CONSTRUCTION PLANS FOR
FEMA FLOOD DAMAGE PROJECT

PROJECT NO. 173120–T021–115010
FEMA PROJECT NO. 115010 2031F00005, STRMSEWER.FLOOD.5618
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

APPLICABLE STANDARDS:
CITY OF TULSA:
SEE SHEET 2
ODOT: SEE SHEET 2

NOTE:
ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE
WITH CURRENT CITY OF TULSA ENGINEERING SERVICES
DEPARTMENT, STANDARDS AND SPECIFICATIONS.

THIS PROJECT COMPLIES WITH ALL OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ)
REQUIREMENTS.

2000 OKLAHOMA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION
NON-STORMWATER SPECIFICATIONS. CURRENT STANDARDS WILL BE
SEEN AS APPLICABLE.

ENTIRE PROJECT IS WITHIN CORPORATE LIMITS OF CITY
OF TULSA (COT)

UTILITY COORDINATION BOX

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>NOTIFIED</th>
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<tbody>
<tr>
<td>WATER DESIGN</td>
<td>918-536-0580</td>
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<tr>
<td>WASTEWATER DESIGN</td>
<td>918-536-9354</td>
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<tr>
<td>TRANSPORTATION DESIGN</td>
<td>918-536-9638</td>
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<tr>
<td>UTILITY COORDINATION – CHRIS KOVAC</td>
<td>918-536-0649</td>
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<tr>
<td>STORMWATER DESIGN</td>
<td>918-536-9480</td>
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<tr>
<td>DDBG – ADAM FIELDS</td>
<td>918-333-6287</td>
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<tr>
<td>DDBG – JONATHAN WEDDING</td>
<td>918-333-6215</td>
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<tr>
<td>AT&amp;T – AL NICHOLS</td>
<td>918-536-6237</td>
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<tr>
<td>COX COMMUNICATION – BRANDON WACE</td>
<td>918-386-4762</td>
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<tr>
<td>MTTA – ERIC SMITH</td>
<td>918-830-0024</td>
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MESHED & ASSOCIATES, L.L.C.
CA. 1487 EXPIRES 6/30/21
1437 S. BOULDER AVE, STE. 1550
TULSA, OK 74119
(918) 392-5820
(TAX) 918-392-5821

SHEET 1 OF 4 SHEETS
## Soil Stabilization Practices:

- Temporary Seeding
- Permanent Sodding, Sprigging or Seeding
- Vegetative Mulching
- Soil Retention Blanket
- Preservation of Existing Vegetation

Note: Temporary erosion control methods must be used on all disturbed areas where construction activities have ceased for over 14 days. Methods used will be as shown on plans, or as directed by the engineer.

## Structural Practices:

- Stabilized Construction Exit
- Temporary Silt Fence
- Temporary Silt Dikes
- Temporary Fiber Log
- Diversion, Interceptor or Perimeter Dikes
- Diversion, Interceptor or Perimeter Swales
- Rock Filter Dams
- Temporary Slope Drain
- Paved Ditch W/ Ditch Liner Protection
- Temporary Diversion Channels
- Temporary Sediment Basins
- Temporary Sediment Traps
- Temporary Sediment Filters
- Temporary Sediment Removal
- Riff Raff Filter
- Inlet Sediment Filter
- Temporary Brush Sediment Barriers
- Sandbag Berms
- Temporary Stream Crossings

## Offsite Vehicle Tracking:

- Haul Roads Damaged
- Haul Roads Wet
- Final Cleaning Up
- Load Haul Trucks to be Covered with Tarpaulin
- Excess Dirt on Road Removed Daily

## Notes:

- This sheet should be used in conjunction with a drainage map that illustrates the drainage patterns/pathways and receiving waters for this project. This sheet should also be used with the erosion control summaries, pay items, & notes.

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**Storm Water Management Plan**

**Site Description**

Project Limits: Mohawk Park - Bird Creek Washout

Project Description: Bank Stabilization

Suggested Sequence of Erosion Control Activities:

1. Temporary Erosion Control
2. Permanent Erosion Control

## Soil Type:

Silt Loam, Silty Clay Loam

Total Area of the Construction Site: 0.25 Acres

Estimated Area to be Disturbed: 0.35 Acres

Total Impervious Area Pre-Construction: 0.009 Acres

Total Impervious Area Post-Construction: 0.009 Acres

Post-Construction Runoff Coefficient of the Site: 0.5

Latitude and Longitude of Center of Project: N36° 12' 20" W95° 54' 46.6"

Name of Receiving Waters: Bird Creek

Name of Project: Will Discharge To:

Sensible Waters or Watersheds: Yes

IMPROVED WATERS: Yes

Located in a TAML: Yes

LAKE THUNDERBIRD TML: Yes

MSU Entity: Yes

IF Yes, Location: Tulsa County

Note: This sheet should be used in conjunction with a drainage map that illustrates the drainage patterns/pathways and receiving waters for this project. This sheet should also be used with the erosion control summaries, pay items, & notes.

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**Erosion and Sediment Controls**

## Maintenance and Inspection:

All erosion and sediment controls will be maintained in Good Working Order from the beginning of construction until an acceptable vegetative cover is established. Inspection by the contractor and any necessary repairs shall be performed once every seven (7) calendar days and within 24 hours after any storm event greater than 0.5 inch as recorded by a non-freezing rain gauge to be located on site. Potentially erosible areas, drainageways, material storage, structural devices, construction entrances and exits along with erosion and sediment control locations are examples of sites that need to be inspected.

## Waste Materials:

- Proper management and disposal of construction waste material is required by the contractor. Materials include stockpiles, surplus, debris, and all other by-products from the construction process. Practices include disposal, proper materials handling, spill prevention and cleanup measures. Controls and practices shall meet the requirements of all federal, state and local agencies.

## Hazardous Materials:

- Proper management and disposal of hazardous waste materials is required by the contractor. The contractor is responsible for following manufacturer's recommendations, state and federal regulations to ensure correct handling, disposal, spill prevention and cleanup measures. Examples include, but are not limited to, paints, acids, cleaning solvents, chemical additives, concrete curbing compounds and contaminated soils.

## General Notes:

A Storm Water Pollution Prevention Plan SWPPP is required to comply with the Oklahoma Pollution Discharge Elimination System OPDES regulations. This plan is initiated during the design phase, confirmed in the pre-construction meetings and available on the job site along with copies of the notice of intent (NO) form and permit certificate that have been filed with the Oklahoma Department of Environmental Quality (ODEQ). The plan must be kept current with up-to-date amendments during the progression of the project. All contractor off-site operations associated with the project must be documented in the SWPPP. I.E. borrow pits, work roads, disposal sites, and all other construction activities. This plan is intended to control the discharge of water quality by reducing pollutants in storm water discharges. Runoff from construction sites has a potential for pollution due to exposed soils and the presence of hazardous materials used in the construction process. The prevention of soil erosion, containment of hazardous materials and the interception of these pollutants before leaving the construction site are the best practices for controlling storm water pollution.

The following sections of the 2009 ODOT standard specifications should be noted:

- 103.05 Bonding Requirements
- 104.10 Final Cleaning Up
- 104.12 Contractor's Responsibility for Work
- 104.13 Environmental Protection
- 104.16 Storage and Handling of Material
- 107.01 Laws, Rules and Regs to be Observed
- 107.20 Storm Water Management
- 220 Management of Erosion, Sedimentation and Storm Water Pollution Prevention and Control
- 221 Temporary Sediment Control

In addition:

- "Construction General Permit (601) for Storm Water Discharges from Construction Activities Within the State of Oklahoma" ODEQ, Water Quality Division, September 13, 2017.
CONSTRUCTION NOTES:
BIRD CREEK ROAD WASHOUT
EMBANKMENT, 250 CY OF UNCLASSIFIED FILL, 60 FT LONG X 7.5 FT WIDE X 15 FT DEEP, APPLICANT
ASSUMES THAT SURFACE WATER FLOODING WASHED AWAY UNCLASSIFIED FILL.
EROSION CONTROL, 900 LF OF SOIL, 60 FT LONG X 15 FT WIDE, SURFACE WATER FLOODING WASHED AWAY EMBANKMENT SURFACE.
SURFACE, 7 CY OF ASPHALT, 60 FT LONG X 6 FT WIDE X 6 IN DEEP, SURFACE WATER FLOODING DAMAGED ROAD SURFACE.
BASE, 7 CY OF ROCK TYPE A AGGREGATE, 60 FT LONG X 6 FT WIDE X 6 IN DEEP, SURFACE WATER FLOODING DAMAGED SURFACE AND BASE OF THE ROAD.

HAZARD MITIGATION PROPOSAL (HMP) SCOPE OF WORK:

- PLACE 250 CY OF RIP-RAP ON EMBANKMENT.

HMP SCOPE NOTE:

1. THE MITIGATION PROPOSAL ESTIMATES WERE GENERATED USING RS MEANS AND OKLAHOMA DOT WEIGHTED AVERAGES.

2. THIS PROJECT FALLS UNDER THE LARGE PROJECT THRESHOLD.

ROADWAY ITEM DESCRIPTION NOTES UNITS QUANTITY
--- --- --- --- ---
201560 0034 UNCLASSIFIED BIDDEW CY 250.00
201569 0065 SOLID SLAG GROWING CY 100.00
203265 0039 AGGREGATE BASE TYPE A TYP 3 CY 2.00
411668 0005 SUPERPAVE, TYP 53 (IPS 64-22 CS) TYP CY 2.00
411668 0052 SUPERPAVE, TYP 54 (IPS 64-22 CS) TYP CY 2.00
401168 0062 TYP 4-1 PLAIN REPAIR CY 250.00

SITE PHOTO

RIP-RAP Installation
HAZARD MITIGATION NOTE DETAIL

LEGEND:
FEMA SITE AREA

MOHAWK PARK - BIRD CREEK ROAD WASHOUT
PROJECT #13120-1021-115010
DAMAGE #331389
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

FEMA AND ENGINEERING SERVICES CONTENTS PREPARED BY:
Medlock & Associates, LLC.

18" TYPE 1 A PLAIN REPAIR
COMPACTED BIDDEW

EXISTING GROUND/ PROPOSED GRADE

CREEK BLVD.

MOHAWK BLVD.

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