

Memorandum



CITY OF DALLAS

DATE June 15, 2018

TO Honorable Mayor and Members of the City Council

SUBJECT Environmental Impact and Public Acquisition Report for Fill Permits
Agenda Item # 89 June 27, 2018 – Fill Permit 16-05 1000 N. Walton Walker Blvd.
Agenda Item # 90 June 27, 2018 – Fill Permit 17-04 3000 Mountain Creek Pkwy.
Agenda Item # 91 June 27, 2018 – Fill Permit 17-12 2410 Walnut Hill Lane
Agenda Item # 92 June 27, 2018 – Fill Permit 18-01 10901 N. Stemmons Frwy.
Agenda Item # 93 June 27, 2018 – Fill Permit 18-03 2171 Manana Drive

Section 51A-5.105(e)(2)(B) of the Dallas Development Code requires the report to be provided to the City Council on Fill Permit applications, including technical evaluation, environmental impacts, and public acquisition issues. Staff has completed all the requirements associated with the above Fill Permit applications, and has found that these projects meet the engineering criteria as set forth in Section 51-A-5.105(h) of the Dallas Development Code as well as the required review for public acquisition. The departments of Park and Recreation and Sustainable Development and Construction reviewed these applications for public acquisition. Neither department objected to the proposed fill permits.

Additionally, none of these sites impact wetlands or waters of the United States so there are no permitting requirements under Section 404 of the Clean Water Act. The City Council may approve the Fill Permit applications, or may deny these applications, subject to the requirements for denial as identified in Section 51A- 5.105(e)(5) be met.

TWM has processed fill permit applications for five different areas as identified below. The following Fill Permits will be included on the June 27, 2018 City Council Agenda for Public Hearing and Council approval.

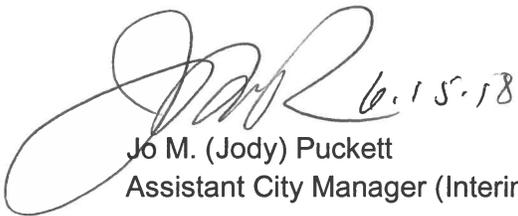
- **Agenda Item 89:** Fill Permit 16-05 (Council District 6), located at 1000 N. Walton Walker Blvd., the property owner has applied for a fill permit to remove the 100-year floodplain from approximately 8.5 acres of the current 23.18 acres within the floodplain of Tributary 8C1 and Mountain Creek. The purpose of the removal is for a commercial site. A neighborhood meeting was held at the Arcadia Recreation Center on January 17, 2018. Attendees included the owner's representative and engineer, four city staff members, and three citizens from the area. There has been no objection to the fill permit.
- **Agenda Item 90:** Fill Permit 17-04 (Council District 3), Dallas Baptist University located at 3000 Mountain Creek Pkwy., has applied for a fill permit to remove the 100-year floodplain from approximately 1.1 acres of the current 35.6 acres within the floodplain of O'Guinn Creek. The purpose of the removal is for a parking lot. neighborhood meeting was held at the Mountain Creek Library on December 20, 2017. Attendees included Dallas Baptist University staff and engineers and three city staff members. There were no citizens from the area present. There has been no objection to the fill permit.

June 15, 2018

Environmental Impact and Public Acquisition Report for Fill Permits

- **Agenda Item 91:** Fill Permit 17-12 (Council District 6), located at 2410 Walnut Hill Lane, the property owner has applied for a fill permit to remove the 100-year floodplain from approximately 1.86 acres of the current 1.96 acres within the floodplain of West Fork of Joe's Creek. The purpose of the removal is for a gas station. A neighborhood meeting was held at the Bachman Recreation Center on May 22, 2018. Attendees included the RaceTrac Petroleum staff and engineers and five city staff members. No citizens from the area attended. There has been no objection to the fill permit.
- **Agenda Item 92:** Fill Permit 18-01 (Council District 6), located at 10901 N. Stemmons Freeway, the property owner has applied for a fill permit to remove the 100-year floodplain from approximately 0.36 acres of the current 1.65 acres within the floodplain of the Elm Fork of the Trinity River. The purpose of the removal is for an industrial site. A neighborhood meeting was held at the Bachman Recreation Center on May 22, 2018. Attendees included the Goodnight Industrial staff and engineer and five city staff members. No citizens from the area attended. There has been no objection to the fill permit.
- **Agenda Item 93:** Fill Permit 18-03 (Council District 6), located at 2171 Manana Drive, the property owner has applied for a fill permit to remove the 100-year floodplain from approximately 0.21 acres of the current 3.19 acres within the floodplain of the Elm Fork of the Trinity River. The purpose of the removal is for an industrial site. A neighborhood meeting was held at the Bachman Recreation Center on May 22, 2018. Attendees included the Valka Industrial staff and engineer and five city staff members. No citizens from the area attended. There has been no objection to the fill permit.

Please let me know if you need additional information.



Jo M. (Jody) Puckett
Assistant City Manager (Interim)

[Attachment]

c: T.C. Broadnax, City Manager
Larry Casto, City Attorney
Craig D. Kinton, City Auditor
Billerae Johnson, City Secretary (Interim)
Daniel F. Solis, Administrative Judge
Kimberly Bizzor Tolbert, Chief of Staff to the City Manager
Majed A. Al-Ghafry, Assistant City Manager

Jon Fortune, Assistant City Manager
Joey Zapata, Assistant City Manager
M. Elizabeth Reich, Chief Financial Officer
Nadia Chandler Hardy, Chief of Community Services
Raquel Favela, Chief of Economic Development & Neighborhood Services
Theresa O'Donnell, Chief of Resilience
Directors and Assistant Directors

1000/1300 Walton Walker

Fill Permit #16-05

Boyd Hydrology, PLLC.

June 27, 2018

Fact Sheet

Scope and Task Information

- Approximately 11.19 acres of floodplain to be removed from two tracts with a combined acreage 55.4, of which approximately 21.06 acres is in floodplain
- A neighborhood meeting was held at Bachman Recreation Center on May 22, 2018. Attendees included Boyd Hydrology staff and engineers, city staff, and no citizens from the area. There has been no objection to the fill permit.

Why it is needed and Why it is Important?

It is required that the Fill Permit meet the 10 Engineering Criteria outlined in the City of Dallas Floodplain Regulations, Article V, Section 51A-5.100.

10 Engineering Criteria

- (1) Except for detention basins, alterations of the FP area may not increase the water surface elevation of the design flood of the creek upstream, downstream, or through the project area. Detention basins may increase the water surface elevation of the design flood provided the increase is within the detention basin's boundaries as approved by the director of public works and transportation.
 There is no rise in the 1-percent-annual-chance flood water surface elevations due to the proposed project.
- (2) Alterations of the FP area may not create or increase an erosive water velocity on or off-site. The mean velocity of stream flow at the downstream end of the site after fill may not exceed the mean velocity of the stream flow under existing conditions.
 No measurable increase in an erosive velocity in the project reach.
- (3) The effects of the existing and proposed public and private improvements will be used in determining water surface elevations and velocities.
 Water surface elevations and velocities were determined using existing and proposed public and private improvements that were known to Boyd Hydrology.
- (4) The FP area may be altered only to the extent permitted by equal conveyance reduction on both sides of the natural channel. The following valley storage requirements apply to all FP areas except those governed by a city council-adopted management plan that contains valley storage regulations, in which event the valley storage regulations contained in the plan apply:

☑ There is no loss in valley storage. Engineer performed valley storage calculations on the site. An equal conveyance model is included that shows an equal reduction in conveyance on the opposite side of the creek and meets the engineering criteria for filling.

(A) Except as otherwise provided in Subparagraph (B):

- (i) No loss of valley storage is permitted along a stream with a drainage area of three square miles or more;
- (ii) valley storage losses along streams with a drainage area between 130 acres and three square miles may not exceed 15 percent, as calculated on a site by site basis; and
- (iii) Valley storage losses along streams with a drainage area of less than 130 acres is not limited.

(B) Hydrologic computations may be performed to evaluate basin-wide valley storage loss impacts on the design flood discharge. If the computations demonstrate that valley storage losses do not result in increases in the design flood discharge at any point downstream of the project, valley storage losses are permitted even though they exceed the limits provided in Subparagraph (A).

- (5) An environmental impact study and a complete stream rehabilitation program must be approved before relocation or alteration of the natural channel or alteration of an environmentally significant area. The net environmental impacts of the proposal may not be negative. The environmental impact study must contain the following item

☑ An EIS was not necessary for this project because there is no alteration of the natural channel and there are no environmentally significant area on the properties. An EIS memo was submitted with the report.

(A) A description of the existing conditions of the site, adjacent properties, upstream and downstream creek sections for approximately 1,000 feet (unless conditions require additional information in the opinion of the director of public works and transportation), and creek and overbank areas. The description of these conditions must include:

(i) the characterization of creek features such as bed quality and material, pool-riffle sequences, natural ground water, springs, seeps, magnitude and continuity of flow, water quality (including biological oxygen demand, dissolved oxygen, and nutrient loadings), bank quality and material, vegetative cover and patterns, bank erosion, topographic relief, disturbances to the natural character of the creek, animal and aquatic life, and the extent and character of wetland areas; and

(ii) soil types and land uses of the site and surrounding area.

(B) A description of the proposed project. This description must include:

(i) the intended ultimate use of the site, or if that is not known, a description of the interim site plan, including construction access;

(ii) reasons why the creek or flood plain alteration is necessary; and

(iii) a site plan showing the flood plain and construction access necessary to perform the work.

(C) A description of at least three possible ways of handling the creek and flood plain, including:

(i) an alternative that assumes the creek and flood plain are not changed;

(ii) the applicant's proposed action; and

(iii) alternatives proposed by the director of public works and transportation.

(D) An identification of the impacts created by each alternative, describing in detail all of the positive and negative impacts upon the existing conditions described in Subparagraph (A), that would be created by each alternative.

(E) A recommended course of action based upon evaluation of the alternatives.

(F) Proposed strategies to mitigate adverse impacts. Examples of strategies include tree wells, temporary construction and permanent erosion and sedimentation controls, vegetative buffers, and replacement planting.

- (6) The toe of any fill slope must parallel the natural channel to prevent an unbalanced stream flow in the altered FP area.

☑ The fill will parallel the natural channel.

- (7) To insure maximum accessibility to the FP area for maintenance and other purposes and to lessen the probability of slope erosion during periods of high water, maximum slopes of the filled area may not exceed four to one for 50 percent of the length of the fill and six to one for the remaining length of the fill. The slope of any excavated area may not exceed four to one unless the excavation is in rock. Vertical walls, terracing, and other slope treatments may be used provided no unbalancing of stream flow results and the slope treatment is approved as a part of a landscaping plan for the property.

☑ The fill area is proposed to have 4:1 slopes and 6:1 to allow for mowing and access to the creek areas as needed. The proposed valley storage excavation west of Tract 2 South will have 4:1 side slopes.

- (8) The elevation of excavated areas in the FP area may not be lower than one-third of the depth of the natural channel, as measured from the adjacent bank, except for excavation of lakes. Excavation must be at least 50 feet from the bank of the natural channel, except as necessary to provide proper drainage. The excavated area may not exceed 25 percent of the total area of the tract's unfilled flood plain.

☑ The 14 acre-foot valley storage excavation located west of Tract 2 South has a bottom elevation of 425 that is 1-foot lower than the adjacent Mountain Creek top of bank elevation of 426 (stream is 17-foot deep). The top of excavation is set back 85-feet from the top of bank of Mountain Creek. The remaining floodplain is to be 9.87 acres and the Fill Permit Application for 1000/ 1300 Walton Walker Blvd Properties vii excavated swale is designed to be 2.46 surface acres that matches the 25% of the area's unfilled floodplain.

(9) A landscape and erosion control plan must be submitted and approved. Landscaping must incorporate natural materials (such as earth, stone, and wood) on cut and filled slopes when possible. The definitions of Section [51A-10.101](#) of this chapter apply to this subsection. Except as otherwise provided, the preservation and mitigation requirements contained in the tree preservation regulations, Division 51A-10.130 of the Dallas Development Code, apply. Each landscape and erosion control plan must comply with the following criteria:

(A) The size, type, and location of all trees within the existing flood plain that are six-inch caliper and larger must be shown. The plans must indicate which of the trees are to be preserved and which will be lost due to development activities in the flood plain.

(B) Trees must be protected if they are more than six-inches in caliper and located in sloped areas of flood plain fill with a depth of four feet or less. If trees are protected by tree wells, the wells must be at or beyond the drip line of the tree and must provide positive drainage. A well may not exceed four feet in depth unless designed and certified by a registered landscape architect. Tree wells are required if either of the following conditions occur at the base of a tree to be protected:

- (i) a fill of greater than six inches; or
- (ii) a cut greater than six inches.

(C) The size, type, and location of all proposed replacement trees to mitigate the loss of existing trees must be shown. The tree types must be selected in accordance with the provisions of Section [51A-10.134](#) and must be approved by the city arborist as suitable for use under local climate and soil conditions.

(D) Where a swale is proposed, tree replacement is required for the loss of existing trees with a six-inch caliper or greater located within the proposed swale. The applicant must indicate replacement of either 35 percent of the number of trees displaced, or the minimum number of trees necessary to provide a spacing equivalent to 50 feet on center, whichever is less. At least 50 percent of the replacement trees must have a caliper of at least six inches. The remainder of the trees must have a caliper of at least three inches.

(E) The specific plant materials proposed to protect fill and excavated slopes must be indicated. Plant materials must be suitable for use under local climate and soil conditions. In general, hydroseeding or sodding Bermuda grass is acceptable during the summer months (May 1st to August 30th). Winter rye or fescue grass may be planted during times other than the summer months as a temporary measure until such time as the permanent planting can be accomplished.

(F) The proposed methods of erosion and sedimentation control, such as hay bales and sedimentation basins, to be used during construction must be shown in detail.

(G) The fill case applicant, current owners, and subsequent owners must maintain and assure the survival of all planted material until the property is developed and a permanent maintenance plan of record is established. Maintenance responsibility must be reflected in the submitted plans or supporting documents.

☑ Due to the scope of this project, an erosion control plan SWPPP is currently active on site that includes monitored erosion control and ensures that there is vegetation coverage on disturbed areas. Due to recent EPA requirements of elevating the cap of the closed municipal landfill, there are no tree loss that needs to be mitigated.

(10) Any alteration of the FP area necessary to obtain a removal of an FP prefix may not cause any additional expense in any current or projected public improvements.

☑ This project will not cause any additional expenses to any proposed public improvements.

3000 Mountain Creek Parkway (DBU)

Fill Permit #17-04

Walter P. Moore

June 27, 2018

Fact Sheet

Scope and Task Information

- Approximately 0.7 acres of floodplain to be removed from a 187.5 acre tract, of which approximately 35.6 acres is in floodplain
- A neighborhood meeting was held at Bachman Recreation Center on May 22, 2018. Attendees included Walter P. Moore staff, city staff, and no citizens from the area. There has been no objection to the fill permit.

Why it is needed and Why it is Important?

It is required that the Fill Permit meet the 10 Engineering Criteria outlined in the City of Dallas Floodplain Regulations, Article V, Section 51A-5.100.

10 Engineering Criteria

- (1) Except for detention basins, alterations of the FP area may not increase the water surface elevation of the design flood of the creek upstream, downstream, or through the project area. Detention basins may increase the water surface elevation of the design flood provided the increase is within the detention basin's boundaries as approved by the director of public works and transportation.

☑ There is no rise in the 1-percent-annual-chance flood water surface elevations due to the proposed project

- (2) Alterations of the FP area may not create or increase an erosive water velocity on or off-site. The mean velocity of stream flow at the downstream end of the site after fill may not exceed the mean velocity of the stream flow under existing conditions.

☑ The existing channel of O'Guinn Creek is lined with rock riprap through the project area and already experiences high channel. The proposed project will widen the channel in the vicinity of the proposed bridge, while also utilizing a hard channel bottom and edge to provide a stable channel that prevents erosion.

- (3) The effects of the existing and proposed public and private improvements will be used in determining water surface elevations and velocities.

☑ DBU has ownership of both sides of O'Guinn Creek throughout the project area, therefore no other existing or proposed private projects are committed nor would be impacted by this project.

- (4) The FP area may be altered only to the extent permitted by equal conveyance reduction on both sides of the natural channel. The following valley storage requirements apply to all FP areas except those governed by a city council-adopted management plan that contains valley storage regulations, in which event the valley storage regulations contained in the plan apply:

☑ DBU has ownership of both sides of O'Guinn Creek throughout the project area, therefore no other adjacent property owners are impacted by this project and the equal conveyance principle is not applicable. There is no loss in valley storage. Engineer performed valley storage calculations on the site.

(A) Except as otherwise provided in Subparagraph (B):

- (i) No loss of valley storage is permitted along a stream with a drainage area of three square miles or more;
- (ii) valley storage losses along streams with a drainage area between 130 acres and three square miles may not exceed 15 percent, as calculated on a site by site basis; and
- (iii) Valley storage losses along streams with a drainage area of less than 130 acres is not limited.

(B) Hydrologic computations may be performed to evaluate basin-wide valley storage loss impacts on the design flood discharge. If the computations demonstrate that valley storage losses do not result in increases in the design flood discharge at any point downstream of the project, valley storage losses are permitted even though they exceed the limits provided in Subparagraph (A).

- (5) An environmental impact study and a complete stream rehabilitation program must be approved before relocation or alteration of the natural channel or alteration of an environmentally significant area. The net environmental impacts of the proposal may not be negative. The environmental impact study must contain the following item

☑ Since the proposed activities result in the loss of less than 0.10 acre, there are no wetlands being impacted, and the impacts are the minimum necessary to protect the linear transportation project, the proposed project will be authorized under NWP 14 without the need for a PCN, and therefore would not constitute an adverse impact, reduction in aquatic habitat, or reduction in environmental benefits.

(A) A description of the existing conditions of the site, adjacent properties, upstream and downstream creek sections for approximately 1,000 feet (unless conditions require additional information in the opinion of the director of public works and transportation), and creek and overbank areas. The description of these conditions must include:

- (i) the characterization of creek features such as bed quality and material, pool-riffle sequences, natural ground water, springs, seeps, magnitude and continuity of flow, water quality (including biological oxygen demand, dissolved oxygen, and nutrient loadings), bank quality and material, vegetative cover and patterns, bank erosion, topographic relief, disturbances to the natural character of the creek, animal and aquatic life, and the extent and character of wetland areas; and

- (ii) soil types and land uses of the site and surrounding area.

(B) A description of the proposed project. This description must include:

- (i) the intended ultimate use of the site, or if that is not known, a description of the interim site plan, including construction access;

- (ii) reasons why the creek or flood plain alteration is necessary; and

- (iii) a site plan showing the flood plain and construction access necessary to perform the work.

(C) A description of at least three possible ways of handling the creek and flood plain, including:

- (i) an alternative that assumes the creek and flood plain are not changed;
- (ii) the applicant's proposed action; and
- (iii) alternatives proposed by the director of public works and transportation.

(D) An identification of the impacts created by each alternative, describing in detail all of the positive and negative impacts upon the existing conditions described in Subparagraph (A), that would be created by each alternative.

(E) A recommended course of action based upon evaluation of the alternatives.

(F) Proposed strategies to mitigate adverse impacts. Examples of strategies include tree wells, temporary construction and permanent erosion and sedimentation controls, vegetative buffers, and replacement planting.

- (6) The toe of any fill slope must parallel the natural channel to prevent an unbalanced stream flow in the altered FP area.

☑ The proposed channel improvements follow the existing channel and do not adversely impact the flow characteristics of flood waters through the project area.

- (7) To insure maximum accessibility to the FP area for maintenance and other purposes and to lessen the probability of slope erosion during periods of high water, maximum slopes of the filled area may not exceed four to one for 50 percent of the length of the fill and six to one for the remaining length of the fill. The slope of any excavated area may not exceed four to one unless the excavation is in rock. Vertical walls, terracing, and other slope treatments may be used provided no unbalancing of stream flow results and the slope treatment is approved as a part of a landscaping plan for the property.

☑ Grading and fill slopes have been designed to maintain stability, prevent erosion, and allow ease of maintenance.

- (8) The elevation of excavated areas in the FP area may not be lower than one-third of the depth of the natural channel, as measured from the adjacent bank, except for excavation of lakes. Excavation must be at least 50 feet from the bank of the natural channel, except as necessary to provide proper drainage. The excavated area may not exceed 25 percent of the total area of the tract's unfilled flood plain.

☑ No excavation is proposed in the floodplain.

(9) A landscape and erosion control plan must be submitted and approved. Landscaping must incorporate natural materials (such as earth, stone, and wood) on cut and filled slopes when possible. The definitions of Section [51A-10.101](#) of this chapter apply to this subsection. Except as otherwise provided, the preservation and mitigation requirements contained in the tree preservation regulations, Division 51A-10.130 of the Dallas Development Code, apply. Each landscape and erosion control plan must comply with the following criteria:

(A) The size, type, and location of all trees within the existing flood plain that are six-inch caliper and larger must be shown. The plans must indicate which of the trees are to be preserved and which will be lost due to development activities in the flood plain.

(B) Trees must be protected if they are more than six-inches in caliper and located in sloped areas of flood plain fill with a depth of four feet or less. If trees are protected by tree wells, the wells must be at or beyond the drip line of the tree and must provide positive drainage. A well may not exceed four feet in depth unless designed and certified by a registered landscape architect. Tree wells are required if either of the following conditions occur at the base of a tree to be protected:

- (i) a fill of greater than six inches; or
- (ii) a cut greater than six inches.

(C) The size, type, and location of all proposed replacement trees to mitigate the loss of existing trees must be shown. The tree types must be selected in accordance with the provisions of Section [51A-10.134](#) and must be approved by the city arborist as suitable for use under local climate and soil conditions.

(D) Where a swale is proposed, tree replacement is required for the loss of existing trees with a six-inch caliper or greater located within the proposed swale. The applicant must indicate replacement of either 35 percent of the number of trees displaced, or the minimum number of trees necessary to provide a spacing equivalent to 50 feet on center, whichever is less. At least 50 percent of the replacement trees must have a caliper of at least six inches. The remainder of the trees must have a caliper of at least three inches.

(E) The specific plant materials proposed to protect fill and excavated slopes must be indicated. Plant materials must be suitable for use under local climate and soil conditions. In general, hydroseeding or sodding Bermuda grass is acceptable during the summer months (May 1st to August 30th). Winter rye or fescue grass may be planted during times other than the summer months as a temporary measure until such time as the permanent planting can be accomplished.

(F) The proposed methods of erosion and sedimentation control, such as hay bales and sedimentation basins, to be used during construction must be shown in detail.

(G) The fill case applicant, current owners, and subsequent owners must maintain and assure the survival of all planted material until the property is developed and a permanent maintenance plan of record is established. Maintenance responsibility must be reflected in the submitted plans or supporting documents.

☑ A landscape and erosion control plan have been submitted with the report. Communication with the City Arborist regarding tree mitigation is also included with this report.

(10) Any alteration of the FP area necessary to obtain a removal of an FP prefix may not cause any additional expense in any current or projected public improvements.

☑ This project will not cause any additional expenses to any proposed public improvements.

2410 Walnut Hill (RaceTrac Market #1235) Fill Permit #17-12

**Halff Associates, Inc.
June 27, 2018**

Fact Sheet

Scope and Task Information

- Approximately 1.86 acres of floodplain to be removed from a 1.89 acre tract, of which approximately 1.89 acres is in floodplain
- A neighborhood meeting was held at Bachman Recreation Center on May 22, 2018. Attendees included Halff Associates, Inc. staff, city staff, and no citizens from the area. There has been no objection to the fill permit.

Why it is needed and Why it is Important?

It is required that the Fill Permit meet the 10 Engineering Criteria outlined in the City of Dallas Floodplain Regulations, Article V, Section 51A-5.100.

10 Engineering Criteria

- (1) Except for detention basins, alterations of the FP area may not increase the water surface elevation of the design flood of the creek upstream, downstream, or through the project area. Detention basins may increase the water surface elevation of the design flood provided the increase is within the detention basin's boundaries as approved by the director of public works and transportation.

☑ The development does not increase the 1-percent-annual-chance flood water surface elevations.
- (2) Alterations of the FP area may not create or increase an erosive water velocity on or off-site. The mean velocity of stream flow at the downstream end of the site after fill may not exceed the mean velocity of the stream flow under existing conditions.

☑ The existing channel of West Fork of Joe's Creek is through the project area and already experiences high flows. The proposed development is located within the ineffective area, the overflow area, of the creek.
- (3) The effects of the existing and proposed public and private improvements will be used in determining water surface elevations and velocities.

☑ Existing and proposed public/private improvements known to the consultant were used. There are no City capital projects in the area.
- (4) The FP area may be altered only to the extent permitted by equal conveyance reduction on both sides of the natural channel. The following valley storage requirements apply to all FP areas except those governed by a city council-adopted management plan that contains valley storage regulations, in which event the valley storage regulations contained in the plan apply:

☑ Both sides of the Wet Fork of Joe's Cree are fully developed and the drainage basin for the creek is greater than three square miles. Equal conveyance reduction is not applicable in this case.

(A) Except as otherwise provided in Subparagraph (B):

(i) No loss of valley storage is permitted along a stream with a drainage area of three square miles or more;

(ii) valley storage losses along streams with a drainage area between 130 acres and three square miles may not exceed 15 percent, as calculated on a site by site basis; and

(iii) Valley storage losses along streams with a drainage area of less than 130 acres is not limited.

(B) Hydrologic computations may be performed to evaluate basin-wide valley storage loss impacts on the design flood discharge. If the computations demonstrate that valley storage losses do not result in increases in the design flood discharge at any point downstream of the project, valley storage losses are permitted even though they exceed the limits provided in Subparagraph (A).

☑ Hydrologic computations were provided that demonstrated that there was no loss in valley storage.

(5) An environmental impact study and a complete stream rehabilitation program must be approved before relocation or alteration of the natural channel or alteration of an environmentally significant area. The net environmental impacts of the proposal may not be negative. The environmental impact study must contain the following item

☑ Not applicable. The proposed development is located within a fully developed area. The existing channel is fully concrete lined and is not being altered or realigned.

(A) A description of the existing conditions of the site, adjacent properties, upstream and downstream creek sections for approximately 1,000 feet (unless conditions require additional information in the opinion of the director of public works and transportation), and creek and overbank areas. The description of these conditions must include:

(i) the characterization of creek features such as bed quality and material, pool-riffle sequences, natural ground water, springs, seeps, magnitude and continuity of flow, water quality (including biological oxygen demand, dissolved oxygen, and nutrient loadings), bank quality and material, vegetative cover and patterns, bank erosion, topographic relief, disturbances to the natural character of the creek, animal and aquatic life, and the extent and character of wetland areas; and

(ii) soil types and land uses of the site and surrounding area.

(B) A description of the proposed project. This description must include:

(i) the intended ultimate use of the site, or if that is not known, a description of the interim site plan, including construction access;

(ii) reasons why the creek or flood plain alteration is necessary; and

(iii) a site plan showing the flood plain and construction access necessary to perform the work.

(C) A description of at least three possible ways of handling the creek and flood plain, including:

(i) an alternative that assumes the creek and flood plain are not changed;

(ii) the applicant's proposed action; and

(iii) alternatives proposed by the director of public works and transportation.

(D) An identification of the impacts created by each alternative, describing in detail all of the positive and negative impacts upon the existing conditions described in Subparagraph (A), that would be created by each alternative.

(E) A recommended course of action based upon evaluation of the alternatives.

(F) Proposed strategies to mitigate adverse impacts. Examples of strategies include tree wells, temporary construction and permanent erosion and sedimentation controls, vegetative buffers, and replacement planting.

(6) The toe of any fill slope must parallel the natural channel to prevent an unbalanced stream flow in the altered FP area.

☑ The proposed development does not adversely impact the flow characteristics of flood waters through the project area.

(7) To insure maximum accessibility to the FP area for maintenance and other purposes and to lessen the probability of slope erosion during periods of high water, maximum slopes of the filled area may not exceed four to one for 50 percent of the length of the fill and six to one for the remaining length of the fill. The slope of any excavated area may not exceed four to one unless the excavation is in rock. Vertical walls, terracing, and other slope treatments may be used provided no unbalancing of stream flow results and the slope treatment is approved as a part of a landscaping plan for the property.

☑ The proposed development does not exceed the slope restrictions and does not produce unbalanced flow conditions.

(8) The elevation of excavated areas in the FP area may not be lower than one-third of the depth of the natural channel, as measured from the adjacent bank, except for excavation of lakes. Excavation must be at least 50 feet from the bank of the natural channel, except as necessary to provide proper drainage. The excavated area may not exceed 25 percent of the total area of the tract's unfilled flood plain.

☑ The proposed excavation is located more than 50' away from the top bank of the West Fork of Joe's Creek top of bank. The excavated area depth is less than 1/3rd the depth of the creek.

(9) A landscape and erosion control plan must be submitted and approved. Landscaping must incorporate natural materials (such as earth, stone, and wood) on cut and filled slopes when possible. The definitions of Section [51A-10.101](#) of this chapter apply to this subsection. Except as otherwise provided, the preservation and mitigation requirements contained in the tree preservation regulations, Division 51A-10.130 of the Dallas Development Code, apply. Each landscape and erosion control plan must comply with the following criteria:

(A) The size, type, and location of all trees within the existing flood plain that are six-inch caliper and larger must be shown. The plans must indicate which of the trees are to be preserved and which will be lost due to development activities in the flood plain.

(B) Trees must be protected if they are more than six-inches in caliper and located in sloped areas of flood plain fill with a depth of four feet or less. If trees are protected by tree wells, the wells must be at or beyond the drip line of the tree and must provide positive drainage. A well may not exceed four feet in depth unless designed and certified by a registered landscape architect. Tree wells are required if either of the following conditions occur at the base of a tree to be protected:

- (i) a fill of greater than six inches; or
- (ii) a cut greater than six inches.

(C) The size, type, and location of all proposed replacement trees to mitigate the loss of existing trees must be shown. The tree types must be selected in accordance with the provisions of Section [51A-10.134](#) and must be approved by the city arborist as suitable for use under local climate and soil conditions.

(D) Where a swale is proposed, tree replacement is required for the loss of existing trees with a six-inch caliper or greater located within the proposed swale. The applicant must indicate replacement of either 35 percent of the number of trees displaced, or the minimum number of trees necessary to provide a spacing equivalent to 50 feet on center, whichever is less. At least 50 percent of the replacement trees must have a caliper of at least six inches. The remainder of the trees must have a caliper of at least three inches.

(E) The specific plant materials proposed to protect fill and excavated slopes must be indicated. Plant materials must be suitable for use under local climate and soil conditions. In general, hydroseeding or sodding Bermuda grass is acceptable during the summer months (May 1st to August 30th). Winter rye or fescue grass may be planted during times other than the summer months as a temporary measure until such time as the permanent planting can be accomplished.

(F) The proposed methods of erosion and sedimentation control, such as hay bales and sedimentation basins, to be used during construction must be shown in detail.

(G) The fill case applicant, current owners, and subsequent owners must maintain and assure the survival of all planted material until the property is developed and a permanent maintenance plan of record is established. Maintenance responsibility must be reflected in the submitted plans or supporting documents.

☑ The development will not alter or remove any vegetation within the tract. A landscape plan was not included with this report. An erosion control plan has been submitted with the report.

(10) Any alteration of the FP area necessary to obtain a removal of an FP prefix may not cause any additional expense in any current or projected public improvements.

☑ This project will not cause any additional expenses to any proposed public improvements.

10901 Stemmons Freeway (Core Logistics)

Fill Permit #18-01

Goodwin and Marshall, Inc.

June 27, 2018

Fact Sheet

Scope and Task Information

- Approximately 0.71 acres of floodplain to be removed from 19.97 acres of tract, of which approximately 1.85 acres is in floodplain
- A neighborhood meeting was held at Bachman Recreation Center on May 22, 2018. Attendees included Goodnight Industrial staff, five city staff. No citizens from the area attended. There has been no objection to the fill permit.

Why it is needed and Why it is Important?

It is required that the Fill Permit meet the 10 Engineering Criteria outlined in the City of Dallas Floodplain Regulations, Article V, Section 51A-5.100.

10 Engineering Criteria

- (1) Except for detention basins, alterations of the FP area may not increase the water surface elevation of the design flood of the creek upstream, downstream, or through the project area. Detention basins may increase the water surface elevation of the design flood provided the increase is within the detention basin's boundaries as approved by the director of public works and transportation.
☑ There is no rise in the 1-percent-annual-chance flood water surface elevations due to the proposed project.
- (2) Alterations of the FP area may not create or increase an erosive water velocity on or off-site. The mean velocity of stream flow at the downstream end of the site after fill may not exceed the mean velocity of the stream flow under existing conditions.
☑ There is no stream flowing through the property and therefore, erosive water velocities are not applicable.
- (3) The effects of the existing and proposed public and private improvements will be used in determining water surface elevations and velocities.
☑ Water surface elevations and velocities were determined using existing and proposed public and private improvements that were known to Goodwin and Marshall. There were no impacts to water surface elevations or velocities.
- (4) The FP area may be altered only to the extent permitted by equal conveyance reduction on both sides of the natural channel. The following valley storage requirements apply to all FP areas except those governed by a city council-adopted management plan that contains valley storage regulations, in which event the valley storage regulations contained in the plan apply:

☑ There is no loss in valley storage. Engineer performed valley storage calculations on the site. Equal conveyance is not applicable to this project.

(A) Except as otherwise provided in Subparagraph (B):

- (i) No loss of valley storage is permitted along a stream with a drainage area of three square miles or more;
- (ii) valley storage losses along streams with a drainage area between 130 acres and three square miles may not exceed 15 percent, as calculated on a site by site basis; and
- (iii) Valley storage losses along streams with a drainage area of less than 130 acres is not limited.

(B) Hydrologic computations may be performed to evaluate basin-wide valley storage loss impacts on the design flood discharge. If the computations demonstrate that valley storage losses do not result in increases in the design flood discharge at any point downstream of the project, valley storage losses are permitted even though they exceed the limits provided in Subparagraph (A).

- (5)** An environmental impact study and a complete stream rehabilitation program must be approved before relocation or alteration of the natural channel or alteration of an environmentally significant area. The net environmental impacts of the proposal may not be negative. The environmental impact study must contain the following item

☑ An EIS has been performed on the project site and the results show no negative impacts and no jurisdictional waters within the property.

(A) A description of the existing conditions of the site, adjacent properties, upstream and downstream creek sections for approximately 1,000 feet (unless conditions require additional information in the opinion of the director of public works and transportation), and creek and overbank areas. The description of these conditions must include:

(i) the characterization of creek features such as bed quality and material, pool-riffle sequences, natural ground water, springs, seeps, magnitude and continuity of flow, water quality (including biological oxygen demand, dissolved oxygen, and nutrient loadings), bank quality and material, vegetative cover and patterns, bank erosion, topographic relief, disturbances to the natural character of the creek, animal and aquatic life, and the extent and character of wetland areas; and

(ii) soil types and land uses of the site and surrounding area.

(B) A description of the proposed project. This description must include:

(i) the intended ultimate use of the site, or if that is not known, a description of the interim site plan, including construction access;

(ii) reasons why the creek or flood plain alteration is necessary; and

(iii) a site plan showing the flood plain and construction access necessary to perform the work.

(C) A description of at least three possible ways of handling the creek and flood plain, including:

(i) an alternative that assumes the creek and flood plain are not changed;

(ii) the applicant's proposed action; and

(iii) alternatives proposed by the director of public works and transportation.

(D) An identification of the impacts created by each alternative, describing in detail all of the positive and negative impacts upon the existing conditions described in Subparagraph (A), that would be created by each alternative.

(E) A recommended course of action based upon evaluation of the alternatives.

(F) Proposed strategies to mitigate adverse impacts. Examples of strategies include tree wells, temporary construction and permanent erosion and sedimentation controls, vegetative buffers, and replacement planting.

- (6) The toe of any fill slope must parallel the natural channel to prevent an unbalanced stream flow in the altered FP area.

☑ The proposed project is not directly adjacent to the natural channel of Elm Fork and therefore the fills are not parallel to the channel.

- (7) To insure maximum accessibility to the FP area for maintenance and other purposes and to lessen the probability of slope erosion during periods of high water, maximum slopes of the filled area may not exceed four to one for 50 percent of the length of the fill and six to one for the remaining length of the fill. The slope of any excavated area may not exceed four to one unless the excavation is in rock. Vertical walls, terracing, and other slope treatments may be used provided no unbalancing of stream flow results and the slope treatment is approved as a part of a landscaping plan for the property.

☑ Fill slopes are less than 4:1 or have vertical retaining walls to compensate.

- (8) The elevation of excavated areas in the FP area may not be lower than one-third of the depth of the natural channel, as measured from the adjacent bank, except for excavation of lakes. Excavation must be at least 50 feet from the bank of the natural channel, except as necessary to provide proper drainage. The excavated area may not exceed 25 percent of the total area of the tract's unfilled flood plain.

☑ The natural channel of Elm Fork is over 30 feet deep. The proposed excavation does not exceed one-third of that depth.

(9) A landscape and erosion control plan must be submitted and approved. Landscaping must incorporate natural materials (such as earth, stone, and wood) on cut and filled slopes when possible. The definitions of Section [51A-10.101](#) of this chapter apply to this subsection. Except as otherwise provided, the preservation and mitigation requirements contained in the tree preservation regulations, Division 51A-10.130 of the Dallas Development Code, apply. Each landscape and erosion control plan must comply with the following criteria:

(A) The size, type, and location of all trees within the existing flood plain that are six-inch caliper and larger must be shown. The plans must indicate which of the trees are to be preserved and which will be lost due to development activities in the flood plain.

(B) Trees must be protected if they are more than six-inches in caliper and located in sloped areas of flood plain fill with a depth of four feet or less. If trees are protected by tree wells, the wells must be at or beyond the drip line of the tree and must provide positive drainage. A well may not exceed four feet in depth unless designed and certified by a registered landscape architect. Tree wells are required if either of the following conditions occur at the base of a tree to be protected:

- (i) a fill of greater than six inches; or
- (ii) a cut greater than six inches.

(C) The size, type, and location of all proposed replacement trees to mitigate the loss of existing trees must be shown. The tree types must be selected in accordance with the provisions of Section [51A-10.134](#) and must be approved by the city arborist as suitable for use under local climate and soil conditions.

(D) Where a swale is proposed, tree replacement is required for the loss of existing trees with a six-inch caliper or greater located within the proposed swale. The applicant must indicate replacement of either 35 percent of the number of trees displaced, or the minimum number of trees necessary to provide a spacing equivalent to 50 feet on center, whichever is less. At least 50 percent of the replacement trees must have a caliper of at least six inches. The remainder of the trees must have a caliper of at least three inches.

(E) The specific plant materials proposed to protect fill and excavated slopes must be indicated. Plant materials must be suitable for use under local climate and soil conditions. In general, hydroseeding or sodding Bermuda grass is acceptable during the summer months (May 1st to August 30th). Winter rye or fescue grass may be planted during times other than the summer months as a temporary measure until such time as the permanent planting can be accomplished.

(F) The proposed methods of erosion and sedimentation control, such as hay bales and sedimentation basins, to be used during construction must be shown in detail.

(G) The fill case applicant, current owners, and subsequent owners must maintain and assure the survival of all planted material until the property is developed and a permanent maintenance plan of record is established. Maintenance responsibility must be reflected in the submitted plans or supporting documents.

☑ An erosion control plan and landscape plan have been submitted as part of the construction drawings.

(10) Any alteration of the FP area necessary to obtain a removal of an FP prefix may not cause any additional expense in any current or projected public improvements.

☑ This project will not cause any additional expenses to any proposed public improvements.

2171 Manana (Valk)

Fill Permit #18-03

Goodwin and Marshall, Inc.

June 27, 2018

Fact Sheet

Scope and Task Information

- Approximately 0.21 acres of floodplain to be removed from 15.86 acres of tract, of which approximately 3.19 acres is in floodplain
- A neighborhood meeting was held at Bachman Recreation Center on May 22, 2018. Attendees included Valk Industrial staff, five city staff. No citizens from the area attended. There has been no objection to the fill permit.

Why it is needed and Why it is Important?

It is required that the Fill Permit meet the 10 Engineering Criteria outlined in the City of Dallas Floodplain Regulations, Article V, Section 51A-5.100.

10 Engineering Criteria

- (1) Except for detention basins, alterations of the FP area may not increase the water surface elevation of the design flood of the creek upstream, downstream, or through the project area. Detention basins may increase the water surface elevation of the design flood provided the increase is within the detention basin's boundaries as approved by the director of public works and transportation.
☑ There is no rise in the 1-percent-annual-chance flood water surface elevations due to the proposed project.
- (2) Alterations of the FP area may not create or increase an erosive water velocity on or off-site. The mean velocity of stream flow at the downstream end of the site after fill may not exceed the mean velocity of the stream flow under existing conditions.
☑ The proposed project will not create or increase erosive water velocities off-site.
- (3) The effects of the existing and proposed public and private improvements will be used in determining water surface elevations and velocities.
☑ Water surface elevations and velocities were determined using existing and proposed public and private improvements that were known to Goodwin and Marshall. There were no impacts to water surface elevations or velocities.
- (4) The FP area may be altered only to the extent permitted by equal conveyance reduction on both sides of the natural channel. The following valley storage requirements apply to all FP areas except those governed by a city council-adopted management plan that contains valley storage regulations, in which event the valley storage regulations contained in the plan apply:

☑ There is no loss in valley storage. Engineer performed valley storage calculations on the site. Equal conveyance is not applicable to this project.

(A) Except as otherwise provided in Subparagraph (B):

- (i) No loss of valley storage is permitted along a stream with a drainage area of three square miles or more;
- (ii) valley storage losses along streams with a drainage area between 130 acres and three square miles may not exceed 15 percent, as calculated on a site by site basis; and
- (iii) Valley storage losses along streams with a drainage area of less than 130 acres is not limited.

(B) Hydrologic computations may be performed to evaluate basin-wide valley storage loss impacts on the design flood discharge. If the computations demonstrate that valley storage losses do not result in increases in the design flood discharge at any point downstream of the project, valley storage losses are permitted even though they exceed the limits provided in Subparagraph (A).

- (5)** An environmental impact study and a complete stream rehabilitation program must be approved before relocation or alteration of the natural channel or alteration of an environmentally significant area. The net environmental impacts of the proposal may not be negative. The environmental impact study must contain the following item

☑ An EIS has been performed on the project site and the results show no negative impacts to the jurisdictional waters within the property.

(A) A description of the existing conditions of the site, adjacent properties, upstream and downstream creek sections for approximately 1,000 feet (unless conditions require additional information in the opinion of the director of public works and transportation), and creek and overbank areas. The description of these conditions must include:

(i) the characterization of creek features such as bed quality and material, pool-riffle sequences, natural ground water, springs, seeps, magnitude and continuity of flow, water quality (including biological oxygen demand, dissolved oxygen, and nutrient loadings), bank quality and material, vegetative cover and patterns, bank erosion, topographic relief, disturbances to the natural character of the creek, animal and aquatic life, and the extent and character of wetland areas; and

(ii) soil types and land uses of the site and surrounding area.

(B) A description of the proposed project. This description must include:

(i) the intended ultimate use of the site, or if that is not known, a description of the interim site plan, including construction access;

(ii) reasons why the creek or flood plain alteration is necessary; and

(iii) a site plan showing the flood plain and construction access necessary to perform the work.

(C) A description of at least three possible ways of handling the creek and flood plain, including:

(i) an alternative that assumes the creek and flood plain are not changed;

(ii) the applicant's proposed action; and

(iii) alternatives proposed by the director of public works and transportation.

(D) An identification of the impacts created by each alternative, describing in detail all of the positive and negative impacts upon the existing conditions described in Subparagraph (A), that would be created by each alternative.

(E) A recommended course of action based upon evaluation of the alternatives.

(F) Proposed strategies to mitigate adverse impacts. Examples of strategies include tree wells, temporary construction and permanent erosion and sedimentation controls, vegetative buffers, and replacement planting.

- (6) The toe of any fill slope must parallel the natural channel to prevent an unbalanced stream flow in the altered FP area.

☑ The proposed project is not directly adjacent to the natural channel of Elm Fork and therefore the fills are not parallel to the channel.

- (7) To insure maximum accessibility to the FP area for maintenance and other purposes and to lessen the probability of slope erosion during periods of high water, maximum slopes of the filled area may not exceed four to one for 50 percent of the length of the fill and six to one for the remaining length of the fill. The slope of any excavated area may not exceed four to one unless the excavation is in rock. Vertical walls, terracing, and other slope treatments may be used provided no unbalancing of stream flow results and the slope treatment is approved as a part of a landscaping plan for the property.

☑ Fill slopes are less than 4:1 or have vertical retaining walls to compensate.

- (8) The elevation of excavated areas in the FP area may not be lower than one-third of the depth of the natural channel, as measured from the adjacent bank, except for excavation of lakes. Excavation must be at least 50 feet from the bank of the natural channel, except as necessary to provide proper drainage. The excavated area may not exceed 25 percent of the total area of the tract's unfilled flood plain.

☑ The natural channel of Elm Fork is over 30 feet deep. The proposed excavation does not exceed one-third of that depth.

(9) A landscape and erosion control plan must be submitted and approved. Landscaping must incorporate natural materials (such as earth, stone, and wood) on cut and filled slopes when possible. The definitions of Section [51A-10.101](#) of this chapter apply to this subsection. Except as otherwise provided, the preservation and mitigation requirements contained in the tree preservation regulations, Division 51A-10.130 of the Dallas Development Code, apply. Each landscape and erosion control plan must comply with the following criteria:

(A) The size, type, and location of all trees within the existing flood plain that are six-inch caliper and larger must be shown. The plans must indicate which of the trees are to be preserved and which will be lost due to development activities in the flood plain.

(B) Trees must be protected if they are more than six-inches in caliper and located in sloped areas of flood plain fill with a depth of four feet or less. If trees are protected by tree wells, the wells must be at or beyond the drip line of the tree and must provide positive drainage. A well may not exceed four feet in depth unless designed and certified by a registered landscape architect. Tree wells are required if either of the following conditions occur at the base of a tree to be protected:

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(D) Where a swale is proposed, tree replacement is required for the loss of existing trees with a six-inch caliper or greater located within the proposed swale. The applicant must indicate replacement of either 35 percent of the number of trees displaced, or the minimum number of trees necessary to provide a spacing equivalent to 50 feet on center, whichever is less. At least 50 percent of the replacement trees must have a caliper of at least six inches. The remainder of the trees must have a caliper of at least three inches.

(E) The specific plant materials proposed to protect fill and excavated slopes must be indicated. Plant materials must be suitable for use under local climate and soil conditions. In general, hydroseeding or sodding Bermuda grass is acceptable during the summer months (May 1st to August 30th). Winter rye or fescue grass may be planted during times other than the summer months as a temporary measure until such time as the permanent planting can be accomplished.

(F) The proposed methods of erosion and sedimentation control, such as hay bales and sedimentation basins, to be used during construction must be shown in detail.

(G) The fill case applicant, current owners, and subsequent owners must maintain and assure the survival of all planted material until the property is developed and a permanent maintenance plan of record is established. Maintenance responsibility must be reflected in the submitted plans or supporting documents.

☑ An erosion control plan and landscape plan have been submitted as part of the construction drawings.

(10) Any alteration of the FP area necessary to obtain a removal of an FP prefix may not cause any additional expense in any current or projected public improvements.

☑ This project will not cause any additional expenses to any proposed public improvements.