EROSION CONTROL

<u>SEEDING</u>

QUANTITIES FOR SEEDING ARE CALCULATED TO TWO (2) FEET BEYOND THE CONSTRUCTION LIMIT AS SHOWN ON THE CROSS SECTIONS.

WATERING AND MOWING PERMANENT SEEDED AREAS

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS AS PER 659.09.

			No. 144.	•	<u> </u>	11	111		
ITEM 659 -	WATER.			 	<u>85</u>	<u>82</u>	204	MGAL.	
	1	-				And the section of th		· · · · · · · · · · · · · · · · · · ·	
ITEM 659 -	MOWING			 	89	86	212	MSE	

REPAIR OF ERODED AREAS

THIS ITEM OF WORK SHALL BE USED AT THE LOCATIONS AS INDICATED ON THE PLAN OR AS DIRECTED BY THE ENGINEER TO REPAIR AND RESEED ERODED AREAS, DEEP TIRE RUTS AND ANY OTHER AREA WHICH ARE LACKING HEALTHY VEGETATION.

THE SEQUENCE OF WORK SHALL BE AS FOLLOWS:

- 1. LOOSEN UP THE EXISTING SOIL AND PERFORM MINOR REGRADING WORK AS NECESSARY. (INCLUDING EMBANKMENT AND EXCAVATION OPERATIONS).
- 2. PLACE TWO INCHES OF TOPSOIL OVER THE PREPARED AREAS. INCORPORATE LIMING AND FERTILIZER INTO THE TOPSOIL.
- 3. PLACE SEEDING AND MULCHING ON ALL REPAIR AREAS.

GENERALLY TWO INCHES OF TOPSOIL SHALL BE PLACED OVER ALL REPAIRED AREAS. THE BOUNDARIES OF THE TOPSOIL PLACEMENT SHALL BE FEATHERED BEYOND THE PREPARED AREAS TO ACHIEVE A GRADUAL TRANSITION AND INSURE DRAINAGE FLOW. PAYMENT SHALL BE BASED ON A WEIGHT CONVERSION OF 2400 LBS PER CUBIC YARD REGARDLESS OF THE ACTUAL UNIT WEIGHT. THE ORGANIC MATTER REQUIREMENT OF 653.02 IS WAIVED FOR THIS ITEM OF WORK.

PRIOR TO PLACING THE TOPSOIL ALL AREAS SHALL BE LEVELLED OFF WITH THE SURROUNDING SOIL. DURING THIS OPERATION GRADING OPERATIONS SHALL BE PERFORMED AS NECESSARY TO INSURE THAT DRAINAGE FLOW TO THE DITCHES AND ALONG THE DITCHES WILL BE MAINTAINED AFTER THE PLACEMENT OF THE TOPSOIL.

PAYMENT FOR ALL OF THE ABOVE GRADING OPERATIONS SHALL BE INCLUDED IN THE COST FOR ITEM 653- TOPSOIL FURNISHED AND PLACED, AS PER PLAN.

AGRICULTURAL LIMING AND FERTILIZER SHALL BE PLACED ON ALL AREAS COVERED WITH TOPSOIL AS PER 659.08.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

,						: <i>a</i>					Ī	<u>II</u>	III	
	ITEM	653 –	TOPSOIL	FURNISHED	AND	PLACED,	AS	PER	PLAN	• • •	. <u>20</u>	30	<u>50</u>	C.Y.
	ITEM	659 –	SEEDING	AND MULCH	HING .				• • •		. 200	<u>300</u>	<u>500</u>	S.Y.
				TURAL LIMIN						,	the same of the same of the same of			TONS
	ITEM	659 —	COMMER	CIAL FERTILI	ZER .				• • •		· <u>0.02</u>	0.03	0.05	TONS

ITEM 601 - PAVED GUTTER, TYPE 1, AS PER PLAN

THIS ITEM OF WORK SHALL INCLUDE THE NECESSARY REMOVAL, REGRADING IF REQUIRED, AND REPLACEMENT OF THE DAMAGED OR ERODED AREAS OF EXISTING LENGTHS OF PAVED GUTTER. THE REPLACEMENT GUTTER SHALL CONFORM TO TYPE I AS SHOWN ON STANDARD DRAWING MC-5 AND SHALL INCLUDE THE 1'-6" SOD STRIP ADJACENT TO EACH EDGE. THE BOTTOM WIDTH SHALL MATCH THE EXISTING PAVED GUTTER WIDTH. THE SIDE EDGES SHALL BE SHAPED TO MEET EXISTING CONDITIONS.

PAYMENT FOR ITEM 601 PAVED GUTTER, TYPE 1, AS PER PLAN, WILL BE BASED ON THE LINEAR FEET OF THE WIDTH SPECIFIED BY THE ENGINEER.

ITEM SPECIAL - STORM SEWER CLEANING

AS PART OF THIS PROJECT IT WILL BE NECESSARY TO CLEAN OUT SILT, DIRT AND DEBRIS FROM EXISTING STORM SEWERS AND CULVERTS. BASED ON SURVEY INFORMATION, THE PLANS INDICATE THE VARIOUS SIZES AND LENGTHS WHICH HAVE BEEN DESIGNATED TO BE CLEANED.

CLEANING SHALL BE ACCOMPLISHED BY THE USE OF A BUCKET MACHINE, A HIGH VELOCITY WATER MACHINE OR OTHER METHOD APPROVED BY THE ENGINEER. MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH ITEM 202.02.

PAYMENT FOR CLEANING OF THE CONDULTS LISTED SHALL BE AT THE CONTRACT UNIT PRICE BID PER LINEAR FOOT OF ITEM SPECIAL PTPE CLEANOUT NG BY SIZE OF CONDUIT AND BY THE ACTUAL LINEAR FEET CLEANED AND ACCEPTED BY THE ENGINEER. THE BID PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS REQUIRED TO COMPLETE THE ITEM.

ITEM SPECIAL - CONCRETE APRON REPLACEMENT FOR EXISTING NO. 4 AND NO. 5 CATCH BASINS

THIS ITEM OF WORK CONSISTS OF THE REMOVAL OF THE EXISTING BROKEN OR DAMAGED CONCRETE APRON AT EXISTING CATCH BASINS, THE REGRADING OF THE AREA ADJACENT TO THE CATCH BASIN AND THE REPLACEMENT OF THE APRON IN ACCORDANCE WITH THE DIMENSIONS AND DETAILS SHOWN BELOW AND AS INDICATED ON STANDARD CONSTRUCTION DRAWINGS CB-4 AND CB-5. THE GRADING AND SHAPING OF THE APRON SHALL BE PERFORMED TO CONFORM WITH THE EXISTING DITCH CONDITION TO FACILITATE THE FLOW OF WATER INTO THE BASIN.

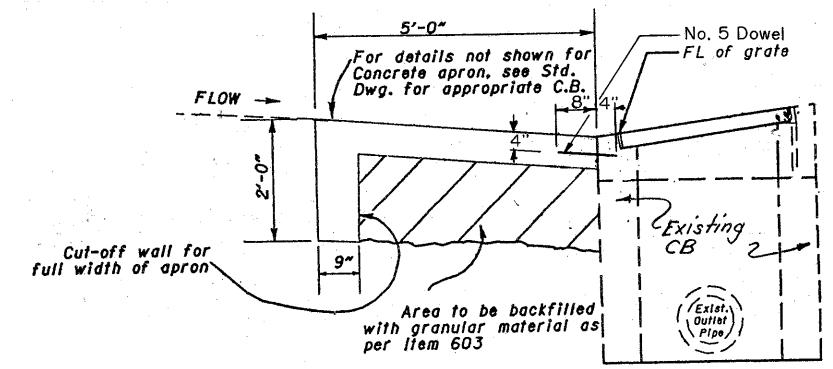
THE CONCRETE SHALL BE IN ACCORDANCE WITH ITEM 499, CLASS "C".

PAYMENT FOR THIS ITEM SHALL BE BASED ON THE ACTUAL SQUARE FEET OF CONCRETE APRON PLACED AND ACCEPTED BY THE ENGINEER, AND SHALL INCLUDE THE COST FOR THE REMOVAL AND DISPOSAL OF THE EXISTING CONCRETE AND ALL NECESSARY GRADING FOR THE NEW APRON.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS APPROVED BY THE ENGINEER. NO WORK IS TO BE PERFORMED UNTIL DIRECTED BY THE ENGINEER.

ITEM SPECIAL - CONCRETE APRON REPLACEMENT FOR CB-4	<u>II</u> <u>33</u>	<u>III</u> <u>33</u>	S.F.
ITEM SPECIAL - CONCRETE APRON REPLACEMENT FOR CB-5 33		33	S.F.
ITEM 660 - SODDING	<u>150</u>	<u>200</u>	S.Y.
ITEM 604 - CATCH BASIN, No.4	<u> </u>		EACH
ITEM 604 — CATCH BASIN, No.5	1		EACH

PAYMENT SHALL BE FOR ITEM SPECIAL - ROADWAY, MISC.: CONCRETE APRON REPLACEMENT, NO. 4 CATCH BASIN OR NO. 5 CATCH BASIN



THE CONCRETE APRON SHALL BE DOWELED INTO THE CATCH BASIN. THE NUMBER OF BARS NEEDED ALONG THE UPSTREAM SIDE OF A NO. 5 CATCH BASIN IS 4, WHILE A NO. 4 CATCH BASIN REQUIRES 7. FOR A NO. 5 AND NO. 4 CATCH BASIN IN A SAG, THE NUMBER OF BARS SHALL BE 8 AND 14, RESPECTIVELY.

THE FURNISHING AND PLACING OF STEEL FOR THE 5/8"x12" DOWEL BARS SHALL BE PER 509 REINFORCING STEEL. THE DOWEL BARS SHALL BE EPOXY COATED PER 509.10. THE DOWEL BARS SHALL BE INSTALLED PER 510. THE 6" CONCRETE APRON SHALL BE REINFORCED PER 601.04(3).

ITEM SPECIAL - PAVED GUTTER CLEANING

ITEM

THIS ITEM SHALL CONSIST OF REMOVAL OF SILT, DEBRIS, AND OTHER DELETERIOUS MATERIALS FROM EXISTING PAVED GUTTERS AS NOTED ON THE PLANS. THE METHOD OF CLEANING SHALL BE DETERMINED BY THE CONTRACTOR WITH THE APPROVAL OF THE ENGINEER. ANY DAMAGE TO THE PAVED GUTTER INCURRED BY THE CONTRACTOR SHALL BE REPAIRED AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER. PAYMENT WILL BE MADE ON THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM SPECIAL ROWDWAY, UNITSE: PAVADINO, TOOMPLETANING, TO OMPLETED AND HACKEN OTHERDR. BY THE ENGINEER.

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER, FOR THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

		· # #	
ITEM 207 - STRAW OR HAY BALES	200	800	EACH
ITEM 207 - TEMPORARY SEEDING AND MULCHING	7896	7609	18846 SD.YD
ITEM 659 - REPAIR SEEDING AND MULCHING	. 1974	1902	47.71 S.Y.
TEM 659 - WATER	21	21	51 MGAL.
ITEM 659 - COMMERCIAL FERTILIZER	0.44	0.43	1.06 TON
SPECIAL — LOW STRENGTH MORTAR BACKFILL I	MATERIAL		I UN

THIS WORK SHALL CONSIST OF PLUGGING THE EXISTING 27" STORM SEWER AT STA. 160+51 FROM 50'± LT. TO 230'± LT. WITH CLASS LSM-50 MORTAR. THIS ITEM IS TO CONFORM TO PROPOSAL NOTE NO. 62-91