



Lady Bird Johnson

Wildflowercenter

The University of Texas at Austin





Our work optimizes the ecological, environmental, and sociological function of landscapes.



RESEARCH · TEACH · APPLY



PRESCRIBED FIRE PROGRAM

EST. 1999

GREEN ROOFS

FOR THE ARID SOUTHWEST



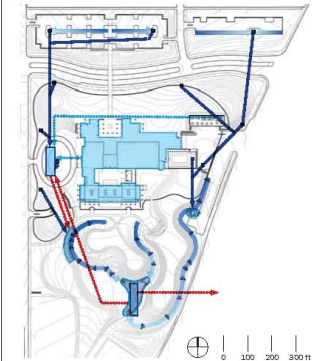
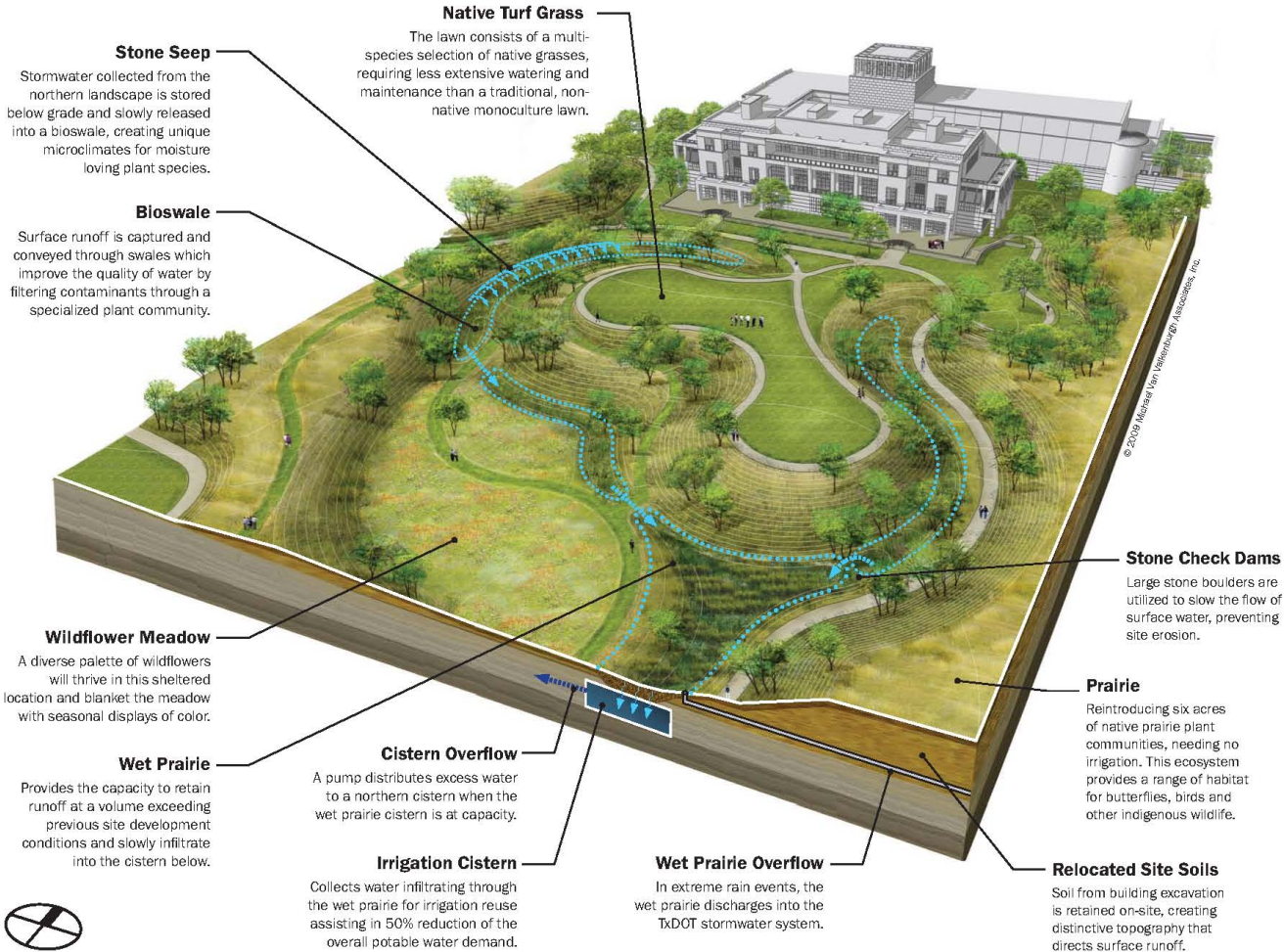




URBAN PRAIRIES
GEORGE W. BUSH PRESIDENTIAL CENTER

George W. Bush Presidential Center Landscape

The Presidential Center plantings, site hydrology, and topography work together to create a landscape that is ecologically rich and environmentally sustainable, while providing a dynamic experience in every season of the year. The native plant communities of North Central Texas are selected for their compatibility with various site microclimates.



Stormwater Management

The overall stormwater collection and distribution strategy will dramatically limit the need for water intake and the occurrence of water outflow into municipal systems. The landscape absorbs rainwater runoff on-site, cleanses contaminants from stormwater, harvests stormwater for irrigation reuse, and sustainably supports native plant communities that thrive in wet conditions.



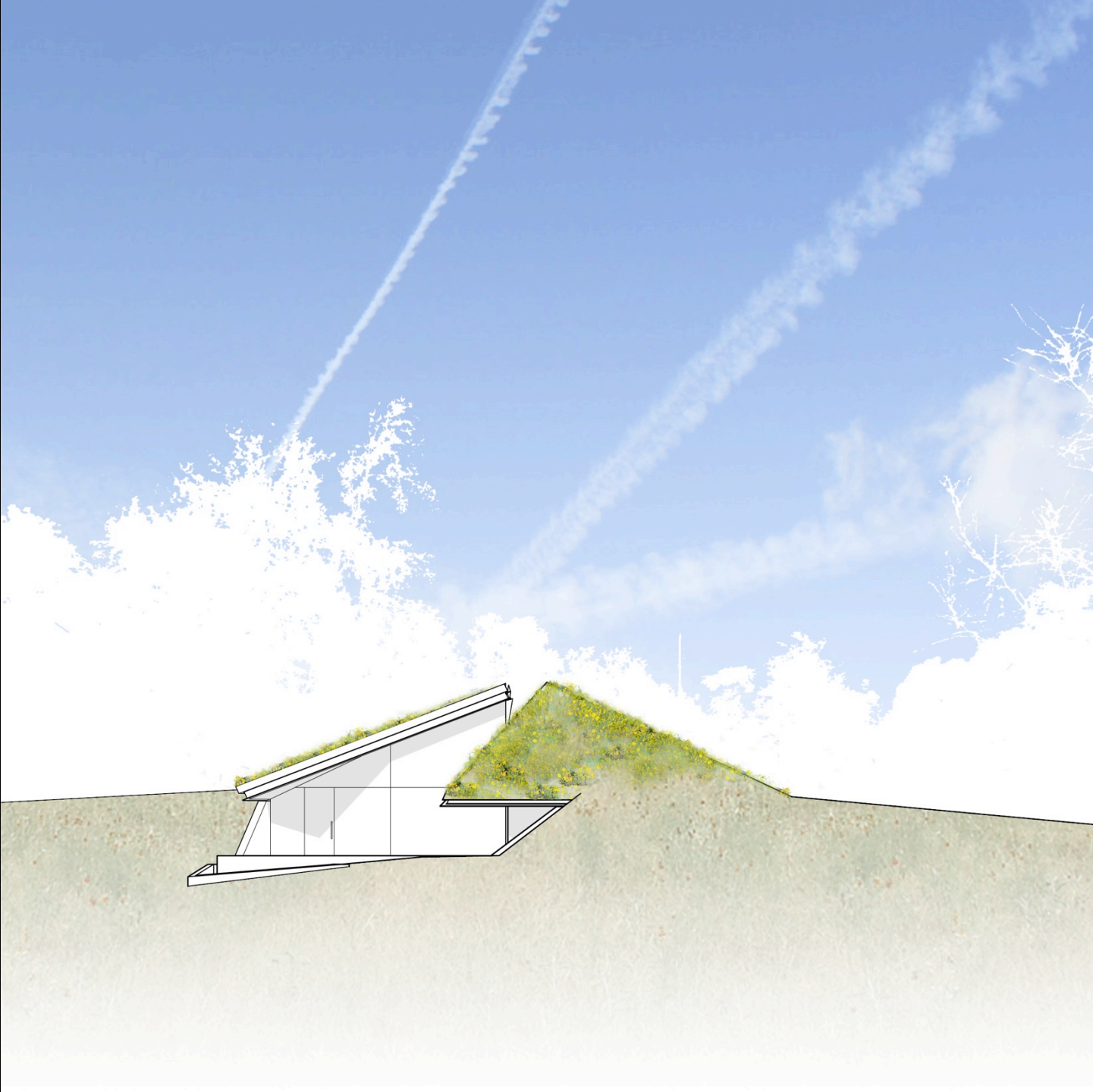






















TEACH
PROFESSIONAL WORKSHOPS - UT



Memorial Day 2015



12pm 5/23 - 12pm 5/24

BLANCO RIVER GAUGE - AT WIMBERLEY -

Hydrograph for Blanco River at Wimberley

40.21 Feet

5/24 @1:00am

32.43 Feet

5/24 @12:00am

26.05 Feet

5/23 @11:30pm

17.12 Feet

5/23 @11:00pm

8.98 Feet

5/23 @10:30pm

50.00 Feet

40.00 Feet

30.00 Feet

20.00 Feet

10.00 Feet - Action Flood Stage

Flood Gauge Legend

-  - Record Flood Stage
-  - Major Flood Stage
-  - Moderate Flood Stage
-  - Minor Flood Stage
-  - Action Flood Stage

Data provided by: NWS Austin/San Antonio





HAYS CO., TX / KVUE



 USA
TODAY



© Mason Photography





Letting the River Heal

Home > Letting the River Heal



Photo: Terry Raines

Letting the River Heal

The good news is, the best thing you can do for your trees and river banks is to leave them alone. Please take a look at the following resources for important information on what you can do to help the trees and riverbanks heal after the Memorial Day weekend floods.

January 11, 2016

GET INVOLVED

Donate >

Subscribe >

Shop >

MORE VIDEO



HILL COUNTRY VIEW RADIO SPOTS

Storm Recovery

Flash Flood Alley

TREES FOR THE BLANCO

In the dark night of May 23, 2015, a 40 foot wall of water rushed down the Blanco River. It swept away lives and homes, uprooted and smashed precious 500 year old cypress trees. The force of the waters scoured the banks of soil, trees, and wildlife. In time nature will reforest the area, but without our cooperation it will take much longer.



In September of 2015 Hays County asked TreeFolks to develop a reforestation plan for planting trees along the devastated section of the Blanco River. TreeFolks, working with Hays County, private landowners, and other stakeholders, developed *Trees for the Blanco* to accelerate the recovery of the riverside forest. Under this plan, all owners of private land damaged by the historic flood along the Blanco River in Hays County are eligible to receive free reforestation services.

Why Reforestation?

Trees, shrubs, and grasses along the riverbank help filter pollutants, slow flooding, shade the river, and provide

habitat for the wildlife of Central Texas. Ecological restoration takes time and this project will continue over several years. TreeFolks' priority will be to serve landowners in a fair and equitable manner.

Who is eligible?

All owners of private land damaged by the historic flood along the Blanco River in Hays County are eligible to receive free reforestation services. While landowners are encouraged to seek restoration resources that are right for them, contacting TreeFolks is the first step to participating in the cost-free *Trees for the Blanco* program. While they are waiting to receive their free reforestation services, landowners are encouraged to begin planting trees and seedlings.

Trees for the Blanco

Apply Now

SPONSORED BY:

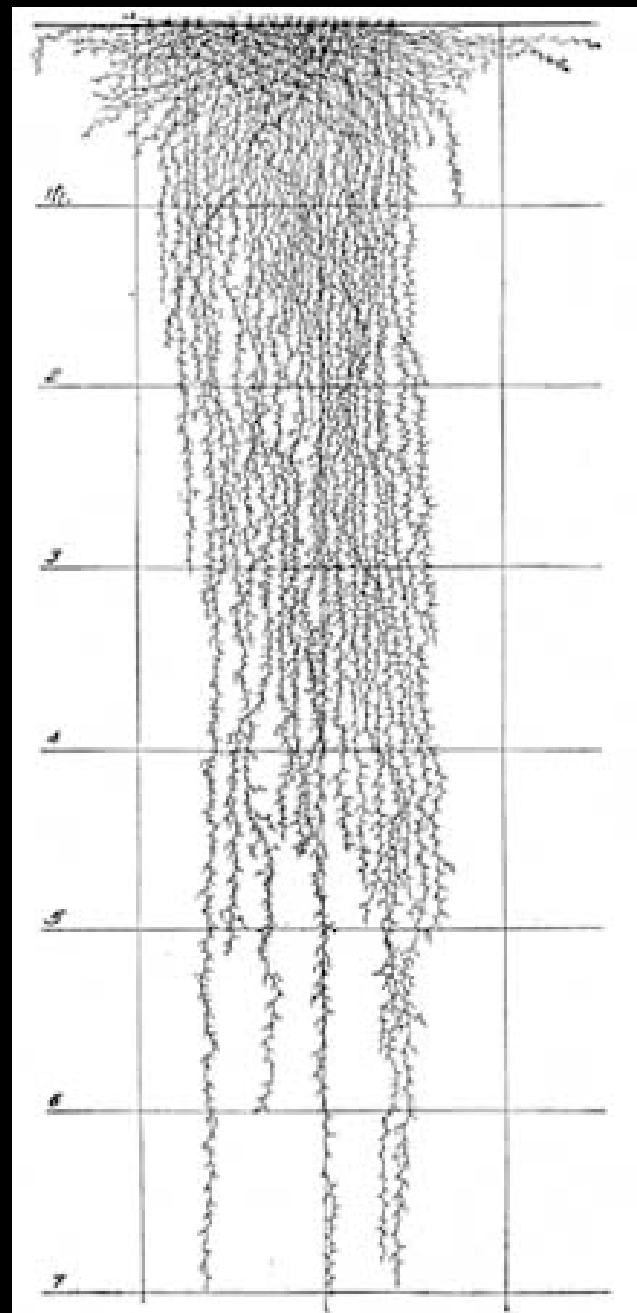






Case Study









BUILDING FUNCTION

Match plants to site and climatic conditions

Select high functioning plants

Think in terms of communities – diversity is end goal

- Structure

- Species

- Age classes

- Community types

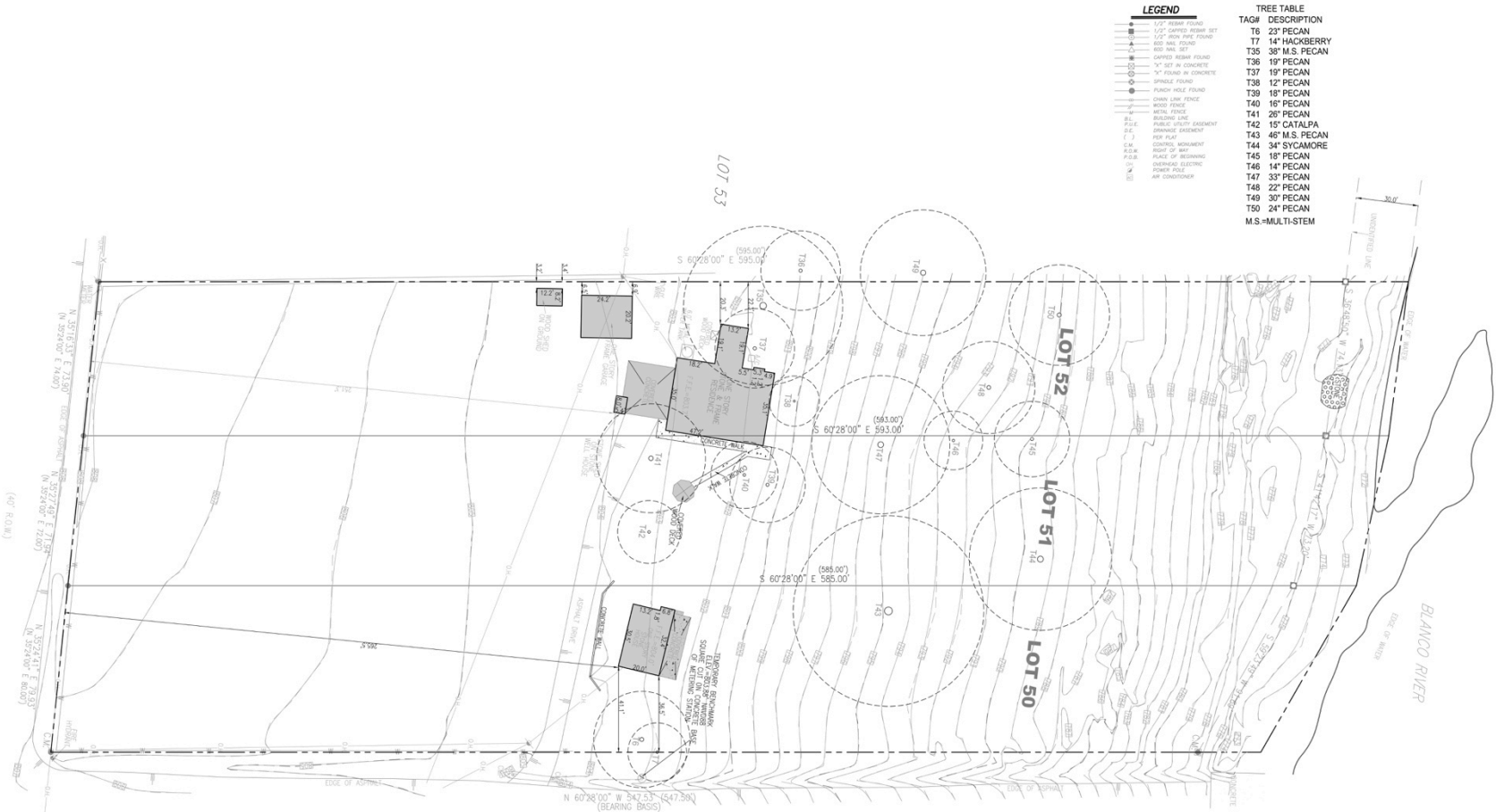
Soil is the foundation for success: protect healthy soils and restore where needed

A scenic view of the Blanco River. The river flows through a rocky, layered bank on the left. The foreground is dominated by lush green grasses and a large, weathered log. A large tree with dense green foliage is on the left side of the frame. The sky is a clear, bright blue.

blanco river

design guidelines





LEGEND

- ▲ 1/2" REBAR FOUND
- 1/2" CEMENT REBAR SET
- 1/2" BOM PIPE FOUND
- 8" BOM FOUND
- △ 8" BOM SET
- 6" CONCRETE REBAR FOUND
- 7" SET IN CONCRETE
- 7" FOUND IN CONCRETE
- SPINDLE FOUND
- PATCH HOLE FOUND
- BRICK FOUND
- CHAIN LINK FENCE
- WOOD FENCE
- METAL FENCE
- 2" RAIL FENCE
- P.U.E. PUBLIC UTILITY EASEMENT
- P.C. PRIME EASEMENT
- P.P.P. PERMITS
- C.M. CEMENT MEASUREMENT
- R.O.M. RIGHT OF WAY
- P.O.A. PLACE OF BEGINNING
- OVERHEAD ELECTRIC POWER POLE
- AIR CONDITIONER

TREE TABLE

TAG#	DESCRIPTION
T6	20' PECAN
T7	14' HACKBERRY
T36	38" M.S. PECAN
T38	19' PECAN
T37	19' PECAN
T38	12' PECAN
T39	18' PECAN
T40	18' PECAN
T41	28' PECAN
T42	15' CATALPA
T43	48" M.S. PECAN
T44	34' SYCAMORE
T45	18' PECAN
T46	14' PECAN
T47	33' PECAN
T48	22' PECAN
T49	30' PECAN
T50	24' PECAN
M.S.	MULTI-STEM



material/finish schedule

ITEM #	DESCRIPTION	MATERIALS	COLOR	FINISH	CORNER	REMARKS
16 FINEMENT & MISC. STONE						
11	SUBJECT TO APPROVAL - UPGRADE FINEMENT WITH FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
12	SUBJECT TO APPROVAL - FINISHES WITH FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
13	STONE FINISH - MEDIUM JAPAN - PERISHABLE	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
14	STONE FINISH - COARSE JAPAN - PERISHABLE	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
15	STONE FINISH - PLAIN JAPAN - PERISHABLE	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
16	TOP FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
17	MISC. STONE	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
26 SITE WALLS						
21	STANDARD BRICK BLOCK	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
22	TOP FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE

30 SITE FEATURES & FINISHES

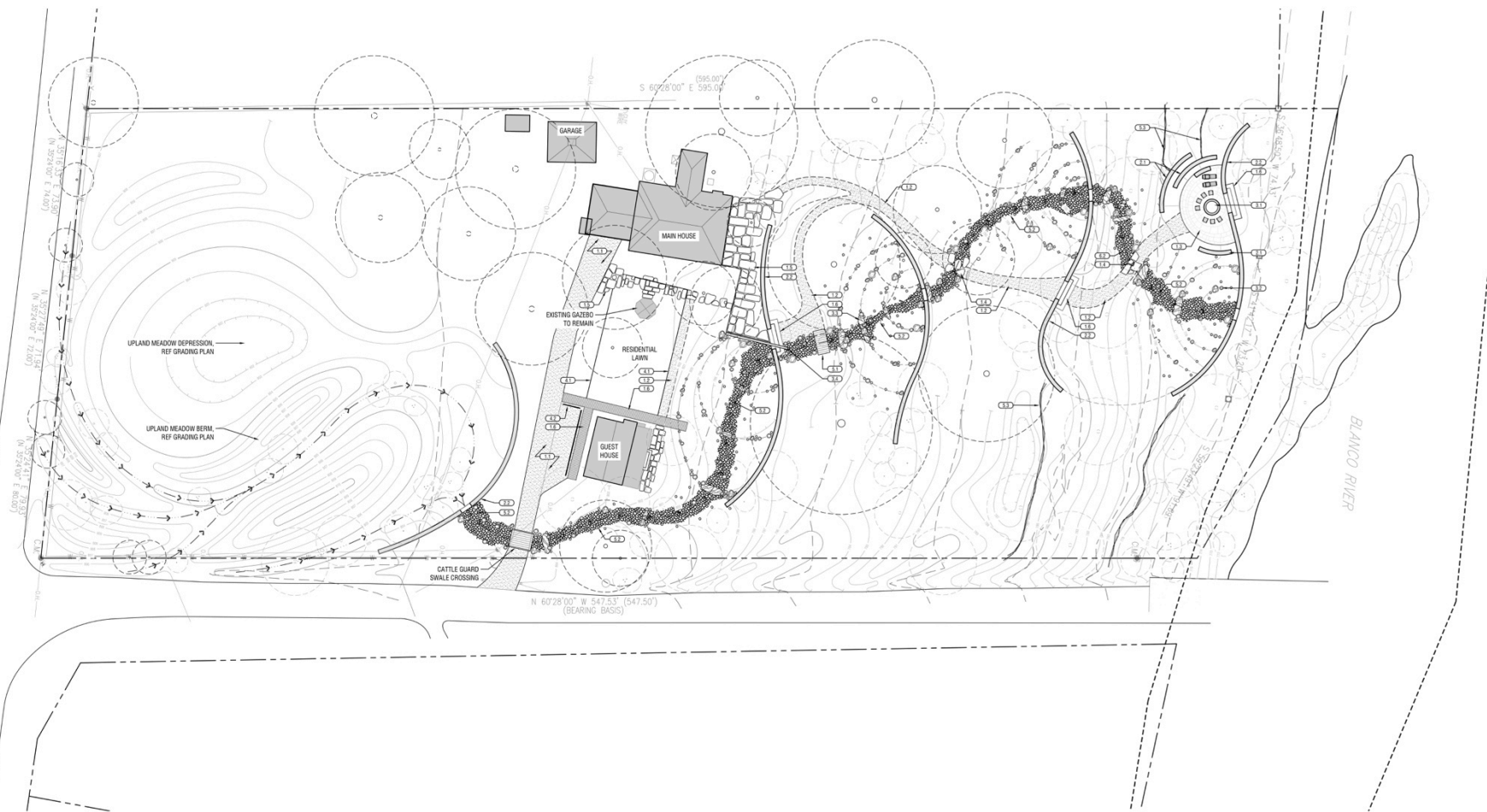
ITEM #	DESCRIPTION	MATERIALS	COLOR	FINISH	CORNER	REMARKS
31	CONCRETE TOP FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
32	CONCRETE FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
33	CONCRETE FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
34	CONCRETE FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
35	CONCRETE FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
36	CONCRETE FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE

40 FINISHES FINISHES & MISC.

ITEM #	DESCRIPTION	MATERIALS	COLOR	FINISH	CORNER	REMARKS
41	CONCRETE FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
42	CONCRETE FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE

50 MISCELLANEOUS

ITEM #	DESCRIPTION	MATERIALS	COLOR	FINISH	CORNER	REMARKS
51	CONCRETE FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE
52	CONCRETE FINISHES	APPROX. 250,000 LBS. ROADBASE		CONCRETE	CONCRETE	FIELD TO COMPACTED SUBSTRATE TOP FINISHES USE OF 1" COMPACTED ROAD BASE



L300
hardscape plan

L3 blanco river restoration
COLLABORATIVE WORKSHOP, LLC
7000 COUNTY ROAD 1000
FORT COCKER, TEXAS

1 | hardscape plan





FLITE ACRES ROAD

N 32°14'00" W 271.50'
(N 32°14'00" E 74.00')
W 33°22'00" E 21.00'
(N 32°24'00" E 74.00')
N 24°41'00" E 79.00'
(N 24°41'00" E 80.00')

**COUNTY ROAD 174
AKA LITTLE ARKANSAS ROAD**

N 60°28'00" W 547.53' (547.50')
(BEARING BASIS)





Upland

Residential

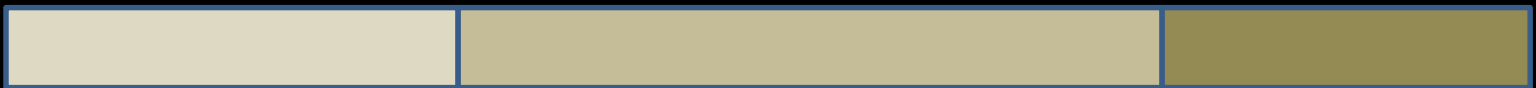
Riparian
Canopy

Riparian
Buffer

Soil Moisture



Soil type



Flood mitigation

Water quality
Bank stability
In-stream habitat



Upland

Residential

Riparian
Canopy

Riparian
Buffer

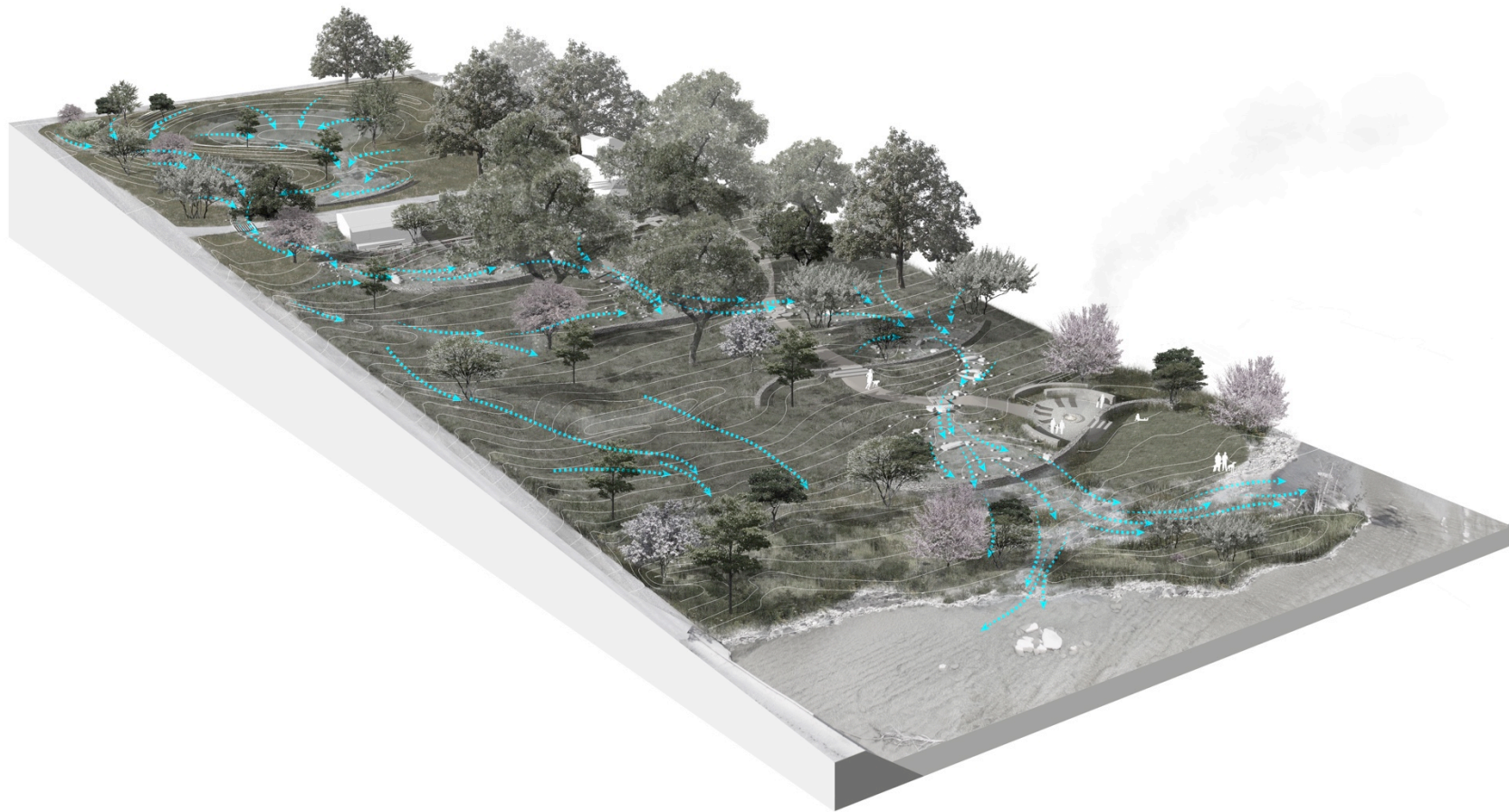
Obligate wetland (OBL)

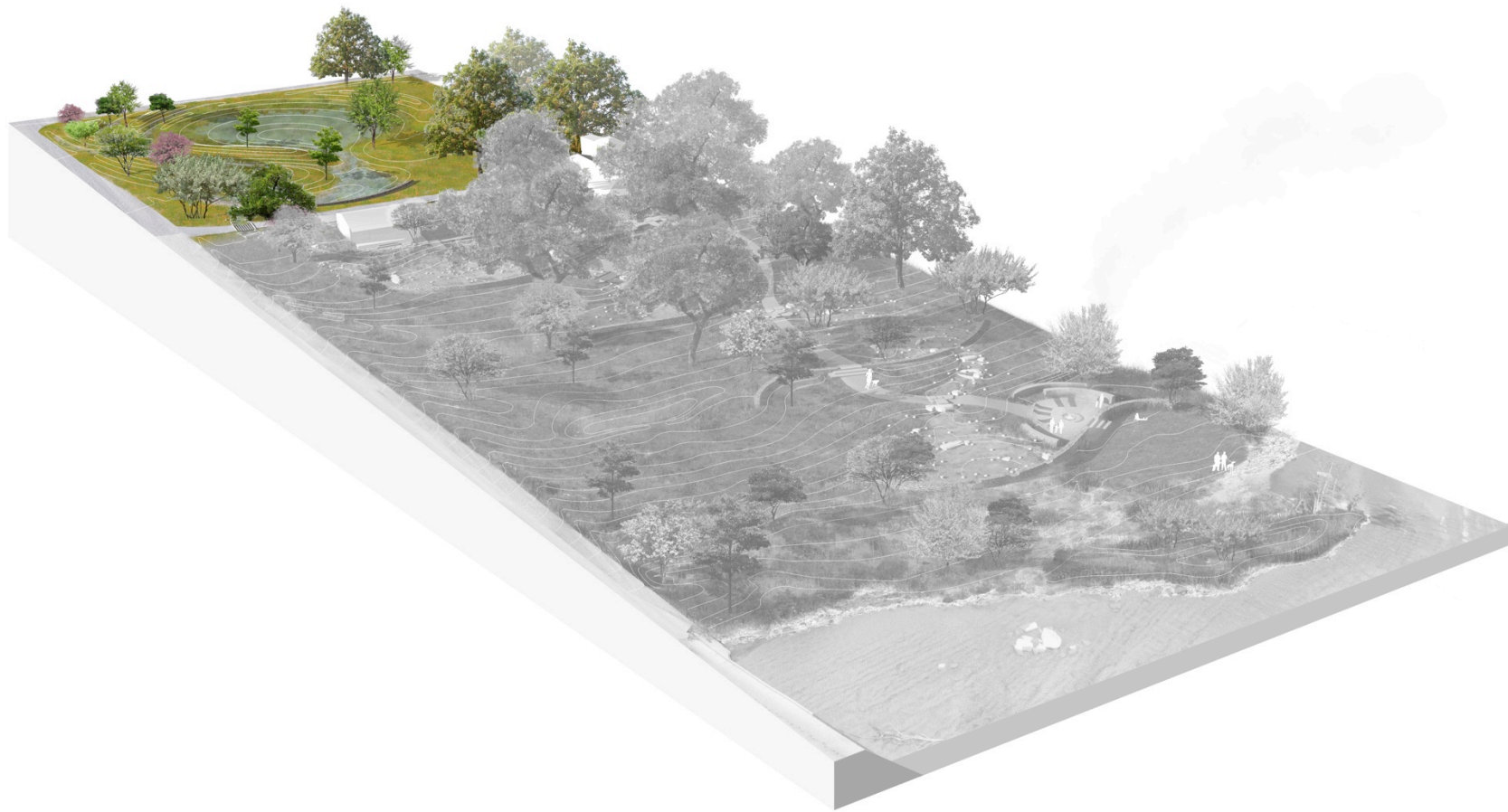
Facultative wetland (FACW)

Facultative (FAC)

Facultative Upland (FACU)

Upland (UPL)





Upland



Function

Slow and infiltrate overland flow to mitigate flooding, clean water, provide habitat

Upland and Facultative species

Can be more open

Deep fibrous root systems

Colonizers

Indian blanket *Gaillardia pulchella*
Upland, strong competitor



Horsemint *Monarda citriodora*
Upland, supports pollinators



Partridge pea *Chamaecrista fasciculata*
Facultative upland, nitrogen fixer



Soil builders

Little bluestem

Schizachyrium scoparium

Facultative upland



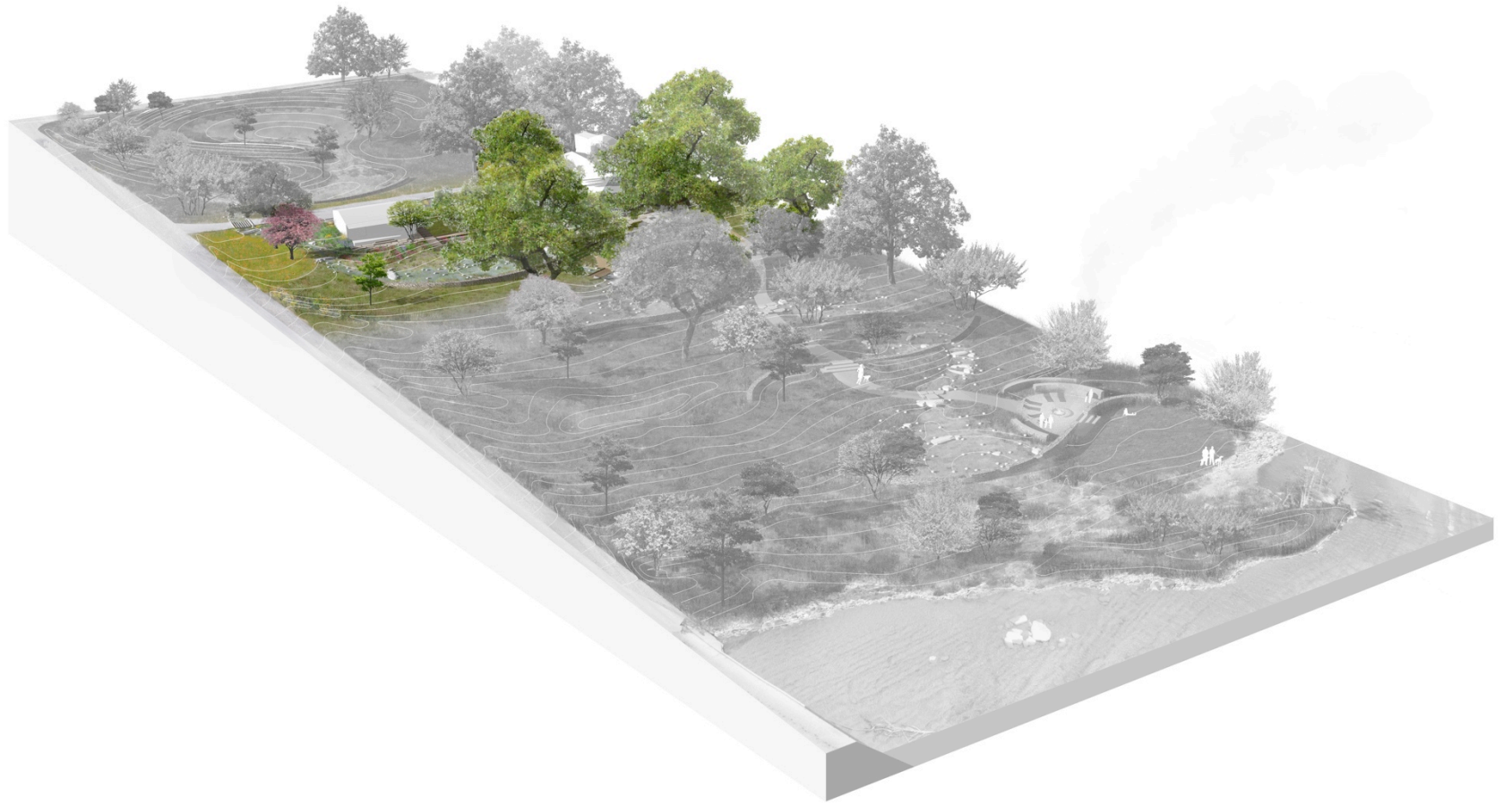
Indiangrass

Sorghastrum nutans

Facultative upland



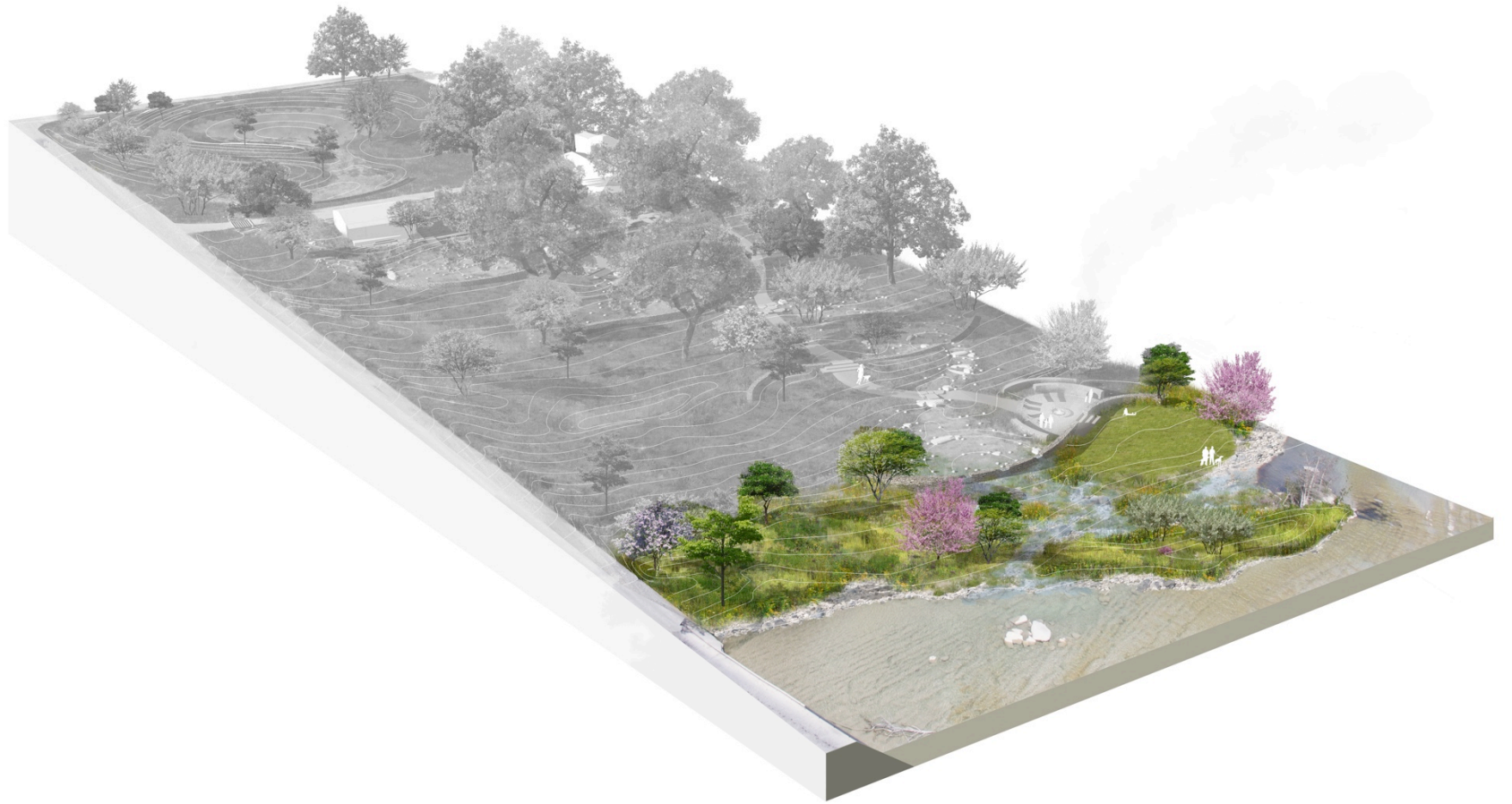




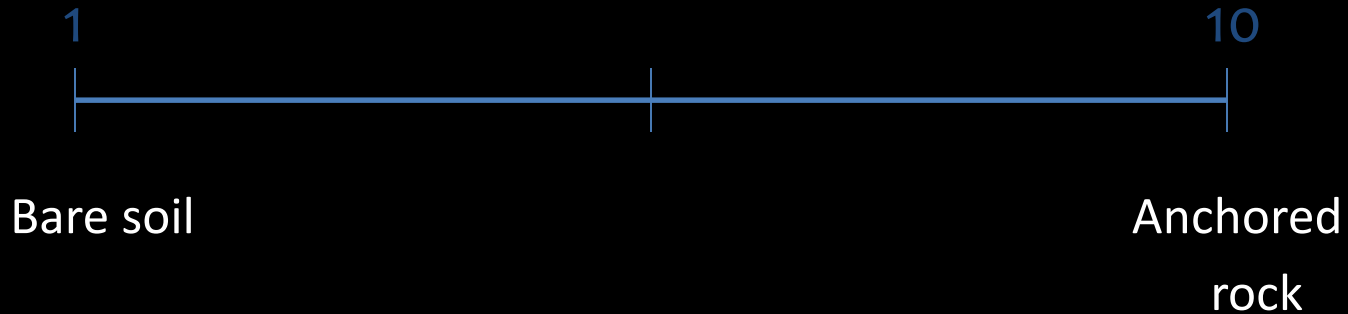








Stability ratings (SR)



Common Plants of Riparian Areas - Central Texas With Wetland Indicator (WI) and Proposed Stability Rating (SR) Compiled by Steve Nelle

<u>Sedges / Grasses</u>	<u>WI</u>	<u>SR</u>	<u>Forbs</u>	<u>WI</u>	<u>SR</u>	<u>Woody</u>	<u>WI</u>	<u>SR</u>
Spikerushes (most)	OBL	6	Water willow	OBL	7	Buttonbush	OBL	8
Emory sedge	OBL	9	Water primrose	OBL	3	Bald Cypress	OBL	9
Sawgrass	OBL	9	Watercress *	OBL	3	Indigobush amorph	OBL	7
Rice cutgrass	OBL	6	Scouring rush	OBL	6	Black willow	FACW	7
Southern wildrice	OBL	9	Marsh fleabane	OBL	5	Arroyo willow	FACW	7
Water bentgrass	OBL	5	Smooth bidens	OBL	5	Spiny aster	FACW	8
Cattail	OBL	9	Water hyssop	OBL	3	Box elder maple	FACW	6
Bulrushes (most)	OBL	9	Pennywort	OBL	3	Possum haw	FACW	6
Porcupine sedge	OBL	5	Cardinalflower	FACW	5	Sycamore	FAC	6
Knotgrass	FACW	6	Tall aster	FACW	5	Eastern cottonwood	FAC	7
Hairseed paspalum	FACW	6	Spiny aster	FACW	8			

Stabilizers

Switchgrass

Panicum virgatum

Facultative wetland, SR: 8-9



Eastern gamagrass

Tripsacum dactyloides

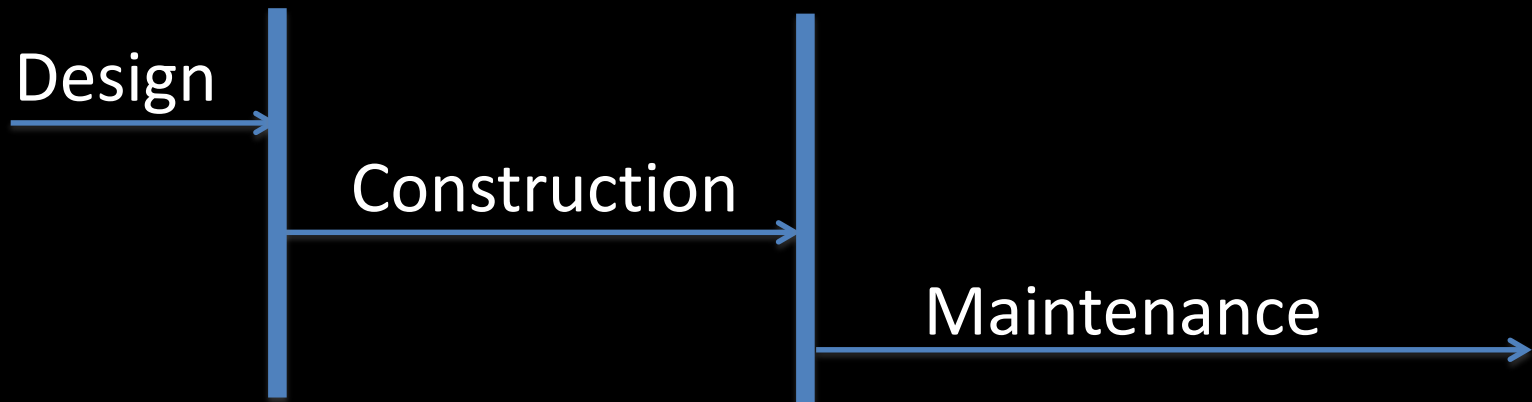
Facultative, SR: 9



Grass/Grass like	Species	Scientific name	Wetland Indicator Status	Stability Rating	Colonizer	Shade tolerant	Habitat value	Ornamental value
	Bushy bluestem	<i>Andropogon glomeratus</i>	FACW	5	Yes		Yes	Yes
	Emory sedge	<i>Carex emoryi</i>	OBL	9	Yes	Yes	Yes	
	Inland seaoats	<i>Chasmanthium latifolium</i>	FAC	5	Yes	Yes	Yes	Yes
	Sawgrass	<i>Cladium mariscoides</i>	OBL	9			Yes	
	Flat sedge	<i>Cyperus</i> sp.	FACW	5	Yes		Yes	
	Spikerush	<i>Eleocharis</i> sp.	OBL	6			Yes	
	Lindheimer muhly	<i>Muhlenbergia linheimeri</i>	FAC	7			Yes	Yes
	Switchgrass	<i>Panicum virgatum</i>	FAC	8-9			Yes	
	Knotgrass	<i>Paspalum distichum</i>	FACW	6	Yes		Yes	
	Rustyseed paspalum	<i>Paspalum langei</i>	FAC	5-6		Yes	Yes	
	White top sedge	<i>Rynchospora colorata</i>	FACW	6			Yes	
Eastern gamagrass	<i>Tripsacum dactyloides</i>	FAC	9			Yes		



Traditional Hierarchy



Traditional Hierarchy

Design →

Construction →

Maintenance →



A scenic view of the Blanco River. The river flows through a rocky, layered bank on the left. The foreground is dominated by lush green grasses and a large, weathered log. A large tree with dense green foliage is on the left side of the frame. The sky is a clear, bright blue.

blanco river

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