



Public Notice

**U.S. Army Corps
of Engineers**
Pittsburgh District

In Reply Refer to
Notice No. below

US Army Corps of Engineers, Pittsburgh District
1000 Liberty Avenue
Pittsburgh, PA 15222-4186

Application No. 2008-704

Date: June 2, 2011

Notice No. 11-23

Closing Date: July 1, 2011

1. TO ALL WHOM IT MAY CONCERN: The following application has been submitted for a Department of the Army Permit under the provisions of Section 404 of the Clean Water Act.
2. APPLICANT: Regional Industrial Development Corporation (RIDC) of Southwest PA
425 Sixth Avenue, Suite 500
Pittsburgh, Pennsylvania 15219

CONSULTANT: Mackin Engineering Company
RIDC Park West
117 Industry Drive
Pittsburgh, Pennsylvania 15275
3. LOCATION: In Brush Creek, unnamed tributaries to Brush Creek, and adjacent wetlands in Marshall and Cranberry Townships, Allegheny and Butler Counties (respectively) Pennsylvania.
4. PURPOSE AND DESCRIPTION OF WORK: This application was originally advertised on September 7, 2010 as Public Notice number 10-50. It is being re-advertised because the original amount of proposed impact was determined to be incorrect. Public Notice 10-50 advertised a proposed impact of 2,375 linear feet of jurisdictional stream channel and 2.92 acres of wetland impact. The actual proposed stream impact is 4,135 linear feet when accounting for all impacts including temporary impacts and impacts as a result of the proposed mitigation plan. The originally proposed amount of wetland impact has not changed.

The applicant proposes to construct commercial developments on the remaining undeveloped parcels in Thorn Hill Industrial Park. Eight of these parcels are located entirely within Allegheny County and a portion of another parcel is located within Allegheny County for a total of 74 acres. Likewise, seven parcels are located entirely within Butler County and a portion of another parcel is located within Butler County for a total of 108 acres. At this time, three projects are currently proposed for development. Of these currently proposed projects, Verizon, Incorporated has plans to develop Parcel 69 for auxiliary parking and connect their existing facility to the proposed parking via an access road from the existing Verizon parking lot. This connector road would impact an unnamed tributary to Brush Creek and two wetlands. East Resources, Incorporated is proposing a Phase II facility expansion on Parcel 539 to include construction of an approximately

26,500 square foot office building. Parking and the required storm water facilities would also be included with this project impacting two wetlands and an unnamed tributary. Elmhurst Group, Incorporated and RIDC- Flex-Building Development is proposing to develop a portion of the Lower Parcel including an access road from the existing Commonwealth Drive. The project would include placing a 16' wide by 7'10" high by 90' precast concrete arch with 20' rock aprons in an unnamed tributary to Brush Creek to access the interior of the parcel. Partial fills are also proposed for two wetlands on this parcel. Also crossing the unnamed tributary would be the utility lines that would service the proposed 48,000 square foot flex building, associated parking lot, and stormwater management facilities.

In addition to the three currently proposed developments, RIDC anticipates development activities will occur on 11 of the remaining undeveloped parcels in Thorn Hill Industrial Park within the next ten years including Parcel 25, 56, 62, 63R, 65, 66, and B Revision in Allegheny County; and Parcel 537, 542, 544, and 545 in Butler County. Due to parcel sizes, variable topography, required building setbacks, existing conservation easements, and presence of aquatic resources within the anticipated development areas, the associated building pads, parking facilities, utility lines, and installation of stormwater management facilities will necessitate minor fills of the resources. In an attempt to provide shovel ready building lots, the applicant is proposing impacts to these resources as well as resources for the three aforementioned (currently proposed) projects totaling 2.92 acres of open water, emergent, shrub scrub, and forested wetlands in addition to 4,135 linear feet of jurisdictional stream channel. To mitigate for the loss of these resources 3.84 acres of wetland mitigation and 3,362 linear feet of stream creation, bank stabilization, and restoration is proposed. Please see enclosed impact and mitigation tables summarizing this information. The applicant is requesting a 0.31 acre wetland mitigation credit (that exists from a previously permitted activity) be applied to the proposed wetland mitigation requirement. Also please find drawings of all the proposed parcels at the following website.

http://www.lrp.usace.army.mil/or/or-f/public_notice.htm

5. ENCROACHMENT PERMIT: The applicant must obtain a Water Obstruction and Encroachment Permit which includes 401 Water Quality Certification from the:

Pennsylvania Department of Environmental Protection
Northwest Regional Office
Soils and Waterways Section
230 Chestnut Street
Meadville, PA 16335

Telephone: 814-332-6984

6. IMPACT ON NATURAL RESOURCES: The District Engineer has consulted the most

recently available information and has determined that the project is not likely to affect the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat of such species which has been determined to be critical. This Public Notice serves as a request to the U. S. Fish and Wildlife Service for any additional information they may have on whether any listed or proposed to be listed endangered or threatened species may be present in the area which would be affected by the activity, pursuant to Section 7(c) of the Endangered Species Act of 1972 (as amended).

7. IMPACT ON CULTURAL RESOURCES: The National Register of Historic Places has been consulted, and it has been determined that there are no properties currently listed on the register which would be directly affected by the proposed work. If we are made aware, as a result of comments received in response to this notice, or by other means, of specific archeological, scientific, prehistorical, or historical sites or structures which might be affected by the proposed work, the District Engineer will immediately take the appropriate action necessary pursuant to the National Historic Preservation Act of 1966 - Public Law 89-665 as amended (including Public Law 96-515).

8. PUBLIC INVOLVEMENT: Any person may request, in writing, within the comment period specified in the paragraph below entitled "RESPONSES," that a public hearing be held to consider this application. The requests for public hearing shall state, with particularity, the reasons for holding a public hearing.

9. EVALUATION: Interested parties are invited to state any objections they may have to the proposed work. The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposals must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those 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, considerations of property ownership and, in general, the needs and welfare of the people. The 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 this proposed activity. Any comments received will be considered by the 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 the 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 overall public interest of the proposed activity. The evaluation of the impact of the activity on

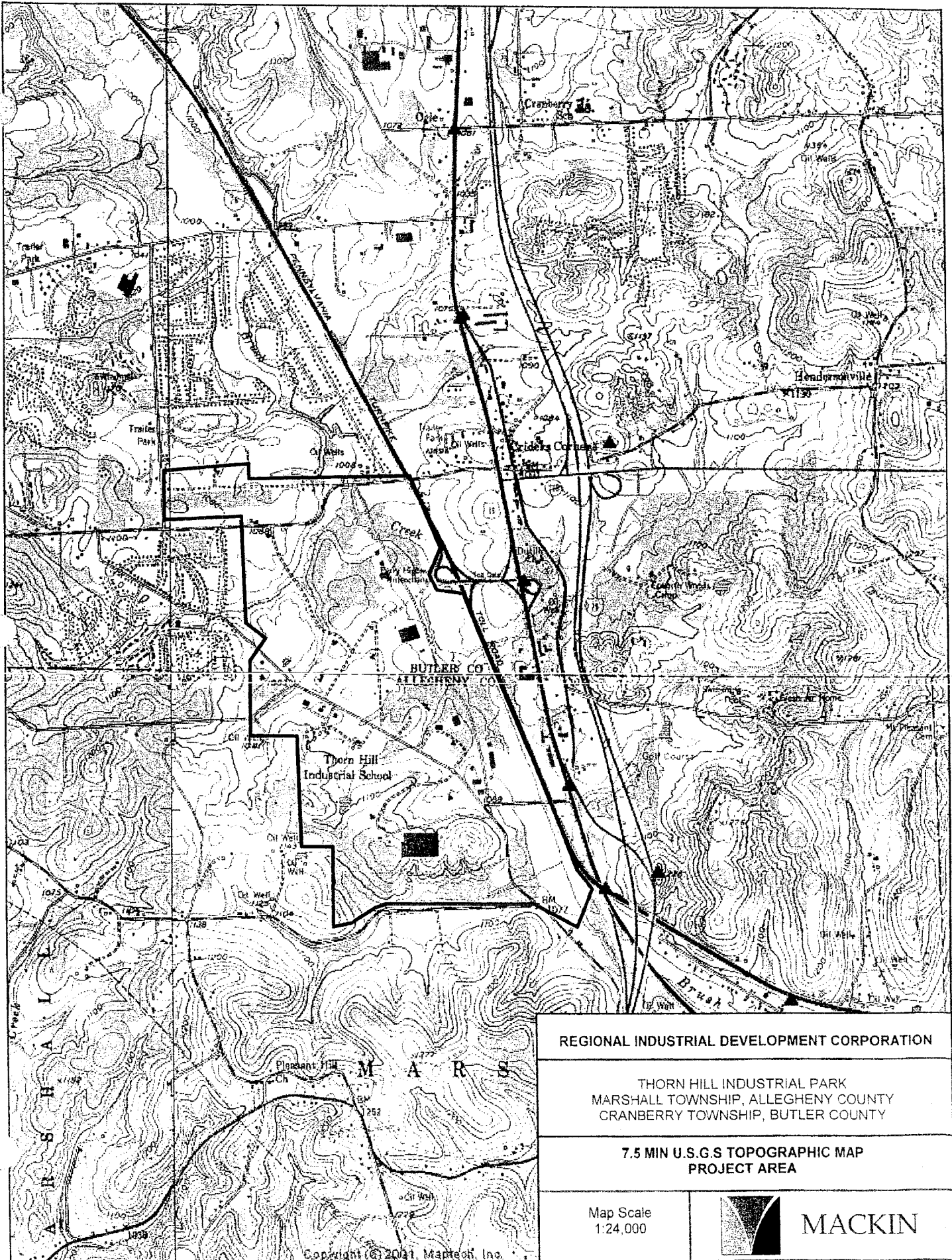
the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under the authority of Section 404(b) of the Clean Water Act (40 CFR Part 230).

10. RESPONSES: A permit will be granted unless its issuance is found to be contrary to the public interest. Written statements concerning the proposed activity should be received in this office on or before the closing date of this Public Notice in order to become a part of the record and to be considered in the final determination. Any objections which are received during this period may be forwarded to the applicant for possible resolution before the determination is made whether to issue or deny the requested DA Permit. All responses to this notice should be directed to the Regulatory Branch, attn Tyler Bintrim at the above address, by telephoning (412) 395-7115, or by e-mail at tyler.j.bintrim@usace.army.mil. Please refer to CELRP-OP-F 2008-704 in all responses.

FOR THE DISTRICT ENGINEER:

//SIGNED//

Nancy Mullen
Chief, Northern Section
Regulatory Branch



REGIONAL INDUSTRIAL DEVELOPMENT CORPORATION

THORN HILL INDUSTRIAL PARK
 MARSHALL TOWNSHIP, ALLEGHENY COUNTY
 CRANBERRY TOWNSHIP, BUTLER COUNTY

7.5 MIN U.S.G.S TOPOGRAPHIC MAP
 PROJECT AREA

Map Scale
 1:24,000



THORN HILL INDUSTRIAL PARK - TOTAL PROJECT RESOURCES, IMPACTS, AND PERMITS

Parcel ID	Identified Resources - Wetland Stream	Jurisdictional Resource	Impact - None Proposed Anticipated	Permit Type - Joint Permit (JP) General Permit (GP) Waiver	Impact Type - Obstruction (Obs) Encroachment (Enc) Channel Change (CC) Stream Enclosure (S-Encl)	Impact Details - Fill/Wall Bridge/Pipe/Culvert Utility Crossing/Storm Outfall-Trenched/Bored	Permanent Impact acres (Ac) lineal feet (LF)	Temporary Impact acres (Ac) lineal feet (LF)	Latitude and Longitude Proposed Impacts (Lat/Long)
Allegheny County Parcel Proposed and Future Development									
25	50-foot Floodway - KDR-12* (p)	Federally non-jurisdictional	Anticipated	GP-4	Floodway - Enc	Stormwater Outfall (SWM-25A)	10 LF	20 LF	40° 40' 22.264" N / 80° 6' 30.249" W
	50-foot Floodway - KDR-12* (p)	Federally non-jurisdictional	Anticipated	GP-4	Floodway - Enc	Stormwater Outfall (SWM-25B)	10 LF	20 LF	40° 40' 23.610" N / 80° 6' 28.819" W
	Stream KDR-12* (p)	Federally jurisdictional	None	-	No resource impact	-	-	-	40° 40' 23.114" N / 80° 6' 29.606" W
	Wetland CJW-1	Federally jurisdictional	None	-	No resource impact	-	-	-	40° 40' 21.700" N / 80° 6' 32.663" W
56	Wetland CJW-4	Federally jurisdictional	Anticipated	JP	Wetland - Enc	Embankment Fill	0.3	-	40° 39' 41.140" N / 80° 5' 48.384" W
	FEMA Floodway - Brush Creek (p)	Federally non-jurisdictional	Anticipated	GP-4	Floodway - Enc	Stormwater Outfall (SWM-56A)	-	-	40° 39' 39.388" N / 80° 5' 44.229" W
	Brush Creek (p)	Federally jurisdictional	Mitigation	GP-3	Stream/Floodway - Enc	RipRap & Vegetative Bank Stabilization #1	200 LF	-	40° 39' 38.424" N / 80° 5' 44.285" W
	Stream KDR-26 (p)	Federally jurisdictional	Mitigation	JP	Stream Channel Fill	Stream channel relocation	162 LF	-	40° 39' 37.518" N / 80° 5' 44.746" W
	FEMA Floodway - Brush Creek (p)	Federally non-jurisdictional	Mitigation	JP	Floodway - Enc	Mitigation Site Excavation (Cut Only)	273 LF	-	40° 39' 43.675" N / 80° 5' 47.463" W
62	Stream KDR-12* (p)	Federally jurisdictional	Anticipated	Chapter 105 Waiver < 100 acre watershed	Stream/Floodway - Obs	30" w x 70 lf RCP Exi/Embankment fill	70 LF	10 LF	40° 40' 19.129" N / 80° 6' 35.993" W
	Wetland CJW-1*	Federally jurisdictional	None	-	No resource impact	-	-	-	40° 40' 22.862" N / 80° 6' 29.798" W
	Wetland CJW-2*	Federally jurisdictional	None	-	No resource impact	-	-	-	40° 40' 21.512" N / 80° 6' 33.111" W
	E-3	Federally non-jurisdictional	Anticipated	Chapter 105 Waiver < 100 acre watershed	Stream/Floodway - Enc	Partial Embankment Fill	41 LF	-	40° 40' 21.789" N / 80° 6' 33.850" W
E-4	Federally non-jurisdictional	Anticipated	Chapter 105 Waiver < 100 acre watershed	Stream/Floodway - Enc	Partial Embankment Fill	104 LF	-	40° 40' 21.088" N / 80° 6' 31.409" W	

Parcel ID	Identified Resources - Wetland Stream	Jurisdictional Resource	Impact - None Proposed Anticipated	Permit Type - Joint Permit (JP) General Permit (GP) Waiver	Impact Type - Obstruction (Obs) Encroachment (Enc) Channel Change (CC) Stream Enclosure (S-Enc)	Impact Details - Fill/Wall Bridge/Pipe/Culvert Utility Crossing/Storm Outfall - Trenched/Bored	Permanent Impact acres (Ac) lineal feet (LF)	Temporary Impact acres (Ac) lineal feet (LF)	Latitude and Longitude Proposed Impacts (Lat/Long)
65	Wetland C.JW-9	Federally jurisdictional	None	-	-	-	-	-	40° 39' 47.708" N / 80° 6' 4.022" W
	Wetland C.JW-10	Federally jurisdictional	Anticipated	JP	Wetland - Enc	Embankment Culvert/Fill	0.35	-	40° 39' 47.984" N / 80° 6' 07.098" W
	Stream KDR-9 (f)	Federally jurisdictional	Anticipated	JP	Stream - S-End	15" x 110' C.P.P. Exd/Embankment fill	109 LF	10 LF	40° 39' 42.037" N / 80° 6' 09.506" W
	Stream KDR-4 (f)	Federally jurisdictional	Anticipated	Chapter 105 Waiver < 100 acre watershed	Stream/Floodway - Obs	50' New Pipe/Embankment fill	60 LF	10 LF	40° 39' 43.729" N / 80° 6' 09.547" W
	50-foot Floodway - KDR-2 (p)	Federally non-jurisdictional	Anticipated	GP-4	Floodway - Enc	Utility Connection/Stormwater Outfall (SAN-65A & SWM-65A) - Minor Fill	10 LF	20 LF	40° 39' 46.360" N / 80° 6' 03.696" W
	50-foot Floodway - KDR-2 (p)	Federally non-jurisdictional	Anticipated	GP-4	Floodway - Enc	Utility Connection/Stormwater Outfall (SAN-65B & SWM-65B) - Minor Fill	10 LF	20 LF	40° 39' 46.097" N / 80° 6' 04.096" W
	50-foot Floodway - KDR-2 (p)	Federally non-jurisdictional	Anticipated	GP-4	Floodway - Enc	Utility Connection (Sanitary) SAN-65D	10 LF	20 LF	40° 39' 44.522" N / 80° 6' 08.280" W
	50-foot Floodway - KDR-2 (p)	Federally non-jurisdictional	Anticipated	GP-4	Floodway - Enc	Utility Connection/Stormwater Outfall (SAN-65C & SWM-65C) - Minor Fill	10 LF	20 LF	40° 39' 44.949" N / 80° 6' 02.374" W
	Stream KDR-17 (f)	Federally jurisdictional	None	-	-	-	-	-	40° 39' 41.161" N / 80° 6' 3.659" W
	E-15	Federally non-jurisdictional	None	-	-	-	-	-	40° 39' 47.687" N / 80° 6' 4.205" W
	E-16	Federally non-jurisdictional	None	-	-	-	-	-	40° 39' 47.815" N / 80° 6' 3.934" W
	Stream KDR-10 (p)	Federally jurisdictional	None	-	-	-	-	-	40° 39' 42.564" N / 80° 6' 6.350" W
	Wetland C.JW-17*	Federally jurisdictional	None	-	-	-	-	-	40° 39' 43.343" N / 80° 6' 10.271" W
	Wetland C.JW-18	Federally jurisdictional	None	-	-	-	-	-	40° 39' 43.456" N / 80° 6' 8.758" W
	Wetland C.JW-19	Federally jurisdictional	None	-	-	-	-	-	40° 39' 44.895" N / 80° 6' 6.309" W
	Wetland C.JW-20	Federally jurisdictional	None	-	-	-	-	-	40° 39' 45.334" N / 80° 6' 3.985" W
	Stream KDR-2* (p)	Federally jurisdictional	Anticipated	JP	Stream/Floodway - Obs	15' w x 6' h x 55' I Box Culvert & 20' Rock Apron/Bank Protection	75 LF	-	40° 39' 43.856" N / 80° 6' 14.481" W
	Stream KDR-2* (p)	Federally jurisdictional	Anticipated	JP	Stream/Floodway - Obs, Channel Change	15' w x 6' h x 70' I Box Culvert & 20' Rock Apron/Bank Protection	90 LF	-	40° 39' 43.825" N / 80° 6' 11.568" W
	50-foot Floodway - KDR-2	Federally non-jurisdictional	Anticipated	GP-4	Stream/Floodway - Enc	Stormwater Outfall (SWM-66A) to Box Culvert	10 LF	20 LF	40° 39' 43.866" N / 80° 6' 14.481" W
	50-foot Floodway - KDR-2	Federally non-jurisdictional	Anticipated	GP-5	Stream/Floodway - Enc	Utility Connection (SAN-66A)	10 LF	20 LF	40° 39' 43.856" N / 80° 6' 14.481" W
50-foot Floodway - KDR-2	Federally non-jurisdictional	Anticipated	GP-4	Stream/Floodway - Enc	Stormwater Outfall (SWM-66B) to Box Culvert - TBD	10 LF	20 LF	40° 39' 43.825" N / 80° 6' 11.568" W	
50-foot Floodway - KDR-2	Federally non-jurisdictional	Anticipated	GP-5	Stream/Floodway - Enc	Utility Connection (SAN-66B)	10 LF	20 LF	40° 39' 43.856" N / 80° 6' 14.481" W	
Stream KDR-6* (p)	Federally jurisdictional	None	-	-	-	-	-	40° 39' 44.626" N / 80° 6' 19.096" W	
Stream KDR-8* (p)	Federally jurisdictional	None	-	-	-	-	-	40° 39' 42.454" N / 80° 6' 14.273" W	
Wetland C.JW-11	Federally jurisdictional	None	-	-	-	-	-	40° 39' 46.334" N / 80° 6' 13.216" W	
Wetland C.JW-15	Federally jurisdictional	None	-	-	-	-	-	40° 39' 43.881" N / 80° 6' 17.946" W	
Wetland C.JW-16	Federally jurisdictional	None	-	-	-	-	-	40° 39' 43.002" N / 80° 6' 13.948" W	
Wetland C.JW-17*	Federally jurisdictional	None	-	-	-	-	-	40° 39' 43.469" N / 80° 6' 10.731" W	
66	Stream KDR-2* (p)	Federally jurisdictional	Anticipated	JP	Stream/Floodway - Obs	15' w x 6' h x 55' I Box Culvert & 20' Rock Apron/Bank Protection	75 LF	-	40° 39' 43.856" N / 80° 6' 14.481" W
	Stream KDR-2* (p)	Federally jurisdictional	Anticipated	JP	Stream/Floodway - Obs, Channel Change	15' w x 6' h x 70' I Box Culvert & 20' Rock Apron/Bank Protection	90 LF	-	40° 39' 43.825" N / 80° 6' 11.568" W
	50-foot Floodway - KDR-2	Federally non-jurisdictional	Anticipated	GP-4	Stream/Floodway - Enc	Stormwater Outfall (SWM-66A) to Box Culvert	10 LF	20 LF	40° 39' 43.866" N / 80° 6' 14.481" W
	50-foot Floodway - KDR-2	Federally non-jurisdictional	Anticipated	GP-5	Stream/Floodway - Enc	Utility Connection (SAN-66A)	10 LF	20 LF	40° 39' 43.856" N / 80° 6' 14.481" W
	50-foot Floodway - KDR-2	Federally non-jurisdictional	Anticipated	GP-4	Stream/Floodway - Enc	Stormwater Outfall (SWM-66B) to Box Culvert - TBD	10 LF	20 LF	40° 39' 43.825" N / 80° 6' 11.568" W
	50-foot Floodway - KDR-2	Federally non-jurisdictional	Anticipated	GP-5	Stream/Floodway - Enc	Utility Connection (SAN-66B)	10 LF	20 LF	40° 39' 43.856" N / 80° 6' 14.481" W
	Stream KDR-6* (p)	Federally jurisdictional	None	-	-	-	-	-	40° 39' 44.626" N / 80° 6' 19.096" W
	Stream KDR-8* (p)	Federally jurisdictional	None	-	-	-	-	-	40° 39' 42.454" N / 80° 6' 14.273" W
	Wetland C.JW-11	Federally jurisdictional	None	-	-	-	-	-	40° 39' 46.334" N / 80° 6' 13.216" W
	Wetland C.JW-15	Federally jurisdictional	None	-	-	-	-	-	40° 39' 43.881" N / 80° 6' 17.946" W
	Wetland C.JW-16	Federally jurisdictional	None	-	-	-	-	-	40° 39' 43.002" N / 80° 6' 13.948" W
	Wetland C.JW-17*	Federally jurisdictional	None	-	-	-	-	-	40° 39' 43.469" N / 80° 6' 10.731" W

Parcel ID	Identified Resources- Wetland Stream	Jurisdictional Resource	Impact- None Proposed Anticipated	Permit Type- Joint Permit (JP) General Permit (GP) Waiver	Impact Type- Obstruction (Obs) Encroachment (CC) Channel Change (CC) Stream Enclosure (S-Enc)	Impact Details - Fill/Wall Bridge/Pipe/Culvert Utility Crossing/Storm Outfall- Trenched/Bored	Permanent Impact acres (Ac) lineal feet (LF)	Temporary Impact acres (Ac) lineal feet (LF)	Latitude and Longitude Proposed Impacts (Lat/Long)
69	Wetland C.JW-6	Federally jurisdictional	Proposed	JP	Wetland/Floodway - Enc	Embankment Fill (partial)	0.11	-	40° 39' 46.651" N / 80° 6' 00.884" W
	Wetland C.JW-4*	Federally jurisdictional	Proposed	JP	Wetland/Floodway - Enc	Wall & Embankment Fill (partial)	0.21	-	40° 39' 47.448" N / 80° 5' 56.340" W
	Stream KDR-2* (p)	Federally jurisdictional	Proposed	GP-4	Wetland/Stream - Enc	Stormwater Outfall (SWM-69A) - 12" Check Valve	-	-	40° 39' 47.137" N / 80° 5' 56.637" W
	Stream KDR-2* (p)	Federally jurisdictional	Mitigation	GP-3	Stream/Floodway - Enc	RipRap & Vegetative Bank Stabilization #2	180 LF	20 LF	40° 39' 45.161" N / 80° 5' 59.652" W
	E-14	Federally jurisdictional	Anticipated	Chapter 105 Waiver < 100 acre watershed	Stream - Enc	Channel Fill	143 LF	-	40° 39' 46.757" N / 80° 6' 1.098" W
63R	Wetland C.JW-4*	Federally jurisdictional	Anticipated	JP	Wetland - Enc	Embankment Fill	0.24	-	40° 39' 42.640" N / 80° 5' 50.909" W
	Wetland C.JW-4*	Federally jurisdictional	Anticipated	GP-4	Stormwater Outfall (63A)	Stormwater Outfall (SWM-63RA)	-	-	40° 39' 44.653" N / 80° 5' 52.665" W
	FEMA Floodway - Brush Creek (p)	Federally non-jurisdictional	Anticipated	GP-5	Floodway Enc	Utility Connection (SAN-63RB)	10 LF	20 LF	40° 39' 44.307" N / 80° 5' 47.453" W
	FEMA Floodway Brush Creek (p)	Federally non-jurisdictional	Mitigation	JP	Floodway - Enc	Mitigation Site Excavation (Cut Only)	586 LF	-	40° 39' 43.675" N / 80° 5' 47.463" W
	Brush Creek (p)	Federally jurisdictional	Mitigation	JP	Streambank/Floodway - Enc	Mitigation Site Cut, RipRap Ford, Rock Channel Protection	100 LF	20 LF	40° 39' 47.940" N / 80° 5' 49.529" W
B Rev	Stream KDR-15 (p)	Federally jurisdictional	Proposed	JP	Stream/Floodway - Obs	7.7'w x 4' 10'h x 60' l Conc Elliptical Culvert & 15' l Rock Apron/Bank Protection	75 LF	-	40° 40' 20.794" N / 80° 7' 02.870" W
	50-Foot Floodway - KDR-15	Federally non-jurisdictional	Anticipated	GP-4	Floodway - Enc	Stormwater Outfall (SWM-B Rev A)	-	-	40° 40' 22.425" N / 80° 7' 00.874" W
	E-1	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 23.708" N / 80° 7' 09.874" W
	E-2	Federally non-jurisdictional	Anticipated	JP	Stream/Floodway - Enc	Embankment Fill (partial)	45 LF	-	40° 40' 22.410" N / 80° 7' 05.111" W
	E-17	Federally non-jurisdictional	Anticipated	JP	Stream/Floodway - Enc	Embankment Fill (partial)	160 LF	-	40° 40' 19.720" N / 80° 7' 3.145" W
	Stream KDR-18 (f)	Federally jurisdictional	None	-	-	-	-	-	40° 40' 20.071" N / 80° 7' 5.589" W
	Stream KDR-19 (f)	Federally jurisdictional	None	-	-	-	-	-	40° 40' 22.700" N / 80° 7' 1.737" W
	Wetland C.JW-32	Federally jurisdictional	Anticipated	JP	Wetland - Enc	7.7' w x 4' 10'h x 60' l Conc Elliptical Culvert & 15' l Rock Apron/Bank Protection	0.04	-	40° 40' 20.794" N / 80° 7' 02.870" W
	Stream KDR-15 (p)	Federally jurisdictional	Anticipated	GP-5	Stream/Floodway/Wetland - Enc	Utility Connection (SAN-B Rev B)	10 LF	20 LF	40° 40' 21.412" N / 80° 7' 04.407" W
	Wetland C.JW-28*	Federally jurisdictional	None	-	-	-	-	-	40° 40' 26.296" N / 80° 6' 11.175" W
L.P.	Wetland C.JW-29*	Federally jurisdictional	None	-	-	-	-	-	40° 40' 26.746" N / 80° 6' 8.782" W
	Wetland C.JW-30	Federally jurisdictional	None	-	-	-	-	-	40° 40' 21.135" N / 80° 6' 6.476" W
	Wetland C.JW-31	Federally jurisdictional	None	-	-	-	-	-	40° 40' 23.359" N / 80° 6' 9.581" W
	Brush Creek (p)	Federally jurisdictional	None	-	-	-	-	-	40° 40' 23.200" N / 80° 6' 6.227" W
	E-5	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 24.391" N / 80° 6' 10.374" W
	Stream KDR-11 (p)	Federally jurisdictional	None	-	-	-	-	-	40° 40' 23.526" N / 80° 6' 12.546" W
	Stream KDR-12 (p)	Federally jurisdictional	None	-	-	-	-	-	40° 40' 26.422" N / 80° 6' 15.262" W

Parcel ID	Identified Resources- Wetland Stream	Jurisdictional Resource	Impact- None Proposed Anticipated	Permit Type- Joint Permit (JP) General Permit (GP) Waiver	Impact Type- Obstruction (Obs) Encroachment (Enc) Channel Change (CC) Stream Enclosure (S-Encl)	Impact Details - Fill/Wall Bridge/Pipe/Culvert Utility Crossing/Storm Outfall- Trenched/Bored	Permanent Impact acres (Ac) lineal feet (LF)	Temporary Impact acres (Ac) lineal feet (LF)	Latitude and Longitude Proposed Impacts (Lat/Long)
Butler County Parcels - Proposed and Future Development									
537	Wetland A (CEC)	Federally jurisdictional	None	-	-	-	-	-	40° 40' 45.461"N / 80° 6' 59.224"W
	Wetland B (CEC)	Federally jurisdictional	None	-	-	-	-	-	40° 40' 44.369"N / 80° 7' 1.387"W
	CEC - Stream 1 (i)	Federally jurisdictional	None	-	-	-	-	-	40° 40' 44.474"N / 80° 7' 1.391"W
	CEC - Stream 2 (p)	Federally non-jurisdictional	None	GP-4	Floodway - Enc	Stormwater Outfall (SWM-537A)	10 LF	20 LF	40° 40' 46.730"N / 80° 6' 58.344"W
539	Wetland CEC-539-A	Federally jurisdictional	Proposed	JP	Wetland - Enc	Embankment Fill (total fill)	0.21	-	40° 40' 37.727" N / 80° 7' 09.907" W
	Wetland CEC-539-C	Federally jurisdictional	Proposed	JP	Wetland - Enc	Embankment Fill (total fill)	0.03	-	40° 40' 33.835" N / 80° 7' 07.588" W
	CEC - Stream A (i)	Federally jurisdictional	Proposed	JP	Stream - Enc (Fill)	Embankment Fill (partial fill)	564 LF	-	40° 40' 36.191" N / 80° 7' 08.379" W
	CEC - Stream A (i)	Federally jurisdictional	Proposed	GP-4	No resource impact	Stormwater Outfall (SWM-539A)	-	-	40° 40' 39.043"N / 80° 7' 10.513"W
542	Wetland JLY-1	Federally jurisdictional	None	-	-	-	-	-	40° 40' 53.302"N / 80° 6' 55.359"W
	Wetland JLY-6	Federally jurisdictional	None	-	-	-	-	-	40° 40' 52.421"N / 80° 6' 54.916"W
	E-1	Federally non-jurisdictional	None	Chapter 105 Waiver < 100 acre watershed	Stream - Enc	Embankment Fill (total fill)	72 LF	-	40° 40' 54.174"N / 80° 6' 58.877"W
	50-foot Floodway - S-2	Federally non-jurisdictional	Anticipated	GP-5	50-foot Floodway - Enc	Utility Connection (SAN-542B)	10 LF	20 LF	40° 40' 49.470"N / 80° 6' 55.172"W
	E-2	Federally jurisdictional	Anticipated	JP	Stream - Enc	Embankment Fill	405 LF	-	40° 40' 54.763"N / 80° 6' 57.178"W
	E-2	Federally jurisdictional	Anticipated	GP-4	No resource impact	Stormwater Outfall (SWM-542A)	-	-	40° 40' 53.940"N / 80° 6' 55.047"W
544	Wetland JLY-12	Federally jurisdictional	Anticipated	JP	Wetland - Enc (Fill)	Embankment Fill (total fill)	0.26	-	40° 40' 46.982" N / 80° 7' 07.879" W
	E-3	Federally jurisdictional	Anticipated	JP	Stream - Enc	Embankment Fill	686 LF	-	40° 40' 46.545" N / 80° 7' 06.787" W
	E-3	Federally jurisdictional	Anticipated	GP-4	No resource impact	Stormwater Outfall (SWM-544A) & Utility Connection (SAN-544B)	-	-	40° 40' 45.942" N / 80° 7' 03.512" W
	E-4*	Federally non-jurisdictional	None	Chapter 105 Waiver < 100 acre watershed	Stream - Enc	Embankment Fill	69 LF	-	40° 40' 45.763" N / 80° 7' 12.252" W
545	S-9 (p)	Federally jurisdictional	Anticipated	GP-4	50-foot Floodway - Enc	Stormwater Outfall (SWM-545A)	-	-	40° 40' 42.631" N / 80° 7' 04.772" W
	S-9 (p)	Federally jurisdictional	Anticipated	GP-5	-	Utility Connection (SAN-545B)	n/a	-	40° 40' 42.631" N / 80° 7' 04.772" W
	E-3*	Federally jurisdictional	Anticipated	JP	Stream Enc	Embankment Fill	352 LF	-	40° 40' 44.438" N / 80° 7' 03.788" W
	E-4*	Federally non-jurisdictional	Anticipated	Chapter 105 Waiver < 100 acre watershed	Stream Enc	Embankment Fill	135 LF	-	40° 40' 44.735" N / 80° 7' 11.288" W

Parcel ID	Identified Resources- Wetland Stream	Jurisdictional Resource	Impact- None Proposed Anticipated	Permit Type- Joint Permit (JP) General Permit (GP) Waiver	Impact Type- Obstruction (Obs) Encroachment (Enc) Channel Change (CC) Stream Enclosure (S-Encl)	Impact Details - Fill/Wall Bridge/Pipe/Culvert Utility Crossing/Storm Outfall- Trenched/Bored	Permanent Impact acres (Ac) lineal feet (LF)	Temporary Impact acres (Ac) lineal feet (LF)	Latitude and Longitude Proposed Impacts (Lat/Long)
	S-8 (p)	Federally jurisdictional	Proposed	JP	Stream/Floodway - Obs	16'w x 7'10"h x 90' l - Concrete Arch/Embankment Fill & 40' l Rock Apron/Bank Protection	124 LF	~	40° 40' 40.095" N / 80° 6' 24.214" W
	Wetland JLY-11	Federally jurisdictional	Proposed	JP	Wetland/Floodway - Enc	16'w x 7'10"h x 90' l - Concrete Arch/Embankment Fill & 40' l Rock Apron/Bank Protection	0.18	~	40° 40' 40.095" N / 80° 6' 24.214" W
	Wetland JLY-11	Federally jurisdictional	Proposed	JP	Wetland/Floodway - Enc	Embankment Fill (partial)	0.24	~	40° 40' 34.745" N / 80° 6' 20.258" W
	Wetland JLY-16	Federally jurisdictional	Proposed	JP	Wetland - Enc	Embankment Fill (partial)	0.24	~	40° 40' 36.869" N / 80° 6' 16.337" W
	Wetland JLY-11	Federally jurisdictional	Proposed	JP	Wetland - Enc	Embankment Fill (partial)	0.51	~	40° 40' 39.835" N / 80° 6' 19.469" W
	Brush Creek (p)	Federally non-jurisdictional	Proposed	JP	Floodway - Enc	Borrow/Waste Excavation	~	300 LF	40° 40' 38.888" N / 80° 6' 15.928" W
	S-8 (p) / JLY-11	Federally jurisdictional	Proposed	GP-5	Wetland/Stream - Enc (crossing)	Utility Connection (SAN-525C)	~	60 LF	40° 40' 35.801" N / 80° 6' 23.092" W
	Wetland JLY-16	Federally jurisdictional	Proposed	GP-5	Wetland/Floodway - Enc (crossing)	Utility Connection (SAN-525D)	~	50 LF	40° 40' 37.082" N / 80° 6' 14.222" W
	Wetland JLY-11	Federally non-jurisdictional	Proposed	GP-4	Wetland - Enc	Stormwater Outfall (SWM-525A)	~	~	40° 40' 32.242" N / 80° 6' 16.824" W
	FEMA Floodway - Brush Creek (p)	Federally non-jurisdictional	Proposed	GP-4	Stream/Floodway - Enc	Stormwater Outfall (SWM-525B)	10 LF	20 LF	40° 40' 43.763" N / 80° 6' 19.897" W
	FEMA Floodway - Brush Creek (p)	Federally non-jurisdictional	Proposed	GP-5	Floodway - Enc	Utility Connection (SAN-525E)	10 LF	20 LF	40° 40' 40.849" N / 80° 6' 15.966" W
	Brush Creek	Federally jurisdictional	Mitigation	GP-3	Stream/Floodway - Enc	RipRap & Vegetative Bank Stabilization #3	150 LF	20 LF	40° 40' 49.288" N / 80° 6' 24.114" W
	Brush Creek	Federally jurisdictional	Mitigation	GP-4	Stream/Floodway - Enc	RipRap & Vegetative Bank Stabilization #4	400 LF	40 LF	40° 40' 44.127" N / 80° 6' 21.728" W
	E-19	Federally non-jurisdictional	None	Chapter 105 Waiver < 100 acre watershed	Stream - Enc	Embankment Fill	27 LF	~	40° 40' 40.218" N / 80° 6' 25.585" W
	Wetland JLY-4	Federally jurisdictional	None	~	~	~	~	~	40° 40' 56.605" N / 80° 6' 33.821" W
	Wetland JLY-5	Federally jurisdictional	None	~	~	~	~	~	40° 40' 50.330" N / 80° 6' 22.958" W
	Wetland JLY-7	Federally jurisdictional	None	~	~	~	~	~	40° 40' 51.041" N / 80° 6' 25.758" W
	Wetland JLY-8	Federally jurisdictional	None	~	~	~	~	~	40° 40' 48.809" N / 80° 6' 24.808" W
	Wetland JLY-9	Federally jurisdictional	None	~	~	~	~	~	40° 40' 52.255" N / 80° 6' 27.911" W
	Wetland JLY-10	Federally jurisdictional	None	~	~	~	~	~	40° 40' 52.078" N / 80° 6' 22.858" W
	Wetland JLY-13	Federally jurisdictional	None	~	~	~	~	~	40° 40' 56.912" N / 80° 6' 25.574" W
	Wetland JLY-14	Federally jurisdictional	None	~	~	~	~	~	40° 40' 28.764" N / 80° 6' 10.871" W
	Wetland JLY-15	Federally jurisdictional	None	~	~	~	~	~	40° 40' 26.900" N / 80° 6' 8.925" W
	Wetland JLY-17	Federally jurisdictional	None	~	~	~	~	~	40° 40' 27.652" N / 80° 6' 8.011" W
	Wetland JLY-18	Federally jurisdictional	None	~	~	~	~	~	40° 40' 58.364" N / 80° 6' 27.689" W
	S-3 (p)	Federally jurisdictional	None	~	~	~	~	~	40° 40' 53.317" N / 80° 6' 23.744" W
	S-4 (p)	Federally jurisdictional	None	~	~	~	~	~	40° 40' 56.947" N / 80° 6' 27.319" W
	S-5 (i)	Federally jurisdictional	None	~	~	~	~	~	40° 40' 43.205" N / 80° 6' 26.378" W

L.P.

Parcel ID	Identified Resources- Wetland Stream	Jurisdictional Resource	Impact- None Proposed Anticipated	Permit Type- Joint Permit (JP) General Permit (GP) Waiver	Impact Type- Obstruction (Obs) Encroachment (Enc) Channel Change (CC) Stream Enclosure (S-Encl)	Impact Details - Fill/Wall Bridge/Pipe/Culvert Utility Crossing/Storm Outfall- Trenched/Bored	Permanent Impact acres (Ac) lineal feet (LF)	Temporary Impact acres (Ac) lineal feet (LF)	Latitude and Longitude Proposed Impacts (Lat/Long)
L.P.	S-6 (I)	Federally jurisdictional	None	-	-	-	-	-	40° 40' 40.010" N / 80° 6' 24.660" W
	S-7 (p)	Federally jurisdictional	None	-	-	-	-	-	40° 40' 14.025" N / 80° 6' 39.579" W
	E-6	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 54.874" N / 80° 6' 35.642" W
	E-7	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 54.083" N / 80° 6' 35.040" W
	E-8	Federally jurisdictional	None	-	-	-	-	-	40° 40' 53.490" N / 80° 6' 29.010" W
	E-9	Federally jurisdictional	None	-	-	-	-	-	40° 40' 53.286" N / 80° 6' 25.286" W
	E-10	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 51.291" N / 80° 6' 23.771" W
	E-11	Federally jurisdictional	None	-	-	-	-	-	40° 40' 50.159" N / 80° 6' 23.640" W
	E-12	Federally jurisdictional	None	-	-	-	-	-	40° 40' 48.826" N / 80° 6' 24.786" W
	E-13	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 46.580" N / 80° 6' 23.560" W
	E-14	Federally jurisdictional	None	-	-	-	-	-	40° 40' 44.567" N / 80° 6' 23.834" W
	E-15	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 44.445" N / 80° 6' 21.238" W
	E-16	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 15.993" N / 80° 6' 43.364" W
	E-17	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 41.877" N / 80° 6' 15.276" W
	E-18	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 41.186" N / 80° 6' 14.907" W
	E-20	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 38.215" N / 80° 6' 13.289" W
	E-21	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 35.948" N / 80° 6' 23.463" W
	E-22	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 12.921" N / 80° 6' 28.356" W
	E-23	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 27.313" N / 80° 6' 7.495" W
	E-24	Federally non-jurisdictional	None	-	-	-	-	-	40° 40' 29.638" N / 80° 6' 20.306" W

None of the waterways or wetlands within the project area (Allegheny and Butler Counties) are classified as Special Protection Resources (p) = perennial stream; (I) = intermittent stream; all ephemeral streams are named E-#. L.P. = Lower Parcel * - Indicates that resource identified is located across adjacent parcel.

THORN HILL INDUSTRIAL PARK PROJECTS - Mackin Project No. 4688-002
PADEP Permit Nos. E10-459 and E02-1635
USACE Application No. 2008-704

Anticipated Wetland Mitigation Requirement and Proposal - Total Project - Updated May 2011					
Wetland Type	Permanent Impacts by Wetland Type (acres)	Mitigation Requirement (USACE/PADEP Fieldview 2009 Decision)	Required Mitigation based on Type and Mitigation Requirement (acres)	Wetland Credit from PADEP Permit No. E10-332 (acres)*	Mitigation wetland to be constructed (acres)
Palustrine Emergent (PEM)	1.55	1:1	1.55	0.281	1.269
Palustrine Scrub Shrub (PSS)	0.97	2:1	1.94	-0.15	2.09
Palustrine Forested (PFO)	0.13	3:1	0.39	0	0.39
Palustrine Open Water (POW)	0.27	1:1	0.27	0.183	0.087
Totals	2.92		4.15	0.314	3.836

Thorn Hill Road Extension Project - Mackin Project No. 4027-013					
PADEP Permit No. E10-332					
Permit Expired December 2004					
Wetland Type	Permanent Impacts by Wetland Type under PADEP Permit No. E10-332 (acres)	Mitigation Requirement**	Required Mitigation based on Type and Mitigation Requirement (acres)	Mitigation Wetland (constructed in 2004/DEP sign off in 2009) (acres)	*Remaining mitigation acres (to be used as credit toward Permit Nos. E10-459 and E02-1635) (acres)
Palustrine Emergent (PEM)	0.0846	1:1	0.0846	0.366	0.2814
Palustrine Scrub Shrub (PSS)	0.2114	1:1	0.2114	0.061	-0.1504
Palustrine Forested (PFO)	0	1:1	0	0	0
Palustrine Open Water (POW)	0	1:1	0	0.183	0.183
Totals	0.296		0.296	0.61	0.314

** A 1:1 ratio for impacts, regardless of wetland type, was required for Permit No. E10-332.

THORN HILL INDUSTRIAL PARK PROJECTS - Mackin Project No. 4688-002

Anticipated Stream Mitigation Requirement and Proposal - Total Project - Updated May 2011

Stream Type Impacted	Number of Streams Impacted	Permanent Impacts by Type (I.F.)*	Mitigation Requirement	Governing Agency Most Stringent Requirement	Proposed Mitigation	Anticipated Mitigation Credit
Perennial Streams	7	1796 (534)	1:1	USACE/EPA (per mitigation site field view 1/19/09)	Create a minimum of 1,300 lf. of new, 2nd Order, perennial stream channel throughout the mitigation complex. The stream channel construction would occur during the wetland construction and would include two minor stream fords to maintain site access for utilities, a temporary water control structure (weir) at the downstream end and rock channel protection at the discharge to Brush Creek. Place remainder of CJW-4 and entire mitigation site in permanent conservation easement.	Credit for approximately 1,300 lf. of perennial stream channel to provide compensatory mitigation for permanent impacts to 361lf. of perennial stream and 743 lf. of intermittent stream (Meets the USACE 1:1 requirement for permanent perennial and intermittent stream impacts)
Intermittent Streams	3	753	1:1	USACE/EPA (per mitigation site field view 1/19/09)		
Ephemeral Watercourses	10	2,239 total (1,586 under federal jurisdiction)	No mandatory requirements	No mandatory requirements	<ol style="list-style-type: none"> 200 lf. - Streambank stabilization to ldb. of Brush Creek (Parcel 56) 150 lf. - Streambank Stabilization to KDR-2 within Parcel 63 & 69 162 lf. - Restoration and stabilization of headcut eroded channel of KDR-26 150 lf. - Streambank Stabilization to eroded sections of the ldb and rdb of Brush Creek (Lower Parcel) 400 lf. - Streambank Stabilization to eroded sections of ldb and rdb of Brush Creek (northern Lower Parcel) 	<ol style="list-style-type: none"> Credit for compensatory mitigation for 600 lf. of permanent ephemeral watercourse impacts Credit for compensatory mitigation for 450 lf. of permanent ephemeral watercourse impacts. Credit for compensatory mitigation for 162 lf. of permanent ephemeral watercourse impacts Credit for compensatory mitigation for 450 lf. of permanent ephemeral watercourse impacts Credit for compensatory mitigation of 400 lf. of permanent ephemeral watercourse impacts

*The total impacts to perennial streams in the project area is 1,796 LF, which includes impacts resulting from the proposed mitigation. Impacts to perennial streams as a result of direct project activities is 534 LF.