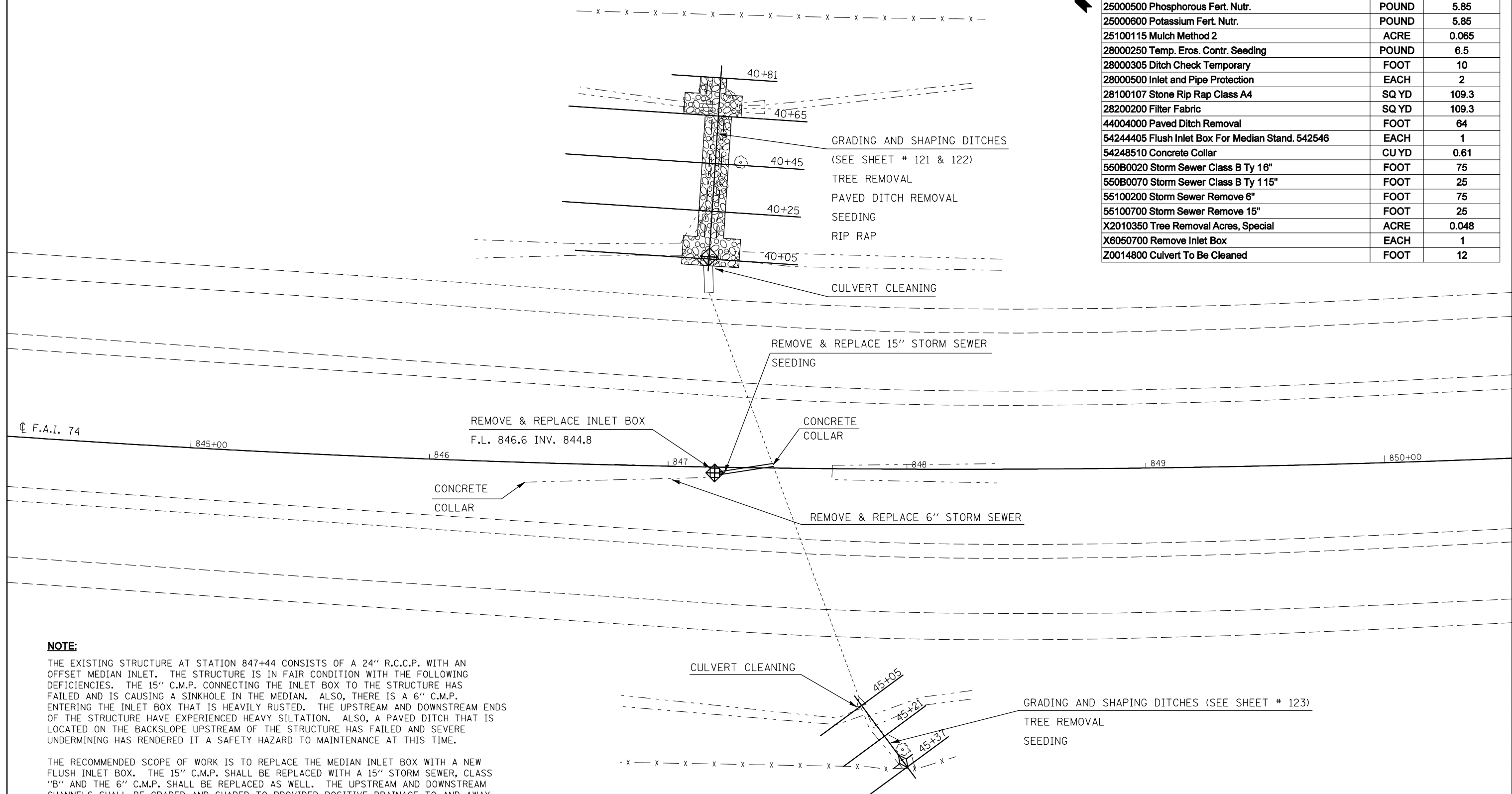
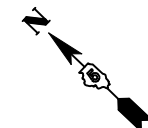


# DRAINAGE STRUCTURE IMPROVEMENT DETAIL

## LOCATION #5 STA. 847 + 44

LOC. #5 STA.847+44

| ITEM # AND DESCRIPTION                            | UNIT  | QUANTITY |
|---|-------|----------|
| 21400100 Grading and Shaping Ditches              | FOOT  | 123      |
| 25000210 Seeding, Class 2A                        | ACRE  | 0.065    |
| 25000400 Nitrogen Fert. Nutr.                     | POUND | 5.85     |
| 25000500 Phosphorous Fert. Nutr.                  | POUND | 5.85     |
| 25000600 Potassium Fert. Nutr.                    | POUND | 5.85     |
| 25100115 Mulch Method 2                           | ACRE  | 0.065    |
| 28000250 Temp. Eros. Contr. Seeding               | POUND | 6.5      |
| 28000305 Ditch Check Temporary                    | FOOT  | 10       |
| 28000500 Inlet and Pipe Protection                | EACH  | 2        |
| 28100107 Stone Rip Rap Class A4                   | SQ YD | 109.3    |
| 28200200 Filter Fabric                            | SQ YD | 109.3    |
| 44004000 Paved Ditch Removal                      | FOOT  | 64       |
| 54244405 Flush Inlet Box For Median Stand. 542546 | EACH  | 1        |
| 54248510 Concrete Collar                          | CU YD | 0.61     |
| 550B0020 Storm Sewer Class B Ty 16"               | FOOT  | 75       |
| 550B0070 Storm Sewer Class B Ty 115"              | FOOT  | 25       |
| 55100200 Storm Sewer Remove 6"                    | FOOT  | 75       |
| 55100700 Storm Sewer Remove 15"                   | FOOT  | 25       |
| X2010350 Tree Removal Acres, Special              | ACRE  | 0.048    |
| X6050700 Remove Inlet Box                         | EACH  | 1        |
| Z0014800 Culvert To Be Cleaned                    | FOOT  | 12       |



**NOTE:**

THE EXISTING STRUCTURE AT STATION 847+44 CONSISTS OF A 24" R.C.C.P. WITH AN OFFSET MEDIAN INLET. THE STRUCTURE IS IN FAIR CONDITION WITH THE FOLLOWING DEFICIENCIES. THE 15" C.M.P. CONNECTING THE INLET BOX TO THE STRUCTURE HAS FAILED AND IS CAUSING A SINKHOLE IN THE MEDIAN. ALSO, THERE IS A 6" C.M.P. ENTERING THE INLET BOX THAT IS HEAVILY RUSTED. THE UPSTREAM AND DOWNSTREAM ENDS OF THE STRUCTURE HAVE EXPERIENCED HEAVY SILTATION. ALSO, A PAVED DITCH THAT IS LOCATED ON THE BACKSLOPE UPSTREAM OF THE STRUCTURE HAS FAILED AND SEVERE UNDERMINING HAS RENDERED IT A SAFETY HAZARD TO MAINTENANCE AT THIS TIME.

THE RECOMMENDED SCOPE OF WORK IS TO REPLACE THE MEDIAN INLET BOX WITH A NEW FLUSH INLET BOX. THE 15" C.M.P. SHALL BE REPLACED WITH A 15" STORM SEWER, CLASS "B" AND THE 6" C.M.P. SHALL BE REPLACED AS WELL. THE UPSTREAM AND DOWNSTREAM CHANNELS SHALL BE GRADED AND SHAPED TO PROVIDED POSITIVE DRAINAGE TO AND AWAY FROM THE STRUCTURE, AND THE PAVED DITCH SHALL BE REMOVED AND REPLACED WITH A RIPRAP DITCH. TREES SHALL BE REMOVED AT EACH END OF THE STRUCTURE. FINALLY, THE CULVERT SHALL BE CLEANED OUT TO REMOVE SILTATION FROM BOTH ENDS.

|   |                     |                 |           |
|---|---------------------|-----------------|-----------|
| FILE NAME =   | USER NAME = hoganbj | DESIGNED - BJM  | REVISED - |
| ct:\pw\work\p\dot\hoganbj\d0158340\0570650\sh-t-sm_struct_det.dgn |                     | DRAWN -         | REVISED - |
| PLOT SCALE = 40.0000' / IN.                                       |                     | CHECKED -       | REVISED - |
| PLOT DATE = 10/21/2010  |                     | DATE - 09/23/10 | REVISED - |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DRAINAGE STRUCTURE IMPROVEMENT DETAIL**  
**LOCATION #5 STA. 847 + 44**

SCALE: 1" = 20'    SHEET NO.    OF    SHEETS    STA.    TO STA.

| F.A.I. RTE.               | SECTION              | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------------|--------|--------------|-----------|
| 74                        | (57-20(1),21,22)RS-3 | McLean | 150          | 55        |
| CONTRACT NO.              |                      |        | 70550        |           |
| ILLINOIS FED. AID PROJECT |                      |        |              |           |