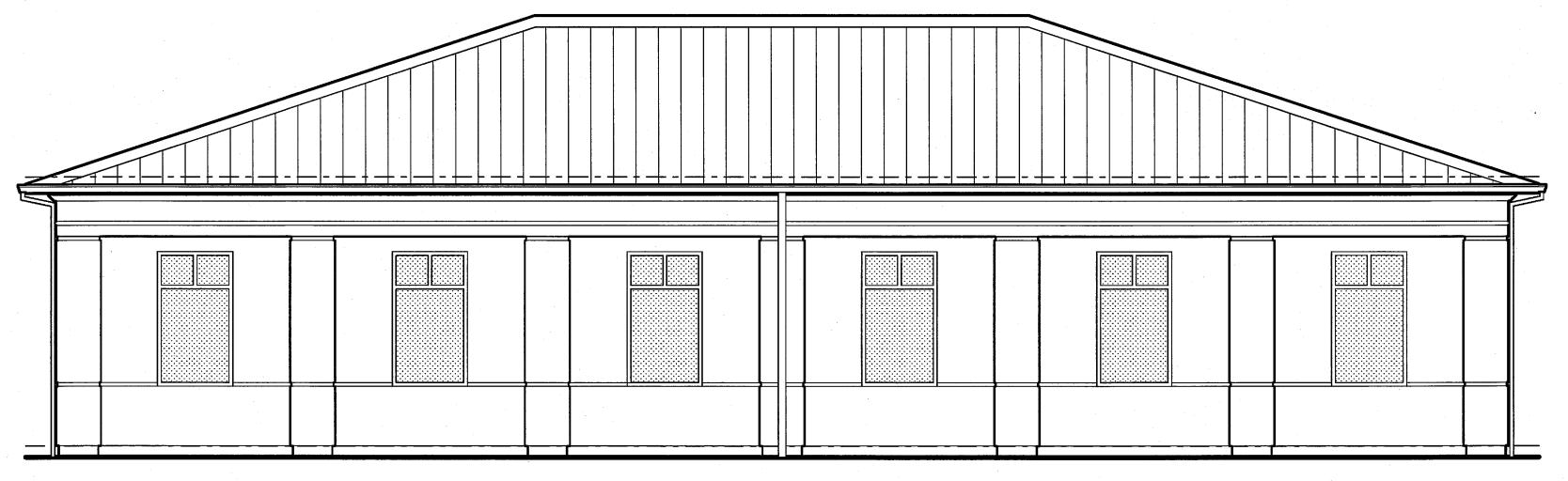
LANDSCAPE WITH ANDORRA JUNIPER

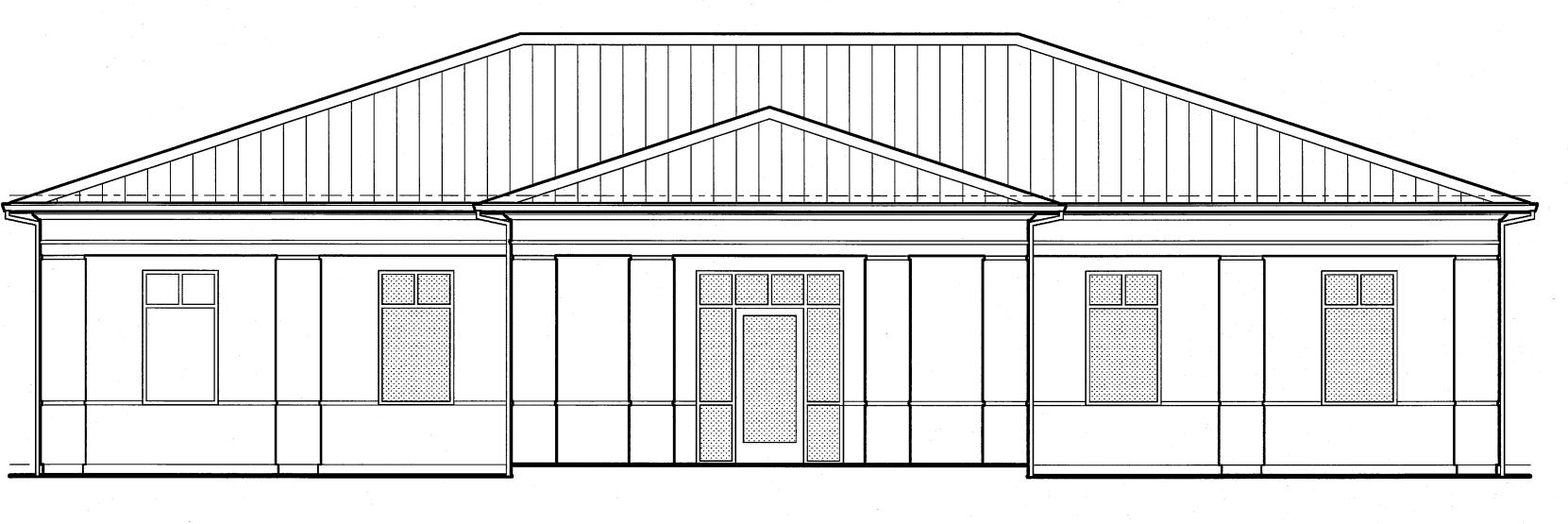
17 FEB. 2011

PROJECT NO.: 10087 PROJECT MGR.: STUART



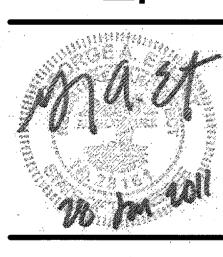




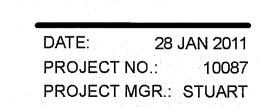


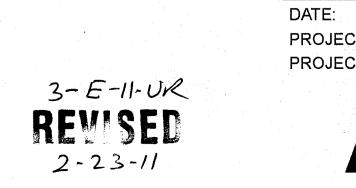
NORTH ELEVATION

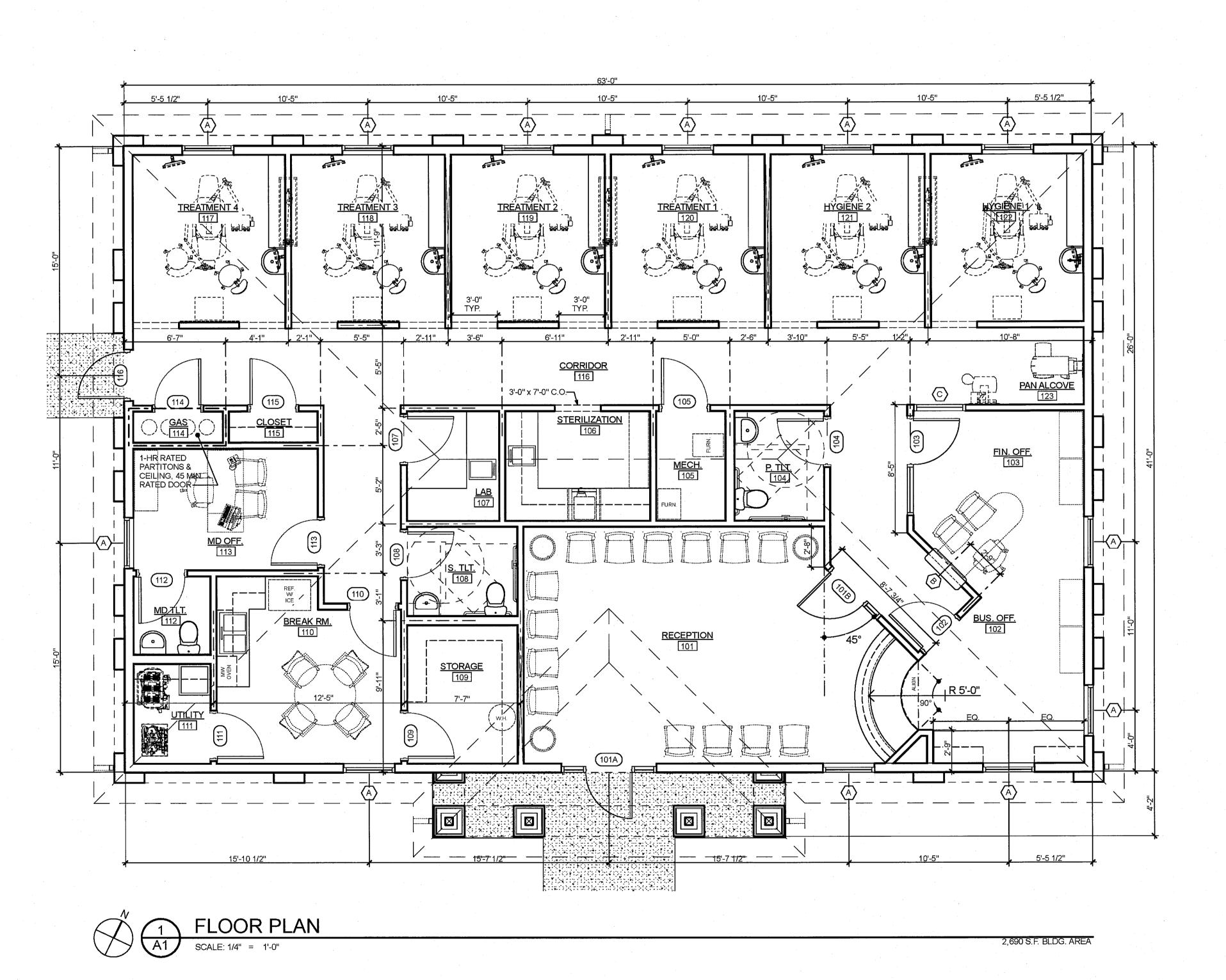
SCALE: 1/4" = 1'-0"

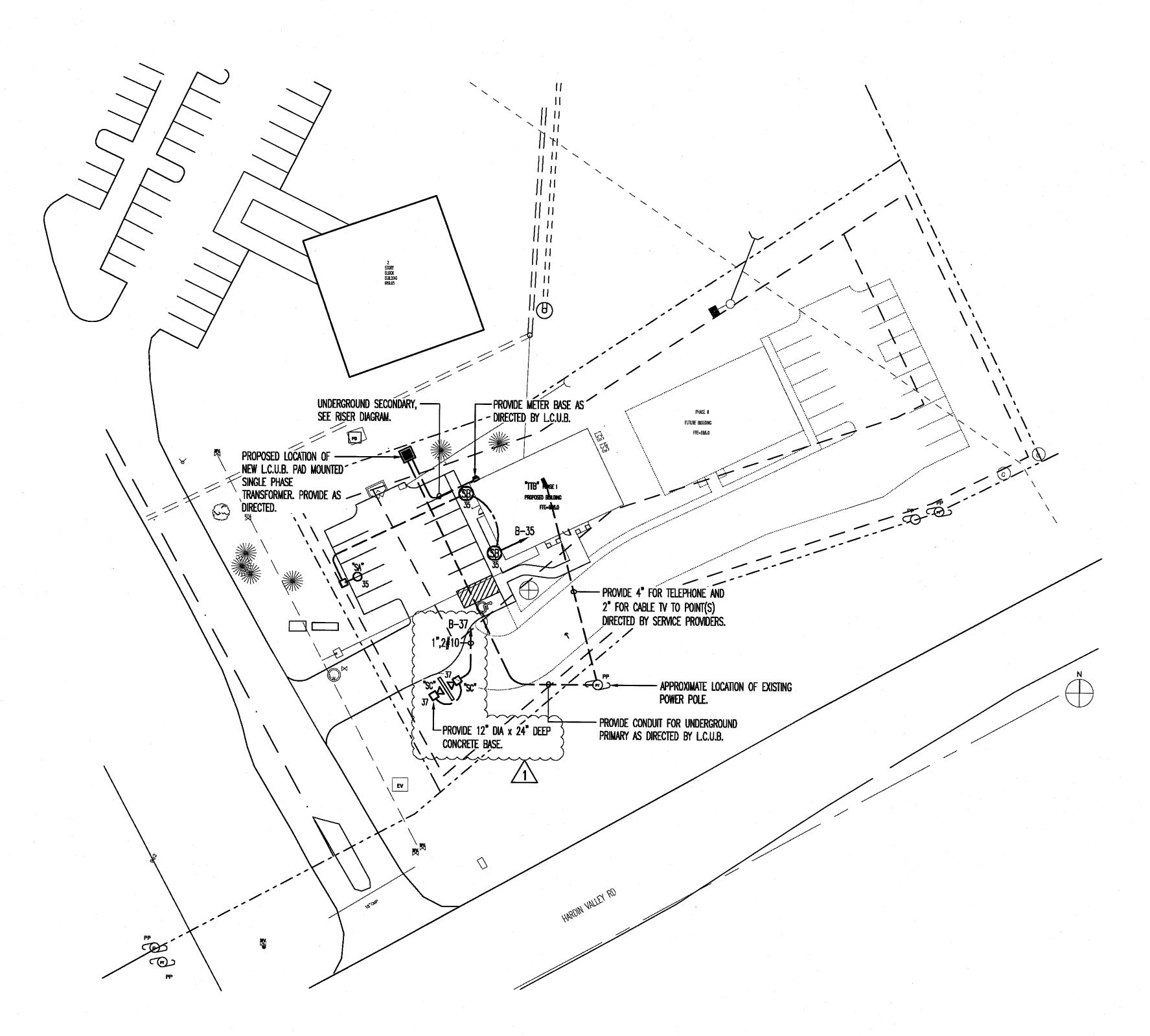




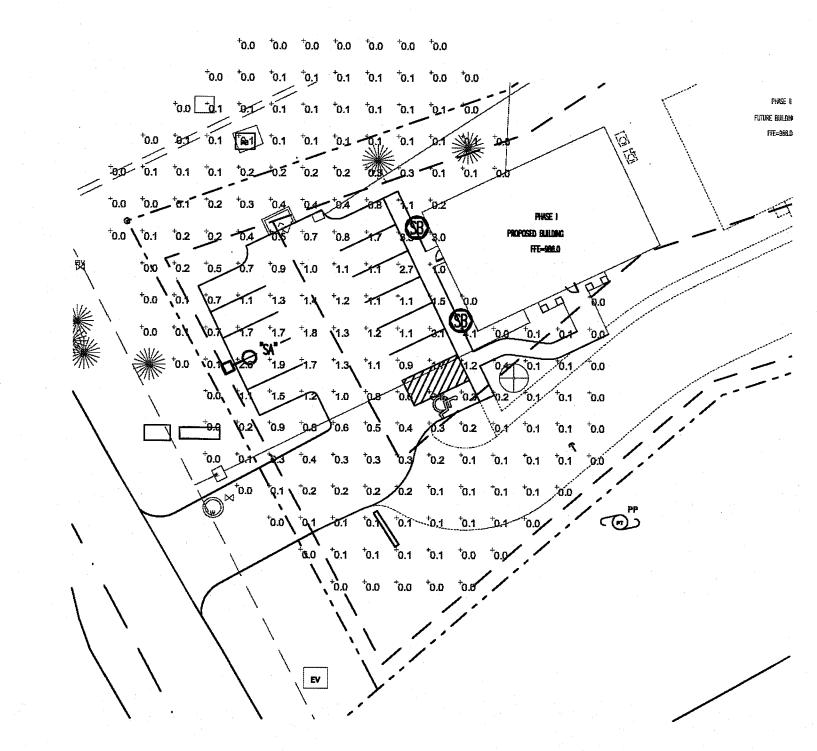








SCALE: 1"=30'-0"

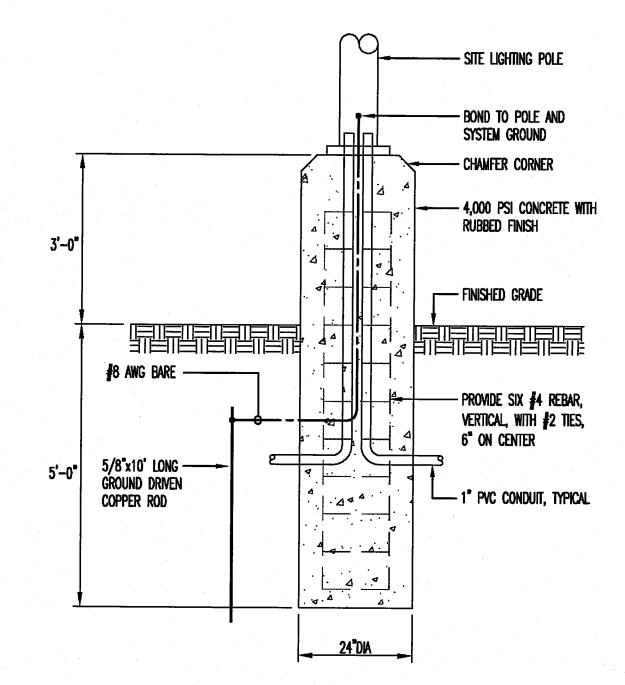


SITE ILLUMINATION PLAN

SCALE: 1"=30'-0"

GENERAL NOTES:

1. THE MINIMUM LEVEL IS 0.2 FOOT CANDLES, THE MAXIMUM LEVEL IS 4.2 FOOT CANDLES. THE AVERAGE OF THE NOTED PHOTOMETRICS POINTS IS 1.0 FOOT CANDLES.



POLE BASE DETAIL NO SCALE USE FOR "SA"

SYM		LAMPS			MOUNTING	DESCRIPTION
		NO	WATTS	TYPE		
SA	LITHONIA FIXTURE - (1) KAD 250M SR4SC SPD04 PE POLE-SSS 25 4C DM19	1	250/300	МН	25' POLE	ONE POLE MOUNTED AREA LIGHT WITH FORWARD THROW FULL CUTOFF
SB	LITHONIA FIXTURE - WST 70M FT PE	1	70/100	МН	WALL	FULL CUT0OFF WALL PACK
sc	LITHONIA FIXTURE - ASF1 70MVFW AFJB BD	1	70/100	МН	GROUND	FLOOD LIGHTS WITH ADJUSTABLE BARN DOORS FOR GLARE CONTROL



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BLDG. FOR CALLIAMS, DMD

HUBBEI

SITE ELECTRICAL PI AN

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3-E-11-UR

2-23-//

= 2-22-2011

FACILITY

SYSTEMS

CONSULTANTS, LIC

773-Septi-Central Street, Softe 107

Experient, Testing-see 379-32

Phone: 1453-246-0140

For: 1459-246-0140

DATE: 28 JAN 2011 PROJECT NO.: 10087 PROJECT MGR.: STUART

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