CONSULTANT ENGINEER: REID T. MAGNER, P.E. CIVILTECH ENGINEERING, INC.
PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. 847-705-4406 SCHAUMBURG, IL

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 63665		

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03-09-12 LETTING ITEM 125

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542201 -02	REINFORCED CONCRETE END SECTIONS FOR PIPE CULVERTS 15" THRU 36" DIA. SKEWED WITH ROADWAY
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701301 -04	LANE CLOSURE 2L2W-SHORT TIME OPERATION
701306 -03	LANE CLOSURE 2L2W-SLOW MOVE OPERATIONS, DAY ONLY 45 MPH
701326 -04	LANE CLOSURE 2L2W PAVEMENT WIDENING 45 MPH
701422 -04	LANE CLOSURE MULTI LANE 45-55MPH
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701901 -02	TRAFFIC CONTROL DEVICES
780001 -03	TYPICAL PAVEMENT MARKINGS
781001 -03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

LCDOT HIGHWAY STANDARDS

LC 2050	TRIANGULAR SILT DIKE INSTALLATION FOR ROADWAY DITCH OR DRAINAGE DITCH
LC 2051	PERIMETER EROSION BARRIER INSTALLATION
LC 4202	CONCRETE WASHOUT FACILITIES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

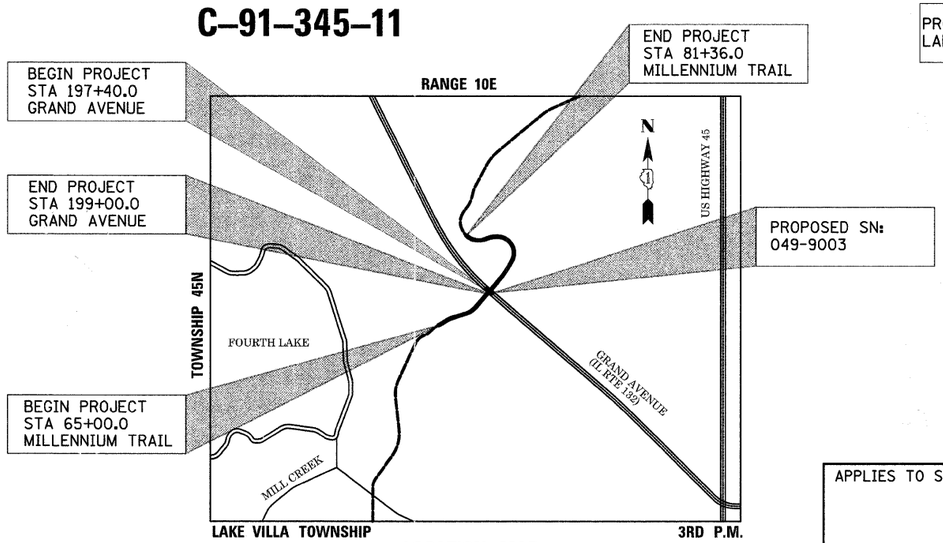
PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAP ROUTE 0541 (GRAND AVENUE, ILLINOIS ROUTE 132)
MILLENNIUM TRAIL UNDERPASS
SECTION 10-F3000-00-BT
PROJECT NO. TE-00D1 (842)
LAKE COUNTY FOREST PRESERVE DISTRICT
LAKE COUNTY
C-91-345-11

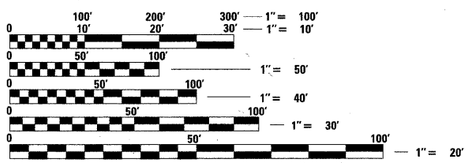
PROJECT LOCATED IN LAKE VILLA TOWNSHIP



LOCATION OF SECTION INDICATED THUS:-



LOCATION MAP
NOT TO SCALE



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

with the following
COUNTY: LAKE
CITY-TOWNSHIP: LINDENHURST - LAKE VILLA
SEC. & 1/4 SEC. NO. 12 SE 1/4 OF THE NW 1/4
48 HOURS BEFORE YOU DIG
EXCLUDING SAT., SUN, & HOLIDAYS

PROJECT LENGTH:

GRAND AVENUE GROSS & NET LENGTH = 160.0 FT (0.030 MILE)
MILLENNIUM TRAIL GROSS & NET LENGTH = 1,636.0 FT (0.310 MILE)
TOTAL GROSS & NET LENGTH = 1,796.0 FT (0.340 MILE)

GRAND AVENUE DESIGN INFORMATION:

DESIGN DESIGNATION = OTHER PRINCIPAL ARTERIAL
POSTED SPEED = 45 MPH
2009 ADT = 14,100 VPD

APPLIES TO SHEETS 1-25, 48-91

REID T. MAGNER 062-056273 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

REGISTERED P.E., STATE OF ILLINOIS EXPIRES 11/30/2013

APPLIES TO SHEETS 26-47

STATE OF ILLINOIS GREGORY J. HATLESTAD 081-005562 CHICAGO, IL REGISTERED STRUCTURAL ENGINEER

REGISTERED S.E., STATE OF ILLINOIS EXPIRES 11/30/2012

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION
DIVISION OF HIGHWAYS

Approved 12/14/11
Lake County Forest Preserve District

Passed 1-4-12
District one Engineer of Local Roads & Streets

Releasing for Bid Based on Limited Review JANUARY 4, 2012
Deputy Director of Highways, Region One Engineer

CIVILTECH ENGINEERING, INC. 184-000826 LS/PE/SE CORPORATION ILLINOIS

PLANS PREPARED BY:

CIVILTECH
450 E. Devon Ave, Suite 300 - Itasca, Illinois 60143
Tel: 630.773.3900 - Fax: 630.773.3975
www.civiltechinc.com

CONTRACT NO. 63665

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GENERAL NOTES

GENERAL

1. ALL REFERENCES TO "ENGINEER" SHALL BE INTERPRETED TO MEAN THE RESIDENT ENGINEER.

2. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE DETAILS IN THE PLANS, THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS, AND THE LATEST EDITION OF THE FOLLOWING STATE OF ILLINOIS SPECIFICATIONS: "THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (REFERRED TO AS THE "STANDARD SPECIFICATIONS"), THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS", THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", THE "MANUAL OF TEST PROCEDURES FOR MATERIALS" AND THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS". ANY REFERENCE TO "STANDARDS" THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST I.D.O.T. STANDARD.

3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, ILLINOIS DEPARTMENT OF TRANSPORTATION (847) 705-4487, AND THE LAKE COUNTY FOREST PRESERVE (847) 968-3277, 72 HOURS PRIOR TO THE COMMENCEMENT OF WORK.

4. NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET TO THE SATISFACTION OF THE ENGINEER.

5. PROPOSED LINES AND GRADES SHOWN ON THE CONSTRUCTION PLANS REPRESENT FINISHED GRADE ELEVATIONS, UNLESS OTHERWISE NOTED.

6. THE CONTRACTOR SHALL SAW CUT PAVEMENT AND CURB & GUTTER TO SEPARATE THE EXISTING MATERIAL TO BE REMOVED BY MEANS OF AN APPROVED SAW TO A DEPTH AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED AS INCLUDED IN THE REMOVAL ITEM INVOLVED. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

7. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE LAKE COUNTY FOREST PRESERVE DISTRICT, AN AUTHORIZED SURVEYOR OR ANY AGENT HAS WITNESSED OR OTHERWISE REFERENCED EACH LOCATION.

8. ALL DIMENSIONS, INCLUDING RADII, ARE GIVEN TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

9. SHOULD THE CONTRACTOR DESIRE TO OBTAIN WATER FOR CONSTRUCTION PURPOSES FROM THE LOCAL AREA, THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING ARRANGEMENTS. LAKE COUNTY FOREST PRESERVE DISTRICT MAY INSTRUCT THE CONTRACTOR WHERE A POTABLE WATER SUPPLY FROM A HYDRANT NEAR THE WORK SITE IS LOCATED. THE CONTRACTOR IS RESPONSIBLE FOR THE TRANSPORTATION OF THE WATER TO THE SITE WHERE NEEDED. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

10. TEMPORARY TOILET - THE CONTRACTOR SHALL PROVIDE A TEMPORARY TOILET FACILITY FOR THE USE OF ALL CONTRACTORS' PERSONNEL EMPLOYED ON THE WORK, AND SHALL MAINTAIN SAME IN PROPER SANITARY CONDITION. AT COMPLETION, THE FACILITY SHALL BE REMOVED AND THE PREMISES LEFT CLEAN. THE ENGINEER SHALL APPROVE THE LOCATION OF THE TEMPORARY TOILET. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES BID AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

11. IN ADDITION TO THE REQUIREMENTS OF THE SPECIAL PROVISION FOR CONSTRUCTION LAYOUT STAKES (ILLINOIS DEPARTMENT OF TRANSPORTATION CHECK SHEET #10), THE CONTRACTOR SHALL REESTABLISH, MONUMENT, AND TIE ALL CONTROL POINTS USED TO COMPLETE THE WORK AS SPECIFIED INCLUDING ALL PI'S, PCS, PT'S, AND POT'S. THE TYPE OF MONUMENTATION USED WILL BE PK NAILS, IRON PIPES, RR SPIKES OR AS APPROVED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "CONSTRUCTION LAYOUT".

12. WHEN REMOVING CURB AND GUTTER, PAVEMENT OR ANY OTHER STRUCTURE, THE CONTRACTOR SHALL TAKE EVERY PRECAUTION NECESSARY TO ENSURE THAT THERE WILL BE NO DAMAGE TO UNDERGROUND PUBLIC OR PRIVATE UTILITIES. UNDER NO CIRCUMSTANCES WILL THE USE OF A FROST BALL CONCRETE BREAKER BE ALLOWED.

13. PROTECTIVE COAT SHALL BE APPLIED IN ALL CASES REGARDLESS OF THE CALENDAR DATE LIMITATIONS CONTAINED IN ARTICLE 420.18. THE PROTECTIVE COATING SHALL BE APPLIED TO THE EXPOSED SURFACES OF THE PORTLAND CEMENT CONCRETE PAVEMENT, CONCRETE SIDEWALK, AND CONCRETE CURB AND GUTTER. PORTLAND CEMENT CONCRETE CURING SHALL BE LIMITED TO METHODS SPECIFIED IN ARTICLE 1020.13 (A) (1), (2) AND (3).

14. THE THICKNESSES OF HOT-MIX ASPHALT MIXTURES SHOWN ON THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE BINDER OR BASE UPON WHICH THE HOT-MIX ASPHALT MATERIALS ARE PLACED.

15. CONCRETE WASHOUT FACILITY SHOULD BE PROVIDED IN THE FIELD BY THE CONTRACTOR. THE COST OF CONCRETE WASHOUT FACILITY SHALL BE INCLUDED IN THE COST OF THE CONCRETE WORK ITEMS INCLUDED IN THE CONTRACT. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

16. THE CONTRACTOR SHALL PAY SPECIAL ATTENTION TO ARTICLE 201.01(a) OF THE STANDARD SPECIFICATIONS. REMOVAL OF ALL OBSTRUCTIONS IN THE RIGHT-OF-WAY, THAT ARE NOT INCLUDED IN A SPECIFIC REMOVAL ITEM, SHALL BE CONSIDERED CLEARING AND INCLUDED IN THE COST OF THE CONTRACT. THIS SHALL INCLUDE, BUT NOT LIMITED TO, FENCES, WALLS, FOUNDATIONS, BUILDINGS, ACCUMULATIONS OF RUBBISH OF WHATEVER NATURE, OLD TYPE III BARRICADES, OLD WATER HEATERS, OLD CMP PIPE, RUBBER TIRES, CONCRETE BLOCKS, DEAD MEN, METAL PARTS, ABANDONED WOODEN POWER POLES, GATES, AND ALL VEGETATION, TREES, SHRUBS, ETC. LESS THAN 6" IN DIAMETER.

17. ALL EARTHWORK EXCAVATION IS TO BE REGRADED/PLACED ON SITE. THERE IS NO HAUL-OFF ANTICIPATED. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "EARTH EXCAVATION", "TOPSOIL EXCAVATION AND PLACEMENT", AND "STRUCTURE EXCAVATION". SHOULD THE CONSTRACTOR ENCOUNTER UNSUITABLE SOILS, THE REMOVAL SHALL BE PAID FOR AS "EARTH EXCAVATION".

18. THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM TO CONTINUOUSLY MONITOR FOR WORKER SAFETY AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

19. FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.

FINAL SURVEY — NO. | NOTE BOOK | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

ORIGINAL SURVEY — NO. | NOTE BOOK | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

STORM SEWERS, STRUCTURES, AND UTILITIES

20. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES. THE LOCATION OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE EXACT LOCATION OF SUCH UTILITIES AND EXERCISE CARE DURING HIS CONSTRUCTION OPERATIONS SO AS NOT TO DAMAGE THEM IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND APPLICABLE ARTICLES INCLUDED IN THE "STANDARD SPECIFICATIONS" INCLUDING, BUT NOT LIMITED TO, ARTICLES 105.07 AND 107.31. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING UTILITIES SO THAT THEIR FACILITIES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF THE CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR CONSTRUCTION STAGING NECESSARY TO ACCOMMODATE UTILITY RELOCATION OR ADJUSTMENT AND/OR FOR DELAYS CAUSED BY UTILITY RELOCATION OR ADJUSTMENT.

21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING LOCAL AGENCIES MAINTAINING STORM & SANITARY SEWERS AND WATER MAINS TO VERIFY THE MATERIALS AND METHODS ALLOWED FOR THE ADJUSTMENT OR RELOCATION OF THEIR FACILITIES, IF NECESSARY.

22. THE STATION/OFFSET/ELEVATIONS NOTED FOR ALL DRAINAGE STRUCTURES LOCATED IN THE CURB LINE REFER TO THE POSITION OF THE ADJACENT PROPOSED EDGE OF PAVEMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE OFFSET NECESSARY FOR EACH STRUCTURE TO SET THE FRAME AND GRATE IN THE PROPER LOCATION. ALL OTHER STRUCTURES ARE DIMENSIONED TO THE CENTER OF STRUCTURE.

23. FRAME ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. THE ADJUSTMENT OF FRAMES ON ALL NEW STRUCTURES TO THE FINAL ELEVATIONS SHALL BE INCLUDED IN THE COST OF THE NEW STRUCTURES. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

24. THE COST OF MAKING STORM SEWER CONNECTIONS TO EXISTING OR PROPOSED SEWER OR DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF THE STORM SEWER BEING CONNECTED. ALL JOINTS IN CONCRETE SEWER PIPE SHALL BE SEALED WITH RUBBER GASKETS, PREFORMED JOINT SEALANTS, OR EXTERNAL SEALING BANDS. NO MASTIC JOINT SEALER WILL BE ALLOWED. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

25. THE CONTRACTOR SHALL MAINTAIN FLOWS THROUGH EXISTING SEWER SYSTEMS AT ALL TIMES. THE EXISTING STRUCTURES SHALL BE INSPECTED BEFORE CONSTRUCTION STARTS. AS DIRECTED BY THE ENGINEER, ANY ACCUMULATION OF MATERIAL IN THE STRUCTURE DUE TO CONSTRUCTION OPERATIONS SHALL BE REMOVED BY THE CONTRACTOR AT HIS EXPENSE. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

26. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS OR STRUCTURES. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS, AND DISCHARGE THE SAME. HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET. HE SHALL BE PREPARED AT ALL TIMES TO IMMEDIATELY DISPOSE OF THE WATER RECEIVED FROM TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

27. THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIAL NECESSARY FOR DEWATERING TRENCH EXCAVATIONS AS WELL AS SHORING TRENCH WALLS DURING UTILITY OPERATIONS. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

28. ANY PAVEMENT REMOVED AS PART OF UTILITY INSTALLATIONS SHALL BE REPLACED WITH PERMANENT PAVEMENT. TEMPORARY STONE SURFACE WILL NOT BE PERMITTED TO REMAIN OVERNIGHT WITHIN THE LIMITS OF LIVE TRAFFIC LANES. TEMPORARY HOT-MIX ASPHALT PATCHING AT THE CONTRACTOR'S EXPENSE MAY BE USED IN LIEU OF IMMEDIATE PAVEMENT REPLACEMENT. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

29. EXISTING STORM SEWERS AND EXISTING STORM SEWER STRUCTURES SHALL BE CLEANED AS DIRECTED BY THE ENGINEER. A CONTINGENCY QUANTITY HAS BEEN INCLUDED IN THE CONTRACT.

30. ALL FRAMES WITH CLOSED LIDS TO BE FURNISHED AS PART OF THIS CONTRACT FOR CONSTRUCTION, ADJUSTMENT OR RECONSTRUCTION OF ANY MANHOLES, CATCH BASIN, INLET, VALVE VAULT, OR METER VAULT SHALL HAVE CAST INTO THE LID ONE OF THE FOLLOWING WORDS: ALL LIDS TO BE USED ON STORM SEWER STRUCTURES SHALL BEAR THE WORD "STORM". ALL LIDS TO BE USED ON SANITARY SEWER STRUCTURES SHALL BEAR THE WORD "SANITARY". ALL LIDS TO BE USED ON WATER SYSTEM STRUCTURES SHALL BEAR THE WORD "WATER". ALL OPEN GRATES SHALL INCLUDE THE WORDING "DUMP NO WASTE, DRAINS TO WATERWAYS". THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE STRUCTURE BEING CONSTRUCTED, ADJUSTED OR RECONSTRUCTED. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

31. THE CONTRACTOR SHALL BE AWARE THAT AT TIMES THE ENGINEER MAY REQUIRE A CHANGE IN STORM SEWER ELEVATION DUE TO A UTILITY LINE OR OTHER OBSTRUCTION. IF SUCH A GRADE CHANGE DOES NOT ALTER THE PIPE CLASSIFICATION, THE ADDITIONAL EXCAVATION OR SHEETING REQUIRED SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE STORM SEWER. HOWEVER, IF THE REVISED GRADE RESULTS IN A CHANGE IN PIPE CLASSIFICATION, PAYMENT WILL BE FOR THE REVISED TYPE OF STORM SEWER.

32. "DFW NON-SHEAR" COUPLINGS AS MANUFACTURED BY NDS COMPANY OR APPROVED EQUAL SHALL BE USED FOR CONNECTIONS OF NEW PIPE TO EXISTING PIPE, AND WHERE DISSIMILAR PIPE AND JOINT MATERIALS ARE ENCOUNTERED. COUPLINGS SHALL BE A MINIMUM OF 8 INCHES LONG FOR CONNECTIONS OF 4-INCH THROUGH 8-INCH PIPE AND A MINIMUM OF 12 INCHES LONG FOR CONNECTIONS ON LARGER PIPES (THESE ARE SPECIAL ORDER ITEMS). NO STAINLESS STEEL SHEAR RINGS WILL BE ALLOWED. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

33. FOR STORM SEWER CONSTRUCTED UNDER THE ROADWAY, BACKFILLING METHODS TWO AND THREE AUTHORIZED UNDER THE PROVISIONS OF ARTICLE 550.07 WILL NOT BE ALLOWED.

STORM SEWERS, STRUCTURES, AND UTILITIES (CONTINUED)

34. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING A DEWATERING PLAN IN COMPLIANCE WITH NPDES REGULATIONS AND SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "DEWATERING STRUCTURE NO.1".

CURB AND GUTTER

35. THE TRANSITION FROM THE PROPOSED CURB AND GUTTER SECTION TO A FLAT OR DEPRESSED SECTION (WHERE THERE IS NO CONNECTION TO EXISTING CURB AND GUTTER) SHALL BE ACCOMPLISHED IN APPROXIMATELY FIVE FEET, AND WILL BE PAID FOR AS "COMBINATION CONCRETE CURB AND GUTTER" OF THE TYPE BEING CONSTRUCTED. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

TREE REMOVAL, CLEARING AND HEDGE REMOVAL

36. ALL TREES ARE DESIGNATED TO BE SAVED UNLESS OTHERWISE NOTED ON THE PLANS, AND SHALL BE PROTECTED IN ACCORDANCE WITH THE PROVISIONS OF ARTICLE 201 OF THE STANDARD SPECIFICATIONS.

37. ALL CLEARING AND REMOVAL OF BUSHES, HEDGES AND TREES UNDER 6" IN DIAMETER SHALL BE INCLUDED IN THE COST OF "EARTH EXCAVATION".

SIGNING, STRIPING & LANDSCAPING

38. SEE IDOT STANDARD 780001 AND PAVEMENT MARKING AND SIGNING SHEETS FOR DETAILS.

39. THE CONTRACTOR WILL BE REQUIRED TO RELOCATE OR REMOVE AND REPLACE SIGNS WHICH INTERFERE WITH HIS CONSTRUCTION OPERATIONS, AND TO TEMPORARILY RESET OR STORE ALL SUCH SIGNS DURING CONSTRUCTION OPERATIONS. THIS WORK WILL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT'S TRAFFIC CONTROL ITEMS.

40. ANY SIGNS WHICH ARE DAMAGED BEYOND REPAIR DURING CONSTRUCTION OPERATIONS SHALL BE REPLACED IN KIND BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE CONTRACT.

41. WHEN DIRECTED BY THE ENGINEER, SUPPLEMENTAL WATERING SHALL BE APPLIED TO ALL SEEDED AREAS PRIOR TO FINAL ACCEPTANCE AT A RATE SPECIFIED BY THE ENGINEER AND IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS" AND SPECIAL PROVISIONS.

42. THE CONTRACTOR SHALL ADHERE TO LIMITS OF RESTORATION SHOWN. AREAS OUTSIDE THESE LIMITS THAT ARE DAMAGED OR DISTURBED BY THE CONTRACTOR, SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

43. TEMPORARY FENCE SHALL BE PLACED AROUND ALL TREES THAT ARE TO BE PROTECTED UNLESS OTHERWISE DIRECTED BY THE ENGINEER. SEE SPECIAL PROVISIONS FOR MORE DETAIL.

44. THE CONTRACTOR SHALL PROVIDE ACCESS TO ABUTTING PROPERTIES AT ALL TIMES DURING CONSTRUCTION, EXCEPT FOR PERIODS OF SHORT DURATION.

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USER NAME = pk	DESIGNED - PK	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
GRAND AVENUE UNDERPASS
SHEET NO. 1 OF 1 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	2
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

	CODED PAY ITEM NO.	PAY ITEM	UNIT	TOTAL QUANTITY	0028 ROADWAY
	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	260	260
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	204	204
	20101000	TEMPORARY FENCE	FOOT	1,010	1,010
	20101200	TREE ROOT PRUNING	EACH	30	30
	20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	15	15
	20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	15	15
	20200100	EARTH EXCAVATION	CU YD	16,346	16,346
*	20400800	FURNISHED EXCAVATION	CU YD	100	100
*	20700220	POROUS GRANULAR EMBANKMENT	CU YD	7,339	7,339
	20800150	TRENCH BACKFILL	CU YD	89	89
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	3,925	3,925
	21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	8,066	8,066
^	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	518	518
^	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	518	518
* ^	25100115	MULCH, METHOD 2	ACRE	5.75	5.75
^	25200200	SUPPLEMENTAL WATERING	UNIT	56	56
	28000200	EARTH EXCAVATION FOR EROSION CONTROL	CU YD	200	200
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	655	655
*	28000305	TEMPORARY DITCH CHECKS	FOOT	224	224
	28000400	PERIMETER EROSION BARRIER	FOOT	918	918
	28000500	INLET AND PIPE PROTECTION	EACH	4	4
	28000510	INLET FILTERS	EACH	6	6
	28200200	FILTER FABRIC	SQ YD	105	105
	35101800	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	2,690	2,690
	35800100	PREPARATION OF BASE	SQ YD	1,225	1,225
	35800200	AGGREGATE BASE REPAIR	TON	55	55
	40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	137	137
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1,854	1,854
	40600990	TEMPORARY RAMP	SQ YD	154	154
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	422	422
	40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	32	32
	40701961	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 14"	SQ YD	819	819
	42001300	PROTECTIVE COAT	SQ YD	371	371
	44000100	PAVEMENT REMOVAL	SQ YD	2,099	2,099

^ DENOTES SPECIALTY ITEM
^^ DENOTES CONSTRUCTION TYPE CODE 0042
* DENOTES SPECIAL PROVISION

CODED PAY ITEM NO.	PAY ITEM	UNIT	TOTAL QUANTITY	0028 ROADWAY
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	2,143	2,143
44000500	COMBINATION CURB AND CUTTER REMOVAL	FOOT	1,602	1,602
50200100	STRUCTURE EXCAVATION	CU YD	4,878	4,878
50300225	CONCRETE STRUCTURES	CU YD	927.9	927.9
50300254	RUBBED FINISH	SQ FT	4,653	4,653
50500505	STUD SHEAR CONNECTORS	EACH	733	733
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	98,380	98,380
50800515	BAR SPLICERS	EACH	120	120
51500100	NAME PLATES	EACH	1	1
5421D012	PIPE CULVERTS, CLASS D, TYPE 1 12" (TEMPORARY)	FOOT	15	15
5421D024	PIPE CULVERTS, CLASS D, TYPE 1 24" (TEMPORARY)	FOOT	30	30
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	2	2
54215543	METAL END SECTIONS 8"	EACH	1	1
54215547	METAL END SECTIONS 12"	EACH	5	5
54215559	METAL END SECTIONS 24"	EACH	1	1
54244405	FLUSH INLET BOX FOR MEDIAN, STANDARD 542546	EACH	2	2
54247130	GRATING FOR CONCRETE FLARED END SECTION 24"	EACH	2	2
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	17	17
550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	FOOT	32	32
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	185	185
550B0030	STORM SEWERS, CLASS B, TYPE 1 8"	FOOT	294	294
550B0050	STORM SEWERS, CLASS B, TYPE 1 12"	FOOT	76	76
58000100	MEMBRANE WATERPROOFING	SQ FT	2,543	2,543
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	945	945
60200805	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 8 GRATE	EACH	2	2
60207605	CATCH BASINS, TYPE C, TYPE 8 GRATE	EACH	1	1
60250200	CATCH BASINS TO BE ADJUSTED	EACH	1	1
60261300	INLETS TO BE ADJUSTED WITH NEW TYPE 11 FRAME AND GRATE	EACH	5	5
60500050	REMOVING CATCH BASINS	EACH	1	1
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1,602	1,602
^ 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	10	10
67100100	MOBILIZATION	L SUM	1	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	7	7

^ DENOTES SPECIALTY ITEM
^^ DENOTES CONSTRUCTION TYPE CODE 0042
* DENOTES SPECIAL PROVISION

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
GRAND AVENUE UNDERPASS
SHEET NO. 1 OF 2 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	3
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

	CODED PAY ITEM NO.	PAY ITEM	UNIT	TOTAL QUANTITY	0028 ROADWAY
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	1,152	1,152
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2,209	2,209
	70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	16,807	16,807
	70300540	PAVEMENT MARKING TAPE, TYPE III 6"	FOOT	1,341	1,341
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	5,603	5,603
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	160	160
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	160	160
^	72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	2	2
^	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	33	33
^	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	7,100	7,100
^	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	278	278
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	2,367	2,367
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	278	278
^	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1	1
*^	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	1
^	81028170	UNDERGROUND CONDUIT, GALVANIZED STEEL, 1" DIA.	FOOT	100	100
^	81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	200	200
^	81200100	CONDUIT EMBEDDED IN STRUCTURE, 1" DIA., GALVANIZED STEEL	FOOT	229	229
^	81300320	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 8" X 8" X 6"	EACH	2	2
^	81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	1,150	1,150
^	81702400	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2	FOOT	210	210
^	82500330	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 60AMP	EACH	1	1
*	X0301852	DEWATERING STRUCTURE NO. 1	EACH	2	2
*	X0322936	REMOVE EXISTING FLARED END SECTION	EACH	1	1
*	X0324455	DRILLING AND SETTING SOLDIER PILES (IN SOIL)	CU FT	6,630	6,630
*	X2010350	TREE REMOVAL, ACRES (SPECIAL)	ACRE	1.25	1.25
* ^	X2501010	SEEDING, CLASS 2 (MODIFIED)	ACRE	0.50	0.50
* ^	X2501700	SEEDING, CLASS 3 (MODIFIED)	ACRE	5.25	5.25
* ^	X2510635	HEAVY DUTY EROSION CONTROL BLANKET, SPECIAL	SQ YD	134	134
* ^	X2511630	EROSION CONTROL BLANKET (SPECIAL)	SQ YD	31,702	31,702
*	X6023102	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID, SPECIAL	EACH	2	2
*	X6024240	INLETS, SPECIAL	EACH	1	1
*	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
*^	X8211070	UNDERPASS LUMINAIRE, 70 WATT, METAL HALIDE	EACH	10	10

^ DENOTES SPECIALTY ITEM
^^ DENOTES CONSTRUCTION TYPE CODE 0042
* DENOTES SPECIAL PROVISION

	CODED PAY ITEM NO.	PAY ITEM	UNIT	TOTAL QUANTITY	0028 ROADWAY
^ *	XX001249	ORNAMENTAL FENCE	FOOT	656	656
*	XX002007	AGGREGATE BICYCLE PATH	SQ YD	27	27
^ *	XX005713	ORNAMENTAL RAILING	FOOT	158	158
*	XX006522	FURNISH WITNESS POST	EACH	10	10
* ^	XX006570	TREES (SPECIAL)	EACH	90	90
*	XX006658	FLOCCULATION LOGS	EACH	20	20
*	XX006659	FLOCCULATION POWDER	POUND	104	104
* ^	XX006698	TREE PROTECTION AND PRESERVATION	EACH	20	20
*	XX006905	STONE RIPRAP, CLASS A2 (SPECIAL)	SQ YD	87	87
*	XX007023	STAINING CONCRETE STRUCTURES	SQ YD	902	902
*	XX008003	FORM LINER TEXTURED SURFACE, SPECIAL	SQ FT	8,137	8,137
*	XZ127902	RETAINING WALL, SPECIAL	SQ FT	617	617
*	Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	1,263	1,263
*	Z0007118	UNTREATED TIMBER LAGGING	SQ FT	4,609	4,609
*	Z0010600	CLEANING DRAINAGE SYSTEM	FOOT	767	767
*	Z0013797	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	334	334
*	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
*	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	8	8
*	Z0019600	DUST CONTROL WATERING	UNIT	10	10
*	Z0026404	FURNISHING SOLDIER PILES (W SECTION)	FOOT	1,961	1,961
*	Z0026407	TEMPORARY SHEET PILING	SQ FT	3,164	3,164
*	Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	2	2
*	Z0030340	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2	EACH	2	2
* ^	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	189	189
*	Z0042002	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	1,258	1,258
*	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	1,117	1,117
*	Z0062456	TEMPORARY PAVEMENT	SQ YD	1,281	1,281
*	Z0067900	STEEL CASINGS 24"	FOOT	33	33
*	Z0069200	STONE RETAINING WALL	SQ FT	88	88
^^ *	Z0076600	TRAINEES	HOUR	500	500
*^	Z0077740	WOOD GUARDRAIL	FOOT	432	432
* ^	XX008639	SHRUBS (SPECIAL)	EACH	225	225

^ DENOTES SPECIALTY ITEM
^^ DENOTES CONSTRUCTION TYPE CODE 0042
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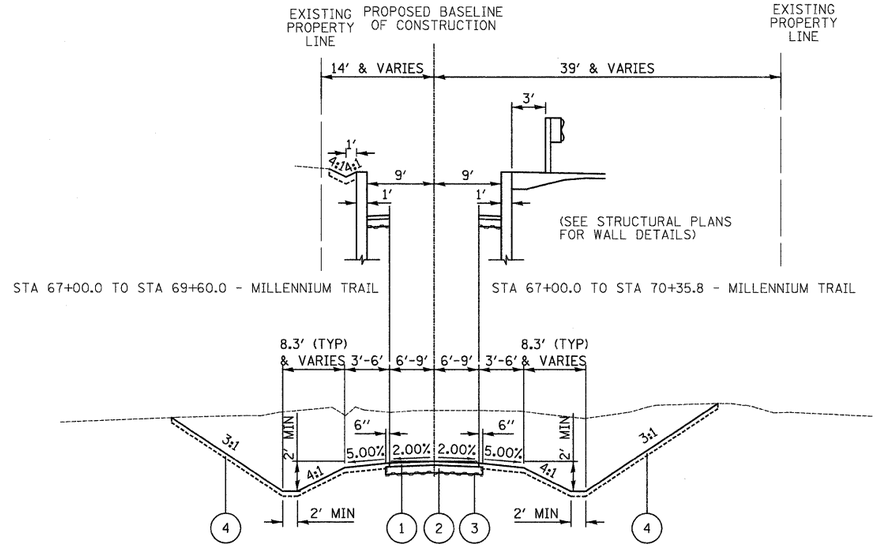
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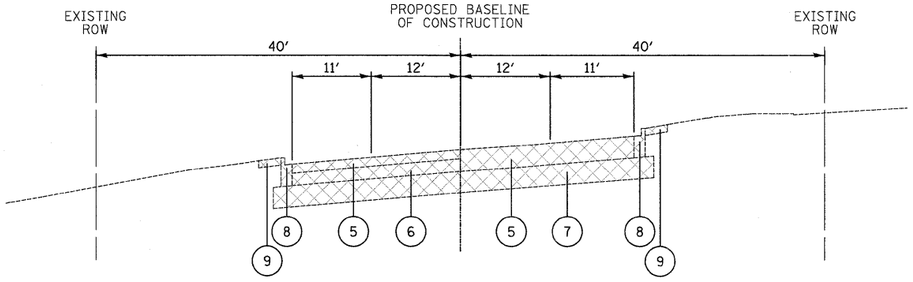
SUMMARY OF QUANTITIES
GRAND AVENUE UNDERPASS
SHEET NO. 2 OF 2 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	4
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



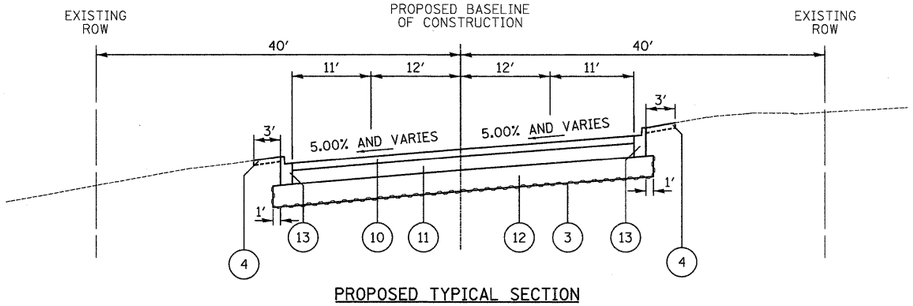
PROPOSED TYPICAL SECTION

STA 65+00.0 TO STA 81+36.0 - MILLENNIUM TRAIL



EXISTING TYPICAL SECTION

STA 197+40.0 TO STA 199+00.0 - GRAND AVENUE



PROPOSED TYPICAL SECTION

STA 197+40.0 TO STA 199+00.0 - GRAND AVENUE

LEGEND

1. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 3"
2. PROPOSED AGGREGATE BASE COURSE, TYPE A, 6"
3. PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
4. PROPOSED TOPSOIL EXCAVATION AND PLACEMENT (4" MINIMUM)
5. EXISTING HOT-MIX ASPHALT COURSE, THICKNESS VARIES FROM 5-3/4" TO 13-1/4" (REFERENCE SOIL EXPLORATION AND ANALYSIS REPORT PREPARED BY MIDLAND STANDARD ENGINEERING & TESTING DATED APRIL 7, 2011)
6. EXISTING PCC BASE COURSE, 7-3/4" (REFERENCE SOIL EXPLORATION AND ANALYSIS REPORT PREPARED BY MIDLAND STANDARD ENGINEERING & TESTING DATED APRIL 7, 2011)
7. EXISTING GRANULAR SUBGRADE COURSE
8. EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
9. EXISTING HOT-MIX ASPHALT SHOULDER, 4"
10. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
11. HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 12"
12. PROPOSED AGGREGATE SUBGRADE, 12"
13. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (WHERE PCC BASE COURSE REMAINS, PROPOSED 24" LONG NO. 6 EPOXY COATED TIE BARS @ 24" C-C SHALL BE PLACED AND PAID FOR AS COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12)

REMOVAL

SOIL NOTES: (GEOTECHNICAL REPORT PREPARED BY MIDLAND STANDARD ENGINEERING & TESTING AND DATED APRIL 7, 2011)

1. A WORKING PLATFORM SHALL BE CONSTRUCTED TO MAINTAIN THE INTEGRITY OF THE EXPOSED BEARING SOIL FROM SOFTENING AND DISTURBANCE. THIS SHALL BE ACCOMPLISHED BY PLACING A MUD MAT 8"-INCH THICK LAYER OF OPEN GRADED AGGREGATE. THIS PROTECTIVE SUBGRADE SOIL LAYER SHALL BE PLACED SOON AFTER EXCAVATION AND APPROVAL OF BEARING SOIL. THIS WORK SHALL BE PAID FOR AS EARTH EXCAVATION AND POROUS GRANULAR EMBANKMENT, SUBGRADE.

2. POROUS GRANULAR EMBANKMENT (PGE) AND POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) HAVE BEEN PROVIDED FOR SOILS THAT ARE UNSTABLE WHEN WET. THE NEED FOR REMOVAL AND REPLACEMENT WITH PGE OR PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER (BY USE OF A CONE PENETROMETER IN CONJUNCTION WITH THE IDOT SUBGRADE MANUAL). IF UNSTABLE SOILS ARE ENCOUNTERED, THE SOILS SHALL BE REMOVED AND REPLACED WITH PGE OR PGES. IF UNSTABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY WILL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE CONTRACTOR.

3. NO SOIL SHALL BE USED TO BACKFILL THE FOOTINGS. WHETHER THE SOIL IS UNSTABLE OR NOT, PGE SHALL BE USED.

4. IT SHALL BE EXPECTED THAT EXCAVATION FOR THE PROPOSED TUNNEL AND FOOTINGS WILL ENCOUNTER GROUNDWATER SEEPAGE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE PREPARED TO DEWATER THESE ACCUMULATIONS.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	**AIR VOIDS**
FULL-DEPTH PAVEMENT (GRAND AVENUE)	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2" (IL-9.5 mm)	4% @ 70 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 12" (IN 4 LIFTS)	4% @ 70 Gyr.
BIKE PATH (MILLENNIUM TRAIL)	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 3" (IL-9.5 mm)	4% @ 50 Gyr.
TEMPORARY PAVEMENT (GRAND AVENUE)	
TEMP PAVEMENT (HMA BINDER COURSE, IL-19mm), 8" (IN 3 LIFTS)	4% @ 50 Gyr.

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR "PERCENT OF RAP" SEE SPECIAL PROVISIONS.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

N.T.S.

TYPICAL SECTIONS
GRAND AVENUE UNDERPASS

SHEET NO. 1 OF 1 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	5
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONDENSED SCHEDULE OF EARTH QUANTITIES

	EARTH EXCAVATION (20200100)	TOPSOIL EXCAVATION AND PLACEMENT (21101505)(1)	FURNISHED EXCAVATION (20400800)(2)	POROUS GRANULAR EMBANKMENT (20700220)(3)	POROUS GRANULAR EMBANKMENT, SUBGRADE (Z0042002)(4)
	(CU FT)	(CU FT)	(CU FT)	(CU FT)	(CU FT)
SUBTOTAL GRAND AVE STAGE 1	16,650	38,200	31,150	0	0
SUBTOTAL GRAND AVE STAGE 2	7,700	3,050	37,250	20,207	16,636
SUBTOTAL BIKE PATH	399,653	129,420	254,464	150,708	0
SUBTOTAL BERM	0	47,100	315,775	0	0
ASSUMED 8" THICK WORKING PLATFORM FOR THE STRUCTURE	3,557	0	0	0	3,557
UNSUITABLE SOILS - ASSUMED 10% AREA OF THE BIKE PATH	13,766	0	0	0	13,766
STRUCTURAL QUANTITY	0	0	0	27,216	0
PROJECT SUBTOTAL (CU. FT.)	441,326	217,770	638,639	198,131	33,959
PROJECT SUBTOTAL (CU. YD.)	16,346	8,066	23,653	7,339	1,258
SHRINKAGE FACTOR ADJUSTMENT (15%)	-	-	x 1.15	-	-
PROJECT TOTAL NEEDED (CU. YD.)	16,346	8,066	27,202	7,339	1,258
PROJECT TOTAL (CU. YD.)	16,346	8,066	100	7,339	1,258

(1) ESTIMATE INCLUDES APPROXIMATELY 12 INCHES OF TOPSOIL STRIPPING.

(2) THERE IS NO HAUL-OFF ANTICIPATED AND ALL CUT SHOULD BE WASTED ON SITE AT THE DIRECTION OF ENGINEER. APPROXIMATE FILL QUANTITIES ARE PROVIDED FOR REFERENCE ONLY. 100 CU YD OF FURNISHED EXCAVATION HAS BEEN PROVIDED AS A CONTINGENCY QUANTITY.

(3) ESTIMATE INCLUDES PGE FROM THE TOP OF THE TUNNEL ELEVATION TO THE BOTTOM OF PGES ALONG GRAND AVENUE, AND FOR VOLUMES REFLECTING A CUT SLOPE OF 3:1 FROM THE BOTTOM OF THE FOOTING TO THE TOP OF THE TUNNEL ELEVATION.

(4) ESTIMATE INCLUDES 12" OF PGES UNDERNEATH AGGREGATE SUBGRADE ALONG THE GRAND AVENUE.

SCHEDULE OF PAVEMENT MARKING ITEMS

STATION FROM	STATION TO	(70300100) SHORT-TERM PAVEMENT MARKING (FOOT)	(70300220) TEMPORARY PAVEMENT MARKING - LINE 4" (FOOT)	(70300520) PAVEMENT MARKING TAPE, TYPE III 4" (FOOT)	(70300540) PAVEMENT MARKING TAPE, TYPE III 6" (FOOT)	(70301000) WORK ZONE PAVEMENT MARKING REMOVAL (SQ FT)	(78000200) THERMOPLASTIC PAVEMENT MARKING - LINE 4" (FOOT)	(78300100) PAVEMENT MARKING REMOVAL (FOOT)
GRAND AVENUE								
183+80	212+60	1,152	2,209	16,807	1,341	5,603	7,100	2,367
Subtotal:		1,152	2,209	16,807	1,341	5,603	7,100	2,367
BIKE PATH								
66+00	74+00	0	0	0	0	0	0	0
74+00	81+36	0	0	0	0	0	0	0
Subtotal:		0	0	0	0	0	0	0
PROJECT TOTAL:		1,152	2,209	16,807	1,341	5,603	7,100	2,367

SCHEDULE OF REMOVAL ITEMS

STATION FROM	STATION TO	(44000100) PAVEMENT REMOVAL (SQ FT)	(44000100) PAVEMENT REMOVAL (SQ YD)	(44000200) DRIVEWAY PAVEMENT REMOVAL (SQ FT)	(44000200) DRIVEWAY PAVEMENT REMOVAL (SQ YD)	(44000500) COMBINATION CURB AND GUTTER REMOVAL (FOOT)
GRAND AVENUE						
183+80	212+60	18,889	2,099	0	0	1,602
Subtotal:			2,099		0	1,602
BIKE PATH						
66+00	74+00	0	0	19,286	2,143	0
74+00	81+36	0	0	0	0	0
Subtotal:			0		2,143	0
PROJECT TOTAL:			2,099		2,143	1,602

SCHEDULE OF AGGREGATE QUANTITIES

STATION FROM	STATION TO	(35101800) AGGREGATE BASE COURSE, TYPE B 6" (SQ FT)	(35101800) AGGREGATE BASE COURSE, TYPE B 6" (SQ YD)	(Z0001050) AGGREGATE SUBGRADE 12" (SQ FT)	(Z0001050) AGGREGATE SUBGRADE 12" (SQ YD)	(XX002007) AGGREGATE BICYCLE PATH (SQ FT)	(XX002007) AGGREGATE BICYCLE PATH (SQ YD)
GRAND AVENUE							
183+80	212+60	0	0	11,365	1,263	0	0
Subtotal:			0		1,263		0
BIKE PATH							
66+00	74+00	13,313	1,480	0	0	240	27
74+00	81+36	10,884	1,210	0	0	0	0
Subtotal:			2,690		0		27
PROJECT TOTAL:			2,690		1,263		27

SCHEDULE OF STORM SEWER PIPES

PIPE #	(5421D012) PIPE CULVERTS, CLASS D, TYPE 1 12" (TEMPORARY) (FOOT)	(5421D024) PIPE CULVERTS, CLASS D, TYPE 1 24" (TEMPORARY) (FOOT)	(550A0050) STORM SEWERS, CLASS A, TYPE 1 12" (FOOT)	(550A0070) STORM SEWERS, CLASS A, TYPE 1 15" (FOOT)	(550A0120) STORM SEWERS, CLASS A, TYPE 1 24" (FOOT)	(550B0030) STORM SEWERS, CLASS B, TYPE 1 8" (FOOT)	(550B0050) STORM SEWERS, CLASS B, TYPE 1 12" (FOOT)
1			17				
2						274	
3				5			
4				27			
5					166		
6					19		
7							38
8							38
Temporary	15						
Temporary		30					
Structural						20	
PROJECT TOTAL:	15	30	17	32	185	294	76

SCHEDULE OF DRAINAGE STRUCTURES

STRUCTURE #	STATION	OFFSET	(54213669) PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24" (EACH)	(54215543) METAL SECTIONS 8" (EACH)	(54215547) METAL SECTIONS 12" (EACH)	(54215559) METAL SECTIONS 24" (EACH)	(54244405) FLUSH INLET BOX FOR MEDIAN, STANDARD 542546 (EACH)	(54247130) GRATING FOR CONCRETE FLARED END SECTION 24" (EACH)	(60200805) CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 8 GRATE (EACH)	(60207605) CATCH BASINS, TYPE C, TYPE 8 GRATE (EACH)	(X6023102) MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID, SPECIAL (EACH)
1	66+85.00	10.00' RT								1	
2	66+85.00	10.00' LT							1		
3	69+61.75	20.87' LT		1							
4	70+70.00	19.68' LT					1				
5	70+70.00	11.28' LT									1
6	70+70.00	19.68' RT					1				
7	72+37.83	7.75' RT									1
8	72+57.59	26.28' RT	1					1			
9	76+50.00	18.32' LT			1						
10	76+50.00	19.85' RT			1						
11	78+50.00	18.32' LT			1						
12	78+50.00	19.85' RT			1						
Temporary	201+75.94	48.89' LT	1					1			
Temporary	201+71.54	78.57' LT				1					
Temporary	194+11.15	59.22' LT			1						
Permanent	194+12.15	28.16' LT							1		
PROJECT TOTAL:			2	1	5	1	2	2	2	1	2

SCHEDULE OF PAVING QUANTITIES

STATION FROM	STATION TO	(40603335) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (SQ FT)	(40603335) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (TON)	(40603340) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (SQ FT)	(40603340) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (TON)	(40701961) HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 14" (SQ FT)	(40701961) HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 14" (SQ YD)	(Z0062456) TEMPORARY PAVEMENT (SQ FT)	(Z0062456) TEMPORARY PAVEMENT (SQ YD)
GRAND AVENUE									
183+80	212+60	0	0	2,564	32	7,364	819	11,525	1,281
Subtotal:			0		32		819		1,281
BIKE PATH									
66+00	74+00	12,530	234	0	0	0	0	0	0
74+00	81+36	10,063	188	0	0	0	0	0	0
Subtotal:			422		0		0		0
PROJECT TOTAL:			422		32		819		1,281

SURVEYED / PLOTTED / TEMPLATE / AREAS CHECKED / NOTE BOOK / NO. / BY / DATE

FINAL SURVEY / ORIGINAL SURVEY

USER NAME = pk	DESIGNED - PK	REVISED -
FILE NAME ...\2322_Schedules.dgn	DRAWN - PK	REVISED -
PLOT SCALE 50.00 ' / in.	CHECKED - RTM	REVISED -
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
GRAND AVENUE UNDERPASS
SHEET NO. 1 OF 3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	6
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

EXTENDED SCHEDULE OF EARTH QUANTITIES

STATION	DISTANCE	EARTH EXCAVATION	TOPSOIL EXCAVATION AND PLACEMENT	FURNISHED EXCAVATION	EARTH EXCAVATION	TOPSOIL EXCAVATION AND PLACEMENT	FURNISHED EXCAVATION	EARTH EXCAVATION	TOPSOIL EXCAVATION AND PLACEMENT	FURNISHED EXCAVATION
(XX+XX)	(FT)	(SQ FT)	(SQ FT)	(SQ FT)	AVG. (SQ FT)	AVG. (SQ FT)	AVG. (SQ FT)	(CU FT)	(CU FT)	(CU FT)
BIKE PATH										
64+50		0	0	0						
	50				0	13	13	0	650	650
65+00		0	26	26						
	50				0	26	24	0	1,275	1,175
65+50		0	25	21						
	50				0	27	29	0	1,350	1,425
66+00		0	29	36						
	21				0	28	35	0	585	734
66+21		0	26	33						
	29				0	29	33	0	833	948
66+50		0	32	33						
	50				6	32	19	300	1,575	950
67+00		12	31	5						
	50				28	32	5	1,375	1,600	250
67+50		43	33	5						
	50				55	32	6	2,725	1,575	300
68+00		66	30	7						
	50				79	30	7	3,925	1,500	350
68+50		91	30	7						
	50				107	29	7	5,350	1,450	350
69+00		123	28	7						
	50				276	65	9	13,775	3,225	425
69+50		428	101	10						
	50				919	117	10	45,950	5,850	475
70+00		1,410	133	9						
	50				1,633	150	9	81,625	7,475	450
70+50		1,855	166	9						
	50				1,639	142	5	81,925	7,075	250
71+00		1,422	117	1						
	6				1,250	111	1	7,110	632	6
71+06		1,077	105	1						
	0				539	53	1	0	0	0
71+06		0	0	0						
	108				0	0	0	0	0	0
72+14		0	0	0						
	0				363	42	1	0	0	0
72+14		725	84	1						
	36				982	113	1	35,656	4,103	36
72+50		1,239	142	1						
	50				969	141	2	48,450	7,050	75
73+00		699	140	2						
	50				408	118	8	20,400	5,900	375
73+50		117	96	13						
	50				67	91	81	3,325	4,550	4,025
74+00		16	86	148						
	50				13	86	175	650	4,300	8,725
74+50		10	86	201						
	50				21	90	213	1,025	4,500	10,625
75+00		31	94	224						
	50				17	89	262	825	4,425	13,075
75+50		2	83	299						
	50				1	84	335	50	4,200	16,725
76+00		0	85	370						
	50				0	92	403	0	4,575	20,125
76+50		0	98	435						
	50				0	115	557	0	5,750	27,850
77+00		0	132	679						
	38				0	130	744	0	4,940	28,272
77+38		0	128	809						
	62				0	120	724	0	7,409	44,888
78+00		0	111	639						
	50				0	110	630	0	5,500	31,475

EXTENDED SCHEDULE OF EARTH QUANTITIES

STATION	DISTANCE	EARTH EXCAVATION	TOPSOIL EXCAVATION AND PLACEMENT	FURNISHED EXCAVATION	EARTH EXCAVATION	TOPSOIL EXCAVATION AND PLACEMENT	FURNISHED EXCAVATION	EARTH EXCAVATION	TOPSOIL EXCAVATION AND PLACEMENT	FURNISHED EXCAVATION
(XX+XX)	(FT)	(SQ FT)	(SQ FT)	(SQ FT)	AVG. (SQ FT)	AVG. (SQ FT)	AVG. (SQ FT)	(CU FT)	(CU FT)	(CU FT)
78+50		0	109	620						
	50				0	103	505	0	5,125	25,250
79+00		0	96	390						
	50				14	84	217	700	4,200	10,825
79+50		28	72	43						
	50				179	81	23	8,925	4,050	1,125
80+00		329	90	2						
	50				380	95	2	19,000	4,725	100
80+50		431	99	2						
	50				282	92	4	14,100	4,575	175
81+00		133	84	5						
	36				68	65	34	2,451	2,343	1,225
81+36		3	46	63						
	0				3	46	63	0	0	0
81+36		3	46	63						
	24				2	23	32	36	551	755
81+60		0	0	0						
							SUBTOTAL BIKE PATH	**399,653**	**129,420**	**254,464**
BERM										
10+00		0	0	0						
	50				0	23	23	0	1,150	1,150
10+50		0	46	46						
	50				0	133	303	0	6,650	15,125
11+00		0	220	559						
	50				0	226	835	0	11,275	41,725
11+50		0	231	1,110						
	50				0	224	1,562	0	11,200	78,075
12+00		0	217	2,013						
	50				0	206	2,129	0	10,300	106,450
12+50		0	195	2,245						
	50				0	98	1,123	0	4,875	56,125
13+00		0	132	1,370						
	25				0	66	685	0	1,650	17,125
13+25		0	0	0						
							SUBTOTAL BERM	**0**	**47,100**	**315,775**
GRAND AVENUE STAGE 1										
192+50		0	0	0						
	50				0	4	2	0	200	75
193+00		0	8	3						
	50				0	12	4	0	575	175
193+50		0	15	4						
	50				13	20	3	625	975	125
194+00		25	24	1						
	50				31	26	1	1,525	1,275	50
194+50		36	27	1						
	50				38	28	1	1,875	1,375	50
195+00		39	28	1						
	50				33	27	1	1,625	1,325	50
195+50		26	25	1						
	50				27	26	1	1,350	1,300	50
196+00		28	27	1						
	50				24	27	1	1,200	1,325	50
196+50		20	26	1						
	50				20	29	2	1,000	1,450	75
197+00		20	32	2						
	50				16	28	2	775	1,400	75
197+50		11	24	1						
	50				11	24	1	525	1,175	50
198+00		10	23	1						
	50				6	22	2	275	1,100	75
198+50		1	21	2						
	50				1	21	3	50	1,050	125
199+00		1	21	3						

DATE / BY / SURVEYED / PLOTTED / TEMPLATE / ISSUE / AREAS CHECKED
FINAL SURVEY / NOTE BOOK / NO.

ORIGINAL SURVEY / NOTE BOOK / NO. / SURVEYED / PLOTTED / TEMPLATE / ISSUE / AREAS CHECKED / BY / DATE

USER NAME = pk	DESIGNED - PK	REVISED -
FILE NAME ...\2322_Schedules.dgn	DRAWN - PK	REVISED -
PLOT SCALE 50.00 ' / in.	CHECKED - RTM	REVISED -
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
GRAND AVENUE UNDERPASS
SHEET NO. 2 OF 3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	7
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

EXTENDED SCHEDULE OF EARTH QUANTITIES

STATION	DISTANCE	EARTH EXCAVATION	TOPSOIL EXCAVATION AND PLACEMENT	FURNISHED EXCAVATION	EARTH EXCAVATION	TOPSOIL EXCAVATION AND PLACEMENT	FURNISHED EXCAVATION	EARTH EXCAVATION	TOPSOIL EXCAVATION AND PLACEMENT	FURNISHED EXCAVATION
(XX+XX)	(FT)	(SQ FT)	(SQ FT)	(SQ FT)	AVG. (SQ FT)	AVG. (SQ FT)	AVG. (SQ FT)	(CU FT)	(CU FT)	(CU FT)
	50				4	22	2	200	1,075	100
199+50		7	22	1						
	50				4	18	3	175	900	150
200+00		0	14	5						
	50				0	18	12	0	875	600
200+50		0	21	19						
	50				0	30	49	0	1,500	2,450
201+00		0	39	79						
	50				0	48	123	0	2,400	6,125
201+50		0	57	166						
	50				0	57	165	0	2,850	8,250
202+00		0	57	164						
	50				0	51	133	0	2,550	6,625
202+50		0	45	101						
	50				0	36	69	0	1,800	3,425
203+00		0	27	36						
	50				0	24	27	0	1,175	1,350
203+50		0	20	18						
	50				0	15	11	0	750	525
204+00		0	10	3						
	50				4	13	2	175	650	100
204+50		7	16	1						
	50				11	18	1	550	875	50
205+00		15	19	1						
	50				20	21	1	1,000	1,050	50
205+50		25	23	1						
	50				21	24	1	1,025	1,175	50
206+00		16	24	1						
	50				20	25	1	975	1,225	50
206+50		23	25	1						
	50				21	26	1	1,025	1,300	50
207+00		18	27	1						
	50				12	22	2	575	1,100	100
207+50		5	17	3						
	50				3	9	2	125	425	75
208+00		0	0	0						
	50				0	0	0	0	0	0
208+50		0	0	0						
					SUBTOTAL GRAND AVENUE STAGE 1			16,650	38,200	31,150
GRAND AVENUE STAGE 2										
192+50		0	0	0						
	50				4	0	3	175	0	125
193+00		7	0	5						
	50				7	0	5	325	0	250
193+50		6	0	5						
	50				6	0	21	275	0	1,025
194+00		5	0	36						
	50				5	0	40	250	0	1,975
194+50		5	0	43						
	50				5	0	44	250	0	2,200
195+00		5	0	45						
	50				5	0	41	250	0	2,025
195+50		5	0	36						
	50				5	0	37	250	0	1,850
196+00		5	0	38						
	50				5	0	37	250	0	1,825
196+50		5	0	35						
	50				5	0	44	250	0	2,175
197+00		5	0	52						
	50				6	2	41	275	75	2,025
197+50		6	3	29						
	50				6	15	49	300	750	2,450
198+00		6	27	69						

EXTENDED SCHEDULE OF EARTH QUANTITIES

STATION	DISTANCE	EARTH EXCAVATION	TOPSOIL EXCAVATION AND PLACEMENT	FURNISHED EXCAVATION	EARTH EXCAVATION	TOPSOIL EXCAVATION AND PLACEMENT	FURNISHED EXCAVATION	EARTH EXCAVATION	TOPSOIL EXCAVATION AND PLACEMENT	FURNISHED EXCAVATION
(XX+XX)	(FT)	(SQ FT)	(SQ FT)	(SQ FT)	AVG. (SQ FT)	AVG. (SQ FT)	AVG. (SQ FT)	(CU FT)	(CU FT)	(CU FT)
	50				6	27	68	275	1,325	3,400
198+50		5	26	67						
	50				6	16	42	275	775	2,075
199+00		6	5	16						
	50				6	3	18	275	125	900
199+50		5	0	20						
	50				5	0	15	250	0	725
200+00		5	0	9						
	50				5	0	9	250	0	450
200+50		5	0	9						
	50				5	0	9	250	0	450
201+00		5	0	9						
	50				5	0	9	250	0	425
201+50		5	0	8						
	50				5	0	8	250	0	400
202+00		5	0	8						
	50				5	0	8	250	0	400
202+50		5	0	8						
	50				5	0	8	250	0	400
203+00		5	0	8						
	50				5	0	8	250	0	375
203+50		5	0	7						
	50				5	0	7	250	0	325
204+00		5	0	6						
	50				5	0	10	250	0	500
204+50		5	0	14						
	50				5	0	19	250	0	925
205+00		5	0	23						
	50				5	0	26	250	0	1,275
205+50		5	0	28						
	50				5	0	31	250	0	1,525
206+00		5	0	33						
	50				5	0	34	250	0	1,675
206+50		5	0	34						
	50				6	0	34	275	0	1,700
207+00		6	0	34						
	50				4	0	23	175	0	1,125
207+50		1	0	11						
	50				2	0	6	75	0	275
208+00		2	0	0						
					SUBTOTAL GRAND AVENUE STAGE 2			7,700	3,050	37,250

NOTE:

REFER TO THE CONDENSED SCHEDULE OF EARTH QUANTITIES FOR PROJECT TOTALS.

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

USER NAME = pk	DESIGNED - PK	REVISED -
FILE NAME ...\2322_Schedules.dgn	DRAWN - PK	REVISED -
PLOT SCALE 50.00 ' / in.	CHECKED - RTM	REVISED -
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
GRAND AVENUE UNDERPASS
SHEET NO. 3 OF 3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	8
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

GRAND CURVE NO. 1

PI STA. = 196+20.71
Δ = 23° 20′ 35″ (LT)
D = 3° 59′ 57″
R = 1,432.69′
T = 295.95′
L = 583.69′
E = 30.25′
P.C. STA = 193+24.76
P.T. STA = 199+08.46

GRAND CURVE NO. 2

PI STA. = 205+26.25
Δ = 0° 30′ 23″ (LT)
D = 0° 09′ 46″
R = 35,197.20′
T = 155.55′
L = 311.10′
E = 0.34′
P.C. STA = 203+70.70
P.T. STA = 206+81.80

TRAIL CURVE NO. 1

PI STA. = 63+19.35
Δ = 7° 54′ 23″ (RT)
D = 22° 55′ 06″
R = 250.00′
T = 17.28′
L = 34.50′
E = 0.60′
P.C. STA = 63+02.07
P.T. STA = 63+36.57

TRAIL CURVE NO. 2

PI STA. = 63+86.79
Δ = 35° 54′ 26″ (RT)
D = 57° 17′ 45″
R = 100.00′
T = 32.40′
L = 62.67′
E = 5.12′
P.C. STA = 63+54.38
P.T. STA = 64+17.05

TRAIL CURVE NO. 3

PI STA. = 64+35.44
Δ = 10° 30′ 12″ (LT)
D = 28° 38′ 52″
R = 200.00′
T = 18.38′
L = 36.66′
E = 0.84′
P.C. STA = 64+17.05
P.T. STA = 64+53.72

TRAIL CURVE NO. 4

PI STA. = 66+06.39
Δ = 29° 34′ 17″ (LT)
D = 57° 17′ 45″
R = 100.00′
T = 26.39′
L = 51.61′
E = 3.42′
P.C. STA = 65+80.00
P.T. STA = 66+31.61

TRAIL CURVE NO. 5

PI STA. = 66+58.01
Δ = 29° 34′ 17″ (RT)
D = 57° 17′ 45″
R = 100.00′
T = 26.39′
L = 51.61′
E = 3.42′
P.C. STA = 66+31.61
P.T. STA = 66+83.22

TRAIL CURVE NO. 6

PI STA. = 69+53.43
Δ = 35° 43′ 51″ (LT)
D = 57° 17′ 45″
R = 100.00′
T = 32.23′
L = 62.36′
E = 5.07′
P.C. STA = 69+21.20
P.T. STA = 69+83.56

TRAIL CURVE NO. 7

PI STA. = 70+68.55
Δ = 20° 10′ 38″ (RT)
D = 38° 11′ 50″
R = 150.00′
T = 26.69′
L = 52.82′
E = 2.36′
P.C. STA = 70+41.86
P.T. STA = 70+94.69

TRAIL CURVE NO. 8

PI STA. = 73+36.44
Δ = 15° 49′ 52″ (RT)
D = 7° 38′ 22″
R = 750.00′
T = 104.28′
L = 207.23′
E = 7.21′
P.C. STA = 72+32.16
P.T. STA = 74+39.39

TRAIL CURVE NO. 9

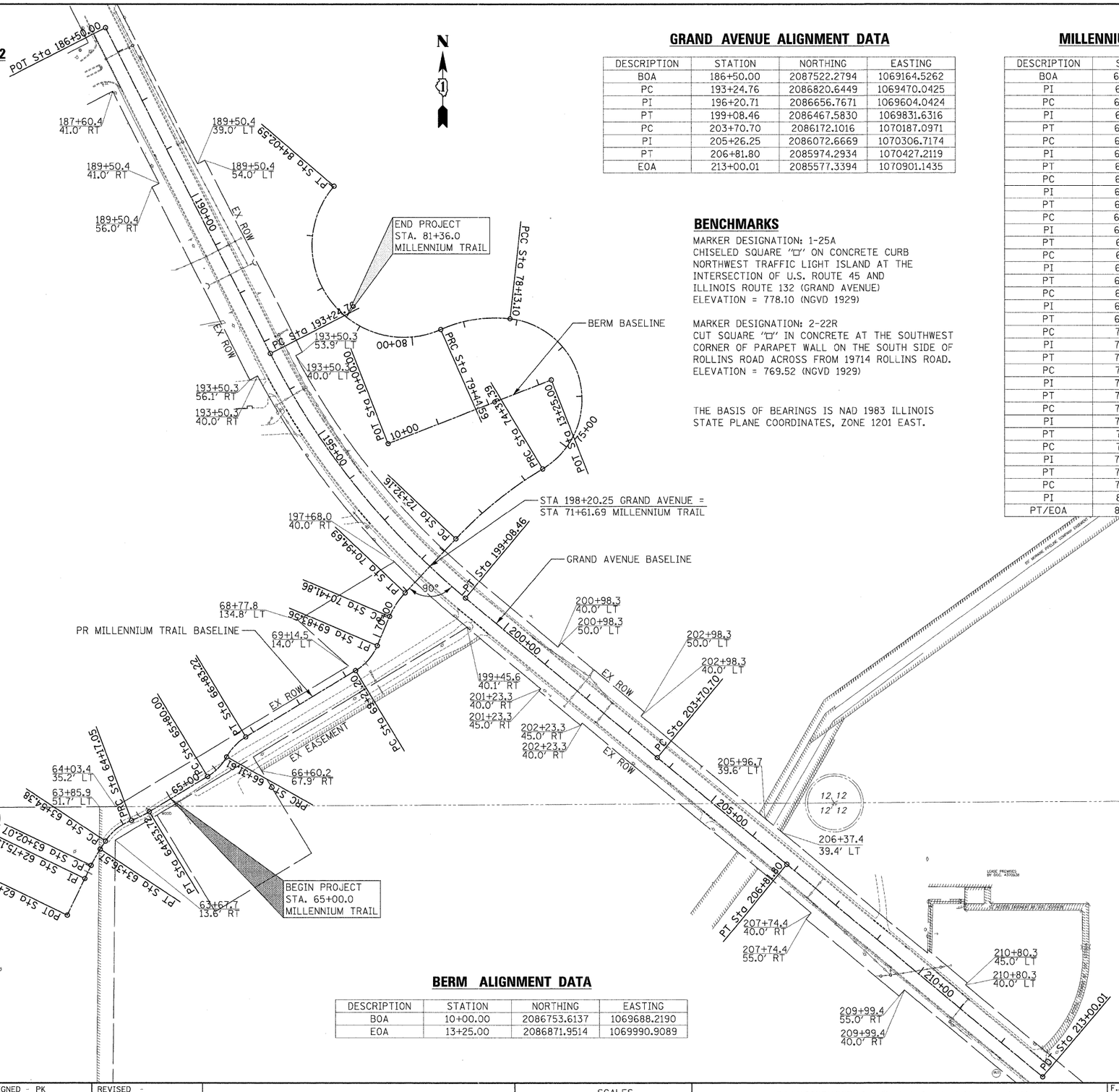
PI STA. = 78+84.42
Δ = 142° 44′ 46″ (LT)
D = 38° 11′ 50″
R = 150.00′
T = 445.02′
L = 373.71′
E = 319.62′
P.C. STA = 74+39.39
P.T. STA = 78+13.10

TRAIL CURVE NO. 10

PI STA. = 78+80.40
Δ = 30° 08′ 07″ (LT)
D = 22° 55′ 06″
R = 250.00′
T = 68.30′
L = 132.49′
E = 8.90′
P.C. STA = 78+13.10
P.T. STA = 79+44.59

TRAIL CURVE NO. 11

PI STA. = 86+91.71
Δ = 154° 21′ 44″ (RT)
D = 33° 42′ 12″
R = 170.00′
T = 764.12′
L = 458.00′
E = 596.22′
P.C. STA = 79+44.59
P.T. STA = 84+02.59



GRAND AVENUE ALIGNMENT DATA

DESCRIPTION	STATION	NORTHING	EASTING
BOA	186+50.00	2087522.2794	1069164.5262
PC	193+24.76	2086820.6449	1069470.0425
PI	196+20.71	2086656.7671	1069604.0424
PT	199+08.46	2086467.5830	1069831.6316
PC	203+70.70	2086172.1016	1070187.0971
PI	205+26.25	2086072.6669	1070306.7174
PT	206+81.80	2085974.2934	1070427.2119
EOA	213+00.01	2085577.3394	1070901.1435

MILLENNIUM TRAIL ALIGNMENT DATA

DESCRIPTION	STATION	NORTHING	EASTING
BOA	62+00.00	2085879.8807	1069093.1996
PI	62+75.13	2085947.5670	1069125.8105
PC	63+02.07	2085971.8784	1069137.4094
PI	63+19.35	2085987.4711	1069144.8487
PT	63+36.57	2086001.8922	1069154.3620
PC	63+54.38	2086016.7652	1069164.1734
PI	63+86.79	2086043.8127	1069182.0161
PT	64+17.05	2086055.2559	1069212.3308
PC	64+17.05	2086055.2559	1069212.3308
PI	64+35.44	2086061.7481	1069229.5295
PT	64+53.72	2086071.2667	1069245.2565
PC	65+80.00	2086136.6536	1069353.2917
PI	66+06.39	2086150.3203	1069375.8726
PT	66+31.61	2086173.3506	1069388.7673
PC	66+31.61	2086173.3506	1069388.7673
PI	66+58.01	2086196.3810	1069401.6621
PT	66+83.22	2086210.0477	1069424.2429
PC	69+21.20	2086333.2692	1069627.8351
PI	69+53.43	2086349.9588	1069655.4103
PT	69+83.56	2086379.6101	1069668.0487
PC	70+41.86	2086433.2405	1069690.9077
PI	70+68.55	2086457.7917	1069701.3722
PT	70+94.69	2086477.2267	1069719.6628
PC	72+32.16	2086577.3396	1069813.8810
PI	73+36.44	2086653.2774	1069885.3474
PT	74+39.39	2086706.8387	1069974.8191
PC	74+39.39	2086706.8387	1069974.8191
PI	78+84.42	2086935.4196	1070356.6532
PT	78+13.10	2086984.6203	1069914.3571
PC	78+13.10	2086984.6203	1069914.3571
PI	78+80.40	2086992.0612	1069847.4657
PT	79+44.59	2086964.9140	1069785.8796
PC	79+44.59	2086964.9140	1069785.8796
PI	86+91.71	2086663.5603	1069102.2301
PT/EOA	84+02.59	2087231.0455	1069588.1840

BENCHMARKS

MARKER DESIGNATION: 1-25A
CHISELED SQUARE "□" ON CONCRETE CURB
NORTHWEST TRAFFIC LIGHT ISLAND AT THE
INTERSECTION OF U.S. ROUTE 45 AND
ILLINOIS ROUTE 132 (GRAND AVENUE)
ELEVATION = 778.10 (NGVD 1929)

MARKER DESIGNATION: 2-22R
CUT SQUARE "□" IN CONCRETE AT THE SOUTHWEST
CORNER OF PARAPET WALL ON THE SOUTH SIDE OF
ROLLINS ROAD ACROSS FROM 19714 ROLLINS ROAD.
ELEVATION = 769.52 (NGVD 1929)

THE BASIS OF BEARINGS IS NAD 1983 ILLINOIS
STATE PLANE COORDINATES, ZONE 1201 EAST.

NOTES:

EXISTING ROADWAY CONFIGURATION SHOWN
BOA = BEGINNING OF ALIGNMENT
BOP = BEGINNING OF PROJECT
PC = POINT OF CURVATURE
PRC = POINT OF REVERSE CURVATURE
PT = POINT OF TANGENT
PI = POINT OF INTERSECTION
EOA = END OF ALIGNMENT
EOP = END OF PROJECT
CP = CONTROL POINT
BM = BENCH MARK

BERM ALIGNMENT DATA

DESCRIPTION	STATION	NORTHING	EASTING
BOA	10+00.00	2086753.6137	1069688.2190
EOA	13+25.00	2086871.9514	1069990.9089

FINAL SURVEY — SURVEYED — PLOTTED — TEMPLATE — CROSS SECTIONS — NOTE BOOK — NO. — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — SURVEYED — PLOTTED — TEMPLATE — CROSS SECTIONS — NOTE BOOK — NO. — AREAS CHECKED — BY — DATE

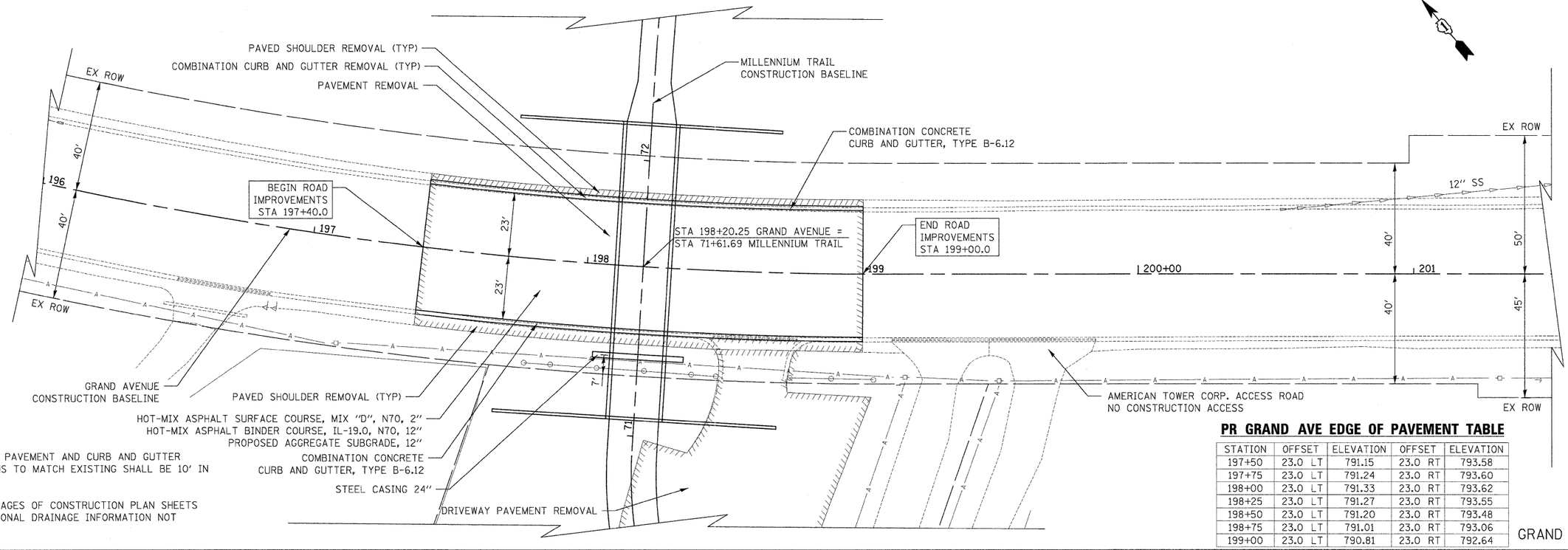
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PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
HORIZ. 0 100 200

ALIGNMENT, TIES AND BENCHMARKS
GRAND AVENUE UNDERPASS
SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	9
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



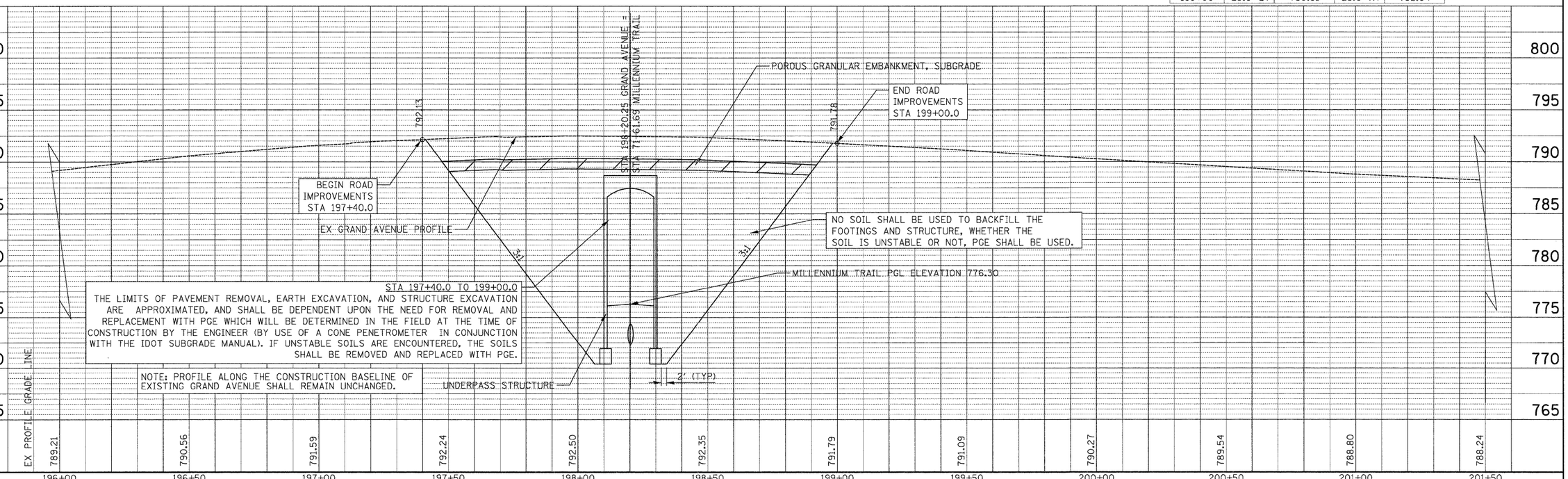
NOTES:
1. EDGE OF PAVEMENT AND CURB AND GUTTER TRANSITIONS TO MATCH EXISTING SHALL BE 10' IN LENGTH.

2. SEE STAGES OF CONSTRUCTION PLAN SHEETS FOR ADDITIONAL DRAINAGE INFORMATION NOT SHOWN.

PR GRAND AVE EDGE OF PAVEMENT TABLE

STATION	OFFSET	ELEVATION	OFFSET	ELEVATION
197+50	23.0 LT	791.15	23.0 RT	793.58
197+75	23.0 LT	791.24	23.0 RT	793.60
198+00	23.0 LT	791.33	23.0 RT	793.62
198+25	23.0 LT	791.27	23.0 RT	793.55
198+50	23.0 LT	791.20	23.0 RT	793.48
198+75	23.0 LT	791.01	23.0 RT	793.06
199+00	23.0 LT	790.81	23.0 RT	792.64

GRAND AVENUE



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PLOT SCALE 20.0000 ' / in.	CHECKED - RTM	REVISED -
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 20 40

GRAND AVENUE – ROADWAY PLAN & PROFILE
GRAND AVENUE UNDERPASS

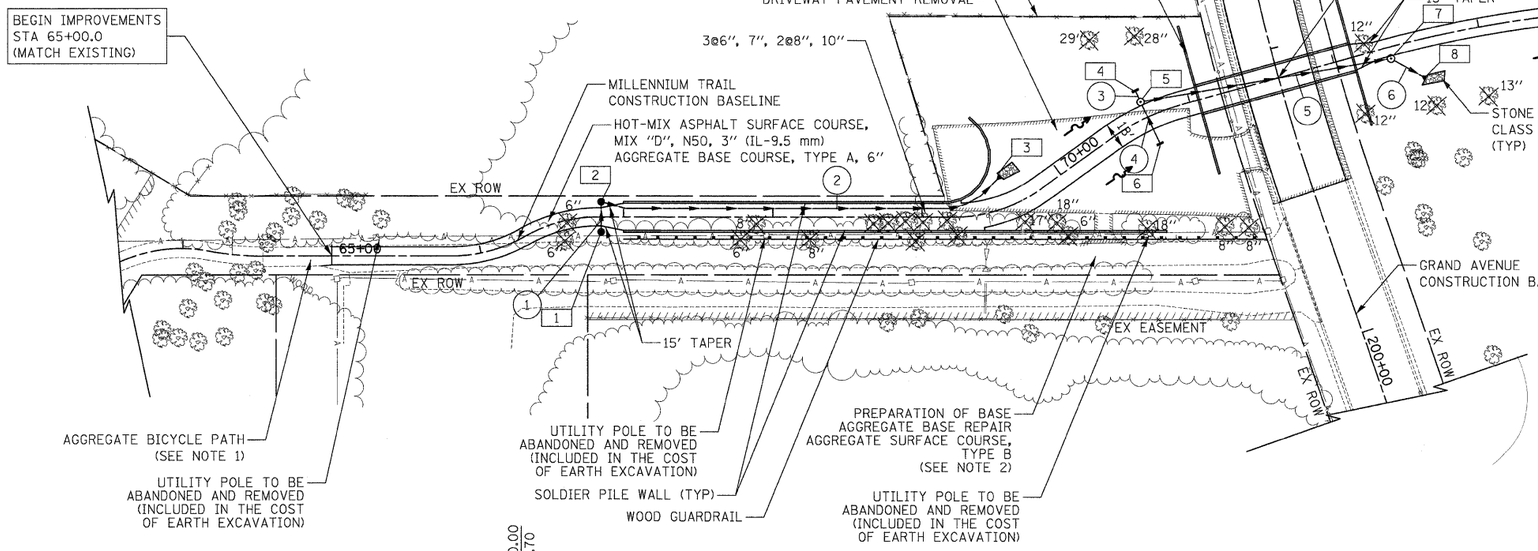
SHEET NO. 1 OF 1 SHEETS | STA. 197+40 TO STA. 199+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	10
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

1	17' - STORM SEW CL A 1, 12" @ 1.35% TBF = 4 CU YD	4	27' - STORM SEW CL A 1, 15" @ 0.32% TBF = 4 CU YD
2	274' - STORM SEW CL B 1, 8" @ 4.19% TBF = 35 CU YD	5	166' - STORM SEW CL A 1, 24" @ 0.57% TBF = 40 CU YD
3	5' - STORM SEW CL A 1, 15" @ 0.32% TBF = 0 CU YD	6	19' - STORM SEW CL A 1, 24" @ 0.17% TBF = 0 CU YD



N

LEGEND:
- PERMANENT DITCH
- OVERLAND FLOW
- REMOVAL
- X" TREE REMOVAL AND DIAMETER

1	STA 66+85.00, 10.00' RT CB TC T8G RIM 793.88 INV 791.40 (NW)	5	STA 70+70.00, 11.28' LT MAN TA 5D T1F CL SPL RIM 776.72 INV 772.98 (NW) INV 772.98 (SE) INV 772.88 (NE)
2	STA 66+85.00, 10.00' LT CB TA 4 DIA T8G RIM 793.88 INV 791.17 (SE) INV 791.07 (NE)	6	STA 70+70.00, 19.68' RT FL INLT BX MED 542546 RIM 775.17 INV 773.07 (NW)
3	STA 69+61.75, 20.87' LT MET END SEC 8 INV 779.50 (SW)	7	STA 72+37.83, 7.75' RT MAN TA 5D T1F CL SPL RIM 775.67 INV 771.93 (SW) INV 771.83 (E)
4	STA 70+70.00, 19.68' LT FL INLT BX MED 542546 RIM 775.10 INV 773.00 (SE)	8	STA 72+57.59, 26.28' RT PRC FLAR END SEC 24 GRATING-C FL END S 24" INV 771.80 (W)

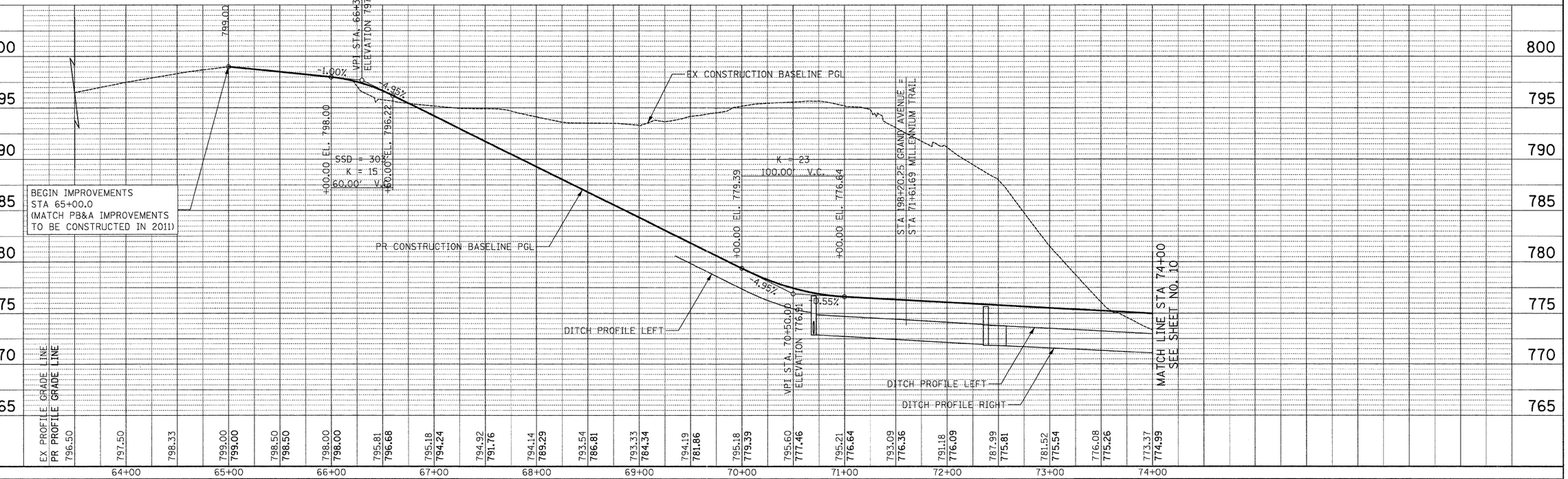
NOTES:

1. A CONTINGENCY QUANTITY OF AGGREGATE BICYCLE PATH HAS BEEN INCLUDED TO RECONSTRUCT AND RESHAPE THE TRAIL CONNECTION POINT TO PROVIDE SMOOTH TRANSITION TO THE HOT-MIX ASPHALT PATH.

2. QUANTITIES PROVIDED TO RESHAPE THE EXISTING AGGREGATE ENTRANCE (SEE DETAIL SHEET FOR A SECTION).

3. AN ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER SAFETY AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

MILLENNIUM TRAIL



USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
FILE NAME ...\2322_PP_02_Bikepath.dgn	DRAWN - PK	REVISED -	
PLOT SCALE 50.0000 ' / in.	CHECKED - RTM	REVISED -	SCALES VERT. 0 5 10 HORIZ. 0 50 100
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	

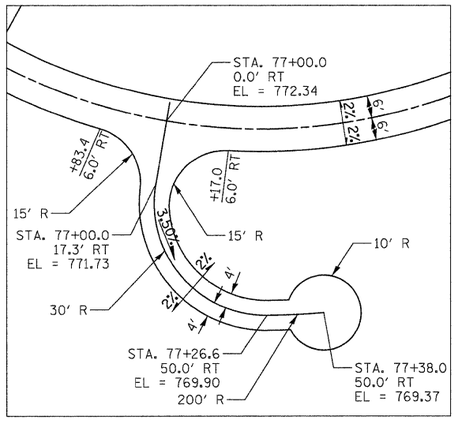
MILLENNIUM TRAIL – PLAN & PROFILE
GRAND AVENUE UNDERPASS

SHEET NO. 1 OF 2 SHEETS | STA. 65+80 | TO STA. 74+00

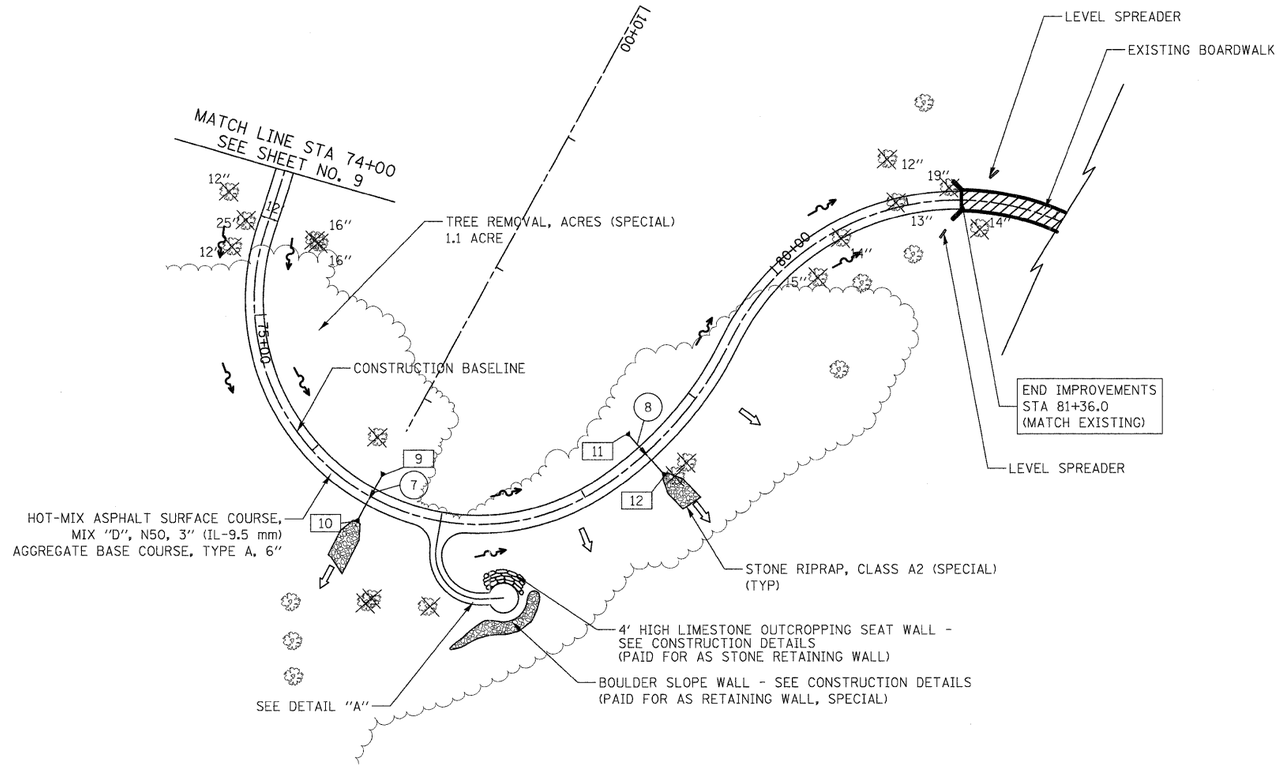
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	11
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE — NO.

ORIGINAL SURVEY — NOTE BOOK — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE — NO.



DETAIL "A"



LEGEND:

- PERMANENT DITCH
- OVERLAND FLOW
- REMOVAL
- X'' TREE REMOVAL AND DIAMETER

(7) 38' - STORM SEW CL B 1, 12'' @ 1.00%
TBF = 3 CU YD

(8) 38' - STORM SEW CL B 1, 12'' @ 1.00%
TBF = 3 CU YD

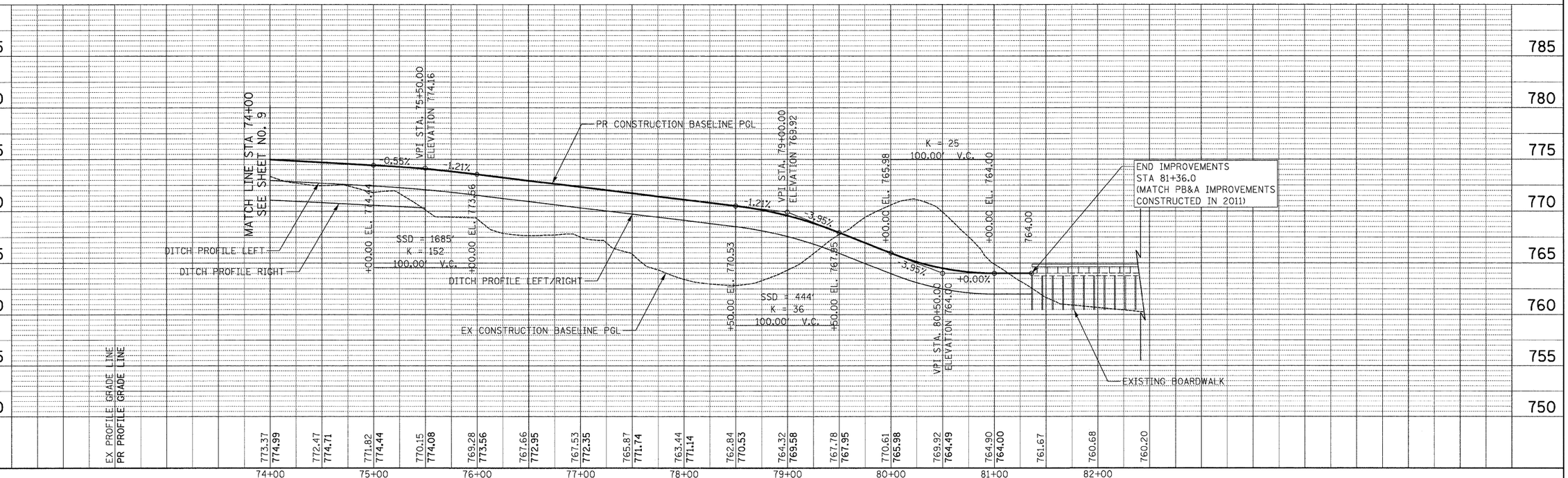
[9] STA 76+50.00, 18.32' LT
MET END SEC 12
INV 770.95 (NE)

[10] STA 76+50.00, 19.85' RT
MET END SEC 12
INV 770.57 (SW)

[11] STA 78+50.00, 18.32' LT
MET END SEC 12
INV 768.53 (N)

[12] STA 78+50.00, 19.85' RT
MET END SEC 12
INV 768.15 (S)

MILLENNIUM TRAIL



USER NAME = pk	DESIGNED - PK	REVISED -
FILE NAME ...\2322_PP_02_Bikepathdgn	DRAWN - PK	REVISED -
PLOT SCALE 50.0000 ' / in.	CHECKED - RTM	REVISED -
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

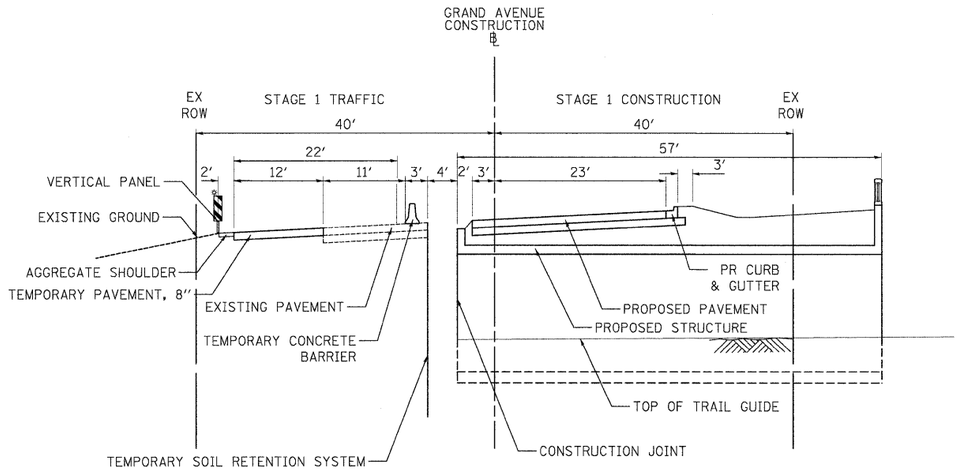
SCALES
VERT. 0 5 10
HORIZ. 0 50 100

MILLENNIUM TRAIL – PLAN & PROFILE
GRAND AVENUE UNDERPASS
SHEET NO. 2 OF 2 SHEETS | STA. 74+00 | TO STA. 81+47

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	12
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE



STAGE 1 TYPICAL

STA. 197+40 TO STA. 199+00

STAGE 1 – CONSTRUCT SOUTHERN SECTION OF UNDERPASS

1. REMOVE EXISTING PAVEMENT MARKING ON GRAND AVENUE FROM STA. 183+80 TO STA. 212+60 FOR THE WB LANES AND TO STA. 208+60 FOR THE EB LANES.
2. REMOVE CURB AND GUTTER ON THE NORTH SIDE OF GRAND AVENUE FROM STA. 192+93 TO STA. 207+35.
3. PLATE INLETS LOCATED WITHIN CURB AND GUTTER REMOVAL LENGTH.
4. REMOVE CATCH BASIN LOCATED AT STA. 194+12 28.2′ LT.
5. CONSTRUCT CONCRETE COLLAR ON EXISTING 12″ STORM SEWER AT CATCH BASIN LOCATED AT STA. 194+12 28.2′ LT.
6. EXTEND TEMPORARY 12″ STORM SEWER AT STA. 194+12 28.2′ LT. INTO DITCH.
7. TEMPORARILY ABANDON 12″ STORM SEWER FROM STA. 193+01 LT TO 194+12 LT.
8. REMOVE FLARED END SECTION AT STA. 201+75 48.8′ LT.
9. EXTEND TEMPORARY 24″ STORM SEWER AT STA. 201+75 30 FEET.
10. INSTALL INLET STAND PIPE AT STA. 207+50.
11. PLACE TEMPORARY PAVEMENT ON THE NORTH SIDE OF THE ROAD FROM STA. 192+93 TO STA. 207+35.

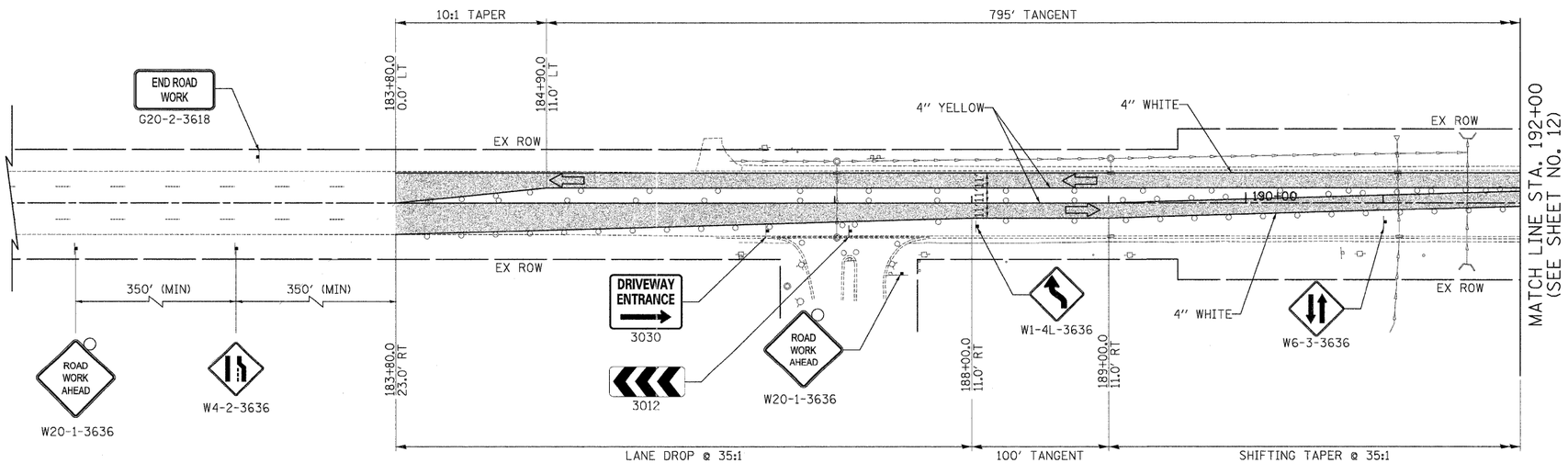
ACCESS TO PRIVATE DRIVES MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION EXCEPT FOR PERIODS OF SHORT DURATION WHEN APPROVED BY THE ENGINEER AND IN ACCORDANCE WITH DETAIL LC7201.

TEMPORARY PAVEMENT MARKING TAPE, TYPE III SHALL BE USED WITHIN THE LIMITS OF EXISTING GRAND AVENUE. TEMPORARY PAINT PAVEMENT MARKINGS SHALL BE USED ON ALL TEMPORARY PAVEMENT AREAS.

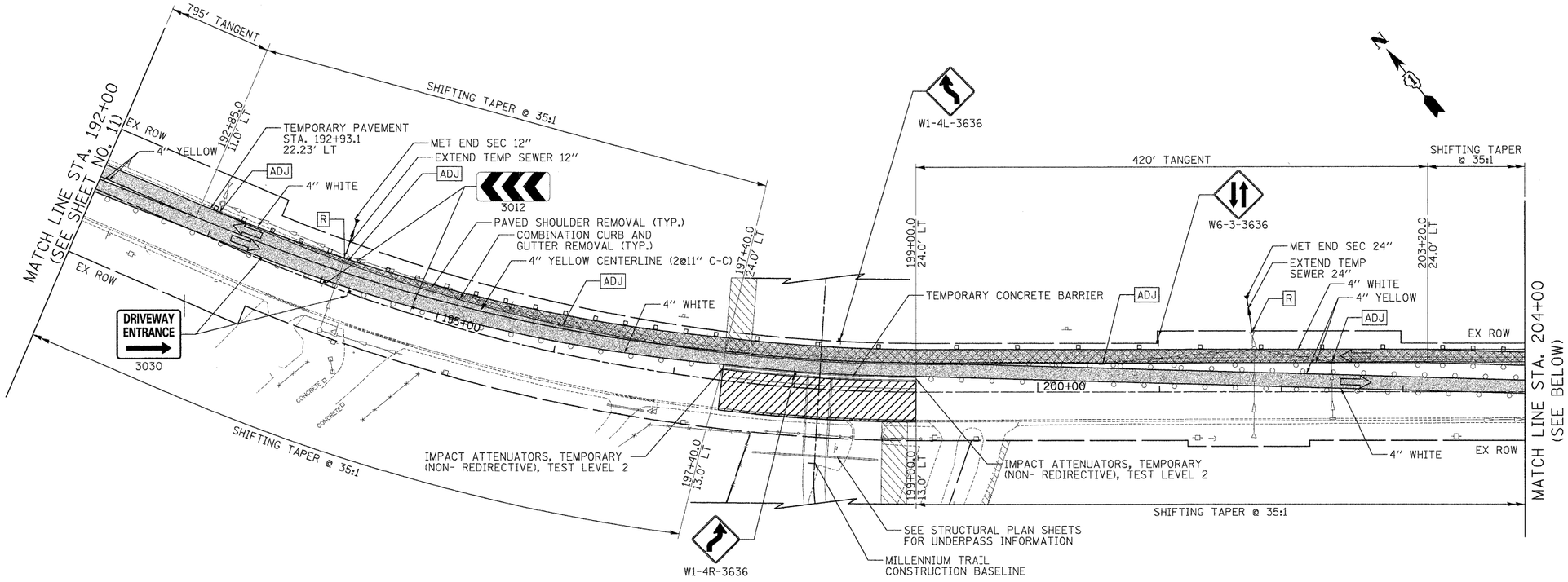
THE PAVEMENT RECONSTRUCTION OF GRAND AVENUE SHALL BE CONSTRUCTED THROUGH TO BINDER COURSE WITH TEMPORARY PAVEMENT RAMPS AT EACH END AND WITH TEMPORARY PAVEMENT MARKINGS WITHIN THE CONSTRUCTION LIMITS. THE CONSTRUCTION AND REMOVAL OF THE TEMPORARY PAVEMENT RAMPS SHALL BE INLCUDED IN THE COST OF THE HMA FULL-DEPTH PAVEMENT. THE TAPER RATE SHALL BE 7.5 FEET PER 1 INCH.

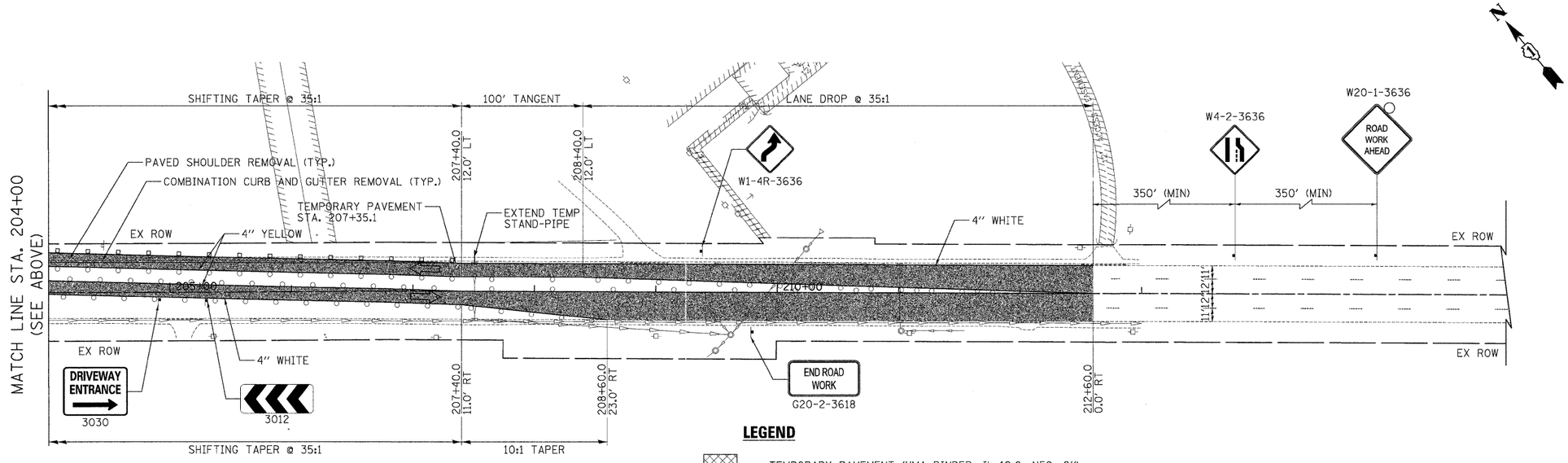
LEGEND

- TEMPORARY PAVEMENT (HMA BINDER, IL-19.0, N50, 8″)
- LIMIT OF WORKZONE FOR THIS STAGE
- SUGGESTED CONSTRUCTION ENTRANCE
- TYPE II BARRICADES WITH MONO-DIRECTIONAL STEADY-BURN LIGHTS @ 50′ CNTRS (25′ AT BEGINNING OF TAPER)
- VERTICAL PANELS WITH MONO-DIRECTIONAL STEADY-BURN LIGHTS @ 50′ CNTRS (25′ AT BEGINNING OF TAPER)
- DIRECTION OF TRAFFIC
- TEMPORARY TRAFFIC SIGN
- ADJ — STRUCTURES TO BE ADJUSTED
- R — STRUCTURES TO BE REMOVED



USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	SCALES HORIZ.0 50 100	**STAGES OF CONSTRUCTION – STAGE 1 GRAND AVENUE UNDERPASS**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FILE NAME ...\07-MOT\2322_SOC_02_SOC1.dgn	DRAWN - PK	REVISED -				0541	10-F3000-00-BT	LAKE	91	13
PLOT SCALE 50.0000 ′ / in.	CHECKED - RTM	REVISED -						CONTRACT NO. 63665		
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -			SHEET NO. 1 OF 4 SHEETS STA. 183+80 TO STA. 192+00	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





LEGEND

- TEMPORARY PAVEMENT (HMA BINDER, IL-19.0, N50, 8")
- LIMIT OF WORKZONE FOR THIS STAGE
- SUGGESTED CONSTRUCTION ENTRANCE
- TYPE II BARRICADES WITH MONO-DIRECTIONAL STEADY-BURN LIGHTS @ 50' CNTRS (25' AT BEGINNING OF TAPER)
- VERTICAL PANELS WITH MONO-DIRECTIONAL STEADY-BURN LIGHTS @ 50' CNTRS (25' AT BEGINNING OF TAPER)
- DIRECTION OF TRAFFIC
- TEMPORARY TRAFFIC SIGN
- ADJ STRUCTURES TO BE ADJUSTED
- R STRUCTURES TO BE REMOVED

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

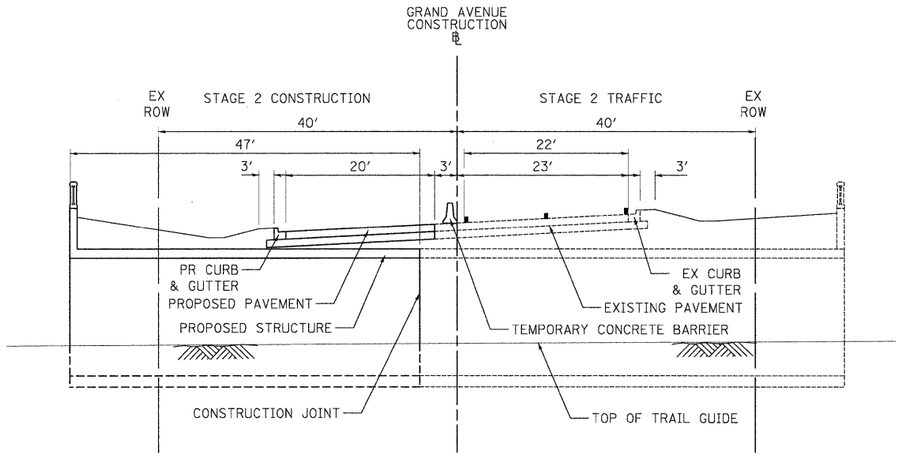
SCALES
HORIZ.0 50 100

STAGES OF CONSTRUCTION – STAGE 1
GRAND AVENUE UNDERPASS
SHEET NO. 2 OF 4 SHEETS | STA. 192+00 | TO STA. 212+60

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	14
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY | NOTE BOOK | NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

ORIGINAL SURVEY | NOTE BOOK | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE



STAGE 2 TYPICAL

STA. 197+40 TO STA. 199+00

STAGE 2 – CONSTRUCT NORTHERN SECTION OF UNDERPASS

1. REMOVE TEMPORARY PAVEMENT FROM STA. 192+93 TO STA. 207+35.
2. REMOVE TEMPORARY STORM SEWER PIPE AT STA. 194+12.
3. INSTALL NEW CATCH BASIN AND CONNECT PREVIOUSLY EXISTING PIPES AT STA. 194+12.
4. REMOVE TEMPORARY STORM SEWER PIPE AT STA. 201+75.
5. INSTALL NEW FLARED END SECTION.
6. REMOVE INLET STAND PIPE AT STA. 207+50.
7. ADJUST INLETS LOCATED WITHIN CURB AND GUTTER REMOVAL LENGTH.
8. PLACE NEW COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.12.

ACCESS TO PRIVATE DRIVES MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION EXCEPT FOR PERIODS OF SHORT DURATION WHEN APPROVED BY THE ENGINEER AND IN ACCORDANCE WITH DETAIL LC7201.

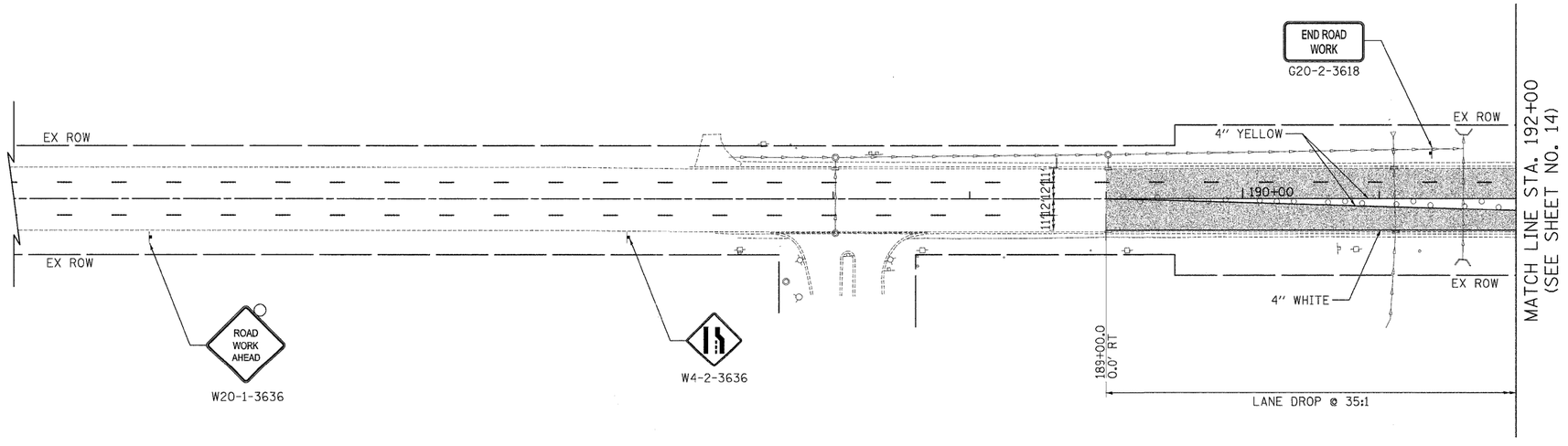
TEMPORARY PAVEMENT MARKING TAPE, TYPE III SHALL BE USED WITHIN THE LIMITS OF EXISTING GRAND AVENUE. TEMPORARY PAINT PAVEMENT MARKINGS SHALL BE USED ON ALL TEMPORARY PAVEMENT AREAS.

THE PAVEMENT RECONSTRUCTION OF GRAND AVENUE SHALL BE CONSTRUCTED THROUGH TO BINDER COURSE WITH TEMPORARY PAVEMENT RAMPS AT EACH END AND WITH TEMPORARY PAVEMENT MARKINGS WITHIN THE CONSTRUCTION LIMITS.

UPON COMPLETION OF UNDERPASS WORK AND AT THE DIRECTION OF THE ENGINEER THE TEMPORARY SOIL RETENTION SYSTEM, CONCRETE BARRIERS AND TEMPORARY PAVEMENT RAMPS SHALL BE REMOVED, FINAL SURFACE COURSE PAVING COMPLETED, ALONG WITH FINAL EARTHWORK GRADING, SHOULDER RESTORATION AND PERMANENT PAVEMENT MARKINGS WITHIN THE LIMITS OF GRAND AVENUE.

LEGEND

- TEMPORARY PAVEMENT (HMA BINDER, IL-19.0, N50, 8″)
- LIMIT OF WORKZONE FOR THIS STAGE
- SUGGESTED CONSTRUCTION ENTRANCE
- ○ ○ ○ TYPE II BARRICADES WITH MONO-DIRECTIONAL STEADY-BURN LIGHTS @ 50′ CNTRS (25′ AT BEGINNING OF TAPER)
- ▫ ▫ ▫ VERTICAL PANELS WITH MONO-DIRECTIONAL STEADY-BURN LIGHTS @ 50′ CNTRS (25′ AT BEGINNING OF TAPER)
- DIRECTION OF TRAFFIC
- TEMPORARY TRAFFIC SIGN
- ADJ STRUCTURES TO BE ADJUSTED
- R STRUCTURES TO BE REMOVED



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

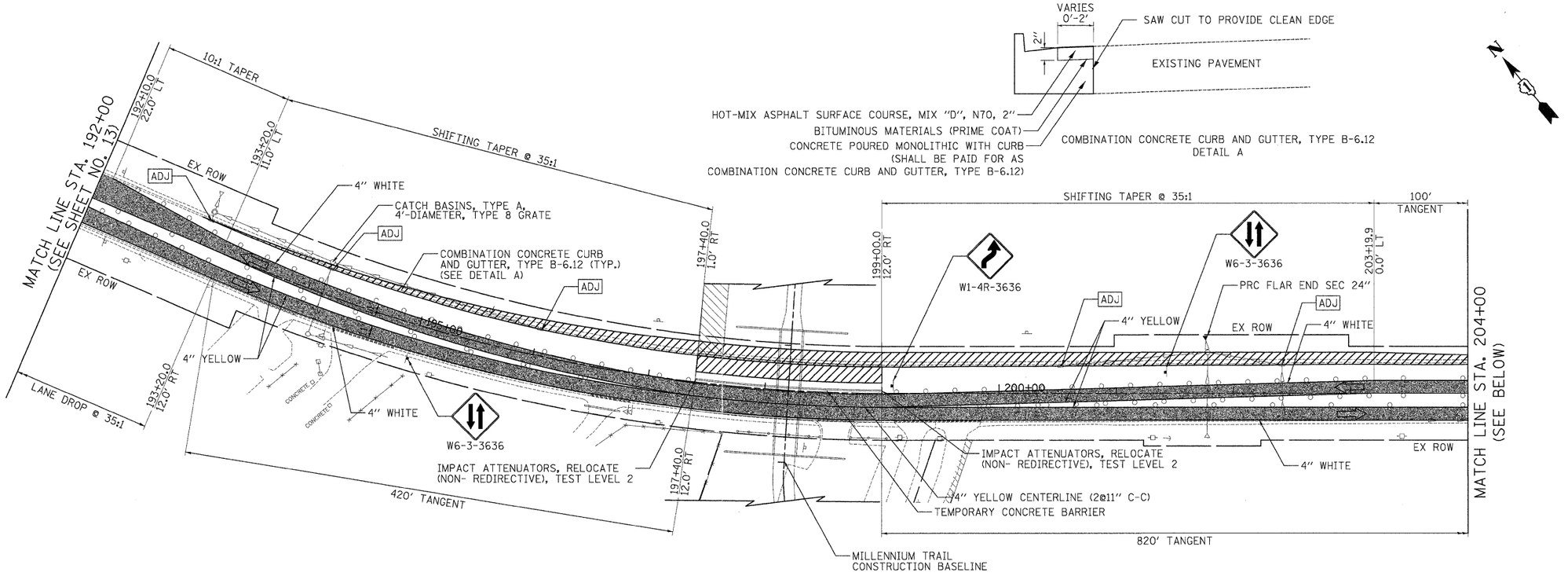
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STAGES OF CONSTRUCTION – STAGE 2
GRAND AVENUE UNDERPASS
SHEET NO. 3 OF 4 SHEETS | STA. 189+00 TO STA. 192+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	15
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE



FINAL SURVEY / ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
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STAGES OF CONSTRUCTION – STAGE 2
GRAND AVENUE UNDERPASS
SHEET NO. 4 OF 4 SHEETS | STA. 192+00 TO STA. 208+40

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	16
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LEGEND:

- PROPOSED BIKE PATH
- PROPOSED WALLS
- ROADWAY SWALE FLOW

END PROJECT
STA. 81+36.0
MILLENNIUM TRAIL

SEE DETAIL "A"

SEE DETAIL "A"

N

STA 198+20.25 GRAND AVENUE =
STA 71+61.69 MILLENNIUM TRAIL

SOLDIER PILE WALLS

PR MILLENNIUM TRAIL BASELINE

BEGIN PROJECT
STA. 65+00.0
MILLENNIUM TRAIL

PR GRAND AVENUE BASELINE

L 65+00

L 70+00

L 75+00

L 80+00

L 85+00

L 90+00

L 95+00

L 100+00

L 105+00

L 110+00

L 115+00

L 120+00

L 125+00

L 130+00

L 135+00

L 140+00

L 145+00

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L 190+00

L 195+00

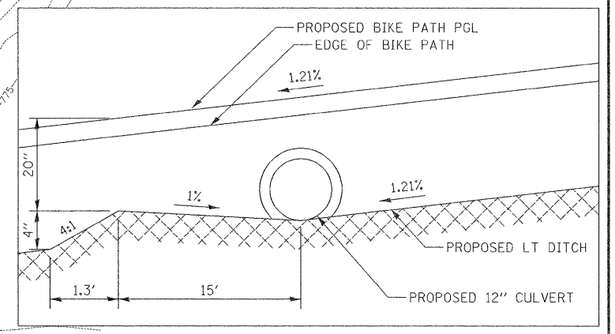
L 200+00

PLANTING LEGEND:

TREES (SPECIAL)	
(1)	10 - BURR OAK 10 - RED OAK 5 - SCARLET OR HILL'S OAK NOTE: TREE SPECIES SHALL BE RANDONLY MIXED AND PLANTED IN THE LOCATIONS INDICATED.
(2)	25 - BURR OAK 25 - SCARLET OR HILL'S OAK 15 - RED OAK NOTE: TREE SPECIES SHALL BE RANDOMLY MIXED AND PLANTED IN THE LOCATIONS INDICATED.
SHRUBS (SPECIAL)	
(3)	50 - EASTERN RED CEDAR 75 - GRAY DOGWOOD 50 - STAGHORN SUMAC 50 - PRAIRIE ROSE NOTE: PLANT EASTERN RED CEDAR AT LOCATIONS INDICATED. REMAINING PLANTS SHALL BE RANDOMLY DISTRIBUTED NEAR EASTERN RED CEDAR IN GROUPS OF 3-7.

PLANTING NOTE:

ALL PLANTINGS SHALL BE PLACED AND PAID FOR AS "TREES (SPECIAL)" AND "SHRUBS (SPECIAL)".



DETAIL "A"
NOT TO SCALE

NOTES:

1. PROPOSED CONTOURS ARE SHOWN FOR CONTRACTOR'S REFERENCE ONLY. SINCE EXACT QUANTITIES FOR EXCAVATION RELATED TO STRUCTURES AND THE REMOVAL OF UNSUITABLE MATERIAL WILL BE DETERMINED IN THE FIELD, AND NO HAUL OFF OR ON IS ANTICIPATED. FINAL SURFACE ELEVATIONS SHALL BE ESTABLISHED ACCORDING TO THE FIELD CONDITIONS AT THE DIRECTION OF THE ENGINEER.

2.EARTHWORK SHALL CONSIST OF THE EXCAVATION, TRANSPORTATION, AND PLACEMENT OF "EARTH EXCAVATION", "TOPSOIL EXCAVATION AND PLACEMENT", AND "STRUCTURE EXCAVATION" PER THE STANDARD SPECIFICATIONS. SUITABLE EXCAVATED MATERIALS SHALL NOT BE WASTEDWITHOUT PERMISSION OF THE ENGINEER. ALL UNSUITABLE AND/OR EXCESS MATERIAL SHALL BE DISPOSED OF OUTSIDE THE TRAIL ALIGNMENT BUT IN PROXIMITY TO THE PROJECT CORRIDOR AND AT THE DIRECTION OF THE ENGINEER. THERE IS NO HAUL-OFF ANTICIPATED.

3.THE CONTRACTOR SHALL CONSTRUCT STOCKPILES AND EMBANKMENTS TO ACCOMMODATE EARTHWORK STAGING IN SUCH A WAY THAT IN THE PERMANENT CONDITION ORGANIC SOILS SHALL BE PLACED ON THE TOP OF SOILS UNSUITABLE FOR LANDSCAPING. THIS MAY REQUIRE MATERIAL FROM THE DEEPEST SECTION OF THE EXCAVATION TO BE PLACED ON THE BOTTOM OF THE PROPOSED EMBANKMENT LOCATION. CRITICAL DEPTH SEPARATIONS SHALL BE AS FOLLOWS: TOPSOIL (4-INCH MINIMUM DEPTH), INTERMEDIATE LAYER, BASE LAYER. IF HYDRIC "BLUE" CLAYS ARE ENCOUNTERED DURING THE EXCAVATION, THIS MATERIAL SHALL BE PLACED AT A MINIMUM OF 6 FEET BELOW FINISHED GRADE WHERE ATTAINABLE. THE RESIDENT ENGINEER SHALL MAKE THE SOLE DETERMINATION REGARDING THE SUITABILITY OF MATERIAL FOR EACH OF THE LAYERS. MULTIPLE STOCKPILES MAY BE REQUIRED TO CONFORM TO THESE REQUIREMENTS. ALL STOCKPILING SHALL BE INCLUDED IN THE COST OF "EARTH EXCAVATION", "STRUCTURE EXCAVATION", AND "TOPSOIL EXCAVATION AND PLACEMENT".

FINAL SURVEY
NOTE BOOK
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TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
HORIZ. 0 50 100

GRADING AND PLANTING PLAN
GRAND AVENUE UNDERPASS
SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	17
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SEDIMENTATION AND EROSION CONTROL NOTES

1. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
2. SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
3. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN 14 CALENDAR DAYS OF THE END OF ACTIVE HYDROLOGIC DISTURBANCE, OR REDISTURBANCE.
4. AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 3H:1V, AND APPROVED BY THE ENFORCEMENT OFFICER, SHALL BE STABILIZED WITH EROSION CONTROL BLANKET (SPECIAL) IN COMBINATION WITH SEEDING AS SPECIFIED ON THE PLANS.
5. EROSION CONTROL BLANKET SHALL BE REQUIRED ON ALL INTERIOR DETENTION BASIN SIDE SLOPES BETWEEN NORMAL WATER LEVEL AND HIGH WATER LEVEL.
6. ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.
7. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
8. ALL TEMPORARY AND PERMANAENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PROPERTY OWNER SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR.
9. A STABILIZED MAT OF AGGREGATE UNDERLAIN WITH FILTER CLOTH (OR OTHER APPROPRIATE MEASURE) SHALL BE LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA. ANY SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OR-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
10. SOIL STOCKPILES SHALL NOT BE LOCATED IN A FLOOD PRONE AREA OR A DESIGNATED BUFFER PROTECTING WATERS OF THE UNITED STATES OR ISOLATED WATERS OF LAKE COUNTY.
11. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURES (E.G. SEDIMENT TRAP, SEDIMENT BASIN, OR OTHER APPROPRIATE MEASURE.)
12. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.
13. QUANTITIES HAVE BEEN PROVIDED FOR EROSION CONTROL MAT, FLOCCULATION LOGS, FLOCCULATION POWDER, AND TEMPORARY FENCE TO BE USED AT THE DIRECTION OF THE RESIDENT ENGINEER.

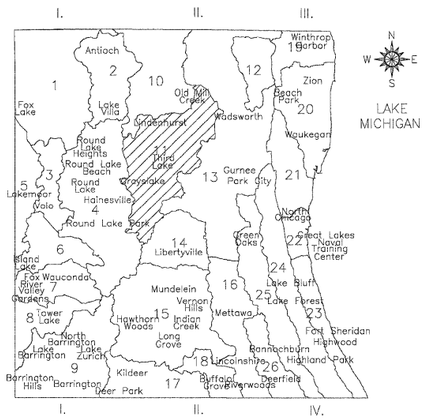
DRAINAGE BASINS OF LAKE COUNTY

I. FOX RIVER WATERSHED
1. UPPER FOX RIVER
2. SEQUOIT CREEK
3. FISH LAKE DRAIN
4. SQUAW CREEK
5. LOWER FOX RIVER
6. MUTTON CREEK
7. SLOCUM LAKE DRAIN
8. TOWER LAKE DRAIN
9. FLINT CREEK

II. DES PLAINES RIVER WATERSHED
10. NORTH MILL CREEK
11. MILL CREEK
12. NEWPORT DRAINAGE DITCH
13. UPPER DES PLAINES RIVER
14. BULL CREEK
15. INDIAN CREEK
16. LOWER DES PLAINES RIVER
17. BUFFALO CREEK
18. APTAKISIC CREEK

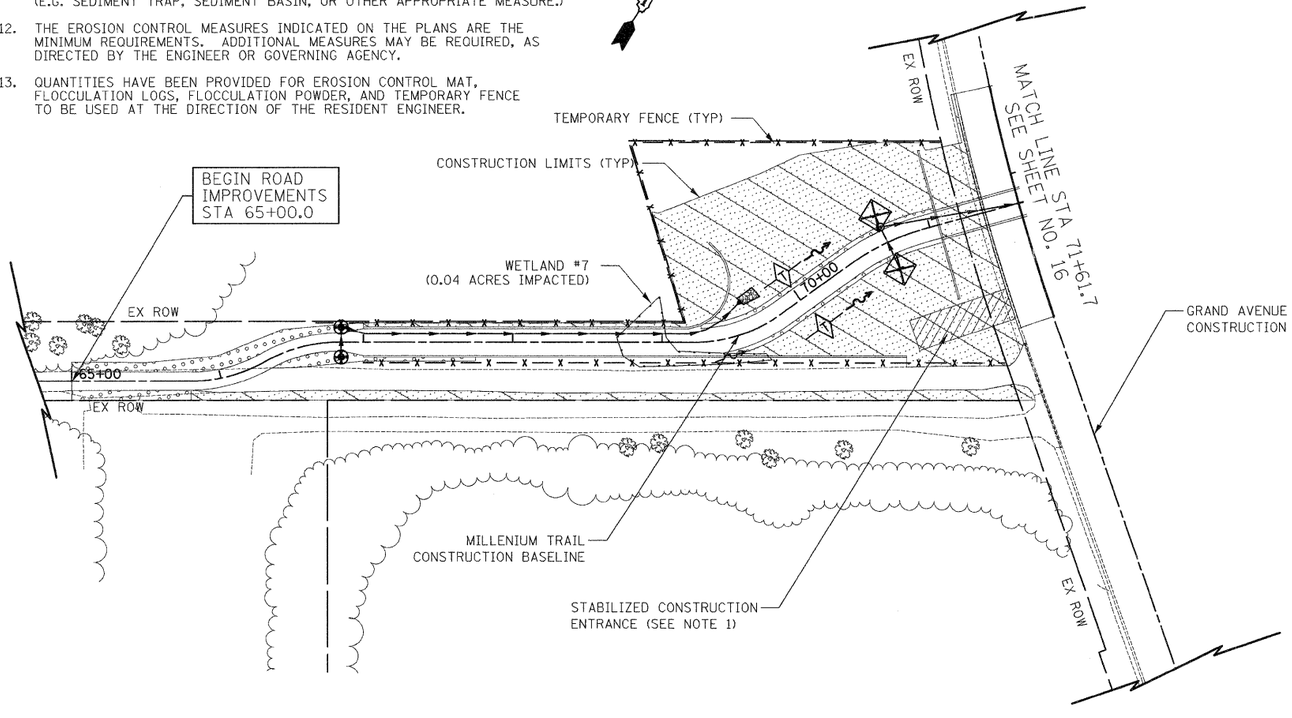
III. LAKE MICHIGAN WATERSHED
19. KELLOGG CREEK
20. DEAD RIVER
21. WAUKEGAN RIVER
22. PETTIBONE CREEK
23. BLUFF/RAVINE

IV. CHICAGO RIVER WATERSHED
24. SKOKIE RIVER
25. MIDDLE FORK
26. WEST FORK



NPDES STATEMENT:

THIS PROJECT DISTURBS 5.9 ACRES OF TOTAL LAND AREA. COMPLIANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER PERMIT IS ONLY NECESSARY IF A PROJECT DISTURBS 1.0 OR MORE ACRES OF TOTAL LAND AREA; AN NPDES STORMWATER PERMIT IS REQUIRED FOR THIS PROJECT.



LEGEND

- TEMPORARY DITCH CHECKS
- INLET FILTERS
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER
- EXISTING TREES
- TREE PROTECTION & PRESERVATION
- ROADWAY SWALE FLOW
- HIGH POINT DITCH FLOW
- STONE RIPRAP, CLASS A1
- SEEDING, CLASS 2 (MODIFIED) EROSION CONTROL BLANKET (SPECIAL) TOPSOIL EXCAVATION AND PLACEMENT
- SEEDING, CLASS 3 (MODIFIED) EROSION CONTROL BLANKET (SPECIAL) TOPSOIL EXCAVATION AND PLACEMENT

NOTES

1. STABILIZED CONSTRUCTION ENTRANCES SHALL BE CONSTRUCTED AT LOCATIONS DESIGNATED BY THE ENGINEER.
2. SHOULDER AREAS THRU BACKSIDE OF THE SWALE SHALL BE RESTORED WITH SEEDING, CLASS 2 (MODIFIED) AND ALL OTHER AREAS SHALL BE RESTORED WITH SEEDING, CLASS 3 (MODIFIED).
3. QUANTITIES HAVE BEEN PROVIDED FOR EROSION CONTROL BLANKET (SPECIAL), HEAVY DUTY EROSION CONTROL BLANKET SPECIAL, FLOCCULATION LOGS, FLOCCULATION POWDER, MULCH METHOD 2, TEMPORARY SEEDING, AND EARTH EXCAVATION FOR EROSION CONTROL TO BE USED AT THE DIRECTION OF THE RESIDENT ENGINEER.

SMC TYPICAL CONSTRUCTION SEQUENCE

1. INSTALLATION OF SOIL EROSION AND SEDIMENT CONTROL SE/SC MEASURES
   A. SELECTIVE VEGETATION REMOVAL FOR SILT FENCE INSTALLATION
   B. SILT FENCE INSTALLATION
   C. CONSTRUCTION FENCING AROUND AREAS NOT TO BE DISTURBED
   D. STABILIZED CONSTRUCTION ENTRANCE
2. TREE REMOVAL WHERE NECESSARY (CLEAR & GRUB)
3. CONSTRUCT SEDIMENT TRAPPING DEVICES (SEDIMENT TRAPS, BASINS*)
4. CONSTRUCT DETENTION FACILITIES AND OUTLET CONTROL STRUCTURE WITH RESTRICTOR & TEMPORARY PERFORATED RISER
5. STRIP TOPSOIL, STOCKPILE TOPSOIL AND GRADE SITE
6. TEMPORARILY STABILIZE TOPSOIL STOCKPILES (SEED AND SILT FENCE AROUND TOE OF SLOPE)
7. INSTALL STORM SEWER, SANITARY SEWER, WATER AND ASSOCIATED INLET & OUTLET PROTECTION
8. PERMANENTLY STABILIZE DETENTION BASINS WITH SEED AND EROSION CONTROL BLANKET
9. TEMPORARILY STABILIZE ALL AREAS INCLUDING LOTS THAT HAVE REACHED TEMPORARY GRADE
10. INSTALL ROADWAYS
11. PERMANENTLY STABILIZE ALL OUTLOT AREAS
12. INSTALL STRUCTURES AND GRADE INDIVIDUAL LOTS
13. PERMANENTLY STABILIZE LOTS
14. REMOVE ALL TEMPORARY SE/SC MEASURES AFTER THE SITE IS STABILIZED WITH VEGETATION

* SOIL EROSION AND SEDIMENT CONTROL MAINTENANCE MUST OCCUR EVERY TWO WEEKS AND AFTER EVERY 1/2 OR GREATER RAINFALL EVENT

ESTIMATED QUANTITIES

918	FEET - PERIMETER EROSION BARRIER
224	FEET - TEMPORARY DITCH CHECKS
4	EACH - INLET AND PIPE PROTECTION
6	EACH - INLET FILTERS
87	SQ YD - STONE RIPRAP, CLASS A2 (SPECIAL)
105	SQ YD - FILTER FABRIC
0.50	ACRE - SEEDING, CLASS 2 (MODIFIED)
5.25	ACRE - SEEDING, CLASS 3 (MODIFIED)
655	POUND - TEMPORARY EROSION CONTROL SEEDING
31,702	SQ YD - EROSION CONTROL BLANKET (SPECIAL)
8,066	CU YD - TOPSOIL EXCAVATION AND PLACEMENT
1,010	FOOT - TEMPORARY FENCE
134	SQ YD - HEAVY DUTY EROSION CONTROL BLANKET, SPECIAL
20	EACH - FLOCCULATION LOGS
104	POUND - FLOCCULATION POWDER
334	SQ YD - STABILIZED CONSTRUCTION ENTRANCE

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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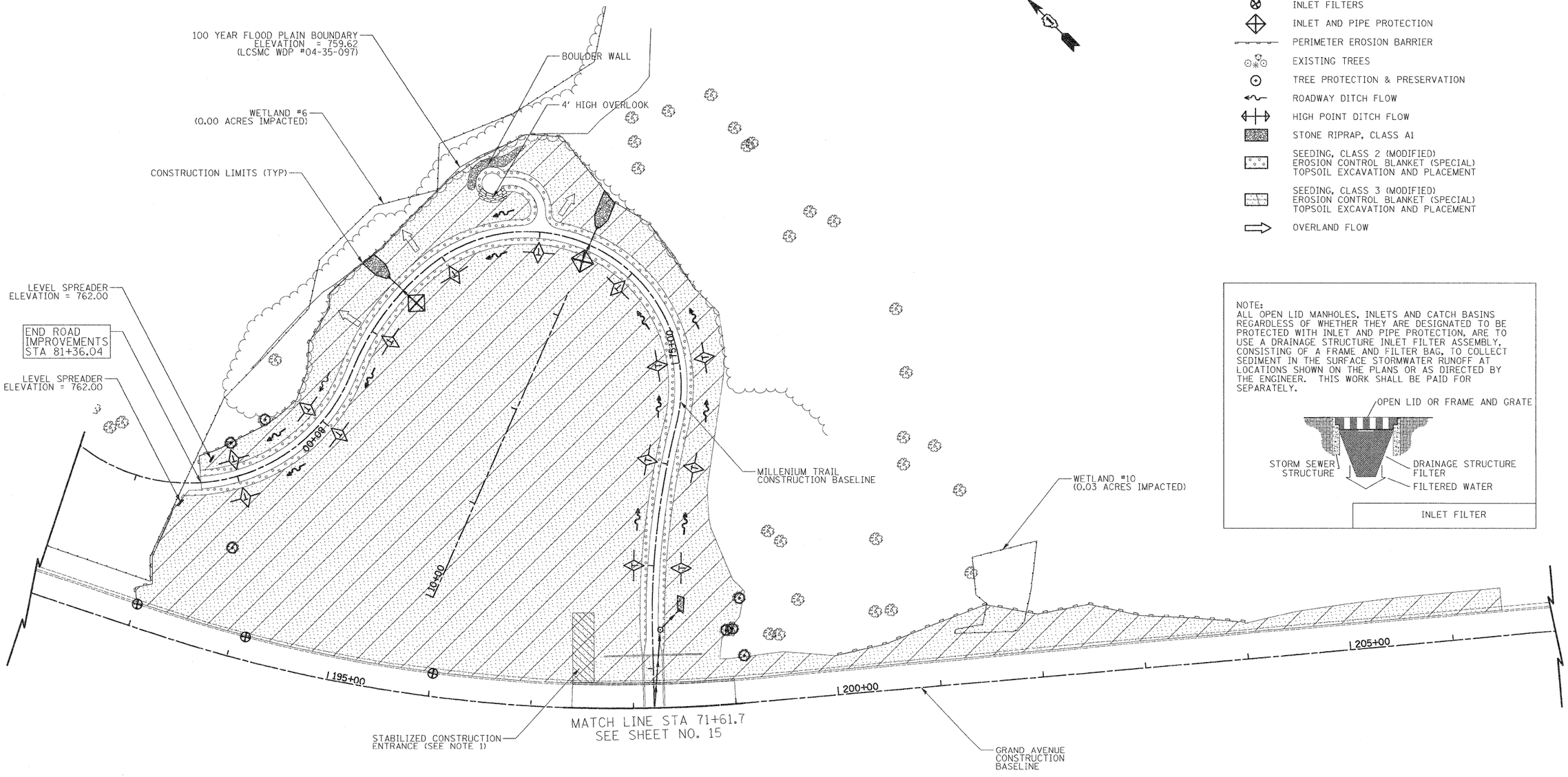
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
HORIZ. 0 50 100

LANDSCAPING AND EROSION CONTROL
GRAND AVENUE UNDERPASS
SHEET NO. 1 OF 2 SHEETS | STA. 65+80 | TO STA. 71+61.7

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	18
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



LEGEND

- TEMPORARY DITCH CHECKS
- INLET FILTERS
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER
- EXISTING TREES
- TREE PROTECTION & PRESERVATION
- ROADWAY DITCH FLOW
- HIGH POINT DITCH FLOW
- STONE RIPRAP, CLASS A1
- SEEDING, CLASS 2 (MODIFIED)
  EROSION CONTROL BLANKET (SPECIAL)
  TOPSOIL EXCAVATION AND PLACEMENT
- SEEDING, CLASS 3 (MODIFIED)
  EROSION CONTROL BLANKET (SPECIAL)
  TOPSOIL EXCAVATION AND PLACEMENT
- OVERLAND FLOW

NOTE:
ALL OPEN LID MANHOLES, INLETS AND CATCH BASINS REGARDLESS OF WHETHER THEY ARE DESIGNATED TO BE PROTECTED WITH INLET AND PIPE PROTECTION, ARE TO USE A DRAINAGE STRUCTURE INLET FILTER ASSEMBLY, CONSISTING OF A FRAME AND FILTER BAG, TO COLLECT SEDIMENT IN THE SURFACE STORMWATER RUNOFF AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID FOR SEPARATELY.

INLET FILTER

NOTES

1. STABILIZED CONSTRUCTION ENTRANCES SHALL BE CONSTRUCTED AT LOCATIONS DESIGNATED BY THE ENGINEER.

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STATE OF ILLINOIS
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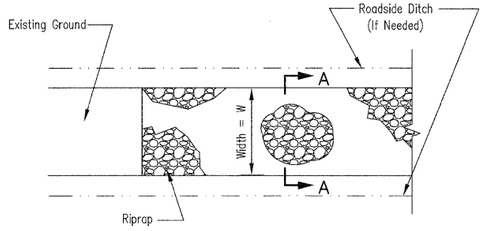
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LANDSCAPING AND EROSION CONTROL
GRAND AVENUE UNDERPASS
SHEET NO. 2 OF 4 SHEETS STA. 71+61.7 TO STA. 81+46.8

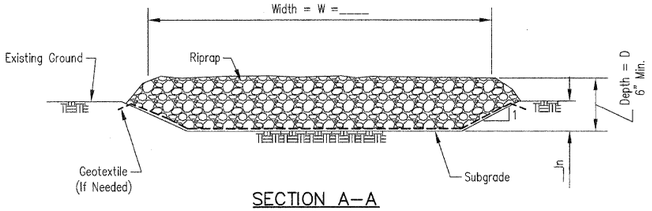
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0541	10-F3000-00-BT	LAKE	91	19
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY NOTE BOOK NO. | SURVEYED PLOTTED TOPSOIL SITE AREAS AREAS CHECKED | BY | DATE

ORIGINAL SURVEY NOTE BOOK NO. | SURVEYED PLOTTED TOPSOIL SITE AREAS AREAS CHECKED | BY | DATE



PLAN VIEW



SECTION A–A

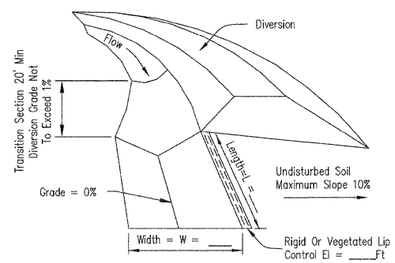
NOTES:
1. Rock shall meet one of the following IDOT coarse aggregate gradations, CA–1, CA–2, CA–3 or CA–4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
2. See plans for construction road location, D and W dimensions.
3. Minimum width is 14 feet for one–way traffic and 20 feet for two–way traffic. Two–way traffic widths shall be increased a minimum of 4 feet for trailer traffic. Depending on the type of vehicle or equipment, speed, loads, climatic and other conditions under which vehicles and equipment operate an increase in the minimum widths may be required.
4. Roadway shall follow the contour of the natural terrain to the extent possible.
5. Geotextile (non–woven) minimum criteria:
   - Weight of Geotextile (oz/sq.yd.)_____6
   - Tensile strength (lb) ASTM D 4632_____180
   - Elongation at failure (%) ASTM D 4632_____≥ 50
   - Puncture (lb) ASTM D 4833_____80
   - Ultraviolet light (% residual tensile strength) ASTM D 4355_____min 70
   - Apparent opening size (AOS) ASTM D 4751_____max 40 sieve
   - Permittivity sec^{-1} ASTM D 4491_____min 0.70
6. Any geotextile splices shall overlap a minimum of 18 inches, with upstream or upslope geotextile overlapping the abutting downslope geotextile.

CONSTRUCTION ROAD STABILIZATION

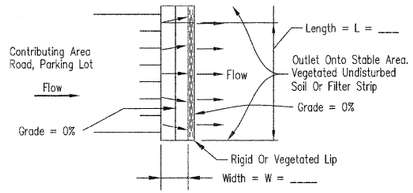
Date 3/09 | Designed M. GIANNES | Drawn M. GIANNES | Checked | Approved

NRCS Natural Resources Conservation Service, United States Department of Agriculture

File No. IL–ENG–58 | Drawing No. | Sheet 1 of 1

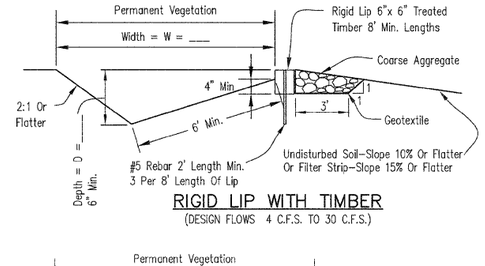


LEVEL SPREADER FOR DIVERSION OUTLET

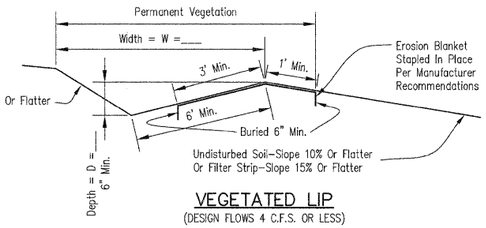


LEVEL SPREADER FOR IMPERVIOUS AREAS

NOTES:
1. Ends of spreader shall be tied into higher ground to prevent flow around level spreader.
2. See plans for L and W dimensions.



RIGID LIP WITH TIMBER
(DESIGN FLOWS 4 C.F.S. TO 30 C.F.S.)



VEGETATED LIP
(DESIGN FLOWS 4 C.F.S. OR LESS)

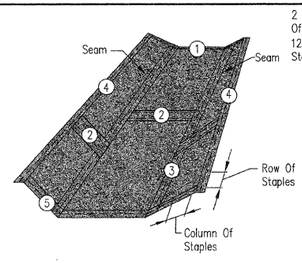
NOTES:
1. Coarse aggregate shall meet one of the following IDOT gradations: CA–1 or CA–3.
2. See plans for permanent seeding requirements
3. See plans for D and W dimensions.
4. Geotextile (non–woven) minimum criteria:
   - Weight of Geotextile (oz/sq.yd.)_____6
   - Tensile strength (lb) ASTM D 4632_____180
   - Elongation at failure (%) ASTM D 4632_____≥50
   - Puncture (lb) ASTM D 4833_____80
   - Ultraviolet light ASTM D 4355_____70
   - Apparent opening size (AOS) ASTM D 4751_____max 40 sieve
   - Permittivity sec^{-1} ASTM D 4491_____0.70

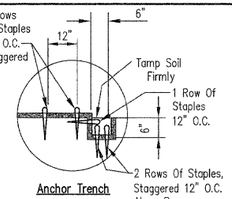
LEVEL SPREADER

Date 3/09 | Designed M. GIANNES | Drawn M. GIANNES | Checked | Approved

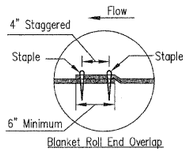
NRCS Natural Resources Conservation Service, United States Department of Agriculture

File No. IL–ENG–62 | Drawing No. | Sheet 1 of 1



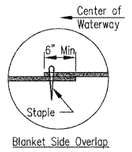


DETAIL 1



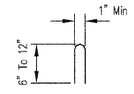
Blanket Roll End Overlap

DETAIL 2



Blanket Side Overlap

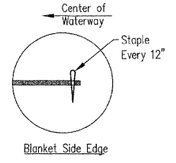
DETAIL 3



STAPLE DETAIL

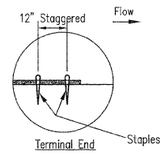
NOTES:
1. Install erosion control blanket (ECB) over waterway: Waterway Width_____ft
   ECB width _____ft
   length _____ft
   Sta. _____ to _____
2. The erosion control blanket shall consist of a machine produced mat of curled wood or coconut fibers, shall have an expected material life of a least 12 months, shall be new and unused, shall be furnished in rolls, and shall meet the minimum requirements stated in Table 1 below.
3. Prepare soil prior to installing erosion control blanket, including seeding, fertilizing, and lime application.
4. The erosion control blanket shall be placed in firm contact with the soil and not be allowed to bridge over surface irregularities. The blanket shall not be stretched.
5. Start laying the blankets by rolling center blanket in the direction of flow, centered on the centerline of waterway. There shall not be an overlap of blankets at the center of the waterway.
6. The erosion control blanket shall be anchored, overlapped, and stapled according to manufacturer's instructions. If no manufacturer's instructions are available, install the blanket as follows:
   a. Staples shall be "U" shaped, 0.12 in diameter wire or greater (#11 gauge). See Staple Detail for dimensions.
   b. Bury upstream end of blanket in a trench 6 inch wide by 6 inch deep and stapled in staggered rows across the width as shown in Detail 1.
   c. For joining ends of rolls, overlap end of upslope blanket a minimum of 6 inches over downslope blanket (shingle style). Use a double row of staggered staples 4 inches apart, as shown in Detail 2.
   d. Blankets on side slopes shall overlap a minimum 6 inches over the blanket below (shingle style). Staple overlap at 12 inch intervals. See Detail 3.
   e. The outer edge along sides of the blanket shall be stapled every 12 inches. See Detail 4.
   f. Staples are to be placed alternately in columns (in the direction of the waterway) 2 feet apart and in rows (across the waterway) 3 feet apart, throughout the area covered by erosion blanket.
   g. Downstream (terminal) end of blanket shall be stapled with a double row of staggered staples 12 inches apart. See Detail 5.

TABLE 1. MINIMUM REQUIREMENTS FOR EROSION CONTROL BLANKET		
	Coconut Blanket	Wood Fiber Blanket
Type of Fiber	100% coconut fibers	100% curled wood fibers
Weight, lbs/sq. yd	0.50	0.63
Fiber Length	N/A	80% of fibers > 6 in.
Fiber Dimensions	N/A	0.021 in. x 0.042 in.
	Optional – Top and bottom of blanket may be covered with a max. 5/8" x 5/8" opening size netting, bound to the mat on max. 1.5" centers.	Optional – Top and bottom of blanket may be covered with a max. 5/8" x 5/8" opening size netting



Blanket Side Edge

DETAIL 4



Terminal End

DETAIL 5

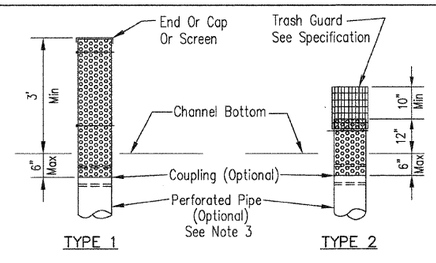
Not To Scale

EROSION BLANKET INSTALLATION DETAILS

Date 3/10 | Designed M. GIANNES | Drawn | Checked | Approved

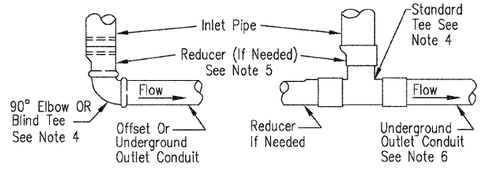
NRCS Natural Resources Conservation Service, United States Department of Agriculture

File No. IL ENG–61 | Drawing No. | Sheet 1 of 1



TYPE 1 TYPE 2

INLET ALTERNATIVES



OFFSET CONNECTION
(Or For Upper Inlet On Conduit)

DIRECT CONNECTION

CONNECTION OF INLET CONDUIT

NOTES:
1. Specification for material and fabrication are as shown.
2. The above ground portion of the inlet must have holes evenly spaced around the circumference of the pipe as shown in chart.
3. The below ground portion of the inlet may be perforated with holes 5/16 inch diameter or less to provide drainage around the inlet.
4. The tee or elbow diameter must be equal to or larger than the diameter of the conduit downstream from the inlet.
5. Install a reducer immediately above the tee or elbow if the inlet diameter is not equal to the diameter of the tee or elbow.
6. The underground outlet conduit must be installed deep enough to provide a minimum 24" of cover (after terrace construction) to prevent crushing.

Material Specification

MATERIAL
Inlets may be fabricated from plastic or metal according to the following requirements.
(a) Plastic pipe Polyvinyl Chloride (PVC) or High Density Polyethylene (PE) pipe with SDR equal to 4.3 or less.
(b) Metal pipe: Smooth steel pipe with 3/16" minimum wall thickness or 16 gage corrugated metal pipe (galvanized or aluminum).

FABRICATION:
Inlet holes shall be smooth and burr free. Holes shall not remove more than 50 percent of material in any horizontal or vertical row or vertical row of holes. For inlets fabricated from metal or smooth plastic, 1"x 4" slots may be used in lieu of 1" diameter holes as long as the openings provide an equal cross–sectional area. Holes larger than 5/16" diameter that are more than 6" below the channel bottom shall be covered with plastic, fiberglass, nylon, gravel or other filter material to prevent soil from entering the inlet. Other combinations of the number and size of holes may be acceptable if approved prior to fabrication. Other materials and method of fabrication may be used for the inlet, tee and other appurtenances as long as the functional intent of the inlet is satisfied and it is approved prior to installation

ORIFICES:
Flow may be restricted by use of an orifice plate installed above the tee. It should be firmly supported and able to be removed for maintenance. Orifice plates shall be made from durable plastic or metal. The opening shall be burr free.

TRASH GUARD:
The trash guard for Type II inlets shall be securely fastened to the inlet. Trash guards may be fabricated from metal rods (1/8" diameter or larger) or galvanized welded wire fabric (16 gage or larger). The spacing between vertical members should be 1" if welded wire fabric is used the spacing between the horizontal members should be 2" (1" if orifice plates are used).

Inlet Diameter Inches	Min No Of 1" Dia. Holes Per Ft Of Inlet
5	25
6	30
8	40
10	50
12	60

INLET DETAIL FOR UNDERGROUND OUTLETS

Date 3/09 | Designed M. GIANNES | Drawn | Checked | Approved

NRCS Natural Resources Conservation Service, United States Department of Agriculture

File No. IL–ENG–118R | Drawing No. | Sheet 1 of 1

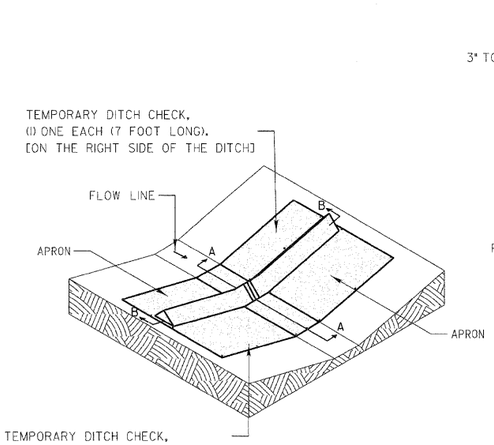
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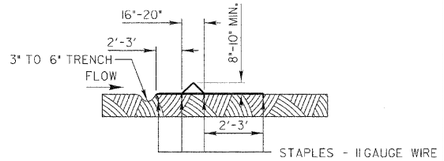
LANDSCAPING AND EROSION CONTROL
GRAND AVENUE UNDERPASS
SHEET NO. 3 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 63665		
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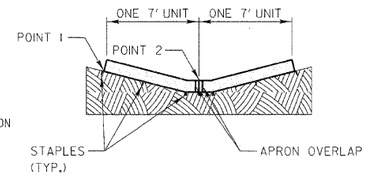
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FINAL SURVEY				
SURVEYED				
PLOTTED				
TEMPLATE				
AREAS				
AREAS CHECKED				



SILT DIKE UNIT ISOMETRIC



SECTION A-A



SECTION B-B

STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE 7' UNIT AS SHOWN ON THE DIAGRAM.

POINT 1 MUST BE HIGHER THAN POINT 2 TO INSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.

NOTE:
THE INSTALLATION SHOWN ABOVE WILL BE MEASURED AS A TEMPORARY DITCH CHECK 14 FEET IN LENGTH.

SCALE: 1" = 5'

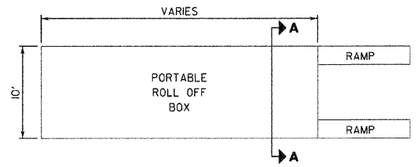
REVISIONS	DATE
ADDED DIMENSIONS	04/11/08
REVISED PAY ITEM	04/15/10

LakeCounty Division of Transportation

APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

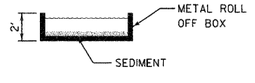
TEMPORARY DITCH CHECK INSTALLATION FOR ROADWAY OR DRAINAGE DITCH

LC2050

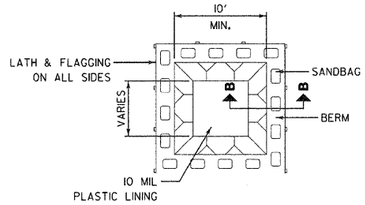


PLAN VIEW

PREFAB PORTABLE WASHOUT

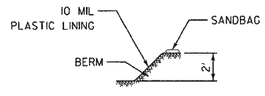


SECTION A-A



PLAN VIEW

BELOW GRADE



SECTION B-B

NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. OTHER WASHOUT DESIGNS MAY BE USED IF APPROVED BY THE ENGINEER.
3. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

NOT TO SCALE

REVISIONS	DATE

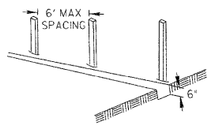
LakeCounty Division of Transportation

APPROVED BY: MCZ
DATE: March 17, 2008

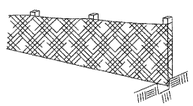
CONCRETE WASHOUT FACILITIES
SHEET 1 OF 2

LC4202

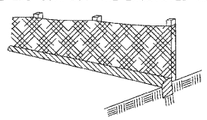
1. SET POSTS AND EXCAVATE OR SLIT-TRENCH A 6-INCH DEEP TRENCH UPSLOPE ALONG THE LINE OF POSTS



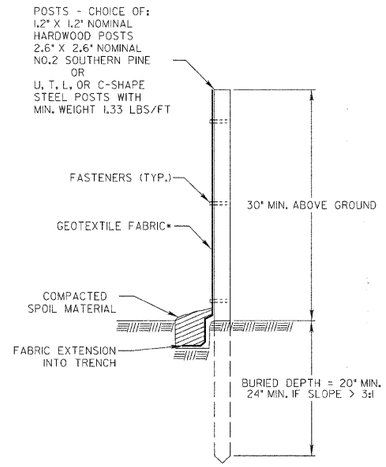
2. ATTACH GEOTEXTILE FILTER FABRIC TO EACH POST WITH A MINIMUM OF 3 (THREE) FASTENERS PER POST AND EXTEND FABRIC TO THE BOTTOM OF THE TRENCH



3. BACKFILL AND COMPACT THE EXCAVATED MATERIALS



Requirements	Test Methods	Wire Backed Supported Silt Fence [a]	Unsupported Silt Fence	
			Geotextile Elongation >=50% [b]	Geotextile Elongation <50% [b]
Maximum Post Spacing		4 feet	4 feet	6 feet
Grab Strength	ASTM D 4632			
Machine direction		90 lbs	124 lbs	124 lbs
X-Machine direction		90 lbs	100 lbs	100lbs
Permittivity [c]	ASTM D 4491	0.05 sec^{-1}	0.05 sec^{-1}	0.05 sec^{-1}
Apparent Opening Size	ASTM D 4751	0.024in maximum average roll value		
Ultraviolet stability (retained strength)	ASTM D 4355	70% after 500 hours of exposure		



* NOTE: OPTIONAL WIRE SUPPORT
- MIN. 30" HEIGHT
- MIN. 14 GAUGE WIRE
- MIN. 6 HORIZ. WIRES
- MIN. 6" VERTICAL SPACING

SCALE 1" = 1'

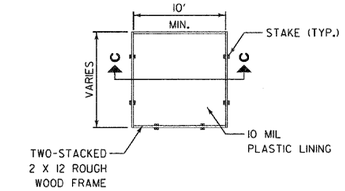
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LakeCounty Division of Transportation

APPROVED BY: M. G. ZEMAITIS
DATE: JUNE 20, 2008

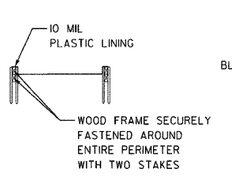
PERIMETER EROSION BARRIER INSTALLATION

LC2051

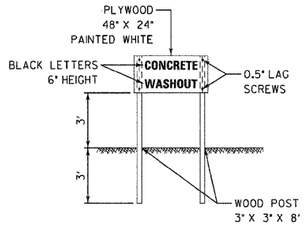


PLAN VIEW

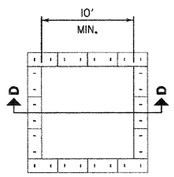
ABOVE GRADE



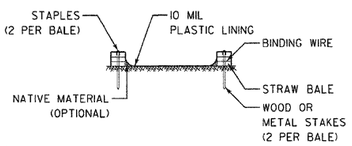
SECTION C-C



CONCRETE WASHOUT SIGN DETAIL (OR EQUIVALENT)

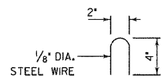


PLAN VIEW



ABOVE GRADE WITH STRAW BALES

SECTION D-D



STAPLE DETAIL

NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. OTHER WASHOUT DESIGNS MAY BE USED IF APPROVED BY THE ENGINEER.
3. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

NOT TO SCALE

REVISIONS	DATE

LakeCounty Division of Transportation

APPROVED BY: MCZ
DATE: March 17, 2008

CONCRETE WASHOUT FACILITIES
SHEET 2 OF 2

LC4202

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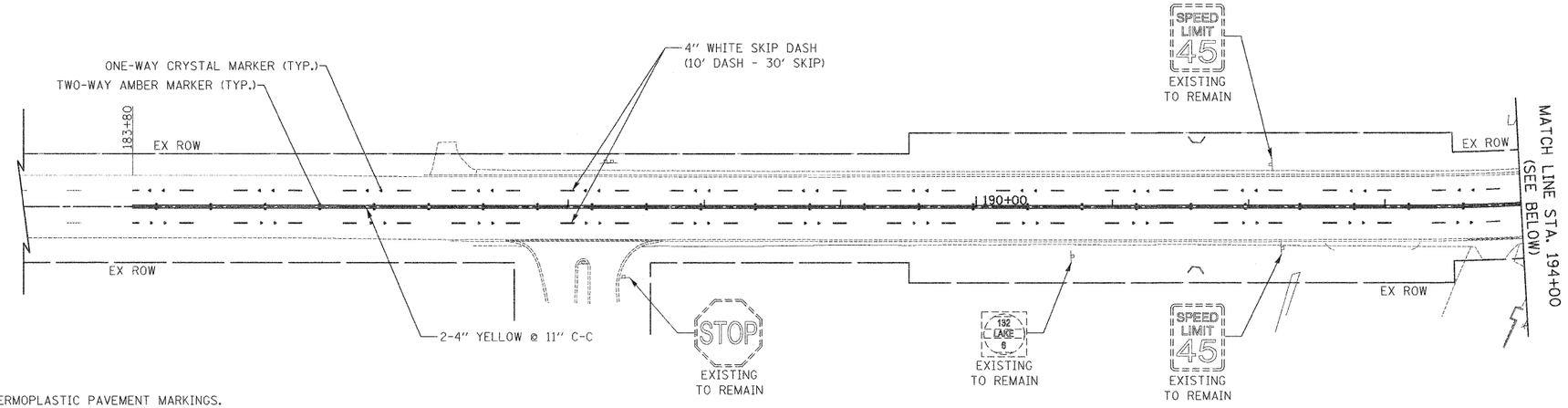
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LANDSCAPING AND EROSION CONTROL
GRAND AVENUE UNDERPASS
SHEET NO. 4 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	21
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY? NOTE BOOK NO. | DATE | BY | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED

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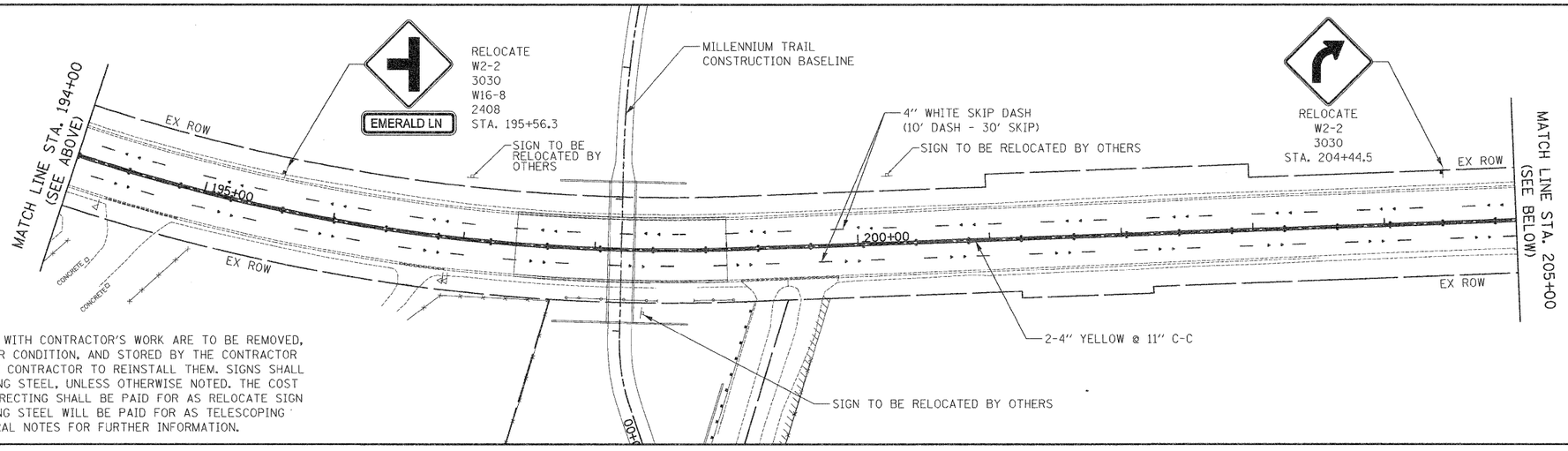
LEGEND:

- PROPOSED SIGN
- EXISTING SIGN
- ONE-WAY CRYSTAL MARKER
- TWO-WAY AMBER MARKER

NOTE:

ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKINGS.

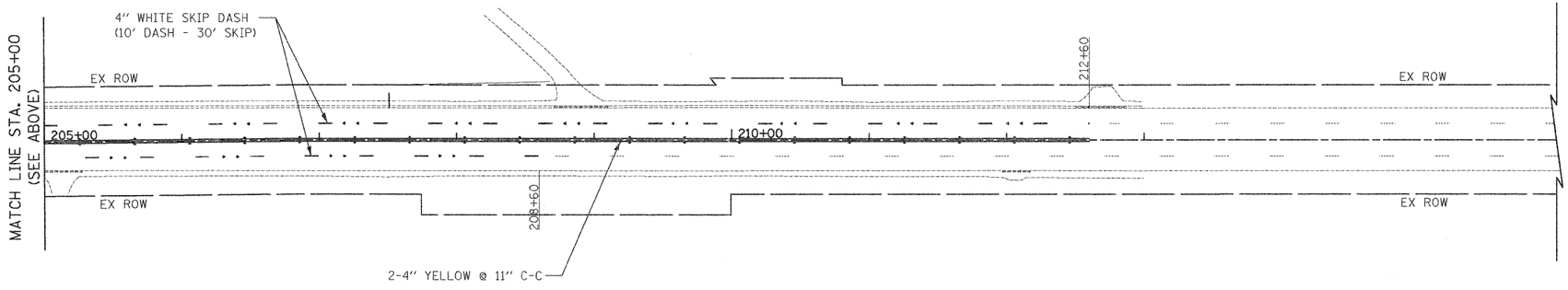
GRAND AVENUE



NOTE:

ALL EXISTING SIGNS CONFLICTING WITH CONTRACTOR'S WORK ARE TO BE REMOVED, INVENTORIED, MAKE NOTE OF THEIR CONDITION, AND STORED BY THE CONTRACTOR UNTIL THE ENGINEER DIRECTS THE CONTRACTOR TO REINSTALL THEM. SIGNS SHALL BE INSTALLED ON NEW TELESCOPING STEEL, UNLESS OTHERWISE NOTED. THE COST FOR REMOVAL, STORING, AND RE-ERECTING SHALL BE PAID FOR AS RELOCATE SIGN PANEL ASSEMBLY. NEW TELESCOPING STEEL WILL BE PAID FOR AS TELESCOPING STEEL SIGN SUPPORTS. SEE GENERAL NOTES FOR FURTHER INFORMATION.

GRAND AVENUE



GRAND AVENUE

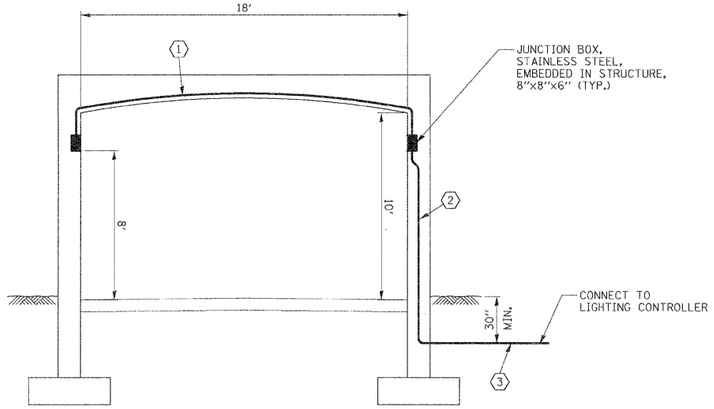
USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS**	SCALES	**PAVEMENT MARKING AND SIGNING**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FILE NAME ...\2322_PMK_01_GRAND.dgn	DRAWN - PK	REVISED -	**DEPARTMENT OF TRANSPORTATION**	HORIZ.0 50 100	**GRAND AVENUE UNDERPASS**	0541	1Q-E3000-00-BI	LAKE	91	22
PLOT SCALE 50.0000 ' / in.	CHECKED - RTM	REVISED -			SHEET NO. 1 OF 1 SHEETS STA. 183+80 TO STA. 212+60				CONTRACT NO. 63665	
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -				FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

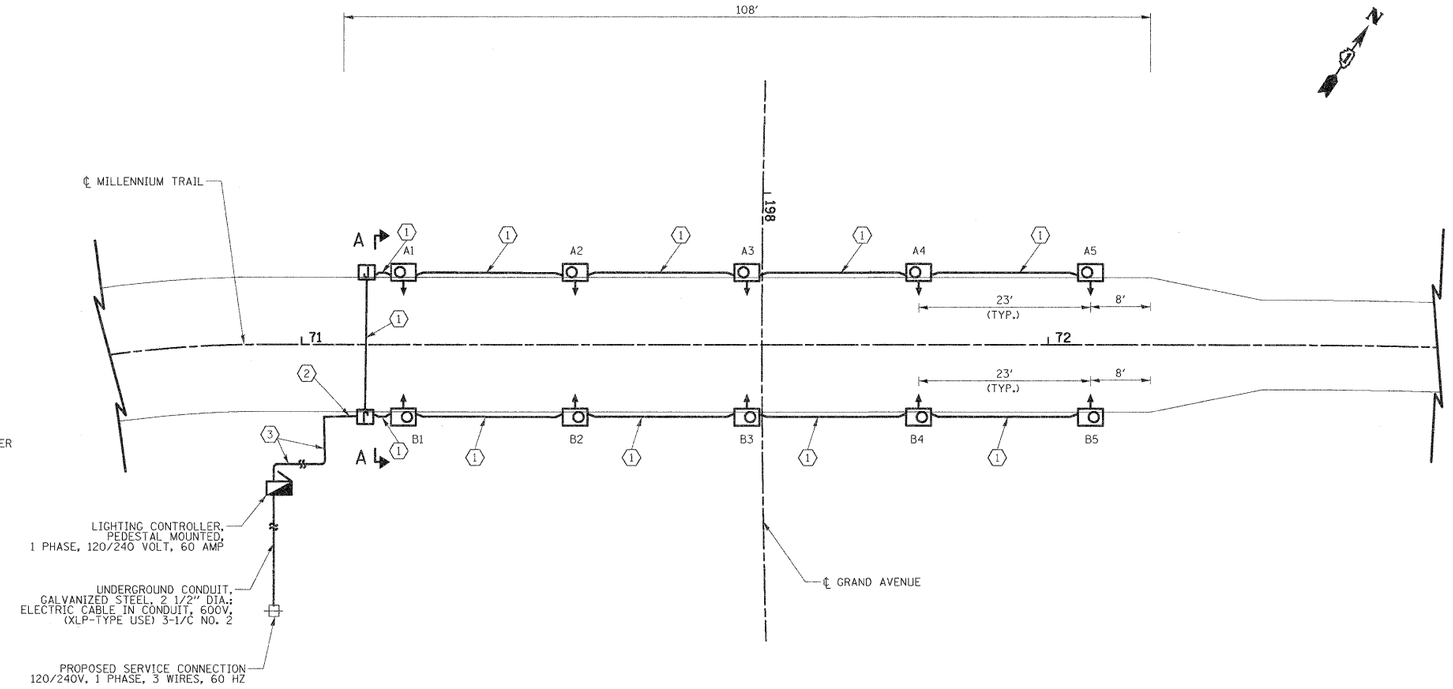
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

FINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED



SECTION A-A



PLAN VIEW

LEGEND

- LUMINAIRE (SPECIAL) UNDERPASS WALL MOUNTED LUMINAIRE, 70 WATT METAL HALIDE
- RIGID GALVANIZED STEEL CONDUIT, TYPE AND SIZE AS NOTED
- J — JUNCTION BOX, STAINLESS STEEL, EMBEDDED IN STRUCTURE, 8"x8"x6"
- PROPOSED LIGHTING CONTROLLER, SPECIAL
- EXISTING POWER POLE

NOTES:

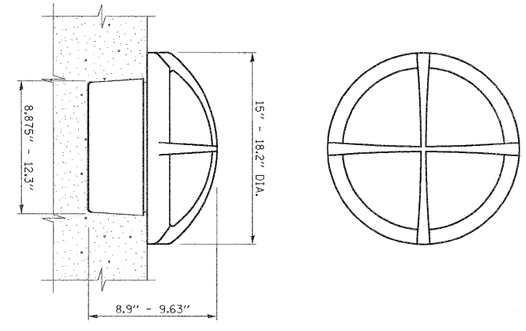
1. ALL WALL MOUNTED LUMINAIRES ARE MOUNTED 8' FROM THE BOTTOM OF THE LUMINAIRE TO THE FINISHED SURFACE OF THE BIKE PATH.

WIRE AND CONDUIT TABLE

TAG	WIRE	RIGID GALVANIZED STEEL CONDUIT
1	2-1/C NO. 10 AND 1/C NO. 10 GROUND	CONDUIT EMBEDDED IN STRUCTURE, 1" DIA. GALVANIZED STEEL
2	3-1/C NO. 10 AND 1/C NO. 10 GROUND	CONDUIT EMBEDDED IN STRUCTURE, 1" DIA. GALVANIZED STEEL
3	3-1/C NO. 10 AND 1/C NO. 10 GROUND	UNDERGROUND CONDUIT, GALVANIZED STEEL, 1" DIA.,

UNDERPASS LUMINAIRE LOCATIONS

LUMINAIRE NO.	STATION	OFFSET
A1	71+14	9.0' LT.
A2	71+37	9.0' LT.
A3	71+60	9.0' LT.
A4	71+83	9.0' LT.
A5	72+06	9.0' LT.
B1	71+14	9.0' RT.
B2	71+37	9.0' RT.
B3	71+60	9.0' RT.
B4	71+83	9.0' RT.
B5	72+06	9.0' RT.



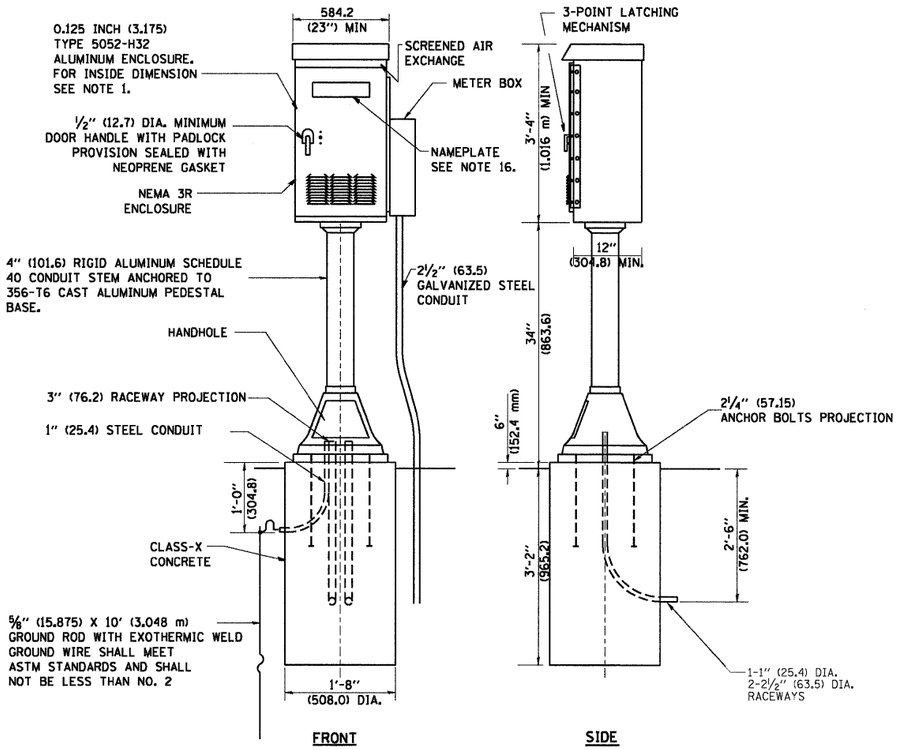
LUMINAIRE (SPECIAL) DETAIL

USER NAME = sjc	DESIGNED - PK	REVISED - 1/3/2012	**STATE OF ILLINOIS**
FILE NAME ...\2322_Lighting 18scale.dgn	DRAWN - PK	REVISED -	**DEPARTMENT OF TRANSPORTATION**
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	SCALES HORIZ. 0 10 20
PLOT DATE = 1/3/2012	DATE - 12/19/2011	REVISED -	**LIGHTING PLAN** **GRAND AVENUE UNDERPASS** SHEET NO. 1 OF 1 SHEETS STA. TO STA.

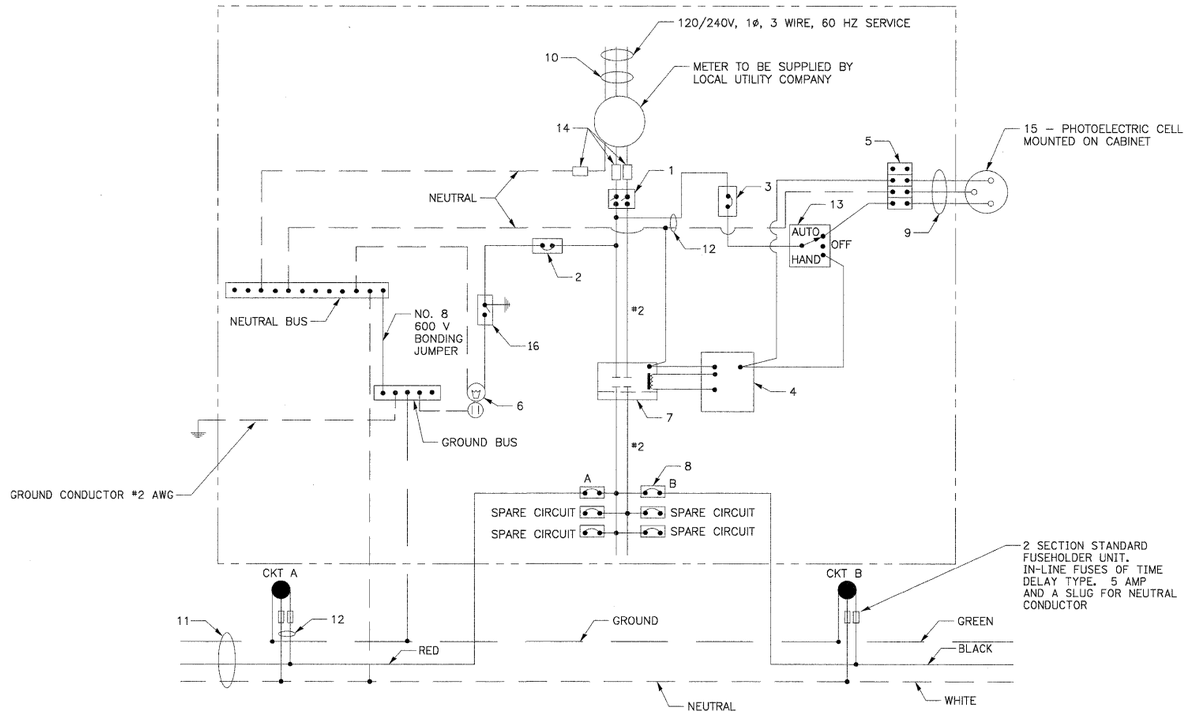
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	23
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

	DATE	BY
FINAL SURVEY	SURVEYED	
NOTE BOOK	PLOTTED	
NO.	TOPO DATE	
	AREAS	
	AREAS CHECKED	

	DATE	BY
ORIGINAL SURVEY	SURVEYED	
NOTE BOOK	PLOTTED	
NO.	TOPO DATE	
	AREAS	
	AREAS CHECKED	



FOUNDATION PLAN



NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. UNLESS OTHERWISE INDICATED, THE CABINET SHALL BE MOUNTED ATOP A 4-INCH (101.6 mm) RIGID ALUMINUM SCHEDULE 40 CONDUIT STEM ANCHORED TO A CAST ALUMINUM PEDESTAL BASE.
3. IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 2" (50.8 mm) TOP SOIL, LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 36" (914.4 mm) x 60" (18.288 m) x 4" (101 mm) MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
4. DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
5. DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
6. DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A ¼" (6.35 mm) DIA. STAINLESS STEEL HINGE PIN.
7. ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
8. CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
9. METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.
10. CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED.
11. THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
12. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.
    R = RED BL = BLUE W = WHITE
    B = BLACK Y = YELLOW G = GREEN
13. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
14. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
15. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".

LIGHTING CONTROLLER COMPONENT SCHEDULE

ITEM	SPECIFICATION OR EQUAL
(1) MAIN CIRCUIT BREAKER	60 AMPERE, 2 POLE, 240 VOLT RATING INTERRUPTING CAPACITY NOT LESS THAN 25,000 RMS SYMMETRICAL AMPS AT 600V
(2) LAMPHOLDER CIRCUIT BREAKER	15 AMPERE, 1 POLE, 120 VOLT RATING INTERRUPTING CAPACITY NOT LESS THAN 14,000 RMS SYMMETRICAL AMPS AT 277V
(3) PHOTOELECTRIC CELL CONTROL CIRCUIT BREAKER	15 AMPERE, 1 POLE, 120 VOLT RATING INTERRUPTING CAPACITY NOT LESS THAN 14,000 RMS SYMMETRICAL AMPS AT 277V
(4) AUXILIARY RELAY	120 VOLT SPST 60 HZ COIL
(5) FOUR POINT TERMINAL BLOCK	600 VOLT
(6) LAMPHOLDER AND OUTLET	120 VOLT SWITCHED LAMPHOLDER AND 15 AMP GFI DUPLEX RECEPTACLE
(7) REMOTE CONTROL SWITCH	60 AMPERE, 2 POLE, 240 VOLT RATING. ELECTRICALLY OPERATED, MECHANICALLY HELD
(8) BRANCH LINE CIRCUIT BREAKERS	CKTS A-B 20 AMP 1 POLE, 120 VOLT RATING INTERRUPTING CAPACITY NOT LESS THAN 10,000 RMS SYMMETRICAL AMPS AT 277V
(9) PHOTOELECTRIC CELL CONTROL WIRE	3-600V XLP NO. 10
(10) SERVICE CABLES	3-600V (XLP-TYPE USE) NO. 2
(11) BRANCH LINE CABLES	SEE PLANS FOR SIZE
(12) LIGHTING POLE WIRE	2-600V XLP NO. 10 CABLES WITH POLE GROUND AND FUSING
(13) HAND-AUTO-OFF CONTROL SWITCH	10 AMPERE, 3 POLE, 120 VOLT
(14) LIGHTING ARRESTOR	BRACKET MOUNTED SURGE ARRESTOR FOR 120/240V 3W SERVICE
(15) PHOTOELECTRIC CELL	120 SECONDS OFF TIME DELAY, 120V
(16) MICRO SWITCH	MOUNT WITH ACTUATOR TO SWITCH WHEN DOOR IS OPEN

LIGHTING CONTROLLER WIRING DIAGRAM

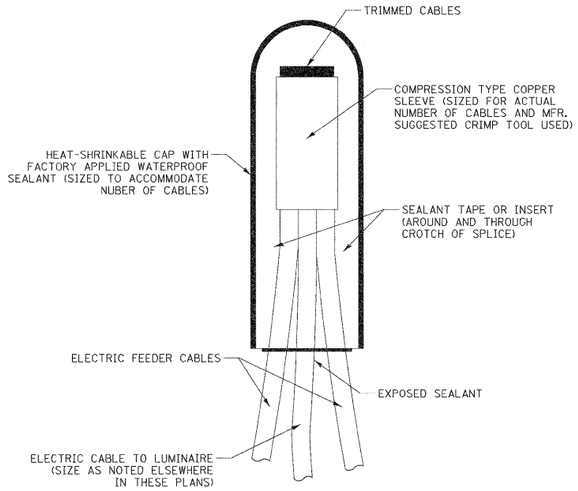
FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS CHECKED — BY — DATE

USER NAME = sjc	DESIGNED - PK	REVISED - 1/3/2012	**STATE OF ILLINOIS**
FILE NAME ...\2322_Light_Detail_1.dgn	DRAWN - PK	REVISED -	**DEPARTMENT OF TRANSPORTATION**
PLOT SCALE 1.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 1/3/2012	DATE - 12/19/2011	REVISED -	

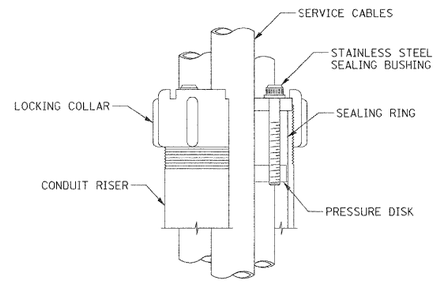
LIGHTING DETAIL
GRAND AVENUE UNDERPASS
SHEET NO. 2 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	24
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

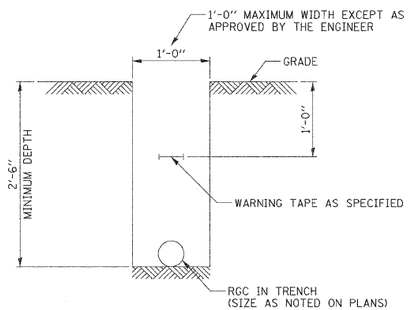


NOTE: NUMBER OF CABLES IN SPLICE MAY VARY

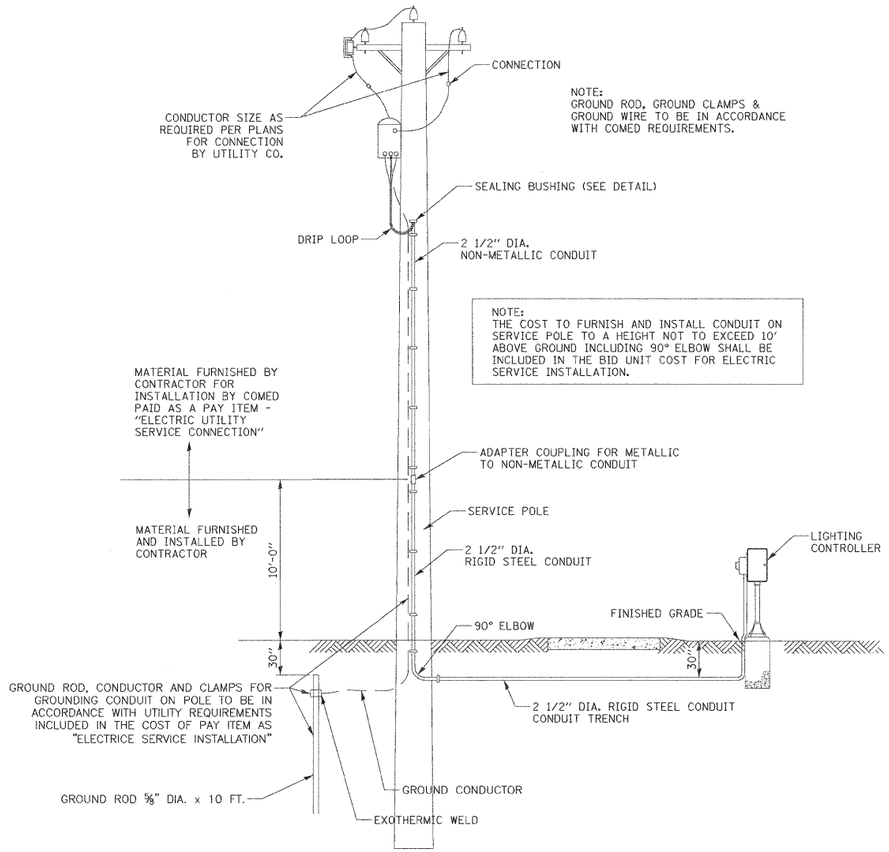
SPLICING ELECTRIC CABLES BASIC MATERIALS AND METHODS



SEALING BUSHING DETAIL



TYPICAL WIRING IN TRENCH - DETAIL



PROPOSED SERVICE INSTALLATION POLE TOP MOUNTED TRANSFORMER

USER NAME = sjo	DESIGNED - PK	REVISED - 1/3/2012
FILE NAME ...\2322_Light_Detail_2.dgn	DRAWN - PK	REVISED -
PLOT SCALE 1.0000 ' / in.	CHECKED - RTM	REVISED -
PLOT DATE = 1/3/2012	DATE - 12/19/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING DETAIL
GRAND AVENUE UNDERPASS
SHEET NO. 3 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	25
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

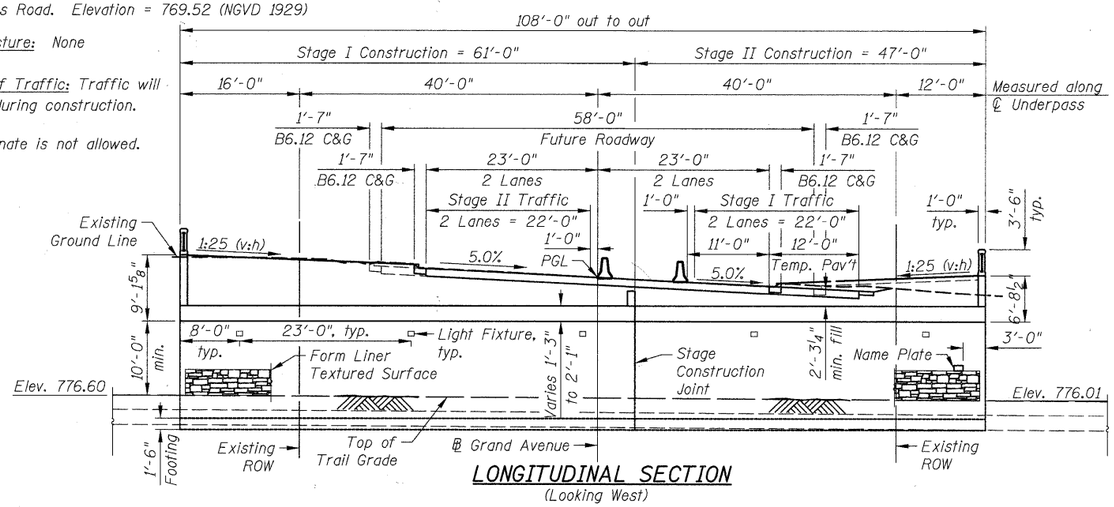
FINAL SURVEY / ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — ITEMS ATE — AREAS — AREAS CHECKED — BY — DATE

Benchmark: Cut square "□" in concrete at the southwest corner of parapet wall on the south side of Rollins Road across from 19714 Rollins Road. Elevation = 769.52 (NGVD 1929)

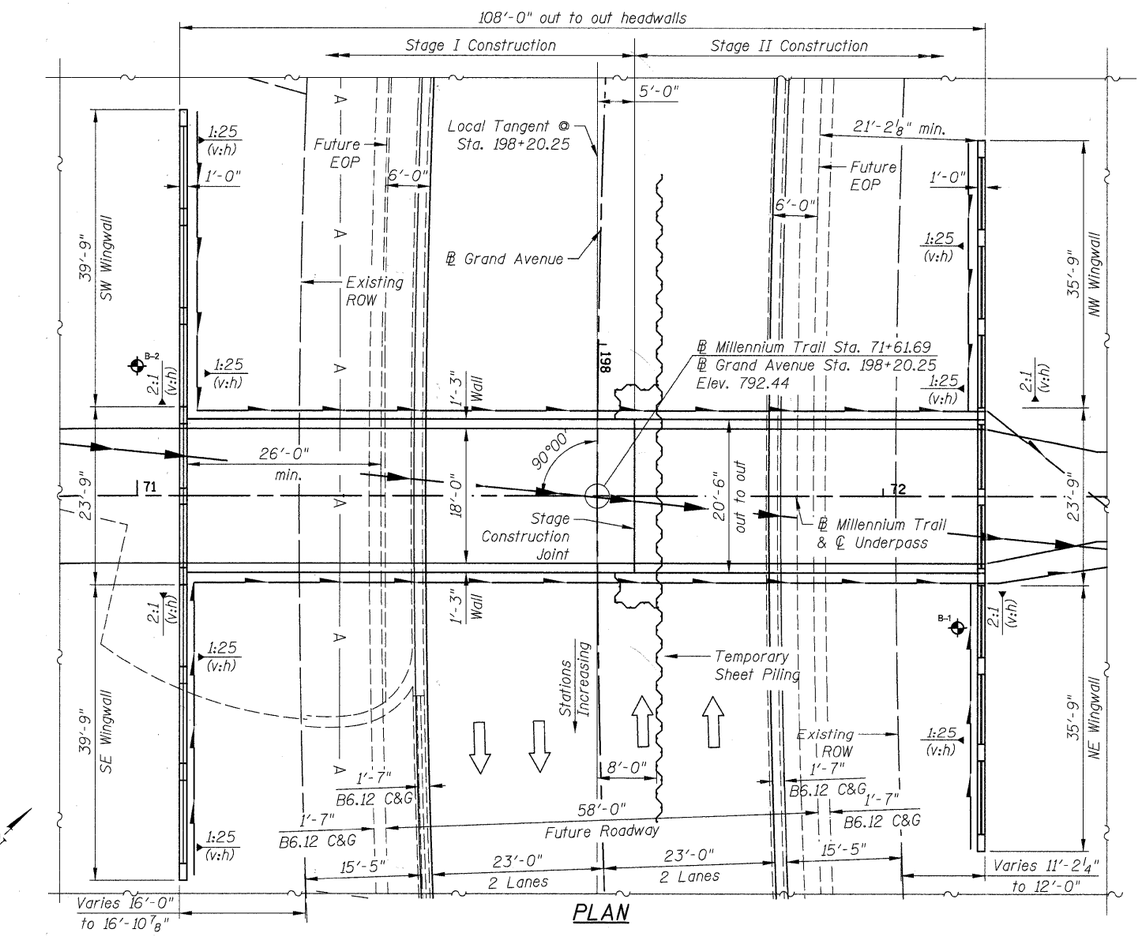
Existing Structure: None

Maintanence of Traffic: Traffic will be staged during construction.

Precast alternate is not allowed.



LONGITUDINAL SECTION
(Looking West)



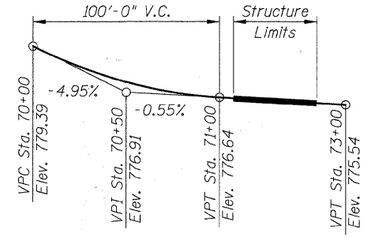
PLAN

INDEX OF SHEETS

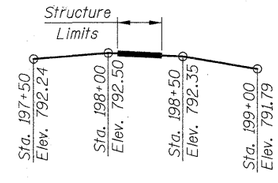
S1 General Plan & Longitudinal Section
S2 General Data
S3 Underpass Plan & Elevation
S4 Underpass Details
S5 South Wingwalls
S6 North Wingwalls
S7 Wingwall Details
S8 Architectural Details
S9 Bar Splicer Assembly Details
S10 "Intentionally Left Blank"
S11 Underpass Soil Boring Logs

GRAND AVENUE
BUILT 201_ BY
LAKE COUNTY FOREST
PRESERVE DISTRICT
SEC 10-F3000-00-BT
F.A.P. 0541 STA. 198+20.25
STR. NO. 049-9003 LOADING HS20

NAME PLATE
See Std. 515001



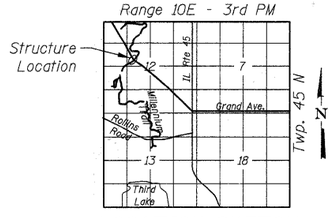
PROPOSED PROFILE GRADE MILLENNIUM TRAIL
(Along ℄ Millennium Trail)



EXISTING PROFILE OF GRAND AVENUE
(Along ℄ Grand Avenue)

CURVE DATA
GRAND AVENUE

Δ = 23° 20' 35" (Lt.)
D = 3° 59' 57"
T = 295.95'
L = 583.69'
E = 30.25'
R = 1,432.69'
S.E. = 5.0%
P.C. = Sta. 193+24.76
P.T. = Sta. 199+08.46
P.I. = Sta. 196+20.71



LOCATION SKETCH

CIVILTECH ENGINEERING, INC.
GREGORY J. HATLESTAD, S.E.

STATE OF ILLINOIS
GREGORY J. HATLESTAD
081-005562
LICENSED STRUCTURAL ENGINEER
CHICAGO, IL

GREGORY J. HATLESTAD, S.E.
081-005562

EXP 11/30/2012

DATE 1/27/2012

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
D. Carl Pyg (TTP)
Engineer of Bridges and Structures

LEGEND

A — Aerial Power Line
Proposed Pipe Underdrain
Proposed Storm Sewer
Soil Boring

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient = 1.0

DESIGN SPECIFICATIONS

2002 AASHTO Standard Spec. for Highway Bridges, 17th Ed.

DESIGN STRESSES
FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

LOADING HS20-44

Allow 50 psf for Future Wearing Surface.

GENERAL PLAN & LONGITUDINAL SECTION
GRAND AVENUE OVER MILLENNIUM TRAIL
F.A.P. RTE. 0541
SEC. 10-F3000-00-BT
LAKE COUNTY
STATION 198+20.25
STRUCTURE NUMBER 049-9003

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DRAWN - K. BOCHNOWSKI	REVISED	
DESIGNED - M. LANGE	REVISED	-
CHECKED - G. HATLESTAD	REVISED	-
DATE - JANUARY 27, 2012	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & LONGITUDINAL SECTION
GRAND AVENUE OVER MILLENNIUM TRAIL
STRUCTURE NO. 049-9003
SHEET NO. S1 OF S11 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	26
			CONTRACT NO.	
	ILLINOIS FED. AID PROJECT	63663		

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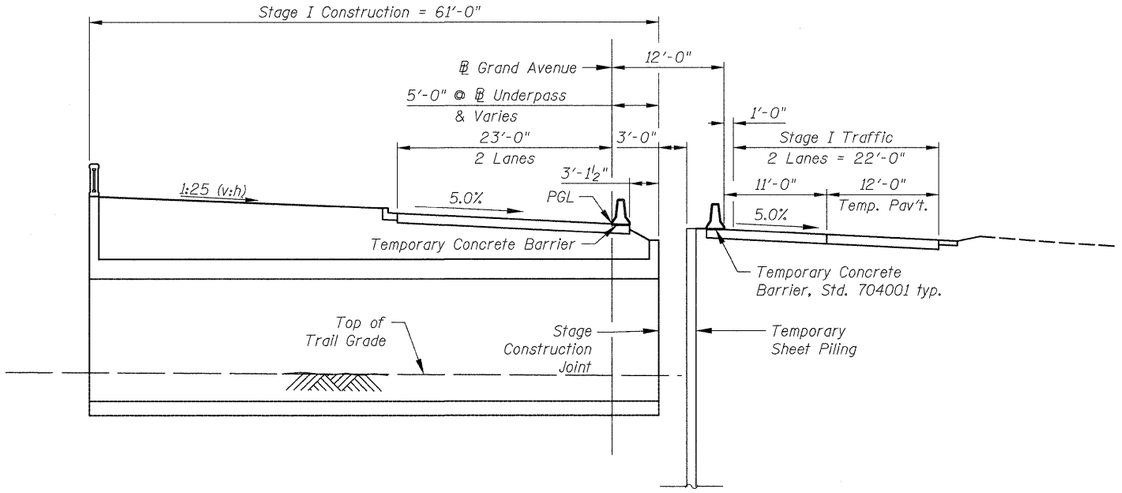
GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.

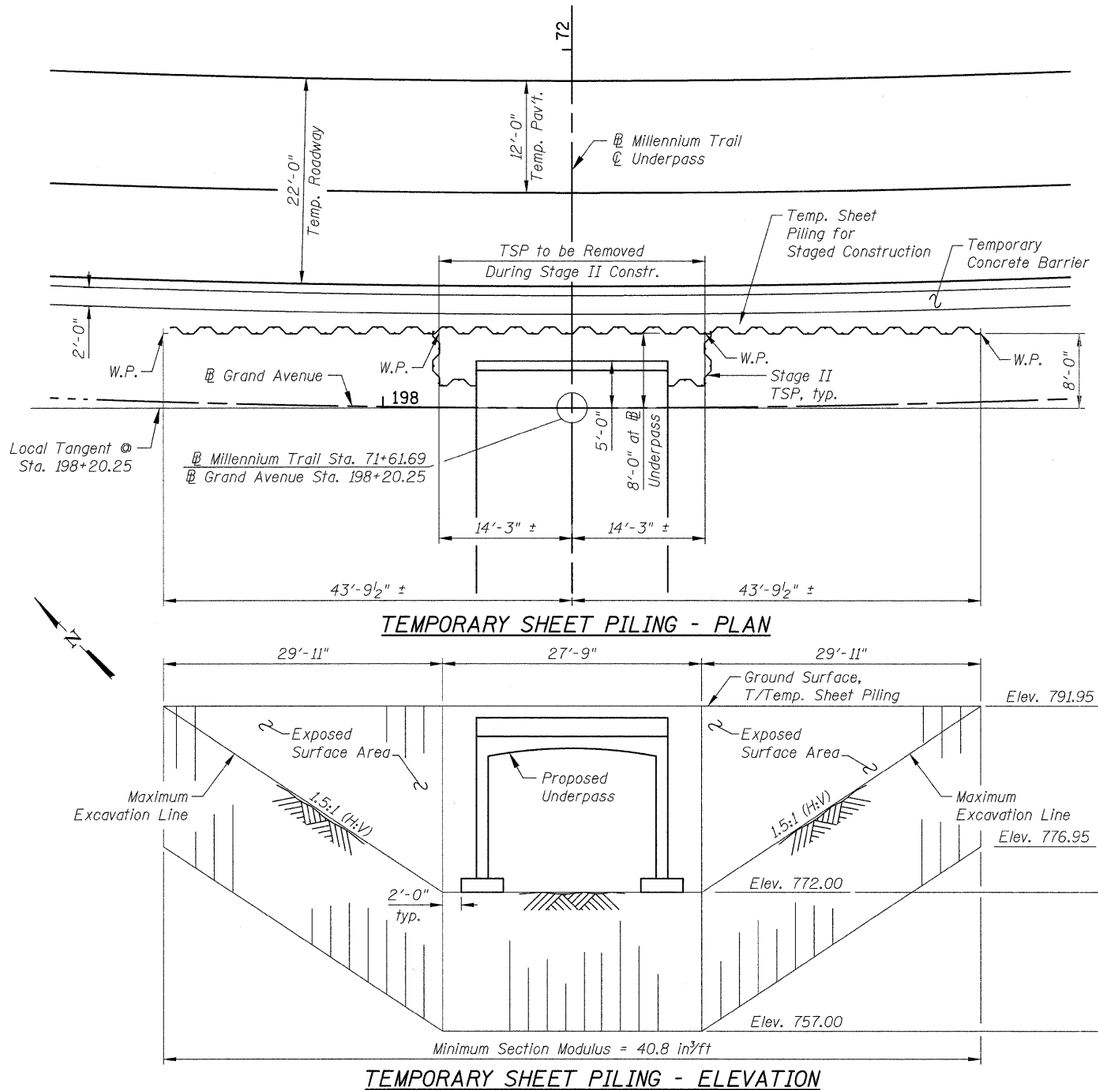
TSP = Temporary Sheet Piling
W.P. = Work Point

TOTAL BILL OF MATERIAL

Item	Unit	Total
Porous Granular Embankment	Cu. Yd.	1,008
Structure Excavation	Cu. Yd.	4,200
Concrete Structures	Cu. Yd.	666.5
Rubbed Finish	Sq. Ft.	4,653
Reinforcement Bars, Epoxy Coated	Pound	82,680
Bar Splicers	Each	120
Name Plates	Each	1
Membrane Waterproofing	Sq. Ft.	2,543
Geocomposite Wall Drain	Sq. Yd.	567
Temporary Sheet Piling	Sq. Ft.	3,164
Pipe Underdrains for Structures, 4"	Foot	419
Ornamental Railing	Foot	158
Staining Concrete Structures	Sq. Yd.	308
Form Liner Textured Surface, Special	Sq. Ft.	2,764

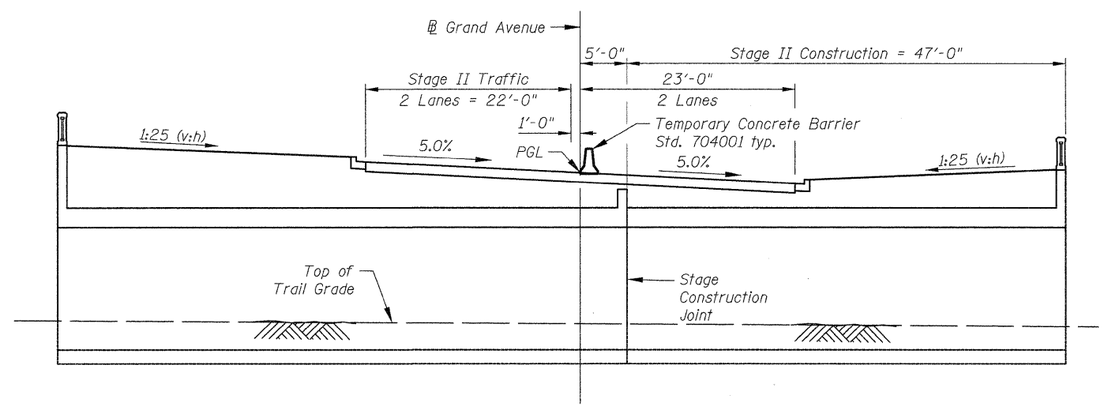


STAGE I CONSTRUCTION



TEMPORARY SHEET PILING - PLAN

TEMPORARY SHEET PILING - ELEVATION



STAGE II CONSTRUCTION

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

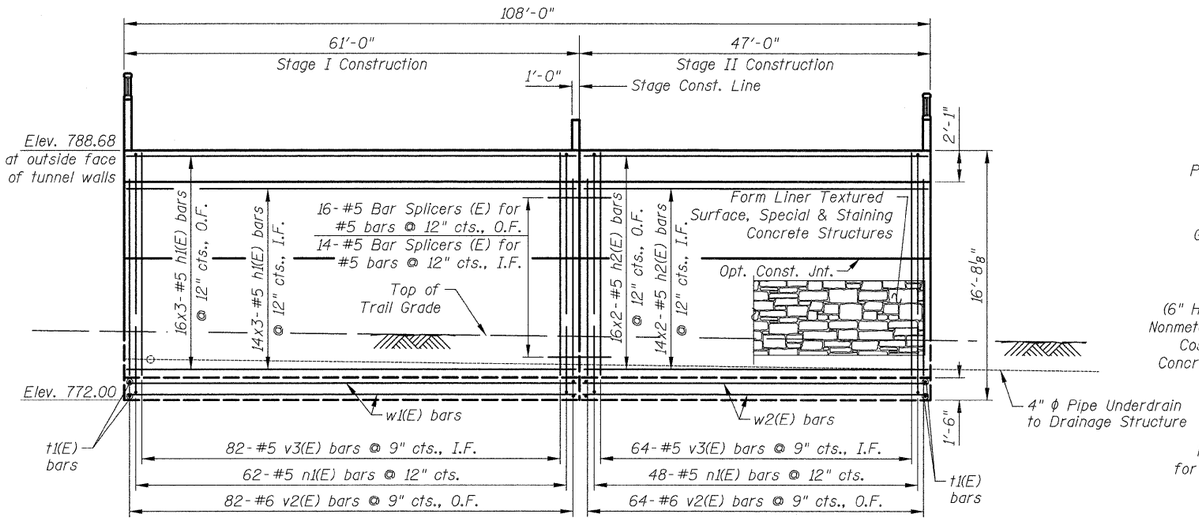
DRAWN - K. BOCHNOWSKI	REVISED -	
DESIGNED - M. LANGE	REVISED -	
CHECKED - G. HATLESTAD	REVISED -	
DATE - JANUARY 27, 2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
GRAND AVENUE OVER MILLENNIUM TRAIL
STRUCTURE NO. 049-9003
SHEET NO. 52 OF 511 SHEETS

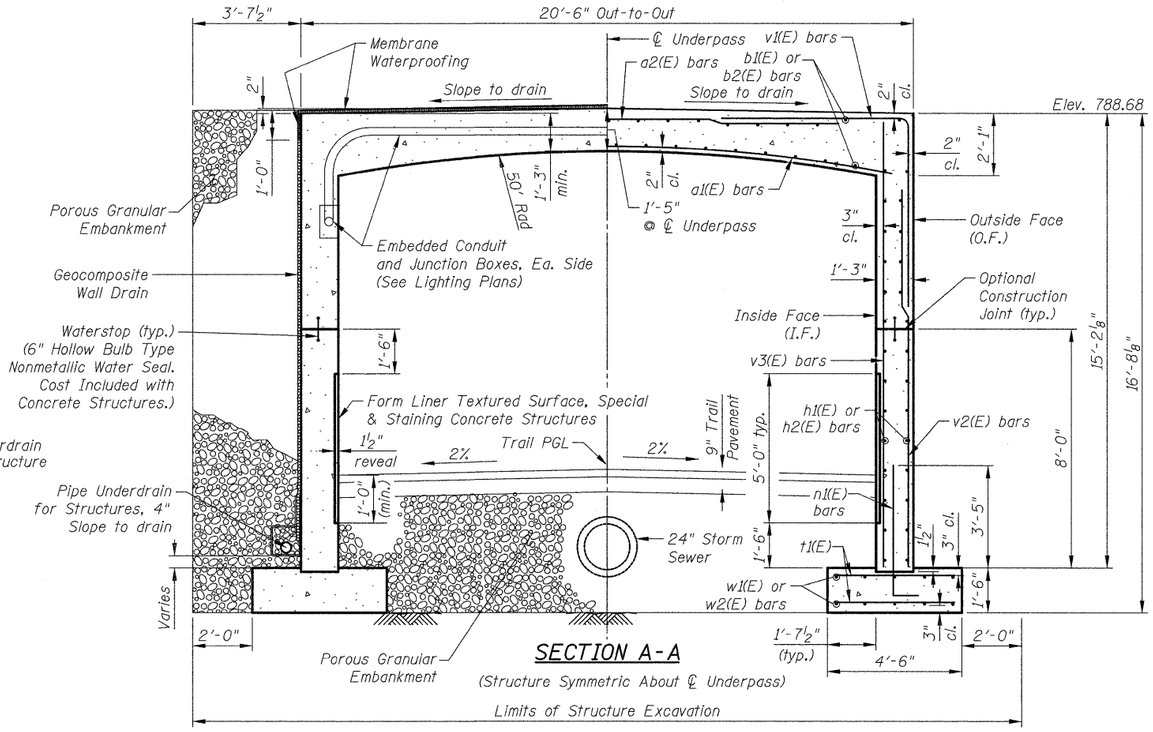
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	27
			CONTRACT NO.	
		ILLINOIS FED. AID PROJECT		

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ELEVATION

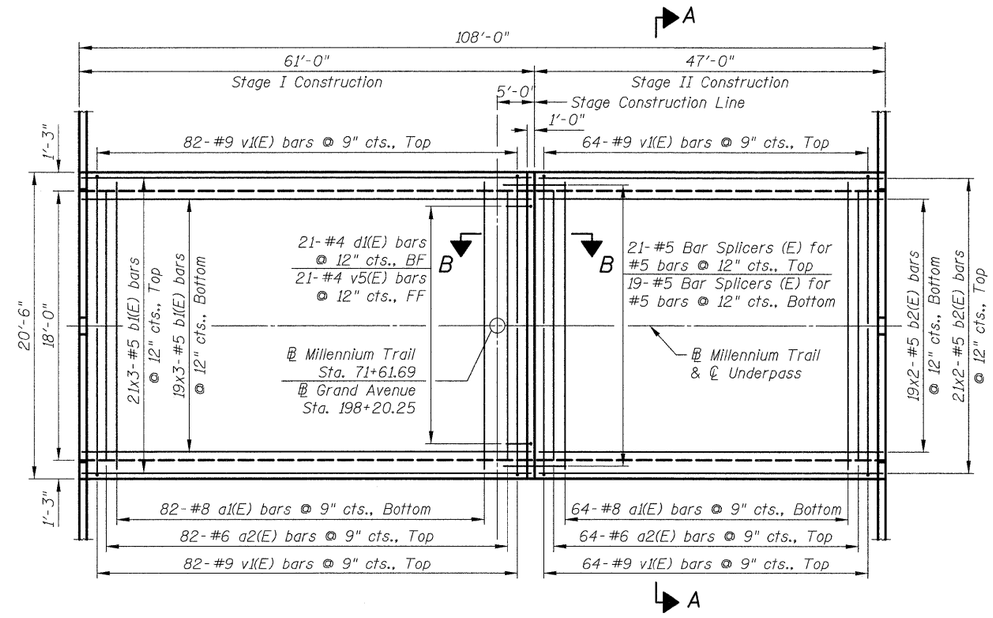
(East Wall Shown - West Wall is Similar)



SECTION A-A

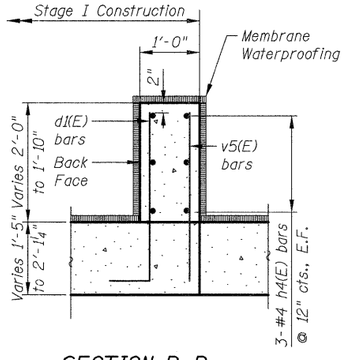
(Structure Symmetric About ℄ Underpass)

Note:
Maximum Applied Bearing Pressure = 2,880 psf
Maximum Allowed Bearing Pressure = 3,000 psf



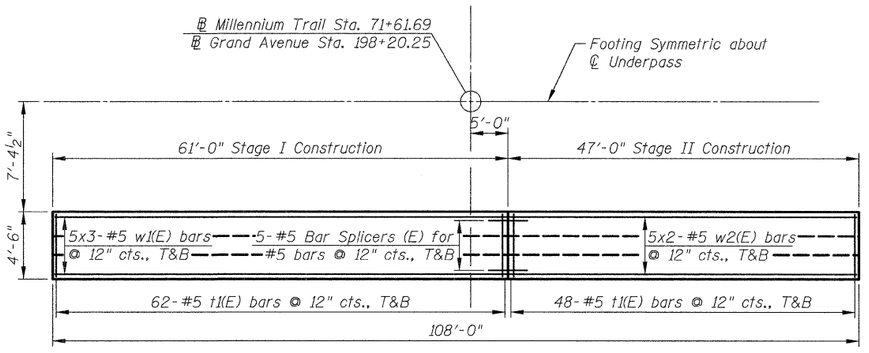
TOP SLAB- PLAN

Note:
1. See sheet S4 for Bill of Material and Bar Diagrams.
2. See sheet S5 & S6 for pipe underdrain invert elevations and S7 for Pipe Underdrain Detail.
3. See sheet S8 for Architectural Details.



SECTION B-B

Underpass Reinforcement Not Shown



FOOTING - PLAN

(East Footing is Shown)

MINIMUM LAP

Bar Size	Class C
#4	2'-7"
#5	3'-3"
#6	3'-10"
#7	5'-2"
#8	6'-9"
#9	8'-7"

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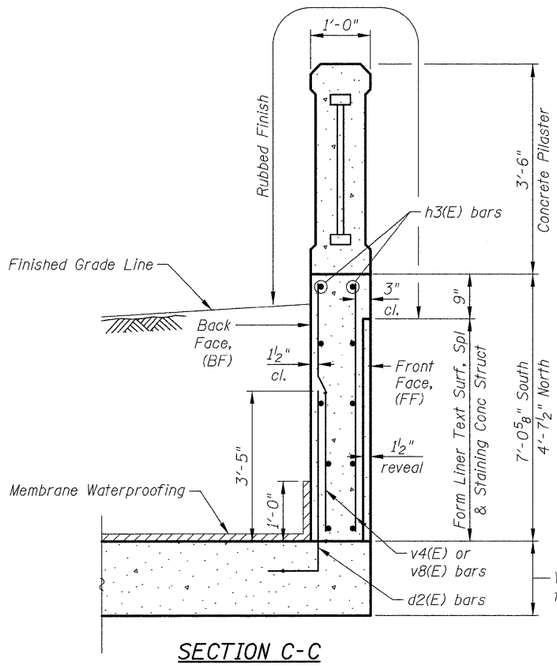
DRAWN - K. BOCHNOWSKI	REVISED -	
DESIGNED - M. LANGE	REVISED -	
CHECKED - G. HATLESTAD	REVISED -	
DATE - JANUARY 27, 2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

UNDERPASS PLAN AND ELEVATION
GRAND AVENUE OVER MILLENNIUM TRAIL
STRUCTURE NO. 049-9003
SHEET NO. S3 OF S11 SHEETS

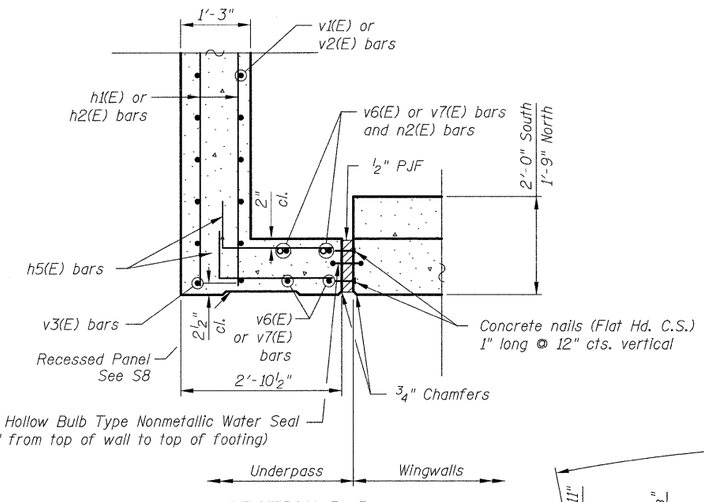
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	28
			CONTRACT NO.	
	ILLINOIS FED. AID PROJECT			

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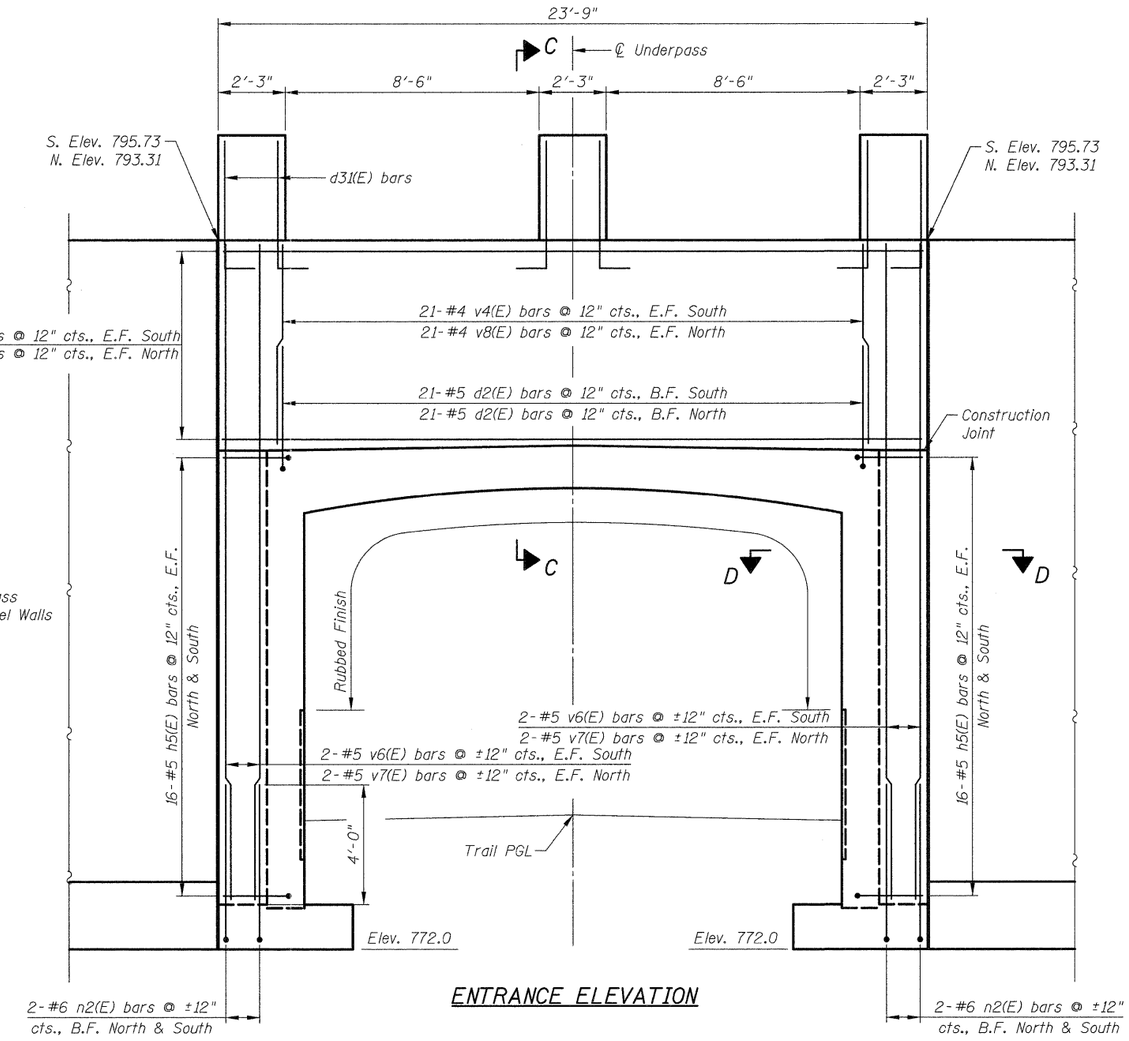


SECTION C-C

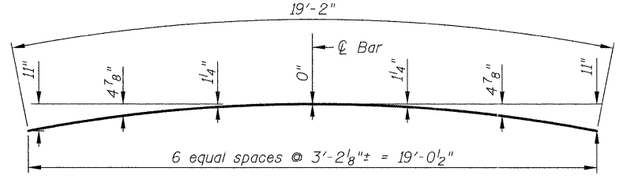
(Pilaster and Underpass Reinforcement Not Shown)



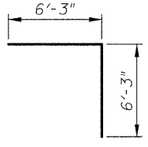
SECTION D-D



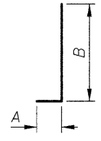
ENTRANCE ELEVATION



BAR d1(E)



BAR v1(E)



BARS d1(E), d2(E), h5(E), n1(E) & n2(E)

Bar	A	B
d1(E)	8"	2'-10"
d2(E)	10"	4'-4"
h5(E)	10"	2'-2"
n1(E)	10"	4'-4"
n2(E)	1'-0"	5'-1"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	146	#8	19'-2"	
a2(E)	146	#6	18'-0"	
b1(E)	120	#5	22'-5"	
b2(E)	80	#5	25'-0"	
d1(E)	21	#4	3'-6"	
d2(E)	42	#5	5'-2"	
h1(E)	180	#5	22'-5"	
h2(E)	120	#5	25'-0"	
h3(E)	28	#4	23'-5"	
h4(E)	6	#4	20'-2"	
h5(E)	128	#5	3'-0"	
n1(E)	220	#5	5'-2"	
n2(E)	8	#6	6'-1"	
v1(E)	292	#9	12'-6"	
v2(E)	292	#6	12'-7"	
v3(E)	292	#5	14'-10"	
v4(E)	42	#4	6'-8"	
v5(E)	21	#4	2'-10"	
v6(E)	8	#5	21'-11"	
v7(E)	8	#5	19'-6"	
v8(E)	42	#4	4'-3"	
t1(E)	440	#5	4'-2"	
w1(E)	60	#5	22'-5"	
w2(E)	40	#5	25'-0"	

Item	Unit	Quantity
Porous Granular Embankment	Cu. Yd.	709
Structure Excavation	Cu. Yd.	2,187
Concrete Structures	Cu. Yd.	336.5
Rubbed Finish	Sq. Ft.	3,674
Reinforcement Bars, Epoxy Coated	Pound	53,910
Membrane Waterproofing	Sq. Ft.	2,543
Geocomposite Wall Drain	Sq. Yd.	341
Pipe Underdrain for Structures, 4"	Foot	256
Staining Concrete Structures	Sq. Yd.	144
Form Liner Textured Surface, Special	Sq. Ft.	1,292

Bars indicated thus 13x3-#6 etc. indicates 13 lines of bars with 3 lengths per line.

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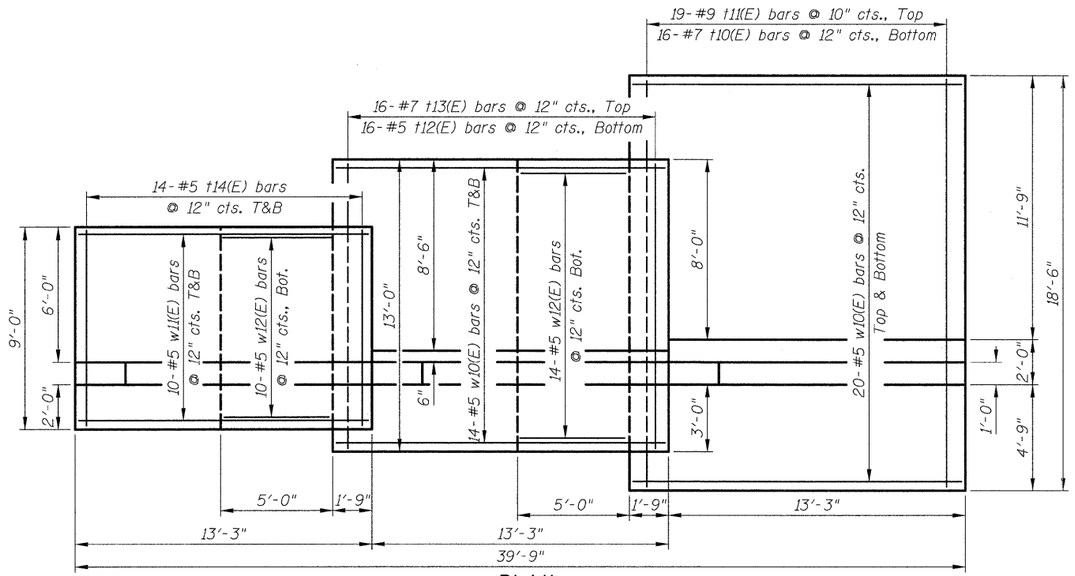
DRAWN - K. BOCHNOWSKI	REVISED -	
DESIGNED - M. LANGE	REVISED -	
CHECKED - G. HATLESTAD	REVISED -	
DATE - JANUARY 27, 2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

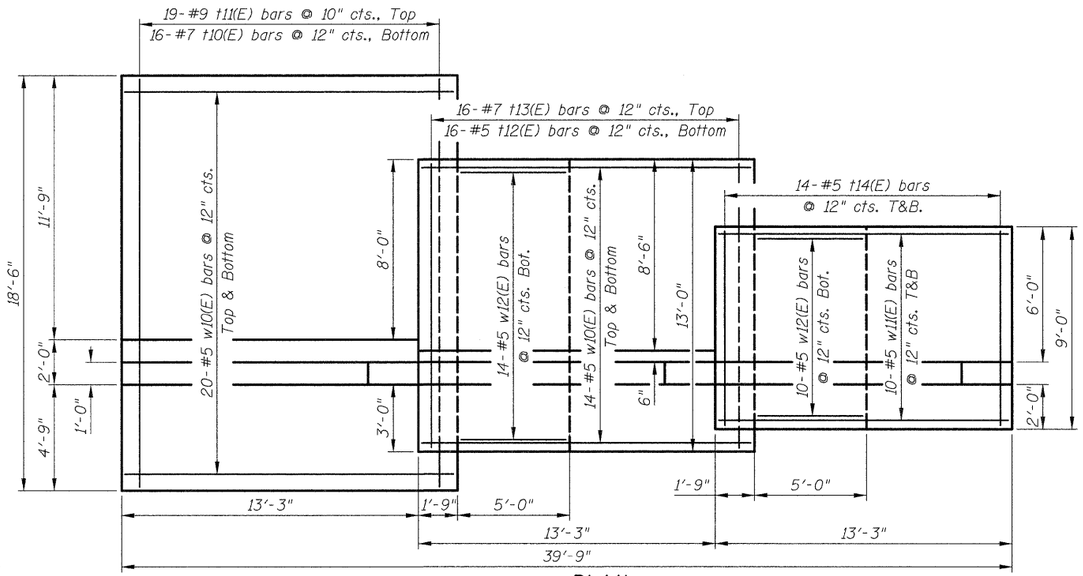
UNDERPASS DETAILS
GRAND AVENUE OVER MILLENNIUM TRAIL
STRUCTURE NO. 049-9003
SHEET NO. S4 OF S11 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	ILLINOIS FED. AID PROJECT			

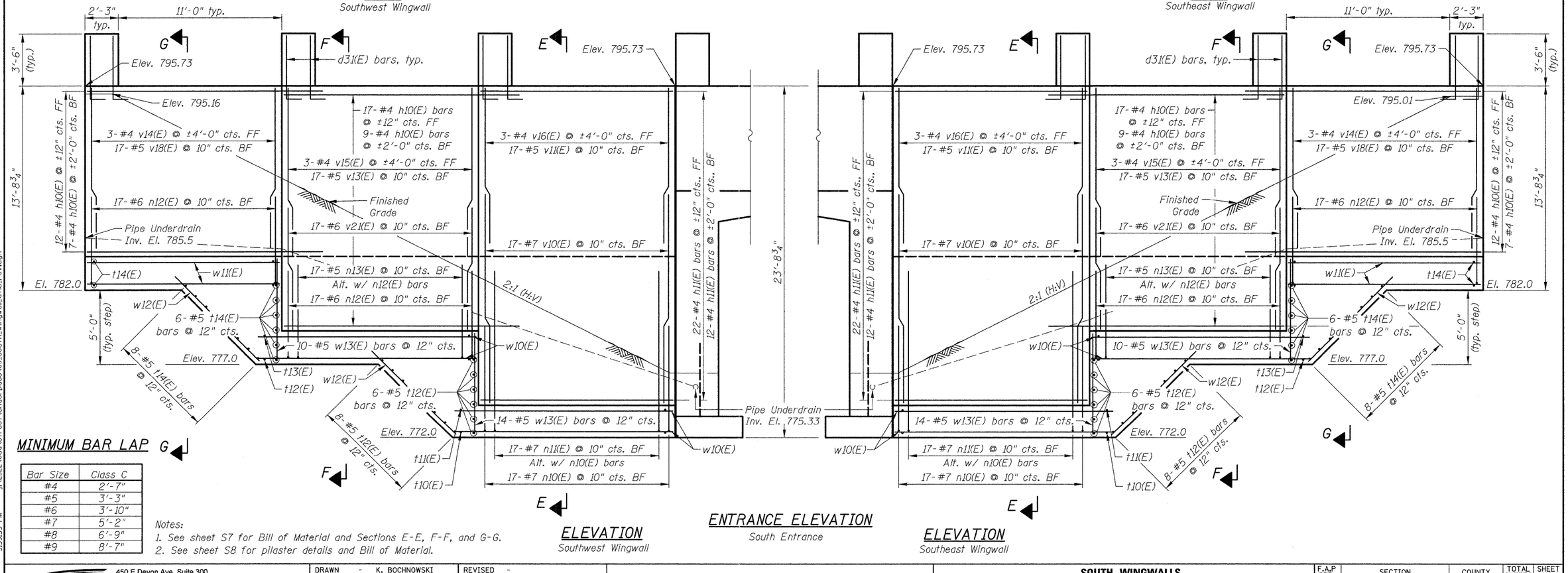
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PLAN
Southwest Wingwall



PLAN
Southeast Wingwall



ELEVATION
Southwest Wingwall

ENTRANCE ELEVATION
South Entrance

ELEVATION
Southeast Wingwall

MINIMUM BAR LAP

Bar Size	Class C
#4	2'-7"
#5	3'-3"
#6	3'-10"
#7	5'-2"
#8	6'-9"
#9	8'-7"

Notes:
1. See sheet S7 for Bill of Material and Sections E-E, F-F, and G-G.
2. See sheet S8 for pilaster details and Bill of Material.

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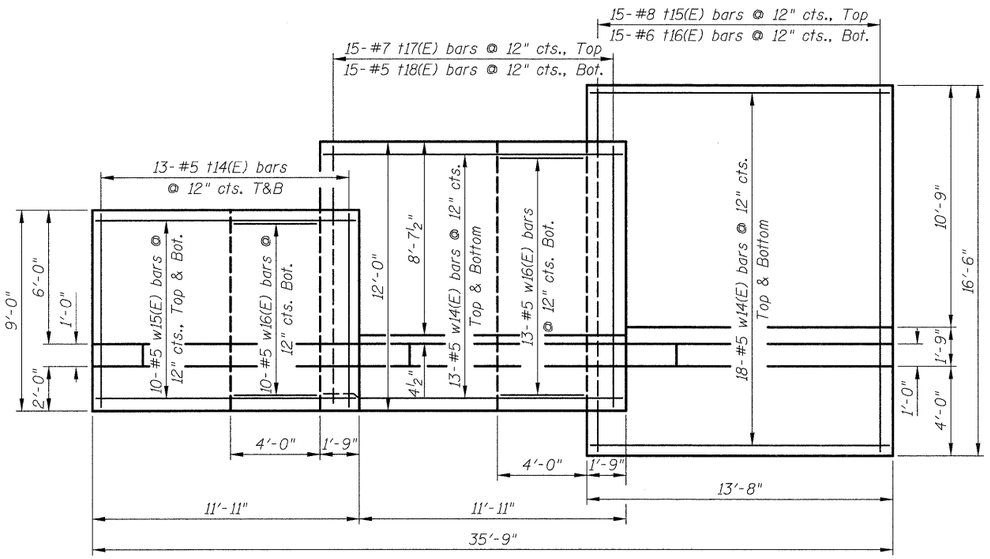
DRAWN - K. BOCHNOWSKI	REVISED -	
DESIGNED - M. LANGE	REVISED -	
CHECKED - G. HATLESTAD	REVISED -	
DATE - JANUARY 27, 2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

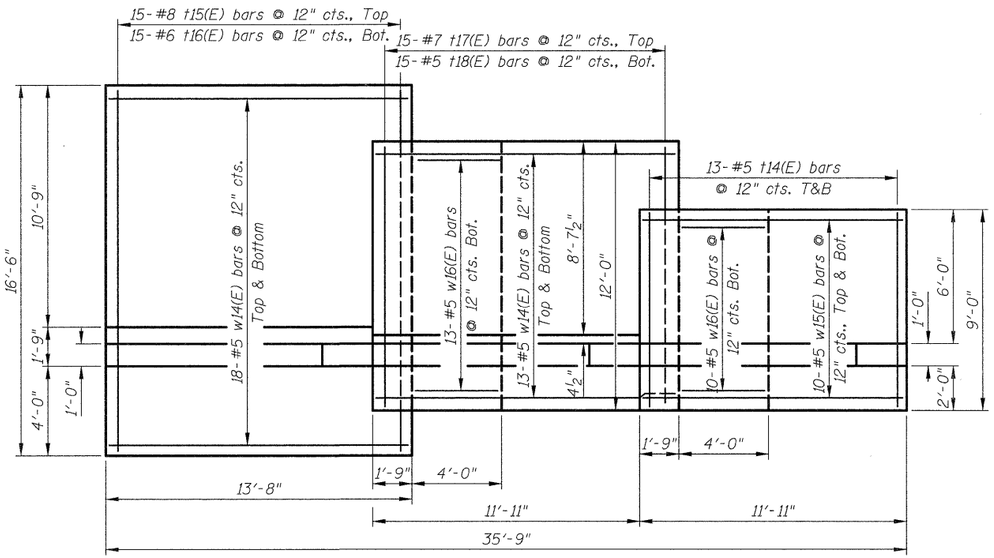
SOUTH WINGWALLS
GRAND AVENUE OVER MILLENNIUM TRAIL
STRUCTURE NO. 049-9003
SHEET NO. S5 OF S11 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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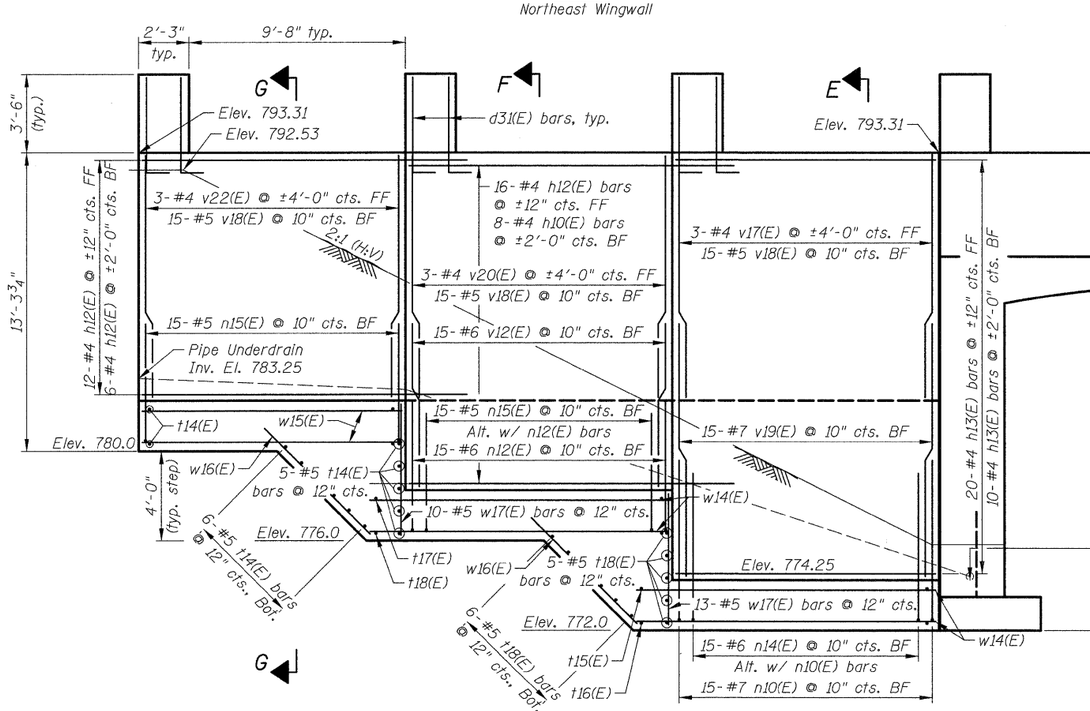
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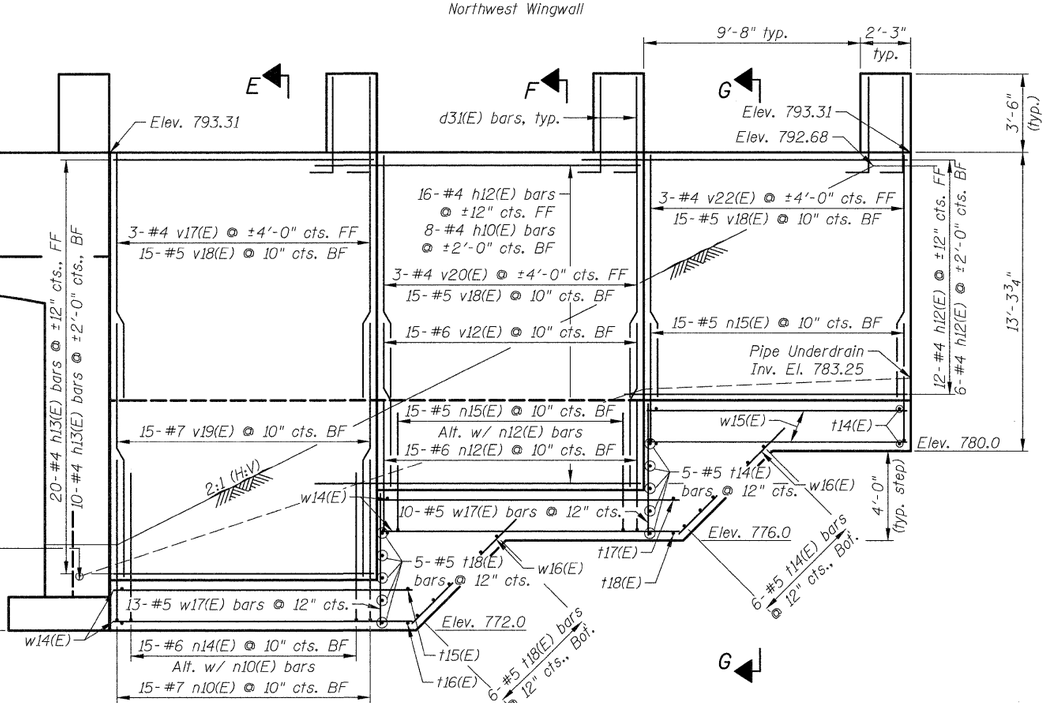
PLAN
Northeast Wingwall



PLAN
Northwest Wingwall



ENTRANCE ELEVATION
North Entrance



ELEVATION
Northeast Wingwall

ELEVATION
Northwest Wingwall

MINIMUM BAR LAP

Bar Size	Class C
#4	2'-7"
#5	3'-3"
#6	3'-10"
#7	5'-2"
#8	6'-9"
#9	8'-7"

Notes:
1. See Sheet S7 for Bill of Material, and Sections E-E, F-F, and G-G.
2. See Sheet S8 for pilaster details and Bill of Material.

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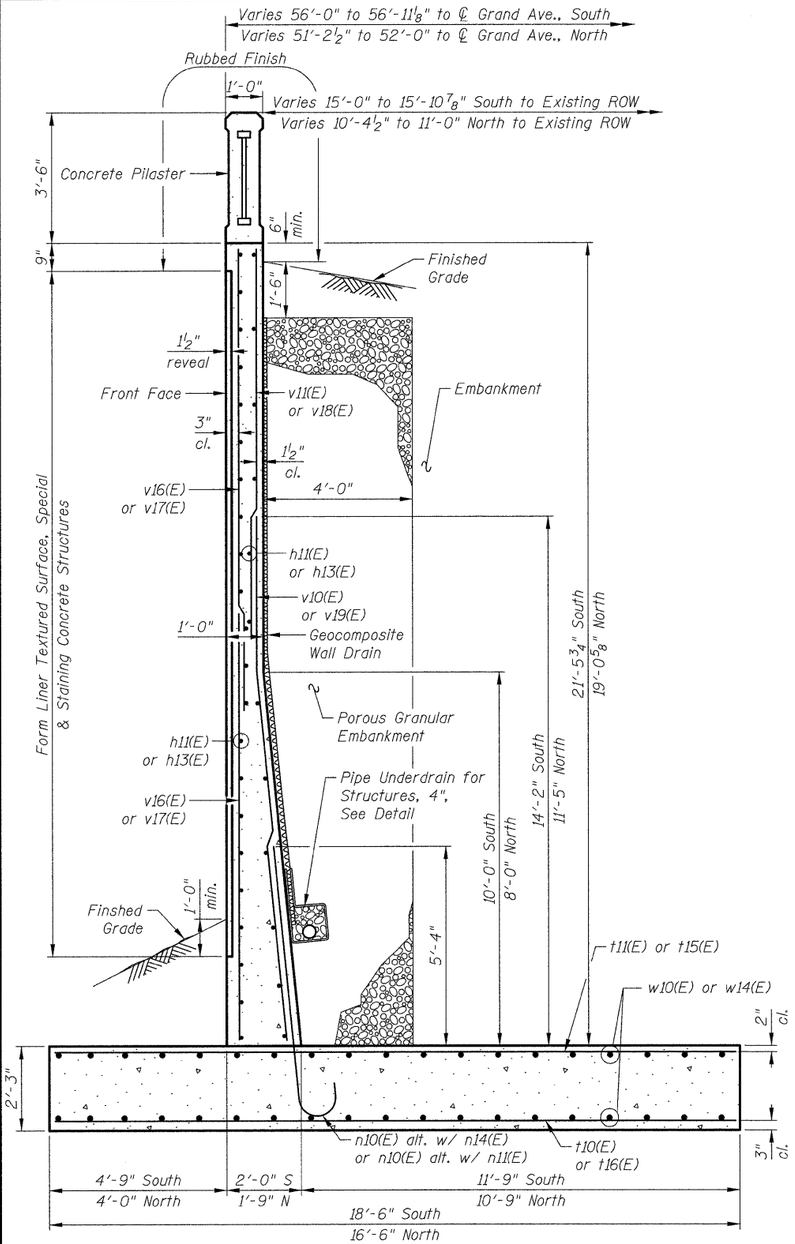
DRAWN - K. BOCHNOWSKI	REVISED -	
DESIGNED - M. LANGE	REVISED -	
CHECKED - G. HATLESTAD	REVISED -	
DATE - JANUARY 27, 2012	REVISED -	

STATE OF ILLINOIS
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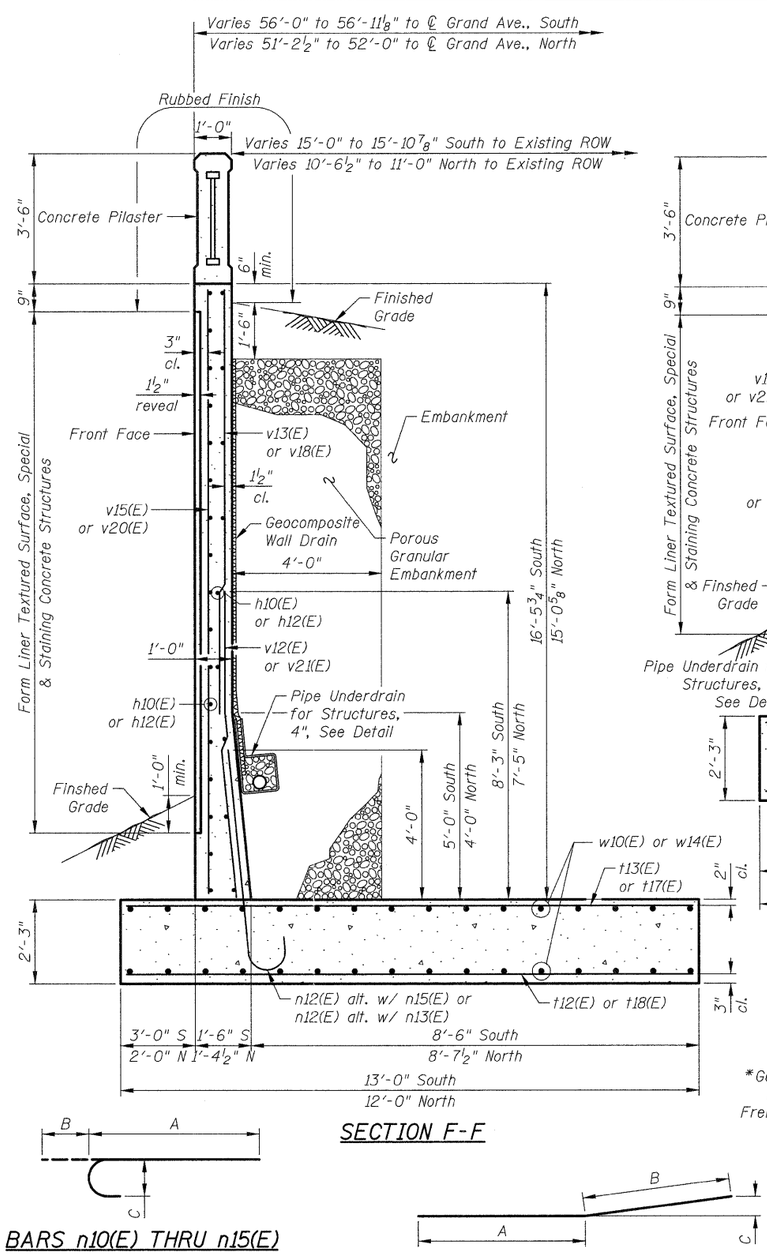
NORTH WINGWALLS
GRAND AVENUE OVER MILLENNIUM TRAIL
STRUCTURE NO. 049-9003
SHEET NO. S6 OF S11 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	31
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	ILLINOIS FED. AID PROJECT			

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SECTION E-E



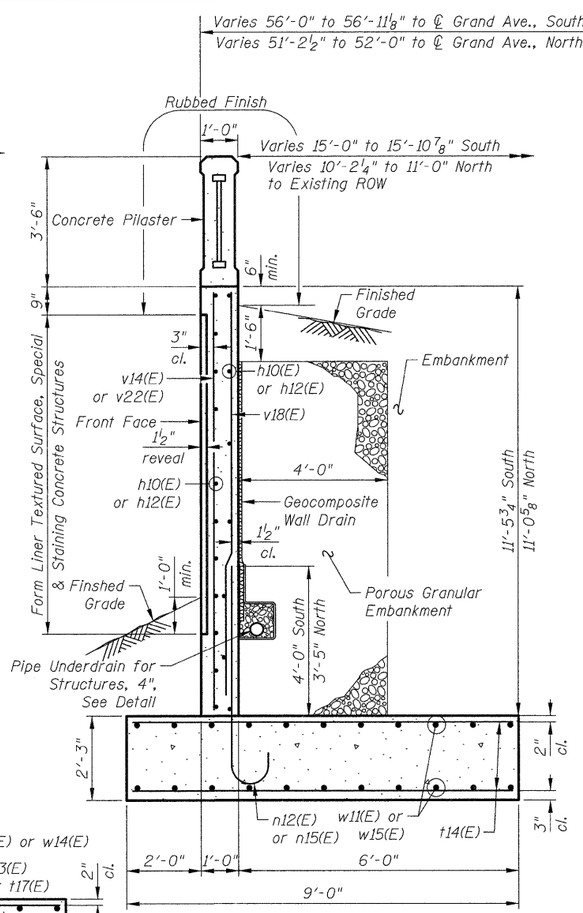
SECTION F-F

BARS n10(E) THRU n15(E)

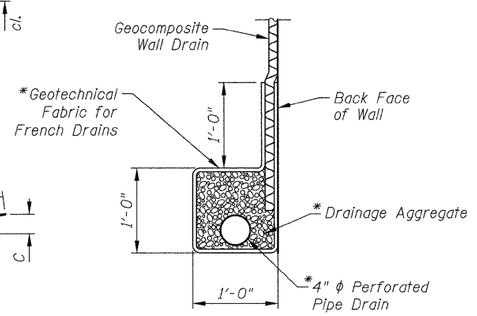
Bar	A	B	C
n10(E)	7'-4"	0'-10"	0'-7"
n11(E)	11'-0"	0'-10"	0'-7"
n12(E)	6'-0"	0'-8"	0'-6"
n13(E)	6'-5"	0'-7"	0'-5"
n14(E)	6'-9"	0'-8"	0'-6"
n15(E)	5'-5"	0'-7"	0'-5"

BARS v10(E), v12(E), v19(E), AND v21(E)

Bar	A	B	C
v10(E)	4'-2"	9'-10"	1'-0"
v12(E)	3'-5"	3'-10"	0'-4½"
v19(E)	3'-5"	7'-10"	0'-9"
v21(E)	3'-3"	4'-11"	0'-6"



SECTION G-G



PIPE UNDERDRAIN DETAIL

*Included in the cost of Pipe Underdrains for Structures, 4"

BILL OF MATERIAL

(For Wingwalls)

Bar	No.	Size	Length	Shape
h10(E)	90	#4	15'-10"	
h11(E)	68	#4	12'-11"	
h12(E)	84	#4	14'-6"	
h13(E)	60	#4	11'-7"	
n10(E)	64	#7	8'-2"	
n11(E)	34	#7	11'-10"	
n12(E)	98	#6	6'-8"	
n13(E)	34	#5	7'-0"	
n14(E)	30	#6	7'-5"	
n15(E)	60	#5	6'-0"	
t10(E)	32	#7	18'-2"	
t11(E)	38	#9	18'-2"	
t12(E)	60	#5	12'-8"	
t13(E)	32	#7	12'-8"	
t14(E)	158	#5	8'-8"	
t15(E)	30	#8	16'-2"	
t16(E)	30	#6	16'-2"	
t17(E)	30	#7	11'-8"	
t18(E)	52	#5	11'-8"	
v10(E)	34	#7	14'-0"	
v11(E)	34	#5	10'-5"	
v12(E)	30	#6	7'-3"	
v13(E)	34	#5	11'-4"	
v14(E)	6	#4	11'-2"	
v15(E)	6	#4	16'-2"	
v16(E)	6	#4	21'-2"	
v17(E)	6	#4	18'-9"	
v18(E)	124	#5	10'-9"	
v19(E)	30	#7	11'-3"	
v20(E)	6	#4	14'-9"	
v21(E)	34	#6	8'-2"	
v22(E)	6	#4	10'-9"	
w10(E)	136	#5	14'-8"	
w11(E)	40	#5	12'-11"	
w12(E)	48	#5	8'-0"	
w13(E)	48	#5	6'-10"	
w14(E)	124	#5	13'-4"	
w15(E)	40	#5	11'-7"	
w16(E)	46	#5	6'-8"	
w17(E)	46	#5	5'-10"	

Item	Unit	Quantity
Porous Granular Embankment	Cu. Yd.	299
Structure Excavation	Cu. Yd.	2,013
Concrete Structures	Cu. Yd.	324.7
Rubbed Finish	Sq. Ft.	529
Reinforcement Bars, Epoxy Coated	Pound	27,910
Geocomposite Wall Drain	Sq. Yd.	226
Staining Concrete Structures	Sq. Yd.	164
Form Liner Textured Surface, Special	Sq. Ft.	1,472
Pipe Underdrain For Structures, 4"	Foot	163

Note:
Maximum Applied Bearing Pressure = 2,940 psf
Maximum Allowed Bearing Pressure = 3,000 pst

Notes:
See Sheet S8 for Concrete Pilasters Details.
See Sheets S5 & S6 for Pipe Underdrain Invert Elevations

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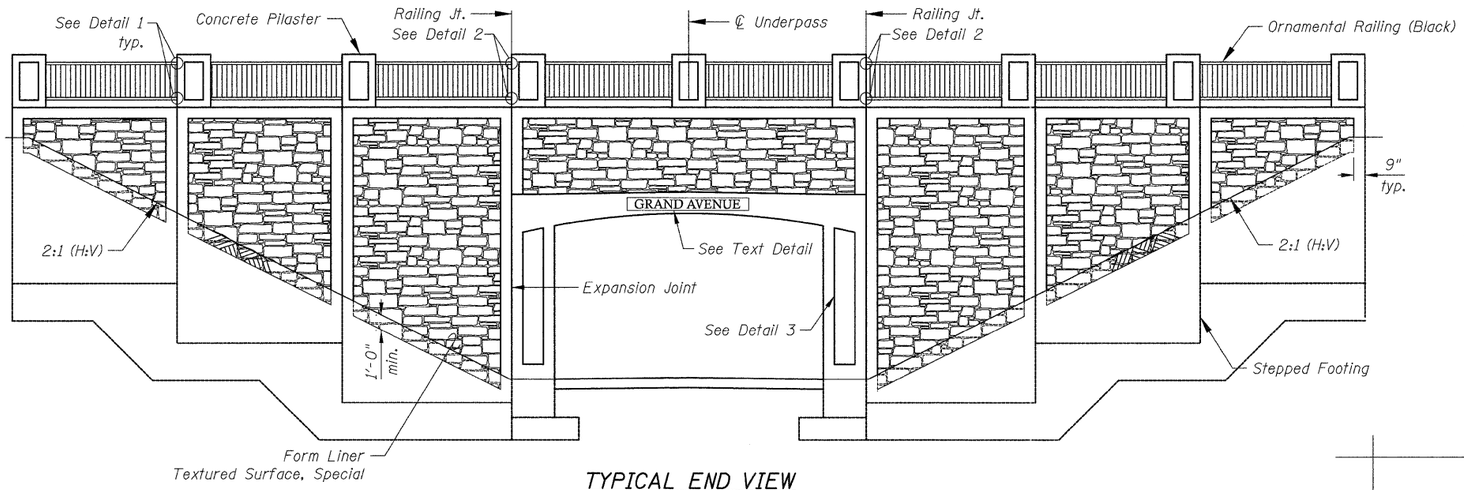
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DESIGNED	M. LANGE	REVISED	-
CHECKED	G. HATLESTAD	REVISED	-
DATE	JANUARY 27, 2012	REVISED	-

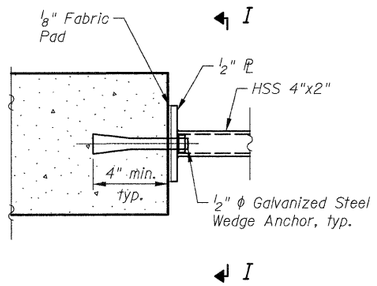
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WINGWALL DETAILS
GRAND AVENUE OVER MILLENNIUM TRAIL
STRUCTURE NO. 049-9003
SHEET NO. 57 OF 511 SHEETS

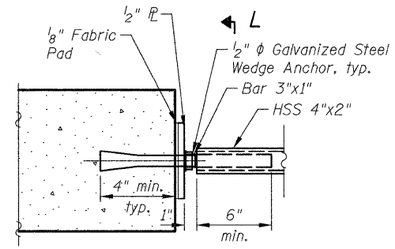
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			CONTRACT NO.	
		ILLINOIS	FED. AID PROJECT	



TYPICAL END VIEW

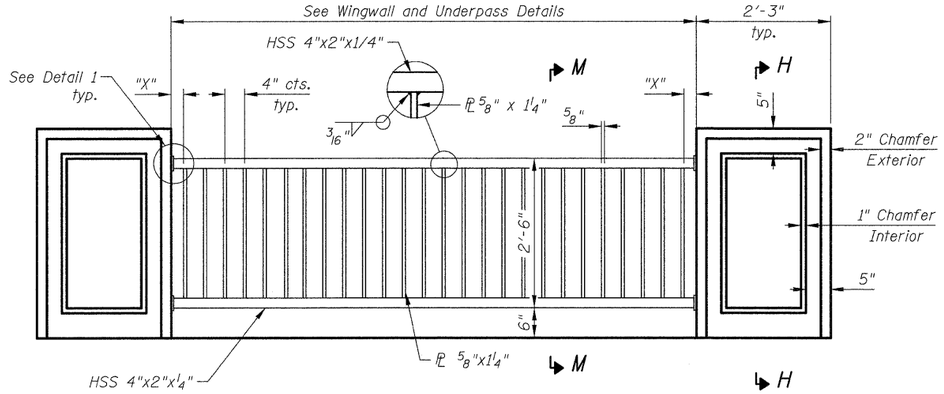


DETAIL 1



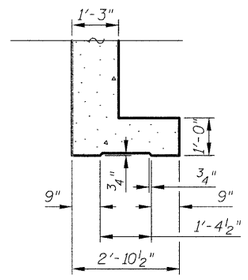
DETAIL 2

Railing Expansion Joint Detail

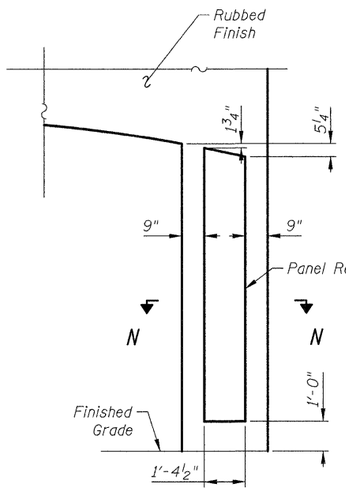


TYPICAL RAILING ELEVATION

Dimension "X" Equals Remaining Distance After Even Plate Spacing

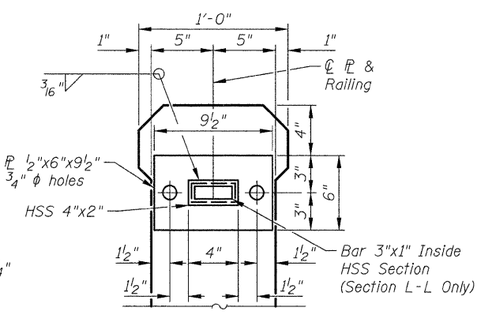


SECTION N-N

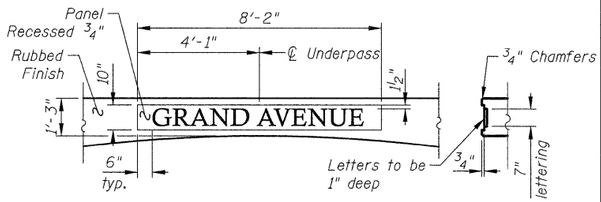


DETAIL 3

Recessed Panel Detail



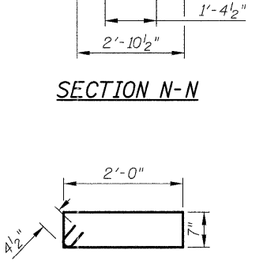
SECTION I-I
SECTION L-L



TEXT DETAIL

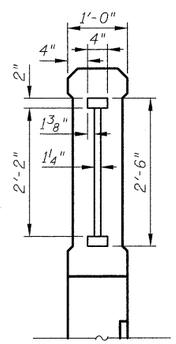
Font Style to be Calisto MT

Letters are to be cast-in-place with a one piece form liner securely attached to the forms and according to Article 503.06(a). Individual letters are not permitted. Cost included with Concrete Structures.

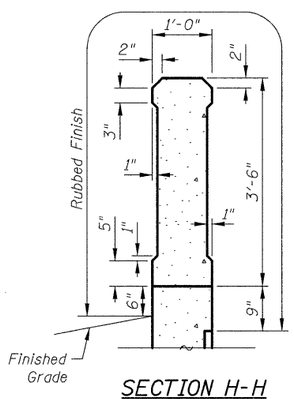


Bar d31(E)

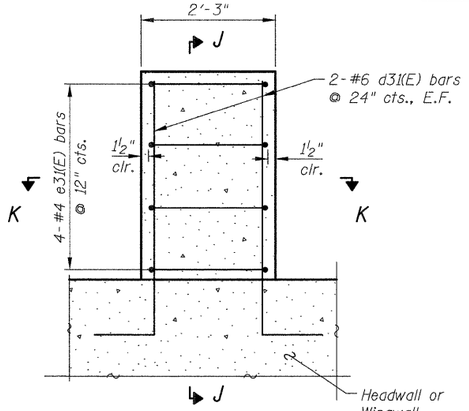
Bar e31(E)



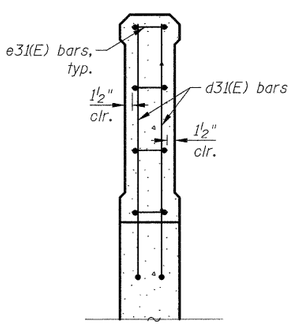
SECTION M-M



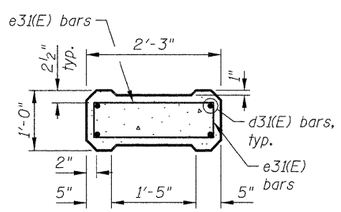
SECTION H-H



PILASTER REINFORCING



SECTION J-J



SECTION K-K

BILL OF MATERIAL

(For Pilasters)

Bar	No.	Size	Length	Shape
d31(E)	72	#6	5'-3"	
e31(E)	72	#4	5'-11"	

Item	Unit	Quantity
Concrete Structures	Cu. Yd.	5.3
Rubbed Finish	Sq. Ft	450
Reinforcement Bars, Epoxy Coated	Pound	860
Ornamental Railing	Foot	158

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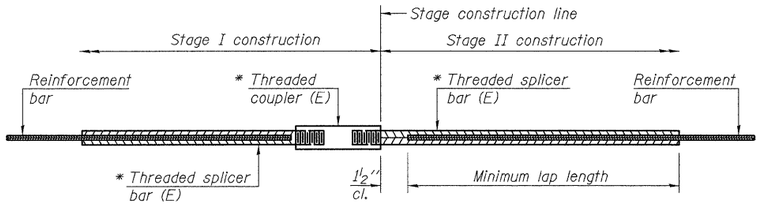
DRAWN	K. BOCHNOWSKI	REVISED	-
DESIGNED	M. LANGE	REVISED	-
CHECKED	G. HATLESTAD	REVISED	-
DATE	JANUARY 27, 2012	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL DETAILS
GRAND AVENUE OVER MILLENNIUM TRAIL
STRUCTURE NO. 049-9003
SHEET NO. S8 OF S11 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	33
			CONTRACT NO.	
	ILLINOIS FED. AID PROJECT			

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STANDARD BAR SPLICER ASSEMBLY

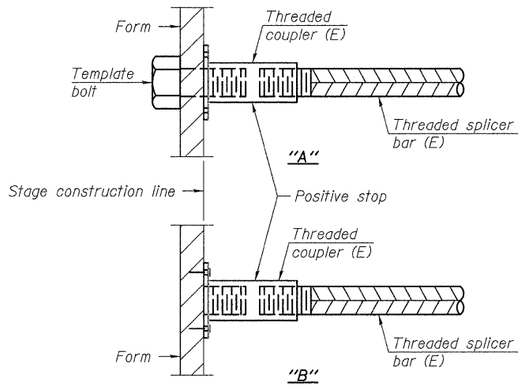
Minimum Lap Lengths				
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

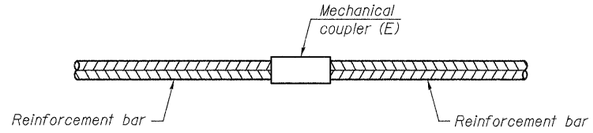
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
East & West Underpass Wall	#5	60	Table 3
Top Slab of Underpass	#5	40	Table 3
East & West Footing	#5	20	Table 3



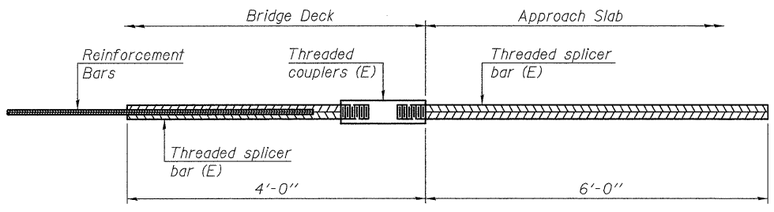
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



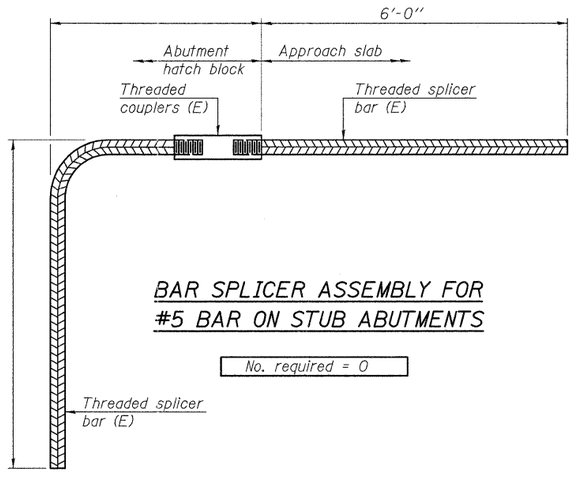
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required = 0



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 0

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

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DESIGNED - M. LANGE	REVISED -	
CHECKED - G. HATLESTAD	REVISED -	
DATE - JANUARY 27, 2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY DETAILS
GRAND AVENUE OVER MILLENNIUM TRAIL
STRUCTURE NO. 049-9003
SHEET NO. S9 OF S11 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	34
			CONTRACT NO.	
	ILLINOIS FED. AID PROJECT			

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THIS SHEET WAS INTENTIONALLY LEFT BLANK

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CHECKED - G. HATLESTAD	REVISED -	
DATE - JANUARY 27, 2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GRAND AVENUE OVER MILLENNIUM TRAIL
STRUCTURE NO. 049-9003
SHEET NO. S10 OF S11 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	35
			CONTRACT NO.	
	ILLINOIS FED. AID PROJECT			

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MSET PROJECT NO.: 11218 | **LOG OF BORING NO. B-1** | Page 1 of 1

PROJECT: Grand Avenue Underpass | SITE LOCATION: Lake County, IL

BORING LOCATION: STA. 72+10 | CLIENT: Civiltech Engineering, Inc.

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE TYPE/ INTERVAL	SAMPLE NO.	N-VALUE Blows per ft.	TESTS Wc%	TESTS Dry Unit Weight, pcf	TESTS Unconfined Compressive Strength, tsf	REMARKS
0		Black Silty CLAY Topsoil	790.5							
		Brown Silty CLAY, little Sand, trace Gravel, A-6, stiff to very hard	789.9	SS	1	7	28	86	1.24	
		few intermittent fine sand or silt seams		SS	2	20	16	114	7.63	
5				SS	3	28	15	113	6.80	
		Brown and Grey		SS	4	32	16	114	10.09	
10				SS	5	31	18	110	9.70	
				SS	6	23	18	111	8.54	
15				SS	7	20	19	107	6.01	
		Grey Silty CLAY, trace Sand and Gravel, A-6, very stiff	772.5	SS	8	17	18	111	3.26	
20				SS	9	16	18	111	3.49	
		small cobble @ 24'		SS	10	18	17	113	3.57	
25				SS	11	13	20	107	2.95	
				SS	12	14	18	112	2.17	
30		End of Boring @ 30'	760.5							

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING: ▽ 18.5'
IMMEDIATELY AFTER DRILLING: ▽ dry
DELAYED READING AFTER

MSET

BORING STARTED: 3/29/11
BORING COMPLETED: 3/29/11
LOGGED BY: SPE
BORING METHOD: CFA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

MSET PROJECT NO.: 11218 | **LOG OF BORING NO. B-2** | Page 1 of 1

PROJECT: Grand Avenue Underpass | SITE LOCATION: Lake County, IL

BORING LOCATION: STA. 71+00 | CLIENT: Civiltech Engineering, Inc.

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE TYPE/ INTERVAL	SAMPLE NO.	N-VALUE Blows per ft.	TESTS Wc%	TESTS Dry Unit Weight, pcf	TESTS Unconfined Compressive Strength, tsf	REMARKS
0		Black Silty CLAY Topsoil	795.2							
		Brown Silty CLAY, little Sand, trace Gravel, A-6, hard to very hard	794.6	SS	1	10	19	107	4.35	
		to Brown and Grey		SS	2	21	16	113	8.57	
5				SS	3	35	17	115	10.90	
				SS	4	24	18	112	7.53	
10				SS	5	19	15	115	5.82	
				SS	6	16	16	115	5.43	
15		to very stiff wet Sand Seam @ 19.5'		SS	7	18	15	114	4.12	
				SS	8	15	14	113	3.76	
20		Grey Silty CLAY, little Sand, trace Gravel, A-6, very stiff	774.7	SS	9	11	19	110	1.94	
				SS	10	10	20	108	1.75	
25				SS	11	14	16	115	2.13	
				SS	12	16	16	115	3.18	
30		End of Boring @ 30'	765.2							

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING: ▽ 19.5'
IMMEDIATELY AFTER DRILLING: ▽ 27.5'
DELAYED READING AFTER

MSET

BORING STARTED: 3/21/11
BORING COMPLETED: 3/21/11
LOGGED BY: SPE
BORING METHOD: CFA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

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Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DRAWN	K. BOCHNOWSKI	REVISED	-
DESIGNED	M. LANGE	REVISED	-
CHECKED	G. HATLESTAD	REVISED	-
DATE	DECEMBER 19, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

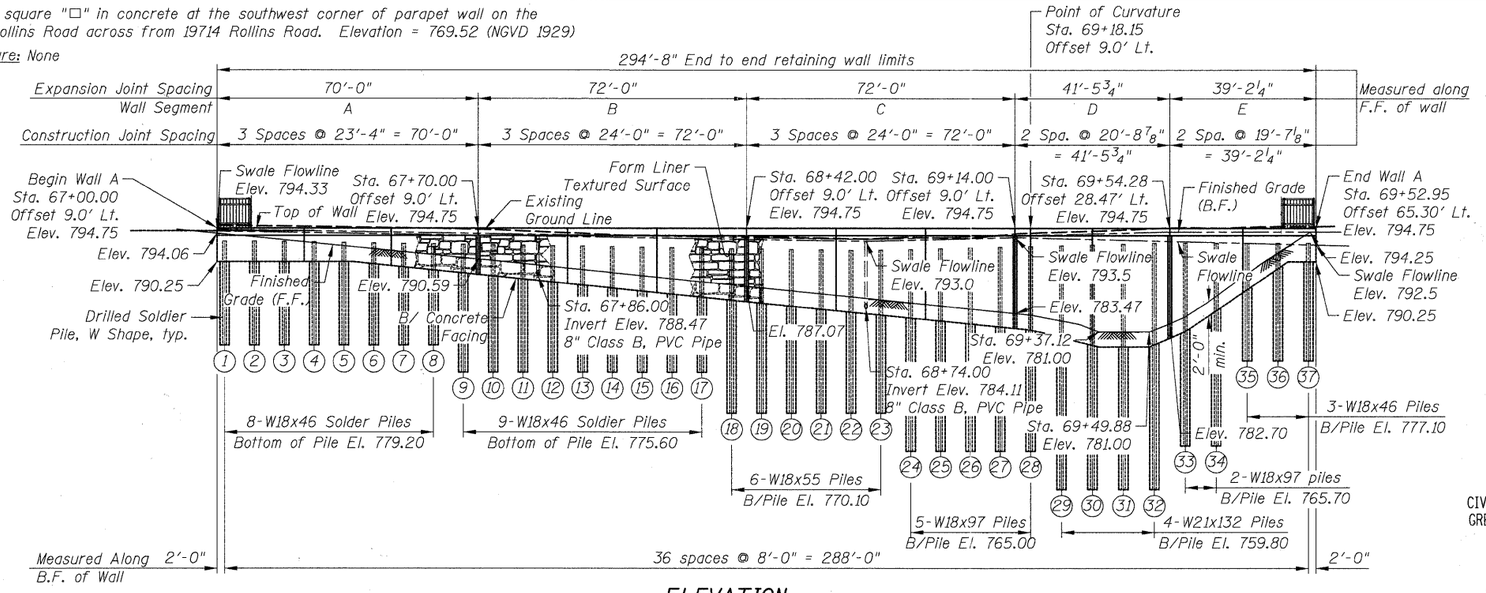
UNDERPASS SOIL BORING LOGS
GRAND AVENUE OVER MILLENNIUM TRAIL
STRUCTURE NO. 049-9003
SHEET NO. S11 OF S11 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	36
			CONTRACT NO.	
	ILLINOIS FED. AID PROJECT			

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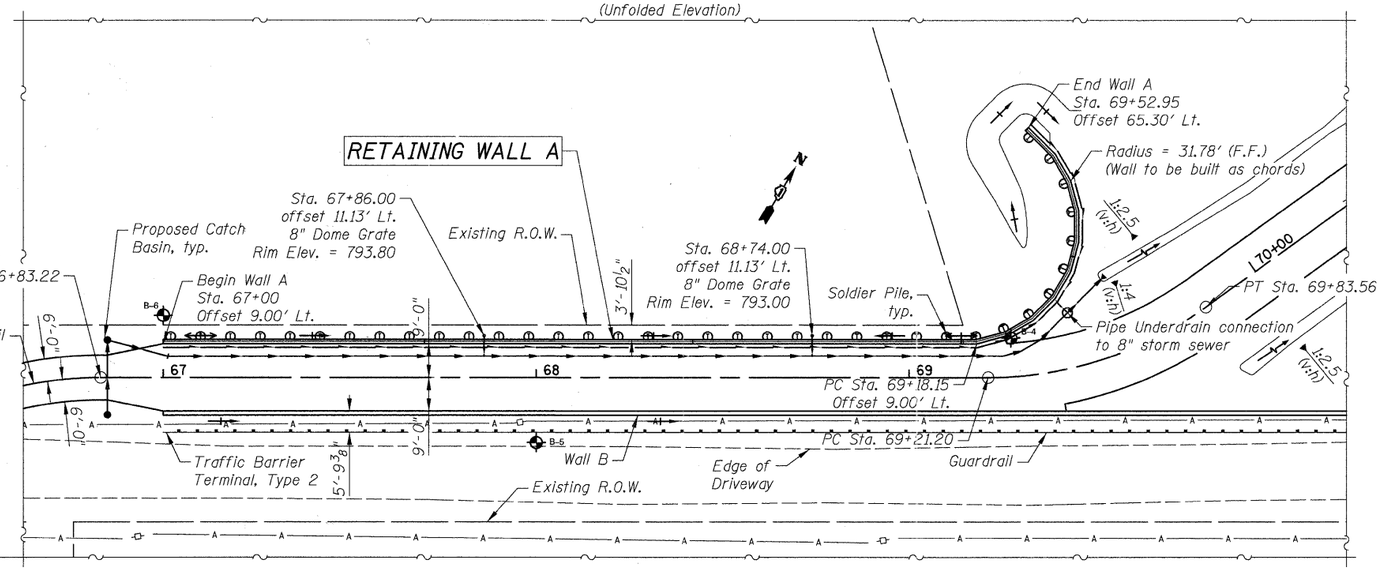
Benchmark: Cut square "□" in concrete at the southwest corner of parapet wall on the south side of Rollins Road across from 19714 Rollins Road. Elevation = 769.52 (NGVD 1929)

Existing Structure: None



ELEVATION

(Looking at F.F. of Wall)
(Unfolded Elevation)



PLAN

Notes:
Offsets are measured from ℄ Millennium Trail to the front face of the wall.
F.F. - Front Face
B.F. - Back Face

CURVE DATA
MILLENNIUM TRAIL

PI STA. = 69+53.43
Δ = 35° 43' 51" (LT)
D = 57° 17' 45"
R = 100.00'
T = 32.23'
L = 62.36'
E = 5.07'
P.C. STA = 69+21.20
P.T. STA = 69+83.56

LEGEND

- Soil Borings
- Proposed Storm Sewer
- Proposed Pipe Underdrain

INDEX OF SHEETS

WA1 General Plan & Elevation
WA2 Wall A Elevations I
WA3 Wall A Elevations II
WA4 Wall A Details
WA5 Wall A Soil Boring Logs

DESIGN SPECIFICATIONS

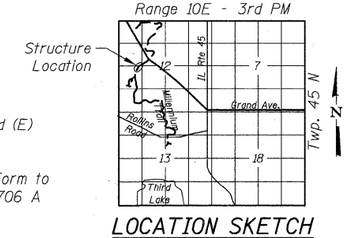
2002 AASHTO Standard Spec. for Highway Bridges

DESIGN STRESSES

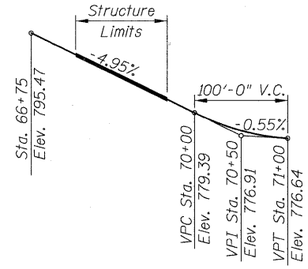
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (M270 Gr. 36 Soldier Piles)

GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Reinforcement bars shall conform to the requirements of ASTM A 706 A Gr 60.



LOCATION SKETCH



PROPOSED PROFILE GRADE
MILLENNIUM TRAIL

(Along ℄ Millennium Trail)

CIVILTECH ENGINEERING, INC.
GREGORY J. HATLESTAD, S.E.

STATE OF ILLINOIS — GREGORY J. HATLESTAD — 081-005562 — CHICAGO — LICENSED STRUCTURAL ENGINEER

GREGORY J. HATLESTAD, S.E.
081-005562

EXP 11/30/2012

DATE 12/15/2011

I certify that to the best of my knowledge, information, and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of the structure and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges.

SOLDIER PILE LOCATION & ELEVATIONS

Pile No.	℄ Pile Stations	℄ Pile Offset	Top of Pile Elevation
1	67+02.00	-10.88	792.60
2	67+10.00	-10.88	792.60
3	67+18.00	-10.88	792.60
4	67+26.00	-10.88	792.60
5	67+34.00	-10.88	792.60
6	67+42.00	-10.88	792.60
7	67+50.00	-10.88	792.60
8	67+58.00	-10.88	792.60
9	67+66.00	-10.88	792.10
10	67+74.00	-10.88	792.10
11	67+82.00	-10.88	792.10
12	67+90.00	-10.88	792.10
13	67+98.00	-10.88	792.10
14	68+06.00	-10.88	792.10
15	68+14.00	-10.88	792.10
16	68+22.00	-10.88	792.10
17	68+30.00	-10.88	792.10
18	68+38.00	-10.88	791.80
19	68+46.00	-10.88	791.80
20	68+54.00	-10.88	791.80
21	68+62.00	-10.88	791.80
22	68+70.00	-10.88	791.80
23	68+78.00	-10.88	791.80
24	68+86.00	-10.90	791.90
25	68+94.00	-10.90	791.90
26	69+02.00	-10.90	791.90
27	69+10.00	-10.90	791.90
28	69+17.89	-10.96	791.90
29	69+25.98	-13.00	792.40
30	69+34.21	-16.26	792.40
31	69+41.96	-20.75	792.40
32	69+48.99	-26.33	792.40
33	69+55.11	-32.79	792.80
34	69+59.43	-40.07	792.80
35	69+61.31	-47.79	793.10
36	69+59.17	-55.52	793.10
37	69+50.88	-62.66	793.10

TOTAL BILL OF MATERIALS

	ITEM	UNIT	TOTAL QUANTITY
	Structure Excavation	Cu. Yd.	301
	Concrete Structures	Cu. Yd.	112.8
	Stud Shear Connectors	Each	302
	Reinforcement Bars, Epoxy Coated	Pound	6,790
	Geocomposite Wall Drain	Sq. Yd.	159
*	Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	2,494
*	Untreated Timber Lagging	Sq. Ft.	1,913
*	Furnishing Soldier Piles (W Section)	Foot	753
*	Pipe Underdrains for Structures 4"	Foot	318
*	Ornamental Fence	Foot	293
*	Staining Concrete Structures	Sq. Yd.	256
*	Form Liner Textured Surface, Special	Sq. Ft.	2,303

* Indicates Special Provision

GENERAL PLAN & ELEVATION
WALL A; MILLENNIUM TRAIL
SEC. 10-F3000-00-BT
LAKE COUNTY
STA. 67+00.00 TO STA. 69+52.95

CIVILTECH
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Itasca, Illinois 60143
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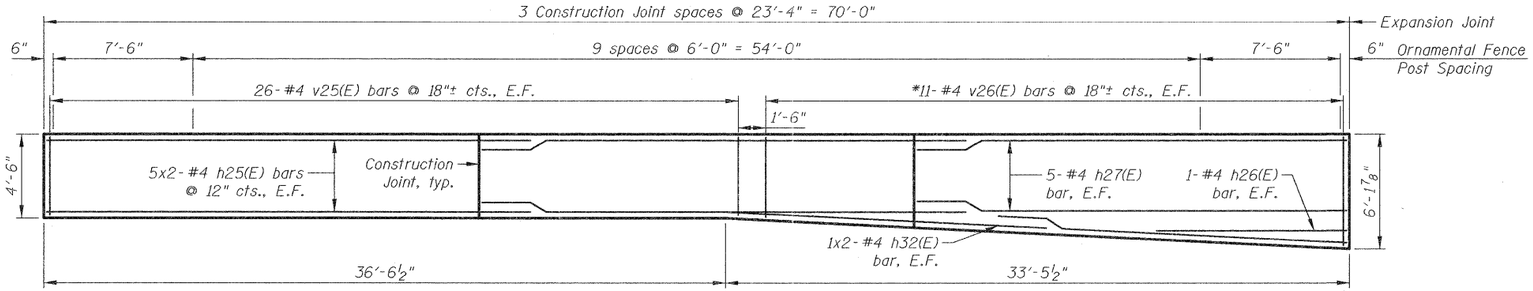
DRAWN	D. ATKINS	REVISED	-
DESIGNED	M. LANGE	REVISED	-
CHECKED	G. HATLESTAD	REVISED	-
DATE	DECEMBER 19, 2011	REVISED	-

STATE OF ILLINOIS
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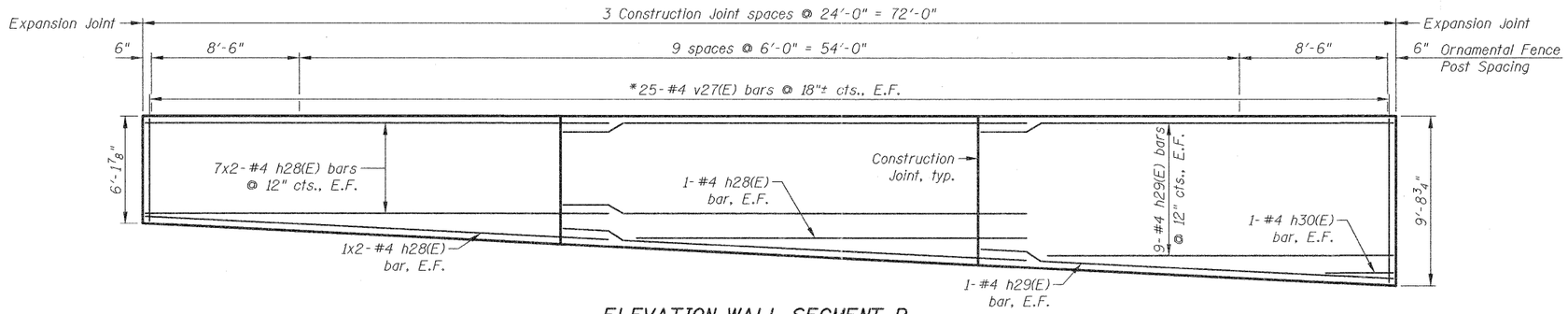
GENERAL PLAN & ELEVATION
WALL A; MILLENNIUM TRAIL
SHEET NO. WA1 OF WA5 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	37
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

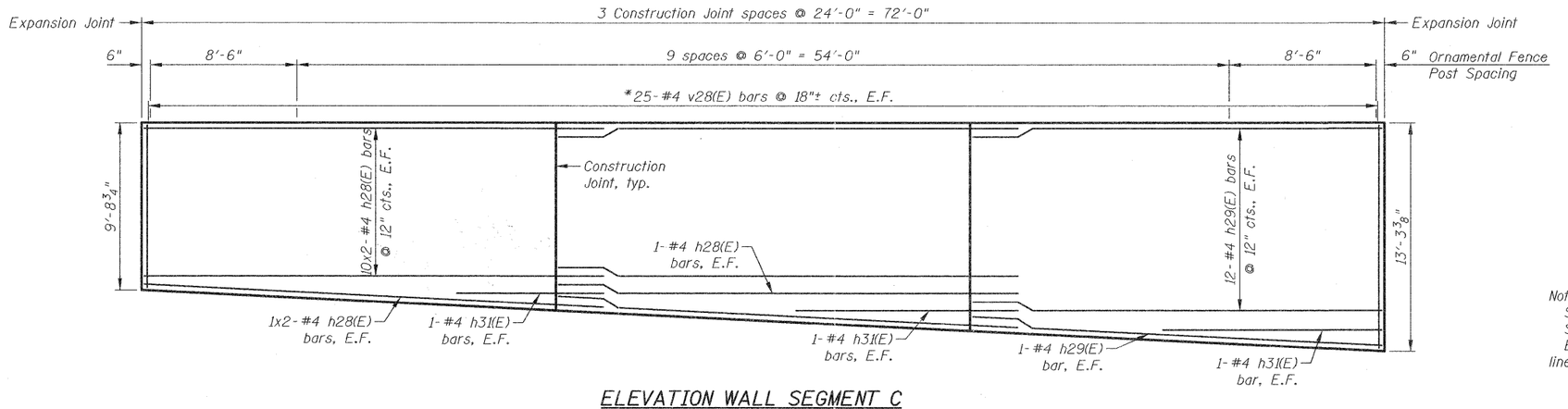
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ELEVATION WALL SEGMENT A



ELEVATION WALL SEGMENT B



ELEVATION WALL SEGMENT C

MINIMUM BAR LAP

#4 bar = 2'-7"

*Field cut to fit.

Notes:
See sheet WA1 for location of wall segments.
See sheet WS1 for Ornamental Fence details.
Bars indicated thus 7x2-#4 etc, indicate 7 lines of bars with 2 lengths per line.

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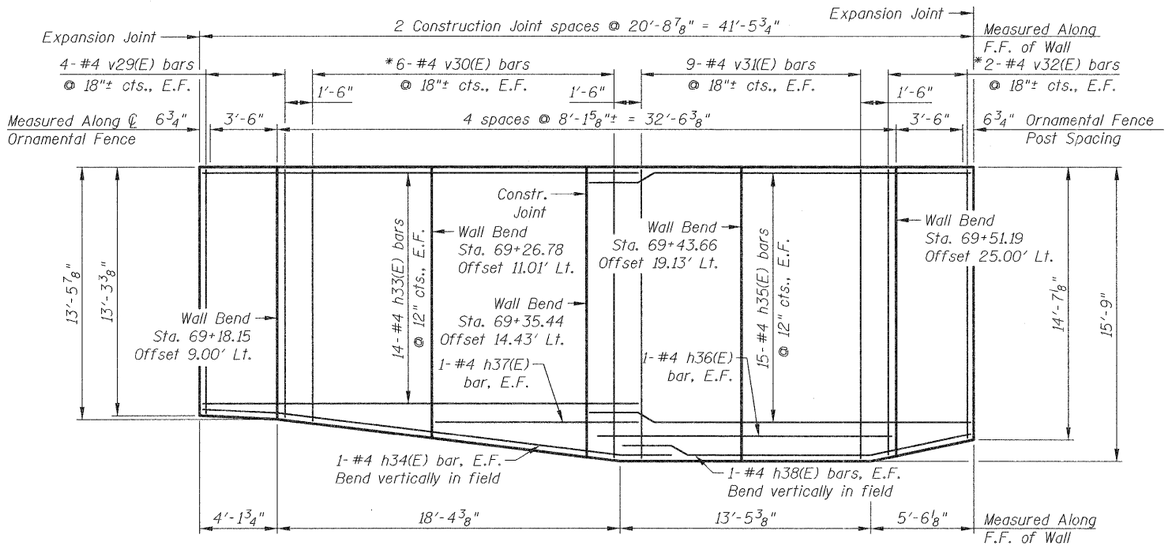
DRAWN - D. ATKINS	REVISED -	
DESIGNED - M. LANGE	REVISED -	
CHECKED - G. HATLESTAD	REVISED -	
DATE - DECEMBER 19, 2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

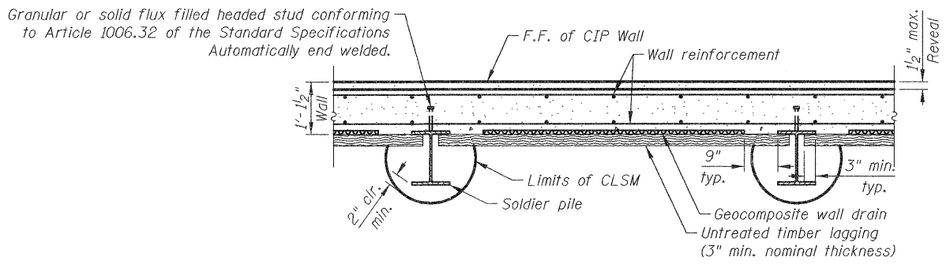
WALL A ELEVATIONS I
WALL A; MILLENNIUM TRAIL
SHEET NO. WA2 OF WA5 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	38
			CONTRACT NO.	
	ILLINOIS FED. AID PROJECT			

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ELEVATION WALL SEGMENT D

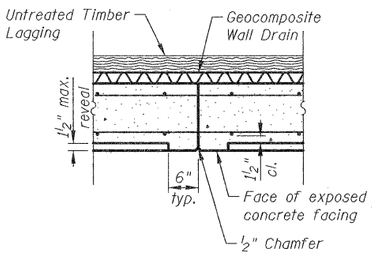


SECTION THRU DRILLED SOLDIER PILE WALL

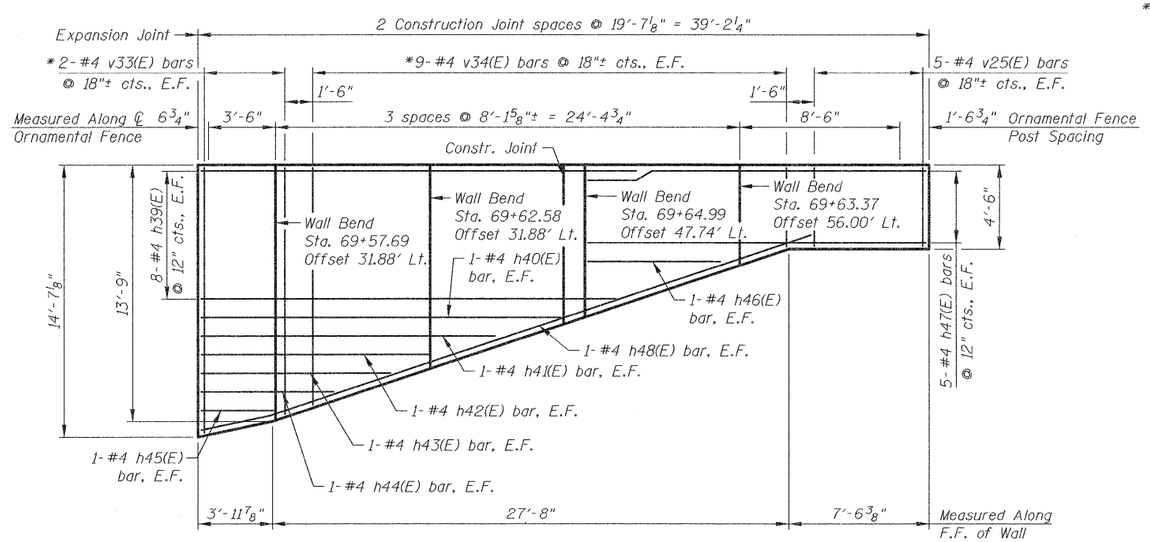
MINIMUM BAR LAP

#4 bar = 2'-7"

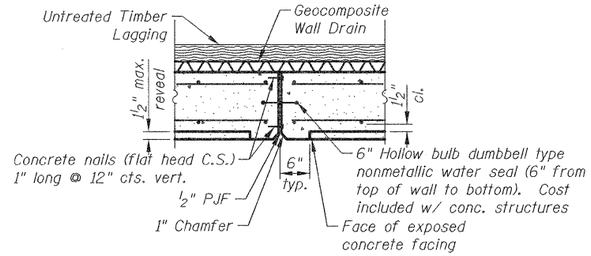
*Field cut to fit.



CONSTRUCTION JOINT



ELEVATION WALL SEGMENT E



EXPANSION JOINT

Notes:
See sheet WA1 for location of wall segments.
See sheet WS1 & WA4 for Ornamental Fence details.
Stations and offsets are given to the front face of wall.

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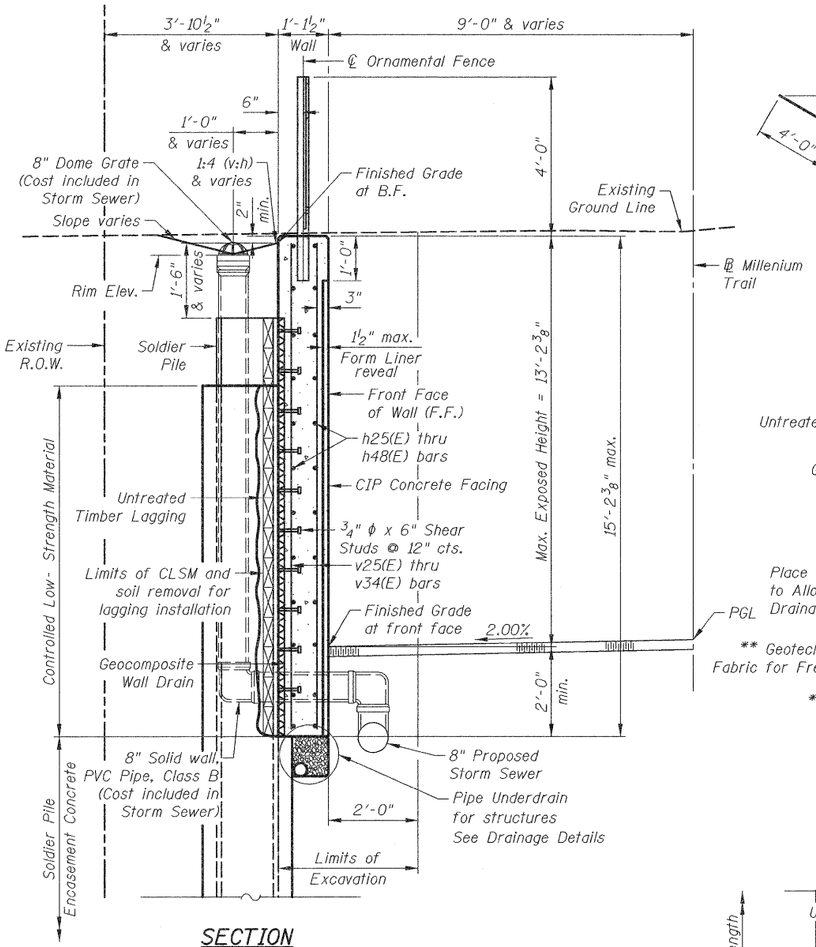
DRAWN	D. ATKINS	REVISED	-
DESIGNED	M. LANGE	REVISED	-
CHECKED	G. HATLESTAD	REVISED	-
DATE	DECEMBER 19, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL A ELEVATIONS II
WALL A; MILLENNIUM TRAIL
SHEET NO. WA3 OF WA5 SHEETS

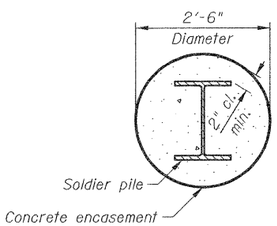
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	39
			CONTRACT NO.	
ILLINOIS	FED. AID PROJECT			

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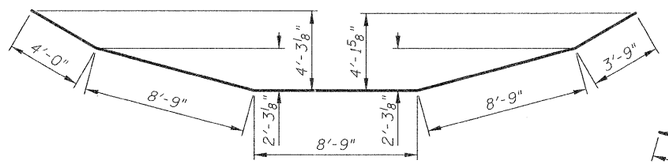


SECTION SOLDIER PILE WALL

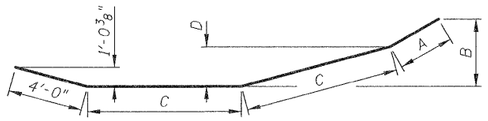
The Contractor is responsible for the design and performance of the lagging using no less than a 3 in. nominal rough-sawn thickness and timber with a miniminum allowable bending stress of 1000 psi.



SOLDIER PILE ENCASEMENT

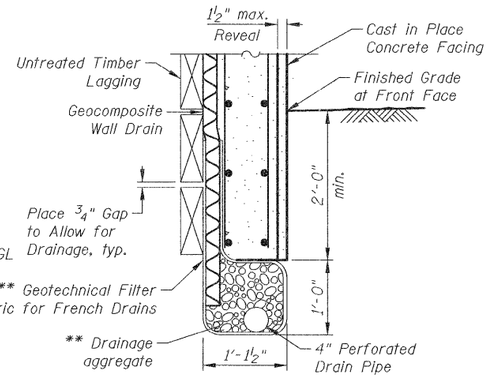


BAR h48(E)

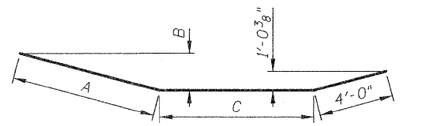


BARS h33(E), h34(E) & h39(E)

Bars	A	B	C	D
h33(E)	3'-0"	3'-7⅝"	8'-3"	2'-1⅝"
h34(E)	4'-7"	3'-5⅝"	8'-4"	2'-1⅛"
h39(E)	2'-7"	3'-5⅛"	8'-3"	2'-1⅝"

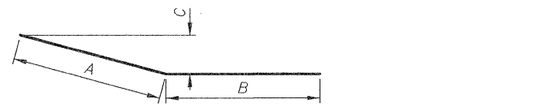


DRAINAGE DETAILS BETWEEN SOLDIER PILES



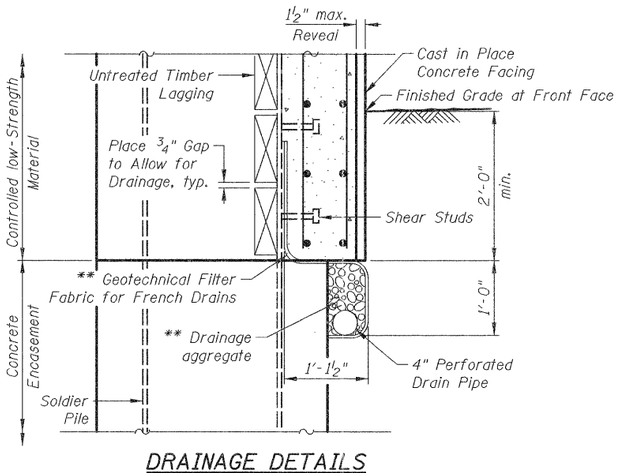
BARS h35(E), h38(E), h40(E) & h41(E)

Bars	A	B	C
h35(E)	7'-9"	2'-0⅛"	8'-3"
h38(E)	8'-3"	2'-1⅝"	8'-4"
h40(E)	7'-1"	1'-10"	8'-3"
h41(E)	4'-9"	1'-2¾"	8'-3"

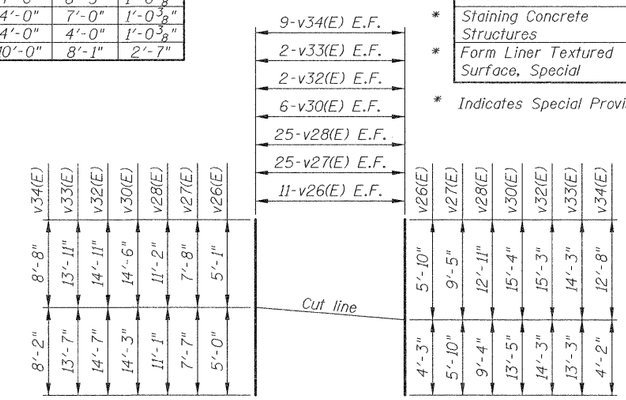


BARS h36(E), h37(E) h42(E), h43(E), h44(E) & h47(E)

Bars	A	B	C
h36(E)	7'-9"	8'-3"	2'-0⅛"
h37(E)	3'-0"	8'-3"	9⅜"
h42(E)	4'-0"	8'-3"	1'-0⅜"
h43(E)	4'-0"	7'-0"	1'-0⅜"
h44(E)	4'-0"	4'-0"	1'-0⅜"
h47(E)	10'-0"	8'-1"	2'-7"



DRAINAGE DETAILS AT SOLDIER PILES



BAR v26(E), thru v28(E), v30(E), v32(E) thru v34(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h25(E)	20	#4	25'-11"	
h26(E)	2	#4	13'-11	
h27(E)	10	#4	23'-0"	
h28(E)	80	#4	26'-7"	
h29(E)	46	#4	23'-8"	
h30(E)	2	#4	11'-0"	
h31(E)	6	#4	14'-9"	
h32(E)	4	#4	17'-10"	
h33(E)	28	#4	23'-6"	
h34(E)	2	#4	23'-3"	
h35(E)	30	#4	20'-0"	
h36(E)	2	#4	16'-0"	
h37(E)	2	#4	11'-3"	
h38(E)	2	#4	20'-7"	
h39(E)	16	#4	23'-1"	
h40(E)	2	#4	19'-4"	
h41(E)	2	#4	17'-0"	
h42(E)	2	#4	12'-3"	
h43(E)	2	#4	11'-0"	
h44(E)	2	#4	8'-0"	
h45(E)	2	#4	4'-0"	
h46(E)	2	#4	8'-3"	
h47(E)	10	#4	18'-1"	
h48(E)	2	#4	34'-0"	
v25(E)	62	#4	4'-2"	
v26(E)	22	#4	10'-1"	
v27(E)	50	#4	15'-3"	
v28(E)	50	#4	22'-3"	
v29(E)	8	#4	13'-0"	
v30(E)	12	#4	28'-9"	
v31(E)	18	#4	15'-5"	
v32(E)	4	#4	29'-6"	
v33(E)	4	#4	27'-6"	
v34(E)	18	#4	16'-10"	

ITEM	UNIT	QUANTITY
Structure Excavation	Cu. Yd.	301
Concrete Structures	Cu. Yd.	112.8
Stud Shear Connectors	Each	302
Reinforcement Bars, Epoxy Coated	Pound	6,790
Geocomposite Wall Drain	Sq. Yd.	159
* Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	2,494
* Untreated Timber Lagging	Sq. Ft.	1,913
* Furnishing Soldier Piles (W Section)	Foot	753
* Pipe Underdrains for Structures 4"	Foot	318
* Ornamental Fence	Foot	293
* Staining Concrete Structures	Sq. Yd.	256
* Form Liner Textured Surface, Special	Sq. Ft.	2,303

* Indicates Special Provision

** Included in the cost of Pipe Underdrains for Structures, 4"

Notes:
See sheet WS1 for Ornamental Fence details.
See sheet WA3 for Section Thru Drilled Soldier Pile Wall, Construction Joint and Expansion Joint details.

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DRAWN - D. ATKINS		REVISED -
DESIGNED - M. LANGE		REVISED -
CHECKED - G. HATLESTAD		REVISED -
DATE - DECEMBER 19, 2011		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL A DETAILS
WALL A; MILLENNIUM TRAIL
SHEET NO. WA4 OF WA5 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	40
			CONTRACT NO.	
		ILLINOIS FED. AID PROJECT		

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12/15/2011

MSET PROJECT NO.: 11218 | **LOG OF BORING NO. B-4** | Page 1 of 1

PROJECT: Grand Avenue Underpass | SITE LOCATION: Lake County, IL

BORING LOCATION: STA. 69+28 | CLIENT: Civiltech Engineering, Inc.

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE TYPE/ INTERVAL	SAMPLE NO.	SAMPLE N-VALUE Blows per ft.	TESTS Wc%	TESTS Dry Unit Weight, pcf	TESTS Unconfined Compressive Strength, tsf	REMARKS
0		6" Bituminous Concrete over 10-1/ 2"	793.3							
		Brown Crushed Gravel base course, wet								
		Brown and Black Silty CLAY: fill, very stiff	791.9	SS	1	6	25	93	2.02	
		Brown and Grey Silty CLAY, trace Sand and Gravel, A- 6, stiff to hard	790.3							
5				SS	2	7	22	96	1.09	
				SS	3	20	18	113	6.79	
		cobble @ 9.5'								
10				SS	4	25	17	114	4.46	
		Grey Silty CLAY, trace Sand and Gravel, A-6, stiff	781.3	SS	5	20	19	109	3.65	
15				SS	6	13	19	110	1.86	
				SS	7	9	15	119	1.36	
20		very stiff to stiff		SS	8	7	14	120	1.01	
				SS	9	9	19	111	2.21	
25				SS	10	10	19	110	1.94	
				SS	11	9	20	108	1.90	
30				SS	12	10	20	108	1.28	
		End of Boring @ 30'	763.3							Hole Caved @ 27. 5' Upon Completion

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING: 13.0'
IMMEDIATELY AFTER DRILLING: 4.6'
DELAYED READING AFTER

MSET

BORING STARTED: 3/21/11
BORING COMPLETED: 3/21/11
LOGGED BY: SPE
BORING METHOD: CFA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

MSET PROJECT NO.: 11218 | **LOG OF BORING NO. B-6** | Page 1 of 1

PROJECT: Grand Avenue Underpass | SITE LOCATION: Lake County, IL

BORING LOCATION: STA. 67+00 | CLIENT: Civiltech Engineering, Inc.

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE TYPE/ INTERVAL	SAMPLE NO.	SAMPLE N-VALUE Blows per ft.	TESTS Wc%	TESTS Dry Unit Weight, pcf	TESTS Unconfined Compressive Strength, tsf	REMARKS
0		4" Brown Crushed Gravel	795.2							
		Dark Brown Silty CLAY Topsoil	794.9							
		Brown and Yellow-Brown Silty CLAY, little Sand, trace Gravel, A-6, stiff to hard	794.0	SS	1	6	18	104	1.36	
5				SS	2	14	18	109	4.50	
		to Brown and Grey		SS	3	22	16	114	8.26	
10		to very stiff		SS	4	23	17	112	6.40	
				SS	5	19	19	110	3.34	
		Grey Silty CLAY, little Sand, trace Gravel, A-6, very stiff to stiff	782.2							
15				SS	6	15	15	120	2.13	
				SS	7	12	16	115	1.74	
20				SS	8	11	14	121	2.33	
				SS	9	11	14	116	1.94	
25				SS	10	12	16	115	1.55	
				SS	11	10	16	115	1.51	
30				SS	12	13	16	115	1.55	
		End of Boring @ 30'	765.2							

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING: 7.5'
IMMEDIATELY AFTER DRILLING: 13.3'
DELAYED READING AFTER

MSET

BORING STARTED: 3/24/11
BORING COMPLETED: 3/24/11
LOGGED BY: SPE
BORING METHOD: CFA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

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450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DRAWN - D. ATKINS	REVISED -	
DESIGNED - M. LANGE	REVISED -	
CHECKED - G. HATLESTAD	REVISED -	
DATE - DECEMBER 19, 2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

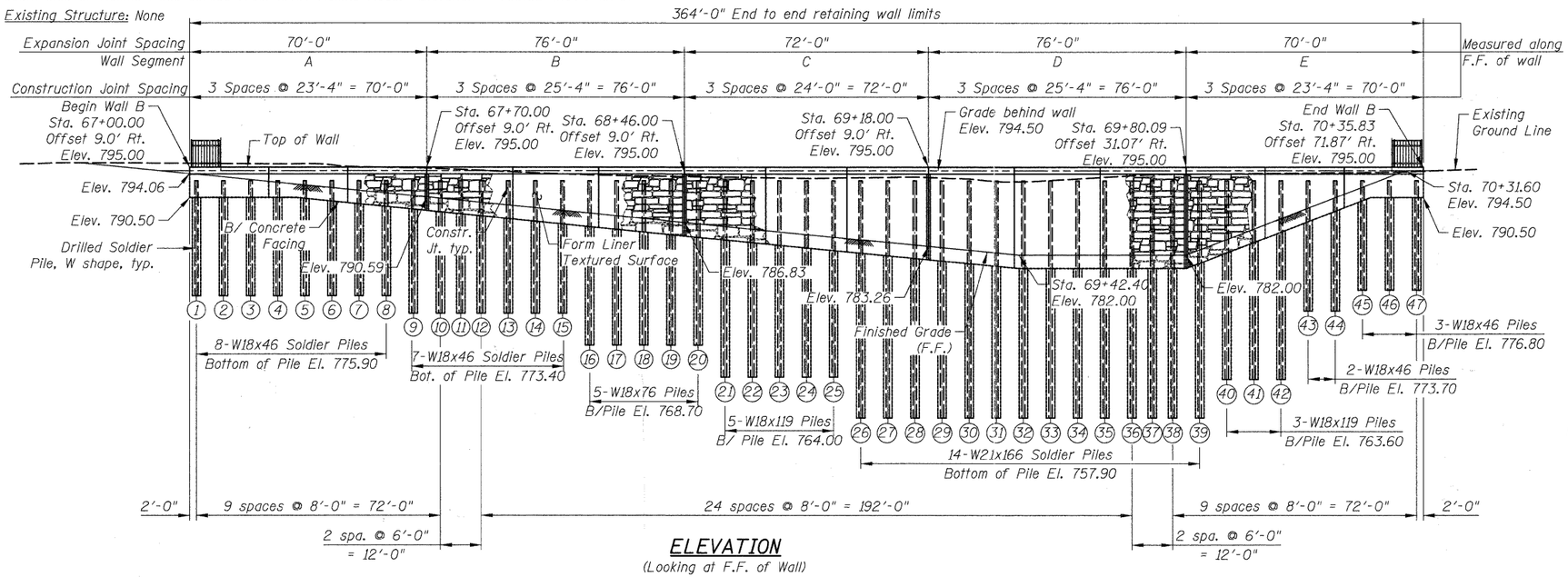
WALL A SOIL BORINGS
WALL A; MILLENNIUM TRAIL
SHEET NO. WA5 OF WA5 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	41
			CONTRACT NO.	
	ILLINOIS FED. AID PROJECT			

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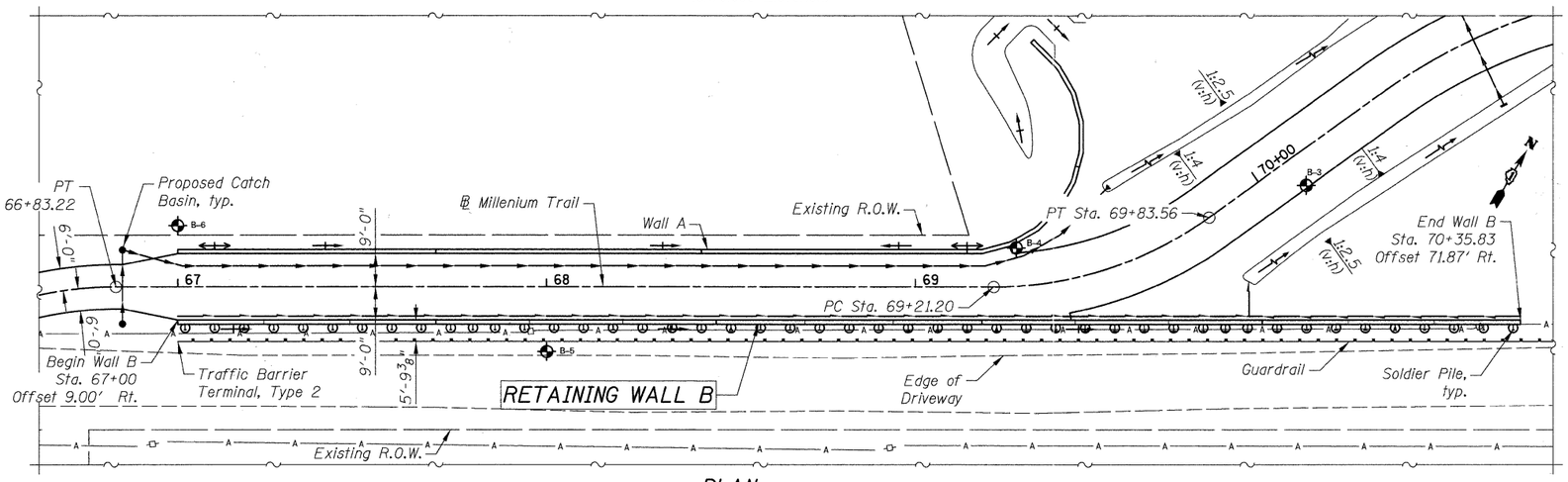
Benchmark: Cut square "□" in concrete at the southwest corner of parapet wall on the south side of Rollins Road across from 19714 Rollins Road. Elevation = 769.52 (NGVD 1929)

Existing Structure: None



ELEVATION

(Looking at F.F. of Wall)
(Unfolded Elevation)



PLAN

CURVE DATA
MILLENNIUM TRAIL

PI STA. = 69+53.43
Δ = 35° 43' 51" (LT)
D = 57° 17' 45"
R = 100.00'
T = 32.23'
L = 62.36'
E = 5.07'
P.C. STA = 69+21.20
P.T. STA = 69+83.56

LEGEND

- Soil Borings
- Proposed Storm Sewer
- Proposed Pipe Underdrain

Notes:
Offsets are measured from ℄ Millenium Trail to the front face of the wall.
F.F. - Front Face
B.F. - Back Face

DESIGN SPECIFICATIONS

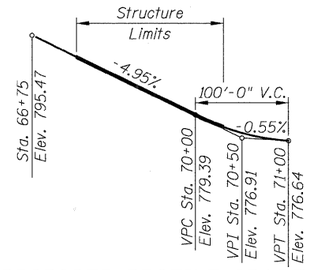
2002 AASHTO Standard Spec. for Highway Bridges

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (M270 Gr. 36 Soldier Piles)

INDEX OF SHEETS

WB1 General Plan & Elevation
WB2 Wall B Elevations I
WB3 Wall B Elevations II
WB4 Wall B Details
WB5 Wall B Soil Boring Logs



PROPOSED PROFILE GRADE
MILLENNIUM TRAIL

(Along ℄ Millennium Trail)

CIVILTECH ENGINEERING, INC.
GREGORY J. HATLESTAD, S.E.

STATE OF ILLINOIS — GREGORY J HATLESTAD 081-005562 — CHICAGO, IL — LICENSED STRUCTURAL ENGINEER

GREGORY J. HATLESTAD, S.E.
081-005562

EXP 11/30/2012

DATE 12/15/2011

I certify that to the best of my knowledge, information, and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of the structure and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges.

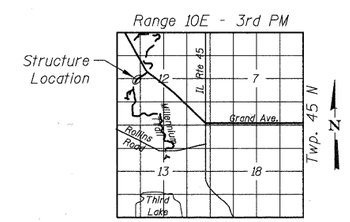
GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Reinforcemet bars shall conform to the requirements of ASTM A 706 Gr. 60.

TOTAL BILL OF MATERIALS

	ITEM	UNIT	TOTAL QUANTITY
	Structure Excavation	Cu. Yd.	377
	Concrete Structures	Cu. Yd.	148.6
	Stud Shear Connectors	Each	431
	Reinforcement Bars, Epoxy Coated	Pound	8,910
	Geocomposite Wall Drain	Sq. Yd.	219
	Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	4,136
*	Untreated Timber Lagging	Sq. Ft.	2,696
*	Furnishing Soldier Piles (W Section)	Foot	1,208
*	Pipe Underdrains for Structures 4"	Foot	380
*	Ornamental Fence	Foot	363
*	Staining Concrete Structures	Sq. Yd.	342
*	Form Liner Textured Surface, Special	Sq. Ft.	3,070

* Indicates Special Provision



LOCATION SKETCH

GENERAL PLAN & ELEVATION
WALL B; MILLENNIUM TRAIL
SEC. 10-F3000-00-BT
LAKE COUNTY
STA. 67+00.00 TO STA. 70+35.83

CIVILTECH
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Itasca, Illinois 60143
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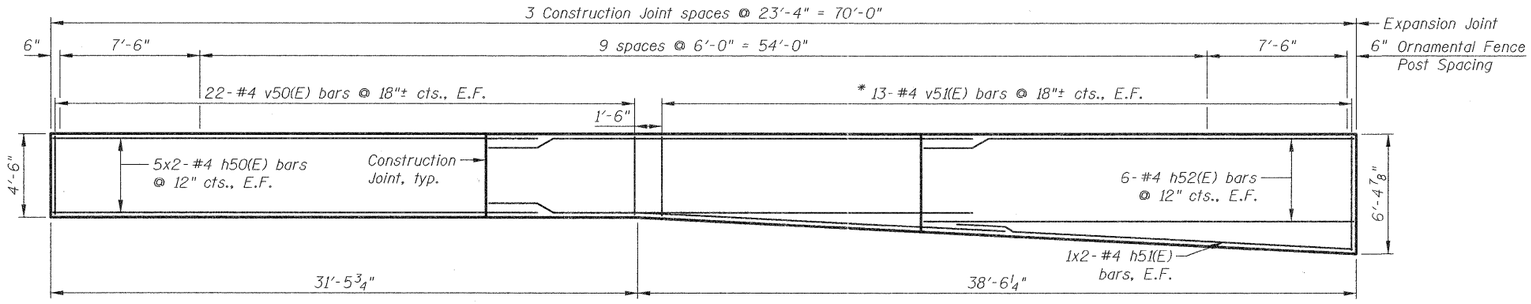
DRAWN - D. ATKINS		REVISED -
DESIGNED - M. LANGE		REVISED -
CHECKED - G. HATLESTAD		REVISED -
DATE - DECEMBER 19, 2011		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

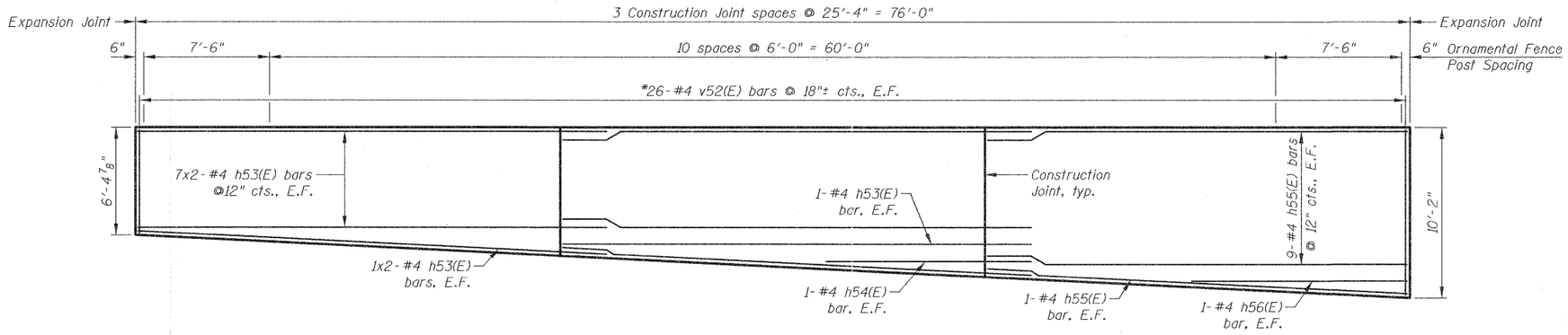
GENERAL PLAN & ELEVATION
WALL B; MILLENNIUM TRAIL
SHEET NO. WB1 OF WB5 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	42
			CONTRACT NO.	
	ILLINOIS FED. AID PROJECT			

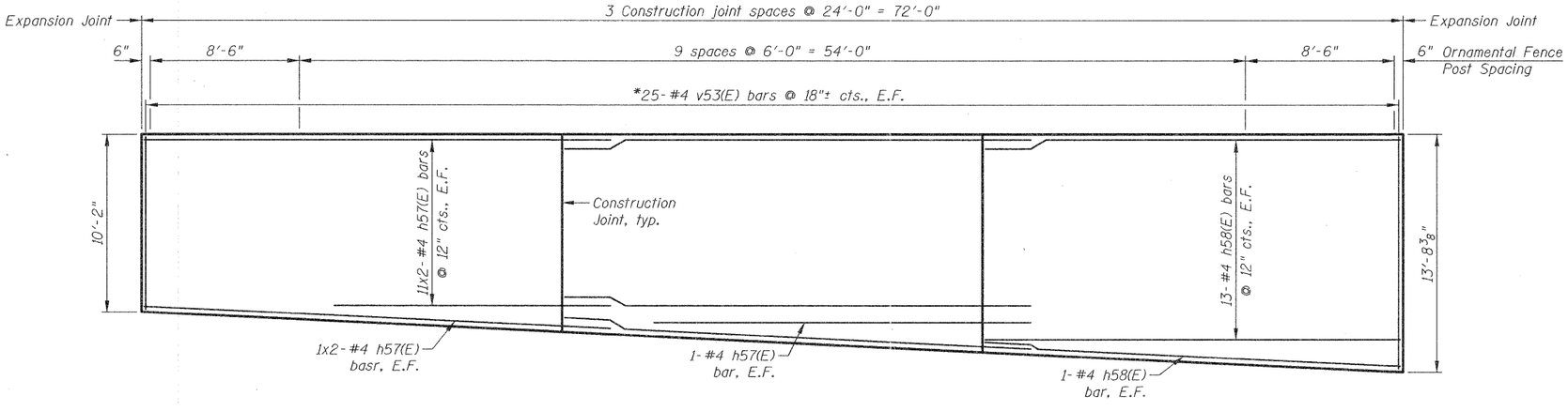
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mfl



ELEVATION WALL SEGMENT A



ELEVATION WALL SEGMENT B



ELEVATION WALL SEGMENT C

MINIMUM BAR LAP

#4 bar = 2'-7"

*Field cut to fit.

Notes:
See sheet WB1 for location of wall segments.
See sheet WS1 for Ornamental Fence details.
Bars indicated thus 7x2-#4 etc. indicate 7 lines of bars with 2 lengths per line.

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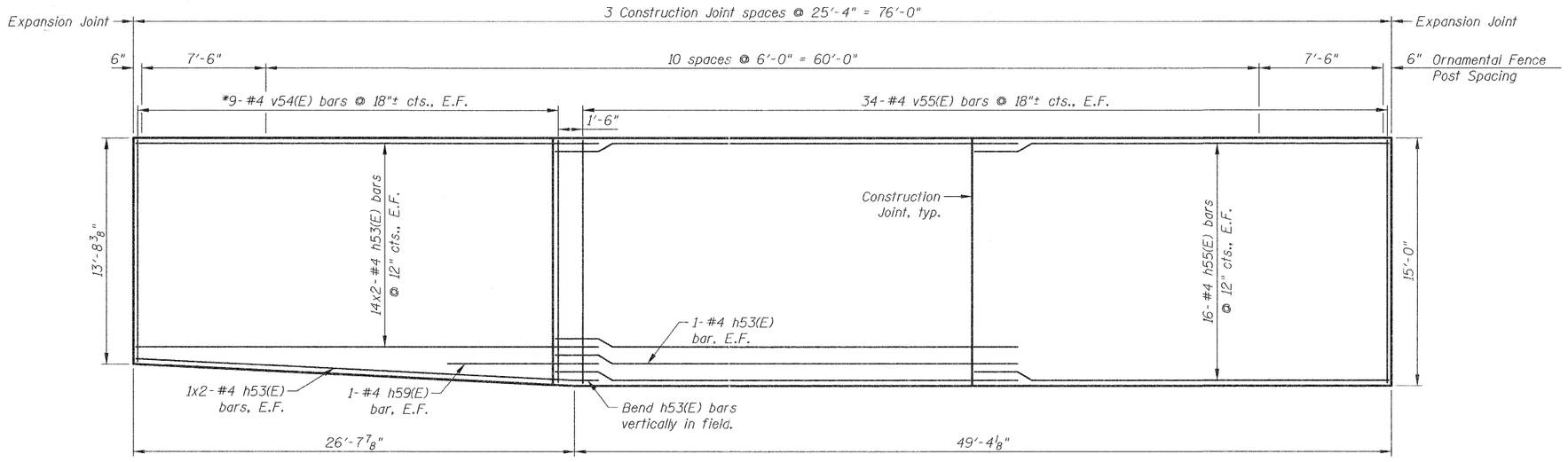
DRAWN - D. ATKINS	REVISED -	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

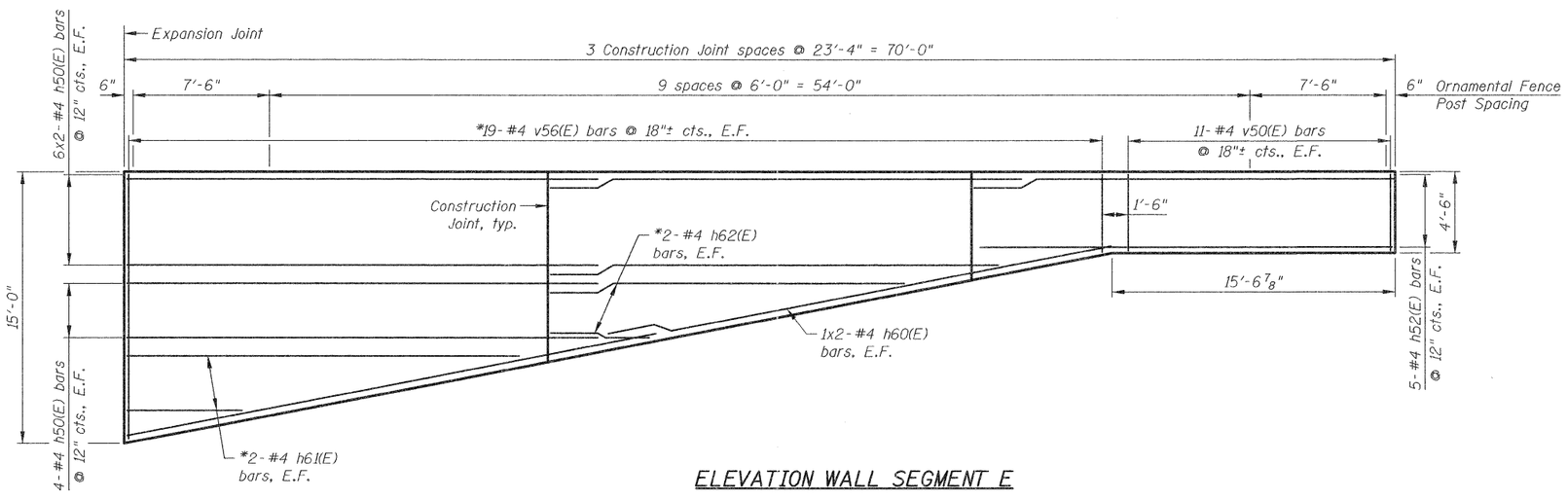
WALL B ELEVATIONS I
WALL B; MILLENNIUM TRAIL
SHEET NO. WB2 OF WB5 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	43
			CONTRACT NO.	
	ILLINOIS FED. AID PROJECT			

m:\jlx2322\cad\struct\Wall B\02_WB_Elev.dgn
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12/15/2011



ELEVATION WALL SEGMENT D



ELEVATION WALL SEGMENT E

MINIMUM BAR LAP

#4 bar = 2'-7"

*Field cut to fit.

Notes:
See sheet WB1 for location of wall segments.
See sheet WS1 for Ornamental Fence details.
Bars indicated thus 7x2-#4 etc, indicate 7 lines of bars with 2 lengths per line.

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
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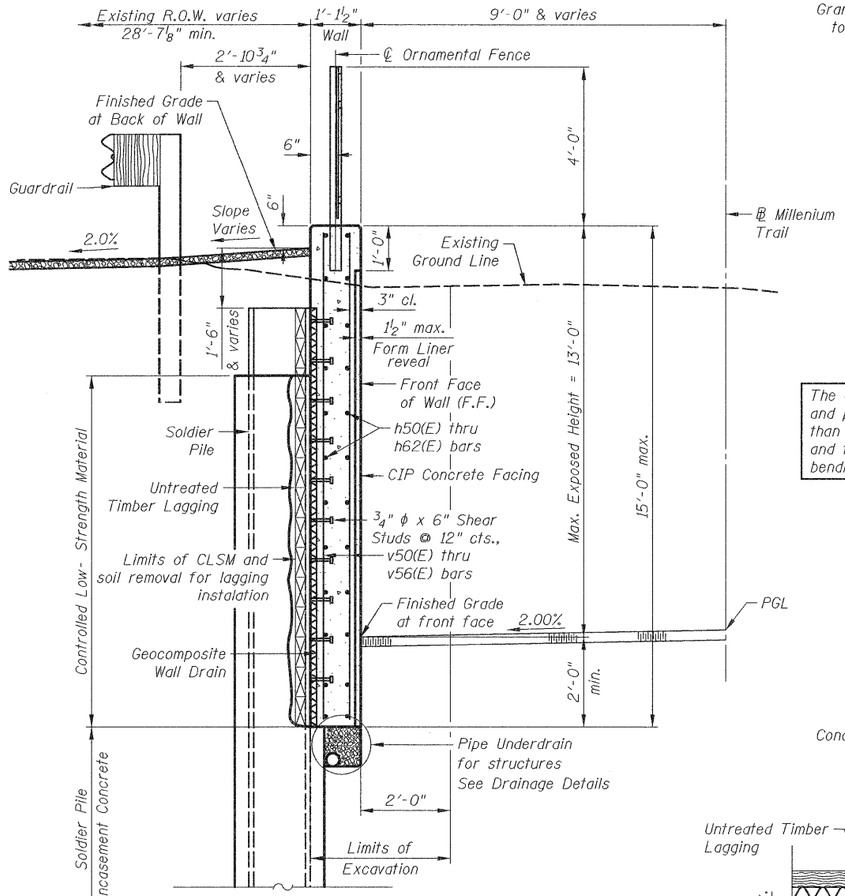
DRAWN - D. ATKINS	REVISED -	
DESIGNED - M. LANGE	REVISED -	
CHECKED - G. HATLESTAD	REVISED -	
DATE - DECEMBER 19, 2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

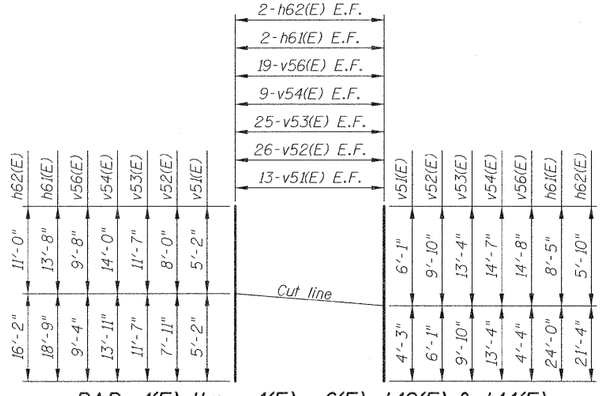
WALL B ELEVATIONS II
WALL B; MILLENNIUM TRAIL
SHEET NO. WB3 OF WB5 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	44
			CONTRACT NO.	
	ILLINOIS FED. AID PROJECT			

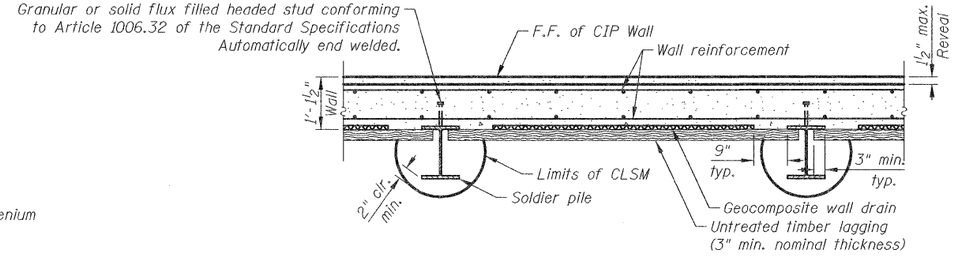
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12/5/2011



SECTION SOLDIER PILE WALL

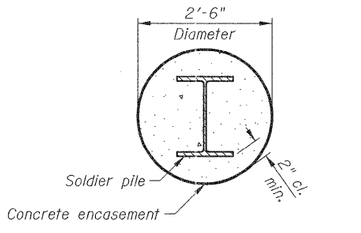


BAR v1(E) thru v4(E), v6(E), h12(E) & h14(E)

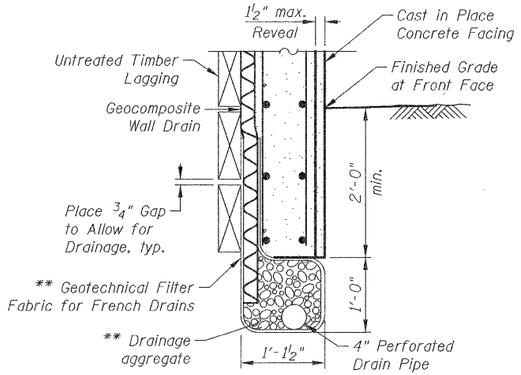


SECTION THRU DRILLED SOLDIER PILE WALL

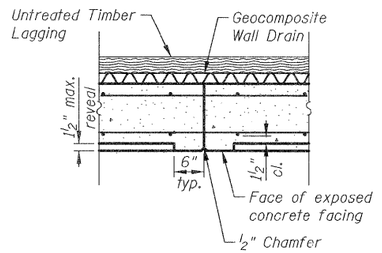
The Contractor is responsible for the design and performance of the lagging using no less than a 3 in. nominal rough-sawn thickness and timber with a miniminum allowable bending stress of 1000 psi.



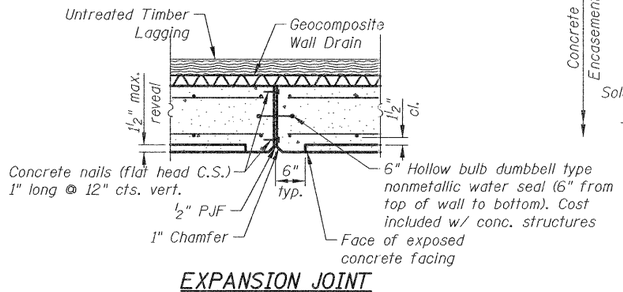
SOLDIER PILE ENCASEMENT



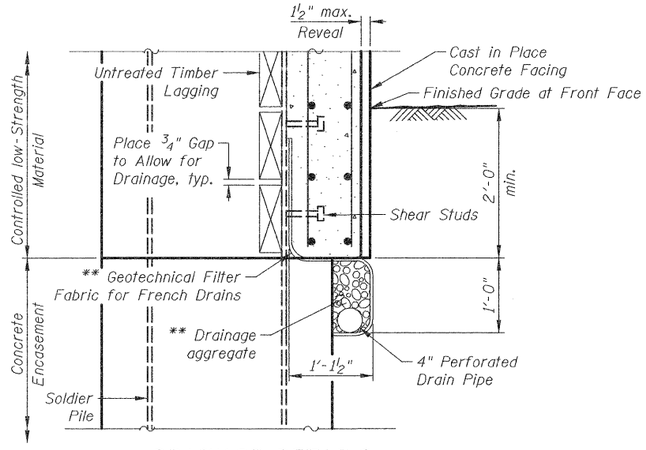
DRAINAGE DETAILS BETWEEN SOLDIER PILES



CONSTRUCTION JOINT



EXPANSION JOINT



DRAINAGE DETAILS AT SOLDIER PILES

** Included in the cost of Pipe Underdrains for Structures, 4"

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h50(E)	52	#4	25'-11"	——
	h51(E)	4	#4	20'-5"	——
	h52(E)	22	#4	23'-0"	——
	h53(E)	96	#4	27'-11"	——
	h54(E)	2	#4	14'-5"	——
	h55(E)	52	#4	25'-0"	——
	h56(E)	2	#4	12'-10"	——
	h57(E)	50	#4	26'-7"	——
	h58(E)	28	#4	23'-8"	——
	h59(E)	2	#4	9'-1"	——
	h60(E)	4	#4	28'-11"	——
	h61(E)	4	#4	32'-5"	——
	h62(E)	4	#4	27'-2"	——
	v50(E)	66	#4	4'-2"	——
	v51(E)	26	#4	10'-4"	——
	v52(E)	52	#4	15'-11"	——
	v53(E)	50	#4	23'-2"	——
	v54(E)	18	#4	27'-11"	——
	v55(E)	68	#4	14'-8"	——
	v56(E)	38	#4	19'-0"	——

	ITEM	UNIT	QUANTITY
	Structure Excavation	Cu. Yd.	377
	Concrete Structures	Cu. Yd.	148.6
	Stud Shear Connectors	Each	431
	Reinforcement Bars, Epoxy Coated	Pound	8,910
	Geocomposite Wall Drain	Sq. Yd.	219
*	Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	4,136
*	Untreated Timber Lagging	Sq. Ft.	2,696
*	Furnishing Soldier Piles (W Section)	Foot	1,208
*	Pipe Underdrains for Structures 4"	Foot	380
	Ornamental Fence	Foot	363
*	Staining Concrete Structures	Sq. Yd.	342
*	Form Liner Textured Surface, Special	Sq. Ft.	3,070

* Indicates Special Provision

Note:
See sheet WS1 for Ornamental Fence details.

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DRAWN	D. ATKINS	REVISED	-
DESIGNED	M. LANGE	REVISED	-
CHECKED	G. HATLESTAD	REVISED	-
DATE	DECEMBER 19, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL B DETAILS
WALL B; MILLENNIUM TRAIL
SHEET NO. WB4 OF WB5 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	45
			CONTRACT NO.	
	ILLINOIS FED. AID PROJECT			

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12/15/2011 11:44:38 AM J:\2322\cad\struct\Wall B\04_WB_Wall Details.dgn

MSET PROJECT NO.: 11218 | **LOG OF BORING NO. B-3** | Page 1 of 1

PROJECT: Grand Avenue Underpass | SITE LOCATION: Lake County, IL

BORING LOCATION: STA. 70+10 | CLIENT: Civiltech Engineering, Inc.

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE TYPE/INTERVAL	SAMPLE NO.	N-VALUE Blows per ft.	TESTS Wc%	TESTS Dry Unit Weight, pcf	TESTS Unconfined Compressive Strength, tsf	REMARKS
0		5-1/2" Bituminous Concrete over 7-1/2" Brown Sand and Gravel Base Course	795.2 794.1							
		Dark Olive Grey to Olive Grey Silty CLAY, little Sand, trace Gravel, A-6, very stiff		SS	1	9	16	111	2.72	
5		Brown and Grey Silty CLAY, little Sand, trace Gravel, A-6, hard to very hard	791.2	SS	2	16	19	108	5.28	
				SS	3	24	16	115	10.90	
10				SS	4	28	17	112	9.82	
				SS	5	20	17	114	8.96	
15				SS	6	22	17	115	8.61	
		Grey Silty CLAY, trace Sand and Gravel, A-6, very stiff to stiff	779.7	SS	7	12	18	113	2.87	
20				SS	8	11	20	108	1.75	
				SS	9	11	14	120	1.94	
		wet Sandy Silt Seam @ 24.5'		SS	10	11	11	127	1.55	
25				SS	11	12	14	120	1.47	
30		End of Boring @ 30'	765.2	SS	12	13	13	122	1.59	

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING: 24.5'
IMMEDIATELY AFTER DRILLING: 27.5'
DELAYED READING AFTER

MSET

BORING STARTED: 3/21/11
BORING COMPLETED: 3/21/11
LOGGED BY: SPE
BORING METHOD: CFA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

MSET PROJECT NO.: 11218 | **LOG OF BORING NO. B-5** | Page 1 of 1

PROJECT: Grand Avenue Underpass | SITE LOCATION: Lake County, IL

BORING LOCATION: STA. 68+00 | CLIENT: Civiltech Engineering, Inc.

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE TYPE/INTERVAL	SAMPLE NO.	N-VALUE Blows per ft.	TESTS Wc%	TESTS Dry Unit Weight, pcf	TESTS Unconfined Compressive Strength, tsf	REMARKS
0		Yellow-Brown Crushed Gravel	794.1							
		Dark Brown Silty CLAY Topsoil	793.6							
		Brown and Yellow-Brown Silty CLAY, little Sand and Gravel, A-6, stiff to hard	792.9	SS	1	9	26	90	1.90	
5				SS	2	12	16	111	2.17	
		to Brown and Grey		SS	3	22	17	111	6.71	
10				SS	4	26	18	109	6.21	
				SS	5	24	18	114	6.56	
15		Grey Silty CLAY, trace Sand and Gravel, A-6, very stiff to stiff	781.6	SS	6	17	18	114	2.87	
				SS	7	13	12	125	1.78	
20				SS	8	13	14	120	2.17	
				SS	9	12	14	120	2.10	
25				SS	10	11	18	110	1.78	
				SS	11	11	18	110	2.48	
30		End of Boring @ 30'	764.1	SS	12	11	13	120	1.16	

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING: none
IMMEDIATELY AFTER DRILLING: dry
DELAYED READING AFTER

MSET

BORING STARTED: 3/24/11
BORING COMPLETED: 3/24/11
LOGGED BY: SPE
BORING METHOD: CFA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

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450 E Devon Ave, Suite 300
Itasca, Illinois 60143
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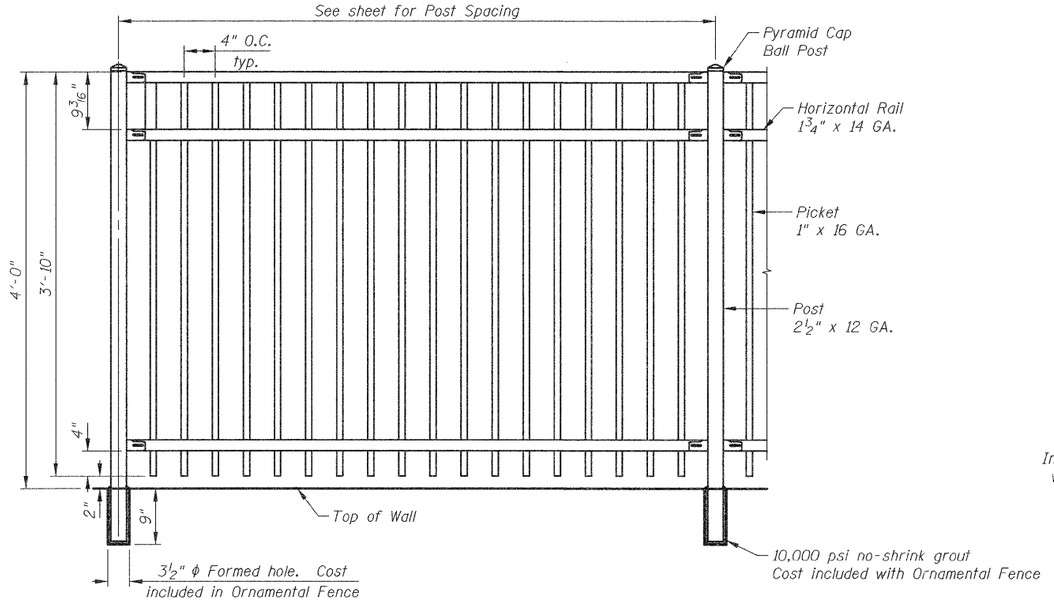
DRAWN	D. ATKINS	REVISED	-
DESIGNED	M. LANGE	REVISED	-
CHECKED	G. HATLESTAD	REVISED	-
DATE	DECEMBER 19, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

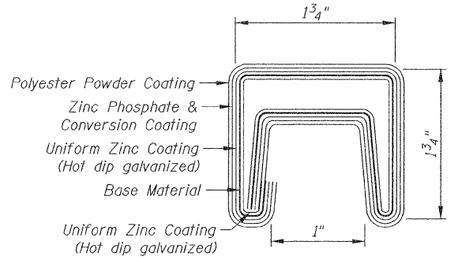
WALL B SOIL BORING LOGS
WALL B; MILLENNIUM TRAIL
SHEET NO. WB5 OF WB5 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	46
		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

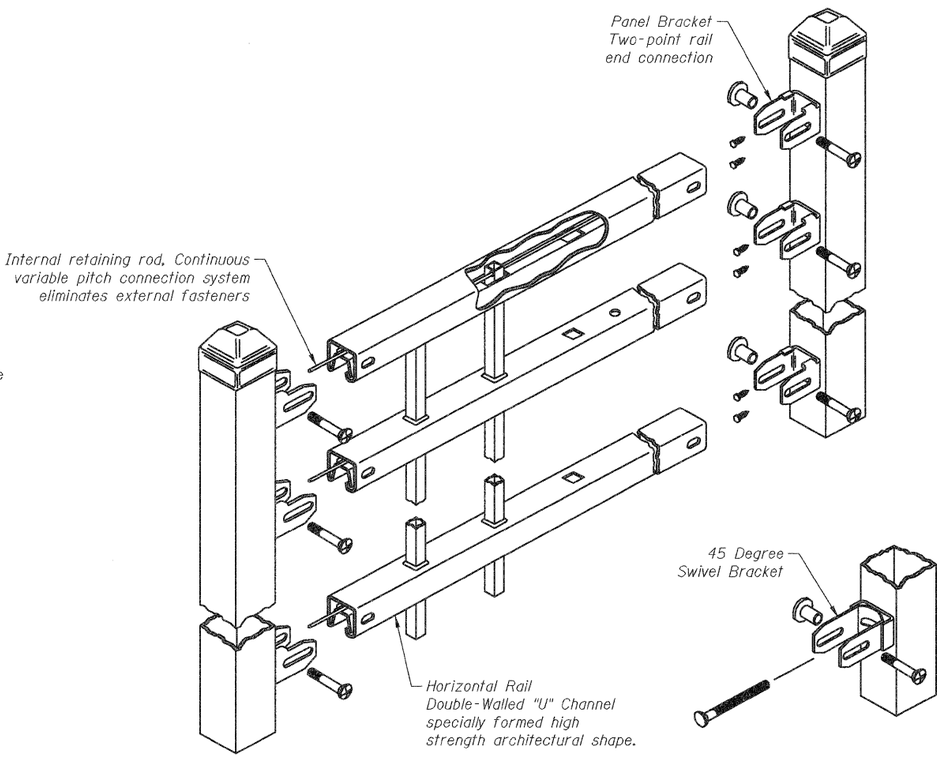
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ELEVATION ORNAMENTAL FENCE



CROSS SECTION OF HORIZONTAL RAIL



ISOMETRIC 3 RAIL

Note:
The color of the Ornamental Fence shall be black.

CIVILTECH
450 E Devon Ave, Suite 300
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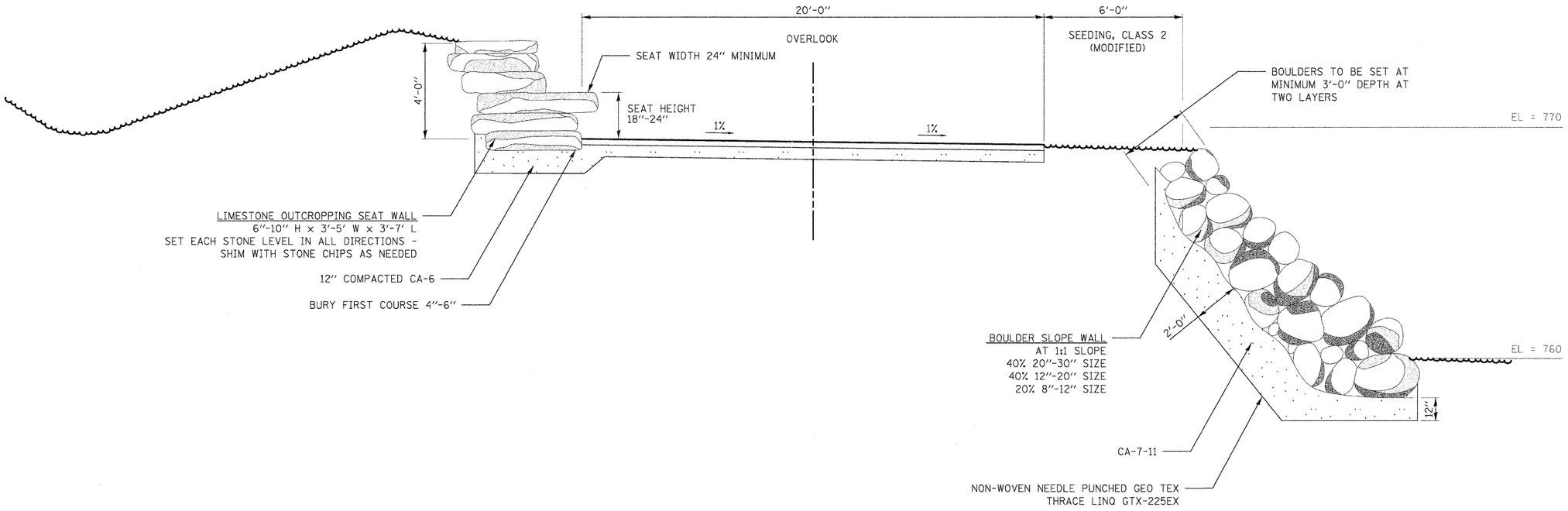
DRAWN - D. ATKINS	REVISED -	
DESIGNED - M. LANGE	REVISED -	
CHECKED - G. HATLESTAD	REVISED -	
DATE - DECEMBER 19, 2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

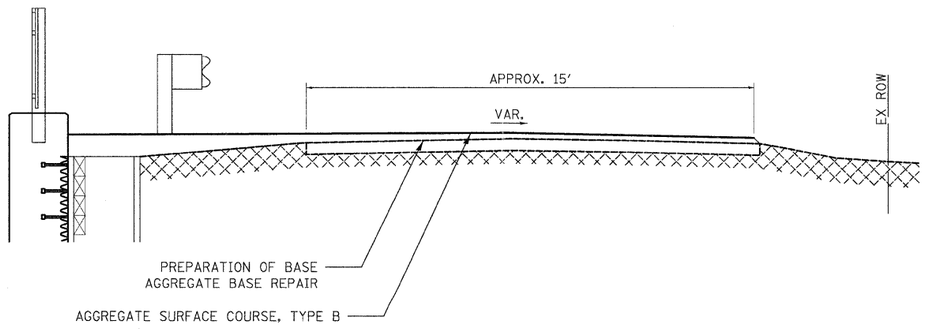
ORNAMENTAL FENCE DETAILS
WALL STANDARDS; MILLENNIUM TRAIL
SHEET NO. WS1 OF WS1 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	87	47
			CONTRACT NO.	
	ILLINOIS FED. AID PROJECT			

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OVERLOOK DETAIL



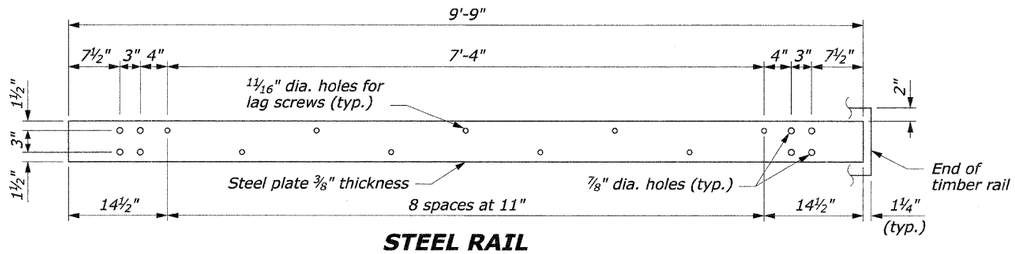
AGGREGATE DRIVEWAY SECTION

USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS**	SCALES	**CONSTRUCTION DETAILS**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FILE NAME ...\12-Details\2322.details.dgn	DRAWN - PK	REVISED -	**DEPARTMENT OF TRANSPORTATION**	VERT. 0 2.5 5	**GRAND AVENUE UNDERPASS**	0541	10-F3000-00-BT	LAKE	91	48
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -		HORIZ.0 2.5 5	SHEET NO. 1 OF 2 SHEETS STA. TO STA.			CONTRACT NO. 63665		
PLOT DATE = 12/16/2011	DATE - 12/19/2011	REVISED -				FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — BY — DATE — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — NO.

ORIGINAL SURVEY — NOTE BOOK — BY — DATE — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — NO.

STATE	PROJECT	SHEET NUMBER



STEEL RAIL

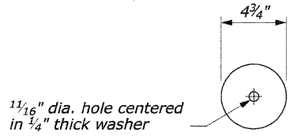
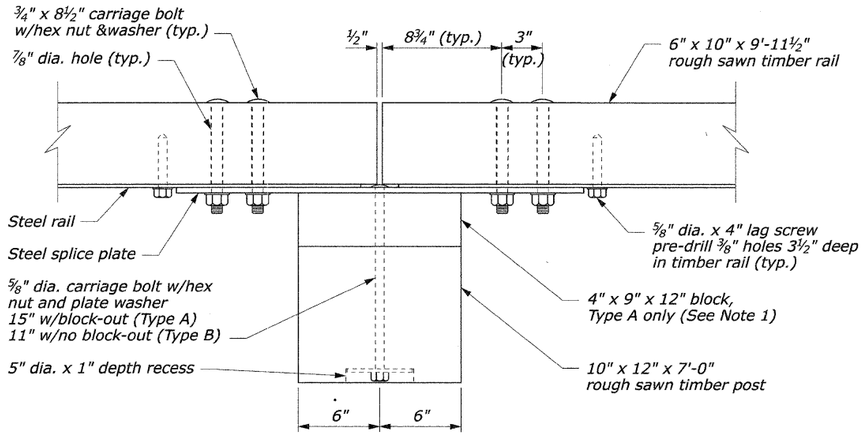


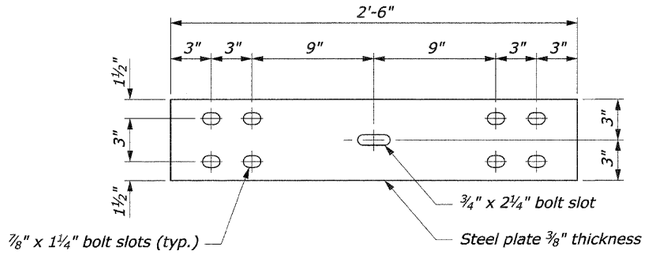
PLATE WASHER

NOTE:

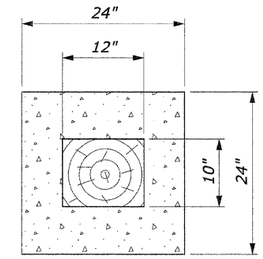
1. Use the Type A, blocked-out, system or the Type B, non-blocked-out, system as specified in the plans.
2. Use weathering steel for all structural steel and fastener hardware as specified.
3. Place a terminal section (See Standards 617-61 and 617-62) on both approach and trailing ends of barrier installations.

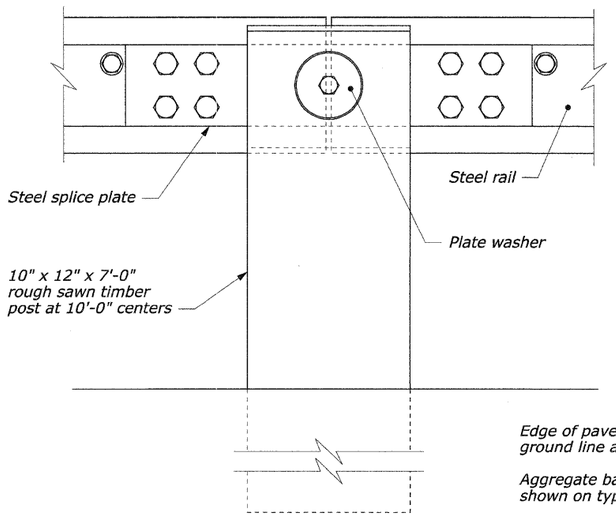


PLAN



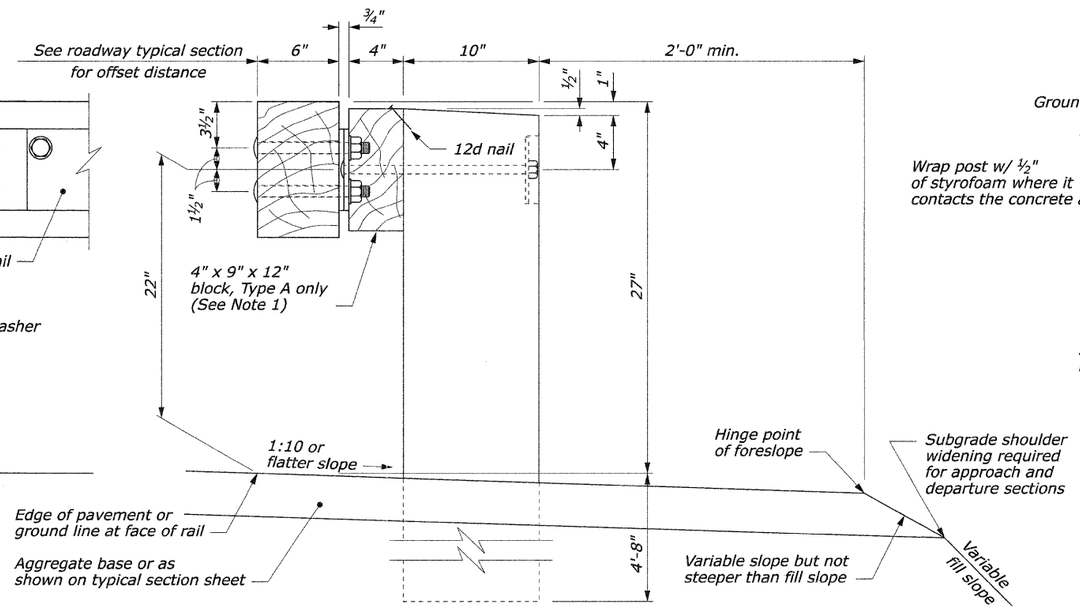
STEEL SPLICE PLATE



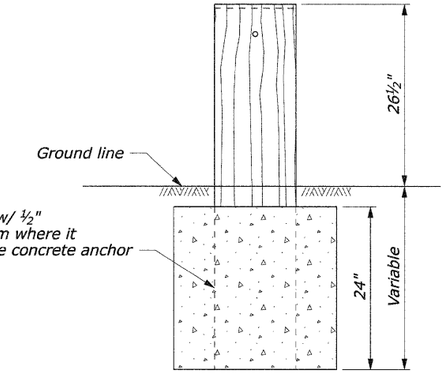


ELEVATION

POST CONNECTION



TYPICAL GUARDRAIL CROSS SECTION



24" dia. round anchor is an acceptable alternative.
Reduced size acceptable in solid rock.

CONCRETE ANCHOR FOR SHORT GUARDRAIL POST

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL LANDS HIGHWAY

U.S. CUSTOMARY STANDARD

STEEL-BACKED TIMBER GUARDRAIL TYPE A & TYPE B

STANDARD APPROVED FOR USE 3/1990	STANDARD
REVISED: 4/1994 6/2005	617-60

USER NAME = pk	DESIGNED - PK	REVISED -
FILE NAME ...\12-Details\2322_details.dgn	DRAWN - PK	REVISED -
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0
HORIZ.0

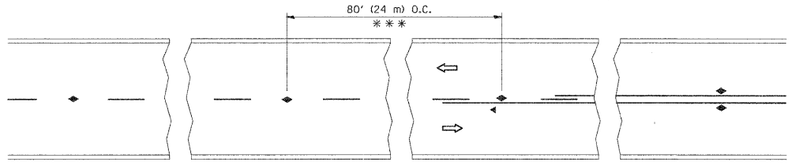
CONSTRUCTION DETAILS
GRAND AVENUE UNDERPASS
SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	49
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

ORIGINAL SURVEY | FINAL SURVEY | NOTE BOOK | NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

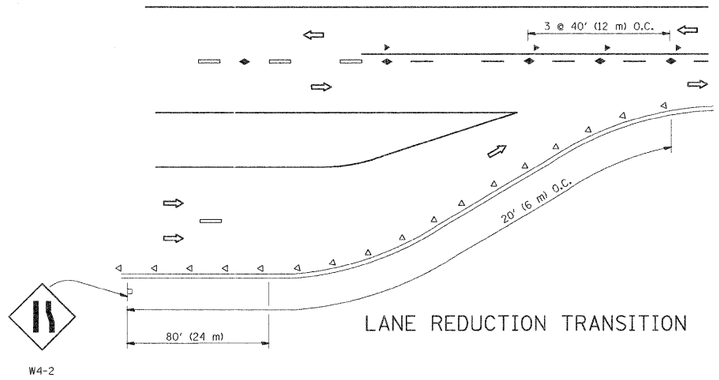
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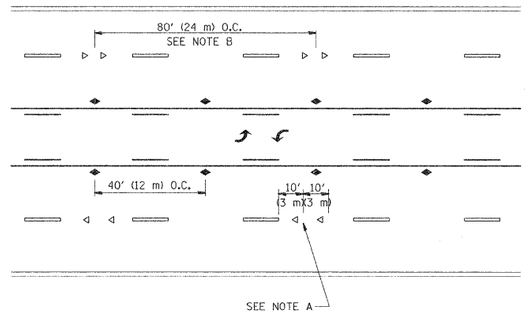


* * * REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

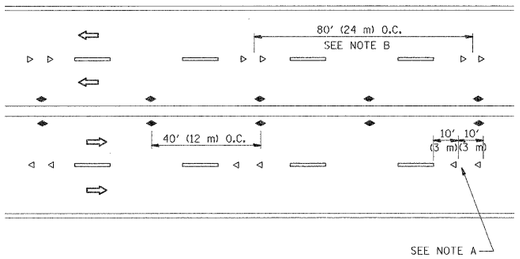
TWO-LANE/TWO-WAY



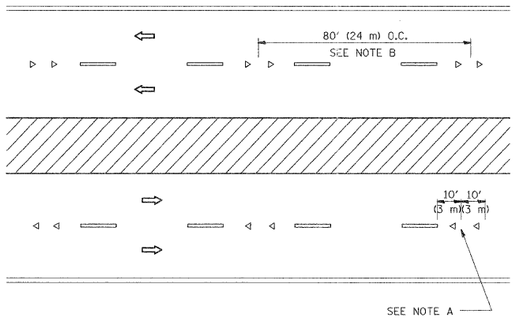
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

- YELLOW STRIPE
- WHITE STRIPE
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (W/O)
- TWO-WAY AMBER MARKER

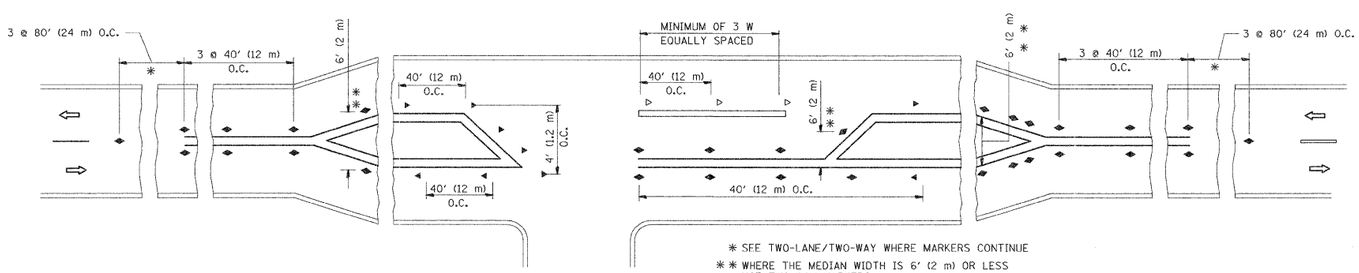
LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

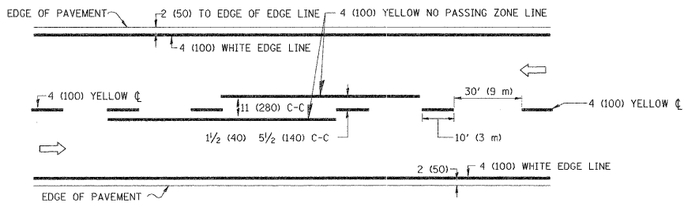
** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

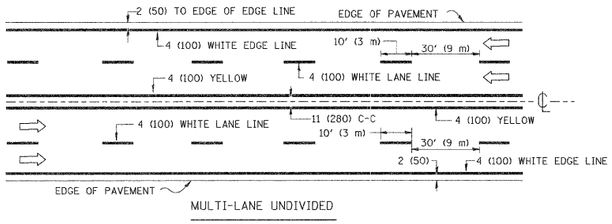
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = c:\pw_work\pwidot\leysa\d0108315\tc11.dgn	USER NAME = leysa	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)**
		DRAWN -	REVISED - T. RAMMACHER 03-12-99		
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00		
	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

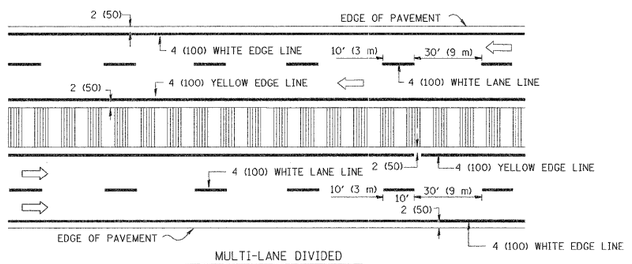
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	50
	TC-11	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



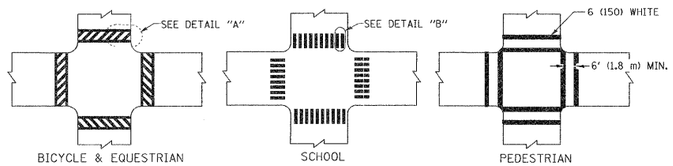
MULTI-LANE UNDIVIDED



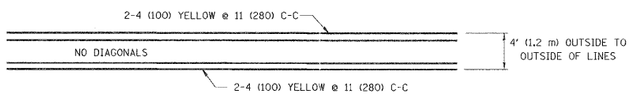
MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

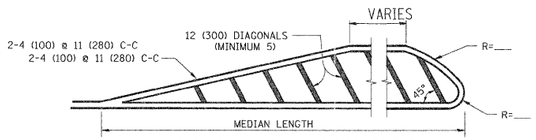
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



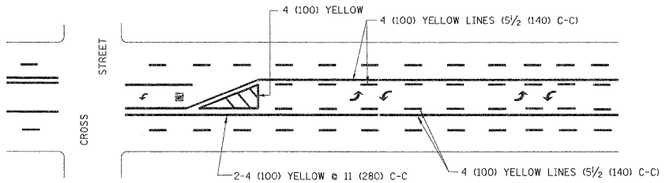
4' (1.2 m) WIDE MEDIANS ONLY



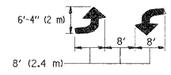
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

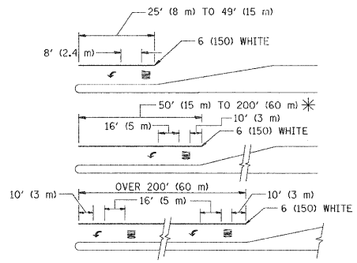


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

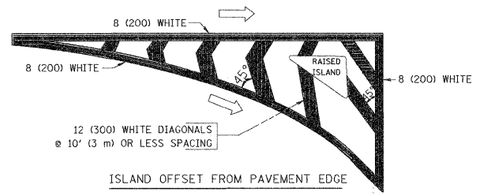


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) ONLY AREA = 20.8 SQ. FT. (1.9 m^2)

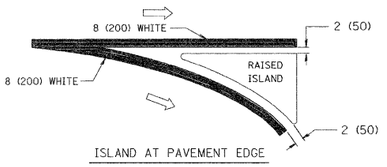
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
o:\pw_work\pwidot\drivakosgn\d2109315\tc13.dgn		DRAWN -	REVISED -C. JUCIUS 09-09-09
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

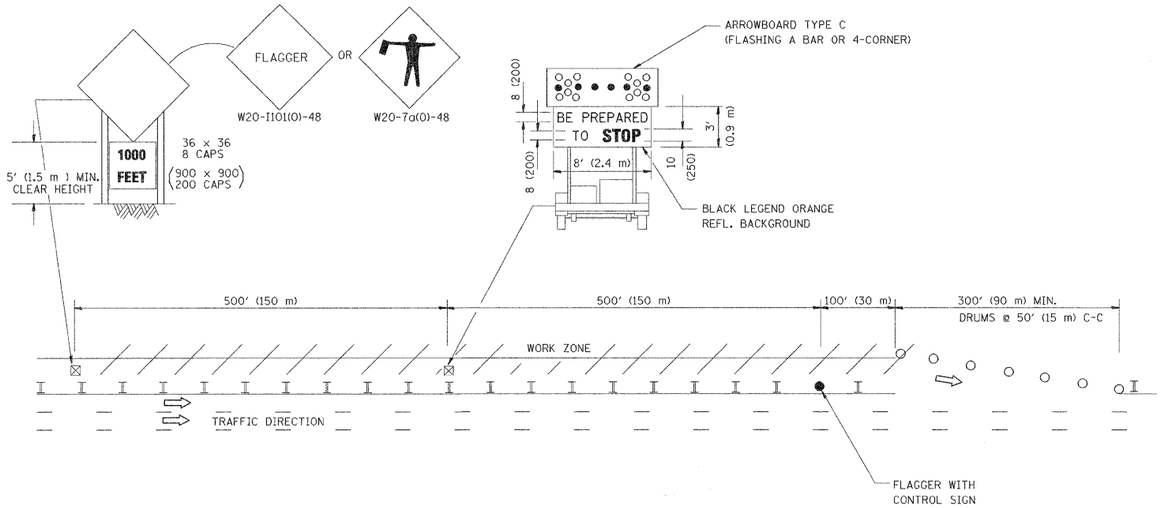
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

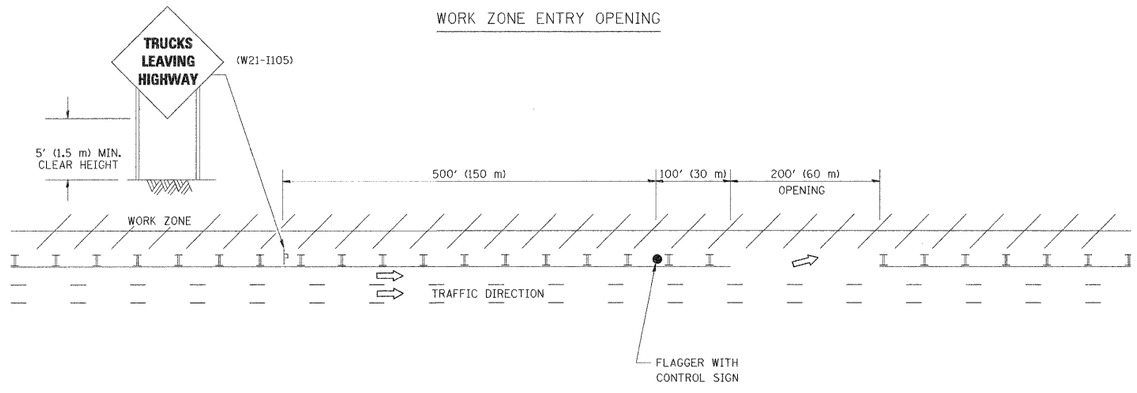
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	51
	TC-13	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. THE ARROWBOARD, THE FLAGGER AHEAD SIGN AND THE TRUCKS LEAVING HIGHWAY SIGN SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE EXIT OPENINGS SHOULD BE A MINIMUM OF ONE HALF MILE APART.
3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

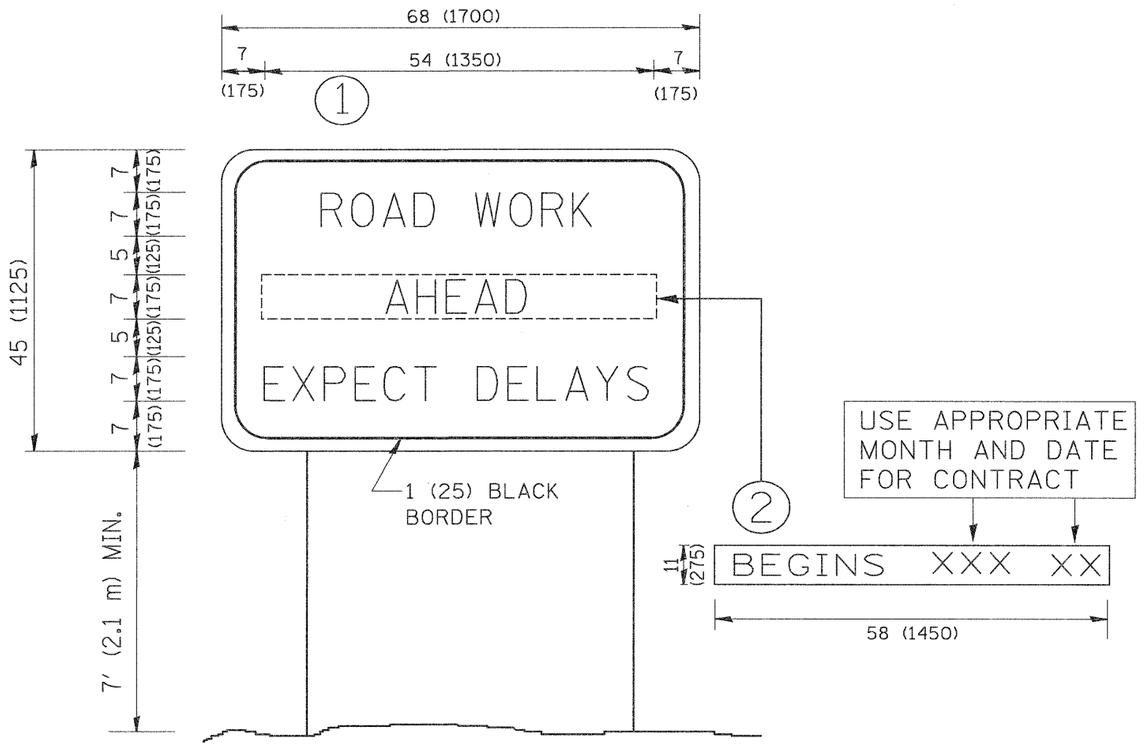
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		DRAWN -	REVISED - J.A.F. 02-06
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - S.P.B. 01-07
	PLOT DATE = 1/26/2010	DATE -	REVISED - S.P.B. 12-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	52
	TC-18	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

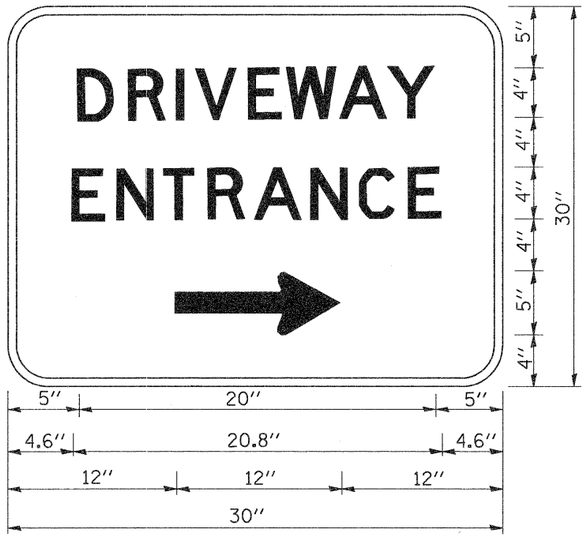
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		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	53
	TC-22	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
"DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" × 5.0"

NOTES:

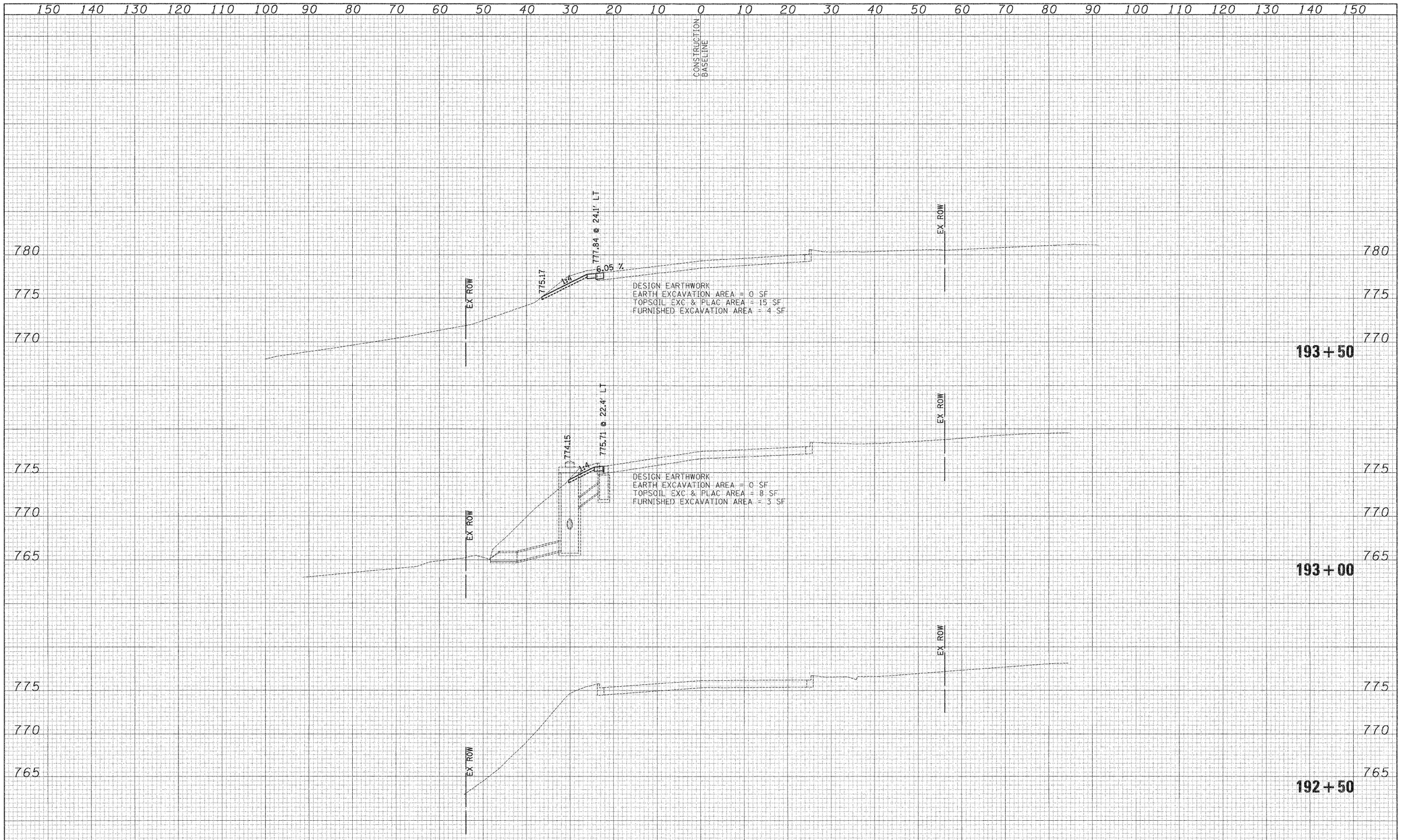
1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME = W:\diststd\22x34\tc26.dgn	USER NAME = geglianobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRIVEWAY ENTRANCE SIGNING
		DRAWN -	REVISED -		
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	PLOT DATE = 1/4/2008	DATE -	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	54
	TC-26	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
AREAS CHECKED		
NO.		



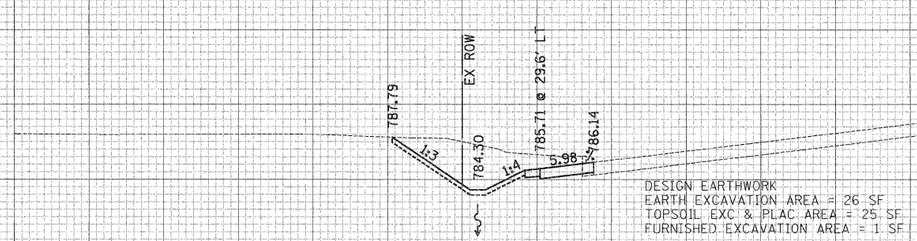
USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	**STATE OF ILLINOIS**	VERT. 0 5 10	**CROSS SECTIONS**
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PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -			**GRAND AVENUE UNDERPASS**
PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -			SHEET NO. 1 OF 9 SHEETS | STA. 192+50.00 TO STA. 193+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	55
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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CONSTRUCTION BASELINE

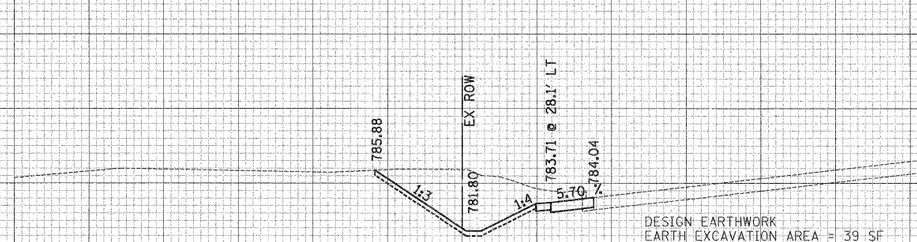
795
790
785



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 26 SF
TOPSOIL EXC & PLAC AREA = 25 SF
FURNISHED EXCAVATION AREA = 1 SF

195+50

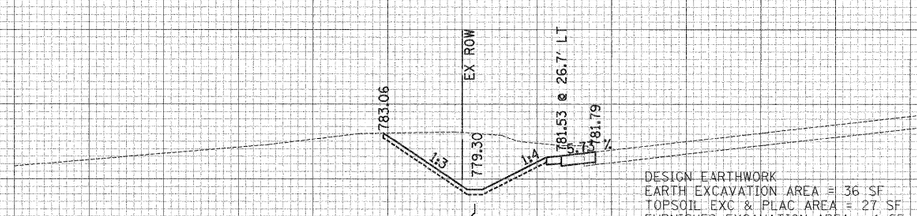
795
790
785
780



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 39 SF
TOPSOIL EXC & PLAC AREA = 28 SF
FURNISHED EXCAVATION AREA = 1 SF

195+00

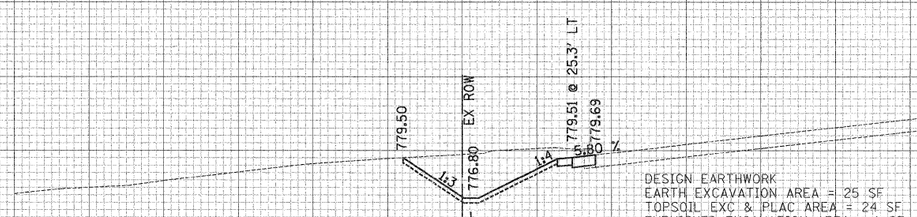
785
780



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 36 SF
TOPSOIL EXC & PLAC AREA = 27 SF
FURNISHED EXCAVATION AREA = 1 SF

194+50

785
780



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 25 SF
TOPSOIL EXC & PLAC AREA = 24 SF
FURNISHED EXCAVATION AREA = 1 SF

194+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 1
GRAND AVENUE UNDERPASS

SHEET NO. 2 OF 9 SHEETS | STA. 194+00.00 TO STA. 195+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	56
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

795
790

CONSTRUCTION BASELINE

EX ROW

791.04
1:3
789.63
1:4
EX ROW
790.71 @ 35.0' LT
5.10 %
791.33

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 10 SF
TOPSOIL EXC & PLAC AREA = 23 SF
FURNISHED EXCAVATION AREA = 1 SF

198+00

791.24
1:3
789.48
1:4
EX ROW
790.56 @ 35.0' LT
4.74 %
791.15

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 11 SF
TOPSOIL EXC & PLAC AREA = 24 SF
FURNISHED EXCAVATION AREA = 1 SF

197+50

793.28
1:3
788.88
1:4
EX ROW
789.96 @ 33.9' LT
4.83 %
790.51

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 20 SF
TOPSOIL EXC & PLAC AREA = 32 SF
FURNISHED EXCAVATION AREA = 2 SF

197+00

791.21
1:3
787.97
1:4
EX ROW
789.05 @ 32.4' LT
4.68 %
789.50

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 20 SF
TOPSOIL EXC & PLAC AREA = 26 SF
FURNISHED EXCAVATION AREA = 1 SF

196+50

789.96
1:3
786.22
1:4
EX ROW
787.30 @ 31.0' LT
6.10 %
787.81

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 28 SF
TOPSOIL EXC & PLAC AREA = 27 SF
FURNISHED EXCAVATION AREA = 1 SF

196+00

FINAL SURVEY NOTE BOOK NO.
SURVEYED PLOTTED TEMPLATE AREAS CHECKED
BY DATE

ORIGINAL SURVEY NOTE BOOK NO.
SURVEYED PLOTTED TEMPLATE AREAS CHECKED
BY DATE

USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	
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PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 1
GRAND AVENUE UNDERPASS

SHEET NO. 3 OF 9 SHEETS | STA. 196+00.00 TO STA. 198+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	57
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

CONSTRUCTION BASELINE

790

EX ROW

786.60

1:4

788.74 @ 35.0' LT

2.19 %

788.99

EX ROW

790

200 + 50

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 21 SF
FURNISHED EXCAVATION AREA = 19 SF

790

EX ROW

789.03

1:4

789.45 @ 35.0' LT

2.40 %

789.73

EX ROW

790

200 + 00

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 14 SF
FURNISHED EXCAVATION AREA = 5 SF

790

EX ROW

790.01

788.81

1:4

789.89 @ 35.0' LT

3.51 %

790.32

EX ROW

790

199 + 50

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 7 SF
TOPSOIL EXC & PLAC AREA = 22 SF
FURNISHED EXCAVATION AREA = 1 SF

795

EX ROW

789.69

789.20

1:4

790.28 @ 35.0' LT

4.26 %

790.81

EX ROW

790

199 + 00

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 1 SF
TOPSOIL EXC & PLAC AREA = 21 SF
FURNISHED EXCAVATION AREA = 3 SF

795

EX ROW

790.10

789.49

1:4

790.57 @ 35.0' LT

5.07 %

791.20

EX ROW

790

198 + 50

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 1 SF
TOPSOIL EXC & PLAC AREA = 21 SF
FURNISHED EXCAVATION AREA = 2 SF

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY
NOTE BOOK
NO.

BY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	

ORIGINAL SURVEY
NOTE BOOK
NO.

BY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	

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PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 1
GRAND AVENUE UNDERPASS

SHEET NO. 4 OF 9 SHEETS | STA. 198+50.00 TO STA. 200+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	58
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

790
785
780

CONSTRUCTION BASELINE

EX ROW

787.27 @ 35.0' LT

787.52

2.38 %

1:4

779.81

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 45 SF
FURNISHED EXCAVATION AREA = 101 SF

202+50

787.41 @ 35.0' LT

787.61

1.83 %

777.63

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 57 SF
FURNISHED EXCAVATION AREA = 164 SF

202+00

787.65 @ 35.0' LT

787.85

1.78 %

778.09

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 57 SF
FURNISHED EXCAVATION AREA = 166 SF

201+50

788.21 @ 35.0' LT

788.41

1.75 %

782.22

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 39 SF
FURNISHED EXCAVATION AREA = 79 SF

201+00

USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	
FILE NAME ...\2322_xsec_01_Grand.dgn	DRAWN - PK	REVISED -	
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 1
GRAND AVENUE UNDERPASS

SHEET NO. 5 OF 9 SHEETS | STA. 201+00.00 | TO STA. 202+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	59
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

CONSTRUCTION BASELINE

790
785

205+00

EX ROW

791.10
787.67
788.75 @ 29.9' LT
788.82
1.40
1:4

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 15 SF
TOPSOIL EXC & PLAC AREA = 19 SF
FURNISHED EXCAVATION AREA = 1 SF

204+50

789.73
787.92
788.71 @ 31.3' LT
788.81
1.50
1:4

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 7 SF
TOPSOIL EXC & PLAC AREA = 16 SF
FURNISHED EXCAVATION AREA = 1 SF

204+00

788.10
788.50 @ 32.7' LT
788.62
1.40
1:4

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 10 SF
FURNISHED EXCAVATION AREA = 3 SF

203+50

785.72
787.88 @ 34.1' LT
788.08
2.10 %
1:4

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 20 SF
FURNISHED EXCAVATION AREA = 18 SF

203+00

784.03
787.60 @ 35.0' LT
787.79
1.86 %
1:4

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 27 SF
FURNISHED EXCAVATION AREA = 36 SF

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY NOTE BOOK NO. | BY | DATE | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED

ORIGINAL SURVEY NOTE BOOK NO. | BY | DATE | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED

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PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 1
GRAND AVENUE UNDERPASS

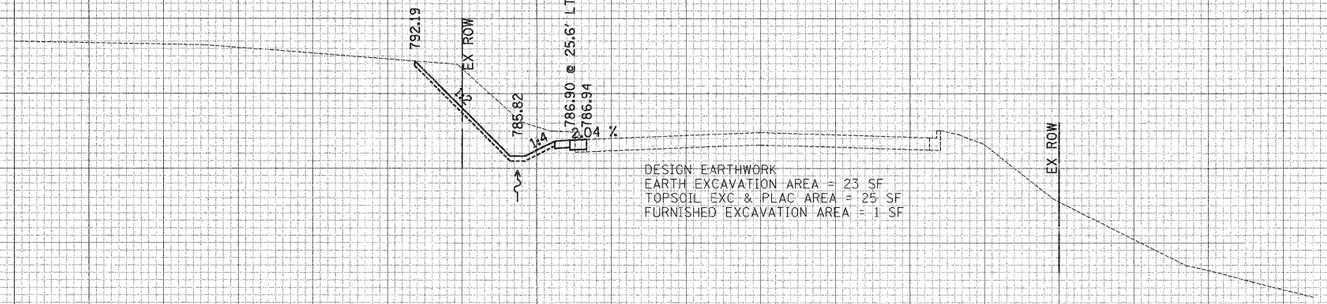
SHEET NO. 6 OF 9 SHEETS | STA. 203+00.00 TO STA. 205+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	60
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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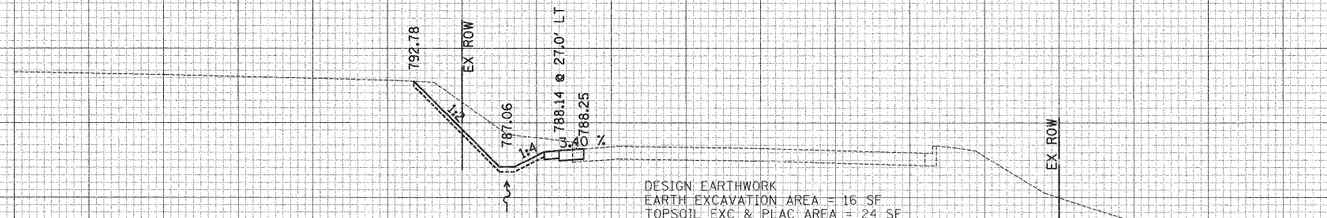
795
790
785
780

CONSTRUCTION BASELINE



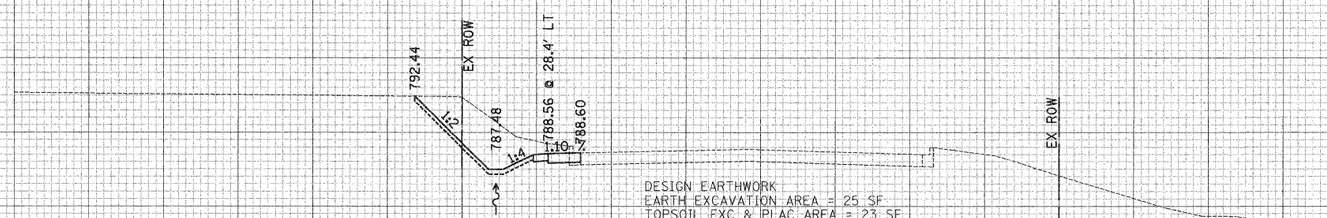
DESIGN EARTHWORK
EARTH EXCAVATION AREA = 23 SF
TOPSOIL EXC & PLAC AREA = 25 SF
FURNISHED EXCAVATION AREA = 1 SF

206+50



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 16 SF
TOPSOIL EXC & PLAC AREA = 24 SF
FURNISHED EXCAVATION AREA = 1 SF

206+00



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 25 SF
TOPSOIL EXC & PLAC AREA = 23 SF
FURNISHED EXCAVATION AREA = 1 SF

205+50

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY
NOTE BOOK
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SURVEYED
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ORIGINAL SURVEY
NOTE BOOK
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PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 1
GRAND AVENUE UNDERPASS

SHEET NO. 7 OF 9 SHEETS | STA. 205+50.00 TO STA. 206+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	61
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	BY	DATE
	SURVEYED	
	PLOTTED	
NOTE BOOK	TEMPLATE	
NO.	AREAS	
	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
	SURVEYED	
	PLOTTED	
NOTE BOOK	TEMPLATE	
NO.	AREAS	
	AREAS CHECKED	

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

805 800 795 790 785 780 775

CONSTRUCTION BASELINE

788.00 EX ROW

12

783.99

14

785.07

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 17 SF
FURNISHED EXCAVATION AREA = 3 SF

EX ROW

207+50

792.22 EX ROW

12

784.79

14

785.87 @ 24.1' LT
785.88

-2.55 %

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 18 SF
TOPSOIL EXC & PLAC AREA = 27 SF
FURNISHED EXCAVATION AREA = 1 SF

EX ROW

207+00

805 800 795 790 785 780 775

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	
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PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 1
GRAND AVENUE UNDERPASS

SHEET NO. 8 OF 9 SHEETS | STA. 207+00.00 TO STA. 207+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	62
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS CHECKED		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

CONSTRUCTION BASELINE

795
790
785
780
775

EX ROW

EX ROW

208+00

USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	
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PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 1
GRAND AVENUE UNDERPASS

SHEET NO. 9 OF 9 SHEETS | STA. 208+00.00 TO STA. 208+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	63
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

CONSTRUCTION BASELINE

780
775
770
765

EX ROW

774.28

113

777.95

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 6 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 5 SF

EX ROW

193+50

EX ROW

772.37

775.72

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 7 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 5 SF

EX ROW

193+00

EX ROW

EX ROW

192+50

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

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PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 2
GRAND AVENUE UNDERPASS

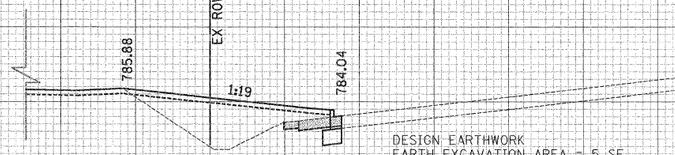
SHEET NO. 1 OF 10 SHEETS | STA. 192+50.00 | TO STA. 193+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	64
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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CONSTRUCTION BASELINE

795
790
785
780

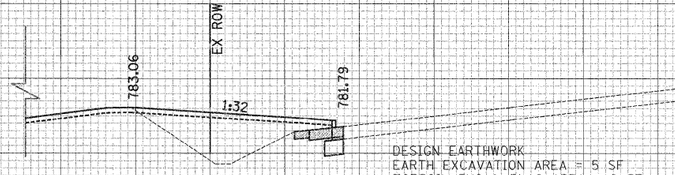


DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 45 SF

EX ROW

195+00

790
785
780

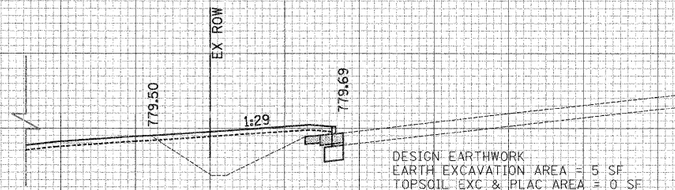


DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 43 SF

EX ROW

194+50

785
780
775



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 36 SF

EX ROW

194+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
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ORIGINAL SURVEY
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SURVEYED
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USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	
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PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 2
GRAND AVENUE UNDERPASS

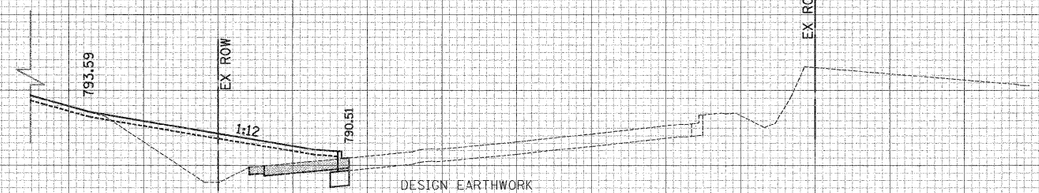
SHEET NO. 2 OF 10 SHEETS | STA. 194+00.00 | TO STA. 195+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	65
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

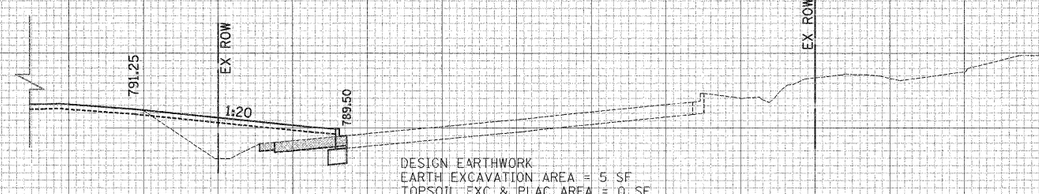
CONSTRUCTION BASELINE

795
790
785



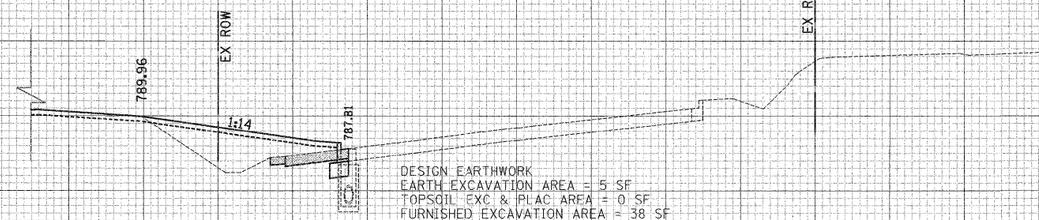
DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 52 SF

197+00



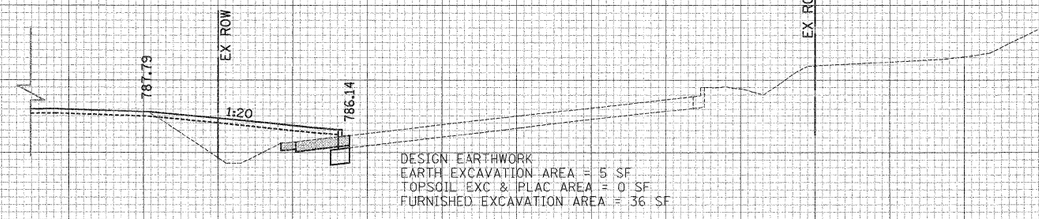
DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 35 SF

196+50



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 38 SF

196+00



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 36 SF

195+50

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	
FILE NAME ...\2322_xsec_01a_Grand_stage2.dgn	DRAWN - PK	REVISED -	
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 2
GRAND AVENUE UNDERPASS

SHEET NO. 3 OF 10 SHEETS | STA. 195+50.00 | TO STA. 197+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	66
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

CONSTRUCTION BASELINE

198+50

EX ROW 792.70 — 1:25 — 791.20 — 5.00 % — 792.33 — 5.00 % — 793.48 — 1:25 — EX ROW 795.25

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 26 SF
FURNISHED EXCAVATION AREA = 67 SF

198+00

EX ROW 792.83 — 1:25 — 791.33 — 5.00 % — 792.47 — 5.00 % — 793.62 — 1:25 — EX ROW 795.40

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 6 SF
TOPSOIL EXC & PLAC AREA = 27 SF
FURNISHED EXCAVATION AREA = 69 SF

UNDERPASS LOCATED AT
STA 198+20.25

ORIGINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

197+50

EX ROW 791.24 — 1:46 — 791.15 — 5.00 % — 792.28 — 5.64 % — 793.58 — 1:6 — 794.31 — EX ROW

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 6 SF
TOPSOIL EXC & PLAC AREA = 3 SF
FURNISHED EXCAVATION AREA = 29 SF

USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	
FILE NAME ...\2322_xsec_01a_Grand_stage2.dgn	DRAWN - PK	REVISED -	
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 2
GRAND AVENUE UNDERPASS

SHEET NO. 4 OF 10 SHEETS | STA. 197+50.00 | TO STA. 198+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	67
		CONTRACT NO. 63665		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

CONSTRUCTION BASELINE

795
790
785

EX ROW
788.66
1:10
788.99
EX ROW

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 9 SF

200+50

EX ROW
789.37
1:10
789.73
EX ROW

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 9 SF

200+00

EX ROW
790.01
1:22
790.32
EX ROW

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 20 SF

199+50

EX ROW
789.69
1:10
790.81
4.00 %
791.72
4.00 %
792.64
1:10
793.61
EX ROW

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 6 SF
TOPSOIL EXC & PLAC AREA = 5 SF
FURNISHED EXCAVATION AREA = 16 SF

199+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY NOTE BOOK

NO.	BY	DATE
	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

ORIGINAL SURVEY NOTE BOOK

NO.	BY	DATE
	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	
FILE NAME ...\2322_xsec_01a_Grand_stage2.dgn	DRAWN - PK	REVISED -	
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 2
GRAND AVENUE UNDERPASS

SHEET NO. 5 OF 10 SHEETS | STA. 199+00.00 | TO STA. 200+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	68
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

CONSTRUCTION BASELINE

790
785
780

EX ROW
787.33
1:10
787.61
DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 8 SF
EX ROW

202+00

790
785
780

EX ROW
787.57
1:10
787.85
DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA =8 SF
EX ROW

201+50

790
785
780

EX ROW
788.13
1:10
788.41
DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 9 SF
EX ROW

201+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY / ORIGINAL SURVEY

NO.	BY	DATE

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK

USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	
FILE NAME ...\2322_xsec_01a_Grand_stage2.dgn	DRAWN - PK	REVISED -	
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ.0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 2
GRAND AVENUE UNDERPASS

SHEET NO. 6 OF 10 SHEETS | STA. 201+00.00 | TO STA. 202+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	69
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

CONSTRUCTION BASELINE

790
785
780

EX ROW 788.42 1:7 788.62 EX ROW

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 6 SF

204+00

EX ROW 787.77 1:8 788.08 EX ROW

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 7 SF

203+50

EX ROW 787.52 1:9 787.79 EX ROW

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 8 SF

203+00

EX ROW 787.19 1:9 787.52 EX ROW

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 8 SF

202+50

FINAL SURVEY	NOTE BOOK	NO.	BY	DATE
SURVEYED				
PLOTTED				
TEMPLATE				
AREAS				
AREAS CHECKED				

ORIGINAL SURVEY	NOTE BOOK	NO.	BY	DATE
SURVEYED				
PLOTTED				
TEMPLATE				
AREAS				
AREAS CHECKED				

USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	
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PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 2
GRAND AVENUE UNDERPASS

SHEET NO. 7 OF 10 SHEETS | STA. 202+50.00 TO STA. 204+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	70
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

CONSTRUCTION BASELINE

795
790
785
780

792.78
EX ROW
1:5
788.25
EX ROW

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 33 SF

206+00

792.44
EX ROW
1:5
788.60
EX ROW

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 28 SF

205+50

791.10
EX ROW
1:9
788.82
EX ROW

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 23 SF

205+00

789.73
EX ROW
1:39
788.81
EX ROW

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 14 SF

204+50

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE AREAS — AREAS CHECKED — BY — DATE

USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	
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PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 2
GRAND AVENUE UNDERPASS

SHEET NO. 8 OF 10 SHEETS | STA. 204+50.00 TO STA. 206+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	71
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

795 790 785 780 775

CONSTRUCTION BASELINE

EX ROW

787.66

1:5

785.07

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 1 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 11 SF

207+50

792.22

EX ROW

1:3

785.88

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 6 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 34 SF

207+00

792.19

EX ROW

1:4

786.94

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 5 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 34 SF

206+50

USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	
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PLOT SCALE 12.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/28/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
GRAND AVENUE – STAGE 2
GRAND AVENUE UNDERPASS

SHEET NO. 9 OF 10 SHEETS | STA. 206+50.00 TO STA. 207+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	72
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK	AREAS	
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK	AREAS	
NO.	AREAS CHECKED	

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

CONSTRUCTION BASELINE

785
780
775
790
785
780
775

EX ROW
EX ROW
EX ROW
EX ROW

784.38
784.19
1:69

208+50
208+00

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 2 SF
TOPSOIL EXC & PLAC AREA = 0 SF
FURNISHED EXCAVATION AREA = 0 SF

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

USER NAME = pk	DESIGNED - PK	REVISED - 1/3/2012	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

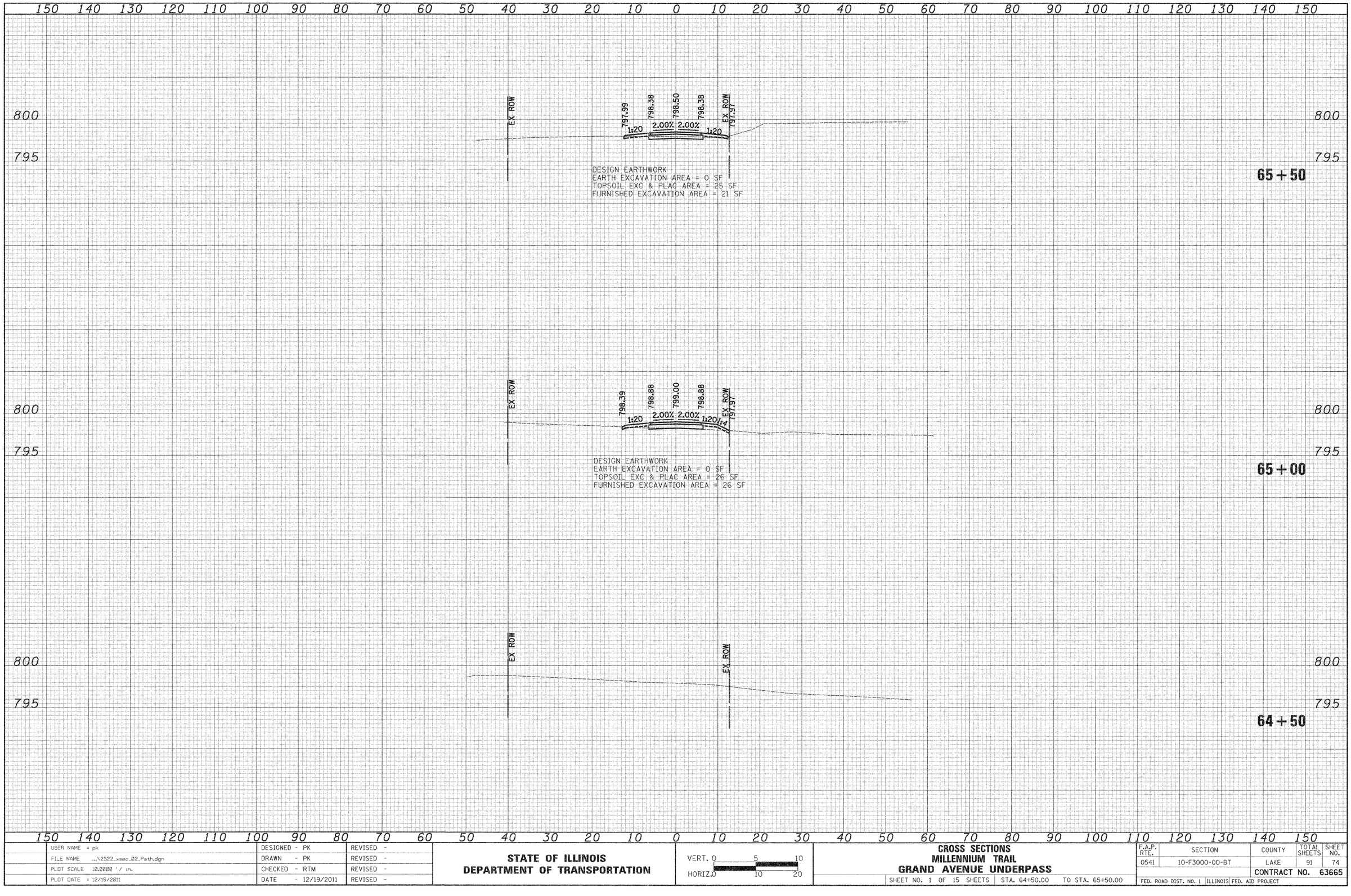
CROSS SECTIONS
GRAND AVENUE – STAGE 2
GRAND AVENUE UNDERPASS

SHEET NO. 10 OF 10 SHEETS | STA. 208+00.00 TO STA. 208+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	73
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS**
FILE NAME ...\2322_xsec_02_Path.dgn	DRAWN - PK	REVISED -	**DEPARTMENT OF TRANSPORTATION**
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/15/2011	DATE - 12/19/2011	REVISED -	

VERT. 0 5 10
HORIZ. 0 10 20

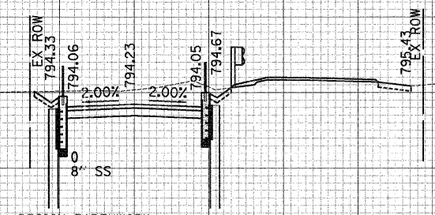
CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS

SHEET NO. 1 OF 15 SHEETS | STA. 64+50.00 | TO STA. 65+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	74
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

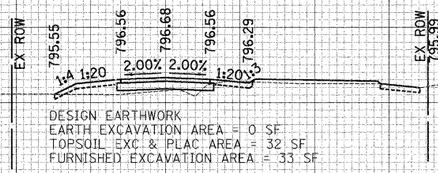
800
795
790
785



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 12 SF
TOPSOIL EXC & PLAC AREA = 21 SF

67+00

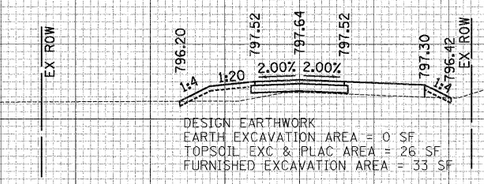
800
795



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 32 SF
FURNISHED EXCAVATION AREA = 33 SF

66+50

800
795



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 26 SF
FURNISHED EXCAVATION AREA = 33 SF

66+21.28

800
795



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 29 SF
FURNISHED EXCAVATION AREA = 36 SF

66+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS**
FILE NAME ...\2322_xsec_02_Path.dgn	DRAWN - PK	REVISED -	**DEPARTMENT OF TRANSPORTATION**
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	VERT. 0 5 10
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	HORIZ. 0 10 20

CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS

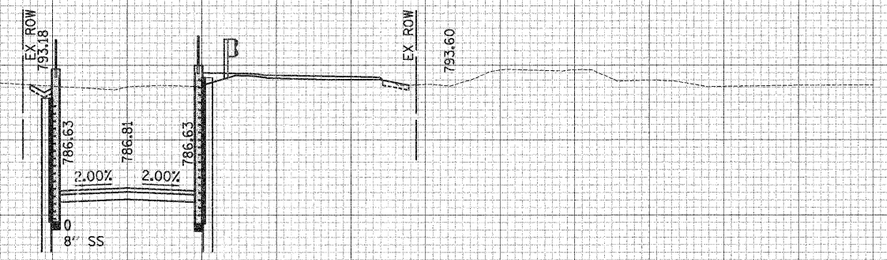
SHEET NO. 2 OF 15 SHEETS | STA. 65+50.00 | TO STA. 67+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	75
		CONTRACT NO. 63665		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

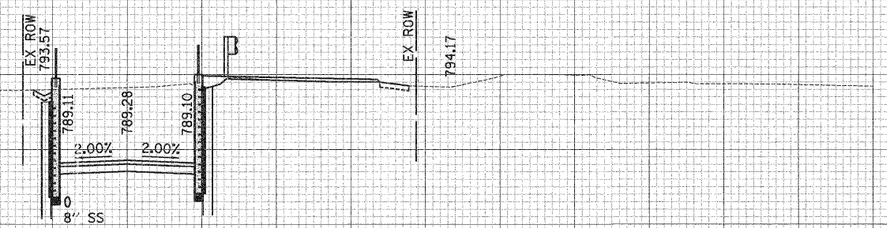
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795 790 785 780



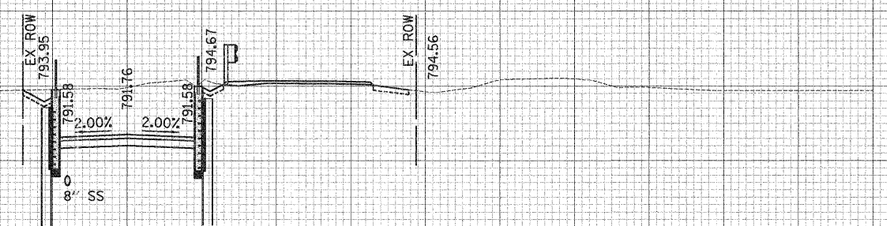
DESIGN EARTHWORK
EARTH EXCAVATION AREA = 91 SF
TOPSOIL EXC & PLAC AREA = 30 SF
FURNISHED EXCAVATION AREA = 7 SF

68+50



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 66 SF
TOPSOIL EXC & PLAC AREA = 30 SF
FURNISHED EXCAVATION AREA = 7 SF

68+00



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 43 SF
TOPSOIL EXC & PLAC AREA = 33 SF
FURNISHED EXCAVATION AREA = 5 SF

67+50

USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
FILE NAME ...\2322_xsec_02_Path.dgn	DRAWN - PK	REVISED -	
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS

SHEET NO. 3 OF 15 SHEETS | STA. 67+50.00 | TO STA. 68+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	76
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

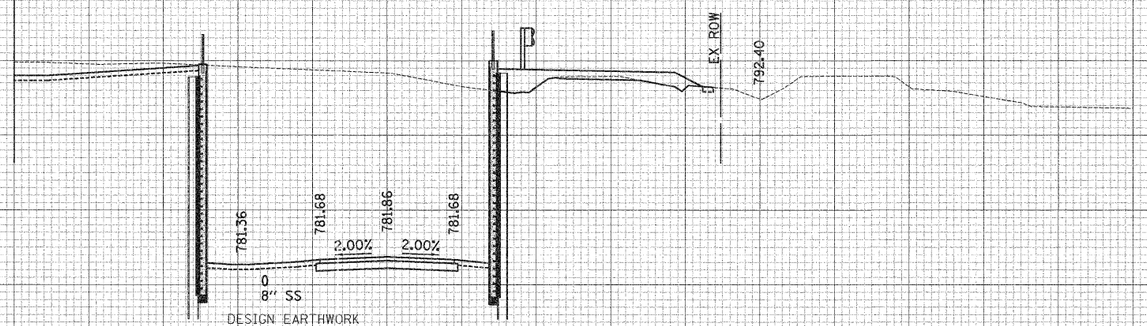
FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS CHECKED — BY — DATE

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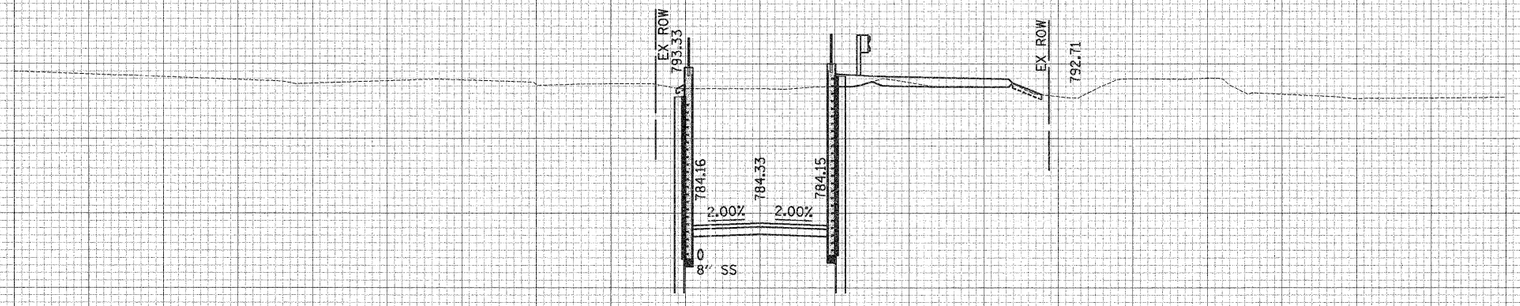
795 790 785 780 775

SEE GRADING AND PLANTING PLAN



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 428 SF
TOPSOIL EXC & PLAC AREA = 101 SF
FURNISHED EXCAVATION AREA = 10 SF

69+50



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 123 SF
TOPSOIL EXC & PLAC AREA = 28 SF
FURNISHED EXCAVATION AREA = 7 SF

69+00

	USER NAME = pk	DESIGNED - PK	REVISED -
	FILE NAME ...\2322_xsec_02_Path.dgn	DRAWN - PK	REVISED -
	PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -
	PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS

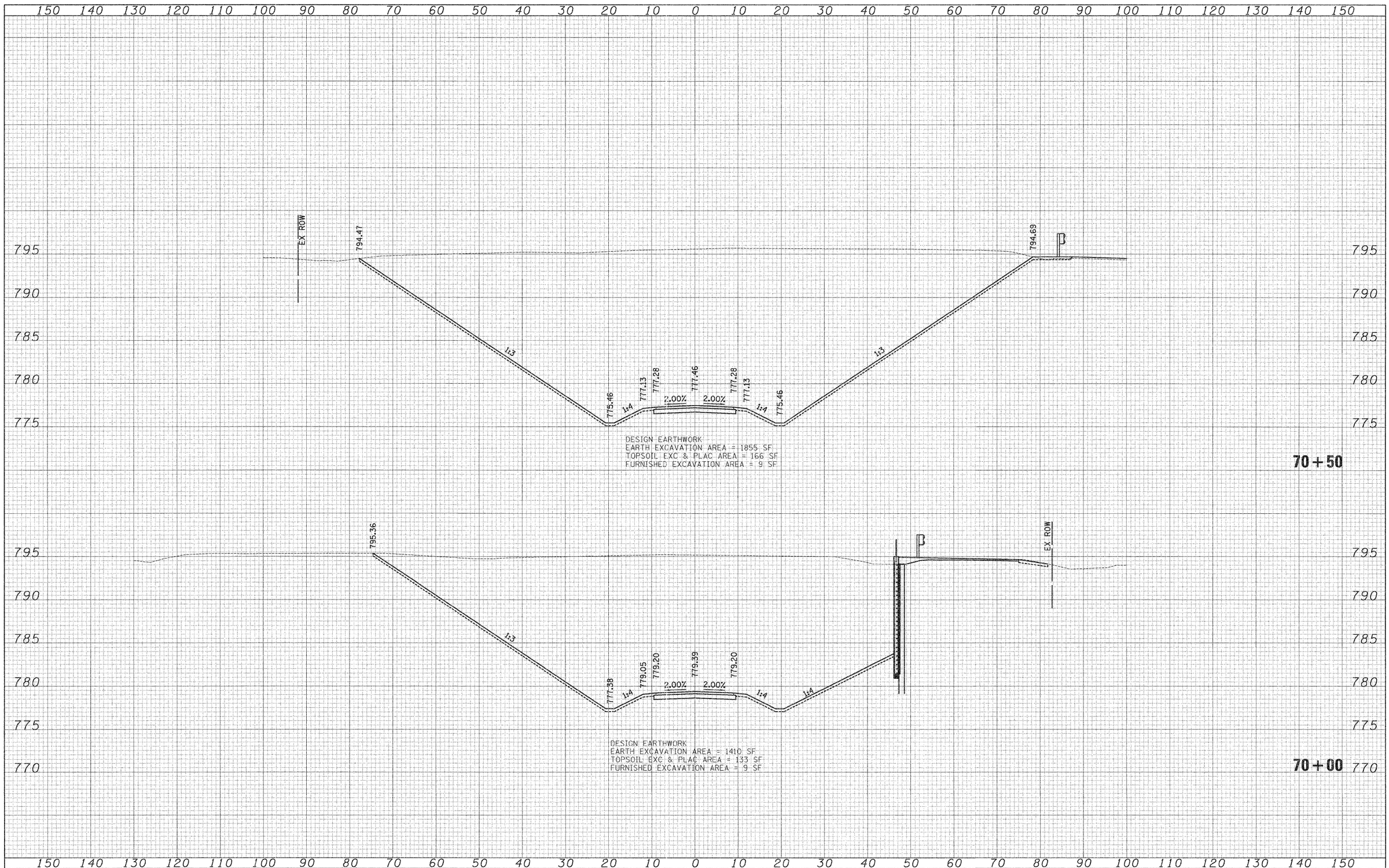
SHEET NO. 4 OF 15 SHEETS | STA. 69+00.00 | TO STA. 69+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	77
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	



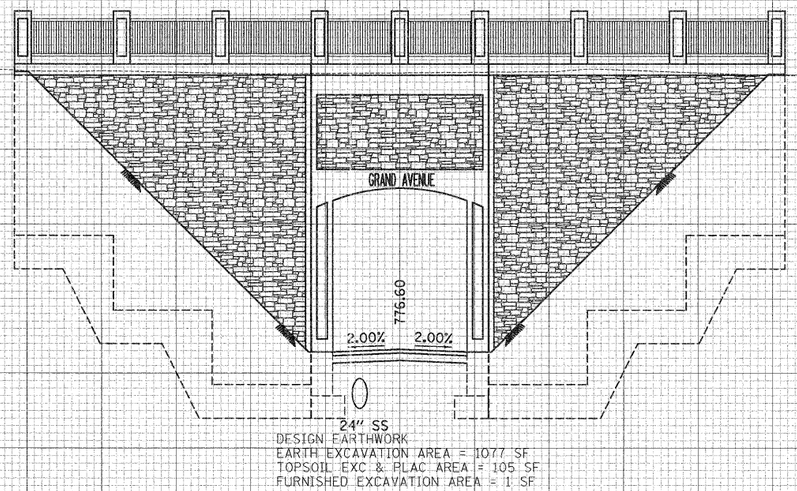
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NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS**
FILE NAME ...\2322_xsec_02_Path.dgn	DRAWN - PK	REVISED -	**DEPARTMENT OF TRANSPORTATION**
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	VERT. 0 5 10
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	HORIZ.0 10 20

CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS

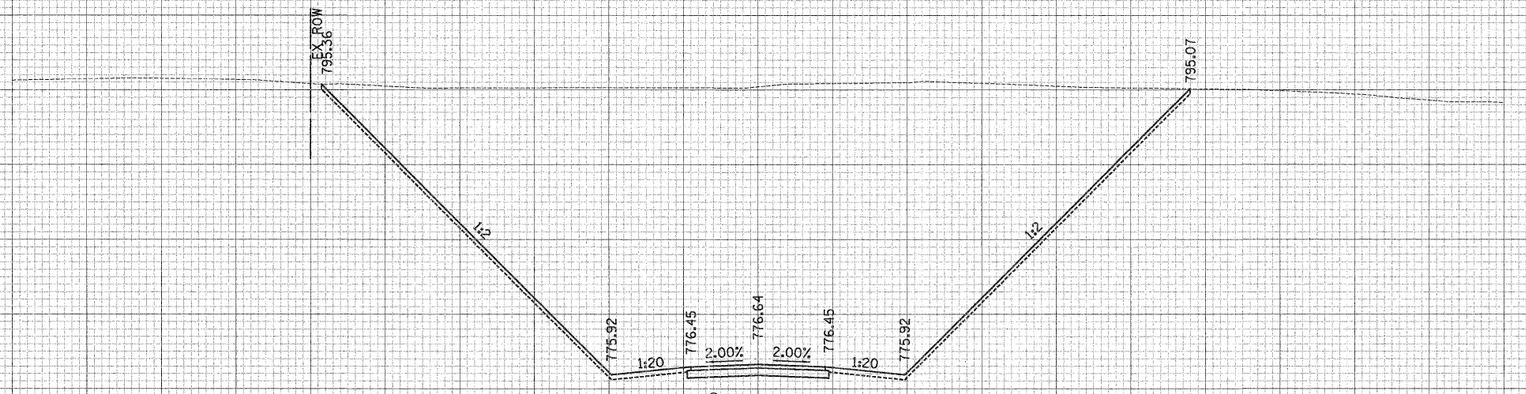
SHEET NO. 5 OF 15 SHEETS | STA. 70+00.00 | TO STA. 70+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	78
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 1077 SF
TOPSOIL EXC & PLAC AREA = 105 SF
FURNISHED EXCAVATION AREA = 1 SF

71+05.69



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 1422 SF
TOPSOIL EXC & PLAC AREA = 117 SF
FURNISHED EXCAVATION AREA = 1 SF

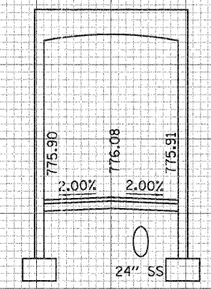
71+00

USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
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PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	**CROSS SECTIONS** **MILLENNIUM TRAIL** **GRAND AVENUE UNDERPASS**
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	SHEET NO. 6 OF 15 SHEETS STA. 71+00.00 TO STA. 71+05.69

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	79
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

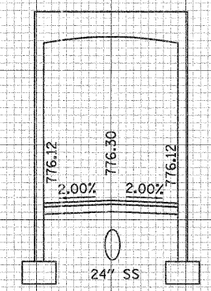
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790
785
780
775



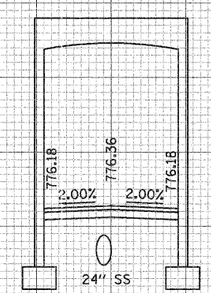
72+00

790
785
780
775



71+61.69

790
785
780
775



71+50

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

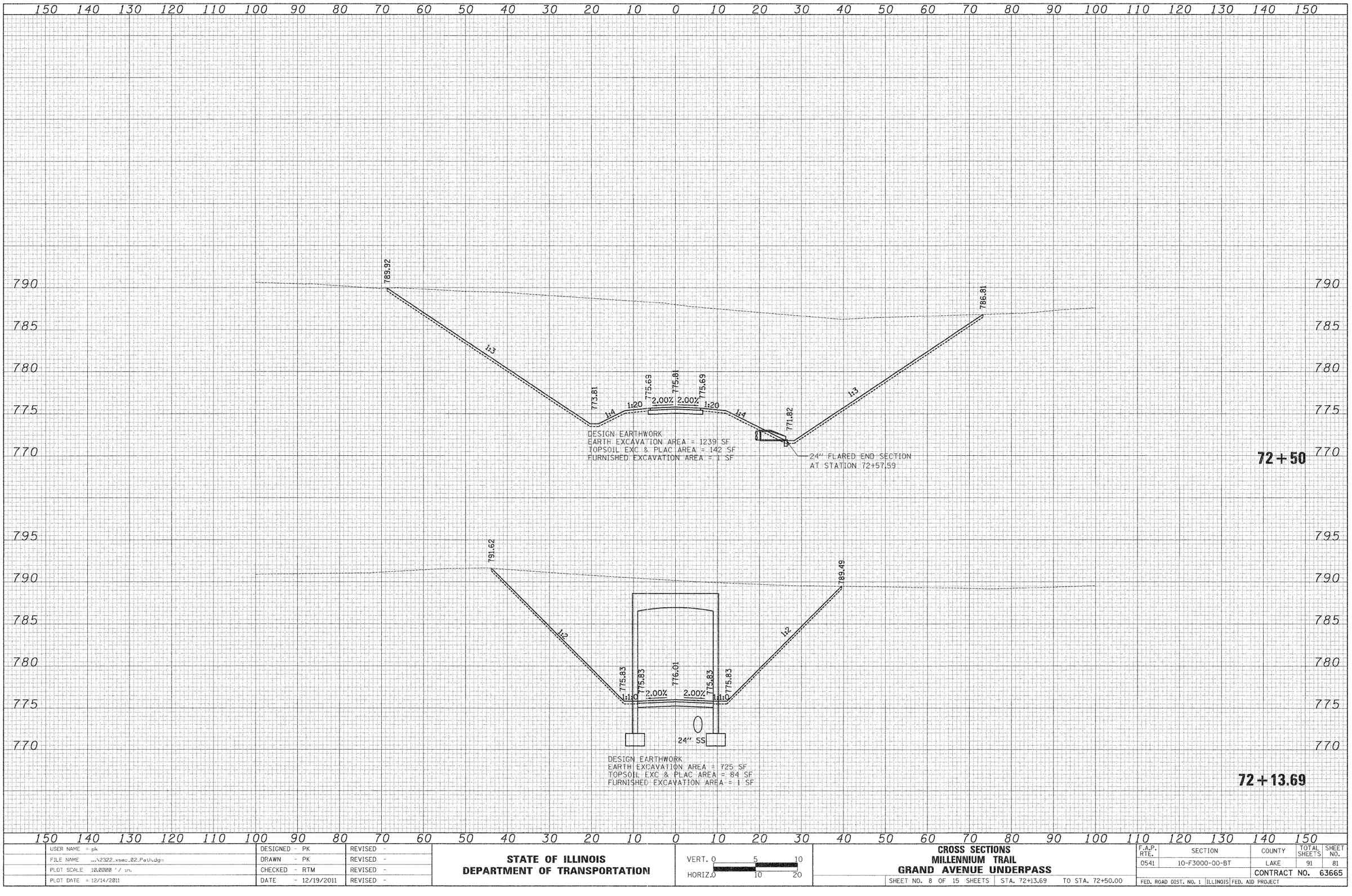
VERT. 0 5 10
HORIZ.0 10 20

CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS

SHEET NO. 7 OF 15 SHEETS | STA. 71+50.00 | TO STA. 72+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	80
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		BY
PLOTTED		DATE
TEMPLATE		
AREAS		
AREAS CHECKED		



ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		BY
PLOTTED		DATE
TEMPLATE		
AREAS		
AREAS CHECKED		

USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS**
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PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	HORIZ. 0 10 20

CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS

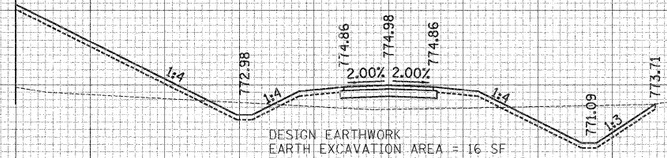
SHEET NO. 8 OF 15 SHEETS | STA. 72+13.69 | TO STA. 72+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	81
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

780
775
770

MATCH LINE
SEE BERM
CROSS SECTIONS

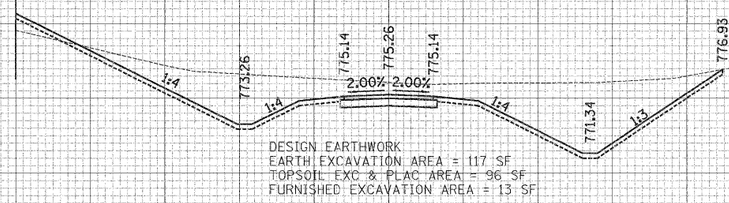


DESIGN EARTHWORK
EARTH EXCAVATION AREA = 16 SF
TOPSOIL EXC & PLAC AREA = 86 SF
FURNISHED EXCAVATION AREA = 148 SF

74+00

785
780
775
770

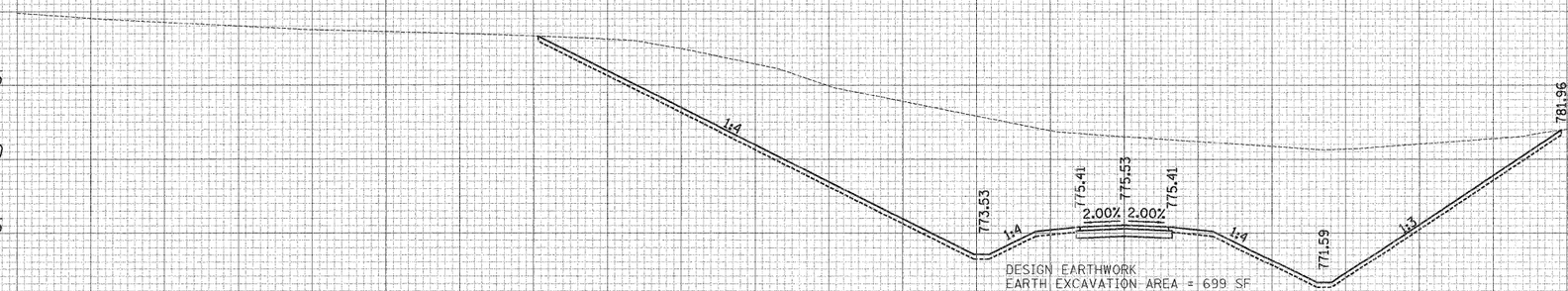
MATCH LINE
SEE BERM
CROSS SECTIONS



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 117 SF
TOPSOIL EXC & PLAC AREA = 96 SF
FURNISHED EXCAVATION AREA = 13 SF

73+50

785
780
775
770



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 699 SF
TOPSOIL EXC & PLAC AREA = 140 SF
FURNISHED EXCAVATION AREA = 2 SF

73+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS**
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PLOT SCALE 12.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	

VERT. 0 5 10
HORIZ.0 10 20

CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS

SHEET NO. 9 OF 15 SHEETS | STA. 73+00.00 | TO STA. 74+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	82
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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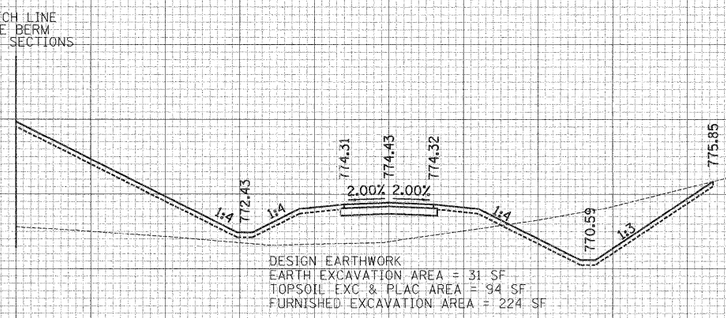
MATCH LINE
SEE BERM
CROSS SECTIONS



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 2 SF
TOPSOIL EXC & PLAC AREA = 83 SF
FURNISHED EXCAVATION AREA = 299 SF

75+50

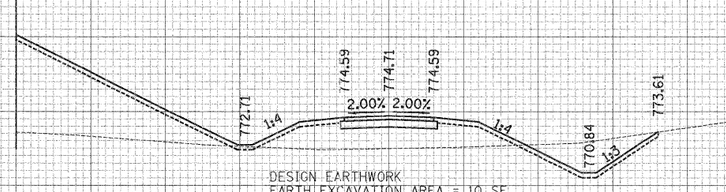
MATCH LINE
SEE BERM
CROSS SECTIONS



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 31 SF
TOPSOIL EXC & PLAC AREA = 94 SF
FURNISHED EXCAVATION AREA = 224 SF

75+00

MATCH LINE
SEE BERM
CROSS SECTIONS



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 10 SF
TOPSOIL EXC & PLAC AREA = 86 SF
FURNISHED EXCAVATION AREA = 201 SF

74+50

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS

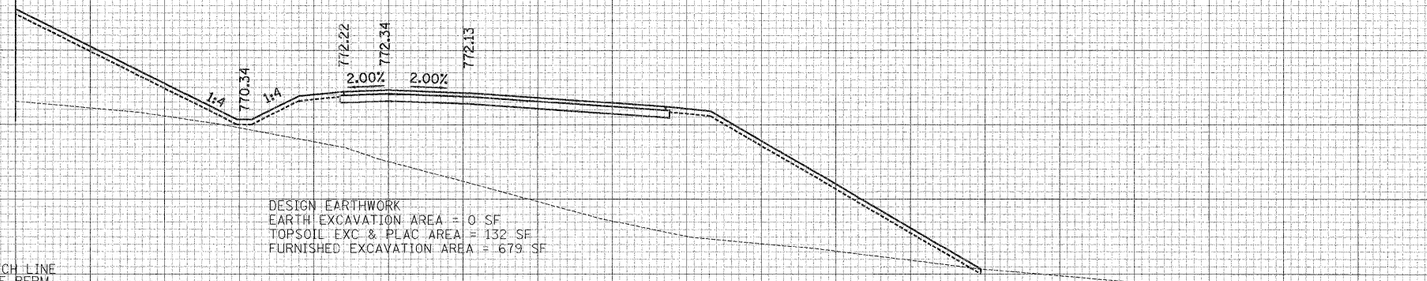
SHEET NO. 10 OF 15 SHEETS | STA. 74+50.00 | TO STA. 75+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	83
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

775
770
765
760

MATCH LINE
SEE BERM
CROSS SECTIONS

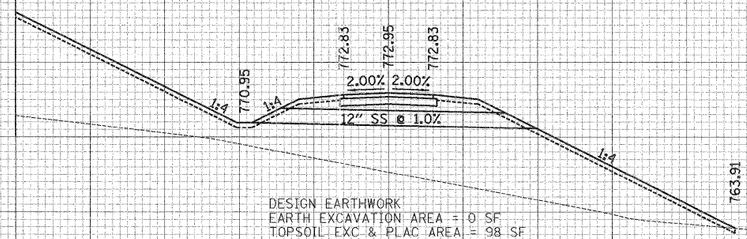


DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 132 SF
FURNISHED EXCAVATION AREA = 679 SF

MATCH LINE
SEE BERM
CROSS SECTIONS

77+00

775
770
765

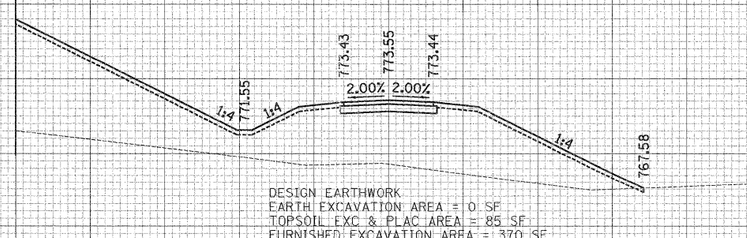


DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 98 SF
FURNISHED EXCAVATION AREA = 435 SF

MATCH LINE
SEE BERM
CROSS SECTIONS

76+50

775
770
765



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 85 SF
FURNISHED EXCAVATION AREA = 370 SF

76+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS**
FILE NAME ...\2322_xsec_02_Path.dgn	DRAWN - PK	REVISED -	**DEPARTMENT OF TRANSPORTATION**
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PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	HORIZ.0 10 20

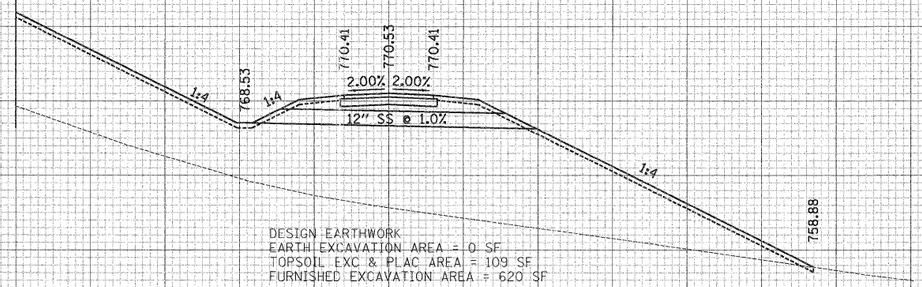
CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS
SHEET NO. 11 OF 15 SHEETS | STA. 76+00.00 | TO STA. 77+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	84
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

775 770 765 760

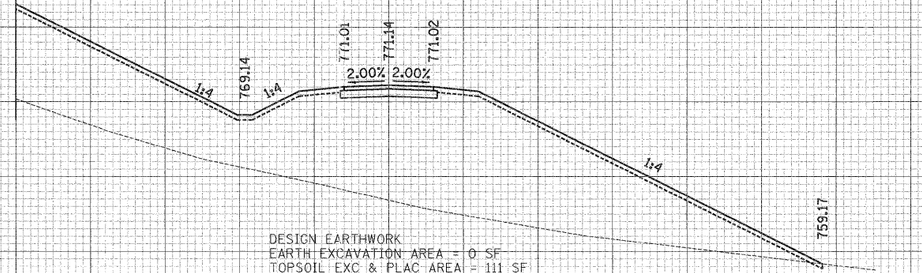
MATCH LINE
SEE BERM
CROSS SECTIONS



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 109 SF
FURNISHED EXCAVATION AREA = 620 SF

78+50

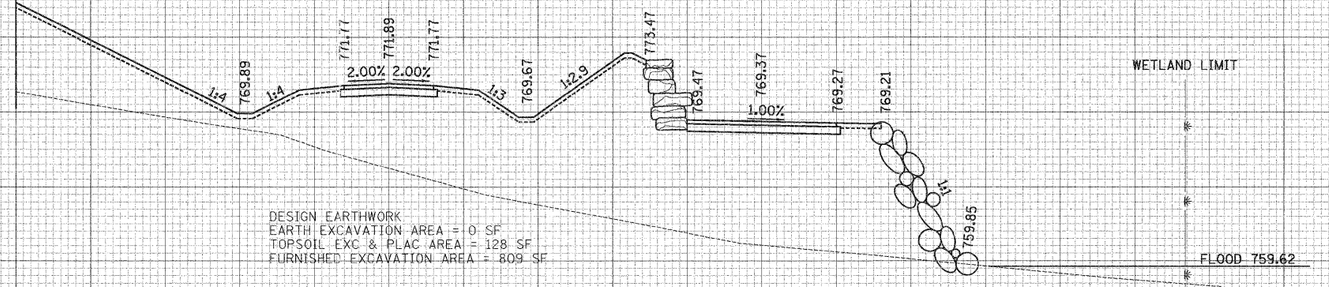
MATCH LINE
SEE BERM
CROSS SECTIONS



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 111 SF
FURNISHED EXCAVATION AREA = 639 SF

78+00

MATCH LINE
SEE BERM
CROSS SECTIONS



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 128 SF
FURNISHED EXCAVATION AREA = 809 SF

77+38

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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FILE NAME ...\2322_xsec_02_Path.dgn	DRAWN - PK	REVISED -	
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

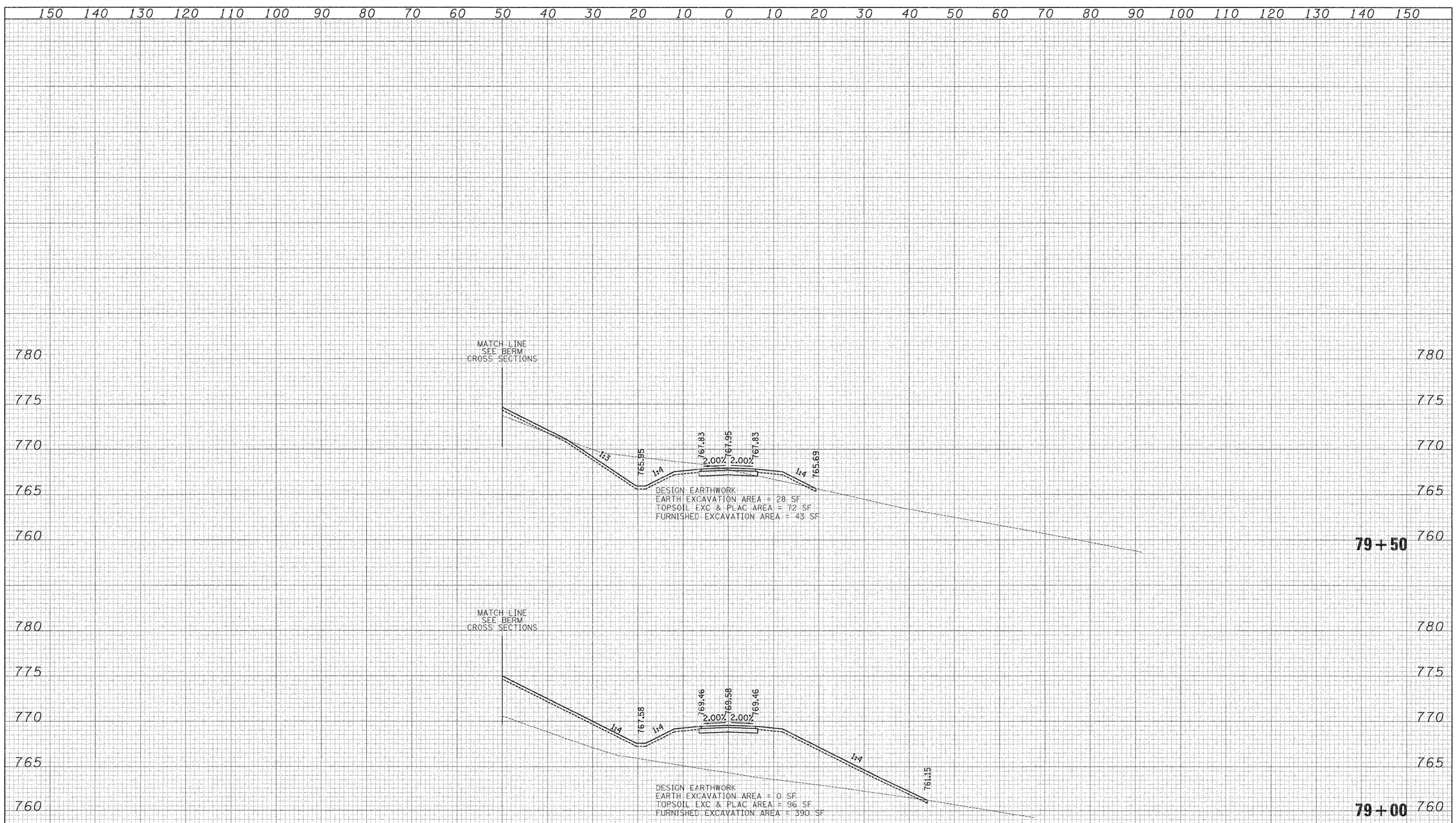
CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS

SHEET NO. 12 OF 15 SHEETS | STA. 77+38.00 | TO STA. 78+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	85
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	



USER NAME = pk	DESIGNED - PK	REVISED -	
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PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

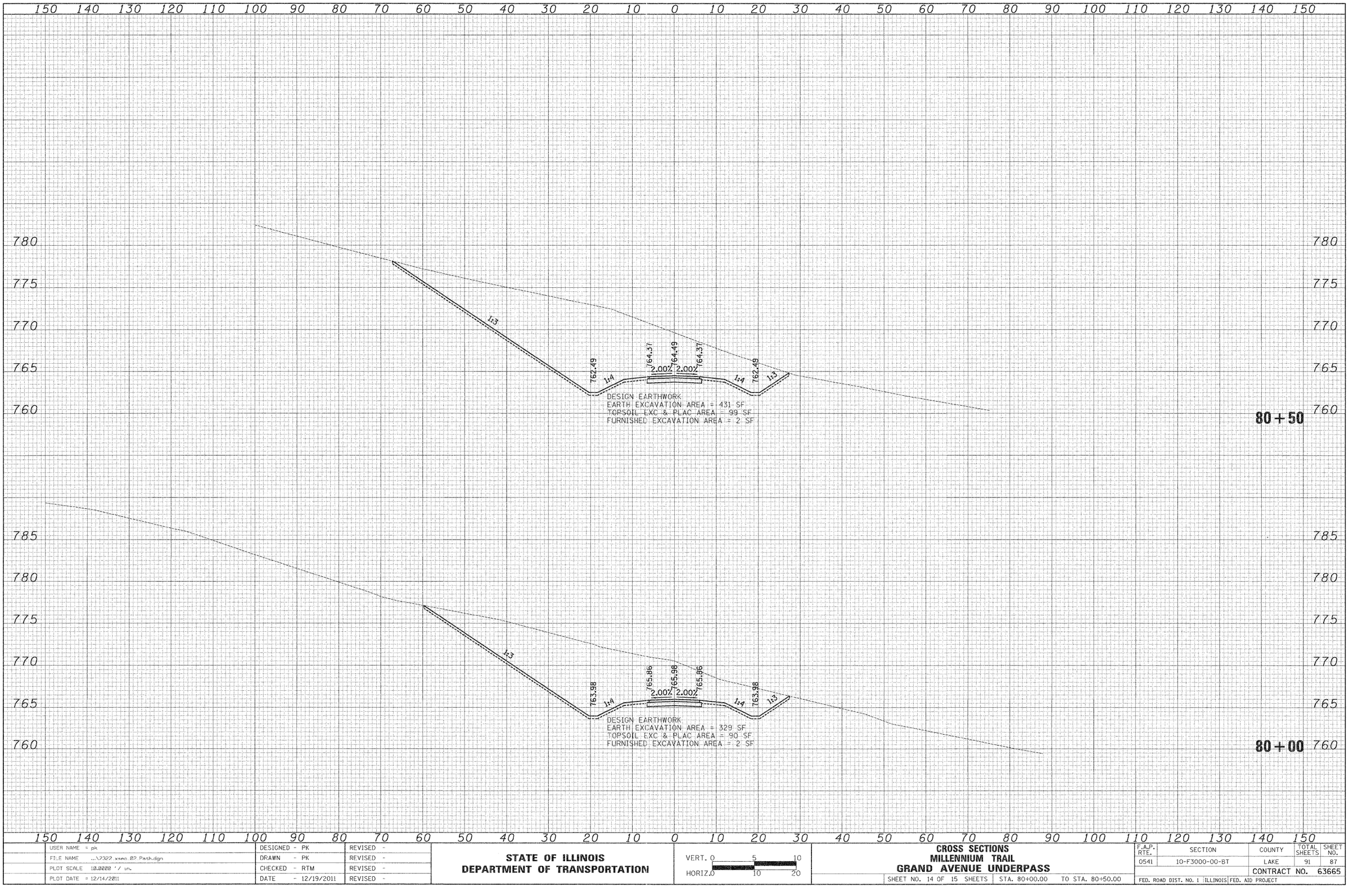
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS

SHEET NO. 13 OF 15 SHEETS | STA. 79+00.00 | TO STA. 79+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	86
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.	BY	DATE
			SURVEYED	
			PLOTTED	
			TEMPLATE	
			AREAS	
			AREAS CHECKED	



ORIGINAL SURVEY	NOTE BOOK	NO.	BY	DATE
			SURVEYED	
			PLOTTED	
			TEMPLATE	
			AREAS	
			AREAS CHECKED	

USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS**
FILE NAME ...\2322_xsec_02_Path.dgn	DRAWN - PK	REVISED -	**DEPARTMENT OF TRANSPORTATION**
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	VERT. 0 5 10
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	HORIZ.0 10 20

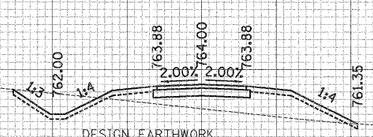
CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS

SHEET NO. 14 OF 15 SHEETS | STA. 80+00.00 | TO STA. 80+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	87
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

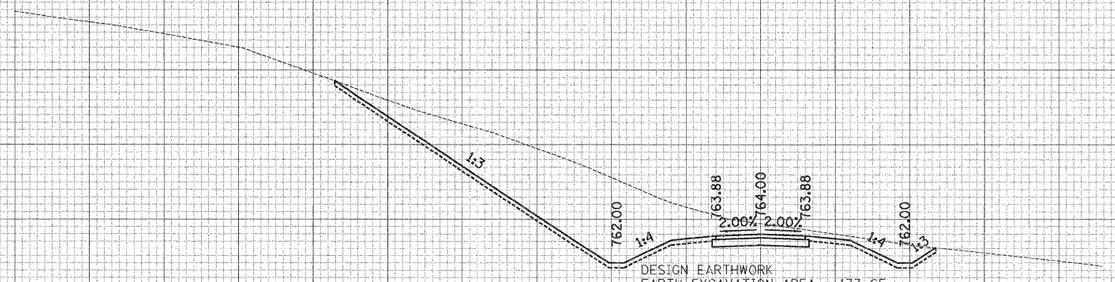
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

770
765
760



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 3 SF
TOPSOIL EXC & PLAC AREA = 46 SF
FURNISHED EXCAVATION AREA = 63 SF

81 + 36.04



DESIGN EARTHWORK
EARTH EXCAVATION AREA = 133 SF
TOPSOIL EXC & PLAC AREA = 84 SF
FURNISHED EXCAVATION AREA = 5 SF

81 + 00

775
770
765
760

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

	USER NAME = pk	DESIGNED - PK	REVISED -
	FILE NAME ...\2322_xsec_02_Path.dgn	DRAWN - PK	REVISED -
	PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -
	PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
MILLENNIUM TRAIL
GRAND AVENUE UNDERPASS

SHEET NO. 15 OF 15 SHEETS | STA. 81+00.00 | TO STA. 81+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	88
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

790
785
780

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 220 SF
FURNISHED EXCAVATION AREA = 559 SF

11+00

790
785
780

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 46 SF
FURNISHED EXCAVATION AREA = 46 SF

10+50

790
785
780
775

10+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

USER NAME = pk	DESIGNED - PK	REVISED -	
FILE NAME ...\2322_xsec_03_Berm.dgn	DRAWN - PK	REVISED -	
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PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
BERM
GRAND AVENUE UNDERPASS

SHEET NO. 1 OF 3 SHEETS | STA. 10+00.00 | TO STA. 11+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	89
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

785
780
775
770

MATCH LINE
SEE MILLENNIUM TRAIL
CROSS SECTIONS

MATCH LINE
SEE MILLENNIUM TRAIL
CROSS SECTIONS

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 195 SF
FURNISHED EXCAVATION AREA = 2245 SF

12+50

790
785
780
775

MATCH LINE
SEE MILLENNIUM TRAIL
CROSS SECTIONS

MATCH LINE
SEE MILLENNIUM TRAIL
CROSS SECTIONS

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 217 SF
FURNISHED EXCAVATION AREA = 2013 SF

12+00

790
785
780
775

MATCH LINE
SEE MILLENNIUM TRAIL
CROSS SECTIONS

MATCH LINE
SEE MILLENNIUM TRAIL
CROSS SECTIONS

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 231 SF
FURNISHED EXCAVATION AREA = 1110 SF

11+50

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

USER NAME = pk	DESIGNED - PK	REVISED -
FILE NAME ...\2322_xsec_03_Berm.dgn	DRAWN - PK	REVISED -
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PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS
BERM
GRAND AVENUE UNDERPASS

SHEET NO. 2 OF 3 SHEETS | STA. 11+50.00 | TO STA. 12+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	90
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

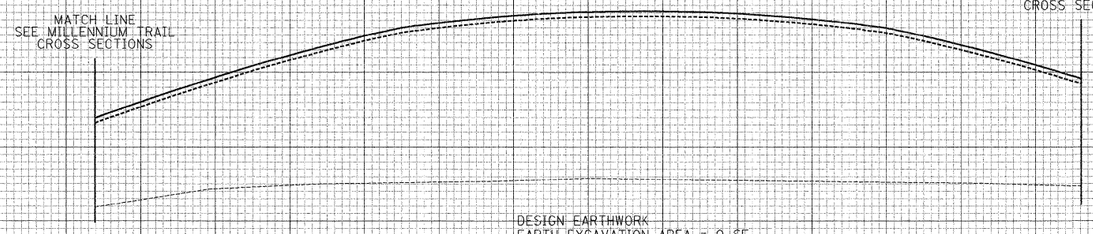
FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



780
775
770

DESIGN EARTHWORK
EARTH EXCAVATION AREA = 0 SF
TOPSOIL EXC & PLAC AREA = 132 SF
FURNISHED EXCAVATION AREA = 1370 SF

13+00

USER NAME = pk	DESIGNED - PK	REVISED -	**STATE OF ILLINOIS**
FILE NAME ...\2322_xsec_03_Berm.dgn	DRAWN - PK	REVISED -	**DEPARTMENT OF TRANSPORTATION**
PLOT SCALE 10.0000 ' / in.	CHECKED - RTM	REVISED -	VERT. 0 5 10
PLOT DATE = 12/14/2011	DATE - 12/19/2011	REVISED -	HORIZ.0 10 20

CROSS SECTIONS
BERM
GRAND AVENUE UNDERPASS

SHEET NO. 3 OF 3 SHEETS | STA. 13+00.00 | TO STA. 13+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0541	10-F3000-00-BT	LAKE	91	91
		CONTRACT NO. 63665		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		