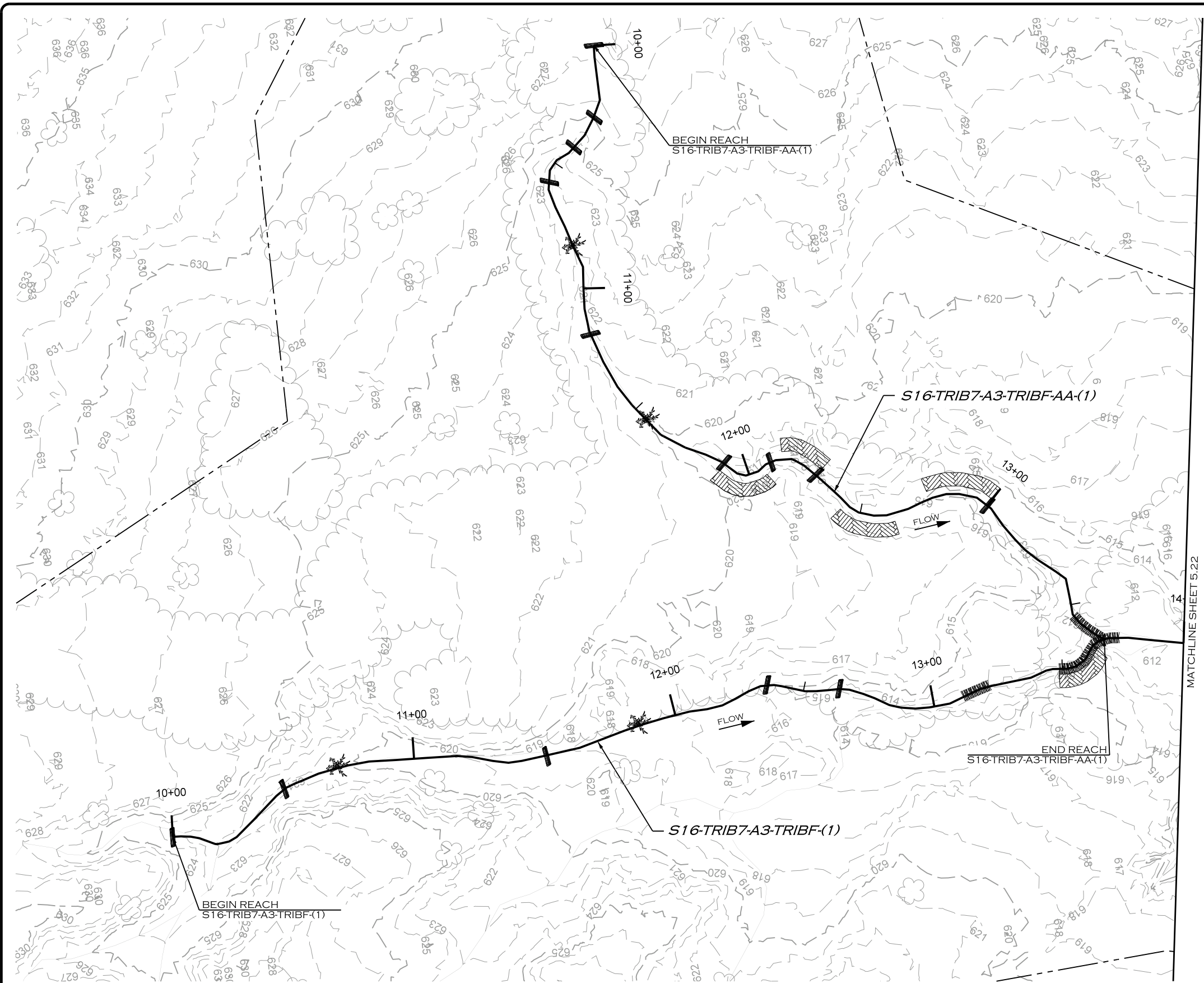




REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:



ECOSYSTEM
PLANNING &
RESTORATION

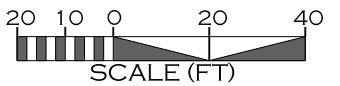
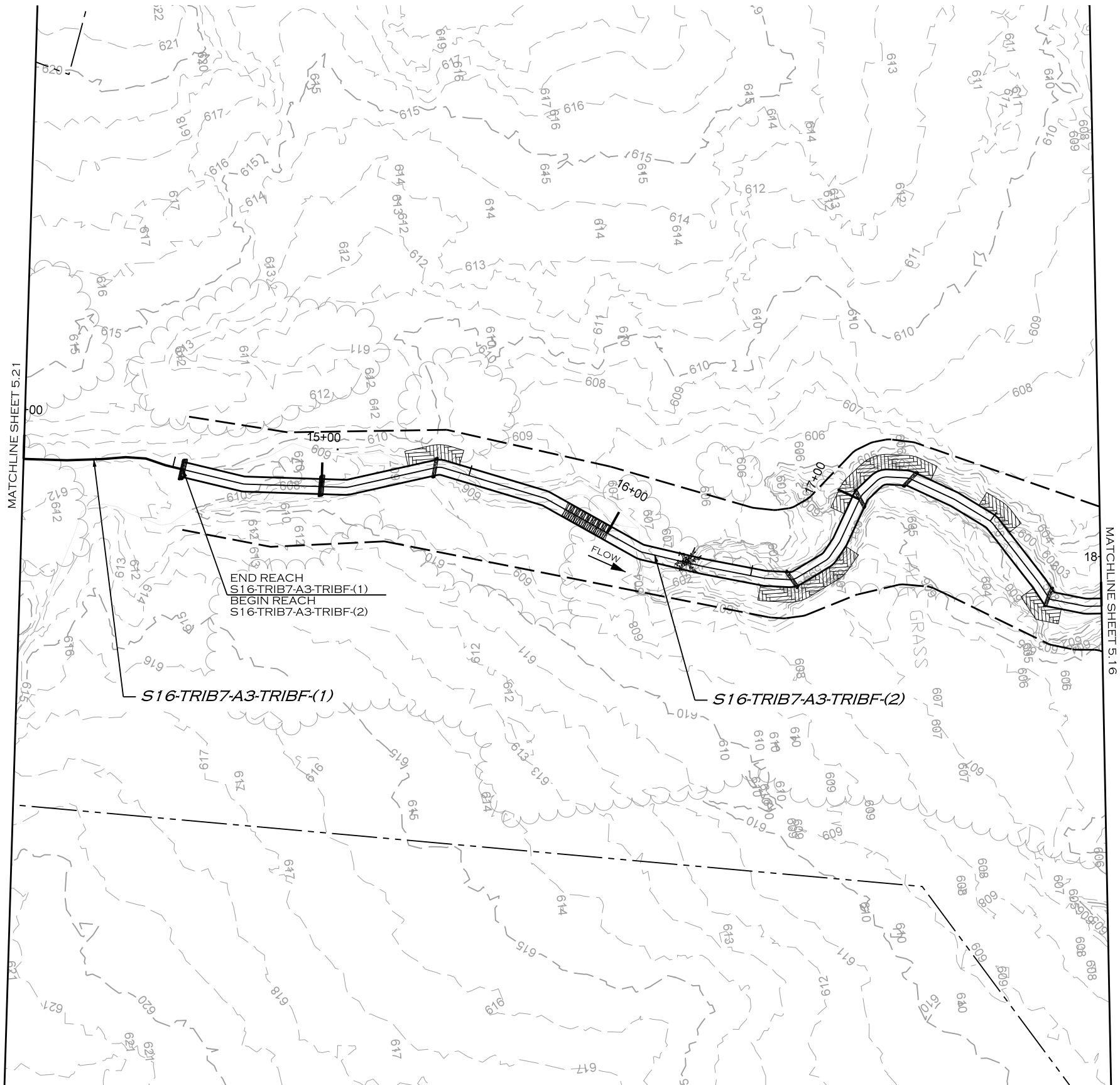
17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

Z:\8\2019 R:\PROJECTS\DALOOO1_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRH_PSH_5.21.dgn



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:

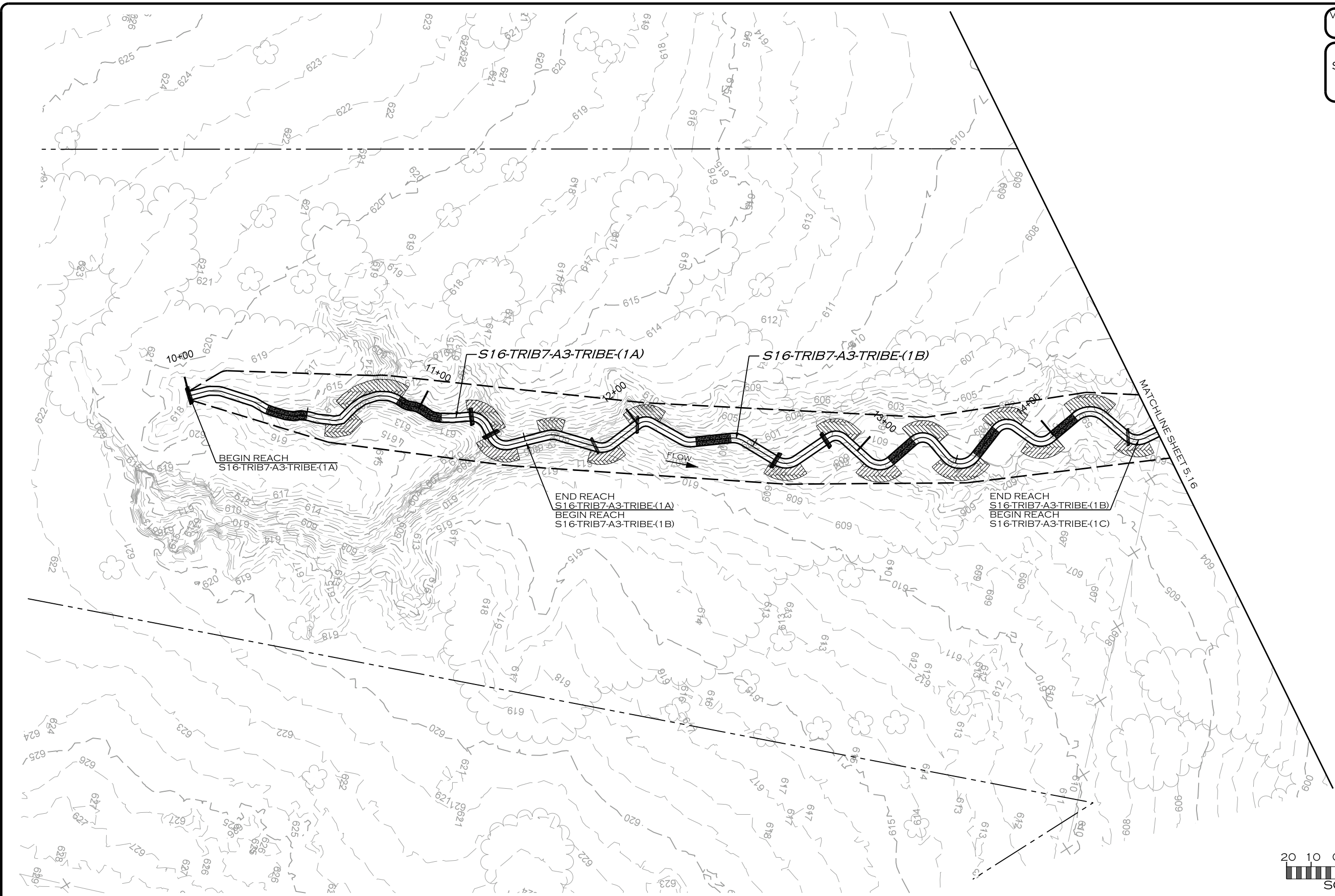


ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019 R:\PROJECTS\DALO001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRH_PSH_5.23.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



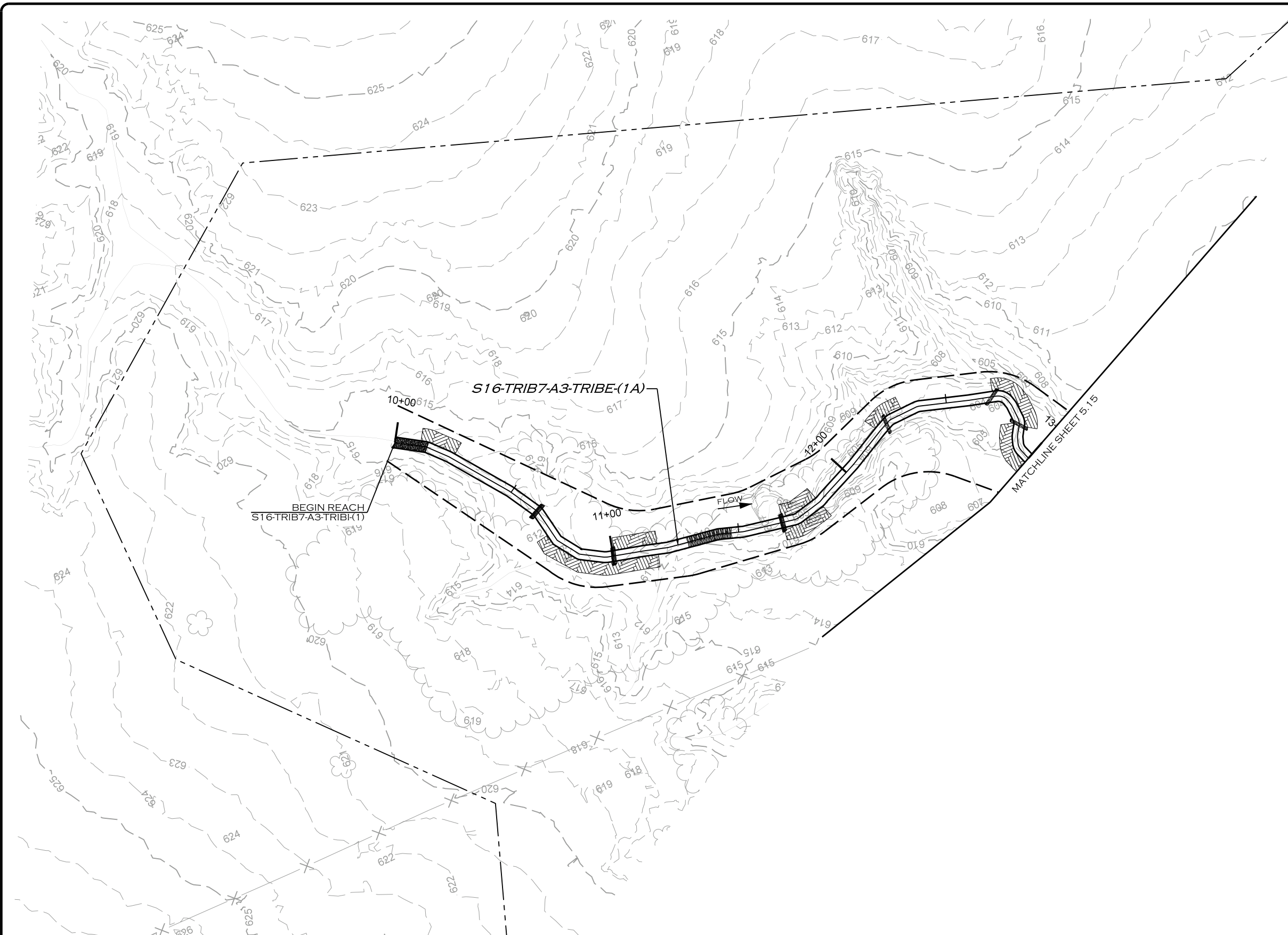
PREPARED IN THE OFFICE OF:

**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019 R:\PROJECTS\DALO001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.24.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:



UPPER TRINITY
REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:

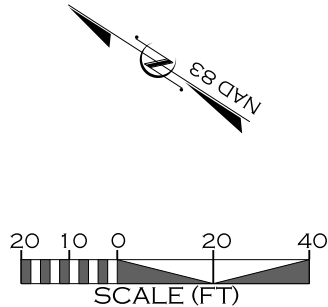
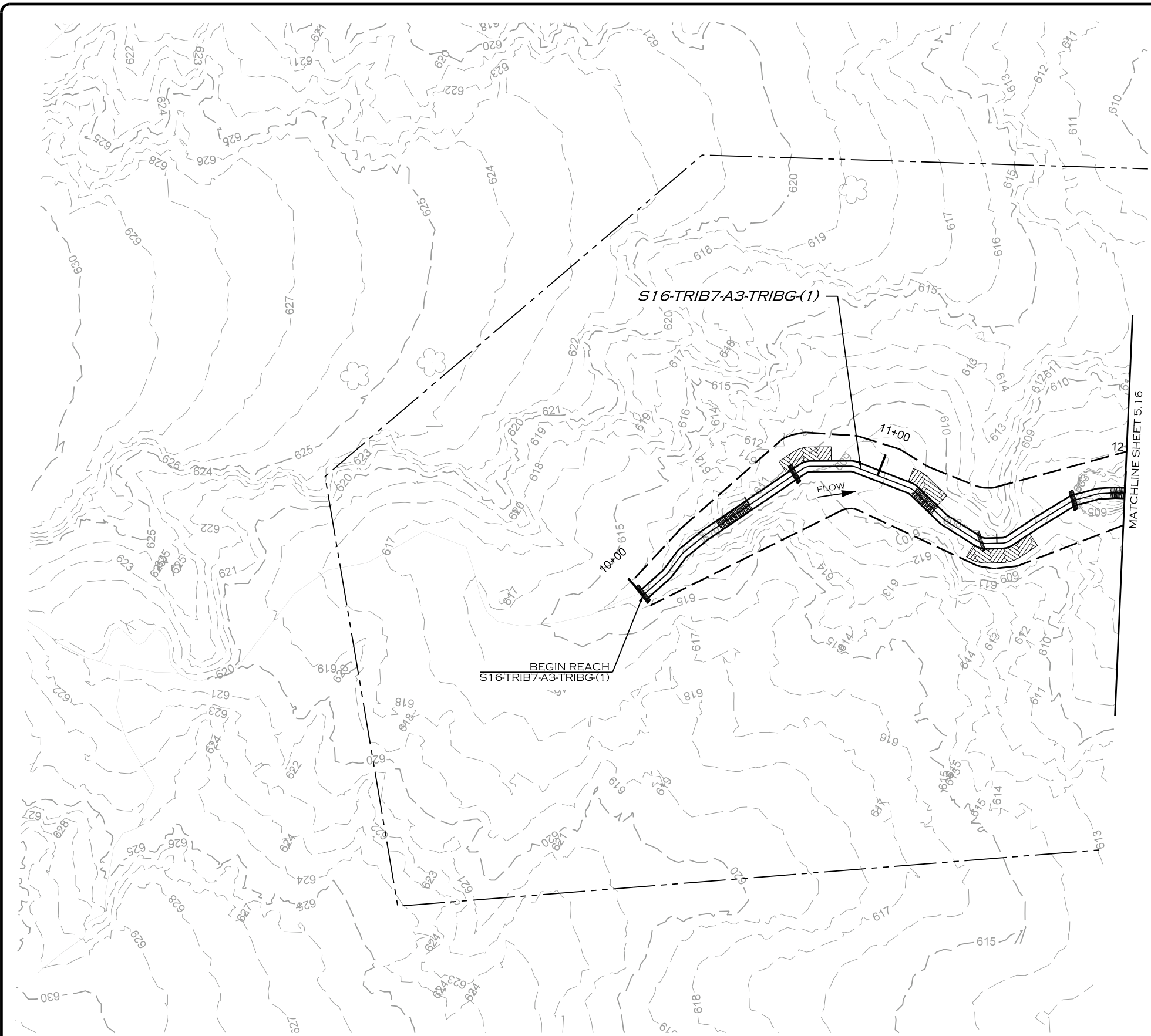


ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:



UPPER TRINITY
REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:



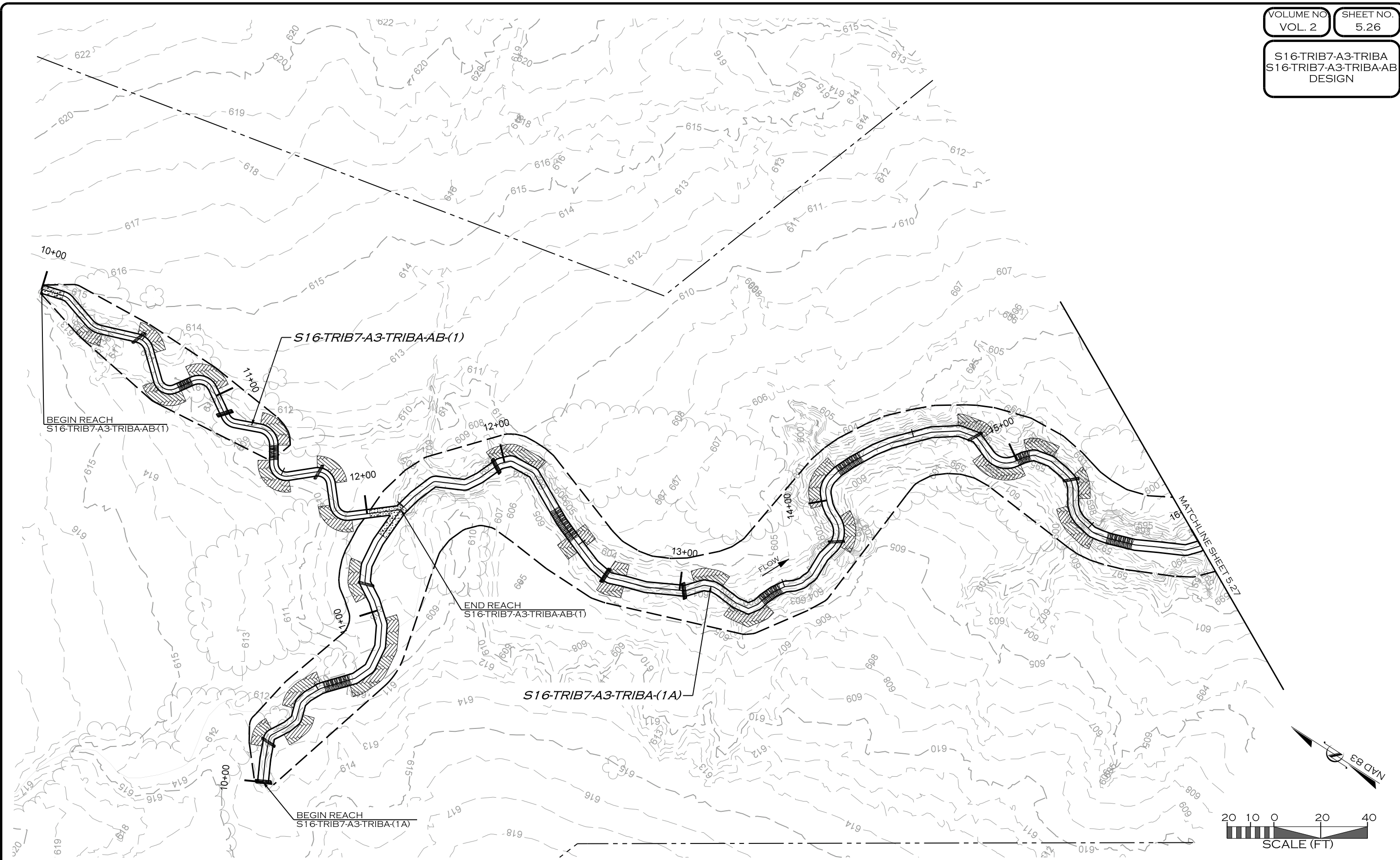
ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

Z:\8\2019
R:\PROJECTS\DALO001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRH_PSH_5.25.dgn
JACOB



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.26.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



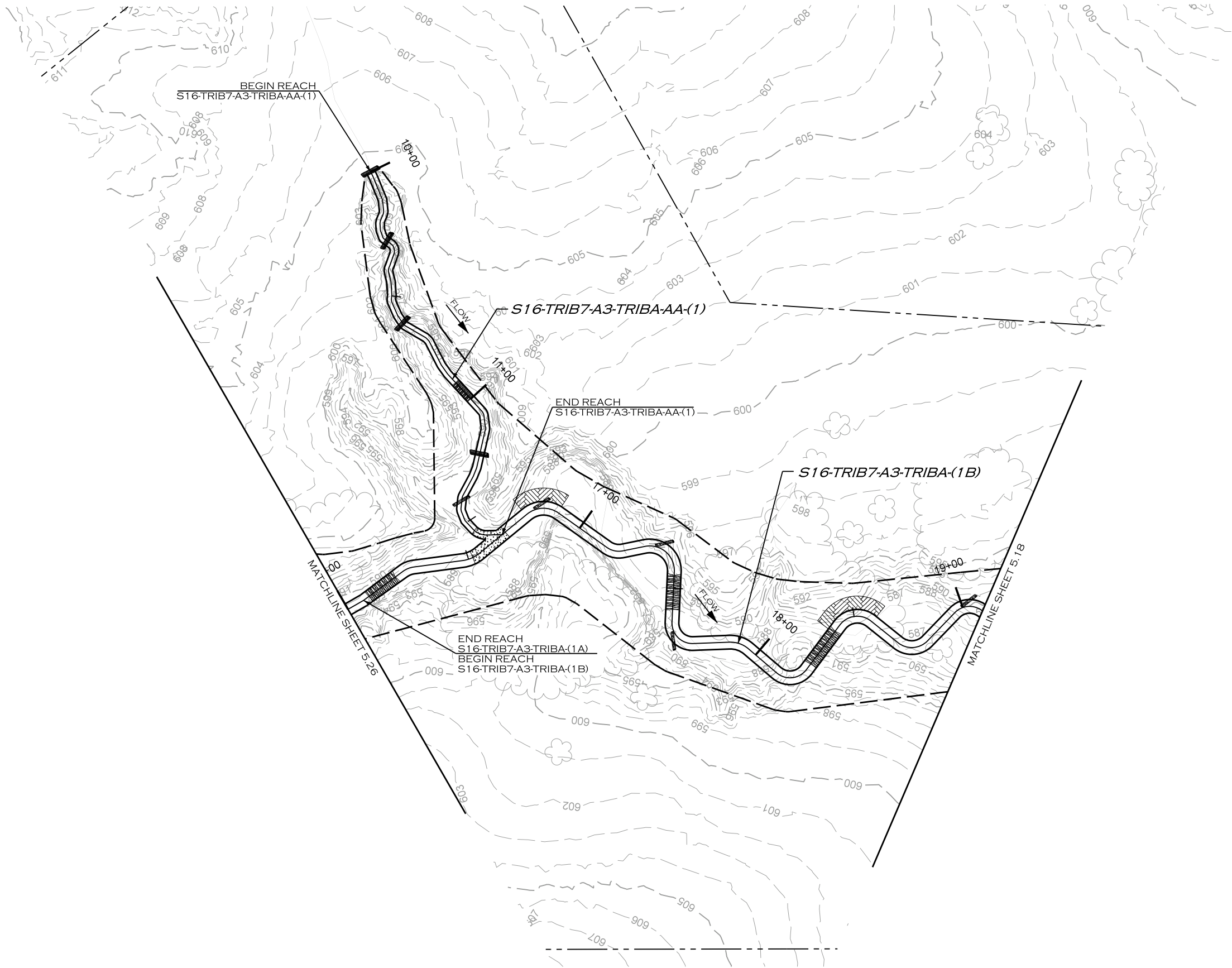
PREPARED IN THE OFFICE OF:

**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.27.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:



ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



Z:\8\2019
R:\PROJECTS\DALO001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.28.dgn
JACON

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



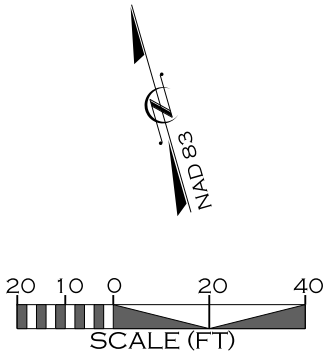
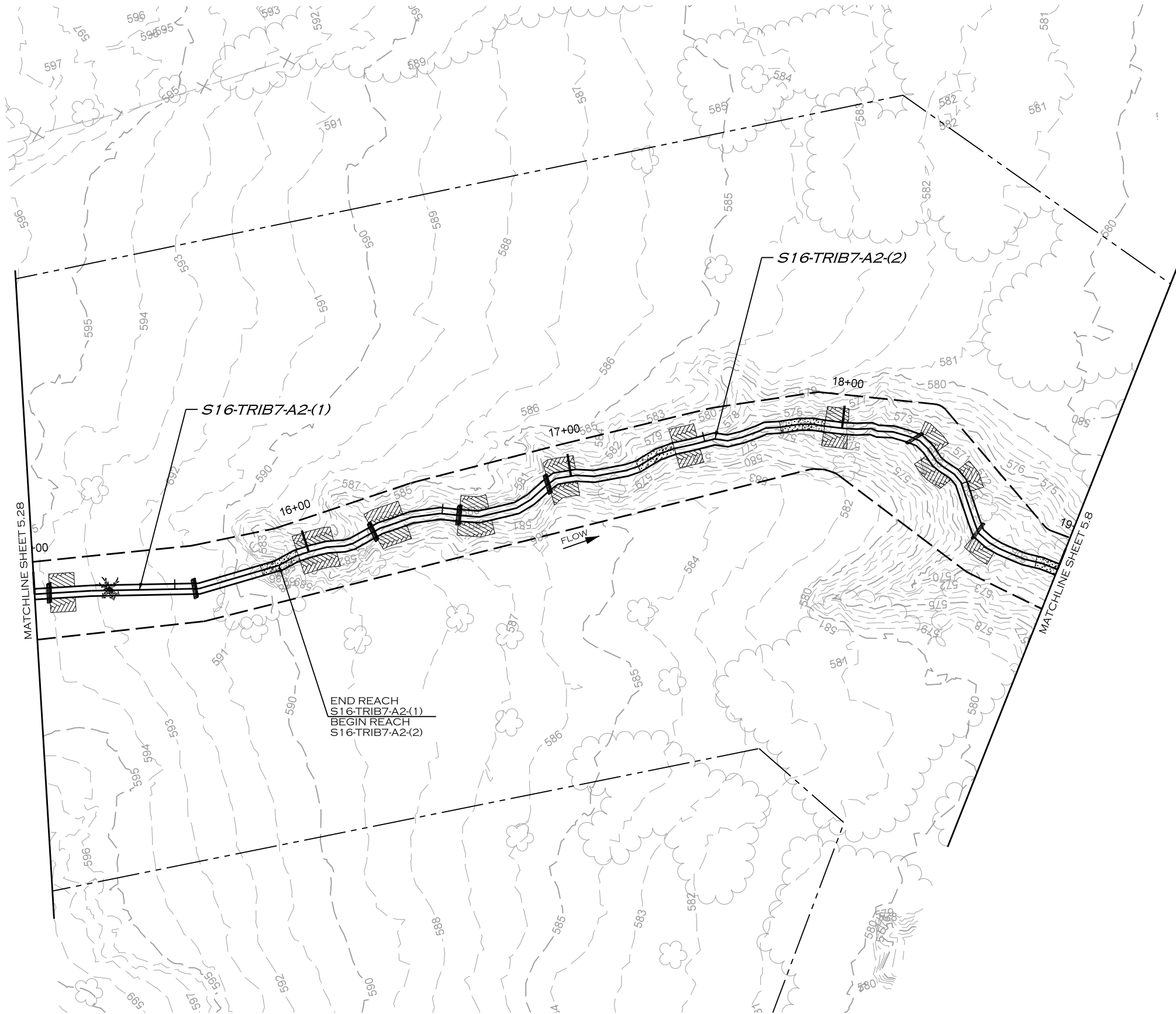
ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PREPARED IN THE OFFICE OF:

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.29.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



PREPARED FOR:

UPPER TRINITY REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:



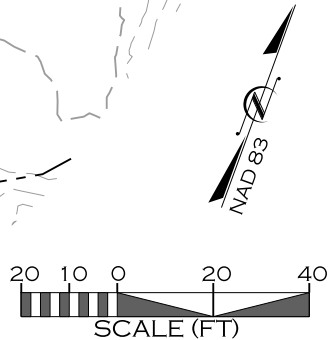
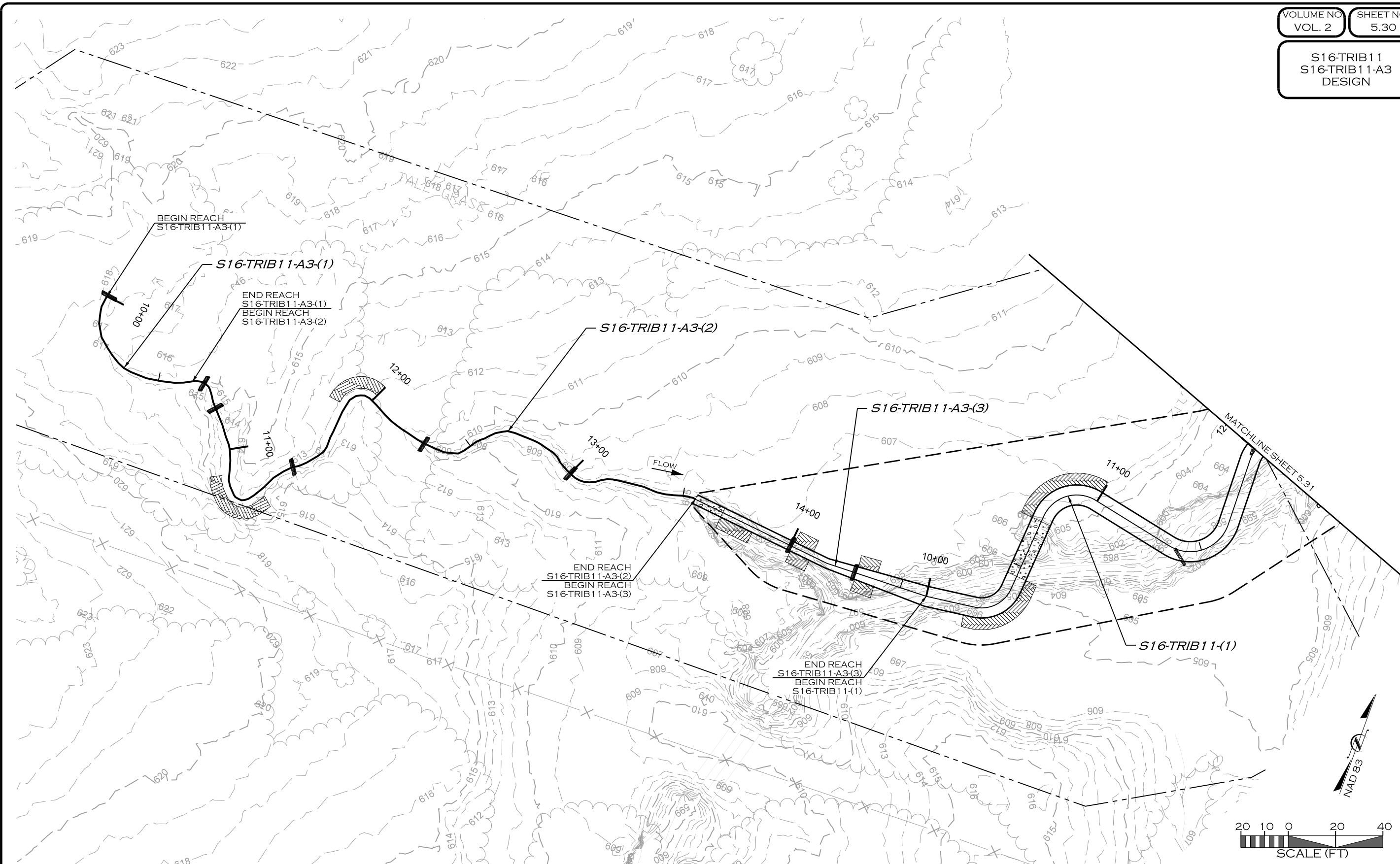
**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S16-TRIB11
S16-TRIB11-A3
DESIGN



Z:\8\2019
R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.30.dgn
JAC

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:

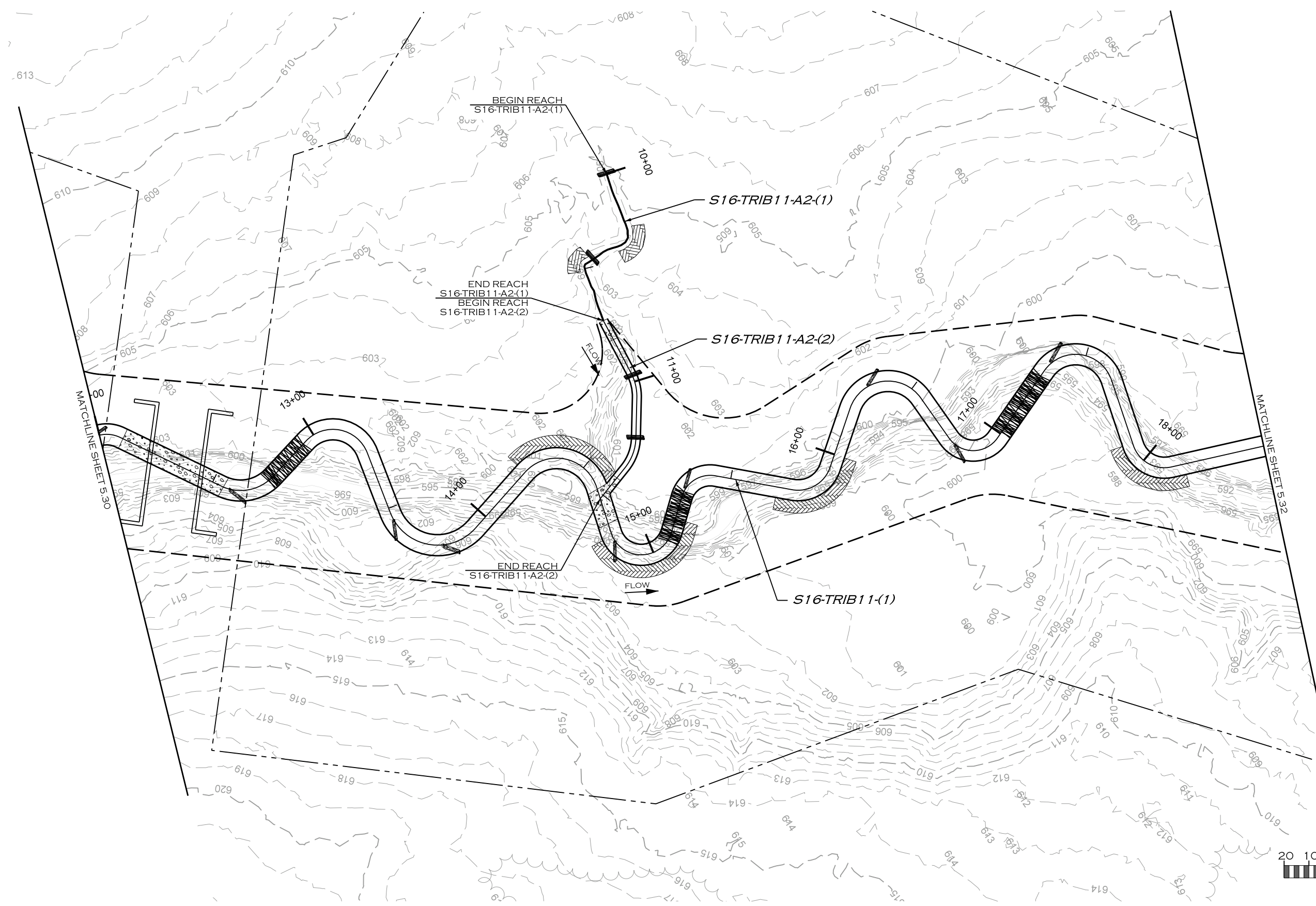


ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



Z:\8\2019\PROJECTS\DALO001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.31.dgn
JACOB

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

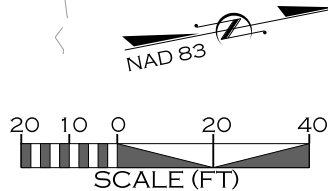
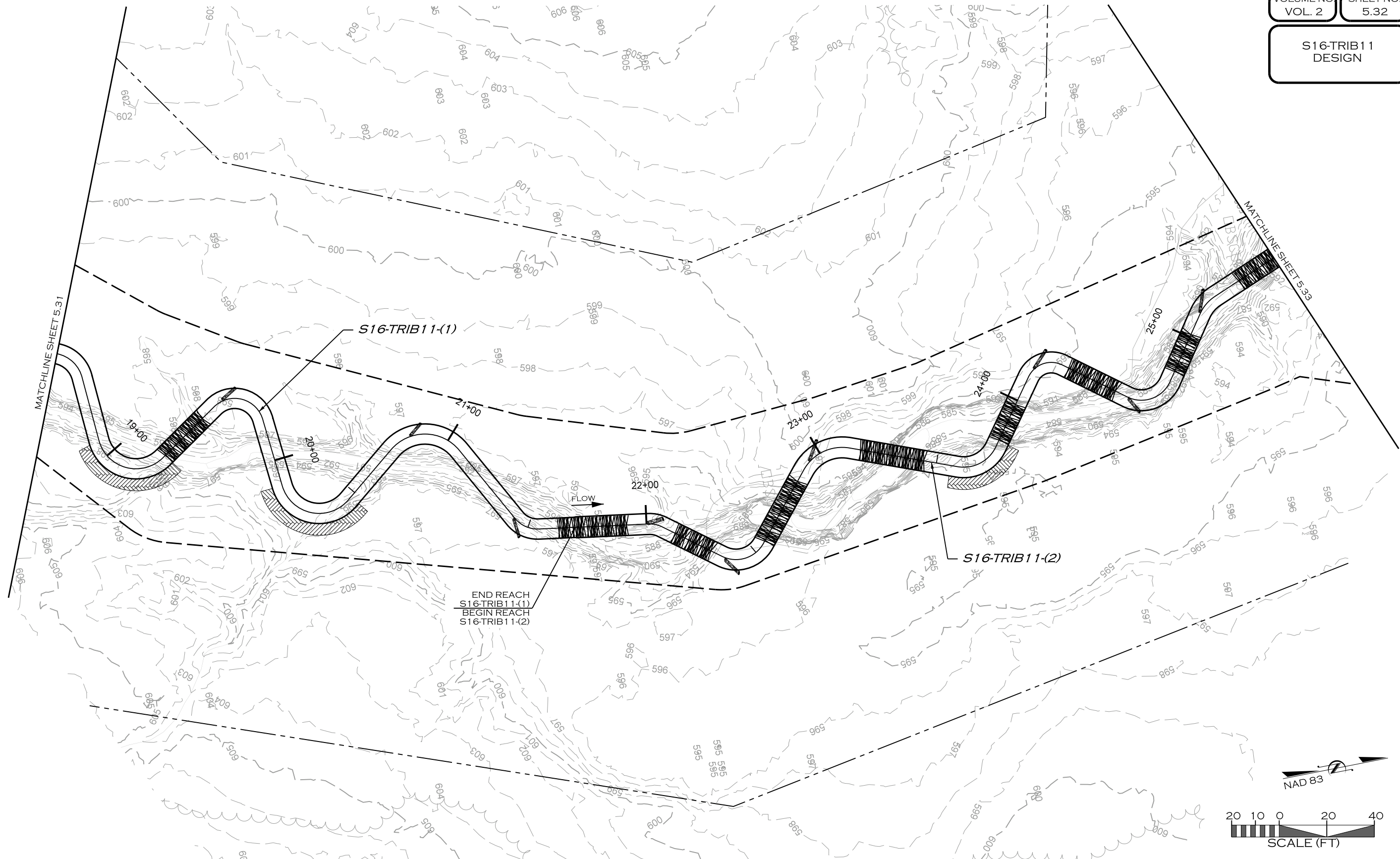
PREPARED IN THE OFFICE OF:

 **ECOSYSTEM PLANNING & RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



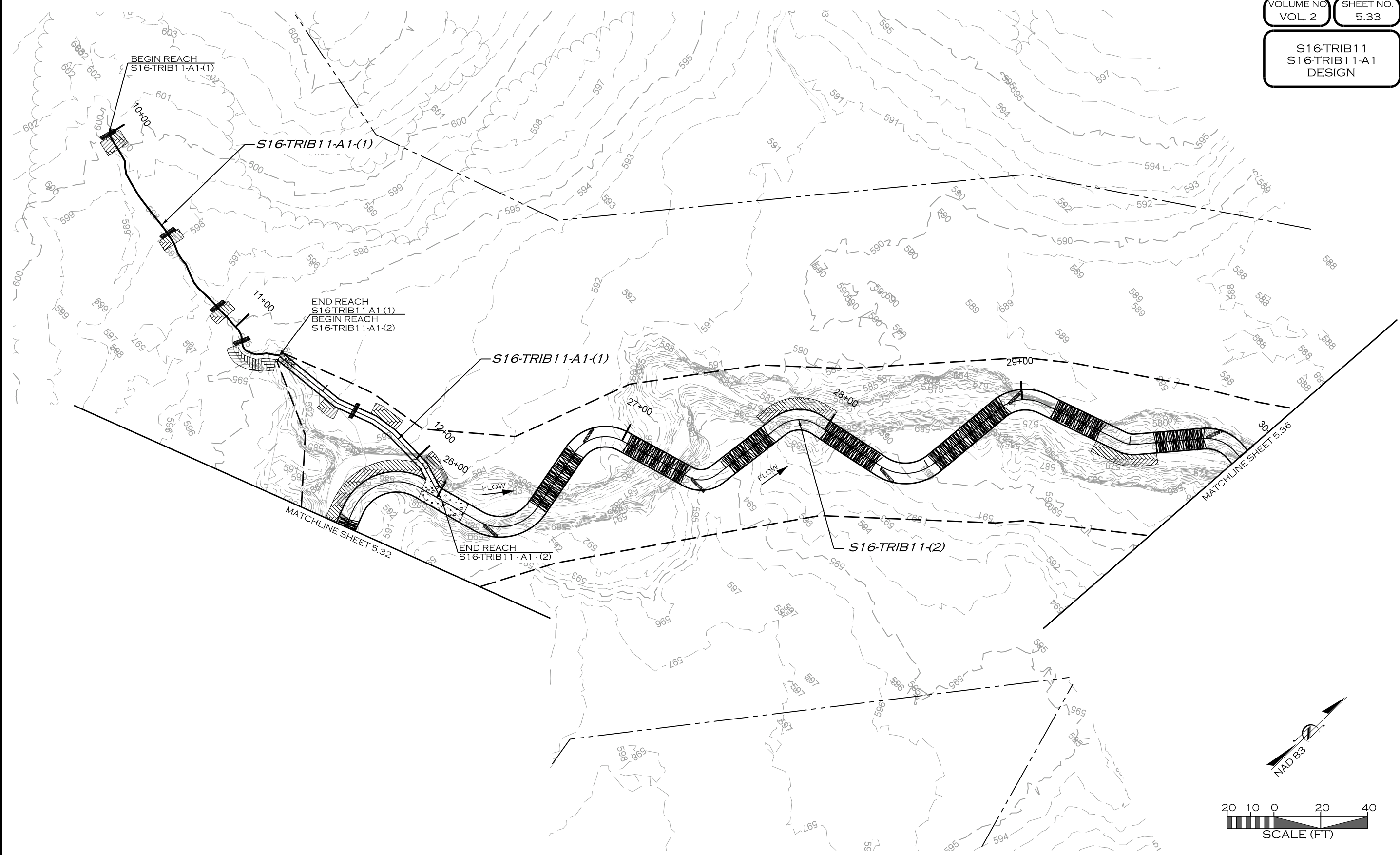
PREPARED IN THE OFFICE OF:
**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S16-TRIB11
S16-TRIB11-A1
DESIGN



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRH_PSH_5.33.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

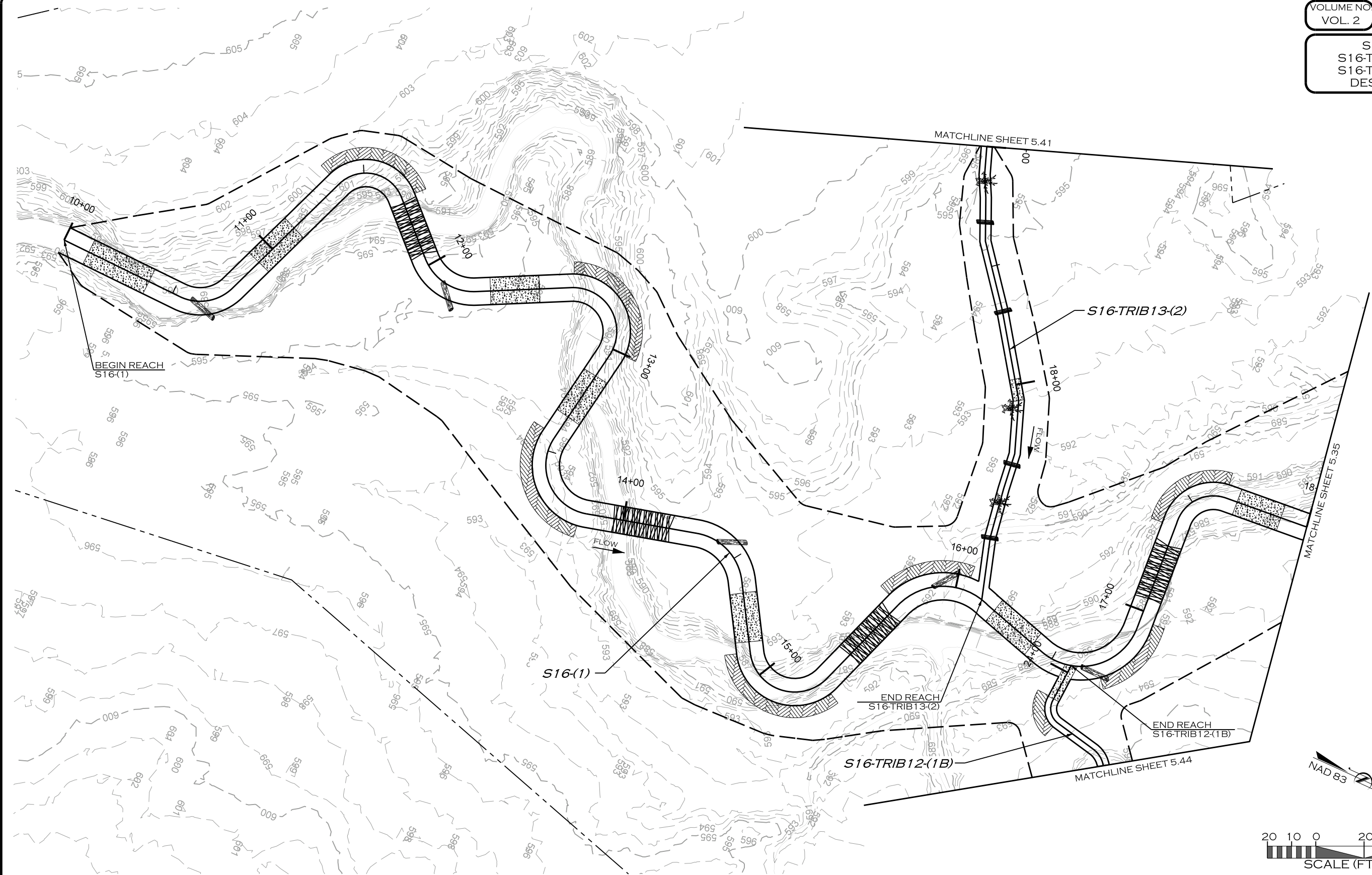
PREPARED IN THE OFFICE OF:

 **ECOSYSTEM PLANNING & RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



Z:\8\2019\PROJECTS\DALOOO1_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRH_PSH_5.34.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:
**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:



**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PREPARED IN THE OFFICE OF:

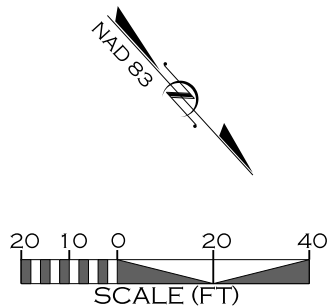
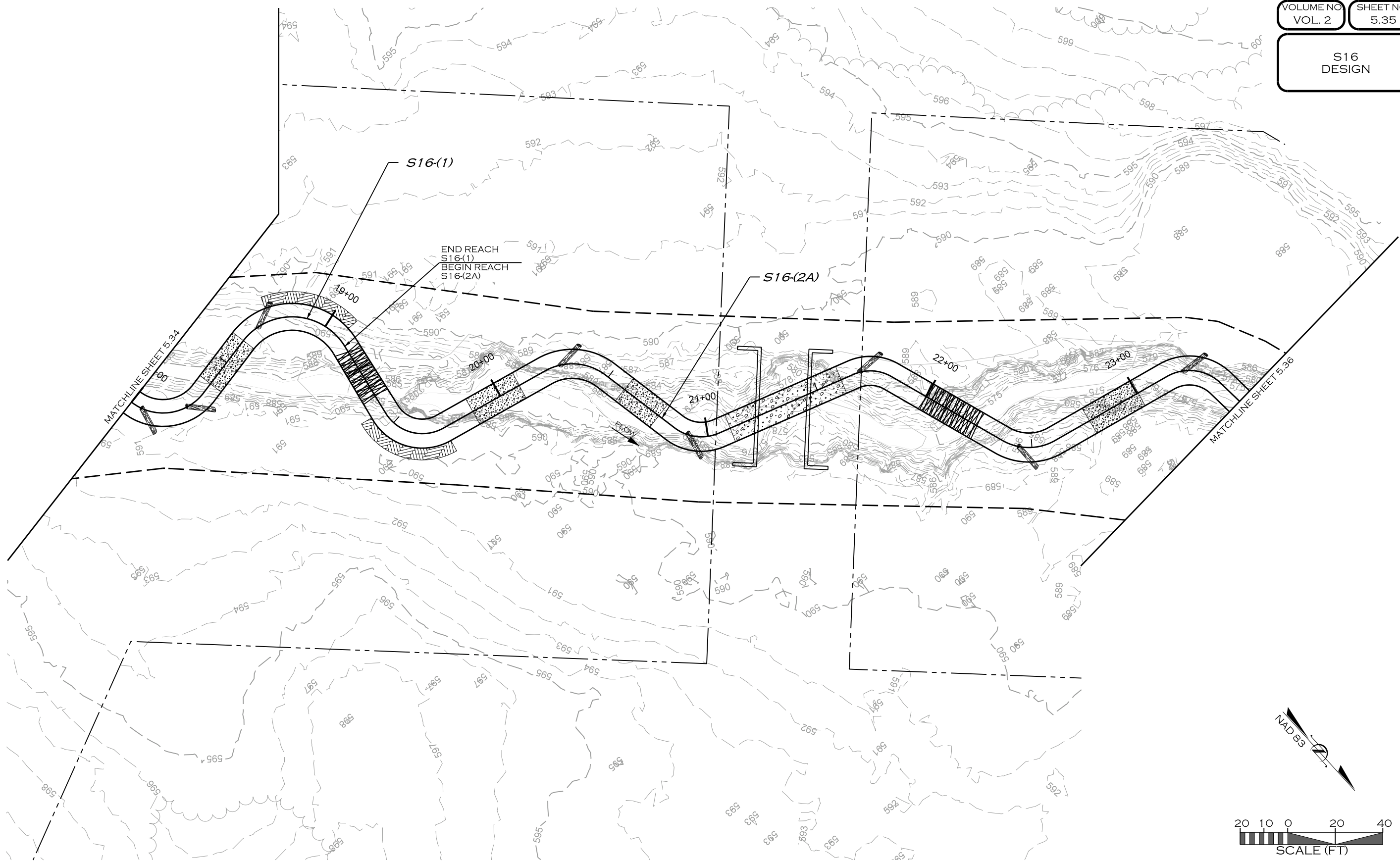


**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019 R:\PROJECTS\DALO001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRH_PSH_5.35.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



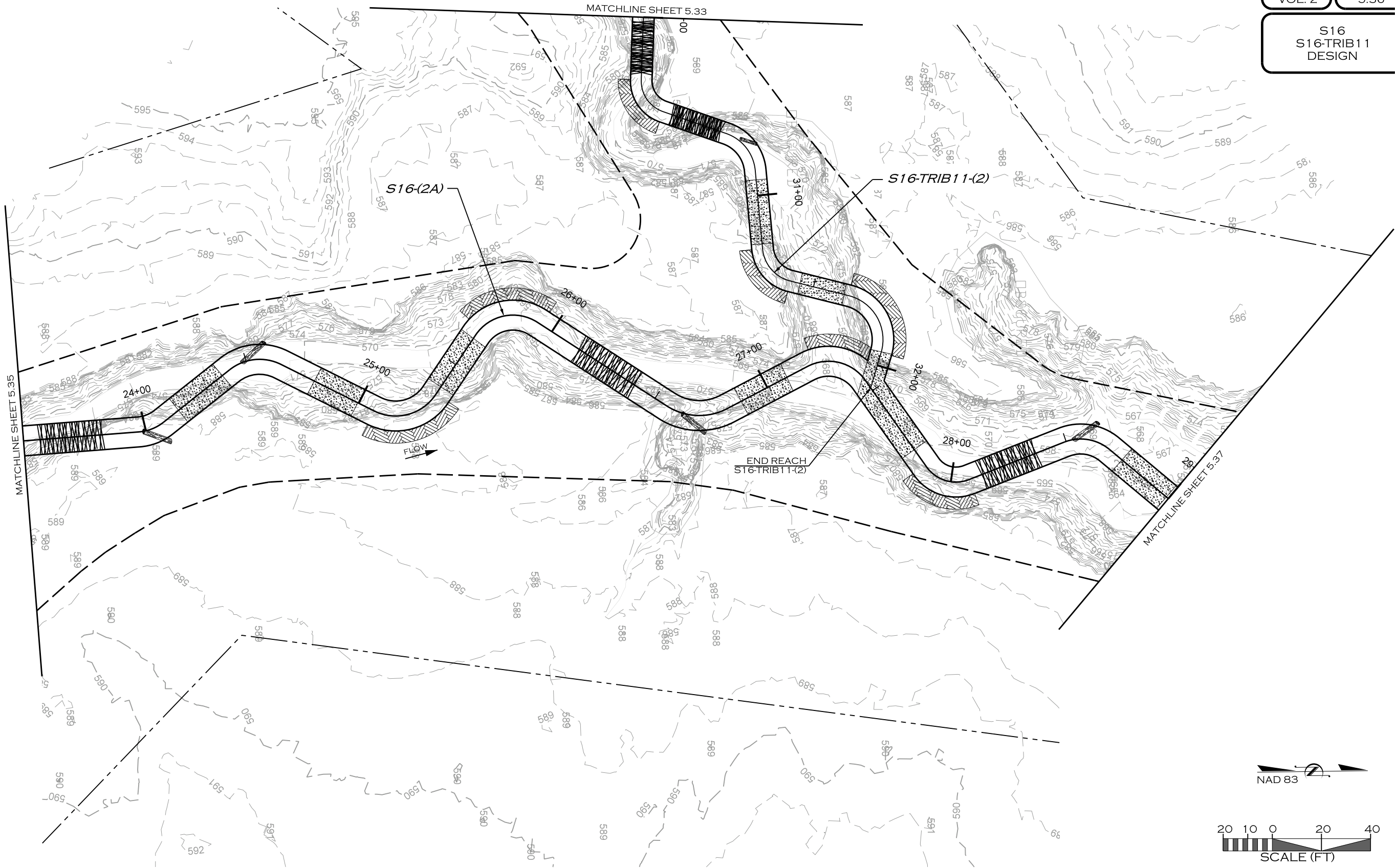
PREPARED IN THE OFFICE OF:

**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:

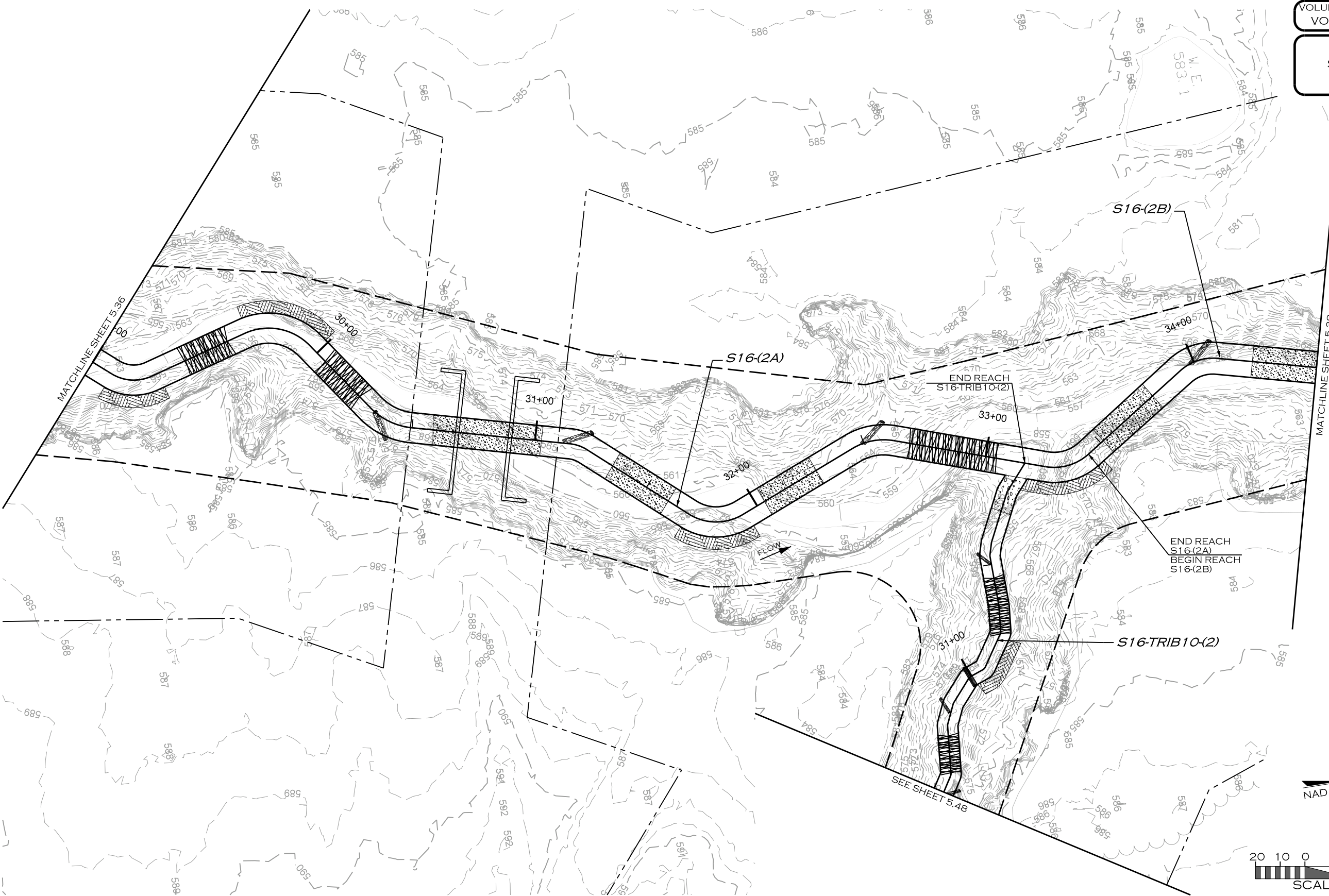


ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

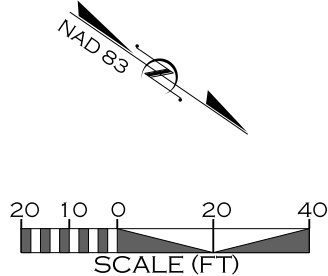
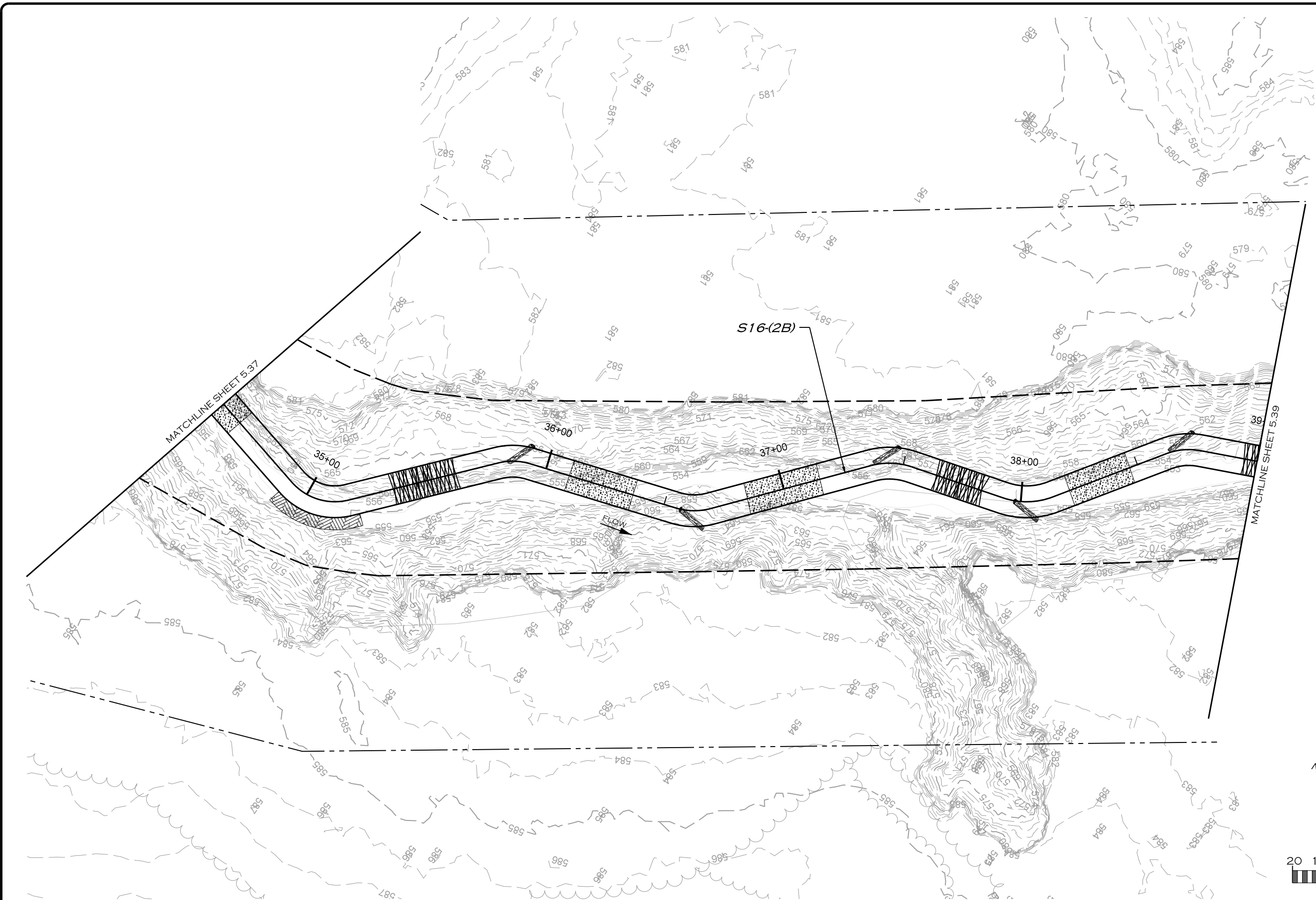
PREPARED IN THE OFFICE OF:

 **ECOSYSTEM PLANNING & RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRH_PSH_5.38.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



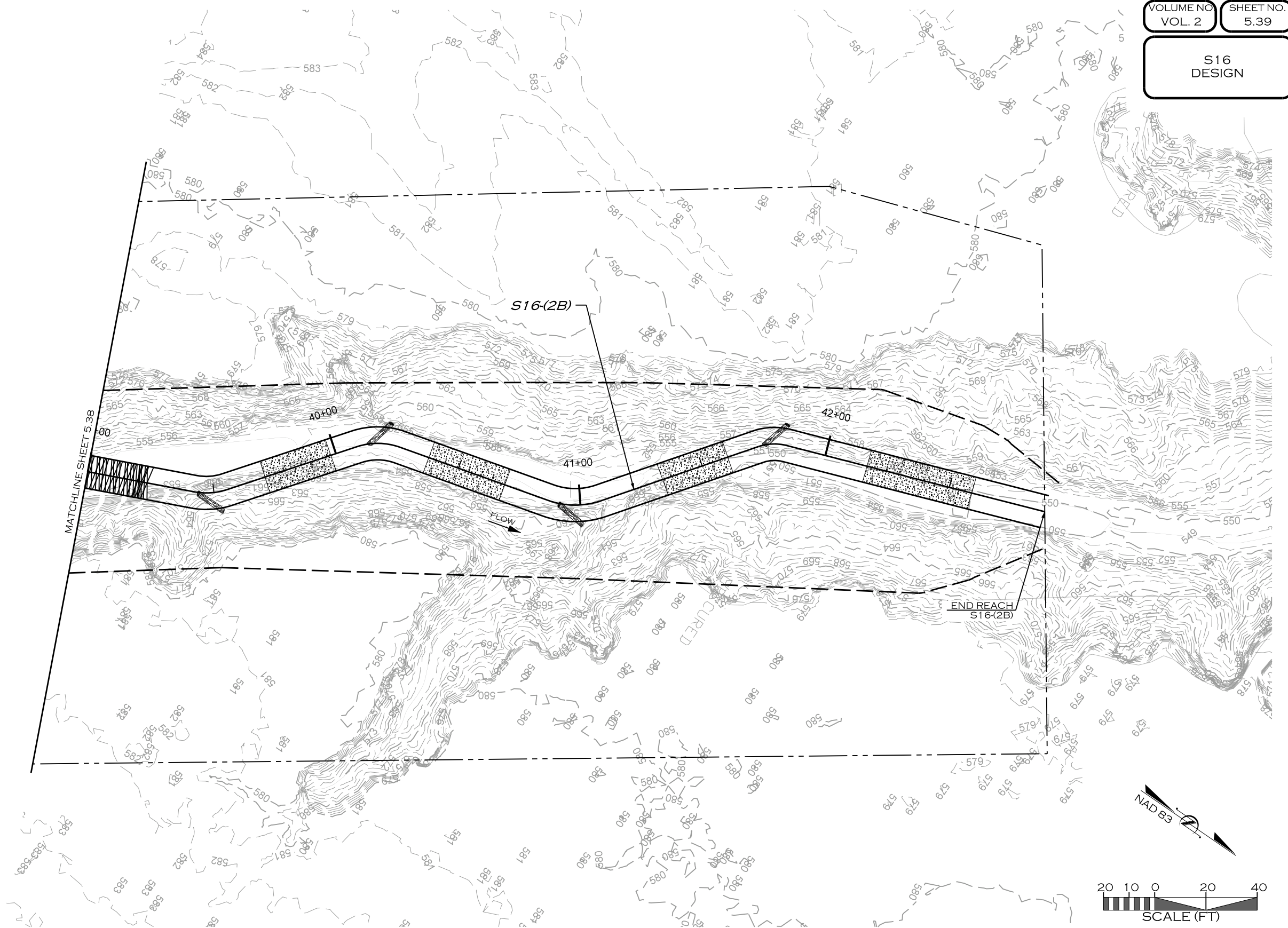
PREPARED IN THE OFFICE OF:

**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.39.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:

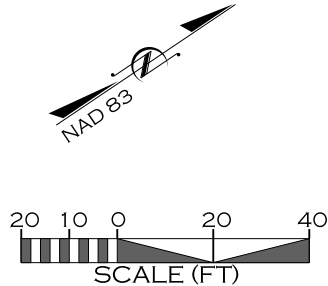
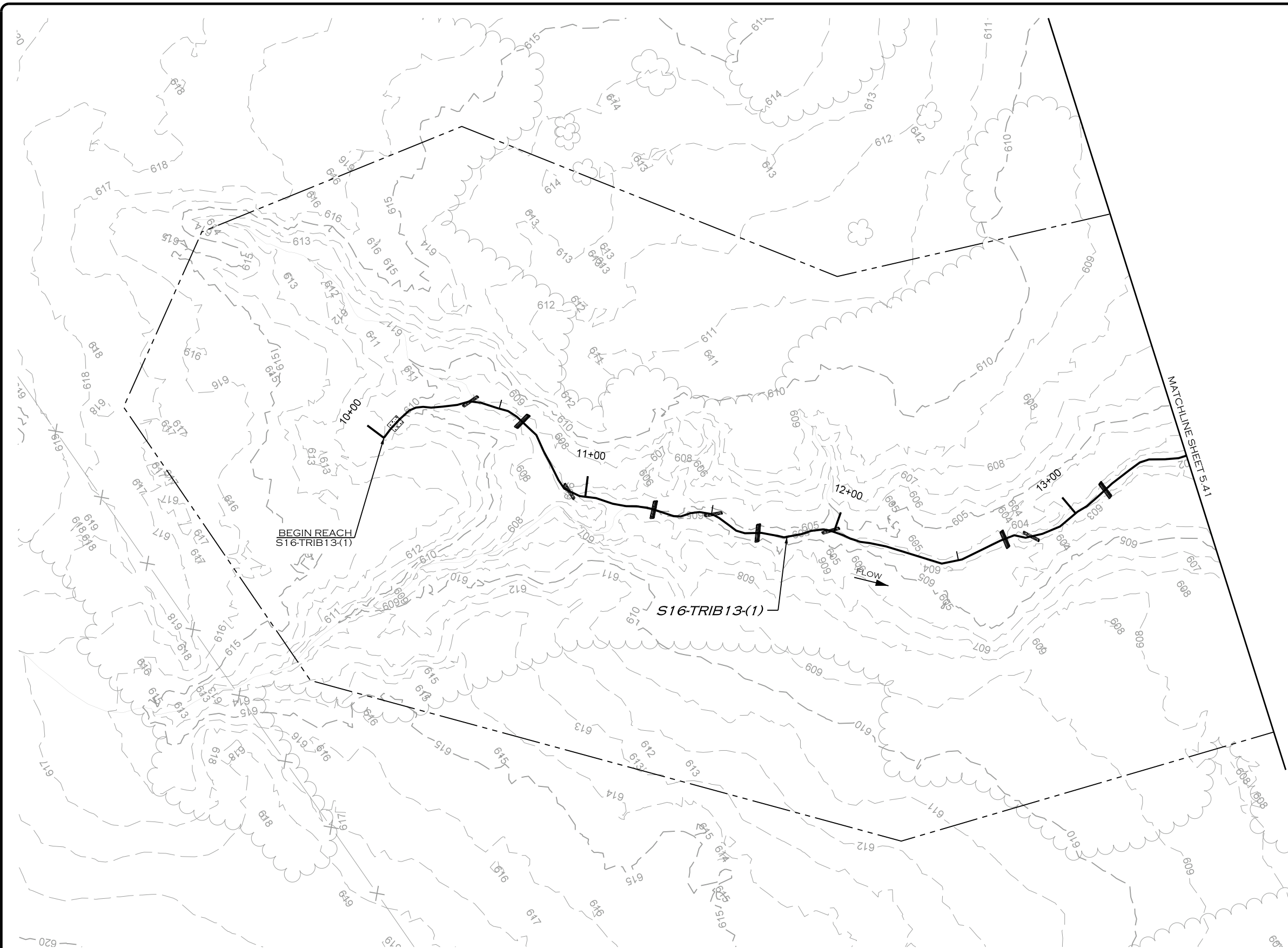


ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:

 **ECOSYSTEM PLANNING & RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

7/8/2019 R:\PROJECTS\DALO001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRH_PSH_5.40.dgn



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:

 **ECOSYSTEM PLANNING & RESTORATION**

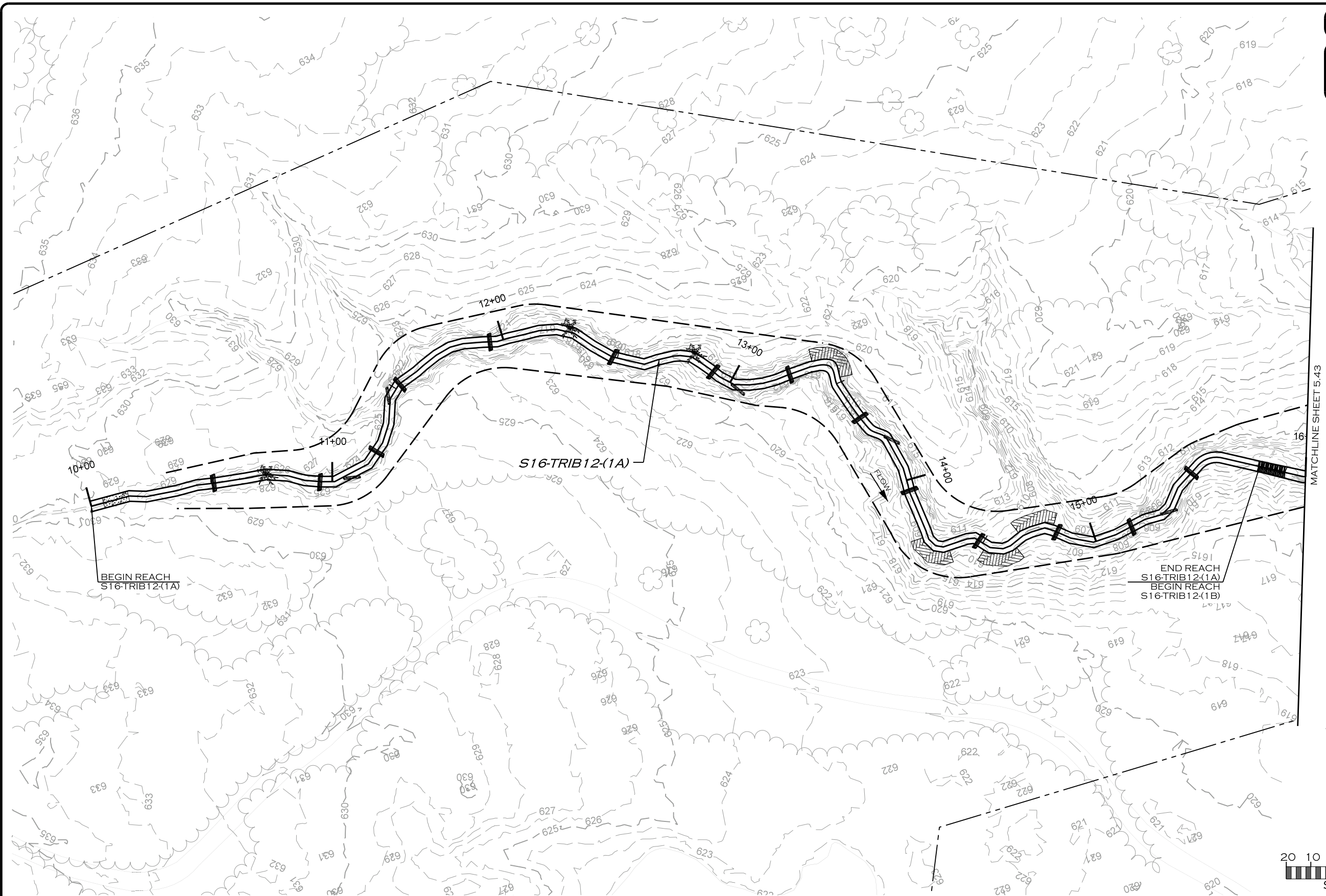
17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

7/8/2019
R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRH_PSH_5.41.dgn
JACOB

S16-TRIB12
DESIGN



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:



UPPER TRINITY
REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:

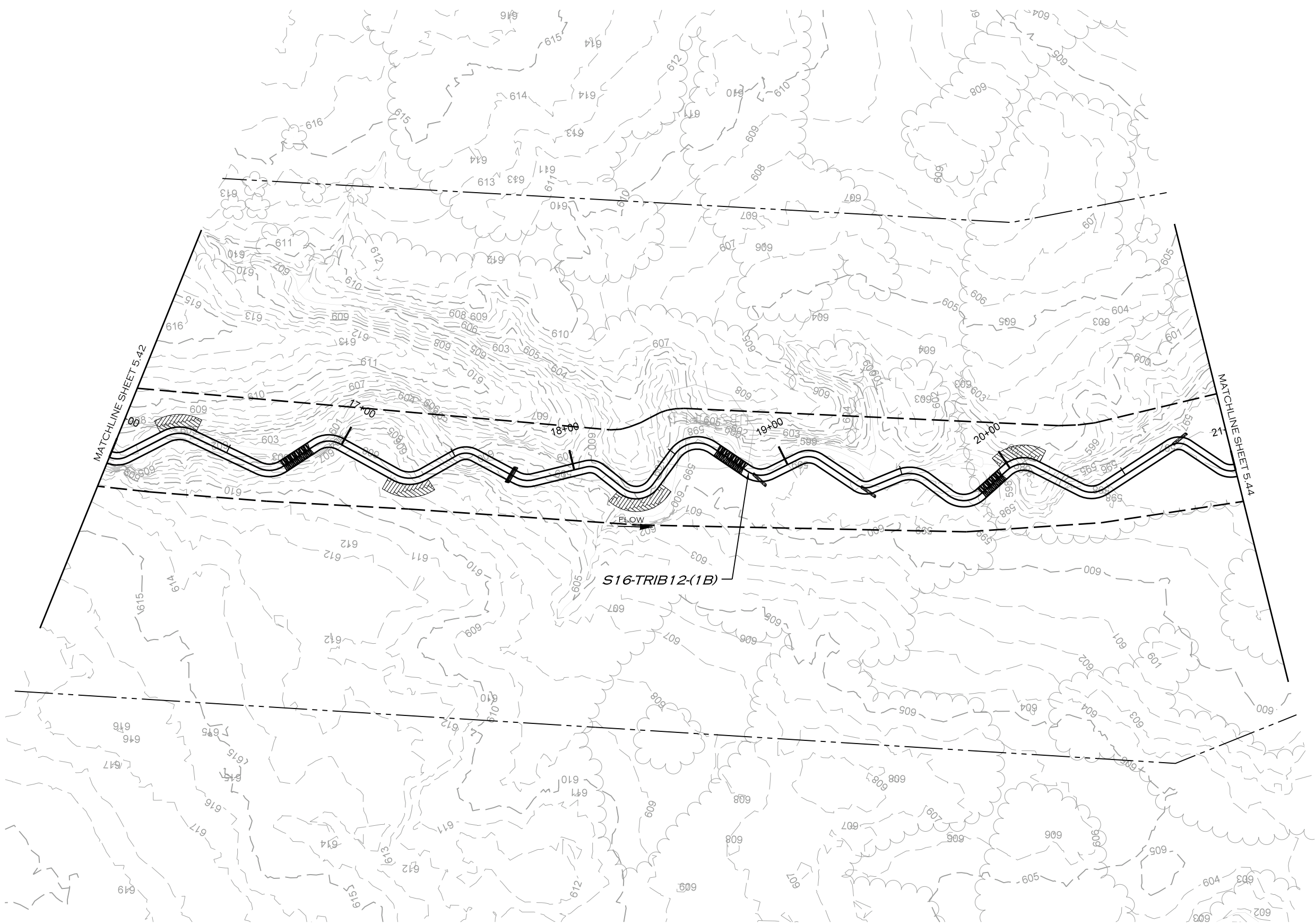


ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



Z:\8\2019
R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.43.dgn
JACON

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:

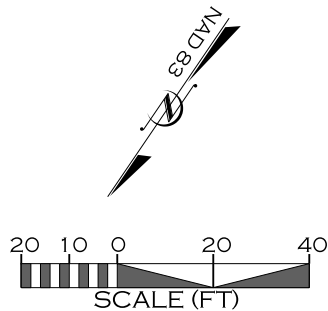
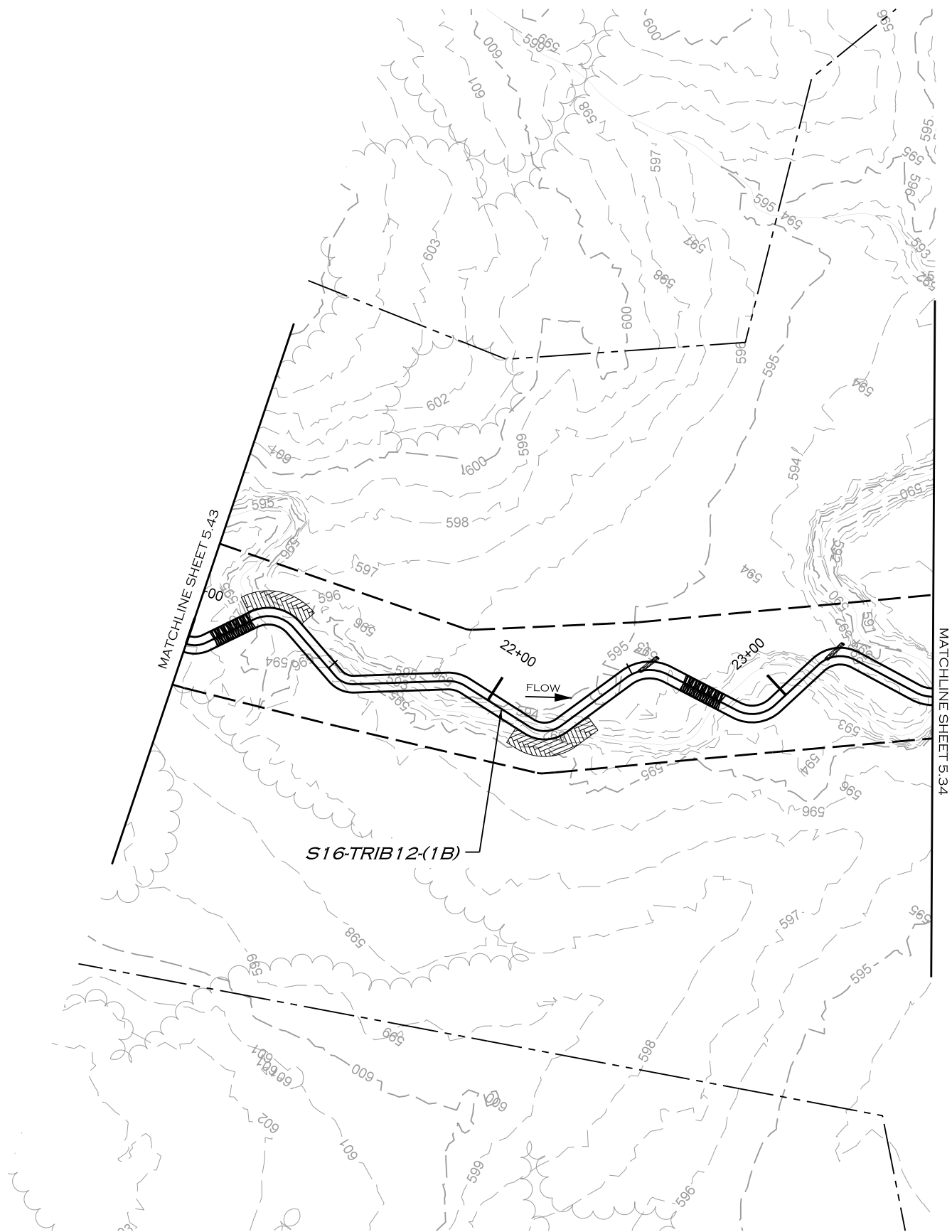


ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019
R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.44.dgn
MKRON

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



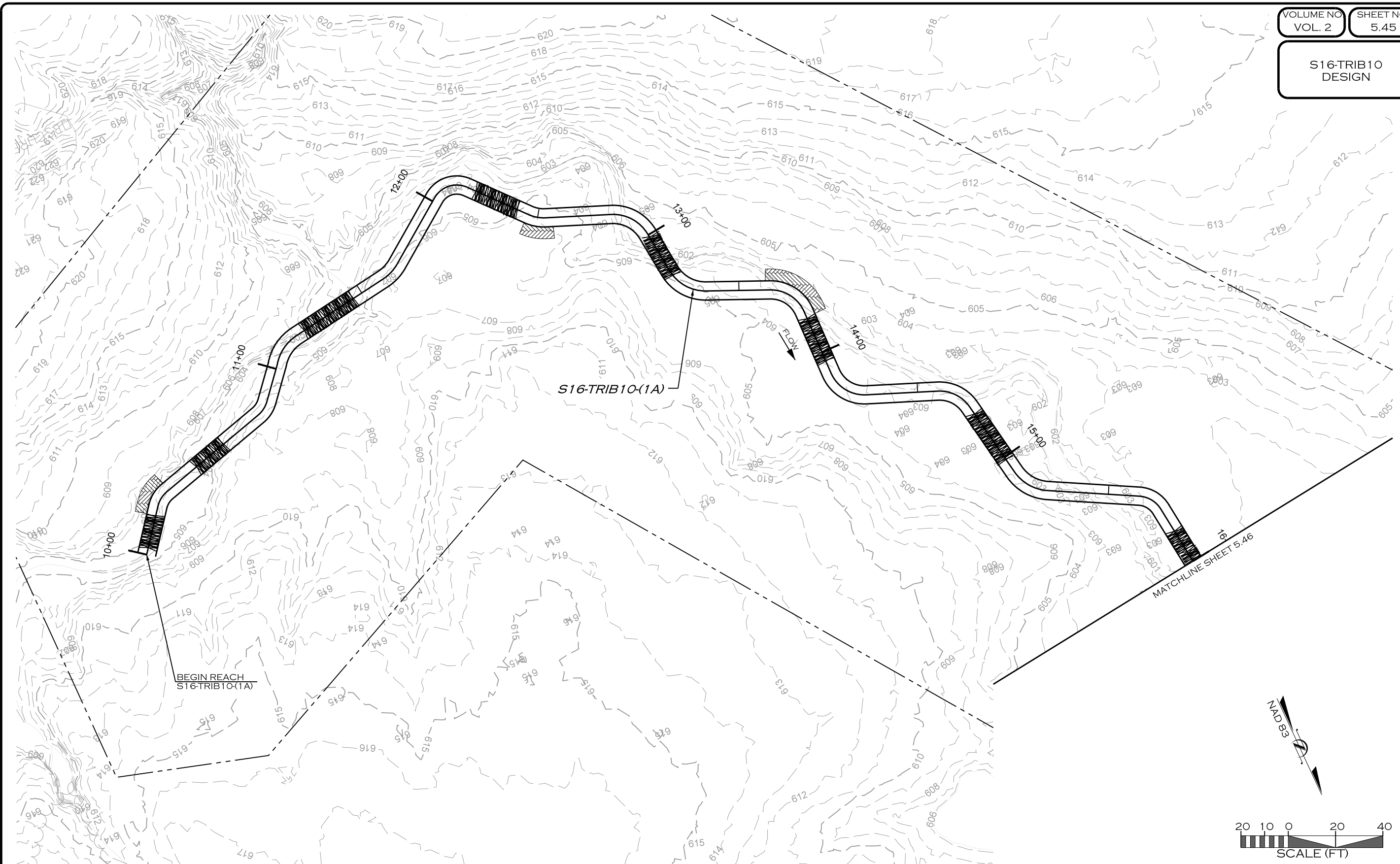
PREPARED IN THE OFFICE OF:

**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019
R:\PROJECTS\DALO001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.45.dgn
JACOB

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY
REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

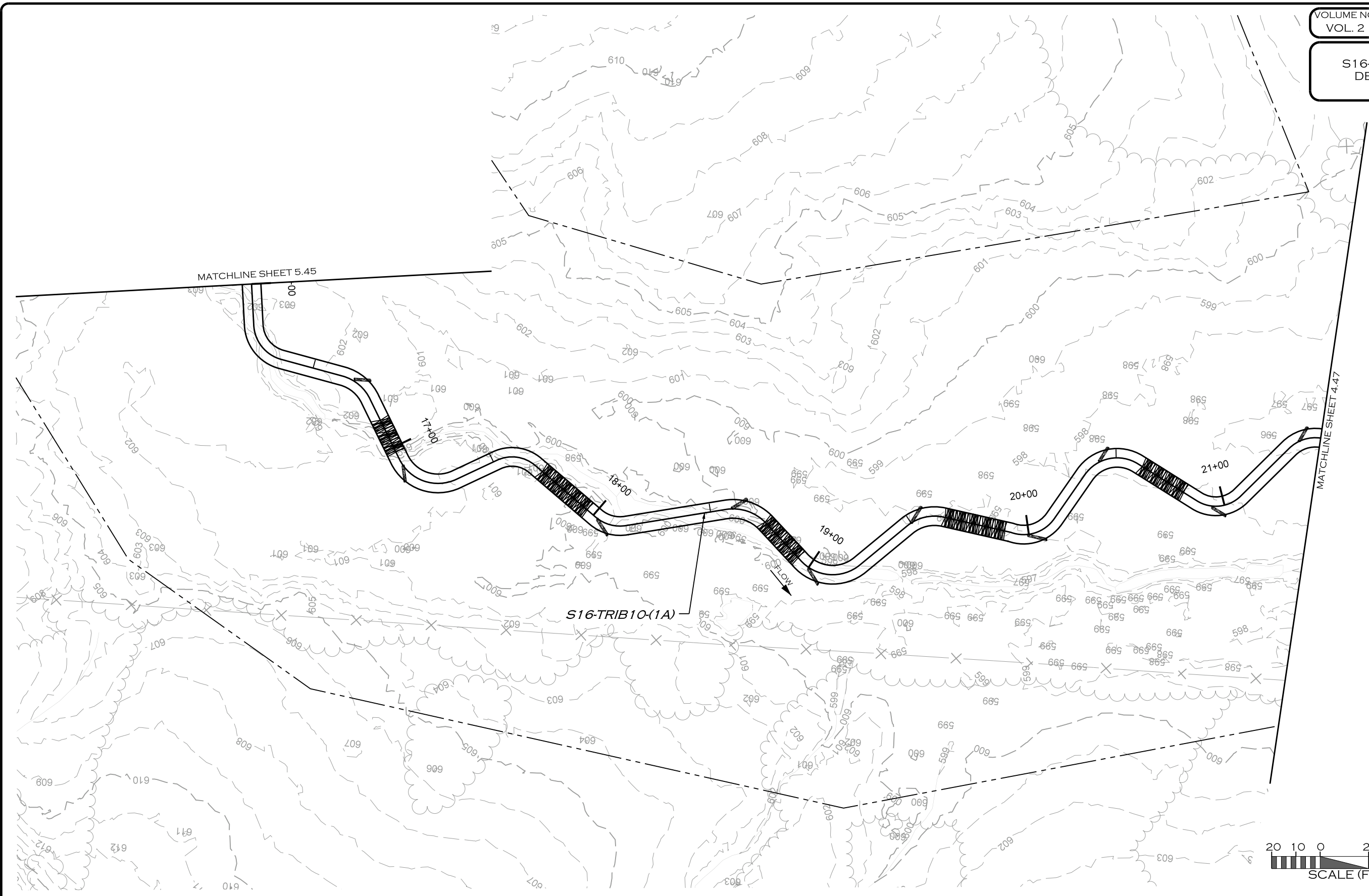
PREPARED IN THE OFFICE OF:

 **ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ECOSYSTEM
PLANNING &
RESTORATION

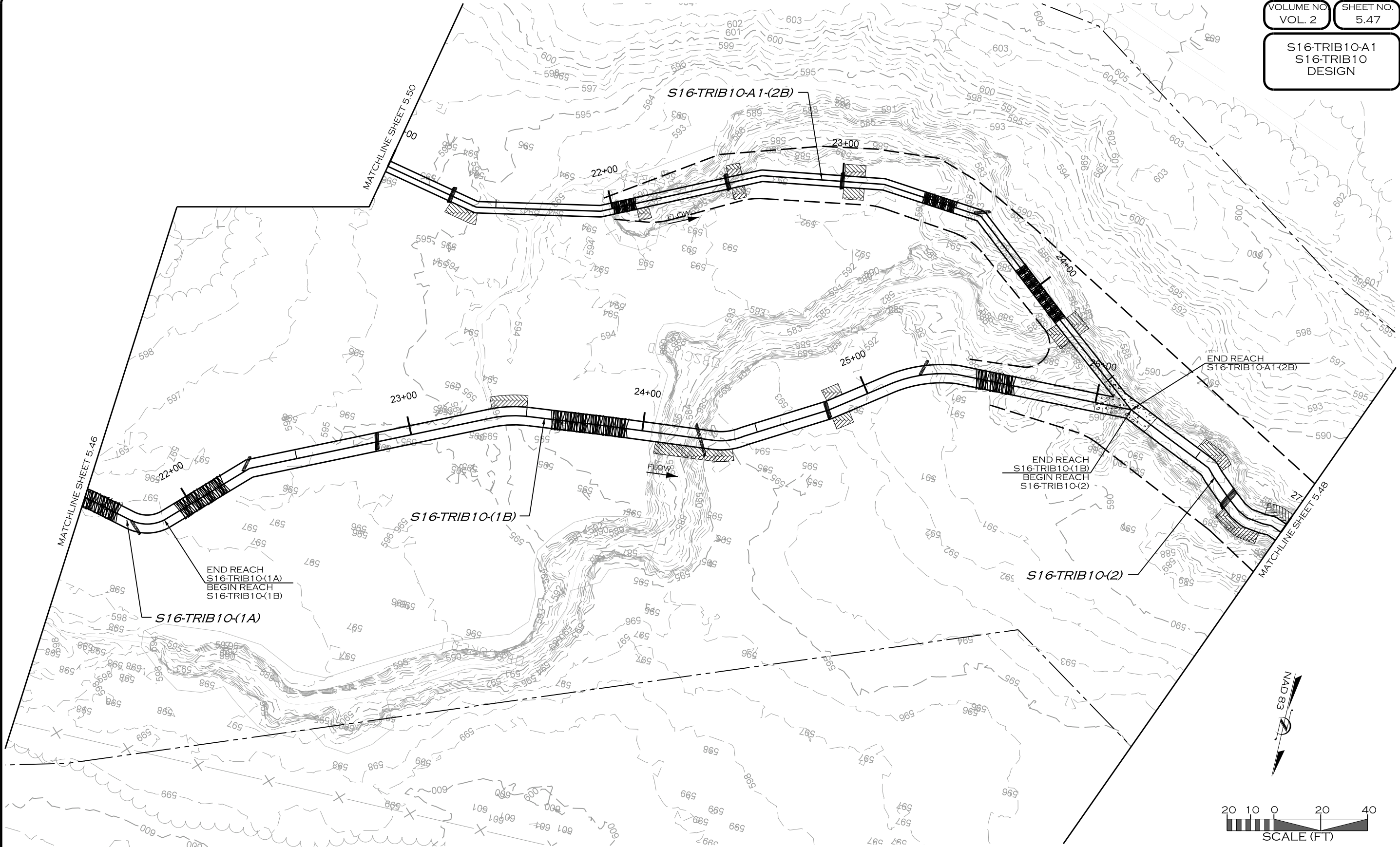
PREPARED IN THE OFFICE OF:

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

7/8/2019 R:\PROJECTS\DALO001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.46.dgn



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:

 **ECOSYSTEM PLANNING & RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

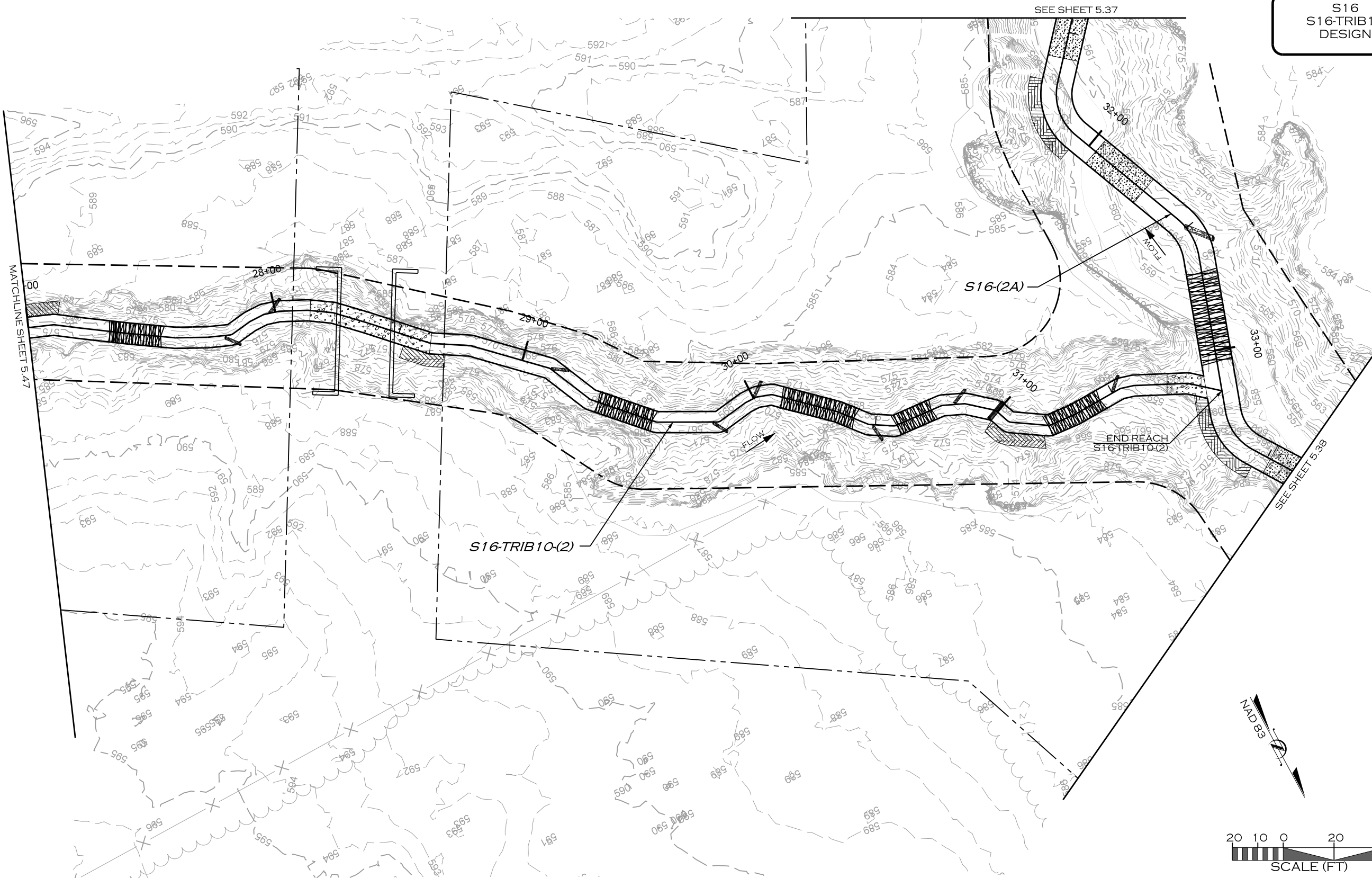
PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S16

S16-TRIB10

DESIGN



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.48.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:

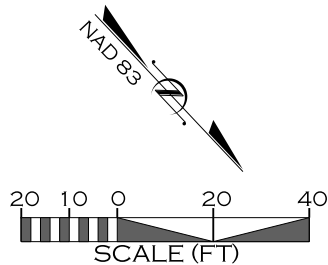
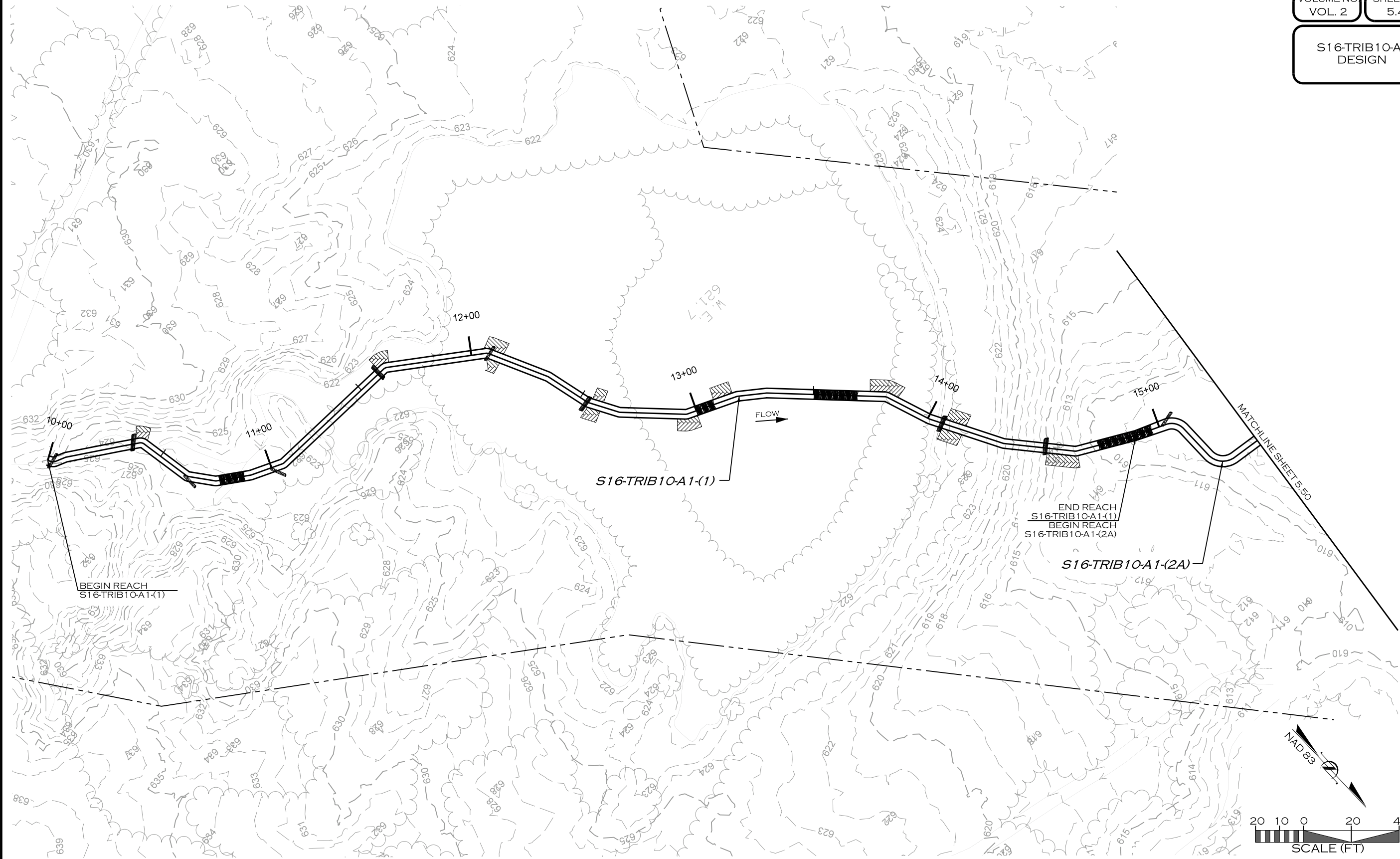


ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.49.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



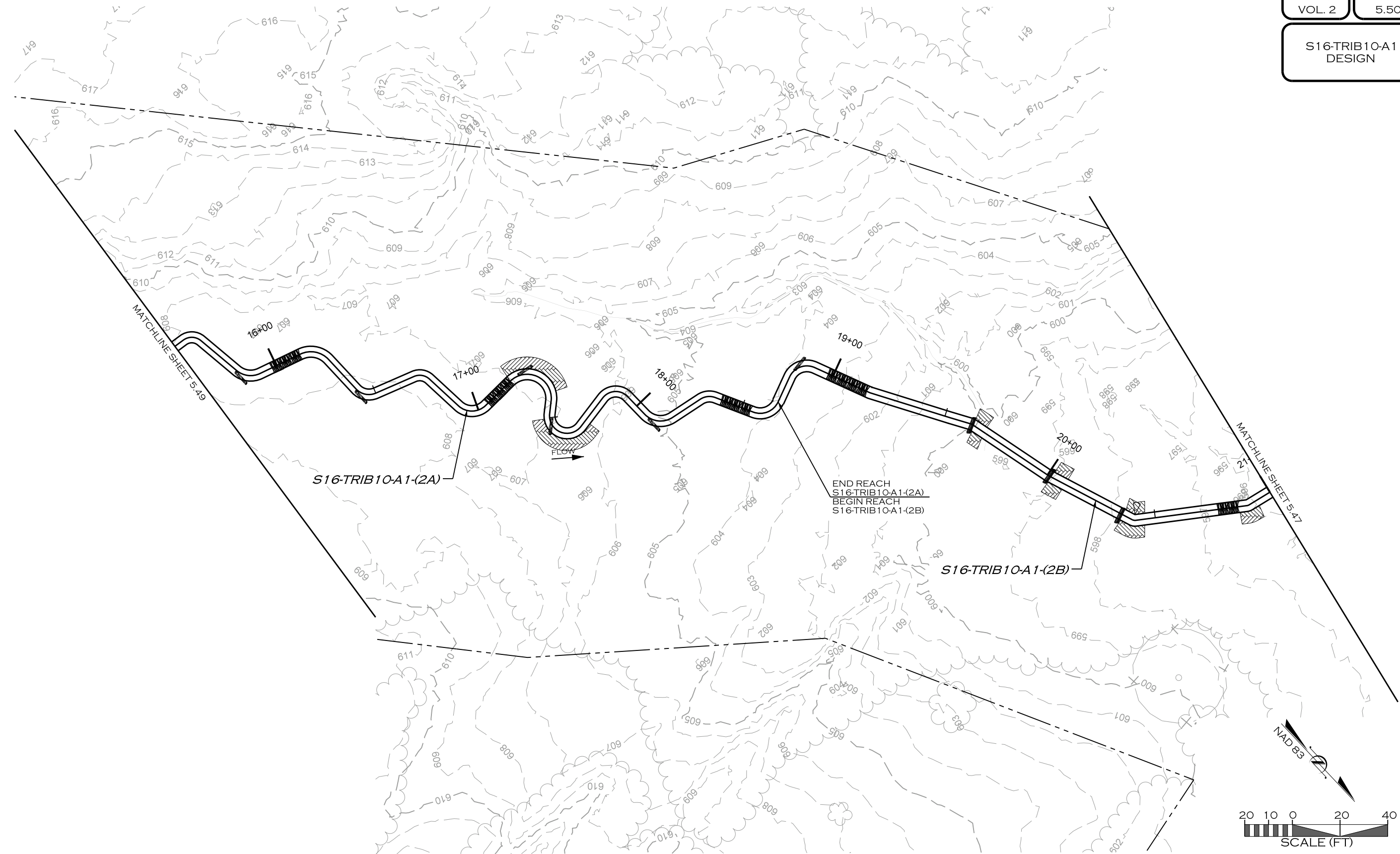
PREPARED IN THE OFFICE OF:

**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



Z:\8\2019
R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.50.dgn
JACON

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:



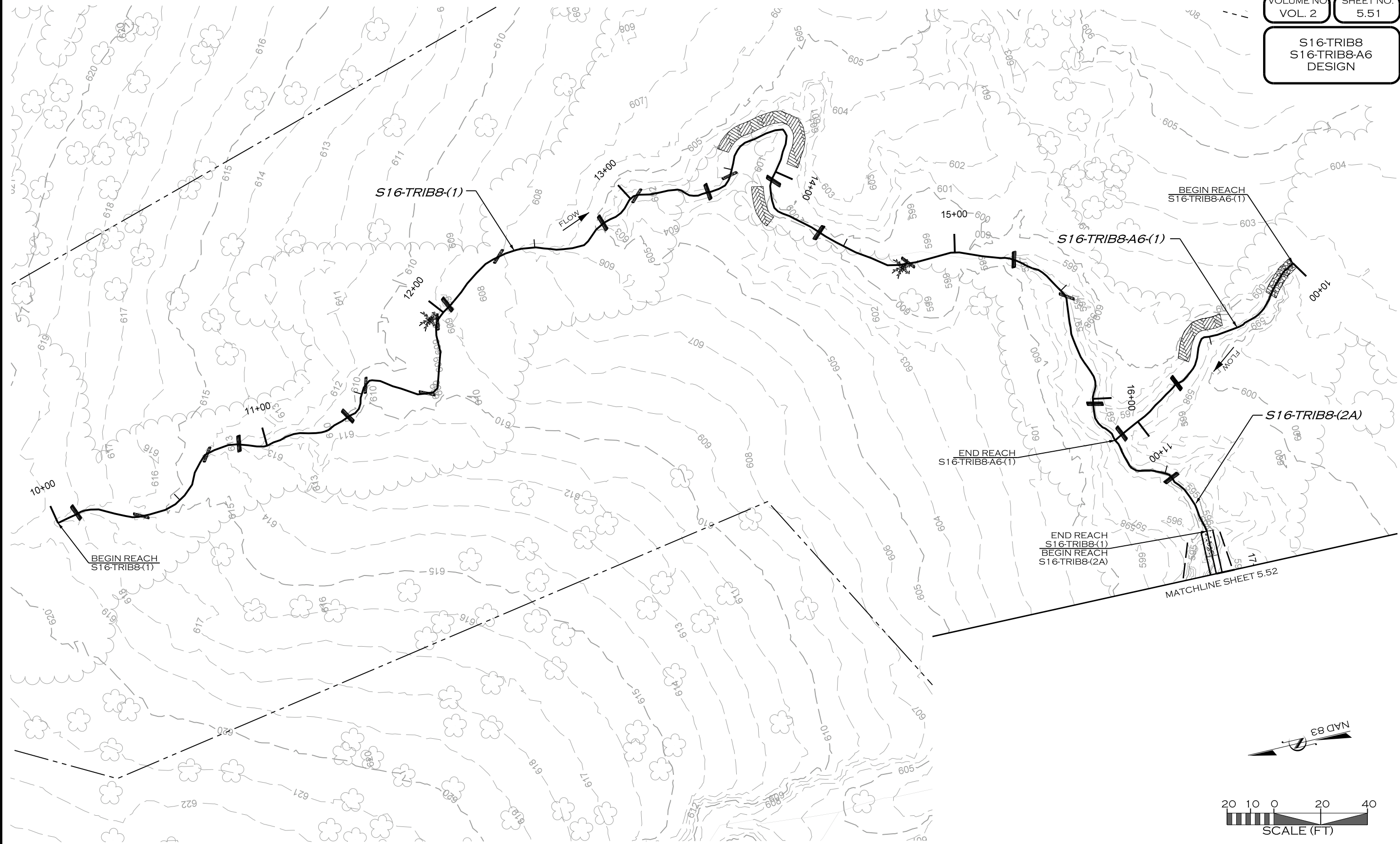
ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S16-TRIB8
S16-TRIB8-A6
DESIGN



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.51.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:

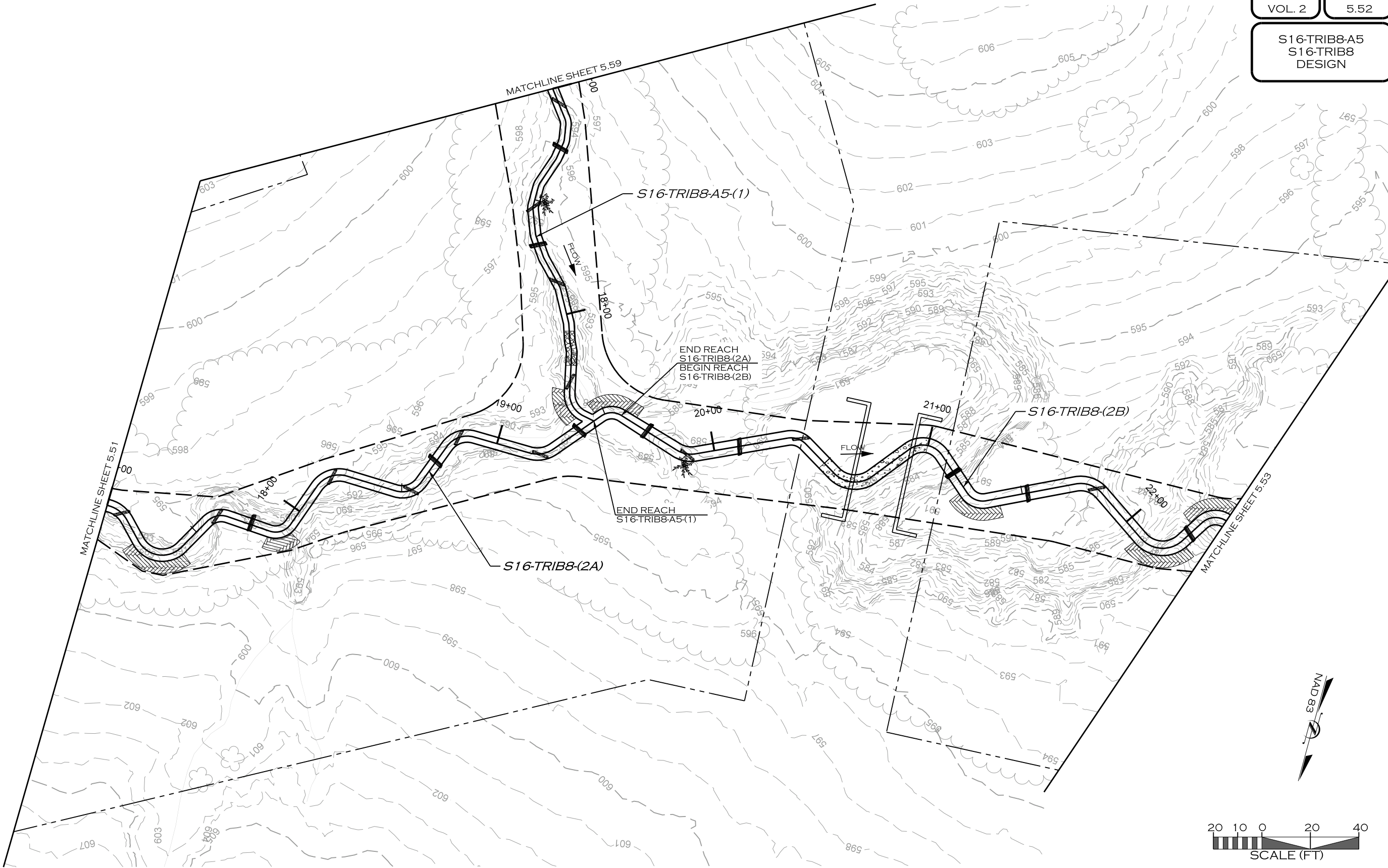
 **ECOSYSTEM PLANNING & RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S16-TRIB8-A5
S16-TRIB8
DESIGN



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:


ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S16-TRIB8
S16-TRIB8-A4
DESIGN



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:

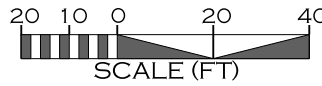
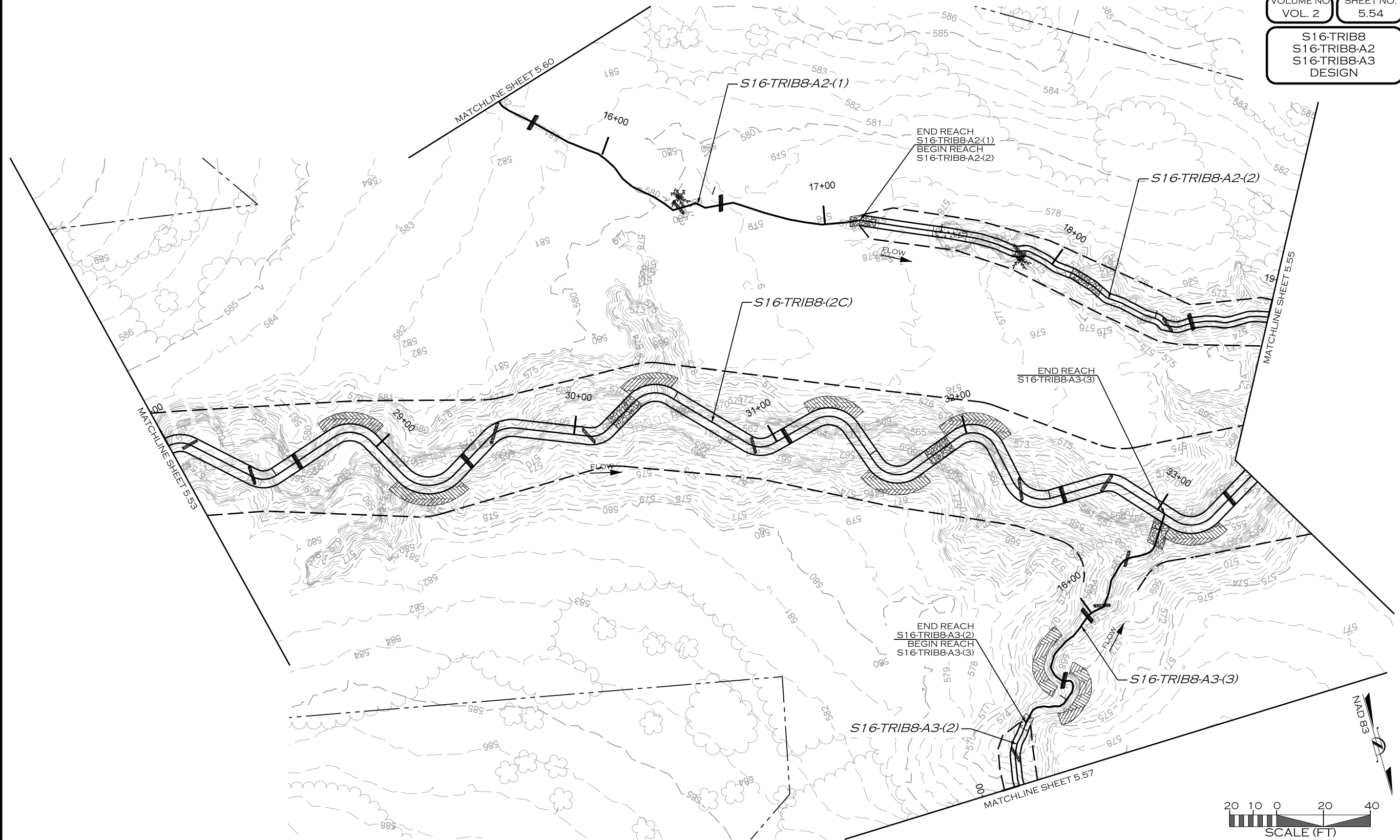
 **ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S16-TRIB8
S16-TRIB8-A2
S16-TRIB8-A3
DESIGN



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:


**ECOSYSTEM
PLANNING &
RESTORATION**

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PREPARED IN THE OFFICE OF:


**ECOSYSTEM
PLANNING &
RESTORATION**

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S16-TRIB8-A2
S16-TRIB8
DESIGN



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.55.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



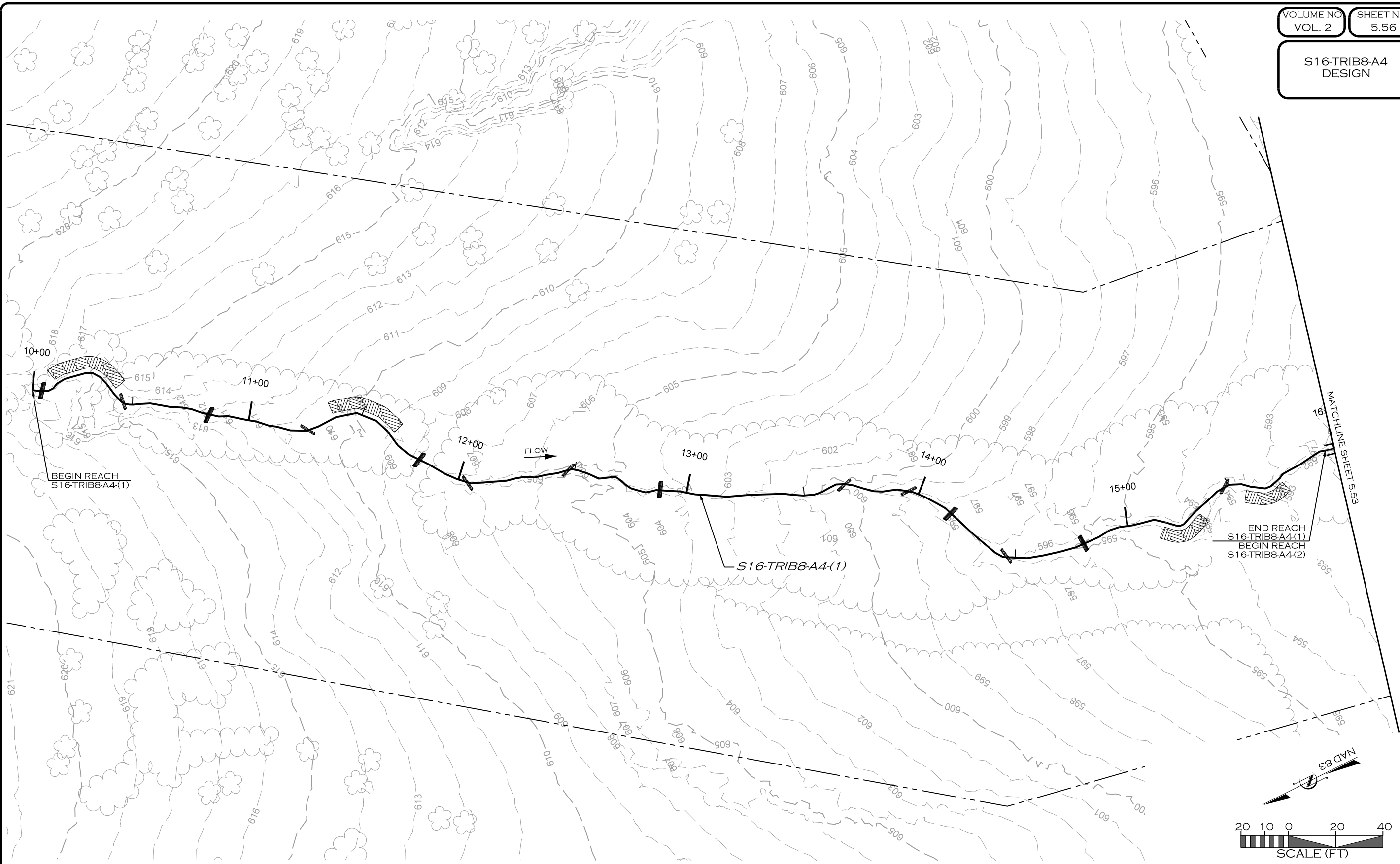
PREPARED IN THE OFFICE OF:

ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



Z:\8\2019
R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRH_PSH_5.56.dgn
JAC

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:



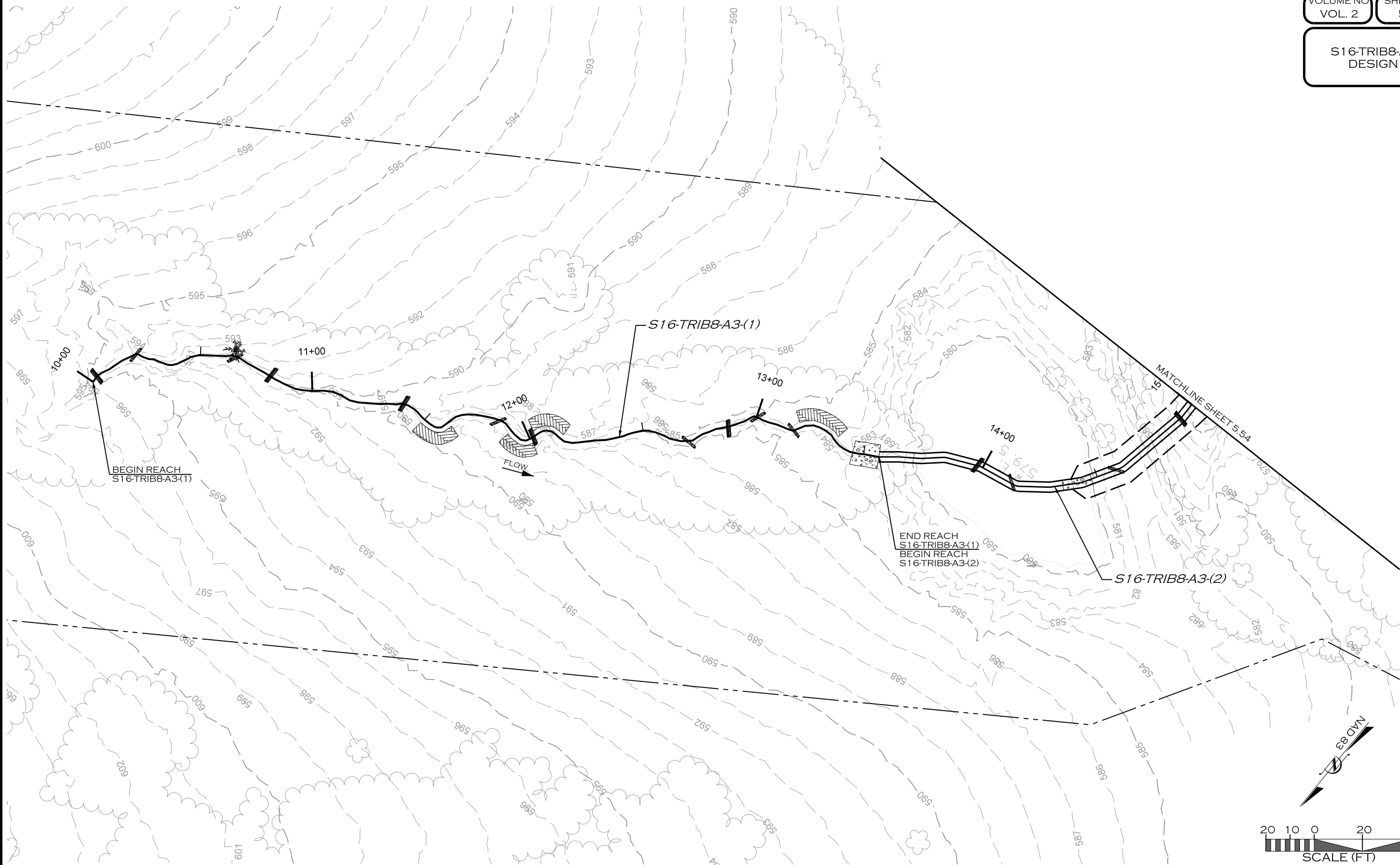
ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S16-TRIB8-A3
DESIGN



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.57.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

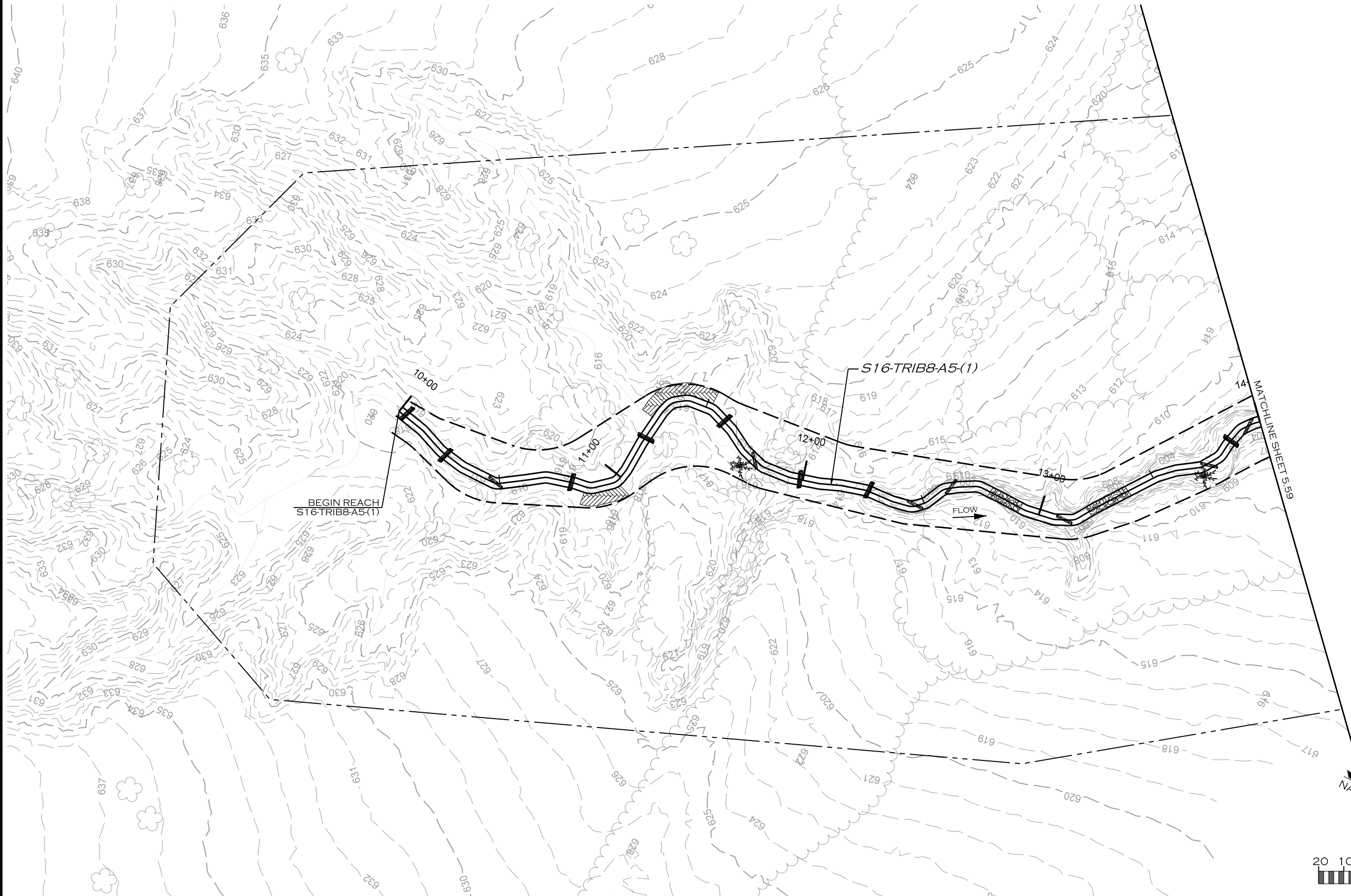
PREPARED IN THE OFFICE OF:


ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



Z:\8\2019
R:\PROJECTS\DALOOO1_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.58.dgn
JACON

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:

**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

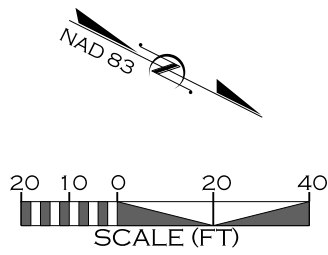
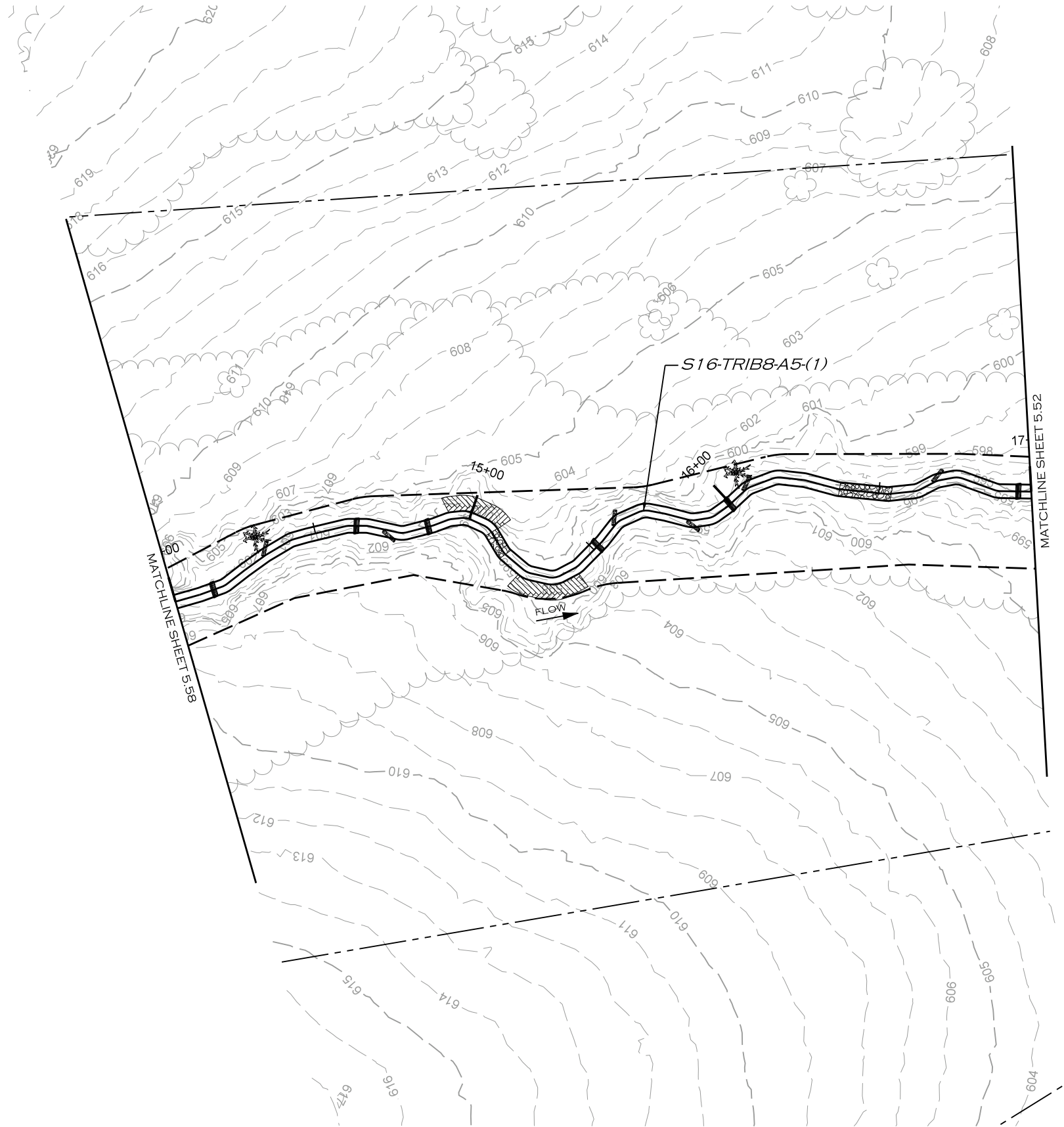
PREPARED IN THE OFFICE OF:

**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019 R:\PROJECTS\DALOOO1_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.59.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



PREPARED IN THE OFFICE OF:

**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:

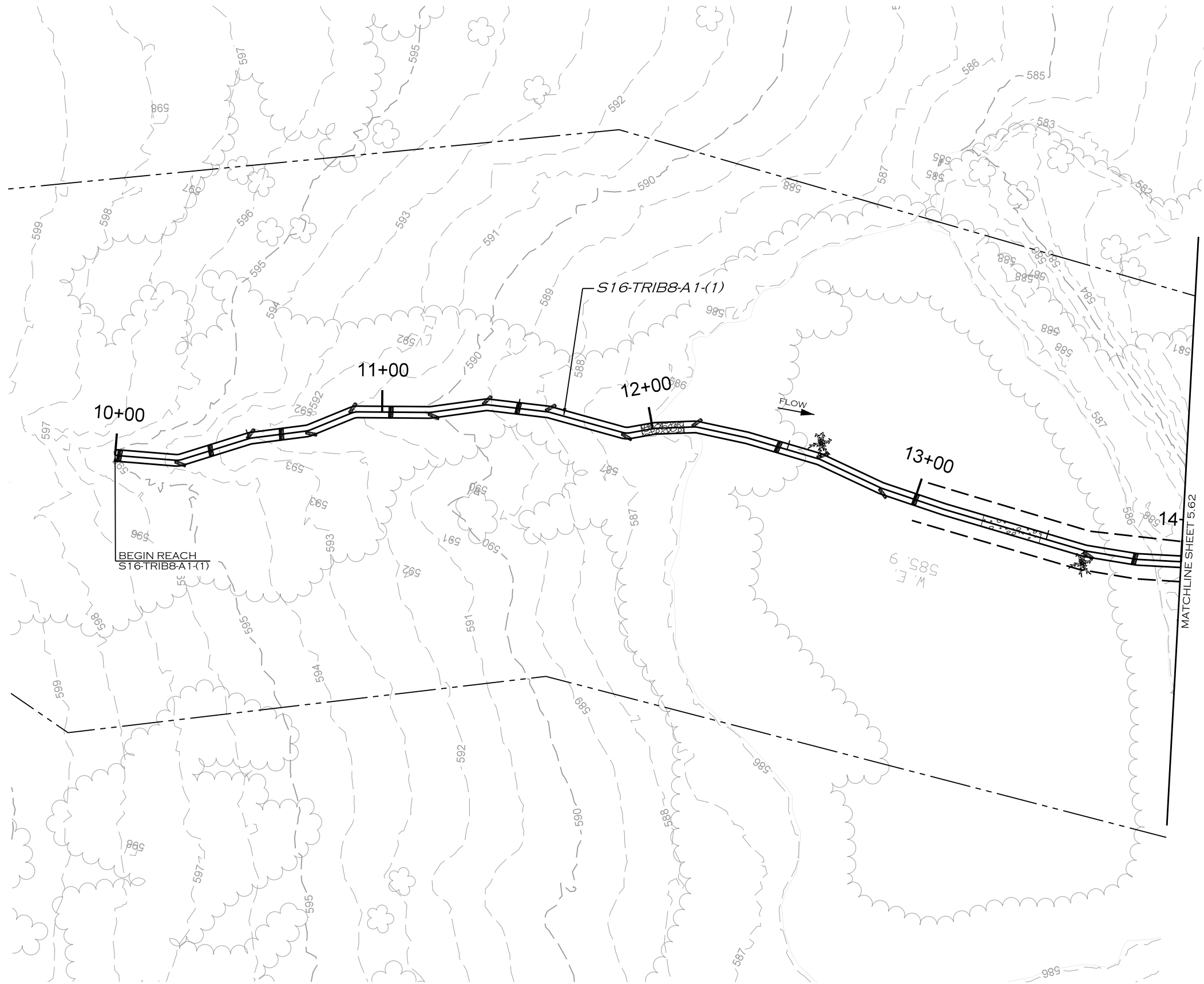
 **ECOSYSTEM PLANNING & RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S16-TRIB8-A1
DESIGN



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ECOSYSTEM
PLANNING &
RESTORATION

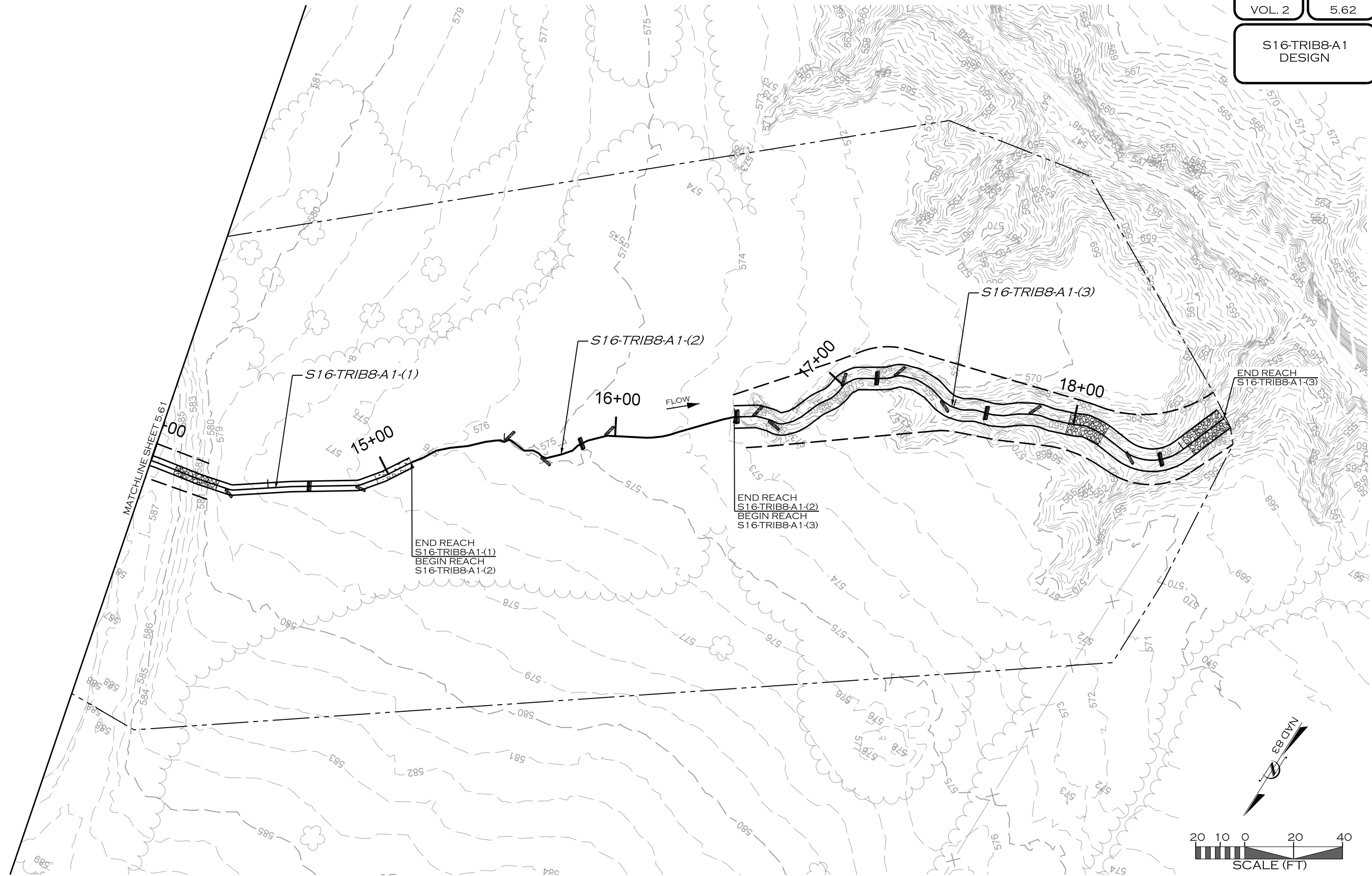
17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PREPARED IN THE OFFICE OF:

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S16-TRIB8-A1
DESIGN



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.62.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

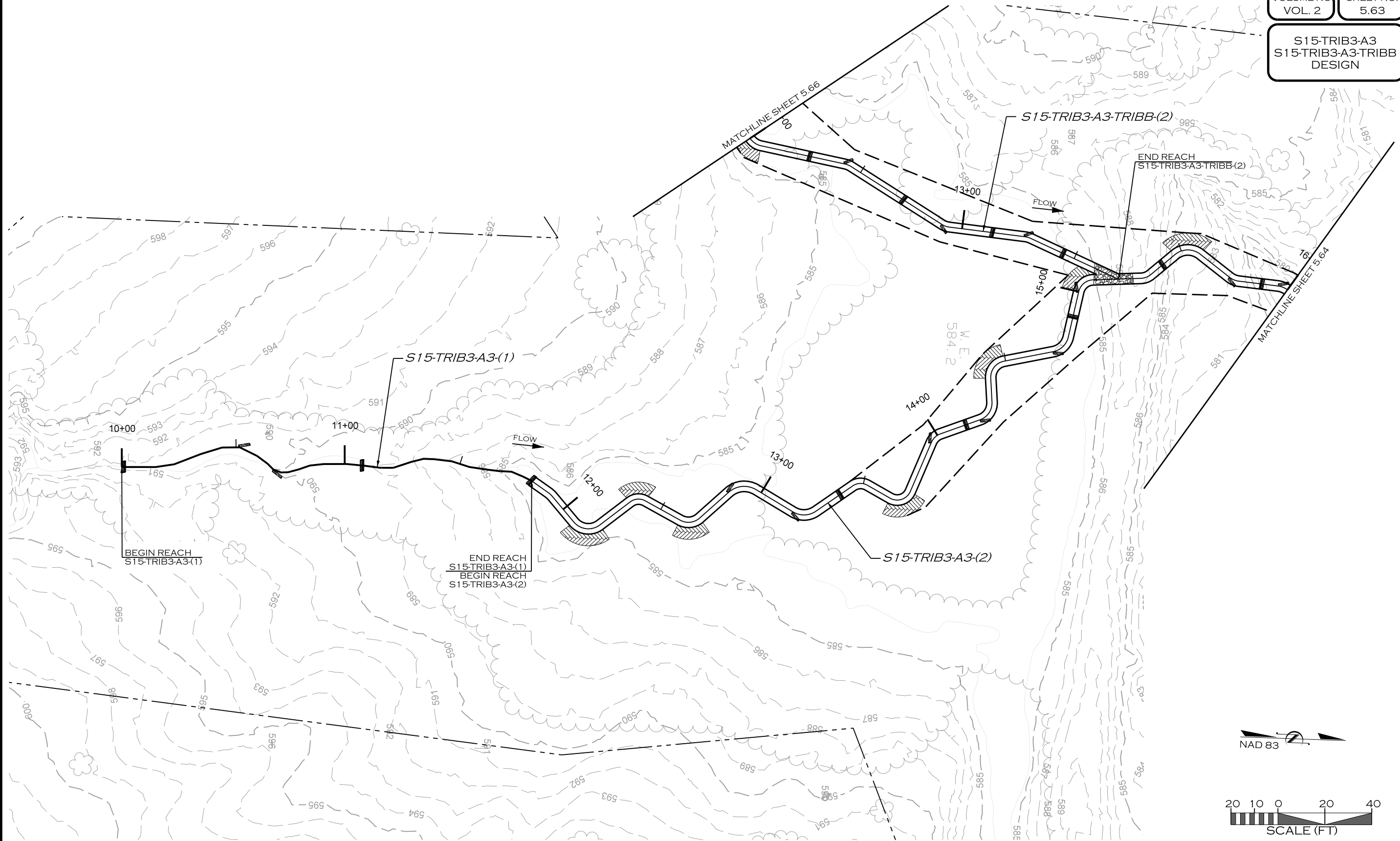
PREPARED IN THE OFFICE OF:

 **ECOSYSTEM PLANNING & RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.63.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



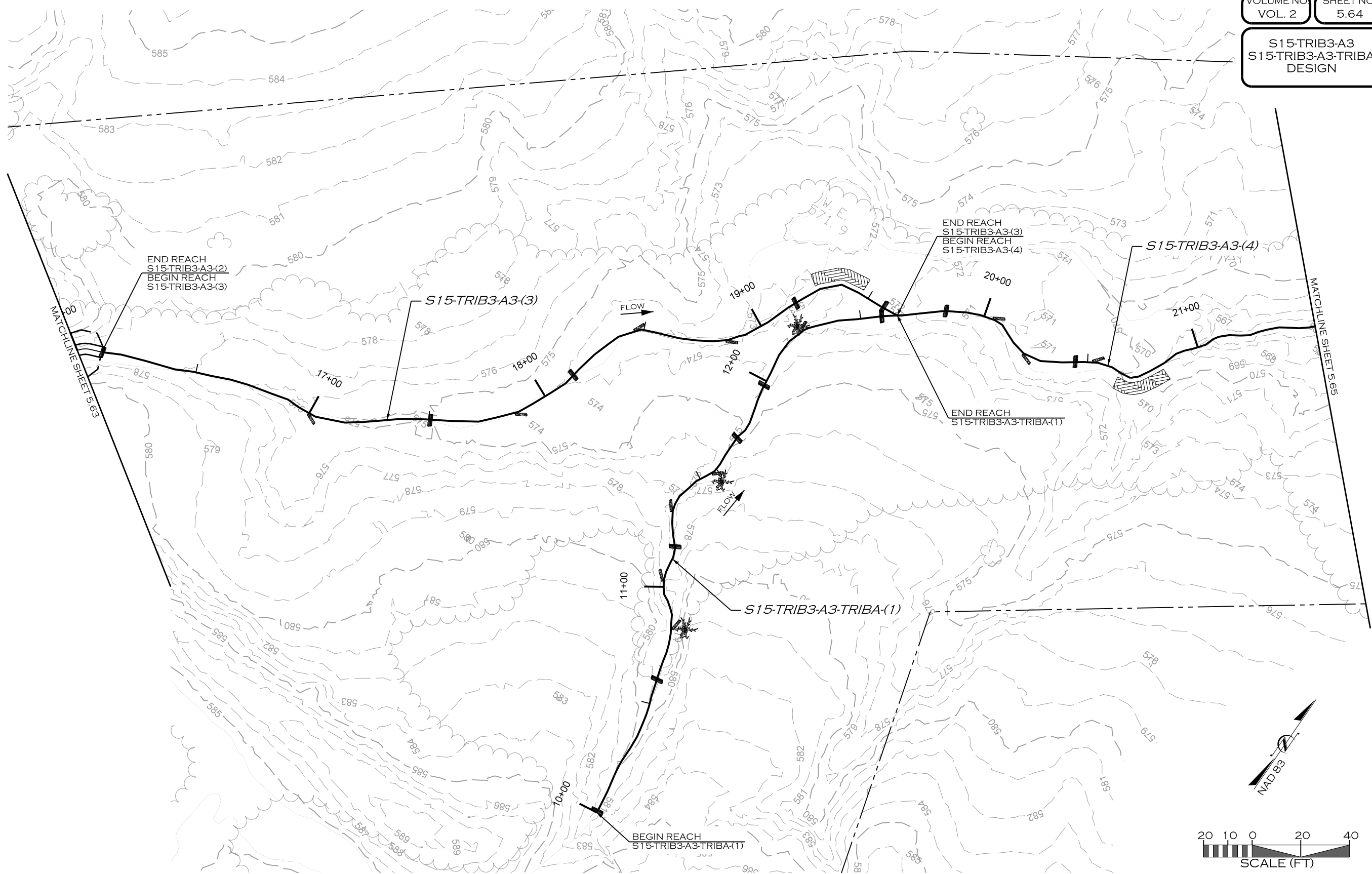
ECOSYSTEM
PLANNING &
RESTORATION

PREPARED IN THE OFFICE OF:

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:



UPPER TRINITY
REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:



ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

Z:\8\2019
R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.64.dgn

[illegible]

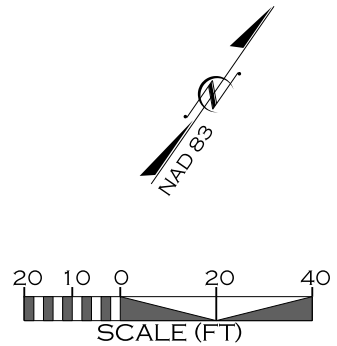
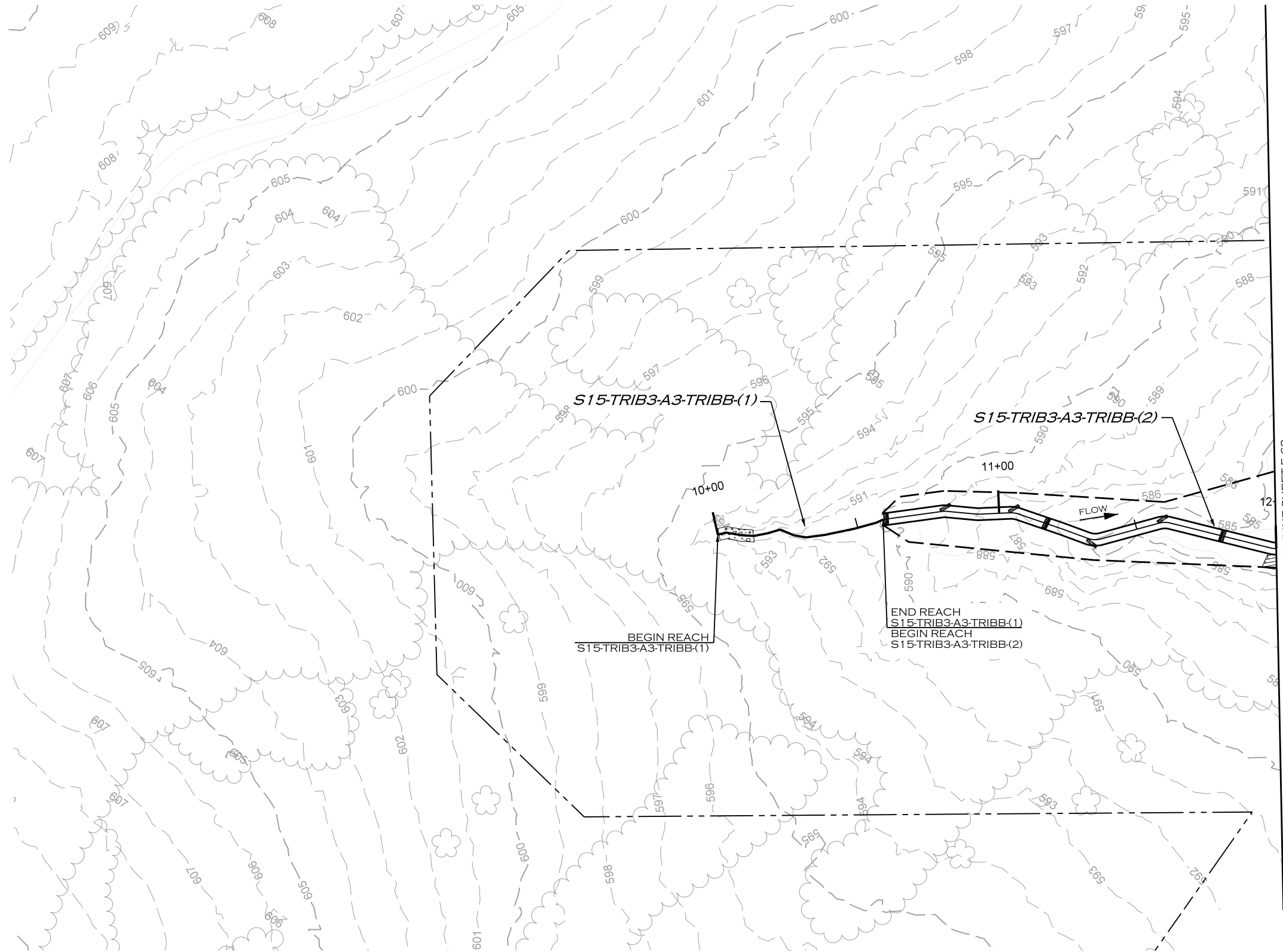
LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



PROJECT ENGINEER

NOT FOR CONSTRUCTION

THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.66.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



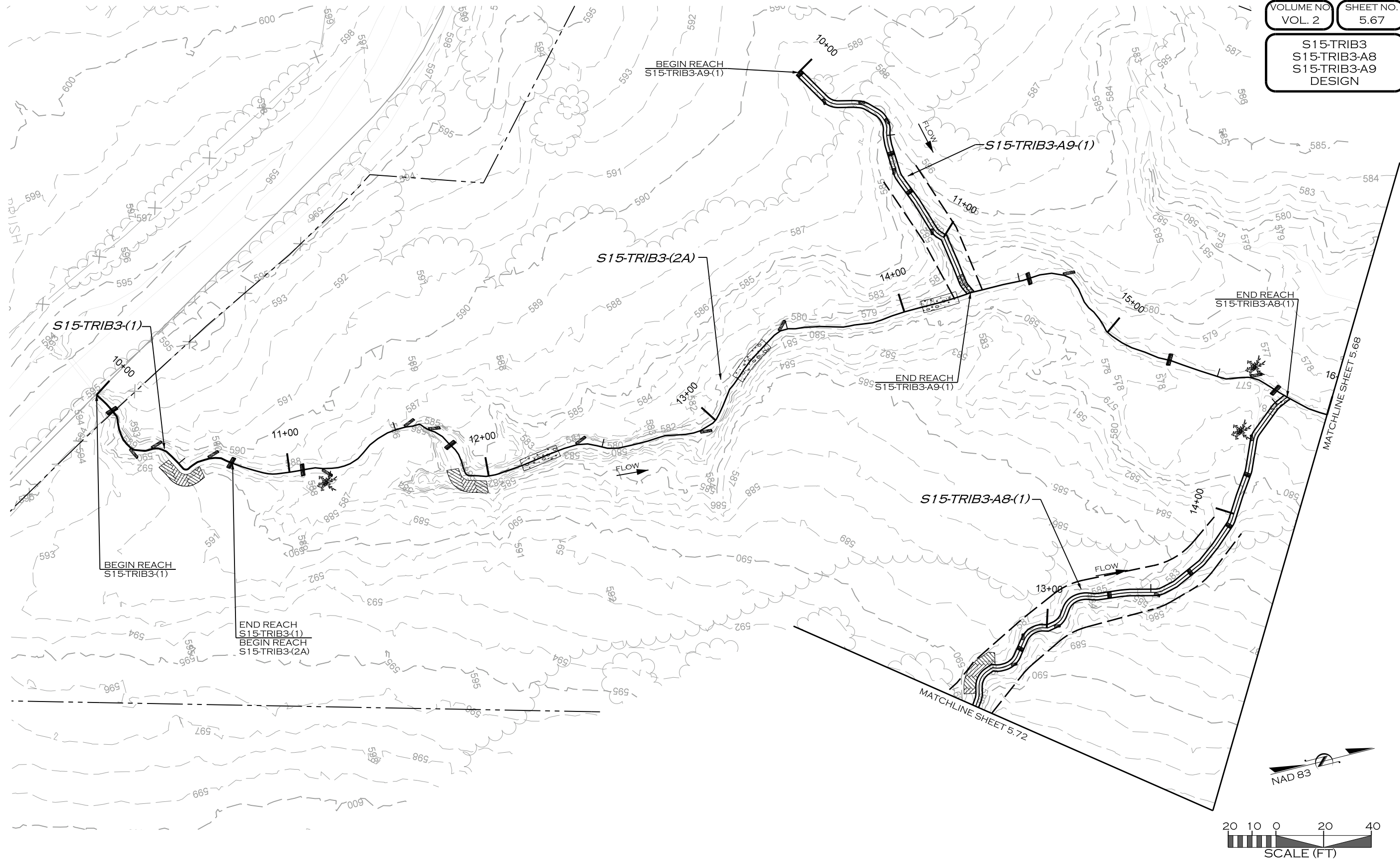
PREPARED IN THE OFFICE OF:

**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.67.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

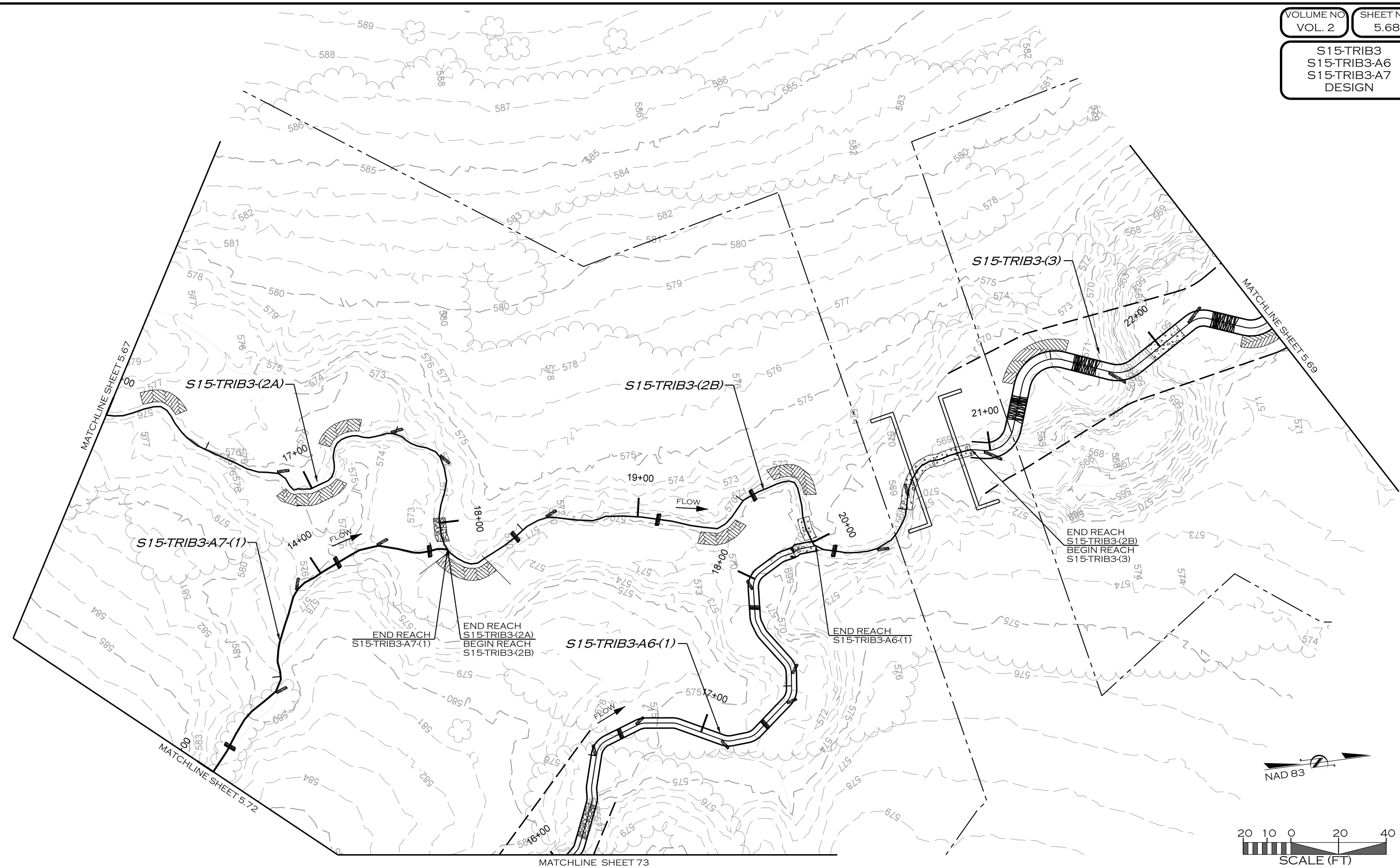
PREPARED IN THE OFFICE OF:



17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.68.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:
**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:

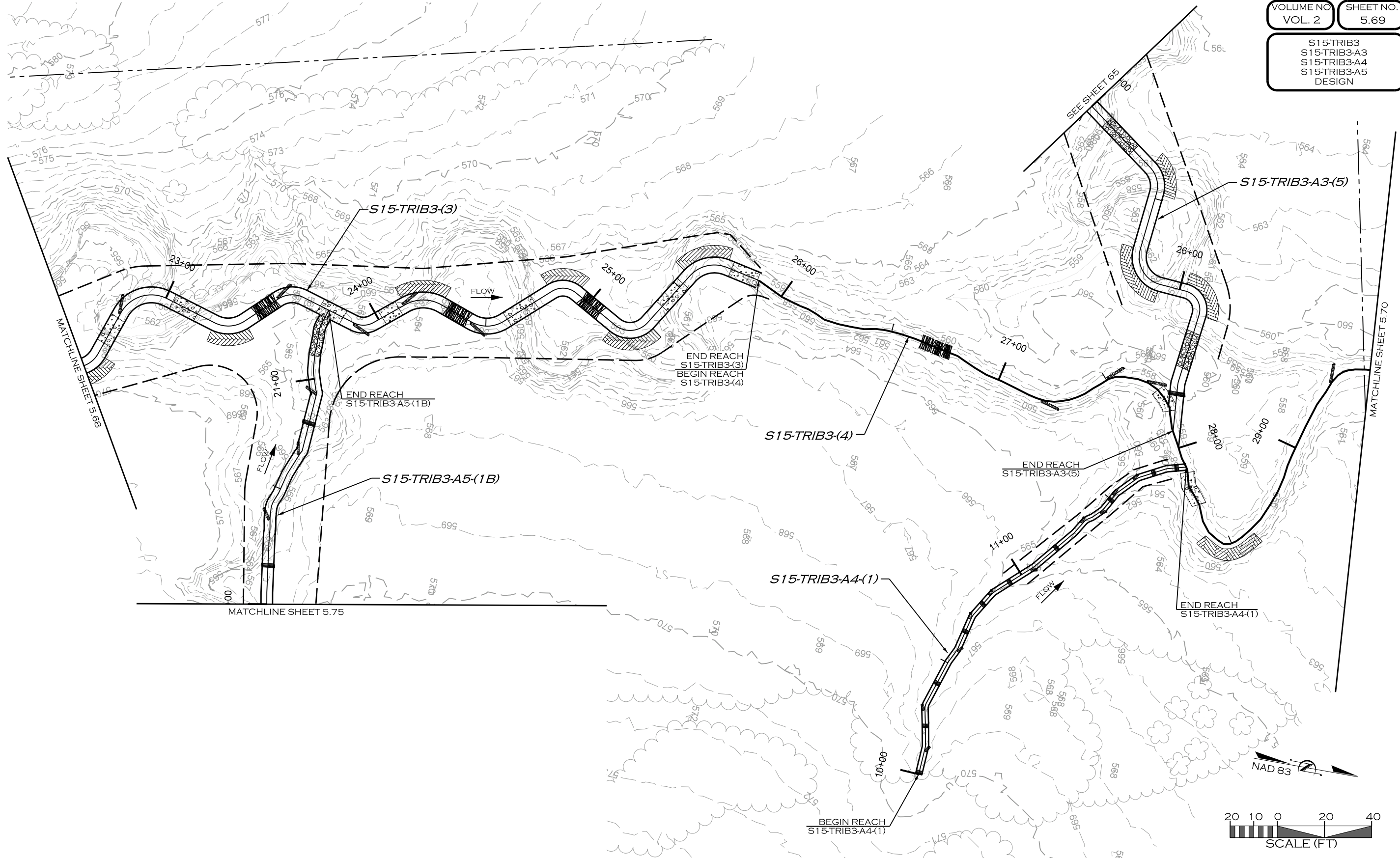

**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S15-TRIB3
S15-TRIB3-A3
S15-TRIB3-A4
S15-TRIB3-A5
DESIGN



7/8/2019 R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.69.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:

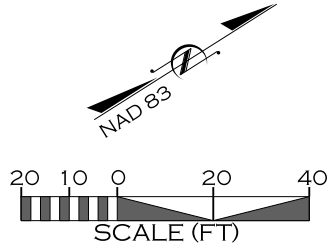
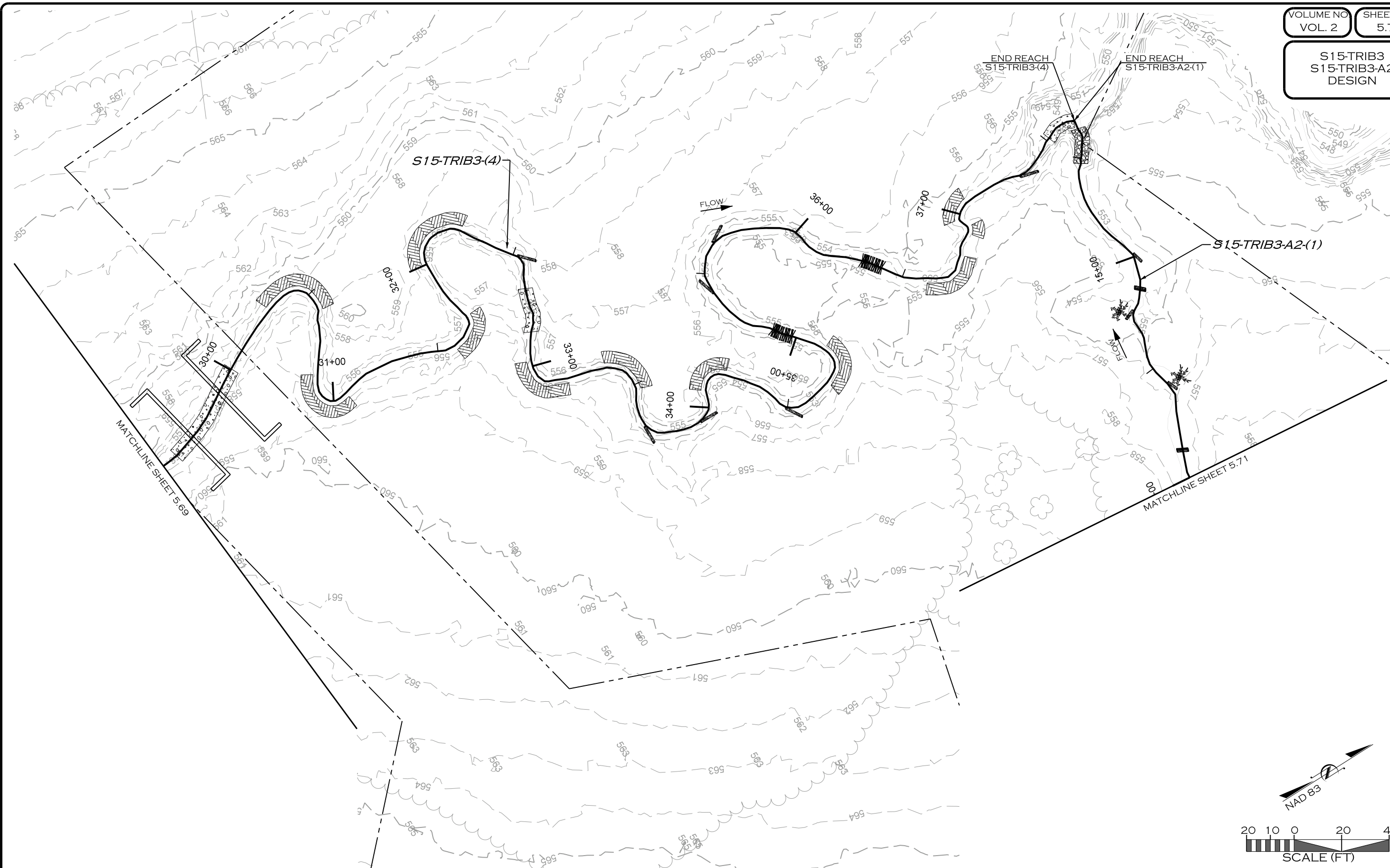
 **ECOSYSTEM PLANNING & RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S15-TRIB3
S15-TRIB3-A2
DESIGN



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

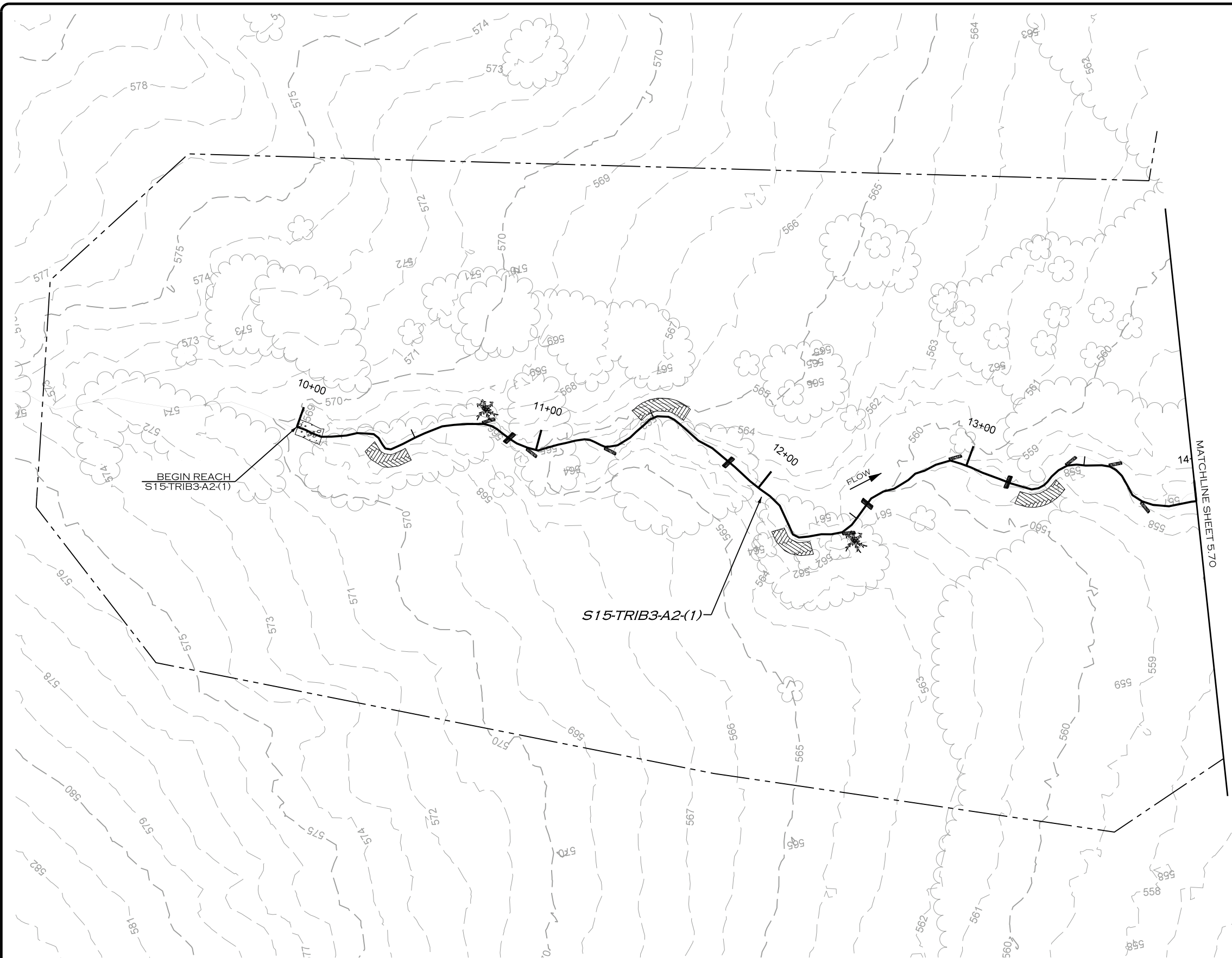
PREPARED IN THE OFFICE OF:

 **ECOSYSTEM PLANNING & RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:

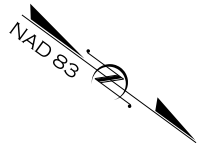
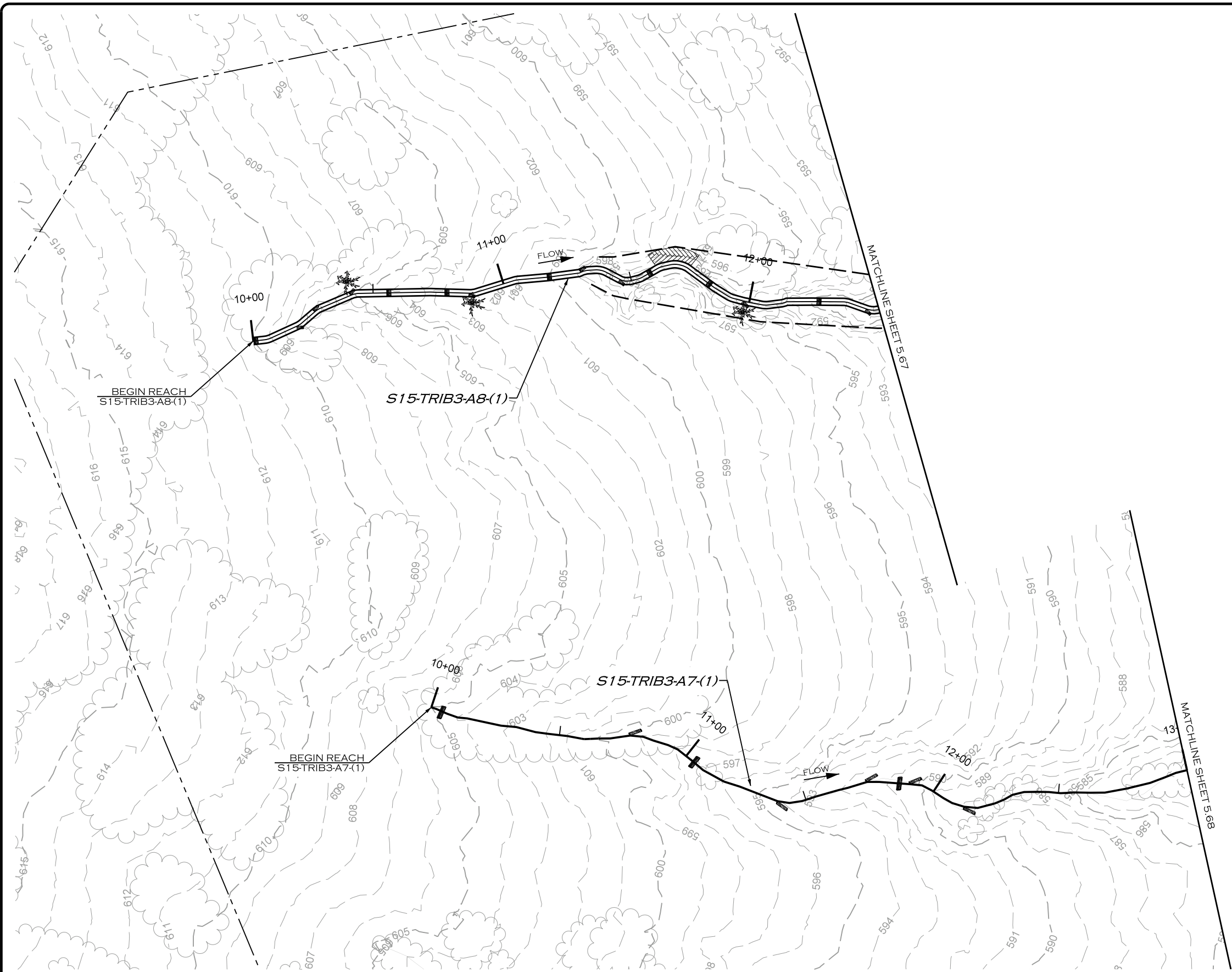
 **ECOSYSTEM PLANNING & RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

7/8/2019
R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.71.dgn



7/8/2019 R:\PROJECTS\DALO001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.72.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:



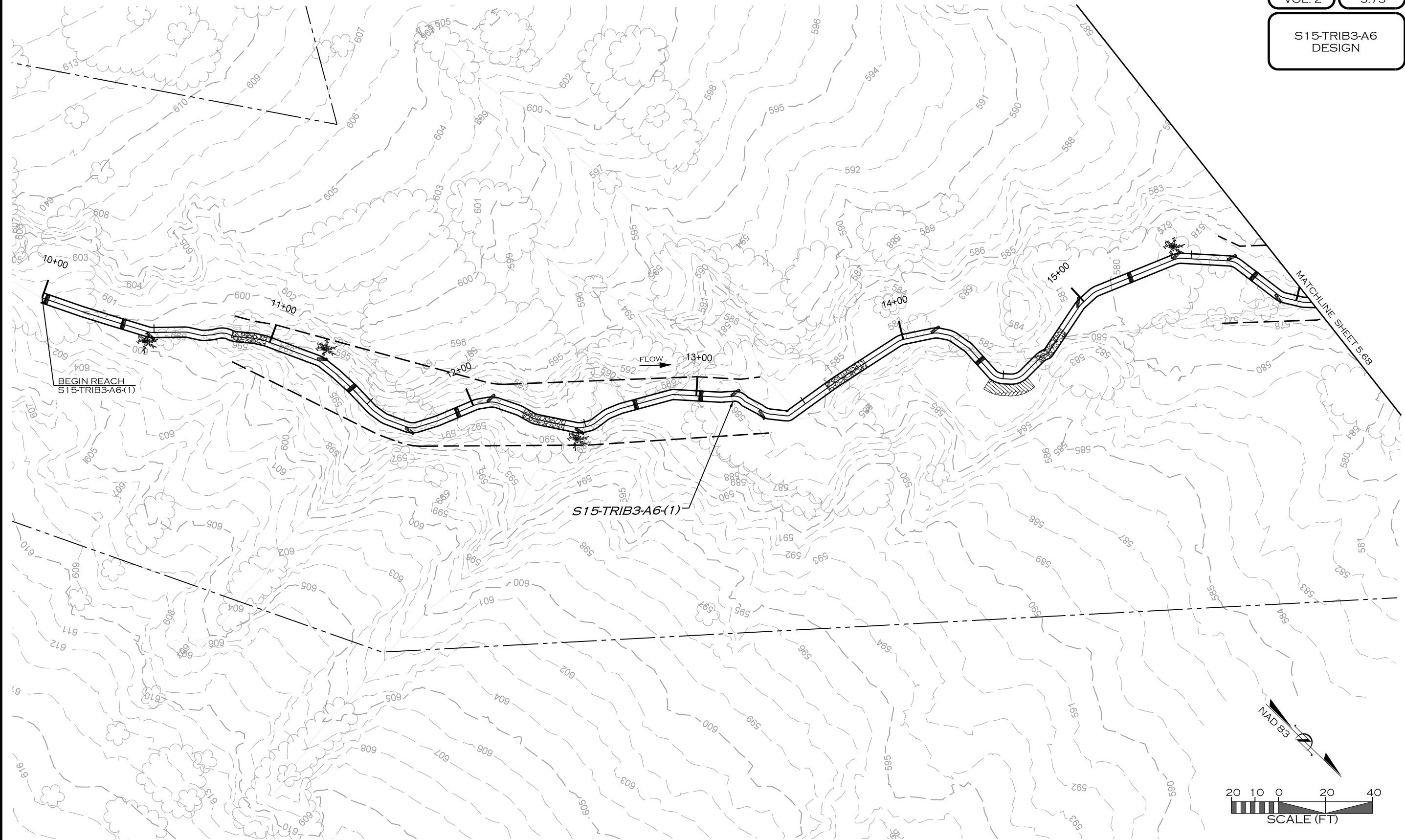
**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION

THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:



UPPER TRINITY
REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:



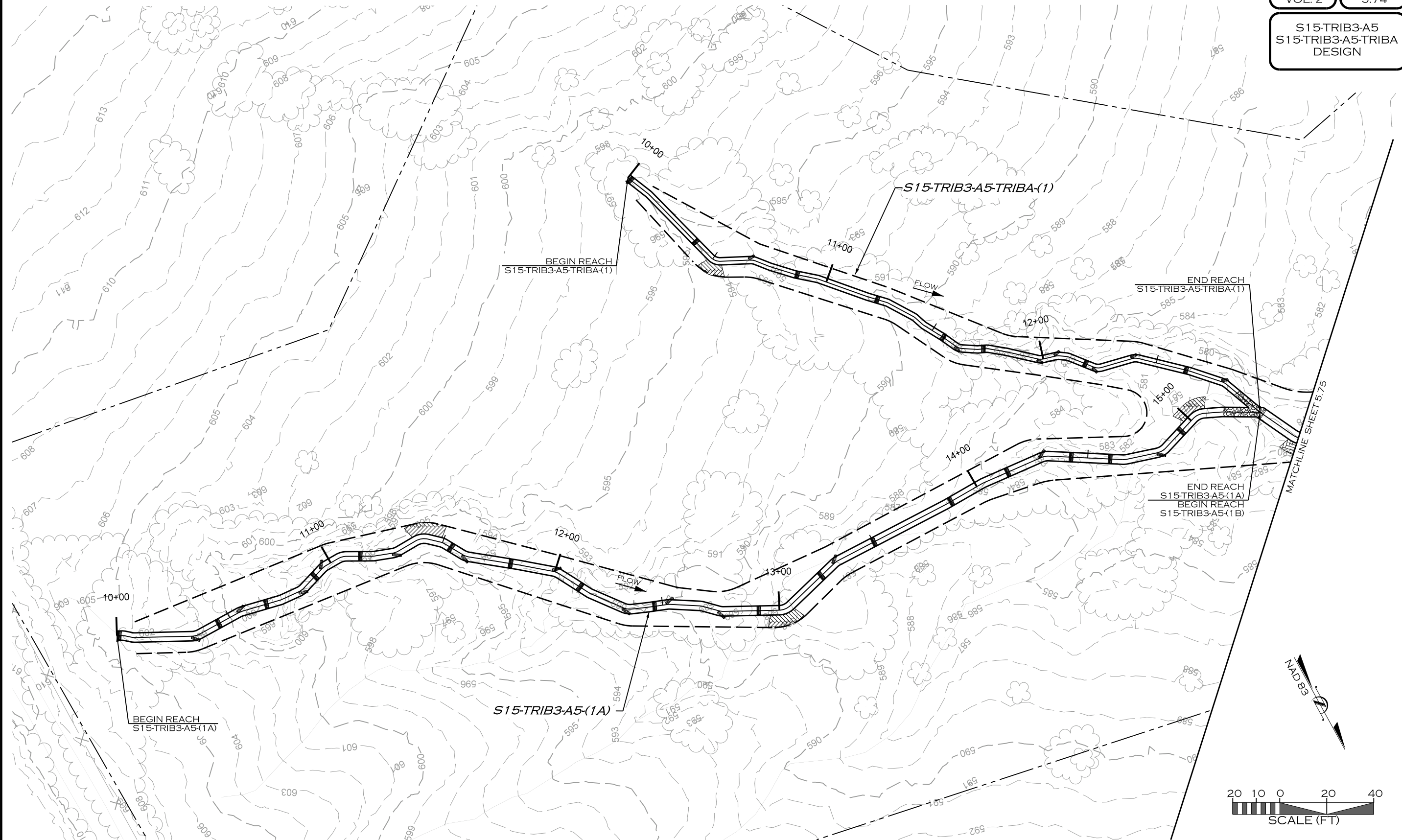
ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

Z:\8\2019
R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.73.dgn



7/8/2019
R:\PROJECTS\DALO001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRH_PSH_5.74.dgn
JW/CDN

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19

PREPARED FOR:

 **UPPER TRINITY REGIONAL WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

PREPARED IN THE OFFICE OF:

 **ECOSYSTEM PLANNING & RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:



ECOSYSTEM
PLANNING &
RESTORATION

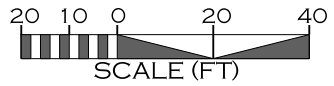
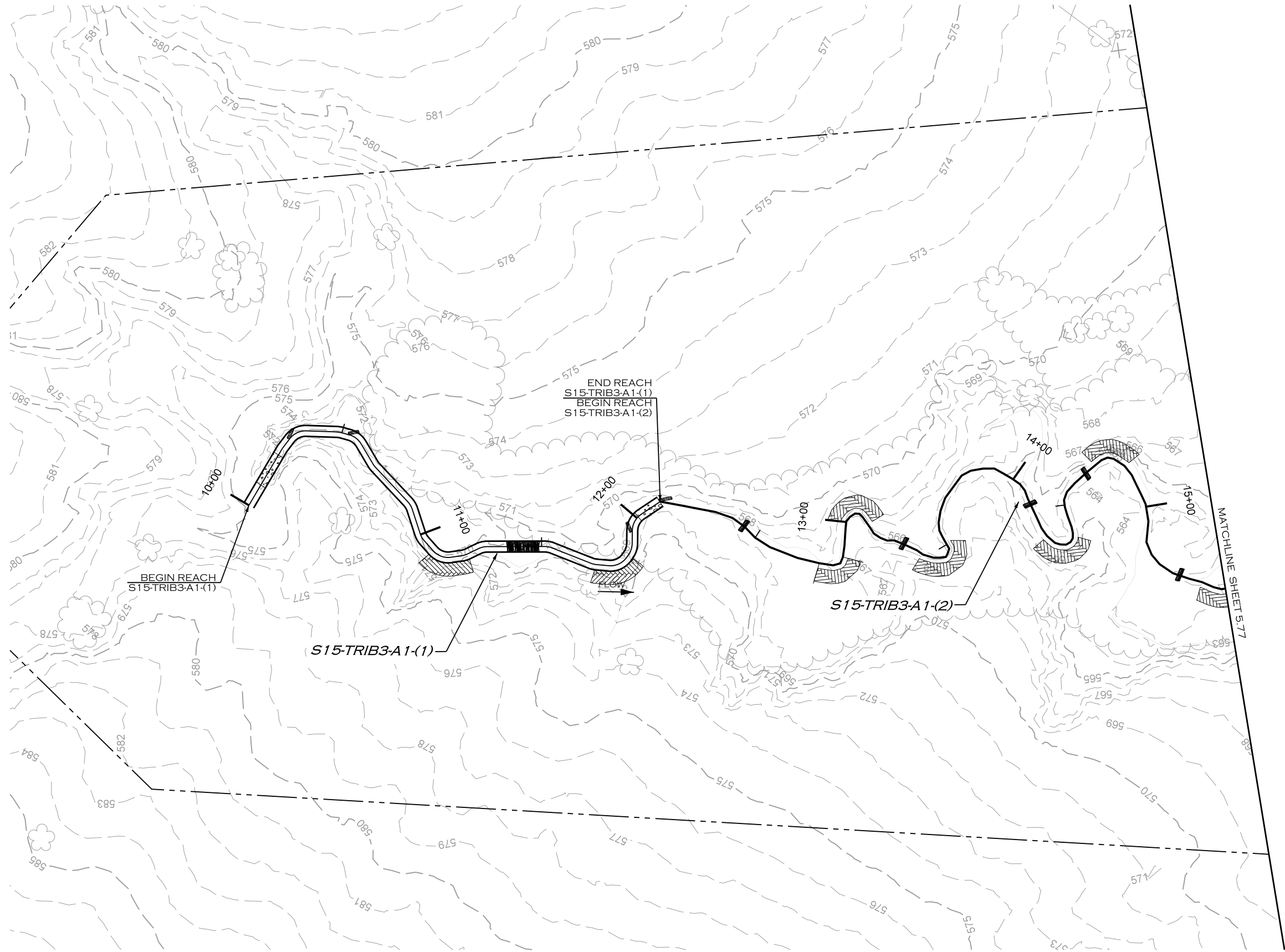
17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

S15-TRIB3-A1
DESIGN



7/8/2019 R:\PROJECTS\DALO001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRH_PSH_5.76.dgn

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



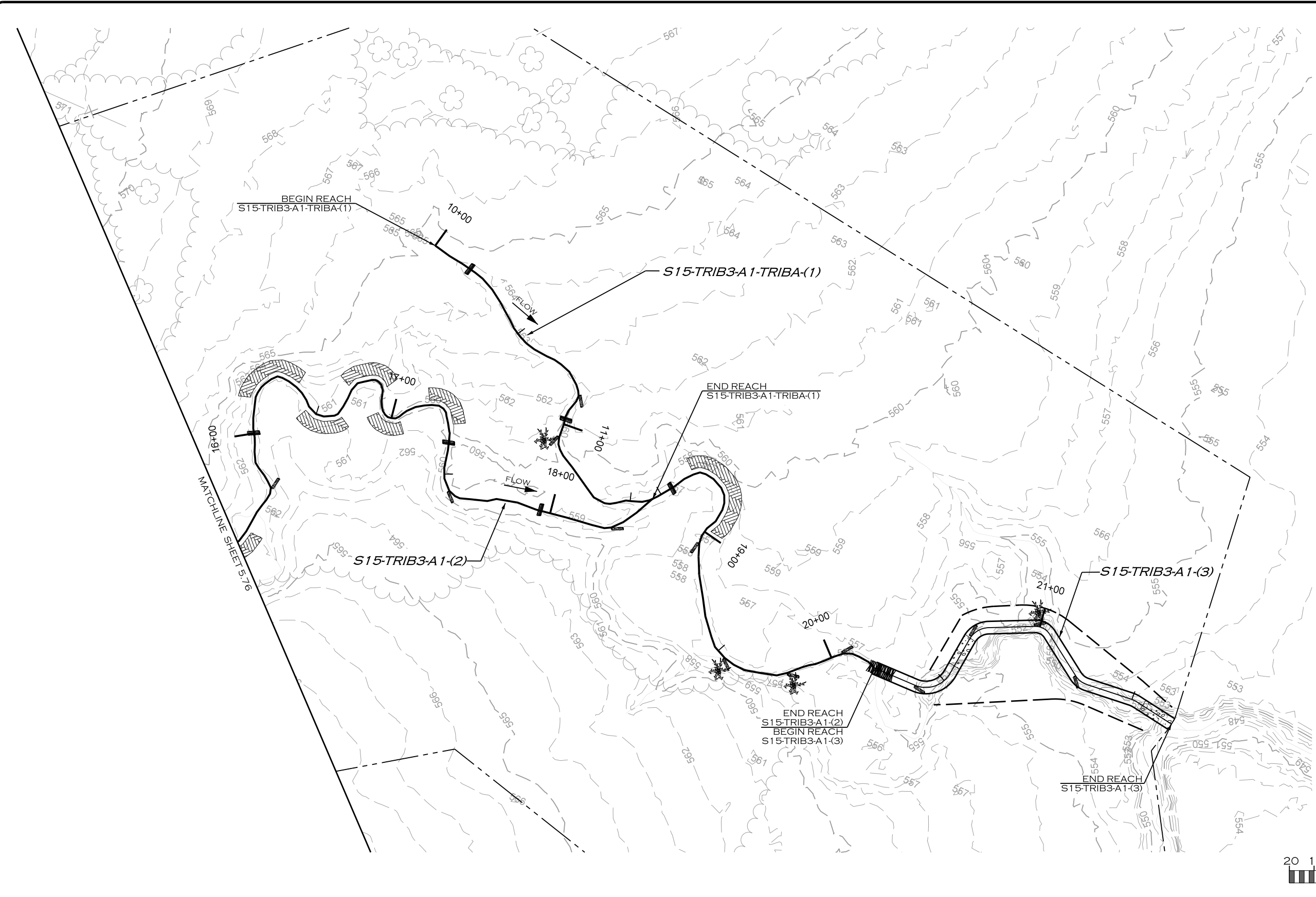
PREPARED IN THE OFFICE OF:

**ECOSYSTEM
PLANNING &
RESTORATION**

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE
1	DRAFT DESIGN PLANS	EMP	KLT	7/01/19



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

900 N KEALY ST
LEWISVILLE, TX 75057

PREPARED IN THE OFFICE OF:



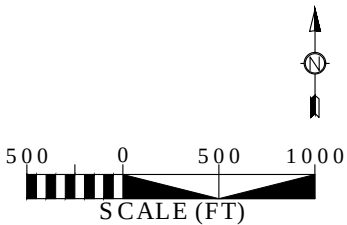
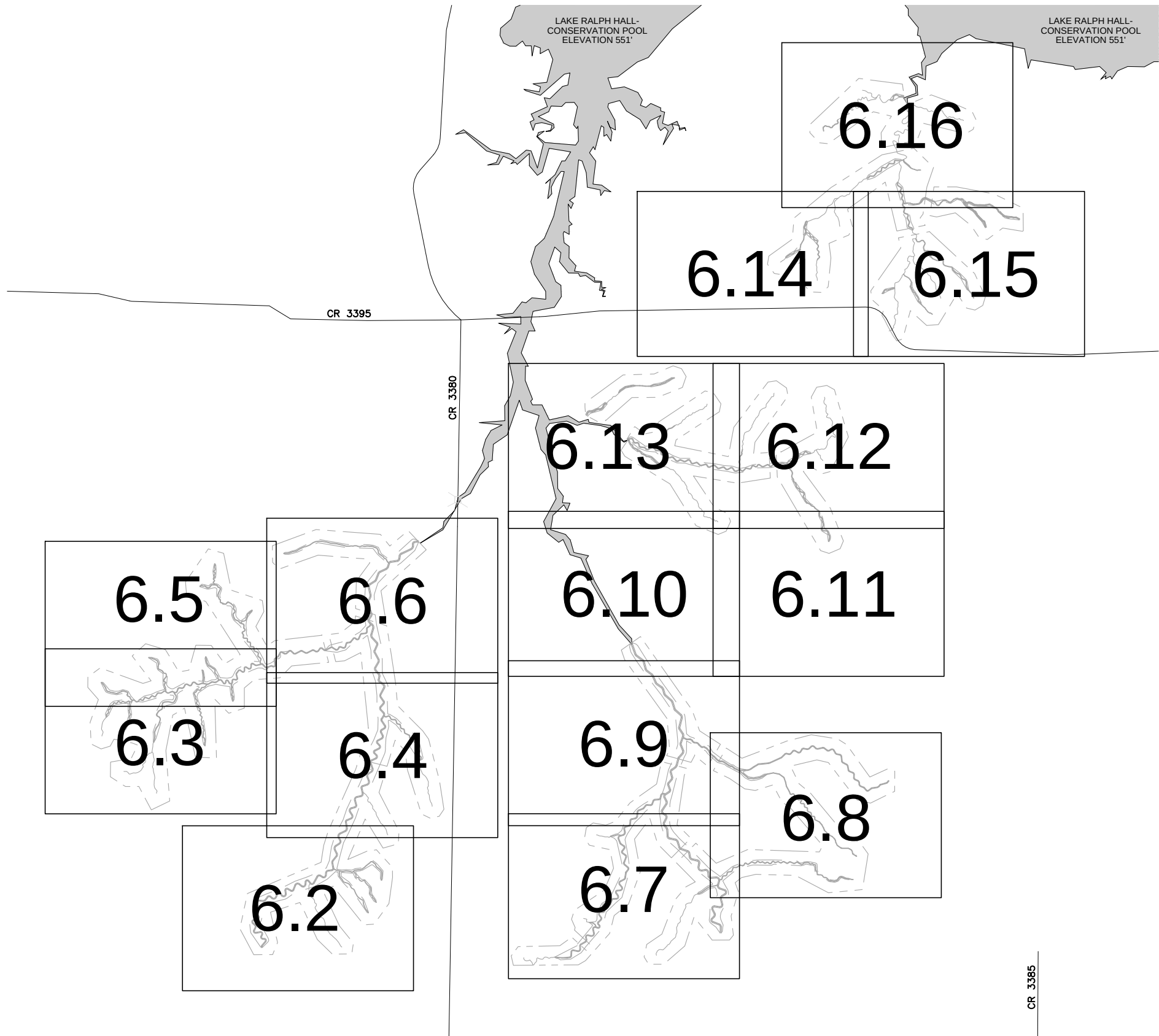
ECOSYSTEM
PLANNING &
RESTORATION

17575 N. ELDRIDGE PARKWAY, BLDG. C
TOMBALL, TX 77377
TEXAS REGISTERED ENGINEERING FIRM F-14997

PROJECT ENGINEER

NOT FOR CONSTRUCTION
THESE DRAWINGS WERE ISSUED BY
KEVIN TWEEDY PE#113620
FOR REGULATORY REVIEW
PURPOSES ONLY

7/8/2019
R:\PROJECTS\DAL0001_LAKE_RALPH_HALL\CADD\MIT AREA B\PLANS\LRL_PSH_5.77.dgn
JACON



PRINTED: 7/2/2019 1:24 PM
M:\Admin\Bickman\Projects\0449\083-01\2-0 Wrk Prod\2-1 ACAD\SHEETFILES-PLANTING\Zone B\ZB-S6-SHEET GRID.dwg
SAVED: 7/1/2019 4:23 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

**UPPER TRINITY REGIONAL
WATER DISTRICT**

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13



ECOSYSTEM
PLANNING &
RESTORATION
EPR

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

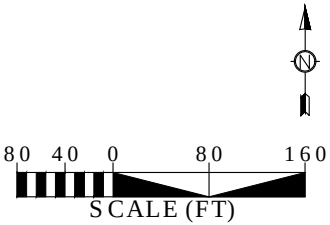
THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.

TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

ZONE B
PLANTING PLAN



- LEGEND
- ENHANCEMENT STREAM
 - RESTORATION STREAM CHANNEL (WIDTH VARIES)
 - CONSERVATION EASEMENT BOUNDARY
 - FLOODPLAIN BENCH
 - PLANTING ZONE 1
 - PLANTING ZONE 2



PRINTED: 7/2/2019 1:24 PM
M:\Admin\Bickman\Projects\0449\083-01\2-0 Wrk Prod\2-1 ACAD\SHEETFILES-PLANTING Zone B\ZB-S6-001.dwg
SAVED: 7/1/2019 3:12 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apaienv.com



ECOSYSTEM
PLANNING &
RESTORATION

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.
TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

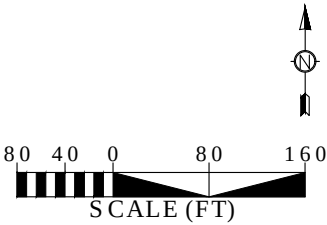
SEE SHEET NO. 6.5

ZONE B
PLANTING PLAN

LEGEND

-  ENHANCEMENT STREAM
-  RESTORATION STREAM CHANNEL
(WIDTH VARIES)
-  CONSERVATION EASEMENT
BOUNDARY
-  FLOODPLAIN BENCH
-  PLANTING ZONE 1
-  PLANTING ZONE 2

SEE SHEET NO. 6.4



PRINTED: 7/2/2019 1:25 PM
M:\Admin\Bickman\Projects\0449\083-01\2-0 Wrk Prod\2-1 ACAD\SHEETFILES-PLANTING Zone B\ZB-S6-002.dwg
SAVED: 6/24/2019 12:01 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS



ECOSYSTEM
PLANNING &
RESTORATION

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apaienv.com

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

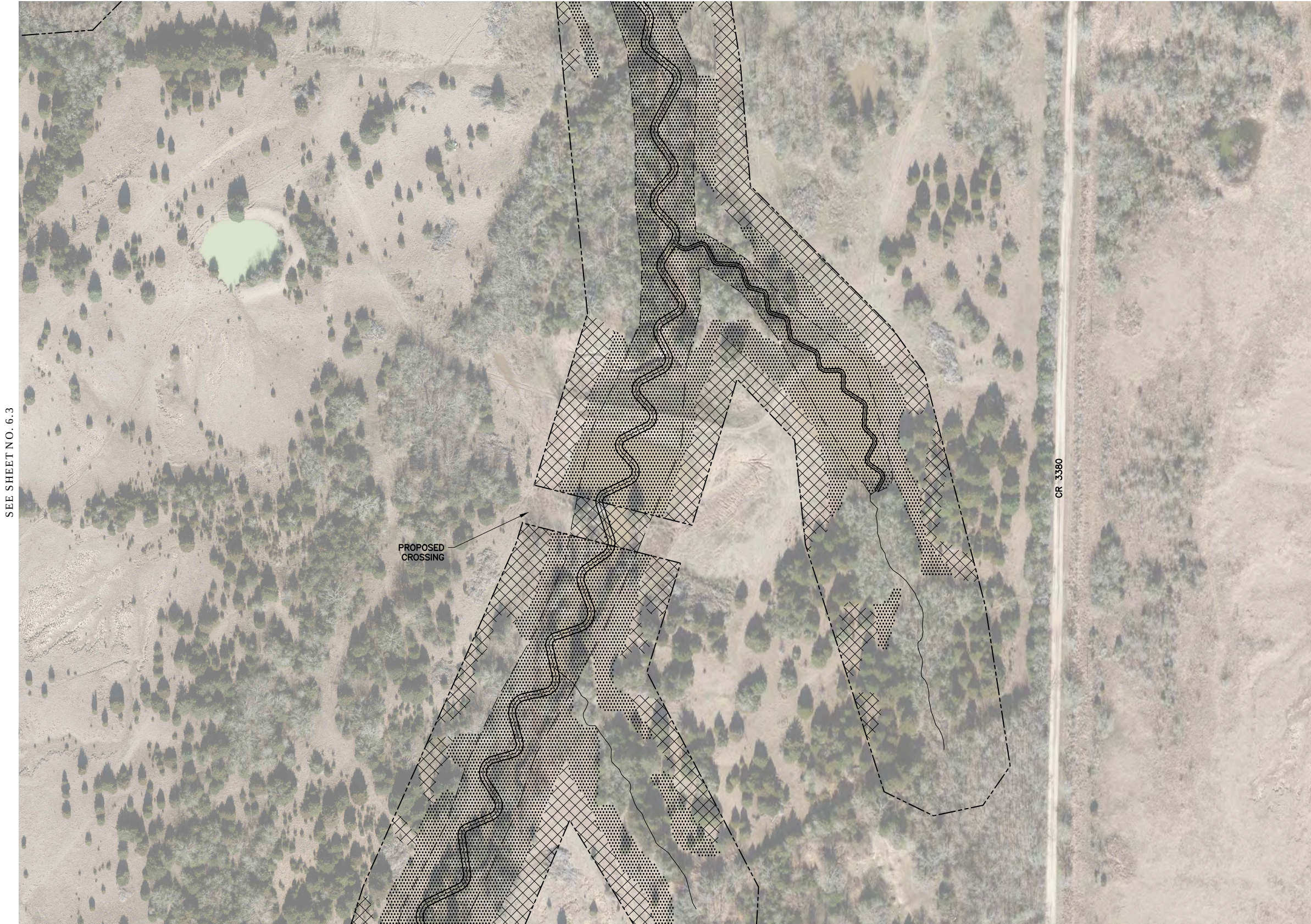
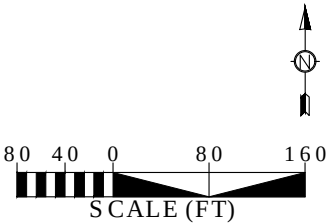
THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.

TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

ZONE B

PLANTING PLAN

- LEGEND
- ENHANCEMENT STREAM
 - RESTORATION STREAM CHANNEL (WIDTH VARIES)
 - CONSERVATION EASEMENT BOUNDARY
 - FLOODPLAIN BENCH
 - PLANTING ZONE 1
 - PLANTING ZONE 2



PRINTED: 7/2/2019 1:25 PM
M:\Admin\Bickman\Projects\0449\083-01\2-0 Wrk Prod\2-1 ACAD\SHEETFILES-PLANTING\Zone B\ZB-S6-003.dwg
SAVED: 6/30/2019 1:59 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE



UPPER TRINITY
REGIONAL WATER DISTRICT

PREPARED FOR:

UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13



ECOSYSTEM
PLANNING &
RESTORATION

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.

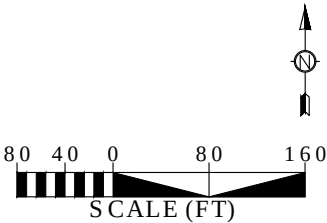
TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

ZONE B

PLANTING PLAN

- LEGEND
- ENHANCEMENT STREAM
 - RESTORATION STREAM CHANNEL (WIDTH VARIES)
 - CONSERVATION EASEMENT BOUNDARY
 - FLOODPLAIN BENCH
 - PLANTING ZONE 1
 - PLANTING ZONE 2

SEE SHEET NO. 6.6



SEE SHEET NO. 6.3

PRINTED: 7/2/2019 1:25 PM
M:\Admin\Bickman\Projects\0449\083-0112-0 Wrk Prod\2-1 ACAD\Sheets\FILES-PLANTING Zone B\ZB-S6-004.dwg
SAVED: 6/24/2019 12:01 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS



ECOSYSTEM
PLANNING &
RESTORATION

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

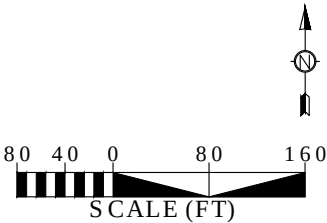
PROJECT ENGINEER

THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.
TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

ZONE B

PLANTING PLAN

- LEGEND
- ENHANCEMENT STREAM
 - RESTORATION STREAM CHANNEL (WIDTH VARIES)
 - CONSERVATION EASEMENT BOUNDARY
 - FLOODPLAIN BENCH
 - PLANTING ZONE 1
 - PLANTING ZONE 2



PRINTED: 7/2/2019 1:25 PM
M:\Admin\Bickman\Projects\0449\083-0112-0 Wrk Prod\2-1 ACAD\SHEETFILES-PLANTING\Zone B\ZB-S6-005.dwg
SAVED: 7/1/2019 4:23 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com



ECOSYSTEM
PLANNING &
RESTORATION

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

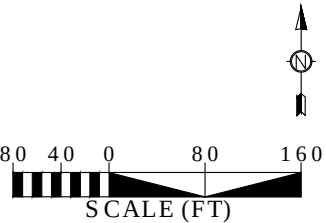
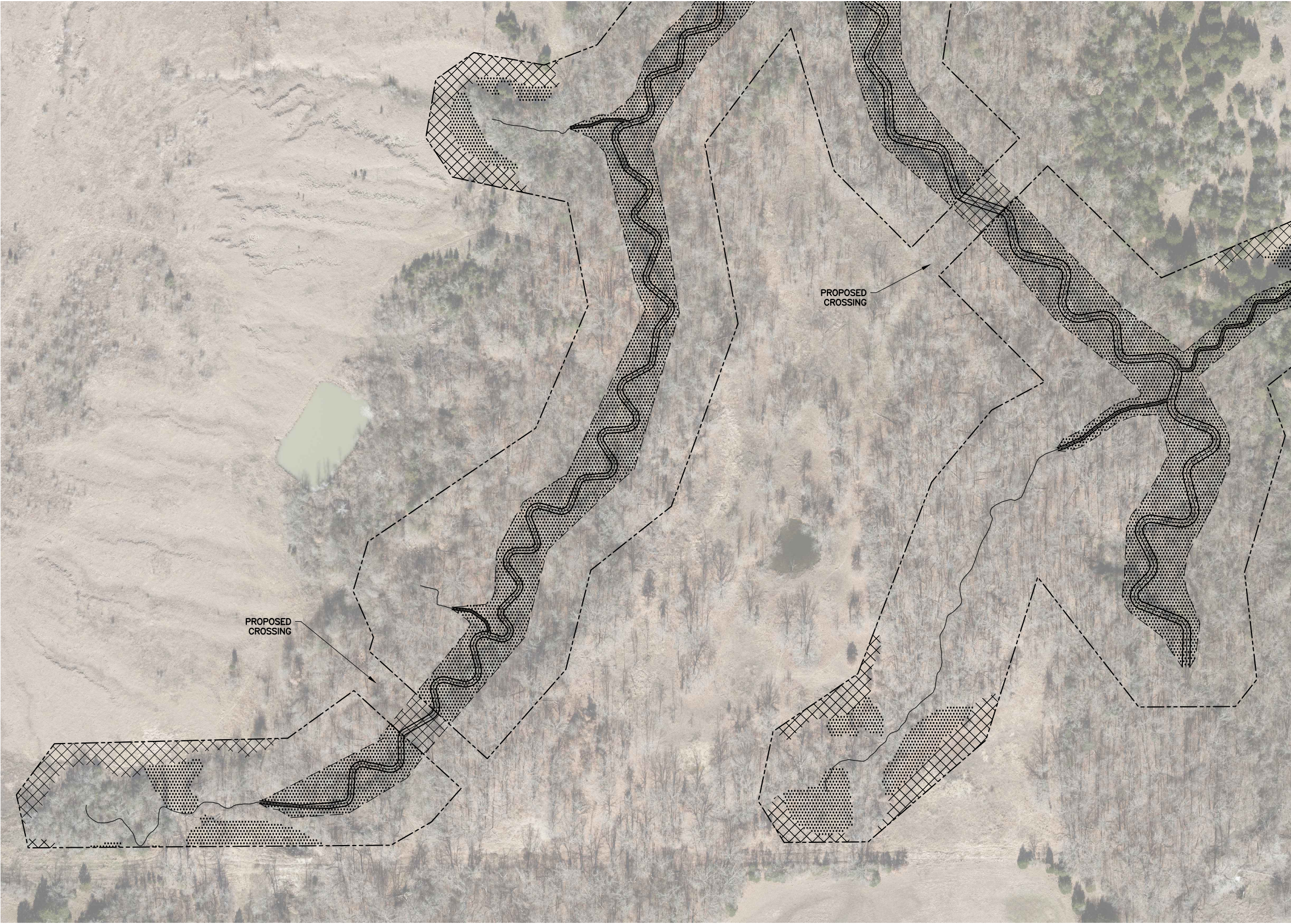
PROJECT ENGINEER

THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.
TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

ZONE B
PLANTING PLAN

- LEGEND
- ENHANCEMENT STREAM
 - RESTORATION STREAM CHANNEL (WIDTH VARIES)
 - CONSERVATION EASEMENT BOUNDARY
 - FLOODPLAIN BENCH
 - PLANTING ZONE 1
 - PLANTING ZONE 2

SEE SHEET NO. 6.8



PRINTED: 7/2/2019 1:26 PM
M:\Admin\Bickman\Projects\049\083-01\2-0 Wrk Prod\2-1 ACAD\Sheets\PLANTING Zone B\ZB-S6-006.dwg
SAVED: 7/2/2019 11:04 AM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com



ECOSYSTEM
PLANNING &
RESTORATION

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

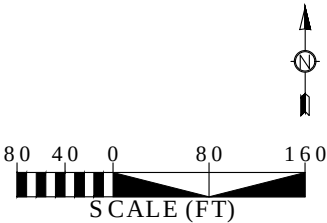
PROJECT ENGINEER

THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.
TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

ZONE B

PLANTING PLAN

- LEGEND
- ENHANCEMENT STREAM
 - RESTORATION STREAM CHANNEL (WIDTH VARIES)
 - CONSERVATION EASEMENT BOUNDARY
 - FLOODPLAIN BENCH
 - PLANTING ZONE 1
 - PLANTING ZONE 2



PRINTED: 7/2/2019 1:26 PM
M:\Admin\Bickman\Projects\049\083-01\2-0 Wrk Prod\2-1 ACAD\SHEETFILES-PLANTING\Zone B\ZB-S6-007.dwg
SAVED: 6/30/2019 2:26 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com



117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

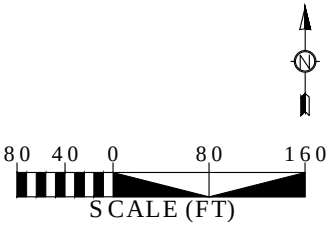
THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.
TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

ZONE B

PLANTING PLAN

- LEGEND
- ENHANCEMENT STREAM
 - RESTORATION STREAM CHANNEL (WIDTH VARIES)
 - CONSERVATION EASEMENT BOUNDARY
 - FLOODPLAIN BENCH
 - PLANTING ZONE 1
 - PLANTING ZONE 2

SEE SHEET NO. 6.8



SEE SHEET NO. 6.10



SEE SHEET NO. 6.7

PRINTED: 7/2/2019 1:26 PM
M:\Admin\Bickman\Projects\049\083-01\2-0 Wrk Prod\2-1 ACAD\Sheets\FILES-PLANTING\Zone B\ZB-S6-006.dwg
SAVED: 6/30/2019 2:26 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER ASSOCIATES, INC.
ENVIRONMENTAL ENGINEERS AND SCIENTISTS
1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com



ECOSYSTEM PLANNING & RESTORATION
117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

SEE SHEET NO. 6.13

ZONE B
PLANTING PLAN

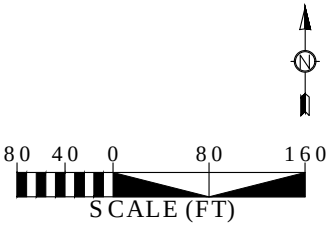
LEGEND

-  ENHANCEMENT STREAM
-  RESTORATION STREAM CHANNEL
(WIDTH VARIES)
-  CONSERVATION EASEMENT
BOUNDARY
-  FLOODPLAIN BENCH
-  PLANTING ZONE 1
-  PLANTING ZONE 2

SEE SHEET NO. 6.11



SEE SHEET NO. 6.9



PRINTED: 7/2/2019 1:27 PM
M:\Admin\Bickman\Projects\0449\083-01\2-0 Wrk Prod\2-1 ACAD\SHEETFILES-PLANTING\Zone B\ZB-S6-009.dwg
SAVED: 7/1/2019 4:24 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS



ECOSYSTEM
PLANNING &
RESTORATION

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.

TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

ZONE B

PLANTING PLAN

- LEGEND
- 

ENHANCEMENT STREAM
- 

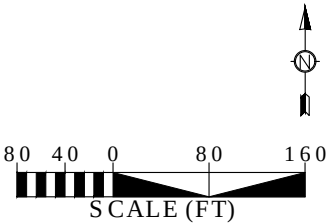
RESTORATION STREAM CHANNEL
(WIDTH VARIES)
- 

CONSERVATION EASEMENT
BOUNDARY
- 

FLOODPLAIN BENCH
- 

PLANTING ZONE 1
- 

PLANTING ZONE 2



SEE SHEET NO. 6.10

SEE SHEET NO. 6.12



PRINTED: 7/2/2019 1:27 PM
M:\Admin\Bickman\Projects\0449\083-01\2-0 Wrk Prod\2-1 ACAD\SHEETFILES-PLANTING\Zone B\ZB-S6-010.dwg
SAVED: 6/24/2019 12:01 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY
REGIONAL WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS



ECOSYSTEM
PLANNING &
RESTORATION

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

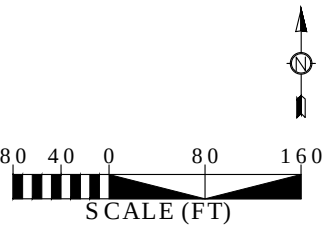
THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.

TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

ZONE B

PLANTING PLAN

- LEGEND
- ENHANCEMENT STREAM
 - RESTORATION STREAM CHANNEL (WIDTH VARIES)
 - CONSERVATION EASEMENT BOUNDARY
 - FLOODPLAIN BENCH
 - PLANTING ZONE 1
 - PLANTING ZONE 2



REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com



ECOSYSTEM
PLANNING &
RESTORATION

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.

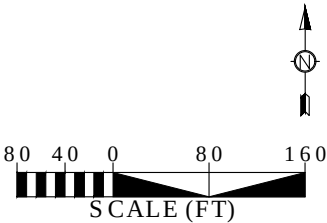
TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

ZONE B

PLANTING PLAN



- LEGEND
- ENHANCEMENT STREAM
 - RESTORATION STREAM CHANNEL
(WIDTH VARIES)
 - CONSERVATION EASEMENT
BOUNDARY
 - FLOODPLAIN BENCH
 - PLANTING ZONE 1
 - PLANTING ZONE 2



PRINTED: 7/2/2019 1:27 PM
M:\Admin\Bickman\Projects\0449\083-01\2-0 Wrk Prod\2-1 ACAD\SHEETFILES-PLANTING\Zone B\ZB-S6-012.dwg
SAVED: 7/1/2019 4:24 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:

UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS

ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM
PLANNING &
RESTORATION

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

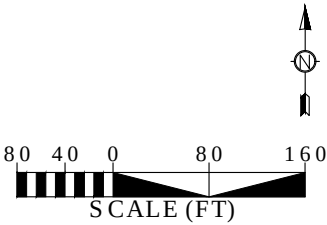
THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.
TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

ZONE B
PLANTING PLAN

LEGEND

-  ENHANCEMENT STREAM
-  RESTORATION STREAM CHANNEL (WIDTH VARIES)
-  CONSERVATION EASEMENT BOUNDARY
-  FLOODPLAIN BENCH
-  PLANTING ZONE 1
-  PLANTING ZONE 2

SEE SHEET NO. 6.15



PRINTED: 7/2/2019 1:28 PM
M:\Admin\Bickman\Projects\0449\083-01\2-0 Wrk Prod\2-1 ACAD\SHEETFILES-PLANTING\Zone B\ZB-S6-013.dwg
SAVED: 6/30/2019 2:04 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com



ECOSYSTEM
PLANNING &
RESTORATION

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.

TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

ZONE B

PLANTING PLAN

- LEGEND
- 

ENHANCEMENT STREAM
- 

RESTORATION STREAM CHANNEL
(WIDTH VARIES)
- 

CONSERVATION EASEMENT
BOUNDARY
- 

FLOODPLAIN BENCH
- 

PLANTING ZONE 1
- 

PLANTING ZONE 2



PRINTED: 7/2/2019 1:28 PM
M:\Admin\Bickman\Projects\049\083-0112-0 Wrk Prod\2-1 ACAD\Sheets\Files-Planting\Zone B\ZB-S6-014.dwg
SAVED: 7/1/2019 11:40 AM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS



ECOSYSTEM
PLANNING &
RESTORATION

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apaienv.com

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

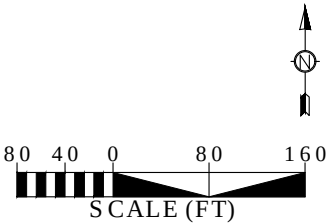
THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.

TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

ZONE B

PLANTING PLAN

- LEGEND
- ENHANCEMENT STREAM
 - RESTORATION STREAM CHANNEL (WIDTH VARIES)
 - CONSERVATION EASEMENT BOUNDARY
 - FLOODPLAIN BENCH
 - PLANTING ZONE 1
 - PLANTING ZONE 2



PRINTED: 7/2/2019 1:28 PM
M:\Admin\Bickman\Projects\0449\083-0112-0 Wrk Prod\2-1 ACAD\SHEETFILES-PLANTING\Zone B\ZB-S6-015.dwg
SAVED: 7/1/2019 4:24 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apaienv.com



ECOSYSTEM
PLANNING &
RESTORATION

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

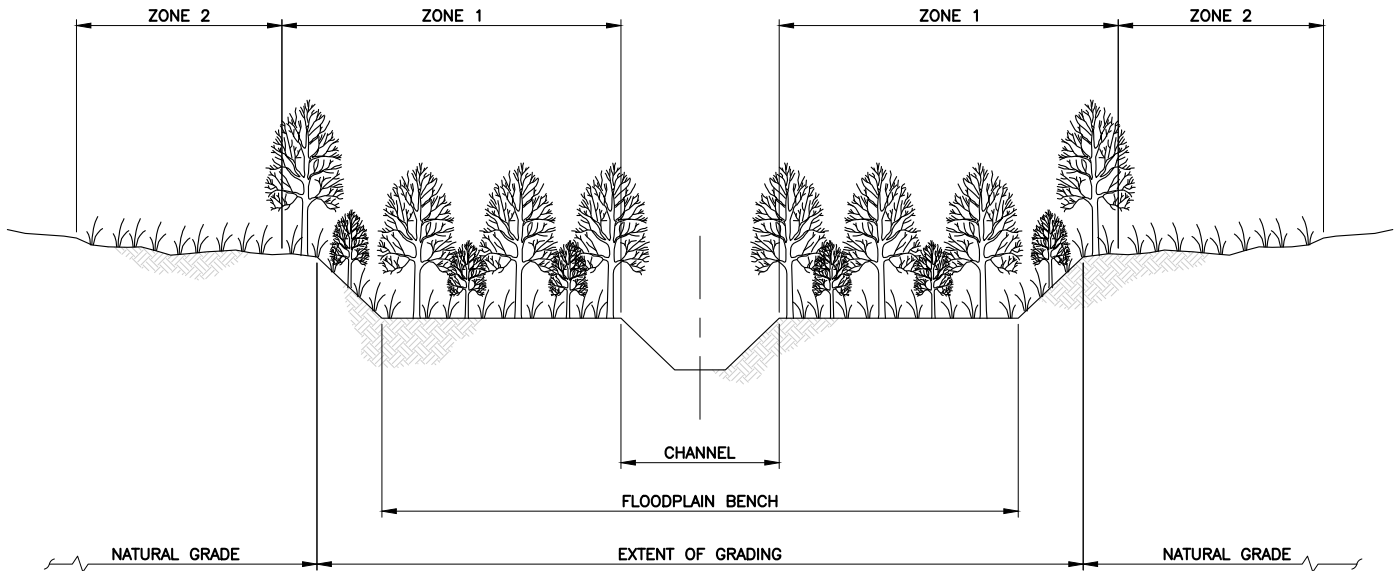
ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.
TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/2/2019

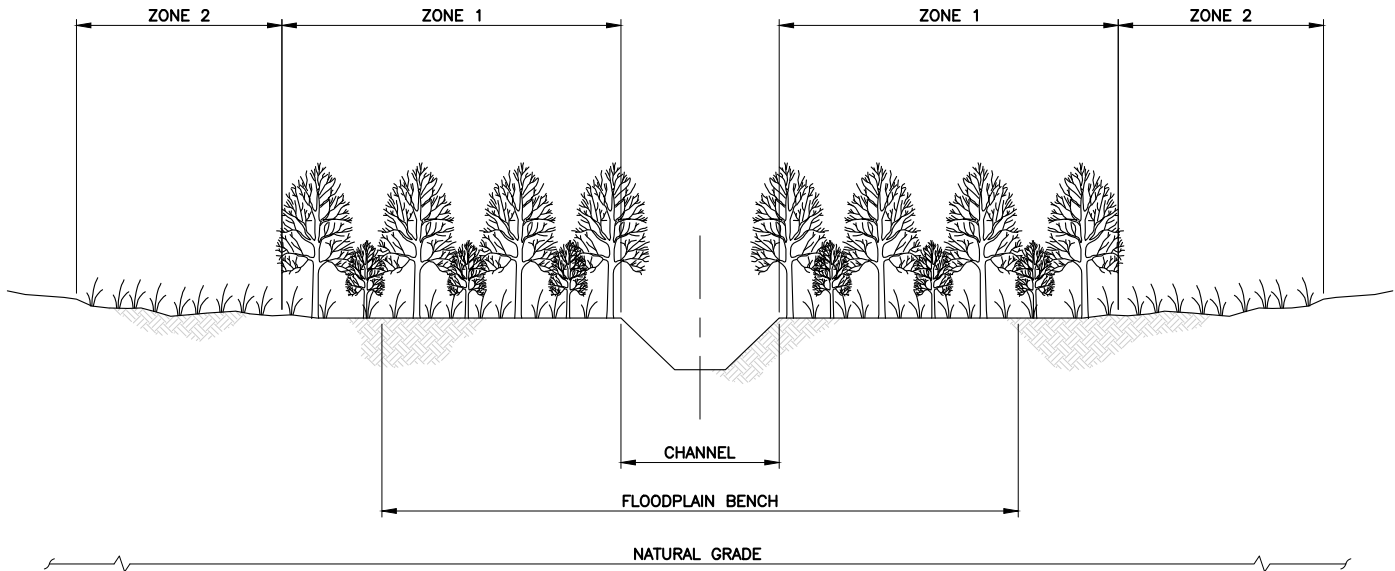
ZONE B

PLANTING DETAILS
AND NOTES



TYPICAL PLANTING ZONES WITH FLOODPLAIN BENCH

NOT TO SCALE



TYPICAL PLANTING ZONES WITH NATURAL GROUND

NOT TO SCALE

- NOTES:
1. CHANNEL WILL MEANDER WITHIN THE FLOODPLAIN BENCH.
 2. REFER TO TABLE 6.1, 6.2, AND 6.3 FOR STREAM MITIGATION PLANTINGS.
 3. PLANTING ZONE 1 WILL BE A MINIMUM 60' WIDE AS MEASURED FROM THE OUTSIDE TOP OF BANK. IF EXTENT OF GRADING IS BEYOND 60', EXTEND WIDTH OF PLANTING ZONE 1 TO COVER BARE GROUND. PLANTINGS WITHIN ZONE 1 WILL INCLUDE HERBACEOUS SEED MIX FROM TABLE 6.3 AND TREE/SHRUB PLANTINGS FROM TABLE 6.1 AND 6.2.
 4. PLANTING ZONE 2 WILL BE A MINIMUM OF 30' WIDE AS MEASURED FROM THE OUTSIDE OF ZONE 1. PLANTINGS WITHIN ZONE 2 SHALL INCLUDE HERBACEOUS SEED MIX FROM TABLE 6.3. EXISTING DESIRABLE PLANT SPECIES (NATIVE GRASS, SHRUBS, TREES) WITHIN ZONE 2 MAY REMAIN.
 5. UNDESIRABLE SPECIES SHALL BE REMOVED PER MITIGATION PLAN.
 6. ALL DISTURBED AREAS DUE TO CONSTRUCTION ACTIVITIES SHALL BE PLANTED WITH HERBACEOUS SEED MIX PER TABLE 6.3 AND IF WITHIN 60' OF STREAM CHANNEL SHALL ALSO BE PLANTED WITH TREE/SHRUB PLANTINGS PER TABLE 6.1 AND 6.2.
 7. EXISTING DESIRABLE TREE, SHRUB AND HERBACEOUS SPECIES WITHIN PLANTING ZONE 1 SHALL REMAIN, FOR AREAS WITH EXISTING TREE CANOPY, CONTRACTOR SHALL PLANT SHRUB/SMALL TREES (MID STORY) AS NEEDED TO ENHANCE RIPARIAN CORRIDOR.
 8. CONTRACTOR SHALL PLANT CANOPY TREE SPECIES FROM TABLE 6.1 SUCH THAT ZONE 1 ACHIEVES A MINIMUM OF 60 PERCENT CANOPY COVER WITHIN 7 YEARS OF PLANTING EFFORT. ONE SINGLE CANOPY TREE SPECIES SHALL NOT OCCUPY GREATER THAN 30% COVERAGE IN ZONE 1. CANOPY TREE SPECIES SHALL BE SPACED TO ACHIEVE MAXIMUM CANOPY TREE COVER WITHIN ZONE 1.

PRINTED: 7/8/2019 3:56 PM
M:\Admin\Bickman\Projects\0449\083-01\2-0 Wrk Prod\2-1 ACAD\SHEETFILES-PLANTING\DETAILS\ZB-DETAILS-01.dwg
SAVED: 7/8/2019 3:47 PM USER: Dickman, Brian

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS



ECOSYSTEM
PLANNING &
RESTORATION
EPR

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM F-14997

PROJECT ENGINEER

THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.
TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/8/2019

TABLE 6.1: STREAM BANK AND PLANTING ZONE 1 CANOPY TREE SPECIES*

Strata	Common Name	Scientific Name
Canopy Tree	American Elm	<i>Ulmus americana</i>
	Black Walnut	<i>Juglans nigra</i>
	Bois d'Arc	<i>Maclura pomifera</i>
	Bur Oak	<i>Quercus macrocarpa</i>
	Cedar Elm	<i>Ulmus crassifolia</i>
	Chinkapin Oak	<i>Quercus muehlenbergii</i>
	Pecan	<i>Carya illinoensis</i>
	Shumard Oak	<i>Quercus shumardii</i>
	Texas Ash	<i>Fraxinus texensis</i>
	Water Oak	<i>Quercus nigra</i>
	Willow Oak	<i>Quercus phellos</i>

*See Note 1

TABLE 6.2: STREAM BANK AND PLANTING ZONE 1 UNDERSTORY TREES AND SHRUB SPECIES

Strata	Common Name	Scientific Name
Small Tree and Shrub	American Beautyberry	<i>Callicarpa americana</i>
	Buttonbush	<i>Cephalanthus occidentalis</i>
	Common or Texas Persimmon	<i>Diospyros virginianum</i> or <i>D. texana</i>
	Coralberry	<i>Symphoricarpos orbiculatus</i>
	Deciduous Holly	<i>Ilex decidua</i>
	Eastern Redbud	<i>Cercis canadensis</i>
	Eve's Necklace	<i>Sophora Affinis</i>
	Mexican Plum	<i>Prunus mexicana</i>
	Rough-leaf Dogwood	<i>Cornus drummondii</i>
	Rusty Blackhaw	<i>Viburnum rufidulum</i>
	Swamp Privet	<i>Forestiera acuminata</i>

TABLE 6.3: STREAM BANK,PLANTING ZONE 1 AND PLANTING ZONE 2 HERBACEOUS SPECIES

Type	Common Name	Scientific Name
Grasses	Big Bluestem	<i>Andropogon gerardii</i>
	Bushy Bluestem	<i>Andropogon glomeratus</i>
	Cane Bluestem	<i>Bothriochloa barbinodis</i>
	Eastern Gamagrass	<i>Tripsacum dactyloides</i>
	Florida Paspalum	<i>Paspalum floridanum</i>
	Green Sprangletop	<i>Leptochloa dubia</i>
	Indiangrass	<i>Sorghastrum nutans</i>
	Inland Sea oats	<i>Chasmanthium latifolium</i>
	Plains Bristlegrass	<i>Setaria vulpiseta</i>
	Prairie Wildrye	<i>Elymus canadensis</i>
	Sand Dropseed	<i>Sporobolus cryptandrus</i>
	Sideoats Grama	<i>Bouteloua curtipendula</i>
	Switchgrass	<i>Panicum virgatum</i>
	Texas Cupgrass	<i>Eriochloa seneca</i>
	Texas Wintergrass	<i>Nassella leucotricha</i>
	Virginia Wildrye	<i>Elymus virginicus</i>
	White Tridens	<i>Tridens albescens</i>
Legumes	Illinois Bundleflower	<i>Desmanthus illinoensis</i>
	Partridge Pea	<i>Chamaecrista fasciculata</i>
	Black-eyed Susan	<i>Rudbeckia hirta</i>
Forbs	Buttonbush	<i>Cephalanthus occidentalis</i>
	Cardinal Flower	<i>Lobelia cardinalis</i>
	Clasping Coneflower	<i>Dracopis amplexicaulis</i>
	Cutleaf Daisy	<i>Engelmannia pinnatifida</i>
	Frostweed	<i>Verbesina virginica</i>
	Giant Goldenrod	<i>Solidago gigantea</i>
	Lemon Mint	<i>Monarda citridora</i>
	Maximilian Sunflower	<i>Helianthus maximiliani</i>
	Plains Coreopsis	<i>Coreopsis tinctoria</i>
	Pink Evening Primrose	<i>Oenothera speciosa</i>
	Redwhisker Clammyweed	<i>Polanisia dodecandra</i>
	Rose Milkweed	<i>Asclepias incarnata</i>
	Scarlet Sage	<i>Salvia coccinea</i>
	Swamp Sunflower	<i>Helianthus angustifolius</i>
	Tall Aster	<i>Symphoricarpon praealtum</i>
	Tall Goldenrod	<i>Solidago altissima</i>
	Turk's Cap/Wax Mallow	<i>Malvastrum arboreus</i>

NOTES:

1. CONTRACTOR SHALL PLANT CANOPY TREE SPECIES FROM TABLE 6.1 SUCH THAT ZONE 1 ACHIEVES A MINIMUM OF 60 PERCENT CANOPY COVER WITHIN 7 YEARS OF INITIAL PLANTING EFFORT. ONE SINGLE CANOPY TREE SPECIES SHALL NOT OCCUPY GREATER THAN 30% COVERAGE IN ZONE 1. CANOPY TREE SPECIES SHALL BE SPACED TO ACHIEVE MAXIMUM CANOPY TREE COVER WITHIN ZONE 1.

REVISIONS				
NO.	DESCRIPTION	ENGR.	APPROV.	DATE

PREPARED FOR:



UPPER TRINITY REGIONAL
WATER DISTRICT

900 N KEALY ST
LEWISVILLE, TX 75057

LAKE RALPH HALL MITIGATION
MITIGATION ZONE B
FANNIN COUNTY, TEXAS



ALAN PLUMMER
ASSOCIATES, INC.
ENVIRONMENTAL
ENGINEERS AND SCIENTISTS



ECOSYSTEM
PLANNING &
RESTORATION

1320 S. UNIVERSITY DRIVE, STE. 300
FORT WORTH, TEXAS 76107
PHONE - (817) 806-1700
FAX - (817) 870-2536
WEB - www.apainv.com

117575 NORTH ELDRIDGE PARKWAY
BUILDING C
TOMBALL, TEXAS 77377
PHONE - (832) 399-3400
WEB - www.eprusa.net

ALAN PLUMMER ASSOCIATES, INC.
TEXAS REGISTERED ENGINEERING
FIRM E-13

ECOSYSTEM PLANNING & RESTORATION
TEXAS REGISTERED ENGINEERING
FIRM E-14997

PROJECT ENGINEER

THESE DOCUMENTS ARE
FOR INTERIM REVIEW
AND ARE NOT INTENDED
FOR CONSTRUCTION,
BIDDING, OR PERMIT
PURPOSES.
TIMOTHY J. NOACK
TEXAS P.E. NO. 54732
DATE: 7/8/2019