RFP# 16-006-83 - Shelby County Fire Station #62
STRUCTURAL REPAIRS AND PAVEMENT REPLACEMENT

4647 Forest Hill Irene Road, Memphis, TN 38125

Architect: John Pruett Architects
Civil & Structural Engineer: Davis Patrikios Criswell, Inc.

LEGEND

LP	LIGHT POLE
PP	POWER POLE
ET	ELECTRIC TRANSFORMER
UGE	UNDERGROUND ELECTRIC
OE	OVERHEAD ELECTRIC
EM	ELECTRIC METER
GEN	GENERATOR
EB	ELECTRIC BOX
MW	MONITORING WELL
SCO	SEWER CLEANOUT
SMH	SEWER MANHOLE
AN	ANCHOR
WM	WATER METER
FH	FIRE HYDRANT
GV	GAS VALVE
ICV	IRRIGATION CONTROL VALVE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

UTILITY NOTE

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM ITEMS VISIBLE ON THE SURFACE AND EXISTING DRAWINGS MADE AVAILABLE AT THE TIME OF THE SURVEY. THERE ARE NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED OR THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM SURFACE INDICATIONS ON SITE AND BASED ON RECORD INFORMATION PROVIDED TO THE SURVEYOR AT THE TIME OF THE SURVEY.

TOPOGRAPHICAL SURVEY OF

SHELBY COUNTY FIRE STATION #62

PREPARED FOR: JOHN PRUETT ARCHITECTS
1869 MADISON
MEMPHIS, TN. 38104

PREPARED BY: ETI CORPORATION

ENGINEERING • SURVEYING • LAND PLANNING • LANDSCAPE ARCHITECTURE

1755 LYNNFIELD ROAD, SUITE 100 MEMPHIS, TENNESSEE 38119 (901)758-0400

SCALE: 1"=20'
DATE: 6-18-2015
LOCATED IN SHELBY COUNTY, TN
DRAWN BY: C.P.
DRAWING NUMBER: SURVEYS/15027.DWG

LIST OF DRAWINGS

A0 COVER, SURVEY
C1.0 CIVIL DEMOLITION PLAN
C2.0 CIVIL SITE REPAIR AND GRADING PLAN
C3.0 CIVIL EROSION CONTROL PLAN
C4.0 SITE REPAIR DETAILS
A1 ARCHITECTURAL SITE PLAN
S1.0 STRUCTURAL REPAIR PLAN
S2.0 STRUCTURAL REPAIR PLAN - EXTERIOR WALL
S2.1 STRUCTURAL REPAIR PLAN - EXTERIOR WALL
S2.2 STRUCTURAL REPAIR PLAN - EXTERIOR WALL
S2.3 STRUCTURAL REPAIR PLAN - EXTERIOR WALL
S2.4 STRUCTURAL REPAIR PLAN - EXTERIOR WALL
S3.0 STRUCTURAL DETAILS

revisions

no.	date	description

seal

JOHN R. PRUETT
REGISTERED ARCHITECT
NO. 20969
STATE OF TENNESSEE
5-20-16

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Construction Document Set

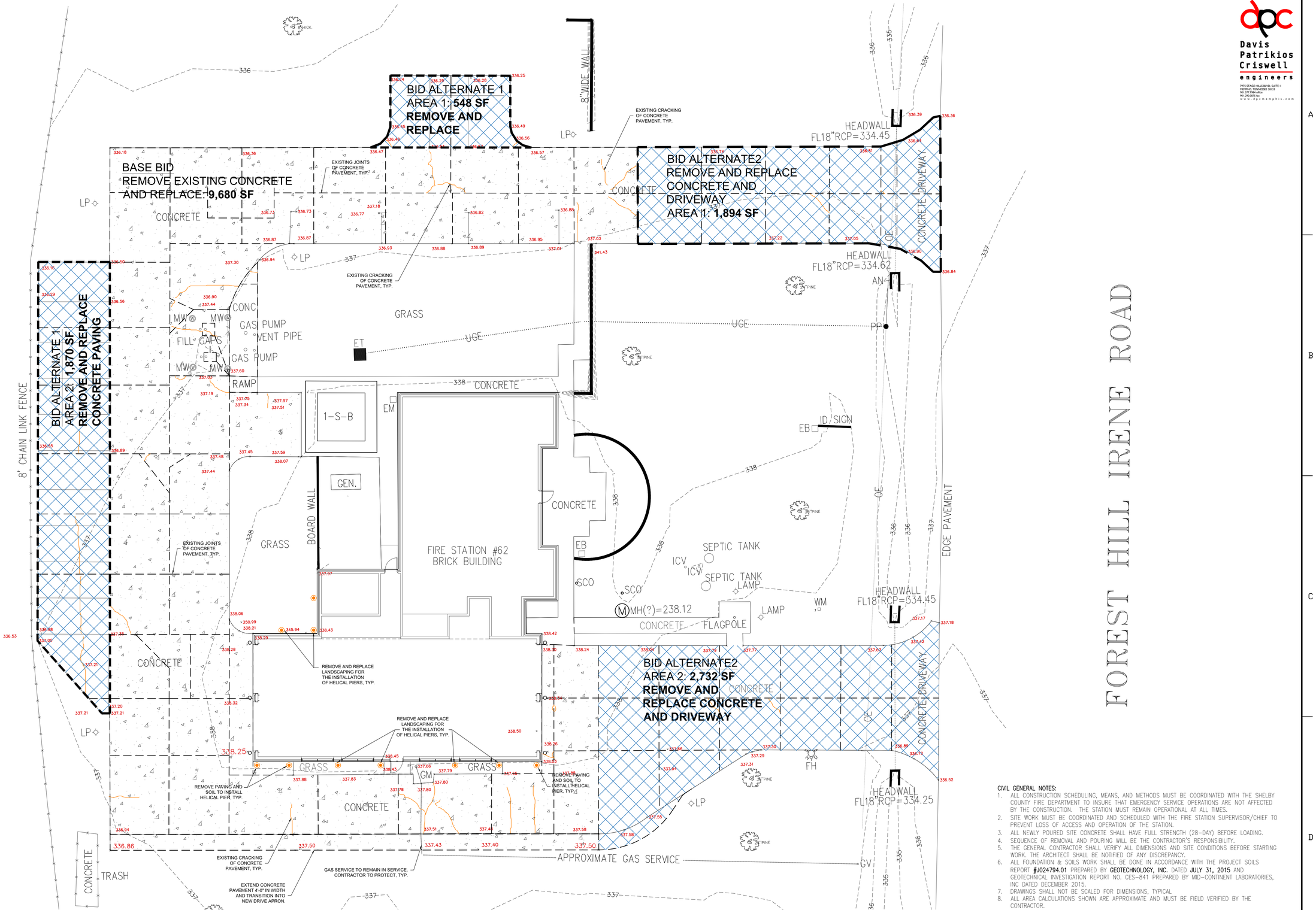
sheet name

COVER SURVEY

date

May 27, 2016

A0



1 A1 SITE DEMOLITION PLAN
3/32"=1'-0"

CIVIL GENERAL NOTES:

1. ALL CONSTRUCTION SCHEDULING, MEANS, AND METHODS MUST BE COORDINATED WITH THE SHELBY COUNTY FIRE DEPARTMENT TO INSURE THAT EMERGENCY SERVICE OPERATIONS ARE NOT AFFECTED BY THE CONSTRUCTION. THE STATION MUST REMAIN OPERATIONAL AT ALL TIMES.
2. SITE WORK MUST BE COORDINATED AND SCHEDULED WITH THE FIRE STATION SUPERVISOR/CHIEF TO PREVENT LOSS OF ACCESS AND OPERATION OF THE STATION.
3. ALL NEWLY POURED SITE CONCRETE SHALL HAVE FULL STRENGTH (28-DAY) BEFORE LOADING.
4. SEQUENCE OF REMOVAL AND POURING WILL BE THE CONTRACTOR'S RESPONSIBILITY.
5. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCY.
6. ALL FOUNDATION & SOILS WORK SHALL BE DONE IN ACCORDANCE WITH THE PROJECT SOILS REPORT **#J024794.01** PREPARED BY **GEOTECHNOLOGY, INC.** DATED **JULY 31, 2015** AND GEOTECHNICAL INVESTIGATION REPORT NO. CES-841 PREPARED BY MID-CONTINENT LABORATORIES, INC DATED DECEMBER 2015.
7. DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS, TYPICAL
8. ALL AREA CALCULATIONS SHOWN ARE APPROXIMATE AND MUST BE FIELD VERIFIED BY THE CONTRACTOR.

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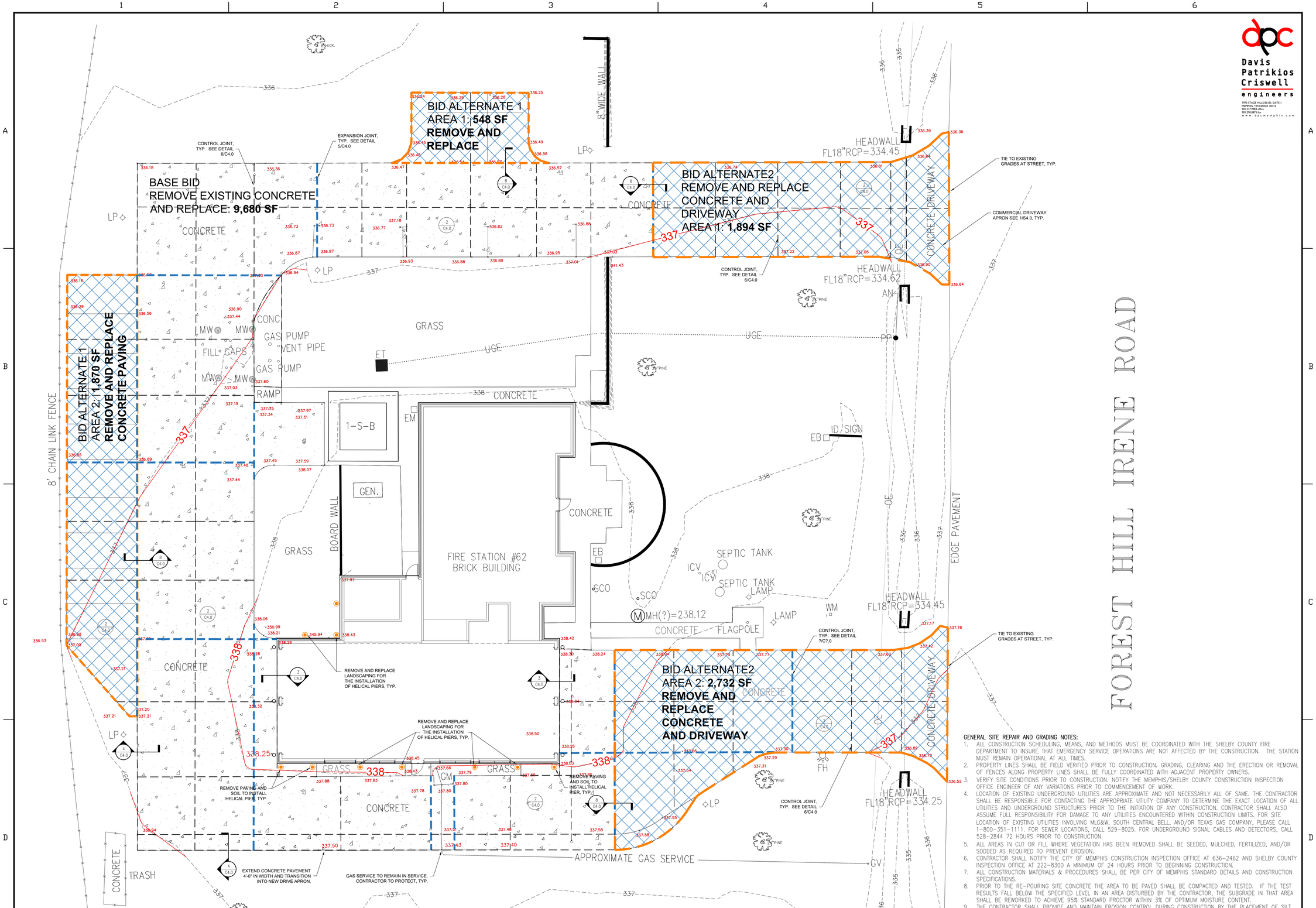
sheet name
DEMOLITION PLAN

date
MAY 27, 2016

C1.0



1 A1 CIVIL SITE REPAIR AND GRADING PLAN
3/32"=1'-0"

GENERAL SITE REPAIR AND GRADING NOTES:

1. ALL CONSTRUCTION SCHEDULING, MEANS, AND METHODS MUST BE COORDINATED WITH THE SHELBY COUNTY FIRE DEPARTMENT TO INSURE THAT EMERGENCY SERVICE OPERATIONS ARE NOT AFFECTED BY THE CONSTRUCTION. THE STATION MUST REMAIN OPERATIONAL AT ALL TIMES.
2. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING, CLEARING AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
3. VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE MEMPHIS/SHELBY COUNTY CONSTRUCTION INSPECTION OFFICE ENGINEER OF ANY VARIATIONS PRIOR TO COMMENCEMENT OF WORK.
4. LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ALL OF SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY COMPANY TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES PRIOR TO THE INITIATION OF ANY CONSTRUCTION. CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION LIMITS. FOR SITE LOCATION OF EXISTING UTILITIES INVOLVING MLG&W, SOUTH CENTRAL BELL, AND/OR TEXAS GAS COMPANY, PLEASE CALL 1-800-351-1111. FOR SEWER LOCATIONS, CALL 529-8025. FOR UNDERGROUND SIGNAL CABLES AND DETECTORS, CALL 528-2844 72 HOURS PRIOR TO CONSTRUCTION.
5. ALL AREAS IN CUT OR FILL WHERE VEGETATION HAS BEEN REMOVED SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO PREVENT EROSION.
6. CONTRACTOR SHALL NOTIFY THE CITY OF MEMPHIS CONSTRUCTION INSPECTION OFFICE AT 636-2462 AND SHELBY COUNTY INSPECTION OFFICE AT 222-8300 A MINIMUM OF 24 HOURS PRIOR TO BEGINNING CONSTRUCTION.
7. ALL CONSTRUCTION MATERIALS & PROCEDURES SHALL BE PER CITY OF MEMPHIS STANDARD DETAILS AND CONSTRUCTION SPECIFICATIONS.
8. PRIOR TO THE RE-POURING SITE CONCRETE THE AREA TO BE PAVED SHALL BE COMPACTED AND TESTED. IF THE TEST RESULTS FALL BELOW THE SPECIFIED LEVEL IN AN AREA DISTURBED BY THE CONTRACTOR, THE SUBGRADE IN THAT AREA SHALL BE REWORKED TO ACHIEVE 95% STANDARD PROCTOR WITHIN 3% OF OPTIMUM MOISTURE CONTENT.
9. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION CONTROL DURING CONSTRUCTION BY THE PLACEMENT OF SILT FENCES AND HAY BALES WHERE NECESSARY TO PREVENT DOWNSTREAM SILTATION OF ANY DITCHES, PIPES, DRAINAGE STRUCTURES, OR ADJACENT PROPERTIES. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL EROSION CONTROL AS NEEDED OR AS DIRECTED BY THE DESIGNER.

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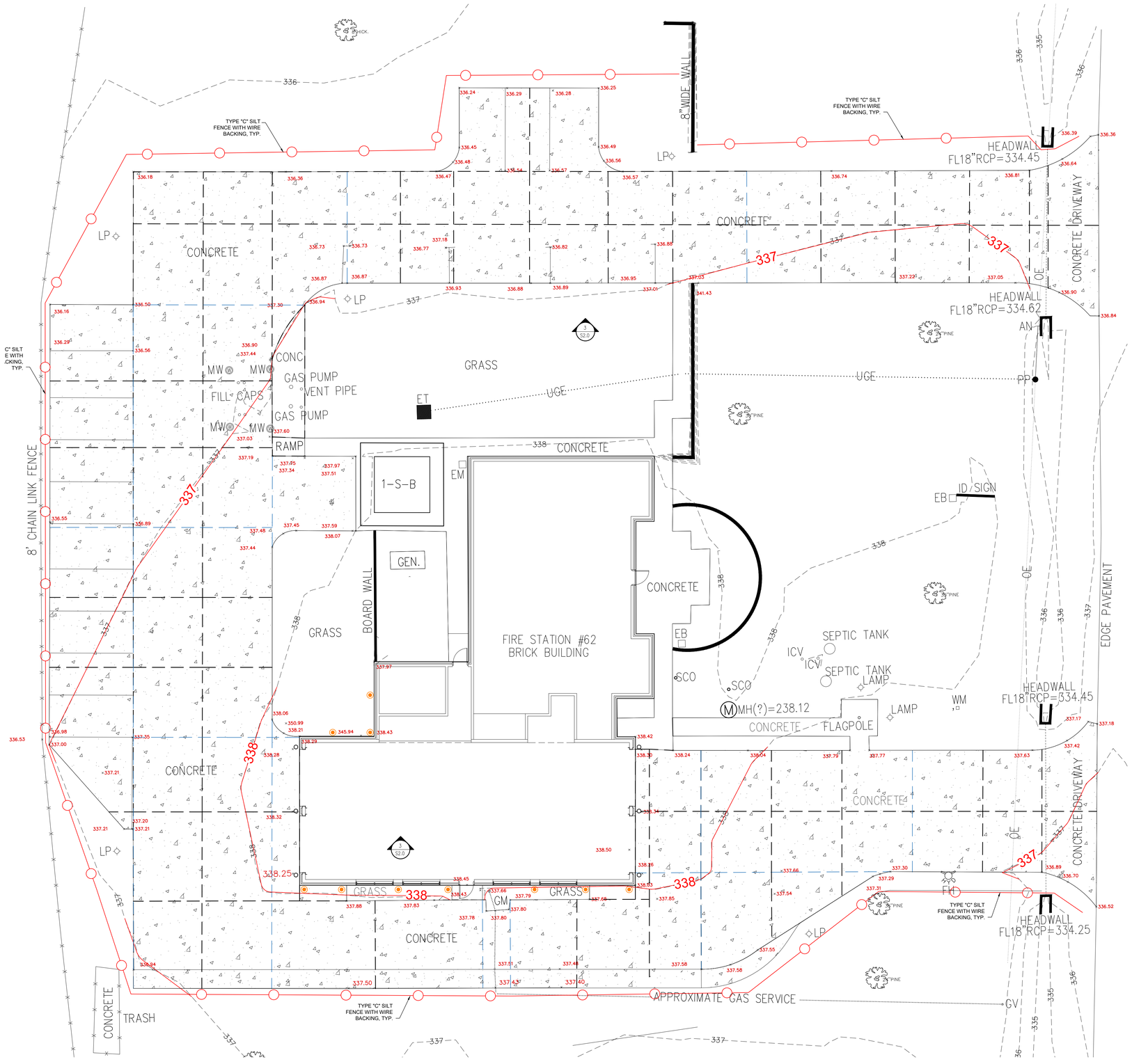
CIVIL SITE REPAIR & GRADING PLAN

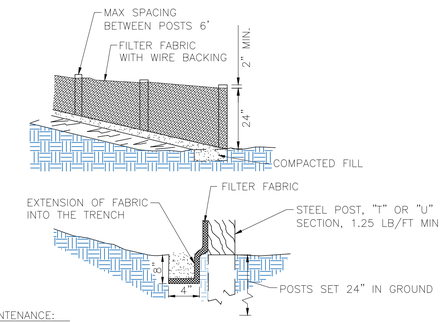
date

MAY 27, 2016

C2.0



1 A1 EROSION CONTROL PLAN
3/32"=1'-0"



MAINTENANCE:

1. INSPECT SEDIMENT FENCES AT LEAST TWICE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REPLACE BURLAP AS NEEDED.
2. REMOVE SEDIMENT DEPOSITS WHEN THE STORAGE VOLUME HAS BEEN REDUCED BY 50% TO PROVIDE ADEQUATE STORAGE FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

TYPICAL SILT FENCE (SF-C) DETAIL

N.T.S

EROSION CONTROL NOTES

1. THE PURPOSE OF THIS EROSION CONTROL PLAN IS TO PREVENT SILTATION AND OTHER POLLUTANTS, DUE TO CONSTRUCTION, FROM ENTERING ADJACENT STREAMS AND PROPERTY.
2. CLEARING AND GRUBBING IS TO BE HELD TO THE MINIMUM WIDTH NECESSARY TO ACCOMMODATE SLOPES. UNNECESSARY CANOPY REMOVAL (TREES, SHRUBS, ETC.) IS PROHIBITED.
3. MAINTAIN ALL GROUND COVER WHENEVER POSSIBLE. ALL AREAS DISTURBED BY CONSTRUCTION THAT ARE NOT TO RECEIVE PAVING SHALL BE SEEDED AND MULCHED AS SOON AS POSSIBLE.
4. TO REDUCE SEDIMENT IN RUNOFF, EROSION CONTROL MEASURES SHALL BE INSTALLED PROMPTLY AND MAINTAINED DURING ALL CONSTRUCTION PHASES.
5. SITE EROSION CONTROLS SHALL BE CHECKED AND IF NECESSARY REPAIRED OR MAINTAINED AS SOON AS POSSIBLE. INSPECTIONS SHALL BE DONE BIWEEKLY, A MINIMUM OF 72 HOURS APART. IN THE EVENT OF CONTINUOUS RAINFALL, EROSION CONTROLS SHALL BE CHECKED DAILY. INSPECTION REPORTS SHALL BE KEPT ON FILE AND SUBMITTED WHEN REQUESTED BY THE DIVISION OF WATER POLLUTION CONTROL.
6. DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EROSION CONTROL STRUCTURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S EXPENSE.
7. ALL AREAS TO REMAIN BARE GREATER THAN 15 DAYS MUST BE TEMPORARILY STABILIZED.
8. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES IS TO BE PLACED AT A SITE APPROVED BY THE ENGINEER. IT SHALL BE TREATED IN A MANNER SO THAT THE AREA AROUND THE DISPOSAL SITE WILL NOT BE CONTAMINATED OR DAMAGED BY THE SEDIMENT IN RUN-OFF. ALL COST FOR SEDIMENT REMOVAL SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
9. UPON COMPLETE REMOVAL OF SEDIMENT TRAPS, SPECIAL DITCHES, ETC., THE AREA WHERE THEY WERE CONSTRUCTED IS TO BE TOPSOILED, SEEDED, AND MULCHED.
10. ALL STOCKPILES TO BE CONTAINED BY SILT FENCE IN ORDER TO PREVENT SEDIMENT RUNOFF FROM ENTERING NEARBY STREAMS.
11. EXCAVATED AREAS SHALL BE PROMPTLY STABILIZED AGAINST EROSION. SILTATION MEASURES SHALL BE IMPLEMENTED PROMPTLY TO REDUCE THE SEDIMENT IN RUN-OFF FROM THE CONSTRUCTION SITE.
12. EQUIPMENT STAGING AND MAINTENANCE AREAS SHALL BE DEVELOPED A SUFFICIENT DISTANCE FROM STREAMS TO ENSURE THAT OIL, GASOLINE, AND OTHER PETROLEUM POLLUTANTS DO NOT ENTER THE WATERWAYS.
13. FAILURE TO MAINTAIN GOOD EROSION CONTROL MEASURES COULD RESULT IN A FINE BEING ISSUED TO THE CONTRACTOR.
14. THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL DEVICES IN GENERAL CONFORMANCE TO THE EROSION CONTROL PLAN. THE EROSION CONTROL PLAN IS PROVIDED TO INDICATE MINIMUM EROSION CONTROL MEASURES REQUIRED OF THE CONTRACTOR AND DOES NOT TAKE INTO ACCOUNT THE CONTRACTOR'S SEQUENCE OF CONSTRUCTION. ADDITIONAL EROSION CONTROL MEASURES SHALL BE UNDERTAKEN BY THE CONTRACTOR AS REQUIRED TO MINIMIZE IMPACTS TO ADJACENT PROPERTIES AND THE DRAINAGE SYSTEM DOWNSTREAM OF THE SITE, AT NO ADDITIONAL COST.

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sheet name
EROSION CONTROL PLAN

date
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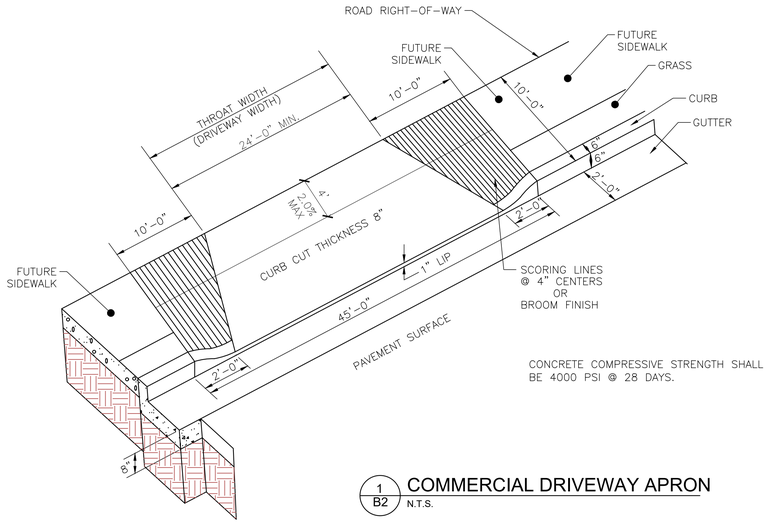
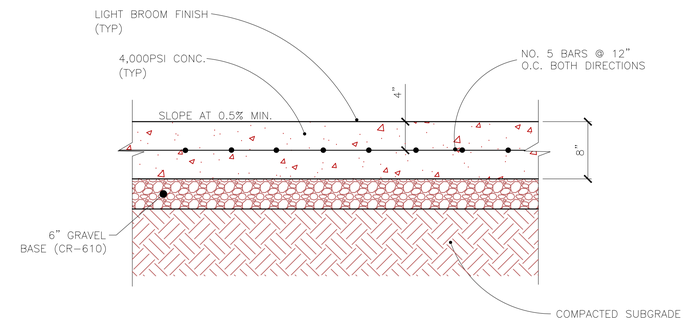
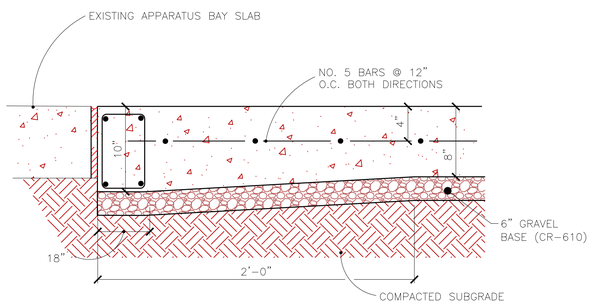
C3.0



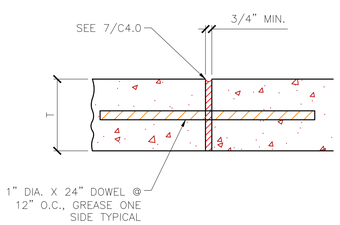
1 / B2 COMMERCIAL DRIVEWAY APRON
N.T.S.



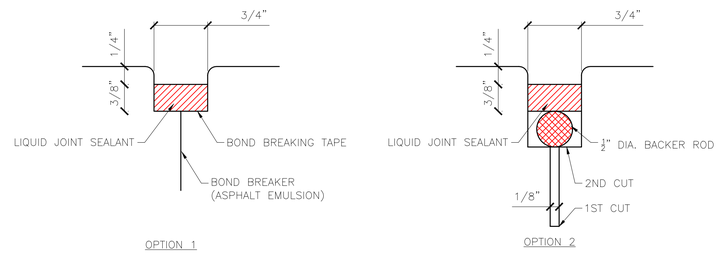
2 / B5 HEAVY DUTY CONC. PAVEMENT
N.T.S.



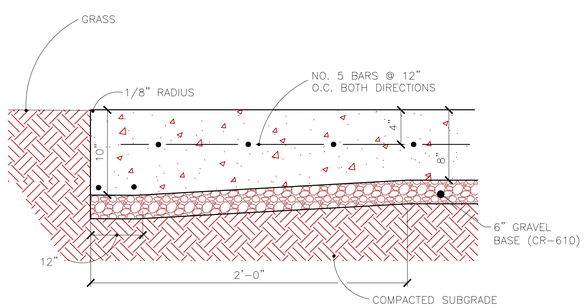
3 / C1 THICKENED EDGE AT APP. DOOR
N.T.S.



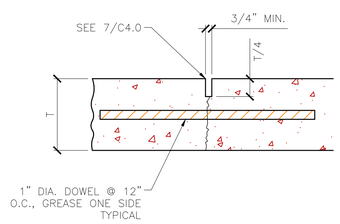
5 / C3 TYPICAL EXPANSION JOINT
N.T.S.



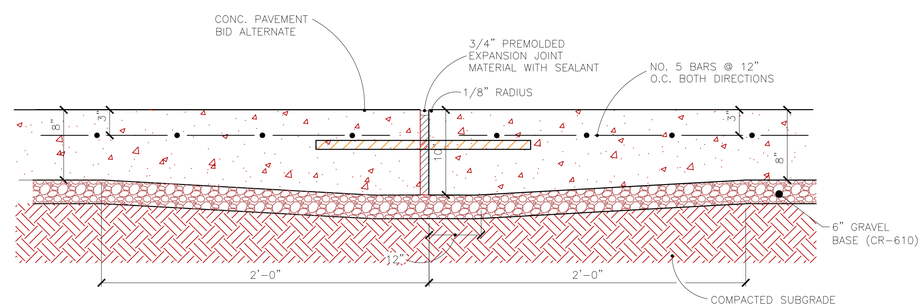
7 / C3 TYPICAL JOINT SEALANT OPTIONS
N.T.S.



4 / D1 TYPICAL THICKENED EDGE
N.T.S.



6 / D3 TYPICAL CONTROL JOINT
N.T.S.



8 / D5 TRANSISTION BETWEEN BID ALTERNATES
N.T.S.

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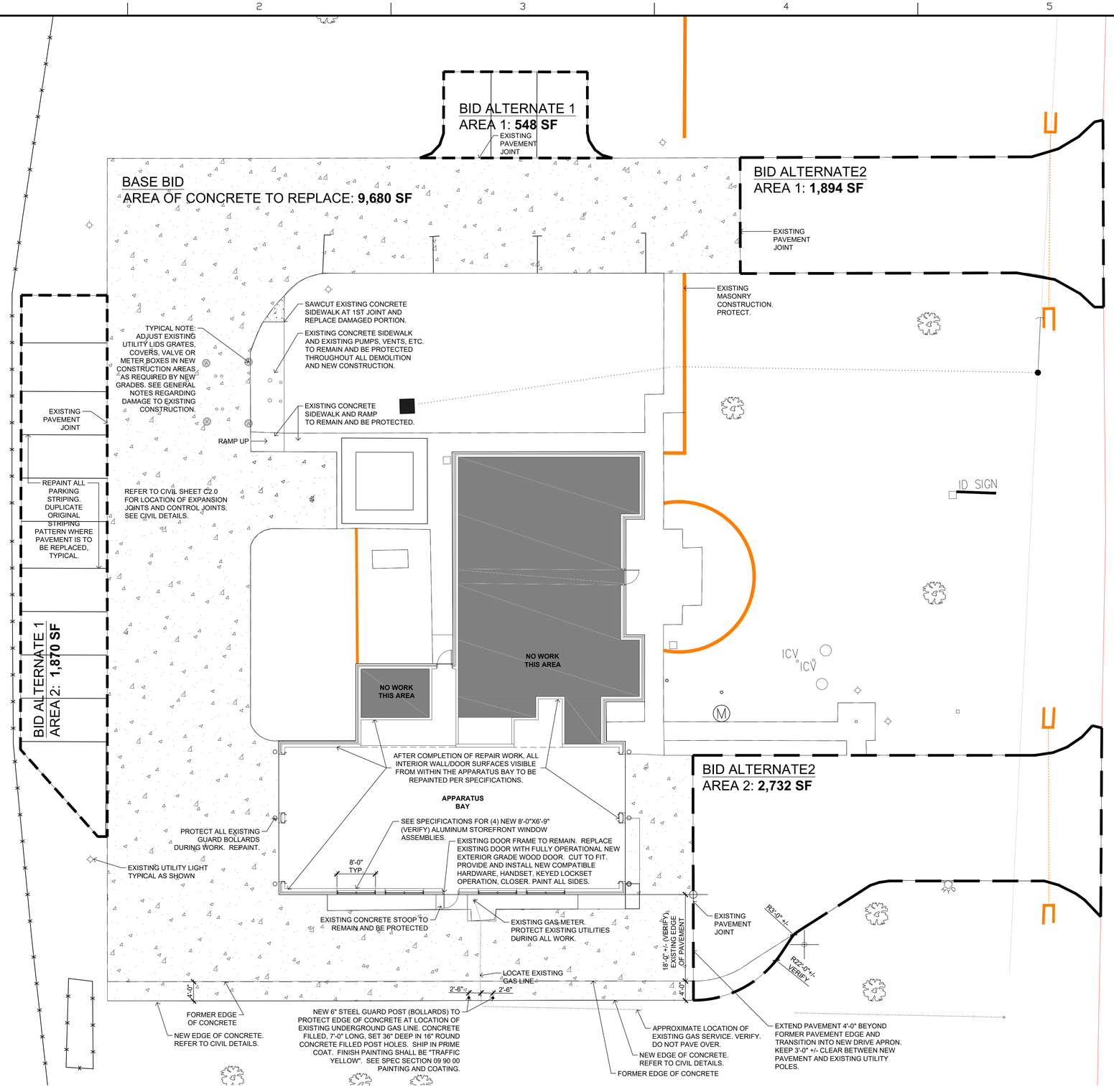

1 / A1 PROPOSED SITE IMPROVEMENT PLAN

SCALE: 3/32"=1'-0"

GENERAL NOTES:

1. NOT USED
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE MEMPHIS / SHELBY COUNTY OFFICE OF CONSTRUCTION CODE ENFORCEMENT 24 HOURS PRIOR TO THE INITIATION OF ANY CONSTRUCTION. THE CONTRACTOR SHALL ALSO COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE FIRE CHIEF ON DUTY EACH DAY.
3. CONTRACTOR TO ADJUST ALL EXISTING UTILITY LIDS, GRATES, COVERS, AND VALVE OR METER BOXES IN NEW CONSTRUCTION AREAS AS REQUIRED BY NEW GRADES.
4. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PUBLIC OR PRIVATE UTILITIES AND SHALL REPAIR, REPLACE, OR RELOCATE SAME AT NO ADDITIONAL COST TO THE OWNER.
5. CONTRACTOR SHALL MAINTAIN OWNER ACCESS TO A MINIMUM OF ONE APPARATUS BAY FROM THE PUBLIC STREET AT ALL TIMES. **NO EXCEPTIONS**.
6. ALL CONSTRUCTION PER SHELBY COUNTY ENGINEERING STANDARDS. COMPACTION OF SUBGRADES UNDER NEW PAVEMENTS, CURBS, GUTTERS, SIDEWALKS, AND CURB CUTS SHALL CONFORM TO THE CURRENT EDITION OF THE SHELBY COUNTY STANDARD CONSTRUCTION SPECIFICATIONS AND APPLICABLE SECTIONS OF THE PROJECT MANUAL. ALL OTHER DISTURBED AREAS TO BE COMPACTED PER THE REQUIREMENTS OF SPECIFICATIONS SECTION 02 20 00, EARTHWORK.
7. THE CONTRACTOR SHALL AT ALL TIMES EMPLOY ADEQUATE EROSION AND SEDIMENTATION CONTROL MEASURES TO PREVENT DAMAGE TO THE PROPERTY, ADJACENT PROPERTIES, PUBLIC RIGHTS-OF WAY, AND PUBLIC OR PRIVATE DRAINAGE SYSTEMS.
8. ALL NEWLY CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED, MULCHED, SEEDED, AND /OR SODDED TO EFFECTIVELY CONTROL SOIL EROSION.
9. ALL EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL PROJECT COMPLETION OR UNTIL CONTRIBUTING DRAINAGE AREAS HAVE BEEN FULLY STABILIZED.
10. ALL NEW SLOPES 3:1 (MAX.) OR GREATER WILL RECEIVE SOLID SOD OR SLOPE PROTECTION PER SPECIFICATIONS SECTION 32 92 23 BERMUDA SOD. SLOPES LESS THAN 3:1 MAY BE SEEDED PER SPECIFICATIONS SECTION 32 92 19 GRASS SEEDING. ALL SLOPE EROSION, DEGRADATION AND/OR RUTTING WILL BE STABILIZED AND HAVE PERMANENT GROUND COVER ESTABLISHED BEFORE FINAL OWNER APPROVAL.
11. ALL STREETS ADJACENT TO THE SITE SHALL BE KEPT CLEAN DURING CONSTRUCTION.
12. EXISTING BOUNDARY AND TOPOGRAPHIC DATA PER ETI CORP DATED 06/18/2015.
13. CONTRACTOR SHALL ARRANGE FOR SHELBY COUNTY GOVERNMENT SUPPORT SERVICES ROUGH-IN AND FINAL INSPECTIONS FOR ALL TRADES OF THE WORK. WORK MAY NOT PROCEED BEYOND THE ROUGH-IN STAGE WITHOUT WRITTEN AUTHORIZATION FROM SHELBY COUNTY GOVERNMENT SUPPORT SERVICES. ADDITIONALLY, SHELBY COUNTY GOVERNMENT SUPPORT SERVICES SHALL APPROVE THE FINAL WORK IN WRITING AS A PREREQUISITE TO THE ARCHITECT'S ISSUE OF SUBSTANTIAL COMPLETION.

DEMOLITION NOTES:

A. EXISTING CONCRETE PAVEMENT TO BE SAW CUT OR REMOVED AT AN EXISTING JOINT (WHERE APPLICABLE) TO MINIMIZE DAMAGE TO EXISTING PAVEMENT TO REMAIN. EXISTING BASE MATERIAL WILL ALSO BE REMOVED AFTER CONCRETE PAVEMENT DEMOLITION. EXPOSED SUBGRADE MATERIAL WILL BE INSPECTED FOR CONDITION BY THE PROJECT SOILS LABORATORY, SUBJECT TO REMOVAL, REPLACEMENT, AND/OR RECOMPACTION AS DEEMED NECESSARY PRIOR TO INSTALLATION OF NEW CONCRETE

revisions

no.	date	description

seal

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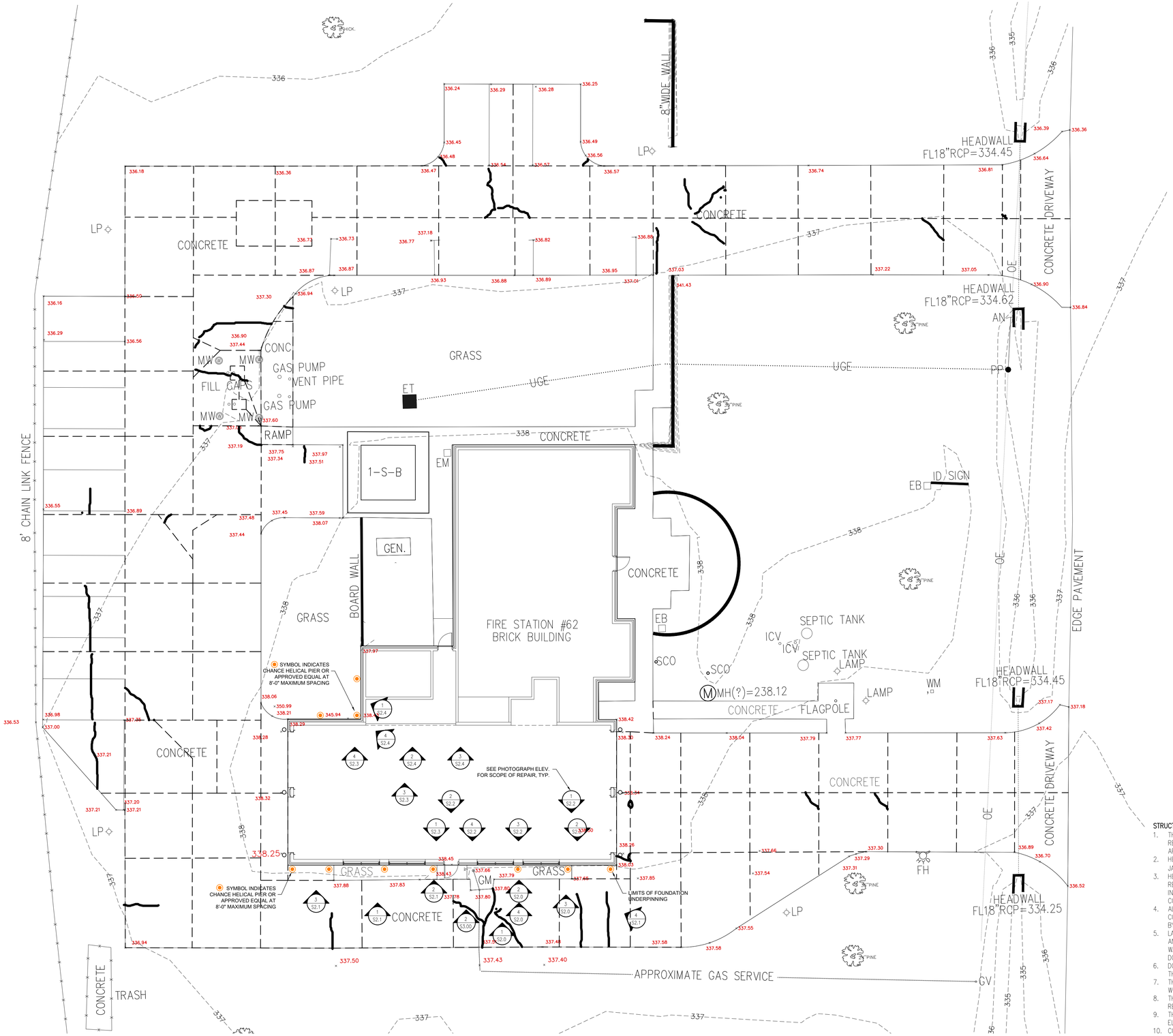
A1



1 / A1 STRUCTURAL REPAIR PLAN
3/32"=1'-0"

STRUCTURAL GENERAL NOTES:

1. THE HELICAL PIERS SHALL BE INSTALLED TO A MINIMUM 20'-0" DEPTH PER THE GEOTECHNICAL REPORT. THE HELICAL PIER SUPPLIER SHALL PROVIDE SHOP DRAWINGS AND CALCULATIONS FOR APPROVAL PRIOR TO COMMENCEMENT OF REPAIRS.
2. HELICAL PIERS SHALL BE USED FOR **STABILIZATION ONLY**. THE EXISTING WALL SHALL NOT BE JACKED BACK INTO PLACE WITHOUT THE ENGINEER OF RECORD'S APPROVAL.
3. HELICAL PIER INSTALLATION SHALL BE INSTALLED PRIOR TO THE INTERIOR AND EXTERIOR MASONRY REPAIRS. HELICAL PIER INSTALLATION MAY CAUSE ADDITIONAL MASONRY CRACKING THAT IS NOT INDICATED IN THE REPAIR PLANS. ANY ADDITIONAL CRACKING SHALL BE REPAIRED WITH NO EXTRA COST TO THE OWNER.
4. ALL CONSTRUCTION SCHEDULING, MEANS, AND METHODS MUST BE COORDINATED WITH THE SHELBY COUNTY FIRE DEPARTMENT TO INSURE THAT EMERGENCY SERVICE OPERATIONS ARE NOT AFFECTED BY THE CONSTRUCTION. THE STATION MUST REMAIN OPERATIONAL AT ALL TIMES.
5. LANDSCAPING AND SOIL REMOVED FOR THE INSTALLATION OF HELICAL PIERS SHALL BE PROTECTED AND MAINTAINED FOR REINSTALLATION ONCE PIERS HAVE BE INSTALLED. THE CONTRACTOR SHALL WATER THE REMOVED LANDSCAPING A MINIMUM OF ONCE DAILY. ADDITIONAL WATERING SHALL BE DONE AS NECESSARY TO KEEP THE PLANTS ALIVE DURING CONSTRUCTION.
6. DO NO CUTTING, DRILLING, OR MODIFYING OF STRUCTURAL MEMBERS WITHOUT THE APPROVAL OF THE ENGINEER.
7. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCY.
8. THE DESIGN ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, ETC.,, IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
9. THE CONTRACTOR SHALL COORDINATE THE ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS WITH THE STRUCTURAL DRAWINGS.
10. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
11. ALL FOUNDATION & SOILS WORK SHALL BE DONE IN ACCORDANCE WITH THE PROJECT SOILS REPORT **#J024794.01** PREPARED BY **GEOTECHNOLOGY, INC.** DATED **JULY 31, 2015** AND GEOTECHNICAL INVESTIGATION REPORT **NO. CES-841** PREPARED BY **MID-CONTINENT LABORATORIES, INC** DATED **DECEMBER 2015**.
12. DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS, TYPICAL

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CONSTRUCTION DOCUMENT SET

sheet name
STRUCTURAL REPAIR PLAN

date
MAY 27, 2016

S1.0

1 / B1 EXT. MASONRY WALL OVERVIEW
N.T.S.

2 / B5 DOUBLE WINDOW LINTEL REPAIR
N.T.S.

3 / D1 END OF LINTEL REPAIR
N.T.S.

4 / D5 MIDDLE OF LINTEL REPAIR
N.T.S.

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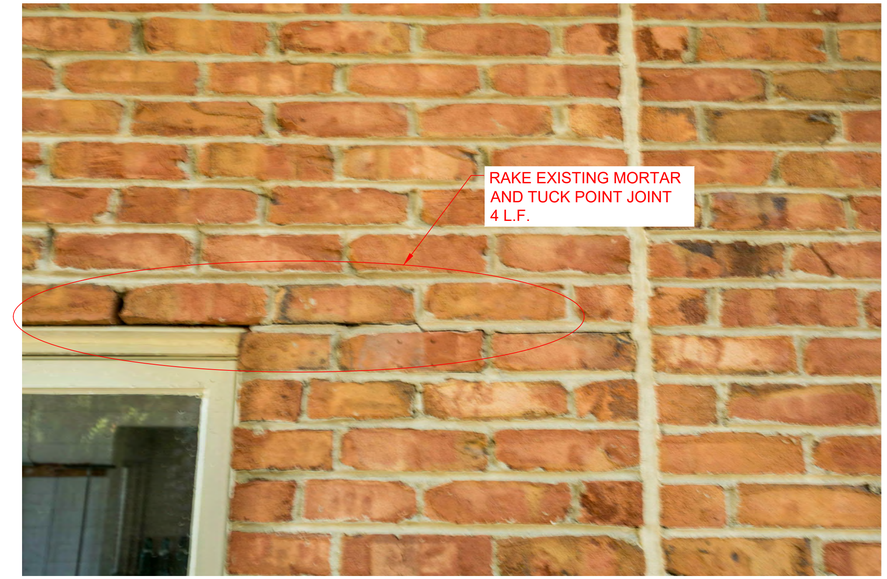
MAY 27, 2016

S2.0

1 / B1 SOUTHERN EXT. WALL (WEST SIDE)
N.T.S.



2 / B5 CLOSE UP OF SOUTHERN WALL
N.T.S.

3 / D1 WEST SIDE OF SOUTHERN WALL
N.T.S.

4 / D5 SOUTHERN WALL OVERVIEW
N.T.S.

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SET

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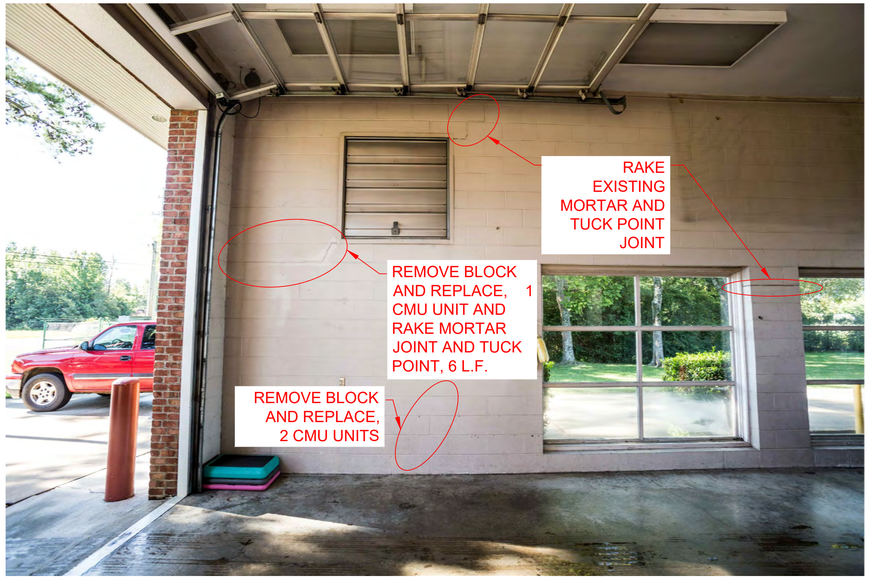
REPAIR PLAN
EXTERIOR WALL

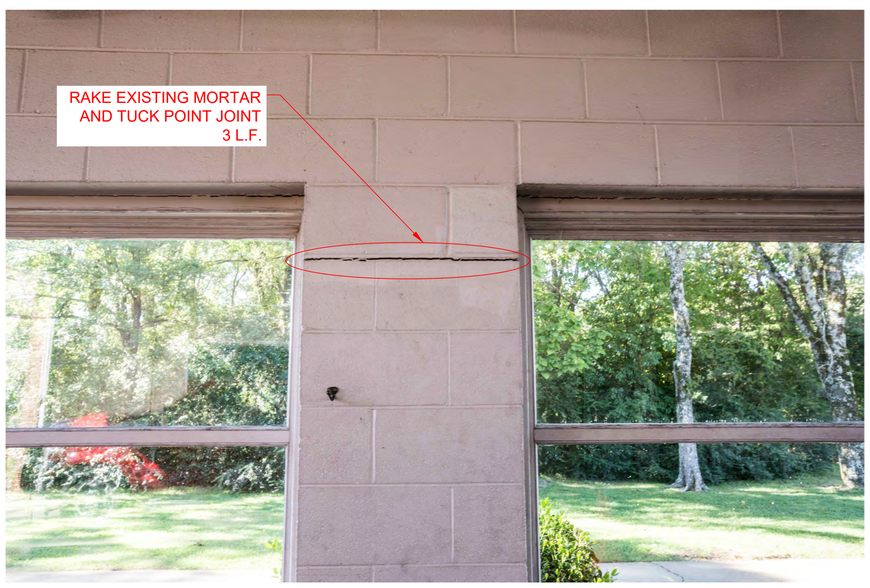
date
MAY 27, 2016

S2.1

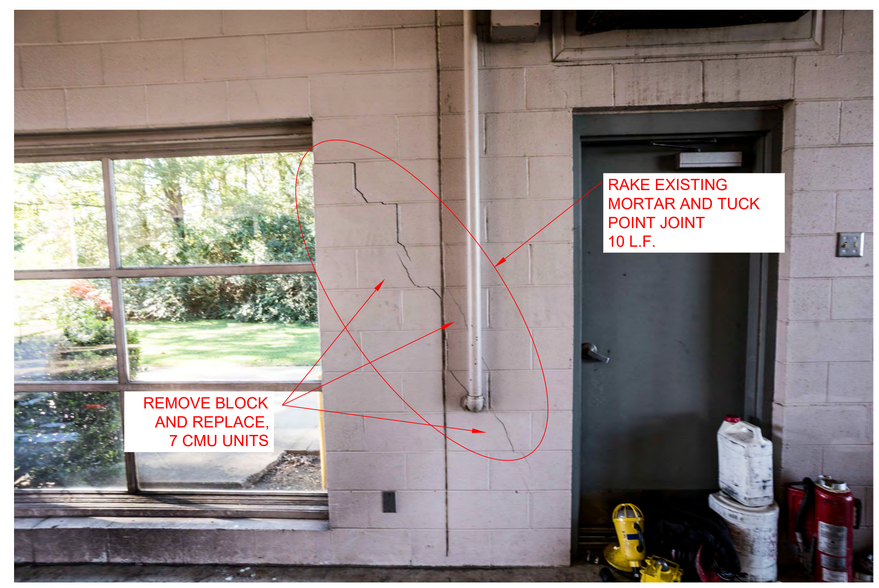


1 / B1 SOUTHERN EXT. WALL (WEST SIDE)
N.T.S.

2 / B5 INT. SOUTHERN EXT. WALL
N.T.S.



3 / D1 WEST SIDE OF SOUTHERN WALL
N.T.S.



4 / D5 SOUTHERN WALL OVERVIEW
N.T.S.

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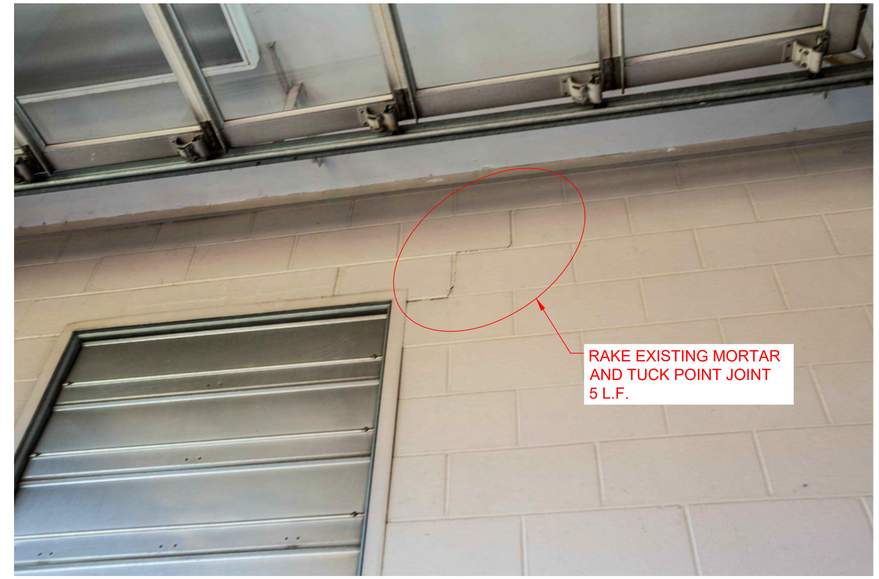
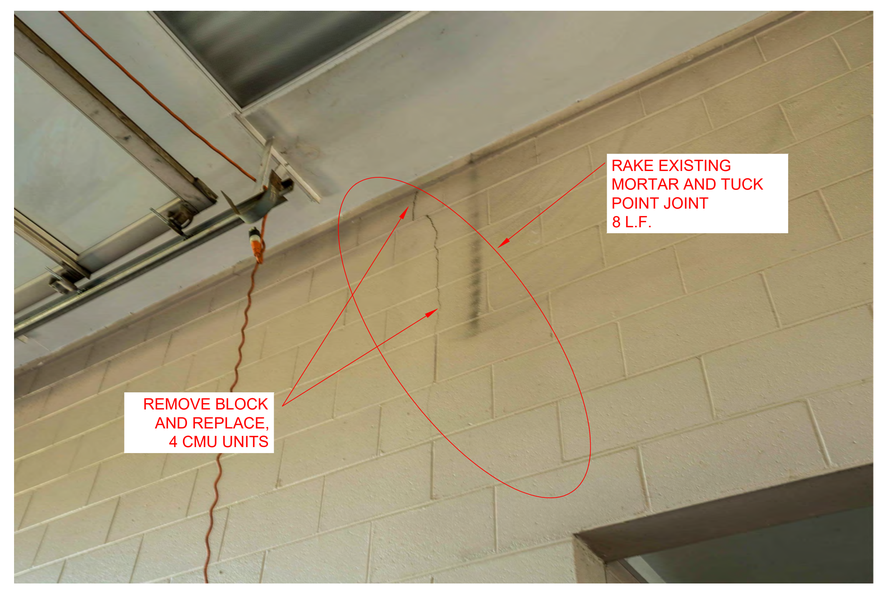
S2.2

1 B1 INT. OF SOUTHERN EXT. WALL
N.T.S.



2 B5 INT. SOUTHERN EXT. WALL
N.T.S.

3 D1 INT. WALL OVERVIEW
N.T.S.



4 D5 INT. WALL WEST SIDE
N.T.S.

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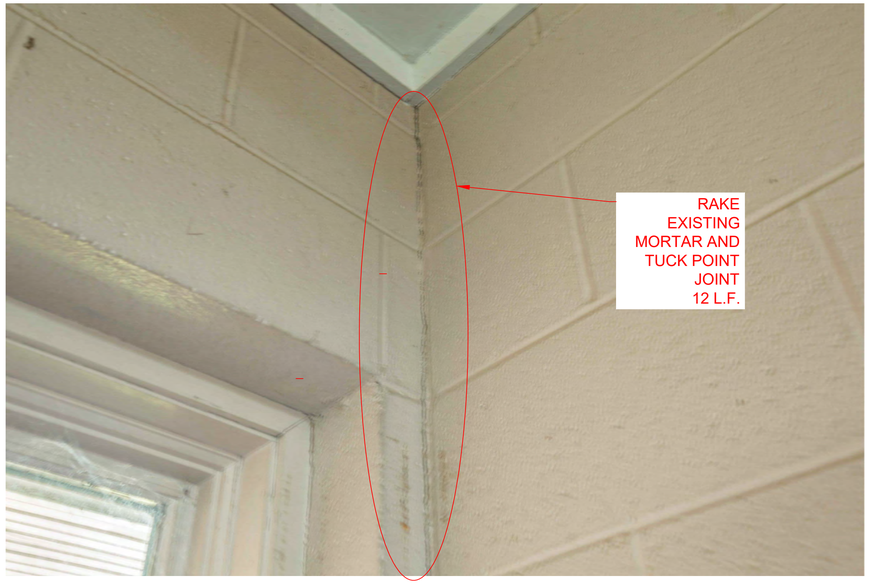
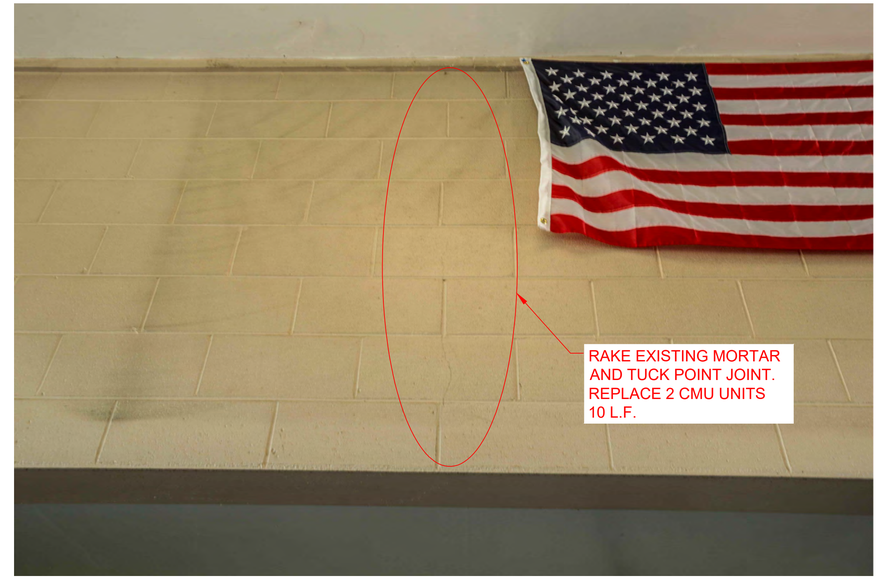
S2.3

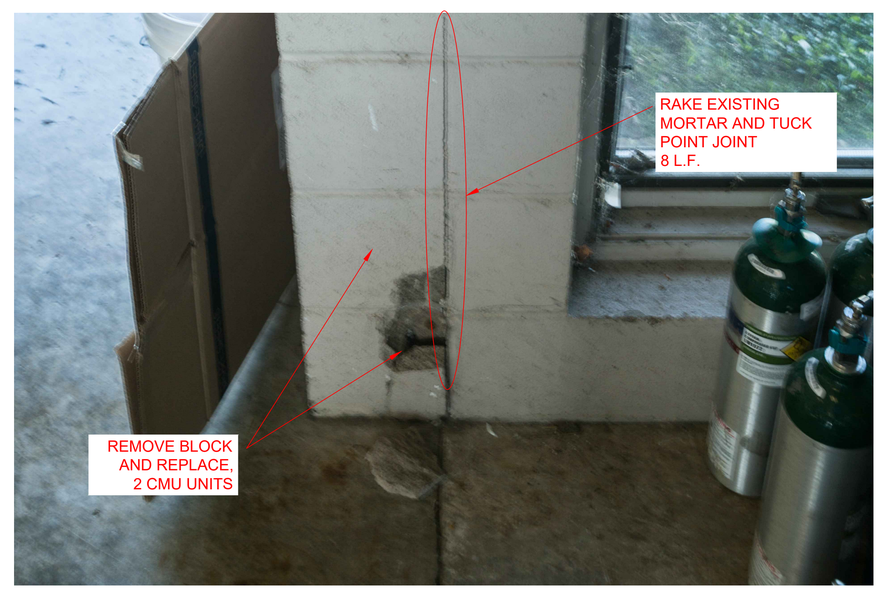


1 B1 INT. OF SOUTHERN EXT. WALL
N.T.S.



2 B5 INT. SOUTHERN EXT. WALL
N.T.S.

3 D1 INT. WALL OVERVIEW
N.T.S.



4 D5 INT. WALL WEST SIDE
N.T.S.

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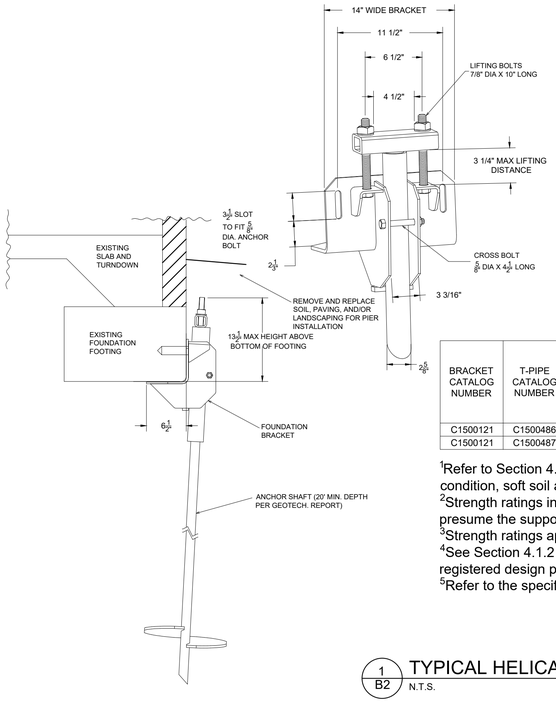
S2.4

STANDARD UNDERPINNING BRACKET
FOR CHANCE TYPE SS5 AND SS150 HELICAL PILES



-NOTES-

1. HOT DIP GALVANIZE PER ASTM A153-(LATEST REVISION).
2. ASSEMBLE COMPLETE AS SHOWN IN SIDE VIEW.
3. THE NUTS ON THE LIFTING BOLTS AND CROSS BOLTS MUST BE TIGHTENED TO ACHIEVE A SNUG-TIGHT CONDITION AS DEFINED IN SECTION J3 OF AISC 360-05; AS A MINIMUM, NUTS MUST BE TIGHTENED 1/4 TURN BEYOND HAND TIGHT CONDITION. DO NOT EXCEED 165 FT-LB OF TORQUE ON LIFTING BOLTS DURING STABILIZATION OR LOAD LOCK OFF.
4. RECOMMENDED ANCHOR SHAFT CUTOFF LEVEL ABOVE THE BOTTOM OF THE FOOTING IS 10" TO 11" FOR MAXIMUM LIFT DISTANCE.
5. FOR DETAILED INSTALLATION INSTRUCTIONS, READ CHANCE BULLETIN 01-9812.
6. MATERIAL SPECIFICATIONS:
   BRACKET BODY : PER ASTM A36 AND ASTM A570 GR. 50.
   T-PIPE TUBE : HOT ROLLED MECHANICAL TUBING PER ASTM A500.
   LIFTING BOLTS : HEX HEAD BOLT PER ASTM A325, TYPE 1.
   CROSS BOLT : HEX HEAD BOLT PER ASTM A325, TYPE 1..
7. SEE ICC-ES EVALUTATION SERVICE, INC., EVALUATION REPORT NO. ESR-2794 FOR STRENGTH VALUES AND/OR CONDITIONS OF USE CONCERNING INFORMATION PRESENTED ON THIS DRAWING.

BRACKET CATALOG NUMBER	T-PIPE CATALOG NUMBER	PILE MODEL	ASD ALLOWABLE STRENGTH IN AXIAL COMPRESSION (kips)[1,2,3,4]					
			2500 psi CONCRETE[5]		3000 psi CONCRETE[5]		4000 psi CONCRETE[5]	
			FIRM SOIL	SOFT SOIL	FIRM SOIL	SOFT SOIL	FIRM SOIL	SOFT SOIL
C1500121	C1500486	SS5/150	21.7	16.0	21.7	16.0	21.7	16.0
C1500121	C1500487	SS5/150	32.8	16.0	36.4	16.0	39.4	16.0

[1]Refer to Section 4.1.3 of ESR-2794 for descriptions of fixed condition, pinned condition, soft soil and firm soil.
[2]Strength ratings include an allowance for corrosion over a 50-year service life and presume the supported structure is braced in accordance with IBC Section 1808.2.5.
[3]Strength ratings apply to the specific bracket, T-pipe and anchor/pile models listed.
[4]See Section 4.1.2 of ESR-2794 for applicable limit states that must be evaluated by a registered design professional.
[5]Refer to the specified compressive strength of concrete at 28 days.

1 / B2 TYPICAL HELICAL PIER
N.T.S.

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S3.0