



**CONSULTANTS:**

CIVIL ENGINEER:  
McCLELLAND CONSULTING  
ENGINEERS INC.

LANDSCAPE ARCHITECT:  
LARSON BURNS SMITH

STRUCTURAL ENGINEER:  
CROMWELL ENGINEERS INC.

MECH., ELEC., PLUMB. ENGINEER:  
CROMWELL ENGINEERS INC.

GLOBAL VILLAGE CONSULTANT:  
CAMBRIDGE SEVEN ASSOCIATES

INTERIOR DESIGNER:  
POLK STANLEY ROWLAND  
CURZON PORTER ARCHITECTS

GENERAL CONTRACTOR:  
CDI CONTRACTORS, INC.

**NOTES:**


ISSUE DATE:  
17 SEPTEMBER 07

**REVISIONS:**

#	DATE	DESCRIPTION

**MURPHY KELLER  
EDUCATION CENTER**

**HEIFER  
INTERNATIONAL  
CENTER**

LITTLE ROCK, ARKANSAS

PSRCP JOB NUMBER:  
431E

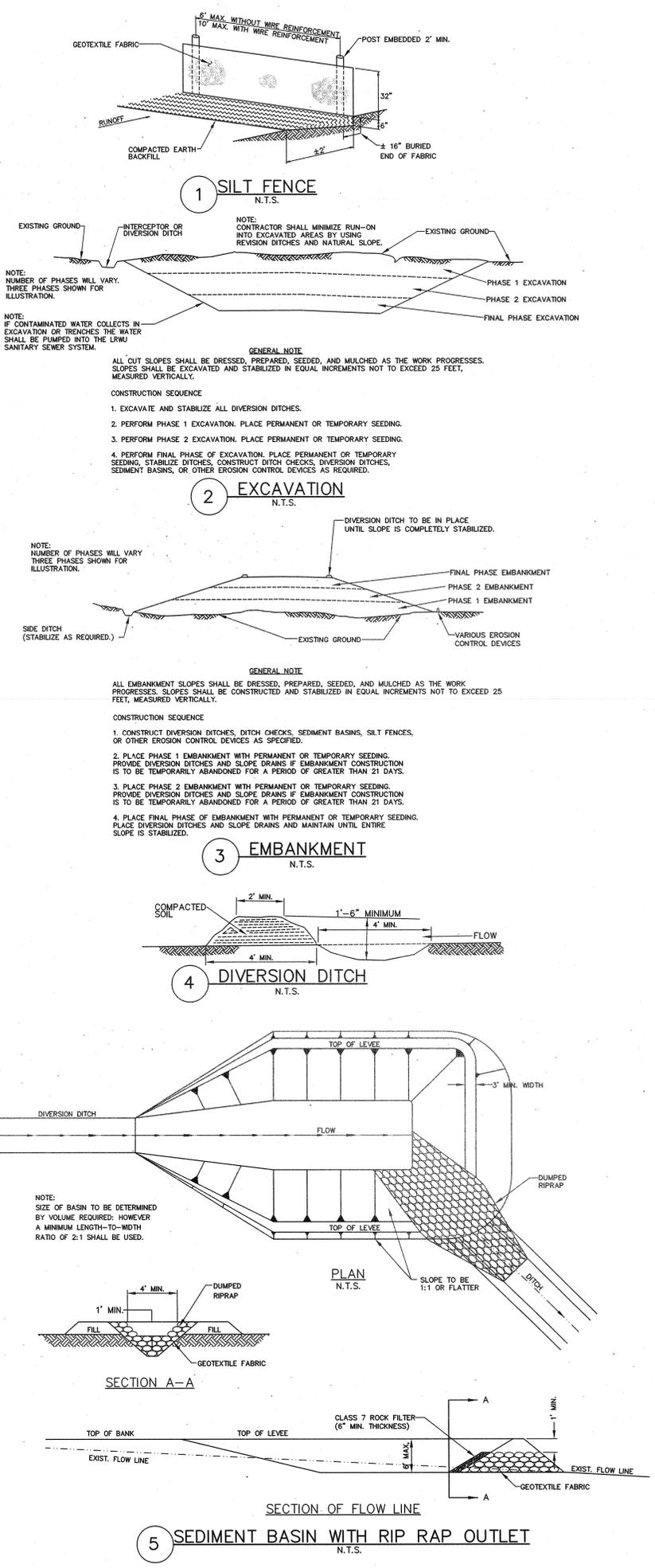
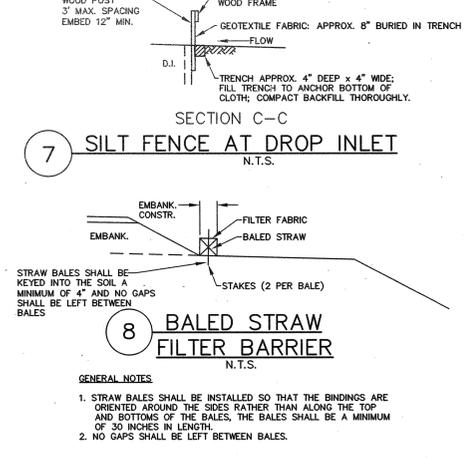
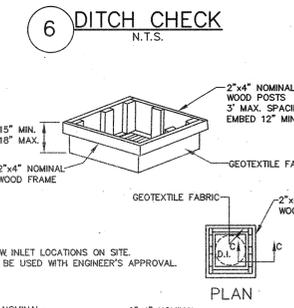
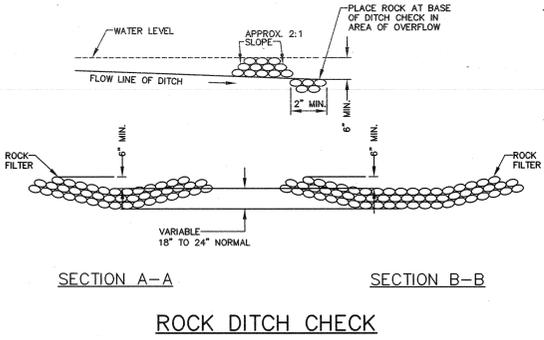
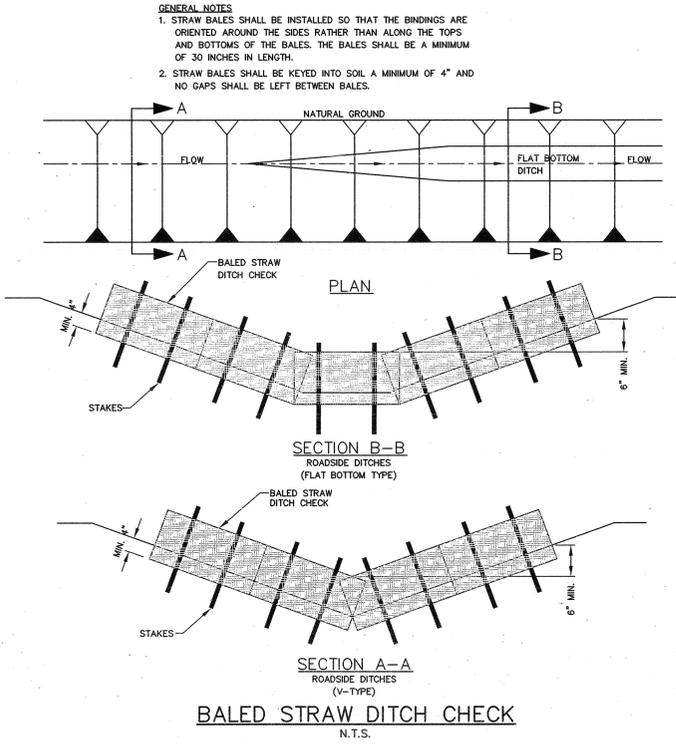
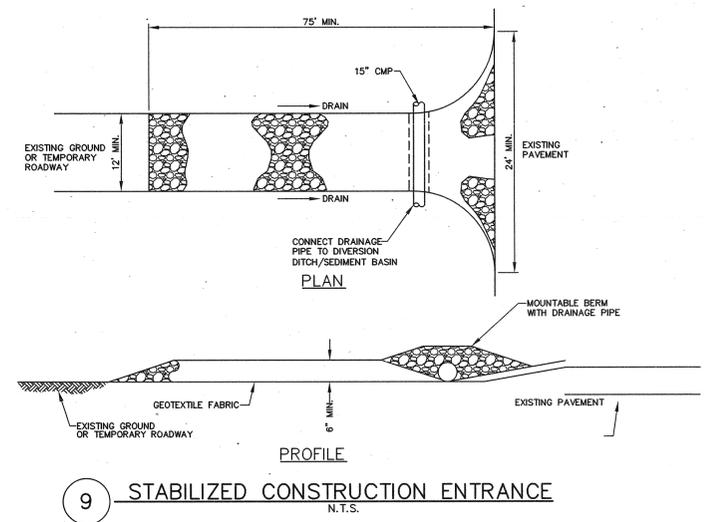
CONTENTS:  
SITE EROSION  
CONTROL DETAILS

SHEET NUMBER:

**C202**



ORIGINAL SIGNATURE ON FILE



**GENERAL NOTES**  
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.  
2. STRAW BALES SHALL BE KEVED INTO SOIL A MINIMUM OF 4" AND NO GAPS SHALL BE LEFT BETWEEN BALES.

**1 SILT FENCE**  
N.T.S.

**2 EXCAVATION**  
N.T.S.

**3 EMBANKMENT**  
N.T.S.

**4 DIVERSION DITCH**  
N.T.S.

**5 SEDIMENT BASIN WITH RIP RAP OUTLET**  
N.T.S.





**GENERAL NOTES:**

1. ALL OSHA REGULATIONS SHALL BE STRICTLY FOLLOWED AND SPECIAL CARE TAKEN TO PREVENT INTERACTION W/ OVERHEAD OR UNDERGROUND POWER SOURCES.
2. THE LOCATION OF KNOWN SUBSURFACE STRUCTURES, PIPE, POWER, GAS, PHONE, ETC. ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING INFORMATION AND SATISFYING HIMSELF AS TO THE LOCATION OF THE AFORESAID ITEMS. SHOWN AND NOT SHOWN. ALL REPAIRS OR RELOCATION'S NECESSARY SHALL BE MADE AS REQUIRED BY THE OWNER OF THE UTILITY OR STRUCTURE. THE COST OF SUCH REPAIRS OR RELOCATION'S NECESSARY SHALL BE BORNE BY THE CONTRACTOR.
3. ALL STREETS, DRIVES, WALKS, DRAINAGE STRUCTURES, FENCES, ETC. THAT ARE DISTURBED SHALL BE RESTORED TO THEIR ORIGINAL OR BETTER CONDITION USING LIKE MATERIALS. COST OF SUCH REPAIRS SHALL BE BORNE BY THE CONTRACTOR UNLESS PROVISION FOR PAYMENT IS MADE IN THE PROPOSAL.
4. THE CONTRACTOR IS REQUIRED TO NOTIFY THE ONE CALL CENTER AT 1-800-482-8898 48 HOURS PRIOR TO DIGGING IN ORDER THAT UNDERGROUND UTILITIES IN THE AREA CAN BE LOCATED.
5. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS, LAYOUT COORDINATES, AND WORK FROM PREVIOUS AND ONGOING CONTRACTS IN THE FIELD. REPORT ANY DISCREPANCIES IMMEDIATELY TO THE LANDSCAPE ARCHITECT FOR DIRECTION PRIOR TO COMMENCING CONSTRUCTION.
6. GENERAL CONTRACTOR IS TO COORDINATE ALL LAYOUT, STAKING, AND GRADING CONTROLS AMONG ALL TRADES; SPECIFICALLY BUT NOT LIMITED TO CONCRETE PAVING, CONCRETE WALL CONSTRUCTION, UNDERGROUND UTILITIES, UNIT PAVING AND PLANTING.
7. ALL LAYOUT COMPONENTS TO BE STAKED OUT IN THE FIELD BY THE CONTRACTOR PER BASELINES CREATED BY CONNECTING INDICATED COORDINATE POINTS OR OFFSETTING FROM BASELINES. OBTAIN LANDSCAPE ARCHITECT'S APPROVAL IN THE FIELD OF LAYOUT WITH BASELINES INDICATED BEFORE STARTING CONSTRUCTION. DO NOT LAYOUT BY MEASURING OFF OF EXISTING ROADS AND BUILDINGS.
8. ANY CHANGES PROPOSED TO LAYOUT OF COORDINATE POINTS OR DIMENSIONS ON THIS DRAWING MUST BE APPROVED BY THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO CONSTRUCTION.
9. ALL SITE DIMENSIONS ARE GIVEN FROM DEFINED COORDINATE POINTS, BASELINES CREATED BY CONNECTING COORDINATE POINTS, AND/OR TO THE FRONT FACES OF ALLS AND STRUCTURES UNLESS OTHERWISE NOTED. TAKE DIMENSIONS FROM COORDINATE POINTS, BASELINES, FRONT OF CURBS, FACE OF ALL, FACE OF PAVING OR CENTERLINES OF COLUMNS UNLESS OTHERWISE SAID.
10. ALL ANGLES ARE ASSUMED TO BE 90 DEGREES UNLESS OTHERWISE STATED OR AS INDICATED PER LAYOUT STAKING ITEM 3 ABOVE.
11. REFER TO PAVING PLANS FOR ALL PAVING MATERIALS, EXPANSION AND CONTRACTION JOINT LOCATIONS.
12. REFER TO ARCHITECTURAL DRAWINGS FOR ALL BUILDING DIMENSIONS AND OTHER INFORMATION.
13. ALL RADII ARE 4.5' BACK OF CURB UNLESS OTHERWISE NOTED.
14. COORDINATES AND ADDITIONAL LAYOUT INFORMATION CAN BE OBTAINED FROM McCLELLAND ENGINEERS INC.

**POLK  
STANLEY  
ROWLAND  
CURZON  
PORTER**  
ARCHITECTS, LTD.

700 SOUTH SCHILLER  
LITTLE ROCK, AR 72201  
501.378.0878 office  
501.372.7629 fax

509W. SPRING STREET, SUITE 150  
FAYETTEVILLE, AR 72701  
479.444.0473 office  
479.251.7216 fax

www.polkstanley.com

**CONSULTANTS:**

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CURZON PORTER ARCHITECTS

GENERAL CONTRACTOR:  
CDI CONTRACTORS, INC.

**NOTES:**

1. 18' L.F. OF 18" R.C.P. @ 1.0% SLOPE
2. 121' L.F. OF 22"x13" ARCH PIPE @ 0.5% SLOPE
3. 117' L.F. OF 22"x13" ARCH PIPE @ 0.5% SLOPE
4. 124' L.F. OF 22"x13" ARCH PIPE @ 0.5% SLOPE
5. 57' L.F. OF 12" HDPE @ 1.0% SLOPE
6. 57' L.F. OF 12" HDPE @ 1.0% SLOPE
7. 57' L.F. OF 12" HDPE @ 1.0% SLOPE
8. 57' L.F. OF 12" HDPE @ 1.0% SLOPE
9. 57' L.F. OF 12" HDPE @ 1.0% SLOPE
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16. 57' L.F. OF 12" HDPE @ 1.0% SLOPE
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18. 57' L.F. OF 12" HDPE @ 1.0% SLOPE
19. 57' L.F. OF 12" HDPE @ 1.0% SLOPE
20. 57' L.F. OF 12" HDPE @ 1.0% SLOPE

ISSUE DATE:  
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EDUCATION CENTER**

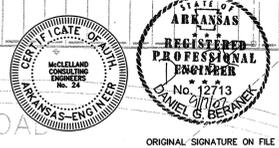
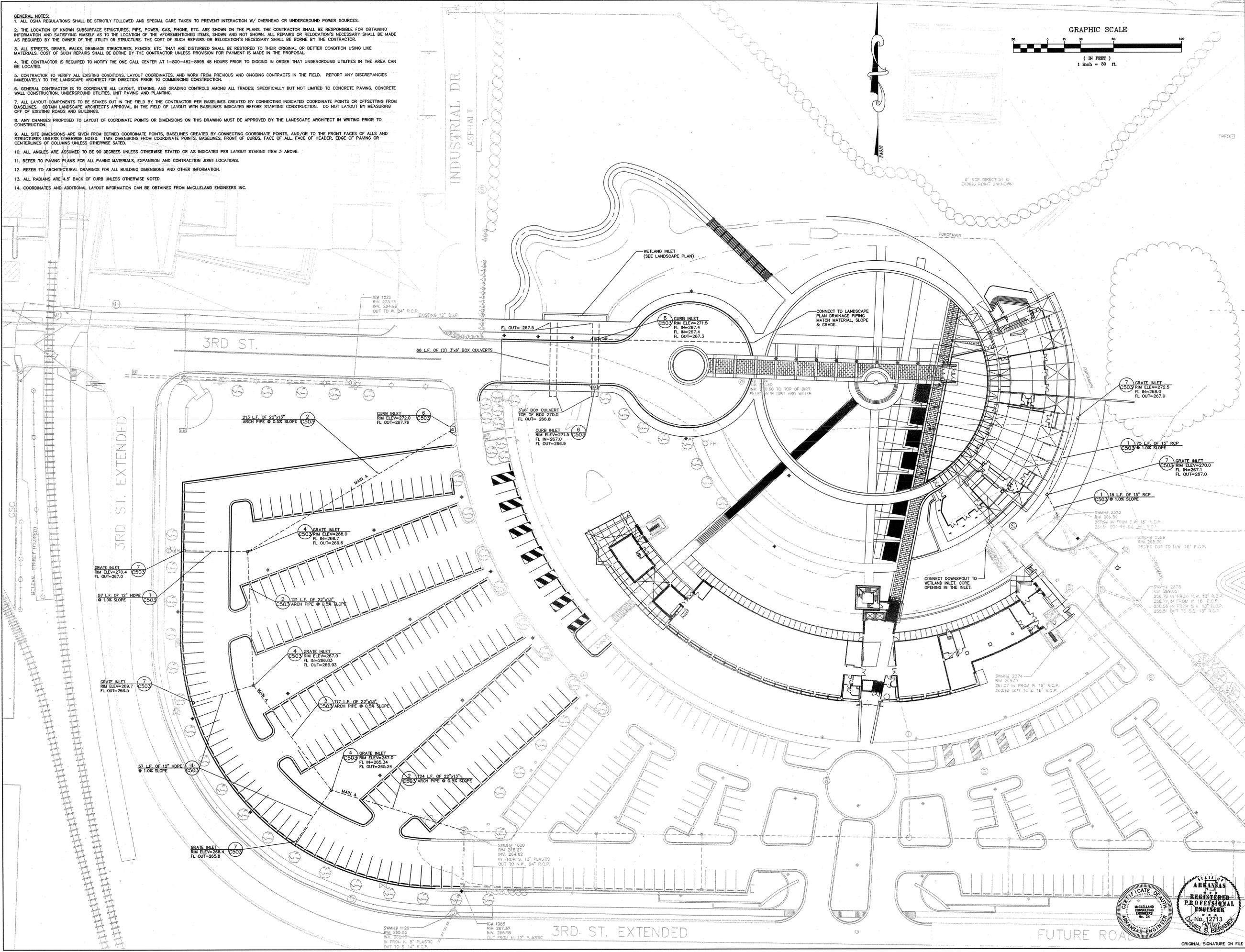
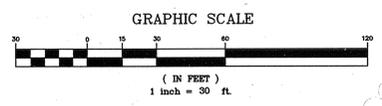
**HEIFER  
INTERNATIONAL  
CENTER**

LITTLE ROCK, ARKANSAS

PSRCP JOB NUMBER:  
431E

CONTENTS:  
SITE DRAINAGE PLAN

SHEET NUMBER:  
**C501**



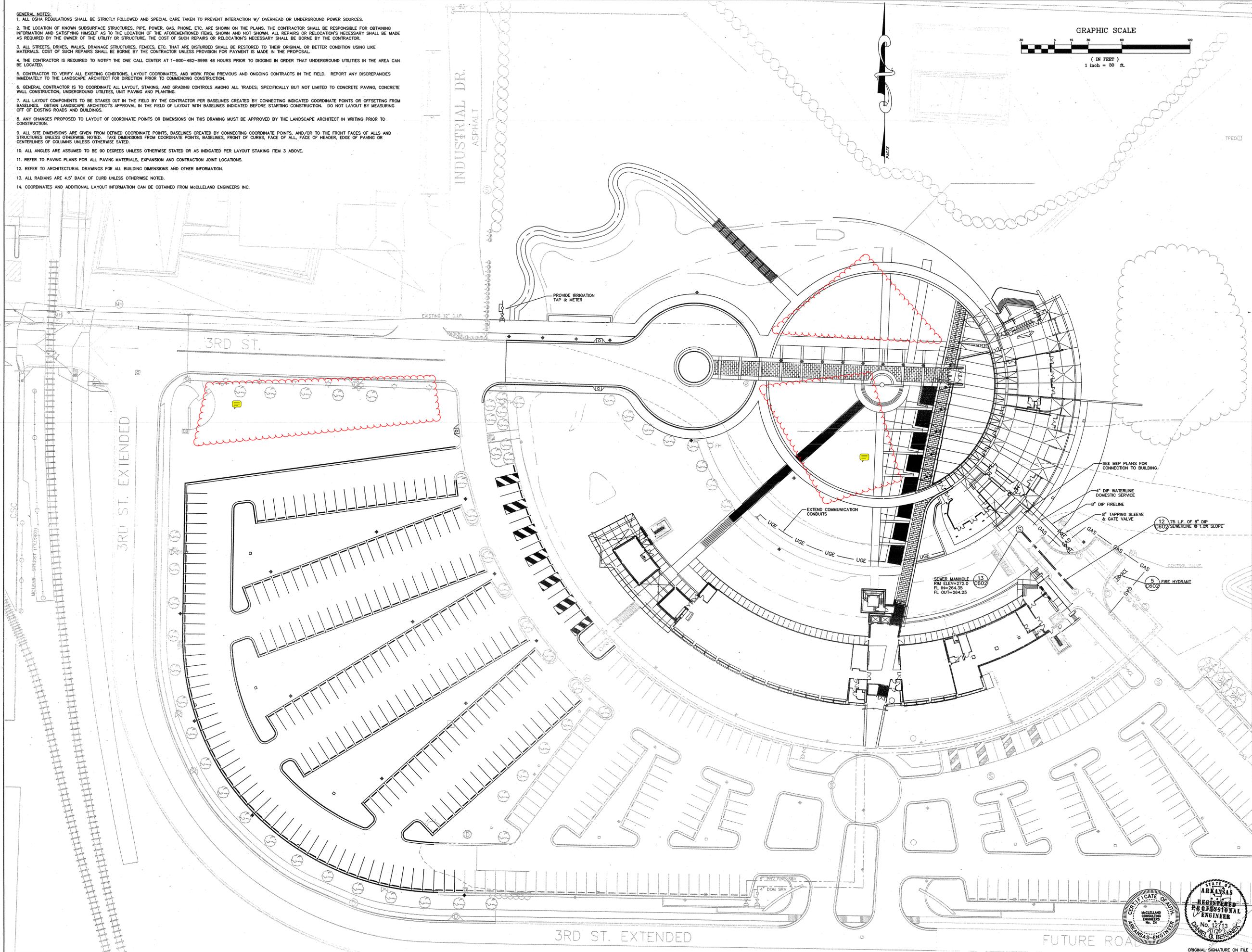
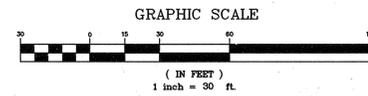
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**POLK STANLEY ROWLAND CURZON PORTER ARCHITECTS, LTD.**

700 SOUTH SCHILLER  
LITTLE ROCK, AR 72201  
501.378.0878 office  
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509V. SPRING STREET, SUITE 150  
FAYETTEVILLE, AR 72701  
479.444.0473 office  
479.251.7216 fax

www.polkstanley.com

- CONSULTANTS:**
- CIVIL ENGINEER: McCLELLAND CONSULTING ENGINEERS INC.
  - LANDSCAPE ARCHITECT: LARSON BURNS SMITH
  - STRUCTURAL ENGINEER: CROMWELL ENGINEERS INC.
  - MECH., ELEC., PLUMB. ENGINEER: CROMWELL ENGINEERS INC.
  - GLOBAL VILLAGE CONSULTANT: CAMBRIDGE SEVEN ASSOCIATES
  - INTERIOR DESIGNER: POLK STANLEY ROWLAND CURZON PORTER ARCHITECTS
  - GENERAL CONTRACTOR: CDI CONTRACTORS, INC.

**NOTES:**

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C601  
Revision 1  
4/17/2008  
Revised  
Waterline  
431E

ISSUE DATE:  
17 SEPTEMBER 07

**REVISIONS:**

#	DATE	DESCRIPTION

**MURPHY KELLER EDUCATION CENTER**

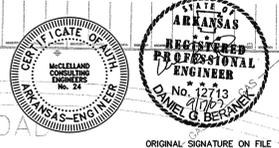
**HEIFER INTERNATIONAL CENTER**

LITTLE ROCK, ARKANSAS

PRSCP JOB NUMBER:  
431E

CONTENTS:  
SITE UTILITY PLAN

SHEET NUMBER:  
**C601**



**CONSULTANTS:**

CIVIL ENGINEER:  
McCLELLAND CONSULTING ENGINEERS INC.

LANDSCAPE ARCHITECT:  
LARBON BURNS SMITH

STRUCTURAL ENGINEER:  
CROMWELL ENGINEERS INC.

MECH. ELEC. PLUMB. ENGINEER:  
CROMWELL ENGINEERS INC.

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POLK STANLEY ROWLAND CURZON PORTER ARCHITECTS

GENERAL CONTRACTOR:  
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**NOTES:**

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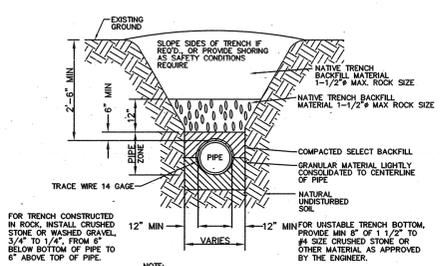
**HEIFER INTERNATIONAL CENTER**

LITTLE ROCK, ARKANSAS

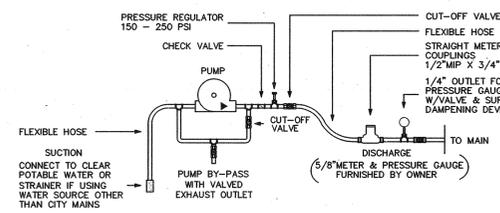
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431E

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SITE UTILITY DETAILS

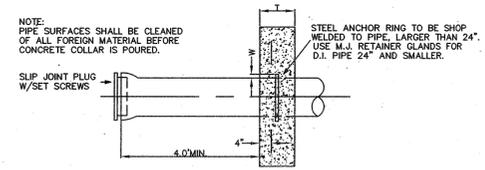
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**C602**



10 TYPICAL WATERLINE TRENCH  
N.T.S.



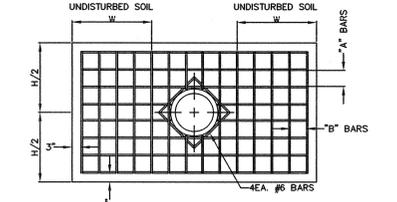
7 BASIC LAYOUT FOR TEST PUMP  
N.T.S.



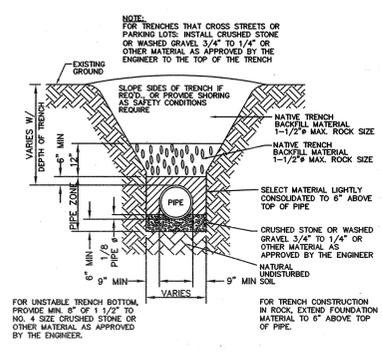
11 NEW SEWER LINE CONNECTION TO EXISTING MANHOLE  
N.T.S.

ANCHOR COLLAR SCHEDULE

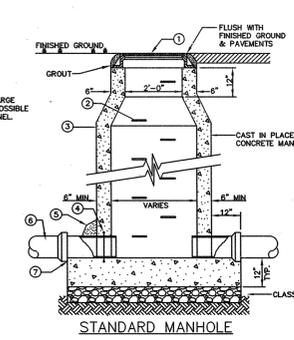
PIPE SIZE	DIMENSIONS				REINFORCING BARS	
	W	H	T	M	"A" BARS	"B" BARS
6"	1.5"	2.0"	1.0"	M.J. RETAINER GLAND	#6@8"	#6@8"
8"	1.5"	2.5"	1.0"	M.J. RETAINER GLAND	#6@8"	#6@8"
12"	2.0"	4.0"	1.5"	M.J. RETAINER GLAND	#6@8"	#6@8"
16"	3.0"	4.5"	1.5"	M.J. RETAINER GLAND	#6@8"	#6@8"
20"	3.0"	5.0"	2.0"	M.J. RETAINER GLAND	#6@8"	#6@8"
24"	3.5"	5.5"	2.0"	M.J. RETAINER GLAND	#7@8"	#6@10"
30"	6.5"	6.0"	2.5"	4"	#6@8"	#7@10"
36"	7.0"	7.0"	2.5"	4"	#6@8"	#7@10"



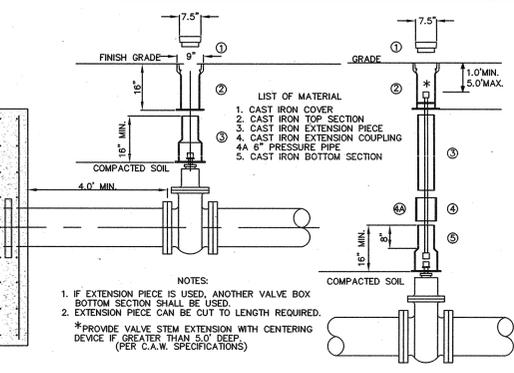
8 ANCHOR COLLAR (ELEVATION)  
N.T.S.



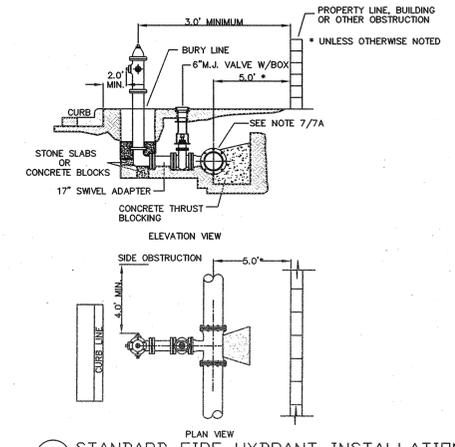
12 TYPICAL DUCTILE IRON SEWER TRENCH  
N.T.S.



13 MANHOLE DETAIL  
N.T.S.

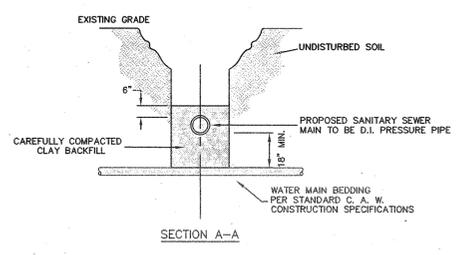


4 GATE VALVE & VALVE BOX INSTALLATION  
N.T.S.

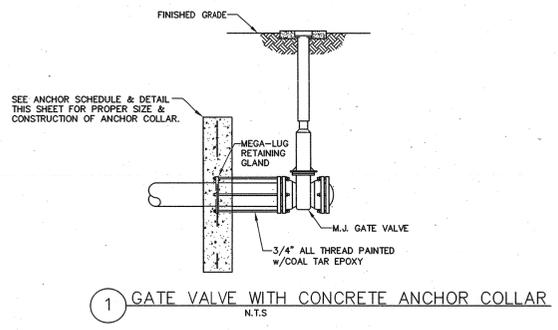


5 STANDARD FIRE HYDRANT INSTALLATION  
USE ANCHOR TEE (UNLESS OTHERWISE NOTED)

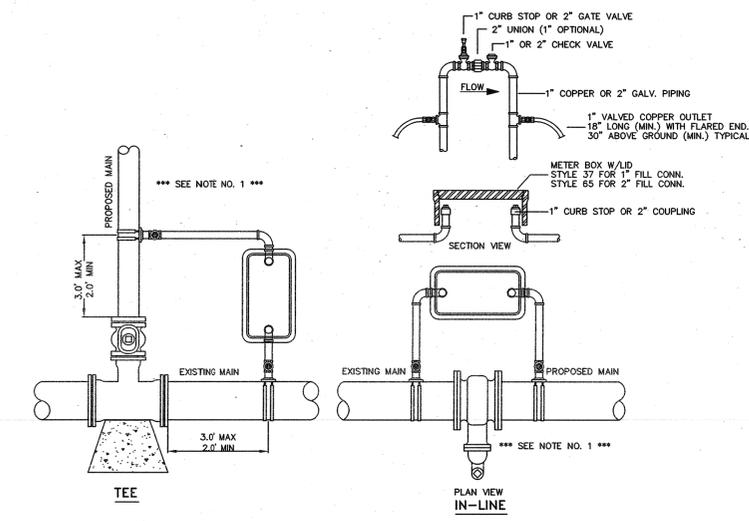
- NOTES:
- DRAINAGE BED SHALL CONSIST OF CRUSH STONE OR COURSE GRAVEL WITH COURSE SAND. MINIMUM VOLUME OF 6 CU. FT. DRAIN BED SHALL EXTEND A MINIMUM OF 6' ABOVE DRAIN OUTLET.
  - USE 6" D.I. NIPPLE WITH M.J. RETAINER GLANDS IF DISTANCE BETWEEN VALVE AND HYDRANT MUST BE GREATER THAN 17\"/>



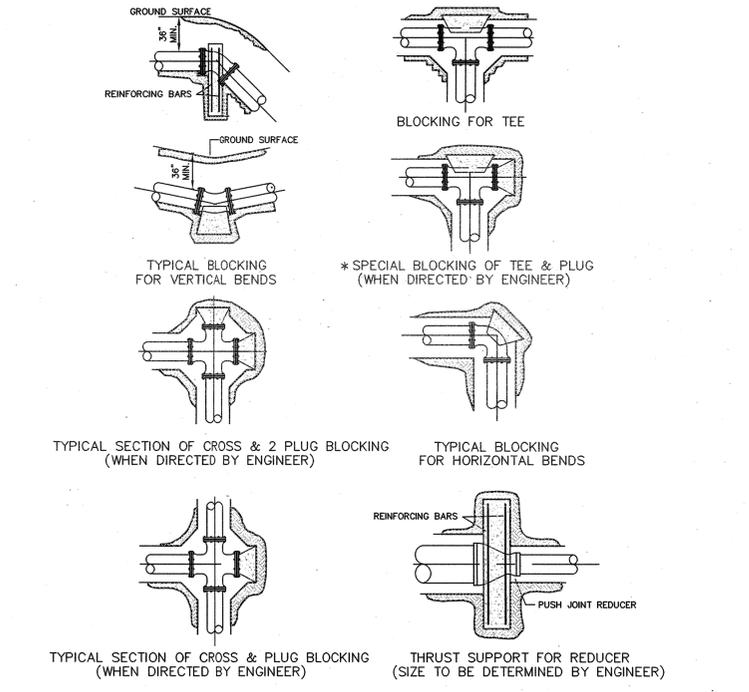
6 SEWER CROSSING  
N.T.S.



1 GATE VALVE WITH CONCRETE ANCHOR COLLAR  
N.T.S.



2 1" & 2" FILL CONNECTION DETAILS TYPICAL INSTALLATIONS  
N.T.S.



3 THRUST BLOCKING  
N.T.S.

- NOTES ON THRUST BLOCKING
- ALL BLOCKING SHALL BE AGAINST UNDISTURBED HAND DUG SOIL.
  - WHERE SOIL CONDITIONS MAKE IT NECESSARY TO POUR CONCRETE OVER JOINTS, THE ENDS OF THE ADJACENT PIPES MUST HAVE A THRUST BLOCK TO RESIST MOVEMENT OF THESE JOINTS.
  - WEIGHT CALCULATIONS TO BE BASED ON THRUST DUE TO STATIC PRESSURE + 50% OR TEST PRESSURE, WHICHEVER IS GREATER. (THRUST = 2AP SIN 1/2 # WHERE A = AREA OF PIPE P = WATER PRESSURE)
  - WHEN BLOCKING AGAINST PLUG, PLUG SHALL BE COVERED TO PREVENT BONDING OF CONCRETE.
  - WHERE SHEAR BECOMES A PROBLEM PROPER REINFORCING MUST BE INSTALLED INTO THE BLOCKING.
  - CLEARANCE SHALL BE A MINIMUM OF 6" BETWEEN PIPE AND OBSTRUCTIONS.
  - CLEARANCE ON PIPES BELONGING TO OIL/GAS COMPANIES SHALL BE 18" UNLESS SPECIAL PERMISSION IS GIVEN BY THESE COMPANIES.

3 THRUST BLOCKING  
N.T.S.