

City Council Work Session Handouts

June 27, 2016

- I. Review and Discuss Zoning File 16-12 and Zoning File 16-15
- II. Public Safety Campus Improvements Project Overview
- III. 2017 Facilities Maintenance Strategy
- IV. Drainage Utility Program



Agenda Item 5

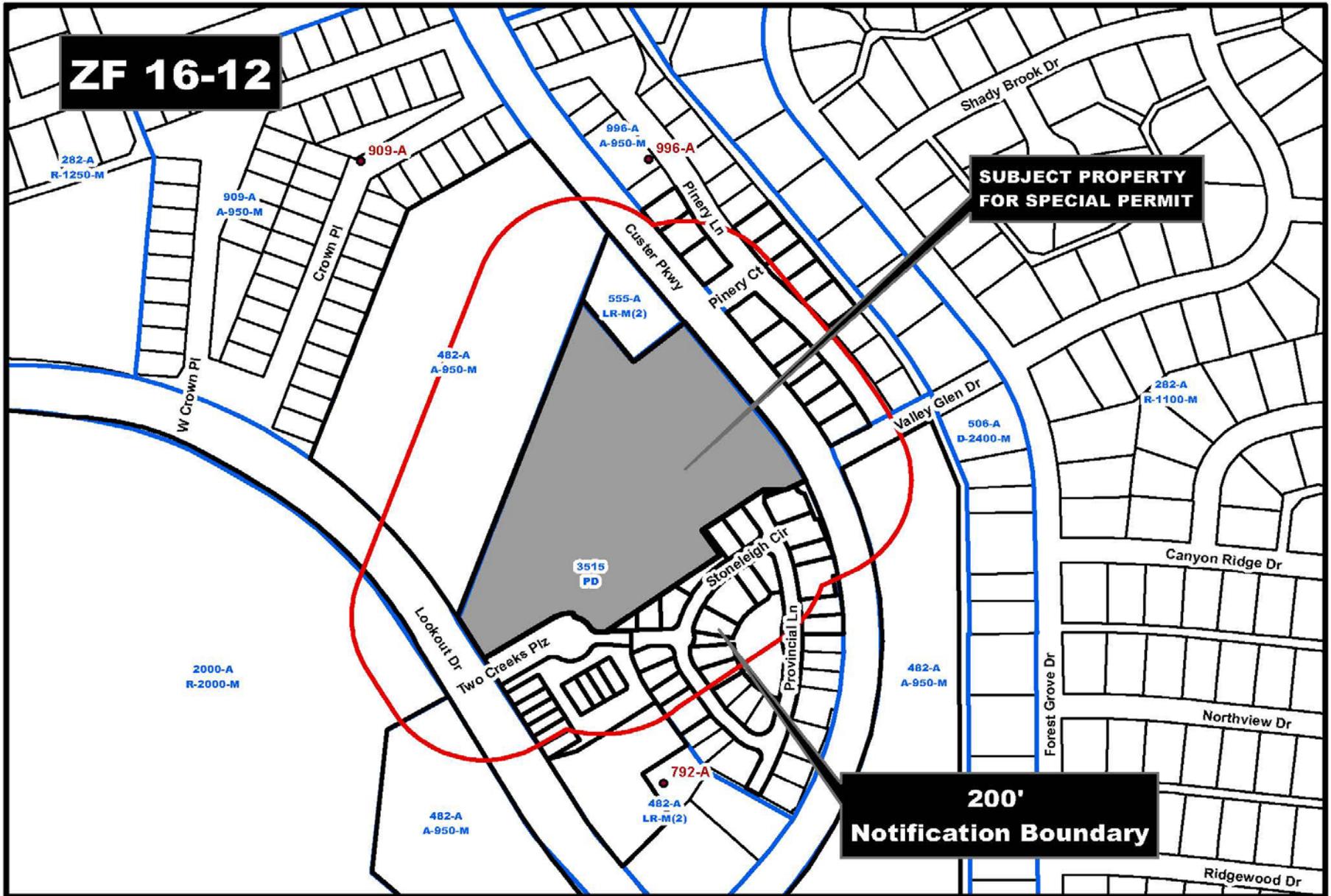
Zoning File 16-12

Special Permit

(Indoor Children's Play Space)

City of Richardson
Development Services





ZF 16-12 Notification Map

Updated By: shacklettc, Update Date: May 18, 2016
 File: D:\Mapping\Cases\12016\ZF1612\ZF1612 notification.mxd

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ZF 16-12

**SUBJECT PROPERTY
FOR SPECIAL PERMIT**



ZF 16-12 Aerial Map

Updated By: shacklettc, Update Date: May 18, 2016
File: DSI\mapping\Cases\Z12016\ZF1612\ZF1612_ortho.mxd

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Custer Parkway

Subject
Lease
Space



Lookout Drive

Oblique Aerial
Looking East

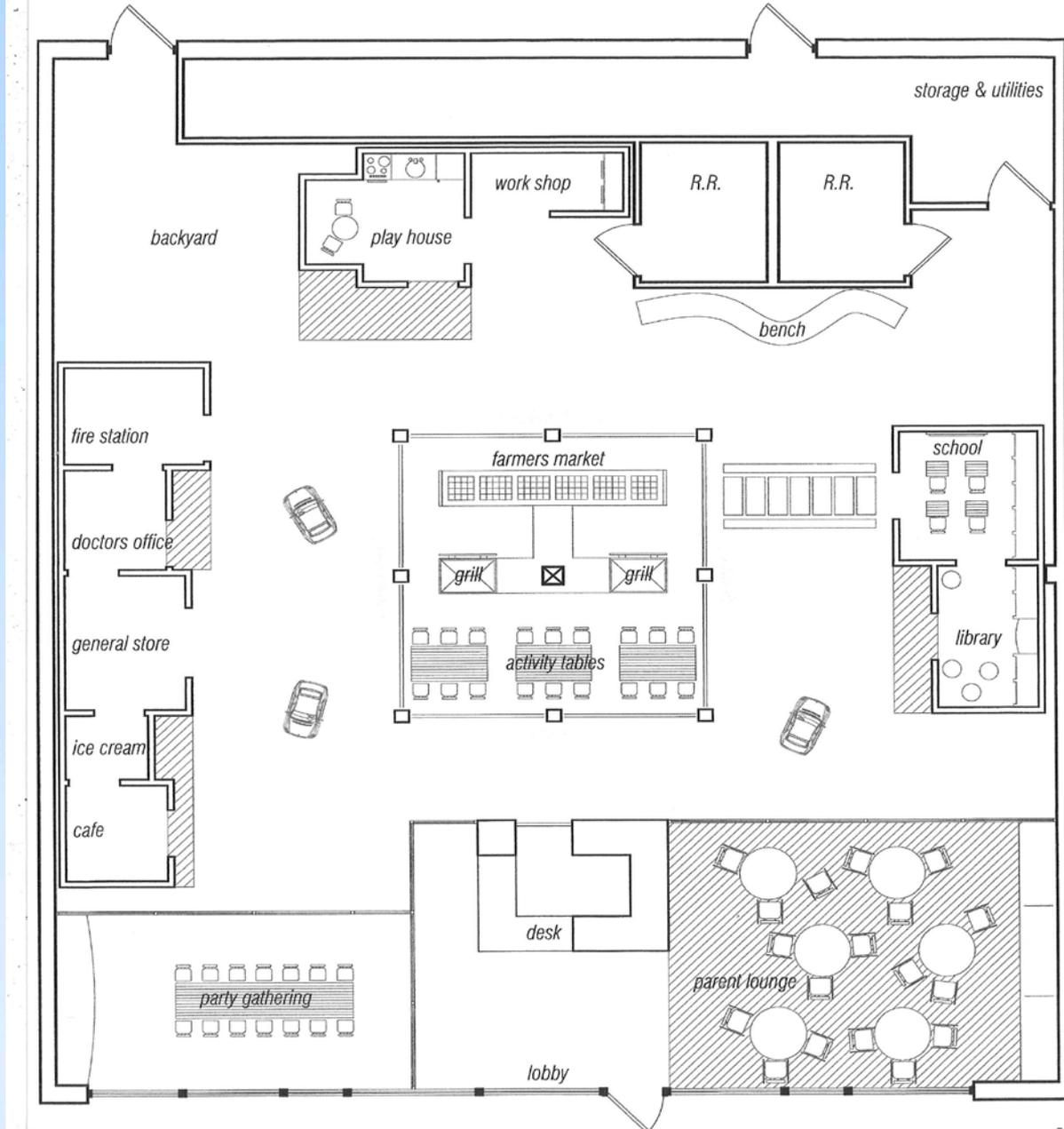


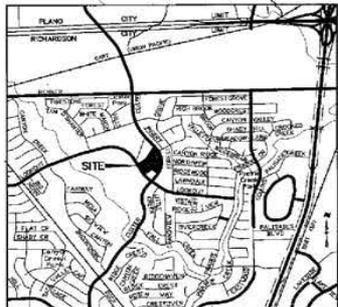


FIRE LANE NO PARKING

Subject Lease Space

(1)





LEGEND

- IRON ROD SET
- IRON ROD FOUND
- PARKING SPACES - QUANTITY
- PROPERTY / LOT LINE
- EASEMENT LINE
- IRON FENCE
- MASONRY SCREENING WALL
- BEARING SETBACK LINE

OWNER

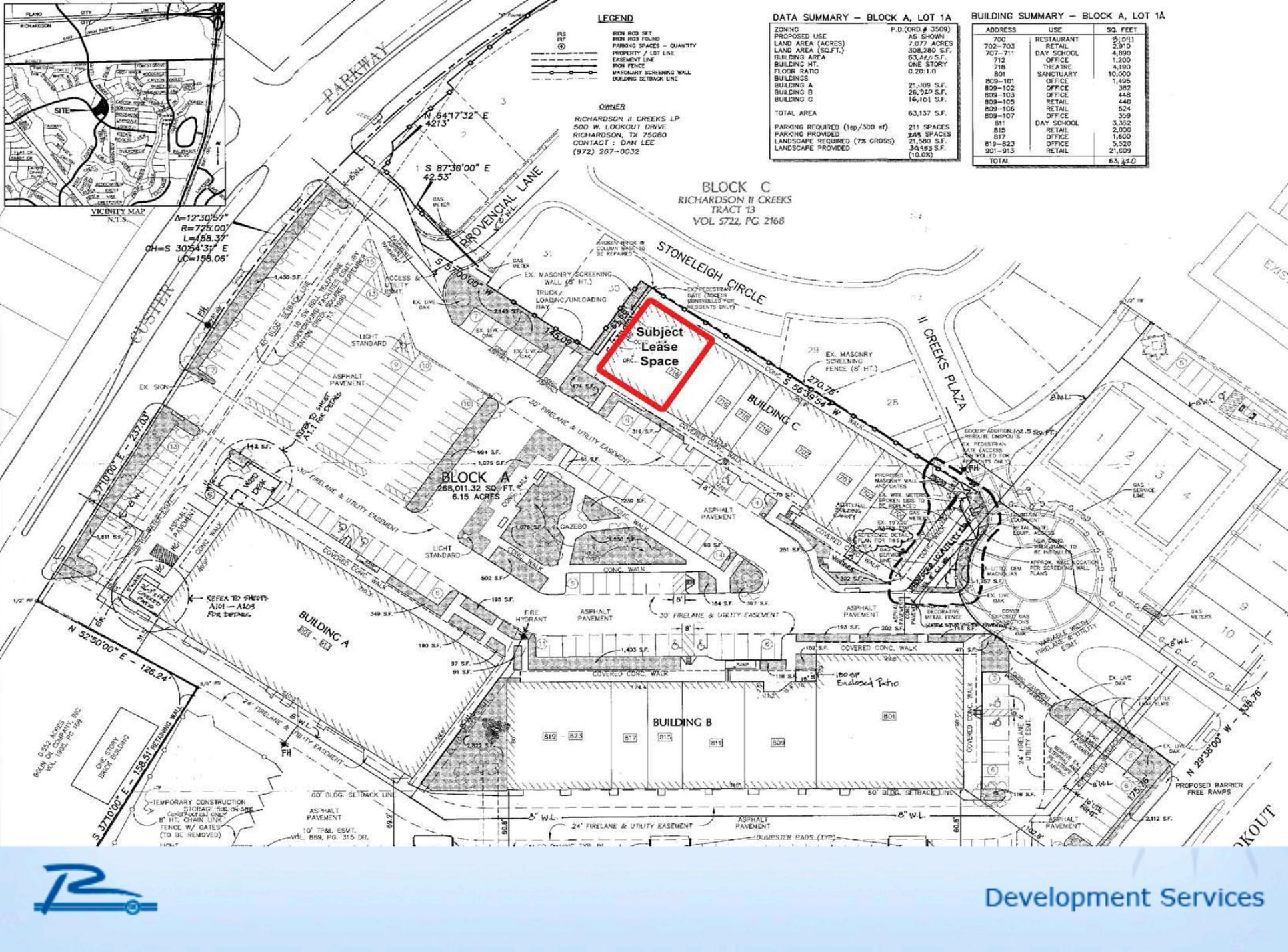
RICHARDSON II CREEKS LP
 500 W. LOCKOUT DRIVE
 RICHARDSON, TX 75080
 CONTACT : DAN LEE
 (972) 267-0032

DATA SUMMARY - BLOCK A, LOT 1A

PROPOSED USE	P.D.(ORD # 3509)
AS SHOWN	
LAND AREA (ACRES)	7.077 ACRES
LAND AREA (SQ.FT.)	308,280 S.F.
BUILDING AREA	63,466 S.F.
BUILDING HT.	ONE STORY
FLOOR RATIO	0.20:1.0
BUILDINGS	
BUILDING A	21,309 S.F.
BUILDING B	26,520 S.F.
BUILDING C	16,101 S.F.
TOTAL AREA	63,137 S.F.
PARKING REQUIRED (1sp/300 sf)	211 SPACES
PARKING PROVIDED	245 SPACES
LANDSCAPE REQUIRED (7% GROSS)	21,580 S.F.
LANDSCAPE PROVIDED	34,953 S.F. (16.2%)

BUILDING SUMMARY - BLOCK A, LOT 1A

ADDRESS	USE	SQ. FEET
700	RESTAURANT	5,091
702-703	RETAIL	2,910
707-711	DAY SCHOOL	4,899
712	OFFICE	1,200
718	THEATRE	4,190
801	SANITARY	10,000
809-101	OFFICE	1,495
809-102	OFFICE	382
809-103	OFFICE	448
809-105	RETAIL	440
809-106	RETAIL	524
809-107	OFFICE	359
811	DAY SCHOOL	3,352
815	RETAIL	2,000
817	OFFICE	1,600
819-823	OFFICE	5,520
901-913	RETAIL	21,009
TOTAL		63,422





Agenda Item 6

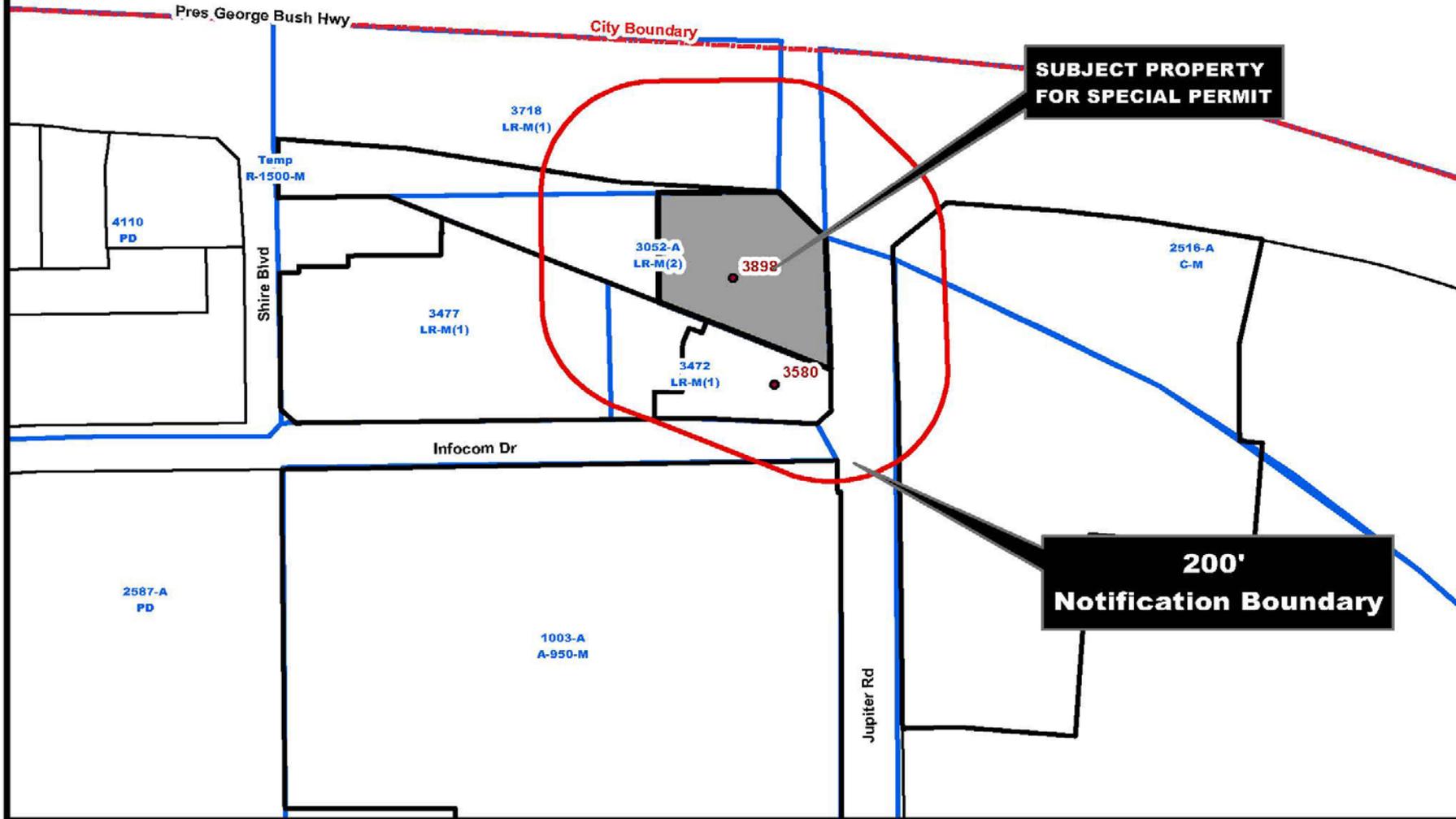
Zoning File 16-15
Special Permit

(Electronic-Cigarette Establishment)

City of Richardson
Development Services



ZF 16-15



ZF 16-15 Notification Map

Updated By: shacklett, Update Date: May 16, 2016
File: D:\Mapping\Cases\Z\2016\ZF 1615\ZF1615 notification.mxd

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ZF 16-15

Pres George Bush Hwy

City Boundary

**SUBJECT PROPERTY
FOR SPECIAL PERMIT**

Shire Blvd

Infocom Dr

Jupiter Rd

ZF 16-15 Aerial Map

Updated By: shacklettc, Update Date: May 16, 2016
File: DSI\Mapping\Cases\Z12016\ZF1615\ZF1615.ortho.mxd

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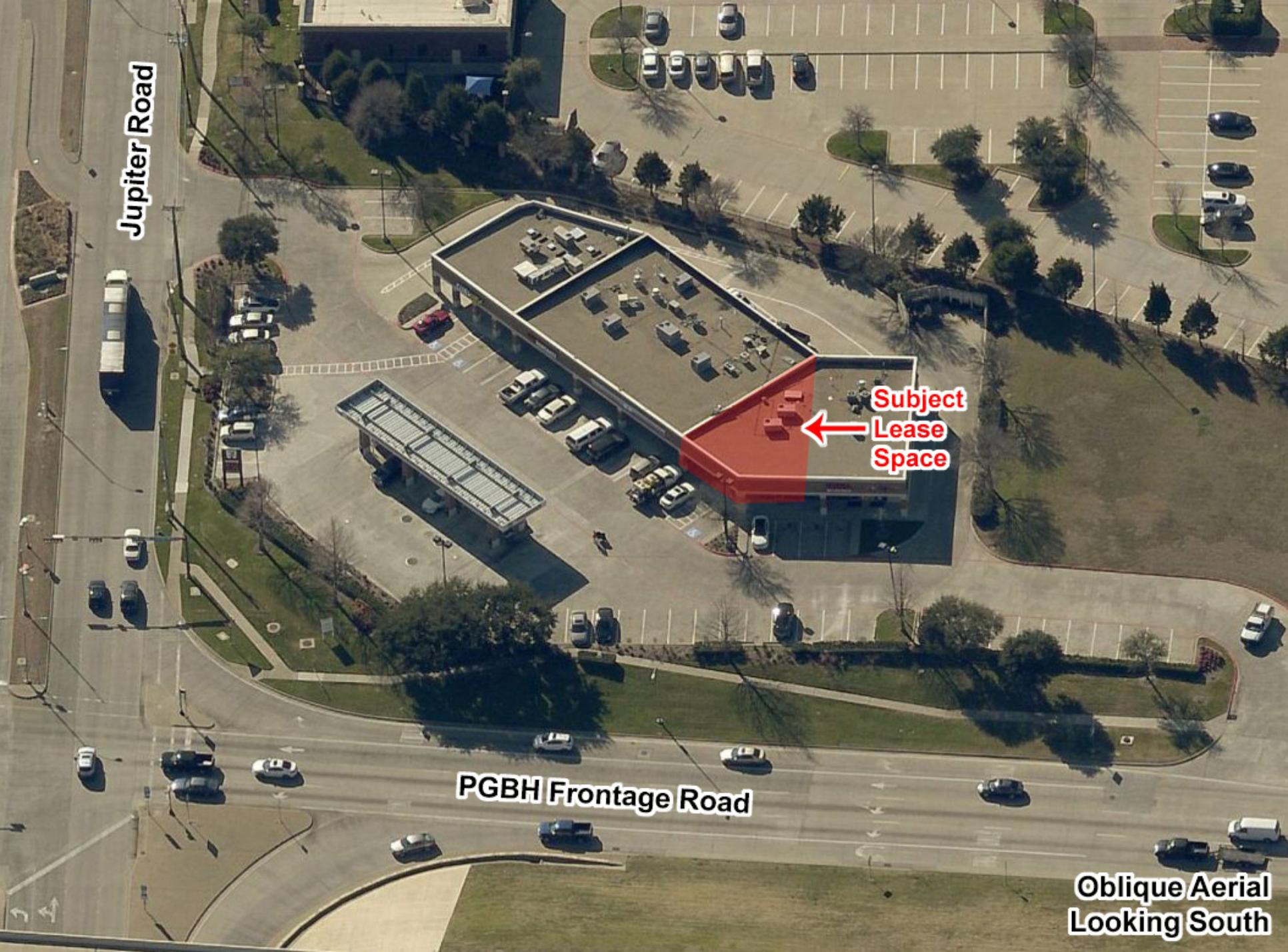
Jupiter Road

PGBH Frontage Road

Subject
Lease
Space



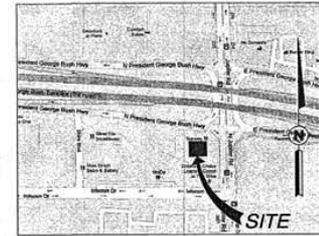
Oblique Aerial
Looking South



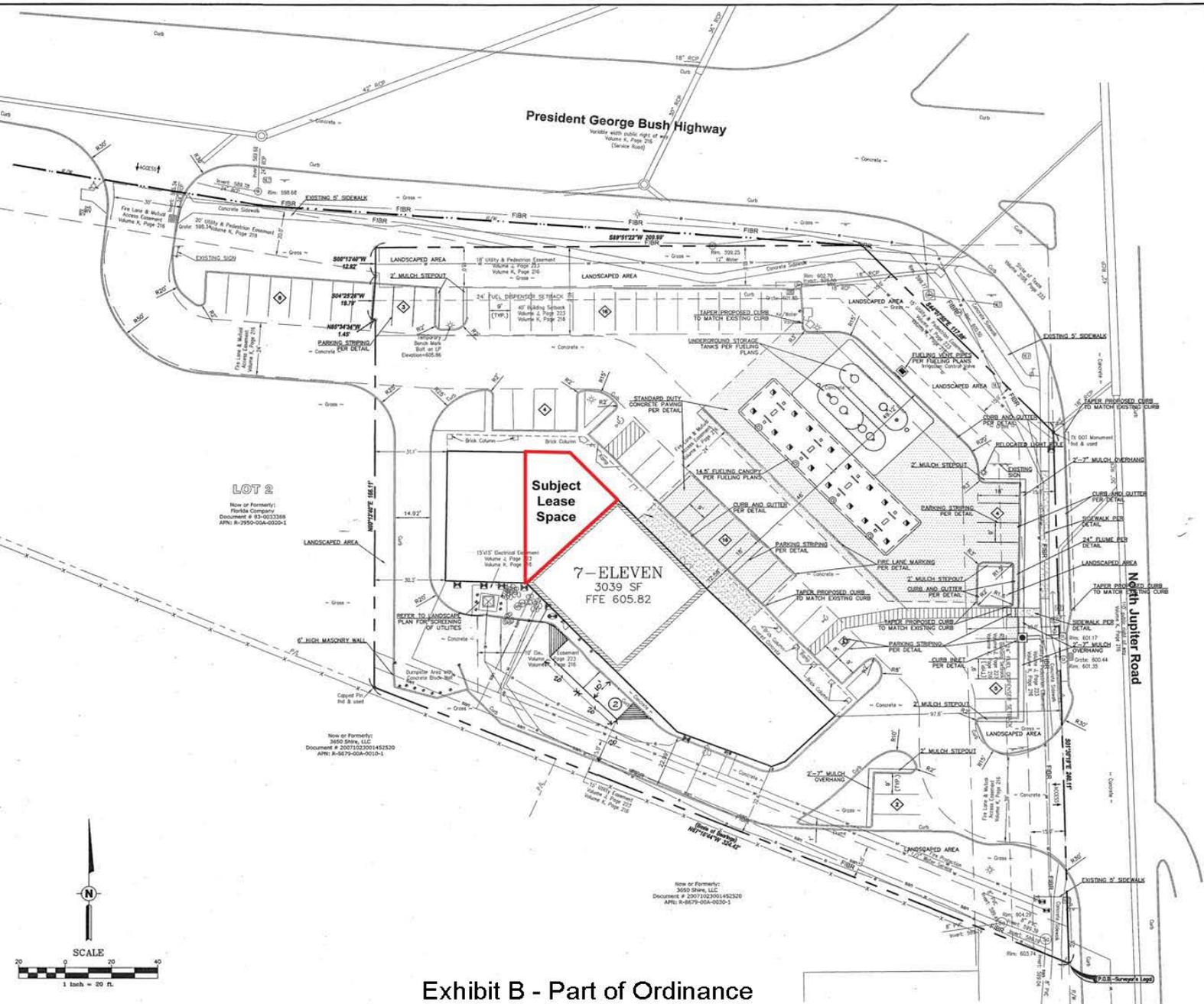


(1)

Subject Lease Space



VICINITY MAP
NO SCALE



PROPOSED

	PROPERTY LINE
	CURBS
	CURB INLET
	PARKING COURT
	SIDEWALK
	STANDARD DUTY CONCRETE PAVING

- GENERAL SITE NOTES**
- UNLESS OTHERWISE SHOWN, ALL CURB PAVES SHALL BE 2" OR 1/4".
 - ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
 - ALL CURBING SHALL BE TYPE B PER DETAIL TYPE B CURB UNLESS OTHERWISE NOTED.
 - ALL WORK AND MATERIALS SHALL COMPLY WITH ALL LOCAL REGULATIONS AND O.S.H.A. STANDARDS.
 - CONTRACTOR SHALL REFER TO ARCHITECT PLANS FOR EXACT BUILDING LOCATION AND DIMENSIONS AND UTILITY ENTRANCE LOCATIONS.
 - CONTRACTOR SHALL REFER TO SPECIFICATIONS AND GEOTECHNICAL REPORT DETAILS FOR PAVING DESIGN AND PROPOSED MATERIALS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE SITE UNTIL WORK IS ACCEPTED BY THE OWNER.
 - ALL SIGNS SHALL BE PER MUTCD.
 - CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE TRAFFIC CONTROL THROUGHOUT THE PROJECT, INCLUDING PROPER TRAFFIC CONTROL DEVICES AND/OR PERSONNEL AS REQUIRED. THIS INCLUDES BOTH VEHICULAR AND PEDESTRIAN TRAFFIC CONTROL. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH MUTCD.
 - NOTE: CONTRACTOR TO VERIFY LOCATION OF EXISTING UTILITIES.

PROJECT SUMMARY

ADDRESS	3601 N. JUPITER RD	
ZONING	LRM (2) / CRD, 3052-A WITH SPL PERMIT FOR M.V. SVC ST. (CRD, 3086)	
LOT AREA	1.698 AC	73,529 SF
SETBACKS	40' ALONG JUPITER RD & P.O.B.T.	
BUILDING AREA	7-ELEVEN (RETAIL)	3,009 SF
	RESTAURANT	3,255 SF
	RETAIL (OTHER)	5,317 SF
	TOTAL	15,162 SF
FLOOR-TO-AREA RATIO	MAX ALLOWED	0.61
	PROVIDED	0.141
BUILDING HEIGHT	1-STORY @ 17'-4"	
PARKING RATIO	RETAIL	1:933 (24 SPACES)
	RESTAURANT	1:100 (24 SPACES)
PARKING SPACES (TOTAL SITE)	REQUIRED	93
	PROVIDED	92
S-SPACE VARIANCE	GRANTED BY CITY COUNCIL 10-23-14	
LANDSCAPE COVERAGE	REQUIRED	7% (5,147 SF)
	PROVIDED	22% (16,607 SF)

7-ELEVEN
1722 ROUTH ST., SUITE 1000
DALLAS, TX 75201
PH. (972) 628-6997

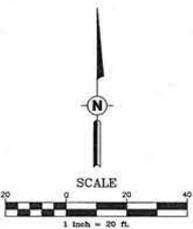


Exhibit B - Part of Ordinance

2015 Bond Program
Public Safety Campus
Improvements Project

City Council Briefing: June 27, 2016





Purpose of Tonight's Briefing

1. 2015 Bond Program Background (Public Buildings)
2. Project Overview
 1. Design Status Update
 2. Conceptual Site Plan
 3. Project Design Schedule
 4. Conceptual Rendering
3. Next steps



Public Safety Campus Bond Program Background

- January 2015 Public Safety Complex Conceptual Facilities Plan identified Police and Fire programming needs
 - Site Security
 - Locker rooms
 - Female fire fighter quarters
 - Hardened Space
 - Parking
 - Space for existing staff
 - Costly repairs needed to existing facilities
 - Defined Entry and Accessibility
- Multiple options of varying cost were identified
 - New Construction vs Renovate and Expand Existing
 - Structured Parking vs Surface Parking
- All options considered required similar campus dimensions
- Recommended option balanced renovating existing building components with new construction and relied on surface parking

2015 Bond Program Summary

Proposition	2015 Estimate	Issuance Amount
Public Buildings	\$53,000,000	\$67,000,000
Streets	\$30,400,000	\$38,570,000
Parks	\$5,600,000	\$7,230,000
Sidewalks	\$2,000,000	\$2,200,000
Total	\$91,000,000	\$115,000,000



Public Buildings Proposition

Project Description	2015 Estimate	Issuance Amount
Animal Shelter Kennel Suite Upgrades	\$375,000	\$475,000
Library Facility Enhancements	\$825,000	\$1,045,000
City Hall Improvements	\$1,400,000	\$1,650,000
Public Safety Phase I	\$6,800,000	\$8,730,000
Public Safety Phase II	\$35,700,000	\$45,170,000
Fire Station #3	\$6,300,000	\$7,970,000
Fire Admin / Station #1 Remodel	\$1,000,000	\$1,200,000
Fire Training Center Parking Lot	\$600,000	\$760,000
Total	\$53,000,000	\$67,000,000



Public Safety Campus Improvement Project

Design Status Update – Design Team Selection

- Brown Reynolds Watford Architects (BRW)
 - Performed the January 2015 Public Safety Complex Facilities Plan and Fire Department Facilities Master Plan
 - Designed Fire Station No. 4
 - Well known for Municipal Architecture
- 720 Design
 - Public Safety Consultant Expert
 - Recently completed North Richland Hills City Hall and Police Department
- Peak Program Value (PPV)
 - Construction Cost Estimating and Project Management
 - Assisted with Heights Recreation Center



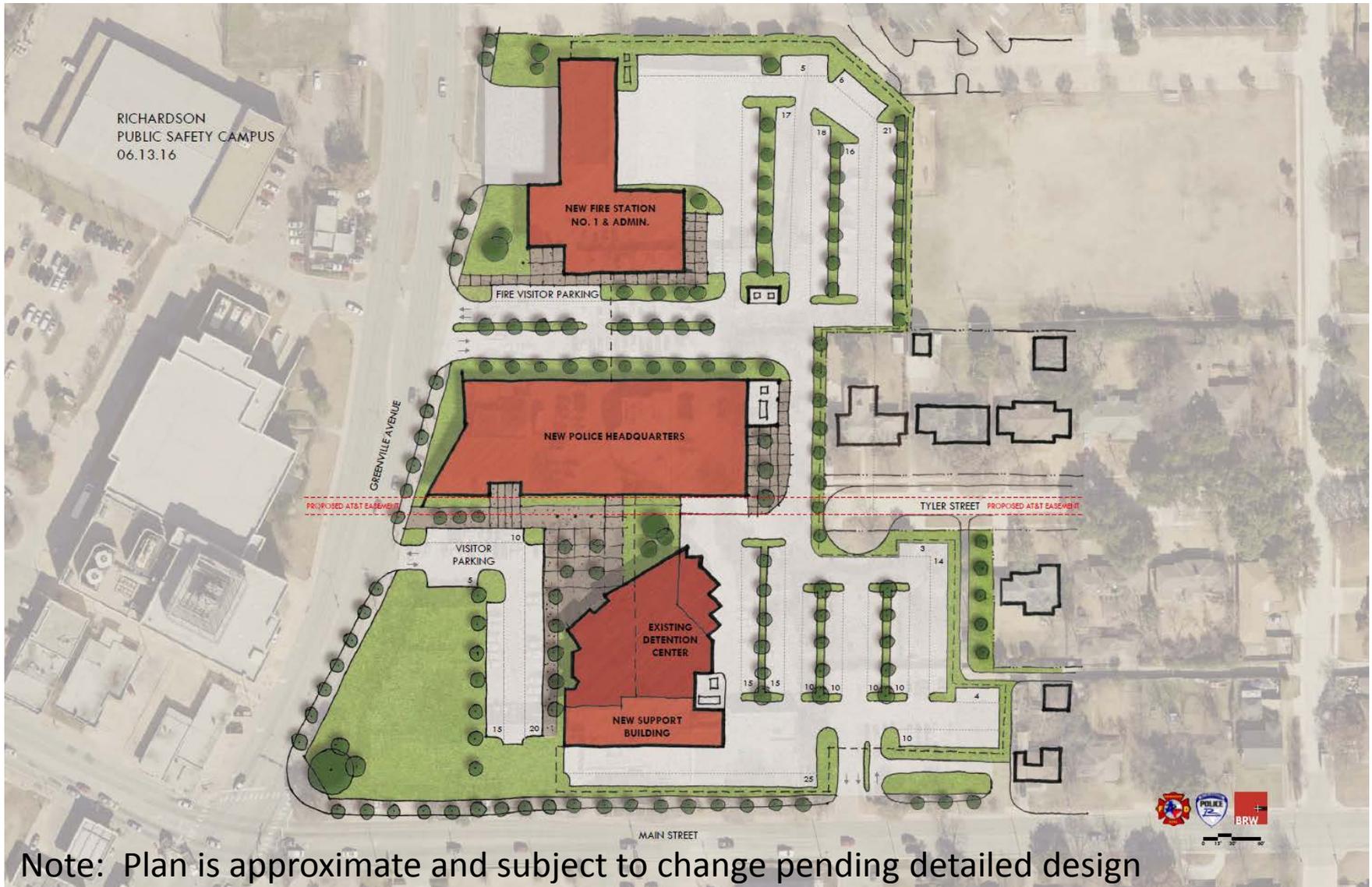
Public Safety Campus Improvement Project

Design Status Update – Conceptual Design Refinement

- Updated space programming from the concept planning study performed in 2014
- Toured New Police Stations
 - Mesquite
 - North Richland Hills
- Recent experience with Fire Station 4 and other Fire Facilities simplified Fire Station 1 and Fire Admin Concept Design
- Adjusted site layout to minimize utility conflicts and simplify move management requirements
- Prepared updated cost estimates for both Police and Fire Department Improvements
- Refinements will continue throughout the design process as we obtain more survey and perform detailed design.



Public Safety Campus Master Plan Overview



Note: Plan is approximate and subject to change pending detailed design



Public Safety Campus Improvement Project

Design Status Update – Conceptual Design Refinement

- Avoided utility relocation in abandoned Tyler St. ROW
- Minimized impacts to existing operations by constructing a new building instead of renovating as much of the existing building
- Cost increase associated with more new construction and less renovation than originally anticipated was mostly offset
 - Utility relocation savings
 - Eliminating need for temporary offices during construction



Public Safety Campus Improvement Project

Design Status Update – Construction Contract Procurement

- Construction Manager at Risk (CMAR) considered best contract procurement method for this project
 - Used to construct recent Recreation Centers
 - Beneficial for complex sites with multiple phases
 - Helps provide cost containment throughout design
- CMAR is a General Contractor selected early in the design process through a two-step, competitively bid proposal
 - Step 1 – Request For Qualifications – publicly advertised
 - Step 2 – Request For Proposal from short-listed firms
- CMAR provides preconstruction services to help the design, establish sequencing/schedule and provide construction cost estimates to validate design and budget



Public Safety Campus Project Overview

Design & Bidding Schedule

- **Schematic Design** **June 2016 – October 2016**
 - Develop building layout and foot print
 - Refine site and utilities layouts
 - Establish architectural look and exterior finishes
- **CMAR Selection** **June 2016 – September 2016**
 - Ideally on board before Schematic Design is complete
- **Design Documents** **October 2016 – January 2017**
 - Further design refinement of interior and exterior finishes
 - Affirm design details meet owners satisfaction
- **Construction Documents** **January 2017 – June 2017**
 - Engineering/Construction Details
 - Provides contractors information they need to build it
- **Contract Bidding and Award** **June 2017 – August 2017**



Master Plan Overview



RICHARDSON PUBLIC SAFETY CAMPUS



06.15.16



Next Steps

- Initiate CMAR Selection Process (Request to Authorize on tonight's Consent Agenda)
- Return to Council in September to award CMAR Contract
- Present Schematic Design in October 2016
 - Complete site and building layouts
 - Architectural Rendering
 - Updated Budget from CMAR
- Provide Council and community updates at key points throughout the project



2017 Facilities Maintenance Strategy

June 27th, 2016

City of Richardson
Capital Projects

Presentation Overview

- City Council Strategy: Improve Documentation, Processes, Structure, & Services
 - Tactic: Conduct and implement Facilities Maintenance Master Plan



Presentation Overview

- Propose a Multi Year Strategy for Facilities
 - Data Driven Decisions
 - Facility Condition Assessment
 - Work Order System
 - Enhanced Budget Tracking
 - Normalize expenses
 - Improve customer service (internally & externally)



Facilities Maintenance Background

- Richardson owns and maintains more than 60 facilities supporting a wide variety of operations
 - Police and Fire, Recreational, Civic Center, Library, Performing Arts, Residential Homes, Historic Farmhouse
 - Construction dates range from 1887 to 2013
 - Average age of 31
 - Totaling more than 1,000,000 square feet
- About half of Richardson's facilities are occupied spaces and total approximately 700,000 square feet



Facilities Maintenance Background

- Facility Maintenance Practices are evolving
 - Staffing and operational changes
 - Older structures require more maintenance
 - Newer structures have more complex systems and controls
- Increase in maintenance demands required a more proactive planning and budgeting Facility Management (FM) strategy
- Department staffing and responsibilities were reorganized in 2015 to develop and implement a data driven approach to Facility Management.



Facilities Maintenance Background

- Facilities are now supported by
 - Capital Projects – Facility Planning and Maintenance
 - Public Services – Custodial Support
 - Parks – Grounds Keeping
- Funding Sources
 - General Fund – Keeps lights on, fixes what breaks and supports minor modifications and renovations
 - Short Term Debt – C.O.'s replace major facility assets like roofs, HVAC components and moderate renovations
 - Bond Program – Facility Renewal and or Replacement
 - Facility Maintenance Fees and Enterprise Funds
 - Grants/Charitable Donations, Insurance Claims



2017 FM Strategy Overview

- Primary Goals:
 - Maximize Use of All Resources
 - Normalize Annual Expenditures
 - Improve Customer Service
- Key to achieving desired goals is using objective data to make decisions
 - Inventory Assessments
 - Work Orders
 - Expenses



Inventory Assessments

- Facility Condition Assessments
 - Inventory Vital Building Components (Envelope, Mechanical)
 - Identify type, age, condition etc. recommend
 - Maintenance (Preventative and Corrective)
 - Capital Improvement – Expected End of Useful Life
- Prioritize Identified Needs
 - Life and Safety Related
 - Value Added/Corrective and Preventative Maintenance
 - Deferrable Maintenance



Maintenance Needs Prioritization

- **Life and Safety Related** – Conditions that immediately affect facility occupants and or compromise health and safety
 - Power outage
 - Broken window
 - HVAC failure
 - Flooded area
 - Leaking pipes
 - Defective fire alarm
- **Value Added/Corrective and Preventative Maintenance** (prolong equipment life, restore and or improve performance)
– Conditions that significantly impair but do not obstruct operations
 - Clogged drain
 - Filter replacements
 - Minor water damage
- **Deferrable Maintenance** – Conditions that do not require immediate attention; can be scheduled and completed within a specific time period
 - Painting
 - Lighting replacement
 - Pest control



Inventory Assessments

- Facility Condition Assessments (FCA's) are required City wide to provide consistent information from all key City Facilities
- Facility Condition Assessments will be performed in three phases to balance existing work load and budget
 - **Phase 1 – FY 16 Completed** – 8 Facilities evaluated
 - Senior Center – 1964
 - Library – 1969
 - StarTech – 1979
 - City Hall / Civic Center – 1980
 - Golf Pavilion & Pro Shop
 - Service Center – 2001
 - Animal Shelter – 2001
 - Eisemann Center – 2002 (underway)
 - **Phase 2 – FY 17 Proposed** – 6 Facilities
 - Municipal Court
 - Fire Stations 2, 5 & 6
 - Huffhines Recreation Center
 - Police Substation
 - **Phase 3 – FY 18** – Evaluate remaining key facilities



Work Orders System

- A work order system receives requests for work and allows a manager to prioritize, assign and track all necessary work from start to finish.
 - Helps prevent work requests and preventative maintenance from “Falling through the cracks”
 - Provides improved reporting which facilitates communication with the work requestor
 - Allows more sophisticated tracking of facilities maintenance work, by facility, technician or type and related expenses
 - Essential tool for effective Facilities Maintenance Management
- Implementation of a new work orders system is underway and there is more to come on this over the next year



Facilities Maintenance Expenses

- Preventative Maintenance
 - Belts, Filters, Inspections Etc.
- Annual Regulatory Certifications
 - Fire Alarm Systems , Elevators, Boilers
- Annual Service Contracts
 - Specialized services, Elevators, Generators, Security Systems
- Corrective Maintenance
 - Planned – Based on Facility Condition Assessments
 - Unplanned – Unexpected systems failures
- System Renewal / Replacement
 - Roofs, HVAC, Lighting Upgrades, Elevator Replacement
 - Capital Intensive – supported by multiple funding sources



FM General Fund FY17 Proposed

Expense Category	FY 13-14	FY 14-15	FY 15-16	FY 16-17 PROPOSED
Preventative Maintenance	\$33,000	\$30,000	\$35,000	\$35,000
Annual Regulatory Certifications	\$58,000	\$58,000	\$ 52,000	\$40,000
Annual Service Contracts	\$44,000	\$40,000	\$103,000	\$46,000
Corrective Maintenance	\$288,000	\$245,000	\$323,000	\$578,000
TOTAL:	\$423,000	\$373,000	\$513,000	\$699,000



FM System Renewal / Replacement FY17 Proposed

Funding Source	FY 13-14	FY 14-15	FY 15-16	FY 16-17 PROPOSED
General Fund – Operating Accounts	\$190,000	\$154,000	\$221,000	\$517,000
Annual C.O. Program	\$613,000	\$145,000	\$234,000	\$0
Hotel Motel & Facility Fee	\$–	\$200,000	\$376,000	\$343,000
Other Funds (Solid Waste/Utilities)	\$–	\$166,000	\$30,000	\$0
TOTAL:	\$803,000	\$665,000	\$861,000	\$860,000



Facilities Maintenance FY17 Budget

- Phase 2 Facility Condition Assessments
- Heavy Emphasis on corrective maintenance needs identified in Phase 1 Facility Condition Assessments
- HVAC System Replacements
 - Animal Shelter Roof Top Units 1, 3 & 4
 - Golf Pro Shop Roof Top Unit 2
 - Library Air Handling Unit 1A
 - Eisemann Fan Motors and Variable Freq. Drives
- Eisemann Lighting Upgrades/Improvements



Facility Maintenance Next Steps

- Complete Phase 2 Facility Condition Assessments and combine with Phase 1 Data
- Implement new Work Orders System
- Implement processes to maximize use of the new Work Order System to improve
 - Customer service and communication
 - Maintenance efficiencies





Drainage Utility Program Update

City of Richardson
Capital Projects

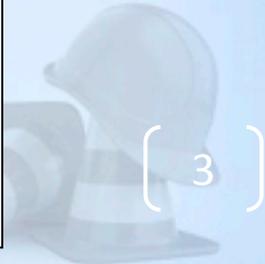
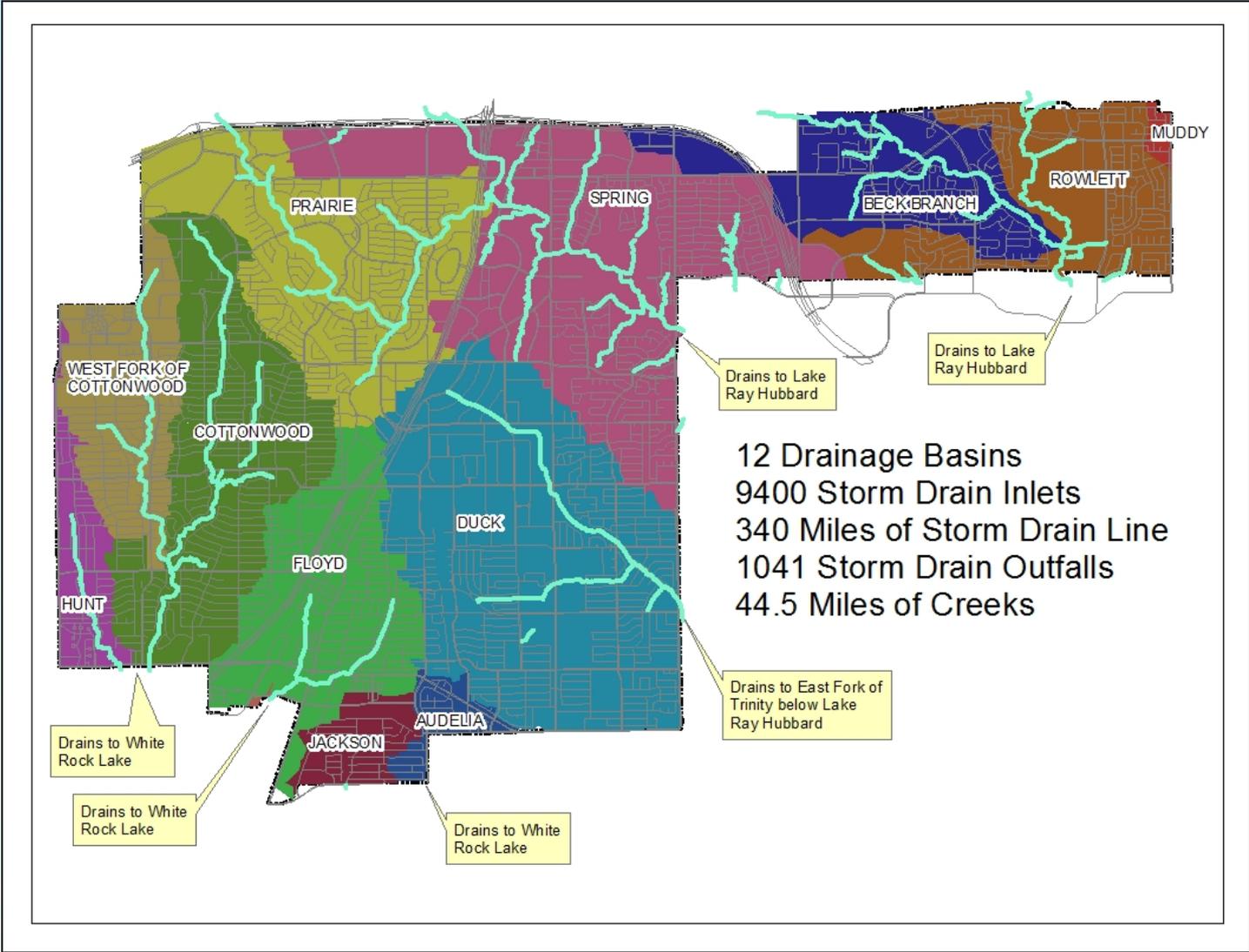
City Council Briefing
June 27, 2016

Presentation Overview

- Background
- Work Plan Update
- Proposed FY2016-2017
- Next Steps



Richardson's Drainage Infrastructure



Drainage Utility Background

- Drainage Utility Established - November 28, 2011
- Purposes:
 - Continue to sustain the City's environmental and regulatory obligations for storm water management
 - Enhance maintenance, capital work plans and services in response to community needs
 - Allocate cost of services through an equitable rate method
- Rates:
 - single residential monthly rate of \$3.75 per household
 - commercial monthly rate of \$0.105 per 100 square feet of impervious area which is equivalent to the charge for the average residential property



12-City Review

City	Drainage Utility?	Avg. Res.
Carrollton	No	-
Garland	Yes	\$2.88
Allen	Yes	\$3.25
Frisco	Yes	\$3.45
Richardson	Yes	\$3.75
Irving	Yes	\$4.00
McKinney	Yes	\$4.00
Plano	Yes	\$4.15
Grand Prairie	Yes	\$4.35
Mesquite	Yes	\$4.50
Arlington	Yes	\$5.25
Ft. Worth	Yes	\$5.40
Dallas	Yes	\$7.77
<i>ELEVEN CITY AVG</i>		<i>Avg: \$4.45</i>



Work Plan Update

- City Operations
 - Maintenance
 - Storm Response
 - Inspection and Compliance
- Contract Services
 - Maintenance contracts
 - Engineering Services
- Projects
 - Flood Prevention
 - Erosion Protection



City Operations supported by the Drainage Utility

Departments and Services

- Public Services
 - Maintenance of inlets, pipes, bridges, channels
 - Storm preparation and response
 - Spill response
- Development Services, Capital Projects, Building Inspections
 - Plan review
 - Inspection /Compliance
 - Flood plain management
- Fire Department
 - Hazardous spill response
- Parks Department
 - Street sweeping
 - Public education
 - Park pond maintenance
- Health Department
 - Public education and outreach
 - Inspection and compliance
 - Spill response
- Capital Projects, Water Customer Services
 - Customer service
 - Program administration



City Operations

Storm Preparation and Response

- Heavy Spring Rains
- Respond to Citizen's drainage and erosion concerns

Construction Activity

- Drainage Improvement Plan Review and Construction Inspection
- Construction Site Pollution Prevention Inspection/Enforcement

Education and Outreach

- Pollution prevention pamphlets
- Creek maintenance article Richardson Today

Flood Insurance Rate Map updates

- Duck Creek Map Revision- Final determination – Effective Oct 2016
- Spring Creek and Prairie Creek Map Revisions – Anticipated 2017
- Rowlett Creek and Beck Branch Map Revisions – Anticipated 2017



Contract Services

- Open Channel Maintenance
- Storm drain and Inlet Inspection and Cleaning
- Street Sweeping
- Engineering and Planning Studies
- Hydraulic Studies for Flood Risk Assessments



Contract Services

Open channel maintenance

- Duck Creek – Jay Ell to International
- Texas Channel – Jackson to Phillips
- Lois Branch – Spring Valley to Centennial
- Floyd Branch – upstream of Buckingham



Contract Services

Storm Drain and Inlet Inspection and Cleaning

- Inspect condition of inlets and pipes
- Remove debris to maintain capacity
- Make repairs as needed



Street sweeping

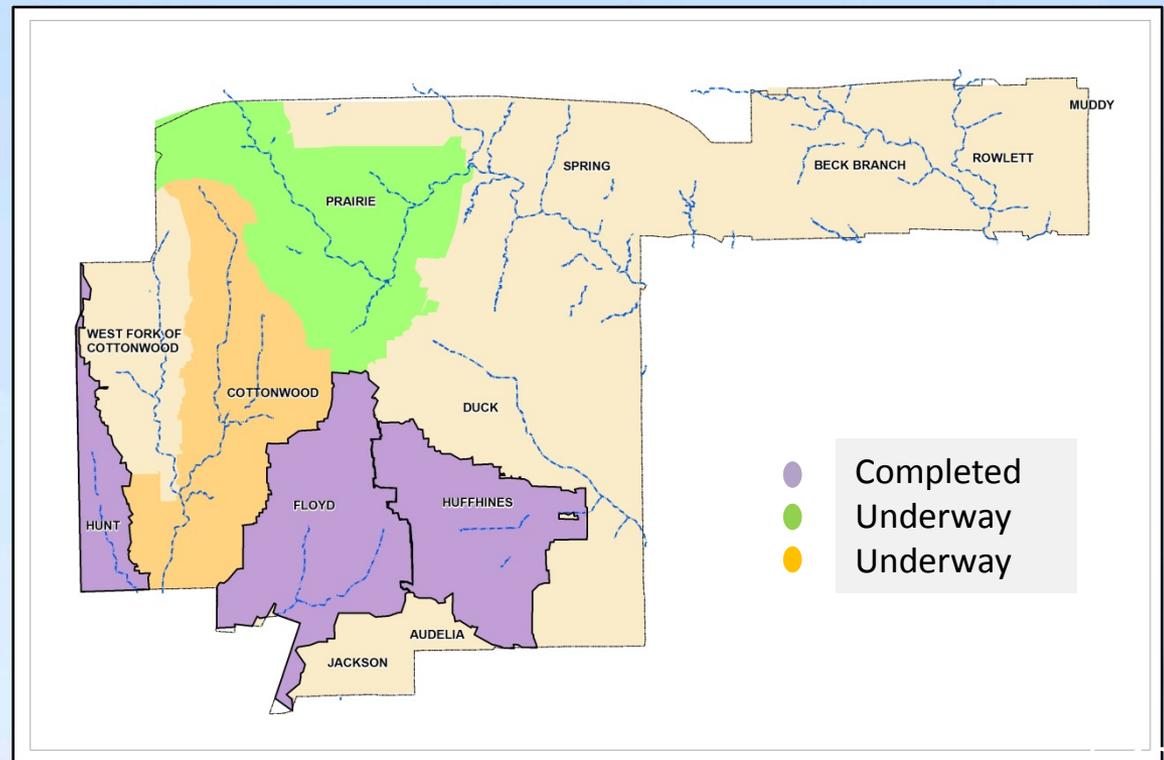
- Contract sweeping of primary roadways
- Litter and sediment removal



Contract Services

Prairie Creek and Cottonwood Creek Watershed Studies and Capital Improvement Plans

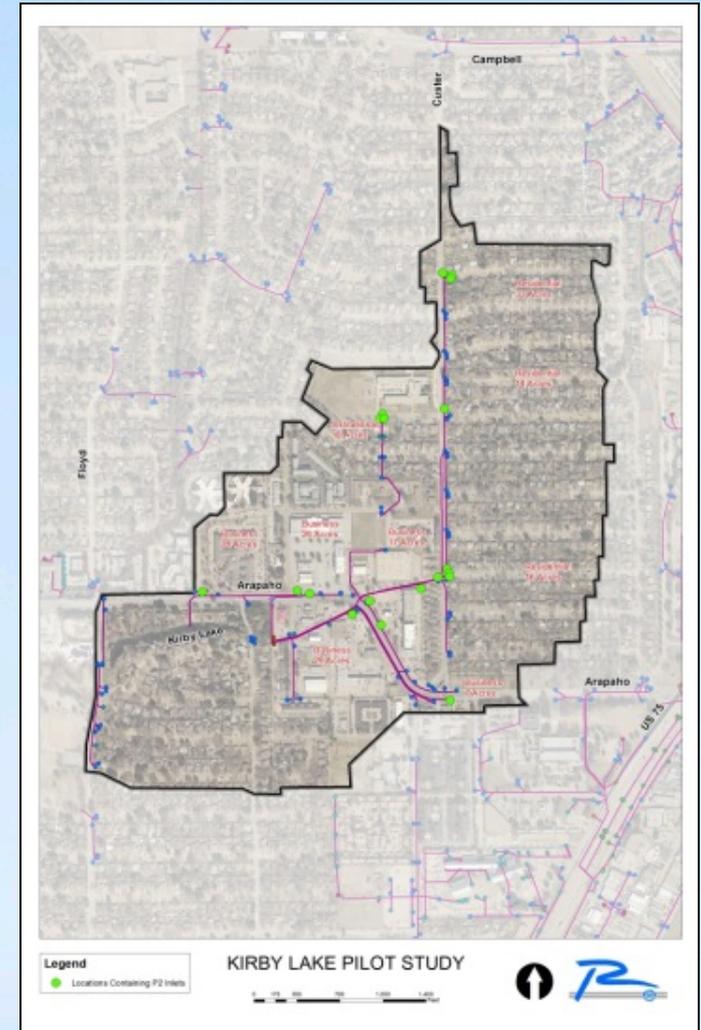
- Studies identify and prioritize future capital improvements
- 2500 and 2200 Acres
- Over 30 miles of pipe
- Scheduled to be completed Fall 2016



Contract Services

Litter abatement study -Kirby Lake Background

- Approximately 200 acre study area
- Variety of land uses
 - Residential
 - Retail
 - Office
 - Institution
- Study began in May of 2014 and concluded in April 2016



Contract Services

Litter abatement study

Objectives:

- Evaluate the use of inlet inserts as a near source stormwater pollution control measure
- Evaluate waste stream from various capture sites to assist in further stormwater pollution prevention strategies
 - Education
 - Construction pollution prevention
 - Development/post-construction pollution prevention



Contract Services

Litter abatement study

Findings:

- Quantity and type of debris captured varied widely for site to site
 - Land use types
 - Drainage area size
 - Rainfall amount and time between rain events
- Sediment was the primary component of the waste stream, followed by yard waste and floatables
- Yard waste is more prevalent at site that are predominately residential land uses
- Floatables are more prevalent at sites in commercial areas



Contract Services

Litter abatement study

Findings:

- Green space and disconnected impervious area resulted in less debris
- 4 of the 19 sites accounted for over half of the total debris capture
- These high volume capture sites are
 - Predominately retail land use
 - High percentage of directly connect impervious area
 - drainage areas greater than 2 acres



Contract Services

Litter abatement study

Conclusions:

- Inlet inserts can be an effective method of near source control of debris at sites anticipated to be high capture locations such as:
 - Retail land use with drainage areas greater than 2 ac., similar to high volume sites in the study
 - Construction sites
 - Sites with significant exposed soil or sparsely vegetate areas
- Inlet inserts should be consider for use at anticipated high volume capture site as an element of future work plans for stormwater pollution prevention



Contract Services

Litter abatement study

Recommendations:

- Continue to use inlet inserts at the four high volume sites from the study
- Select other locations for implementation of inlet inserts at sites anticipated to be high volume
- Continue to use Inlet insert and other near source controls as a construction pollution prevention measure.
- Continue to include near source controls in site developments as a post-construction pollution prevention measure
- Continue pollution prevention education
 - managing yard waste and pet waste
 - encouraging green space and disconnected impervious areas
 - “This Drain for Rain”



Projects

PROJECT	SCHEDULE
Shenandoah Flood Prevention	Completed April 2016
Brentwood Flood Prevention	Completed March 2016
Wisteria Culvert Replacement	Completed January 2016
Brentwood Culvert Replacement	Completed April 2016
Melrose Culvert Replacement	Completion Fall 2016
Shady Hill Drainage	Completion June 2016
Lamp Post Flood Prevention	Construction Summer 2016
Woodhaven Addition Flood Prevention	Construction 2017
Nantucket Branch Erosion	Construction 2017
Prairie Creek Park Erosion	Construction 2017



Projects

Wisteria Way Culvert at Cottonwood Creek



Drainage Utility Work Plans Proposed FY2016-17



Drainage Utility Work Plans

	FY 12/13	FY 13/14	FY 14/15	FY15/16	FY16/17 Proposed
City Operations (inter-fund transfer)	\$ 910,000	\$ 910,000	\$1,025,000	\$1,025,000	\$1,025,000
Contract Services	\$ 390,000	\$ 400,000	\$ 440,000	\$ 575,000	\$475,000
Projects	\$1,385,000	\$1,410,000	\$1,235,000	\$1,100,000	\$1,200,000
Total	\$2,685,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000



City Operations FY2015-16

Continuation of drainage services provided by City forces

- Multi-departmental
 - Conveyance
 - Water quality
 - Floodplain management



Contract Services FY2016-17

Storm Drain and Inlet Inspection and Cleaning
Street Sweeping

Inlet inserts at three retail sites

- Camelot
- Richardson Heights
- Richardson Square

Open Channel Maintenance

Parcel Impervious area update

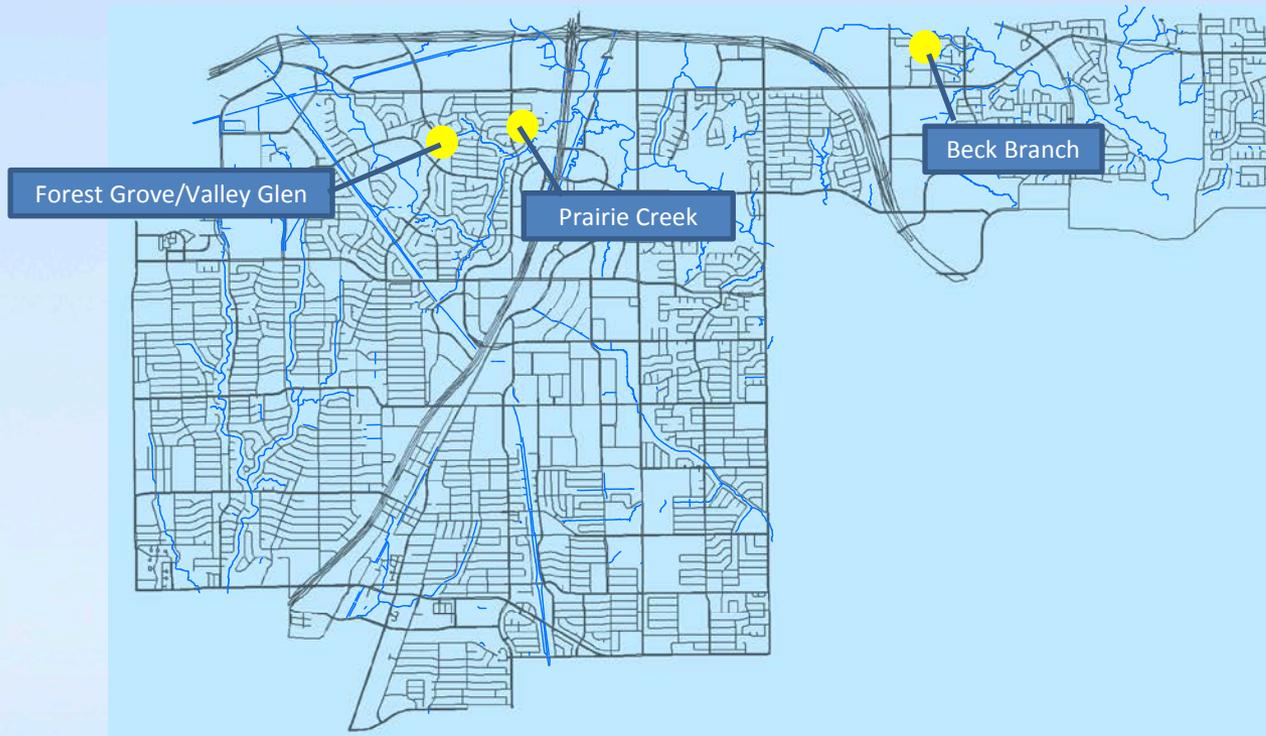
Drainage Design Criteria Review



Projects FY2016-17

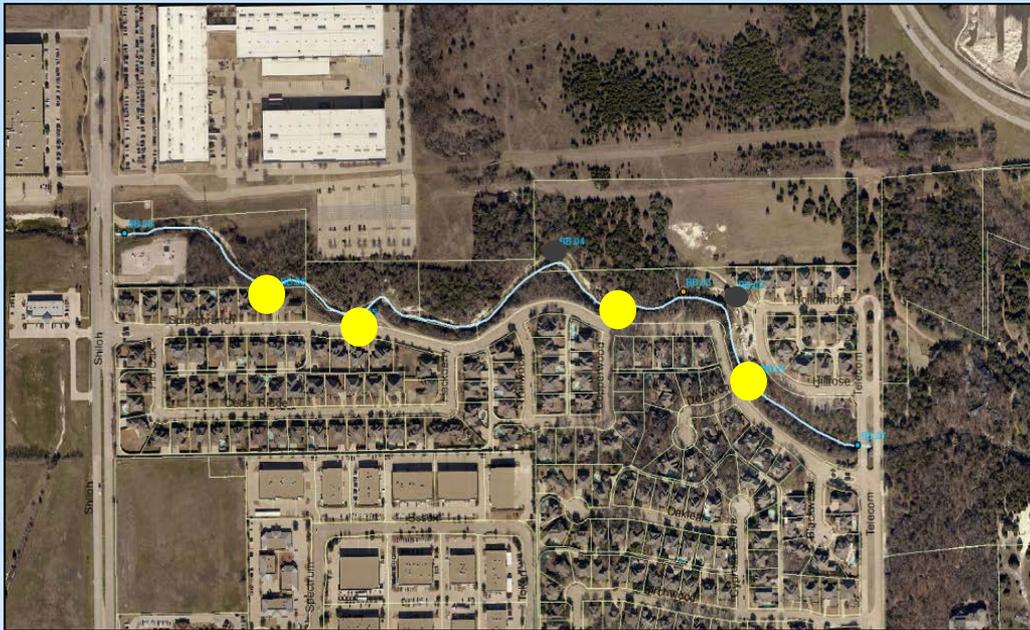
Storm Drain Outfall and Erosion Protection

- Beck Branch Storm Drain Outfall/Erosion \$ 800,000
- Prairie Creek Storm Drain Outfall/Erosion \$ 300,000
- Forest Grove/Valley Glen Outfall \$ 100,000



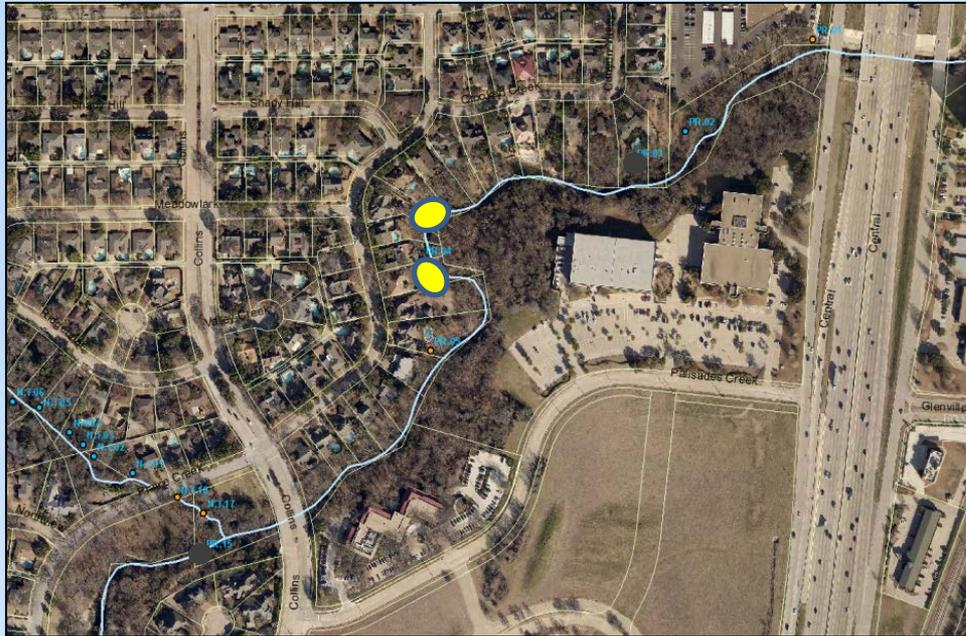
Projects FY2016-17

Beck Branch Storm Drain Outfalls and Erosion Protection



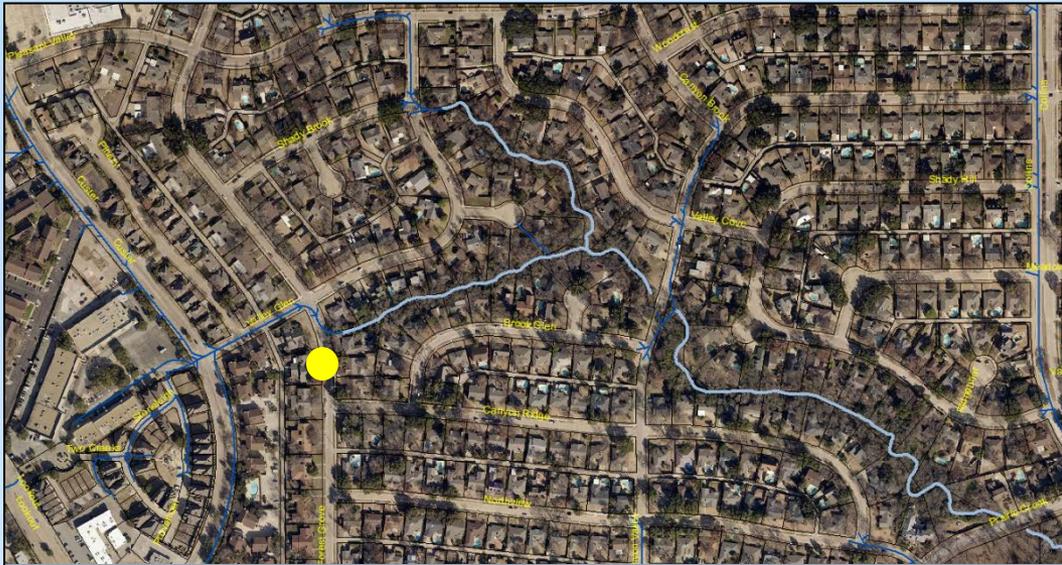
Projects FY2016-17

Prairie Creek Storm Drain Outfalls and Erosion Protection



Projects FY2016-17

Forest Grove/Valley Glen Storm Drain Outfall



Next Steps

- Continue work on current year work plan.
- Future year work plans will build on studies and assessments
- Drainage Utility will target projects generally less than \$0.5 M with some larger projects constructed in phases.
- Studies will also identify larger capital projects to be considered for future G.O. bond program.
- Work plans will be reviewed and updated annually.





Capital Projects