Public Notice

US ARMY CORPS OF ENGINEERS
St. Louis District
Gateway to Excellence

Reply To:
U.S. Army Corps of Engineers
Attn: CEMVS-OD-F
1222 Spruce Street
St. Louis, Missouri 63103-2833

Public Notice No.
P-2815
Public Notice Date
December 27, 2011
Expiration Date
January 17, 2012

Postmaster Please Post Conspicuously Until:

File Number: MVS-2011-460 (Laclede Gas Shrewsbury Yard Storm Sewer Extension)

Interested parties are hereby notified that an application has been received for a Department of the Army permit for certain work in waters of the United States, as described below and shown on the attached maps.

COMMENTS AND ADDITIONAL INFORMATION: Comments on the described work should reference the U.S. Army Corps of Engineers File Number shown above and must reach this office no later than the above expiration date of the Public Notice to become part of the record and be considered in the decision. Comments should be mailed to the following address:

U.S. Army Corps of Engineers
Regulatory Branch
1222 Spruce Street
St. Louis, Missouri 63103-2833
ATTN: Matt Shively

APPLICANT: Laclede Gas Company, 3950 Forest Park Avenue, St. Louis, Missouri 63108; Point of Contact: Mr. Rick Kottemann (314) 658-5598.

AGENT: Pangea Engineering & Surveying, LLC., 2604 South Jefferson Avenue, St. Louis, Missouri 63118; Point of Contact: Mr. Kent Nurnberger (314) 333-0629.

LOCATION: The project is located in Shrewsbury, St. Louis County, Missouri. From the intersection of Big Bend Boulevard and Shrewsbury Avenue, the project is located approximately 1,800 feet southeast. The approximate geographic coordinates for the upstream end of the project corridor are 38.5990° North, -90.3245° West . The approximate geographic coordinates for the downstream end of the project corridor are 38.5999° North, -90.3230° West.

PROJECT DESCRIPTION: *Summary: the applicant proposes to enclose 490 linear feet of an unnamed tributary to Deer Creek. The tributary will be enclosed in a 450-ft., 66-inch pipe. The majority of the tributary's drainage area has historically been piped. The proposed pipe will extend from an existing stormwater pipe, to the tributary's confluence with Deer Creek. The purpose of the project is to address instability of the tributary banks. The tributary channel is deeply incised, with*

steep banks. The banks are eroding, and sloughing and slope failure is occurring. The instability of the banks threatens the adjacent industrial property and an MSD seven-foot diameter sanitary sewer.

The Applicant proposes to enclose a portion of an unnamed tributary to Deer Creek. Based upon the topography of the site, the tributary likely formerly extended 1,500 to 2,500 into its approximate 70-acre watershed. However, the majority of the tributary has historically been piped. The 490-linear foot project reach is the final remaining segment of open channel. Deer Creek is a tributary to River Des Peres, a primary tributary to the Mississippi River.

The tributary is noticeably degraded. The channel is incised significantly deeper than would typically be expected for its drainage area. Bank heights exceed 30 feet. The channel incision is believed to largely be the result of the historic conversion of the upstream drainage pattern to an enclosed stormwater system. In addition, the placement of man-made fill over many years has encroached upon the channel. This appears to concentrate stormwater discharges into the remaining section of open channel, subjecting it to erosive flows. According to the drainage area map submitted by the project consultant, the channel receives runoff discharge totaling approximately 250 cfs. As the channel downcut, it became disconnected from its floodway, further increasing erosive potential. The banks have become unstable due to increasing bank height, and corresponding slope gradient. Slopes commonly exceed 1:1 (vertical:horizontal), with areas of near-vertical bank toe. As the bank toes erode, portions of the banks are failing, with material sloughing off and falling into the channel.

The tributary is also degraded in ways unrelated to its hydrologic and geomorphic characteristics. The channel bed substrate contains large quantities of rubble and debris, including concrete, asphalt, bricks, broken pipes, etc. The channel banks have historically been used as a disposal area for excavation spoils. The material has become exposed due to bank erosion, and can be seen protruding from the bank. The channel does not appear to contribute appreciable natural function to the Deer Creek watershed. For the most part, the channel does not appear to provide suitable habitat for aquatic organisms. The approximate lower half of the channel is within the Deer Creek floodplain, and therefore may provide sporadic backwater habitat and floodwater storage function. The forested corridor of the tributary has been reduced to approximately 50 feet on either bank.

The project site in general has a history of environmental contamination. From 1911 to 1961, the site was formerly used in manufactured gas production, primarily preceding ownership by Laclede Gas Company. In 1991, the US Environmental Protection Agency investigated the site for possible contamination under Sections 104 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Contaminants identified in soil samples taken at the site contained polycyclic aromatic hydrocarbons (PAHs). In conjunction with USEPA involvement, Laclede Gas Co. performed various studies in the 1990's related to the extent of site contamination and potential remediation strategies. The studies concluded that there is no measurable migration of PAHs into Deer Creek. In 1999, Laclede Gas Co. entered into an Administrative Order on Consent (AOC) to implement the remediation of the site. The remediation plan has since been successfully completed, and USEPA considers the matter closed; however, Laclede Gas is under continuing obligation to prevent exposure or release of contaminants.

The instability of the banks threatens the surrounding Laclede Gas property. The height and steepness of the banks pose a moderate safety hazard. Fencing at the top-of-bank has had to be moved due to bank failure. The Applicant proposes to enclose the channel in a 450-ft., 66-inch pipe. The pipe will connect to an existing stormwater pipe at the upstream end of the existing channel. To address the potential for discharge scouring within Deer Creek, a 418 sq.-yd. riprap blanket will be installed at the outfall. The lower portion of the riprap blanket will extend into the creek.

Approximately 55 linear feet of Deer Creek will be armored. The southeastern bank of Deer Creek was previously armored as part of the AOC site remediation. The opposite bank appears to have historically been armored by others.

The District will require that compensatory mitigation be provided for the loss of 490 linear feet of tributary channel. Mitigation is proposed to be provided in the form of a credit purchase. The project site is not within the service area of an approved mitigation bank; therefore, purchase from an in-lieu fee service provider will be accepted. A formal mitigation plan will be required prior to permit authorization.

LOCATION MAPS AND DRAWINGS: See attached.

ADDITIONAL INFORMATION: Additional information may be obtained by contacting Matt Shively, Project Manager, U.S. Army Corps of Engineers, at (314) 331-8632. Your inquiries may also be sent by electronic facsimile to (314) 331-8741 or by e-mail to matt.s.shively@usace.army.mil.

AUTHORITY: This permit will be processed under Section 404 of the Clean Water Act (33 U.S.C. 1344).

WATER QUALITY CERTIFICATION: The project plans have been submitted to the Missouri Department of Natural Resources, Water Protection Program for state certification of the proposed work in accordance with Section 401 of the Clean Water Act. The certification is requested as of the date of this Public Notice, and if issued, will express the Agency's opinion that the proposed activities will not violate applicable water quality standards. Written comments concerning possible impacts to waters of Missouri should be addressed to: Water Protection Program, Post Office Box 176, Jefferson City, Missouri 65102-0176, with a copy provided to the Corps of Engineers.

SECTION 404 (b)(1) EVALUATION: The impact of the activity on the public interest will be evaluated in accordance with the Environmental Protection Agency guidelines pursuant to Section 404 (b)(1) of the Clean Water Act.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the applicant's proposal. Any request for a public hearing shall state, with particularity, the reason for the hearing, and must be based on issues that would warrant additional public review.

ENDANGERED SPECIES: A preliminary determination, in compliance with the Endangered Species Act, as amended, has been made that the work that is proposed would not affect species designated as threatened or endangered, or adversely affect critical habitat. Therefore, no formal consultation request has been made to the United States Department of Interior, Fish and Wildlife Service. In order to complete our evaluation, comments are solicited from the Fish and Wildlife Service and other interested agencies and individuals through this Public Notice.

CULTURAL RESOURCES: The St. Louis District will evaluate information provided by the State Historic Preservation Officer (SHPO) and the public in response to this public notice. Based upon the comments received concerning the potential for cultural resources within the project site, the District may require a reconnaissance survey of the project area or additional cultural resources preservation measures in compliance with Section 106 of the National Historic Preservation Act.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the described activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit that may reasonably be expected to accrue from the described activity must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the activity described, will be considered including the cumulative effects. Among factors considered are: conservation; economics; aesthetics; general environmental concerns; wetlands; historic properties; fish and wildlife values; flood hazards; flood plain values; land use; navigation; shoreline erosion and accretion; recreation; water supply and conservation; water quality; energy needs; safety; food and fiber production; mineral needs; consideration of property ownership; and in general the needs and welfare of the people.

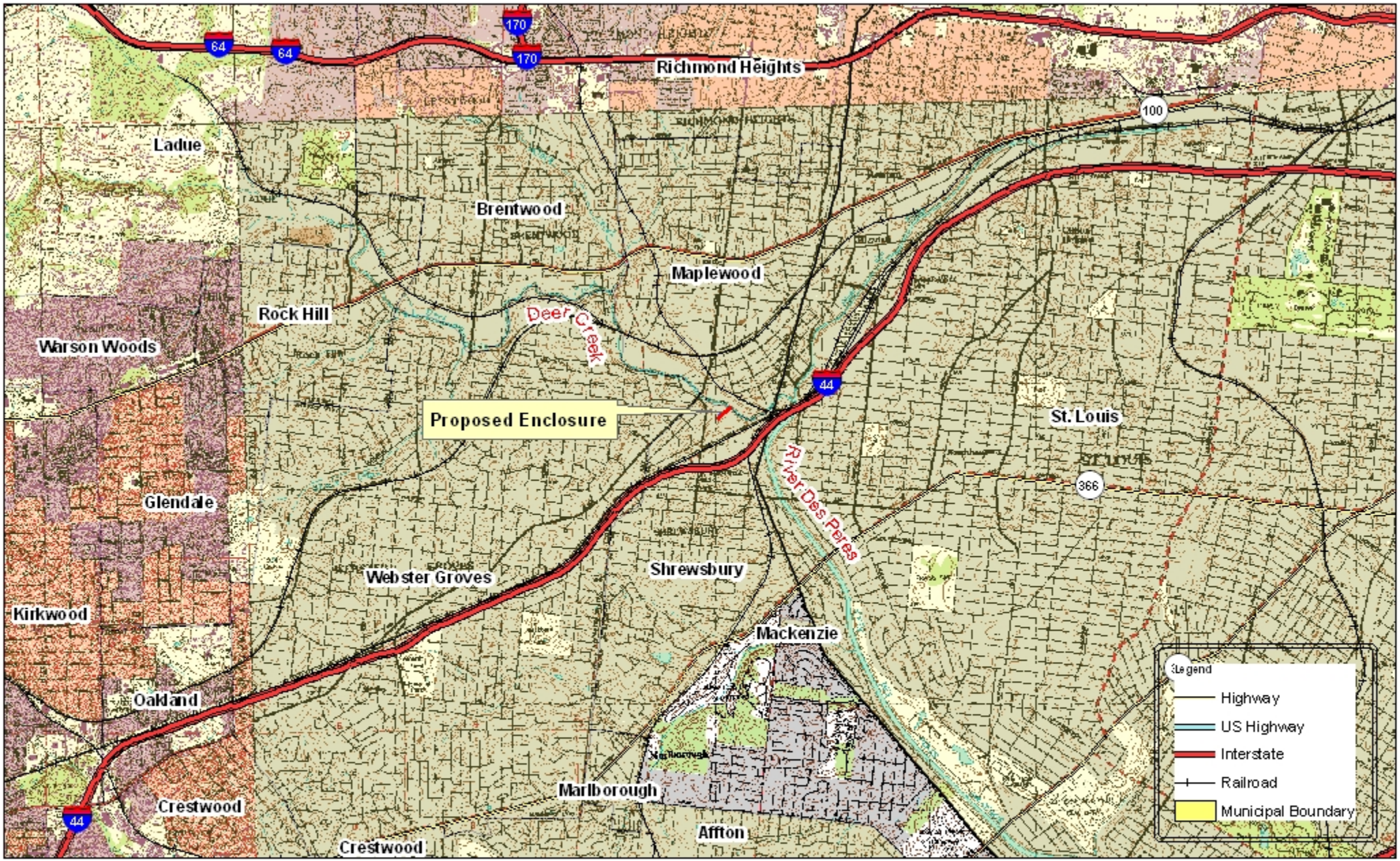
SOLICITATION OF COMMENTS: The U.S. Army Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of the proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

DANNY D. MCCLENDON
Chief, Regulatory Branch

Attachments

NOTICE TO POSTMASTERS:

It is requested that this notice be conspicuously and continually placed for 21 days from the date of this issuance of this notice.



Laclede Gas Shrewsbury Yard Stormwater Extension

MVS-2011-460 P-2815

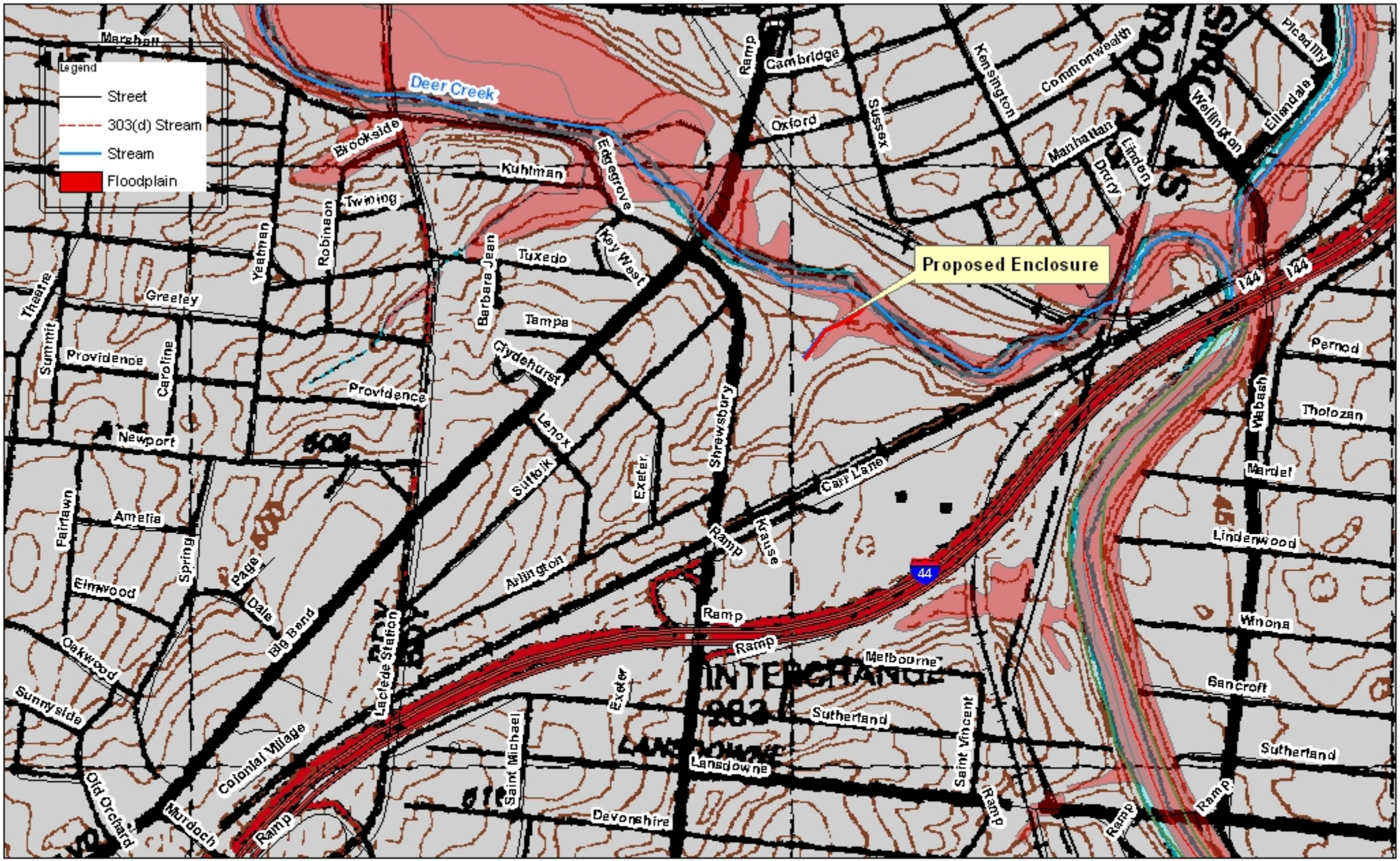
Vicinity Map

Shrewsbury, St. Louis County, Missouri

N

0 2,875 5,750 11,500 Feet

US Army Corps of Engineers
St Louis District



Laclede Gas Shrewsbury Yard Stormwater Extension

MVS-2011-460 P-2815

USGS / Floodplain Map

Shrewsbury, St. Louis County, Missouri

N

0 500 1,000 2,000 Feet

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St Louis District

Laclede Gas Shrewsbury Yard Stormwater Extension

MVS-2011-460 P-2815

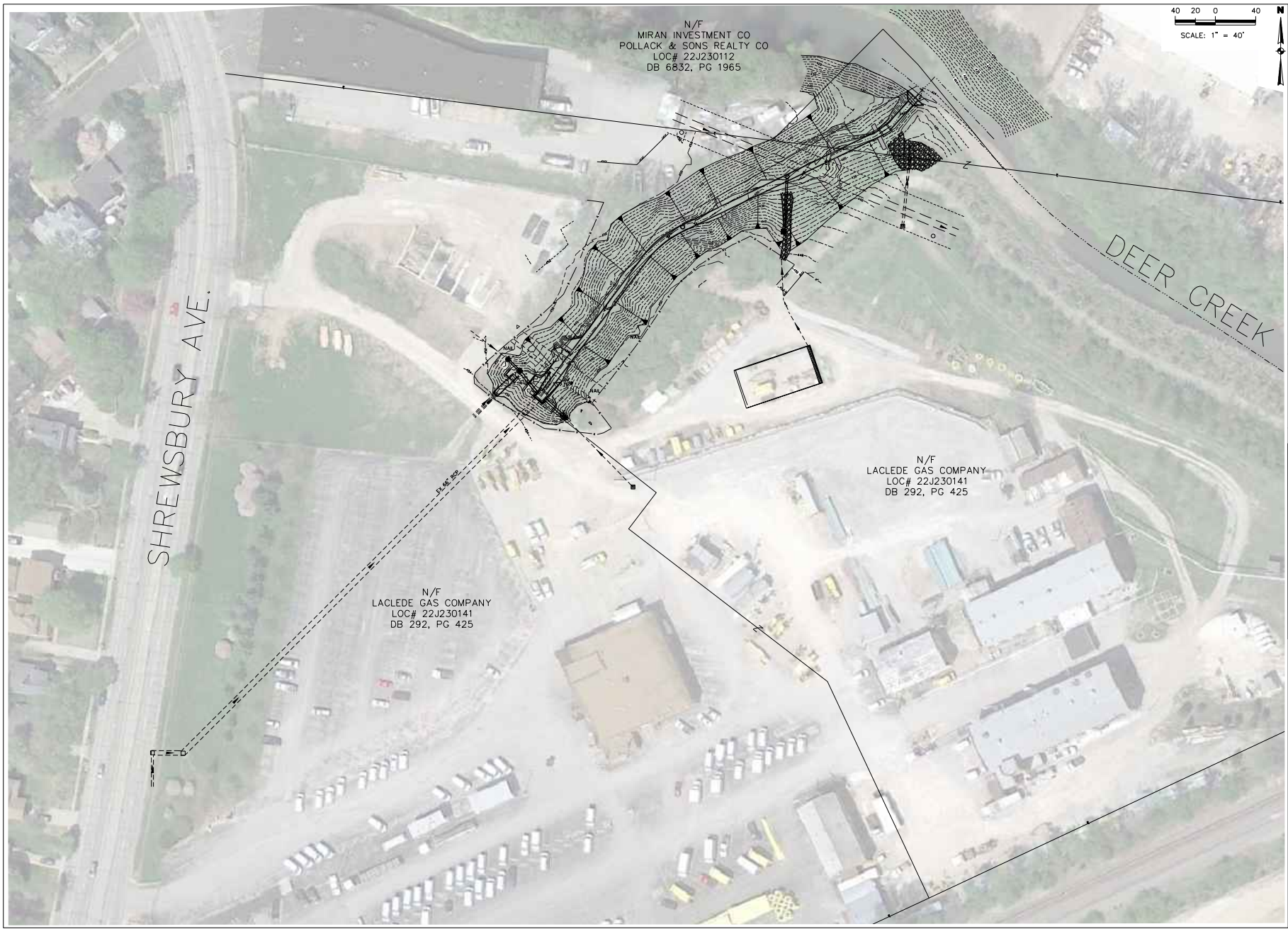
2010 Aerial / NWI Map

Shrewsbury, St. Louis County, Missouri

N

0 90 180 360 Feet

US Army Corps of Engineers
St Louis District



DESCRIPTION	REV

DESIGNED: KAN
DRAWN: KAN
CHECKED: SMH
APP. BY: SMH
DATE: 7/18/11

DISCLAIMER OF RESPONSIBILITY
I HEREBY SPECIFY THAT THE DOCUMENTS INTENDED BY MY SEAL ARE LIMITED TO THIS SHEET, AND HEREBY DISCLAIM ANY RESPONSIBILITY FOR ALL OTHER DRAWINGS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS RELATING TO OR INTENDED TO BE USED FOR ANY PART OF THE ARCHITECTURAL OR ENGINEERING PROJECT OR SURVEY.

STUART M. HAW III – ENGINEER
MO# E-22997

PROJECT: STORM SEWER EXTENSION
SHREWSBURY YARD

CLIENT: LACLEDE GAS COMPANY
3950 FOREST PARK AVENUE
ST. LOUIS, MISSOURI 63108
(314)658-5598 TELEPHONE

PANGEA ENGINEERING AND SURVEYING, L.L.C. (314)333-0600 TELEPHONE (314)333-0601 FAX
STUART M. HAW III, P.E. MISSOURI STATE CERTIFICATE OF AUTHORITY #2007028645

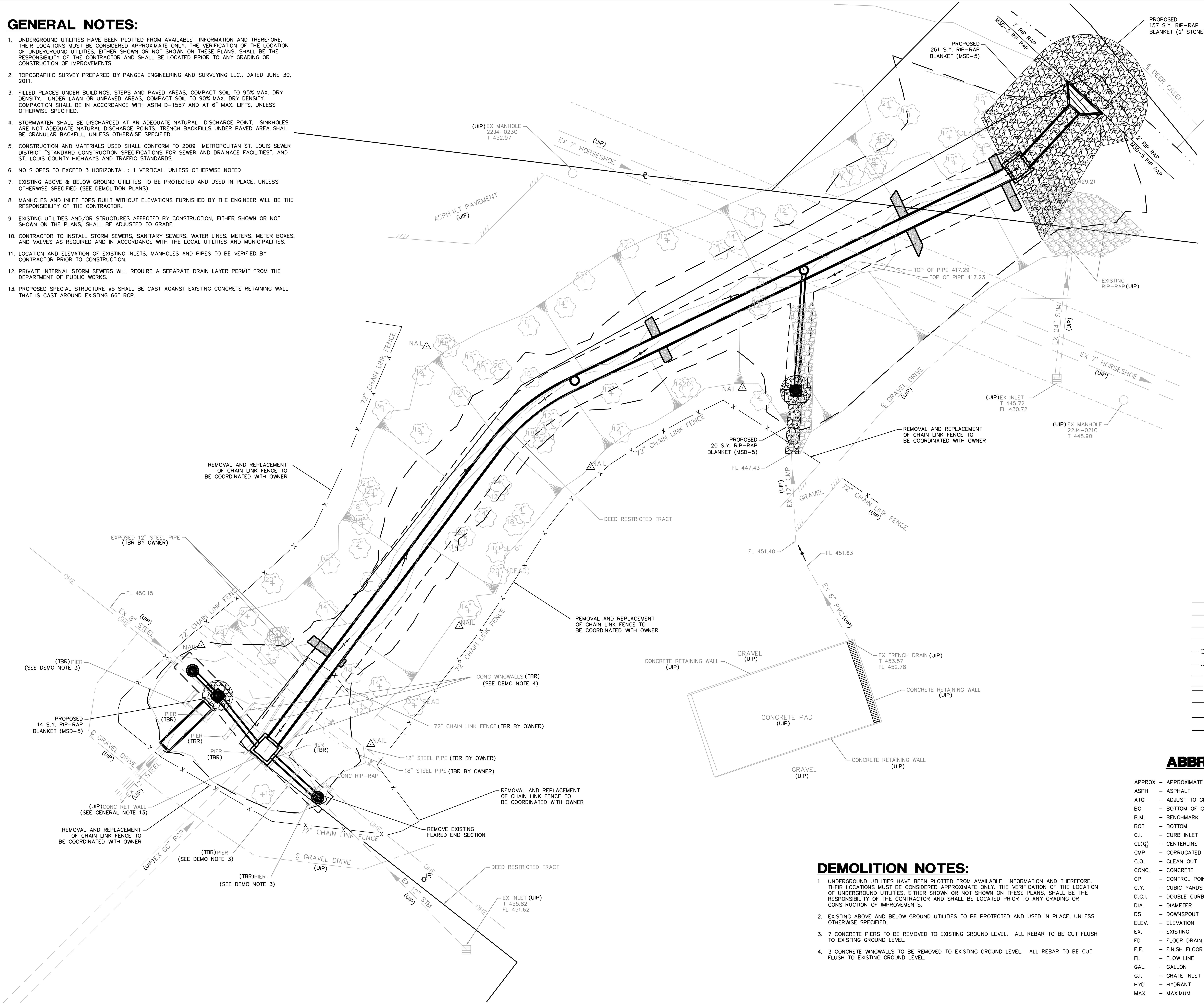
SHEET: OVERALL SITE PLAN

FILE NAME: 11SS0005.dwg
SCALE: 1"=XX'
SHEET NO. EXHIBIT–1

MSD P-0023243-02 MSD BASE MAP 22J

GENERAL NOTES:

1. UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF IMPROVEMENTS.
2. TOPOGRAPHIC SURVEY PREPARED BY PANGEA ENGINEERING AND SURVEYING LLC., DATED JUNE 30, 2011.
3. FILLED PLACES UNDER BUILDINGS, STEPS AND PAVED AREAS, COMPACT SOIL TO 95% MAX. DRY DENSITY. UNDER LAWN OR UNPAVED AREAS, COMPACT SOIL TO 90% MAX. DRY DENSITY. COMPACTION SHALL BE IN ACCORDANCE WITH ASTM D-1557 AND AT 6" MAX. LIFTS, UNLESS OTHERWISE SPECIFIED.
4. STORMWATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE NATURAL DISCHARGE POINTS. TRENCH BACKFILLS UNDER PAVED AREA SHALL BE GRANULAR BACKFILL, UNLESS OTHERWISE SPECIFIED.
5. CONSTRUCTION AND MATERIALS USED SHALL CONFORM TO 2009 METROPOLITAN ST. LOUIS SEWER DISTRICT "STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWER AND DRAINAGE FACILITIES", AND ST. LOUIS COUNTY HIGHWAYS AND TRAFFIC STANDARDS.
6. NO SLOPES TO EXCEED 3 HORIZONTAL : 1 VERTICAL. UNLESS OTHERWISE NOTED
7. EXISTING ABOVE & BELOW GROUND UTILITIES TO BE PROTECTED AND USED IN PLACE, UNLESS OTHERWISE SPECIFIED (SEE DEMOLITION PLANS).
8. MANHOLES AND INLET TOPS BUILT WITHOUT ELEVATIONS FURNISHED BY THE ENGINEER WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
9. EXISTING UTILITIES AND/OR STRUCTURES AFFECTED BY CONSTRUCTION, EITHER SHOWN OR NOT SHOWN ON THE PLANS, SHALL BE ADJUSTED TO GRADE.
10. CONTRACTOR TO INSTALL STORM SEWERS, SANITARY SEWERS, WATER LINES, METER BOXES, AND VALVES AS REQUIRED AND IN ACCORDANCE WITH THE LOCAL UTILITIES AND MUNICIPALITIES.
11. LOCATION AND ELEVATION OF EXISTING INLETS, MANHOLES AND PIPES TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
12. PRIVATE INTERNAL STORM SEWERS WILL REQUIRE A SEPARATE DRAIN LAYER PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS.
13. PROPOSED SPECIAL STRUCTURE #5 SHALL BE CAST AGAINST EXISTING CONCRETE RETAINING WALL THAT IS CAST AROUND EXISTING 66" RCP.



20 10 0 20

SCALE: 1" = 20'

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BENCHMARK

MSD BENCHMARK NO. 255

"STANDARD TABLET" STAMPED 44 GEU 1975 SET IN CONCRETE GUARD RAIL AT SOUTHEAST END OF OVERPASS ALONG SHREWSBURY AVENUE OVER HWY. I-44. ELEVATION = 496.96

SITE BENCHMARK

SQUARE CUT IN CONCRETE ON TOP OF STEEL POST LOCATED APPROXIMATELY 5 FEET NORTH OF THE SOUTH FENCE LINE. ELEVATION = 463.49

EXISTING LEGEND

SYMBOL	DESCRIPTION
80.43	SPOT ELEVATION
C.O.	CLEAN OUT
G.I.	GRATE INLET
C.I.	CURB INLET
M.H.	MANHOLE
	CROSS
	LIGHT STANDARD
	STREET SIGN
SH	SPRINKLER HEAD
PP	POWER POLE
WV	WATER VALVE
GV	GAS VALVE
GM	GAS METER
TREE	TREE AND SIZE
	SHRUB
	FIRE HYDRANT
TCB	TELEPHONE/CABLE BOX
W	WATER LINE / SIZE
G	GAS LINE / SIZE
T	OVERHEAD TELEPHONE LINE
UGT	UNDERGROUND TELEPHONE LINE
OHE	OVERHEAD ELECTRIC LINE
UGE	UNDERGROUND ELECTRIC LINE
	SEWER PIPE 6" THRU 18"
	SEWER PIPE 21" THRU 108"
ℙ	PROPERTY LINE
R/W	RIGHT OF WAY LINE
	SUBDIVISION LINE

DEMOLITION NOTES:

1. UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF IMPROVEMENTS.
2. EXISTING ABOVE AND BELOW GROUND UTILITIES TO BE PROTECTED AND USED IN PLACE, UNLESS OTHERWISE SPECIFIED.
3. 7 CONCRETE PIERS TO BE REMOVED TO EXISTING GROUND LEVEL. ALL REBAR TO BE CUT FLUSH TO EXISTING GROUND LEVEL.
4. 3 CONCRETE WINGWALLS TO BE REMOVED TO EXISTING GROUND LEVEL. ALL REBAR TO BE CUT FLUSH TO EXISTING GROUND LEVEL.

ABBREVIATIONS

APPROX	APPROXIMATE	MH	MANHOLE
ASPH	ASPHALT	O.C.	ON CENTER
ATG	ADJUST TO GRADE	PAVT.	PAVEMENT
BC	BOTTOM OF CURB	P.C.	PORTLAND CEMENT
B.M.	BENCHMARK	PCC	PRECAST CONCRETE
BOT	BOTTOM	PROP.	PROPOSED
C.I.	CURB INLET	P.S.I	POUNDS/SQUARE INCH
CL(℄)	CENTERLINE	R.C.	REINFORCED CONCRETE
CMP	CORRUGATED METAL PIPE	RCP	REINFORCED CONCRETE PIPE
C.O.	CLEAN OUT	RET	RETAINING
CONC.	CONCRETE	R.R.	RAIL ROAD
CP	CONTROL POINT	R/W	RIGHT OF WAY
C.Y.	CUBIC YARDS	SAN.	SANITARY
D.C.I.	DOUBLE CURB INLET	SCHD.	SCHEDULE
DIA.	DIAMETER	S.F.	SQUARE FOOT
DS	DOWNSPOUT	S.Y.	SQUARE YARD
ELEV.	ELEVATION	T=	TOP ELEVATION
EX.	EXISTING	TBA	TO BE ABANDONED
FD	FLOOR DRAIN	TBR	TO BE REMOVED
F.F.	FINISH FLOOR	TC	TOP OF CURB
FL	FLOW LINE	TYP.	TYPICAL
GAL.	GALLON	UIP	USE IN PLACE
G.I.	GRATE INLET	VCP	VITRIFIED CLAY PIPE
HYD	HYDRANT	WV	WATER VALVE
MAX.	MAXIMUM	YD	YARD DRAIN

DESCRIPTION	
REV	
DESIGNED:	KAN
DRAWN:	KAN
CHECKED:	SMH
APP. BY:	SMH
DATE:	7/18/11

STUART M. HAW III - ENGINEER
MO# E-22997

PROJECT: STORM SEWER EXTENSION SHREWSBURY YARD

CLIENT: LACLEDE GAS COMPANY
3950 FOREST PARK AVENUE
ST LOUIS, MISSOURI 63108
(314)658-5598 TELEPHONE

PANGEA ENGINEERING AND SURVEYING, L.L.C.
(314)333-0600 TELEPHONE
(314)333-0601 FAX
ENGINEER - MISSOURI STATE CERTIFICATE OF AUTHORITY
#2007028645

SHEET: DEMOLITION AND SITE PLAN

FILE NAME: 11SS0005.dwg

SCALE: 1"=XX'

SHEET NO. C-2.0