Contents

Cypress Creek Watershed Major Tributaries Drainage Plan
Data and Maps
2003 version

DATA: 2003 Major Tributaries

1. Name of Tributary	Page	Total Length (feet)	Watershed Size		Detention		
			Square Miles	*Acres*	*Basins*	*AC Feet Storage*	*Acres*
Mound Creek	1	42,240	35.6	22,750			
Above City					2	669	115
Main Stem					3	7,287	687
Little Cypress	4	189,500	51.9	32,900	8	4200	900
Dry Creek	7	10,000	7.9	5,050	1	413	30
Faulkey Gully	9	32,500	12.9	8,250	1	133	33
Pillot Gully	11	10,500	5.2	3,300	1	120	30
Dry Gully	13		5.3	3,400	2	80	12.5
Spring Gully	15		12.3	7,900	2	384	44
Seals Gully	17	2,600	7.7	4,900	1	180	20
Lemm Gully	19	5,700	7.7	5,000	3	137	37

2. Size							
a. Total Length (ft)	293,040						
b. Square Miles		146.5					
c. Acres			93,450				

3. Detention							
a. Basins				24			
b. AC Feet Storage					13603		
c. Acres						1908.5	

Mound Creek (K166-00-00)

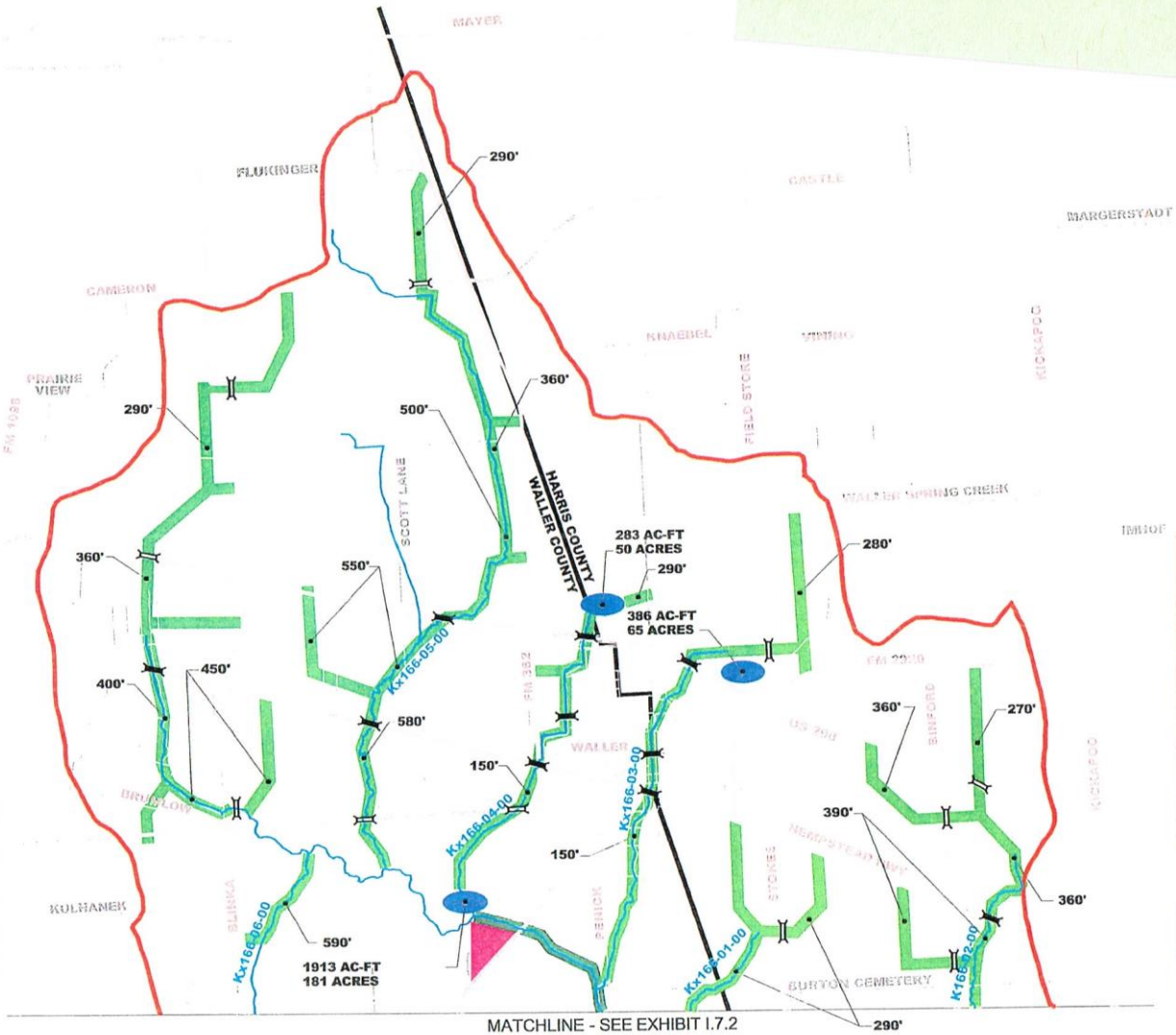
Watershed Description

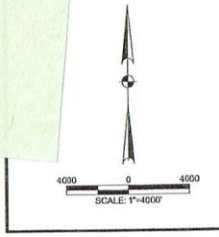
Watershed Information	• Size – 22,750 Acres (35.6 Square Miles) • Percentage of Watershed Developed – 5% • City of Waller
Environmental Considerations	• Good Quality Stream Habitat in Lower and Middle Reach of Main Stem of Mound Creek Natural Channel
Flooding Concerns	• City of Waller

Recommended Plan Components

Stream Corridors	• 150' to 550' wide Stream Corridors Throughout Watershed
Detention Facilities	• 50 and 65 Acre Basins Upstream of City of Waller Provides 669 ac-ft Storage • Three Regional Basins along Main Stem of Mound Creek; 181, 291 and 215 Acres, Provides 7,287 ac-ft Storage
Stream Habitat/Floodplain Preservation Corridors	• Preservation along Main Stem of Mound Creek from Confluence to Middle Fork • Total Length = 8 miles • Proposed Channel Corridors Will Provide Environmental Enhancements to Watershed
Voluntary Structure Buyouts	• Approximately 40 Potentially Flood Prone Structures
Reduction of 100-Year Flows Entering Cypress Creek	• Project reduces peak flows at streams outfall by approximately 90 cfs
Cost	• Approximately $162.5 million

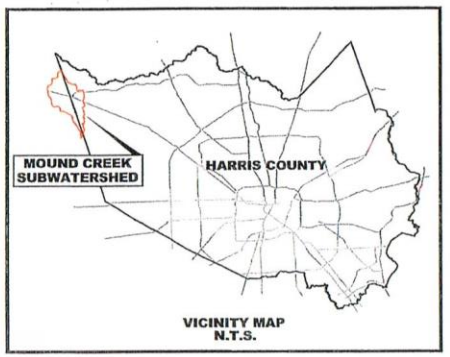
ORIGINALS





LEGEND

- Streets
- Major Roadways
- Ditches
- Watershed Boundary
- Proposed Detention Basin
- Proposed Stream Corridor
- Proposed Land Acquisition of Stream Quality Habitat Preservation
- Voluntary Acquisition of Historic Flood Prone Structures
- Proposed Bridge
- Proposed Bridge Modification



VICINITY MAP
N.T.S.

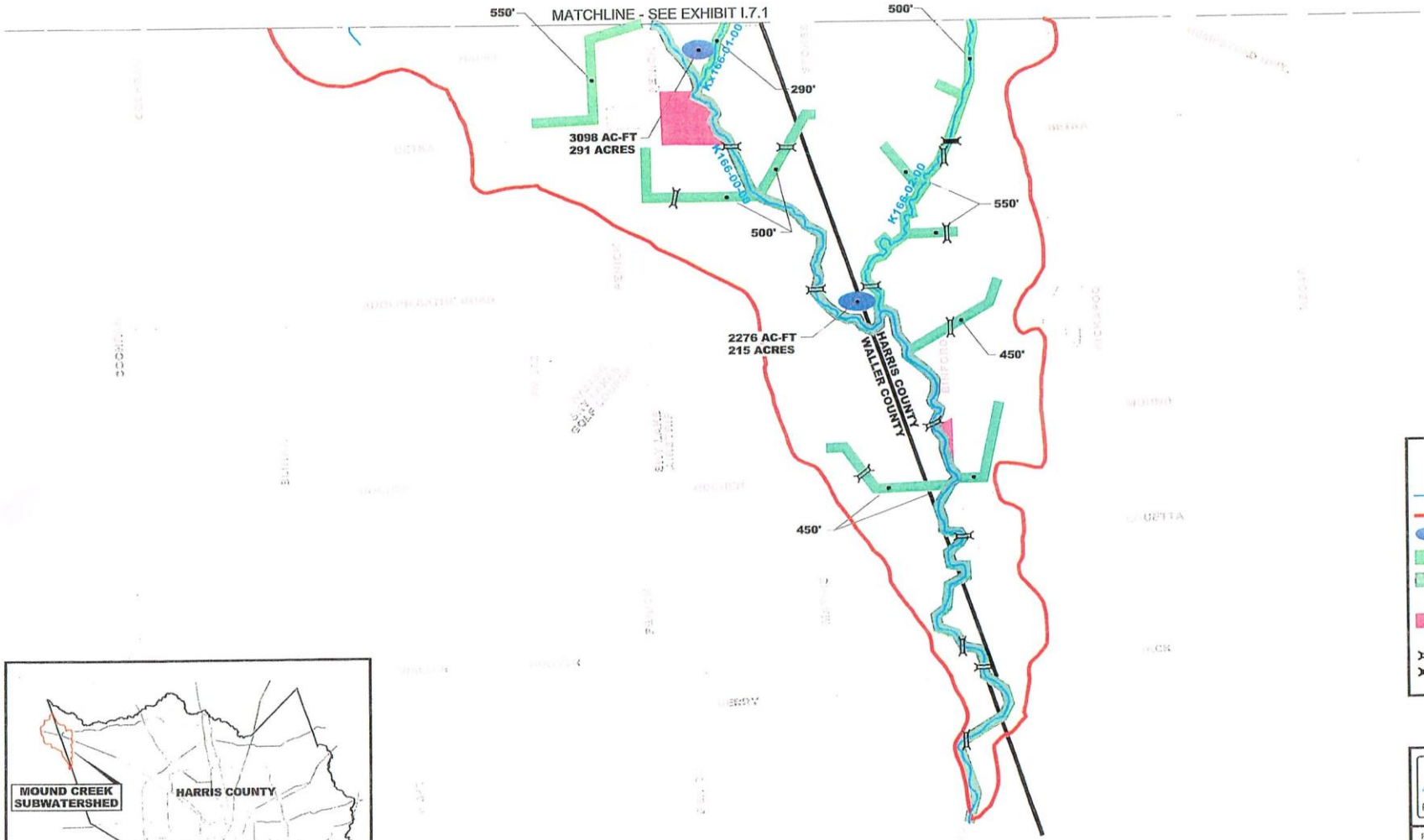
(2)

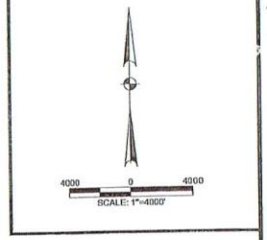
AN INITIATIVE OF HARRIS COUNTY FLOOD CONTROL DISTRICT IN ASSOCIATION WITH THE TEXAS WATER DEVELOPMENT BOARD

REGIONAL DRAINAGE PLAN AND ENVIRONMENTAL INVESTIGATIO FOR MAJOR TRIBUTARIES IN THE CYPRESS CREEK WATERSHE PHASE III - REGIONAL DRAINAGE PLAN AND ENVIRONMENTAL INVESTIGATION REPORT TWDB CONTRACT NO. 2000-483-356

MOUND CREEK WATERSHED
RECOMMENDED PLAN REPORT
RECOMMENDED PLAN FEATURES

FEBRUARY, 2003	K166-00-00	EXHIBIT I.7.





LEGEND

- Streets
- Major Roadways
- Ditches
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MOUND CREEK WATERSHED
RECOMMENDED PLAN REPORT
RECOMMENDED PLAN FEATURES

FEBRUARY, 2003	K166-00-00	EXHIBIT I.7.2

3

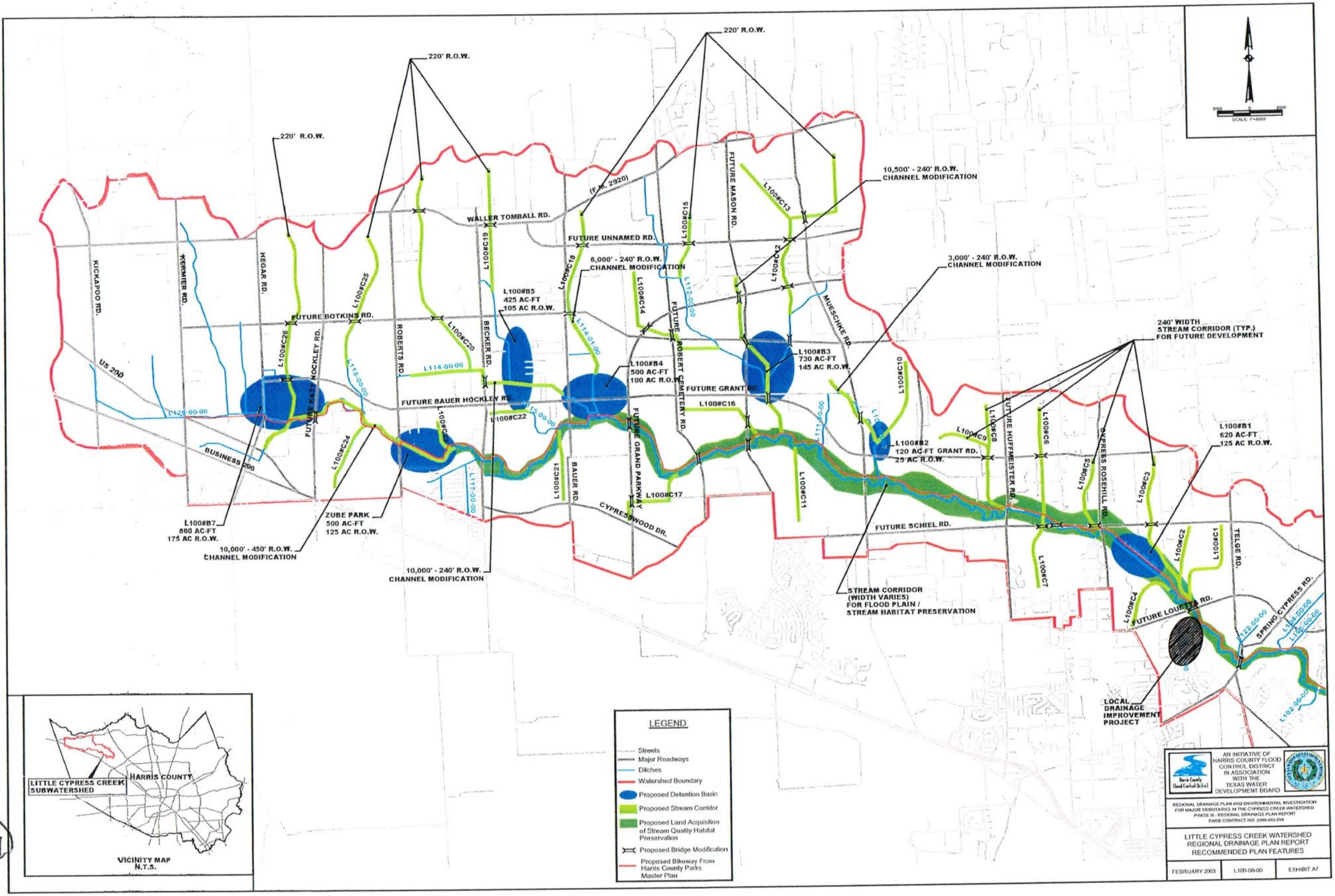
Little Cypress Creek (L100-00-00)

Watershed Description

Watershed Information	• Size - 32,900 Acres (51.9 Square Miles) • Percentage of Watershed Developed - 15% • Development Mostly in Lower Reaches • Natural Channel Drainage - Improved Tributaries Downstream of Spring-Cypress Road
Environmental Considerations	• Good Quality Stream Habitat Along Main Stem • Wetlands and Prairie Mounds Throughout Area • Wide Flood Plain
Flooding Concerns	• Some Flooding Complaints and Repetitive Flood Losses • Some Buyouts Have Occurred

Recommended Plan Components

Stream Corridors	• Reduces larger floodplain areas, provides storage volume in the section and provides dual-use possibilities • 26 proposed Stream Corridors from 220' – 240' wide • Total length = 156,000 feet • Upper Main Stem and lateral channel improvements into stream corridor sections • Total length = 33,500 feet
Detention Facilities	• Seven new and one existing detention facility proposed in plan. • Approximately 900 acres providing 4200 acre-feet of storage • Provides flow reduction and dual-use possibilities
Stream Habitat/Floodplain Preservation Corridors	• Main stem preserved by variable width preservation corridor • Approximately 1900 acres of high-quality habitat and floodplain preserved
Voluntary Structure Buyout	• A number of structures near Kluge Road along Little Cypress Creek remaining in the residual 100-year floodplain
Reduction of 100-Year Flows Entering Cypress Creek	• Project provides approximately 2686 cfs reduction of the baseline peak 100-year flows
Cost	• Approximately $106 million



220' R.O.W.
220' R.O.W.
220' R.O.W.
10,500' - 240' R.O.W.
CHANNEL MODIFICATION
6,000' - 240' R.O.W.
CHANNEL MODIFICATION
3,000' - 240' R.O.W.
CHANNEL MODIFICATION
240' WIDTH
STREAM CORRIDOR (TYP.)
FOR FUTURE DEVELOPMENT
L100#B1
620 AC-FT
125 AC R.O.W.
L100#B2
120 AC-FT
25 AC R.O.W.
L100#B3
730 AC-FT
145 AC R.O.W.
L100#B4
500 AC-FT
100 AC R.O.W.
L100#B5
425 AC-FT
105 AC R.O.W.
L100#B7
880 AC-FT
175 AC R.O.W.
ZUBE PARK
500 AC-FT
125 AC R.O.W.
10,000' - 450' R.O.W.
CHANNEL MODIFICATION
10,000' - 240' R.O.W.
CHANNEL MODIFICATION
STREAM CORRIDOR
(WIDTH VARIES)
FOR FLOOD PLAIN /
STREAM HABITAT PRESERVATION
LOCAL
DRAINAGE
IMPROVEMENT
PROJECT
KICKAPOO RD.
KERMIER RD.
HEGAR RD.
FUTURE KATY HOCKLEY RD.
FUTURE BOTKINS RD.
ROBERTS RD.
BECKER RD.
WALLER TOMBALL RD.
(F.M. 2920)
FUTURE UNNAMED RD.
BAUER RD.
FUTURE GRAND PARKWAY
FUTURE ROBERT CEMETERY RD.
FUTURE MASON RD.
MUESCHKE RD.
FUTURE GRANT RD.
GRANT RD.
FUTURE BAUER HOCKLEY RD.
CYPRESSWOOD DR.
FUTURE HUFFMEISTER RD.
CYPRESS ROSEHILL RD.
FUTURE SCHIEL RD.
FUTURE LOUETTA RD.
TELGE RD.
SPRING CYPRESS RD.
US 290
BUSINESS 290
L100#C1
L100#C2
L100#C3
L100#C4
L100#C5
L100#C6
L100#C7
L100#C8
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L120-00-00
L122-00-00
L100-00-00
SCALE: 1"=8000'
LEGEND
Streets
Major Roadways
Ditches
Watershed Boundary
Proposed Detention Basin
Proposed Stream Corridor
Proposed Land Acquisition of Stream Quality Habitat Preservation
Proposed Bridge Modification
Proposed Bikeway From Harris County Parks Master Plan
LITTLE CYPRESS CREEK SUBWATERSHED
HARRIS COUNTY
VICINITY MAP
N.T.S.
AN INITIATIVE OF
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CONTROL DISTRICT
IN ASSOCIATION
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TEXAS WATER
DEVELOPMENT BOARD
REGIONAL DRAINAGE PLAN AND ENVIRONMENTAL INVESTIGATION
FOR MAJOR TRIBUTARIES IN THE CYPRESS CREEK WATERSHED
PHASE III - REGIONAL DRAINAGE PLAN REPORT
TWDB CONTRACT NO. 2000-483-358
LITTLE CYPRESS CREEK WATERSHED
REGIONAL DRAINAGE PLAN REPORT
RECOMMENDED PLAN FEATURES
FEBRUARY 2003
L100-00-00
EXHIBIT A7

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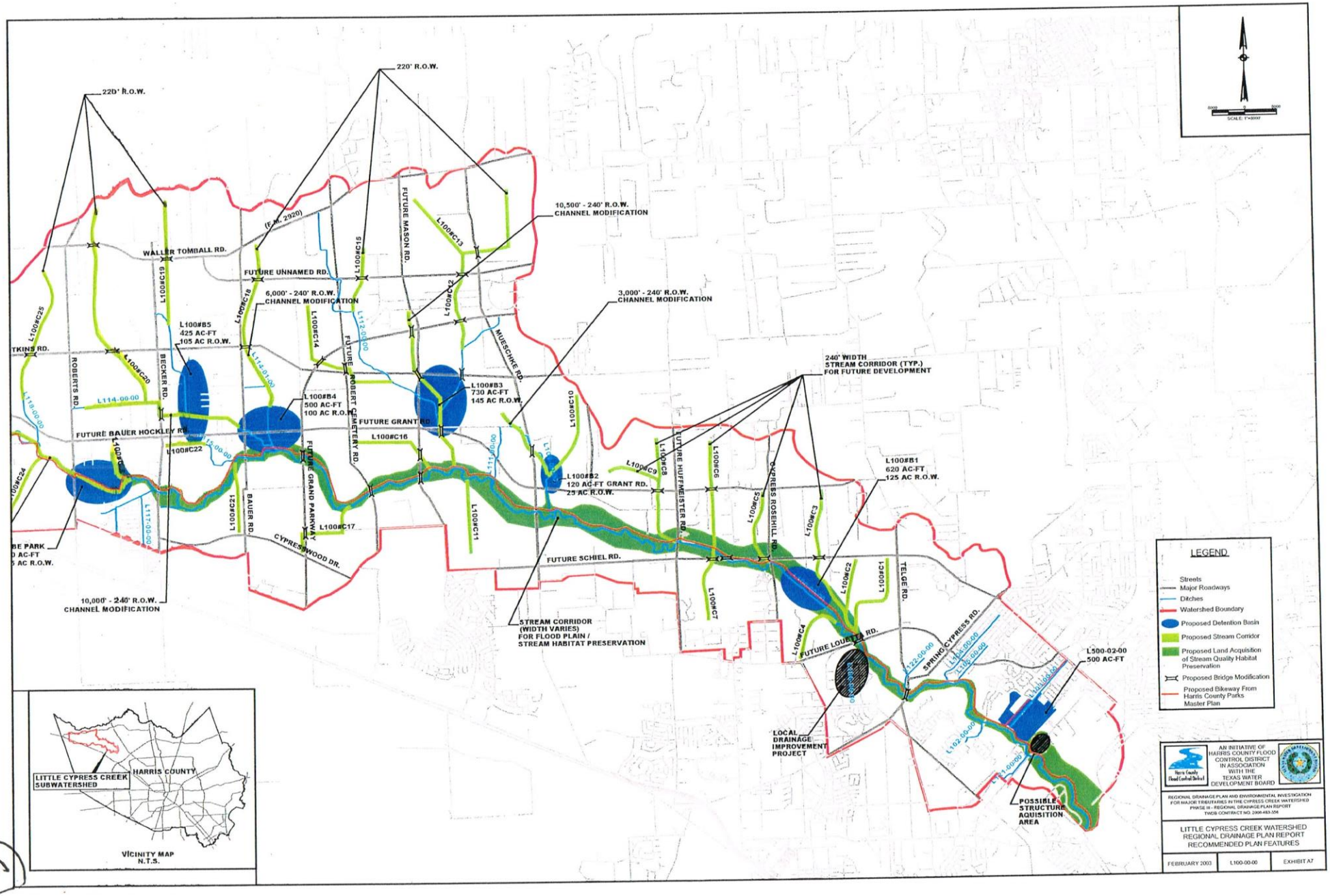
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STREAM CORRIDOR
(WIDTH VARIES)
FOR FLOOD PLAIN /
STREAM HABITAT PRESERVATION
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FUTURE UNNAMED RD.
FUTURE MASON RD.
MUESCHKE RD.
ROBERTS RD.
BECKER RD.
FUTURE BAUER HOCKLEY RD.
FUTURE ROBERT CEMETERY RD.
FUTURE GRANT RD.
FUTURE GRAND PARKWAY
BAUER RD.
CYPRESSWOOD DR.
FUTURE SCHIEL RD.
FUTURE HUFFMEISTER RD.
CYPRESS ROSEHILL RD.
TELGE RD.
FUTURE LOUETTA RD.
SPRING CYPRESS RD.
L100#B5
425 AC-FT
105 AC R.O.W.
L100#B4
500 AC-FT
100 AC R.O.W.
L100#B3
730 AC-FT
145 AC R.O.W.
L100#B2
120 AC-FT GRANT RD.
29 AC R.O.W.
L100#B1
620 AC-FT
125 AC R.O.W.
L500-02-00
500 AC-FT
LOCAL
DRAINAGE
IMPROVEMENT
PROJECT
POSSIBLE
STRUCTURE
AQUISITION
AREA
LEGEND
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FEBRUARY 2003
L100-00-00
EXHIBIT A7

Dry Creek (K145-00-00)

Watershed Description

Watershed Information

- Size – 5,050 Acres (7.9 Square Miles)
- Percentage of Watershed Developed – 70%
- Development in Lower and Middle Watershed

Environmental Considerations

- Good Quality Stream Habitat in Lower Reach
- Channel Improvements in Middle Reach

Flooding Concerns

- Flooding in Western Trails Subdivision
- Most Development Occurs Around Rectified Channels with Adequate Capacity

Recommended Plan Components

Stream Corridors

- 300' Stream Corridor along K145#C1

Detention Facilities

- 30 Acre Basin Upstream of Spring Cypress Rd.
- Provides 413 ac-ft Storage

Stream Habitat/Floodplain Preservation Corridors

- Preservation along Downstream Reach
- Total Length = 10,000 feet
- Proposed Channel Corridors Will Provide Environmental Enhancements to Watershed

Voluntary Structure Buyouts

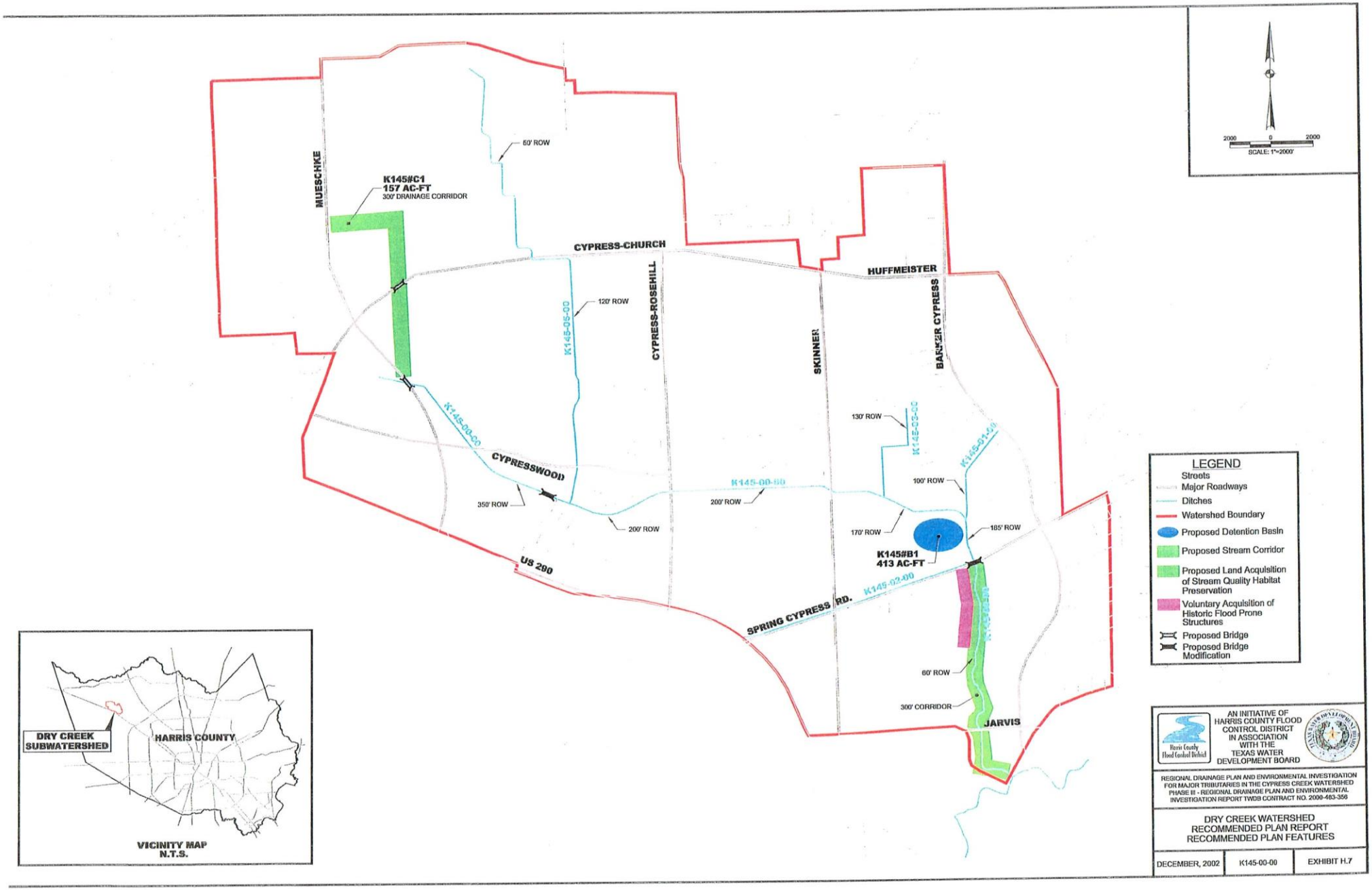
- Approximately 25 Potentially Flood Prone Structures within Western Trails Subdivision

Reduction of 100-Year Flows Entering Cypress Creek

- Project reduces peak flows at streams outfall by approximately 277 cfs

Cost

- Approximately $15.1 million


2000 0 2000
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MUESCHKE
K145#C1
157 AC-FT
300' DRAINAGE CORRIDOR
60' ROW
CYPRESS-CHURCH
120' ROW
K145-05-00
CYPRESS-ROSEHILL
SKINNER
HUFFMEISTER
BAKER CYPRESS
130' ROW
K145-03-00
K145-01-00
100' ROW
K145-00-00
CYPRESSWOOD
350' ROW
K145-00-00
200' ROW
200' ROW
170' ROW
185' ROW
K145#B1
413 AC-FT
US 290
K145-02-00
SPRING CYPRESS RD.
K145-00-00
60' ROW
300' CORRIDOR
JARVIS
LEGEND
Streets
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Ditches
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DRY CREEK WATERSHED
RECOMMENDED PLAN REPORT
RECOMMENDED PLAN FEATURES
DECEMBER, 2002
K145-00-00
EXHIBIT H.7

(10)

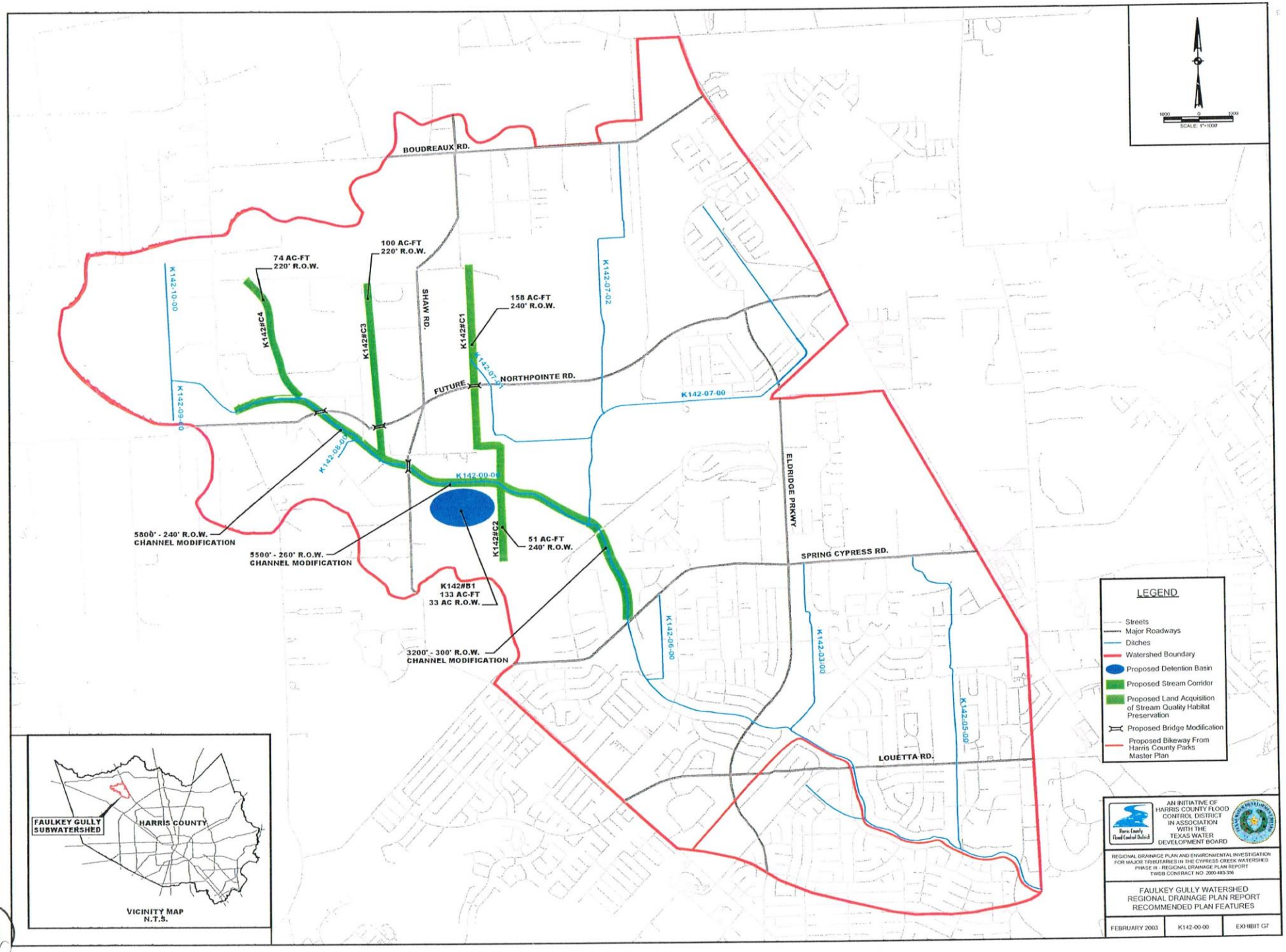
Faulkey Gully (K142-00-00)

Watershed Description

Watershed Information	• Size - 8,250 Acres (12.9 Square Miles) • Percentage of Watershed Developed - 40% • Fully Developed Lower Half With 800-Acre Planned Development (NorthPointe) in Middle Third of Watershed
Environmental Considerations	• Good Quality Stream Habitat in Upper Half • Wetlands and Prairie Mounds in Upper Half • Fully Rectified Channel Section in Lower Half
Flooding Concerns	• Few Flooding Complaints or Repetitive Flood Losses. • Most Development Occurs Around Rectified Channels With Adequate Capacity

Recommended Plan Components

Stream Corridors	• Reduces larger floodplain areas, provides storage volume in the section and provides dual-use possibilities • 18,000 feet of new Stream Corridors from 220'-240' wide in the upper reach of Faulkey Gully • 14,500 feet of Main Stem channel improvements into a stream corridor section ranging from 240'-300' wide.
Detention Facilities	• K142#B1 along Faulkey Gully downstream of Shaw Road • 33 acre tract, provides approximately 133 acre-feet of storage potential • Provides flow reduction and dual-use possibilities
Reduction of 100-Year Flows Entering Cypress Creek	• Project provides approximately 122 cfs reduction of the baseline peak 100-year flows • Reduction can be increased based on usage of channel improvement sections along the main stem as linear detention
Cost	• Approximately $12.3 million


BOUDREAUX RD.
74 AC-FT
220' R.O.W.
100 AC-FT
220' R.O.W.
158 AC-FT
240' R.O.W.
K142#C4
K142#C3
K142#C1
SHAW RD.
K142-10-00
K142-09-00
K142-07-02
K142-07-01
FUTURE
NORTHPOINTE RD.
K142-07-00
K142-08-00
K142-00-00
ELDRIDGE PRKWY
5800' - 240' R.O.W.
CHANNEL MODIFICATION
5500' - 260' R.O.W.
CHANNEL MODIFICATION
K142#C2
51 AC-FT
240' R.O.W.
SPRING CYPRESS RD.
K142#B1
133 AC-FT
33 AC R.O.W.
K142-06-00
K142-03-00
K142-05-00
3200' - 300' R.O.W.
CHANNEL MODIFICATION
LOUETTA RD.
1000 0 1000
SCALE: 1"=1000'
LEGEND
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RECOMMENDED PLAN FEATURES
FEBRUARY 2003
K142-00-00
EXHIBIT G7

21

Pillot Gully (K140-00-00)

Watershed Description

Watershed Information

- Size - 3,300 Acres (5.2 Square Miles)
- Percentage of Watershed Developed - 30%
- Development in Middle Watershed

Environmental Considerations

- Good Quality Stream Habitat in Lower Reaches
- Channel Improvements in Middle and Upper Reaches

Flooding Concerns

- No Flooding Complaints or Repetitive Flood Losses Due to Pillot Gully.
- Some Local Flooding Concerns Due to Poor Surface Drainage
- Most Development Occurs Around Rectified Channels With Adequate Capacity

Recommended Plan Components

Stream Corridors

- Reduces larger floodplain areas, provides storage volume in the section and provides dual-use possibilities
- 220' wide Stream Corridors along upper Pillot Gully and as an extension of existing tributary K140-05-00
- Includes channel modifications upstream of Huffsmith-Kohrville Road
- Total length = 10,500 feet

Detention Facilities

- K140#B2 along Pillot Gully, upstream of Huffsmith-Kohrville Road
- 30 acre tract, provides approximately 120 acre-feet of storage potential
- Provides flow reduction and dual-use possibilities

Stream Habitat/Floodplain Preservation Corridors

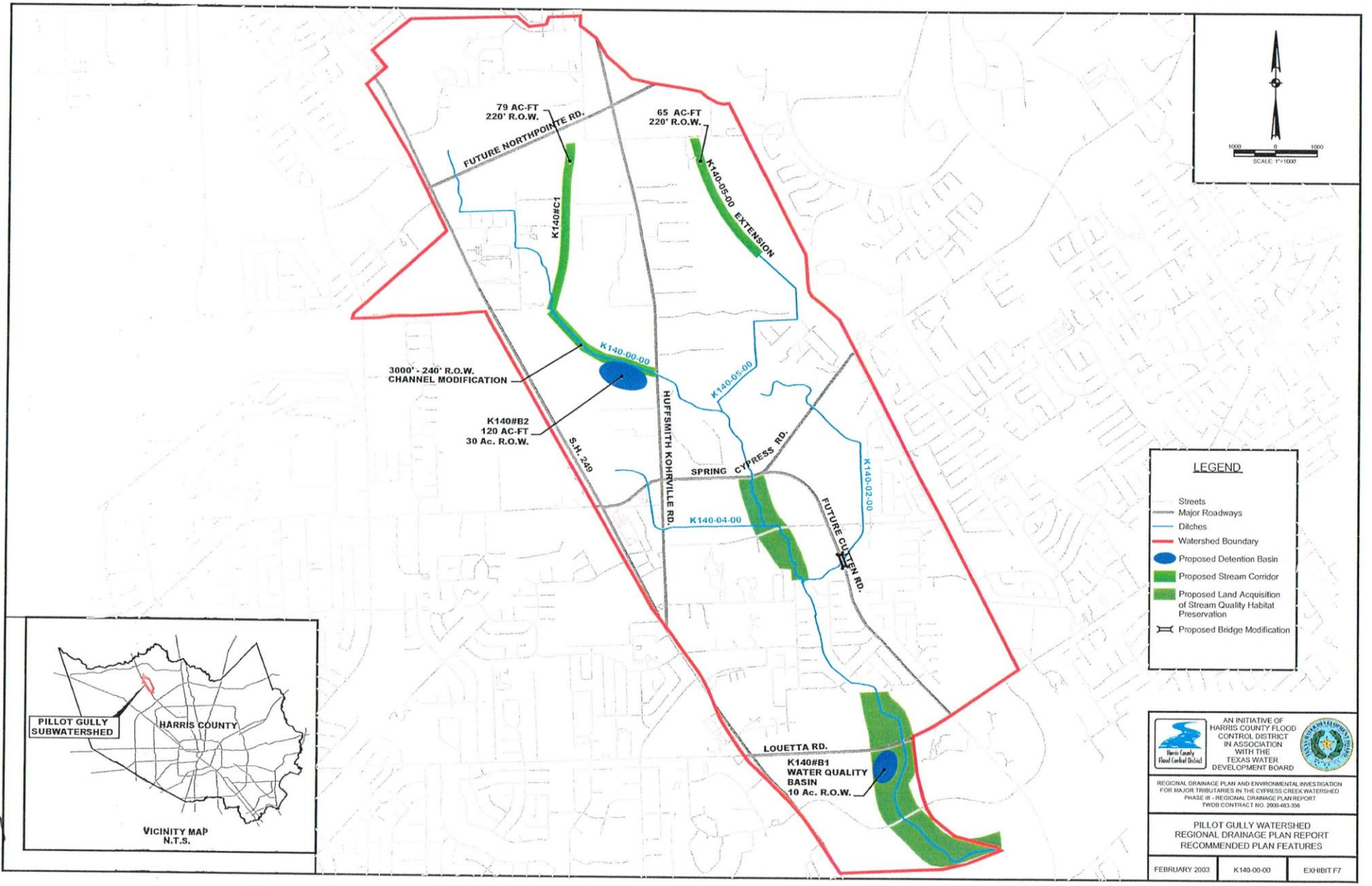
- 2 areas of preservation at the mouth and downstream of Spring-Cypress Road
- Approximately 145 acres of high-quality habitat and floodplain preserved

Reduction of 100-Year Flows Entering Cypress Creek

- Project provides approximately 421 cfs reduction of the baseline peak 100-year flows

Cost

- Approximately $7.3 million


79 AC-FT
220' R.O.W.
65 AC-FT
220' R.O.W.
FUTURE NORTHPOINTE RD.
K140#C1
K140-05-00 EXTENSION
K140-00-00
3000' - 240' R.O.W.
CHANNEL MODIFICATION
K140#B2
120 AC-FT
30 Ac. R.O.W.
K140-05-00
HUFFSMITH KOHRVILLE RD.
S.H. 249
SPRING CYPRESS RD.
K140-02-00
K140-04-00
FUTURE CULTEN RD.
LOUETTA RD.
K140#B1
WATER QUALITY
BASIN
10 Ac. R.O.W.
1000 0 1000
SCALE: 1"=1000'
LEGEND
Streets
Major Roadways
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PILLOT GULLY WATERSHED
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RECOMMENDED PLAN FEATURES
FEBRUARY 2003
K140-00-00
EXHIBIT F7

(21)

Dry Gully (K133-00-00)

Watershed Description

Watershed Information

- Size - 3,400 acres (5.3 square miles)
- GleannLoch Farms is a master-planned development in upper watershed (55% of watershed)
- Over 90% development in the middle and lower watershed regions

Environmental Considerations

- Poor quality stream habitat
- Channel rectification along entire channel reach

Flooding Concerns

- Documented historical structural flooding within multiple areas of Memorial Northwest subdivision
- Flooding is mainly an internal drainage problem
- Most development occurs around rectified channels with adequate capacity

Recommended Plan Components

Detention Facilities

Sideweir Detention Basin **K133#B1**

- Located along Dry Gully, downstream of Louetta Road
- Weir set below 10-year water surface elevation
- 10 acre tract; 67 acre-feet of storage
- Provides flow reduction along Dry Gully and possibilities as a multiple usage facility

Spring-Cypress Road Detention Basin **K133#B2**

- Located along Dry Gully, downstream of Spring-Cypress Road
- 2.5 acres; 13 acre-feet
- Provides storage for storm water quality and mitigation requirements for the future expansion of Spring-Cypress Road

Storm Water Drainage Improvement Areas

Memorial Northwest Subdivision

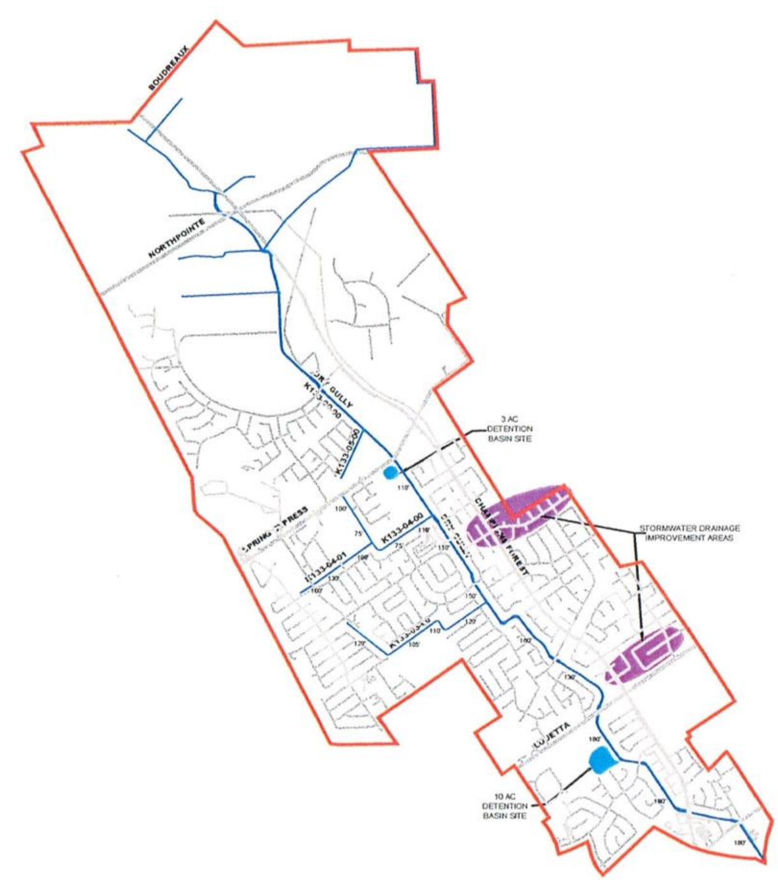
- Aid in the flood relief to documented historic structural flooding
- Reduction of internal drainage problems
- Coordination with HCPID ED to investigate internal drainage problems

Reduction of 100-Year Flows Entering Cypress Creek

- Project reduces peak flows at streams outfall by approximately 400 cfs

Cost

- Approximately $1.1 million

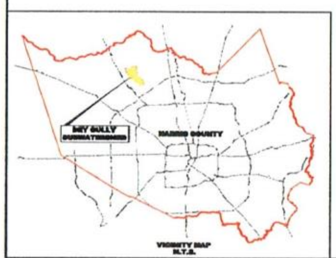


LEGEND

- Street
- Major Road
- Stream
- Watershed Boundary

PLAN COMPONENTS

- Proposed Detention Basin
- Proposed Channel Corridor
- Proposed Floodplain/Stream Habitat Preservation
- Proposed Stormwater Drainage Improvement Investigation Areas
- Proposed Bridge Modification



AN INITIATIVE OF HARRIS COUNTY FLOOD CONTROL DISTRICT IN ASSOCIATION WITH THE TEXAS WATER DEVELOPMENT BOARD

REGIONAL DRAINAGE PLAN AND ENVIRONMENTAL INVESTIGATION FOR MAJOR TRIBUTARIES IN THE CYPRESS CREEK WATESRHED
PHASE III - REGIONAL DRAINAGE PLAN REPORT
TWDB CONTRACT NO. 2000-483-356

DRY GULLY WATERSHED
REGIONAL DRAINAGE PLAN REPORT
RECOMMENDED PLAN FEATURES

FEBRUARY 2003	K133-00-00	EXHIBIT: E7

Spring Gully (K131-00-00)

Watershed Description

Watershed Information

- Size – 7,900 acres (12.3 square miles)
- Percentage of watershed developed = 35%
- Most development is residential located in lower half of watershed
- Pine Lakes Subdivision is a master planned community in the upper watershed along K131-04

Environmental Considerations

- High quality stream habitat in lower reach of Spring Gully
- Wetlands in upper half of Theiss Gully Watershed

Flooding Concerns

- Historical flooding in Oakwood Glen and Shannon Forest Subdivisions along the mid reaches of Theiss Gully
- Other historical flooding during T.S. Allison scattered within watershed

Recommended Plan Components

Stream Corridors

K131-00-00, K131#C1

- 300' wide Stream Corridor along un-improved Spring Gully
- 300' wide Stream Corridor along new K131#C1, a proposed tributary to Spring Gully

K131-02-04

- 150' wide Stream Corridor along upper reaches of Theiss Gully
- 300' wide Stream Corridor extension of upper Theiss Gully

Detention Facilities

Flow Through Detention Basin **K13102#B1**

- Located along Theiss Gully, downstream of Spring Cypress Road
- 20 acre tract; 114 acre-feet

Sideweir Detention Basin **K131#B1**

- Located along Spring Gully, upstream of Cypresswood Drive
- 24 acre tract; 270 acre-feet

Stream Habitat/Floodplain Preservation Corridors

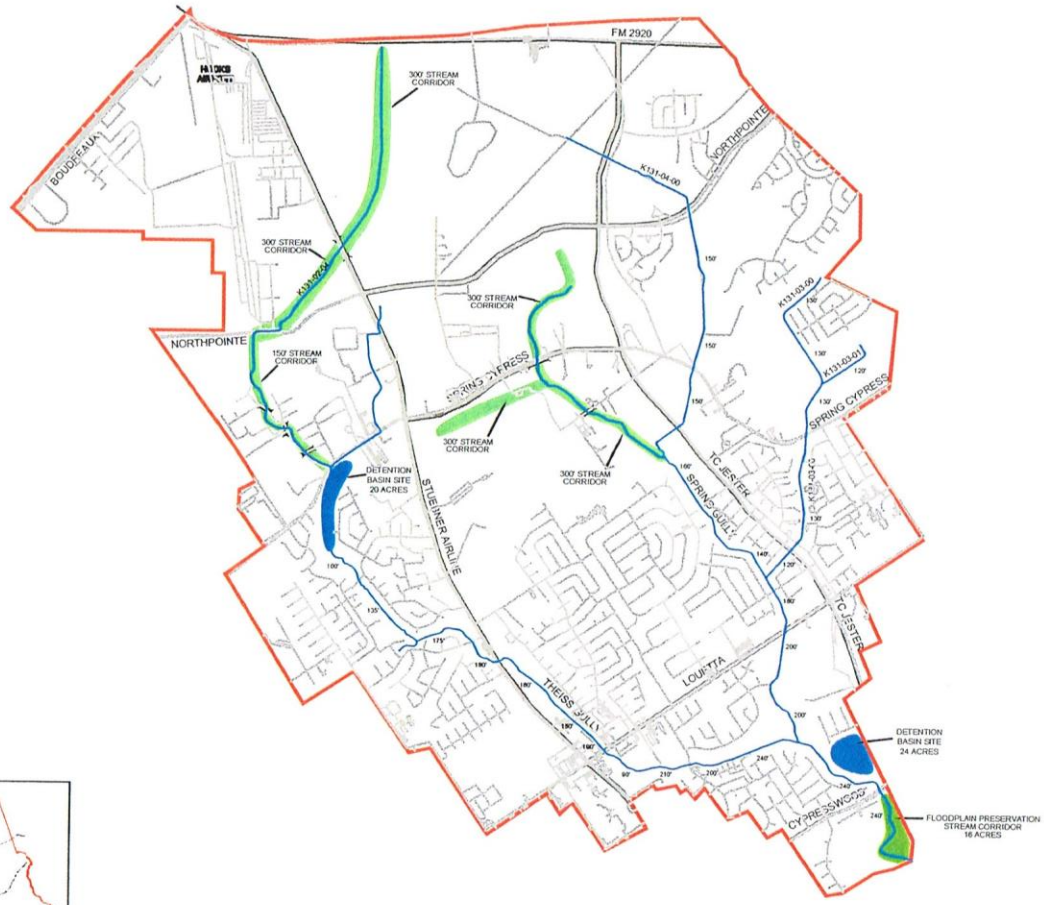
- Approximately 16 acres along the lower reaches of Spring Gully

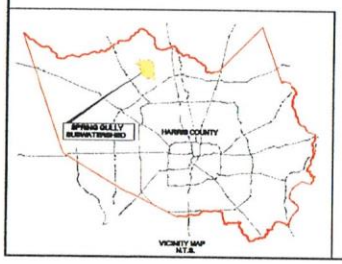
Reduction of 100-Year Flows Entering Cypress Creek

- Project reduces peak flows at streams outfall by approximately 1,400 cfs

Cost

- Approximately $13.1 million





VICINITY MAP
N.T.S.

LEGEND

- Street
- Major Road
- Stream
- Watershed Boundary

PLAN COMPONENTS

- Proposed Detention Basin
- Proposed Channel Corridor
- Proposed Floodplain/Stream Habitat Preservation
- Voluntary Buyout of Historic Flood Prone Structures
- Proposed Bridge Modification

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REGIONAL DRAINAGE PLAN AND ENVIRONMENTAL INVESTIGATION FOR MAJOR TRIBUTARIES IN THE CYPRESS CREEK WATERSHED
PHASE III - REGIONAL DRAINAGE PLAN REPORT
TWDB CONTRACT NO. 2000-483-358

SPRING GULLY WATERSHED REGIONAL DRAINAGE PLAN REPORT RECOMMENDED PLAN FEATURES

FEBRUARY 2003	K131-00-00	EXHIBIT D6

61

Seals Gully (K124-00-00)

Watershed Description

Watershed Information

- Size – 4,900 acres (7.7 square miles)
- Percentage of watershed developed = 45%
- Kothman Gully is a major tributary

Environmental Considerations

- Good stream habitat only along mid reach of Seals Gully
- Most of Seals Gully has been rectified
- Entire reach of Kothman Gully has been rectified

Flooding Concerns

- Documented structural flooding within Enchanted Oaks and Devonshire Subdivisions in the lower reaches of Seals Gully
- Documented structural flooding within Northwood Park subdivisions along K124-02-03 within the upper Kothman Gully subarea.

Recommended Plan Components

Stream Corridors

K124-04, K124-05, K124#C1

- 300' wide Stream Corridors to provide drainage infrastructure and outfall depth

K124-02-03

- 200' wide Stream Corridor to provide drainage infrastructure and outfall depth
- Also provides relief for existing flooding within Northwood Park Subdivision

Detention Facilities

Sideweir Detention Basin **K124#B1**

- Located along Seals Gully, downstream of Cypresswood Drive
- 20 acre tract; 180 acre-feet
- Provides flow reduction and multiple usage possibilities

Stream Habitat/Floodplain Preservation Corridors

- Preservation of Floodplain Corridor along mid-reach of Seals Gully
- Total stream protection length of 2,600 feet
- Proposed preservation corridor will preserve watershed environmental qualities

Voluntary Structure Buyout

Enchanted Oaks and **Devonshire Subdivisions**

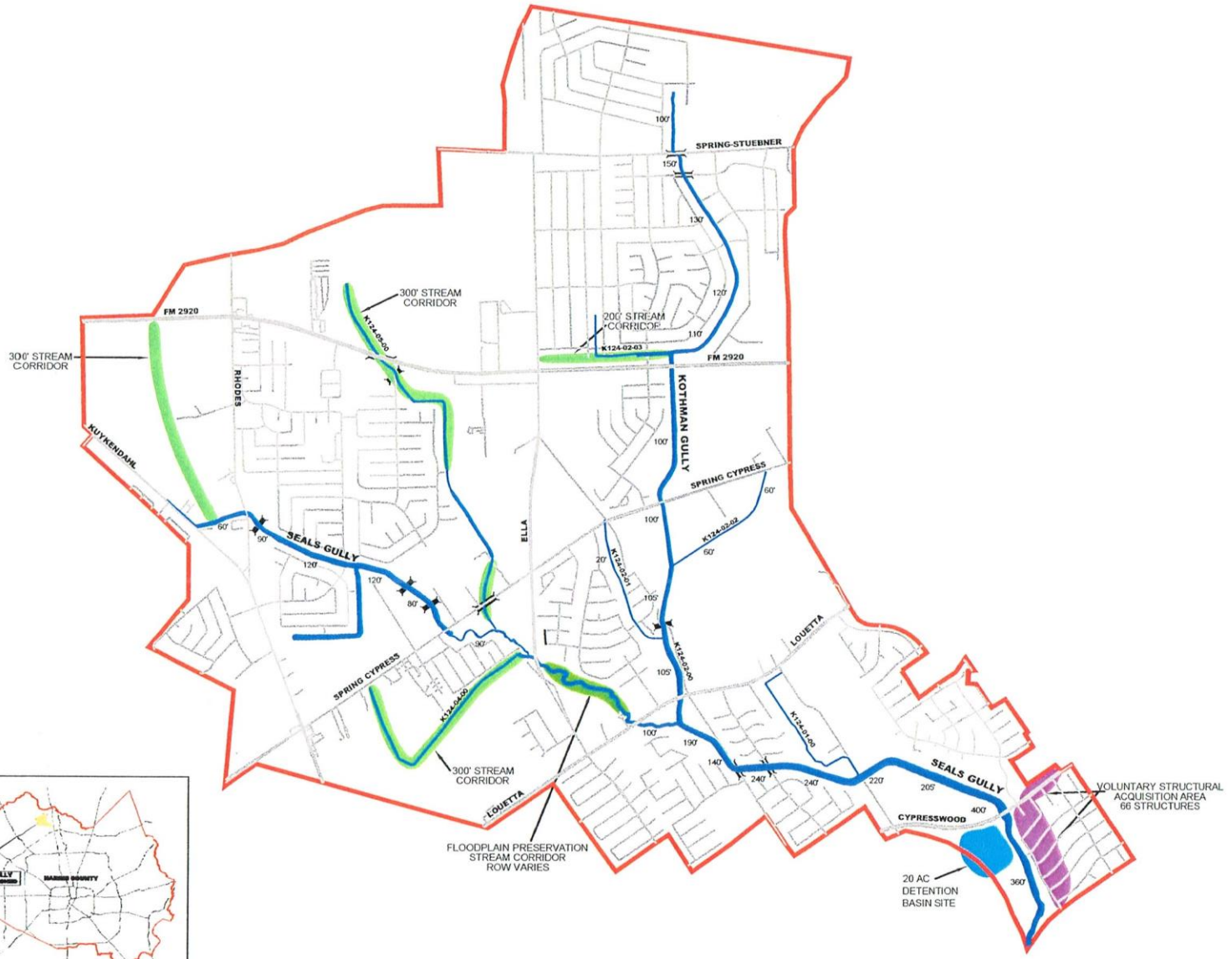
- Approximately 66 documented historical flooded homes

Reduction of 100-Year Flows Entering Cypress Creek

- Project reduces peak flows at streams outfall by approximately 1,000 cfs

Cost

- Approximately $18.7 million



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REGIONAL DRAINAGE PLAN AND ENVIRONMENTAL INVESTIGATION FOR MAJOR TRIBUTARIES IN THE CYPRESS CREEK WATERSHED PHASE III - REGIONAL DRAINAGE PLAN REPORT TWDB CONTRACT NO. 2000-483-356

SEALS GULLY WATERSHED REGIONAL DRAINAGE PLAN REPORT RECOMMENDED PLAN FEATURES

FEBRUARY 2003	K124-00-00	EXHIBIT C7

Lemm Gully (K120-00-00)

COPY

Watershed Description

Watershed Information

- Size – 5,000 acres (7.7 square miles)
- Percentage of watershed developed = 40%
- Development mostly in lower reaches and along Senger Gully
- Senger and Wunsche Gullies are major tributaries

Environmental Considerations

- High stream habitat along lower reaches of Lemm Gully and Senger Gully
- Most of Lemm Gully and Senger Gully have been rectified
- Wide floodplain along upper reach of Wunsche Gully

Flooding Concerns

- North Hill Estates along Lemm Gully
- Enchanted Oaks and Devonshire along Senger Gully
- Other Scattered Locations along Senger and Wunsche Gullies

Recommended Plan Components

Stream Corridors

K120-03

- Reduces Large Floodplain and Provides Multiple Usage Possibilities
- 300' wide Stream Corridor along upper Wunsche Gully; upstream of I-45
- Total Corridor Length = 5,700 feet

Detention Facilities

- Sideweir Detention Basin **K120#B1**
- Located along Senger Gully, downstream of Cypresswood Drive
- Weir set below 10-year water surface elevation
- 22 acre tract; 137 acre-feet

Stream Habitat/Floodplain Preservation Corridors

- Approximately 63 acres along the lower reaches of Lemm Gully and Senger Gully

Voluntary Structure Buyout

- Approximately 61 documented historical flooded homes along the lower reaches of Lemm Gully and Senger Gully

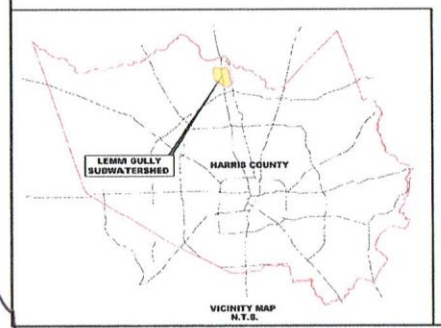
Reduction of 100-Year Flows Entering Cypress Creek

- Project reduces peak flows at streams outfall by approximately 480 cfs

Cost

- Approximately $13.0 million

COMBINED ALTERNATIVES - LEMM GULLY



LEGEND

- MAJOR THOROUGHFARE
- PROPOSED DETENTION BASIN
- PROPOSED STREAM CORRIDOR
- PROPOSED BRIDGE MODIFICATION
- PROPOSED LAND ACQUISITION OF STREAM QUALITY HABITAT PRESERVATION
- VOLUNTARY ACQUISITION OF HISTORIC FLOOD PRONE STRUCTURES

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REGIONAL DRAINAGE PLAN AND ENVIRONMENTAL INVESTIGATION FOR MAJOR TRIBUTARIES IN THE CYPRESS CREEK WATERSHED PHASE III HYDROLOGIC AND HYDRAULIC BASELINE REPORT TWDB CONTRACT NO. 2000-483-356

LEMM GULLY PHASE III TWDB COMBINED ALTERNATIVES

SEPT 2002 K120-00-00 EXHIBIT 2