11-17-2023 LETTING ITEM 053

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	1
	ILLINOIS	CONTRACT NO. 68D36		

D-94-001-17

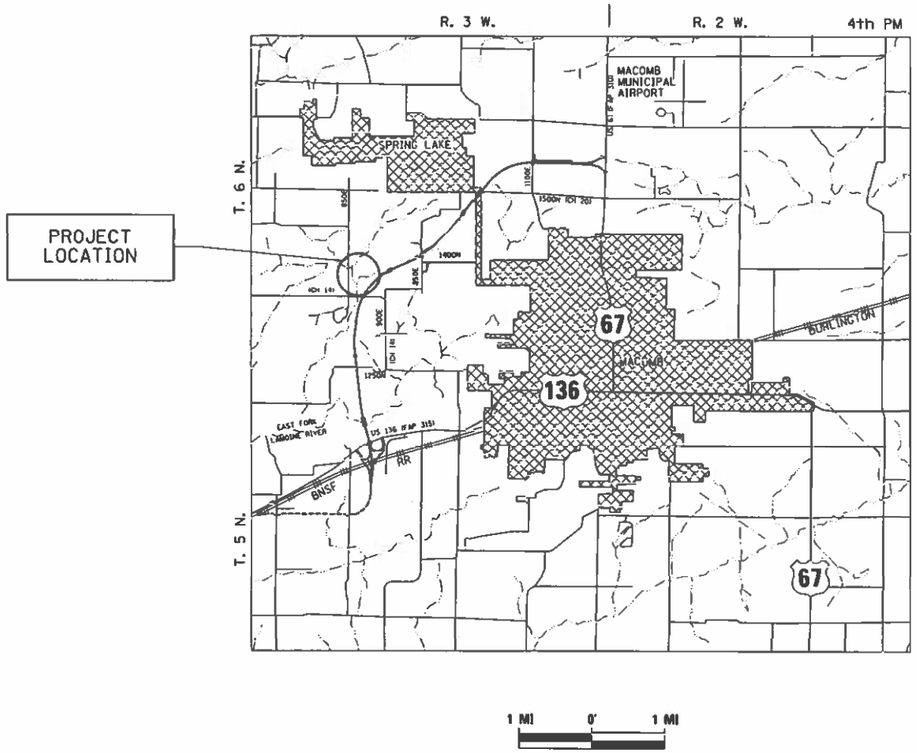
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROPOSED
HIGHWAY PLANS
FAP ROUTE 407 (IL 336 /US 67 /IL 110)
SECTION (55-3)SCR

SLOPE STABILIZATION
McDONOUGH COUNTY
C-94-002-17

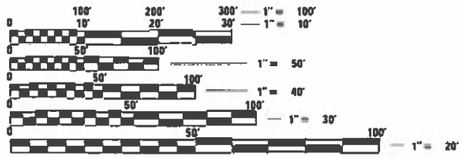
INDEX OF SHEETS

HIGHWAY STANDARDS

280001-07
701001-02
701006-05
701901-08



LOCATION OF SECTION INDICATED THUS:-



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER : NICOLE FAYANT PHONE: (309) 671-3454
PROJECT MANAGER : NICOLE FAYANT PHONE: (309) 671-3454

CONTRACT NO. 68D36

Hutchison Engineering, Inc.
SINCE 1945
JACKSONVILLE • SHOREWOOD • PEORIA

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Aug 31 2023
Ronald A Barnett KSD
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
October 13, 2023
ENGINEER OF DESIGN AND ENVIRONMENT
October 13, 2023
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV. 10/2/23

GENERAL NOTES

SOIL REPORT AVAILABILITY
THE SOILS REPORT AND ALL SOILS DATA COLLECTED AND PROCESSED FOR THE SOILS REPORT MADE IN CONJUNCTION WITH THE DESIGN OF THIS IMPROVEMENT IS ON FILE AT THE DISTRICT OFFICE WHERE IT IS AVAILABLE FOR INSPECTION BY CONTRACTORS OR PROSPECTIVE BIDDERS. BY SUBMITTING A BID, THE CONTRACTOR ACKNOWLEDGES THAT THE SOILS REPORT HAS BEEN MADE AVAILABLE AND IS AWARE OF THE REPORT CONTENTS AND APPENDICES.

AVAILABILITY OF ELECTRONIC FILES
MICROSTATION AND GEOPAK FILES OF THIS PROJECT WILL BE MADE AVAILABLE TO THE CONTRACTOR. IF THERE IS A CONFLICT BETWEEN THE ELECTRONIC FILES AND THE PRINTED CONTRACT PLANS AND DOCUMENTS, THE PRINTED CONTRACT PLANS AND DOCUMENTS SHALL TAKE PRECEDENCE OVER THE ELECTRONIC FILES. THE CONTRACTOR SHALL ACCEPT ALL RISK ASSOCIATED WITH USING THE ELECTRONIC FILES AND SHALL HOLD THE DEPARTMENT HARMLESS FOR ANY ERRORS OR OMISSIONS IN THE ELECTRONIC FILES AND THE DATA CONTAINED THEREIN. ERRORS OR DELAYS RESULTING FROM THE USE OF THE ELECTRONIC FILES BY THE CONTRACTOR SHALL NOT RESULT IN AN EXTENSION OF TIME FOR ANY INTERIM OR FINAL COMPLETION DATE OR SHALL NOT BE CONSIDERED CAUSE FOR ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL NOT USE, SHARE, OR DISTRIBUTE THESE ELECTRONIC FILES EXCEPT FOR THE PURPOSE OF CONSTRUCTING THIS CONTRACT. ANY CLAIMS BY THIRD PARTIES DUE TO USE OR ERRORS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL INCLUDE THIS DISCLAIMER WITH THE TRANSFER OF THESE ELECTRONIC FILES TO ANY OTHER PARTIES AND SHALL INCLUDE APPROPRIATE LANGUAGE BINDING THEM TO SIMILAR RESPONSIBILITIES.

UTILITIES - LOCATION/INFORMATION ON PLANS
THE LOCATIONS OF EXISTING WATER MAINS, GAS MAINS, SEWERS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT THEY ARE NOT GUARANTEED. UNLESS ELEVATIONS ARE SHOWN ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTH SUPPLIED BY THE UTILITY COMPANY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.

TREE REMOVAL - UTILITY RELOCATION
TREE REMOVAL MAY BE NECESSARY PRIOR TO UTILITY COMPANIES BEING ABLE TO RELOCATE THEIR FACILITIES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR SHOULD COORDINATE ANY CONTRACT TREE REMOVAL ACTIVITIES WITH THE UTILITY COMPANIES TO ELIMINATE CONFLICTS AND POTENTIAL DELAYS CAUSED BY UTILITY TREE REMOVAL ACTIVITIES OR INCOMPLETE UTILITY RELOCATIONS.

PLAN ELEVATIONS - U.S.G.S. MEAN SEA LEVEL DATUM
ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U.S.G.S. MEAN SEA LEVEL DATUM.

TREE REMOVAL
THE DISTRICT FOUR TREE COMMITTEE SHOULD BE CONTACTED AND PRIOR APPROVAL OBTAINED FOR ANY TREE REMOVAL BEYOND THE LIMITS/LOCATIONS INCLUDED IN THE PLANS.

ENVIRONMENTAL REVIEWS
PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS WILL NEED TO BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

- BDE FORM 2289 (CULTURAL AND NATURAL RESOURCES REVIEW OF BORROW AREAS)
- BDE FORM 2290 (WASTE/USE AREA REVIEW)
- A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
- COLOR PHOTOGRAPHS DEPICTING THE USE AREA
- BORROW AREA ENTRY AGREEMENT FORM - D4 PI0101

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED WASTE SITE ENVIRONMENTAL CLEARANCES AND FIVE WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES.

JOB-SPECIFIC NOTES

TREES AND BRUSH TO BE REMOVED
(BUT NOT LIMITED TO)
AUTUMN OLIVE
RUSSIAN OLIVE
OSAGE ORANGE
HONEYSUCKLE (SP)
BLACK LOCUST
HONEY LOCUST
MULTIFLORA ROSE
RASPBERRY CANES
ELM (SP)
COTTON WOOD
BOX ELDER
CHERRY (SP)
SMALL NATIVE SAPLINGS AT THE DIRECTION OF THE ENGINEER

PLANTS TO BE SAVED
IDOT RESERVES THE RIGHT TO ORDER SAVED ON SITE:
HOP HORNBEAM/IRONWOOD
REDBUD
NATIVE OAKS
LARGE SAVANNA TYPE OAKS
NATIVE SHRUBS SUCH AS VIBURNUM AND AMERICAN FILBERT
AREAS THAT WERE NOT HEAVILY DISTURBED FROM GRAZING OR FARMING PRACTICES
PATCHES OF MAYAPPLES, BLOOD ROOT, TRILLIUM, DUTCHMEN'S BRITCHES, ETC

EROSION CONTROL
WHEN AREAS ARE CLEARED OF UNWANTED BRUSH AND SMALL TREES, THE AREA MAY BE SUBJECT TO EROSION FROM WIND AND RAIN. THESE BARE AREAS SHALL BE TEMP SEEDED WITHIN 24 HOURS OF BRUSH REMOVAL AND STUMP TREATMENT.

IN STEEP AREAS, HEAVY DUTY EROSION CONTROL BLANKET SHALL BE APPLIED WITH THE PERMANENT SEED MATRIX.

AREAS OF EXTENSIVE BRUSH REMOVAL MAY BE TREATED/SEEDED WITH TEMPORARY SEEDING PRIOR TO BRUSH REMOVAL OPERATIONS SO THAT THE SEED IS WORKED INTO THE SOIL AND READY TO GERMINATE.

SEVERAL OF THE SITES HAVE STEEP RAVINES WHERE TEMPORARY/PERMANENT DITCH CHECKS SHALL BE APPLIED AS PER PLAN AND AT THE DIRECTION OF THE ENGINEER.

HAUL ROUTE
THE CONTRACTOR SHALL UTILIZE, US ROUTE 67, 1500N (CH 20), AND TOWNSHIP ROAD 850E AS THE ONLY TRUCK ROUTE FOR HAULING RIPRAP AND OTHER MATERIALS TO THE JOB SITE.

COMMITMENTS
THE ABOVE REFERENCED PROJECT IS LOCATED IN EMMET TOWNSHIP IN MCDONOUGH COUNTY. PROPOSED ACCESS TO THE PROJECT IS VIA TR 850. EMMET TOWNSHIP WILL WAVE THE 8 TON WEIGHT LIMIT RESTRICTION ON TR 850 FOR THE PURPOSE OF CONSTRUCTION OF THE ABOVE REFERENCE PROJECT.

LANDSCAPING LEGEND

SEEDING, CLASS 2 WITH MULCH, METHOD 2

SEEDING, CLASS 4B

TEMPORARY EROSION CONTROL SEEDING

HEAVY-DUTY EROSION CONTROL BLANKET

PERIMETER EROSION BARRIER

TEMPORARY DITCH CHECK

INLET & PIPE PROTECTION

FILE NAME = D468D36-sht-gennote.dgn	USER NAME = JWhite	DESIGNED - JRB	REVISED -
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	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
GENERAL NOTES, JOB-SPECIFIC NOTES & LEGEND

SCALE: N/A | SHEET NO. 1 OF 1 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	2
		CONTRACT NO. 68D36		
		ILLINOIS FED. AID PROJECT		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE 100% STATE ROADWAY 0020 RURAL
20100500	TREE REMOVAL, ACRES	ACRES	2.5	2.5
20300100	CHANNEL EXCAVATION	CU YD	90	90
25000200	SEEDING, CLASS 2	ACRE	2.00	2.00
25000314	SEEDING, CLASS 4B	ACRE	1.50	1.50
25100115	MULCH, METHOD 2	ACRE	2.00	2.00
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	2299	2299
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	670	670
28000305	TEMPORARY DITCH CHECKS	FOOT	108	108
28000400	PERIMETER EROSION BARRIER	FOOT	1901	1901
28000500	INLET AND PIPE PROTECTION	EACH	2	2
28100209	STONE RIPRAP, CLASS A5	TON	1877	1877
5421C018	PIPE CULVERTS, CLASS C, TYPE 1 18" (TEMPORARY)	FOOT	100	100
67100100	MOBILIZATION	LSUM	1	1
Z0015500	DEBRIS REMOVAL	LSUM	1	1
X4023000	TEMPORARY ACCESS (ROAD)	EACH	2	2

* SEE SPECIAL PROVISIONS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SUMMARY OF QUANTITIES

SCALE: N/A | SHEET 1 OF 1 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	3
		CONTRACT NO. 68D36		
	ILLINOIS FED. AID PROJECT			

REV. 10/2/23 REV. 9/19/23

EARTHWORK

LOCATION	20300100 CHANNEL EXCAVATION	EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE •	EMBANKMENT	BALANCE WASTE (+) OR SHORTAGE (-)
	CU YD			
REACH 6	86.5	69.2	69.2	0.0
TOTAL	86.5	69.2	69.2	0.0
USE	90	70	70	0

• SHRINKAGE FACTOR = 20%

STONE RIPRAP, CLASS A5

LOCATION	BANK SIDE	PROTECTION LENGTH	28100209 STREAM TOE PROTECTION	KEY ONLY	BARBS WITH KEYS	ESTIMATED MISCELLANEOUS PROTECTION	TOTAL
		FOOT	TON				
REACH 1	RT	500	260	80		34	374
REACH 2	LT	350			450	45	495
REACH 6	RT	350	182	30	186	40	438
REACH 7	LT	400	208	10	300	52	570
TOTAL		1,600					1,877

SEEDING

LOCATION	25000200 SEEDING, CLASS 2	25000314 SEEDING, CLASS 4B	25100115 MULCH, METHOD 2
	ACRE		
REACH 1 & ENTRANCE AREA	0.99	0.36	0.99
REACH 2		0.30	
REACH 6 & ENTRANCE AREA	0.99	0.24	0.99
REACH 7		0.43	
TOTAL	1.98	1.33	1.98
USE	2.00	1.50	2.00

ENTRANCES

LOCATION	5421C018 PIPE CULVERTS, CLASS C, TYPE 1 18" (TEMPORARY)	X4023000 TEMPORARY ACCESS (ROAD)
	FOOT	EACH
CONSTRUCTION ENTRANCE REACH 1 & REACH 2	50	1
CONSTRUCTION ENTRANCE REACH 6 & REACH 7	50	1
TOTAL	100	2
USE	100	2

EROSION CONTROL ITEMS

LOCATION	25100635 HEAVY DUTY EROSION CONTROL BLANKET	28000250 TEMPORARY EROSION CONTROL SEEDING	28000305 TEMPORARY DITCH CHECKS	28000400 PERIMETER EROSION BARRIER	28000500 INLET AND PIPE PROTECTION
	SQ YD	POUND	FOOT		EACH
REACH 1	963.2	270	53.6	1,040	1
REACH 2	398.2	60			
REACH 6	576.4	246	53.6	861	1
REACH 7	360.6	86			
TOTAL	2,298.4	662	107.2	1,901	2
USE	2,299	670	108	1,901	2

LOCATION	20100500 TREE REMOVAL, ACRES
	ACRE ACRE
ENTIRE PROJECT	2.5

FILE NAME = D468D36-sht-schedule01.dgn	USER NAME = Elias.Elderzi	DESIGNED - JRB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP ROUTE 407 (IL 336 /IL 110) SCHEDULES OF QUANTITIES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - TJD	REVISED -					407	(55-3)SCR	McDONOUGH	19	4
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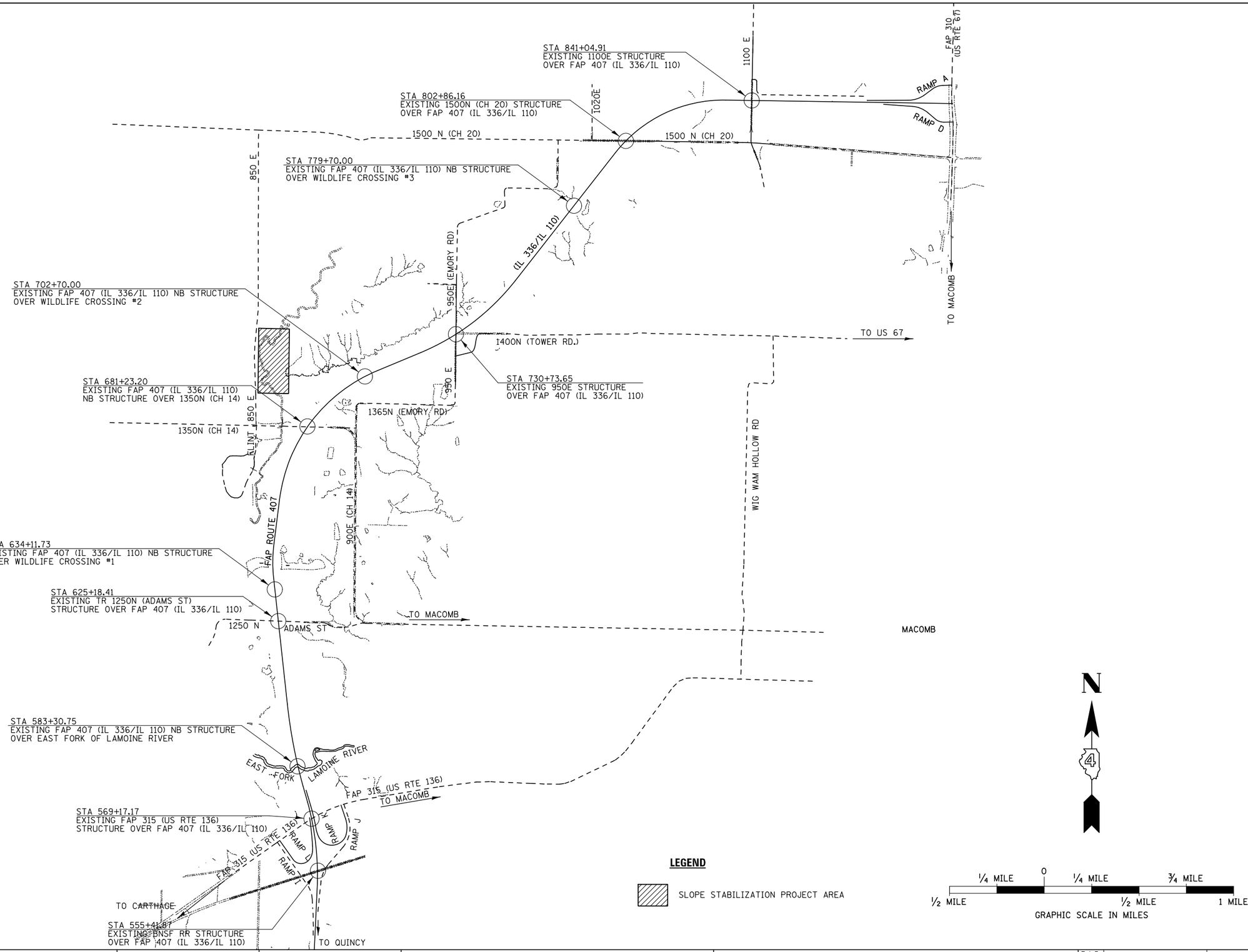

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SLOPE STABILIZATION LOCATION MAP

SCALE: 1"=1/4 MILE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	5
		CONTRACT NO. 68D36		
	ILLINOIS FED. AID PROJECT			

±1,130′

±1,440′

PROPOSED TEMPORARY
ACCESS (ROAD), 1-EACH

PROPOSED TEMPORARY
ACCESS (ROAD), 1-EACH

TR850

TR850

1350N (CH 14)

1350N (CH 14)

SCRUB

TREES

SCRUB

TREES

REACH 1
500′ RIPRAP STREAM TOE PROTECTION
AND 8 RIPRAP STREAM BANK KEYS

500′

REACH 3
(BY OTHERS)

SPRING CREEK

REACH 4
(BY OTHERS)

REACH 5
(BY OTHERS)

EXCAVATE THE NOSE OF INSIDE CURVE
AND PLACE ON OUTSIDE OF CURVE TO
SMOOTH OUT.

350′

REACH 2
6 RIPRAP BARBS AND
6 RIPRAP STREAM BANK KEYS

400′

350′

REACH 6
350′ RIPRAP STREAM TOE PROTECTION,
6 STREAM BANK KEYS AND 3 RIPRAP BARBS

REACH 7
400′ RIPRAP STREAM TOE PROTECTION,
5 STREAM BANK KEYS AND 4 RIPRAP BARBS

REACH 8
(BY OTHERS)

SPRING CREEK

SPRING CREEK

N

0 100 200 300

SCALE IN FEET

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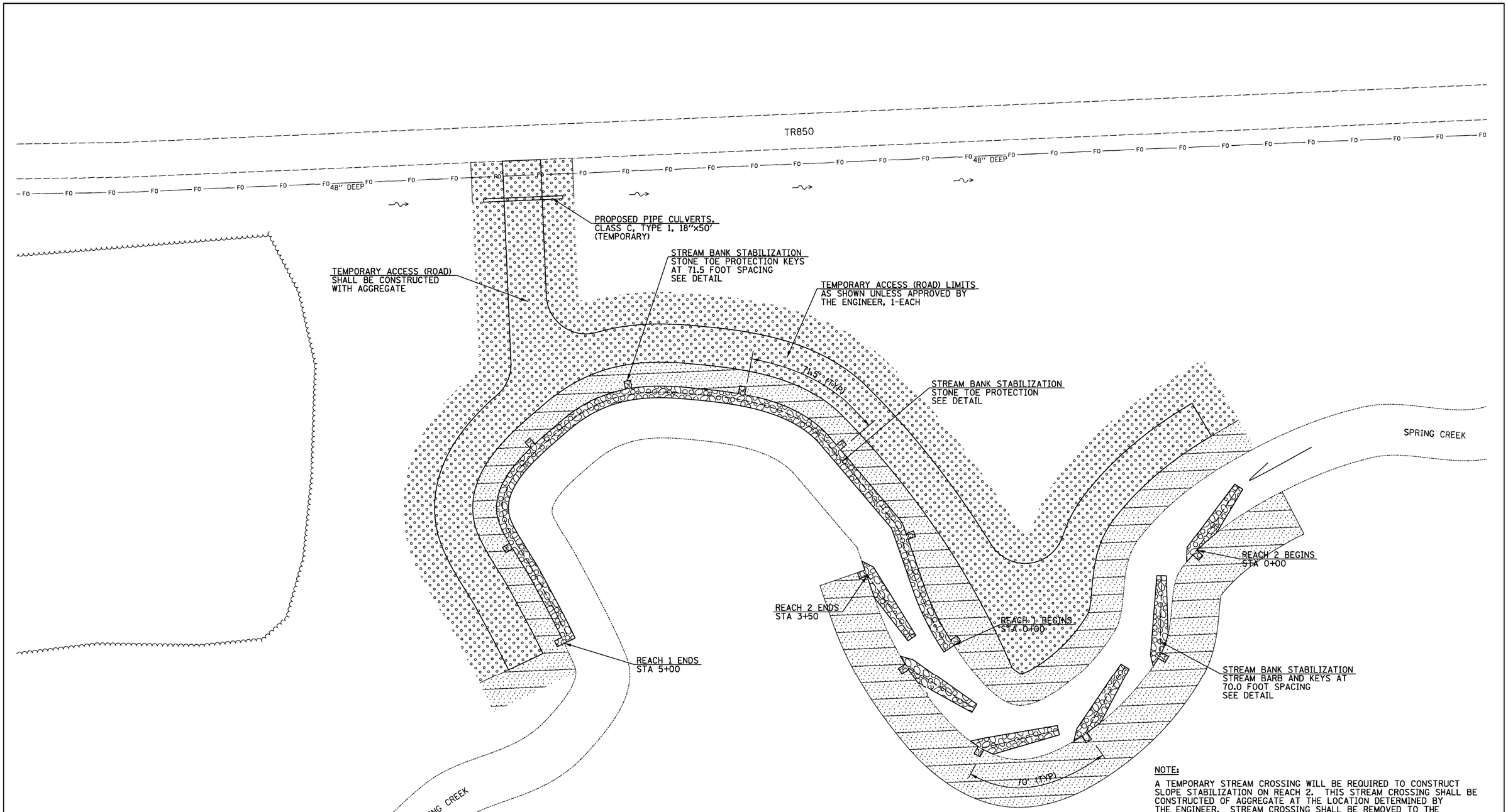
$MODELNAME$	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SLOPE STABILIZATION GENERAL PLAN LAYOUT

SCALE: 1″=100′ | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	6
		CONTRACT NO. 68D36		
	ILLINOIS	FED. AID PROJECT		



NOTE:

A TEMPORARY STREAM CROSSING WILL BE REQUIRED TO CONSTRUCT SLOPE STABILIZATION ON REACH 2. THIS STREAM CROSSING SHALL BE CONSTRUCTED OF AGGREGATE AT THE LOCATION DETERMINED BY THE ENGINEER. STREAM CROSSING SHALL BE REMOVED TO THE SATISFACTION OF THE ENGINEER AT THE END OF EACH WORK DAY TO RE-ESTABLISH STREAM FLOW.
ALL COST SHOULD BE INCLUDED WITH TEMPORARY ACCESS ROAD PAY ITEM.

LEGEND

- SEEDING, CLASS 2 AND MULCH, METHOD 2
- SEEDING, CLASS 4B
- RIPRAP

N

0 30 60 90

SCALE IN FEET

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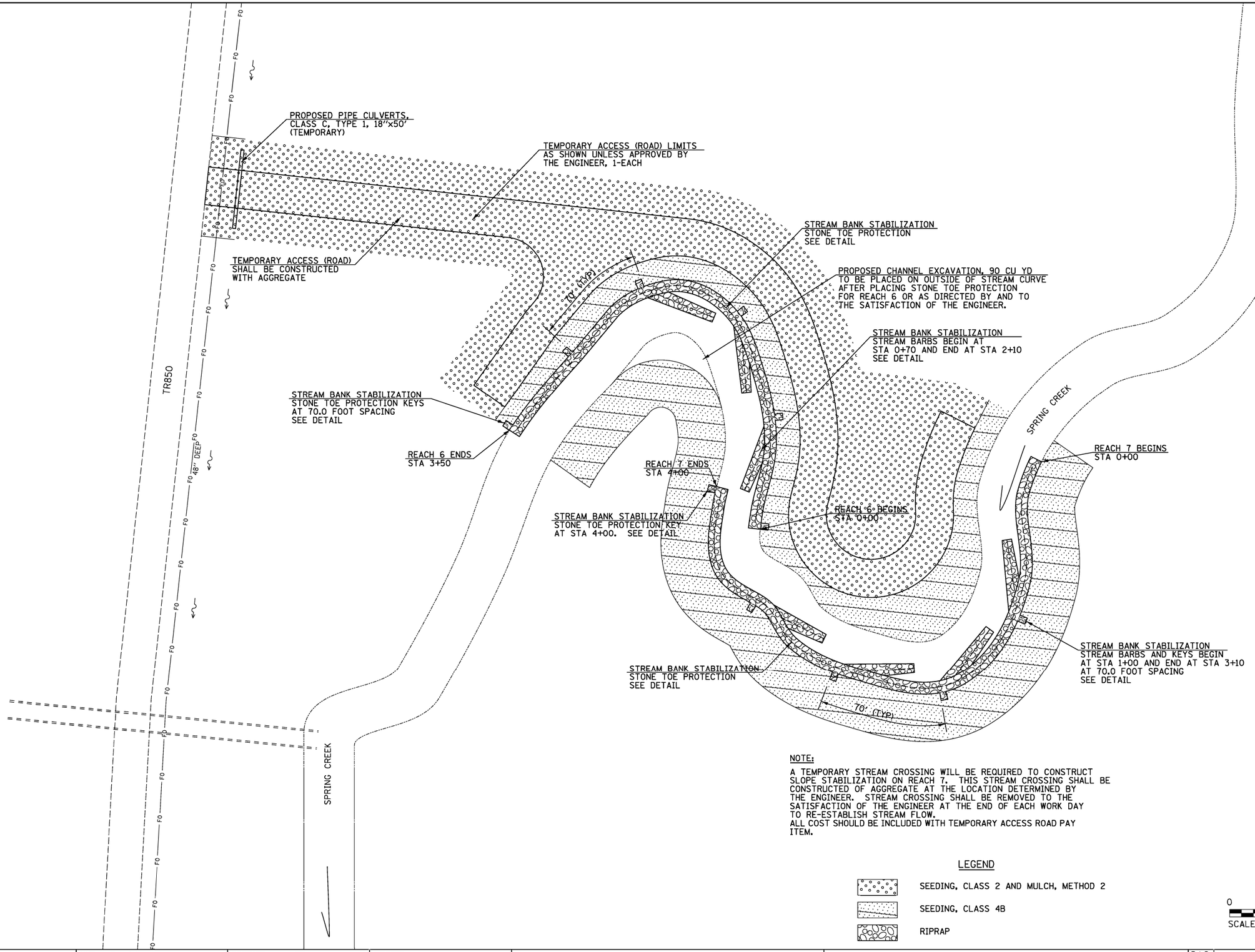
	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SLOPE STABILIZATION – REACH 1 AND REACH 2

SCALE: 1"=30' | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	7
		CONTRACT NO. 68D36		
		ILLINOIS FED. AID PROJECT		



NOTE:

A TEMPORARY STREAM CROSSING WILL BE REQUIRED TO CONSTRUCT SLOPE STABILIZATION ON REACH 7. THIS STREAM CROSSING SHALL BE CONSTRUCTED OF AGGREGATE AT THE LOCATION DETERMINED BY THE ENGINEER. STREAM CROSSING SHALL BE REMOVED TO THE SATISFACTION OF THE ENGINEER AT THE END OF EACH WORK DAY TO RE-ESTABLISH STREAM FLOW.
ALL COST SHOULD BE INCLUDED WITH TEMPORARY ACCESS ROAD PAY ITEM.

LEGEND

- SEEDING, CLASS 2 AND MULCH, METHOD 2
- SEEDING, CLASS 4B
- RIPRAP

FILE NAME = D468D36-sht-plan02.dgn	USER NAME = JWhite	DESIGNED - JRB	REVISED -
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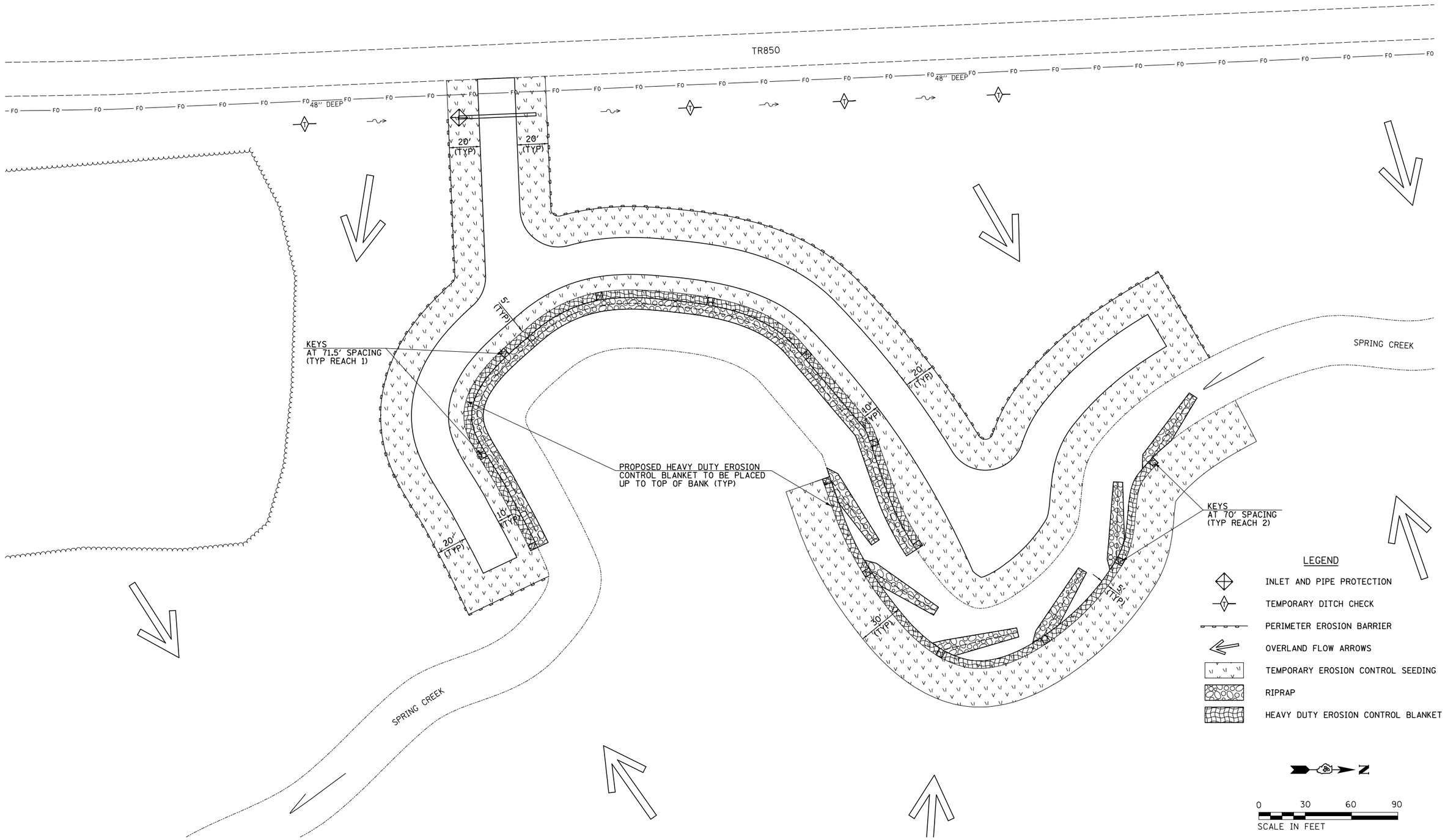
$MODELNAME$	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SLOPE STABILIZATION – REACH 6 AND REACH 7

SCALE: 1"=30' | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	8
		CONTRACT NO. 68D36		
		ILLINOIS FED. AID PROJECT		



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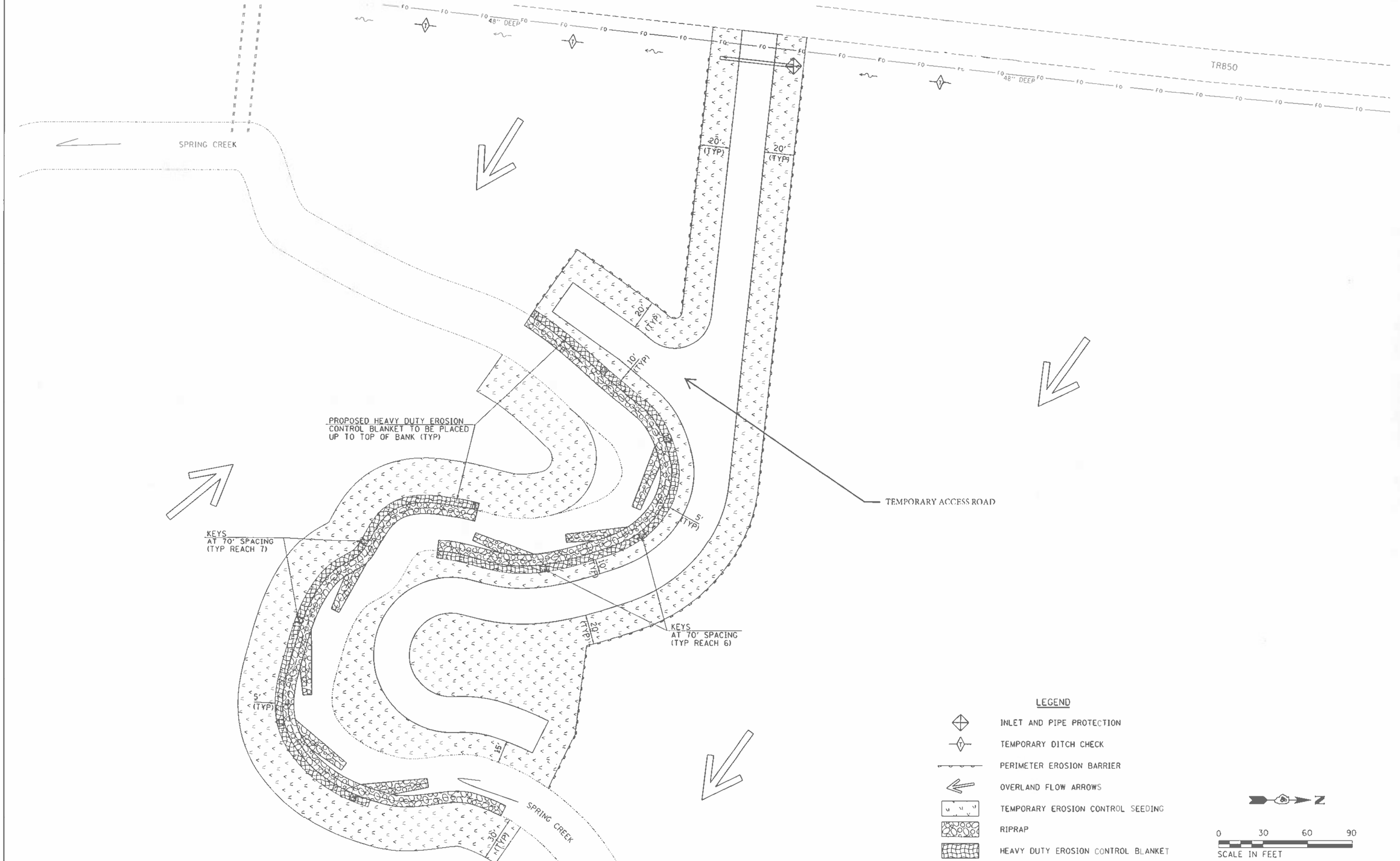
$MODELNAME$	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SLOPE STABILIZATION – EROSION CONTROL FOR REACH 1 AND REACH 2

SCALE: 1"=30' | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	9
		CONTRACT NO. 68D36		
	ILLINOIS	FED. AID PROJECT		



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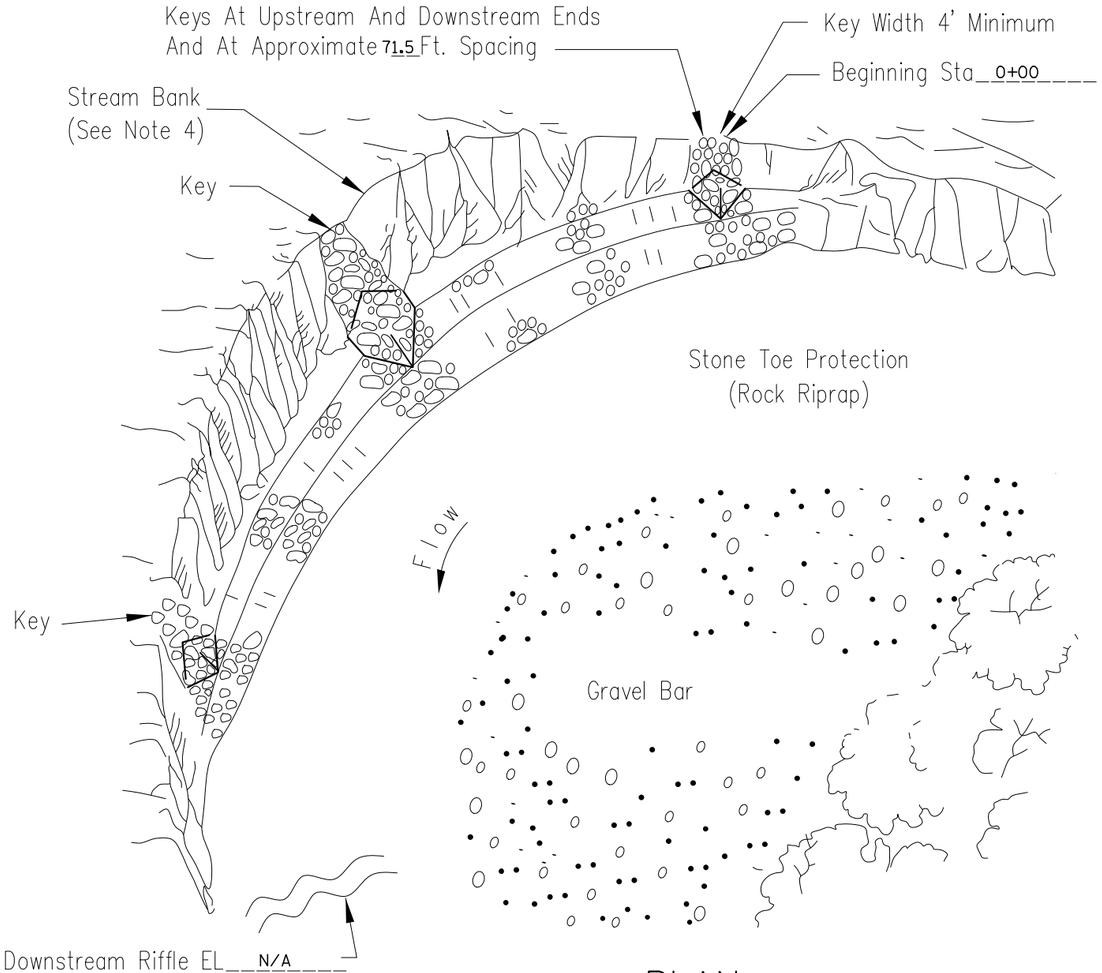
$MODELNAME$	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SLOPE STABILIZATION – EROSION CONTROL FOR REACH 6 AND REACH 7

SCALE: 1"=30' | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	10
		CONTRACT NO. 68D36		
	ILLINOIS FED. AID PROJECT			



PLAN

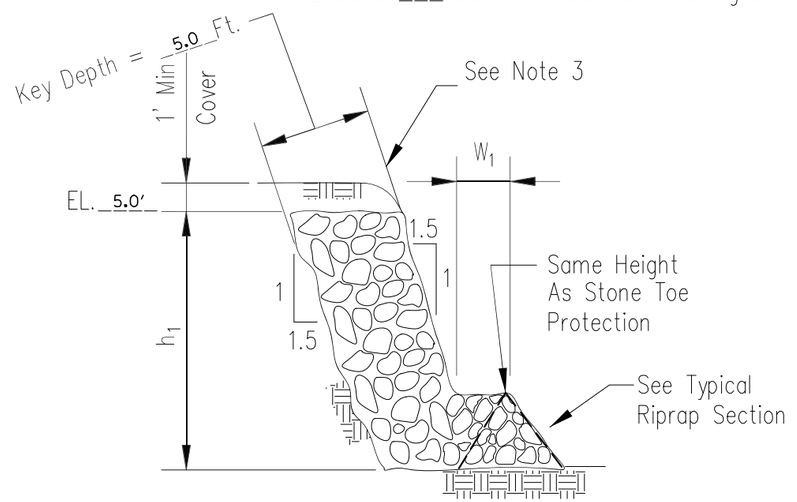
Key	Sta.	h_1	W_1	Level Crest El.
1	0+00.0	5.0′	3.75′	2.5′
2	0+71.5	5.0′	3.75′	2.5′
3	1+43.0	5.0′	3.75′	2.5′
4	2+14.5	5.0′	3.75′	2.5′
5	2+86.0	5.0′	3.75′	2.5′
6	3+57.5	5.0′	3.75′	2.5′
7	4+29.0	5.0′	3.75′	2.5′
8	5+00.0	5.0′	3.75′	2.5′

Benchmark EL. 0′
Description STREAM BED

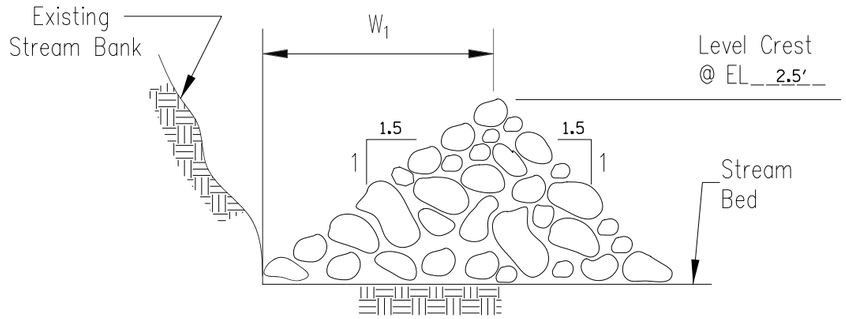
Beginning Sta. Description
FIELD LOCATE BY IDOT/NRCS

Landowner	ILLINOIS DEPARTMENT OF TRANSPORTATION	Stream	SPRING CREEK	Location	REACH 1

Notes:
1. Rock gradation shall meet IDOT requirements for GRAD. NO. 5 riprap, quality designation "A", or as designated by engineer.
2. Stone Toe 500 ft @ 0.52 Tons/Ft. average
Keys 8 @ 10 Tons Each
Total Rock Amount (Estimate) 340 Tons
3. Key shall be constructed so that the vertical section remains embedded in the existing stream bank.
4. Location RT side of streambank looking downstream.



KEY DETAIL



TYPICAL RIPRAP SECTION

NOT TO SCALE

Date
Designed —
Drawn M. QUINONES 9/11
Checked —
Approved —

STREAM BANK STABILIZATION
STONE TOE PROTECTION

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File No. IL-ENG-152
Drawing Set
Page 1 of 1
Sheet 1 of 1

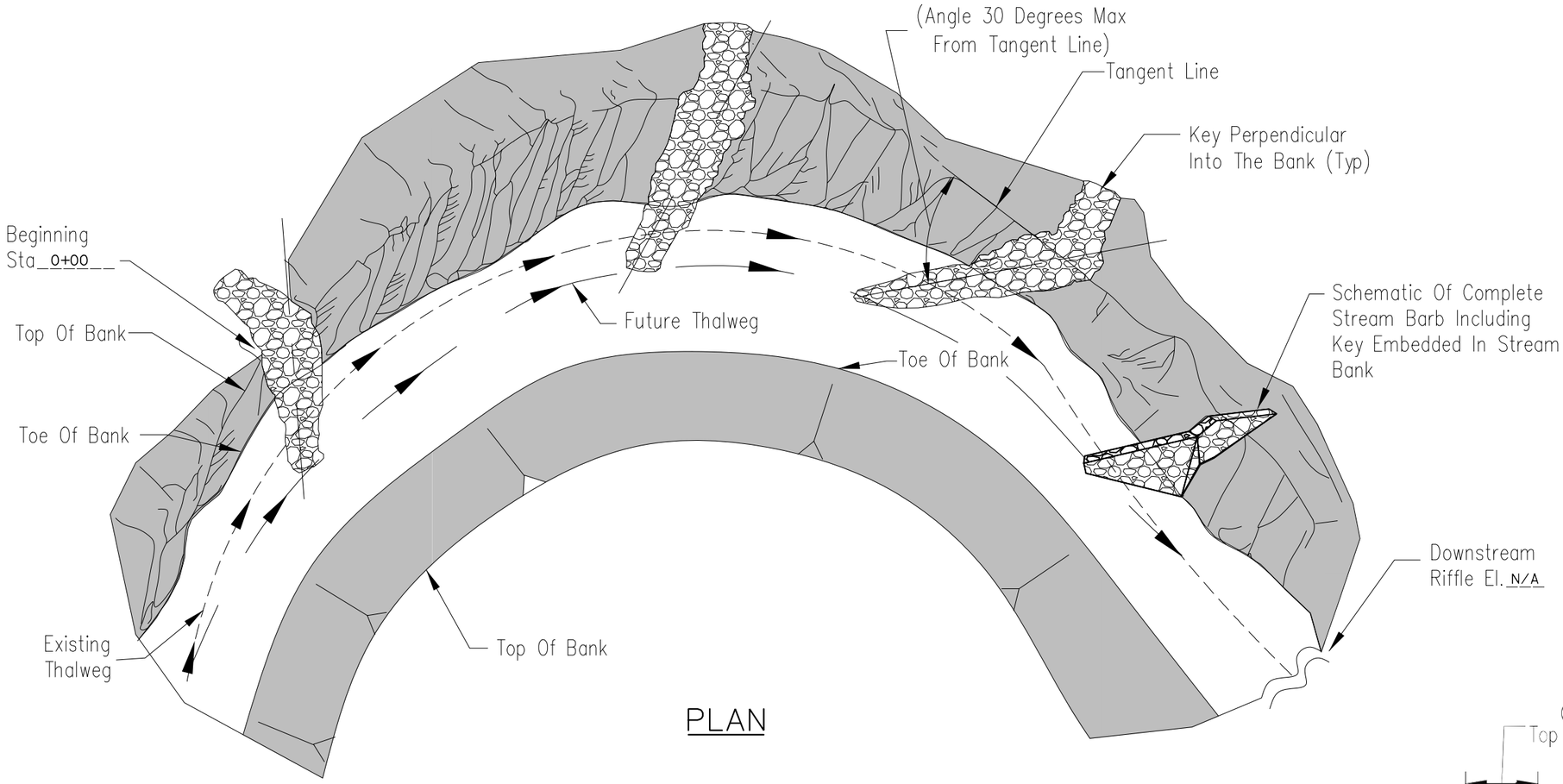
FILE NAME = D468D36-sht-ReachIDetails01.dgn	USER NAME = JWhite	DESIGNED - JRB	REVISED -
		DRAWN - TJD	REVISED -
	PLOT SCALE = 1.0000 ' / in.	CHECKED - JRB	REVISED -
$MODELNAME$	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SLOPE STABILIZATION DETAILS

SCALE: NONE | SHEET 1 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	11
		CONTRACT NO. 68D36		
	ILLINOIS	FED. AID PROJECT		

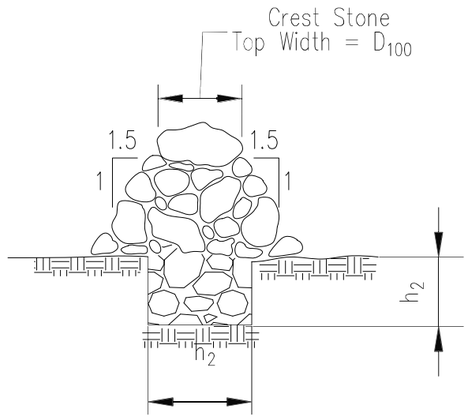


PLAN

Benchmark EL. 0'

Description STREAM BED

Beginning Sta. Description
FIELD LOCATE BY IDOT/NRCS



TYPICAL BARB SECTION

Landowner	ILLINOIS DEPARTMENT OF TRANSPORTATION	Stream	SPRING CREEK	Location	REACH 2

NOT TO SCALE

Date
Designed
Drawn M. QUINONES 10/1/13
Checked
Approved

STREAM BANK STABILIZATION
STREAM BARB

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File No. IL-ENG-167
Drawing No.
Page 1 of 2
Sheet 1 of 2

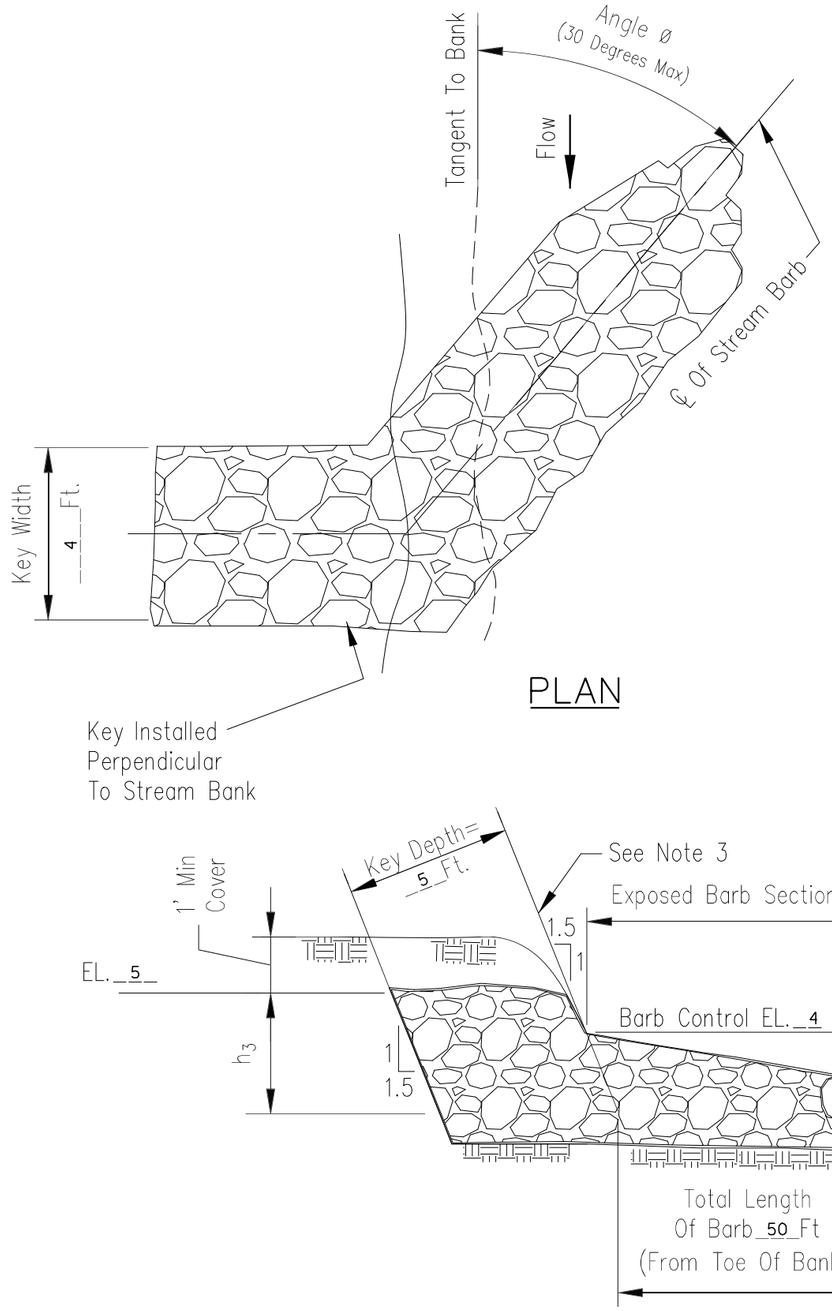
FILE NAME =	USER NAME = JWhite	DESIGNED - JRB	REVISED -
D468D36-sht-Reach2Details01.dgn		DRAWN - TJD	REVISED -
$MODELNAME$	PLOT SCALE = 1.0000 '/ in.	CHECKED - JRB	REVISED -
	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SLOPE STABILIZATION DETAILS

SCALE: NONE | SHEET 2 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	12
		CONTRACT NO. 68D36		
	ILLINOIS FED. AID PROJECT			



TYPICAL PROFILE, CENTERLINE OF STREAM BARB

NOT TO SCALE

Barb	*Bank	Station	Total Length Of Barb	Barb Control Elevation	h_1	h_2	h_3	Slope	Angle ø	** Azimuth	Tons
1	LT	0+00	50′	-	4′	2′	5′	VAR	TBD	N/A	75
2	LT	0+70	50′	-	4′	2′	5′	VAR	TBD	N/A	75
3	LT	1+40	50′	-	4′	2′	5′	VAR	TBD	N/A	75
4	LT	2+10	50′	-	4′	2′	5′	VAR	TBD	N/A	75
5	LT	2+80	50′	-	4′	2′	5′	VAR	TBD	N/A	75
6	LT	3+50	50′	-	4′	2′	5′	VAR	TBD	N/A	75
7											
8											
9											
10											
11											
12											
13											
14											
15											
								Total Stone			450

Notes:

1. **Azimuth is the compass reading from magnetic north along the centerline of weir.
2. *Bank–left side or right side looking downstream.
3. Key shall be constructed so that the vertical section remains embedded in the existing stream bank.
4. Rock gradation shall meet IDOT requirements for GRAD. NO. 5 riprap, quality designation "A", or as designated by engineer.

REFERENCE TABLE		
GRAD. NO.	h_2 (D_{100})	D_{50}
4	1.3 ft	7.4 in
5	1.7 ft	9.8 in
6	2.0 ft	12.1 in
7	2.5 ft	14.6 in

Landowner	ILLINOIS DEPARTMENT OF TRANSPORTATION	Stream	SPRING CREEK	Location	REACH 2

Date
Designed —
Drawn M. QUINONES 10/1/13
Checked —
Approved —

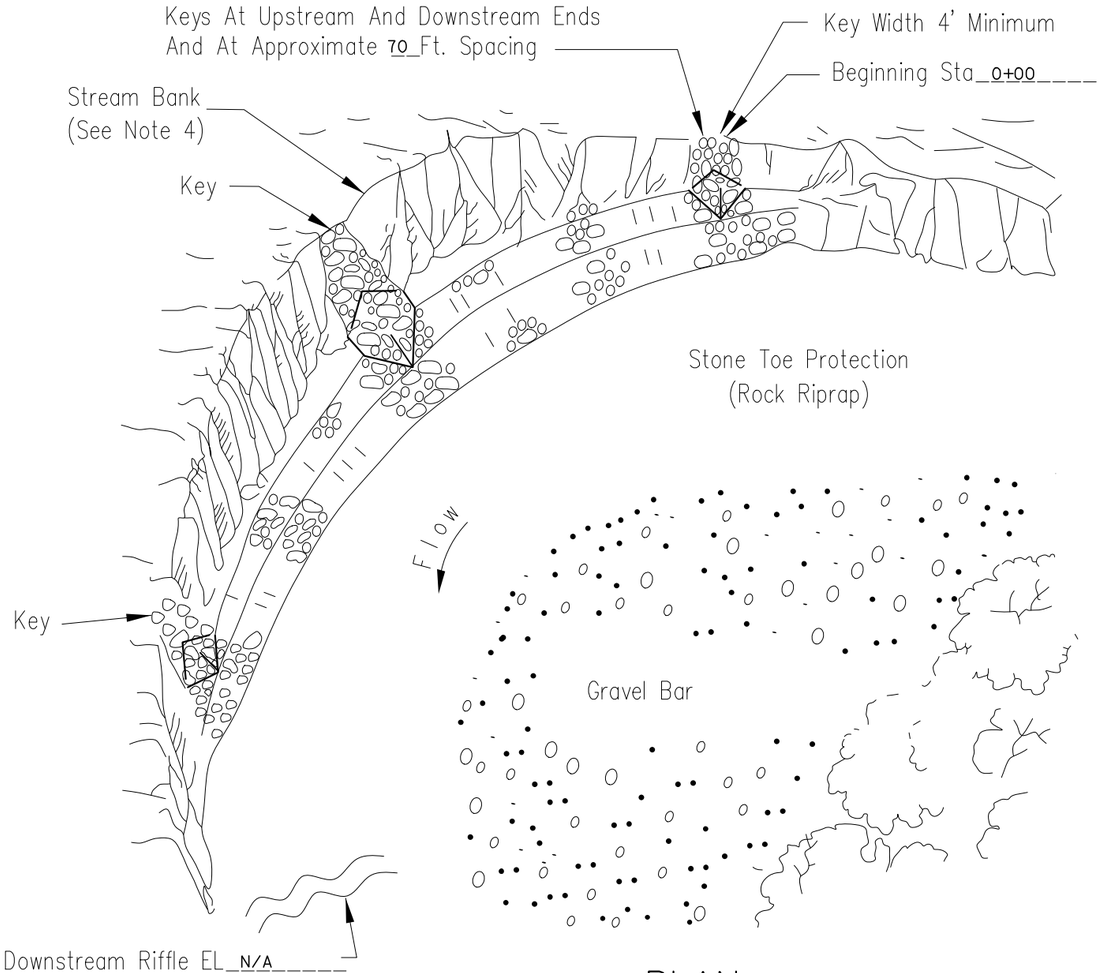
STREAM BANK STABILIZATION
STREAM BARB

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File No. IL-ENG-167
Drawing No.
Page 2 of 2
Sheet 2 of 2

FILE NAME = D468D36-sht-Reach2Details02.dgn	USER NAME = JWhite	DESIGNED - JRB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP ROUTE 407 (IL 336 /IL 110) SLOPE STABILIZATION DETAILS
		DRAWN - TJD	REVISED -		
$MODELNAME$	PLOT SCALE = 1.0000 ' / in.	CHECKED - JRB	REVISED -		SCALE: SHEET 3 OF 9 SHEETS STA. TO STA.
	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	13
		CONTRACT NO. 68D36		
	ILLINOIS	FED. AID PROJECT		



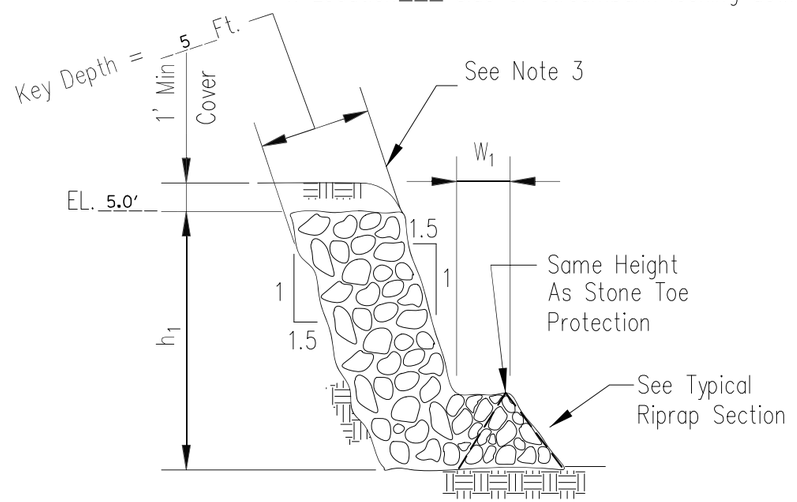
PLAN

Key	Sta.	h_1	W_1	Level Crest El.
1	0+00	5.0′	3.75′	2.5′
2	0+70	SEE STREAM BARB CALCULATIONS		
3	1+40	SEE STREAM BARB CALCULATIONS		
4	2+10	SEE STREAM BARB CALCULATIONS		
5	2+80	5.0′	3.75′	2.5′
6	3+50	5.0′	3.75′	2.5′

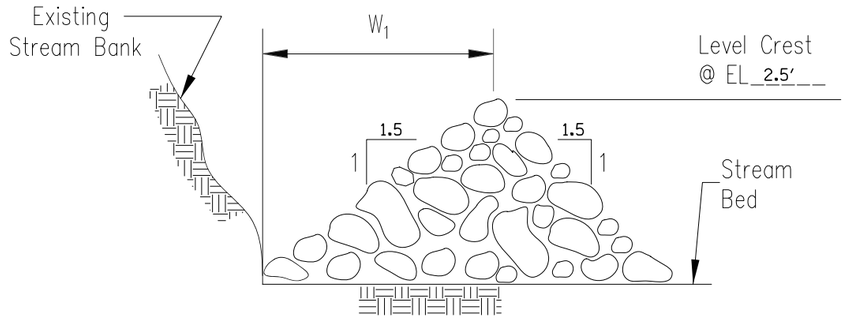
Benchmark EL. 0′
Description STREAM BED

Beginning Sta. Description
FIELD LOCATE BY IDOT/NRCS

Notes:
1. Rock gradation shall meet IDOT requirements for GRAD. NO. 5 riprap, quality designation "A", or as designated by engineer.
2. Stone Toe 350 ft @ 0.52 Tons/Ft. average
Keys 3 @ 10 Tons Each
Total Rock Amount (Estimate) 212 Tons
3. Key shall be constructed so that the vertical section remains embedded in the existing stream bank.
4. Location RT side of streambank looking downstream.



KEY DETAIL



TYPICAL RIPRAP SECTION

NOT TO SCALE

Landowner	ILLINOIS DEPARTMENT OF TRANSPORTATION	Stream	SPRING CREEK	Location	REACH 6

Date
Designed —
Drawn M. QUINONES 9/11
Checked —
Approved —

STREAM BANK STABILIZATION
STONE TOE PROTECTION

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File No. IL-ENG-152
Drawing Set
Page 1 of 1
Sheet 1 of 3

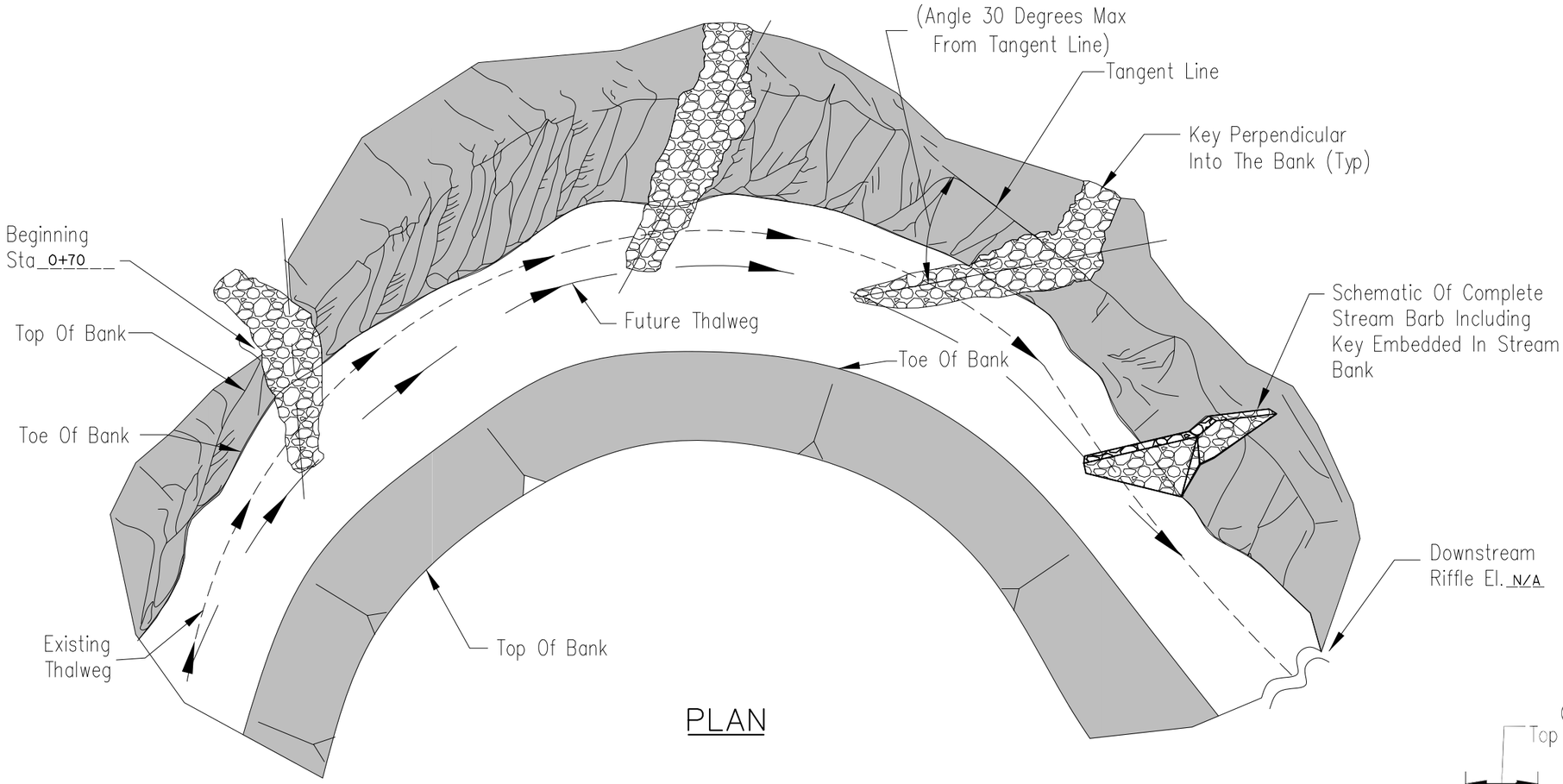
FILE NAME =	USER NAME = JWhite	DESIGNED - JRB	REVISED -
D468D36-sht-Reach6Details01.dgn		DRAWN - TJD	REVISED -
$MODELNAME$	PLOT SCALE = 1.0000 ' / in.	CHECKED - JRB	REVISED -
	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SLOPE STABILIZATION DETAILS

SCALE: NONE | SHEET 4 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	14
		CONTRACT NO. 68D36		
	ILLINOIS FED. AID PROJECT			

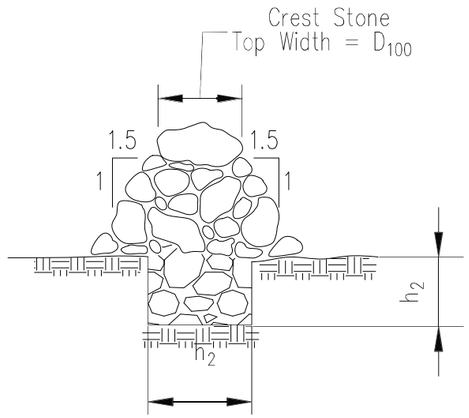


PLAN

Benchmark EL. 0'

Description STREAM BED

Beginning Sta. Description
FIELD LOCATE BY IDOT/NRCS



TYPICAL BARB SECTION

Landowner	ILLINOIS DEPARTMENT OF TRANSPORTATION	Stream	SPRING CREEK	Location	REACH 6

NOT TO SCALE

Date
Designed —
Drawn M. QUINONES 10/1/13
Checked —
Approved —

STREAM BANK STABILIZATION
STREAM BARB

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File No.
IL-ENG-167
Drawing No.
Page 1 of 2
Sheet 2 of 3

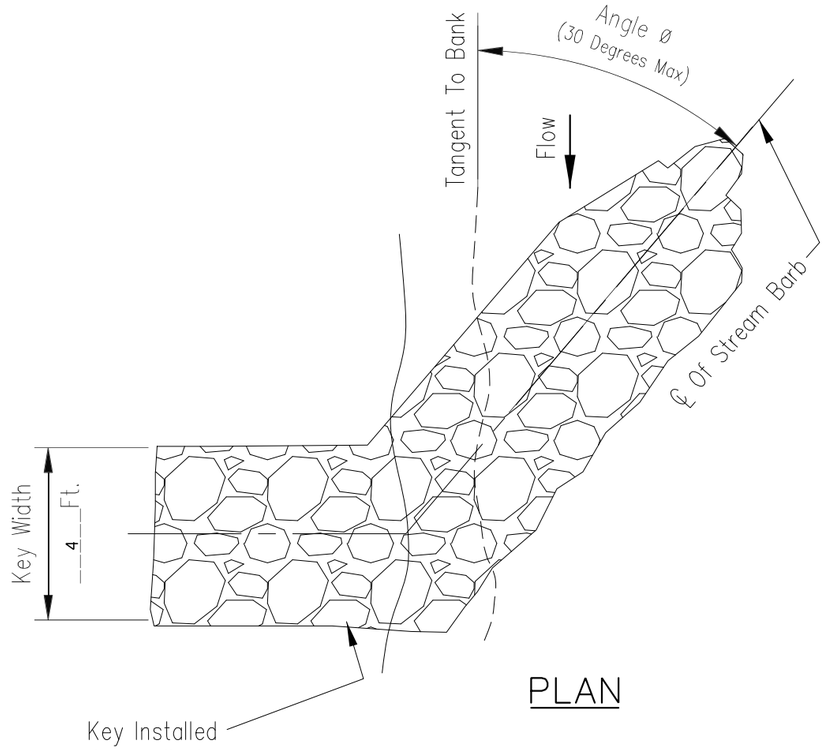
FILE NAME =	USER NAME = JWhite	DESIGNED - JRB	REVISED -
D468D36-sht-Reach6Details02.dgn		DRAWN - TJD	REVISED -
$MODELNAME$	PLOT SCALE = 1.0000 '/ in.	CHECKED - JRB	REVISED -
	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SLOPE STABILIZATION DETAILS

SCALE: NONE | SHEET 5 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	15
		CONTRACT NO. 68D36		
	ILLINOIS FED. AID PROJECT			

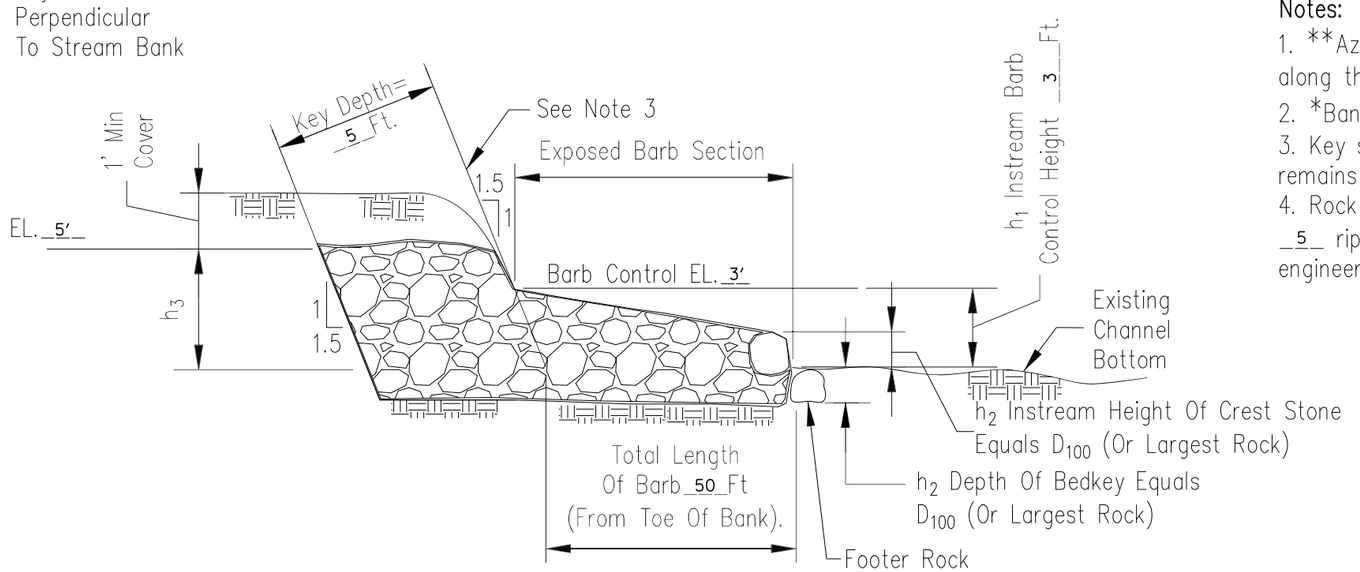


PLAN

Barb	*Bank	Station	Total Length Of Barb	Barb Control Elevation	h_1	h_2	h_3	Slope	Angle ø	** Azimuth	Tons
1	RT	0+70	50′	3′	3′	2′	5′	VAR	TBD	N/A	62
2	RT	1+40	50′	3′	3′	2′	5′	VAR	TBD	N/A	62
3	RT	2+10	50′	3′	3′	2′	5′	VAR	TBD	N/A	62
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
								Total Stone			186

Notes:

1. **Azimuth is the compass reading from magnetic north along the centerline of weir.
2. *Bank–left side or right side looking downstream.
3. Key shall be constructed so that the vertical section remains embedded in the existing stream bank.
4. Rock gradation shall meet IDOT requirements for GRAD. NO. 5 riprap, quality designation "A", or as designated by engineer.



TYPICAL PROFILE, CENTERLINE OF STREAM BARB

NOT TO SCALE

REFERENCE TABLE		
GRAD. NO.	h_2 (D_{100})	D_{50}
4	1.3 ft	7.4 in
5	1.7 ft	9.8 in
6	2.0 ft	12.1 in
7	2.5 ft	14.6 in

Landowner	ILLINOIS DEPARTMENT OF TRANSPORTATION	Stream	SPRING CREEK	Location	REACH 6

Date
Designed —
Drawn M. QUINONES 10/1/13
Checked —
Approved —

STREAM BANK STABILIZATION
STREAM BARB

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File No. IL-ENG-167
Drawing No.
Page 2 of 2
Sheet 3 of 3

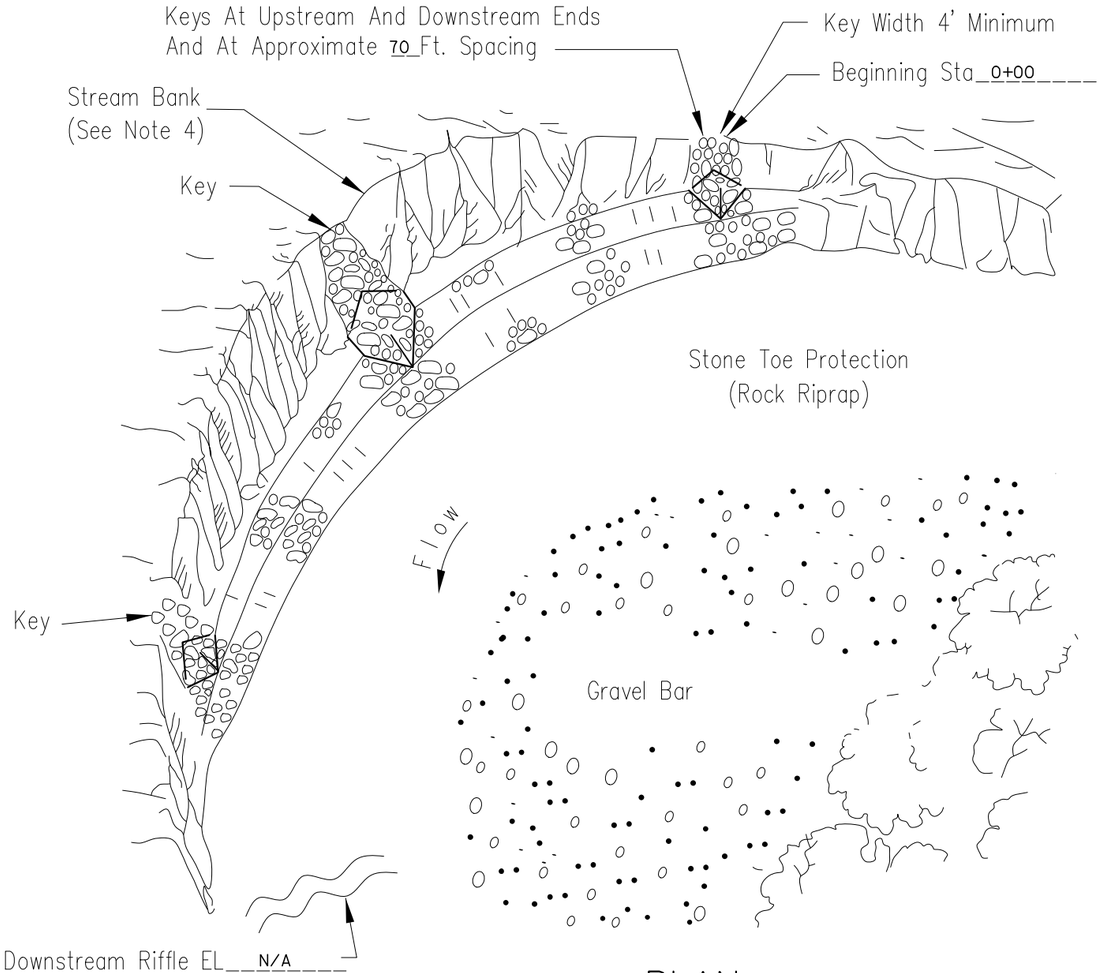
FILE NAME =	USER NAME = JWhite	DESIGNED - JRB	REVISED -
D468D36-sht-Reach6Details03.dgn		DRAWN - TJD	REVISED -
$MODELNAME$	PLOT SCALE = 1.0000 ' / in.	CHECKED - JRB	REVISED -
	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SLOPE STABILIZATION DETAILS

SCALE: | SHEET 6 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	16
		CONTRACT NO. 68D36		
	ILLINOIS FED. AID PROJECT			



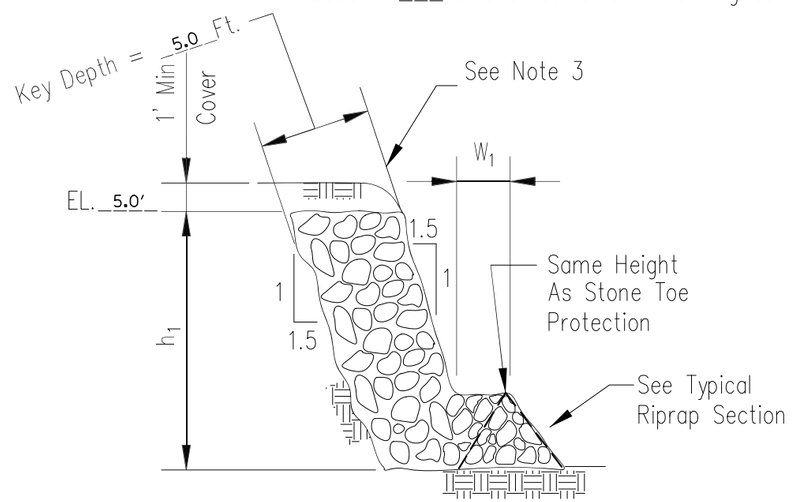
PLAN

Key	Sta.	h_1	W_1	Level Crest El.
1	1+00	SEE STREAM BARB CALCULATIONS		
2	1+70	SEE STREAM BARB CALCULATIONS		
3	2+40	SEE STREAM BARB CALCULATIONS		
4	3+10	SEE STREAM BARB CALCULATIONS		
5	4+00	5.0′	3.75′	2.5′

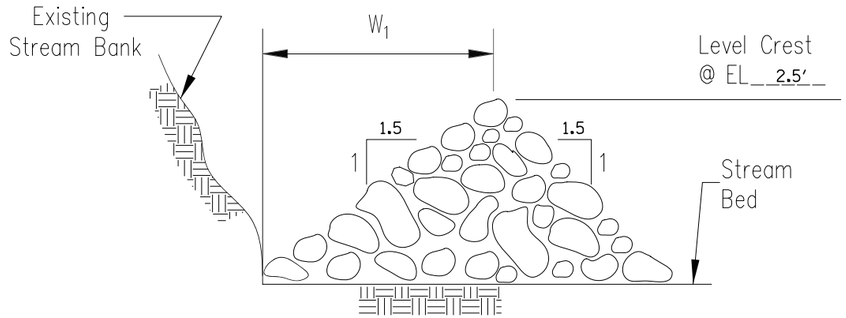
Benchmark EL. 0′
Description STREAM BED

Beginning Sta. Description
FIELD LOCATE BY IDOT/NRCS

Notes:
1. Rock gradation shall meet IDOT requirements for GRAD. NO. 5 riprap, quality designation "A", or as designated by engineer.
2. Stone Toe 400 ft @ 0.52 Tons/Ft. average
Keys 1 @ 10 Tons Each
Total Rock Amount (Estimate) 218 Tons
3. Key shall be constructed so that the vertical section remains embedded in the existing stream bank.
4. Location LT side of streambank looking downstream.



KEY DETAIL



TYPICAL RIPRAP SECTION

NOT TO SCALE

Landowner	ILLINOIS DEPARTMENT OF TRANSPORTATION	Stream	SPRING CREEK	Location	REACH 7

Date
Designed —
Drawn M. QUINONES 9/11
Checked —
Approved —

STREAM BANK STABILIZATION
STONE TOE PROTECTION

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File No. IL-ENG-152
Drawing Set
Page 1 of 1
Sheet 1 of 3

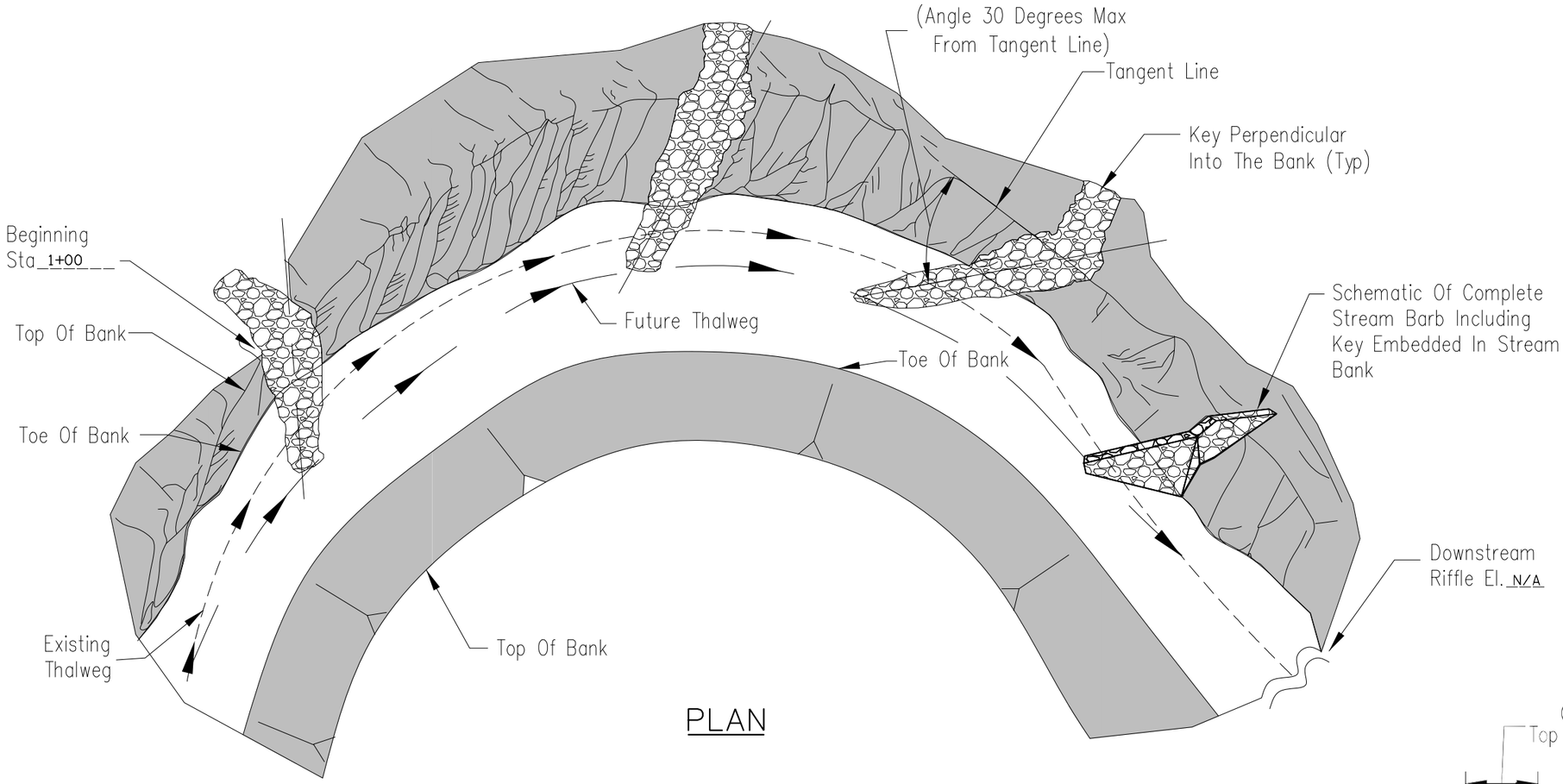
FILE NAME = D468D36-sht-Reach7Details01.dgn	USER NAME = JWhite	DESIGNED - JRB	REVISED -
		DRAWN - TJD	REVISED -
$MODELNAME$	PLOT SCALE = 1.0000 ' / in.	CHECKED - JRB	REVISED -
	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SLOPE STABILIZATION DETAILS

SCALE: NONE | SHEET 7 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	17
		CONTRACT NO. 68D36		
	ILLINOIS FED. AID PROJECT			

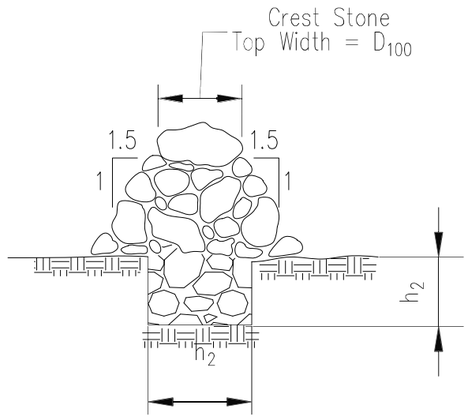


PLAN

Benchmark EL. 0'

Description STREAM BED

Beginning Sta. Description
FIELD LOCATE BY IDOT/NRCS



TYPICAL BARB SECTION

Landowner	ILLINOIS DEPARTMENT OF TRANSPORTATION	Stream	SPRING CREEK	Location	REACH 7

NOT TO SCALE

Date
Designed —
Drawn M. QUINONES 10/1/13
Checked —
Approved —

STREAM BANK STABILIZATION
STREAM BARB

Natural Resources Conservation Service
United States Department of Agriculture

File No.
IL-ENG-167
Drawing No.
Page 1 of 2
Sheet 2 of 3

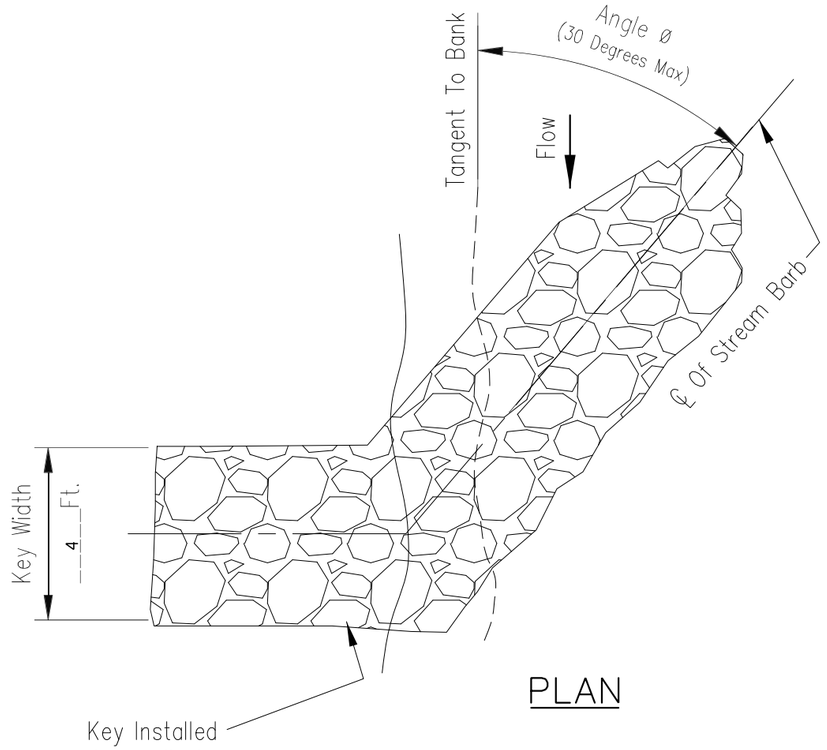
FILE NAME = D468D36-sht-Reach7Details02.dgn	USER NAME = JWhite	DESIGNED - JRB	REVISED -	
		DRAWN - TJD	REVISED -	
$MODELNAME$	PLOT SCALE = 1.0000 '/ in.	CHECKED - JRB	REVISED -	
	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 407 (IL 336 /IL 110)
SLOPE STABILIZATION DETAILS

SCALE: NONE | SHEET 8 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	18
		CONTRACT NO. 68D36		
	ILLINOIS FED. AID PROJECT			

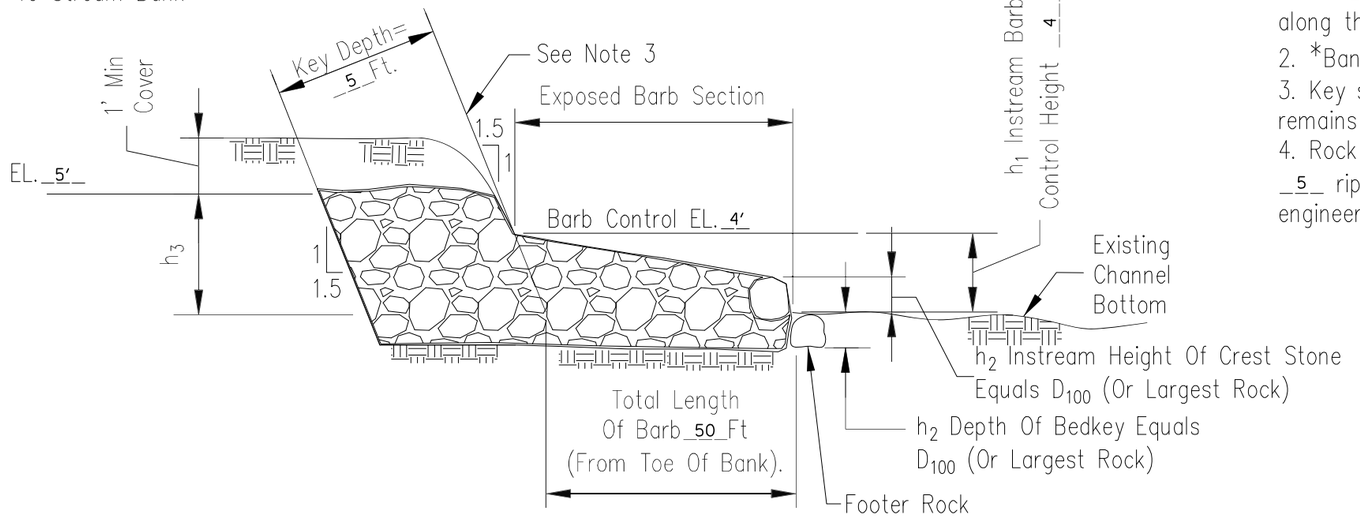


PLAN

Barb	*Bank	Station	Total Length Of Barb	Barb Control Elevation	h_1	h_2	h_3	Slope	Angle ø	** Azimuth	Tons
1	LT	1+00	50′	4′	4′	2′	5′	VAR	TBD	N/A	75
2	LT	1+70	50′	4′	4′	2′	5′	VAR	TBD	N/A	75
3	LT	2+40	50′	4′	4′	2′	5′	VAR	TBD	N/A	75
4	LT	3+10	50′	4′	4′	2′	5′	VAR	TBD	N/A	75
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
								Total Stone			300

Notes:

1. **Azimuth is the compass reading from magnetic north along the centerline of weir.
2. *Bank–left side or right side looking downstream.
3. Key shall be constructed so that the vertical section remains embedded in the existing stream bank.
4. Rock gradation shall meet IDOT requirements for GRAD. NO. 5 riprap, quality designation "A", or as designated by engineer.



TYPICAL PROFILE, CENTERLINE OF STREAM BARB

NOT TO SCALE

REFERENCE TABLE		
GRAD. NO.	h_2 (D_{100})	D_{50}
4	1.3 ft	7.4 in
5	1.7 ft	9.8 in
6	2.0 ft	12.1 in
7	2.5 ft	14.6 in

Landowner	ILLINOIS DEPARTMENT OF TRANSPORTATION	Stream	SPRING CREEK	Location	REACH 7

Date
Designed
Drawn M. QUINONES 10/1/13
Checked
Approved

STREAM BANK STABILIZATION
STREAM BARB

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File No. IL-ENG-167
Drawing No.
Page 2 of 2
Sheet 3 of 3

FILE NAME = D468D36-sht-Reach7Details03.dgn	USER NAME = JWhite	DESIGNED - JRB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP ROUTE 407 (IL 336 /IL 110) SLOPE STABILIZATION DETAILS
		DRAWN - TJD	REVISED -		
$MODELNAME$	PLOT SCALE = 1.0000 ′ / in.	CHECKED - JRB	REVISED -		SCALE: NONE SHEET 9 OF 9 SHEETS STA. TO STA.
	PLOT DATE = 1/3/2019	DATE - 2/28/17	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	(55-3)SCR	McDONOUGH	19	19
		CONTRACT NO. 68D36		
	ILLINOIS FED. AID PROJECT			