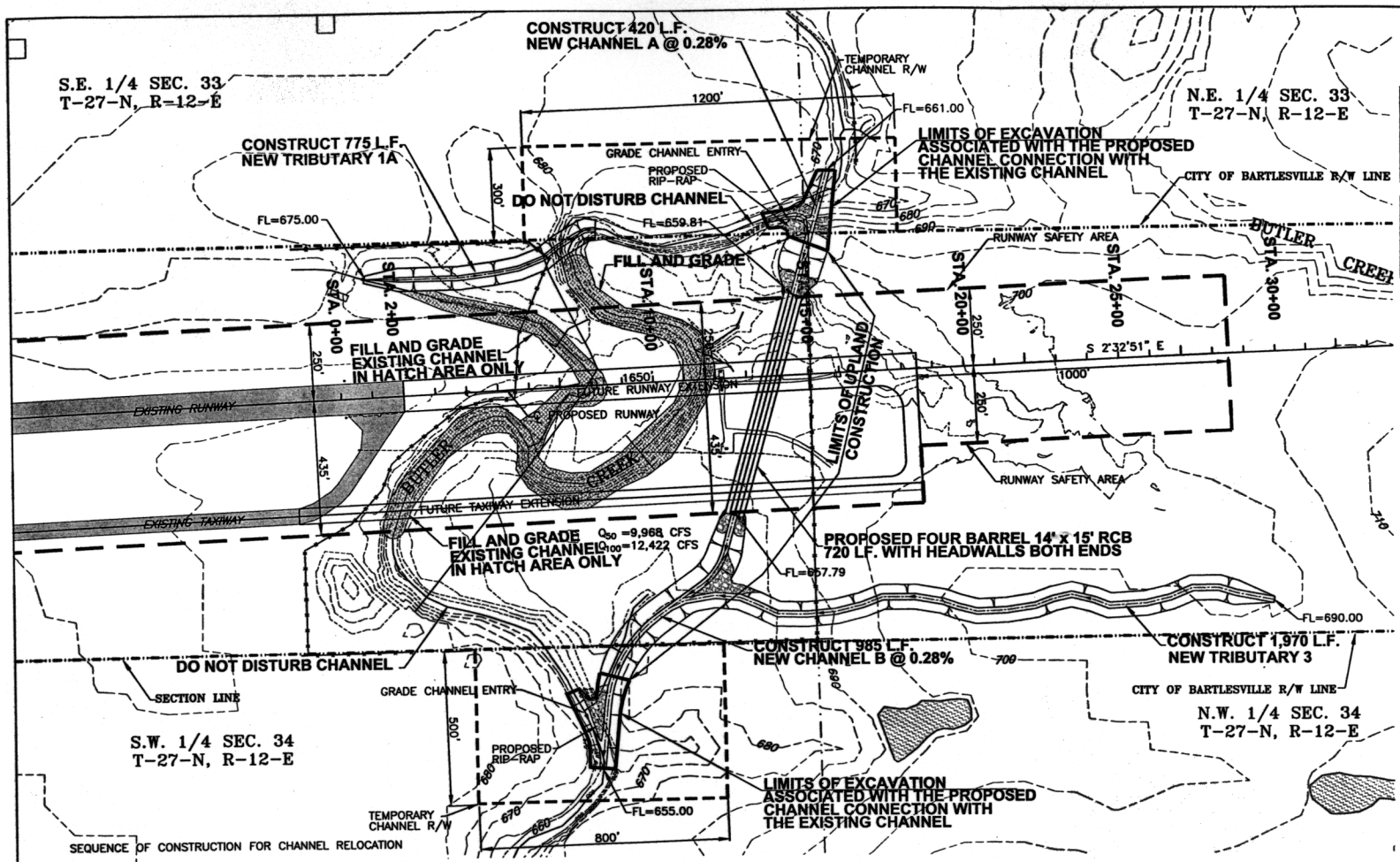
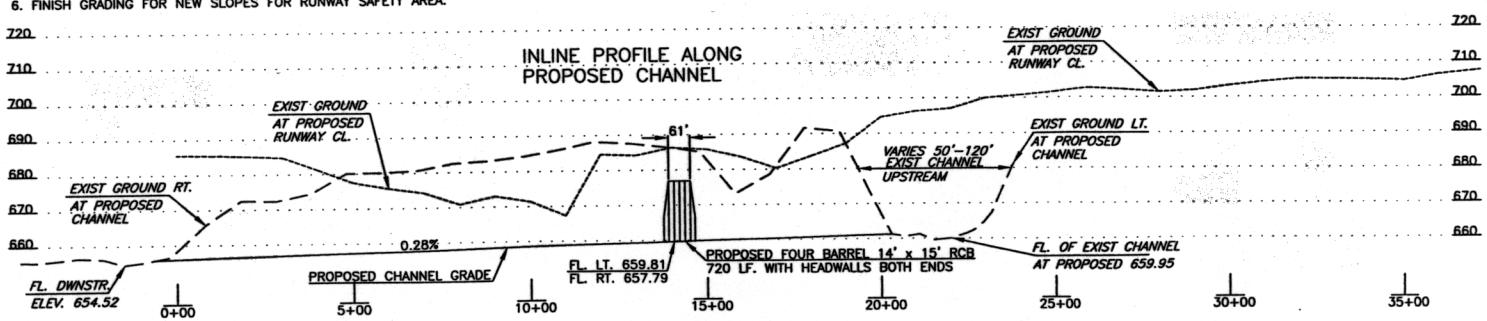


SEQUENCE OF CONSTRUCTION FOR CHANNEL RELOCATION

1. EXCAVATE NEW CHANNEL, TRIBUTARIES, AND R.C.B. KEEP DRY.
2. EXCAVATE THE CONNECTION LIMITS OF THE NEW CHANNEL AND EXISTING CHANNEL AS SHOWN ON THE PLAN.
3. DIRECT FLOW INTO NEW CHANNEL.
4. DE-WATER EXISTING CHANNEL. PUMP IF NECESSARY.
5. FILL EXISTING CHANNEL WHEN DRY.
6. FINISH GRADING FOR NEW SLOPES FOR RUNWAY SAFETY AREA.



CHANNEL LENGTHS

DESCRIPTION	QUANTITY
EXIST. BUTLER CREEK (DISTURBED)	2,350 L.F.
EXIST. TRIBUTARY (DISTURBED)	1,100 L.F.
TOTAL EXISTING CREEK (DISTURBED)	3,450 L.F.
NEW CHANNEL A	420 L.F.
NEW CHANNEL B	985 L.F.
NEW TRIBUTARY 1A	775 L.F.
NEW TRIBUTARY 3	1,970 L.F.
TOTAL NEW CHANNEL FL LENGTH	4,150 L.F.

HYDRAULIC DATA

CHANNEL DATA		BRIDGE DATA	
Q10 =	4,220 CFS	Q10 =	4,390 CFS
WS10 =	675.89 FT	WS10 =	675.67 FT
V10 =	3.93 FPS	V10 =	5.22 FPS
Q50 =	7,920 CFS	Q50 =	8,230 CFS
WS50 =	680.79 FT	WS50 =	680.44 FT
V50 =	2.73 FPS	V50 =	9.79 FPS
Q100 =	10,060 CFS	Q100 =	10,540 CFS
WS100 =	684.03 FT	WS100 =	683.71 FT
V100 =	2.05 FPS	V100 =	12.53 FPS
Q500 =	16,000 CFS	Q500 =	16,600 CFS
WS500 =	686.39 FT	WS500 =	685.84 FT
V500 =	2.30 FPS	V500 =	11.79 FPS
			FT

CHANNEL 404 QUANTITIES

DESCRIPTION	EXCAVATION C.Y.	EXCAVATION AREA (AC)	FILL C.Y.	FILL AREA (AC)	NOTES
NEW CHANNEL A	15,906		654	0.32	(1)
NEW CHANNEL B	21,694		690	0.43	(1)
EXISTING CHANNEL			138,660	5.48	(2)

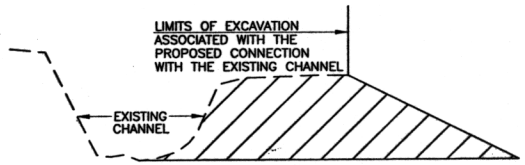
(1) Quantity of fill includes filter blanket and rip rap below elevation of 674.91 which is the Q2.

(2) Quantity of fill is calculated below elevation 674.91 which is the Q2.

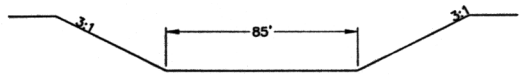
0 100' 200' 400'

LEGEND

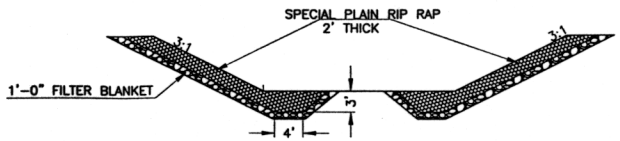
- RUNWAY / TAXIWAY SAFETY AREA
- EXISTING PROPERTY LINE
- NEW TEMPORARY RIGHT-OF-WAY
- RUNWAY CENTERLINE
- EXISTING RUNWAY / TAXIWAY
- FUTURE RUNWAY / TAXIWAY
- EXISTING CREEK FILL AREA
- NEW RIP-RAP PLACEMENT
- LIMITS OF EXCAVATION STAGE 2



TYPICAL CHANNEL OPENING EXC.



TYPICAL MAIN CHANNEL



TYPICAL RIP RAP SECTION

FILENAME: CHANNEL CHANGE.DWG

DESIGN	J.T.B.	11/19/02	AIRPORT IMPROVEMENTS — BARTLESVILLE, OK
DRAWN	B.W.R.		**CHANNEL CHANGE BARTLESVILLE AIRPORT**
CHECKED	D.M.S.		
APPROV.	M.P.H.		
SQUAD	COBB ENG.		AIP NO. _____ SHEET NO. 1